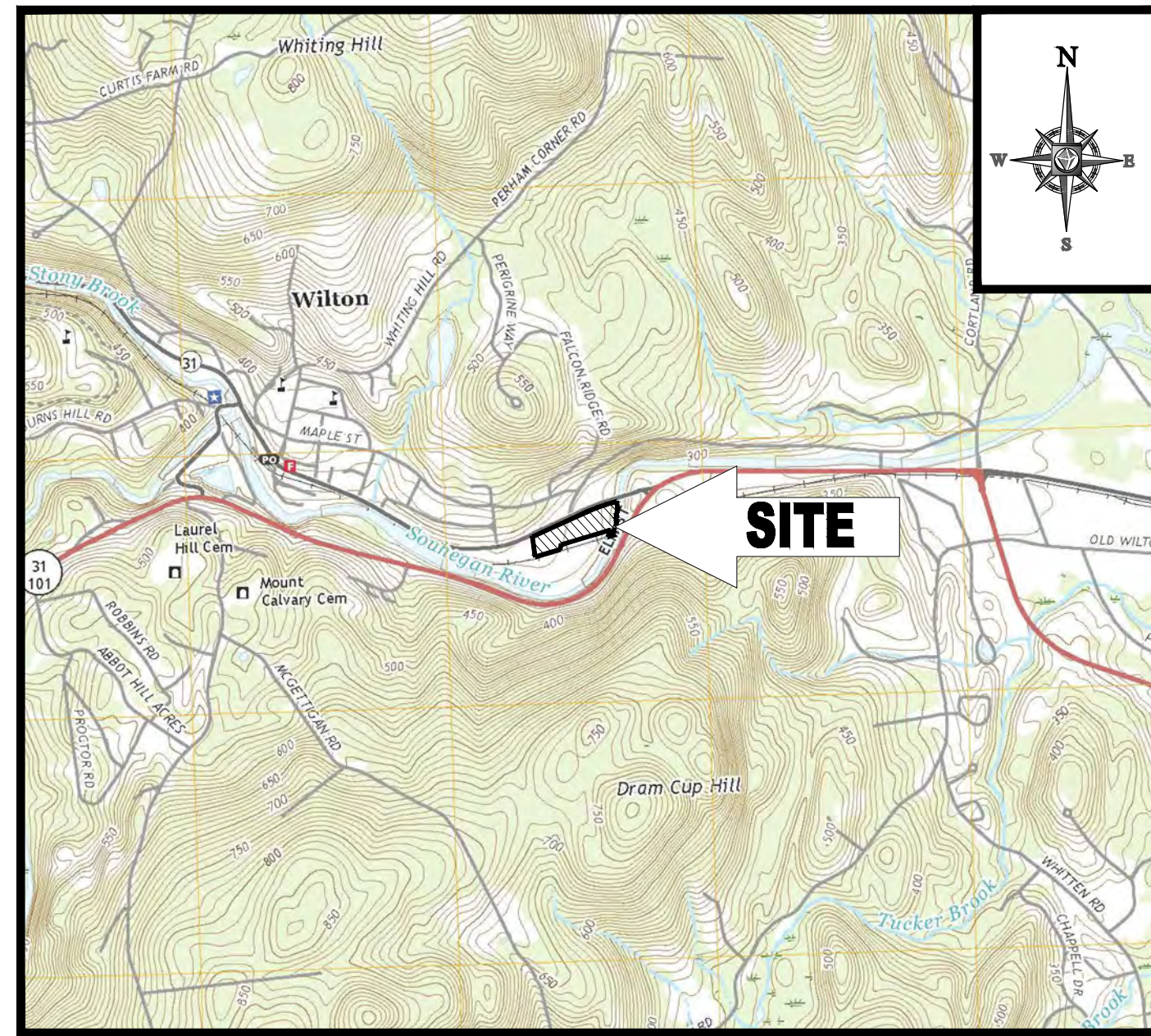


# SITE DEVELOPMENT PLANS

FOR:  
PROPOSED

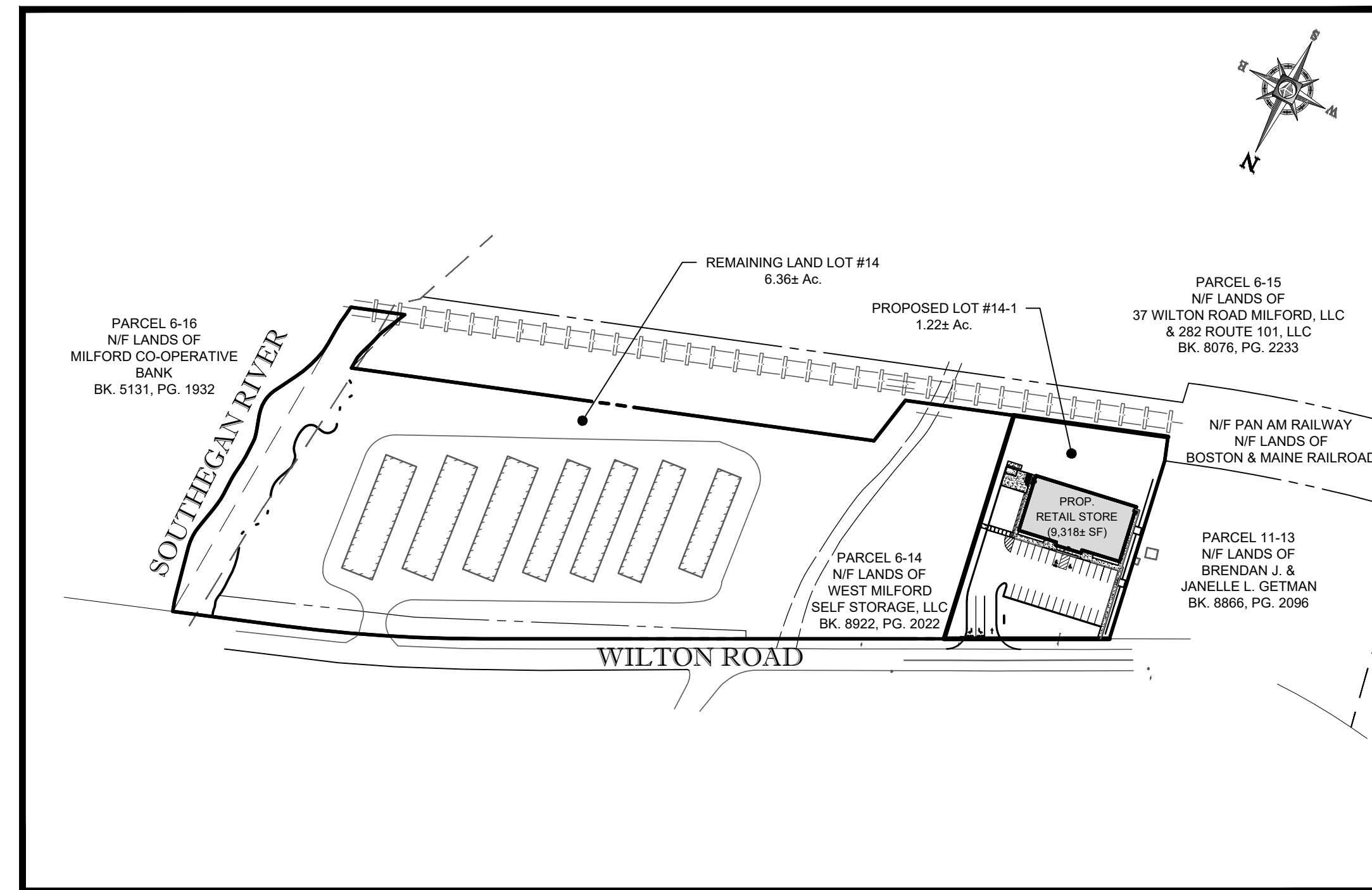
## LISCIOTTI DEVELOPMENT CORP.

LOCATION OF SITE:  
30 WILTON ROAD, TOWN OF MILFORD  
HILLSBOROUGH COUNTY, NEW HAMPSHIRE  
MAP #6, LOT #14



LOCATION MAP

SCALE: 1"=2000'  
PLAN REFERENCE: MILFORD, NEW HAMPSHIRE USGS QUADRANGLE



AREA PLAN

SCALE: 1"=150'

SHEET TITLE	SHEET NUMBER
COVER SHEET	1 OF 13
GENERAL NOTES SHEET	2 OF 13
DEMOLITION PLAN	3 OF 13
SITE PLAN	4 OF 13
GRADING & DRAINAGE PLAN	5 OF 13
UTILITY PLAN	6 OF 13
SOIL EROSION & SEDIMENT CONTROL PLAN	7 OF 13
SOIL EROSION CONTROL NOTES & DETAILS SHEET	8 OF 13
LANDSCAPE PLAN	9 OF 13
LANDSCAPE NOTES & DETAILS	10 OF 13
CONSTRUCTION DETAIL SHEET	11 OF 13
CONSTRUCTION DETAIL SHEET	12 OF 13
CONSTRUCTION DETAIL SHEET	13 OF 13
ALTA / NSPS LAND TITLE SURVEY (BY OTHERS)	1 OF 2
ALTA / NSPS LAND TITLE SURVEY (BY OTHERS)	2 OF 2
LIGHTING PLAN (BY OTHERS)	1 OF 1

SHEET INDEX

WAIVER REQUESTS:

THE FOLLOWING WAIVERS ARE REQUESTED FROM THE TOWN OF MILFORD DEVELOPMENT REGULATIONS:

6.05.4 - TABLE OF OFF-STREET PARKING; (GRANTED AT JANUARY 22, 2019 HEARING)

REQUIRED: "RETAIL SHOPPING CENTERS (0-49,999 SF)" USE REQUIRES 4 SPACES PER 1,000 SF, OR A TOTAL OF THIRTY-SEVEN (37) REQUIRED PARKING SPACES FOR THE PROPOSED 9,318± SQUARE FOOT RETAIL FACILITY.

REQUESTED: TWENTY-EIGHT (28) PARKING SPACES ARE PROPOSED FOR THE PROPOSED RETAIL FACILITY.

6.05.6 (E) - PARKING AND LOADING AREA STANDARDS:

REQUIRED: ALL OFF-STREET PARKING AND LOADING OR UNLOADING SPACES SHALL BE AT LEAST TEN FEET (10') FROM ANY PUBLIC STREET RIGHT-OF-WAY AND SHALL BE SEPARATED FROM SUCH RIGHT-OF-WAY BY A GRANITE CURB AND LANDSCAPING AS REQUIRED IN 6.08 LANDSCAPING STANDARDS.

REQUESTED: NO GRANITE CURBING IS PROPOSED AS PART OF THE PROJECT.

TOWN OF MILFORD NOTES:

- THE PURPOSE OF THIS PLAN IS TO REFLECT THE PROPOSED SITE DEVELOPMENT AT THE SUBJECT PROPERTY FOR SUBMISSION TO THE TOWN OF MILFORD PLANNING BOARD.
- AS-BUILT PLANS SHALL BE DELIVERED TO THE BUILDING DEPARTMENT PRIOR TO A CERTIFICATE OF OCCUPANCY BEING ISSUED.
- WATER, SEWER, ROAD (INCLUDING PARKING LOT) AND DRAINAGE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF MILFORD'S WATER UTILITIES DEPARTMENT AND PUBLIC WORKS DEPARTMENT STANDARDS.
- OPEN SPACE CALCULATIONS: 45.5% (24,222± SF TOTAL AREA)
- THE PROJECT IS SUBJECT TO POLICE IMPACT FEES IN ACCORDANCE WITH THE TOWN OF MILFORD.
- THE PROJECT IS NOT LOCATED WITHIN THE GROUNDWATER PROTECTION DISTRICT.
- NO WETLANDS HAVE BEEN IDENTIFIED ON THE SUBJECT PROPERTY.

REFERENCE PLANS

THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE PLAN:

- "ALTA/NSPS LAND TITLE SURVEY", PREPARED BY CONTROL POINT ASSOCIATES, INC. DATED 11/13/2018.
- GEOTECHNICAL REPORT, PREPARED BY GEOTECHNICAL SERVICES, INC. DATED 11/12/2018.

OWNER/APPLICANT INFORMATION:

- APPLICANT:  
MILFORD DG SERIES LLC  
83 ORCHARD HILL PARK DRIVE  
LEOMINSTER, MA, 01453
- OWNER:  
WEST MILFORD SELF STORAGE, LLC  
5 CARDELLI CROSSING  
MILFORD, NH 03055
- PARCEL:  
MAP #6, LOT #14  
30 WILTON ROAD  
TOWN OF MILFORD  
HILLSBOROUGH COUNTY / NEW HAMPSHIRE

TOWN OF MILFORD PLANNING BOARD

SIGNATURE	DATE
SIGNATURE	DATE
SIGNATURE	DATE
SIGNATURE	DATE
SIGNATURE	DATE
SIGNATURE	DATE
SIGNATURE	DATE
SIGNATURE	DATE

PROPERTY OWNER

SIGNATURE	DATE
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PREPARED BY



REVISIONS

REV	DATE	COMMENT	BY
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PERMIT

PROJECT No.:	W181203
DRAWN BY:	DTS/EKR
CHECKED BY:	AFT/MDS
DATE:	12/21/2018
SCALE:	AS NOTED
CAD I.D.:	W181203_S53

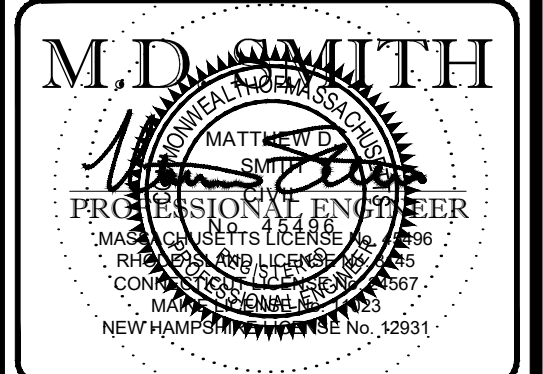
SITE DEVELOPMENT PLANS

FOR:  
LISCIOTTI DEVELOPMENT CORP.

LOCATION OF SITE  
MAP #6, LOT #14  
30 WILTON ROAD  
TOWN OF MILFORD  
HILLSBOROUGH COUNTY  
NEW HAMPSHIRE



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SHEET TITLE:

COVER SHEET

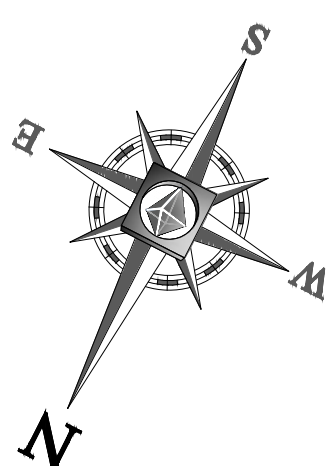
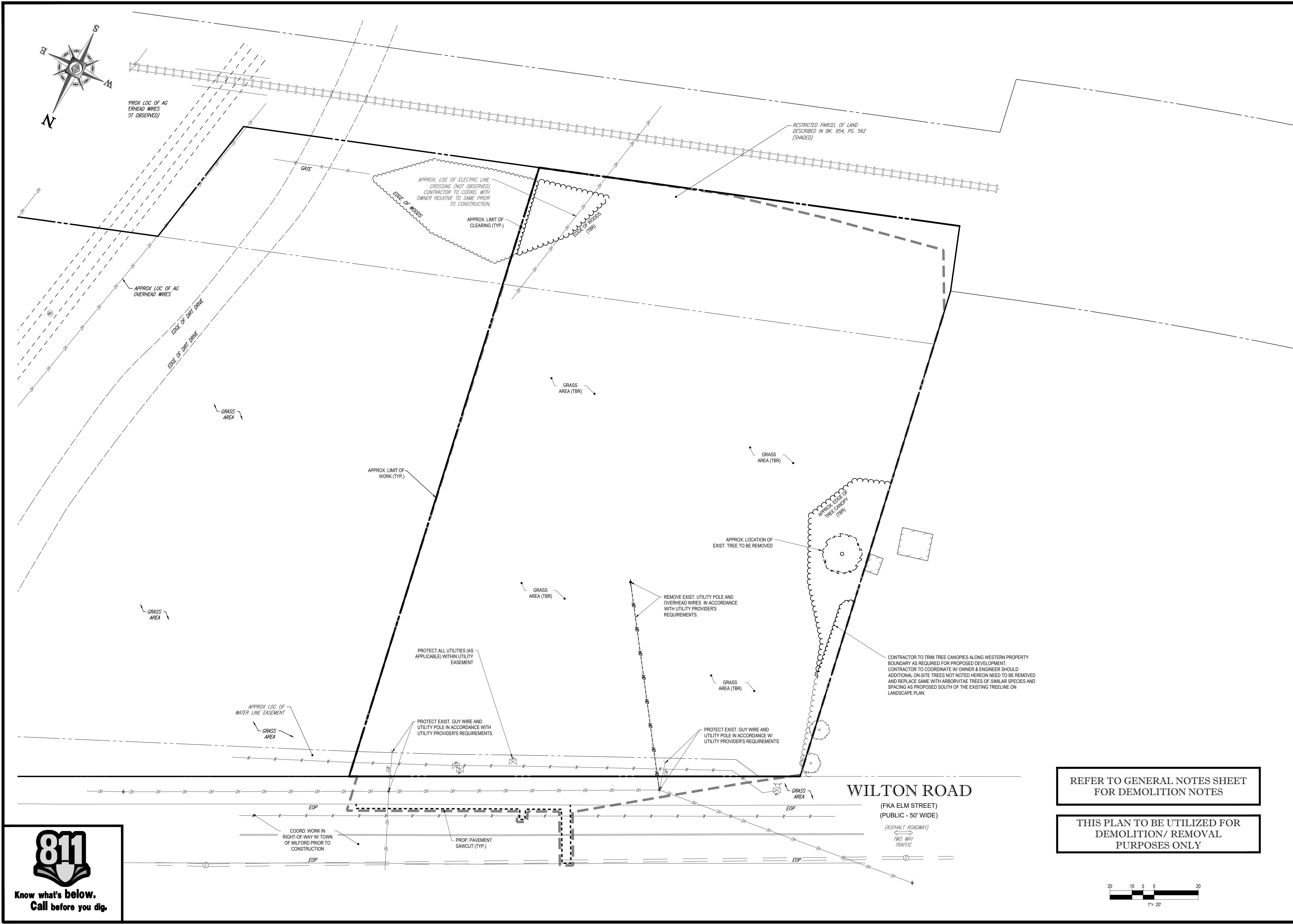
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1

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**SITE DEVELOPMENT PLANS**  
 FOR

LISCIOTTI DEVELOPMENT CORP.

LOCATION OF SITE  
 MAP #6, LOT #14  
 30 WILTON ROAD  
 TOWN OF MILFORD  
 HILLSBOROUGH COUNTY  
 NEW HAMPSHIRE

**BOHLER ENGINEERING**

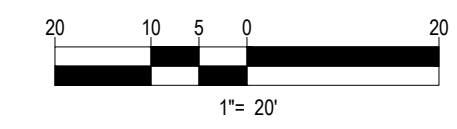
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**M.D. SMITH**

MATT SMITH  
 PROFESSIONAL ENGINEER  
 REG. NO. 12591  
 STATE OF NEW HAMPSHIRE

REFER TO GENERAL NOTES SHEET FOR DEMOLITION NOTES

THIS PLAN TO BE UTILIZED FOR DEMOLITION/ REMOVAL PURPOSES ONLY



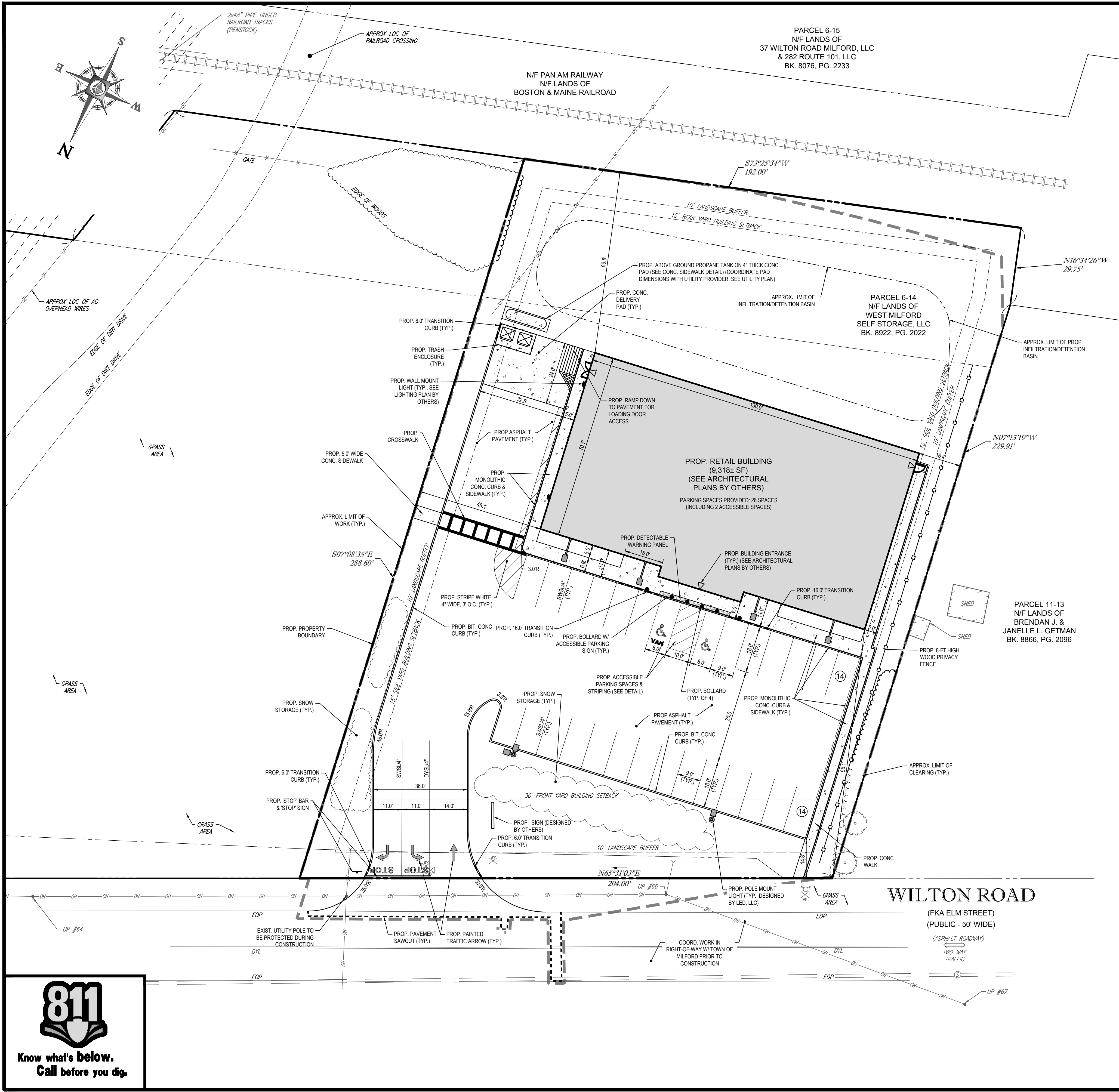
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**DEMOLITION PLAN**

SHEET NUMBER:  
**3**  
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### ZONING ANALYSIS TABLE

INTEGRATED COMMERCIAL-INDUSTRIAL (IC) DISTRICT WEST ELM STREET GATEWAY OVERLAY DISTRICT RETAIL BUSINESS USE PERMITTED BY-RIGHT			
ZONING DISTRICT	REQUIRED	EXISTING	PROPOSED
MINIMUM LOT AREA	20,000 SF	53,289± SF	53,289± SF
MINIMUM LOT FRONTAGE	150 FT	204± FT	204± FT
MAX. BUILDING COVERAGE	N/A	0%	17.5±%
MIN. FRONT SETBACK	30 FT	N/A	95.1± FT
MIN. SIDE SETBACK	15 FT	N/A	16.4± FT
MIN. REAR SETBACK	15 FT	N/A	69.8± FT
MAX. BUILDING HEIGHT	40 FT	N/A	30.3± FT
IMPERVIOUS COVERAGE	70%	0%	54.3±%
PARKING SPACES	37	N/A	28 (W)
PARKING CRITERIA	4 SPACES PER 1,000 SF FOR RETAIL SHOPPING CENTERS BETWEEN 0-49,999 SF (4 SPACES / 1,000 SF) X (9,318 SF) = 37 SPACES  APPROX. ALTERNATIVE CALCULATION: [(4 SPACES / 1,000 SF) X 7,343± SF RETAIL] + [(4 SPACES / 1,000 SF) + 1.010± SF WAREHOUSE] = 30 SPACES		
ACCESSIBLE PARKING SPACES	2	N/A	2
ACCESSIBLE PARKING CRITERIA	TOTAL PARKING 26 TO 50 = 2 ACCESSIBLE SPACES VAN ACCESSIBLE SPACES= 1/6 ACCESSIBLE SPACES		

N/A - NOT APPLICABLE  
N/S - NOT SPECIFIED  
(W) - WAIVER REQUESTED

### PAINT STRIPING LEGEND

SYSL4"	SINGLE YELLOW SOLID LINE / 4 IN. WIDE
SWSL4"	SINGLE WHITE SOLID LINE / 4 IN. WIDE
SYSL6"	SINGLE YELLOW SOLID LINE / 6 IN. WIDE
DYSL4"	DOUBLE YELLOW SOLID LINE / 4 IN. WIDE

**SNOW SHALL BE REMOVED TO AN OFF-SITE LOCATION IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL CODE SHOULD ADEQUATE ROOM NOT BE AVAILABLE ON SITE DURING SIGNIFICANT STORM EVENTS. AT NO TIME SHALL SNOW BE PLACED WITHIN THE STORMWATER DETENTION/ INFILTRATION BASINS.**

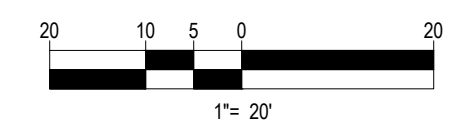
**DELIVERY TRUCK MANEUVERS SHALL OCCUR ENTIRELY WITHIN SUBJECT SITE AND SHALL NOT UTILIZE WILTON ROAD FOR SAME.**

**THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING POSTAL DELIVERY METHOD WITH THE LOCAL JURISDICTION. IF A PHYSICAL MAILBOX IS REQUIRED, GC IS RESPONSIBLE FOR THE PURCHASE, LOCATION PLACEMENT, AND INSTALLATION.**

**MAINTENANCE OF A CLEAR SIGHT LINE IS THE RESPONSIBILITY OF THE PROPERTY OWNER**

**REFER TO GENERAL NOTES SHEET FOR NOTES**

**THIS PLAN TO BE UTILIZED FOR SITE LAYOUT PURPOSES ONLY**



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DATE: 12/21/2018  
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CAD I.D.: W181203\_S83

### SITE DEVELOPMENT PLANS

FOR

**LISCIOTTI DEVELOPMENT CORP.**

LOCATION OF SITE  
MAP #6, LOT #14  
30 WILTON ROAD  
TOWN OF MILFORD  
HILLSBOROUGH COUNTY  
NEW HAMPSHIRE

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**M.D. SMITH**

PROFESSIONAL ENGINEER  
REG. NO. 12931

SHEET TITLE:  
**SITE PLAN**

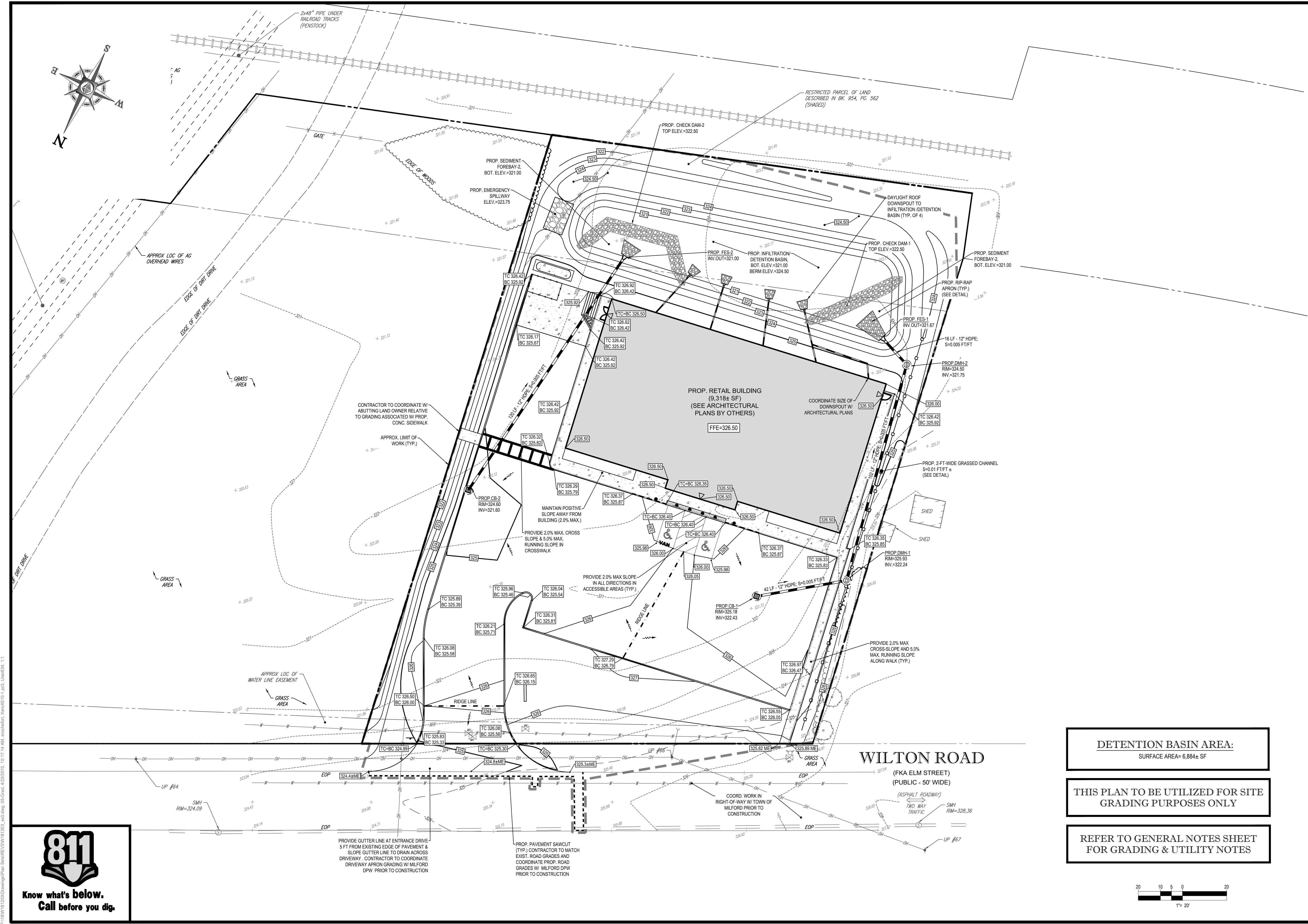
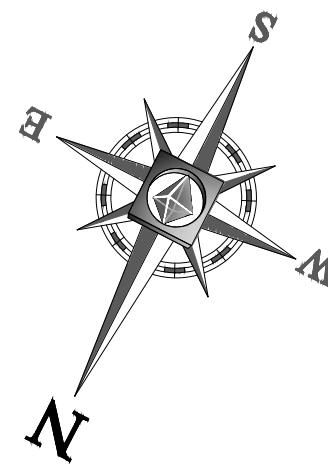
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**SITE DEVELOPMENT PLANS**  
 FOR

LISCIOTTI DEVELOPMENT CORP.

LOCATION OF SITE  
 MAP #6, LOT #14  
 30 WILTON ROAD  
 TOWN OF MILFORD  
 HILLSBOROUGH COUNTY  
 NEW HAMPSHIRE

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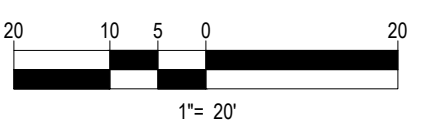
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 PROFESSIONAL ENGINEER  
 REG. NO. 12591  
 STATE OF NEW HAMPSHIRE

**DETENTION BASIN AREA:**  
 SURFACE AREA= 6,884± SF

**THIS PLAN TO BE UTILIZED FOR SITE GRADING PURPOSES ONLY**

**REFER TO GENERAL NOTES SHEET FOR GRADING & UTILITY NOTES**



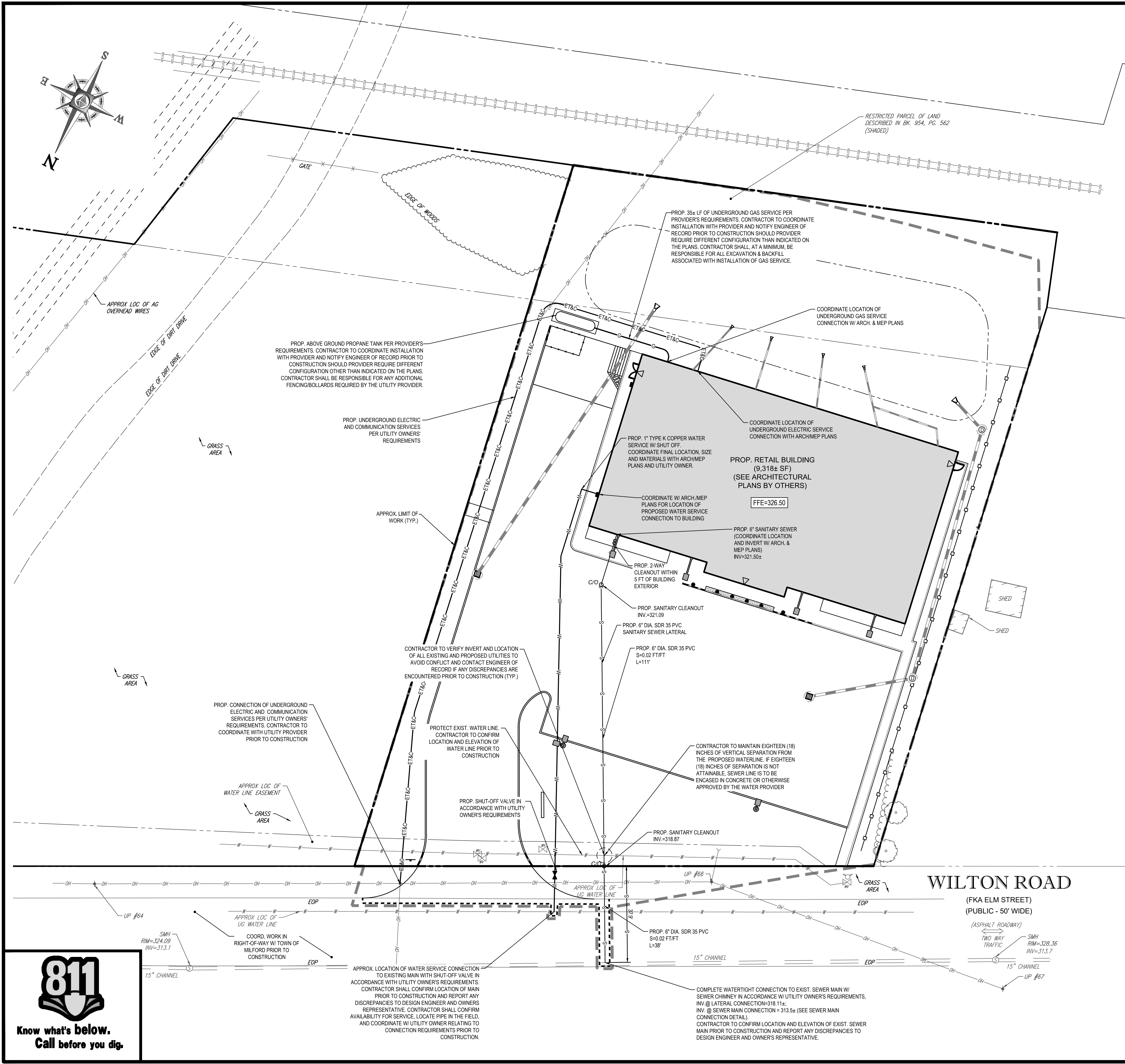
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**GRADING & DRAINAGE PLAN**

SHEET NUMBER:  
**5**  
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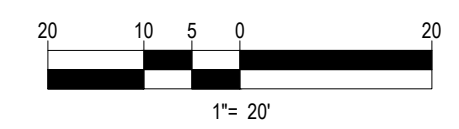


CONTRACTOR TO VERIFY ELEVATION AND LOCATION OF ALL UTILITY INFRASTRUCTURE WITH UTILITY PROVIDERS AND NOTIFY ENGINEER OF RECORD IF ANY DISCREPANCIES ARE ENCOUNTERED PRIOR TO CONSTRUCTION.

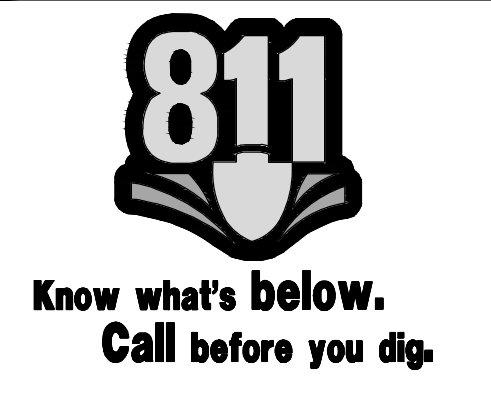
WATER, SEWER, ROAD (INCLUDING PARKING LOT), AND DRAINAGE WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF MILFORD'S WATER UTILITIES DEPARTMENT AND PUBLIC WORKS DEPARTMENT STANDARDS.

THIS PLAN TO BE UTILIZED FOR UTILITIES PURPOSES ONLY

REFER TO GENERAL NOTES SHEET FOR GRADING & UTILITY NOTES



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**SITE DEVELOPMENT PLANS**

FOR

LISCIOTTI DEVELOPMENT CORP.

LOCATION OF SITE  
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**M.D. SMITH**

MATT SMITH  
 PROFESSIONAL ENGINEER  
 REG. NO. 12596  
 CO. MA 0000000000  
 NEW HAMPSHIRE 12591

SHEET TITLE:  
**UTILITY PLAN**

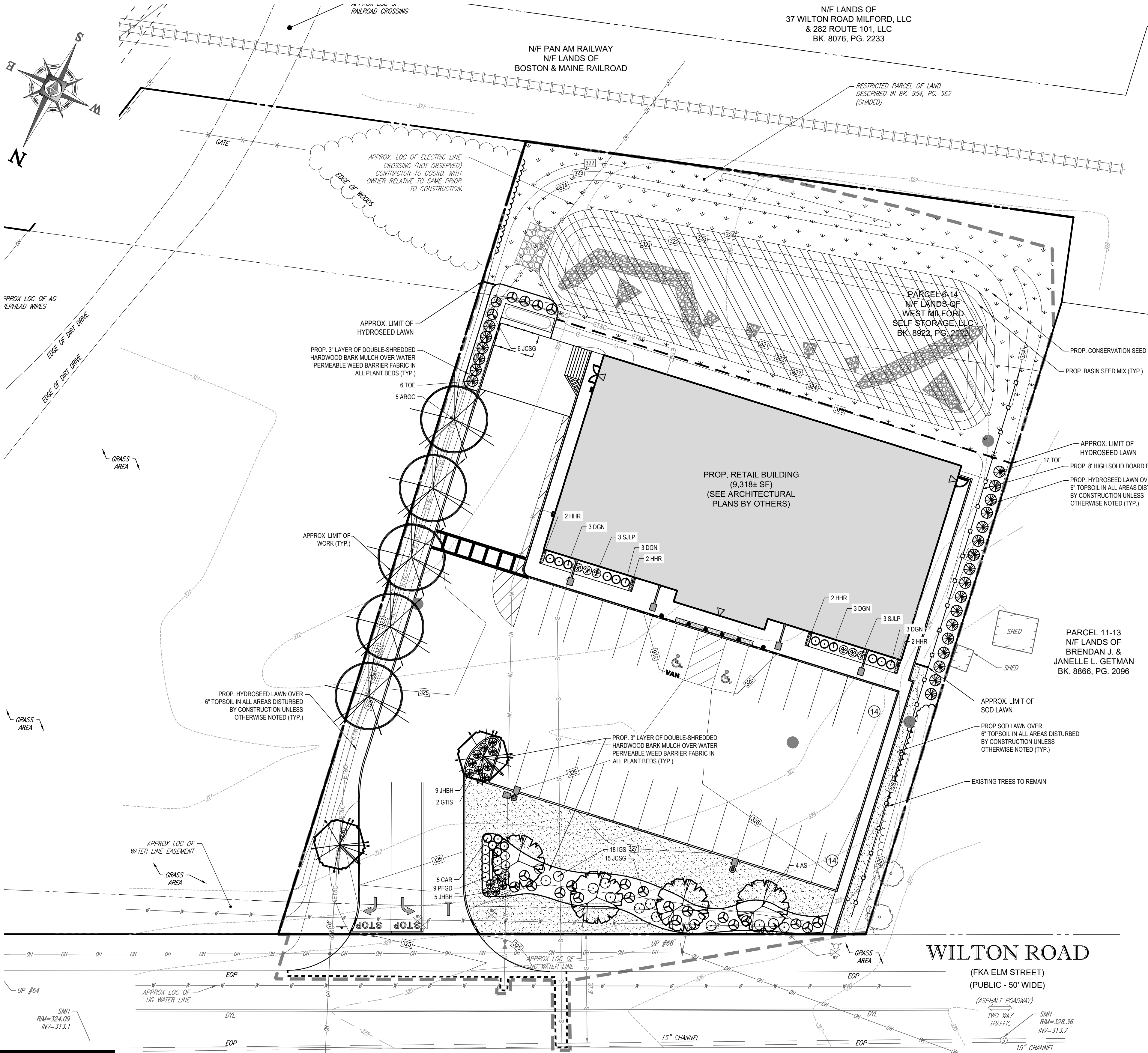
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### TOWN OF MILFORD LANDSCAPE REQUIREMENTS

SECTION OF BYLAW	LANDSCAPE REQUIREMENTS	REQUIRED	PROPOSED
SECTION 6.08.5 LANDSCAPE BUFFER	A2) ABUTS RESIDENTIAL USE B1) ADD 6' HT. SOLID BOARD FENCE C1) SCREEN DUMPSTER	YES YES YES	YES YES YES
SECTION 6.08.6 FRONTAGE	1 SHRUB PER EVERY 5' OF FRONTAGE	215 / 5= 43 SHRUBS	58 SHRUBS
SECTION 6.08.7 PARKING LOTS	A) PERIPHERY 1 TREE PER EVERY 30' B) WITHIN PARKING LOT 1 TREE PER EVERY 15 SPACES	126.9 / 30= 4.23 TREES 28 / 15= 1.86 TREES	5 TREES 2 TREES

### LANDSCAPE SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	SIZE	CONT.
<b>SHADE TREES</b>					
AROG	5	ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	3.3 1/2" CAL. & 12' HT.	8-B
AS	4	ACER SACCHARUM 'AUTUMN SPLENDOR'	AUTUMN SPLENDOR SUGAR MAPLE	3.3 1/2" CAL. & 12' HT.	8-B
GTS	2	GLEDITSIA TRACANTHOS VAR. INERMIS 'SHADEMASTER'	SHADEMASTER HONEYLOCUST	3.3 1/2" CAL. & 12' HT.	8-B
<b>DECIDUOUS SHRUBS</b>					
CAR	5	CLETHRA ALNIFOLIA 'ROSEAN'	PINK SUMMERSHEET CLETHRA	24-30"	CONTAINER
DGN	12	DEUTZIA GRACILIS 'NIMMO'	COMPACT DEUTZIA	18-24"	CONTAINER
PFGD	9	POTENTILLA FRUTICOSA 'GOLD DROP'	GOLD DROP CINQUEFOIL	24-30"	CONTAINER
SJLP	6	SPIREA JAPONICA 'LITTLE PRINCESS'	LITTLE PRINCESS SPIREA	15-18"	CONTAINER
<b>EVERGREEN SHRUBS</b>					
IGS	15	SYRINGA MEYER 'PALBIR'	DWARF KOREAN LILAC	24-30"	CONTAINER
JCSG	24	JUNIPERUS CHINENSIS 'SEA GREEN'	SEA GREEN JUNIPER	24-30" SPRD.	8-B
TOE	23	THUJA OCCIDENTALIS 'EMERALD'	EMERALD GREEN ARBORVITAE	5-6'	8-B
<b>GROUND COVERS</b>					
JHBH	14	JUNIPERUS HORIZONTALIS 'BAR HARBOR'	BAR HARBOR CREEPING JUNIPER	15-18" SPRD.	CONTAINER
<b>PERENNIALS</b>					
HHR	8	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	2 GAL.	CONTAINER

### STANDARD FOR PERMANENT STABILIZATION WITH SOD

**METHODS AND MATERIALS**

- CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD. SPECIFY "CERTIFIED SOD," OR OTHER HIGH QUALITY CULTIVATED SOD.
- SOD SHOULD BE FREE OF WEEDS AND UNDESIRABLE COARSE WEEDY GRASSES.
- SOD SHOULD BE OF UNIFORM THICKNESS, APPROXIMATELY 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT TIME OF CUTTING. (EXCLUDES TOP GROWTH.)
- SOD SHOULD BE VIGOROUS AND DENSE AND BE ABLE TO RETAIN ITS OWN SHAPE AND WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP FROM THE UPPER 10 PERCENT OF THE STRIP. BROKEN PADS OR TORN AND UNEVEN ENDS WILL NOT BE ACCEPTABLE.
- FOR DRAUGHT SITES, A SOD OF KENTUCKY 31 TALL FESCUE AND BLUEGRASS IS PREFERRED OVER A STRAIGHT BLUEGRASS SOD.
- ONLY MOIST, FRESH, UNHEATED SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS.

**I. SITE PREPARATION**

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR LIMING, FERTILIZING, AND SOIL PREPARATION. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.

B. INSTALL ALL NEEDED EROSION CONTROL PRACTICES AND FACILITIES, SUCH AS INTERCEPTOR DITCHES, DIKES AND TERRACES, EROSION STOPS, AND DE-SILTING BASINS.

**II. SOIL PREPARATION**

A. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE OFFERED BY RUTGERS UNIVERSITY SOIL TESTING LABORATORY. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT. IN ADDITION, 300 POUNDS 38-0-0 PER ACRE OR EQUIVALENT OF SLOW RELEASE NITROGEN MAY BE USED IN LIEU OF TOP-DRESSING. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDES) AS FOLLOWS:

SOIL TEXTURE	TONS/ACRE	LBS/1000 SQ. FT.
CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL	4	180
SANDY LOAM, LOAM, SILT LOAM	3	135
LOAMY SAND, SAND	2	90

B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCOING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED.

C. REMOVE FROM THE SURFACE ALL OBJECTS THAT WOULD PREVENT GOOD SOD TO SOIL CONTACT AND REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS, OR OTHER UNSUITABLE MATERIAL.

D. INSPECT SITE JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RE-TILLED AND FIRMED AS ABOVE.

**III. SOD PLACEMENT**

A. SOD STRIPS SHOULD BE LAID ON THE CONTOUR, NEVER UP AND DOWN THE SLOPE, STARTING AT THE BOTTOM OF THE SLOPE AND WORKING UP. ON STEEP SLOPES, THE USE OF LADDERS WILL FACILITATE THE WORK AND PREVENT DAMAGE TO THE SOD. DURING PERIODS OF HIGH TEMPERATURE, LIGHTLY IRRIGATE THE SOIL IMMEDIATELY PRIOR TO LAYING THE SOD.

B. PLACE SOD STRIPS WITH SUGU, EVEN JOINTS THAT ARE STAGGERED. OPEN SPACES INVITE EROSION.

C. ROLL OR TAMP SOD IMMEDIATELY FOLLOWING PLACEMENT TO INSURE SOLID CONTACT OF ROOT MAT AND SOIL SURFACE. DO NOT OVERLAP SOD. ALL JOINTS SHOULD BE BUTTED TIGHTLY IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE DRYING OF THE ROOTS.

D. ON SLOPES GREATER THAN 3 TO 1, SECURE SOD TO SURFACE SOIL WITH WOOD PEGS, WIRE STAPLES, OR SPLIT SHINGLES (8 TO 10 INCHES LONG BY 3/4 INCH WIDE).

E. SURFACE WATER CANNOT ALWAYS BE DIVERTED FROM FLOWING OVER THE FACE OF THE SLOPE, BUT A CAPPING STRIP OF HEAVY JUTE OR PLASTIC NETTING, PROPERLY SECURED, ALONG THE CROWN OF THE SLOPE AND EDGES WILL PROVIDE EXTRA PROTECTION AGAINST LIFTING AND UNDERCUTTING OF SOD. THE SAME TECHNIQUE CAN BE USED TO ANCHOR SOD IN WATER CARRYING CHANNELS AND OTHER CRITICAL AREAS. WIRE STAPLES MUST BE USED TO ANCHOR NETTING IN CHANNEL WORK.

F. IMMEDIATELY FOLLOWING INSTALLATION, SOD SHOULD BE WATERED UNTIL MOISTURE PENETRATES THE SOIL LAYER BENEATH SOD TO A DEPTH OF 4 INCHES. MAINTAIN OPTIMUM MOISTURE FOR AT LEAST TWO WEEKS, AND CONTINUE IRRIGATION THROUGHOUT ENTIRE SEASON.

**IV. TOP-DRESSING** IF SLOW RELEASE NITROGEN (300 POUNDS 38-0-0 PER ACRE OR EQUIVALENT) IS USED IN ADDITION TO SUGGESTED FERTILIZER, THEN A FOLLOW-UP OF TOP DRESSING IS NOT MANDATORY.

A. SPRING INSTALLATION OF SOD WILL REQUIRE AN APPLICATION OF FERTILIZER SUCH AS 10-20-10 OR EQUIVALENT AT 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET BETWEEN MARCH 15 AND APRIL 1.

B. FALL INSTALLATION OF SOD WILL REQUIRE THE ABOVE BETWEEN SEPTEMBER 1 AND OCTOBER 15.

### LANDSCAPE TABLE

BEDED / MULCHED AREAS	HARDWOOD BARK MULCH (BROWN)
NUMBER OF SHRUBS	89
NUMBER OF TREES	11
MOW-ABLE AREA	9,135 SF
IRRIGATION SYSTEM (Y/N)	YES
IRRIGATION ON SEPARATE METER (Y/N)	YES [!]

### IRRIGATION NOTES:

- ALL LANDSCAPE AREAS AND LAWNS ADJACENT TO PAVED AREAS AND/OR STREETS ARE TO BE FULLY IRRIGATED.
- IRRIGATION SYSTEM TO INCLUDE ALL SPRAY HEADS, VALVES AND CONTROLLERS.
- A SEPARATE METER AND BACKFLOW PREVENTER WILL BE REQUIRED.
- LOCATE HEADS A MINIMUM OF 2" FROM EDGE OF PAVEMENT/CURB.
- LOCATE RAINBIRD CONTROL PANEL IN RECEIVING AREA NEXT TO ELECTRICAL PANELS.
- IRRIGATION SYSTEM TO BE DESIGNED BY OTHERS.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND FURNISHING IRRIGATION SYSTEM AND ASSOCIATED APPLIANCES, INCLUDING ALL REQUIRED SLEEVING.

### LANDSCAPE TABLE

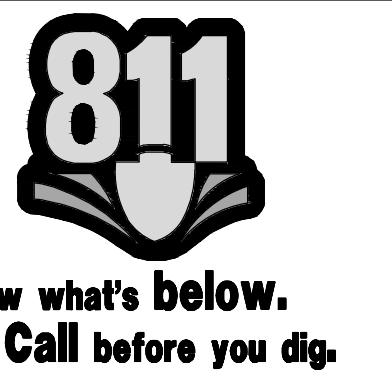
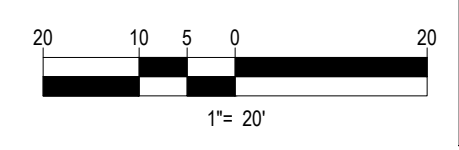
[Symbol]	SOD
[Symbol]	BASEIN MIX
[Symbol]	CONSERVATION SEED MIX

[!] COORDINATE ALLOWANCE OF SEPARATE METER AND REQUIREMENTS FOR SAME WITH UTILITY PROVIDER

**NOTES:**

- ANY LANDSCAPE ELEMENT THAT DIES, OR IS OTHERWISE REMOVED, SHALL BE PROMPTLY REPLACED WITH THE SAME, IF NOT SIMILAR TO, HEIGHT OR TEXTURE ELEMENT AS ORIGINALLY INTENDED. IN ADDITION, LANDSCAPED AREAS SHALL BE KEPT FREE OF ALL DEBRIS, RUBBISH, WEEDS, AND OVERGROWN TURF GRASS.
- ALL PLANT STOCK SHALL MEET ANSI Z60.1.

IN ACCORDANCE WITH TOWN OF MILFORD REQUIREMENTS, PERMANENT IRRIGATION SYSTEM, IF PROVIDED, SHALL BE A LOW VOLUME (DRIP IRRIGATION) SYSTEM. IRRIGATION SYSTEMS UTILIZE WATER SAVING TECHNOLOGIES, INCLUDING RAIN SENSORS AND WEATHER MONITORING.



## BOHLER ENGINEERING

SITE CIVIL AND CONSULTING ENGINEERING  
LAND SURVEYING PROGRAM MANAGEMENT LANDSCAPE ARCHITECTURE  
SUSTAINABLE DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES

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MEMPHIS, TN  
MIAMI, FL  
MINNEAPOLIS, MN  
NEW YORK, NY  
PHILADELPHIA, PA  
PITTSBURGH, PA  
RICHMOND, VA  
SAN ANTONIO, TX  
SOUTH BEND, IN  
TAMPA, FL  
WASHINGTON, DC

### REVISIONS

REV	DATE	COMMENT	BY
1	01/30/19	PER TOWN & PEER REVIEW COMMENTS	EKR
2	03/21/19	PER TOWN COMMENTS	EKR
3			
4			
5			
6			
7			
8			
9			

### PERMIT

PROJECT No.: W181203  
DRAWN BY: DTB/EKR  
CHECKED BY: AFT/MSD  
DATE: 12/21/2018  
SCALE: AS NOTED  
CAD I.D.: XREF\_LAND\_W181203

### SITE DEVELOPMENT PLANS

FOR

LOCATION OF SITE  
MAP #6, LOT #14  
30 WILTON ROAD  
TOWN OF MILFORD  
HILLSBOROUGH COUNTY  
NEW HAMPSHIRE

LISCIOTTI DEVELOPMENT CORP.

## BOHLER ENGINEERING

352 TURNPIKE ROAD  
SOUTHBOROUGH, MA 01772  
Phone: (508) 480-9900  
Fax: (508) 480-9900  
www.BohlerEngineering.com

## M. J. PERVA

REGISTERED LANDSCAPE ARCHITECT  
MATTIEV PERVA  
REG. NO. 217  
RHOENUS, MA 01545  
NEW YORK No. 419  
NEW HAMPSHIRE No. 100  
CONNECTICUT No. 1359

SHEET TITLE:  
**LANDSCAPE PLAN**

SHEET NUMBER:  
**9**

OF 13

REV 2 - 03/21/2019

P:\18118\2019\Drawings\Plan\_Site\REV3\REF\_LAND\_W181203.dwg, LA\_4/25/2019, 10:17:14 AM, ekr006101.pcd, User:EKR, 11

# LANDSCAPE SPECIFICATIONS

**1. SCOPE OF WORK:**  
 THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

**2. MATERIALS**  
 A. GENERAL - ALL HARDCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.

B. TOPSOIL - NATURAL, FRABLE, LOAMY SILT SOIL, HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.

C. LAWN - ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM 6" THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED ON THE LANDSCAPE PLAN.

I. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.  
 II. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE-PEST FREE WITH A UNIFORM THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.

D. MULCH - ALL PLANTING BEDS SHALL BE MULCHED WITH A 3" THICK LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN AND/OR LANDSCAPE PLAN NOTES/DETAILS.

E. FERTILIZER  
 I. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A DRY, UNEXPOSED PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.  
 II. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.

F. PLANT MATERIAL  
 I. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (FORMERLY THE AMERICAN ASSOCIATION OF NURSERYMEN).  
 II. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.  
 III. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.

IV. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1/2", WHICH HAVE NOT BEEN COMPLETELY CALLED, SHALL BE REJECTED. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.  
 V. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH, WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.  
 VI. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 1/2" ABOVE THE NATURAL GRADE.  
 VII. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.  
 VIII. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

G. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:  
 ACER RUBRUM PLATANUS X ACERIFOLIA  
 BETULA VARIETIES POPULUS VARIETIES  
 CARPINUS VARIETIES PRUNUS VARIETIES  
 CRATAEGUS VARIETIES PYRUS VARIETIES  
 KOELREUTERA QUERCUS VARIETIES  
 LIQUIDAMBAR STYRACIFLUA TILIA TOMENTOSA  
 LIRIODENDRON TULIPIFERA ZELKOVA VARIETIES

H. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:  
 I. 1 PART PEAT MOSS  
 II. 1 PART COMPOSTED COW MANURE BY VOLUME  
 III. 3 PARTS TOPSOIL BY VOLUME  
 IV. 21 GRAMS AGIFORM PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:  
 A) 2 TABLETS PER 1 GALLON PLANT  
 B) 3 TABLETS PER 5 GALLON PLANT  
 C) 4 TABLETS PER 15 GALLON PLANT  
 D) LARGER PLANTS: 2 TABLETS PER 1/2" CALIPER OF TRUNK

I. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.  
 J. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.  
 K. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.  
 L. GROUND COVER AREAS SHALL RECEIVE A 1/2" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.  
 M. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.  
 N. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.  
 O. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)  
 A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.  
 B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.  
 C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.  
 D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.  
 E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.  
 F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

11. WATERING  
 A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.  
 B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.  
 C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

12. GUARANTEE  
 A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF 1 YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.  
 B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION.  
 C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATING, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.  
 D. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF EROSION OR BARE AREAS.

13. CLEANUP  
 A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.  
 B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

14. MAINTENANCE (ALTERNATIVE BID)  
 A 90 DAY MAINTENANCE PERIOD SHALL COMMENCE AT THE END OF ALL LANDSCAPE INSTALLATION OPERATIONS. THE 90 DAY MAINTENANCE PERIOD ENSURES TO THE OWNER/OPERATOR THAT THE NEWLY INSTALLED LANDSCAPING HAS BEEN MAINTAINED AS SPECIFIED ON THE APPROVED LANDSCAPE PLAN. ONCE THE INITIAL 90 DAY MAINTENANCE PERIOD HAS EXPIRED, THE OWNER/OPERATOR MAY REQUEST THAT THE BIDDERS SUBMIT AN ALTERNATE MAINTENANCE BID FOR A MONTHLY MAINTENANCE CONTRACT. THE ALTERNATE MAINTENANCE CONTRACT WILL ENCOMPASS ANY WORK THAT IS CONSIDERED APPROPRIATE TO ENSURE THAT PLANT AND LAWN AREAS ARE HEALTHY AND MANICURED TO THE APPROVAL OF THE OWNER/OPERATOR.

15. FINISHED GRADING  
 A. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.  
 B. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1").  
 C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.  
 D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

16. TOPSOILING  
 A. CONTRACTOR SHALL PROVIDE A 6" THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.  
 B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.  
 C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.  
 D. ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE FILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY [SEE SPECIFICATION 6.1]):  
 I. 20 POUNDS "GRO-POWER" OR APPROVED SOIL CONDITIONER/FERTILIZER  
 II. 20 POUNDS NITRO-FORM (SOURCE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER

17. SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

18. PLANTING  
 A. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.  
 B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS

ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.  
 C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHES SHALL BE REMOVED.  
 D. ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.  
 E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.  
 F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:  
 I. PLANTS: MARCH 15 TO DECEMBER 15  
 II. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1

PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.  
 G. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:  
 ACER RUBRUM PLATANUS X ACERIFOLIA  
 BETULA VARIETIES POPULUS VARIETIES  
 CARPINUS VARIETIES PRUNUS VARIETIES  
 CRATAEGUS VARIETIES PYRUS VARIETIES  
 KOELREUTERA QUERCUS VARIETIES  
 LIQUIDAMBAR STYRACIFLUA TILIA TOMENTOSA  
 LIRIODENDRON TULIPIFERA ZELKOVA VARIETIES

H. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:  
 I. 1 PART PEAT MOSS  
 II. 1 PART COMPOSTED COW MANURE BY VOLUME  
 III. 3 PARTS TOPSOIL BY VOLUME  
 IV. 21 GRAMS AGIFORM PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:  
 A) 2 TABLETS PER 1 GALLON PLANT  
 B) 3 TABLETS PER 5 GALLON PLANT  
 C) 4 TABLETS PER 15 GALLON PLANT  
 D) LARGER PLANTS: 2 TABLETS PER 1/2" CALIPER OF TRUNK

I. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.  
 J. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.  
 K. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.  
 L. GROUND COVER AREAS SHALL RECEIVE A 1/2" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.  
 M. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.  
 N. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.  
 O. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)  
 A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.  
 B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.  
 C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.  
 D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.  
 E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.  
 F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

11. WATERING  
 A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.  
 B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.  
 C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

12. GUARANTEE  
 A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF 1 YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.  
 B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION.  
 C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATING, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.  
 D. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF EROSION OR BARE AREAS.

13. CLEANUP  
 A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.  
 B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

14. MAINTENANCE (ALTERNATIVE BID)  
 A 90 DAY MAINTENANCE PERIOD SHALL COMMENCE AT THE END OF ALL LANDSCAPE INSTALLATION OPERATIONS. THE 90 DAY MAINTENANCE PERIOD ENSURES TO THE OWNER/OPERATOR THAT THE NEWLY INSTALLED LANDSCAPING HAS BEEN MAINTAINED AS SPECIFIED ON THE APPROVED LANDSCAPE PLAN. ONCE THE INITIAL 90 DAY MAINTENANCE PERIOD HAS EXPIRED, THE OWNER/OPERATOR MAY REQUEST THAT THE BIDDERS SUBMIT AN ALTERNATE MAINTENANCE BID FOR A MONTHLY MAINTENANCE CONTRACT. THE ALTERNATE MAINTENANCE CONTRACT WILL ENCOMPASS ANY WORK THAT IS CONSIDERED APPROPRIATE TO ENSURE THAT PLANT AND LAWN AREAS ARE HEALTHY AND MANICURED TO THE APPROVAL OF THE OWNER/OPERATOR.

15. FINISHED GRADING  
 A. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.  
 B. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1").  
 C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.  
 D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

16. TOPSOILING  
 A. CONTRACTOR SHALL PROVIDE A 6" THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.  
 B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.  
 C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.  
 D. ALL LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE FILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA - FOR BID PURPOSES ONLY [SEE SPECIFICATION 6.1]):  
 I. 20 POUNDS "GRO-POWER" OR APPROVED SOIL CONDITIONER/FERTILIZER  
 II. 20 POUNDS NITRO-FORM (SOURCE) 38-0-0 BLUE CHIP OR APPROVED NITROGEN FERTILIZER

17. SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

18. PLANTING  
 A. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.  
 B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS

ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.  
 C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHES SHALL BE REMOVED.  
 D. ALL PLANTING CONTAINERS, BASKETS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.  
 E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.  
 F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:  
 I. PLANTS: MARCH 15 TO DECEMBER 15  
 II. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1

PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.  
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 I. 1 PART PEAT MOSS  
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I. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.  
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 D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.  
 E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.  
 F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

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 C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATING, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.  
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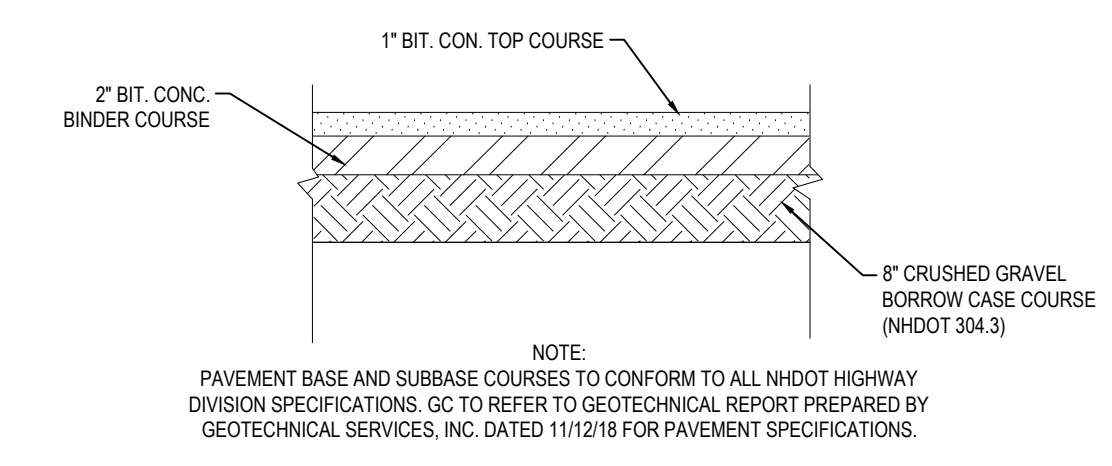
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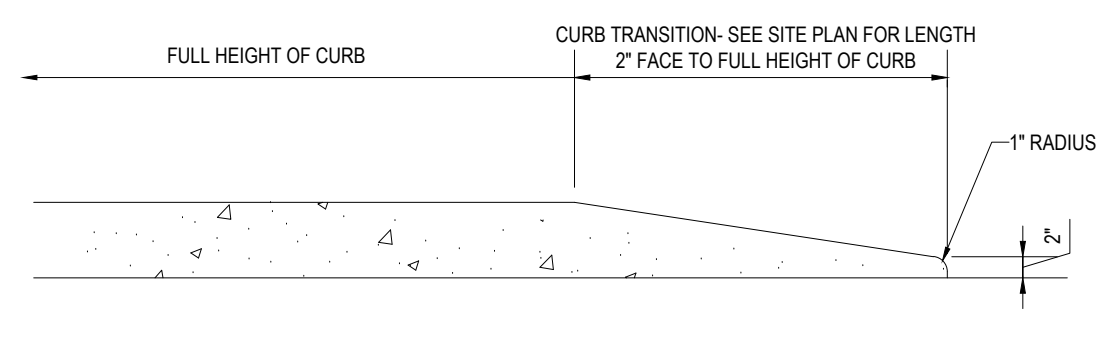
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 B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS

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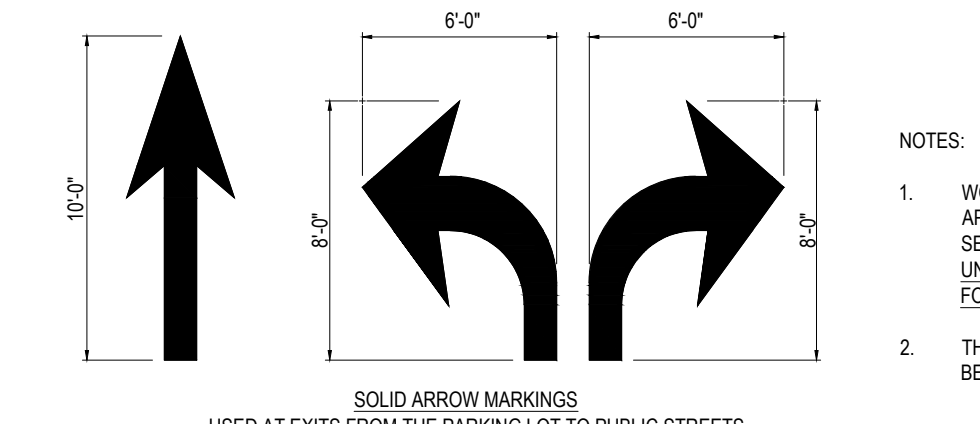
**ASPHALT PAVEMENT SECTION**

N.T.S.



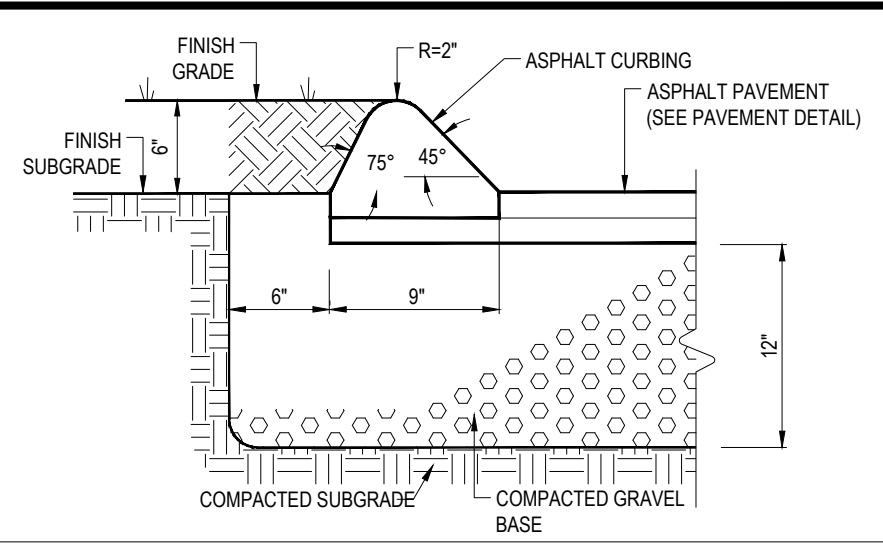
**TRANSITION CURB DETAIL**

N.T.S.



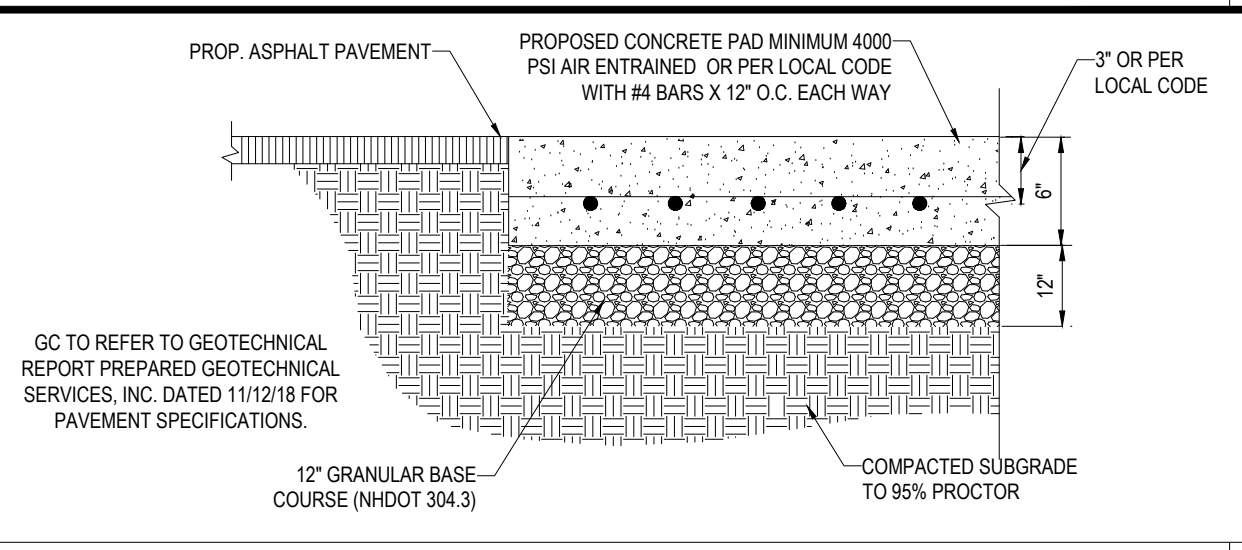
**PAINTED TRAFFIC ARROWS**

N.T.S.



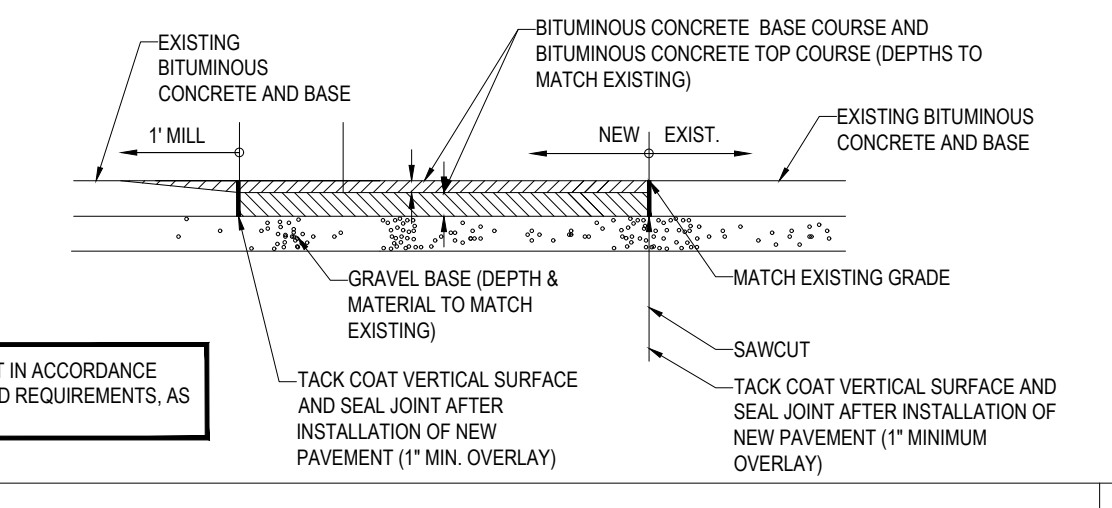
**BITUMINOUS CONC. CURB DETAIL**

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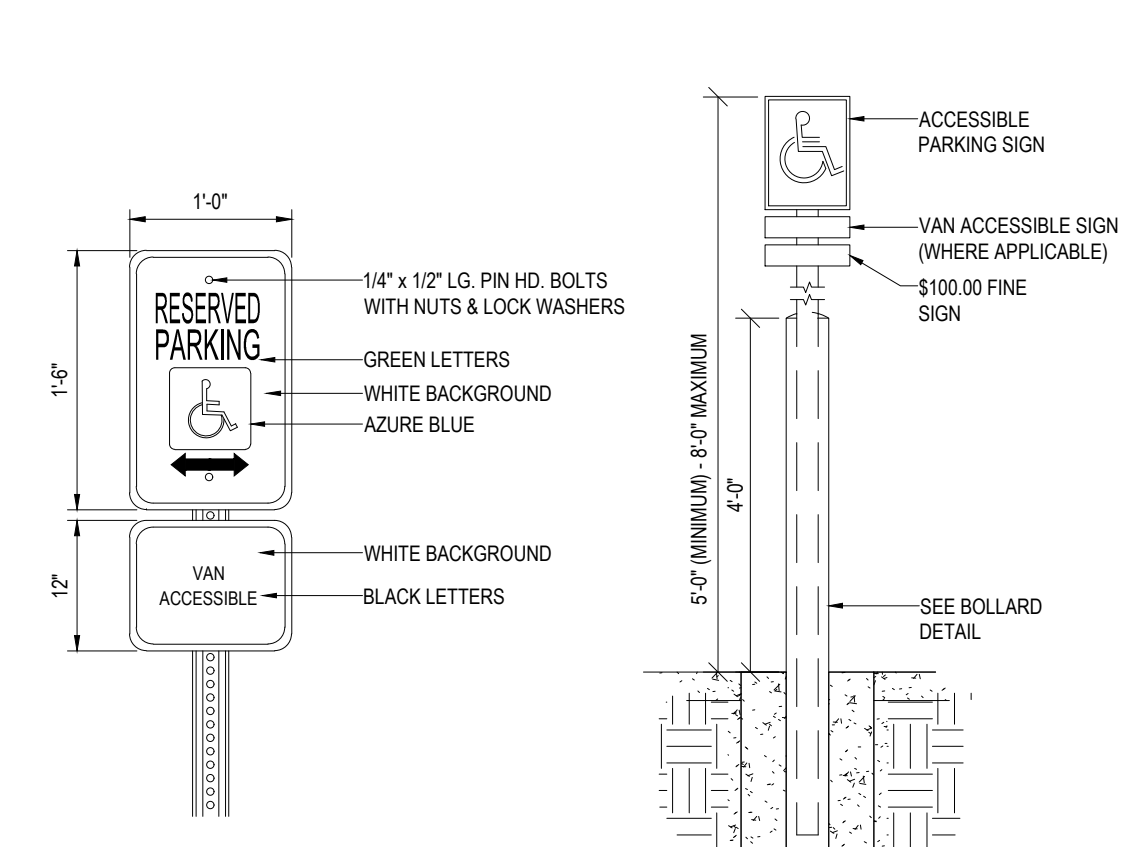
**CONCRETE PAD DETAIL**

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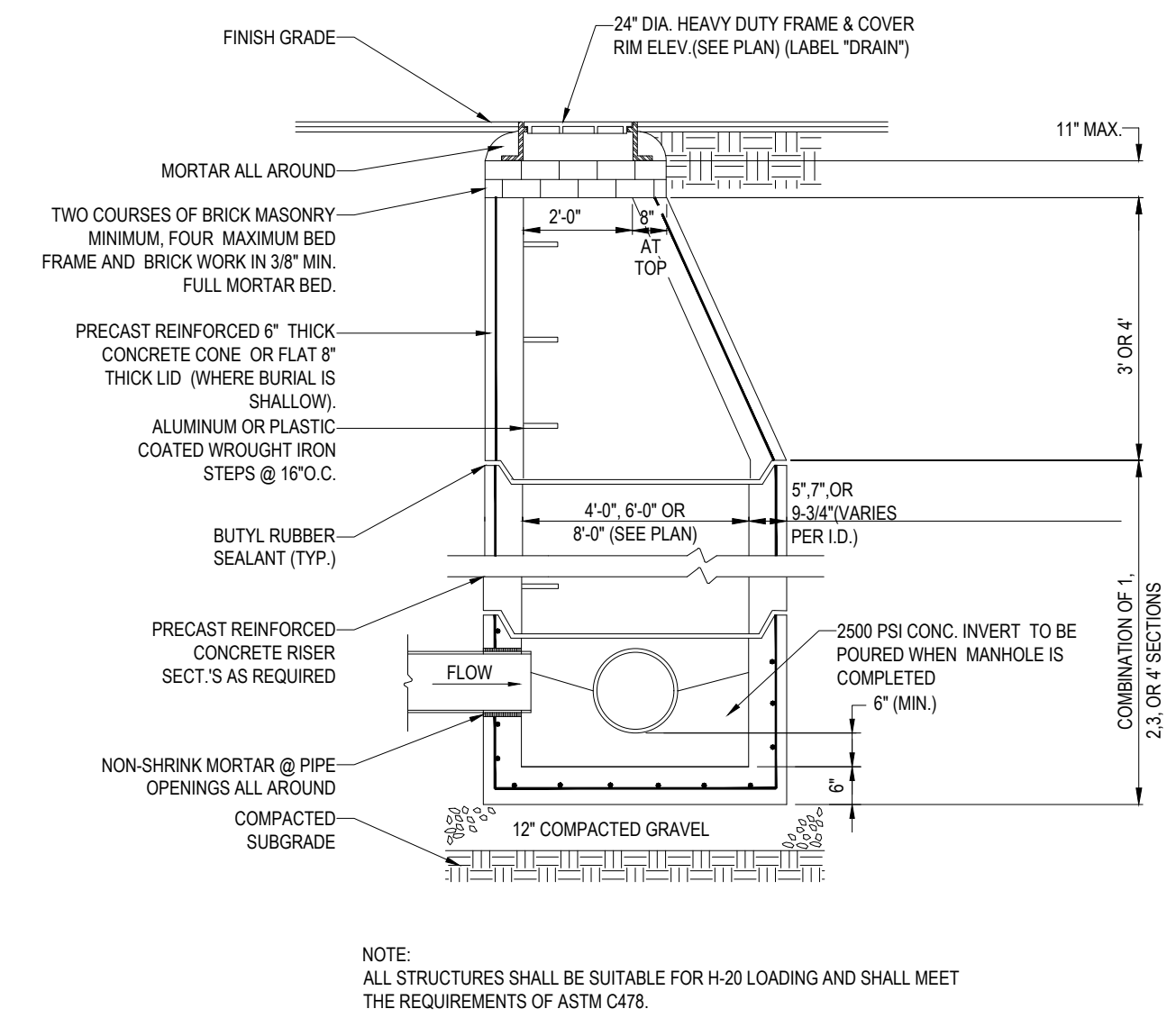
**ROADWAY PATCHING DETAIL**

N.T.S.



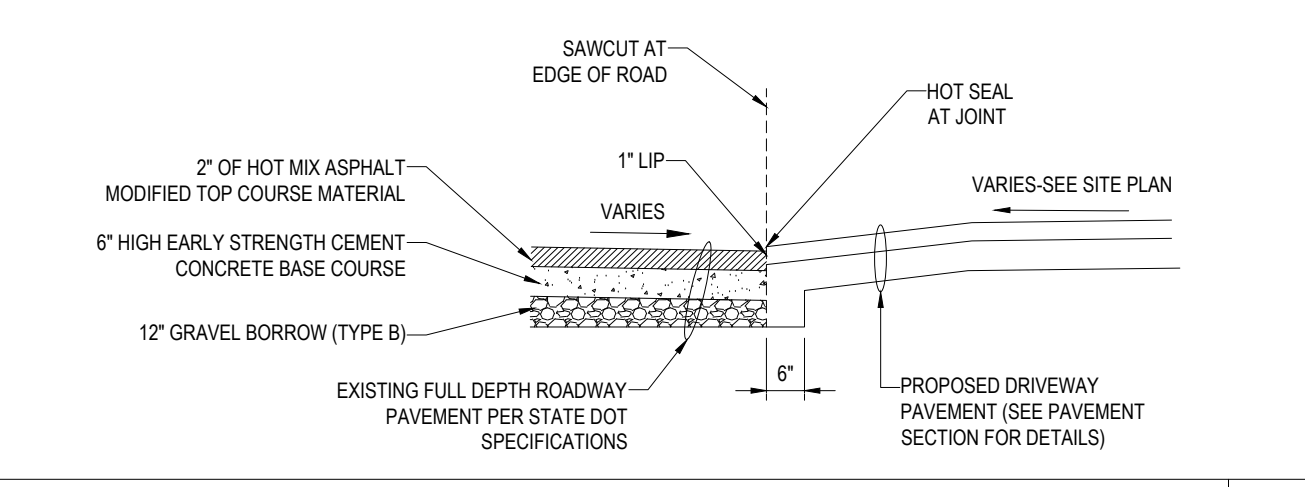
**ACCESSIBLE PARKING SIGN W/ BOLLARD DETAIL**

N.T.S.



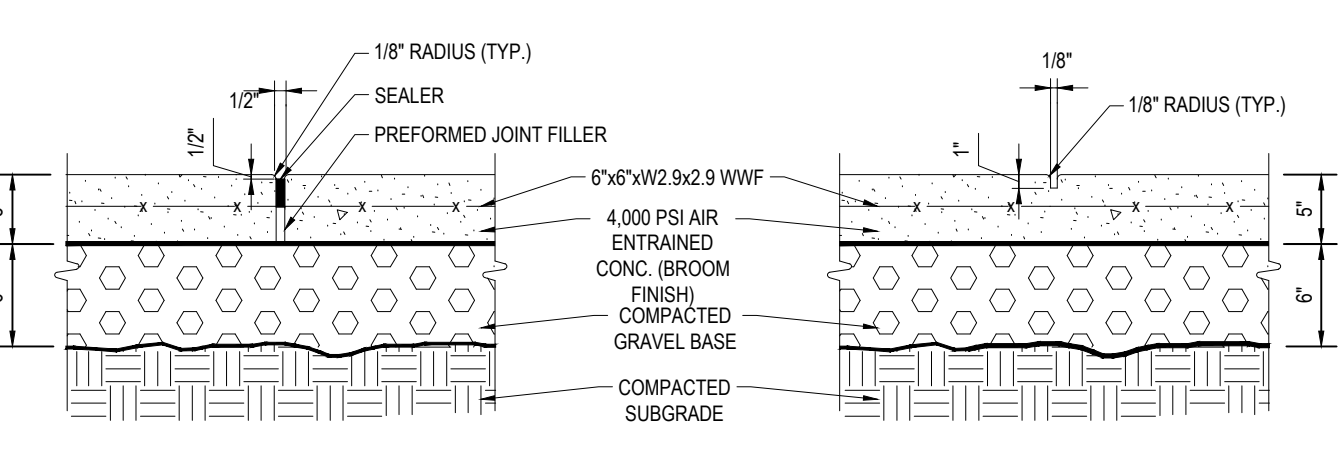
**TYP. PRECAST CONCRETE MANHOLE STORM DRAIN**

N.T.S.

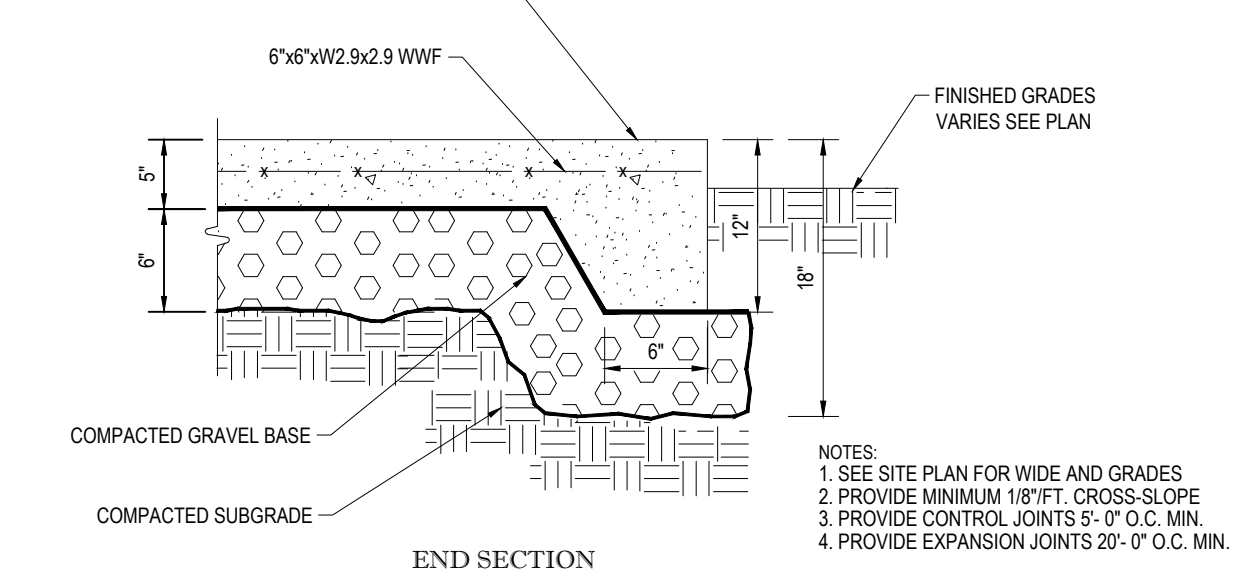


**DRIVEWAY CONSTRUCTION DETAIL**

N.T.S.

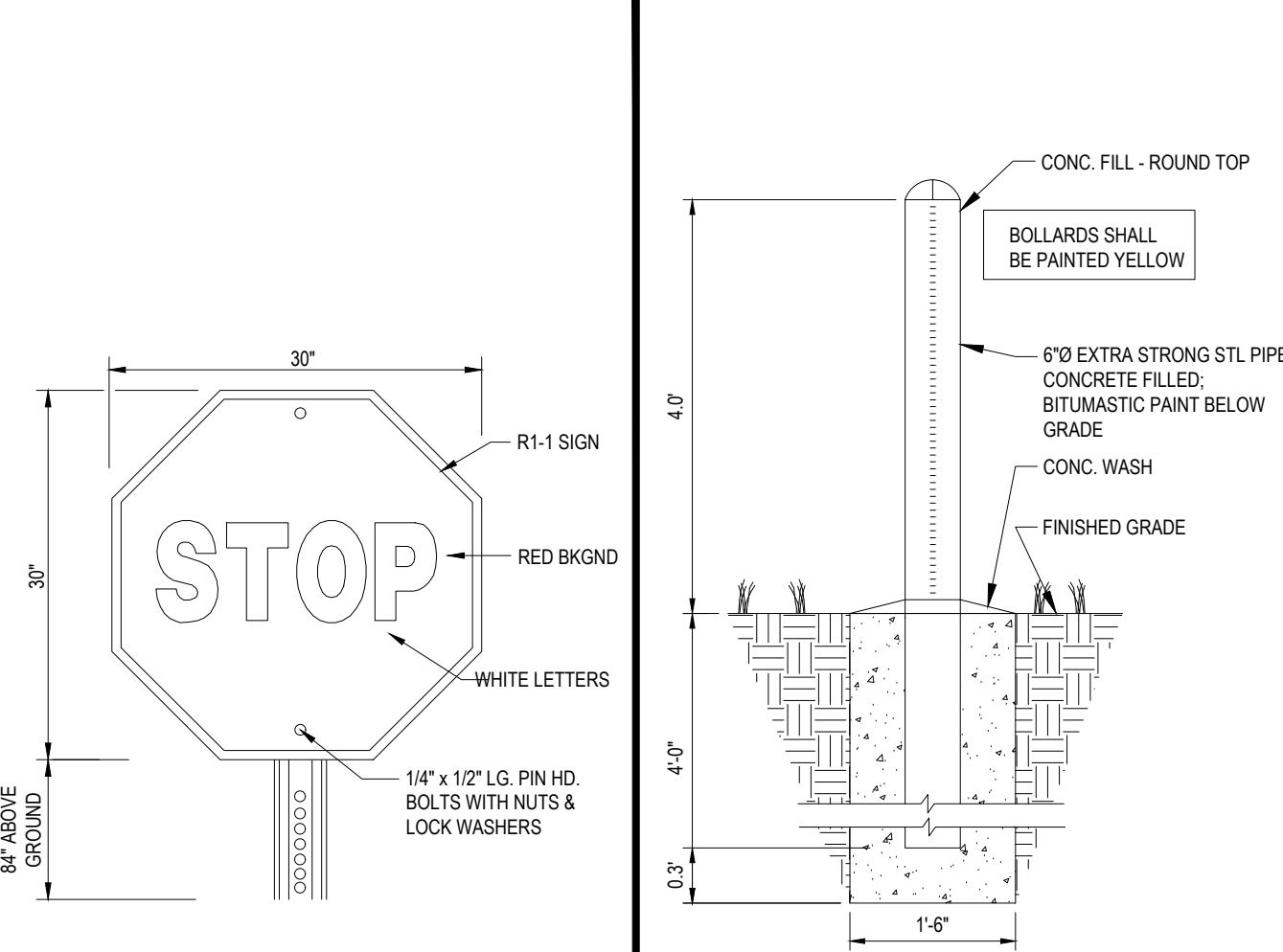


**EXPANSION JOINT CONTROL JOINT**



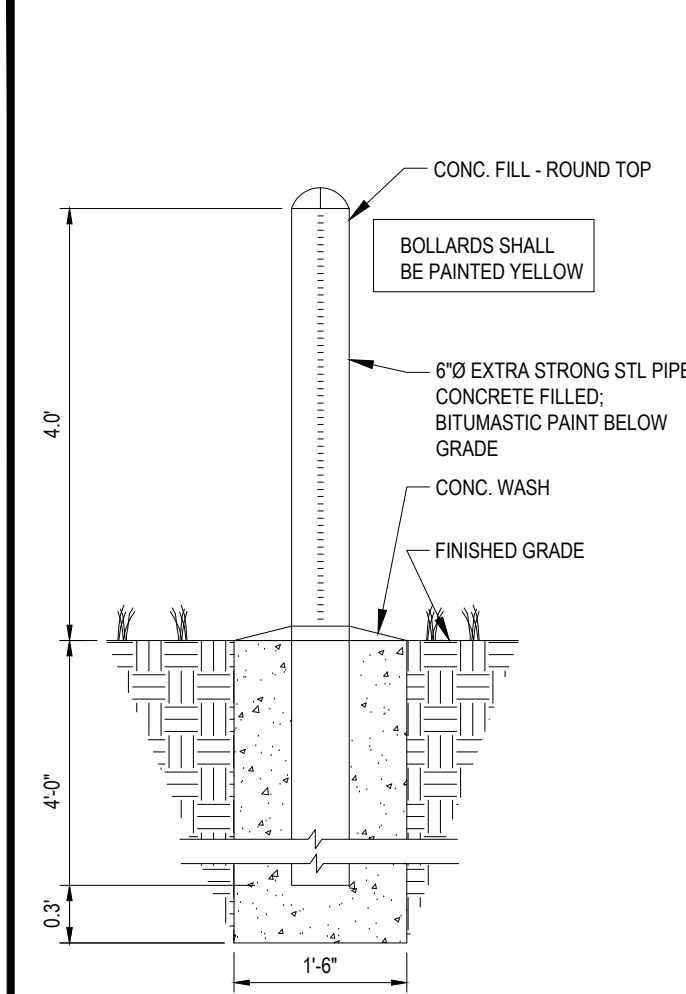
**MONOLITHIC CONC. SIDEWALK DETAILS**

N.T.S.



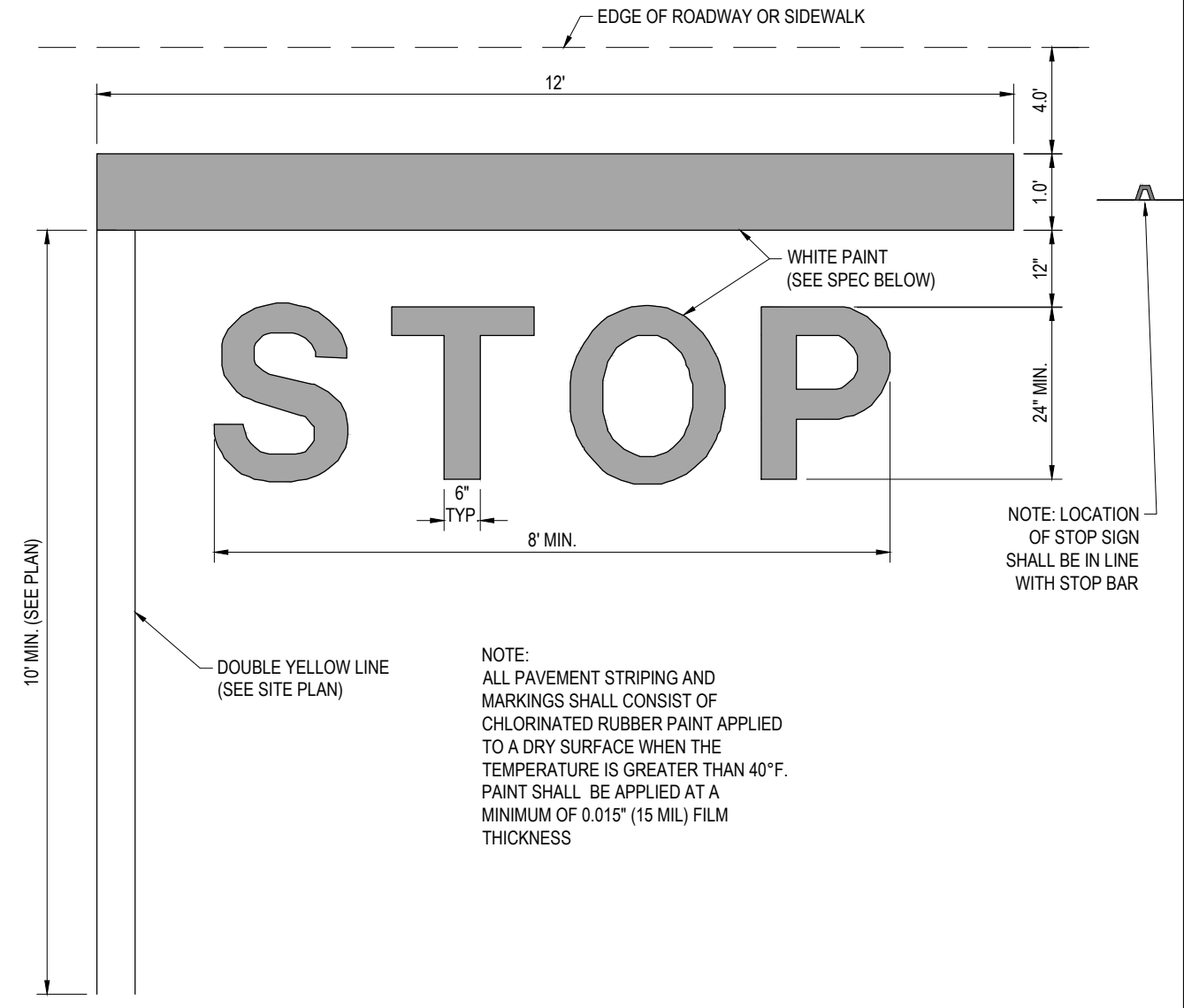
**'STOP' SIGN**

N.T.S.



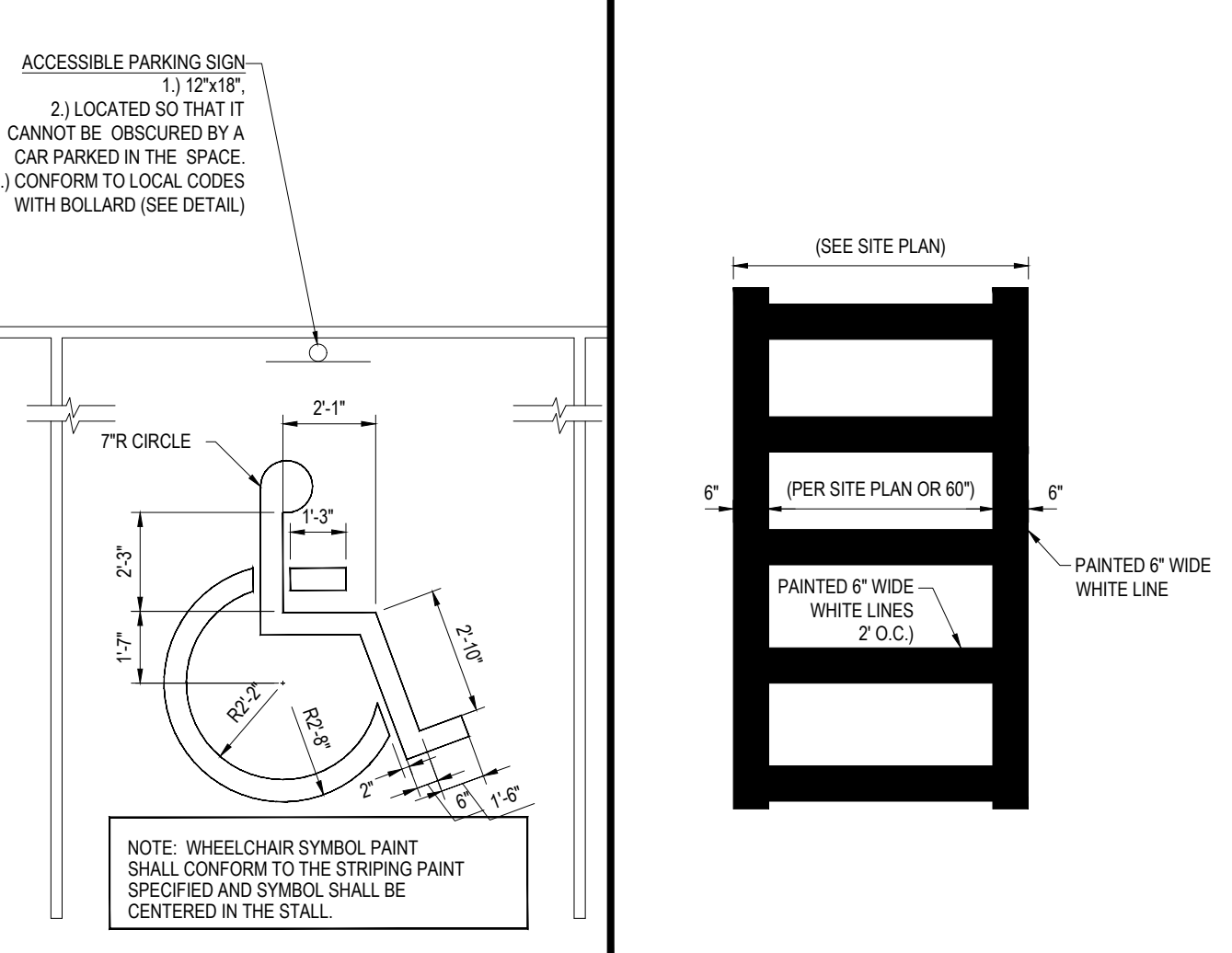
**BOLLARD DETAIL**

N.T.S.



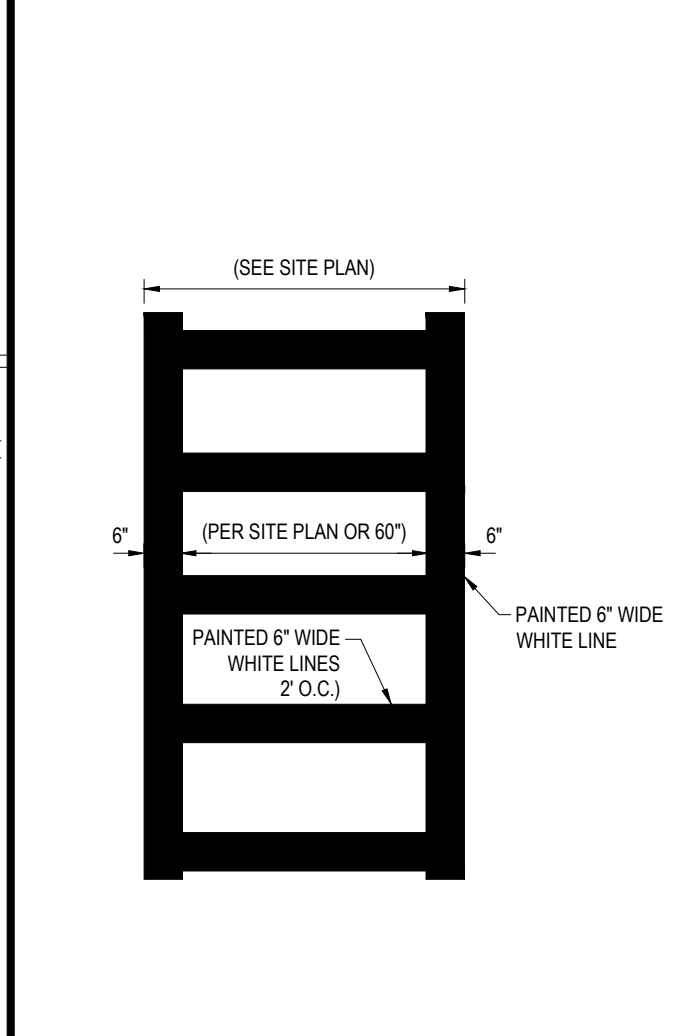
**'STOP' BAR DETAIL**

N.T.S.



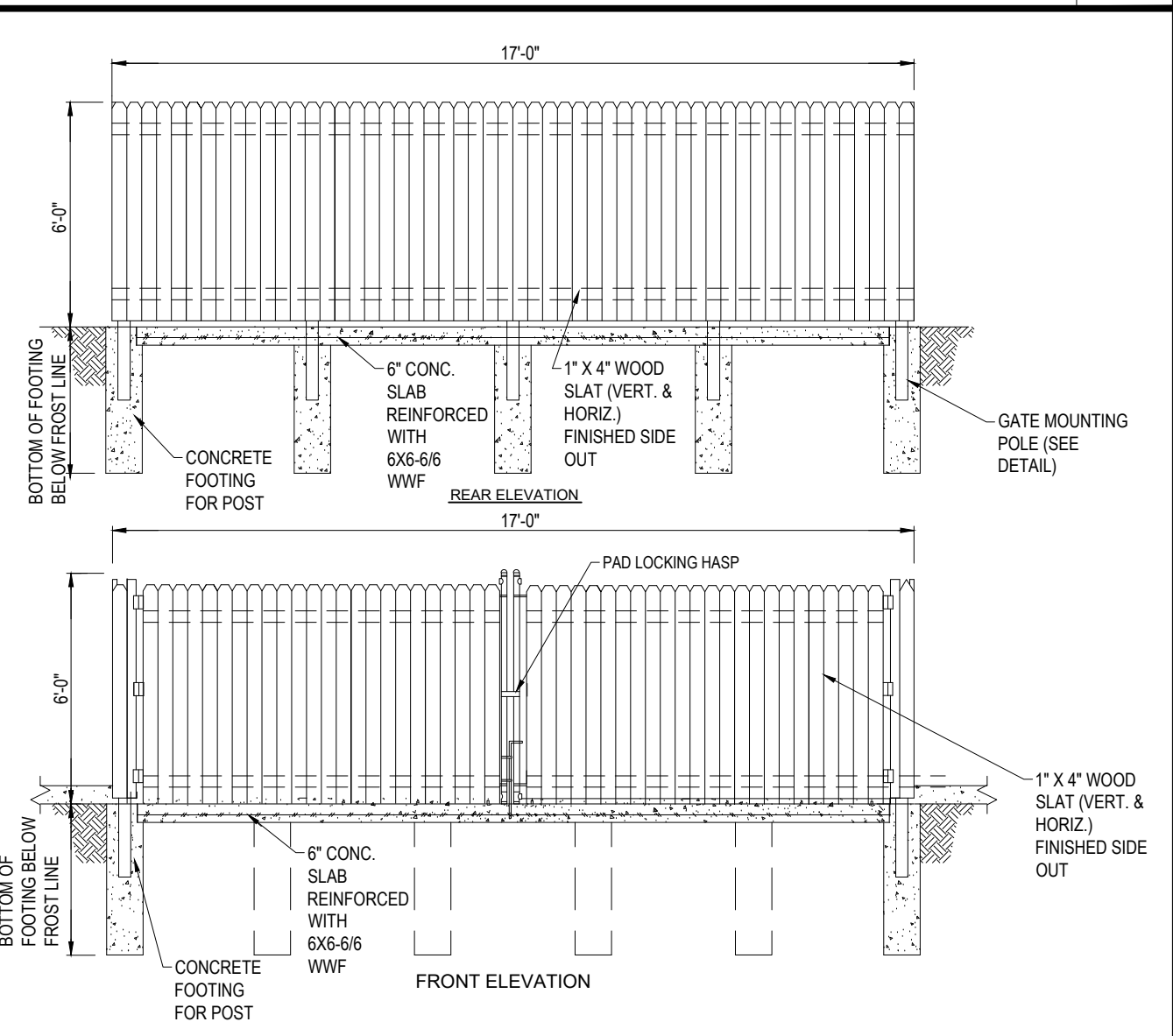
**ACCESSIBLE PARKING STALL PAINTING DETAIL**

N.T.S.



**CROSSWALK DETAIL**

N.T.S.



**STOCKADE FENCE TRASH ENCLOSURE DETAIL**

N.T.S.

NOTE: ALL CONCRETE CURBS AND SIDEWALKS TO BE FC 4000 P.S.I. CONCRETE AT 28 DAYS CURB EXPANSION JOINTS TO MATCH SIDEWALK EXPANSION JOINT SPACING

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 PITTSBURGH PA TAMPA FL  
 PITTSBURGH PA  
 PITTSBURGH PA  
 PITTSBURGH PA  
 PITTSBURGH PA  
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 PITTSBURGH PA  
 PITTSBURGH PA  
 PITTSBURGH PA

**REVISIONS**

REV	DATE	COMMENT	BY
1	01/30/19	PER TOWN & PEER REVIEW COMMENTS	EKR
2	03/21/19	PER TOWN COMMENTS	EKR
3			
4			
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**PERMIT**

PROJECT NO: W181203  
 DRAWN BY: DTB/EKR  
 CHECKED BY: AFT/MDS  
 DATE: 12/21/2018  
 SCALE: AS NOTED  
 CAD I.D.: W181203\_S83

**SITE DEVELOPMENT PLANS**

FOR

**LISCOTTI DEVELOPMENT CORP.**

LOCATION OF SITE  
 MAP #6, LOT #14  
 30 WILTON ROAD  
 TOWN OF MILFORD  
 HILLSBOROUGH COUNTY  
 NEW HAMPSHIRE

**BOHLER ENGINEERING**

352 TURNPIKE ROAD  
 SOUTHBOROUGH, MA 01772  
 Phone: (508) 480-9900  
 Fax: (508) 480-9080  
[www.BohlerEngineering.com](http://www.BohlerEngineering.com)

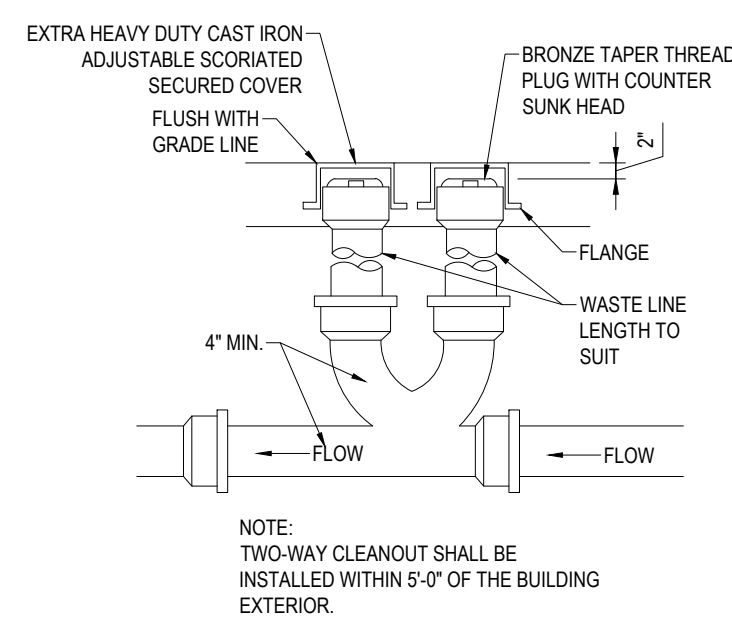
**M.D. SMITH**  
 PROFESSIONAL ENGINEER  
 LICENSE # 12931

**CONSTRUCTION DETAIL SHEET**

SHEET NUMBER: **11**  
 OF 13

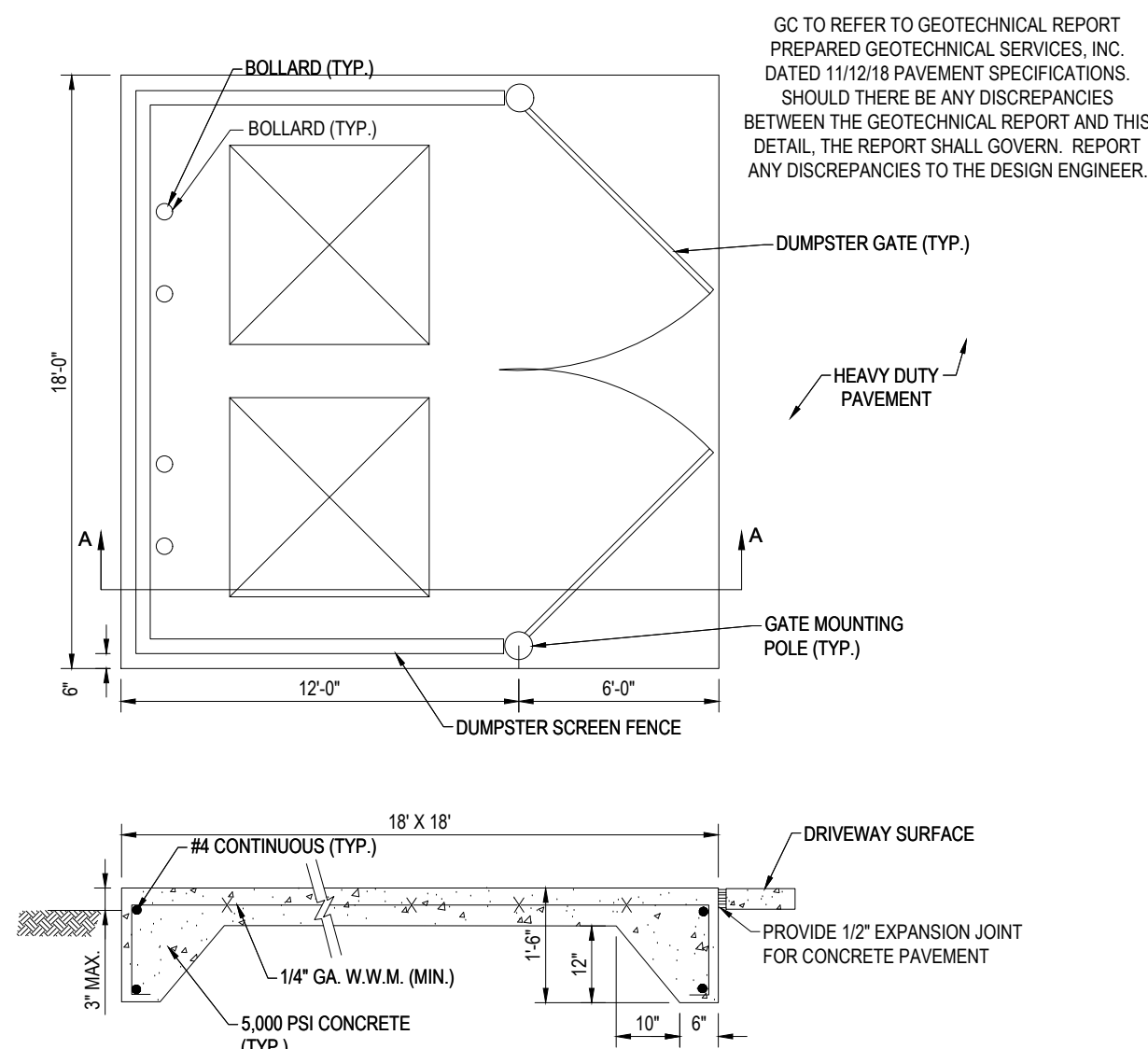
REV 2 - 03/21/2019

P:\B\18 2020\Drawings\Plan Sheet\REV3\W181203\_s83.dwg - 1:Details, 4/23/2019, 10:17:14 AM, ercondrat, Xerox5101 - lpc2, User84, 1:1



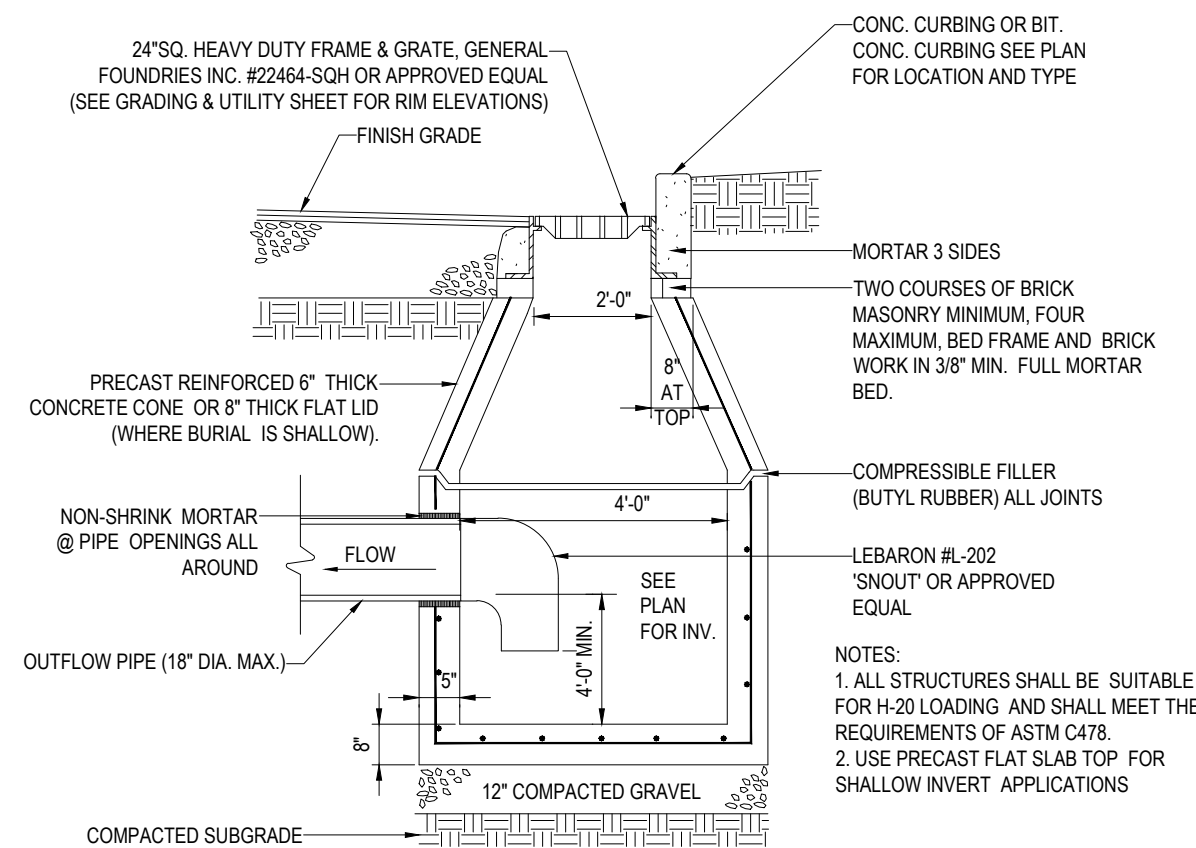
**TWO-WAY CLEANOUT**

N.T.S.



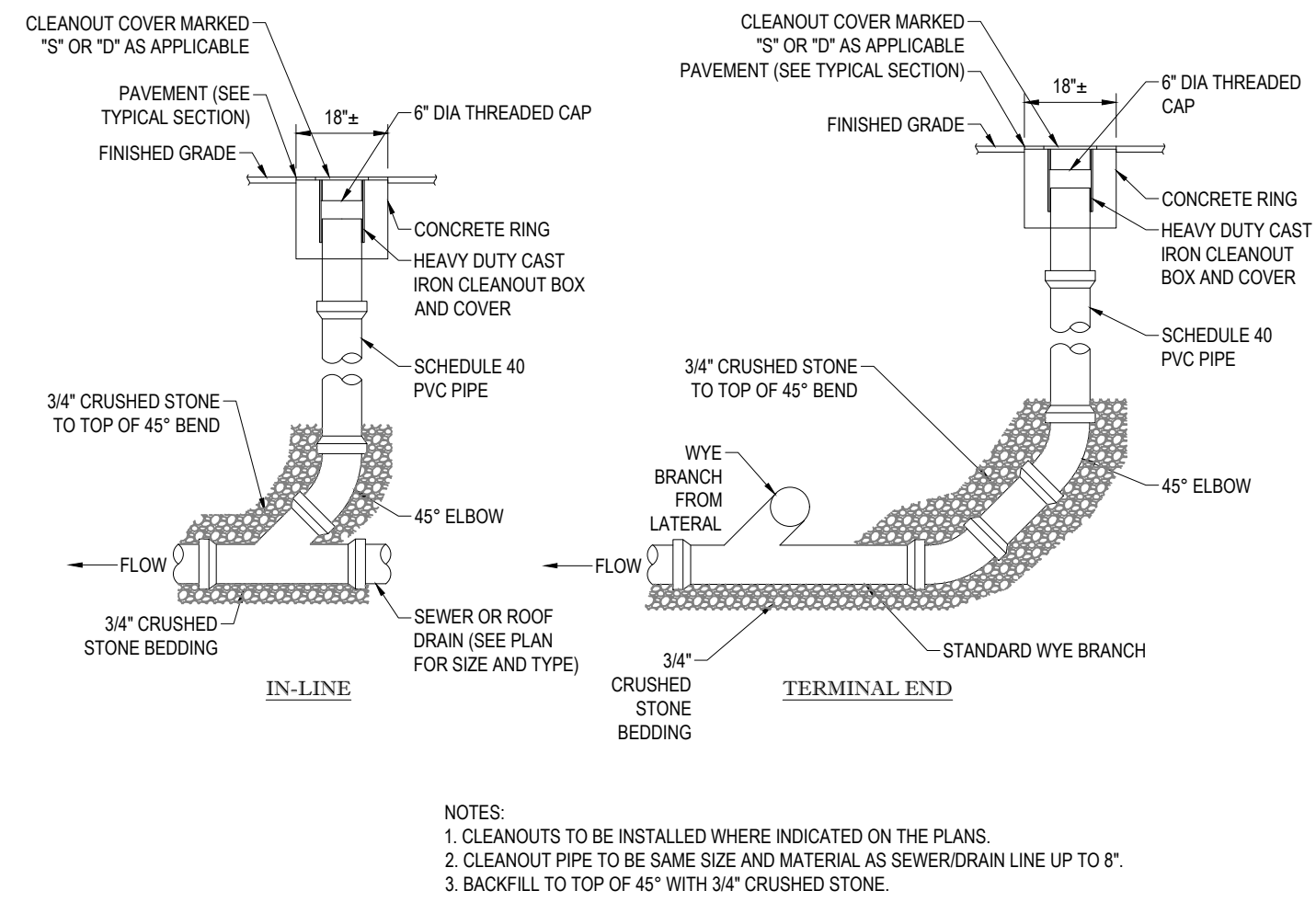
**DUMPSTER PAD WITH SCREENING**

N.T.S.



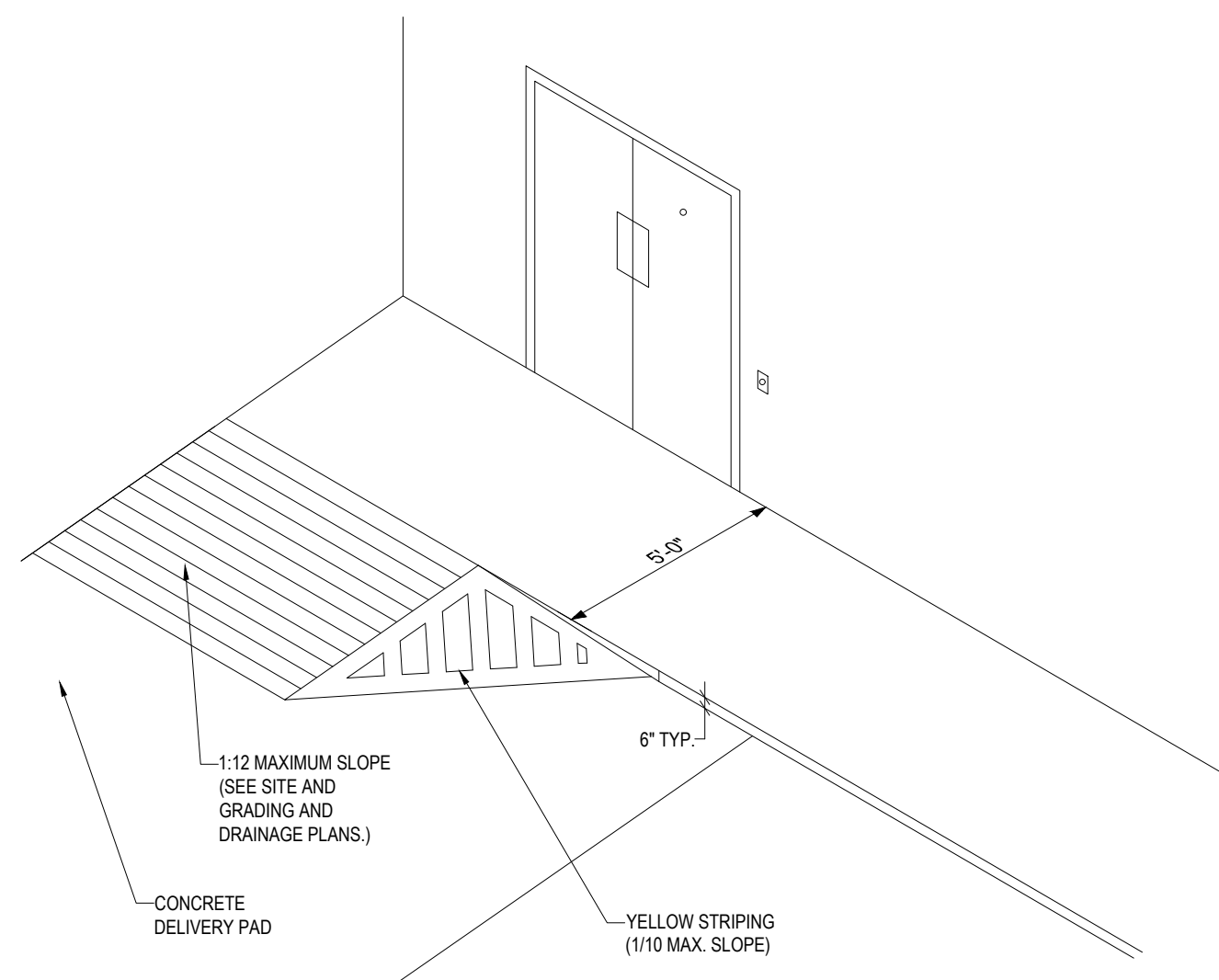
**PRECAST CONCRETE DEEP SUMP CATCH BASIN DETAIL**

N.T.S.



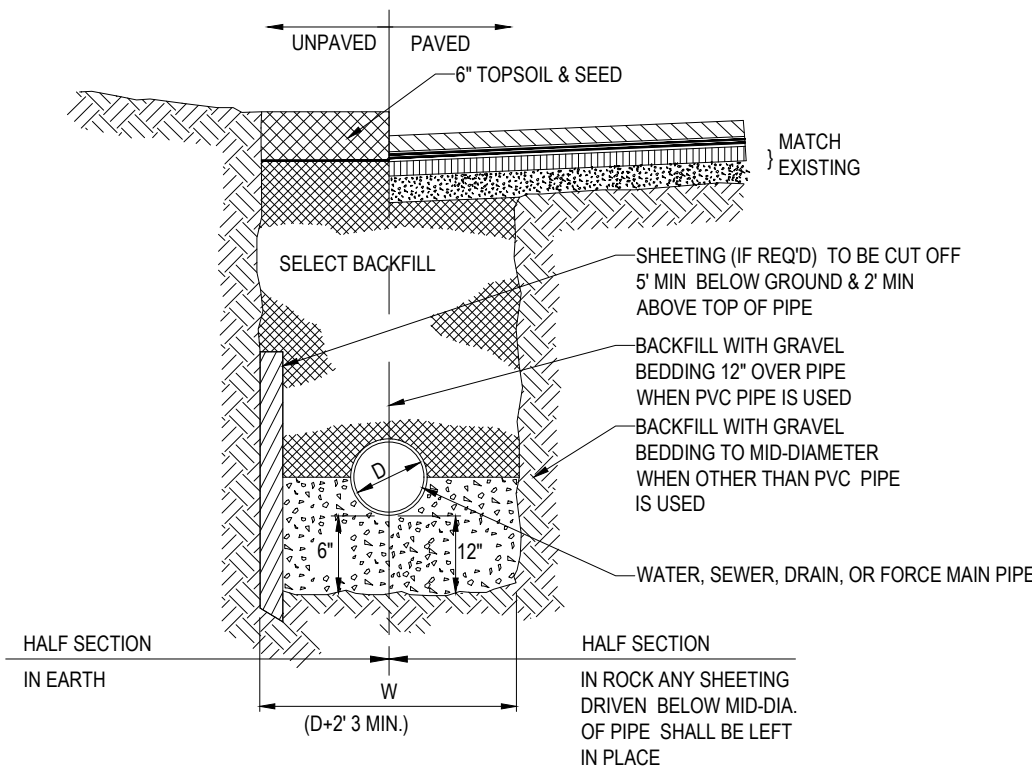
**CLEANOUT DETAIL**

N.T.S.



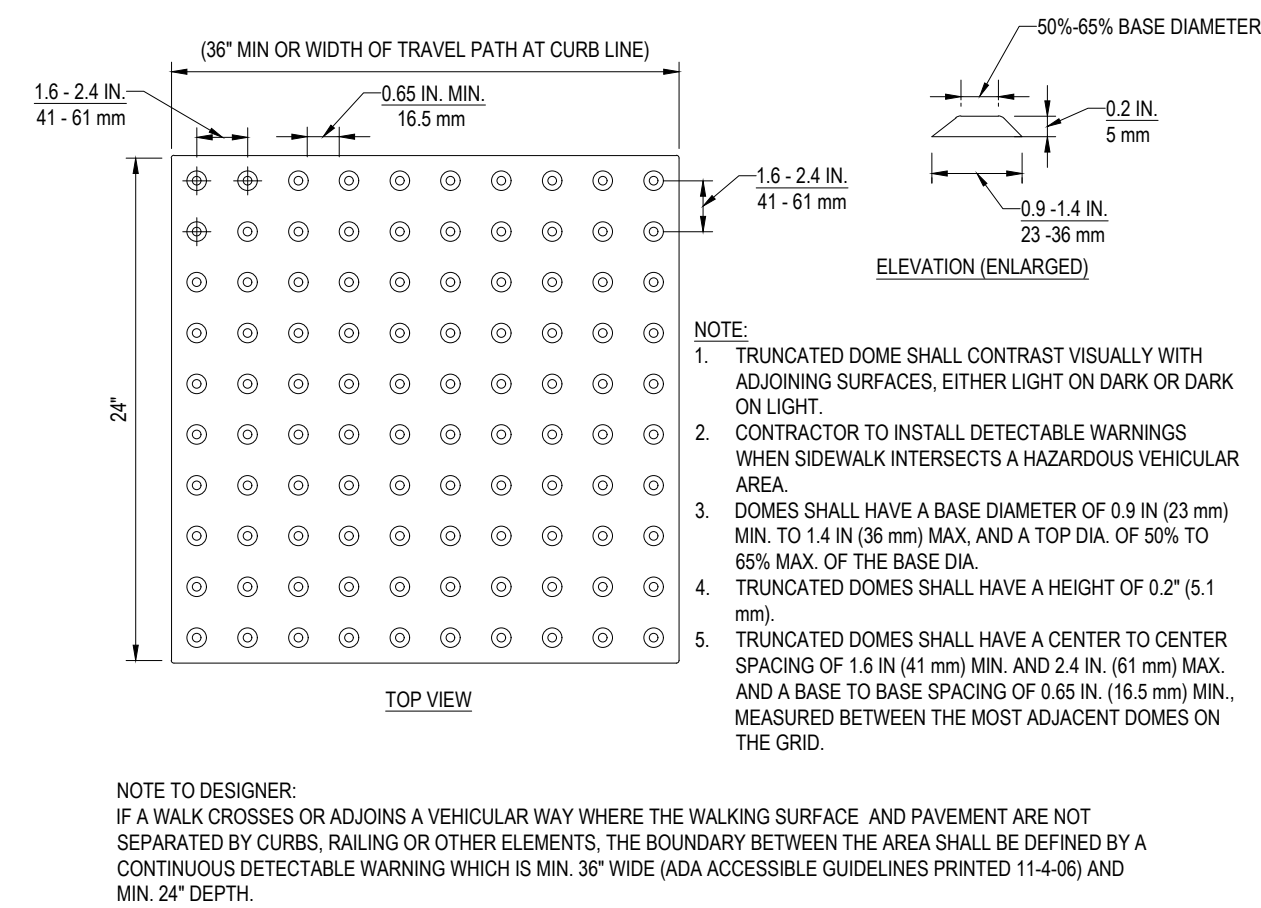
**TYPICAL SERVICE RAMP DETAIL**

N.T.S.



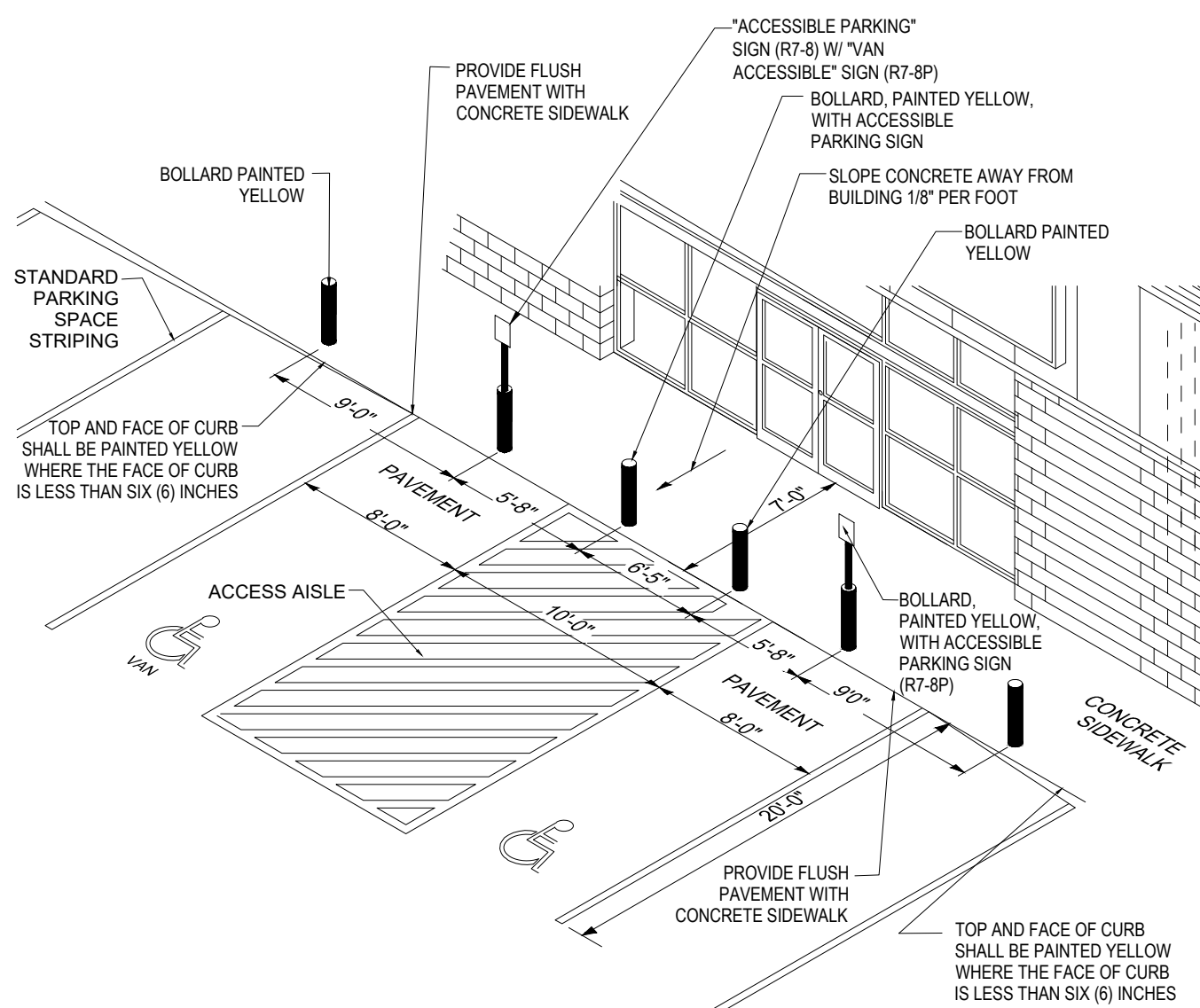
**TYPICAL UTILITY TRENCH**

N.T.S.



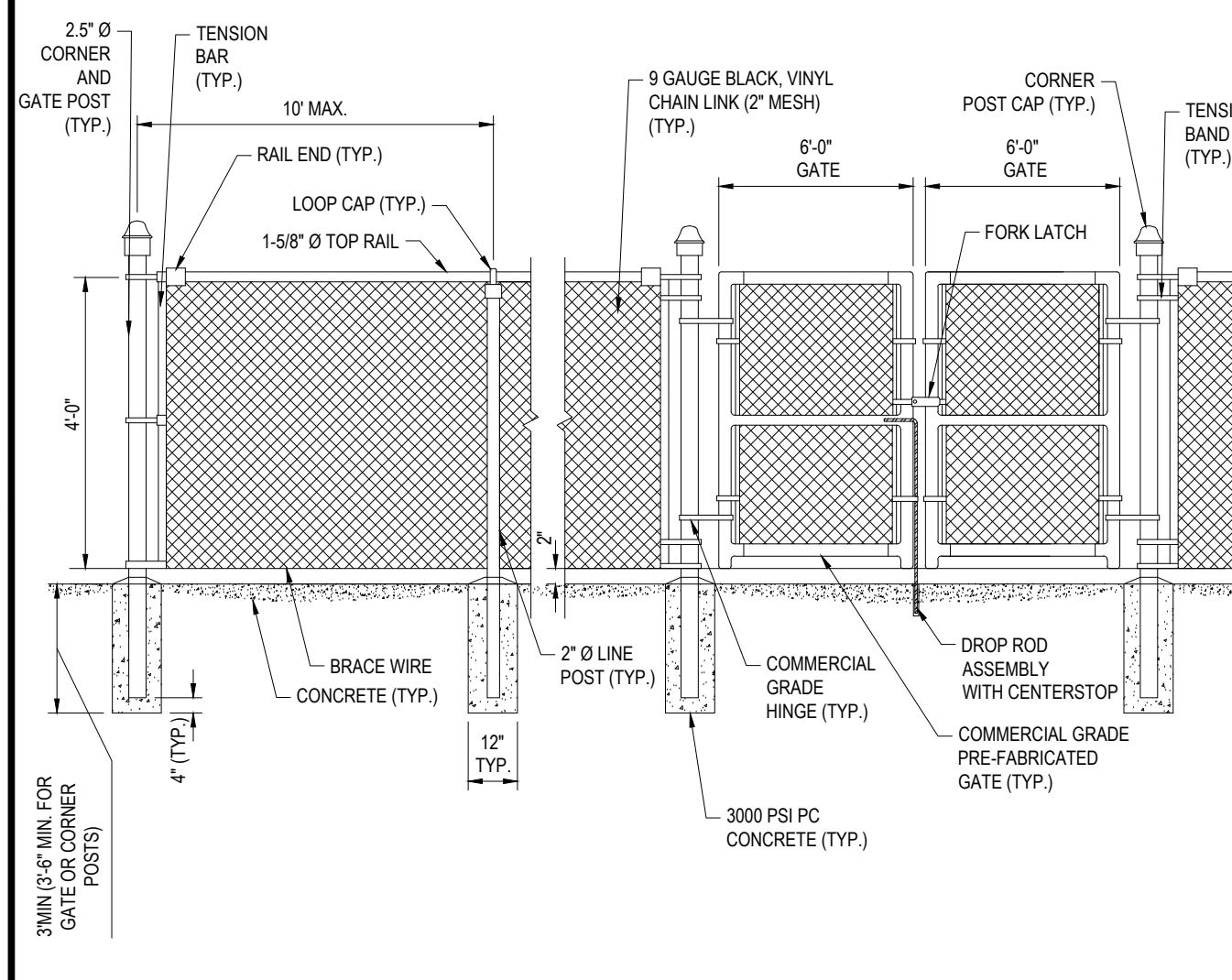
**DETECTIVE WARNING PANEL**

N.T.S.



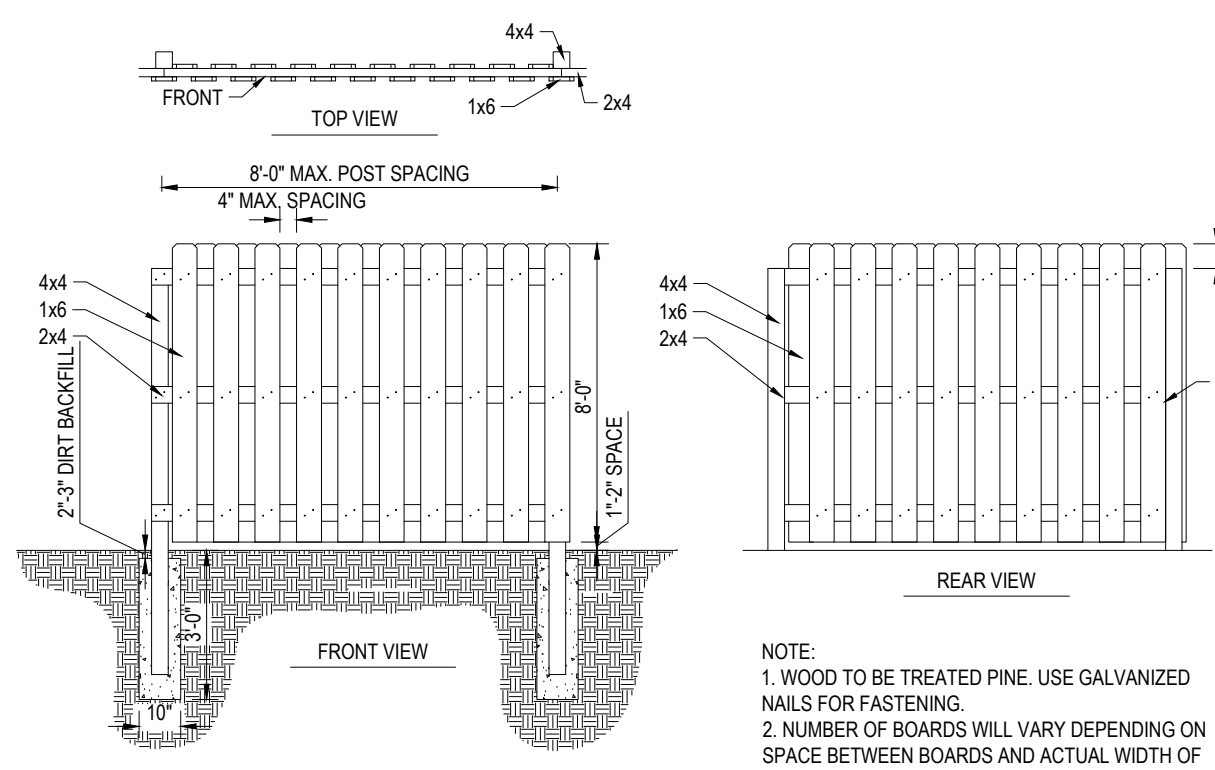
**ACCESSIBLE PARKING AND ACCESS AISLE DETAIL**

N.T.S.



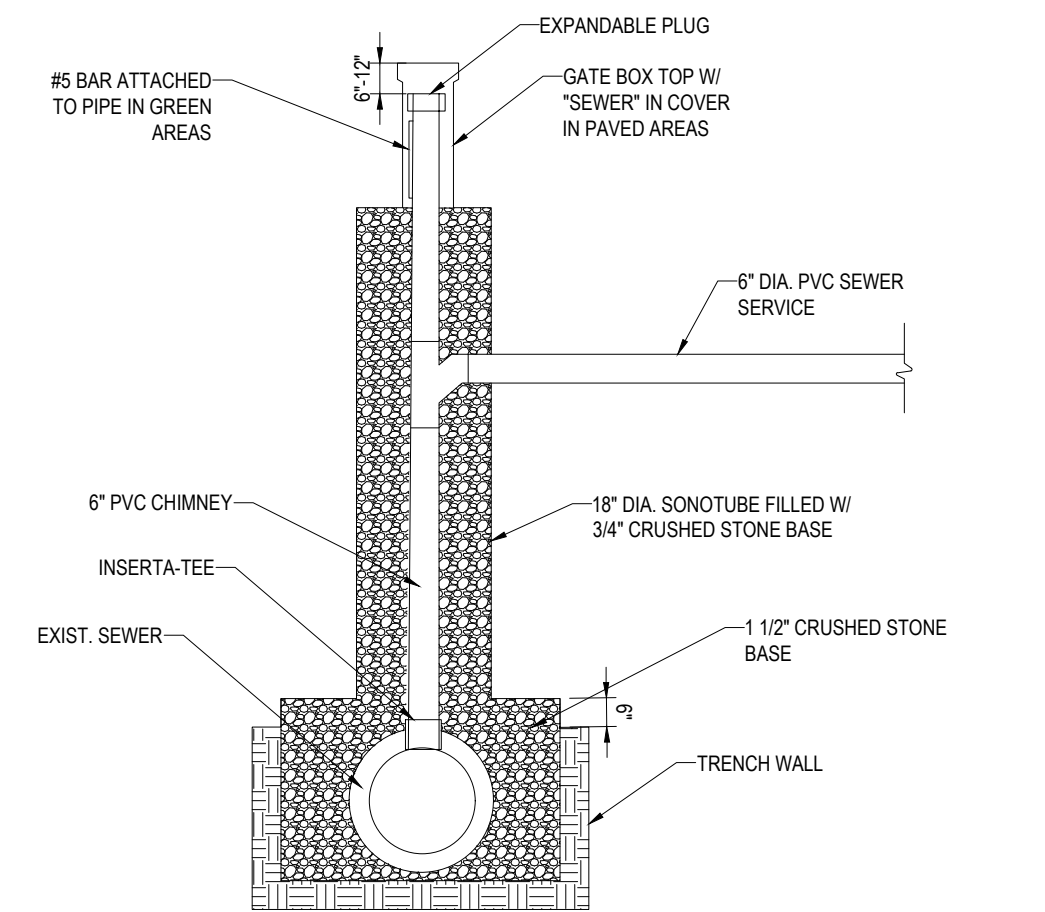
**CHAIN LINK FENCE WITH DOUBLE GATE**

N.T.S.



**PRIVACY FENCE DETAIL**

N.T.S.



**ALTERNATIVE SEWER CHIMNEY CONNECTION DETAIL**

N.T.S.

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 WASHINGTON, DC

**REVISIONS**

REV	DATE	COMMENT	BY
1	01/30/19	PER TOWN & PEER REVIEW COMMENTS	EKR
2	03/21/19	PER TOWN COMMENTS	EKR
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**PERMIT**

PROJECT NO: W161203  
 DRAWN BY: DTB/EKR  
 CHECKED BY: AFT/MS  
 DATE: 12/21/2018  
 SCALE: AS NOTED  
 CAD I.D.: W181203\_S53

**SITE DEVELOPMENT PLANS**

FOR

**LISCIOTTI DEVELOPMENT CORP.**

LOCATION OF SITE  
 MAP #6, LOT #14  
 30 WILTON ROAD  
 TOWN OF MILFORD  
 HILLSBOROUGH COUNTY  
 NEW HAMPSHIRE

**BOHLER ENGINEERING**

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**M.D. SMITH**

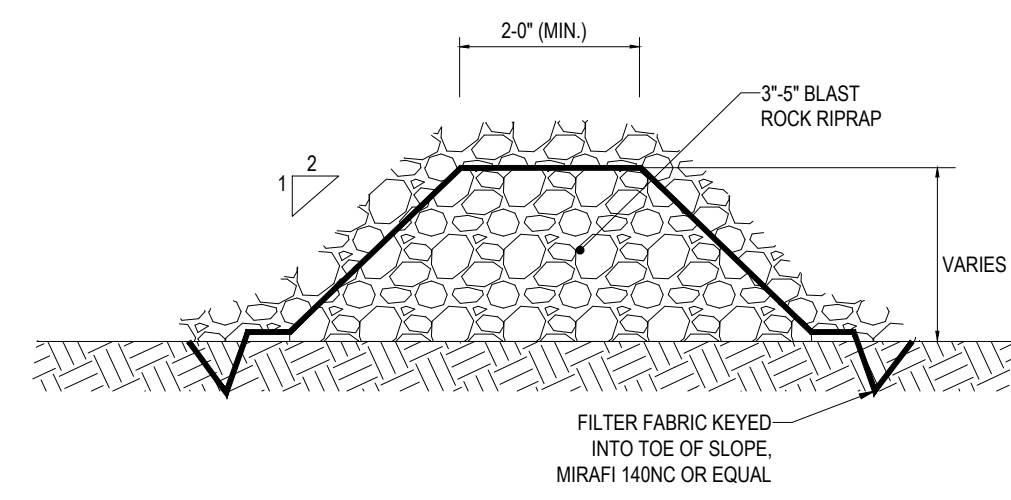
PROFESSIONAL ENGINEER  
 REG. NO. 12931  
 MASSACHUSETTS LICENSE # 12931

SHEET TITLE:  
**CONSTRUCTION DETAIL SHEET**

SHEET NUMBER:  
**12**  
 OF 13

REV 2 - 03/21/2019

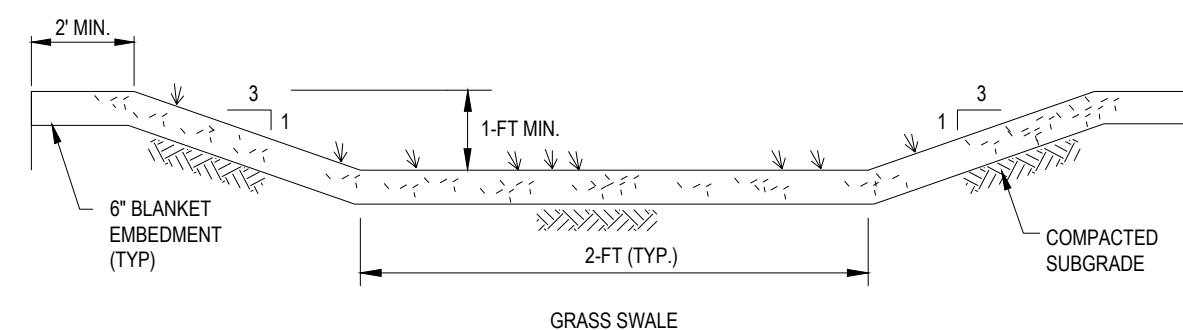
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NOTES:  
1. STONE SHALL BE PLACED MECHANICALLY OR BY HAND. STONE SHALL NOT BE DUMPED DIRECTLY INTO FOREBAY.

STONE CHECK DAM DETAIL

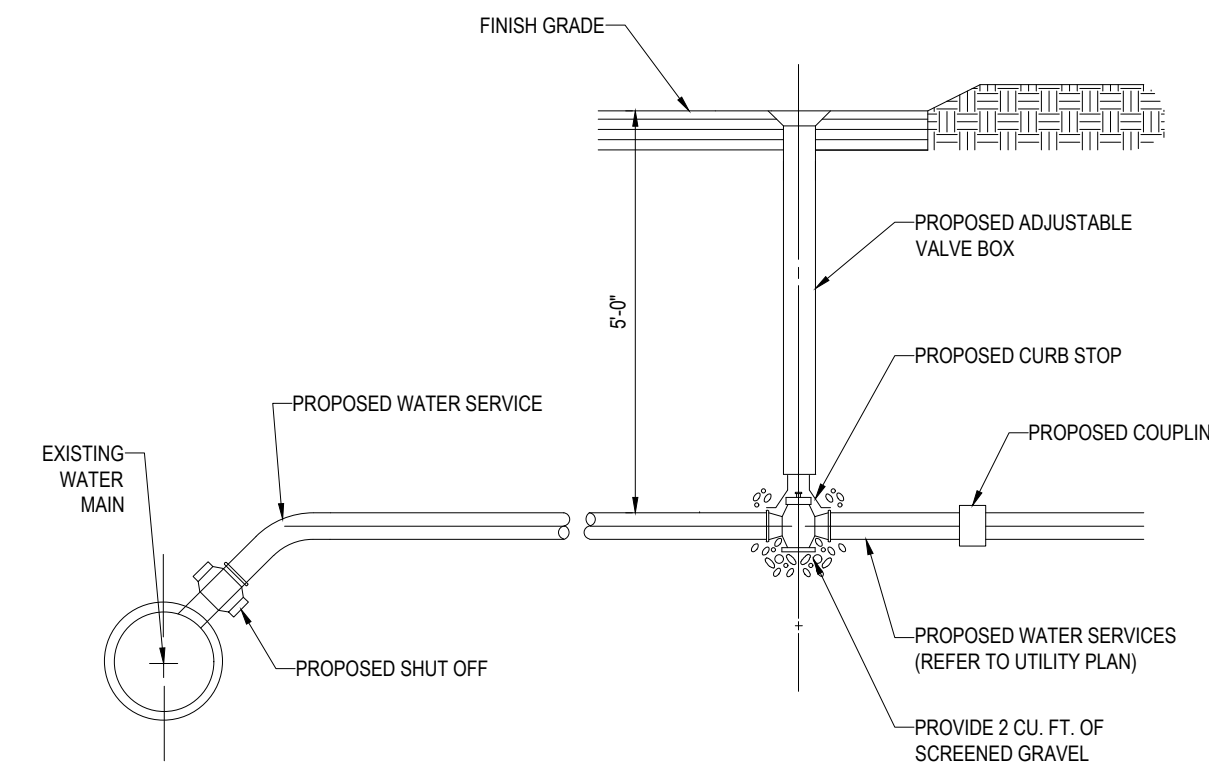
N.T.S.



NOTES:  
1. GEOTECHNICAL FABRIC TO BE INSTALLED FOR SLOPE STABILIZATION WHERE SLOPES EXCEED 4%.  
2. SEED MIX FOR GRASS SWALES SHALL CONSIST OF THE FOLLOWING:  
70% RED FESCUE  
15% PERENNIAL RYE GRASS  
15% BIRDS FOOT TREFLOIL

GRASS CHANNEL

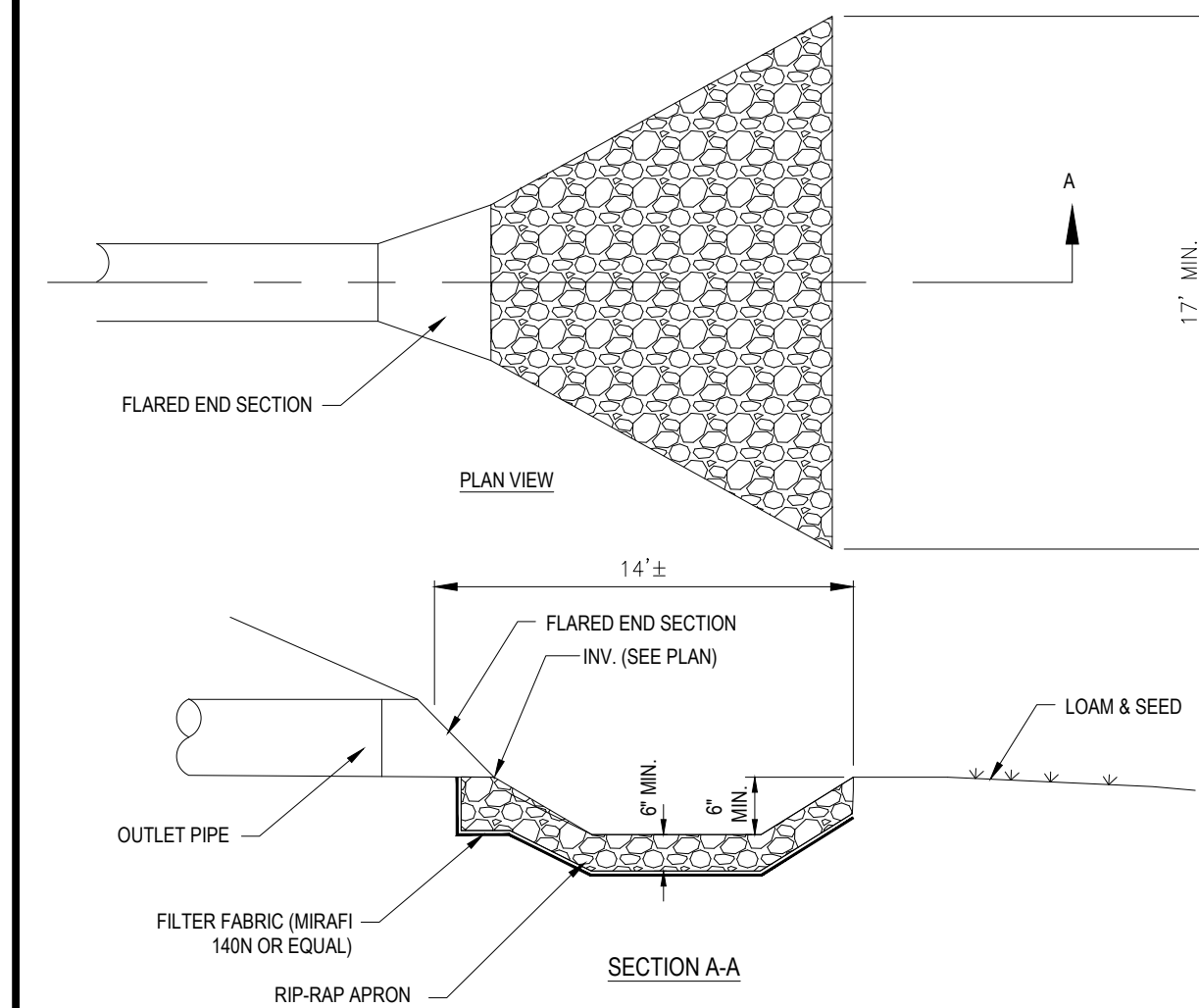
N.T.S.



NOTE: PROVIDE CONNECTION IN ACCORDANCE WITH THE TOWN OF MILFORD REQUIREMENTS.

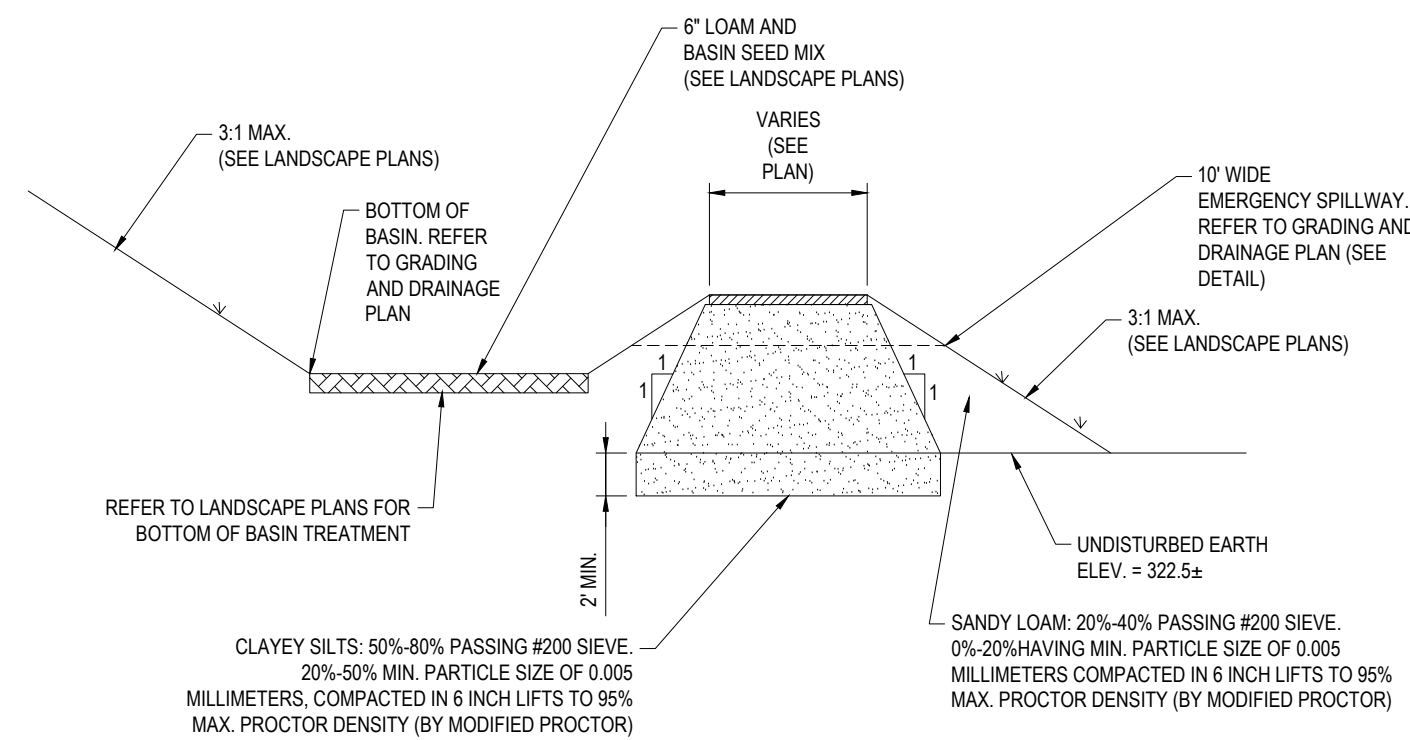
SERVICE CONNECTION DETAIL

N.T.S.



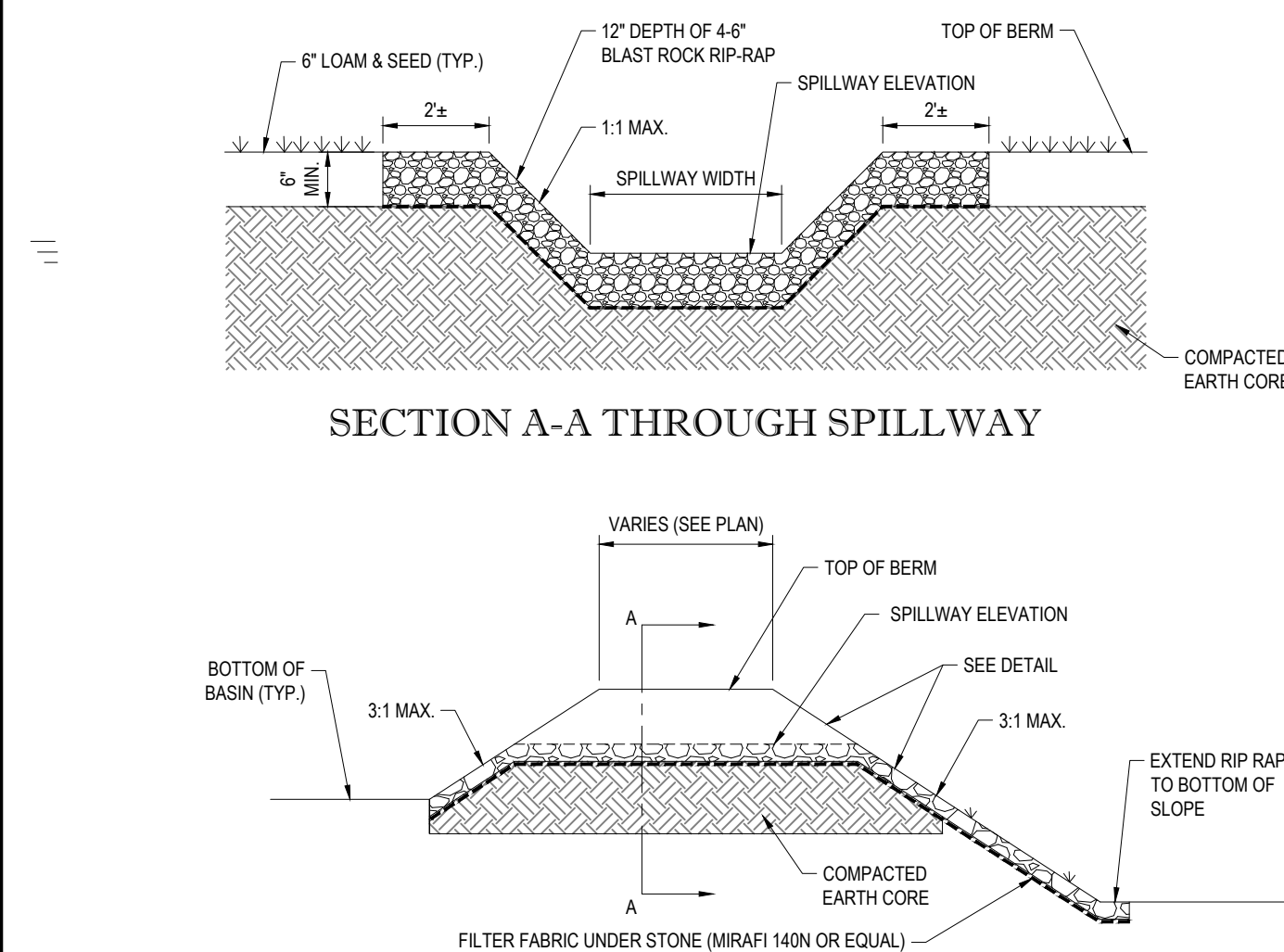
FLARED END SECTION WITH RIP RAP APRON DETAIL

N.T.S.



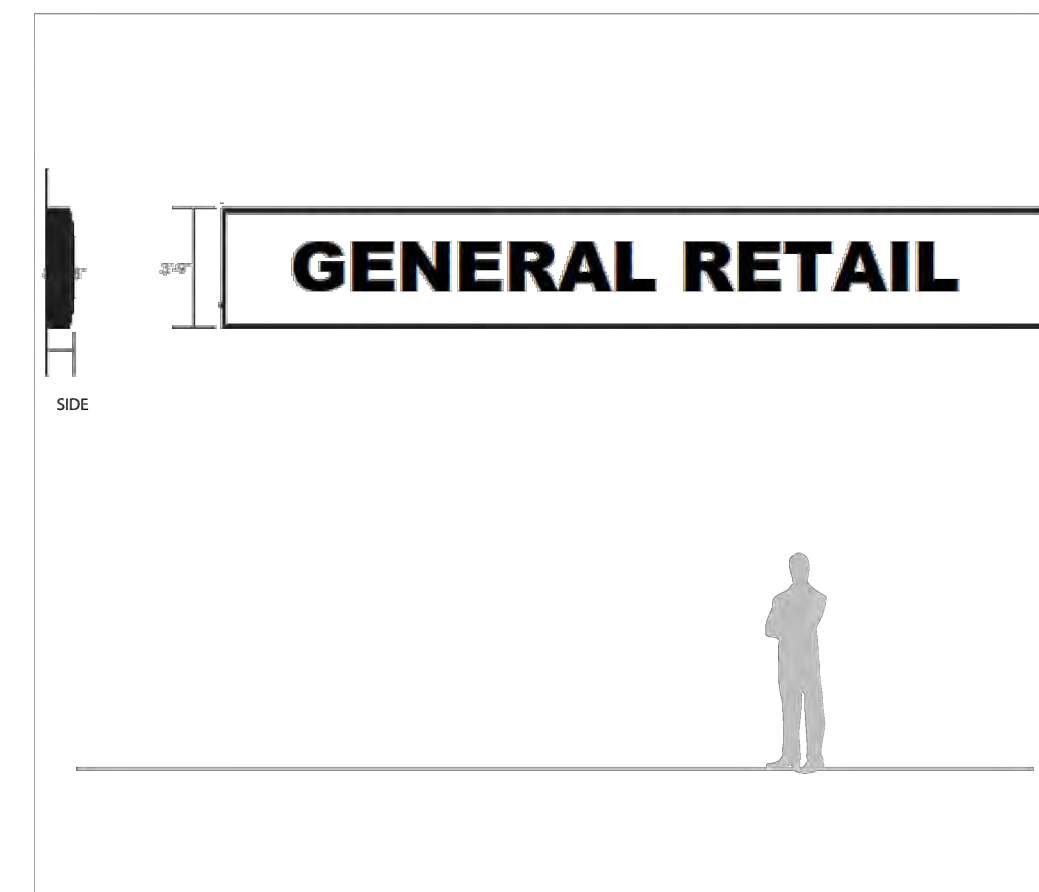
DETENTION/INFILTRATION BASIN BERM DETAIL

N.T.S.



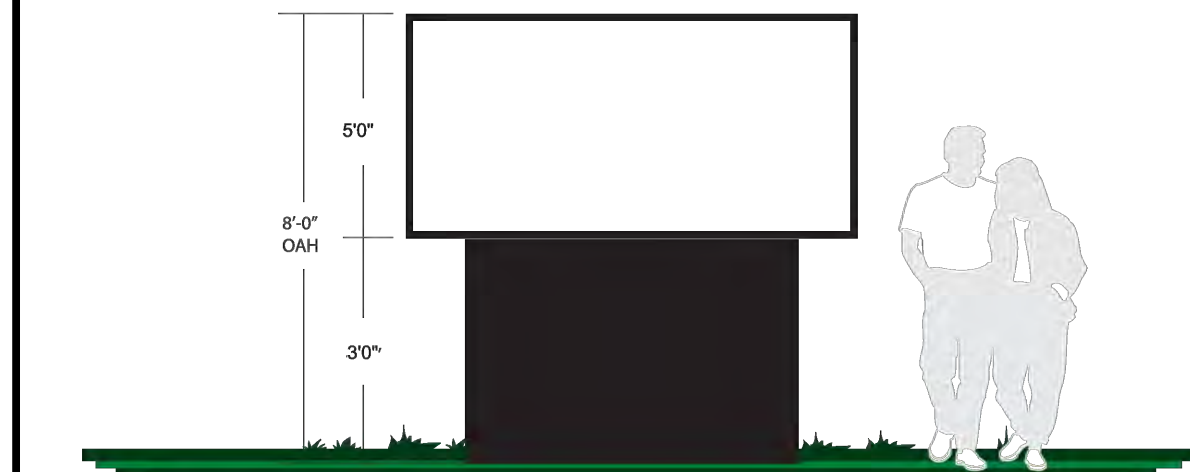
EMERGENCY SPILLWAY DETAIL

N.T.S.



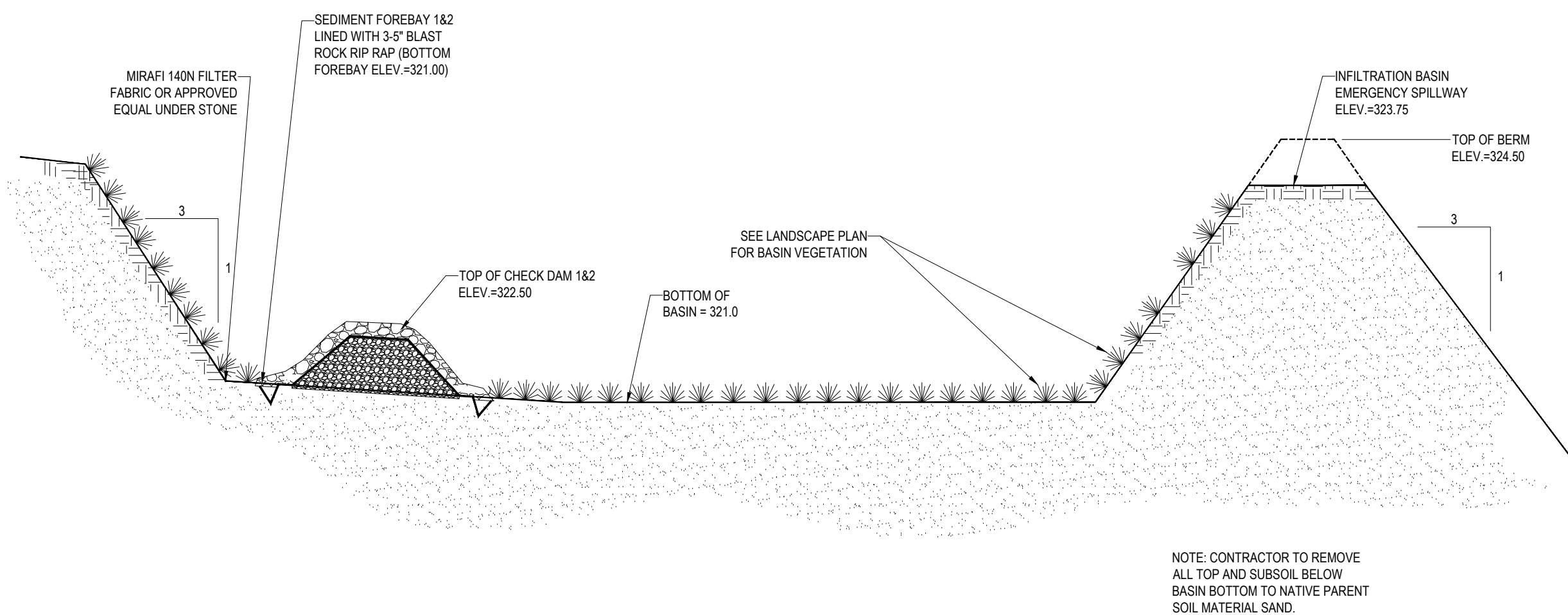
WALL SIGN DETAIL

N.T.S.



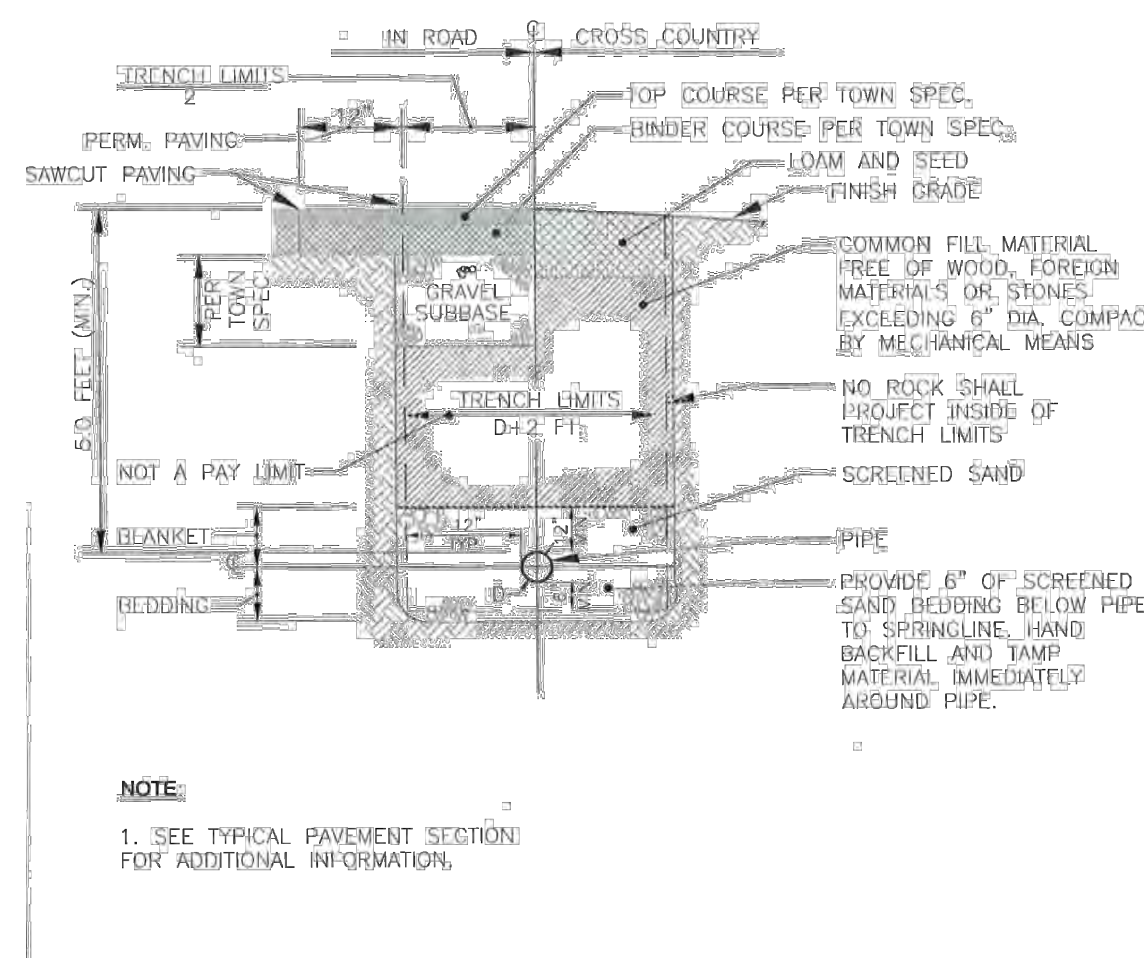
FREESTANDING SIGN DETAIL

N.T.S.



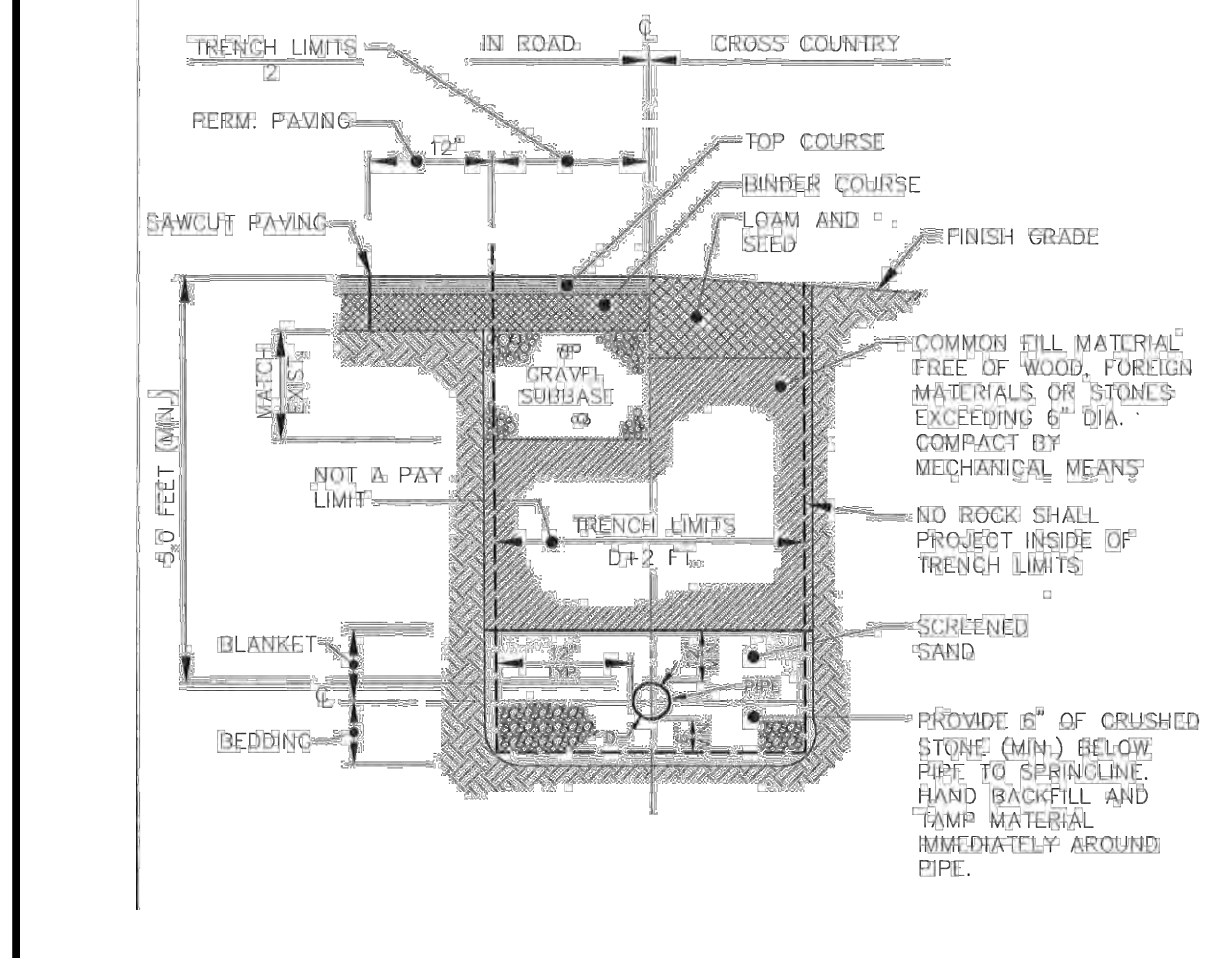
TYPICAL SECTION THROUGH DETENTION / INFILTRATION BASIN

N.T.S.



WATER MAIN TRENCH DETAIL

N.T.S.



SEWER TRENCH DETAIL

N.T.S.

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REVISIONS			
REV	DATE	COMMENT	BY
1	01/30/19	PER TOWN & PEER REVIEW COMMENTS	EKR
2	03/21/19	PER TOWN COMMENTS	EKR
3			
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**PERMIT**

PROJECT NO.: W181203  
DRAWN BY: DTB/EKR  
CHECKED BY: AFT/MDS  
DATE: 12/21/2018  
SCALE: AS NOTED  
CAD I.D.: W181203\_S83

**SITE DEVELOPMENT PLANS**

FOR

LISCIOTTI DEVELOPMENT CORP.

LOCATION OF SITE  
MAP #6, LOT #14  
30 WILTON ROAD  
TOWN OF MILFORD  
HILLSBOROUGH COUNTY  
NEW HAMPSHIRE

**BOHLER ENGINEERING**

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Phone: (508) 480-9900  
Fax: (508) 480-9080  
[www.BohlerEngineering.com](http://www.BohlerEngineering.com)

**M.D. SMITH**

PROFESSIONAL ENGINEER  
REGISTERED PROFESSIONAL ENGINEER  
STATE OF NEW HAMPSHIRE  
LICENSE NO. 12931

SHEET TITLE:  
**CONSTRUCTION DETAIL SHEET**

SHEET NUMBER:  
**13**  
OF 13

REV 2 - 03/21/2019

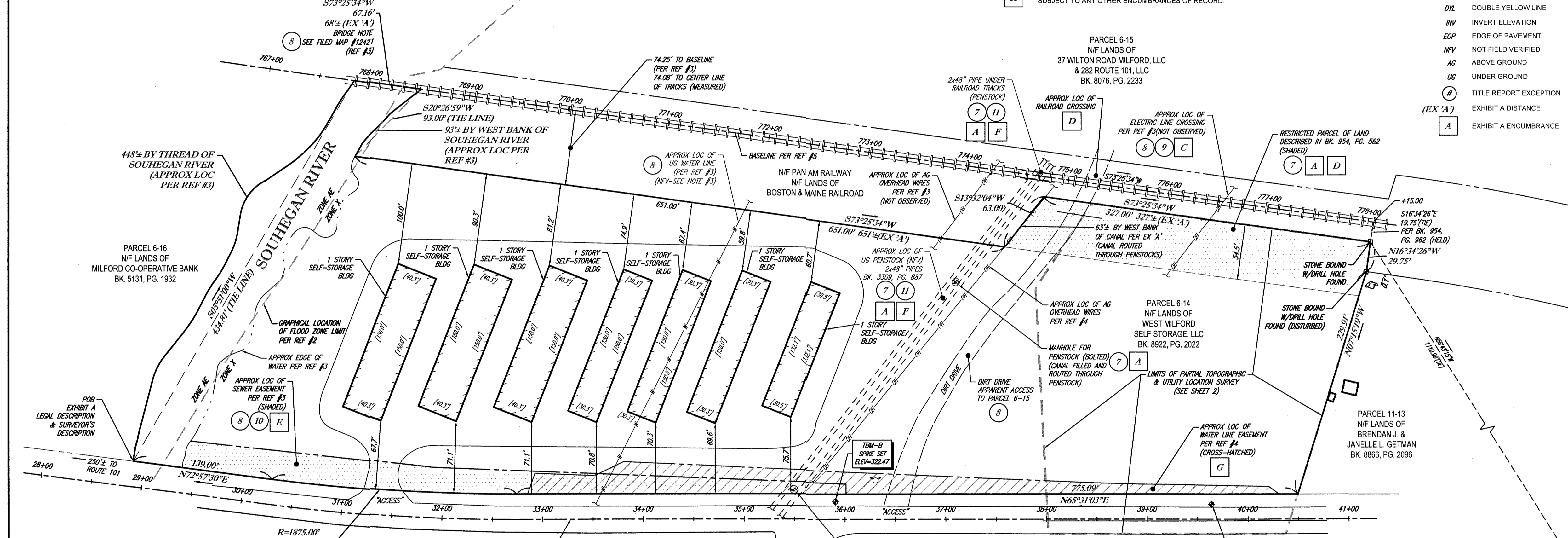
P:\181181\2019\Drawings\Plan\_Sheet\REV\W181203\_s83.dwg - 13.dwg - 13.dwg - 4/23/2019 10:17:14 AM - ecrandart - Xerox510 - lpc2 - User54 - 1:1

SURVEYOR'S METES AND BOUNDS DESCRIPTION MAP 6, LOTS 14 TOWN OF MILFORD HILLSBOROUGH COUNTY, NEW HAMPSHIRE

- 1. ALONG THE THREAD OF THE SOUHEGAN RIVER, 448 FEET, MORE OR LESS TO A POINT AT THE RAILROAD BRIDGE NOW OR FORMERLY OF THE BOSTON & MAINE RAILROAD, SAID POINT HAVING A TIE LINE OF SOUTH 05 DEGREES - 51 MINUTES - 00 SECONDS WEST, A DISTANCE OF 434.81 FEET FROM THE POINT OF BEGINNING, RUNNING THENCE;

CONTAINING 330,062± SQUARE FEET OR 7.57± ACRES, MORE OR LESS THIS DESCRIPTION IS PREPARED WITH REFERENCE TO A TITLE REPORT PREPARED BY STEWART TITLE GUARANTY COMPANY, HAVING A FILE NO. 01159-8671, WITH AN EFFECTIVE DATE OF SEPTEMBER 12, 2018.

THIS DESCRIPTION IS ALSO WRITTEN WITH REFERENCE TO A MAP ENTITLED "PLAN OF TAX PARCELS 7-27, 7-33, & 7-34, HILLSBOROUGH MILLS, MILFORD, N.H.," PREPARED BY THOMAS F. MORAN, INC., DATED JULY 17, 1979, RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN NO. 12421.



UTILITIES: THE FOLLOWING COMPANIES WERE NOTIFIED BY NEW HAMPSHIRE ONE-CALL SYSTEM (1-888-344-7233) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVICING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST.

ZONING INFORMATION INTEGRATED COMMERCIAL INDUSTRIAL (ICI) DISTRICT SOURCE: TOWN OF MILFORD ZONING ORDINANCE SECTION 5.08 - ICI DISTRICT

Table with 2 columns: ITEMS and REQUIRED. Lists requirements for MIN LOT AREA (150 FT), MIN FRONTAGE (30 FT), MIN FRONT YARD (15 FT), MIN SIDE YARD (15 FT), MIN REAR YARD (15 FT), and MAX BUILDING HEIGHT (40 FT).

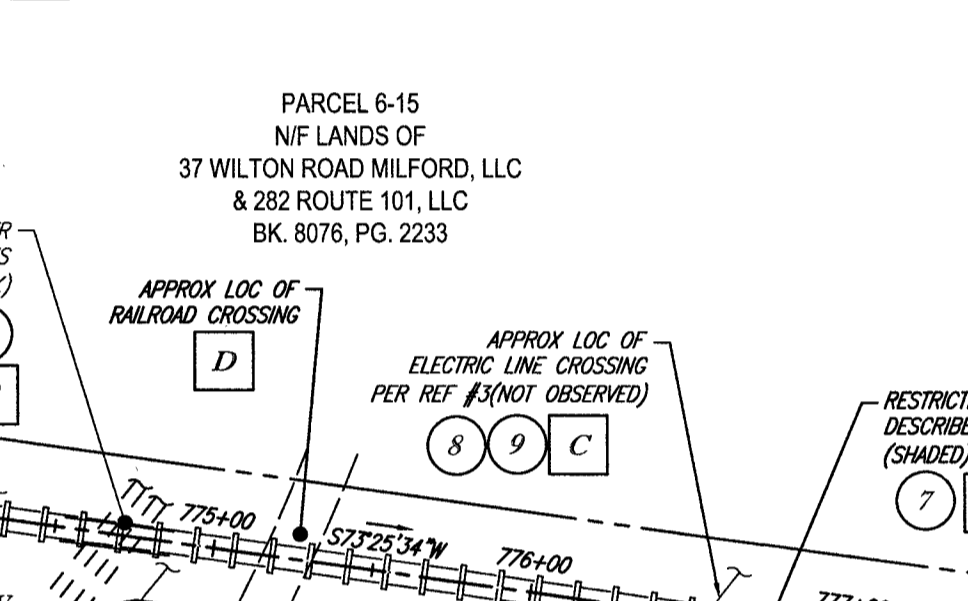
PER SECTION 5.08 4 - LOT SIZES AND FRONTAGES, THE MINIMUM LOT SIZE FOR AREAS SERVICED BY BOTH MUNICIPAL SEWERAGE AND WATER SYSTEMS SHALL BE 20,000 SQUARE FEET AND THE MINIMUM LOT SIZE FOR AREAS NOT SERVICED BY MUNICIPAL SEWERAGE AND WATER SYSTEMS SHALL BE 40,000 SQUARE FEET.

EXHIBIT "A" LEGAL DESCRIPTION

- A CERTAIN TRACT OR PARCEL OF LAND, WITH THE IMPROVEMENTS THEREON, IN THE TOWN OF MILFORD, HILLSBOROUGH COUNTY, NEW HAMPSHIRE, SITUATE ON THE SOUTHERLY SIDE OF ELM STREET, NOW KNOWN AS WILTON ROAD, AND NORTHWESTERLY SIDE OF THE SOUHEGAN RIVER, AND SHOWN AS LOT 7-33 ON A PLAN ENTITLED "HILLSBOROUGH MILLS, MILFORD, N.H." DATED JULY 17, 1979, BY THOMAS F. MORAN, INC. RECORDED IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS AS PLAN #12421, SAID PARCEL DESCRIBED AS FOLLOWS:

RUNNING ALONG SAID SOUTH SIDE OF ELM STREET NORTH 72° 57' 30" EAST FOR A DISTANCE OF 139 FEET, MORE OR LESS, TO THE POINT OF BEGINNING.

- A SUBJECT TO THE RIGHT OF THE TOWN OF MILFORD TO A PERMANENT EASEMENT TO CONSTRUCT, MAINTAIN, OPERATE AND REPAIR AN INTERCEPTOR SEWER, ALONG THE SOUTH SIDE OF ELM STREET ON PARCEL 6 AND GRANTED BY DEED DATED JULY 9, 1979, TO THE TOWN OF MILFORD, RECORDED AT BOOK 2704, PAGE 771, AS AFFECTED BY AN AMENDMENT DEED AT BOOK 2771, PAGE 288 - SEWER EASEMENT SHOWN PER REFERENCE #3



REFERENCES: 1. THE TAX ASSESSOR'S MAP OF MILFORD, HILLSBOROUGH COUNTY, NEW HAMPSHIRE, SHEET D1.

- 2. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, HILLSBOROUGH COUNTY, NEW HAMPSHIRE (ALL JURISDICTIONS), PANEL 453 OF 701, MAP NUMBER 300110C463D, EFFECTIVE DATE, SEPTEMBER 6, 2009

TOGETHER WITH WATER PRIVILEGES AND SUBJECT TO THE TERMS CONTAINED IN: (I) A LICENSE DATED DECEMBER 28, 1867, BETWEEN PINE VALLEY COMPANY AND WILTON RAILROAD COMPANY, (II) RELEASE BY WILTON RAILROAD COMPANY FROM A PORTION OF THE OBLIGATIONS IMPOSED BY THE LICENSE DATED DECEMBER 28, 1867, BETWEEN PINE VALLEY COMPANY AND WILTON RAILROAD COMPANY, WHICH RELEASE WAS RECORDED AT BOOK 954, PAGE 562, AND (III) AGREEMENT DATED MAY 1, 1985, BY AND BETWEEN BOSTON AND MAINE CORPORATION AND WINSLOW H. MACDONALD, TRUSTEE OF MILFORD ELM STREET TRUST, RECORDED AT BOOK 3309, PAGE 887 - BK. 954, PG. 562 - SUBJECT PARCEL SHOWN; BK. 3309, PG. 887 - PENSTOCK SHOWN

- A SUBJECT TO THE UNDERSTANDING THAT THE WOOD FRAME WAREHOUSE SHOWN ON RECORDED PLAN 12421 ON SAID PARCEL B NO LONGER EXISTS - SUBJECT WAREHOUSE NOT OBSERVED

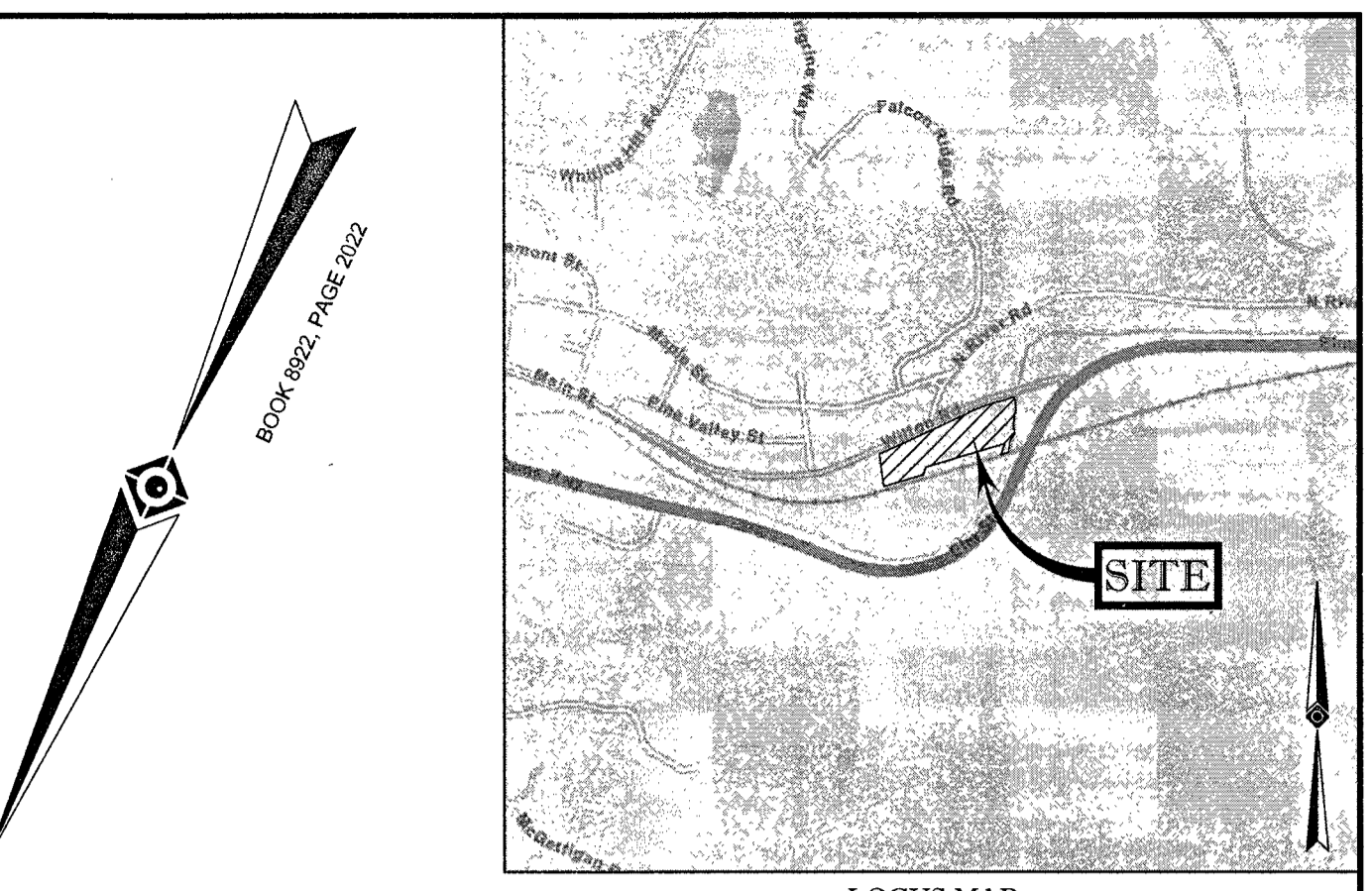
SUBJECT TO UNDERSTANDING THAT THE ELECTRIC TRANSMISSION LINES OVER LAND NOW OR FORMERLY OF TRUSTEES OF BOSTON & MAINE RAILROAD CORPORATION WHICH PREVIOUSLY EXISTED UNDER EASEMENT RECORDED AT BOOK 988, PAGE 87, HAVE BEEN CUT AND ARE NO LONGER IN USE, AND ANY AND ALL RIGHT, TITLE AND INTEREST UNDER SAID EASEMENT IS CONVEYED WITHOUT COVENANTS OF ANY KIND - ELECTRIC TRANSMISSION LINES SHOWN PER REFERENCE # 3; ELECTRIC LINES NOT OBSERVED IN THE FIELD BY THE SURVEYOR

TOGETHER WITH SUCH RIGHTS WHICH MAY EXIST TO THE PRIVATE RAILROAD CROSSING OVER SAID LAND OF THE TRUSTEES OF BOSTON & MAINE RAILROAD CORPORATION TO PARCEL C NEAR WHAT IS DESCRIBED AS THE CANAL ON RECORDED PLAN 12421, REFERRED TO IN A MAP RECORDED WITH A DEED TO HILLSBOROUGH MILLS BY WILTON RAILROAD COMPANY DATED AUGUST 15, 1936, RECORDED AT BOOK 954, PAGE 562, AND SUBJECT TO THE PREVIOUS RESERVATION TO THE WILTON RAILROAD COMPANY TO THE RIGHT TO PREVENT THE CONSTRUCTION OF ADDITIONAL BUILDINGS OTHER THAN A WOOD FRAME WAREHOUSE (SAID BUILDING HAS BEEN DEMOLISHED) ON PROPERTY CONVEYED BY DEED OF WILTON RAILROAD COMPANY SO FAR AS CURRENTLY IN FORCE AND APPLICABLE, AND ANY OTHER TERMS IN SAID INSTRUMENTS - BK. 954, PG. 562 - DIRT DRIVE SHOWN IN VICINITY OF PATH ON FILE MAP 12421

SUBJECT TO THE RIGHT OF THE TOWN OF MILFORD TO A PERMANENT EASEMENT TO CONSTRUCT, MAINTAIN, OPERATE AND REPAIR AN INTERCEPTOR SEWER, ALONG THE SOUTH SIDE OF ELM STREET ON PARCEL 8 AND GRANTED BY DEED DATED JULY 9, 1979, TO THE TOWN OF MILFORD, RECORDED AT BOOK 2704, PAGE 771, AS AFFECTED BY AN AMENDMENT DEED AT BOOK 2771, PAGE 288 - SEWER EASEMENT SHOWN PER REFERENCE #3

SUBJECT TO AN EASEMENT AGREEMENT, TO BE RECORDED AT SAID REGISTRY, BETWEEN GRANTORS, THE TOWN OF WILTON WATER COMMISSION, AND PVM COMMERCIAL CENTER, LLC, WITH RESPECT TO THE EXISTING WATER LINE AND PARALLEL TO WILTON ROAD - POSSIBLE LOCATION OF WATER LINE EASEMENT SHOWN PER REF #4

SUBJECT TO ANY OTHER ENCUMBRANCES OF RECORD.



LOCUS MAP © 2013 ESRI WORLD STREET MAPS (NOT TO SCALE)

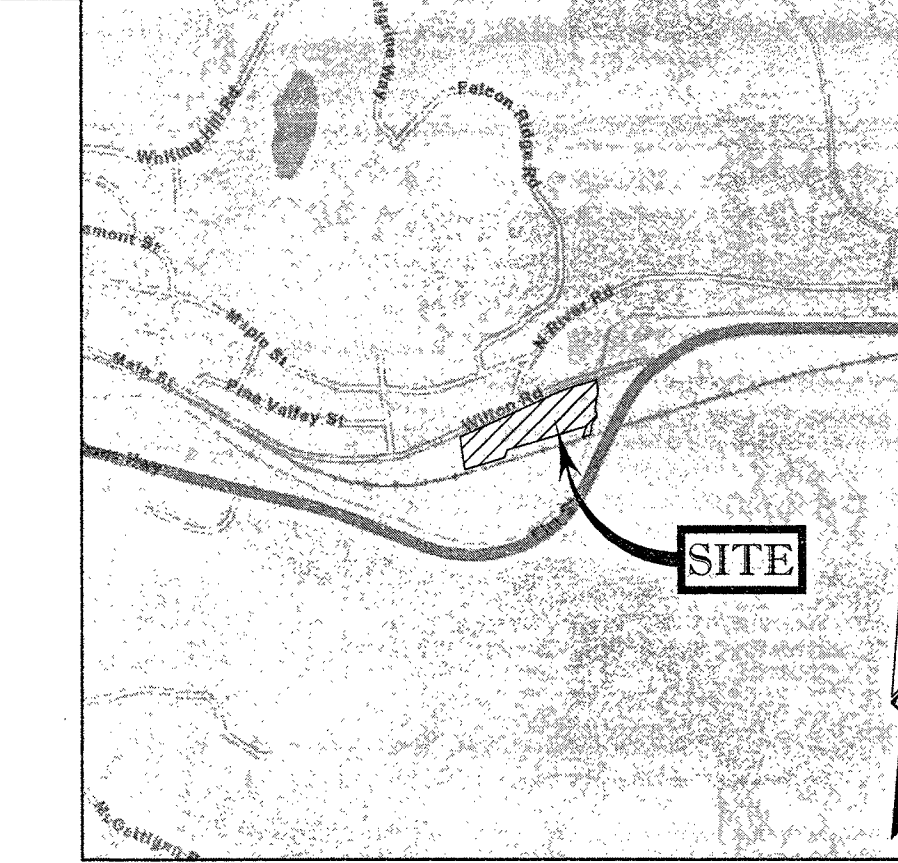
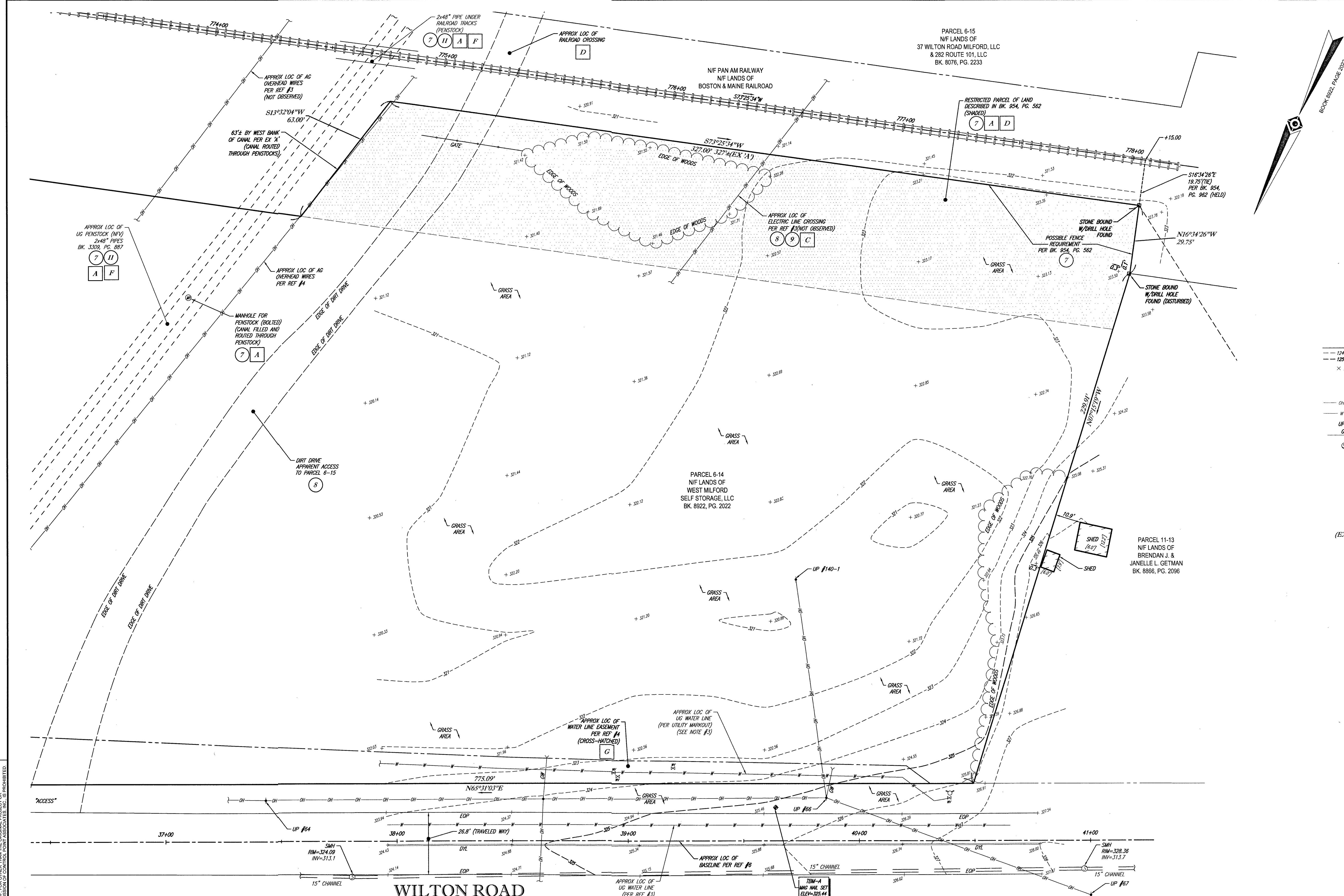
- LEGEND: - - - 124 - - - EXISTING CONTOUR, - - - 125 - - - EXISTING SPOT ELEVATION, X 123.65 EXISTING SPOT ELEVATION, HW HYDRANT, WV WATER VALVE, OH OVERHEAD WIRES, UP -- -- -- APPROX. LOC. UNDERGROUND WATER LINE, UP -- -- -- UTILITY POLE, GW GUY WIRE, SMH SANITARY/SEWER MANHOLE, DYL DOUBLE YELLOW LINE, INV INVERT ELEVATION, EOP EDGE OF PAVEMENT, NFV NOT FIELD VERIFIED, AG ABOVE GROUND, UG UNDER GROUND, (EX 'A') TITLE REPORT EXCEPTION, (EX 'A') EXHIBIT A DISTANCE, (EX 'A') EXHIBIT A ENCUMBRANCE

- NOTES: 1. PROPERTY KNOWN AS PARCEL 6-14 AS SHOWN ON THE TOWN OF NEW HAMPSHIRE, HILLSBOROUGH COUNTY, STATE OF NEW HAMPSHIRE TAX ASSESSOR MAP 01.

TEMPORARY BENCH MARKS SET: TBM-A MAG NAIL SET ON SOUTHERLY SIDE OF WILTON ROAD - ELEVATION = 325.44', TBM-B SPIKE SET ON SOUTHERLY SIDE OF WILTON ROAD - ELEVATION = 322.47'

ALTA/NSPS LAND TITLE SURVEY Lisciotti Development Corp. 30 WILTON ROAD PARCEL 6-14 TOWN OF MILFORD, HILLSBOROUGH COUNTY STATE OF NEW HAMPSHIRE CONTROL POINT ASSOCIATES, INC. DATE 11/13/2018

WILTON ROAD (FKA ELM STREET) (PUBLIC - 50' WIDE) (ASPHALT ROADWAY) TWO WAY TRAFFIC. GRAPHIC SCALE (IN FEET) 1 inch = 60 ft. JOHN P. LYNCH NEW HAMPSHIRE PROFESSIONAL LAND SURVEYOR #899



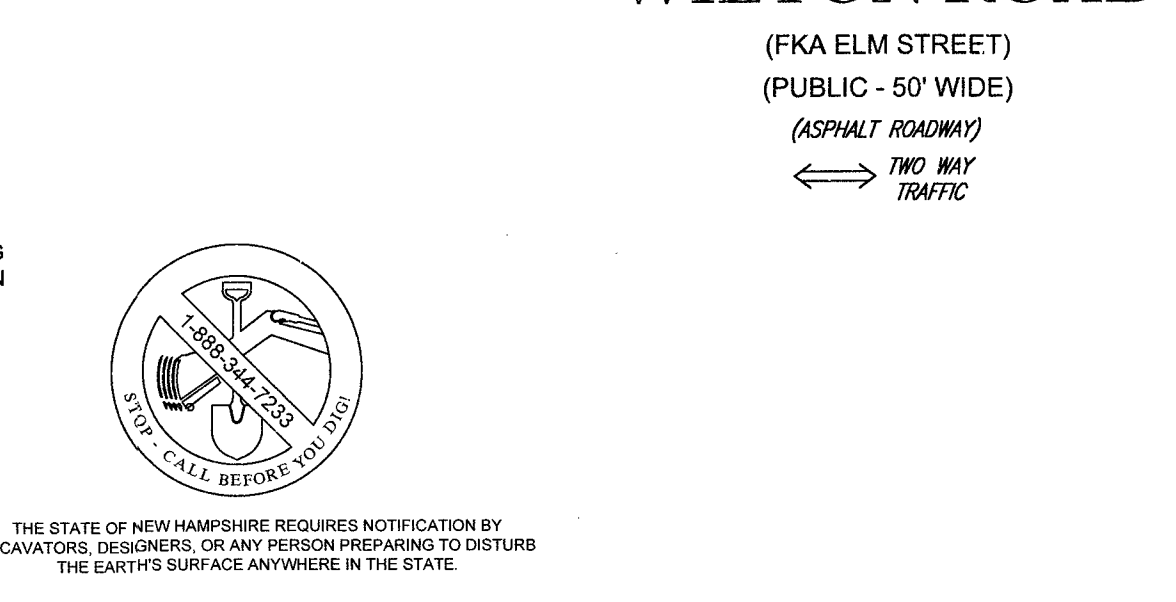
LEGEND

- 124 --- EXISTING CONTOUR
- 125 --- EXISTING CONTOUR
- x 123.45 EXISTING SPOT ELEVATION
- HYDRANT
- WATER VALVE
- OH OVERHEAD WIRES
- W APPROX. LOC. UNDERGROUND WATER LINE
- UP #1 GUY WIRE
- SMH SANITARY/SEWER MANHOLE
- D/L DOUBLE YELLOW LINE
- INV INVERT ELEVATION
- EOP EDGE OF PAVEMENT
- N/V NOT FIELD VERIFIED
- AG ABOVE GROUND
- UG UNDER GROUND
- (R) TITLE REPORT EXCEPTION
- (EX 'A') EXHIBIT A DISTANCE
- (A) EXHIBIT A ENCUMBRANCE

UTILITIES:

THE FOLLOWING COMPANIES WERE NOTIFIED BY NEW HAMPSHIRE ONE-CALL SYSTEM (1-888-344-7233) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST. SERIAL NUMBER: 20184201383

UTILITY COMPANY	PHONE NUMBER
CONSOLIDATED COMMUNICATIONS	844-968-7224
EVERSOURCE - ELECTRIC	800-592-2000
PENNSHUCK WATER WORKS	800-882-6191
COMCAST	800-934-6489
WILTON DPW	203-563-0152
TDS TELECOM - WILTON	866-671-6692



THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT WAS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 5, 7(a), 7(b)(1), 7(c), 8, 9, 11, 13, & 14 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON NOVEMBER 7, 2018.

NOT A VALID ORIGINAL DOCUMENT UNLESS EMBOSSED WITH RAISED IMPRESSION OR STAMPED WITH A BLUE INK SEAL.

THIS SURVEY IS CERTIFIED TO:  
MILFORD D&G, LLC  
STEWART TITLE GUARANTY COMPANY

DATE: 11/13/2018

<p>ALTA/NSPS LAND TITLE SURVEY LISCIOTTI DEVELOPMENT CORP. 30 WILTON ROAD PARCEL 6-14 TOWN OF MILFORD, HILLSBOROUGH COUNTY STATE OF NEW HAMPSHIRE</p>	
<p>FIELD DATE 11-7-18</p> <p>FIELD BOOK NO 18-14MA</p> <p>FIELD BOOK PG 62</p>	<p>FIELD CREW T.M./T.O.</p> <p>DRAWN A.M.M.</p> <p>REVIEWED S.P.P./A.D.</p>
<p>CONTROL POINT ASSOCIATES, INC. 352 TURNPIKE ROAD SOUTHBOROUGH, MA 01772 508-948-3000 - 508-948-3003 FAX</p>	
<p>ALBANY, NY 5182175010 CHALFONTE, PA 2157129800 MANHATTAN, NY 6467800411 MT LAUREL, NJ 6098572099 WARREN, NJ 9086680099</p>	
<p>FILE NO 03-180300</p> <p>DWG NO. 2 OF 2</p>	<p>DATE 11-12-18</p> <p>SCALE 1"=20'</p> <p>FILE NO 03-180300</p> <p>DWG NO. 2 OF 2</p>

CONTROL POINT ASSOCIATES, INC. - ALL RIGHTS RESERVED. THIS SURVEY IS THE PROPERTY OF CONTROL POINT ASSOCIATES, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF CONTROL POINT ASSOCIATES, INC.

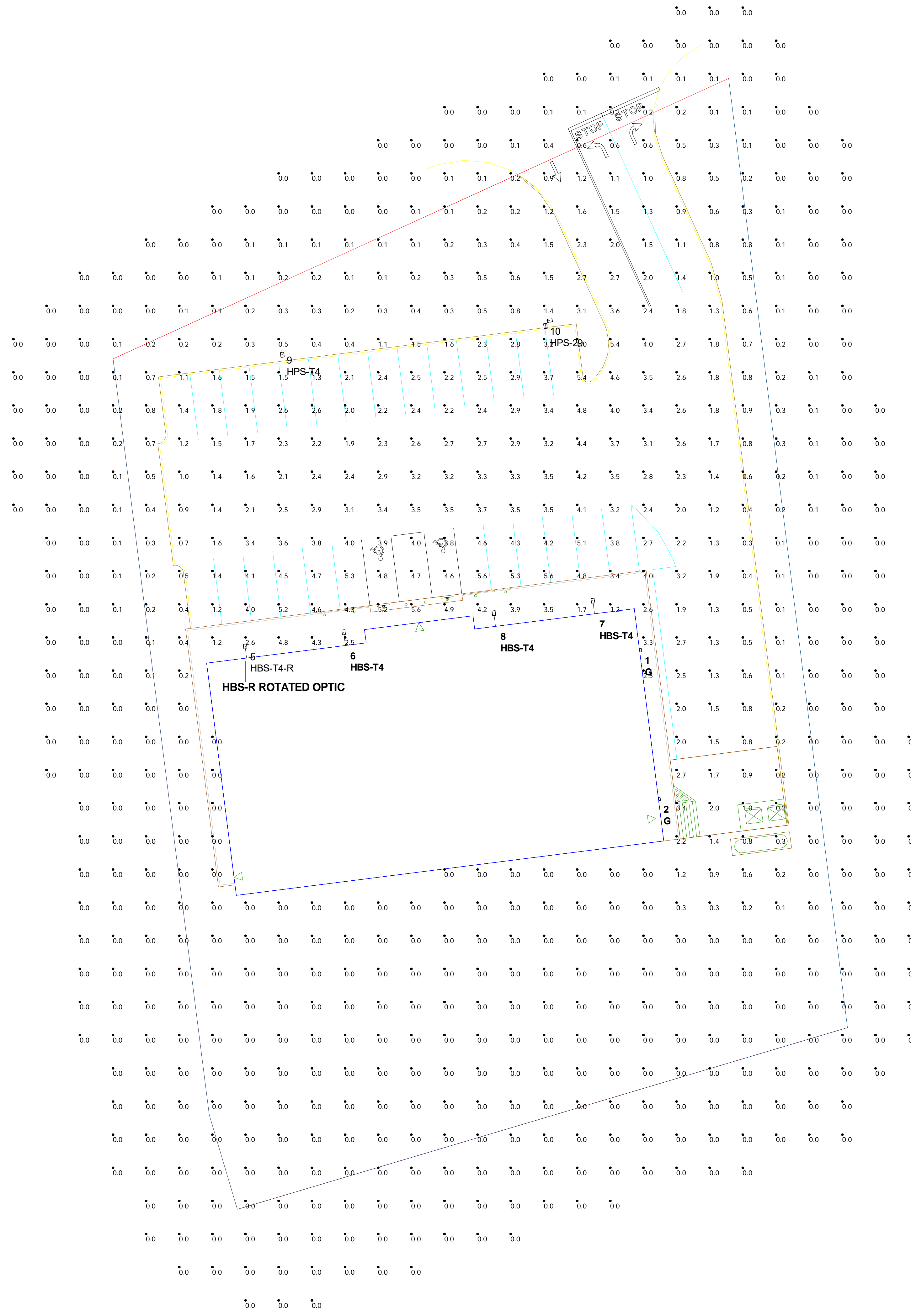
Project:

**DOLLAR  
GENERAL  
MILFORD,  
NH**

Notes:

Notes:

1. Calculation at grade.
2. See Luminaire Location Summary for wall luminaire mounting height.
3. Arm mnt wall fixtures estimated with 2' rise from mounting.
4. Based on 20' poles plus 2' AFG bases.



Symbol	Qty	Label	Lumens/Lamp	Arrangement	LLF	Description
[Symbol]	2	G	N.A.	SINGLE	0.900	LHSWP-1-C-M-T3-C-ONE BRICK TYPE 3 700MA LED WALL PACK
[Symbol]	3	HBS-T4	N.A.	SINGLE	0.900	LSBT-1-C-X-T4-F-R-S213-ONE BRICK TYPE 4 1400MA LED W/BACK SHLD 42IN ARM WALL MNT
[Symbol]	1	HBS-T4-R	N.A.	SINGLE	0.900	LSBT-1-C-X-T4-F-R-S213-ONE BRICK TYPE 4 1400MA W/BACK SHLD 42IN ARM WALL MNT ROTATE OPTIC RIGHT
[Symbol]	1	HPS-29	N.A.	2 @ 90 DEGREES	0.900	LSBT-1-C-X-T3-F-S213-ONE BRICK TYPE 3 1400MA LED W/BACK SHLD
[Symbol]	1	HPS-T4	N.A.	SINGLE	0.900	LSBT-1-C-X-T4-F-S213-ONE BRICK TYPE 4 1400MA LED W/BACK SHLD

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
SITE	Illuminance	Fc	0.75	5.6	0.0	N.A.	N.A.
PARKING AND DRIVE	Illuminance	Fc	2.60	5.6	0.2	13.00	28.00

LumNo	Label	Z-luminaire height	Tilt
1	G	12	0
2	G	12	0
5	HBS-T4-R	18.5	0
6	HBS-T4	18.5	0
7	HBS-T4	18.5	0
8	HBS-T4	18.5	0
9	HPS-T4	22	0
10	HPS-29	22	0

- DUE TO CHANGING LIGHTING ORDINANCES IT IS THE CONTRACTORS RESPONSIBILITY TO SUBMIT THE SITE PHOTOMETRICS AND LUMINAIRE SPECS TO THE LOCAL INSPECTOR BEFORE ORDERING TO ENSURE THIS PLAN COMPLIES WITH LOCAL LIGHTING ORDINANCES.  
 - THIS LIGHTING DESIGN IS BASED ON INFORMATION SUPPLIED BY OTHERS. CHANGES IN ELECTRICAL SUPPLY, AREA GEOMETRY AND OBJECTS WITHIN THE LIGHTED AREA MAY PRODUCE ILLUMINATION VALUES DIFFERENT FROM THE PREDICTED RESULTS SHOWN ON THIS LAYOUT.  
 - THIS LAYOUT IS BASED ON .IES FILES THAT WERE LAB TESTED OR COMPUTER GENERATED. ACTUAL RESULTS MAY VARY.

FILE:  
dg-milford-2.agi

Date:  
1-4-19







March 21, 2019

Town of Milford Planning Board  
1 Union Square  
Milford, MA 03055

Attention: Lincoln Daley, Director of Community Development

**Re: Proposed Retail Building Development  
30 Wilton Road, Milford, NH – Map 6, Lot 14  
Response to Major Site Plan Review Community Development / Planning Comments**

Dear Members of the Board:

Below please find our responses to comments noted within the letter from the Office of Community Development, dated February 21, 2019. The responses contained in the letter and the associated revisions that have been made to the enclosed Site Development Plans are reflective of discussions with the Planning Board at their January 22, 2019 and February 26, 2019 public hearings, a March 07, 2019 meeting with the Nashua Regional Planning Commission (NRPC), and multiple discussions with the Town of Milford Planning Department, respectively. For clarity, the original comments are in italics, while our responses are directly below in bold font.

**Public Works:**

*Comment 1: Project will require a Town Street Opening Permit and Driveway Permit.*

**Response 1: Comment acknowledged. Applications for a Town Street Opening Permit and a Driveway Permit are anticipated to be filed with Public Works prior to construction.**

*Comment 2: Concern regarding the proposed construction of the driveway entrance and repair of Wilton Road. See Town of Milford, Infrastructure Design, Construction & Administration Standards.*

**Response 2: Work within the right-of-way is proposed to be performed in accordance with applicable requirements of the Town of Milford Infrastructure Design, Construction & Administration Standards.**

*Comment 3: Sheet 13 Stone Check Dam Detail. Revise the detail by removing the filter fabric.*

**Response 3: The Stone Check Dam Detail has been revised as requested, as shown on Sheet 13 of the enclosed Site Development Plans.**



**Comment 4:** *Ensure that all plantings do not impact sight distance for access/egress along Wilton Road.*

**Response 4:** **Proposed landscape plantings have been designed such that they are not anticipated to impact sight distance from the proposed access/egress driveway onto Wilton Road.**

**Comment 5:** *The plan should incorporate pedestrian activity along Wilton Road.*

**Response 5:** **A proposed sidewalk is now shown on the plans from the subject site to the Wilton Road right-of-way. In consideration comments relative to potential future upgrades to the municipal sidewalk infrastructure, , the Applicant is providing the Town with a \$5,000.00 contribution towards said future municipal sidewalk improvements.**

**Water/Sewer Utilities:**

**Comment 1:** *Water will have to be supplied by Wilton Water (Milford Water ends at the Milford side of the bridge on Wilton road).*

**Response 1:** **Comment acknowledged.**

**Comment 2:** *Sewer utilities and inverts (depths) will have to be verified for 5 foot minimum burial and sewer pipe slope.*

**Response 2:** **Proposed sanitary sewer lines have been designed to provide five (5 ft) foot minimum burial depth, as shown within the enclosed Site Development Plans.**

**Comment 3:** *Sewer clean out will need to be installed at the property line along with the building clean outs.*

**Response 3:** **A sanitary sewer cleanout has been proposed at the property boundary, as shown within the enclosed Site Development Plans.**

**Comment 4:** *The word “forcemain” is used on the utility plan. The Department will need to verify if the sewer is gravity or a pumped force main.*

**Response 4:** **A gravity sanitary sewer connection is proposed. The reference to “force main” has been removed from Sheet 6 of the enclosed Site Development Plans.**

**Comment 5:** *We have details for the utility trenches that they will have to comply with.*

**Response 5:** **Typical Town of Milford details for utility trenches have been included on Sheet 13 of the enclosed Site Development Plans.**

**Comment 6:** *Modify the sewer connection using the attached “Alt. Sewer Chimney Detail”.*

**Response 6:** **The proposed sanitary sewer connection has been modified to reflect the provided “Alt. Sewer Chimney Detail”, as shown within the enclosed Site Development Plans.**



**Community Development/Planning:**

**Comment 1:** *Sheet 1. Please revise the plan to include signature blocks for the Planning Board and Property Owner and resubmit.*

**Response 1:** **Planning Board and Property Owner signature blocks have been included on Sheet 1 of the enclosed Site Development Plans.**

**Comment 2:** *Sheet 1. Waiver Requests. Recommend incorporating the Waiver Requests Block into a general Notes block. Further, please add the following notes:*

- a. Note defining the Purpose of the plan*
- b. Note detailing Open Space calculations*
- c. A note indicating: "As-built plans shall be delivered to the Building Department prior to a Certificate of Occupancy being issued."*
- d. A note indicating: "Water, sewer, road (including parking lot) and drainage work shall be constructed in accordance with the Town of Milford's Water Utilities Department and Public Works Department Standards."*
- e. A note indication that the project is subject to Police Impact Fees.*
- f. A note detailing Groundwater Protection District information.*
- g. A note showing the approval dates for the (1) Milford Stormwater Management and (2) Erosion Control Permit and NH DOT.*
- h. A note delineating all wetlands and wetland buffers (if applicable). As we have discussed and at a minimum, please verify that no wetlands were identified on the subject property.*

**Response 2:** **The requested notation has been included on Sheet 1 of the enclosed Site Development Plans.**

**Comment 3:** *Sheet 1. Please revise the plans to include a Reference Plan block and plans used to compile the submitted site plan.*

**Response 3:** **A Reference Plan block has been included on Sheet 1 of the enclosed Site Development Plans.**

**Comment 4:** *Sheet 3, Zoning Analysis Table. The project area is located on an undeveloped portion of the parent lot, Map 6, Lot 14. Please confirm the existing impervious coverage calculation of 31.8% and clarify if said percentage represents the parent lot, Map 6, Lot 14 or the proposed subdivided lot, Map 6, Lot 14-1. Similarly, please explain the 54.3% proposed impervious coverage area.*

**Response 4:** **The Zoning Analysis Table has been updated to be reflective of information for only the land area associated with proposed Lot 14-1, as shown on Sheet 4 of the enclosed Site Development Plans.**

**Comment 5:** *Sheet 4, Site Plan, Zoning Analysis Table. The plan states that the maximum height of the building will be 18'. However, the submitted elevations show that the building height will be 30' 4". Please explain and revise the plan accordingly.*



**Response 5:** The Zoning Analysis Table has been updated to reflect a proposed building height of 30'-4", consistent with the proposed architectural building design. The updated Site Development Plans are enclosed with this letter.

*Comment 6:* Sheet 4, Zoning Analysis Table. Please revise the parking calculation by separating the retail use and warehouse/storage area within the building in accordance with Section 6.05.4 of the Development Regulations.

**Response 6:** The parking requirement shown within the Zoning Analysis Table has been maintained as thirty-seven (37) required parking spaces, as the Development Regulations appear to require the use of the entire building gross floor area under the "Retail Shopping Centers" category. Alternate calculations have been included within the Zoning Analysis Table based the total retail and storage uses within the building, yielding a required parking total of thirty (30) parking spaces. The Planning Board, as part of their deliberations during their January 22, 2019 public hearing, approved a waiver to reduce the requisite number of parking spaces from thirty-seven (37) to twenty-eight (28), as indicated on the enclosed Site Development Plans.

*Comment 7:* Sheet 4. Proposed Signage. Please include the proposed design, construction, and engineering details associate with the monument sign, directional signage, and wall signage. Recommended placement of information on Sheet 13.

**Response 7:** Details representative of the anticipated monument and building signage has been included on Sheet 13 of the enclosed Site Development Plans. Final signage details are anticipated to be completed by the proposed tenant and provided to the Town prior to construction.

*Comment 8:* Sheet 4. Snow Storage. The plan shows a snow storage location along the front and east side perimeters of the subdivided lot. Sheet 4 also contains a note stating that snow shall be removed to an off-site location..... Please clarify and describe the anticipated process for snow removal. It is recommended that the snow removal company be a certified Green Snow Professional.

**Response 8:** As noted, snow storage areas are indicated on the enclosed Site Development Plans. Should additional snow storage be required during more intense storm events and above that which is currently indicated, snow is proposed to be removed to an off-site location in accordance with the applicable regulations governing same. The snow removal contractor is to be retained by the respective tenant. The recommendation relative to said snow removal contractor being a Green Snow professional will be relayed to the tenant for their consideration.

*Comment 9:* Sheets 4 and 9. The plan displays an 8' tall fence extending along on the western property border to the southwest corner of the building. It is recommended that the fence be extended to the property line of the residential abutter to provide further visual mitigation of the building and improve the safety/security between the two properties.

**Response 9:** The proposed eight (8) foot high fence has been extended an additional thirty-five (35±) feet towards the rear of the parcel to the limit of the existing easement, as shown on Sheet 4 of the enclosed Site Development Plans. The beneficiary of the existing easement, Pan



**Am Railway, will not permit the placement of structures within the easement. Accordingly, the proposed fence has been extended to the extent that it can.**

**Comment 10:** *Sheet 5. Please explain if LID practices were considered as part of the drainage/stormwater and landscape design. More specifically it would appear that opportunities exist to utilize portions of the landscaped areas for treatment and infiltration of stormwater. In addition, were there considerations to design a functional raingarden in lieu of the proposed 3 foot deep detention basin?*

**Response 10:** **The proposed stormwater detention/infiltration basin was designed in consideration of requirements associated with the New Hampshire Stormwater Management Manual, specifically to meet the groundwater recharge requirements of same. Alternative options were considered, however would not allow the project to meet New Hampshire Stormwater Management Manual requirements. The design of the project's proposed stormwater management system has been reviewed by Town's peer review engineer, KV Partners LLC, and they have indicated the plans meet the requisite design standards by way of their letter dated February 8, 2019.**

**Comment 11:** *Sheet 9, Irrigation Notes. The plan states that all landscaped areas and lawns are to be fully irrigated. Further, the irrigation system would be designed by other and include all spray heads, valves and controllers. Please refer to Section 6.08.2 of the Development Regulations detailing the requirements for a permanent irrigation system and revise the plans accordingly.*

**Response 11:** **The plans have been updated such that permanent irrigation systems, if provided, shall be low volume systems and utilize water saving technologies, as shown on Sheet 9 of the enclosed Site Development Plans.**

**Comment 12:** *Sheet 9. The proposed landscape design does not currently include any plantings along the building. Pursuant to Section 6.08.6 of the Development Regulations, landscaping shall be provided along all building frontage. A minimum of one (1) shrub for every five (5') feet of building frontage shall be provided. In instances where it is not possible to locate all required shrubs along the building frontage due to doorways, walkways or other impervious surfaces, the required shrubs shall be utilized within the parking lot or landscape buffers. Please revise the plan accordingly or submit a waiver request.*

**Response 12:** **The Landscaping Plans has been updated to include additional landscaping along the building frontage, as shown on the enclosed Site Development Plans. Additional landscape plantings were previously proposed within landscape buffers above that required in consideration of the overall landscape design.**

**Comment 13:** *Sheet 9. Pursuant to Section 6.08.8.A of the Development Regulations, please confirm that all plant stock meets the ANSI Z60.1 standard.*

**Response 13:** **All plant stock is proposed to meet ANSI Z60.1, a note stating same is included on the enclosed Site Development Plans.**

**Comment 14:** *Sheet 9. Please add a note to the plan stating the following, "Any landscape element that dies, or is otherwise removed, shall be promptly replaced with the same, if not similar to, height or texture*



*element as originally intended. In addition, landscaped areas shall be kept free of all debris, rubbish, weeds and overgrown turf grass.”*

- Response 14:** The requested note has been added the Landscaping Plan included as part of the enclosed Site Development Plans.
- Comment 15:** *Sheet 11, Stockade Fence Detail. Please revise the plans by replacing the vinyl coated chain link fence along the front of the dumpster pad with the wooden slat detail and adjust the gate design accordingly.*
- Response 15:** The front gate of the dumpster enclosure has been modified to be wooden slat, as shown on the enclosed Site Development Plans.
- Comment 16:** *Lighting Plan. Please revise the plan set to include the engineering and construction details for the lights, 20' light poles, and associated 2' AFG bases. Include the manufacturing photographs of each proposed light.*
- Response 16:** Specific construction details for the light pole bases are anticipated to be completed by the structural engineer prior to construction. Typical manufacturer specification sheets and representative images of the proposed light fixtures are enclosed with this response for reference.
- Comment 17:** *Lighting Plan. Please explain the reason for not adding security lighting to the rear of the building.*
- Response 17:** Security lighting is not proposed at the rear of the building as there are no building access or egress points along that façade. The Applicant, in consideration of the feedback that has been provided as part of the review process, has made an effort to minimize the lighting features which are to remain operational during non-business hours.
- Comment 18:** *Sheets 1 and 4, Lighting Note Detail. Please revise the plan note stating “Typ. See Lighting Plan By Others” to “See Lighting Plan.”*
- Response 18:** As the Lighting Plan has been prepared by another industry professional, Light Efficient Design, LLC, under separate contract with the respective tenant, the note referring to the Lighting Plan as being prepared by others has been updated to include additional information as to the specific entity which was responsible for the preparation of that plan. The updated Site Development Plans are enclosed with this letter.
- Comment 19:** *General Comment. Please revise the plan by deleting the “Plans By Others” with the correct referenced plan sheet.*
- Response 19:** As the Lighting Plan has been prepared by another industry professional, Light Efficient Design, LLC, under separate contract with the respective tenant, the note referring to the Lighting Plan as being prepared by others has been updated to include additional information as to the specific entity which was responsible for the preparation of that plan. The updated Site Development Plans are enclosed with this letter.



**Comment 20:** *General Comment - Pedestrian Connectivity. Pursuant to Section 7.03 Sidewalks of the Development Regulations, the Planning Board may require sidewalks for pedestrian traffic to provide a connection between the main entrances of business, housing or industrial establishments, parking areas and along public roadways. Further, the Planning Board may also require sidewalks from the road to the main building entrance or along the road frontage if there is a reasonable expectation pedestrian patrons, residents, neighbors, children, shoppers or employees would be traveling to or from the site. Sidewalks and pedestrian connectivity is further emphasized in the West Elm Street Overlay District.*

*The property is located in close proximity (approx. 500 linear feet) to existing sidewalk located along the southern side of Wilton Road heading west towards Wilton. A smaller section of sidewalk is located at the intersection of Wilton Road and North River Road. Staff asserts that there would be a reasonable expectation that pedestrian patrons, residents, neighbors, children, shoppers or employees would be traveling to or from the site given its proposed use and proximity to residential uses and existing sidewalk network. Staff recommends that the plan be revised to show a sidewalk in located along the frontage of the proposed subject lot. In addition, staff recommends the construction of a lighted crosswalk at the intersection of North River Road and Wilton Road to the southern side of Wilton Road to improve pedestrian safety and connectivity to the Pine Valley Mill property and neighboring residential properties.*

**Response 20:** **As previously noted, a proposed sidewalk is now shown on the plans from the subject site to the Wilton Road right-of-way. In consideration comments relative to potential future upgrades to the municipal sidewalk infrastructure, the Applicant is providing the Town with a \$5,000.00 contribution towards said future municipal sidewalk improvements.**

**Comment 21:** *General Comment – Section 6.07.6.E.1 Building Orientation. Pursuant to Section 6.07.6.e, new structures shall maintain an appropriate street edge in relationship to adjacent structures. The location of the proposed building is approximately 115 feet from the edge of road. Said distance far exceeds the street edge of adjacent structures. Please explain or submit a waiver request seeking relief from this requirement.*

**Response 21:** **As discussed with the Planning Board at their January 22, 2019 hearing and as further discussed in the response to staff comments letter prepared by our office, dated January 30, 2019, the building orientation and site layout has been designed to allow for on-site circulation of traffic, as well as delivery and emergency response vehicles while respecting encumbrances associated with the existing land, including limited lot depth incurred as a result of the existing railroad easement. Alternative layouts were considered, however they necessitated additional depth that was unavailable to the project or large areas of land on Map 6, Lot 14 that were not practicable for the overall development of same. Subsequent to our discussions with the Planning Board at their January 22, 2019 public hearing, a general consensus was reached with the Board that the layout was appropriate given the number of factors which are influencing same. The additional setback distance from Wilton Road provides the project an opportunity to provide additional landscape screening in an effort to further buffer the project from the public travel way.**

**Additionally, properties to the west of the subject site consist of residential properties to which no correlation exists between the orientation of the two uses. A proposed landscaping and fence screen is proposed along the existing property boundary abutting said property to further separate the two uses. Properties to the east of the subject site consist of self-storage facilities, which are setback from the Wilton Road travelled way approximately eighty-five (85) feet. Accordingly, we believe the proposed building**



**orientation is not inappropriate relative to adjacent structures and meets the needs of the proposed facility.**

**Comment 22:** *General Comment – Section 6.07.6.E.2 Building Massing, Form, Height. Pursuant to Section 6.07.06.E.2, to enhance the character of new development and the corridor, the building scale should be reduced introducing small-scaled architectural features, creating an irregular footprint and variations in roof forms and height of roof elements.*

*Please explain how the side elevations of the building meet these design standards and what alternatives were considered.*

**Response 22:** **As discussed with the Planning Board at the January 22, 2019 hearing and as further discussed in the response to staff comments letter prepared by our office dated January 30, 2019, the project and building elevations have been designed in consideration of the standards associated with the West Elm Street Gateway District. Architectural design elements introduced to the front façade of the building include but are not limited to a peaked roof feature at the center of the building, an awning over the main entrance, upgraded clapboard siding, color changes, the inclusion of additional architectural trim to provide visual interest to the façade, a projection of the building face at the main entrance, and decorative window panels and shutters.**

**The side (east) building façade is oriented such that it is angled away from Wilton Road. In consideration of discussions with the Planning Board at the January 22, 2019 hearing relative to the side (east) facing elevation, the project has proposed additional shade tree plantings along the eastern property boundary to provide additional visual buffer to the project.**

**Comment 23:** *General Comment – Section 6.07.6.E.3 Architectural Features and Materials. Pursuant to Section 6.07.06.E.3, long expanses of repetitive architectural elements and flat unarticulated wall surfaces shall be avoided. Please explain how the side elevations of the building meet this requirement and what alternatives were considered. Please modify the plan in compliance with this section or request a waiver from said section.*

**Response 23:** **As discussed with the Planning Board at the January 22, 2019 hearing and as further discussed in the response to staff comments letter prepared by our office dated January 30, 2019, the project and building elevations have been designed in consideration of the standards associated with the West Elm Street Gateway District. Architectural design elements introduced to the front façade of the building include but are not limited to a peaked roof feature at the center of the building, an awning over the main entrance, upgraded clapboard siding, color changes, the inclusion of additional architectural trim to provide visual interest to the façade, a projection of the building face at the main entrance, and decorative window panels and shutters.**

**The side (east) building façade is oriented such that it is angled away from Wilton Road. In consideration of discussions with the Planning Board at the January 22, 2019 hearing relative to the side (east) facing elevation, the project has proposed additional shade tree plantings along the eastern property boundary to provide additional visual buffer to the project.**





**Comment 24:** *General Comment – Section 6.07.6.E.8 Windows. Consideration should be given to adding windows to the side elevations to break up the walls.*

**Response 24:** **Decorative window features have been included on the front building façade. The side (east) building façade is oriented such that it is angled away from Wilton Road. In consideration of discussions with the Planning Board at the January 22, 2019 hearing relative to the side (east) facing elevation, the project has proposed additional shade tree plantings along the eastern property boundary to provide additional visual buffer to the project.**

**Comment 25:** *General Comment – Section 6.07.6.E.10 Signage. Please provide all design, engineering, and construction details for all monument and wall signs for the project.*

**Response 25:** **Details representative of anticipated monument and building signage has been included on Sheet 13 of the enclosed Site Development Plans. Final signage details are anticipated to be completed by the proposed tenant and provided to the Town prior to construction.**

**Comment 26:** *General Comment – Section 6.07.6.E.11 Screening. Pursuant to Section 6.07.06.E.11, states that all rooftop air conditioning, heating and large mechanical equipment, building accessories, and refuse shall have noise reduction screening and be screened from public view and have noise reduction screening. Please identify on the plans where the anticipated roof mounted units will be located. Further, please provide building design and construction details for sound and visual screening mitigation for all roof mounted mechanical units.*

**Response 26:** **Four (4) rooftop HVAC units are anticipated to be installed generally evenly oriented around the center of the building’s roof. The proposed building has been designed with a peaked roof at the center of the building and a raised façade along the front of the building in an effort to provide additional screening of rooftop units from public view.**

**Comment 27:** *General Comment – Section 6.07.06.F.1 Access Management.*

- a. *Pursuant to Section 6.07.06.F.1 of the Zoning Ordinance, shared access and interconnecting driveways are strongly encouraged between adjacent interior parking lots to further reduce potential access points along the main road, and allow pedestrian and vehicular access between adjacent lots without entering the roadway.*

*Based on the previous statements made by the applicant involving the development of adjacent commercial property, to allow for future connectivity, and improved internal pedestrian/vehicular circulation, Staff recommends that the plan be revised to include a future access/egress connection between the two commercial properties.*

**Response 27a.:** **As discussed with the Planning Board at their January 22, 2019 hearing and with Planning Staff subsequent to the March 7, 2019 meeting with NRPC, a shared vehicular access to the property currently identified in the Town of Milford’s Assessors database as Map 6, Lot 14 is not appropriate or viable at this time. The Applicant is, however, amendable to including for potential future pedestrian connectivity between the respective properties by way of a paved sidewalk to the abutting property boundary. Per coordination with the current Owner, potential future development of Map 6, Lot 14 is anticipated to utilize the existing driveway servicing that portion of the property.**



- b. *General Comment – Shared Parking Design. What alternatives were considered to allow for or incorporate a shared parking design between the subject parcel and adjacent commercial lot?*

**Response 27b.:** As discussed with the Planning Board at their January 22, 2019 hearing, the project reviewed potential alternative layout considerations, with the current version representing a more efficient use of the property while still operating within the requirements of the applicable regulations governing same. The project has been designed to provide appropriate parking and circulation for the proposed use. No information is known relative to potential development of the abutting land. Accordingly, the Applicant cannot incorporate additional design considerations for a potential future development which is not currently planned.

- c. *Please provide an internal turning radius template analysis showing the turning movements for WB 50 design vehicle.*

**Response 27c:** A truck movement exhibit for the proposed delivery vehicle, a WB-67 design vehicle, has been enclosed with this response.

**Comment 28:** *General Question – Sections 6.07.06.F.3 and 5. Given the location of the store in proximity to residential uses in Milford and surrounding communities, what bicycle and transit facilities were considered?*

**Response 28:** The proposed facility is not anticipated to receive significant bicycle traffic. However, and as previously noted, a proposed sidewalk is now shown on the plans from the subject site to the Wilton Road right-of-way. In consideration comments relative to potential future upgrades to the municipal sidewalk infrastructure, the Applicant is providing the Town with a \$5,000.00 contribution towards said future municipal sidewalk improvements.

**Comment 29:** *General Comments – Building Design and Elevations*

- a. *Roof Form and Materials – Section 6.07.E.7 of the Zoning Ordinance and the Development Regulations, Section 6.04.3 state that rooflines shall be characteristically sloped and articulated with architectural features such as dormers, chimneys, gables, cupolas, etc. Further, flat roofs are strongly discouraged unless the Planning Board finds that a proposal can provide appropriate visual appeal. In addition, rooflines shall not run in continuous planes and shall be broken into appropriately scaled masses. Please explain how the front and side roof lines of building meet these requirements. Further, please discuss what alternative building designs were considered for the location, corridor, and in context with Milford's architectural heritage.*

**Response 29:** As discussed with the Planning Board at the January 22, 2019 hearing and as further discussed in the response to staff comments letter prepared by our office dated January 30, 2019, the project and building elevations have been designed in consideration of the standards associated with the West Elm Street Gateway District. Architectural design elements introduced to the front façade of the building include but are not limited to a peaked roof feature at the center of the building, an awning over the main entrance, upgraded clapboard siding, color changes, the inclusion of additional architectural trim to provide visual interest to the façade, a projection of the building face at the main entrance, and decorative window panels and shutters.



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**The side (east) building façade is oriented such that it is angled away from Wilton Road. In consideration of discussions with the Planning Board at the January 22, 2019 hearing relative to the side (east) facing elevation, the project has proposed additional shade tree plantings along the eastern property boundary to provide additional visual buffer to the project.**


**Alternative architectural elevations were presented to the Board at the January 22, 2019 hearing, however were not included as part of the original application.**

We trust the above is sufficient for your needs at this time and look forward to continuing our discussion with the Planning Board at their March 26, 2019 meeting. As always, please do not hesitate to contact us at 508.480.9900 should you have any additional question or wish to discuss further.

Sincerely,

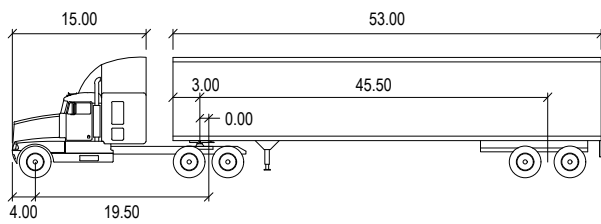
BOHLER ENGINEERING

  
Matthew K. Bombaci, P.E.

  
Austin F. Turner

Cc: Chad Brubaker, John Scribner – Lisciotti Development

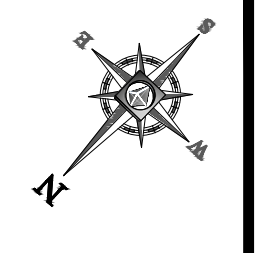
W181203  
Response to Comments 3-20-19.docx



WB-67

	feet	
Tractor Width	: 8.00	Lock to Lock Time : 6.0
Trailer Width	: 8.50	Steering Angle : 28.4
Tractor Track	: 8.00	Articulating Angle : 75.0
Trailer Track	: 8.50	

**WB-67 PROFILE**




**TRUCK MOVEMENT EXHIBIT**

30 WILTON ROAD  
MILFORD, NEW HAMPSHIRE

DATE: 03/20/19

PREPARED BY



**BOHLER**  
ENGINEERING



DesignLights Consortium® Qualified. Please go to [www.designlights.org](http://www.designlights.org) for the current Qualified Products List. Further details about qualified models may be found under Family Models.

Catalog Number	
Project	Type



## Tapered Back Saber LED Area Light LSBT SERIES

### FEATURES & SPECIFICATIONS

**APPLICATION** — The high performance luminaire is designed for area lighting applications where long life, low maintenance, and consistent color rendering is required. Areas with limited accessibility due to fixture location or where heavy pedestrian or vehicle traffic makes maintenance difficult are ideal applications such as parking lots or walkways. It is also compact and versatile enough for general purpose security lighting.

**CONSTRUCTION** — The heavy duty housing is constructed of extruded aluminum. The optical assemblies are sealed in place using a silicone gasket for weather tight protection. Modular LED bricks wired in parallel for ease of maintenance. ETL listed for wet locations (IP64). Additional IP66 rating available upon request.

**FINISH** — A Super Durable Polyester powder coat finish is electrostatically applied in our state of the art paint facility. Standard colors available: Black, Bronze, US Green, White. Custom colors available upon request.

**OPTICAL SYSTEM** — Made with a state of the art UV stabilized acrylic high performance refractive optical assemblies that use high transmittivity materials to achieve precise photometric distributions. Available in Type II, III, IV, IV Automotive, V Medium and V Wide beam configurations. Star Light Friendly (meets or exceeds Dark Sky requirements) in the horizontal position.

**ELECTRICAL SYSTEM** — Available in up to a 6 brick LED system in 5000K Cool White (+/- 500K) or 4100K Neutral White color temperatures (70 CRI min.) propagated with Philips Lumileds LUXEON® T LED's or Osram equivalent. Available with 90-300V 50/60 Hz Class II power supply. LED's rated over 355,000 hours (TM21 Calculated L70) at 25°C ambient temperature with selectable 700mA, 1050mA and 1400mA operation. Lumen Maintenance >97% at 50K hrs. 347V and 480V input options available. Standard 0-10V dimming. Fixture provided with integral 10kV surge protection that meets IEEE C62.42.2-2002. Built-in Active PFC Function. LED Power Supply conforms to UL1310 Class 2 and UL8750 standards and is IP67 rated for wet locations.

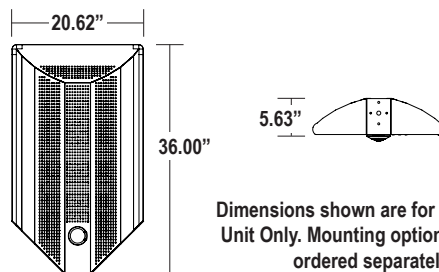
**MOUNTING** — The fixture is designed to mount directly to a square pole. An adaptor is available for direct mount to round poles. Techlight's Quick Mount Bracket for flush mount or the Quick Mount Bracket with various arm lengths also available. All mounting options allow the Tapered Back Saber to mount at 90 degree intervals.

**LISTINGS** — LED Power Supply listed for wet locations (IP67). LED bricks ETL listed for wet locations (IP64). Meets US and Canadian safety standards. -40°C to 50°C ambient operation. RoHS Compliant.

**WARRANTY** — The complete luminaire is covered by a 5-year limited warranty.



Shown with optional Quick Mount Bracket (QMB)



Dimensions shown are for 5 & 6 Brick Unit Only. Mounting options must be ordered separately.

Series	Housing Height	Length & Width	EPA (ft²)
LSBT	5.63"	36.00" x 20.62"	.8

### ORDERING INFORMATION

Choose the bold face options for the appropriate luminaire configuration for your application and enter on the line above each fixture attribute. Accessories may be factory installed, depending on the particular accessory chosen, but still be ordered as a separate line item.

Example: LSBT6C8T5WD1-BZ

QMB

(NOTE: QMB Must Be Ordered Separately)

LSBT

Series	# of Bricks	Color Temp	# LED's per Brick	Optics	Drive Current	Voltage	Options	Finish
LSBT	1 <b>1 Brick</b>	C <b>Cool White (5000K)</b>	8 <b>18 LED</b>	T2 <b>Type II</b>	C <b>700mA Driver</b>	1 <b>Multi-Volt<sup>1</sup></b>	L <b>Left Rotated Optics</b>	BK <b>Black</b>
	2 <b>2 Brick</b>	N <b>Neutral White (4100K)</b>		T3 <b>Type III</b>	D <b>1050mA Driver</b>	2 <b>480V</b>	R <b>Right Rotated Optics</b>	BZ <b>Bronze</b>
	3 <b>3 Brick</b>			T4 <b>Type IV</b>	F <b>1400mA Driver</b>	3 <b>347V</b>		GR <b>US Green</b>
	4 <b>4 Brick</b>			T4A <b>Type IV Automotive</b>				WH <b>White</b>
	5 <b>5 Brick</b>			T5M <b>Type V Medium</b>			(Leave Blank for standard optics)	SP <b>Special<sup>2</sup></b>
	6 <b>6 Brick</b>			T5W <b>Type V Wide</b>				

### Accessories (Order as separate line items)

LEDEB18-325	2000 Lumen/90 Minute Battery Back-Up	TLWSFSIR-100	(Lenses Ordered Separately)
QMB	Quick Mount Bracket - Flush, No Arm	TLWSFSP-L2	Remote Handheld Sensor Configuration Tool
QMSSA-S	Quick Mount Bracket with 2" Straight Arm	TLWSFSP-L3	360° lens, maximum coverage 48" diameter from 8' height
QMSSA-M	Quick Mount Bracket with 8" Straight Arm	TLWSFSP-L4	360° lens, maximum coverage 60" diameter from 20' height
QMSSA	Quick Mount Bracket with 10.75" Straight Arm	TLWSFSP-L7	360° lens, maximum coverage 60" diameter from 40' height
RPASSA	Round Pole Mount Adaptor for Direct Mounting	TLWSFSP-L7	360° lens, maximum coverage 100" diameter from 40' height
IP66 <sup>3</sup>	Additional IP66 Fixture Rating	PPCR/D7	7-Pin Twist-Lock Photocell Receptacle ANSI C136.41
LEDOPTIC-W	Spill Light Elimination	PTLJP-275	480V Twist-Lock Photocell
LEDOPTIC-B	Spill Light Elimination "Black Out"	PC2	Multi-Tap (105-285V) Twist-Lock Photocell
TLWSFSP-211	Fixture Mount Passive Infrared Motion Sensor	PC6	

#### NOTES

- Multi-Volt is an auto ranging power supply from 90V to 300V input.
- Custom RAL color matching is available. Contact your Techlight sales representative for additional information.
- Additional IP66 rating may not be changed once production has begun on the fixtures.

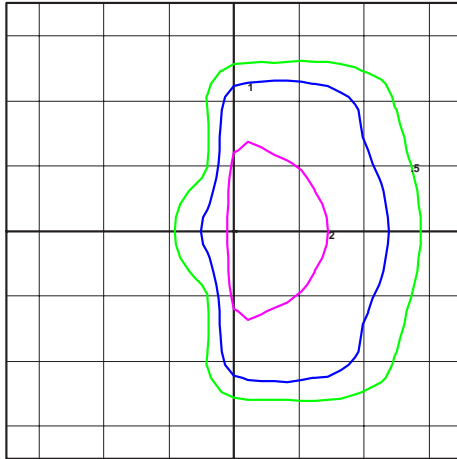
# LSBT Tapered Back Saber LED Area Light

## PHOTOMETRICS

IES INDOOR REPORT  
PHOTOMETRIC FILE  
NAME: LSBT6C8T3D1

Type III Optical Assembly  
6 Brick, 1050mA, Cool  
White

**365W LSBT LED Area Light**  
**Color Temperature: 5,000 K**



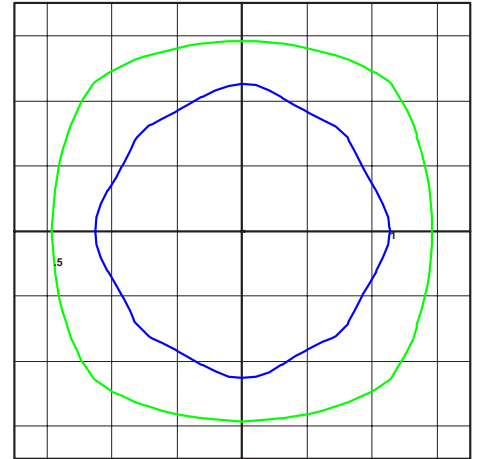
TECHLIGHT  
LSBR6C8T3D  
LED COOL WHITE LUXEON T (1050mA)

Horizontal Footcandles  
Scale: 1 inch = 30 Ft.  
Light Loss Factor = 1.00  
Lumens Per Lamp = N.A. (absolute photometry)  
Luminaire Lumens = 25392  
Mounting Height = 30.00 Ft  
Maximum Calculated Value = 3.48 Fc  
Arrangement: Single

IES INDOOR REPORT  
PHOTOMETRIC  
FILE NAME:  
LSBT6C8T5WD1

Type V Wide Optical  
Assembly  
6 Brick, 1050mA, Cool  
White

**365W LSBT LED Area Light**  
**Color Temperature: 5,000 K**

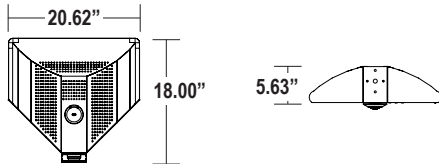


TECHLIGHT  
LSBR6C8T5WD  
LED COOL WHITE LUXEON T (1050mA)

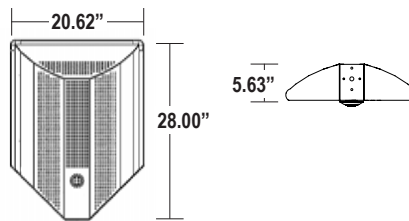
Horizontal Footcandles  
Scale: 1 inch = 30 Ft.  
Light Loss Factor = 1.00  
Lumens Per Lamp = N.A. (absolute photometry)  
Luminaire Lumens = 53074  
Mounting Height = 30.00 Ft  
Maximum Calculated Value = 1.98 Fc  
Arrangement: Single

## ADDITIONAL FIXTURE DIMENSIONS

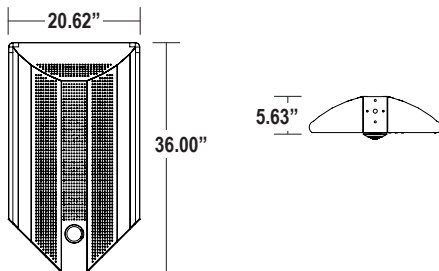
Dimensions for 1 & 2 Brick Unit



Dimensions for 3 & 4 Brick Unit



Dimensions for 5 & 6 Brick Unit



# LSBT Tapered Back Saber LED Area Light

## LUMINAIRE CHARACTERISTICS

### Cool White (5000K) 700 mA Drive Current

# of LED Bricks	# of LEDs per Brick	Color Temp	Delivered Lumens						System Wattage	L70 @ 25°C	Amperage Draw					
			TYPE II	TYPE III	TYPE IV	TYPE 4A	TYPE 5M	TYPE 5W			120V	208V	240V	277V	347V	480V
1 BRICK	18	CW	4056	3993	4041	3992	4014	4065	41	>495K	.35 A	.20 A	.18 A	.15 A	.12 A	.09 A
			B2 U0 G1	B2 U0 G1	B2 U0 G1	B1 U0 G1	B2 U0 G1	B3 U0 G1								
2 BRICK	18	CW	8111	7987	8081	7983	8027	8130	81	>495K	.68 A	.39 A	.34 A	.30 A	.24 A	.17 A
			B3 U0 G2	B3 U0 G2	B3 U0 G2	B2 U0 G1	B3 U0 G1	B4 U0 G2								
3 BRICK	18	CW	12167	11980	12122	11975	12041	12195	122	>495K	1.02 A	.59 A	.51 A	.45 A	.36 A	.26 A
			B3 U0 G2	B3 U0 G2	B3 U0 G2	B3 U0 G2	B3 U0 G1	B4 U0 G2								
4 BRICK	18	CW	16222	15974	16162	15967	16054	16260	162	>495K	1.35 A	.78 A	.68 A	.59 A	.47 A	.34 A
			B4 U0 G2	B4 U0 G3	B4 U0 G3	B3 U0 G2	B4 U0 G2	B5 U0 G3								
5 BRICK	18	CW	20278	19967	20203	19959	20068	20325	203	>495K	1.70 A	.98 A	.85 A	.74 A	.59 A	.43 A
			B4 U0 G3	B4 U0 G3	B4 U0 G3	B3 U0 G2	B4 U0 G2	B5 U0 G3								
6 BRICK	18	CW	24334	23961	24243	23950	24081	24390	243	>495K	2.03 A	1.17 A	1.02 A	.88 A	.71 A	.51 A
			B4 U0 G3	B4 U0 G4	B4 U0 G4	B3 U0 G3	B5 U0 G2	B5 U0 G4								

### Cool White (5000K) 1050 mA Drive Current

# of LED Bricks	# of LEDs per Brick	Color Temp	Delivered Lumens						System Wattage	L70 @ 25°C	Amperage Draw					
			TYPE II	TYPE III	TYPE IV	TYPE 4A	TYPE 5M	TYPE 5W			120V	208V	240V	277V	347V	480V
1 BRICK	18	CW	5505	5421	5484	5505	5448	5518	61	>425K	.51 A	.30 A	.26 A	.23 A	.18 A	.13 A
			B2 U0 G1	B2 U0 G1	B2 U0 G1	B2 U0 G1	B2 U0 G1	B3 U0 G2								
2 BRICK	18	CW	11010	10841	10969	11010	10896	11035	122	>425K	1.02 A	.59 A	.51 A	.45 A	.36 A	.26 A
			B3 U0 G2	B3 U0 G2	B3 U0 G2	B3 U0 G2	B3 U0 G1	B4 U0 G2								
3 BRICK	18	CW	16514	16262	16453	16515	16343	16553	183	>425K	1.53 A	.88 A	.77 A	.67 A	.53 A	.39 A
			B4 U0 G2	B4 U0 G3	B4 U0 G3	B3 U0 G2	B4 U0 G2	B5 U0 G3								
4 BRICK	18	CW	22019	21682	21938	22020	21791	22070	244	>425K	2.04 A	1.18 A	1.02 A	.89 A	.71 A	.51 A
			B4 U0 G3	B4 U0 G3	B4 U0 G3	B3 U0 G3	B4 U0 G2	B5 U0 G4								
5 BRICK	18	CW	27524	27103	27422	27525	27239	27588	304	>425K	2.54 A	1.47 A	1.27 A	1.10 A	.88 A	.64 A
			B4 U0 G4	B4 U0 G4	B4 U0 G4	B4 U0 G3	B5 U0 G2	B5 U0 G4								
6 BRICK	18	CW	33029	32523	32906	33030	32687	33106	365	>425K	3.05 A	1.76 A	1.53 A	1.32 A	1.06 A	.77 A
			B5 U0 G4	B5 U0 G4	B5 U0 G4	B4 U0 G3	B5 U0 G3	B5 U0 G4								

### Cool White (5000K) 1400 mA Drive Current

# of LED Bricks	# of LEDs per Brick	Color Temp	Delivered Lumens						System Wattage	L70 @ 25°C	Amperage Draw					
			TYPE II	TYPE III	TYPE IV	TYPE 4A	TYPE 5M	TYPE 5W			120V	208V	240V	277V	347V	480V
1 BRICK	18	CW	7932	7813	7908	7946	7859	7948	87	>355K	.73 A	.42 A	.37 A	.32 A	.26 A	.19 A
			B3 U0 G2	B3 U0 G2	B3 U0 G2	B2 U0 G1	B3 U0 G1	B3 U0 G2								
2 BRICK	18	CW	15864	15626	15816	15892	15718	15896	174	>355K	1.45 A	.84 A	.73 A	.63 A	.51 A	.37 A
			B3 U0 G2	B3 U0 G2	B3 U0 G2	B3 U0 G2	B4 U0 G2	B4 U0 G2								
3 BRICK	18	CW	23796	23439	23724	23838	23577	23844	261	>355K	2.18 A	1.26 A	1.09 A	.95 A	.76 A	.55 A
			B4 U0 G3	B4 U0 G3	B4 U0 G3	B3 U0 G2	B4 U0 G2	B5 U0 G3								
4 BRICK	18	CW	31728	31252	31632	31784	31436	31792	348	>355K	2.90 A	1.68 A	1.45 A	1.26 A	1.01 A	.73 A
			B4 U0 G4	B4 U0 G4	B4 U0 G4	B4 U0 G3	B5 U0 G2	B5 U0 G4								
5 BRICK	18	CW	39660	39065	39540	39730	39295	39740	435	>355K	3.63 A	2.10 A	1.82 A	1.58 A	1.26 A	.91 A
			B5 U0 G4	B5 U0 G4	B5 U0 G4	B4 U0 G3	B5 U0 G3	B5 U0 G5								
6 BRICK	18	CW	47592	46878	47448	47676	47154	47688	522	>355K	4.35 A	2.51 A	2.18 A	1.89 A	1.51 A	1.09 A
			B5 U0 G4	B5 U0 G5	B5 U0 G5	B4 U0 G3	B5 U0 G3	B5 U0 G5								

**WARNING:** Maintenance performed including the replacement of LED bricks while power is still supplied to the luminaire may result in system failures and will void the warranty.

# LSBT Saber LED Area Light

## LUMINAIRE CHARACTERISTICS CONTINUED

### Neutral White (4100K) 700 mA Drive Current

# of LED Bricks	# of LEDs per Brick	Color Temp	Delivered Lumens						System Wattage	L70 @ 25°C	Amperage Draw					
			TYPE II	TYPE III	TYPE IV	TYPE 4A	TYPE 5M	TYPE 5W			120V	208V	240V	277V	347V	480V
1 BRICK	18	NW	5160	5081	5141	5078	5107	5172	41	>495K	.35 A	.20 A	.18 A	.15 A	.12 A	.09 A
2 BRICK	18	NW	10320	10161	10281	10157	10212	10343	81	>495K	.68 A	.39 A	.34 A	.30 A	.24 A	.17 A
3 BRICK	18	NW	15478	15242	15421	15235	15318	15515	122	>495K	1.02 A	.59 A	.51 A	.45 A	.36 A	.26 A
4 BRICK	18	NW	20638	20322	20561	20313	20425	20686	162	>495K	1.35 A	.78 A	.68 A	.59 A	.47 A	.34 A
5 BRICK	18	NW	25798	25402	25701	25391	25530	25857	203	>495K	1.70 A	.98 A	.85 A	.74 A	.59 A	.43 A
6 BRICK	18	NW	30957	30483	30842	30470	30636	31029	243	>495K	2.03 A	1.17 A	1.02 A	.88 A	.71 A	.51 A

### Neutral White (4100K) 1050 mA Drive Current

# of LED Bricks	# of LEDs per Brick	Color Temp	Delivered Lumens						System Wattage	L70 @ 25°C	Amperage Draw					
			TYPE II	TYPE III	TYPE IV	TYPE 4A	TYPE 5M	TYPE 5W			120V	208V	240V	277V	347V	480V
1 BRICK	18	NW	7004	6897	6978	6893	6931	7020	61	>425K	.51 A	.30 A	.26 A	.23 A	.18 A	.13 A
2 BRICK	18	NW	14007	13792	13955	13786	13861	14039	122	>425K	1.02 A	.59 A	.51 A	.45 A	.36 A	.26 A
3 BRICK	18	NW	21010	20689	20932	20680	20793	21059	183	>425K	1.53 A	.88 A	.77 A	.67 A	.53 A	.39 A
4 BRICK	18	NW	28013	27584	27909	27572	27723	28078	244	>425K	2.04 A	1.18 A	1.02 A	.89 A	.71 A	.51 A
5 BRICK	18	NW	35016	34480	34886	34465	34653	35098	304	>425K	2.54 A	1.47 A	1.27 A	1.10 A	.88 A	.64 A
6 BRICK	18	NW	42019	41376	41863	41357	41584	42117	365	>425K	3.05 A	1.76 A	1.53 A	1.32 A	1.06 A	.77 A

### Neutral White (5000K) 1400 mA Drive Current

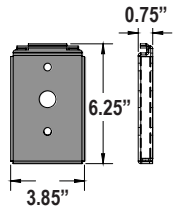
# of LED Bricks	# of LEDs per Brick	Color Temp	Delivered Lumens						System Wattage	L70 @ 25°C	Amperage Draw					
			TYPE II	TYPE III	TYPE IV	TYPE 4A	TYPE 5M	TYPE 5W			120V	208V	240V	277V	347V	480V
1 BRICK	18	NW	8402	8271	8371	8281	8319	8415	87	>355K	.73 A	.42 A	.37 A	.32 A	.26 A	.19 A
2 BRICK	18	NW	16804	16543	16743	16561	16638	16829	174	>355K	1.45 A	.84 A	.73 A	.63 A	.51 A	.37 A
3 BRICK	18	NW	25209	24814	25113	24843	24962	25248	261	>355K	2.18 A	1.26 A	1.09 A	.95 A	.76 A	.55 A
4 BRICK	18	NW	33608	33085	33487	33122	33275	33656	348	>355K	2.90 A	1.68 A	1.45 A	1.26 A	1.01 A	.73 A
5 BRICK	18	NW	42010	41363	41851	41398	41595	42071	435	>355K	3.63 A	2.10 A	1.82 A	1.58 A	1.26 A	.91 A
6 BRICK	18	NW	50417	49627	50227	49686	49922	50521	522	>355K	4.35 A	2.51 A	2.18 A	1.89 A	1.51 A	1.09 A



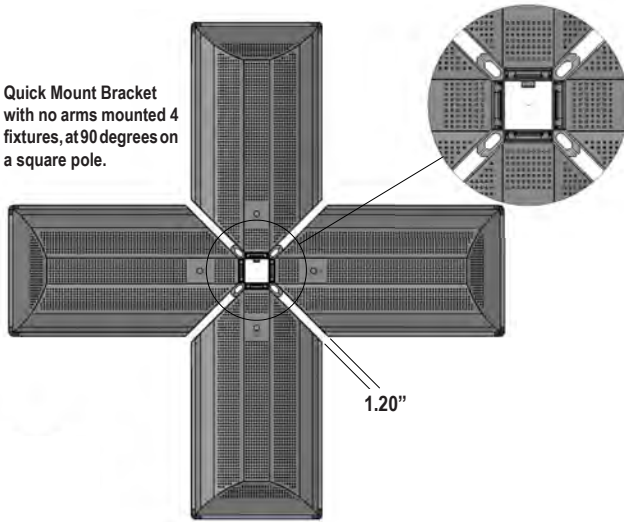
# LSBT Saber LED Area Light

## MOUNTING ACCESSORIES

QMB  
Quick Mount Bracket - Flush, No Arm



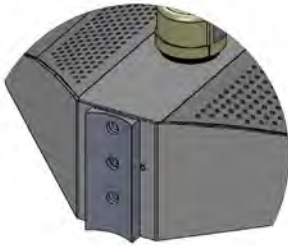
Quick Mount Bracket with no arms mounted 4 fixtures, at 90 degrees on a square pole.

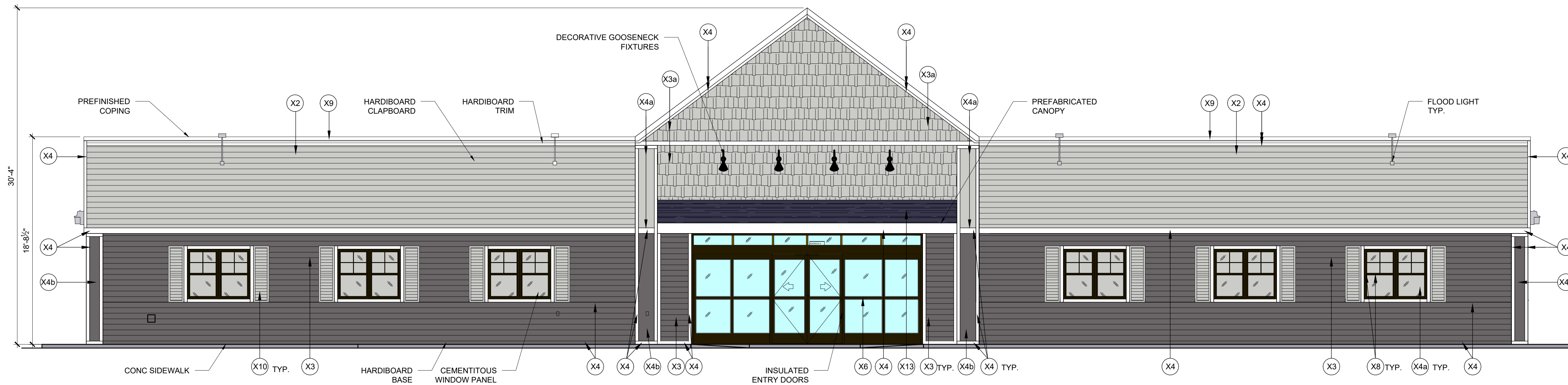


QMSSA-S  
Quick Mount Bracket with 2" Straight Arm  
QMSSA-M  
Quick Mount Bracket with 8" Straight Arm  
QMSSA  
Quick Mount Bracket with 10.75" Straight Arm

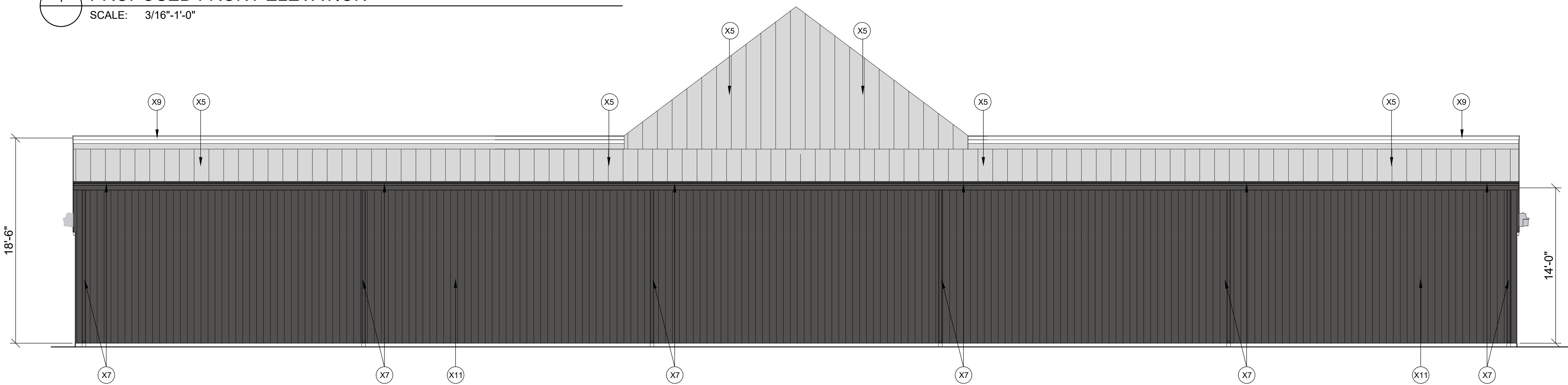


RPASSA  
Round Pole Mount Adaptor for Direct Mounting

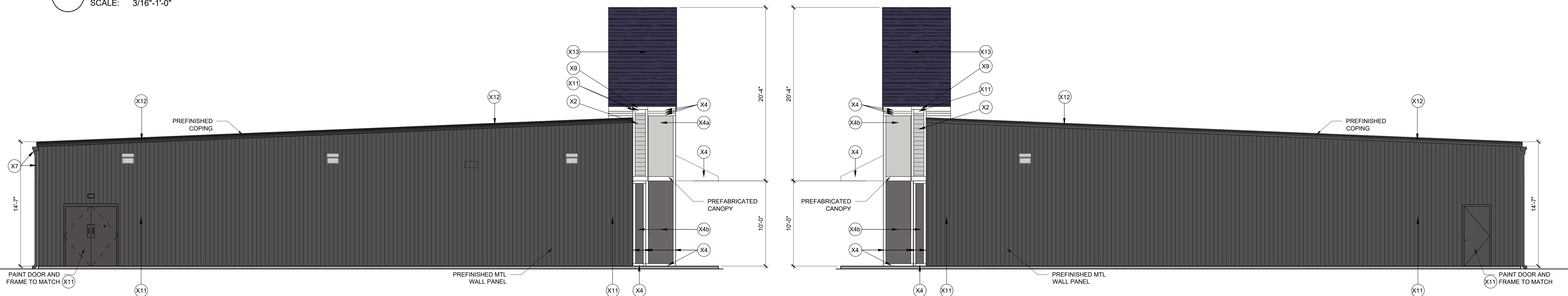




1 PROPOSED FRONT ELEVATION  
SCALE: 3/16"-1'-0"



2 PROPOSED REAR ELEVATION  
SCALE: 3/16"-1'-0"



3 PROPOSED LEFT SIDE ELEVATION  
SCALE: 3/16"-1'-0"

4 PROPOSED RIGHT SIDE ELEVATION  
SCALE: 3/16"-1'-0"

EXTERIOR FINISH SCHEDULE			
TAG	MATERIAL/ MFG.	COLOR/ NO.	NOTES
(X1)	NOT USED	COLOR: N/A	N/A
(X2)	HARDIE-BOARD LAPBOARD	COLOR: PEARL GRAY	PRE-FINISHED
(X3)	HARDIE-BOARD LAPBOARD	COLOR: NIGHT GRAY	PRE-FINISHED
(X3a)	HARDIE-BOARD SHINGLES	COLOR: PEARL GRAY	PRE-FINISHED
(X4)	HARDIE-TRIM	COLOR: WHITE	PRE-FINISHED
(X4a)	HARDIE-TRIM	COLOR: PEARL GRAY	PRE-FINISHED
(X4b)	HARDIE-TRIM	COLOR: NIGHT GRAY	PRE-FINISHED
(X5)	STANDARD METAL ROOF PANEL	COLOR: GALVALUME	FINISH BY PEMB
(X6)	STANDARD ENTRY DOORS	COLOR: DARK BRONZE	PRE-FINISHED
(X7)	MTL GUTTERS, DOWNSPOUTS	COLOR: CHARCOAL GRAY O.E.	FINISH BY PEMB
(X8)	HARDIE-TRIM	COLOR: TO MATCH (X6)	FINISH BY PEMB
(X9)	MTL COPING	COLOR: WHITE O.E.	FINISH BY PEMB
(X10)	DECORATIVE SHUTTERS	COLOR: TO MATCH (X4a)	PAINTED
(X11)	MTL PANEL	COLOR: CHARCOAL GRAY O.E.	FINISH BY PEMB
(X12)	MTL COPING	COLOR: CHARCOAL GRAY	FINISH BY PEMB
(X13)	ASPHALT SHINGLES	COLOR: PEWTER GREY	GAF TIMBERLINE
(X14)	RACEWAY	COLOR: COLONIAL WHITE	PAINTED