



**LEGEND:**

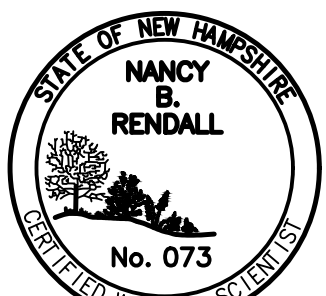
■ CONC BOUND w/DRILL HOLE (FOUND)	⊕ WELL	—222— 2 FT CONTOUR
● REBAR/OR IRON PIPE (FOUND)	⊖ STONEWALL	—220— 10 FT CONTOUR
⊙ DRILL HOLE FOUND	—EOP— EDGE OF PAVEMENT	—P— PROPERTY LINE
□ BOUND TO BE SET	—EOW— EDGE OF WETLAND	—B— BUILDING SETBACK LINE
○ REBAR OR DRILL HOLE TO BE SET	—EOW— EXISTING STRUCTURE	—E— EASEMENT LINE
	⊕ WELL	—G— EXIST. GAS MAIN
	⊖ TEST PIT	—OH— EXIST. OVERHEAD WIRES
		—W— EXIST. HYDRANT & WATER MAIN
		—S— EXIST. SEWER MAIN
		—T— EXIST. TELECOM. LINE

**ABBREVIATIONS:**

UP UTILITY POLE	RCRD ROCKINGHAM COUNTY REGISTRY OF DEEDS
EOP EDGE OF PAVEMENT	
EOG EDGE OF GRAVEL	
STY STORY	
WD WOOD	
FR FRAME	
TYP TYPICAL	
PROP PROPOSED	
EDA EFFLUENT DISPOSAL AREA	

**WETLAND NOTES:**

- Wetland boundaries as flagged were delineated by Nancy B. Rendall, Certified Wetland Scientist, #073 in October, 2021 and represent site conditions at that time.
- Wetland delineation was performed to the standards in the "Regional Supplement to the Corps of Engineers Wetland Delineation Manual Northcentral and Northeast Region (Version 2.0), USACE, January, 2012."
- Hydric soils were determined in accordance with the protocol in "Field Indicators of Hydric Soils in the United States - A Guide for Identifying and Delineating Hydric soils, NRCS, Version 8.0, 2016" and "Version 4 of the Field Indicators for Identifying Hydric Soils in New England."
- Determination of wetland vegetation was assessed using the National Wetland Plant List, Version 3.3, U.S. Army Corps of Engineers 2019.
- Wetlands were classified using the USFWS Methodology, "Classification of Wetlands and Deepwater Habitats, Cowardin, et al, 1979."



**NOTES:**

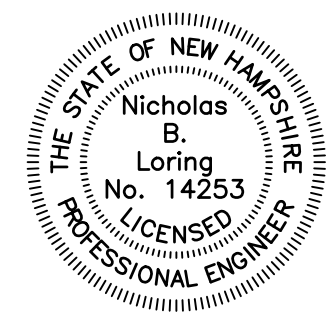
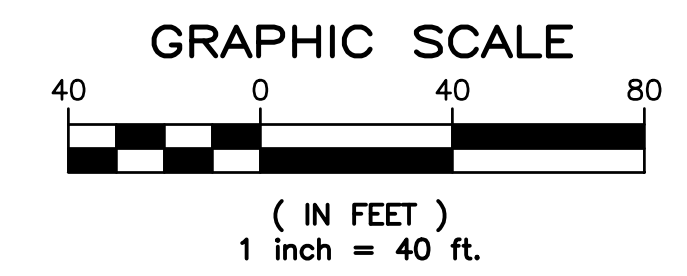
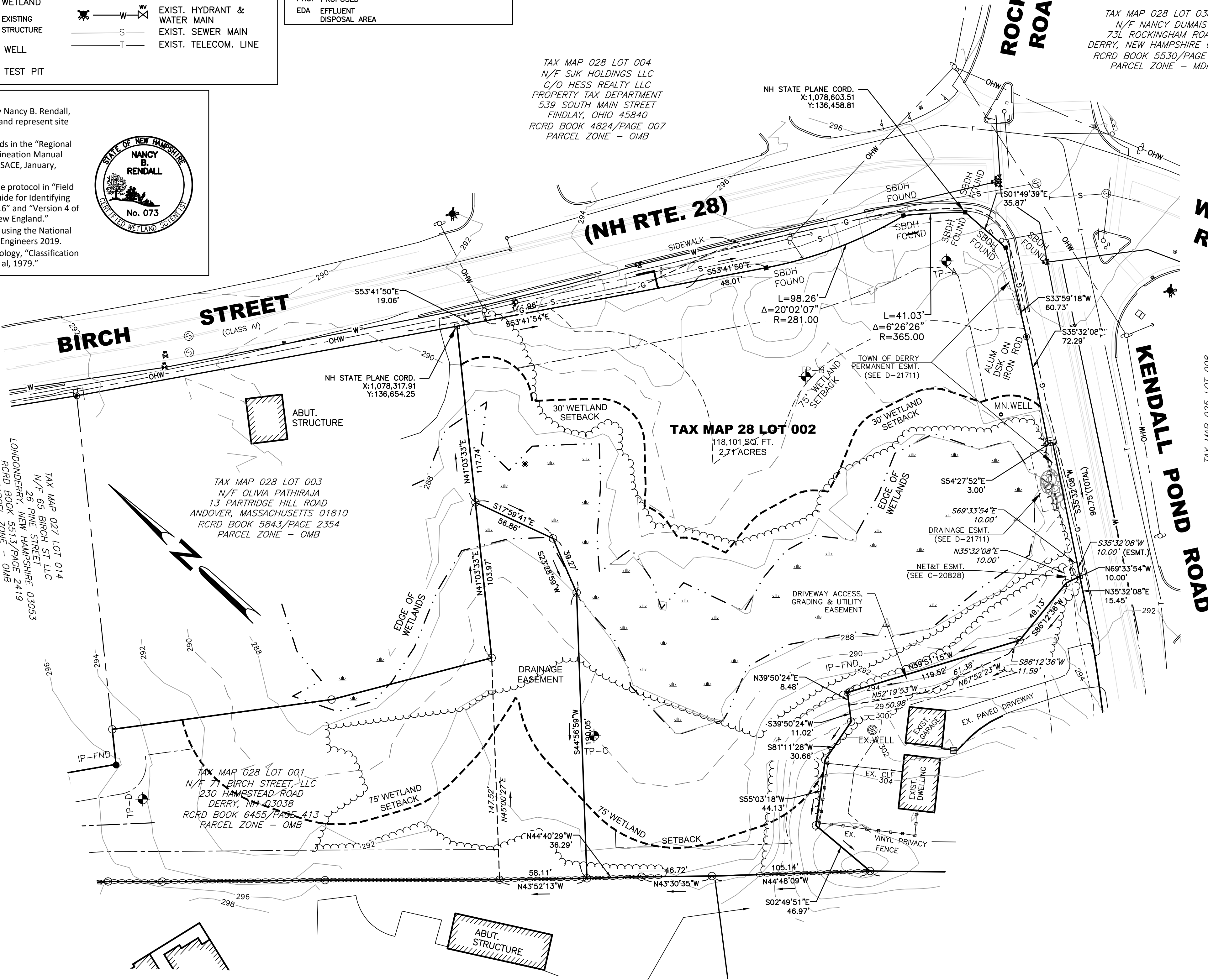
- SEE SHEET 1 FOR ADDITIONAL NOTES AND INFORMATION.
- WETLANDS MAPPED ON-SITE BY: BLUE MOON ENVIRONMENTAL CONCORD, NEW HAMPSHIRE 03301 NANCY B RENDALL CWS
- BOUNDARY SURVEY COMPLETED IN CONJUNCTION WITH: RANGEWAY LAND SURVEY & DESIGN 252 DANIEL PLUMMER ROAD GOFFSTOWN, NEW HAMPSHIRE 03045
- THE LOCATION OF ANY UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. BENCHMARK, LLC MAKE NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT NEW HAMPSHIRE DIG SAFE AT 1-888-344-7233.
- 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 MEASURES AT NO EXPENSE TO THE TOWN.

TAX MAP 028 LOT 038R  
N/F MADELINE ROULLIER & MICHAEL OTTMAN  
73R ROCKINGHAM ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6360/PAGE 1956  
PARCEL ZONE - MDR

TAX MAP 028 LOT 038L  
N/F NANCY DUMAIS  
73L ROCKINGHAM ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 5530/PAGE 663  
PARCEL ZONE - MDR

TAX MAP 028 LOT 004  
N/F SJK HOLDINGS LLC  
C/O HESS REALTY LLC  
PROPERTY TAX DEPARTMENT  
539 SOUTH MAIN STREET  
FINDLAY, OHIO 45840  
RCRD BOOK 4824/PAGE 007  
PARCEL ZONE - OMB

TAX MAP 005 LOT 043  
N/F TOWN OF DERRY  
14 MANNING STREET  
DERRY, NEW HAMPSHIRE 03038  
PARCEL ZONE - OMB



**EXISTING CONDITIONS PLAN**  
**TAX MAP 28 LOT 002**  
**#71 BIRCH STREET**  
**DERRY, NEW HAMPSHIRE 03038**  
OWNER OF RECORD / PREPARED FOR  
71 BIRCH STREET, LLC  
230 HAMPSTEAD ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6455/PAGE 413

SCALE: 1"=40' SHEET 2 of 12 JUNE 23, 2023

REVISIONS	DATE



**BENCHMARK LLC**  
Consulting Engineers Land Planners  
1F Commons Drive, Suite 35  
Londonderry, New Hampshire 03053  
Phone: (603) 437-5000

**BENCHMARK**  
ALUMINUM DISK ON IRON ROD,  
IN PAVEMENT ALONG THE  
NORTHERLY SIDE OF KENDALL  
POND  
ELEVATION 290.89'

NORTH ORIENTATION IS NH GRID NAD83 &  
ELEVATION DATUM IS NAVD88 BASED ON  
GPS DATA.

TAX MAP 025 LOT 014-002  
N/F VENTAS BIRCH HEIGHTS LLC  
C/O ALTUS GROUP US INC  
PO BOX 71970  
PHOENIX ARIZONA 85050  
RCRD BOOK 5482/PAGE 1448  
PARCEL ZONE - OMB

TAX MAP 025 LOT 014  
N/F TOMSON FAMILY REV TRUST OF 2016  
MARK & CHRISTINE THOMPSON, TRUSTEES  
PO BOX 939  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 5741/PAGE 970  
PARCEL ZONE - OMB

APPROVED BY THE TOWN OF DERRY, NH PLANNING BOARD

On Date: \_\_\_\_\_

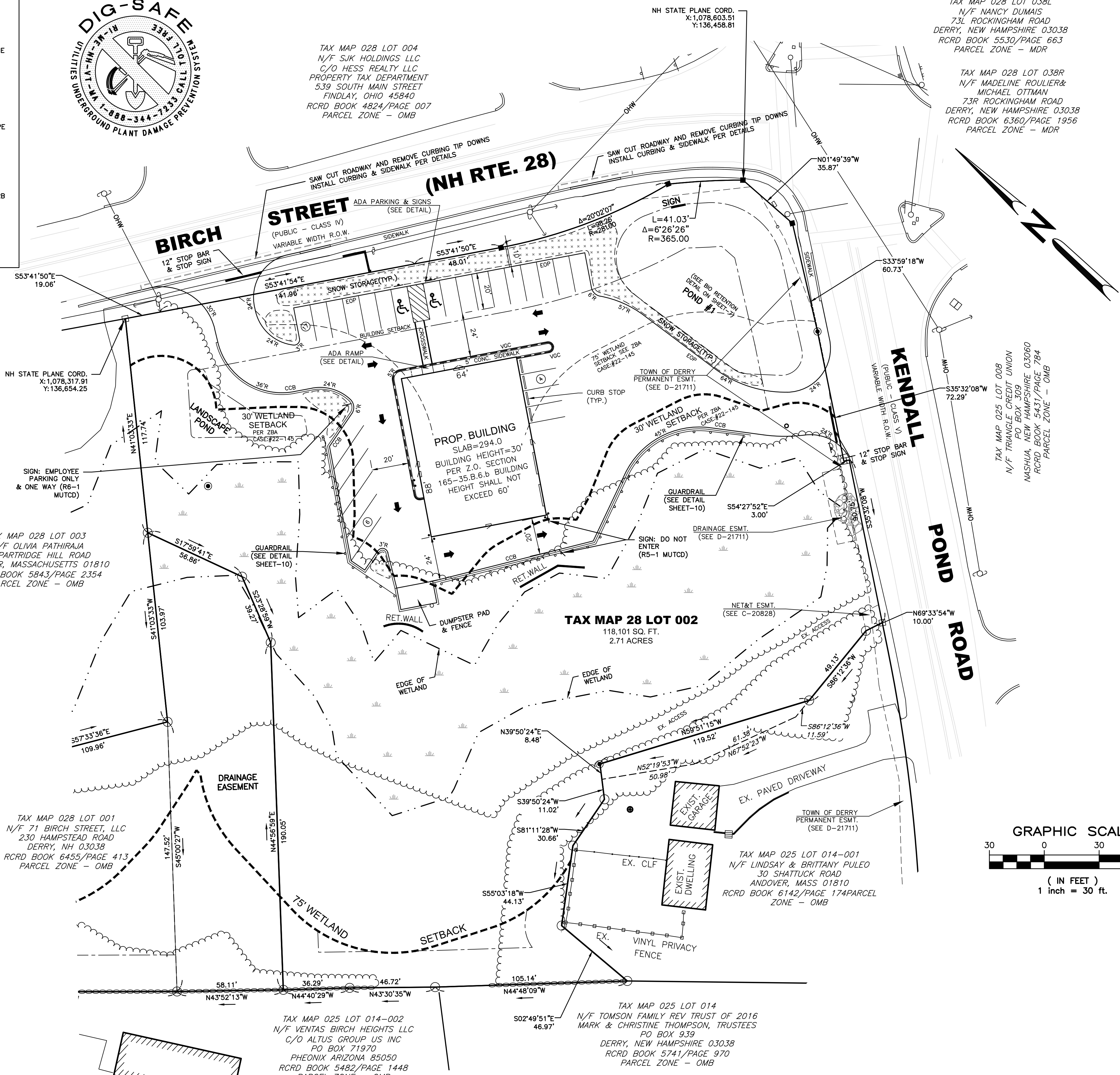
Certified By: \_\_\_\_\_

CHAIRMAN \_\_\_\_\_

SECRETARY \_\_\_\_\_

**LEGEND:**

- BOUND FOUND
- PROPERTY LINE
- - - BUILDING SETBACK LINE
- - - EASEMENT LINE
- ⊙ TEST PIT
- △ TBM/ BENCHMARK
- EXIST. CATCH BASIN
- FLOW DIRECTION
- EXISTING DRAINAGE PIPE
- EXISTING UTILITY POLE
- EXISTING TREELINE
- EXISTING STRUCTURE
- STONEWALL
- VERTICAL GRANITE CURB
- - - EDGE OF WETLAND



TAX MAP 028 LOT 004  
N/F SJK HOLDINGS LLC  
C/O HESS REALTY LLC  
PROPERTY TAX DEPARTMENT  
539 SOUTH MAIN STREET  
FINDLAY, OHIO 45840  
RCRD BOOK 4824/PAGE 007  
PARCEL ZONE - OMB

TAX MAP 028 LOT 038L  
N/F NANCY DUMAIS  
73L ROCKINGHAM ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 5530/PAGE 663  
PARCEL ZONE - MDR

TAX MAP 028 LOT 038R  
N/F MADELINE ROULIER &  
MICHAEL OTTMAN  
73R ROCKINGHAM ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6360/PAGE 1956  
PARCEL ZONE - MDR

TAX MAP 028 LOT 003  
N/F OLIVIA PATHIRAJA  
13 PARTRIDGE HILL ROAD  
ANDOVER, MASSACHUSETTS 01810  
RCRD BOOK 5843/PAGE 2354  
PARCEL ZONE - OMB

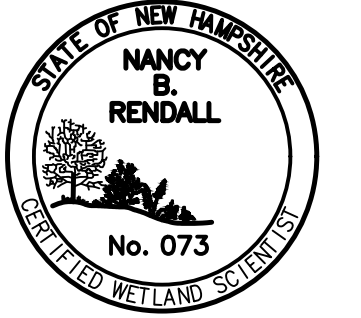
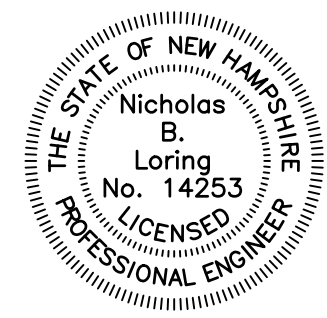
TAX MAP 028 LOT 001  
N/F 71 BIRCH STREET, LLC  
230 HAMPSTEAD ROAD  
DERRY, NH 03038  
RCRD BOOK 6455/PAGE 413  
PARCEL ZONE - OMB

TAX MAP 025 LOT 014-002  
N/F VENTAS BIRCH HEIGHTS LLC  
C/O ALTUS GROUP US INC  
PO BOX 71970  
PHOENIX ARIZONA 85050  
RCRD BOOK 5482/PAGE 1448  
PARCEL ZONE - OMB

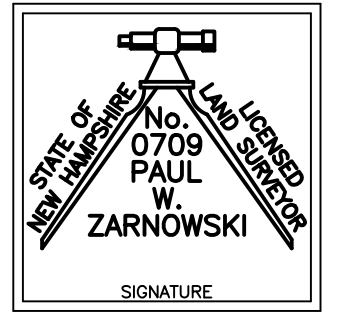
TAX MAP 025 LOT 014  
N/F TOMSON FAMILY REV TRUST OF 2016  
MARK & CHRISTINE THOMPSON, TRUSTEES  
PO BOX 939  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 5741/PAGE 970  
PARCEL ZONE - OMB

TAX MAP 025 LOT 014-001  
N/F LINDSAY & BRITTANY PULEO  
30 SHATTUCK ROAD  
ANDOVER, MASS 01810  
RCRD BOOK 6142/PAGE 174  
PARCEL ZONE - OMB

- NOTES:
- PURPOSE OF THIS PLAN TO SHOW THE PROPOSED IMPROVEMENTS ON TAX MAP 28 LOT 2
  - SEE SHEET #1 FOR ADDITIONAL NOTES
  - BOUNDARY INFORMATION PROVIDED IN CONJUNCTION WITH: RANGEWAY LAND SURVEY & DESIGN 252 DANIEL PLUMMER ROAD GOFFSTOWN, NEW HAMPSHIRE 03045 603-642-1602
  - WETLAND MAPPING PROVIDED BY: BLUE MOON ENVIRONMENTAL, INC., CONCORD, NH NANCY RENDALL CWS



I HEREBY CERTIFY THAT THE WORK PERFORMED IN THE PREPARATION OF THIS PLAN HAS AN ERROR OF CLOSURE OF 1:10,000 OR BETTER.

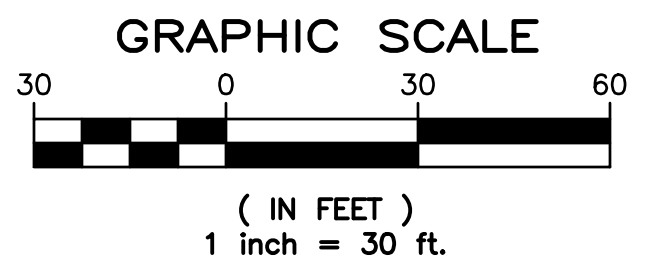


RANGEWAY LAND SURVEY & DESIGN DATE  
252 DANIEL PLUMMER ROAD  
GOFFSTOWN, NEW HAMPSHIRE 03045

**SITE PLAN  
TAX MAP 28 LOT 002  
#71 BIRCH STREET  
DERRY, NEW HAMPSHIRE 03038**

OWNER OF RECORD / PREPARED FOR  
71 BIRCH STREET, LLC  
230 HAMPSTEAD ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6455/PAGE 413

SCALE: 1"=30' SHEET 3 of 12 JUNE 23, 2023



REVISIONS	DATE
TRC 2/16/24 COMMENTS	2/20/24
CONSERVATION COM.	10/12/23
TRC 7/28/23 COMMENTS	9/15/23

**BENCHMARK LLC**  
Consulting Engineers Land Planners  
1F Commons Drive, Suite 35  
Londonderry, New Hampshire 03053  
Phone: (603) 437-5000

APPROVED BY THE TOWN OF DERRY, NH PLANNING BOARD

On Date: \_\_\_\_\_  
Certified By: \_\_\_\_\_  
CHAIRMAN \_\_\_\_\_  
SECRETARY \_\_\_\_\_



TAX MAP 028 LOT 004  
N/F SJK HOLDINGS LLC  
C/O HESS REALTY LLC  
PROPERTY TAX DEPARTMENT  
539 SOUTH MAIN STREET  
FINDLAY, OHIO 45840  
RCRD BOOK 4824/PAGE 007  
PARCEL ZONE - OMB

TAX MAP 028 LOT 038L  
N/F NANCY DUMAIS  
73L ROCKINGHAM ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 5530/PAGE 663  
PARCEL ZONE - MDR

TAX MAP 028 LOT 038R  
N/F MADELINE ROULIER &  
MICHAEL OTTMAN  
73R ROCKINGHAM ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6360/PAGE 1956  
PARCEL ZONE - MDR

- NOTES:**
- PURPOSE OF THIS PLAN TO SHOW THE PROPOSED LANDSCAPING ON TAX MAP 28 LOT 2
  - SEE SHEET #1 FOR ADDITIONAL NOTES.
  - ALL PLANT MATERIALS REQUIRED UNDER THIS SECTION SHALL BE STANDARD NURSERY STOCK, INSTALLED IN ACCORDANCE WITH GENERALLY ACCEPTED HORTICULTURAL STANDARDS AND BE REGULARLY MAINTAINED AFTER INSTALLATION.
  - OWNER RESERVES THE RIGHT TO SUBSTITUTE PLANTINGS BASED UPON NURSERY STOCK AVAILABILITY.
  - SEE SHEET #11 FOR ADDITIONAL LANDSCAPE PLANTING DETAILS

**LANDSCAPING CALCULATIONS:**

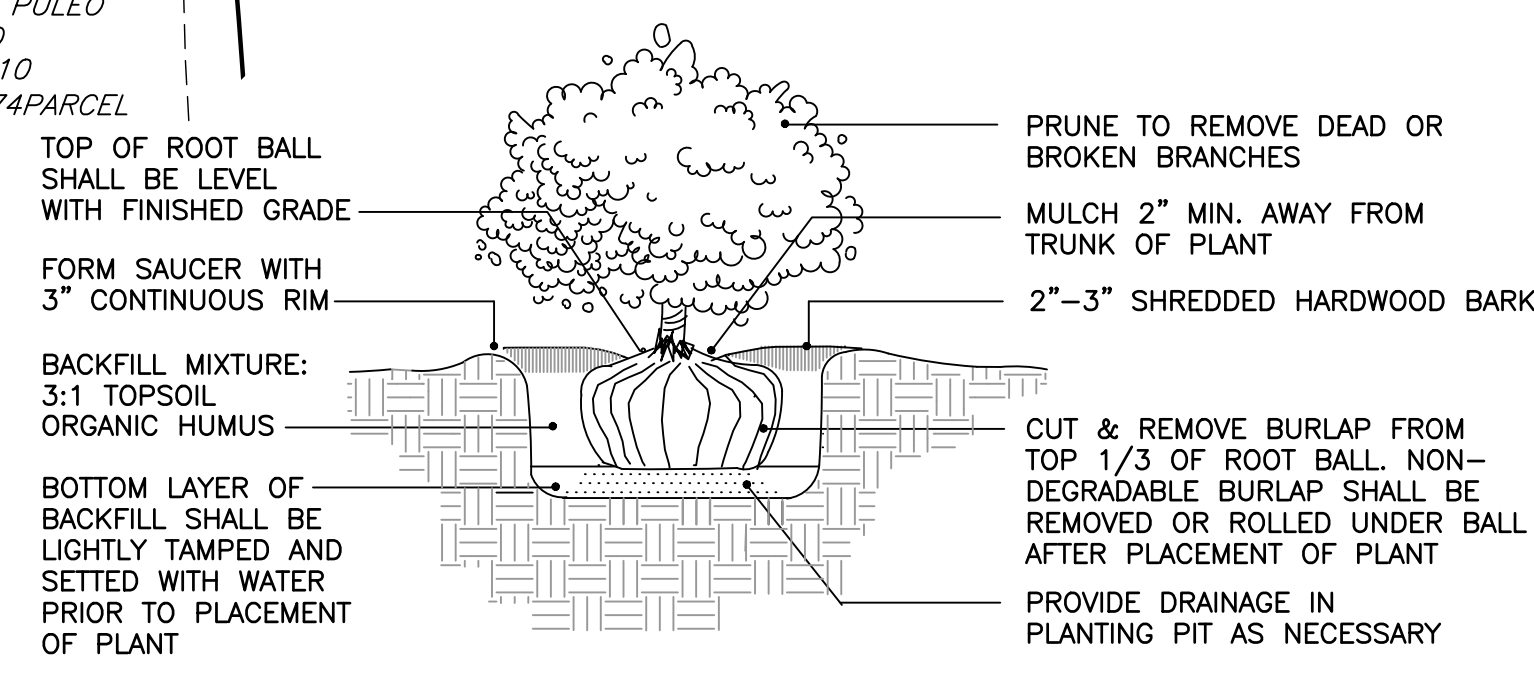
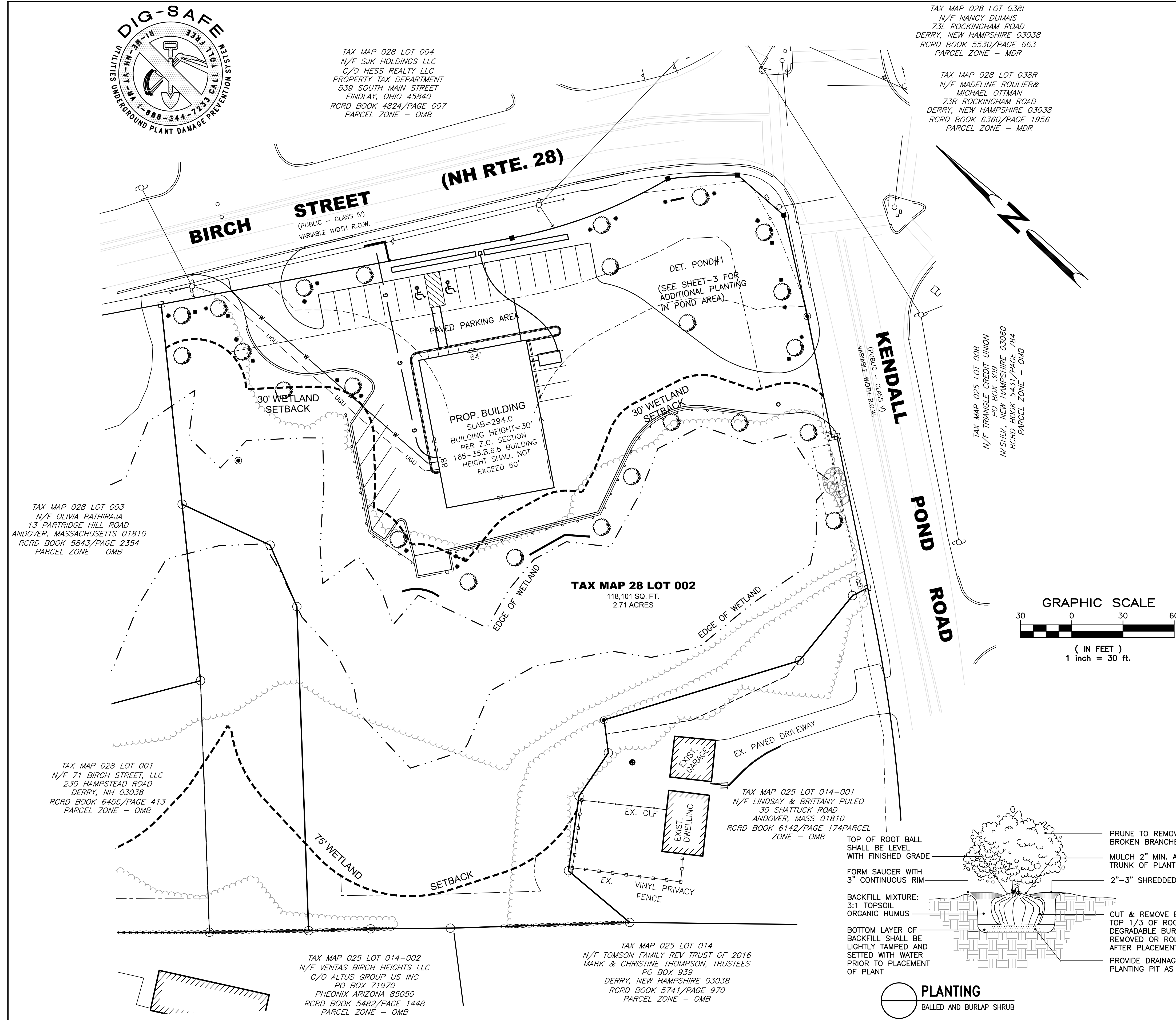
**SECTION 170-64.B.1 - FRONTAGE STREET TREES:**  
611 FEET OF FRONTAGE X 1 TREE / 50 FEET OF FRONTAGE  
= 13 TREES REQUIRED  
= 13 TREES PROVIDED

**SECTION 170-64.B.2 - BUILDING PERIMETER TREES:**  
304 L.F. OF FRONT BUILDING PERIMETER X 1 TREE / 30 L.F.  
= 10.2 TREES REQUIRED  
TOTAL = 11 TREES REQUIRED  
= 11 TREES PROPOSED

**SECTION 170-64.B.3 - SHRUBS:**  
28 NEW PARKING SPACES X 1 SHRUB/ 2 PARKING SPACES  
= 14 SHRUBS REQUIRED  
= 24 SHRUBS PROPOSED

PLANTING SCHEDULE			
SYMBOL	DESCRIPTION	MIN. HEIGHT/CAL.	#
○	SHADE & STREET TREES	2.5" CAL.	24
●	SHRUBS	18 INCHES	24

- SHADE & STREET TREES (TYP):**  
TREES SHALL BE A VARIED MIX OF THE FOLLOWING TREE TYPES:
- A) RED MAPLE (RM)
  - B) RED OAK (RO)
  - C) FLOWERING PEAR (FP)
  - D) JAPANEZE YEW (JY)
  - E) FLOWERING CHERRY (FC)
- SHRUB PLANTINGS:**  
SHRUBS SHALL BE A VARIED MIX OF THE FOLLOWING TYPES:
- A) JUNIPER (J)
  - B) RHODODENDRON (R)
  - C) AZALEA (AZ)
  - D) LILAC (L)
  - E) ROSASHARON (RS)
  - F) DAYLILLY (D)
  - G) KNOCKOUT ROSE (KR)



**PLANTING**  
BALLED AND BURLAP SHRUB

**LANDSCAPE PLAN**  
**TAX MAP 28 LOT 002**  
**#71 BIRCH STREET**  
**DERRY, NEW HAMPSHIRE 03038**  
OWNER OF RECORD / PREPARED FOR  
71 BIRCH STREET, LLC  
230 HAMPSTEAD ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6455/PAGE 413

SCALE: 1"=30'      SHEET 4 of 12      JUNE 23, 2023

TRC	DATE	COMMENTS	DATE
TRC 2/16/24	2/20/24	COMMENTS	
CONSERVATION COM.	10/12/23		
TRC 7/28/23	9/15/23	COMMENTS	
REVISIONS	DATE		

**BENCHMARK LLC**  
Consulting Engineers Land Planners  
1F Commons Drive, Suite 35  
Londonderry, New Hampshire 03053  
Phone: (603) 437-5000

APPROVED BY THE TOWN OF DERRY, NH PLANNING BOARD

On Date: \_\_\_\_\_

Certified By: \_\_\_\_\_

CHAIRMAN \_\_\_\_\_

SECRETARY \_\_\_\_\_

**LIGHTING NOTES:**

- ALL LIGHTING SHALL CONFORM TO THE TOWN OF DERRY SITE PLAN REGULATIONS.
- ALL LIGHTING TO BE DARK SKY COMPLIANT.
- LIGHTING PROVIDED BY:  
CHARRON INC.  
40 LONDONDERRY TURNPIKE, SUITE 1  
HOOKSETT, NH 03106  
PHONE (603) 624-4827
- LIGHT FIXTURES MAY BE SUBSTITUTED WITH AN EQUIVALENT TYPE OF FIXTURE PROVIDING THE FOOT CANDLES REMAIN THE SAME AS THE EXAMPLES SHOWN

TAX MAP 028 LOT 004  
N/F SJK HOLDINGS LLC  
C/O HESS REALTY LLC  
PROPERTY TAX DEPARTMENT  
539 SOUTH MAIN STREET  
FINDLAY, OHIO 45840  
RCRD BOOK 4824/PAGE 007  
PARCEL ZONE - OMB

TAX MAP 028 LOT 038L  
N/F NANCY DUMAIS  
73L ROCKINGHAM ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 5530/PAGE 663  
PARCEL ZONE - MDR

TAX MAP 028 LOT 038R  
N/F MADELINE ROULIER & MICHAEL OTTMAN  
73R ROCKINGHAM ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6360/PAGE 1956  
PARCEL ZONE - MDR

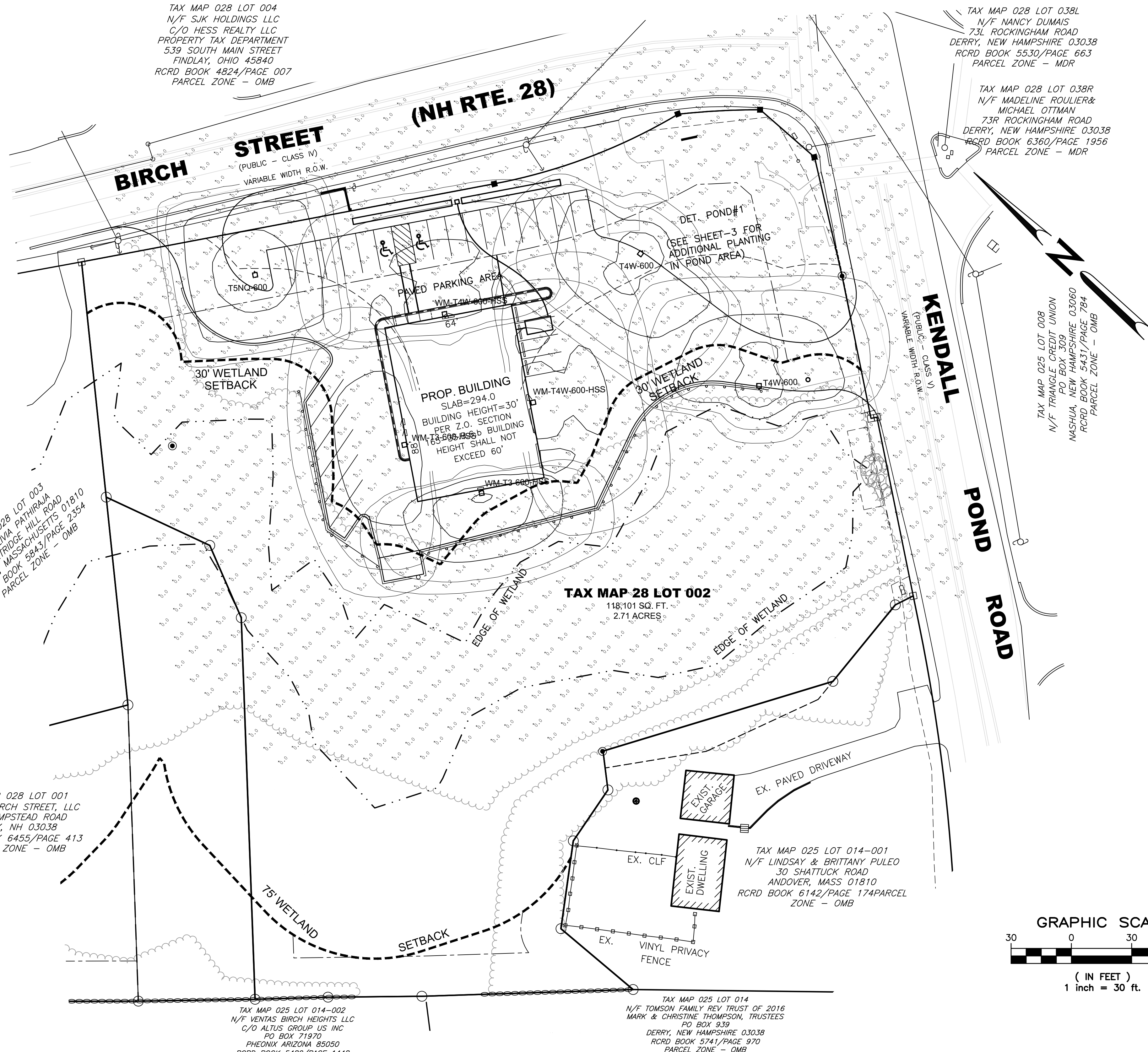
TAX MAP 028 LOT 003  
N/F OLIVIA PATHIRAJA  
13 PARTRIDGE HILL ROAD  
ANDOVER, MASSACHUSETTS 01810  
RCRD BOOK 5843/PAGE 2354  
PARCEL ZONE - OMB


TAX MAP 028 LOT 001  
N/F 71 BIRCH STREET, LLC  
230 HAMPSTEAD ROAD  
DERRY, NH 03038  
RCRD BOOK 6455/PAGE 413  
PARCEL ZONE - OMB

TAX MAP 025 LOT 014-002  
N/F VENTAS BIRCH HEIGHTS LLC  
C/O ALTUS GROUP US INC  
PO BOX 71970  
PHOENIX ARIZONA 85050  
RCRD BOOK 5482/PAGE 1448  
PARCEL ZONE - OMB

TAX MAP 025 LOT 014  
N/F TOMSON FAMILY REV TRUST OF 2016  
MARK & CHRISTINE THOMPSON, TRUSTEES  
PO BOX 939  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 5741/PAGE 970  
PARCEL ZONE - OMB


TAX MAP 025 LOT 014-001  
N/F LINDSAY & BRITTANY PULEO  
30 SHATTUCK ROAD  
ANDOVER, MASS 01810  
RCRD BOOK 6142/PAGE 174  
PARCEL ZONE - OMB



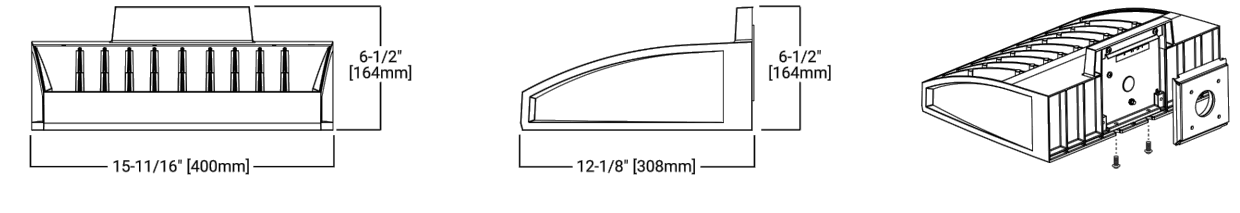


**McGraw-Edison**  
**GWC Galleon Wall**  
Wall Mount Luminaire

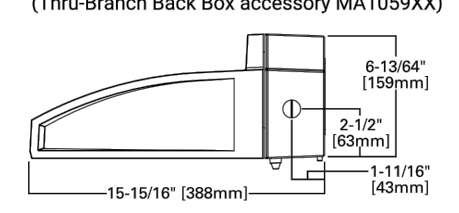
**Product Features**



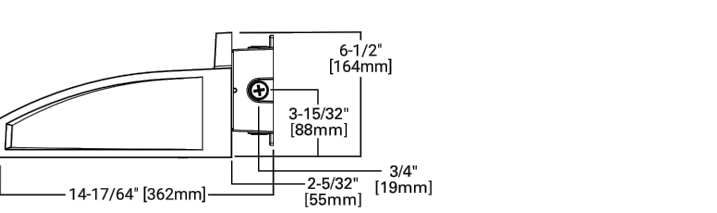
**Dimensional Details**  
Net Weight: 17.0 lbs (7.7 kgs)



**GWC with CBP option installed**  
(Thru-Branch Back Box accessory MA1059XX)

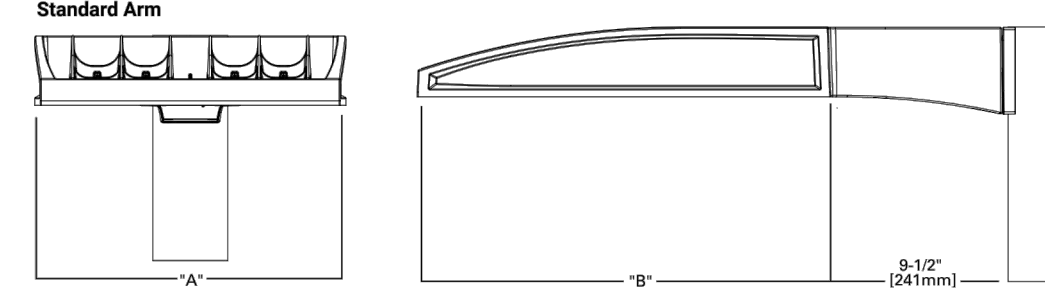


**GWC with accessory BB/GWCXX Back Box installed**




**WALL MOUNT LIGHTING DETAIL**  
(NOT TO SCALE)

**Standard Arm**




Number of Light Spheres	Width "A"	Housing Length "B"	Weight with Standard or OIM Arm	EPA with Standard or OIM Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTE: For arm selection requirements and additional line art, see Mounting Details section.



**McGraw-Edison**  
**GALN Galleon II**  
Area / Site Luminaire

**Product Features**







**POLE LIGHTING DETAIL**  
(NOT TO SCALE)

**LIGHTING PLAN**  
**TAX MAP 28 LOT 002**  
**#71 BIRCH STREET**  
**DERRY, NEW HAMPSHIRE 03038**

OWNER OF RECORD / PREPARED FOR  
71 BIRCH STREET, LLC  
230 HAMPSTEAD ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6455/PAGE 413

SCALE: 1"=30'      SHEET 5 of 12      JUNE 23, 2023

Luminaire Schedule									
Symbol	Qty	Label	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts	[MANUFAC]	Mounting Height
	2	WM-T4W-600-HSS	GWC-SA1A-740-U-T4W-HSS	1.000	3608	34	68	COOPER LIGHTING SOLUTIONS	25
	2	WM-T3-600-HSS	GWC-SA1A-740-U-T3-HSS	1.000	3627	34	68	COOPER LIGHTING SOLUTIONS	20, 25
	1	T5NQ-600	GALN-SA1A-740-U-5NQ	1.000	4829	33	33	COOPER LIGHTING SOLUTIONS	20
	2	T4W-600	GALN-SA1A-740-U-T4W	1.000	4631	33	66	COOPER LIGHTING SOLUTIONS	20

TRC 2/16/24 COMMENTS	2/20/24
CONSERVATION COM.	10/12/23
TRC 7/28/23 COMMENTS	9/15/23
REVISIONS	DATE

APPROVED BY THE TOWN OF DERRY, NH PLANNING BOARD

On Date: \_\_\_\_\_

Certified By: \_\_\_\_\_

CHAIRMAN

SECRETARY



**BENCHMARK LLC**  
Consulting Engineers Land Planners  
1F Commons Drive, Suite 35  
Londonderry, New Hampshire 03053  
Phone: (603) 437-5000

**LEGEND:**

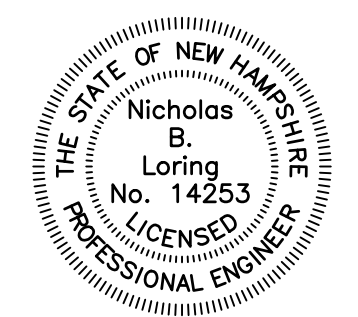
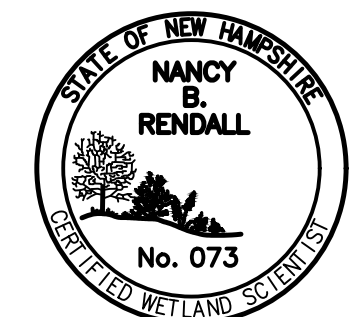
- TREELINE
- STONEWALL
- 222 2 FT CONTOUR
- 220 10 FT CONTOUR
- 220 PROPOSED CONTOUR
- EOP EDGE OF PAVEMENT
- EOG EDGE OF GRAVEL
- EDGE OF WETLAND
- PROPOSED SILT FENCE
- EXIST. GAS MAIN
- EXIST. OVERHEAD WIRES
- EXIST. HYDRANT & WATER MAIN
- EXIST. SEWER MAIN
- EXIST. TELECOM. LINE
- DRAINAGE LINE W/ CATCH BASIN FLOW DIRECTION
- SEWER MANHOLE W/ SEWER LINE
- UTILITY POLE W/ GUY WIRE
- WELL
- TEST PIT
- PROP. VERTICAL GRANITE CURB
- EXISTING STRUCTURE
- EXIST. TELECOM LINE
- PROP. GAS SERVICE
- PROP. WATER SERVICE
- UGU PROPOSED ELECTRICAL SERVICE

**ABBREVIATIONS:**

- UP UTILITY POLE
- EOP EDGE OF PAVEMENT
- EOG EDGE OF GRAVEL
- STY STORY
- WD WOOD
- FR FRAME
- TYP TYPICAL
- PROP PROPOSED
- EDA EFFLUENT DISPOSAL AREA
- RCRD ROCKINGHAM COUNTY REGISTRY OF DEEDS
- RMP RAMP

**NOTES:**

- SEE SHEET #1 FOR ADDITIONAL NOTES
- BOUNDARY INFORMATION PROVIDED IN CONJUNCTION WITH: RANGEWAY LAND SURVEY & DESIGN 252 DANIEL PLUMMER ROAD GOFFSTOWN, NEW HAMPSHIRE 03045 603-642-1602
- WETLAND MAPPING PROVIDED BY: BLUE MOON ENVIRONMENTAL, INC., CONCORD, NH NANCY RENDALL CWS
- IF DURING THE BUILDING PERMIT PROCESS FIRE PROTECTION IS DETERMINED TO BE REQUIRED THEN THE SERVICE LINE SIZE SHALL DETERMINED BY A FIRE PROTECTION ENGINEER.

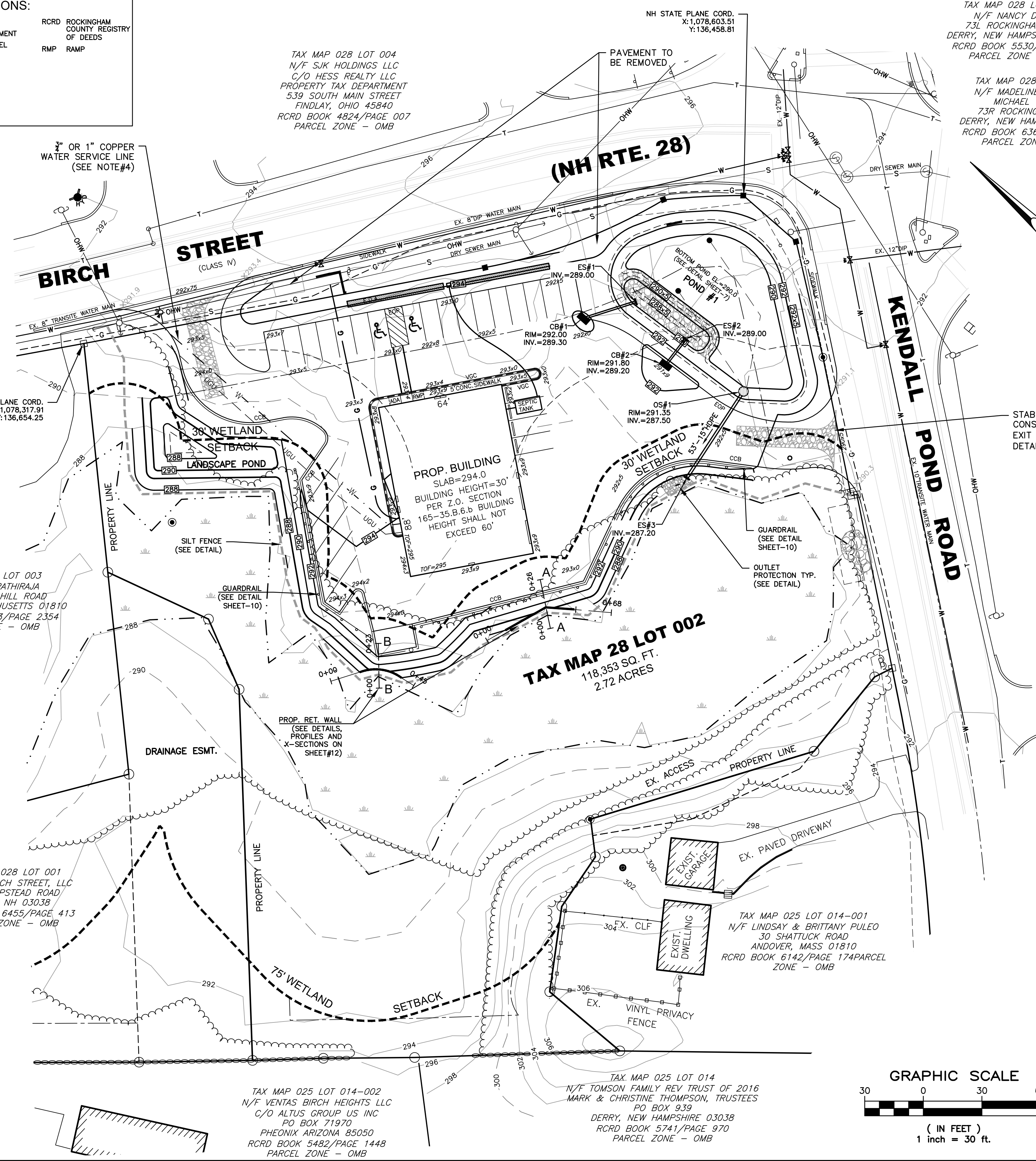


TAX MAP 028 LOT 038L  
N/F NANCY DUMAIS  
73L ROCKINGHAM ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 5530/PAGE 663  
PARCEL ZONE - MDR

TAX MAP 028 LOT 038R  
N/F MADELINE ROULIER & MICHAEL OTTMAN  
73R ROCKINGHAM ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6360/PAGE 1956  
PARCEL ZONE - MDR

TAX MAP 025 LOT 008  
N/F TRIANGLE CREDIT UNION  
PO BOX 309  
NASHUA, NEW HAMPSHIRE 03060  
RCRD BOOK 5431/PAGE 784  
PARCEL ZONE - OMB

STABILIZED CONSTRUCTION EXIT (SEE DETAIL)



TAX MAP 028 LOT 003  
N/F OLIVIA PATHIRAJA  
13 PARTRIDGE HILL ROAD  
ANDOVER, MASSACHUSETTS 01810  
RCRD BOOK 5843/PAGE 2354  
PARCEL ZONE - OMB

TAX MAP 028 LOT 001  
N/F 71 BIRCH STREET, LLC  
230 HAMPSTEAD ROAD  
DERRY, NH 03038  
RCRD BOOK 6455/PAGE 413  
PARCEL ZONE - OMB

TAX MAP 025 LOT 014-001  
N/F LINDSAY & BRITTANY PULEO  
30 SHATTUCK ROAD  
ANDOVER, MASS 01810  
RCRD BOOK 6142/PAGE 174 PARCEL ZONE - OMB

TAX MAP 025 LOT 014-002  
N/F VENTAS BIRCH HEIGHTS LLC  
C/O ALTUS GROUP US INC  
PO BOX 71970  
PHEONIX ARIZONA 85050  
RCRD BOOK 5482/PAGE 1448  
PARCEL ZONE - OMB

TAX MAP 025 LOT 014  
N/F TOMSON FAMILY REV TRUST OF 2016  
MARK & CHRISTINE THOMPSON, TRUSTEES  
PO BOX 939  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 5741/PAGE 970  
PARCEL ZONE - OMB

**BENCHMARK**  
ALUMINUM DISK ON IRON ROD,  
IN PAVEMENT ALONG THE  
NORTHERLY SIDE OF KENDALL  
POND  
ELEVATION 290.89'  
NORTH ORIENTATION IS NH GRID NAD83 &  
ELEVATION DATUM IS NAVD88 BASED ON  
GPS DATA.

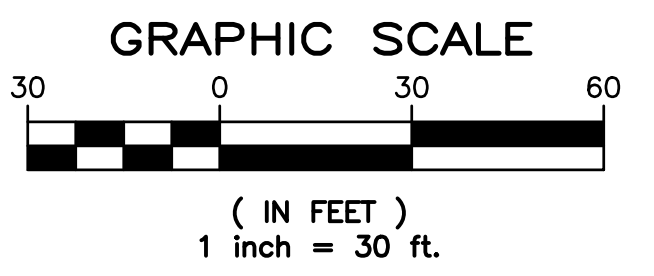
**GRADING, EROSION CONTROL & UTILITIES PLAN**  
**TAX MAP 28 LOT 002**  
#71 BIRCH STREET  
DERRY, NEW HAMPSHIRE 03038  
OWNER OF RECORD / PREPARED FOR  
71 BIRCH STREET, LLC  
230 HAMPSTEAD ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6455/PAGE 413

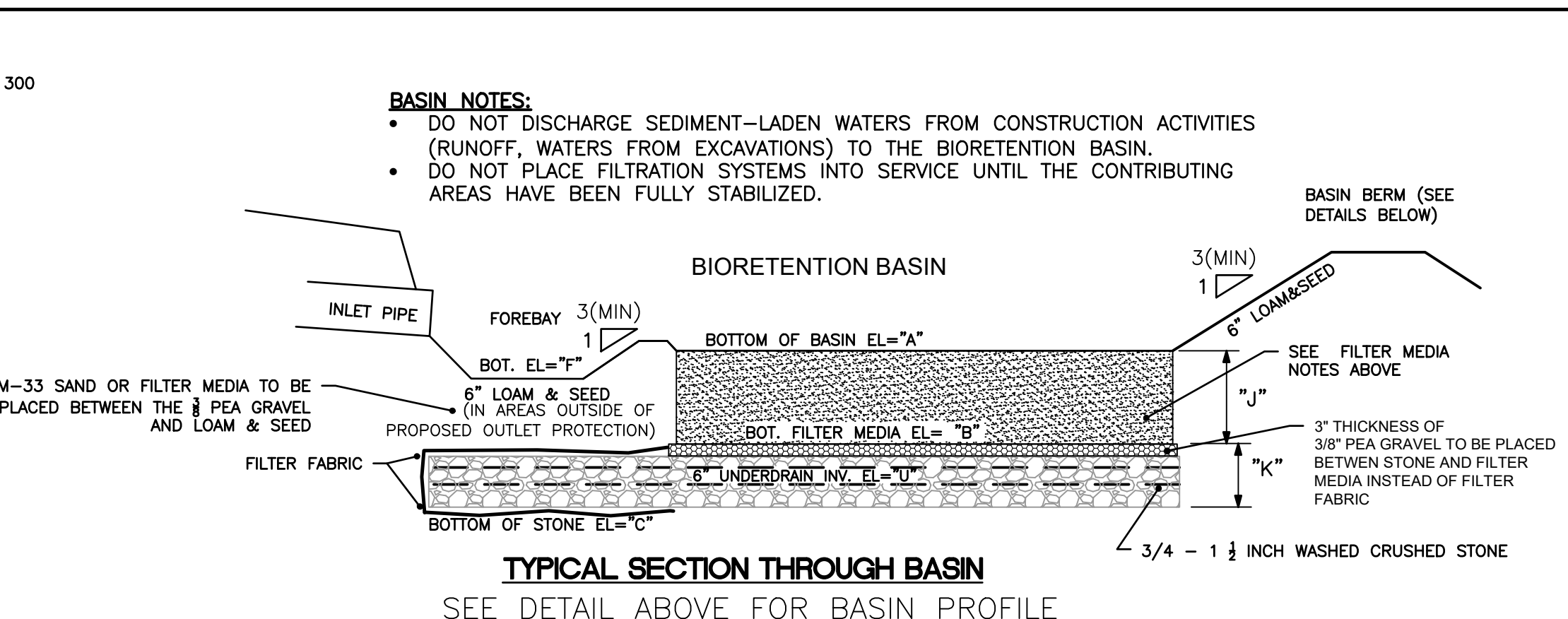
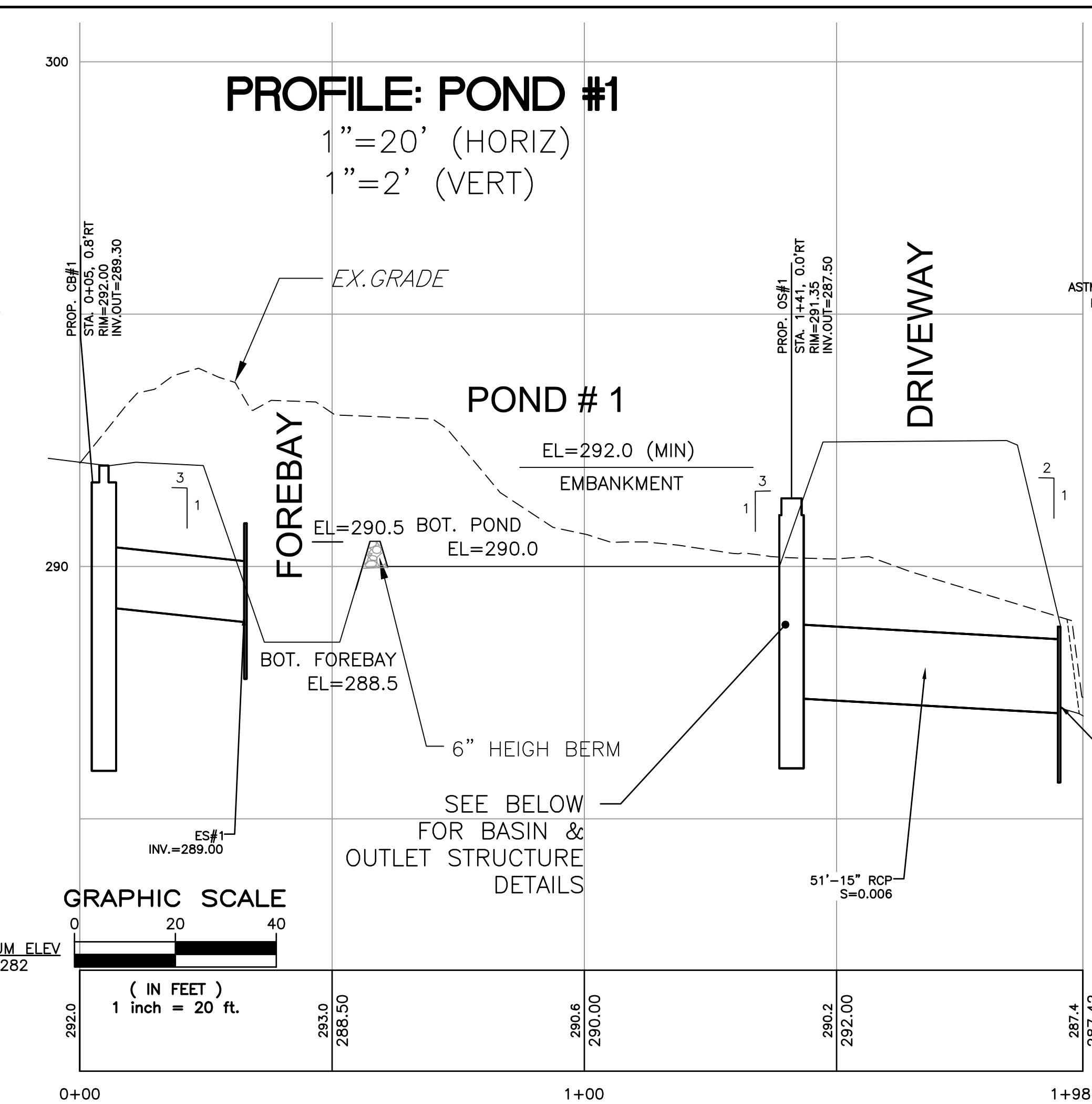
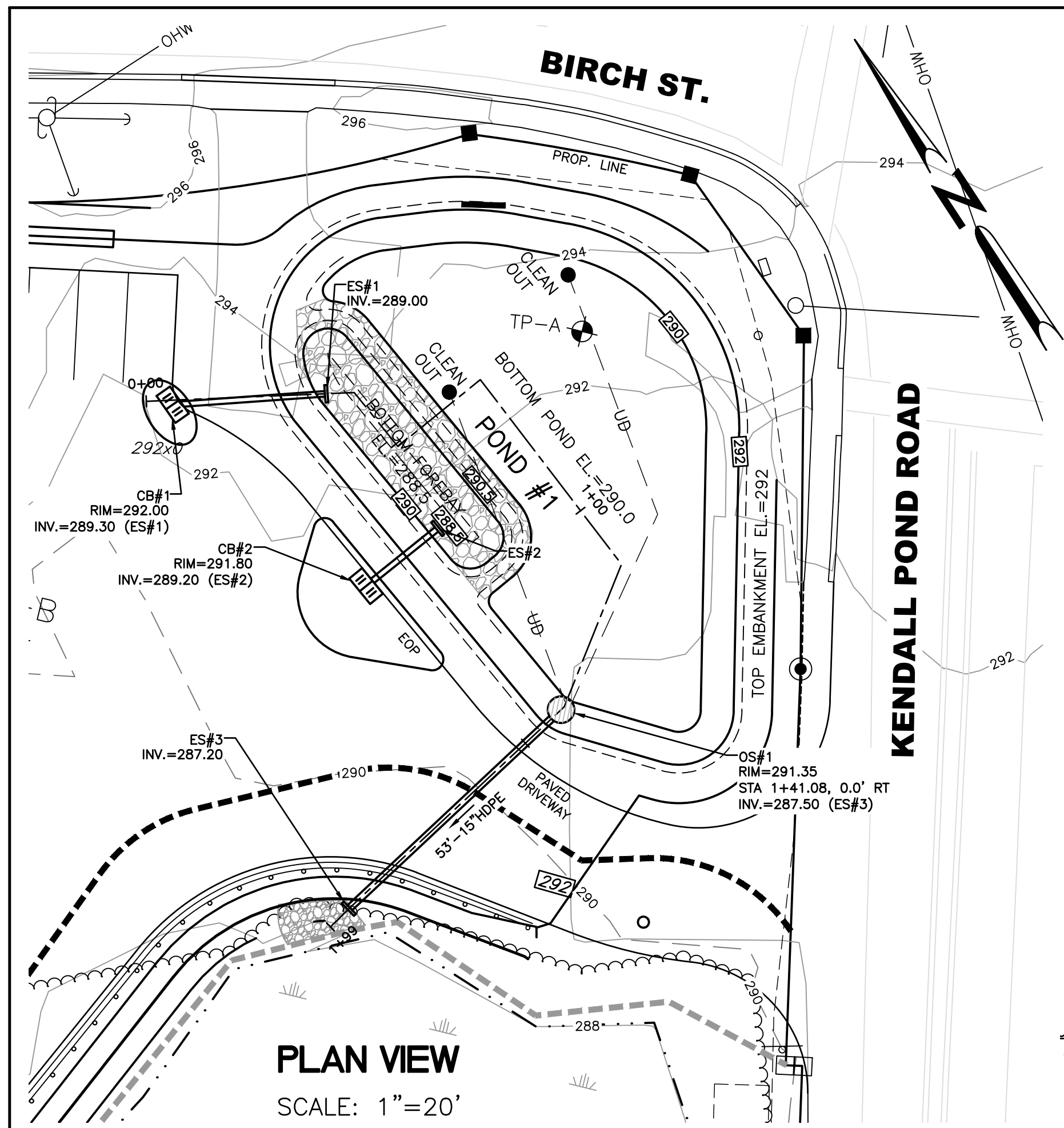
SCALE: 1"=30' SHEET 6 of 12 JUNE 23, 2023

REVISIONS	DATE
TRC 2/16/24 COMMENTS	2/20/24
CONSERVATION COM.	10/12/23
TRC 7/28/23 COMMENTS	9/15/23

**BENCHMARK LLC**  
Consulting Engineers Land Planners  
1F Commons Drive, Suite 35  
Londonderry, New Hampshire 03053  
Phone: (603) 437-5000

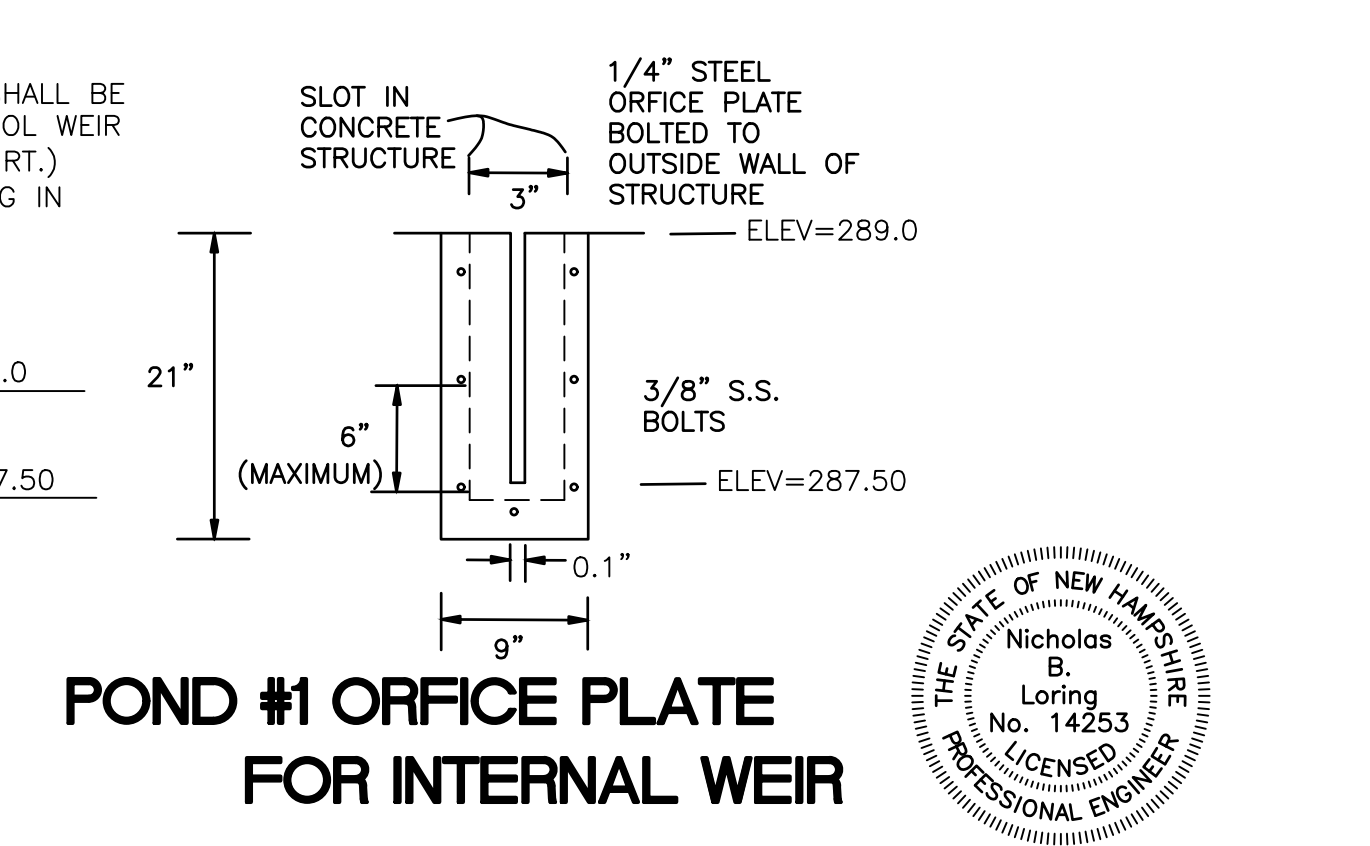
APPROVED BY THE TOWN OF DERRY, NH PLANNING BOARD  
On Date: \_\_\_\_\_  
Certified By: \_\_\_\_\_  
CHAIRMAN  
SECRETARY



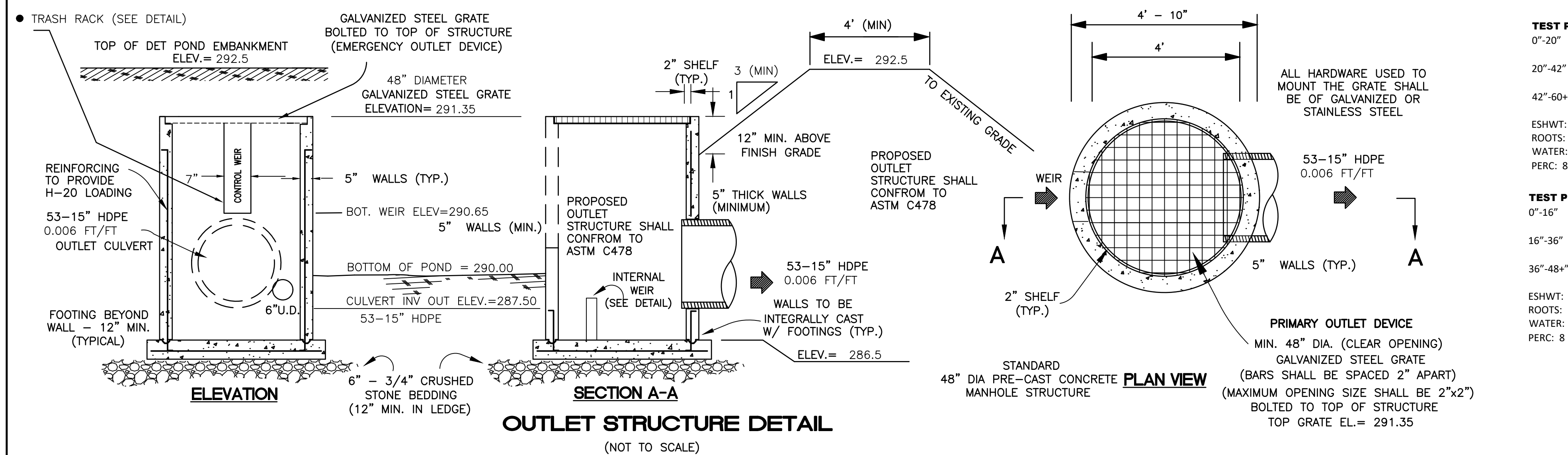
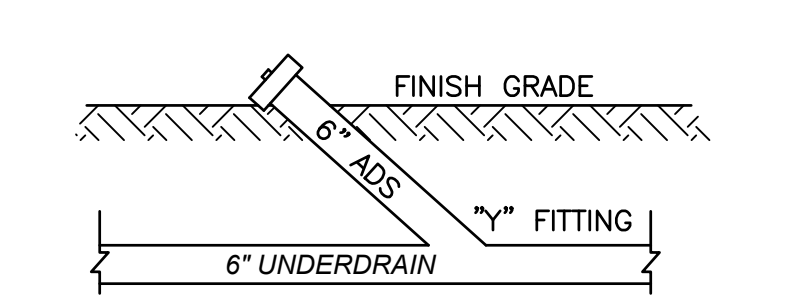


**BIORETENTION BASIN SCHEDULE**

LOCATION	BOT. BASIN EL. "A"	BOT. FILTER MEDIA EL. "B"	BOT. STONE EL. "C"	UNDERDRAIN EL. "U"	FILTER DEPTH "J"	STONE DEPTH "K"	FOREBAY BOTTOM ELEV= "F"
POND #1	290.00	288.50	287.25	287.50	18"	15"	289.0



- NOTES:**
- 1) ALL CEMENT CONCRETE TO BE 4,000 PSI (MIN.)
  - 2) GALVANIZED STEEL GRATE SHALL BE BOLTED TO THE TOP OF THE STRUCTURE
  - 3) OUTLET PIPE SHALL NOT BE LESS THAN 15" (MINIMUM)
  - 4) ALL OPENINGS SHALL BE CAST IN AS REQUIRED
  - 5) PRECAST CONCRETE REINFORCED 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
  - 7) MINIMUM EMBANKMENT ELEVATION TO BE 12" ABOVE THE 50-YEAR STORM ELEVATION.
  - 8) ALL PIPE CONNECTIONS, INCLUDING PIPE-TO-RISER JOINT AND ALL PIPE COUPLINGS SHALL BE WATERTIGHT.



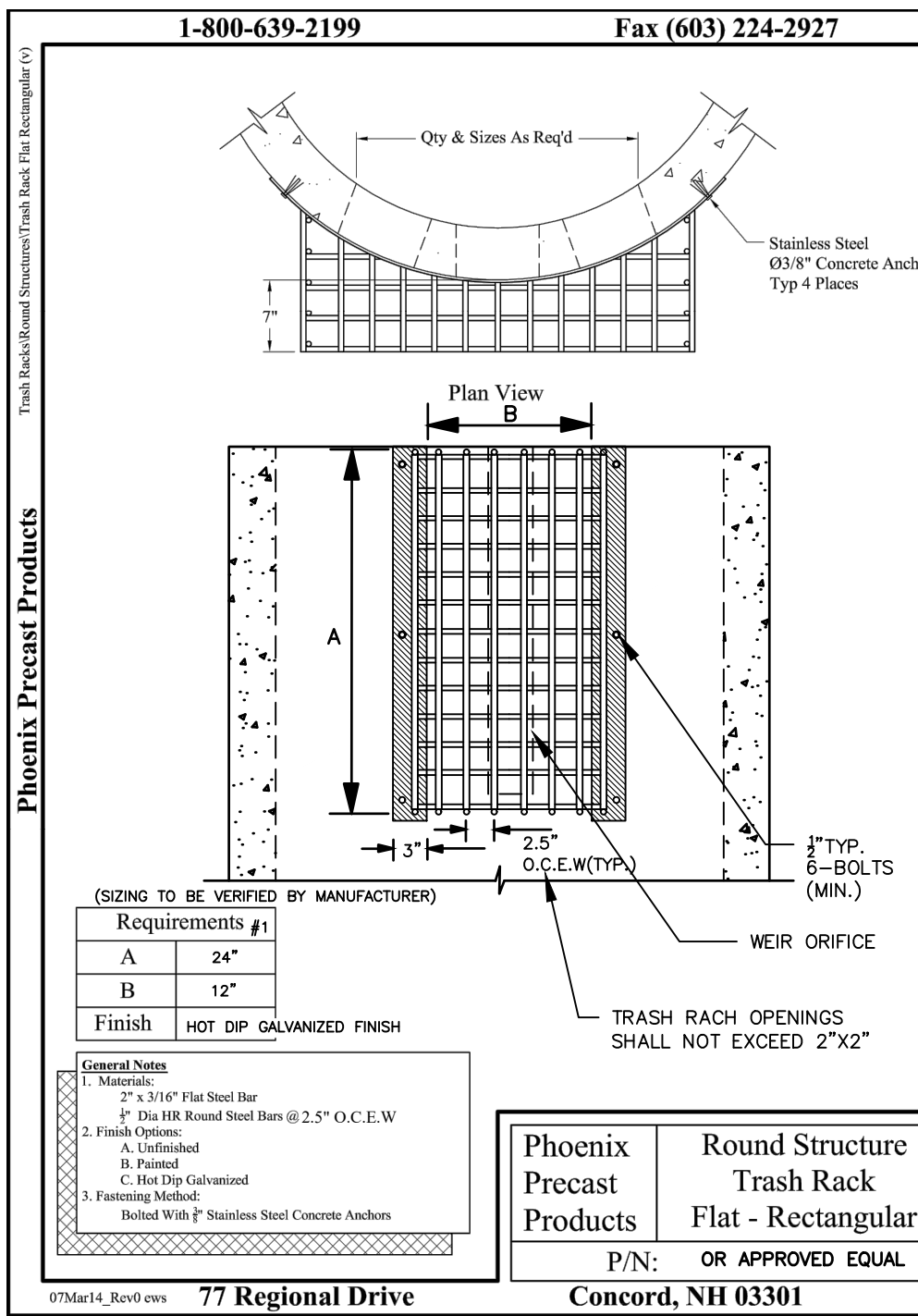
**POND #1 DETAILS**  
**TAX MAP 28 LOT 002**  
**#71 BIRCH STREET**  
**DERRY, NEW HAMPSHIRE 03038**

OWNER OF RECORD / PREPARED FOR  
71 BIRCH STREET, LLC  
230 HAMPSTEAD ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6455/PAGE 413

SCALE: 1"=20' SHEET 7 of 12 JUNE 23, 2023

APPROVED BY THE TOWN OF DERRY, NH PLANNING BOARD  
On Date: \_\_\_\_\_  
Certified By: \_\_\_\_\_  
CHAIRMAN \_\_\_\_\_  
SECRETARY \_\_\_\_\_

**BENCHMARK LLC**  
Consulting Engineers Land Planners  
1F Commons Drive, Suite 35  
Londonderry, New Hampshire 03053  
Phone: (603) 437-5000



**BIO-RETENTION SOIL MIX SPECIFICATIONS & NOTES:**  
FROM UNH STORMWATER CENTER BIORETENTION SOIL SPECIFICATIONS SEPTEMBER 2021 PART 2

2.1 SOIL MEDIA SPECIFIED ACCORDING TO PERFORMANCE REQUIREMENTS PARTICLE SIZE DISTRIBUTION ACCORDING TO ASTM D422 (STANDARD TEST METHOD FOR PARTICLE SIZE ANALYSIS OF SOILS).

- PARTICLE SIZE DISTRIBUTION BY SEPARATES:
  - EXCLUDES ANY MATERIAL > 4.76 mm = 0%
  - VERY COARSE SAND/GRAVEL: GRAVEL (2.0 TO 4.76 MM) 5% MAXIMUM (PERCENT BY DRY WEIGHT)
  - SAND (0.42 TO 2.0 MM) 90-80% (PERCENT BY DRY WEIGHT)
  - SILT/CLAY (LESS THAN 0.075 MM) 5% MAXIMUM (PERCENT BY DRY WEIGHT)

TABLE 1: ACCEPTABLE PARTICLE SIZE DISTRIBUTION OF FINAL BIORETENTION SOIL MIX

SIEVE #	SIEVE SIZE IN (MM)	% PASSING
4	0.187 (4.76)	100
10	0.075 (2)	95
40	0.017 (0.42)	10-20
200	0.003 (0.075)	<5

- FRAGMENT SIZE DISTRIBUTION:
  - STICKS AND ROOTS: SHOULD BE MINIMIZED AND PREFERABLY ELIMINATED OR LIMITED TO NOTHING LARGER THAN 4.76MM
  - DEBRIS AND OTHER FOREIGN MATERIALS: SHOULD BE MINIMIZED
- PERCENT OF ORGANIC MATTER: MINIMUM 3 PERCENT BY VOLUME AND MAXIMUM 10 PERCENT BY VOLUME
- SOIL REACTION: pH OF 6 TO 7
- CEC OF TOTAL SOIL: MINIMUM 10 meq/100 mL AT pH OF 7.0
- SOIL INFILTRATION RATE: MINIMUM OF 20 INCHES PER HOUR (PREFERABLY IN THE RANGE OF 20-30 INCHES/HOUR PROVIDING A 3X FACTOR OF SAFETY TO ACCOUNT FOR AGING AND SURFACE CLOGGING)
- BASIS-OF-DESIGN PRODUCT: SUBJECT TO COMPLIANCE WITH REQUIREMENTS INDICATED ON DRAWINGS
- BASIC PROPERTIES: MANUFACTURED SOIL SHALL NOT CONTAIN THE FOLLOWING:
  - UNACCEPTABLE MATERIALS: CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, BUILDING DEBRIS, ASPHALT BRICKS, OILS, GASOLINE, DIESEL FUEL, PAINT THINNER, TURPENTINE, TAR, ROOFING COMPOUND, ACID, SOLID WASTE OR OTHER EXTRANEIOUS MATERIAL THAT ARE HARMFUL TO PLANT GROWTH.
  - UNSATURABLE MATERIALS: STONES, ROOTS, PLANTS, SOD, CLAY LUMPS, AND POCKETS OF COARSE SAND THAT EXCEED A COMBINED MAXIMUM OF 5 PERCENT BY DRY WEIGHT OF THE MANUFACTURED SOIL
  - LARGE MATERIALS: STONES, CLODS, ROOTS, CLAY LUMPS, AND POCKETS OF COARSE SAND EXCEEDING 0.187 INCHES (4.76 MM) IN ANY DIMENSION.
- ACCEPTABLE ORGANIC SOIL AMENDMENTS
  - NO COMPOST SHOULD BE USED IN THE PLANTING MIX
  - SPHAGNUM PEAT: PARTIALLY DECOMPOSED SPHAGNUM PEAT MOSS, FINELY DIVIDED OR OF GRANULAR TEXTURE WITH 100 PERCENT PASSING THROUGH A 1/2-INCH (13-MM) SIEVE, A PH OF 3.4 TO 4.8
  - WOOD DERIVATIVES: SHREDDED WOOD, WOOD CHIPS, GROUND BARK, OR WOOD WASTE, OF UNIFORM TEXTURE AND FREE OF STONES, STICKS, SOIL, OR TOXIC MATERIALS

COMPACTION: COMPACT EACH BLENDED LIFT OF SOIL MEDIA TO 75 PERCENT OF MAXIMUM STANDARD PROCTOR DENSITY ACCORDING TO ASTM D 698

**DETENTION POND CONSTRUCTION NOTES:**

- EMBANKMENT PREPARATION. THE AREA UNDER AND WITHIN 10' OF THE EMBANKMENT SHALL BE CLEARED OF TREES, LOGS, STUMPS, ROOTS, BRUSH, BOULDERS, SOD, PEAT AND OTHER UNSUITABLE MATERIAL. ALL UNSUITABLE SOILS SHALL BE EXCAVATED AND REMOVED FROM THE EMBANKMENT AREA.
- FILL MATERIAL FOR EMBANKMENTS SHALL MEET THE FOLLOWING GRADATION:  
SIEVE SIZE: % PASSING (BY WEIGHT)  
4" 100  
#10 70 - 85  
#40 50 - 60  
#200 40 - 60
- NATIVE SUITABLE EARTH MATERIAL CAN BE USED FOR FILL UNDER THE EMBANKMENT. DO NOT USE HIGHLY PERMEABLE SOILS SUCH AS SANDS AND GRAVELS. THE MATERIAL PLACED IN FILL SHALL BE FREE OF DETRIMENTAL AMOUNTS OF SOD, ROOTS, FROZEN SOIL, STONES MORE THAN 6" IN DIAMETER AND/ OR OTHER OBJECTIONABLE MATERIAL. SELECTED BACKFILL MATERIALS SHALL BE PLACED AROUND STRUCTURES AND PIPE CONDUITS AT ABOUT THE SAME RATE ON ALL SIDES TO PREVENT DAMAGE FROM UNEQUAL LOADING. THE PLACING AND SPREADING OF FILL MATERIAL SHALL BE STARTED AT THE LOWEST POINT OF THE DETENTION POND EMBANKMENT AND THE FILL SHALL BE BROUGHT UP IN HORIZONTAL LAYERS NOT MORE THAN ONE (1) FOOT THICK. THE DISTRIBUTION AND GRADATION OF F MATERIALS SHALL BE SUCH THAT NO LENSES, POCKETS, STREAKS OR LAYERS OF MATERIAL DIFFER SUBSTANTIALLY IN TEXTURE OR GRADATION FROM THE SURROUNDING MATERIAL.
- MOISTURE CONTROL. THE MOISTURE CONTENT OF THE FILL MATERIAL SHALL BE ADEQUATE FOR OBTAINING THE REQUIRED COMPACTION. MATERIAL THAT IS TOO WET SHALL BE DRIED TO MEET THIS REQUIREMENT AND THE MATERIAL THAT IS TOO DRY SHALL HAVE WATER ADDED TO IT AND MIXED UNTIL THIS REQUIREMENT IS MET.
- COMPACTION. CONSTRUCTION EQUIPMENT SHALL BE OPERATED OVER THE AREAS OF EACH LAYER OF FILL TO ENSURE THAT THE REQUIRED COMPACTION IS OBTAINED. SPECIAL EQUIPMENT SUCH AS MECHANICAL COMPACTOR AND/ OR VIBRATORY ROLLER SHALL BE USED IF NEEDED TO OBTAIN THE REQUIRED COMPACTION OF 95% OR BETTER (95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST - ASTM D 1557). FILL ADJACENT TO STRUCTURES AND PIPE CONDUITS SHALL BE COMPACTED TO A DENSITY EQUIVALENT TO THAT OF SURROUNDING FILL BY MEANS OF HAND TAMPING, POWER TAMPERS AND/ OR PLATE VIBRATORS.
- PROTECTION. ALL EXPOSED SURFACES OF EMBANKMENT SHALL BE LOAMED AND SEEDED. USE OF EROSION CONTROL MATS IS HIGHLY RECOMMENDED ON SLOPES STEEPER THAN 3/1 (H/V).

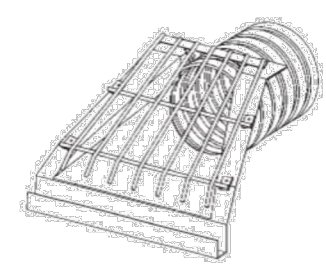
**OPERATION & MAINTENANCE PONDS & OUTLET STRUCTURES:**

- POND EMBANKMENT. POND EMBANKMENTS SHALL BE INSPECTED ANNUALLY TO DETERMINE IF RODENT BURROWS, WET AREAS OR EROSION OF FILLS TAKING PLACE. REPAIRS SHALL BE PERFORMED WITH SUITABLE MATERIAL (SEE CONSTRUCTION NOTES) AND PROPER GRASS COVER SHALL BE MAINTAINED ON EARTH EMBANKMENTS AT ALL TIMES.
- VEGETATION. THE VEGETATED AREA OF STRUCTURES SHALL BE PROTECTED BY DAMAGE FROM EROSION, FIRE, GRAZING AND TRAFFIC. TREES AND SHRUBS SHALL BE KEPT OFF THE EMBANKMENTS.
- INLETS. END SECTIONS AND PIPE INLETS SHALL BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. ACCUMULATED DEBRIS AND SEDIMENT SHALL BE REMOVED. RIP RAP OUTLET PROTECTION SHALL BE CLEANED AND REPLACED IF NECESSARY.
- OUTLETS. OUTLET STRUCTURES AND PIPES SHALL BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. THE CONDITION OF THE OUTLET STRUCTURES AND PIPES SHALL BE NOTED AND REPAIRS MADE AS NECESSARY. IF EROSION IS TAKING PLACE, THAN APPROPRIATE CORRECTIVE MEASURES SHALL BE TAKEN TO STABILIZE AND PROTECT THE OUTLET.
- SEDIMENT. THE DETENTION PONDS SHALL BE CONTINUALLY CHECKED FOR SEDIMENT. WHEN SEDIMENT REACHES AN ELEVATION 3" BELOW THE OUTLET CONTROL DEVICE, THE SEDIMENT ADJACENT TO THE OUTLET STRUCTURE SHALL BE REMOVED AND PROPERLY DISPOSED OFF. AN ADDITIONAL NH WETLANDS BOARD PERMIT MAY BE REQUIRED TO PERFORM WORK IN WETLAND AREAS.
- SAFETY INSPECTIONS. THE OPERATION OF THE DETENTION POND AND OUTLET STRUCTURE SHALL BE VISUALLY CHECKED FOR EROSION AND SEEPAGE AFTER EVERY MAJOR STORM.
- SAFETY. THE DETENTION AREA SHALL INCORPORATE ALL POSSIBLE SAFETY PRECAUTIONS INCLUDING WARNING SIGNS.
- PROPOSED OWNER'S NAME:  
71 BIRCH STREET, LLC  
230 HAMPSTEAD ROAD  
DERRY, NEW HAMPSHIRE 03038

**ADS Miscellaneous Products**

**END SECTION TRASH GUARDS**

Part #	Size
1290DA	12"
1590DA	15"
1890DA	18"
2490DA	24"
3090DA	30"
3690DA	36"



NOTE: F.E.S TRASH GUARD TO BE INSTALLED ON FES#3 (END OF DET. POND #1 OUTLET CULVERT)

**F.E.S. TRASH GUARD DETAIL**  
NO SCALE

**POND #1 PLANTING SCHEDULE**

SYMBOL	DESCRIPTION	MIN. HEIGHT/CAL.	#
●	SHRUBS	3 GAL.	30

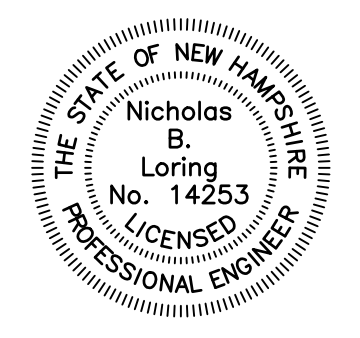
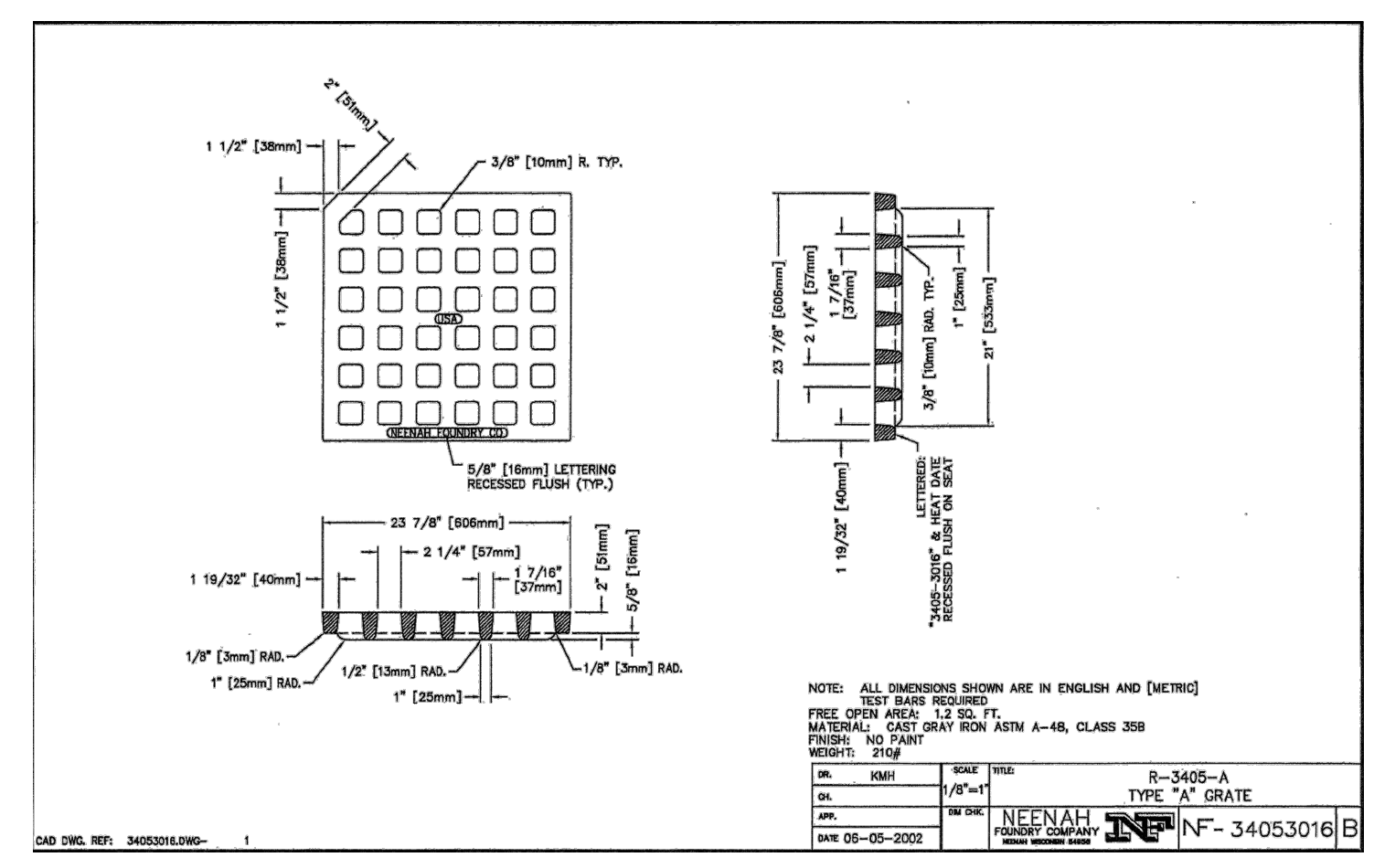
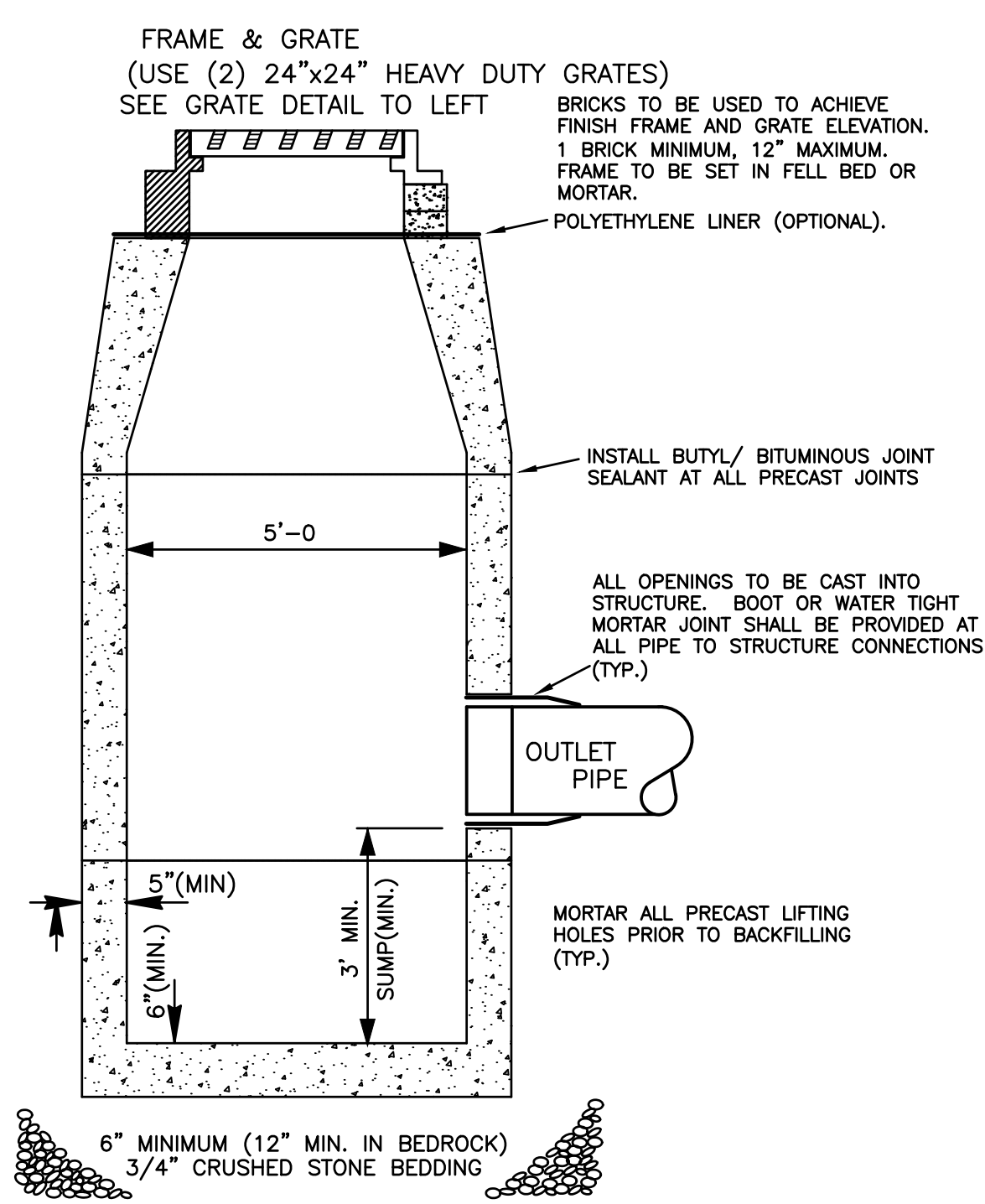
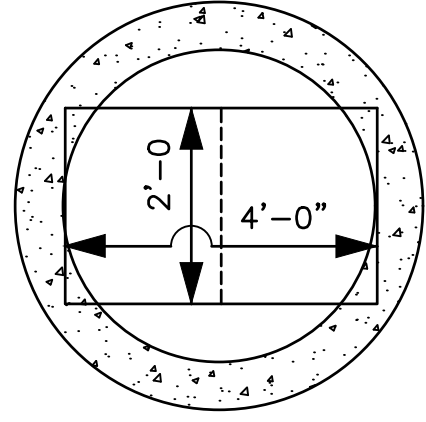
**SHRUB PLANTINGS:**  
SHRUBS SHALL BE A VARIED MIX OF THE FOLLOWING TYPES PLANTED WITHIN THE BOTTOM AND SIDE SLOPES OF POND#1:

- GOLDEN ALEXANDERS
- PURPLE DOME ASTERS
- JOE PIE WEED (LITTLE JOE CULTIVAR)

ADDITIONAL PLANTINGS AND OPTIONS SHALL BE SUBSTITUTED FROM THE UNH "NATIVE PLANTS FOR NEW ENGLAND RAIN GARDENS"

**POLYETHYLENE LINER NOTES:**

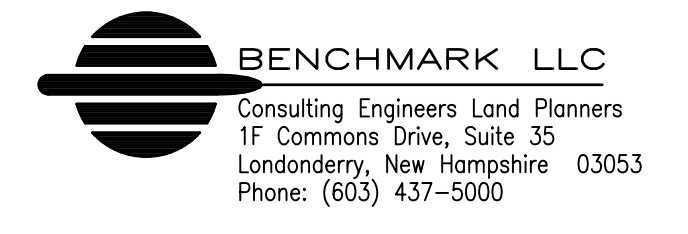
- ALL CATCH BASINS ARE RECOMMENDED TO BE OUTFITTED WITH A POLYETHYLENE LINER DOWNSPOUT. POLYETHYLENE LINER (NHDOT ITEM 604.0007) SHALL BE FABRICATED AT THE SHOP. DOWNSPOUT SHALL BE EXTRUSION FILLET WELDED TO THE POLYETHYLENE SHEET. PLACE A CONTINUOUS BEAD OF AN APPROVED SILICONE SEALANT BETWEEN THE FRAME AND POLYETHYLENE SHEET.
- PLACE CLASS AA CONCRETE TO 2" BELOW THE TOP OF GRATE ELEVATION (SUBSIDIARY TO DRAINAGE STRUCTURE) 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). CENTER OF THE GRATE AND FRAME MAY BE SHIFTED A MAXIMUM OF 3" FROM THE CENTER OF THE DOWNSPOUT IN ANY DIRECTION.



**POND #1 DETAILS TAX MAP 28 LOT 002**  
#71 BIRCH STREET  
DERRY, NEW HAMPSHIRE 03038  
OWNER OF RECORD / PREPARED FOR  
71 BIRCH STREET, LLC  
230 HAMPSTEAD ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6455/PAGE 413

SCALE: 1"=20'  
SHEET 8 of 12  
JUNE 23, 2023

TRC	DATE	COMMENTS	DATE
TRC 2/16/24	COMMENTS	2/20/24	
CONSERVATION COM.		10/12/23	
TRC 7/28/23	COMMENTS	9/15/23	
REVISIONS		DATE	



APPROVED BY THE TOWN OF DERRY, NH PLANNING BOARD

On Date: \_\_\_\_\_

Certified By: \_\_\_\_\_

CHAIRMAN \_\_\_\_\_

SECRETARY \_\_\_\_\_

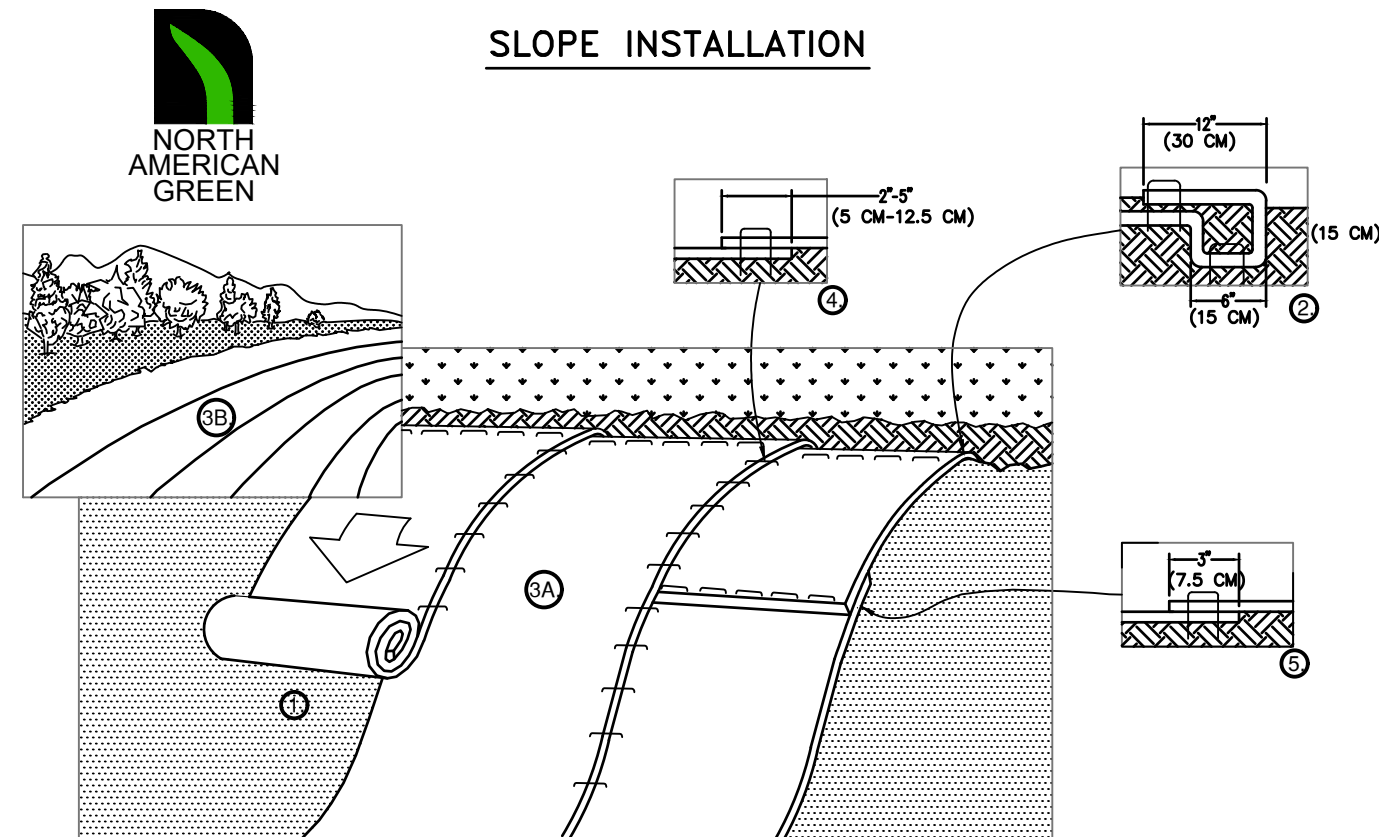


**GENERAL EROSION CONTROL NOTES:**

- PERIMETER CONTROLS MUST BE INSTALLED PRIOR TO EARTH MOVING ACTIVITIES.
- DETENTION POND TO BE INSTALLED BEFORE ROUGH GRADING THE SITE.
- RUNOFF IS TO BE DIRECTED TO TEMPORARY PRACTICES UNTIL THE DETENTION POND IS STABILIZED.
- ALL CUT AND FILL SLOPES SHALL BE SEEDED/ LOADED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
- ROADWAY SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
- 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.
- POND SHALL BE FULLY STABILIZED PRIOR TO DIRECTING RUN-OFF TO THEM.
- ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
  - BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
  - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
  - A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP AS BEEN INSTALLED.
  - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- STABILIZATION SHALL BE ACCOMPLISHED BY LOAMING, FERTILIZING, SEEDING AND MULCHING ALL DISTURBED AREAS OTHER THAN UNDER THE PAVEMENT AS FOLLOWS:
  - LOAM - SCREENED LOAM WITH A MINIMUM DEPTH OF 4"
  - LIME AND FERTILIZER SHALL BE APPLIED PRIOR TO, OR AT THE TIME OF, PERMANENT SEEDING AND INCORPORATED INTO THE SOIL AT THE FOLLOWING RATES:
 

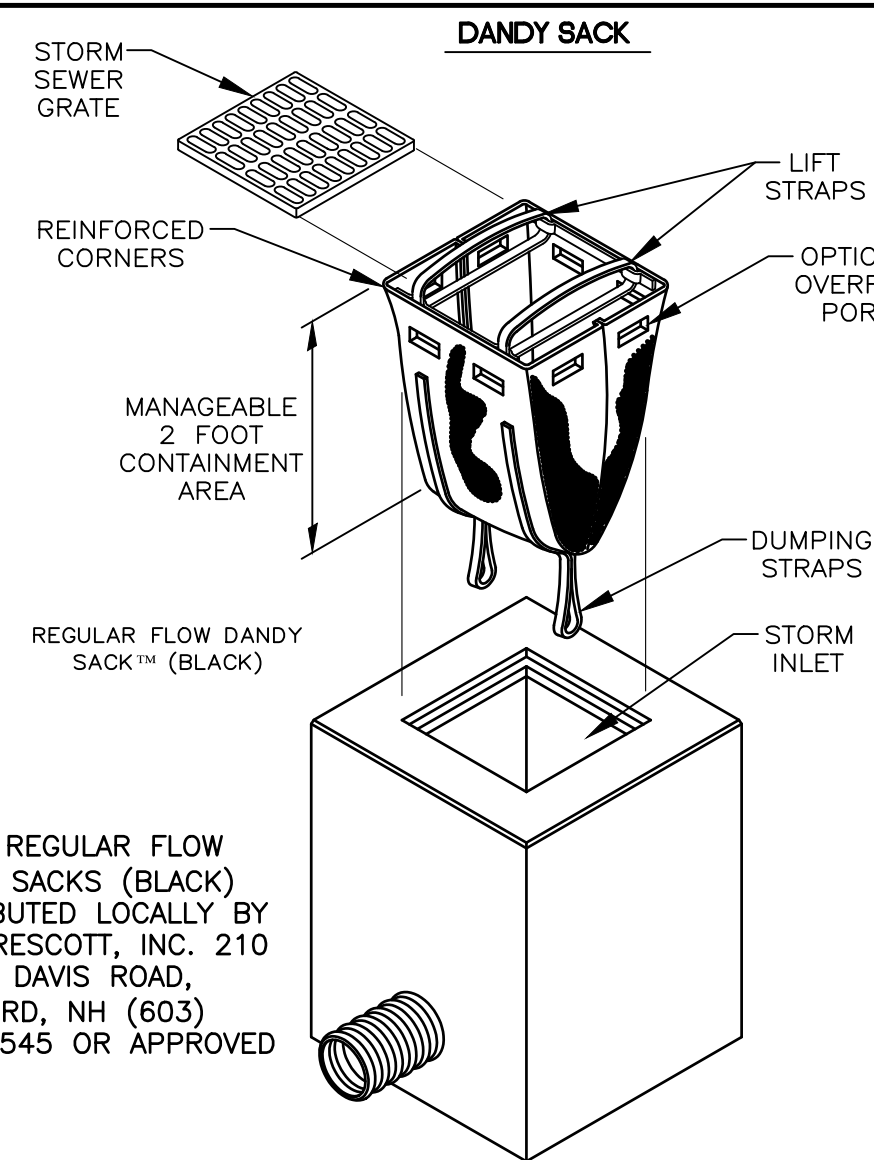
LIMESTONE (AGRICULTURAL)	3,000 LBS/ACRE
COMMERCIAL TURF STARTER FERTILIZER (10-18-10) FOR ESTABLISHMENT ONLY AT 150LBS/ACRE (SUCH AS "GREEN GOLD RENEW")	
  - SEED SELECTION (OR EQUIVALENT) & SEEDING RATES:
 

TEMPORARY:	ANNUAL RYE GRASS @ 50 LBS/ACRE												
PERMANENT:	"ROCKINGHAM COUNTY CONSERVATION MIX" 150LBS/ACRE CONSISTING OF: <table border="1"> <tr> <td>CREeping RED FESCUE</td> <td>35%</td> </tr> <tr> <td>TALL FESCUE</td> <td>25%</td> </tr> <tr> <td>ANNUAL RYE GRASS</td> <td>15%</td> </tr> <tr> <td>PERENNIAL RYE GRASS</td> <td>12%</td> </tr> <tr> <td>KENTUCKY BLUE GRASS</td> <td>10%</td> </tr> <tr> <td>WHITE CLOVER(LEGUME)</td> <td>3%</td> </tr> </table>	CREeping RED FESCUE	35%	TALL FESCUE	25%	ANNUAL RYE GRASS	15%	PERENNIAL RYE GRASS	12%	KENTUCKY BLUE GRASS	10%	WHITE CLOVER(LEGUME)	3%
CREeping RED FESCUE	35%												
TALL FESCUE	25%												
ANNUAL RYE GRASS	15%												
PERENNIAL RYE GRASS	12%												
KENTUCKY BLUE GRASS	10%												
WHITE CLOVER(LEGUME)	3%												
  - MULCHING SHALL BE APPLIED (FROM MAY TO SEPTEMBER ONLY) AT THE RATE OF 1-1/2 TO 2 TONS/ACRE.
  - THE RECOMMENDED GRASS MIXTURES AND FERTILIZERS SPECIFIED HEREIN ARE AVAILABLE AT BLUE SEAL FEEDS, NASHUA, NH (603-883-9531)



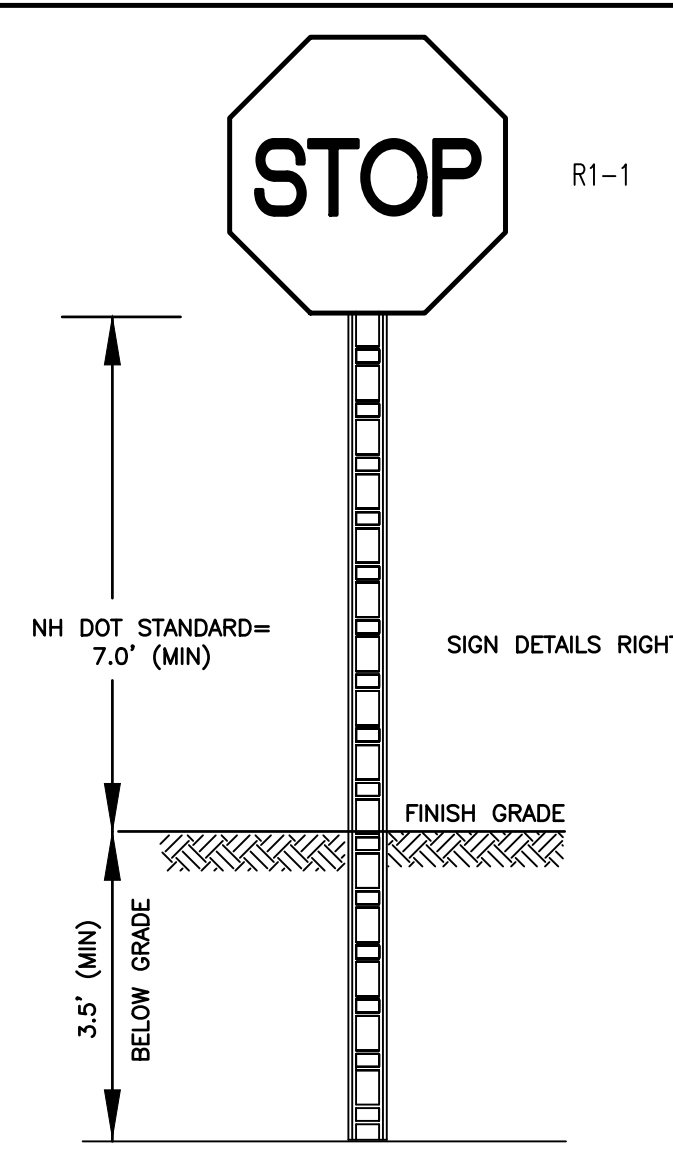
- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
  - BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.
  - ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
  - THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE.
  - CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH.
- NOTE:  
IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
- USE NORTH AMERICAN GREEN SC150BN EROSION CONTROL BLANKET (OR APPROVED EQUAL) DISTRIBUTED BY EJ PRESCOTT, INC 210 SHEEP DAVIS ROAD, CONCORD, NH PHONE: (603) 224-9545

**EROSION CONTROL BLANKET (NOT TO SCALE)**



NOTE: REGULAR FLOW DANDY SACKS (BLACK) DISTRIBUTED LOCALLY BY E.J. PRESCOTT, INC. 210 SHEEP DAVIS ROAD, CONCORD, NH (603) 224-9545 OR APPROVED EQUAL.

**DETAIL OF INLET SEDIMENT CONTROL DEVICE (NOT TO SCALE)**

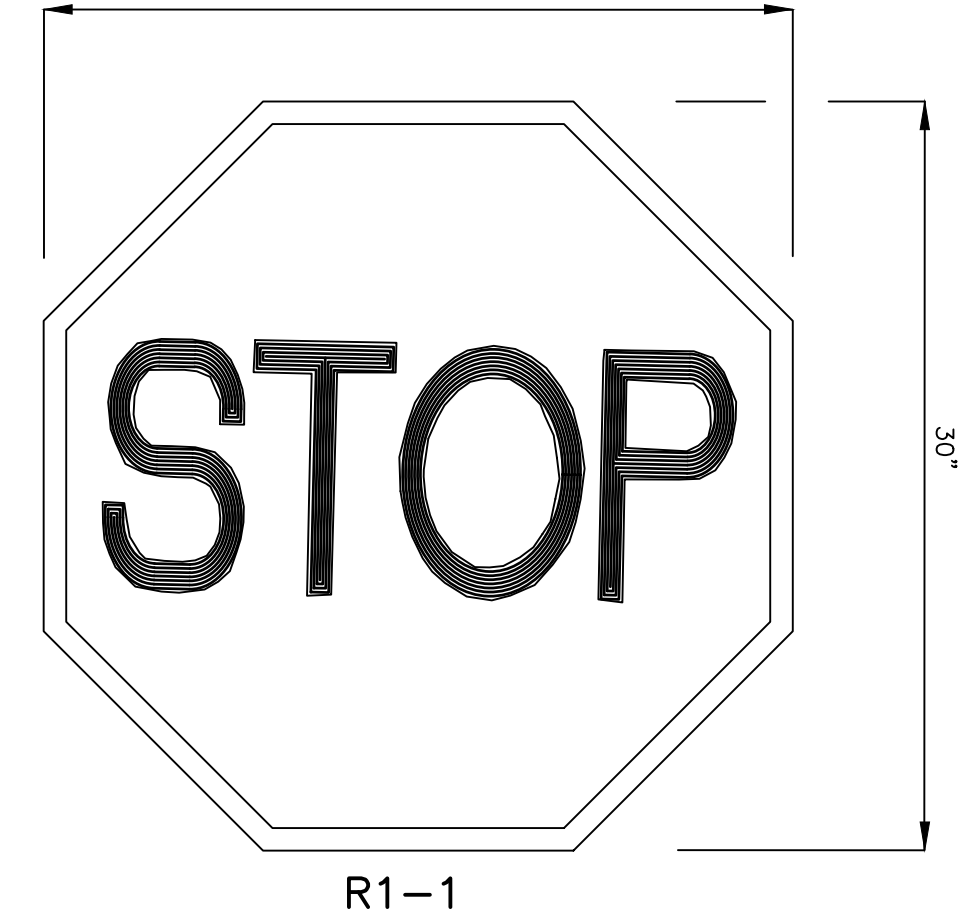


- HOLES SHALL BE 3/8" DIA. C-C FULL LENGTH
- STEEL SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-6791 (GRADE 1070-1080)
- FINISH SHALL BE PAINTED WITH 2 COATS OF APPROVED MEDIUM GREEN, BAKED ON OR AIR DRIED, PAINT OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

**TYPICAL SIGN DETAIL (NO SCALE)**

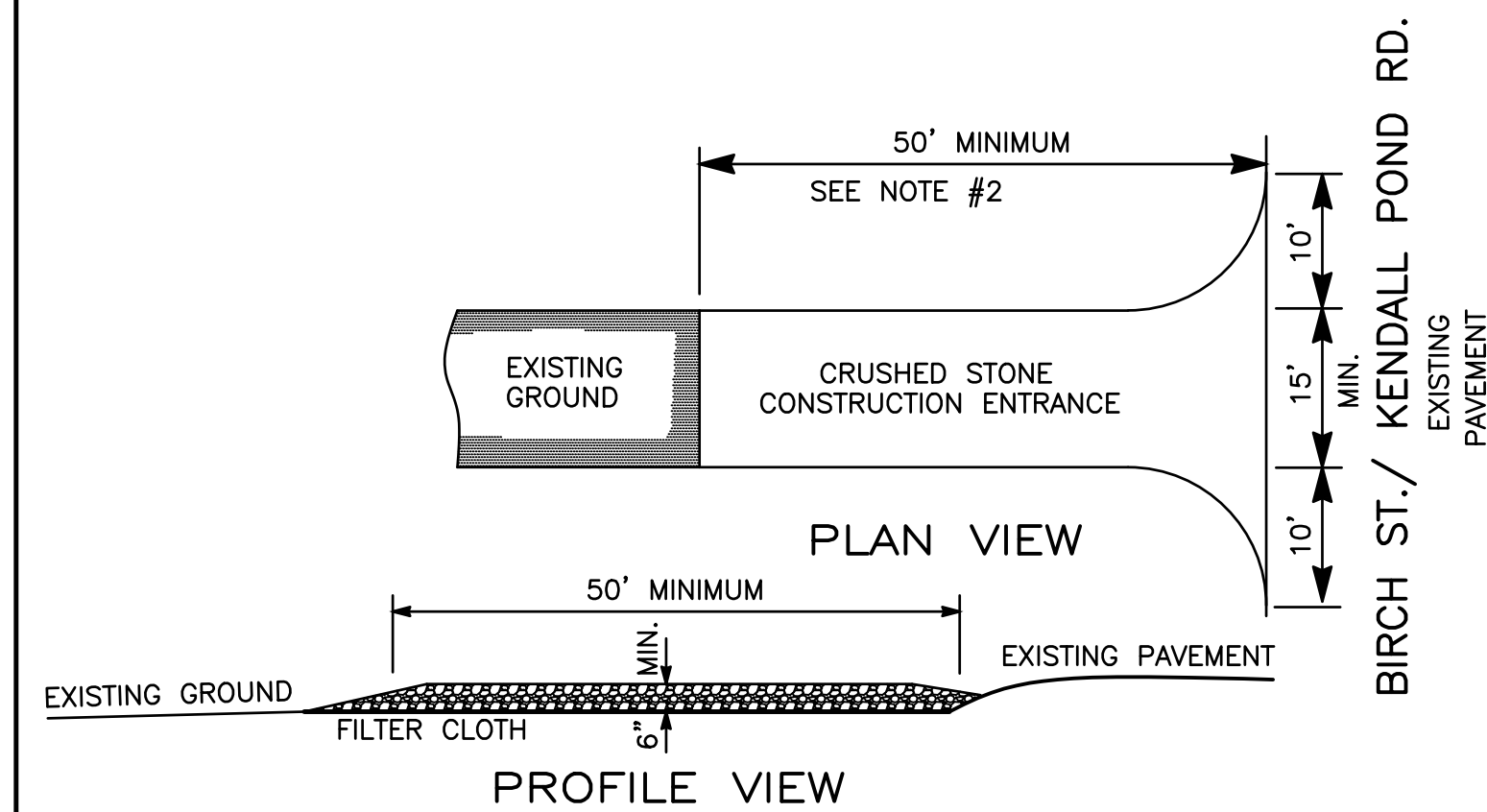
INSTALL MUTCD R1-1 STOP SIGNS AND STREET NAME SIGNS AT ALL PROPOSED INTERSECTIONS

COLORS:  
LEGEND BACKGROUND 30" WHITE (RETROREFLECTIVE)  
RED (RETROREFLECTIVE)



TRAFFIC SIGNS:  
ALL TRAFFIC SIGNS & PAVEMENT MARKINGS SHALL BE PER "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), LATEST EDITION.

**STOP SIGN DETAILS**

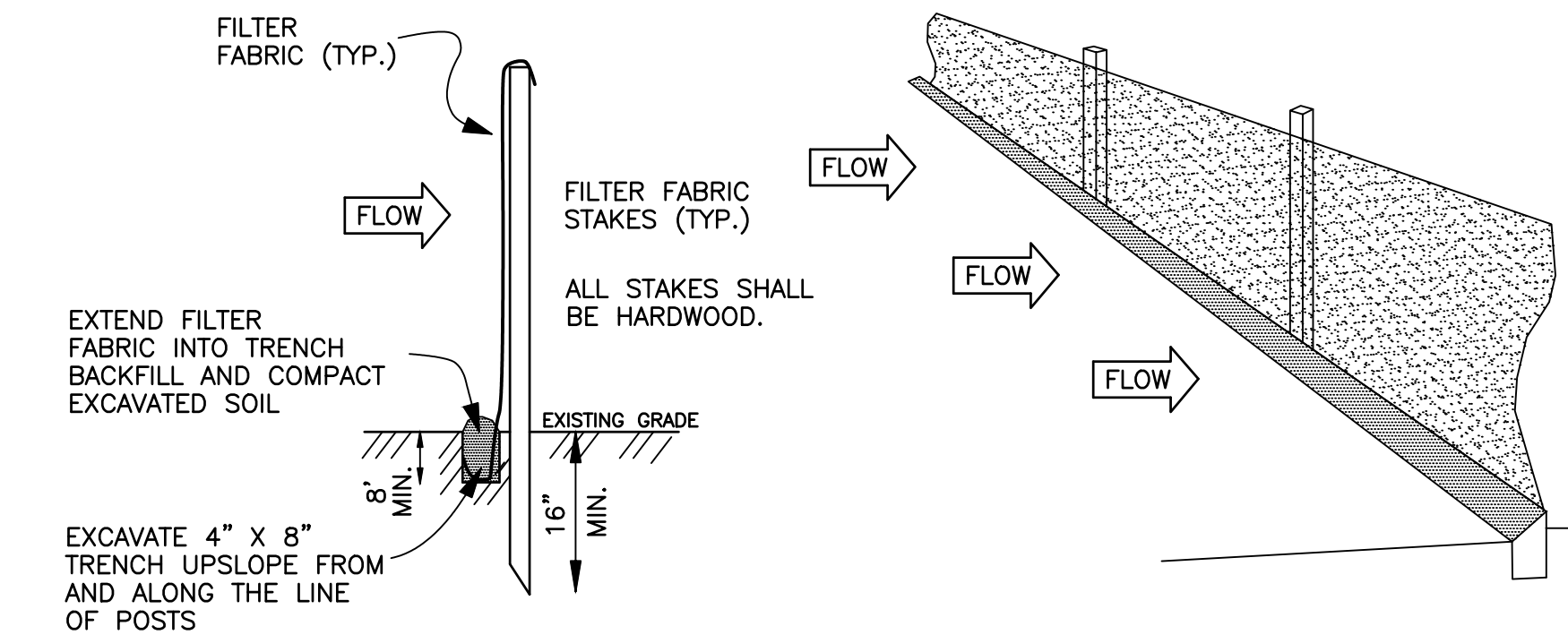


**CONSTRUCTION SPECIFICATIONS**

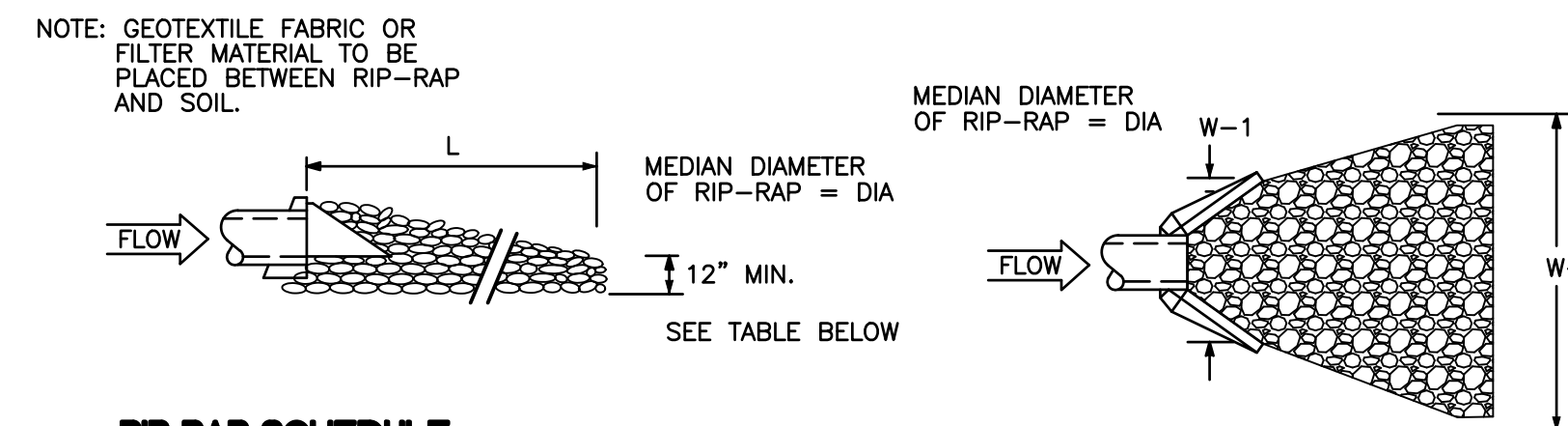
- MINIMUM STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 INCH CRUSHED STONE
- THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 75 FEET, EXCEPT THAT THE MINIMUM MAY BE REDUCED TO 50 FEET IF A 3-INCH TO 6-INCH HIGH BERM IS INSTALLED AT THE ENTRANCE OF THE PROJECT SITE
- THE WIDTH OF THE CONSTRUCTION ENTRANCE SHALL EXTEND THE FULL WIDTH OF THE CONSTRUCTION ACCESS ROAD OR 10 FEET, WHICH EVER IS GREATER.
- THE PAD SHALL SLOPE AWAY FROM THE EXISTING ROAD
- THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
- GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE STONE PAD AND THE EARTH SURFACE BELOW THE PAD
- 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
- ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARDS 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.
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT 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 ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED PROMPTLY.
- IF NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

**STABILIZED CONSTRUCTION EXIT**

TO BE CONSTRUCTED AT THE PROPOSED DRIVEWAY AT ITS INTERSECTION WITH BIRCH ST. & KENDALL POND RD. (NO SCALE)



**OUTLET PROTECTION DETAILS (NO SCALE)**



**RIP RAP SCHEDULE**

DETAIL #	LOCATION	W-1 (FT)	W-2 (FT)	L (FT)	DIA. (IN)
A	ES 3 - POND #1 OUTLET	3	10	8	6
B	ES 1 & 2 - POND #1 INLET	ENTIRE FOREBAY PER PLAN			6

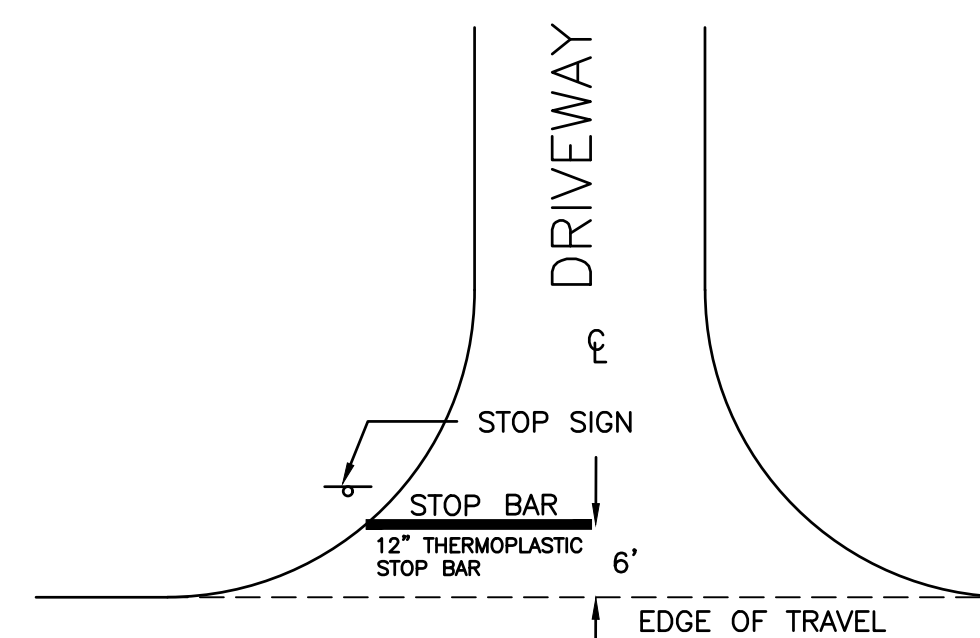
**SILT FENCE MAINTENANCE**

- SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
- IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
- SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

**CONSTRUCTION SPECIFICATIONS**

- THE GEOTEXTILE FABRIC SHALL MEET THE DESIGN CRITERIA FOR SILT FENCES.
- THE FABRIC SHALL BE EMBEDDED A MINIMUM OF 8 INCHES INTO THE GROUND AND THE SOIL COMPACTED OVER THE EMBEDDED FABRIC.
- WOVEN WIRE FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH SHALL BE FASTENED SECURELY TO THE WOVEN WIRE FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP, MID-SECTION AND BOTTOM.
- WHEN 2 SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED.
- FENCE POSTS SHALL BE A MINIMUM OF 36 INCHES LONG AND DRIVEN A MINIMUM OF 16 INCHES INTO THE GROUND. WOOD POSTS SHALL BE OF SOUND QUALITY HARDWOOD AND SHALL HAVE A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQUARE INCHES.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED TO PREVENT BULGES IN THE SILT FENCE DUE TO DEPOSITION OF SEDIMENT.

**SILT FENCE DETAIL (NO SCALE)**



**TYPICAL STOP BAR DETAIL (NOT TO SCALE)**

**EROSION CONTROL DETAILS TAX MAP 28 LOT 002**

#71 BIRCH STREET  
DERRY, NEW HAMPSHIRE 03038

OWNER OF RECORD / PREPARED FOR

71 BIRCH STREET, LLC  
230 HAMPSTEAD ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6455/PAGE 413

SCALE: NONE

SHEET 9 of 12

JUNE 23, 2023

TRC	DATE	COMMENTS
TRC 2/16/24	2/20/24	COMMENTS
CONSERVATION COM.	10/12/23	COMMENTS
TRC 7/28/23	9/15/23	COMMENTS
REVISIONS	DATE	

**BENCHMARK LLC**  
Consulting Engineers Land Planners  
1F Commons Drive, Suite 35  
Londonderry, New Hampshire 03053  
Phone: (603) 437-5000

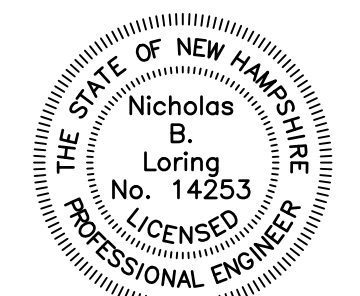
APPROVED BY THE TOWN OF DERRY, NH PLANNING BOARD

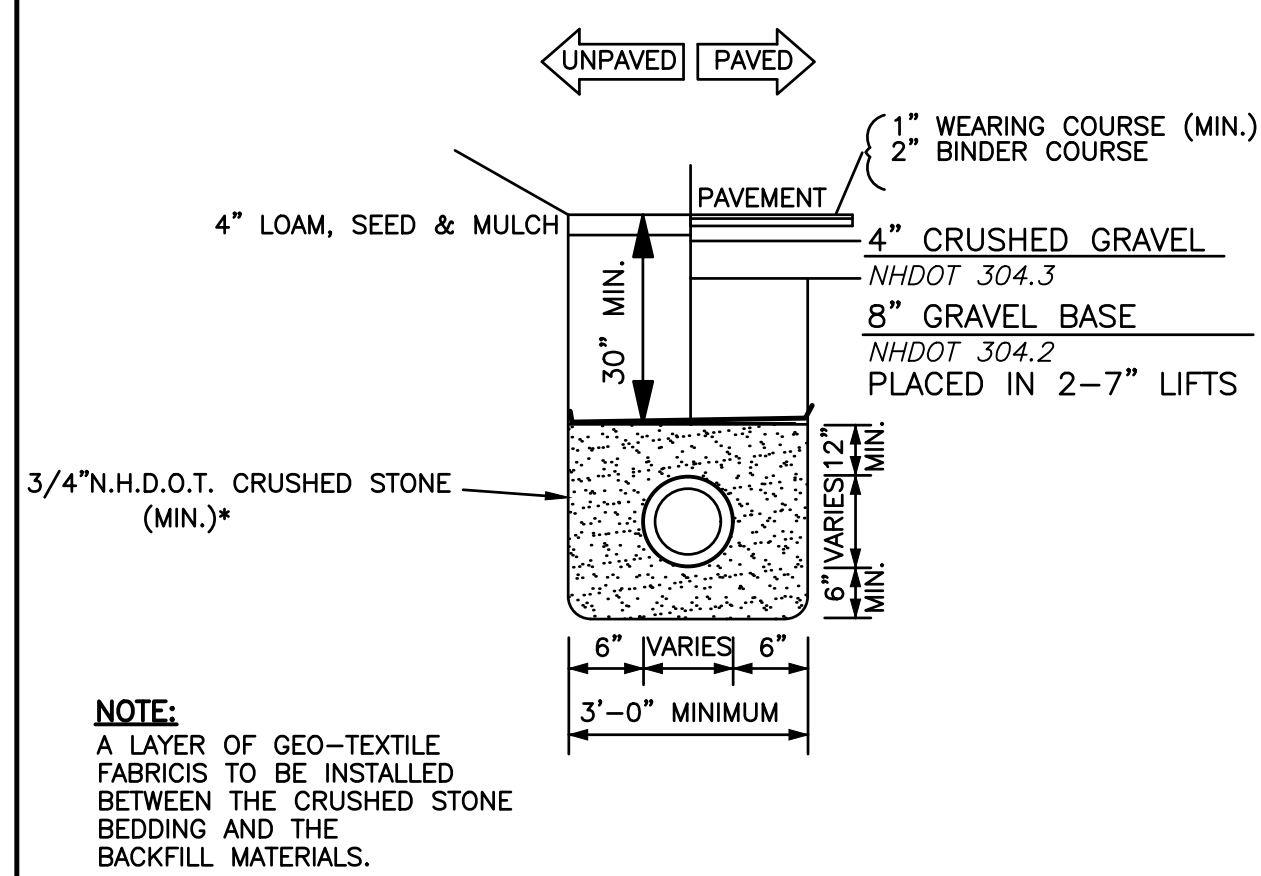
On Date: \_\_\_\_\_

Certified By: \_\_\_\_\_

CHAIRMAN

SECRETARY

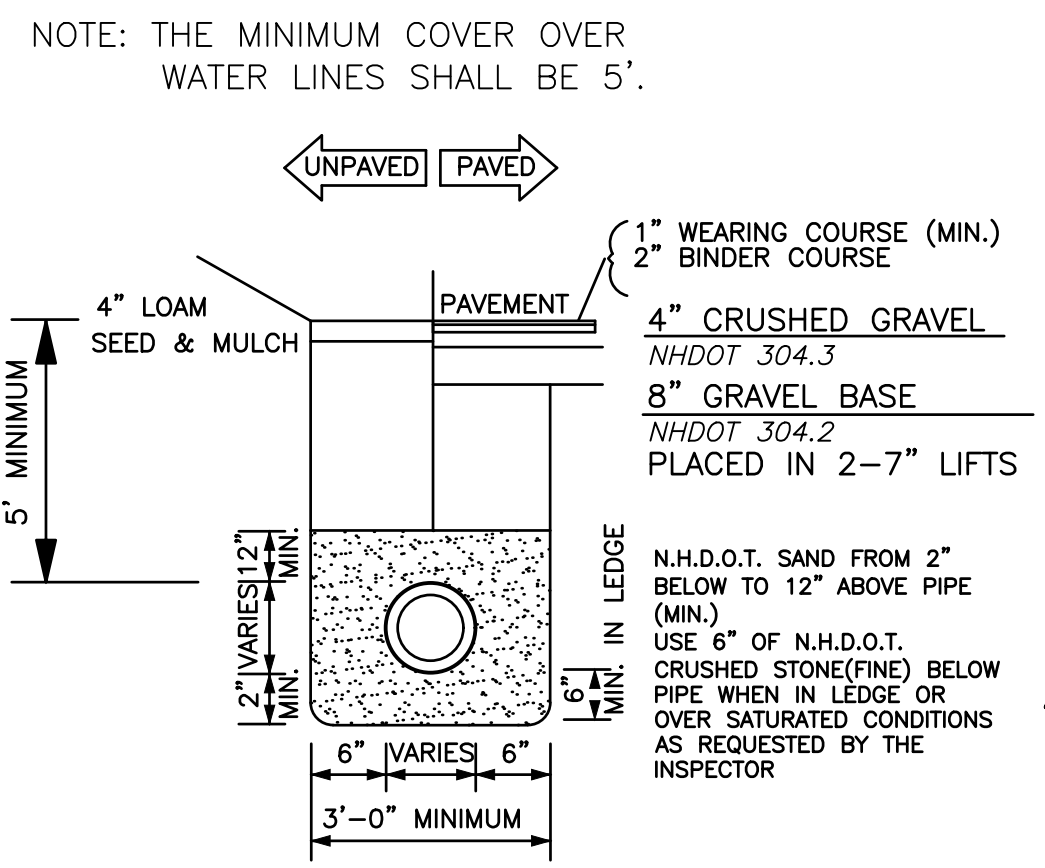




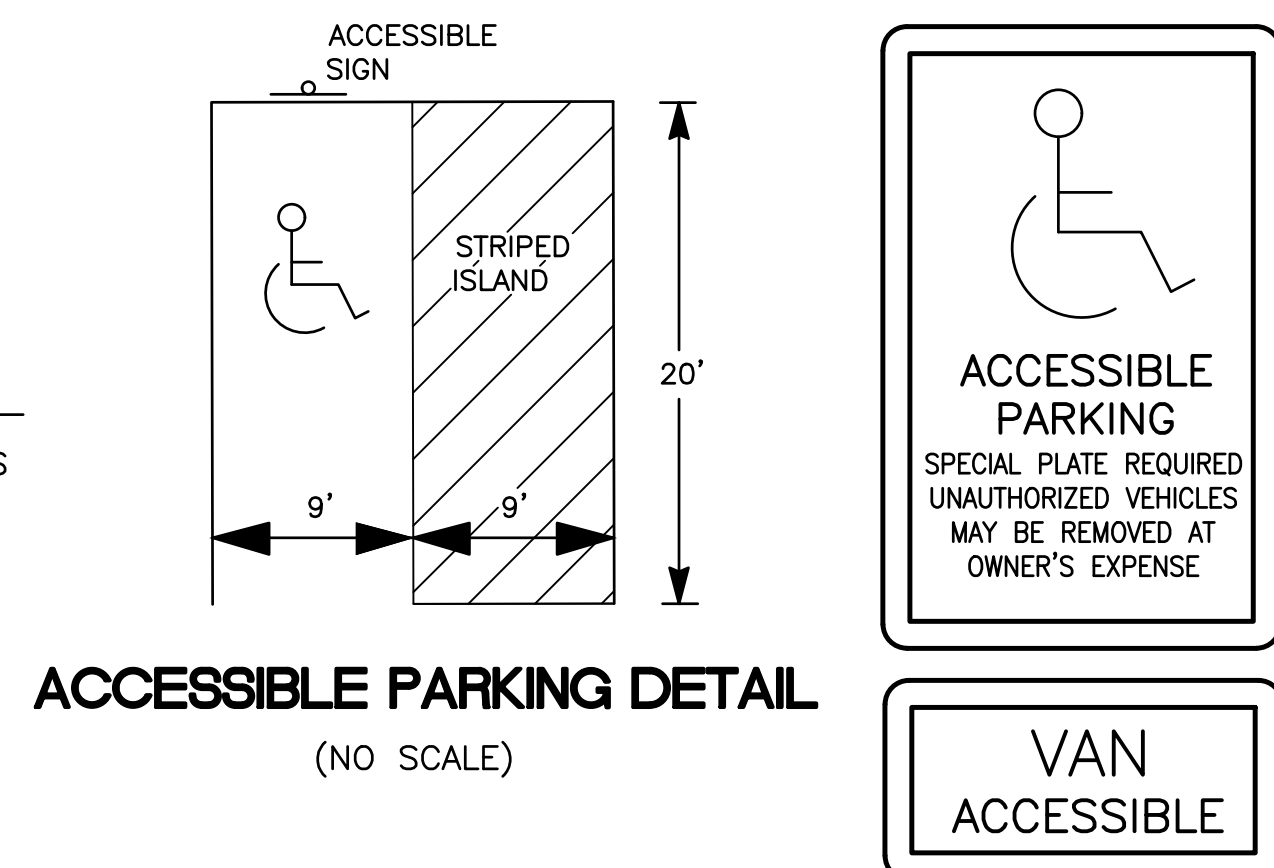
**TYPICAL DRAIN TRENCH DETAIL**  
(NO SCALE)

SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOPSOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL AND ALL ROCKS OVER SIX INCHES IN THE LARGEST DIMENSION, OR ANY MATERIAL WHICH, AS DETERMINED BY THE TOWN OF DERRY TOWN ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION. SUITABLE MATERIAL SHALL BE PLACED IN 12" LIFTS AND THOROUGHLY COMPACTED TO 95% OR BETTER COMPACTION.

IN CROSS-COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE TOWN OF DERRY TOWN ENGINEER MAY PERMIT THE USE OF TOPSOIL, LOAM OR PEAT, IF SATISFIED THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE STRUCTURES FOR MAINTENANCE AND RECONSTRUCTION (WHEN NECESSARY) WILL BE PRESERVED. SUITABLE MATERIAL SHALL BE PLACED IN 18" LIFTS AND THOROUGHLY COMPACTED TO 92% OR BETTER COMPACTION IN ACCORDANCE WITH NHDOT STANDARD SPECIFICATIONS, SECTION 304.

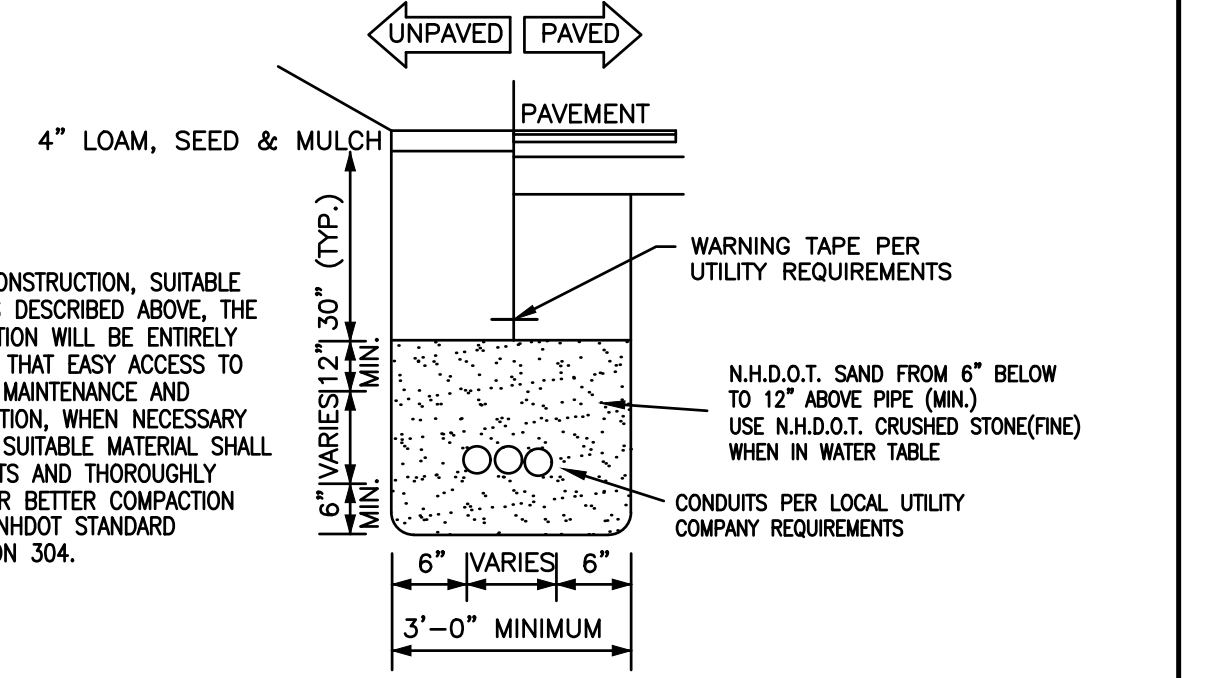


**TYPICAL WATER TRENCH DETAIL**  
(NO SCALE)

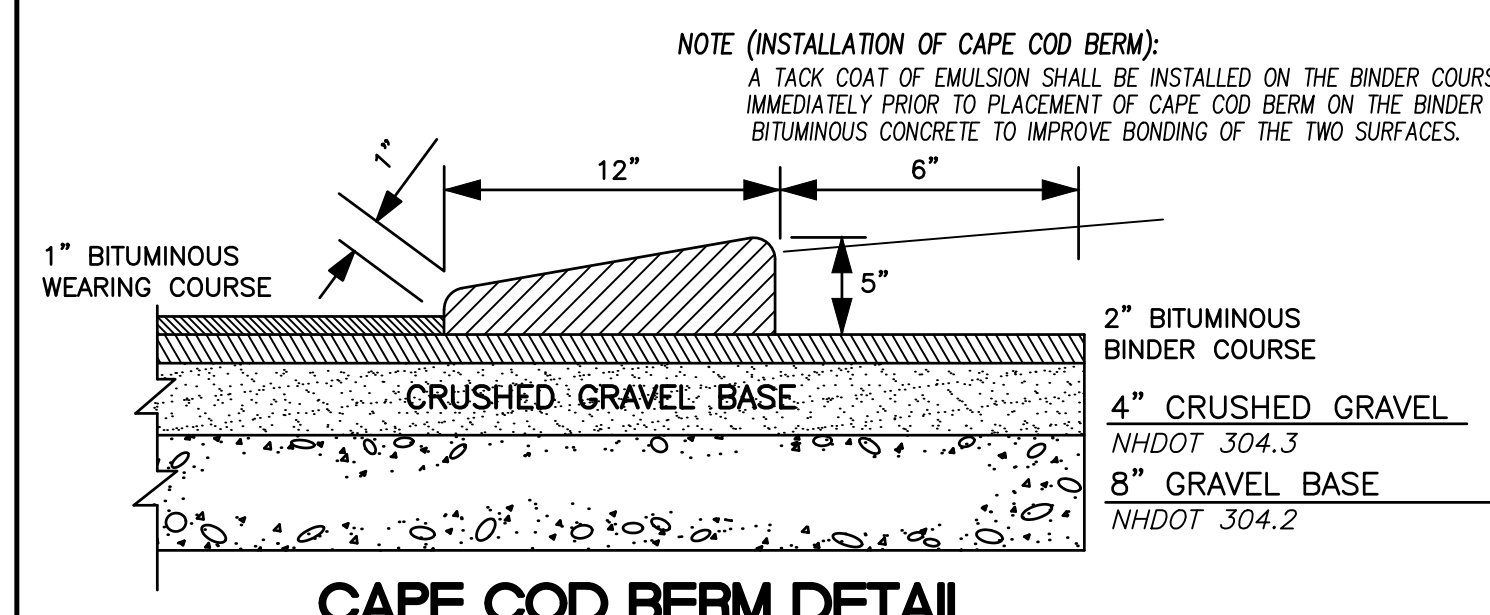


**ACCESSIBLE PARKING DETAIL**  
(NO SCALE)

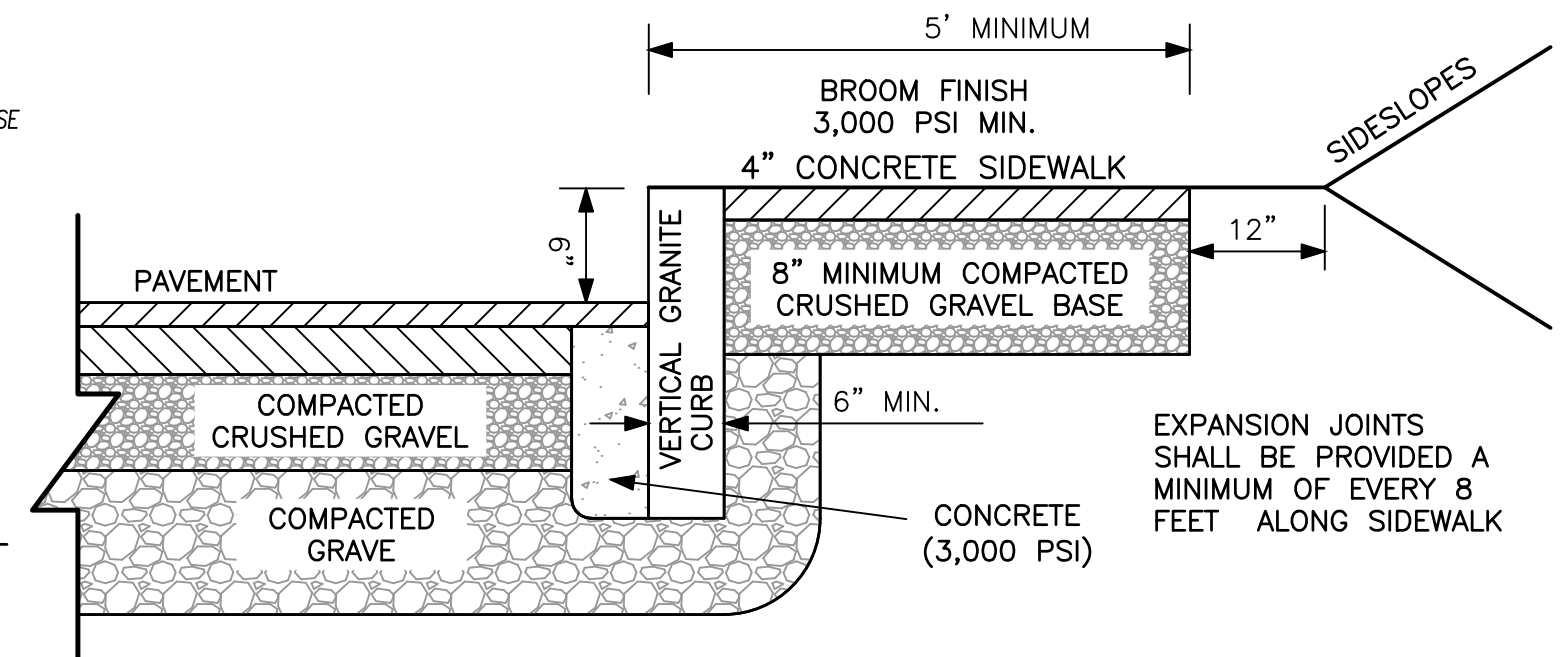
**ACCESSIBLE PARKING SIGN**  
(NO SCALE)  
(SIGNS TO BE MUTCD R7-8 & R7-8P AND TO BE MOUNTED AT A MINIMUM OF 60" IN HEIGHT)



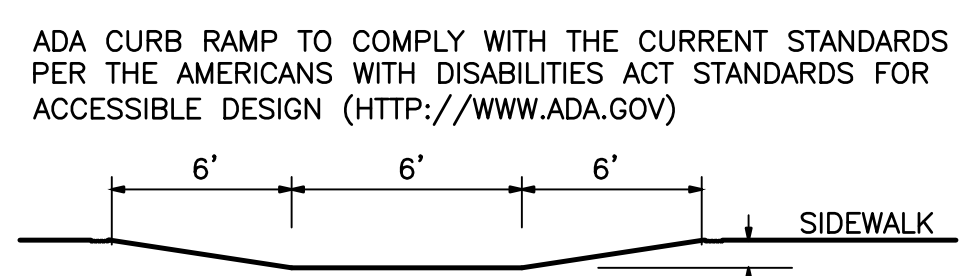
**TYPICAL ELECTRICAL, TELEPHONE, CABLE TRENCH DETAIL**  
(NO SCALE)



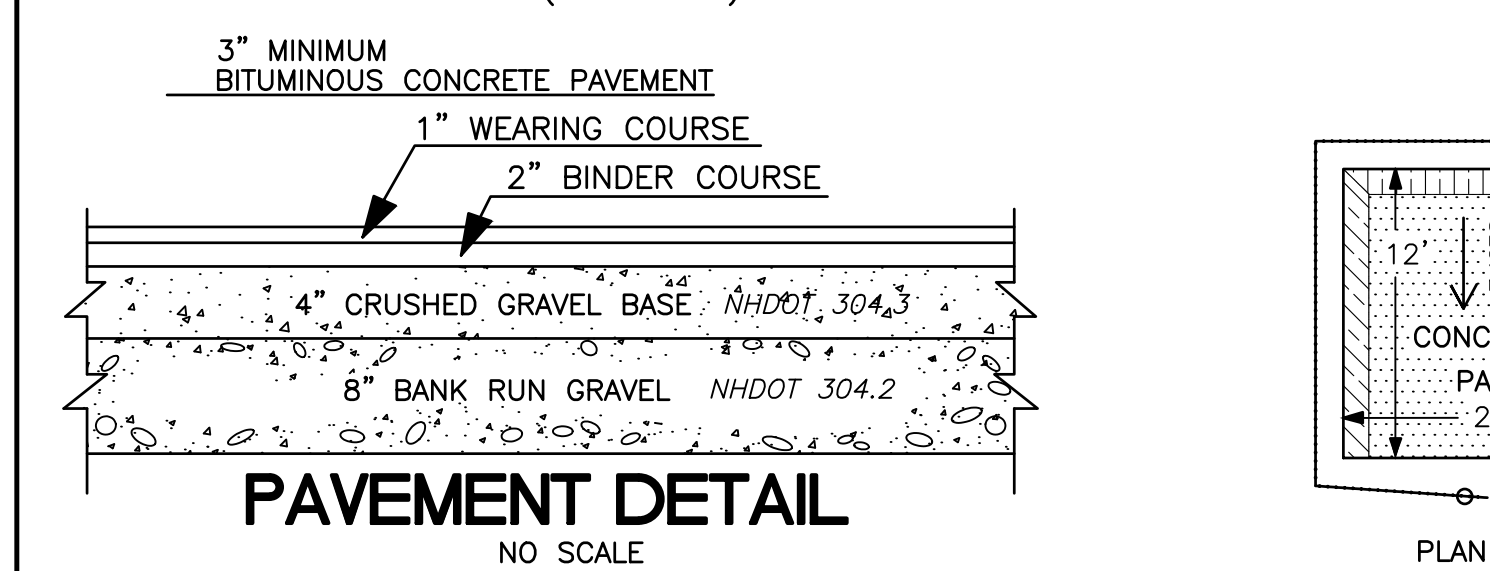
**CAPE COD BERM DETAIL**  
(NO SCALE)



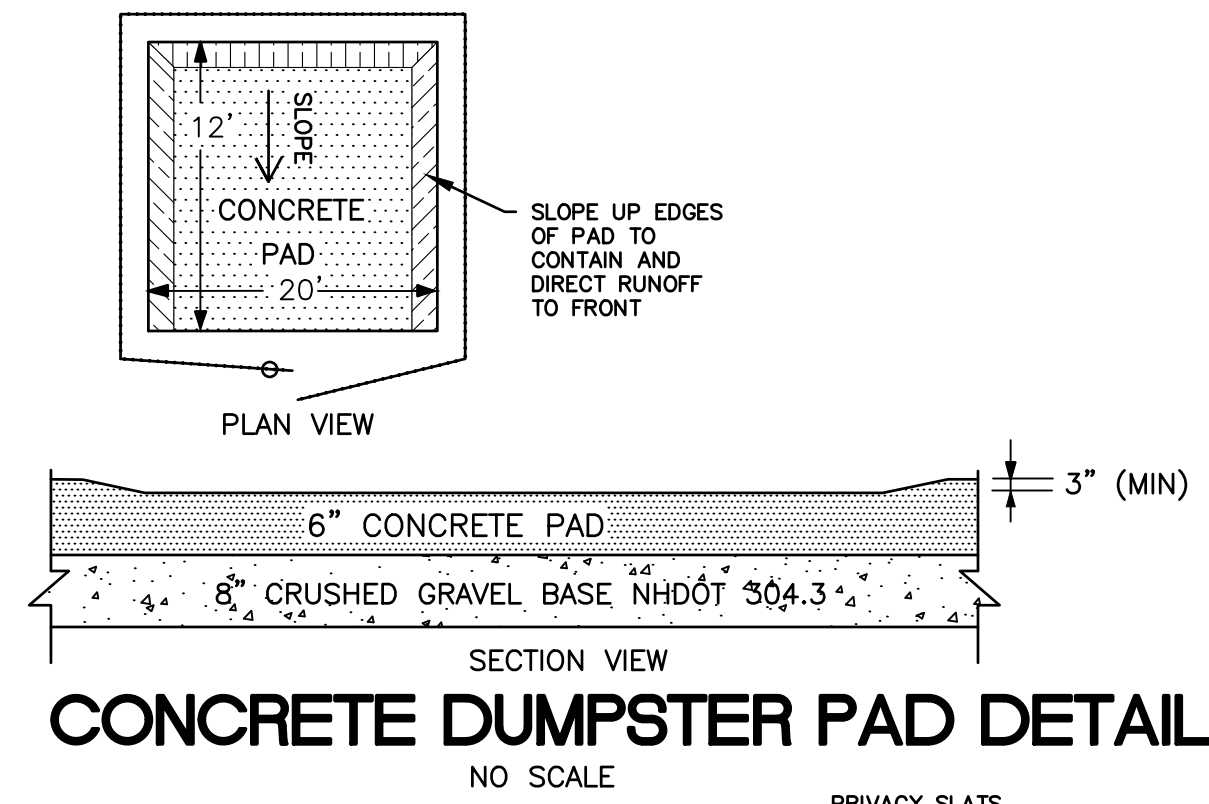
**CURBING & SIDEWALK DETAIL**  
NO SCALE



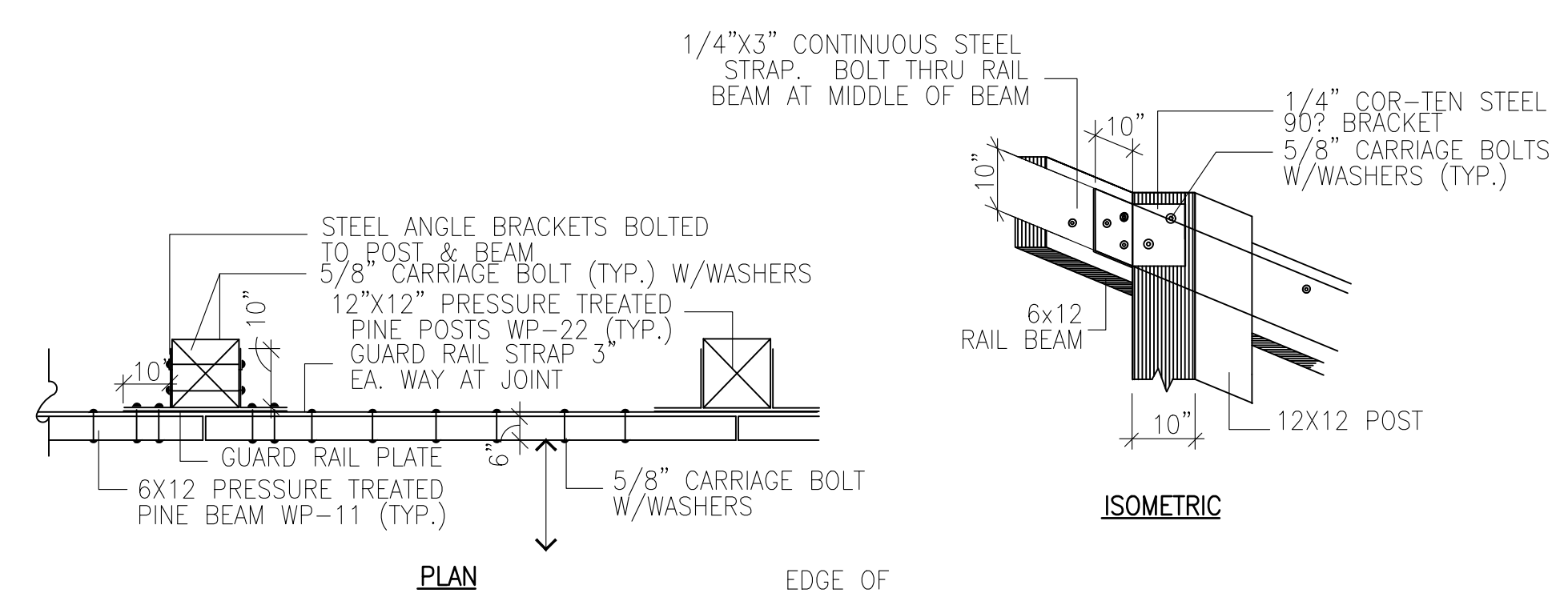
**SIDEWALK NOTES:**  
SIDEWALK ALONG PROPOSED ROADWAYS SHALL TIP DOWN AT THE PROPOSED DRIVEWAYS AND INTERSECTIONS. TAPERS AND CONSTRUCTION METHODS FOR "TIP-DOWNS" SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND ANY ADDITIONAL REQUIREMENTS OF THE TOWN OF DERRY, NEW HAMPSHIRE.



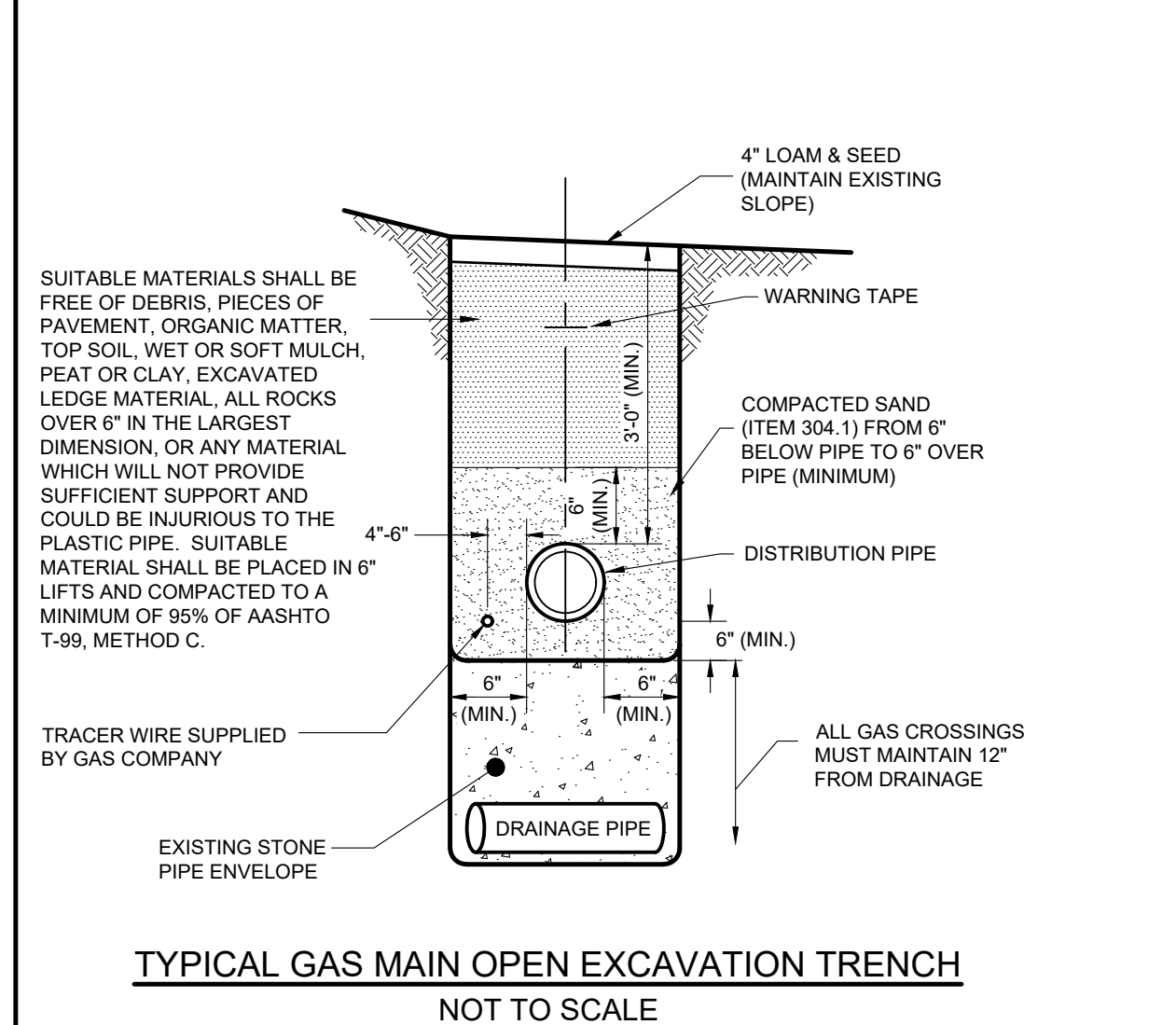
**PAVEMENT DETAIL**  
NO SCALE



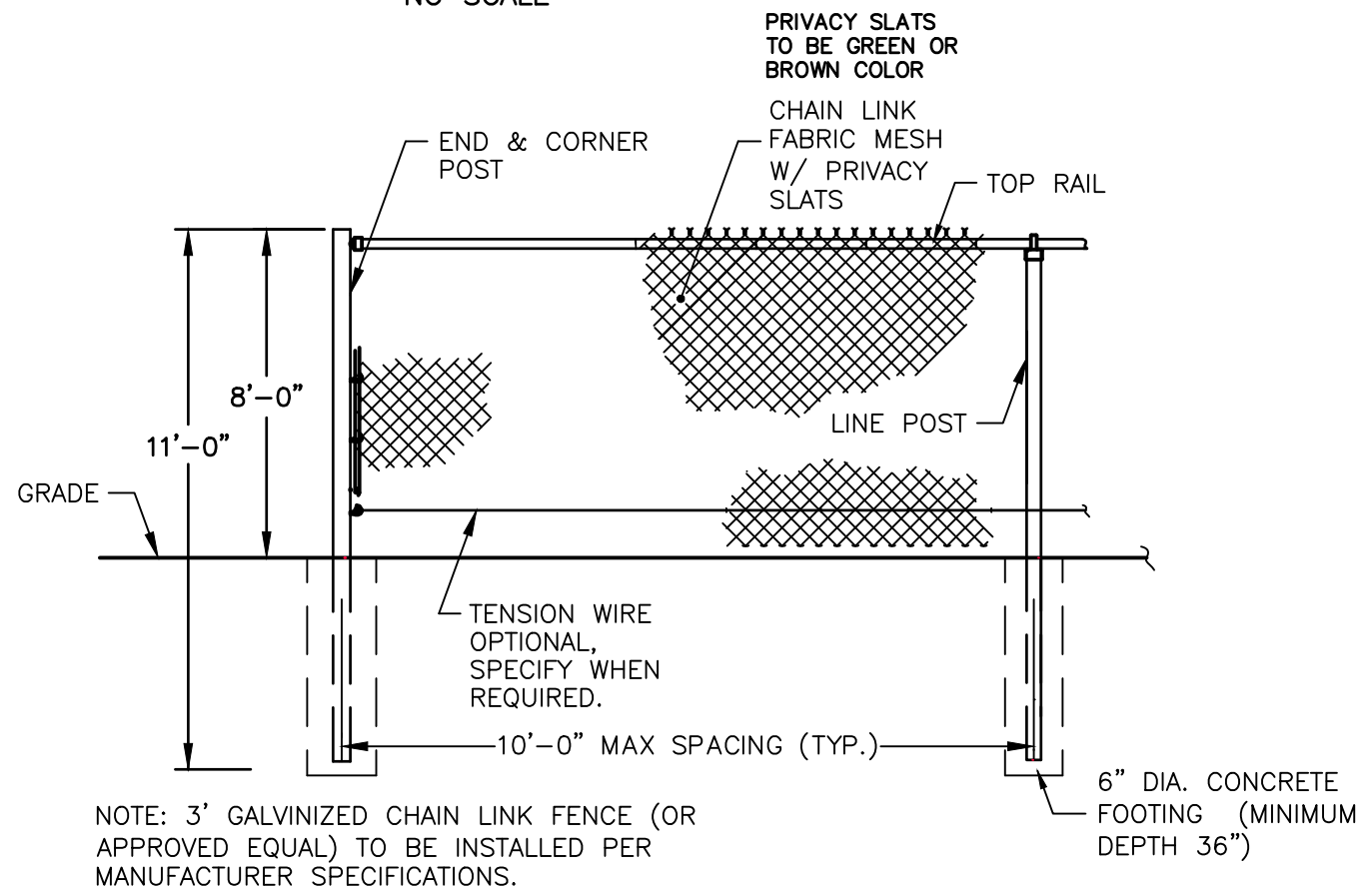
**CONCRETE DUMPSTER PAD DETAIL**  
NO SCALE



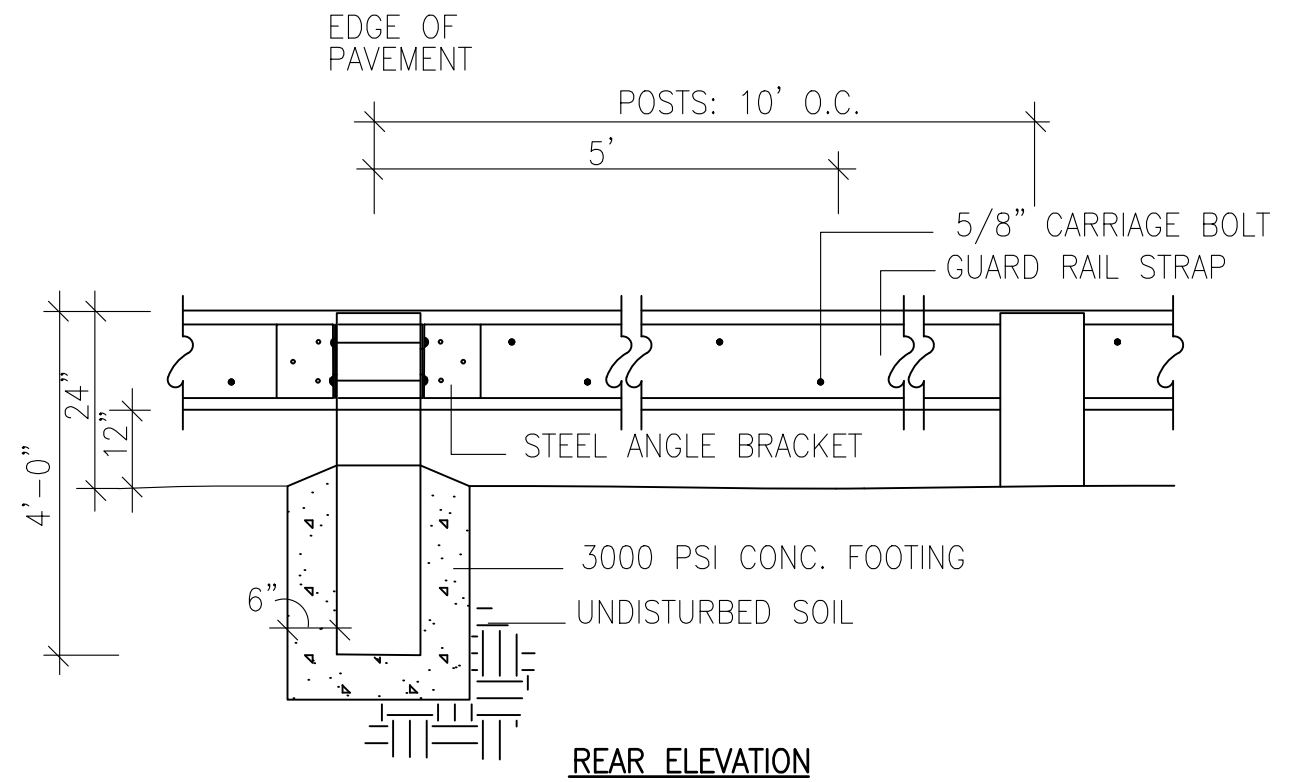
**ISOMETRIC**  
**PLAN**



**TYPICAL GAS MAIN OPEN EXCAVATION TRENCH**  
NOT TO SCALE



**FENCED IN DUMPSTER ENCLOSURE**  
(NO SCALE)

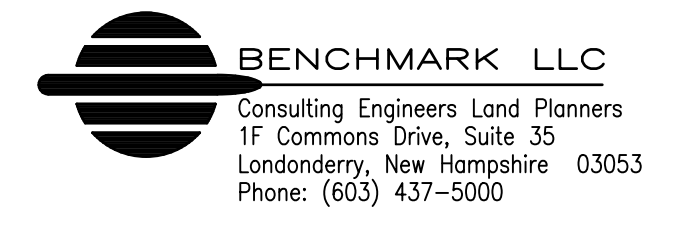
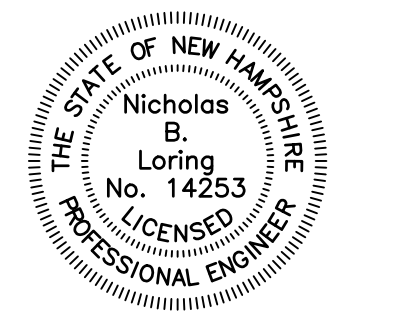


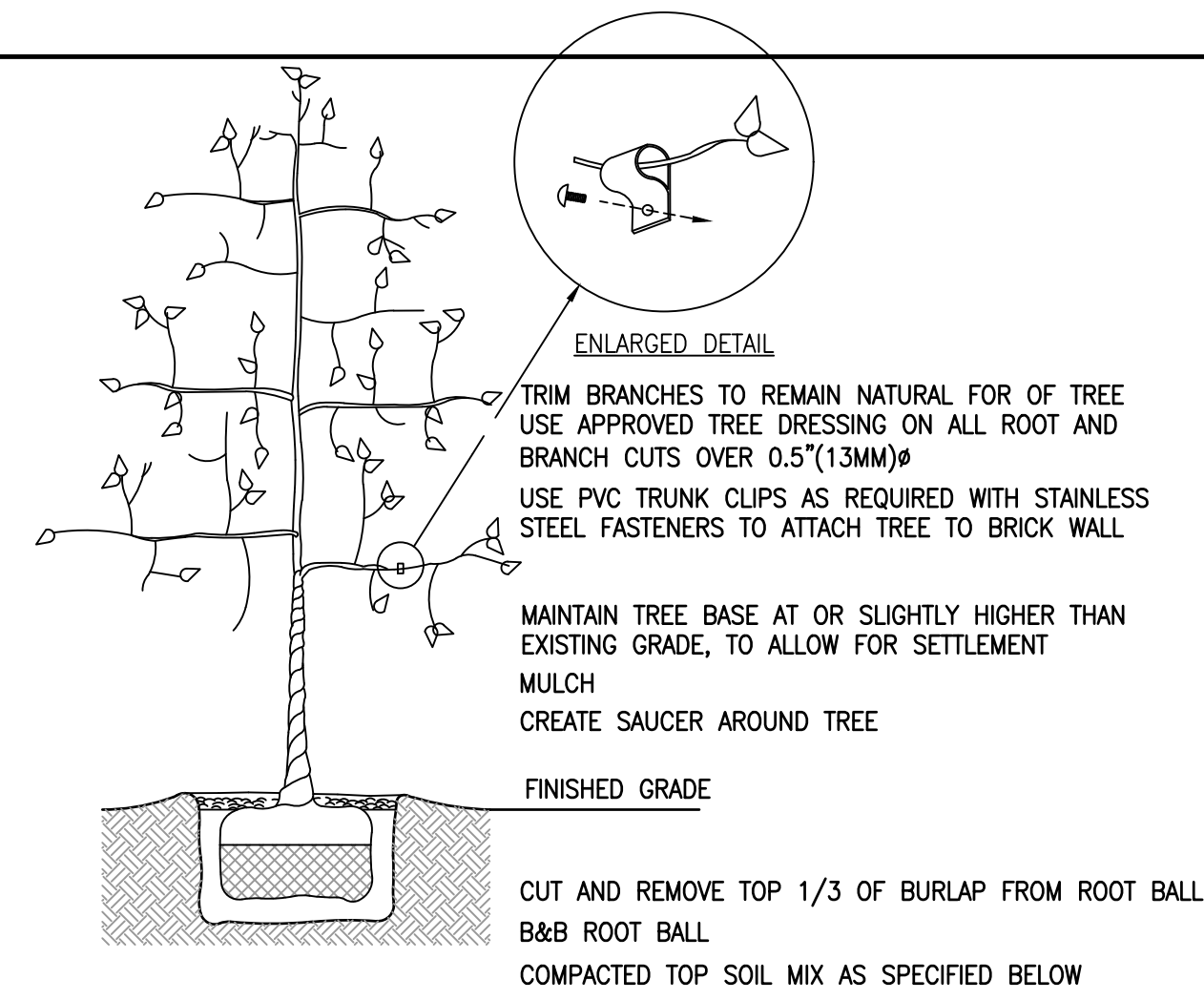
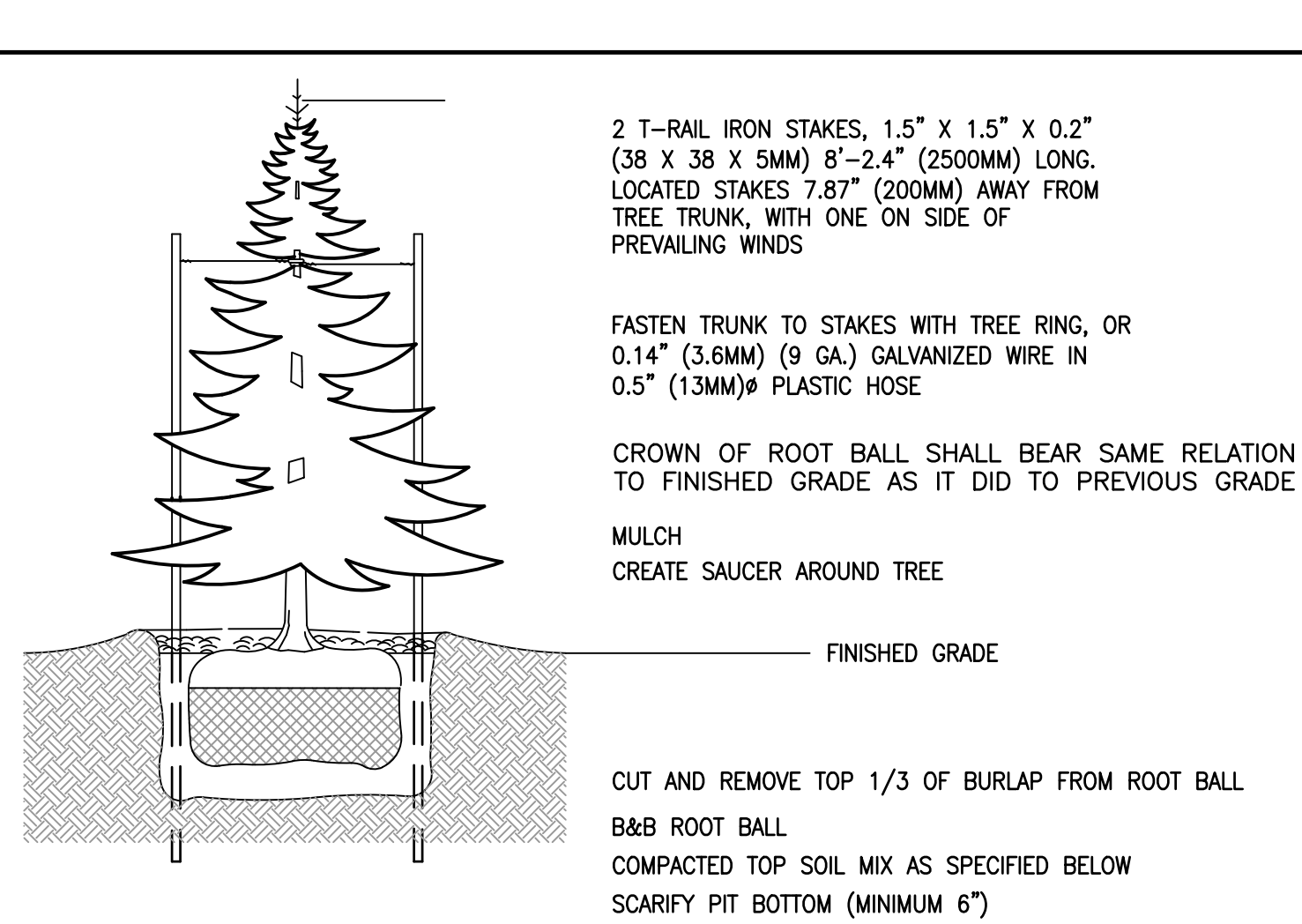
**REAR ELEVATION**  
**DETAIL GUARDRAIL AT RETAINING WALL**  
(NOT TO SCALE)

**CONSTRUCTION DETAILS**  
**TAX MAP 28 LOT 002**  
**#71 BIRCH STREET**  
**DERRY, NEW HAMPSHIRE 03038**  
OWNER OF RECORD / PREPARED FOR  
71 BIRCH STREET, LLC  
230 HAMPSTEAD ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6455/PAGE 413  
SCALE: NONE SHEET 10 of 12 JUNE 23, 2023

TRC 2/16/24 COMMENTS	2/20/24
CONSERVATION COM.	10/12/23
TRC 7/28/23 COMMENTS	9/15/23
REVISIONS	DATE

APPROVED BY THE TOWN OF DERRY, NH PLANNING BOARD  
On Date: \_\_\_\_\_  
Certified By: \_\_\_\_\_  
CHAIRMAN \_\_\_\_\_  
SECRETARY \_\_\_\_\_



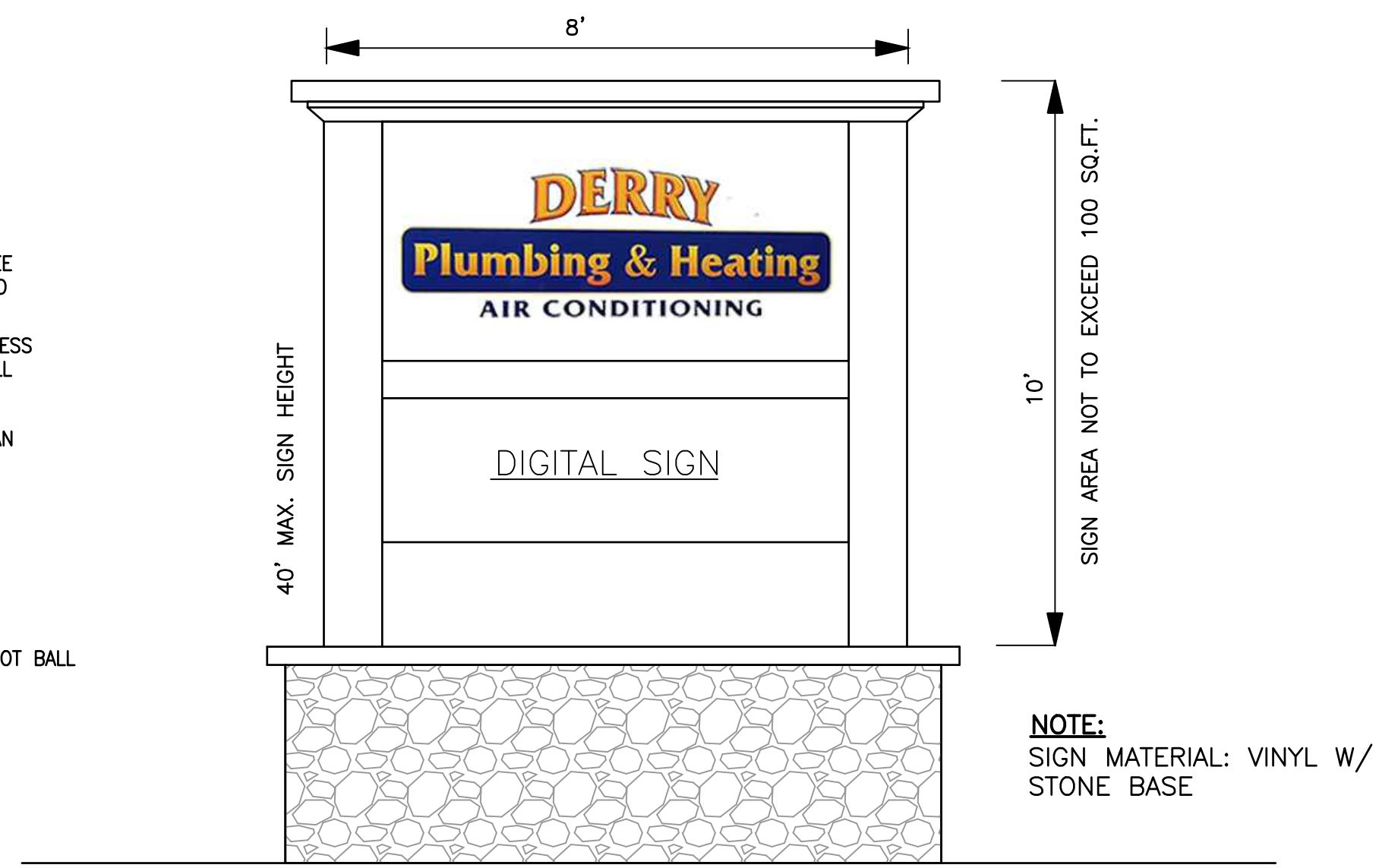


- SPECIFICATIONS:**
- DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKE.
  - WATER THOROUGHLY AFTER INSTALLATION.
  - REMOVE TREE RINGS AND STAKES TWO YEARS AFTER INSTALLATIONS
  - PROVIDED DRAINAGE FOR PLANTING PIT IN IMPERMEABLE SOIL.
  - TOPSOIL MIX, SEE SPEC.

- SPECIFICATIONS:**
- TOPSOIL MIX, SEE SPEC.
  - DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE STAKE.
  - WATER THOROUGHLY AFTER INSTALLATION.
  - REMOVE TREE RINGS AND STAKES TWO YEARS AFTER INSTALLATIONS
  - PROVIDED DRAINAGE FOR PLANTING PIT IN IMPERMEABLE SOIL.

CONIFEROUS TREE DETAIL

DECIDUOUS TREE DETAIL



FREE STANDING SIGN DETAIL

(NO SCALE)



RIGHT SIDE ELEVATION  
SCALE: 1/8" = 1'-0"



LEFT SIDE ELEVATION  
SCALE: 1/8" = 1'-0"



FRONT ELEVATION  
SCALE: 1/8" = 1'-0"



REAR ELEVATION  
SCALE: 1/8" = 1'-0"

**BUILDING ELEVATIONS & LANDSCAPING DETAILS**  
**TAX MAP 28 LOT 002**

#71 BIRCH STREET  
DERRY, NEW HAMPSHIRE 03038

OWNER OF RECORD / PREPARED FOR  
71 BIRCH STREET, LLC  
230 HAMPSTEAD ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6455/PAGE 413

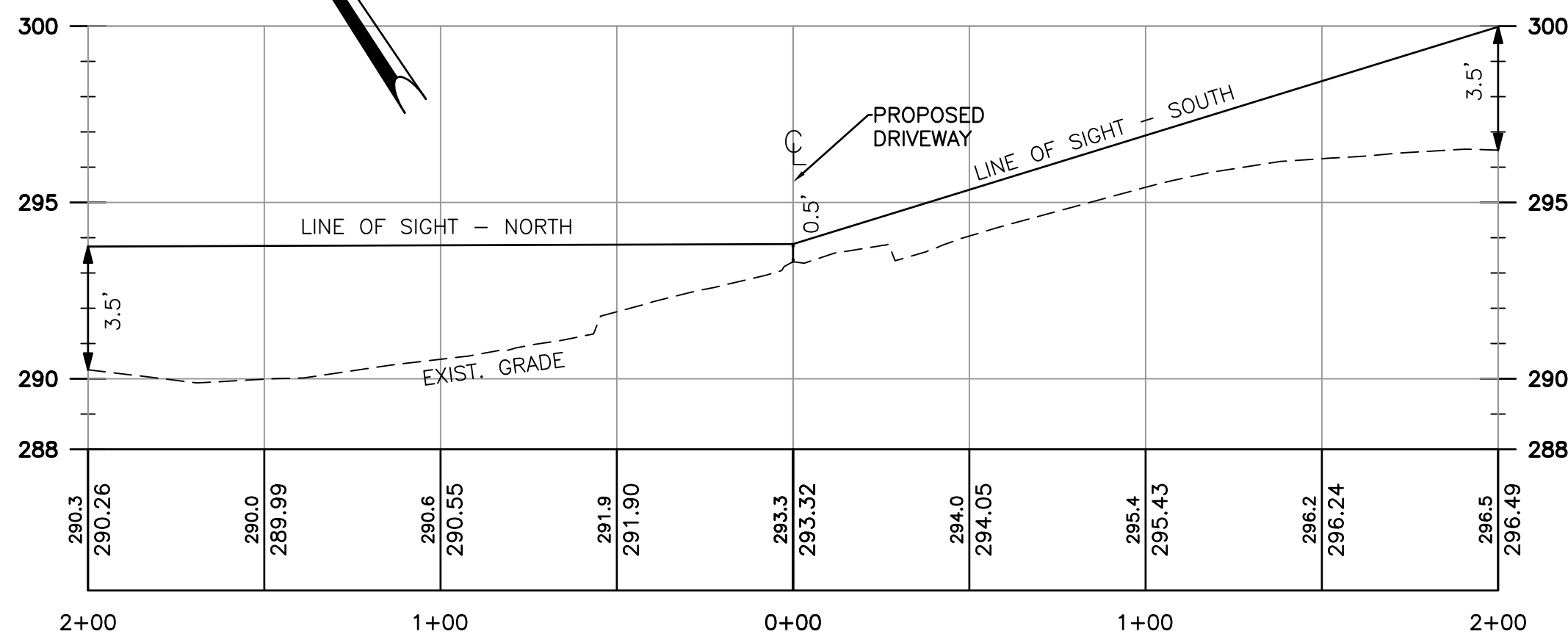
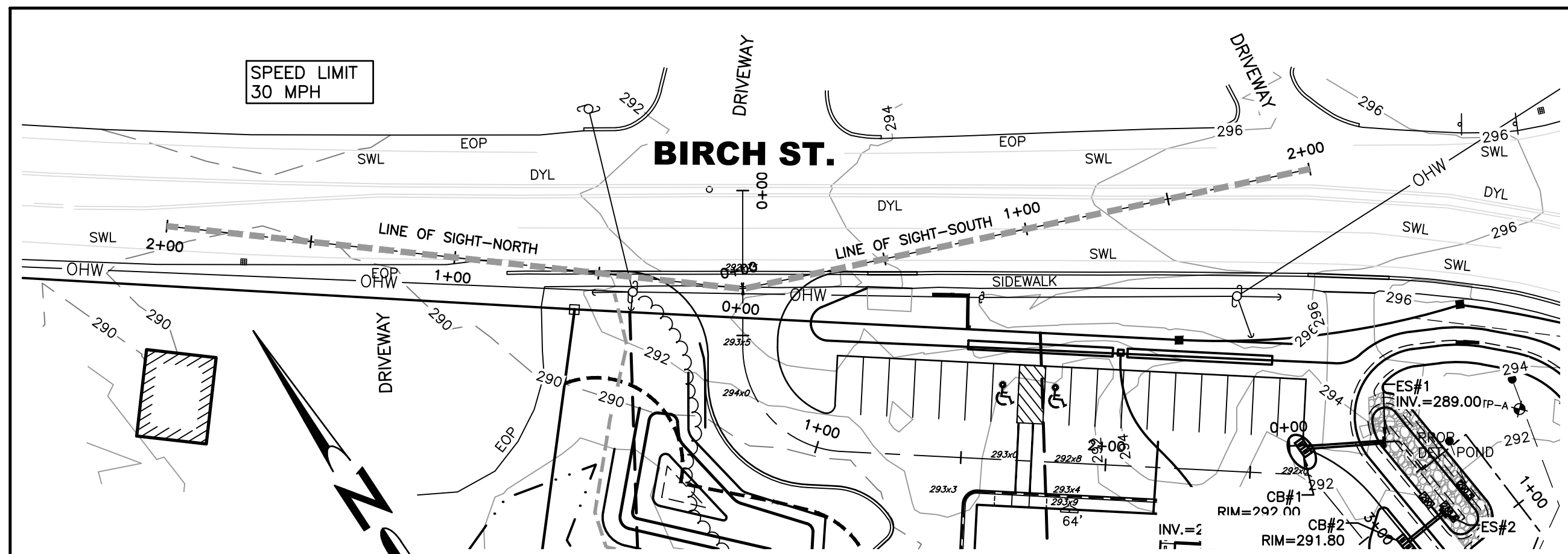
SCALE: NONE SHEET 11 of 12 JUNE 23, 2023

REVISIONS	DATE
TRC 2/16/24 COMMENTS	2/20/24
CONSERVATION COM.	10/12/23
TRC 7/28/23 COMMENTS	9/15/23

**BENCHMARK LLC**  
Consulting Engineers Land Planners  
1F Commons Drive, Suite 35  
Londonderry, New Hampshire 03053  
Phone: (603) 437-5000

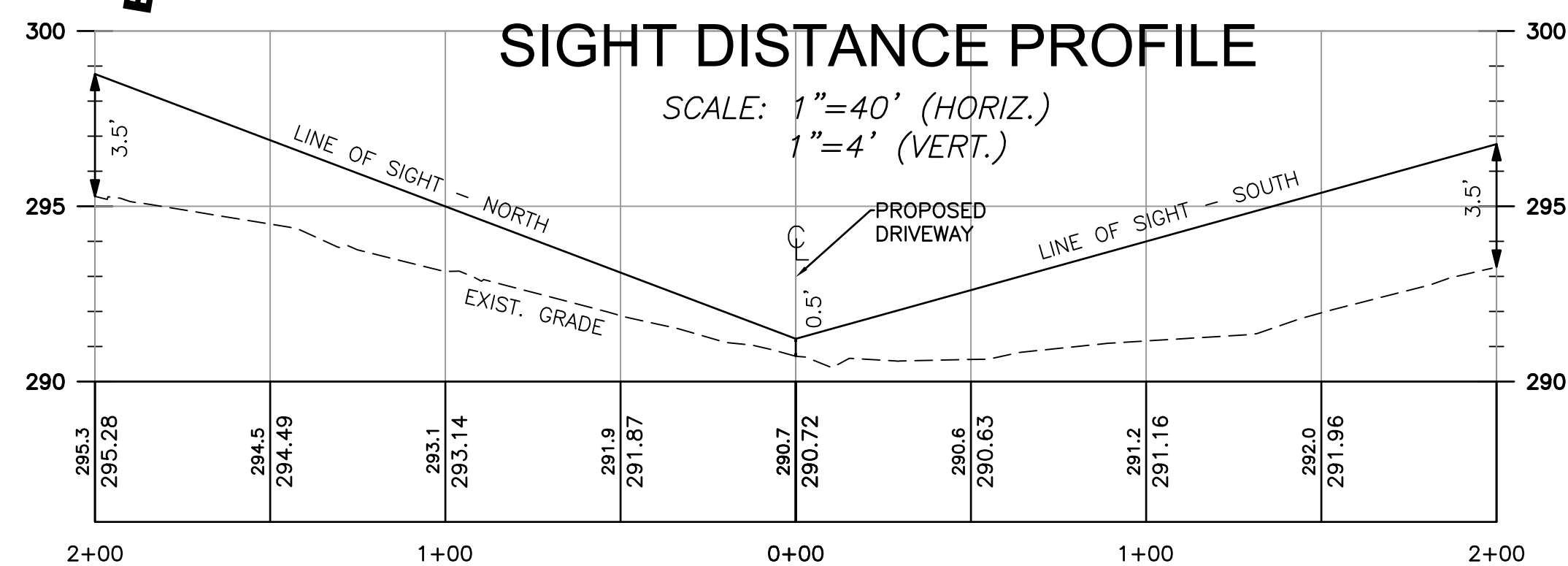
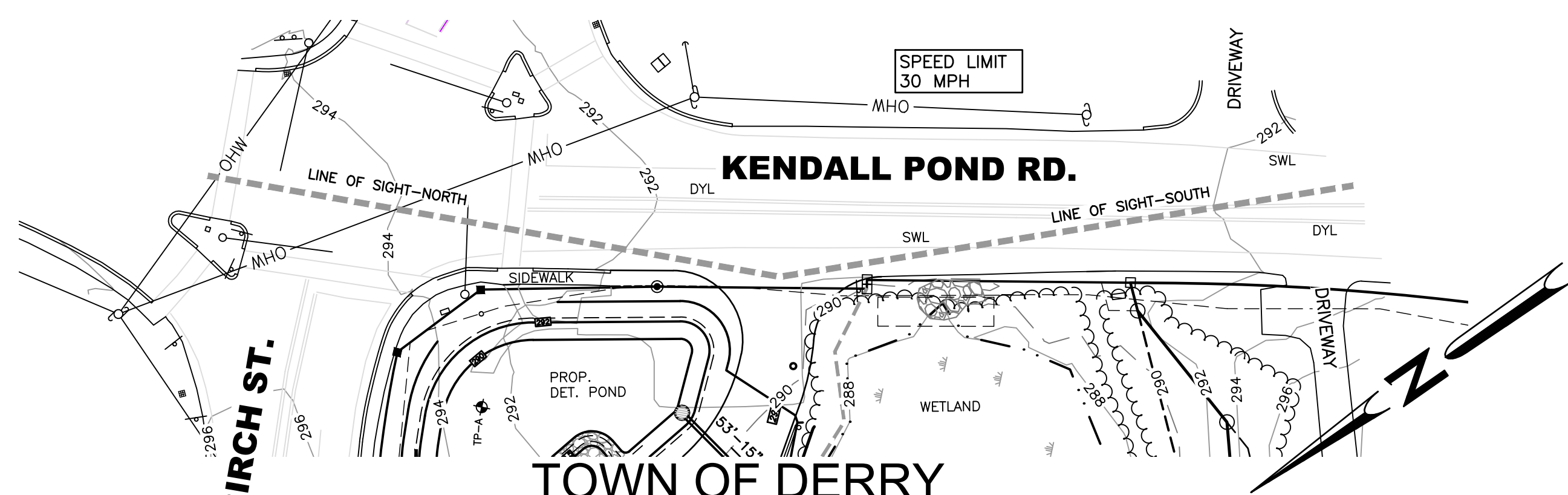
APPROVED BY THE TOWN OF DERRY, NH PLANNING BOARD

On Date: \_\_\_\_\_  
Certified By: \_\_\_\_\_  
CHAIRMAN  
SECRETARY



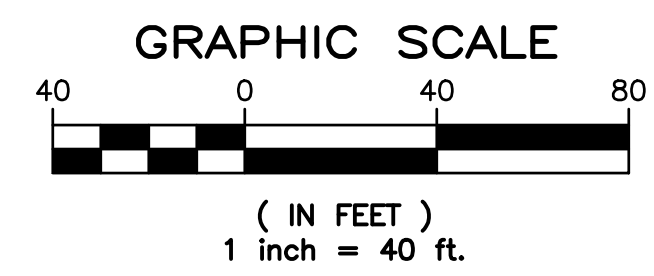
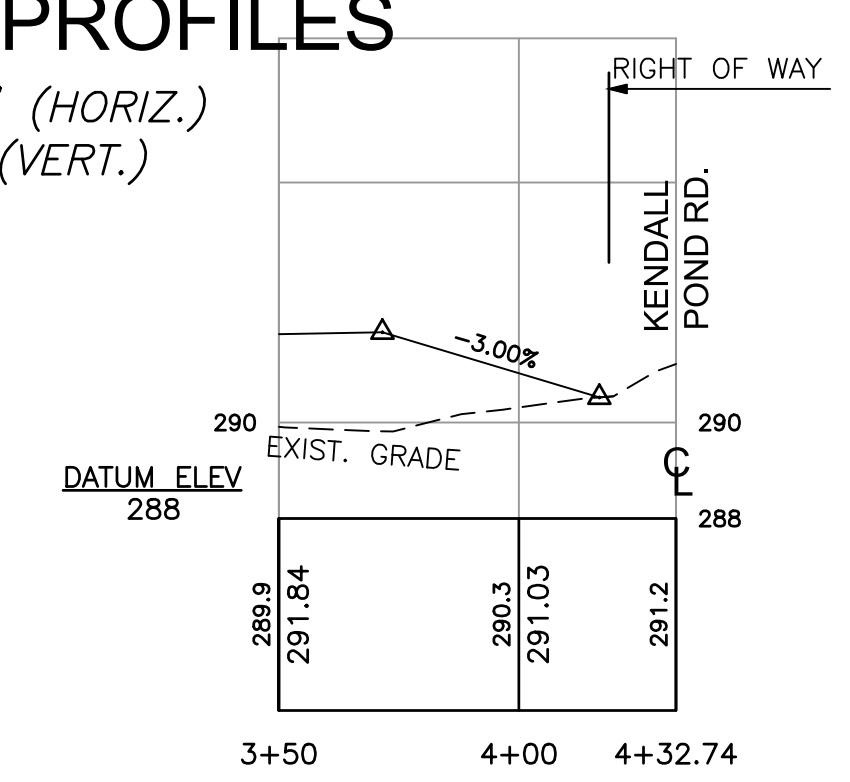
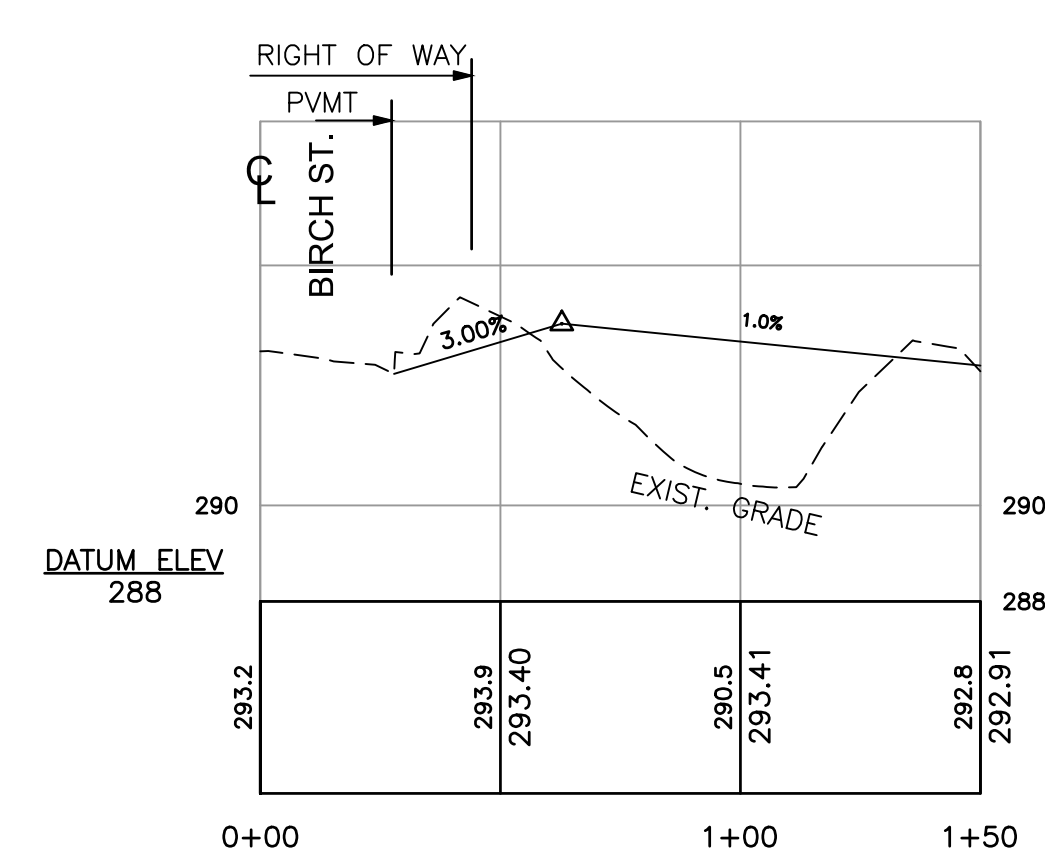
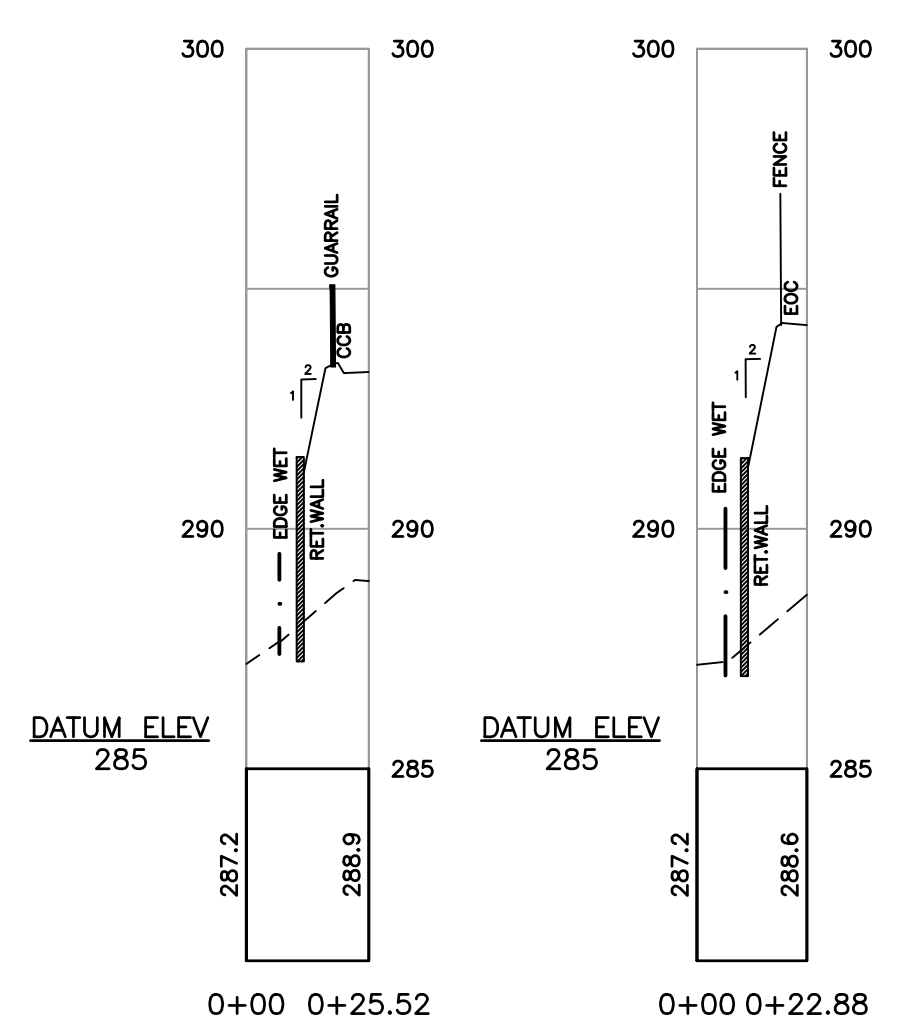
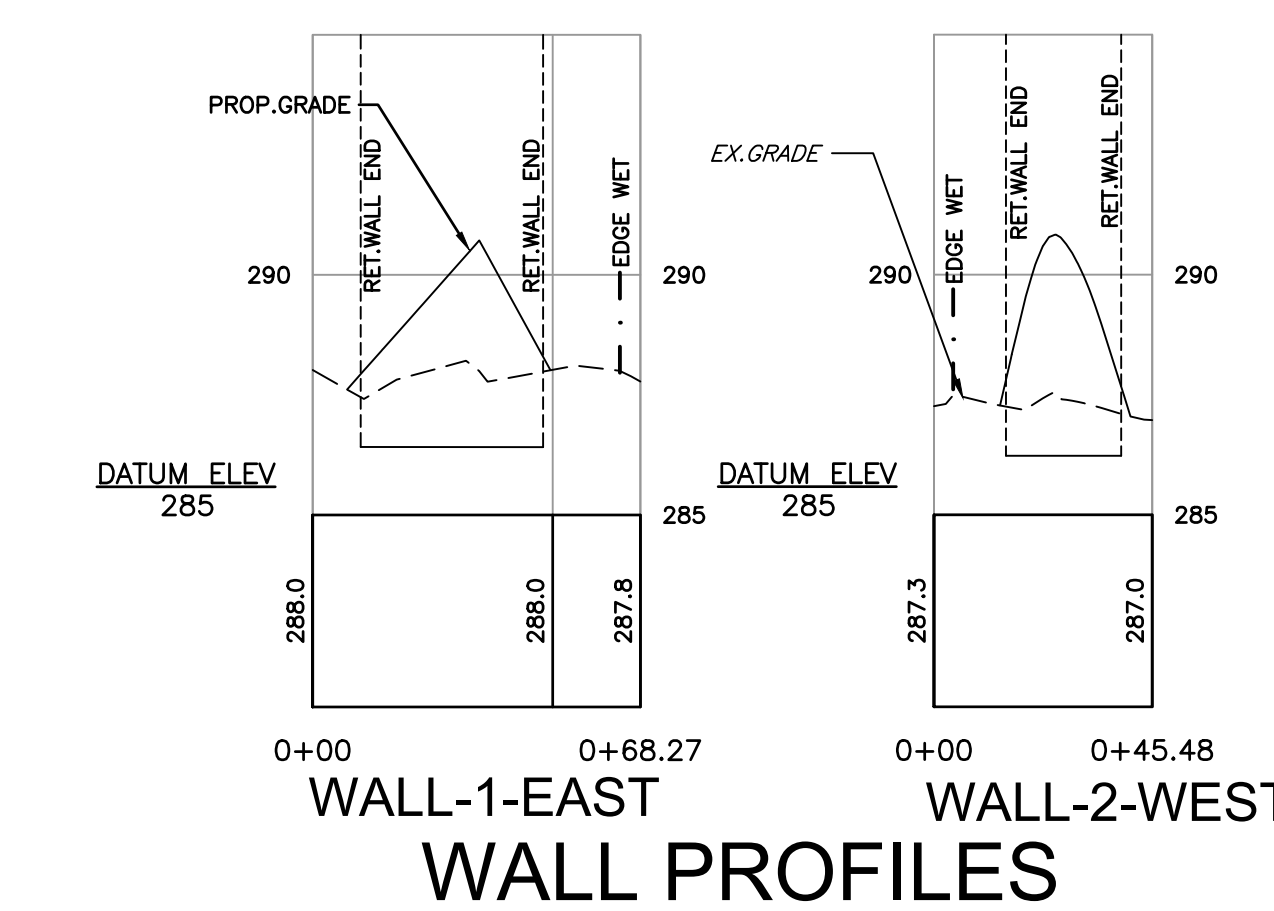
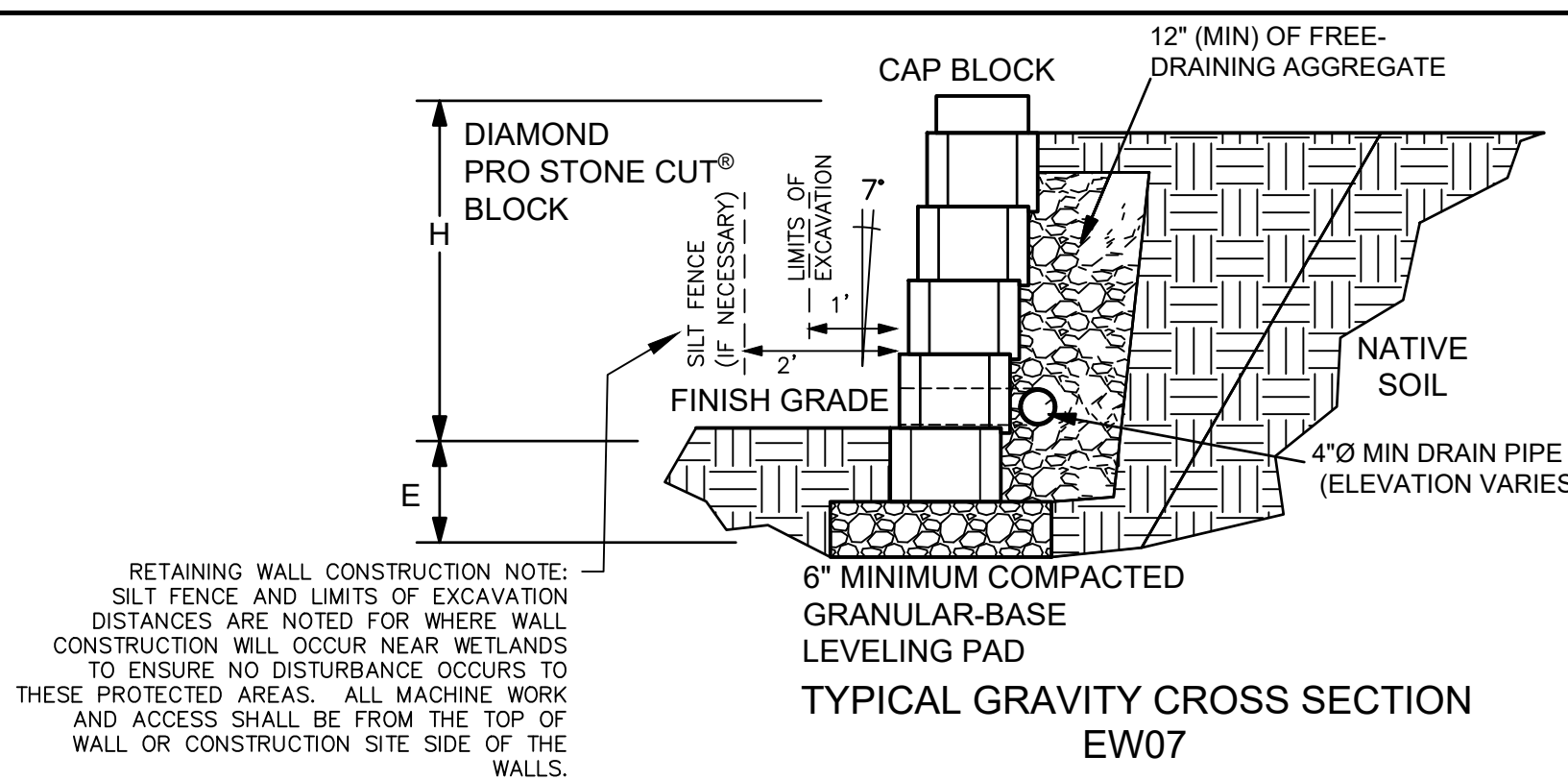
**TOWN OF DERRY SIGHT DISTANCE PROFILE**

SCALE: 1"=40' (HORIZ.)  
1"=4' (VERT.)



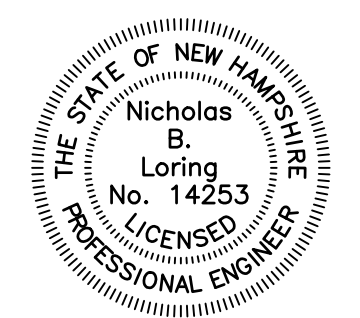
**TOWN OF DERRY SIGHT DISTANCE PROFILE**

SCALE: 1"=40' (HORIZ.)  
1"=4' (VERT.)



NOTES:  
1. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL PROVIDE A STAMPED ENGINEER DESIGN OF THE RETAINING WALLS WITH ALL ASSOCIATED PROFILES AND GUARDRAIL ASSEMBLIES TO THE SATISFACTION OF THE TOWN OF DERRY ENGINEERING AND BUILDING DEPARTMENTS

I HEREBY CERTIFY THAT THE 200' OF SIGHT DISTANCE AS REQUIRED BY THE TOWN OF DERRY WILL BE ACHIEVED UPON COMPLETION OF THE IMPROVEMENTS SHOWN ON THIS PLAN.



NICHOLAS B. LORING, PE

**SIGHT DISTANCE PLAN**  
**TAX MAP 28 LOT 002**  
**#71 BIRCH STREET**  
**DERRY, NEW HAMPSHIRE 03038**  
OWNER OF RECORD / PREPARED FOR  
71 BIRCH STREET, LLC  
230 HAMPSTEAD ROAD  
DERRY, NEW HAMPSHIRE 03038  
RCRD BOOK 6455/PAGE 413  
SCALE: 1"=40' SHEET 12 of 12 JUNE 23, 2023

TRC 2/16/24 COMMENTS	2/20/24
CONSERVATION COM.	10/12/23
TRC 7/28/23 COMMENTS	9/15/23
REVISIONS	DATE

APPROVED BY THE TOWN OF DERRY, NH PLANNING BOARD  
On Date: \_\_\_\_\_  
Certified By: \_\_\_\_\_  
CHAIRMAN \_\_\_\_\_  
SECRETARY \_\_\_\_\_