Town of Londonderry Planning Board
268B Mammoth Road - Moose Hill Conference
Agenda
March 11 , 2026
7:00 p.m.

I. **Call to Order**

II. **Administrative Board Work**

A. Approval of Minutes

B. Regional Impact Determinations

C. Discussions with Town Staff

III. **Old Business**

A. Public hearing on an application for formal review of a subdivision to permit an organic waste processing facility in the Gateway Business (GB) district at 162 Litchfield Road (Map 14, Lot 39-2). Zoned Gateway Business (GB), PurposeEnergy-Londonderry, LLC (applicant), Nicholas F Codner Trust 2012 (owner) (continued from January 14, 2026, February 11, 2026)

Documents:

162 subdivision.pdf

B. Public hearing on an application for formal review of a site plan and conditional use permits to permit an organic waste processing facility in the Gateway Business (GB) district at 162 Litchfield Road (Map 14, Lot 39-2). Zoned Gateway Business (GB), PurposeEnergy-Londonderry, LLC (applicant), Nicholas F Codner Trust 2012 (owner) (continued from January 14, 2026, February 11, 2026)

Documents:

162.pdf

C. Public hearing for an application for formal review of a site plan for forty (40) residential units and a conditional use permit for 1,023 square feet of buffer impacts, including associated site improvements in the Commercial II (C-II) Zone. 225 Rockingham Road, Tax Map 15, Lot 126, Genex Construction Group, LLC (Owner/Applicant) continued from February 4, 2026) (Applicant

requested continuance to April 8, 2026 meeting.)

Documents:

--24_503-22_Site Plans_STAMPED_12-31-25.pdf

IV. New Plans/Conceptual Plans

A. Public hearing for an application for a Conditional Use Permit for 19,150 Square feet of buffer impacts and associated site improvements in the Commercial II (C-II) and Industrial I (IND-I) Zoning Districts. 2 Highlander Way, Map 28, Lot 10-0, City of Manchester (Owner), Benton Family Trust (Applicant) and 5 Highlander Way, Map 28, Lots 10-4, Benton Family Realty LLC (Owner/Applicant), Commercial II (C-II) Zoning District.

Documents:

17562-06 Site Plans R01.3.pdf

B. Public hearing of an application for a site plan for a two story 41,700 square foot building with 12 indoor pickleball courts along with 21 outdoor pickleball courts and associated site improvements in the Commercial II (C-II), 2 Highlander Way, Map 28, Lot 10-0, City of Manchester (Owner), Benton Family Trust (Applicant) ; 5 Highlander Way, Map 28, Lots 10-4, Benton Family Realty LLC (Owner/Applicant), Commercial II (C-II) Zoning District; 3385 Brown Avenue, Map 28, Lot 9, City of Manchester (Owner), Benton Family Trust (Applicant).

Documents:

pickleball site plans.pdf

V. Other Business

A. Election of Officers

B. HOP Grant update and discussion about alignment with State RSAs

Documents:

1-HOP_Land-Use-RSA_Alignment_Review.pdf
2-HOP_Land-Use-RSA_Alignment_Matrix.pdf
3-HOP_RSA674_2025-Changes_Language-Links.pdf
4-HOP_Diversified-Housing_Definition-Purpose.pdf
5-HOP_Housing-Typologies_to-Audit.pdf
6-HOP_Housing-Sources_Board-Consideration.pdf
Londonderry_RSA_Audit_Housing_Direction_March_2026_v3.pdf

VI. Adjournment

Hop Grant Documents

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS

SUBDIVISION PLANS

162 LITCHFIELD ROAD, LONDONDERRY, NEW HAMPSHIRE

GENERAL INFORMATION

OWNER
MAP 14 LOT 39
CODNER NICHOLAS F TRUST 2012
162 LITCHFIELD ROAD
LONDONDERRY, NH 03053
603-432-1100

APPLICANT
PUPROSEENERGY-LONDONDERRY, LLC
C/O SEAN O'NEIL
25 PELHAM ROAD, SUITE 102
SALEM, NH 03079
6172029156

PREPARED FOR
PUPROSEENERGY-LONDONDERRY, LLC
C/O SEAN O'NEIL
25 PELHAM ROAD, SUITE 102
SALEM, NH 03079
6172029156

RESOURCE LIST
TOWN MANAGER
268B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 151
SHAUN MULHOLLANDI, TOWN MANAGER

PLANNING & ECONOMIC DEVELOPMENT
268B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 149
KELLIE CARON, ASST. TOWN MANAGER, DIRECTOR OF ECONOMIC DEVELOPMENT

BUILDING, HEALTH, ZONING AND CODE ENFORCEMENT
268B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 161
NICK CODNER, CHIEF BUILDING INSPECTOR & CODE ENFORCEMENT OFFICER

HEALTH DIVISION
268B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 151

PUBLIC WORKS & ENGINEERING
268B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 139
DAVE WHOLLEY, DIRECTOR PUBLIC WORKS & MUNICIPAL FACILITIES
JOHN TROITTER, DIRECTOR OF ENGINEERING & ENVIRONMENTAL SERVICES

HIGHWAY DIVISION
268B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 152
DAVE WHOLLEY, DIRECTOR PUBLIC WORKS & MUNICIPAL FACILITIES

POLICE DEPARTMENT
268A MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1118
KIM ALAN BERNARD, CHIEF OF POLICE

FIRE DEPARTMENT
280 MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1124
PHIL LEBLANC, ACTING FIRE CHIEF

NHDES AOT
29 HAZEN DRIVE
CONCORD, NH 03302-0095
(603) 271-2303
AMY CLARK, PE, AOT SUPERVISOR

ASSOCIATED PROFESSIONALS
ARCHITECT
RANDALL-PAULSON ARCHITECTS
MILLYARD ECHNOLOGY PARK, 82 TECHNOLOGY WAY SUITE 3W2A NASHUA, NH 03060
603-617-3706
TIMOTHY ENGELBERT AICP

GEOTECHNICAL SERVICES
ARIES ENGINEERING
104 PLEASANT STREET
CONCORD, NH 03301
(603) 226-0374
GEORGE C. HOLT, P.G.

TRAFFIC ENGINEER
TFMORAN, INC.
48 CONSTITUTION DRIVE
BEDFORD, NH 03110
ROBERT DUVAL, PE, PRINCIPAL

WETLAND SCIENTIST
TFMORAN, INC.
48 CONSTITUTION DRIVE
BEDFORD, NH 03110
CHRISTOPHER K. DANFORTH, CWS

SOIL SCIENTIST
BAG LAND CONSULTANTS
43 ROCKINGHAM STREET
CONCORD, NH 03301
BRUCE A. GILDAY, CSS

ABUTTERS
R014-039-0
NICHOLAS F CODNER TRUST 2012
162 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R014-047-0
US OF AMERICA FED AVIATION ADMIN
12 NE EXECUTIVE PARK
BURLINGTON, MA 01803

R01-044-3B
STATE OF NEW HAMPSHIRE
PO BOX 483, 1 HAZEN DRIVE
CONCORD, NH 03302-0483

R014-44-0
GRANITE RIDGE ENERGY, LLC
21 NORTH WENTWORTH AVE
LONDONDERRY, NH 03053

R014 LOTS 044-3 & 040-0
TRACIE L & BRUCE A LEMIEUX
154 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R014-039-1
VICTOR D & CECILIA C REIS
158 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R011-020-13
RICHARD A BELANGER
149 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R011-020-12
NICOLE M THOMAS
151 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R011-020-11JUSTIN M QUISH
153 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R011-020-10
SHARON B BARTHOLOMEW
155 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R011-020-9
SAHIN B DAYIOGLU
157 LITCHFIELD ROAD
LONDONDERRY, NH 03053

ABUTTERS (CONT)
R011-020-8
ERIC J AND AMBER E POMER
159 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R011-020-7
JOHN ALBERT & LISA MARIE KIRCALDIE
51 YELLOWSTONE ROAD
LONDONDERRY, NH 03053-2502

R011-020-6
MICHAEL A ST. PIERRE
163 LITCHFIELD ROAD
LONDONDERRY, NH 03053-7408

R011-020-5
CLARK FAMILY TRUST OF 2011
165 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R011-015-0
ERICK MENDONSA
167 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R014-051-0
CLAIRE M KELLY
166 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R014-050-0
BRUCE ALLAN & CINDY LOUISE GOODWIN
168 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R014-007-0
MICHAEL W SIRACUSE III
170 LITCHFIELD ROAD
LONDONDERRY, NH 03053

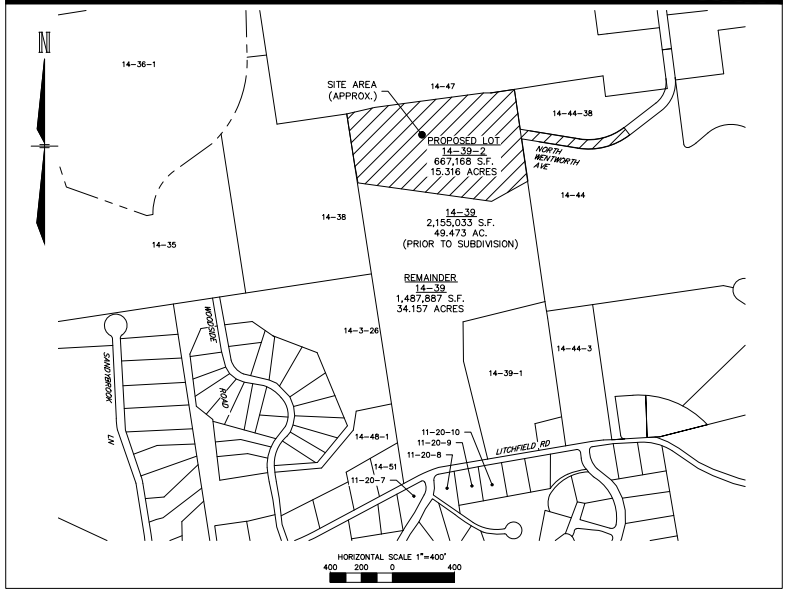
R014-005-0
ARIANNA O'NEIL
172 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R014-048-1
STATE OF NEW HAMPSHIRE
PO BOX 483
CONCORD, NH 03302-0483

R-014-003-26
GYPSUM CONSTRUCTION CORP.
184 ROCKINGHAM ROAD
LONDONDERRY, NH 03053

R014-038-0
TANA PROPERTIES LTD. PARTNERSHIP
40 TEMPLE STREET
NASHUA, NH 03060

TAX MAP SKETCH



LOT AREAS TABLE

LOT	AREA (SF)	AREA (ACRES)
14-39 (EXIST)	2,155,133 SF	49.473 AC
14-39 (REMAINDER)	1,487,887 SF	34.157 AC
14-39-2 (PROPOSED)	667,168 SF	15.316 AC

PERMITS/APPROVALS

	NUMBER	APPROVED	EXPIRES
TOWN PLANNING BOARD SUBDIVISION APPROVAL			
TOWN PLANNING BOARD CUP (FRONTAGE)			
NHDES WETLAND DREDGE AND FILL PERMIT			

WAIVERS

THE FOLLOWING WAIVERS FROM THE TOWN OF LONDONDERRY SITE REVIEW REGULATIONS IS REQUESTED FROM THE PLANNING BOARD:

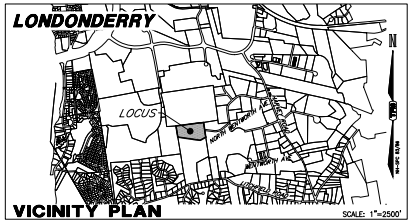
1. TOWN OF LONDONDERRY SUBDIVISION REVIEW REGULATIONS SECTION 3.10, 4.17 & CHECKLIST ITEM XI –
   TO PROVIDE SITE SPECIFIC SOIL MAPPING IN LIEU OF HISS MAPPING REQUIREMENTS.
2. TOWN OF LONDONDERRY SUBDIVISION REVIEW REGULATIONS SECTION 3.02.C, 4.12.C.14 & CHECKLIST ITEM V.14 –
   TO LIMIT CO SIGNAGE TO LOT 14-39-02 (DEVELOPMENT LOT).
4. TOWN OF LONDONDERRY SUBDIVISION REVIEW REGULATIONS SECTION 3.05, 3.06, 3.07, 3.08, 4.16, & CHECKLIST ITEMS X.3, VIII.13-18 & EXHIBIT D2 –
   TO PROVIDE ALL TECHNICAL UTILITY DESIGN ELEMENTS AND IMPROVMENT PLANS WITHIN THE CORRESPONDING SITE PLAN APPLICATION

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48 Constitution Drive, Bedford, N.H. 03110

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This plan is not effective unless signed by a duly authorized officer of TFMoran, Inc.

DIG SAFE
CALL BEFORE YOU DIG
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION



VICINITY PLAN

NOTES

1. OWNER OF RECORD: NICHOLAS F. CODNER TRUST OF 2012
   162 LITCHFIELD ROAD
   LONDONDERRY, NEW HAMPSHIRE
   DEED REFERENCE: BOOK 5336, PAGE 1874
   PROPOSED LOT AREA: 667,167.7 S.F. OR 15.3161 ACRES
   EXISTING LOT AREA: 2,155,033 S.F. OR 49.473 ACRES
2. 14-39-0 INDICATES TAX MAP AND LOT NUMBER.
3. THE PURPOSE OF THIS SUBDIVISION PLAN IS TO SHOW THE EXISTING CONDITIONS PRESENT AT THE TIME OF THE FIELD SURVEY FOR ASSESSORS MAP 14 LOT 39, SITUATED ON THE WESTERLY TERMINUS OF NORTH WENTWORTH AVENUE IN THE TOWN OF LONDONDERRY, NEW HAMPSHIRE AS SHOWN HEREON AND TO SUBDIVIDE MAP 14 LOT 39 INTO ONE NEW LOT AND ONE REMAINDER LOT AS SHOWN:

LOT	AREA (SF)	AREA (AC)
14-39 (EXIST)	2,155,133 SF	49.473 AC
14-39 (REMAINDER)	1,487,887 SF	34.157 AC
14-39-1 (PROPOSED)	667,168 SF	15.316 AC

4. CURRENT ZONING IS: GATEWAY BUSINESS (GB) AND AGRICULTURAL RESIDENTIAL (AR-1)

EXISTING USE:	RESIDENTIAL	
PROPOSED USE 14-39:	RESIDENTIAL (AR-1)	
PROPOSED USE 14-39-2:	ORGANIC WASTE PROCESSING FACILITY (GB)	
ZONE:	(GB)	(AR-1, SINGLE FAMILY, SEPTIC & WELL)
MINIMUM LOT SIZE:	1 ACRE	1 ACRE
MINIMUM LOT FRONTAGE:	150 FEET (CLASS V OR BETTER ROAD)	150 FEET (CLASS V OR BETTER ROAD)
MINIMUM FRONT BUILDING SETBACKS:	30 FEET	40 FEET
MINIMUM SIDE BUILDING SETBACKS:	20 FEET	15 FEET
MINIMUM REAR BUILDING SETBACKS:	20 FEET	15 FEET
MAXIMUM BUILDING HEIGHT:	50 FEET	35 FEET
MINIMUM OPEN SPACE:	25%	40%

5. EXAMINATION OF THE FLOOD INSURANCE RATE MAP FOR ROCKINGHAM COUNTY, NEW HAMPSHIRE (ALL JURISDICTIONS), MAP NUMBER 33015C0318E, EFFECTIVE DATE OF MAY 17, 2005, INDICATES THAT THE SUBJECT PARCELS ARE NOT LOCATED WITHIN A FLOOD HAZARD AREA.
6. CONTOURS DEPICTED ON THIS PLAN ARE AT 2 FOOT INTERVALS.
7. HORIZONTAL DATUM: NH-SPC NAD83/2011
   VERTICAL DATUM: NGVD29
   BENCHMARKS SET: TBM-1: TOP OF DRILL HOLE FOUND AT THE CORNER OF A STONE WALL LOCATED AT THE NORTHWESTERLY CORNER OF PROPOSED LOT 14-39-0, AS SHOWN HEREON. EL= 273.57'
   TBM-2: TOP OF DRILL HOLE FOUND IN STONE WALL LOCATED AT THE SOUTHWESTERLY CORNER OF PROPOSED LOT 14-39-0, AS SHOWN HEREON. EL= 242.21'
   TBM-3: TOP OF IRON ROD LOCATED AT THE SOUTHERLY CORNER OF PROPOSED LOT 14-39-0, AS SHOWN HEREON. EL= 268.36'
   TBM-4: TOP OF DRILL HOLE FOUND IN STONE WALL LOCATED ON THE NORTHERLY PROPERTY LINE, APPROXIMATELY 230 FEET FROM THE NORTHEASTERLY CORNER OF PROPOSED LOT 14-39-0, AS SHOWN HEREON. EL= 303.29'
   DATUM WAS OBTAINED BY SURVEY GRADE GPS UNIT ON MAY 21, 2024.
8. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL MAY DETERMINE.
9. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. T.F.MORAN INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 811.
10. THE INFORMATION SHOW HEREON IS FROM AN ACTUAL SURVEY PREFORMED BY THIS OFFICE FROM MAY THROUGH JUNE 2024.
11. SHEETS SUB-1 & SUB-2 SHALL BE RECORDED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. A FULL SET OF PLANS (C-1, S-1 SUB-1 THROUGH SUB-9) SHALL BE ON FILE WITH THE TOWN OF LONDONDERRY PLANNING DEPARTMENT.
13. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT DEFICIENCIES EXIST IN THE APPROVED DESIGN DRAWINGS, THE OWNER SHALL BE REQUIRED TO CORRECT THE DEFICIENCIES TO MEET THE REQUIREMENTS OF THE REGULATIONS AT NO EXPENSE TO THE TOWN.
14. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE TOWN.
15. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO TOWN OF LONDONDERRY SUBDIVISION REGULATIONS AND THE LATEST EDITION OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION.

INDEX OF SHEETS

SHEET	SHEET TITLE
COVER	COVER SHEET
S-01 TO S-08	SUBSIVISION PLANS
C-13	DRIVEWAY PLAN AND PROFILE
SD-1	SIGHT DISTANCE PLAN

SUBDIVISION PLANS

TAX MAP 14 LOT 39-2 AND 39

SUBDIVISION COVER

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053
OWNED BY
PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

NOT TO SCALE **SEPTEMBER 8, 2025**

OWNER'S SIGNATURE

OWNER OR REPRESENTATIVE — DATE 12/22/2025

Approved by the Londonderry, NH Planning Board for Phase ____
on Date ____
Certified by: ____

REV	DATE	DESCRIPTION	DR	CK
2	12/18/2025	REVISED PER TOWN REVIEW COMMENTS	JD	MRD
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR		FB	-	
18252-02	CK		CADFILE	18252-02 SUBDIVISION PLAN	COVER

Dec 23, 2025 - 2:01pm
P:\TFM Projects\18252 Litchfield Rd, Londonderry, NH\Carlson Survey\Dwgs\18252-10 SUBDIVISION PLAN.dwg

LEGEND

STONE BOUND (FOUND)	SAC	SLOPED ASPHALT CURB	ABUTTING PROPERTY LINE
IRON PIN (FOUND)	OHW	OVERHEAD WIRES	BUILDING SETBACK
DRILL HOLE (FOUND)		STONEWALL	EP EDGE OF PAVEMENT
UTILITY POLE	302	2' CONTOUR	ZONING DISTRICT BOUNDARY
GUY WIRE		10' CONTOUR	PROPERTY BOUNDARY
BENCHMARK	280	SOILS BOUNDARY	EASEMENT LINE
WATER VALVE		SOILS MAP UNIT SYMBOL	W WATER LINE
HYDRANT		WETLAND DELINEATION	G GAS LINE
CATCH BASIN	5-12	WETLAND FLAG LOCATION	D DRAIN LINE
DIRECTION OF DRAINAGE FLOW		WETLAND SETBACK	S SEWER LINE

G.BND GRANITE BOUND TO BE SET
T.B.S.

VICINITY PLAN

SCALE: 1"=2,500'±

TAX MAP SKETCH

SCALE:1" = 400'

NOTES

1. OWNER OF RECORD: NICHOLAS F. CODNER TRUST OF 2012
   162 LITCHFIELD ROAD
   LONDONDERRY, NEW HAMPSHIRE
   DEED REFERENCE: BOOK 5336, PAGE 1874
   PROPOSED LOT AREA: 667,167.7 S.F. OR 15.3161 ACRES
   EXISTING LOT AREA: 2,155,033 S.F. OR 49.473 ACRES
2. 14-39-2 INDICATES TAX MAP AND LOT NUMBER.
3. THE PURPOSE OF THIS SUBDIVISION PLAN IS TO SHOW THE EXISTING CONDITIONS PRESENT AT THE TIME OF THE FIELD SURVEY FOR ASSESSORS MAP 14 LOT 39, SITUATED ON THE WESTERLY TERMINUS OF NORTH WENTWORTH AVENUE IN THE TOWN OF LONDONDERRY, NEW HAMPSHIRE AS SHOWN HEREON AND NO OTHER PURPOSE.
4. CURRENT ZONING IS: GATEWAY BUSINESS (GB) AND AGRICULTURAL RESIDENTIAL (AR-1)
   EXISTING USE: RESIDENTIAL
   PROPOSED USE 14-39: RESIDENTIAL (AR-1)
   PROPOSED USE 14-39-2: ORGANIC WASTE PROCESSING FACILITY (GB)

ZONE:	(GB)	(AR-1, SINGLE FAMILY, SEPTIC & WELL)
MINIMUM LOT SIZE:	1 ACRE	1 ACRE
MINIMUM LOT FRONTAGE:	150 FEET (CLASS V OR BETTER ROAD)	150 FEET (CLASS V OR BETTER ROAD)
MINIMUM FRONT BUILDING SETBACKS:	30 FEET	40 FEET
MINIMUM SIDE BUILDING SETBACKS:	20 FEET	15 FEET
MINIMUM REAR BUILDING SETBACKS:	20 FEET	15 FEET
MAXIMUM BUILDING HEIGHT:	50 FEET	35 FEET
MINIMUM OPEN SPACE:	25%	40%

5. EXAMINATION OF THE FLOOD INSURANCE RATE MAP FOR ROCKINGHAM COUNTY, NEW HAMPSHIRE (ALL JURISDICTIONS), MAP NUMBER 33015C0318E, EFFECTIVE DATE OF MAY 17, 2005, INDICATES THAT THE SUBJECT PARCELS ARE NOT LOCATED WITHIN A FLOOD HAZARD AREA.
6. CONTOURS DEPICTED ON THIS PLAN ARE AT 2 FOOT INTERVALS.
7. HORIZONTAL DATUM: NH-SPC NAD83/2011. VERTICAL DATUM: NGVD29
   DATUMS WERE OBTAINED BY SURVEY GRADE GPS UNIT ON MAY 21, 2024

BENCHMARKS SET:
- TBM-1: TOP OF DRILL HOLE FOUND AT THE CORNER OF A STONE WALL LOCATED AT THE NORTHWESTERLY CORNER OF PROPOSED LOT 14-39-0, AS SHOWN HEREON. EL= 273.57'
- TBM-2: TOP OF DRILL HOLE FOUND IN STONE WALL LOCATED AT THE SOUTHWESTERLY CORNER OF PROPOSED LOT 14-39-0, AS SHOWN HEREON. EL= 242.21'
- TBM-3: TOP OF IRON ROD LOCATED AT THE SOUTHERLY CORNER OF PROPOSED LOT 14-39-0, AS SHOWN HEREON. EL= 268.36'
- TBM-4: TOP OF DRILL HOLE FOUND IN STONE WALL LOCATED ON THE NORTHERLY PROPERTY LINE, APPROXIMATELY 230 FEET FROM THE NORTHEASTERLY CORNER OF PROPOSED LOT 14-39-0, AS SHOWN HEREON. EL= 303.29'

Graphic Scale
100' 50' 0' 100' 200' 300' 400'
1" = 100'

NOTES (CONT.)

8. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL MAY DETERMINE.
9. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. T.F.MORAN INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 811.
10. THE INFORMATION SHOW HEREON IS FROM AN ACTUAL SURVEY PREFORMED BY THIS OFFICE FROM MAY THROUGH JUNE 2024.
11. SHEETS SUB-01 AND SUB-02 WILL BE RECORDED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS.
12. A COMPLETE SET OF SUBDIVISION PLANS WILL BE ON FILE AT THE TOWN OF LONDONDERRY.
13. THE USE OF THE EXISTING LOT 14-39 IS RESIDENTIAL AND OPEN WOODLAND. THE PROPOSED USE OF LOT 14-39 AFTER THE SUBDIVISION IS RESIDENTIAL AND OPEN WOODLAND, THE PROPOSED USE OF THE PROPOSED LOT 14-39-2 IS AN ORGANIC WASTE PROCESSING FACILITY.
14. THE EXISTING RESIDENTIAL HOUSE IS SERVICED BY AN ON-SITE EFFLUENT DISPOSAL SYSTEM.
15. THE PROPOSED LOT 14-39-2 SHALL BE SERVICED BY TOWN OF LONDONDERRY SEWER AND MANCHESTER WATER WORKS.
16. THE EXISTING RESIDENTIAL HOUSE ON LOT 14-39 IS LISTED AS A SINGLE FAMILY HOME WITH FOUR (4) BEDROOMS.

UTILITY PROVIDERS

WATER: MANCHESTER WATER WORKD
SEWER: TOWN OF LONDONDERRY
GAS: NATIONAL GRID
ELECTRICITY: EVERSOURCE

LOT AREAS TABLE

LOT	AREA (SF)	AREA (ACRES)
14-39 (EXIST)	2,155,133 SF	49.473 AC
14-39 (REMAINDER)	1,487,887 SF	34.157 AC
14-39-2 (PROPOSED)	667,168 SF	15.316 AC

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION. FURTHER, THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE IN MAY OF 2024. SAID SURVEY HAS AN ERROR OF CLOSURE OF NOT LESS ACCURACY THAN ONE PART IN TEN THOUSAND (1:10,000).

Michael R Dahlberg 12/22/2025
LICENSED LAND SURVEYOR DATE

STATE OF NEW HAMPSHIRE LAND SURVEYOR No. 714 MICHAEL R DAHLBERG SIGNATURE

OWNER'S SIGNATURE 12/22/2025
OWNER OR REPRESENTATIVE DATE

Approved by the Londonderry, NH Planning Board for Phase
on Date:
Certified by:

SEE SHEETS SUB-3 OF 8 THROUGH SUB-8 OF 8 FOR 40 SCALE DETAIL OF ENTIRE SITE.
SHEETS SUB-1 OF 8 THROUGH SUB-8 OF 8 WILL BE ON FILE AT THE PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT OF THE TOWN OF LONDONDERRY

WETLAND SCIENTIST CERTIFICATION

JURISDICTIONAL WETLANDS SHOWN ON THIS PLAN WERE DELINEATED ON AUGUST 16, 2024 BY CHRISTOPHER K. DANFORTH CWS #077. THE WETLANDS WERE DELINEATED ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (1987) AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2, JANUARY 2012. DOMINANT HYDRIC SOILS WITHIN THE WETLAND(S) WERE IDENTIFIED USING "FIELD INDICATORS OF HYDRIC SOILS OF THE UNITED STATES" A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, NRCS, VERSION 8.1, 2017. DOMINANCE OF HYDROPHYTIC VEGETATION WAS DETERMINED USING THE USACE NATIONAL WETLAND PLANT LIST, NWPL 2016 VERSION 3.3 HTTP://WETLAND_PLANTS.USACE.ARMY.MIL.

CHRISTOPHER K. DANFORTH No. 077 CERTIFIED WETLAND SCIENTIST 8/28/2024

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CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION "IT'S THE LAW"
811 Dig Safe MA-ME-NH-RI-VT

REV.	DATE	DESCRIPTION	DR	CK
2	12-18-25	REVISED PER TOWN REVIEW COMMENTS	JD	MRD
1	11-24-25	ADDITIONS PER REVIEW COMMENTS	MRD	MRD

TAX MAP 14 LOT 39-2 AND 39

SUBDIVISION PLAN

LAND OF CODNER
162 LITCHFIELD ROAD
LONDONDERRY, NEW HAMPSHIRE

OWNED BY:
CRAIG FOWLER (TRUSTEE)
NICHOLAS F. CODNER TRUST OF 2012
PREPARED FOR:
PURPOPURPOSEENERGY-LONDONDERRY, LLC
PO BOX 4345, WINDHAM, NH 03087

SCALE: 1" = 100' **SEPTEMBER 8, 2025**

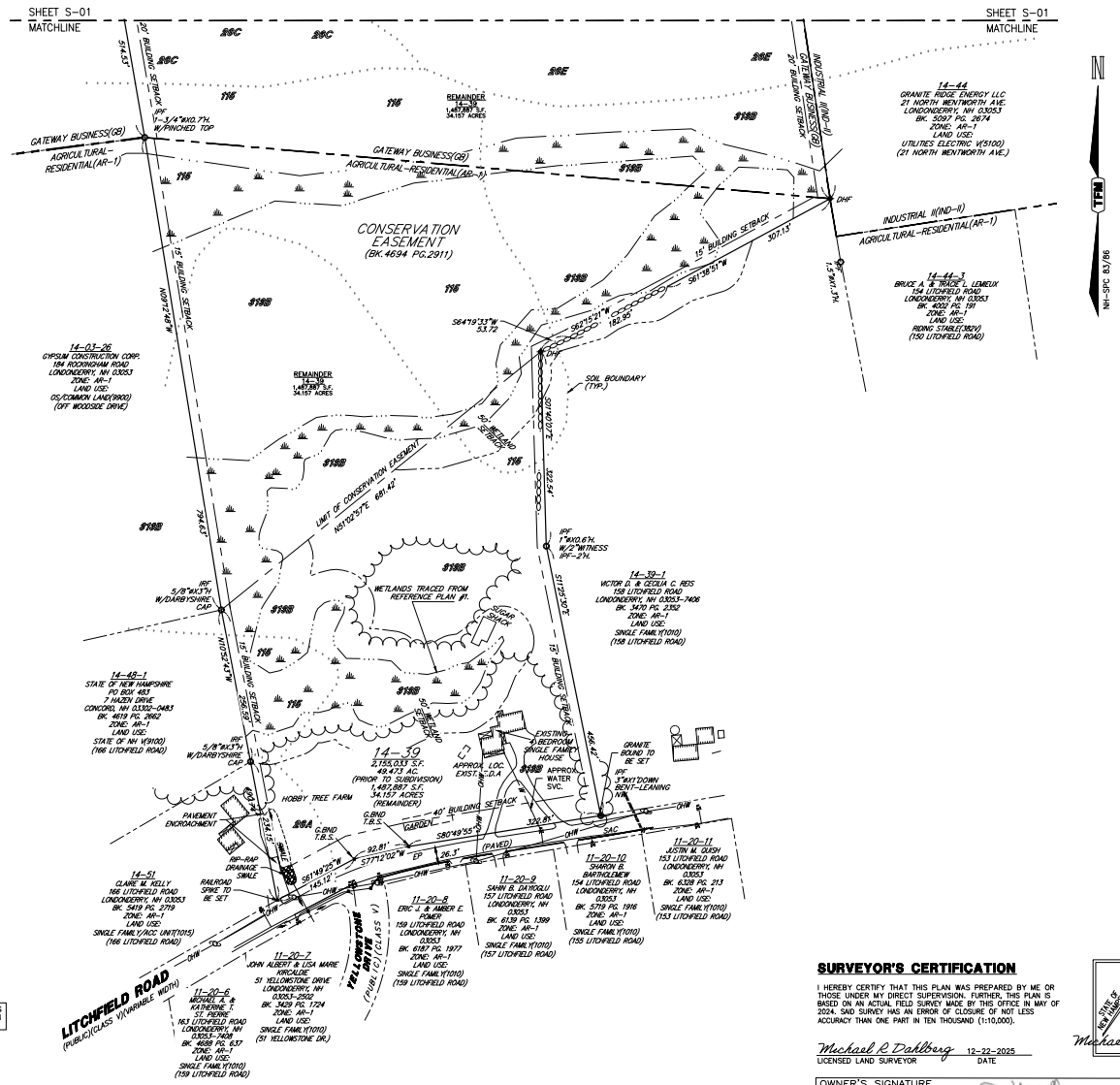
TFM Civil Engineers, Structural Engineers, Traffic Engineers, Land Surveyors, Landscape Architects, Scientists
48 Constitution Drive, Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE 18252.01 | DR TNB | FB 2229/2230 | CK MRD | CADFILE 18252-01 Survey | SUB-1 OF 8

Dec 23, 2025 - 2:30pm
P:\TFM Projects\18252 Litchfield Rd - Londonderry, NH\Carlson Survey\Dwgs\18252-02 SUBDIVISION PLAN.dwg

LEGEND

G.BND T.B.S. ■	GRANITE BOUND TO BE SET
⊡	GRANITE BOUND (FOUND)
○	IRON PIN (FOUND)
✦	DRILL HOLE (FOUND)
ᵁ○	UTILITY POLE
←	GUY WIRE
⋊	BENCHMARK
⋊ W	WATER VALVE
⋊ H	HYDRANT
⊞	CATCH BASIN
⟵	DIRECTION OF DRAINAGE FLOW
EP	EDGE OF PAVEMENT
SAC	SLOPED ASPHALT CURB
OHW	OVERHEAD WIRES
○○○○○○○	STONEWALL
302	2' CONTOUR
280	10' CONTOUR
	SOILS BOUNDARY
S&A	SOILS MAP UNIT SYMBOL
	WETLAND DELINEATION
5–12 ●	WETLAND FLAG LOCATION
	WETLAND SETBACK
	BUILDING SETBACK
	ZONING DISTRICT BOUNDARY
	PROPERTY BOUNDARY
	EASEMENT LINE
W	WATER LINE
G	GAS LINE
D	DRAIN LINE
S	SEWER LINE
	ABUTTING PROPERTY LINE



REFERENCE PLANS

1. STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, BEDFORD–MANCHESTER–LONDONDERRY–LITCHFIELD–MERRIMACK, 11512, NHDOT PARCEL 1051, TAX MAP 14, LOT 39, PLAN OF WETLAND IMPACT MITIGATION SITES FOR STATE OF NEW HAMPSHIRE, LITCHFIELD ROAD, LONDONDERRY, N.H., SCALE: 1"=100', DATED: OCTOBER 25, 2007, PREPARED BY PAUL M. DARBYSHIRE ASSOCIATES. R.C.R.D. PLAN NO. 35156, PAGE 28.
2. SUBDIVISION PLAN OF LAND, WEBCO DEVELOPMENT CORP., LONDONDERRY, N.H., SCALE: 1"=200', DATED: MARCH 4, 1975, PREPARED BY THOMAS F. MORAN, INC. R.C.R.D. PLAN NO. D-5114.
3. FEDERAL AVIATION ADMINISTRATION, LONDONDERRY, N.H., MANCHESTER MUNICIPAL AIRPORT, ASR, PROPERTY PLAN RECORD, SCALE: 1"=100', DATED: MARCH 11, 1980, PREPARED BY DAVIS, BENOIT & TESSIER, INC. R.C.R.D. PLAN NO. D-9464.
4. FINAL SUBDIVISION PLAN, TAX MAP 11, LOT 12, COUNTLAND ESTATES, SCALE: 1"=50', DATED: MARCH 27, 1985, PREPARED BY RONALD R. BURD, INC. R.C.R.D. PLAN NO. D-13547.
5. ECOLOGICAL INDUSTRIAL PARK, WENTWORTH AVENUE, LONDONDERRY, NEW HAMPSHIRE, SCALE: AS SHOWN, DATED: OCTOBER 20, 1999, PREPARED BY TF MORAN, INC. R.C.R.D. PLAN NO. D-27991.

SEE SHEETS SUB-3 OF 8 THROUGH SUB-8 OF 8 FOR 40 SCALE DETAIL OF ENTIRE SITE.
SHEETS SUB-1 OF 8 THROUGH SUB-8 OF 8 WILL BE ON FILE AT THE PLANNING & ECONOMIC DEVELOPMENT DEPARTMENT OF THE TOWN OF LONDONDERRY

Graphic Scale
100' 50' 0' 100' 200' 300' 400'
1" = 100'

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REV.	DATE	DESCRIPTION	DR	CK
1	12-18-25	REVISED PER TOWN REVIEW COMMENTS	JD	MRD

SURVEYOR'S CERTIFICATION

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Michael R Dahlberg 12-22-2025
LICENSED LAND SURVEYOR DATE

STATE OF NEW HAMPSHIRE No. 714 LICENSED LAND SURVEYOR MICHAEL R. DAHLBERG SIGNATURE

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CHRISTOPHER K. DANFORTH No. 077 8/28/2024

OWNER'S SIGNATURE
OWNER OR REPRESENTATIVE 12/22/2025 DATE

Approved by the Londonderry, NH Planning Board for Phase
on Date:
Certified by:

TAX MAP 14 LOT 39-2 AND 39

SUBDIVISION PLAN

LAND OF CODNER
162 LITCHFIELD ROAD
LONDONDERRY, NEW HAMPSHIRE

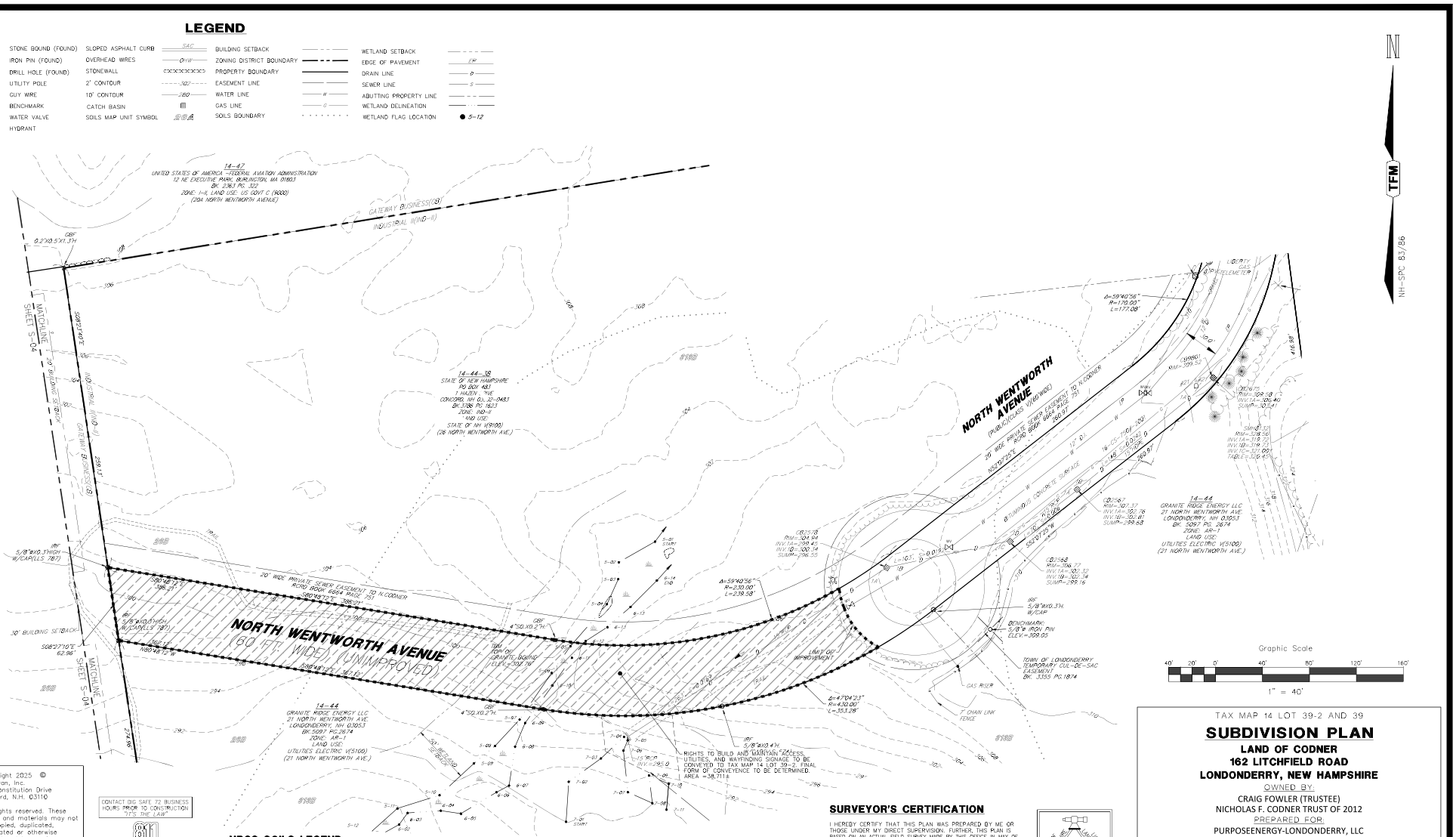
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PO BOX 4345, WINDHAM, NH 03087

SCALE: 1" = 100' **SEPTEMBER 8, 2025**

TFM Civil Engineers, Structural Engineers, Traffic Engineers, Land Surveyors, Landscape Architects, Scientists
48 Constitution Drive, Bedford, NH 03110, Phone (603) 472-4488, Fax (603) 472-9747, www.tfmoran.com

FILE	DR	FB	CK	CADFILE	
18252.01	TNB	2229/2230	MRD	18252-01 Survey	SUB-2 OF 8

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NRCS SOILS LEGEND

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26A	WINDSOR LOAMY SAND, 0 TO 3 PERCENT SLOPES
26B	WINDSOR LOAMY SAND, 3 TO 8 PERCENT SLOPES
26C	WINDSOR LOAMY SAND, 8 TO 15 PERCENT SLOPES
26E	WINDSOR LOAMY SAND, 15 TO 60 PERCENT SLOPES
45B	MONTAUK FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY
715	SCARBORO MUCK, COASTAL LOWLAND, 0 TO 3 PERCENT SLOPES
913B	DEERFIELD LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES

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Michael P. Dahlberg 12-22-2025
LICENSED LAND SURVEYOR DATE

NEW HAMPSHIRE LICENSED LAND SURVEYOR No. 714 MICHAEL P. DAHLBERG SIGNATURE

OWNER'S SIGNATURE

12/22/2025
OWNER OR REPRESENTATIVE DATE

TAX MAP 14 LOT 39-2 AND 39

SUBDIVISION PLAN

LAND OF CODNER
162 LITCHFIELD ROAD
LONDONDERRY, NEW HAMPSHIRE

OWNED BY:
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PREPARED FOR:
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SCALE: 1" = 40' **SEPTEMBER 8, 2025**

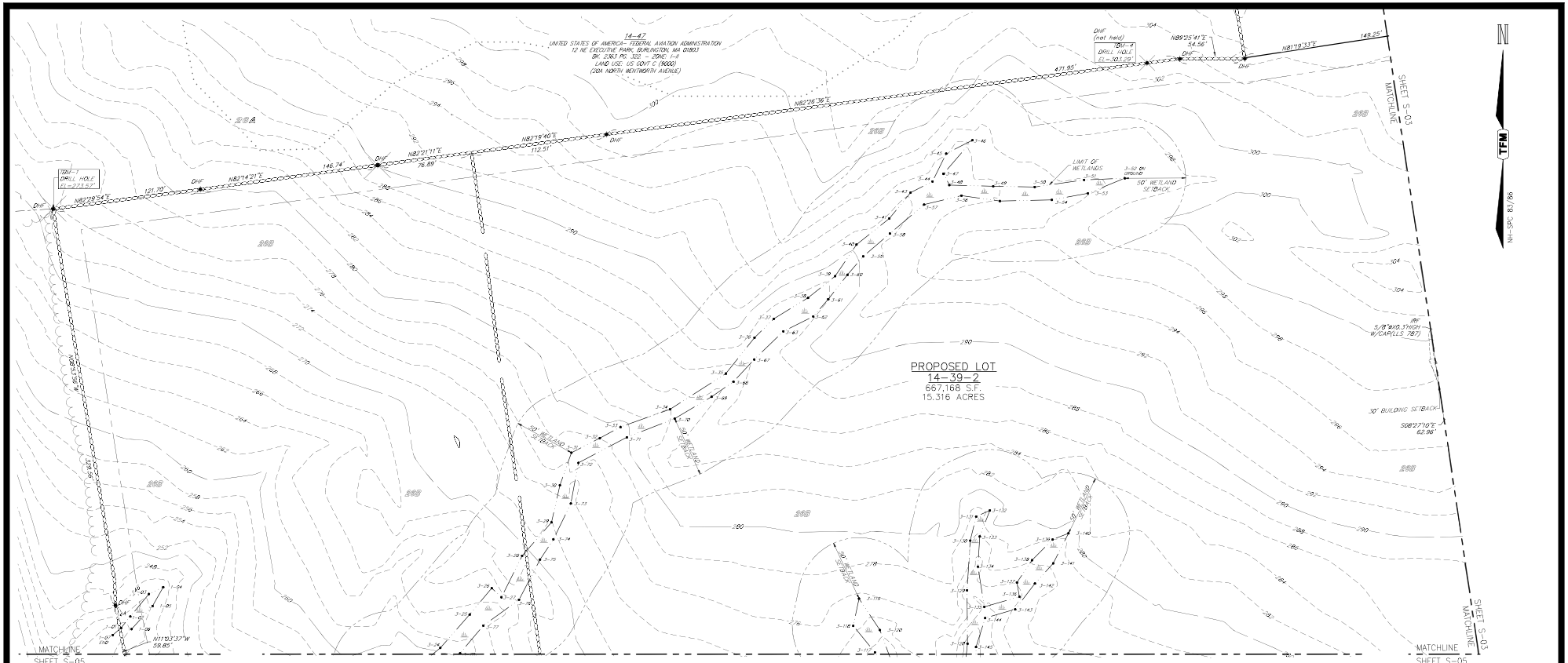
REV.	DATE	DESCRIPTION	DR	CK
1	12-22-25	REVISED PER TOWN REVIEW COMMENTS	JD	MRD

TFM
Civil Engineers
Structural Engineers
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FILE 18252.01 | DR TNB | FB 2229/2230 | CK MRD | CADFILE 18252-01 Survey

SUB-3 OF 8

Dec 22, 2025 - 2:02pm
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LEGEND

STONE BOUND (FOUND)	SLOPED ASPHALT CURB	SAC	BUILDING SETBACK
IRON PIN (FOUND)	OVERHEAD WIRES	OHW	ZONING DISTRICT BOUNDARY
DRILL HOLE (FOUND)	STONEWALL		PROPERTY BOUNDARY
UTILITY POLE	2' CONTOUR	102	EASEMENT LINE
GUY WIRE	10' CONTOUR	280	WATER LINE
BENCHMARK	SOILS BOUNDARY		GAS LINE
WATER VALVE	SOILS MAP UNIT SYMBOL		DRAIN LINE
HYDRANT	WETLAND DELINEATION		SEWER LINE
CATCH BASIN	WETLAND FLAG LOCATION 5-12		ABUTTING PROPERTY LINE
MAILBOX	WETLAND SETBACK		
EDGE OF PAVEMENT	DIRECTION OF DRAINAGE FLOW		

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Graphic Scale

40' 20' 0' 40' 80' 120' 160'

1" = 40'

TAX MAP 14 LOT 39-2 AND 39

SUBDIVISION PLAN

LAND OF CODNER
162 LITCHFIELD ROAD
LONDONDERRY, NEW HAMPSHIRE

OWNED BY:
CRAIG FOWLER (TRUSTEE)
NICHOLAS F. CODNER TRUST OF 2012

PREPARED FOR:
PURPOSEENERGY-LONDONDERRY, LLC
PO BOX 4345, WINDHAM, NH 03087

SCALE: 1" = 40' **SEPTEMBER 8, 2025**

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811 Dig Safe
MA-RI-NH-ALL-WT

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CHRISTOPHER K. DANFORTH — No. 077 — 8/28/2024

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Michael P. Dahlberg — 12-22-2025
LICENSED LAND SURVEYOR — DATE

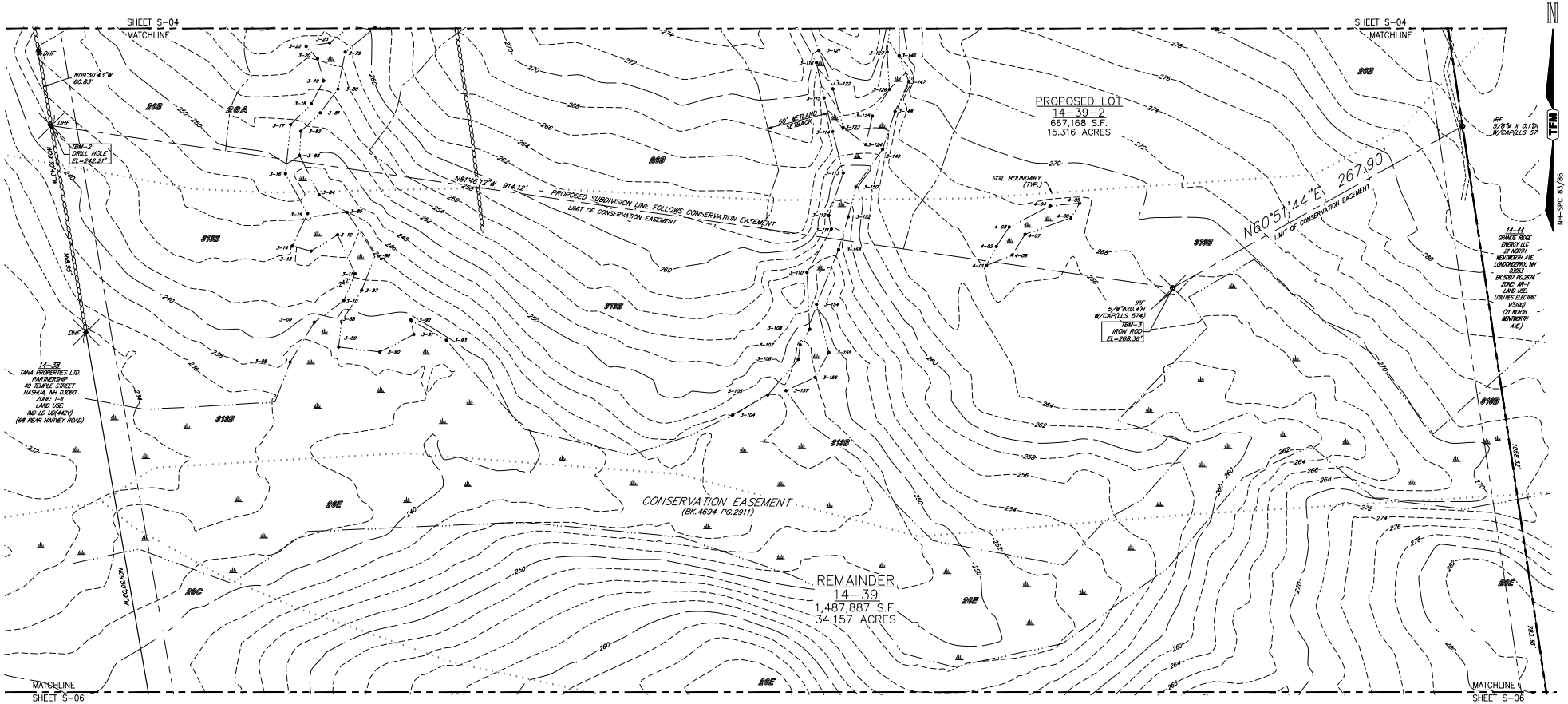
STATE OF NEW HAMPSHIRE — NO. 714 — MICHAEL P. DAHLBERG — LICENSED LAND SURVEYOR — SIGNATURE

OWNER'S SIGNATURE — 12/22/2025
OWNER OR REPRESENTATIVE — DATE

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
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FILE	DR	FB	
18252.01	TNB	2229/2230	SUB-4 OF 8
	CK MRD	CADFILE 18252-01 Survey	

Dec 22, 2025 - 2:10pm
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LEGEND

⊡	STONE BOUND (FOUND)	SLOPED ASPHALT CURB	BUILDING SETBACK
○	IRON PIN (FOUND)	OVERHEAD WIRES	ZONING DISTRICT BOUNDARY
✦	DRILL HOLE (FOUND)	STONEWALL	PROPERTY BOUNDARY
ᵀᵁ	UTILITY POLE	2' CONTOUR	EASEMENT LINE
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	MAILBOX	WETLAND SETBACK	
EP	EDGE OF PAVEMENT	DIRECTION OF DRAINAGE FLOW	

NRCS SOILS LEGEND

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71S	SCARBORO MUCK, COASTAL LOWLAND, 0 TO 3 PERCENT SLOPES
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Michael R Dahlberg 12-22-2025
LICENSED LAND SURVEYOR DATE

STATE OF NEW HAMPSHIRE No. 714 MICHAEL R. DAHLBERG LICENSED LAND SURVEYOR
Michael R Dahlberg
SIGNATURE

OWNER'S SIGNATURE
OWNER OR REPRESENTATIVE 12-22-2025 DATE

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Graphic Scale
40' 20' 0' 40' 80' 120' 160'
1" = 40'

WETLAND NOTE

THE WETLANDS DEPICTED SOUTH OF THE PROPOSED LOT LINE WITHIN THE EXISTING CONSERVATION EASEMENT WERE DIGITIZED FROM PLANS OF RECORD PREPARED FOR THE STATE OF NEW HAMPSHIRE AND RECORDED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS AS PLAN #35156 SHEET 26.

TAX MAP 14 LOT 39-2 AND 39

SUBDIVISION PLAN

LAND OF CODNER
162 LITCHFIELD ROAD
LONDONDERRY, NEW HAMPSHIRE

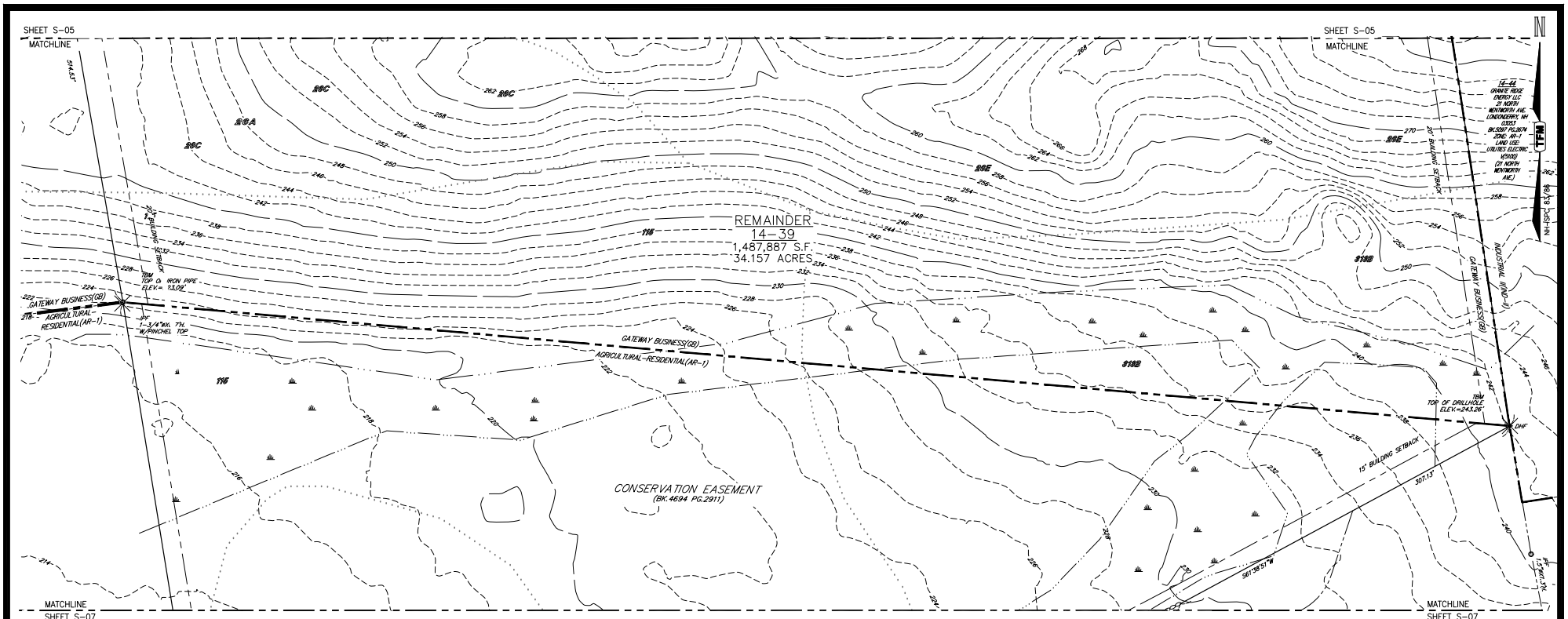
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26C	WINDSOR LOAMY SAND, 8 TO 15 PERCENT SLOPES
26E	WINDSOR LOAMY SAND, 15 TO 60 PERCENT SLOPES
46B	MONTAUK FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY
116	SCARBORO MUCK, COASTAL LOWLAND, 0 TO 3 PERCENT SLOPES
518B	DEERFIELD LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES

Graphic Scale

40' 20' 0' 40' 80' 120' 160'

1" = 40'

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CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION "IT'S THE LAW"

811 Dig Safe
NH-ME-VT-RI-VT

REV.	DATE	DESCRIPTION	DR	CK
1	12-22-25	REVISED PER TOWN REVIEW COMMENTS	JD	MRD

WETLAND NOTE

THE WETLANDS DEPICTED SOUTH OF THE PROPOSED LOT LINE WITHIN THE EXISTING CONSERVATION EASEMENT WERE DIGITIZED FROM PLANS OF RECORD PREPARED FOR THE STATE OF NEW HAMPSHIRE AND RECORDED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS AS PLAN #35156 SHEET 26.

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION. FURTHER, THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE IN MAY OF 2024. SAID SURVEY HAS AN ERROR OF CLOSURE OF NOT LESS ACCURACY THAN ONE PART IN TEN THOUSAND (1:10,000).

Michael R Dahlberg 12-22-2025
LICENSED LAND SURVEYOR DATE

STATE OF NEW HAMPSHIRE — No. 714 — MICHAEL R. DAHLBERG — LICENSED LAND SURVEYOR

Michael R. Dahlberg
SIGNATURE

OWNER'S SIGNATURE

OWNER OR REPRESENTATIVE 12-22-2025 DATE

TAX MAP 14 LOT 39-2 AND 39

SUBDIVISION PLAN

LAND OF CODNER
162 LITCHFIELD ROAD
LONDONDERRY, NEW HAMPSHIRE

OWNED BY:
CRAIG FOWLER (TRUSTEE)
NICHOLAS F. CODNER TRUST OF 2012

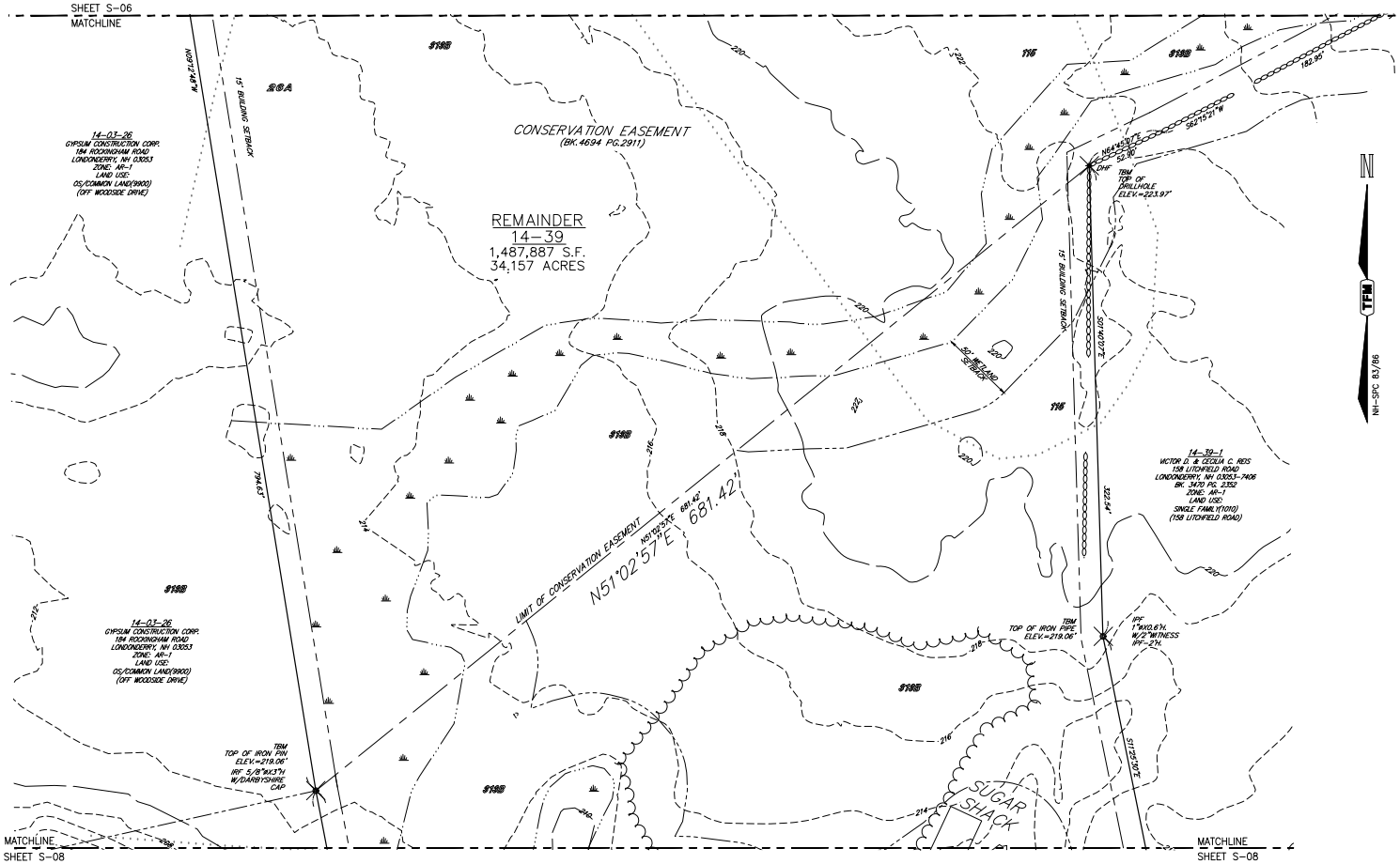
PREPARED FOR:
PURPOSEENERGY-LONDONDERRY, LLC
PO BOX 4345, WINDHAM, NH 03087

SCALE: 1" = 40' **SEPTEMBER 8, 2025**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	FB		
18252.01	TNB	2229/2230	SUB-6 OF 8	
	CK MRD	CADFILE 18252-01 Survey		

Dec 22, 2025 - 7:02pm
P:\TFM Projects\18252 Litchfield Rd - Londonderry, NH\Carlson Survey\Dwgs\18252-02 SUBDIVISION PLAN.dwg



LEGEND

- STONE BOUND (FOUND)
- IRON PIN (FOUND)
- DRILL HOLE (FOUND)
- UTILITY POLE
- GUY WIRE
- BENCHMARK
- WATER VALVE
- HYDRANT
- CATCH BASIN
- MAIL BOX
- DIRECTION OF DRAINAGE FLOW
- EP — EDGE OF PAVEMENT
- SAC — SLOPED ASPHALT CURB
- OHW — OVERHEAD WIRES
- STONEWALL
- 302 — 2' CONTOUR
- 280 — 10' CONTOUR
- SOILS BOUNDARY
- SOILS MAP UNIT SYMBOL
- WETLAND DELINEATION
- 5-12 — WETLAND FLAG LOCATION
- WETLAND SETBACK
- BUILDING SETBACK
- ZONING DISTRICT BOUNDARY
- PROPERTY BOUNDARY
- EASEMENT LINE
- W — WATER LINE
- G — GAS LINE
- D — DRAIN LINE
- S — SEWER LINE
- ABUTTING PROPERTY LINE

NRCS SOILS LEGEND

SOILS INFORMATION SHOWN HEREON IS GRAPHICALLY REPRODUCED FROM THE USDA NATURAL RESOURCES CONSERVATION SERVICE, NATIONAL COOPERATIVE SOIL SURVEY OF ROCKINGHAM COUNTY, NEW HAMPSHIRE.

26A	WINDSOR LOAMY SAND, 0 TO 3 PERCENT SLOPES
26B	WINDSOR LOAMY SAND, 3 TO 8 PERCENT SLOPES
26C	WINDSOR LOAMY SAND, 8 TO 15 PERCENT SLOPES
26E	WINDSOR LOAMY SAND, 15 TO 60 PERCENT SLOPES
45B	MONTAUK FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY
115	SCARBORO MUCK, COASTAL LOWLAND, 0 TO 3 PERCENT SLOPES
918B	DEERFIELD LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES

Graphic Scale

40' 20' 0' 40' 80' 120' 160'

1" = 40'

TAX MAP 14 LOT 39-2 AND 39

SUBDIVISION PLAN

LAND OF CODNER
162 LITCHFIELD ROAD
LONDONDERRY, NEW HAMPSHIRE

OWNED BY:
CRAIG FOWLER (TRUSTEE)
NICHOLAS F. CODNER TRUST OF 2012

PREPARED FOR:
PURPOSEENERGY-LONDONDERRY, LLC
PO BOX 4345, WINDHAM, NH 03087

SCALE: 1" = 40' **SEPTEMBER 8, 2025**

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MAINE-VT-NH-VT

REV.	DATE	DESCRIPTION	DR	CK
1	12-22-25	REVISED PER TOWN REVIEW COMMENTS	JD	MRD

WETLAND NOTE

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Michael R Dahlberg 12-22-2025
LICENSED LAND SURVEYOR DATE

STATE OF NEW HAMPSHIRE — No. 714 — MICHAEL R. DAHLBERG — LICENSED LAND SURVEYOR
Michael R Dahlberg
SIGNATURE

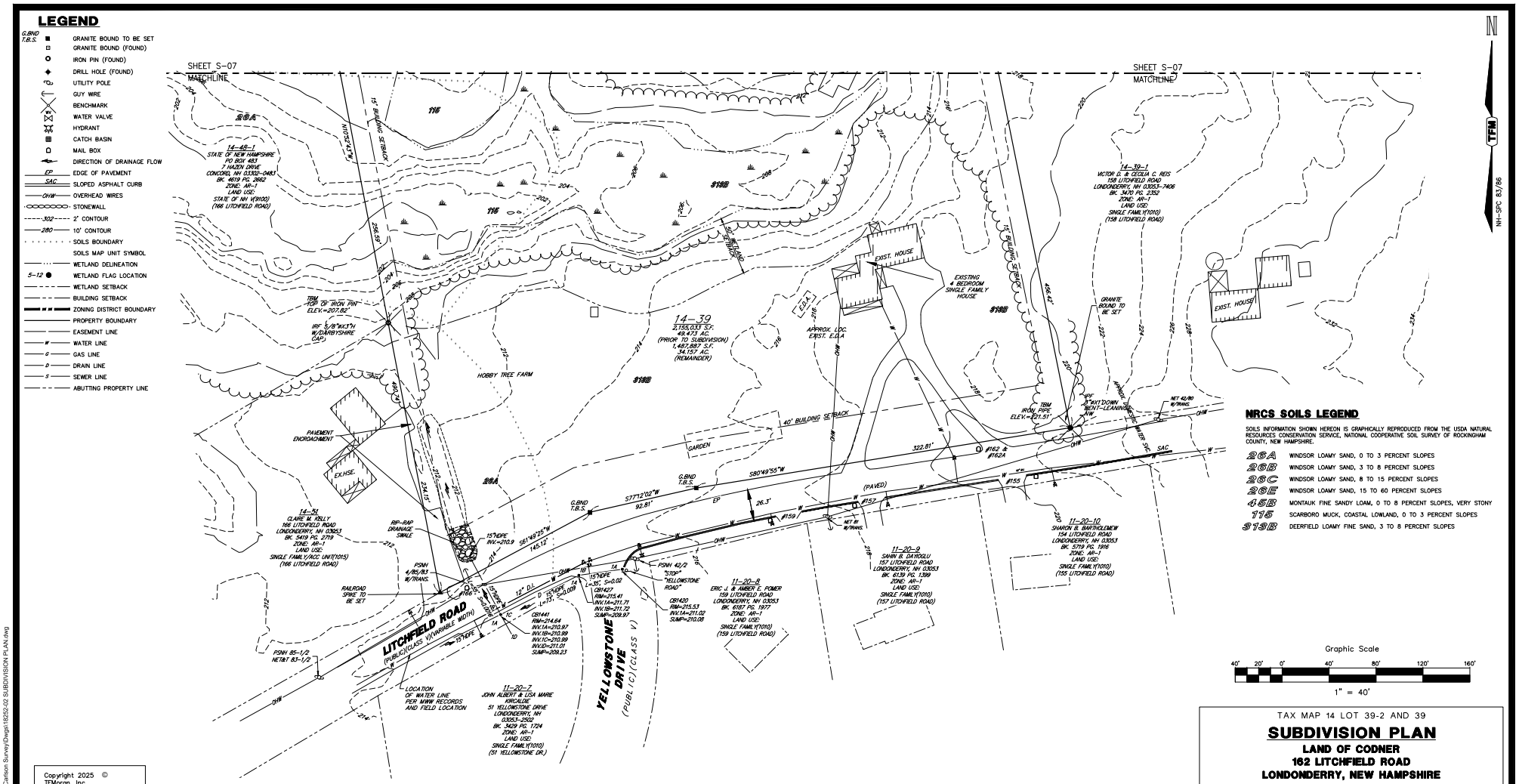
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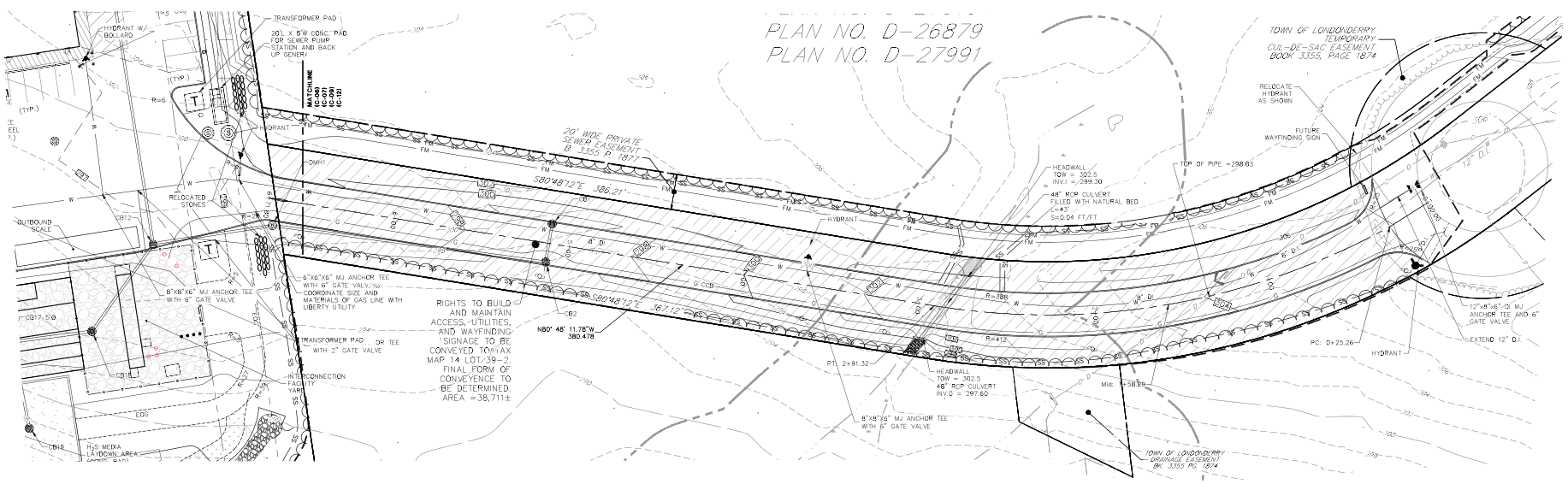
OWNER OR REPRESENTATIVE 12-22-2025 DATE

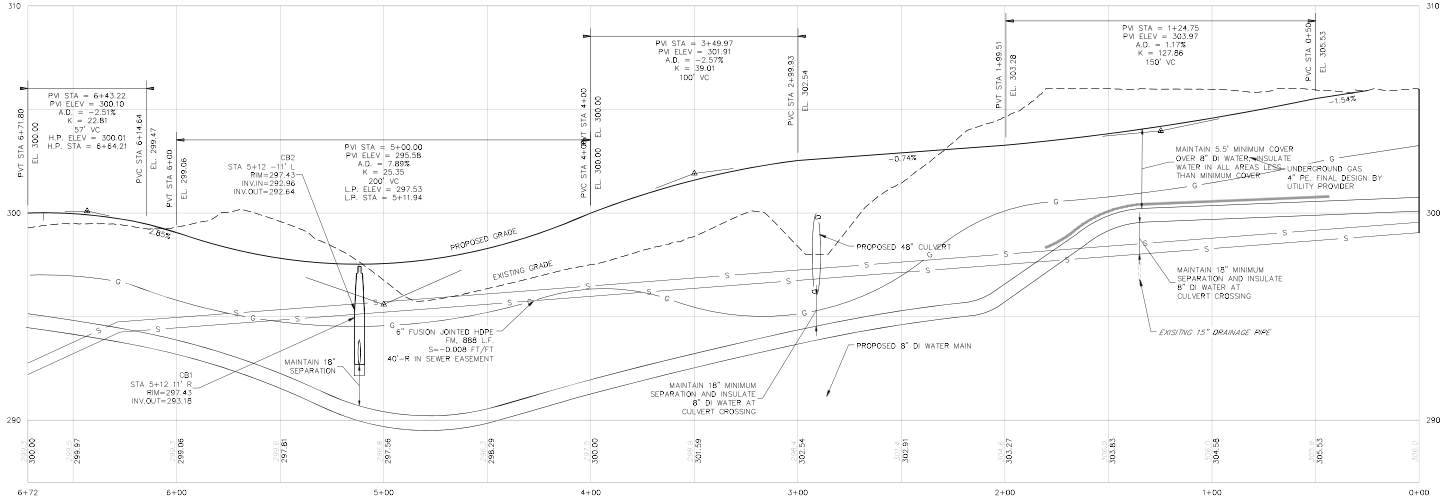
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FILE	18252.01	DR	TNB	FB	2229/2230	SUB-7 OF 8
		CK	MRD	CADFILE	18252-01 Survey	

Dec 22, 2025 - 7:20pm
P:\TFM Projects\18252.01 Litchfield Rd - Londonderry, NH\Carlson Survey\Dwgs\18252-02 SUBDIVISION PLAN.dwg


LEGEND
G.BND GRANITE BOUND TO BE SET
T.B.S. GRANITE BOUND (FOUND)
IRON PIN (FOUND)
DRILL HOLE (FOUND)
UTILITY POLE
GUY WIRE
BENCHMARK
WATER VALVE
HYDRANT
CATCH BASIN
MAIL BOX
DIRECTION OF DRAINAGE FLOW
EP EDGE OF PAVEMENT
SAC SLOPED ASPHALT CURB
OHW OVERHEAD WIRES
STONEWALL
302 2' CONTOUR
280 10' CONTOUR
SOILS BOUNDARY
SOILS MAP UNIT SYMBOL
WETLAND DELINEATION
5-12 WETLAND FLAG LOCATION
WETLAND SETBACK
BUILDING SETBACK
ZONING DISTRICT BOUNDARY
PROPERTY BOUNDARY
EASEMENT LINE
W WATER LINE
G GAS LINE
D DRAIN LINE
S SEWER LINE
ABUTTING PROPERTY LINE
SHEET S-07 MATCHLINE
SHEET S-07 MATCHLINE
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TFM
NH-SPC 83/86
14-42-1 STATE OF NEW HAMPSHIRE PO BOX 483 7 HAZEN DRIVE CONCORD, NH 03302-0483 BK. 4619 PG. 2662 ZONE: AR-1 LAND USE: STATE OF NH V(9120) (166 LITCHFIELD ROAD)
14-39 2,155,033 S.F. 49.473 AC. (PRIOR TO SUBDIVISION) 1,487,887 S.F. 34.157 AC. (REMAINDER)
14-39-1 VICTOR D. & CECILIA C. REIS 158 LITCHFIELD ROAD LONDONDERRY, NH 03053-7406 BK. 3410 PG. 2352 ZONE: AR-1 LAND USE: SINGLE FAMILY(1010) (158 LITCHFIELD ROAD)
14-51 CLAIRE M. KELLY 168 LITCHFIELD ROAD LONDONDERRY, NH 03053 BK. 5419 PG. 2719 ZONE: AR-1 LAND USE: SINGLE FAMILY/ACC UNIT(1015) (166 LITCHFIELD ROAD)
11-20-10 SHARON B. BARTHOLOMEW 154 LITCHFIELD ROAD LONDONDERRY, NH 03053 BK. 5719 PG. 1916 ZONE: AR-1 LAND USE: SINGLE FAMILY(1010) (155 LITCHFIELD ROAD)
11-20-9 SAHIN B. DAYBOGU 157 LITCHFIELD ROAD LONDONDERRY, NH 03053 BK. 6139 PG. 1399 ZONE: AR-1 LAND USE: SINGLE FAMILY(1010) (157 LITCHFIELD ROAD)
11-20-8 ERIC J. & AMBER C. POMER 159 LITCHFIELD ROAD LONDONDERRY, NH 03053 BK. 6187 PG. 1977 ZONE: AR-1 LAND USE: SINGLE FAMILY(1010) (159 LITCHFIELD ROAD)
11-20-7 JOHN ALBERT & LISA MARIE KIRCALDIE 51 YELLOWSTONE DRIVE LONDONDERRY, NH 03053-2522 BK. 3429 PG. 1724 ZONE: AR-1 LAND USE: SINGLE FAMILY(1010) (51 YELLOWSTONE DR.)
EXISTING 4 BEDROOM SINGLE FAMILY HOUSE
EXIST. HOUSE
EXIST. HOUSE
APPROX. LOC. EXIST. E.O.A.
HOBBY TREE FARM
GARDEN
PAVEMENT ENCROACHMENT
EX.HSE.
RIP-RAP DRAINAGE SWALE
RAILROAD SPIKE TO BE SET
TBM "CUT" ON IRON PIN ELEV.=207.82'
IRF 5/8"#K37Y W/CAP(BRYSHIRE CAP)
TBM IRON PIPE ELEV.=201.51'
IRF "KIT"DOWN BENT-LEANING" NW
GRANITE BOUND TO BE SET
40' BUILDING SETBACK
15' BUILDING SETBACK
15' BUILDING SETBACK
S77°12'02"W 92.81'
S80°49'55"W 322.81'
S61°49'25"W 145.12'
N12°10'35"W 254.15'
N80°49'25"E 490.74'
N78°49'25"E 456.42'
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PROPOSED DRIVEWAY

HORIZONTAL SCALE 1"=30'
VERTICAL SCALE 1"=3'

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DRIVEWAY PLAN & PROFILE

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: 1" = 30' H / 1" = 3' V **SEPTEMBER 8, 2025**

REV	DATE	DESCRIPTION	DR	CK
2	11/3/2025	TOWN SEWER COMMENTS	JD	NG
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	FB		
18252-02	CK	CADFILE	18252-02 SITE PLAN	C-13

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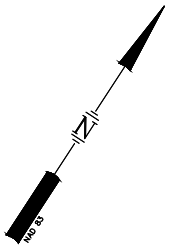
STATE OF NEW HAMPSHIRE — NICHOLAS C. GOLON — No. 14086 — LICENSED PROFESSIONAL ENGINEER

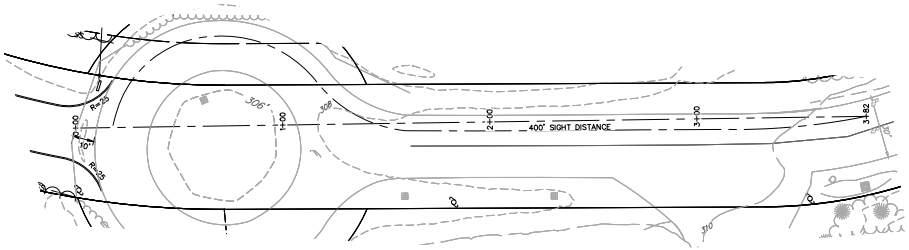
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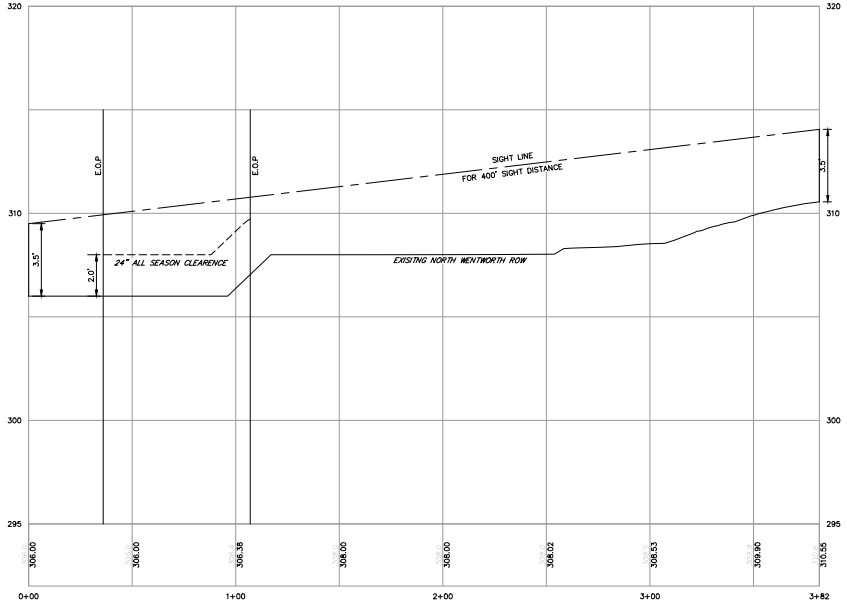
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NOTES

1. POSTED SPEED LIMIT ON NORTH WENTWORTH AVE. IS 30 MPH.
2. TOWN OF LONDONDERRY SIGHT DISTANCE CALCULATIONS:
   SUBDIVISION REGULATIONS SECTION 3.09.F.2 & EHXIBIT D3
   MINIMUM ALL SEASON SIGHT DISTANCE = 365-FEET (NON-RESIDNETIAL) WHICH IS EXCEEDED.







SITE DISTANCE

HORIZONTAL SCALE 1"=30'
30 15 0 30
VERTICAL SCALE 1"=3'
3 0 3

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

SIGHT DISTANCE

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053
OWNED BY
PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE. 1" = 30' H / 1" = 3' V **SEPTEMBER 8, 2025**

STATE OF NEW HAMPSHIRE — NICHOLAS C. GOLON No. 14086 — LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
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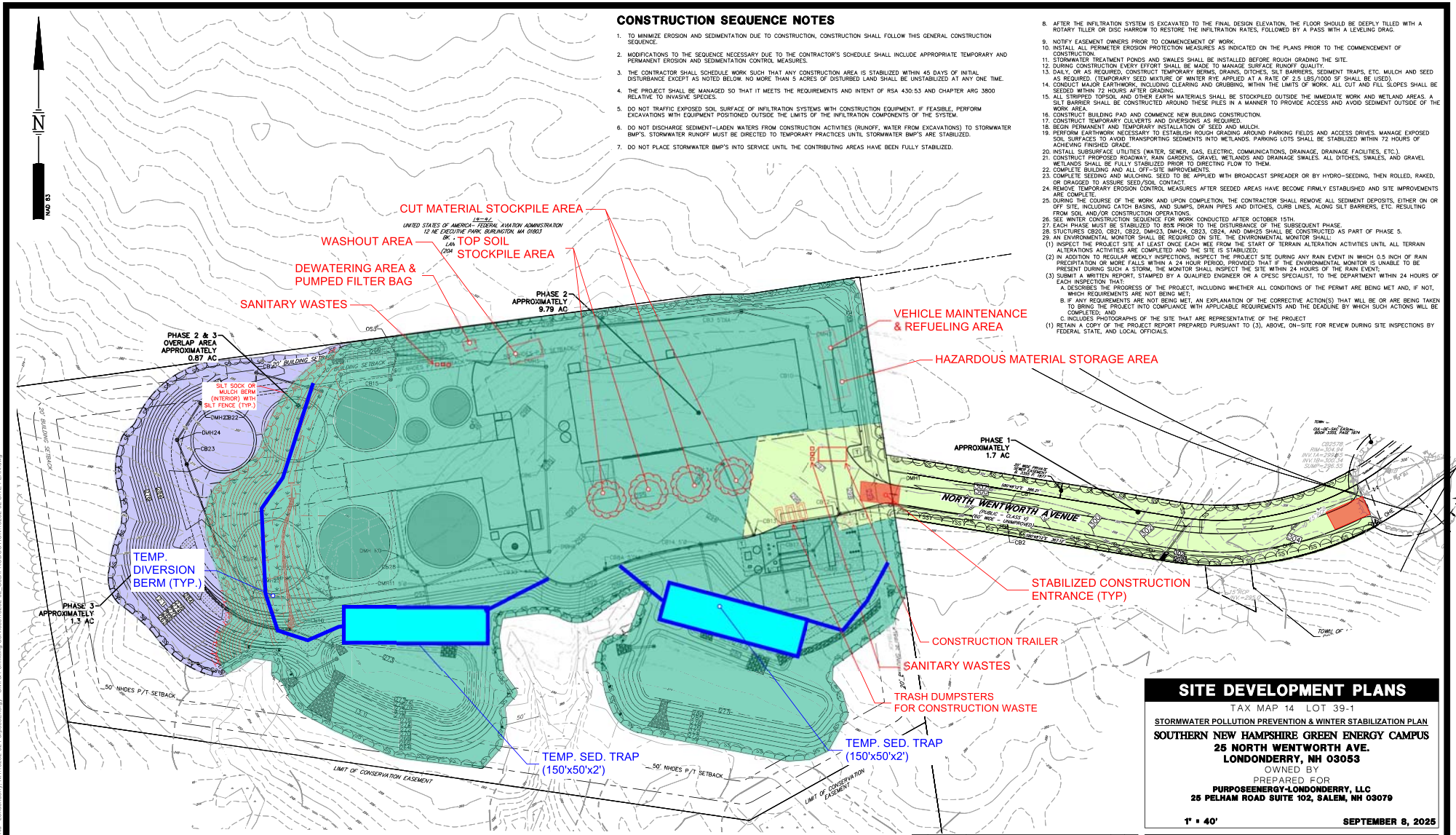
FILE	DR		FB		
18252-02	CK		CADFILE	18252-02 SITE PLAN	SD-1

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CONSTRUCTION SEQUENCE NOTES

1. TO MINIMIZE EROSION AND SEDIMENTATION DUE TO CONSTRUCTION, CONSTRUCTION SHALL FOLLOW THIS GENERAL CONSTRUCTION SEQUENCE.
2. MODIFICATIONS TO THE SEQUENCE NECESSARY DUE TO THE CONTRACTOR'S SCHEDULE SHALL INCLUDE APPROPRIATE TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES.
3. THE CONTRACTOR SHALL SCHEDULE WORK SUCH THAT ANY CONSTRUCTION AREA IS STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE EXCEPT AS NOTED BELOW. NO MORE THAN 5 ACRES OF DISTURBED LAND SHALL BE UNSTABILIZED AT ANY ONE TIME.
4. THE PROJECT SHALL BE MANAGED SO THAT IT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER ARC 3800 RELATIVE TO INVASIVE SPECIES.
5. DO NOT TRAFFIC EXPOSED SOIL SURFACE OF INFILTRATION SYSTEMS WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.
6. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO STORMWATER BMP'S. STORMWATER RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMP'S ARE STABILIZED.
7. DO NOT PLACE STORMWATER BMP'S INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
8. AFTER THE INFILTRATION SYSTEM IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE THE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
9. NOTIFY EASEMENT OWNERS PRIOR TO COMMENCEMENT OF WORK.
10. INSTALL ALL PERIMETER EROSION PROTECTION MEASURES AS INDICATED ON THE PLANS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
11. STORMWATER TREATMENT PONDS AND SWALES SHALL BE INSTALLED BEFORE ROUGH GRADING THE SITE.
12. DURING CONSTRUCTION EVERY EFFORT SHALL BE MADE TO MANAGE SURFACE RUNOFF QUALITY.
13. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT BARRIERS, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED. (TEMPORARY SEED MIXTURE OF WINTER RYE APPLIED AT A RATE OF 2.5 LBS/1000 SF SHALL BE USED).
14. CONDUCT MAJOR EARTHWORK, INCLUDING CLEARING AND GRUBBING, WITHIN THE LIMITS OF WORK. ALL CUT AND FILL SLOPES SHALL BE SEEDED WITHIN 72 HOURS AFTER GRADING.
15. ALL STRIPPED TOPSOIL AND OTHER EARTH MATERIALS SHALL BE STOCKPILED OUTSIDE THE IMMEDIATE WORK AND WETLAND AREAS. A SILT BARRIER SHALL BE CONSTRUCTED AROUND THESE PILES IN A MANNER TO PROVIDE ACCESS AND AVOID SEDIMENT OUTSIDE OF THE WORK AREA.
16. CONSTRUCT BUILDING PAD AND COMMENCE NEW BUILDING CONSTRUCTION.
17. CONSTRUCT TEMPORARY CULVERTS AND DIVERSIONS AS REQUIRED.
18. BEGIN PERMANENT AND TEMPORARY INSTALLATION OF SEED AND MULCH.
19. PERFORM EARTHWORK NECESSARY TO ESTABLISH ROUGH GRADING AROUND PARKING FIELDS AND ACCESS DRIVES. MANAGE EXPOSED SOIL SURFACES TO AVOID TRANSPORTING SEDIMENTS INTO WETLANDS. PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
20. INSTALL SUBSURFACE UTILITIES (WATER, SEWER, GAS, ELECTRIC, COMMUNICATIONS, DRAINAGE, DRAINAGE FACILITIES, ETC.).
21. CONSTRUCT PROPOSED ROADWAY, RAIN GARDENS, GRAVEL WETLANDS AND DRAINAGE SWALES. ALL DITCHES, SWALES, AND GRAVEL WETLANDS SHALL BE FULLY STABILIZED PRIOR TO DIRECTING FLOW TO THEM.
22. COMPLETE BUILDING AND ALL OFF-SITE IMPROVEMENTS.
23. COMPLETE SEEDING AND MULCHING. SEED TO BE APPLIED WITH BROADCAST SPREADER OR BY HYDRO-SEEDING, THEN ROLLED, RAKED, OR DRAGGED TO ASSURE SEED/SOIL CONTACT.
24. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDED AREAS HAVE BECOME FIRMLY ESTABLISHED AND SITE IMPROVEMENTS ARE COMPLETE.
25. DURING THE COURSE OF THE WORK AND UPON COMPLETION, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT DEPOSITS, EITHER ON OR OFF SITE, INCLUDING CATCH BASINS, AND SUMPS, DRAIN PIPES AND DITCHES, CURB LINES, ALONG SILT BARRIERS, ETC. RESULTING FROM SOIL AND/OR CONSTRUCTION OPERATIONS.
26. SEE WINTER CONSTRUCTION SEQUENCE FOR WORK CONDUCTED AFTER OCTOBER 15TH.
27. EACH PHASE MUST BE STABILIZED TO 85% PRIOR TO THE DISTURBANCE OF THE SUBSEQUENT PHASE.
28. STUCTURES CB20, CB21, CB22, DMH23, DMH24, CB23, CB24, AND DMH25 SHALL BE CONSTRUCTED AS PART OF PHASE 5.
29. AN ENVIRONMENTAL MONITOR SHALL BE REQUIRED ON SITE. THE ENVIRONMENTAL MONITOR SHALL:
   (1) INSPECT THE PROJECT SITE AT LEAST ONCE EACH WEE FROM THE START OF TERRAIN ALTERATION ACTIVITIES UNTIL ALL TERRAIN ALTERATIONS ACTIVITIES ARE COMPLETED AND THE SITE IS STABILIZED;
   (2) IN ADDITION TO REGULAR WEEKLY INSPECTIONS, INSPECT THE PROJECT SITE DURING ANY RAIN EVENT IN WHICH 0.5 INCH OF RAIN PRECIPITATION OR MORE FALLS WITHIN A 24 HOUR PERIOD, PROVIDED THAT IF THE ENVIRONMENTAL MONITOR IS UNABLE TO BE PRESENT DURING SUCH A STORM, THE MONITOR SHALL INSPECT THE SITE WITHIN 24 HOURS OF THE RAIN EVENT;
   (3) SUBMIT A WRITTEN REPORT, STAMPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, TO THE DEPARTMENT WITHIN 24 HOURS OF EACH INSPECTION THAT:
      A. DESCRIBES THE PROGRESS OF THE PROJECT, INCLUDING WHETHER ALL CONDITIONS OF THE PERMIT ARE BEING MET AND, IF NOT, WHICH REQUIREMENTS ARE NOT BEING MET;
      B. IF ANY REQUIREMENTS ARE NOT BEING MET, AN EXPLANATION OF THE CORRECTIVE ACTION(S) THAT WILL BE OR ARE BEING TAKEN TO BRING THE PROJECT INTO COMPLIANCE WITH APPLICABLE REQUIREMENTS AND THE DEADLINE BY WHICH SUCH ACTIONS WILL BE COMPLETED; AND
      C. INCLUDES PHOTOGRAPHS OF THE SITE THAT ARE REPRESENTATIVE OF THE PROJECT
   (1) RETAIN A COPY OF THE PROJECT REPORT PREPARED PURSUANT TO (3), ABOVE, ON-SITE FOR REVIEW DURING SITE INSPECTIONS BY FEDERAL STATE, AND LOCAL OFFICIALS.

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-1

STORMWATER POLLUTION PREVENTION & WINTER STABILIZATION PLAN

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY
PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

1" = 40' **SEPTEMBER 8, 2025**

REV	DATE	DESCRIPTION	BY	CK
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	FB		
18252-02	CK	CADFILE	18252-02 SITE PLAN	PH-1

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48 Constitution Drive, Bedford, N.H. 03110

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This plan is not effective unless signed by a duly authorized officer of TFMoran, Inc.

Dec 08, 2025 - 12:32pm
F:\TFM Projects\18252 Litchfield Rd, Londonderry, NH\18252-02\ Purposeenergy - Civil & Permitting Services\18252-02_CIVIL\PRODUCTION\18252-02 SITE PLAN.dwg

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS

25 NORTH WENTWORTH AVE. LONDONDERRY, NEW HAMPSHIRE

GENERAL INFORMATION

OWNER
MAP 14 LOT 39
CODNER NICHOLAS F TRUST 2012
162 LITCHFIELD ROAD
LONDONDERRY, NH 03053
603-432-1100

APPLICANT
PUPROSEENERGY-LONDONDERRY, LLC
C/O SEAN O'NEIL
25 PELHAM ROAD, SUITE 102
SALEM, NH 03079
6172029156

PREPARED FOR
PUPROSEENERGY-LONDONDERRY, LLC
C/O SEAN O'NEIL
25 PELHAM ROAD, SUITE 102
SALEM, NH 03079
6172029156

RESOURCE LIST

TOWN MANAGER
268B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 151
SHAUN MULHOLLAND, TOWN MANAGER

PLANNING & ECONOMIC DEVELOPMENT
268B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 149
KELLIE CARON, ASST. TOWN MANAGER, DIRECTOR OF ECONOMIC DEVELOPMENT

BUILDING, HEALTH, ZONING AND CODE ENFORCEMENT
268B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 161
NICK CODNER, CHIEF BUILDING INSPECTOR & CODE ENFORCEMENT OFFICER

HEALTH DIVISION
268B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 151

PUBLIC WORKS & ENGINEERING
268B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 139
DAVE WHOLLEY, DIRECTOR PUBLIC WORKS & MUNICIPAL FACILITIES
JOHN TROTTIER, DIRECTOR OF ENGINEERING & ENVIRONMENTAL SERVICES

HIGHWAY DIVISION
268B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 152
DAVE WHOLLEY, DIRECTOR PUBLIC WORKS & MUNICIPAL FACILITIES

POLICE DEPARTMENT
268A MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1118
KIM ALAN BERNARD, CHIEF OF POLICE

FIRE DEPARTMENT
280 MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1124
PHIL LEBLANC, ACTING CHIEF

NHDES AOT
29 HAZEN DRIVE
CONCORD, NH 03302-0095
(603) 271-2303
AMY CLARK, PE, AOT SUPERVISOR

ASSOCIATED PROFESSIONALS

GEOTECHNICAL SERVICES
ARIES ENGINEERING
104 PLEASANT STREET
CONCORD, NH 03301
(603) 226-0374
GEORGE C. HOLT, P.G.

TRAFFIC ENGINEER
TFMORAN, INC.
48 CONSTITUTION DRIVE
BEDFORD, NH 03110
ROBERT DUVAL, PE, PRINCIPAL

WETLAND SCIENTIST
TFMORAN, INC.
48 CONSTITUTION DRIVE
BEDFORD, NH 03110
CHRISTOPHER K. DANFORTH, CWS

SOIL SCIENTIST
BAG LAND CONSULTANTS
43 ROCKINGHAM STREET
CONCORD, NH 03301
BRUCE A. GILDAY, CSS

ABUTTERS

R014-039-0
NICHOLAS F CODNER TRUST 2012
162 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R014-047-0
US OF AMERICA FED AVIATION ADMIN
12 NE EXECUTIVE PARK
BURLINGTON, MA 01803

R01-044-38
STATE OF NEW HAMPSHIRE
PO BOX 483, 1 HAZEN DRIVE
CONCORD, NH 03302-0483

R014-44-0
GRANITE RIDGE ENERGY, LLC
21 NORTH WENTWORTH AVE
LONDONDERRY, NH 03053

R014 LOTS 044-3 & 040-0
TRACIE L & BRUCE A LEMIEUX
154 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R014-039-12
VICTOR D & CECILIA C REIS
158 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R011-020-13
RICHARD A BELANGER
149 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R011-020-12
NICOLE M THOMAS
151 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R011-020-11JUSTIN M QUISH
153 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R011-020-10
SHARON B BARTHOLOMEW
155 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R011-020-9
SAHIN B DAYIOGLU
157 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R011-020-8
ERIC J AND AMBER E POMER
159 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R011-020-7
JOHN ALBERT & LISA MARIE KIRCALDIE
51 YELLOWSTONE ROAD
LONDONDERRY, NH 03053-2502

R011-020-6
MICHAEL A ST. PIERRE
163 LITCHFIELD ROAD
LONDONDERRY, NH 03053-7408

R011-020-5
CLARK FAMILY TRUST OF 2011
165 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R011-015-0
ERICK MENDONSA
167 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R014-051-0
CLAIRE M KELLY
166 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R014-050-0
BRUCE ALLAN & CINDY LOUISE GOODWIN
168 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R014-007-0
MICHAEL W SIRACUSE III
170 LITCHFIELD ROAD
LONDONDERRY, NH 03053

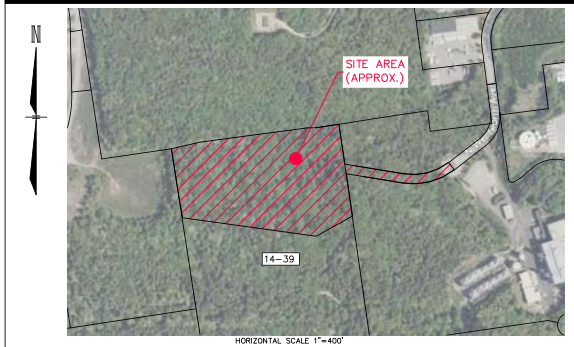
R014-005-0
ARIANNA O'NEIL
172 LITCHFIELD ROAD
LONDONDERRY, NH 03053

R014-048-1
STATE OF NEW HAMPSHIRE
PO BOX 483
CONCORD, NH 03302-0483

R-014-003-26
GYPSUM CONSTRUCTION CORP.
184 ROCKINGHAM ROAD
LONDONDERRY, NH 03053

R014-038-0
TANA PROPERTIES LTD.
PARTNERSHIP
40 TEMPLE STREET
NASHUA, NH 03060

LOCATION PLAN



INDEX OF SHEETS

SHEET	SHEET TITLE
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C-02	NOTES & LEGEND
C-03	NOTES
S-01 TO S-04	EXISTING CONDITIONS PLANS
C-04	SITE PREPARATION & DEMOLITION PLAN
C-05	OVERALL SITE PLAN
C-06	SITE LAYOUT PLAN
C-07	GRADING & DRAINAGE PLAN
C-08	DRAINAGE STRUCTURE TABLES
C-09	UTILITY PLAN
C-10	SITE SEWERS PLAN AND PROFILE
C-11	OFFSITE INFRASTRUCTURE PLAN
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C-17	LANDSCAPE PLAN
PH-1	AOT PHASING PLAN
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REFERENCE PLANS BY ASSOCIATED PROFESSIONALS	
L-01	LIGHTING PLAN
A-1-3	ARCHITECTURAL ELEVATIONS

PERMITS/APPROVALS

	NUMBER	APPROVED	EXPIRES
TOWN PLANNING BOARD SUBDIVISION APPROVAL			
TOWN PLANNING BOARD SITE PLAN REVIEW APPROVAL			
TOWN PLANNING BOARD DRIVEWAY PERMIT			
TOWN PLANNING BOARD CUP (WETLAND BUFFERS)			
TOWN PLANNING BOARD CUP (FRONTAGE)			
TOWN STORMWATER PERMIT			
TOWN SEWER DISCHARGE PERMIT			
TOWN INDUSTRIAL DISCHARGE PERMIT			
TOWN INDUSTRIAL DISCHARGE PERMIT			
US EPA CGP			
NHDES SOLID WASTE PERMIT			
NHDES INDUSTRIAL WASTEWATER DICHARGE PERMIT			
NHDES INDUSTRIAL WASTEWATER DICHARGE PERMIT			
NHDES AOT PERMIT			
NHDES SEWER CONNECTION PERMIT			
NHDES WETLAND PERMIT (MAJOR)			
NH NHB DATA CHECK	NHB24-1680	6/11/24	6/11/25
NH DHR RPR	2025PR00341	3/27/25	
FAA			

NHF&G AOT PERMIT CONDITIONS

1. BLANDING'S TURTLE (STATE ENDANGERED), EASTERN HOGNOSE SNAKE (STATE ENDANGERED), NEW ENGLAND COTTONTAIL (STATE ENDANGERED), SMOOTH GREEN SNAKE (SPECIAL CONCERN), SPOTTED TURTLE (STATE THREATENED), northern BLACK RACER (STATE THREATENED) OCCUR WITHIN THE VICINITY OF THE PROJECT AREA. ALL OPERATORS AND PERSONNEL WORKING ON OR ENTERING THE SITE SHALL BE MADE AWARE OF THE POTENTIAL PRESENCE OF THESE SPECIES AND SHALL BE PROVIDED FLYERS THAT HELP TO IDENTIFY THESE SPECIES, ALONG WITH NHFG CONTACT INFORMATION. SEE FLYERS ON PLAN SHEET D-17.
2. RARE SPECIES INFORMATION (E.G. IDENTIFICATION, OBSERVATION AND REPORTING OF OBSERVATIONS, WHEN TO CONTACT NHFG IMMEDIATELY AND NHFG CONTACT INFORMATION) SHALL BE COMMUNICATED DURING MORNING TAILGATE MEETINGS PRIOR TO WORK COMMENCEMENT WHILE THE PROJECT IS UNDER ACTIVE CONSTRUCTION. SEE FLYERS ON PLAN SHEET D-17.
3. OBSERVATIONS OF EASTERN HOGNOSE SNAKE AND NORTHERN BLACK RACER SHALL BE REPORTED IMMEDIATELY TO NHFG WILDLIFE BIOLOGISTS MELISSA WINTERS (603-479-1129) AND BRENDAN CLIFFORD (603-944-0885) VIA GROUP TEXT. A PHOTOGRAPH WITH THE TEXT WILL BE PROVIDED IF FEASIBLE. IMMEDIATE REPORTING OF OBSERVATIONS IS CRITICAL AS NHFG BIOLOGISTS WILL NEED TO COLLECT DATA ON THE INDIVIDUAL. SEE FLYERS ON PLAN SHEET D-17.
4. NHFG SHALL HAVE THE OPPORTUNITY TO ATTEMPT TO TRAP AND RELOCATE ANY RABBITS THAT MAY BE ON SITE. ENTRAPMENT AND RELOCATION OF RABBITS SHALL BE COORDINATED NO LESS THAN THREE WEEKS IN ADVANCE WITH NHFG BEFORE WORK BEGINS.
5. ALL MANUFACTURED EROSION AND SEDIMENT CONTROL PRODUCTS, WITH THE EXCEPTION OF TURF REINFORCEMENT MATS, UTILIZED FOR, BUT NOT LIMITED TO, SLOPE PROTECTION, RUNOFF DIVERSION, SLOPE INTERRUPTION, PERIMETER CONTROL, INLET PROTECTION, CHECK DAMS, AND SEDIMENT TRAPS SHALL NOT CONTAIN PLASTIC, OR MULTIFILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8 INCHES. SEE DETAILS ON SHEET D-01 AND D-02.
6. TURTLES MAY BE ATTRACTED TO DISTURBED GROUND DURING NESTING SEASON. TURTLE NESTING SEASON OCCURS APPROXIMATELY MAY 15TH – JULY 30TH. ALL TURTLE SPECIES NESTS AND NORTHERN BLACK RACER NESTS ARE PROTECTED BY NH LAWS. IF A NEST IS OBSERVED OR SUSPECTED, OPERATORS SHALL CONTACT JOSH MEGYESY AT NHFG IMMEDIATELY FOR FURTHER CONSULTATION. THE NEST OR SUSPECTED NEST SHALL BE MARKED (SURROUNDING ROPED OFF OR CONE BUFFER DEPLOYED) AND AVOIDED; THIS SHALL BE COMMUNICATED TO ALL PERSONNEL ONSITE. SITE ACTIVITIES SHALL NOT OCCUR IN THE AREA SURROUNDING THE NEST OR SUSPECTED NEST UNTIL FURTHER GUIDANCE IS PROVIDED BY NHFG.
10. ALL OBSERVATIONS OF THREATENED OR ENDANGERED SPECIES ON THE PROJECT SITE SHALL BE REPORTED IMMEDIATELY TO THE NHFG NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM BY PHONE AT 603-271-2461 AND BY EMAIL AT NHFGREVIEW@WILDLIFE.NH.GOV, WITH THE EMAIL SUBJECT LINE: NHB24-1680, DCT25-2647 LONDONDERRY GREEN ENERGY CAMPUS, WILDLIFE SPECIES OBSERVATION.
1. PHOTOGRAPHS OF THE OBSERVED SPECIES AND NEARBY ELEMENTS OF HABITAT OR AREAS OF LAND DISTURBANCE SHALL BE PROVIDED TO NHFG IN DIGITAL FORMAT AT THE ABOVE EMAIL ADDRESS FOR VERIFICATION, AS FEASIBLE.
11. IN THE EVENT A THREATENED OR ENDANGERED SPECIES IS OBSERVED ON THE PROJECT SITE DURING THE TERM OF THE PERMIT, THE SPECIES SHALL NOT BE DISTURBED, HANDLED, OR HARMED IN ANY WAY PRIOR TO CONSULTATION WITH NHFG AND IMPLEMENTATION OF CORRECTIVE ACTIONS RECOMMENDED BY NHFG.
   A. SITE OPERATORS SHALL BE ALLOWED TO RELOCATE WILDLIFE ENCOUNTERED IF DISCOVERED WITHIN THE ACTIVE WORK ZONE IF IN DIRECT HARM FROM PROJECT ACTIVITIES. WILDLIFE SHALL BE RELOCATED IN CLOSE PROXIMITY TO THE CAPTURE LOCATE BUT OUTSIDE OF THE WORK ZONE AND IN THE DIRECTION THE INDIVIDUAL WAS HEADING. NHFG SHALL BE CONTACTED IMMEDIATELY IF THIS ACTION OCCURS.
12. THE NHFG, INCLUDING ITS EMPLOYEES AND AUTHORIZED AGENTS, SHALL HAVE ACCESS TO THE PROPERTY DURING THE TERM OF THE PERMIT, ALONG WITH NHFG CONTACT INFORMATION. THE APPLICANT SHOULD NOTIFY NHFG 30 DAYS PRIOR TO STARTING SONSTRUCTION ACTIVITIES. NHFG SHOULD HAVE THE OPPURTUNITY TO ATTEMPT TO TRAP ANDD RELOCATE ANY RABBITS THAT MAY BE ON SITE.
13. SMOOTH GREEN SNAKE (SPECIAL CONCERN) OCCUR WITHIN THE VICINITY OF THE PROJECT AREA. ALL OPERATORS AND PERSONNEL WORKING ON OR ENTERING THE SITE SHOULD BE MADE AWARE OF THE POTENTIAL PRESENCE OF THIS SPECIES AND SHOULD BE PROVIDED FLYERS THAT HELP TO IDENTIFY THIS SPECIES, ALONG WITH NHFG CONTACT INFORMATION. SEE FLYER ON PLAN SHEET D-17.
14. A WILDLIFE EXCLUSIONARY BARRIER SHOULD BE INSTALLED AROUND THE PERIMETER OF THE SITE PRIOR TO APRIL 15TH AND MAINTAINED BETWEEN APRIL 15TH AND OCTOBER 15TH THROUGHOUT THE LIFE OF THE ACTIVE PROJECT/CONSTRUCTION ACTIVITES. THE WILDLIFE EXLUSIONARY BARRIER SHOULD BE BURIED TO A DEPTH OF NO LESS THAN 6-8" AND EXTEND NO LESS THAN 18" ABOVE EXISTING GRADE. THE WILDLIFE EXCULSIONARY BARRIER SHOULD BE INSPECTED DAILY FOR ANY DEFECTS AS WELL AS POSSIBLE TRAPPED WILDLIFE PRIOR TO SITE CONSTRUCTION ACTIVITIES.
15. WETLAND IMPACT SHOULD OCCUR BETWEEN APRIL 15TH AND OCTOBER 15TH TO AVOID IMPACTING OVERWINTERING TURTLES.
16. STAGING OF CONSTRUCTION EQUIPMENT/MATERIAL AND VEHICLE PARKING SHOULD NOT OCCUR IN SHRUB COVER OR WETLANDS AND SHRUB CONVER SHOULD NOT BE REMOVED.
17. CATCH BASINS AND OUTLET CONTROL STRUCTURES SHOULD NOT CONTAIN SUMPS AND SHOULD HAVE GRATE OPENINGS NO LARGER THAN 2" X 2".
18. OUTLET CONTROL STRUCTURES SHOULD BE A MINIMUM OF 12-18" ABOVE GRADE AND SET BACK AT LEAST 3' FROM ADJACENT SLOPES.
19. RIP-RAP SHOULD BE FILLED WITH FINER MATERIAL (NATIVE WETLAND MATERIAL, NATIVE WETLAND SEED MIX, OR GRAVEL IN BETWEEN RIP-RAP) TO CREATE A RELATIVELY SMOOTH SURFACE FOR WILDLIFE TO TRAVERSE.
20. IF HYDROSEEDING IS DEEMED NECESARY, THE MIX SHOULD NOT CONTAIN MICROPLASTICS AND DYES SHOULD BE WATER-SOLUABLE AND ECO-FRIENDLY. HYDROSEEDING SHOULD NOT OCCUR WITHIN 75 FEET OF WETLANDS. SEE PLAN SHEETS C-06.
21. AVOID OR MINIMIZE THE USE OF FERTILIZERS IN UPLAND AREAS OR TRANSITION ZONES. IF FERTILIZERS ARE NECESSARY, USE ORGANIC VERSUS SYNTHETIC FERTILIZER OPTIONS. SYNTHETIC OPTIONS SHOULD BE AVOIDED; HOWEVER, IF CHOSEN, THEY SHOULD BE CONTROLLED-RELEASED/SLO-RELEASED AND AT LOW STRENGTHS. SEE PLAN SHEETS C-06.
22. A NATIVE SEED MIXTURE SHOULD BE APPLIED TO ALL AREAS AFFECTED BY CONSTRUCTION. PLEASE SEE THE MODIFIED NEW ENGLAND CONSERVATION/WETLAND MIX BY NEW ENGLAND WETLAND PLANTS, INC AS A SEED MIXTURE OPTION THAT MAY BE USED IN AREA AFFECTED BY CONSTRUCTION. THE SEED MIXES SHALL NOT CONTAIN INVASIVE SPECIES SUCH AS CROWN VETCH, BIRD'S-FOOT TREFOIL, OXEYE DAISY, ALSIKE CLOVER, AND FLATPEA. SEE PLAN SHEET C-03 OR D-18
23. MITIGATION REQUIREMENTS INCLUDED WITH NHFG'S REVIEW AND RECOMMENDATIONS ARE CONSISTEN WITH AN AGREEMENT BETWEEN THE TOWN OF LONDONDERRY AND NHFG THAT WAS ENTERED INTO EFFECT ON MAY 28, 2019 THAT REQUIRES A MITIGATION FEE FOR EACH INDIVIDUAL PROJECT THAT OCCURS WITHIN A PREDEFINED AREA WITHIN LONDONDERRY. PER RSA 212-A:16, A MITIGATION FEE BASED ON A DISTURBANCE AREA SHOULD BE MADE PAYABLE TO THE NEW HAMPSHIRE FISH AND GAME DEPARTMENT FOR NEGATIVE IMPACTS TO NEW ENGLAND COTTONTAIL, A STATE-ENDANGERED SPECIES. THE MEMO FIELD SHOULD IDENTIFY "NONGAME AND ENDANGERED WILDLIFE PROGRAM, NHB24-1680, DCT25-2647". THIS CHECK SHOULD BE ISSUED AND SUBMITTED TO NHFG FOLLOWING PERMIT APPROVAL AND MUST BE RECEIVED PRIOR TO ANY WORK OCCURRING ON THE SITE.
24. THESE CONSERVATION MEASURES DO NOT CONSTITUTION COMPLIANCE WITH THE FEDERAL ENGANGED SPECIES ACT (ESA). THERE MAY BE OCCURRENCES OF FEDERALLY LISTED SPECIES IN NEW HAMPSHIRE THAT ARE NOT INCLUDED ON THE DATACHECK LETTER. PLEASE VISIT THE US FISH AND WILDLIFE SERVICES'S (USFWS) INFORMATION FOR PLANNING AND CONSULTATION WEBSITE (IPAC; HTTPS://IPAC.ECOSPHERE.FWS.GOV/) FOR AN OFFICIAL LIST OF FEDERALLY LISTED SPECIES THAT MAY BE PRESENT IN YOUR PROJECT AREA. IF A FEDERAL AGENCY IS INVOLVED IN YOUR PROJECT THROUGH FUNDING, PERMIT, OR OTHER AUTHORIZATION, COORDINATE YOUR IPAC RESULTS WITH YOUR POINT OF CONTACT AT THAT AGENCY FOR FURTHER ESA REVIEW. IF THERE IS NO FEDERAL AGENCY NEXUS TO YOUR PROJECT AND YOU DETERMINE THOUGH IPAC, HABITAT EVALUATIONS, ECT. THAT A PROJECT MAY CAUSE TAKE OF FEDERALLY LISTED SPECIES, WE RECOMMENT COORDIANTION WITH THE USFWS' NEW ENGLAND GFIELD OFFICE (NEWENGLAND@FWS.GOV; 603-223-2541)

WAIVERS

THE FOLLOWING WAIVERS FROM THE TOWN OF LONDONDERRY SITE REVIEW REGULATIONS IS REQUESTED FROM THE PLANNING BOARD:

1. TOWN OF LONDONDERRY SITE REVIEW REGULATIONS SECTION 3.09(d)(TABLE B) – TO USE ITE GENERATION MANAUL FOR PARKING CALCULATION.
2. TOWN OF LONDONDERRY SITE REVIEW REGULATIONS SECTION 3.10(e)(1) – TO WAIVE AN INTERIOR PARKING LANDSCAPE AREA.
2. TOWN OF LONDONDERRY SITE REVIEW REGULATIONS SECTION 4.12.c.19.viii – TO WAIVE DELINEATING TREES WITH GREATER THEN 15" DIAMETER

Approved by the Londonderry, NH Planning Board for Phase _____

on Date: _____

Certified by:

_____

_____

OWNER'S SIGNATURE

_____ 12/22/2025

OWNER OR AUTHORIZED AGENT — DATE

REV	DATE	DESCRIPTION	DR	CK
5	12/18/2025	AOT & STAFF COMMENTS	JD	NG
4	10/24/2025	NHF&G APPROVAL	JD	NG
3	11/3/2025	TOWN SEWER COMMENTS	JD	NG
2	9/30/2025	REVISED FOR NHF&G & NHDES COMMENTS	JD	NG
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

NICHOLAS C. COLON No. 14886 LICENSED PROFESSIONAL ENGINEER — STATE OF NEW HAMPSHIRE

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

COVER SHEET

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR		FB	-	
18252-02	CK		CADFILE	18252-02 COVER & DETAILS	C-01

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DIG SAFE — CALL 811 OR 1-888-DIG-SAFE — CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

Dec 23, 2025 - 2:14pm
P:\TFM Projects\18252 Upshire Rd - Londonderry, NH\18252.02 PurposeEnergy - Civil & Permitting Services\18252-02_CD\PRODUCTION\18252-02 Cover & Details.dwg

LEGEND

PROPOSED	
	PROPERTY LINE
	ZONING LINE
	EASEMENT
	BASELINE
	FLOODPLAIN
	EDGE OF WATERBODY
	EDGE OF WETLAND
	SETBACK (WETLAND)
	SETBACK (STRUCTURE)
	SETBACK (PARKING)
	SETBACK (LANDSCAPE)
	GRAVEL ROAD
EOP	EDGE OF PAVEMENT
VGC	VERTICAL GRANITE CURB
SGC	SLOPED GRANITE CURB
CC	CONCRETE CURB
JCC	INTEGRATED CONCRETE CURB
BIT	BITUMINOUS ASPHALT CURB
CCB	CAPE COD BERM
	SAWCUT
	BUILDING
	BUILDING ROOF OVERHANG
	BUILDING FOUNDATION
	BUILDING ENTRANCE
	OVERHEAD DOOR
	TREE LINE
	FENCE (CHAIN LINK)
	FENCE (WIRE)
	FENCE (STOCKADE)
	GUARDRAIL
	BLANKET SLOPE PROTECTION
	RETAINING WALL
	SILT FENCE
	SILT SOCK
XXX	SOIL BOUNDARY
	LIMIT OF GRADING
100	CONTOUR
TC100.50 BC100.00 OR X 100.00	SPOT GRADE
#	PARKING COUNT
DSLY	YELLOW DOUBLE SOLID LINE
SSLY	YELLOW SINGLE SOLID LINE
SSLW	WHITE SINGLE SOLID LINE
SBLW	WHITE SINGLE BROKEN LINE
STOP	STOP BAR
	CROSSWALK
	ACCESSIBLE PARKING SYMBOL
	PAVEMENT ARROW
	TRAFFIC FLOW ARROW (NOT PAINTED)
	SIGN (SINGLE POST)
	SIGN (DOUBLE POST)
	SIGN (PYLON)
	SIGN (MONUMENT)
	BOLLARD
D	DUMPSTER PAD

PROPOSED	
	CONCRETE
	GRAVEL
	WETLAND IMPACT
	CONSTRUCTION ENTRANCE
	SNOW STORAGE
	RIPRAP
	INLET PROTECTION
	FLOW ARROW
RIDGE	GRADE BREAK RIDGE
	DRAIN LINE
	DRAINAGE SWALE
	STORMWATER BMP
S	SEWER LINE
FM	SEWER FORCE MAIN LINE
W	WATER LINE
G	GAS LINE
OHE	OVERHEAD UTILITY LINE
UGE	UNDERGROUND UTILITY LINE
	CATCH BASIN
	DRAIN INLET
	OUTLET CONTROL STRUCTURE
	ROOF DRAIN
	DRAIN CLEANOUT
	DRAIN MANHOLE
	FARED END SECTION
	SEWER CLEAN OUT
	SEWER MANHOLE
	SEWER VENT
	DRAIN/SEWER/WATER PLUG OR CAP
	HYDRANT
	FIRE DEPARTMENT CONNECTION
	WATER GATE VALVE
	WATER SHUTOFF
	THRUST BLOCK
	WATER METER
	WATER MANHOLE
	WELL
	GAS GATE VALVE
	GAS SHUT OFF
	GAS METER
	TELEPHONE MANHOLE
	ELECTRIC MANHOLE
	TRAFFIC CONTROL CABINET
	ELECTRIC HANDHOLE
	ELECTRIC PULL BOX
	ELECTRIC METER
	FLOOD LIGHT
	LIGHT POLE
	UTILITY POLE
	GUY POLE
T	TRANSFORMER PAD
	BORING LOCATION
TP	TEST PIT LOCATION
	INFILTRATION TEST LOCATION
MW-#	MONITORING WELL

ABBREVIATIONS

GENERAL

ABAN	ABANDON
AC	ACRES
ADJ	ADJUST
APPROX	APPROXIMATE
BC	BOTTOM OF CURB
BIT	BITUMINOUS
BK/PG	BOOK & PAGE
BLDG	BUILDING
BMP	BEST MANAGEMENT PRACTICE
BS	BOTTOM OF SLOPE
BW	BOTTOM OF WALL
CONC	CONCRETE
COORD	COORDINATE
DIA	DIAMETER
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
EXIST	EXISTING
FFE	FINISHED FLOOR ELEVATION
FND	FOUNDATION
HP	HIGH POINT
INV	INVERT ELEVATION
IT	INFILTRATION TEST
L	LENGTH
LF	LINEAR FEET
LSA	LANDSCAPE AREA
MAX	MAXIMUM
MIN	MINIMUM
N/F	NOW OR FORMERLY
NHFG	NEW HAMPSHIRE FISH & GAME
NTS	NOT TO SCALE
OC	ON CENTER
PAVE	PAVEMENT
PERF	PERFORATED
PROP	PROPOSED
R	RADIUS
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
REM	REMOVE
RET	RETAIN
RIM	RIM ELEVATION
ROW	RIGHT OF WAY
S	SLOPE
SF	SQUARE FEET
SW	SIDEWALK
TBM	TEMPORARY BENCHMARK
TC	TOP OF CURB
TP	TEST PIT
TW	TOP OF WALL
TYP	TYPICAL
UG	UNDERGROUND
WCR	ACCESSIBLE WHEELCHAIR RAMP
W/	WITH

UTILITIES

CB	CATCH BASIN
CIP	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COND	CONDUIT
DCB	DOUBLE CATCH BASIN
DIP	DUCTILE IRON PIPE
DMH	DRAIN MANHOLE
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FES	FLARED END SECTION
GT	GREASE TRAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
LP	LIGHT POLE
OCS	OUTLET CONTROL STRUCTURE
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
SMH	SEWER MANHOLE
SOS	SEDIMENT OIL SEPARATOR
TSV	TAPPING SLEEVE, VALVE, AND BOX
UP	UTILITY POLE

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GENERAL NOTES

1. THESE PLANS ARE PERMIT DRAWINGS ONLY AND HAVE NOT BEEN DETAILED FOR CONSTRUCTION OR BIDDING.
2. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. TFMORAN, INC. ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
3. ALL IMPROVEMENTS SHOWN ON THE SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF THE LONDONDERRY PLANNING BOARD.
4. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF LONDONDERRY, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ALL WORK TO CONFORM TO TOWN OF LONDONDERRY DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS. ALL WORK WITHIN THE RIGHT-OF-WAY OF THE LONDONDERRY AND/OR STATE SHALL COMPLY WITH APPLICABLE STANDARDS. COORDINATE ALL WORK WITHIN THE RIGHT-OF-WAY WITH APPROPRIATE LONDONDERRY, COUNTY, AND/OR STATE AGENCY.
5. THE SITE CONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH APPLICABLE SECTIONS OF ENV-WQ 1500. THE SITE CONTRACTOR SHALL NOTIFY THE ENGINEER IN ADVANCE OF CONSTRUCTION OF EACH STORMWATER FACILITY TO COORDINATE REQUIRED INSPECTIONS. THE CONTRACTOR SHALL TAKE PROGRESS PHOTOS DURING CONSTRUCTION OF ALL STORMWATER DRAINAGE COMPONENTS AND SEND TO THE ENGINEER.
6. SEE EXISTING CONDITIONS PLAN FOR THE HORIZONTAL AND VERTICAL DATUM.
7. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION. VERIFY TBM ELEVATIONS PRIOR TO CONSTRUCTION.
8. CONTACT EASEMENT OWNERS PRIOR TO COMMENCING ANY WORK WITHIN THE EASEMENTS.
9. PRIOR TO COMMENCING ANY SITE WORK, ALL LIMITS OF WORK SHALL BE CLEARLY MARKED IN THE FIELD.
10. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY PLAN. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.
11. TFMORAN, INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE ENGINEER OF RECORD.
12. TEMPORARY FENCING SHALL BE PROVIDED AND COVERED WITH A FABRIC MATERIAL TO CONTROL DUST MITIGATION.
13. ALL DEMOLITION SHALL ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKWAYS, AND ANY OTHER ADJACENT OPERATING FACILITIES. PRIOR WRITTEN PERMISSION FROM THE OWNER/DEVELOPER AND LOCAL PERMITTING AUTHORITY IS REQUIRED IF CLOSURE/OBSTRUCTIONS TO ROADS, STREET, WALKWAYS, AND OTHERS IS DEEMED NECESSARY. CONTRACTOR TO PROVIDE ALTERNATE ROUTES AROUND CLOSURES/OBSTRUCTIONS PER STATE/FEDERAL REGULATIONS.
14. REFER TO ARCHITECTURAL PLANS FOR LAYOUT OF BUILDING FOUNDATIONS AND CONCRETE ELEMENTS WHICH ABUT THE BUILDING SUCH AS STAIRS, SIDEWALKS, LOADING DOCK RAMPS, PADS, AND COMPACTOR PADS. DO NOT USE SITE PLANS FOR LAYOUT OF FOUNDATIONS.
15. IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND DETAILS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.
16. IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED WORK.
17. CONTRACTOR'S GENERAL RESPONSIBILITIES:
    A. BID AND PERFORM THE WORK IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL CODES, SPECIFICATIONS, REGULATIONS, AND STANDARDS AND CONDITIONS OF ALL PROJECT-SPECIFIC PERMITS AND APPROVALS AS LISTED ON THE COVER SHEET TO THESE PLANS OR OTHERWISE REQUIRED.
    B. NOTIFY ENGINEER IN WRITING OF ANY DISCREPANCIES OF PROPOSED LAYOUT AND/OR EXISTING FEATURES.
    C. EMPLOY A LICENSED SURVEYOR TO DETERMINE ALL LINES AND GRADES AND LAYOUT OF SITE ELEMENTS AND BUILDINGS.
    D. THE CONTRACTOR SHALL BE RESPONSIBLE TO BECOME FAMILIAR WITH THE SITE AND ALL SURROUNDING CONDITIONS. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF INTENTIONS AT LEAST 48 HOURS IN ADVANCE.
    E. MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY WORK AT ALL TIMES.
    F. IN ACCORDANCE WITH RSA 430:53 AND AGR 3800, THE CONTRACTOR SHALL NOT TRANSPORT INVASIVE SPECIES OFF THE PROPERTY, AND SHALL DISPOSE OF INVASIVE SPECIES ON-SITE IN A LEGAL MANNER.
    G. COORDINATE WITH ALL UTILITY COMPANIES AND CONTACT DIGSAFE (811 OR 888-344-7233) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION.
    H. PROTECT NEW AND EXISTING BURIED UTILITIES DURING INSTALLATION OF ALL SITE ELEMENTS. DAMAGED UTILITIES SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
    I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY TFMORAN, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OF THEIR EMPLOYEES, AGENTS, OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE US OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
    J. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
    K. VERIFY LAYOUT OF PROPOSED BUILDING FOUNDATIONS WITH ARCHITECT AND THAT PROPOSED FOUNDATION MEETS PROPERTY LINE AND/OR WETLAND SETBACKS PRIOR TO COMMENCING ANY FOUNDATION CONSTRUCTION.
    L. PROVIDE AN AS-BUILT PLAN AT THE COMPLETION OF THE PROJECT TO THE TOWN PLANNER AND PER LONDONDERRY REGULATIONS.
    M. IF ANY DEVIATIONS FROM THE APPROVED PLANS AND SPECIFICATIONS HAVE BEEN MADE, THE SITE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS STAMPED BY A LICENSED SURVEYOR OR QUALIFIED ENGINEER ALONG WITH A LETTER STAMPED BY A QUALIFIED ENGINEER DESCRIBING ALL SUCH DEVIATIONS, AND BEAR ALL COSTS FOR PREPARING AND FILING ANY NEW PERMITS OR PERMIT AMENDMENTS THAT MAY BE REQUIRED.
    N. AT COMPLETION OF CONSTRUCTION, THE SITE CONTRACTOR SHALL PROVIDE A LETTER CERTIFYING THAT THE PROJECT WAS COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND A LETTER STAMPED BY A QUALIFIED ENGINEER THAT THEY HAVE OBSERVED ALL UNDERGROUND DETENTION SYSTEMS, INFILTRATION SYSTEMS, OR FILTERING SYSTEMS PRIOR TO BACKFILL, AND THAT SUCH SYSTEMS CONFORM TO THE APPROVED PLANS AND SPECIFICATIONS.
    O. THIS PROJECT IS SUBJECT TO THE AOT PERMIT LISTED ON THE COVER SHEET. THE CONTRACTOR SHALL CONFORM TO ALL CONDITIONS OF THE PERMIT AND PROVIDE THE FOLLOWING DOCUMENTATION TO OWNER AND ENGINEER.

– ADVANCE WRITTEN NOTICE AT LEAST ONE WEEK PRIOR TO COMMENCING ANY WORK UNDER THE PERMIT AND NOTIFICATION TO AOT VIA THE START OF CONSTRUCTION FORM.

– UPON COMPLETION OF CONSTRUCTION, NOTIFICATION TO AOT VIA THE COMPLETION OF CONSTRUCTION FORM AND WRITTEN CERTIFICATION THAT:
  A) ALL WORK UNDER THE PERMIT HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATION.
  B) IF ANY DEVIATION FROM THE APPROVED PLANS WERE MADE, WRITTEN DESCRIPTIONS AND AS-BUILT DRAWINGS OF ALL SUCH DEVIATIONS, STAMPED BY A QUALIFIED ENGINEER, SHALL BE PROVIDED.

    P. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT DEFICIENCIES EXIST IN THE APPROVED DESIGN DRAWINGS, THE OWNER SHALL BE REQUIRED TO CORRECT THE DEFICIENCIES TO MEET THE REQUIREMENTS OF THE REGULATIONS AT NO EXPENSE TO THE TOWN.
    Q. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE TOWN.
    R. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO TOWN OF LONDONDERRY SUBDIVISION REGULATIONS AND THE LATEST EDITION OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
    S. IN ACCORDANCE WITH SECTION 6.01 OF THE LONDONDERRY SITE PLAN REGULATIONS AND RSA § 676:13, ALL IMPROVEMENTS SPECIFIED ON THESE SITE PLANS SHALL BE CONSTRUCTED, COMPLETED, AND INSPECTED AND APPROVED BY THE TOWN OF LONDONDERRY PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
    T. IN ACCORDANCE WITH SECTION 6.01 OF THE LONDONDERRY SITE PLAN REGULATIONS AND RSA § 676:12, ALL OFF-SITE IMPROVEMENTS SPECIFIED ON THESE SITE PLANS SHALL BE CONSTRUCTED, COMPELTED, AND INSPECTED AND APPROVED BY THE TOWN OF LONDONDERRY (AND/OR THE NHDOT, IF APPLICABLE) PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

UTILITY NOTES

1. LENGTH OF PIPE IS FOR CONVENIENCE ONLY. ACTUAL PIPE LENGTH SHALL BE DETERMINED IN THE FIELD.
2. ALL PROPOSED UTILITY WORK, INCLUDING MATERIAL, INSTALLATION, TERMINATION, EXCAVATION, BEDDING, BACKFILL, COMPACTION, TESTING, CONNECTIONS, AND CONSTRUCTION SHALL BE COORDINATED WITH AND COMPLETED IN ACCORDANCE WITH THE APPROPRIATE REQUIREMENTS, CODES, AND STANDARDS OF ALL CORRESPONDING UTILITY ENTITIES AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE DIGGING.
4. COORDINATE ALL WORK ADJACENT TO PROPOSED BUILDINGS WITH ARCHITECTURAL BUILDING DRAWINGS. CONFIRM UTILITY PENETRATIONS AND INVERT ELEVATIONS ARE COORDINATED PRIOR TO INSTALLATION.
5. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
6. THE EXACT LOCATION OF NEW UTILITY CONNECTIONS SHALL BE DETERMINED BY THE CONTRACTOR IN COORDINATION WITH UTILITY COMPANY, COUNTY AGENCY, AND/OR PRIVATE UTILITY COMPANY.
7. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER THE UTILITY INSTALLATION COMPLETE AND OPERATIONAL.
8. ALL UTILITY COMPANIES REQUIRE INDIVIDUAL CONDUITS. CONTRACTOR TO COORDINATE WITH TELEPHONE, CABLE, AND ELECTRIC COMPANIES REGARDING NUMBER, SIZE, AND TYPE OF CONDUITS REQUIRED PRIOR TO INSTALLATION OF ANY CONDUIT.
9. SANITARY SEWER SHALL BE CONSTRUCTED TO THE TOWN OF LONDONDERRY STANDARDS AND SPECIFICATIONS AS SHOWN ON THESE PLANS. ALL SEWER MAINS AND FITTINGS SHALL BE PVC AND SHALL CONFORM TO ASTM F 679 (SDR 35 MINIMUM). FORCE MAINS AND FITTINGS SHALL CONFORM TO NH CODE OF ADMINISTRATIVE RULES ENV-WQ 700. ALL SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH NH CODE OF ADMINISTRATIVE RULES ENV-WQ 700. SANITARY MANHOLES SHALL CONFORM TO NHDES WATER DIVISION WASTEWATER ENGINEERING BUREAU STANDARDS AND SPECIFICATIONS SHOWN HEREON.
10. ON-SITE WATER DISTRIBUTION SHALL BE TO MANCHESTER WATER WORKS STANDARDS AND SPECIFICATIONS. WATER MAINS SHALL HAVE A MINIMUM OF 5.5' COVER. WHERE WATER PIPES CROSS SEWER LINES A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE OBSERVED. HORIZONTAL SEPARATION BETWEEN WATER AND SEWER SHALL BE 10' MINIMUM. WHERE A SANITARY LINE CROSSES A WATER LINE, SEWER LINE SHALL BE CONSTRUCTED OF FORCE MAIN MATERIALS (PER ENV-WQ 704.08) FROM BUILDING OR MANHOLE TO MANHOLE, OR SUBSTITUTE RUBBER-GASKETED PRESSURE PIPE FOR THE SAME DISTANCE. WHERE SANITARY LINES PASS BELOW WATER LINES, LAY PIPE SO THAT NO JOINT IN THE SANITARY LINE WILL BE CLOSER THAN 6' HORIZONTALLY TO THE WATER LINE.
11. THRUST BLOCKS SHALL BE PROVIDED AT ALL LOCATIONS WHERE WATER LINE CHANGES DIRECTIONS OR CONNECTS TO ANOTHER WATER LINE.
12. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT AND WIRING TO ALL SIGNS AND LIGHTS. CONDUIT TO BE A MINIMUM OF 24" BELOW FINISH GRADE.
13. ALL PROPOSED UTILITIES SHALL BE UNDERGROUND. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES.
14. THE CONTRACTOR SHALL ARRANGE AND PAY FOR ALL INSPECTIONS, TESTING, AND RELATED SERVICES AND SUBMIT COPIES OF ACCEPTANCE TO THE OWNER, UNLESS OTHERWISE INDICATED.
15. PROVIDE PERMANENT PAVEMENT REPAIR FOR ALL UTILITY TRENCHES IN EXISTING ROAD OR PAVEMENT TO REMAIN. SAW CUT TRENCH, PAVEMENT, AND GRANULAR BASE THICKNESS TO MATCH EXISTING PAVEMENT. OBTAIN ALL PERMITS REQUIRED FOR TRENCHING.
16. UNLESS OTHERWISE SPECIFIED, ALL UNDERGROUND STRUCTURES, PIPES, CHAMBERS, ETC. SHALL BE COVERED WITH A MINIMUM OF 18" OF COMPACTED SOIL BEFORE EXPOSURE TO VEHICLE LOADS.
17. THE PROPERTY WILL BE SERVICED BY THE FOLLOWING:

DRAINAGE	PRIVATE
SEWER	MUNICIPAL
WATER	MUNICIPAL
GAS	LIBERTY UTILITIES
ELECTRIC	EVERSOURCE ENERGY
TELECOMM.	COMCAST XFINITY

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

NOTES & LEGEND

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY
PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

STATE OF NEW HAMPSHIRE — NICHOLAS C. COLON — No. 14886 — LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
5	12/18/2025	AOT & STAFF COMMENTS	JD	NG
4	10/24/2025	NHF&G APPROVAL	JD	NG
3	11/3/2025	TOWN SEWER COMMENTS	JD	NG
2	9/30/2025	REVISED FOR NHF&G & NHDES COMMENTS	JD	NG
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

TFM — Civil Engineers, Structural Engineers, Traffic Engineers, Land Surveyors, Landscape Architects, Scientists
48 Constitution Drive, Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	FB	–	
18252-02	CK	CADFILE	18252-02 COVER & DETAILS	C-02

Dec 23, 2025 - 2:14pm
P:\TFM Projects\18252 Istenfield Rd - Londonderry, NH\18252-02 PurposeEnergy - Civil & Permitting Services\18252-02_CSD\PRODUCTION\18252-02 Cover & Details.dwg

CONSTRUCTION SEQUENCE NOTES

1. TO MINIMIZE EROSION AND SEDIMENTATION DUE TO CONSTRUCTION, CONSTRUCTION SHALL FOLLOW THIS GENERAL CONSTRUCTION SEQUENCE.
2. MODIFICATIONS TO THE SEQUENCE NECESSARY DUE TO THE CONTRACTOR'S SCHEDULE SHALL INCLUDE APPROPRIATE TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES.
3. CONDUCT A PRE-CONSTRUCTION MEETING WITH THE OWNER, CONTRACTOR, TOWN ENGINEER, AND OTHER TOWN DEPARTMENTS. TOWN INSPECTIONS SHALL BE CONDUCTED AT INTERVALS AS REQUIRED BY THE TOWN OF LONDONDERRY PUBLIC WORKS AND ENGINEERING DEPARTMENT.
4. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
5. CUT AND CLEAR TREES WITHIN AREA OF DISTURBANCE UNLESS OTHERWISE NOTED.
6. CONSTRUCT TEMPORARY AND PERMANENT EROSION CONTROL FACILITIES, AND BASINS PRIOR TO ANY ROUGH GRADING.
7. CONSTRUCT PERMANENT SWALES PRIOR TO ANY ROUGH GRADING. SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
8. GRUB & ROUGH GRADE SITE FOR PHASED WORK AREA. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER GRADING. ALL DISTURBED AREAS SHALL BE STABILIZED NO LATER THAN 72 HOURS AFTER CONSTRUCTION ACTIVITY CEASES. IF EARTHWORK TEMPORARILY CEASES ON A PORTION OF OR THE ENTIRE SITE, AND WILL NOT RESUME WITHIN 21 DAYS, THE AREA SHALL BE STABILIZED.
9. AN AREA SHALL BE CONSIDERED STABILIZED IF:
   A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
   B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   C) A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED, OR
   D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
10. CONSTRUCT CULVERTS, STORMWATER MANAGEMENT AREAS, AND SWALES. PLACE FLARED END SECTIONS, RIP-RAP AND OTHER DRAINAGE FACILITIES ACCORDING TO PLAN. THE CONTRACTOR SHALL STABILIZE ALL DITCHES, SWALES, AND BASINS PRIOR TO DIRECTING FLOW TO THEM.
11. INSTALL ALL UNDERGROUND UTILITIES.
12. CONSTRUCT BUILDINGS AND STRUCTURES.
13. CONSTRUCT PARKING AND FINISH GRADE SITE ACCORDING TO PLAN. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
14. THE CONTRACTOR SHALL INSPECT ALL TEMPORARY EROSION CONTROL MEASURES AT LEAST ONCE A WEEK AND WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A STORM WITH RAINFALL AMOUNT GREATER THAN 0.5 INCHES. THE INSPECTIONS SHALL VERIFY THAT THE STRUCTURAL BMPS SHOWN AND DESCRIBED ON THE PLANS ARE IN GOOD CONDITION AND ARE MINIMIZING EROSION. A MAINTENANCE AND INSPECTION REPORT SHALL BE MADE WITH EACH INSPECTION.
15. COMPLETE PERMANENT SEEDING.
16. REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE ALL AREAS ARE STABILIZED WITH A SUITABLE STAND OF GRASS, PAVEMENT OR COMPACTED GRAVELS.
17. REFER TO THE STORMWATER MANAGEMENT PLAN FOR EROSION CONTROL MEASURES AND SPECIFIC INFORMATION.

GENERAL NOTES

1. WHERE DEPTH OF COVER IS LESS THAN 3 FEET CLASS V REINFORCED CONCRETE PIPE SHALL BE USED.
2. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS WORK AT ALL TIMES.
4. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
5. EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED FOR THE DURATION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE NHDES STANDARDS. THESE DETAILS SERVE AS A GUIDE ONLY.
6. REFER TO THE TOWN STANDARD DETAILS, LATEST REVISION, FOR THE APPLICABLE REGULATIONS AND STANDARDS.
7. THE CONTRACTOR SHALL STABILIZE ALL DITCHES, SWALES, AND BASINS PRIOR TO DIRECTING FLOW TO THEM.
8. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. SEE PHASING PLAN FOR ADDITIONAL INFORMATION ON ALLOWABLE AREAS OF DISTURBANCE.

WINTER CONSTRUCTION

IN ADDITION TO THE OTHER NOTES CONTAINED ON THIS PLAN, THE FOLLOWING MUST BE IMPLEMENTED:

1. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED AS SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
2. ANY AREA WITHIN 50 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIER.
3. TEMPORARY MULCH MUST BE APPLIED WITHIN 7 DAYS OF SOIL EXPOSURE OR PRIOR TO ANY STORM EVENT, BUT AFTER EVERY WORKDAY IN AREAS WITHIN 100 FEET FROM A PROTECTED NATURAL RESOURCE.
4. AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE PERMANENTLY MULCHED THE SAME DAY.
5. IN THE EVENT OF A SNOWFALL GREATER THAN 1 INCH (FRESH OR CUMULATIVE), THE SNOW SHALL BE REMOVED FROM THE AREAS DUE TO BE SEEDED AND MULCHED.
6. LOAM SHALL BE FREE OF FROZEN CLUMPS BEFORE IT IS APPLIED.
7. A DITCH THAT WILL BE CONSTRUCTED DURING THE WINTER MUST BE STABILIZED WITH RIPRAP.
8. ALL PROPOSED VEGETATIVE AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
9. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
10. AFTER OCTOBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF GRAVEL PER NHDOT ITEM 304.3.
11. ALL TEMPORARY AND PERMANENT STABILIZATION REQUIREMENTS DENOTED IN ADDITIONAL PLAN NOTES SHALL BE APPLICABLE DURING WINTER CONSTRUCTION.

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EROSION CONTROL NOTES

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED:

1. INSTALLATION OF SILTATION FENCES AND/OR OTHER EROSION CONTROL MEASURES SHALL BE COMPLETED PRIOR TO THE START OF SITE WORK IN ANY GIVEN AREA. PREFABRICATED SILTATION FENCES SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
2. SILTATION FENCES AND/OR OTHER EROSION CONTROL MEASURES SHALL BE KEPT CLEAN DURING CONSTRUCTION AND REMOVED WHEN ALL SLOPES HAVE A VEGETATIVE COVER OF GREATER THAN 85%. EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN TWENTY-FOUR (24) HOURS OF THE END OF A STORM WITH RAINFALL AMOUNT GREATER THAN 0.5 INCHES.
3. EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEREVER POSSIBLE.
4. THE AREA OF LAND EXPOSED AND THE TIME OF EXPOSURE SHALL BE MINIMIZED. UNLESS A LARGER AREA IS ALLOWED UNDER ENV-WQ 1505.03(c), NO MORE THAN 5 ACRES SHALL BE DISTURBED (NOT STABILIZED) AT ANY TIME. DISTURBED AREAS MUST BE STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN 45 DAYS AFTER INTIAL DISTURBANCE. CUT AND FILL SLOPES SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.
5. ALL DISTURBED AREAS SHALL HAVE A MINIMUM OF 6" OF LOAM. ACCEPTABLE SEED MIXES ARE AS FOLLOWS:

   PARK SEED MIX (NHDOT TYPE 44) MIN. 135 LBS/ACRE:
   33% CREEPING RED FESCUE (MIN. 45 LBS/ACRE)
   42% PERENNIAL RYEGRASS (MIN. 55 LBS/ACRE)
   21% KENTUCKY BLUEGRASS (MIN. 30 LBS/ACRE)
   4% REDTOP (MIN. 5 LBS/ACRE)

   MODIFIED NEW ENGLAND CONSERVATION WILDLIFE MIX (MIN. 25 LBS/ACRE)*
   CONTAINS: VIRGINIA WILD RYE (ELYMUS VIRGINICUS), LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), BIG BLUESTEM (ANDROPOGON GERARDII), PANICLEDLEAF TICK TREFOIL (DESMODIUM PANICULATUM), BLUE VERVAIN (VERBENA HASTATA), BLACK EYED SUSAN (RUDBECKIA HIRTA), HEATH ASTER (ASTERPILOSUS/SYMPHYOTRICHUM PILOSUM), EARLY GOLDENROD (SOLIDAGO JUNCEA), UPLAND BENTGRASS (AGROSTIS PERENNANS).
   *SEED MIX SHALL NOT CONTAIN JOHNSON GRASS (SORGHASTRUM NUTANS), RED FESCUE (FESTUCA RUBRA), SWITCH GRASS (PANICUM VIRGATUM), PARTRIDGE PEA (CHAMAECRISTA FASCICULATA), OR COMMON SNEEZEWEED (HELENIUM AUTUNALE).

   TEMPORARY LAWN MIX: (MIN. 47 LBS/ACRE)
   100% ANNUAL RYE

   A. PLACING LOAM ON SITE
      a. ALL SUBGRADE ELEVATIONS SHOULD BE UNIFORMLY GRADED TO RECEIVE LOAM AND SHALL BE INSPECTED AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO PLACEMENT OF LOAM.
      b. PLACE LOAM TO FORM A MINIMUM DEPTH OF 4" WHEN ROLLED, UNLESS OTHERWISE INDICATED.
      c. ALL DEPRESSIONS EXPOSED DURING THE ROLLING SHALL BE FILLED WITH ADDITIONAL LOAM.

   B. SEED BED PREPARATION
      AFTER FINISH GRADING AND JUST BEFORE SEEDING, THE AREAS TO BE SEEDED SHALL BE LOOSENED TO PROVIDE A ROUGH, FIRM BUT FINELY PULVERIZED SEEDBED. THE INTENT IS A TEXTURE CAPABLE OF RETAINING WATER, SEED AND FERTILIZER WHILE REMAINING STABLE AND ALLOWING SEED TIME TO GERMINATE. SEED SHALL BE APPLIED TO THE CONDITIONED SEEDBED NOT MORE THAN 48 HOURS AFTER THE SEEDBED HAS BEEN PREPARED.

6. LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE SOIL PRIOR TO OR AT THE TIME OF AT THE TIME OF SEEDING. A MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS. PER ACRE OF 10-20-20 FERTILIZER SHALL BE APPLIED. SEEDING PRACTICES SHALL COMPLY WITH LOCAL USDA SOIL CONSERVATION SERVICES RECOMMENDATIONS.
7. HAY OR STRAW MULCH OR JUTE MATTING SHALL BE USED WHERE INDICATED ON THE PLANS. IF JUTE MATTING IS USED, IT SHALL BE LAID IN THE DIRECTION OF RUNOFF FLOW AND APPLIED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
8. MULCHING SHALL COMPLY WITH:
   ENV-WQ 1506.01 EROSION CONTROL METHODS: TEMPORARY AND PERMANENT MULCHING.
   (a) HAY AND STRAW MULCHES SHALL BE ANCHORED WITH MULCH NETTING OR TACKIFIER SO THAT THEY ARE NOT BLOWN AWAY BY WIND OR WASHED AWAY BY FLOWING WATER;
   (b) MULCH MATERIALS SHALL BE SELECTED BASED UPON SOILS, SLOPE, FLOW CONDITIONS, AND TIME OF YEAR;
   (c) HAY OR STRAW MULCH SHALL BE APPLIED AT A RATE OF 1.5 TO 2 TONS PER ACRE, EQUIVALENT TO 70 TO 90 POUNDS PER 1,000 SQUARE FEET.
   ENV-WQ 1506.02 EROSION CONTROL METHODS: VEGETATION. VEGETATING DISTURBED AREAS SHALL BE COMPLETED ONLY AS SPECIFIED BELOW:
   (h) AREAS SEEDED BETWEEN MAY 15TH TO AUGUST 15TH SHALL BE COVERED WITH HAY OR STRAW MULCH MEETING THE CRITERIA OF ENV-WQ 1506.01(a) THROUGH (c).
9. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. SEEDED AREAS SHALL BE MULCHED AND PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING WINTER MONTHS.
10. WATER SHALL BE USED FOR DUST CONTROL IN APPROPRIATE AREAS.
11. TEMPORARY DIVERSION SWALES, SEDIMENT TRAPS AND/OR BASINS MUST BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED. TACKIFIER SHALL BE APPLIED IN ALL TEMPORARY STABILIZATION UTILIZING SEEDING. SEE PHASING PLAN, FOR ADDITIONAL INFORMATION.
12. OWNER SHALL MAINTAIN AT LEAST 85% COVERAGE OF VEGETATION IN GOOD CONDITION (EVENLY DISTRIBUTED, WITH NO BARE AREAS) AND REPAIR AREAS OF EROSION.

OVERWINTER STABILIZATION

1. PERMANENT STABILIZATION CONSISTS OF AT LEAST 85% VEGETATION, PAVEMENT/GRAVEL BASE OR RIPRAP.
2. DO NOT EXPOSE SLOPES OR LEAVE SLOPES EXPOSED OVER THE WINTER OR FOR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY PROTECTED WITH MULCH.
3. APPLY HAY MULCH AT TWICE THE STANDARD RATE (150 LBS. PER 1,000 SF). THE MULCH MUST BE THICK ENOUGH SUCH THAT THE GROUND SURFACE WILL NOT BE WISIBLE AND MUST BE ANCHORED.
4. USE MULCH AND MULCH NETTING OR AN EROSION CONTROL MULCH BLANKET OR MIX FOR ALL SLOPES GREATER THAN 8% OR OTHER AREAS EXPOSED TO DIRECT WIND.
5. INSTALL AN EROSION CONTROL BLANKET IN ALL DRAINAGE WAYS (BOTTOM AND SIDES) WITH A SLOPE GREATER THAN 3%
6. SEE THE VEGETATION MEASURES FOR MORE INFORMATION ON SEEDING DATES AND TYPES.

CONSTRUCTION SEQUENCE NOTES (FOR ALTERATION OF TERRAIN)

1. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO BMP'S DURING ANY STAGE OF CONSTRUCTION.
2. DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.
3. AFTER INFILTRATION SYSTEMS ARE EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
4. DO NOT PLACE STORMWATER BMP'S INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
5. DO NOT PLACE STORMWATER BMP'S INTO SERVICE UNTIL THE BMP HAS BEEN PLANTED, IF NECESSARY, AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

GRADING & DRAINAGE NOTES

1. THE CONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF NHDES ENV-WQ 1500 AND THE TOWN OF LONDONDERRY AS APPLICABLE.
2. THE CONTRACTOR SHALL PREPARE, MAINTAIN, AND EXECUTE A S.W.P.P.P. IN ACCORDANCE WITH EPA REGULATIONS AND THE CONSTRUCTION GENERAL PERMIT.
3. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14 DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK THE ACCURACY OF THE TOPOGRAPHY AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO ANY EARTHWORK BEING PERFORMED ON THE SITE. NO CLAIM FOR EXTRA WORK WILL BE CONSIDERED FOR PAYMENT AFTER EARTHWORK HAS COMMENCED.
5. THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR INFORMATION ABOUT SOIL AND GROUNDWATER CONDITIONS. THE CONTRACTOR SHALL FOLLOW THE GEOTECHNICAL ENGINEER'S RECOMMENDED METHODS TO ADDRESS ANY SOIL AND GROUNDWATER ISSUES THAT ARE FOUND ON SITE, INCLUDING AND NOT LIMITED TO DEWATERING METHODS, PERIMETER DRAINS AND TIE INTO STORMWATER MANAGEMENT SYSTEM, ETC.
6. COORDINATE WITH GEOTECHNICAL/STRUCTURAL PLANS FOR SITE PREPARATION AND OTHER BUILDING INFORMATION.
7. COORDINATE WITH ARCHITECTURAL PLANS FOR DETAILED GRADING AT BUILDING, AND SIZE AND LOCATION OF ALL BUILDING SERVICES.
8. COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ROOF DRAIN INFORMATION.
9. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING, SIDEWALKS, AND ALIGNMENTS.
10. THE CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE, RAMPS, AND LOADING AREAS.
11. THE SITE SHALL BE GRADED SO ALL FINISHED PAVEMENT HAS POSITIVE DRAINAGE AND SHALL NOT POND WATER DEEPER THAN 1/4" FOR A PERIOD OF MORE THAN 15 MINUTES AFTER FLOODING.
12. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED. CURBS HAVE A 6" REVEAL UNLESS OTHERWISE NOTED.
13. ALL SIDEWALK AND OTHER CURB REVEALS SHALL BE 6" WITH A TOLERANCE OF PLUS OR MINUS 3/8". WHERE SIDEWALK IS TO BE FLUSH, THE PAVEMENT REVEAL SHALL BE 1/4" WITH A TOLERANCE OF 1/8".
14. THE FINISHED GRADE AT BOTTOM OF ALL ACCESSIBLE RAMPS SHALL BE FLUSH WITH PAVEMENT WITH A TOLERANCE OF PLUS OR MINUS 1/4".
15. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE PRIOR TO INSTALLATION OF FINISHED PAVEMENT.
16. ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS AND SHALL MEET TOWN OF LONDONDERRY STANDARDS AND THE REQUIREMENTS OF THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION AND THE NHDOT STANDARD STRUCTURE DRAWINGS UNLESS OTHERWISE NOTED.
17. STORMWATER DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO TOWN OF LONDONDERRY & NHDOT STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE TYPE B AND CONFORM TO NHDOT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
18. NO FILL SHALL BE PLACED IN ANY WETLAND AREA.
19. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
20. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED, FERTILIZER, AND MULCH.
21. DENSITY REQUIREMENTS:

MINIMUM DENSITY*	LOCATION
95%	BELOW PAVED OR CONCRETE AREAS
95%	TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL
90%	BELOW LOAM AND SEED AREAS

*ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM ASTM D-6938 OR EQUIVOLENT METHOD.

22. PER THE GEOTECHNICAL REPORT: STRUCTURAL FILL SHOULD BE USED FOR ENGINEERED FILLS BELOW PROPOSED BUILINGS, BIOREACTORS, TANKS, RETAINING WALLS, AND FOUNDATION BACKFILL.
23. PER THE GEOTECHNICAL REPORT: COMMON FILL SHOULD BE USED FOR ENGINEERED FILLS BELOW ROADWAY, PARKING, AND OTHER NON-STRUCTURAL AREAS.

Type	Sieve Size	% Passing
Structural Fill, NHDOT 304.3 (Crushed Gravel)	3" (75 mm)	100
	2" (50 mm)	95-100
	1" (25 mm)	55-85
	No. 4 (4.75 mm)	27-52
	No. 200 (75 µm)	0-12* (in sand portion)
Common Fill	8"	100
	No. 200 (75 µm)	0-15 when placed within 3 feet of finished grade in paved areas

SITE PREPARATION NOTES

1. LONDONDERRY EMERGENCY SERVICES (POLICE/FIRE) SHALL HAVE ACCESS TO THE SITE AT ALL TIMES DURING CONSTRUCTION.
2. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS WORK AT ALL TIMES.
3. THE CONTRACTOR SHALL VERIFY ALL SURVEY INFORMATION IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
4. EXISTING UTILITY SERVICES TO BE DISCONTINUED ARE TO BE CAPPED AS REQUIRED BY THE RESPECTIVE UTILITY COMPANIES.
5. ALL DEMOLITION AND CONSTRUCTION DEBRIS SHALL BE REMOVED FROM SITE AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
6. IN THAT THE PROJECT WILL DISTURB MORE THAN 5-ACRES AT ONE TIME A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL OR A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE ("MONITOR") SHALL BE EMPLOYED TO INSPECT THE SITE FROM THE START OF ALTERATION OF TERRAIN ACTIVITIES UNTIL THE SITE IS IN FULL COMPLIANCE WITH THE ALTERATION OF TERRAIN PERMIT ("PERMIT").
   A. DURING THIS PERIOD, THE MONITOR SHALL INSPECT THE SUBJECT SITE AT LEAST ONCE A WEEK, AND IF POSSIBLE, DURING ANY ½ INCH OR GREATER RAIN EVENT (I.E. ½ INCH OF PRECIPITATION OR MORE WITHIN A 24 HOUR PERIOD). IF UNABLE TO BE PRESENT DURING SUCH A STORM, THE MONITOR SHALL INSPECT THE SITE WITHIN 24 HOURS OF THIS EVENT.
   B. THE MONITOR SHALL PROVIDE TECHNICAL ASSISTANCE AND RECOMMENDATION TO THE CONTRACTOR ON THE APPROPRIATE BEST MANAGEMENT PRACTICES FOR EROSION AND SEDIMENT CONTROLS REQUIRED TO MEET THE REQUIREMENTS OF RSA 485-A:17 AND ALL APPLICABLE DES PERMIT CONDITIONS.
   C. WITHIN 24 HOURS OF EACH INSPECTION, THE MONITOR SHALL SUBMIT A REPORT TO DES VIA EMAIL (TO KEVIN THATCHER AT KEVIN.D.THATCHER@DES.NH.GOV).
7. CONTRACTOR TO INSTALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE WORK. REFER TO THE STORMWATER MANAGEMENT PLAN FOR SPECIFIC INFORMATION.
8. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN OF LONDONDERRY'S CONSTRUCTION STANDARDS AND DETAILS (LATEST ADDITION), AND THE TOWN STANDARDS SHALL TAKE PRECEDENCE IN CASE OF ANY DETAILS OR PLANS IN CONFLICT.
9. FINAL CONSTRUCTION SEQUENCING SUBJECT TO CONTRACTOR AND OWNER CONFIRMATION.

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

NOTES

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

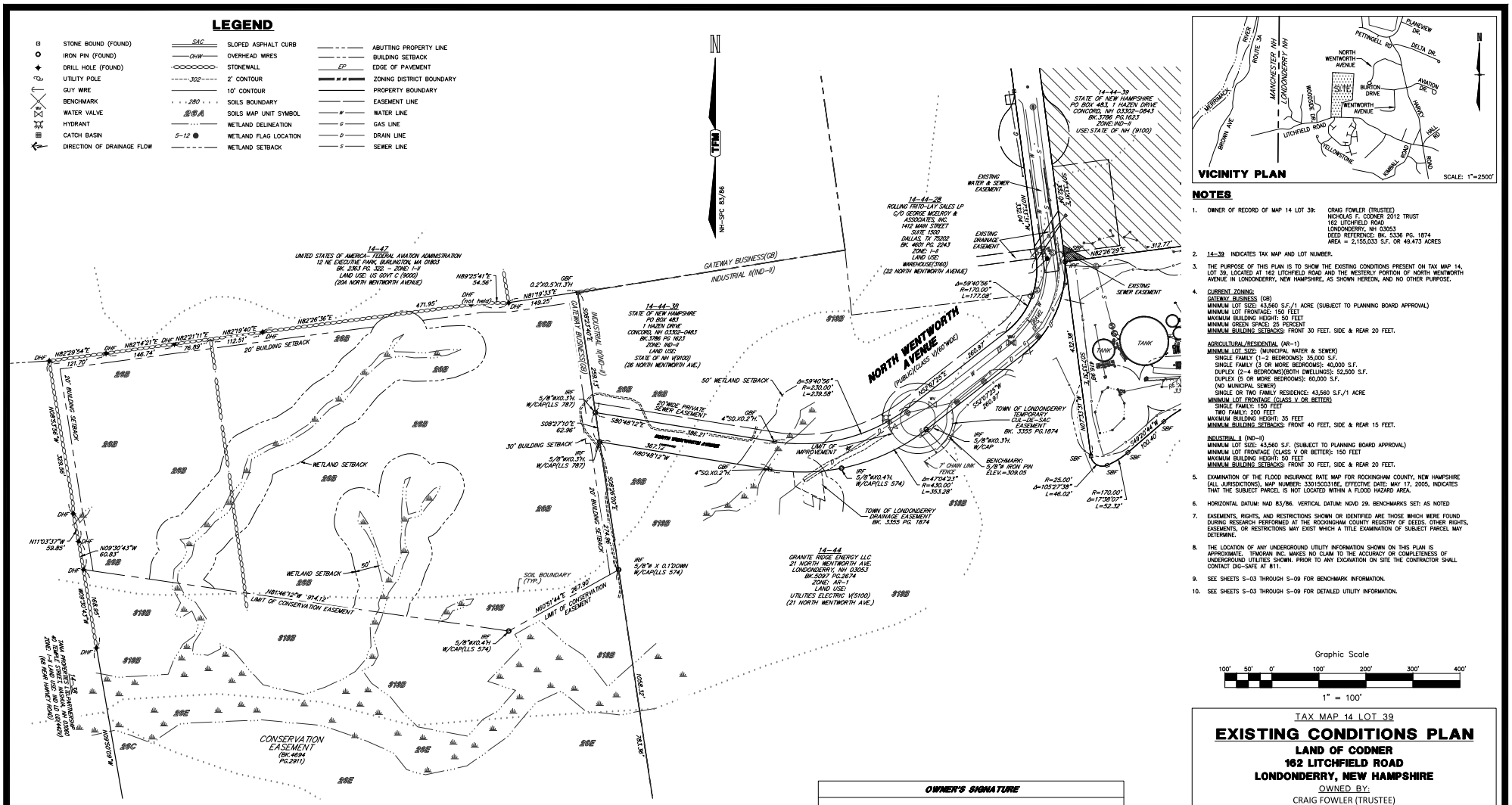
STATE OF NEW HAMPSHIRE — NICHOLAS C. COLON — No. 14886 — LICENSED PROFESSIONAL ENGINEER

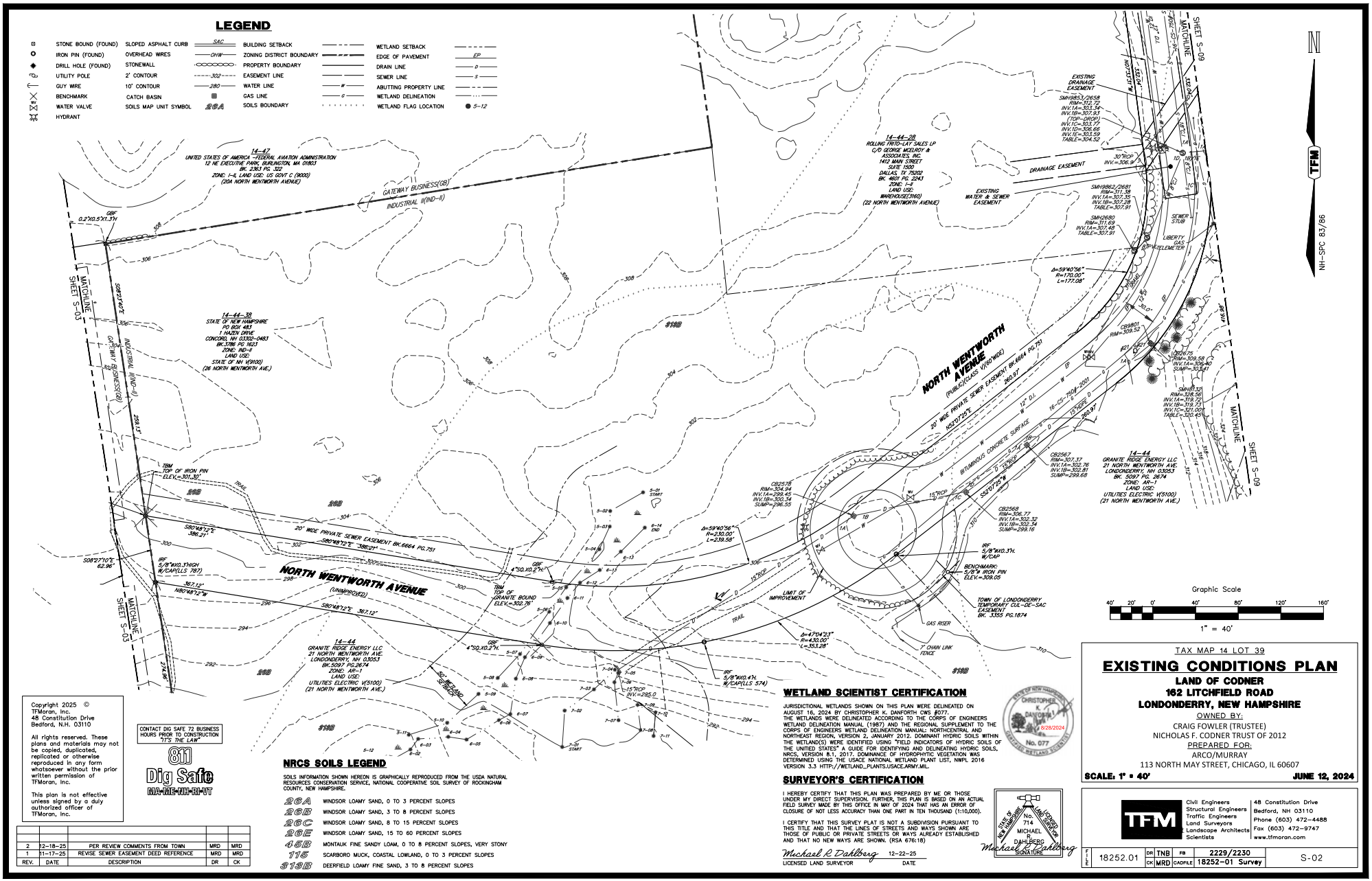
REV	DATE	DESCRIPTION	DR	CK
5	12/18/2025	AOT & STAFF COMMENTS	JD	NG
4	10/24/2025	NHF&G APPROVAL	JD	NG
3	11/3/2025	TOWN SEWER COMMENTS	JD	NG
2	9/30/2025	REVISED FOR NHF&G & NHDES COMMENTS	JD	NG
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

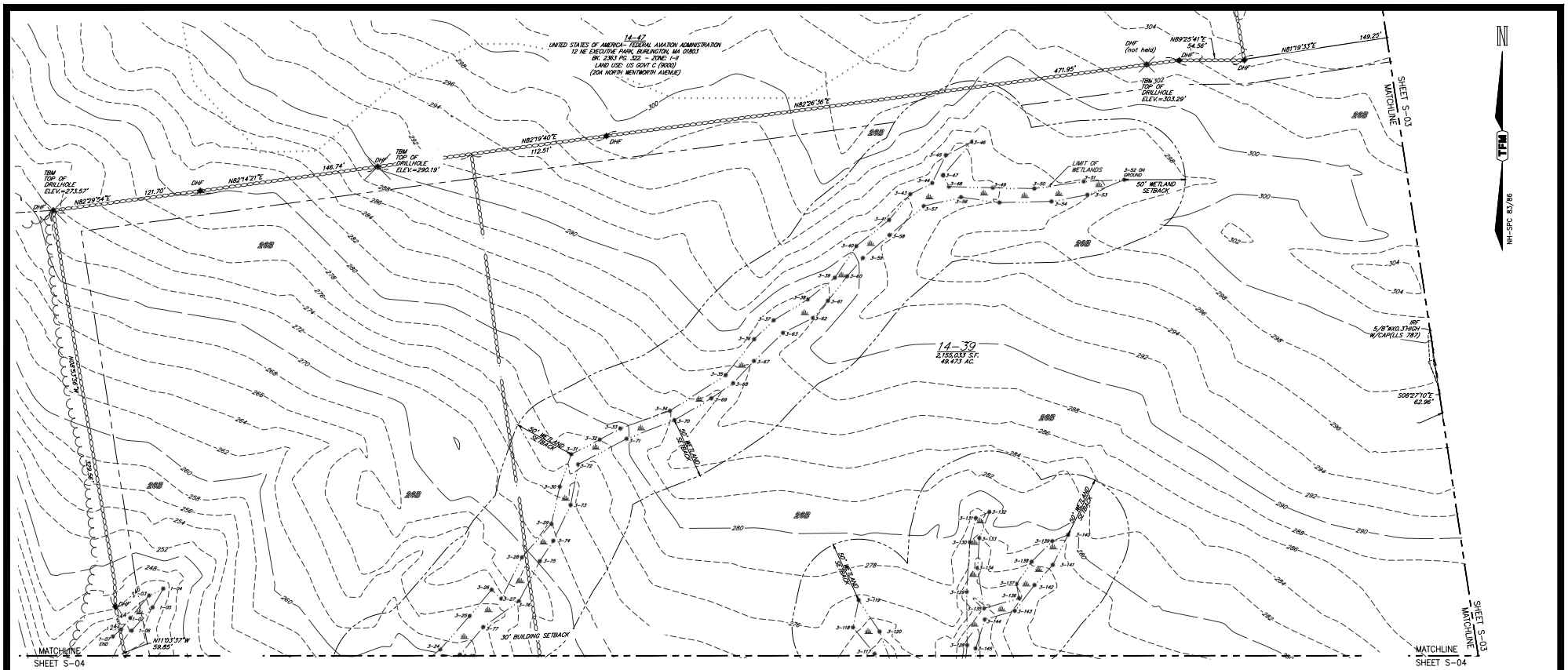
TFM — Civil Engineers, Structural Engineers, Traffic Engineers, Land Surveyors, Landscape Architects, Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
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FILE	18252-02	DR		FB	-	C-03
		CK		CADFILE	18252-02 COVER & DETAILS	

Dec 23, 2025 - 2:14pm
P:\TFM Projects\18252\Identified Plot - Londonderry, NH\18252-02 PurposeEnergy - Civil & Permitting Services\18252-02_CSD\PRODUCTION\18252-02 Cover & Details.dwg


LEGEND
STONE BOUND (FOUND)
IRON PIN (FOUND)
DRILL HOLE (FOUND)
UTILITY POLE
GUY WIRE
BENCHMARK
WATER VALVE
HYDRANT
CATCH BASIN
DIRECTION OF DRAINAGE FLOW
SLOPED ASPHALT CURB
OVERHEAD WIRES
STONEWALL
2' CONTOUR
10' CONTOUR
SOILS BOUNDARY
SOILS MAP UNIT SYMBOL
WETLAND DELINEATION
WETLAND FLAG LOCATION
WETLAND SETBACK
ABUTTING PROPERTY LINE
BUILDING SETBACK
EDGE OF PAVEMENT
ZONING DISTRICT BOUNDARY
PROPERTY BOUNDARY
EASEMENT LINE
WATER LINE
GAS LINE
DRAIN LINE
SEWER LINE
N
TFM
NH-SPC 83/86
14-47
UNITED STATES OF AMERICA- FEDERAL AVIATION ADMINISTRATION
12 NE EXECUTIVE PARK, BURLINGTON, MA 01803
BK. 2361 PG. 322 - ZONE: I-A
LAND USE: US GOVT C (9000)
(20A NORTH WENTWORTH AVENUE)
14-44-39
STATE OF NEW HAMPSHIRE
PO BOX 483, 1 HAZEN DRIVE
CONCORD, NH 03302-0483
BK. 3786 PG. 1623
ZONE: IND-II
LAND USE:
STATE OF NH (9100)
(26 NORTH WENTWORTH AVE.)
14-44-39
STATE OF NEW HAMPSHIRE
PO BOX 483, 1 HAZEN DRIVE
CONCORD, NH 03302-0483
BK. 3786 PG. 1623
ZONE: IND-II
LAND USE:
STATE OF NH (9100)
(26 NORTH WENTWORTH AVE.)
14-44-28
ROLLING FRITO-LAY SALES LP
C/O GEORGE MCELROY & ASSOCIATES, INC.
1412 MAIN STREET
SUITE 1500
DALLAS, TX 75202
BK. 4601 PG. 2243
ZONE: I-A
LAND USE:
WAREHOUSE(3160)
(22 NORTH WENTWORTH AVENUE)
14-44
GRANITE RIDGE ENERGY LLC
21 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053
BK. 5097 PG. 2674
ZONE: AR-1
LAND USE:
UTILITIES ELECTRIC V(5100)
(21 NORTH WENTWORTH AVE.)
14-46
TWM PROPERTIES LLC
40 TEMPLE STREET
NASHUA, NH 03060
(40 BEAR HAWK'S ROAD)
14-45
TOWN OF LONDONDERRY
(NO ST. NO LOT #)
(BEAR HAWK'S ROAD)
GATEWAY BUSINESS(GB)
INDUSTRIAL II(IND-II)
NORTH WENTWORTH AVENUE
(PUBLIC)(CLASS V)(60' WIDE)
20' BUILDING SETBACK
30' BUILDING SETBACK
50' WETLAND SETBACK
WETLAND SETBACK
20' WIDE PRIVATE SEWER EASEMENT
EXISTING SEWER EASEMENT
EXISTING WATER & SEWER EASEMENT
EXISTING DRAINAGE EASEMENT
TOWN OF LONDONDERRY TEMPORARY CUL-DE-SAC EASEMENT BK. 3355 PG.1874
TOWN OF LONDONDERRY DRAINAGE EASEMENT BK. 3355 PG. 1874
LIMIT OF CONSERVATION EASEMENT
LIMIT OF IMPROVEMENT
SOIL BOUNDARY (TYP.)
CONSERVATION EASEMENT (BK. 4634 PG.2911)
BENCHMARK: 5/8"ø IRON PIN ELEV.=309.05
7' CHAIN LINK FENCE
TANK
MARK
SBF
SBC
SBE
GBF
DHF
IRF
N11°03'37"W 59.85'
N09°30'43"W 60.83'
N10°35'57"W 325.18'
N11°46'12"W 914.13'
N10°51'44"E 257.90'
S08°27'10"E 62.96'
S80°48'12"E 386.21'
N80°48'12"W 367.17'
S09°30'43"E 274.96'
S10°35'57"E 1008.53'
S11°03'37"E 783.36'
N10°05'07"W 1008.53'
N11°03'37"W 168.95'
S52°07'25"W 260.31'
S37°52'35"E 260.31'
S52°07'25"W 260.31'
N52°07'25"E 260.31'
S37°52'35"E 416.86'
N37°52'35"W 416.86'
S08°20'44"W 100.00'
N08°20'44"E 100.00'
R=25.00'
Δ=105°27'59"
L=46.02'
R=170.00'
Δ=17°38'07"
L=52.32'
R=170.00'
Δ=59°40'56"
L=177.08'
R=230.00'
L=239.58'
R=430.00'
Δ=47°04'23"
L=353.28'
N82°26'29"E 312.77'
N82°26'56"E 471.95'
N89°25'41"E 54.56'
N81°19'33"E 149.25'
N82°26'54"E 121.70'
N82°14'21"E 146.74'
N82°21'11"E 76.89'
N82°19'40"E 112.51'
S08°27'10"E 257.17'
S08°27'10"E 274.96'
S80°48'12"E
N80°48'12"W
N81


LEGEND
STONE BOUND (FOUND)
IRON PIN (FOUND)
DRILL HOLE (FOUND)
UTILITY POLE
GUY WIRE
BENCHMARK
WATER VALVE
HYDRANT
SLOPED ASPHALT CURB
OVERHEAD WIRES
STONEWALL
2' CONTOUR
10' CONTOUR
CATCH BASIN
SOILS MAP UNIT SYMBOL
BUILDING SETBACK
ZONING DISTRICT BOUNDARY
PROPERTY BOUNDARY
EASEMENT LINE
WATER LINE
GAS LINE
SOILS BOUNDARY
WETLAND SETBACK
EDGE OF PAVEMENT
DRAIN LINE
SEWER LINE
ABUTTING PROPERTY LINE
WETLAND DELINEATION
WETLAND FLAG LOCATION
14-47
UNITED STATES OF AMERICA -FEDERAL AVIATION ADMINISTRATION
12 NE EXECUTIVE PARK, BURLINGTON, MA 01803
BK. 2363 PG. 132
ZONE: I-A, LAND USE: US 02VT C (9000)
(20A NORTH WENTWORTH AVENUE)
14-44-28
ROLLING FRITO-LAY SALES LP
C/O GEORGE MCELROY & ASSOCIATES, INC.
1412 MAIN STREET SUITE 1500
DALLAS, TX 75202
BK. 4601 PG. 2243
ZONE: I-2
LAND USE: WAREHOUSE(7160)
(22 NORTH WENTWORTH AVENUE)
14-44-38
STATE OF NEW HAMPSHIRE
PO BOX 483
1 HAZEN DRIVE
CONCORD, NH 03302-0483
BK. 3786 PG 1623
ZONE: IND-II
LAND USE:
STATE OF NH W(9100)
(26 NORTH WENTWORTH AVE.)
14-44
GRANITE RIDGE ENERGY LLC
21 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053
BK. 5097 PG. 2674
ZONE: AR-1
LAND USE:
UTILITIES ELECTRIC W(5100)
(21 NORTH WENTWORTH AVE.)
NORTH WENTWORTH AVENUE
(PUBLIC)(CLASS V)(60' WIDE)
(UNIMPROVED)
GATEWAY BUSINESS(GB)
INDUSTRIAL II(IND-II)
MATCHLINE SHEET S-03
MATCHLINE SHEET S-09
20' WIDE PRIVATE SEWER EASEMENT BK.6664 PG.751
EXISTING DRAINAGE EASEMENT
DRAINAGE EASEMENT
EXISTING WATER & SEWER EASEMENT
LIMIT OF IMPROVEMENT
TOWN OF LONDONDERRY TEMPORARY CUL-DE-SAC EASEMENT BK. 3355 PG.1874
TRAIL
7' CHAIN LINK FENCE
GAS RISER
BENCHMARK: 5/8"# IRON PIN ELEV.=309.05
TBM TOP OF IRON PIN ELEV.=301.30'
TBM TOP OF GRANITE BOUND ELEV.=302.76'
BITUMINOUS CONCRETE SURFACE
SEWER STUB
LIBERTY GAS TELEMETER
Graphic Scale
40' 20' 0' 40' 80' 120' 160'
1" = 40'
TAX MAP 14 LOT 39
EXISTING CONDITIONS PLAN
LAND OF CODNER
162 LITCHFIELD ROAD
LONDONDERRY, NEW HAMPSHIRE
OWNED BY:
CRAIG FOWLER (TRUSTEE)
NICHOLAS F. CODNER TRUST OF 2012
PREPARED FOR:
ARCO/MURRAY
113 NORTH MAY STREET, CHICAGO, IL 60607
SCALE: 1" = 40'
JUNE 12, 2024
NRCS SOILS LEGEND
SOILS INFORMATION SHOWN HEREON IS GRAPHICALLY REPRODUCED FROM THE USDA NATURAL RESOURCES CONSERVATION SERVICE, NATIONAL COOPERATIVE SOIL SURVEY OF ROCKINGHAM COUNTY, NEW HAMPSHIRE.
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26B WINDSOR LOAMY SAND, 3 TO 8 PERCENT SLOPES
26C WINDSOR LOAMY SAND, 8 TO 15 PERCENT SLOPES
26E WINDSOR LOAMY SAND, 15 TO 60 PERCENT SLOPES
46B MONTAUK FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY
115 SCARBORO MUCK, COASTAL LOWLAND, 0 TO 3 PERCENT SLOPES
313B DEERFIELD LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES
WETLAND SCIENTIST CERTIFICATION
JURISDICTIONAL WETLANDS SHOWN ON THIS PLAN WERE DELINEATED ON AUGUST 16, 2024 BY CHRISTOPHER K. DANFORTH CWS #077.
THE WETLANDS WERE DELINEATED ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (1987) AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2, JANUARY 2012. DOMINANT HYDRIC SOILS WITHIN THE WETLAND(S) WERE IDENTIFIED USING "FIELD INDICATORS OF HYDRIC SOILS OF THE UNITED STATES" A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, NRCS, VERSION 8.1, 2017. DOMINANCE OF HYDROPHYTIC VEGETATION WAS DETERMINED USING THE USACE NATIONAL WETLAND PLANT LIST, NWPL 2016 VERSION 3.3 HTTP://WETLAND_PLANTS.USACE.ARMY.MIL.
CHRISTOPHER K. DANFORTH
8/28/2024
No. 077
CERTIFIED WETLAND SCIENTIST
SURVEYOR'S CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION. FURTHER, THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY MADE BY THIS OFFICE IN MAY OF 2024 THAT HAS AN ERROR OF CLOSURE OF NOT LESS ACCURACY THAN ONE PART IN TEN THOUSAND (1:10,000).
I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN. (RSA 676:18)
Michael R Dahlberg 12-22-25
LICENSED LAND SURVEYOR DATE
STATE OF NEW HAMPSHIRE
No. 714
MICHAEL R. DAHLBERG
LICENSED LAND SURVEYOR
Michael R Dahlberg
SIGNATURE
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CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION "IT'S THE LAW"
811 Dig Safe
MA-ME-VT-RI-VT
REV. DATE DESCRIPTION DR CK
2 12-18-25 PER REVIEW COMMENTS FROM TOWN MRD MRD
1 11-17-25 REVISE SEWER EASEMENT DEED REFERENCE MRD MRD
TFM
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Fax (603) 472-9747
www.tfmoran.com
FILE 18252.01
DR TNB FB 2229/2230
CK MRD CADFILE 18252-01 Survey
S-02



LEGEND

STONE BOUND (FOUND)	SLOPED ASPHALT CURB	SAC	BUILDING SETBACK
IRON PIN (FOUND)	OVERHEAD WIRES	OHW	ZONING DISTRICT BOUNDARY
DRILL HOLE (FOUND)	STONEWALL		PROPERTY BOUNDARY
UTILITY POLE	2' CONTOUR	302	EASEMENT LINE
GUY WIRE	10' CONTOUR	280	WATER LINE
BENCHMARK	SOILS BOUNDARY		GAS LINE
WATER VALVE	SOILS MAP UNIT SYMBOL	26A	DRAIN LINE
HYDRANT	WETLAND DELINEATION		SEWER LINE
CATCH BASIN	WETLAND FLAG LOCATION	5-12	ABUTTING PROPERTY LINE
MAILBOX	WETLAND SETBACK		
EDGE OF PAVEMENT	DIRECTION OF DRAINAGE FLOW		

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26E	WINDSOR LOAMY SAND, 15 TO 60 PERCENT SLOPES
45B	MONTAUK FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY
715	SCARBORO MUCK, COASTAL LOWLAND, 0 TO 3 PERCENT SLOPES
313B	DEERFIELD LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES

Graphic Scale

40' 20' 0' 40' 80' 120' 160'

1" = 40'

TAX MAP 14 LOT 39

EXISTING CONDITIONS PLAN

LAND OF CODNER
162 LITCHFIELD ROAD
LONDONDERRY, NEW HAMPSHIRE

OWNED BY:
CRAIG FOWLER (TRUSTEE)
NICHOLAS F. CODNER TRUST OF 2012
PREPARED FOR:
ARCO/MURRAY
113 NORTH MAY STREET, CHICAGO, IL 60607

SCALE: 1" = 40' **JUNE 12, 2024**

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REV.	DATE	DESCRIPTION	DR	CK
2	12-18-25	PER REVIEW COMMENTS FROM TOWN	MRD	MRD
1	11-17-25	REVISE SEWER EASEMENT DEED REFERENCE	MRD	MRD

CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION
"IT'S THE LAW"
811 Dig Safe
MA-ME-NH-RI-VT

WETLAND SCIENTIST CERTIFICATION

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CHRISTOPHER K. DANFORTH — STATE OF NEW HAMPSHIRE — No. 077 — CERTIFIED WETLAND SCIENTIST — 8/28/2024

SURVEYOR'S CERTIFICATION

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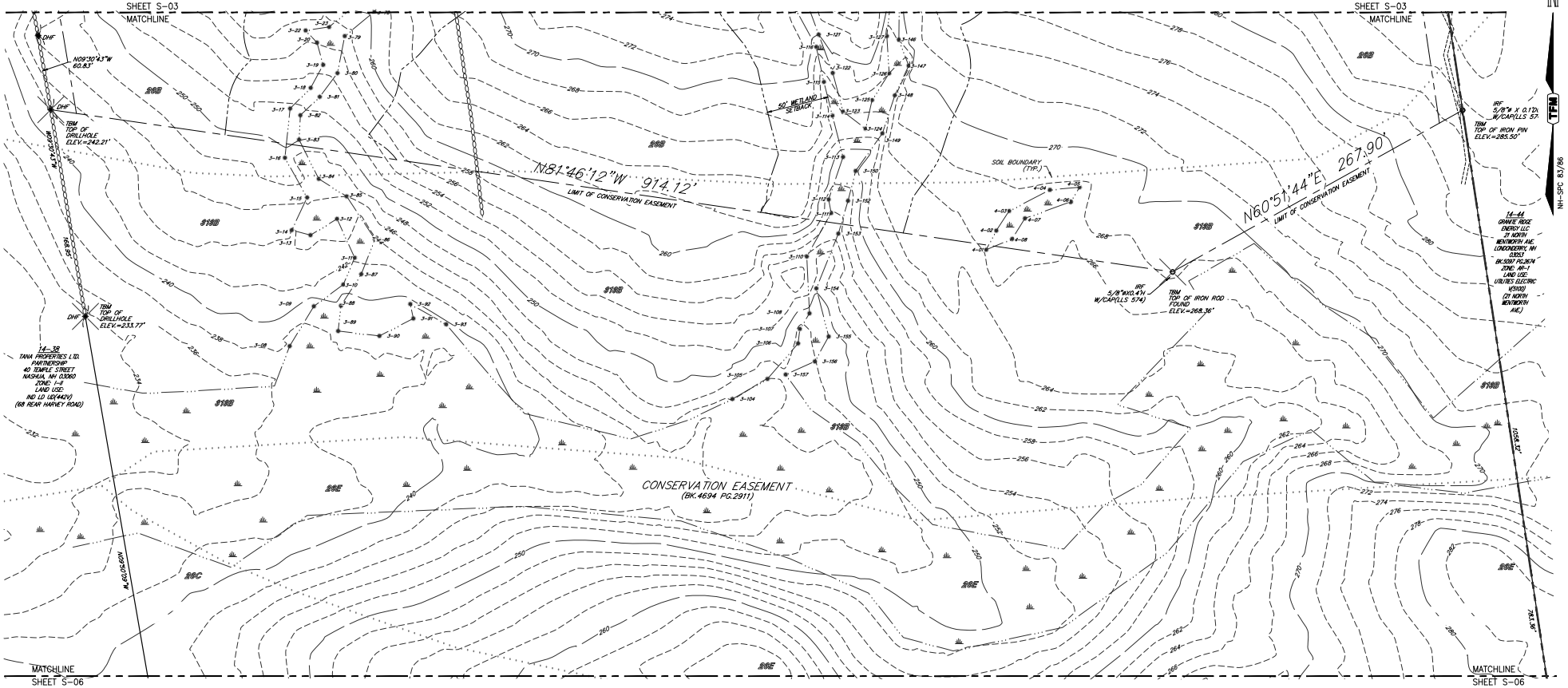
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Michael R Dahlberg — 12-22-25
LICENSED LAND SURVEYOR — DATE

STATE OF NEW HAMPSHIRE — No. 714 — MICHAEL R. DAHLBERG — LICENSED LAND SURVEYOR — SIGNATURE

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
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Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	FB	
18252.01	TNB	2229/2230	S-03
	CK MRD	CADFILE 18252-01 Survey	



LEGEND

STONE BOUND (FOUND)	SLOPED ASPHALT CURB	BUILDING SETBACK	
IRON PIN (FOUND)	OVERHEAD WIRES	ZONING DISTRICT BOUNDARY	
DRILL HOLE (FOUND)	STONEWALL	PROPERTY BOUNDARY	
UTILITY POLE	2' CONTOUR	EASEMENT LINE	
GUY WIRE	10' CONTOUR	WATER LINE	
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26E	WINDSOR LOAMY SAND, 15 TO 60 PERCENT SLOPES
46B	MONTAUK FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY
71S	SCARBORO MUCK, COASTAL LOWLAND, 0 TO 3 PERCENT SLOPES
91SB	DEERFIELD LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES

Graphic Scale

40' 20' 0' 40' 80' 120' 160'

1" = 40'

TAX MAP 14 LOT 39

EXISTING CONDITIONS PLAN

LAND OF CODNER
162 LITCHFIELD ROAD
LONDONDERRY, NEW HAMPSHIRE

OWNED BY:
CRAIG FOWLER (TRUSTEE)
NICHOLAS F. CODNER TRUST OF 2012

PREPARED FOR:
ARCO/MURRAY
113 NORTH MAY STREET, CHICAGO, IL 60607

SCALE: 1" = 40' **JUNE 12, 2024**

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REV.	DATE	DESCRIPTION	DR	CK
2	12-18-25	PER REVIEW COMMENTS FROM TOWN	MRD	MRD
1	11-17-25	REVISE SEWER EASEMENT DEED REFERENCE	MRD	MRD

WETLAND NOTE

THE WETLANDS DEPICTED ON THIS SHEET AND THOSE LOCATED WITHIN THE EXISTING CONSERVATION EASEMENT WERE DIGITIZED FROM PLANS OF RECORD PREPARED FOR THE STATE OF NEW HAMPSHIRE AND RECORDED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS AS PLAN #

WETLAND SCIENTIST CERTIFICATION

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CHRISTOPHER K. DANFORTH — No. 077 — 8/28/2024

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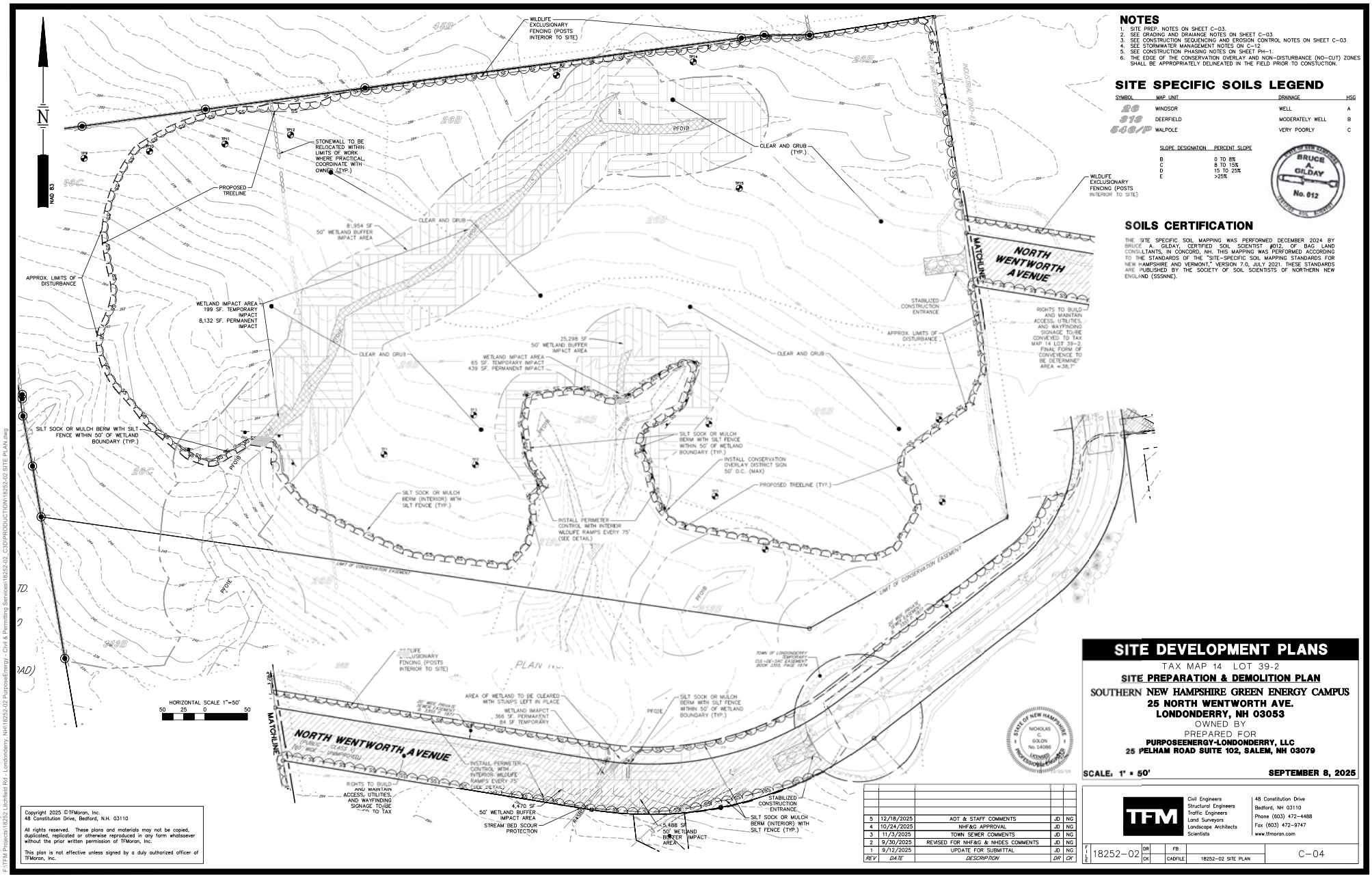
Michael R Dahlberg 12-22-25
LICENSED LAND SURVEYOR — DATE

THE STATE OF NEW HAMPSHIRE — No. 714 — MICHAEL R. DAHLBERG — LICENSED LAND SURVEYOR — SEAL

Michael R Dahlberg
SIGNATURE

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
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Fax (603) 472-9747
www.tfmoran.com

FILE	DR	CK	FB	CADFILE		
18252.01	TNB	MRD	2229/2230	18252-01 Survey	S-04



NOTES

1. SITE PREP. NOTES ON SHEET C-03.
2. SEE GRADING AND DRAINAGE NOTES ON SHEET C-03
3. SEE CONSTRUCTION SEQUENCING AND EROSION CONTROL NOTES ON SHEET C-03
4. SEE STORMWATER MANAGEMENT NOTES ON C-12
5. SEE CONSTRUCTION PHASING NOTES ON SHEET PH-1.
6. THE EDGE OF THE CONSERVATION OVERLAY AND NON-DISTURBANCE (NO-CUT) ZONES SHALL BE APPROPRIATELY DELINEATED IN THE FIELD PRIOR TO CONSTUCTION.

SITE SPECIFIC SOILS LEGEND

SYMBOL	MAP UNIT	DRAINAGE	HSG
26	WINDSOR	WELL	A
313	DEERFIELD	MODERATELY WELL	B
646/P	WALPOLE	VERY POORLY	C

SLOPE DESIGNATION	PERCENT SLOPE
B	0 TO 8%
C	8 TO 15%
D	15 TO 25%
E	>25%

BRUCE A. GILDAY No. 012 CERTIFIED SOIL SCIENTIST

SOILS CERTIFICATION

THE SITE SPECIFIC SOIL MAPPING WAS PERFORMED DECEMBER 2024 BY BRUCE A. GILDAY, CERTIFIED SOIL SCIENTIST #012, OF BAG LAND CONSULTANTS, IN CONCORD, NH. THIS MAPPING WAS PERFORMED ACCORDING TO THE STANDARDS OF THE "SITE-SPECIFIC SOIL MAPPING STANDARDS FOR NEW HAMPSHIRE AND VERMONT," VERSION 7.0, JULY 2021. THESE STANDARDS ARE PUBLISHED BY THE SOCIETY OF SOIL SCIENTISTS OF NORTHERN NEW ENGLAND (SSSNNE).

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

SITE PREPARATION & DEMOLITION PLAN

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: 1" = 50' **SEPTEMBER 8, 2025**

NICHOLAS C. GOLON No. 14086 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

REV	DATE	DESCRIPTION	DR	CK
5	12/18/2025	AOT & STAFF COMMENTS	JO	NG
4	10/24/2025	NHF&G APPROVAL	JO	NG
3	11/3/2025	TOWN SEWER COMMENTS	JO	NG
2	9/30/2025	REVISED FOR NHF&G & NHDES COMMENTS	JO	NG
1	9/12/2025	UPDATE FOR SUBMITTAL	JO	NG

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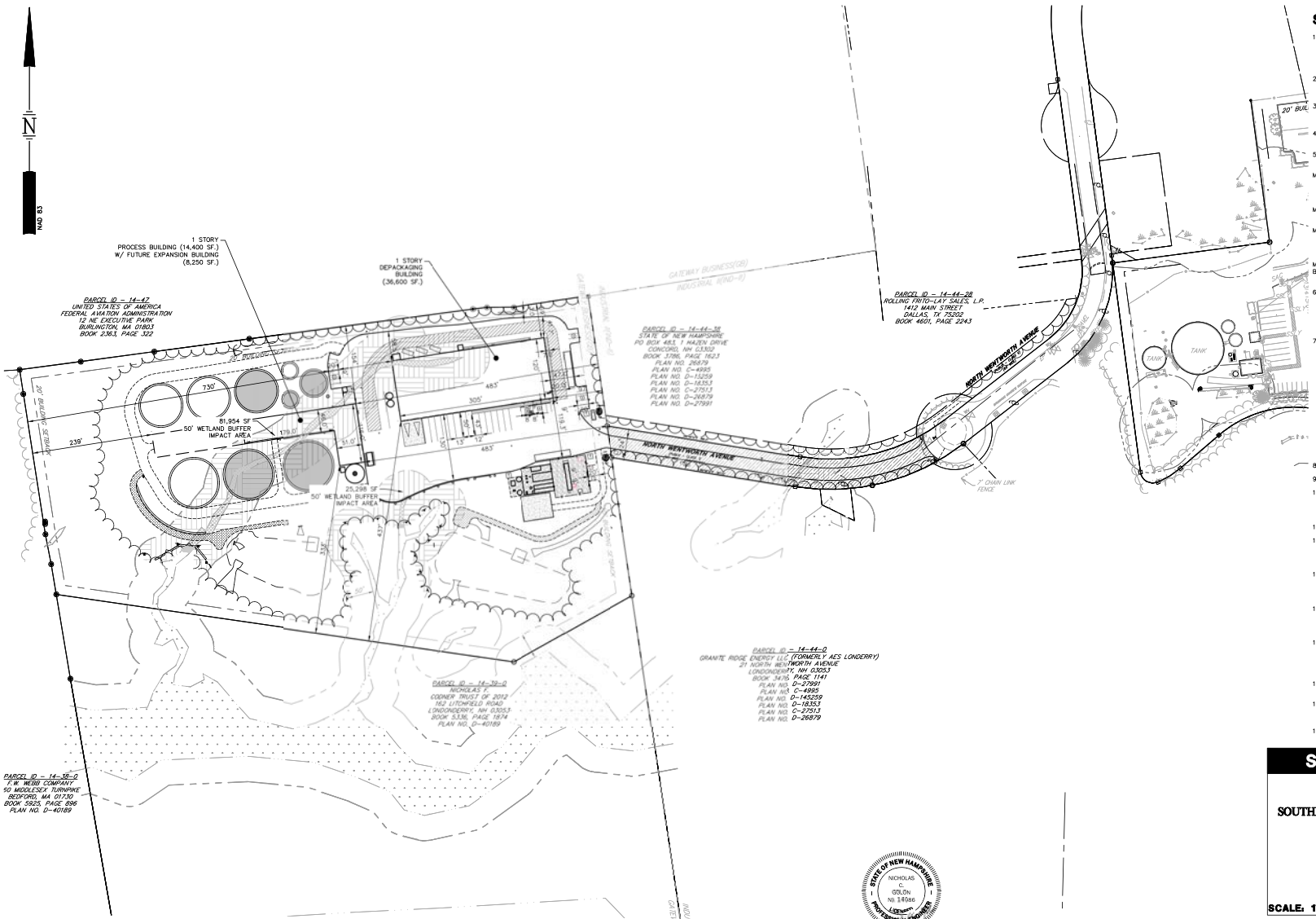
FILE	DR	FB		
18252-02	CK		CADFILE: 18252-02 SITE PLAN	C-04

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Dec 23, 2025 - 2:15pm
P:\TFM Projects\18252\Litchfield Rd - Londonderry, NH\18252-02 Purposeenergy - Civil & Permitting Services\18252-02_CSD\PRODUCTION\18252-02 SITE PLAN.dwg



SITE DATA

1. OWNER OF RECORD OF MAP 14 LOT 39:

   CRAIG FOWLER (TRUSTEE) NICHOLAS F. CODNER TRUST 2012, 162 LITCHFIELD ROAD
   DEED REFERENCE TO PARCEL IS BK 5336 PG 1874
   AREA OF PARCEL = 2,155,033± SF OR 49.473± ACRES

2. ZONED: GATEWAY BUSINESS (GB)
   EXISTING USE: UNDEVELOPED
   PROPOSED USE: ORGANIC WASTE PROCESSING FACILITY

3. THE PURPOSE OF THIS PLAN IS TO CONSTRUCT A RESOURCE RECOVERY CENTER. ASSOCIATED IMPROVEMENTS INCLUDE AND ARE NOT LIMITED TO ACCESS, GRADING, STORMWATER MANAGEMENT SYSTEMS, UTILITIES, LIGHTING, AND LANDSCAPING.

4. TYPICAL HOURS OF OPERATION (OFFICE): 7 AM TO 4 PM MONDAY TO FRIDAY. FACILTY RUNS 24-7 YEAR ROUND WITH EXCEPTIONS FOR MAINTENANCE.

5. DIMENSIONAL REQUIREMENTS (CURRENT ZONING)

	REQUIRED:	PROVIDED:
MINIMUM LOT DIMENSIONS:		
LOT AREA	43,560 SF (1.00± AC)	667,167.7 SF* (15.316± AC)
LOT FRONTAGE	150 FT	60 FT
MAXIMUM STRUCTURE DIMENSIONS:		
STRUCTURE HEIGHT	50 FT	39.5 FT
MINIMUM SETBACKS/BUFFER:		
BUILDING FRONT	30 FT	96.6 FT
BUILDING SIDE	20 FT	69.4 FT
BUILDING REAR	20 FT	351.9 FT
MINIMUM GREEN SPACE	25%	64%%
BUILDING COVERAGE	N/A	

   * UPON FINALIZATION AND RECORDING OF LOT SUBDIVISION

6. PARKING REQUIREMENTS

PARKING SPACES (SEE CALCULATION)	1 PER 800 SF FA	64 SPACES
ACCESSIBLE SPACES (REQ'D BY ADA)	3 FOR 51-75 SPACES	3 SPACES
PARKING SPACE SIZE	9 FT X 20 FT	9 FT X 20 FT
AISLE WIDTH	22 FT	22 FT

7. PARKING CALCULATIONS

   REQUIRED PARKING RATIO:
   RESOURCE RECOVERY CETNER: 1 SPACE PER 800 SF FLOOR AREA

TOTAL REQUIRED = 50,700 SF FA/800 SF	= 64 SPACES
TOTAL	= 64 SPACES

   PARKING PROVIDED PER ITE:

   LAND USE CODE (LUC) 110 – GENERAL LIGHT INDUSTRIAL

   AVG. RATE = 0.76 SPACES/EMPLOYEE

   30 EMPLOYEES x 0.76 SPACES/EMPLOYEES = 23 SPACES

   THE SITE PROVIDES 23 CAR PARKING SPACES AND 6 TRUCK PARKING SPACES.

8. THIS PLANSET IS ON FILE AT THE TOWN OF LONDONDERRY PLANNING DEPARTMENT

9. THE SITE WILL BE SERVICED BY MUNICIPAL SEWER AND WATER.

10. EXAMINATION OF THE FLOOD INSURANCE RATE MAP FOR ROCKINGHAM COUNTY, NEW HAMPSHIRE (ALL JURISDICTIONS), MAP NUMBER 33015C0318E, EFFECTIVE DATE OF MAY 17, 2005, INDICATES THAT THE SUBJECT PARCEL IS NOT LOCATED WITHIN A FLOOD HAZARD AREA.

11. ALL BUILDINGS ON SITE SHALL BE 1 STORY.

12. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEAUSRES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE TOWN.

13. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO TOWN OF LONDONDERRY SUBDIVISION REGULATIONS AND THE LATEST EDITION OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION.

14. IN ACCORDANCE WITH SECTION 6.01 OF THE LONDONDERRY SITE PLAN REGUALTIONS AND RSA 676.13, ALL IMPROVMENTS SPECIFIED ON THESE SITE PLAN SHALL BE CONSTRUCTED, COMPLETED, INSPECTED AND APPROVED BY THE TOWN OF LONDONDERRY PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

15. IN ACCORDANCE WITH SECTION 6.01 OF THE LONDONDERRY SITE PLAN REGULATIONS AND RSA 676:12, ALL OFF-SITE IMPROVEMENTS SPECIFIED ON THESE SITE PLAN SHALL BE CONSTRUCTED, COMPLETED, INSPECTED AND APPROVED BY THE TOWN OF LONDONDERRY (AND/OR THE NHDOT, IF APPLICABLE) PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

16. APPLICANT SHALL COORDINATE TRAINING MEETING WITH LONDONDERRY POLICE & FIRE DEPARTMENTS.

17. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT DEFINCIENCIES EXIST IN THE APPROVED DESIGN DRAWINGS, THE OWNER SHALL BE REQUIRED TO CORRECT THE DEFICIENCIES TO MEET THE REGULATIONS AT NO EXPENSE TO THE TOWN.

18. THIS PLAN SET HAS BEEN PREPARED FOR THE FULL BUILDOUT OF THE FACILITY NOTING A PHASED CONSTRUCTION SCHEDULE.

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

OVERALL SITE PLAN

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: 1" = 100' **SEPTEMBER 8, 2025**

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OWNER'S SIGNATURE

OWNER OR AUTHORIZED AGENT — DATE: 12/22/2025

Approved by the Londonderry, NH Planning Board for Phase ____
on Date: ____
Certified by: ____

HORIZONTAL SCALE 1"=100'
100 50 0 100

STATE OF NEW HAMPSHIRE — NICHOLAS C. GOLON — No. 14086 — LICENSED PROFESSIONAL ENGINEER — 12/22/25

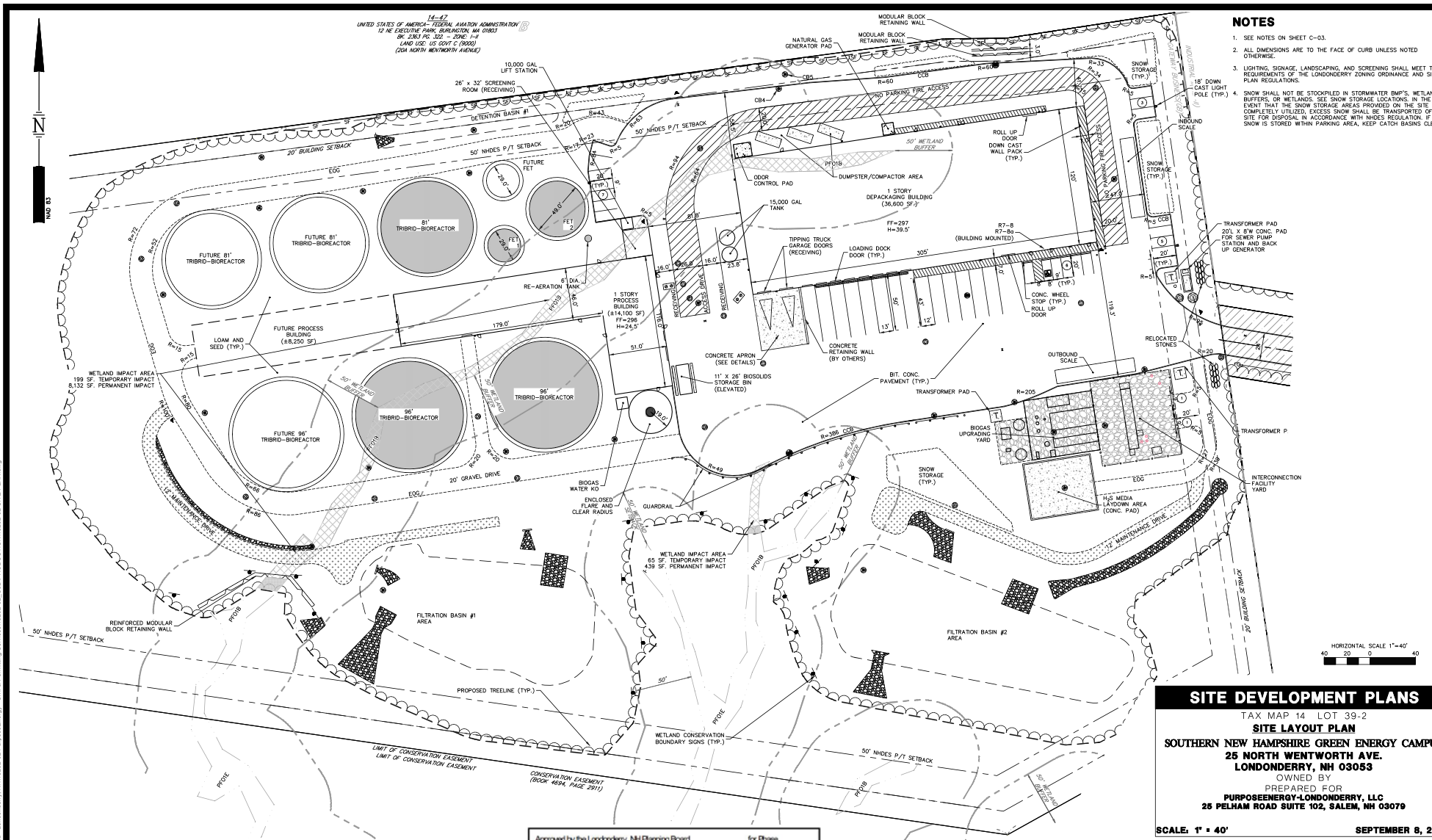
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4	10/24/2025	NHF&G APPROVAL	JD	NG
3	11/3/2025	TOWN SEWER COMMENTS	JD	NG
2	9/30/2025	REVISED FOR NHF&G & NHDES COMMENTS	JD	NG
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

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C-05

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SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

SITE LAYOUT PLAN

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: 1" = 40' **SEPTEMBER 8, 2025**

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4	10/24/2025	NHF&G APPROVAL	JD	NG
3	11/3/2025	TOWN SEWER COMMENTS	JD	NG
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C-06

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_____ 12/22/2025
OWNER OR AUTHORIZED AGENT DATE

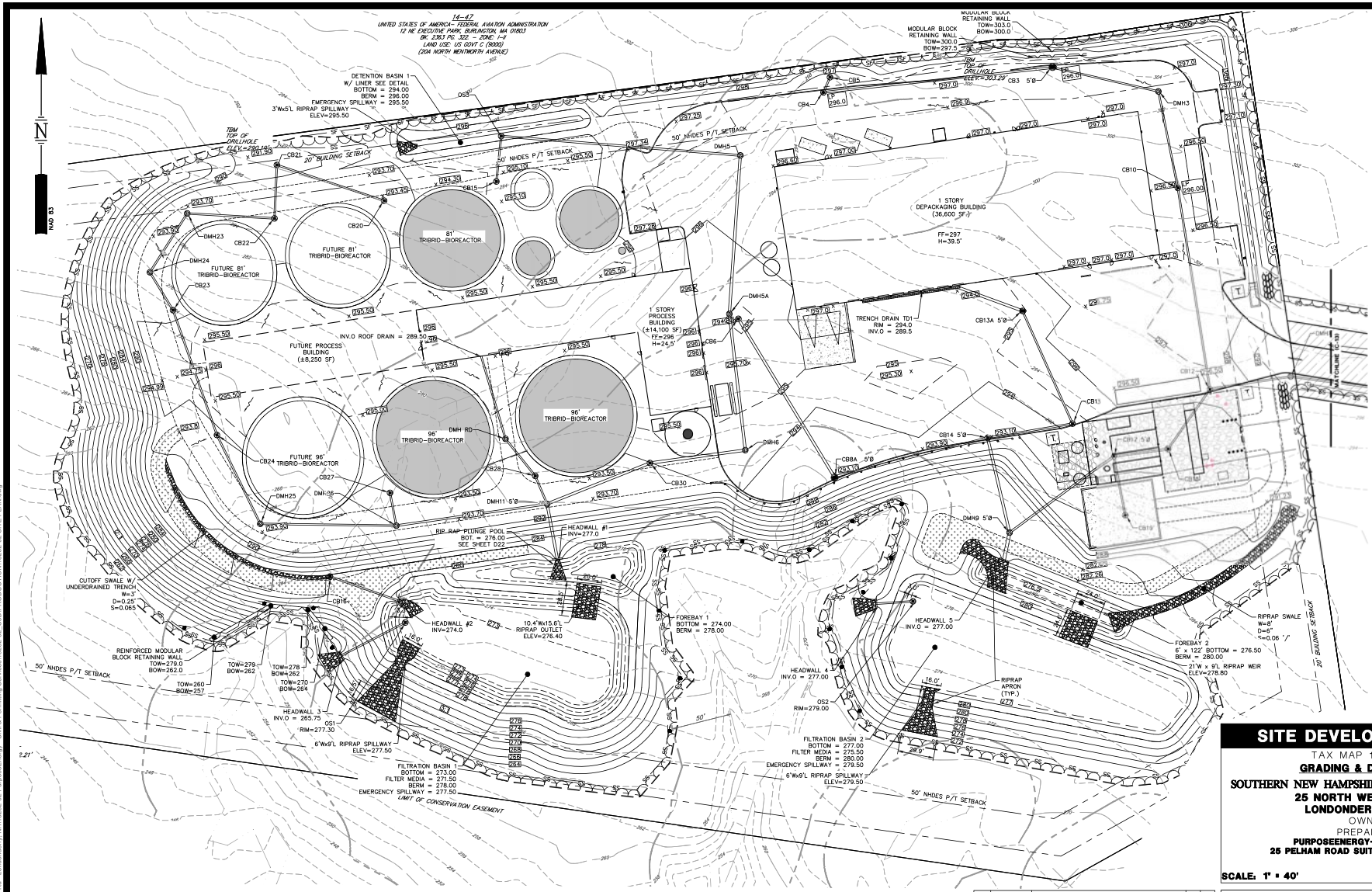
STATE OF NEW HAMPSHIRE NICHOLAS C. GOLON No. 14886 LICENSED PROFESSIONAL ENGINEER

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SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

GRADING & DRAINAGE PLAN

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: 1" = 40' **SEPTEMBER 8, 2025**

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STATE OF NEW HAMPSHIRE
NICHOLAS C. GOLON
No. 14046
LICENSED PROFESSIONAL ENGINEER

HORIZONTAL SCALE 1"=40'
40 20 0 40

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4	10/24/2025	NHF&G APPROVAL	JD	NG
3	11/3/2025	TOWN SEWER COMMENTS	JD	NG
2	9/30/2025	REVISED FOR NHF&G & NHDES COMMENTS	JD	NG
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

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		CK		CADFILE	18252-02 SITE PLAN	C-07

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Pipe Table				
Pipe Name	SIZE	MATERIAL	Length	Slope
CB10–CB12	15"	HDPE PIPE	169 LF	0.010
DMH1–CB12	15"	HDPE PIPE	65 LF	0.010
CB14–DMH9	24"	HDPE PIPE	81 LF	0.010
CB13–CB14	15"	HDPE PIPE	71 LF	0.012
CB1–CB2	15"	HDPE PIPE	22 LF	0.010
CB2–DMH1	15"	HDPE PIPE	156 LF	0.010
CB12–CB18	15"	HDPE PIPE	60 LF	0.010
CB6–CB8A	24"	HDPE PIPE	153 LF	0.008
CB8A–CB14	18"	HDPE PIPE	131 LF	0.010
DMH9–POND2	30"	HDPE PIPE	24 LF	0.005
CB30–DMH11	24"	HDPE PIPE	92 LF	0.010
DMH11–POND1	24"	HDPE PIPE	46 LF	0.005
CB28–DMH11	15"	HDPE PIPE	25 LF	0.008
CB27–DMH26	15"	HDPE PIPE	28 LF	0.010
CB20–CB21	15"	HDPE PIPE	94 LF	0.025
CB21–CB22	15"	HDPE PIPE	44 LF	0.009
CB22–DMH23	15"	HDPE PIPE	73 LF	0.010
DMH23–DMH24	15"	HDPE PIPE	58 LF	0.010
CB24–DMH25	15"	HDPE PIPE	82 LF	0.011
DMH25–DMH26	15"	HDPE PIPE	113 LF	0.009
DMH26–DMH11	18"	HDPE PIPE	126 LF	0.010
DMH6–CB8A	24"	HDPE PIPE	80 LF	0.010
DMH24–CB23	15"	HDPE PIPE	37 LF	0.009
OS3–DMH5	18"	HDPE PIPE	199 LF	0.010
DMH5–DMH5A	24"	HDPE PIPE	132 LF	0.010

Pipe Table				
Pipe Name	SIZE	MATERIAL	Length	Slope
CB4–DMH5	18"	HDPE PIPE	191 LF	0.010
CB23–CB24	15"	HDPE PIPE	110 LF	0.010
CB13A–CB13	15"	HDPE PIPE	102 LF	0.010
CB17–DMH9	18"	HDPE PIPE	108 LF	0.015
CB5–CB4	15"	HDPE PIPE	14 LF	0.007
TD–CB13A	24"	HDPE PIPE	56 LF	0.010
CB18–CB17	18"	HDPE PIPE	45 LF	0.010
CB19–CB17	15"	HDPE PIPE	50 LF	0.010
CB3–DMH3	15"	HDPE PIPE	90 LF	0.010
DMH3–CB10	15"	HDPE PIPE	82 LF	0.010
OS2–OUT	15"	HDPE PIPE	31 LF	0.016
OS1–OUT	15"	HDPE PIPE	60 LF	0.004
CB16–HW2	15"	HDPE PIPE	61 LF	0.030
CB15–OS3	15"	HDPE PIPE	38 LF	0.009
DMH RD–CB28	15"	HDPE PIPE	39 LF	0.005
PROCESS –DMH RD	15"	CORRUGATED HDPE PIPE	72 LF	0.005
DMH5A–DMH6	24"	CORRUGATED HDPE PIPE	114 LF	0.010

NOTES

1. SEE NOTES ON SHEET C-02.
2. SEE GRADING AND DRAINAGE PLAN ON SHEET C-07

STRUCTURE TABLE		
STRUCTURE NAME	STRUCTURE DETAILS	SUMP
CB1	RIM = 297.43 CB1–CB2 INV OUT = 293.18	0.0
CB2	RIM = 297.43 CB1–CB2 INV IN = 292.96 CB2–DMH1 INV OUT = 292.64	0.0
CB3 5'Ø	RIM = 296.74 CB4–DMH5 INV IN = 289.15 CB3–DMH3 INV OUT = 289.05	0.0
CB4	RIM = 297.46 CB5–CB4 INV IN = 291.16 CB4–DMH5 INV OUT = 291.06	0.0
CB5	RIM = 296.65 CB5–CB4 INV OUT = 291.26	0.0
CB6	RIM = 294.80 CB6–CB8A INV OUT = 288.00	0.0
CB8A 5'Ø	RIM = 293.10 CB6–CB8A INV IN = 286.82 CB8A–CB14 INV IN = 284.69	0.0
CB10	RIM = 296.00 DMH3–CB10 INV IN = 286.15 CB10–CB12 INV OUT = 285.94	0.0
CB12	RIM = 296.75 CB10–CB12 INV IN = 284.25 CB12–CB18 INV OUT = 284.15	0.0
CB13	RIM = 294.50 CB13A–CB13 INV IN = 289.66 CB13–CB14 INV OUT = 288.00	0.0
CB13A 5'Ø	RIM = 294.95 TD–CB13A INV IN = 288.94 CB13A–CB13 INV OUT = 290.70	0.0
CB14 5'Ø	RIM = 293.10 CB13–CB14 INV IN = 287.13 CB8A–CB14 INV OUT = 286.00 CB14–DMH9 INV OUT = 280.06	0.0
CB15	RIM = 296.08 CB15–OS3 INV OUT = 291.94	0.0
CB16	RIM = 281.80 CB16–HW2 INV OUT = 277.55	0.0
CB17 5'Ø	RIM = 298.57 CB18–CB17 INV OUT = 282.45 CB17–DMH9 INV OUT = 279.72 CB19–CB17 INV OUT = 285.00	0.0
CB18	RIM = 298.57 CB18–CB17 INV IN = 282.00 CB12–CB18 INV IN = 283.55	0.0
CB19	RIM = 293.00 CB19–CB17 INV IN = 284.50	0.0
CB20	RIM = 293.44 CB20–CB21 INV OUT = 289.20	0.0
CB21	RIM = 291.69 CB20–CB21 INV IN = 286.90 CB21–CB22 INV OUT = 286.80	0.0
CB22	RIM = 293.45 CB21–CB22 INV IN = 286.41 CB22–DMH23 INV OUT = 286.31	0.0

STRUCTURE TABLE		
STRUCTURE NAME	STRUCTURE DETAILS	SUMP
CB23	RIM = 293.50 DMH24–CB23 INV IN = 284.46 CB23–CB24 INV OUT = 284.31	0.0
CB24	RIM = 293.40 CB23–CB24 INV IN = 283.20 CB24–DMH25 INV OUT = 283.10	0.0
CB27	RIM = 292.34 CB27–DMH26 INV OUT = 288.15	0.0
CB28	RIM = 293.39 DMH RD–CB28 INV IN = 288.85 CB28–DMH11 INV OUT = 288.75	0.0
CB30	RIM = 295.91 DMH6–CB8A INV IN = 285.92 CB30–DMH11 INV OUT = 285.80	0.0
DMH RD	RIM = 294.18 PROCESS –DMH RD INV IN = 289.15 DMH RD–CB28 INV OUT = 289.05	0.0
DMH1	RIM = 300.00 DMH1–CB12 INV IN = 289.30 CB2–DMH1 INV IN = 291.08	0.0
DMH3	RIM = 296.65 CB3–DMH3 INV IN = 288.15 DMH3–CB10 INV OUT = 286.97	0.0
DMH5	RIM = 296.65 OS3–DMH5 INV IN = 289.51 DMH5–DMH5A INV OUT = 289.40	0.0
DMH5A	RIM = 293.04 DMH5–DMH5A INV IN = 288.13 DMH5A–DMH6 INV OUT = 288.00	0.0
DMH6	RIM = 294.50 DMH5A–DMH6 INV IN = 286.82 DMH6–CB8A INV OUT = 286.72	0.0
DMH9 5'Ø	RIM = 292.03 CB17–DMH9 INV IN = 278.10 CB14–DMH9 INV IN = 279.25 DMH9–POND2 INV OUT = 278.12	0.0
DMH11 5'Ø	RIM = 292.73 CB30–DMH11 INV IN = 284.88 CB28–DMH11 INV IN = 288.54 DMH26–DMH11 INV IN = 279.54 DMH11–POND1 INV OUT = 277.23	0.0
DMH23	RIM = 293.73 CB22–DMH23 INV IN = 285.59 DMH23–DMH24 INV OUT = 285.49	0.0
DMH24	RIM = 293.70 DMH23–DMH24 INV IN = 284.91 DMH24–CB23 INV OUT = 284.81	0.0
DMH25	RIM = 293.90 CB24–DMH25 INV IN = 282.23 DMH25–DMH26 INV OUT = 282.10	0.0
DMH26	RIM = 293.70 DMH25–DMH26 INV IN = 281.05 CB27–DMH26 INV IN = 287.87 DMH26–DMH11 INV OUT = 280.80	0.0
OS1	RIM = 277.30 OS1–OUT INV OUT = 266.00	0.0
OS2	RIM = 279.00 OS2–OUT INV OUT = 272.00	0.0
OS3	RIM = 295.90 CB15–OS3 INV IN = 291.60 OS3–DMH5 INV OUT = 291.50	0.0

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DRAINAGE STRUCTURE TABLES

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NONE **SEPTEMBER 8, 2025**

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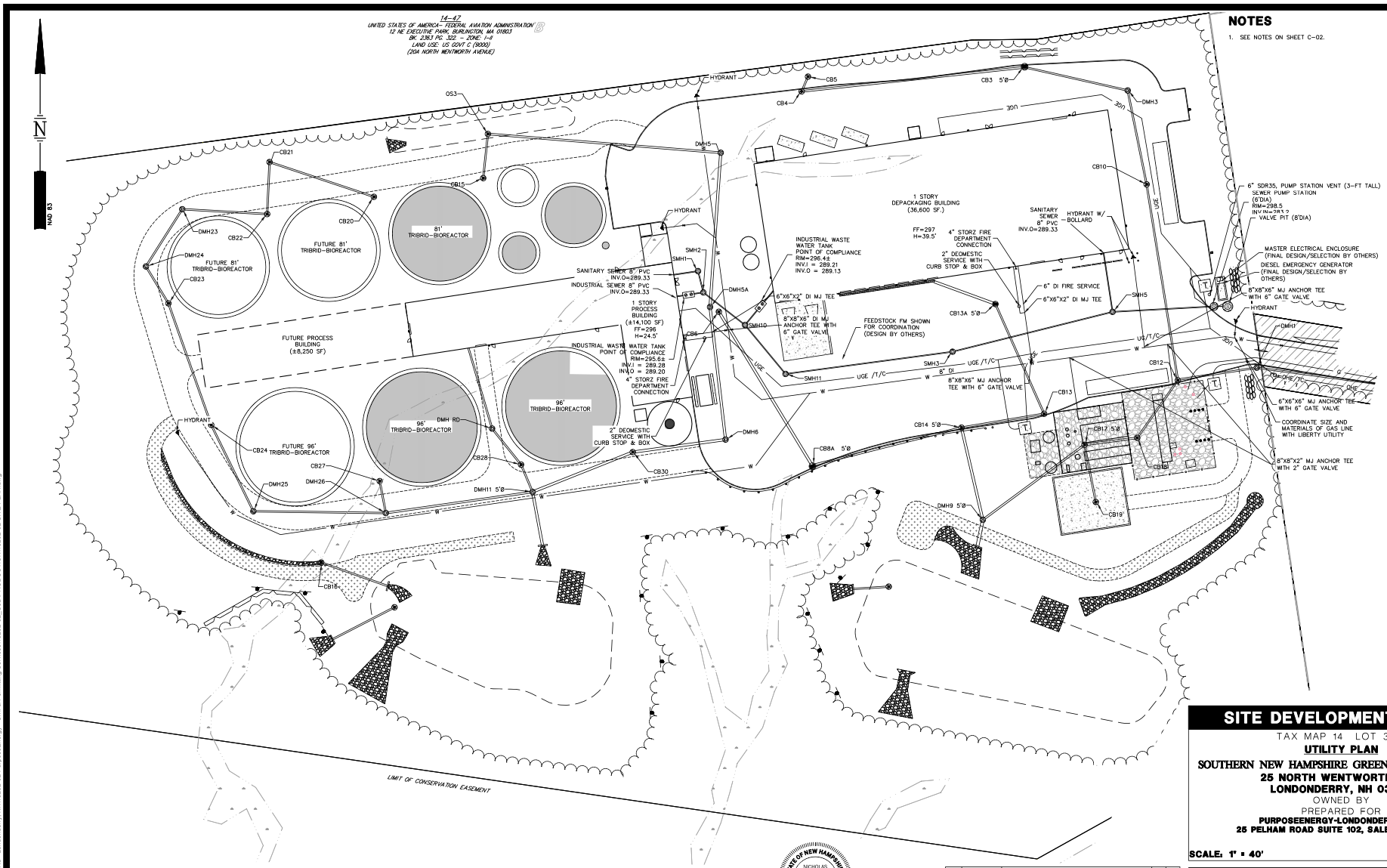
STATE OF NEW HAMPSHIRE
NICHOLAS C. GOLON
No. 14086
LICENSED PROFESSIONAL ENGINEER
12/05/25

REV.	DATE	DESCRIPTION	DR	CK
5	12/18/2025	AOT & STAFF COMMENTS	JD	NG
4	10/24/2025	NHF&G APPROVAL	JD	NG
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SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

UTILITY PLAN

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: 1" = 40' **SEPTEMBER 8, 2025**

STATE OF NEW HAMPSHIRE — NICHOLAS J. GOULON — No. 14986 — LICENSED PROFESSIONAL ENGINEER

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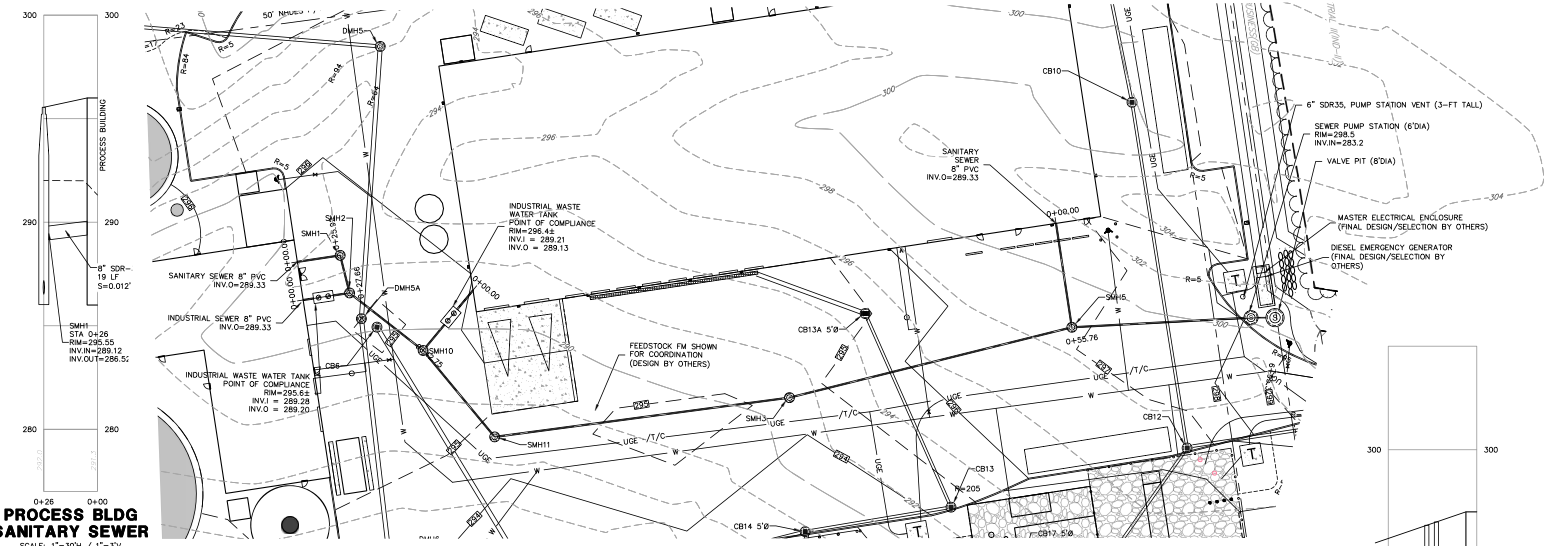
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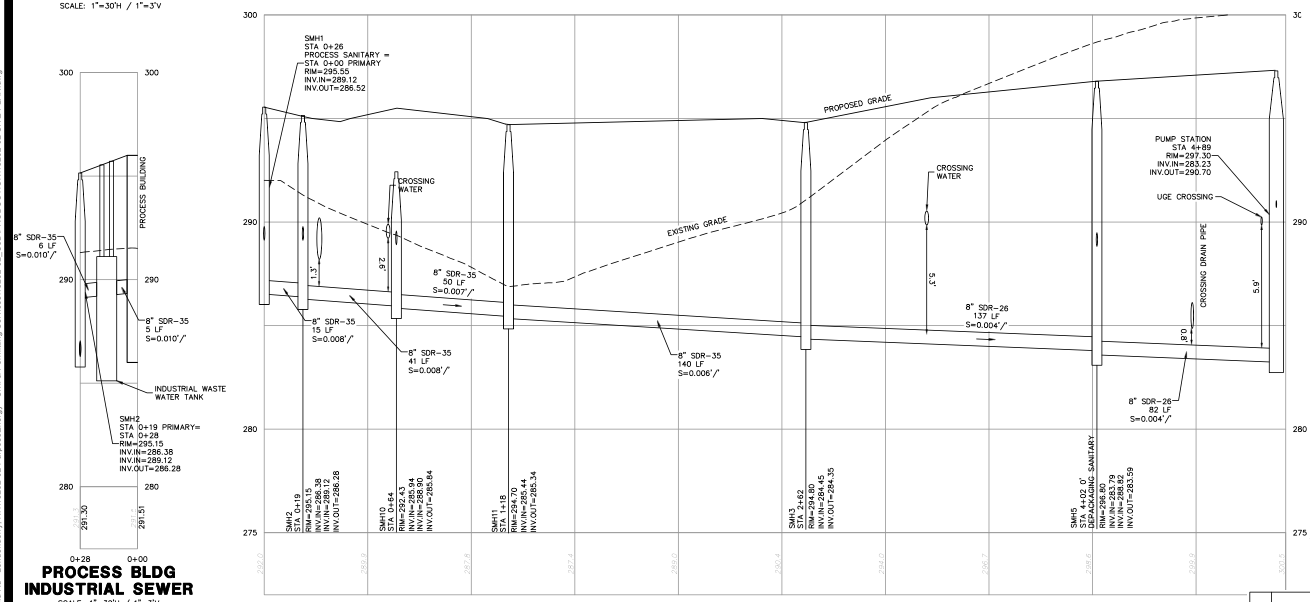


PROCESS BLDG SANITARY SEWER

SCALE: 1"=30'H / 1"=3'V

DEPACKING BLDG SANITARY SEWER

SCALE: 1"=30'H / 1"=3'V

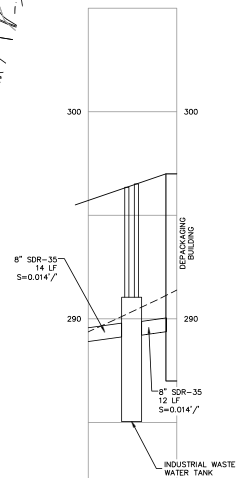


PROCESS BLDG INDUSTRIAL SEWER

SCALE: 1"=30'H / 1"=3'V

PRIMARY SITE SEWER

SCALE: 1"=30'H / 1"=3'V



DEPACKING BLDG INDUSTRIAL SEWER

SCALE: 1"=30'H / 1"=3'V

HORIZONTAL SCALE 1"=30'

VERTICAL SCALE 1"=3'

NOTES

1. SEE NOTES ON SHEET C-02.

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

SITE SEWERS PLAN AND PROFILE

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: 1" = 30' H / 1" = 3' V **SEPTEMBER 8, 2025**

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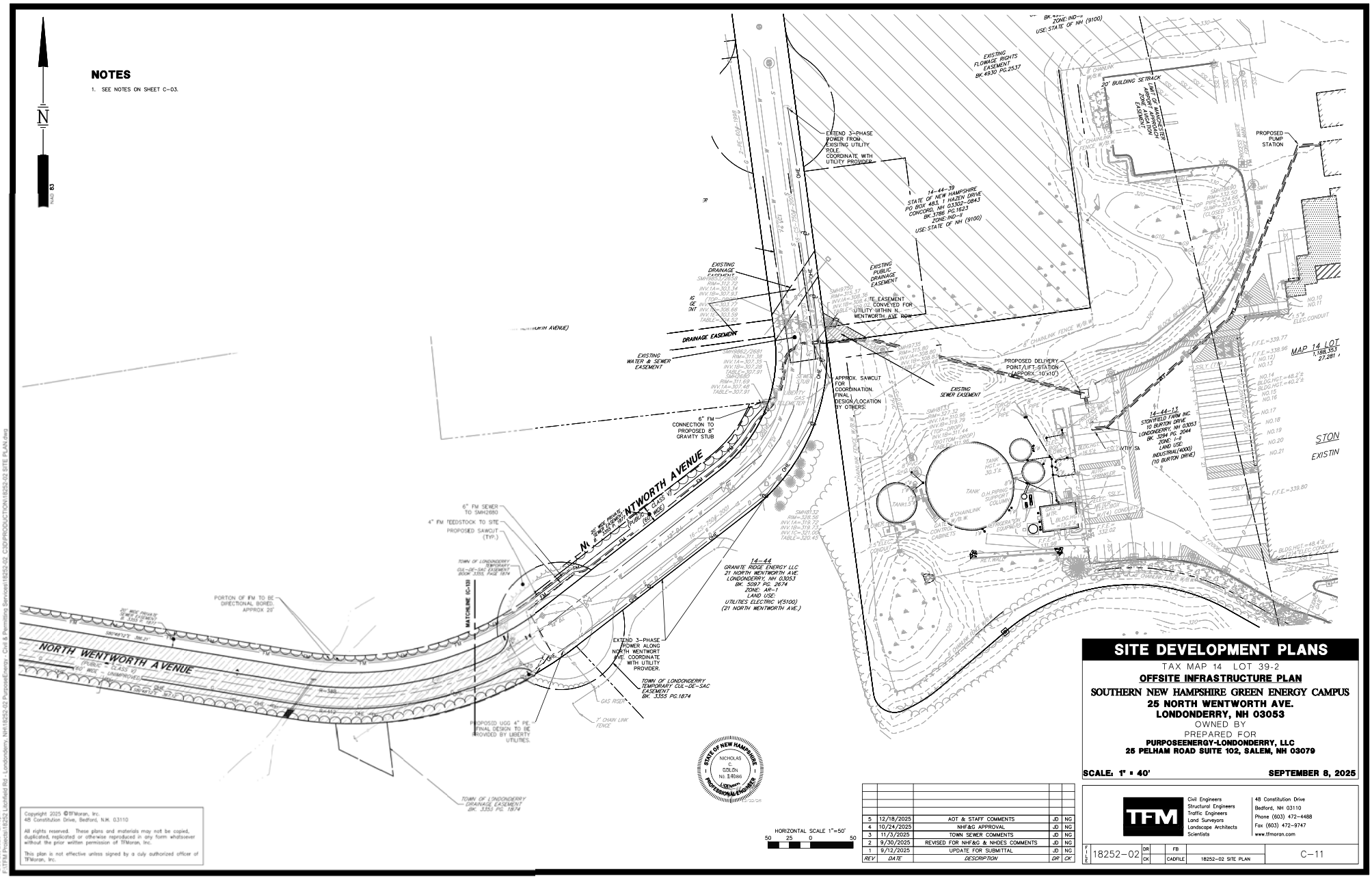
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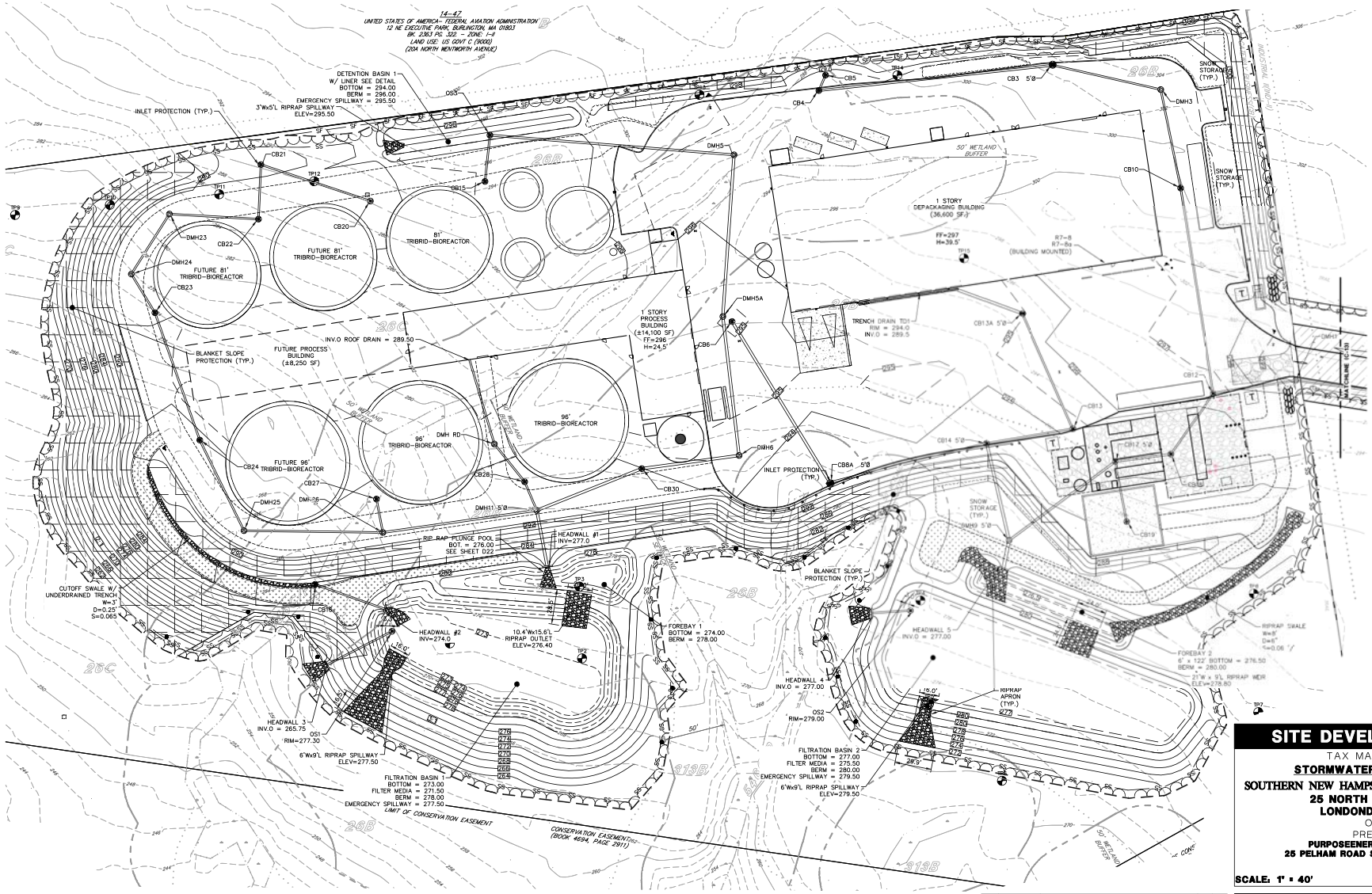
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4	10/24/2025	NHF&G APPROVAL	JD	NG
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NOTES
1. SEE NOTES ON SHEET C-03.
N
MAP 83
NORTH WENTWORTH AVENUE
(PUBLIC - CLASS V)
60' WIDE - UNIMPROVED
14-44
GRANITE RIDGE ENERGY LLC
21 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053
BK. 5097 PG. 2674
ZONE: AR-1
LAND USE:
UTILITIES ELECTRIC W(5100)
(21 NORTH WENTWORTH AVE.)
14-44-39
STATE OF NEW HAMPSHIRE
PO BOX 483, 1 HAZEN DRIVE
CONCORD, NH 03302-0843
BK. 3785 PG.1623
ZONE: IND-4
USE: STATE OF NH (9100)
14-44-13
STONYFIELD FARM INC.
10 BURTON DRIVE
LONDONDERRY, NH 03053
BK. 3284 PG. 2044
ZONE: I-2
LAND USE:
INDUSTRIAL(4000)
(10 BURTON DRIVE)
EXISTING FLOWAGE RIGHTS EASEMENT BK.4930 PG.2537
EXTEND 3-PHASE POWER FROM EXISTING UTILITY POLE. COORDINATE WITH UTILITY PROVIDER.
EXISTING DRAINAGE EASEMENT
EXISTING PUBLIC DRAINAGE EASEMENT
DRAINAGE EASEMENT
EXISTING WATER & SEWER EASEMENT
TE EASEMENT CONVEYED FOR UTILITY WITHIN N. WENTWORTH AVE. ROW
APPROX. SAWCUT FOR COORDINATION. FINAL LOCATION BY OTHERS.
6" FM CONNECTION TO PROPOSED 8" GRAVITY STUB
PROPOSED DELIVERY POINT/LIFT STATION (APPROX. 10'x10')
EXISTING SEWER EASEMENT
PROPOSED PUMP STATION
20' BUILDING SETBACK
MAP 14 LOT 1,188,153 27,281
6" FM SEWER TO SMH2680
4" FM 'FEEDSTOCK TO SITE PROPOSED SAWCUT (TYP.)
TOWN OF LONDONDERRY TEMPORARY CUL-DE-SAC EASEMENT BOOK 3355, PAGE 1874
PORTION OF 8"W TO BE DIRECTIONAL BORED. APPROX 20'
MATCHLINE (C-13)
EXTEND 3-PHASE POWER ALONG NORTH WENTWORT AVE. COORDINATE WITH UTILITY PROVIDER.
TOWN OF LONDONDERRY TEMPORARY CUL-DE-SAC EASEMENT BK. 3355 PG.1874
PROPOSED UGG 4" PE. FINAL DESIGN TO BE PROVIDED BY LIBERTY UTILITIES.
GAS RISER
4' CHAIN LINK FENCE
TOWN OF LONDONDERRY DRAINAGE EASEMENT BK. 3355 PG. 1874
STATE OF NEW HAMPSHIRE
NICHOLAS C. GOLDEN
No. 14066
LICENSED PROFESSIONAL ENGINEER
HORIZONTAL SCALE 1"=50'
50 25 0 50
SITE DEVELOPMENT PLANS
TAX MAP 14 LOT 39-2
OFFSITE INFRASTRUCTURE PLAN
SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053
OWNED BY
PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079
SCALE: 1" = 40'
SEPTEMBER 8, 2025
5 12/19/2025 AOT & STAFF COMMENTS JD NG
4 10/24/2025 NHF&G APPROVAL JD NG
3 11/3/2025 TOWN SEWER COMMENTS JD NG
2 9/30/2025 REVISED FOR NHF&G & NHDES COMMENTS JD NG
1 9/12/2025 UPDATE FOR SUBMITTAL JD NG
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FILE 18252-02
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CK
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CADFILE 18252-02 SITE PLAN
C-11
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NOTES

1. SEE SHEET D-01 FOR STORMWATER MANAGMENT AND CONSTRUCTION GENERAL PERMIT NOTES.

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

STORMWATER MANAGEMENT PLAN

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: 1" = 40' **SEPTEMBER 8, 2025**

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STATE OF NEW HAMPSHIRE
NICHOLAS C. GOLON
No. 14696
LICENSED PROFESSIONAL ENGINEER

HORIZONTAL SCALE 1"=40'
40 20 0 40

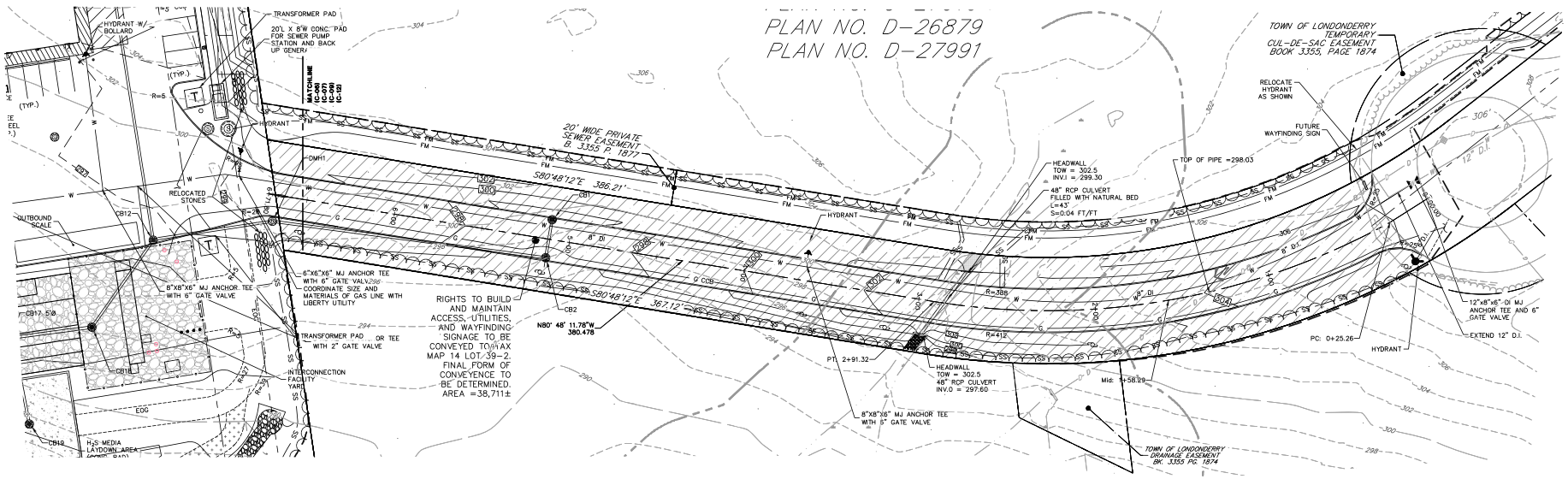
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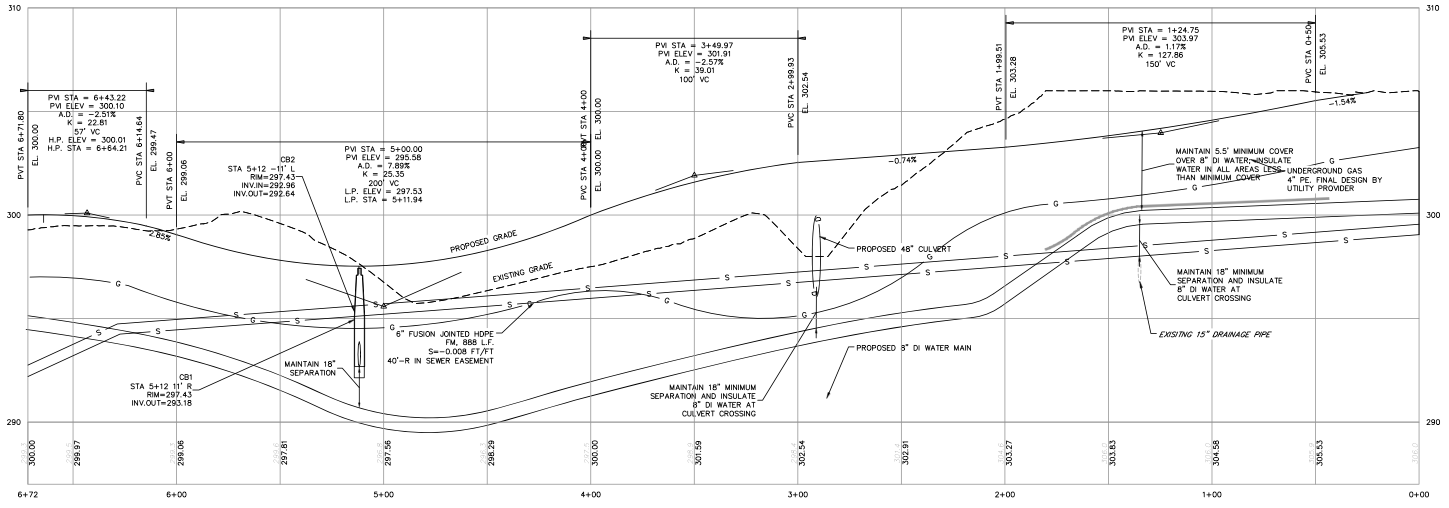
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C-12

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PROPOSED DRIVEWAY

HORIZONTAL SCALE 1"=30'
VERTICAL SCALE 1"=3'

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DRIVEWAY PLAN & PROFILE

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: 1" = 30' H / 1" = 3' V **SEPTEMBER 8, 2025**

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STATE OF NEW HAMPSHIRE — NICHOLAS C. COLON — No. 14866 — LICENSED PROFESSIONAL ENGINEER

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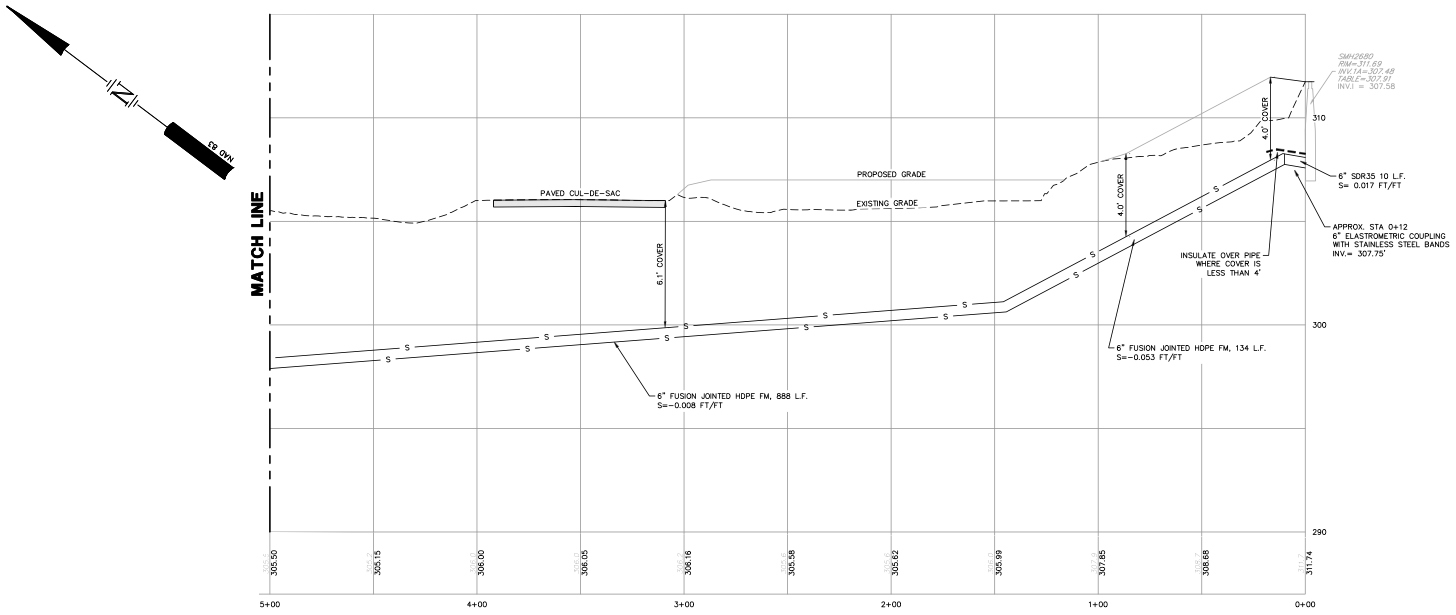
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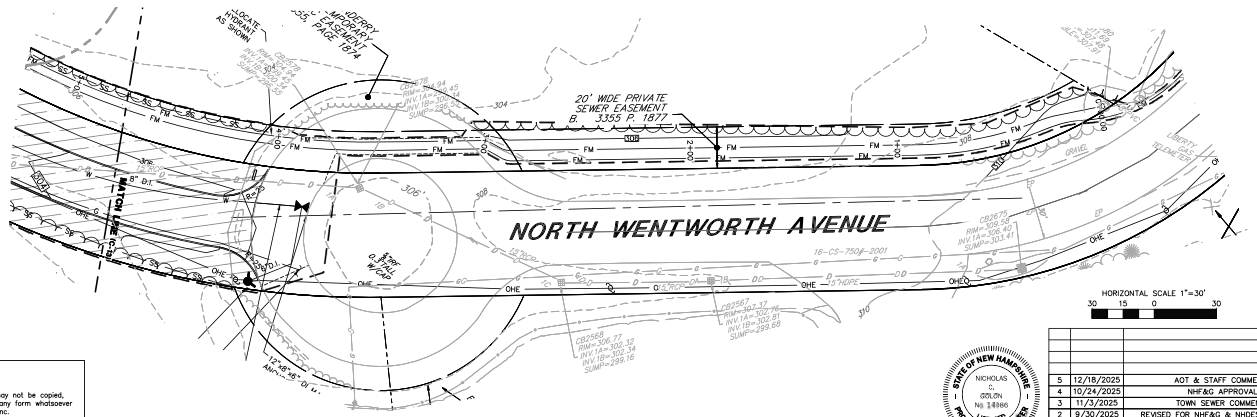
NOTES

1. SEE NOTES ON SHEET C-03.



SEWER FORCEMAIN TO MUNICIPAL SYSTEM

SCALE: 1" = 30' H/1"=3' V



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No. 14866
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SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

FORCEMAIN PLAN AND PROFILE

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25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR
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25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: 1" = 30' H / 1" = 3' V **SEPTEMBER 8, 2025**

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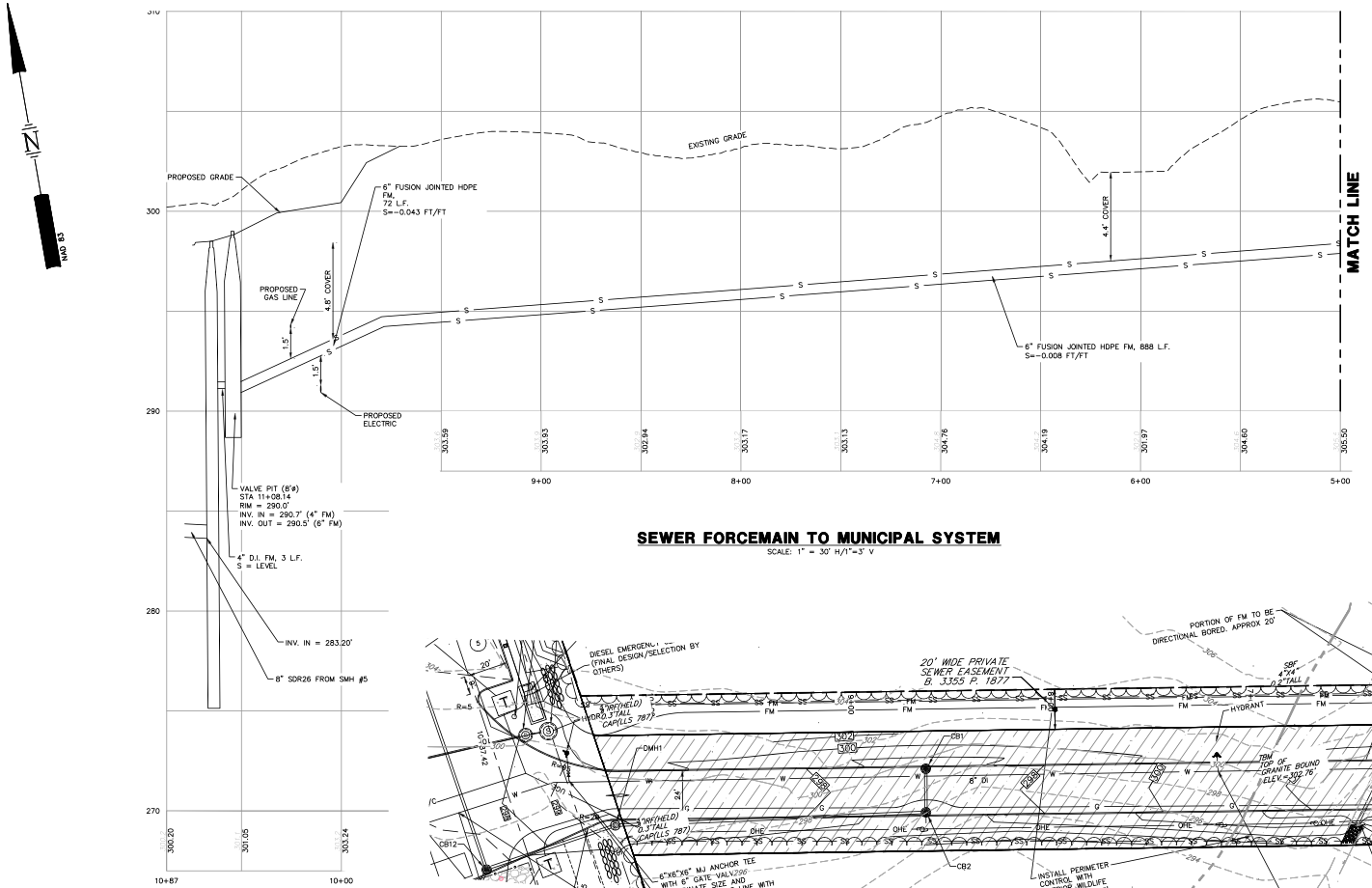
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NOTES

1. SEE NOTES ON SHEET C-03.



SEWER FORCEMAIN TO MUNICIPAL SYSTEM

SCALE: 1" = 30' H/1"=3' V

HORIZONTAL SCALE 1"=30'

30 15 0 30

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

FORCEMAIN PLAN AND PROFILE

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

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25 PELHAM ROAD SUITE 102, SALEM, NH 03079

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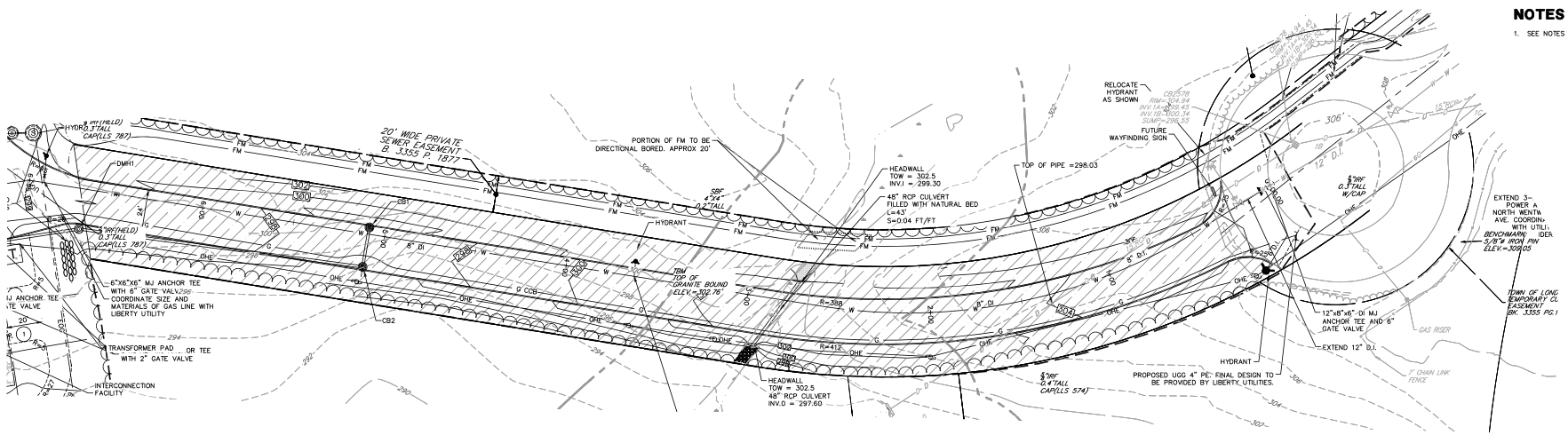
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18252-02	CK	CADFILE	18252-02 SITE PLAN	C-15

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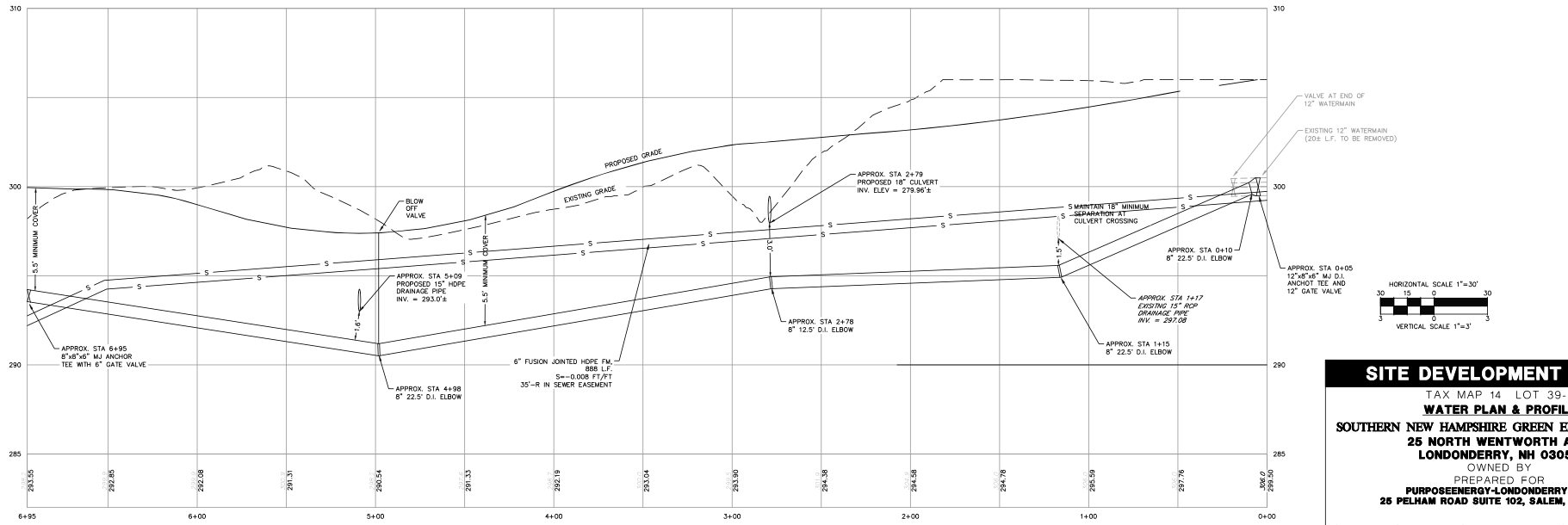
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NOTES

1. SEE NOTES ON SHEET C-03.



SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

WATER PLAN & PROFILE

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25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

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25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: 1" = 30' H / 1" = 3' V **SEPTEMBER 8, 2025**

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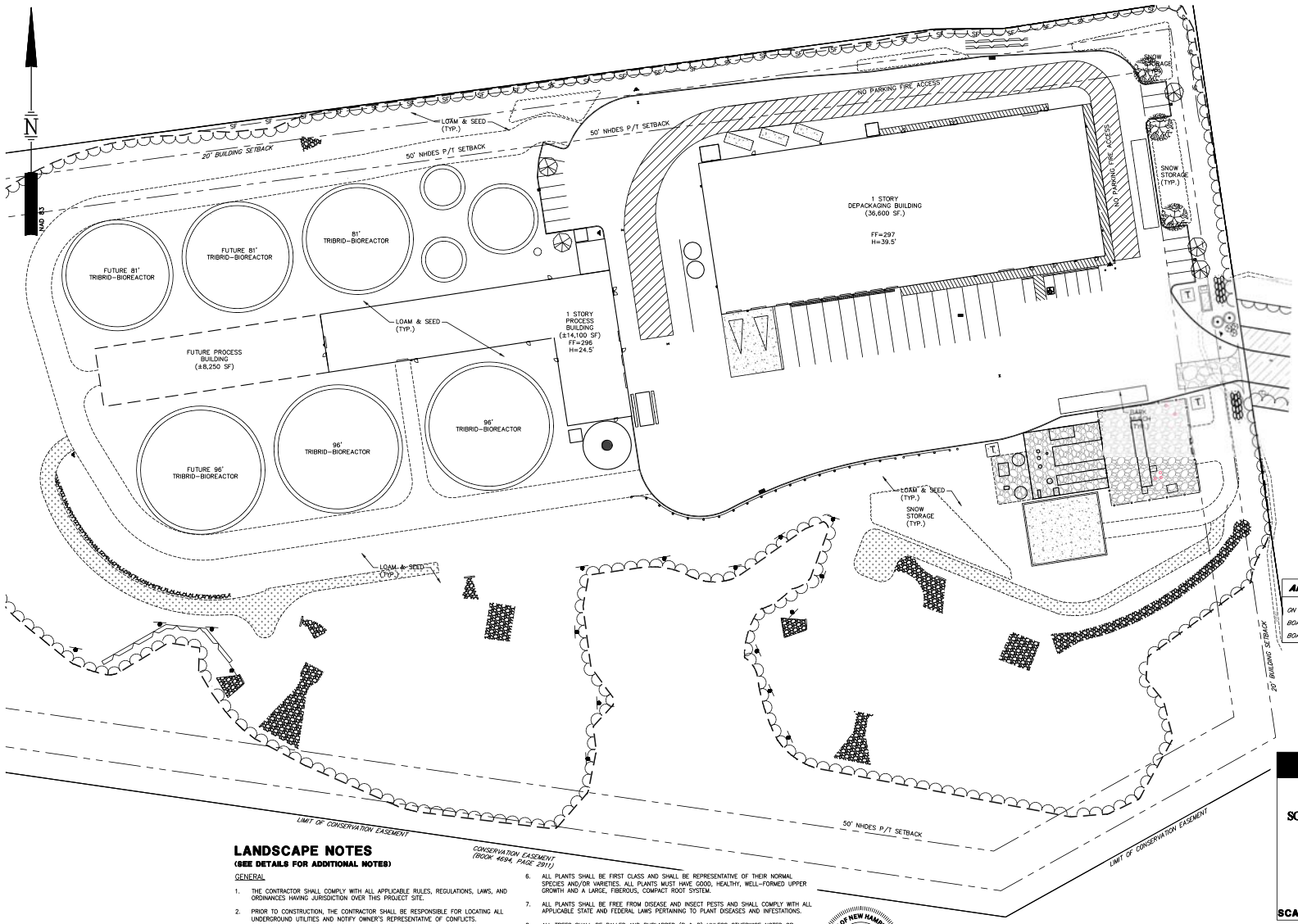
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LANDSCAPE LEGEND

SYMBOL	QTY	BOTANICAL NAME COMMON NAME	SIZE	REMARKS
	3	QUERCUS RUBRA RED OAK	2 1/2" TO 3" CAL.	B&B
	5	QUERCUS P. 'GREEN PILLAR' GREEN PILLAR PIN OAK	2 1/2" TO 3" CAL.	B&B
	3	JUNIPERUS VIRGINIANA HILLSPIRE' HILLSPIRE EASTERN RED CEDAR	6' TO 7'	B&B
	3	SYRINGA VULGARIS 'NEW AGE LAVENDER' NEW AGE LAVENDER LILAC	5 GAL.	CONT.

LANDSCAPE REQUIREMENTS

GREEN SPACE REQUIREMENT:
REQUIRED: 25%
PROVIDED: 64%

INTERIOR PARKING LANDSCAPE AREA REQUIREMENTS:
(3.10g1. OF SITE PLAN REG.'S) *WAIVER REQUIRED

INTERNAL PARKING LOT LANDSCAPING:
(3.10g3. OF SITE PLAN REG.'S)
1 TREE/15 PARKING SPACES (19 SPACES/15) = 1.2 TREES
TOTAL TREES REQUIRED = 1
TREES PROVIDED = 2 TREES

PARKING LOT PERIMETER LANDSCAPING:
(3.10g5. OF SITE PLAN REG.'S)
1 SHADE TREE/20' OF PARKING PERIMETER = 117 SF/20' = 5.8 SHADE TREES
TOTAL TREES REQUIRED = 6
TREES PROVIDED = 6 TREES

SCREENING FROM PUBLIC RIGHT-OF-WAY:
(3.10g6. OF SITE PLAN REG.'S)
EXISTING VEGETATION TO SATISFY REQUIREMENT.

ACCORDING TO THE USDA PLANT HARDINESS ZONE MAP THE ANNUAL MINIMUM TEMERATURE ZONES FOR SOUTHERN NH ARE BETWEEN ZONE 4 (-30 TO -20 DEGREES) AND ZONE 5 (-20 TO -10 DEGREES). THE PLANT MATERIALS SHOWN ON THIS PLAN HAVE A HARDINESS ZONE TO MEET THAT OF SOUTHERN NH.

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION AND MAINTENANCE THROUGHOUT CONSTRUCTION OF PROTECTIVE TREE FENCING LOCATED 12" INCHES OFF THE THE DRIPLINE OF ALL TREES TO BE PROTECTED. PRIOR TO CONSTRUCTION THE CONTRACTOR IS REQUIRED TO HAVE ALL NO-CUT ZONES DELINEATED IN THE FIELD.

THE CONTRACTOR/APPLICANT IS RESPONSIBLE FOR REPLACEMENT OF "ANY TREES DESIGNATED TO REMAIN, WHICH HAVE BEEN DAMAGED, KILLED OR REMOVED AS A RESULT OF CONSTRUCTION ACTIVITIES". SEE TOWN OF LONDONDERRY "LANDSCAPE DESIGN STANDARDS" SECTION 3.10.D OF THE SITE PLAN REGULATIONS.

THE OWNER IS RESPONSIBLE FOR MAINTENANCE OF ALL LANDSCAPE AREAS ONCE CONSTRUCTION IS COMPLETED AS OUTLINED IN THE TOWN OF LONDONDERRY, "LANDSCAPE DESIGN STANDARDS" SECTION 3.10.F OF THE SITE PLAN REGULATIONS.

LANDSCAPE NOTES

(SEE DETAILS FOR ADDITIONAL NOTES)

GENERAL

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE RULES, REGULATIONS, LAWS, AND ORDINANCES HAVING JURISDICTION OVER THIS PROJECT SITE.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND NOTIFY OWNER'S REPRESENTATIVE OF CONFLICTS.
3. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON PLANS BEFORE PRICING THE WORK. ANY DIFFERENCE IN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION. LANDSCAPE QUANTITIES SHOWN ON THE PLAN SHALL SUPERCEDE QUANTITIES LISTED IN LANDSCAPE LEGEND.
4. THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO STARTING WORK AND VERIFY THAT THE PLANS IN THE CONTRACTOR'S POSSESSION ARE THE MOST CURRENT PLANS AVAILABLE AND ARE THE APPROVED PLAN SET FOR USE IN CONSTRUCTION.
5. ALL PLANT MATERIALS INSTALLED SHALL MEET OR EXCEED THE SPECIFICATIONS OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA) [FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN] IN THE AMERICAN STANDARD FOR NURSERY STOCK (AS AMENDED) [ANSI Z60.1-1996].
6. ALL PLANTS SHALL BE FIRST CLASS AND SHALL BE REPRESENTATIVE OF THEIR NORMAL SPECIES AND/OR VARIETIES. ALL PLANTS MUST HAVE GOOD, HEALTHY, WELL-FORMED UPPER GROWTH AND A LARGE, FIBEROUS, COMPACT ROOT SYSTEM.
7. ALL PLANTS SHALL BE FREE FROM DISEASE AND INSECT PESTS AND SHALL COMPLY WITH ALL APPLICABLE STATE AND FEDERAL LAWS PERTAINING TO PLANT DISEASES AND INFESTATIONS.
8. ALL TREES SHALL BE BALLED AND BURLAPPED (B & B) UNLESS OTHERWISE NOTED OR APPROVED BY LANDSCAPE ARCHITECT.
9. IF APPLICABLE, THE CONTRACTOR SHALL HAVE ALL FALL TRANSPLANTING HAZARD PLANTS DUG IN THE SPRING AND STORED FOR FALL PLANTING.
10. ALL INVASIVE PLANT SPECIES FROM THE "NEW HAMPSHIRE PROHIBITED INVASIVE PLANT SPECIES LIST", TO BE REMOVED SHALL BE DONE SO IN ACCORDANCE WITH THE "INVASIVE SPECIES ACT, HB 1258-FN."
11. LANDSCAPING SHALL NOT CONFLICT WITH SNOW STORAGE, LIGHT FIXTURES, OR SIGHT DISTANCE.

GUARANTEE

1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE WORK FOR A PERIOD OF ONE

HORIZONTAL SCALE 1"=40'
40 20 0 40

APPROVED BY THE TOWN OF LONDONDERRY PLANNING BOARD

ON _____

BOARD MEMBER _____ AND

BOARD MEMBER _____

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

LANDSCAPE PLAN

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: 1" = 40' **SEPTEMBER 8, 2025**

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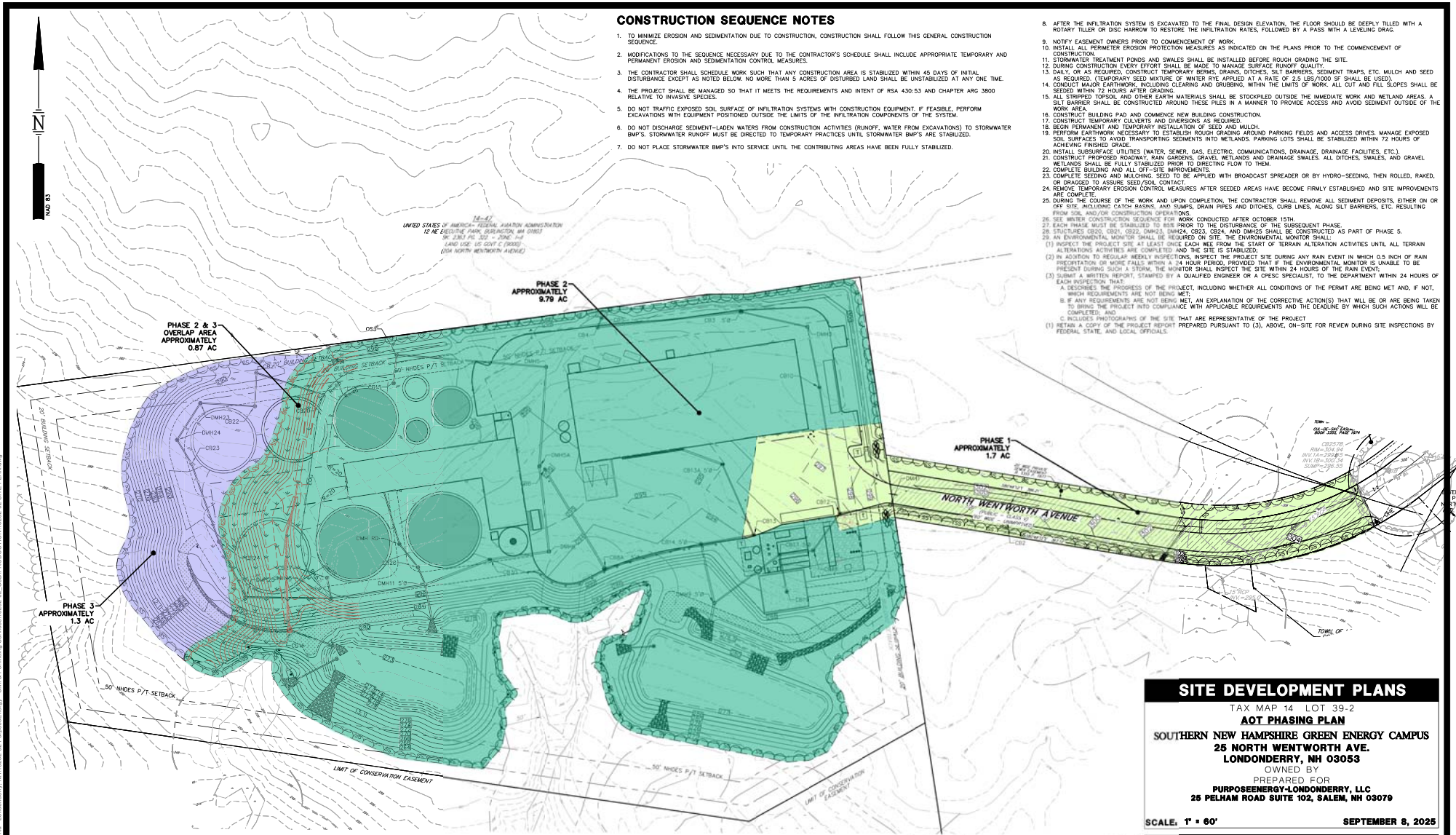
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CONSTRUCTION SEQUENCE NOTES

1. TO MINIMIZE EROSION AND SEDIMENTATION DUE TO CONSTRUCTION, CONSTRUCTION SHALL FOLLOW THIS GENERAL CONSTRUCTION SEQUENCE.
2. MODIFICATIONS TO THE SEQUENCE NECESSARY DUE TO THE CONTRACTOR'S SCHEDULE SHALL INCLUDE APPROPRIATE TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES.
3. THE CONTRACTOR SHALL SCHEDULE WORK SUCH THAT ANY CONSTRUCTION AREA IS STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE EXCEPT AS NOTED BELOW. NO MORE THAN 5 ACRES OF DISTURBED LAND SHALL BE UNSTABILIZED AT ANY ONE TIME.
4. THE PROJECT SHALL BE MANAGED SO THAT IT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER ARG 3800 RELATIVE TO INVASIVE SPECIES.
5. DO NOT TRAFFIC EXPOSED SOIL SURFACE OF INFILTRATION SYSTEMS WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.
6. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO STORMWATER BMP'S. STORMWATER RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMP'S ARE STABILIZED.
7. DO NOT PLACE STORMWATER BMP'S INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
8. AFTER THE INFILTRATION SYSTEM IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE THE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
9. NOTIFY EASEMENT OWNERS PRIOR TO COMMENCEMENT OF WORK.
10. INSTALL ALL PERIMETER EROSION PROTECTION MEASURES AS INDICATED ON THE PLANS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
11. STORMWATER TREATMENT PONDS AND SWALES SHALL BE INSTALLED BEFORE ROUGH GRADING THE SITE.
12. DURING CONSTRUCTION EVERY EFFORT SHALL BE MADE TO MANAGE SURFACE RUNOFF QUALITY.
13. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT BARRIERS, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED. (TEMPORARY SEED MIXTURE OF WINTER RYE APPLIED AT A RATE OF 2.5 LBS/1000 SF SHALL BE USED).
14. CONDUCT MAJOR EARTHWORK, INCLUDING CLEARING AND GRUBBING, WITHIN THE LIMITS OF WORK. ALL CUT AND FILL SLOPES SHALL BE SEEDED WITHIN 72 HOURS AFTER GRADING.
15. ALL STRIPPED TOPSOIL AND OTHER EARTH MATERIALS SHALL BE STOCKPILED OUTSIDE THE IMMEDIATE WORK AND WETLAND AREAS. A SILT BARRIER SHALL BE CONSTRUCTED AROUND THESE PILES IN A MANNER TO PROVIDE ACCESS AND AVOID SEDIMENT OUTSIDE OF THE WORK AREA.
16. CONSTRUCT BUILDING PAD AND COMMENCE NEW BUILDING CONSTRUCTION.
17. CONSTRUCT TEMPORARY CULVERTS AND DIVERSIONS AS REQUIRED.
18. BEGIN PERMANENT AND TEMPORARY INSTALLATION OF SEED AND MULCH.
19. PERFORM EARTHWORK NECESSARY TO ESTABLISH ROUGH GRADING AROUND PARKING FIELDS AND ACCESS DRIVES. MANAGE EXPOSED SOIL SURFACES TO AVOID TRANSPORTING SEDIMENTS INTO WETLANDS. PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
20. INSTALL SUBSURFACE UTILITIES (WATER, SEWER, GAS, ELECTRIC, COMMUNICATIONS, DRAINAGE, DRAINAGE FACILITIES, ETC.).
21. CONSTRUCT PROPOSED ROADWAY, RAIN GARDENS, GRAVEL WETLANDS AND DRAINAGE SWALES. ALL DITCHES, SWALES, AND GRAVEL WETLANDS SHALL BE FULLY STABILIZED PRIOR TO DIRECTING FLOW TO THEM.
22. COMPLETE BUILDING AND ALL OFF-SITE IMPROVEMENTS.
23. COMPLETE SEEDING AND MULCHING. SEED TO BE APPLIED WITH BROADCAST SPREADER OR BY HYDRO-SEEDING, THEN ROLLED, RAKED, OR DRAGGED TO ASSURE SEED/SOIL CONTACT.
24. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDED AREAS HAVE BECOME FIRMLY ESTABLISHED AND SITE IMPROVEMENTS ARE COMPLETE.
25. DURING THE COURSE OF THE WORK AND UPON COMPLETION, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT DEPOSITS, EITHER ON OR OFF SITE, INCLUDING CATCH BASINS AND SUMPS, DRAIN PIPES AND DITCHES, CURB LINES, ALONG SILT BARRIERS, ETC. RESULTING FROM SOIL AND/OR CONSTRUCTION OPERATIONS.
26. SEE WINTER CONSTRUCTION SEQUENCE FOR WORK CONDUCTED AFTER OCTOBER 15TH.
27. EACH PHASE MUST BE STABILIZED TO 85% PRIOR TO THE DISTURBANCE OF THE SUBSEQUENT PHASE.
28. STUCTURES CB20, CB21, CB22, DMH23, DMH24, CB23, CB24, AND DMH25 SHALL BE CONSTRUCTED AS PART OF PHASE 5.
29. AN ENVIRONMENTAL MONITOR SHALL BE REQUIRED ON SITE. THE ENVIRONMENTAL MONITOR SHALL:
    (1) INSPECT THE PROJECT SITE AT LEAST ONCE EACH WEE FROM THE START OF TERRAIN ALTERATION ACTIVITIES UNTIL ALL TERRAIN ALTERATIONS ACTIVITIES ARE COMPLETED AND THE SITE IS STABILIZED;
    (2) IN ADDITION TO REGULAR WEEKLY INSPECTIONS, INSPECT THE PROJECT SITE DURING ANY RAIN EVENT IN WHICH 0.5 INCH OF RAIN PRECIPITATION OR MORE FALLS WITHIN A 24 HOUR PERIOD, PROVIDED THAT IF THE ENVIRONMENTAL MONITOR IS UNABLE TO BE PRESENT DURING SUCH A STORM, THE MONITOR SHALL INSPECT THE SITE WITHIN 24 HOURS OF THE RAIN EVENT;
    (3) SUBMIT A WRITTEN REPORT, STAMPED BY A QUALIFIED ENGINEER OR A CPESC SPECIALIST, TO THE DEPARTMENT WITHIN 24 HOURS OF EACH INSPECTION THAT:
        A. DESCRIBES THE PROGRESS OF THE PROJECT, INCLUDING WHETHER ALL CONDITIONS OF THE PERMIT ARE BEING MET AND, IF NOT, WHICH REQUIREMENTS ARE NOT BEING MET;
        B. IF ANY REQUIREMENTS ARE NOT BEING MET, AN EXPLANATION OF THE CORRECTIVE ACTION(S) THAT WILL BE OR ARE BEING TAKEN TO BRING THE PROJECT INTO COMPLIANCE WITH APPLICABLE REQUIREMENTS AND THE DEADLINE BY WHICH SUCH ACTIONS WILL BE COMPLETED; AND
        C. INCLUDES PHOTOGRAPHS OF THE SITE THAT ARE REPRESENTATIVE OF THE PROJECT
    (1) RETAIN A COPY OF THE PROJECT REPORT PREPARED PURSUANT TO (3), ABOVE, ON-SITE FOR REVIEW DURING SITE INSPECTIONS BY FEDERAL STATE, AND LOCAL OFFICIALS.

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

AOT PHASING PLAN

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY
PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: 1" = 60' **SEPTEMBER 8, 2025**

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STATE OF NEW HAMPSHIRE — NICHOLAS C. WOOD — NO. 18086 — PROFESSIONAL ENGINEER

HORIZONTAL SCALE: 1"=60'
60 30 0 60

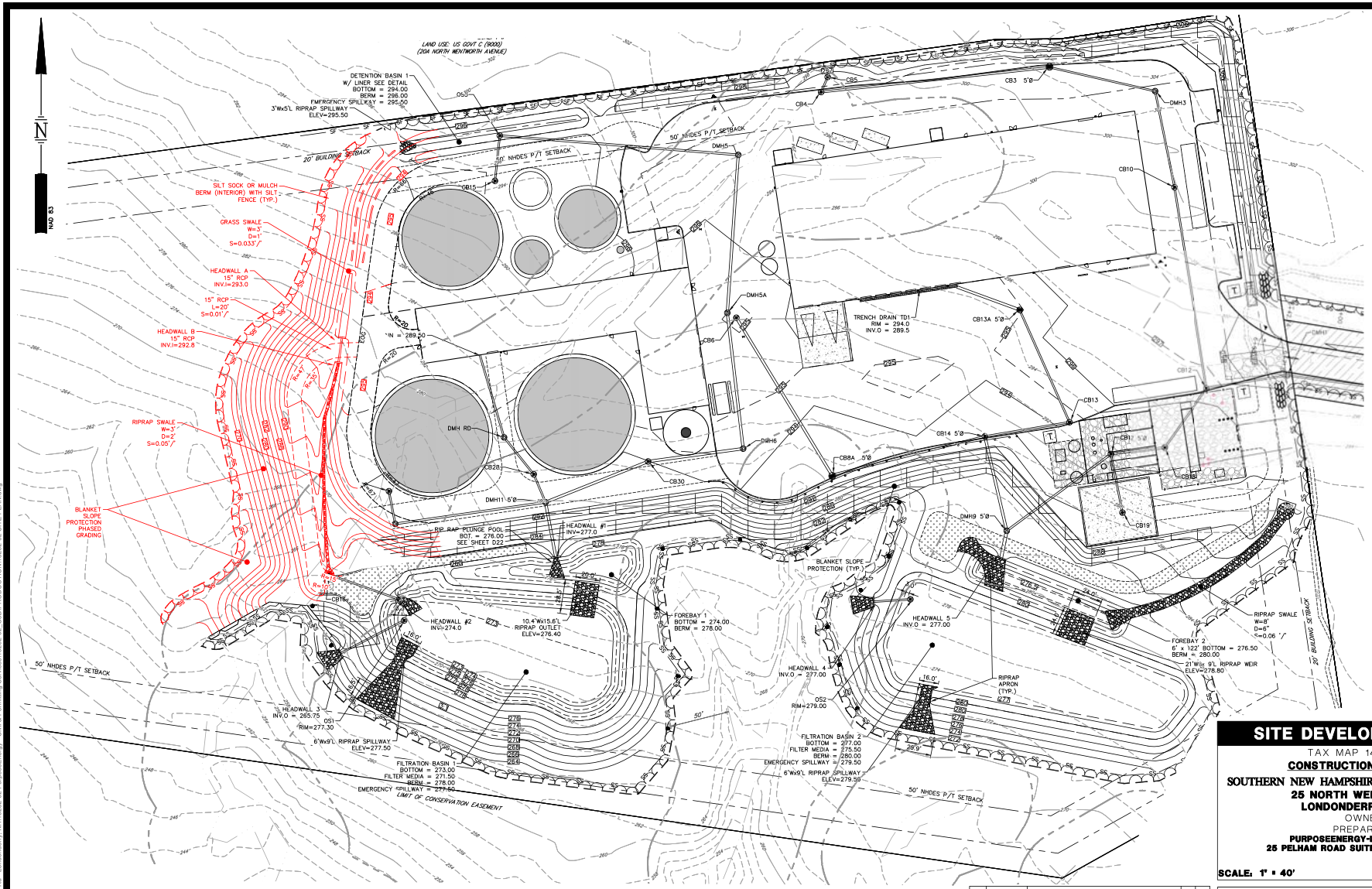
REV	DATE	DESCRIPTION	DR	CK
5	12/18/2025	AOT & STAFF COMMENTS	JD	NG
4	10/24/2025	NHF&G APPROVAL	JD	NG
3	11/3/2025	TOWN SEWER COMMENTS	JD	NG
2	9/30/2025	REVISED FOR NHF&G & NHDES COMMENTS	JD	NG
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	FB		
18252-02	CK	CADFILE	18252-02 SITE PLAN	PH-1

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SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

CONSTRUCTION PHASING PLAN

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: 1" = 40' **SEPTEMBER 8, 2025**

HORIZONTAL SCALE 1"=40'
40 20 0 40

REV	DATE	DESCRIPTION	DR	CK
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FILE	18252-02	DR		FB		
		CK		CADFILE	18252-02 SITE PLAN	PH-2

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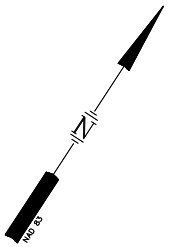
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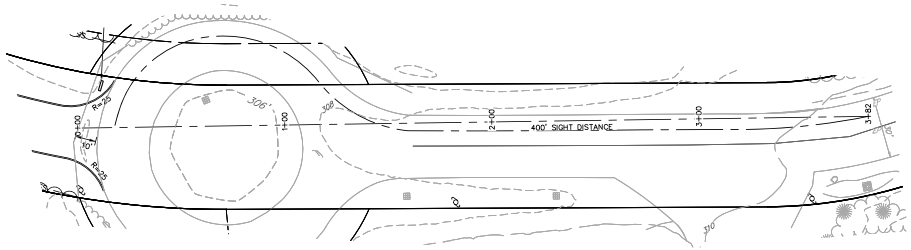
STATE OF NEW HAMPSHIRE
NICHOLAS C. GOLON
No. 18686
LICENSED PROFESSIONAL ENGINEER
12/23

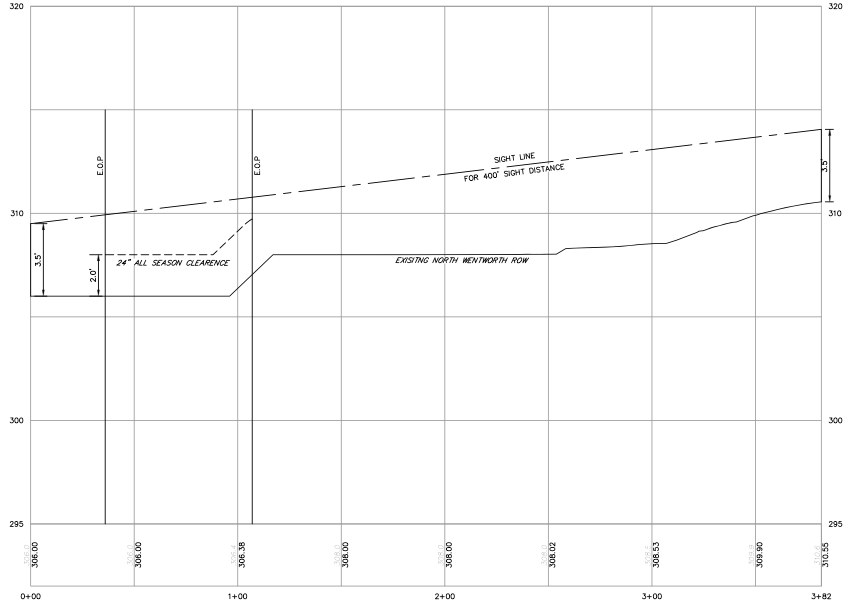
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NOTES

1. POSTED SPEED LIMIT ON NORTH WENTWORTH AVE. IS 30 MPH.
2. TOWN OF LONDONDERRY SIGHT DISTANCE CALCULATIONS:
   SUBDIVISION REGULATIONS SECTION 3.09.F.2 & EHXIBIT D3
   MINIMUM ALL SEASON SIGHT DISTANCE = 365-FEET (NON-RESIDNETIAL) WHICH IS EXCEEDED.







SITE DISTANCE

HORIZONTAL SCALE 1"=30'
30 15 0 30
VERTICAL SCALE 1"=3'
3 0 3

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

SIGHT DISTANCE

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053
OWNED BY
PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: 1" = 30' H / 1" = 3' V **SEPTEMBER 8, 2025**

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STATE OF NEW HAMPSHIRE
NICHOLAS C. GOLON
No. 14866
LICENSED PROFESSIONAL ENGINEER

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FILE	18252-02	DR		FB		SD-1
		CK		CADFILE	18252-02 SITE PLAN	

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CONSTRUCTION GENERAL PERMIT

1. THE OWNER, IN CONJUNCTION WITH THE CONTRACTOR (OPERATORS), MUST OBTAIN A CONSTRUCTION GENERAL PERMIT (CGP) FOR LARGE CONSTRUCTION ACTIVITIES (FIVE OR MORE ACRES) OR SMALL CONSTRUCTION ACTIVITIES (GREATER THAN ONE ACRE BUT LESS THAN FIVE ACRES) FROM THE ENVIRONMENTAL PROTECTION AGENCY (EPA). AS PART OF THE CGP, A STORMWATER NOTICE OF INTENT (NOI) MUST BE SUBMITTED TO THE EPA AT LEAST 7 DAYS PRIOR TO COMMENCING CONSTRUCTION. THE NOI MUST BE SUBMITTED TO STORM WATER NOTICE OF INTENT (4203M), USEPA, 1200 PENNSYLVANIA AVE. NW, WASHINGTON, DC 20460.

2. THE CGP OUTLINES A SET OF PROVISIONS MANDATING THE OWNER AND CONTRACTOR TO COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER REGULATIONS, INCLUDING, BUT NOT LIMITED TO, STORM WATER POLLUTION PREVENTION PLANS (SWPPP'S), IMPLEMENTATION OF EROSION AND SEDIMENTATION CONTROLS, EQUIPMENT MAINTENANCE GUIDELINES, ETC. PLEASE CONTACT USEPA OFFICE OF WASTEWATER MANAGEMENT AT 202-564-9545 OR AT WWW.EPA.GOV/NPDES/STORMWATER FOR ADDITIONAL INFORMATION. FOR FURTHER ASSISTANCE, CONTACT ABBY SWAINE OF NEW ENGLAND'S EPA REGION 1 AT 617-918-1841.

NOTES

1. IT IS BEING PROPOSED TO CONSTRUCT AN ORGANIC WASTE PROCESSING FACILITY INCLUDING ACCESS, GRADING, STORMWATER MANAGEMENT SYSTEMS, UTILITIES, AND LANDSCAPING.

TOTAL SITE AREA: 15.3 AC (SITE PARCEL)
TOTAL PROPOSED AREA OF DISTURBANCE: 13.0 AC

SOILS SHOWN WERE PREPARED IN ACCORDANCE WITH THE SITE-SPECIFIC SOIL MAPPING STANDARDS FOR NEWHAMPSHIRE AND VERMONT, VERSION 7.0, HULY 2021.
26 – WINDSOR
313 – DEERFIELD
546/P – WALPOLE

2. STORM WATER DRAINAGE SYSTEM IS SHOWN ON THE PLAN. SEE GRADING & DRAINAGE PLAN AND INVERT TABLES FOR RIM, INVERT, PIPE LENGTH, AND SLOPE INFORMATION.
POST-CONSTRUCTION RUNOFF COEFFICIENT: C=0.37
IMPERVIOUS SURFACE AREA: 5.9± AC.
*IMPERVIOUS AREA AND POST-DEVELOPMENT RUNOFF COEFFICIENT DO NOT INCLUDE OFFSITE RUN-ON AREAS

3. STABILIZATION PRACTICES FOR EROSION AND SEDIMENTATION CONTROLS:

TEMPORARY STABILIZATION – TOPSOIL STOCKPILES AND DISTURBED AREAS OF THE CONSTRUCTION SITE THAT WILL NOT BE REDISTURBED FOR 14 DAYS OR MORE MUST BE STABILIZED BY THE 14TH DAY AFTER THE LAST DISTURBANCE. THE TEMPORARY SEED SHALL BE ANNUAL RYE APPLIED AT THE RATE OF 1.1 LBS PER 1,000 SF. PRIOR TO SEEDING, A MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS PER ACRE OF 10-20-20 FERTILIZER SHALL BE APPLIED. AFTER SEEDING, EACH AREA SHALL BE MULCHED WITH 1.5 TONS PER ACRE OF HAY MULCH. MULCH TO BE ANCHORED IN PLACE WHERE NECESSARY. AREAS OF THE SITE THAT WILL BE PAVED WILL BE TEMPORARILY STABILIZED BY APPLYING GEOTEXTILES AND A STONE SUB-BASE UNTIL BITUMINOUS PAVEMENT CAN BE APPLIED. CALCIUM CHLORIDE SHALL BE USED FOR DUST CONTROL IF NEEDED.

PERMANENT STABILIZATION – DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASES SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 3 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE PERMANENT SEED MIX SHALL BE AS SPECIFIED BY THE LANDSCAPE PLAN NOTES OR MAY OTHERWISE CONSIST OF 0.45 LBS/1,000 SF TALL FESCUE, 0.20 LBS/1,000 SF CREEPING RED FESCUE, AND 0.20 LBS/1,000 SF BIRDSFOOT TREFOIL PRIOR TO SEEDING, A MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS PER ACRE IF 10-20-20 FERTILIZER SHALL BE APPLIED. AFTER SEEDING, EACH AREA SHALL BE MULCHED WITH 1.5 TONS PER ACRE OF HAY MULCH. MULCH TO BE ANCHORED IN PLACE WHERE NECESSARY.

4. STRUCTURAL PRACTICES FOR EROSION AND SEDIMENTATION CONTROL

SILT SOCK – WILL BE CONSTRUCTED AROUND THE PERIMETER OF THE DISTURBED AREAS AND WILL DELINEATE THE LIMITS OF WORK FOR THE PROPOSED CONSTRUCTION. THE SILT SOCK WILL BE INSTALLED BY OTHERS. POSTS SHALL BE USED WITH AT LEAST 6" OF THE POST BURIED BELOW THE GROUND SURFACE TO PREVENT THE SILT SOCK FROM FORMING GAPS NEAR THE GROUND SURFACE. RUNOFF WILL FLOW THROUGH THE OPENINGS IN THE SILT SOCK WHILE RETAINING THE SEDIMENT WITHIN THE CONSTRUCTION AREA.

SILT FENCE – WILL BE CONSTRUCTED AROUND THE PERIMETER OF THE DISTURBED AREAS AND WILL DELINEATE THE LIMITS OF WORK FOR THE PROPOSED CONSTRUCTION. THE SILT FENCE WILL BE INSTALLED BY STRETCHING REINFORCED FILTER FABRIC BETWEEN POSTS WITH AT LEAST 8" OF THE FABRIC BURIED BELOW THE GROUND SURFACE TO PREVENT GAPS FROM FORMING NEAR THE GROUND SURFACE. RUNOFF WILL FLOW THROUGH THE OPENINGS IN THE FILTER FABRIC WHILE RETAINING THE SEDIMENT WITHIN THE CONSTRUCTION AREA.

STABILIZED CONSTRUCTION ENTRANCE – WILL BE INSTALLED IN ACCORDANCE WITH THE DETAIL AT THE ENTRANCE TO THE CONSTRUCTION SITE TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS OFF THE SITE. THE STABILIZED ENTRANCE WILL BE 20'-WIDE AND FLARE AT THE ENTRANCE TO THE PAVED ROAD AND HAVE A DEPTH OF 12" OF STONE. THE STABILIZED ENTRANCE SHALL BE MAINTAINED UNTIL THE REMAINDER OF THE CONSTRUCTION SITE HAS BEEN FULLY STABILIZED. THE PAVED STREET ADJACENT TO THE SITE SHALL BE SWEPT ON A WEEKLY BASIS TO REMOVE EXCESS MUD AND DIRT FROM BEING TRACKED FROM THE SITE. TRUCKS HAULING MATERIAL TO AND/OR FROM THE SITE SHALL BE COVERED WITH A TARPAULIN.

CATCH BASINS – WILL BE CLEANED ON AN ANNUAL BASIS TO REMOVE ALL SEDIMENTS FROM THE CATCH BASIN SUMPS.

CATCH BASIN PROTECTION – WILL BE INSTALLED AT ALL CATCH BASINS WITHIN THE CONSTRUCTION AREA. FILTER FABRIC WILL BE INSTALLED AROUND THE GRATES OF CATCH BASINS THAT ARE LOCATED IN THE TRAVEL WAY AND STONE/FILTER FABRIC PROTECTION WILL BE INSTALLED AT THE CATCH BASINS FOUND WITHIN THE PARKING AREA AND GRASS.

BLANKET SLOPE PROTECTION – SHALL BE INSTALLED ON ALL 2:1 SLOPES OR STEEPER ON SITE. ANCHOR THE TOP OF THE BLANKET BY ANCHORING THE BLANKET IN A 6" DEEP TRENCH. BACKFILL AND COMPACT TRENCH AFTER STAPLING. ROLL THE BLANKET IN THE DIRECTION OF STORM WATER FLOW. WHERE 2 OR MORE STRIPS OF BLANKET ARE REQUIRED, A MINIMUM OF 4" OF OVERLAP SHALL BE PROVIDED.

STONE CHECK DAMS – WILL BE INSTALLED IN EXISTING AND PROPOSED GRASS SWALES TO REDUCE THE VELOCITY OF CONCENTRATED STORM WATER FLOWS AND PREVENT EROSION OF THE SWALE.

5. STORM WATER MANAGEMENT

STORM WATER DRAINAGE FOR DEVELOPED AREAS WILL BE COLLECTED BY A PIPE AND CATCH BASIN CLOSED DRAINAGE SYSTEM. APPROXIMATELY 3.6 ACRES OF THE 15.3 ACRE SITE WILL REMAIN UNTOUCHED AND IN ITS NATURAL STATE. WHEN CONSTRUCTION IS COMPLETE THE FACILITY AND PARKING AREA WILL BE ROUTED TO TWO (2) SURFACE STORMWATER TREATMENT FILTER BASINS.

6. ALL CONSTRUCTION DEBRIS AND WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURE DUMPSTERS OR APPROVED ENCLOSURE AND REMOVED FROM THE SITE ON A WEEKLY BASIS. NO CONSTRUCTION WASTE SHALL BE BURIED ON SITE. PORTABLE TOLET SANITARY WASTE FACILITIES WILL BE PROVIDED DURING CONSTRUCTION AND MAINTAINED/DISPOSED OF ON A REGULAR BASIS IN ACCORDANCE WITH TOWN AND STATE REGULATIONS.

7. A LIST OF CONSTRUCTION ITEMS AND OTHER PRODUCTS USED ON THIS PROJECT SHALL BE KEPT ON RECORD WITH THIS PLAN ONSITE. ALL CHEMICALS, PETROLEUM PRODUCTS AND OTHER MATERIALS USED DURING CONSTRUCTION SHALL BE STORED IN A SECURE AREA, AND PRECAUTIONS USED TO PREVENT POTENTIAL SOURCES OF CONTAMINATION OR POLLUTION. ANY SPILL OF THESE TYPES OF SUBSTANCES SHALL BE CLEANED UP AND DISPOSED OF IN A LEGAL MANNER AS SPECIFIED BY STATE REGULATIONS AND THE MANUFACTURER. ANY SPILL IN AMOUNTS EQUAL TO OR EXCEEDING REPORTABLE QUANTITY AS DEFINED BY THE EPA SHALL TAKE THE FOLLOWING STEPS:
– NOTIFY THE NATIONAL RESPONSE CENTER IMMEDIATELY AT (888) 424-8802; IN WASHINGTON, D.C., CALL (202) 426-2675.
– WITHIN 14 DAYS, SUBMIT A WRITTEN DESCRIPTION OF THE RELEASE TO THE EPA REGIONAL OFFICE PROVIDING THE DATE AND CIRCUMSTANCES OF THE RELEASE AND THE STEPS TO BE TAKEN TO PREVENT ANOTHER RELEASE
– MODIFY THE POLLUTION PREVENTION PLAN TO INCLUDE THE INFORMATION LISTED ABOVE.

GOOD HOUSEKEEPING:
THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.
– AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB;
– ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE;
– PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL;
– SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER;
– WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER;
– MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED;
– TRASH DUMPSTERS SHALL BE GASKETED OR HAVE A SECURE WATERTIGHT LID AND BE PLACED AWAY FROM STORMWATER CONVEYANCES AND DRAINS.
– THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.

HAZARDOUS PRODUCTS:
THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
– PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE;
– ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION;
– IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES:
THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON SITE:
PETROLEUM PRODUCTS:
ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHT, SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS:
FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

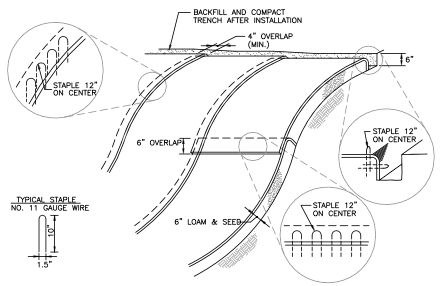
PAINTS:
ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS:
EXCESS CONCRETE SHALL BE USED IN AREAS DESIGNATED BY THE SITE CONTRACTOR. WASH WATER SHALL BE DISPOSED OF USING BEST MANAGEMENT PRACTICES. BUILDING CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL DRUM WASH WATER ASSOCIATED WITH CONCRETE FOR THE BUILDING PAD. SITE CONTRACTOR TO COORDINATE AND PROVIDE BUILDING CONTRACTOR WITH AN AREA FOR DRUM WASH WATER.

SPILL CONTROL PRACTICES:
IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
– MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
– MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
– ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
– THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
– SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF SIZE.
– THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
– THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THEY WILL DESIGNATE AT LEAST THREE OTHER SITE PERSONNEL WHO WILL EACH RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ONSITE.

11. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN RECORDS OF CONSTRUCTION ACTIVITIES, INCLUDING DATES OF MAJOR GRADING ACTIVITIES, DATES WHEN CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED ON A PORTION OF THE SITE, DATES WHEN WORK IS COMPLETED ON A PORTION OF THE SITE, AND DATES WHEN STABILIZATION MEASURES ARE INITIATED ONSITE.

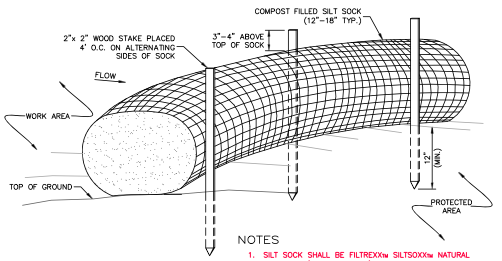
12. THE CONTRACTOR SHALL PERFORM INSPECTIONS OR HAVE A CONSULTING ENGINEER PERFORM INSPECTIONS EVERY SEVEN (7) DAYS AND WITHIN 24 HOURS AFTER A STORM OF 0.5" OR GREATER. INSPECTIONS REPORTS ARE TO BE KEPT ON FILE AT THE SITE WITH THIS PLAN. MAINTENANCE OR MODIFICATION SHALL BE IMPLEMENTED AND ADDED TO THE PLAN AS RECOMMENDED BY THE QUALIFIED INSPECTOR.



1. BLANKET SLOPE PROTECTION SHALL MEET REQUIREMENTS OF ENV-WQ 1506.15 MANUFACTURED EROSION AND SEDIMENT CONTROL PRODUCTS.
2. BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6" DEEP TRENCH. BACKFILL AND COMPACT TRENCH AFTER STAPLING.
3. ROLL THE BLANKET DOWN THE SWALE IN THE DIRECTION OF THE WATER FLOW.
4. THE EDGES OF BLANKETS MUST BE STAPLED WITH APPROX. 4 INCH OVERLAP WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SWALE, PLACE BLANKET END OVER END WITH 6 INCH (MIN.) OVERLAP AND ANCHOR DOWN SLOPE BLANKET IN A 6 INCH DEEP TRENCH.
6. BLANKET SHALL BE NORTH AMERICAN GREEN C125BN, EAST COAST EROSION CONTROL ECC-2B, AMERICAN EXCELSIOR COMPANY CURLEX III FIBRENET, ROLANKA GEONATURAL EROSION & SEDIMENT CONTROL MATTE JUTEMAT OR BIOD-OCF 30, OR APPROVED EQUAL.
7. BLANKET SHALL NOT CONTAIN WELDED PLASTIC, PLASTIC, MULTI-FILAMENT, OR MONO-FILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8".

BLANKET SLOPE PROTECTION

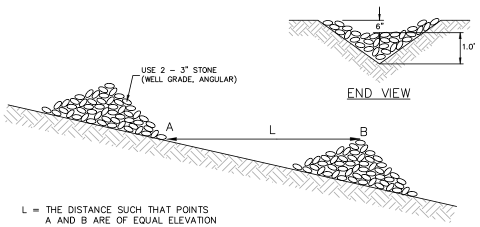
FOR EROSION CONTROL NOT TO SCALE



NOTES
1. SILT SOCK SHALL BE FILTREXXw SILTSOXXw NATURAL ORIGINALw (BIODEGRADABLE) OR APPROVED EQUIVALENT.
2. SEE SPECIFICATIONS FOR SOCK SIZE AND COMPOST FILL REQUIREMENTS.
3. SILT SOCK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS, AND REPAIR OR REPLACEMENT SHALL BE PERFORMED AS NEEDED.
4. COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS DETERMINED BY THE ENGINEER.

SILT SOCK

NOT TO SCALE



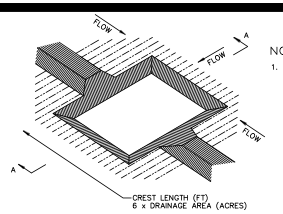
END VIEW

L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

CHECK DAM

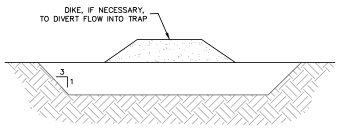
STONE CHECK DAM

IN SWALE NOT TO SCALE



NOTES
1. SEDIMENT TRAP TO BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL BASINS/PONDS ARE STABILIZED. IF IT IS DETERMINED THAT CONSTRUCTION OF A SEDIMENT TRAP IS WARRANTED, CONSULT WITH ENGINEER TO DETERMINE APPROPRIATE NUMBER AND DIMENSIONS.

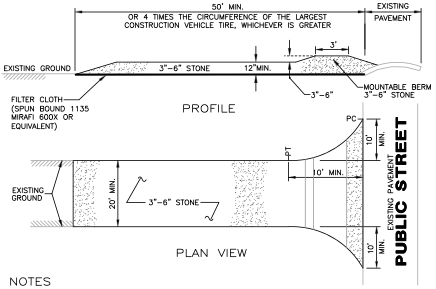
SEDIMENT TRAP – ISOMETRIC VIEW



SECTION A–A

SEDIMENT TRAP

NOT TO SCALE



NOTES
1. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE SURFACE.
2. NO SURFACE WATER SHALL BE DIRECTED TOWARD CONSTRUCTION ENTRANCES.
3. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
4. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
5. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN STORM EVENT.

STABILIZED CONSTRUCTION ENTRANCE

SEE PLAN FOR PROPOSED LOCATION NOT TO SCALE

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY
PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

REV	DATE	DESCRIPTION	DR	CK
5	12/19/2025	AOT & STAFF COMMENTS	JD	NG
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2	9/30/2025	REVISED FOR NHF&G & NHDES COMMENTS	JD	NG
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

STATE OF NEW HAMPSHIRE NICHOLAS C. GOLON No. 14886 LICENSED PROFESSIONAL ENGINEER

TFM Civil Engineers, Structural Engineers, Traffic Engineers, Land Surveyors, Landscape Architects, Scientists
48 Constitution Drive, Bedford, NH 03110, Phone (603) 472-4488, Fax (603) 472-9747, www.tfmoran.com

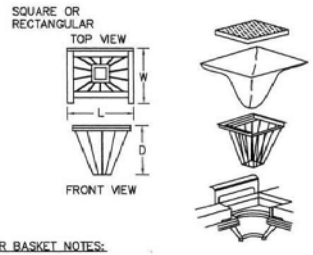
FILE	DR	FB	–	
18252-02	CK	CADFILE	18252-02 COVER & DETAILS	D-01

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Dec 23, 2025 - 2:23pm
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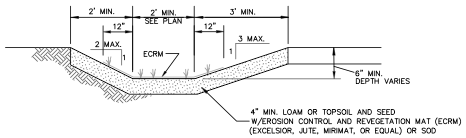


FILTER BASKET NOTES:

1. INLET BASKETS SHALL BE USED ON ALL CATCH BASINS WITHIN THE PROJECT LIMITS WITHIN PAVED AREAS. INLET FILTER BASKETS SHALL BE "SILT SACK©" OR APPROVED EQUAL.
2. FILTER FABRIC SHALL BE PUSHED DOWN AND FORMED TO THE SHAPE OF THE BASKET. THE SHEET OF FABRIC SHALL BE LARGE ENOUGH TO BE SUPPORTED BY THE BASKET FRAME WHEN HOLDING SEDIMENT AND EXTEND AT LEAST 6 INCHES PAST THE FRAME. THE INLET GRATE SHALL BE PLACED OVER THE BASKET/FRAME AND WILL SERVE AS THE FABRIC ANCHOR.
3. THE FILTER FABRIC SHALL BE A GEO-TEXTILE FABRIC: POLYESTER, POLYPROPYLENE, STABILIZED NYLON, POLYETHYLENE OR POLYVINYLIDENE CHLORIDE MEETING THE FOLLOWING SPECIFICATIONS:
   GRAB STRENGTH: 300 lb. MINIMUM IN ANY PRINCIPAL DIRECTION (ASTM D-4632).
   MULLEN BURST STRENGTH: MINIMUM 800 psi (ASTM D-3786).
4. THE FABRIC SHALL HAVE AN OPENING NO GREATER THAN A NUMBER 40 U.S. STANDARD SIEVE AND MINIMUM PERMEABILITY OF 40 gpm/sq. ft.
5. THE INLET BASKET SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING EXTENDED PERIODS OF PRECIPITATION. REPAIRS SHALL BE MADE IMMEDIATELY, AS NECESSARY, TO PREVENT PARTICLES FROM ENTERING THE DRAINAGE PIPING SYSTEM AND/OR CAUSING SURFACE FLOODING.
6. INLET BASKETS SHALL BE MAINTAINED IN PLACE UNTIL ALL PAVING IS COMPLETED AND ALL UNPAVED AREAS HAVE BEEN STABILIZED WITH VEGETATION.

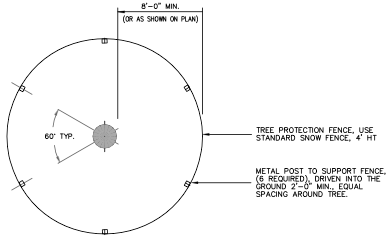
INLET FILTER BASKET

NOT TO SCALE



GRASS LINED SWALE

FOR USE WHERE VELOCITIES ARE 3 FPS OR LESS NOT TO SCALE

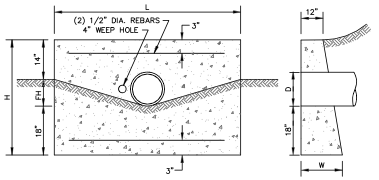


NOTES:
EXCAVATING WITHIN 10 FEET OF EXISTING TREES SHALL BE PERFORMED BY HAND DIGGING, HYDRAULIC OR PNEUMATIC TOOLS METHODS. THE USE OF HEAVEY EQUIPMENT SHALL BE AVOIDED. NO ROOTS GREATER THAN 2 INCHES IN DIAMETER SHALL BE CUT WITHOUT APPROVAL OF AN ARBORIST. WHEN ROOTS MUST BE CUT, THEY SHALL BE CUT CLEANLY WITH A SHARP SAW TO SOUND WOOD AND FLUSH WITH THE TRENCH SITE. AVOID EXPOSING ROOTS DURING HOT, DRY WEATHER. BACKFILL TRENCHES AS SOON AS POSSIBLE WITH SOIL AND SOAK WITH WATER THE SAME DAY. IF THE TRENCH MUST BE LEFT OPEN FOR AN EXTENDED AMOUNT OF TIME, ALL ROOTS MUST BE KEPT MOIST BY WRAPPING THEM IN PEAT MOSS AND BURLAP.

TREE PROTECTION

NOT TO SCALE

NOMINAL PIPE SIZE D	LENGTH OF BARS	L	H	FH	W
12	3'-2"	3'-6"	3'-6"	0'-10"	1'-10.5"
15	4-2	4-6	3-9	1-1	1-11.25
18	5-2	5-6	4-0	1-4	2-0
24	7-2	7-6	4-6	1-10	2-1.5
30	9-2	9-6	5-0	2-4	2-3
36	11-2	11-6	5-6	2-10	2-4.5
42	13-2	13-6	6-0	3-4	2-6
48	15-2	15-6	6-6	3-10	2-7.5



CONCRETE HEADWALL

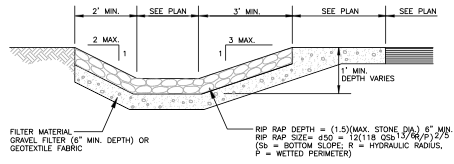
SINGLE PIPE SYSTEM NOT TO SCALE

RIP-RAP GRADATION

STONE SIZE	% FINER BY WEIGHT D 50 = 6"	D 50 = 9"	D 50 = 12"	D 50 = 18"	D 50 = 24"
2"	0-15%	0%	–	–	–
4"	20-35%	10-20%	0-10%	–	–
6"	35-50%	25-35%	10-25%	0-10%	–
8"	50-65%	30-50%	20-30%	10-20%	0-10%
10"	60-80%	40-60%	30-40%	15-30%	5-15%
12"	75-100%	–	–	–	–
15"	–	70-100%	45-60%	25-40%	20-30%
20"	–	–	70-100%	40-60%	30-45%
30"	–	–	–	70-100%	50-70%
40	–	–	–	–	70-100%

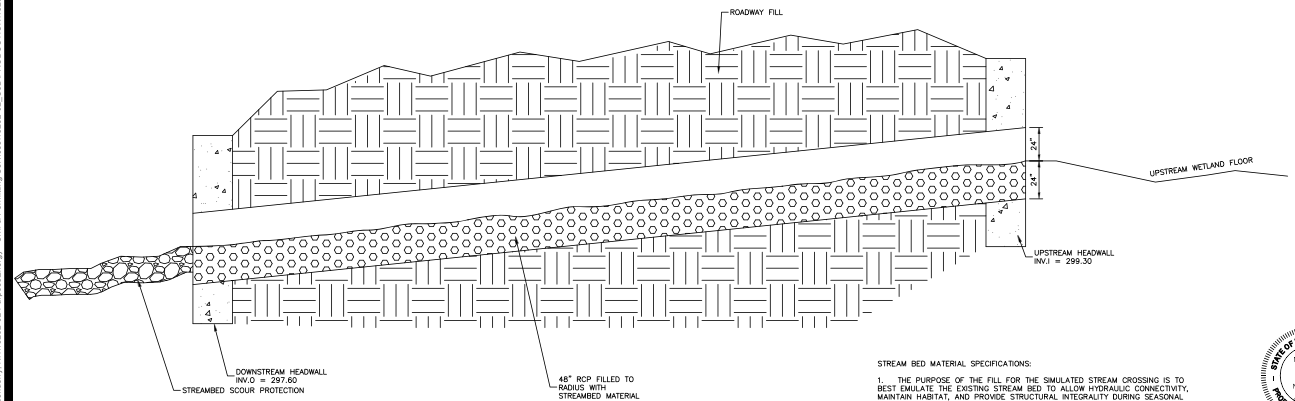
GRAVEL FILTER GRADATION

SIEVE SIZE	% PASSING BY WEIGHT
3½"	100
3"	85-100
1½"	60-90
¾"	40-70
⅜"	20-50
NO. 4	10-40
NO. 200	0-8



RIP RAP SWALE

FOR USE WHERE VELOCITIES EXCEED 3 FPS NOT TO SCALE



STREAM BED MATERIAL SPECIFICATIONS:

1. THE PURPOSE OF THE FILL FOR THE SIMULATED STREAM CROSSING IS TO BEST EMULATE THE EXISTING STREAM BED TO ALLOW HYDRAULIC CONNECTIVITY, MAINTAIN HABITAT, AND PROVIDE STRUCTURAL INTEGRALITY DURING SEASONAL RUNOFF EVENTS.
2. THE STREAMBED MATERIAL SHALL CONSIST OF WELL GRADED, ROUNDED, FLAT BOTTOM, NATURAL RIVER BED MATERIAL. NO ANGULAR ROCK TO BE USED.
3. COBBLES, STONES, AND GRAVELS:

STONE SIZE	PERCENT PASSING BY WEIGHT
8"	50%
4"	40%
2"	10%

CROSS CULVERT SECTION

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REV	DATE	DESCRIPTION	DR	CK
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1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

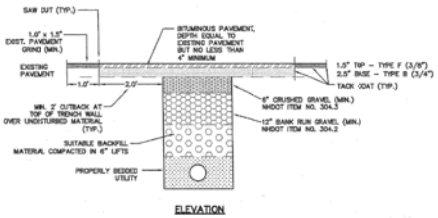
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

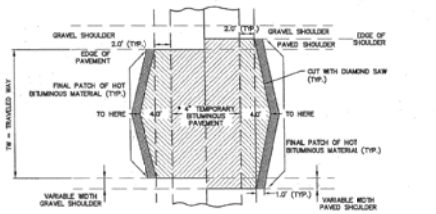
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
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FILE	DR		FB	–	
18252-02	CK		CADFILE	18252-02 COVER & DETAILS	D-02

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ELEVATION



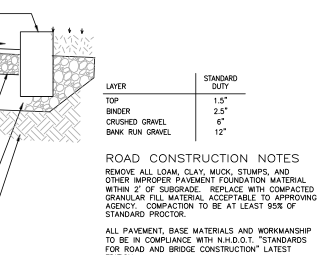
PLAN

* TO BE REMOVED FOR PERMANENT REPAIR

PAVEMENT TRENCH PATCH

FLUSH

NOT TO SCALE



LAYER	STANDARD DUTY
TOP	1.5"
BINDER	2.5"
CRUSHED GRAVEL	6"
BANK RUN GRAVEL	12"

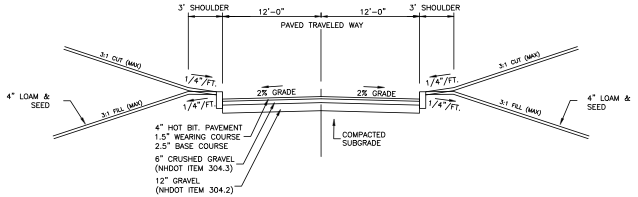
ROAD CONSTRUCTION NOTES

REMOVE ALL LOAM, CLAY, MUCK, STUMPS, AND OTHER IMPROPER PAVEMENT FOUNDATION MATERIAL WITHIN 2' OF SUBGRADE. REPLACE WITH COMPACTED GRANULAR FILL MATERIAL ACCEPTABLE TO APPROVING AGENCY. COMPACTION TO BE AT LEAST 95% OF STANDARD PROCTOR.

ALL PAVEMENT, BASE MATERIALS AND WORKMANSHIP TO BE IN COMPLIANCE WITH N.H.D.O.T. "STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION.

PAVEMENT SECTION

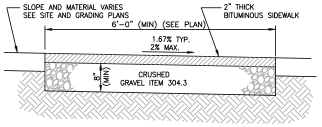
NOT TO SCALE



1. ALL ROADWAY MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE LATEST NHDOT SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. PROVIDE 4" MIN. COMPACTED LOAM AND SEED ON ALL SIDE SLOPES AND DRAINAGE SWALES UNLESS OTHERWISE NOTED.
3. ALL LEDGE SHALL BE REMOVED TO 6" BELOW SUBGRADE.
4. CURBING SHALL BE BITUMINOUS CONCRETE CURB.

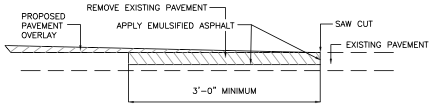
DRIVEWAY SECTION

NOT TO SCALE



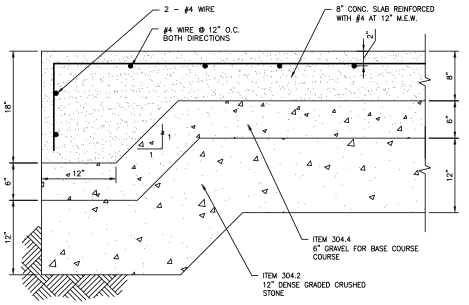
BITUMINOUS SIDEWALK

NOT TO SCALE



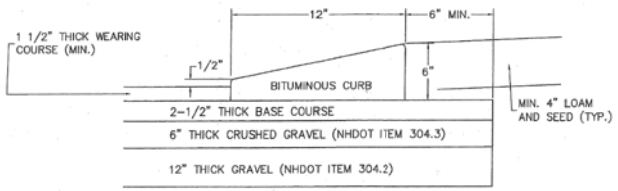
PAVEMENT SAWCUT

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CONCRETE PAD DETAIL

NOT TO SCALE

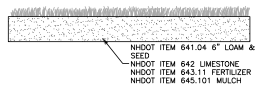


NOTES:

1. APPLY TACK COAT PRIOR TO PLACEMENT OF CURB
2. BITUMINOUS CURB MATERIAL SHALL MEET THE REQUIREMENTS OF NHDOT SECTION 609.
3. CAPE COD BERM DIMENSIONS SHALL MATCH THOSE GIVEN IN THIS DETAIL.

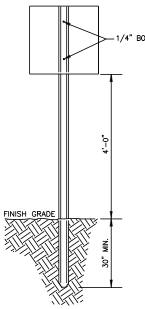
BITUMINOUS CONCRETE CURB

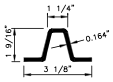
NOT TO SCALE



LOAM & SEED DETAIL

NOT TO SCALE





LENGTH: P–12, 12'–0"; P–14, 14'–0"; P–16, 16'–0"

WEIGHT PER LINEAR FOOT: 2.50 LBS. (MIN.)

HOLES: 3/8" DIA. 1" C–C FULL LENGTH

STEEL: SHALL CONFORM TO ASTM A–499 (GRADE 60) OR ASTM A–576 (GRADE 1070–1080).

FINISH: SHALL BE PAINTED WITH TWO COATS OF AN APPROVED MEDIUM GREEN, BAKED ON OR AIR DRIED, PAINT OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

POST NOTES

1. POSTS SHALL BE PLUMB; ANY POST BENT OR OTHERWISE DAMAGED SHALL BE REMOVED AND PROPERLY REPLACED. POSTS MAY BE SET OR DRIVEN.
2. WHEN POSTS ARE SET, HOLES SHALL BE DUG TO THE PROPER DEPTH, AFTER INSERTING POSTS, THE HOLES SHALL BE BACKFILLED WITH SUITABLE MATERIAL IN LAYERS NOT TO EXCEED 6" DEEP, THOROUGHLY COMPACTED, CARE BEING TAKEN TO PRESERVE THE ALIGNMENT OF THE POST.
3. WHEN POSTS ARE DRIVEN, A SUITABLE DRIVING CAP SHALL BE USED AND AFTER DRIVING THE TOP OF THE POST SHALL HAVE SUBSTANTIALLY THE SAME CROSS SECTIONAL DIMENSION AS THE BODY OF THE POST; BATTERED HEADS WILL NOT BE ACCEPTED.
4. POSTS SHALL NOT BE DRIVEN WITH THE SIGN ATTACHED TO THE POST.
5. SIGNS SHALL BE ERECTED IN CONFORMANCE WITH THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
6. WHEN SIGN IS IN PLACE NO PART OF POST SHALL EXTEND ABOVE THE SIGN.
7. DIMENSIONS SHOWN ARE NOMINAL.
8. ALTERNATE SECTIONS MUST BE APPROVED PRIOR TO USE.

SIGN NOTE

SIGNS SHALL BE PLACED ON TREES IN BUFFER LINE OR SHALL BE INSTALLED ON SIGN POSTS AS SHOWN. THE MAXIMUM SPACING BETWEEN SIGNS SHALL BE 50 FEET.

PROTECTED CONSERVATION AREA

DO NOT DISTURB SOILS OR VEGETATION

VIOLATORS WILL BE PROSECUTED

For Information Or To Report A Violation Call The Code Enforcement Officer At 432–1100 Ext. 125

CONSERVATION OVERLAY DISTRICT SIGN

NOT TO SCALE

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4	10/24/2025	NHF&G APPROVAL	JD	NG
3	11/3/2025	TOWN SEWER COMMENTS	JD	NG
2	9/30/2025	REVISED FOR NHF&G & NHDES COMMENTS	JD	NG
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

STATE OF NEW HAMPSHIRE — NICHOLAS C. COLON — No. 14886 — LICENSED PROFESSIONAL ENGINEER

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

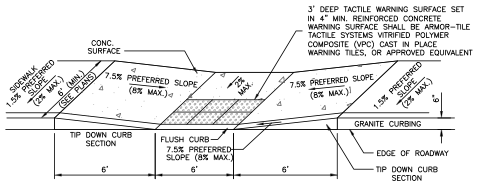
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

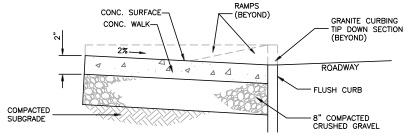
SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472–4488
Fax (603) 472–9747
www.tfmoran.com

FILE	18252–02	DR		FB	–	D–03
		CK		CADFILE	18252–02 COVER & DETAILS	

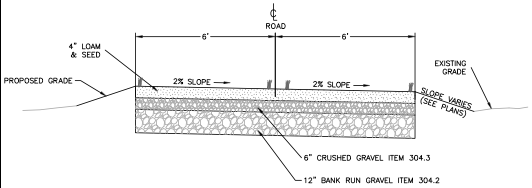
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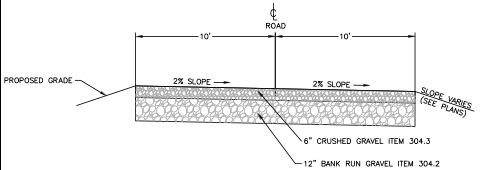
ACCESSIBLE RAMP RECESSED IN WALK

WITH DETECTABLE WARNING SURFACE (VPC) NOT TO SCALE



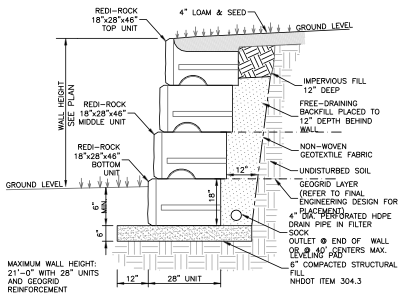
MAINTENANCE DRIVE

STORMWATER MANAGEMENT AREAS NOT TO SCALE



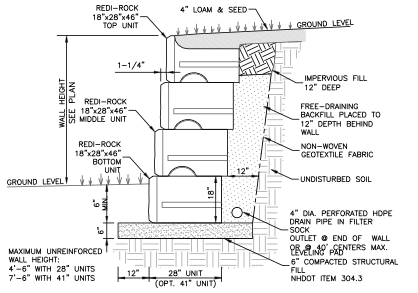
GRAVEL MAINTENANCE DRIVE

PROCESS BUILDING NOT TO SCALE



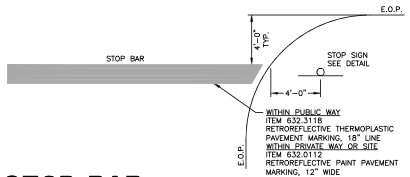
REDI-ROCK RETAINING WALL

REINFORCED WITH GEOGRID SCALE: 1/2"=1'-0"



REDI-ROCK RETAINING WALL

UNREINFORCED SCALE: 1/2"=1'-0"



STOP BAR

NOT TO SCALE

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

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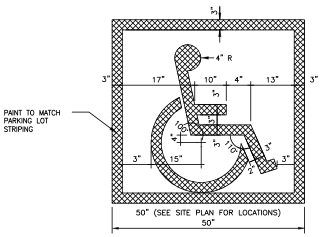
STATE OF NEW HAMPSHIRE — NICHOLAS C. COLON — No. 14866 — LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
5	12/18/2025	AOT & STAFF COMMENTS	JD	NG
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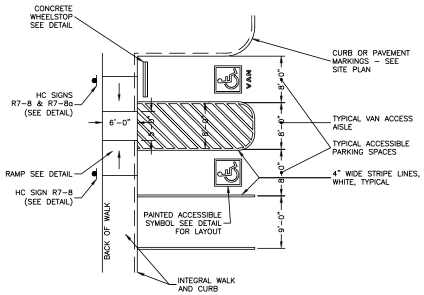
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		CK		CADFILE	18252-02 COVER & DETAILS	

Dec 23, 2025 - 2:23pm
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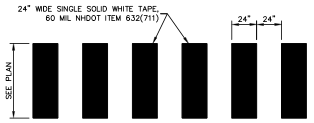
PAINTED ACCESSIBLE SYMBOL

NOT TO SCALE



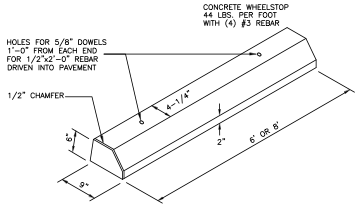
VAN ACCESSIBLE STRIPING LAYOUT

NOT TO SCALE



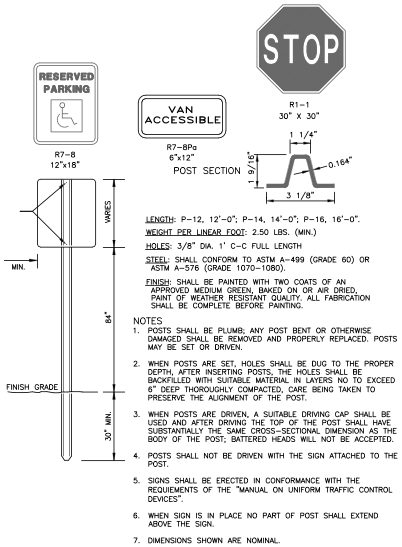
LADDER CROSSWALK

NOT TO SCALE



CONCRETE WHEELSTOP

NOT TO SCALE



LENGTH: P-12, 12'-0"; P-14, 14'-0"; P-16, 16'-0".

WEIGHT PER LINEAR FOOT: 2.50 LBS. (MIN.)

HOLES: 3/8" DIA. 1' C-C FULL LENGTH

STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576 (GRADE 1070-1080).

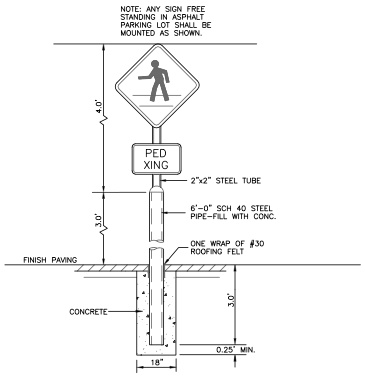
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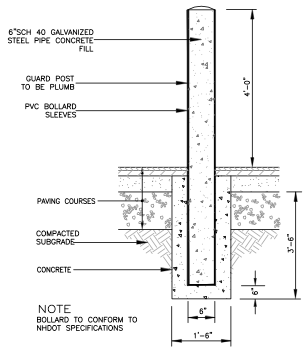
SIGN POST IN GRADE

NOT TO SCALE



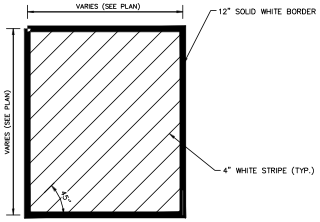
SIGN POLE IN PAVEMENT

NOT TO SCALE



GUARD POST (BOLLARD)

NOT TO SCALE



LOADING ZONE PAINT

NOT TO SCALE

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

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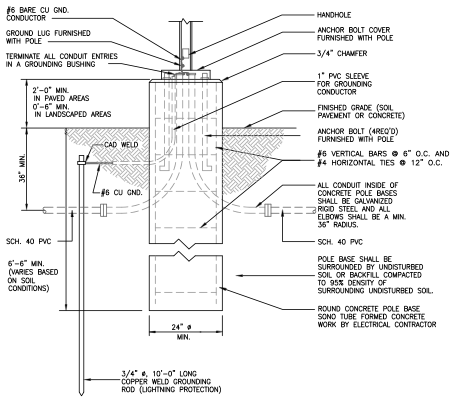
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STATE OF NEW HAMPSHIRE — NICHOLAS C. GOLON No. 14886 — LICENSED PROFESSIONAL ENGINEER

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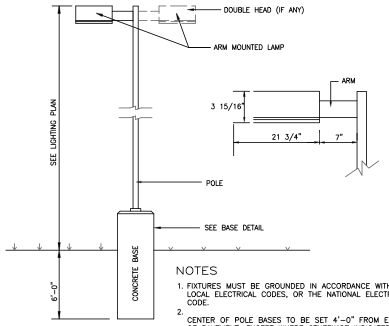
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		CK		CADFILE	18252-02 COVER & DETAILS	

Dec 23, 2025 - 2:23pm
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LIGHT POLE BASE

NOT TO SCALE



NOTES

1. FIXTURES MUST BE GROUNDED IN ACCORDANCE WITH LOCAL ELECTRICAL CODES, OR THE NATIONAL ELECTRICAL CODE.
2. CENTER OF POLE BASES TO BE SET 4'-0" FROM EDGE OF PAVEMENT, EXCEPT WHERE OTHERWISE INDICATED ON DRAWING.
3. LIGHTING SHOWN HERE IS AREA LIGHTING, SUPPLEMENTAL BUILDING-MOUNTED FIXTURES AT DOORWAYS, ETC. MAY BE REQUIRED.
4. SEE LIGHTING PLAN FOR FIXTURE SCHEDULE.

LIGHT POLE

NOT TO SCALE

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SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

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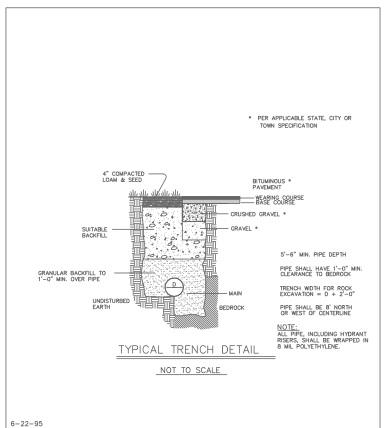
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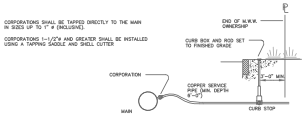
TYPICAL TRENCH DETAIL

NOT TO SCALE

6-22-95

REVISED	MANCHESTER WATER WORKS MANCHESTER,NH	SD1A
	STANDARD DETAIL	

95SD1



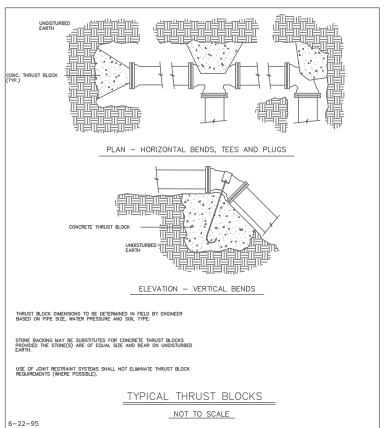
TYPICAL SERVICE CONNECTION

NOT TO SCALE

6-22-95

REVISED	MANCHESTER WATER WORKS MANCHESTER,NH	SD2
	STANDARD DETAIL	

95SD2



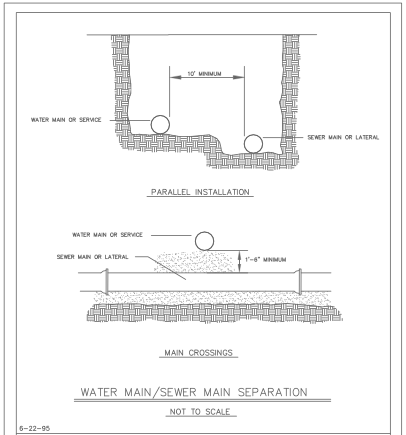
TYPICAL THRUST BLOCKS

NOT TO SCALE

6-22-95

REVISED	MANCHESTER WATER WORKS MANCHESTER,NH	SD4
	STANDARD DETAIL	

95SD4



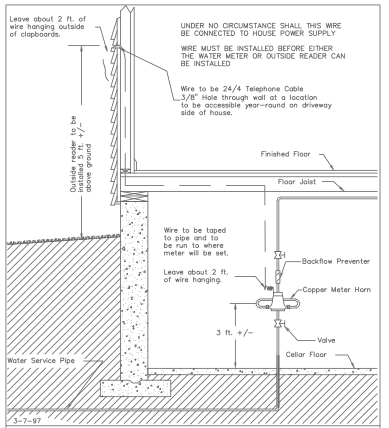
WATER MAIN/SEWER MAIN SEPARATION

NOT TO SCALE

6-22-95

REVISED	MANCHESTER WATER WORKS MANCHESTER,NH	SD6
	STANDARD DETAIL	

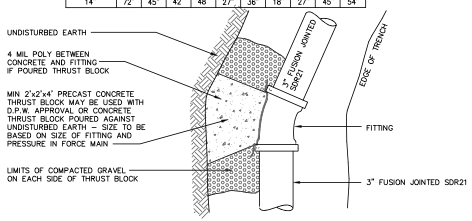
95SD6



3-7-97

REVISED	MANCHESTER WATER WORKS MANCHESTER,NH	SD12
	STANDARD DETAIL	

TABLE OF DIMENSIONS										
PIPE SIZE	90° BEND		45° BEND		22½° BEND		11¼° BEND		TEE & PLUG	
	WIDTH	HGT.	WIDTH	HGT.	WIDTH	HGT.	WIDTH	HGT.	WIDTH	HGT.
3"	–	–	–	–	–	–	–	–	–	–
6"	33"	21"	18"	21"	12"	18"	9"	12"	21"	24"
8"	45"	27"	24"	27"	18"	21"	12"	15"	27"	33"
10"	60"	36"	36"	36"	24"	30"	18"	21"	36"	42"
12"	66"	39"	36"	42"	24"	30"	18"	21"	39"	45"
14"	72"	45"	42"	48"	27"	36"	18"	27"	45"	54"

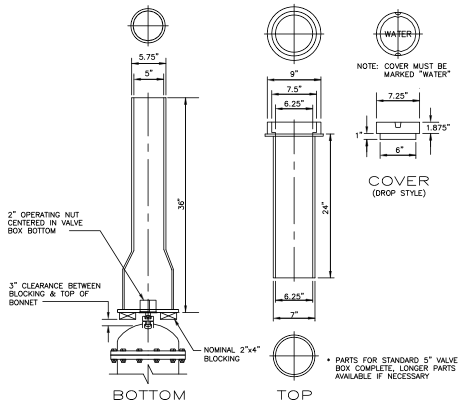


NOTE

1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO D.P.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 6' FROM TOP OF PIPE TO FINISH GRADE, UNLESS NOTED OTHERWISE. REFER TO SEWER EXTENSION PROFILE.

THRUST BLOCKING BEHIND FITTINGS INSTALLATION

NOT TO SCALE



VALVE BOX

NOT TO SCALE

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

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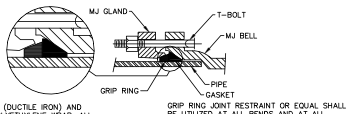
STATE OF NEW HAMPSHIRE
NICHOLAS C. COLON
No. 14886
LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
5	12/18/2025	AOT & STAFF COMMENTS	JD	NG
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3	11/3/2025	TOWN SEWER COMMENTS	JD	NG
2	9/30/2025	REVISED FOR NHF&G & NHDES COMMENTS	JD	NG
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FILE	18252-02	DR		FB	–	D-07
		CK		CADFILE	18252-02 COVER & DETAILS	

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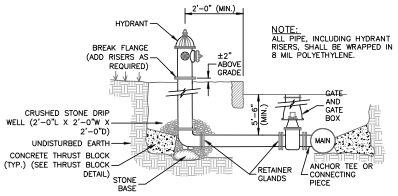


NOTE:
1. ALL WATER MAINS (DUCTILE IRON) AND SERVICES SHALL BE POLYETHYLENE WRAP. ALL GASKETS SHALL BE NITRILE.

GRIP RING JOINT RESTRAINT SHALL BE UTILIZED AT ALL BENDS AND AT ALL CHANGES IN DIRECTION OF WATER MAINS WHERE A RESTRAINED JOINT IS NEEDED.

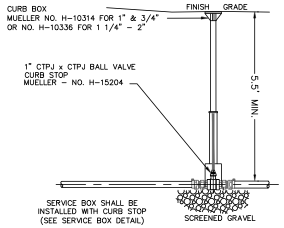
GRIP RING JOINT RESTRAINT

NOT TO SCALE



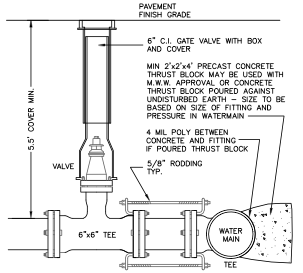
TYPICAL HYDRANT INSTALLATION

MANCHESTER WATER WORKS NOT TO SCALE



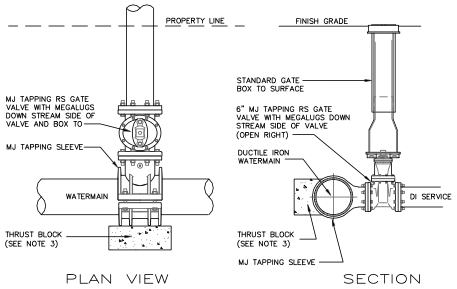
CURB STOP

NOT TO SCALE



BURIED GATE VALVE

NOT TO SCALE



PLAN VIEW SECTION

NOTE

1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO M.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5'-6" FROM TOP OF PIPE TO FINISH GRADE.
3. MIN 2'x2'x4' PRECAST CONCRETE THRUST BLOCK MAY BE USED WITH M.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATERMAIN.

WET TAP TEE INSTALLATION

NOT TO SCALE

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

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SEWER SERVICE NOTES

1) MINIMUM SIZE PIPE FOR SEWER SERVICE SHALL BE FOUR INCHES.

2) PIPE AND JOINT MATERIALS:
   A. PLASTIC SEWER PIPE
      1. PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

ASTM STANDARDS	GENERIC PIPE MATERIAL	SIZES APPROVED
D3034	*PVC (SOLID WALL)	8" THROUGH 15" (SDR 35)
F679	PVC (SOLID WALL)	18" THROUGH 27" (T-1 & T-2)
F789	PVC (SOLID WALL)	4" THROUGH 18" (T-1 TO T-3)
F794	PVC (RIBBED WALL)	8" THROUGH 36"
D2680	*ABS (COMPOSITES WALL)	8" THROUGH 15"

*PVC: POLY VINYL CHLORIDE
*ABS: ACRYLONITRILE-BUTADIENE-STYRENE

      2. JOINTS SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D-3212 AND SHALL BE PUSH-ON, BELL AND SPIGOT TYPE.

      ABS TRUSS PIPE AND FITTINGS SHALL CONFORM TO ASTM D-2680, POLYMER COMPOUNDING SHALL BE TO ASTM D-1788 (CLASS 322).

      JOINTS FOR ABS TRUSS PIPE SHALL BE CHEMICAL WELDED COUPLINGS TYPE SC IN ACCORDANCE WITH ASTM D-2680, FORMING A CHEMICAL WELDED JOINT.

   B. DUCTILE-IRON PIPE, FITTINGS AND JOINTS.

      1. DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE UNITED STATES OF AMERICA STANDARDS INSTITUTE:
         A21.50 THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A-536 DUCTILE IRON CASTINGS.
         A21.51 DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS FOR WATER OR OTHER LIQUIDS.
      2. JOINTS SHALL BE OF THE MECHANICAL OR PUSH-ON TYPE. JOINTS AND GASKETS SHALL CONFORM TO:
         A21.11 RUBBER GASKETS JOINTS FOR CAST IRON PRESSURE PIPE & FITTINGS

3) DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.

4) JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER-TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATIO WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.

5) TEES AND WYES: WHERE A TEE OR WYE IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE, FOLLOWING MANUFACTURERS' INSTRUCTIONS USING A BOLTED, CLAMPED OR EPOXY-CEMENTED SADDLE TAPPED INTO A SMOOTHLY DRILLED OR SAWN OPENING IN THE SEWER. THE PRACTICE OF BREAKING AN OPENING WITH A SLEDGE HAMMER, STUFFING CLOTH OR OTHER SUCH MATERIAL AROUND THE JOINT, OR APPLYING MORTAR TO HOLD THE CONNECTION, AND ANY OTHER SIMILAR CRUDE PRACTICES OR INEPT OR HASTY IMPROVISATIONS WILL NOT BE PERMITTED. THE CONNECTION SHALL BE CONCRETE ENCASED AS SHOWN IN THE DETAIL UP TO AND INCLUDING 15" DIAMETER.

6) SEWER SERVICE INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 6 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL AS SPECIFIED IN NOTE 10. BEDDING AND RE-FILL FOR DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH APPROPRIATE MECHANICAL DEVICES.

   THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE FOUNDATION AT A GRADE OF NOT LESS THAN 1/4" INCH PER FOOT. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.

7) TESTING: THE COMPLETED SEWER SERVICE SHALL BE SUBJECTED TO A THIRD PARTY LEAKAGE TEST IN ANY OF THE FOLLOWING MANNERS: (PRIOR TO BACKFILLING)

   A. ALL NEW GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF LOW-PRESSURE AIR TESTS.

      LOW PRESSURE AIR TESTING SHALL BE IN CONFORMANCE WITH:

         ASTM F1417-92(2005) "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW PRESSURE AIR".

         UNI-BELL PVC PIPE ASSOCIATION UNI-B-6, "LOW PRESSURE AIR TESTING OF INSTALLED SEWER PIPE".

   LEAKAGE OBSERVED IN ANY ONE OF THE ABOVE ALTERNATE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG-UP IF NECESSARY AND RE-LAID SO AS TO ASSURE WATER TIGHTNESS.

8) ILLEGAL CONNECTIONS: NOTHING BUT SANITARY WASTE FLOW FROM TOILETS, SINKS, LAUNDRY ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS, SUMP PUMPS OR OTHER SIMILAR CONNECTIONS CARRYING RAIN WATER, DRAINAGE OR GROUND WATER SHALL NOT BE PERMITTED.

9) WATER SERVICE SHALL NOT BE LAID IN SAME TRENCH AS SEWER SERVICE.

10) BEDDING: CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C33-67.

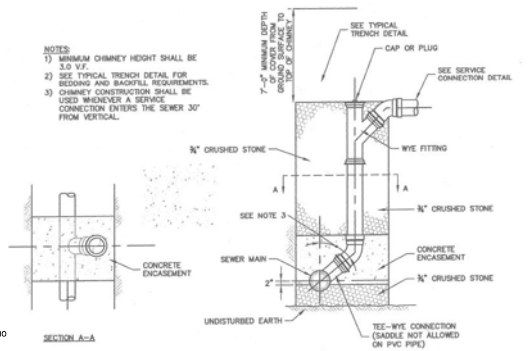
100% PASSING	1 INCH SCREEN
90%-100% PASSING	3/4 INCH SCREEN
20%-55% PASSING	3/8 INCH SCREEN
0%-10% PASSING	#4 SIEVE
0%-5% PASSING	#8 SIEVE

   WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, CRUSHED STONE 1/2 INCH TO 1 1/ INCH SHALL BE USED.

11) LOCATION: THE LOCATION OF THE TEE OR WYE SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS METAL ROD OR PIPE SHALL BE PLACED OVER THE TEE OR WYE AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL, TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPEFINDER.

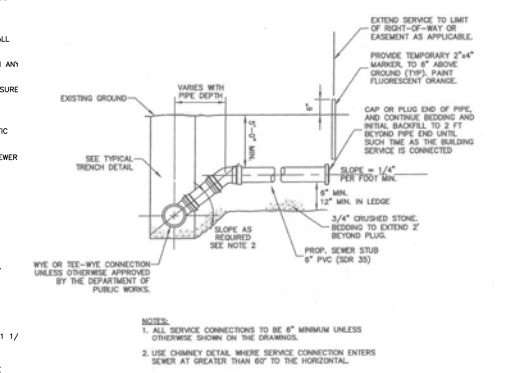
12) CHIMNEYS: IF VERTICAL DROP INTO SEWER IS GREATER THAN 4 FEET, A CHIMNEY SHALL BE CONSTRUCTED FOR THE SEWER CONNECTION. CHIMNEY INSTALLATION AS RECOMMENDED BY THE PIPE MANUFACTURER MAY BE USED IF APPROVED BY THE ENGINEER.

SEWER SERVICE DETAILS



CHIMNEY (SEE NOTE 12)

NOT TO SCALE



SEWER SERVICE

NOT TO SCALE

GRAVITY SEWER NOTES

1. MINIMUM SIZE PIPE FOR GRAVITY SEWER SHALL BE 8-INCHES.

2. PIPE AND JOINT MATERIALS FOR PLASTIC SEWER PIPE SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

ASTM STANDARDS	GENERIC PIPE MATERIAL	SIZES APPROVED
D3034-04a	*. PVC (SOLID WALL)	8" THROUGH 15" (SDR 35)
F679-03	PVC (SOLID WALL)	18" THROUGH 27" (T-1 & T-2)
F794-03	PVC (RIBBED WALL)	8" THROUGH 36"
F1760-01(2005)e1	PVC, RECYCLED	ALL DIAMETERS

*PVC: POLY VINYL CHLORIDE

3. PLASTIC SEWER PIPE SHALL HAVE A PIPE STIFFNESS RATING OF AT LEAST 46 POUNDS PER SQUARE INCH AT 5 PERCENT PIPE DIAMETER DEFLECTION, AS MEASURED IN ACCORDANCE WITH ASTM D2412-02 DURING MANUFACTURE.

4. JOINTS SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D-3212-96(a)(2003)e1 AND SHALL BE PUSH-ON, BELL AND SPIGOT TYPE.

5. DUCTILE-IRON PIPE, FITTINGS AND JOINTS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION (AWWA).

   AWWA C150/A21.50 FOR THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A536 FOR DUCTILE IRON CASTINGS.

   AWWA C151/A21.51 FOR DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL- OR SAND-LINED MOLDS FOR WATER, WASTEWATER, AND RECLAIMED WATER SYSTEMS.

   JOINTS SHALL BE OF THE MECHANICAL TYPE, PUSH-ON TYPE, OR BALL- AND SOCKET TYPE AS APPROPRIATE FOR THE SPECIFIC APPLICATION. JOINTS AND GASKETS SHALL CONFORM TO AWWA C151/A21.11 RUBBER GASKETS JOINTS FOR CAST IRON PRESSURE PIPE & FITTINGS.

6. CONCRETE PIPE SHALL CONFORM TO AWWA C302-04.

7. PRESTRESSED CONCRETE CYLINDER PIPE AND FITTINGS SHALL CONFORM TO AWWA C301-99.

8. JOINTS SEALS FOR CONCRETE CYLINDER PIPE SHALL BE OIL RESISTANT ELASTOMERIC MATERIAL CONFORMING TO ASWWA C301-99 SPECIFICATIONS.

9. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.

10. GRAVITY SEWER PIPE TESTING SHALL BE AS FOLLOWS:

   ALL NEW GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF LOW-PRESSURE AIR TESTS.

   LOW PRESSURE AIR TESTING SHALL BE IN CONFORMANCE WITH:

      ASTM F1417-92(2005) "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW PRESSURE AIR".

      UNI-BELL PVC PIPE ASSOCIATION UNI-B-6, "LOW PRESSURE AIR TESTING OF INSTALLED SEWER PIPE".

11. ALL NEW GRAVITY SEWERS SHALL BE CLEANED AND VISUALLY INSPECTED AND SHALL BE TRUE TO LINE AND GRADE FOLLOWING INSTALLATION AND PRIOR TO USE.

12. ALL PLASTIC SEWER PIPE SHALL BE DEFLECTION TESTED NOT LESS THAN 30 DAYS FOLLOWING INSTALLATION.

13. THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5 PERCENT OF THE AVERAGE INSIDE DIAMETER.

14. TRENCH CONSTRUCTION SHALL CONFORM TO THE FOLLOWING:

   SEWERS SHALL BE BURIED TO A MINIMUM DEPTH OF 6' BELOW GRADE IN ALL ROADWAY LOCATIONS AND TO A MINIMUM DEPTH OF 4 FEET BELOW GRADE IN ALL CROSS COUNTRY LOCATIONS.

   WHERE SEWER LINES CROSS WATER PIPES, A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE OBSERVED. AT SEWER/WATER INTERSECTIONS, A MINIMUM OF 6 FEET SHALL BE PROVIDED FROM THE WATER LINE TO THE SEWER PIPE JOINT. 12" SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE REQUIRED BETWEEN SEWER LINES AND ALL OTHER PIPES.

   TRENCH DIMENSIONS FOR SEWER PIPE LESS THAN 15 INCHES IN DIAMETER, THE ALLOWABLE TRENCH WIDTH AT A PLANE 12 INCHES ABOVE THE PIPE SHALL BE NO MORE THAN 36 INCHES AND FOR PIPE 15 INCHES AND LARGER, THE ALLOWABLE WIDTH SHALL BE EQUAL TO THE PIPES OUTSIDE DIAMETER PLUS 24 INCHES.

   PIPE TRENCH BEDDING MATERIAL AND FILL MATERIAL FOR EXCAVATION BELOW GRADE SHALL BE CRUSHED STONE TO ASTM C33-03 STONE SIZE NO. 67. THE PIPE SAND BLANKET MATERIAL SHALL BE GRADED SAND FREE FROM ANY ORGANIC MATERIALS, GRADED SUCH THAT 100 PERCENT PASSED THE 1/2-INCH SIEVE AND A MAXIMUM OF 15 PERCENT PASSES A #200 SIEVE. IN LIEU OF A SAND BLANKET, A STONE ENVELOPE 6 INCHES THICK COMPLETELY AROUND THE PIPE USING 3/4-INCH STONE MAY BE USED.

   PIPE BEDDING MATERIAL SHALL EXTEND FROM A HORIZONTAL PLANE THROUGH THE PIPE AXIS TO 6-INCHES BELOW THE BOTTOM OF THE OUTSIDE SURFACE OF THE PIPE.

   PIPE SAND BLANKET MATERIAL SHALL COVER THE PIPE A MINIMUM OF 12 INCHES ABOVE THE CROWN OF THE OUTSIDE SURFACE.

   COMPACTION SHALL BE IN 12-INCH LAYERS FOR BEDDING AND BLANKET MATERIALS.

   BACKFILL MATERIAL SHALL BE IN 3-FOOT LAYERS TO THE GROUND SURFACE EXCEPT FOR ROAD CONSTRUCTION WHERE THE FINAL 3-FEET SHALL BE COMPACTED IN 12-INCH LAYERS TO THE ROAD BASE SURFACE.

   TRENCH BACKFILL MATERIAL IN ROADWAY LOCATIONS SHALL BE NATURAL MATERIALS EXCAVATED FROM THE TRENCH DURING CONSTRUCTION, EXCLUDING DEBRIS, PAVEMENT PIECES, ORGANIC MATTER, TOP SOIL, WET OR SOFT MUCK, PEAT, CLAY, EXCAVATED LEDGE, ROCKS OVER 6 INCHES IN THE LARGEST DIMENSION, OR ANY OTHER UNSUITABLE MATERIAL NOT APPROVED BY THE ENGINEER.

   TRENCH BACKFILL AT CROSS-COUNTRY LOCATIONS SHALL BE AS DESCRIBED ABOVE EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK OR PEAT, IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLE RECONSTRUCTION, WHEN NECESSARY WILL BE PRESERVED. BACKFILL SHALL BE MOUNDED 6-INCHES ABOVE ORIGINAL GROUND.

   BASE COURSE MATERIALS FOR TRENCH REPAIRS SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION.

   WHERE SHEETING IS PLACED ALONG SIDE OF THE PIPE AND EXTENDS BELOW MID-DIAMETER, THE SHEETING SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN ONE FOOT ABOVE THE TOP OF THE PIPE AND AT LEAST 3 FEET BELOW FINISH GRADE.

   TRENCHES FOR SEWER PIPES WITH SLOPES OVER 0.08 FEET PER FOOT AND TRENCHES FOR SEWER PIPES BELOW THE SEASONAL HIGH GROUND WATER LEVEL SHALL HAVE IMPERVIOUS TRENCH DAMS CONSTRUCTED EVERY 300 FEET TO PREVENT POTENTIAL DISTURBANCE TO PIPE BEDDING AND BLANKET MATERIALS.

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

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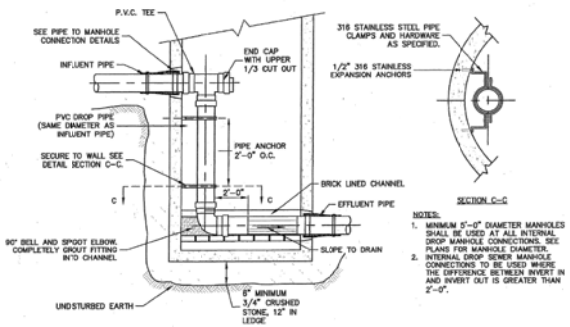
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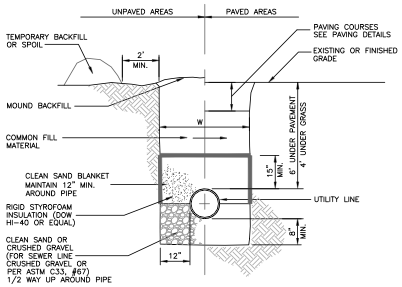
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TYPICAL SEWER MANHOLE
WITH INTERNAL DROP CONNECTION

NOT TO SCALE

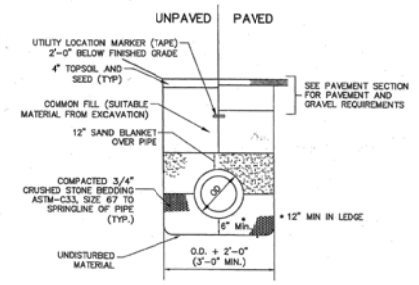


NOTE

W=MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.

PIPE INSULATION

NOT TO SCALE



TYPICAL SEWER PIPE TRENCH

NOT TO SCALE

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Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	18252-02	DR		FB	-	D-10
		CK		CADFILE	18252-02 COVER & DETAILS	

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Dec 23, 2025 - 2:24pm
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GENERAL NOTES

1. ALL SEWER CONSTRUCTION STANDARDS AND DETAILS SHALL ADHERE TO ENV-WQ 700, EFFECTIVE DATE JULY 1, 2025.
2. IT IS THE INTENTION THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES SHALL BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT AND ADEQUATE JOINTING. THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND HS-20-44 LOADING INCLUDING THE FRAME AND COVER.
3. SEWER MANHOLE DIAMETER SHALL BE AS INDICATED ON THE PLANS.
4. LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN OF LONDONDERRY AND NHDES REQUIREMENTS. INVERT AND SHELF TO BE PLACED AFTER PASSING THE LEAKAGE TEST.
   (a) ALL MANHOLES SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST IN ACCORDANCE WITH THE ASTM C1244 STANDARD IN EFFECT WHEN THE TESTING IS PERFORMED.
   (b) THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING:
      1. THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES Hg.
      2. THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR 1-INCH Hg PRESSURE DROP TO 9 INCHES SHALL BE:
         A. NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP.
         B. NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP.
         C. NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP.
   (c) THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (b) ABOVE.
   (d) INVERTS AND SHELVES SHALL NOT BE INSTALLED UNTIL AFTER SUCCESSFUL TESTING IS COMPLETE.
   (e) FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN OR ANIMALS, UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENT TO GRADE.
5. CARE SHALL BE TAKEN TO ENSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT. INVERT BRICKS SHALL BE LAID ON EDGE. BASE SECTION TO BE FULL.
6. MANHOLE CHANNELS REQUIRING CHANGE IN ALIGNMENT ARE TO BE BUILD ON A SMOOTH RADIUS.
7. IN CROSS COUNTRY AREAS BEYOND ROADWAY RIGHT-OF-WAYS, THE MANHOLE FRAME ELEVATION SHALL BE A MINIMUM OF 6" ABOVE FINISHED GRADE. GRADE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE MANHOLE.
8. FRAMES AND COVERS: MANHOLES FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. 3-INCH (MINIMUM HEIGHT) LETTERS WITH THE WORD "SEWER" SHALL BE PLAINLY CAST INTO THE CENTER OF EACH MANHOLE COVER.
9. BARRELS, CONE SECTIONS AND CONCRETE GRADE RINGS SHALL BE PRECAST REINFORCED CONCRETE AND SHALL CONFORM ENV-WQ 704.12 & 704.13.
10. PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478-06.
11. BASE SECTIONS SHALL BE OF MONOLITHIC CONSTRUCTION TO A POINT AT LEAST 6 INCHES ABOVE THE CROWN OF THE INCOMING PIPE.
12. MANHOLE CONE SECTIONS SHALL BE ECCENTRIC IN SHAPE.
13. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL.
14. ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING.
15. SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS.
16. HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATERTIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT. APPROVED ELASTOMERIC SEALANTS ARE:
   (a) SIKAFLEX-12-SL; OR
   (b) SONNEBORN BUILDING PRODUCTS-SONOLASTIC SL-1
17. THE MINIMUM INTERNAL DIAMETER OF MANHOLES SHALL BE 48 INCHES. FOR SEWERS LARGER THAN 24-INCH DIAMETER. MANHOLE DIAMETERS SHALL BE INCREASED SO AS TO PROVIDE AT LEAST 12-INCHES OF SHELF ON EACH SIDE OF THE SEWER.
18. LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE TO ENV-WQ 704.17.
19. BRICK MASONRY FOR SHELF, INVERT AND GRADE ADJUSTMENT SHALL COMPLY WITH ASTM C32-05, CLAY OR SHALE, FOR GRADE SS HARD BRICK.
20. MORTAR SHALL BE COMPOSED OF PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE:
   (a) 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR
   (b) 4.5 PARTS SAND, 1 PART CEMENT AND 0.5 PART HYDRATED LIME
21. CEMENT SHALL BE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150-05. HYDRATED LIME SHALL BE TYPE S CONFORMING TO ASTM C207-06 "STANDARD SPECIFICATIONS FOR HYDRATED LIME FOR MASONRY PURPOSES". SAND SHALL CONSIST OF INERT NATURAL SAND CONFORMING TO ASTM C33-03 "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES".
22. INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED OR PRECAST CONCRETE SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF THE PIPE AND FLOW. AT CHANGES IN DIRECTIONS, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.
23. FRAMES AND COVERS: MANHOLES FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN, CLASS 30, CONFORMING TO ASTM A48/48M AND PROVIDE A 30-INCH CLEAR OPENING. 3-INCH WORD (MINIMUM HEIGHT) LETTERS "SEWER" SHALL BE PLAINLY CAST INTO THE TOP SURFACE. THE CASTING SHALL BE OF EVEN GRAINED CAST IRON, SMOOTH, AND FREE FROM SCALE, LUMPS, BLUSTERS, SAND HOLES AND DEFECTS. CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION.
24. BEDDING: PRECAST BASES SHALL BE PLACED ON A 6-INCH (12-INCH IN LEDGE) LAYER OF COMPACTED BEDDING MATERIAL THAT CONFORMS TO ASTM C33-03 NO. 67 STONE AND FREE FROM CLAY, LOAM AND ORGANIC MATTER. THE EXCAVATION SHALL BE PROPERLY DEWATERED WHILE PLACING BEDDING MATERIAL AND SETTING OF THE BASE OR POURING CONCRETE. WATER-STOPS SHALL BE USED AT THE HORIZONTAL JOINT OF THE CAST-IN-PLACE MANHOLES.

100% PASSING	1" SCREEN
90-100% PASSING	3/4" SCREEN
20-55% PASSING	3/8" SCREEN
0-10% PASSING	#4 SIEVE
0-5% PASSING	#8 SIEVE

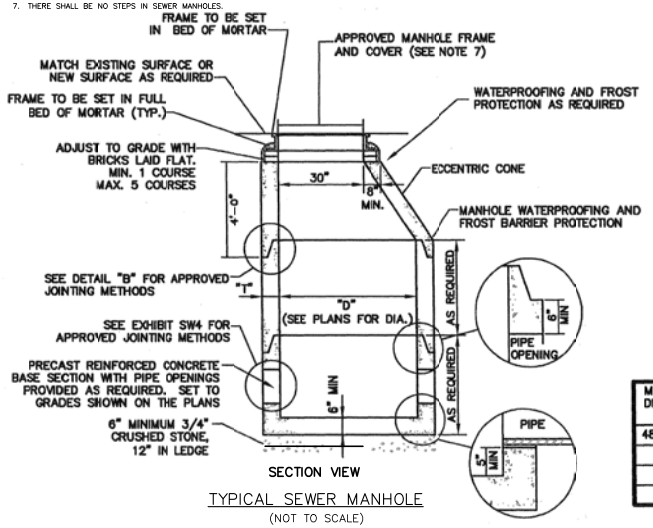
25. FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES FROM ANY MANHOLE CONNECTION: (a) WITHIN 48 INCHES FOR REINFORCED CONCRETE PIPE (RCP). (b) WITHIN 60 INCHES FOR PVC PIPE LARGER THAN 15" DIAMETER.
26. NO FLEXIBLE JOINT SHALL BE REQUIRED FOR DUCTILE IRON PIPE OR PVC PIPE UP THROUGH 15-INCH DIAMETER.
27. PIPE TO MANHOLE JOINTS SHALL BE ONLY AS FOLLOWS:
   A. ELASTOMERIC, RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES.
   B. CAST INTO WALL OR SECURED WITH STAINLESS STEEL CLAMPS.
   C. ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH THE SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING.

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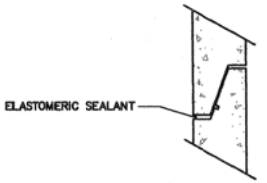
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1. IN CROSS COUNTRY AREAS BEYOND ROADWAY RIGHT-OF-WAYS, THE MANHOLE FRAME ELEVATION SHALL BE A MINIMUM OF 6" ABOVE FINISHED GRADE. GRADE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE MANHOLE
2. THE INVERT OF THE INCOMING PIPE SHALL BE NO MORE THAN 6 INCHES ABOVE THE OUTGOING PIPE UNLESS A DROP ENTRY IS USED.
3. THE SEWER CONNECTIONS SHALL BE INSPECTED BY AUTHORIZED TOWN OF LONDONDERRY PUBLIC WORKS AND ENGINEERING DEPARTMENT PERSONNEL BEFORE ANY BACKFILLING. INSPECTION HOURS ARE BETWEEN 9:00AM AND 4:30PM, MONDAY-FRIDAY, WITH AT LEAST 2 DAYS OF ADVANCE NOTICE.
4. THE SEWER SERVICE MANHOLE SHALL BE VACUUM TESTED AND THE PVC PIPING PRESSURE TESTED WITH AUTHORIZED TOWN OF LONDONDERRY PUBLIC WORKS AND ENGINEERING DEPARTMENT PERSONNEL PRESENT ON SITE WITH A WITNESS.
5. ALL SEWER CONSTRUCTION AND USE SHALL CONFORM TO THE STATE OF NEW HAMPSHIRE STANDARD SEWER CONSTRUCTION SPECIFICATION AND THE TOWN OF LONDONDERRY SEWER USE ORDINANCE.
6. A MANDATORY PRECONSTRUCTION MEETING SHALL BE HELD WITH THE TOWN, CONTRACTOR, OWNER AND ALL UTILITY REPRESENTATIVES PRIOR TO ANY CONSTRUCTION. NO WORK SHALL BEGIN UNTIL APPROVAL BY THE DEPARTMENT OF PUBLIC WORKS HAS BEEN OBTAINED.
7. THERE SHALL BE NO STEPS IN SEWER MANHOLES.



TYPICAL SEWER MANHOLE
(NOT TO SCALE)

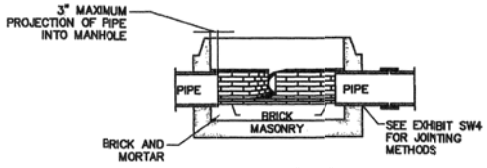
MANHOLE DIAMETER "D"	MAX. PIPE DIAMETER STRAIGHT THROUGH TO 45° DEFLECTION	"T" (WALL THICKNESS)
48" (MIN.)	30" OD MAX.	5" (MIN.)
60"	44" OD MAX.	6"
72"	51" OD MAX.	7"
96"	72" OD MAX.	9"



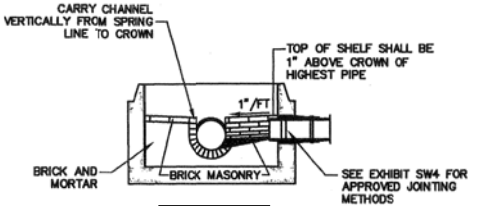
ELASTOMERIC SEALANT

NOTE:
ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS

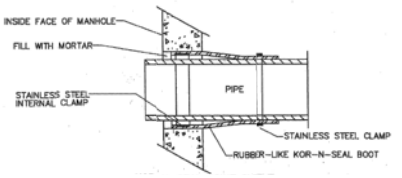
DETAIL "B" HORIZONTAL JOINTS



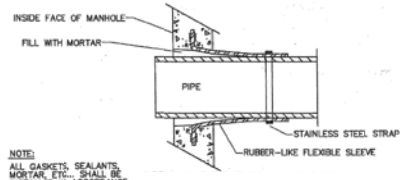
SECTION "A-A"



SECTION "B-B"

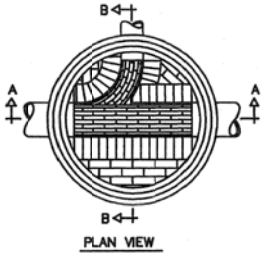


KOR-N-SEAL JOINT SLEEVE
(OR ACCEPTABLE SUBSTITUTE)



NOTE:
ALL GASKETS, SEALANTS, MORTAR, ETC., SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS

LOCK-JOINT FLEXIBLE MANHOLE SLEEVE
(OR ACCEPTABLE SUBSTITUTE)



PLAN VIEW

TYPICAL MANHOLE - PLAN VIEW

STATE OF NEW HAMPSHIRE
NICHOLAS C. GOLON
No. 18986
LICENSED PROFESSIONAL ENGINEER
07/22/2025

REV.	DATE	DESCRIPTION	DR	CK
5	12/18/2025	AOT & STAFF COMMENTS	JD	NG
4	10/24/2025	NHF&G APPROVAL	JD	NG
3	11/3/2025	TOWN SEWER COMMENTS	JD	NG
2	9/30/2025	REVISED FOR NHF&G & NHDES COMMENTS	JD	NG
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

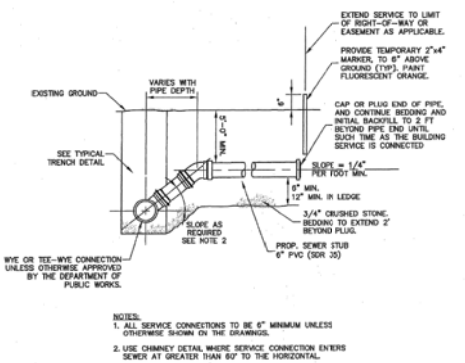
OWNED BY
PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
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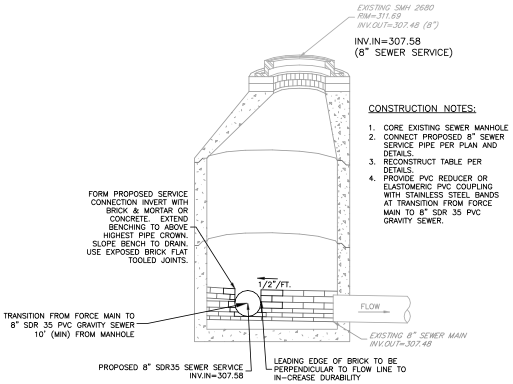
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E		CK		CADFILE	18252-02 COVER & DETAILS	

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NOTES:
1. ALL SERVICE CONNECTIONS TO BE 6" MINIMUM UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
2. USE CHIMNEY DETAIL WHERE SERVICE CONNECTION ENTERS SEWER AT GREATER THAN 60° TO THE HORIZONTAL.

SEWER SERVICE CONNECTION

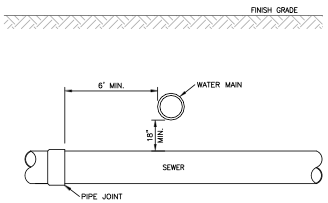


CONSTRUCTION NOTES:
1. CORE EXISTING SEWER MANHOLE
2. CONNECT PROPOSED 8" SEWER SERVICE PIPE PER PLAN AND DETAILS.
3. RECONSTRUCT TABLE PER DETAILS.
4. PROVIDE PVC REDUCER OR ELASTOMERIC PVC COUPLING WITH STAINLESS STEEL BANDS AT TRANSITION FROM FORCE MAIN TO 8" SDR 35 PVC GRAVITY SEWER.

MORTAR SHALL CONSIST OF: 1 PART BY VOLUME PORTLAND CEMENT, 2 PARTS BY VOLUME, DAMP WASHED COARSE SAND AND POTABLE WATER TO PRODUCE A CONSISTENCY OF STIFF PASTE. SEAL ALL PRECAST JOINTS WITH MORTAR.

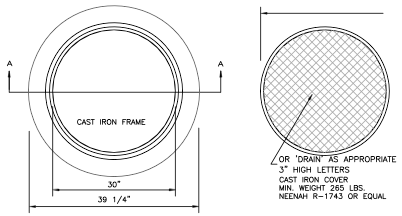
SEWER SERVICE CONNECTION

EX. SMH2680 NOT TO SCALE

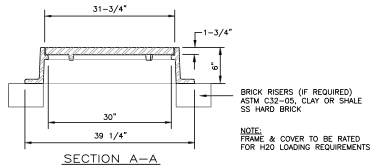


SEWER / WATER INTERSECTIONS

ELEVATION VIEW NOT TO SCALE



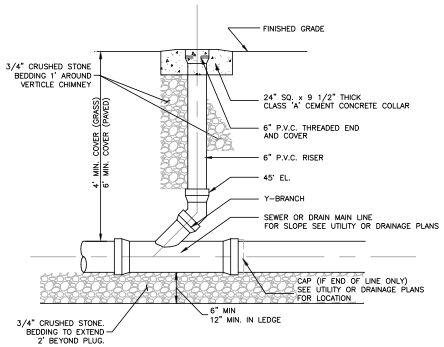
PLAN VIEW



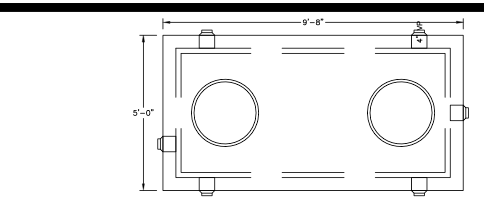
SECTION A-A

MANHOLE FRAME & COVER

HEAVY DUTY

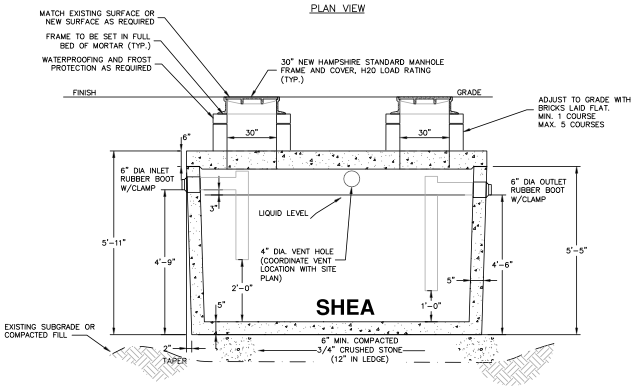


SEWER CLEAN OUT



PLAN VIEW

NOTES
1. TANK, WHETHER A SINGLE UNIT OR MULTIPLE SECTIONS, SHALL BE SEALED SO AS TO MEET N.H.D.E.S. WATERTIGHT SPECIFICATIONS.
2. SEE TYPICAL SEWER MANHOLE DETAIL AND AND JOINT DETAILS FOR ADDITIONAL DETAILS.



SECTION VIEW

ITEM NO.	M1000H	H-20 (6" TOP)
	M1000HT10	H-20 (10" TOP)

WEIGHT:
BOTTOM = 11,250#
10" TOP = 5,960#
6" TOP = 3,575#

NOTES:
1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. ALL REINFORCEMENT PER ASTM C1227.
3. TEES AND BAFFLES SOLD SEPARATELY.
4. TONGUE & GROOVE JOINT SEALED WITH BUTYL RESIN.
5. DESIGNED FOR AASHTO HS-20 LOADING, 1 TO 5 FT COVER.

INDUSTRIAL TANK DETAIL

SHEA CONCRETE 1,000 GALLON SEPTIC TANK (OR APPROVED EQUAL) NOT TO SCALE

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR
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25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

REV	DATE	DESCRIPTION	DR	CK
3	12/18/2025	AOT & STAFF COMMENTS	JD	NG
2	10/22/2025	TOWN SEWER COMMENTS	JD	NG
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

STATE OF NEW HAMPSHIRE — NICHOLAS C. GOLON No. 14866 LICENSED PROFESSIONAL ENGINEER

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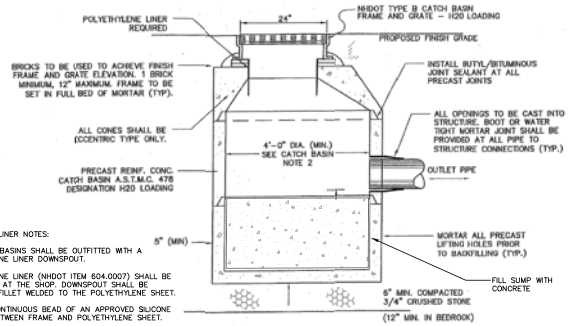
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POLYETHYLENE LINER NOTES:

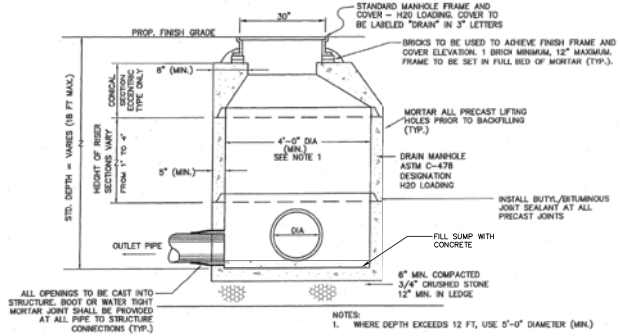
1. ALL CATCH BASINS SHALL BE OUTFITTED WITH A POLYETHYLENE LINER DOWNSPOUT.
2. POLYETHYLENE LINER (NHDOT ITEM 604.0007) SHALL BE FABRICATED AT THE SHOP. DOWNSPOUT SHALL BE EXTRUSION FILLET WELDED TO THE POLYETHYLENE SHEET.
3. PLACE A CONTINUOUS BEAD OF AN APPROVED SILICONE SEALANT BETWEEN FRAME AND POLYETHYLENE SHEET.
4. PLACE A CLASS AA CONCRETE TO 2" BELOW THE TOP OF GRATE ELEVATION (SUBSIDIARY TO DRAINAGE STRUCTURE).
5. TRIM POLYETHYLENE SHEET A MAXIMUM OF 4" OUTSIDE THE FLANGE ON THE FRAME FOR THE CATCH BASIN BEFORE PLACING CONCRETE (EXCEPT AS SHOWN WHEN USED WITH CURB).
6. THE CENTER OF THE GRATE & FRAME MAY BE SHIFTED A MAXIMUM OF 3" FROM THE CENTER OF THE DOWNSPOUT IN ANY DIRECTION.

CATCH BASIN NOTES:

1. WHERE DEPTH EXCEEDS 12 FT, USE 5'-0" DIAMETER (MIN.)
2. MINIMUM PIPE DROP (INLET TO OUTLET) SHALL BE 3" UNLESS OTHERWISE APPROVED BY THE TOWN OF LONDONDERRY DEPARTMENT OF PUBLIC WORKS AND ENGINEERING.
3. ALL BOOTS, GASKETS, AND SEALANTS, SHALL BE IN ACCORDANCE WITH MANUFACTURES WRITTEN INSTRUCTIONS.
4. ALL PRECAST SECTIONS SHALL CONFORM TO ASTM C-478 DESIGNAT ION H20 LOADING.

CATCH BASIN

NOT TO SCALE



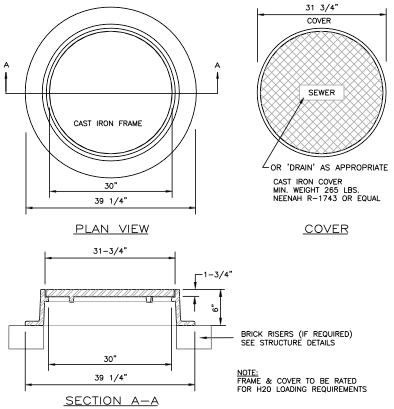
NOTES:

1. WHERE DEPTH EXCEEDS 12 FT, USE 5'-0" DIAMETER (MIN.)
2. MINIMUM PIPE DROP (INLET TO OUTLET) SHALL BE 3" UNLESS OTHERWISE APPROVED BY THE DEPARTMENT OF PUBLIC WORKS AND ENGINEERING.
3. ALL BOOTS, GASKETS AND SEALANTS SHALL BE IN ACCORDANCE WITH MANUFACTURES WRITTEN INSTRUCTIONS

DRAIN MANHOLE

ECCENTRIC CONE

NOT TO SCALE

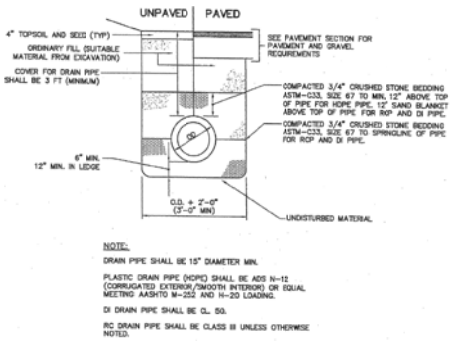


NOTE:
FRAME & COVER TO BE RATED FOR H20 LOADING REQUIREMENTS

MANHOLE FRAME & COVER

HEAVY DUTY

NOT TO SCALE



NOTE:

DRAIN PIPE SHALL BE 15" DIAMETER MIN.

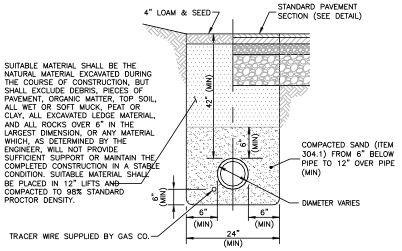
PLASTIC DRAIN PIPE (HDPE) SHALL BE ADS N-12 (CORRUGATED EXTERIOR/SMOOTH INTERIOR) OR EQUAL MEETING AASHTO M-252 AND H-20 LOADING.

DI DRAIN PIPE SHALL BE CL. 50.

RC DRAIN PIPE SHALL BE CLASS III UNLESS OTHERWISE NOTED.

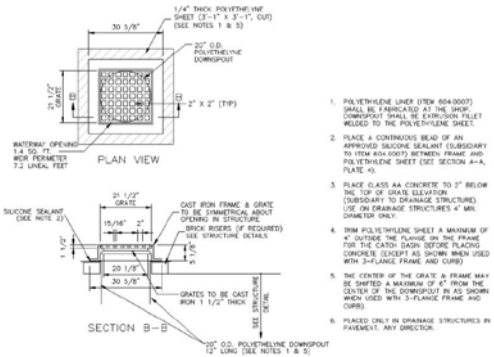
STORM DRAIN TRENCH

NOT TO SCALE



GAS MAIN TRENCH

NOT TO SCALE



1. POLYETHYLENE LINER (ITEM 604.0007) SHALL BE FABRICATED AT THE SHOP. DOWNSPOUT SHALL BE EXTRUSION FILLET WELDED TO THE POLYETHYLENE SHEET.
2. PLACE A CONTINUOUS BEAD OF AN APPROVED SILICONE SEALANT (SUBSIDIARY TO ITEM 604.0007) BETWEEN FRAME AND POLYETHYLENE SHEET (SEE SECTION A-A, PLATE 4).
3. PLACE CLASS AA CONCRETE TO 2" BELOW THE TOP OF GRATE ELEVATION (SUBSIDIARY TO DRAINAGE STRUCTURE). USE ON DRAINAGE STRUCTURES 4' MIN. DIAMETER ONLY.
4. TRIM POLYETHYLENE SHEET A MAXIMUM OF 4" OUTSIDE THE FLANGE ON THE FRAME FOR THE CATCH BASIN BEFORE PLACING CONCRETE (EXCEPT AS SHOWN WHEN USED WITH 3-FLANGE FRAME AND CURB).
5. THE CENTER OF THE GRATE & FRAME MAY BE SHIFTED A MAXIMUM OF 6" FROM THE CENTER OF THE DOWNSPOUT IN AS SHOWN WHEN USED WITH 3-FLANGE FRAME AND CURB).
6. PLACED ONLY IN DRAINAGE STRUCTURES IN PAVEMENT. ANY DIRECTION.

CATCH BASIN FRAME AND GRATE

NEENAH R-3404 OR EQUIVALENT

NOT TO SCALE

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

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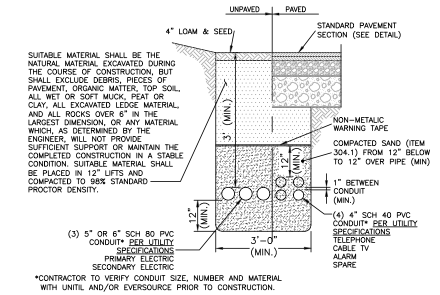
STATE OF NEW HAMPSHIRE
NICHOLAS C. COLON
No. 24860
LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
5	12/18/2025	AOT & STAFF COMMENTS	JD	NG
4	10/24/2025	NHF&G APPROVAL	JD	NG
3	11/3/2025	TOWN SEWER COMMENTS	JD	NG
2	9/30/2025	REVISED FOR NHF&G & NHDES COMMENTS	JD	NG
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	18252-02	DR		FB	–	D-13
		CK		CADFILE	18252-02 COVER & DETAILS	

Dec 23, 2025 - 2:24pm
P:\TFM Projects\18252 Litchfield Rd - Londonderry, NH\18252-02\ Purposeenergy - Civil & Permitting Services\18252-02_CSD\PRODUCTION\18252-02 Cover & Details.dwg



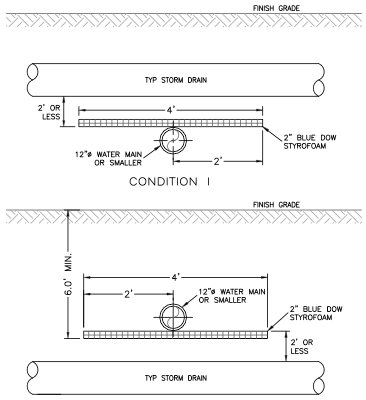
*CONTRACTOR TO VERIFY CONDUIT SIZE, NUMBER AND MATERIAL WITH UNITIL AND/OR EVERSOURCE PRIOR TO CONSTRUCTION.

NOTES

1. ALL CONDUITS SHALL BE 6" GRAY, ELECTRICAL GRADE, SCHEDULE 80 PVC CONDUIT WITH THE EXCEPTION OF THE SWEEPS AT RISER POLE AND THE FIRST HORIZONTAL AND VERTICAL CONDUIT SECTIONS AT EACH RISER POLE WHICH SHALL BE 6" HOT-DIPPED, GALVANIZED RIGID STEEL.
   a. THE STEEL TO PVC CONDUIT TRANSITIONS SHALL BE MADE WITH PVC THREADED ADAPTORS.
2. CONDUITS SHALL BE INSTALLED IN STRAIGHT LINES.
   a. NO SWEEPS SHALL BE USED IN THE CONDUIT SYSTEM EXCEPT AT RISER POLES AND EQUIPMENT PADS.
   b. THE MAXIMUM CHANGE IN CONDUIT DIRECTION BETWEEN TO CONTIGUOUS LENGTH OF CONDUIT SHALL BE LIMITED TO 2.5 DEGREES.
   c. ALL HORIZONTAL AND/OR VERTICAL CONDUIT BEND/CHANGES IN DIRECTION, NO MATTER HOW SMALL, SHALL BE REVIEWED AND APPROVED BY UNITIL.
3. ALL CONDUIT RUNS SHALL BE CLEANED BY PULLING A PLUG OR MANDREL (NO SMALLER THAN ¼" LESS THAN THE CONDUIT) THROUGH EACH CONDUIT.
4. ALL CONDUITS SHALL HAVE A 2,500# FLAT, WOVEN, POLYESTER PULLING LINE INSTALLED.
5. TEMPORARY CAPS SHALL BE INSTALLED ON THE END OF CONDUITS UNTIL CABLES ARE INSTALLED.
6. THE CONDUIT DUCT BANK INSTALLATION SHALL BE INSPECTED AND ACCEPTED BY UNITIL PRIOR TO BACKFILL.

UTILITY TRENCH

NOT TO SCALE

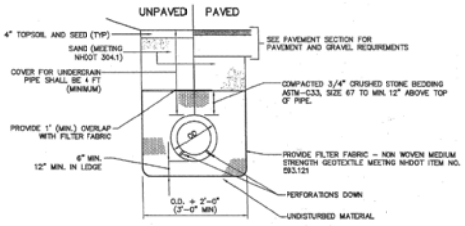


NOTES

1. INSULATION REQUIREMENTS MAY BE MODIFIED BY WATER DEPT. BASED ON FIELD CONDITIONS, ETC.
2. THE LENGTH OR WIDTH OF INSULATION SHALL EXTEND 1 STORM DRAIN PIPE DIAMETER BEYOND THE EDGE OF STORM DRAIN PIPE IN EACH DIRECTION OR A MINIMUM OF 2' BEYOND THE CENTERLINE OF THE STORM DRAIN PIPE, WHICHEVER IS GREATER.
3. ALL BUTT JOINT SEAMS TO BE OVERLAPPED WITH A 1' PIECE OF INSULATION CENTERED OVER SEAM.

STORM DRAIN / WATER MAIN INTERSECTING RUNS

ELEVATION VIEW NOT TO SCALE



NOTE:

PLASTIC UNDERDRAIN PIPE (HDPE) SHALL BE 6" DIAMETER (MIN.) ADS N-12 (CORRUGATED EXTERIOR/SMOOTH INTERIOR) OR EQUAL MEETING AASHTO M-252 AND H-20 LOADING.

UNDERDRAIN TRENCH

NOT TO SCALE

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

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LONDONDERRY, NH 03053

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1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

STATE OF NEW HAMPSHIRE — NICHOLAS C. GOLON No. 14860 — LICENSED PROFESSIONAL ENGINEER

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
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FILE	18252-02	DR		FB	-	D-14
		CK		CADFILE	18252-02 COVER & DETAILS	

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PUMP STATION DESIGN NOTES

Env-Wq 704.07 FORCE MAINS:

1. FORCE MAINS FOR CONSTANT SPEED PUMPS SHALL BE SIZED TO YIELD A CLEANSING VELOCITY OF 3 FEET PER SECOND OR GREATER AT DESIGN PUMP CAPACITY.
2. FORCE MAINS FOR VARIABLE SPEED PUMPS SHALL BE SIZED TO YIELD A VELOCITY OF 2 FEET PER SECOND OR GREATER AT AVERAGE DAILY DESIGN FLOW.
3. SEWER FORCE MAIN SHALL BE 6" INCHES IN NOMINAL DIAMETER FOR THE SEWER FROM THE SITE.
4. FORCE MAINS SHALL BE PROVIDED WITH AUTOMATIC AIR RELIEF VALVE(S) AT HIGH POINTS TO PREVENT AIR LOCKING.
5. FORCE MAINS SHALL ENTER THE GRAVITY SEWER SYSTEM AT THE FLOW LINE OF THE RECEIVING MANHOLE.
6. FORCE MAINS SHALL BE PROVIDED WITH DRAINAGE BLOW-OFFS, PROPERLY VALVED, AT LOW POINTS. SPACE SHALL BE AVAILABLE AT SUCH LOCATIONS FOR HANDLING THE DISPLACED WASTE WITHOUT DANGER OF POLLUTION OR HEALTH HAZARD.
7. FORCE MAINS SHALL BE DESIGNED IN ACCORDANCE WITH Env-Wq 704.07, CONSTRUCTED WITH MATERIALS AS SPECIFIED IN Env-Wq 704.08, AND TESTED AS SPECIFIED IN Env-Wq 704.09.
8. THRUST BLOCKS MADE FROM INORGANIC, CORROSION-RESISTANT MATERIAL SHALL BE PLACED AT ALL BENDS, ELBOWS, TEES AND JUNCTIONS.
9. FORCE MAINS SHALL BE DESIGNED TO WITHSTAND HYDROSTATIC PRESSURES OF AT LEAST 2.5 TIMES THE DESIGN TOTAL DYNAMIC HEAD.

Env-Wq 704.09 FORCE MAIN AND PRESSURE SEWER TESTING:

1. FORCE MAINS AND PRESSURE SEWERS AND FORCE MAINS AND PRESSURE SEWERS SHALL BE TESTED IN ACCORDANCE WITH SECTION 9 OF THE AWWA C600, 'INSTALLATION OF CAST IRON WATER MAINS AND THEIR APPURTENANCES' STANDARD IN EFFECT WHEN THE TEST IS CONDUCTED, AVAILABLE AS NOTED IN APPENDIX A, AT A PRESSURE EQUAL TO THE GREATER OF 150 PERCENT OF THE DESIGN OPERATING TOTAL DYNAMIC HEAD OR AT LEAST 100 PSI.

Env-Wq 705.04 PUMP STATION ACCESS:

1. DRY WELL SHALL PROVIDE ACCESSIBILITY FOR THE REPAIR AND REMOVAL OF PUMPS, MOTORS, AND OTHER ITEMS OF EQUIPMENT THAT ARE ESSENTIAL TO THE SEWAGE PUMPING PROCESS.
2. SEPARATE EXTERIOR ENTRANCES SHALL BE PROVIDED TO BOTH WET WELLS AND DRY WELLS OF SEWAGE PUMPING STATIONS.
3. FOR BUILT-IN-PLACE SEWAGE PUMPING STATIONS, ACCESS TO LOWER LEVELS SHALL BE BY STAIRWAYS WITH HANDRAILS.
4. PREFABRICATED STATIONS MAY HAVE LADDERS WITH LESS THAN OR EQUAL TO A 75° SLOPE OR SPIRAL STAIRS.
5. VERTICAL DISTANCES BETWEEN FLOORS OR REST LANDINGS SHALL NOT EXCEED 12 FEET.
6. SAFETY BARRIERS TO PREVENT FALLING SHALL BE PROVIDED AT LANDINGS.
7. POWER ELEVATORS PROPOSED FOR ALL DEEP STATIONS SHALL HAVE A CAPACITY LIMIT OF NOT LESS THAN 600 POUNDS.
8. LIFTING EQUIPMENT SHALL BE PROVIDED FOR SUBMERSIBLE PUMP REMOVAL.
9. LIFTING CHAINS SHALL BE STAINLESS STEEL OR OTHER CORROSION RESISTANT MATERIAL.

Env-Wq 705.07 ELECTRICAL REQUIREMENTS:

1. SUBMERSIBLE PUMPS FOR SEWAGE PUMPING STATIONS SHALL CONFORM TO THE NEC REQUIREMENTS ADOPTED BY REFERENCE IN THE STATE BUILDING CODE PURSUANT TO RSA 155-A:1, IV, FOR INSTALLATION IN AREAS CLASSIFIED BY THE NEC AS CLASS I, DIVISION I.
2. ELECTRICAL SYSTEMS AND COMPONENTS INCLUDING MOTORS, LIGHTS, CABLE, CONDUITS, SWITCH BOXES AND CONTROL CIRCUITS SHALL BE PROTECTED FROM FLOODING IN ACCORDANCE WITH Env-Wq 705.01.
3. ELECTRICAL SYSTEMS AND COMPONENTS INCLUDING MOTORS, LIGHTS, CABLES, CONDUITS, SWITCH BOES AND CONTROL CIRCUITS IN ENCLOSED OR PARTIALLY ENCLOSED SPACES WHERE FLAMMABLE MIXTURES OCCASIONALLY MAY BE PRESENT, INCLUDING RAW SEWAGE WET WELLS, SHALL BE CERTIFIED BY THE MANUFACTURER AS:
   A. COMPLYING WITH THE NEC REQUIREMENTS ADOPTED BY REFERENCE IN THE STATE BUILDING CODE PURSUANT TO RSA 155-A:1, IV, FOR CLASS 1, DIVISION 1 LOCATIONS; OR
   B. BEING RATED FOR CLASS I DIVISION 2 REQUIREMENTS WHERE MECHANICAL VENTILATION IS PROVIDED IN ACCORDANCE WITH THE NFPA AS ADOPTED BY REFERENCE IN THE STATE FIRE CODE IN SAF-C 6000.
4. ALL ELECTRICAL EQUIPMENT AND WORK SHALL COMPLY WITH THE REQUIREMENTS OF NEC AS ADOPTED BY REFERENCE IN THE STATE BUILDING CODE PURSUANT TO RSA 155-A:1, IV, AND NFPA AS ADOPTED BY REFERENCE IN THE STATE FIRE CODE IN SAF-C 6000 IN EFFECT AT THE TIME OF INSTALLATION.

Env-Wq 705.08 VENTILATION REQUIREMENTS:

1. MECHANICAL VENTILATION FOR PERSONNEL AND EQUIPMENT SHALL BE PROVIDED FOR ALL OCCUPIED SPACES WITHIN SEWAGE PUMPING STATION IN ACCORDANCE WITH THE NFPA AS INCORPORATED BY REFERENCE IN THE STATE FIRE CODE IN SAF-C 6000.
2. MECHANICAL VENTILATION FOR BELOW-GRADE DRY WELLS SHALL BE PROVIDED, SO ARRANGED AS TO INDEPENDENTLY VENTILATE THE DRY WELL AND THE WET WELL.
3. THERE SHALL BE NO INTERCONNECTION BETWEEN THE WET WELL AND DRY WELL VENTILATION SYSTEMS.
4. SWITCHES FOR OPERATION OF VENTILATION EQUIPMENT SHALL BE MARKED AND LOCATED CONVENIENTLY.
5. DEHUMIDIFICATION SHALL BE PROVIDED IN BELOW-GROUND DRY WELLS.
6. VENTILATION OF WET WELLS SHALL PROVIDE AT LEAST 30 AIR CHANGES PER HOUR IF THE VENTILATION SYSTEM IS OPERATED INTERMITTENTLY, OR AT LEAST 12 AIR CHANGES PER HOUR IF THE VENTILATION SYSTEM IS OPERATED CONTINUOUSLY.
7. FANS INSTALLED WITHIN THE WET WELL STRUCTURE SHALL BE SUITABLE FOR A CLASS I, DIVISION I, GROUP C OR D ENVIRONMENT.
8. VENTILATION OF SUBMERSIBLE PUMP CHAMBERS OR SUCTION LIFE WET WELLS WHERE THERE IS NO OCCUPANCY FOR REGULAR MAINTENANCE PURPOSES MAY BE BY GRAVITY VENTILATION.
9. VENTILATION EXHAUST FROM WET WELLS SHALL NOT CAUSE AN ODOR NUISANCE TO THE PUBLIC OR SURROUNDING OCCUPIED BUILDINGS.
10. ACCESS DOORS TO WET WELLS SHALL HAVE WARNING SIGNS ON THE UNDERSIDE WHICH READ, "WARNING – HAZARDOUS AREA, ENTER ONLY WITH PROPER EQUIPMENT" OR "CONFINED SPACE, ENTRY BY PERMIT ONLY", AS APPROPRIATE.
11. THE ALARM SHALL INCLUDE A LOCAL AUDIBLE ENUNCIATOR AND LIGHT.

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PUMP STATION OPERATIONAL INSTRUCTIONS

1. THE FOLLOWING MAINTENANCE SHALL BE DONE ON A MONTHLY BASIS (AT A MINIMUM):
2. PUMP STATION SHALL BE VISUALLY INSPECTED TO ENSURE THAT PUMPS AND APPURTENANCES ARE FUNCTIONING, PIPE SUPPORTS ARE SECURELY FIXED TO THE MANHOLE, STAINLESS STEEL LIFTING CHAINS ARE SAFELY STORED WITHIN THE PUMP STATION. IF ANY OF THE ABOVE PARTS ARE NOT FUNCTIONING AS DESIGNED THEY SHALL BE REPAIRED IMMEDIATELY.
3. PUMP STATION AND VALVE MANHOLE ACCESS HATCHES ARE WORKING PROPERLY. IF THE ACCESS HATCHES ARE NOT FUNCTIONING PER THE MANUFACTURER'S RECOMMENDATIONS, THEY SHALL BE REPAIRED IMMEDIATELY.
4. ELECTRIC CONTROL PANEL SHALL BE INSPECTED TO CONFIRM ELAPSED TIME METER, HIGH WATER ALARM, LOW LEVEL ALARM, LOSS OF ONE OR MORE PHASES OF POWER SUPPLY OR VOLTAGE DROP ALARM, LOSS OF ALARM TRANSMISSION LINE, AND STANDBY GENERATOR APPLICATION ALARM. IF ANY OF THE ALARMS ARE NOT FUNCTIONING AS DESIGNED, THEY SHALL BE REPAIRED IMMEDIATELY.
5. THE BACK-UP GENERATOR SHALL BE INSPECTED ON A MONTHLY BASIS (AT A MINIMUM, UNLESS OTHERWISE NOTED):
6. ALL RECOMMENDATIONS FROM THE MANUFACTURER AND OPERATOR'S MANUAL SHALL BE STRICTLY FOLLOWED.
7. THE GENERATOR SHALL BE PRIMED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
8. ALL FLUIDS SHALL BE CHECKED ON A DAILY BASIS AND ADDED ON AN AS NEEDED BASIS AND IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
9. ALL PARTS SHALL BE CHECKED ON A DAILY BASIS AND SHALL BE FIXED IMMEDIATELY WHEN NOT FUNCTIONING PROPERLY.
10. PUMP STATION OPERATION & MAINTENANCE (O&M) MANUAL SHALL BE SUBMITTED TO NHDES WASTEWATER BUREAU WITHIN 60 DAYS FOLLOWING COMPLETION OF PUMP STATION CONSTRUCTION.

Env-Wq 705.09 ALARM SYSTEMS:

1. ALARM SYSTEMS SHALL BE PROVIDED FOR ALL SEWAGE PUMPING STATIONS.
2. THE ALARM SIGNAL SHALL BE ACTIVATED IN ONE OF THE FOLLOWING CASES:
   A. HIGH WATER IN THE WET WELL.
   B. LOW WATER IN THE WET WELL.
   C. LOSS OF ONE OR MORE PHASES OF POWER SUPPLY OR SEVERE VOLTAGE DROP.
   D. HIGH WATER LEVEL IN THE PUMP ROOM SUMP.
   E. LOSS OF ALARM TRANSMISSION CAPABILITY.
   F. STANDBY GENERATOR APPLICATION.
   G. PUMP MALFUNCTION, INCLUDING SHAFT SEAL FAILURE.
   H. LOSS OF AIR PRESSURE IN A BUBBLER TUBE SYSTEM.
   I. LEVEL SENSING MALFUNCTION OR FAILURE.
   J. LOSS OF VENTILATION IN AREAS CLASSIFIED AS CLASS 1 DIVISION 2 AND USING MECHANICAL VENTILATION PER THE NFPA AS INCORPORATED BY REFERENCE IN THE STATE FIRE CODE IN SAF-C 6000.
   K. INTRUSION.
   L. TEMPERATURE OUTSIDE NORMAL OPERATING RANGES.
3. THE HIGH WATER ALARM AND LOW WATER ALARM TRIGGERS SHALL BE SEPARATE DEVICES, INDEPENDENT OF THE PUMP WET WELL LEVEL CONTROL SYSTEM AND SET AT ELEVATIONS ABOVE AND BELOW THE LAG PUMP ON AND OFF ELEVATIONS.
4. SATISFACTORY OPERATION OF THE ALARM SYSTEM SHALL BE INDICATED ON A PANEL WITH A LIGHT WHICH LIGHTS UP UPON FAILURE OF THE ALARM SYSTEM.
5. THE POWER SOURCE FOR THE ALARM SYSTEM SHALL BE:
   A. AN INDEPENDENT BATTERY WITH A CONTINUOUS CHARGE OR;
   B. MAIN LINE POWER WITH A BACK-UP BATTERY SYSTEM, WHICH SHALL BE CONNECTED AUTOMATICALLY SHOULD MAIN POWER FAIL.
6. THE ALARM SIGNAL SHALL BE TRANSMITTED THROUGH A 24 HOUR PER DAY, 7 DAY PER WEEK NOTIFICATION SYSTEM TO THE APPROPRIATE UTILITY OPERATOR.
7. THE ALARM SHALL INCLUDE A LOCAL AUDIBLE ENUNCIATOR AND LIGHT.
8. PROVISION SHALL BE MADE TO PERMIT SILENCING OF THE AUDIBLE ENUNCIATOR MANUALLY, AFTER THE ALARM HAS BEEN SOUNDED, BUT THE LIGHT SHALL CONTINUE UNTIL THE ALARM CONDITION HAS BEEN RECTIFIED.
9. ALARM SIGNALS FOR PRIVATELY-OPERATED SEWER PUMPING STATIONS SHALL BE TRANSMITTED TO THE RESPONSIBLE MAINTENANCE PERSON DIRECTLY OR VIA AN ANSWERING SERVICE.
10. IF A CENTRAL SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM EXISTS AT THE WWTP, THE PUMPING STATION ALARMS SHALL BE CONNECTED TO THE SCADA SYSTEM USING PROGRAMMABLE LOGIC CONTROLLER (PLC) TECHNOLOGY.

Env-Wq 705.10 INSTRUCTION AND EQUIPMENT:

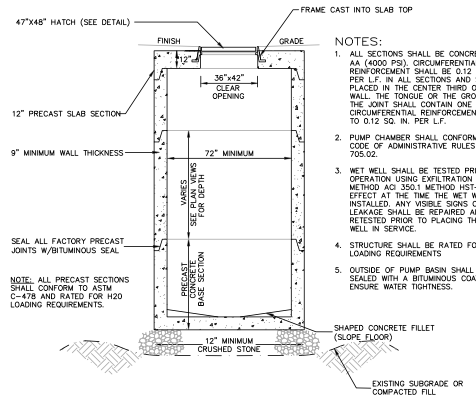
1. THE OWNER SHALL OBTAIN AN OPERATION AND MAINTENANCE MANUAL THAT PROVIDES INFORMATION AND GUIDANCE FOR DAY-TO-DAY OPERATION OF THE SEWAGE PUMPING STATION AND PROVIDE A COPY TO NHDES.

Env-Wq 705.11 EMERGENCY OPERATION:

1. THE ENGINEER SHALL RECOMMEND EMERGENCY OPERATION PROCEDURES TO PREVENT THE BACK-UP, OVERFLOW, OR OTHER UNPERMITTED DISCHARGE OF WASTEWATER FROM THE SEWAGE PUMPING STATION.
2. AN INDEPENDENT ENGINE-GENERATOR TYPE SOURCE OF ELECTRIC POWER SHALL BE PROVIDED FOR ELECTRICALLY-DRIVEN PUMPS. THIS SOURCE SHALL BE AUTOMATICALLY ACTIVATED BY FAILURE OF ANY PHASE OF POWER SUPPLY OR UPON ANY FLUCTUATION IN VOLTAGE, THE AMOUNT OR DURATION OF WHICH WOULD CAUSE DAMAGE TO THE MOTORS. INSTALLATIONS SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE NATIONAL ELECTRIC CODE AND THE STATE FIRE CODE IN SAF-C 6000.
3. THE EMERGENCY POWER GENERATOR SHALL BE PERMANENTLY SECURED IN PLACE, WITH PROVISIONS FOR REMOVAL TO FACILITATE GENERATOR REPAIR OR REPLACEMENT.
4. PROVISIONS SHALL BE MADE FOR AUTOMATIC AND MANUAL START-UP AND CUT-IN. THE CONTROLS SHALL BE SUCH THAT UPON AUTOMATIC START-UP UNDER EMERGENCY CONDITIONS, SHUT-DOWN SHALL BE ACCOMPLISHED AUTOMATICALLY ON RESTORATION OF UTILITY POWER WITH CONTROLLED SHUT-DOWN OF THE UNIT. MANUAL SHUT-DOWN SHALL ALSO BE PROVIDED. PROVISION SHALL BE MADE TO ALLOW PUMPS TO RUN DOWN BEFORE RE-ENERGIZING ON TRANSFER OF POWER.
5. THE EMERGENCY POWER GENERATOR SHALL BE SIZED TO SEQUENTIALLY START AND OPERATE ALL PUMPS NEEDED TO HANDLE DESIGN MAXIMUM WASTE FLOWS, PLUS LIGHTING, VENTILATION, CONTROLS, AND GRINDING OR SCREENING.
6. THE EMERGENCY POWER GENERATOR SHALL BE LOCATED ABOVE GRADE WITH VENTILATION OF EXHAUST GASES.
7. ALL EMERGENCY POWER GENERATION EQUIPMENT SHALL BE PROVIDED WITH INSTRUCTIONS FOR ROUTINE EXERCISING, LOAD TESTING AND MAINTENANCE.
8. THE GENERATOR ENGINE CONTROLS SHALL BE EQUIPPED WITH AN AUTOMATIC EXERCISER WHICH CAN BE SET ON ANY SELECTED SCHEDULE TO START THE GENERATOR, RUN THE GENERATOR UNDER NO LOAD OR LOAD CONDITIONS BY SELECTION AND SHUT THE GENERATOR OFF WITHOUT ACTUATING THE ALARM SYSTEM.
9. THE OWNER SHALL PROVIDE EACH EMERGENCY GENERATOR WITH ENOUGH FUEL FOR THE GENERATOR TO RUN UNDER FULL LOAD OR PEAK STATION FLOW FOR AT LEAST 46 HOURS OR UNDER NORMAL OPERATING CONDITIONS FOR AT LEAST 96 HOURS, WHICHEVER REQUIRES THE GREATER AMOUNT OF FUEL.
10. NO SEWAGE PUMPING STATION BY-PASSES ALLOWING THE DISCHARGE OF RAW SEWAGE EITHER OVERLAND OR TO ANY WATER COURSE SHALL BE PERMITTED.

GENERATOR STANDARD SPECIFICATIONS

1. GENERAC STANDBY GENERATOR, MODEL SD015T
   - 1.1. RATED MAXIMUM POWER CAPACITY: 15,000 WATTS
   - 1.2. RATED VOLTAGE: 240
   - 1.3. PHASE: 3
   - 1.4. TYPE OF ENGINE: PERKINS 2.2L
   - 1.5. OPERATING RPM: 1,800
   - 1.6. FUEL CONSUMPTION: HALF LOAD: 1.0 GAL/HR; FULL LOAD: 1.3 GAL/HR
2. INSTALLATIONS SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE NEC AND THE STATE FIRE CODE IN SAF-C 6000.
3. EMERGENCY GENERATOR SHALL HAVE ENOUGH FUEL TO OPERATE FOR EITHER 48-HRS UNDER FULL LOAD OR 96-HRS UNDER NORMAL OPERATING CONDITIONS, WHICHEVER REQUIRES MORE FUEL.
   - 3.1. HALF LOAD: 1.0 GAL/HR X 96-HRS = 96.0 GALLONS
   - 3.2. FULL LOAD: 1.3 GAL/HR X 48-HRS = 62.4 GALLONS
4. A 130-GALLON DIESEL FUEL TANK IS INCORPORATED INTO THE GENERATOR ASSEMBLY.
5. SEE PLANS FOR GENERATOR, VENT PIPE, AND ENCLOSURE LOCATIONS.
6. FINAL GENERATOR SELECTION SHALL CONFORM TO THESE MINIMUM STANDARDS. COORDINATE WITH OWNER, CONTRACTOR AND ELECTRICAL CONSULTANT.

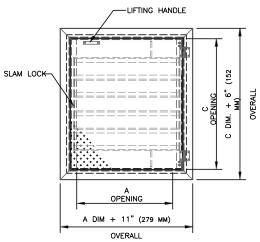


NOTES:

1. ALL SECTIONS SHALL BE CONCRETE CLASS AA (4000 PSI). CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ. IN. PER L.F. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER L.F.
2. PUMP CHAMBER SHALL CONFORM TO NH CODE OF ADMINISTRATIVE RULES Env-Wq 705.02.
3. WET WELL SHALL BE TESTED PRIOR TO OPERATION USING EXFILTRATION TESTING METHOD ACI 350.1 METHOD HST-NML IN EFFECT AT THE TIME THE WET WELL IS INSTALLED. ANY VISIBLE SIGNS OF LEAKAGE SHALL BE REPAIRED AND RETESTED PRIOR TO PLACING THE WET WELL IN SERVICE.
4. STRUCTURE SHALL BE RATED FOR H20 LOADING REQUIREMENTS
5. OUTSIDE OF PUMP BASIN SHALL BE SEALED WITH A BITUMINOUS COATING TO ENSURE WATER TIGHTNESS.

PUMP CHAMBER MANHOLE

SLAB TOP — NOT TO SCALE



SERIES H1R ACCESS DOOR

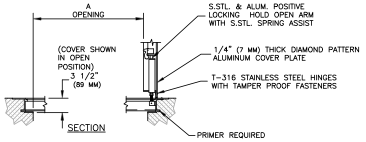
STANDARD FEATURES:

- AUTO-LOCK T-316 STAINLESS STEEL HOLD OPEN ARM WITH RELEASE HANDLE
- T-316 STAINLESS STEEL HINGES AND ATTACHING HARDWARE
- T-316 STAINLESS STEEL SLAM LOCK WITH REMOVABLE KEY
- STAINLESS STEEL COMPRESSION SPRING ASSIST
- SINGLE LEAF CONSTRUCTION
- H20 LOAD RATING (SEE NOTES)
- EXTRUDED ALUMINUM FRAME
- RECESSED LIFTING HANDLE
- LIFETIME GUARANTEE

NOTES:

1) SUITABLE FOR USE IN OFF STREET LOCATION WHERE NOT SUBJECTED TO HIGH DENSITY TRAFFIC.

2) PROVIDE A FULL BED OF CLASS "A" CONCRETE UNDER FRAME AND SUPPORT ANGLES.



PUMP CHAMBER HATCH

NOT TO SCALE

STATE OF NEW HAMPSHIRE — NICHOLAS C. COLON — No. 14886 — LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
5	12/18/2025	AOT & STAFF COMMENTS	JD	NG
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2	9/30/2025	REVISED FOR NHF&G & NHDES COMMENTS	JD	NG
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

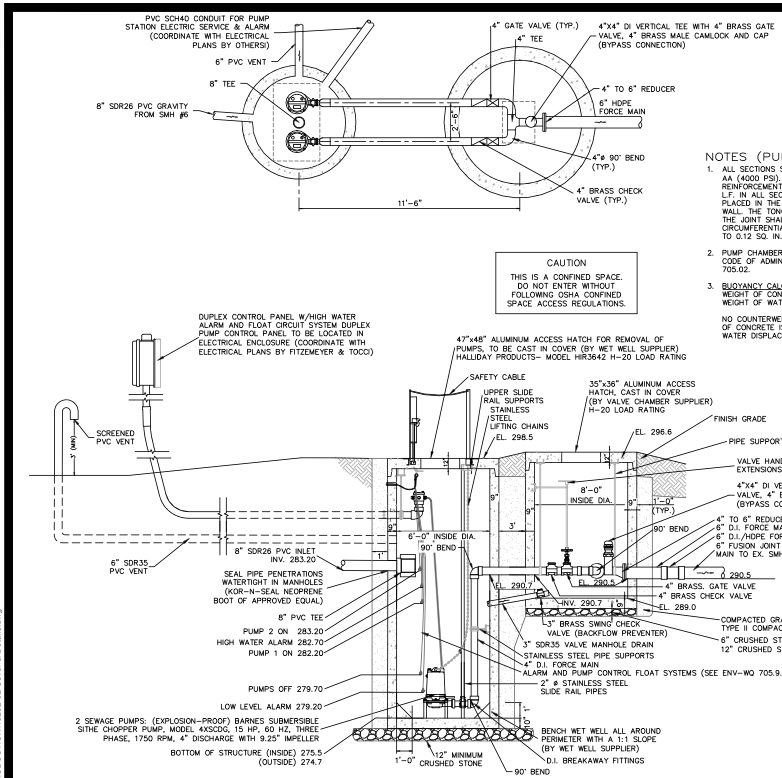
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
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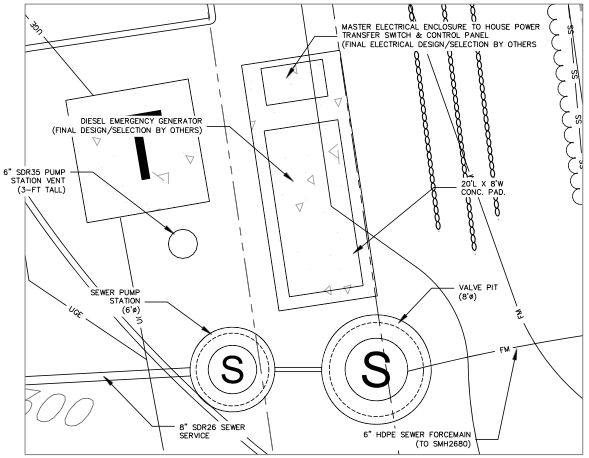
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NOTES (PUMP STATION MANHOLE):

1. ALL SECTIONS SHALL BE CONCRETE CLASS AA (4000 PSI). CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ. IN. PER L.F. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER L.F.
2. PUMP CHAMBER SHALL CONFORM TO NH CODE OF ADMINISTRATIVE RULES Env-Wq 705.02.
3. BUOYANCY CALCULATIONS:
   WEIGHT OF CONCRETE=56,019 LBS
   WEIGHT OF WATER DISPLACED=40,476 LBS

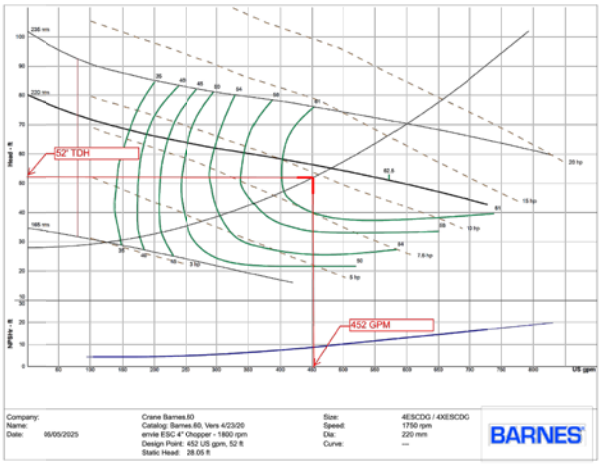
   NO COUNTERWEIGHT REQUIRED AS WEIGHT OF CONCRETE IS GREATER THAN WEIGHT OF WATER DISPLACED.



SEWER PUMP STATION PLAN VIEW

SCALE: 1"=5'

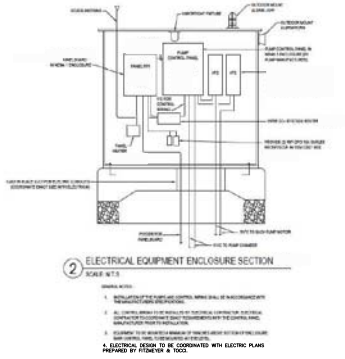
NOTES:
1. SYSTEM COMPONENTS (ELECTRICAL, CONTROLS, EMERGENCY GENERATOR, ETC.) SHOWN FOR COORDINATION PURPOSES ONLY.
2. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL PLANS (BY OTHERS) FOR CONSTRUCTION DETAILS.



PUMP CURVE DATA

BARNES SUBMERSIBLE CHOPPER PUMP

NOT TO SCALE



WASTEWATER FLOW INFORMATION

AVERAGE DAILY FLOW:	120,440 GPD (84 GPM)
PEAK DAILY FLOW:	650,376 GPD (452 GPM)

PUMP INFORMATION (AT PEAK DAILY FLOW RATE)

STATIC HEAD:	28'
FRICTION HEAD:	24'
TOTAL DYNAMIC HEAD:	52'

WET WELL STORAGE

VOLUME OF WET WELL:	211 GAL/VERTICAL FT
AVAIL. VERT STORAGE: (INV. TO PUMP OFF)	3.5 FT
VOLUME AVAILABLE:	740 GALLONS

PUMP STATION NOTES:

ALL PIPE AND FITTINGS TO BE PRODUCED BY A SINGLE MANUFACTURER AND TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS. BURIED PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM F 1668. SOLVENT CEMENTS SHALL CONFORM TO ASTM D 2564. PRIMER SHALL CONFORM TO ASTM F 656.

NOTES:

1. STRUCTURES AND HATCHES TO BE H-20 LOADING. SUBMERSIBLE PUMPS AND ALL ELECTRICAL COMPONENTS SHALL BE SUITABLE FOR USE IN CLASS 1 DIVISION 1 HAZARDOUS LOCATIONS.
2. DUPLEX AUTOMATIC CONTROL PANEL AND ALARM PANEL TO BE PLACED IN ENCLOSURE. SYSTEM SHALL INCLUDE BOTH AUDIBLE AND VISUAL ALARMS. COORDINATE LOCATION WITH ARCHITECT.
3. USE 2 DUPLEX (EXPLOSION-PROOF) BARNES SUBMERSIBLE SITHE CHOPPER PUMP, MODEL 4XSCDG, 15 HP, 60 HZ, THREE PHASE, 1750 RPM, 4" DISCHARGE WITH 9.25" IMPELLER, OR APPROVED EQUAL.
4. OUTSIDE OF PUMP BASIN SHALL BE SEALED WITH A BITUMINOUS COATING TO ENSURE WATER TIGHTNESS.
5. ALL JOINTS SHALL BE SEALED WITH A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT.
6. CONTROL PANEL TO BE WIRED TO ALTERNATE OPERATION OF PUMPS. PUMP CONTROLS SHALL PROVIDE AUTOSTART OF LAG PUMP SHOULD LEAD PUMP FAIL TO START.
7. SEPARATE ELECTRICAL CIRCUITS SHALL BE PROVIDED FOR THE PUMPS AND ALARM SYSTEMS.
8. AN ADDITIONAL RECEPTACLE SHALL BE PROVIDED FOR CONNECTION OF GENERATOR IN THE EVENT OF POWER OUTAGE.
9. ALL PIPE AND FITTINGS TO BE PRODUCED BY A SINGLE MANUFACTURER AND TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS. BURIED PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM F 1668. SOLVENT CEMENTS SHALL CONFORM TO ASTM D 2564. PRIMER SHALL CONFORM TO ASTM F 656.
10. PUMP STATIONS SHALL BE OUTFITTED WITH AUDIBLE ALARM, FLASHING WARNING LIGHT AND DISCONNECT TO BE MOUNTED ADJACENT TO EACH PUMP STATION.
11. PUMP STATION SHALL RECORD PUMP RUN TIMES AND HAVE CONTINUOUS FLOW RECORDING.
12. AN OPERATION AND MAINTENANCE MANUAL IS REQUIRED AND SHALL BE PROVIDED TO THE OWNER/OPERATOR PURSUANT TO ENV-WQ 705.10(a).
13. VALVE PIT SHALL BE EQUIPPED WITH A BYPASS CONNECTION TO ALLOW FOR CONNECTION OF A PUMP AROUND WET WELL FOR MAINTENANCE, REPAIRS AND CONSTRUCTION PURSUANT TO ENV-WQ 705.02(e)(2).

PUMP STATION / VALVE MANHOLE DETAIL

NOT TO SCALE

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

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25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

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STATE OF NEW HAMPSHIRE — NICHOLAS C. GOLON — No. 14860 — LICENSED PROFESSIONAL ENGINEER

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
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		CK		CADFILE	18252-02 COVER & DETAILS	

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NEW HAMPSHIRE
STATE ENDANGERED

BLANDING'S TURTLE

Report Sightings: Contact Wildlife Biologist Josh Megyesy at (603) 271 – 1125 or the Wildlife Division at (603) 271 – 2461. Observation reports can be sent to RAARP@wildlife.nh.gov. Photographs and exact locations are strongly encouraged.



Specific Information:

- Adults are 7 – 9 inches long.
- Shell is highly domed with light speckles.
- Distinct yellow throat and chin.
- Uses variety of wetlands and moves extensively over land.
- Turtles are frequently concealed by leaves and undergrowth and may not be easily visible.
- Turtles are most active from April 15 – October 15.
- During nesting season (May 15 – July 15) turtles are attracted to disturbed ground.





This species is protected under RSA 212-A and Fis 1000. Thank you for reporting any observations.

PLEASE DO NOT DISTURB OR HANDLE WILDLIFE

REPORT OBSERVATIONS
Smooth Green Snake
(Species of Special Concern)

Report sightings to NHFG Wildlife Division at NHFGReview@wildlife.nh.gov

Reference NHB# and project name if applicable.
Please report promptly, noting specific location and date.
Photographs strongly encouraged.



- Thin, bright green snake
- 10-20 inches long
- White or pale yellow underside
- Found in open or lightly forested habitats such as grassy fields, meadows, blueberry barrens, and forest openings
- Dead individuals turn blue





EASTERN HOGNOSE SNAKE

(New Hampshire state endangered species)

*Egg laying occurs **June 1 - July 15th.***
*Young emerge in **August - September.***



Identifying traits

- Black, gray or patterned appearance
- Upturned snout
- Adults are 2-3 ft. long
- May spread neck out or hiss
- May play dead if they feel threatened.
- Rarely bite – display is a defense strategy



Habitat Use

- Can be found in a variety of habitats throughout the season



Immediately report sightings to NH Fish & Game
Melissa Winters (603-479-1129) or
Brendan Clifford (603-944-0885)
Please report promptly, noting specific location and date.
Photographs strongly encouraged.

State Laws Pertaining to this Species
RSA 212-A:7, FIS 804.05, Fis 1401.03 (a)



Northern Black Racer

(New Hampshire state threatened species)

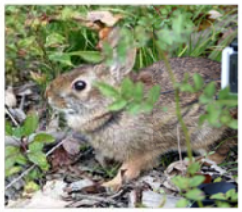
- Solid black with a white throat and chin
- Slender with glossy scales, 3-6 ft. long
- Hatchlings are very small and patterned



Immediately report sightings to NH Fish and Game
Melissa Winters (603-479-1129) or
Brendan Clifford (603-944-0885)
Please report promptly, noting specific location and date
Photographs strongly encouraged

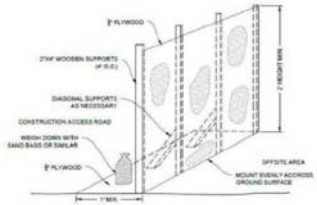
New England Cottontail *(Sylvilagus transitionalis)*

(New Hampshire State-Endangered)



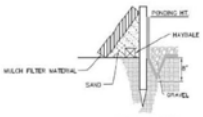
- Adults are 15-17" in length
- Brown and gray coat that does NOT change color with the seasons.
- Black spot between the years is sometimes visible but not always present.
- Can be mistaken for non-native Eastern cottontails.

Please report sightings to NH Fish and Game at RAARP@wildlife.nh.gov or at 603-271-2461. Photo documentation, location, and date/time of observation is helpful.



WILDLIFE EXCLUSIONARY BARRIER GATE

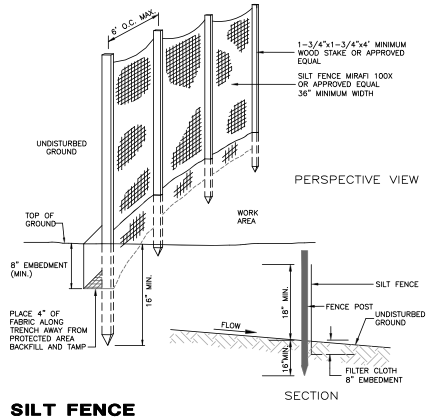
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WILDLIFE RAMP

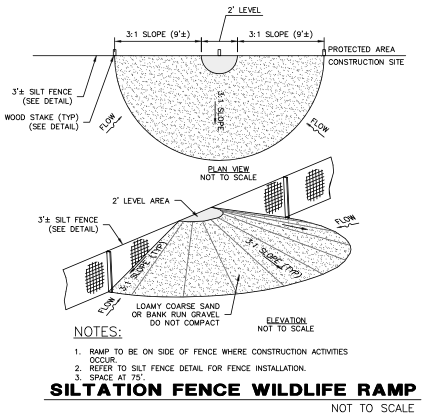
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SILT FENCE

NOT TO SCALE



NOTES:

1. RAMP TO BE ON SIDE OF FENCE WHERE CONSTRUCTION ACTIVITIES OCCUR.
2. REFER TO SILT FENCE DETAIL FOR FENCE INSTALLATION.
3. SPACE AT 75'.

SILTATION FENCE WILDLIFE RAMP

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SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

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25 NORTH WENTWORTH AVE.
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LANDSCAPE NOTES

SITE AND SOIL PREPARATION

1. WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OR LEDGE, NOTIFY LANDSCAPE ARCHITECT/ENGINEER BEFORE PLANTING.

2. ALL DISTURBED AREAS & PLANTING AREAS, INCLUDING AREAS TO BE SODDED, SHALL RECEIVE THE FOLLOWING SOIL PREPARATION PRIOR TO PLANTING: A MINIMUM OF 6 INCHES OF LIGHTLY COMPACTED TOPSOIL SHALL BE INSTALLED OVER THE SUBSOIL IF TOPSOIL HAS BEEN REMOVED OR IS NOT PRESENT.

3. LOAM SHALL CONSIST OF LOOSE FRIABLE TOPSOIL WITH NO ADMIXTURE OF REFUSE OR MATERIAL TOXIC TO PLANT GROWTH. LOAM SHALL BE FREE FROM STONES, LUMPS, STUMPS, OR SIMILAR OBJECTS LARGER THAN TWO INCHES (2") IN GREATEST DIAMETER, SUBSOIL, ROOTS, AND WEEDS. THE MINIMUM AND MAXIMUM PH VALUE SHALL BE FROM 5.5 TO 7.0. LOAM SHALL CONTAIN A MINIMUM OF TWO PERCENT (2%) AND A MAXIMUM OF FIVE PERCENT (5%) ORGANIC MATTER AS DETERMINED BY LOSS BY IGNITION. SOIL TEXTURE SHALL BE SANDY CLAY LOAM OR SANDY LOAM WITH CLAY CONTENT BETWEEN 15 AND 25%, AND A COMBINED CLAY/SILT CONTENT OF NO MORE THAN 55%. NOT MORE THAN SIXTY-FIVE PERCENT (65%) SHALL PASS A NO. 200 SIEVE AS DETERMINED BY THE WASH TEST IN ACCORDANCE WITH ASTM D1140. IN NO INSTANCE SHALL MORE THAN 20% OF THAT MATERIAL PASSING THE #4 SIEVE CONSIST OF CLAY SIZE PARTICLES.

4. NATURAL TOPSOIL NOT CONFORMING TO THE PARAGRAPH ABOVE OR CONTAINING EXCESSIVE AMOUNTS OF CLAY OR SAND SHALL BE TREATED BY THE CONTRACTOR TO MEET THOSE REQUIREMENTS.

5. SUBMIT TEST RESULTS OBTAINED FROM SOURCE TO ENGINEER/LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL, PRIOR TO SPREADING OPERATIONS.

6. APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT TO USE THE TOPSOIL WILL DEPEND UPON THE RESULTS OF THE SOIL TESTS.

7. THE BURDEN OF PROOF OF SOIL AMENDMENT INSTALLATION RESTS WITH THE CONTRACTOR. SOIL TESTS MAY BE REQUIRED AT THE CONTRACTOR'S EXPENSE IN ORDER TO CONFIRM AMENDMENT INSTALLATION.

SEEDING

1. ROUGH GRADING SHALL BE COMPLETED PRIOR TO THE START OF PLANTING IN ANY GIVEN AREA OF THE PROJECT SITE.

2. SEEDING SHALL BE DONE BETWEEN APRIL 1 TO JUNE 15 OR AUGUST 15 TO OCTOBER 15, EXCEPT FOR RESEEDING OF BARE SPOTS AND MAINTENANCE. ALL DISTURBED AREAS NOT COVERED BY BUILDINGS, PAVING OR AREAS THAT HAVE NOT BEEN OTHERWISE DEVELOPED SHALL BE SEEDED OR SODDED. SLOPES GREATER THAN 3:1 SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET. AFTER OCTOBER 15 DISTURBED SOILS SHALL BE PROTECTED IN ACCORDANCE WITH THE WINTER CONSTRUCTION NOTES.

ACCEPTABLE SEED MIXES ARE AS FOLLOWS:

PARK SEED MIX (NHDOT TYPE 44) MIN. 135 LBS/ACRE:
33% CREEPING RED FESCUE (MIN. 45 LBS/ACRE)
42% PERENNIAL RYEGRASS (MIN. 55 LBS/ACRE)
21% KENTUCKY BLUEGRASS (MIN. 30 LBS/ACRE)
4% REDTOP (MIN. 5 LBS/ACRE)

MODIFIED NEW ENGLAND CONSERVATION WILDLIFE MIX (MIN. 25 LBS/ACRE)*
CONTAINS: VIRGINIA WILD RYE (ELYMUS VIRGINICUS), LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), BIG BLUESTEM (ANDROPOGON GERARDII), PANICLEDLEAF TICK TREFOIL (DESMODIUM PANICULATUM), BLUE VERVAIN (VERBENA HASTATA), BLACK EYED SUSAN (RUDBECKIA HIRTA), HEATH ASTER (ASTERPILOSUS/SYMPHYOTRICHUM PILOSUM), EARLY GOLDENROD (SOLIDAGO JUNCEA), UPLAND BENTGRASS (AGROSTIS PERENNANS).
*SEED MIX SHALL NOT CONTAIN INDIAN GRASS (SORGHASTRUM NUTANS), RED FESCUE (FESTUCA RUBRA), SWITCH GRASS (PANICUM VIRGATUM), PARTRIDGE PEA (CHAMAECRISTA FASCICULATA), OR COMMON SNEEZEWEED (HELENIUM AUTUNALE).

TEMPORARY LAWN MIX: (MIN. 47 LBS/ACRE)
100% ANNUAL RYE

*SEED MIX SHALL NOT CONTAIN INDIAN GRASS (SORGHASTRUM NUTANS), RED FESCUE (FESTUCA RUBRA), SWITCH GRASS (PANICUM VIRGATUM), PARTRIDGE PEA (CHAMAECRISTA FASCICULATA), OR COMMON SNEEZEWEED (HELENIUM AUTUNALE).

PLANTING

1. EXCAVATE PITS, PLANTERS, BEDS AND TRENCHES WITH VERTICAL SIDES AND WITH BOTTOM OF EXCAVATION SLIGHTLY RAISED AT CENTER TO PROVIDE PROPER DRAINAGE. LOOSEN HARD SUBSOIL IN BOTTOM OF EXCAVATION.

2. ANY LEDGE OR RUBBLE MATERIAL SHALL BE FRACTURED TO A DEPTH OF 3 FEET AND EXCAVATED TO A DEPTH OF 30 INCHES FOR TREE POCKETS AND 18 INCHES FOR SHRUB BEDS. THIS PROCEDURE SHALL BE HANDLED BY THE SITE CONTRACTOR. SITE TOPSOIL SHALL BE DEPOSITED IN ALL EXCAVATED POCKETS.

3. DISPOSE OF SUBSOIL REMOVED FROM PLANTING EXCAVATIONS. DO NOT MIX WITH PLANTING SOIL OR USE AS BACKFILL.

4. FILL EXCAVATIONS FOR TREES AND SHRUBS WITH WATER AND ALLOW TO PERCOLATE OUT BEFORE PLANTING.

5. DISH TOP OF BACKFILL TO ALLOW FOR MULCH – PLANT SAUCERS SHALL BE AS SHOWN ON DETAIL SHEETS; 6' DIAMETER FOR ALL DECIDUOUS TREES, AND FOR EVERGREEN TREES A RADIUS 2' BEYOND THE OUTER MOST BRANCHES.

6. MULCH TREES, SHRUBS, PLANTERS AND BEDS. PROVIDE NOT LESS THAN 3" THICKNESS OF BARK MULCH, 3/8"–2" OF WIDTH, AND WORK INTO TOP OF BACKFILL. FINISH LEVEL WITH ADJACENT FINISH GRADES AS DIRECTED IN THE FIELD.

7. TREEGATOR WATERING SYSTEM OR APPROVED EQUAL SHALL BE INSTALLED FOR ALL DECIDUOUS TREES AT TIME OF PLANTING AND REMOVED BEFORE FROST. WATERING RATE TO BE APPLIED PER MANUFACTURER'S SPECIFICATIONS.

8. ALL PLANT MATERIALS SHALL HAVE DEAD OR DAMAGED BRANCHES REMOVED AT TIME OF PLANTING. ALL TAGS AND RIBBONS SHALL BE REMOVED AT THIS TIME.

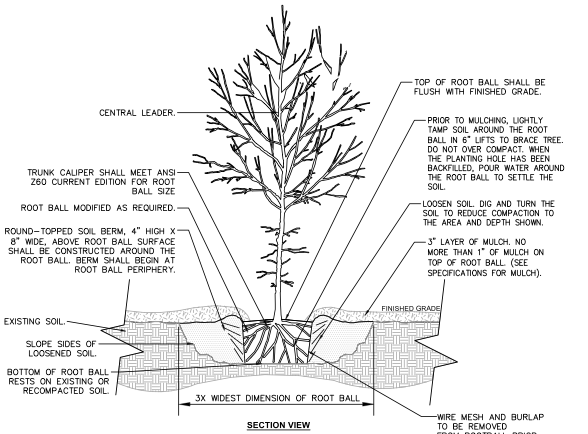
9. THE CONTRACTOR SHALL REQUEST A FINAL OBSERVATION BY THE OWNER'S REPRESENTATIVE UPON COMPLETION OF INSTALLATION.

10. AVOID OR MINIMIZE THE USE OF FERTILIZERS IN UPLAND AREAS OR TRANSITION ZONES. IF FERTILIZERS ARE NECESSARY, USE ORGANIC VERSUS SYNTHETIC FERTILIZERS OPTIONS. SYNTHETIC OPTIONS SHOULD BE AVOIDED; HOWEVER, IF CHOSEN, THEY SHOULD BE CONTROLLED-RELEASE/SLOW-RELEASE AND AT LOW STRENGTHS.

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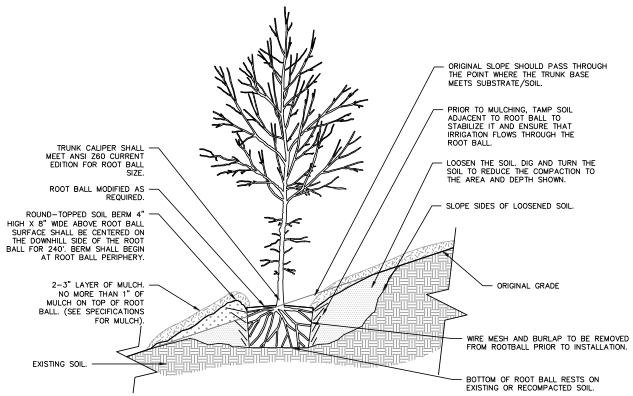
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SECTION VIEW

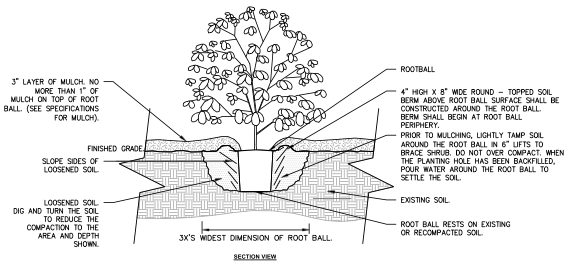
TREE WITH MULCH BERM

NOT TO SCALE



TREE ON SLOPE 5% (20:1) TO 50% (2:1)

NOT TO SCALE



SECTION VIEW

SHRUB PLANTING

NOT TO SCALE

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053
OWNED BY
PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

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1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

STATE OF NEW HAMPSHIRE — NICHOLAS C. COLON — No. 14866 — LICENSED PROFESSIONAL ENGINEER

TFM
Civil Engineers
Structural Engineers
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Land Surveyors
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STORMWATER MANAGEMENT INSPECTION & MAINTENANCE MANUAL

COPIES OF THE I&M REPORTS SHALL BE FILED WITH THE TOWN ON AN ANNUAL BASIS.



Inspection & Maintenance Manual

PurposeEnergy-Londonderry, LLC
Southern New Hampshire Green Energy Campus
North Wentworth Avenue, Londonderry, NH
September 10, 2025
Revised December 19, 2025

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Inspection & Maintenance Log
Deicing Data Form
Inspection Checklist and Inspection & Maintenance Plan

Southern New Hampshire Green Energy Campus
Stormwater Management Report
Tax Map 14 Lot 39
North Wentworth Ave
Londonderry, NH 03053

Description of Project

The Southern New Hampshire Green Energy Campus will reduce the waste management burden on New Hampshire by tackling the food waste problem. It will feature two connected resource recovery facilities.

- The first, RecycleWorks, will receive food waste that normally goes to landfill, including food that has passed its sell by date or is out of specification but is wrapped in glass, plastic, or metal packaging. RecycleWorks will remove the organic waste from that packaging and send it to the second facility on the campus.
- PurposeEnergy – Londonderry. PurposeEnergy will pump the food waste into tanks that digest it in a process similar to a human stomach. The tanks will also receive dairy waste directly by pipe from a local business, Stonyfield Yogurt. The digester tanks will produce renewable biogas that will be cleaned to pipeline quality and injected into the local natural gas network.

The Green Energy Campus is not a landfill; all of the material that comes to the campus will leave it either as recyclable material, renewable biogas, clear water, or biosolids (the residuals from digestion which will be sent to a compost facility for use as fertilizer).
The net impact of the Southern New Hampshire Green Energy Campus is to

- divert 90% of solid waste away from New Hampshire landfills;
- reduce the escape of environmentally damaging methane gas resulting from decomposition of organic matter;
- support local business in the cost-effective and environmentally beneficial management of food manufacturing waste.

The site consists of the following major elements:

- 36,600 sf Depackaging Facility (RecycleWorks)
- A 14,100 sf Process Building, with future expansion of 9,800 sf (PurposeEnergy)
- 60mil bio-reactors
- 3 flow equalization tanks
- 26' x 32' screening room building
- A biogas upgrading yard
- An interconnection facility yard
- Truck scales
- Parking and trucking interconnection

An open and closed drainage system is proposed to attenuate, convey, and treat runoff from the proposed development. A series of catchbasins, sediment forebays, two (2) filtration basins and one (1) detention basin, strategically located through the site will provide pretreatment/treatment and manage runoff.

Southern New Hampshire Green Energy Campus
Stormwater Management Report
Tax Map 14 Lot 39
North Wentworth Ave
Londonderry, NH 03053

Responsible Party

Operator: PurposeEnergy-Londonderry, LLC

Address: PurposeEnergy-Londonderry, LLC

Contact: Sean O'Neill, sneal@purposeenergy.com, (917).776.5155

Southern New Hampshire Green Energy Campus
Stormwater Management Report
Tax Map 14 Lot 39
North Wentworth Ave
Londonderry, NH 03053

Stormwater Practices – Schedule of Maintenance

The following practices shall be inspected twice annually, once following snowmelt (spring) and once following leaf-drop (fall):

- Sediment Forebays
- Filtration/Detention Basins
- Catch Basin

The following practices shall be inspected annually following snowmelt (spring):

- Culvert
- Catch Basin
- Headwalls
- Riprap Aprons
- Swales

Southern New Hampshire Green Energy Campus
Stormwater Management Report
Tax Map 14 Lot 39
North Wentworth Ave
Londonderry, NH 03053

Stormwater Practices – Maintenance Guidelines

Treatment Practices
(inspected twice a year)

Filtration/Detention Basin
Maintenance Requirements:

- To be inspected twice annually, once following snowmelt (spring) and once following leaf-drop (fall).
- Removal of debris from inlet and outlet structures;
- Removal of accumulated sediment;
- Periodic mowing of embankments;
- Removal of woody vegetation from embankments;
- Inspection and repair of embankments; and
- If an infiltration system does not drain within 72-hours following a rainfall event, then a qualified professional should assess the condition of the facility to determine measures required to restore infiltration function, including but not limiting to removal of accumulated sediments or reconstruction of the infiltration trench.

Southern New Hampshire Green Energy Campus
Stormwater Management Report
Tax Map 14 Lot 39
North Wentworth Ave
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Pretreatment Practices

(inspected twice a year)

Sediment Forebay
Maintenance Requirements:

- To be inspected at least twice annually, once following snowmelt and once following leaf-drop and cleaned as indicated by inspection;
- Conduct periodic mowing of embankments (two times per year) to control growth of woody vegetation on embankments;
- Remove debris from outlet structure;
- Remove and dispose of accumulated sediment; and
- Install and maintain a staff gage or other measuring device to indicate depth of sediment accumulation and level at which clean-out is required. It shall be cleaned out when sediment fills half the sump depth (minimum sump depth is 2 feet when clear).

Conveyance Practices
(Inspections As Noted)

Culvert
Maintenance Requirements:

- To be inspected at least twice annually, once following snow-melt (spring) and once following leaf drop (fall), and cleaned as indicated by inspection.
- Inspect culvert inlet, outlet, and structure.
- Remove accumulated sediments greater than 2 inches in depth and debris at the inlet, at the outlet, and within the conduit.
- Repair any erosion damage at the culvert's inlet and outlet.

Catch Basin
Maintenance Requirements:

- To be inspection a least twice annually, once following snow-melt and once following leaf-drop and cleaned as indicated by inspection.
- Sediment should be removed annually and when it approaches half the sump depth; and
- If floating hydrocarbons are observed during an inspection, the material should be removed immediately by skimming, absorbent materials, or other method and disposed of in conformance with applicable state and federal regulations.

Headwalls
Maintenance Requirements:

- Inspect at least once annually for accumulation of sediment and debris and for signs of erosion along embankments;
- Remove debris whenever observed during inspection; and
- Remove sediment when accumulation exceeds 25% of channel depth.

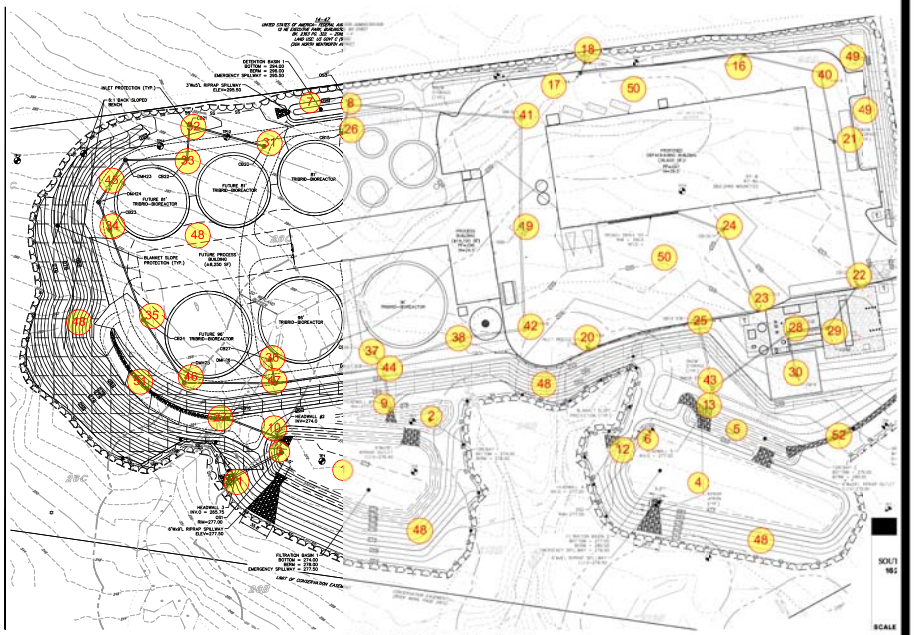
Riprap Apron/Plunge Pool
Maintenance Requirements:

- Inspect at least once annually for damage and deterioration; and
- Repair damages immediately.

Swale Dredging
Maintenance Requirements:

- Inspect at least once annually for damage and deterioration
- Remove footed debris

Southern New Hampshire Green Energy Campus
Stormwater Management Report
Tax Map 14 Lot 39
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INSPECTION & MAINTENANCE PLAN

NOT TO SCALE



SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

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STATE OF NEW HAMPSHIRE
NICHOLAS C. GOLON
No. 14986
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STORMWATER MANAGEMENT INSPECTION & MAINTENANCE MANUAL

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- Repair damages immediately.

System Components

Access Driveway (North Wentworth Ave ROW):
Maintenance Requirements (only for section constructed by this site plan):

- Sediments and debris should be removed and disposed of from impervious areas by power-broom sweeping.
- Sweep at least two (2) times per year and on a more frequent basis depending on sanding operations.
- All resulting sweepings shall be collected and properly disposed of off-site in accordance with NHDES and other applicable requirements.

Driveway, Sidewalk, and Parking Areas:
Maintenance Requirements

- Sediments and debris should be removed and disposed of from impervious areas by power-broom sweeping.
- Sweep at least two (2) times per year and on a more frequent basis depending on sanding operations.
- All resulting sweepings shall be collected and properly disposed of off-site in accordance with NHDES and other applicable requirements.

Lawns and Landscaping Areas:
Maintenance Requirements

- Inspect, maintain, and repair as necessary development area lawns and landscaped areas to ensure a stabilized surface.
- Maintain lawn areas with healthy turf. Take steps to necessary to restore distressed turf to good health.
- Ensure that landscape mulch materials are refreshed as necessary and does not wash onto sidewalks or other adjacent surfaces.

Control of Invasive Plans

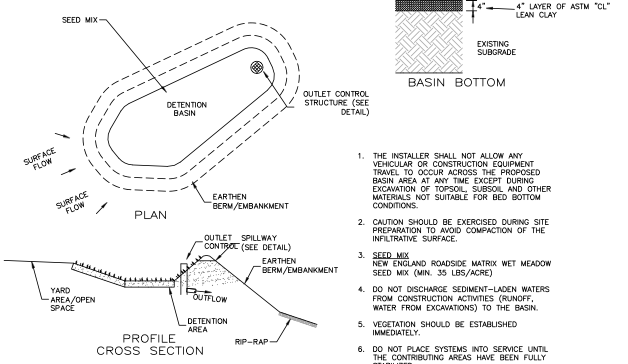
During maintenance activities, check for the presence of invasive plants. If invasive plants are found, they shall be controlled and removed in a safe manner as described on the following pages.

Invasive plants are introduced alien, or non-native plants, which have been moved by people from their native habitat to a new area. Some exotic plants are imported for human use such as landscaping, erosion control, or food crops. They also can arrive as "hitchhikers" among shipments of other plants, seeds, packing materials or fresh produce. Invasive plants can cause harm by:

- Becoming weedy and overgrown;
- Killing established shade trees;
- Obstructing pipes and drainage systems
- Forming dense beds in water
- Lowering water levels in lakes, streams, and wetlands
- Destroying natural communities
- Promoting erosion on stream banks and hillsides
- Releasing cornor except by hazardous chemicals.

Inspection & Maintenance Log

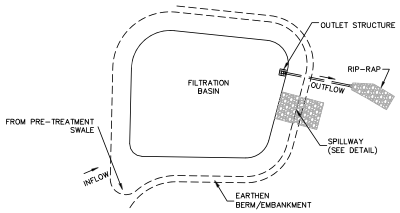
Date	Inspector	BMPs checked	Maintenance Required

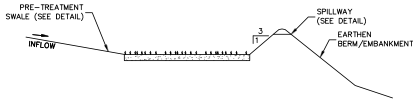


1. THE INSTALLER SHALL NOT ALLOW ANY VEHICULAR OR CONSTRUCTION EQUIPMENT TRAVEL TO OCCUR ACROSS THE PROPOSED BASIN AREA AT ANY TIME EXCEPT DURING EXCAVATION OF TOPSOIL, SUBSOIL AND OTHER MATERIALS NOT SUITABLE FOR BED BOTTOM CONDITIONS.
2. CAUTION SHOULD BE EXERCISED DURING SITE PREPARATION TO AVOID COMPACTION OF THE INFILTRATIVE SURFACE.
3. SEED MIX
   NEW ENGLAND ROADSIDE MATRIX WET MEADOW SEED MIX (MIN. 35 LBS/ACRE)
4. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE BASIN.
5. VEGETATION SHOULD BE ESTABLISHED IMMEDIATELY.
6. DO NOT PLACE SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

DETENTION BASIN

NOT TO SCALE







FILTER MEDIA NOTES

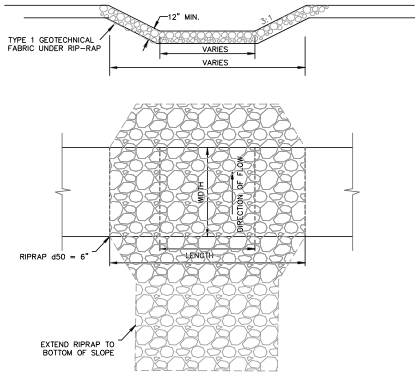
1. ASTM C-33 CONCRETE SAND (50%-55% BY VOLUME)
2. LOAMY SAND TOPSOIL WITH 15%-25% FINES PASSING THE NO. 200 SIEVE (20%-30% BY VOLUME).
3. MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH WITH LESS THAN 5% PASSING THE NO. 200 SIEVE (20%-30% BY VOLUME)

FILTRATION BASIN NOTES

1. THE INSTALLER SHALL NOT ALLOW ANY VEHICULAR OR CONSTRUCTION EQUIPMENT TRAVEL TO OCCUR ACROSS THE PROPOSED BASIN AREA AT ANY TIME EXCEPT DURING EXCAVATION OF TOPSOIL, SUBSOIL AND OTHER MATERIALS NOT SUITABLE FOR BED BOTTOM CONDITIONS.
2. CAUTION SHOULD BE EXERCISED DURING SITE PREPARATION TO AVOID COMPACTION OF THE INFILTRATIVE SURFACE.
3. SEED MIX
   NEW ENGLAND ROADSIDE MATRIX WET MEADOW SEED MIX (MIN. 35 LBS/ACRE)
4. FILTER MEDIA SOIL SAMPLE TO BE PROVIDED TO THE ENGINEER PRIOR TO PLACEMENT. ON SITE MIXING OF MANUFACTURED SOIL MAY BE ACCEPTABLE PENDING ENGINEER APPROVAL.
5. DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE BASIN.
6. AFTER THE BASIN IS EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
7. VEGETATION SHOULD BE ESTABLISHED IMMEDIATELY.
8. DO NOT PLACE FILTRATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
9. FILTRATION MEDIA SHALL BE INSTALLED ALONG INTERIOR SIDE SLOPES TO ELEVATION EQUAL TO OUTLET STRUCTURE RIM OR WEIR ELEVATION, WHICHEVER IS LOWER.
10. FILL TO BRING EMBANKMENT AREAS TO GRADE SHALL BE EXISTING SIDE MATERIALS OR IMPORTED MATERIAL CONSISTENT WITH THE GEOTECHNICAL REPORT RECOMMENDATIONS FOR COMMON FILL (SEE NOTE 21 AND 22 ON SHEET C-02).

FILTRATION BASIN

NOT TO SCALE



WEIR	TOP OF BASIN BERM EL.	WEIR INV.	LENGTH	WIDTH
SEDIMENT FOREBAY #1	278.0	276.40	10.4'	15.6'
SEDIMENT FOREBAY #2	280.0	278.90	21.0'	9.0'

BROAD CRESTED WEIR

FROM FOREBAYS

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

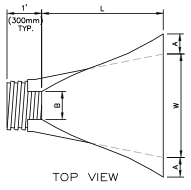
PREPARE BEDDING:
BACKFILL MATERIAL AROUND THE END SECTION MAY BE THE SAME AS THE MATERIAL AROUND THE PIPE. PLACE A FEW INCHES OF BACKFILL MATERIAL IN THE TRENCH OR DITCH WHERE THE END SECTION WILL BE PLACED. COMPACT AND CONTOUR THIS BEDDING MATERIAL TO GENERALLY MATCH THE END SECTION, EXCAVATE AN AREA IN THE BEDDING WHERE TOE TROUGH WILL SEAT SO THAT THE END SECTION WILL BE LEVEL WITH THE BOTTOM OF THE TRENCH OR DITCH IN THE FINISHED INSTALLATION.

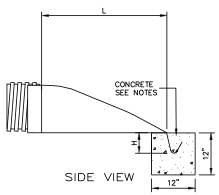
PLACE END SECTION OF PIPE:
OPEN THE END SECTION COLLAR AND SEAT IT OVER THE TWO PIPE CONNECTIONS. ONCE THE END SECTION IS POSITIONED, CHECK TO MAKE SURE THAT THE INVERT OF THE END SECTION MATCHES THE INVERT OF THE PIPE AND THAT THE END SECTION IS LEVEL WITH THE TRENCH OR DITCH BOTTOM.

SECURE THE END SECTION:
SLIP THE STAINLESS STEEL ROD THROUGH THE PRE-DRILLED HOLES AT THE TOP OF THE COLLAR. THE ROD SHOULD BE BETWEEN THE CROWNS OF THE TWO PIPE CONNECTIONS. PLACE A WASHER ON EITHER END OF THE ROD. PLACE A NUT ON EITHER END OF THE ROD AND TIGHTEN WITH A WRENCH.

SECURE THE TOE TROUGH:
TO PREVENT WASHOUTS FROM HIGH VELOCITY FLOW, IT IS RECOMMENDED THAT THE TROUGH BE SECURED WITH CONCRETE. POUR CONCRETE IN THE TROUGH UP TO THE LEVEL OF THE TRENCH OR DITCH BOTTOM AND ALONG THE ENTIRE LENGTH OF THE TROUGH.

FINISH BACKFILL:
SHOVEL BACKFILL AROUND THE END SECTION IN 6 TO 9 INCH LAYERS EQUALLY ON BOTH SIDES, KNIFING IT TO ELIMINATE VOIDS. TAMP WITH A SMALL-FACED COMPACTOR OR OTHER EQUIPMENT SUITABLE FOR SMALL AREAS. CONTINUE PLACING, KNIFING, AND COMPACTING BACKFILL LAYERS TO THE TOP OF THE END SECTION TO SEAT IT WELL INTO THE BACKFILL.





	DIMENSIONS, INCHES (mm)					
PIPE DIAMETER	PART NO.	A, ±1 (25)	B MAX	H, ±1 (25)	L, ±1/2 (13)	W, ±2 (50)
12", 15" (300,375)	1210 NP	6.5 (165)	10 (254)	6.5 (165)	25 (635)	29 (736)
18" (450)	1810 NP	7.5 (190)	15 (380)	6.5 (168)	32 (812)	35 (890)
24" (600)	2410 NP	7.5 (190)	18 (450)	6.5 (165)	36 (900)	45 (1140)
30" (750)	3010 NP	10.5 (266)	NA	7.0 (178)	53 (1346)	68 (1725)
36" (900)	3610 NP	10.5 (266)	NA	7.0 (178)	53 (1346)	68 (1725)

FLARED END SECTION

HIGH DENSITY POLYETHYLENE (HDPE)

NOT TO SCALE

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
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PREPARED FOR

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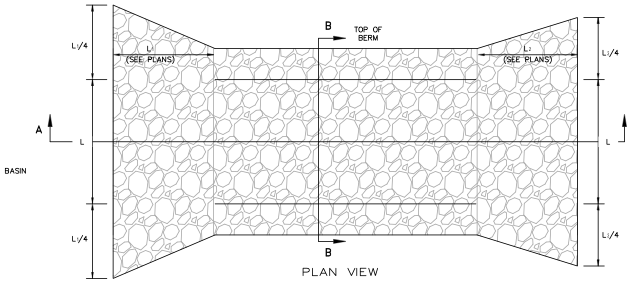
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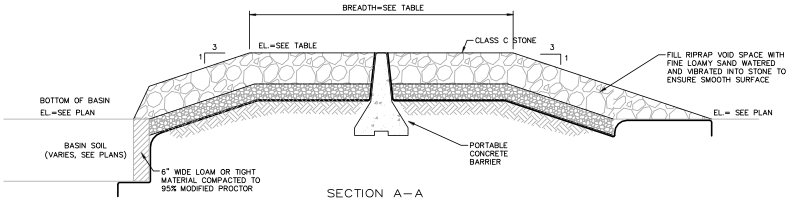
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RIP-RAP GRADATION

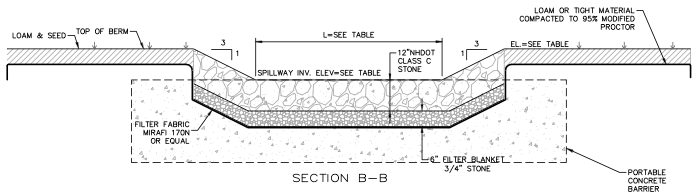
STONE SIZE	% FINER BY WEIGHT				
	D 50 = 6"	D50 = 9"	D 50 = 12"	D50 = 18"	D 50 = 24"
2"	0-15%	0%	–	–	–
4"	20-35%	10-20%	0-10%	–	–
6"	35-50%	25-35%	10-25%	0-10%	–
8"	50-65%	30-50%	20-30%	10-20%	0-10%
10"	60-80%	40-60%	30-40%	15-30%	5-15%
12"	75-100%	–	–	–	–
15"	–	70-100%	45-60%	25-40%	20-30%
20"	–	–	70-100%	40-60%	30-45%
30"	–	–	–	70-100%	50-70%
40	–	–	–	–	70-100%



PLAN VIEW



SECTION A-A



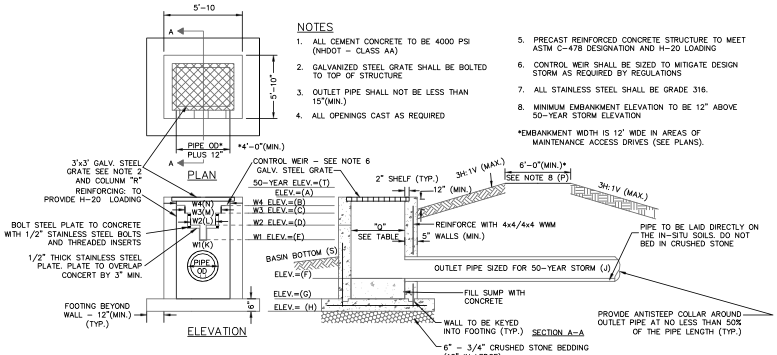
SECTION B-B

SYSTEM	TOP OF BASIN BERM EL.	SPILLWAY INV.	LENGTH (L)	BREADTH
FILTRATION BASIN #1	278.0	277.5	6'	9'
FILTRATION BASIN #2	280.0	279.5	6'	9'
DETENTION BASIN #1	296.0	295.5	3'	5'

SPILLWAY

FROM BASINS

NOT TO SCALE



NOTES

1. ALL CEMENT CONCRETE TO BE 4000 PSI (NHDOT - CLASS AA)
2. GALVANIZED STEEL GRATE SHALL BE BOLTED TO TOP OF STRUCTURE
3. OUTLET PIPE SHALL NOT BE LESS THAN 15"(MIN.)
4. ALL OPENINGS CAST AS REQUIRED
5. PRECAST REINFORCED CONCRETE STRUCTURE TO MEET ASTM C-478 DESIGNATION AND H-20 LOADING
6. CONTROL WEIR SHALL BE SIZED TO MITIGATE DESIGN STORM AS REQUIRED BY REGULATIONS
7. ALL STAINLESS STEEL SHALL BE GRADE 316.
8. MINIMUM EMBANKMENT ELEVATION TO BE 12" ABOVE 50-YEAR STORM ELEVATION

*EMBANKMENT WIDTH IS 12' WIDE IN AREAS OF MAINTENANCE ACCESS DRIVES (SEE PLANS).

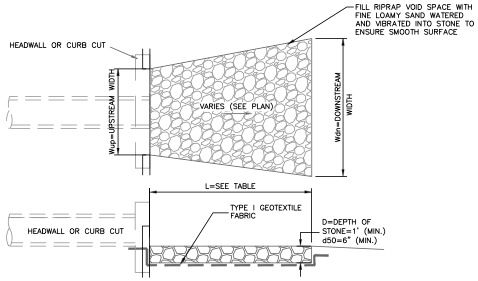
*FREEBOARD IS DEFINED AS THE VERTICAL DISTANCE FROM THE 50-YR STORM ELEVATION TO THE LOWEST ELEVATION OF THE EMBANKMENT NOT DESIGNED TO BE OVERFLOWED

OUTLET STRUCTURE	ELEVATIONS/DIMENSIONS																
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	FREEBOARD (A-T)
FILTRATION BASIN #1	277.30	296.65	295.95	274.55	273.95	266.00	265.50	265.00	15"	1.2"	2.4"	6.0"	14.4"	278.00	4.00'x4.00'	4.50'x4.50'	273.00	277.00	1.00'
FILTRATION BASIN #2	279.00	–	278.65	278.35	277.75	272.00	271.50	271.00	15"	1.2"	6.0"	30.0"	–	280.00	4.00'x4.00'	4.50'x4.50'	277.00	278.97	1.03'
RETENTION BASIN #1	294.50	–	–	–	294.00	290.00	289.50	289.00	18"	9.0"	–	–	–	296.00	5.00'x5.00'	5.50'x5.50'	294.00	294.50	1.50'

OUTLET STRUCTURE AT STORMWATER BASINS

NOT TO SCALE

OUTLET	Do (ft.)	Q25 (cfs)	Tw (ft.)	La (ft.)	Wup (ft.)	Wdn (ft.)	d50 (in.)*
Headwall1(DMH11)	2.00	10.3	1.8	24.9	6.0	16.0	6.0
Headwall2 (CB16)	1.25	0.1	0.1	8.9	3.8	12.6	6.0
Headwall3 (OS1)	1.25	2.3	0.1	11.7	3.8	15.5	6.0
Headwall4 (OS2)	1.25	0.3	0.1	9.1	3.8	12.9	6.0
Headwall5 (DMH9)	2.50	16.9	2.0	30.3	7.5	19.6	6.0

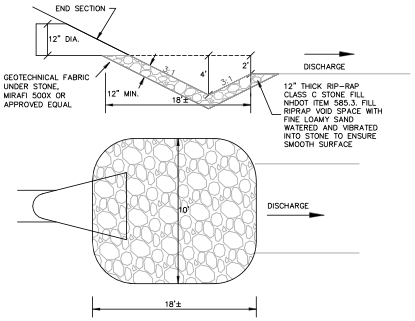


CONSTRUCTION SPECIFICATIONS:

1. THE SUBGRADE FOR THE GEOTEXTILE FABRIC AND RIP-RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE ROCK USED FOR RIP-RAP SHALL CONFORM TO THE SPECIFIED GRADATION (D50=6" (MIN)).
3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIP-RAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
4. STONE FOR THE RIP-RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.

OUTLET APRON

NOT TO SCALE



RIP RAP PLUNGE POOL

NOT TO SCALE

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

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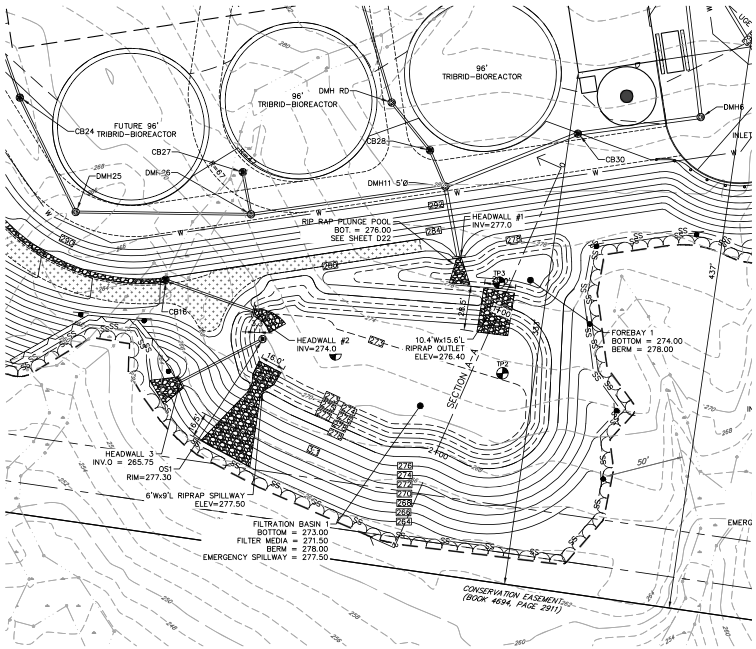
STATE OF NEW HAMPSHIRE — NICHOLAS C. COLON — No. 14886 — LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
5	12/18/2025	AOT & STAFF COMMENTS	JD	NG
4	10/24/2025	NHF&G APPROVAL	JD	NG
3	11/13/2025	TOWN SEWER COMMENTS	JD	NG
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1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

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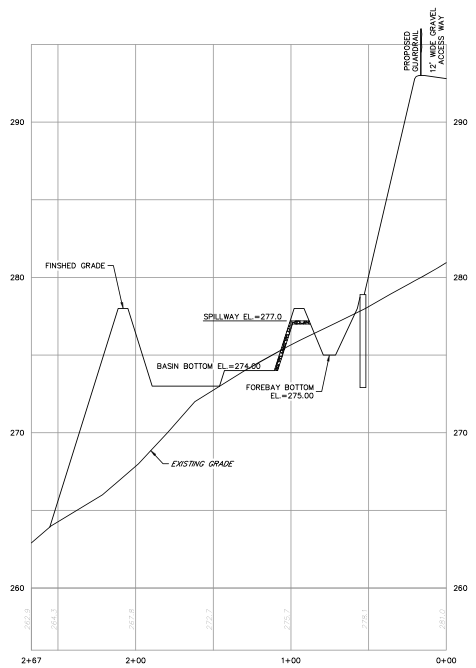
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		CK		CADFILE	18252-02 COVER & DETAILS	

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FILTRATION BASIN #1 PLAN VIEW

SCALE: 1"=40'



FILTRATION BASIN #1 SECTION A-A

SCALE: 1"=40' H/1"=4' V

GRADING & DRAINAGE NOTES

1. THE CONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF NHDES ENV-WQ 1500 AS APPLICABLE.
2. THE CONTRACTOR SHALL PREPARE, MAINTAIN, AND EXECUTE A S.W.P.P.P. IN ACCORDANCE WITH EPA REGULATIONS AND THE CONSTRUCTION GENERAL PERMIT.
3. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14 DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK THE ACCURACY OF THE TOPOGRAPHY AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO ANY EARTHWORK BEING PERFORMED ON THE SITE. NO CLAIM FOR EXTRA WORK WILL BE CONSIDERED FOR PAYMENT AFTER EARTHWORK HAS COMMENCED.
5. THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR INFORMATION ABOUT SOIL AND GROUNDWATER CONDITIONS. THE CONTRACTOR SHALL FOLLOW THE GEOTECHNICAL ENGINEER'S RECOMMENDED METHODS TO ADDRESS ANY SOIL AND GROUNDWATER ISSUES THAT ARE FOUND ON SITE, INCLUDING AND NOT LIMITED TO DEWATERING METHODS, PERIMETER DRAINS AND TIE INTO STORMWATER MANAGEMENT SYSTEM, ETC.
6. COORDINATE WITH GEOTECHNICAL REPORT FOR SITE PREPARATION AND OTHER PERTINENT INFORMATION.
7. COORDINATE WITH ELECTRICAL DESIGN PLANS FOR DETAILED GRADING AT ELECTRICAL STRUCTURES, AND SIZE AND LOCATION OF ALL ELECTRICAL SERVICES.
8. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS, THIS INCLUDES GRADING, DRIVES, ROADS, AND ALIGNMENTS.
10. THE CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE, RAMPS, AND LOADING AREAS.
11. THE SITE SHALL BE GRADED SO ALL FINISHED PAVEMENT HAS POSITIVE DRAINAGE AND SHALL NOT POND WATER DEEPER THAN 1/4" FOR A PERIOD OF MORE THAN 15 MINUTES AFTER FLOODING.
12. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED. CURBS HAVE A 6" REVEAL UNLESS OTHERWISE NOTED.
13. ALL SIDEWALK AND OTHER CURB REVEALS SHALL BE 6" WITH A TOLERANCE OF PLUS OR MINUS 3/8". WHERE SIDEWALK IS TO BE FLUSH, THE PAVEMENT REVEAL SHALL BE 1/4" WITH A TOLERANCE OF 1/8".
14. THE FINISHED GRADE AT BOTTOM OF ALL ACCESSIBLE RAMPS SHALL BE FLUSH WITH PAVEMENT WITH A TOLERANCE OF PLUS OR MINUS 1/4".
15. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE PRIOR TO INSTALLATION OF FINISHED PAVEMENT.
16. ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS AND SHALL MEET LOCAL STANDARDS AND THE REQUIREMENTS OF THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION AND THE NHDOT STANDARD STRUCTURE DRAWINGS UNLESS OTHERWISE NOTED.
17. STORMWATER DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE TYPE B AND CONFORM TO NHDOT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
18. NO FILL SHALL BE PLACED IN ANY WETLAND AREA.
19. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
20. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED, FERTILIZER, AND MULCH.
21. DENSITY REQUIREMENTS:

MINIMUM DENSITY*	LOCATION
95%	BELOW PAVED OR CONCRETE AREAS
95%	TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL
90%	BELOW LOAM AND SEED AREA
90%	EMBANKMENTS/PERIMETER SLOPES ASSOCIATED WITH STORMWATER MANAGEMENT AREAS
70%	STORMWATER MANAGEMENT AREAS BASIN BOTTOMS, INCLUDING SUBGRADE

*ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM D-6938.

22. COMMON FILL GRADATION REQUIREMENTS *PER GEOTECHNICAL REPORT SPECIFICATIONS

SIEVE SIZE	PERCENT FINER BY WEIGHT
8 INCH	100
NO. 4	25 – 70
NO.200	0 – 12 (TOTAL)

23. SWALES ARE TO BE VEGETATED OR STONE LINED PRIOR TO DIRECTING RUNOFF TO THEM.

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

SCALE: NOT TO SCALE **SEPTEMBER 8, 2025**

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STATE OF NEW HAMPSHIRE — NICHOLAS P. COLON — No. 14866 — LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
5	12/18/2025	AOT & STAFF COMMENTS	JD	NG
4	10/24/2025	NHF&G APPROVAL	JD	NG
3	11/3/2025	TOWN SEWER COMMENTS	JD	NG
2	9/30/2025	REVISED FOR NHF&G & NHDES COMMENTS	JD	NG
1	9/12/2025	UPDATE FOR SUBMITTAL	JD	NG

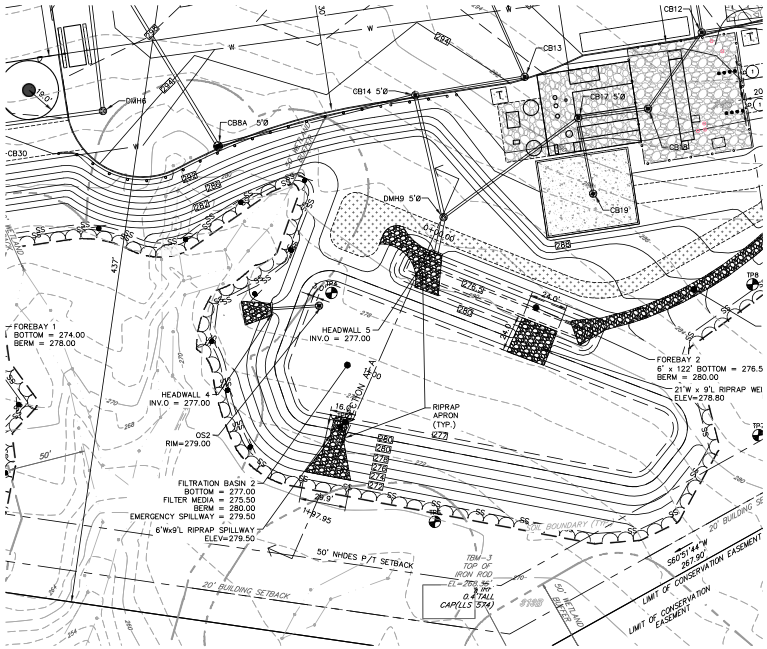
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		CK		CADFILE	18252-02 COVER & DETAILS	

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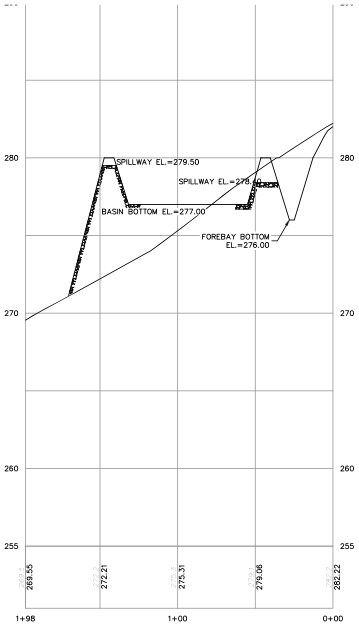
GRADING & DRAINAGE NOTES

1. SEE NOTES ON SHEET D-23.



FILTRATION BASIN #2 PLAN VIEW

SCALE: 1"=40'



FILTRATION BASIN #2

FILTRATION BASIN #2 SECTION A-A

SCALE: 1"=40' H/1"=4' V

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

DETAILS

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25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

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25 PELHAM ROAD SUITE 102, SALEM, NH 03079

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STATE OF NEW HAMPSHIRE — NICHOLAS D. GOLON — No. 14866 — LICENSED PROFESSIONAL ENGINEER

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18252-02	CK		CADFILE	18252-02 COVER & DETAILS	D-24

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NOTES

1. LIGHTING DESIGN PROVIDED BY EXPOSURE INCORPORATED.
2. ALL SITE LIGHITNG SHALL BE FULL CUTOFF, DOWNCAST FIXTURE TYPES.

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	Manufacturer	Type
	3	S3	Single	VALS-SYL-SF-30K8-CRX-SA-IMSBTL1 / 40Q B3 SIDE S CRX AB 48C	LSI INDUSTRIES, INC.	14' POLE ON 3' BASE
	3	S4	Single	VALS-SYL-SF-30K8-CRX-SA-IMSBTL1 / 40Q B3 SIDE S CRX AB 48C	LSI INDUSTRIES, INC.	19' POLE ON 3' BASE
	4	W1	Single	XWS-LED-XL-PFW-INV-30K-90-RTCB1-IMSBTLC-CRX	LSI INDUSTRIES, INC.	WALL MOUNTED 8' AFG
	2	W2	Single	XWM-L-LED-EL-30K8-UE-CRX-IMSBTLC	LSI INDUSTRIES, INC.	WALL MOUNTED 14' AFG
	2	W4	Single	XWM-L-LED-EL-30K8-UE-CRX-IMSBTLC	LSI INDUSTRIES, INC.	WALL MOUNTED 14' AFG

DOCK AREAS
Illuminance (Fc)
Average = 4.62
Maximum = 9.5
Minimum = 0.9
Avg/Min Ratio = 5.13
Max/Min Ratio = 10.33

PARKING AT BACK OF BLDG
Illuminance (Fc)
Average = 3.76
Maximum = 6.4
Minimum = 2.2
Avg/Min Ratio = 1.71
Max/Min Ratio = 2.91

TRUCK PKG AT BACK OF BLDG
Illuminance (Fc)
Average = 1.92
Maximum = 5.1
Minimum = 0.4
Avg/Min Ratio = 4.80
Max/Min Ratio = 12.75

PARKING IN FRONT OF BLDG
Illuminance (Fc)
Average = 2.51
Maximum = 4.1
Minimum = 1.1
Avg/Min Ratio = 2.28
Max/Min Ratio = 3.73



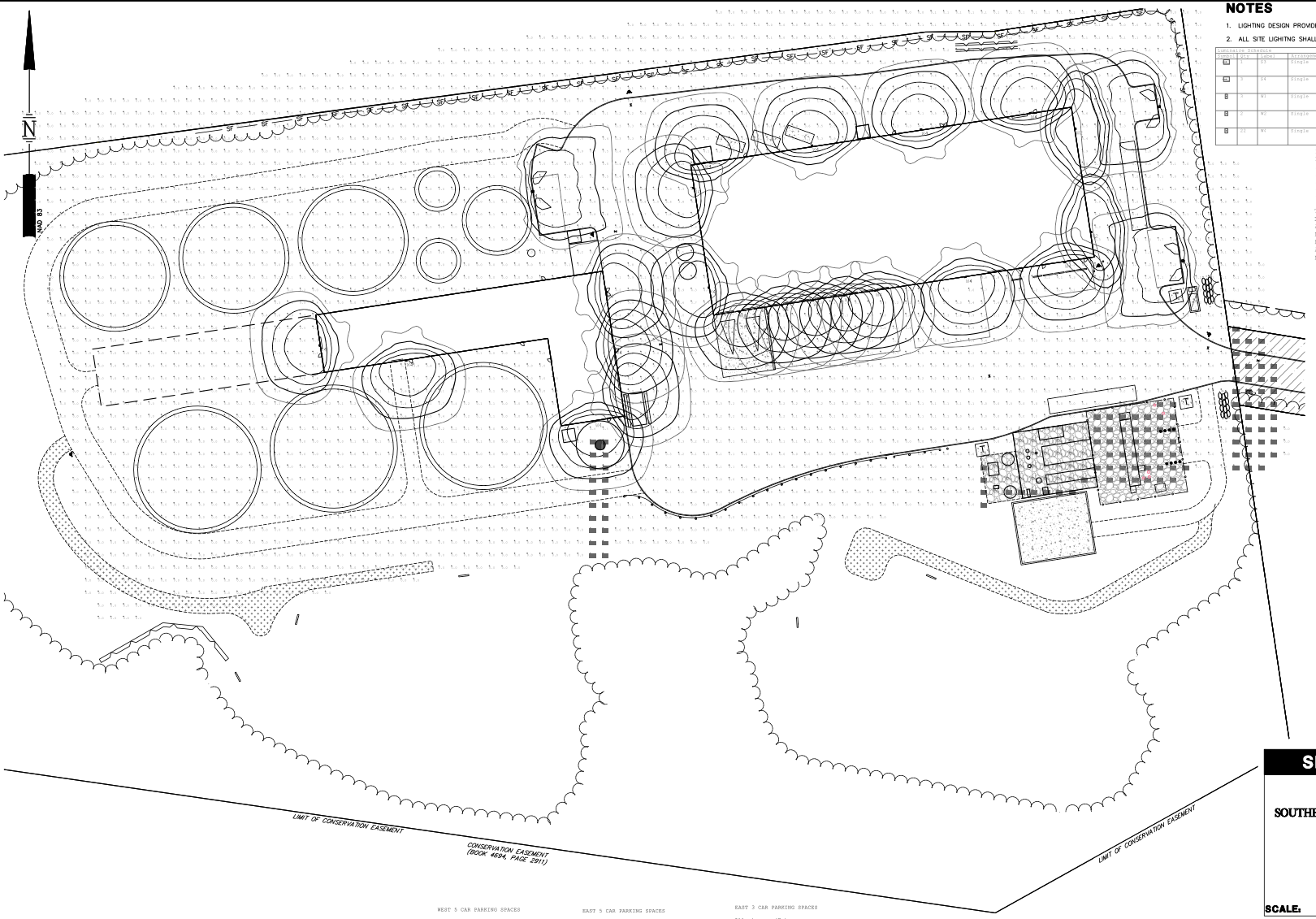
POLE MOUNTED FIXTURE
V-LOCITY SMALL VALS (S3 & S4)



WALL MOUNTED FIXTURE
MIRADA MEDIUM WALL SCONCE XWM (W2 & W4)



WALL MOUNTED FIXTURE
MIRADA SMALL WALL SCONCE XWS VC (W1)



SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-2

LIGHTING PLAN

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SCALE. **SEPTEMBER 8, 2025**

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STATE OF NEW HAMPSHIRE — NICHOLAS J. GOLON No. 14886 LICENSED PROFESSIONAL ENGINEER

HORIZONTAL SCALE 1"=20'
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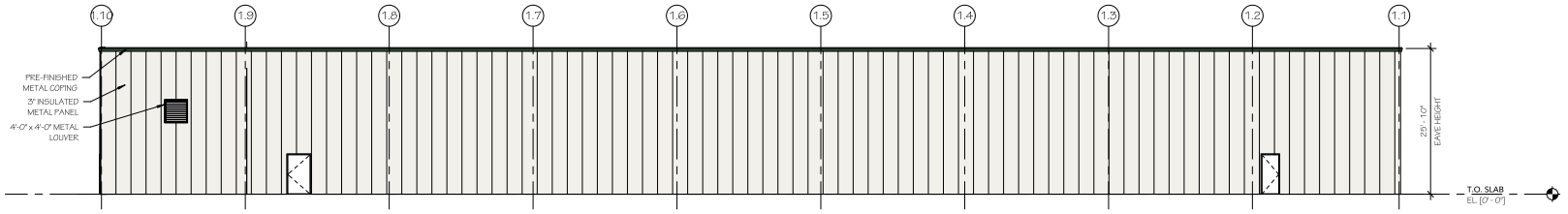
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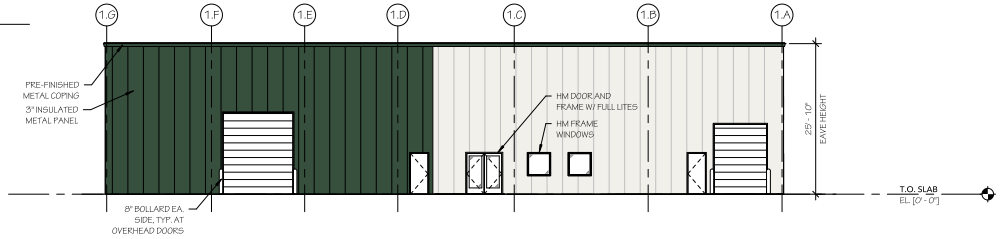
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18252-02	CK	CADFILE	18252-02 SITE PLAN	L-01

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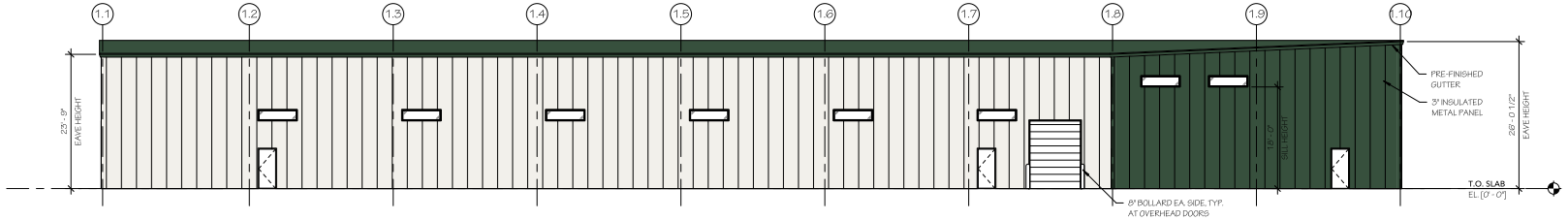
4 NORTH ELEVATION

3/32" = 1'-0" PROCESS BUILDING



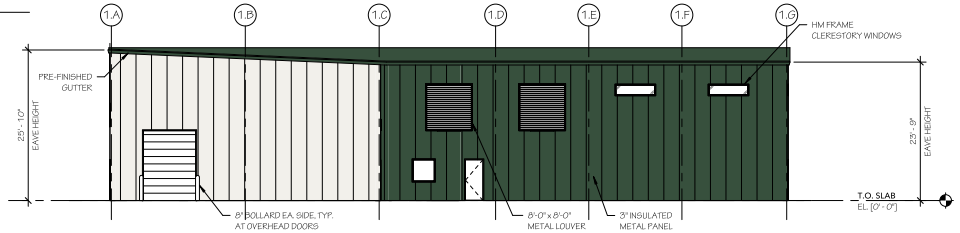
3 EAST ELEVATION

3/32" = 1'-0" PROCESS BUILDING



2 SOUTH ELEVATION

3/32" = 1'-0" DEPACK BUILDING



1 WEST ELEVATION

3/32" = 1'-0" PROCESS BUILDING

REV	DATE	DESCRIPTION	DR	CK
1	12/08/25	REVISION #1	JG	MG

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-1

BUILDING ELEVATIONS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY
PREPARED FOR
PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

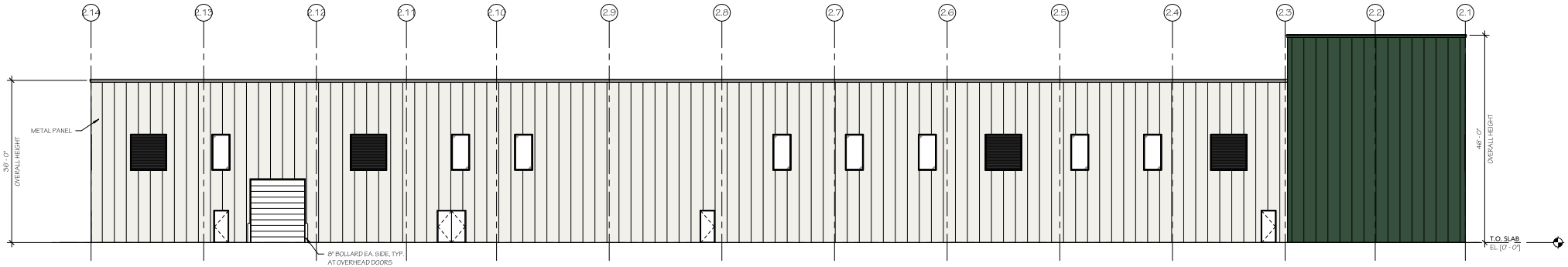
3/32" = 1'-0" SEPTEMBER 8, 2025

285 SOUTH OHIO STREET
P.O. BOX 3
MINSTER, OHIO 45865
(419) 628-3364
www.baumerconstruction.com

JOB #	25.02	DR	JG	SCALE	3/32" = 1'-0"	A-1
		CK	MG	DATE	12/08/2025	

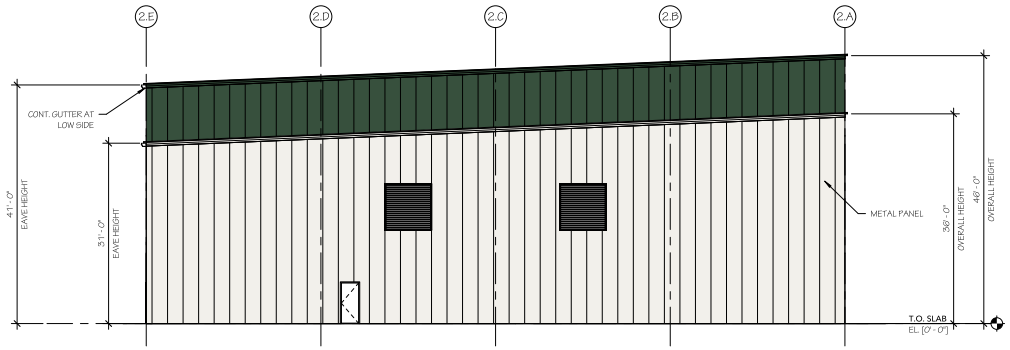
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2 NORTH ELEVATION

3/32" = 1'-0" DEPACK BUILDING



1 EAST ELEVATION

3/32" = 1'-0" DEPACK BUILDING

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-1
BUILDING ELEVATIONS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053
OWNED BY
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25 PELHAM ROAD SUITE 102, SALEM, NH 03079

3/32" = 1'-0" SEPTEMBER 8, 2025

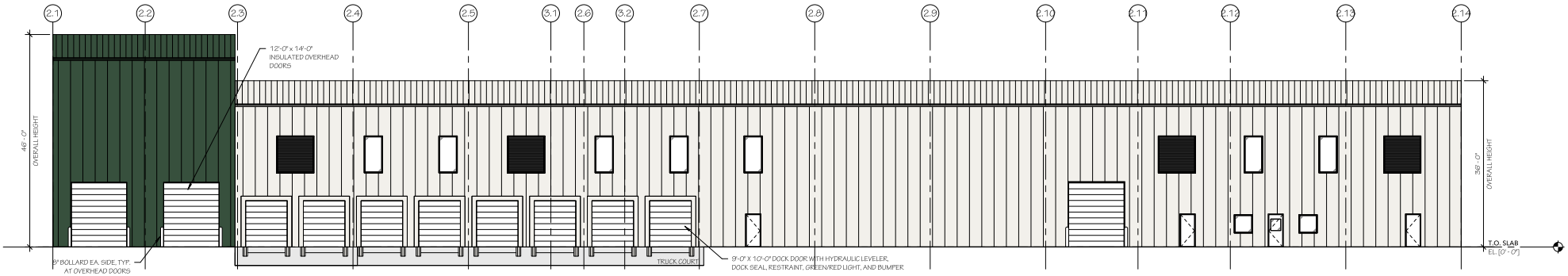
REV	DATE	DESCRIPTION	DR	CK
1	12/09/25	REVISION #1	JG	MG

285 SOUTH OHIO STREET
P.O. BOX 3
MINSTER, OHIO 45865
(419) 628-3364
www.baumerconstruction.com

JOB #		DR	JG	SCALE	3/32" = 1'-0"	A-2
	25.02	CK	MG	DATE	12/09/2025	

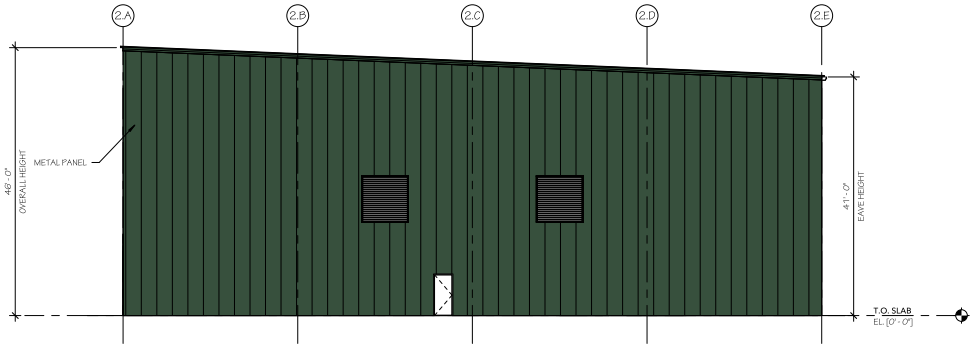
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4 SOUTH ELEVATION

3/32" = 1'-0" DEPACK BUILDING



3 WEST ELEVATION

3/32" = 1'-0" DEPACK BUILDING

SITE DEVELOPMENT PLANS

TAX MAP 14 LOT 39-1

BUILDING ELEVATIONS

SOUTHERN NEW HAMPSHIRE GREEN ENERGY CAMPUS
25 NORTH WENTWORTH AVE.
LONDONDERRY, NH 03053

OWNED BY

PREPARED FOR

PURPOSEENERGY-LONDONDERRY, LLC
25 PELHAM ROAD SUITE 102, SALEM, NH 03079

3/32" = 1'-0" SEPTEMBER 8, 2025

REV	DATE	DESCRIPTION	DR	CK
1	12/08/25	REVISION #1	JG	MG

285 SOUTH OHIO STREET
P.O. BOX 3
MINSTER, OHIO 45865
(419) 628-3364
www.baumerconstruction.com

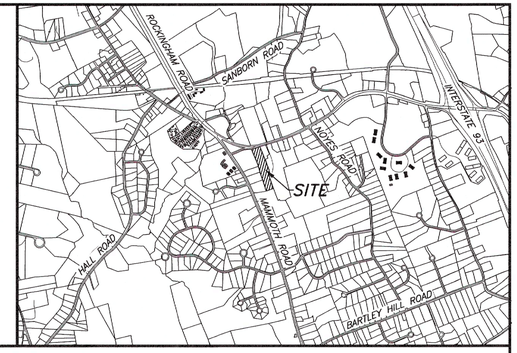
JOB #		DR	JG	SCALE	3/32" = 1'-0"	A-3
	25.02	CK	MG	DATE	12/08/2025	

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ROCKPOINT COMMONS
SITE PLAN
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PLAN INDEX	SHEET NO
COVER SHEET	1
EXISTING CONDITIONS PLANS	2–3
SITE PLANS	4–5
GRADING PLANS	6–8
UTILITY PLANS	9–11
DRIVEWAY PROFILE	12
SANITARY SEWER PROFILE	13
NHDOT CURBCUT PLAN	14
NHDOT SIGHT DISTANCE PLAN	15
LANDSCAPE PLANS	16–17
LIGHTING PLAN	18–19
STORMWATER MAINTENANCE	20–21
CONSTRUCTION DETAILS	22–28
CONSTRUCTION CENTERLINE	29
ARCHITECTURAL PLANS	30–33



VICINITY MAP
SCALE: 1"=2500'

NOTES

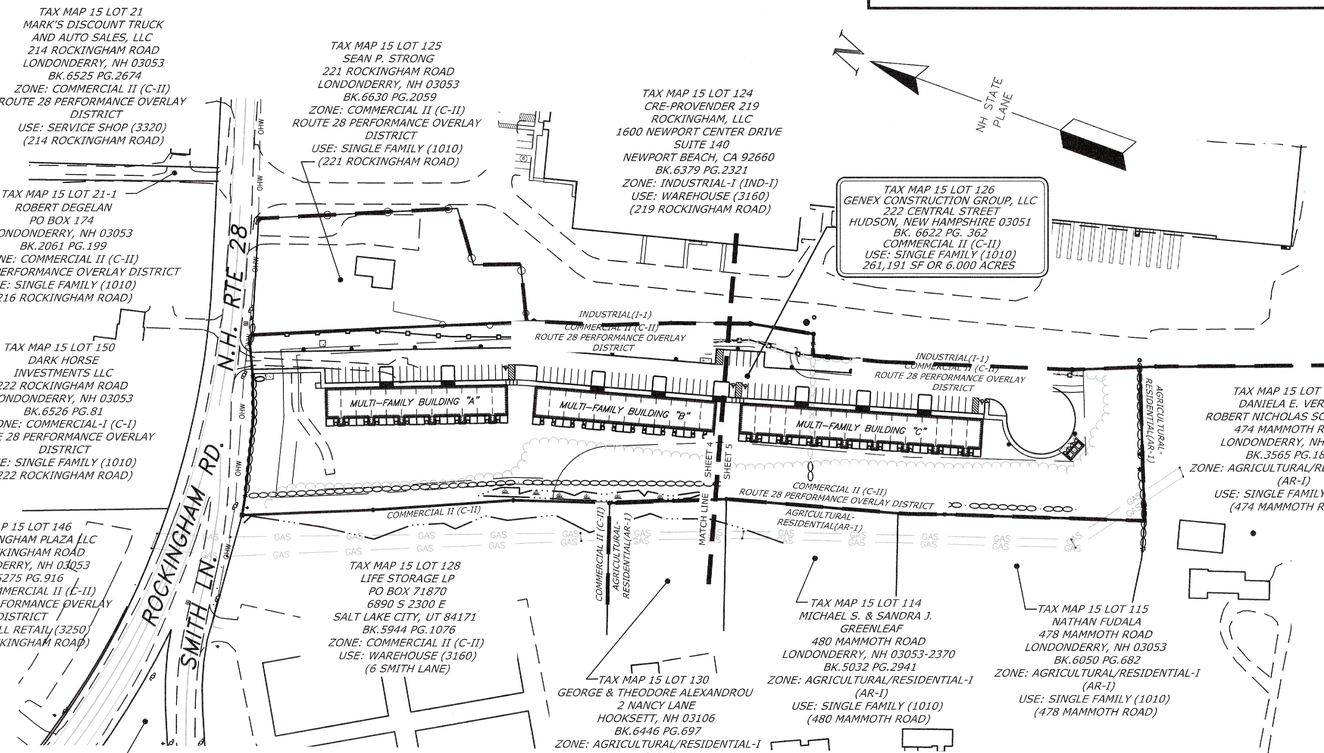
1. THE PURPOSE OF THIS PLAN IS TO SHOW THE CONSTRUCTION OF FORTY (40) TWO-STORY RESIDENTIAL RENTAL UNITS IN THREE (3) BUILDINGS AND ASSOCIATED FACILITIES ON TAX MAP 15 LOT 126 FOR A TOTAL OF 64,000 SF (GROSS).
2. OWNER OF RECORD:
   TAX MAP 15 LOT 126
   GENEX CONSTRUCTION GROUP, LLC
   222 CENTRAL STREET
   HUDSON, NH 03051
   BOOK 6622 PAGE 362
3. LOT AREA: PARCEL AREA: 261,191 S.F. OR 6.000 AC.
4. THE PARCEL IS IN THE COMMERCIAL II (C-II) ZONING DISTRICT AND ROUTE 28 PERFORMANCE OVERLAY DISTRICT.
5. DIMENSIONAL REQUIREMENTS

DIMENSIONAL REQUIREMENTS	C-II REQ.	PROPOSED
MINIMUM LOT AREA:	1 ACRE	6 ACRES
MINIMUM LOT FRONTAGE:	150'	227.63'
MINIMUM FRONT SETBACK:	60'	95'
MINIMUM SIDE SETBACK:	30'	66'
MINIMUM REAR SETBACK:	30'	209'
MAXIMUM BUILDING HEIGHT:	45'	43'
MAXIMUM BUILDING COVERAGE:	25%	12.7%
MINIMUM GREEN SPACE AREA:	33%	67.6%
MAXIMUM IMPERVIOUS COVERAGE:	66%	32.4%
GREEN SPACE BUFFER (ENCLOSED PERIMETER)	15'	15'
GREEN SPACE BUFFER (ABUTTING PUBLIC R.O.W.)	30'	30'

6. THE LOT IS CURRENTLY A SINGLE FAMILY RESIDENCE.
7. PARKING REQUIREMENTS: (Sec 3.09)
   40 UNIT RESIDENTIAL @ 2 SP/UNIT (STATE LAW 1.5 SPACES PER UNIT)
   80 SPACES REQUIRED, 81 SPACES PROVIDED (2.02/UNIT) (INCLUDING 4 HANDICAP SPACES)
8. THE SITE IS SERVICED BY MANCHESTER WATER WORKS AND TOWN OF LONDONDERRY SEWER.
9. ZBA CASES: NO ZBA CASES WERE FOUND.
10. HORIZONTAL DATUM IS BASED ON STATE PLANE AND VERTICAL DATUM IS NAVD 1988 DERIVED FROM STATIS GPS OBSERVATIONS REDUCED BY OPUS. TOPOGRAPHIC INFORMATION IS BASED ON LIDAR DATA OBTAINED FROM LIDAR.UNH.EDU.
11. EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM), COMMUNITY NO. 330150 0317E, EFFECTIVE DATE MAY 17, 2005, INDICATES THE SUBJECT PREMISES IS LOCATED WITHIN ZONE X, NOT A DESIGNATED FLOOD HAZARD AREA.
12. TAX MAP 15 LOT 126 IS SUBJECT TO THE FOLLOWING EASEMENT RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS:
    A. GAS TRANSMISSION LINE EASEMENT: BOOK 1237 PAGE 237.
       NO WIDTH OR LOCATION GIVEN.
       GAS LINE SHOWN IS APPROXIMATE BASED ON MARKERS.
13. THE FOLLOWING PERMITS ARE REQUIRED FOR THIS PROJECT:

NHDES SEWER CONNECTION PERMIT:	SC2025-1003, ISSUED 10-14-25
NHDES ALTERATION OF TERRAIN PERMIT:	AoT-2935, ISSUED 10-24-25
LONDONDERRY STORMWATER PERMIT:	PENDING
LONDONDERRY SEWER PERMIT:	ISSUED OCTOBER 29, 2025
NHDOT CURBCUT PERMIT	DOT-DRI-003236, ISSUED 10-29-25

14. THE FOLLOWING WAIVERS ARE REQUIRED BY THE PLANNING BOARD.
    – SECTION (4.12.C.19.viii) LOCATE ALL TREES GREATER THAN 15" DIAMETER
15. THE PLANNING BOARD REQUIRES APPROVAL OF A CONDITIONAL USE PERMIT FOR 900 S.F. WETLAND BUFFER IMPACT.
16. "IF DURING CONSTRUCTION, IT BECOMES APPARENT THAT DEFICIENCIES EXIST IN THE APPROVED DESIGN DRAWINGS, THE OWNER SHALL BE REQUIRED TO CORRECT THE DEFICIENCIES TO MEET THE REQUIREMENTS OF THE REGULATIONS AT NO EXPENSE TO THE TOWN."
17. "IF DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE TOWN."
18. "ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE TOWN OF LONDONDERRY SITE PLAN REGULATIONS AND THE LATEST EDITION OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION."
19. "IN ACCORDANCE WITH SECTION 6.01 OF THE LONDONDERRY SITE PLAN REGULATIONS AND RSA §676:13, ALL IMPROVEMENTS SPECIFIED ON THESE SITE PLANS SHALL BE CONSTRUCTED, COMPLETED, AND INSPECTED AND APPROVED BY THE TOWN OF LONDONDERRY PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY."
20. "IN ACCORDANCE WITH SECTION 6.01 OF THE LONDONDERRY SITE PLAN REGULATIONS AND RSA §676:12, ALL OFF-SITE IMPROVEMENTS SPECIFIED ON THESE SITE PLANS SHALL BE CONSTRUCTED, COMPLETED, AND INSPECTED AND APPROVED BY THE TOWN OF LONDONDERRY (AND/OR THE NHDOT, IF APPLICABLE) PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY."
21. SITE IMPROVEMENTS DEPICTED ON THE PLAN SHALL CONFORM WITH TITLE III OF THE AMERICANS WITH DISABILITIES ACT WITH REGARD TO DIMENSION AND GRADES.
22. TRASH PICK UP SHALL BE BY TOWN OF LONDONDERRY.
23. HOURS OF CONSTRUCTION 7:00 A.M. TO 6:00 P.M. MONDAY THROUGH SATURDAY.
24. PLOWED SNOW FROM THE RESIDENTIAL DRIVEWAYS SHALL BE STORED IN THE DESIGNATED AREA SHOWN IN THIS PLAN SET. WHEN SNOW STORAGE AREAS ARE AT CAPACITY, SUBSEQUENT SNOW SHALL BE HAULED OFF SITE AND DISPOSED OF IN AN ENVIRONMENTALLY SOUND FASHION AND IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS. PRIOR TO THE START OF ANY CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROXIMATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 1-888-344-7233 AT LEAST 72 HOURS BEFORE DIGGING.
26. THIS PLAN SET CONTAINS 33 SHEETS ALL ON FILE AT THE LONDONDERRY PLANNING DEPARTMENT.
27. THE EDGE OF THE CONSERVATION OVERLAY DISTRICT AND NON DISTURBANCE ZONES SHALL BE APPROPRIATELY DELINEATED IN THE FIELD PRIOR TO CONSTRUCTION.
28. COPIES OF THE STORMWATER MAINTENANCE DOCUMENTS TO BE SUBMITTED TO THE DEPARTMENT OF ENGINEERING AND ENVIRONMENTAL SERVICES ON A YEARLY BASIS AS REQUIRED BY THE STORMWATER MAINTENANCE PLAN.
29. PROJECT PHASING: PROJECT SHALL BE CONSTRUCTED IN ONE PHASE.
30. NO OUTSIDE STORAGE IS ALLOWED EXCEPT AS NOTED ON THE PLAN



OVERVIEW PLAN
SCALE: =100'

GRAPHIC SCALE (100 0 50 100 200 400)

NEW HAMPSHIRE FISH AND GAME AOT PERMIT CONDITIONS RELATED TO THREATENED AND ENDANGERED SPECIES:

ALL OBSERVATIONS OF THREATENED OR ENDANGERED SPECIES SHALL BE REPORTED IMMEDIATELY TO THE NEW HAMPSHIRE FISH AND GAME DEPARTMENT NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM BY PHONE AT 603-271-2461 AND BY EMAIL AT NHFGREVIEW@WILDLIFE.NH.GOV. EMAIL SUBJECT LINE: DCT25-2169, 225 ROCKINGHAM ROAD, LONDONDERRY, WILDLIFE SPECIES OBSERVATION.

- PHOTOGRAPHS OF THE OBSERVED SPECIES AND NEARBY ELEMENTS OF HABITAT OR AREAS OF LAND DISTURBANCE SHALL BE PROVIDED TO NHF&G IN DIGITAL FORMAT AT THE ABOVE EMAIL ADDRESS FOR VERIFICATION AS FEASIBLE.
- IN THE EVENT A THREATENED OR ENDANGERED SPECIES IS OBSERVED ON THE PROJECT SITE DURING THE TERM OF THE PERMIT, THE SPECIES SHALL NOT BE DISTURBED, HANDLED, OR HARMED IN ANY WAY PRIOR TO CONSULTATION WITH NHF&G AND IMPLEMENTATION OF CORRECTIVE ACTIONS RECOMMENDED BY NHF&G, IF ANY, TO ASSURE THE PROJECT DOES NOT APPRECIABLY JEOPARDIZE THE CONTINUED EXISTENCE OF THREATENED AND ENDANGERED SPECIES AS DEFINED IN FIS 1002.04.
- THE NHF&G, INCLUDING ITS EMPLOYEES AND AUTHORIZED AGENTS, SHALL HAVE ACCESS TO THE PROPERTY DURING THE TERM OF THE PERMIT.

WETLAND CERTIFICATION

THOMAS SOKOLOSKI, CERTIFIED WETLAND SCIENTIST #127, OF TES ENVIRONMENTAL CONSULTANTS, L.L.C. OF BOW, NH, PERFORMED THE WETLAND IDENTIFICATION AND DELINEATION ON DECEMBER 12, 2024 ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012, US ARMY CORPS OF ENGINEERS.

STATE OF NEW HAMPSHIRE — THOMAS E. SOKOLOSKI — No. 127 — CERTIFIED WETLAND SCIENTIST — 7/10/2025

OWNER'S SIGNATURE — 8/4/25 DATE

Approved by the Londonderry, NH Planning Board for Phase
on Date:

Certified By:

BENCHMARK DATA

THIS PLAN AND TOPOGRAPHIC INFORMATION WAS BASED ON SURVEY FIELD WORK PERFORMED ON MARCH 5 AND MAY 21, 2025 UTILIZING CARLSON BRX-7 GPS RECEIVERS AND CARLSON CRX-5 ROBOTIC TOTAL STATION. COORDINATE SYSTEM IS NEW HAMPSHIRE STATE PLANE BASED ON A STATIC OBSERVATION REDUCED UTILIZING OPUS. ELEVATIONS ARE NAVD 1988.

STATE OF NEW HAMPSHIRE — LICENSED LAND SURVEYOR — No. 858 — RAYMOND T. CRITCH — SIGNATURE — 11/17/25

SURVEYOR CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS AN ERROR OF CLOSURE OF GREATER ACCURACY THAN ONE PART IN TEN THOUSAND (1:10,000)."

LICENSED LAND SURVEYOR — 11/17/25 DATE

STATE OF NEW HAMPSHIRE — GREGORY A. CROCKETT — No. 15125 — LICENSED LAND SURVEYOR — 12-31-25

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC – STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

COVER SHEET
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 100'	JUNE 12, 2025	SHEET 1 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503–22
JST	JST	GAC	692	28	

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ENGINEERS, SURVEYORS & LANDSCAPE ARCHITECTS
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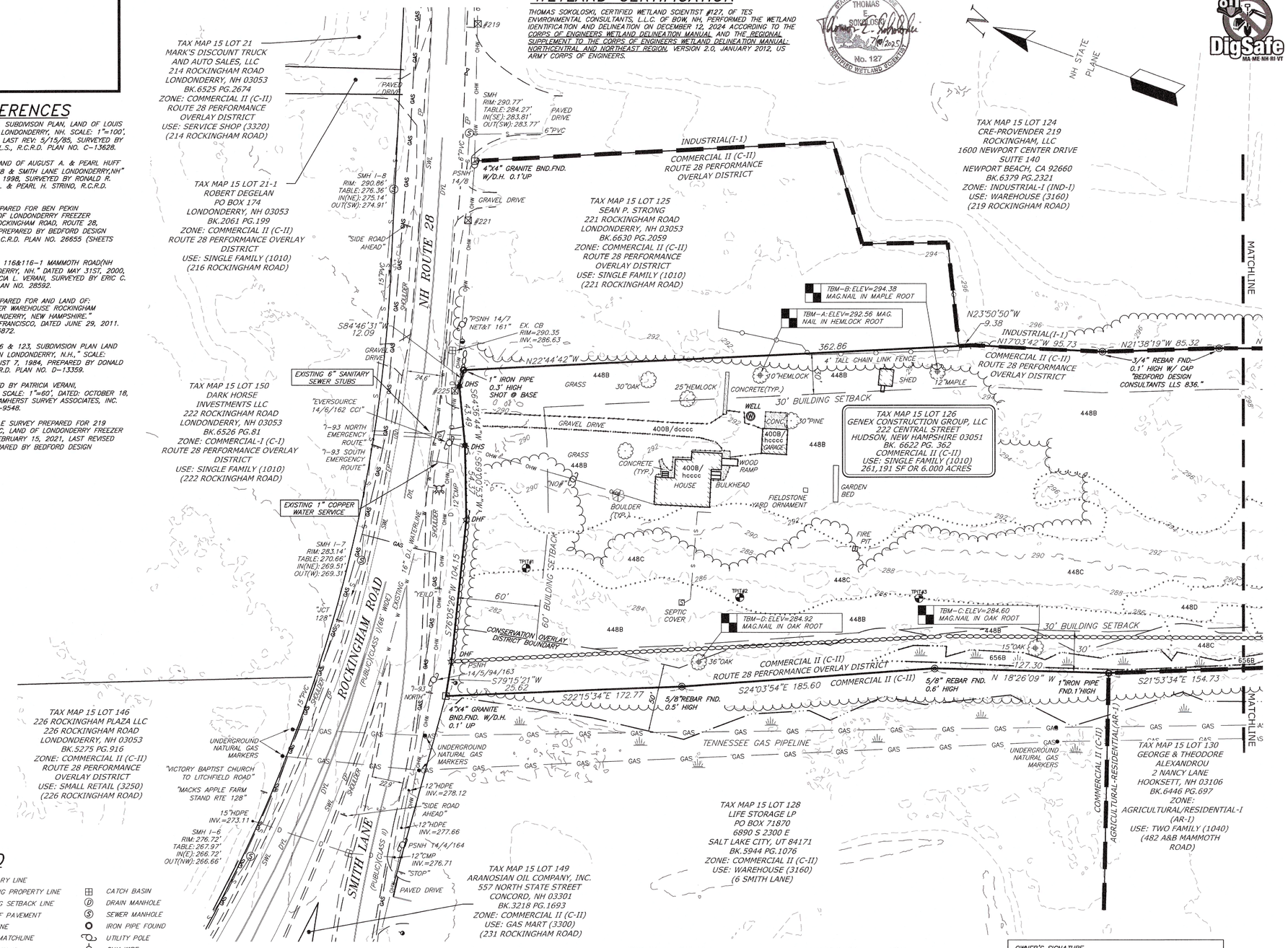
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STATE OF NEW HAMPSHIRE — THOMAS E. SOKOLOSKI — No. 127 — CERTIFIED WETLAND SCIENTIST — 7/10/2025

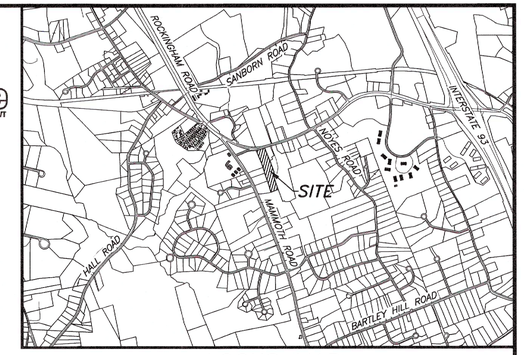
PLAN REFERENCES

1. "MAP 15 PARCEL 126, SUBDIVISON PLAN, LAND OF LOUIS & JANE KUSZEK," IN LONDONDERRY, NH. SCALE: 1"=100', DATED: MAY 1, 1985, LAST REV: 5/15/85, SURVEYED BY DONALD C. JENKS, L.L.S., R.C.R.D. PLAN NO. C-13628.
2. "BOUNDARY PLAN OFLAND OF AUGUST A. & PEARL HUFF STRINO NH ROUTE 128 & SMITH LANE LONDONDERRY,NH" DATED FEBRUARY 17, 1998, SURVEYED BY RONALD R. BURD, FOR AUGUST A. & PEARL H. STRINO, R.C.R.D. PLAN NO. 26257.
3. "BOUNDARY PLAN PREPARED FOR BEN PEKIN CORPORATION, LAND OF LONDONDERRY FREEZER WAREHOUSE, L.L.C. ROCKINGHAM ROAD, ROUTE 28, LONDONDERRY, NH." PREPARED BY BEDFORD DESIGN CONSULTANTS, INC. R.C.R.D. PLAN NO. 26655 (SHEETS 1&2).
4. "TAX MAP 15 – LOTS 116&116-1 MAMMOTH ROAD(NH ROUTE 128) LONDONDERRY, NH." DATED MAY 31ST, 2000, PREPARED FOR PATRICIA L. VERANI, SURVEYED BY ERIC C. MITCHELL, R.C.R.D. PLAN NO. 28592.
5. "BOUNDARY PLAN PREPARED FOR AND LAND OF: LONDONDERRY FREEZER WAREHOUSE ROCKINGHAM ROAD,(RTE.28) LONDONDERRY, NEW HAMPSHIRE." SURVEYED BY CRAIG FRANCISCO, DATED JUNE 29, 2011. R.C.R.D. PLAN NO. 36872.
6. "MAP 15 PARCELS 116 & 123, SUBDIVISION PLAN LAND OF PATRICIA VERANI IN LONDONDERRY, N.H.," SCALE: 1"=100', DATED: AUGUST 7, 1984, PREPARED BY DONALD C. JENKS, L.L.S. R.C.R.D. PLAN NO. D-13359.
7. "PLAN OF LAND OWNED BY PATRICIA VERANI, LONDONDERRY, N.H.," SCALE: 1"=60', DATED: OCTOBER 18, 1975, PREPARED BY AMHERST SURVEY ASSOCIATES, INC. R.C.R.D. PLAN NO. D-9548.
8. "ALTA/NSPS LAND TITLE SURVEY PREPARED FOR 219 ROCKINGHAM MZL, LLC, LAND OF LONDONDERRY FREEZER WAREHOUSE", DATA FEBRUARY 15, 2021, LAST REVISED 04/01/21, AND PREPARED BY BEDFORD DESIGN CONSULTANTS, INC.



LOCUS MAP

(SCALE: 1"=2500')



NOTES

1. THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS PRESENT ON TAX MAP 15 LOT 126, LOCATED AT 225 ROCKINGHAM ROAD IN LONDONDERRY, NH.
2. OWNER OF RECORD:
   TAX MAP 15 LOT 126
   GENEX CONSTRUCTION GROUP, LLC
   222 CENTRAL STREET
   HUDSON, NH 03051
   BOOK 6622 PAGE 362
3. LOT AREA: PARCEL AREA: 261,191 S.F. OR 6.000 AC.
4. THE PARCEL IS IN THE COMMERCIAL II (C–II) ZONING DISTRICT AND ROUTE 28 PERFORMANCE OVERLAY DISTRICT. DIMENSIONAL REQUIREMENTS ARE AS FOLLOWS:

MINIMUM LOT AREA:	1 ACRE
MINIMUM LOT FRONTAGE:	150'
MINIMUM FRONT SETBACK:	60'
MINIMUM SIDE SETBACK:	30'
MINIMUM REAR SETBACK:	30'
MAXIMUM BUILDING HEIGHT:	45'
MAXIMUM BUILDING COVERAGE:	25%
MINIMUM GREEN SPACE AREA:	33%
MAXIMUM IMPERVIOUS COVERAGE:	66%
GREEN SPACE BUFFER (ENCLOSED PERIMETER)	15'
GREEN SPACE BUFFER (ABUTTING PUBLIC R.O.W.)	30'

5. THE SITE IS CURRENTLY SERVICED BY MANCHESTER WATER WORKS AND TOWN SEWER SYSTEMS.
6. FIELD SURVEY PERFORMED ON MARCH 5 & MAY 21, 2025.
7. HORIZONTAL DATUM IS BASED ON STATE PLANE AND VERTICAL DATUM IS NAVD 1988 DERIVED FROM STATIS GPS OBSERVATIONS REDUCED BY OPUS. TOPOGRAPHIC INFORMATION IS BASED ON LIDAR DATA OBTAINED FROM LIDAR.UNH.EDU.
8. EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM), COMMUNITY NO. 330150C317E, EFFECTIVE DATE MAY 17, 2005, INDICATES THE SUBJECT PREMISES IS LOCATED WITHIN ZONE X, NOT A DESIGNATED FLOOD HAZARD AREA.
9. TAX MAP 15 LOT 126 IS SUBJECT TO THE FOLLOWING EASEMENT RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS:
   A. GAS TRANSMISSION LINE EASEMENT: BOOK 1237 PAGE 237.
      NO WIDTH OR LOCATION GIVEN.
      GAS LINE SHOWN IS APPROXIMATE BASED ON MARKERS.
10. REFER TO SHEET 3 FOR TEST PIT INFORMATION.

SURVEYOR CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS AN ERROR OF CLOSURE OF GREATER ACCURACY THAN ONE PART IN TEN THOUSAND (1:10,000)."

STATE OF NEW HAMPSHIRE — LICENSED LAND SURVEYOR — No. 858 — RAYMOND T. CRITCH — SIGNATURE — 11/17/25

LICENSED LAND SURVEYOR — 11/17/25 DATE

LEGEND

- BOUNDARY LINE
- ABUTTING PROPERTY LINE
- BUILDING SETBACK LINE
- EDGE OF PAVEMENT
- ZONE LINE
- SHEET MATCHLINE
- 290 — 10' CONTOUR
- 288 — 2' CONTOUR
- TREE LINE
- CHAIN LINK FENCE
- STONEWALL
- W — WATER LINE
- S — SEWER LINE
- OHW — OVERHEAD WIRES
- D — DRAINAGE LINE
- EDGE OF WETLANDS
- WETLAND BUFFER
- BUILDING
- ROADWAY MARKINGS
- SITE SPECIFIC SOIL LINE
- 448C — SITE SPECIFIC SOIL TYPE
- CATCH BASIN
- DRAIN MANHOLE
- SEWER MANHOLE
- IRON PIPE FOUND
- UTILITY POLE
- GUY WIRE
- GRANITE BOUND FOUND
- REBAR FOUND
- DRILL HOLE SET
- DRILL HOLE FOUND
- BENCHMARK
- MAILBOX
- WATER GATE VALVE
- TREES
- WATER SHUTOFF
- FIRE HYDRANT
- WETLAND SYMBOL
- SIGN

SOIL LEGEND

THIS DETAILED SITE-SPECIFIC SOIL MAP, PREPARED ON DECEMBER 12, 2024 BY THOMAS E. SOKOLOSKI, CERTIFIED SOIL SCIENTIST #063 OF TES ENVIRONMENTAL CONSULTANTS, L.L.C. IN BOW, NEW HAMPSHIRE, CONFORMS TO THE STANDARDS OF SSSNNE PUBLICATION NO. 3, VERSION 7.0, "SITE-SPECIFIC SOIL MAPPING STANDARDS FOR NEW HAMPSHIRE AND VERMONT", MARCH 2021. THIS MAP HAS BEEN PREPARED TO COMPLY WITH SOIL MAPPING REQUIREMENTS OF RSA 485 A: 17 AND NHDES ENV-WQ 1500, ALTERATION OF TERRAIN. SEE ACCOMPANYING REPORT FOR METHODOLOGY, MAP SYMBOL LEGEND, AND INTERPRETATIONS. USE OF THE MAP SYMBOL DENOMINATORS FOR DISTURBED OR ALTERED SOILS, WHERE GIVEN, IS AT THE DISCRETION OF THE CERTIFIED SOIL SCIENTIST.

THIS MAP PRODUCT IS WITHIN THE TECHNICAL STANDARDS OF THE NATIONAL COOPERATIVE SOIL SURVEY. IT IS A SPECIAL PURPOSE PRODUCT, INTENDED FOR USE IN SUPPORT OF A NEW HAMPSHIRE ALTERATION OF TERRAIN PERMIT APPLICATION. IT WAS PRODUCED BY A CERTIFIED SOIL SCIENTIST, AND IS NOT A PRODUCT OF THE USDA NATURAL RESOURCES CONSERVATION SERVICE. THERE IS A NARRATIVE REPORT THAT ACCOMPANIES THIS MAP.

STATE OF NEW HAMPSHIRE — THOMAS E. SOKOLOSKI — No. 063 — CERTIFIED SOIL SCIENTIST — 7/10/2025

SSSM SYM.*	MAP UNIT	DRAINAGE CLASS	HIS**
89B	CHATFIELD FINE SANDY LOAM	WELL	C
89C	CHATFIELD FINE SANDY LOAM	WELL	C
89D	CHATFIELD FINE SANDY LOAM	WELL	C
400B/dcccc	UDORTHENTS, SANDY	MODERATELY WELL	C
400B/hcccc	UDORTHENTS, SANDY	UNDETERMINABLE	C
448B	SCITUATE FINE SANDY LOAM	MODERATELY WELL	C
448C	SCITUATE FINE SANDY LOAM	MODERATELY WELL	C
448D	SCITUATE FINE SANDY LOAM	MODERATELY WELL	C
656B	RIDGEBURY FINE SANDY LOAM	POORLY	D

* REFER TO ACCOMPANYING REPORT FOR 5-UNIT SUPPLEMENTAL SYMBOL EXPLANATION.
** SSSNNE RECENTLY RECOMMENDED USING HYDROLOGIC SOIL INDEX INSTEAD OF NRCS HYDROLOGIC SOIL GROUP.

SLOPE PHASE:
0-8% B 8-15% C 15-25% D 25%+ E

OWNER'S SIGNATURE
NAME _____ DATE 8/4/25

SCALE: 1"=40'

40 0 20 40 80 160
GRAPHIC SCALE

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC – STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

EXISTING CONDITIONS PLAN
ROCKPOINT COMMONS

LOCATED AT:
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE
ROCKINGHAM COUNTY

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 40'	JUNE 12, 2025	SHEET 2 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503-22
T.N.B.	T.N.B.	R.T.C.	692	28	

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1. "MAP 15 PARCEL 126, SUBDIVISON PLAN, LAND OF LOUIS & JANE KUSZEK," IN LONDONDERRY, NH. SCALE: 1"=100', DATED: MAY 1, 1985, LAST REV: 5/15/85, SURVEYED BY DONALD C. JENKS, L.L.S., R.C.R.D. PLAN NO. C-13628.
2. "BOUNDARY PLAN OFLAND OF AUGUST A. & PEARL HUFF STRINO NH ROUTE 128 & SMITH LANE LONDONDERRY,NH" DATED FEBRUARY 17, 1998, SURVEYED BY RONALD R. BURD, FOR AUGUST A. & PEARL H. STRINO, R.C.R.D. PLAN NO. 26257.
3. "BOUNDARY PLAN PREPARED FOR BEN PEKIN CORPORATION, LAND OF LONDONDERRY FREEZER WAREHOUSE, L.L.C. ROCKINGHAM ROAD, ROUTE 28, LONDONDERRY, NH." PREPARED BY BEDFORD DESIGN CONSULTANTS, INC. R.C.R.D. PLAN NO. 26655 (SHEETS 1&2).
4. "TAX MAP 15 – LOTS 116&116-1 MAMMOTH ROAD(NH ROUTE 128) LONDONDERRY, NH." DATED MAY 31ST, 2000, PREPARED FOR PATRICIA L. VERANI, SURVEYED BY ERIC C. MITCHELL, R.C.R.D. PLAN NO. 28592.
5. "BOUNDARY PLAN PREPARED FOR AND LAND OF: LONDONDERRY FREEZER WAREHOUSE ROCKINGHAM ROAD,(RTE.28) LONDONDERRY, NEW HAMPSHIRE." SURVEYED BY CRAIG FRANCISCO, DATED JUNE 29, 2011. R.C.R.D. PLAN NO. 36872.
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WETLAND CERTIFICATION

THOMAS SOKOLOSKI, CERTIFIED WETLAND SCIENTIST #127, OF TES ENVIRONMENTAL CONSULTANTS, L.L.C. OF BOW, NH, PERFORMED THE WETLAND IDENTIFICATION AND DELINEATION ON DECEMBER 12, 2024 ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012, US ARMY CORPS OF ENGINEERS.

STATE OF NEW HAMPSHIRE — THOMAS E. SOKOLOSKI — No. 127 — CERTIFIED WETLAND SCIENTIST — 7/01/2025

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STATE OF NEW HAMPSHIRE — THOMAS E. SOKOLOSKI — No. 063 — CERTIFIED SOIL SCIENTIST — 7/01/2025

SSSM SYM.*	MAP UNIT	DRAINAGE CLASS	HIS**
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400B/dcccc	UDORTHENTS, SANDY	MODERATELY WELL	C
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448B	SCITUATE FINE SANDY LOAM	MODERATELY WELL	C
448C	SCITUATE FINE SANDY LOAM	MODERATELY WELL	C
448D	SCITUATE FINE SANDY LOAM	MODERATELY WELL	C
656B	RIDGEBURY FINE SANDY LOAM	POORLY	D

* REFER TO ACCOMPANYING REPORT FOR 5-UNIT SUPPLEMENTAL SYMBOL EXPLANATION.
** SSSNNE RECENTLY RECOMMENDED USING HYDROLOGIC SOIL INDEX INSTEAD OF NRCS HYDROLOGIC SOIL GROUP.

SLOPE PHASE:
0-8% B 8-15% C 15-25% D 25%+ E

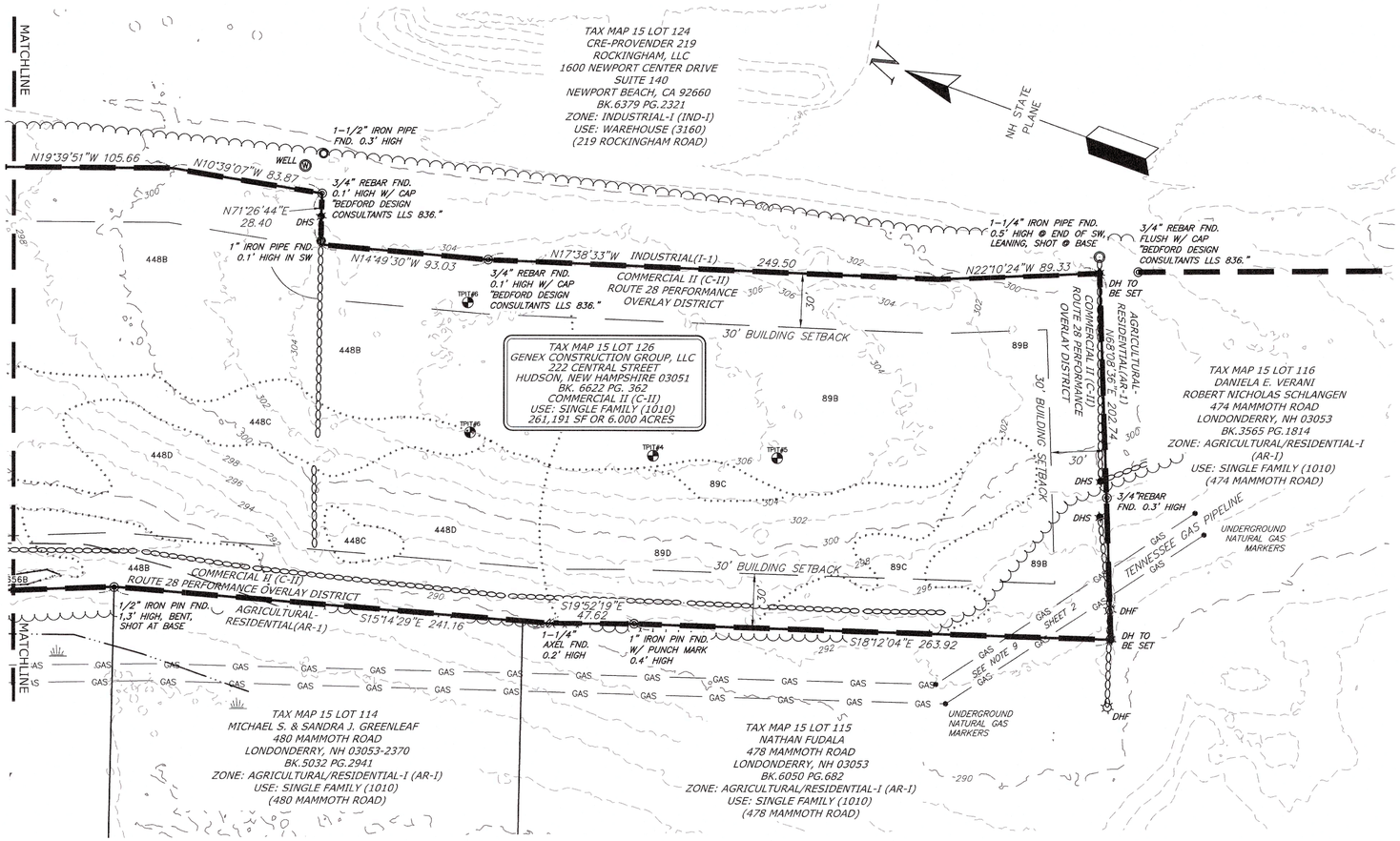


LOCUS MAP

(SCALE: 1"=2500')

LEGEND

- BOUNDARY LINE
- ABUTTING PROPERTY LINE
- BUILDING SETBACK LINE
- EDGE OF PAVEMENT
- ZONE LINE
- SHEET MATCHLINE
- 290 — 10' CONTOUR
- 288 — 2' CONTOUR
- TREE LINE
- CHAIN LINK FENCE
- STONEWALL
- W — WATER LINE
- S — SEWER LINE
- OHW — OVERHEAD WIRES
- D — DRAINAGE LINE
- EDGE OF WETLANDS
- WETLAND BUFFER
- BUILDING
- ROADWAY MARKINGS
- SITE SPECIFIC SOIL LINE
- 448C — SITE SPECIFIC SOIL TYPE
- CATCH BASIN
- DRAIN MANHOLE
- SEWER MANHOLE
- IRON PIPE FOUND
- UTILITY POLE
- GUY WIRE
- GRANITE BOUND FOUND
- REBAR FOUND
- DRILL HOLE SET
- DRILL HOLE FOUND
- BENCHMARK
- MAILBOX
- WATER GATE VALVE
- TREES
- WATER SHUTOFF
- FIRE HYDRANT
- WETLAND SYMBOL
- SIGN



TEST PITS

TEST PITS OBSERVED BY THOMAS E. SOKOLOSKI, CERTIFIED NH SOIL SCIENTIST #063 OF TES ENVIRONMENTAL CONSULTANTS, L.L.C. IN BOW, NEW HAMPSHIRE ON APRIL 24, 2025.

TEST PIT NO. 1

0-6	2.5Y 3/3	SANDY LOAM, GRANULAR, VERY FRIABLE, MANY FINE & MEDIUM ROOTS
6-29	10YR 5/6	SANDY LOAM, BLOCKY, FRIABLE, COMMON FINE & MEDIUM ROOTS
29-86	2.5Y 6/3	GRAVELLY LOAMY SAND, MASSIVE, FIRM, COMMON FINE ROOTS, 7.5YR5/8 CONCENTRATIONS AT 30"

ESHWT AT 30", ROOTS TO 36", OBSERVED WATER AT 76", NO LEDGE, RESTRICTIVE LAYER AT 29"

TEST PIT NO. 2

0-14	10YR 3/2	FINE SANDY LOAM, GRANULAR, VERY FRIABLE, MANY FINE & MEDIUM ROOTS
14-34	10YR 5/4	SANDY LOAM, BLOCKY, FRIABLE, COMMON FINE & MEDIUM ROOTS
34-74	2.5Y 6/3	GRAVELLY LOAMY SAND, MASSIVE, FIRM, FEW FINE ROOTS, 7.5YR5/8 CONCENTRATIONS AT 37"

ESHWT AT 37", ROOTS TO 40", OBSERVED WATER AT 65", NO LEDGE, RESTRICTIVE LAYER AT 34"

TEST PIT NO. 3

0-14	10YR 2/2	FINE SANDY LOAM, GRANULAR, VERY FRIABLE, MANY FINE & MEDIUM ROOTS
14-30	2.5Y 5/6	SANDY LOAM, BLOCKY, FRIABLE, COMMON FINE & MEDIUM ROOTS
30-74	2.5Y 5/4	GRAVELLY LOAMY SAND, MASSIVE, FIRM, FEW FINE ROOTS, 7.5YR4/6 CONCENTRATIONS AT 33"

ESHWT AT 33", ROOTS TO 38", OBSERVED WATER AT 62", NO LEDGE, RESTRICTIVE LAYER AT 30"

TEST PIT NO. 4

0-4	10YR 2/2	FINE SANDY LOAM, GRANULAR, VERY FRIABLE, MANY FINE & MEDIUM ROOTS
4-20	10YR 5/6	SANDY LOAM, BLOCKY, FRIABLE, COMMON FINE & MEDIUM ROOTS
20-22	2.5Y 5/2	SANDY LOAM, BLOCKY FRIABLE, COMMON FINE ROOTS

NO ESHWT AT 22", ROOTS TO 22", NO WATER AT 22", LEDGE AT 22", NO RESTRICTIVE LAYER

TEST PIT NO. 5

0-7	10YR 2/2	FINE SANDY LOAM, GRANULAR, VERY FRIABLE, MANY FINE & MEDIUM ROOTS
7-19	10YR 5/6	SANDY LOAM, BLOCKY, FRIABLE, COMMON FINE & MEDIUM ROOTS
19-23	2.5Y 5/2	SANDY LOAM, BLOCKY FRIABLE, COMMON FINE ROOTS

NO ESHWT AT 23", ROOTS TO 23", NO WATER AT 23", LEDGE AT 23", NO RESTRICTIVE LAYER

TEST PIT NO. 6

0-8	10YR 2/2	FINE SANDY LOAM, GRANULAR, VERY FRIABLE, MANY FINE & MEDIUM ROOTS
8-21	10YR 5/6	SANDY LOAM, BLOCKY, FRIABLE, COMMON FINE & MEDIUM ROOTS
21-56	2.5Y 6/2	GRAVELLY LOAMY SAND, MASSIVE, FIRM, FEW FINE ROOTS

NO ESHWT AT 56", ROOTS TO 34", NO WATER AT 56", NO LEDGE AT 56", RESTRICTIVE LAYER AT 21"

TEST PIT NO. 7

0-8	10YR 3/3	FINE SANDY LOAM, GRANULAR, VERY FRIABLE, MANY FINE & MEDIUM ROOTS
8-33	2.5Y 5/6	SANDY LOAM, BLOCKY, FRIABLE, COMMON FINE & MEDIUM ROOTS
33-60	2.5Y 6/3	LOAMY SAND, MASSIVE, FIRM, FEW FINE ROOTS

NO ESHWT AT 60", ROOTS TO 42", NO WATER AT 60", NO LEDGE AT 60", RESTRICTIVE LAYER AT 33"

OWNER'S SIGNATURE
NAME Mark Stiles DATE 8/4/25

SCALE: 1"=40'

40 0 20 40 80 160
GRAPHIC SCALE

SURVEYOR CERTIFICATION

"I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS AN ERROR OF CLOSURE OF GREATER ACCURACY THAN ONE PART IN TEN THOUSAND (1:10,000)."

STATE OF NEW HAMPSHIRE — LICENSED LAND SURVEYOR — No. 858 — RAYMOND T. CRITCH — SIGNATURE — 11/17/25

LICENSED LAND SURVEYOR 11/17/25 DATE

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC – STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

EXISTING CONDITIONS PLAN
ROCKPOINT COMMONS

LOCATED AT:
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE
ROCKINGHAM COUNTY

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 40'	JUNE 12, 2025	SHEET 3 OF 33

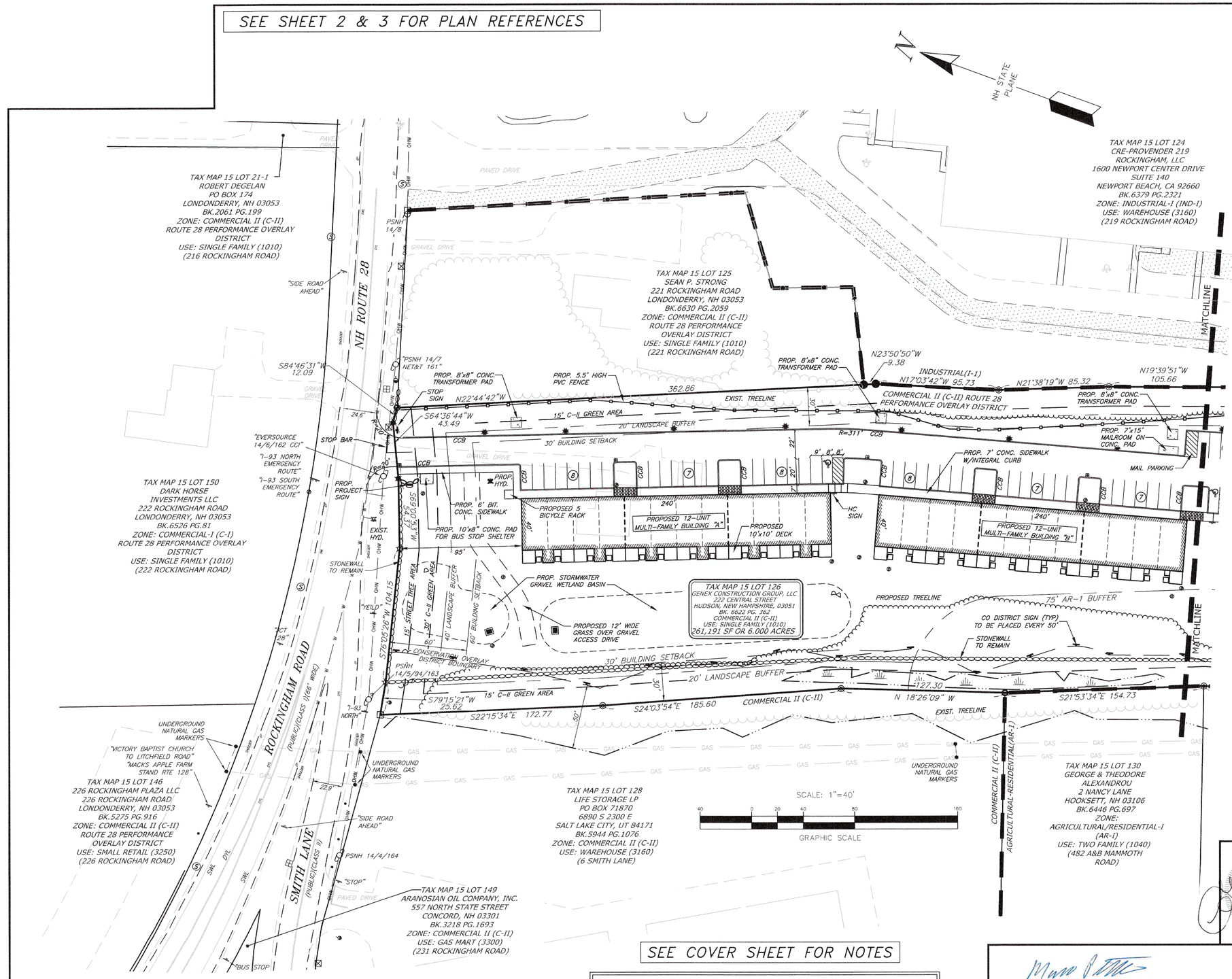
DESIGN:	DRAWN:	CHECKED:	FB:	PG:	
J.S.T.	T.N.B.	R.T.C.	692	28	503-22

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SEE SHEET 2 & 3 FOR PLAN REFERENCES





VICINITY MAP
(SCALE: 1"=2500')

LEGEND

- BOUNDARY/PROPERTY LINE
- ABUTTING PROPERTY LINE
- SETBACK LINE
- EDGE OF JURISDICTIONAL WETLANDS
- ZONE LINE
- SHEET MATCHLINE
- WETLAND SYMBOL
- WETLAND BUFFER
- EXISTING WATERWAY
- PROPOSED TREE LINE
- EXISTING TREE LINE
- EXISTING ROADWAY
- PROPOSED ROADWAY
- PROPOSED CURBING
- EXISTING CURBING
- EXISTING STOCKADE FENCE
- PROPOSED PVC FENCE
- EXISTING CHAINLINK FENCE
- OHW — EXISTING OVERHEAD UTILITIES
- EXISTING GUARDRAIL
- PROPOSED BUILDING
- EXISTING UTILITY POLE
- EXISTING GUY WIRE
- REBAR FOUND
- STONE BOUND FOUND
- REBAR TO BE SET
- GRANITE BOUND TO BE SET
- IRON PIPE FOUND
- BENCHMARK SET
- EXISTING LIGHT POLE
- PROPOSED LIGHT POLE
- SEWER MANHOLE
- DRAIN MANHOLE
- (3) #OF PARKING SPACES
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING HYDRANT
- PROPOSED HYDRANT

BENCHMARK DATA

THIS PLAN AND TOPOGRAPHIC INFORMATION WAS BASED ON SURVEY FIELD WORK PERFORMED ON MARCH 5 AND MAY 21, 2025 UTILIZING CARLSON BRX-7 GPS RECEIVERS AND CARLSON CRX-5 ROBOTIC TOTAL STATION. COORDINATE SYSTEM IS NEW HAMPSHIRE STATE PLANE BASED ON A STATIC OBSERVATION REDUCED UTILIZING OPUS. ELEVATIONS ARE NAVD 1988.

STATE OF NEW HAMPSHIRE — LICENSED LAND SURVEYOR — No. 858 — RAYMOND T. CRITCH — SIGNATURE — 11/17/25

SURVEYOR CERTIFICATION

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LICENSED LAND SURVEYOR — 11/17/25 DATE

WETLAND CERTIFICATION

THOMAS SOKOLOSKI, CERTIFIED WETLAND SCIENTIST #127, OF TES ENVIRONMENTAL CONSULTANTS, L.L.C. OF BOW, NH, PERFORMED THE WETLAND IDENTIFICATION AND DELINEATION ON DECEMBER 12, 2024 ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTH/CENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012, US ARMY CORPS OF ENGINEERS.

STATE OF NEW HAMPSHIRE — THOMAS E SOKOLOSKI — No. 127 — 7/9/2025 — CERTIFIED WETLAND SCIENTIST

SEE COVER SHEET FOR NOTES

Approved by the Londonderry, NH Planning Board for Phase _____
on Date: _____

Certified By:

_____

_____

_____
OWNER'S SIGNATURE

8/4/25
DATE

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC - STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
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9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

STATE OF NEW HAMPSHIRE — JAMES S. VOLK — No. 15815 — LICENSED PROFESSIONAL ENGINEER — 12-31-25

TAX MAP 15 LOT 126

SITE PLAN
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 40'	JUNE 12, 2025	SHEET 4 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	
JST	JST	GAC	692	28	503-22

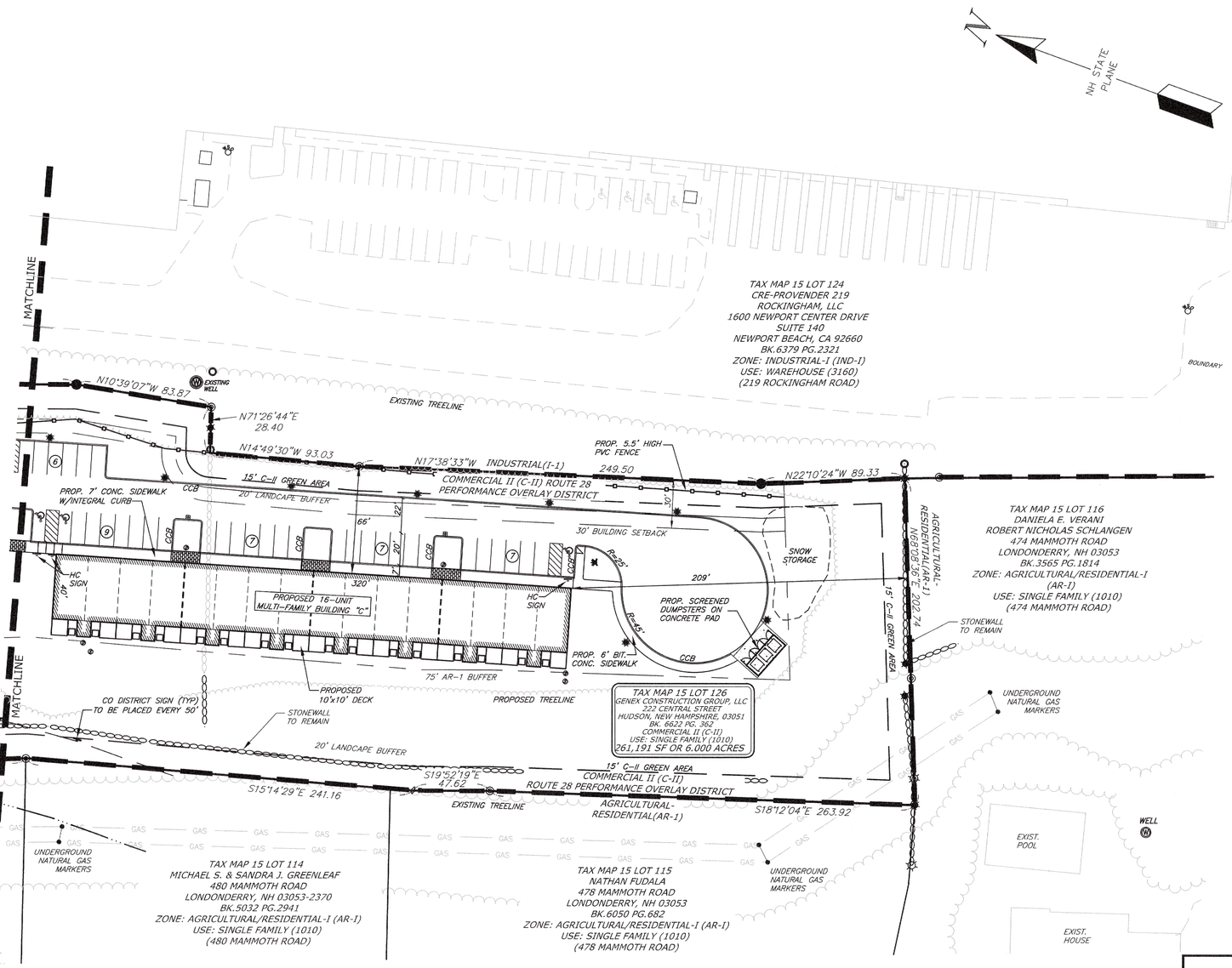
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SCALE: 1"=40'

GRAPHIC SCALE (40 0 20 40 80 160)



VICINITY MAP

(SCALE: 1"=2500')

LEGEND

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- ABUTTING PROPERTY LINE
- SETBACK LINE
- EDGE OF JURISDICTIONAL WETLANDS
- ZONE LINE
- SHEET MATCHLINE
- WETLAND SYMBOL
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- EXISTING STOCKADE FENCE
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- REBAR FOUND
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- REBAR TO BE SET
- GRANITE BOUND TO BE SET
- IRON PIPE FOUND
- BENCHMARK SET
- EXISTING LIGHT POLE
- PROPOSED LIGHT POLE
- SEWER MANHOLE
- DRAIN MANHOLE
- # OF PARKING SPACES
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING HYDRANT
- PROPOSED HYDRANT

BENCHMARK DATA

THIS PLAN AND TOPOGRAPHIC INFORMATION WAS BASED ON SURVEY FIELD WORK PERFORMED ON MARCH 5 AND MAY 21, 2025 UTILIZING CARLSON BRX-7 GPS RECEIVERS AND CARLSON CRX-5 ROBOTIC TOTAL STATION. COORDINATE SYSTEM IS NEW HAMPSHIRE STATE PLANE BASED ON A STATIC OBSERVATION REDUCED UTILIZING OPUS. ELEVATIONS ARE NAVD 1988.

SURVEYOR CERTIFICATION

STATE OF NEW HAMPSHIRE — No. 858 — RAYMOND T. CRITCH — LICENSED LAND SURVEYOR — SIGNATURE — 11/17/25

"I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS AN ERROR OF CLOSURE OF GREATER ACCURACY THAN ONE PART IN TEN THOUSAND (1:10,000)."

Raymond T. Critch — 11/17/25

LICENSED LAND SURVEYOR — DATE

WETLAND CERTIFICATION

STATE OF NEW HAMPSHIRE — THOMAS E SOKOLOSKI — No. 127 — CERTIFIED WETLAND SCIENTIST — 7/8/2025

THOMAS SOKOLOSKI, CERTIFIED WETLAND SCIENTIST #127, OF TES ENVIRONMENTAL CONSULTANTS, L.L.C. OF BOW, NH, PERFORMED THE WETLAND IDENTIFICATION AND DELINEATION ON DECEMBER 12, 2024 ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2.0, JANUARY 2012, US ARMY CORPS OF ENGINEERS.

SEE COVER SHEET FOR NOTES

Approved by the Londonderry, NH Planning Board for Phase _____
on Date: _____

Certified By:

_____

_____

STATE OF NEW HAMPSHIRE — GREGORY A. CUNNINGHAM JR. — No. 8818 — LICENSED PROFESSIONAL ENGINEER — 8/7/25

_____ 8/4/25
OWNER'S SIGNATURE — DATE

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC - STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

SITE PLAN

ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 40'	JUNE 12, 2025				SHEET 5 OF 33
DESIGN: JST	DRAWN: JST	CHECKED: GAC	FB: 692	PG: 28	503-22

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REFER TO SHEET 7 FOR GRADING NOTES

811 DigSafe MA-ME-NH-RI-VT

LEGEND

- PROPOSED CONTOUR
- EXISTING CONTOUR
- PROPOSED SPOT GRADE
- EXISTING SPOT GRADE
- STATION NUMBERING FOR DRIVEWAY PROFILE
- DRAINAGE FLOW ARROW
- TEST PIT
- PROPOSED SILT FENCE
- PROPOSED RIP RAP
- PROPOSED GAS LINE
- EXISTING GAS LINE
- PROPOSED WATER LINE
- EXISTING WATER LINE
- PROPOSED UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING OVERHEAD UTILITIES
- PROPOSED DRAIN LINE
- EXISTING DRAIN LINE
- PROPOSED ROOF DRAIN
- PROPOSED SEWER LINE
- EXISTING SEWER LINE
- EXISTING WATER SHUTOFF
- PROPOSED WATER SHUTOFF
- EXISTING HYDRANT
- PROPOSED HYDRANT
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- SEWER MANHOLE
- DRAIN MANHOLE
- EXISTING UTILITY POLE
- EXISTING GUY WIRE
- EXISTING LIGHT POLE
- PROPOSED LIGHT POLE
- EXISTING STOCKADE FENCE
- PROPOSED PVC FENCE
- EXISTING CHAINLINK FENCE
- EXISTING GUARDRAIL
- EDGE OF JURISDICTIONAL WETLANDS
- WETLAND SYMBOL
- WETLAND BUFFER
- PROPOSED TREE LINE
- EXISTING TREE LINE
- ZONE LINE
- SHEET MATCHLINE

SCALE: 1"=20'

GRAPHIC SCALE

TEST PITS

TEST PIT NO. 1

0–6	2.5Y 3/3	SANDY LOAM, GRANULAR, VERY FRIABLE, MANY FINE & MEDIUM ROOTS	
6–29	10YR 5/6	SANDY LOAM, BLOCKY, FRIABLE, COMMON FINE & MEDIUM ROOTS	
29–86	2.5Y 6/3	GRAVELLY LOAMY SAND, MASSIVE, FIRM, COMMON FINE ROOTS, 7.5YR5/8 CONCENTRATIONS AT 30"	

ESHWT AT 30", ROOTS TO 36", OBSERVED WATER AT 76", NO LEDGE, RESTRICTIVE LAYER AT 29"

TEST PIT NO. 2

0–14	10YR 3/2	FINE SANDY LOAM, GRANULAR, VERY FRIABLE, MANY FINE & MEDIUM ROOTS	
14–34	10YR 5/4	SANDY LOAM, BLOCKY, FRIABLE, COMMON FINE & MEDIUM ROOTS	
34–74	2.5Y 6/3	GRAVELLY LOAMY SAND, MASSIVE, FIRM, FEW FINE ROOTS, 7.5YR5/6 CONCENTRATIONS AT 37"	

ESHWT AT 37", ROOTS TO 40", OBSERVED WATER AT 65", NO LEDGE, RESTRICTIVE LAYER AT 34"

TEST PIT NO. 3

0–14	10YR 2/2	FINE SANDY LOAM, GRANULAR, VERY FRIABLE, MANY FINE & MEDIUM ROOTS	
14–30	2.5Y 5/6	SANDY LOAM, BLOCKY, FRIABLE, COMMON FINE & MEDIUM ROOTS	
30–74	2.5Y 5/4	GRAVELLY LOAMY SAND, MASSIVE, FIRM, FEW FINE ROOTS, 7.5YR4/6 CONCENTRATIONS AT 33"	

ESHWT AT 33", ROOTS TO 38", OBSERVED WATER AT 62", NO LEDGE, RESTRICTIVE LAYER AT 30"

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC – STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

STATE OF NEW HAMPSHIRE — BRIAN J. LEVESQUE JR. — 15815 — LICENSED PROFESSIONAL ENGINEER

12-31-25

TAX MAP 15 LOT 126

GRADING PLAN
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 20'	JUNE 12, 2025	SHEET 6 OF 33

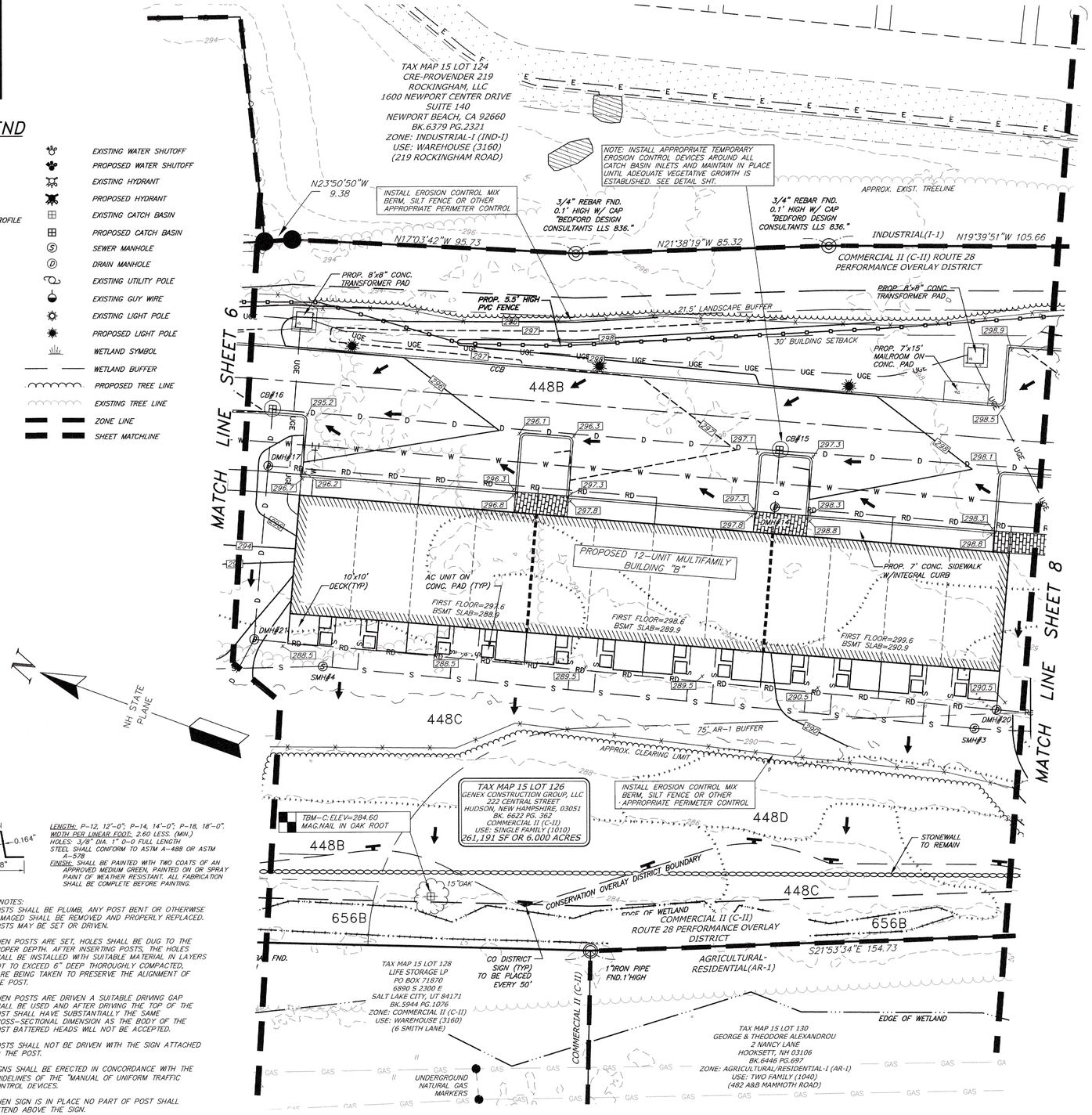
DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503–22
JST	JST	GAC	692	28	

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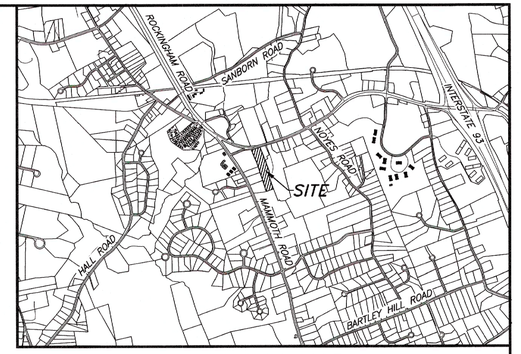
LEGEND

- PROPOSED CONTOUR (290)
- EXISTING CONTOUR (290)
- PROPOSED SPOT GRADE (430.3)
- EXISTING SPOT GRADE (282.6x)
- STATION NUMBERING FOR DRIVEWAY PROFILE (2+00)
- DRAINAGE FLOW ARROW
- TEST PIT (TP#19)
- PROPOSED SILT FENCE
- PROPOSED RIP RAP
- PROPOSED GAS LINE (GAS)
- EXISTING GAS LINE (GAS)
- PROPOSED WATER LINE (W)
- EXISTING WATER LINE (W)
- PROPOSED UNDERGROUND ELECTRIC (UGE)
- EXISTING UNDERGROUND ELECTRIC (E)
- EXISTING OVERHEAD UTILITIES (OHW)
- PROPOSED DRAIN LINE (D)
- EXISTING DRAIN LINE (D)
- PROPOSED ROOF DRAIN (RD)
- PROPOSED SEWER LINE (S)
- EXISTING SEWER LINE (S)
- EXISTING STOCKADE FENCE
- PROPOSED PVC FENCE
- EXISTING CHAINLINK FENCE
- EXISTING GUARDRAIL
- EDGE OF JURISDICTIONAL WETLANDS
- EXISTING WATER SHUTOFF
- PROPOSED WATER SHUTOFF
- EXISTING HYDRANT
- PROPOSED HYDRANT
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- SEWER MANHOLE (S)
- DRAIN MANHOLE (D)
- EXISTING UTILITY POLE
- EXISTING GUY WIRE
- EXISTING LIGHT POLE
- PROPOSED LIGHT POLE
- WETLAND SYMBOL
- WETLAND BUFFER
- PROPOSED TREE LINE
- EXISTING TREE LINE
- ZONE LINE
- SHEET MATCHLINE



SCALE: 1"=20'

GRAPHIC SCALE (20 0 10 20 40 80)



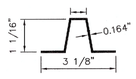
VICINITY MAP

SCALE: 1"=2500'

GRADING NOTES:

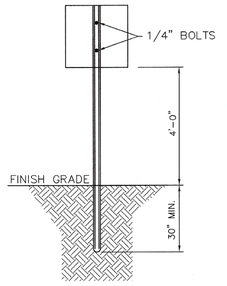
1. THE PURPOSE OF THIS PLAN IS TO SHOW THE GRADING, DRAINAGE, AND UTILITY IMPROVEMENTS ASSOCIATED WITH THE PROPOSED SITE PLAN
2. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF LONDONDERRY AND SHALL BE BUILT IN A WORKMAN LIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, LATEST EDITION, ARE HEREBY INCORPORATED BY REFERENCE.
3. ALL DRAINAGE PIPE SHALL BE INSTALLED FOLLOWING MANUFACTURERS INSTALLATION INSTRUCTIONS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS. PRIOR TO THE START OF ANY CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROXIMATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 1-800-344-7233 AT LEAST 72 HOURS BEFORE DIGGING.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION AND/OR PROTECTION OF ALL UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE WITH THE OWNER OF SAID UTILITIES,
6. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS CONSTRUCTION WORK AT ALL TIMES.
7. THE CONTRACTOR SHALL THOROUGHLY SECURE ALL EXCAVATIONS ON A DAILY BASIS AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
8. CONTRACTOR SHALL VERIFY T.B.M. ELEVATION PRIOR TO THE START OF CONSTRUCTION.
9. ALL PROPOSED AND EXISTING CATCH BASINS WHICH MAY RECEIVE STORMWATER RUNOFF FROM THE DEVELOPMENT DURING CONSTRUCTION, SHALL BE OUTFITTED WITH INLET PROTECTION.
10. THE CONTRACTOR SHALL DISPOSE OF ANY UNSUITABLE MATERIAL FOUND ON-SITE (I.E. TRASH, STUMPS, ETC.) IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL REGULATIONS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL DEVISES AS SHOWN IN THE PLAN SET THROUGHOUT THE DURATION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE N.H.D.E.S. STANDARDS. IF DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE CONTRACTOR SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE CITY/TOWN.
12. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THIS PLAN SET, PREPARED BY BEDFORD DESIGN CONSULTANTS, INC., DO NOT EXTEND TO OR INCLUDE METHODS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR AND/OR ENGINEER AS INCLUDED IN THE PLAN SET DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE AND/OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REQUIREMENTS.
13. ALL TRAFFIC CONTROL AND TEMPORARY CONSTRUCTION SIGNAGE ARRANGEMENTS, ACCEPTABLE TO N.H.D.O.T., LOCAL CITY/TOWN POLICE DEPARTMENT, AND DEPARTMENT OF PUBLIC WORKS SHALL BE EMPLOYED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
14. THE SITE SHALL BE GRADED SO ALL FINISHED PAVEMENT HAS POSITIVE DRAINAGE. DRIVEWAYS SHALL BE GRADED AWAY FROM GARAGES TO PREVENT SURFACE RUNOFF FROM ENTERING THE GARAGE. ALL FRONT, SIDE AND REAR LAWN AREAS SHALL BE GRADED TO DIRECT SURFACE RUNOFF AWAY FROM THE PROPOSED BUILDINGS.
15. CONTRACTOR TO PROVIDE FINISHED PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING AND GARAGE ENTRANCES.
16. THE PROPERTY OWNERS OR ASSIGNED QUALIFIED PROFESSIONAL WILL CONDUCT THE OPERATION AND MAINTENANCE PROGRAM SET FORTH IN THE LONG TERM MAINTENANCE PLAN INSPECTION & MAINTENANCE (I&M) MANUAL FOR STORMWATER BEST MANAGEMENT PRACTICES. PROPERTY OWNERS WILL ENSURE THAT INSPECTIONS AND RECORD KEEPING ARE TIMELY AND ACCURATE, AND THAT CLEANING AND MAINTENANCE ARE PERFORMED AT LEAST ON A BI-ANNUAL BASIS. INSPECTION & MAINTENANCE LOG FORMS SHALL INCLUDE THE DATE AND THE AMOUNT OF THE LAST SIGNIFICANT STORM EVENT IN EXCESS OF 2.5" OF RAIN IN A 24-HOUR PERIOD, PHYSICAL CONDITIONS OF THE STRUCTURES, DEPTH OF SEDIMENT IN STRUCTURES, EVIDENCE OF OVERTOPPING OR DEBRIS BLOCKAGE AND MAINTENANCE REQUIRED OF EACH STRUCTURE. RECORDS OF MAINTENANCE AND APPROPRIATE INSPECTION & MAINTENANCE LOG SHEETS SHALL BE KEPT BY THE OWNER INDICATING ALL WORK AND INSPECTIONS. THESE REPORTS WILL BE SENT TO THE LONDONDERRY ENGINEERING OFFICE ON A YEARLY BASIS. ALL STORMWATER MANAGEMENT STRUCTURES WILL BE INSPECTED TWO TIMES PER YEAR, WITH CLEANING TYPICALLY OCCURRING IN APRIL AND OCTOBER AND POSSIBLY MORE OFTEN, AS SITE CONDITIONS WARRANT. CONCURRENT WITH INSPECTION AND CLEANING, ALL LITTER SHALL BE PICKED UP AND REMOVED FROM THE PARKING AREAS, LAWN, LANDSCAPED AND WOODED AREAS.

PROTECTED CONSERVATION AREA
DO NOT DISTURB SOILS OR VEGETATION
VIOLATORS WILL BE PROSECUTED
FOR INFORMATION OR TO REPORT A VIOLATION CALL THE CODE ENFORCEMENT OFFICER AT 432-1100 EXT 125



LENGTH: P-12, 12'-0"; P-14, 14'-0"; P-18, 18'-0".
WIDTH PER LINEAR FOOT: 2.60 LESS. (MIN.)
HOLES: 3/8" DIA. 1"O-O FULL LENGTH
STEEL SHALL CONFORM TO ASTM A-488 OR ASTM A-578
FINISH: SHALL BE PAINTED WITH TWO COATS OF AN APPROVED MEDIUM GREEN, PAINTED ON OR SPRAY PAINT OF WEATHER RESISTANT. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

POST NOTES:
1. POSTS SHALL BE PLUMB, ANY POST BENT OR OTHERWISE DAMAGED SHALL BE REMOVED AND PROPERLY REPLACED. POSTS MAY BE SET OR DRIVEN.
2. WHEN POSTS ARE SET, HOLES SHALL BE DUG TO THE PROPER DEPTH. AFTER INSERTING POSTS, THE HOLES SHALL BE INSTALLED WITH SUITABLE MATERIAL IN LAYERS NOT TO EXCEED 6" DEEP THOROUGHLY COMPACTED, CARE BEING TAKEN TO PRESERVE THE ALIGNMENT OF THE POST.
3. WHEN POSTS ARE DRIVEN A SUITABLE DRIVING CAP SHALL BE USED AND AFTER DRIVING THE TOP OF THE POST SHALL HAVE SUBSTANTIALLY THE SAME CROSS-SECTIONAL DIMENSION AS THE BODY OF THE POST BATTERED HEADS WILL NOT BE ACCEPTED.
4. POSTS SHALL NOT BE DRIVEN WITH THE SIGN ATTACHED TO THE POST.
5. SIGNS SHALL BE ERECTED IN CONCORDANCE WITH THE GUIDELINES OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
6. WHEN SIGN IS IN PLACE NO PART OF POST SHALL EXTEND ABOVE THE SIGN.
7. DIMENSIONS SHOWN ARE NOMINAL.
8. ALTERNATE SECTIONS MUST BE APPROVED PRIOR TO USE.



CONSERVATION AREA SIGN DETAIL

NOT TO SCALE

12-31-25	PER DRC - STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A
DATE	DESCRIPTION	BY	REV.

12-31-25

STATE OF NEW HAMPSHIRE GREGORY A. CUM JR. No. 9515 LICENSED PROFESSIONAL ENGINEER

TAX MAP 15 LOT 126

GRADING PLAN

ROCKPOINT COMMONS

225 ROCKINGHAM ROAD

LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 20'	JUNE 12, 2025	SHEET 7 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	
JST	JST	GAC	692	28	503-22

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REFER TO SHEET 7 FOR GRADING NOTES

NH STATE PLANE

MATCH LINE SHEET 7

TAX MAP 15 LOT 124
CRE-PROVENDER 219 ROCKINGHAM, LLC
1600 NEWPORT CENTER DRIVE
SUITE 140
NEWPORT BEACH, CA 92660
BK.6379 PG.2321
ZONE: INDUSTRIAL-I (IND-1)
USE: WAREHOUSE (3160)
(219 ROCKINGHAM ROAD)

1-1/2" IRON PIPE FND. 0.3' HIGH

EXISTING WELL

PROP. 5.5' HIGH PVC FENCE

N10°39'07"W 83.87

3/4" REBAR FND. 0.1' HIGH W/ CAP "BEDFORD DESIGN CONSULTANTS LLS 836."

DHS

N71°26'44"E 28.40

1" IRON PIPE FND. 0.1' HIGH IN SW

INSTALL EROSION CONTROL MIX BERM, SILT FENCE OR OTHER APPROPRIATE PERIMETER CONTROL

NOTE: INSTALL APPROPRIATE TEMPORARY EROSION CONTROL DEVICES AROUND ALL CATCH BASIN INLETS AND MAINTAIN IN PLACE UNTIL ADEQUATE VEGETATIVE GROWTH IS ESTABLISHED. SEE DETAIL SHT.

3/4" REBAR FND. 0.1' HIGH W/ CAP "BEDFORD DESIGN CONSULTANTS LLS 836."

N14°49'30"W 93.03

PROP. 5.5' HIGH PVC FENCE

N17°38'33"W 249.50

APPROX. EXIST. TREELINE

1-1/4" IRON PIPE FND. 0.5' HIGH @ END OF SW, LEANING, SHOT @ BASE

INDUSTRIAL(I-1)

N22°10'24"W 89.33

DRILL HOLE TO BE SET

3/4" REBAR FND. FLUSH W/ CAP "BEDFORD DESIGN CONSULTANTS LLS 836."

COMMERCIAL II (C-II) ROUTE 28 PERFORMANCE OVERLAY DISTRICT

AGRICULTURAL-RESIDENTIAL(AR-1)

21.5' LANDSCAPE BUFFER

30' BUILDING SETBACK

448B

448C

448D

89B

89C

89D

CB#13

CB#11

DMH#12

DMH#10

DMH#18

SMH#2

SMH#1

STONEWALL TBR

PROPOSED 16-UNIT MULTIFAMILY BUILDING "C"

FIRST FLOOR=301.2
BSMT SLAB=292.5

FIRST FLOOR=302.2
BSMT SLAB=293.5

FIRST FLOOR=303.2
BSMT SLAB=294.5

FIRST FLOOR=304.2
BSMT SLAB=295.5

PROP. 7' CONC. SIDEWALK W/INTEGRAL CURB

AC UNIT ON CONC. PAD (TYP)

10'x10' DECK(TYP)

PROP. HYD.

TEMP. TOPSOIL STORAGE AREA

PROP. 6' BIT. CONC. SIDEWALK

75' AR-1 BUFFER

PROP. SCREENED DUMPSTERS ON CONCRSTE PAD

STONEWALL TO REMAIN

INSTALL EROSION CONTROL MIX BERM, SILT FENCE OR OTHER APPROPRIATE PERIMETER CONTROL

TAX MAP 15 LOT 126
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, NEW HAMPSHIRE, 03051
BK. 6622 PG. 362
COMMERCIAL II (C-II)
USE: SINGLE FAMILY (1010)
261,191 SF OR 6.000 ACRES

TAX MAP 15 LOT 116
DANIELA E. VERANI
ROBERT NICHOLAS SCHLANGEN
474 MAMMOTH ROAD
LONDONDERRY, NH 03053
BK.3565 PG.1814
ZONE: AGRICULTURAL/RESIDENTIAL-I (AR-1)
USE: SINGLE FAMILY (1010)
(474 MAMMOTH ROAD)

N68°08'36"E 202.74

DRILL HOLE TO BE SET

3/4"REBAR FND. 0.3' HIGH

UNDERGROUND NATURAL GAS MARKERS

APPROX. EXIST. TREELINE

CONSERVATION OVERLAY DISTRICT BOUNDARY

1/2" IRON PIN FND. 1.3' HIGH, BENT, SHOT AT BASE

S15°14'29"E 241.16

1-1/4" AXEL FND. 0.2' HIGH

S19°52'19"E 47.62

1" IRON PIN FND. W/ PUNCH MARK 0.4' HIGH

S18°12'04"E 263.92

TAX MAP 15 LOT 114
MICHAEL S. & SANDRA J. GREENLEAF
480 MAMMOTH ROAD
LONDONDERRY, NH 03053-2370
BK.5032 PG.2941
ZONE: AGRICULTURAL/RESIDENTIAL-1 (AR-1)
USE: SINGLE FAMILY (1010)
(480 MAMMOTH ROAD)

TAX MAP 15 LOT 115
NATHAN FUDALA
478 MAMMOTH ROAD
LONDONDERRY, NH 03053
BK.6050 PG.682
ZONE: AGRICULTURAL/RESIDENTIAL-1 (AR-1)
USE: SINGLE FAMILY (1010)
(478 MAMMOTH ROAD)

UNDERGROUND NATURAL GAS MARKERS

EDGE OF WETLAND

TEST PITS

TEST PIT NO. 4

0–4	10YR 2/2	FINE SANDY LOAM, GRANULAR, VERY FRIABLE, MANY FINE & MEDIUM ROOTS
4–20	10YR 5/6	SANDY LOAM, BLOCKY, FRIABLE, COMMON FINE & MEDIUM ROOTS
20–22	2.5Y 5/2	SANDY LOAM, BLOCKY FRIABLE, COMMON FINE ROOTS

NO ESHWT AT 22", ROOTS TO 22", NO WATER AT 22", LEDGE AT 22", NO RESTRICTIVE LAYER

TEST PIT NO. 5

0–7	10YR 2/2	FINE SANDY LOAM, GRANULAR, VERY FRIABLE, MANY FINE & MEDIUM ROOTS
7–19	10YR 5/6	SANDY LOAM, BLOCKY, FRIABLE, COMMON FINE & MEDIUM ROOTS
19–23	2.5Y 5/2	SANDY LOAM, BLOCKY FRIABLE, COMMON FINE ROOTS

NO ESHWT AT 23", ROOTS TO 23", NO WATER AT 23", LEDGE AT 23", NO RESTRICTIVE LAYER

TEST PIT NO. 6

0–8	10YR 2/2	FINE SANDY LOAM, GRANULAR, VERY FRIABLE, MANY FINE & MEDIUM ROOTS
8–21	10YR 5/6	SANDY LOAM, BLOCKY, FRIABLE, COMMON FINE & MEDIUM ROOTS
21–56	2.5Y 6/2	GRAVELLY LOAMY SAND, MASSIVE, FIRM, FEW FINE ROOTS

NO ESHWT AT 56", ROOTS TO 34", NO WATER AT 56", NO LEDGE AT 56", RESTRICTIVE LAYER AT 21"

TEST PIT NO. 7

0–8	10YR 3/3	FINE SANDY LOAM, GRANULAR, VERY FRIABLE, MANY FINE & MEDIUM ROOTS
8–33	2.5Y 5/6	SANDY LOAM, BLOCKY, FRIABLE, COMMON FINE & MEDIUM ROOTS
33–60	2.5Y 6/3	LOAMY SAND, MASSIVE, FIRM, FEW FINE ROOTS

NO ESHWT AT 60", ROOTS TO 42", NO WATER AT 60", NO LEDGE AT 60", RESTRICTIVE LAYER AT 33"

SCALE: 1"=20'

GRAPHIC SCALE

811 DigSafe MA-ME-NH-RI-VT

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC – STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

12-31-25

STATE OF NEW HAMPSHIRE GEORGE A. CHAMPOUX JR. NO. 15115 LICENSED PROFESSIONAL ENGINEER

TAX MAP 15 LOT 126

GRADING PLAN

ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 20'	JUNE 12, 2025	SHEET 8 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503–22
JST	JST	GAC	692	28	

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REFER TO SHEET 10 FOR UTILITY NOTES

TAX MAP 15 LOT 125
SEAN P. STRONG
221 ROCKINGHAM ROAD
LONDONDERRY, NH 03053
BK.6630 PG.2059
ZONE: COMMERCIAL II (C-II)
ROUTE 28 PERFORMANCE OVERLAY DISTRICT
USE: SINGLE FAMILY (1010)
(221 ROCKINGHAM ROAD)

TEMPORARY SEWER BYPASS NOTE:

SEWER MANHOLE #7 SHALL BE A NEW STRUCTURE SET INLINE ON EXISTING SEWER MAIN. CONTRACTOR SHALL PROVIDE A TEMPORARY SEWER BYPASS PLAN FROM EXISTING SMH 1–8 TO EXISTING SMH 1–7 TO THE TOWN OF LONDONDERRY DEPARTMENT OF ENGINEERING & ENVIRONMENTAL SERVICES FOR APPROVAL PRIOR TO CONSTRUCTION.

PROP. 16"x8" TAPPING SLEEVE PER MANCHESTER WATER WORKS SPECS.

SAW CUT LIMITS FOR WATERLINE REMOVAL

EXISTING SANITARY SEWER STUBS TO BE ABANDONED IN PLACE.

EXISTING 1" COPPER WATER SERVICE TO BE CUT AND CAPPED AT THE MAIN. TURN OFF THE CORPORATION, DISCONNECT AND CAP THE CORPORATION.

TAX MAP 15 LOT 150
DARK HORSE INVESTMENTS LLC
222 ROCKINGHAM ROAD
LONDONDERRY, NH 03053
BK.6526 PG.81
ZONE: COMMERCIAL-I (C-I)
ROUTE 28 PERFORMANCE OVERLAY DISTRICT
USE: SINGLE FAMILY (1010)
(222 ROCKINGHAM ROAD)

TAX MAP 15 LOT 146
226 ROCKINGHAM PLAZA LLC
226 ROCKINGHAM ROAD
LONDONDERRY, NH 03053
BK.5275 PG.916
ZONE: COMMERCIAL II (C-II)
ROUTE 28 PERFORMANCE OVERLAY DISTRICT
USE: SMALL RETAIL (3250)
(226 ROCKINGHAM ROAD)

TAX MAP 15 LOT 128
LIFE STORAGE LP
PO BOX 71870
6890 S 2300 E
SALT LAKE CITY, UT 84171
BK.5944 PG.1076
ZONE: COMMERCIAL II (C-II)
USE: WAREHOUSE (3160)
(6 SMITH LANE)

TAX MAP 15 LOT 126
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, NEW HAMPSHIRE, 03051
BK. 6622 PG. 362
COMMERCIAL II (C-II)
USE: SINGLE FAMILY (1010)
261,191 SF OR 6.000 ACRES

PROPOSED 12–UNIT MULTIFAMILY BUILDING "A"

FIRST FLOOR=294.3
BSMT SLAB=285.6

FIRST FLOOR=295.3
BSMT SLAB=286.6

FIRST FLOOR=296.3
BSMT SLAB=287.6

PROP. 5.5' HIGH PVC FENCE

PROP. 8'x8" CONC. TRANSFORMER PAD

PROP. 6' BIT. CONC. SIDEWALK

PROP. 10'x8' CONC. PAD FOR BUS STOP SHELTER

PROP. PROJECT SIGN

PROP. 8" D.I. WATERLINE

8"x8"x6" TEE WITH THRUST BLOCK

8" 45° BEND W/ THRUST BLOCK

8" 11.25° BEND W/ THRUST BLOCK

PROP. SMH#7 (6'DIA)
INSIDE DROP
RIM=286.5
INV. IN=271.10(15")
INV. IN=277.85(8")
INV. OUT=271.00(15")

8" SDR 35 PVC SAN. SEWER
88 LF, S=0.007

SMH#6
RIM=290.0
INV. IN=278.57
INV. OUT=278.47

PROPOSED 12' WIDE GRAVEL ACCESS DRIVE

PROPOSED 5 BICYCLE RACK

6" D.I. FIRE SERVICE W/ 2" DOMESTIC LINE (SEE DETAIL SHT. 10)

8" HDP ROOF DRAIN 74 LF, S=0.005

8" HDP ROOF DRAIN 165 LF, S=0.005

8" HDP ROOF DRAIN 240 LF, S=0.005

15" HDP STORM DRAIN 168 LF, S=0.018

8" HDP ROOF DRAIN 19 LF, S=0.010

15" HDP STORM DRAIN 82 LF, S=0.008

8" SDR 35 PVC SANITARY SEWER 90 LF, S=0.007

8" SDR 35 PVC SANITARY SEWER 300 LF, S=0.007

8" INV=288.0

SMH#5
RIM=287.9
INV. IN=279.30
INV. OUT=279.20

DMH#30
STA 2+88 (29'RT)
RIM=293.5
INV. IN=289.30(8"S)
INV. IN=288.30(8"N)
INV. OUT=288.05(8"E)

DMH#23
RIM=290.50
INV. IN=286.00(8")
INV. IN=286.00(8")
INV. OUT=285.75(8")

4" PVC SERVICE (TYP.)

DMH#21 TO ES#22
24" HDP STORM DRAIN
31 LF, S=0.010

ES#24
INV. OUT=284.00

ES#22
INV. OUT=284.19

CB#31
STA 2+88 (10'RT)
RIM=292.59
INV. IN=287.86(8")
INV. OUT=287.00(15")

CB#32
STA 1+20 (10'RT)
RIM=288.46
INV. IN=283.96
INV. OUT=283.71

DMH#36 TO ES#37
18" HDP STORM DRAIN
28 LF, S=0.005

DMH#36
RIM=285.00
INV. IN=280.36(18")
INV. OUT=280.26(18")

ES#37
INV. OUT=280.00

OS#26 TO DMH#36
18" HDP STORM DRAIN
47 LF, S=0.003

OS#26
RIM=284.50
INV. OUT=280.50

OS#24 TO DMH#36
18" HDP STORM DRAIN
8 LF, S=0.017

OS#35
RIM=284.50
INV. OUT=280.50

ES#33
INV. OUT=283.00

SEDIMENT FOREBAY

PROPOSED GRAVEL WETLAND STORMWATER BASIN NO. 34

PROPOSED GRAVEL WETLAND STORMWATER BASIN NO. 25

STONE BERM

SEDIMENT FOREBAY

STONEWALL TO REMAIN

STONEWALL TO REMAIN

CONSERVATION OVERLAY DISTRICT BOUNDARY

EDGE OF WETLAND

EDGE OF WETLAND

5/8"REBAR FND. 0.5' HIGH

5/8" REBAR 0.6' HIGH

4"X4" GRANITE BND.FND. W/D.H. 0.1' UP

EXISTING 15" PIPE TO REMAIN IN SERVICE

SOLID COUPLING, FERNCO OR OTHER FLEXIBLE COUPLINGS SHALL NOT BE PERMITTED.

NEW 6' DIA. INSIDE DROP MANHOLE

NEW 8" SERVICE DROP CONNECTION

EXISTING 15" PIPE TO REMAIN IN SERVICE

PROP. SMH #7
CUT IN SMH DETAIL
NOT TO SCALE

NOTES:

1. CONTRACTOR SHALL EXCAVATE TEST PIT AT LOCATION OF NEW MANHOLE TO DETERMINE EXACT LOCATION, ELEVATION AND SLOPE OF EXISTING 15" SANITARY SEWER PRIOR TO BEGINNING CONSTRUCTION.
2. THE EXISTING PIPE SHALL BE TEMPORARILY PLUGGED PRIOR TO CUT IN MANHOLE WORK.
3. THE CONTRACTOR SHALL PROVIDE BY–PASS PUMPING DURING MANHOLE WORK AS NEEDED.
4. UPON COMPLETEION, TESTING, AND ACCEPTANCE OF ALL NEW GRAVITY SEWER, THE CONTRACTOR SHALL CONSTRUCT THE NEW INVERT AND REDIRECT FLOW INTO THE NEW SEWER.

SMH 1–7
RIM: 283.14'
TABLE: 270.66'
IN(NE): 269.51'
OUT(W): 269.31'

12"CMP INV.=284.14

12"HDPE INV.=278.12

"ICT 128"

"FELD"

"SIDE ROAD AHEAD"

PSNH 14/5/94/163

7–93 NORTH"

"PSNH 14/7 NET&T 161"

EX. CB RIM=290.35 INV.=286.63

GRAVEL DRIVE

EXIST. 15" PVC SANITARY SEWER 266 LF, S=0.020

EXIST. 6" PVC SANITARY SEWER

"EVERSOURCE 14/6/162 CCI"

(2) 6" SERVICE CONN.

"7–93 NORTH EMERGENCY ROUTE"

"7–93 SOUTH EMERGENCY ROUTE"

EXIST. HYD.

PROP. HYD.

6" DI TO HYD.

DHS

DHF

N. H. ROUTE 28

ROCKINGHAM ROAD (PUBLIC/CLASS VI 66' WIDE)

SMITH LANE (PUBLIC/CLASS II)

UNDERGROUND NATURAL GAS MARKERS

UNDERGROUND NATURAL GAS MARKERS

N22°44'42"W 362.86

S54°46'31"W 12.09

S76°05'26"W 104.45

S79°15'21"W 25.62

S22°15'34"E 172.77

S24°03'54"E 185.60

S69°00'55"W 447.39

N 1+00 2+00 3+00 4+00

MATCH LINE SHEET 10

NH STATE PLANE

SCALE: 1"=20'

GRAPHIC SCALE

LEGEND

- PROPOSED CONTOUR
- EXISTING CONTOUR
- STATION NUMBERING FOR DRIVEWAY PROFILE
- TEST PIT
- PROPOSED SILT FENCE
- PROPOSED RIP RAP
- PROPOSED GAS LINE
- EXISTING GAS LINE
- PROPOSED WATER LINE
- EXISTING WATER LINE
- PROPOSED UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING OVERHEAD UTILITIES
- PROPOSED DRAIN LINE
- EXISTING DRAIN LINE
- PROPOSED ROOF DRAIN
- PROPOSED SEWER LINE
- EXISTING SEWER LINE
- EXISTING WATER SHUTOFF
- PROPOSED WATER SHUTOFF
- EXISTING HYDRANT
- PROPOSED HYDRANT
- EXISTING GATE VALVE
- PROPOSED GATE VALVE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- SEWER MANHOLE
- DRAIN MANHOLE
- EXISTING UTILITY POLE
- EXISTING GUY WIRE
- EXISTING LIGHT POLE
- PROPOSED LIGHT POLE
- EXISTING STOCKADE FENCE
- PROPOSED PVC FENCE
- EXISTING CHAINLINK FENCE
- EXISTING GUARDRAIL
- EDGE OF JURISDICTIONAL WETLANDS
- WETLAND SYMBOL
- WETLAND BUFFER
- PROPOSED TREE LINE
- EXISTING TREE LINE
- ZONE LINE
- SHEET MATCHLINE

SANITARY SEWER FLOW CALCULATIONS

DAILY FLOW

PROPOSED THREE BEDROOM RESIDENTIAL UNITS
40 UNITS @ 450 GPD/UNIT = 18,000 GPD FLOW

SEWER LINE INFILTRATION = 300 GALLONS / INCH DIAMETER OF PIPE/ MILE/ DAY
= 8" PIPE X 1,058 FT X 300 GALLONS/IN/5,280 FT / DAY
= 481 GPD

SEWER MANHOLE INFILTRATION = 1 GALLON / VERTICAL FOOT / DAY
67 VERTICAL FEET = 67 GPD

TOTAL DAILY FLOW

18,000 + 481 + 67 = 18,548 GPD

PEAK FLOW = 18,548 GPD X 6 = 111,288 GPD

DATE	DESCRIPTION	BY	REV.
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8–20–25	PER TOWN SEWER DEPT. REVIEW	JST	A

GEORGE A. CHADWICK JR. 13515 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

12/31/25

TAX MAP 15 LOT 126

UTILITY PLAN

ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

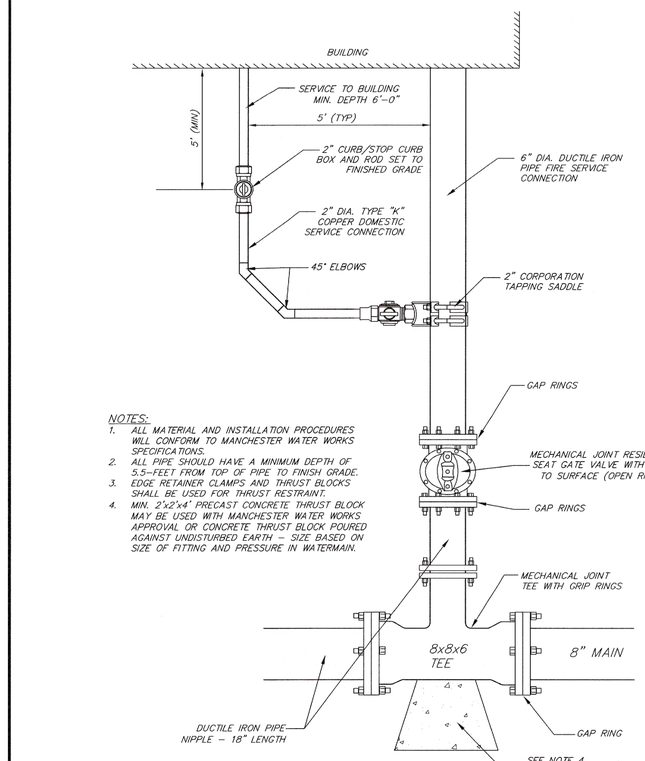
PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 20'	JUNE 12, 2025	SHEET 9 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503–22
JST	JST	GAC	692	28	

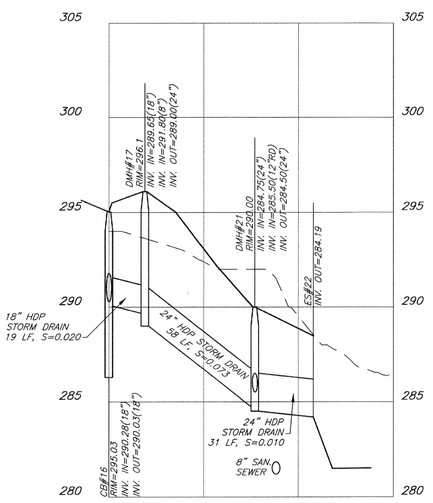
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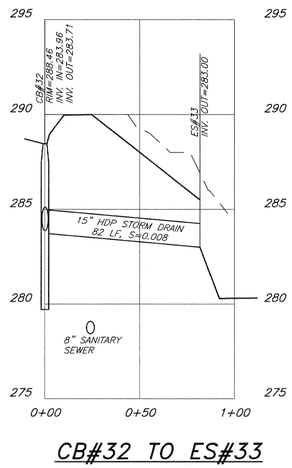


NOTES:
1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO MANCHESTER WATER WORKS SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5.5-FEET FROM TOP OF PIPE TO FINISH GRADE.
3. EDGE RETAINER CLAMPS AND THRUST BLOCKS SHALL BE USED FOR THRUST RESTRAINT.
4. MIN. 2'x2'x4' PRECAST CONCRETE THRUST BLOCK MAY BE USED WITH MANCHESTER WATER WORKS APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE BASED ON SIZE OF FITTING AND PRESSURE IN WATERMAIN.

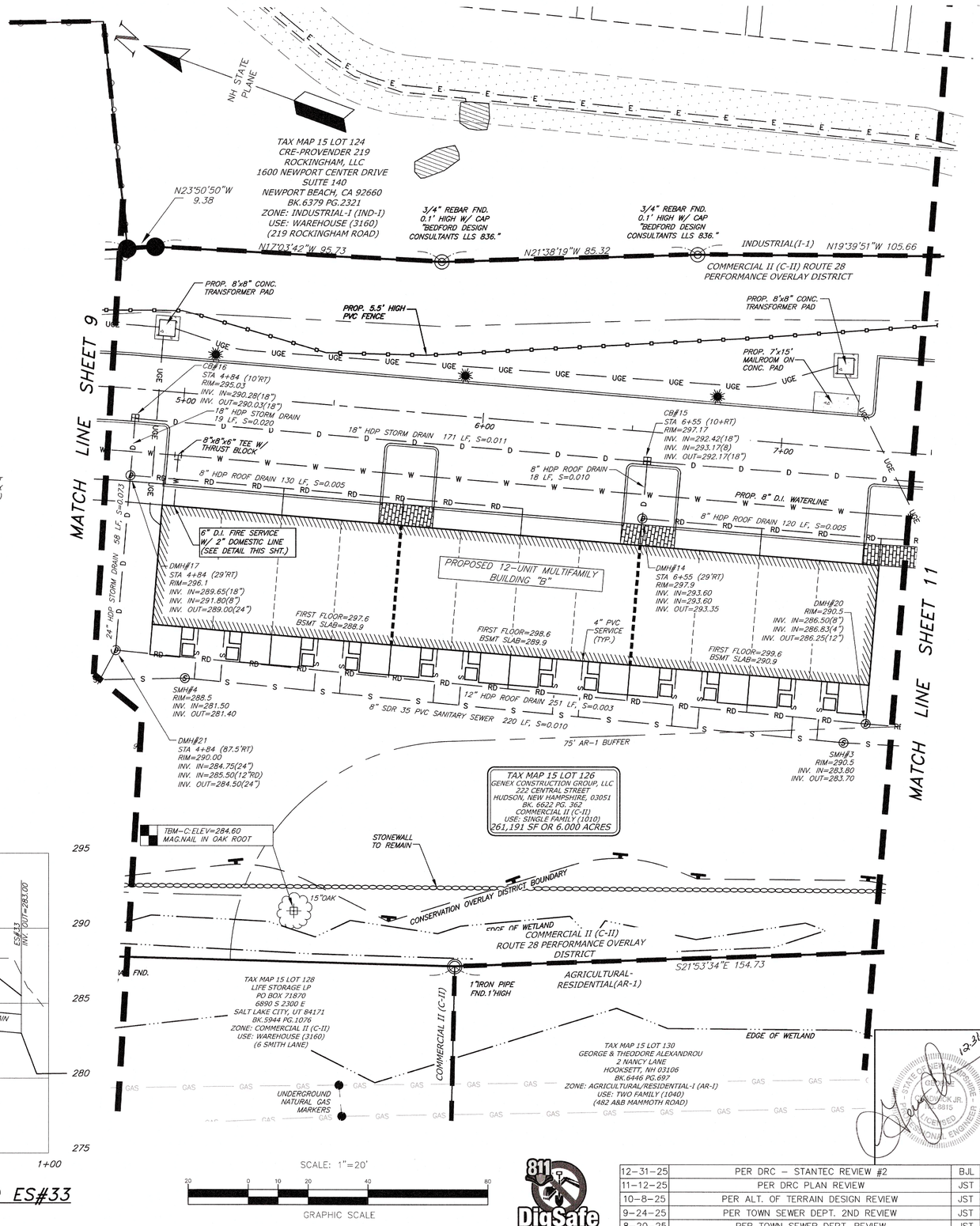
TYPICAL BUILDING DOMESTIC/FIRE SERVICE
NOT TO SCALE



CB#16 TO ES#22



CB#32 TO ES#33



UTILITY NOTES:

1. THE PURPOSE OF THIS PLAN IS TO SHOW THE UTILITY IMPROVEMENTS ASSOCIATED WITH THE PROPOSED SITE PLAN
2. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF LONDONDERRY AND SHALL BE BUILT IN A WORKMAN LIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION APPROVED AND ADOPTED 2016 ARE HEREBY INCORPORATED BY REFERENCE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS. PRIOR TO THE START OF ANY CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROXIMATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 1-888-344-7233 AT LEAST 72 HOURS BEFORE DIGGING.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION AND/OR PROTECTION OF ALL UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE WITH THE OWNER OF SAID UTILITIES.
5. ALL DRAINAGE PIPE SHALL BE NON-PERFORATED ADS N-12 HIGH-DENSITY POLYETHYLENE PIPE SMOOTH INTERIOR (OR APPROVED EQUAL), OR RCP CLASS IV, UNLESS NOTED ON THE PLANS. ALL DRAINAGE PIPE SHALL BE INSTALLED FOLLOWING MANUFACTURERS INSTALLATION INSTRUCTIONS.
6. ALL CATCH BASIN SUMPS AND PIPING SHALL BE THOROUGHLY CLEANED TO REMOVE ALL SEDIMENT AND DEBRIS AFTER THE PROJECT HAS BEEN PAVED.
7. ALL ROOF DRAINS FROM BUILDING SHALL BE CONSTRUCTED TO WITHIN 5' OF THE OUTSIDE THE BUILDING LIMITS AS SHOWN ON THE PLANS AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AND WITNESS AT THE END.
8. ALL DRAINAGE AND SANITARY SEWER STRUCTURE INTERIOR DIAMETERS (4' MIN.) SHALL BE DETERMINED BY THE MANUFACTURER BASED ON THE PIPE CONFIGURATIONS SHOWN ON THESE PLANS. CATCH BASINS SHALL HAVE 4' DEEP SUMPS WITH HOODS, UNLESS OTHERWISE NOTED.
9. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY H-29 LOADING AND SHALL BE INSTALLED ACCORDINGLY.
10. NO FOUNDATION DRAINS, ROOF DRAINS, FLOOR DRAINS SHALL BE CONNECTED TO THE MUNICIPAL SEWER.
11. OPERATION AND MAINTENANCE OF THE SEWER SERVICE SHALL BE THE RESPONSIBILITY OF THE APPLICANT.
12. THE MINIMUM SEWER TRENCH WIDTH SHALL BE AT LEAST 2 TIMES OUTER DIAMETER OF THE PIPE.
13. THE SEWER CONNECTIONS SHALL BE INSPECTED BY AUTHORIZED TOWN OF LONDONDERRY PUBLIC WORKS AND ENGINEERING DEPARTMENT PERSONNEL BEFORE ANY BACKFILLING. INSPECTION HOURS ARE BETWEEN 9 A.M. AND 4:30 P.M., MONDAY - FRIDAY, WITH AT LEAST 2 DAYS OF ADVANCED NOTICE.
14. THE SEWER SERVICE MANHOLES SHALL BE VACUUM TESTED AND THE PVC PIPING PRESSURE TESTED WITH AUTHORIZED TOWN OF LONDONDERRY PUBLIC WORKS AND/OR ENGINEERING DEPARTMENT PERSONNEL PRESENT ON SITE AS A WITNESS.
15. SEWER MAINS TO BE 8" SDR 35 PVC MEETING ASTM D3034 OR APPROVED EQUIVALENT. ALL SEWER CONSTRUCTION SHALL CONFORM TO THE STATE OF NEW HAMPSHIRE STANDARD SEWER CONSTRUCTION SPECIFICATIONS AND THE TOWN OF LONDONDERRY DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS.
16. A MANDATORY PRECONSTRUCTION MEETING SHALL BE HELD WITH THE TOWN, CONTRACTOR, OWNER, AND ALL UTILITY REPRESENTATIVES PRIOR TO CONSTRUCTION. NO WORK SHALL BEGIN UNTIL APPROVAL BY THE DEPARTMENT OF PUBLIC WORKS HAS BEEN OBTAINED.
17. WATER MAINS TO BE 8" DUCTILE IRON PIPE CLASS 52 DOUBLE CEMENT LINED AND WRAPPED IN 8 MIL POLYETHYLENE CONFORMING TO ANSI A.21.51 (AWWA C-151) AND ANSI A.21.4. SEAL COATING SHALL BE APPLIED INSIDE AND OUT. ALL PIPE SHALL BE PUSH ON TYPE JOINT, IN ACCORDANCE WITH ANSI A.21.11. WATERLINE MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH MANCHESTER WATER WORKS SPECIFICATIONS.
18. LOCATION OF PROPOSED GAS SERVICES ARE SCHEMATIC IN NATURE FOR COORDINATION PURPOSES ONLY. FINAL DESIGN BY OTHERS IN COORDINATION WITH UTILITY PROVIDING SERVICE. GAS LINE CONSTRUCTION SHALL BE IN CONFORMANCE WITH APPLICABLE UTILITY COMPANY SPECIFICATIONS.
19. ANY FIELD UTILITY ADJUSTMENTS SHALL BE APPROVED BY THE LOCAL AUTHORITIES AND THE OWNER PRIOR TO INSTALLATION.
20. LOCATION OF PROPOSED ELECTRICAL/COMMUNICATION SERVICES ARE SCHEMATIC IN NATURE FOR COORDINATION PURPOSES ONLY. FINAL DESIGN BY OTHERS IN COORDINATION WITH UTILITY PROVIDING SERVICE. ALL ELECTRIC, TELEPHONE AND CABLE TV LINES ARE TO BE INSTALLED IN CONFORMANCE WITH APPLICABLE UTILITY COMPANY SPECIFICATIONS.
21. POWER FEEDS AND INTERCONNECTIONS FOR THE SITE LIGHTING TO BE COORDINATED WITH THE ELECTRICAL ENGINEER.
22. ANY UTILITIES TO BE TAKEN OUT OF SERVICE SHALL BE DISCONNECTED AS DIRECTED BY THE SPECIFIC UTILITY COMPANY AND THE LOCAL DEPARTMENT OF PUBLIC WORKS.
23. THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL PROPOSED BUILDING UTILITY CONNECTIONS WITH THE ARCHITECTURAL PLANS.

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC - STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

UTILITY PLAN
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 20' | JUNE 12, 2025 | SHEET 10 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	
JST	JST	GAC	692	28	503-22

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12-31-25

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REFER TO SHEET 10 FOR UTILITY NOTES

"SHIPPING AND RECEIVING"

TAX MAP 15 LOT 124
CRE-PROVENDER 219 ROCKINGHAM, LLC
1600 NEWPORT CENTER DRIVE
SUITE 140
NEWPORT BEACH, CA 92660
BK.6379 PG.2321
ZONE: INDUSTRIAL-1 (IND-1)
USE: WAREHOUSE (3160)
(219 ROCKINGHAM ROAD)

1-1/2" IRON PIPE FND. 0.3' HIGH

NH STATE PLANE

EXISTING WELL

N10°39'07"W 83.87

PROP. 5.5' HIGH PVC FENCE

3/4" REBAR FND. 0.1' HIGH W/ CAP "BEDFORD DESIGN CONSULTANTS LLS 836."

DHS

N71°26'44"E 28.40

1" IRON PIPE FND. 0.1' HIGH IN SW

N14°49'30"W 93.03

3/4" REBAR FND. 0.1' HIGH W/ CAP "BEDFORD DESIGN CONSULTANTS LLS 836."

N17°38'33"W 249.50

PROP. 5.5' HIGH PVC FENCE

1-1/4" IRON PIPE FND. 0.5' HIGH @ END OF SW, LEANING, SHOT @ BASE

N22°10'24"W 89.33

INDUSTRIAL(I-1)

COMMERCIAL II (C-II) ROUTE 28 PERFORMANCE OVERLAY DISTRICT

DRILL HOLE TO BE SET

3/4" REBAR FND. FLUSH W/ CAP "BEDFORD DESIGN CONSULTANTS LLS 836."

AGRICULTURAL-RESIDENTIAL(AR-1)

STONEWALL TBR

STONEWALL TO REMAIN

MATCH LINE SHEET 10

8+00

9+00

10+00

11+00

12+00

12+76.65

21.5' LANDSCAPE BUFFER

75' AR-1 BUFFER

18" HDP STORM DRAIN 191 LF, S=0.013

8"x8"x6" TEE WITH THRUST BLOCK

8" HDP ROOF DRAIN

CB#13
STA 8+47 (10+RT)
RIM=299.57
INV. IN=295.07(15")
INV. IN=295.57(8")
INV. OUT=294.82(18")

15" HDP STORM DRAIN 160 LF, S=0.011

8" HDP ROOF DRAIN 18 LF, S=0.010

8" HDP ROOF DRAIN 120 LF, S=0.005

PROP. 8" D.I. WATERLINE

CB#11
STA 10+07 (10+RT)
RIM=301.57
INV. IN=297.07
INV. OUT=296.82

8" HDP ROOF DRAIN 18 LF, S=0.010

8" HDP ROOF DRAIN 80 LF, S=0.005

8"x6" REDUCER

6" DI TO HYD.

G.V.

PROP. HYD.

6" D.I. FIRE SERVICE W/ 2" DOMESTIC LINE (SEE DETAIL SHT. 10)

DMH#12
STA 8+47 (29'RT)
RIM=300.3
INV. IN=296.00
INV. IN=296.00
INV. OUT=295.75

PROPOSED 16-UNIT MULTIFAMILY BUILDING "C"

DMH#10
STA 10+07 (29'RT)
RIM=302.5
INV. IN=297.50
INV. OUT=297.25

ROOF DRAIN (TYP.)

RESTRAINT JOINTS REQUIRED WITHIN 30' OF HYDRANT

8" HDP ROOF DRAIN 53 LF, S=0.088

FIRST FLOOR=301.2
BSMT SLAB=292.5

4" PVC SERVICE (TYP.)

FIRST FLOOR=302.2
BSMT SLAB=293.5

FIRST FLOOR=303.2
BSMT SLAB=294.5

FIRST FLOOR=304.2
BSMT SLAB=295.5

8" SDR 35 PVC SANITARY SEWER 65 LF, S=0.090

DMH#19
RIM=300.4
INV. IN=296.40(8")
INV. OUT=291.17(8")

SMH#2 (6' DIA)
INSIDE DROP
RIM=300.2
INV. IN=293.75
INV. OUT=289.55

8" HDP ROOF DRAIN 300 LF, S=0.010

8" SDR 35 PVC SANITARY SEWER 295 LF, S=0.010

DMH#18
RIM=303.4
INV. IN=299.73(4")
INV. OUT=299.40(8")

SMH#1
RIM=303.4
INV. OUT=296.70

PROP. SCREENED DUMPSTERS ON CONCRETE PAD

TAX MAP 15 LOT 116
DANIELA E. VERANI
ROBERT NICHOLAS SCHLANGEN
474 MAMMOTH ROAD
LONDONDERRY, NH 03053
BK.3565 PG.1814
ZONE: AGRICULTURAL/RESIDENTIAL-1 (AR-1)
USE: SINGLE FAMILY (1010)
(474 MAMMOTH ROAD)

N68°08'36"E 202.74

DHS

3/4"REBAR FND. 0.3' HIGH

DHS

UNDERGROUND NATURAL GAS MARKERS

DHF

DRILL HOLE TO BE SET

TAX MAP 15 LOT 126
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, NEW HAMPSHIRE, 03051
BK. 6622 PG. 362
COMMERCIAL II (C-II)
USE: SINGLE FAMILY (1010)
261,191 SF OR 6.000 ACRES

CONSERVATION OVERLAY DISTRICT BOUNDARY

COMMERCIAL II (C-II) ROUTE 28 PERFORMANCE OVERLAY DISTRICT

AGRICULTURAL-RESIDENTIAL(AR-1)

1/2" IRON PIN FND. 1,3' HIGH, BENT, SHOT AT BASE

S15°14'29"E 241.16

S19°52'19"E 47.62

1-1/4" AXEL FND. 0.2' HIGH

1" IRON PIN FND. W/ PUNCH MARK 0.4' HIGH

S18°12'04"E 263.92

TAX MAP 15 LOT 114
MICHAEL S. & SANDRA J. GREENLEAF
480 MAMMOTH ROAD
LONDONDERRY, NH 03053-2370
BK.5032 PG.2941
ZONE: AGRICULTURAL/RESIDENTIAL-1 (AR-1)
USE: SINGLE FAMILY (1010)
(480 MAMMOTH ROAD)

TAX MAP 15 LOT 115
NATHAN FUDALA
478 MAMMOTH ROAD
LONDONDERRY, NH 03053
BK.6050 PG.682
ZONE: AGRICULTURAL/RESIDENTIAL-1 (AR-1)
USE: SINGLE FAMILY (1010)
(478 MAMMOTH ROAD)

UNDERGROUND NATURAL GAS MARKERS

EDGE OF WETLAND

GAS

SCALE: 1"=20'

20 0 10 20 40 80

GRAPHIC SCALE

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC - STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

12/31/25

STATE OF NEW HAMPSHIRE - GREGORY A. GOLDWASSER JR. 15915 LICENSED PROFESSIONAL ENGINEER

TAX MAP 15 LOT 126

UTILITY PLAN
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 20' | JUNE 12, 2025 | SHEET 11 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503-22
JST	JST	GAC	692	28	

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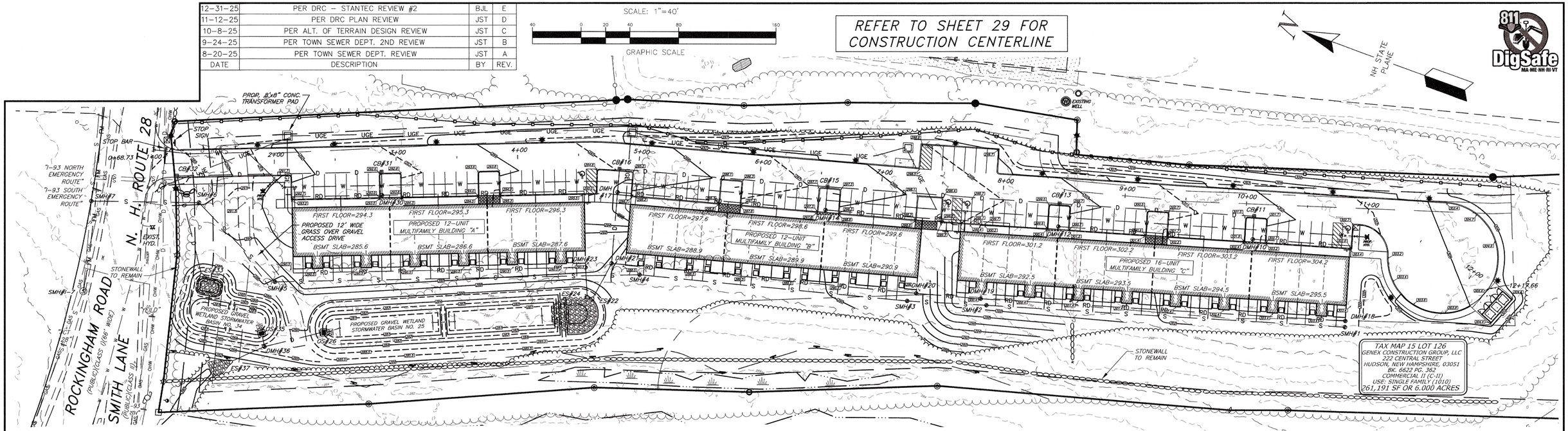
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DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC - STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

SCALE: 1"=40'

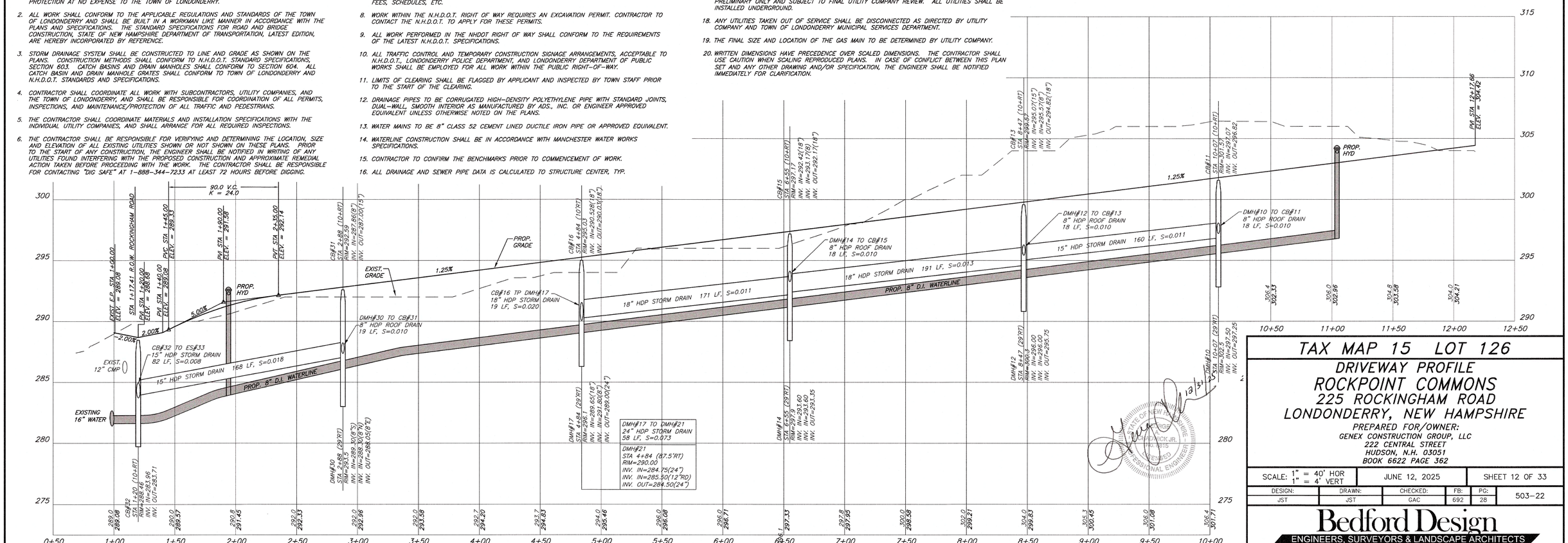
GRAPHIC SCALE

REFER TO SHEET 29 FOR CONSTRUCTION CENTERLINE



NOTES:

1. IF DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE TOWN OF LONDONDERRY.
2. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF LONDONDERRY AND SHALL BE BUILT IN A WORKMAN LIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, LATEST EDITION, ARE HEREBY INCORPORATED BY REFERENCE.
3. STORM DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO N.H.D.O.T. STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN AND DRAIN MANHOLE GRATES SHALL CONFORM TO TOWN OF LONDONDERRY AND N.H.D.O.T. STANDARDS AND SPECIFICATIONS.
4. CONTRACTOR SHALL COORDINATE ALL WORK WITH SUBCONTRACTORS, UTILITY COMPANIES, AND THE TOWN OF LONDONDERRY, AND SHALL BE RESPONSIBLE FOR COORDINATION OF ALL PERMITS, INSPECTIONS, AND MAINTENANCE/PROTECTION OF ALL TRAFFIC AND PEDESTRIANS.
5. THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY COMPANIES, AND SHALL ARRANGE FOR ALL REQUIRED INSPECTIONS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS. PRIOR TO THE START OF ANY CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROXIMATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 1-888-344-7233 AT LEAST 72 HOURS BEFORE DIGGING.
7. THE APPLICANT/CONTRACTOR WILL NEED TO SCHEDULE A MANDATORY PRECONSTRUCTION MEETING WITH LONDONDERRY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION TO DISCUSS INSPECTION FEES, SCHEDULES, ETC.
8. WORK WITHIN THE N.H.D.O.T. RIGHT OF WAY REQUIRES AN EXCAVATION PERMIT. CONTRACTOR TO CONTACT THE N.H.D.O.T. TO APPLY FOR THESE PERMITS.
9. ALL WORK PERFORMED IN THE NHDOT RIGHT OF WAY SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST N.H.D.O.T. SPECIFICATIONS.
10. ALL TRAFFIC CONTROL AND TEMPORARY CONSTRUCTION SIGNAGE ARRANGEMENTS, ACCEPTABLE TO N.H.D.O.T., LONDONDERRY POLICE DEPARTMENT, AND LONDONDERRY DEPARTMENT OF PUBLIC WORKS SHALL BE EMPLOYED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
11. LIMITS OF CLEARING SHALL BE FLAGGED BY APPLICANT AND INSPECTED BY TOWN STAFF PRIOR TO THE START OF THE CLEARING.
12. DRAINAGE PIPES TO BE CORRUGATED HIGH-DENSITY POLYETHYLENE PIPE WITH STANDARD JOINTS, DUAL-WALL, SMOOTH INTERIOR AS MANUFACTURED BY ADS., INC. OR ENGINEER APPROVED EQUIVALENT UNLESS OTHERWISE NOTED ON THE PLANS.
13. WATER MAINS TO BE 8" CLASS 52 CEMENT LINED DUCTILE IRON PIPE OR APPROVED EQUIVALENT.
14. WATERLINE CONSTRUCTION SHALL BE IN ACCORDANCE WITH MANCHESTER WATER WORKS SPECIFICATIONS.
15. CONTRACTOR TO CONFIRM THE BENCHMARKS PRIOR TO COMMENCEMENT OF WORK.
16. ALL DRAINAGE AND SEWER PIPE DATA IS CALCULATED TO STRUCTURE CENTER, TYP.
17. ALL ELECTRIC, TELEPHONE, AND CABLE TV LINES ARE TO BE INSTALLED IN CONFORMANCE WITH APPLICABLE UTILITY CO. SPECIFICATIONS. THE LOCATION SHOWN ON THESE PLANS IS PRELIMINARY ONLY AND SUBJECT TO FINAL UTILITY COMPANY REVIEW. ALL UTILITIES SHALL BE INSTALLED UNDERGROUND.
18. ANY UTILITIES TAKEN OUT OF SERVICE SHALL BE DISCONNECTED AS DIRECTED BY UTILITY COMPANY AND TOWN OF LONDONDERRY MUNICIPAL SERVICES DEPARTMENT.
19. THE FINAL SIZE AND LOCATION OF THE GAS MAIN TO BE DETERMINED BY UTILITY COMPANY.
20. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.



TAX MAP 15 LOT 126

DRIVEWAY PROFILE
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

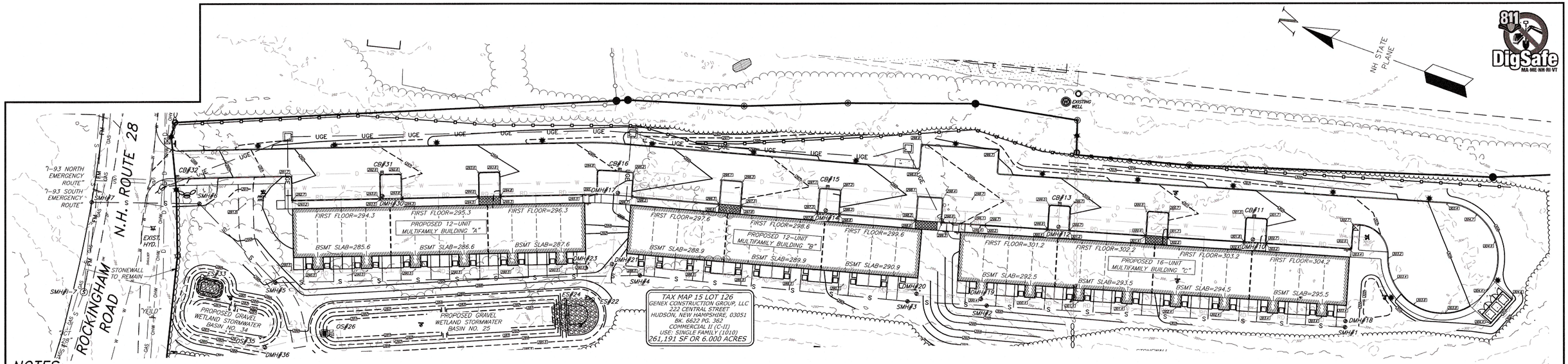
STATE OF NEW HAMPSHIRE — CHRISTOPHER R. BRUCE, JR. — NO. 15815 — LICENSED PROFESSIONAL ENGINEER

SCALE: 1" = 40' HOR 1" = 4' VERT	JUNE 12, 2025			SHEET 12 OF 33
DESIGN:	DRAWN:	CHECKED:	FB:	PG:
JST	JST	GAC	692	28

503-22

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TAX MAP 15 LOT 126
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, NEW HAMPSHIRE, 03051
BK. 6622 PG. 362
COMMERCIAL II (C-II)
USE: SINGLE FAMILY (1010)
261,191 SF OR 6.000 ACRES

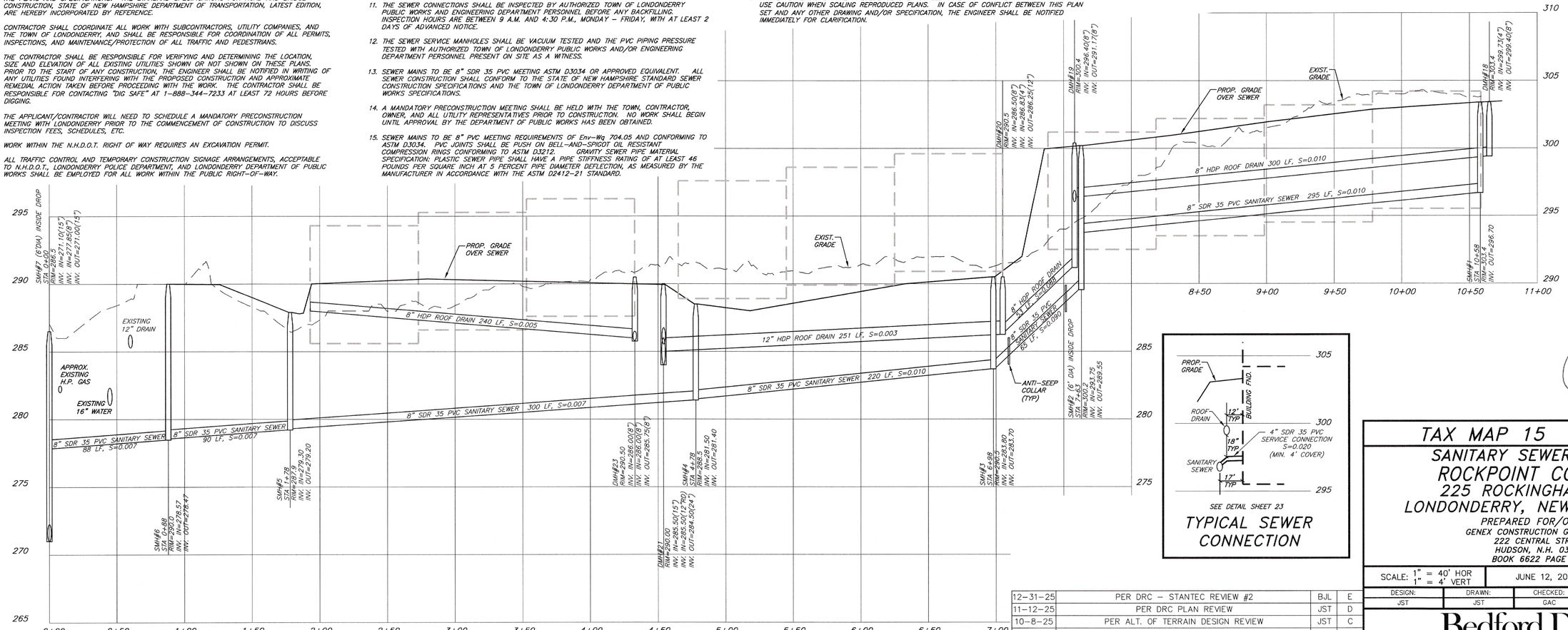
NOTES:

1. IF DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE TOWN OF LONDONDERRY.
2. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF LONDONDERRY AND SHALL BE BUILT IN A WORKMAN LIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, LATEST EDITION, ARE HEREBY INCORPORATED BY REFERENCE.
3. CONTRACTOR SHALL COORDINATE ALL WORK WITH SUBCONTRACTORS, UTILITY COMPANIES, AND THE TOWN OF LONDONDERRY, AND SHALL BE RESPONSIBLE FOR COORDINATION OF ALL PERMITS, INSPECTIONS, AND MAINTENANCE/PROTECTION OF ALL TRAFFIC AND PEDESTRIANS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS. PRIOR TO THE START OF ANY CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROXIMATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 1-888-344-7233 AT LEAST 72 HOURS BEFORE DIGGING.
5. THE APPLICANT/CONTRACTOR WILL NEED TO SCHEDULE A MANDATORY PRECONSTRUCTION MEETING WITH LONDONDERRY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION TO DISCUSS INSPECTION FEES, SCHEDULES, ETC.
6. WORK WITHIN THE N.H.D.O.T. RIGHT OF WAY REQUIRES AN EXCAVATION PERMIT.
7. ALL TRAFFIC CONTROL AND TEMPORARY CONSTRUCTION SIGNAGE ARRANGEMENTS, ACCEPTABLE TO N.H.D.O.T., LONDONDERRY POLICE DEPARTMENT, AND LONDONDERRY DEPARTMENT OF PUBLIC WORKS SHALL BE EMPLOYED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
8. LIMITS OF CLEARING SHALL BE FLAGGED BY APPLICANT AND INSPECTED BY TOWN STAFF PRIOR TO THE START OF THE CLEARING.
9. EQUIVALENT UNLESS OTHERWISE NOTED ON THE PLANS.
10. THE MINIMUM SEWER TRENCH WIDTH SHALL BE AT LEAST 2 TIMES OUTER DIAMETER OF THE PIPE.
11. THE SEWER CONNECTIONS SHALL BE INSPECTED BY AUTHORIZED TOWN OF LONDONDERRY PUBLIC WORKS AND ENGINEERING DEPARTMENT PERSONNEL BEFORE ANY BACKFILLING. INSPECTION HOURS ARE BETWEEN 9 A.M. AND 4:30 P.M., MONDAY - FRIDAY, WITH AT LEAST 2 DAYS OF ADVANCED NOTICE.
12. THE SEWER SERVICE MANHOLES SHALL BE VACUUM TESTED AND THE PVC PIPING PRESSURE TESTED WITH AUTHORIZED TOWN OF LONDONDERRY PUBLIC WORKS AND/OR ENGINEERING DEPARTMENT PERSONNEL PRESENT ON SITE AS A WITNESS.
13. SEWER MAINS TO BE 8" SDR 35 PVC MEETING ASTM D3034 OR APPROVED EQUIVALENT. ALL SEWER CONSTRUCTION SHALL CONFORM TO THE STATE OF NEW HAMPSHIRE STANDARD SEWER CONSTRUCTION SPECIFICATIONS AND THE TOWN OF LONDONDERRY DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS.
14. A MANDATORY PRECONSTRUCTION MEETING SHALL BE HELD WITH THE TOWN, CONTRACTOR, OWNER, AND ALL UTILITY REPRESENTATIVES PRIOR TO CONSTRUCTION. NO WORK SHALL BEGIN UNTIL APPROVAL BY THE DEPARTMENT OF PUBLIC WORKS HAS BEEN OBTAINED.
15. SEWER MAINS TO BE 8" PVC MEETING REQUIREMENTS OF Env-Wq 704.05 AND CONFORMING TO ASTM D3034. PVC JOINTS SHALL BE PUSH ON BELL-AND-SPIGOT OIL RESISTANT COMPRESSION RINGS CONFORMING TO ASTM D3212. GRAVITY SEWER PIPE MATERIAL SPECIFICATION: PLASTIC SEWER PIPE SHALL HAVE A PIPE STIFFNESS RATING OF AT LEAST 46 POUNDS PER SQUARE INCH AT 5 PERCENT PIPE DIAMETER DEFLECTION, AS MEASURED BY THE MANUFACTURER IN ACCORDANCE WITH THE ASTM D2412-21 STANDARD.
10. CONTRACTOR TO CONFIRM THE BENCHMARKS PRIOR TO COMMENCEMENT OF WORK.
11. ALL DRAINAGE AND SEWER PIPE DATA IS CALCULATED TO STRUCTURE CENTER, TYP.
12. ANY UTILITIES TAKEN OUT OF SERVICE SHALL BE DISCONNECTED AS DIRECTED BY UTILITY COMPANY AND TOWN OF LONDONDERRY MUNICIPAL SERVICES DEPARTMENT.
13. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.

SCALE: 1"=20'

20 0 10 20 40 80

GRAPHIC SCALE



SEE DETAIL SHEET 23

TYPICAL SEWER CONNECTION

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC - STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

12/31/25

STATE OF NEW HAMPSHIRE · GEORGE J. SCHNEIDER JR. · 9815 · LICENSED PROFESSIONAL ENGINEER

TAX MAP 15 LOT 126

SANITARY SEWER PROFILE
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

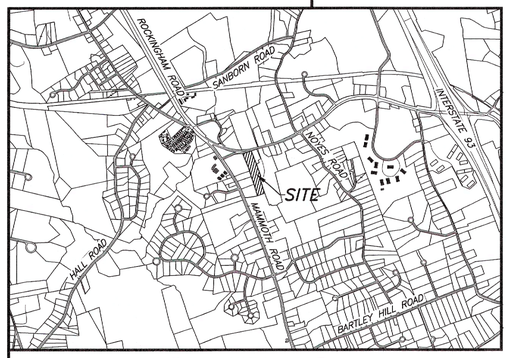
PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 40' HOR, 1" = 4' VERT	JUNE 12, 2025	SHEET 13 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503-22
JST	JST	GAC	692	28	

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VICINITY MAP

(SCALE: 1"=2500')

NOTES:

1. THE PURPOSE OF THIS PLAN IS TO SHOW THE CONSTRUCTION OF FORTY (40) RESIDENTIAL RENTAL UNITS IN THREE (3) BUILDINGS AND ASSOCIATED FACILITIES ON TAX MAP 15 LOT 126.
2. OWNER OF RECORD:
   TAX MAP 15 LOT 126
   GENEX CONSTRUCTION GROUP, LLC
   222 CENTRAL STREET
   HUDSON, NH 03051
   BOOK 6662 PAGE 362
3. LOT AREA: PARCEL AREA: 261,191 S.F. OR 6.000 AC.
4. THE PARCEL IS IN THE COMMERCIAL II (C-II) ZONING DISTRICT.
5. THE LOT IS CURRENTLY A SINGLE FAMILY RESIDENCE.
6. PARKING REQUIREMENTS: (Sec 3.09)
   40 UNIT RESIDENTIAL @ 2 SP/UNIT (STATE LAW 1.5 SPACES PER UNIT)
   80 SPACES REQUIRED, 81 SPACES PROVIDED (2.02/UNIT) (INCLUDING 6 HANDICAP SPACES)
7. THE SITE IS SERVICED BY MANCHESTER WATER WORKS AND TOWN OF LONDONDERRY SEWER.
8. HORIZONTAL DATUM IS BASED ON STATE PLANE AND VERTICAL DATUM IS NAVD 1988 DERIVED FROM STATIS GPS OBSERVATIONS REDUCED BY OPUS. TOPOGRAPHIC INFORMATION IS BASED ON LIDAR DATA OBTAINED FROM LIDAR.UNH.EDU.
9. EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM), COMMUNITY NO. 330150C0317E, EFFECTIVE DATE MAY 17, 2005, INDICATES THE SUBJECT PREMISES IS LOCATED WITHIN ZONE X, NOT A DESIGNATED FLOOD HAZARD AREA.

TAX MAP 15 LOT 21
MARK'S DISCOUNT TRUCK AND AUTO SALES, LLC
214 ROCKINGHAM ROAD
LONDONDERRY, NH 03053
BK.6525 PG.2674
ZONE: COMMERCIAL II (C-II)
ROUTE 28 PERFORMANCE OVERLAY DISTRICT
USE: SERVICE SHOP (3320)
(214 ROCKINGHAM ROAD)

TAX MAP 15 LOT 21-1
ROBERT DEGELAN
PO BOX 174
LONDONDERRY, NH 03053
BK.2061 PG.199
ZONE: COMMERCIAL II (C-II)
ROUTE 28 PERFORMANCE OVERLAY DISTRICT
USE: SINGLE FAMILY (1010)
(216 ROCKINGHAM ROAD)

TAX MAP 15 LOT 125
SEAN P. STRONG
221 ROCKINGHAM ROAD
LONDONDERRY, NH 03053
BK.6630 PG.2059
ZONE: COMMERCIAL II (C-II)
ROUTE 28 PERFORMANCE OVERLAY DISTRICT
USE: SINGLE FAMILY (1010)
(221 ROCKINGHAM ROAD)

TAX MAP 15 LOT 150
DARK HORSE INVESTMENTS LLC
222 ROCKINGHAM ROAD
LONDONDERRY, NH 03053
BK.6526 PG.81
ZONE: COMMERCIAL-1 (C-1)
ROUTE 28 PERFORMANCE OVERLAY DISTRICT
USE: SINGLE FAMILY (1010)
(222 ROCKINGHAM ROAD)

TAX MAP 15 LOT 146
226 ROCKINGHAM PLAZA LLC
226 ROCKINGHAM ROAD
LONDONDERRY, NH 03053
BK.5275 PG.916
ZONE: COMMERCIAL II (C-II)
ROUTE 28 PERFORMANCE OVERLAY DISTRICT
USE: SMALL RETAIL (3250)
(226 ROCKINGHAM ROAD)

TAX MAP 15 LOT 149
ARANOSIAN OIL COMPANY, INC.
557 NORTH STATE STREET
CONCORD, NH 03301
BK.3218 PG.1693
ZONE: COMMERCIAL II (C-II)
USE: GAS MART (3300)
(231 ROCKINGHAM ROAD)

TAX MAP 15 LOT 128
LIFE STORAGE LP
PO BOX 71870
6890 S 2300 E
SALT LAKE CITY, UT 84171
BK.5944 PG.1076
ZONE: COMMERCIAL II (C-II)
USE: WAREHOUSE (3160)
(6 SMITH LANE)

TAX MAP 15 LOT 126
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, NEW HAMPSHIRE, 03051
BK. 6622 PG. 362
COMMERCIAL II (C-II)
USE: SINGLE FAMILY (1010)
261,191 SF OR 6.000 ACRES

NH ROUTE 28 · ROCKINGHAM ROAD (PUBLIC)(CLASS II)(66' WIDE) · SMITH LANE (PUBLIC)(CLASS II)

"NET&T/159/PSNH/14/9" · "EVERSOURCE 14/9" · NH STATE PLANE

PAVED DRIVE · GRAVEL DRIVE · "SIDE ROAD AHEAD" · PSNH 14/8 · PSNH 14/5/94/163

"PSI EX. CB NET-RIM=290.35 INV.=286.63" · PROP. 8'x8" CONC. TRANSFORMER PAD · STOP SIGN · STOP BAR

S84°46'31"W 12.09 · N22°44'42"W 362.86 · S64°36'44"W 43.49 · 4' TA

"EVERSOURCE 14/6/162 CCI" · "I-93 NORTH EMERGENCY ROUTE" · "I-93 SOUTH EMERGENCY ROUTE" · PROP. PROJECT SIGN · EXIST. HYD. · 12"CMP

PROP. HYD. · PROP. 6' BIT. CONC. SIDEWALK · PROP. 10'x8" CONC. PAD FOR BUS STOP SHELTER · PROPOSED 5 BICYCLE RACK · PROPOSED 12-UNIT MULTIFAMILY BUILDING "A" · 240' · 50'

STONEWALL TO REMAIN · 12"CMP INV.=284.14 · "FEILD" · 2"CT 28"

PROP. STORMWATER GRAVEL WETLAND BASIN · CONSERVATION OVERLAY DISTRICT BOUNDARY · PROPOSED 12' WIDE GRASS OVER GRAVEL ACCESS DRIVE

S76°05'26"W 25.62 · S79°15'21"W 172.77 · S24°03'54"E 185.60 · 50'

I-93 NORTH

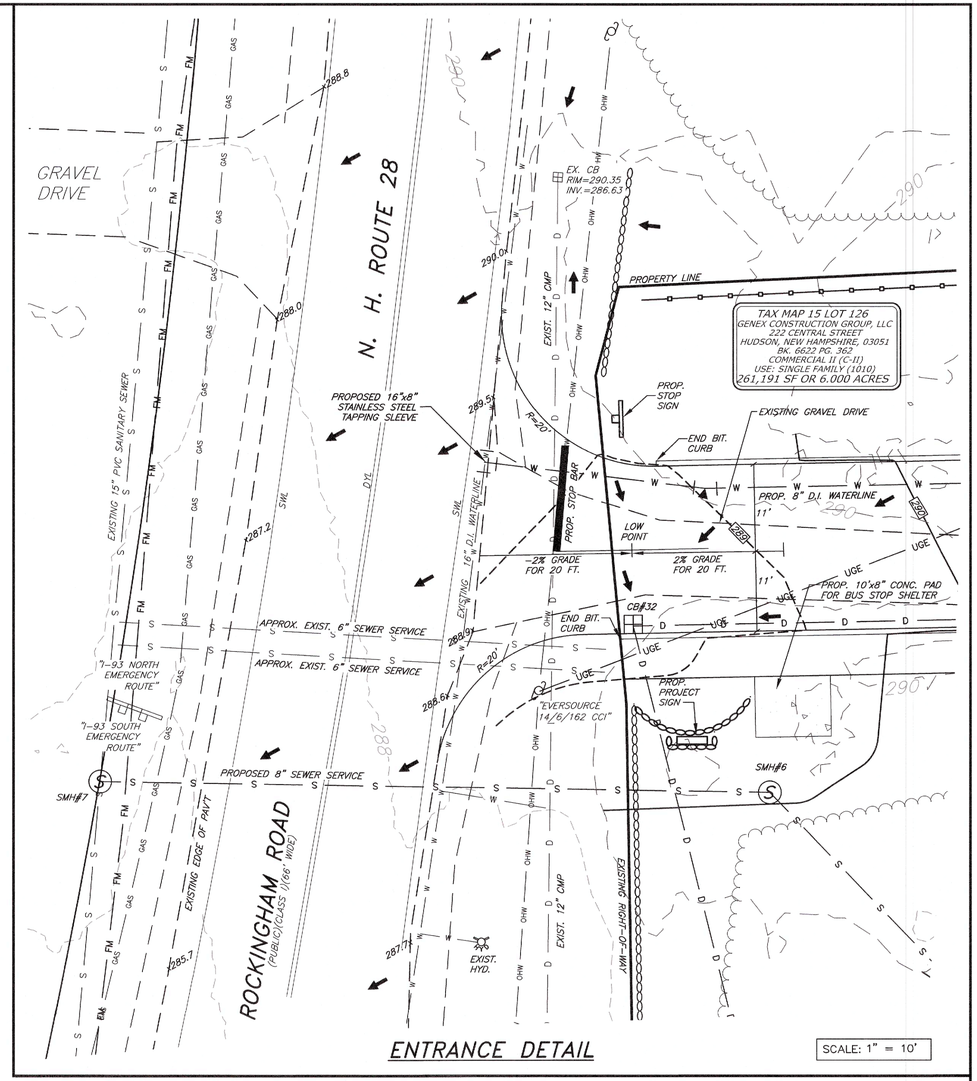
UNDERGROUND NATURAL GAS MARKERS · "VICTORY BAPTIST CHURCH TO LITCHFIELD ROAD" "MACKS APPLE FARM STAND RTE 128" · 15"HDPE INV.=273.11 · EX. CB RIM=278.70

12"HDPE INV.=278.12 "SIDE ROAD AHEAD" · 12"HDPE INV.=277.66 · PSNH 14/4/164 · 12"HDPE INV.=276.71 "STOP" · PAVED DRIVE

SCALE: 1"=40'

40 0 20 40 80 160

GRAPHIC SCALE



ENTRANCE DETAIL

SCALE: 1" = 10'

NHDOT DRIVEWAY PERMIT
#DOT-DRI-003236

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC - STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

NHDOT CURBCUT PLAN
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 40'	JUNE 12, 2025	SHEET 14 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503-22
JST	JST	GAC	692	28	

DigSafe 811 MA-ME-NH-RI-VT

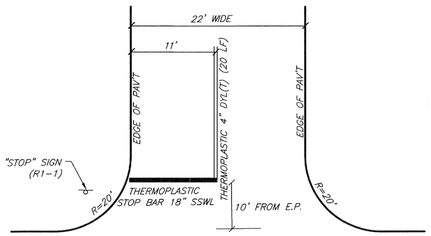
12/31/25

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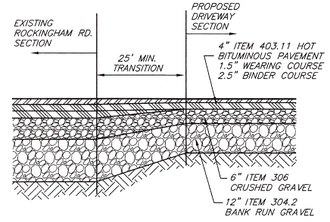
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NOTES

1. THE INTENT OF THIS PLAN IS TO SHOW THE PROPOSED RECONSTRUCTED DRIVEWAY ACCESS FOR FORTY (40) RESIDENTIAL UNITS IN THREE (3) BUILDINGS AND ASSOCIATED FACILITIES. ON MAP 15/LOT 126.
2. PROPOSED DRIVEWAY TO BE 22 FEET WIDE.

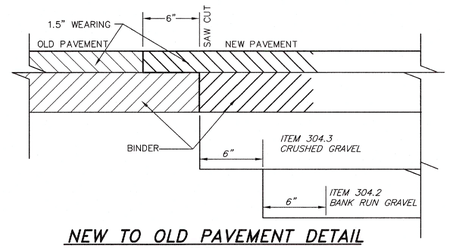


DRIVEWAY ENTRANCE DETAIL
NOT TO SCALE

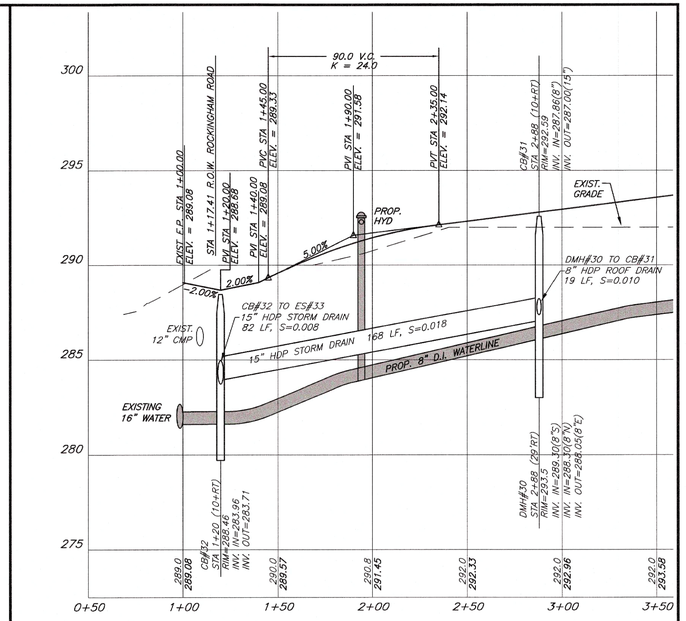


NOTE: CONTRACTOR SHALL CONFIRM PAVEMENT SECTION WITHIN ROCKINGHAM ROAD. TRANSITION FROM ROCKINGHAM ROAD TO BE PROVIDED TO SITE ACCORDINGLY OVER 25-FOOT MIN. DISTANCE.

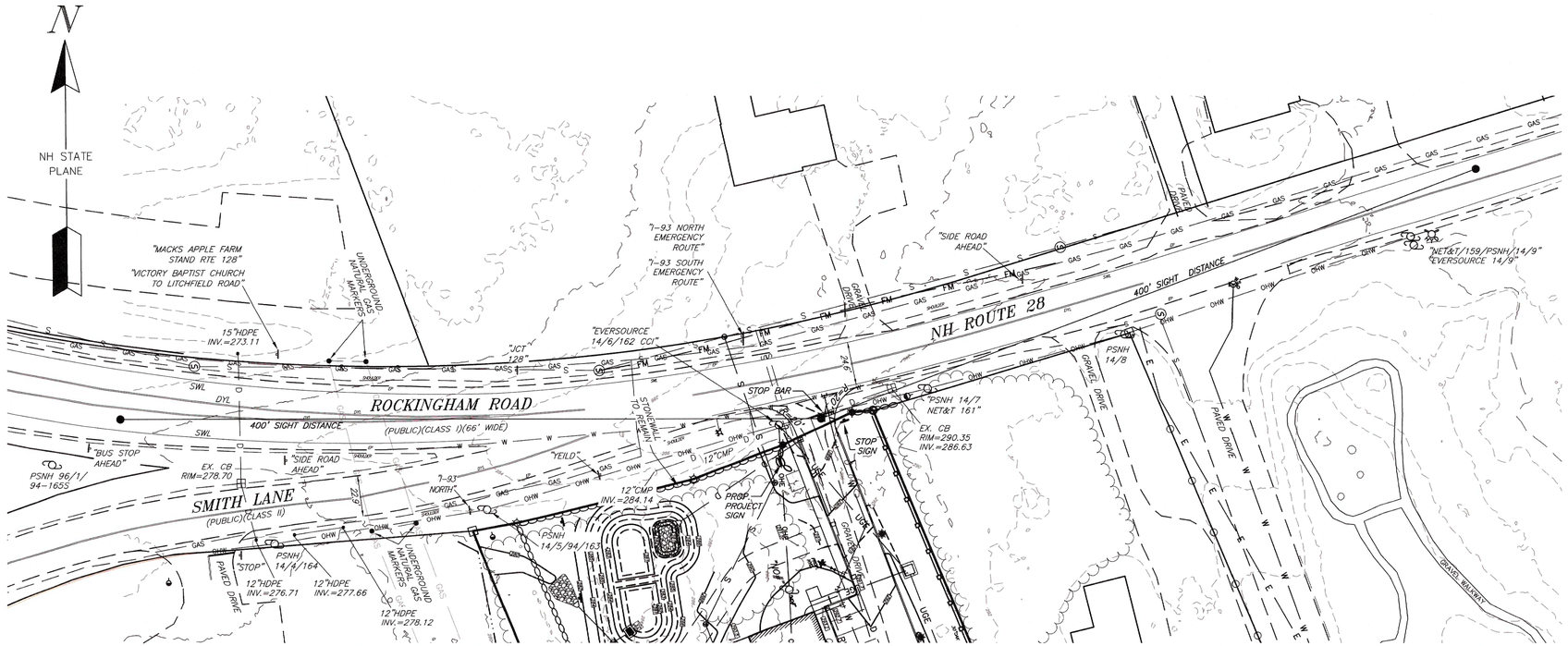
PAVEMENT SECTION TRANSITION
ROCKINGHAM ROAD/ ENTRANCE DRIVE
NOT TO SCALE

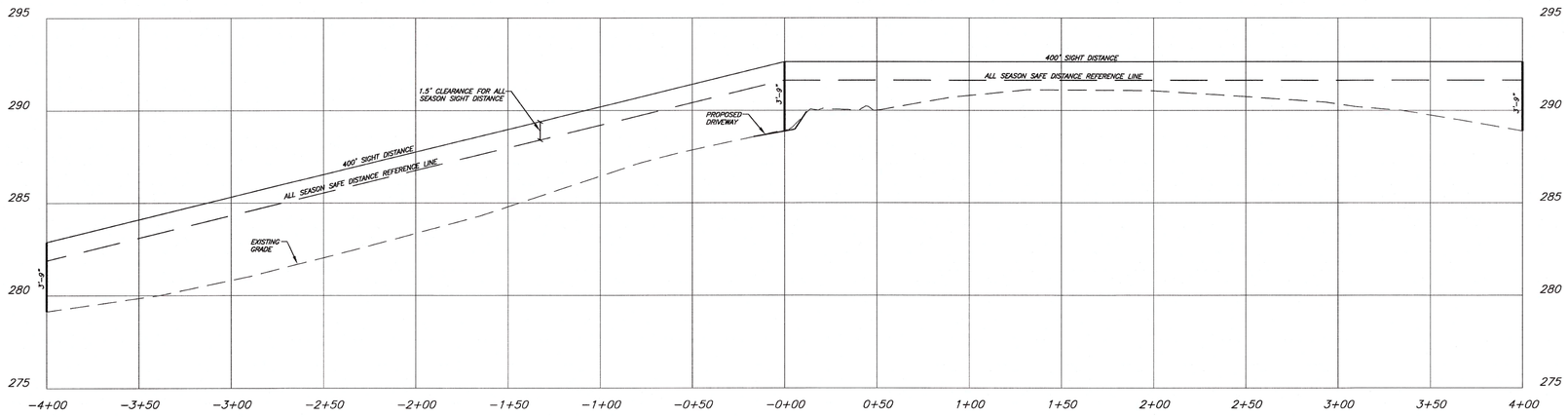


NEW TO OLD PAVEMENT DETAIL
NOT TO SCALE



DRIVEWAY PROFILE
SCALE: 1" = 40' HOR
1" = 4' VERT





DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC - STANTEC REVIEW #2	BJL	E
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10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

NHDOT SIGHT DISTANCE PLAN
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

811 DigSafe MA ME NH RI VT

12/31/25

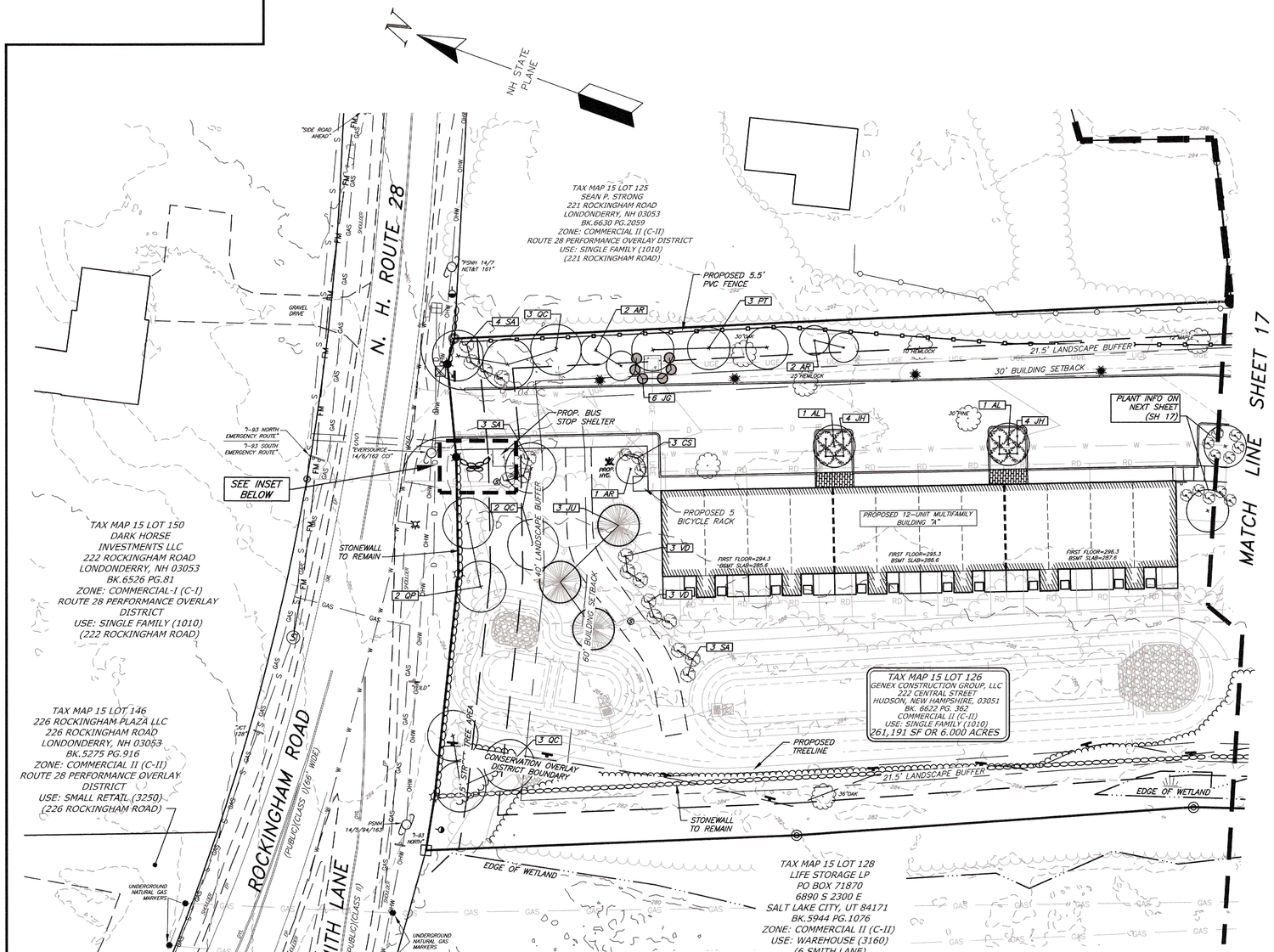
STATE OF NEW HAMPSHIRE JOSEPH A. CAMPBELL JR. No. 19815 LICENSED PROFESSIONAL ENGINEER

SCALE: 1" = 40'	JUNE 12, 2025	SHEET 15 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503-22
JST	JST	GAC	692	28	

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PLANT SCHEDULE

QUANTITY	KEY	BOTANICAL NAME	COMMON NAME	MATURE SIZE	PURCHASE SIZE
DECIDUOUS TREES					
5	AL	AMELANCHIER LAEVIS	ALLEGHENY SERVICEBERRY	20'-30' H&W	2.5" CALIPER
5	AR	ACER RUBRUM 'BOWHALL'	BOWHALL RED MAPLE	40'-60'H x 10'-15'W	2.5" CALIPER
2	CC	CARPINUS CAROLINIANA	AMERICAN HORNBEAM	20'-30' H&W	2.5" CALIPER
3	CF	CORNUS (BENTHAMIDIA) FLORIDA 'APPALACHIAN BLUSH'	APPALACHIAN BLUSH DOGWOOD	10'x15'H x 10'-15'W	2" CALIPER
3	GT	GLEDITSIA T.I. 'IMPERIAL'	IMPERIAL HONEYLOCUST	20'-30' H&W	2.5" CALIPER
12	PT	POPULUS TREMULOIDES	QUAKING ASPEN	40'-60'H x 20'-30'W	2.5" CALIPER
11	QC	QUERCUS COCCINEA	SCARLET OAK	60'+H x 30'-40'W	2.5" CALIPER
2	QP	QUERCUS PALUSTRIS	PIN OAK	60'+H x 30'-40'W	2.5" CALIPER
EVERGREENS					
13	IG	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	4-5' H&W	#3
20	JH	JUNIPERUS HORIZONTALIS 'PLUMOSA COMPACTA'	ANDORRA JUNIPER	12-24"H X 6-8'W	#3
7	JU	JUNIPERUS VIRGINIANA	EAST RED CEDAR	30-40'H x 10'-15'W	6-7' B&B
19	JG	JUNIPERUS VIGINIANA 'GREY OWL'	GREY OWL EASTERN RED CEDAR	2-3'H x 6-8'W	#3
10	KL	KALMIA LATIFOLIA 'BULLSEYE'	BULLSEYE MOUNTAIN LUREL	4-5' H&W	#5
8	PG	PICEA GLAUCA	WHITE SPRUCE	40-60'H x 15-20'W	5-6' B&B
8	TO	THUJA OCCIDENTALIS 'HOLMSTRUP'	HOLMSTRUP ARBORVITAE	10-15'H x 4-5'W	5-6' B&B
SHRUBS					
8	CK	CORNUS (SWIDA) SERICEA 'KELSEYI'	KELSEYI RED-OSIER DOGWOOD	2-3' H&W	#3
2	CL	CLETHRA ALNIFOLIA 'RUBY SPICE'	RUBY SPICE SUMMERSWEET	5-6'H x 4-5'W	#3
3	CS	CORNUS (SWIDA) SERICEA 'FLAVIRAMEA'	YELLOW-TWIGGED DOGWOOD	6-8'H & 6-8'W	#6
6	IV	ILEX VERTICILLATA 'RED SPRITE'	RED SPRITE WINTERBERRY	3-4'H & 3-4' W	#3
6	VD	VIBURNUM DENTATUM 'BLUE MUFFIN'	BLUE MUFFIN ARROWWOOD VIBURNUM	6-8'H & 4-5'W	#3
10	SA	SYRINGA VULGARIS 'ALBA'	COMMON WHITE LILAC	10-15' H&W	#3
PERENNIALS					
6	AS	ASTER (SYMPHYOTRICHUM) 'WOOD'S BLUE'	WOODS BLUE ASTER	18"	#1
9	AU	ARCTOSTAPHYLOS UVA-URSI	BEARBERRY	6"H x 4.5'W	#1
3	ES	ERAGROSTIS SPECTABILIS	PURPLE LONG GRASS	18"	#1

LANDSCAPE REQUIREMENTS

C–II LANDSCAPE REGULATIONS
4.3.3(B)(1) REQUIRES 33% GRASSED/LANDSCAPED AREA
15' SIDE AND REAR GREEN AREA PROVIDED
30' FRONT GREEN AREA PROVIDED

RTE 28 OVERLAY REGULATIONS
4.6.7.7(D) LANDSCAPE PERFORMANCE STANDARDS

40' FRONT BUFFER AREA TO IMPERVIOUS SURFACE FACING ROW
REQUIRES 2 TREES / 30' OF BUILDING FACADE FACING ROW
40'/30' = 1.33 x 2 = 2.66 TREES, 3 TREES PROVIDED
TREES SHALL BE 1/2 THE PROPOSED BUILDING HEIGHT AT 21.5'

SIDE AND REAR BUFFERS SHALL BE 1/2 THE PROPOSED BUILDING HEIGHT AT A MINIMUM OF 20' WITH 4 SEASON VISUAL SCREENING
43'/2 = 21.5' WIDE BUFFERS

PERFORMANCE ZONE REGULATIONS
4.6.6.7(D) LANDSCAPE PERFORMANCE STANDARDS

15' STREET TREE AREA ALONG ROW WITH 1 SHADE TREE PER 50' FRONTAGE
227'/50 = 4.54 TREES, 5 TREES PROVIDED

SITE PLAN
3.10(g) MITIGATING THE IMPACT OF PARKING LOTS

SIDE PARKING = 31,300 S.F., 8% INTERIOR PARKING LANDSCAPING IS 2,504 S.F. WITH 3,230 S.F. PROPOSED

(3) I SHADE TREE PER 15 PARKING SPACES = 81 SPACES/15 = 5.4 TREES REQ. = 6 PROVIDED

(5) I SHADE TREE PER 20' OF THE PERIMETER OF THE PARKING LOT = 682'/20 = 34.1 TREES REQ. = 34 PROVIDED

OFFSTREET PARKING LOCATED AT FRONT OR SIDE SHALL PROVIDE 50% OPACITY AT 3.5' HIGH ONE YEAR FROM PLANTING.

LANDSCAPE NOTES

1. *PLANTS CAN BE FOUND AT MILLICAN NURSERIES IN CHICHESTER, NH.*
2. *PLANT STOCK SHALL MEET THE AMERICAN NURSERY STANDARDS AND SHALL BE PLANTED IN ACCORDANCE WITH THEIR GUIDELINES AS WELL AS THE TOWN OF LONDONDERRY'S REGULATIONS.*
3. *ANY CHANGES TO THE APPROVED PLANTING PLAN MUST BE APPROVED BY THE LANDSCAPE ARCHITECT IN WRITING.*
4. *FOR PLANT DETAILS SEE THE DETAIL SHEETS.*
5. *ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED WITH 4" OF LOAM AND THE SPECIFIED SEED MIX IN THE CONSTRUCTION DETAIL NOTES.*
6. *THE TOWN REQUIRES THE FOLLOWING PLANT SIZES AT PLANTING:*
   DECIDUOUS TREES = 2.5" CALIPER
   DECIDUOUS ORNAMENTAL TREES = 1.5" CALIPER
   EVERGREEN TREES = 5–6' B&B
7. *PLANTING LOCATIONS SHALL NOT CONFLICT WITH SIGHT DISTANCE, SNOW STORAGE AREAS, UNDERGROUND UTILITIES, AND LIGHT FIXTURES.*

STATE OF NEW HAMPSHIRE GEORGE A. MICHAEL JR. NH 8815 LICENSED PROFESSIONAL ENGINEER

SCALE: 1"=30'

30 0 15 30 60 120
GRAPHIC SCALE

DATE	DESCRIPTION	BY	REV.
12–31–25	PER DRC – STANTEC REVIEW #2	BJL	E
11–12–25	PER DRC PLAN REVIEW	JST	D
10–8–25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9–24–25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8–20–25	PER TOWN SEWER DEPT. REVIEW	JST	A

OWNER'S SIGNATURE — 8/4/25 DATE

Approved by the Londonderry, NH Planning Board on Date: _____ for Phase _____

Certified By: _____

_____

TAX MAP 15 LOT 126

LANDSCAPE PLAN
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 30' | JUNE 12, 2025 | SHEET 16 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503–22
JST	JST	GAC	692	28	

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G: \PROJECT\0503022 GENEX Rockingham Road\DWG\0503022cv01.dwg

OWNER'S SIGNATURE — DATE 8/4/25

Approved by the Londonderry, NH Planning Board for Phase
on Date: _____

Certified By:

_____

_____

811 DigSafe MA-ME-NH-RI-VT

NH STATE PLANE

END CAPE COD BERM

END CAPE COD BERM

"SHIPPING AND RECEIVING"

TAX MAP 15 LOT 124
CRE-PROVENDER 219 ROCKINGHAM, LLC
1600 NEWPORT CENTER DRIVE
SUITE 140
NEWPORT BEACH, CA 92660
BK.6379 PG.2321
ZONE: INDUSTRIAL-1 (IND-1)
USE: WAREHOUSE (3160)
(219 ROCKINGHAM ROAD)

INDUSTRIAL(I-1)
COMMERCIAL II (C-II) ROUTE 28 PERFORMANCE OVERLAY DISTRICT

EXISTING WELL

PROPOSED TREELINE

PROPOSED 5.5' PVC FENCE

21.5' LANDSCAPE BUFFER

30' BUILDING SETBACK

EXISTING TREELINE

PROPOSED 12-UNIT MULTIFAMILY BUILDING "B"

FIRST FLOOR=297.6 BSMT SLAB=288.9
FIRST FLOOR=298.6 BSMT SLAB=289.3
FIRST FLOOR=299.6 BSMT SLAB=290.9

PROPOSED 16-UNIT MULTIFAMILY BUILDING "C"

FIRST FLOOR=301.2 BSMT SLAB=292.2
FIRST FLOOR=302.2 BSMT SLAB=293.5
FIRST FLOOR=303.2 BSMT SLAB=294.5
FIRST FLOOR=304.2 BSMT SLAB=295.5

6 JG
2 AU
1 GT
6 IV
5 KL
1 CC
5 IG
1 CF
9 PT
7 JG
3 IG
1 AL
4 JH
3 AU
2 GT
1 QC
4 TO
2 QC
3 PG
2 JU
2 PG
5 KL

SNOW STORAGE

STONEWALL TO REMAIN

75' AR-1 BUFFER

TAX MAP 15 LOT 116
DANIELA E. VERANI
ROBERT NICHOLAS SCHLANGEN
474 MAMMOTH ROAD
LONDONDERRY, NH 03053
BK.3565 PG.1814
ZONE: AGRICULTURAL/RESIDENTIAL-1 (AR-1)
USE: SINGLE FAMILY (1010)
(474 MAMMOTH ROAD)

AGRICULTURAL-RESIDENTIAL(AR-1)

TAX MAP 15 LOT 126
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, NEW HAMPSHIRE, 03051
BK. 6622 PG. 362
COMMERCIAL II (C-II)
USE: SINGLE FAMILY (1010)
261,191 SF OR 6.000 ACRES

MATCH LINE SHEET 16

15" OAK

CONSERVATION OVERLAY DISTRICT BOUNDARY

EDGE OF WETLAND

COMMERCIAL II (C-II) ROUTE 28 PERFORMANCE OVERLAY DISTRICT

AGRICULTURAL-RESIDENTIAL(AR-1)

TAX MAP 15 LOT 128
LIFE STORAGE LP
PO BOX 71870
6890 S 2300 E
SALT LAKE CITY, UT 84171
BK.5944 PG.1076
ZONE: COMMERCIAL II (C-II)
USE: WAREHOUSE (3160)
(6 SMITH LANE)

TAX MAP 15 LOT 130
GEORGE & THEODORE ALEXANDROU
2 NANCY LANE
HOOKSETT, NH 03106
BK.6446 PG.697
ZONE: AGRICULTURAL/RESIDENTIAL-1 (AR-1)
USE: TWO FAMILY (1040)
(482 A&B MAMMOTH ROAD)

TAX MAP 15 LOT 114
MICHAEL S. & SANDRA J. GREENLEAF
480 MAMMOTH ROAD
LONDONDERRY, NH 03053-2370
BK.5032 PG.2941
ZONE: AGRICULTURAL/RESIDENTIAL-1 (AR-1)
USE: SINGLE FAMILY (1010)
(480 MAMMOTH ROAD)

TAX MAP 15 LOT 115
NATHAN FUDALA
478 MAMMOTH ROAD
LONDONDERRY, NH 03053
BK.6050 PG.682
ZONE: AGRICULTURAL/RESIDENTIAL-1 (AR-1)
USE: SINGLE FAMILY (1010)
(478 MAMMOTH ROAD)

SCALE: 1"=30'

30 0 15 30 60 120

GRAPHIC SCALE

DECIDUOUS TREE PLANTING

NOT TO SCALE

FOR ALL FALL PLANTING, WRAP WITH 3" WIDE BLACK SPUN BOND POLYPROPYLENE SPECIFICALLY MANUFACTURED FOR TREE WRAPPING AND TO RESIST INSECT INFESTATION. WRAP TRUNK TO 2ND LOWEST BRANCH. REMOVE WRAP DURING THE FOLLOWING SPRING SEASON.

TREE SHALL BE PLANTED 2" ABOVE SURROUNDING GRADE. TREE SHALL BE PLUMB AFTER SETTLEMENT.

ROLL BURLAP BACK FROM TOP 1/3 OF ROOTBALL BEFORE BACKFILLING. UNTIE ROPE FROM TRUNK. REMOVE TOP 8-16" OF WIRE BASKET ONCE THE ROOTBALL IS STABLE IN THE PLANTING HOLE.

UNDISTURBED SUBGRADE

ADD AGRIFORM FERTILIZER TABLETS PER MANUFACTURER'S SPECIFICATIONS

3" SHREDDED, UNTREATED PINE BARK MULCH (HOLD MULCH OFF ROOT FLARE)

MIXTURE OF TILLED NATIVE SOIL WITH TOPSOIL

4" HIGH LOAM SAUCER AROUND TREE PIT.

SURROUNDING LAWN/SEEDED AREA (FINISH GRADE)

TAMP SOIL FIRMLY AT ROOTBALL BASE TO PREVENT ROOTBALL MOVEMENT

ROOTBALL TO SIT DIRECTLY ON UNCOMPRESSED/UNDISTURBED SOIL

1 : 3

PLANTING HOLE

MIN 3X WIDER THAN ROOT BALL ALL SIDES

CONIFEROUS TREE PLANTING DETAIL

NOT TO SCALE

INSTALL 3 GUYS PER TREE EQUALLY SPACED AROUND ROOTBALL. GUY WIRE TO BE NEW PLIABLE ANNEALED GALVANIZED SOFT STEEL WIRE NO. 12 GAUGE SIZE. ATTACH AT 2/3 HT. OF TREE IN TWO-PLY, BLACK REINFORCED RUBBER GARDEN HOSE. TIGHTLY CONNECT, HOWEVER ALLOW FOR SLIGHT NATURAL LOOSENING TO OCCUR. REMOVE GUYS AFTER 9 MONTHS.

TREE SHALL BE PLANTED 2" ABOVE SURROUNDING GRADE. TREE SHALL BE PLUMB AFTER SETTLEMENT.

4" HIGH LOAM SAUCER AROUND TREE PIT.

SURROUNDING LAWN/SEEDED AREA (FINISH GRADE)

BACKFILL WITH TOPSOIL MIXTURE

TAMP SOIL FIRMLY AT ROOTBALL BASE TO PREVENT ROOTBALL MOVEMENT

UNDISTURBED SUBGRADE

ADD AGRIFORM FERTILIZER TABLETS PER MANUFACTURER'S SPECIFICATIONS

(3) 2" X 3" X 4' HARDWOOD STAKES SET ANGLE OF POST AND GUY TO ENTER GROUND AT THE LIMIT OF THE SPREAD OF THE BOTTOM BRANCHES

3" SHREDDED, UNTREATED PINE BARK MULCH (HOLD MULCH OFF ROOT FLARE)

ROLL BURLAP BACK FROM TOP 1/3 OF ROOTBALL BEFORE BACKFILLING. UNTIE ROPE FROM TRUNK. REMOVE TOP 8-16" OF WIRE BASKET ONCE THE ROOTBALL IS STABLE IN THE PLANTING HOLE.

1 : 3

25°

PLANTING HOLE

MIN 3X WIDER THAN ROOT BALL ALL SIDES

ROOTBALL TO SIT DIRECTLY ON UNCOMPRESSED/UNDISTURBED SOIL

SHRUB PLANTING DETAIL

NOT TO SCALE

TOP OF BALL – 2" BELOW GRADE

4" MULCH – AS SPEC.

REMOVE TOP 1/3 OF BURLAP

PREPARED PLANTING SOIL

ELEVATE ROOTBALL SO THAT IT IS LEVEL WITH EXISTING GRADE

UNDISTURBED SOIL

3 TO 5 TIMES WIDTH OF ROOTBALL

10/31/25

STATE OF NEW HAMPSHIRE GEORGE A. JACKSON JR. No. 8515 LICENSED PROFESSIONAL ENGINEER

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC – STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
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9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

LANDSCAPE PLAN

ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

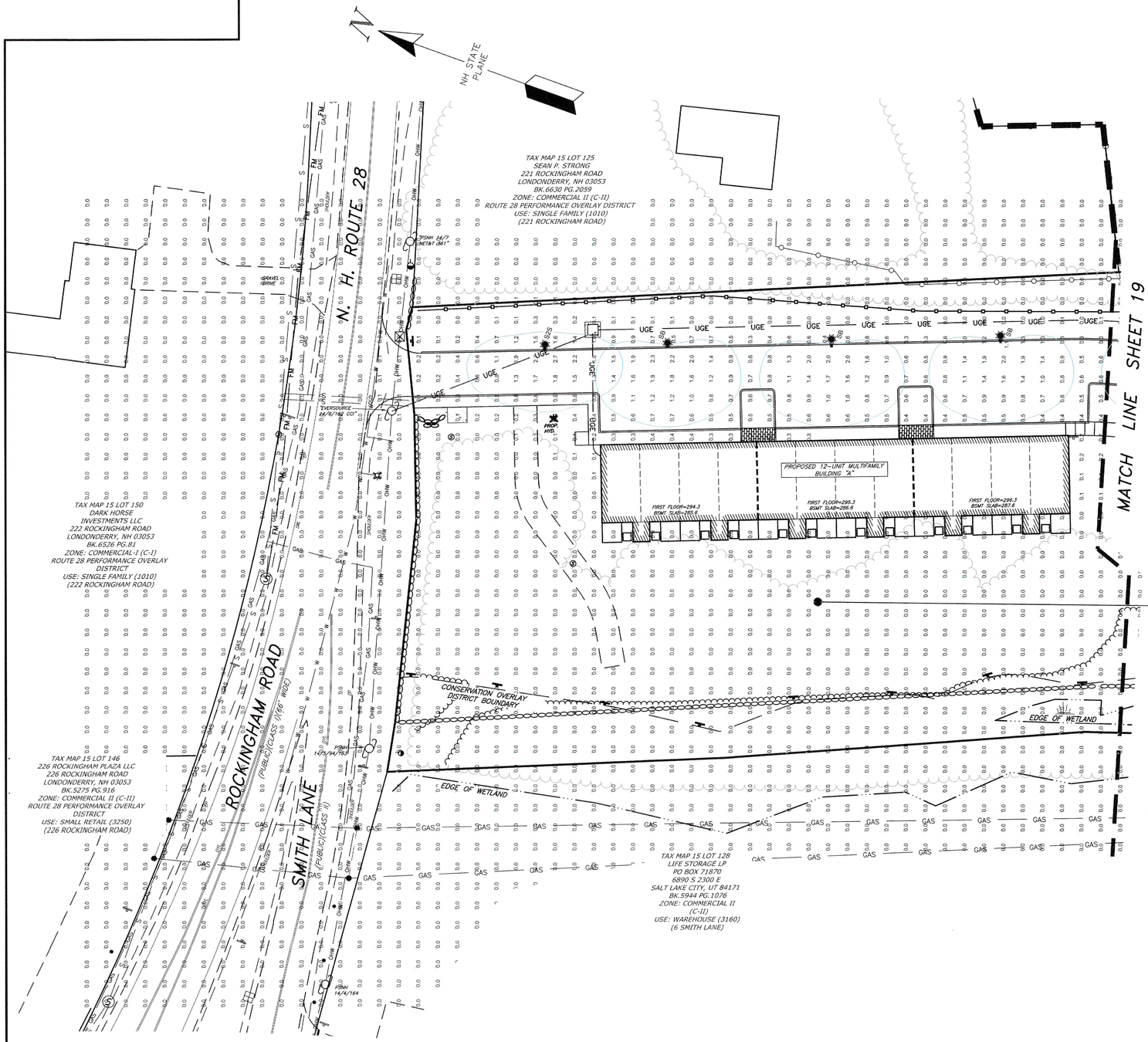
SCALE: 1" = 30'	JUNE 12, 2025	SHEET 17 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503-22
JST	JST	GAC	692	28	

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ALL LIGHTING FIXTURES SHALL BE FULL CUT-OFF TYPE FIXTURES AS REQUIRED





GARDCO OPF-S-A01-730

SCALE: 1"=30'

30 0 15 30 60 120

GRAPHIC SCALE

APEX
LIGHTING SOLUTIONS
20-30 BEAVER ROAD, WETHERSFIELD, CT 06109
TELEPHONE 860.632.8766 / WWW.APEXLTG.COM

GENERAL DISCLAIMER:
Calculations have been performed according to IES standards and good practice Some differences between measured values and calculated results may occur due to tolerances in calculation methods, testing procedures, component performance, measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lighting calculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

* LLF Determined Using Current Published Lamp Data

NOTE TO REVIEWER:
Total Light Loss Factor (LLF) applied at time of design is determined by applying the Lamp Lumen Depreciation (LLD) from current lamp manufacturer's catalog, a Luminaire Dirt Depreciation Factor (LDD) based on IES recommended values and a Ballast Factor (BF) from current ballast specification sheets. Application of an incorrect Light Loss Factor (LLF) will result in forecasts of performance that will not accurately depict actual results.
For proper comparison of photometric layouts, it is essential that you insist all designers use correct Light Loss Factors.

JOB NAME: GENEX - ROCKINGHAM RD - LONDONDERRY, NH
APEX LIGHTING SOLUTIONS
WORKPLANE/CALC PLANE: AT FINISH GRADE
MOUNTING HEIGHT: SEE LUMINAIRE SCHEDULE
APPS: LED
SALES: CR
SPECIFIER: BEDFORD DESIGN CONSULTANTS

Luminaire Schedule

Qty	Label	Arrangement	Lumens	Input Watts	LLF	BUG Rating	Description
1	S2S	Single	5354	41.88	0.900	B1-U0-G1	GARDCO OPF-S-A01-730-T2M-AR1-UNV-FINISH-OPF-S-HIS-1 / MOUNTED TO SSS-CB-4-11-20-D1-DT5-FINISH
1	S4S	Single	5468	41.88	0.900	B1-U0-G2	GARDCO OPF-S-A01-730-T4M-AR1-UNV-FINISH-OPF-S-HIS-T4-1 / MOUNTED TO SSS-CB-4-11-20-D1-DT5-FINISH
13	SB	Single	4875	41.88	0.900	B0-U0-G2	GARDCO OPF-S-A01-730-BLC-AR1-UNV-FINISH / MOUNTED TO SSS-CB-4-11-20-D1-DT5-FINISH

Calculation Summary

Label	Grid Height	Avg	Max	Min	Avg/Min	Max/Min
OVERALL SITE	0	0.11	2.7	0.0	N.A.	N.A.
PARKING & DRIVE LANES	0	1.07	2.7	0.0	N.A.	N.A.

12/31/25

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC – STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

LIGHTING PLAN
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

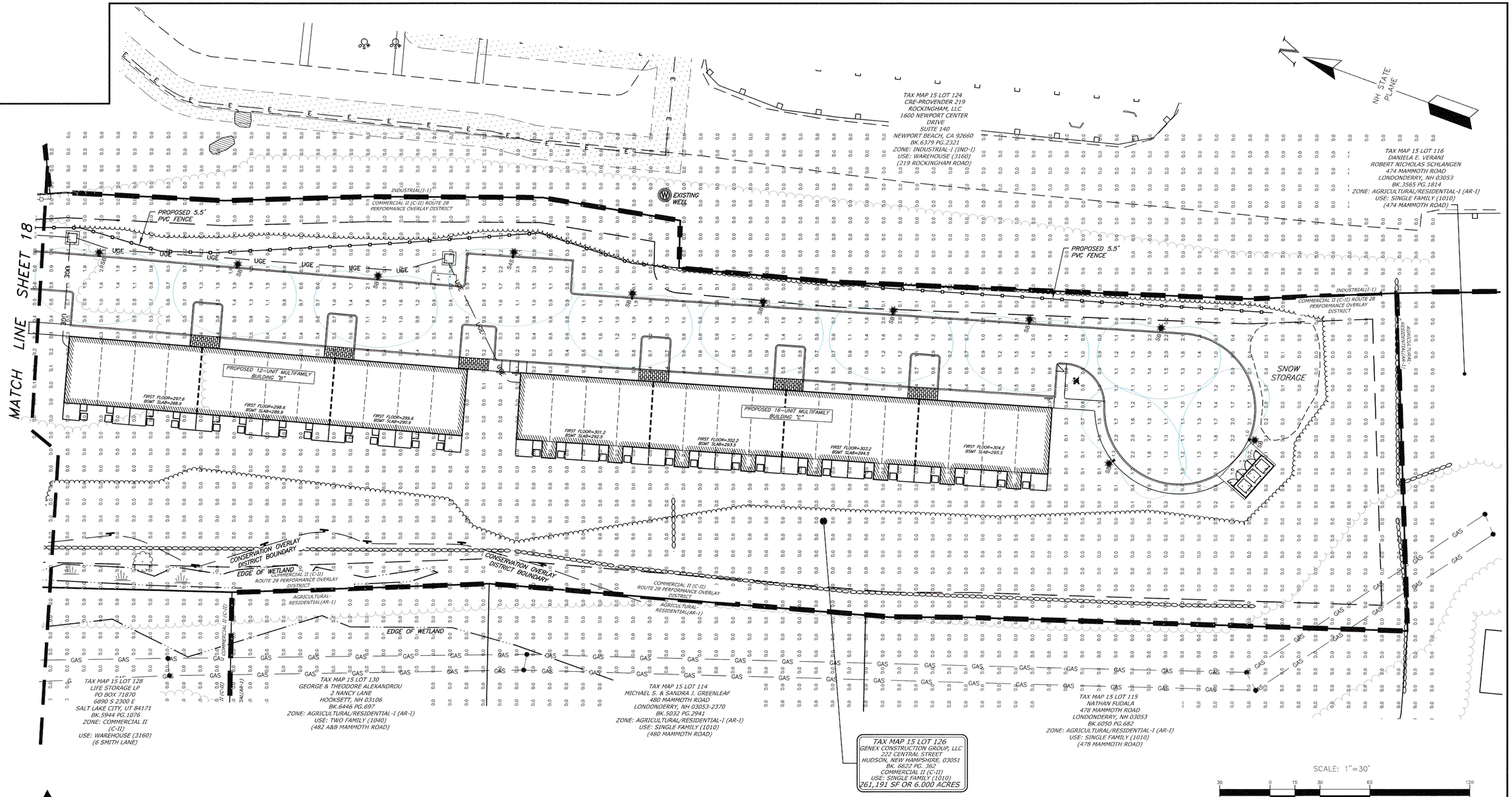
PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 30' | JUNE 12, 2025 | SHEET 18 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503-22
JST	JST	GAC	692	28	

Bedford Design
ENGINEERS, SURVEYORS & LANDSCAPE ARCHITECTS
603-622-5533 • 592 HARVEY ROAD MANCHESTER, NH 03103 • www.BedfordDesign.com

G:\PROJECT\0503022 GENEX Rockingham Road\DWG\0503022ex01.dwg



G:\PROJECT\05032022 GENEX Rockingham Road\DWG\05032022cx01.dwg

811 DigSafe MA-ME-NH-RI-VT

APEX
LIGHTING SOLUTIONS
20-30 BEAVER ROAD, WETHERSFIELD, CT 06109
TELEPHONE 860.632.8766 / WWW.APEXLTG.COM

GENERAL DISCLAIMER:

Calculations have been performed according to IES standards and good practice. Some differences between measured values and calculated results may occur due to tolerances in calculation methods, testing procedures, component performance, measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lighting calculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

* LLF Determined Using Current Published Lamp Data

NOTE TO REVIEWER:

Total Light Loss Factor (LLF) applied at time of design is determined by applying the Lamp Lumen Depreciation (LLD) from current lamp manufacturer's catalog, a Luminaire Dirt Depreciation Factor (LDD) based on IES recommended values and a Ballast Factor (BF) from current ballast specification sheets. Application of an incorrect Light Loss Factor (LLF) will result in forecasts of performance that will not accurately depict actual results.

For proper comparison of photometric layouts, it is essential that you insist all designers use correct Light Loss Factors.

JOB NAME: GENEX - ROCKINGHAM RD - LONDONDERRY, NH
APEX LIGHTING SOLUTIONS
WORKPLANE/CALC PLANE: AT FINISH GRADE
MOUNTING HEIGHT: SEE LUMINAIRE SCHEDULE
APPS: LED
SALES: CR
SPECIFIER: BEDFORD DESIGN CONSULTANTS

ALL LIGHTING FIXTURES SHALL BE FULL CUT-OFF TYPE FIXTURES AS REQUIRED

Luminaire Schedule

Qty	Label	Arrangement	Lumens	Input Watts	LLF	BUG Rating	Description
1	S2S	Single	5354	41.88	0.900	B1-U0-G1	GARDCO OPF-S-A01-730-T2M-AR1-UNV-FINISH-OPF-S-HIS-1 / MOUNTED TO SSS-CB-4-11-20-D1-DT5-FINISH
1	S4S	Single	5468	41.88	0.900	B1-U0-G2	GARDCO OPF-S-A01-730-T4M-AR1-UNV-FINISH-OPF-S-HIS-T4-1 / MOUNTED TO SSS-CB-4-11-20-D1-DT5-FINISH
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Calculation Summary

Label	Grid Height	Avg	Max	Min	Avg/Min	Max/Min
OVERALL SITE	0	0.11	2.7	0.0	N.A.	N.A.
PARKING & DRIVE LANES	0	1.07	2.7	0.0	N.A.	N.A.


GARDCO OPF-S-A01-730



DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC - STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
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9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

LIGHTING PLAN

ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 30' | JUNE 12, 2025 | SHEET 19 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	
JST	JST	GAC	692	28	503-22

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Long Term Maintenance Plan
Inspection & Maintenance (I&M) Manual for Stormwater Best Management Practices

ROCKPOINT COMMONS

225 Rockingham Road

Londonderry, New Hampshire

November 11, 2025

This long-term Stormwater Inspection and Maintenance (I&M) Plan shall be implemented at Rockpoint Commons, Londonderry, N.H. to ensure that the stormwater management system functions as designed and in accordance with NHDES Env-Wq 1500 Alteration of Terrain Regulations and the Town of Londonderry Stormwater Regulations. This Inspection and Maintenance Plan is intended to cover all on-site drainage structures.

The purpose of this Inspection & Maintenance manual is to assist the responsible parties in maintaining and understanding the functions of the stormwater best management practices installed at the subject facility.

Party Responsible for Reporting, Inspection & Maintenance after Construction:

Genex Construction Group, LLC – Marco Plante, 603-235-8066 m.plante@genexconstgroup.com
222 Central Street
Hudson, N.H. 03051

Genex Construction Group possesses the primary responsibility for overseeing and implementing the I&M Plan and designating a person who will be responsible for the proper operation and maintenance of the stormwater structures. In case of transfer of property ownership, future property owners shall be notified of the presence of the stormwater management system and the requirements for proper implementation of the I&M Plan.

Party Responsible for Reporting, Inspection & Maintenance during Construction:

Genex Construction Group, LLC – Marco Plante, 603-235-8066 m.plante@genexconstgroup.com
222 Central Street
Hudson, N.H. 03051

Components of the Inspection and Maintenance Plan include:

- Removal of all trash and litter debris from entire site, particularly parking areas, service areas, landscaped areas, wooded areas, drainage basin areas;
- Pavement sweeping of driveways, parking areas and service areas;
- Removal of sediment and pollutants trapped in swales and basins;
- Prohibition on high-phosphorous content fertilizers.

Stormwater Runoff Quality
The stormwater management system protects and enhances the stormwater runoff water quality through the removal of sediment and pollutants, and source control significantly reduces the amount of pollutants entering the system. Preventive maintenance of the system will include a comprehensive source reduction program of regular sweeping and litter removal, prohibitions on the use of pesticides, and maintenance of trash areas. These measures are described below.

Drainage System
Stormwater runoff is directed to off-line deep sump catch basins within the new private driveway and parking areas. This closed drainage system collects stormwater and directs it to stormwater gravel wetland basins for further treatment prior to release into an existing drainage system along Rockingham Road.

The deep sump catch basins provide water quality treatment by removing large sediment particulate and floating contaminants from runoff. The stormwater gravel wetland basins will further treat runoff prior to discharge the areas adjacent to wetlands on-site. Maintenance and cleaning of the stormwater gravel wetland basins, riprap outlets, and deep sump catch basins will assure adequate performance and treatment prior to discharge off-site.

Maintenance Program
The Property Manager and maintenance staff will conduct the operation and maintenance program set forth in this document. The Manager will ensure that inspections and record keeping are timely and accurate, and that cleaning and maintenance are performed at least on a bi-annual basis. Inspection & Maintenance Log Forms (attached) shall include the date and the amount of the last significant storm event in excess of 1" of rain in a 24-hour period, physical conditions of the structures, depth of sediment in structures, evidence of overtopping or debris blockage and maintenance required of each structure. Photographs of each practice that is subject to the I&M requirement at each inspection of that practice shall be attached to the Inspection & Maintenance Log Forms. *Copies of maintenance will be kept on file at the Property Manager's office and copies of Inspection & Maintenance Log sheets indicating all work and inspections will be sent to the Town of Londonderry Department of Engineering and Environmental Services and made available to the New Hampshire Department of Environmental Services upon request.*

All stormwater management structures will be inspected two times per year, with cleaning typically occurring in April and October and possibly more often, as site conditions warrant. Concurrent with inspection and cleaning, all litter shall be picked up and removed from the parking areas, service areas, grass, landscaped and wooded areas.

Quarterly Inspections

1. Inspect sediment forebay inlet's and remove any debris monthly or as determined to be reasonable based on experience with the installed systems to ensure that the forebays are working in their intended fashion and that they are free of debris; quarterly, inspect catch basin sumps and bottom of drain manholes; if depth of sediment in sumps exceeds 50% capacity, sediment must be removed. Excessive sediment shall be removed and properly disposed by a licensed drainage cleaning company;
2. Inspect catch basin sumps; if depth of sediment in sumps exceeds 50% capacity, sediment must be removed. Excessive sediment shall be removed and properly disposed by a licensed drainage cleaning company;
3. Photographs of all areas inspected shall be taken at time of inspection. Additional photographs shall be taken post cleaning/maintenance as required.

Bi-Annual Inspections (performed in April and October)

1. Inspect grassed swales and stormwater gravel wetland basins and remove wind-blown trash and debris. Inspect vegetation twice per year during both the growing and non-growing seasons. Remove accumulated sediment once every ten years or more often as necessary;
2. Inspect Flared End Sections and Headwalls and remove any litter, sediment or debris;
3. Inspect all vegetated areas and remove litter and debris as necessary. Inspect slopes and embankments early in the growing season to identify active or potential erosion problems Remove any invasive species present in the swales or basins. Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows;
4. Inspection of trash and recycling enclosures for spillage and scattered litter must be performed on a regular basis to prevent the spread of pollutants into the stormwater management system.
5. Photographs of all areas inspected shall be taken at time of inspection. Additional photographs shall be taken post cleaning/maintenance as required.

Pavement Sweeping Program

Long-term management practices include quarterly sweeping of driveways and non-pervious pavement parking areas. The sweeping program will remove sand and contaminants directly from paved surfaces before they become mobilized during rain events and transported to the drainage system. Pavement sweeping is a highly effective source control measure for reducing pollutant loading in stormwater. All sweepings will be disposed of in a legal manner.

Fertilizer Use

Only slow-release organic low-phosphorous fertilizers will be used in any landscaped areas in order to limit the amount of nutrients that could enter the stormwater system.

Removal of Non-Native Invasive Plants

During maintenance activities, check for the presence of invasive plants. Non-native invasive plants crowd out natives in natural and managed landscapes. Invasive plants grow well even in less than desirable conditions such as sandy soils along roadsides, shaded wooded areas, and in wetlands. In ideal conditions, they grow and spread even faster. There are many ways to remove these non-native invasives, but once removed, care is needed to dispose the removed plant material so the plants don't grow where disposed. Remove and dispose of all invasive plant materials in accordance with "Methods for Disposing Non-Native Invasive Plants" published by the University of New Hampshire Cooperative Extension.
http://extension.unh.edu/resources/files/resource000988_rep1720.pdf

Snow Disposal and Plowing

The purpose for the snow and snowmelt management plan is to provide guidelines regarding snow disposal site selection, site preparation and maintenance that are acceptable to the Department of Environmental Protection. For the areas that require snow removal, snow storage onsite will largely be accomplished by utilizing pervious upland areas along the shoulder of the roadways and parking areas as windrowed by plows. No snow shall be pushed into the buffers or wetlands. Any excess snow shall be trucked off site and disposed of in a legal manor. Ensure that drainage structures are not blocked by ice, snow, debris or trash during winter months. Sand shall be the primary agent used for driveway and parking lot safety during ice and snow conditions. No deicing materials shall be stored on site.

- All operators shall be "green SnowPro" certified.
- Avoid dumping of snow into any water body, including streams, ponds, or wetlands, as this could lead to water quality impacts and flooding.
- Avoid disposing of snow on top of storm drain catch basins or in stormwater basins. Snow combined with sand and debris may block the storm drainage system, causing localized flooding. A high volume of sand, sediment, and litter released from melting snow also may quickly be transported through the system into the surface water.
- During winter conditions sand use site-wide shall be applied to the minimum extent possible to maintain safe conditions.
- The usage of Sodium Chloride for snow and ice removal is prohibited.
- The amount of salt usage shall be reported yearly to NHDES

Stormwater BMP's on-site: (see attached map for locations)

Pre-Treatment Areas:
Sediment Forebays

Treatment Areas:
Stormwater Gravel Wetland

Recommended Maintenance for Specific BMP's:

Sediment Forebays

- Forebays help reduce the sediment load to downstream BMPs, and will therefore require more frequent cleaning;
- Inspect sediment forebays quarterly;
- Conduct periodic mowing of embankments (generally two times per year) to control growth of woody vegetation on embankments. Set mower blades no lower than 3 to 4 inches;
- Remove debris from outlet structures at least once per year:
- Check for signs of rilling or gullying and repair areas as needed;
- Remove and dispose of accumulated sediment based on inspection;
- After removing sediment, replace any vegetation damaged during the clean-out by either reseeding or resodding. When reseeding, incorporate practices such as hydroseeding with a tackifier, blanket, or similar practice to ensure that no scour occurs in the forebay while the seeds germinate;
- Install and maintain a staff gage or other measuring device, to indicate depth of sediment accumulation and level at which clean-out is required.

Deep Sump Catch Basins

- Catch basins may require frequent maintenance. Depending on the location, this may require several cleanings of the sumps per year. At a minimum, Inspection of outlet structure and appurtenances at least twice annually once after snow melt and once after leaf drop and following any rainfall event exceeding 2.5 inches in a 24-hour period, with maintenance or rehabilitation conducted as warranted by such inspection;
- Removal of surface debris from inlet grate and outlet structures twice annually and following any rainfall event exceeding 2.5 inches in a 24-hour period;
- Removal of accumulated sediment and debris when it approaches half the depth of the sump;
- If floating hydrocarbons are observed during an inspection, the material should be removed immediately by skimming, absorbent materials, or other method and disposed in conformance with applicable State and Federal regulations;
- Cleaning may require a Vacuum truck instead of a "clam-shell" to avoid damage to the hood;
- Damaged hoods should be replaced when noted by inspection.

Grassed Swales/Landscaped Areas

- Removal of debris from inlet and outlet structures twice annually and following any rainfall event exceeding 2.5 inches in a 24-hour period;
- Removal of accumulated sediment and debris annually or as necessary following inspection;
- Inspection at least twice annually (and following any rainfall event exceeding 2.5 inches in a 24-hour period) for erosion, sediment accumulation, vegetation loss, and presence of invasive species with maintenance or rehabilitation conducted as warranted by such inspection;
- Perform periodic mowing of embankments; do not cut shorter than 4" depth required for water quality flow;
- Repair eroded areas, remove invasive plant species and dead vegetation, and reseed areas with applicable grass mix as warranted by inspection;

Stormwater Gravel Wetland

- Removal of debris from inlet and outlet structures whenever observed by inspection;
- Removal of accumulated sediment and debris when it significantly affects the basin capacity and function;
- Inspection of pretreatment measures at least twice annually, and removal of accumulated sediment as warranted by inspection, but no less than twice annually;
- Inspection of inlet and outlet structures, energy dissipation structures or practices, and other structural appurtenances at least twice annually by a qualified professional and following any rainfall event exceeding 2.5 inches in a 24-hour period, with corrective action implemented (maintenance, repairs, or rehabilitation) conducted as warranted by such inspection;
- Basin embankments should be inspected at least annually by a qualified professional for settlement, erosion, seepage, animal borrows, woody vegetation, and other conditions that could degrade the embankment and reduce its ability to impound water. Immediate corrective actions should be implemented if any such conditions are found. Vegetation should be maintained in a healthy condition, including pruning, removal and replacement of dead or diseased vegetation, and removal of invasive plant species.

Outlet Protection:

- Inspect the riprap outlet protection twice annually for damage and deterioration. Repair/Replace materials as necessary to provide proper outlet protection and prevent soil erosion and transport.

Maintenance Schedule

The following is a general maintenance schedule that can be used as a reference by the Property Manager. This schedule includes the maintenance action to be taken and when the action is to occur.

Site Component	Action to be Taken	Timeline for Completion
Pavement Areas	Sweeping of standard pavement areas, disposal of sweepings in a legal manner; removal of trash and litter from pavement	Monthly
Swales, Forebays, Gravel Wetland Basins & Landscape Areas	Removal of wind-blown trash and litter from entire property. Removal and proper disposal of invasive plants	April October
Swales, Gravel Wetland Basins	Inspect for accumulated sediment	April October
Swales, Gravel Wetland Basins	Inspect for standing water for periods in excess of 72 hours and for accumulated sediment	After each storm greater than 2.5" for 3 months after construction. Then biannually in April and October
Drainage Flared End Outlets & Headwalls	Removal of trash and sediment from drainage outlets	April October
Catch Basins	Inspection and Clean, removal of sediments, oils, and floatables	Monthly Inspection, Quarterly Cleaning

ROCKPOINT COMMONS

225 Rockingham Road
Londonderry, New Hampshire

Stormwater Drainage Inspection and Maintenance Log (sheet 1 of 2)
(Make additional copies for each inspection)
(All inspection checklists to be kept in a log book in date order from oldest to newest inspection and sent to the Town of Londonderry Department of Engineering and Environmental Services on an Annual basis)

Site Maintenance Supervisor: _____ Date: _____
☐ Routine ☐ Response to Rainfall Event ____in ☐ Other _____

Best Management Practice	Minimum Frequency	Date Performed	Comments	Cleaning/ Repair Required	Date of Cleaning /Repair	Performed By
Lawn Areas & Landscaping	Twice Annually			Yes/No		
DMH no. 10	After 2.5" Storm or Twice Annually			Yes/No		
CB no. 11	After 2.5" Storm or Twice Annually			Yes/No		
DMH no. 12	After 2.5" Storm or Twice Annually			Yes/No		
CB no. 13	After 2.5" Storm or Twice Annually			Yes/No		
DMH no. 14	After 2.5" Storm or Twice Annually			Yes/No		
CB no. 15	After 2.5" Storm or Twice Annually			Yes/No		
CB no. 16	After 2.5" Storm or Twice Annually			Yes/No		
DMH no. 17	After 2.5" Storm or Twice Annually			Yes/No		
DMH no. 18	After 2.5" Storm or Twice Annually			Yes/No		
DMH no. 19	After 2.5" Storm or Twice Annually			Yes/No		
DMH no. 20	After 2.5" Storm or Twice Annually			Yes/No		
DMH no. 21	After 2.5" Storm or Twice Annually			Yes/No		

Best Management Practice	Minimum Frequency	Date Performed	Comments	Cleaning/ Repair Required	Date of Cleaning /Repair	Performed By
DMH no. 23	After 2.5" Storm or Twice Annually			Yes/No		
DMH no. 30	After 2.5" Storm or Twice Annually			Yes/No		
CB no. 31	After 2.5" Storm or Twice Annually			Yes/No		
CB no. 32	After 2.5" Storm or Twice Annually			Yes/No		
DMH no. 36	After 2.5" Storm or Twice Annually			Yes/No		
Sediment Forebay no. 25	After 2.5" Storm or Twice Annually			Yes/No		
Gravel Wetland no. 25	After 2.5" Storm or Twice Annually			Yes/No		
Outlet Structure no. 26	After 2.5" Storm or Twice Annually			Yes/No		
Sediment Forebay no. 34	After 2.5" Storm or Twice Annually			Yes/No		
Gravel Wetland no. 34	After 2.5" Storm or Twice Annually			Yes/No		
Outlet Structure no. 35	After 2.5" Storm or Twice Annually			Yes/No		
End Section no. 22	After 2.5" Storm or Annually			Yes/No		
End Section no. 24	After 2.5" Storm or Twice Annually			Yes/No		
End Section no. 33	After 2.5" Storm or Twice Annually			Yes/No		
End Section no. 37	After 2.5" Storm or Twice Annually			Yes/No		

ROCKPOINT COMMONS

225 Rockingham Road
Londonderry, New Hampshire

Stormwater Drainage Inspection and Maintenance Log (sheet 2 of 2)

ROCKPOINT COMMONS

225 Rockingham Road

Londonderry, New Hampshire

Deicing Inspection and Maintenance Log
(Make additional copies for each inspection)
(All inspection checklists to be kept in a log book in date order from oldest to newest inspection)
The amount of salt usage shall be reported yearly to NHDES

Site Maintenance Supervisor: _____ Date: _____
☐ Routine ☐ Response to Snowfall Event ____in ☐ Other _____

Location	Date Performed	Comments, materials applied	Performed By
Entrance Drive			
Walkways			

INSPECTION OF STORMWATER GRAVEL WETLANDS

Years 0-3 of Operation

Inspections should be conducted bi-annually, and during and after 2.5" rainfall events.

General Information

BMP Description	Stormwater Wetland No.		
BMP Location			
Inspector's Name			
Date of Inspection		Date of Last Inspection	
Start Time		End Time	
Type of Inspection: Regular ☐ Pre-Storm Event ☐ During Storm Event ☐ Post-Storm Event ☐			
Describe the weather conditions at time of inspection			

Specific Information

Maintenance Activity	Maintenance Frequency	Is Status of BMP Satisfactory?	Corrective Action Needed
Inspect for invasive species and remove if present	Monthly	Yes ☐ No ☐	
Replace all media and vegetation	As Needed	Yes ☐ No ☐	

In addition, the following information should be recorded and mapped at least once per year:

- Types and distribution of dominant wetland plants
- Presence and distribution of planted wetland species
- Presence and distribution of invasive species
- Indications other species are replacing planted wetland species
- Percent of standing water that is not vegetated
- Replace all media and vegetation
- Stability of original depth zones and micro-topographic features
- Accumulation of sediment in the forebay and micropool and survival rate of plants

INSPECTION OF STORMWATER GRAVEL WETLANDS

Year 4 - Lifetime of Operation

Inspections should be conducted bi-annually, and during and after 2.5" rainfall events.

General Information

BMP Description	Stormwater Wetland No.		
BMP Location			
Inspector's Name			
Date of Inspection		Date of Last Inspection	
Start Time		End Time	
Type of Inspection: Regular ☐ Pre-Storm Event ☐ During Storm Event ☐ Post-Storm Event ☐			
Describe the weather conditions at time of inspection			

Specific Information

Maintenance Activity	Maintenance Frequency	Is Status of BMP Satisfactory?	Corrective Action Needed
Inspect for invasive species and remove if present	Bi-Annually	Yes ☐ No ☐	
Clean forebays	Annually	Yes ☐ No ☐	
Clean sediment in basin/wetland system	Once every 10 years	Yes ☐ No ☐	
Mulch void areas	Annually	Yes ☐ No ☐	
Remove dead vegetation	Bi-Annually	Yes ☐ No ☐	
Replace dead vegetation	Annually	Yes ☐ No ☐	
Prune	Annually	Yes ☐ No ☐	
Replace all media and vegetation	As Needed	Yes ☐ No ☐	

CATCH BASIN INSPECTION FORM
Inspections should be conducted bi-annually, and during and after 2.5" rainfall events.
Inspector: _____ **Date:** _____

Catch Basin I.D.		**Final Discharge from Structure?** Yes ☐ No ☐ **If Yes, Discharge to Outfall No:** _____	
Catch Basin Label:	**Stencil** ☐ **Ground Inset** ☐ **Sign** ☐ **None** ☐ **Other:** _____		
Basin Material:	Concrete ☐ HDPE ☐ Stone ☐ Other: _____	**Catch Basin Condition:**	Good ☐ Poor ☐ Fair ☐ Crumbling ☐
Pipe Material:	Concrete ☐ HDPE ☐ PVC ☐ Other: _____	**Pipe Measurements:**	Inlet Dia. (in): d= ____ Outlet Dia. (in): D= ____

Required Maintenance/ Problems (check all that apply):
☐ Tree Work Required ☐ Cannot Remove Cover
☐ New Grate is Required ☐ Ditch Work
☐ Pipe is Blocked ☐ Corrosion at Structure
☐ Frame Maintenance is Required ☐ Erosion Around Structure
☐ Remove Accumulated Sediment ☐ Remove Trash & Debris
☐ Pipe Maintenance is Required ☐ Need Cement Around Grate
☐ Basin Undermined or Bypassed **Other:** _____

Catch Basin Grate Type:	**Sediment Buildup Depth:**	**More than 50% full?**	**Description of Flow:**	**Street Name/ Structure Location:**
Bar: ☐ Cascade: ☐ Other: _____	0-6 (in): ____ 6-12(in): ____ 12-18 (in): ____ 18-24 (in): ____ 24 + (in): ____	Yes ☐ No ☐	Heavy ☐ Moderate ☐ Slight ☐ Trickling ☐	
Properly Aligned Yes ☐ No ☐				

***If the outlet is submerged check yes and indicate approximate height of water above the outlet invert.** Is above invert (in)____ Yes ☐ No ☐

☐ **Flow** ☐ **Standing Water** **(check one or both)**	**Observations:** Color: Odor:	**Circle those present:** Foam, Oil Sheen, Sanitary Waste, Excessive Growth, Orange Staining, Floatables, Excessive sediment, Pet Waste, Other: _____, Optical Enhancers
Weather Conditions:	Dry > 24 hours ☐ Wet ☐	
Sample of Screenings Collected for Analysis? Yes ☐ No ☐ **Amount of sediment removed:**		
Comments:		

INSPECTION OF GRASSED SWALE

Inspections should be conducted bi-annually, and during and after 2.5" rainfall events.

General Information

BMP Description			
BMP Location			
Inspector's Name			
Date of Inspection		Date of Last Inspection	
Start Time		End Time	
Type of Inspection: Regular ☐ Pre-Storm Event ☐ During Storm Event ☐ Post-Storm Event ☐			
Describe the weather conditions at time of inspection			

Specific Information

Maintenance Activity	Maintenance Frequency	Is Status of BMP Satisfactory?	Corrective Action Needed
Inspect for soil erosion and repair	Monthly	Yes ☐ No ☐	
Inspect for invasive species and remove if present	Bi-Annually	Yes ☐ No ☐	
Remove trash and debris	Bi-Annually	Yes ☐ No ☐	
Remove dead vegetation	Bi-Annually	Yes ☐ No ☐	
		Yes ☐ No ☐	
		Yes ☐ No ☐	



DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC – STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

STORMWATER MAINTENANCE PLAN
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: NONE | JUNE 12, 2025 | SHEET 20 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503-22
JST	JST	GAC	692	28	

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NH STATE PLANE

TAX MAP 15 LOT 21-1
ROBERT DEGELAN
PO BOX 174
LONDONDERRY, NH 03053
BK.2061 PG.199
ZONE: COMMERCIAL II (C-II)
ROUTE 28 PERFORMANCE OVERLAY DISTRICT
USE: SINGLE FAMILY (1010)
(216 ROCKINGHAM ROAD)

TAX MAP 15 LOT 124
CRE-PROVENDER 219 ROCKINGHAM, LLC
1600 NEWPORT CENTER DRIVE
SUITE 140
NEWPORT BEACH, CA 92660
BK.6379 PG.2321
ZONE: INDUSTRIAL-I (IND-I)
USE: WAREHOUSE (3160)
(219 ROCKINGHAM ROAD)

TAX MAP 15 LOT 125
SEAN P. STRONG
221 ROCKINGHAM ROAD
LONDONDERRY, NH 03053
BK.6630 PG.2059
ZONE: COMMERCIAL II (C-II)
ROUTE 28 PERFORMANCE OVERLAY DISTRICT
USE: SINGLE FAMILY (1010)
(221 ROCKINGHAM ROAD)

TAX MAP 15 LOT 124
CRE-PROVENDER 219 ROCKINGHAM, LLC
1600 NEWPORT CENTER DRIVE
SUITE 140
NEWPORT BEACH, CA 92660
BK.6379 PG.2321
ZONE: INDUSTRIAL-I (IND-I)
USE: WAREHOUSE (3160)
(219 ROCKINGHAM ROAD)

NH ROUTE 28

PROP. 10'x8" CONC. PAD FOR BUS STOP SHELTER

PROP. 5.5' HIGH PVC FENCE

PROP. 8'x8" CONC. TRANSFORMER PAD

4' TALL CHAIN LINK FENCE

PROP. 8'x8" CONC. TRANSFORMER PAD

PROP. 7' CONC. SIDEWALK W/INTEGRAL CURB

PROP. 7'x15' MAILROOM ON CONC. PAD

EXISTING WELL

CB #32

CB#31

CB#16

CB#15

CB#13

CB#11

DMH#30

DMH#17

DMH#14

DMH#12

DMH#10

PROP. HYD.

PROPOSED 12-UNIT MULTIFAMILY BUILDING "A"

PROPOSED 12-UNIT MULTIFAMILY BUILDING "B"

PROPOSED 16-UNIT MULTIFAMILY BUILDING "C"

ROCKPOINT LANE (PRIVATE DRIVE)

SNOW STORAGE

BOTTOM SWALE (TYP.)

SMH#7

SMH#6

SMH#5

SMH#4

SMH#3

SMH#2

SMH#1

DMH#36

DMH#23

DMH#21

DMH#20

DMH#19

DMH#18

ES#24

ES#22

ES#37

OS#35

OS#26

PROPOSED GRAVEL WETLAND STORMWATER BASIN NO. 34

PROPOSED GRAVEL WETLAND STORMWATER BASIN NO. 25

STONEWALL TO REMAIN

CONSERVATION OVERLAY DISTRICT BOUNDARY

EDGE OF WETLAND

PROP. SCREENED DUMPSTERS ON CONCRETE PAD

TAX MAP 15 LOT 116
DANIELA E. VERANI
ROBERT NICHOLAS SCHLANGEN
474 MAMMOTH ROAD
LONDONDERRY, NH 03053
BK.3565 PG.1814
ZONE: AGRICULTURAL/RESIDENTIAL-1 (AR-1)
USE: SINGLE FAMILY (1010)
(474 MAMMOTH ROAD)

TAX MAP 15 LOT 150
DARK HORSE INVESTMENTS LLC
222 ROCKINGHAM ROAD
LONDONDERRY, NH 03053
BK.6526 PG.81
ZONE: COMMERCIAL-I (C-1)
ROUTE 28 PERFORMANCE OVERLAY DISTRICT
USE: SINGLE FAMILY (1010)
(222 ROCKINGHAM ROAD)

TAX MAP 15 LOT 146
226 ROCKINGHAM PLAZA LLC
226 ROCKINGHAM ROAD
LONDONDERRY, NH 03053
BK.5275 PG.916
ZONE: COMMERCIAL II (C-II)
ROUTE 28 PERFORMANCE OVERLAY DISTRICT
USE: SMALL RETAIL (3250)
(226 ROCKINGHAM ROAD)

TAX MAP 15 LOT 128
LIFE STORAGE LP
PO BOX 71870
6890 S 2300 E
SALT LAKE CITY, UT 84171
BK.5944 PG.1076
ZONE: COMMERCIAL II (C-II)
USE: WAREHOUSE (3160)
(6 SMITH LANE)

TAX MAP 15 LOT 130
GEORGE & THEODORE ALEXANDROU
2 NANCY LANE
HOOKSETT, NH 03106
BK.6446 PG.697
ZONE: AGRICULTURAL/RESIDENTIAL-1 (AR-1)
USE: TWO FAMILY (1040)
(482 A&B MAMMOTH ROAD)

TAX MAP 15 LOT 114
MICHAEL S. & SANDRA J. GREENLEAF
480 MAMMOTH ROAD
LONDONDERRY, NH 03053-2370
BK.5032 PG.2941
ZONE: AGRICULTURAL/RESIDENTIAL-1 (AR-1)
USE: SINGLE FAMILY (1010)
(480 MAMMOTH ROAD)

TAX MAP 15 LOT 115
NATHAN FUDALA
478 MAMMOTH ROAD
LONDONDERRY, NH 03053
BK.6050 PG.682
ZONE: AGRICULTURAL/RESIDENTIAL-1 (AR-1)
USE: SINGLE FAMILY (1010)
(478 MAMMOTH ROAD)

TAX MAP 15 LOT 149
ARANOSIAN OIL COMPANY, INC.
557 NORTH STATE STREET
CONCORD, NH 03301
BK.3218 PG.1693
ZONE: COMMERCIAL II (C-II)
USE: GAS MART (3300)
(231 ROCKINGHAM ROAD)

ROCKINGHAM ROAD (PUBLIC/CIRCUMFERENTIAL HIGHWAY)

SMITH LANE (PUBLIC/LOCAL ROAD)

UNDERGROUND NATURAL GAS MARKERS

WELL

SCALE: 1"=50'

GRAPHIC SCALE (50 0 25 50 100 200)

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC - STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

STORMWATER MAINTENANCE PLAN
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: 1" = 50'	JUNE 12, 2025	SHEET 21 OF 33

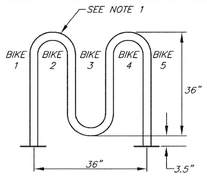
DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503-22
JST	JST	GAC	692	28	

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STATE OF NEW HAMPSHIRE GEORGE A. CHMIELEWSKI JR. 14-9915 LICENSED PROFESSIONAL ENGINEER 12/31/25

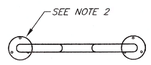
811 DigSafe MA-ME-NH-RI-VT

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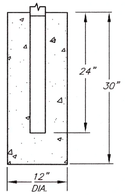


FRONT VIEW

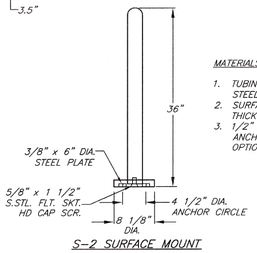
BICYCLE RACKS TO BE SUPPLIED BY "DUMOR, INC. P.O. BOX 112 MIFFLINTOWN, PA (http://dumor.com)", OR APPROVED EQUAL



TOP VIEW



S-1 EMBEDMENT



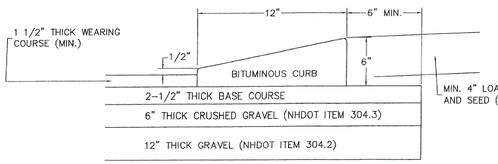
S-2 SURFACE MOUNT

MATERIALS LIST:

1. TUBING – 2 1/2" DIA. SCH 40 STEEL TUBING.
2. SURFACE PLATE – 6" DIA. x 3/8" THICK STEEL.
3. 1/2" DIA. x 3 3/4" EXPANSION ANCHOR BOLTS PROVIDED FOR OPTION S-2.

SERPENTINE BICYCLE RACK DETAIL

NOT TO SCALE



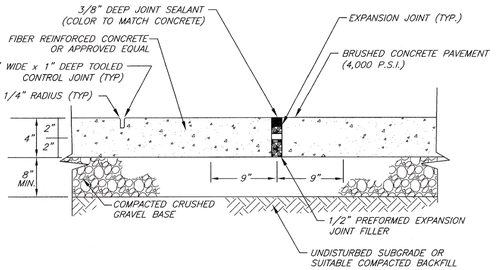
NOTES:

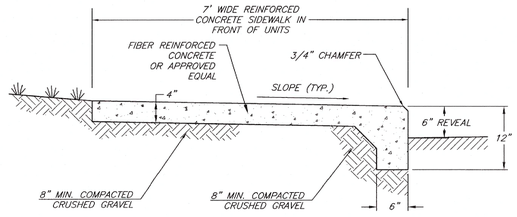
1. APPLY TACK COAT PRIOR TO PLACEMENT OF CURB
2. BITUMINOUS CURB MATERIAL SHALL MEET THE REQUIREMENTS OF NHDOT SECTION 609.
3. CAPE COD BERM DIMENSIONS SHALL MATCH THOSE GIVEN IN THIS DETAIL.

TYPICAL CAPE COD BERM

NOT TO SCALE

EXHIBIT R104



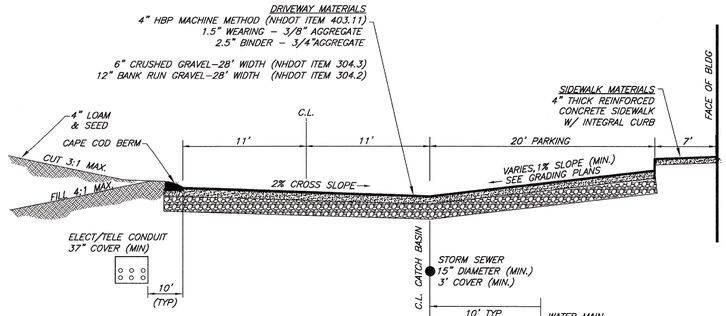


NOTES:

1. CROSS SLOPE OF SIDEWALK TO BE AS SPECIFIED ON THE PLAN.
2. MAINTAIN 2" CLEARANCE (TYP) BETWEEN ALL CONCRETE EDGES AND WIRE FABRIC OR DOWEL.
3. CONTROL JOINTS TO BE LOCATED 5-FEET ON CENTER.
4. EXPANSION JOINTS TO BE LOCATED 25-FEET ON CENTER.
5. WELDED WIRE FABRIC SHALL BE LAPSED A MINIMUM OF 2 WIRE SPACES.
6. ALL CONCRETE TO BE 4,000 PSI NHDOT CLASS AA.

REINFORCED CONCRETE SIDEWALK DETAIL

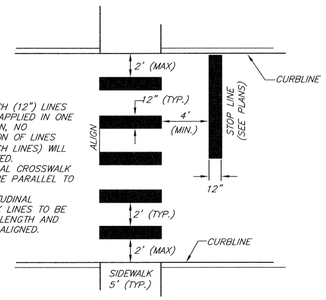
NOT TO SCALE



1. ALL ROADWAY MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE LATEST N.H.D.O.T. SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, INCLUDING SUBSEQUENT AMENDMENTS AND EDITIONS.
2. PROVIDE 4" (MIN) COMPACTED LOAM AND SEED ON ALL SIDE SLOPES AND DRAINAGE SWALES UNLESS OTHERWISE NOTED.

TYPICAL DRIVEWAY CROSS SECTION

NOT TO SCALE

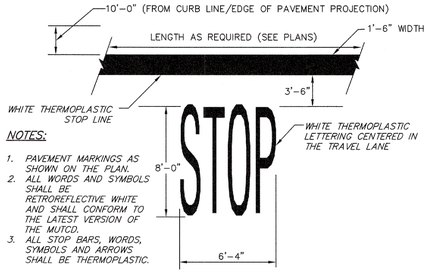


NOTES:

1. TWELVE INCH (12") LINES SHALL BE APPLIED IN ONE APPLICATION. NO COMBINATION OF LINES (TWO 6 INCH LINES) WILL BE ACCEPTED.
2. LONGITUDINAL CROSSWALK LINES TO BE PARALLEL TO CURBLINE.
3. ALL LONGITUDINAL CROSSWALK LINES TO BE THE SAME LENGTH AND PROPERLY ALIGNED.

CROSSWALK DETAIL

NOT TO SCALE

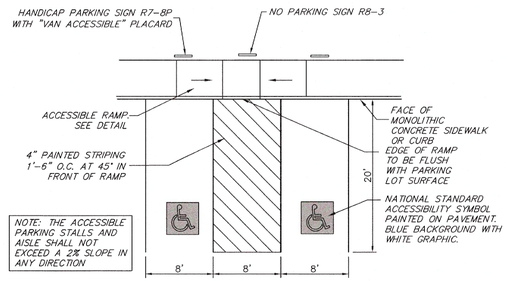


NOTES:

1. PAVEMENT MARKINGS AS SHOWN ON THE PLAN.
2. ALL WORDS AND SYMBOLS SHALL BE RETROREFLECTIVE WHITE AND SHALL CONFORM TO THE LATEST VERSION OF THE MUTCD.
3. ALL STOP BARS, WORDS, SYMBOLS AND ARROWS SHALL BE THERMOPLASTIC.

STOP BAR DETAIL

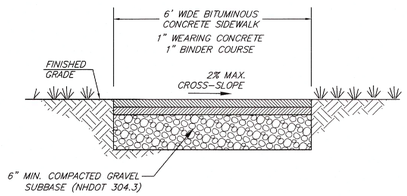
NOT TO SCALE



STRIPE PARKING AREAS AND DRIVES AS SHOWN INCLUDE PARKING SPACES, HANDICAP SYMBOLS AND PAINTED ISLES. ALL MARKINGS TO BE CONSTRUCTED USING WHITE TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AS3910 M248 TYPE F.

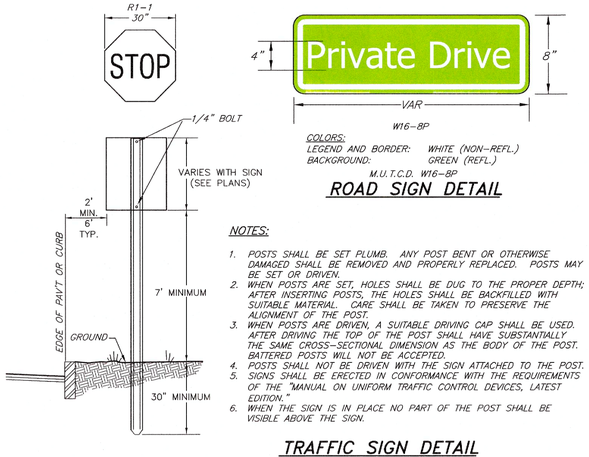
ACCESSIBLE PARKING SPACES

NOT TO SCALE



BITUMINOUS SIDEWALK DETAIL

NOT TO SCALE



COLORS:
LEGEND AND BORDER: WHITE (NON–REFL.)
BACKGROUND: GREEN (REFL.)
M.U.T.C.D. W16–8P

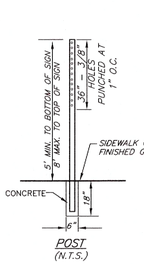
ROAD SIGN DETAIL

NOTES:

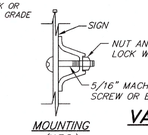
1. POSTS SHALL BE SET PLUMB. ANY POST BENT OR OTHERWISE DAMAGED SHALL BE REMOVED AND PROPERLY REPLACED. POSTS MAY BE SET OR DRIVEN.
2. WHEN POSTS ARE SET, HOLES SHALL BE DUG TO THE PROPER DEPTH; AFTER INSERTING POSTS, THE HOLES SHALL BE BACKFILLED WITH SUITABLE MATERIAL. CARE SHALL BE TAKEN TO PRESERVE THE ALIGNMENT OF THE POST.
3. WHEN POSTS ARE DRIVEN, A SUITABLE DRIVING CAP SHALL BE USED. AFTER DRIVING THE TOP OF THE POST SHALL HAVE SUBSTANTIALLY THE SAME CROSS–SECTIONAL DIMENSION AS THE BODY OF THE POST. BATTERED POSTS WILL NOT BE ACCEPTED.
4. POSTS SHALL NOT BE DRIVEN WITH THE SIGN ATTACHED TO THE POST.
5. SIGNS SHALL BE ERECTED IN CONFORMANCE WITH THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION."
6. WHEN THE SIGN IS IN PLACE NO PART OF THE POST SHALL BE VISIBLE ABOVE THE SIGN.

TRAFFIC SIGN DETAIL

NOT TO SCALE

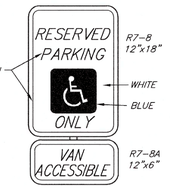


POST (N.T.S.)



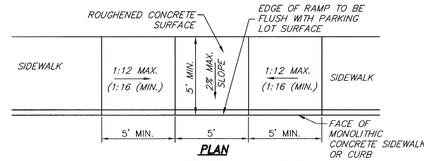
MOUNTING (N.T.S.)

POST SECTION (N.T.S.)



VAN ACCESSIBLE HANDICAP PARKING SIGN DETAIL

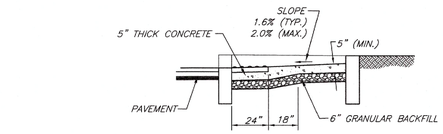
NOT TO SCALE



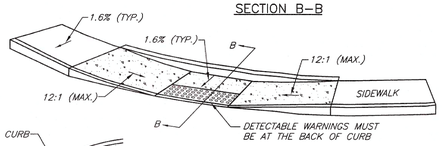
PLAN

ACCESSIBLE PARKING RAMP

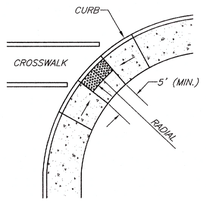
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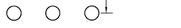
SECTION B–B



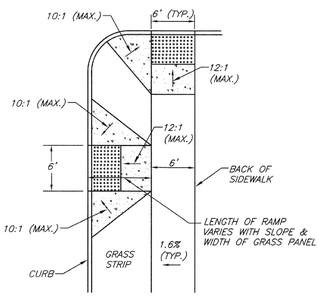
PARALLEL CURB RAMP



CORNER PARALLEL CURB RAMP



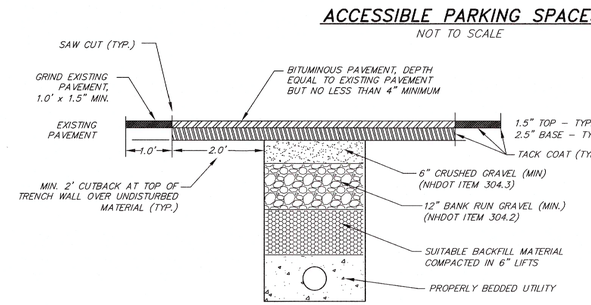
TRIANGULAR PATTERN
(FOR USE WITH RAMPS ON CURVES)



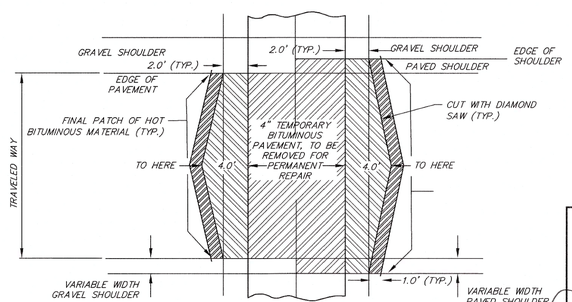
CORNER PARALLEL CURB RAMP

CURB RAMP DETAILS

NOT TO SCALE



ELEVATION



PLAN

TYPICAL PERMANENT PAVEMENT REPAIR

NOT TO SCALE

811 DigSafe MA ME NH RI VT

DATE	DESCRIPTION	BY	REV.
12–31–25	PER DRC – STANTEC REVIEW #2	BJL	E
11–12–25	PER DRC PLAN REVIEW	JST	D
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9–24–25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8–20–25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

CONSTRUCTION DETAILS
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

STATE OF NEW HAMPSHIRE GEORGE A. CHAMBERLAIN JR. NO. 15415 LICENSED PROFESSIONAL ENGINEER

12/31/25

SCALE: AS SHOWN | JUNE 12, 2025 | SHEET 22 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503–22
JST	JST	GAC	692	28	

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MANHOLE TESTING PER Env-Wq 704.17

(A) MANHOLES SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST IN ACCORDANCE WITH THE ASTM C1244/C1244M-20 STANDARD IN EFFECT WHEN THE TESTING IS PERFORMED, AVAILABLE AS NOTED IN APPENDIX D. A MANHOLE MAY BE BACKFILLED PRIOR TO PERFORMING A VACUUM TEST, BUT IF THE MANHOLE FAILS THE VACUUM TEST, BACKFILL SHALL BE REMOVED SO REPAIRS TO THE MANHOLE CAN BE MADE FROM THE OUTSIDE OF THE MANHOLE PRIOR TO RETESTING.

(B) THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING:
- (1) THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES HG; AND
- (2) THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR A 1-INCH HG PRESSURE DROP TO 9 INCHES HG SHALL BE:
  - A. NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP IN DEPTH;
  - B. NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP; AND
  - C. NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP;

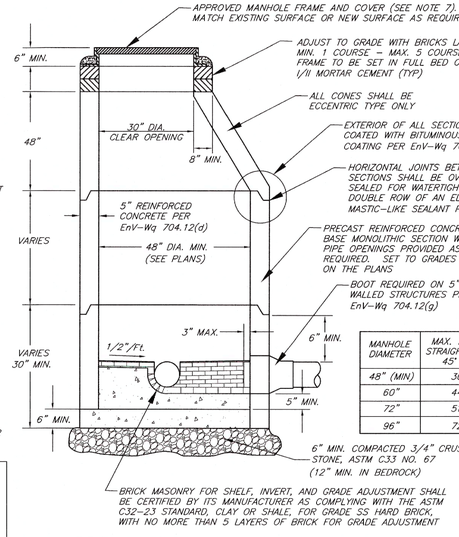
(C) THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (B), ABOVE.

(D) INVERTS AND SHELVES SHALL NOT BE INSTALLED UNTIL AFTER SUCCESSFUL TESTING IS COMPLETED.

(E) IMMEDIATELY FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON THE TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN, OR ANIMALS, UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENT TO GRADE.

THE SEWER CONNECTIONS SHALL BE INSPECTED BY AUTHORIZED TOWN OF LONDONDERRY PUBLIC WORKS AND ENGINEERING DEPARTMENT PERSONNEL BEFORE ANY BACKFILLING. INSPECTION HOURS ARE BETWEEN 9 A.M. AND 4:30 P.M., MONDAY – FRIDAY, WITH AT LEAST 2 DAYS OF ADVANCED NOTICE.

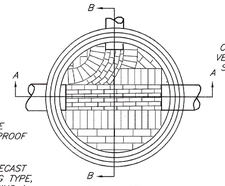
THE SEWER SERVICE MANHOLES SHALL BE VACUUM TESTED AND THE PVC PIPING PRESSURE TESTED WITH AUTHORIZED TOWN OF LONDONDERRY PUBLIC WORKS AND/OR ENGINEERING DEPARTMENT PERSONNEL PRESENT ON SITE AS A WITNESS



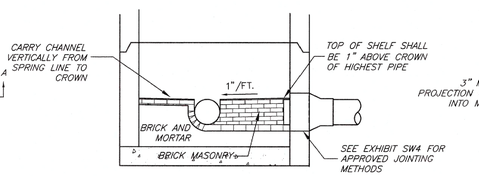
MANHOLE DIAMETER	MAX. PIPE DIAMETER STRAIGHT THROUGH TO 45° DEFLECTION	"T" (WALL THICKNESS)
48" (MIN)	30" OD MAX.	5" (MIN.)
60"	44" OD MAX.	6"
72"	51" OD MAX.	7"
96"	72" OD MAX	9"

PRE-CAST SANITARY SEWER MANHOLE

NOT TO SCALE



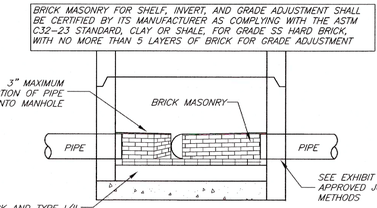
PLAN VIEW



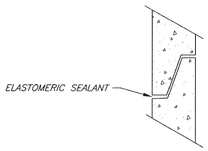
SECTION "B-B"

NOTES:

1. IT IS THE INTENTION THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWINGS. MANHOLES SHALL BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT AND ADEQUATE JOINTING. THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND HS-20-44 LOADING INCLUDING THE FRAME AND COVER.
2. SEWER MANHOLE DIAMETER SHALL BE AS INDICATED ON THE PLANS.
3. LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE WITH ALL LOCAL AND NHDES REQUIREMENTS. INVERT AND SHELF TO BE PLACED AFTER PASSAGE OF LEAKAGE TEST.
4. CARE TO BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT. INVERT BRICKS SHALL BE LAID ON EDGE. BASE SECTION SHALL BE FULL.
5. MANHOLE CHANNELS REQUIRING CHANGE IN ALIGNMENT ARE TO BE BUILT AS A SMOOTH RADIUS.
6. IN CROSS COUNTRY AREAS BEYOND ROADWAY RIGHT-OF-WAYS, THE MANHOLE FRAME ELEVATION SHALL BE SET A MINIMUM OF 6" ABOVE FINISHED GRADE. GRADE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE MANHOLE.
7. FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN (H20 LOADING) AND PROVIDE A 30-INCH CLEAR OPENING. 3-INCH (MINIMUM HEIGHT) LETTERS WITH THE WORD "SEWER" SHALL BE PLAINLY CAST INTO THE CENTER OF EACH MANHOLE COVER.
8. PRECAST CONCRETE BARREL SECTIONS, CONES, AND BASES SHALL BE CERTIFIED BY THEIR MANUFACTURER(S) AS CONFORMING TO THE ASTM C478 STANDARD IN EFFECT AT THE TIME THE BARREL SECTIONS, CONES, AND BASES ARE MANUFACTURED; ALL SECTIONS TO BE H-20 LOAD RATED.
9. THE CASTINGS SHALL BE OF EVEN-GRAINED CAST IRON, SMOOTH, AND FREE FROM SCALE, LUMPS, BLISTERS, SAND HOLES, AND DEFECTS;
10. CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION;
11. CASTINGS SHALL BE EQUAL TO CLASS 30 AND CERTIFIED BY THEIR MANUFACTURER AS CONFORMING TO THE ASTM A48/48M STANDARD IN EFFECT AT THE TIME THE CASTINGS WERE MANUFACTURED;
12. MORTAR SHALL BE COMPOSED OF TYPE I/II MORTAR CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION PER Env-Wq 704.13(c)



SECTION "A-A"

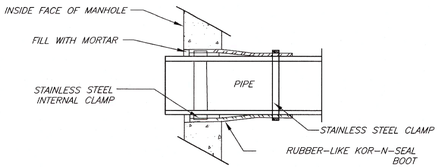


ELASTOMERIC SEALANT

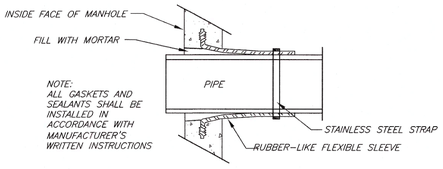
DETAIL "B"

HORIZONTAL JOINTS

ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS



KOR-N-SEAL JOINT SLEEVE (OR APPROVED EQUAL)

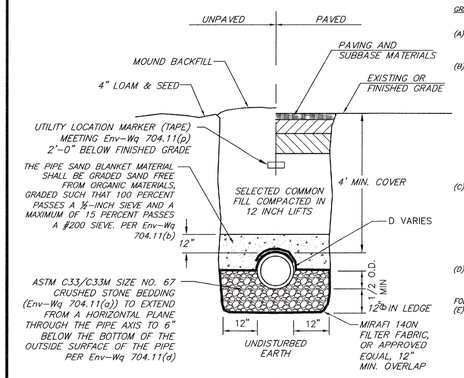


NOTE:
ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS

LOCK-JOINT FLEXIBLE MANHOLE SLEEVE (OR APPROVED EQUAL)

PIPE TO SEWER MANHOLE JOINTS

EXHIBIT SW4



NOTES:

1. MIN. TRENCH WIDTH SHALL BE THE INSIDE PIPE DIAMETER + 24 INCHES. 2. INSTALL 2" RIGID POLYSTYRENE THERMAL INSULATION WITH A MINIMUM "R" VALUE OF 10 AND EXTEND 4' EACH SIDE OF PIPE IF MINIMUM COVER CAN NOT BE ACHIEVED:
   - 4' FOR CROSS COUNTRY SANITARY SEWER PIPE
   - 6' FOR SANITARY SEWER PIPE UNDER PAVED AREAS
2. INSTALL TRENCH DAMS TO PREVENT GROUNDWATER FLOW ALONG PIPE AS SUBSURFACE CONDITIONS WARRANT.

SEWER MAIN TRENCH DETAIL

NOT TO SCALE

GRAVITY SEWER PIPE TESTING PER Env-Wq 704.06

(A) ALL NEW GRAVITY SEWERS SHALL BE TESTED FOR WATER TIGHTNESS BY THE USE OF LOW-PRESSURE AIR TESTS.

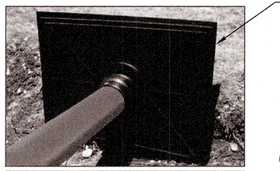
(B) LOW-PRESSURE AIR TESTING SHALL BE IN CONFORMANCE WITH THE FOLLOWING TESTING STANDARDS IN EFFECT AT THE TIME THE TEST IS CONDUCTED:
- (1) ASTM F1417 "STANDARD TEST METHOD FOR INSTALLATION ACCEPTANCE OF PLASTIC GRAVITY SEWER LINES USING LOW-PRESSURE AIR"; AVAILABLE AS NOTED IN APPENDIX D, OR
- (2) UNI-BELL PVC PIPE ASSOCIATION UNI-B-6, "LOW-PRESSURE AIR TESTING OF INSTALLED SEWER PIPE"; AVAILABLE AS NOTED IN APPENDIX D.

(C) ALL NEW GRAVITY SEWERS SHALL BE:
- (1) CLEANED AND VISUALLY INSPECTED USING A LAMP TEST AND BY INTRODUCING WATER TO DETERMINE THAT THERE IS NO STANDING WATER IN THE SEWER; AND
- (2) TRUE TO LINE AND GRADE FOLLOWING INSTALLATION AND PRIOR TO USE.

(D) ALL PLASTIC SEWER PIPE SHALL BE VISUALLY INSPECTED AND DEFLECTION TESTED NOT LESS THAN 30 DAYS NOR MORE THAN 90 DAYS FOLLOWING INSTALLATION.

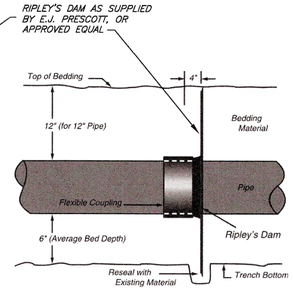
(E) THE MAXIMUM ALLOWABLE DEFLECTION OF FLEXIBLE SEWER PIPE SHALL BE 5% PERCENT OF AVERAGE INSIDE DIAMETER. A RIGID BALL OR MANDREL WITH A DIAMETER OF AT LEAST 95% OF THE AVERAGE INSIDE PIPE DIAMETER SHALL BE USED FOR TESTING PIPE DEFLECTION. THE DEFLECTION TEST SHALL BE CONDUCTED WITHOUT MECHANICAL PULLING DEVICES.

(F) PVC JOINTS SEALS SHALL CONFORM WITH ASTM D3212



DESCRIPTION	PRODUCT NUMBER
4"-8" Ripley's Dam less/cplg.*	62388
10"-12" Ripley's Dam less/cplg.*	62388 1
15"-18" Ripley's Dam less/cplg.*	62388 2
21"-24" Ripley's Dam less/cplg.*	62388 3

* Pipe size and type must be specified when ordering.



INSTALLATION INSTRUCTIONS:

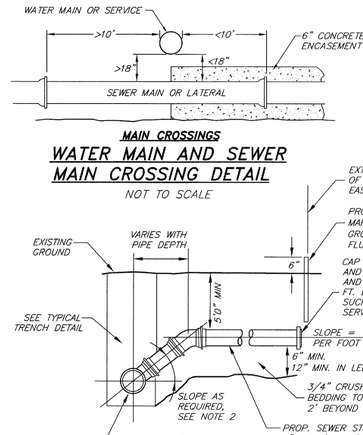
1. MEASURE THE DISTANCE BETWEEN THE LASER POINT AND THE TRENCH BOTTOM.
2. COMPARE THAT DISTANCE WITH THE DISTANCE BETWEEN THE TARGET POINT AND THE BOTTOM OF THE DAM. DIG A TRENCH APPROXIMATELY THREE FEET FROM THE PRECEDING BELL TO AC-COMMODATE THE BOTTOM OF THE DAM.
3. WITH THE NECK OF THE DAM FACING UPSTREAM, FIT THE DAM INTO THE HAND-DUG TRENCH.
4. CENTER THE DAM OPENING INTO THE CORRECT POSITION USING THE LASER AND SNAP THE EDGES INTO THE TRENCH SIDE WALLS. THE DAM OPENING MUST BE LOCATED BEFORE BACKFILLING BEGINS.
5. PLACE BEDDING MATERIAL ON BOTH SIDES OF THE DAM.
6. SLIDE THE FLEXIBLE COUPLING SUPPLIED, OVER THE PIPE TO BE INSTALLED. SLIDE THE PIPE THROUGH THE DAM OPENING AND BELL AS USUAL. SLIDE THE FLEXIBLE COUPLING OVER THE DAM NECK AND TIGHTEN.
7. SET THE PIPE TO LINE AND GRADE AND BACKFILL.

NOTES:

1. COLLARS TO BE INSTALLED EQUIDISTANT FROM ENDS OF PIPE AND SPACED 20 FEET APART.
2. COLLARS SHALL BE WATERPROOF AND HAVE A FLEXIBLE WATERPROOF CONNECTION AROUND THE PIPE AT ALL SPLICES.

ANTI-SEEP COLLAR DETAIL

NOT TO SCALE



MAIN CROSSINGS

WATER MAIN AND SEWER MAIN CROSSING DETAIL

NOT TO SCALE

NOTES:

1. ALL SERVICE CONNECTIONS TO BE 4" MINIMUM DIAMETER UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
2. USE TOWN OF LONDONDERRY CHIMNEY DETAIL (EXHIBIT SW6) WHERE SERVICE CONNECTION ENTERS SEWER AT GREATER THAN 60° TO THE HORIZONTAL.

TYPICAL SEWER SERVICE CONNECTION

EXHIBIT SW5

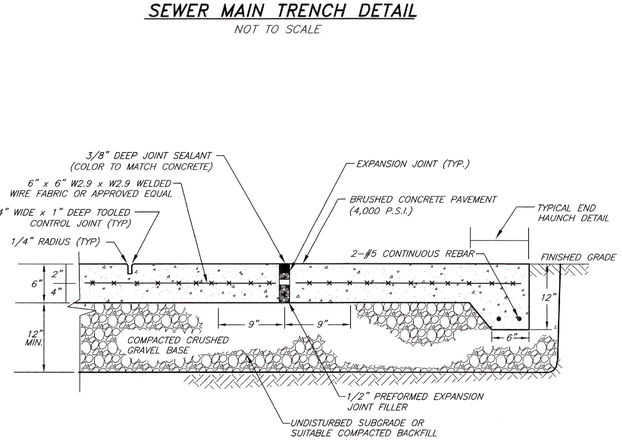
SECTION C-C

NOTES:

1. MINIMUM 5'-0" DIAMETER MANHOLES SHALL BE USED AT ALL INTERNAL DROP MANHOLE CONNECTIONS. SEE PLANS FOR MANHOLE DIAMETER.
2. INTERNAL DROP SEWER MANHOLE CONNECTIONS TO BE USED WHERE THE DIFFERENCE BETWEEN INVERT IN AND INVERT OUT IS GREATER THAN 2'-0".

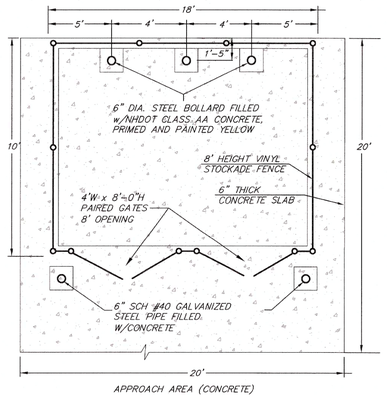
INTERNAL DROP SANITARY SEWER MANHOLE:

EXHIBIT SW3



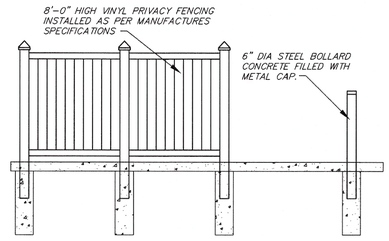
REINFORCED CONCRETE PAD DETAIL

NOT TO SCALE



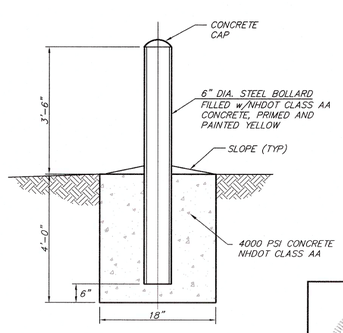
DOUBLE DUMPSTER ENCLOSURE DETAIL

NOT TO SCALE



NOTES:

1. CROSS SLOPE OF CONCRETE PAD TO BE AS SPECIFIED ON THE PLAN.
2. MAINTAIN 2" CLEARANCE (TYP.) BETWEEN ALL CONCRETE EDGES AND WIRE FABRIC OR DOWEL.
3. CONTROL JOINTS TO BE LOCATED 5-FEET ON CENTER OR AS SHOWN ON ARCHITECTURAL PLANS.
4. EXPANSION JOINTS TO BE LOCATED 25-FEET ON CENTER.
5. WELDED WIRE FABRIC SHALL BE LAPSED A MINIMUM OF 2 WIRE SPACES.
6. ALL CONCRETE TO BE 4,000 PSI NHDOT CLASS AA.



TYPICAL BOLLARD DETAIL FOR DUMPSTER PAD

NOT TO SCALE

811 DigSafe MA-ME-NH-RI-VT

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC – STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

CONSTRUCTION DETAILS
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

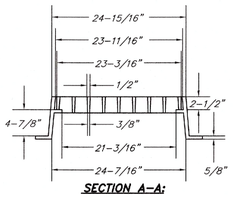
PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: AS SHOWN	JUNE 12, 2025	SHEET 23 OF 33

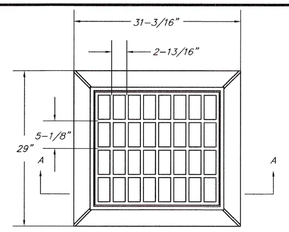
DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503-22
JST	JST	GAC	692	28	

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SECTION A-A:



PLAN VIEW:

NOTES:

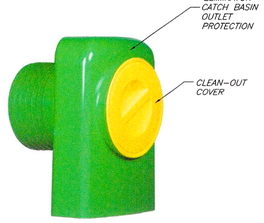
- ALL DIMENSIONS ARE NOMINAL.
- 8" HEIGHT
- FREE OPEN AREA = 2.55 SQ. FT.
- USE 3-FLANGE FRAME IF INSTALLED ADJACENT TO GRANITE CURB.
- ALL DIMENSIONS SHOWN ARE IN INCHES UNLESS OTHERWISE NOTED.

TYPE "B" FRAME & GRATE DETAIL

NOT TO SCALE

POLYETHYLENE LINER NOTES:

1. ALL CATCH BASINS SHALL BE OUTFITTED WITH A POLYETHYLENE LINER' DOWNSPOUT AND MEET H20 LOADING RATE.
2. POLYETHYLENE LINER (NHDOT ITEM 604.0007) SHALL BE FABRICATED AT THE SHOP. DOWNSPOUT SHALL BE EXTRUSION FILLET WELDED TO THE POLYETHYLENE SHEET.
3. PLACE A CONTINUOUS BEAD OF AN APPROVED SILICONE SEALANT BETWEEN FRAME AND POLYETHYLENE SHEET.
4. PLACE CLASS AA CONCRETE TO 2" BELOW THE TOP OF GRATE ELEVATION (SUBSIDIARY TO DRAINAGE STRUCTURE).
5. TRIM POLYETHYLENE SHEET A MAXIMUM OF 4" OUTSIDE THE FLANGE ON THE FRAME FOR THE CATCH BASIN BEFORE PLACING CONCRETE (EXCEPT AS SHOWN WHEN USED WITH CURB).
6. THE CENTER OF THE GRATE & FRAME MAY BE SHIFTED A MAXIMUM OF 3" FROM THE CENTER OF THE DOWNSPOUT IN ANY DIRECTION.

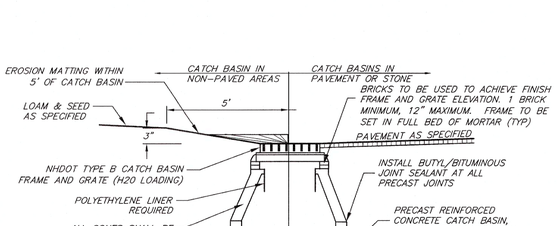


NOTES:

1. HOOD SHALL BE "THE ELIMINATOR" OIL & FLOATING DEBRIS TRAP AS MANUFACTURED BY GROUND WATER RESCUE, INC., QUINCY, MA., TEL. 617-773-1128, ON THE WEB @ WWW.KLEANSTREAM.COM
2. HOODS AVAILABLE TO FIT 12", 15" AND 18" DIAMETER OUTLETS.
3. INSTALL PER MANUFACTURER'S SPECIFICATIONS.

CATCH BASIN HOOD (ELIMINATOR)

NOT TO SCALE

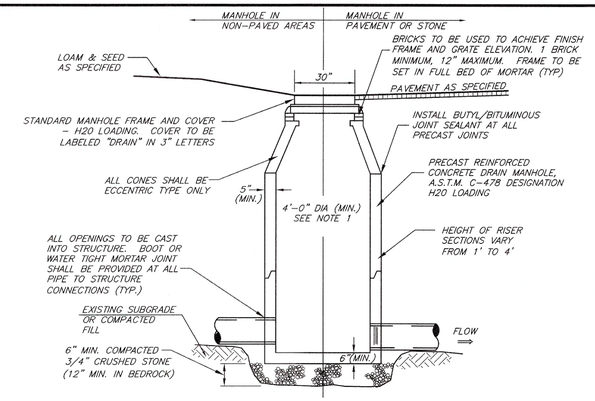


CATCH BASIN NOTES:

1. WHERE DEPTH EXCEEDS 12 FT., USE 5'-0" DIAMETER (MIN.) MAXIMUM DEPTH = 18 FEET.
2. MINIMUM PIPE DROP (INLET TO OUTLET SHALL BE 3" UNLESS OTHERWISE APPROVED BY THE DEPARTMENT OF PUBLIC WORKS AND ENGINEERING.
3. ALL BOOTS, GASKETS, AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS.

CATCH BASIN DETAIL

NOT TO SCALE

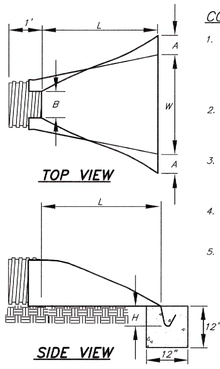


DRAIN MANHOLE NOTES:

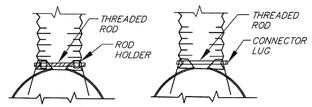
1. WHERE DEPTH EXCEEDS 12 FT., USE 5'-0" DIAMETER (MIN.) MAXIMUM DEPTH = 18 FEET.
2. MINIMUM PIPE DROP (INLET TO OUTLET SHALL BE 3" UNLESS OTHERWISE APPROVED BY THE DEPARTMENT OF PUBLIC WORKS AND ENGINEERING.
3. ALL BOOTS, GASKETS, AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS.

DRAINAGE MANHOLE DETAIL

NOT TO SCALE



PIPE DIA.	PART NO.	A 1" TOL	B MAX.	H 1" TOL	L 0.5" TOL	W 2" TOL.
15"	1210 NP	6.5"	10"	6.5"	25"	29"
18"	1810 NP	7.5"	15"	6.5"	32"	35"
24"	2410 NP	7.5"	18"	6.5"	36"	45"
30"	3010 NP	10.5"	NA	7"	53"	68"
36"	3610 NP	10.5"	NA	7"	53"	68"

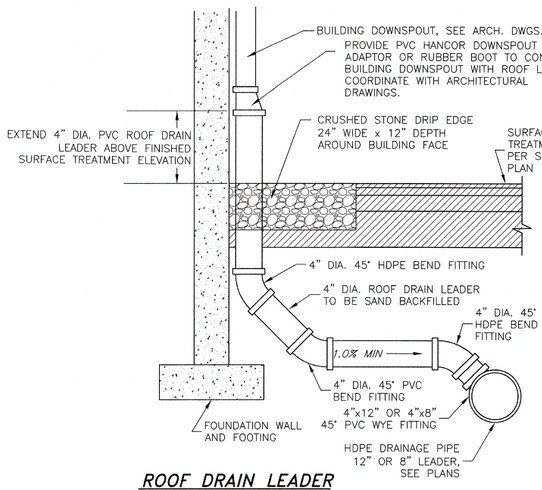


END SECTION FOR HDPE PIPE

NOT TO SCALE

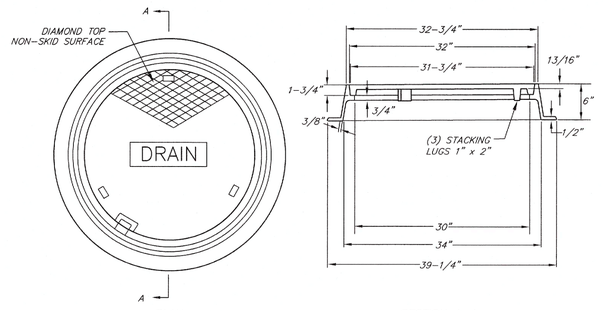
CONSTRUCTION SPECIFICATIONS:

1. PREPARE BEDDING - BACKFILL MATERIAL AROUND THE END SECTION MAY BE THE SAME AS THE MATERIAL AROUND THE PIPE. PLACE A FEW INCHES OF BACKFILL MATERIAL IN THE TRENCH WHERE THE END SECTION WILL BE PLACED. COMPACT AND CONTOUR THIS BEDDING MATERIAL TO GENERALLY MATCH THE END SECTION. EXCAVATE AN AREA IN THE BEDDING WHERE TOE TROUGH WILL SEAT SO THAT THE END SECTION WILL BE LEVEL WITH THE BOTTOM OF THE TRENCH IN THE FINISHED INSTALLATION.
2. PLACE END SECTION OF PIPE - OPEN THE END SECTION COLLAR AND SEAT IT OVER THE TWO PIPE CONNECTIONS. ONCE THE END SECTION IS POSITIONED, CHECK TO MAKE SURE THAT THE INVERT OF THE END SECTION MATCHES THE INVERT OF THE PIPE AND THAT THE END SECTION IS LEVEL WITH THE TRENCH.
3. SECURE END SECTION - SLIP THE STAINLESS STEEL ROD THROUGH THE PRE-DRILLED HOLES AT THE TOP OF THE COLLAR. THE ROD SHOULD BE BETWEEN THE CROWNS OF THE TWO PIPE CONNECTIONS. PLACE A WASHER ON EITHER END OF THE ROD. PLACE A NUT ON EITHER END OF THE ROD AND TIGHTEN WITH A WRENCH.
4. SECURE THE TOE TROUGH - TO PREVENT WASHOUTS FROM HIGH VELOCITY FLOW, IT IS RECOMMENDED THAT THE TROUGH BE SECURED WITH CONCRETE. POUR CONCRETE IN THE TROUGH UP TO THE LEVEL OF THE TRENCH AND ALONG THE ENTIRE LENGTH OF THE TROUGH.
5. FINISH BACKFILL - SHOVEL BACKFILL AROUND THE END SECTION IN 6 TO 9 INCH LAYERS EQUALLY ON BOTH SIDES, KNIFING IT TO ELIMINATE VOIDS. TAMP WITH A SMALL-FACED COMPACTOR OR OTHER EQUIPMENT SUITABLE FOR SMALL AREAS. CONTINUE PLACING, KNIFING, AND COMPACTING BACKFILL LAYERS TO THE TOP OF THE END SECTION TO SEAT IT WELL INTO THE BACKFILL.



ROOF DRAIN LEADER

NOT TO SCALE

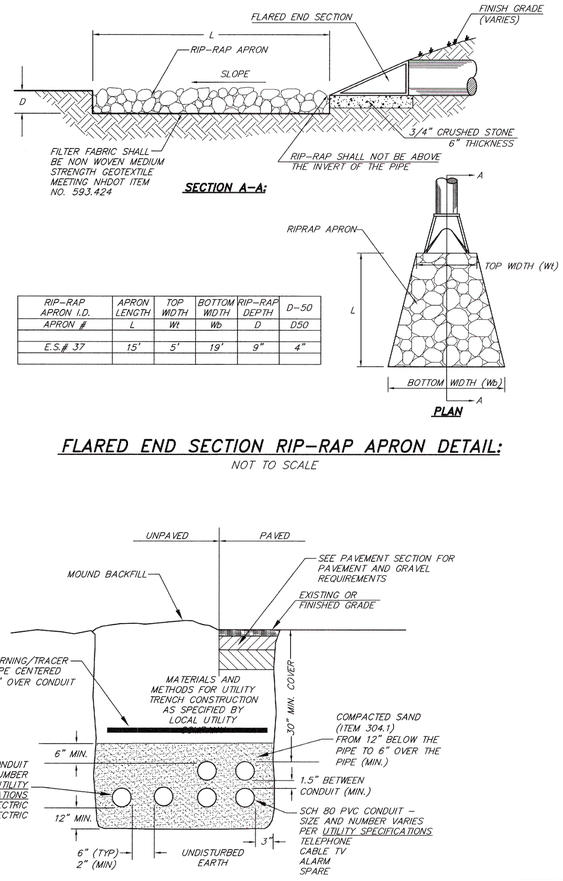


NOTES:

1. ALL DIMENSIONS ARE NOMINAL.
2. FRAMES USING NARROWER DIMENSIONS FOR THICKNESS ARE ALLOWED PROVIDED:
   a. THE FRAMES MUST MEET H20 LOADING RATE.
   b. THE INTERIOR PERIMETER (SEAT AREA) DIMENSIONS OF THE FRAMES REMAIN THE SAME TO ALLOW CONTINUED USE OF EXISTING GRATES/COVERS AS THE EXISTING FRAMES ALLOW, WITHOUT SHIMS OR OTHER MODIFICATIONS OR ACCOMIDATIONS.
   c. ALL OTHER PERTINENT REQUIREMENTS OF THE SPECIFICATIONS ARE MET.
3. LABEL TYPE OF MANHOLE WITH 3" HIGH LETTERS IN THE CENTER OF THE COVER.
4. LABEL SHALL IDENTIFY UTILITY IN ACCORDANCE WITH CITY/TOWN STANDARDS.

MANHOLE FRAME AND COVER

NOT TO SCALE



RIP-RAP APRON I.D.	APRON LENGTH L	TOP WIDTH Wt	BOTTOM WIDTH Wb	RIP-RAP DEPTH D	D-50 D50
APRON #					
E.S.# 37	15'	5'	19'	9"	4"

FLARED END SECTION RIP-RAP APRON DETAIL:

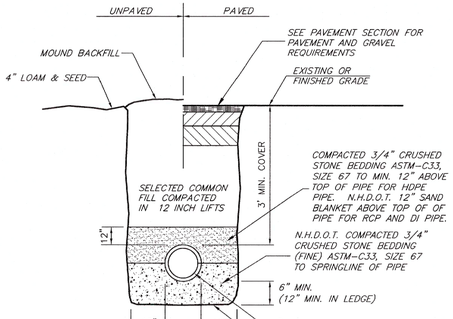
NOT TO SCALE

NOTES:

1. NO CONDUIT RUN SHALL EXCEED 360 DEGRESS IN TOTAL BENDS
2. A SUITABLE PULLING STRING, CAPABLE OF 200 POUNDS OF PULL, SHALL BE INSTALLED IN THE COUNDUIT PRIOR TO INSTALLING THE CONDUIT. THE STRING SHALL BE BLOWN INTO THE COUNDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE CONDUIT.
3. ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND WHERE APPLICABLE, THE NATIONAL ELECTRIC CODES.
4. CONTRACTOR SHALL CONFIRM SIZE OF ELECTRICAL CONDUIT MEETS THE MINIMUM SIZE CRITERIA REQUIRED BASED ON THE NATIONAL ELECTRIC CODE FOR THE SIZE OF THE CONDUCTOR WITHIN EACH CONDUIT.

ELECTRICAL/LIGHTING/COMMUNICATIONS UTILITY TRENCH DETAIL

NOT TO SCALE



NOTES:

1. PLASTIC DRAIN PIPE (HDPE) SHALL BE ADS N-12 (CORREGATED EXTERIOR/SMOOTH INTERIOR) OR APPROVED EQUAL MEETING AASHTO M-252 AND H20 LOADING.
2. D.I. PIPE SHALL BE CLASS 50.
3. REINFORCED CONCRETE PIPE SHALL BE CLASS III, UNLESS OTHERWISE NOTED.

DRAINAGE TRENCH DETAIL

NOT TO SCALE

RIP-RAP APRON MAINTENANCE & CONSTRUCTION NOTES

MAINTENANCE NOTES:

ROCK RIP-RAP SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. THE IMMEDIATE AREA DOWNSTREAM FROM THE RIP-RAP SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. IF THE RIP-RAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY BEFORE FURTHER DAMAGE CAN TAKE PLACE. WOODY VEGETATION SHOULD BE REMOVED FROM THE ROCK RIP-RAP ANNUALLY BECAUSE TREE ROOTS WILL EVENTUALLY DISLODGE THE ROCK RIP-RAP. IF THE RIP-RAP IS ON A CHANNEL BANK, THE STREAM SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT BARS THAT MAY CHANGE FLOW PATTERNS WHICH COULD DAMAGE OR DISPLACE THE RIP-RAP. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE RIP-RAP.

CONSTRUCTION SPECIFICATIONS:

1. THE SUBGRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC OR RIP-RAP SHALL BE CLEARED AND GRUBBED TO REMOVE ALL ROOTS, VEGETATION, AND DEBRIS AND PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE ROCK AND/OR GRAVEL USED FOR FILTER AND RIP-RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING PLACEMENT OF THE ROCK RIP-RAP BY PLACING A CUSHION OF SAND AND GRAVEL OVER THE FABRIC. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 IN.
4. STONE FOR THE RIP-RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT DISPLACEMENT OF THE UNDERLYING MATERIALS. HAND PLACEMENT MAY BE REQUIRED TO PREVENT DAMAGE TO ANY PERMANENT STRUCTURES.
5. STONES FOR RIP-RAP SHALL BE ANGULAR OR SUBANGULAR. THE STONES SHOULD BE SHAPED SO THAT THE LEAST DIMENSION OF THE STONE FRAGMENT SHALL BE NOT LESS THAN ONE-THIRD OF THE GREATEST DIMENSION OF THE FRAGMENT. FLAT ROCKS SHALL NOT BE USED FOR RIP-RAP.
6. VOIDS IN THE ROCK RIP-RAP SHOULD BE FILLED WITH SPALLS AND SMALLER ROCKS.

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC - STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

CONSTRUCTION DETAILS
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: AS SHOWN	JUNE 12, 2025	SHEET 24 OF 33

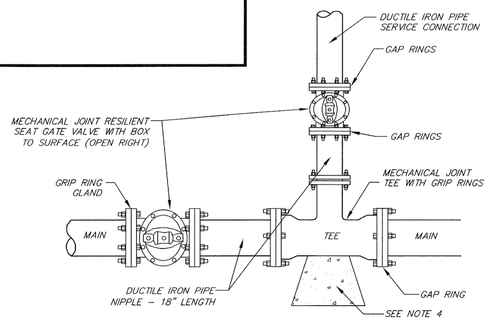
DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503-22
JST	JST	GAC	692	28	

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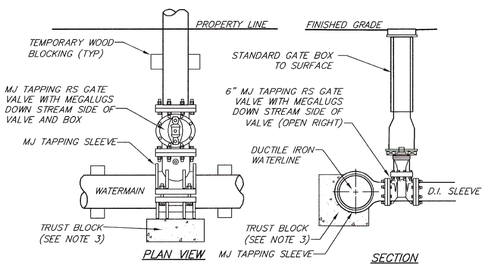
STATE OF NEW HAMPSHIRE - GREGORY A. CZUNAK JR. NO. 8915 - LICENSED PROFESSIONAL ENGINEER

G:\PROJECT\0503022 GENEX ROCKINGHAM ROAD\DWG\0503022CV01.DWG



NOTES:
1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO MANCHESTER WATER WORKS SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5.5–FEET FROM TOP OF PIPE TO FINISH GRADE.
3. EDGE RETAINER CLAMPS AND THRUST BLOCKS SHALL BE USED FOR THRUST RESTRAINT.
4. MIN. 2'x2'x4' PRECAST CONCRETE THRUST BLOCK MAY BE USED WITH MANCHESTER WATER WORKS APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH – SIZE BASED ON SIZE OF FITTING AND PRESSURE IN WATERMAIN.

WATER TEE INSTALLATION
NOT TO SCALE

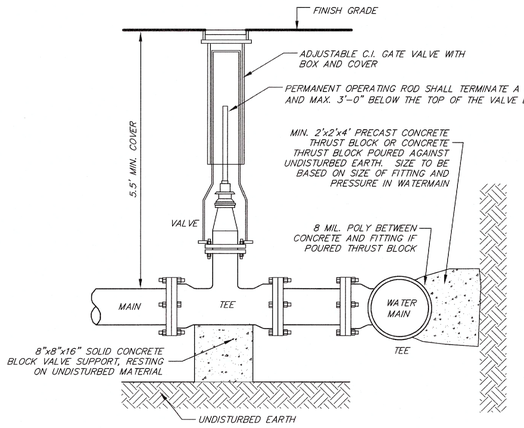


PLAN VIEW SECTION

NOTES:
1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO MANCHESTER WATER WORKS SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5–FEET FROM TOP OF PIPE TO FINISH GRADE.
3. MIN. 2'x2'x4' PRECAST CONCRETE THRUST BLOCK MAY BE USED WITH MANCHESTER WATER WORKS APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH – SIZE BASED ON SIZE OF FITTING AND PRESSURE IN WATERMAIN.

WET TAP TEE INSTALLATION
NOT TO SCALE

DUCTILE IRON PIPE –
1. THE DUCTILE IRON PIPE SHALL BE CLASS 52 AND SHALL CONFORM TO ANSI A.21.51 (AWWA C–151) FOR "PIPE CENTRIFUGALLY CAST IN METAL MOLDS OR SAND LINED MOLDS FOR WATER".
2. CEMENT LININGS SHALL BE DOUBLE THE STANDARD THICKNESS AND SHALL CONFORM TO ANSI A.21.4
3. SEAL COATING SHALL BE APPLIED INSIDE AND OUT.
4. ALL PIPE SHALL BE PUSH–ON TYPE JOINT, IN ACCORDANCE WITH ANSI A.21.11.
5. ALL PIPE SHALL BE CAST in U.S.A.



GATE VALVES 4"–12" – GATE VALVES SHALL BE 200 PSI WORKING PRESSURE, VERTICAL, PLAIN NON–RISING STEM, NUT OPERATED, OPEN RIGHT WITH MECHANICAL JOINT END CONNECTIONS.

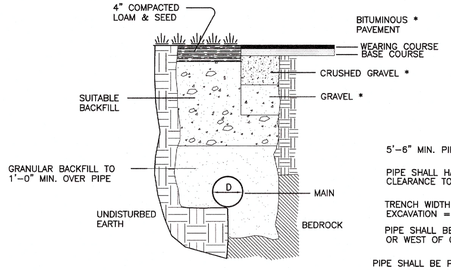
VALVES SHALL COMPLY WITH AWWA C500 OR C509. VALVES SHALL BE RESILIENT SEATED (RS). RS VALVES SHALL MEET THE FOLLOWING REQUIREMENTS: VALVE BODY AND BONNET SHALL BE OF CAST OR DUCTILE IRON COATED ON ALL EXTERIOR AND INTERIOR SURFACES WITH A FUSION BONDED EPOXY CONFORMING TO AWWA STANDARD C–550, LATEST REVISION, APPLIED WITH A MINIMUM THICKNESS OF EIGHT (8) MILS. THE MANUFACTURER SHALL CERTIFY THAT THE COATING IS SUITABLE FOR USE IN A POTABLE WATER SYSTEM, AND THE INTERIOR COATING CERTIFIED TO BE HOLIDAY–FREE. THE GATE SHALL BE COMPLETELY COVERED WITH RUBBER OVER ALL FERROUS SURFACES. THE RUBBER SHALL BE SECURELY BONDED TO THE GATE BODY.

THE "O" RING STEM SEAL SHALL BE REPLACEABLE WITH THE VALVE UNDER PRESSURE IN THE FULL OPEN POSITION.

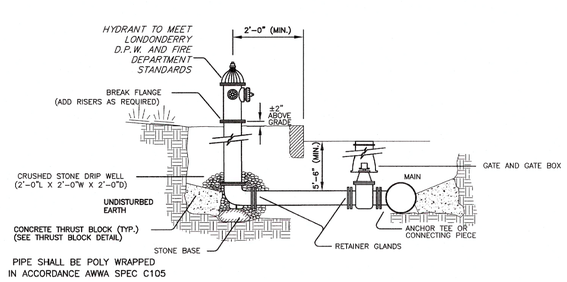
ALL EXTERIOR FASTENERS SHALL BE CONSTRUCTED OF 316 STAINLESS STEEL.

VALVES SHALL BE FULL PORT OPENING. TAPPING VALVES SHALL HAVE ENLARGED PORTS.

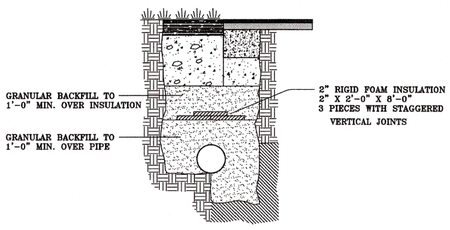
STANDARD GATE VALVE
NOT TO SCALE



TYPICAL TRENCH DETAIL
NOT TO SCALE



TYPICAL HYDRANT INSTALLATION
NOT TO SCALE



MAIN INSTALLATIONS OF LESS THAN 5'–6" OF COVER SHALL BE ALLOWED ONLY AT THE DISCRETION OF THE ENGINEER. ALL INSTALLATIONS OF LESS 5'–6" OF COVER SHALL BE INSULATED AS SHOWN.

INSULATED MAIN
NOT TO SCALE

MECHANICAL JOINT FITTINGS – THE MECHANICAL JOINT FITTINGS SHALL CONFORM TO AWWA C104/ANSI A21.4, C111/A21.11 OR C153/A21.53, CLASS 350 MINIMUM, DUCTILE IRON COMPACT FITTING, WITH DOUBLE CEMENT–LINING THICKNESS AND SEAL COATED INSIDE AND OUT. FITTINGS SHALL BE COMPLETE WITH ACCESSORIES – TEE BOLTS SHALL BE EITHER DUCTILE IRON OR CORTEN. ALL M.J. FITTINGS SHALL BE CAST IN U.S.A.

BOLTED SLEEVE–TYPE COUPLINGS – THE COUPLING SHALL CONFORM TO AWWA 219–11. THE BODY AND RINGS SHALL BE CARBON STEEL WITH A FUSION BONDED EPOXY COATING. THE BOLTS AND NUTS SHALL BE 304 STAINLESS STEEL WITH THE BOLTS COATED WITH AN ANTI–SEIZE COMPOUND. THE GASKET SHALL BE MADE IN TWO LAYERS WITH A REMOVABLE INNER LAYER THAT ALLOWS FOR DIAMETER RANGE EXPANSION.

BUTTERFLY VALVES 16"– 24" – ALL 16", 20" AND 24" BUTTERFLY VALVES SHALL BE OPEN RIGHT WITH MECHANICAL JOINT END CONNECTIONS, COMPLETE WITH ACCESSORIES FOR BURIED SERVICE.

VALVES SHALL BE OF THE TIGHT CLOSING RUBBER SEAT TYPE WITH SEAT BONDED OR MECHANICALLY RETAINED INTO THE DISC OR VALVE BODY. VALVES SHALL HAVE A FULL UNINTERRUPTED 360 DEGREE SEALING SURFACE AND SHALL BE BUBBLE TIGHT AT RATED PRESSURES IN BOTH DIRECTIONS. VALVES SHALL BE DESIGNED FOR USE IN EITHER THROTTLING APPLICATION OR FOR VERY INFREQUENT OPERATION AFTER EXTENDED PERIODS OF INACTIVITY. VALVES SHALL BE IN FULL COMPLIANCE WITH AWWA SPECIFICATION C–504, WITH THE FOLLOWING EXCEPTIONS:

VALVE BODIES – ALL VALVE BODIES SHALL BE OF CAST IRON CONFORMING TO ASTM A–126, CLASS B WITH INTEGRAL CAST ENDS AND SHALL MEET THE FOLLOWING REQUIREMENTS: VALVE BODY AND BONNET SHALL BE OF CAST OR DUCTILE IRON, COATED ON ALL EXTERIOR AND INTERIOR SURFACES WITH EPOXY CONFORMING TO AWWA STANDARD C–550, LATEST REVISION, APPLIED WITH A MINIMUM THICKNESS OF EIGHT (8) MILS. THE MANUFACTURER SHALL CERTIFY THAT THE COATING IS SUITABLE FOR USE IN A POTABLE WATER SYSTEM, AND THE INTERIOR COATING CERTIFIED TO BE HOLIDAY–FREE. ALL EXTERIOR FASTENERS SHALL BE CONSTRUCTED OF 316 STAINLESS STEEL.

VALVE DISCS – ALL VALVE DISCS SHALL BE STREAMLINED AND PRESENT THE SMALLEST PROFILE POSSIBLE CONSISTENT WITH THE STRUCTURAL REQUIREMENTS OF THE PRESSURE CLASS. THEY SHALL BE OF OFFSET OR FLOW THROUGH DESIGN AND MATERIAL COMPOSITION OF CAST OR DUCTILE IRON. DISC SEALING EDGE SHALL HAVE A CONTINUOUS UNINTERRUPTED 360 DEGREE SEALING SURFACE OF 18–8 STAINLESS STEEL.

VALVE SHAFTS – VALVE SHAFTS SHALL BE OF 18–8 TYPE 304 STAINLESS STEEL OR CARBON STEEL WITH STAINLESS STEEL JOURNALS. SHAFT DESIGN SHALL BE OF THRU OR STUB TYPE CONSTRUCTION WITH AT LEAST 1" SHAFT DIAMETER ENGAGEMENT INTO THE DISC. SHAFT TO DISC CONNECTION SHALL BE OF A RIGID, NON–SLIP TYPE CONNECTION.

VALVE SEATS – VALVE SEATS SHALL BE A RUBBER MATERIAL BONDED OR MECHANICALLY RETAINED.

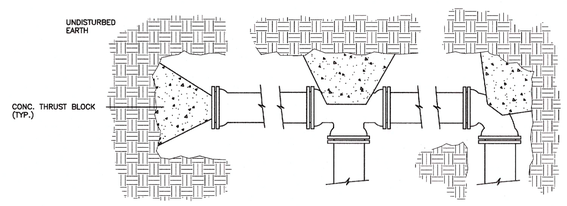
VALVE BEARINGS – VALVE BEARINGS SHALL BE SELF–LUBRICATING AND NON–CORROSIVE AND SHALL HAVE A SIGNIFICANT DIFFERENCE IN HARDNESS FROM THE VALVE SHAFT.

VALVE ACTUATORS–GENERAL – ALL VALVE ACTUATORS SHALL BE DESIGNED AS AN INTEGRAL PART OF THE VALVE AND SHALL MEET OR EXCEED ALL THE REQUIREMENTS OF AWWA C–504. ACTUATORS SHALL BE OF RACK AND PINION, LINK AND LEVER OR TRAVELING DESIGN.

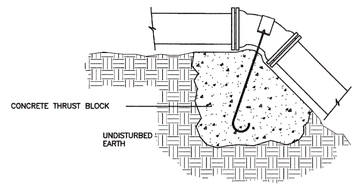
ALL MOVING PARTS PENETRATING INTO THE ACTUATOR, AND EXTERIOR FASTENERS SHALL BE 316 STAINLESS STEEL. ALL ACTUATOR TYPES, IN A GIVEN SIZE, TO BE INTERCHANGEABLE AND FASTENED TO VALVES WITH READILY ACCESSIBLE EXTERNAL BOLTS. ALL ACTUATORS MUST FIT ON THE VALVES THEY ARE DESIGNED TO OPERATE IN ANY MOUNTED POSITION OR ROTATIONAL DIRECTION WITHOUT ANY SPECIAL PRIOR PREPARATION TO EITHER THE VALVE OR THE ACTUATOR.

RETAINER GLANDS – RETAINER GLANDS SHALL BE HEAVYWEIGHT, DUCTILE IRON, WEDGE–TYPE, DESIGNED FOR 70 FT–LBS OF TORQUE.

VALVE BOXES – VALVE BOXES SHALL BE SLIDE TYPE CAST OR DUCTILE IRON STANDARD 5'–0" BURY WITH THE FOLLOWING THREE (3) COMPONENTS:
1. GATE BOX COVERS SHALL FIT PROPERLY AND SEAT FLUSH IN THE GATE VALVE BOX TOP SECTIONS.
2. THE TOP SECTION SHALL BE A MINIMUM OF 26" IN LENGTH WITH TOP FLANGE.
3. THE BELLED DESIGN BASE SECTION SHALL BE A MINIMUM OF 36" IN LENGTH.
4. THE COVER SHALL BE MARKED "WATER". THE BOXES SHALL BE 5 1/4" INSIDE DIAMETER.



PLAN – HORIZONTAL BENDS, TEES AND PLUGS



ELEVATION – VERTICAL BENDS

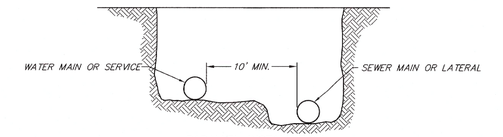
THRUST BLOCK DIMENSIONS TO BE DETERMINED IN FIELD BY ENGINEER BASED ON PIPE SIZE, WATER PRESSURE AND SOIL TYPE.

STONE BACKING MAY BE SUBSTITUTED FOR CONCRETE THRUST BLOCKS PROVIDED THE STONE(S) ARE OF EQUAL SIZE AND BEAR ON UNDISTURBED EARTH.

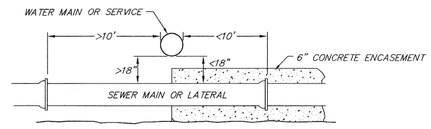
USE OF JOINT RESTRAINT SYSTEMS SHALL NOT ELIMINATE THRUST BLOCK REQUIREMENTS (WHERE POSSIBLE).

PIPE SHALL BE POLY WRAPPED IN ACCORDANCE AWWA SPEC C105

TYPICAL THRUST BLOCKS
NOT TO SCALE

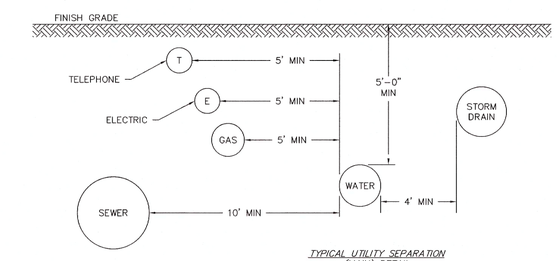


PARALLEL INSTALLATION



MAIN CROSSINGS

WATER MAIN AND SEWER MAIN SEPARATION DETAIL
NOT TO SCALE



TYPICAL UTILITY SEPARATION (MAIN) DETAIL

DATE	DESCRIPTION	BY	REV.
12–31–25	PER DRC – STANTEC REVIEW #2	BJL	E
11–12–25	PER DRC PLAN REVIEW	JST	D
10–8–25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9–24–25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8–20–25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

CONSTRUCTION DETAILS
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

811 DigSafe MA ME NH RI VT

12/31/25

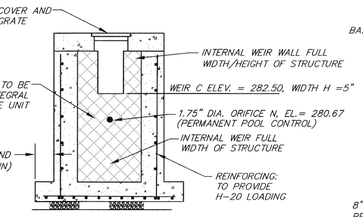
STATE OF NEW HAMPSHIRE – GEORGE C. CHADWICK, JR. – No. 8615 – LICENSED PROFESSIONAL ENGINEER

SCALE: AS SHOWN | JUNE 12, 2025 | SHEET 25 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503–22
JST	JST	GAC	692	28	

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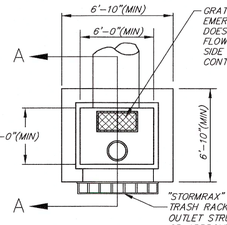
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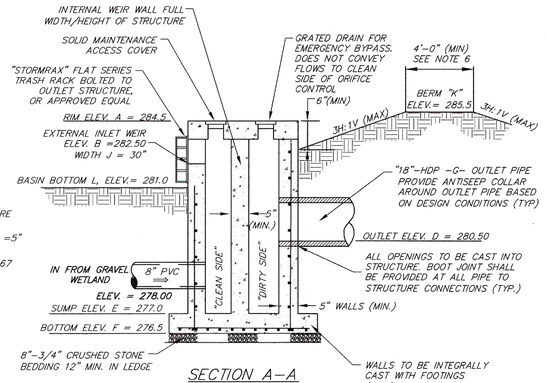
ELEVATION
INTERIOR WEIR WALL

NOTES:

1. ALL CEMENT CONCRETE TO BE 4000 PSI(MIN).
2. GALVANIZED STEEL GRATE SHALL BE BOLTED TO TOP OF STRUCTURE WITH 1/2" STAINLESS STEEL BOLTS AND THREADED INSERTS.
3. OUTLET PIPE SHALL NOT BE LESS THAN 15" DIAMETER AND SHALL BE SIZED FOR A 50-YEAR STORM.
4. ALL OPENINGS SHALL BE CAST IN AS REQUIRED. MINIMUM CONCRETE WEIR WIDTH SHALL BE 2 INCHES.
5. PRECAST REINFORCED CONCRETE STRUCTURE TO MEET ASTM C-478 DESIGNATION AND H-20 LOADING.
6. CONTROL WEIR SHALL BE SIZED TO MITIGATE DESIGN STORM AS REQUIRED BY THE REGULATIONS AND IN ACCORDANCE WITH THE APPROVED DRAINAGE CALCULATIONS. STAINLESS STEEL PLATE SHALL BE USED FOR CONTROL WEIRS LESS THAN 2 INCHES WIDE.
7. ALL STAINLESS STEEL SHALL BE GRADE 316.
8. MINIMUM EMBANKMENT ELEVATION TO BE 12" ABOVE 50-YEAR STORM ELEVATION.



PLAN VIEW

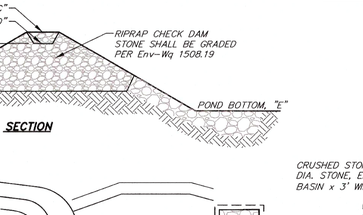


SECTION A–A

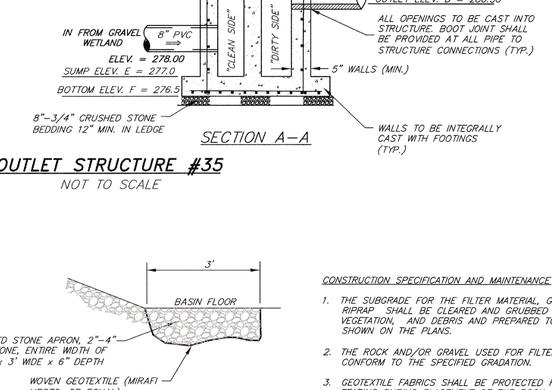
OUTLET STRUCTURE #26

NOT TO SCALE

OUTLET STRUCTURE	ELEVATIONS/DIMENSIONS												
	A	B	C	D	E	F	G	H	J	K	L	M	N
OS#26	284.50	282.50	282.50	280.50	277.00	276.50	18"	5"	30"	285.50	281.00	N.A.	280.67
OS#35	284.50	282.50	282.50	280.50	277.00	276.50	18"	3.5"	30"	285.00	281.00	N.A.	280.67



ELEVATION
INTERIOR WEIR WALL

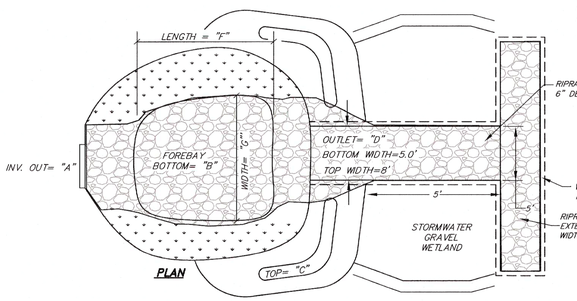


SECTION A–A

OUTLET STRUCTURE #35

NOT TO SCALE

SECTION



PLAN

E.S.#	"A"	"B"	"C"	"D"	"E"	"F"	"G"
22	284.19	282.0	284.5	284.0	281.0	15'	15'
33	283.00	281.0	283.5	283.0	281.0	15'	9'

SEDIMENT FOREBAY DETAIL

NOT TO SCALE

RIPRAP APRON SPILLWAY EXTENSION

% OF PASSING BY WEIGHT	SIEVE SIZE
100	12 INCH
84–100	6 INCH
68–83	3 INCH
42–55	1 INCH
8–12	NO. 4

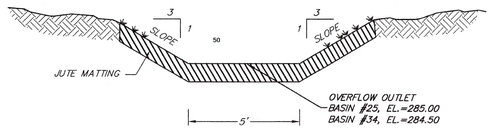
CHECK DAM STONE GRADATION TABLE:

DESIGN SIZE	RIP-RAP SIZE	% OF WEIGHT (SMALLER THAN GIVEN SIZE)	SIZE OF STONE	THICKNESS (D)
Dso	4"	100	6" TO 8"	9"
		85	5.2" TO 7.2"	
		50	4" TO 6"	
		15	1.2" TO 2"	

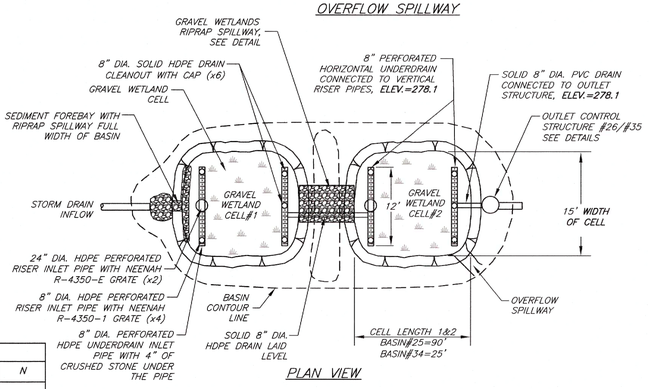
FOREBAY BOTTOM STONE GRADATION TABLE:

CONSTRUCTION SPECIFICATION AND MAINTENANCE

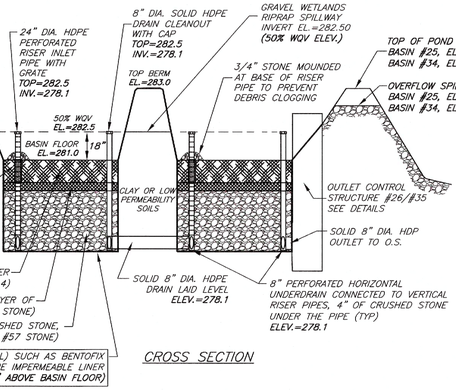
1. THE SUBGRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC OR RIPRAP SHALL BE CLEARED AND GRUBBED TO REMOVE ALL ROOTS, VEGETATION, AND DEBRIS AND PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
2. THE ROCK AND/OR GRAVEL USED FOR FILTER AND RIPRAP SHALL CONFORM TO THE SPECIFIED GRADATION.
3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING PLACEMENT OF THE ROCK RIPRAP BY PLACING A CUSHION OF SAND AND GRAVEL OVER THE FABRIC. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 IN.
4. STONE FOR THE RIPRAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT DISPLACEMENT OF THE UNDERLYING MATERIALS. HAND PLACEMENT MAY BE REQUIRED TO PREVENT DAMAGE TO ANY PERMANENT STRUCTURES.
5. STONES FOR RIPRAP SHALL BE ANGULAR OR SUBANGULAR. THE STONES SHOULD BE SHAPED SO THAT THE LEAST DIMENSION OF THE STONE FRAGMENT SHALL BE NOT LESS THAN ONE-THIRD OF THE GREATEST DIMENSION OF THE FRAGMENT. FLAT ROCKS SHALL NOT BE USED FOR RIPRAP.
6. VOIDS IN THE ROCK RIPRAP SHOULD BE FILLED WITH SPALLS AND SMALLER ROCKS.
7. ROCK RIPRAP SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIPRAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY BEFORE FURTHER DAMAGE CAN TAKE PLACE. WOODY VEGETATION SHOULD BE REMOVED FROM THE ROCK RIPRAP ANNUALLY BECAUSE TREE ROOTS WILL EVENTUALLY DISLODGE THE ROCK RIPRAP. IF THE RIPRAP IS ON A CHANNEL BANK, THE STREAM SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT BARS THAT MAY CHANGE FLOW PATTERNS WHICH COULD DAMAGE OR DISPLACE THE RIPRAP. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE RIPRAP.



OVERFLOW SPILLWAY



PLAN VIEW



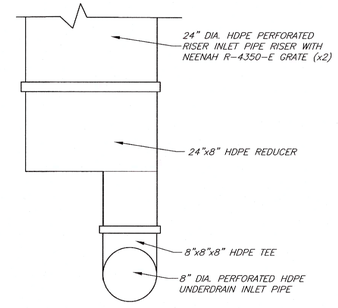
CROSS SECTION

GENERAL NOTES:

1. SOIL SPECIFICATIONS PER JUNE 2016 UNIVERSITY OF NEW HAMPSHIRE STORMWATER CENTER SUBSURFACE GRAVEL WETLAND DESIGN SPECIFICATIONS. GEO-TECHNICAL ENGINEER MAY RECOMMEND ALTERNATE SOIL MIXTURES.
2. GEOSYNTHETIC CLAY LINER: A GEOSYNTHETIC CLAY LINER (GCL) SUCH AS BENTOFIX SRNWL, OR EQUIVALENT, SHALL BE USED TO LINE THE BOTTOM OF EACH SUBMERGED GRAVEL WETLAND. THE GCL SHALL CONSIST OF TWO LAYERS: A TOP LAYER OF NON-WOVEN GEOTEXTILE, AND A BOTTOM LAYER OF SCRIM-REINFORCED NON-WOVEN GEOTEXTILE WITH A CORE OF NATURAL SODIUM BENTONITE CLAY.

STORMWATER GRAVEL WETLAND

NOT TO SCALE



8" TO 24" ADAPTOR DETAIL

NOT TO SCALE

BASIN PLAN:

THE FOLLOWING CRITERIA APPLY TO ALL GRAVEL WETLANDS:

1. SIDE SLOPES: ALL SIDE SLOPES TO THE FOREBAY AND THE TREATMENT CELLS SHOULD BE 3:1 OR FLATTER FOR MAINTENANCE ACCESS.
2. GEOTEXTILE FABRIC: A GEOTEXTILE FABRIC SHOULD BE PLACED BETWEEN THE GRAVEL LAYER AND ADJACENT SOIL. THE FABRIC WILL PREVENT THE SURROUNDING SOIL FROM MIGRATING INTO THE TRENCH AND CLOGGING THE OUTLET. USE AN APPROPRIATE MESH SIZE THAT IS COMPATIBLE WITH THE SURROUNDING SOIL. OVERLAP SEAMS SHOULD BE A MINIMUM OF 12 INCHES.
3. IMPERMEABLE MEMBRANE: A LOW PERMEABILITY LINER OR SOIL MAY BE NECESSARY TO CONTAIN THE SYSTEM AND PREVENT INFILTRATION OR LOSS OF MOISTURE, PRESERVE HORIZONTAL FLOW WITHIN THE TREATMENT LAYER AND SUSTAIN THE WETLAND PLANTS. IF GEOTECHNICAL TESTING CONFIRMS THE NEED FOR A LINER, AN IMPERMEABLE LINER SUCH AS A GEOSYNTHETIC CLAY LINER (GCL) SUCH AS BENTOFIX SRNWL OR 30 MIL HDPE LINER OR EQUAL WILL BE NECESSARY. IF THE UNDISTURBED NATIVE SOILS WHERE THE GRAVEL WETLAND WILL BE LOCATED HAVE A LOW HYDRAULIC CONDUCTIVITY (SUCH AS A SOIL TYPE D) OR THE WATER TABLE IS NEAR THE TOP OF THE BASIN, A LINER WILL NOT BE NECESSARY.
4. WETLAND SOIL: THE WETLAND SOIL SHOULD HAVE A THICKNESS OF 8 INCHES MINIMUM AND SHOULD HAVE A LOW HYDRAULIC CONDUCTIVITY (0.1–0.01 FT/DAY). THIS SOIL CAN BE MANUFACTURED, USING COMPOST, SAND AND FINE SOILS, INTO A BLEND WITH MORE THAN 15% ORGANIC MATTER. IT SHOULD CONTAIN MORE THAN 15% SILT (PASSING THE #200 SIEVE); BUT WITH A CLAY SIZE PORTION THAT IS LESS THAN 2%.
5. INTERMEDIATE LAYER: AN INTERMEDIATE LAYER (6 INCHES THICK) OF AGGREGATE FILTER (PEA GRAVEL) IS NEEDED TO PREVENT THE WETLAND SOIL FROM MIGRATING INTO THE CRUSHED-STONE (GRAVEL) SATURATED DRAINAGE LAYER. DO NOT USE A GEOTEXTILE FABRIC AS IT WILL RESTRICT ROOT GROWTH.
6. SATURATED DRAINAGE LAYER: BELOW THE WETLAND SOIL AND INTERMEDIATE LAYER IS A CRUSHED STONE (OR VERY COARSE GRAVEL) DRAINAGE LAYER WITH A 24-INCH MINIMUM THICKNESS. ANGULAR 3/4" CRUSHED STONE, IS RECOMMENDED AS LARGE ANGULAR PARTICLES ARE NEEDED TO MAINTAIN THE PERMEABILITY OF THE SYSTEM. THE PIPE UNDERDRAINS SHOULD HAVE AT LEAST 1-FOOT OF GRAVEL COVER AND FOUR INCHES BELOW THE PIPE.
7. UNDERDRAINS: HORIZONTAL UNDERDRAINS AND RISERS DISTRIBUTE THE INFLOW THROUGH THE GRAVEL LAYER WITHIN EACH OF THE CELLS; AND AT THE DOWNSTREAM, AN OUTFLOW UNDERDRAIN RECOLLECTS THE WATER TO DISTRIBUTE IT TO THE NEXT CELL OR FOR DISCHARGE.
8. TREATMENT LENGTH: THE FLOW PATH BETWEEN THE INFLOW AND THE OUTFLOW SUBDRAINS WITHIN EACH CELL'S SATURATED DRAINAGE LAYER SHOULD BE 15 FEET AT A MINIMUM.

OUTLETS:

THE CHANNEL PROTECTION VOLUME MUST BE DISCHARGED SOLELY THROUGH THE UNDERDRAINED GRAVEL OUTLET HAVING A WEIR OR A SINGLE ELBOWED PIPE OUTLET PLACED AT THE ELEVATION OF THE WETLAND BASIN TO FORCE A NEAR-SURFACE GROUNDWATER CONDITION (WITH AS AN INVERT 4 INCHES BELOW THE WETLAND GROUND SURFACE). THE OUTLET NEEDS TO BE SIZED TO PROVIDE THE SLOW DISCHARGE (24–48 HOURS) OF THE WATER QUALITY VOLUME.

1. RISERS: IN BOTH WETLAND CELLS, VERTICAL PERFORATED OR SLOTTED RISERS DELIVER THE OUTFLOW TO THE HORIZONTAL AND PERPENDICULAR SUB-DRAINS IMBEDDED IN THE GRAVEL DRAINAGE LAYER. THE PERFORATED/SLOTTED RISER SHOULD EXTEND 18 INCHES ABOVE THE SURFACE OF THE WETLAND SOIL. A RISER SHOULD BE PROVIDED FOR EVERY 10 FEET OF LINEAR INFLOW SUB-DRAIN.
2. UNDERDRAIN PIPE: THE UNDERDRAIN PIPING SHOULD BE 6-INCH DIAMETER WITH SLOTTED, RIGID SCHEDULE 40 PVC OR SDR35 PIPE.
3. OVERFLOW SPILLWAY: AN ARMORED SPILLWAY SHOULD BE PROVIDED BETWEEN THE CELLS FOR LARGER STORMS TO FLOW THROUGH WITHOUT CAUSING EROSION. THE SPILLWAY SHOULD BE 18 INCHES ABOVE THE WETLAND SURFACE.
4. EMERGENCY SPILLWAYS: EMERGENCY SPILLWAYS SHOULD BE DESIGNED TO INDEPENDENTLY CONVEY THE ROUTED RUNOFF FROM LARGER STORMS (2, 10 AND 25-YEAR, 24-HOUR STORM) WHILE MAINTAINING AT LEAST ONE FOOT OF FREEBOARD; AND TO SAFELY CONVEY THE 100-YEAR STORM WITHOUT OVERTOPPING THE EMBANKMENT. OVERFLOW MUST DISCHARGE TO A STABLE CHANNEL OR VEGETATED AREA. THE EMERGENCY SPILLWAYS SHOULD BE LOCATED ON UNDISTURBED, NON-FILL SOIL WHEREVER POSSIBLE. IF THE SPILLWAY MUST BE LOCATED ON FILL SOILS, THEN IT MUST BE HORIZONTALLY OFFSET AT LEAST 20 FEET FROM THE PRINCIPAL OUTLET AND APPROPRIATELY STABILIZED.
5. CLEANING PORTS: A CLEAN-OUT PORT SHOULD BE PROVIDED FOR EACH OF THE HORIZONTAL UNDERDRAIN PIPE STRUCTURE IN BOTH BASINS.

VEGETATION:

APPROPRIATE WETLAND SPECIES SHOULD BE CAREFULLY SELECTED TO STABILIZE THE SIDES AND BOTTOM OF THE BASINS. THE CREATION OF A MARSH ENVIRONMENT AT THE POND INLET WILL HELP TO TRAP SEDIMENT. FERTILIZER SHOULD NOT BE USED UNLESS NECESSARY TO ESTABLISH NEW VEGETATION, ALLOWING FOR THE NATURAL INVASION OF NATIVE SPECIES MAY ENCOURAGE HIGHER GROWTH THAN PLANTING SPECIES NOT ALREADY FOUND ON SITE.

1. WETLAND PLANTS: WETLAND PLANTS FUNCTION IN TWO IMPORTANT WAYS: THE STEMS AND LEAVES PROVIDE A LARGE SURFACE AREA FOR THE ATTACHMENT OF MICROBIAL POPULATIONS; AND THE PLANTS TRANSPORT OXYGEN TO THE ROOT ZONE. THE BY-PRODUCTS PRODUCED BY THE AEROBIC MICROBES ARE THEN EASILY UTILIZED BY THE ANAEROBIC MICROBES IN THE SATURATED LAYER. LEAVES AND STALKS PROVIDE A CANOPY OF SHADE, WHICH LIMIT SUNLIGHT PENETRATION AND ALGA GROWTH (THE ALGAE CAN DETER THE OXYGEN TRANSFER AND CREATES A TOXIC ENVIRONMENT FOR THE PLANTS). THE MOST APPROPRIATE WETLAND PLANTS ARE THE FOLLOWING:
   a. REEDS (JUNCUS EFFUSUS) ARE THE 'WORKER PLANTS' IN A GRAVEL WETLAND. THEIR ROOTS GO DOWN QUICKLY AND DEEPLY. THEY SPREAD ACROSS THE MEDIA AND THEY ARE PEST RESISTANT AND WINTER HARDY.
   b. CATTAILS (TYPHA LATIFOLIA) ARE THE PLANTS MOST OFTEN ASSOCIATED WITH WETLANDS. THEY WORK WELL AND HAVE A POSITIVE IMPACT ON TREATMENT. THE LARGER, NATIVE VARIETIES, HOWEVER, CAN BE DOMINANT AND TAKE OVER A SMALL FILTER IF NOT REMOVED IN LATER YEARS.
   c. BULRUSH (SCIRPUS) CAN PRODUCE DENSE STANDS OF VEGETATION. IT CAN SURVIVE UNFAVORABLE CONDITIONS LIKE PROLONGED FLOODING, OR DROUGHT AS BURIED SEEDS.
   d. PHRAGMITES (REED) IS VERY INVASIVE AND IS NOT RECOMMENDED.

CONSTRUCTION:

THE SUBAREA DRAINING TO A CREATED WETLAND MUST BE COMPLETELY STABLE BEFORE RUNOFF IS DIRECTED TO THE BASIN TO PREVENT SEDIMENTATION OF THE DRAINAGE LAYER; OR ALL RUNOFF SHOULD BE RE-DIRECTED UNTIL CONSTRUCTION IS FINALIZED. THE VEGETATION WITHIN THE STRUCTURE IS EQUALLY IMPORTANT AND MUST BE WELL ESTABLISHED BEFORE IT CAN ACCEPT ANY RUNOFF. CONSTRUCTION SHOULD BE STARTED NO LATER THAN SEPTEMBER 1 OR EARLIER THAN JUNE 1; AND IF VEGETATION CANNOT BE ESTABLISHED BY THE END OF THE GROWING SEASON, CONSTRUCTION SHOULD BE DELAYED TO THE FOLLOWING YEAR. SEEDING OR STABILIZATION MUST OCCUR BY SEPTEMBER 15 IN PREPARATION FOR THE WINTER SEASON.

1. OVERSIGHT: A GRAVEL WETLAND SHOULD ONLY BE CONSTRUCTED UNDER THE SUPERVISION FROM THE DESIGN ENGINEER.

MAINTENANCE:

OPERATION AND MAINTENANCE REQUIREMENTS SIMILAR TO THOSE FOR UNDERDRAINED FILTER BASINS SHOULD BE EXPECTED. THE PLANT BIOMASS SHOULD BE HARVESTED ANNUALLY, AND ACCUMULATED SEDIMENT REMOVED AT INTERVALS OF 5–10 YEARS. THESE ACTIVITIES MAY DISRUPT THE WETLANDS SYSTEM AND MAY REQUIRE SOME VEGETATION RE-ESTABLISHMENT. THE RISER PIPES MAY CLOG AND WILL REQUIRE ANNUAL CLEAN-OUT (IT SHOULD BE DONE IN THE WINTER TIME WHEN ONE CAN WALK ON THE WETLAND).

1. FIRST YEAR POST-CONSTRUCTION: INSPECTION FREQUENCY SHOULD OCCUR AFTER EVERY MAJOR STORM IN THE FIRST YEAR FOLLOWING CONSTRUCTION.
   a. INSPECT THAT THE SYSTEM DRAINS WITHIN 24–48 HOURS.
   b. THE PLANTS MAY NEED WATERING IF NECESSARY DURING THE FIRST GROWING SEASON. REVEGETATE IF THE VEGETATION IS POORLY ESTABLISHING.
   c. IDENTIFY AREAS OF EROSION AND MAKE TIMELY REPAIRS.
   d. CHECK ALL INLETS, OUTLETS AND SUBDRAINS FOR PROPER FUNCTIONING. RISERS MAY NEED TO BE CLEANED.
2. POST-CONSTRUCTION: INSPECTION FREQUENCY SHOULD OCCUR AT LEAST EVERY 6 MONTHS AND AFTER EVERY MAJOR STORM. ACTIVITIES ARE EXPECTED TO INCLUDE:
   a. CHECK THE BASIN FOR A DENSE ROOT MAT ESTABLISHMENT OF WETLAND VEGETATION.
   b. CHECK AND CLEAN THE RISERS IF THERE IS EVIDENCE OF STANDING WATER, DISCOLORED WATER OR ACCUMULATED SEDIMENTS IN THE CELLS.
   c. CHECK AND CLEAN THE FOREBAY FOR SEDIMENTS, TRASH AND DEBRIS. WHEN SEDIMENTS HAVE ACCUMULATED TO A DEPTH OF 12 INCHES, STANDING WATER IS PERSISTENT OR WETLAND VEGETATION BECOME ESTABLISHED, THE FOREBAY WILL NEED TO BE EXCAVATED AND REFORMED.
   d. VERIFY THAT THE CELLS DRAIN WITHIN 24–48 HOURS. SEDIMENT WILL NEED TO BE REMOVED WHEN AN ACCUMULATION OF 4 INCHES IS EVIDENT OVER THE WETLAND SURFACE.
   e. CHECK AND CLEAN ALL OUTLETS AND OVERFLOW SPILLWAY IF BLOCKED OR THERE IS EVIDENCE OF STRUCTURAL DAMAGE OR EROSION.
   f. REMOVE DECAYING VEGETATION, LITTER AND DEBRIS.
   g. CHECK FOR FOREIGN SPECIES. PARTICULAR CARE MUST BE USED TO AVOID THE UNINTENDED INTRODUCTION OF INVASIVE SPECIES SUCH AS PURPLE LOOSESTRIFE (LYTHRUM SALICARIA) AND COMMON REED (PHRAGMITES AUSTRALIS). IT IS RECOMMENDED THAT A QUALIFIED WETLAND BIOLOGIST BE CONSULTED WHEN THESE ARE FOUND IN THE AREA OF THE GRAVEL WETLAND.

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC – STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

CONSTRUCTION DETAILS
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

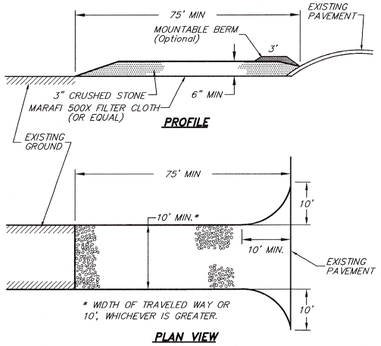
811 DigSafe MA ME NH RI VT

12/31/25

SCALE: AS SHOWN	JUNE 12, 2025			SHEET 26 OF 33
DESIGN:	DRAWN:	CHECKED:	FB:	PG: 503-22
JST	JST	GAC	692	28

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STABILIZED CONSTRUCTION EXIT

NOT TO SCALE

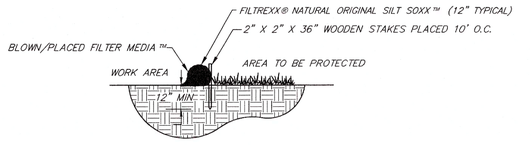
MAINTENANCE NOTES:

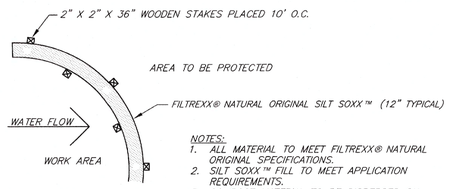
MUD AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VOIDS IN THE GRAVEL AND THE EFFECTIVENESS OF THE GRAVEL PAD WILL NOT BE SATISFACTORY. WHEN THIS OCCURS, THE PAD SHOULD BE TOPDRESSED WITH NEW STONE. COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.

IF WASHING FACILITIES ARE USED, THE SEDIMENT TRAPS SHOULD BE CLEANED OUT AS OFTEN AS NECESSARY TO ASSURE THAT ADEQUATE TRAPPING EFFICIENCY AND STORAGE VOLUME IS AVAILABLE. VEGETATIVE FILTER STRIPS SHOULD BE MAINTAINED TO INSURE A VIGOROUS STAND OF VEGETATION AT ALL TIMES.

CONSTRUCTION SPECIFICATION

(A) THE MINIMUM STONE USED SHALL BE 3–INCH CRUSHED STONE;
(B) THE MINIMUM LENGTH OF THE PAD SHALL BE 75 FEET, EXCEPT THAT THE MINIMUM LENGTH MAY BE REDUCED TO 50 FEET IF A 3–INCH TO 6–INCH HIGH BERM IS INSTALLED AT THE ENTRANCE OF THE PROJECT SITE;
(C) THE PAD SHALL EXTEND THE FULL WIDTH OF THE CONSTRUCTION ACCESS ROAD OR 10 FEET, WHICHEVER IS GREATER;
(D) THE PAD SHALL SLOPE AWAY FROM THE EXISTING ROADWAY;
(E) THE PAD SHALL BE AT LEAST 6 INCHES THICK;
(F) A GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE STONE PAD AND THE EARTH SURFACE BELOW THE PAD; AND
(G) THE PAD SHALL BE MAINTAINED OR REPLACED WHEN MUD AND SOIL PARTICLES CLOG THE VOIDS IN THE STONE SUCH THAT MUD AND SOIL PARTICLES ARE TRACKED OFF–SITE. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC RIGHTS–OF–WAY. THIS MAY MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT– OF–WAY MUST BE REMOVED PROMPTLY.
(H) ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.

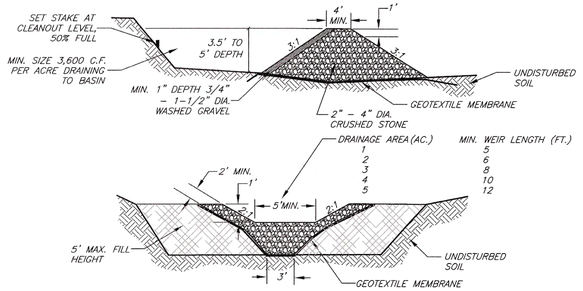




NOTES:
1. ALL MATERIAL TO MEET FILTREXX® NATURAL ORIGINAL SPECIFICATIONS.
2. SILT SOXX™ FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

FILTREXX NATURAL ORIGINAL SILT SOXX DETAIL

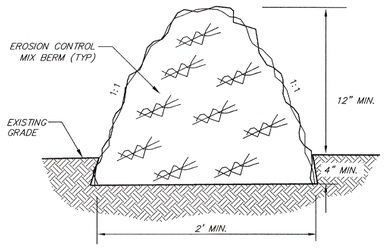
NOT TO SCALE



NOTES:
1. WHEN NECESSARY TO MINIMIZE THE RELEASE OF SEDIMENT–LADEN RUNOFF PRIOR TO STABILIZATION OF THE SITE AND THE PERMANENT STORMWATER MANAGEMENT SYSTEM AND COMPONENTS, SEDIMENT–LADEN WATER SHALL BE DIVERTED AND STORED IN TEMPORARY SEDIMENT TRAPS.
2. TEMPORARY DIVERSION CHANNELS SHALL BE CONSTRUCTED TO DIRECT RUNOFF TO THE SEDIMENT TRAPS. DIVERSION CHANNELS WITH A SLOPE OF 2 PERCENT OR GREATER SHALL BE STABILIZED PRIOR TO USE. CHANNELS WITH A SLOPE OF LESS THAN 2 PERCENT SHALL BE STABILIZED ONLY IF EROSION IS OBSERVED.
3. APPROPRIATE ENERGY DISSIPATION METHODS SHALL BE IMPLEMENTED WITHIN DIVERSION CHANNELS TO CONTROL RUNOFF VELOCITY.
4. TEMPORARY SEDIMENT TRAPS MAY BE FORMED BY BERM OR BY PARTIAL OR COMPLETE EXCAVATION.
5. CONTRACTOR TO DETERMINE LOCATIONS OF TEMPORARY SEDIMENT TRAPS IN THE FIELD AS REQUIRED.
6. TEMPORARY SEDIMENT TRAPS SHALL BE LOCATED AS CLOSE TO THE DISTURBED AREA OR SOURCE OF SEDIMENT AS POSSIBLE.
7. ALL MATERIALS REMOVED FROM THE TEMPORARY SEDIMENT TRAPS AND DIVERSION CHANNELS SHALL BE PROPERLY DISPOSED OF AND STABILIZED.
8. TEMPORARY SEDIMENT TRAP SHALL DISCHARGE INTO A STABILIZED AREA.

TEMPORARY SEDIMENT TRAP DETAIL

NOT TO SCALE



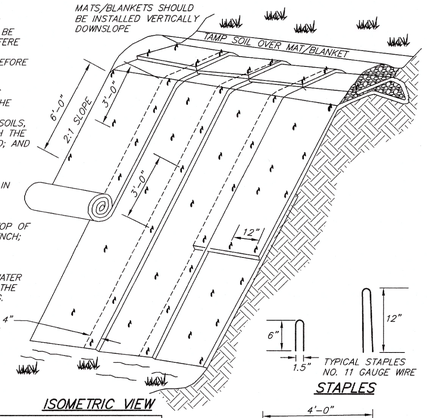
A. EROSION CONTROL MIX BERMS SHALL BE USED ONLY AS FOLLOWS:

1. USED ONLY IN AREAS WHERE EROSION WILL OCCUR IN THE FORM OF SHEET EROSION ONLY AND THERE IS NO CONCENTRATION OF WATER IN A CHANNEL OR OTHER DRAINAGE WAY ABOVE THE BERM;
2. THE BERMS SHALL BE INSTALLED FOLLOWING THE CONTOUR OF THE LAND AS CLOSELY AS POSSIBLE;
3. THE BERMS SHALL BE USED ONLY IF THE AREA UPSLOPE OF THE BERM HAS A SLOPE OF LESS THAN 5%;
4. THE BERMS SHALL BE AT LEAST 12 INCHES HIGH AND AT LEAST 2 FEET WIDE;
5. THE MIX SHALL HAVE AN ORGANIC PORTION BETWEEN 25% AND 65% DRY WEIGHT BASIS THAT IS:
   a. FIBROUS AND ELONGATED SUCH AS FROM SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR EQUIVALENT MANUFACTURED PRODUCTS; AND
   b. NOT COMPRISED OF WOOD CHIPS, BARK CHIPS, GROUND CONSTRUCTION DEBRIS, OR REPROCESSED WOOD PRODUCTS;
6. THE MIX SHALL NOT CONTAIN SILTS, CLAYS, OR FINE SANDS;
7. THE MIX SHALL HAVE A PARTICLE SIZE BY WEIGHT OF 100% PASSING A 3–INCH SCREEN, 90% TO 100% PASSING A 1–INCH SCREEN, 70% TO 100% PASSING A 0.75–INCH SCREEN, AND 30% TO 75% PASSING A 0.25–INCH SCREEN; AND
8. THE MIX SHALL HAVE A PH BETWEEN 5.0 AND 8.0.
9. **WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR PROCESSED WOOD PRODUCTS SHALL NOT BE USED AS THE ORGANIC MATERIAL.**

EROSION CONTROL MIX BERM

NOT TO SCALE

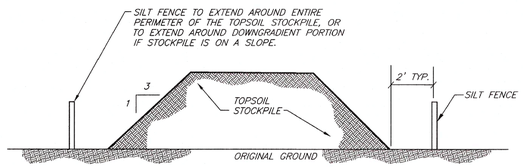
NOTES:
A. STONES AND TRASH SHALL BE REMOVED FROM THE AREA TO BE SEEDED SO AS NOT TO INTERFERE WITH SEEDING; AND
B. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS; AND
C. BLANKETS SHALL BE:
   1. PLACED WITHIN 24 HOURS AFTER SOWING SEED IN THE AREA BEING COVERED;
   2. LAID LOOSELY OVER THE SOILS, MAINTAINING CONTACT WITH THE SOIL, AND NOT STRETCHED; AND
   3. INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS AND THE FOLLOWING, EVEN IF NOT IN THE MANUFACTURER'S INSTRUCTIONS:
      a. BLANKETS SHALL BE ANCHORED AT THE TOP OF THE SLOPE IN A TRENCH; AND
      b. BLANKETS SHALL BE UNROLLED IN THE DIRECTION OF THE WATER FLOW, OVERLAPPING THE EDGES AND STAPLING.



a. THERE SHALL BE NO PLASTIC, OR MULTI–FILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8 INCHES MATERIAL UTILIZED, (NOT APPLICABLE TO TURF REINFORCEMENT MATS).
b. TURF REINFORCEMENT MATS SHALL BE COVERED WITH SOIL TO PREVENT EXPOSURE OF THE MATS TO THE SURFACE.

EROSION CONTROL BLANKETS SHALL BE NORTH AMERICAN GREEN BIONET SC150BN, OR APPROVED WILDLIFE FRIENDLY MATERIAL

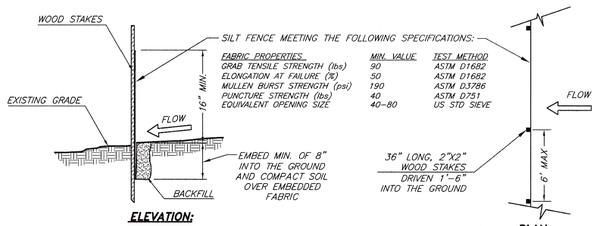
EROSION CONTROL BLANKETS SLOPE INSTALLATION



NOTES:
1. AN ON–SITE DRAINAGE SWALE SHALL BE LOCATED BETWEEN THE TOPSOIL STOCKPILE AND OFF–SITE PROPERTY.
2. REFERENCE IS MADE TO SILT FENCE DETAIL FOR MATERIALS AND INSTALLATION METHODS.
3. IF THE STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, IT SHALL BE STABILIZED WITH EROSION CONTROL MATTING OR SEEDED WITHIN 7 DAYS OF COMPLETION TO MINIMIZE EROSION.
4. INSPECTION OF SILT FENCES SHALL BE AT LEAST ONCE PER WEEK AND AFTER RAINFALL EVENTS IN EXCESS OF 0.5 INCHES. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. SEDIMENT TRAPPED BY THE FENCES SHALL BE REMOVED AND PROPERLY DISPOSED OF WHENEVER SIGNIFICANT ACCUMULATION OCCURS.
6. SILT FENCES SHALL BE MAINTAINED IN PLACE UNTIL TOPSOIL STOCKPILE HAS BEEN ELIMINATED AND SHALL BE REMOVED ONLY WHEN DIRECTED BY THE TOWN.

TEMPORARY STOCKPILE DETAIL

NOT TO SCALE

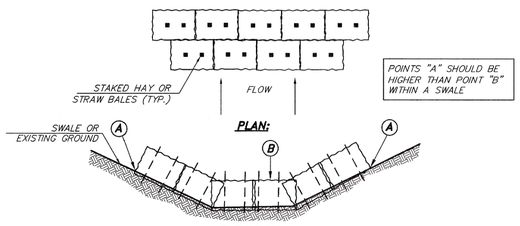


CONSTRUCTION NOTES:

A. FENCES SHALL BE USED IN AREAS WHERE EROSION WILL OCCUR ONLY IN THE FORM OF SHEET EROSION AND THERE IS NO CONCENTRATION OF WATER IN A CHANNEL OR OTHER DRAINAGE WAY ABOVE THE FENCE;
B. THE MAXIMUM CONTRIBUTING DRAINAGE AREA ABOVE THE FENCE SHALL BE LESS THAN 1/4–ACRE PER 100 LINEAR FEET OF FENCE;
C. THE MAXIMUM LENGTH OF THE SLOPE ABOVE THE FENCE SHALL BE 100 FEET;
D. THE MAXIMUM SLOPE OF THE AREA ABOVE THE FENCE SHALL BE 2:1;
E. FENCES SHALL BE INSTALLED AS FOLLOWS:
   1. FENCES SHALL FOLLOW THE CONTOUR OF THE LAND AS CLOSELY AS POSSIBLE;
   2. THE ENDS OF THE FENCE SHALL BE FLARED UP–SLOPE;
   3. THE BASE OF THE FENCE SHALL BE:
      a. FOLDED SUCH THAT NOT LESS THAN 4 INCHES OF THE FENCE IS PLACED ALONG THE BOTTOM OF A TRENCH THAT IS EXCAVATED AT LEAST 4 INCHES DEEP INTO THE GROUND, WITH THE SOIL COMPACTED OVER THE EMBEDDED FABRIC; OR
      b. IF SITE CONDITIONS INCLUDE FROZEN GROUND, LEDGE, OR THE PRESENCE OF HEAVY ROOTS, EMBEDDED IN A MINIMUM THICKNESS OF 8 INCHES OF ¼–INCH STONE;
   4. SUPPORT POSTS SHALL BE SIZED AND ANCHORED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS; AND
   5. ADJOINING SECTIONS OF THE FENCE SHALL BE OVERLAPPED BY 6 INCHES, FOLDED AND STAPLED TO A SUPPORT POST;
F. FENCES SHALL BE INSPECTED AND MAINTAINED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL; ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY; AND
G. SEDIMENT THAT ACCUMULATES AT THE FENCE SHALL BE REMOVED WITH SUFFICIENT FREQUENCY TO PREVENT THE DEPTH OF THE SEDIMENT FROM REACHING ONE–THIRD THE HEIGHT OF THE FENCE.
H. INSTALL FENCE PER MANUFACTURES SPECIFICATIONS.
I. IF THE FABRIC ON THE SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE LIFE OF THE FENCE, THE FABRIC SHALL BE PROMPTLY REPLACED.
J. SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE BARRIER HAS BEEN DISMANTLED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED USING THE APPROPRIATE VEGETATIVE BMP.

SILT FENCE DETAIL

NOT TO SCALE

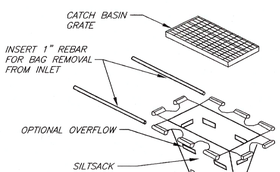


STRAW BALE BARRIERS. STRAW BALE BARRIERS SHALL BE USED ONLY AS FOLLOWS:

A. THE BARRIERS SHALL BE USED IN AREAS WHERE EROSION WILL OCCUR ONLY IN THE FORM OF SHEET EROSION AND THERE IS NO CONCENTRATION OF WATER IN A CHANNEL OR OTHER DRAINAGE WAY ABOVE THE BARRIER;
B. THE MAXIMUM CONTRIBUTING DRAINAGE AREA ABOVE THE BARRIER SHALL BE LESS THAN 0.25 ACRE PER 100 LINEAR FEET OF BARRIER;
C. THE MAXIMUM LENGTH OF THE SLOPE ABOVE THE BARRIER SHALL BE 100 FEET;
D. THE MAXIMUM SLOPE OF THE AREA ABOVE THE BARRIER SHALL BE 2:1;
E. THE BARRIERS SHALL BE INSTALLED AS FOLLOWS:
   1. THE BARRIERS SHALL FOLLOW THE CONTOUR OF THE LAND AS CLOSELY AS POSSIBLE;
   2. THE ENDS OF THE BARRIER SHALL BE FLARED UP SLOPE;
   3. THE BALE ENDS SHALL BE TIGHTLY ADJOINED;
   4. EACH BALE SHALL BE EMBEDDED AT LEAST 4 INCHES INTO THE GROUND; AND
   5. A MINIMUM OF 2 ANCHORING STAKES PER BALE SHALL BE USED, WITH ALL STAKES PENETRATING AT LEAST 20 TO 24 INCHES INTO THE GROUND;
F. THE BARRIERS SHALL BE INSPECTED AND MAINTAINED IMMEDIATELY AFTER EACH RAIN EVENT AND AT LEAST DAILY DURING PROLONGED RAIN EVENTS; AND
G. SEDIMENT THAT ACCUMULATES AT THE BARRIERS SHALL BE REMOVED WITH SUFFICIENT FREQUENCY TO PREVENT THE DEPTH OF THE SEDIMENT FROM REACHING ONE–THIRD THE HEIGHT OF THE BARRIER

STRAW BALE CHECK DAM

NOT TO SCALE



NOTES:
1. INLET BASKETS SHALL BE USED ON ALL CATCH BASINS DURING CONSTRUCTION. INLET BASKETS SHALL BE "SILTSACK" OR APPROVED EQUAL.
2. THE FILTER FABRIC SHALL BE A WOVEN POLYPROPYLENE GEO–TECTILE FABRIC MEETING THE FOLLOWING SPECIFICATIONS:
   GRAB TENSILE STRENGTH: 300 LBS. MINIMUM (ASTM D–4632)
   GRAB ELONGATION: 20% MINIMUM (ASTM D–4632)
   PUNCTURE: 120 LBS. MINIMUM (ASTM D–4833)
   TRAPEZOID TEAR STRENGTH: 120 LBS. MINIMUM (ASTM D–4533)
   MULLEN BURST STRENGTH: MINIMUM 800 PSI (ASTM D–3786)
3. THE FABRIC SHALL HAVE AN OPENING NO GREATER THAN A NUMBER 40 U.S. STANDARD SIEVE AND MINIMUM PERMEABILITY OF 40 GPM/SQ. FT.
4. THE INLET BASKET SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING EXTENDED PERIODS OF PRECIPITATION. REPAIRS SHALL BE MADE IMMEDIATELY, AS NECESSARY, TO PREVENT PARTICLES FROM ENTERING THE DRAINAGE PIPING SYSTEM AND/OR CAUSING SURFACE FLOODING.
5. INLET BASKET SHALL BE MAINTAINED IN PLACE UNTIL ALL PAVING IS COMPLETED AND ALL UNPAVED AREAS HAVE BEEN STABILIZED WITH VEGETATION.

INSTALLATION AND MAINTENANCE NOTES:

TO INSTALL THE SILTSACK® IN THE CATCH BASIN, REMOVE THE GRATE AND PLACE THE SACK IN THE OPENING. HOLD APPROXIMATELY SIX INCHES OF THE SACK OUTSIDE THE FRAME. THIS IS THE AREA OF THE LIFTING STRAPS. REPLACE THE GRATE TO HOLD THE SACK IN PLACE.

THE SILTSACK® IS FULL AND SHOULD BE EMPTIED WHEN THE YELLOW RESTRAINT CORD IS NO LONGER VISIBLE.

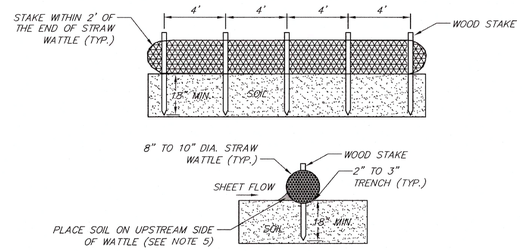
TO REMOVE THE SILTSACK®, TAKE TWO PIECES OF 1" DIAMETER REBAR AND PLACE THROUGH THE LIFTING LOOPS ON EACH SIDE OF THE SACK TO FACILITATE THE LIFTING OF THE SILTSACK®.

TO EMPTY THE SILTSACK®, PLACE IT WHERE THE CONTENTS WILL BE COLLECTED. PLACE THE REBAR THROUGH THE LIFT STRAPS (CONNECTED TO THE BOTTOM OF THE SACK) AND LIFT. THIS WILL TURN THE SILTSACK® INSIDE OUT AND EMPTY THE CONTENTS. CLEAN OUT AND RINSE. RETURN THE SILTSACK® TO ITS ORIGINAL SHAPE AND PLACE BACK IN THE BASIN.

THE SILTSACK® IS REUSABLE. ONCE THE CONSTRUCTION CYCLE IS COMPLETE, REMOVE THE SILTSACK® FROM THE BASIN AND CLEAN. THE SILTSACK® SHOULD BE STORED OUT OF THE SUNLIGHT WHEN NOT IN USE.

INLET SEDIMENT FILTER BASKET

NOT TO SCALE



INSTALLATION NOTES:

1. LAYOUT A CONTOUR LINE ON THE SLOPE WITH A HAND LEVEL AND WIRE FLAGS.
2. DIG A SHALLOW DEPRESSION (ABOUT 2 TO 3 INCHES DEEP) AND LAY THE WATTLE INTO IT.
3. DRIVE A WOODEN STAKE THROUGH THE CENTER OF THE WATTLE AT LEAST 18 INCHES INTO THE GROUND, STOPPING ABOUT TWO INCHES ABOVE THE WATTLE.
4. PUT 5 STAKES IN EACH WATTLE, INSTALLING THEM END TO END IN THE TRENCH.
5. SEAT THE WATTLE WITH FOOT TAMPED BACKFILL ON THE UPSTREAM SIDE SUCH THAT WATER FLOWING DOWN THE SLOPE WILL NOT RUN UNDER IT.

NOTES:

1. ENDS OF WATTLES SHALL BE TURNED SLIGHTLY UP.
2. RECOMMENDED STAKES ARE 1 1/8" WIDE x 1 1/8" THICK x 30" LONG.
3. STAKES SHALL NOT EXTEND MORE THAN 2" ABOVE STRAW WATTLE.

STRAW WATTLE DETAIL

NOT TO SCALE

DATE	DESCRIPTION	BY	REV.
12–31–25	PER DRC – STANTEC REVIEW #2	BJL	E
11–12–25	PER DRC PLAN REVIEW	JST	D
10–8–25	PER ALT. OF TERRAIN PLAN REVIEW	JST	C
9–24–25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8–20–25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

CONSTRUCTION DETAILS
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: AS SHOWN	JUNE 12, 2025	SHEET 27 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503–22
JST	JST	GAC	692	28	

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STATE OF NEW HAMPSHIRE GEORGE A. CHEEK JR. 13315 LICENSED PROFESSIONAL ENGINEER
12/31/25

G:\PROJECT\0503022 GENEX ROCKINGHAM ROAD\DWG\0503022CV01.DWG

GENERAL CONSTRUCTION NOTES:

1. BOTH THE CONTRACTOR AND OWNER NEED TO SUBMIT A SEPARATE "NOTICE OF INTENT" TO BE COVERED BY THE N.H.D.E.S. GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES.
2. A MANDATORY PRECONSTRUCTION MEETING SHALL BE HELD WITH THE TOWN, CONTRACTOR, OWNER, AND ALL UTILITY REPRESENTATIVES PRIOR TO CONSTRUCTION. NO WORK SHALL BEGIN UNTIL APPROVAL BY THE HIGHWAY DEPARTMENT HAS BEEN OBTAINED.
3. ALL CONSTRUCTION MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROPRIATE SECTION OF THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS (LATEST EDITION) AND LOCAL REGULATIONS.
4. ANY SUBSTITUTIONS OF MATERIALS SHALL BE APPROVED BY THE ENGINEER IN WRITING.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED LOCAL AND STATE CONSTRUCTION PERMITS PRIOR TO BEGINNING WORK.
6. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND ACTUAL FIELD CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
7. SHOULD GROUND WATER OR UNSUITABLE MATERIALS BE ENCOUNTERED DURING CONSTRUCTION, THE ENGINEER SHALL BE CONTACTED IMMEDIATELY FOR DETERMINATION OF POSSIBLE CONSTRUCTION DESIGN CHANGES SUCH AS (BUT NOT LIMITED TO) UNDERDRAINS OR ALIGNMENT AND GRADE CHANGES.
8. CLEARING THE SITE SHALL INCLUDE THE REMOVAL AND DISPOSAL OF DOWN TIMBER, RUBBISH AND DEBRIS FOUND EXISTING WITHIN THE AREAS TO BE CLEARED. CLEARING SHALL NOT TAKE PLACE UNTIL THE CONTRACTOR HAS DETERMINED FROM THE OWNER WHICH TREES ARE TO BE SAVED WITHIN THE CLEARING LIMITS.
9. PAVEMENT OF THE ROADWAY SHALL CONSIST OF A HOT BITUMINOUS LAYER, A CRUSHED GRAVEL LAYER AND A GRAVEL SUBBASE LAYER.
   A. BITUMINOUS TYPE F WEARING AND TYPE B BASE COURSES SHALL BE CONSTRUCTED PER N.H.D.O.T. SPECIFICATION 401 CONSTRUCTION REQUIREMENTS.
   B. GRAVEL SHALL MEET THE REQUIREMENTS OF N.H.D.O.T. 304.2.
   C. THE CRUSHED GRAVEL SHALL MEET THE REQUIREMENTS OF N.H.D.O.T. 304.3.
   D. REFER TO THE TYPICAL ROAD CROSS SECTION DETAIL FOR DIMENSIONS.
10. COMPACTION OF BACKFILL:
    A. GRASSED AREAS:
       EMBANKMENT FILL AREAS SHALL CONSIST OF COMMON FILL PLACED IN 12 INCH LIFTS AND COMPACTED TO 90%
    B. ROADWAY:
       THE COMPACTION REQUIREMENTS FOR MATERIALS PLACED AS BACKFILL, SUBGRADE, BASE COURSE AND PAVEMENT SHALL BE AS SPECIFIED FOR EACH SEPARATE ITEM IN THE N.H.D.O.T. "STANDARD SPECIFICATIONS" FOR ROAD AND BRIDGE CONSTRUCTION.
11. CATCH BASINS AND MANHOLES SHALL BE PRE-CAST REINFORCED CONCRETE DESIGNED BY AN ENGINEER REGISTERED IN THE STATE OF NEW HAMPSHIRE AND ABLE TO WITHSTAND LOADINGS OF 8 TONS (H-20 LOADING).
12. TRENCH CONSTRUCTION WILL CONFORM WITH SECTION 603.3.1. OF THE N.H.D.O.T. STANDARD SPECIFICATIONS (LATEST EDITION).
13. WOOD SHEETING OR A SUITABLE TRENCH BOX SHALL BE USED TO SUPPORT THE TRENCH AS NECESSARY. IF WOOD SHEETING IS USED, IT SHALL BE DRIVEN AT A DISTANCE OF ONE FOOT FROM THE OUTSIDE DIAMETER OF THE PIPE TO A DEPTH SIX INCHES BELOW THE INVERT OF THE PIPE. WOOD SHEETING SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION NOT LESS THAN ONE FOOT ABOVE THE TOP OF THE PIPE, BUT NOT GREATER THAN THREE FEET BELOW THE FINISHED GRADE.
14. TRENCH BEDDING SHALL CONFORM WITH SECTION 603.3.2. OF THE STANDARD SPECIFICATIONS (LATEST EDITION). FIRST CLASS BEDDING WILL BE REQUIRED FOR ALL PIPES 48" OR MORE IN DIAMETER OR SPAN.
15. BACKFILL MATERIAL FOR TRENCHES WILL CONFORM WITH SECTION 603.3.5. OF THE STANDARD SPECIFICATIONS (LATEST EDITION) AND IN ADDITION, SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTE, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIAL WHICH AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION. BACKFILL SHALL NOT BE PLACED ON FROZEN MATERIAL.
16. COMPACTION OF TRENCH BACKFILL AND PIPE BEDDING SHALL BE SIX INCH LIFTS FOR BEDDING AND BACKFILL TO A PLANE ONE FOOT ABOVE THE PIPE AND IN 12 INCH LIFTS THEREAFTER BY AN APPROVED MECHANICAL COMPACTOR.
17. SHOULD FROZEN MATERIAL BE ENCOUNTERED, IT SHALL NOT BE PLACED IN THE BACKFILL NOR SHALL BACKFILL BE PLACED UPON FROZEN MATERIAL.
18. THE DISTURBED AREA SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 30 DAYS SHALL BE STABILIZED.
19. ALL SEEDED AREAS SHALL BE MULCHED WITHIN 24 HOURS AFTER SEEDING. A GOOD QUALITY OF STRAW MULCH SHOULD BE USED AND APPLIED AT THE RATE OF 2 TONS PER ACRE.
20. STORMWATER FLOWS SHALL NOT BE DIRECTED TO THE GRAVEL WETLAND BASINS, SWALES, OR DITCHES UNTIL ALL CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
21. ALL SLOPES GREATER THAN 3:1 MUST BE MATTED WITH NORTH AMERICAN GREEN S150BN EROSION CONTROL BLANKETING.
22. THE PROJECT SHALL BE MANAGED TO MEET THE REQUIREMENTS OF AND INTENT OF RSA 430:51-57 AND Agr 3800 RELATIVE TO INVASIVE SPECIES: AND FUGITIVE DUST IS TO BE CONTROLLED IN ACCORDANCE WITH Env-A 1000.
23. THE TOWN OF LONDONDERRY RESERVES THE RIGHT TO REQUIRE THAT ADDITIONAL EROSION CONTROL MEASURES BE INSTALLED DURING CONSTRUCTION BASED ON FIELD OBSERVATIONS/INSPECTIONS.

FUELING AND MAINTENANCE OF CONSTRUCTION EQUIPMENT

A. IF ANY CONSTRUCTION EQUIPMENT, INCLUDING BUT NOT LIMITED TO EARTHMOVING, EXCAVATION, AND BORING EQUIPMENT, WILL BE FUELED FROM A TANK TRUCK OR OTHER CONTAINER THAT IS MOVED AROUND THE SITE, THE FOLLOWING SHALL APPLY:
   1. PORTABLE CONTAINMENT EQUIPMENT THAT IS SIZED TO CONTAIN THE MOST LIKELY VOLUME OF FUEL TO BE SPILLED DURING A FUEL TRANSFER SHALL BE USED, WHERE THE MOST LIKELY VOLUME TO BE SPILLED IS DETERMINED BASED ON THE FUEL TRANSFER RATE, THE AMOUNT OF FUEL BEING TRANSFERRED, THE DISTANCE BETWEEN THE HOSE NOZZLE AND PUMP SHUT OFF SWITCH, AND THE RESPONSE TIME OF PERSONNEL AND EQUIPMENT AVAILABLE AT THE FACILITY;
   2. THE CONTAINMENT EQUIPMENT SHALL BE POSITIONED TO CATCH ANY FUEL SPILLS DUE TO OVERFILLING THE EQUIPMENT AND ANY OTHER SPILLS THAT MIGHT OCCUR AT OR NEAR THE FUEL FILLER PORT TO THAT EQUIPMENT;
   3. THE TYPE OF CONTAINMENT EQUIPMENT USED AND ITS POSITIONING AND USE SHALL ACCOUNT FOR ALL OF THE DRIP POINTS ASSOCIATED WITH THE FUEL FILLING PORT AND THE HOSE FROM THE FUEL DELIVERY TRUCK; AND
   4. PERSONNEL SHALL NOT LEAVE THE IMMEDIATE AREA WHILE FUEL IS BEING TRANSFERRED, TO ENSURE THAT ANY SPILLS WILL BE OF LIMITED VOLUME.

B. IF THE SITE WILL HAVE A FIXED LOCATION FOR FUELING CONSTRUCTION EQUIPMENT, THE FOLLOWING SHALL APPLY:
   1. ALL FUEL CONTAINERS, INCLUDING BUT NOT LIMITED TO SKID-MOUNTED TANKS, DRUMS, AND FIVE GALLON CANS, SHALL HAVE SECONDARY CONTAINMENT THAT:
      a. IS CAPABLE OF CONTAINING 110% OF THE VOLUME OF THE LARGEST FUEL STORAGE CONTAINER; AND
      b. HAS AN IMPERVIOUS FLOOR;
   2. SECONDARY CONTAINMENT FOR TANKS MAY COMPRISE A METAL, PLASTIC, POLYMER OR PRECAST CONCRETE VAULT PROVIDING 110 PERCENT OF THE VOLUME OF THE LARGEST FUEL STORAGE CONTAINER;
   3. FOR CONTAINERS, SECONDARY CONTAINMENT MAY COMPRISE CONTAINMENT PALLETS;
   4. THE AREA WHERE FUEL IS TRANSFERRED SHALL BE A FLAT, IMPERVIOUS AREA THAT:
      a. IS ADJACENT TO THE FUEL CONTAINER(S); AND
      b. EXTENDS BEYOND THE FULL REACH, OR LENGTH, OF THE FUEL HOSE; AND
   5. SECONDARY CONTAINMENT AREAS MAY BE IN THE FORM OF A BASIN THAT IS:
      a. SLOPED DOWN TO A CENTRAL LOW POINT OR BERMED ALONG THE PERIMETER;
      b. LINED WITH A CONTINUOUS SHEET OF 20 MIL OR THICKER POLYMER MATERIAL OR APPROPRIATE GEOMEMBRANE LINER; AND
      c. BACKFILLED WITH AT LEAST 6 INCHES OF SAND

GENERAL EROSION CONTROL NOTES:

1. PERIMETER CONTROLS MUST BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS;
2. STORMWATER TREATMENT PONDS AND DRAINAGE SWALES MUST BE INSTALLED BEFORE ROUGH GRADING THE SITE;
3. RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMPS ARE STABILIZED;
4. BASINS, DITCHES AND SWALES MUST BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM;
5. ROADWAYS AND PARKING AREAS MUST BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE;
6. CUT AND FILL SLOPES MUST BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE;
7. ALL AREAS OF UNSTABILIZED SOIL MUST BE STABILIZED AS SOON AS PRACTICABLE BUT NO LATER THAN 45 DAYS OF INITIAL DISTURBANCE;
8. EROSION CONTROL PRACTICES MUST BE INSPECTED AT LEAST WEEKLY AND AFTER EVERY RAIN EVENT OF 0.5 INCH OR MORE;
9. THE AREA OF DISTURBANCE MUST BE LIMITED TO 5 ACRES UNLESS ENV-WQ 1505.05 RELATIVE TO COLD WEATHER STABILIZATION APPLIES;
10. IN AREAS THAT WILL NOT BE PAVED, STABLE MEANS THAT:
    a. A MINIMUM OF 85% VEGETATIVE COVER HAS BEEN ESTABLISHED;
    b. A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
    c. EROSION CONTROL BLANKETS HAVE BEEN INSTALLED IN ACCORDANCE WITH ENV-WQ 1506.03; AND
11. IN AREAS TO BE PAVED, STABLE MEANS THAT BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2 HAVE BEEN INSTALLED.

CONSTRUCTION SEQUENCE:

1. A MANDATORY PRECONSTRUCTION MEETING SHALL BE HELD WITH THE TOWN, CONTRACTOR, OWNER, AND ALL UTILITY REPRESENTATIVES PRIOR TO CONSTRUCTION. NO WORK SHALL BEGIN UNTIL APPROVAL BY THE HIGHWAY DEPARTMENT HAS BEEN OBTAINED.
2. CLEAR AREA FOR CONSTRUCTION ENTRANCE AND INSTALL STABILIZED CONSTRUCTION ENTRANCES AS SHOWN ON THESE PLANS.
3. CUT AND CLEAR TREES IN ROADWAY CONSTRUCTION AREAS ONLY AS SHOWN ON THESE PLANS.
4. INSTALL SILT FENCE ALONG LIMIT OF CLEARING, AND AS SHOWN ON THESE PLANS.
5. REMOVE STUMPS FROM SITE FOR SITE GRADING (CUT AND/OR FILL) TO SUBGRADE. STABILIZE AREAS WITH BASE GRAVEL WITHIN SIX WEEKS OF REMOVING STUMPS.
6. THE MAXIMUM UNSTABILIZED AREA SHALL BE LIMITED TO THE MINIMUM AREA PRACTICABLE FOR SITE CONSTRUCTION (NOT TO EXCEED 5 ACRES). NO AREA SHALL BE LEFT UNSTABILIZED MORE THAN 6 WEEKS. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS HAPPENED:
   - BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
   - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED; OR
   - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
7. CONSTRUCT TEMPORARY AND PERMANENT SEDIMENT, EROSION AND DETENTION CONTROL FACILITIES AS PER THE NOTES IN THESE DRAWINGS. EROSION, SEDIMENT, AND DETENTION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATION.
   - SILT FENCE
   - RIP RAP LINED SWALES
   - RIP RAP APRONS AT CULVERT OUTLETS
   - TREATMENT SWALES
   - GRAVEL WETLAND BASINS
8. ALL DITCHES/SWALES/BASINS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
9. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION AND SEDIMENT CONTROL MEASURES.
10. STORMWATER FLOWS SHALL NOT BE DIRECTED TO THE GRAVEL WETLAND BASINS, SWALES, OR DITCHES UNTIL ALL CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
11. FINISH CLEARING AND GRUBBING.
12. CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS, AS NECESSARY.
13. CONSTRUCT CONSTRUCTION ENTRANCE FOR ACCESS TO DESIRED CONSTRUCTION AREAS.
14. BEGIN CONSTRUCTION OF UTILITIES AND STORM DRAINAGE AS NECESSARY.
15. ROADWAY SHALL BE BROUGHT TO SUBGRADE ELEVATIONS (PRIOR TO PLACEMENT OF GRAVELS), CURBING INSTALLATION, SIDEWALK INSTALLATION, FINAL PAVING, SIGNS, AND PAVEMENT MARKINGS.
16. ALL GRAVELS THAT ARE SPREAD SHALL BE PROPERLY COMPACTED PRIOR TO BINDER PAVING.
17. MODIFY EROSION CONTROL MEASURES AS NECESSARY DURING CONSTRUCTION.
18. BEGIN PERMANENT AND TEMPORARY INSTALLATION OF SEED AND MULCH. ALL CUT AND FILL SLOPES SHALL BE STABILIZED DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAIN DITCHES, SILT FENCES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS NECESSARY. SPREAD ALL GRAVELS AND PAVE ROADWAY AREAS AS SPECIFIED ON THE PLAN.
19. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION. ALL EROSION AND SEDIMENT CONTROLS NEED TO BE INSPECTED WEEKLY AND AFTER EVERY 0.5" OF RAINFALL.
20. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
21. ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 72 HOURS OF FINISH GRADING. MAXIMUM EXPOSURE LENGTH FOR ALL DISTURBED AREAS IS 30 DAYS.
22. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDED AREAS HAVE ESTABLISHED THEMSELVES AND SITE IMPROVEMENTS ARE COMPLETED.
23. LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE

SITE MAINTENANCE AND INSPECTION PROGRAM

A. INSPECTIONS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE CONSTRUCTION PROJECT. MAINTENANCE PRACTICES SHALL INCLUDE, BUT ARE NOT LIMITED TO

1. CLEANING OF CATCH BASINS TWICE PER YEAR OR MORE FREQUENTLY AS DICTATED BY WEEKLY INSPECTIONS AND/OR AFTER 0.5" RAINFALL EVENTS.
2. CLEANING OF SEDIMENT OR DEBRIS FROM STORM WATER MANAGEMENT AREA INLETS TWICE PER YEAR OR MORE FREQUENTLY AS DICTATED BY WEEKLY INSPECTIONS AND/OR AFTER 0.5" RAINFALL EVENTS.
3. WEEKLY SITE INSPECTIONS TO DETERMINE/IMPLEMENT NECESSARY REPAIR AND MAINTENANCE ACTIVITIES.
4. REMOVAL OF SEDIMENT BUILDUP ALONG SILT FENCES, STRAW BALE BARRIERS, GRASS SWALES, AND TREATMENT BASIN INLETS. REMOVE SEDIMENT BUILDUP IN BOTTOM OF TREATMENT BASINS SUCH THAT ALL OUTLETS ARE KEPT FREE FROM SEDIMENT AND DEBRIS.
5. INSPECTION/RECONSTRUCTION OF THE STABILIZED CONSTRUCTION ENTRANCE.
6. TREATMENT OF NON-STORMWATER RELATED DISCHARGES SUCH AS WATER LINE INSTALLATION FLUSH WATER OR GROUNDWATER FROM DEWATERING ACTIVITIES. THESE FLOWS SHOULD BE DIRECTED TO A TEMPORARY SEDIMENTATION BASIN OR CONSTRUCTED STORM WATER MANAGEMENT AREA WITH WATER QUALITY SKIMMER OUTLETS.
7. SWEEP PAVED PARKING LOTS AND DRIVES REGULARLY TO MINIMIZE SEDIMENT ACCUMULATION.

B. GOOD HOUSEKEEPING PRACTICES

THE CONTRACTOR SHALL EMPLOY MEASURES AND PRACTICES TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS TO STORM WATER RUNOFF. THE CONTRACTOR SHALL USE CARE IN THE HANDLING, USE AND DISPOSAL OF MATERIALS SUCH AS PETROLEUM PRODUCTS, FERTILIZERS AND PAINTS TO ENSURE THAT THE RISK ASSOCIATED WITH THE USE OF THESE PRODUCTS IS MINIMIZED. THE FOLLOWING PRACTICES SHALL BE FOLLOWED DURING THE CONSTRUCTION OF THIS PROJECT:

1. AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED FOR THIS SPECIFIC SITE.
2. ALL MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER SUITABLE ENCLOSURE.
3. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THEIR ORIGINAL LABELS.
4. WHENEVER POSSIBLE, ALL OF THE PRODUCT SHALL BE USED BEFORE DISPOSING OF THE CONTAINER.
5. THE MANUFACTURERS RECOMMENDATIONS SHALL BE FOLLOWED IN REGARD TO THE PROPER USE AND DISPOSAL OF ALL PRODUCTS.
6. THE CONTRACTOR SHALL INSPECT DAILY TO ENSURE THE PROPER USE AND DISPOSAL OF ALL MATERIALS ON SITE;

C. SPILL PREVENTION AND CLEANUP PRACTICES

THE CONTRACTOR/OPERATOR SHALL BE RESPONSIBLE FOR THE SAFE HANDLING, USE AND DISPOSAL PROGRAM OF ALL HAZARDOUS MATERIALS FOR THE DURATION OF THIS PROJECT AND SHALL HAVE A SPECIFIC SPILL PREVENTION AND CLEANUP PROTOCOL FOR ALL HAZARDOUS MATERIALS, INCLUDING, BUT NOT LIMITED TO:

1. MANUFACTURERS RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THESE PROCEDURES AND THE LOCATION OF THE CLEANUP SUPPLIES.
2. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIAL WILL INCLUDE, BUT NOT BE LIMITED TO; BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC/METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
3. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
4. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
5. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
6. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING, AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

SEEDING/MULCHING OF DISTURBED AREAS

TEMPORARY AND PERMANENT MULCHING. MULCHING SHALL COMPLY WITH THE FOLLOWING:

(A. HAY AND STRAW MULCHES SHALL BE ANCHORED WITH MULCH NETTING OR TACKIFIER SO THAT THEY ARE NOT BLOWN AWAY BY WIND OR WASHED AWAY BY FLOWING WATER;
(B. MULCH MATERIALS SHALL BE SELECTED BASED UPON SOILS, SLOPE, FLOW CONDITIONS, AND TIME OF YEAR;
(C. HAY OR STRAW MULCH SHALL BE APPLIED AT A RATE OF 1.5 TO 2 TONS PER ACRE, EQUIVALENT TO 70 TO 90 POUNDS PER 1,000 SQUARE FEET;
(D. WOOD CHIPS OR GROUND BARK SHALL BE APPLIED AT 2 TO 6 INCHES DEEP AT A RATE OF 10 TO 20 TONS PER ACRE, EQUIVALENT TO 460 TO 920 POUNDS PER 1,000 SQUARE FEET;
(E. JUTE AND FIBROUS MATS AND WOOD EXCELSIOR SHALL BE INSTALLED ACCORDING TO THE APPLICABLE MANUFACTURER'S INSTRUCTIONS; AND
(F. EROSION CONTROL MIX SHALL:
(1) MEET THE CRITERIA OF ENV-WQ 1506.05(B); AND
(2) BE PLACED AT A THICKNESS OF 2 INCHES OR MORE.

VEGETATION. VEGETATING DISTURBED AREAS SHALL BE COMPLETED ONLY AS SPECIFIED BELOW:

A. ALL ESSENTIAL GRADING AND TEMPORARY STRUCTURES, SUCH AS DIVERSIONS, DAMS, DITCHES, AND DRAINS NEEDED TO PREVENT GULLYING AND REDUCE SILTATION, SHOULD BE COMPLETED PRIOR TO SEEDING.
B. STONES AND TRASH SHALL BE REMOVED FROM THE AREA TO BE SEEDED SO AS NOT TO INTERFERE WITH THE SEEDING;
C. TILL THE SOIL TO A DEPTH OF ABOUT FOUR (4) INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL
D. ON SLOPES 4:1 OR STEEPER, FINAL PREPARATION OF THE AREA TO BE SEEDED SHALL INCLUDE CREATING GROOVES IN THE SOIL PERPENDICULAR TO THE DIRECTION OF THE SLOPE TO CATCH SEED AND REDUCE RUNOFF;
E. IF NEEDED TO ENSURE GROWTH, FERTILIZER OR OTHER ORGANIC SOIL AMENDMENTS SHALL BE APPLIED DURING THE GROWING SEASON;
F. FERTILIZER APPLIED TO ANY AREA WITHIN 100 FEET OF ANY RIVER, STREAM, POND, OR LAKE SHALL BE LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER ONLY;
G. FERTILIZER APPLIED TO ANY AREA THAT IS SUBJECT TO RSA 483-B, THE COMPREHENSIVE WATER QUALITY PROTECTION ACT (ACT), SHALL MEET OR BE MORE PROTECTIVE OF WATER QUALITY THAN THE MINIMUM STANDARDS OF THE ACT;
H. ALL SEEDED AREAS SHALL BE FERTILIZED, FERTILIZATION SHALL BE AT THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER.
I. ALL GRADED AREAS SHALL BE SEEDED WITH:

1.	TALL FESCUE:	20	POUNDS PER ACRE
2.	CREEPING RED FESCUE:	20	POUNDS PER ACRE
3.	BIRDSFOOT TREFOIL:	8	POUNDS PER ACRE
4.	TOTAL	48	POUNDS PER ACRE LIVE SEED

J. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING, AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH 0.25 IN. OF SOIL OR LESS, BY CULTIPACKING OR RAKING.
K. RUNOFF SHALL BE DIVERTED FROM THE SEEDED AREA;
L. SUBJECT TO (N) BELOW, SEEDING SHALL OCCUR PRIOR TO SEPTEMBER 15TH OF THE YEAR IN WHICH THE AREA BEING SEEDED WAS DISTURBED;
M. AREAS SEEDED BETWEEN MAY 15TH TO AUGUST 15TH SHALL BE COVERED WITH HAY OR STRAW MULCH MEETING THE CRITERIA OF ENV-WQ 1506.01(A) THROUGH (C); AND
N. IF VEGETATED GROWTH COVERING AT LEAST 85% OF THE DISTURBED AREA IS NOT ACHIEVED PRIOR TO OCTOBER 15TH, ONE OR MORE ADDITIONAL EROSION CONTROL METHODS SHALL BE IMPLEMENTED.

TEMPORARY SEEDING/MULCHING

TEMPORARY SEEDING. SHALL COMPLY WITH THE FOLLOWING:

1. TEMPORARY VEGETATION CONSISTS OF THE ESTABLISHMENT OF A GRASS COVER ON EXPOSED SOILS FOR UP TO 12 MONTHS. THE PURPOSE IS TO REDUCE EROSION AND SEDIMENTATION BY STABILIZING DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A YEAR OR LESS AND TO REDUCE PROBLEMS ASSOCIATED WITH MUD AND DUST PRODUCTION FROM EXPOSED SOILS DURING CONSTRUCTION. ALL ESSENTIAL GRADING AND TEMPORARY STRUCTURES, SUCH AS DIVERSIONS, DAMS, DITCHES, AND DRAINS NEEDED TO PREVENT GULLYING AND REDUCE SILTATION, SHOULD BE COMPLETED PRIOR TO SEEDING.
2. SEEDBED PREPARATION

   REMOVE THE STONES AND TRASH THAT WILL INTERFERE WITH SEEDING OF THE AREA. WHERE FEASIBLE, TILL THE SOIL TO A DEPTH OF ABOUT FOUR (4) INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.
3. FERTILIZERS

   FERTILIZER SHOULD BE UNIFORMLY SPREAD OVER THE AREA PRIOR TO BEING INCORPORATED INTO THE SOIL. A MINIMUM OF 300 POUNDS PER ACRE (7 POUNDS PER 1,000 SQUARE FEET) OF 10-10-10 FERTILIZER, OR ITS EQUIVALENT, SHOULD BE APPLIED.
4. SEED AND SEEDING

   SEED AND SEEDING RATES MAY BE SELECTED FROM THE TABLE BELOW. THE SELECTION WILL BE BASED ON THE TIME OF YEAR THE SEEDING IS TO BE MADE AND THE LENGTH OF TIME THE VEGETATION IS TO AFFORD THE PROTECTION. THE SEED SHOULD BE SPREAD UNIFORMLY OVER THE AREA. AFTER SEEDING, THE SOIL SHOULD BE FIRMED BY ROLLING OR PACKING. WHERE ROLLING OR PACKING IS NOT FEASIBLE, THE SEED SHOULD BE COVERED LIGHTLY BY RAKING, DISKING, OR DRAGGING.
5. MULCHING

   MULCH THE AREA WITH HAY OR STRAW AT 2 TONS/AC. (90 LBS/1000 S.F. OR 2 BALES/1000 S.F.). QUALITY OF HAY OR STRAW MULCH ALLOWABLE WILL BE DETERMINED BASED ON LONG TERM USE AND VISUAL CONCERNS. MULCH ANCHORING WILL BE REQUIRED WHERE WIND OR AREAS OF WATER ARE A CONCERN. WOOD FIBER HYDROMULCH OR OTHER SPRAYABLE PRODUCTS MAY BE USED IF APPLIED ACCORDING TO MANUFACTURERS SPECIFICATIONS.
6. PLANT SELECTION AND SEEDING RATES

SPECIES	PER ACRE	PER 1000 SQ. FT.	REMARKS
WINTER RYE	90 LBS.	2 LBS.	BEST FOR FALL SEEDING. SEED FROM AUGUST 15 TO SEPT. 5 FOR BEST COVER. SEED TO A DEPTH OF 1 IN.
ANNUAL RYEGRASS	20 LBS.	0.5 LB.	GROWS QUICKLY, BUT IS OF SHORT DURATION. USE WHERE APPEARANCES ARE IMPORTANT. SEED EARLY SPRING. COVER THE SEED WITH NO MORE THAN 0.25 INCH OF SOIL.
PERENNIAL RYEGRASS	20 LBS.	0.5 LBS.	GOOD COVER WHICH IS LONGER LASTING THAN ANNUAL RYEGRASS. SEED BETWEEN APRIL 1 AND JUNE 1 MULCHING WILL ALLOW SEEDING THROUGHOUT THE GROWING SEASON. SEED TO A DEPTH OF APPROXIMATELY 0.5 INCH.

7. ESTABLISHING A STAND

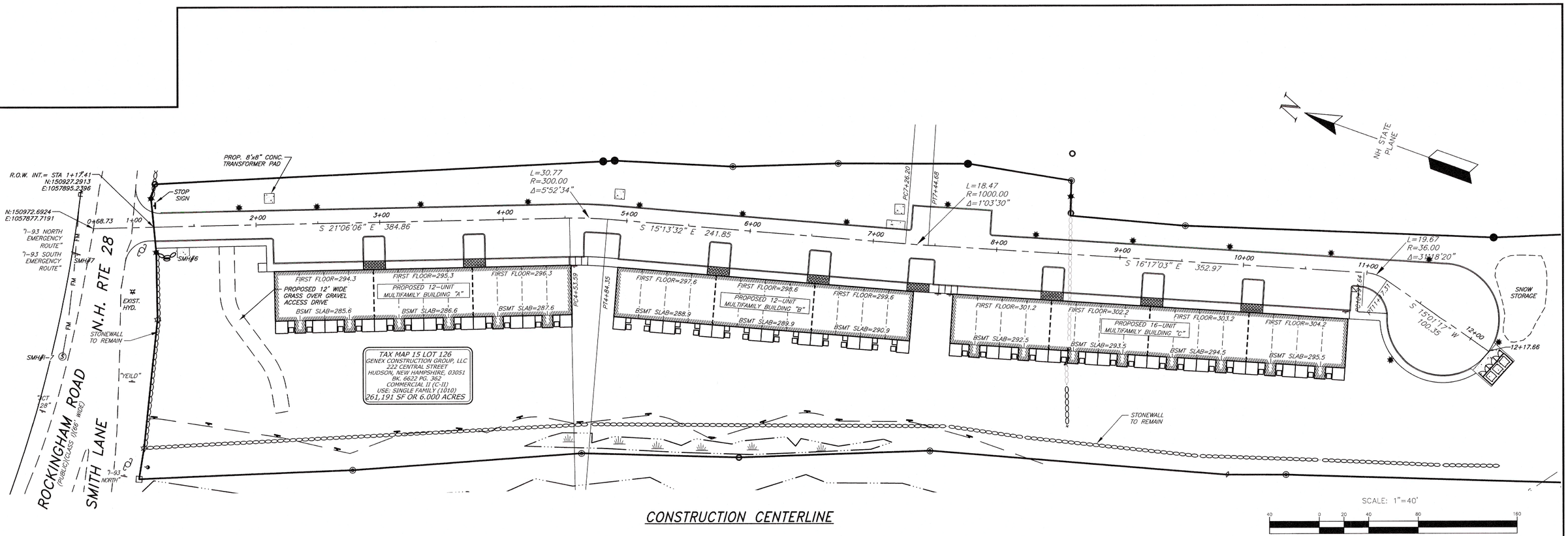
   SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING, AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.

BEST MANAGEMENT PRACTICES FOR BLASTING

ALL ACTIVITIES RELATING TO BLASTING SHALL FOLLOW BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT CONTAMINATION OF GROUNDWATER INCLUDING PREPARING, REVIEWING AND FOLLOWING AN APPROVED BLASTING PLAN; PROPER DRILLING, EXPLOSIVE HANDLING AND LOADING PROCEDURES; OBSERVING THE ENTIRE BLASTING PROCEDURES; EVALUATING BLASTING PERFORMANCE; AND HANDLING AND STORAGE OF BLASTED ROCK.

LOADING PRACTICES. THE FOLLOWING BLAST HOLE LOADING PRACTICES SHALL BE IMPLEMENTED:

A. THE DRILLER SHALL MAINTAIN DRILLING LOGS TO DOCUMENT:
   1. THE DEPTHS AND LENGTHS OF VOIDS, CAVITIES, AND FAULT ZONES OR OTHER WEAK ZONES ENCOUNTERED; AND
   2. GROUNDWATER CONDITIONS;
B. THE DRILLER SHALL COMMUNICATE THE CONTENTS OF THE DRILLING LOGS DIRECTLY TO THE BLASTER;
C. EXPLOSIVE PRODUCTS SHALL BE MANAGED ON-SITE SUCH THAT THEY ARE:
   1. USED IN THE BOREHOLE;
   2. RETURNED TO THE DELIVERY VEHICLE; OR
   3. PLACED IN SECURE CONTAINERS FOR OFF-SITE DISPOSAL;
D. SPILLAGE AROUND THE BOREHOLE SHALL BE:
   1. PLACED IN THE BOREHOLE; OR
   2. CLEANED UP AND RETURNED TO AN APPROPRIATE VEHICLE FOR HANDLING OR PLACEMENT IN SECUR



SCALE: 1"=40'

40 0 20 40 80 160

GRAPHIC SCALE

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC – STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

TAX MAP 15 LOT 126

CONSTRUCTION CENTERLINE
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: AS SHOWN	JUNE 12, 2025	SHEET 29 OF 33

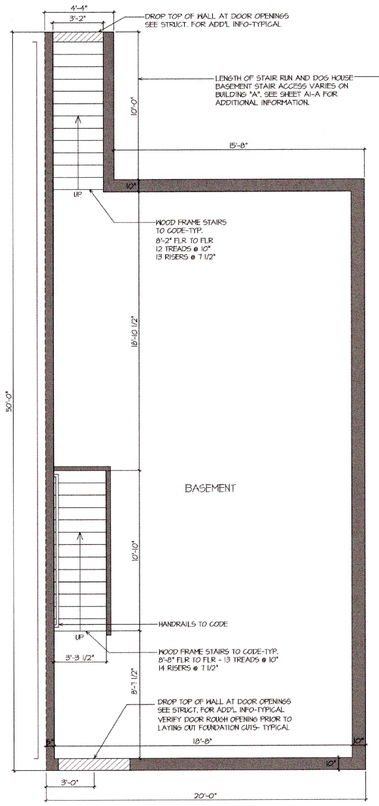
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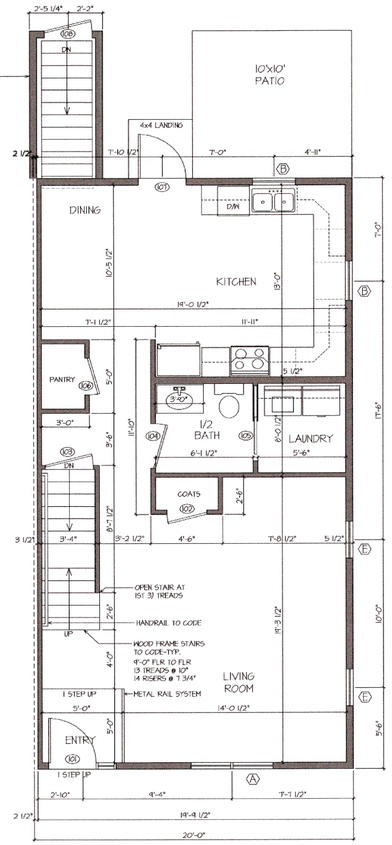
STATE OF NEW HAMPSHIRE GEORGE A. CHAMPAGNE JR. 13313 LICENSED PROFESSIONAL ENGINEER 12/31/25

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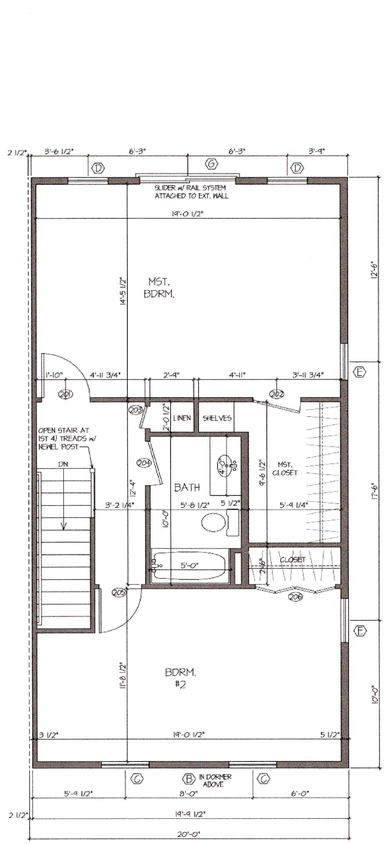
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1 A1.1b BASEMENT FLOOR PLAN
SCALE 3/8" = 1'-0"



2 A1.1b FIRST FLOOR PLAN
SCALE 3/8" = 1'-0"

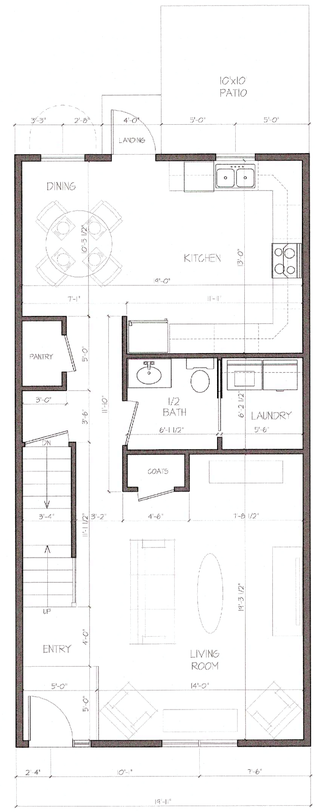


3 A1.1b SECOND FLOOR PLAN
SCALE 3/8" = 1'-0"

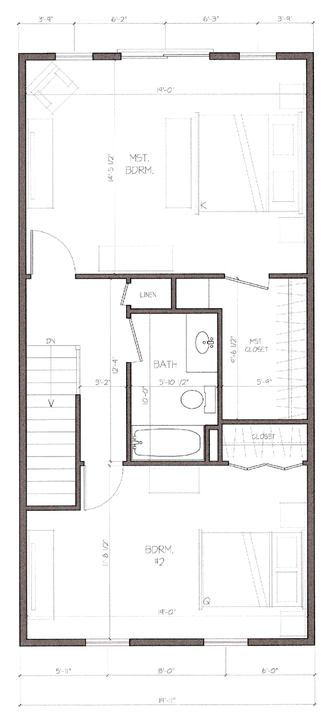
FLOOR PLANS
BUILDING A - END UNIT



1 50/2 BASEMENT FLOOR PLAN



2 50/2 FIRST FLOOR PLAN



3 50/2 SECOND FLOOR PLAN

FLOOR PLANS
UNIT TYPE "2"

BERARD MARTEL ARCHITECTURE, INC.
170 SOUTH RIVER ROAD; BEDFORD, NH 03110
603-626-7903; www.BerardMartel.com

DATE	DESCRIPTION	BY	REV.
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11-12-25	PER DRC PLAN REVIEW	JST	D
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8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

811 DigSafe MA ME NH RI VT

12/31/25

TAX MAP 15 LOT 126

FLOOR PLANS
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

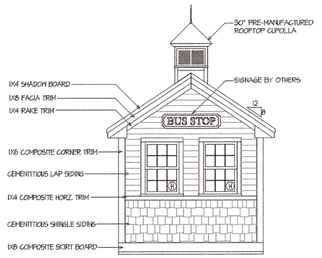
PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
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BOOK 6622 PAGE 362

SCALE: AS SHOWN	JUNE 12, 2025	SHEET 30 OF 33

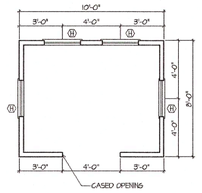
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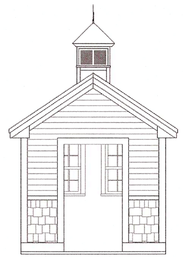
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3 / A6.1 FRONT ELEVATION



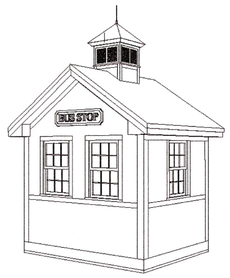
1 / A6.1 FLOOR PLAN

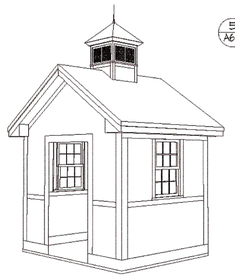


4 / A6.1 REAR ELEVATION



5 / A6.1 SIDE ELEVATION





6 / A6.1 ISOMETRIC VIEWS

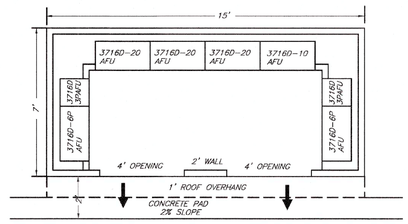
BUS STOP PLANS

NOT TO SCALE

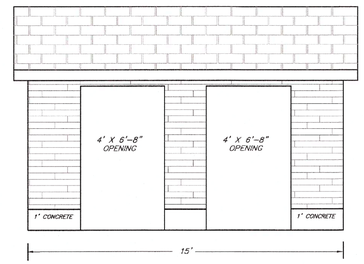


PROJECT SIGN

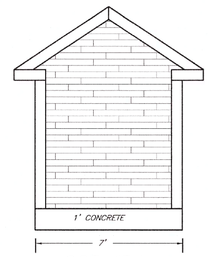
NOT TO SCALE



ACCESS DRIVE



FRONT VIEW



SIDE VIEW

MAILROOM PLANS

NOT TO SCALE

BERARD MARTEL ARCHITECTURE, INC.
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603-626-7903; www.BerardMartel.com

DATE	DESCRIPTION	BY	REV.
12-31-25	PER DRC - STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
9-24-25	PER TOWN SEWER DEPT. 2ND REVIEW	JST	B
8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

811 DigSafe MA-ME-NH-RI-VT 31

STATE OF NEW HAMPSHIRE LICENSED PROFESSIONAL ENGINEER

TAX MAP 15 LOT 126

BUS STOP/PROJECT SIGN/MAILROOM PLANS
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: AS SHOWN	JUNE 12, 2025				SHEET 31 OF 33
DESIGN: JST	DRAWN: JST	CHECKED: GAC	FB: 692	PG: 28	503-22

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ENGINEERS, SURVEYORS & LANDSCAPE ARCHITECTS
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G:\PROJECT\0503022 GENEX ROCKINGHAM ROAD\DWG\0503022CV01.DWG



FRONT ELEVATION PLAN
NOT TO SCALE



REAR ELEVATION PLAN
NOT TO SCALE

G:\PROJECT\0503022 GENEX ROCKINGHAM ROAD\DWG\0503022CV01.DWG

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603-626-7903; www.BerardMartel.com

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8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A

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12/31/25

STATE OF NEW HAMPSHIRE - GREGORY A. CUNNINGHAM JR. - 13015 - LICENSED PROFESSIONAL ENGINEER

TAX MAP 15 LOT 126

ELEVATION PLANS
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

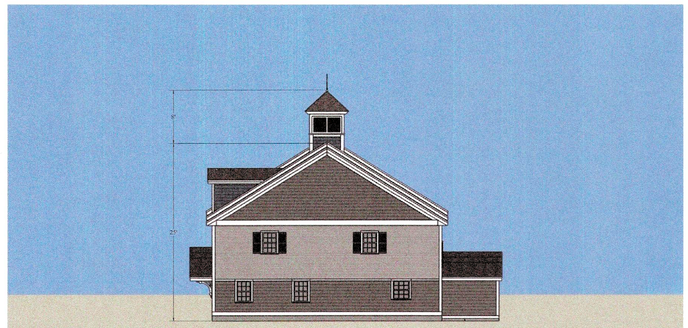
SCALE: AS SHOWN	JUNE 12, 2025	SHEET 32 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	503-22
JST	JST	GAC	692	28	

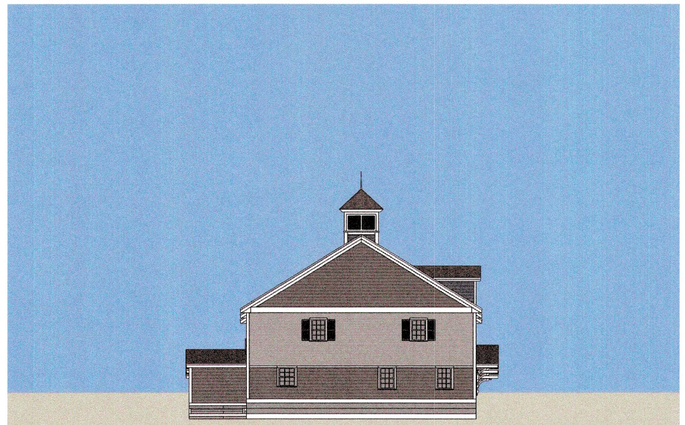
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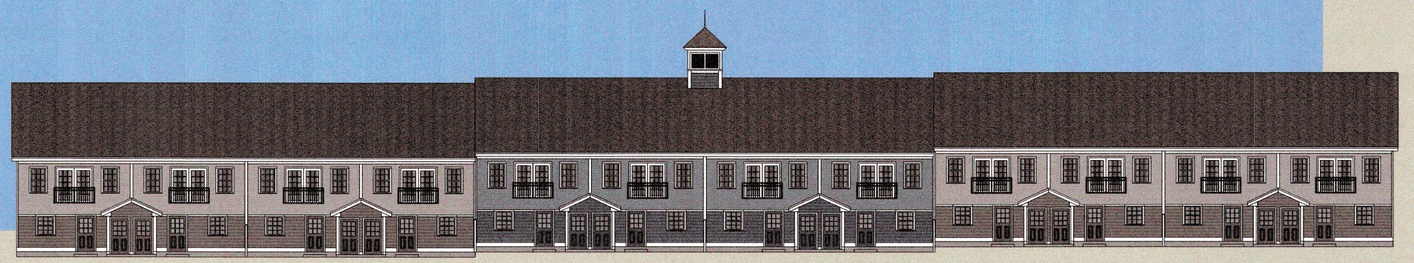
Front Elevation



Right Elevation



Left Elevation



Rear Elevation

ELEVATION PLANS

NOT TO SCALE

12-31-25	PER DRC - STANTEC REVIEW #2	BJL	E
11-12-25	PER DRC PLAN REVIEW	JST	D
10-8-25	PER ALT. OF TERRAIN DESIGN REVIEW	JST	C
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8-20-25	PER TOWN SEWER DEPT. REVIEW	JST	A
DATE	DESCRIPTION	BY	REV.

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170 SOUTH RIVER ROAD; BEDFORD, NH 03110
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I CERTIFY THAT THIS PLAN IS IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS AND IS APPROVED FOR RECORDING
GREGORY A. CASKIN, JR. NO. 9815 LICENSED PROFESSIONAL ENGINEER

TAX MAP 15 LOT 126

ELEVATION PLANS
ROCKPOINT COMMONS
225 ROCKINGHAM ROAD
LONDONDERRY, NEW HAMPSHIRE

PREPARED FOR/OWNER:
GENEX CONSTRUCTION GROUP, LLC
222 CENTRAL STREET
HUDSON, N.H. 03051
BOOK 6622 PAGE 362

SCALE: AS SHOWN	JUNE 12, 2025	SHEET 33 OF 33

DESIGN:	DRAWN:	CHECKED:	FB:	PG:	
JST	JST	GAC	692	28	503-22

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EXECUTIVE COUNTRY CLUB
RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY
LONDONDERRY, NEW HAMPSHIRE

GENERAL INFORMATION

OWNER

MAP 28 LOT 10-0
CITY OF MANCHESTER
C/O AIRPORT AUTHORITY
1 AIRPORT ROAD, SUITE 300
MANCHESTER, NH 03103

MAP 28 LOT 10-9
CITY OF MANCHESTER
C/O AIRPORT AUTHORITY
1 AIRPORT ROAD, SUITE 300
MANCHESTER, NH 03103

MAP 28 LOT 10-4
BENTON FAMILY REALTY LLC
1 HIGHLANDER WAY
MANCHESTER, NH 03103

APPLICANT / PREPARED FOR

BENTON FAMILY REALTY LLC
1 HIGHLANDER WAY
MANCHESTER, NH 03103

RESOURCE LIST

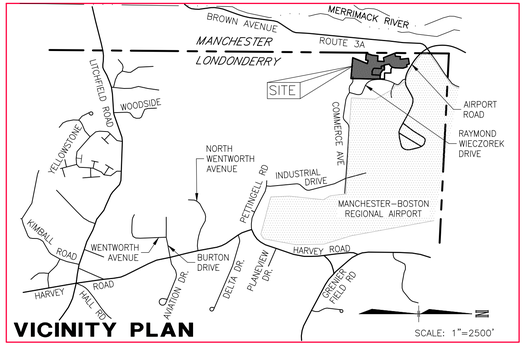
COMMUNITY DEVELOPMENT DEPARTMENT
268 B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 129
KELLIE CARON, TOWN PLANNER

PUBLIC WORKS
268 B MAMMOTH ROAD
LONDONDERRY, NH
(603) 432-1100 EXT. 152
DAVE WHOLLEY, DIRECTOR

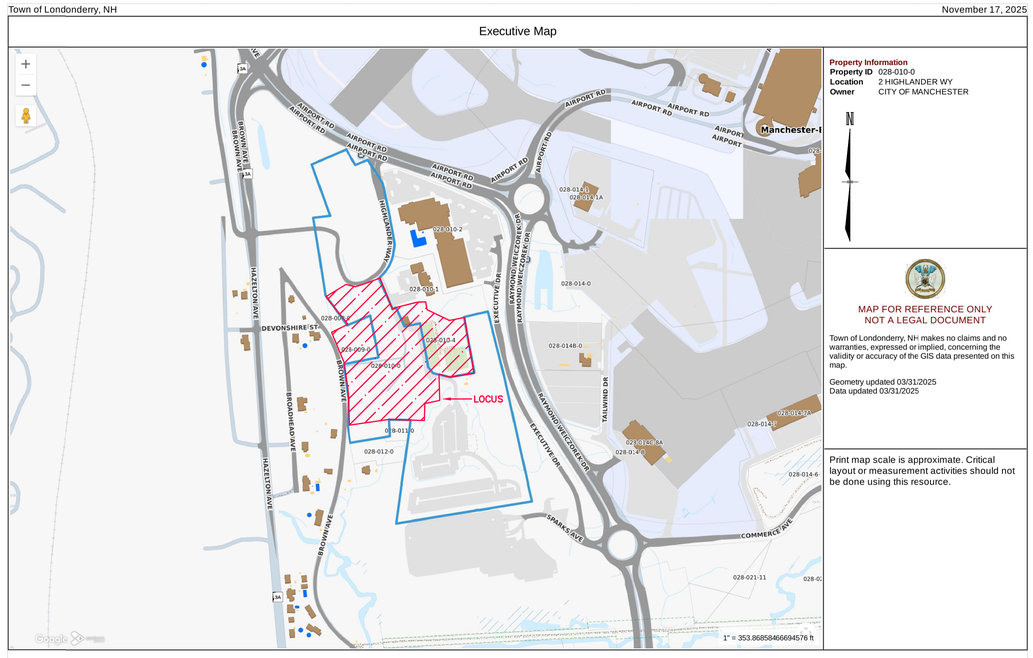
POLICE DEPARTMENT
268 A MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1118
FAX (603) 432-1117
CHIEF KIM BERNARD

FIRE DEPARTMENT
280 MAMMOTH ROAD
LONDONDERRY, NH
(603) 432-1124
FAX (603) 432-1129
CHIEF BRIAN JOHNSON

HEALTH DEPARTMENT
268 B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 115



VICINITY PLAN



HORIZONTAL SCALE 1"=400'
400 200 0 400

INDEX OF SHEETS

SHEET	SHEET TITLE
C-1	COVER
C-2	NOTES & LEGEND
SHEETS 1-5	EXISTING CONDITIONS PLAN
C-3	SITE PREPARATION & DEMOLITION PLAN
C-4	OVERALL SITE LAYOUT PLAN
C-5	SITE LAYOUT PLAN
C-6	GRADING & DRAINAGE PLAN
C-8	UTILITY PLAN
C-9	SEWER PLAN & PROFILE
C-10	LANDSCAPE PLAN
C-11	EROSION CONTROL PLAN
C-12	EROSION CONTROL NOTES
C-13	LIGHTING PLAN
C-14 - C-22	DETAILS SHEET
T-1	TURNING MOVEMENT PLAN
REFERENCE PLANS BY ASSOCIATED PROFESSIONALS	
-	ARCHITECTURAL PLANS

PERMITS/APPROVALS

	NUMBER	APPROVED	EXPIRES
LONDONDERRY PLANNING BOARD SITE PLAN REVIEW	PENDING	-	-
LONDONDERRY SEWER PERMIT	PENDING	-	-
LONDONDERRY STORMWATER PERMIT	-	-	-
NHDES ALTERATION OF TERRAIN PERMIT	PENDING	-	-
NHDES SEWER DISCHARGE PERMIT	PENDING		

VARIANCES (APPROVED IN SUMMER 2025)

MAP 028 LOT 010-4

1. SEC. 4.3.3.A - TO ALLOW A SIDE YARD BUILDING/STRUCTURE ENCROACHMENT OF 24.9 FT, OR A SETBACK OF 5.1 FT, WHERE 30 FT IS REQUIRED.
2. SEC. 4.3.2.A - TO ALLOW 0 FT. OF FRONTAGE WHERE 150 FT IS REQUIRED.
3. 4.4.3.3.B.2 a & b - TO NOT PROVIDE A 50 FT PERMANENTLY LANDSCAPED BUFFER ZONE WHERE AN EXISTING DRIVEWAY IS WITHIN 200 FT OF THE AR-1 ZONING DISTRICT.
4. 4.3.3.B.1 - TO ALLOW AN ENCROACHMENT OF 15 FT, OR A 0 FT PERIMETER LANDSCAPE BUFFER, WHERE 15 FT IS REQUIRED IN C-II ZONE.

MAP 028 LOT 010-0

5. SEC. 4.3.3.B.1 - TO ALLOW AN ENCROACHMENT OF UP TO 15 FT, OR A 0 FT PERIMETER LANDSCAPE BUFFER, WHERE 15 FT (30 FT AT RIGHT-OF-WAY) IS REQUIRED IN C-II ZONE.

ABUTTERS LIST
EXECUTIVE HEALTH & SPORTS CENTER, LONDONDERRY NH

02/18/2026

JOB # 17562.06

MAP 028 LOTS 004-0, 009-0, 010-0, 011-0, 012-0, 014-0; MAP 710 LOTS , 1A, 2, 3, 7, 7F;
MAP 866 LOTS 4, 5, 7, 12, 13, 14, 16, 16A, 17
CITY OF MANCHESTER
C/O MANCHESTER AIRPORT AUTHORITY
1 AIRPORT ROAD, SUITE 300
MANCHESTER, NH 03103

MAP 028 LOT 006-0
TOWN OF LONDONDERRY
268B MAMMOTH ROAD
LONDONDERRY, NH 03053

MAP 028 LOT 008-0; MAP 710 LOT 4
BLUE SKY HOLDINGS, LLC
51 MICHAEL STREET
MANCHESTER, NH 03104

MAP 866 LOTS 9 AND 10
KATHLEEN Y. WIBBER
3526 BROWN AVENUE
MANCHESTER, NH 03103

MAP 028 LOT 014C-8A
UNITED PARCEL SERVICE
ATTN: CORPORATE REAL ESTATE
55 GLENLAKE PKWY, NE
ATLANTA, GA 30328

MAP 028 LOT 005-0
CITY OF MANCHESTER
C/O MANCHESTER AIRPORT AUTHORITY
1 AIRPORT ROAD, SUITE 100
MANCHESTER, NH 03103

MAP 710 LOT 5
CITY OF MANCHESTER
C/O 3F LLC
70 LOWELL STREET
MANCHESTER, NH 03101

MAP 028 LOTS 010-2, 010-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY
MANCHESTER, NH 03103

MAP 028 LOT 010-1
TT OF HILLSBOROUGH, LLC
505 SOUTH FLAGLER DRIVE, STE 1400
WEST PALM BEACH, FL 33401

MAP 028 LOT 013-0 & MAP 710 LOT 1
JEFFREY W. & ANNIE MARIE CHICK
3563 BROWN AVENUE
MANCHESTER, NH 03103

MAP 028 LOT 014-10 & MAP 711 LOT 55
STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
P.O. BOX 483
7 HAZEN DRIVE
CONCORD, NH 03302-0483

MAP 028 LOT 014B-0
HERTZ CORPORATION
8501 WILLIAMS ROAD
ESTERO, FL 33928

MAP 028 LOT 014-10
STATE OF NEW HAMPSHIRE
P.O. BOX 483
CONCORD, NH 03302

MAP 866 LOT 1
SCOTT RILEY
3600 BROWN AVENUE
MANCHESTER, NH 03103

TFMORAN, INC.
48 CONSTITUTION DRIVE
BEDFORD, NH 03110
ATTN: ROBERT DUVAL

MAP 866 LOT 19
ARCHIE F. SYRENE
142 LOWELL ST APT 6
MANCHESTER, NH 03104

MAP 866 LOT 6
ROGER BOUTIN REVOC TR
254 WOODCREST CT
MANCHESTER, NH 03109

MAP 710 LOT 8
CITY OF MANCHESTER
ONE CITY HALL PLAZA
MANCHESTER, NH 03101

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DIG SAFE
811 OR 1-888-DIG-SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

APPROVED BY THE LONDONDERRY NH PLANNING BOARD FOR PHASE _____
ON DATE: _____
CERTIFIED BY:

OWNER'S SIGNATURE

(MAP 28 LOT 10-4) BENTON FAMILY REALTY TRUST DATE

(MAP 28 LOTS 9-0, 10-0) CITY OF MANCHESTER DATE

STATE OF NEW HAMPSHIRE
JASON MILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

COVER

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH
OWNER: MAP 28 LOTS 9, 10
CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103
OWNER: MAP 28 LOT 10-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103
APPLICANT
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

PROJ. #	DR	JSH
17562.06	CK	RED

CADFILE: 17562-06 COVER-DETAILS

C-1

LEGEND

PROPOSED

- PROPERTY LINE
- ZONING LINE
- EASEMENT
- BASELINE
- FLOODPLAIN
- EDGE OF WATERBODY
- EDGE OF WETLAND
- SETBACK (WETLAND)
- SETBACK (STRUCTURE)
- SETBACK (PARKING)
- SETBACK (LANDSCAPE)
- GRAVEL ROAD
- EOP — EDGE OF PAVEMENT
- VGC — VERTICAL GRANITE CURB
- SGC — SLOPED GRANITE CURB
- CC — CONCRETE CURB
- ICC — INTEGRATED CONCRETE CURB
- BIT — BITUMINOUS ASPHALT CURB
- CCB — CAPE COD BERM
- SAWCUT
- BUILDING
- BUILDING ROOF OVERHANG
- BUILDING FOUNDATION
- BUILDING ENTRANCE
- OVERHEAD DOOR
- TREE LINE
- FENCE (CHAIN LINK)
- FENCE (WIRE)
- FENCE (STOCKADE)
- GUARDRAIL
- STONE WALL — [POINTS TOWARD HIGH SIDE]
- RETAINING WALL
- SF — SILT FENCE
- SS — SILT SOCK
- SOIL BOUNDARY
- LIMIT OF GRADING
- 100 — CONTOUR
- TC100.50 / BC100.00 OR 100.00 — SPOT GRADE
- ## — PARKING COUNT
- DSLY — YELLOW DOUBLE SOLID LINE
- SSLY — YELLOW SINGLE SOLID LINE
- SSLW — WHITE SINGLE SOLID LINE
- SBLW — WHITE SINGLE BROKEN LINE
- STOP — STOP BAR
- CROSSWALK
- ACCESSIBLE PARKING SYMBOL
- PAVEMENT ARROW
- TRAFFIC FLOW ARROW (NOT PAINTED)
- SIGN (SINGLE POST)
- SIGN (DOUBLE POST)
- SIGN (PYLON)
- SIGN (MONUMENT)
- BOLLARD
- D — DUMPSTER PAD

PROPOSED

- CONCRETE
- GRAVEL
- HEAVY DUTY PAVEMENT
- CONSTRUCTION ENTRANCE
- SNOW STORAGE
- RIPRAP
- INLET PROTECTION
- FLOW ARROW
- RIDGE — GRADE BREAK RIDGE
- DRAIN LINE
- DRAINAGE SWALE
- STORMWATER BMP
- S — SEWER LINE
- FM — SEWER FORCE MAIN LINE
- W — WATER LINE
- G — GAS LINE
- OHE — OVERHEAD UTILITY LINE
- UGE — UNDERGROUND UTILITY LINE
- CATCH BASIN
- DRAIN INLET
- OUTLET CONTROL STRUCTURE
- ROOF DRAIN
- DRAIN CLEANOUT
- DRAIN MANHOLE
- FARED END SECTION
- SEWER CLEAN OUT
- SEWER MANHOLE
- SEWER VENT
- DRAIN/SEWER/WATER PLUG OR CAP
- HYDRANT
- FIRE DEPARTMENT CONNECTION
- WATER GATE VALVE
- WATER SHUTOFF
- THRUST BLOCK
- WATER METER
- WATER MANHOLE
- WELL
- GAS GATE VALVE
- GAS SHUT OFF
- GAS METER
- TELEPHONE MANHOLE
- ELECTRIC MANHOLE
- TRAFFIC CONTROL CABINET
- ELECTRIC HANDHOLE
- ELECTRIC PULL BOX
- ELECTRIC METER
- FLOOD LIGHT
- LIGHT POLE
- UTILITY POLE
- GUY POLE
- T — TRANSFORMER PAD
- B-# — BORING LOCATION
- TP-# — TEST PIT LOCATION
- IT-# — INFILTRATION TEST LOCATION
- MW-# — MONITORING WELL

ABBREVIATIONS

GENERAL

ABAN	ABANDON
AC	ACRES
ADJ	ADJUST
APPROX	APPROXIMATE
BC	BOTTOM OF CURB
BIT	BITUMINOUS
BK/PG	BOOK & PAGE
BLDG	BUILDING
BMP	BEST MANAGEMENT PRACTICE
BS	BOTTOM OF SLOPE
BW	BOTTOM OF WALL
CONC	CONCRETE
COORD	COORDINATE
DIA	DIAMETER
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
EXIST	EXISTING
FFE	FINISHED FLOOR ELEVATION
FND	FOUNDATION
HP	HIGH POINT
INV	INVERT ELEVATION
IT	INFILTRATION TEST
L	LENGTH
LF	LINEAR FEET
LSA	LANDSCAPE AREA
MAX	MAXIMUM
MIN	MINIMUM
N/F	NOW OR FORMERLY
NHFG	NEW HAMPSHIRE FISH & GAME
NTS	NOT TO SCALE
OC	ON CENTER
PAVE	PAVEMENT
PERF	PERFORATED
PROP	PROPOSED
R	RADIUS
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
REM	REMOVE
RET	RETAIN
RIM	RIM ELEVATION
ROW	RIGHT OF WAY
S	SLOPE
SF	SQUARE FEET
SW	SIDEWALK
TBM	TEMPORARY BENCHMARK
TC	TOP OF CURB
TP	TEST PIT
TW	TOP OF WALL
TYP	TYPICAL
UG	UNDERGROUND
WCR	ACCESSIBLE WHEELCHAIR RAMP
W/	WITH

UTILITIES

CB	CATCH BASIN
CIP	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COND	CONDUIT
DCB	DOUBLE CATCH BASIN
DIP	DUCTILE IRON PIPE
DMH	DRAIN MANHOLE
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FES	FLARED END SECTION
GT	GREASE TRAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
LP	LIGHT POLE
OCS	OUTLET CONTROL STRUCTURE
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
SMH	SEWER MANHOLE
SOS	SEDIMENT OIL SEPARATOR
TSV	TAPPING SLEEVE, VALVE, AND BOX
UP	UTILITY POLE

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DIG SAFE — CALL 811 IT'S THE LAW — CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

GENERAL NOTES

1. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. TFMORAN, INC. ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
2. ALL IMPROVEMENTS SHOWN ON THE SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS.
3. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF LONDONDERRY, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ALL WORK TO CONFORM TO TOWN OF LONDONDERRY DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS. ALL WORK WITHIN THE RIGHT-OF-WAY OF THE TOWN AND/OR STATE SHALL COMPLY WITH APPLICABLE STANDARDS. COORDINATE ALL WORK WITHIN THE RIGHT-OF-WAY WITH APPROPRIATE TOWN, COUNTY, AND/OR STATE AGENCY.
4. AN ALTERATION OF TERRAIN PERMIT IS REQUIRED PER ENV-WQ 1503.02. THE SITE CONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF NHDES ENV-WQ 1500 OR AS APPLICABLE.
5. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION. VERIFY TBM ELEVATIONS PRIOR TO CONSTRUCTION.
6. PRIOR TO COMMENCING ANY SITE WORK ALL LIMITS OF WORK SHALL BE CLEARLY MARKED IN THE FIELD.
7. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY SHEET. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.
8. TFMORAN, INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE ENGINEER OF RECORD.
9. ALL DEMOLITION SHALL INSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKWAYS, AND ANY OTHER ADJACENT OPERATING FACILITIES. PRIOR WRITTEN PERMISSION FROM THE OWNER/DEVELOPER AND LOCAL PERMITTING AUTHORITY IS REQUIRED IF CLOSURE/OBSTRUCTIONS TO ROADS, STREET, WALKWAYS, AND OTHERS IS DEEMED NECESSARY. CONTRACTOR TO PROVIDE ALTERNATE ROUTES AROUND CLOSURES/OBSTRUCTIONS PER LOCAL/STATE/FEDERAL REGULATIONS.
10. REFER TO ARCHITECTURAL PLANS FOR LAYOUT OF BUILDING FOUNDATIONS AND CONCRETE ELEMENTS WHICH ABUT THE BUILDING SUCH AS STAIRS, SIDEWALKS, LOADING DOCK RAMPS, PADS, AND COMPACTOR PADS. DO NOT USE SITE PLANS FOR LAYOUT OF FOUNDATIONS.
11. IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND DETAILS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.
12. IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED WORK.
13. CONTRACTOR'S GENERAL RESPONSIBILITIES:
    - A. BID AND PERFORM THE WORK IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL CODES, SPECIFICATIONS, REGULATIONS, AND STANDARDS.
    - B. NOTIFY ENGINEER IN WRITING OF ANY DISCREPANCIES OF PROPOSED LAYOUT AND/OR EXISTING FEATURES.
    - C. EMPLOY A LICENSED SURVEYOR TO DETERMINE ALL LINES AND GRADES AND LAYOUT OF SITE ELEMENTS AND BUILDINGS.
    - D. THE CONTRACTOR SHALL BE RESPONSIBLE TO BECOME FAMILIAR WITH THE SITE AND ALL SURROUNDING CONDITIONS. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF INTENTIONS AT LEAST 48 HOURS IN ADVANCE.
    - E. TAKE APPROPRIATE MEASURES TO REDUCE, TO THE FULLEST EXTENT POSSIBLE, NOISE, DUST AND UNSIGHTLY DEBRIS FROM CONSTRUCTION ACTIVITIES.
    - F. MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY WORK AT ALL TIMES.
    - G. IN ACCORDANCE WITH RSA 430:53 AND AGR 3800, THE CONTRACTOR SHALL NOT TRANSPORT INVASIVE SPECIES OFF THE PROPERTY, AND SHALL DISPOSE OF INVASIVE SPECIES ON-SITE IN A LEGAL MANNER.
    - H. COORDINATE WITH ALL UTILITY COMPANIES AND CONTACT DIGSAFE (811 OR 888-344-7233) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION.
    - I. PROTECT NEW AND EXISTING BURIED UTILITIES DURING INSTALLATION OF ALL SITE ELEMENTS. DAMAGED UTILITIES SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
    - J. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY TFMORAN, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS, OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE US OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
    - K. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
    - L. VERIFY LAYOUT OF PROPOSED BUILDING FOUNDATIONS WITH ARCHITECT AND THAT PROPOSED FOUNDATION MEETS PROPERTY LINE SETBACKS PRIOR TO COMMENCING ANY FOUNDATION CONSTRUCTION.
    - M. PROVIDE AN AS-BUILT PLAN AT THE COMPLETION OF THE PROJECT TO THE PLANNING DIRECTOR AND PER TOWN REGULATIONS.
    - N. IF ANY DEVIATIONS FROM THE APPROVED PLANS AND SPECIFICATIONS HAVE BEEN MADE, THE SITE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS STAMPED BY A LICENSED SURVEYOR OR QUALIFIED ENGINEER ALONG WITH A LETTER STAMPED BY A QUALIFIED ENGINEER DESCRIBING ALL SUCH DEVIATIONS, AND BEAR ALL COSTS FOR PREPARING AND FILING ANY NEW PERMITS OR PERMIT AMENDMENTS THAT MAY BE REQUIRED.
    - O. AT COMPLETION OF CONSTRUCTION, THE SITE CONTRACTOR SHALL PROVIDE A LETTER CERTIFYING THAT THE PROJECT WAS COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND A LETTER STAMPED BY A QUALIFIED ENGINEER THAT THEY HAVE OBSERVED ALL UNDERGROUND DETENTION SYSTEMS, INFILTRATION SYSTEMS, OR FILTERING SYSTEMS PRIOR TO BACKFILL, AND THAT SUCH SYSTEMS CONFORM TO THE APPROVED PLANS AND SPECIFICATIONS.
14. SUBJECT PROPERTIES ARE LOCATED WITHIN THE ST. GOBAIN CONSENT DECREE AREA. AS SUCH, EXPORT OF SOILS IS REGULATED UNDER ENV-OR 600 (CONTAMINATED SITE MANAGEMENT RULES)

GRADING NOTES

1. THE CONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF NHDES ENV-WQ 1500 AS APPLICABLE.
2. THE CONTRACTOR SHALL PREPARE, MAINTAIN, AND EXECUTE A S.W.P.P.P. IN ACCORDANCE WITH EPA REGULATIONS AND THE CONSTRUCTION GENERAL PERMIT.
3. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14 DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK THE ACCURACY OF THE TOPOGRAPHY AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO ANY EARTHWORK BEING PERFORMED ON THE SITE. NO CLAIM FOR EXTRA WORK WILL BE CONSIDERED FOR PAYMENT AFTER EARTHWORK HAS COMMENCED.
5. THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR INFORMATION ABOUT SOIL AND GROUNDWATER CONDITIONS. THE CONTRACTOR SHALL FOLLOW THE GEOTECHNICAL ENGINEERS RECOMMENDED METHODS TO ADDRESS ANY SOIL AND GROUNDWATER ISSUES THAT ARE FOUND ON SITE.
6. COORDINATE WITH GEOTECHNICAL/STRUCTURAL PLANS FOR SITE PREPARATION AND OTHER BUILDING INFORMATION.
7. COORDINATE WITH ARCHITECTURAL PLANS FOR DETAILED GRADING AT BUILDING, AND SIZE AND LOCATION OF ALL BUILDING SERVICES.
8. COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ROOF DRAIN INFORMATION.
9. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING, SIDEWALKS, AND ALIGNMENTS.
10. THE CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE, RAMPS AND LOADING AREAS.
11. THE SITE SHALL BE GRADED SO ALL FINISHED PAVEMENT HAS POSITIVE DRAINAGE AND SHALL NOT POND WATER DEEPER THAN 1/4" FOR A PERIOD OF MORE THEN 15 MINUTES AFTER FLOODING.
12. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED. CURBS HAVE A 6" REVEAL UNLESS OTHERWISE NOTED.
13. ALL SIDEWALK AND OTHER CURB REVEALS SHALL BE 6" WITH A TOLERANCE OF PLUS OR MINUS 3/8". WHERE SIDEWALK IS TO BE FLUSH, THE PAVEMENT REVEAL SHALL BE 1/4" WITH A TOLERANCE OF 1/8".
14. THE FINISHED GRADE AT BOTTOM OF ALL ACCESSIBLE RAMPS SHALL BE FLUSH WITH PAVEMENT WITH A TOLERANCE OF PLUS OR MINUS 1/4".
15. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE PRIOR TO INSTALLATION OF FINISHED PAVEMENT.
16. ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS AND SHALL MEET LOCAL STANDARDS AND THE REQUIREMENTS OF THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION AND THE NHDOT STANDARD STRUCTURE DRAWINGS UNLESS OTHERWISE NOTED.
17. STORMWATER DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE TYPE B AND CONFORM TO NHDOT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
18. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
19. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED, FERTILIZER AND MULCH.
20. DENSITY REQUIREMENTS:

MINIMUM DENSITY*	LOCATION
95%	BELOW PAVED OR CONCRETE AREAS
95%	TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL
90%	BELOW LOAM AND SEED AREAS

*ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM D-6938.

UTILITY NOTES

1. ALL PROPOSED UTILITY WORK, INCLUDING MATERIAL, INSTALLATION, TERMINATION, EXCAVATION, BEDDING, BACKFILL, COMPACTION, TESTING, CONNECTIONS, AND CONSTRUCTION SHALL BE COORDINATED WITH AND COMPLETED IN ACCORDANCE WITH THE APPROPRIATE REQUIREMENTS, CODES, AND STANDARDS OF ALL CORRESPONDING UTILITY ENTITIES AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE DIGGING.
3. COORDINATE ALL WORK ADJACENT TO PROPOSED BUILDINGS WITH ARCHITECTURAL BUILDING DRAWINGS. CONFIRM UTILITY PENETRATIONS AND INVERT ELEVATIONS ARE COORDINATED PRIOR TO INSTALLATION.
4. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE EXACT LOCATION OF NEW UTILITY CONNECTIONS SHALL BE DETERMINED BY THE CONTRACTOR IN COORDINATION WITH UTILITY COMPANY, COUNTY AGENCY, AND/OR PRIVATE UTILITY COMPANY.
6. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER THE UTILITY INSTALLATION COMPLETE AND OPERATIONAL.
7. ALL UTILITY COMPANIES REQUIRE INDIVIDUAL CONDUITS. CONTRACTOR TO COORDINATE WITH TELEPHONE, CABLE, AND ELECTRIC COMPANIES REGARDING NUMBER, SIZE, AND TYPE OF CONDUITS REQUIRED PRIOR TO INSTALLATION OF ANY CONDUIT.
9. SANITARY SEWER SHALL BE CONSTRUCTED TO THE STANDARDS AND SPECIFICATIONS AS SHOWN ON THESE PLANS. ALL SEWER MAINS AND FITTINGS SHALL BE PVC AND SHALL CONFORM TO ASTM F 679 (SDR 35 MINIMUM). FORCE MAINS AND FITTINGS SHALL CONFORM TO NH CODE OF ADMINISTRATIVE RULES ENV-WQ 700. ALL SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH NH CODE OF ADMINISTRATIVE RULES ENV-WQ 700. SANITARY MANHOLES SHALL CONFORM TO NHDES WATER DIVISION WASTEWATER ENGINEERING BUREAU STANDARDS AND SPECIFICATIONS SHOWN HEREON.
10. ON-SITE WATER DISTRIBUTION SHALL BE TO MANCHESTER WATER WORKS STANDARDS AND SPECIFICATIONS. WATER MAINS SHALL HAVE A MINIMUM OF 5.5' COVER. WHERE WATER PIPES CROSS SEWER LINES A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE OBSERVED. HORIZONTAL SEPARATION BETWEEN WATER AND SEWER SHALL BE 10' MINIMUM. WHERE A SANITARY LINE CROSSES A WATER LINE, ENCASE THE SANITARY LINE IN 6" THICK CONCRETE FOR A DISTANCE OF 10' EITHER SIDE OF THE CROSSING, OR SUBSTITUTE RUBBER-GASKETED PRESSURE PIPE FOR THE SAME DISTANCE. WHEN SANITARY LINES PASS BELOW WATER LINES, LAY PIPE SO THAT NO JOINT IN THE SANITARY LINE WILL BE CLOSER THAN 3' HORIZONTALLY TO THE
11. THRUST BLOCKS SHALL BE PROVIDED AT ALL LOCATIONS WHERE WATER LINE CHANGES DIRECTIONS OR CONNECTS TO ANOTHER WATER LINE. ALL THRUST BLOCKS SHALL BE PRECAST CONCRETE.
12. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT AND WIRING TO ALL SIGNS AND LIGHTS. CONDUIT TO BE A MINIMUM OF 24" BELOW FINISH GRADE.
13. ALL PROPOSED UTILITIES SHALL BE UNDERGROUND. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES.
14. THE CONTRACTOR SHALL ARRANGE AND PAY FOR ALL INSPECTIONS, TESTING AND RELATED SERVICES AND SUBMIT COPIES OF ACCEPTANCE TO THE OWNER, UNLESS OTHERWISE INDICATED.
15. PROVIDE PERMANENT PAVEMENT REPAIR FOR ALL UTILITY TRENCHES IN EXISTING ROAD OR PAVEMENT TO REMAIN. SAW CUT TRENCH, PAVEMENT AND GRANULAR BASE THICKNESS TO MATCH EXISTING PAVEMENT. OBTAIN ALL PERMITS REQUIRED FOR TRENCHING.
16. UNLESS OTHERWISE SPECIFIED, ALL UNDERGROUND STRUCTURES, PIPES, CHAMBERS, ETC. SHALL BE COVERED WITH A MINIMUM OF 18" OF COMPACTED SOIL BEFORE EXPOSURE TO VEHICLE LOADS.
17. THE PROPERTY WILL BE SERVICED BY THE FOLLOWING:

DRAINAGE	PRIVATE
SEWER	TOWN OF LONDONDERRY
WATER	MANCHESTER WATER WORKS
GAS	LIBERTY UTILITIES
ELECTRIC	EVERSOURCE
TELEPHONE	CONSOLIDATED COMMUNICATIONS
CABLE	COMCAST

STATE OF NEW HAMPSHIRE — JASON HILL No. 15391 LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TAX MAP 28 LOTS 9, 10, &10-4

NOTES & LEGEND

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10
CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT
BENTON FAMILY REALTY, LLC
NDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	JSH
17562.06	CK	RED

CADFILE: 17562-06 COVER-DETAILS

C-2

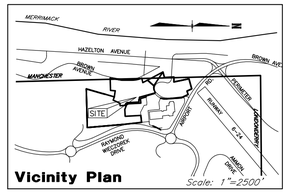
LEGEND

VERTICAL GRANITE CURB	VGC	SEWER MANHOLE	EASEMENT
VERTICAL CONCRETE CURB	VCC	CATCH BASIN	ZONE BOUNDARY
EDGE OF PAVEMENT	EOP	WATER GATE	SETBACK LINE
SEWER LINE	S	UTILITY POLE	BUFFER LINE
SEWER FORCE MAIN	FM	GAS VALVE	
WATER LINE	W	LIGHT POLE	
DRAIN LINE	D	HYDRANT	
GAS LINE	G	ELECTRIC PULLBOX	
OVERHEAD UTILITIES	OHW	GUY ANCHOR	
U.G. ELEC.,TEL., & CABLE	UGETC	BOUND	
CONCRETE SURFACE		DRILL HOLE	
DECIDUOUS TREE		IRON PIN	
CONIFEROUS TREE		DRAIN MANHOLE	
		SIGN	

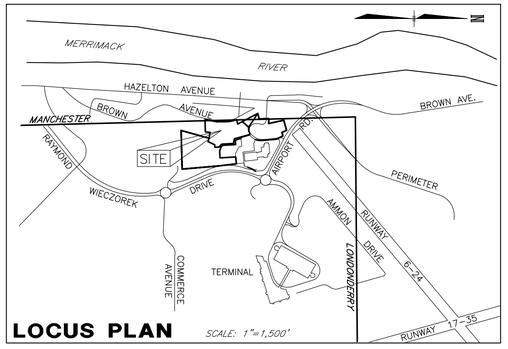
2 OF 5	3 OF 5
4 OF 5	5 OF 5

SHEET INDEX

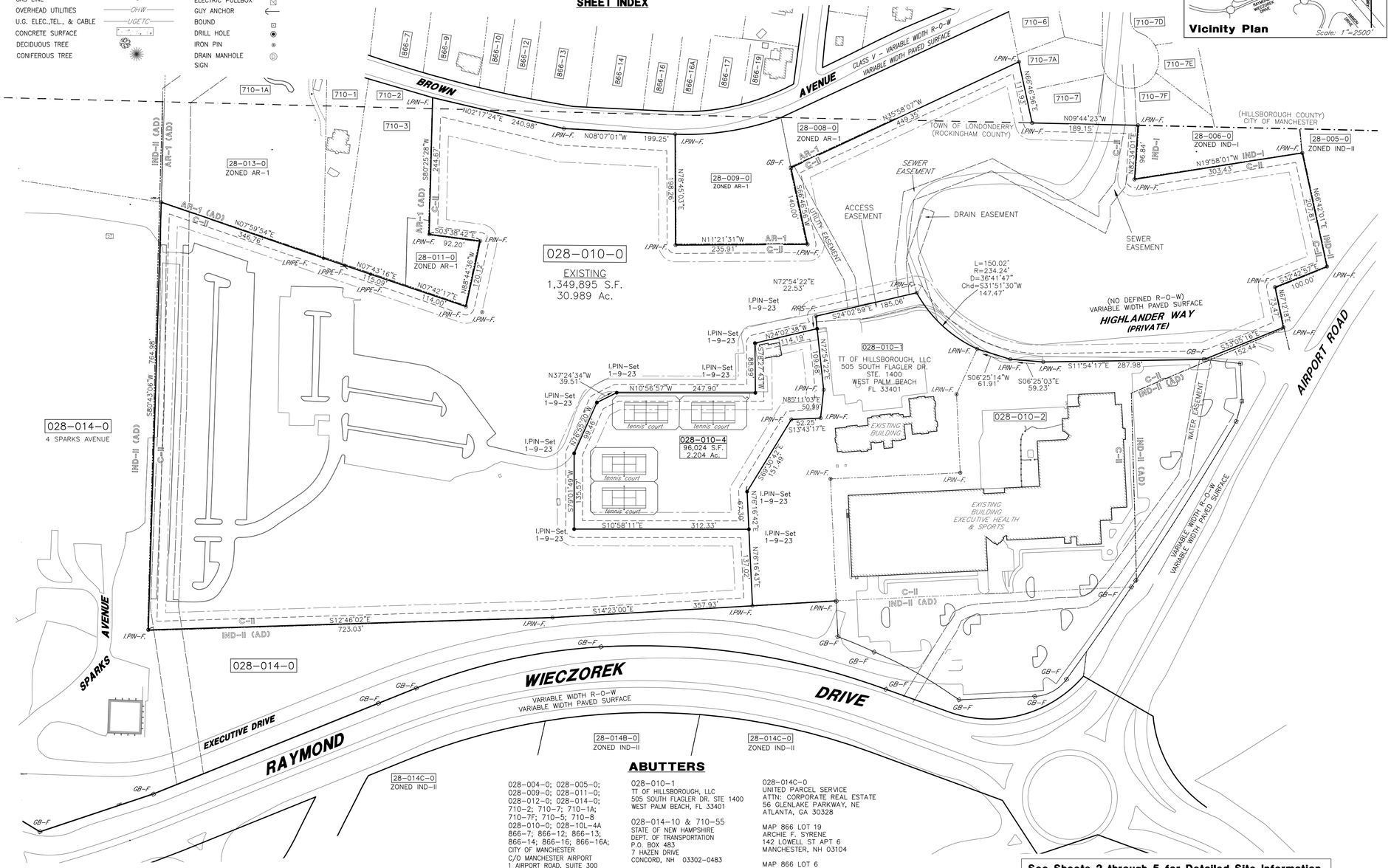
NH-SPC 83/2011 TFM N



Vicinity Plan Scale: 1"=2500'



LOCUS PLAN SCALE: 1"=1,500'



NOTES

1. OWNERS OF RECORD: MAP 28 LOT 009-0 & 010-0
   CITY OF MANCHESTER
   AIRPORT ROAD, SUITE 300
   MANCHESTER, NH 03103
   DEED REFERENCE: BK. 5130 PG. 2103
   MAP 28 LOT 010-2
   BENTON FAMILY REALTY, LLC
   1 HIGHLANDER WAY
   MANCHESTER, NH 03103
   DEED REFERENCE: BK.6570 PG.1016
2. 28-10-0 INDICATES TAX MAP AND LOT NUMBER.
3. THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS PRESENT AS OF NOVEMBER 25, 2025 ON TAX MAP 28 LOTS 9, 10, & 10-4 IN THE TOWN OF LONDONDERRY AS SHOWN HEREON AND NO OTHER PURPOSE.
4. CURRENT ZONING IS COMMERCIAL II – C-II
   COMMERCIAL II
   LOT SIZE (MIN):1 ACRE
   LOT FRONTAGE (MIN): 150 FT
   BUILDING SETBACKS (MIN)
   FRONT 60 FT
   SIDE 30 FT
   REAR 30 FT
   GREEN SPACE (MIN): 33%
   LANDSCAPE PERIMETER BUFFER: 15 FT. (30 FT AT RIGHT-OF-WAY)
5. EXAMINATION OF THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF NEW HAMPSHIRE, ROCKINGHAM COUNTY, COMMUNITY PANEL NUMBER 33015C0315E EFFECTIVE DATE: MAY 17, 2005, INDICATES THAT THE SUBJECT PARCELS ARE NOT LOCATED WITHIN A FLOOD HAZARD AREA.
6. BENCHMARK USED: NHDOT CONTROL POINT "GELINAS 1946", VERTICAL DATUM NAVD 88.
7. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) MAY DETERMINE.
8. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. TF MORAN INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 811.
9. THE PROPERTY WILL CONTINUE TO BE SERVED BY THE FOLLOWING: DRAINAGE: PRIVATE, SEWER: LONDONDERRY SEWER DEPARTMENT, WATER: MANCHESTER WATER WORKS, GAS: NATIONAL GRID, ELECTRIC: PSNH, TELEPHONE: FAIRPOINT COMMUNICATIONS, CABLE: COMCAST.
10. EXISTING USES: HEALTH CLUB, RECREATIONAL FACILITIES & ACTIVITIES, OFFICES.
11. PROPOSED USES: HEALTH CLUB, RECREATIONAL FACILITIES & ACTIVITIES, OFFICES. NO CHANGE.

REFERENCE PLANS

1. ALTA/ACSM LAND TITLE SURVEY – URBAN "PERIMETER ROAD LONDONDERRY & MANCHESTER, NH" OWNER OF RECORD: GAEL TERRA ASSOCIATES AND THE CITY OF MANCHESTER. PREPARED BY ALLEN B. SWANSON, INC., DATED 1 SEPTEMBER 1993 AS RECORDED WITH R.CR.D. PLAN NO. D-23784
2. MASTER PLAN SITE PLAN (LOT 10, MAP 28) "PROPOSED HOTEL EXPANSION" HIGHLANDER WAY, LONDONDERRY, NH. OWNER OF RECORD: THREE F, LLC. PREPARED BY HAYNER/SWANSON, INC. DATED 25 APRIL 2001
3. "SITE & UTILITIES PLAN" EXECUTIVE HEALTH CLUB PERIMETER ROAD, LONDONDERRY, NH PREPARED BY KIMBALL CHASE COMPANY, INC. DATED: 12/18/86
4. "HIGHLANDER INN COMPLEX – LOT D" TAX MAP 28, LOT 10, 2 HIGHLANDER WAY, LONDONDERRY, NH. PREPARED BY KEACH-NORDSTORM ASSOC., INC. DATED: AUGUST 1998
5. "EASEMENT PLAN" MANCHESTER AIRPORT, EXECUTIVE HEALTH & SPORTS CENTER AND THE HIGHLANDER. TAX MAP 28, LOTS 10 & 14 & 14-9, LONDONDERRY, NH. PREPARED BY JOSEPH M. WICHERT, LLS, INC. DATED: 20 FEBRUARY 2001

Graphic Scale
100' 50' 0' 100' 200' 300' 400'
1" = 100'

See Sheets 2 through 5 for Detailed Site Information, Topography, Utilities, etc. at 40 Scale

ABUTTERS

028-004-0; 028-005-0;
028-009-0; 028-011-0;
028-012-0; 028-014-0;
710-2; 710-7; 710-1A;
710-7F; 710-5; 710-8
028-010-0; 028-10L-4A
866-7; 866-12; 866-13;
866-14; 866-16; 866-16A;
CITY OF MANCHESTER
C/O MANCHESTER AIRPORT
1 AIRPORT ROAD, SUITE 300
MANCHESTER, NH 03103

028-006-0
TOWN OF LONDONDERRY
268B MAMMOTH ROAD
LONDONDERRY, NH 03053

028-008-0 & 710-4
BLUE SKY HOLDINGS, LLC
51 MICHAEL STREET
MANCHESTER, NH 03104

866-9; 866-10
KATHLEEN Y. WIBBER
3526 BROWN AVENUE
MANCHESTER, NH 03103

028-010-1
TT OF HILLSBOROUGH, LLC
505 SOUTH FLAGLER DR. STE 1400
WEST PALM BEACH, FL 33401

028-014-10 & 710-55
STATE OF NEW HAMPSHIRE
DEPT. OF TRANSPORTATION
P.O. BOX 483
7 HAZEN DRIVE
CONCORD, NH 03302-0483

028-014B-0
HERTZ CORPORATION
8501 WILLIAMS ROAD
ESTERO, FL 33928

028-10C-3; 028-10C-4
028-10-2, 028-010-4
BENTON FAMILY REALTY LLC
1 HIGHLANDER WAY
MANCHESTER, NH 03103

028-10C-0
EXECUTIVE CONDO ASSOC.
C/O BENTON FAMILY REALTY TR.
1 HIGHLANDER WAY
LONDONDERRY, NH 03053

028-014C-0
UNITED PARCEL SERVICE
ATTN: CORPORATE REAL ESTATE
56 GLENLAKE PARKWAY, NE
ATLANTA, GA 30328

MAP 866 LOT 19
ARCHIE F. SYRENE
142 LOWELL ST APT 6
MANCHESTER, NH 03104

MAP 866 LOT 6
ROGER A. BOUTIN
254 WOODCREST CT
MANCHESTER, NH 03109

MAP 866 LOT 1
SCOTT RILEY
3600 BROWN AVENUE
MANCHESTER, NH 03103

028-013-0 & 710-1
JEFFREY W. & ANNIE MARIE CHICK
3563 BROWN AVE.
MANCHESTER, NH 03103

MAP 710 LOT 5
CITY OF MANCHESTER
C/O 3F LLC
70 LOWELL STREET
MANCHESTER, NH 03101

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS SURVEY AND PLAT WERE PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS AN ERROR OF CLOSURE OF GREATER ACCURACY THAN ONE PART IN TEN THOUSAND (1:10,000).

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN. (RSA 676:18-III)

Michael R Dahlberg — 02-17-2026
LICENSED LAND SURVEYOR — DATE

STATE OF NEW HAMPSHIRE LICENSED LAND SURVEYOR No. 714 MICHAEL R. DAHLBERG SIGNATURE

Michael R Dahlberg

OWNER'S SIGNATURE

BENTON FAMILY TRUST/EXECUTIVE HEALTH & SPORTS CENTER — 2/18/2026 DATE

CITY OF MANCHESTER, NEW HAMPSHIRE — 2/18/2026 DATE

TAX MAP 28 LOTS 010-0 & 014-0

EXISTING CONDITIONS PLAN

EXECUTIVE HEALTH & SPORTS CENTER

1 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: **CITY OF MANCHESTER**
1 AIRPORT ROAD, SUITE 300, MANCHESTER, NH

APPLICANT: **BENTON FAMILY TRUST**
1 HIGHLANDER WAY, LONDONDERRY, NH

PREPARED FOR
EXECUTIVE HEALTH & SPORTS CENTER
1 HIGHLANDER WAY, LONDONDERRY, NH 03053

SCALE: 1" = 100' **NOVEMBER 25, 2025**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

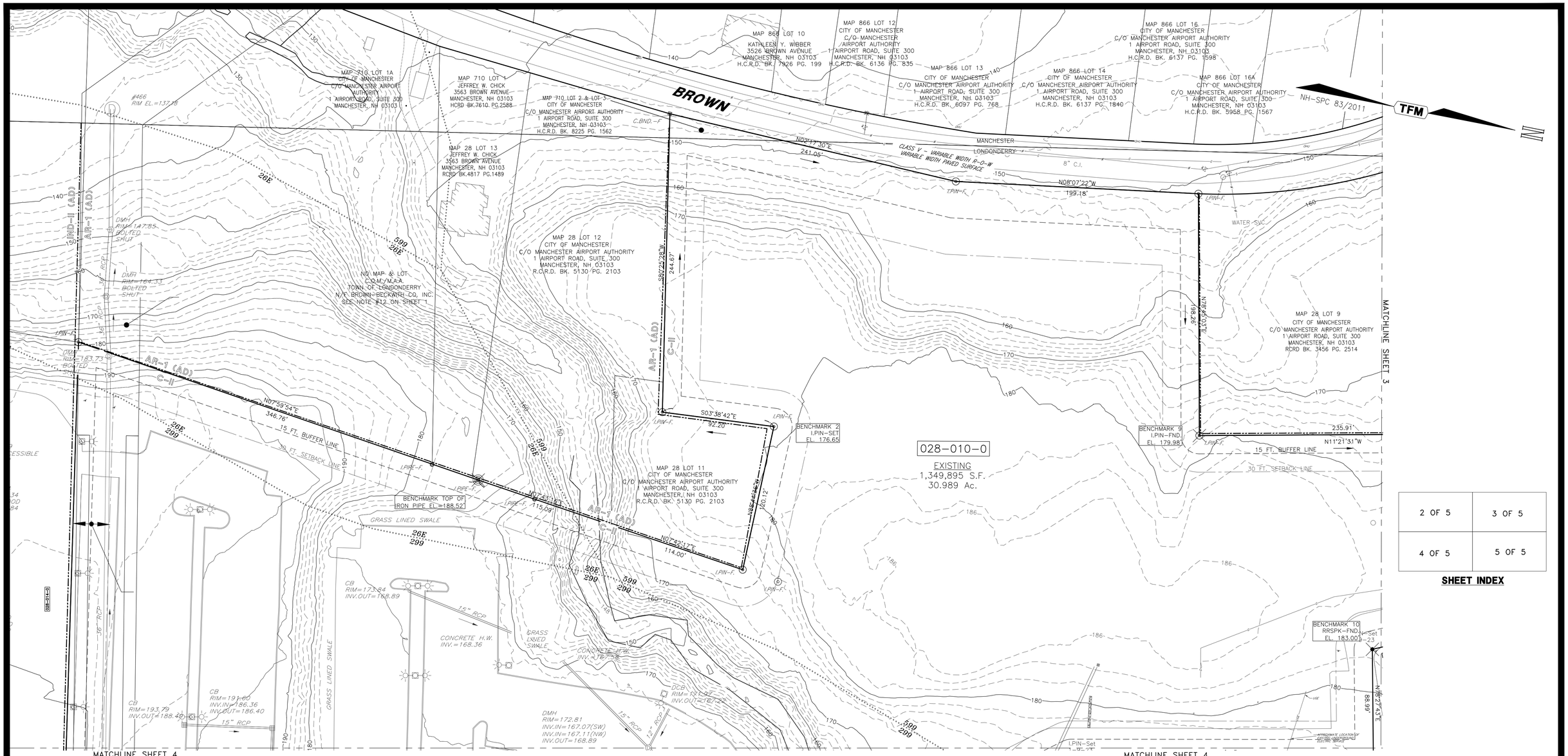
FILE	DR	CK	FB	CADFILE	
17562.06	MRD	MRD	–	17562.06 EXC	SHEET 1 OF 5

CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION "IT'S THE LAW"
811 Dig Safe MA-ME-NH-RI-VT

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REV.	DATE	DESCRIPTION	DRAWN	CHECK
1	2-17-26	REVISIONS-ADDITIONS PER 3RD PARTY REVIEW	MRD	MRD

02/18/2026 11:25am – mdahlberg – F:\TFM Projects\17562\Carlson Survey\Dwgs\EXCON NOVEMBER 2025\17562-06 EXCON 100 SCALE OVERVIEW 2-17-26.dwg



2 OF 5	3 OF 5
4 OF 5	5 OF 5

SHEET INDEX

Graphic Scale

40' 20' 0' 40' 80' 120' 160'

1" = 40'

CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION "IT'S THE LAW"

811 Dig Safe MA-ME-NH-RI-VT

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LEGEND

VERTICAL GRANITE CURB	VGC	WATER GATE	WV
VERTICAL CONCRETE CURB	VCC	UTILITY POLE	
EDGE OF PAVEMENT	EOP	GAS VALVE	GV
SIGN		LIGHT POLE	
GUY ANCHOR		HYDRANT	
SEWER LINE	S	ELECTRIC PULLBOX	
SEWER FORCE MAIN	FM	CONCRETE SURFACE	
WATER LINE	W	DECIDUOUS TREE	
DRAIN LINE	D	CONIFEROUS TREE	
GAS LINE	G	BOUND	
OVERHEAD UTILITIES	OHW	DRILL HOLE	
U.G. ELEC.,TEL., & CABLE	UGT UGE UGU	IRON PIN	
SEWER MANHOLE	S	DRAIN MANHOLE	D
CATCH BASIN			
EASEMENT		ZONE BOUNDARY	
SETBACK LINE		BUFFER LINE	

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STATE OF NEW HAMPSHIRE
CHRISTOPHER K. DANFORTH
2/18/2026
No. 077
CERTIFIED WETLAND SCIENTIST

SURVEYOR'S CERTIFICATION

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Michael R Dahlberg — 12-02-25
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STATE OF NEW HAMPSHIRE
No. 714
MICHAEL R. DAHLBERG
LICENSED LAND SURVEYOR
SIGNATURE

TAX MAP 28 LOTS 010-0 & 014-0

TOPOGRAPHIC EXISTING CONDITIONS PLAN

EXECUTIVE HEALTH & SPORTS CENTER

1 HIGHLANDER WAY, LONDONDERRY, NH

OWNER
CITY OF MANCHESTER
1 AIRPORT ROAD, SUITE 300, MANCHESTER, NH

APPLICANT
BENTON FAMILY TRUST
1 HIGHLANDER WAY, LONDONDERRY, NH 03053

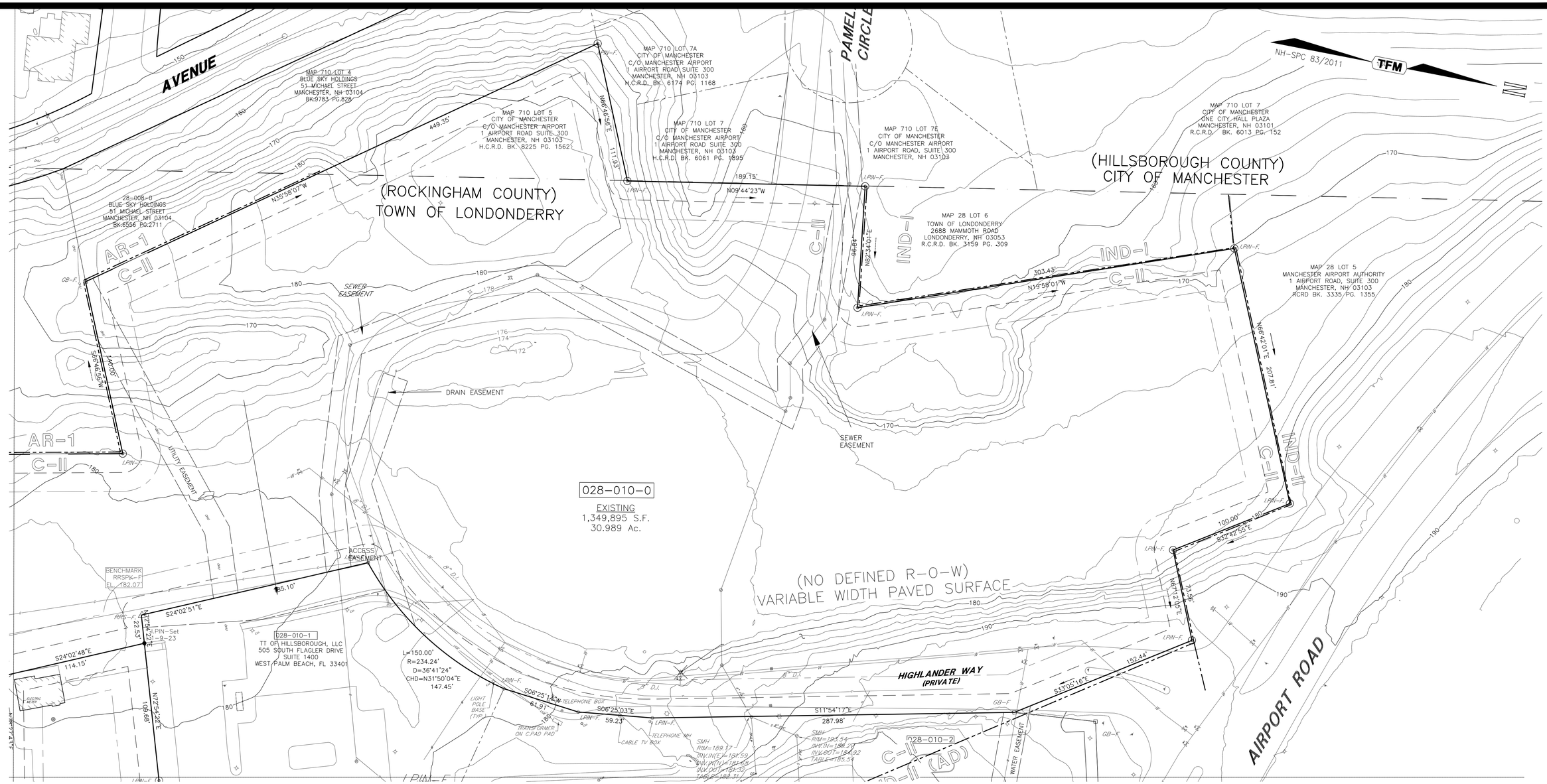
PREPARED FOR
EXECUTIVE HEALTH & SPORTS CENTER
1 HIGHLANDER WAY, LONDONDERRY, NH 03053

SCALE: 1" = 40' **NOVEMBER 26, 2025**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
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FILE	17562.06	DR	MRD	FB	-	SHEET 2 OF 5
		CK	MRD	CADFILE	17562-06 EXC	

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SIGNATURE
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APPLICANT
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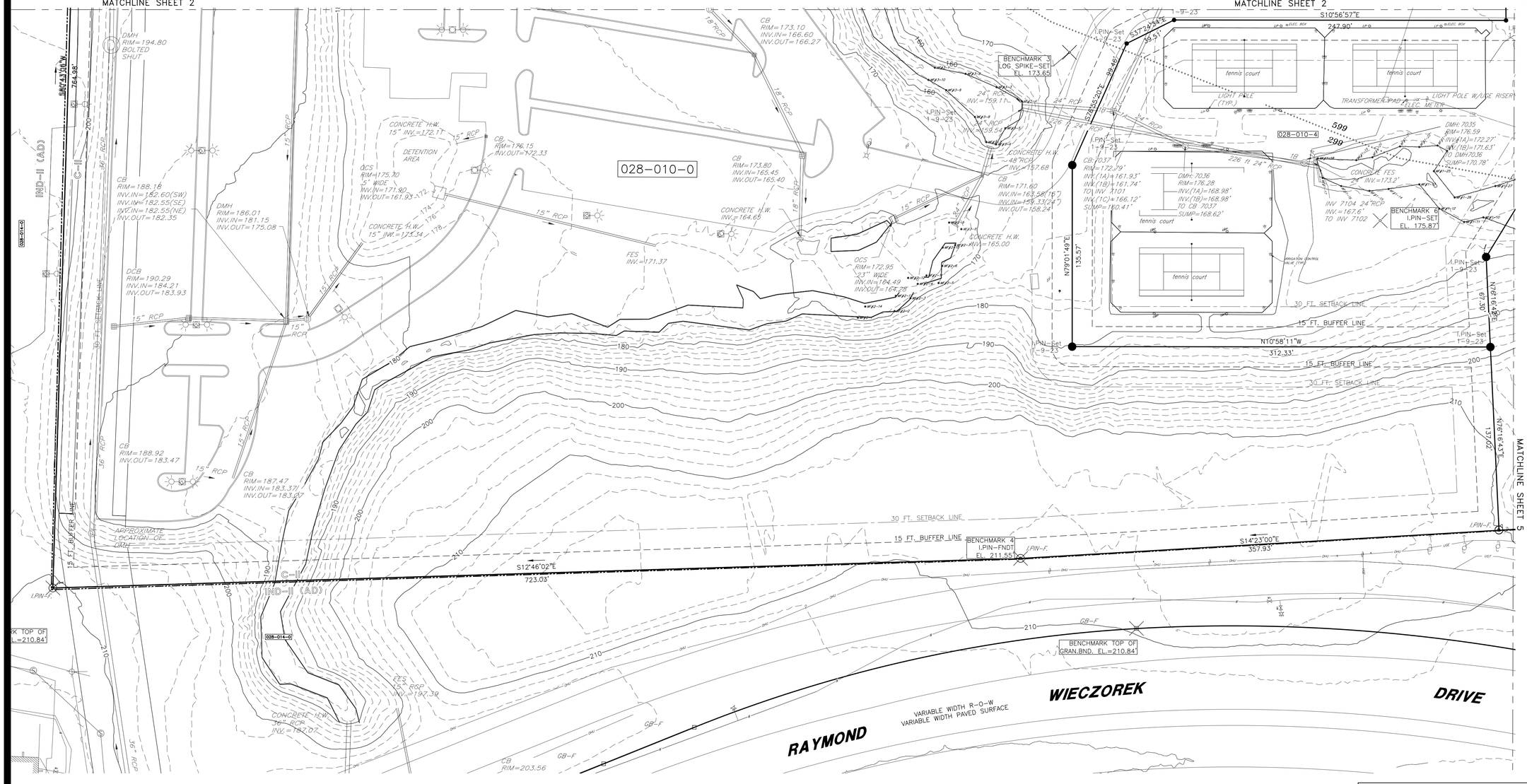
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Michael R Dahlberg — 12-02-25
LICENSED LAND SURVEYOR — DATE

STATE OF NEW HAMPSHIRE — No. 714 — MICHAEL R. DAHLBERG — LICENSED LAND SURVEYOR
Michael R Dahlberg
SIGNATURE

TAX MAP 28 LOTS 010-0 & 014-0

TOPOGRAPHIC EXISTING CONDITIONS PLAN

EXECUTIVE HEALTH & SPORTS CENTER

1 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: **CITY OF MANCHESTER**
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APPLICANT: **BENTON FAMILY TRUST**
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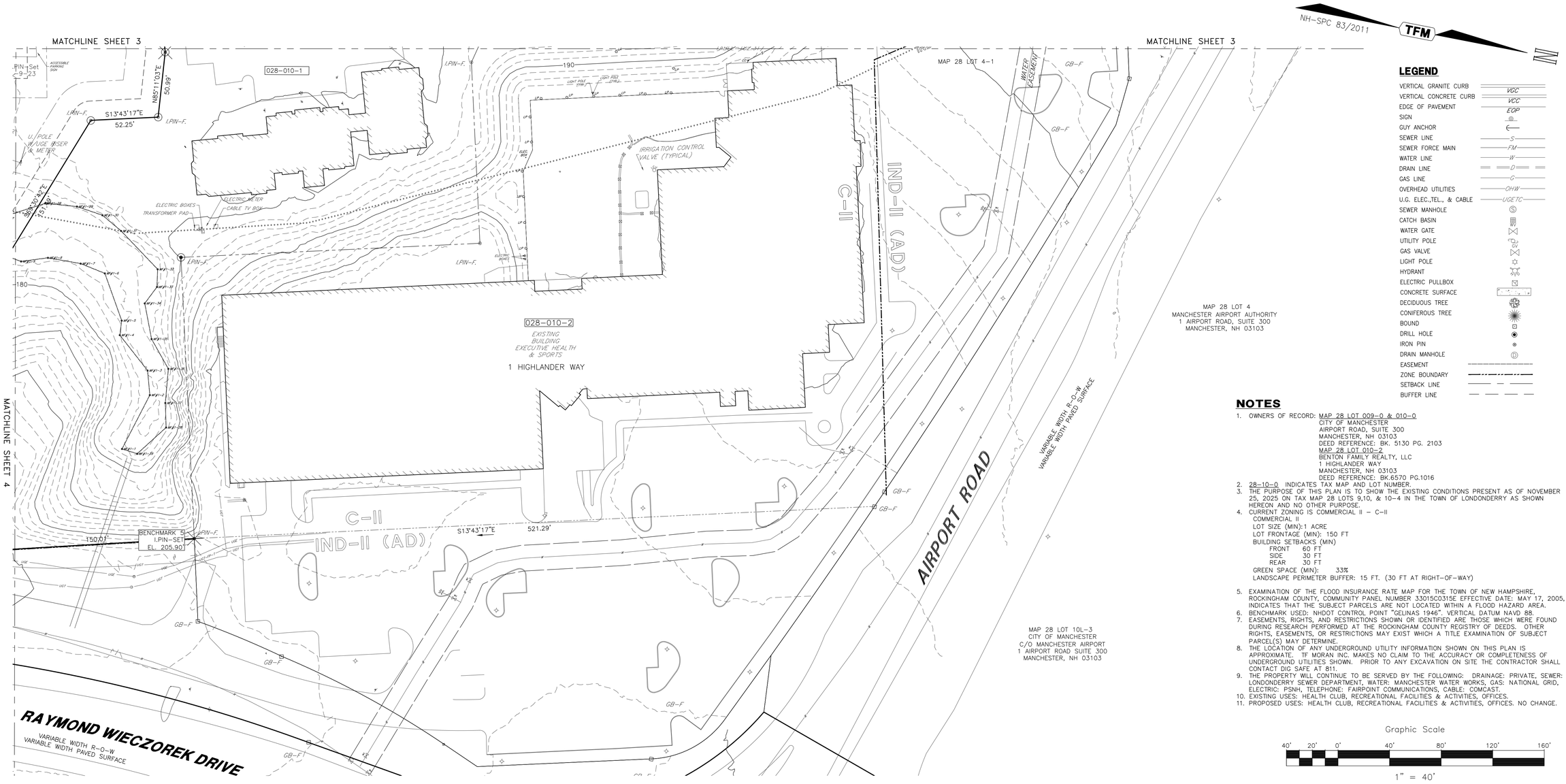
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17562.06	MRD		–	SHEET 4 OF 5
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SEWER FORCE MAIN	FM
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DRAIN LINE	D
GAS LINE	G
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U.G. ELEC.,TEL., & CABLE	UGETC
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ELECTRIC PULLBOX	
CONCRETE SURFACE	
DECIDUOUS TREE	
CONIFEROUS TREE	
BOUND	
DRILL HOLE	
IRON PIN	
DRAIN MANHOLE	D
EASEMENT	
ZONE BOUNDARY	
SETBACK LINE	
BUFFER LINE	

NOTES

1. OWNERS OF RECORD: MAP 28 LOT 009-0 & 010-0
   CITY OF MANCHESTER
   AIRPORT ROAD, SUITE 300
   MANCHESTER, NH 03103
   DEED REFERENCE: BK. 5130 PG. 2103
   MAP 28 LOT 010-2
   BENTON FAMILY REALTY, LLC
   1 HIGHLANDER WAY
   MANCHESTER, NH 03103
   DEED REFERENCE: BK.6570 PG.1016
2. 28-10-0 INDICATES TAX MAP AND LOT NUMBER.
3. THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS PRESENT AS OF NOVEMBER 25, 2025 ON TAX MAP 28 LOTS 9,10, & 10-4 IN THE TOWN OF LONDONDERRY AS SHOWN HEREON AND NO OTHER PURPOSE.
4. CURRENT ZONING IS COMMERCIAL II - C-II
   COMMERCIAL II
   LOT SIZE (MIN):1 ACRE
   LOT FRONTAGE (MIN): 150 FT
   BUILDING SETBACKS (MIN)
   FRONT 60 FT
   SIDE 30 FT
   REAR 30 FT
   GREEN SPACE (MIN): 33%
   LANDSCAPE PERIMETER BUFFER: 15 FT. (30 FT AT RIGHT-OF-WAY)
5. EXAMINATION OF THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF NEW HAMPSHIRE, ROCKINGHAM COUNTY, COMMUNITY PANEL NUMBER 33015C0315E EFFECTIVE DATE: MAY 17, 2005, INDICATES THAT THE SUBJECT PARCELS ARE NOT LOCATED WITHIN A FLOOD HAZARD AREA.
6. BENCHMARK USED: NHDOT CONTROL POINT "GELINAS 1946". VERTICAL DATUM NAVD 88.
7. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) MAY DETERMINE.
8. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. TF MORAN INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 811.
9. THE PROPERTY WILL CONTINUE TO BE SERVED BY THE FOLLOWING: DRAINAGE: PRIVATE, SEWER: LONDONDERRY SEWER DEPARTMENT, WATER: MANCHESTER WATER WORKS, GAS: NATIONAL GRID, ELECTRIC: PSNH, TELEPHONE: FAIRPOINT COMMUNICATIONS, CABLE: COMCAST.
10. EXISTING USES: HEALTH CLUB, RECREATIONAL FACILITIES & ACTIVITIES, OFFICES.
11. PROPOSED USES: HEALTH CLUB, RECREATIONAL FACILITIES & ACTIVITIES, OFFICES. NO CHANGE.

Graphic Scale

40' 20' 0' 40' 80' 120' 160'

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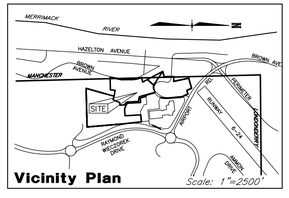
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NOTES

1. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS WORK AT ALL TIMES.
2. THE CONTRACTOR SHALL VERIFY ALL SURVEY INFORMATION IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
3. STUMPS SHALL NOT BE BURIED ON SITE; STUMPS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER.
4. THE LOCATION OF UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. TFMORAN INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE, THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233.
5. EXISTING UTILITY SERVICES TO BE DISCONTINUED ARE TO BE CAPPED AS REQUIRED BY THE RESPECTIVE UTILITY COMPANIES.
6. CONSTRUCTION DEBRIS AND ANY INVASIVE SPECIES SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A LEGAL MANNER.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELF WITH THE SITE AND ALL EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF THEIR INTENTION AT LEAST 48 HOURS IN ADVANCE.

TAX MAP 28 LOTS 9, 10, &10-4

SITE PREPARATION & DEMOLITION PLAN

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)

1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4

BENTON FAMILY REALTY, LLC

1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

BENTON FAMILY REALTY, LLC

1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

STATE OF NEW HAMPSHIRE - JASON HILL No. 15391 LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

HORIZONTAL SCALE 1"=40'
40 20 0 40

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FILE	DR	CK			
17562.06	JSH	RED	CADFILE	17562-06 SITE	C-3

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DIG SAFE STATE OF NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

TAX MAP 28 LOTS 9, 10, &10-4

OVERALL SITE LAYOUT PLAN

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4

BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

HORIZONTAL SCALE 1"=80'
80 40 0 80

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	CK	CADFILE		
17562.06	JSH	RED		17562-06 SITE	C-4

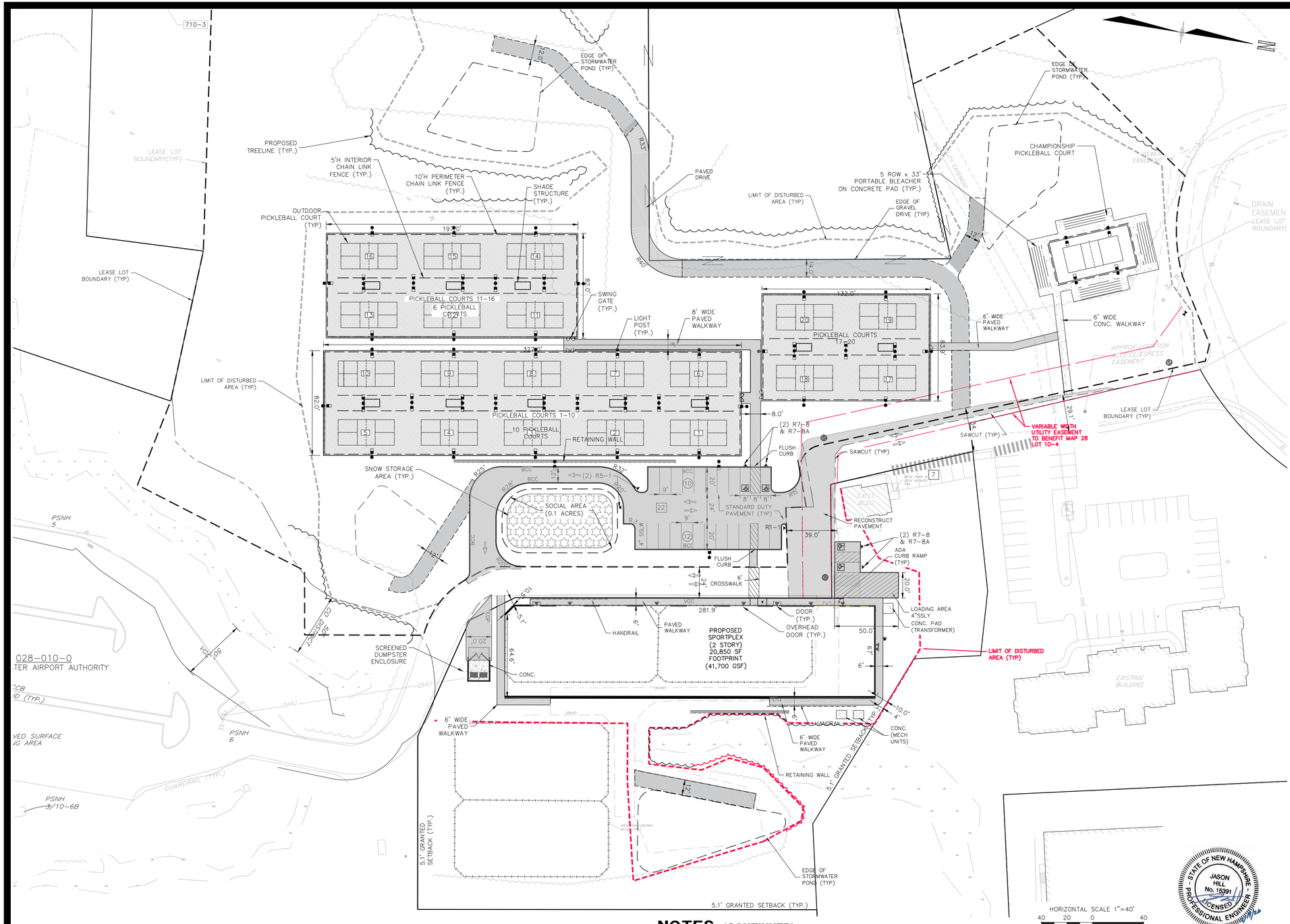
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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

APPROVED BY THE LONDONDERRY NH PLANNING BOARD FOR PHASE _____
ON DATE: _____
CERTIFIED BY: _____



NOTES

1. THE PURPOSE OF THIS PLAN IS TO DEPICT A PROPOSED EXPANSION TO THE EXISTING EXECUTIVE HEALTH & SPORTS CENTER WITH ASSOCIATED SITE IMPROVEMENTS.

2. CURRENT ZONING IS COMMERCIAL II

COMMERCIAL II (REQUIRED)		PROVIDED LOT 10	PROVIDED LOT 10-4
LOT SIZE (MIN):	1 ACRE	**30.989 AC.**	2.2 AC
LOT FRONTAGE (MIN):	150 FT	440.2'	0'
BUILDING SETBACKS (MIN)			
FRONT	60 FT	177.4'(LIGHT POLE)	N/A
SIDE	30 FT	N/A	5.1' VARIANCE GRANTED
REAR	30 FT	>30'	N/A
MAX. BUILDING HEIGHT:		N/A	<50'
MAX. BUILDING COVERAGE:		N/A	41.7% VARIANCE GRANTED
GREEN SPACE (MIN):	33%	>33%	54.8%
LANDSCAPE PERIMETER:	15 FT (30 FT AT RIGHT-OF-WAY)	0' VARIANCE GRANTED	0' VARIANCE GRANTED

PARKING CALCULATIONS:

EXISTING PARKING (PER LONDONDERRY ZONING):
EXISTING TENNIS COURTS: 3 SPACES/ COURT = 8 COURTS X 3 SPACES = 24 SPACES
EXISTING HEALTH CLUB: 4 SPACES/1,000 SF=(43,000 SF X 4 SPACES/1000 SF)=172 SPACES
EXISTING MEDICAL OFFICE: 4.5 SPACES/1000 SF=(7,000 SF X 4.5 SPACES/1000 SF)= 32 SPACES
PROPOSED OUTDOOR SPORTS COURT: 3 SPACES/COURT = 3 SPACES X 21 COURTS = 63 SPACES
PROPOSED INDOOR SPORTS COURTS: 3 SPACES/COURT = (12 COURTS X 3 SP) = 36 SPACES

TOTAL SPACES REQUIRED = **327**
EXISTING: **310** SPACES, INCLUDING 7 HANDICAP
PROPOSED: **24** SPACES, INCLUDING 4 HANDICAP
TOTAL SPACES PROVIDED: **334** SPACES

3. THE PROPERTY WILL BE SERVICED BY THE FOLLOWING:

DRAINAGE	PRIVATE
SEWER	TOWN OF LONDONDERRY
WATER	MANCHESTER WATER WORKS
GAS	LIBERTY UTILITIES
ELECTRIC	EVERSOURCE
TELEPHONE	CONSOLIDATED COMMUNICATIONS
CABLE	COMCAST

4. IN THE EVENT THAT THE SNOW STORAGE AREAS PROVIDED ON THE SITE ARE COMPLETELY UTILIZED, EXCESS SNOW SHALL BE TRANSPORTED OFF SITE FOR DISPOSAL IN ACCORDANCE WITH N.H.D.E.S. REGULATIONS. IF SNOW IS STORED WITHIN PARKING AREA KEEP CATCH BASINS CLEAR.

5. THE CONTRACTOR SHALL BID AND PERFORM THE WORK IN ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL CODES, SPECIFICATIONS, REGULATIONS AND STANDARDS.

6. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS NOTED OTHERWISE.

7. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.

8. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY TFMORAN, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.

9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE SITE AND ALL EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF HIS INTENTIONS AT LEAST 48 HOURS IN ADVANCE.

10. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS WORK AT ALL TIMES.

11. LIGHTING, SIGNAGE, LANDSCAPING, AND SCREENING SHALL MEET THE REQUIREMENTS OF THE CITY/TOWN ZONING ORDINANCE AND SITE PLAN REGULATIONS.

12. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY SHEET. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.

13. ALL WORK IS TO CONFORM TO TOWN OF LONDONDERRY DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS.

14. IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND DETAILS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.

15. IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED WORK.

16. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. TFMORAN INC. ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.

17. TFMORAN INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE ENGINEER OF RECORD.

18. WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN OF LONDONDERRY CONSTRUCTION STANDARDS AND DETAILS (LATEST ADDITION). THESE CONSTRUCTION STANDARDS SHALL TAKE PRECEDENCE IN THE EVENT OF CONFLICTS BETWEEN PLANS, DETAILS OR OTHER DRAWINGS.

19. IN ACCORDANCE WITH SECTION 6.01 OF THE LONDONDERRY SITE PLAN REGULATIONS AND RSA 676:13, ALL IMPROVEMENTS SPECIFIED ON THESE SITE PLANS SHALL BE CONSTRUCTED, COMPLETED, AND INSPECTED AND APPROVED BY THE TOWN OF LONDONDERRY PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

20. TRASH COLLECTION WILL BE PRIVATE.

21. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT DEFICIENCIES EXIST IN THE APPROVED DESIGN DRAWINGS, THE OWNER SHALL BE REQUIRED TO CORRECT THE DEFICIENCIES TO MEET THE REQUIREMENTS OF THE REGULATIONS AT NO EXPENSE TO THE TOWN.

NOTES (CONTINUED)

22. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE TOWN.

23. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO TOWN OF LONDONDERRY SITE PLAN REGULATIONS AND THE LATEST EDITION OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION.

24. IN ACCORDANCE WITH SECTION 6.01 OF THE LONDONDERRY SITE PLAN REGULATIONS AND RSA 676:12, ALL OFF-SITE IMPROVEMENTS SPECIFIED ON THESE SITE PLANS SHALL BE CONSTRUCTED, COMPLETED, INSPECTED AND APPROVED BY THE TOWN OF LONDONDERRY (AND/OR THE NHDOT, IF APPLICABLE) PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

25. THE APPROVED SITE PLANS SHALL BE ON FILE AT THE TOWN OF LONDONDERRY PLANNING DEPARTMENT.

APPROVED BY THE LONDONDERRY NH PLANNING BOARD FOR PHASE _____
ON DATE: _____
CERTIFIED BY:

OWNER'S SIGNATURE

BETNON FAMILY TRUST/EXECUTIVE HEALTH & SPORTS CENTER — DATE
CITY OF MANCHESTER — DATE

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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

SITE LAYOUT PLAN

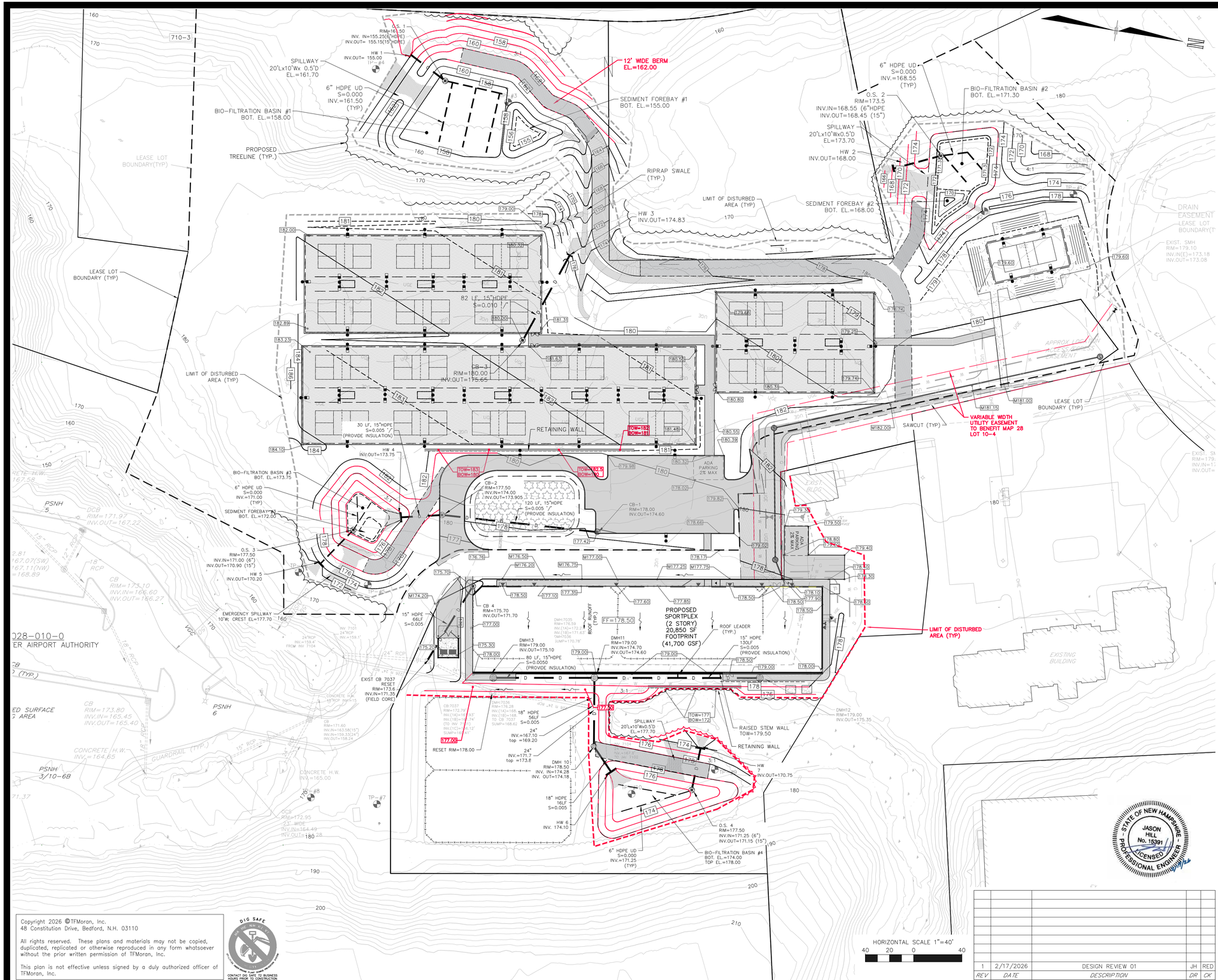
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2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

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APPLICANT
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1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

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Structural Engineers
Traffic Engineers
Land Surveyors
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FILE	DR	CK	CADFILE		
17562.06	JSH	RED	17562-06 SITE		C-5



NOTES

1. ALL WORK SHALL CONFORM TO THE TOWN OF LONDONDERRY CONSTRUCTION STANDARDS, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE SITE AND ALL SURROUNDING CONDITIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE DIGGING.
4. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY AGENCIES/COMPANIES, AND ARRANGE FOR ALL INSPECTIONS.
6. ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL CONFORM TO TOWN OF LONDONDERRY TYPICAL DETAILS FOR SITE & ROADWAY INFRASTRUCTURE AND THE REQUIREMENTS OF THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION AND THE NHDOT STANDARD STRUCTURE DRAWINGS UNLESS OTHERWISE NOTED.
7. STORM DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE TYPE B AND CONFORM TO NHDOT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
8. ALL MANHOLES IN PAVEMENT SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY ELEVATIONS OTHERWISE SHOWN.
9. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED. CURBS HAVE A 6" REVEAL UNLESS OTHERWISE NOTED.
10. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
11. IN ACCORDANCE WITH RSA 430:53 AND Agr 3800, THE CONTRACTOR SHALL NOT TRANSPORT INVASIVE SPECIES OFF THE PROPERTY, AND SHALL DISPOSE OF INVASIVE SPECIES ON-SITE IN A LEGAL MANNER.
12. THE SITE CONTRACTOR SHALL PREPARE, MAINTAIN, AND EXECUTE A S.W.P.P.P. IN ACCORDANCE WITH EPA REGULATIONS AND THE CONSTRUCTION GENERAL PERMIT. THE CONTRACTOR SHALL ALSO OBTAIN A LONDONDERRY STORMWATER PERMIT.
13. THE SITE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14 DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE.
14. COORDINATE WITH ARCHITECTURAL PLANS FOR DETAILED GRADING AT BUILDING, AND SIZE AND LOCATION OF ALL BUILDING SERVICES.
15. COORDINATE WITH GEOTECHNICAL/STRUCTURAL PLANS FOR SITE PREPARATION AND OTHER BUILDING INFORMATION.
16. COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ROOF DRAIN INFORMATION.
17. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING, SIDEWALKS AND ALIGNMENTS.
18. THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR INFORMATION ABOUT GROUNDWATER CONDITIONS. THE CONTRACTOR SHALL FOLLOW THE GEOTECHNICAL ENGINEERS RECOMMENDED METHODS TO ADDRESS ANY GROUNDWATER ISSUES THAT ARE FOUND ON SITE.
19. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR THE CONDITIONS AT THE SITE. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND REPORT DISCREPANCIES TO THE ENGINEER.
20. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK THE ACCURACY OF THE TOPOGRAPHY AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO ANY EARTHWORK BEING PERFORMED ON THE SITE. NO CLAIM FOR EXTRA WORK WILL BE CONSIDERED FOR PAYMENT AFTER EARTHWORK HAS COMMENCED.
21. VERIFY TBM ELEVATIONS PRIOR TO CONSTRUCTION.
22. IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND DETAILS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.
23. IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED WORK.
24. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. TFMORAN INC. ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
25. TFMORAN INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE ENGINEER OF RECORD.
28. AT COMPLETION OF CONSTRUCTION, THE SITE CONTRACTOR SHALL PROVIDE A LETTER CERTIFYING THAT THE PROJECT WAS COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND A LETTER STAMPED BY A QUALIFIED ENGINEER THAT THEY HAVE OBSERVED ALL UNDERGROUND DETENTION SYSTEMS, INFILTRATION SYSTEMS, OR FILTERING SYSTEMS PRIOR TO BACKFILL, AND THAT SUCH SYSTEMS CONFORM TO THE APPROVED PLANS AND SPECIFICATIONS.
29. THE SITE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS STAMPED BY A LICENSED SURVEYOR OR QUALIFIED ENGINEER ALONG WITH A LETTER STAMPED BY A QUALIFIED ENGINEER PRIOR TO OBTAINING A CERTIFICATE OF OCCUPANCY. THE CONTRACTOR SHALL BEAR ALL COSTS FOR PREPARING AND FILING ANY NEW PERMITS OR PERMIT AMENDMENTS THAT MAY BE REQUIRED.

TAX MAP 28 LOTS 9, 10, &10-4

GRADING & DRAINAGE PLAN

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

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1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4

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1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

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1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

STATE OF NEW HAMPSHIRE - JASON HILL No. 15391 LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

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Civil Engineers
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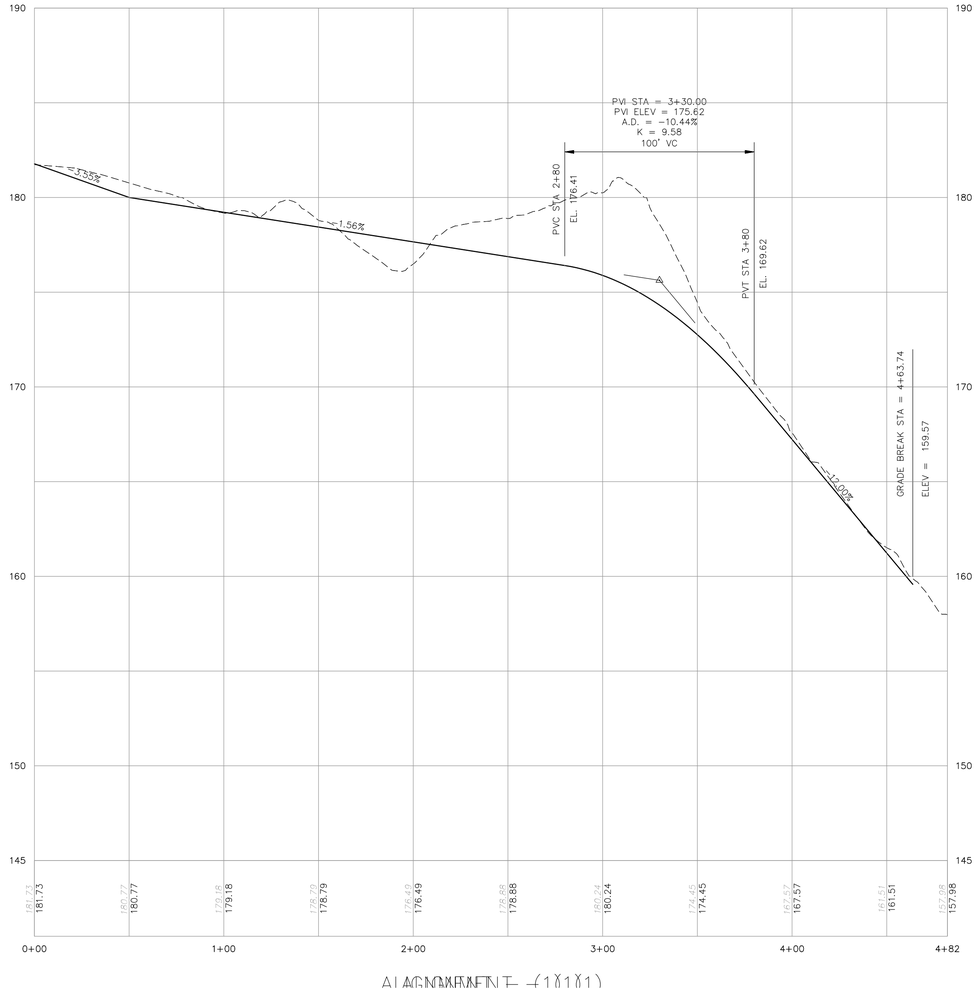
FILE	DR	CK			
17562.06	JSH	RED	CADFILE	17562-06 SITE	C-6

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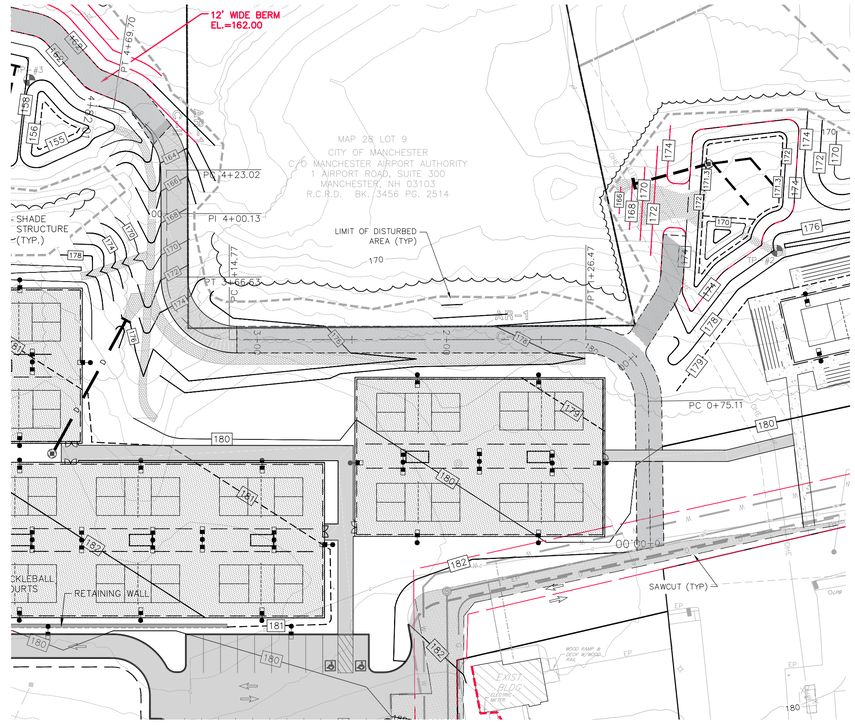
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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION



ALIGNMENT (1"=4')



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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

HORIZONTAL SCALE 1"=40'
40 20 0 40
VERTICAL SCALE 1"=4'
4 0 4

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

DRIVE PROFILE

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
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1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

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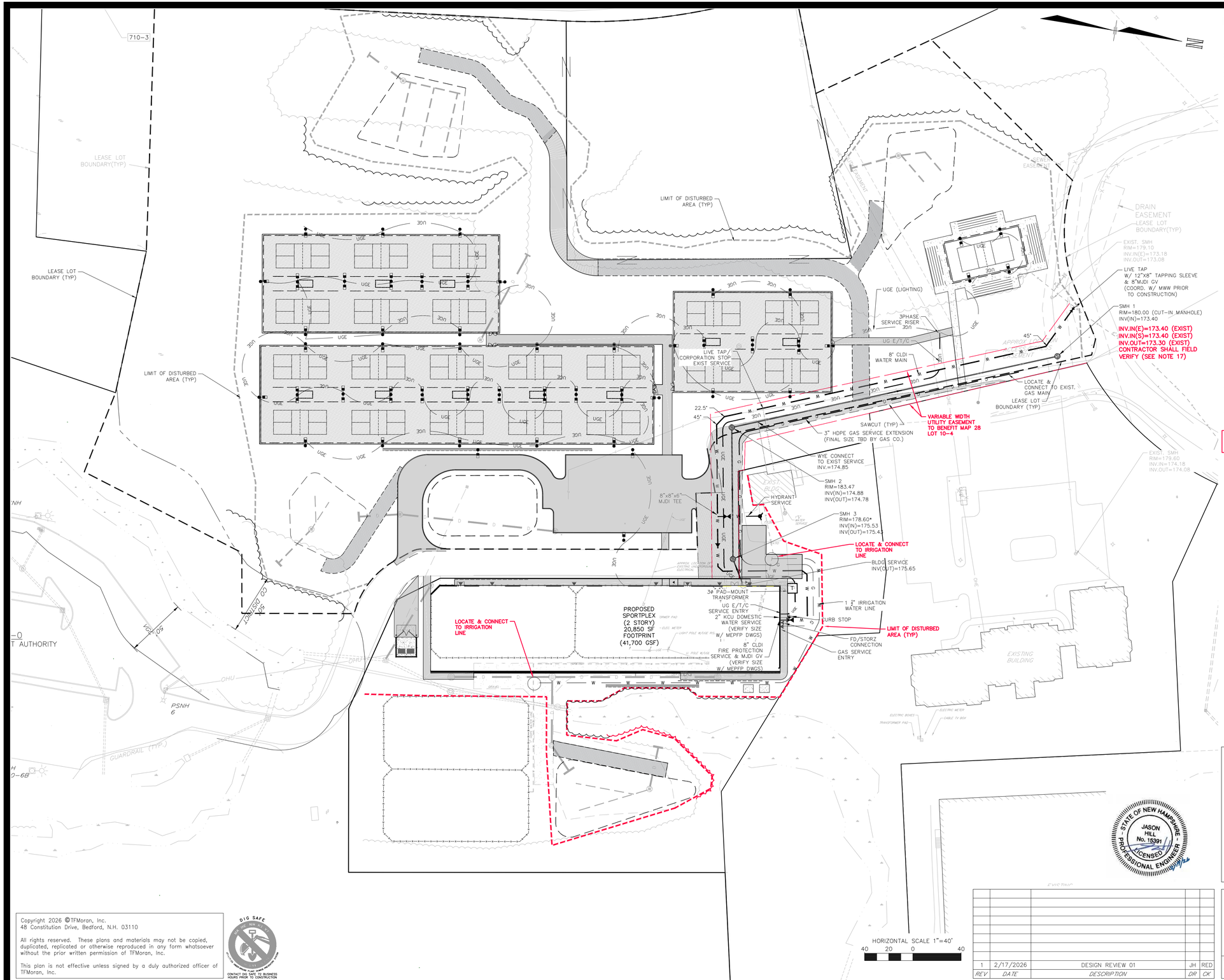
APPLICANT
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NOVEMBER 18, 2025

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FILE	DR	CK	CADFILE		
17562.06	JSH	RED		17562-06 SITE	C-7



NOTES

1. ALL WORK SHALL CONFORM TO THE TOWN OF LONDONDERRY CONSTRUCTION STANDARDS, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE SITE AND ALL SURROUNDING CONDITIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE DIGGING.
4. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY AGENCIES/COMPANIES, AND ARRANGE FOR ALL INSPECTIONS.
6. ALL MANHOLES IN PAVEMENT SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY ELEVATIONS OTHERWISE SHOWN.
7. ON-SITE WATER DISTRIBUTION SHALL BE TO MANCHESTER WATER WORKS CONSTRUCTION STANDARDS. WATER MAINS SHALL HAVE A MINIMUM OF 5.5 FEET COVER. WHERE WATER PIPES CROSS SEWER LINES A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE OBSERVED. HORIZONTAL SEPARATION BETWEEN WATER AND SEWER SHALL BE 10 FEET MINIMUM. THRUST BLOCKS SHALL BE USED AT ALL BENDS IN THE WATER MAINS.
8. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT AND WIRING TO ALL SIGNS AND LIGHTS. CONDUIT TO BE A MINIMUM OF 24" BELOW FINISH GRADE.
9. VERIFY UTILITY CONNECTIONS TO BUILDING WITH ARCHITECTURAL DRAWINGS.
10. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
11. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING, SIDEWALKS AND ALIGNMENTS.
12. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR THE CONDITIONS AT THE SITE. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND REPORT DISCREPANCIES TO THE ENGINEER.
13. UNLESS OTHERWISE SPECIFIED, ALL UNDERGROUND STRUCTURES, PIPES, CHAMBERS, ETC. SHALL BE COVERED WITH A MINIMUM OF 18" OF COMPACTED SOIL BEFORE EXPOSURE TO VEHICLE LOADS.
14. THE CONNECTION(S) OF THE PROPOSED SEWER TO THE EXISTING SEWER SHALL BE INSPECTED BY AUTHORIZED TOWN OF LONDONDERRY DEPARTMENT OF ENGINEERING & ENVIRONMENTAL SERVICES PERSONNEL BEFORE ANY BACKFILLING. INSPECTION HOURS ARE BETWEEN 9:00 AM AND 4:30 PM, MONDAY THRU FRIDAY, WITH A MINIMUM NOTICE OF 2 BUSINESS DAYS.
15. PROPOSED PVC SEWER PIPE SHALL BE PRESSURE TESTED BY AN APPROVED THIRD-PARTY TESTING FIRM WITH TOWN OF LONDONDERRY DEPARTMENT OF ENGINEERING & ENVIRONMENTAL SERVICES PERSONNEL, OR AUTHORIZED REPRESENTATIVE, PRESENT ON SITE AS A WITNESS.
16. ALL SEWER CONSTRUCTION AND USE SHALL CONFORM TO THE NHDES ENV-WQ 700 STANDARDS, THE TOWN OF LONDONDERRY TYPICAL DETAILS FOR SITE & ROADWAY INFRASTRUCTURE AND THE TOWN OF LONDONDERRY SEWER USE ORDINANCE.
17. ANY PROPOSED BYPASS METHOD MUST BE REVIEWED AND APPROVED BY THE DEPARTMENT PRIOR TO THE START OF ANY BYPASS WORK

HORIZONTAL SCALE 1"=40'
40 20 0 40

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STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TAX MAP 28 LOTS 9, 10, &10-4

UTILITY PLAN

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4

BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

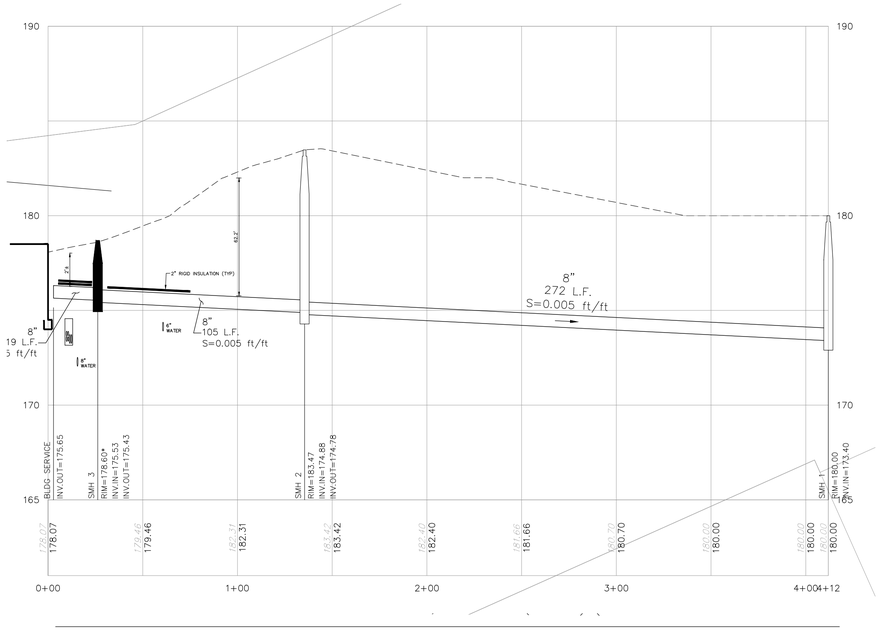
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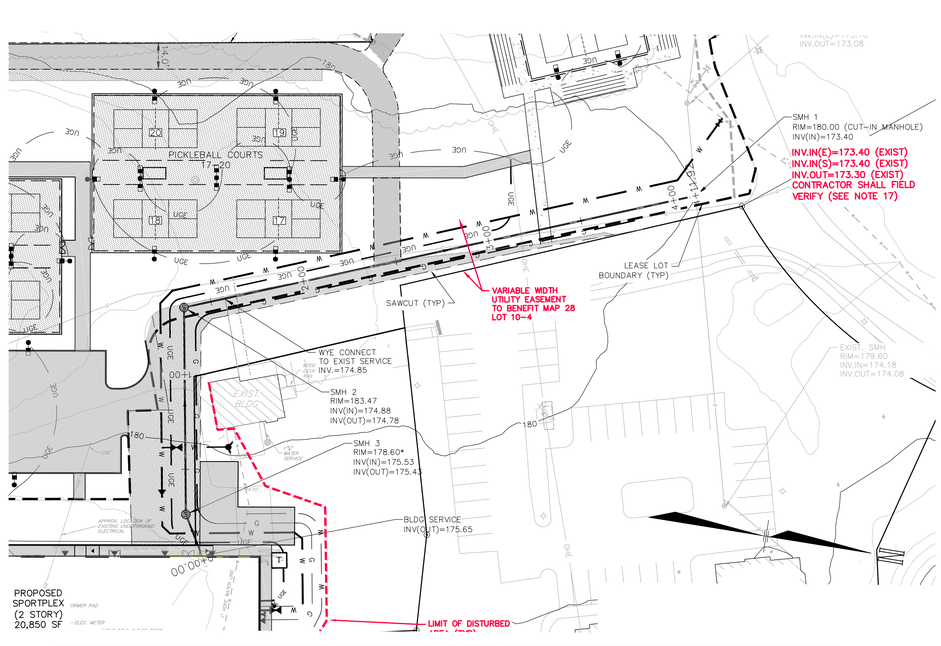
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Bedford, NH 03110
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SEWER PROFILE



SEWER PROFILE

HORIZONTAL SCALE 1"=40'
40 20 0 40
4 0 4
VERTICAL SCALE 1"=4'

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SEWER PLAN & PROFILE

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

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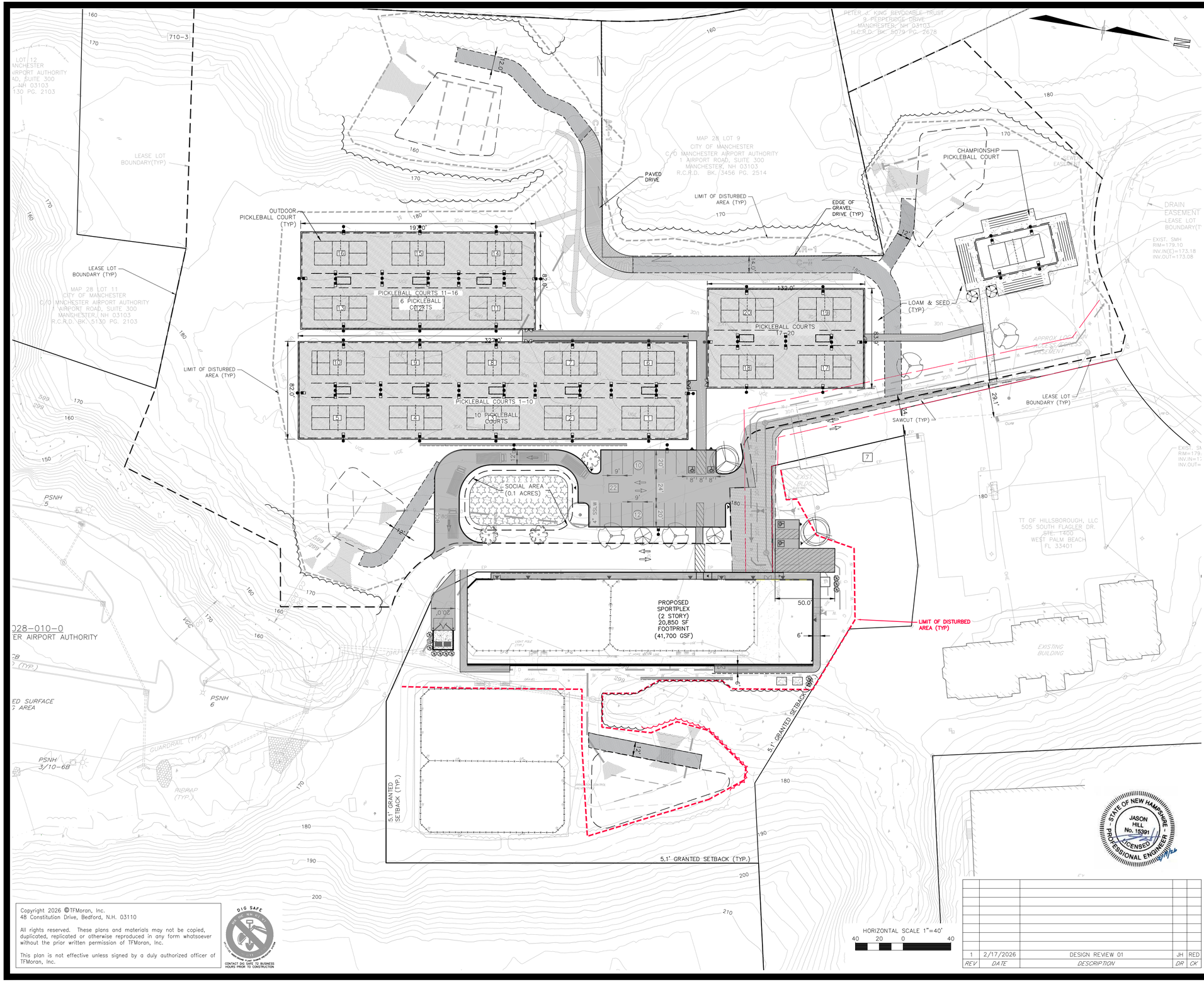
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HORIZONTAL SCALE 1"=40'

40 20 0 40

LANDSCAPE LEGEND

SYMBOL	QTY	BOTANICAL NAME COMMON NAME	SIZE	REMARKS
	3	ACER RUBRUM 'BOWHALL' BOWHALL RED MAPLE	2 1/2" TO 3" CAL.	B&B
	2	BETULA NIGRA 'DURA HEAT' DURA HEAT RIVER BIRCH	12' TO 14' CLUMP	B&B
	2	CRATAEGUS CRUSGALLI I. 'CRUSADER' CRUSADER THORNLESS HAWTHORN	2 1/2" TO 3" CAL.	B&B
	1	QUERCUS RUBRA RED OAK	2 1/2" TO 3" CAL.	B&B
	4	ULMUS AMERICANA 'PRINCETON' PRINCETON AMERICAN ELM	2 1/2" TO 3" CAL.	B&B
	2	SYRINGA VULGARIS COMMON PURPLE LILAC	3 GAL.	CONT.
	12	THUJA O. 'SMARAGD' EMERALD GREEN ARBORVITAE	5' TO 6'	B&B

LANDSCAPE REQUIREMENTS

GREEN SPACE REQUIREMENT:
20' GREEN SPACE BUFFER ALONG ROW.
15' GREEN SPACE BUFFER ALONG SIDE AND REAR LOT LINES.

INTERIOR PARKING LANDSCAPE AREA REQUIREMENTS:
(3.10g1. OF SITE PLAN REGS)
FRONT PARKING LOT: 10% LANDSCAPE AREA REQUIRED.
REQUIRED: FRONT PARKING LOT: 2,105 SF
PROVIDED: 5,978 SF
SIDE PARKING LOT: 8% LANDSCAPE AREA
REQUIRED. SIDE PARKING LOT: N/A
PROVIDED: N/A
REAR PARKING LOT: 5% LANDSCAPE AREA
REQUIRED. SIDE PARKING LOT: N/A.
PROVIDED: N/A

INTERNAL PARKING LOT LANDSCAPING:
(3.10g3. OF SITE PLAN REGS)
1 TREE/15 PARKING SPACES (24 SPACES/15) = 2 TREES
TOTAL TREES REQUIRED = 2
TOTAL TREES PROVIDED = 3

PARKING LOT PERIMETER LANDSCAPING:
(3.10g5. OF SITE PLAN REGS)
1 SHADE TREE/20' OF PARKING PERIMETER = 120 L.F./20' = 6 SHADE TREES
TOTAL TREES REQUIRED = 6
TOTAL TREES PROVIDED = 7

LANDSCAPE NOTES

(SEE DETAILS FOR ADDITIONAL NOTES)

GENERAL

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE RULES, REGULATIONS, LAWS, AND ORDINANCES HAVING JURISDICTION OVER THIS PROJECT SITE.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND NOTIFY OWNER'S REPRESENTATIVE OF CONFLICTS.
3. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON PLANS BEFORE PRICING THE WORK. ANY DIFFERENCE IN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION. LANDSCAPE QUANTITIES SHOWN ON THE PLAN SHALL SUPERCEDE QUANTITIES LISTED IN LANDSCAPE LEGEND.
4. THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO STARTING WORK AND VERIFY THAT THE PLANS IN THE CONTRACTOR'S POSSESSION ARE THE MOST CURRENT PLANS AVAILABLE AND ARE THE APPROVED PLAN SET FOR USE IN CONSTRUCTION.
5. ALL PLANT MATERIALS INSTALLED SHALL MEET OR EXCEED THE SPECIFICATIONS OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA) [FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN] IN THE AMERICAN STANDARD FOR NURSERY STOCK (AS AMENDED) [ANSI Z60.1–1996],
6. ALL PLANTS SHALL BE FIRST CLASS AND SHALL BE REPRESENTATIVE OF THEIR NORMAL SPECIES AND/OR VARIETIES. ALL PLANTS MUST HAVE GOOD, HEALTHY, WELL–FORMED UPPER GROWTH AND A LARGE, FIBEROUS, COMPACT ROOT SYSTEM.
7. ALL PLANTS SHALL BE FREE FROM DISEASE AND INSECT PESTS AND SHALL COMPLY WITH ALL APPLICABLE STATE AND FEDERAL LAWS PERTAINING TO PLANT DISEASES AND INFESTATIONS.
8. ALL TREES SHALL BE BALLED AND BURLAPPED (B & B) UNLESS OTHERWISE NOTED OR APPROVED BY LANDSCAPE ARCHITECT.
9. IF APPLICABLE, THE CONTRACTOR SHALL HAVE ALL FALL TRANSPLANTING HAZARD PLANTS DUG IN THE SPRING AND STORED FOR FALL PLANTING.
10. ALL INVASIVE PLANT SPECIES FROM THE "NEW HAMPSHIRE PROHIBITED INVASIVE PLANT SPECIES LIST", TO BE REMOVED SHALL BE DONE SO IN ACCORDANCE WITH THE "INVASIVE SPECIES ACT, HB 1258–FN."

GUARANTEE

1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE WORK FOR A PERIOD OF ONE YEAR, BEGINNING AT THE START OF THE MAINTENANCE PERIOD.

TAX MAP 28 LOTS 9, 10, &10-4

LANDSCAPE PLAN

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

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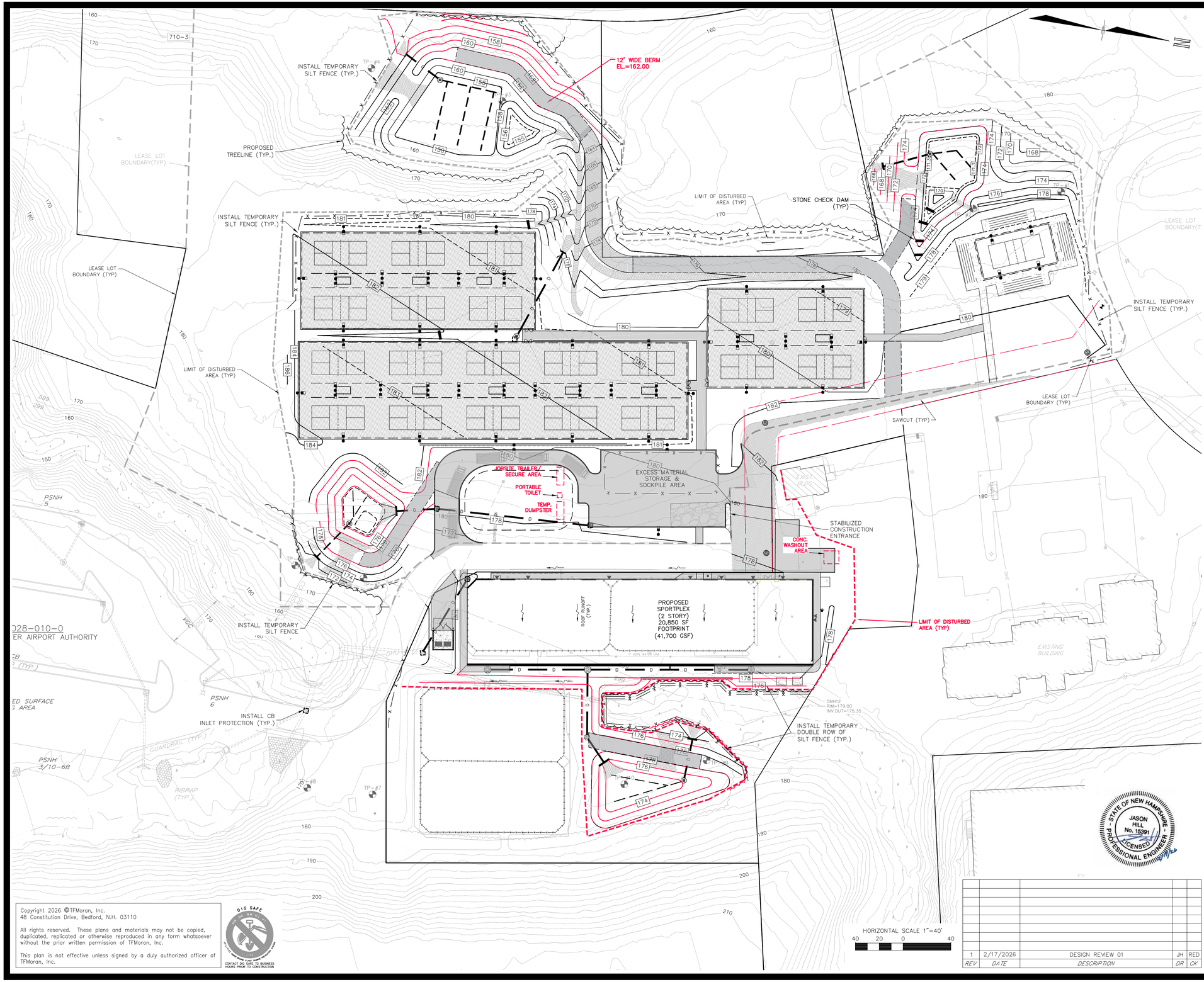
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CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION



NOTES

1. SEE NOTES ON SHEET C-2, EROSION CONTROL NOTES ON SHEET C-11, EROSION CONTROL DETAILS ON SHEET C-13, AND THE APPROVED SWPPP, AS APPLICABLE.
2. INSTALL SILT BARRIER ALONG THE PERIMETER OF THE AREA TO BE DISTURBED AS FIRST ORDER OF WORK.
3. PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS WITHIN THE WORK LIMITS AND MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED. INLET PROTECTION BARRIERS SHALL BE IN PLACE AT ALL CATCH BASINS PRIOR TO THE DISTURBANCE OF SOIL.
4. DUST CONTROL SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. IT SHALL BE ACCOMPLISHED BY THE UNIFORM APPLICATION OF CALCIUM CHLORIDE AT THE RATE OF 1-1/2 POUNDS PER SQUARE YARD BY MEANS OF A LIME SPREADER OR OTHER APPROVED METHOD. WATER MAY ALSO BE USED FOR DUST CONTROL, AND APPLIED BY SPRINKLING WITH WATER TRUCK DISTRIBUTORS, AS REQUIRED.
5. THE SITE WILL REQUIRE A USEPA NPDES PERMIT FOR STORMWATER DISCHARGE FOR THE SITE CONSTRUCTION IF THE DISTURBANCE EXCEEDS ONE ACRE. THE CONSTRUCTION SITE OPERATOR SHALL DEVELOP AND IMPLEMENT A CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH EPA REGULATIONS AND THE CONSTRUCTION GENERAL PERMIT WHICH SHALL REMAIN ON SITE AND MADE ACCESSIBLE TO THE PUBLIC. THE SITE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14 DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE. A COMPLETED NOTICE OF TERMINATION (NOT) SHALL BE SUBMITTED TO NPDES PERMITTING AUTHORITY WITHIN 30 DAYS AFTER EITHER OF THE FOLLOWING CONDITIONS HAVE BEEN MET: FINAL STABILIZATION HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE FOR, OR ANOTHER OPERATOR/PERMITTEE HAS ASSUMED CONTROL OVER ALL AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
6. SILT PROTECTION MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED IN THIS PLAN SET.
7. CONSTRUCT JUTE MATTING ON ALL SLOPES STEEPER THAN 3:1, DISTURBED AREAS SLOPING TOWARDS WETLANDS AND ALL LOCATIONS SHOWN ON PLAN.
8. INSPECT EROSION CONTROL MEASURES WEEKLY AND AFTER EACH RAIN STORM OF 0.10" OR GREATER. REPAIR/MODIFY SILT BARRIER AS NECESSARY TO MAXIMIZE FILTER EFFICIENCY. REMOVE SEDIMENT WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
9. PROVIDE SILT BARRIERS AT THE BASE OF CUT AND FILL SLOPES UNTIL COMPLETION OF THE PROJECT OR UNTIL VEGETATION BECOMES ESTABLISHED ON SLOPES. EROSION PROTECTION BELOW FILL SLOPES SHALL BE PLACED IMMEDIATELY AFTER CLEARING, PRIOR TO EMBANKMENT CONSTRUCTION.
10. ALL DISTURBED AREAS SHALL BE REVEGETATED AS QUICKLY AS POSSIBLE. ALL CUT AND FILL SLOPES SHALL BE SEEDED WITHIN 72 HOURS AFTER GRADING.
11. ALL WORK AREAS TO BE STABILIZED AT THE END OF EACH WORK DAY AND PRIOR TO ANY PREDICTED SIGNIFICANT RAIN EVENT.
12. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
    - A. BASE COURSE GRAVELS, WHICH MEET THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2, ARE INSTALLED IN AREAS TO BE PAVED
    - B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
    - C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED
    - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED
13. ALL CATCH BASINS, MANHOLES, AND DRAIN LINES SHALL BE THOROUGHLY CLEANED OF ALL SEDIMENT AND DEBRIS AFTER ALL AREAS HAVE BEEN STABILIZED.
14. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SLOPE STABILITY DURING CONSTRUCTION.
15. THE EROSION CONTROL PRACTICES SHOWN ON THESE PLANS ARE ILLUSTRATIVE ONLY AND SHALL BE SUPPLEMENTED BY THE SITE CONTRACTOR AS NEEDED.
16. THE TOWN SHOULD RESERVE THE RIGHT TO REQUIRE ADDITIONAL EROSION CONTROL MEASURES DURING CONSTRUCTION.
17. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE TOWN.
18. TURTLES MAY BE ATTRACTED

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REV	DATE	DESCRIPTION	DR	CK
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TAX MAP 28 LOTS 9, 10, &10-4

EROSION CONTROL PLAN

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

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	CK RED			

SOIL CHARACTERISTICS

THE SOIL IN THE VICINITY OF THE SITE CONSISTS OF WINDSOR–URBAN LAND COMPLEX, UDORTHENTS AND URBAN LAND–HOOSIC COMPLEX. WINDSOR–URBAN LAND COMPLEX IS A HSG (HYDROLOGIC SOIL GROUP) A SOIL. UDORTHENTS AND URBAN LAND–HOOSIC ARE AN UNDEFINED SOIL GROUP.

DISTURBED AREA

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 243,500 SQUARE FEET (5.59 ACRES). CONSTRUCTION SHALL BE PHASED TO LIMIT DISTURBED AREAS TO LESS THAN 5 ACRES.

CRITICAL NOTE: THIS DRAWING IS PROVIDED FOR GENERAL GUIDANCE. ALL SPECIAL EROSION CONTROL MEASURES MUST BE EXECUTED IN ACCORDANCE WITH APPLICABLE CURRENT STATE AND LOCAL REGULATIONS, APPROVED SWPPP, AND PERMIT REQUIREMENTS.

SEQUENCE OF MAJOR ACTIVITIES

1. INSTALL PERIMETER CONTROLS, STABILIZED CONSTRUCTION ENTRANCE, AND TEMPORARY EROSION CONTROL MEASURES PER APPROVED SITE DEVELOPMENT PLANS, PERMITS, OR SWPPP IF REQUIRED, PRIOR TO EARTH MOVING OPERATIONS.
2. DEMOLISH EXISTING SITE WORK DESIGNATED FOR REMOVAL.
3. INSTALL SWALES BEFORE ROUGH GRADING THE SITE.
4. COMPLETE MAJOR GRADING OF SITE.
5. CONSTRUCT BUILDING PAD, STORMWATER SYSTEM, AND SITE UTILITIES.
6. CONSTRUCT PARKING LOT.
7. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND SITE IS STABILIZED, REMOVE ALL INLET PROTECTION, SILT BARRIERS, AND SEDIMENT THAT HAS BEEN TRAPPED BY THESE DEVICES.
8. CONSULT APPLICABLE REGULATIONS, PERMITS, CONDITIONS, AND APPROVED SWPPP FOR CONDITIONS RELATED TO NOTICE OF TERMINATION, IF REQUIRED.

EROSION AND SEDIMENT CONTROLS AND STABILIZATION PRACTICES

STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES AND DISTURBED AREAS WHERE CONSTRUCTION ACTIVITY WILL NOT OCCUR FOR MORE THAN TWENTY ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

1. BASE COURSE GRAVELS, WHICH MEET THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2, HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
3. A MINIMUM OF 3" OF NON–EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILT BARRIERS. ALL STORM DRAIN INLETS SHALL BE PROVIDED WITH BARRIER FILTERS. STONE RIPRAP SHALL BE PROVIDED AT THE OUTLETS OF DRAINAGE PIPES WHERE EROSIVE VELOCITIES ARE ENCOUNTERED.

OFF SITE VEHICLE TRACKING

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED.

INSTALLATION, MAINTENANCE, AND INSPECTION OF EROSION AND SEDIMENT CONTROLS

A. GENERAL

THESE ARE THE GENERAL INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO IMPLEMENT THE PLAN.

1. STABILIZATION OF ALL SWALES, DITCHES, AND PONDS IS REQUIRED PRIOR TO DIRECTING FLOW TO THEM.
2. THE SMALLEST PRACTICAL PORTION OF THE SITE WILL BE DENUDED AT ONE TIME. (5 AC MAX)
3. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
4. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT BARRIER WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE BARRIER.
5. ALL DIVERSION DIKES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
6. TEMPORARY SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND UNHEALTHY GROWTH.
7. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION.
8. THE CONTRACTOR'S SITE SUPERINTENDENT WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE, AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.

B. FILTERS / BARRIERS

1. SILT SOCKS

A. KNOTTED MESH NETTING MATERIAL SHALL BE DELIVERED TO SITE IN A 5 MIL CONTINUOUS, TUBULAR, HDPE 3/8" MATERIAL, FILLED WITH COMPOST CONFORMING TO THE FOLLOWING REQUIREMENTS:

PHYSICAL PROPERTY	TEST	REQUIREMENTS
PH	TMECC 04.11–A	5.0 TO 8.0
PARTICLE SIZE	TMECC 02.02–B	2" SIEVE AND MIN. 60% GREATER THAN THE ⅜" SIEVE
MOISTURE CONTENT		STND TESTING < 60%

MATERIAL SHALL BE RELATIVELY FREE OF INERT OR FOREIGN MAN–MADE MATERIALS

MATERIAL SHALL BE WEED FREE AND DERIVED FROM A WELL–DECOMPOSED SOURCE OF ORGANIC MATTER, FREE FROM ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH.

B. SEDIMENT COLLECTED AT THE BASE OF THE SILT SOCK SHALL BE REMOVED ONCE IT HAS REACHED 1/3 OF THE EXPOSED HEIGHT OF THE SILT SOCK.

C. SILT BARRIER SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREAS HAS BEEN PERMANENTLY STABILIZED.

2. SEQUENCE OF INSTALLATION

SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.

3. MAINTENANCE

A. SILT BARRIERS SHALL BE INSPECTED WEEKLY AND IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. THEY SHALL BE REPAIRED IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM.

B. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

C. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE THIRD (1/3) THE HEIGHT OF THE BARRIER.

D. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFIRM WITH THE EXISTING GRADE, PREPARED AND SEEDED.

C. MULCHING

1. TIMING

IN ORDER FOR MULCH TO BE EFFECTIVE, IT MUST BE IN PLACE PRIOR TO MAJOR STORM EVENTS. THERE ARE TWO (2) TYPES OF STANDARDS WHICH SHALL BE USED TO ASSURE THIS:

A. APPLY MULCH PRIOR TO ANY STORM EVENT.

THIS IS APPLICABLE WHEN WORKING WITHIN 100' OF WETLANDS. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER PREDICTIONS, USUALLY BY CONTACTING THE NATIONAL WEATHER SERVICE, TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.

B. REQUIRED MULCHING WITHIN A SPECIFIED TIME PERIOD.

THE TIME PERIOD CAN RANGE FROM 14 TO 21 DAYS OF INACTIVITY ON AN AREA, WHERE THE LENGTH OF TIME VARIES WITH SITE CONDITIONS. PROFESSIONAL JUDGMENT SHALL BE USED TO EVALUATE THE INTERACTION OF SITE CONDITIONS (SOIL ERODIBILITY, SEASON OF YEAR, EXTENT OF DISTURBANCE, PROXIMITY TO SENSITIVE RESOURCES, ETC.) AND THE POTENTIAL IMPACT OF EROSION ON ADJACENT AREAS TO CHOOSE AN APPROPRIATE TIME RESTRICTION.

2. GUIDELINES FOR WINTER MULCH APPLICATION.

WHEN MULCH IS APPLIED TO PROVIDE PROTECTION OVER WINTER (PAST THE GROWING SEASON) IT SHALL BE AT A RATE OF 6,000 POUNDS OF HAY OR STRAW PER ACRE. A TACKIFIER MAY BE ADDED TO THE MULCH.

3. MAINTENANCE

ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR RILL EROSION. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED.

D. VEGETATIVE PRACTICE

1. AFTER ROUGH GRADING OF THE SUBGRADE HAS BEEN COMPLETED AND APPROVED, THE SUB GRADE SURFACE SHALL BE SCARIFIED TO A DEPTH OF 4". THEN, FURNISH AND INSTALL A LAYER OF LOAM PROVIDING A ROLLED THICKNESS AS SPECIFIED IN THESE PLANS. ANY DEPRESSIONS WHICH MAY OCCUR DURING ROLLING SHALL BE FILLED WITH ADDITIONAL LOAM, REGRADED AND REROLLED UNTIL THE SURFACE IS TRUE TO THE FINISHED LINES AND GRADES. ALL LOAM NECESSARY TO COMPLETE THE WORK UNDER THIS SECTION SHALL BE SUPPLIED BY THE SITE SUBCONTRACTOR.
2. ALL LARGE STIFF CLODS, LUMPS, BRUSH, ROOTS, DEBRIS, GLASS, STUMPS, LITTER, AND OTHER FOREIGN MATERIAL, AS WELL AS STONES OVER 1" IN DIAMETER, SHALL BE REMOVED FROM THE LOAM AND DISPOSED OF OFF SITE. THE LOAM SHALL BE RAKED SMOOTH AND EVEN.
3. THE LOAM SHALL BE PREPARED TO RECEIVE SEED BY REMOVING STONES, FOREIGN OBJECTS AND GRADING TO ELIMINATE WATER POCKETS AND IRREGULARITIES PRIOR TO PLACING SEED. FINISH GRADING SHALL RESULT IN STRAIGHT UNIFORM GRADES AND SMOOTH, EVEN SURFACES WITHOUT IRREGULARITIES TO LOW POINTS.
4. SHAPE THE AREAS TO THE LINES AND GRADES REQUIRED. THE SITE SUBCONTRACTOR'S ATTENTION IS DIRECTED TO THE SCHEDULING OF LOAMING AND SEEDING OF GRADED AREAS TO PERMIT SUFFICIENT TIME FOR THE STABILIZATION OF THESE AREAS. IT SHALL BE THE SITE SUBCONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE AREAS DURING THE CONSTRUCTION PERIOD AND REGRADE, LOAM AND RESEED ANY DAMAGED AREAS.
5. ALL AREAS DISTURBED BY CONSTRUCTION WITHIN THE PROPERTY LINES AND NOT COVERED BY STRUCTURES, PAVEMENT, OR MULCH SHALL BE LOAMED AND SEEDED.
6. LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF 2 TONS PER ACRE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5.
7. FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 500 POUNDS PER ACRE OF 10–20–20 FERTILIZER.
8. SOIL CONDITIONERS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY WORKED INTO THE LOAM. LOAM SHALL BE RAKED UNTIL THE SURFACE IS FINELY PULVERIZED, SMOOTH AND EVEN, AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE REQUIRED LINES AND GRADES WITH APPROVED ROLLERS WEIGHING BETWEEN 4 1/2 POUNDS AND 5 1/2 POUNDS PER INCH OF WIDTH.
9. SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4" AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH.
10. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 2 TONS PER ACRE. MULCH THAT BLOWS OR WASHES AWAY SHALL BE REPLACED IMMEDIATELY AND ANCHORED USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.
11. THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED.
12. THE SITE SUBCONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED, INCLUDING CUTTING, AS SPECIFIED HEREIN AFTER UNDER MAINTENANCE AND PROTECTION.
13. UNLESS OTHERWISE APPROVED, SEEDING SHALL BE DONE DURING THE APPROXIMATE PERIODS OF EARLY SPRING TO SEPTEMBER 30, WHEN SOIL CONDITIONS AND WEATHER ARE SUITABLE FOR SUCH WORK. IN NO CASE SHALL THE WEED CONTENT EXCEED 1 PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. FOR TEMPORARY PLANTINGS AFTER SEPTEMBER 30, TO EARLY SPRING AND FOR TEMPORARY PROTECTION OF DISTURBED AREAS:

A. FOLLOW ABOVE SLOPE, LOAM DEPTH AND GRADING REQUIREMENTS.
B. FERTILIZER SHALL BE SPREAD AND WORKED INTO THE SURFACE AT A RATE OF 500 POUNDS PER ACRE.

MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES:

WINTER RYE (FALL SEEDING)	2.5 LBS/1,000 SF
OATS (SPRING SEEDING)	2.0 LBS/1,000 SF
MULCH	1.5 TONS/ACRE

E. CATCH BASIN INLET PROTECTION

1. INLET BASKET STRUCTURE

A. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY PRIOR TO DISTURBING PAVEMENT AND SHALL REMAIN IN PLACE AND MAINTAINED UNTIL PAVEMENT BINDER COURSE IS COMPLETE.

B. MOLD 6X6, 42 LB. WIRE SUPPORT AROUND INLET FRAME AND GRATE AND EXTEND 6" BEYOND SIDES. SECURE FILTER FABRIC TO WIRE SUPPORT.

C. THE FILTER FABRIC SHALL BE A GEOTEXTILE FABRIC; POLYESTER, POLYPROPYLENE, STABILIZED NYLON, POLYETHYLENE OR POLYVINYLIDENE CHLORIDE MEETING THE FOLLOWING SPECIFICATIONS:

GRAB STRENGTH: 45 LB. MINIMUM IN ANY PRINCIPAL DIRECTION (ASTM D1682)
MULLEN BURST STRENGTH: MIN. 60PSI (ASTM D774)

D. THE FABRIC SHALL HAVE AN OPENING NO GREATER THAN A NUMBER 20 U.S. STANDARD SIEVE AND A MINIMUM PERMEABILITY OF 120 GPM.

E. THE INLET PROTECTION SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING EXTENDED PERIODS OF PRECIPITATION. REPAIRS SHALL BE MADE IMMEDIATELY, AS NECESSARY, TO PREVENT PARTICLES FROM REACHING THE DRAINAGE SYSTEM AND/OR CAUSING SURFACE FLOODING.

F. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT, OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED.

F. WINTER CONSTRUCTION SEQUENCE

1. ALL PROPOSED POST–DEVELOPMENT LANDSCAPED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1 AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENT.
2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
3. AFTER OCTOBER 15TH, INCOMPLETE PARKING AREAS WHERE ACTIVE CONSTRUCTION HAS STOPPED FOR THE WINTER ALL TRAVEL SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3" OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOWFALL AFTER EACH STORM EVENT.

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, SILT BARRIERS SHALL BE INSTALLED PRIOR TO COMMENCING ANY CLEARING OR GRADING OF THE SITE. STRUCTURAL CONTROLS SHALL BE INSTALLED CONCURRENTLY WITH THE APPLICABLE ACTIVITY. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN TWENTY ONE (21) DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN FOURTEEN (14) DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, SILT BARRIERS AND ANY EARTH/DIKES WILL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.

FOR SINGLE/DUPLEX FAMILY SUBDIVISIONS, WHEN LOT DEVELOPMENT IS NOT PART OF THE PERMIT, THEN LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.

WASTE DISPOSAL

1. WASTE MATERIALS
ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN A DUMPSTER. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ON SITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
2. HAZARDOUS WASTE
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
3. SANITARY WASTE
ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

SPILL PREVENTION

1. MATERIAL MANAGEMENT PRACTICES
THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:

GOOD HOUSEKEEPING:
THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ON SITE DURING THE CONSTRUCTION PROJECT:

A. AN EFFORT WILL BE MADE TO STORE ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB.

B. ALL MATERIALS STORED ON SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

C. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.

D. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.

E. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

F. WHENEVER POSSIBLE ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

HAZARDOUS PRODUCTS:
THE FOLLOWING PRACTICES WILL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:

A. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.

B. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.

C. SURPLUS PRODUCT THAT MUST BE DISPOSED OF WILL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.

2. PRODUCT SPECIFICATION PRACTICES
THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON SITE:

PETROLEUM PRODUCTS:
ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS:
FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS. ONCE APPLIED FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. STORAGE WILL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS:
ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS:
CONCRETE TRUCKS WILL DISCHARGE AND WASH OUT SURPLUS CONCRETE OR DRUM WASH WATER IN A CONTAINED AREA DESIGNATED ON SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

A. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

B. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

C. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

D. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

E. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.

F. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM RECURRING AND HOW TO CLEANUP THE SPILL IF IT RECURS. A DESCRIPTION OF THE SPILL, ITS CAUSE, AND THE CLEANUP MEASURES WILL BE INCLUDED.

G. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY–TO–DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.

DUST CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL METHODS SHALL INCLUDE, BUT NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS.

(DCT25-2469) NH FISH & GAME CONSERVATION MEASURES

1. MITIGATION REQUIREMENTS INCLUDED WITH NHFG'S REVIEW AND RECOMMENDATIONS ARE CONSISTENT WITH AN AGREEMENT BETWEEN THE TOWN OF LONDONDERRY AND NHFG THAT WAS ENTERED INTO EFFECT ON MAY 28, 2019 (ATTACHED) THAT REQUIRES A MITIGATION FEE FOR EACH INDIVIDUAL PROJECT THAT OCCURS WITHIN A PREDEFINED AREA WITHIN LONDONDERRY PER RSA 212–A:16. A MITIGATION FEE OF NO LESS THAN $5,214.06 SHALL BE MADE PAYABLE TO THE NEW HAMPSHIRE FISH & GAME DEPARTMENT FOR NEGATIVE IMPACTS TO NEW ENGLAND COTTONTAIL, A STATE–ENDANGERED SPECIES. THE MEMO FIELD SHALL IDENTIFY "NONGAME AND ENDANGERED WILDLIFE PROGRAM, DCT25–2469". THIS CHECK SHALL BE ISSUED AND SUBMITTED TO NHFG FOLLOWING PERMIT APPROVAL AND SHALL BE RECEIVED PRIOR TO ANY WORK OCCURRING ON THE SITE. THE CHECK MAY BE DROPPED OFF IN PERSON OR MAILED TO NHFG – NONGAME AND ENDANGERED WILDLIFE PROGRAM, ATTN: MICHAEL MARCHAND, 11 HAZEN DRIVE, CONCORD, NH 03301–6500. PLEASE INCLUDE THE NHB# (DCT25–2469) AND A DESCRIPTION OF WHAT THE CHECK IS FOR WITH THE SUBMITTAL. *THE MITIGATION FEE IS BASED ON A DISTURBANCE AREA OF 260,703 SQ. FT. IF THE DISTURBANCE AREA IS GREATER THAN 260,703 SQ. FT., NHFG SHALL BE CONTACTED IMMEDIATELY. THE APPLICANT SHALL BE RESPONSIBLE FOR PAYMENT OF TOTAL DISTURBANCE AREA AND MAY BE SUBJECT TO ADDITIONAL FEES OR CONSERVATION MEASURES.
2. THE FOLLOWING SPECIES HAVE BEEN IDENTIFIED THROUGH THE DATACHECK TOOL SCREENING AS BEING POTENTIALLY AFFECTED BY ACTIVITIES AT THIS LOCATION: NEW ENGLAND COTTONTAIL (STATE ENDANGERED), BLANDING'S TURTLE (STATE ENDANGERED), EASTERN HOGNOSE SNAKE (STATE ENDANGERED), EASTERN MEADOWLARK (STATE THREATENED), GRASSHOPPER SPARROW (STATE THREATENED), SPOTTED TURTLE (STATE THREATENED), AND NORTHERN BLACK RACER (STATE THREATENED). ALL OPERATORS AND PERSONNEL WORKING ON OR ENTERING THE SITE SHALL BE MADE AWARE OF THE POTENTIAL PRESENCE OF THIS SPECIES AND SHALL BE PROVIDED FLYERS THAT HELP TO IDENTIFY THIS SPECIES, ALONG WITH NHFG CONTACT INFORMATION. SEE PLAN SHEET C–21.
3. RARE SPECIES INFORMATION (E.G. IDENTIFICATION, OBSERVATION AND REPORTING OF OBSERVATIONS, WHEN TO CONTACT NHFG IMMEDIATELY AND NHFG CONTACT INFORMATION) SHALL BE COMMUNICATED DURING MORNING MEETINGS PRIOR TO WORK COMMENCEMENT DURING THE CONSTRUCTION PHASE OF THE PROJECT. SEE PLAN SHEET C–21.
4. OBSERVATIONS OF NORTHERN BLACK RACER AND EASTERN HOGNOSE SNAKE SHALL BE REPORTED IMMEDIATELY TO THE NEW HAMPSHIRE FISH AND GAME DEPARTMENT NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM. PLEASE CONTACT MELISSA WINTERS AND BRENDAN CLIFFORD – VIA GROUP TEXT PREFERRED. A PHOTOGRAPH WITH TEXT WILL BE PROVIDED IF FEASIBLE. SEE SPECIES FLYERS, SEE PLAN SHEET C–21 FOR NHFG CONTACT INFORMATION.
5. TURTLES AND SNAKES MAY BE ATTRACTED TO DISTURBED GROUND DURING THE NESTING SEASON (MAY 15TH – JULY 15TH). TURTLE AND SNAKE NESTS ARE PROTECTED BY NH LAWS (RSA 212–B:4, FIS 1401.03). IF A NEST IS OBSERVED OR SUSPECTED, OPERATORS SHALL CONTACT MELISSA WINTERS AND BRENDAN CLIFFORD FOR SNAKES AND JOSH MEGYESY FOR TURTLES AT NHFG IMMEDIATELY FOR FURTHER CONSULTATION. SEE SPECIES FLYERS, SEE PLAN SHEET C–21 FOR NHFG CONTACT INFORMATION.
   A. TO MINIMIZE THE POTENTIAL FOR NESTING TO OCCUR WITHIN THE PROJECT SITE:
      I. MINIMIZE GROUND DISTURBANCE ACTIVITIES DURING THE ACTIVE NESTING SEASON. LIMIT CLEARING AREAS AND DISTURBING GROUND UNTIL READY TO START ACTIVE CONSTRUCTION FOR A PROJECT COMPONENT.
      II. MINIMIZE ACCESS OR MAKE AREAS LESS ATTRACTIVE TO WILDLIFE FOR NESTING FOR DISTURBED GROUND AREAS DURING ACTIVE NESTING SEASON. SOIL/SANDY MOUNDS OR OPEN SANDY/GRAVELY AREAS WITHIN THE ACTIVE PROJECT SITE SHALL BE COVERED WITH TARPS OR OTHER CONSTRUCTION MATERIALS AT THE END OF THE WORK DAY (NOTE TURTLES CAN MOVE INTO A SITE OVERNIGHT TO NEST – BE OBSERVANT OF TRACKS AND NESTING SIGNS).
      III. THE NEST OR SUSPECTED NEST SHALL BE MARKED (SURROUNDING ROPED OFF OR CONE BUFFER DEPLOYED) AND AVOIDED. THIS SHALL BE COMMUNICATED TO ALL PERSONNEL ONSITE.
      IV. SITE ACTIVITIES SHALL NOT OCCUR IN THE AREA SURROUNDING THE NEST OR SUSPECTED NEST UNTIL FURTHER GUIDANCE IS PROVIDED BY NHFG.
6. THE APPLICANT SHALL NOTIFY NHFG 30 DAYS PRIOR TO STARTING CONSTRUCTION ACTIVITIES. NHFG SHALL HAVE THE OPPORTUNITY TO ATTEMPT TO TR

LIGHTING CALCULATIONS

PARKING SPACES AT COMPETITION COURT
Illuminance (Fc)
Average = 2.19
Maximum = 3.3
Minimum = 0.4
Avg/Min Ratio = 5.48
Max/Min Ratio = 8.25

LARGE PARKING LOT
Illuminance (Fc)
Average = 2.59
Maximum = 4.2
Minimum = 1.1
Avg/Min Ratio = 2.35
Max/Min Ratio = 3.82

COMPETITION COURT
Illuminance (Fc)
Average = 64.46
Maximum = 69.5
Minimum = 55.6
Avg/Min Ratio = 1.16
Max/Min Ratio = 1.25

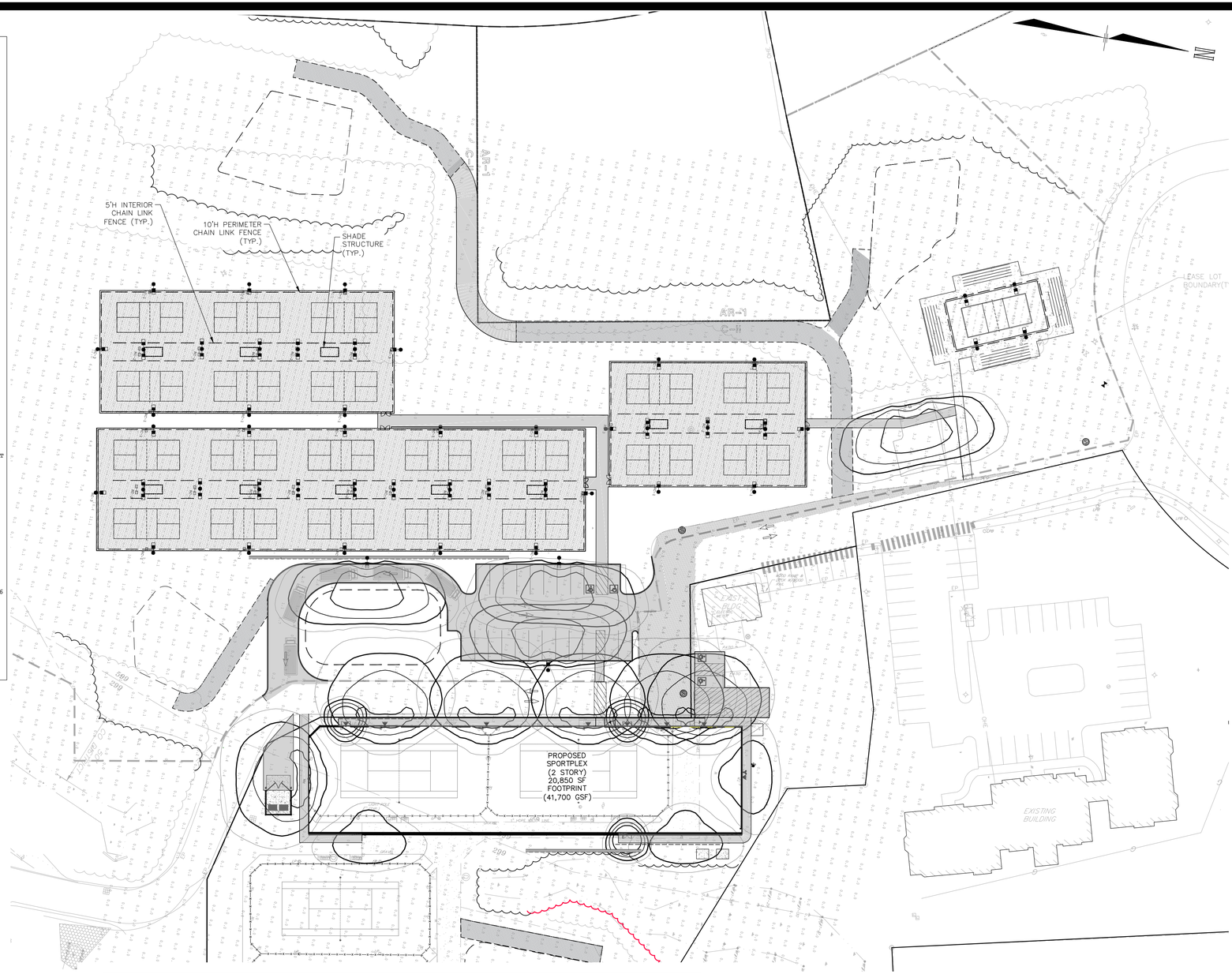
TYPICAL COURT
FOUR COURT AREA - COURT 20
Illuminance (Fc)
Average = 39.29
Maximum = 50.1
Minimum = 24.1
Avg/Min Ratio = 1.63
Max/Min Ratio = 2.08

TYPICAL INNER COURT
TEN COURT AREA - COURT 8
Illuminance (Fc)
Average = 41.01
Maximum = 53.3
Minimum = 25.2
Avg/Min Ratio = 1.63
Max/Min Ratio = 2.12

TYPICAL END COURT_1
TEN COURT AREA -COURT
Illuminance (Fc)
Average = 40.85
Maximum = 51.2
Minimum = 28.3
Avg/Min Ratio = 1.44
Max/Min Ratio = 1.81

TYPICAL CENTER COURT
SIX COURT AREA - COURT 15
Illuminance (Fc)
Average = 40.28
Maximum = 52.3
Minimum = 26.5
Avg/Min Ratio = 1.52
Max/Min Ratio = 1.97

TYPICAL END COURT
SIX COURT AREA - COURT 16
Illuminance (Fc)
Average = 40.24
Maximum = 50.2
Minimum = 27.3
Avg/Min Ratio = 1.47
Max/Min Ratio = 1.84



NOTES

1. LIGHTING PLAN AND CALCULATIONS PREPARED BY EXPOSURE LIGHTING.



LSI - MIRADA MEDIUM (MRM)
POLE MOUNTED 20' ABOVE F.G. NOT TO SCALE



LSI - ZONE MEDIUM (ZNM)
POLE MOUNTED 20' ABOVE F.G. NOT TO SCALE



LSI - STEEL POLES
SQUARE STRAIGHT POLE NOT TO SCALE



LSI - SLIM WALL PACK (WPSLS)
WALL MOUNTED 8' ABOVE F.G. NOT TO SCALE



LSI - MIRADA MEDIUM WALL SCONCE (XWM)
WALL MOUNTED 18' ABOVE F.G. NOT TO SCALE

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Description	Tag	[MANUFAC]
⊟	4	CC-1	Single	ZNM-55L-CT-UNV-40-ALSC-ALCS02-CXX / 4SQ B3-S11G20-S-CXX-AB-4BC	20' POLE	LSI INDUSTRIES, INC.
⊡	3	MD	Single	WPSLS-2L-40-PCIXXX-BLK	WALL MOUNT 8' AFG	LSI INDUSTRIES, INC.
⊟	4	P-1	Single	MRM-LED-09L-SIL-3-UNV-DIM-40-70CRI-CXX-ALSC-ALSC02-IL / 4SQ B3 S11G20 S CXX AB 4BC	20' POLE	LSI INDUSTRIES, INC.
⊟	20	RC-1	Single	ZNM-36L-CT-UNV-40--ALSC-ALSC02-CXX-IH / 4SQ B3 S11G20 S CXX AB 4BC	20' POLE	LSI INDUSTRIES, INC.
⊟—⊟	17	RC-2	Back-Back	ZNM-36L-CT-UNV-40-ALSC-ALSC02-CXX / 4SQ B3 S11G20 D180 CXX AB 4BC	20' POLE	LSI INDUSTRIES, INC.
⊟	6	RC-3	Single	ZNM-36L-FT-UNV-40--ALSC-ALSC02-CXX-IH / 4SQ B3 S11G20 S CXX AB 4BC	20' POLE	LSI INDUSTRIES, INC.
⊡	3	W1	Single	XWS-LED-02L-SIL-2-UNV-DIM-30-70CRI-ALSCS02	WALL MOUNTED 18' AFG	LSI INDUSTRIES, INC.
⊡	6	WM	Single	XWM-4-LED-6L-40-UE-BLK-ALSCS02	WALL MOUNTED 18' AFG	LSI INDUSTRIES, INC.

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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

HORIZONTAL SCALE 1"=40'
40 20 0 40

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TAX MAP 28 LOTS 9, 10, &10-4

LIGHTING PLAN

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH
OWNER: MAP 28 LOTS 9, 10
CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103
OWNER: MAP 28 LOT 10-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103
APPLICANT
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	CK	CADFILE		
17562.06	JSH	RED	17562-06 SITE		C-13

CONSTRUCTION SEQUENCE NOTES

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2. CUT AND CLEAR TREES WITHIN AREA OF DISTURBANCE UNLESS OTHERWISE NOTED.
3. CONSTRUCT TEMPORARY AND PERMANENT EROSION CONTROL FACILITIES PRIOR TO ANY EARTH MOVING OPERATION.
4. DEMOLISH EXISTING STRUCTURES.
5. ROUGH GRADE SITE OR PHASED WORK AREA. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER GRADING. ALL DISTURBED AREAS SHALL BE STABILIZED NO LATER THAN 72 HOURS AFTER CONSTRUCTION ACTIVITY CEASES. IF EARTHWORK TEMPORARILY CEASES ON A PORTION OF OR THE ENTIRE SITE, AND WILL NOT RESUME WITHIN 21 DAYS, THE AREA SHALL BE STABILIZED.

   AN AREA SHALL BE CONSIDERED STABILIZED IF:
   A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
   B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   C) A MINIMUM OF .3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED, OR
   D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
6. CONSTRUCT CULVERTS, DETENTION BASINS AND TREATMENT SWALES. PLACE HEADWALLS, RIP-RAP AND OTHER DRAINAGE FACILITIES ACCORDING TO PLAN. THE CONTRACTOR SHALL STABILIZE ALL DITCHES, SWALES, AND PONDS/BASINS PRIOR TO DIRECTING FLOW TO THEM.
7. INSTALL ALL UNDERGROUND UTILITIES.
8. CONSTRUCT BUILDINGS.
9. CONSTRUCT PARKING AND FINISH GRADE SITE ACCORDING TO PLAN. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
10. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL MEASURES PERIODICALLY AND IMMEDIATELY AFTER STORM EVENTS.
11. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
12. REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE ALL AREAS ARE STABILIZED WITH A SUITABLE STAND OF GRASS, PAVEMENT OR COMPACTED GRAVELS.

* REFER TO THE STORM WATER MANAGEMENT PLAN FOR EROSION CONTROL MEASURES AND SPECIFIC INFORMATION.

GENERAL NOTES

1. ALL IN PAVEMENT MANHOLES SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY ELEVATIONS OTHERWISE SHOWN.
2. WHERE DEPTH OF COVER IS LESS THAN 3 FEET CLASS V REINFORCED CONCRETE PIPE SHALL BE USED.
3. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
4. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS WORK AT ALL TIMES.
5. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
6. EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED FOR THE DURATION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE NHDES STANDARDS. THESE DETAILS SERVE AS A GUIDE ONLY.
7. REFER TO THE TOWN STANDARD DETAILS, LATEST REVISION, FOR ADDITIONAL INFORMATION AND CRITERIA.
8. THE CONTRACTOR SHALL STABILIZE ALL DITCHES, SWALES, AND PONDS PRIOR TO DIRECTING FLOW TO THEM.
9. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.

WINTER CONSTRUCTION

IN ADDITION TO THE OTHER NOTES CONTAINED ON THIS PLAN, THE FOLLOWING MUST BE IMPLEMENTED:

1. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED AS SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
2. AN AREA WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIER.
3. TEMPORARY MULCH MUST BE APPLIED WITHIN 7 DAYS OF SOIL EXPOSURE OR PRIOR TO ANY STORM EVENT, BUT AFTER EVERY WORKDAY IN AREAS WITHIN 100 FEET FROM A PROTECTED NATURAL RESOURCE.
4. AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE PERMANENTLY MULCHED THE SAME DAY.
5. IN THE EVENT OF A SNOWFALL GREATER THAN 1 INCH (FRESH OR CUMULATIVE), THE SNOW SHALL BE REMOVED FROM THE AREAS DUE TO BE SEEDED AND MULCHED.
6. LOAM SHALL BE FREE OF FROZEN CLUMPS BEFORE IT IS APPLIED.
7. A DITCH THAT WILL BE CONSTRUCTED DURING THE WINTER MUST BE STABILIZED WITH RIPRAP.

OVERWINTER STABILIZATION

1. PERMANENT STABILIZATION CONSISTS OF AT LEAST 85% VEGETATION, PAVEMENT/GRAVEL BASE OR RIPRAP.
2. ALL PROPOSED VEGETATED AREAS THAT DO NO EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
3. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
4. AFTER NOVEMBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OR 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.
5. DO NOT EXPOSE SLOPES OR LEAVE SLOPES EXPOSED OVER THE WINTER OR FOR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY PROTECTED WITH MULCH.
6. APPLY HAY MULCH AT TWICE THE STANDARD RATE (150 LBS. PER 1,000 SF). THE MULCH MUST BE THICK ENOUGH SUCH THAT THE GROUND SURFACE WILL NOT BE VISIBLE AND MUST BE ANCHORED.
7. USE MULCH AND MULCH NETTING OR AN EROSION CONTROL MULCH BLANKET OR MIX FOR ALL SLOPES GREATER THAN 8% OR OTHER AREAS EXPOSED TO DIRECT WIND.
8. INSTALL AN EROSION CONTROL BLANKET IN ALL DRAINAGE WAYS (BOTTOM AND SIDES) WITH A SLOPE GREATER THAN 3%.
9. SEE THE VEGETATION MEASURES FOR MORE INFORMATION ON SEEDING DATES AND TYPES.

EROSION CONTROL NOTES

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED:

1. INSTALLATION OF SILTATION FENCES AND OTHER EROSION CONTROL MEASURES SHALL BE COMPLETED PRIOR TO THE START OF SITE WORK IN ANY GIVEN AREA. PREFABRICATED SILTATION FENCES SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
2. SILTATION FENCES AND OTHER EROSION CONTROL MEASURES SHALL BE KEPT CLEAN DURING CONSTRUCTION AND REMOVED WHEN ALL SLOPES HAVE A VEGETATIVE COVER OF GREATER THAN 85%. EROSION CONTROL MEASURES SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EVERY RAINFALL.
3. EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEREVER POSSIBLE.
4. THE AREA OF LAND EXPOSED AND THE TIME OF EXPOSURE SHALL BE MINIMIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.
5. ALL DISTURBED AREAS SHALL HAVE A MINIMUM OF 4" OF LOAM. ACCEPTABLE SEED MIXES ARE AS FOLLOWS:

   TYPICAL LAWN MIX (MIN. 200 LBS/ACRE):
   33% CREEPING RED FESCUE (MIN. 66 LBS/ACRE)
   42% PERENNIAL RYEGRASS (MIN. 84 LBS/ACRE)
   21% KENTUCKY BLUEGRASS (MIN. 42 LBS/ACRE)
   4% REDTOP (MIN. 8 LBS/ACRE)

   TEMPORARY LAWN MIX: (MIN. 47 LBS/ACRE)
   100% ANNUAL RYE

   WILDFLOWER SLOPE (NHDOT TYPE 45) MIX 3:1 OR GREATER SLOPES (MIN. 160 LBS/ACRE):
   38% CREEPING RED FESCUE (MIN. 60 LBS/ACRE)
   32% PERENNIAL RYEGRASS (MIN. 51 LBS/ACRE)
   5% REDTOP (MIN. 8 LBS/ACRE)
   5% ALSIKE CLOVER (MIN. 8 LBS/ACRE)
   5% BIRDSFOOT TREFOIL (MIN. 8 LBS/ACRE)
   3% LANCE-LEAF COREOPSIS (MIN. 3 LBS/ACRE)
   3% OXEYE DAISY (MIN. 3 LBS/ACRE)
   3% BUTTERFLY WEED (MIN. 3 LBS/ACRE)
   3% BLACKEYED SUSAN (MIN. 3 LBS/ACRE)
   3% WILD LUPINE (MIN. 3 LBS/ACRE)

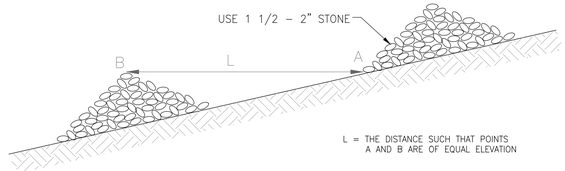
   GENERAL SLOPE (NHDOT TYPE 44) MIX 3:1 OR GREATER SLOPES (MIN. 160 LBS/ACRE):
   44% CREEPING RED FESCUE (MIN. 70 LBS/ACRE)
   38% PERENNIAL RYEGRASS (MIN. 60 LBS/ACRE)
   6% REDTOP (MIN. 10 LBS/ACRE)
   6% ALSIKE CLOVER (MIN. 10 LBS/ACRE)
   6% BIRDSFOOT TREFOIL (MIN. 10 LBS/ACRE)

   A. PLACING LOAM ON SITE
      a. ALL SUBGRADE ELEVATIONS SHOULD BE UNIFORMLY GRADED TO RECEIVE LOAM AND SHALL BE INSPECTED AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO PLACEMENT OF LOAM.
   a. PLACE LOAM TO FORM A MINIMUM DEPTH OF 4" WHEN ROLLED, UNLESS OTHERWISE INDICATED.
   b. ALL DEPRESSIONS EXPOSED DURING THE ROLLING SHALL BE FILLED WITH ADDITIONAL LOAM.

   B. SEED BED PREPARATION
   AFTER FINISH GRADING AND JUST BEFORE SEEDING, THE AREAS TO BE SEEDED SHALL BE LOOSENED TO PROVIDE A ROUGH, FIRM BUT FINELY PULVERIZED SEEDBED. THE INTENT IS A TEXTURE CAPABLE OF RETAINING WATER, SEED AND FERTILIZER WHILE REMAINING STABLE AND ALLOWING SEED TIME TO GERMINATE. SEED SHALL BE APPLIED TO THE CONDITIONED SEEDBED NOT MORE THAN 48 HOURS AFTER THE SEEDBED HAS BEEN PREPARED.
6. LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE SOIL PRIOR TO OR AT THE TIME OF AT THE TIME OF SEEDING. A MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS. PER ACRE OF 10-20-20 FERTILIZER SHALL BE APPLIED. SEEDING PRACTICES SHALL COMPLY WITH LOCAL USDA SOIL CONSERVATION SERVICES RECOMMENDATIONS.
7. HAY MULCH OR JUTE MATTING SHALL BE USED WHERE INDICATED ON THE PLANS. A MINIMUM OF 1.5 TONS OF MULCH PER ACRE SHALL BE APPLIED. MULCH SHALL BE ANCHORED IN PLACE WHERE NECESSARY. JUTE MATTING SHALL BE LAID IN THE DIRECTION OF RUNOFF FLOW AND APPLIED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
8. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS AREA NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 15 TO SEPTEMBER 15. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING WINTER MONTHS.
9. WATER SHALL BE USED FOR DUST CONTROL IN APPROPRIATE AREAS.

STOCKPILE NOTES

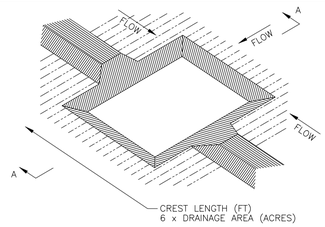
1. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CONCENTRATED FLOWS OF STORMWATER, DRAINAGE COURSES AND INLETS.
2. PROTECT ALL STOCKPILES FROM STORMWATER RUN-ON USING TEMPORARY PERIMETER MEASURES SUCH AS DIVERSIONS, BERMS, SANDBAGS OR OTHER APPROVED PRACTICES.
3. STOCKPILES SHOULD BE SURROUNDED BY SEDIMENT BARRIERS, SUCH AS SILT FENCE OR SILT SOCK, TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.
4. IMPLEMENT WIND EROSION CONTROL PRACTICES AS APPROPRIATE ON ALL STOCKPILED MATERIAL.
5. PLACE BAGGED MATERIALS ON PALLETS AND UNDER COVER.
6. INACTIVE STOCKPILES
   a. INACTIVE SOIL STOCKPILES sHOULD BE COVERED WITH ANCHORED TARPS OR PROTECTED WITH SOIL STABILIZATION MEASURES (TEMPORARY SEED AND MULCH OR OTHER TEMPORARY PRACTICE) AND TEMPORARY PERIMETER SEDIMENT BARRIERS AT ALL TIMES.
   b. INACTIVE STOCKPILES OF CONCRETE RUBBLE, ASPHALT CONCRETE RUBBLE, AGGREGATE MATERIALS AND OTHER SIMILAR MATERIALS SHOULD BE PROTECTED WITH TEMPORARY SEDIMENT PERIMETER BARRIERS AT ALL TIMES. IF THE MATERIALS ARE A SOURCE OF DUST, THEY SHOULD ALSO BE COVERED.
7. ACTIVE STOCKPILES
   a. ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY LINEAR SEDIMENT BARRIERS PRIOR TO THE ONSET OF PRECIPITATION. PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHOULD BE INSPECTED AT THE END OF EACH WORKING DAY.
   b. WHEN A STORM EVENT IS PREDICTED, STOCKPILES SHOULD BE PROTECTED WITH AN ANCHORED PROTECTIVE COVERING.



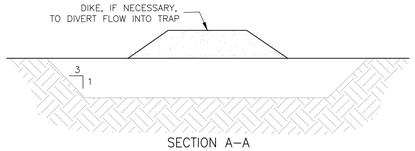
L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

STONE CHECK DAM

NOT TO SCALE



SEDIMENT TRAP – ISOMETRIC VIEW



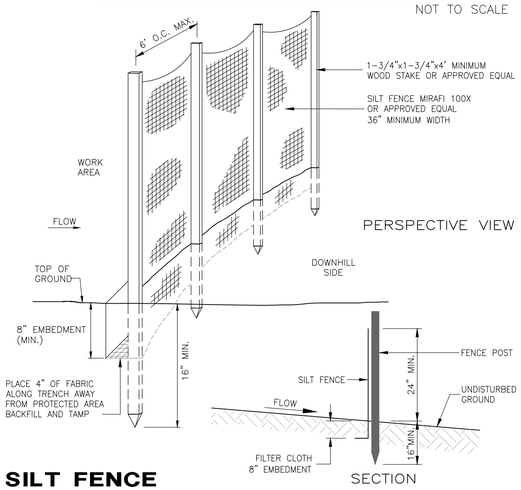
SECTION A–A

NOTES

1. SEDIMENT TRAP TO BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL BASINS/PONDS ARE STABILIZED. IF IT IS DETERMINED THAT CONSTRUCTION OF A SEDIMENT TRAP IS WARRANTED, CONSULT WITH ENGINEER TO DETERMINE APPROPRIATE NUMBER AND DIMENSIONS.

SEDIMENT TRAP

NOT TO SCALE

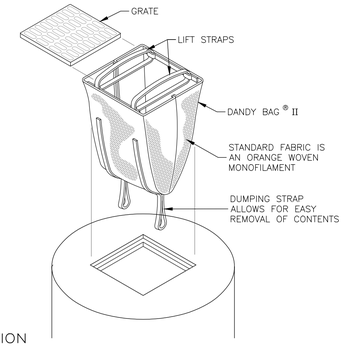


PERSPECTIVE VIEW

SECTION

SILT FENCE

NOT TO SCALE



INSTALLATION

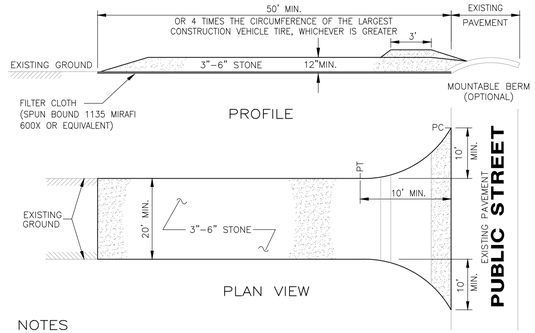
INSTALLATION: REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND THE GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO THE DANDY BAG® II SO THAT THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.

MAINTENANCE

MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE DANDY BAG® II. IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL OIL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.

DANDY BAG® II

NOT TO SCALE

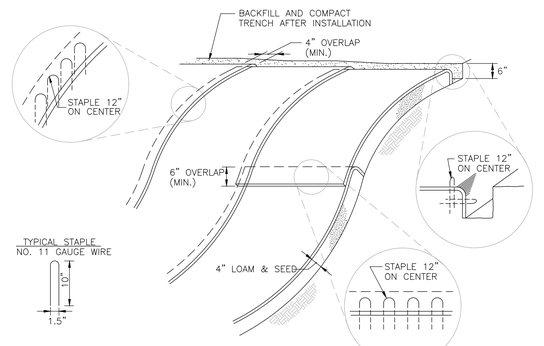


NOTES

1. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE SURFACE.
2. WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
3. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
4. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
5. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN STORM EVENT.

USDA - SCS STABILIZED CONSTRUCTION ENTRANCE

SEE PLAN FOR PROPOSED LOCATION NOT TO SCALE



NOTES

1. BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6" DEEP TRENCH. BACKFILL AND COMPACT TRENCH AFTER STAPLING.
2. ROLL THE BLANKET DOWN THE SWALE IN THE DIRECTION OF THE WATER FLOW.
3. THE EDGES OF BLANKETS MUST BE STAPLED WITH APPROX. 4 INCH OVERLAP WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED.
4. WHEN BLANKETS MUST BE SPLICED DOWN THE SWALE, PLACE BLANKET END OVER END WITH 6 INCH (MIN.) OVERLAP AND ANCHOR DOWN SLOPE BLANKET IN A 6 INCH DEEP TRENCH.
5. BLANKET SHALL BE NORTH AMERICAN GREEN C125BN, EAST COAST EROSION CONTROL ECC-2B, AMERICAN EXCELSIOR COMPANY CURLEX III FIBRENET, ROLANKA GEONATURAL EROSION & SEDIMENT CONTROL MATTE JUTEMAT OR BIOD-OCF 30, OR APPROVED EQUAL.
6. THERE SHALL BE NO PLASTIC, OR MULTI-FILAMENT OR MONO-FILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8 INCHES MATERIAL UTILIZED.

BLANKET SLOPE PROTECTION

FOR EROSION CONTROL NOT TO SCALE

STATE OF NEW HAMPSHIRE – JASON HILL No. 15391 LICENSED PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

DETAILS SHEET

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH
OWNER: MAP 28 LOTS 9, 10
CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103
OWNER: MAP 28 LOT 10-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103
APPLICANT
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
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FILE	DR	JSH	
17562.06	CK	RED	CADFILE

17562-06 COVER-DETAILS

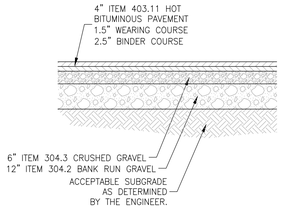
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DIG SAFE 811 – CALL BEFORE YOU DIG – CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION



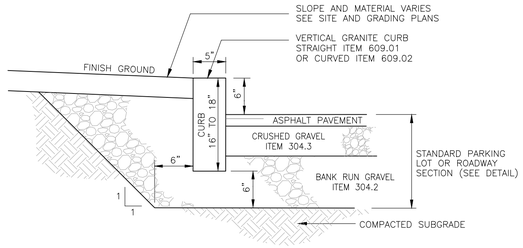
NOTES:

REMOVE ALL LOAM, CLAY, MUCK, STUMPS, AND OTHER IMPROPER PAVEMENT FOUNDATION MATERIAL WITHIN 2' OF SUBGRADE. REPLACE WITH COMPACTED GRANULAR FILL MATERIAL ACCEPTABLE TO APPROVING AGENCY. COMPACTION TO BE AT LEAST 95% OF STANDARD PROCTOR.

ALL PAVEMENT, BASE MATERIALS AND WORKMANSHIP TO BE IN COMPLIANCE WITH N.H.D.O.T. "STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION.

TYPICAL PAVEMENT SECTION

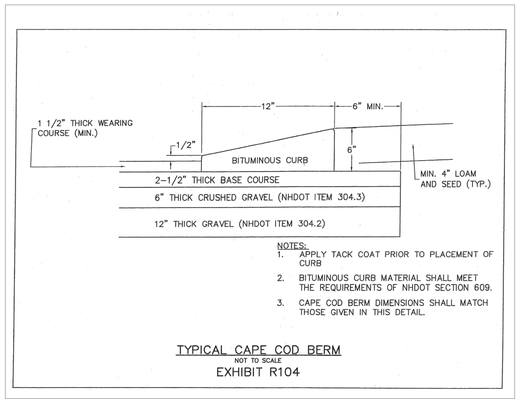
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NOTE: PROVIDE TRANSITIONS & RAMPS PER A.D.A.

VERTICAL GRANITE CURB

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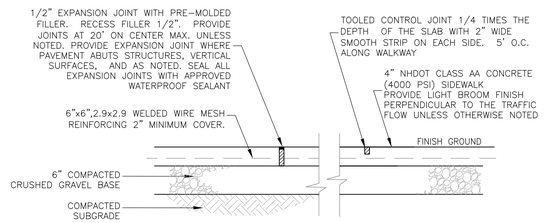
NOTES:

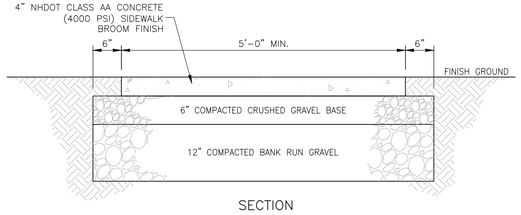
1. APPLY TACK COAT PRIOR TO PLACEMENT OF CURB
2. BITUMINOUS CURB MATERIAL SHALL MEET THE REQUIREMENTS OF NHDOT SECTION 609.
3. CAPE COD BERM DIMENSIONS SHALL MATCH THOSE GIVEN IN THIS DETAIL.

TYPICAL CAPE COD BERM

NOT TO SCALE

EXHIBIT R104

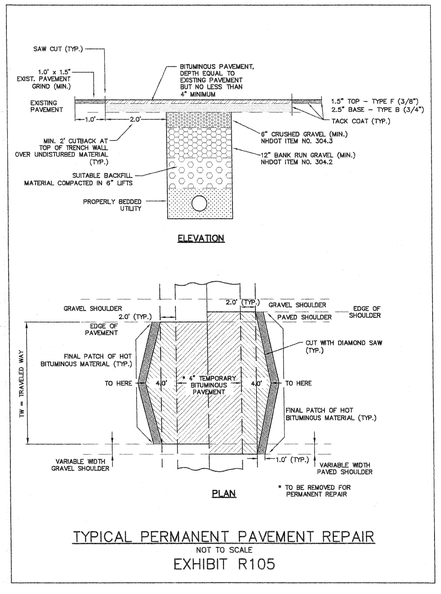




SECTION

CONCRETE SIDEWALK

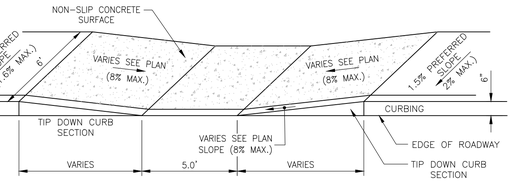
NOT TO SCALE



TYPICAL PERMANENT PAVEMENT REPAIR

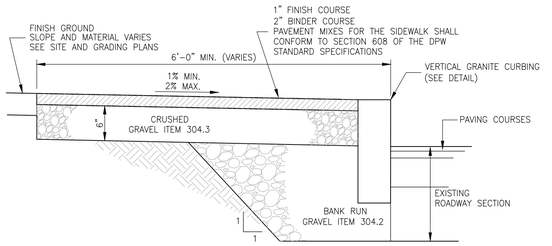
NOT TO SCALE

EXHIBIT R105



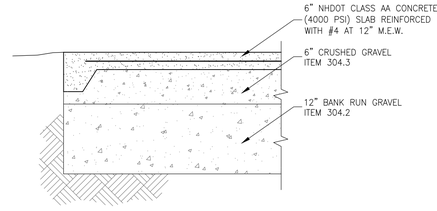
ACCESSIBLE RAMP RECESSED IN WALK

NOT TO SCALE



BITUMINOUS SIDEWALK

NOT TO SCALE



CONCRETE PAD

FOR EXTERIOR BUILDING PADS & DUMPSTER NOT TO SCALE

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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

DETAILS SHEET

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10
CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

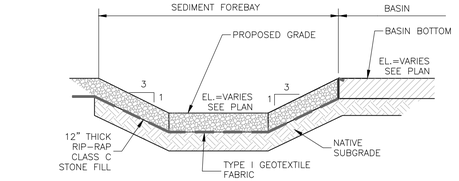
APPLICANT
BENTON FAMILY REALTY, LLC
NDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

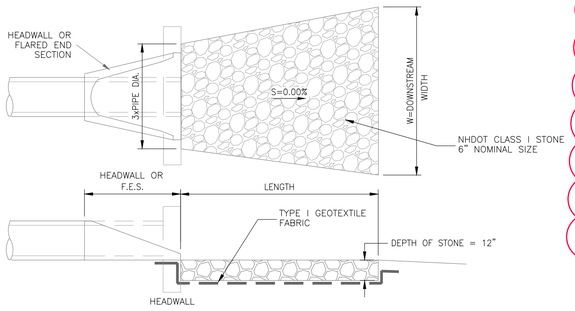
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Civil Engineers
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17562.06	JSH	RED		17562-06 COVER-DETAILS	C-15



SEDIMENT FOREBAY

NOT TO SCALE



OUTLET	Do (ft.)	Q25 (cfs)	Tw (ft.)	LENGTH (ft.)	WIDTH up (ft.)	WIDTH dn (ft.)	d50 (in.)*
HW-2	1.25	2.0	0.8	13.0	3.8	9.0	0.6
HW-1	1.00	1.6	0.7	11.8	3.0	7.7	0.7
							*Note:6"min.

Notes:

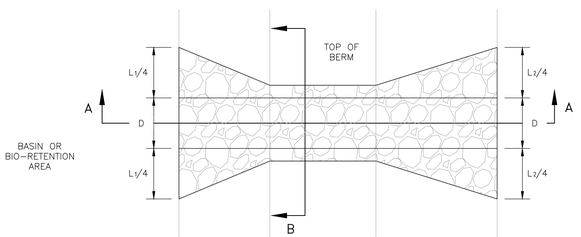
1 Use NHDOT Class C Stone

2 Depth of Stone to be 12" min. or 1.5 times d50 - which ever is larger

3 Design storm: 25-year storm

OUTLET APRON

NOT TO SCALE



RIPRAP EMERGENCY SPILLWAY

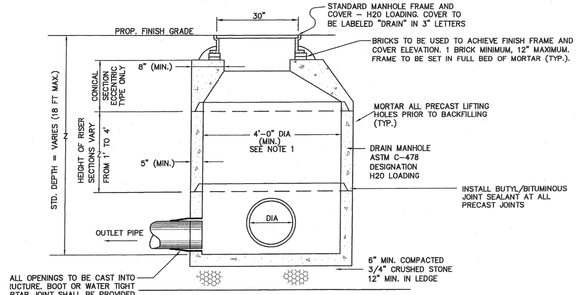
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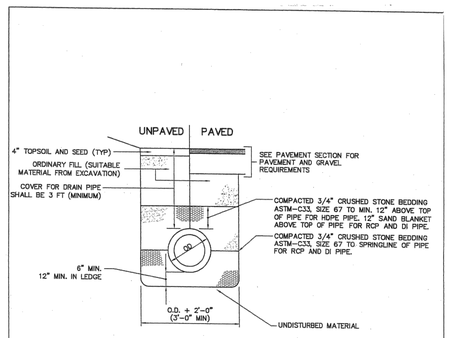
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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION



NOTES:

1. WHERE DEPTH EXCEEDS 12 FT, USE 5'-0" DIAMETER (MIN.)
2. MINIMUM PIPE DROP (INLET TO OUTLET) SHALL BE 3" UNLESS OTHERWISE APPROVED BY THE DEPARTMENT OF PUBLIC WORKS AND ENGINEERING.
3. ALL BOOTS, GASKETS AND SEALANTS SHALL BE IN ACCORDANCE WITH MANUFACTURES WRITTEN INSTRUCTIONS



NOTE:

DRAIN PIPE SHALL BE 15" DIAMETER MIN.

PLASTIC DRAIN PIPE (HDPE) SHALL BE ADS N-12 (CORRUGATED EXTERIOR/SMOOTH INTERIOR) OR EQUAL MEETING AASHTO M-252 AND H-20 LOADING.

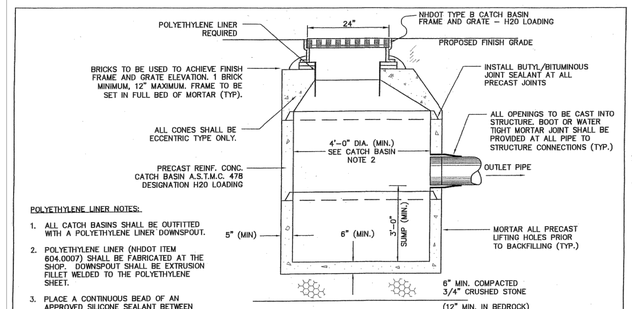
DI DRAIN PIPE SHALL BE CL. 50.

RC DRAIN PIPE SHALL BE CLASS III UNLESS OTHERWISE NOTED.

TYPICAL DRAIN PIPE TRENCH

NOT TO SCALE

EXHIBIT D101



POLYETHYLENE LINER NOTES:

1. ALL CATCH BASINS SHALL BE OUTFITTED WITH A POLYETHYLENE LINER DOWNSPOUT.
2. POLYETHYLENE LINER (NHDOT ITEM 604.0007) SHALL BE FABRICATED AT THE SHOP. DOWNSPOUT SHALL BE EXTRUSION FILLET WELDED TO THE POLYETHYLENE SHEET.
3. PLACE A CONTINUOUS BEAD OF AN APPROVED SILICONE SEALANT BETWEEN FRAME AND POLYETHYLENE SHEET.
4. PLACE CLASS AA CONCRETE TO 2" BELOW THE TOP OF GRATE ELEVATION (SUBSIDIARY TO DRAINAGE STRUCTURE).
5. TRIM POLYETHYLENE SHEET A MAXIMUM OF 4" OUTSIDE THE FLANGE ON THE FRAME FOR THE CATCH BASIN BEFORE PLACING CONCRETE (EXCEPT AS SHOWN WHEN USED WITH CURB).
6. THE CENTER OF THE GRATE & FRAME MAY BE SHIFTED A MAXIMUM OF 3" FROM THE CENTER OF THE DOWNSPOUT IN ANY DIRECTION.

CATCH BASIN NOTES:

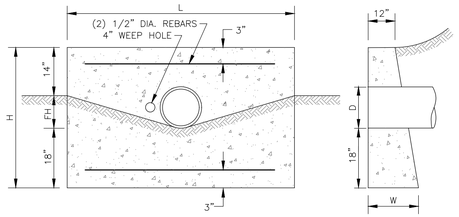
1. WHERE DEPTH EXCEEDS 12 FT, USE 5'-0" DIAMETER (MIN.) MAXIMUM DEPTH = 18 FEET
2. MINIMUM PIPE DROP (INLET TO OUTLET) SHALL BE 3" UNLESS OTHERWISE APPROVED BY THE DEPARTMENT OF PUBLIC WORKS AND ENGINEERING.
3. ALL BOOTS, GASKETS AND SEALANTS SHALL BE IN ACCORDANCE WITH MANUFACTURES WRITTEN INSTRUCTIONS

CATCH BASIN DETAIL

NOT TO SCALE

EXHIBIT D104

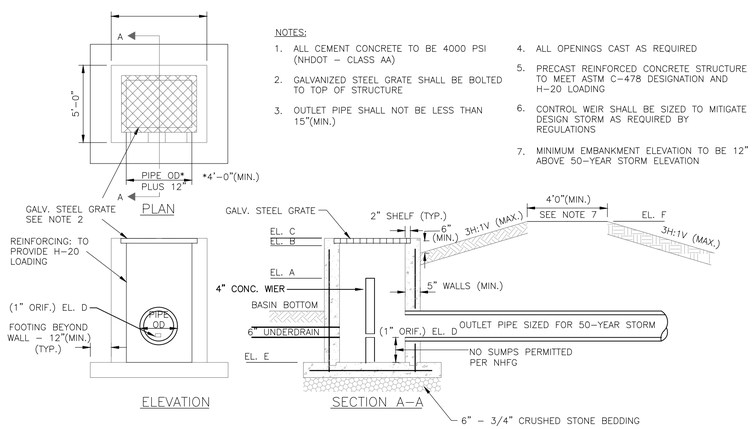
NOMINAL PIPE SIZE D	LENGTH OF BARS	L	H	FH	W
12	3'-2"	3'-6"	3'-6"	0'-10"	1'-10.5"
15	4-2	4-6	3-9	1-1	1-11.25
18	5-2	5-6	4-0	1-4	2-0
24	7-2	7-6	4-6	1-10	2-1.5
30	9-2	9-6	5-0	2-4	2-3
36	11-2	11-6	5-6	2-10	2-4.5
42	13-2	13-6	6-0	3-4	2-6
48	15-2	15-6	6-6	3-10	2-7.5



CONCRETE HEADWALL

SINGLE PIPE SYSTEM

NOT TO SCALE



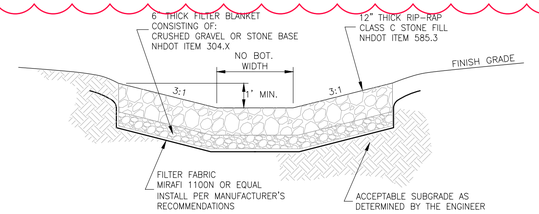
NOTES:

1. ALL CEMENT CONCRETE TO BE 4000 PSI (NHDOT – CLASS AA)
2. GALVANIZED STEEL GRATE SHALL BE BOLTED TO TOP OF STRUCTURE
3. OUTLET PIPE SHALL NOT BE LESS THAN 15"(MIN.)
4. ALL OPENINGS CAST AS REQUIRED
5. PRECAST REINFORCED CONCRETE STRUCTURE TO MEET ASTM C-478 DESIGNATION AND H-20 LOADING
6. CONTROL WEIR SHALL BE SIZED TO MITIGATE DESIGN STORM AS REQUIRED BY REGULATIONS
7. MINIMUM EMBANKMENT ELEVATION TO BE 12" ABOVE 50-YEAR STORM ELEVATION

LOCATION	ELEV A	ELEV B	ELEV C	ELEV D	ELEV E	ELEV F
OS1	160	161.5	161.5	155.15	155.05	162
OS2	172.3	173.3	173.3	168.45	168.35	173.5
OS3	176.5	177.5	177.5	170.9	170.8	178
OS4	-	-	177.5	171.15	171.05	178

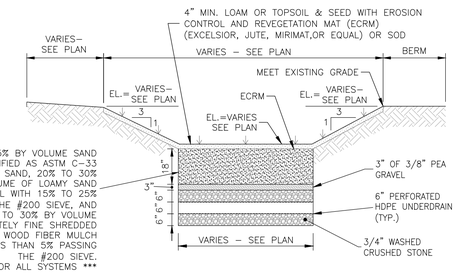
OUTLET STRUCTURE AT DETENTION BASIN

NOT TO SCALE



RIP RAP SWALE

NOT TO SCALE



NOTES

1. THE INSTALLER SHALL NOT ALLOW ANY VEHICULAR OR CONSTRUCTION EQUIPMENT TRAVEL TO OCCUR ACROSS THE PROPOSED RECHARGE BASIN AREA AT ANY TIME EXCEPT DURING EXCAVATION OF TOPSOIL, SUBSOIL AND OTHER MATERIALS
2. NOT SUITABLE FOR BED BOTTOM CONDITIONS.

CAUTION SHOULD BE EXERCISED DURING SITE PREPARATION TO AVOID COMPACTION OF THE INFILTRATIVE SURFACE.

TYPICAL INFILTRATION BASIN

NOT TO SCALE

STATE OF NEW HAMPSHIRE – JASON HILL No. 15391 LICENSED PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

DETAILS SHEET

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

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BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

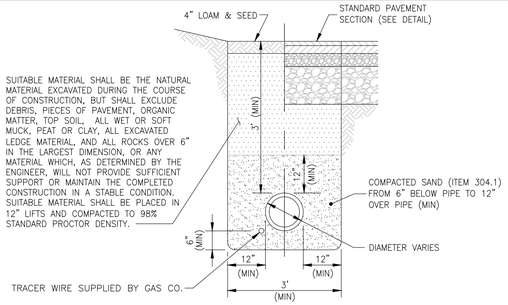
BENTON FAMILY REALTY, LLC
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NOVEMBER 18, 2025

REV	DATE	DESCRIPTION	DR	CK
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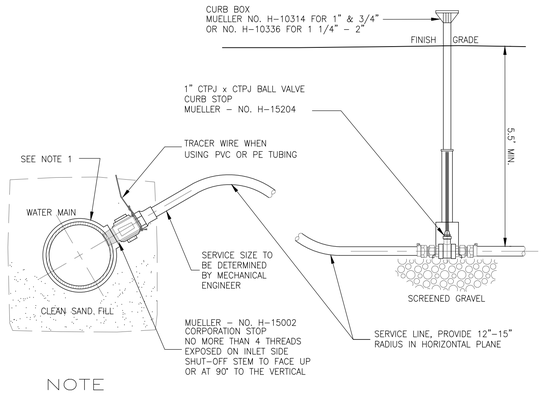
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Traffic Engineers
Land Surveyors
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48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
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FILE	DR	CK			
17562.06	JSH	RED	CADFILE	17562-06 COVER-DETAILS	C-16



GAS MAIN TRENCH

NOT TO SCALE

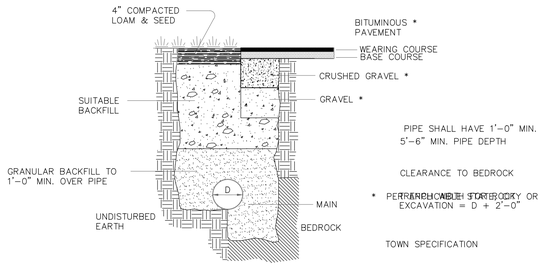


NOTE

1. IF WATERMAIN IS PVC OR TRANSITE, A DOUBLE STAINLESS STEEL STRAP TAPPING SADDLE MUST BE USED TO CONNECT THE CORPORATION TO THE WATERMAIN.

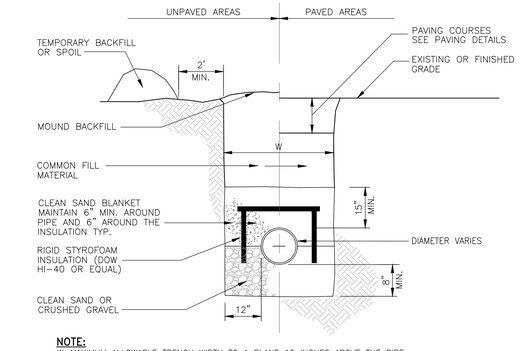
DOMESTIC SERVICE CONNECTION

NOT TO SCALE



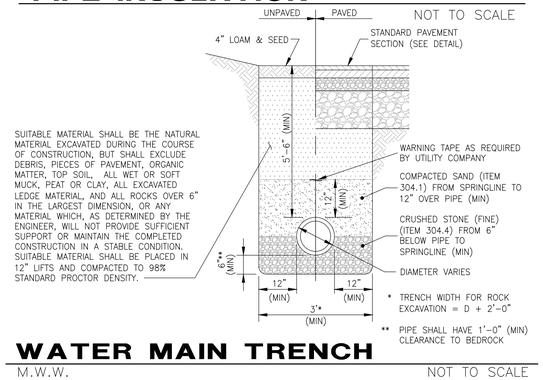
WATER SERVICE TRENCH

NOT TO SCALE



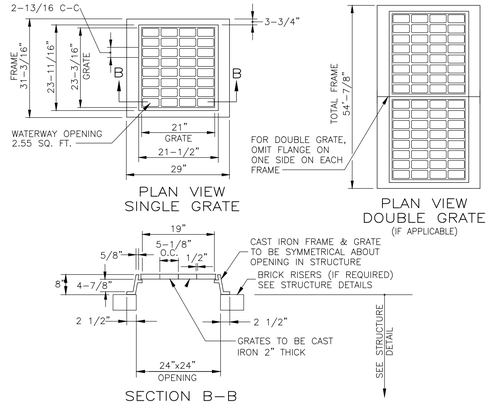
NOTE:
W=MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.

PIPE INSULATION



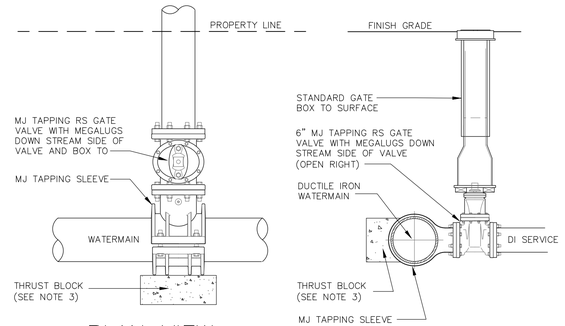
WATER MAIN TRENCH

M.W.W. NOT TO SCALE



FRAME AND GRATE

NHDOT TYPE B ALT 1 NOT TO SCALE



PLAN VIEW SECTION

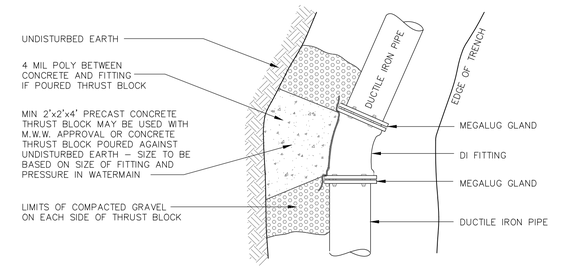
NOTE

1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO M.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. MIN 2'x2'x4' PRECAST CONCRETE THRUST BLOCK MAY BE USED WITH M.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATERMAIN.

WET TAP TEE INSTALLATION

NOT TO SCALE

TABLE OF DIMENSIONS										
PIPE SIZE	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		TEE & PLUG	
	WIDTH	HGT.	WIDTH	HGT.	WIDTH	HGT.	WIDTH	HGT.	WIDTH	HGT.
6"	33"	21"	18"	21"	12"	18"	9"	12"	21"	24"
8"	45"	27"	24"	27"	18"	21"	12"	15"	27"	33"
10"	60"	36"	36"	36"	24"	30"	18"	21"	36"	42"
12"	66"	39"	36"	42"	24"	30"	18"	21"	39"	45"
14"	72"	45"	42"	48"	27"	36"	18"	27"	45"	54"



NOTE

1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO M.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.

THRUST BLOCKING BEHIND FITTINGS INSTALLATION

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FILE	DR	JSH	CADFILE		
17562.06	CK	RED	17562-06 COVER-DETAILS	C-17	

GENERAL NOTES

1. IT IS THE INTENTION THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES SHALL BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE, CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
2. BARRELS, CONE SECTIONS AND CONCRETE GRADE RINGS SHALL BE PRECAST REINFORCED CONCRETE AND SHALL CONFORM ENV-WQ 704.12 & 704.13.
3. PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478-06.
4. BASE SECTIONS SHALL BE OF MONOLITHIC CONSTRUCTION TO A POINT AT LEAST 6 INCHES ABOVE THE CROWN OF THE INCOMING PIPE.
5. MANHOLE CONE SECTIONS SHALL BE ECCENTRIC IN SHAPE.
6. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL.
7. ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING.
8. SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS.
9. HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATERTIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT. APPROVED ELASTOMERIC SEALANTS ARE:

   SIKAFLEX-12-SL

   SONNEBORN BUILING PRODUCTS-SONOLASTIC SL-1
10. THE MINIMUM INTERNAL DIAMETER OF MANHOLES SHALL BE 48 INCHES. FOR SEWERS LARGER THAN 24-INCH DIAMETER. MANHOLE DIAMETERS SHALL BE INCREASED SO AS TO PROVIDE AT LEAST 12-INCHES OF SHELF ON EACH SIDE OF THE SEWER.
11. LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE TO ENV-WQ 704.17.
    (a) ALL MANHOLES SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST IN ACCORDANCE WITH THE ASTM C1244 STARNDARD IN EFFECT WHEN THE TESTING IS PERFORMED.
    (b) THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING:
        1. THE INITIAL VACUUM GUAGE TEST PRESSURE SHALL BE 10 INCHES Hg.
        2. THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR 1-INCH Hg PRESSURE DROP TO 9 INCHES SHALL BE:
           A. NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP.
           B. NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP.
           C. NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP.
    (c) THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (b) ABOVE.
    (d) INVERTS AND SHELVES SHALL NOT BE INSTALLED UNTIL AFTER SUCCESSFUL TESTING IS COMPLETE.
    (e) FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN OR ANIMALS, UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENT TO GRADE.
12. BRICK MASONRY FOR SHELF, INVERT AND GRADE ADJUSTMENT SHALL COMPLY WITH ASTM C32-05, CLAY OR SHALE, FOR GRADE SS HARD BRICK.
13. MORTAR SHALL BE COMPOSED OF PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE:
    (a) 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR
    (b) 4.5 PARTS SAND, 1 PART CEMENT AND 0.5 PART HYDRATED LIME

    CEMENT SHALL BE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150-05. HYDRATED LIME SHALL BE TYPE S CONFORMING TO ASTM C207-06 "STANDARD SPECIFICATIONS FOR HYDRATED LIME FOR MASONRY PURPOSES". SAND SHALL CONSIST OF INERT NATURAL SAND CONFORMING TO ASTM C33-03 "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES".
14. INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED OR PRECAST CONCRETE SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF THE PIPE AND FLOW. AT CHANGES IN DIRECTIONS, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.
15. FRAMES AND COVERS: MANHOLES FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN, CLASS 30, CONFORMING TO ASTM A48/48M AND PROVIDE A 30-INCH CLEAR OPENING. 3-INCH WORD (MINIMUM HEIGHT) LETTERS "SEWER" SHALL BE PLAINLY CAST INTO THE TOP SURFACE. THE CASTING SHALL BE OF EVEN GRAINED CAST IRON, SMOOTH, AND FREE FROM SCALE, LUMPS, BLISTERS, SAND HOLES AND DEFECTS. CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION.
16. BEDDING: PRECAST BASES SHALL BE PLACED ON A 6-INCH LAYER OF COMPACTED BEDDING MATERIAL THAT CONFORMS TO ASTM C33-03 NO. 67 STONE AND FREE FROM CLAY, LOAM AND ORGANNIC MATTER. THE EXCAVATION SHALL BE PROPERLY DEWATERED WHILE PLACING BEDDING MATERIAL AND SETTING OF THE BASE OR POURING CONCRETE. WATER-STOPS SHALL BE USED AT THE HORIZONTAL JOINT OF THE CAST-IN-PLACE MANHOLES.

100% PASSING	1" SCREEN
90-100% PASSING	3/4" SCREEN
20-55% PASSING	3/8" SCREEN
0-10% PASSING	#4 SIEVE
0-5% PASSING	#8 SIEVE

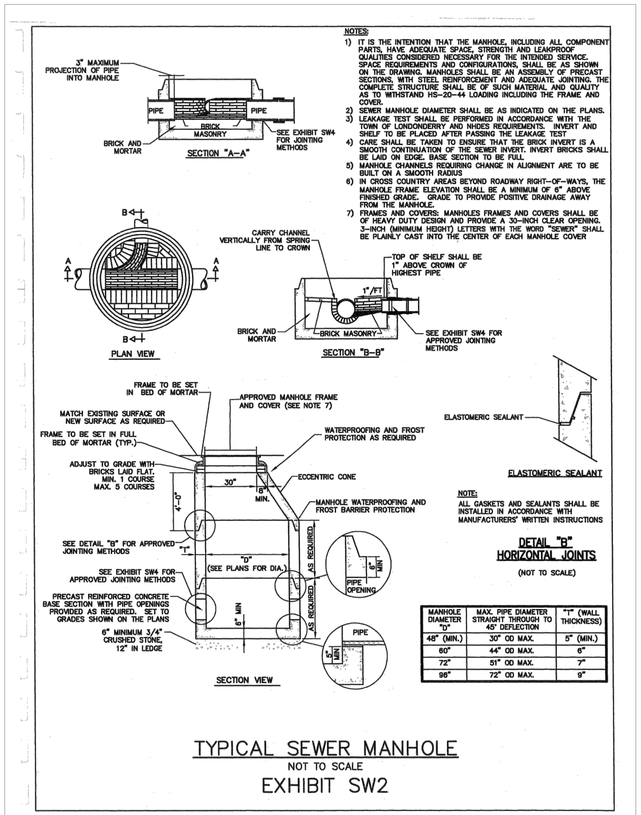
17. FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDED WIbHIN THE FOLLOWING DISTANCES FROM ANY MANHOLE CONNECTION: (a) WITHIN 48 INCHES FOR REINFORCED CONCRETE PIPE (RCP). (b) WITHIN 60 INCHES FOR PVC PIPE LARGER THAN 15" DIAMETER.
18. NO FLEXIBLE JOINT SHALL BE REQUIRED FOR DUCTILE IRON PIPE OR PVC PIPE UP THROUGH 15-INCH DIAMETER.
19. PIPE TO MANHOLE JOINTS SHALL BE ONLY AS FOLLOWS:
    A. ELASTOMERIC, RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES.
    B. CAST INTO WALL OR SECUREED WITH STAINLESS STEEL CLAMPS.
    C. ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH THE SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING.
    D. NON-SHRINK GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.
20. THE INVERT OF THE INCOMING PIPE SHALL BE NO MORE THAN 6 INCHES ABOVE THE OUTGOING PIPE UNLESS A DROP ENTRY IS USED.

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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

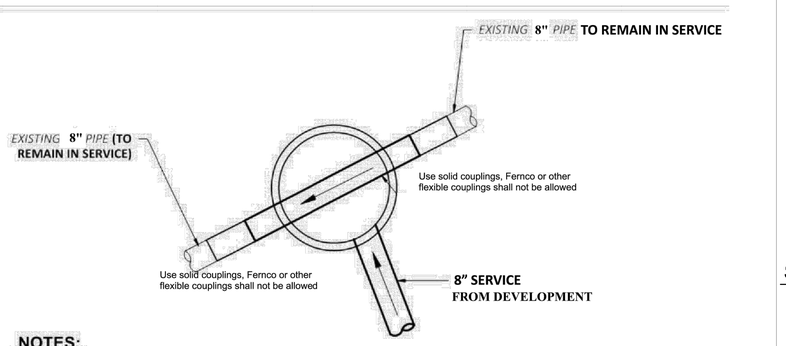


MANHOLE DIAMETER "D"	MAX. PIPE DIAMETER STRAIGHT THROUGH TO 45° DEFLECTION	"T" (WALL THICKNESS)
48" (MIN.)	30" OD MAX.	5" (MIN.)
60"	44" OD MAX.	6"
72"	51" OD MAX.	7"
98"	72" OD MAX.	9"

TYPICAL SEWER MANHOLE

NOT TO SCALE

EXHIBIT SW2

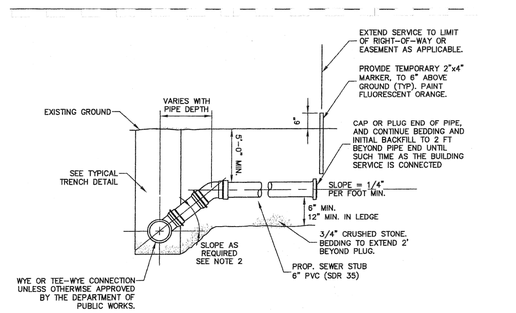


NOTES:

1. CONTRACTOR SHALL EXCAVATE TEST PIT AT LOCATION OF NEW MANHOLE TO DETERMINE EXACT LOCATION, ELEVATION AND SLOPE OF EXISTING 8" SEWER PRIOR TO BEGINNING CONSTRUCTION.
2. THE EXISTING PIPE SHALL BE TEMPORARILY PLUGGED PRIOR TO CUT IN MANHOLE WORK.
3. THE CONTRACTOR SHALL PROVIDE BY-PASS PUMPING DURING MANHOLE WORK AS NEEDED.
4. UPON COMPLETION, TESTING, AND ACCEPTANCE OF ALL NEW GRAVITY SEWER, THE CONTRACTOR SHALL, CONSTRUCT THE NEW INVERT, AND REDIRECT FLOW INTO THE NEW SEWER.

CUT IN SMH

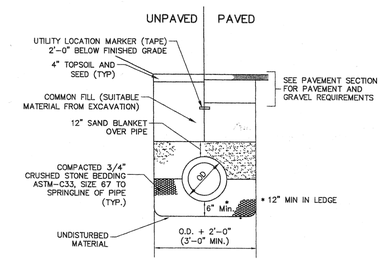
SCALE: NTS



NOTES:
1. ALL SERVICE CONNECTIONS TO BE 6" MINIMUM UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
2. USE CHIMNEY DETAIL WHERE SERVICE CONNECTION ENTERS SEWER AT GREATER THAN 60° TO THE HORIZONTAL.

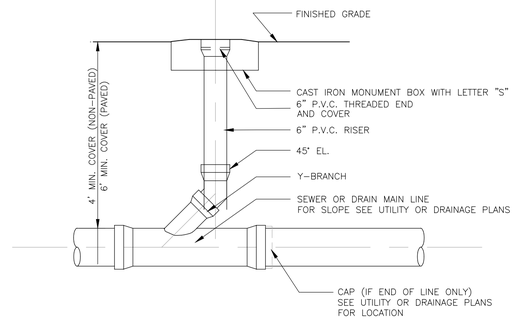
SEWER SERVICE CONNECTION

NOT TO SCALE



TYPICAL SEWER PIPE TRENCH

NOT TO SCALE



SEWER CLEAN OUT

NOT TO SCALE

GENERAL NOTES

1) MINIMUM SIZE PIPE FOR SEWER SERVICE SHALL BE SIX (6) INCHES.
2) PIPE AND JOINT MATERIALS:
   A. PLASTIC SEWER PIPE
      1. PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

ASTM STANDARDS	GENERIC PIPE MATERIAL	SIZES APPROVED
D3034	*PVC (SOLID WALL)	8" THROUGH 15" (SDR 35)
F679	PVC (SOLID WALL)	18" THROUGH 27" (T-1 & T-2)
F789	PVC (SOLID WALL)	4" THROUGH 18" (T-1 TO T-3)
F794	PVC (RIBBED WALL)	8" THROUGH 36"
D2680	*ABS (COMPOSITES WALL)	8" THROUGH 15"

      *PVC: POLY VINYL CHLORIDE
      *ABS: ACRYLONITRILE-BUTADIENE-STYRENE

      2. JOINTS SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D-3212 AND SHALL BE PUSH-ON, BELL AND SPIGOT TYPE.

         ABS TRUSS PIPE AND FITTINGS SHALL CONFORM TO ASTM D-2680, POLYMER COMPOUNDING SHALL BE TO ASTM D-1788 (CLASS 322).

         JOINTS FOR ABS TRUSS PIPE SHALL BE CHEMICAL WELDED COUPLINGS TYPE SC IN ACCORDANCE WITH ASTM D-2680, FORMING A CHEMICAL WELDED JOINT.
3) DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.
4) JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER-TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.
5) SEWER SERVICE INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 6 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL AS SPECIFIED IN NOTE 10. BEDDING AND RE-FILL FOR DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH APPROPRIATE MECHANICAL DEVICES.

   THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE FOUNDATION AT A GRADE OF NOT LESS THAN 1/4" INCH PER FOOT. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.
6) TESTING: THE COMPLETED SEWER SERVICE SHALL BE SUBJECTED TO A LEAKAGE TEST IN ANY OF THE FOLLOWING MANNERS: (PRIOR TO BACKFILLING)
   A. AN OBSERVATION TEE SHALL BE INSTALLED AS SHOWN AND WHEN READY FOR TESTING, AN INFLATABLE BLADDER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE TEE. AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE PLUG TO A HEIGHT OF 5 FEET ABOVE THE LEVEL OF THE PLUG.

   LEAKAGE OBSERVED DURING TESTING SHALL BE IN ANY ONE OF THE ABOVE ALTERNATE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG-UP IF NECESSARY AND RE-LAID SO AS TO ASSURE WATER TIGHTNESS.
7) ILLEGAL CONNECTIONS: NOTHING BUT SANITARY WASTE FLOW FROM TOILETS, SINKS, LAUNDRY ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS, SUMP PUMPS OR OTHER SIMILAR CONNECTIONS CARRYING RAIN WATER, DRAINAGE OR GROUND WATER SHALL NOT BE PERMITTED.
8) WATER SERVICE SHALL NOT BE LAID IN SAME TRENCH AS SEWER SERVICE.
9) BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C33-67.

100% PASSING	1 INCH SCREEN
90%-100% PASSING	3/4 INCH SCREEN
20%-55% PASSING	3/8 INCH SCREEN
0%-10% PASSING	#4 SIEVE
0%-5% PASSING	#8 SIEVE

   WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH TO 1 1/2 INCH SHALL BE USED.
10) LOCATION: THE LOCATION OF THE TEE OR WYE SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS METAL ROD OR PIPE SHALL BE PLACED OVER THE TEE OR WYE AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL, TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPEFINDER.
11) CHIMNEYS: IF VERTICAL DROP INTO SEWER IS GREATER THAN 4 FEET, A CHIMNEY SHALL BE CONSTRUCTED FOR THE SEWER CONNECTION. CHIMNEY INSTALLATION AS RECOMMENDED BY THE PIPE MANUFACTURER MAY BE USED IF APPROVED BY THE ENGINEER.

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

DETAILS SHEET

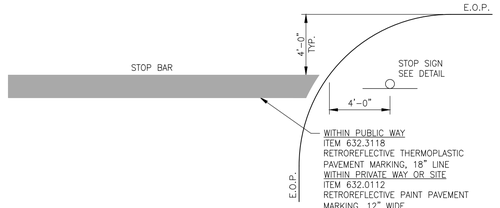
EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH
OWNER: MAP 28 LOTS 9, 10
CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103
OWNER: MAP 28 LOT 10-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103
APPLICANT
BENTON FAMILY REALTY, LLC
HDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

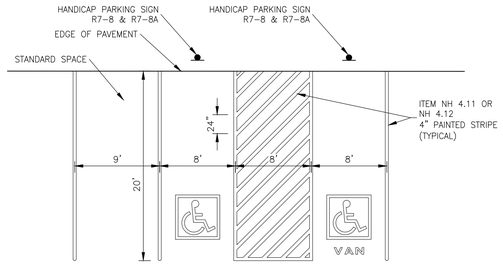
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Civil Engineers
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Phone (603) 472-4488
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FILE	DR	CK	CADFILE	
17562.06	JSH	RED	17562-06 COVER-DETAILS	C-18



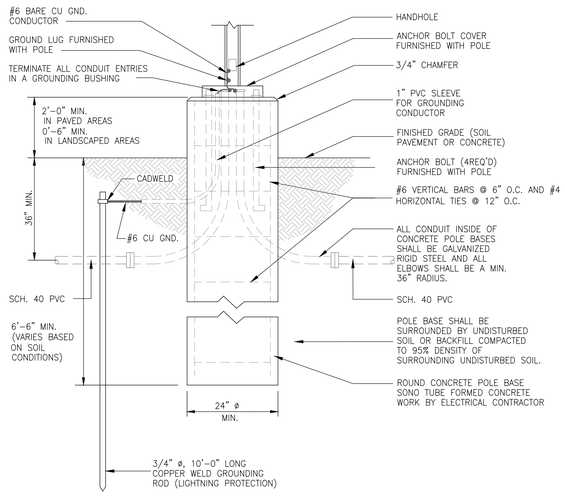
STOP BAR

NOT TO SCALE



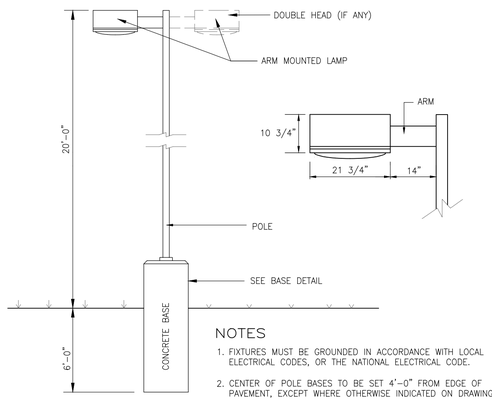
PARKING STRIPING DETAIL

NOT TO SCALE



LIGHT POLE BASE

NOT TO SCALE

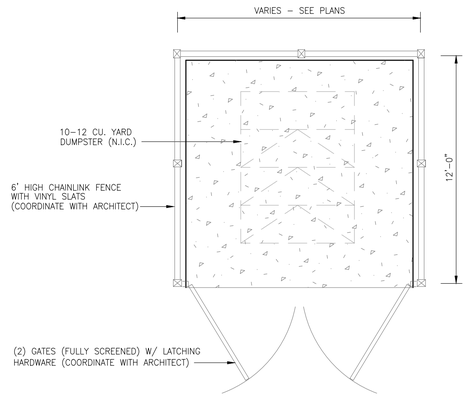


NOTES

1. FIXTURES MUST BE GROUNDED IN ACCORDANCE WITH LOCAL ELECTRICAL CODES, OR THE NATIONAL ELECTRICAL CODE.
2. CENTER OF POLE BASES TO BE SET 4'-0" FROM EDGE OF PAVEMENT, EXCEPT WHERE OTHERWISE INDICATED ON DRAWING.
3. LIGHTING SHOWN HERE IS AREA LIGHTING, SUPPLEMENTAL BUILDING-MOUNTED FIXTURES AT DOORWAYS, ETC. MAY BE REQUIRED.
4. SEE LIGHTING PLAN FOR FIXTURE SCHEDULE.

LIGHT POLE

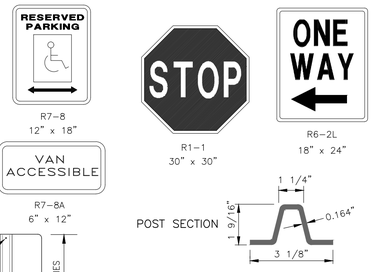
NOT TO SCALE



DUMPSTER ENCLOSURE - VINYL

SEE PLANS FOR LAYOUT

NOT TO SCALE



LENGTH: P-12, 12'-0"; P-14, 14'-0"; P-16, 16'-0".

WEIGHT PER LINEAR FOOT: 2.50 LBS. (MIN.)

HOLES: 3/8" DIA. 1' C-C FULL LENGTH

STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576 (GRADE 1070-1080).

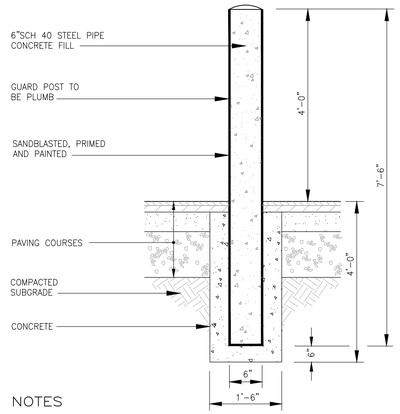
FINISH: SHALL BE PAINTED WITH TWO COATS OF AN APPROVED MEDIUM GREEN, BAKED ON OR AIR DRIED, PAINT OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

NOTES

1. POSTS SHALL BE PLUMB; ANY POST BENT OR OTHERWISE DAMAGED SHALL BE REMOVED AND PROPERLY REPLACED. POSTS MAY BE SET OR DRIVEN.
2. WHEN POSTS ARE SET, HOLES SHALL BE DUG TO THE PROPER DEPTH, AFTER INSERTING POSTS, THE HOLES SHALL BE BACKFILLED WITH SUITABLE MATERIAL IN LAYERS NO TO EXCEED 6" DEEP THOROUGHLY COMPACTED, CARE BEING TAKEN TO PRESERVE THE ALIGNMENT OF THE POST.
3. WHEN POSTS ARE DRIVEN, A SUITABLE DRIVING CAP SHALL BE USED AND AFTER DRIVING THE TOP OF THE POST SHALL HAVE SUBSTANTIALLY THE SAME CROSS-SECTIONAL DIMENSION AS THE BODY OF THE POST; BATTERED HEADS WILL NOT BE ACCEPTED.
4. POSTS SHALL NOT BE DRIVEN WITH THE SIGN ATTACHED TO THE POST.
5. SIGNS SHALL BE ERECTED IN CONFORMANCE WITH THE REQUIEMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
6. WHEN SIGN IS IN PLACE NO PART OF POST SHALL EXTEND ABOVE THE SIGN.
7. DIMENSIONS SHOWN ARE NOMINAL.
8. ALTERNATE SECTIONS MUST BE APPROVED PRIOR TO USE.

TRAFFIC SIGN POST IN GRADE

NOT TO SCALE

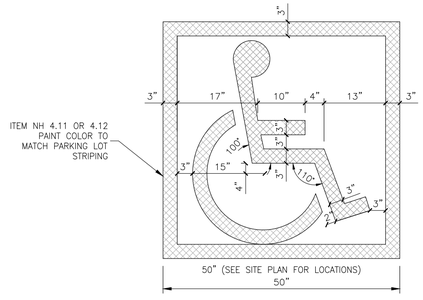


NOTES

1. BOLLARD TO CONFORM TO NHDOT SPECIFICATIONS
2. INSTALL POYLY COVER TO BOLLARDS ALONG BUILDING (GRAY POLYETHELENE COVER FROM IDEAL SHIELD 313-842-7290)

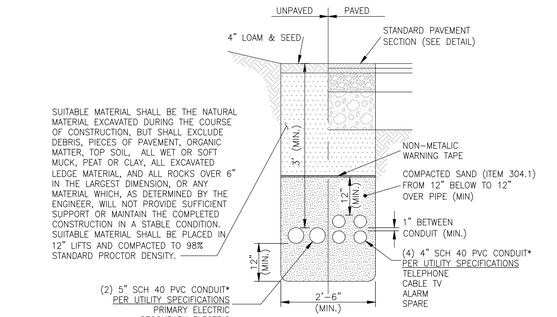
BOLLARD

NOT TO SCALE



PAINTED HANDICAP SYMBOL

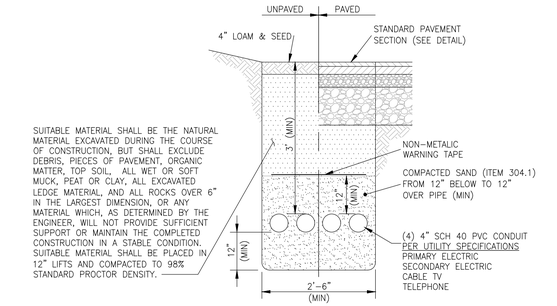
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*CONTRACTOR TO VERIFY CONDUIT SIZE, NUMBER AND MATERIAL WITH INDIVIDUAL UTILITY PROVIDERS PRIOR TO CONSTRUCTION.

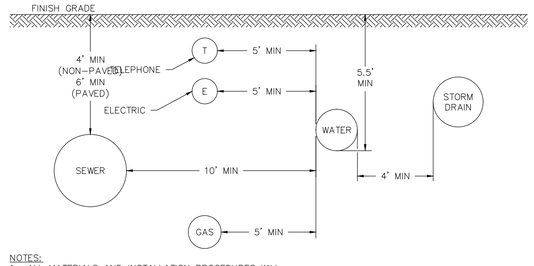
UTILITY TRENCH

NOT TO SCALE



UTILITY TRENCH

NOT TO SCALE



NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO TOWN OF LONDONDERRY AND M.W.W. TECHNICAL SPECIFICATIONS.
2. ALL WATER MAIN SHOULD HAVE A MINIMUM DEPTH OF 5.5' FROM INVERT (BOTTOM) OF PIPE TO FINISH GRADE.

TYPICAL UTILITY SEPARATION

NOT TO SCALE

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DIG SAFE
811 OR 1-888-DIG-SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

DETAILS SHEET

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4

BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

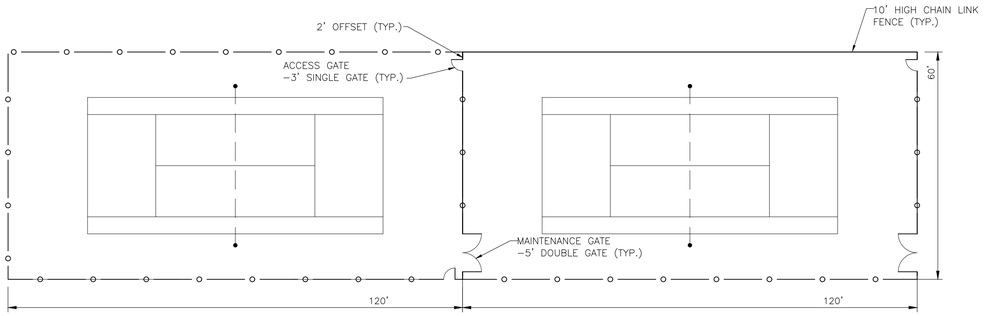
BENTON FAMILY REALTY, LLC
HIGHLANDER WAY, MANCHESTER, NH 03103

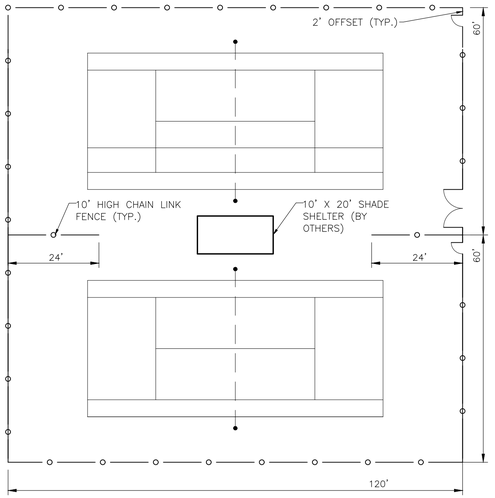
NOVEMBER 18, 2025

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

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Bedford, NH 03110
Phone (603) 472-4488
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FILE	DR	CK	CADFILE		
17562.06	JSH	RED	17562-06 COVER-DETAILS		C-19

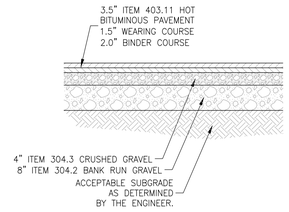




FENCE LAYOUT

SCHEMATIC REPRESENTATION

1' = 20'



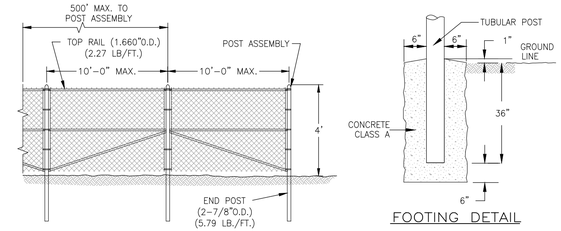
NOTES:

REMOVE ALL LOAM, CLAY, MUCK, STUMPS, AND OTHER IMPROPER PAVEMENT FOUNDATION MATERIAL WITHIN 2' OF SUBGRADE. REPLACE WITH COMPACTED GRANULAR FILL MATERIAL ACCEPTABLE TO APPROVING AGENCY. COMPACTION TO BE AT LEAST 95% OF STANDARD PROCTOR.

ALL PAVEMENT, BASE MATERIALS AND WORKMANSHIP TO BE IN COMPLIANCE WITH N.H.D.O.T. "STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION.

TYPICAL RACQUET COURT SECTION

NOT TO SCALE



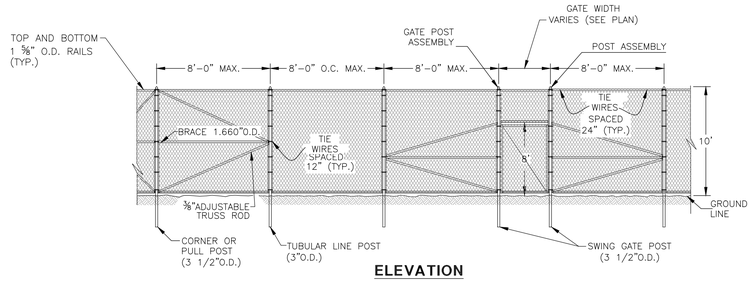
ELEVATION

FOOTING DETAIL

ALL END POSTS SHALL HAVE ONE BRACE.
ALL CORNER AND INTERMEDIATE BRACE OR PULL POSTS SHALL HAVE TWO BRACES, WITH A MAXIMUM SPACING OF BETWEEN POST ASSEMBLIES OF 500 FEET.

CHAIN LINK FENCE

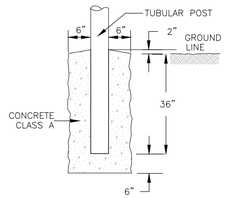
NOT TO SCALE



ELEVATION

NOTES:

1. PROVIDE 9' OPEN MESH VINYL COATED WINDSCREEN – DARK GREEN. (INSTALL PER MANUFACTUR'S RECOMMENDATIONS.)
2. ALL POST, RAILS, TIES AND FABRIC TO BE GALVANIZED GREEN VINYL-COATED.
3. FABRIC SHALL BE 11 GAUGE, 1¾" DIAMOND PATTERN OR 9 GAUGE, 2" DIAMOND PATTERN WITH KNUCKLED SELVAGE TOP AND BOTTOM.
4. FENCE FRAME WORK TO BE HIGH STRENGTH STEEL PIPE.
5. INSTALL FABRIC ON COURT SIDE OF POSTS.



FOOTING DETAIL

10' CHAIN LINK FENCE DETAIL

NOT TO SCALE

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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

DETAILS SHEET

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4

BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

BENTON FAMILY REALTY, LLC
NDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	CK	CADFILE		
17562.06	JSH	RED		17562-06 COVER-DETAILS	C-20

NEW HAMPSHIRE
STATE ENDANGERED

BLANDING'S TURTLE

Report Sightings: Contact Wildlife Biologist Josh Megyesy at (603) 271 – 1125 or the Wildlife Division at (603) 271 – 2461. Observation reports can be sent to RAARP@wildlife.nh.gov. Photographs and exact locations are strongly encouraged.



Specific Information:
- Adults are 7 – 9 inches long.
- Shell is highly domed with light speckles.
- Distinct yellow throat and chin.
- Uses variety of wetlands and moves extensively over land.
- Turtles are frequently concealed by leaves and undergrowth and may not be easily visible.
- Turtles are most active from April 15 – October 15.
- During nesting season (May 15 – July 15) turtles are attracted to disturbed ground.





This species is protected under RSA 212-A and Fis 1000. Thank you for reporting any observations.

PLEASE DO NOT DISTURB OR HANDLE WILDLIFE

NEW HAMPSHIRE
STATE THREATENED

EASTERN MEADOWLARK

Report Sightings: For environmental review projects, contact the Wildlife Division at (603) 271 – 2461 or as otherwise noted in permit documents. For non-urgent reports, submit observations to Ebird.org. Photographs and exact locations are strongly encouraged.



Species Information:
- 9 – 10 inches long with 14 – 16 inch wingspan, similar size as American Robin.
- Mottled brown back with a bright yellow throat and breast.
- Black "V" on chest, white outer tail feathers.
- Found in large grasslands, such as hayfields and airports.
- Most nesting is in the Connecticut and Merrimack valleys and near seacoast.
- Nesting between May and August.
- 2 – 7 eggs per nest, white with brown spots.
- May nest more than once in a season.
- Nests are built on ground with grass "roof" and are not always visible (see image).





This species is protected under RSA 209:8, RSA 209:10, and Fis 1000.

DO NOT DISTURB OR HANDLE WILDLIFE UNLESS AUTHORIZED BY NH FISH AND GAME

9/2/25

NEW HAMPSHIRE
STATE THREATENED

GRASSHOPPER SPARROW

Report Sightings: For environmental review projects, contact the Wildlife Division at (603) 271 – 2461 or as otherwise noted in permit documents. For non-urgent reports, submit observations to Ebird.org. Photographs and exact locations are strongly encouraged.



Species Information:
- Small 4 – 5 inches long, 8-inch wingspan.
- Flat head, deep bill, and orange-yellow spot in front of eye.
- Unstreaked, buffy belly and rusty spotting or streaking on back.
- Song is a short insect-like buzz followed by several short, fainter notes.
- Found in dry and sparse grasslands generally over 30 acres.
- Located primarily along the Merrimack Valley and Seacoast.
- Breeding May – August with 4 – 5 speckled eggs in a compact cup nest found on grass.





This species is protected under RSA 209:8, RSA 209:10, and Fis 1000.

DO NOT DISTURB OR HANDLE WILDLIFE UNLESS AUTHORIZED BY NH FISH AND GAME

9/5/25

EASTERN HOGNOSE SNAKE

(New Hampshire state endangered species)

*Egg laying occurs **June 1 - July 15th**.*
*Young emerge in **August - September**.*



Identifying traits
- Black, gray or patterned appearance
- Upturned snout
- Adults are 2-3 ft. long
- May spread neck out or hiss
- May play dead if they feel threatened.
- Rarely bite – display is a defense strategy

Habitat Use
- Can be found in a variety of habitats throughout the season





Immediately report sightings to NH Fish & Game

Melissa Winters (603-479-1129) or
Brendan Clifford (603-944-0885)
Please report promptly, noting specific location and date.
Photographs strongly encouraged.

State Laws Pertaining to this Species

RSA 212-A:7, FIS 804.05, Fis 1401.03 (a)

NEW HAMPSHIRE
STATE ENDANGERED

NEW ENGLAND COTTONTAIL

Report Sightings: For environmental review project, contact Wildlife Biologist Heidi Holman at (603) 616 – 3324, heidi.l.holman@wildlife.nh.gov, or the Wildlife Division at (603) 271 – 2461. Otherwise, observations can be sent to nhrabbitreports.org. Photographs and locations are strongly encouraged.



Specific Information:
- Adults are 15 – 17 inches in length.
- Brown and gray coat that does not change color with seasons.
- Black spot between the eyes is sometimes visible.
- Often mistaken for Eastern Cottontails.
- Found in shrublands and young-growth or early-successional forests.
- Mating begins in March, with nests present throughout the summer.
- Young are weaned around 28 days and continue growing throughout their first winter.
- Do not hibernate and use habitat all year.





This species is protected under RSA 212-A and Fis 1000. Thank you for reporting any observations.

PLEASE DO NOT DISTURB OR HANDLE WILDLIFE

Northern Black Racer

(New Hampshire state-threatened species)

NHFG Wildlife Biologist Contacts:
Melissa Winters 603-479-1129 and Brendan Clifford 603-944-0885

- **Emerge from hibernacula in April, Basking April - August**
- **Hatchlings emerge August - September, Return to hibernacula mid-September - mid-October**
- **Found in a variety of habitats but prefer early successional and sandy (sand pit) sites.**





- Solid black with a white thrat and chin
- Slender with glossy scales, 3-6 ft. long
- Hatchlings are very small and patterned





Northern black racers are protected by state laws. It is illegal to capture, harass or harm these species, including their nests. Handle ONLY if necessary to move out of harms way. Move to the nearest location in the direction they were moving and contact NHFG. Do not disturb nests. Fis 1401.03 (a) No person shall take or possess a black racer (Coluber constrictor)...or any egg or part thereof.

Report sightings in accordance with NHFG permit conditions. Contact NHFG Wildlife Biologist Melissa Winters 603-479-1129 (cell) and Brendan Clifford 603-944-0885 (group text preferred) if a turtle is observed nesting or a nest site is suspected within the project area. Please report promptly, noting specific location, project site and date – Photographs strongly encouraged to be included with report.

NEW HAMPSHIRE
STATE THREATENED

SPOTTED TURTLE

Report Sightings: Contact Wildlife Biologist Josh Megyesy at (603) 271 – 1125 or the Wildlife Division at (603) 271 – 2461. Observation reports can be sent to RAARP@wildlife.nh.gov. Photographs and exact locations are strongly encouraged.



Specific Information:
- Adults are 3 – 5 inches long
- Shell is black or brown, fairly flat, and with yellow spots.
- Uses variety of wetlands and moves extensively over land.
- Turtles are frequently concealed by leaves and undergrowth and may not be easily visible.
- Turtles are most active from April 15 – October 15.
- During nesting season (May 15 – July 15) turtles are attracted to disturbed ground.





This species is protected under RSA 212-A and Fis 1000. Thank you for reporting any observations.

PLEASE DO NOT DISTURB OR HANDLE WILDLIFE

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

DETAILS SHEET

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

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APPLICANT
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NOVEMBER 18, 2025

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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

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FILE	DR	CK	CADFILE		
17562.06	JSH	RED		17562-06 COVER-DETAILS	C-21

LANDSCAPE NOTES

(SEE DETAILS FOR ADDITIONAL NOTES)

SITE AND SOIL PREPARATION

1. WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OR LEDGE, NOTIFY LANDSCAPE ARCHITECT/ENGINEER BEFORE PLANTING.
2. ALL DISTURBED AREAS & PLANTING AREAS, INCLUDING AREAS TO BE SODDED, SHALL RECEIVE THE FOLLOWING SOIL PREPARATION PRIOR TO PLANTING: A MINIMUM OF 6 INCHES OF LIGHTLY COMPACTED TOPSOIL SHALL BE INSTALLED OVER THE SUBSOIL IF TOPSOIL HAS BEEN REMOVED OR IS NOT PRESENT.
3. LOAM SHALL CONSIST OF LOOSE FRIABLE TOPSOIL WITH NO ADMIXTURE OF REFUSE OR MATERIAL TOXIC TO PLANT GROWTH. LOAM SHALL BE FREE FROM STONES, LUMPS, STUMPS, OR SIMILAR OBJECTS LARGER THAN TWO INCHES (2") IN GREATEST DIAMETER, SUBSOIL, ROOTS, AND WEEDS. THE MINIMUM AND MAXIMUM PH VALUE SHALL BE FROM 5.5 TO 7.0. LOAM SHALL CONTAIN A MINIMUM OF TWO PERCENT (2%) AND A MAXIMUM OF FIVE PERCENT (5%) ORGANIC MATTER AS DETERMINED BY LOSS BY IGNITION. SOIL TEXTURE SHALL BE SANDY CLAY LOAM OR SANDY LOAM WITH CLAY CONTENT BETWEEN 15 AND 25%, AND A COMBINED CLAY/SILT CONTENT OF NO MORE THAN 55%. NOT MORE THAN SIXTY-FIVE PERCENT (65%) SHALL PASS A NO. 200 SIEVE AS DETERMINED BY THE WASH TEST IN ACCORDANCE WITH ASTM D1140. IN NO INSTANCE SHALL MORE THAN 20% OF THAT MATERIAL PASSING THE #4 SIEVE CONSIST OF CLAY SIZE PARTICLES.
4. NATURAL TOPSOIL NOT CONFORMING TO THE PARAGRAPH ABOVE OR CONTAINING EXCESSIVE AMOUNTS OF CLAY OR SAND SHALL BE TREATED BY THE CONTRACTOR TO MEET THOSE REQUIREMENTS.
5. SUBMIT TEST RESULTS OBTAINED FROM SOURCE TO ENGINEER/LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL, PRIOR TO SPREADING OPERATIONS.
6. APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT TO USE THE TOPSOIL WILL DEPEND UPON THE RESULTS OF THE SOIL TESTS.
7. THE BURDEN OF PROOF OF SOIL AMENDMENT INSTALLATION RESTS WITH THE CONTRACTOR. SOIL TESTS MAY BE REQUIRED AT THE CONTRACTOR'S EXPENSE IN ORDER TO CONFIRM AMENDMENT INSTALLATION.

SEEDING

1. ROUGH GRADING SHALL BE COMPLETED PRIOR TO THE START OF PLANTING IN ANY GIVEN AREA OF THE PROJECT SITE.
2. SEEDING SHALL BE DONE BETWEEN APRIL 1 TO JUNE 15 OR AUGUST 15 TO OCTOBER 15, EXCEPT FOR RESEEDING OF BARE SPOTS AND MAINTENANCE. ALL DISTURBED AREAS NOT COVERED BY BUILDINGS, PAVING OR AREAS THAT HAVE NOT BEEN OTHERWISE DEVELOPED SHALL BE SEEDED OR SODDED. SLOPES GREATER THAN 3:1 SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET. AFTER OCTOBER 15 DISTURBED SOILS SHALL BE PROTECTED IN ACCORDANCE WITH THE WINTER CONSTRUCTION NOTES.

ACCEPTABLE SEED MIXES ARE AS FOLLOWS:

PARK SEED MIX (NHDOT TYPE 15) MIN. 120 LBS/ACRE:

33% CREEPING RED FESCUE	(MIN. 40 LBS/ACRE)
42% PERENNIAL RYEGRASS	(MIN. 50 LBS/ACRE)
21% KENTUCKY BLUEGRASS	(MIN. 25 LBS/ACRE)
4% REDTOP	(MIN. 5 LBS/ACRE)

TEMPORARY LAWN MIX: (MIN. 47 LBS/ACRE)
100% ANNUAL RYE

SLOPE SEED (WF) (NHDOT TYPE 45) MIX 3:1 OR GREATER SLOPES (MIN. 95 LBS/ACRE):

38% CREEPING RED FESCUE	(MIN. 35 LBS/ACRE)
32% PERENNIAL RYEGRASS	(MIN. 30 LBS/ACRE)
5% REDTOP	(MIN. 5 LBS/ACRE)
5% ALSIKE CLOVER	(MIN. 5 LBS/ACRE)
5% BIRDSFOOT TREFOIL	(MIN. 5 LBS/ACRE)
3% LANCE-LEAF COREOPSIS	(MIN. 4 LBS/ACRE)
3% OXEYE DAISY	(MIN. 3 LBS/ACRE)
3% BLACKEYED SUSAN	(MIN. 4 LBS/ACRE)
3% WILD LUPINE	(MIN. 4 LBS/ACRE)

SLOPE SEED (NHDOT TYPE 44) MIX 3:1 OR GREATER SLOPES (MIN. 80 LBS/ACRE):

44% CREEPING RED FESCUE	(MIN. 35 LBS/ACRE)
38% PERENNIAL RYEGRASS	(MIN. 30 LBS/ACRE)
6% REDTOP	(MIN. 5 LBS/ACRE)
6% ALSIKE CLOVER	(MIN. 5 LBS/ACRE)
6% BIRDSFOOT TREFOIL	(MIN. 5 LBS/ACRE)

PLANTING

1. EXCAVATE PITS, PLANTERS, BEDS AND TRENCHES WITH VERTICAL SIDES AND WITH BOTTOM OF EXCAVATION SLIGHTLY RAISED AT CENTER TO PROVIDE PROPER DRAINAGE. LOOSEN HARD SUBSOIL IN BOTTOM OF EXCAVATION.
2. ANY LEDGE OR RUBBLE MATERIAL SHALL BE FRACTURED TO A DEPTH OF 3 FEET AND EXCAVATED TO A DEPTH OF 30 INCHES FOR TREE POCKETS AND 18 INCHES FOR SHRUB BEDS. THIS PROCEDURE SHALL BE HANDLED BY THE SITE CONTRACTOR. SITE TOPSOIL SHALL BE DEPOSITED IN ALL EXCAVATED POCKETS.
3. DISPOSE OF SUBSOIL REMOVED FROM PLANTING EXCAVATIONS. DO NOT MIX WITH PLANTING SOIL OR USE AS BACKFILL.
4. FILL EXCAVATIONS FOR TREES AND SHRUBS WITH WATER AND ALLOW TO PERCOLATE OUT BEFORE PLANTING.
5. DISH TOP OF BACKFILL TO ALLOW FOR MULCH – PLANT SAUCERS SHALL BE AS SHOWN ON DETAIL SHEETS; 6' DIAMETER FOR ALL DECIDUOUS TREES, AND FOR EVERGREEN TREES A RADIUS 2' BEYOND THE OUTER MOST BRANCHES.
6. MULCH TREES, SHRUBS, PLANTERS AND BEDS. PROVIDE NOT LESS THAN 3" THICKNESS OF BARK MULCH, 3/8"-2" OF WIDTH, AND WORK INTO TOP OF BACKFILL. FINISH LEVEL WITH ADJACENT FINISH GRADES AS DIRECTED IN THE FIELD.
7. TREEGATOR WATERING SYSTEM OR APPROVED EQUAL SHALL BE INSTALLED FOR ALL DECIDUOUS TREES AT TIME OF PLANTING AND REMOVED BEFORE FROST. WATERING RATE TO BE APPLIED PER MANUFACTURER'S SPECIFICATIONS.
8. ALL PLANT MATERIALS SHALL HAVE DEAD OR DAMAGED BRANCHES REMOVED AT TIME OF PLANTING. ALL TAGS AND RIBBONS SHALL BE REMOVED AT THIS TIME.
9. THE CONTRACTOR SHALL REQUEST A FINAL OBSERVATION BY THE OWNER'S REPRESENTATIVE UPON COMPLETION OF INSTALLATION.

LANDSCAPE MAINTENANCE

LAWN

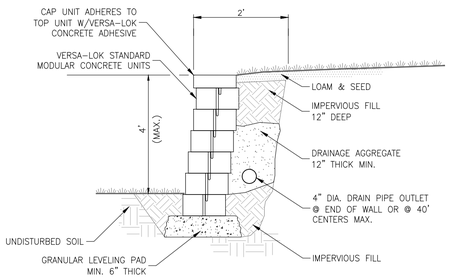
1. BEGIN MAINTENANCE IMMEDIATELY AFTER EACH AREA IS PLANTED AND CONTINUE UNTIL ACCEPTABLE LAWN IS ESTABLISHED, BUT NOT LESS THAN THE FOLLOWING PERIODS:
   A. SEEDED LAWNS: 60 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
      1. WHEN FULL MAINTENANCE PERIOD HAS NOT ELAPSED BEFORE END OF PLANTING SEASON, OR IF LAWN IS NOT FULLY ESTABLISHED, CONTINUE MAINTENANCE DURING NEXT PLANTING SEASON.
   B. SODDED LAWNS: 30 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
   C. PLUGGED LAWNS: 30 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
   D. SPRIGGED LAWNS: 30 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
2. MAINTAIN AND ESTABLISH LAWN BY WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, REPLANTING, AND OTHER OPERATIONS. ROLL, REGRADE, AND REPLANT BARE OR ERODED AREAS AND REMULCH TO PRODUCE A UNIFORMLY SMOOTH LAWN.
   A. IN AREAS WHERE MULCH HAS BEEN DISTURBED BY WIND OR MAINTENANCE OPERATIONS, ADD NEW MULCH. ANCHOR AS REQUIRED TO PREVENT DISPLACEMENT.
3. WATERING: PROVIDE AND MAINTAIN TEMPORARY PIPING, HOSES, AND LAWN-WATERING EQUIPMENT TO CONVEY WATER FROM SOURCES AND KEEP LAWN UNIFORMLY MOIST TO A DEPTH OF FOUR INCHES (100 mm).
   A. SCHEDULE WATERING TO PREVENT WILTING, PUDDLING, EROSION, AND DISPLACEMENT OF SEED OR MULCH. LAY OUT TEMPORARY WATERING SYSTEM TO AVOID WALKING OVER MUDDY OR NEWLY PLANTED AREAS.
   B. WATER LAWN AT A MINIMUM RATE OF ONE INCH (25 mm) PER WEEK.
4. MOW LAWN AS SOON AS TOP GROWTH IS TALL ENOUGH TO CUT. REPEAT MOWING TO MAINTAIN SPECIFIC HEIGHT WITHOUT CUTTING MORE THAN 40 PERCENT OF GRASS HEIGHT. REMOVE NO MORE THAN 40 PERCENT OF GRASS-LEAF GROWTH IN INITAL OR SUBSEQUENT MOWINGS. DO NOT DELAY MOWING UNTIL GRASS BLADES BEND OVER AND BECOME MATTED. DO NOT MOW WHEN GRASS IS WET. SCHEDULE INITIAL AND SUBSEQUENT MOWINGS TO MAINTAIN THE FOLLOWING GRASS HEIGHT.
5. LAWN POSTFERTILIZATION: APPLY FERTILIZER AFTER INITIAL MOWING AND WHEN GRASS IS DRY.
   A. USE FERTILIZER THAT WILL PROVIDE ACTUAL NITROGEN OF AT LEAST 1 lb/1,000 SF (0.45 kg/92.9 SM) TO LAWN AREA.

MEADOW

1. BEGIN MAINTENANCE IMMEDIATELY AFTER EACH AREA IS PLANTED AND CONTINUE UNTIL ACCEPTABLE MEADOW IS ESTABLISHED, BUT FOR NOT LESS THAN 40 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
2. MAINTAIN AND ESTABLISH MEADOW BY WATERING, WEEDING, MOWING, TRIMMING, REPLANTING, AND OTHER OPERATIONS. ROLL, REGRADE, AND REPLANT BARE OR ERODED AREAS AND REMULCH.
3. WATERING: PROVIDE AND MAINTAIN TEMPORARY PIPING, HOSES, AND LAWN-WATERING EQUIPMENT TO CONVEY WATER FROM SOURCES AND KEEP MEADOW UNIFORMLY MOIST.
   A. SCHEDULE WATERING TO PREVENT WILTING, PUDDLING, EROSION, AND DISPLACEMENT OF SEED OR MULCH. LAY OUT TEMPORARY WATERING SYSTEM TO AVOID WALKING OVER MUDDY OR NEWLY PLANTED AREAS.
   B. WATER LAWN AT A MINIMUM RATE OF 1/2 INCH (13 mm) PER WEEK FOR 4 WEEKS.

TREES AND SHRUBS:

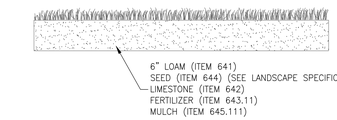
1. PRUNING SHOULD BE STARTED EARLY AND KEPT UP AT REGULAR INTERVALS. TREES SHOULD BE PRUNED AND SHAPED TO AVOID SPLITTING LATER IN LIFE. BROKEN TOPS AND BRANCHES SHOULD BE REMOVED AS SOON AS POSSIBLE AFTER INJURY. BROKEN, WEAK OR DISEASED BRANCHES SHOULD BE REMOVED FIRST, DEAD BRANCHES SECOND AND HEALTHY BRANCHES LAST.
2. TREES AND SHRUBS SHOULD BE PROTECTED AGAINST DAMAGE INCURRED WITH LAWN MOWERS AND GARDEN EQUIPMENT. KEEPING GRASS AWAY FROM TREE TRUNKS WITH THE USE OF MULCH IS RECOMMENDED.
3. THE USE OF ROAD SALT AROUND TREES AND SHRUBS SHOULD BE AVOIDED OR MINIMIZED.
4. LANDSCAPED AREAS SHALL BE ROUTINELY MAINTAINED FREE OF DEBRIS AND LITTER. SPRAY AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE. MAINTAINENCE SHALL INCLUDE THE REPLACEMENT OF ALL DEAD PLANT MATERIAL WITHIN THE GUARANTEED CONTRACT PERIOD.



RETAINING WALLS HIGHER THAN 3 FT ARE CONSIDERED STRUCTURES AND REQUIRES A BUILDING PERMIT. OWNER SHALL SUBMIT DESIGN PLANS STAMPED BY A NH LICENSED PROFESSIONAL ENGINEER TO LONDONDERRY BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.

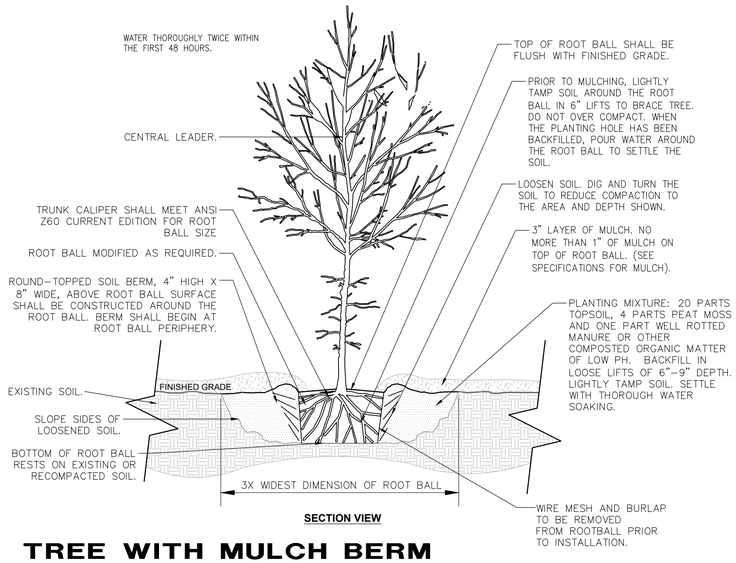
UNREINFORCED RETAINING WALL

VERSA-LOK (OR EQUAL) NOT TO SCALE



LOAM & SEED

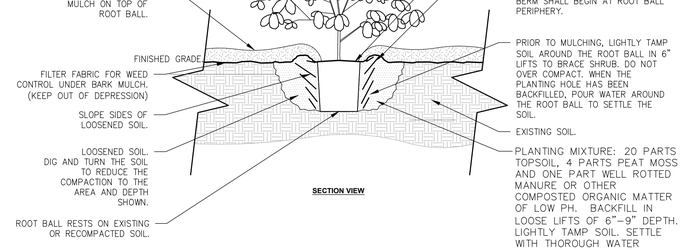
NOT TO SCALE



SECTION VIEW

TREE WITH MULCH BERM

NOT TO SCALE



SECTION VIEW

SHRUB PLANTING

NOT TO SCALE

TAX MAP 28 LOTS 9, 10, &10-4

DETAILS SHEET

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
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NDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

STATE OF NEW HAMPSHIRE - JASON HILL No. 15391 LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TFM
Civil Engineers
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Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

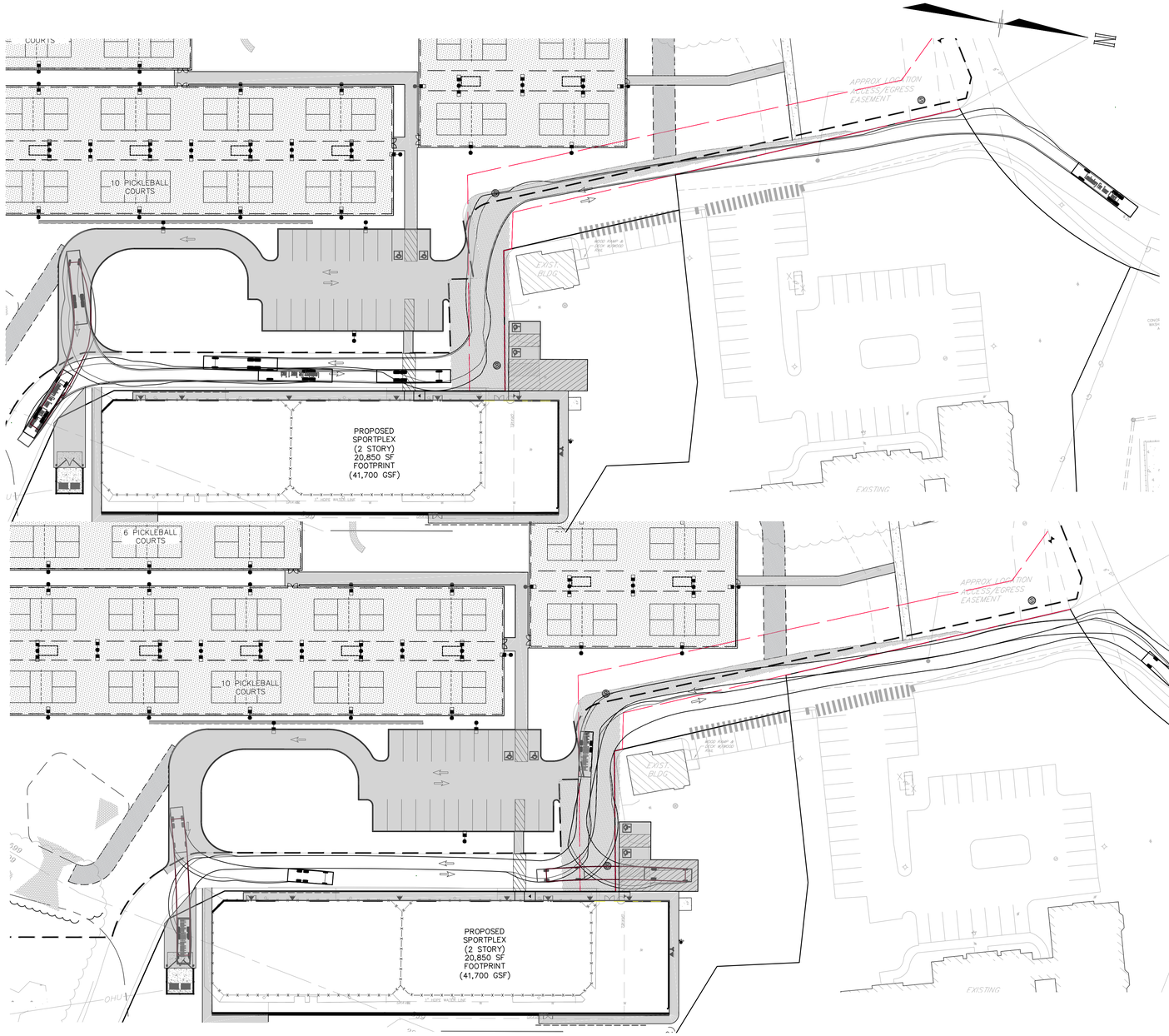
FILE	DR	CK	CADFILE		
17562.06	JSH	RED		17562-06 COVER-DETAILS	C-22

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DIG SAFE STOP. THINK. CALL. CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION



HORIZONTAL SCALE 1"=40'

40 20 0 40

JASON HILL No. 15391 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE -

TAX MAP 28 LOTS 9, 10, &10-4

TURNING MOVEMENTS

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)

1 AIRPORT RD, SUITE 200, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4

BENTON FAMILY REALTY, LLC

1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

BENTON FAMILY REALTY, LLC

1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TFM

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	CK	
17562.06	JSH	RED	CADFILE

17562-06 SITE

C-T1

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DIG SAFE DIG SAFE NH811.com CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

EXECUTIVE COUNTRY CLUB
RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY
LONDONDERRY, NEW HAMPSHIRE

GENERAL INFORMATION

OWNER

MAP 28 LOT 10-0
CITY OF MANCHESTER
C/O AIRPORT AUTHORITY
1 AIRPORT ROAD, SUITE 300
MANCHESTER, NH 03103

MAP 28 LOT 10-9
CITY OF MANCHESTER
C/O AIRPORT AUTHORITY
1 AIRPORT ROAD, SUITE 300
MANCHESTER, NH 03103

MAP 28 LOT 10-4
BENTON FAMILY REALTY LLC
1 HIGHLANDER WAY
MANCHESTER, NH 03103

APPLICANT / PREPARED FOR

BENTON FAMILY REALTY LLC
1 HIGHLANDER WAY
MANCHESTER, NH 03103

RESOURCE LIST

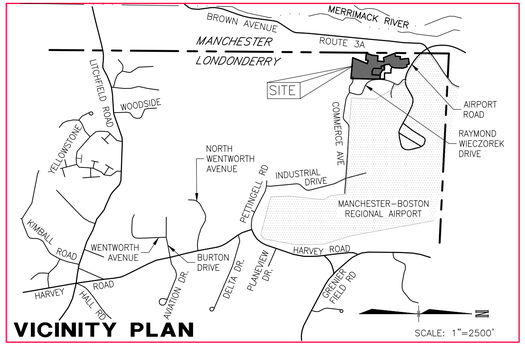
COMMUNITY DEVELOPMENT DEPARTMENT
268 B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 129
KELLIE CARON, TOWN PLANNER

PUBLIC WORKS
268 B MAMMOTH ROAD
LONDONDERRY, NH
(603) 432-1100 EXT. 152
DAVE WHOLLEY, DIRECTOR

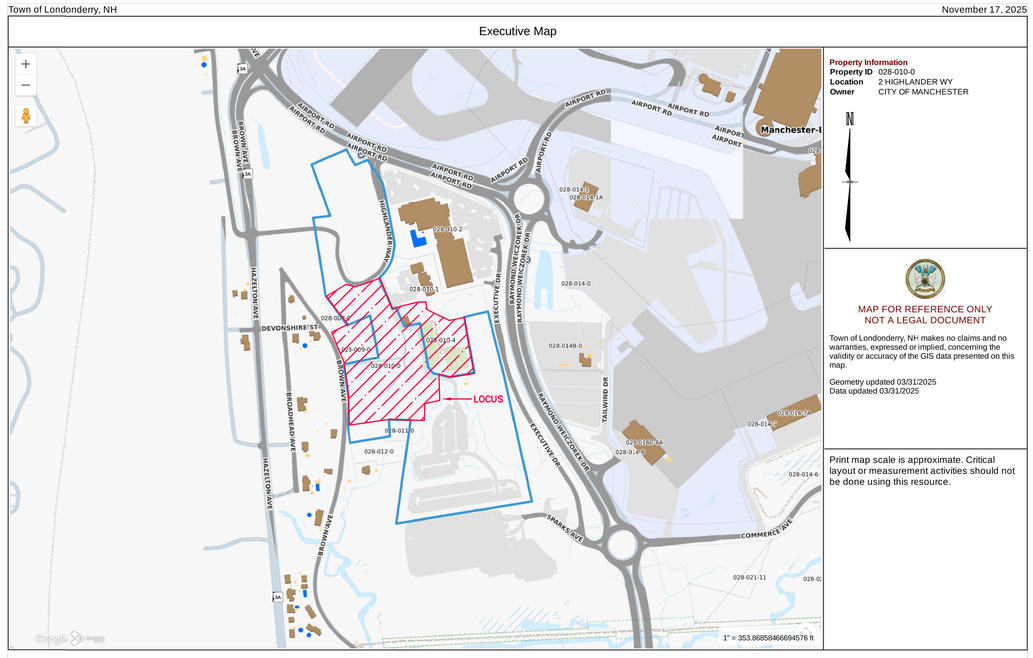
POLICE DEPARTMENT
268 A MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1118
FAX (603) 432-1117
CHIEF KIM BERNARD

FIRE DEPARTMENT
280 MAMMOTH ROAD
LONDONDERRY, NH
(603) 432-1124
FAX (603) 432-1129
CHIEF BRIAN JOHNSON

HEALTH DEPARTMENT
268 B MAMMOTH ROAD
LONDONDERRY, NH 03053
(603) 432-1100 EXT. 115



VICINITY PLAN



HORIZONTAL SCALE 1"=400'
400 200 0 400

INDEX OF SHEETS

SHEET	SHEET TITLE
C-1	COVER
C-2	NOTES & LEGEND
SHEETS 1-5	EXISTING CONDITIONS PLAN
C-3	SITE PREPARATION & DEMOLITION PLAN
C-4	OVERALL SITE LAYOUT PLAN
C-5	SITE LAYOUT PLAN
C-6	GRADING & DRAINAGE PLAN
C-8	UTILITY PLAN
C-9	SEWER PLAN & PROFILE
C-10	LANDSCAPE PLAN
C-11	EROSION CONTROL PLAN
C-12	EROSION CONTROL NOTES
C-13	LIGHTING PLAN
C-14 - C-22	DETAILS SHEET
T-1	TURNING MOVEMENT PLAN
REFERENCE PLANS BY ASSOCIATED PROFESSIONALS	
-	ARCHITECTURAL PLANS

PERMITS/APPROVALS

	NUMBER	APPROVED	EXPIRES
LONDONDERRY PLANNING BOARD SITE PLAN REVIEW	PENDING	-	-
LONDONDERRY SEWER PERMIT	PENDING	-	-
LONDONDERRY STORMWATER PERMIT	-	-	-
NHDES ALTERATION OF TERRAIN PERMIT	PENDING	-	-
NHDES SEWER DISCHARGE PERMIT	PENDING		

VARIANCES (APPROVED IN SUMMER 2025)

MAP 028 LOT 010-4

1. SEC. 4.3.3.A - TO ALLOW A SIDE YARD BUILDING/STRUCTURE ENCROACHMENT OF 24.9 FT, OR A SETBACK OF 5.1 FT, WHERE 30 FT IS REQUIRED.
2. SEC. 4.3.2.A - TO ALLOW 0 FT. OF FRONTAGE WHERE 150 FT IS REQUIRED.
3. 4.4.3.3.B.2 a & b - TO NOT PROVIDE A 50 FT PERMANENTLY LANDSCAPED BUFFER ZONE WHERE AN EXISTING DRIVEWAY IS WITHIN 200 FT OF THE AR-1 ZONING DISTRICT.
4. 4.3.3.B.1 - TO ALLOW AN ENCROACHMENT OF 15 FT, OR A 0 FT PERIMETER LANDSCAPE BUFFER, WHERE 15 FT IS REQUIRED IN C-II ZONE.

MAP 028 LOT 010-0

5. SEC. 4.3.3.B.1 - TO ALLOW AN ENCROACHMENT OF UP TO 15 FT, OR A 0 FT PERIMETER LANDSCAPE BUFFER, WHERE 15 FT (30 FT AT RIGHT-OF-WAY) IS REQUIRED IN C-II ZONE.

ABUTTERS LIST
EXECUTIVE HEALTH & SPORTS CENTER, LONDONDERRY NH

02/18/2026

JOB # 17562.06

MAP 028 LOTS 004-0, 009-0, 010-0, 011-0, 012-0, 014-0; MAP 710 LOTS , 1A, 2, 3, 7, 7F;
MAP 866 LOTS 4, 5, 7, 12, 13, 14, 16, 16A, 17
CITY OF MANCHESTER
C/O MANCHESTER AIRPORT AUTHORITY
1 AIRPORT ROAD, SUITE 300
MANCHESTER, NH 03103

MAP 028 LOT 006-0
TOWN OF LONDONDERRY
268B MAMMOTH ROAD
LONDONDERRY, NH 03053

MAP 028 LOT 008-0; MAP 710 LOT 4
BLUE SKY HOLDINGS, LLC
51 MICHAEL STREET
MANCHESTER, NH 03104

MAP 866 LOTS 9 AND 10
KATHLEEN Y. WIBBER
3526 BROWN AVENUE
MANCHESTER, NH 03103

MAP 028 LOT 014C-8A
UNITED PARCEL SERVICE
ATTN: CORPORATE REAL ESTATE
55 GLENLAKE PKWY, NE
ATLANTA, GA 30328

MAP 028 LOT 005-0
CITY OF MANCHESTER
C/O MANCHESTER AIRPORT AUTHORITY
1 AIRPORT ROAD, SUITE 100
MANCHESTER, NH 03103

MAP 710 LOT 5
CITY OF MANCHESTER
C/O 3F LLC
70 LOWELL STREET
MANCHESTER, NH 03101

MAP 028 LOTS 010-2, 010-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY
MANCHESTER, NH 03103

MAP 028 LOT 010-1
TT OF HILLSBOROUGH, LLC
505 SOUTH FLAGLER DRIVE, STE 1400
WEST PALM BEACH, FL 33401

MAP 028 LOT 013-0 & MAP 710 LOT 1
JEFFREY W. & ANNIE MARIE CHICK
3563 BROWN AVENUE
MANCHESTER, NH 03103

MAP 028 LOT 014-10 & MAP 711 LOT 55
STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION
P.O. BOX 483
7 HAZEN DRIVE
CONCORD, NH 03302-0483

MAP 028 LOT 014B-0
HERTZ CORPORATION
8501 WILLIAMS ROAD
ESTERO, FL 33928

MAP 028 LOT 014-10
STATE OF NEW HAMPSHIRE
P.O. BOX 483
CONCORD, NH 03302

MAP 866 LOT 1
SCOTT RILEY
3600 BROWN AVENUE
MANCHESTER, NH 03103

TFMORAN, INC.
48 CONSTITUTION DRIVE
BEDFORD, NH 03110
ATTN: ROBERT DUVAL

MAP 866 LOT 19
ARCHIE F. SYRENE
142 LOWELL ST APT 6
MANCHESTER, NH 03104

MAP 866 LOT 6
ROGER BOUTIN REVOC TR
254 WOODCREST CT
MANCHESTER, NH 03109

MAP 710 LOT 8
CITY OF MANCHESTER
ONE CITY HALL PLAZA
MANCHESTER, NH 03101

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DIG SAFE
811 OR 1-888-DIG-SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

APPROVED BY THE LONDONDERRY NH PLANNING BOARD FOR PHASE _____
ON DATE: _____
CERTIFIED BY:

OWNER'S SIGNATURE

(MAP 28 LOT 10-4) BENTON FAMILY REALTY TRUST DATE

(MAP 28 LOTS 9-0, 10-0) CITY OF MANCHESTER DATE

STATE OF NEW HAMPSHIRE
JASON MILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

COVER

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH
OWNER: MAP 28 LOTS 9, 10
CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103
OWNER: MAP 28 LOT 10-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103
APPLICANT
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

PROJ. #	DR	JSH
17562.06	CK	RED

CADFILE: 17562-06 COVER-DETAILS

C-1

LEGEND

PROPOSED

- PROPERTY LINE
- ZONING LINE
- EASEMENT
- BASELINE
- FLOODPLAIN
- EDGE OF WATERBODY
- EDGE OF WETLAND
- SETBACK (WETLAND)
- SETBACK (STRUCTURE)
- SETBACK (PARKING)
- SETBACK (LANDSCAPE)
- GRAVEL ROAD
- EOP — EDGE OF PAVEMENT
- VGC — VERTICAL GRANITE CURB
- SGC — SLOPED GRANITE CURB
- CC — CONCRETE CURB
- ICC — INTEGRATED CONCRETE CURB
- BIT — BITUMINOUS ASPHALT CURB
- CCB — CAPE COD BERM
- SAWCUT
- BUILDING
- BUILDING ROOF OVERHANG
- BUILDING FOUNDATION
- BUILDING ENTRANCE
- OVERHEAD DOOR
- TREE LINE
- FENCE (CHAIN LINK)
- FENCE (WIRE)
- FENCE (STOCKADE)
- GUARDRAIL
- STONE WALL — [POINTS TOWARD HIGH SIDE]
- RETAINING WALL
- SF — SILT FENCE
- SS — SILT SOCK
- SOIL BOUNDARY
- LIMIT OF GRADING
- 100 — CONTOUR
- TC100.50 / BC100.00 OR 100.00 — SPOT GRADE
- ## — PARKING COUNT
- DSLY — YELLOW DOUBLE SOLID LINE
- SSLY — YELLOW SINGLE SOLID LINE
- SSLW — WHITE SINGLE SOLID LINE
- SBLW — WHITE SINGLE BROKEN LINE
- STOP — STOP BAR
- CROSSWALK
- ACCESSIBLE PARKING SYMBOL
- PAVEMENT ARROW
- TRAFFIC FLOW ARROW (NOT PAINTED)
- SIGN (SINGLE POST)
- SIGN (DOUBLE POST)
- SIGN (PYLON)
- SIGN (MONUMENT)
- BOLLARD
- D — DUMPSTER PAD

PROPOSED

- CONCRETE
- GRAVEL
- HEAVY DUTY PAVEMENT
- CONSTRUCTION ENTRANCE
- SNOW STORAGE
- RIPRAP
- INLET PROTECTION
- FLOW ARROW
- RIDGE — GRADE BREAK RIDGE
- DRAIN LINE
- DRAINAGE SWALE
- STORMWATER BMP
- S — SEWER LINE
- FM — SEWER FORCE MAIN LINE
- W — WATER LINE
- G — GAS LINE
- OHE — OVERHEAD UTILITY LINE
- UGE — UNDERGROUND UTILITY LINE
- CATCH BASIN
- DRAIN INLET
- OUTLET CONTROL STRUCTURE
- ROOF DRAIN
- DRAIN CLEANOUT
- DRAIN MANHOLE
- FARED END SECTION
- SEWER CLEAN OUT
- SEWER MANHOLE
- SEWER VENT
- DRAIN/SEWER/WATER PLUG OR CAP
- HYDRANT
- FIRE DEPARTMENT CONNECTION
- WATER GATE VALVE
- WATER SHUTOFF
- THRUST BLOCK
- WATER METER
- WATER MANHOLE
- WELL
- GAS GATE VALVE
- GAS SHUT OFF
- GAS METER
- TELEPHONE MANHOLE
- ELECTRIC MANHOLE
- TRAFFIC CONTROL CABINET
- ELECTRIC HANDHOLE
- ELECTRIC PULL BOX
- ELECTRIC METER
- FLOOD LIGHT
- LIGHT POLE
- UTILITY POLE
- GUY POLE
- T — TRANSFORMER PAD
- B-# — BORING LOCATION
- TP-# — TEST PIT LOCATION
- IT-# — INFILTRATION TEST LOCATION
- MW-# — MONITORING WELL

ABBREVIATIONS

GENERAL

ABAN	ABANDON
AC	ACRES
ADJ	ADJUST
APPROX	APPROXIMATE
BC	BOTTOM OF CURB
BIT	BITUMINOUS
BK/PG	BOOK & PAGE
BLDG	BUILDING
BMP	BEST MANAGEMENT PRACTICE
BS	BOTTOM OF SLOPE
BW	BOTTOM OF WALL
CONC	CONCRETE
COORD	COORDINATE
DIA	DIAMETER
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
EXIST	EXISTING
FFE	FINISHED FLOOR ELEVATION
FND	FOUNDATION
HP	HIGH POINT
INV	INVERT ELEVATION
IT	INFILTRATION TEST
L	LENGTH
LF	LINEAR FEET
LSA	LANDSCAPE AREA
MAX	MAXIMUM
MIN	MINIMUM
N/F	NOW OR FORMERLY
NHFG	NEW HAMPSHIRE FISH & GAME
NTS	NOT TO SCALE
OC	ON CENTER
PAVE	PAVEMENT
PERF	PERFORATED
PROP	PROPOSED
R	RADIUS
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
REM	REMOVE
RET	RETAIN
RIM	RIM ELEVATION
ROW	RIGHT OF WAY
S	SLOPE
SF	SQUARE FEET
SW	SIDEWALK
TBM	TEMPORARY BENCHMARK
TC	TOP OF CURB
TP	TEST PIT
TW	TOP OF WALL
TYP	TYPICAL
UG	UNDERGROUND
WCR	ACCESSIBLE WHEELCHAIR RAMP
W/	WITH

UTILITIES

CB	CATCH BASIN
CIP	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COND	CONDUIT
DCB	DOUBLE CATCH BASIN
DIP	DUCTILE IRON PIPE
DMH	DRAIN MANHOLE
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FES	FLARED END SECTION
GT	GREASE TRAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
LP	LIGHT POLE
OCS	OUTLET CONTROL STRUCTURE
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
SMH	SEWER MANHOLE
SOS	SEDIMENT OIL SEPARATOR
TSV	TAPPING SLEEVE, VALVE, AND BOX
UP	UTILITY POLE

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DIG SAFE — CALL 811 IT'S THE LAW — CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

GENERAL NOTES

1. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. TFMORAN, INC. ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
2. ALL IMPROVEMENTS SHOWN ON THE SITE PLAN SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PLAN BY THE PROPERTY OWNER AND ALL FUTURE PROPERTY OWNERS.
3. ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE TOWN OF LONDONDERRY, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ALL WORK TO CONFORM TO TOWN OF LONDONDERRY DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS. ALL WORK WITHIN THE RIGHT-OF-WAY OF THE TOWN AND/OR STATE SHALL COMPLY WITH APPLICABLE STANDARDS. COORDINATE ALL WORK WITHIN THE RIGHT-OF-WAY WITH APPROPRIATE TOWN, COUNTY, AND/OR STATE AGENCY.
4. AN ALTERATION OF TERRAIN PERMIT IS REQUIRED PER ENV-WQ 1503.02. THE SITE CONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF NHDES ENV-WQ 1500 OR AS APPLICABLE.
5. SEE EXISTING CONDITIONS PLAN FOR BENCHMARK INFORMATION. VERIFY TBM ELEVATIONS PRIOR TO CONSTRUCTION.
6. PRIOR TO COMMENCING ANY SITE WORK ALL LIMITS OF WORK SHALL BE CLEARLY MARKED IN THE FIELD.
7. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY SHEET. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.
8. TFMORAN, INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE ENGINEER OF RECORD.
9. ALL DEMOLITION SHALL INSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKWAYS, AND ANY OTHER ADJACENT OPERATING FACILITIES. PRIOR WRITTEN PERMISSION FROM THE OWNER/DEVELOPER AND LOCAL PERMITTING AUTHORITY IS REQUIRED IF CLOSURE/OBSTRUCTIONS TO ROADS, STREET, WALKWAYS, AND OTHERS IS DEEMED NECESSARY. CONTRACTOR TO PROVIDE ALTERNATE ROUTES AROUND CLOSURES/OBSTRUCTIONS PER LOCAL/STATE/FEDERAL REGULATIONS.
10. REFER TO ARCHITECTURAL PLANS FOR LAYOUT OF BUILDING FOUNDATIONS AND CONCRETE ELEMENTS WHICH ABUT THE BUILDING SUCH AS STAIRS, SIDEWALKS, LOADING DOCK RAMPS, PADS, AND COMPACTOR PADS. DO NOT USE SITE PLANS FOR LAYOUT OF FOUNDATIONS.
11. IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND DETAILS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.
12. IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED WORK.
13. CONTRACTOR'S GENERAL RESPONSIBILITIES:
    - A. BID AND PERFORM THE WORK IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL CODES, SPECIFICATIONS, REGULATIONS, AND STANDARDS.
    - B. NOTIFY ENGINEER IN WRITING OF ANY DISCREPANCIES OF PROPOSED LAYOUT AND/OR EXISTING FEATURES.
    - C. EMPLOY A LICENSED SURVEYOR TO DETERMINE ALL LINES AND GRADES AND LAYOUT OF SITE ELEMENTS AND BUILDINGS.
    - D. THE CONTRACTOR SHALL BE RESPONSIBLE TO BECOME FAMILIAR WITH THE SITE AND ALL SURROUNDING CONDITIONS. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF INTENTIONS AT LEAST 48 HOURS IN ADVANCE.
    - E. TAKE APPROPRIATE MEASURES TO REDUCE, TO THE FULLEST EXTENT POSSIBLE, NOISE, DUST AND UNSIGHTLY DEBRIS FROM CONSTRUCTION ACTIVITIES.
    - F. MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY WORK AT ALL TIMES.
    - G. IN ACCORDANCE WITH RSA 430:53 AND AGR 3800, THE CONTRACTOR SHALL NOT TRANSPORT INVASIVE SPECIES OFF THE PROPERTY, AND SHALL DISPOSE OF INVASIVE SPECIES ON-SITE IN A LEGAL MANNER.
    - H. COORDINATE WITH ALL UTILITY COMPANIES AND CONTACT DIGSAFE (811 OR 888-344-7233) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION.
    - I. PROTECT NEW AND EXISTING BURIED UTILITIES DURING INSTALLATION OF ALL SITE ELEMENTS. DAMAGED UTILITIES SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
    - J. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY TFMORAN, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS, OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE US OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
    - K. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
    - L. VERIFY LAYOUT OF PROPOSED BUILDING FOUNDATIONS WITH ARCHITECT AND THAT PROPOSED FOUNDATION MEETS PROPERTY LINE SETBACKS PRIOR TO COMMENCING ANY FOUNDATION CONSTRUCTION.
    - M. PROVIDE AN AS-BUILT PLAN AT THE COMPLETION OF THE PROJECT TO THE PLANNING DIRECTOR AND PER TOWN REGULATIONS.
    - N. IF ANY DEVIATIONS FROM THE APPROVED PLANS AND SPECIFICATIONS HAVE BEEN MADE, THE SITE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS STAMPED BY A LICENSED SURVEYOR OR QUALIFIED ENGINEER ALONG WITH A LETTER STAMPED BY A QUALIFIED ENGINEER DESCRIBING ALL SUCH DEVIATIONS, AND BEAR ALL COSTS FOR PREPARING AND FILING ANY NEW PERMITS OR PERMIT AMENDMENTS THAT MAY BE REQUIRED.
    - O. AT COMPLETION OF CONSTRUCTION, THE SITE CONTRACTOR SHALL PROVIDE A LETTER CERTIFYING THAT THE PROJECT WAS COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND A LETTER STAMPED BY A QUALIFIED ENGINEER THAT THEY HAVE OBSERVED ALL UNDERGROUND DETENTION SYSTEMS, INFILTRATION SYSTEMS, OR FILTERING SYSTEMS PRIOR TO BACKFILL, AND THAT SUCH SYSTEMS CONFORM TO THE APPROVED PLANS AND SPECIFICATIONS.
14. SUBJECT PROPERTIES ARE LOCATED WITHIN THE ST. GOBAIN CONSENT DECREE AREA. AS SUCH, EXPORT OF SOILS IS REGULATED UNDER ENV-OR 600 (CONTAMINATED SITE MANAGEMENT RULES)

GRADING NOTES

1. THE CONTRACTOR SHALL ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF NHDES ENV-WQ 1500 AS APPLICABLE.
2. THE CONTRACTOR SHALL PREPARE, MAINTAIN, AND EXECUTE A S.W.P.P.P. IN ACCORDANCE WITH EPA REGULATIONS AND THE CONSTRUCTION GENERAL PERMIT.
3. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14 DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK THE ACCURACY OF THE TOPOGRAPHY AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO ANY EARTHWORK BEING PERFORMED ON THE SITE. NO CLAIM FOR EXTRA WORK WILL BE CONSIDERED FOR PAYMENT AFTER EARTHWORK HAS COMMENCED.
5. THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR INFORMATION ABOUT SOIL AND GROUNDWATER CONDITIONS. THE CONTRACTOR SHALL FOLLOW THE GEOTECHNICAL ENGINEERS RECOMMENDED METHODS TO ADDRESS ANY SOIL AND GROUNDWATER ISSUES THAT ARE FOUND ON SITE.
6. COORDINATE WITH GEOTECHNICAL/STRUCTURAL PLANS FOR SITE PREPARATION AND OTHER BUILDING INFORMATION.
7. COORDINATE WITH ARCHITECTURAL PLANS FOR DETAILED GRADING AT BUILDING, AND SIZE AND LOCATION OF ALL BUILDING SERVICES.
8. COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ROOF DRAIN INFORMATION.
9. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING, SIDEWALKS, AND ALIGNMENTS.
10. THE CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE, RAMPS AND LOADING AREAS.
11. THE SITE SHALL BE GRADED SO ALL FINISHED PAVEMENT HAS POSITIVE DRAINAGE AND SHALL NOT POND WATER DEEPER THAN 1/4" FOR A PERIOD OF MORE THEN 15 MINUTES AFTER FLOODING.
12. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED. CURBS HAVE A 6" REVEAL UNLESS OTHERWISE NOTED.
13. ALL SIDEWALK AND OTHER CURB REVEALS SHALL BE 6" WITH A TOLERANCE OF PLUS OR MINUS 3/8". WHERE SIDEWALK IS TO BE FLUSH, THE PAVEMENT REVEAL SHALL BE 1/4" WITH A TOLERANCE OF 1/8".
14. THE FINISHED GRADE AT BOTTOM OF ALL ACCESSIBLE RAMPS SHALL BE FLUSH WITH PAVEMENT WITH A TOLERANCE OF PLUS OR MINUS 1/4".
15. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE PRIOR TO INSTALLATION OF FINISHED PAVEMENT.
16. ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS AND SHALL MEET LOCAL STANDARDS AND THE REQUIREMENTS OF THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION AND THE NHDOT STANDARD STRUCTURE DRAWINGS UNLESS OTHERWISE NOTED.
17. STORMWATER DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE TYPE B AND CONFORM TO NHDOT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
18. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
19. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED, FERTILIZER AND MULCH.
20. DENSITY REQUIREMENTS:

MINIMUM DENSITY*	LOCATION
95%	BELOW PAVED OR CONCRETE AREAS
95%	TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL
90%	BELOW LOAM AND SEED AREAS

*ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C. FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM D-6938.

UTILITY NOTES

1. ALL PROPOSED UTILITY WORK, INCLUDING MATERIAL, INSTALLATION, TERMINATION, EXCAVATION, BEDDING, BACKFILL, COMPACTION, TESTING, CONNECTIONS, AND CONSTRUCTION SHALL BE COORDINATED WITH AND COMPLETED IN ACCORDANCE WITH THE APPROPRIATE REQUIREMENTS, CODES, AND STANDARDS OF ALL CORRESPONDING UTILITY ENTITIES AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE DIGGING.
3. COORDINATE ALL WORK ADJACENT TO PROPOSED BUILDINGS WITH ARCHITECTURAL BUILDING DRAWINGS. CONFIRM UTILITY PENETRATIONS AND INVERT ELEVATIONS ARE COORDINATED PRIOR TO INSTALLATION.
4. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE EXACT LOCATION OF NEW UTILITY CONNECTIONS SHALL BE DETERMINED BY THE CONTRACTOR IN COORDINATION WITH UTILITY COMPANY, COUNTY AGENCY, AND/OR PRIVATE UTILITY COMPANY.
6. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER THE UTILITY INSTALLATION COMPLETE AND OPERATIONAL.
7. ALL UTILITY COMPANIES REQUIRE INDIVIDUAL CONDUITS. CONTRACTOR TO COORDINATE WITH TELEPHONE, CABLE, AND ELECTRIC COMPANIES REGARDING NUMBER, SIZE, AND TYPE OF CONDUITS REQUIRED PRIOR TO INSTALLATION OF ANY CONDUIT.
9. SANITARY SEWER SHALL BE CONSTRUCTED TO THE STANDARDS AND SPECIFICATIONS AS SHOWN ON THESE PLANS. ALL SEWER MAINS AND FITTINGS SHALL BE PVC AND SHALL CONFORM TO ASTM F 679 (SDR 35 MINIMUM). FORCE MAINS AND FITTINGS SHALL CONFORM TO NH CODE OF ADMINISTRATIVE RULES ENV-WQ 700. ALL SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH NH CODE OF ADMINISTRATIVE RULES ENV-WQ 700. SANITARY MANHOLES SHALL CONFORM TO NHDES WATER DIVISION WASTEWATER ENGINEERING BUREAU STANDARDS AND SPECIFICATIONS SHOWN HEREON.
10. ON-SITE WATER DISTRIBUTION SHALL BE TO MANCHESTER WATER WORKS STANDARDS AND SPECIFICATIONS. WATER MAINS SHALL HAVE A MINIMUM OF 5.5' COVER. WHERE WATER PIPES CROSS SEWER LINES A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE OBSERVED. HORIZONTAL SEPARATION BETWEEN WATER AND SEWER SHALL BE 10' MINIMUM. WHERE A SANITARY LINE CROSSES A WATER LINE, ENCASE THE SANITARY LINE IN 6" THICK CONCRETE FOR A DISTANCE OF 10' EITHER SIDE OF THE CROSSING, OR SUBSTITUTE RUBBER-GASKETED PRESSURE PIPE FOR THE SAME DISTANCE. WHEN SANITARY LINES PASS BELOW WATER LINES, LAY PIPE SO THAT NO JOINT IN THE SANITARY LINE WILL BE CLOSER THAN 3' HORIZONTALLY TO THE
11. THRUST BLOCKS SHALL BE PROVIDED AT ALL LOCATIONS WHERE WATER LINE CHANGES DIRECTIONS OR CONNECTS TO ANOTHER WATER LINE. ALL THRUST BLOCKS SHALL BE PRECAST CONCRETE.
12. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT AND WIRING TO ALL SIGNS AND LIGHTS. CONDUIT TO BE A MINIMUM OF 24" BELOW FINISH GRADE.
13. ALL PROPOSED UTILITIES SHALL BE UNDERGROUND. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES.
14. THE CONTRACTOR SHALL ARRANGE AND PAY FOR ALL INSPECTIONS, TESTING AND RELATED SERVICES AND SUBMIT COPIES OF ACCEPTANCE TO THE OWNER, UNLESS OTHERWISE INDICATED.
15. PROVIDE PERMANENT PAVEMENT REPAIR FOR ALL UTILITY TRENCHES IN EXISTING ROAD OR PAVEMENT TO REMAIN. SAW CUT TRENCH, PAVEMENT AND GRANULAR BASE THICKNESS TO MATCH EXISTING PAVEMENT. OBTAIN ALL PERMITS REQUIRED FOR TRENCHING.
16. UNLESS OTHERWISE SPECIFIED, ALL UNDERGROUND STRUCTURES, PIPES, CHAMBERS, ETC. SHALL BE COVERED WITH A MINIMUM OF 18" OF COMPACTED SOIL BEFORE EXPOSURE TO VEHICLE LOADS.
17. THE PROPERTY WILL BE SERVICED BY THE FOLLOWING:

DRAINAGE	PRIVATE
SEWER	TOWN OF LONDONDERRY
WATER	MANCHESTER WATER WORKS
GAS	LIBERTY UTILITIES
ELECTRIC	EVERSOURCE
TELEPHONE	CONSOLIDATED COMMUNICATIONS
CABLE	COMCAST

STATE OF NEW HAMPSHIRE — JASON HILL No. 15391 LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TAX MAP 28 LOTS 9, 10, &10-4

NOTES & LEGEND

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10
CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT
BENTON FAMILY REALTY, LLC
NDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	JSH
17562.06	CK	RED

CADFILE: 17562-06 COVER-DETAILS

C-2

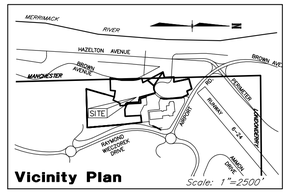
LEGEND

VERTICAL GRANITE CURB	VGC	SEWER MANHOLE	EASEMENT
VERTICAL CONCRETE CURB	VCC	CATCH BASIN	ZONE BOUNDARY
EDGE OF PAVEMENT	EOP	WATER GATE	SETBACK LINE
SEWER LINE	S	UTILITY POLE	BUFFER LINE
SEWER FORCE MAIN	FM	GAS VALVE	
WATER LINE	W	LIGHT POLE	
DRAIN LINE	D	HYDRANT	
GAS LINE	G	ELECTRIC PULLBOX	
OVERHEAD UTILITIES	OHW	GUY ANCHOR	
U.G. ELEC.,TEL., & CABLE	UGETC	BOUND	
CONCRETE SURFACE		DRILL HOLE	
DECIDUOUS TREE		IRON PIN	
CONIFEROUS TREE		DRAIN MANHOLE	
		SIGN	

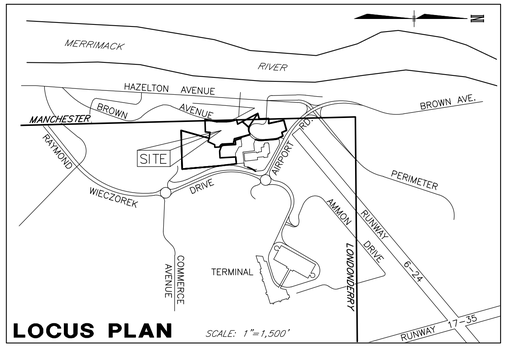
2 OF 5	3 OF 5
4 OF 5	5 OF 5

SHEET INDEX

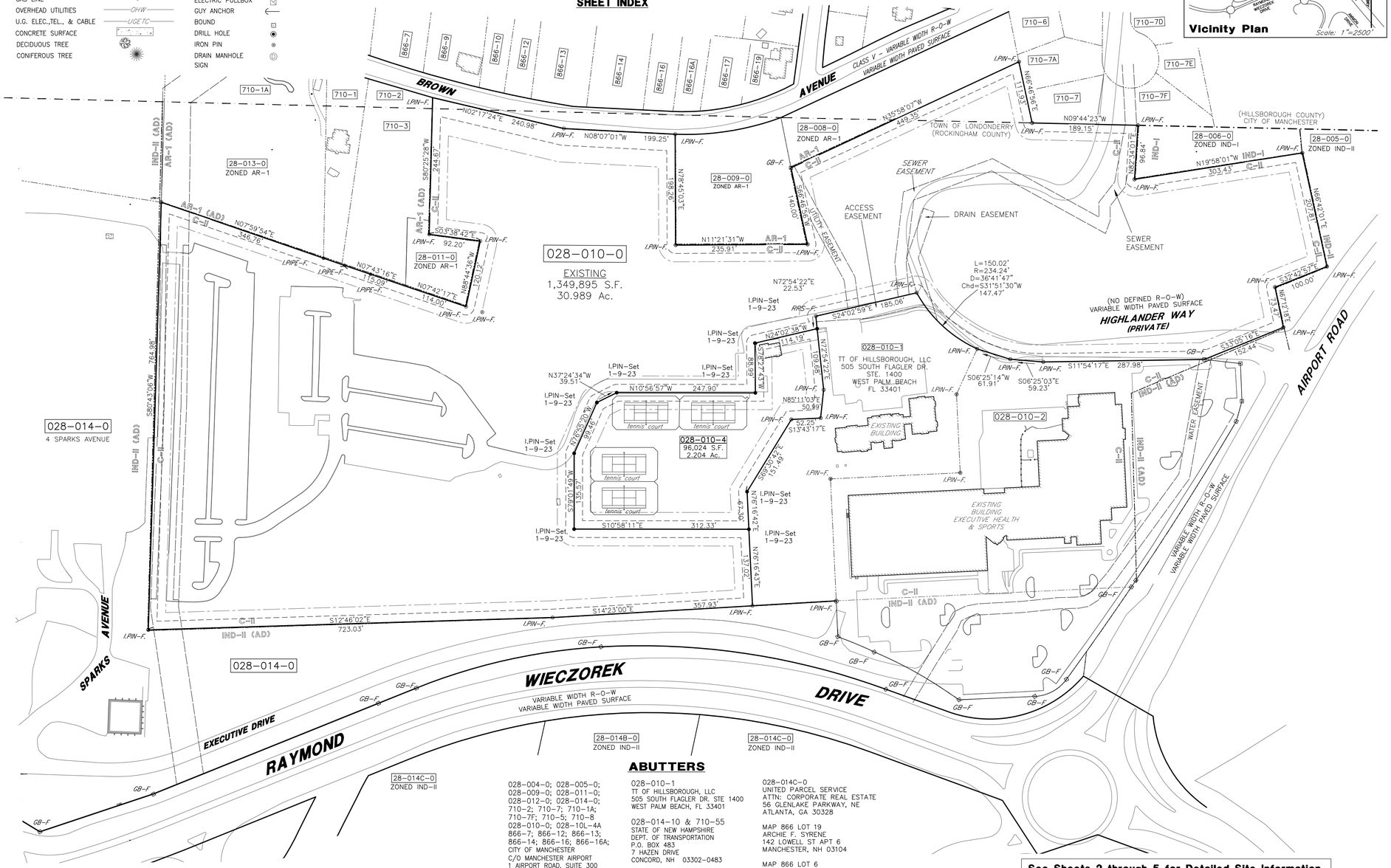
NH-SPC 83/2011 TFM N



Vicinity Plan Scale: 1"=2500'



LOCUS PLAN SCALE: 1"=1,500'



NOTES

1. OWNERS OF RECORD: MAP 28 LOT 009-0 & 010-0
   CITY OF MANCHESTER
   AIRPORT ROAD, SUITE 300
   MANCHESTER, NH 03103
   DEED REFERENCE: BK. 5130 PG. 2103
   MAP 28 LOT 010-2
   BENTON FAMILY REALTY, LLC
   1 HIGHLANDER WAY
   MANCHESTER, NH 03103
   DEED REFERENCE: BK.6570 PG.1016
2. 28-10-0 INDICATES TAX MAP AND LOT NUMBER.
3. THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS PRESENT AS OF NOVEMBER 25, 2025 ON TAX MAP 28 LOTS 9, 10, & 10-4 IN THE TOWN OF LONDONDERRY AS SHOWN HEREON AND NO OTHER PURPOSE.
4. CURRENT ZONING IS COMMERCIAL II – C-II
   COMMERCIAL II
   LOT SIZE (MIN):1 ACRE
   LOT FRONTAGE (MIN): 150 FT
   BUILDING SETBACKS (MIN)
   FRONT 60 FT
   SIDE 30 FT
   REAR 30 FT
   GREEN SPACE (MIN): 33%
   LANDSCAPE PERIMETER BUFFER: 15 FT. (30 FT AT RIGHT-OF-WAY)
5. EXAMINATION OF THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF NEW HAMPSHIRE, ROCKINGHAM COUNTY, COMMUNITY PANEL NUMBER 33015C0315E EFFECTIVE DATE: MAY 17, 2005, INDICATES THAT THE SUBJECT PARCELS ARE NOT LOCATED WITHIN A FLOOD HAZARD AREA.
6. BENCHMARK USED: NHDOT CONTROL POINT "GELINAS 1946", VERTICAL DATUM NAVD 88.
7. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) MAY DETERMINE.
8. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. TF MORAN INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 811.
9. THE PROPERTY WILL CONTINUE TO BE SERVED BY THE FOLLOWING: DRAINAGE: PRIVATE, SEWER: LONDONDERRY SEWER DEPARTMENT, WATER: MANCHESTER WATER WORKS, GAS: NATIONAL GRID, ELECTRIC: PSNH, TELEPHONE: FAIRPOINT COMMUNICATIONS, CABLE: COMCAST.
10. EXISTING USES: HEALTH CLUB, RECREATIONAL FACILITIES & ACTIVITIES, OFFICES.
11. PROPOSED USES: HEALTH CLUB, RECREATIONAL FACILITIES & ACTIVITIES, OFFICES. NO CHANGE.

REFERENCE PLANS

1. ALTA/ACSM LAND TITLE SURVEY – URBAN "PERIMETER ROAD LONDONDERRY & MANCHESTER, NH" OWNER OF RECORD: GAEL TERRA ASSOCIATES AND THE CITY OF MANCHESTER. PREPARED BY ALLEN B. SWANSON, INC., DATED 1 SEPTEMBER 1993 AS RECORDED WITH R.CR.D. PLAN NO. D-23784
2. MASTER PLAN SITE PLAN (LOT 10, MAP 28) "PROPOSED HOTEL EXPANSION" HIGHLANDER WAY, LONDONDERRY, NH. OWNER OF RECORD: THREE F, LLC. PREPARED BY HAYNER/SWANSON, INC. DATED 25 APRIL 2001
3. "SITE & UTILITIES PLAN" EXECUTIVE HEALTH CLUB PERIMETER ROAD, LONDONDERRY, NH PREPARED BY KIMBALL CHASE COMPANY, INC. DATED: 12/18/86
4. "HIGHLANDER INN COMPLEX – LOT D" TAX MAP 28, LOT 10, 2 HIGHLANDER WAY, LONDONDERRY, NH. PREPARED BY KEACH-NORDSTORM ASSOC., INC. DATED: AUGUST 1998
5. "EASEMENT PLAN" MANCHESTER AIRPORT, EXECUTIVE HEALTH & SPORTS CENTER AND THE HIGHLANDER. TAX MAP 28, LOTS 10 & 14 & 14-9, LONDONDERRY, NH. PREPARED BY JOSEPH M. WICHERT, LLS, INC. DATED: 20 FEBRUARY 2001

Graphic Scale
100' 50' 0' 100' 200' 300' 400'
1" = 100'

See Sheets 2 through 5 for Detailed Site Information, Topography, Utilities, etc. at 40 Scale

ABUTTERS

028-004-0; 028-005-0;
028-009-0; 028-011-0;
028-012-0; 028-014-0;
710-2; 710-7; 710-1A;
710-7F; 710-5; 710-8
028-010-0; 028-10L-4A
866-7; 866-12; 866-13;
866-14; 866-16; 866-16A;
CITY OF MANCHESTER
C/O MANCHESTER AIRPORT
1 AIRPORT ROAD, SUITE 300
MANCHESTER, NH 03103

028-006-0
TOWN OF LONDONDERRY
268B MAMMOTH ROAD
LONDONDERRY, NH 03053

028-008-0 & 710-4
BLUE SKY HOLDINGS, LLC
51 MICHAEL STREET
MANCHESTER, NH 03104

866-9; 866-10
KATHLEEN Y. WIBBER
3526 BROWN AVENUE
MANCHESTER, NH 03103

028-010-1
TT OF HILLSBOROUGH, LLC
505 SOUTH FLAGLER DR. STE 1400
WEST PALM BEACH, FL 33401

028-014-10 & 710-55
STATE OF NEW HAMPSHIRE
DEPT. OF TRANSPORTATION
P.O. BOX 483
7 HAZEN DRIVE
CONCORD, NH 03302-0483

028-014B-0
HERTZ CORPORATION
8501 WILLIAMS ROAD
ESTERO, FL 33928

028-10C-3; 028-10C-4
028-10-2, 028-010-4
BENTON FAMILY REALTY LLC
1 HIGHLANDER WAY
MANCHESTER, NH 03103

028-10C-0
EXECUTIVE CONDO ASSOC.
C/O BENTON FAMILY REALTY TR.
1 HIGHLANDER WAY
LONDONDERRY, NH 03053

028-014C-0
UNITED PARCEL SERVICE
ATTN: CORPORATE REAL ESTATE
56 GLENLAKE PARKWAY, NE
ATLANTA, GA 30328

MAP 866 LOT 19
ARCHIE F. SYRENE
142 LOWELL ST APT 6
MANCHESTER, NH 03104

MAP 866 LOT 6
ROGER A. BOUTIN
254 WOODCREST CT
MANCHESTER, NH 03109

MAP 866 LOT 1
SCOTT RILEY
3600 BROWN AVENUE
MANCHESTER, NH 03103

028-013-0 & 710-1
JEFFREY W. & ANNIE MARIE CHICK
3563 BROWN AVE.
MANCHESTER, NH 03103

MAP 710 LOT 5
CITY OF MANCHESTER
C/O 3F LLC
70 LOWELL STREET
MANCHESTER, NH 03101

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS SURVEY AND PLAT WERE PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS AN ERROR OF CLOSURE OF GREATER ACCURACY THAN ONE PART IN TEN THOUSAND (1:10,000).

I CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN. (RSA 676:18-III)

Michael R Dahlberg — 02-17-2026
LICENSED LAND SURVEYOR — DATE

STATE OF NEW HAMPSHIRE LICENSED LAND SURVEYOR No. 714 MICHAEL R. DAHLBERG SIGNATURE

Michael R Dahlberg

OWNER'S SIGNATURE

BENTON FAMILY TRUST/EXECUTIVE HEALTH & SPORTS CENTER — 2/18/2026 DATE

CITY OF MANCHESTER, NEW HAMPSHIRE — 2/18/2026 DATE

TAX MAP 28 LOTS 010-0 & 014-0

EXISTING CONDITIONS PLAN

EXECUTIVE HEALTH & SPORTS CENTER

1 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: **CITY OF MANCHESTER**
1 AIRPORT ROAD, SUITE 300, MANCHESTER, NH

APPLICANT: **BENTON FAMILY TRUST**
1 HIGHLANDER WAY, LONDONDERRY, NH

PREPARED FOR
EXECUTIVE HEALTH & SPORTS CENTER
1 HIGHLANDER WAY, LONDONDERRY, NH 03053

SCALE: 1" = 100' **NOVEMBER 25, 2025**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

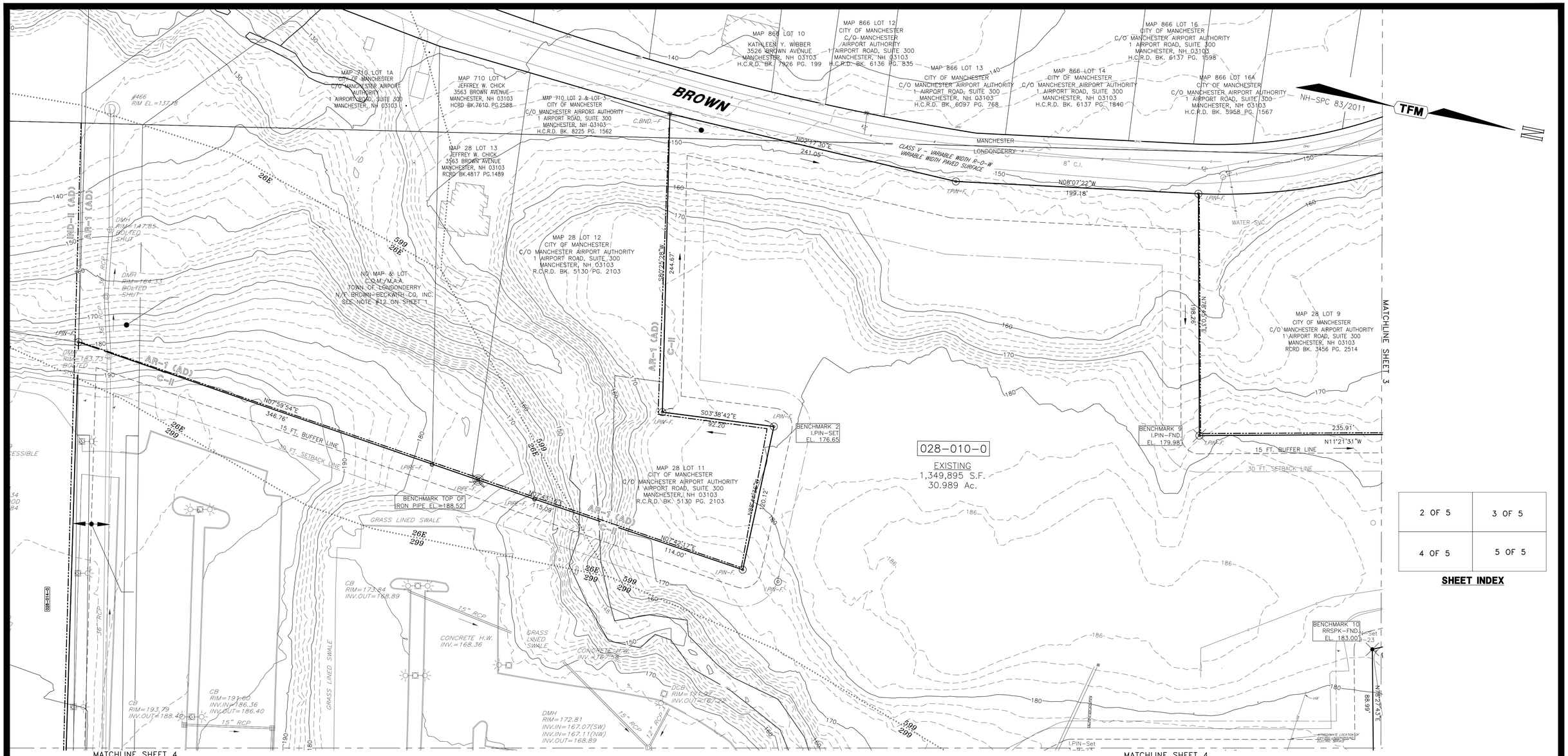
FILE	DR	CK	FB	CADFILE	
17562.06	MRD	MRD	–	17562.06 EXC	SHEET 1 OF 5

CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION "IT'S THE LAW"
811 Dig Safe MA-ME-NH-RI-VT

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REV.	DATE	DESCRIPTION	DRAWN	CHECK
1	2-17-26	REVISIONS-ADDITIONS PER 3RD PARTY REVIEW	MRD	MRD

02/18/2026 11:25am – mdahlberg – F:\TFM Projects\17562\Carlson Survey\Dwgs\EXCON NOVEMBER 2025\17562-06 EXCON 100 SCALE OVERVIEW 2-17-26.dwg



2 OF 5	3 OF 5
4 OF 5	5 OF 5

SHEET INDEX

Graphic Scale

40' 20' 0' 40' 80' 120' 160'

1" = 40'

CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION "IT'S THE LAW"

811 Dig Safe MA-ME-NH-RI-VT

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REV.	DATE	DESCRIPTION	DRAWN	CHECK
1	2-17-26	REVISIONS-ADDITIONS PER 3RD PARTY REVIEW	MRD	MRD

LEGEND

VERTICAL GRANITE CURB	VGC	WATER GATE	WV
VERTICAL CONCRETE CURB	VCC	UTILITY POLE	UP
EDGE OF PAVEMENT	EOP	GAS VALVE	GV
SIGN		LIGHT POLE	
GUY ANCHOR		HYDRANT	
SEWER LINE	S	ELECTRIC PULLBOX	
SEWER FORCE MAIN	FM	CONCRETE SURFACE	
WATER LINE	W	DECIDUOUS TREE	
DRAIN LINE	D	CONIFEROUS TREE	
GAS LINE	G	BOUND	
OVERHEAD UTILITIES	OHW	DRILL HOLE	
U.G. ELEC.,TEL., & CABLE	UGT UGE UGU	IRON PIN	
SEWER MANHOLE	S	DRAIN MANHOLE	D
CATCH BASIN			
EASEMENT		ZONE BOUNDARY	
SETBACK LINE		BUFFER LINE	

WETLAND SCIENTIST CERTIFICATION:

JURISDICTIONAL WETLANDS SHOWN (WHERE INDICATED AS NON-RECORD) ON THIS PLAN WERE DELINEATED DURING SEPTEMBER OF 2025, BY CHRISTOPHER K. DANFORTH CWS #077. THE WETLANDS WERE DELINEATED ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (1987) AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2, JANUARY 2012. DOMINANT HYDRIC SOILS WITHIN THE WETLAND(S) WERE IDENTIFIED USING "FIELD INDICATORS OF HYDRIC SOILS OF THE UNITED STATES" A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, NRCS, VERSION 8.1, 2017. DOMINANCE OF HYDROPHYTIC VEGETATION WAS DETERMINED USING THE USACE NATIONAL WETLAND PLANT LIST, NWPL 2016 VERSION 3.3 HTTP://WETLAND_PLANTS.USACE.ARMY.MIL.

STATE OF NEW HAMPSHIRE
CHRISTOPHER K. DANFORTH
2/18/2026
No. 077
CERTIFIED WETLAND SCIENTIST

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS SURVEY AND PLAT WERE PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS AN ERROR OF CLOSURE OF GREATER ACCURACY THAN ONE PART IN TEN THOUSAND (1:10,000).

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Michael R Dahlberg 12-02-25

LICENSED LAND SURVEYOR — DATE

STATE OF NEW HAMPSHIRE
No. 714
MICHAEL R. DAHLBERG
LICENSED LAND SURVEYOR
SIGNATURE

TAX MAP 28 LOTS 010-0 & 014-0

TOPOGRAPHIC EXISTING CONDITIONS PLAN

EXECUTIVE HEALTH & SPORTS CENTER

1 HIGHLANDER WAY, LONDONDERRY, NH

OWNER
CITY OF MANCHESTER
1 AIRPORT ROAD, SUITE 300, MANCHESTER, NH

APPLICANT
BENTON FAMILY TRUST
1 HIGHLANDER WAY, LONDONDERRY, NH 03053

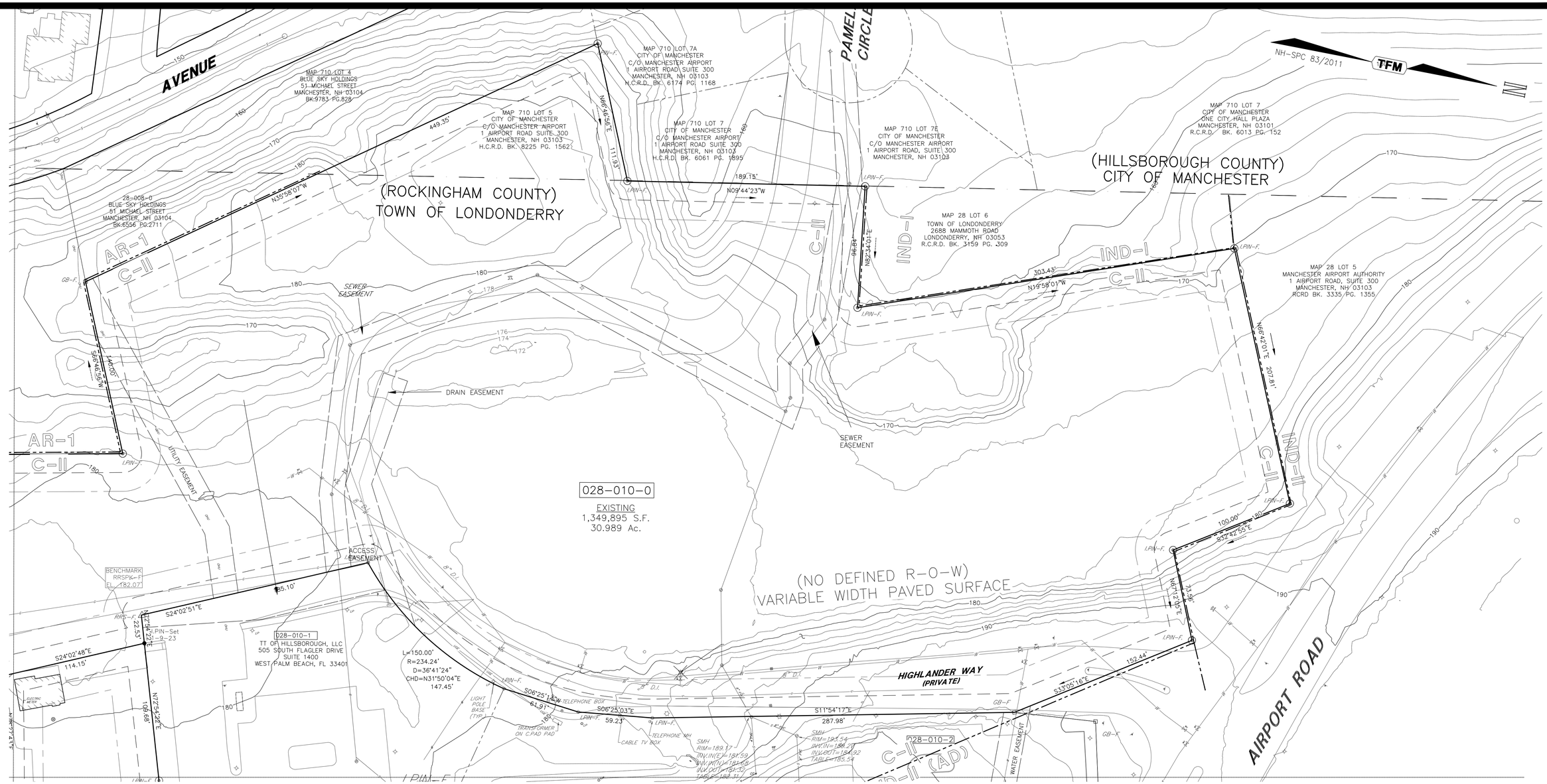
PREPARED FOR
EXECUTIVE HEALTH & SPORTS CENTER
1 HIGHLANDER WAY, LONDONDERRY, NH 03053

SCALE: 1" = 40' **NOVEMBER 26, 2025**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	FB		
17562.06	MRD	–	SHEET 2 OF 5	
	CK	MRD	CADFILE	17562-06 EXC

02/17/2026 1:32pm - mdahlberg - F:\TFM Projects\17562\Carlson Survey\Dwgs\EXCON NOVEMBER 2025\17562-06 EXCON 40 SCALE SHEETS EXECUTIVE HEALTH 02-17-26.dwg



Graphic Scale

40' 20' 0' 40' 80' 120' 160'

1" = 40'

CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION
"IT'S THE LAW"
811 Dig Safe
MA-ME-NH-RI-VT

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REV.	DATE	DESCRIPTION	DRAWN	CHECK

LEGEND

VERTICAL GRANITE CURB	VGC	WATER GATE	WV
VERTICAL CONCRETE CURB	VCC	UTILITY POLE	
EDGE OF PAVEMENT	EOP	GAS VALVE	GV
SIGN		LIGHT POLE	
GUY ANCHOR		HYDRANT	
SEWER LINE	S	ELECTRIC PULLBOX	
SEWER FORCE MAIN	FM	CONCRETE SURFACE	
WATER LINE	W	DECIDUOUS TREE	
DRAIN LINE	D	CONIFEROUS TREE	
GAS LINE	G	BOUND	
OVERHEAD UTILITIES	OHW	DRILL HOLE	
U.G. ELEC.,TEL., & CABLE	UGETC	IRON PIN	
SEWER MANHOLE	S	DRAIN MANHOLE	D
CATCH BASIN			

WETLAND SCIENTIST CERTIFICATION:

JURISDICTIONAL WETLANDS SHOWN (WHERE INDICATED AS NON-RECORD) ON THIS PLAN WERE DELINEATED DURING SEPTEMBER OF 2025, BY CHRISTOPHER K. DANFORTH CWS #077. THE WETLANDS WERE DELINEATED ACCORDING TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL (1987) AND THE REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION, VERSION 2, JANUARY 2012. DOMINANT HYDRIC SOILS WITHIN THE WETLAND(S) WERE IDENTIFIED USING "FIELD INDICATORS OF HYDRIC SOILS OF THE UNITIED STATES" A GUIDE FOR IDENTIFYING AND DELINEATING HYDRIC SOILS, NRCS, VERSION 8.1, 2017. DOMINANCE OF HYDROPHYTIC VEGETATION WAS DETERMINED USING THE USACE NATIONAL WETLAND PLANT LIST, NWPL 2016 VERSION 3.3 HTTP://WETLAND_PLANTS.USACE.ARMY.MIL.

STATE OF NEW HAMPSHIRE
CHRISTOPHER K. DANFORTH
2/18/2026
No. 077
CERTIFIED WETLAND SCIENTIST

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS SURVEY AND PLAT WERE PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS AN ERROR OF CLOSURE OF GREATER ACCURACY THAN ONE PART IN TEN THOUSAND (1:10,000).

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Michael R Dahlberg — 12-02-25
LICENSED LAND SURVEYOR — DATE

STATE OF NEW HAMPSHIRE
No. 714
MICHAEL R. DAHLBERG
LICENSED LAND SURVEYOR
SIGNATURE
Michael R Dahlberg

TAX MAP 28 LOTS 010-0 & 014-0

TOPOGRAPHIC EXISTING CONDITIONS PLAN

EXECUTIVE HEALTH & SPORTS CENTER

1 HIGHLANDER WAY, LONDONDERRY, NH

OWNER
CITY OF MANCHESTER
1 AIRPORT ROAD, SUITE 300, MANCHESTER, NH

APPLICANT
BENTON FAMILY TRUST
1 HIGHLANDER WAY, LONDONDERRY, NH 03053

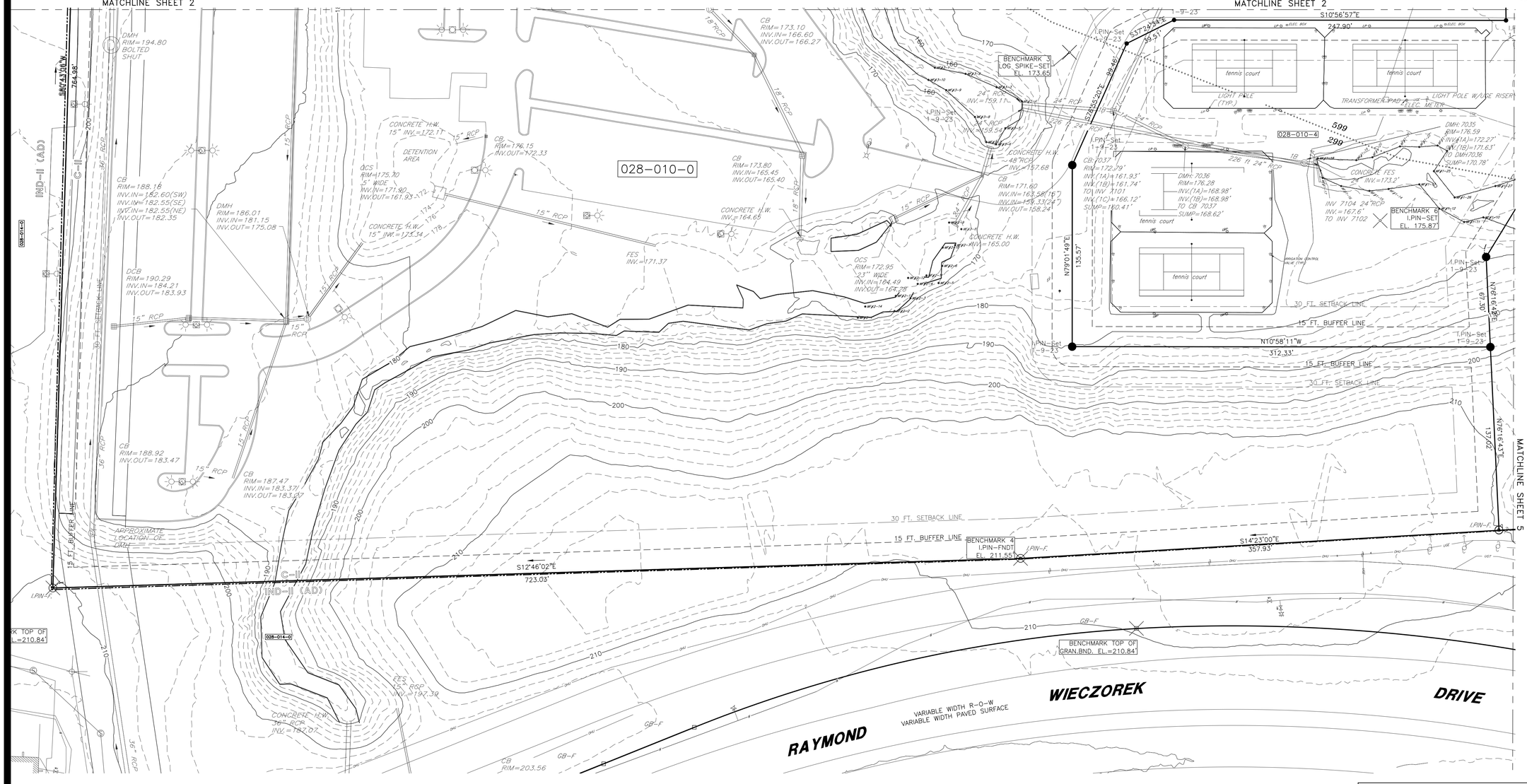
PREPARED FOR
EXECUTIVE HEALTH & SPORTS CENTER
1 HIGHLANDER WAY, LONDONDERRY, NH 03053

SCALE: 1" = 40' **NOVEMBER 26, 2025**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
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Phone (603) 472-4488
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FILE	DR	FB		SHEET
17562.06	MRD	–		3 OF 5
	CK	CADFILE		
	MRD		17562-06 EXC	

02/18/2026 11:14am – mdahlberg – F:\TFM Projects\17562\Carlson Survey\Dwgs\EXCON NOVEMBER 2025\17562-06 EXCON 100 SCALE OVERVIEW 2-17-26.dwg



LEGEND

- VERTICAL GRANITE CURB — VGC
- VERTICAL CONCRETE CURB — VCC
- EDGE OF PAVEMENT — EOP
- SIGN
- GUY ANCHOR
- SEWER LINE — S
- SEWER FORCE MAIN — FM
- WATER LINE — W
- DRAIN LINE — D
- GAS LINE — G
- OVERHEAD UTILITIES — OHW
- U.G. ELEC.,TEL., & CABLE — UGETC
- SEWER MANHOLE
- CATCH BASIN
- WATER GATE
- UTILITY POLE
- GAS VALVE
- LIGHT POLE
- HYDRANT
- ELECTRIC PULLBOX
- CONCRETE SURFACE
- DECIDUOUS TREE
- CONIFEROUS TREE
- BOUND
- DRILL HOLE
- IRON PIN
- DRAIN MANHOLE
- EASEMENT
- ZONE BOUNDARY
- SETBACK LINE
- BUFFER LINE

Graphic Scale

40' 20' 0' 40' 80' 120' 160'

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CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION "IT'S THE LAW"

811 Dig Safe MA·ME·NH·RI·VT

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REV.	DATE	DESCRIPTION	DRAWN	CHECK
1	2-17-26	REVISIONS-ADDITIONS PER 3RD PARTY REVIEW	MRD	MRD

2 OF 5	3 OF 5
4 OF 5	5 OF 5

SHEET INDEX

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STATE OF NEW HAMPSHIRE
CHRISTOPHER K. DANFORTH
2/18/2026
No. 077
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Michael R Dahlberg — 12-02-25
LICENSED LAND SURVEYOR — DATE

STATE OF NEW HAMPSHIRE — No. 714 — MICHAEL R. DAHLBERG — LICENSED LAND SURVEYOR
Michael R Dahlberg
SIGNATURE

TAX MAP 28 LOTS 010-0 & 014-0

TOPOGRAPHIC EXISTING CONDITIONS PLAN

EXECUTIVE HEALTH & SPORTS CENTER

1 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: **CITY OF MANCHESTER**
1 AIRPORT ROAD, SUITE 300, MANCHESTER, NH

APPLICANT: **BENTON FAMILY TRUST**
1 HIGHLANDER WAY, LONDONDERRY, NH 03053

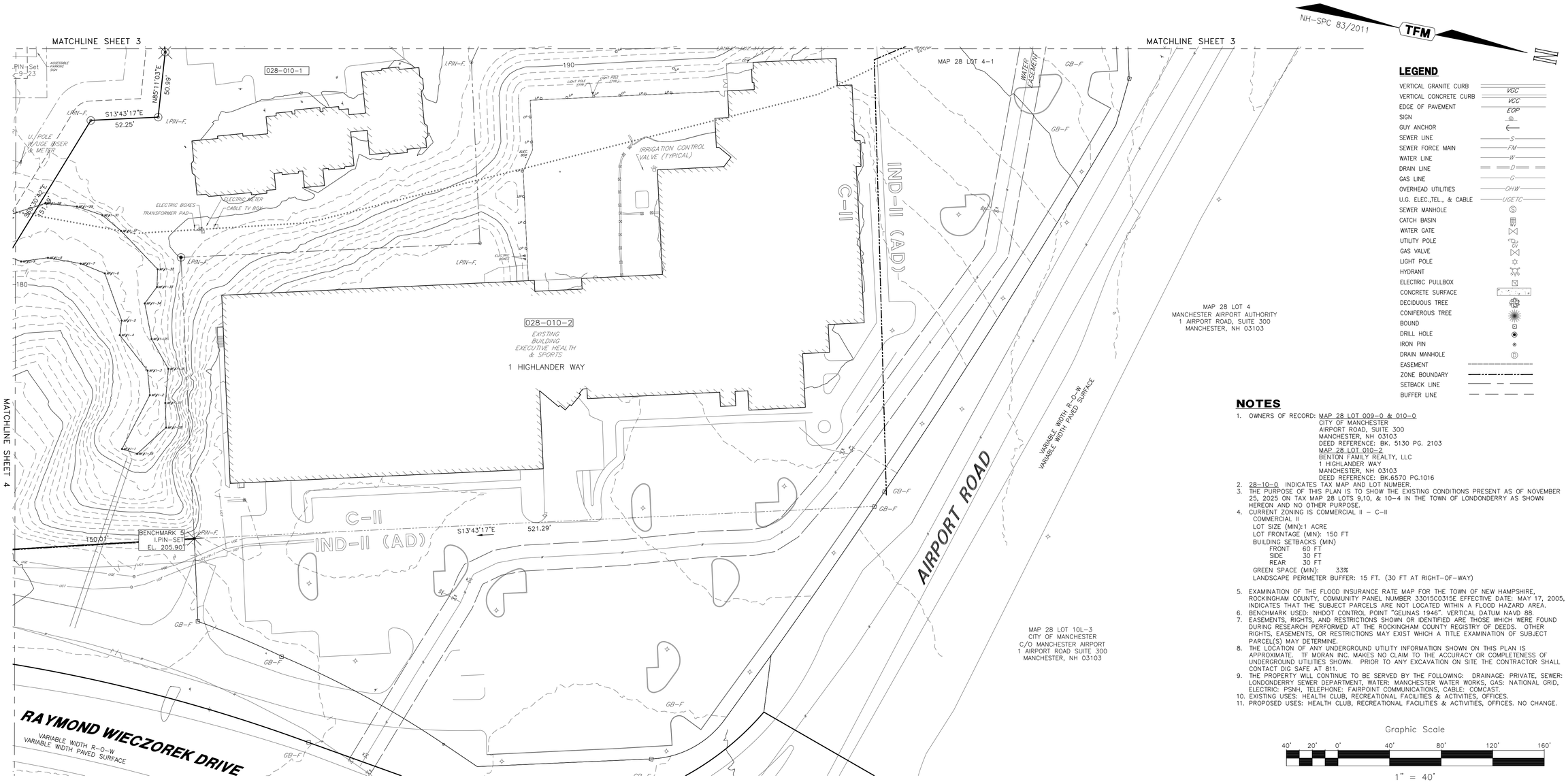
PREPARED FOR
EXECUTIVE HEALTH & SPORTS CENTER
1 HIGHLANDER WAY, LONDONDERRY, NH 03053

SCALE: 1" = 40' **NOVEMBER 26, 2025**

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Structural Engineers
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Land Surveyors
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FILE	DR	FB		
17562.06	MRD		–	SHEET 4 OF 5
	CK MRD	CADFILE	17562-06 EXC	

02/17/2026 1:33pm – mdahlberg – F:\TFM Projects\17562\Carlson Survey\Dwgs\EXCON NOVEMBER 2025\17562-06 EXCON 40 SCALE SHEETS EXECUTIVE HEALTH 02-17-26.dwg



LEGEND

VERTICAL GRANITE CURB	VGC
VERTICAL CONCRETE CURB	VCC
EDGE OF PAVEMENT	EOP
SIGN	
GUY ANCHOR	
SEWER LINE	S
SEWER FORCE MAIN	FM
WATER LINE	W
DRAIN LINE	D
GAS LINE	G
OVERHEAD UTILITIES	OHW
U.G. ELEC.,TEL., & CABLE	UGETC
SEWER MANHOLE	S
CATCH BASIN	
WATER GATE	
UTILITY POLE	
GAS VALVE	GV
LIGHT POLE	
HYDRANT	
ELECTRIC PULLBOX	
CONCRETE SURFACE	
DECIDUOUS TREE	
CONIFEROUS TREE	
BOUND	
DRILL HOLE	
IRON PIN	
DRAIN MANHOLE	D
EASEMENT	
ZONE BOUNDARY	
SETBACK LINE	
BUFFER LINE	

NOTES

1. OWNERS OF RECORD: MAP 28 LOT 009-0 & 010-0
   CITY OF MANCHESTER
   AIRPORT ROAD, SUITE 300
   MANCHESTER, NH 03103
   DEED REFERENCE: BK. 5130 PG. 2103
   MAP 28 LOT 010-2
   BENTON FAMILY REALTY, LLC
   1 HIGHLANDER WAY
   MANCHESTER, NH 03103
   DEED REFERENCE: BK.6570 PG.1016
2. 28-10-0 INDICATES TAX MAP AND LOT NUMBER.
3. THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS PRESENT AS OF NOVEMBER 25, 2025 ON TAX MAP 28 LOTS 9,10, & 10-4 IN THE TOWN OF LONDONDERRY AS SHOWN HEREON AND NO OTHER PURPOSE.
4. CURRENT ZONING IS COMMERCIAL II - C-II
   COMMERCIAL II
   LOT SIZE (MIN):1 ACRE
   LOT FRONTAGE (MIN): 150 FT
   BUILDING SETBACKS (MIN)
   FRONT 60 FT
   SIDE 30 FT
   REAR 30 FT
   GREEN SPACE (MIN): 33%
   LANDSCAPE PERIMETER BUFFER: 15 FT. (30 FT AT RIGHT-OF-WAY)
5. EXAMINATION OF THE FLOOD INSURANCE RATE MAP FOR THE TOWN OF NEW HAMPSHIRE, ROCKINGHAM COUNTY, COMMUNITY PANEL NUMBER 33015C0315E EFFECTIVE DATE: MAY 17, 2005, INDICATES THAT THE SUBJECT PARCELS ARE NOT LOCATED WITHIN A FLOOD HAZARD AREA.
6. BENCHMARK USED: NHDOT CONTROL POINT "GELINAS 1946". VERTICAL DATUM NAVD 88.
7. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) MAY DETERMINE.
8. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. TF MORAN INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 811.
9. THE PROPERTY WILL CONTINUE TO BE SERVED BY THE FOLLOWING: DRAINAGE: PRIVATE, SEWER: LONDONDERRY SEWER DEPARTMENT, WATER: MANCHESTER WATER WORKS, GAS: NATIONAL GRID, ELECTRIC: PSNH, TELEPHONE: FAIRPOINT COMMUNICATIONS, CABLE: COMCAST.
10. EXISTING USES: HEALTH CLUB, RECREATIONAL FACILITIES & ACTIVITIES, OFFICES.
11. PROPOSED USES: HEALTH CLUB, RECREATIONAL FACILITIES & ACTIVITIES, OFFICES. NO CHANGE.

Graphic Scale

40' 20' 0' 40' 80' 120' 160'

1" = 40'

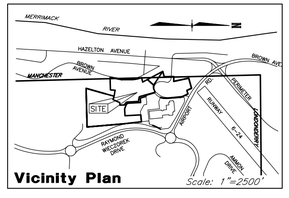
2 OF 5	3 OF 5
4 OF 5	5 OF 5

SHEET INDEX

CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION "IT'S THE LAW"
811 Dig Safe
MA-ME-NH-RI-VT

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REV.	DATE	DESCRIPTION	DRAWN	CHECK
1	2-17-26	REVISIONS-ADDITIONS PER 3RD PARTY REVIEW	MRD	MRD



Vicinity Plan

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STATE OF NEW HAMPSHIRE
CHRISTOPHER K. DANFORTH
2/18/2026
No. 077
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Michael R Dahlberg 12-02-25
LICENSED LAND SURVEYOR DATE

STATE OF NEW HAMPSHIRE
No. 714
MICHAEL R. DAHLBERG
LICENSED LAND SURVEYOR
SIGNATURE
Michael R Dahlberg

TAX MAP 28 LOTS 010-0 & 014-0

TOPOGRAPHIC EXISTING CONDITIONS PLAN

EXECUTIVE HEALTH & SPORTS CENTER

1 HIGHLANDER WAY, LONDONDERRY, NH

OWNER
CITY OF MANCHESTER
1 AIRPORT ROAD, SUITE 300, MANCHESTER, NH

APPLICANT
BENTON FAMILY TRUST
1 HIGHLANDER WAY, LONDONDERRY, NH 03053

PREPARED FOR
EXECUTIVE HEALTH & SPORTS CENTER
1 HIGHLANDER WAY, LONDONDERRY, NH 03053

SCALE: 1" = 40' **NOVEMBER 26, 2025**

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
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FILE		DR	MRD	FB	-	
	17562.06	CK	MRD	CADFILE	17562-06 EXC	SHEET 5 OF 5

02/17/2026 1:33pm - mdahlberg - F:\TFM Projects\17562\Carlson Survey\Dwgs\EXCON NOVEMBER 2025\17562-06 EXCON 40 SCALE SHEETS EXECUTIVE HEALTH 02-17-26.dwg

NOTES

1. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS WORK AT ALL TIMES.
2. THE CONTRACTOR SHALL VERIFY ALL SURVEY INFORMATION IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
3. STUMPS SHALL NOT BE BURIED ON SITE; STUMPS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LEGAL MANNER.
4. THE LOCATION OF UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. TFMORAN INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE, THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233.
5. EXISTING UTILITY SERVICES TO BE DISCONTINUED ARE TO BE CAPPED AS REQUIRED BY THE RESPECTIVE UTILITY COMPANIES.
6. CONSTRUCTION DEBRIS AND ANY INVASIVE SPECIES SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A LEGAL MANNER.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELF WITH THE SITE AND ALL EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF THEIR INTENTION AT LEAST 48 HOURS IN ADVANCE.

TAX MAP 28 LOTS 9, 10, &10-4

SITE PREPARATION & DEMOLITION PLAN

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)

1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4

BENTON FAMILY REALTY, LLC

1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

BENTON FAMILY REALTY, LLC

1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

STATE OF NEW HAMPSHIRE - JASON HILL No. 15391 LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

HORIZONTAL SCALE 1"=40'
40 20 0 40

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
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FILE	DR	CK			
17562.06	JSH	RED	CADFILE	17562-06 SITE	C-3

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DIG SAFE STATE OF NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

TAX MAP 28 LOTS 9, 10, &10-4

OVERALL SITE LAYOUT PLAN

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4

BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

HORIZONTAL SCALE 1"=80'
80 40 0 80

REV	DATE	DESCRIPTION	DR	CK
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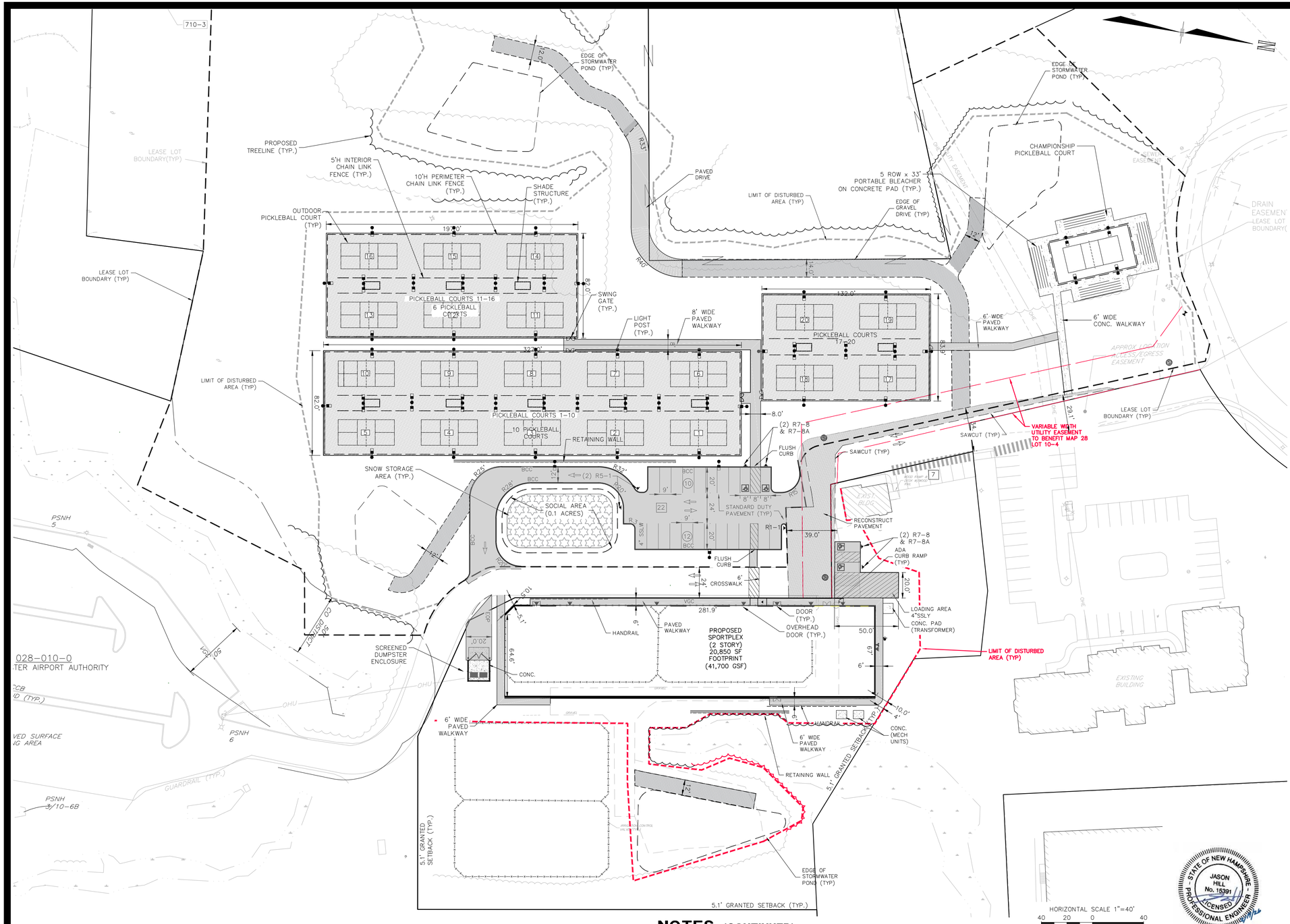
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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

APPROVED BY THE LONDONDERRY NH PLANNING BOARD FOR PHASE _____
ON DATE: _____
CERTIFIED BY: _____



NOTES

1. THE PURPOSE OF THIS PLAN IS TO DEPICT A PROPOSED EXPANSION TO THE EXISTING EXECUTIVE HEALTH & SPORTS CENTER WITH ASSOCIATED SITE IMPROVEMENTS.

2. CURRENT ZONING IS COMMERCIAL II

COMMERCIAL II (REQUIRED)		PROVIDED LOT 10	PROVIDED LOT 10-4
LOT SIZE (MIN):	1 ACRE	**30.989 AC.**	2.2 AC
LOT FRONTAGE (MIN):	150 FT	440.2'	0'
BUILDING SETBACKS (MIN)			
FRONT	60 FT	177.4'(LIGHT POLE)	N/A
SIDE	30 FT	N/A	5.1' VARIANCE GRANTED
REAR	30 FT	>30'	N/A
MAX. BUILDING HEIGHT:		N/A	<50'
MAX. BUILDING COVERAGE:		N/A	41.7% VARIANCE GRANTED
GREEN SPACE (MIN):	33%	>33%	54.8%
LANDSCAPE PERIMETER:	15 FT (30 FT AT RIGHT-OF-WAY)	0' VARIANCE GRANTED	0' VARIANCE GRANTED

PARKING CALCULATIONS:

EXISTING PARKING (PER LONDONDERRY ZONING):
EXISTING TENNIS COURTS: 3 SPACES/ COURT = 8 COURTS X 3 SPACES = 24 SPACES
EXISTING HEALTH CLUB: 4 SPACES/1,000 SF=(43,000 SF X 4 SPACES/1000 SF)=172 SPACES
EXISTING MEDICAL OFFICE: 4.5 SPACES/1000 SF=(7,000 SF X 4.5 SPACES/1000 SF)= 32 SPACES
PROPOSED OUTDOOR SPORTS COURT: 3 SPACES/COURT = 3 SPACES X 21 COURTS = 63 SPACES
PROPOSED INDOOR SPORTS COURTS: 3 SPACES/COURT = (12 COURTS X 3 SP) = 36 SPACES

TOTAL SPACES REQUIRED = **327**
EXISTING: **310** SPACES, INCLUDING 7 HANDICAP
PROPOSED: **24** SPACES, INCLUDING 4 HANDICAP
TOTAL SPACES PROVIDED: **334** SPACES

3. THE PROPERTY WILL BE SERVICED BY THE FOLLOWING:

DRAINAGE	PRIVATE
SEWER	TOWN OF LONDONDERRY
WATER	MANCHESTER WATER WORKS
GAS	LIBERTY UTILITIES
ELECTRIC	EVERSOURCE
TELEPHONE	CONSOLIDATED COMMUNICATIONS
CABLE	COMCAST

4. IN THE EVENT THAT THE SNOW STORAGE AREAS PROVIDED ON THE SITE ARE COMPLETELY UTILIZED, EXCESS SNOW SHALL BE TRANSPORTED OFF SITE FOR DISPOSAL IN ACCORDANCE WITH N.H.D.E.S. REGULATIONS. IF SNOW IS STORED WITHIN PARKING AREA KEEP CATCH BASINS CLEAR.

5. THE CONTRACTOR SHALL BID AND PERFORM THE WORK IN ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL CODES, SPECIFICATIONS, REGULATIONS AND STANDARDS.

6. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS NOTED OTHERWISE.

7. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.

8. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY TFMORAN, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.

9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE SITE AND ALL EXISTING CONDITIONS SURROUNDING IT AND THEREON. THE CONTRACTOR SHALL ADVISE THE APPROPRIATE AUTHORITY OF HIS INTENTIONS AT LEAST 48 HOURS IN ADVANCE.

10. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS WORK AT ALL TIMES.

11. LIGHTING, SIGNAGE, LANDSCAPING, AND SCREENING SHALL MEET THE REQUIREMENTS OF THE CITY/TOWN ZONING ORDINANCE AND SITE PLAN REGULATIONS.

12. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY SHEET. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.

13. ALL WORK IS TO CONFORM TO TOWN OF LONDONDERRY DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS.

14. IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND DETAILS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.

15. IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED WORK.

16. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. TFMORAN INC. ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.

17. TFMORAN INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE ENGINEER OF RECORD.

18. WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN OF LONDONDERRY CONSTRUCTION STANDARDS AND DETAILS (LATEST ADDITION). THESE CONSTRUCTION STANDARDS SHALL TAKE PRECEDENCE IN THE EVENT OF CONFLICTS BETWEEN PLANS, DETAILS OR OTHER DRAWINGS.

19. IN ACCORDANCE WITH SECTION 6.01 OF THE LONDONDERRY SITE PLAN REGULATIONS AND RSA 676:13, ALL IMPROVEMENTS SPECIFIED ON THESE SITE PLANS SHALL BE CONSTRUCTED, COMPLETED, AND INSPECTED AND APPROVED BY THE TOWN OF LONDONDERRY PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

20. TRASH COLLECTION WILL BE PRIVATE.

21. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT DEFICIENCIES EXIST IN THE APPROVED DESIGN DRAWINGS, THE OWNER SHALL BE REQUIRED TO CORRECT THE DEFICIENCIES TO MEET THE REQUIREMENTS OF THE REGULATIONS AT NO EXPENSE TO THE TOWN.

NOTES (CONTINUED)

22. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE TOWN.

23. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO TOWN OF LONDONDERRY SITE PLAN REGULATIONS AND THE LATEST EDITION OF THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION.

24. IN ACCORDANCE WITH SECTION 6.01 OF THE LONDONDERRY SITE PLAN REGULATIONS AND RSA 676:12, ALL OFF-SITE IMPROVEMENTS SPECIFIED ON THESE SITE PLANS SHALL BE CONSTRUCTED, COMPLETED, INSPECTED AND APPROVED BY THE TOWN OF LONDONDERRY (AND/OR THE NHDOT, IF APPLICABLE) PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

25. THE APPROVED SITE PLANS SHALL BE ON FILE AT THE TOWN OF LONDONDERRY PLANNING DEPARTMENT.

APPROVED BY THE LONDONDERRY NH PLANNING BOARD FOR PHASE _____
ON DATE: _____
CERTIFIED BY:

OWNER'S SIGNATURE

BETNON FAMILY TRUST/EXECUTIVE HEALTH & SPORTS CENTER — DATE
CITY OF MANCHESTER — DATE

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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

SITE LAYOUT PLAN

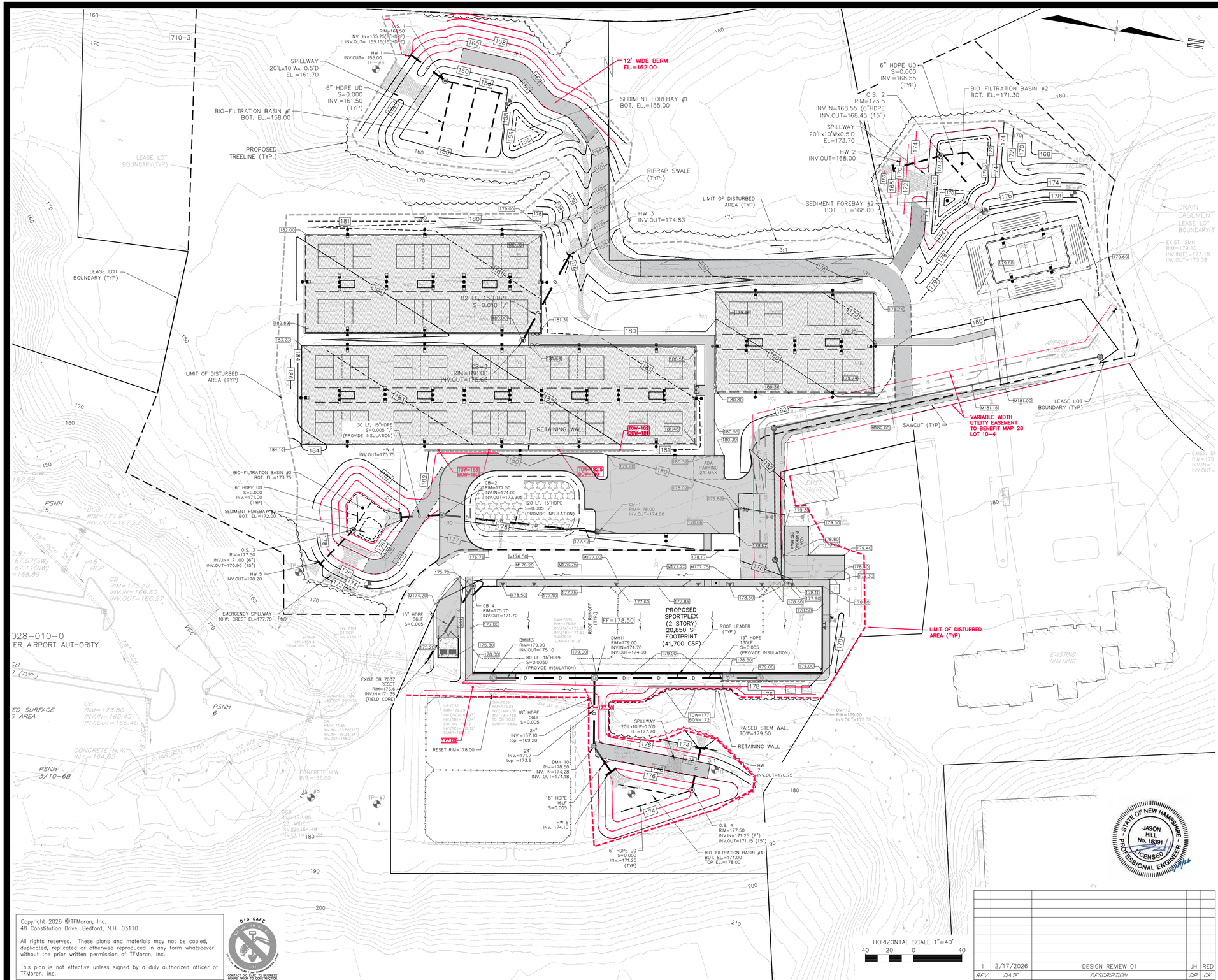
EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10
CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103
OWNER: MAP 28 LOT 10-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103
APPLICANT
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	CK	CADFILE		
17562.06	JSH	RED	17562-06 SITE		C-5



NOTES

1. ALL WORK SHALL CONFORM TO THE TOWN OF LONDONDERRY CONSTRUCTION STANDARDS, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE SITE AND ALL SURROUNDING CONDITIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE DIGGING.
4. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY AGENCIES/COMPANIES, AND ARRANGE FOR ALL INSPECTIONS.
6. ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL CONFORM TO TOWN OF LONDONDERRY TYPICAL DETAILS FOR SITE & ROADWAY INFRASTRUCTURE AND THE REQUIREMENTS OF THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION AND THE NHDOT STANDARD STRUCTURE DRAWINGS UNLESS OTHERWISE NOTED.
7. STORM DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE TYPE B AND CONFORM TO NHDOT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
8. ALL MANHOLES IN PAVEMENT SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY ELEVATIONS OTHERWISE SHOWN.
9. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED. CURBS HAVE A 6" REVEAL UNLESS OTHERWISE NOTED.
10. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
11. IN ACCORDANCE WITH RSA 430:53 AND Agr 3800, THE CONTRACTOR SHALL NOT TRANSPORT INVASIVE SPECIES OFF THE PROPERTY, AND SHALL DISPOSE OF INVASIVE SPECIES ON-SITE IN A LEGAL MANNER.
12. THE SITE CONTRACTOR SHALL PREPARE, MAINTAIN, AND EXECUTE A S.W.P.P.P. IN ACCORDANCE WITH EPA REGULATIONS AND THE CONSTRUCTION GENERAL PERMIT. THE CONTRACTOR SHALL ALSO OBTAIN A LONDONDERRY STORMWATER PERMIT.
13. THE SITE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14 DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE.
14. COORDINATE WITH ARCHITECTURAL PLANS FOR DETAILED GRADING AT BUILDING, AND SIZE AND LOCATION OF ALL BUILDING SERVICES.
15. COORDINATE WITH GEOTECHNICAL/STRUCTURAL PLANS FOR SITE PREPARATION AND OTHER BUILDING INFORMATION.
16. COORDINATE WITH MECHANICAL AND PLUMBING PLANS FOR ROOF DRAIN INFORMATION.
17. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING, SIDEWALKS AND ALIGNMENTS.
18. THE CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR INFORMATION ABOUT GROUNDWATER CONDITIONS. THE CONTRACTOR SHALL FOLLOW THE GEOTECHNICAL ENGINEERS RECOMMENDED METHODS TO ADDRESS ANY GROUNDWATER ISSUES THAT ARE FOUND ON SITE.
19. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR THE CONDITIONS AT THE SITE. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND REPORT DISCREPANCIES TO THE ENGINEER.
20. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK THE ACCURACY OF THE TOPOGRAPHY AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO ANY EARTHWORK BEING PERFORMED ON THE SITE. NO CLAIM FOR EXTRA WORK WILL BE CONSIDERED FOR PAYMENT AFTER EARTHWORK HAS COMMENCED.
21. VERIFY TBM ELEVATIONS PRIOR TO CONSTRUCTION.
22. IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND DETAILS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.
23. IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED WORK.
24. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. TFMORAN INC. ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
25. TFMORAN INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE ENGINEER OF RECORD.
28. AT COMPLETION OF CONSTRUCTION, THE SITE CONTRACTOR SHALL PROVIDE A LETTER CERTIFYING THAT THE PROJECT WAS COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND A LETTER STAMPED BY A QUALIFIED ENGINEER THAT THEY HAVE OBSERVED ALL UNDERGROUND DETENTION SYSTEMS, INFILTRATION SYSTEMS, OR FILTERING SYSTEMS PRIOR TO BACKFILL, AND THAT SUCH SYSTEMS CONFORM TO THE APPROVED PLANS AND SPECIFICATIONS.
29. THE SITE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS STAMPED BY A LICENSED SURVEYOR OR QUALIFIED ENGINEER ALONG WITH A LETTER STAMPED BY A QUALIFIED ENGINEER PRIOR TO OBTAINING A CERTIFICATE OF OCCUPANCY. THE CONTRACTOR SHALL BEAR ALL COSTS FOR PREPARING AND FILING ANY NEW PERMITS OR PERMIT AMENDMENTS THAT MAY BE REQUIRED.

TAX MAP 28 LOTS 9, 10, &10-4

GRADING & DRAINAGE PLAN

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)

1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4

BENTON FAMILY REALTY, LLC

1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

BENTON FAMILY REALTY, LLC

1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

STATE OF NEW HAMPSHIRE - JASON HILL No. 15391 LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

48 Constitution Drive
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Fax (603) 472-9747
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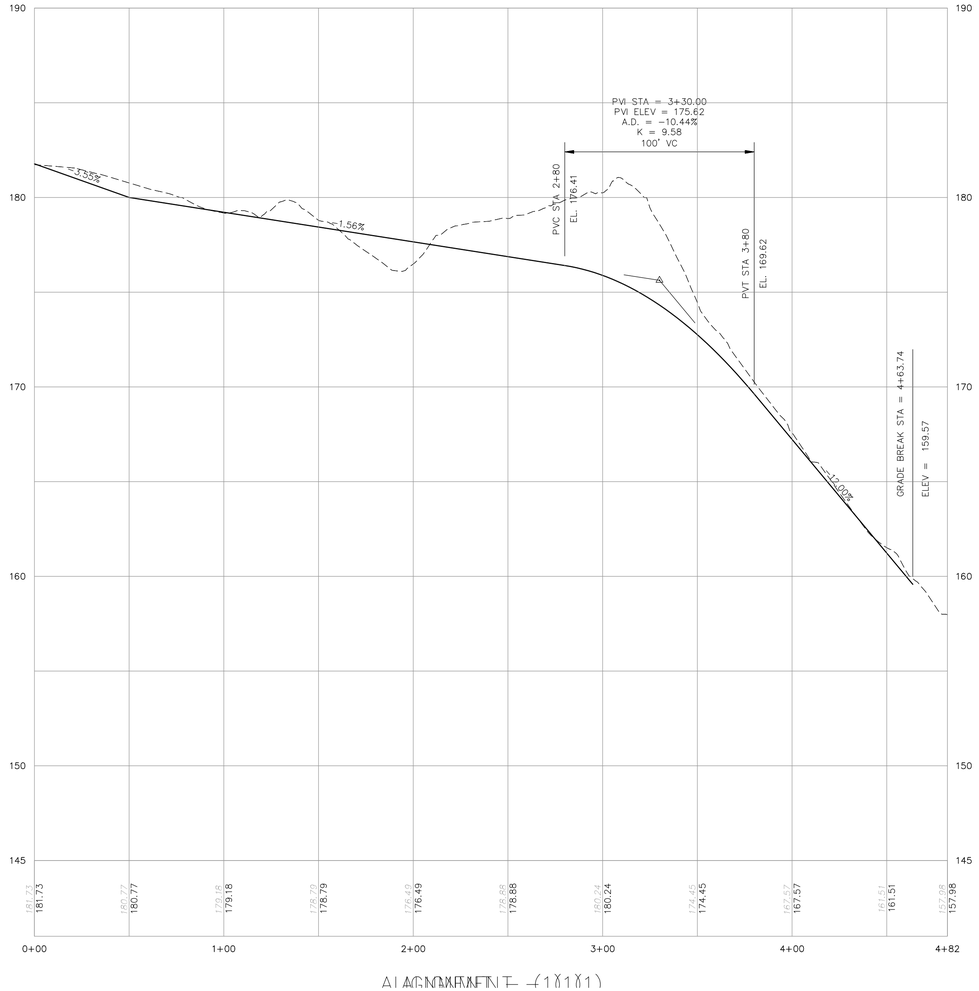
FILE	DR	CADFILE		
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	CK RED			

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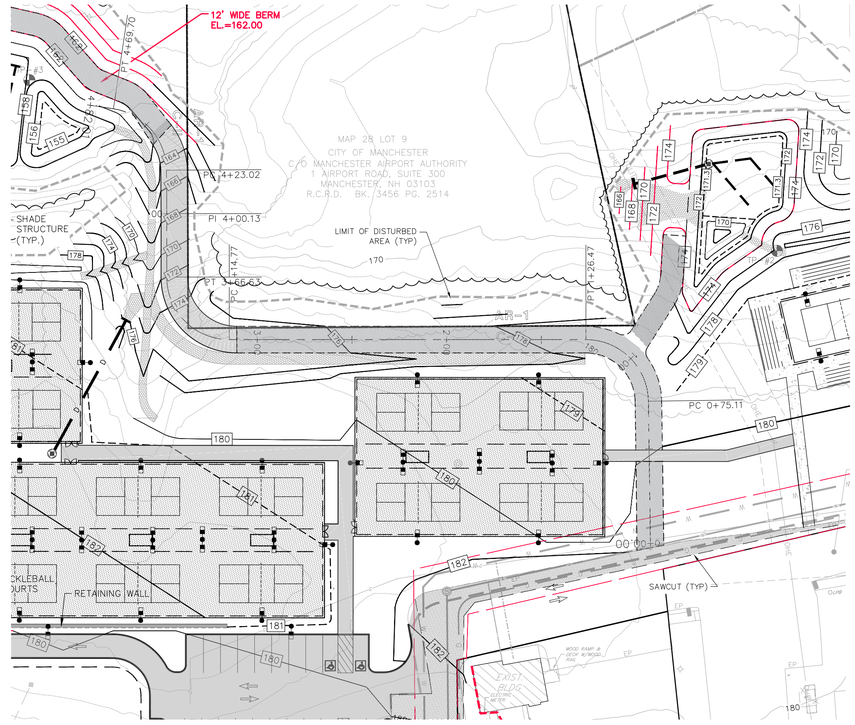
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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION



ALIGNMENT (1"=4')



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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

HORIZONTAL SCALE 1"=40'
40 20 0 40
VERTICAL SCALE 1"=4'
4 0 4

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

DRIVE PROFILE

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10
CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

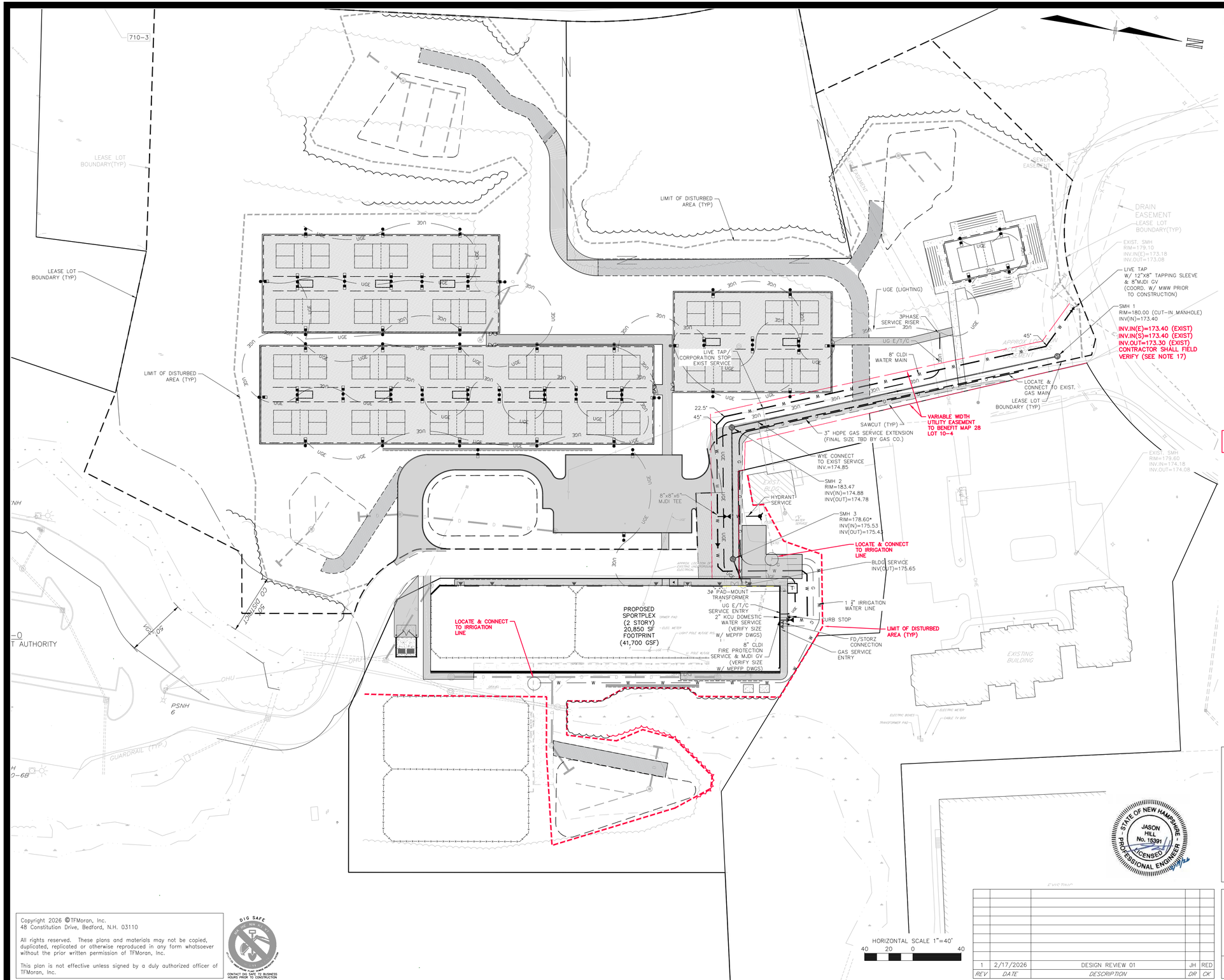
APPLICANT
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	CK	CADFILE		
17562.06	JSH	RED		17562-06 SITE	C-7



NOTES

1. ALL WORK SHALL CONFORM TO THE TOWN OF LONDONDERRY CONSTRUCTION STANDARDS, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE HIMSELF WITH THE SITE AND ALL SURROUNDING CONDITIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE DIGGING.
4. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL COORDINATE MATERIALS AND INSTALLATION SPECIFICATIONS WITH THE INDIVIDUAL UTILITY AGENCIES/COMPANIES, AND ARRANGE FOR ALL INSPECTIONS.
6. ALL MANHOLES IN PAVEMENT SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY ELEVATIONS OTHERWISE SHOWN.
7. ON-SITE WATER DISTRIBUTION SHALL BE TO MANCHESTER WATER WORKS CONSTRUCTION STANDARDS. WATER MAINS SHALL HAVE A MINIMUM OF 5.5 FEET COVER. WHERE WATER PIPES CROSS SEWER LINES A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE OBSERVED. HORIZONTAL SEPARATION BETWEEN WATER AND SEWER SHALL BE 10 FEET MINIMUM. THRUST BLOCKS SHALL BE USED AT ALL BENDS IN THE WATER MAINS.
8. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONDUIT AND WIRING TO ALL SIGNS AND LIGHTS. CONDUIT TO BE A MINIMUM OF 24" BELOW FINISH GRADE.
9. VERIFY UTILITY CONNECTIONS TO BUILDING WITH ARCHITECTURAL DRAWINGS.
10. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
11. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING, SIDEWALKS AND ALIGNMENTS.
12. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR THE CONDITIONS AT THE SITE. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND REPORT DISCREPANCIES TO THE ENGINEER.
13. UNLESS OTHERWISE SPECIFIED, ALL UNDERGROUND STRUCTURES, PIPES, CHAMBERS, ETC. SHALL BE COVERED WITH A MINIMUM OF 18" OF COMPACTED SOIL BEFORE EXPOSURE TO VEHICLE LOADS.
14. THE CONNECTION(S) OF THE PROPOSED SEWER TO THE EXISTING SEWER SHALL BE INSPECTED BY AUTHORIZED TOWN OF LONDONDERRY DEPARTMENT OF ENGINEERING & ENVIRONMENTAL SERVICES PERSONNEL BEFORE ANY BACKFILLING. INSPECTION HOURS ARE BETWEEN 9:00 AM AND 4:30 PM, MONDAY THRU FRIDAY, WITH A MINIMUM NOTICE OF 2 BUSINESS DAYS.
15. PROPOSED PVC SEWER PIPE SHALL BE PRESSURE TESTED BY AN APPROVED THIRD-PARTY TESTING FIRM WITH TOWN OF LONDONDERRY DEPARTMENT OF ENGINEERING & ENVIRONMENTAL SERVICES PERSONNEL, OR AUTHORIZED REPRESENTATIVE, PRESENT ON SITE AS A WITNESS.
16. ALL SEWER CONSTRUCTION AND USE SHALL CONFORM TO THE NHDES ENV-WQ 700 STANDARDS, THE TOWN OF LONDONDERRY TYPICAL DETAILS FOR SITE & ROADWAY INFRASTRUCTURE AND THE TOWN OF LONDONDERRY SEWER USE ORDINANCE.
17. ANY PROPOSED BYPASS METHOD MUST BE REVIEWED AND APPROVED BY THE DEPARTMENT PRIOR TO THE START OF ANY BYPASS WORK

HORIZONTAL SCALE 1"=40'
40 20 0 40

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DIG SAFE
811 OR 1-888-DIG-SAFE
CONTACT DIG SAFE TO BUSINESS HOURS PRIOR TO CONSTRUCTION

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TAX MAP 28 LOTS 9, 10, &10-4

UTILITY PLAN

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4

BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

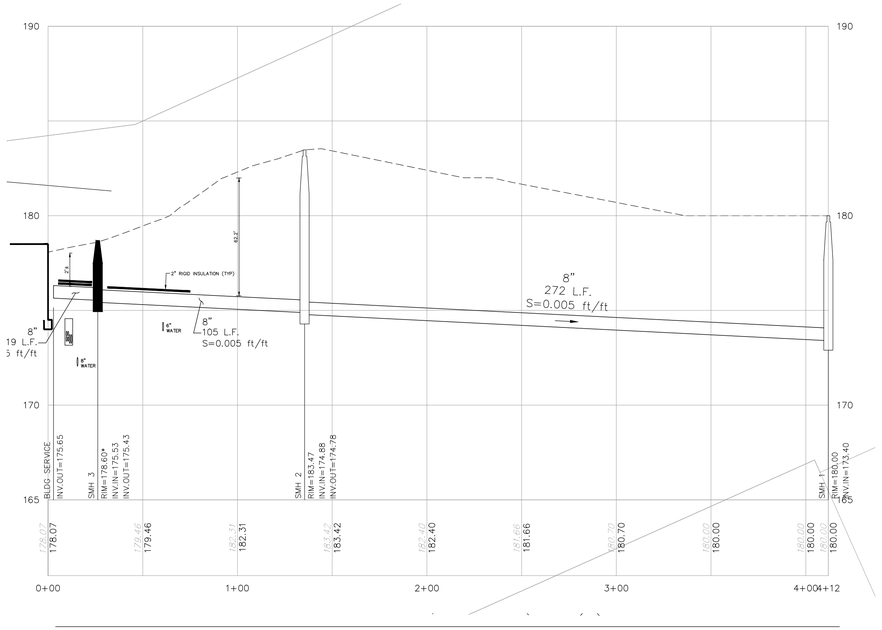
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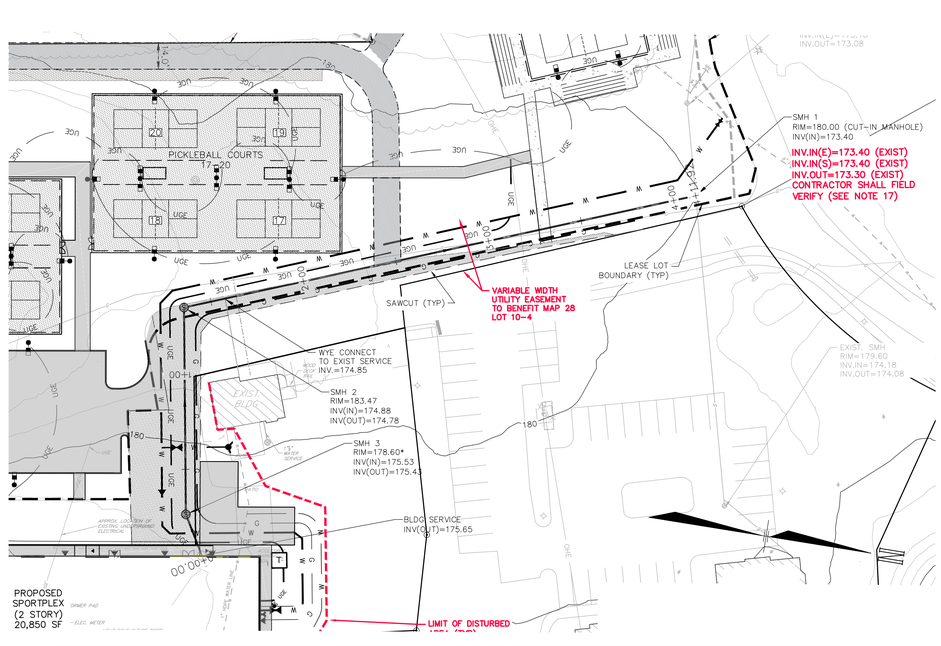
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17562.06	JSH	RED		17562-06 SITE	C-8



SEWER PROFILE



SEWER PROFILE

HORIZONTAL SCALE 1"=40'
40 20 0 40
4 0 4
VERTICAL SCALE 1"=4'

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TAX MAP 28 LOTS 9, 10, &10-4

SEWER PLAN & PROFILE

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)

1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4

BENTON FAMILY REALTY, LLC

1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

BENTON FAMILY REALTY, LLC

1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

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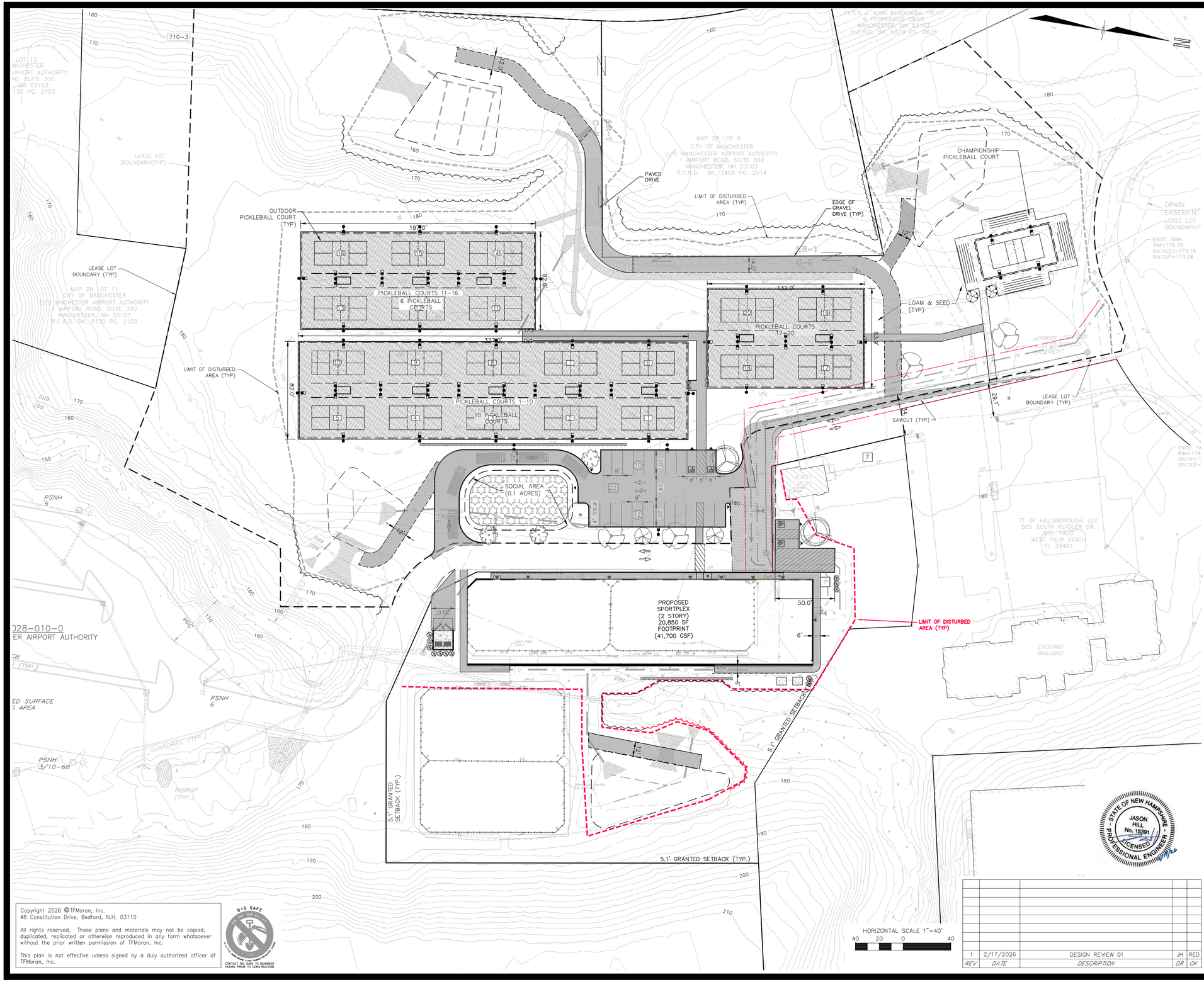
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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

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Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
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FILE	DR	CK	CADFILE		
17562.06	JSH	RED	17562-06 SITE		C-9



HORIZONTAL SCALE 1"=40'

40 20 0 40

LANDSCAPE LEGEND

SYMBOL	QTY	BOTANICAL NAME COMMON NAME	SIZE	REMARKS
	3	ACER RUBRUM 'BOWHALL' BOWHALL RED MAPLE	2 1/2" TO 3" CAL.	B&B
	2	BETULA NIGRA 'DURA HEAT' DURA HEAT RIVER BIRCH	12' TO 14' CLUMP	B&B
	2	CRATAEGUS CRUSGALLI I. 'CRUSADER' CRUSADER THORNLESS HAWTHORN	2 1/2" TO 3" CAL.	B&B
	1	QUERCUS RUBRA RED OAK	2 1/2" TO 3" CAL.	B&B
	4	ULMUS AMERICANA 'PRINCETON' PRINCETON AMERICAN ELM	2 1/2" TO 3" CAL.	B&B
	2	SYRINGA VULGARIS COMMON PURPLE LILAC	3 GAL.	CONT.
	12	THUJA O. 'SMARAGD' EMERALD GREEN ARBORVITAE	5' TO 6'	B&B

LANDSCAPE REQUIREMENTS

GREEN SPACE REQUIREMENT:
20' GREEN SPACE BUFFER ALONG ROW.
15' GREEN SPACE BUFFER ALONG SIDE AND REAR LOT LINES.

INTERIOR PARKING LANDSCAPE AREA REQUIREMENTS:
(3.10g1. OF SITE PLAN REGS)
FRONT PARKING LOT: 10% LANDSCAPE AREA REQUIRED.
REQUIRED: FRONT PARKING LOT: 2,105 SF
PROVIDED: 5,978 SF
SIDE PARKING LOT: 8% LANDSCAPE AREA
REQUIRED. SIDE PARKING LOT: N/A
PROVIDED: N/A
REAR PARKING LOT: 5% LANDSCAPE AREA
REQUIRED. SIDE PARKING LOT: N/A.
PROVIDED: N/A

INTERNAL PARKING LOT LANDSCAPING:
(3.10g3. OF SITE PLAN REGS)
1 TREE/15 PARKING SPACES (24 SPACES/15) = 2 TREES
TOTAL TREES REQUIRED = 2
TOTAL TREES PROVIDED = 3

PARKING LOT PERIMETER LANDSCAPING:
(3.10g5. OF SITE PLAN REGS)
1 SHADE TREE/20' OF PARKING PERIMETER = 120 L.F./20' = 6 SHADE TREES
TOTAL TREES REQUIRED = 6
TOTAL TREES PROVIDED = 7

LANDSCAPE NOTES

(SEE DETAILS FOR ADDITIONAL NOTES)

GENERAL

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE RULES, REGULATIONS, LAWS, AND ORDINANCES HAVING JURISDICTION OVER THIS PROJECT SITE.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND NOTIFY OWNER'S REPRESENTATIVE OF CONFLICTS.
3. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON PLANS BEFORE PRICING THE WORK. ANY DIFFERENCE IN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION. LANDSCAPE QUANTITIES SHOWN ON THE PLAN SHALL SUPERCEDE QUANTITIES LISTED IN LANDSCAPE LEGEND.
4. THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO STARTING WORK AND VERIFY THAT THE PLANS IN THE CONTRACTOR'S POSSESSION ARE THE MOST CURRENT PLANS AVAILABLE AND ARE THE APPROVED PLAN SET FOR USE IN CONSTRUCTION.
5. ALL PLANT MATERIALS INSTALLED SHALL MEET OR EXCEED THE SPECIFICATIONS OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA) [FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN] IN THE AMERICAN STANDARD FOR NURSERY STOCK (AS AMENDED) [ANSI Z60.1–1996],
6. ALL PLANTS SHALL BE FIRST CLASS AND SHALL BE REPRESENTATIVE OF THEIR NORMAL SPECIES AND/OR VARIETIES. ALL PLANTS MUST HAVE GOOD, HEALTHY, WELL–FORMED UPPER GROWTH AND A LARGE, FIBEROUS, COMPACT ROOT SYSTEM.
7. ALL PLANTS SHALL BE FREE FROM DISEASE AND INSECT PESTS AND SHALL COMPLY WITH ALL APPLICABLE STATE AND FEDERAL LAWS PERTAINING TO PLANT DISEASES AND INFESTATIONS.
8. ALL TREES SHALL BE BALLED AND BURLAPPED (B & B) UNLESS OTHERWISE NOTED OR APPROVED BY LANDSCAPE ARCHITECT.
9. IF APPLICABLE, THE CONTRACTOR SHALL HAVE ALL FALL TRANSPLANTING HAZARD PLANTS DUG IN THE SPRING AND STORED FOR FALL PLANTING.
10. ALL INVASIVE PLANT SPECIES FROM THE "NEW HAMPSHIRE PROHIBITED INVASIVE PLANT SPECIES LIST", TO BE REMOVED SHALL BE DONE SO IN ACCORDANCE WITH THE "INVASIVE SPECIES ACT, HB 1258–FN."

GUARANTEE

1. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE WORK FOR A PERIOD OF ONE YEAR, BEGINNING AT THE START OF THE MAINTENANCE PERIOD.

TAX MAP 28 LOTS 9, 10, &10-4

LANDSCAPE PLAN

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4

BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472–4488
Fax (603) 472–9747
www.tfmoran.com

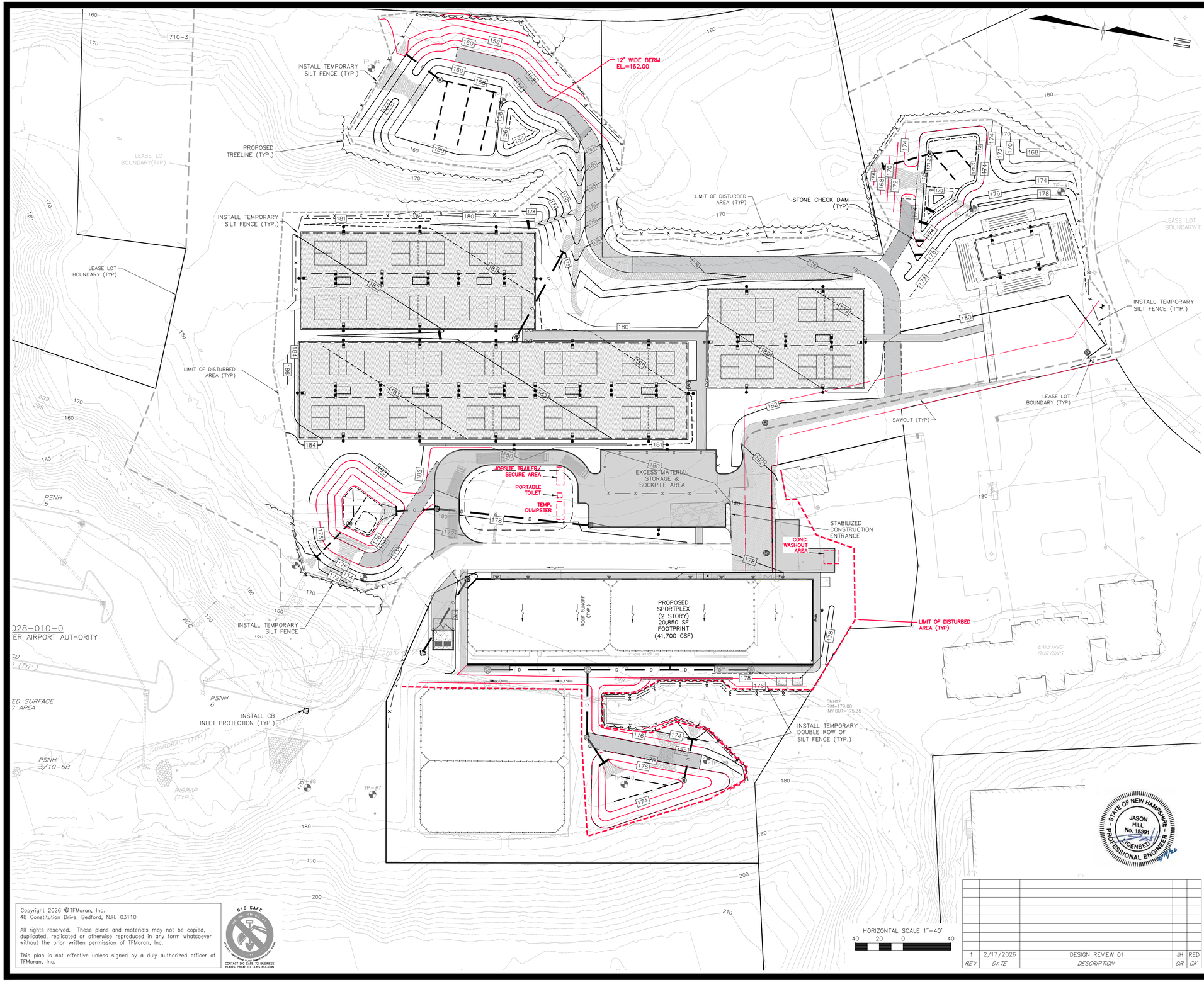
FILE 17562.06 | DR JSH | CK RED | CADFILE | 17562–06 SITE | C–10

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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION



NOTES

1. SEE NOTES ON SHEET C-2, EROSION CONTROL NOTES ON SHEET C-11, EROSION CONTROL DETAILS ON SHEET C-13, AND THE APPROVED SWPPP, AS APPLICABLE.
2. INSTALL SILT BARRIER ALONG THE PERIMETER OF THE AREA TO BE DISTURBED AS FIRST ORDER OF WORK.
3. PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS WITHIN THE WORK LIMITS AND MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED. INLET PROTECTION BARRIERS SHALL BE IN PLACE AT ALL CATCH BASINS PRIOR TO THE DISTURBANCE OF SOIL.
4. DUST CONTROL SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. IT SHALL BE ACCOMPLISHED BY THE UNIFORM APPLICATION OF CALCIUM CHLORIDE AT THE RATE OF 1-1/2 POUNDS PER SQUARE YARD BY MEANS OF A LIME SPREADER OR OTHER APPROVED METHOD. WATER MAY ALSO BE USED FOR DUST CONTROL, AND APPLIED BY SPRINKLING WITH WATER TRUCK DISTRIBUTORS, AS REQUIRED.
5. THE SITE WILL REQUIRE A USEPA NPDES PERMIT FOR STORMWATER DISCHARGE FOR THE SITE CONSTRUCTION IF THE DISTURBANCE EXCEEDS ONE ACRE. THE CONSTRUCTION SITE OPERATOR SHALL DEVELOP AND IMPLEMENT A CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH EPA REGULATIONS AND THE CONSTRUCTION GENERAL PERMIT WHICH SHALL REMAIN ON SITE AND MADE ACCESSIBLE TO THE PUBLIC. THE SITE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO SUBMIT AN eNOI AT LEAST 14 DAYS IN ADVANCE OF ANY EARTHWORK ACTIVITIES AT THE SITE. A COMPLETED NOTICE OF TERMINATION (NOT) SHALL BE SUBMITTED TO NPDES PERMITTING AUTHORITY WITHIN 30 DAYS AFTER EITHER OF THE FOLLOWING CONDITIONS HAVE BEEN MET: FINAL STABILIZATION HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE FOR, OR ANOTHER OPERATOR/PERMITTEE HAS ASSUMED CONTROL OVER ALL AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
6. SILT PROTECTION MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED IN THIS PLAN SET.
7. CONSTRUCT JUTE MATTING ON ALL SLOPES STEEPER THAN 3:1, DISTURBED AREAS SLOPING TOWARDS WETLANDS AND ALL LOCATIONS SHOWN ON PLAN.
8. INSPECT EROSION CONTROL MEASURES WEEKLY AND AFTER EACH RAIN STORM OF 0.10" OR GREATER. REPAIR/MODIFY SILT BARRIER AS NECESSARY TO MAXIMIZE FILTER EFFICIENCY. REMOVE SEDIMENT WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
9. PROVIDE SILT BARRIERS AT THE BASE OF CUT AND FILL SLOPES UNTIL COMPLETION OF THE PROJECT OR UNTIL VEGETATION BECOMES ESTABLISHED ON SLOPES. EROSION PROTECTION BELOW FILL SLOPES SHALL BE PLACED IMMEDIATELY AFTER CLEARING, PRIOR TO EMBANKMENT CONSTRUCTION.
10. ALL DISTURBED AREAS SHALL BE REVEGETATED AS QUICKLY AS POSSIBLE. ALL CUT AND FILL SLOPES SHALL BE SEEDED WITHIN 72 HOURS AFTER GRADING.
11. ALL WORK AREAS TO BE STABILIZED AT THE END OF EACH WORK DAY AND PRIOR TO ANY PREDICTED SIGNIFICANT RAIN EVENT.
12. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
    - A. BASE COURSE GRAVELS, WHICH MEET THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2, ARE INSTALLED IN AREAS TO BE PAVED
    - B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
    - C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED
    - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED
13. ALL CATCH BASINS, MANHOLES, AND DRAIN LINES SHALL BE THOROUGHLY CLEANED OF ALL SEDIMENT AND DEBRIS AFTER ALL AREAS HAVE BEEN STABILIZED.
14. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SLOPE STABILITY DURING CONSTRUCTION.
15. THE EROSION CONTROL PRACTICES SHOWN ON THESE PLANS ARE ILLUSTRATIVE ONLY AND SHALL BE SUPPLEMENTED BY THE SITE CONTRACTOR AS NEEDED.
16. THE TOWN SHOULD RESERVE THE RIGHT TO REQUIRE ADDITIONAL EROSION CONTROL MEASURES DURING CONSTRUCTION.
17. IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE OWNER SHALL BE REQUIRED TO INSTALL THE NECESSARY EROSION PROTECTION AT NO EXPENSE TO THE TOWN.
18. TURTLES MAY BE ATTRACTED

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DIG SAFE
811 OR 1-888-DIG-SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TAX MAP 28 LOTS 9, 10, &10-4

EROSION CONTROL PLAN

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

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	CK RED			

SOIL CHARACTERISTICS

THE SOIL IN THE VICINITY OF THE SITE CONSISTS OF WINDSOR–URBAN LAND COMPLEX, UDORTHENTS AND URBAN LAND–HOOSIC COMPLEX. WINDSOR–URBAN LAND COMPLEX IS A HSG (HYDROLOGIC SOIL GROUP) A SOIL. UDORTHENTS AND URBAN LAND–HOOSIC ARE AN UNDEFINED SOIL GROUP.

DISTURBED AREA

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 243,500 SQUARE FEET (5.59 ACRES). CONSTRUCTION SHALL BE PHASED TO LIMIT DISTURBED AREAS TO LESS THAN 5 ACRES.

CRITICAL NOTE: THIS DRAWING IS PROVIDED FOR GENERAL GUIDANCE. ALL SPECIAL EROSION CONTROL MEASURES MUST BE EXECUTED IN ACCORDANCE WITH APPLICABLE CURRENT STATE AND LOCAL REGULATIONS, APPROVED SWPPP, AND PERMIT REQUIREMENTS.

SEQUENCE OF MAJOR ACTIVITIES

1. INSTALL PERIMETER CONTROLS, STABILIZED CONSTRUCTION ENTRANCE, AND TEMPORARY EROSION CONTROL MEASURES PER APPROVED SITE DEVELOPMENT PLANS, PERMITS, OR SWPPP IF REQUIRED, PRIOR TO EARTH MOVING OPERATIONS.
2. DEMOLISH EXISTING SITE WORK DESIGNATED FOR REMOVAL.
3. INSTALL SWALES BEFORE ROUGH GRADING THE SITE.
4. COMPLETE MAJOR GRADING OF SITE.
5. CONSTRUCT BUILDING PAD, STORMWATER SYSTEM, AND SITE UTILITIES.
6. CONSTRUCT PARKING LOT.
7. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND SITE IS STABILIZED, REMOVE ALL INLET PROTECTION, SILT BARRIERS, AND SEDIMENT THAT HAS BEEN TRAPPED BY THESE DEVICES.
8. CONSULT APPLICABLE REGULATIONS, PERMITS, CONDITIONS, AND APPROVED SWPPP FOR CONDITIONS RELATED TO NOTICE OF TERMINATION, IF REQUIRED.

EROSION AND SEDIMENT CONTROLS AND STABILIZATION PRACTICES

STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES AND DISTURBED AREAS WHERE CONSTRUCTION ACTIVITY WILL NOT OCCUR FOR MORE THAN TWENTY ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

1. BASE COURSE GRAVELS, WHICH MEET THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2, HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
3. A MINIMUM OF 3" OF NON–EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILT BARRIERS. ALL STORM DRAIN INLETS SHALL BE PROVIDED WITH BARRIER FILTERS. STONE RIPRAP SHALL BE PROVIDED AT THE OUTLETS OF DRAINAGE PIPES WHERE EROSIVE VELOCITIES ARE ENCOUNTERED.

OFF SITE VEHICLE TRACKING

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED.

INSTALLATION, MAINTENANCE, AND INSPECTION OF EROSION AND SEDIMENT CONTROLS

A. GENERAL

THESE ARE THE GENERAL INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO IMPLEMENT THE PLAN.

1. STABILIZATION OF ALL SWALES, DITCHES, AND PONDS IS REQUIRED PRIOR TO DIRECTING FLOW TO THEM.
2. THE SMALLEST PRACTICAL PORTION OF THE SITE WILL BE DENUDED AT ONE TIME. (5 AC MAX)
3. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
4. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT BARRIER WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE BARRIER.
5. ALL DIVERSION DIKES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
6. TEMPORARY SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND UNHEALTHY GROWTH.
7. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION.
8. THE CONTRACTOR'S SITE SUPERINTENDENT WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE, AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.

B. FILTERS / BARRIERS

1. SILT SOCKS

A. KNOTTED MESH NETTING MATERIAL SHALL BE DELIVERED TO SITE IN A 5 MIL CONTINUOUS, TUBULAR, HDPE 3/8" MATERIAL, FILLED WITH COMPOST CONFORMING TO THE FOLLOWING REQUIREMENTS:

PHYSICAL PROPERTY	TEST	REQUIREMENTS
PH	TMECC 04.11–A	5.0 TO 8.0
PARTICLE SIZE	TMECC 02.02–B	2" SIEVE AND MIN. 60% GREATER THAN THE ⅜" SIEVE
MOISTURE CONTENT		STND TESTING < 60%

MATERIAL SHALL BE RELATIVELY FREE OF INERT OR FOREIGN MAN–MADE MATERIALS

MATERIAL SHALL BE WEED FREE AND DERIVED FROM A WELL–DECOMPOSED SOURCE OF ORGANIC MATTER, FREE FROM ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH.

B. SEDIMENT COLLECTED AT THE BASE OF THE SILT SOCK SHALL BE REMOVED ONCE IT HAS REACHED 1/3 OF THE EXPOSED HEIGHT OF THE SILT SOCK.

C. SILT BARRIER SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREAS HAS BEEN PERMANENTLY STABILIZED.

2. SEQUENCE OF INSTALLATION

SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.

3. MAINTENANCE

A. SILT BARRIERS SHALL BE INSPECTED WEEKLY AND IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. THEY SHALL BE REPAIRED IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM.

B. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

C. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE THIRD (1/3) THE HEIGHT OF THE BARRIER.

D. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFIRM WITH THE EXISTING GRADE, PREPARED AND SEEDED.

C. MULCHING

1. TIMING

IN ORDER FOR MULCH TO BE EFFECTIVE, IT MUST BE IN PLACE PRIOR TO MAJOR STORM EVENTS. THERE ARE TWO (2) TYPES OF STANDARDS WHICH SHALL BE USED TO ASSURE THIS:

A. APPLY MULCH PRIOR TO ANY STORM EVENT.

THIS IS APPLICABLE WHEN WORKING WITHIN 100' OF WETLANDS. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER PREDICTIONS, USUALLY BY CONTACTING THE NATIONAL WEATHER SERVICE, TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.

B. REQUIRED MULCHING WITHIN A SPECIFIED TIME PERIOD.

THE TIME PERIOD CAN RANGE FROM 14 TO 21 DAYS OF INACTIVITY ON AN AREA, WHERE THE LENGTH OF TIME VARIES WITH SITE CONDITIONS. PROFESSIONAL JUDGMENT SHALL BE USED TO EVALUATE THE INTERACTION OF SITE CONDITIONS (SOIL ERODIBILITY, SEASON OF YEAR, EXTENT OF DISTURBANCE, PROXIMITY TO SENSITIVE RESOURCES, ETC.) AND THE POTENTIAL IMPACT OF EROSION ON ADJACENT AREAS TO CHOOSE AN APPROPRIATE TIME RESTRICTION.

2. GUIDELINES FOR WINTER MULCH APPLICATION.

WHEN MULCH IS APPLIED TO PROVIDE PROTECTION OVER WINTER (PAST THE GROWING SEASON) IT SHALL BE AT A RATE OF 6,000 POUNDS OF HAY OR STRAW PER ACRE. A TACKIFIER MAY BE ADDED TO THE MULCH.

3. MAINTENANCE

ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR RILL EROSION. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED.

D. VEGETATIVE PRACTICE

1. AFTER ROUGH GRADING OF THE SUBGRADE HAS BEEN COMPLETED AND APPROVED, THE SUB GRADE SURFACE SHALL BE SCARIFIED TO A DEPTH OF 4". THEN, FURNISH AND INSTALL A LAYER OF LOAM PROVIDING A ROLLED THICKNESS AS SPECIFIED IN THESE PLANS. ANY DEPRESSIONS WHICH MAY OCCUR DURING ROLLING SHALL BE FILLED WITH ADDITIONAL LOAM, REGRADED AND REROLLED UNTIL THE SURFACE IS TRUE TO THE FINISHED LINES AND GRADES. ALL LOAM NECESSARY TO COMPLETE THE WORK UNDER THIS SECTION SHALL BE SUPPLIED BY THE SITE SUBCONTRACTOR.
2. ALL LARGE STIFF CLODS, LUMPS, BRUSH, ROOTS, DEBRIS, GLASS, STUMPS, LITTER, AND OTHER FOREIGN MATERIAL, AS WELL AS STONES OVER 1" IN DIAMETER, SHALL BE REMOVED FROM THE LOAM AND DISPOSED OF OFF SITE. THE LOAM SHALL BE RAKED SMOOTH AND EVEN.
3. THE LOAM SHALL BE PREPARED TO RECEIVE SEED BY REMOVING STONES, FOREIGN OBJECTS AND GRADING TO ELIMINATE WATER POCKETS AND IRREGULARITIES PRIOR TO PLACING SEED. FINISH GRADING SHALL RESULT IN STRAIGHT UNIFORM GRADES AND SMOOTH, EVEN SURFACES WITHOUT IRREGULARITIES TO LOW POINTS.
4. SHAPE THE AREAS TO THE LINES AND GRADES REQUIRED. THE SITE SUBCONTRACTOR'S ATTENTION IS DIRECTED TO THE SCHEDULING OF LOAMING AND SEEDING OF GRADED AREAS TO PERMIT SUFFICIENT TIME FOR THE STABILIZATION OF THESE AREAS. IT SHALL BE THE SITE SUBCONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE AREAS DURING THE CONSTRUCTION PERIOD AND REGRADE, LOAM AND RESEED ANY DAMAGED AREAS.
5. ALL AREAS DISTURBED BY CONSTRUCTION WITHIN THE PROPERTY LINES AND NOT COVERED BY STRUCTURES, PAVEMENT, OR MULCH SHALL BE LOAMED AND SEEDED.
6. LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF 2 TONS PER ACRE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5.
7. FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 500 POUNDS PER ACRE OF 10–20–20 FERTILIZER.
8. SOIL CONDITIONERS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY WORKED INTO THE LOAM. LOAM SHALL BE RAKED UNTIL THE SURFACE IS FINELY PULVERIZED, SMOOTH AND EVEN, AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE REQUIRED LINES AND GRADES WITH APPROVED ROLLERS WEIGHING BETWEEN 4 1/2 POUNDS AND 5 1/2 POUNDS PER INCH OF WIDTH.
9. SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4" AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH.
10. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 2 TONS PER ACRE. MULCH THAT BLOWS OR WASHES AWAY SHALL BE REPLACED IMMEDIATELY AND ANCHORED USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.
11. THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED.
12. THE SITE SUBCONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED, INCLUDING CUTTING, AS SPECIFIED HEREIN AFTER UNDER MAINTENANCE AND PROTECTION.
13. UNLESS OTHERWISE APPROVED, SEEDING SHALL BE DONE DURING THE APPROXIMATE PERIODS OF EARLY SPRING TO SEPTEMBER 30, WHEN SOIL CONDITIONS AND WEATHER ARE SUITABLE FOR SUCH WORK. IN NO CASE SHALL THE WEED CONTENT EXCEED 1 PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. FOR TEMPORARY PLANTINGS AFTER SEPTEMBER 30, TO EARLY SPRING AND FOR TEMPORARY PROTECTION OF DISTURBED AREAS:

A. FOLLOW ABOVE SLOPE, LOAM DEPTH AND GRADING REQUIREMENTS.
B. FERTILIZER SHALL BE SPREAD AND WORKED INTO THE SURFACE AT A RATE OF 500 POUNDS PER ACRE.

MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES:

WINTER RYE (FALL SEEDING)	2.5 LBS/1,000 SF
OATS (SPRING SEEDING)	2.0 LBS/1,000 SF
MULCH	1.5 TONS/ACRE

E. CATCH BASIN INLET PROTECTION

1. INLET BASKET STRUCTURE

A. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY PRIOR TO DISTURBING PAVEMENT AND SHALL REMAIN IN PLACE AND MAINTAINED UNTIL PAVEMENT BINDER COURSE IS COMPLETE.

B. MOLD 6X6, 42 LB. WIRE SUPPORT AROUND INLET FRAME AND GRATE AND EXTEND 6" BEYOND SIDES. SECURE FILTER FABRIC TO WIRE SUPPORT.

C. THE FILTER FABRIC SHALL BE A GEOTEXTILE FABRIC; POLYESTER, POLYPROPYLENE, STABILIZED NYLON, POLYETHYLENE OR POLYVINYLIDENE CHLORIDE MEETING THE FOLLOWING SPECIFICATIONS:

GRAB STRENGTH: 45 LB. MINIMUM IN ANY PRINCIPAL DIRECTION (ASTM D1682)
MULLEN BURST STRENGTH: MIN. 60PSI (ASTM D774)

D. THE FABRIC SHALL HAVE AN OPENING NO GREATER THAN A NUMBER 20 U.S. STANDARD SIEVE AND A MINIMUM PERMEABILITY OF 120 GPM.

E. THE INLET PROTECTION SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING EXTENDED PERIODS OF PRECIPITATION. REPAIRS SHALL BE MADE IMMEDIATELY, AS NECESSARY, TO PREVENT PARTICLES FROM REACHING THE DRAINAGE SYSTEM AND/OR CAUSING SURFACE FLOODING.

F. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT, OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED.

F. WINTER CONSTRUCTION SEQUENCE

1. ALL PROPOSED POST–DEVELOPMENT LANDSCAPED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1 AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENT.
2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
3. AFTER OCTOBER 15TH, INCOMPLETE PARKING AREAS WHERE ACTIVE CONSTRUCTION HAS STOPPED FOR THE WINTER ALL TRAVEL SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3" OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOWFALL AFTER EACH STORM EVENT.

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, SILT BARRIERS SHALL BE INSTALLED PRIOR TO COMMENCING ANY CLEARING OR GRADING OF THE SITE. STRUCTURAL CONTROLS SHALL BE INSTALLED CONCURRENTLY WITH THE APPLICABLE ACTIVITY. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN TWENTY ONE (21) DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN FOURTEEN (14) DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, SILT BARRIERS AND ANY EARTH/DIKES WILL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.

FOR SINGLE/DUPLEX FAMILY SUBDIVISIONS, WHEN LOT DEVELOPMENT IS NOT PART OF THE PERMIT, THEN LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.

WASTE DISPOSAL

1. WASTE MATERIALS
ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN A DUMPSTER. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ON SITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
2. HAZARDOUS WASTE
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
3. SANITARY WASTE
ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

SPILL PREVENTION

1. MATERIAL MANAGEMENT PRACTICES
THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:

GOOD HOUSEKEEPING:
THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ON SITE DURING THE CONSTRUCTION PROJECT:

A. AN EFFORT WILL BE MADE TO STORE ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB.

B. ALL MATERIALS STORED ON SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

C. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.

D. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.

E. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

F. WHENEVER POSSIBLE ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

HAZARDOUS PRODUCTS:
THE FOLLOWING PRACTICES WILL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:

A. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.

B. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.

C. SURPLUS PRODUCT THAT MUST BE DISPOSED OF WILL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.

2. PRODUCT SPECIFICATION PRACTICES
THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON SITE:

PETROLEUM PRODUCTS:
ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS:
FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS. ONCE APPLIED FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. STORAGE WILL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS:
ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS:
CONCRETE TRUCKS WILL DISCHARGE AND WASH OUT SURPLUS CONCRETE OR DRUM WASH WATER IN A CONTAINED AREA DESIGNATED ON SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

A. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

B. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

C. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

D. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

E. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.

F. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM RECURRING AND HOW TO CLEANUP THE SPILL IF IT RECURS. A DESCRIPTION OF THE SPILL, ITS CAUSE, AND THE CLEANUP MEASURES WILL BE INCLUDED.

G. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY–TO–DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.

DUST CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL METHODS SHALL INCLUDE, BUT NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS.

(DCT25-2469) NH FISH & GAME CONSERVATION MEASURES

1. MITIGATION REQUIREMENTS INCLUDED WITH NHFG'S REVIEW AND RECOMMENDATIONS ARE CONSISTENT WITH AN AGREEMENT BETWEEN THE TOWN OF LONDONDERRY AND NHFG THAT WAS ENTERED INTO EFFECT ON MAY 28, 2019 (ATTACHED) THAT REQUIRES A MITIGATION FEE FOR EACH INDIVIDUAL PROJECT THAT OCCURS WITHIN A PREDEFINED AREA WITHIN LONDONDERRY PER RSA 212–A:16. A MITIGATION FEE OF NO LESS THAN $5,214.06 SHALL BE MADE PAYABLE TO THE NEW HAMPSHIRE FISH & GAME DEPARTMENT FOR NEGATIVE IMPACTS TO NEW ENGLAND COTTONTAIL, A STATE–ENDANGERED SPECIES. THE MEMO FIELD SHALL IDENTIFY "NONGAME AND ENDANGERED WILDLIFE PROGRAM, DCT25–2469". THIS CHECK SHALL BE ISSUED AND SUBMITTED TO NHFG FOLLOWING PERMIT APPROVAL AND SHALL BE RECEIVED PRIOR TO ANY WORK OCCURRING ON THE SITE. THE CHECK MAY BE DROPPED OFF IN PERSON OR MAILED TO NHFG – NONGAME AND ENDANGERED WILDLIFE PROGRAM, ATTN: MICHAEL MARCHAND, 11 HAZEN DRIVE, CONCORD, NH 03301–6500. PLEASE INCLUDE THE NHB# (DCT25–2469) AND A DESCRIPTION OF WHAT THE CHECK IS FOR WITH THE SUBMITTAL. *THE MITIGATION FEE IS BASED ON A DISTURBANCE AREA OF 260,703 SQ. FT. IF THE DISTURBANCE AREA IS GREATER THAN 260,703 SQ. FT., NHFG SHALL BE CONTACTED IMMEDIATELY. THE APPLICANT SHALL BE RESPONSIBLE FOR PAYMENT OF TOTAL DISTURBANCE AREA AND MAY BE SUBJECT TO ADDITIONAL FEES OR CONSERVATION MEASURES.
2. THE FOLLOWING SPECIES HAVE BEEN IDENTIFIED THROUGH THE DATACHECK TOOL SCREENING AS BEING POTENTIALLY AFFECTED BY ACTIVITIES AT THIS LOCATION: NEW ENGLAND COTTONTAIL (STATE ENDANGERED), BLANDING'S TURTLE (STATE ENDANGERED), EASTERN HOGNOSE SNAKE (STATE ENDANGERED), EASTERN MEADOWLARK (STATE THREATENED), GRASSHOPPER SPARROW (STATE THREATENED), SPOTTED TURTLE (STATE THREATENED), AND NORTHERN BLACK RACER (STATE THREATENED). ALL OPERATORS AND PERSONNEL WORKING ON OR ENTERING THE SITE SHALL BE MADE AWARE OF THE POTENTIAL PRESENCE OF THIS SPECIES AND SHALL BE PROVIDED FLYERS THAT HELP TO IDENTIFY THIS SPECIES, ALONG WITH NHFG CONTACT INFORMATION. SEE PLAN SHEET C–21.
3. RARE SPECIES INFORMATION (E.G. IDENTIFICATION, OBSERVATION AND REPORTING OF OBSERVATIONS, WHEN TO CONTACT NHFG IMMEDIATELY AND NHFG CONTACT INFORMATION) SHALL BE COMMUNICATED DURING MORNING MEETINGS PRIOR TO WORK COMMENCEMENT DURING THE CONSTRUCTION PHASE OF THE PROJECT. SEE PLAN SHEET C–21.
4. OBSERVATIONS OF NORTHERN BLACK RACER AND EASTERN HOGNOSE SNAKE SHALL BE REPORTED IMMEDIATELY TO THE NEW HAMPSHIRE FISH AND GAME DEPARTMENT NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM. PLEASE CONTACT MELISSA WINTERS AND BRENDAN CLIFFORD – VIA GROUP TEXT PREFERRED. A PHOTOGRAPH WITH TEXT WILL BE PROVIDED IF FEASIBLE. SEE SPECIES FLYERS, SEE PLAN SHEET C–21 FOR NHFG CONTACT INFORMATION.
5. TURTLES AND SNAKES MAY BE ATTRACTED TO DISTURBED GROUND DURING THE NESTING SEASON (MAY 15TH – JULY 15TH). TURTLE AND SNAKE NESTS ARE PROTECTED BY NH LAWS (RSA 212–B:4, FIS 1401.03). IF A NEST IS OBSERVED OR SUSPECTED, OPERATORS SHALL CONTACT MELISSA WINTERS AND BRENDAN CLIFFORD FOR SNAKES AND JOSH MEGYESY FOR TURTLES AT NHFG IMMEDIATELY FOR FURTHER CONSULTATION. SEE SPECIES FLYERS, SEE PLAN SHEET C–21 FOR NHFG CONTACT INFORMATION.
   A. TO MINIMIZE THE POTENTIAL FOR NESTING TO OCCUR WITHIN THE PROJECT SITE:
      I. MINIMIZE GROUND DISTURBANCE ACTIVITIES DURING THE ACTIVE NESTING SEASON. LIMIT CLEARING AREAS AND DISTURBING GROUND UNTIL READY TO START ACTIVE CONSTRUCTION FOR A PROJECT COMPONENT.
      II. MINIMIZE ACCESS OR MAKE AREAS LESS ATTRACTIVE TO WILDLIFE FOR NESTING FOR DISTURBED GROUND AREAS DURING ACTIVE NESTING SEASON. SOIL/SANDY MOUNDS OR OPEN SANDY/GRAVELY AREAS WITHIN THE ACTIVE PROJECT SITE SHALL BE COVERED WITH TARPS OR OTHER CONSTRUCTION MATERIALS AT THE END OF THE WORK DAY (NOTE TURTLES CAN MOVE INTO A SITE OVERNIGHT TO NEST – BE OBSERVANT OF TRACKS AND NESTING SIGNS).
      III. THE NEST OR SUSPECTED NEST SHALL BE MARKED (SURROUNDING ROPED OFF OR CONE BUFFER DEPLOYED) AND AVOIDED. THIS SHALL BE COMMUNICATED TO ALL PERSONNEL ONSITE.
      IV. SITE ACTIVITIES SHALL NOT OCCUR IN THE AREA SURROUNDING THE NEST OR SUSPECTED NEST UNTIL FURTHER GUIDANCE IS PROVIDED BY NHFG.
6. THE APPLICANT SHALL NOTIFY NHFG 30 DAYS PRIOR TO STARTING CONSTRUCTION ACTIVITIES. NHFG SHALL HAVE THE OPPORTUNITY TO ATTEMPT TO TR

LIGHTING CALCULATIONS

PARKING SPACES AT COMPETITION COURT
Illuminance (Fc)
Average = 2.19
Maximum = 3.3
Minimum = 0.4
Avg/Min Ratio = 5.48
Max/Min Ratio = 8.25

LARGE PARKING LOT
Illuminance (Fc)
Average = 2.59
Maximum = 4.2
Minimum = 1.1
Avg/Min Ratio = 2.35
Max/Min Ratio = 3.82

COMPETITION COURT
Illuminance (Fc)
Average = 64.46
Maximum = 69.5
Minimum = 55.6
Avg/Min Ratio = 1.16
Max/Min Ratio = 1.25

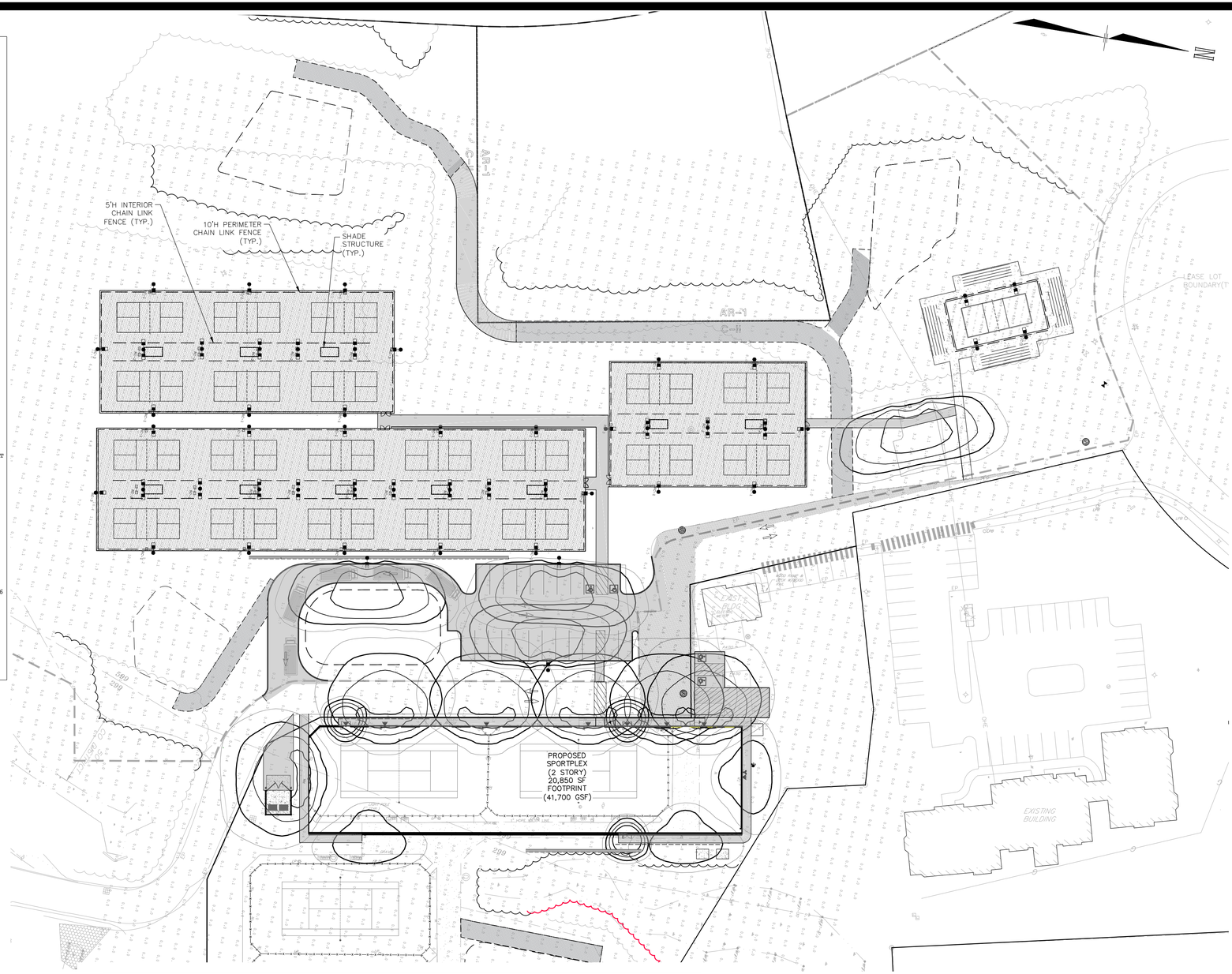
TYPICAL COURT
FOUR COURT AREA - COURT 20
Illuminance (Fc)
Average = 39.29
Maximum = 50.1
Minimum = 24.1
Avg/Min Ratio = 1.63
Max/Min Ratio = 2.08

TYPICAL INNER COURT
TEN COURT AREA - COURT 8
Illuminance (Fc)
Average = 41.01
Maximum = 53.3
Minimum = 25.2
Avg/Min Ratio = 1.63
Max/Min Ratio = 2.12

TYPICAL END COURT_1
TEN COURT AREA -COURT
Illuminance (Fc)
Average = 40.85
Maximum = 51.2
Minimum = 28.3
Avg/Min Ratio = 1.44
Max/Min Ratio = 1.81

TYPICAL CENTER COURT
SIX COURT AREA - COURT 15
Illuminance (Fc)
Average = 40.28
Maximum = 52.3
Minimum = 26.5
Avg/Min Ratio = 1.52
Max/Min Ratio = 1.97

TYPICAL END COURT
SIX COURT AREA - COURT 16
Illuminance (Fc)
Average = 40.24
Maximum = 50.2
Minimum = 27.3
Avg/Min Ratio = 1.47
Max/Min Ratio = 1.84



NOTES

1. LIGHTING PLAN AND CALCULATIONS PREPARED BY EXPOSURE LIGHTING.



LSI - MIRADA MEDIUM (MRM)
POLE MOUNTED 20' ABOVE F.G. NOT TO SCALE



LSI - ZONE MEDIUM (ZNM)
POLE MOUNTED 20' ABOVE F.G. NOT TO SCALE



LSI - STEEL POLES
SQUARE STRAIGHT POLE NOT TO SCALE



LSI - SLIM WALL PACK (WPSLS)
WALL MOUNTED 8' ABOVE F.G. NOT TO SCALE



LSI - MIRADA MEDIUM WALL SCONCE (XWM)
WALL MOUNTED 18' ABOVE F.G. NOT TO SCALE

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Description	Tag	[MANUFAC]
⊟	4	CC-1	Single	ZNM-55L-CT-UNV-40-ALSC-ALCS02-CXX / 4SQ B3-S11G20-S-CXX-AB-4BC	20' POLE	LSI INDUSTRIES, INC.
⊡	3	MD	Single	WPSLS-2L-40-PCIXXX-BLK	WALL MOUNT 8' AFG	LSI INDUSTRIES, INC.
⊟	4	P-1	Single	MRM-LED-09L-SIL-3-UNV-DIM-40-70CRI-CXX-ALSC-ALSC02-IL / 4SQ B3 S11G20 S CXX AB 4BC	20' POLE	LSI INDUSTRIES, INC.
⊟	20	RC-1	Single	ZNM-36L-CT-UNV-40--ALSC-ALSC02-CXX-IH / 4SQ B3 S11G20 S CXX AB 4BC	20' POLE	LSI INDUSTRIES, INC.
⊟—⊟	17	RC-2	Back-Back	ZNM-36L-CT-UNV-40-ALSC-ALSC02-CXX / 4SQ B3 S11G20 D180 CXX AB 4BC	20' POLE	LSI INDUSTRIES, INC.
⊟	6	RC-3	Single	ZNM-36L-FT-UNV-40--ALSC-ALSC02-CXX-IH / 4SQ B3 S11G20 S CXX AB 4BC	20' POLE	LSI INDUSTRIES, INC.
⊡	3	W1	Single	XWS-LED-02L-SIL-2-UNV-DIM-30-70CRI-ALSCS02	WALL MOUNTED 18' AFG	LSI INDUSTRIES, INC.
⊡	6	WM	Single	XWM-4-LED-6L-40-UE-BLK-ALSCS02	WALL MOUNTED 18' AFG	LSI INDUSTRIES, INC.

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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

HORIZONTAL SCALE 1"=40'
40 20 0 40

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TAX MAP 28 LOTS 9, 10, &10-4

LIGHTING PLAN

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH
OWNER: MAP 28 LOTS 9, 10
CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103
OWNER: MAP 28 LOT 10-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103
APPLICANT
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	CK	CADFILE		
17562.06	JSH	RED	17562-06 SITE		C-13

CONSTRUCTION SEQUENCE NOTES

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2. CUT AND CLEAR TREES WITHIN AREA OF DISTURBANCE UNLESS OTHERWISE NOTED.
3. CONSTRUCT TEMPORARY AND PERMANENT EROSION CONTROL FACILITIES PRIOR TO ANY EARTH MOVING OPERATION.
4. DEMOLISH EXISTING STRUCTURES.
5. ROUGH GRADE SITE OR PHASED WORK AREA. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER GRADING. ALL DISTURBED AREAS SHALL BE STABILIZED NO LATER THAN 72 HOURS AFTER CONSTRUCTION ACTIVITY CEASES. IF EARTHWORK TEMPORARILY CEASES ON A PORTION OF OR THE ENTIRE SITE, AND WILL NOT RESUME WITHIN 21 DAYS, THE AREA SHALL BE STABILIZED.

   AN AREA SHALL BE CONSIDERED STABILIZED IF:
   A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
   B) A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   C) A MINIMUM OF .3" OF NON-EROSIVE MATERIAL SUCH STONE OR RIPRAP HAS BEEN INSTALLED, OR
   D) EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
6. CONSTRUCT CULVERTS, DETENTION BASINS AND TREATMENT SWALES. PLACE HEADWALLS, RIP-RAP AND OTHER DRAINAGE FACILITIES ACCORDING TO PLAN. THE CONTRACTOR SHALL STABILIZE ALL DITCHES, SWALES, AND PONDS/BASINS PRIOR TO DIRECTING FLOW TO THEM.
7. INSTALL ALL UNDERGROUND UTILITIES.
8. CONSTRUCT BUILDINGS.
9. CONSTRUCT PARKING AND FINISH GRADE SITE ACCORDING TO PLAN. ALL SLOPES SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
10. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL MEASURES PERIODICALLY AND IMMEDIATELY AFTER STORM EVENTS.
11. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
12. REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE ALL AREAS ARE STABILIZED WITH A SUITABLE STAND OF GRASS, PAVEMENT OR COMPACTED GRAVELS.

* REFER TO THE STORM WATER MANAGEMENT PLAN FOR EROSION CONTROL MEASURES AND SPECIFIC INFORMATION.

GENERAL NOTES

1. ALL IN PAVEMENT MANHOLES SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY ELEVATIONS OTHERWISE SHOWN.
2. WHERE DEPTH OF COVER IS LESS THAN 3 FEET CLASS V REINFORCED CONCRETE PIPE SHALL BE USED.
3. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
4. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS WORK AT ALL TIMES.
5. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
6. EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED FOR THE DURATION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE NHDES STANDARDS. THESE DETAILS SERVE AS A GUIDE ONLY.
7. REFER TO THE TOWN STANDARD DETAILS, LATEST REVISION, FOR ADDITIONAL INFORMATION AND CRITERIA.
8. THE CONTRACTOR SHALL STABILIZE ALL DITCHES, SWALES, AND PONDS PRIOR TO DIRECTING FLOW TO THEM.
9. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.

WINTER CONSTRUCTION

IN ADDITION TO THE OTHER NOTES CONTAINED ON THIS PLAN, THE FOLLOWING MUST BE IMPLEMENTED:

1. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED AS SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
2. AN AREA WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIER.
3. TEMPORARY MULCH MUST BE APPLIED WITHIN 7 DAYS OF SOIL EXPOSURE OR PRIOR TO ANY STORM EVENT, BUT AFTER EVERY WORKDAY IN AREAS WITHIN 100 FEET FROM A PROTECTED NATURAL RESOURCE.
4. AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE PERMANENTLY MULCHED THE SAME DAY.
5. IN THE EVENT OF A SNOWFALL GREATER THAN 1 INCH (FRESH OR CUMULATIVE), THE SNOW SHALL BE REMOVED FROM THE AREAS DUE TO BE SEEDED AND MULCHED.
6. LOAM SHALL BE FREE OF FROZEN CLUMPS BEFORE IT IS APPLIED.
7. A DITCH THAT WILL BE CONSTRUCTED DURING THE WINTER MUST BE STABILIZED WITH RIPRAP.

OVERWINTER STABILIZATION

1. PERMANENT STABILIZATION CONSISTS OF AT LEAST 85% VEGETATION, PAVEMENT/GRAVEL BASE OR RIPRAP.
2. ALL PROPOSED VEGETATED AREAS THAT DO NO EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
3. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
4. AFTER NOVEMBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OR 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.
5. DO NOT EXPOSE SLOPES OR LEAVE SLOPES EXPOSED OVER THE WINTER OR FOR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY PROTECTED WITH MULCH.
6. APPLY HAY MULCH AT TWICE THE STANDARD RATE (150 LBS. PER 1,000 SF). THE MULCH MUST BE THICK ENOUGH SUCH THAT THE GROUND SURFACE WILL NOT BE VISIBLE AND MUST BE ANCHORED.
7. USE MULCH AND MULCH NETTING OR AN EROSION CONTROL MULCH BLANKET OR MIX FOR ALL SLOPES GREATER THAN 8% OR OTHER AREAS EXPOSED TO DIRECT WIND.
8. INSTALL AN EROSION CONTROL BLANKET IN ALL DRAINAGE WAYS (BOTTOM AND SIDES) WITH A SLOPE GREATER THAN 3%.
9. SEE THE VEGETATION MEASURES FOR MORE INFORMATION ON SEEDING DATES AND TYPES.

EROSION CONTROL NOTES

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED:

1. INSTALLATION OF SILTATION FENCES AND OTHER EROSION CONTROL MEASURES SHALL BE COMPLETED PRIOR TO THE START OF SITE WORK IN ANY GIVEN AREA. PREFABRICATED SILTATION FENCES SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
2. SILTATION FENCES AND OTHER EROSION CONTROL MEASURES SHALL BE KEPT CLEAN DURING CONSTRUCTION AND REMOVED WHEN ALL SLOPES HAVE A VEGETATIVE COVER OF GREATER THAN 85%. EROSION CONTROL MEASURES SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EVERY RAINFALL.
3. EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEREVER POSSIBLE.
4. THE AREA OF LAND EXPOSED AND THE TIME OF EXPOSURE SHALL BE MINIMIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.
5. ALL DISTURBED AREAS SHALL HAVE A MINIMUM OF 4" OF LOAM. ACCEPTABLE SEED MIXES ARE AS FOLLOWS:

   TYPICAL LAWN MIX (MIN. 200 LBS/ACRE):
   33% CREEPING RED FESCUE (MIN. 66 LBS/ACRE)
   42% PERENNIAL RYEGRASS (MIN. 84 LBS/ACRE)
   21% KENTUCKY BLUEGRASS (MIN. 42 LBS/ACRE)
   4% REDTOP (MIN. 8 LBS/ACRE)

   TEMPORARY LAWN MIX: (MIN. 47 LBS/ACRE)
   100% ANNUAL RYE

   WILDFLOWER SLOPE (NHDOT TYPE 45) MIX 3:1 OR GREATER SLOPES (MIN. 160 LBS/ACRE):
   38% CREEPING RED FESCUE (MIN. 60 LBS/ACRE)
   32% PERENNIAL RYEGRASS (MIN. 51 LBS/ACRE)
   5% REDTOP (MIN. 8 LBS/ACRE)
   5% ALSIKE CLOVER (MIN. 8 LBS/ACRE)
   5% BIRDSFOOT TREFOIL (MIN. 8 LBS/ACRE)
   3% LANCE-LEAF COREOPSIS (MIN. 3 LBS/ACRE)
   3% OXEYE DAISY (MIN. 3 LBS/ACRE)
   3% BUTTERFLY WEED (MIN. 3 LBS/ACRE)
   3% BLACKEYED SUSAN (MIN. 3 LBS/ACRE)
   3% WILD LUPINE (MIN. 3 LBS/ACRE)

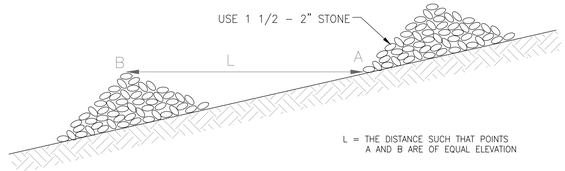
   GENERAL SLOPE (NHDOT TYPE 44) MIX 3:1 OR GREATER SLOPES (MIN. 160 LBS/ACRE):
   44% CREEPING RED FESCUE (MIN. 70 LBS/ACRE)
   38% PERENNIAL RYEGRASS (MIN. 60 LBS/ACRE)
   6% REDTOP (MIN. 10 LBS/ACRE)
   6% ALSIKE CLOVER (MIN. 10 LBS/ACRE)
   6% BIRDSFOOT TREFOIL (MIN. 10 LBS/ACRE)

   A. PLACING LOAM ON SITE
      a. ALL SUBGRADE ELEVATIONS SHOULD BE UNIFORMLY GRADED TO RECEIVE LOAM AND SHALL BE INSPECTED AND APPROVED BY THE GENERAL CONTRACTOR PRIOR TO PLACEMENT OF LOAM.
   a. PLACE LOAM TO FORM A MINIMUM DEPTH OF 4" WHEN ROLLED, UNLESS OTHERWISE INDICATED.
   b. ALL DEPRESSIONS EXPOSED DURING THE ROLLING SHALL BE FILLED WITH ADDITIONAL LOAM.

   B. SEED BED PREPARATION
   AFTER FINISH GRADING AND JUST BEFORE SEEDING, THE AREAS TO BE SEEDED SHALL BE LOOSENED TO PROVIDE A ROUGH, FIRM BUT FINELY PULVERIZED SEEDBED. THE INTENT IS A TEXTURE CAPABLE OF RETAINING WATER, SEED AND FERTILIZER WHILE REMAINING STABLE AND ALLOWING SEED TIME TO GERMINATE. SEED SHALL BE APPLIED TO THE CONDITIONED SEEDBED NOT MORE THAN 48 HOURS AFTER THE SEEDBED HAS BEEN PREPARED.
6. LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE SOIL PRIOR TO OR AT THE TIME OF AT THE TIME OF SEEDING. A MINIMUM OF 2 TONS PER ACRE OF AGRICULTURAL LIMESTONE AND 500 LBS. PER ACRE OF 10-20-20 FERTILIZER SHALL BE APPLIED. SEEDING PRACTICES SHALL COMPLY WITH LOCAL USDA SOIL CONSERVATION SERVICES RECOMMENDATIONS.
7. HAY MULCH OR JUTE MATTING SHALL BE USED WHERE INDICATED ON THE PLANS. A MINIMUM OF 1.5 TONS OF MULCH PER ACRE SHALL BE APPLIED. MULCH SHALL BE ANCHORED IN PLACE WHERE NECESSARY. JUTE MATTING SHALL BE LAID IN THE DIRECTION OF RUNOFF FLOW AND APPLIED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
8. PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS AREA NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 15 TO SEPTEMBER 15. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING WINTER MONTHS.
9. WATER SHALL BE USED FOR DUST CONTROL IN APPROPRIATE AREAS.

STOCKPILE NOTES

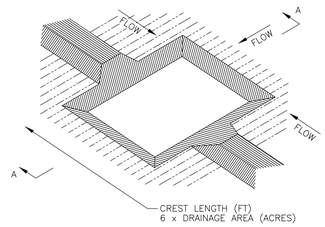
1. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CONCENTRATED FLOWS OF STORMWATER, DRAINAGE COURSES AND INLETS.
2. PROTECT ALL STOCKPILES FROM STORMWATER RUN-ON USING TEMPORARY PERIMETER MEASURES SUCH AS DIVERSIONS, BERMS, SANDBAGS OR OTHER APPROVED PRACTICES.
3. STOCKPILES SHOULD BE SURROUNDED BY SEDIMENT BARRIERS, SUCH AS SILT FENCE OR SILT SOCK, TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.
4. IMPLEMENT WIND EROSION CONTROL PRACTICES AS APPROPRIATE ON ALL STOCKPILED MATERIAL.
5. PLACE BAGGED MATERIALS ON PALLETS AND UNDER COVER.
6. INACTIVE STOCKPILES
   a. INACTIVE SOIL STOCKPILES sHOULD BE COVERED WITH ANCHORED TARPS OR PROTECTED WITH SOIL STABILIZATION MEASURES (TEMPORARY SEED AND MULCH OR OTHER TEMPORARY PRACTICE) AND TEMPORARY PERIMETER SEDIMENT BARRIERS AT ALL TIMES.
   b. INACTIVE STOCKPILES OF CONCRETE RUBBLE, ASPHALT CONCRETE RUBBLE, AGGREGATE MATERIALS AND OTHER SIMILAR MATERIALS SHOULD BE PROTECTED WITH TEMPORARY SEDIMENT PERIMETER BARRIERS AT ALL TIMES. IF THE MATERIALS ARE A SOURCE OF DUST, THEY SHOULD ALSO BE COVERED.
7. ACTIVE STOCKPILES
   a. ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY LINEAR SEDIMENT BARRIERS PRIOR TO THE ONSET OF PRECIPITATION. PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHOULD BE INSPECTED AT THE END OF EACH WORKING DAY.
   b. WHEN A STORM EVENT IS PREDICTED, STOCKPILES SHOULD BE PROTECTED WITH AN ANCHORED PROTECTIVE COVERING.



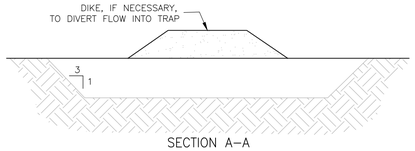
L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION

STONE CHECK DAM

NOT TO SCALE



SEDIMENT TRAP – ISOMETRIC VIEW



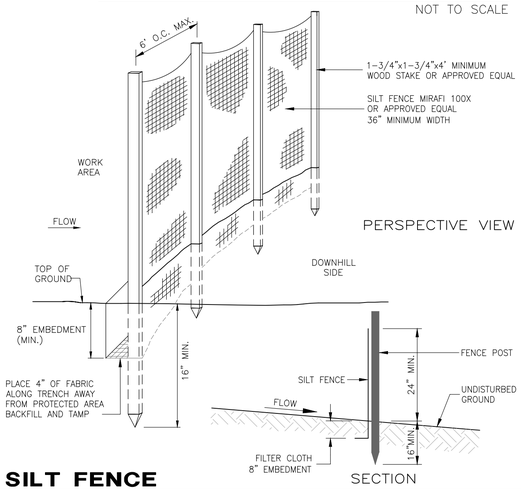
SECTION A–A

NOTES

1. SEDIMENT TRAP TO BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL BASINS/PONDS ARE STABILIZED. IF IT IS DETERMINED THAT CONSTRUCTION OF A SEDIMENT TRAP IS WARRANTED, CONSULT WITH ENGINEER TO DETERMINE APPROPRIATE NUMBER AND DIMENSIONS.

SEDIMENT TRAP

NOT TO SCALE

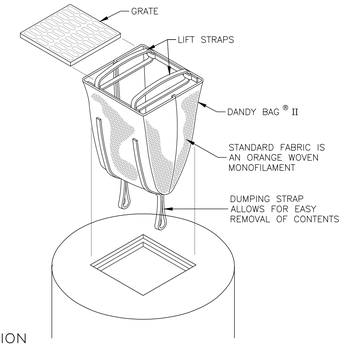


PERSPECTIVE VIEW

SECTION

SILT FENCE

NOT TO SCALE



INSTALLATION

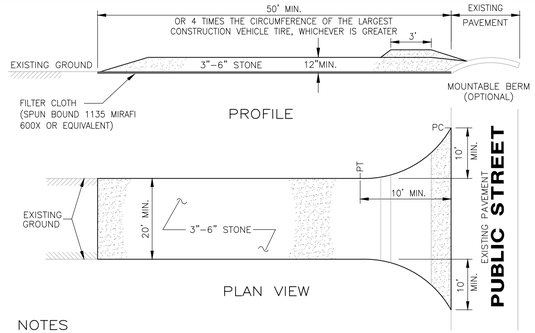
INSTALLATION: REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND THE GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO THE DANDY BAG® II SO THAT THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.

MAINTENANCE

MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE DANDY BAG® II. IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL OIL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.

DANDY BAG® II

NOT TO SCALE

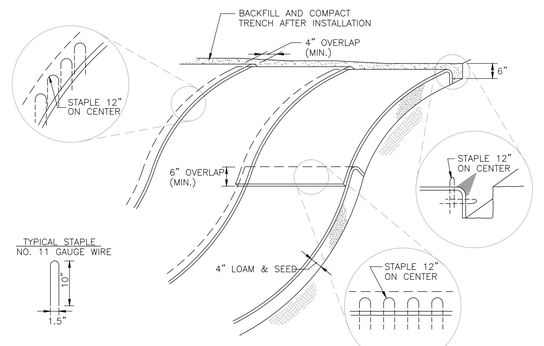


NOTES

1. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE SURFACE.
2. WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
3. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
4. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
5. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN STORM EVENT.

USDA - SCS STABILIZED CONSTRUCTION ENTRANCE

SEE PLAN FOR PROPOSED LOCATION NOT TO SCALE



NOTES

1. BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6" DEEP TRENCH. BACKFILL AND COMPACT TRENCH AFTER STAPLING.
2. ROLL THE BLANKET DOWN THE SWALE IN THE DIRECTION OF THE WATER FLOW.
3. THE EDGES OF BLANKETS MUST BE STAPLED WITH APPROX. 4 INCH OVERLAP WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED.
4. WHEN BLANKETS MUST BE SPLICED DOWN THE SWALE, PLACE BLANKET END OVER END WITH 6 INCH (MIN.) OVERLAP AND ANCHOR DOWN SLOPE BLANKET IN A 6 INCH DEEP TRENCH.
5. BLANKET SHALL BE NORTH AMERICAN GREEN C125BN, EAST COAST EROSION CONTROL ECC-2B, AMERICAN EXCELSIOR COMPANY CURLEX III FIBRENET, ROLANKA GEONATURAL EROSION & SEDIMENT CONTROL MATTE JUTEMAT OR BIOD-OCF 30, OR APPROVED EQUAL.
6. THERE SHALL BE NO PLASTIC, OR MULTI-FILAMENT OR MONO-FILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8 INCHES MATERIAL UTILIZED.

BLANKET SLOPE PROTECTION

FOR EROSION CONTROL NOT TO SCALE

STATE OF NEW HAMPSHIRE – JASON HILL No. 15391 LICENSED PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

DETAILS SHEET

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH
OWNER: MAP 28 LOTS 9, 10
CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103
OWNER: MAP 28 LOT 10-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103
APPLICANT
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	JSH	
17562.06	CK	RED	CADFILE

17562-06 COVER-DETAILS

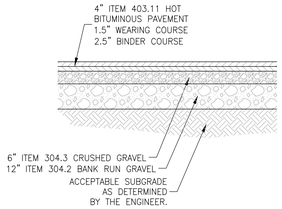
C–14

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DIG SAFE 811 – CALL BEFORE YOU DIG – CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION



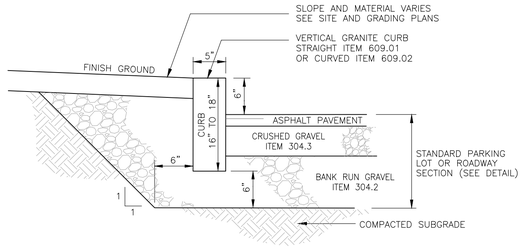
NOTES:

REMOVE ALL LOAM, CLAY, MUCK, STUMPS, AND OTHER IMPROPER PAVEMENT FOUNDATION MATERIAL WITHIN 2' OF SUBGRADE. REPLACE WITH COMPACTED GRANULAR FILL MATERIAL ACCEPTABLE TO APPROVING AGENCY. COMPACTION TO BE AT LEAST 95% OF STANDARD PROCTOR.

ALL PAVEMENT, BASE MATERIALS AND WORKMANSHIP TO BE IN COMPLIANCE WITH N.H.D.O.T. "STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION.

TYPICAL PAVEMENT SECTION

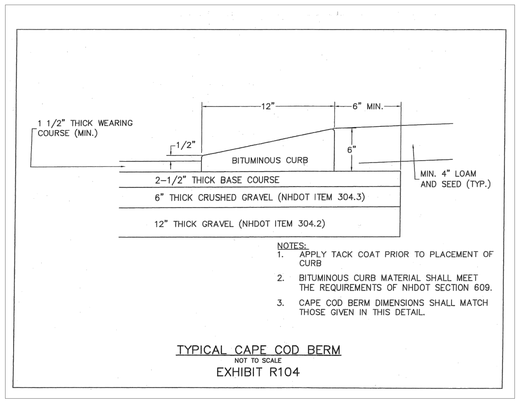
NOT TO SCALE



NOTE: PROVIDE TRANSITIONS & RAMPS PER A.D.A.

VERTICAL GRANITE CURB

NOT TO SCALE



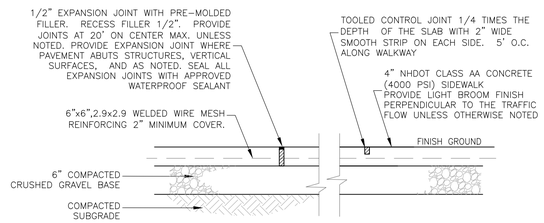
NOTES:

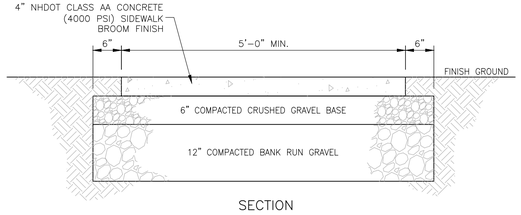
1. APPLY TACK COAT PRIOR TO PLACEMENT OF CURB
2. BITUMINOUS CURB MATERIAL SHALL MEET THE REQUIREMENTS OF NHDOT SECTION 609.
3. CAPE COD BERM DIMENSIONS SHALL MATCH THOSE GIVEN IN THIS DETAIL.

TYPICAL CAPE COD BERM

NOT TO SCALE

EXHIBIT R104

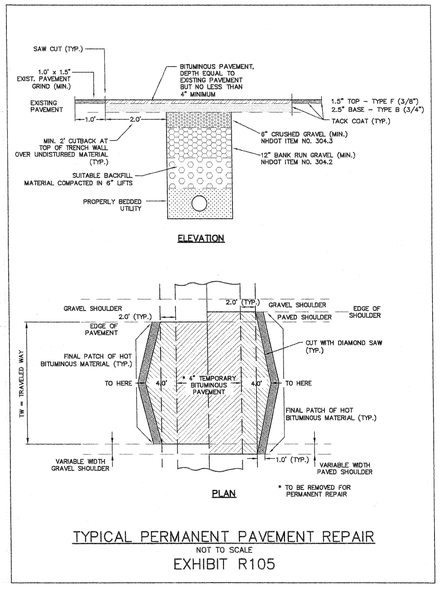




SECTION

CONCRETE SIDEWALK

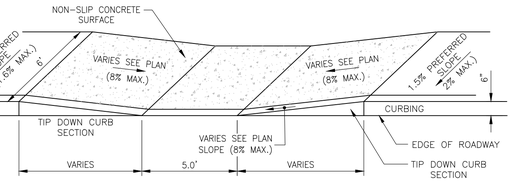
NOT TO SCALE



TYPICAL PERMANENT PAVEMENT REPAIR

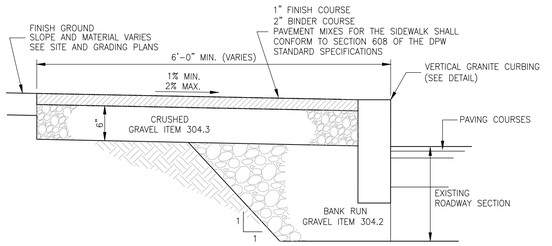
NOT TO SCALE

EXHIBIT R105



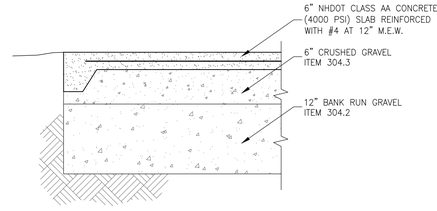
ACCESSIBLE RAMP RECESSED IN WALK

NOT TO SCALE



BITUMINOUS SIDEWALK

NOT TO SCALE



CONCRETE PAD

FOR EXTERIOR BUILDING PADS & DUMPSTER NOT TO SCALE

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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

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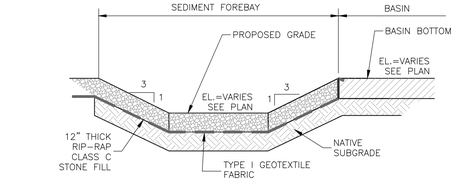
APPLICANT
BENTON FAMILY REALTY, LLC
NDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

REV	DATE	DESCRIPTION	DR	CK
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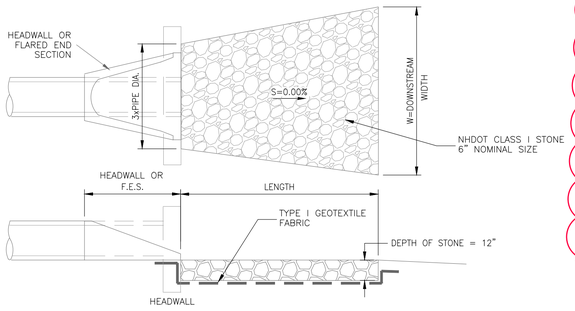
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	CK	CADFILE		
17562.06	JSH	RED		17562-06 COVER-DETAILS	C-15



SEDIMENT FOREBAY

NOT TO SCALE



OUTLET	Do (ft.)	Q25 (cfs)	Tw (ft.)	LENGTH (ft.)	WIDTH up (ft.)	WIDTH dn (ft.)	d50 (in.)*
HW-2	1.25	2.0	0.8	13.0	3.8	9.0	0.6
HW-1	1.00	1.6	0.7	11.8	3.0	7.7	0.7
							*Note:6"min.

Notes:

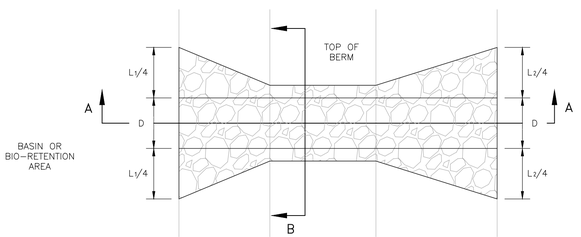
1 Use NHDOT Class C Stone

2 Depth of Stone to be 12" min. or 1.5 times d50 - which ever is larger

3 Design storm: 25-year storm

OUTLET APRON

NOT TO SCALE



RIPRAP EMERGENCY SPILLWAY

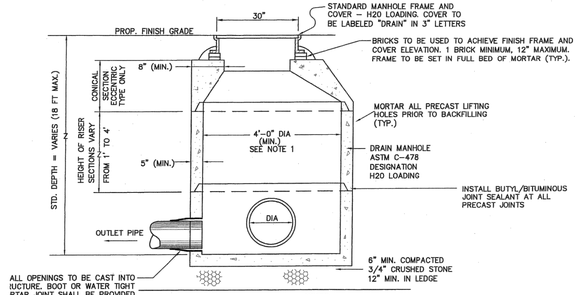
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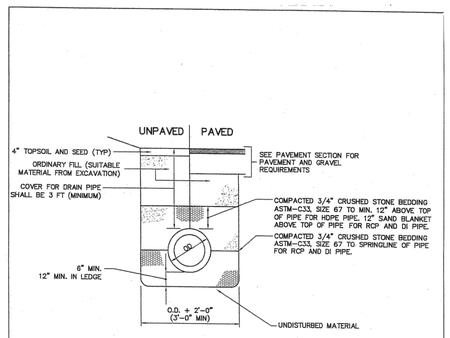
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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION



NOTES:

1. WHERE DEPTH EXCEEDS 12 FT, USE 5'-0" DIAMETER (MIN.)
2. MINIMUM PIPE DROP (INLET TO OUTLET) SHALL BE 3" UNLESS OTHERWISE APPROVED BY THE DEPARTMENT OF PUBLIC WORKS AND ENGINEERING.
3. ALL BOOTS, GASKETS AND SEALANTS SHALL BE IN ACCORDANCE WITH MANUFACTURES WRITTEN INSTRUCTIONS



NOTE:

DRAIN PIPE SHALL BE 15" DIAMETER MIN.

PLASTIC DRAIN PIPE (HDPE) SHALL BE ADS N-12 (CORRUGATED EXTERIOR/SMOOTH INTERIOR) OR EQUAL MEETING AASHTO M-252 AND H-20 LOADING.

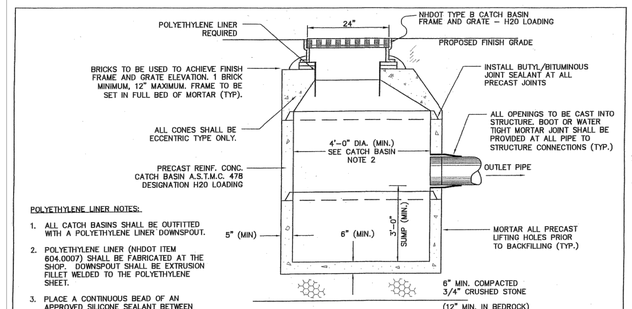
DI DRAIN PIPE SHALL BE CL. 50.

RC DRAIN PIPE SHALL BE CLASS III UNLESS OTHERWISE NOTED.

TYPICAL DRAIN PIPE TRENCH

NOT TO SCALE

EXHIBIT D101



POLYETHYLENE LINER NOTES:

1. ALL CATCH BASINS SHALL BE OUTFITTED WITH A POLYETHYLENE LINER DOWNSPOUT.
2. POLYETHYLENE LINER (NHDOT ITEM 604.0007) SHALL BE FABRICATED AT THE SHOP. DOWNSPOUT SHALL BE EXTRUSION FILLET WELDED TO THE POLYETHYLENE SHEET.
3. PLACE A CONTINUOUS BEAD OF AN APPROVED SILICONE SEALANT BETWEEN FRAME AND POLYETHYLENE SHEET.
4. PLACE CLASS AA CONCRETE TO 2" BELOW THE TOP OF GRATE ELEVATION (SUBSIDIARY TO DRAINAGE STRUCTURE).
5. TRIM POLYETHYLENE SHEET A MAXIMUM OF 4" OUTSIDE THE FLANGE ON THE FRAME FOR THE CATCH BASIN BEFORE PLACING CONCRETE (EXCEPT AS SHOWN WHEN USED WITH CURB).
6. THE CENTER OF THE GRATE & FRAME MAY BE SHIFTED A MAXIMUM OF 3" FROM THE CENTER OF THE DOWNSPOUT IN ANY DIRECTION.

CATCH BASIN NOTES:

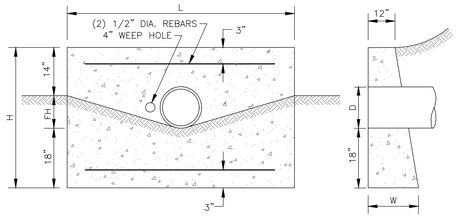
1. WHERE DEPTH EXCEEDS 12 FT, USE 5'-0" DIAMETER (MIN.) MAXIMUM DEPTH = 18 FEET
2. MINIMUM PIPE DROP (INLET TO OUTLET) SHALL BE 3" UNLESS OTHERWISE APPROVED BY THE DEPARTMENT OF PUBLIC WORKS AND ENGINEERING.
3. ALL BOOTS, GASKETS AND SEALANTS SHALL BE IN ACCORDANCE WITH MANUFACTURES WRITTEN INSTRUCTIONS

CATCH BASIN DETAIL

NOT TO SCALE

EXHIBIT D104

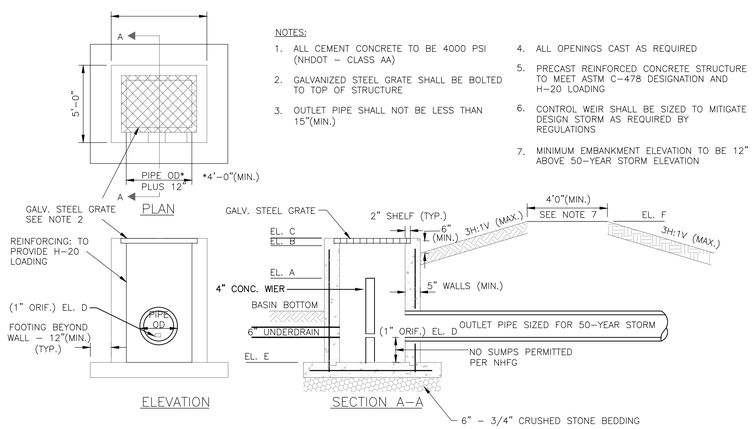
NOMINAL PIPE SIZE D	LENGTH OF BARS	L	H	FH	W
12	3'-2"	3'-6"	3'-6"	0'-10"	1'-10.5"
15	4-2	4-6	3-9	1-1	1-11.25
18	5-2	5-6	4-0	1-4	2-0
24	7-2	7-6	4-6	1-10	2-1.5
30	9-2	9-6	5-0	2-4	2-3
36	11-2	11-6	5-6	2-10	2-4.5
42	13-2	13-6	6-0	3-4	2-6
48	15-2	15-6	6-6	3-10	2-7.5



CONCRETE HEADWALL

SINGLE PIPE SYSTEM

NOT TO SCALE



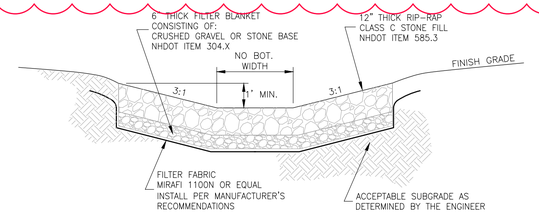
NOTES:

1. ALL CEMENT CONCRETE TO BE 4000 PSI (NHDOT – CLASS AA)
2. GALVANIZED STEEL GRATE SHALL BE BOLTED TO TOP OF STRUCTURE
3. OUTLET PIPE SHALL NOT BE LESS THAN 15"(MIN.)
4. ALL OPENINGS CAST AS REQUIRED
5. PRECAST REINFORCED CONCRETE STRUCTURE TO MEET ASTM C-478 DESIGNATION AND H-20 LOADING
6. CONTROL WEIR SHALL BE SIZED TO MITIGATE DESIGN STORM AS REQUIRED BY REGULATIONS
7. MINIMUM EMBANKMENT ELEVATION TO BE 12" ABOVE 50-YEAR STORM ELEVATION

LOCATION	ELEV A	ELEV B	ELEV C	ELEV D	ELEV E	ELEV F
OS1	160	161.5	161.5	155.15	155.05	162
OS2	172.3	173.3	173.3	168.45	168.35	173.5
OS3	176.5	177.5	177.5	170.9	170.8	178
OS4	-	-	177.5	171.15	171.05	178

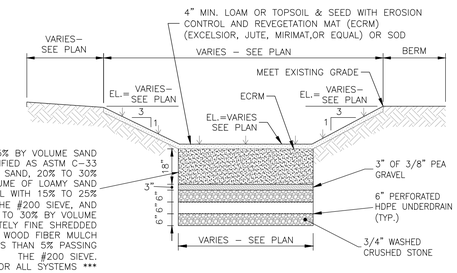
OUTLET STRUCTURE AT DETENTION BASIN

NOT TO SCALE



RIP RAP SWALE

NOT TO SCALE



NOTES

1. THE INSTALLER SHALL NOT ALLOW ANY VEHICULAR OR CONSTRUCTION EQUIPMENT TRAVEL TO OCCUR ACROSS THE PROPOSED RECHARGE BASIN AREA AT ANY TIME EXCEPT DURING EXCAVATION OF TOPSOIL, SUBSOIL AND OTHER MATERIALS
2. NOT SUITABLE FOR BED BOTTOM CONDITIONS.

CAUTION SHOULD BE EXERCISED DURING SITE PREPARATION TO AVOID COMPACTION OF THE INFILTRATIVE SURFACE.

TYPICAL INFILTRATION BASIN

NOT TO SCALE

STATE OF NEW HAMPSHIRE – JASON HILL No. 15391 LICENSED PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

DETAILS SHEET

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4

BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

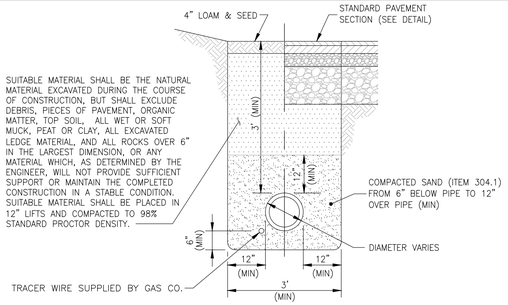
BENTON FAMILY REALTY, LLC
NDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

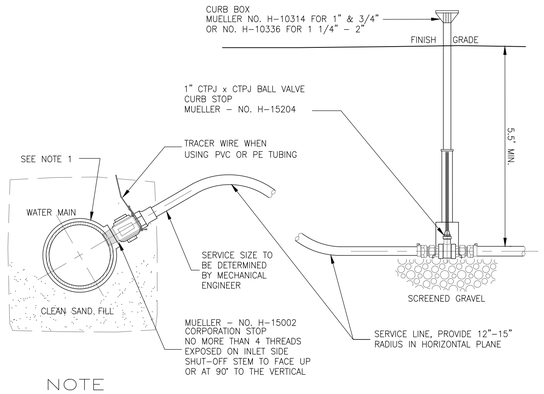
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
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FILE	DR	CK			
17562.06	JSH	RED	CADFILE	17562-06 COVER-DETAILS	C-16



GAS MAIN TRENCH

NOT TO SCALE

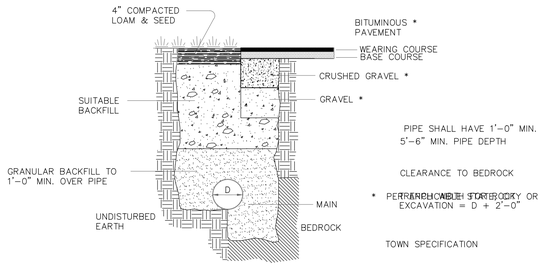


NOTE

1. IF WATERMAIN IS PVC OR TRANSITE, A DOUBLE STAINLESS STEEL STRAP TAPPING SADDLE MUST BE USED TO CONNECT THE CORPORATION TO THE WATERMAIN.

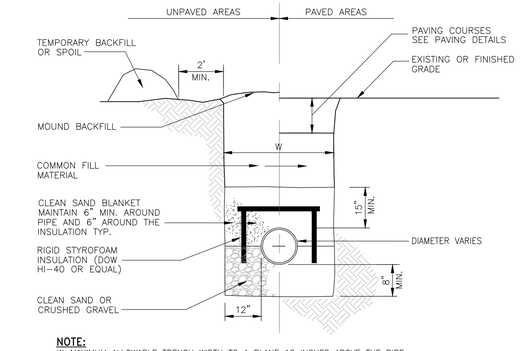
DOMESTIC SERVICE CONNECTION

NOT TO SCALE



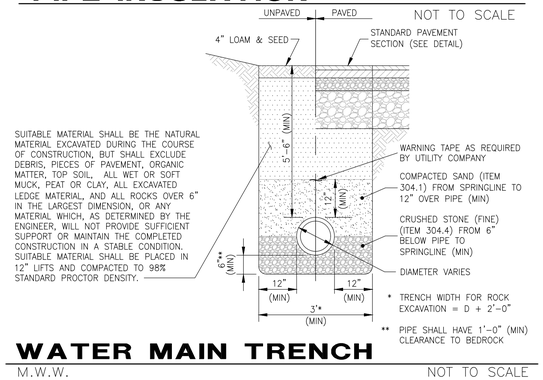
WATER SERVICE TRENCH

NOT TO SCALE



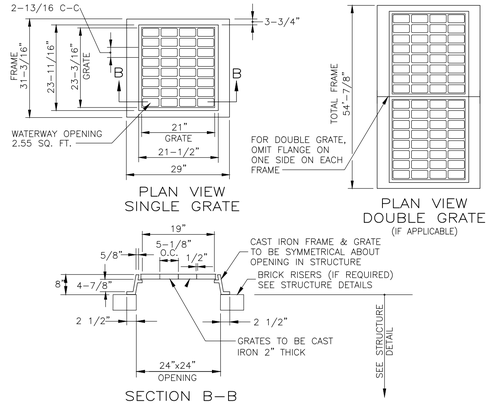
NOTE:
W=MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES; FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.

PIPE INSULATION



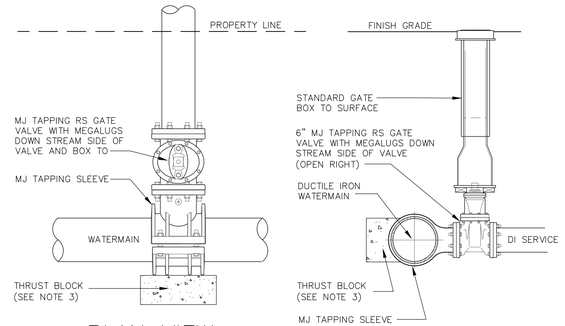
WATER MAIN TRENCH

M.W.W. NOT TO SCALE



FRAME AND GRATE

NHDOT TYPE B ALT 1 NOT TO SCALE



PLAN VIEW SECTION

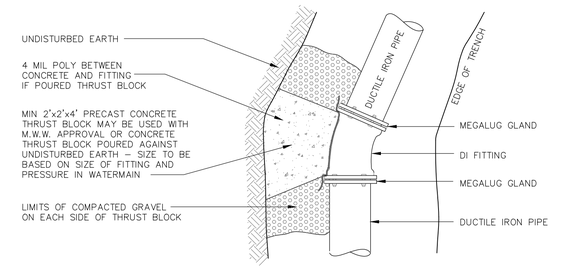
NOTE

1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO M.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
3. MIN 2'x2'x4' PRECAST CONCRETE THRUST BLOCK MAY BE USED WITH M.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATERMAIN.

WET TAP TEE INSTALLATION

NOT TO SCALE

TABLE OF DIMENSIONS										
PIPE SIZE	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		TEE & PLUG	
	WIDTH	HGT.	WIDTH	HGT.	WIDTH	HGT.	WIDTH	HGT.	WIDTH	HGT.
6"	33"	21"	18"	21"	12"	18"	9"	12"	21"	24"
8"	45"	27"	24"	27"	18"	21"	12"	15"	27"	33"
10"	60"	36"	36"	36"	24"	30"	18"	21"	36"	42"
12"	66"	39"	36"	42"	24"	30"	18"	21"	39"	45"
14"	72"	45"	42"	48"	27"	36"	18"	27"	45"	54"



NOTE

1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO M.W.W. TECHNICAL SPECIFICATIONS.
2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.

THRUST BLOCKING BEHIND FITTINGS INSTALLATION

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CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

DETAILS SHEET

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10
CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
Fax (603) 472-9747
www.tfmoran.com

FILE	DR	JSH	CADFILE		
17562.06	CK	RED	17562-06 COVER-DETAILS	C-17	

GENERAL NOTES

1. IT IS THE INTENTION THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES SHALL BE AN ASSEMBLY OF PRECAST SECTIONS, WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE, CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
2. BARRELS, CONE SECTIONS AND CONCRETE GRADE RINGS SHALL BE PRECAST REINFORCED CONCRETE AND SHALL CONFORM ENV-WQ 704.12 & 704.13.
3. PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478-06.
4. BASE SECTIONS SHALL BE OF MONOLITHIC CONSTRUCTION TO A POINT AT LEAST 6 INCHES ABOVE THE CROWN OF THE INCOMING PIPE.
5. MANHOLE CONE SECTIONS SHALL BE ECCENTRIC IN SHAPE.
6. ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OR TRADEMARK OF THE MANUFACTURER IMPRESSED OR INDELIBLY MARKED ON THE INSIDE WALL.
7. ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOFING COATING.
8. SHALLOW MANHOLE: IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H-20 LOADS.
9. HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED FOR WATERTIGHTNESS USING A DOUBLE ROW OF AN ELASTOMERIC OR MASTIC-LIKE SEALANT. APPROVED ELASTOMERIC SEALANTS ARE:

   SIKAFLEX-12-SL

   SONNEBORN BUILING PRODUCTS-SONOLASTIC SL-1
10. THE MINIMUM INTERNAL DIAMETER OF MANHOLES SHALL BE 48 INCHES. FOR SEWERS LARGER THAN 24-INCH DIAMETER. MANHOLE DIAMETERS SHALL BE INCREASED SO AS TO PROVIDE AT LEAST 12-INCHES OF SHELF ON EACH SIDE OF THE SEWER.
11. LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE TO ENV-WQ 704.17.
    (a) ALL MANHOLES SHALL BE TESTED FOR LEAKAGE USING A VACUUM TEST IN ACCORDANCE WITH THE ASTM C1244 STARNDARD IN EFFECT WHEN THE TESTING IS PERFORMED.
    (b) THE MANHOLE VACUUM TEST SHALL CONFORM TO THE FOLLOWING:
        1. THE INITIAL VACUUM GUAGE TEST PRESSURE SHALL BE 10 INCHES Hg.
        2. THE MINIMUM ACCEPTABLE TEST HOLD TIME FOR 1-INCH Hg PRESSURE DROP TO 9 INCHES SHALL BE:
           A. NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP.
           B. NOT LESS THAN 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP.
           C. NOT LESS THAN 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP.
    (c) THE MANHOLE SHALL BE REPAIRED AND RETESTED IF THE TEST HOLD TIMES FAIL TO ACHIEVE THE ACCEPTANCE LIMITS SPECIFIED IN (b) ABOVE.
    (d) INVERTS AND SHELVES SHALL NOT BE INSTALLED UNTIL AFTER SUCCESSFUL TESTING IS COMPLETE.
    (e) FOLLOWING COMPLETION OF THE LEAKAGE TEST, THE FRAME AND COVER SHALL BE PLACED ON TOP OF THE MANHOLE OR SOME OTHER MEANS USED TO PREVENT ACCIDENTAL ENTRY BY UNAUTHORIZED PERSONS, CHILDREN OR ANIMALS, UNTIL THE CONTRACTOR IS READY TO MAKE FINAL ADJUSTMENT TO GRADE.
12. BRICK MASONRY FOR SHELF, INVERT AND GRADE ADJUSTMENT SHALL COMPLY WITH ASTM C32-05, CLAY OR SHALE, FOR GRADE SS HARD BRICK.
13. MORTAR SHALL BE COMPOSED OF PORTLAND CEMENT AND SAND WITH OR WITHOUT HYDRATED LIME ADDITION. PROPORTIONS IN MORTAR OF PARTS BY VOLUMES SHALL BE:
    (a) 4.5 PARTS SAND AND 1.5 PARTS CEMENT; OR
    (b) 4.5 PARTS SAND, 1 PART CEMENT AND 0.5 PART HYDRATED LIME

    CEMENT SHALL BE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150-05. HYDRATED LIME SHALL BE TYPE S CONFORMING TO ASTM C207-06 "STANDARD SPECIFICATIONS FOR HYDRATED LIME FOR MASONRY PURPOSES". SAND SHALL CONSIST OF INERT NATURAL SAND CONFORMING TO ASTM C33-03 "STANDARD SPECIFICATIONS FOR CONCRETE, FINE AGGREGATES".
14. INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED OR PRECAST CONCRETE SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF THE PIPE AND FLOW. AT CHANGES IN DIRECTIONS, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.
15. FRAMES AND COVERS: MANHOLES FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN, CLASS 30, CONFORMING TO ASTM A48/48M AND PROVIDE A 30-INCH CLEAR OPENING. 3-INCH WORD (MINIMUM HEIGHT) LETTERS "SEWER" SHALL BE PLAINLY CAST INTO THE TOP SURFACE. THE CASTING SHALL BE OF EVEN GRAINED CAST IRON, SMOOTH, AND FREE FROM SCALE, LUMPS, BLISTERS, SAND HOLES AND DEFECTS. CONTACT SURFACES OF COVERS AND FRAMES SHALL BE MACHINED AT THE FOUNDRY TO PREVENT ROCKING OF COVERS IN ANY ORIENTATION.
16. BEDDING: PRECAST BASES SHALL BE PLACED ON A 6-INCH LAYER OF COMPACTED BEDDING MATERIAL THAT CONFORMS TO ASTM C33-03 NO. 67 STONE AND FREE FROM CLAY, LOAM AND ORGANNIC MATTER. THE EXCAVATION SHALL BE PROPERLY DEWATERED WHILE PLACING BEDDING MATERIAL AND SETTING OF THE BASE OR POURING CONCRETE. WATER-STOPS SHALL BE USED AT THE HORIZONTAL JOINT OF THE CAST-IN-PLACE MANHOLES.

100% PASSING	1" SCREEN
90-100% PASSING	3/4" SCREEN
20-55% PASSING	3/8" SCREEN
0-10% PASSING	#4 SIEVE
0-5% PASSING	#8 SIEVE

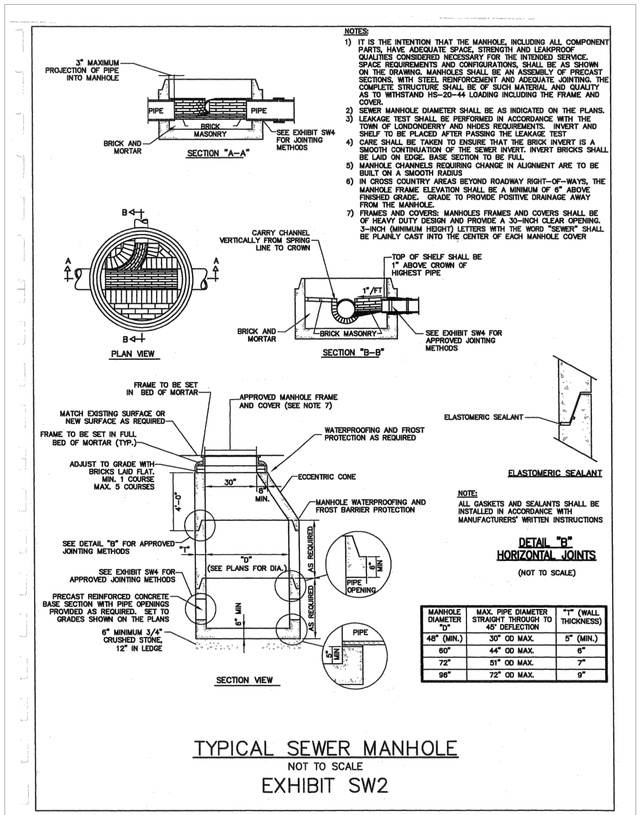
17. FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDED WIbHIN THE FOLLOWING DISTANCES FROM ANY MANHOLE CONNECTION: (a) WITHIN 48 INCHES FOR REINFORCED CONCRETE PIPE (RCP). (b) WITHIN 60 INCHES FOR PVC PIPE LARGER THAN 15" DIAMETER.
18. NO FLEXIBLE JOINT SHALL BE REQUIRED FOR DUCTILE IRON PIPE OR PVC PIPE UP THROUGH 15-INCH DIAMETER.
19. PIPE TO MANHOLE JOINTS SHALL BE ONLY AS FOLLOWS:
    A. ELASTOMERIC, RUBBER SLEEVE WITH WATERTIGHT JOINTS AT THE MANHOLE OPENING AND PIPE SURFACES.
    B. CAST INTO WALL OR SECUREED WITH STAINLESS STEEL CLAMPS.
    C. ELASTOMERIC SEALING RING CAST IN THE MANHOLE OPENING WITH THE SEAL FORMED ON THE SURFACE OF THE PIPE BY COMPRESSION OF THE RING.
    D. NON-SHRINK GROUTED JOINTS WHERE WATERTIGHT BONDING TO THE MANHOLE AND PIPE CAN BE OBTAINED.
20. THE INVERT OF THE INCOMING PIPE SHALL BE NO MORE THAN 6 INCHES ABOVE THE OUTGOING PIPE UNLESS A DROP ENTRY IS USED.

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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

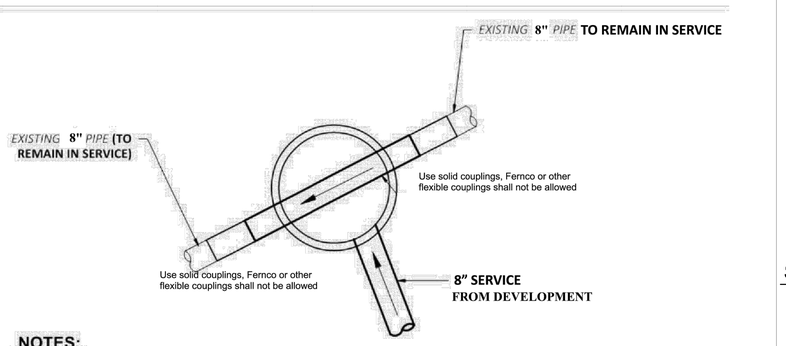


MANHOLE DIAMETER "D"	MAX. PIPE DIAMETER STRAIGHT THROUGH TO 45° DEFLECTION	"T" (WALL THICKNESS)
48" (MIN.)	30" OD MAX.	5" (MIN.)
60"	44" OD MAX.	6"
72"	51" OD MAX.	7"
98"	72" OD MAX.	9"

TYPICAL SEWER MANHOLE

NOT TO SCALE

EXHIBIT SW2

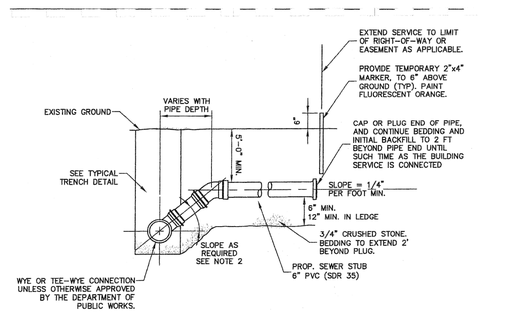


NOTES:

1. CONTRACTOR SHALL EXCAVATE TEST PIT AT LOCATION OF NEW MANHOLE TO DETERMINE EXACT LOCATION, ELEVATION AND SLOPE OF EXISTING 8" SEWER PRIOR TO BEGINNING CONSTRUCTION.
2. THE EXISTING PIPE SHALL BE TEMPORARILY PLUGGED PRIOR TO CUT IN MANHOLE WORK.
3. THE CONTRACTOR SHALL PROVIDE BY-PASS PUMPING DURING MANHOLE WORK AS NEEDED.
4. UPON COMPLETION, TESTING, AND ACCEPTANCE OF ALL NEW GRAVITY SEWER, THE CONTRACTOR SHALL, CONSTRUCT THE NEW INVERT, AND REDIRECT FLOW INTO THE NEW SEWER.

CUT IN SMH

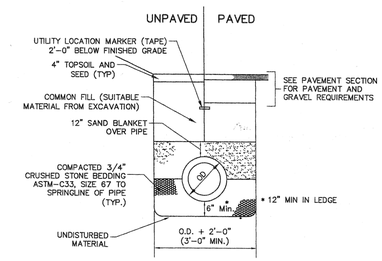
SCALE: NTS



NOTES:
1. ALL SERVICE CONNECTIONS TO BE 6" MINIMUM UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
2. USE CHIMNEY DETAIL WHERE SERVICE CONNECTION ENTERS SEWER AT GREATER THAN 60° TO THE HORIZONTAL.

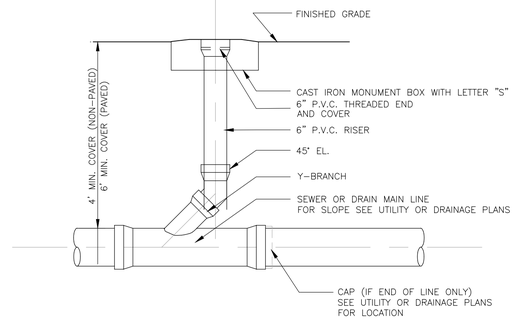
SEWER SERVICE CONNECTION

NOT TO SCALE



TYPICAL SEWER PIPE TRENCH

NOT TO SCALE



SEWER CLEAN OUT

NOT TO SCALE

GENERAL NOTES

1) MINIMUM SIZE PIPE FOR SEWER SERVICE SHALL BE SIX (6) INCHES.
2) PIPE AND JOINT MATERIALS:
   A. PLASTIC SEWER PIPE
      1. PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

ASTM STANDARDS	GENERIC PIPE MATERIAL	SIZES APPROVED
D3034	*PVC (SOLID WALL)	8" THROUGH 15" (SDR 35)
F679	PVC (SOLID WALL)	18" THROUGH 27" (T-1 & T-2)
F789	PVC (SOLID WALL)	4" THROUGH 18" (T-1 TO T-3)
F794	PVC (RIBBED WALL)	8" THROUGH 36"
D2680	*ABS (COMPOSITES WALL)	8" THROUGH 15"

      *PVC: POLY VINYL CHLORIDE
      *ABS: ACRYLONITRILE-BUTADIENE-STYRENE

      2. JOINTS SEALS FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D-3212 AND SHALL BE PUSH-ON, BELL AND SPIGOT TYPE.

         ABS TRUSS PIPE AND FITTINGS SHALL CONFORM TO ASTM D-2680, POLYMER COMPOUNDING SHALL BE TO ASTM D-1788 (CLASS 322).

         JOINTS FOR ABS TRUSS PIPE SHALL BE CHEMICAL WELDED COUPLINGS TYPE SC IN ACCORDANCE WITH ASTM D-2680, FORMING A CHEMICAL WELDED JOINT.
3) DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.
4) JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER-TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER WYE OR AT THE FOUNDATION WALL, APPROPRIATE MANUFACTURED ADAPTERS SHALL BE USED.
5) SEWER SERVICE INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 6 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL AS SPECIFIED IN NOTE 10. BEDDING AND RE-FILL FOR DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH APPROPRIATE MECHANICAL DEVICES.

   THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE FOUNDATION AT A GRADE OF NOT LESS THAN 1/4" INCH PER FOOT. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DEWATER THE TRENCH.
6) TESTING: THE COMPLETED SEWER SERVICE SHALL BE SUBJECTED TO A LEAKAGE TEST IN ANY OF THE FOLLOWING MANNERS: (PRIOR TO BACKFILLING)
   A. AN OBSERVATION TEE SHALL BE INSTALLED AS SHOWN AND WHEN READY FOR TESTING, AN INFLATABLE BLADDER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE TEE. AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE PLUG TO A HEIGHT OF 5 FEET ABOVE THE LEVEL OF THE PLUG.

   LEAKAGE OBSERVED DURING TESTING SHALL BE IN ANY ONE OF THE ABOVE ALTERNATE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG-UP IF NECESSARY AND RE-LAID SO AS TO ASSURE WATER TIGHTNESS.
7) ILLEGAL CONNECTIONS: NOTHING BUT SANITARY WASTE FLOW FROM TOILETS, SINKS, LAUNDRY ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS, SUMP PUMPS OR OTHER SIMILAR CONNECTIONS CARRYING RAIN WATER, DRAINAGE OR GROUND WATER SHALL NOT BE PERMITTED.
8) WATER SERVICE SHALL NOT BE LAID IN SAME TRENCH AS SEWER SERVICE.
9) BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM C33-67.

100% PASSING	1 INCH SCREEN
90%-100% PASSING	3/4 INCH SCREEN
20%-55% PASSING	3/8 INCH SCREEN
0%-10% PASSING	#4 SIEVE
0%-5% PASSING	#8 SIEVE

   WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH TO 1 1/2 INCH SHALL BE USED.
10) LOCATION: THE LOCATION OF THE TEE OR WYE SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS METAL ROD OR PIPE SHALL BE PLACED OVER THE TEE OR WYE AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL, TO AID IN LOCATING THE BURIED PIPE WITH A DIP NEEDLE OR PIPEFINDER.
11) CHIMNEYS: IF VERTICAL DROP INTO SEWER IS GREATER THAN 4 FEET, A CHIMNEY SHALL BE CONSTRUCTED FOR THE SEWER CONNECTION. CHIMNEY INSTALLATION AS RECOMMENDED BY THE PIPE MANUFACTURER MAY BE USED IF APPROVED BY THE ENGINEER.

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

DETAILS SHEET

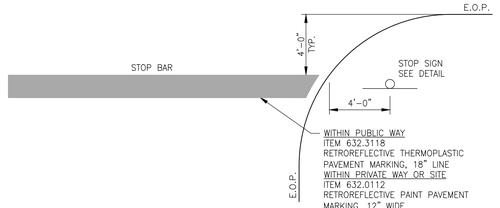
EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH
OWNER: MAP 28 LOTS 9, 10
CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103
OWNER: MAP 28 LOT 10-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103
APPLICANT
BENTON FAMILY REALTY, LLC
HDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

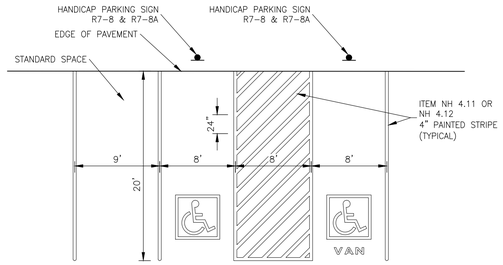
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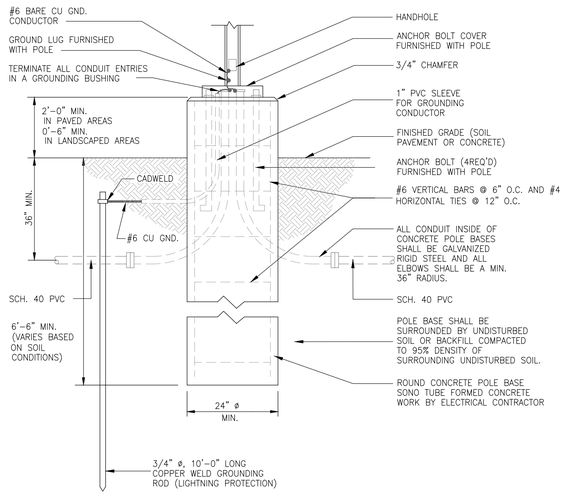
STOP BAR

NOT TO SCALE



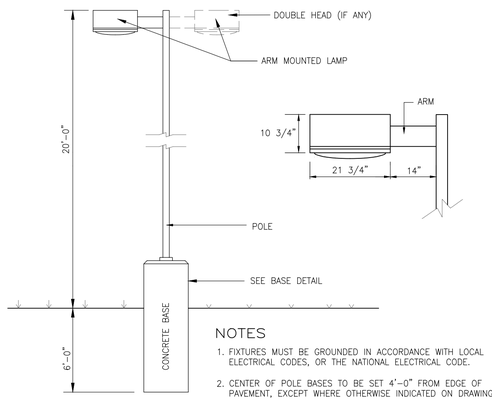
PARKING STRIPING DETAIL

NOT TO SCALE



LIGHT POLE BASE

NOT TO SCALE

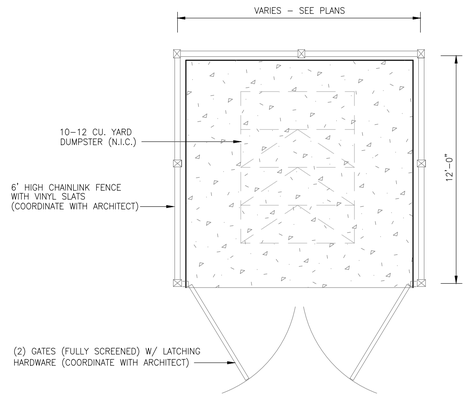


NOTES

1. FIXTURES MUST BE GROUNDED IN ACCORDANCE WITH LOCAL ELECTRICAL CODES, OR THE NATIONAL ELECTRICAL CODE.
2. CENTER OF POLE BASES TO BE SET 4'-0" FROM EDGE OF PAVEMENT, EXCEPT WHERE OTHERWISE INDICATED ON DRAWING.
3. LIGHTING SHOWN HERE IS AREA LIGHTING, SUPPLEMENTAL BUILDING-MOUNTED FIXTURES AT DOORWAYS, ETC. MAY BE REQUIRED.
4. SEE LIGHTING PLAN FOR FIXTURE SCHEDULE.

LIGHT POLE

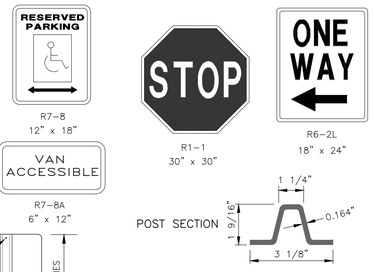
NOT TO SCALE



DUMPSTER ENCLOSURE - VINYL

SEE PLANS FOR LAYOUT

NOT TO SCALE



LENGTH: P-12, 12'-0"; P-14, 14'-0"; P-16, 16'-0".

WEIGHT PER LINEAR FOOT: 2.50 LBS. (MIN.)

HOLES: 3/8" DIA. 1' C-C FULL LENGTH

STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576 (GRADE 1070-1080).

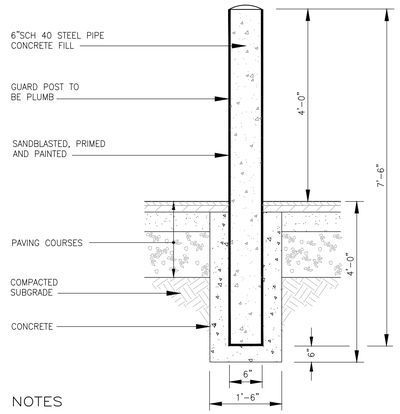
FINISH: SHALL BE PAINTED WITH TWO COATS OF AN APPROVED MEDIUM GREEN, BAKED ON OR AIR DRIED, PAINT OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

NOTES

1. POSTS SHALL BE PLUMB; ANY POST BENT OR OTHERWISE DAMAGED SHALL BE REMOVED AND PROPERLY REPLACED. POSTS MAY BE SET OR DRIVEN.
2. WHEN POSTS ARE SET, HOLES SHALL BE DUG TO THE PROPER DEPTH, AFTER INSERTING POSTS, THE HOLES SHALL BE BACKFILLED WITH SUITABLE MATERIAL IN LAYERS NO TO EXCEED 6" DEEP THOROUGHLY COMPACTED, CARE BEING TAKEN TO PRESERVE THE ALIGNMENT OF THE POST.
3. WHEN POSTS ARE DRIVEN, A SUITABLE DRIVING CAP SHALL BE USED AND AFTER DRIVING THE TOP OF THE POST SHALL HAVE SUBSTANTIALLY THE SAME CROSS-SECTIONAL DIMENSION AS THE BODY OF THE POST; BATTERED HEADS WILL NOT BE ACCEPTED.
4. POSTS SHALL NOT BE DRIVEN WITH THE SIGN ATTACHED TO THE POST.
5. SIGNS SHALL BE ERECTED IN CONFORMANCE WITH THE REQUIEMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
6. WHEN SIGN IS IN PLACE NO PART OF POST SHALL EXTEND ABOVE THE SIGN.
7. DIMENSIONS SHOWN ARE NOMINAL.
8. ALTERNATE SECTIONS MUST BE APPROVED PRIOR TO USE.

TRAFFIC SIGN POST IN GRADE

NOT TO SCALE

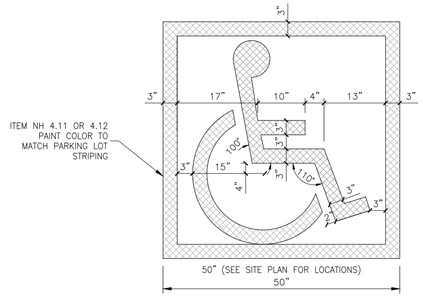


NOTES

1. BOLLARD TO CONFORM TO NHDOT SPECIFICATIONS
2. INSTALL POYLY COVER TO BOLLARDS ALONG BUILDING (GRAY POLYETHELENE COVER FROM IDEAL SHIELD 313-842-7290)

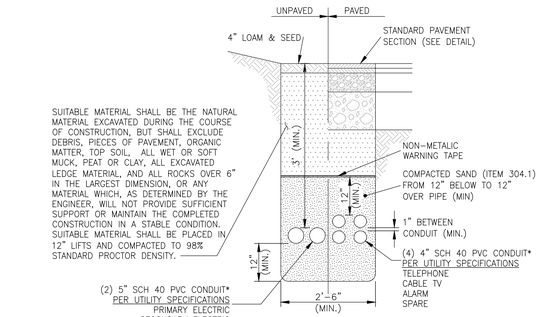
BOLLARD

NOT TO SCALE



PAINTED HANDICAP SYMBOL

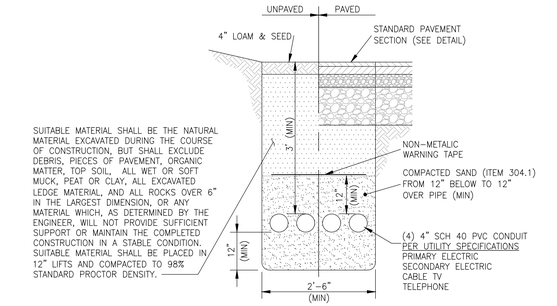
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*CONTRACTOR TO VERIFY CONDUIT SIZE, NUMBER AND MATERIAL WITH INDIVIDUAL UTILITY PROVIDERS PRIOR TO CONSTRUCTION.

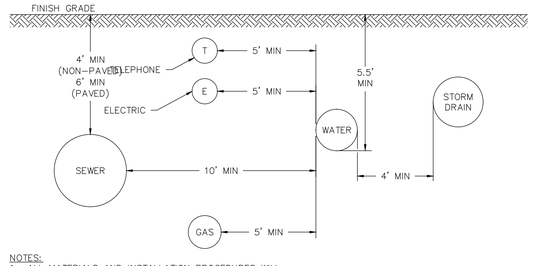
UTILITY TRENCH

NOT TO SCALE



UTILITY TRENCH

NOT TO SCALE



NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO TOWN OF LONDONDERRY AND M.W.W. TECHNICAL SPECIFICATIONS.
2. ALL WATER MAIN SHOULD HAVE A MINIMUM DEPTH OF 5.5' FROM INVERT (BOTTOM) OF PIPE TO FINISH GRADE.

TYPICAL UTILITY SEPARATION

NOT TO SCALE

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811 OR 1-888-DIG-SAFE
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STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

DETAILS SHEET

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

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1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

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APPLICANT

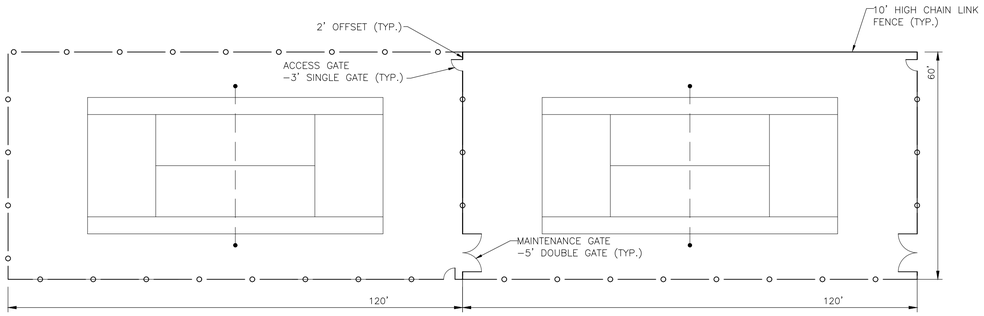
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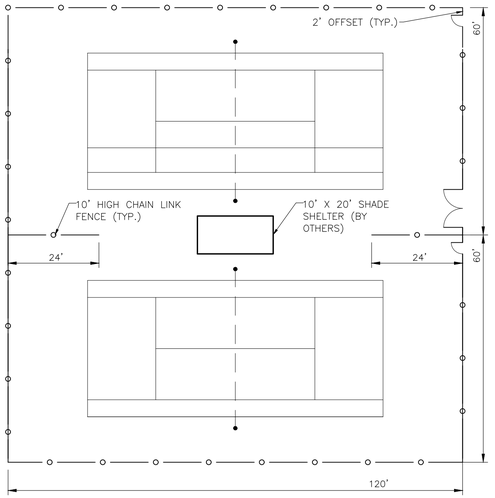
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FILE	DR	CK	CADFILE		
17562.06	JSH	RED	17562-06 COVER-DETAILS		C-19

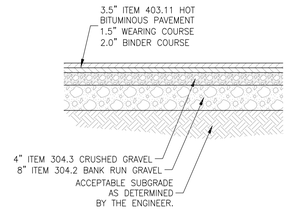




FENCE LAYOUT

SCHEMATIC REPRESENTATION

1' = 20'



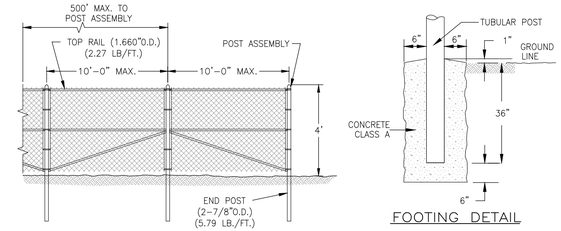
NOTES:

REMOVE ALL LOAM, CLAY, MUCK, STUMPS, AND OTHER IMPROPER PAVEMENT FOUNDATION MATERIAL WITHIN 2' OF SUBGRADE. REPLACE WITH COMPACTED GRANULAR FILL MATERIAL ACCEPTABLE TO APPROVING AGENCY. COMPACTION TO BE AT LEAST 95% OF STANDARD PROCTOR.

ALL PAVEMENT, BASE MATERIALS AND WORKMANSHIP TO BE IN COMPLIANCE WITH N.H.D.O.T. "STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION.

TYPICAL RACQUET COURT SECTION

NOT TO SCALE



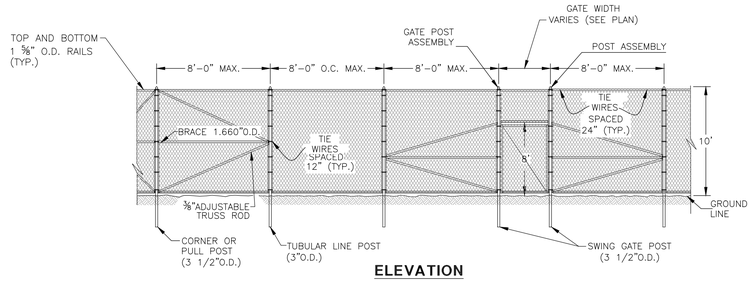
ELEVATION

FOOTING DETAIL

ALL END POSTS SHALL HAVE ONE BRACE.
ALL CORNER AND INTERMEDIATE BRACE OR PULL POSTS SHALL HAVE TWO BRACES, WITH A MAXIMUM SPACING OF BETWEEN POST ASSEMBLIES OF 500 FEET.

CHAIN LINK FENCE

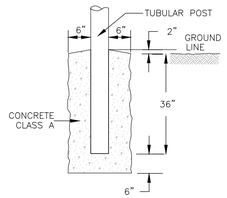
NOT TO SCALE



ELEVATION

NOTES:

1. PROVIDE 9' OPEN MESH VINYL COATED WINDSCREEN – DARK GREEN. (INSTALL PER MANUFACTUR'S RECOMMENDATIONS.)
2. ALL POST, RAILS, TIES AND FABRIC TO BE GALVANIZED GREEN VINYL-COATED.
3. FABRIC SHALL BE 11 GAUGE, 1¾" DIAMOND PATTERN OR 9 GAUGE, 2" DIAMOND PATTERN WITH KNUCKLED SELVAGE TOP AND BOTTOM.
4. FENCE FRAME WORK TO BE HIGH STRENGTH STEEL PIPE.
5. INSTALL FABRIC ON COURT SIDE OF POSTS.



FOOTING DETAIL

10' CHAIN LINK FENCE DETAIL

NOT TO SCALE

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JASON HILL
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LICENSED
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NEW HAMPSHIRE
STATE ENDANGERED

BLANDING'S TURTLE

Report Sightings: Contact Wildlife Biologist Josh Megyesy at (603) 271 – 1125 or the Wildlife Division at (603) 271 – 2461. Observation reports can be sent to RAARP@wildlife.nh.gov. Photographs and exact locations are strongly encouraged.



Specific Information:
- Adults are 7 – 9 inches long.
- Shell is highly domed with light speckles.
- Distinct yellow throat and chin.
- Uses variety of wetlands and moves extensively over land.
- Turtles are frequently concealed by leaves and undergrowth and may not be easily visible.
- Turtles are most active from April 15 – October 15.
- During nesting season (May 15 – July 15) turtles are attracted to disturbed ground.





This species is protected under RSA 212-A and Fis 1000. Thank you for reporting any observations.

PLEASE DO NOT DISTURB OR HANDLE WILDLIFE

NEW HAMPSHIRE
STATE THREATENED

EASTERN MEADOWLARK

Report Sightings: For environmental review projects, contact the Wildlife Division at (603) 271 – 2461 or as otherwise noted in permit documents. For non-urgent reports, submit observations to Ebird.org. Photographs and exact locations are strongly encouraged.



Species Information:
- 9 – 10 inches long with 14 – 16 inch wingspan, similar size as American Robin.
- Mottled brown back with a bright yellow throat and breast.
- Black "V" on chest, white outer tail feathers.
- Found in large grasslands, such as hayfields and airports.
- Most nesting is in the Connecticut and Merrimack valleys and near seacoast.
- Nesting between May and August.
- 2 – 7 eggs per nest, white with brown spots.
- May nest more than once in a season.
- Nests are built on ground with grass "roof" and are not always visible (see image).





This species is protected under RSA 209:8, RSA 209:10, and Fis 1000.

DO NOT DISTURB OR HANDLE WILDLIFE UNLESS AUTHORIZED BY NH FISH AND GAME

9/2/25

NEW HAMPSHIRE
STATE THREATENED

GRASSHOPPER SPARROW

Report Sightings: For environmental review projects, contact the Wildlife Division at (603) 271 – 2461 or as otherwise noted in permit documents. For non-urgent reports, submit observations to Ebird.org. Photographs and exact locations are strongly encouraged.



Species Information:
- Small 4 – 5 inches long, 8-inch wingspan.
- Flat head, deep bill, and orange-yellow spot in front of eye.
- Unstreaked, buffy belly and rusty spotting or streaking on back.
- Song is a short insect-like buzz followed by several short, fainter notes.
- Found in dry and sparse grasslands generally over 30 acres.
- Located primarily along the Merrimack Valley and Seacoast.
- Breeding May – August with 4 – 5 speckled eggs in a compact cup nest found on grass.





This species is protected under RSA 209:8, RSA 209:10, and Fis 1000.

DO NOT DISTURB OR HANDLE WILDLIFE UNLESS AUTHORIZED BY NH FISH AND GAME

9/5/25

EASTERN HOGNOSE SNAKE

(New Hampshire state endangered species)

*Egg laying occurs **June 1 - July 15th**.*
*Young emerge in **August - September**.*



Identifying traits
- Black, gray or patterned appearance
- Upturned snout
- Adults are 2-3 ft. long
- May spread neck out or hiss
- May play dead if they feel threatened.
- Rarely bite – display is a defense strategy

Habitat Use
- Can be found in a variety of habitats throughout the season





Immediately report sightings to NH Fish & Game

Melissa Winters (603-479-1129) or
Brendan Clifford (603-944-0885)
Please report promptly, noting specific location and date.
Photographs strongly encouraged.

State Laws Pertaining to this Species

RSA 212-A:7, FIS 804.05, Fis 1401.03 (a)

NEW HAMPSHIRE
STATE ENDANGERED

NEW ENGLAND COTTONTAIL

Report Sightings: For environmental review project, contact Wildlife Biologist Heidi Holman at (603) 616 – 3324, heidi.l.holman@wildlife.nh.gov, or the Wildlife Division at (603) 271 – 2461. Otherwise, observations can be sent to nhrabbitreports.org. Photographs and locations are strongly encouraged.



Specific Information:
- Adults are 15 – 17 inches in length.
- Brown and gray coat that does not change color with seasons.
- Black spot between the eyes is sometimes visible.
- Often mistaken for Eastern Cottontails.
- Found in shrublands and young-growth or early-successional forests.
- Mating begins in March, with nests present throughout the summer.
- Young are weaned around 28 days and continue growing throughout their first winter.
- Do not hibernate and use habitat all year.





This species is protected under RSA 212-A and Fis 1000. Thank you for reporting any observations.

PLEASE DO NOT DISTURB OR HANDLE WILDLIFE

Northern Black Racer

(New Hampshire state-threatened species)

NHFG Wildlife Biologist Contacts:
Melissa Winters 603-479-1129 and Brendan Clifford 603-944-0885

- **Emerge from hibernacula in April, Basking April - August**
- **Hatchlings emerge August - September, Return to hibernacula mid-September - mid-October**
- **Found in a variety of habitats but prefer early successional and sandy (sand pit) sites.**





- Solid black with a white thrat and chin
- Slender with glossy scales, 3-6 ft. long
- Hatchlings are very small and patterned





Northern black racers are protected by state laws. It is illegal to capture, harass or harm these species, including their nests. Handle ONLY if necessary to move out of harms way. Move to the nearest location in the direction they were moving and contact NHFG. Do not disturb nests. Fis 1401.03 (a) No person shall take or possess a black racer (Coluber constrictor)...or any egg or part thereof.

Report sightings in accordance with NHFG permit conditions. Contact NHFG Wildlife Biologist Melissa Winters 603-479-1129 (cell) and Brendan Clifford 603-944-0885 (group text preferred) if a turtle is observed nesting or a nest site is suspected within the project area. Please report promptly, noting specific location, project site and date – Photographs strongly encouraged to be included with report.

NEW HAMPSHIRE
STATE THREATENED

SPOTTED TURTLE

Report Sightings: Contact Wildlife Biologist Josh Megyesy at (603) 271 – 1125 or the Wildlife Division at (603) 271 – 2461. Observation reports can be sent to RAARP@wildlife.nh.gov. Photographs and exact locations are strongly encouraged.



Specific Information:
- Adults are 3 – 5 inches long
- Shell is black or brown, fairly flat, and with yellow spots.
- Uses variety of wetlands and moves extensively over land.
- Turtles are frequently concealed by leaves and undergrowth and may not be easily visible.
- Turtles are most active from April 15 – October 15.
- During nesting season (May 15 – July 15) turtles are attracted to disturbed ground.





This species is protected under RSA 212-A and Fis 1000. Thank you for reporting any observations.

PLEASE DO NOT DISTURB OR HANDLE WILDLIFE

STATE OF NEW HAMPSHIRE
JASON HILL
No. 15391
LICENSED
PROFESSIONAL ENGINEER

TAX MAP 28 LOTS 9, 10, &10-4

DETAILS SHEET

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT
2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10
CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4
BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT
BENTON FAMILY REALTY, LLC
NDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

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DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

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FILE	DR	CK	CADFILE		
17562.06	JSH	RED		17562-06 COVER-DETAILS	C-21

LANDSCAPE NOTES

(SEE DETAILS FOR ADDITIONAL NOTES)

SITE AND SOIL PREPARATION

1. WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OR LEDGE, NOTIFY LANDSCAPE ARCHITECT/ENGINEER BEFORE PLANTING.
2. ALL DISTURBED AREAS & PLANTING AREAS, INCLUDING AREAS TO BE SODDED, SHALL RECEIVE THE FOLLOWING SOIL PREPARATION PRIOR TO PLANTING: A MINIMUM OF 6 INCHES OF LIGHTLY COMPACTED TOPSOIL SHALL BE INSTALLED OVER THE SUBSOIL IF TOPSOIL HAS BEEN REMOVED OR IS NOT PRESENT.
3. LOAM SHALL CONSIST OF LOOSE FRIABLE TOPSOIL WITH NO ADMIXTURE OF REFUSE OR MATERIAL TOXIC TO PLANT GROWTH. LOAM SHALL BE FREE FROM STONES, LUMPS, STUMPS, OR SIMILAR OBJECTS LARGER THAN TWO INCHES (2") IN GREATEST DIAMETER, SUBSOIL, ROOTS, AND WEEDS. THE MINIMUM AND MAXIMUM PH VALUE SHALL BE FROM 5.5 TO 7.0. LOAM SHALL CONTAIN A MINIMUM OF TWO PERCENT (2%) AND A MAXIMUM OF FIVE PERCENT (5%) ORGANIC MATTER AS DETERMINED BY LOSS BY IGNITION. SOIL TEXTURE SHALL BE SANDY CLAY LOAM OR SANDY LOAM WITH CLAY CONTENT BETWEEN 15 AND 25%, AND A COMBINED CLAY/SILT CONTENT OF NO MORE THAN 55%. NOT MORE THAN SIXTY-FIVE PERCENT (65%) SHALL PASS A NO. 200 SIEVE AS DETERMINED BY THE WASH TEST IN ACCORDANCE WITH ASTM D1140. IN NO INSTANCE SHALL MORE THAN 20% OF THAT MATERIAL PASSING THE #4 SIEVE CONSIST OF CLAY SIZE PARTICLES.
4. NATURAL TOPSOIL NOT CONFORMING TO THE PARAGRAPH ABOVE OR CONTAINING EXCESSIVE AMOUNTS OF CLAY OR SAND SHALL BE TREATED BY THE CONTRACTOR TO MEET THOSE REQUIREMENTS.
5. SUBMIT TEST RESULTS OBTAINED FROM SOURCE TO ENGINEER/LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL, PRIOR TO SPREADING OPERATIONS.
6. APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT TO USE THE TOPSOIL WILL DEPEND UPON THE RESULTS OF THE SOIL TESTS.
7. THE BURDEN OF PROOF OF SOIL AMENDMENT INSTALLATION RESTS WITH THE CONTRACTOR. SOIL TESTS MAY BE REQUIRED AT THE CONTRACTOR'S EXPENSE IN ORDER TO CONFIRM AMENDMENT INSTALLATION.

SEEDING

1. ROUGH GRADING SHALL BE COMPLETED PRIOR TO THE START OF PLANTING IN ANY GIVEN AREA OF THE PROJECT SITE.
2. SEEDING SHALL BE DONE BETWEEN APRIL 1 TO JUNE 15 OR AUGUST 15 TO OCTOBER 15, EXCEPT FOR RESEEDING OF BARE SPOTS AND MAINTENANCE. ALL DISTURBED AREAS NOT COVERED BY BUILDINGS, PAVING OR AREAS THAT HAVE NOT BEEN OTHERWISE DEVELOPED SHALL BE SEEDED OR SODDED. SLOPES GREATER THAN 3:1 SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET. AFTER OCTOBER 15 DISTURBED SOILS SHALL BE PROTECTED IN ACCORDANCE WITH THE WINTER CONSTRUCTION NOTES.

ACCEPTABLE SEED MIXES ARE AS FOLLOWS:

PARK SEED MIX (NHDOT TYPE 15) MIN. 120 LBS/ACRE:

33% CREEPING RED FESCUE	(MIN. 40 LBS/ACRE)
42% PERENNIAL RYEGRASS	(MIN. 50 LBS/ACRE)
21% KENTUCKY BLUEGRASS	(MIN. 25 LBS/ACRE)
4% REDTOP	(MIN. 5 LBS/ACRE)

TEMPORARY LAWN MIX: (MIN. 47 LBS/ACRE)
100% ANNUAL RYE

SLOPE SEED (WF) (NHDOT TYPE 45) MIX 3:1 OR GREATER SLOPES (MIN. 95 LBS/ACRE):

38% CREEPING RED FESCUE	(MIN. 35 LBS/ACRE)
32% PERENNIAL RYEGRASS	(MIN. 30 LBS/ACRE)
5% REDTOP	(MIN. 5 LBS/ACRE)
5% ALSIKE CLOVER	(MIN. 5 LBS/ACRE)
5% BIRDSFOOT TREFOIL	(MIN. 5 LBS/ACRE)
3% LANCE-LEAF COREOPSIS	(MIN. 4 LBS/ACRE)
3% OXEYE DAISY	(MIN. 3 LBS/ACRE)
3% BLACKEYED SUSAN	(MIN. 4 LBS/ACRE)
3% WILD LUPINE	(MIN. 4 LBS/ACRE)

SLOPE SEED (NHDOT TYPE 44) MIX 3:1 OR GREATER SLOPES (MIN. 80 LBS/ACRE):

44% CREEPING RED FESCUE	(MIN. 35 LBS/ACRE)
38% PERENNIAL RYEGRASS	(MIN. 30 LBS/ACRE)
6% REDTOP	(MIN. 5 LBS/ACRE)
6% ALSIKE CLOVER	(MIN. 5 LBS/ACRE)
6% BIRDSFOOT TREFOIL	(MIN. 5 LBS/ACRE)

PLANTING

1. EXCAVATE PITS, PLANTERS, BEDS AND TRENCHES WITH VERTICAL SIDES AND WITH BOTTOM OF EXCAVATION SLIGHTLY RAISED AT CENTER TO PROVIDE PROPER DRAINAGE. LOOSEN HARD SUBSOIL IN BOTTOM OF EXCAVATION.
2. ANY LEDGE OR RUBBLE MATERIAL SHALL BE FRACTURED TO A DEPTH OF 3 FEET AND EXCAVATED TO A DEPTH OF 30 INCHES FOR TREE POCKETS AND 18 INCHES FOR SHRUB BEDS. THIS PROCEDURE SHALL BE HANDLED BY THE SITE CONTRACTOR. SITE TOPSOIL SHALL BE DEPOSITED IN ALL EXCAVATED POCKETS.
3. DISPOSE OF SUBSOIL REMOVED FROM PLANTING EXCAVATIONS. DO NOT MIX WITH PLANTING SOIL OR USE AS BACKFILL.
4. FILL EXCAVATIONS FOR TREES AND SHRUBS WITH WATER AND ALLOW TO PERCOLATE OUT BEFORE PLANTING.
5. DISH TOP OF BACKFILL TO ALLOW FOR MULCH – PLANT SAUCERS SHALL BE AS SHOWN ON DETAIL SHEETS; 6' DIAMETER FOR ALL DECIDUOUS TREES, AND FOR EVERGREEN TREES A RADIUS 2' BEYOND THE OUTER MOST BRANCHES.
6. MULCH TREES, SHRUBS, PLANTERS AND BEDS. PROVIDE NOT LESS THAN 3" THICKNESS OF BARK MULCH, 3/8"-2" OF WIDTH, AND WORK INTO TOP OF BACKFILL. FINISH LEVEL WITH ADJACENT FINISH GRADES AS DIRECTED IN THE FIELD.
7. TREEGATOR WATERING SYSTEM OR APPROVED EQUAL SHALL BE INSTALLED FOR ALL DECIDUOUS TREES AT TIME OF PLANTING AND REMOVED BEFORE FROST. WATERING RATE TO BE APPLIED PER MANUFACTURER'S SPECIFICATIONS.
8. ALL PLANT MATERIALS SHALL HAVE DEAD OR DAMAGED BRANCHES REMOVED AT TIME OF PLANTING. ALL TAGS AND RIBBONS SHALL BE REMOVED AT THIS TIME.
9. THE CONTRACTOR SHALL REQUEST A FINAL OBSERVATION BY THE OWNER'S REPRESENTATIVE UPON COMPLETION OF INSTALLATION.

LANDSCAPE MAINTENANCE

LAWN

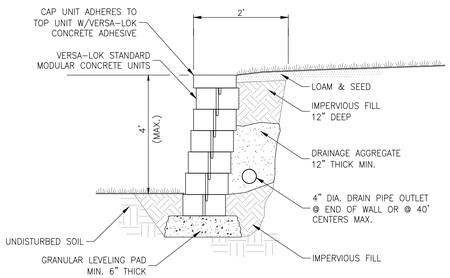
1. BEGIN MAINTENANCE IMMEDIATELY AFTER EACH AREA IS PLANTED AND CONTINUE UNTIL ACCEPTABLE LAWN IS ESTABLISHED, BUT NOT LESS THAN THE FOLLOWING PERIODS:
   A. SEEDED LAWNS: 60 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
      1. WHEN FULL MAINTENANCE PERIOD HAS NOT ELAPSED BEFORE END OF PLANTING SEASON, OR IF LAWN IS NOT FULLY ESTABLISHED, CONTINUE MAINTENANCE DURING NEXT PLANTING SEASON.
   B. SODDED LAWNS: 30 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
   C. PLUGGED LAWNS: 30 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
   D. SPRIGGED LAWNS: 30 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
2. MAINTAIN AND ESTABLISH LAWN BY WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, REPLANTING, AND OTHER OPERATIONS. ROLL, REGRADE, AND REPLANT BARE OR ERODED AREAS AND REMULCH TO PRODUCE A UNIFORMLY SMOOTH LAWN.
   A. IN AREAS WHERE MULCH HAS BEEN DISTURBED BY WIND OR MAINTENANCE OPERATIONS, ADD NEW MULCH. ANCHOR AS REQUIRED TO PREVENT DISPLACEMENT.
3. WATERING: PROVIDE AND MAINTAIN TEMPORARY PIPING, HOSES, AND LAWN-WATERING EQUIPMENT TO CONVEY WATER FROM SOURCES AND KEEP LAWN UNIFORMLY MOIST TO A DEPTH OF FOUR INCHES (100 mm).
   A. SCHEDULE WATERING TO PREVENT WILTING, PUDDLING, EROSION, AND DISPLACEMENT OF SEED OR MULCH. LAY OUT TEMPORARY WATERING SYSTEM TO AVOID WALKING OVER MUDDY OR NEWLY PLANTED AREAS.
   B. WATER LAWN AT A MINIMUM RATE OF ONE INCH (25 mm) PER WEEK.
4. MOW LAWN AS SOON AS TOP GROWTH IS TALL ENOUGH TO CUT. REPEAT MOWING TO MAINTAIN SPECIFIC HEIGHT WITHOUT CUTTING MORE THAN 40 PERCENT OF GRASS HEIGHT. REMOVE NO MORE THAN 40 PERCENT OF GRASS-LEAF GROWTH IN INITAL OR SUBSEQUENT MOWINGS. DO NOT DELAY MOWING UNTIL GRASS BLADES BEND OVER AND BECOME MATTED. DO NOT MOW WHEN GRASS IS WET. SCHEDULE INITIAL AND SUBSEQUENT MOWINGS TO MAINTAIN THE FOLLOWING GRASS HEIGHT.
5. LAWN POSTFERTILIZATION: APPLY FERTILIZER AFTER INITIAL MOWING AND WHEN GRASS IS DRY.
   A. USE FERTILIZER THAT WILL PROVIDE ACTUAL NITROGEN OF AT LEAST 1 lb/1,000 SF (0.45 kg/92.9 SM) TO LAWN AREA.

MEADOW

1. BEGIN MAINTENANCE IMMEDIATELY AFTER EACH AREA IS PLANTED AND CONTINUE UNTIL ACCEPTABLE MEADOW IS ESTABLISHED, BUT FOR NOT LESS THAN 40 DAYS FROM DATE OF SUBSTANTIAL COMPLETION.
2. MAINTAIN AND ESTABLISH MEADOW BY WATERING, WEEDING, MOWING, TRIMMING, REPLANTING, AND OTHER OPERATIONS. ROLL, REGRADE, AND REPLANT BARE OR ERODED AREAS AND REMULCH.
3. WATERING: PROVIDE AND MAINTAIN TEMPORARY PIPING, HOSES, AND LAWN-WATERING EQUIPMENT TO CONVEY WATER FROM SOURCES AND KEEP MEADOW UNIFORMLY MOIST.
   A. SCHEDULE WATERING TO PREVENT WILTING, PUDDLING, EROSION, AND DISPLACEMENT OF SEED OR MULCH. LAY OUT TEMPORARY WATERING SYSTEM TO AVOID WALKING OVER MUDDY OR NEWLY PLANTED AREAS.
   B. WATER LAWN AT A MINIMUM RATE OF 1/2 INCH (13 mm) PER WEEK FOR 4 WEEKS.

TREES AND SHRUBS:

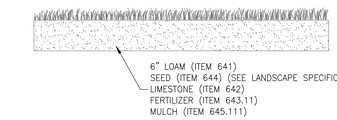
1. PRUNING SHOULD BE STARTED EARLY AND KEPT UP AT REGULAR INTERVALS. TREES SHOULD BE PRUNED AND SHAPED TO AVOID SPLITTING LATER IN LIFE. BROKEN TOPS AND BRANCHES SHOULD BE REMOVED AS SOON AS POSSIBLE AFTER INJURY. BROKEN, WEAK OR DISEASED BRANCHES SHOULD BE REMOVED FIRST, DEAD BRANCHES SECOND AND HEALTHY BRANCHES LAST.
2. TREES AND SHRUBS SHOULD BE PROTECTED AGAINST DAMAGE INCURRED WITH LAWN MOWERS AND GARDEN EQUIPMENT. KEEPING GRASS AWAY FROM TREE TRUNKS WITH THE USE OF MULCH IS RECOMMENDED.
3. THE USE OF ROAD SALT AROUND TREES AND SHRUBS SHOULD BE AVOIDED OR MINIMIZED.
4. LANDSCAPED AREAS SHALL BE ROUTINELY MAINTAINED FREE OF DEBRIS AND LITTER. SPRAY AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE. MAINTAINENCE SHALL INCLUDE THE REPLACEMENT OF ALL DEAD PLANT MATERIAL WITHIN THE GUARANTEED CONTRACT PERIOD.



RETAINING WALLS HIGHER THAN 3 FT ARE CONSIDERED STRUCTURES AND REQUIRES A BUILDING PERMIT. OWNER SHALL SUBMIT DESIGN PLANS STAMPED BY A NH LICENSED PROFESSIONAL ENGINEER TO LONDONDERRY BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.

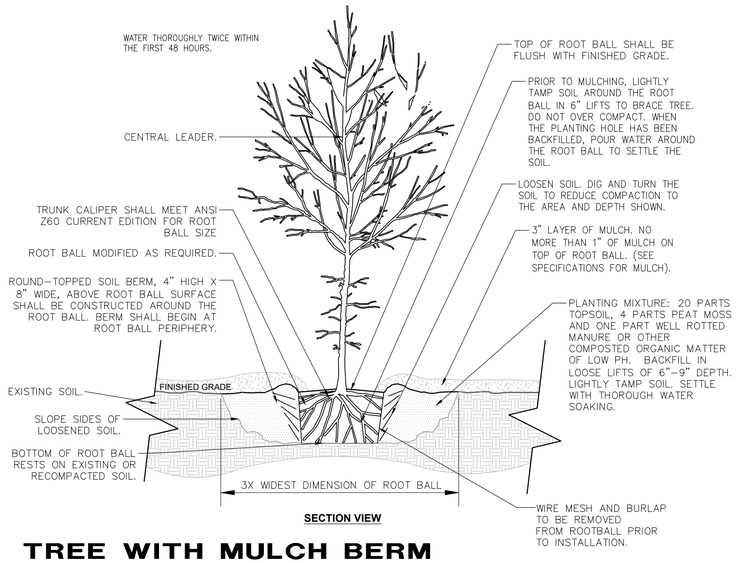
UNREINFORCED RETAINING WALL

VERSA-LOK (OR EQUAL) NOT TO SCALE



LOAM & SEED

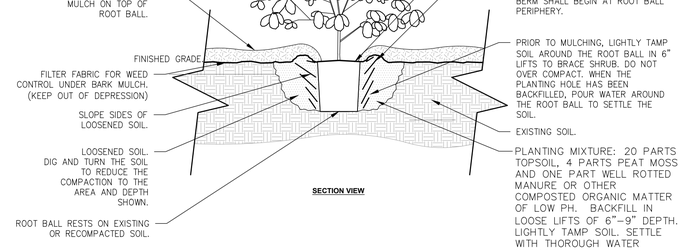
NOT TO SCALE



SECTION VIEW

TREE WITH MULCH BERM

NOT TO SCALE



SECTION VIEW

SHRUB PLANTING

NOT TO SCALE

TAX MAP 28 LOTS 9, 10, &10-4

DETAILS SHEET

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)
1 AIRPORT RD, SUITE 300, MANCHESTER, NH 03103

OWNER: MAP 28 LOT 10-4

BENTON FAMILY REALTY, LLC
1 HIGHLANDER WAY, MANCHESTER, NH 03103

APPLICANT

BENTON FAMILY REALTY, LLC
NDER WAY, MANCHESTER, NH 03103

NOVEMBER 18, 2025

STATE OF NEW HAMPSHIRE - JASON HILL No. 15391 LICENSED PROFESSIONAL ENGINEER

REV	DATE	DESCRIPTION	DR	CK
1	2/17/2026	DESIGN REVIEW 01	JH	RED

TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
48 Constitution Drive
Bedford, NH 03110
Phone (603) 472-4488
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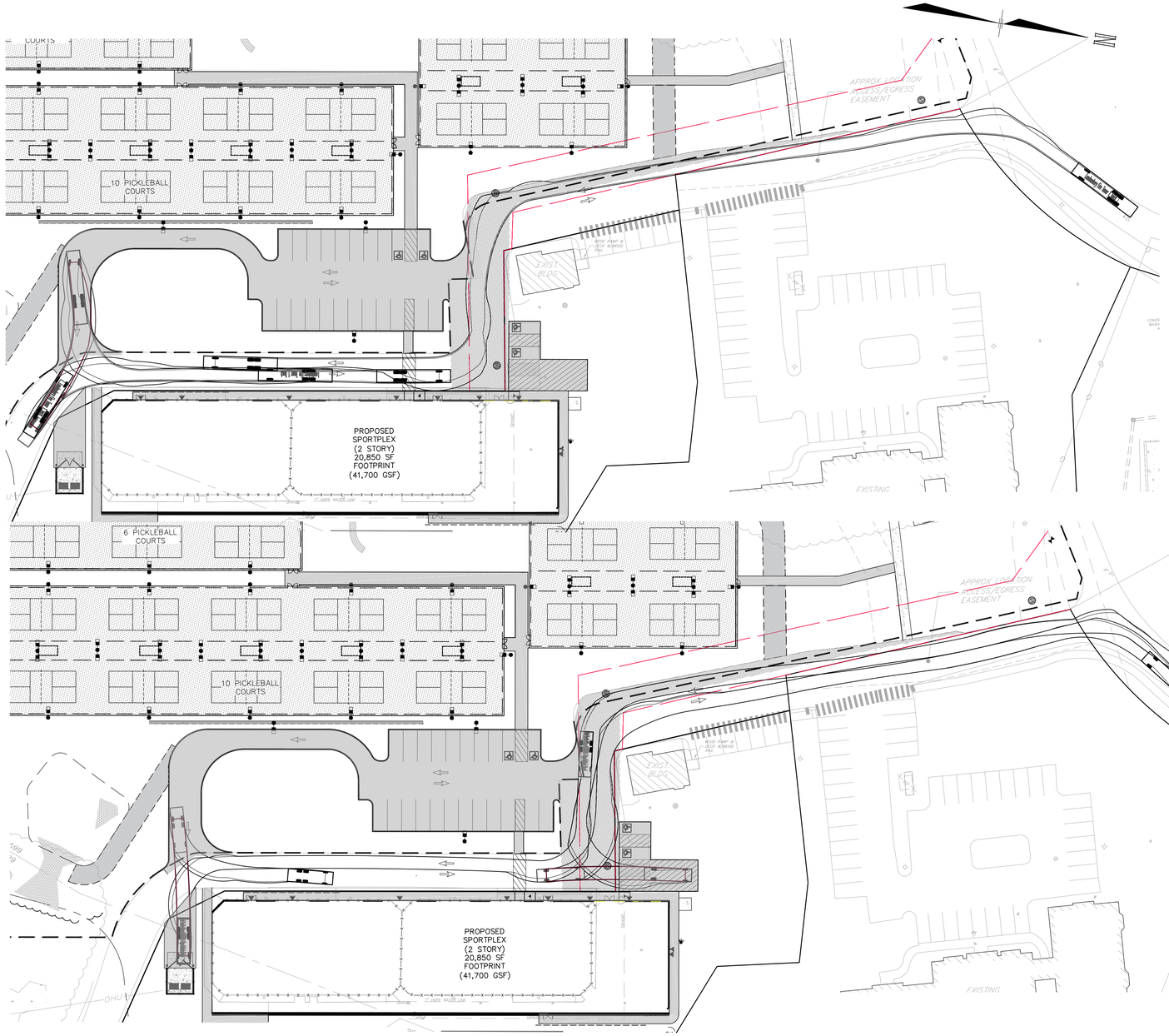
FILE	DR	CK	CADFILE		
17562.06	JSH	RED		17562-06 COVER-DETAILS	C-22

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DIG SAFE STOP. THINK. CALL. CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION



HORIZONTAL SCALE 1"=40'

40 20 0 40

JASON HILL No. 15391 LICENSED PROFESSIONAL ENGINEER - STATE OF NEW HAMPSHIRE -

TAX MAP 28 LOTS 9, 10, &10-4

TURNING MOVEMENTS

EXECUTIVE COUNTRY CLUB- RACQUET SPORTS DEVELOPMENT

2 & 5 HIGHLANDER WAY, LONDONDERRY, NH

OWNER: MAP 28 LOTS 9, 10

CITY OF MANCHESTER (C/O MANCHESTER AIRPORT AUTHORITY)

1 AIRPORT RD, SUITE 200, MANCHESTER, NH 03103

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FILE	DR	CK	
17562.06	JSH	RED	CADFILE

17562-06 SITE

C-T1

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DIG SAFE DIG SAFE NH811.com CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

Town of Londonderry Regulatory Audit:

Local Zoning, Sub-division, and Site Plan Regulation Alignment with 2025 changes to NH RSA 674: Local Land Use Planning and Regulatory Powers.

Planning, Zoning, and Land Use Alignment Review

This document presents a consolidated review of the Town of Londonderry's Zoning Ordinance, Subdivision Regulations, and Site Plan Regulations in light of planning-, zoning-, and housing-related laws enacted by the State of New Hampshire in 2025. This audit evaluates alignment of local regulations with 13 state laws enacted in 2025:

- HB 2
- HB 168
- HB 296
- HB 413
- HB 457
- HB 577
- HB 631
- SB 281
- SB 283
- SB 284

The review is framed to support the Planning Board's work by identifying opportunities to improve clarity, predictability, and consistency while reducing unintended barriers to housing. The intent of this review is to identify alignment opportunities and practical refinements. It is not intended as a critique of policy choice, but as a resource for assisting the town in implementing new state laws and supporting a diversified housing strategy.

The analysis places an emphasize on:

- Mandatory compliance with new RSA provisions
- Housing-enabling impacts (missing middle, multifamily, and procedural barriers)
- Risk exposure for appeals under RSA 677
- Clear, implementable fixes suitable for Planning Board action

The following regulatory documents (as amended) were reviewed as part of the audit:

- Zoning Ordinance (August 18, 2025)
- Subdivision Regulations (June 11, 2025)
- Site Plan Regulations (June 11, 2025)

Master Table of Legislative Bills Signed Into Law in 2025

A. Administrative / Planning Authority

(governance or planning-board functions; no zoning-text amendments required)

RSA SECTION	BILL	TYPE OF CHANGE	SUBJECT
RSA 674:1, VII	HB 2	Added	Planning Board designation of municipally/county-owned land for residential use
RSA 674:43, VI–VIII	HB 2	Amended	Expedited review & pattern zoning authority
RSA 674:21, V	HB 168	Amended	Impact fees expanded to include public works facilities

B. Substantive Zoning Controls — High Priority

(Direct constraints on zoning ordinance content)

RSA SECTION	BILL	TYPE OF CHANGE	SUBJECT
RSA 674:16, VIII	HB 457	Added	Residential occupancy limits (2 persons per bedroom; no relationship limits)
RSA 674:71	HB 577	Amended	ADU-related definitions
RSA 674:72	HB 577	Reenacted	Core ADU requirements
RSA 674:73	HB 577	Amended	Detached ADUs required to be permitted

C. Use Permissions & Development Rights

(Changes to what must be allowed by zoning)

RSA SECTION	BILL	TYPE OF CHANGE	SUBJECT
RSA 674:79	HB 631	Added	Definitions for multi-family residential development on commercially zoned land
RSA 674:80	HB 631	Added	Requirement to permit multi-family or mixed-use residential development on commercially zoned land

D. Development on Streets (Land Use Authority)

(Limits on denial of building permits)

RSA SECTION	BILL	TYPE OF CHANGE	SUBJECT
RSA 674:41, I(C)	SB 281	Repealed & reenacted	Building permits on Class VI roads
RSA 674:41, I(D)(1)	HB 296	Amended	Building permits on private roads and Class VI roads

E. Dimensional & Intensity Controls

(Bulk, scale, and parking standards)

RSA SECTION	BILL	TYPE OF CHANGE	SUBJECT
RSA 674:16, VII	SB 284	Amended	Residential parking requirements capped at 1 space per dwelling unit
RSA 674:77	SB 283	Added	Definitions — floor area ratio, below-grade area, new construction
RSA 674:78	SB 283	Added	Amendment to zoning regulations — exclusion of below-grade area from FAR

F. Vesting, Appeals, and Procedural Safeguards

(Applies to approvals, appeals, and regulatory stability)

RSA SECTION	BILL	TYPE OF CHANGE	SUBJECT
RSA 674:39	HB 413	Amended	Extended vesting/exemption periods

Topic Area A: Zoning Ordinance Audit of Planning & Zoning Authority

RSA 674:1, VII (As amended by HB 2):

Adds a **new, specific planning board responsibility**. In summary, it authorizes the **planning board** to identify municipally or county-owned land and determine whether such land is **appropriate for residential development.** The law requires the planning board to transmit such determination to the governing body, and the Office of Planning and Development (OPD). This law is explicitly **Advisory and administrative** and focused on **inventory and identification**, not regulation. The law does **not** require zoning changes, override existing zoning districts, or mandate residential development. The statute operates **outside the zoning power** and within the **planning board's advisory and planning role**.

Finding Summary:

RSA 674:1, VII establishes an advisory role for planning boards to identify municipally or county-owned land that may be suitable for residential development. The statute does not require zoning ordinance amendments. The Londonderry Zoning Ordinance appropriately regulates land use by district and does not conflict with the planning board's advisory responsibilities under state law.

RSA 674:43, VI-VIII (As amended by HB 2):

Adds three related but distinct planning authorities:

VI. Expedited Review – Which allows municipalities to adopt procedures for **expedited review** of qualifying residential development. This rule applies primarily to **planning board review of site plans and subdivisions** and is **permissive, not mandatory**.

VII. Pattern Zoning - Authorizes municipalities to adopt **pattern zoning** standards to facilitate residential development consistent with existing neighborhood patterns. This is intended as an **optional zoning tool**.

VIII. Scope - Clarifies that use of these tools is a **local option** and subject to adopted local standards. Critically, the statute does **not require** municipalities to adopt expedited review or pattern zoning, does **not invalidate** existing zoning approaches and does **not impose minimum standards** that must appear in a zoning ordinance.

Finding Summary:

RSA 674:43, VI–VIII authorizes, but does not require, municipalities to adopt expedited review procedures and pattern zoning standards for residential development. The Londonderry Zoning Ordinance does not currently implement these optional tools and does not conflict with the statute. No zoning amendments are required for compliance.

RSA 674:21 V (As amended by HB 168):

Governs **municipal impact fee authority**. As amended by **HB 168**, the statute expands the list of eligible capital facilities for which impact fees may be assessed to include **Public works facilities** (in addition to roads, schools, water, sewer, etc.). The law retains all existing statutory limitations; impact fees must be based on **capital improvement programs** and fees must be **proportional** and used for **growth-related impacts only.**

The statute affects **how fees may be imposed**, not zoning or land-use standards.

Finding Summary:

RSA 674:21, V expands municipal authority to assess impact fees for public works facilities. The statute does not require zoning ordinance amendments. The Londonderry Zoning Ordinance does not regulate impact fees and does not conflict with the expanded statutory authority.

Topic Area B: Substantive Zoning Controls of High Priority

RSA 674:16, VIII (As amended by HB 457):

Places **substantive limits on municipal zoning authority** regarding residential occupancy. As enacted by **HB 457**, the statute provides that a zoning ordinance **shall not** limit occupancy of a dwelling unit to **fewer than 2 persons per bedroom**, nor restrict occupancy based on familial relationship, marital status, or other relationship-based classifications. The statute applies to all dwelling units in all zoning districts. The statute is **self-executing** and **preemptive**, meaning conflicting local provisions are unenforceable as of the effective date. This statute directly **constrains zoning content.**

Where This Must Be Reflected Locally:

If a zoning ordinance includes any of the following, it must be reviewed for consistency:

- Definitions of "family" tied to relationship status.
- Maximum occupancy standards
- Per-unit or per-bedroom occupancy caps
- Conditional use criteria referencing "family" composition.

Any standard that results in **fewer than 2 occupants per bedroom** or uses **relationship-based criteria** is inconsistent with RSA 674:16, VIII.

Review of the Londonderry Zoning Ordinance

The Londonderry Zoning Ordinance includes traditional dwelling definitions (single-family, two-family, multi-family) and use-based regulation rather than explicit occupancy counts.

As such, the ordinance **does not include an explicit per-bedroom occupancy cap, nor does it include a "family" definition that limits unrelated occupants.**

Residential use regulations are based on unit count, building type and lot / dimensional standards. No sections were identified that cap occupancy below 2 persons per bedroom, or restrict occupancy based on relationship status.

Housing-Oriented Observations (Non-Directive)

From a housing perspective, the absence of occupancy restrictions supports flexibility in housing use and aligns with fair housing principles. Continued compliance depends on avoiding future adoption of relationship-based occupancy language and ensuring conditional use criteria do not indirectly impose such limits.

Finding Summary:

RSA 674:16, VIII prohibits zoning ordinances from limiting residential occupancy to fewer than two persons per bedroom or from imposing relationship-based occupancy restrictions. The Londonderry Zoning Ordinance does not contain such provisions and is consistent with the statute.

RSA 674:71 (As Amended by HB 577):

Defines an Accessory Dwelling Units, including definitions for attached and detached. The definition for an ADU also includes language that coincides with building code definitions for a "dwelling unit".

Where is shows up in a zoning ordinance:

For RSA 674:71 specifically, the compliance question is focused on ADU definition. Does the zoning ordinance ADU concept match the state's **baseline definition** (independent living facilities on the same amount as a single-family dwelling)? Does the ordinance language avoid inadvertently defining ADUs **more narrowly than the statute's definition** (e.g., "within or attached only")?

What Londonderry's zoning ordinance currently does:

Section 5.18 and states the purpose is to "increase housing alternatives." 5.18, (D) Requires the accessory dwelling to have **self-sufficient living quarters** including sleeping, bathing, and eating accommodations. 5,18, (H) Requires ADUs to be within or added to the principal structure, attached to an accessory structure (e.g., garage), **or** a free-standing accessory structure.

Narrower framing than the RSA definition:

The zoning ordinance does not have an explicit definition for an Accessory Dwelling Unit. Conditions of permitting an ADU found in Section 5,18 are not fully aligned with the state definition of an ADU.

Compliance Determination:

Zoning language is mostly aligned but key language revisions are needed to be in full alignment with the state-law and to reduce confusion on what constitutes an ADU.

Recommended adjustment to zoning regulations:

Add a definition for Accessory Dwelling Unit (ADU) to the zoning ordinance which is matched to the state-law terminology of RSA 674:71 (e.g., define Accessory Dwelling Unit, Attached unit, Detached unit).

Findings Summary:

RSA 674:71 updates the definition of accessory dwelling units to include units located on a lot with a single-family dwelling, including attached and detached forms. Londonderry's Accessory Dwelling standards describe a self-sufficient living unit and expressly allow configurations within, attached to, or detached from the principal dwelling, which is mostly aligned with the state definition. For clarity and ease of administration, the ordinance should be amended to match the state-law definition of an ADU, including the state-law terms for an "attached unit" and a "detached unit."

RSA 674:72 (As Repealed and Replaced by HB 577):

This is the **core ADU statute** and is one of the most consequential changes for local zoning ordinances. As reenacted by **HB 577**, this RSA requires municipalities to **allow** at least one accessory dwelling unit **by right** in all zoning districts that permit single-family dwellings. Key statutory limits on local regulation include **permitting ADUs without conditional use approval, special exception, or variance.** The state's ADU law says municipalities **must allow ADUs to be attached or detached** at the owners discretion. Further, municipalities **may not** require additional lot area beyond what is required for a single-family dwelling, require owner-occupancy, or impose excessive dimensional, design, or location standards that would effectively preclude ADUs. ADUs must be reviewed administratively (e.g., building permit / site plan if applicable). This statute is **mandatory and preemptive**.

Where this must be reflected locally:

A zoning ordinance must ensure that ADUs are **Permitted uses** (not conditional uses) and allowed in **every district that allows single-family dwellings.** The ordinance **cannot impose prohibited conditions**, such as lot size increases, or discretionary approvals.

Any conflicting local provision is **unenforceable** as of the statute's effective date.

Review of Section 5.18 Conditions for Alignment with State Law:

A. By-Right Permitting

States ADUs are permitted. Note, ADUs are not listed in Table 4-1, which makes it unclear if they are permitted **by-right, by special exception, or by conditional use** (planning board approval). For the general public, it may be difficult to determine that ADU's are **allowed by-right**, consistent with the intent of RSA 674:72.

B. Number of ADUs Allowed

Allows one ADU per lot, this language is consistent with state ADU law.

C. Lot size and dimensional standards

The condition language exempts ADUs from the calculation of minimum lot size. This is consistent with RSA 674:72 language prohibiting requiring **additional lot area beyond what is required for a single-family dwelling**. Clarity can be offered here by stating:

> *"ADU's, regardless of the number of bedrooms, do not count towards minimum lot size requirements of Table 4-3."*

D. Owner Occupancy

Requires that either the principal dwelling or the accessory dwelling be **owner-occupied**. RSA 674:72 **allows such owner-occupancy requirements**. This condition language is consistent with state ADU law.

E. Living Quarters

Requires adequate sleeping, bathing, and eating accommodations. The state ADU law has a variation on this language which aligns with the definition of a dwelling unit in the state building code. It is recommended to use the state language for consistency across zoning and building code. This would limit the need for interpretation of the intent of zoning language when the state-law take precedence anyway.

F. Unit Size

The condition requires ADUs not exceed 40% of the living area of the principal dwelling and have no more than 2 bedrooms. The state's language puts a maximum size of between 750 - 950sf on ADU's unless the town allows them to be larger. As the town's language is written, it does not acknowledge the State's floor of 750sf as a restriction on maximum floor area. I recommend changing the language as follows:

> *"F. The maximum size for an Accessory Dwelling shall not exceed **750sf or** 40% of the living area for principal dwellings **greater than 1,875sf, which ever is greater. ADUs** ~~and~~ shall include no more than 2 bedrooms."*

G. Aesthetic Standards

Requires the ADU to be consistent with the appearance, design, colors, and materials of the principal home. RSA 674:72, VII limits the ability of a municipality to apply aesthetic standards. Aesthetic standards can only be applied to ADUs if they are also applied to the principal dwelling unit. The typical scenario for this would be the architectural standards of a historic district. The AR-1 District appears to have no aesthetic standards.

H. Attached and Detached ADU terms

Describes conditions for an ADU as part of the principal structure and as a free standing structure. These conditions are not aligned with the state's definition for ADUs found in RSA 674:71. As long as the ADU meets dimensional standards for the principal dwelling as defined in the zoning, then the town would not be able to further restrict the construction of the ADU on the grounds of location on the property (i.e., requiring detached ADUs to be in the rear of the lot).

I. ADU Location (Setbacks)

The condition requires compliance with all setbacks. RSA 674:72, I states that ADUs can only be subject to the requirements that would be applied to the single-family dwelling without an ADU, meaning the setback requirement applied to the ADU are the same as those applied to the principle dwelling. AR-1 has no design related regulations for the location of a primary home, other than setbacks. In addition, RSA 674:72, XI carves out an exemption for the conversion of existing structures into an ADU regardless of that structure's conformity to dimensional standards. The zoning ordinance should include language making this clear to homeowners.

J. Water and Waste Provisions

Requires provisions comply with NH DES regulations. This condition language is consistent with the state ADU law, although it can be clarified by matching state language as follows:

> *"The applicant for a permit to construct an accessory dwelling unit shall make adequate provisions for water supply and sewage disposal for the accessory dwelling unit in* ***accordance with RSA 485-A:38, separate systems are not required for the principal and accessory dwelling units.****"*

K. Parking

Requires one parking space per ADU and limits the location and access to ADU parking. This condition language is not fully aligned with the state ADU law. The state law says:

> *"If a municipality has established regulations requiring parking for the principal dwelling unit, it may require up to one additional parking space for each accessory dwelling unit. Required parking spaces may be provided either on-site or at a legally dedicated off-site location, at the property owner's discretion."*

To align this condition, the language should explicitly allow off-site parking and not restrict parking beyond the requirements for the single-family home. The most consistent way to do this would be a reference to parking requirements of the underlying zoning. For instance, AR-I Parking Requirements (Section 4.2.1.5) states:

> "*A minimum of two parking spaces per dwelling unit shall be provided…."*

Aside from the required number of parking spaces (which is not aligned with RSA 674:16, VII) there are no other zoning requirements dictating the location and access to parking. As such, ADU parking location and access cannot be held to a narrower standard.

L. Ownership Conversion

Condition restricts the conversion of an ADU into any form of separate ownership. Condition language is consistent with the state ADU law.

M. Workforce Housing

States all ADUs will be counted as workforce housing units to meet the municipal obligations of RSA 674:59. Condition language is consistent with the state ADU law.

Findings Summary:

Section 5:18 would benefit from a comprehensive review which would address multiple inconsistencies with the State's ADU law. From a housing-facilitation perspective RSA 674:72 is intended to normalize ADUs as small-scale housing option, reduce administrative delay, and allow homeowners to respond to changing household needs.

Existing ordinance provisions appear to reflect statutory authority prior to the adoption of HB 577. Updating the ordinance would improve clarity for applicants and staff and align local ADU permitting practices with current state law.

RSA 674:73 (As Amended by HB 577):

This state law requires detached ADUs be allowed by-right in all locations where single-family dwellings are allowed by zoning. Alignment of section 5:18 with RSA 674:72 as recommended in this document would make the section consistent with State's ADU law.

Topic Area C: Use Permissions & Development Rights

RSA 674:79-80 (As Amended by HB 631):

Establishes a **new, mandatory use permission** in municipal zoning. In summary, the statute provides that a zoning ordinance **shall permit multifamily residential development** on land that is zoned primarily for **commercial use.** RSA 674:79 contains definitions for "Commercially zoned land," "Mixed-use," and "Adaptive reuse." RSA 674:80 requires municipalities to **permit residential as a principal use** subject to **objective, site-specific standards.** Municipalities **may regulate** building height, density, dimensional standards, and site design. Municipalities **may not** prohibit residential use on qualifying commercial land, require a zoning amendment or rezoning to allow such use, or require discretionary approval that effectively denies residential use. This statute is **mandatory and preemptive** with respect to use permission.

Where This Must Be Reflected Locally

To comply with RSA 674:80, a zoning ordinance must ensure that commercially zoned districts allow multifamily residential or mixed-use residential as a **permitted principal use** and that residential use is **not limited to accessory status, special exception, conditional use, or overlay districts only**.

Review of Londonderry Zoning Ordinance

Londonderry includes multiple districts that are **commercially oriented** (Commercial I-IV and Mixed Use Commercial). Within these districts, residential uses are generally limited, secondary, or accessory in nature, **or** at mercy of subjective discretionary approval pathways. **Multi-family residential development** is largely not permitted **by-right as a principal use** within commercial districts. The zoning does define Mixed-use Residential as:

> *"a building which contains dwellings located above the ground floor of an institutional, civic, office, commercial, or retail use."*

The ordinance does **not permit Multifamily Residential in a commercial zoning district and only allows Mixed-Use Residential as permitted in the form of affordable housing units in the Mixed Use Commercial and Commercial IV districts** (which only make up 0.03%, or 72 acres of all land in the municipality). This effectively makes development not possible. Additionally, requirements for mixed-use residential units to be affordable housing units further limits permitting. Affordable units without subsidies are largely not feasible in the market. Most scenarios, where affordable housing is developed using typical subsidies, such as Low Income Housing Tax Credits, disqualify costs not associated with the residential units, meaning the retail component on the ground floor is not feasible to build.

Compliance Determination

The Londonderry Zoning Ordinance does not currently align with RSA 674:79–80 because residential use on commercially zoned land is not permitted by right as a principal use in nearly all scenarios and is often constrained to accessory or discretionary approval status. The ordinance does not clearly implement the statute's **mandatory use permission**. As a result, the local ordinance framework reflects **pre-2025 zoning assumptions** that have now been superseded by state law.

Housing Barrier Framing

RSA 674:79–80 reflects a statewide policy decision to encourage housing in commercial corridors and areas with existing infrastructure. The law supports adaptive reuse of underutilized commercial properties and mixed-use redevelopment. The allowance of residential in commercial districts is intended to reduce growth pressure on established residential neighborhoods. Londonderry's current zoning structure appears to emphasize functional separation of uses and a discretionary approach to residential use in commercial areas. Updating the ordinance to reflect RSA 674:80 would improve predictability for applicants and staff, enable reinvestment in commercial areas, and align local regulations with current state law while retaining control over form and impacts.

Summary of Findings

RSA 674:79–80 requires municipalities to permit multi-family or mixed-use residential development as a principal use on commercially zoned land, subject to reasonable, objective standards. The Londonderry Zoning Ordinance currently limits residential use in commercial districts and does not clearly permit such development outside of subjective review. Zoning would benefit from revision to ensure consistency with current state law.

Topic Area D: Development on Streets (Land Use Authority)

RSA 674:41, I(c) (As Repealed and Reenacted by SB 281):

Limits municipal discretion to deny building permits solely because lots front on a Class VI road. Allows denial **only if** the governing body makes specific findings related to emergency vehicle access, public safety, and the adequacy of the road to serve the proposed use. Requires that standards be **objective and articulated**, not ad hoc and decisions be grounded in adopted policy or regulation, not generalized concern. Preserves municipal authority to require improvements or mitigation, protect public safety, and avoid assumption of maintenance responsibility. This statute is **substantive land-use law** and directly constrains zoning and permitting authority.

Where This Must Be Reflected Locally

Compliance with RSA 674:41, I(c) typically appears in zoning ordinance provisions addressing access, street frontage, and buildability of lots. Ordinance language that conditions development on frontage on "approved," "accepted," or "maintained" roads or treats Class VI roads as an automatic bar to development. Any provision that results in **categorical denial** of permits on Class VI roads is inconsistent with the statute.

Review of the Londonderry Zoning Ordinance

The ordinance contains provisions that condition development on frontage on an **approved or accepted street** and treat lack of municipal maintenance as a limiting factor. The ordinance framework does not clearly distinguish between **subdivision approval standards**, and **permit eligibility for existing lots** on Class VI roads. There is **no clear policy-based pathway** in the zoning ordinance allowing administrative approval of building permits on Class VI roads subject to safety findings. As written, the ordinance appears to reflect older **practice**, where frontage on an unaccepted road could function as a de facto prohibition.

Compliance Determination

The statute does **not require** municipalities to approve all development on Class VI roads. However, it **does require** that denial be based on articulated, objective safety findings and not be automatic or categorical. The Londonderry Zoning Ordinance does not clearly incorporate this standard and could be read to allow broader discretion than RSA 674:41, I(c) now permits. This creates **legal ambiguity**, even if the actual practice is more flexible.

Summary of Findings

RSA 674:41, I(c), as amended in 2025, limits the circumstances under which building permits may be denied solely due to frontage on a Class VI road and requires that such decisions be based on articulated public safety findings. The Londonderry Zoning Ordinance contains frontage and access provisions that predate these changes and do not clearly reflect the updated statutory standard. Clarifying this relationship in the ordinance or related policies would improve consistency with state law and provide clearer guidance to applicants and staff.

RSA 674:41, I(d)(1) (As Amended by HB 296):

Addresses municipal authority to issue building permits for lots served by **private roads and Class VI roads**. A municipality **may not deny a building permit solely because a lot is served by a private road or Class VI road.** Denial must be tied to **specific, supportable concerns**, typically related to public safety, emergency access road adequacy for the proposed use. Municipalities retain authority to require waivers or acknowledgements regarding road maintenance, avoid assuming maintenance responsibility, and apply objective safety standards The statute reinforces that decisions must be **fact-based and objective**, not categorical. This provision works in tandem with RSA 674:41, I(c) and continues the legislative trend away from blanket prohibitions.

Where This Must Be Reflected Locally

This statute primarily affects zoning provisions requiring frontage on an "accepted," "approved," or "public" street, buildability standards for lots on private ways and administrative practices in issuing building permits. An ordinance becomes vulnerable if it requires frontage exclusively on accepted public streets for a lot to be buildable or treats private road frontage as an automatic disqualification.

Review of the Londonderry Zoning Ordinance (High-Level)

At a structural level, the Londonderry Zoning Ordinance emphasizes frontage, access, and road standards. It also reflects traditional New Hampshire zoning practice where accepted streets are the norm for new development. The zoning does not clearly articulate a modern statutory standard for private or Class VI roads. Because many ordinances predate the 2025 changes, this is **not unusual**. A zoning ordinance does not need to restate RSA 674:41 verbatim but it **should not contain language that effectively contradicts it**.

Compliance Determination

Clarification Recommended. There is no clear categorical prohibition of development on Class VI roads in the zoning language but there are multiple instances of language requiring frontage on a *"Class V or better road"* which implies a prohibition of development on class VI roads. The main exposure is legal. A modest clarification to the zoning would reduce appeal vulnerability, improve predictability for applicants, and align practices with current law.

Findings Summary

RSA 674:41, I(d)(1), as amended in 2025, limits denial of building permits solely due to frontage on private or Class VI roads and emphasizes case-specific safety findings. The Londonderry Zoning Ordinance reflects traditional frontage standards that predate these changes. Modest clarification is recommended to improve alignment with current state law and provide clearer guidance for applicants and staff.

Topic Area E: Dimensional & Intensity Controls

RSA 674:16, VII (As Amended by SB 284):

Places a **statewide cap** on minimum parking requirements for residential uses. A municipality **shall not require more than 1 off-street parking space per dwelling unit** as a minimum. This applies to single-family, two-family, multifamily and mixed-use developments where residential units are included. This statute is **mandatory and preemptive** where local minimums exceed the cap.

Where This Must Be Reflected Locally

This requirement can appear in zoning ordinance parking tables or ratios, site plan regulations that establish **minimum** parking counts and overlay or district-specific parking standards. Any provision requiring **>1 space per dwelling unit as a minimum** is inconsistent with the statute.

Review of the Londonderry Zoning Ordinance (Zoning Text)

The ordinance **establishes numeric residential parking ratio of 2 spaces per unit for allowed residential uses the AR-1 district**. For other districts with residential uses, the zoning repeatedly references that parking design, and standards are governed by the **Site Plan Regulations (Section 3.09)** including parking areas and layouts.

Within the site plan regulations (June 11th, 2025) **Table B** assigns off-street parking space requirements for other residential uses. Multi-family, Elderly, and Mixed-Use Residential, and Live-Work Unit all require more than one parking space per unit. Additionally, Table B contains a note pointing back to Section 2.3.1.6 & 7 for Single-Family and Two-Family Dwelling parking requirements. The August 18th, 2025, version of the zoning ordinance contains no such sections. Likely, the Table B footnote should refer to zoning section 4.2.1.5. The one use type where parking space requirements are spelled out are Accessory Dwelling Units, which does not apply the same parking dimensional standards as are applied to single-family homes, as such is not in alignment with state-laws.

Compliance Determination

A zoning text; cross-reference review recommended. Parking space minimums are not directly addressed in zoning ordinance. Site Plan regulations address parking for some residential uses and conditions while others are missing. Table B of Site Plan Regulations has requirements exceeding the cap as identified in the ordinance text.

Findings Summary

This state law limits minimum residential parking requirements to one space per dwelling unit. The AR-1 District parking requirements and Site Plan Regulations Table B parking language is not in alignment with the state law.

RSA 674:77-78 (As Added by SB 283):

Establishes statewide standards for how **Floor Area Ratio (FAR)** must be defined and applied in zoning ordinances. RSA674:77 creates statutory definitions for Floor Area Ratio (FAR), gross floor area, below-grade area, and new construction (for FAR purposes). RSA 674:78 states that if a municipality uses FAR as a zoning control, it must **exclude below-grade floor area** (e.g., basements below finished grade) from FAR calculations. These statutes standardize FAR calculations. They do not require municipalities to adopt FAR nor does it affect other dimensional controls. This law applies **only where FAR is used.**

Where This Matters Locally

These statutes are relevant only if a zoning ordinance uses FAR as a dimensional control, or limits building size using FAR formulas. They do **not** apply where intensity is controlled through density per acre, lot coverage, height limits, or setbacks.

Review of the Londonderry Zoning Ordinance

Based on review of the ordinance Londonderry regulates building scale using lot size, setbacks, height limits, and lot coverage. The ordinance does **not rely on FAR as a regulatory metric.** No FAR formulas or FAR-based limits were identified.

Compliance Determination

Because Londonderry does not regulate development using FAR the statutory requirements do not apply to the ordinance. No amendment is required. If FAR were adopted in the future, the statutory definitions and exclusions would apply automatically.

Housing Barrier Framing

These statutes are primarily intended to prevent basements from counting against FAR limits which avoids unintended constraints on housing size. Since Londonderry does not use FAR the statutes do not constrain local zoning practice. The Town retains flexibility in managing building scale through existing dimensional standards.

Findings Summary

The Londonderry Zoning Ordinance does not use FAR as a regulatory tool and instead relies on other dimensional controls. As a result, the ordinance is consistent with the statute.

Topic Area F: Vesting, Appeals, and Procedural Safeguards

RSA 674:39 (As Amended by HB 413):

Governs the **vesting (exemption) period** for approved subdivision plats and site plans. The statutory exemption period is extended to **seven (7) years**. During this period, an approved plat or site plan is protected from subsequently adopted zoning or regulatory changes that would otherwise affect the project. The statute sets conditions for when the vesting period starts, how it may be maintained or extended, and when protections lapse. This is a **state-law protection that applies automatically** once a qualifying approval is granted.

Where This Must Be Reflected Locally

Affects **Subdivision Regulations**, **Site Plan Review Regulations** and Administrative practices related to approval tracking. It does **not require zoning ordinance text**. Vesting is statutory and self-executing, as such local ordinances cannot reduce the statutory period.

Review of the Londonderry Zoning Ordinance

At a zoning-ordinance level the zoning ordinance generally regulates use, dimensional standards, and zoning districts. It does **not establish vesting timelines** for approved plans. No provisions were identified that override state vesting rules or establish conflicting vesting periods. This is consistent with standard practice in NH municipalities.

Compliance Determination

This is implemented through subdivision/site plan regulations, not zoning text. The Londonderry Zoning Ordinance does not conflict with the statute. No zoning amendment is required.

Housing Barrier Determination

The extended vesting period provides predictability for developers, reduces regulatory risk for phased projects, and supports financing of housing developments. Because this protection is statutory local zoning does not need to replicate it. The benefit applies automatically.

Section II — Subdivision Regulations Findings

The Subdivision Regulations influence how zoning permissions translate into buildable housing. The review examined application procedures, infrastructure standards, and administrative tools that affect cost, timing, and feasibility.

Application Procedures and Review

Optional pre-application and design review steps provide useful early guidance. Additional clarity around study requirements, escrow expectations, and scheduling could further enhance predictability for housing-related subdivisions.

Design Standards for Improvements

Street, drainage, and utility standards protect public safety and long-term maintenance. Explicit recognition of proportional and context-sensitive design approaches would help balance these objectives with housing affordability and feasibility.

Plan Specifications and Assurances

Submittal, bonding, and inspection requirements support orderly development. Refinements that allow phased submissions and milestone-based assurances could reduce unnecessary cost and delay for housing projects.

Administration and Waivers

Clear waiver criteria can provide flexibility where equal or better performance can be achieved. This tool can support housing feasibility while preserving regulatory intent.

Section III — Site Plan Regulations Findings

The Site Plan Regulations shape the review of multifamily and mixed-use housing. The analysis focused on proportionality, coordination with zoning standards, and opportunities to streamline review for lower-impact projects.

Applicability and Review Pathways

Administrative and minor site plan review options offer opportunities to reduce review time for appropriately scaled housing projects. Clear eligibility thresholds would improve their effectiveness.

Design Standards

Parking, circulation, landscaping, lighting, and traffic standards influence housing cost and layout. Ensuring consistency with zoning requirements and scaling studies to actual impacts would support efficient and predictable review.

Submission, Assurances, and Administration

Submission requirements and completion assurances are important management tools. Phased and milestone-based approaches can support housing project delivery without reducing safeguards.

Conclusion and Next Steps

Overall, the review indicates that Londonderry's regulations are fundamentally sound. Targeted updates focused on clarity, consistency, and proportionality would help align local regulations with recent state law and support a diversified housing strategy.

These refinements can assist the Planning Board in continuing to protect public health and safety while improving predictability and reducing unintended barriers to housing.

TOPIC AREA	RSA SECTION(S)	STATE RSA REQUIREMENT	ZONING ORDINANCE MISALIGNMENT	SUBDIVISION REGULATION MISALIGNMENT	SITE PLAN REGULATION MISALIGNMENT	HOUSING-BARRIER FRAMING (WHAT THE CONFLICT *DOES*)
A.	**RSA 674:1, VII** (HB 2)	Planning board authority to identify municipally/county-owned land suitable for residential; advisory power.	**None found** (no ordinance language contradicting advisory inventory role).	N/A	N/A	No direct housing barrier—this is an enabling/administrative change.
A.	**RSA 674:43, VI–VIII** (HB 2)	Adds planning authorities (expedited review & pattern zoning authority).	**None found** (no direct conflict identified in zoning text via this audit pass).	N/A	**None found** (regs cite Ch. 674 authority and operate within it).	Potential opportunity area, not a barrier. This could be used to streamline housing forms if the municipality chooses.
B.	**RSA 674:21, V** (HB 168)	Impact fees expanded to include public works facilities.	**None found** in the zoning ordinance. The ordinance makes no reference to impact fees.	N/A	N/A	Not a prohibition; more about what municipalities *may* include. Impact fees do create a cost/risk barrier to housing.
B.	**RSA 674:16, VIII** (HB 457)	Adds limits on residential occupancy regulation (e.g., "2 persons/bedroom; no relationship limits").	**None found** in ordinance sections reviewed for direct conflict.	N/A	N/A	If local "family" definitions cap unrelated occupants or effectively limit bedrooms, that can suppress shared housing and affordability.
B.	**RSA 674:71–72** (HB 577)	Updated ADU definitions and core ADU requirements; intent is to normalize ADUs and reduce administrative delay.	**Conflict (process):** The zoning language is not explicit about ADUs being allowed by-right and approved administratively. **Conflict (size):** Size language in condition "F" is not fully aligned with state-law. **Conflict (definition):** Zoning Ordinance does not contain a definition for an Accessory Dwelling Unit, what is described in condition "H" is not fully aligned with state-law. **Conflict (parking)**: State-law requires ADUs be held to the same zoning standards as the primary home. Condition "K", makes the location of parking for an ADU more restrictive than it is for single-family homes.	N/A	**Missing Information:** Table B – Off-Street Parking Requirements refers to section 2.3.1.6 & 7 in the zoning ordinance. No such section exists.	Aligning ADU language in section 5.18 of the zoning ordinance with the new state ADU law will clarify rules for homeowners seeking to build an ADU. This will boost homeowner confidence while also reducing the risk of the town's zoning language creating confusion about what constitutes an ADU and under what circumstances they are allowed.
B.	**RSA 674:73** (HB 577)	Detached ADUs must be allowed by-right where single-family dwellings are allowed.	**Point of Clarity (detached ADU limitation):** ADUs are described as "Attached" or "free-standing". The zoning ordinance distinction of ADU type is not aligned with the state-law. **Conflict (existing structures):** The zoning does not contain language exempting ADUs in existing structures from bulk standards.	None found	None found	Detached ADUs are a low infrastructure way to add housing units. Providing clarity about the scenarios in which ADUs are allowed will improve homeowner confidence.

TOPIC AREA	RSA SECTION(S)	STATE RSA REQUIREMENT	ZONING ORDINANCE MISALIGNMENT	SUBDIVISION REGULATION MISALIGNMENT	SITE PLAN REGULATION MISALIGNMENT	HOUSING-BARRIER FRAMING (WHAT THE CONFLICT *DOES*)
C.	**RSA 674:79–80** (HB 631)	Zoning **must permit** multifamily/mixed-use residential on land zoned primarily commercial; cannot require discretionary approvals that effectively deny it.	**Conflict:** Residential in commercial districts is largely achieved via discretionary review; multifamily is not permitted by-right as a principal use in most scenarios. Mixed-use residential is described as only permitted as "*affordable*" in a very limited acreage within the town, creating a functional prohibition.	None found	None was found. Site plan review will apply once a use is allowed. Then, the required parking ratios cannot be greater than 1 space/unit. Developers can choose to build more parking if desired.	This is a **high-impact housing barrier**: if commercial corridors cannot host housing as a principal use, supply gets pushed into low density residential districts, raising price pressures and reducing the diversity of housing types.
D.	**RSA 674:41, I(c) & I(d)(1)** (SB 281; HB 296)	A municipality **may not deny** a building permit **solely** because a lot is served by a **Class VI road** or a **private road**; denials must be grounded in objective safety findings.	**Potential conflict (frontage standard as proxy prohibition):** multi-family/workforce housing standards include frontage on a **state highway or Town maintained Class V or better**. This creates risk of treating frontage on a Class VI road as categorical disqualifier.	**Potential conflict (subdivision access standard):** *"Every subdivision shall have safe access to a **class V public road or better**."* Instead, objective standards for roads should be referenced.	**Potential conflict (site plan access standard):** "All sites shall have safe access to a **class V public road or better**." Objective standards for roads should be made clear to demonstrate there is no categorical denial.	If frontage standards are used as an automatic gatekeeper (instead of using a safety-finding framework), they have the potential to block development of otherwise buildable lots, restricting development of small-scale housing on existing roads.
E.	**RSA 674:16 , VII** (SB 284)	**Residential parking requirements capped at 1 space per dwelling unit.**	**Conflict:** zoning text includes a **"minimum of two (2) parking spaces per dwelling shall be provided in the AR-1 district"** (zoning section 4.2.1.5)	None found	**Conflict (direct):** Residential Uses parking ratios exceed 1 space/unit (e.g., **Live-Work 3.0/DU; Multi-family 2.0/DU; Elderly 1.5/DU**). **Conflict (missing):** parking footnotes refer to missing parking ratio requirements in the zoning.	Parking minimums are one of the most consistent "silent" housing suppressors: they increase land consumption, construction cost, and often reduce achievable unit counts.
E.	**RSA 674:77–78** (SB 283)	Defines FAR/below-grade area and requires zoning to exclude below-grade area from FAR. Londonderry does not use FAR as a zoning control.	N/A	N/A	N/A	Not a barrier. FAR isn't used in the zoning. If FAR is introduced later as a later date, be sure to align definitions to avoid inadvertent bulk limits.
F.	**RSA 674:39** (HB 413)	Extended vesting/exemption periods.	None found	None found	**No conflict found**: site plan revocation references the **time periods in RSA 674:39** rather than imposing a shorter local clock.	Predictable vesting reduces "approval-risk premium," which supports feasibility—especially for housing projects that require financing certainty.

NH RSA 674 Changes in 2025:

Chapter 674: Local Land Use Planning and Regulatory Powers

RSA 674:1, VII (HB2)

HTTPS://GC.NH.GOV/RSA/HTML/LXIV/674/674-1.HTM

VII. The planning board may vote to designate any property recommended to it as appropriate for development as a residential use by the select board pursuant to RSA 41:11-a, IV, as appropriate for development for residential use and forward a description of said property to the office of planning and development pursuant to RSA 12-O:55, VIII.

RSA 674:16, VII (SB284)

HTTPS://GC.NH.GOV/RSA/HTML/LXIV/674/674-16.HTM

I. In this section:
(a) "Residential use" means lands, buildings, or structures, or portions thereof, used, designed, or intended for non-transient occupancy.
(b) "On-site parking requirements" means the required number of on-site parking spaces, the maximum distance of the parking spaces from the proposed use, the dimensions of the parking spaces, the angle of the parking spaces, and the hours of the day the parking spaces must be available as required by a zoning ordinance, site plan review regulation, subdivision regulation, or innovative land use control.
(c) "Alternative parking solution" means a proposal by an applicant to meet the parking demand created by a proposed residential use which is a substitute for meeting the on-site parking requirements prescribed by a zoning ordinance, site plan review regulation, subdivision regulation, or innovative land use control. Alternative parking solutions shall include, but not be limited to: (1) an agreement for the provision of off-site parking spaces with another owner of real property during hours which the off-site parking spaces are not in use within a quarter of a mile of the proposed residential use, (2) agreement with a rideshare company to provide transportation to the occupants of the proposed residential use, (3) availability of public transportation including fixed-route bus service within a quarter of a mile of the proposed residential use, or (4) location in a district officially designated in a municipality's master plan, or by zoning ordinance, as a downtown, town center, central business district, or village center in which there is adequate walkability infrastructure. The planning board shall not be required to approve the alternative parking solution if the results of the third-party review under RSA 676:4-b, I, conclude that the proposed alternative parking solution will not meet the parking demand created by the proposed residential use. Planning boards shall have the authority under RSA 674:16-a to approve residential uses with alternative parking solutions which may be inconsistent with the requirements of their zoning ordinance.
(d) "Adequate walkability infrastructure" means sidewalks, density of development, bus

stops, bike lanes, mixed use neighborhoods, and other infrastructure that supports walkability.
II. If a proposed residential use proposes to meet the on-site parking requirements prescribed by a zoning ordinance adopted pursuant to RSA 674:16, prescribed by a site plan review regulation adopted pursuant to RSA 674:44, prescribed by a subdivision regulation adopted pursuant to RSA 674:36, or other innovative land use control adopted pursuant to RSA 674:21, with an alternative parking solution, in any of the above cases due to economic considerations, the planning board shall be required to consider such alternative parking solution.
III. If the applicant can demonstrate that the alternative parking solution will meet the parking demand created by the proposed residential use, a planning board shall be required to approve the alternative parking solution proposed by the applicant as a substitute for the proposed residential use meeting the on-site parking requirements.
IV. If a planning board during the review process of a subdivision plat, site plan, or other land use application for the proposed residential use doesn't agree with the applicant's determination that the alternative parking solution will meet the parking demand created by the proposed residential use, the planning board can request third-party review under RSA 676:4-b, I.

RSA 674:16, VIII (HB457)

HTTPS://GC.NH.GOV/RSA/HTML/LXIV/674/674-16.HTM

VIII. In its exercise of the powers granted under this subdivision, the legislative body of a city, town, village district, or county in which there are located unincorporated towns or unorganized places shall not adopt any ordinance that restricts the number of occupants of any dwelling unit to less than 2 occupants per bedroom, and the governing body thereof shall not enforce any such ordinance. Such legislative body shall not adopt any ordinance based on the familial or non-familial relationships or marital status, occupation, employment status, or the educational status, including but not limited to scholastic enrollment or academic achievement at any level among the occupants of the dwelling unit, including but not limited to college students, and the governing body thereof shall not enforce any such ordinance. Nothing in this section shall prohibit the enforcement of the state building code or state fire code.

RSA 674:21, V (HB168)

HTTPS://GC.NH.GOV/RSA/HTML/LXIV/674/674-21.HTM

V. As used in this section "impact fee" means a fee or assessment imposed upon development, including subdivision, building construction, or other land use change, in order to help meet the needs occasioned by that development for the construction or improvement of capital facilities owned or operated by the municipality, including and limited to water treatment and distribution facilities; wastewater treatment and disposal facilities; sanitary sewers; storm water, drainage and flood control facilities; municipal road

systems and rights-of-way; municipal office facilities; public school facilities; public works facilities; the municipality's proportional share of capital facilities of a cooperative or regional school district of which the municipality is a member; public safety facilities; solid waste collection, transfer, recycling, processing, and disposal facilities; public library facilities; and public recreational facilities not including public open space. No later than July 1, 1993, all impact fee ordinances shall be subject to the following:

(a) The amount of any such fee shall be a proportional share of municipal capital improvement costs which is reasonably related to the capital needs created by the development, and to the benefits accruing to the development from the capital improvements financed by the fee. Upgrading of existing facilities and infrastructures, the need for which is not created by new development, shall not be paid for by impact fees.

(b) In order for a municipality to adopt an impact fee ordinance, it must have enacted a capital improvements program pursuant to RSA 674:5-7.

(c) Any impact fee shall be accounted for separately, shall be segregated from the municipality's general fund, may be spent upon order of the municipal governing body, shall be exempt from all provisions of RSA 32 relative to limitation and expenditure of town moneys, and shall be used solely for the capital improvements for which it was collected, or to recoup the cost of capital improvements made in anticipation of the needs which the fee was collected to meet.

(d) All impact fees imposed pursuant to this section shall be assessed at the time of planning board approval of a subdivision plat or site plan. When no planning board approval is required, or has been made prior to the adoption or amendment of the impact fee ordinance, impact fees shall be assessed prior to, or as a condition for, the issuance of a building permit or other appropriate permission to proceed with development. Impact fees shall be intended to reflect the effect of development upon municipal facilities at the time of the issuance of the building permit. Impact fees shall be collected at the time a certificate of occupancy is issued. If no certificate of occupancy is required, impact fees shall be collected when the development is ready for its intended use. Nothing in this subparagraph shall prevent the municipality and the assessed party from establishing an alternate, mutually acceptable schedule of payment of impact fees in effect at the time of subdivision plat or site plan approval by the planning board. If an alternate schedule of payment is established, municipalities may require developers to post bonds, issue letters of credit, accept liens, or otherwise provide suitable measures of security so as to guarantee future payment of the assessed impact fees.

(e) The ordinance shall establish reasonable times after which any portion of an impact fee which has not become encumbered or otherwise legally bound to be spent for the purpose for which it was collected shall be refunded, with any accrued interest. Whenever the calculation of an impact fee has been predicated upon some portion of capital improvement costs being borne by the municipality, a refund shall be made upon the failure of the legislative body to appropriate the municipality's share of the capital improvement costs

within a reasonable time. The maximum time which shall be considered reasonable hereunder shall be 6 years.

(f) Unless otherwise specified in the ordinance, any decision under an impact fee ordinance may be appealed in the same manner provided by statute for appeals from the officer or board making that decision, as set forth in RSA 676:5, RSA 677:2-14, or RSA 677:15, respectively.

(g) The ordinance may also provide for a waiver process, including the criteria for the granting of such a waiver.

(h) The adoption of a growth management limitation or moratorium by a municipality shall not affect any development with respect to which an impact fee has been paid or assessed as part of the approval for that development.

(i) Neither the adoption of an impact fee ordinance, nor the failure to adopt such an ordinance, shall be deemed to affect existing authority of a planning board over subdivision or site plan review, except to the extent expressly stated in such an ordinance.

(j) The failure to adopt an impact fee ordinance shall not preclude a municipality from requiring developers to pay an exaction for the cost of off-site improvement needs determined by the planning board to be necessary for the occupancy of any portion of a development. For the purposes of this subparagraph, "off-site improvements" means those improvements that are necessitated by a development but which are located outside the boundaries of the property that is subject to a subdivision plat or site plan approval by the planning board. Such off-site improvements shall be limited to any necessary highway, drainage, and sewer and water upgrades pertinent to that development. The amount of any such exaction shall be a proportional share of municipal improvement costs not previously assessed against other developments, which is necessitated by the development, and which is reasonably related to the benefits accruing to the development from the improvements financed by the exaction. As an alternative to paying an exaction, the developer may elect to construct the necessary improvements, subject to bonding and timing conditions as may be reasonably required by the planning board. Any exaction imposed pursuant to this section shall be assessed at the time of planning board approval of the development necessitating an off-site improvement. Whenever the calculation of an exaction for an off-site improvement has been predicated upon some portion of the cost of that improvement being borne by the municipality, a refund of any collected exaction shall be made to the payor or payor's successor in interest upon the failure of the local legislative body to appropriate the municipality's share of that cost within 6 years from the date of collection. For the purposes of this subparagraph, failure of local legislative body to appropriate such funding or to construct any necessary off-site improvement shall not operate to prohibit an otherwise approved development.

(k) Revenue from impact fees imposed upon development and collected by a municipality under RSA 674:21, V for construction of or improvement to municipal road systems may be expended upon state highways within the municipality only for improvement costs that are

related to the capital needs created by the development. Such improvements may include items such as, but not limited to, traffic signals and signage, turning lanes, additional travel lanes, and guard rails. No such improvements shall be constructed or installed without approval of the state department of transportation. In no event shall impact fees be used for any improvements to roads, bridges, or interchanges that are part of the interstate highway system. Nothing in RSA 674:21, V shall be construed as allowing or authorizing additional impact fees merely by virtue of having approved the expenditure of collected fee revenue for construction of or improvement of state highways, nor shall it be construed as allowing the adoption of new impact fees devoted to assessing impacts to state highways.

(l) No later than 60 days following the end of the fiscal year, any municipality having adopted an impact fee ordinance shall prepare a report listing all expenditures of impact fee revenue for the prior fiscal year, identifying the capital improvement project for which the fees were assessed and stating the dates upon which the fees were assessed and collected. The annual report shall enable the public to track the payment, expenditure, and status of the individually collected fees to determine whether said fees were expended, retained, or refunded.

RSA 674:39 (SB413)

HTTPS://GC.NH.GOV/RSA/HTML/LXIV/674/674-41.HTM

I. Every subdivision plat approved by the planning board and properly recorded in the registry of deeds and every site plan approved by the planning board and properly recorded in the registry of deeds, if recording of site plans is required by the planning board or by local regulation, shall be exempt from all subsequent changes in subdivision regulations, site plan review regulations, impact fee ordinances, and zoning ordinances adopted by any city, town, or county in which there are located unincorporated towns or unorganized places, except those regulations and ordinances which expressly protect public health standards, such as water quality and sewage treatment requirements, for a period of 7 years after the date of approval; provided that:
(a) Active and substantial development or building has begun on the site by the owner or the owner's successor in interest in accordance with the approved subdivision plat within 3 years after the date of approval, or in accordance with the terms of the approval, and, if a bond or other security to cover the costs of roads, drains, or sewers is required in connection with such approval, such bond or other security is posted with the city, town, or county in which there are located unincorporated towns or unorganized places, at the time of commencement of such development;
(b) Development remains in full compliance with the public health regulations and ordinances specified in this section; and
(c) At the time of approval and recording, the subdivision plat or site plan conforms to the subdivision regulations, site plan review regulations, and zoning ordinances then in effect at the location of such subdivision plat or site plan.
II. Once substantial completion of the improvements as shown on the subdivision plat or site plan has occurred in compliance with the approved subdivision plat or site plan or the

terms of said approval or unless otherwise stipulated by the planning board, the rights of the owner or the owner's successor in interest shall vest and no subsequent changes in subdivision regulations, site plan regulations, or zoning ordinances, except impact fees adopted pursuant to RSA 674:21 and 675:2-4, shall operate to affect such improvements.
III. The planning board may, as part of its subdivision and site plan regulations or as a condition of subdivision plat or site plan approval, specify the threshold levels of work that shall constitute the following terms, with due regard to the scope and details of a particular project:
(a) "Substantial completion of the improvements as shown on the subdivision plat or site plan," for purposes of fulfilling paragraph II; and
(b) "Active and substantial development or building," for the purposes of fulfilling paragraph I.
IV. Failure of a planning board to specify by regulation or as a condition of subdivision plat or site plan approval what shall constitute "active and substantial development or building" shall entitle the subdivision plat or site plan approved by the planning board to the 7-year exemption described in paragraph I. The planning board may, for good cause, extend the 3-year period set forth in subparagraph I(a).
V. The 7-year period and 3-year exemption in this section shall apply to any approval granted on or after July 1, 2023.

RSA 674:41, I(c) (SB281 & HB 296)

HTTPS://GC.NH.GOV/RSA/HTML/LXIV/674/674-41.HTM

(c) Is a class VI highway, provided that the applicant:
(1) Signs a liability waiver acknowledging that the:
(A) Municipality shall not maintain the highway nor provide any services to any lot accessible by the highway;
(B) Municipality shall not accept any responsibility for losses or damages caused by a lack of services; and
(C) Responsibility for such services falls solely on the applicant; and
(2) Prior to the issuance of a building permit, produces evidence that this waiver has been recorded in the county register of deeds; and
(3) Prior to the issuance of a building permit, proves the lot and any buildings thereon are insurable;

RSA 674:41, I(d)(1) (SB281 & HB 296)

HTTPS://GC.NH.GOV/RSA/HTML/LXIV/674/674-41.HTM

(d) Is a private road, provided that:
(1) The local governing body, after review and comment by the planning board, or after establishing that the private road identifies and complies with policy adopted by the

RSA 674:43, VI–VIII (HB2)

HTTPS://GC.NH.GOV/RSA/HTML/LXIV/674/674-43.HTM

VI. If the planning board has submitted a property description to the office of planning and development, then the local governing body may further vote to authorize that properties in the municipality on the list generated pursuant to RSA 12-O:55, VIII qualify for expedited review and approval pursuant to RSA 676:4, III.
VII. If the local legislative body of a municipality has by ordinance or resolution authorized minor site plan review pursuant to RSA 674:43, III, then all solely residential development projects proposing to construct workforce housing, as defined in RSA 674:58, IV, that are included on the list generated pursuant to RSA 12-0:55, VIII, may also qualify for expedited review and approval pursuant to RSA 676:4, III.
VIII. The local legislative body of a municipality may by ordinance or resolution adopt pattern zoning regulations to accelerate the construction of infill housing in neighborhoods. To meet the definition of infill housing, projects must be new residential development constructed on vacant lots interspersed among lots with existing, non-vacant development. Pattern zoning provides permit-ready designs with appropriate zoning and regulations to speed the process of building high quality infill housing that is compatible with existing homes in the neighborhood.

RSA 674:71 (HB577)

HTTPS://GC.NH.GOV/RSA/HTML/LXIV/674/674-71.HTM

As used in this subdivision:
I. "Accessory dwelling unit" means a residential living unit that is located on a lot containing a single-family dwelling that provides independent living facilities for one or more persons, including provisions for sleeping, eating, cooking, and sanitation, on the same parcel of land as the principal dwelling unit it accompanies. Accessory dwelling units may be constructed at the same time as the principal dwelling unit.
II. "Attached unit" means a unit that is within or physically connected to the principal dwelling unit, or completely contained within a preexisting detached structure.
III. "Detached unit" means a unit that is neither within nor physically connected to the principal dwelling unit, nor completely contained within a preexisting detached structure.

RSA 674:72 (HB577)

HTTPS://GC.NH.GOV/RSA/HTML/LXIV/674/674-72.HTM

I. A municipality that adopts a zoning ordinance pursuant to the authority granted in this chapter shall allow accessory dwelling units in all zoning districts that permit single-family dwellings. One accessory dwelling unit, which may be either attached or detached, shall be allowed as a matter of right. The municipality shall allow one accessory dwelling unit without additional requirements for lot size, except as described by this section, setbacks, aesthetic requirements, design review requirements, frontage, space limitations, or other

controls beyond what would be required for a single-family dwelling without an accessory dwelling unit. The municipality may not impose greater requirements for a septic system for a single-family home with an accessory dwelling unit than is required by the department of environmental services. The municipality is not required to allow more than one accessory dwelling unit for any single-family dwelling. The municipality may prohibit accessory dwelling units associated with multiple single-family dwellings attached to each other, such as townhouses. The municipality may prohibit accessory dwelling units associated with rented or leased land. Subsequent condominium conveyance of any accessory dwelling unit separate from that of the principal dwelling unit shall be prohibited, notwithstanding the provisions of RSA 356-B:5, unless allowed by the municipality.

II. If a zoning ordinance contains no provisions pertaining to accessory dwelling units, then one accessory dwelling unit shall be deemed a permitted accessory use, as a matter of right, to any single-family dwelling in the municipality, and no municipal permits or conditions shall be required other than building permits, if required by statute.

III. Attached accessory dwelling units shall have either an independent means of ingress and egress or ingress and egress through a common space shared with the principal dwelling. However, the municipality shall not limit the choice of ingress and egress.

IV. Any municipal regulation applicable to single-family dwellings shall also apply to the combination of a principal dwelling unit and an accessory dwelling unit, including but not limited to lot coverage standards and standards for maximum occupancy per bedroom consistent with policy adopted by the United States Department of Housing and Urban Development, provided that such municipal regulations shall not be more restrictive for accessory dwelling units than for any single-family use in the same zoning district. If a municipality has established regulations requiring parking for the principal dwelling unit, it may require up to one additional parking space for each accessory dwelling unit. Required parking spaces may be provided either on-site or at a legally dedicated off-site location, at the property owner's discretion.

V. The applicant for a permit to construct an accessory dwelling unit shall make adequate provisions for water supply and sewage disposal for the accessory dwelling unit in accordance with RSA 485-A:38, but separate systems shall not be required for the principal and accessory dwelling units. In order to comply with this paragraph and prior to constructing an accessory dwelling unit, an application for approval for a sewage disposal system shall be submitted in accordance with RSA 485-A as applicable. The approved sewage disposal system shall be installed if the existing system has not received construction approval and approval to operate under current rules or predecessor rules, or the system fails or otherwise needs to be repaired or replaced.

VI. A municipality may require owner occupancy of one of the dwelling units, but it shall not specify which unit the owner must occupy. A municipality may require that the owner demonstrate that one of the units is his or her principal place of residence, and the municipality may establish reasonable regulations to enforce such a requirement.

VII. A municipality may apply aesthetic standards to accessory dwelling units only if it has also applied such standards to the principal dwelling unit. The total living space of the accessory dwelling unit shall not exceed 950 square feet unless otherwise authorized by the municipality. A municipality may not restrict the total living space to less than 750 square feet.

VIII. A municipality shall not require a familial relationship between the occupants of an accessory dwelling unit and the occupants of a principal dwelling unit.
IX. A municipality shall not limit an accessory dwelling unit to only one bedroom.
X. An accessory dwelling unit may be deemed a unit of workforce housing for the purpose of satisfying the municipality's regional fair share obligation under RSA 674:59, III if the unit meets the criteria in RSA 674:58, IV for rental units.
XI. A municipality shall allow accessory dwelling units to be converted from existing structures, including but not limited to detached garages, regardless of whether such structures violate current dimensional requirements for setbacks or lot coverage.
XII. A municipality shall not deny the establishment of a separate electrical panel and separate electrical service to the accessory dwelling unit.

RSA 674:73 (HB577)

HTTPS://GC.NH.GOV/RSA/HTML/LXIV/674/674-73.HTM

Detached Accessory Dwelling Units. – A municipality shall permit one detached accessory dwelling unit. Detached accessory dwelling units shall comply with the requirements of, and any municipal ordinances or regulations adopted pursuant to, RSA 674:72, IV through IX.

RSA 674:79 (HB631)

HTTPS://GC.NH.GOV/RSA/HTML/LXIV/674/674-79.HTM

In this subdivision:
I. "Commercially zoned land" means land zoned for such commercial activities as retail and office space.
II. "Mixed-use" means a type of development that combines residential, commercial, cultural, institutional, or entertainment uses within a single building or development area.
III. "Adaptive reuse" means the repurposing of existing buildings or structures in whole or in part for residential purposes.

RSA 674:80 (HB 631)

HTTPS://GC.NH.GOV/RSA/HTML/LXIV/674/674-80.HTM

I. Notwithstanding any provision to the contrary, municipalities shall allow multi-family residential development on commercially zoned land, provided that adequate infrastructure, including roads, water, and sewage systems, shall be available or provided to support the development.
II. Nothing in this section shall be interpreted to prohibit municipalities from restricting residential development in zones where industrial and manufacturing uses are permitted which may result in impacts that are incompatible with residential use, such as air, noise, odor, or transportation impacts.
III. A municipality may require all available ground floor space or a percentage thereof to be dedicated to retail or similar uses.

IV. A municipality shall provide an exemption to any requirements regarding setbacks, height, or frontage of a building being converted to multi-family or mixed-use through adaptive reuse, provided that the building's floor area, height, and setbacks do not change.

governing body of the municipality, has voted to authorize the issuance of building permits for the erection of buildings on said private road or portion thereof;

RSA 674:77 (SB283)

HTTPS://GC.NH.GOV/RSA/HTML/LXIV/674/674-77.HTM

In this subdivision:
I. "Floor-area-ratio (FAR)" means the ratio of a building's total floor area to the size of the parcel of land upon which it is built.
II. "Below-grade area" means any part of a building that is entirely or partially below the ground level, including basements, cellars, and sublevels.
III. "New construction" means any newly constructed building or structure, including those that are newly erected or created by major renovations.

RSA 674:78 (SB283)

HTTPS://GC.NH.GOV/RSA/HTML/LXIV/674/674-78.HTM

I. Notwithstanding any provision to the contrary, municipalities with floor-area-ratio (FAR) limitations shall exclude below-grade areas from the calculation of FAR for new construction projects.
II. Developers may utilize below-grade areas for purposes such as parking, storage, mechanical spaces, and additional facilities, without impacting the calculation of FAR for the building.

What is a Diversified Housing Strategy?

A **Diversified Housing Strategy** is a policy or planning approach used to ensure a wide range of **housing types, tenures, and price points** are available within a community.

The goal of a diversified housing strategy is to meet the needs of current and future residents across different **income levels, household sizes, life stages**, and **abilities**.

Key Components of a Diversified Housing Strategy

1. **Housing Types**
    - Accessory Dwelling Units
    - Single-family detached homes
    - Duplexes/Triplexes/Quadplexes
    - Townhouses / row houses
    - Small apartments (5-12 units)
    - Midsize multifamily and mixed-use residential (13-50 units)
    - Manufactured housing

2. **Tenure Options**
    - Ownership (freehold and strata)
    - Open market rental
    - Non-market rental (e.g. non-profit, social housing)
    - Rent-to-own and shared equity models

3. **Affordability Levels**
    - Market-rate housing
    - Below-market and subsidized housing
    - Deep affordability (e.g. housing for very low-income households)

4. **Target Populations**
    - Families
    - Seniors
    - Young adults / students
    - Persons with disabilities
    - Indigenous populations
    - Newcomers and refugees
    - Low- to moderate-income workers

Objectives of a Diversified Housing Strategy

- **Improved Housing Affordability:** Address gaps in the housing market, especially where lower-income households are priced out.
- **Greater Inclusivity:** Ensure people of all backgrounds and needs can live in the community.
- **Boost Economic Development:** Ensure that local workers can live near their jobs, reducing commute burdens and labor shortages.
- **Enable Aging in Place:** Provide housing options that allow residents to remain in their communities as their needs change over time.
- **Reduce Urban Sprawl:** By encouraging a mix of housing forms within existing neighborhoods, the strategy supports more compact, sustainable growth patterns.

How It's Implemented

A diversified housing strategy is embedded in or supported by:

- **A Housing Needs Assessment**
- **The Local Master Plan**
- **Zoning Reforms** (e.g., upzoning, missing middle housing)
- **Partnerships** with non-profit housing providers, developers, and other levels of government

Housing Typologies to Audit

1) Accessory Dwelling Units and Internal Conversions

Goal: Incremental units, gentle density, aging-in-place, attainable rentals.
Typical barriers to test: owner-occupancy, size caps, parking, detached ADU limits, special permit triggers, utility requirements, neighborhood standards that function as prohibitions.

2) Duplex / Two-Unit / "Two-Family" Housing

Goal: Missing-middle housing at neighborhood scale.
Typical barriers to test: where permitted, lot size/frontage requirements, density math, setbacks, parking ratios, "single-family only" zones, discretionary review.

3) Triplex / Fourplex / Small Multifamily

Goal: Workforce housing, attainable rentals, small infill.
Typical barriers to test: use table omissions, special permit reliance, dimensional/density standards that make projects infeasible, open space requirements, building form standards.

4) Midsize Multifamily and Mixed-Use Residential

Goal: Meaningful unit production near services, supports local economy.
Typical barriers to test: conditional-use chokepoints, design standards that add cost without proportional safety benefit, traffic/impact study triggers, parking minimums, procedural layering (multiple boards/steps).

5) Senior Housing, Assisted Living, and Care-Integrated Housing

Goal: Right-sizing, reduced household strain, service-linked housing.
Typical barriers to test: treated as "facility" not "housing," district limitations, intensity assumptions, special permit burdens, compatibility standards that effectively prohibit.

6) Manufactured Housing and Smaller Homes

Goal: Naturally occurring affordability and entry-level options.
Typical barriers to test: district limitations, design/aesthetic mandates, frontage/road standards in subdivision regs, park/community provisions.

7) Workforce / Inclusionary Housing (Regulated Affordable Units)

Goal: Ensure affordability as production happens.
Typical barriers to test: whether incentives are usable, whether requirements unintentionally suppress production, administrative complexity, monitoring burdens vs. scale.

8) Subdivision-Based Lot Production and Conservation Subdivisions

Goal: Expand unit supply through lot creation, while preserving character.
Typical barriers to test: road cross-sections, cul-de-sac standards, sidewalk/curb mandates, infrastructure triggers, phasing, waiver practice (how easy it is to use).

Londonderry HOP Grant
February 25th, 2026

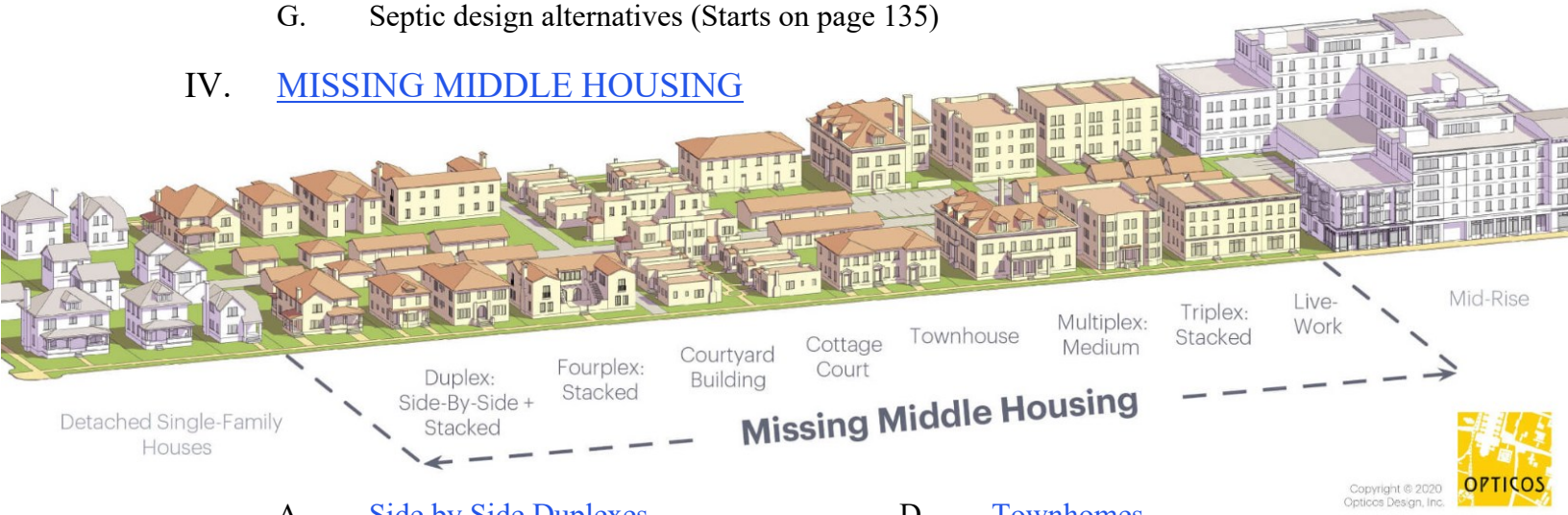
Housing Strategy Sources **(for board consideration)**

I. HOUSING SUPPLY ACCELERATOR (NLC/APA)
   A. Land use and regulation strategies (Starts on page 67)

II. LOCAL HOUSING SOLUTIONS (.ORG)
   A. Align housing supply with market conditions (Starts at pillar 2)

III. NEW HAMPSHIRE HOUSING TOOLBOX
   A. Cluster Housing (Starts on page 29) (already used in some form)
   B. Inclusionary Zoning (Starts on page 55)
   C. Infill development (Starts on page 60)
   D. Mixed-use development (Starts on page 86)
   E. Reduced zoning / sub-division regs (Page 101) (deserves focus)
   F. Village plan alternative (Starts on page 130)
   G. Septic design alternatives (Starts on page 135)

IV. MISSING MIDDLE HOUSING



   A. Side by Side Duplexes
   B. Three & Four Unit Buildings
   C. Cottage Courts
   D. Townhomes
   E. Multi-Unit Buildings (12 units)
   F. Live-work buildings

V. POCKET NEIGHBORHOODS
   A. What is a Pocket Neighborhood? (Codes for Courtyards Primer)
      1. Pocket Neighborhood Model Code

VI. VERMONT HOMES FOR ALL TOOLKIT
   A. Home Typologies (Starting on page 136)
   B. Community Infill Design (Starting on page 161)

VII. PLACE CODE & (MODEL PLACE CODE ZONING FOR MAINE)

VIII. HOMEWORK: SEEKING IDEAS FROM BOARD MEMBERS
   A. (Bring examples of housing you would like to share)
   B. Starter sources: (Freefarmhouse.com)(Dooryard)(Housing Design Catalogue)

2025 NH RSA Audit (Ch. 674) & Housing Strategy Direction

Town of Londonderry Planning Board • March 2026 (work session)

Today’s agenda

- Summarize the RSA audit results (where local text conflicts with state law)
- Capture planning board direction for desired housing types

Part 1 — RSA Audit Highlights

- Audit scope (RSA changes in Chapter 674 only)
- What changed in 2025 (housing-relevant items)
- Confirmed misalignments (state vs local text)
- Why these items matter for housing feasibility

Part 2 — Board direction: housing preferences

- Solution options: minimum compliance vs “best practice”
- Sequencing & workload (quick wins → longer-term)
- Board input: preferred housing types + locations
- Next steps: draft amendments for board discussion

2025 NH RSA Audit (Ch. 674) & Housing Strategy Direction

Town of Londonderry Planning Board • March 2026 (work session)

Provided in the Board Packet

- Local land use regulation to NH RSA 674 alignment review
- Local land use regulation to NH RSA 674 alignment matrix
- Language and Links to 2025 NH RSA 674 changes (reference document)
- Diversified Housing Strategy Definition and Purpose
- Housing Typologies to Audit (reference document)
- Housing Solutions Sources (for board consideration)
- This presentation slide deck

Recap – Prior Activities

What Ch. 674 RSAs changed in 2025: (Ch. 674 is local land use planning and regulatory powers)

Land Use Analysis

Analysis of land cover, zoning coverage, and current uses

External Forces Review

Demographics, migration, housing Cost, unit production

Staff and Board Intro

Discussion with planning board and staff about implementation

Regulatory Desk Review

In depth review of zoning, site plan, and sub-division regulation

Developer Interviews

Longer vesting
for approved plans.

Progress Presentation

Project scope, staff discussions, developer interviews

Part 1 – RSA Audit

What Ch. 674 RSAs changed in 2025: (Ch. 674 is local land use planning and regulatory powers)

ADUs
ADUs must be allowed by-right (statewide).

Parking
Residential minimums.
Capped at 1 parking space unit.

Commercial land
Multifamily and mixed-uses must be permitted.

Class VI/private roads
Permit denial can’t be categorical.

Occupancy
Limits on local occupancy restrictions.

Vesting
Longer vesting for approved plans.

The audit focused on where local land use regulation conflicts with state RSAs (and where small edits can remove uncertainty).

Audit scope & documents reviewed

Focused on direct conflicts with RSA Ch. 674

Scope

- RSA Chapter 674 only (local land use planning & regulatory powers)
- Identifies “Misalignment”, which is local text that requires or prohibits something the RSA now allows or controls
- Output: Identification of specific clauses to revise

Local documents

- Zoning Ordinance (August 2025 version reviewed)
- Subdivision Regulations (June 2025 version reviewed)
- Site Plan Regulations (June 2025 version reviewed)

Where state law is procedural (e.g., vesting), the audit flags conflicts only if local text is more restrictive.

How findings are framed

- Alignment opportunities
- Why it matters
- Discussion

Summary: audit results

Top items to address first

Zoning Ordinance — direct conflicts

- ADUs: some standards more restrictive than RSA 674:72–73
- Parking: minimums exceed 1 space/unit in some contexts
- Commercial MF: residential not clearly permitted as the principal use on commercially zoned land
- Road Classification: frontage language should not act as categorical permit denial

Subdivision Regs — mostly aligned

- No direct conflicts identified in the audit pass
- Clarify: Use safety objectives in lieu of road classifications to avoiding categorical denial of permits. Changes needed to avoid conflict with RSA 674:41 (Effective July 1st, 2026)

Site Plan Regs — direct conflicts

- Parking: Table B parking requirements exceed one parking space per unit, which is controlled by RSA 674:16, VII

Priority principle: fix direct conflicts first (state preemption), then address clarifications and optional improvements.

Finding 1 — Accessory Dwelling Units (ADUs)

RSA 674:71–73 (HB 577)

State requirement (plain language)

- ADUs must be allowed where single-family is allowed
- Detached ADUs must be allowed
- Limits regulations to match single-family standards

Observed local conflicts (partial list)

- Definition of ADUs not the same as state RSA
- Missing exemption from dimensional standards for ADUs in existing non-compliant structures
- Minor siting/ingress/parking constraints

Why it matters for housing

Accessory dwellings are one of the most effective ways to introduce gentle density to existing neighborhoods.

Minimum for Compliance

1) Clarify by-right status of ADUs and ADU definitions
2) Update parking language to increase flexibility
3) Adjust language for ADU size limitations
4) Add exemptions for conversion of existing structures

Want to Go Further?

1) Consider allowing two ADUs per home
2) Allow ADUs on non-owner-occupied properties
3) Host an ADU design competition
4) Create a free pre-approved ADU plans library

Board Discussion

Are there any questions or direction on the Section 5.18 (accessory dwellings) comments provided in the board packet?

Next: parking cap misalignment

Finding 2 — Residential parking cap

RSA 674:16, VII (SB 284)

State requirement (plain language)

- A municipality may regulate parking…

  …but cannot require more than 1 residential space per unit.

Observed local conflicts (examples)

- Site Plan parking table requires >1 space per unit.
- Some outdated cross-references.

Why it matters for housing

Parking minimums directly affect land cost and sitework cost, site layout, stormwater, and achievable unit count.

Aligning to the 1-space cap can unlock “missing middle,” mixed-use, and smaller-unit projects.

Board Discussion:

- Would the town be open to adopting shared parking standards?
- Does shared parking present conflicts or concerns for the residents or business owners?

Next: commercial zoning multifamily requirement

Finding 3 — Multifamily on commercially zoned land

RSA 674:79–80 (HB 631)

State requirement (plain language)

- Beginning July 1, the requires the allowance of multi-family residential development on “commercially zoned land” where adequate infrastructure is available, subject to standards.
- Municipalities can establish objective standards for allowing residential development in commercial districts.
- Adaptive reuse: Some conversions are exempt from certain dimensional standards (setbacks/height/frontage) when the building envelope doesn’t change.

Observed local gap (high level)

- Residential in commercial districts is limited to a narrow allowance and discretionary reviews
- Multi-family is not consistently established as a principal by-right option across commercially zoned districts (as contemplated by RSA 674:79–80).
- Adaptive reuse: need to consider clear dimensional exemption language where an existing building envelope does not change.

Why it matters for housing

This requirement shifts some balance of housing opportunity toward commercial corridors and underutilized sites, reducing pressure on established neighborhoods and supporting reinvestment on primary corridors.

Board Discussion

What percentage of ground floor should be required as a commercial use?
How does the board envision dimensional standards playing a role in shaping mixed use development in commercial districts?

Clarification item — Class VI & private roads

RSA 674:41 (SB 281; HB 296)

State framework (plain language)

- Permits cannot be denied solely due to Class VI road or private road designation of frontage
- Town can require objective safety findings and recorded waivers
- Goal: avoid categorical prohibitions; keep decisions defensible in the event of an appeal.

Local alignment check

- Identify categorical language (“Class V or better”) in zoning and subdivision regulations. Replace as need
- Clarify road class is not grounds for an permit denial.
- Create an administrative policy for consistent handling

Board discussion

Any comments or questions on this item?

What to Watch – 2026 Legislative Session

Potential Impacts to the Land Use Audit

Watchlist

Direct Impact on local regulation:

- HB1010 (Engrossed): As Amended would modify the commercial multifamily mandate.
- HB1195 (Active): Revises RSA 674:16, VI To remove conditional permitting of childcare centers on commercial land and adds conversion exemptions; effective 7/1/26.

Secondary tools:

- HB1468 (Engrossed): master plan flood resilience planning language (optional tool).
- HB1711-FN (Engrossed): government land use hearing/process change (PB process implications).

Part 2 – Housing Preferences

How we will capture preferences

Round-robin share-outs (optional)

Members to share favored housing type / policy approach
Share ideas you believe are relevant to Londonderry
Capture a single “top ideas” list to carry into the next phase of regulation review.

Translate ideas into decisions

What housing types should be prioritized?
Where should housing go (and where should it not go)?
What matter most in creating a successful outcome?

Output from tonight

1) Short list of preferred housing types.
2) “Must-haves” and “deal-breakers” for regulatory standards.
3) Direction on which regulatory changes are a best fit for Londonderry

Housing strategy sources (Included in your packet)

Policy Approaches

- **Housing Supply Accelerator Playbook** — see *"Land Use & Regulation Strategies"* (start at page 67)
- **Local Housing Solutions** — see *"Align Housing Supply with Market Conditions"* (start at pillar 2)
- **NH Housing Toolbox** — Many topics are relevant to Londonderry. Recommend at least reviewing the *"Reduced Zoning/Subdivision Requirements"* and the *"Village Plan Alternative"* sections.

Building Types

- **Missing Middle Housing** — info on 2-4 unit buildings, cottage courts, townhomes, small multi-unit, live-work
- **Pocket Neighborhoods** — Introduction, example projects, and model zoning language.
- **Vermont Homes for All** — A toolkit for development aimed at facilitating small-scale home builders.

Alternative Zoning Approaches

- **Maine PlaceCode Library Guide** – An open-source library of zoning tools intended to help rural areas, villages, towns, and cities create the places they want, based on the best-loved places they already have…

Other Ideas From the Planning Board

- Policy Approaches
- Building Types
- Zoning Examples

Discussion prompts (guided input)

To help translate preferences into implementable standards

Where should housing go?

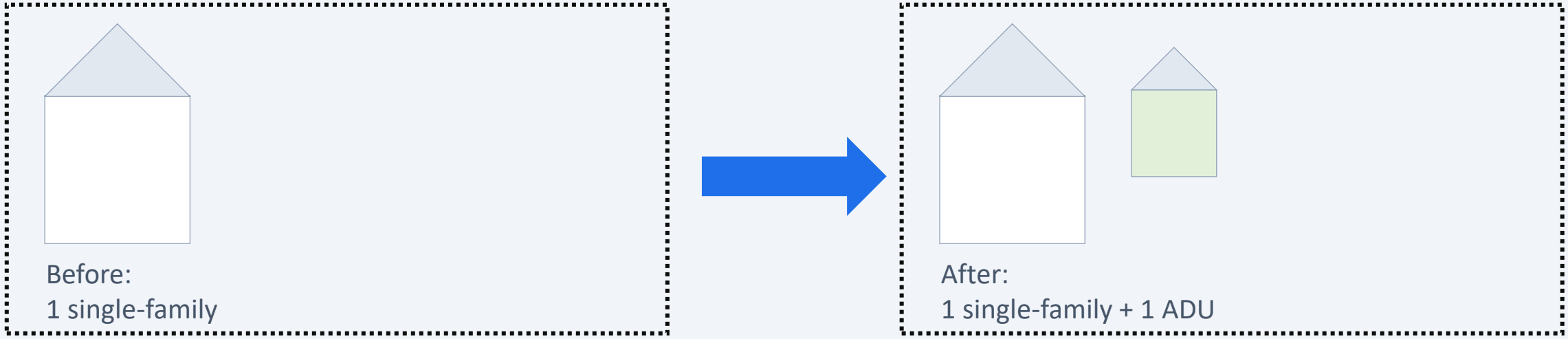
- Any areas where housing should be limited?
  For what reasons? (infrastructure/traffic/capacity)?
- Where should “gentle density” be encouraged?
  In what form? (ADUs/Duplexes/3-to-4-unit Houses)?
- How does the board envision Multi-family housing being built in Commercial Districts?
  What criteria should be used to determine the allowance?

Which standards have flexibility to change?

- Lot Sizes / Building Heights / Setbacks / Buffers / Open Space / Stormwater? (should be objective and measurable)
- Parking approach within the 1-space per unit cap? (shared/tandem/waivers)
- Infrastructure? (changes to roadway design, water/sewer connection fees, drainage requirements, fire access)

Goal: move from “preferences” to measurable standards

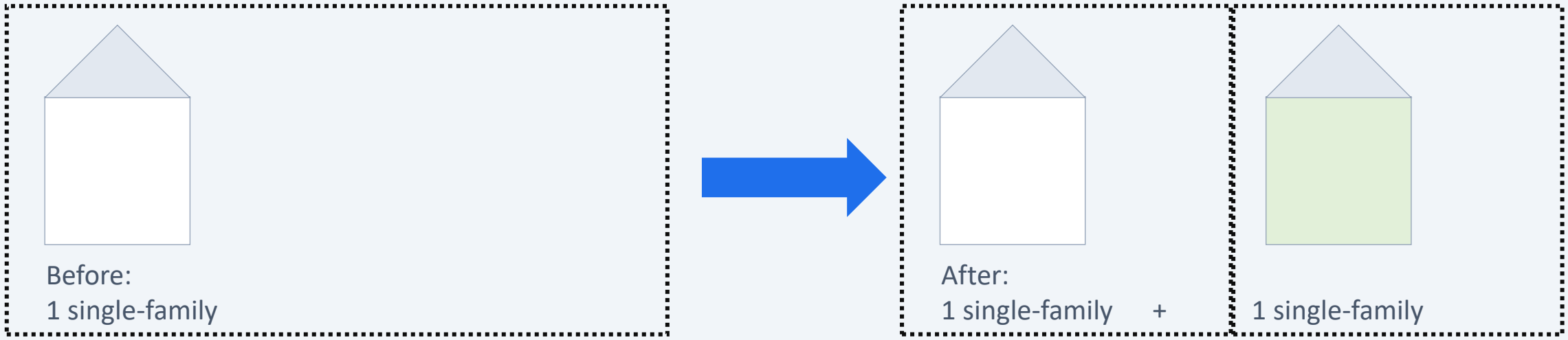
Infill: accessory dwelling units (already allowed)



Discussion prompts for Londonderry

- Is the town having success with permitting ADU in recent years?
- Who is building ADUs and for what purpose?
- Are ADUs considered a desirable housing solution?
- Are there changes to the regulations that would help increase ADU permitting?

Infill: reduced lot size

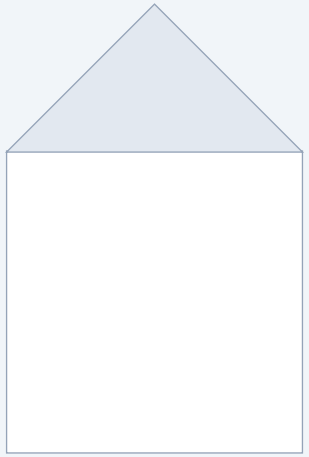


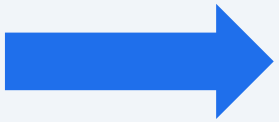
Discussion prompts for Londonderry

- What concerns does the board have about reducing lot sizes?
- What opportunities could smaller lots sizes create?
- Would limiting smaller lot sizes to specific areas make a difference?

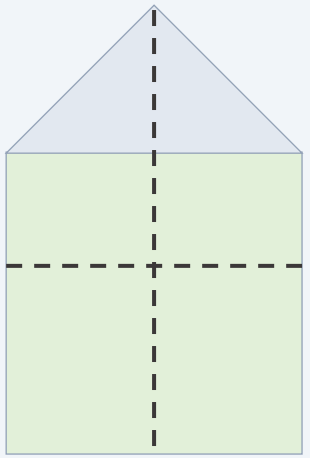
Infill: allowance of 4-unit houses

Before:
1 single-family





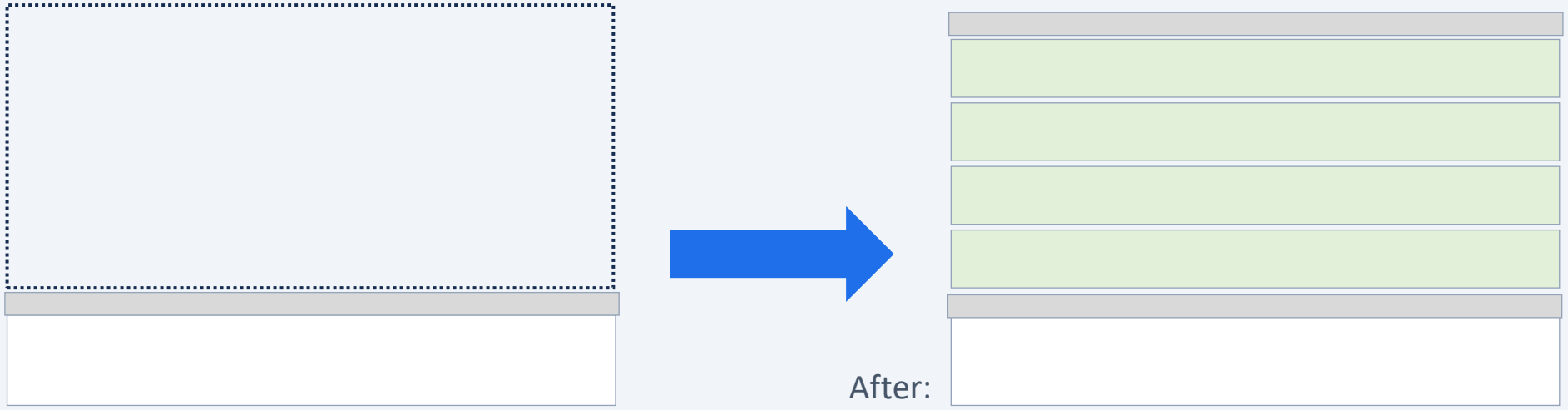
After:
4 single-family



Discussion prompts for Londonderry

- Does a single-family home with four bedrooms have the same impacts as a single building with four one-bedroom units?
- What concerns does the board have about this approach?
- What opportunities would four units on a single-family lot create?
- Would limiting the allowance of four-unit buildings to lots connected to both water and sewer service make a difference?

Mixed-Use: housing over retail / office uses



Before:
1 story retail / office

After:
4 story residential over retail / office / parking

Discussion prompts for Londonderry

- What concerns does the board have about this approach?
- What opportunities would this create?
- Would limiting the allowance of four-unit buildings to lots connected to both water and sewer service make a difference?

Board input: preferred housing types

Dot-vote or rank during discussion

Instruction: Discuss housing types you want to encourage in Londonderry over the next 3–5 years.

- Accessory Dwelling Units
- Apartment Houses (3-4 units)
- Townhomes
- Cottage courts / small clusters
- Small multifamily (5–12 units)
- Midsize multifamily (13–50 units)
- Mixed-use (housing over retail/office)
- Manufactured / smaller homes
- Adaptive reuse (commercial → housing)

Select Preferred Housing Types

Identify Housing Locations

Are there preferred locations for the top 3 housing types.

Next steps

Turning the audit + board input into implementable actions

Next Steps

- Use findings from the RSA audit to develop draft language for amendments to land use regulations
- Use direction from planning board to audit land use regulations against preferred housing types and locations
- Identify regulatory barrier and draft amendment language based on board housing preferences input

Chronology

1. ~~Confirm today's priorities (preferred housing types)~~
2. **Audit land use regulations (for barriers to desired housing)**
3. **Present findings audit of housing barriers (for board input)**
4. **Draft amendment language to address audit results and board input (RSAs and Housing Preferences)**
5. **Present amendment language to planning board for review and advancement**