

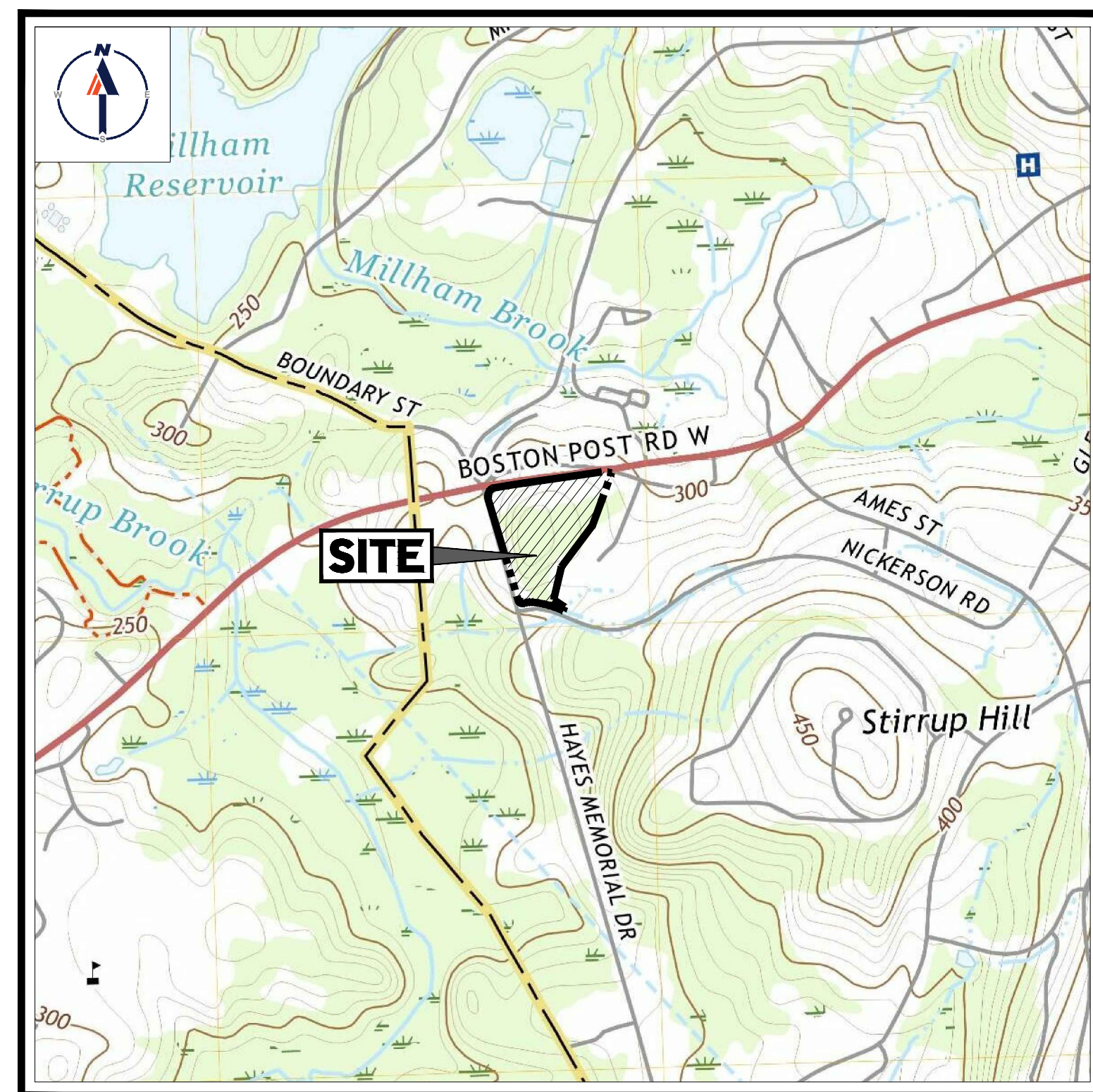
# PROPOSED SITE PLAN DOCUMENTS

FOR



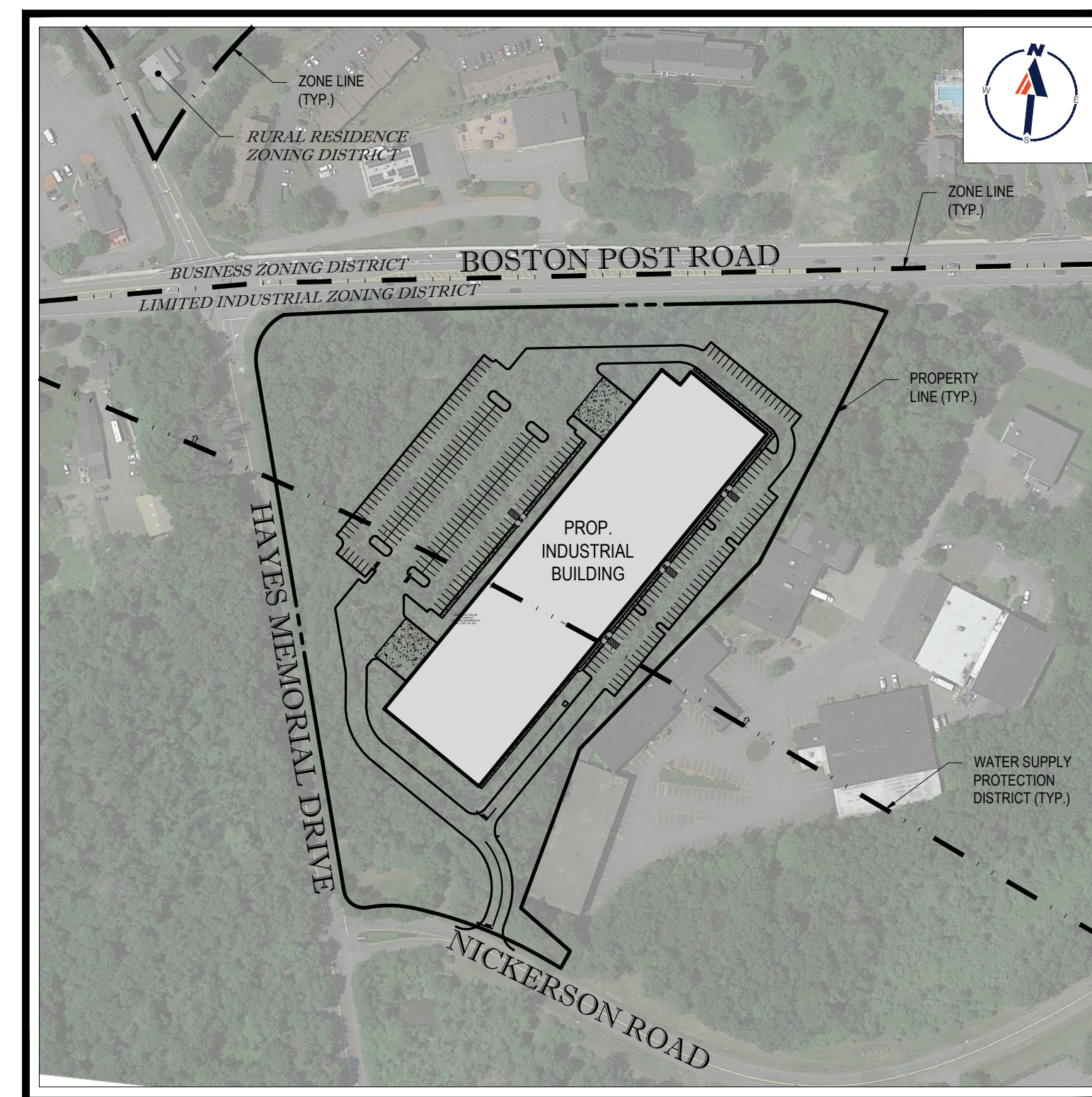
## PROPOSED FLEX GMP INDUSTRIAL BUILDING

LOCATION OF SITE:  
1000 NICKERSON ROAD, CITY OF MARLBOROUGH  
MIDDLESEX COUNTY, MASSACHUSETTS  
MAP #88, LOTS #29 & #36



**USGS MAP**

SCALE: 1" = 1,000'  
SOURCE: MARLBOROUGH MASSACHUSETTS USGS QUADRANGLE



**SITE MAP**

SCALE: 1" = 200'  
SOURCE: GOOGLE AERIAL

### DRAWING SHEET INDEX

SHEET TITLE	SHEET NUMBER
COVER SHEET	C-101
GENERAL NOTES SHEET	C-102
DEMOLITION PLAN	C-201
OVERALL SITE PLAN	C-301
SITE LAYOUT PLAN A & B	C-302 & C-303
GRADING AND DRAINAGE PLAN A & B	C-401 & C-402
UTILITY PLAN A & B	C-501 & C-502
EROSION AND SEDIMENT CONTROL PLAN A & B	C-601 & C-602
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS	C-603
LANDSCAPE PLAN A & B	C-701 & C-702
LANDSCAPE NOTES AND DETAILS	C-703
LIGHTING PLAN	C-704
DETAIL SHEET	C-901 - C906
ALTANSPS LAND TITLE SURVEY (BY OTHERS)	4 SHEETS

### APPROVAL BLOCK

CITY OF MARLBOROUGH COMMITTEE APPROVAL APPROVED BY THE SITE PLAN REVIEW COMMITTEE OF THE CITY OF MARLBOROUGH	
SIGNATURE _____	DATE _____
SIGNATURE _____	DATE _____
SIGNATURE _____	DATE _____
SIGNATURE _____	DATE _____
SIGNATURE _____	DATE _____
SIGNATURE _____	DATE _____

### REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY



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PROJECT No.: W211007  
DRAWN BY: CFDMA  
CHECKED BY: NEMJAK  
DATE: 06/08/2021  
CAD ID: W211007-CVL-0

PROJECT:

### PROPOSED SITE PLAN DOCUMENTS

FOR

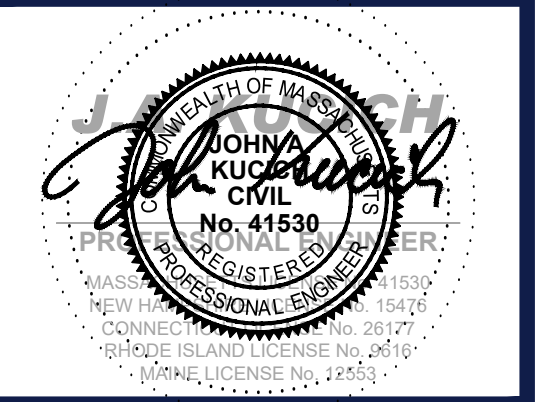


PROPOSED INDUSTRIAL BUILDING  
MAP #88, LOTS #29 & #36  
1000 NICKERSON ROAD  
CITY OF MARLBOROUGH  
MIDDLESEX COUNTY,  
MASSACHUSETTS

### BOHLER

352 TURNPIKE ROAD  
SOUTHBOROUGH, MA 01772  
Phone: (508) 480-9900

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SHEET TITLE:

### COVER SHEET

SHEET NUMBER:

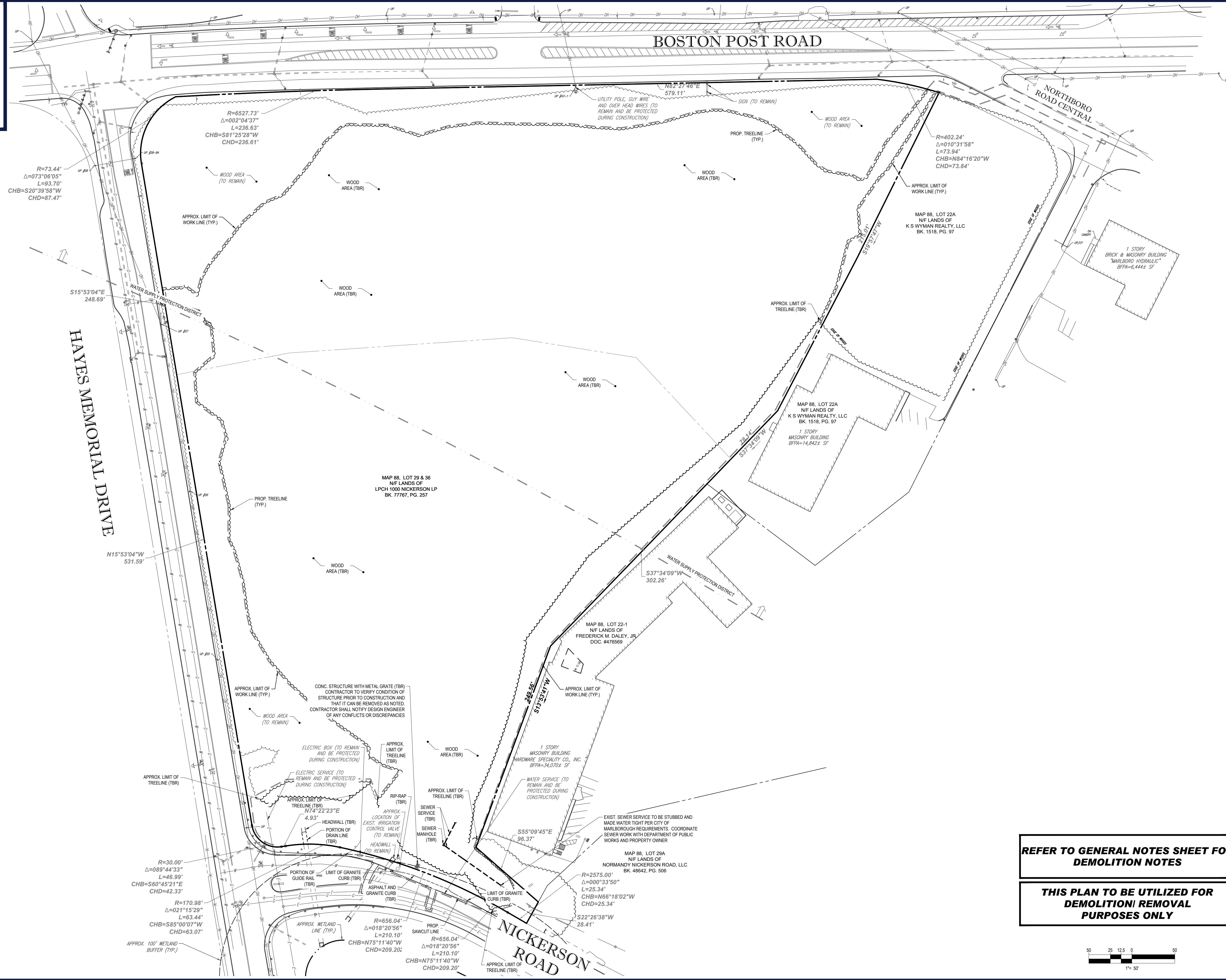
**C-101**

ORG. DATE - 06/08/2021

PREPARED BY







R=73.44'  
Δ=073°08'05"  
L=93.70'  
CHB=S20°39'58"W  
CHD=87.47'

R=6527.73'  
Δ=002°04'37"  
L=236.63'  
CHB=S81°25'28"W  
CHD=236.61'

HAYES MEMORIAL DRIVE

BOSTON POST ROAD

NORTHBORO ROAD CENTRAL

NICKERSON ROAD

APPROX. LIMIT OF WORK LINE (TYP.)

WOOD AREA (TO REMAIN)

WOOD AREA (TBR)

WOOD AREA (TBR)

WOOD AREA (TO REMAIN)

WOOD AREA (TBR)

PROP. TREELINE (TYP.)

WOOD AREA (TBR)

WOOD AREA (TBR)

APPROX. LIMIT OF TREELINE (TBR)

APPROX. LIMIT OF TREELINE (TBR)

WOOD AREA (TO REMAIN)

WOOD AREA (TBR)

WOOD AREA (TBR)

ELECTRIC SERVICE (TO REMAIN AND BE PROTECTED DURING CONSTRUCTION)

ELECTRIC BOX (TO REMAIN AND BE PROTECTED DURING CONSTRUCTION)

APPROX. LIMIT OF TREELINE (TBR)

APPROX. LIMIT OF TREELINE (TBR)

HEADWALL (TBR)

PORTION OF DRAIN LINE (TBR)

HEADWALL (TO REMAIN)

SEWER SERVICE (TBR)

SEWER MANHOLE (TBR)

APPROX. LIMIT OF TREELINE (TBR)

SEWER SERVICE (TO REMAIN AND BE PROTECTED DURING CONSTRUCTION)

1 STORY MASONRY BUILDING HARDWARE SPECIALTY CO., INC. BFFA=34,070.8 SF

APPROX. LIMIT OF TREELINE (TBR)

EXIST. SEWER SERVICE TO BE STUBBED AND MADE WATER TIGHT PER CITY OF MARLBOROUGH REQUIREMENTS. COORDINATE SEWER WORK WITH DEPARTMENT OF PUBLIC WORKS AND PROPERTY OWNER

MAP 88, LOT 29A N/F LANDS OF NORMANDY NICKERSON ROAD, LLC BK. 48642, PG. 506

APPROX. LIMIT OF TREELINE (TBR)

R=2575.00'  
Δ=000°33'50"  
L=25.34'  
CHB=N66°18'02"W  
CHD=25.34'

APPROX. LIMIT OF TREELINE (TBR)

R=656.04'  
Δ=018°20'56"  
L=210.10'  
CHB=N75°11'40"W  
CHD=209.20'

APPROX. LIMIT OF TREELINE (TBR)

R=656.04'  
Δ=018°20'56"  
L=210.10'  
CHB=N75°11'40"W  
CHD=209.20'

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SITE CIVIL AND CONSULTING ENGINEERING  
PROGRAM MANAGEMENT  
LANDSCAPE ARCHITECTURE  
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PERMITTING SERVICES  
TRANSPORTATION SERVICES

**REVISIONS**

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PROJECT No.: W211007  
DRAWN BY: CF/DMA  
CHECKED BY: NEM/JAK  
DATE: 06/08/2021  
CAD ID: W211007-CVL-0

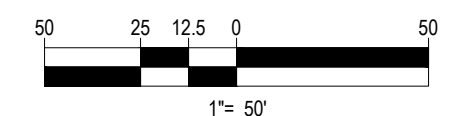
**PROPOSED SITE PLAN DOCUMENTS**  
FOR  
**LINCOLN PROPERTY COMPANY**  
PROPOSED INDUSTRIAL BUILDING  
MAP #88, LOTS #29 & #36  
1000 NICKERSON ROAD  
CITY OF MARLBOROUGH  
MIDDLESEX COUNTY,  
MASSACHUSETTS

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SOUTHBOROUGH, MA 01772  
Phone: (508) 480-9900  
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**REFER TO GENERAL NOTES SHEET FOR DEMOLITION NOTES**

**THIS PLAN TO BE UTILIZED FOR DEMOLITION/REMOVAL PURPOSES ONLY**



SHEET TITLE:  
**DEMOLITION PLAN**  
SHEET NUMBER:  
**C-201**  
ORG. DATE - 06/08/2021

P:\211007\DRAWINGS\PLAN SET\811\W211007-CVL-0.dwg - LAYOUT - C-201.DWG



# BOSTON POST ROAD

## SITE INFORMATION

1. APPLICANT:  
LINCOLN PROPERTY COMPANY  
53 STATE STREET, 8TH FLOOR  
BOSTON, MA 02109
2. OWNER:  
LPCH 1000 NICKERSON LP
3. PARCEL:  
MAP #88 & LOTS #29 & #36  
1000 NICKERSON ROAD  
CITY OF MARLBOROUGH  
MIDDLESEX COUNTY, MA

MAP #88, LOT 22A  
N/F LANDS OF  
K S WYMAN REALTY, LLC  
BK. 1518, PG. 97

## ZONING ANALYSIS TABLE

ZONING DISTRICT	REQUIRED PERMIT	REQUIRED	EXISTING	PROPOSED
LIMITED INDUSTRIAL (LI)	WATER SUPPLY PROTECTION			
OVERLAY DISTRICT	SITE PLAN REVIEW			
MIN. LOT AREA	2 AC.	12.3 AC.		NO CHANGE
MIN. LOT FRONTAGE	200 FT	936.5 FT (BOSTON POST ROAD)		NO CHANGE
MAX. BLDG COVERAGE	NS	N/A		22.4%
MIN. FRONT SETBACK	50 FT	N/A		96.1 FT (BOSTON POST ROAD)
MIN. SIDE SETBACK	50 FT	N/A		77.0 FT
MIN. REAR SETBACK	50 FT	N/A		N/A
MAX. BUILDING HEIGHT	52 FT (1)	N/A		<40 FT
MAX. IMPER. COVERAGE	55% (2)	0%		52.1%
FRONT LANDSCAPE BUFFER	15 FT	N/A		46.5 FT
SIDE LANDSCAPE BUFFER	7 FT	N/A		17.4 FT
PARKING SPACES	1 SPACE PER 3 EMPLOYEES (3)	N/A		298
ACCESS. PARKING SPACES	7	N/A		8
PARKING STALL CRITERIA	(3) USE CATEGORY: 1 SPACE / 3 WORKERS ON PEAK EMPLOYMENT STANDARD: 9 FT x 18 FT COMPACT: 8 FT x 16 FT	ANTICIPATED TO BE FLEX GMP OR OTHER ALLOWED INDUSTRIAL USE REQUIRED PARKING: 897 WORKERS ASSUMED CALCULATION: (1 SPACE / 3 WORKERS) * (897 WORKERS) = 299 SPACES		
ACCESSIBLE PARKING CRITERIA	1-25 SPACES = 1 MIN. ACCESSIBLE SPACE 26-50 SPACES = 2 MIN. ACCESSIBLE SPACES STANDARD: 8 FT x 18 FT STALL (MIN.) = 51-75 SPACES = 3 MIN. ACCESSIBLE SPACES 5 FT x 18 FT AISLE (MIN.) = 76-100 SPACES = 4 MIN. ACCESSIBLE SPACES VAN: 8 FT x 18 FT STALL (MIN.) = 101-150 SPACES = 5 MIN. ACCESSIBLE SPACES 8 FT x 18 FT AISLE (MIN.) = 151-200 SPACES = 6 MIN. ACCESSIBLE SPACES 201-300 SPACES = 7 MIN. ACCESSIBLE SPACES 301-400 SPACES = 8 MIN. ACCESSIBLE SPACES	401-500 SPACES = 9 MIN. ACCESSIBLE SPACES 501-1,000 SPACES = MIN. 2% OF TOTAL 1001+ SPACES = MIN. 20 + 1 FOR EACH 100 SPACES OVER 1,000 1 ACCESSIBLE VAN SPACE PER 6 STANDARD ACCESSIBLE SPACES (MIN.)		

- (1) SZ MAXIMUM HEIGHT ALLOWED FOR SETBACK TO RESIDENTIAL ZONE > 400'. APPROX. SETBACK IS 773'.
- (2) MAXIMUM IMPERVIOUS COVERAGE IS 53% IN THE WATER SUPPLY PROTECTION OVERLAY DISTRICT.
- (3) FOR PURPOSES OF PARKING CALCULATION AN INDUSTRIAL AND MANUFACTURING USE WAS ASSUMED PER THE CITY OF MARLBOROUGH DIMENSIONAL, LANDSCAPING AND PARKING REGULATIONS (ARTICLE VII) THE PARKING REQUIREMENT OF AN INDUSTRIAL AND MANUFACTURING ESTABLISHMENT IS 1 SPACE PER 3 WORKERS BASED ON PEAK EMPLOYMENT. THE 298 SPACES WOULD CORRELATE WITH 894 EMPLOYEES ON MAX. SHIFT WHICH EXCEEDS EXPECTATIONS.



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PROJECT No.: W211007  
DRAWN BY: CF/DMA  
CHECKED BY: NEM/JAK  
DATE: 06/08/2021  
CAD I.D.: W211007-CVL-0

## PROJECT:

## PROPOSED SITE PLAN DOCUMENTS

FOR  
**LINCOLN PROPERTY COMPANY**  
PROPOSED INDUSTRIAL BUILDING  
MAP #88, LOTS #29 & #36  
1000 NICKERSON ROAD  
CITY OF MARLBOROUGH  
MIDDLESEX COUNTY,  
MASSACHUSETTS

## BOHLER

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## SHEET TITLE:

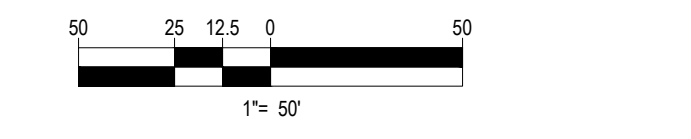
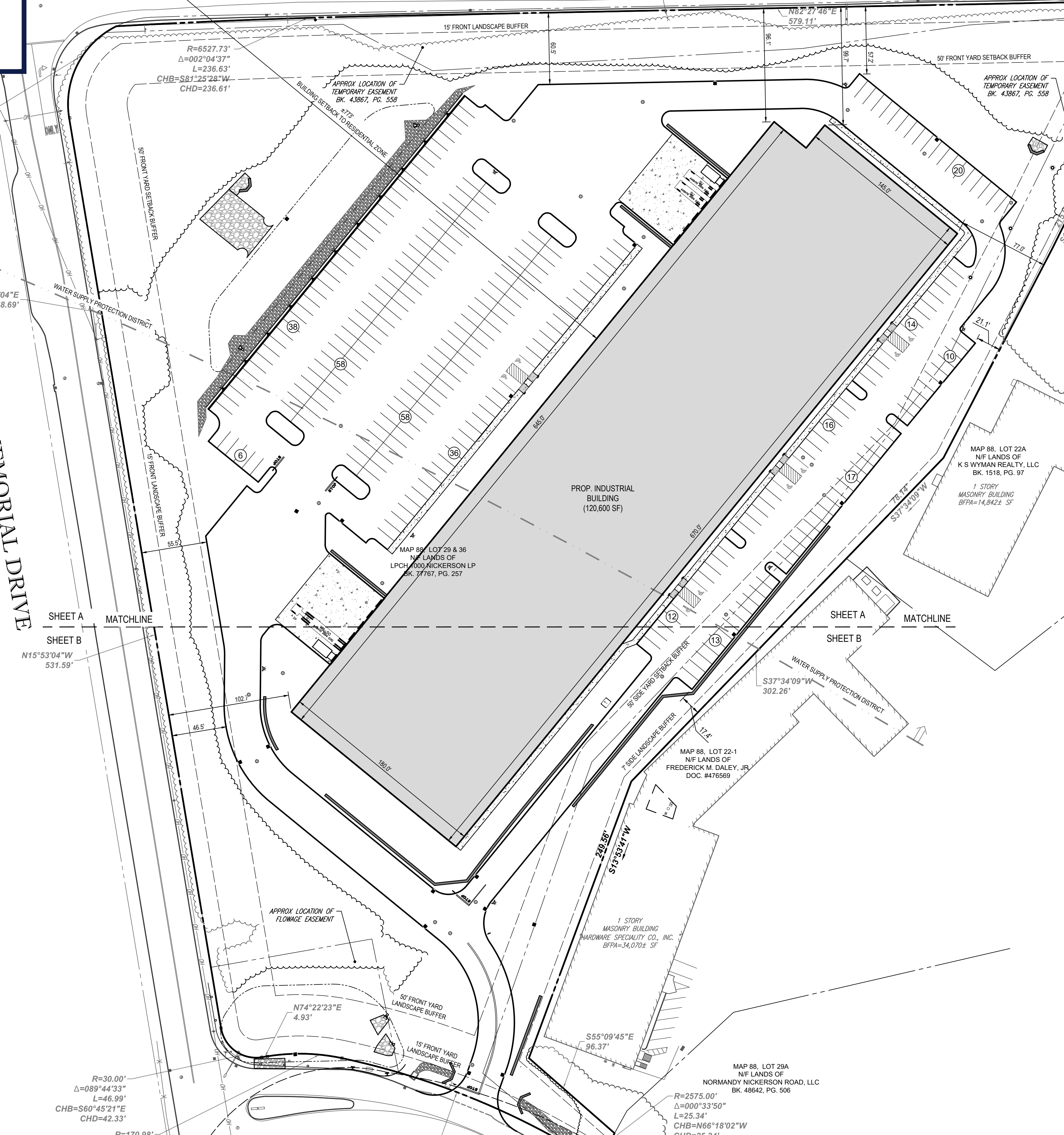
## OVERALL SITE PLAN

## SHEET NUMBER:

# C-301

ORG. DATE - 06/08/2021

# HAYES MEMORIAL DRIVE



P:\11\211007\DRAWINGS\PLAN SET\SET\W211007-CVL-0-3-LAYOUT-C-301-OVERALL SITE







# BOSTON POST ROAD

(PUBLIC - VARIABLE WIDTH)

TWO WAY TRAFFIC  
(ASPHALT ROADWAY)

**BOHLER**  
SITE CIVIL AND CONSULTING ENGINEERING  
PROGRAM MANAGEMENT  
LANDSCAPE ARCHITECTURE  
SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

**REVISIONS**

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PROJECT No.: W211007  
DRAWN BY: CF/DMA  
CHECKED BY: NEM/MAK  
DATE: 06/08/2021  
CAD ID.: W211007-CVL-0-GRAD

### PROPOSED SITE PLAN DOCUMENTS

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PROPOSED INDUSTRIAL BUILDING  
MAP #88, LOTS #29 & #36  
1000 NICKERSON ROAD  
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MASSACHUSETTS

## BOHLER

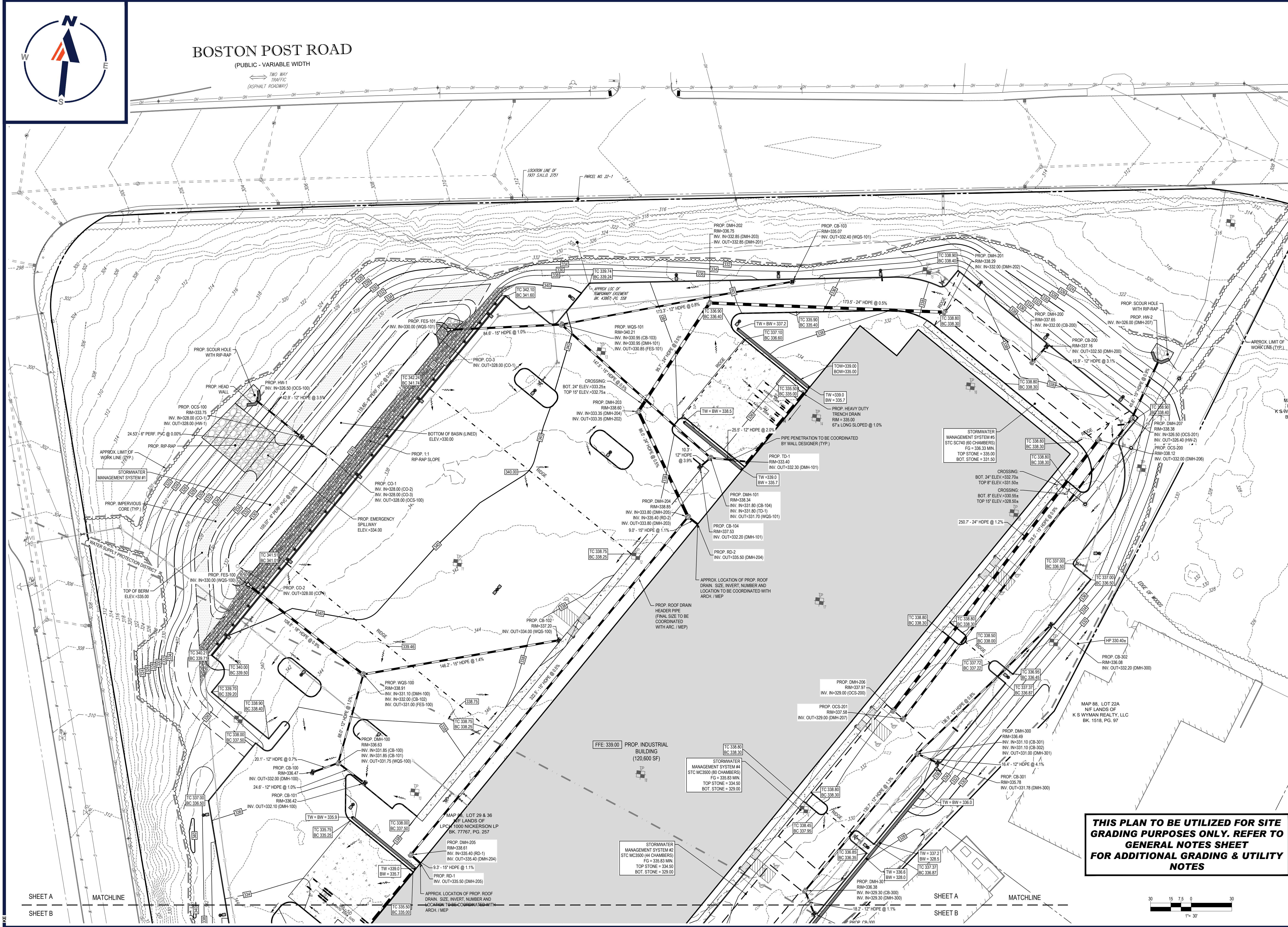
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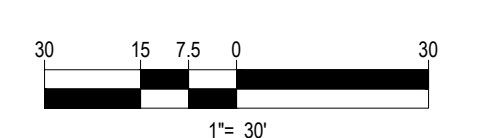
### GRADING AND DRAINAGE PLAN A

SHEET NUMBER:  
**C-401**

ORG. DATE - 06/08/2021



**THIS PLAN TO BE UTILIZED FOR SITE GRADING PURPOSES ONLY. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL GRADING & UTILITY NOTES**



SHEET A  
MATCHLINE

SHEET A  
MATCHLINE

P:\211007\DRAWINGS\PLAN SET\811\W211007-CVL-0-GRAD.dwg - LAYOUT: C-401-GRAD.A

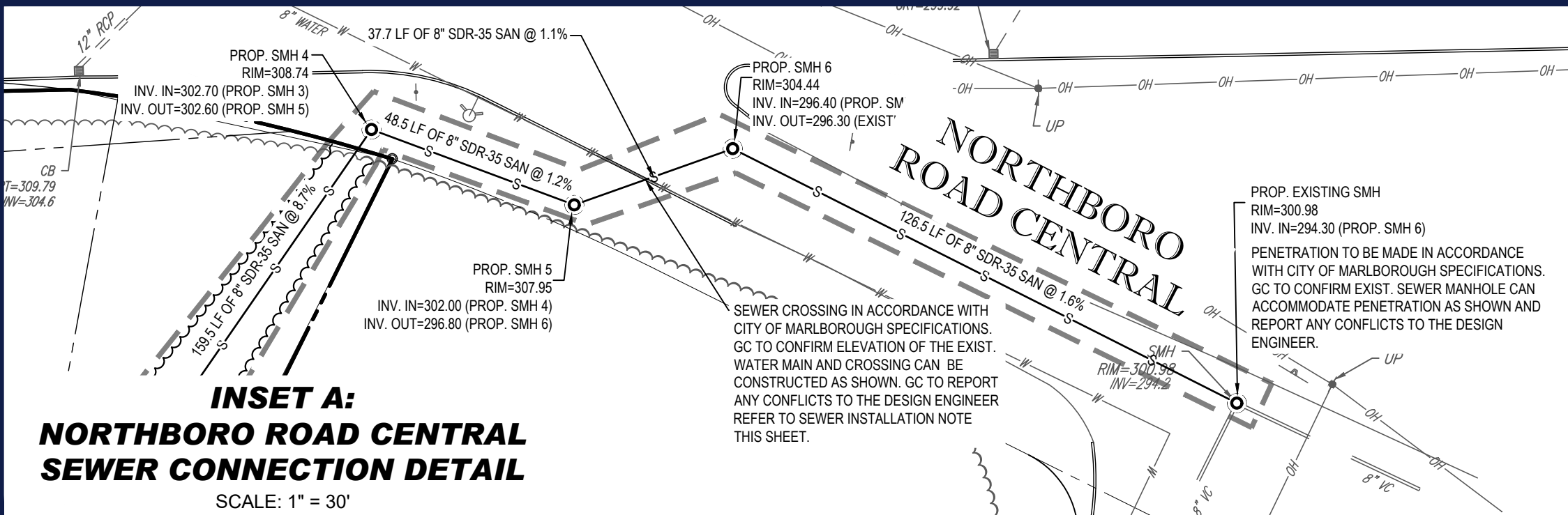






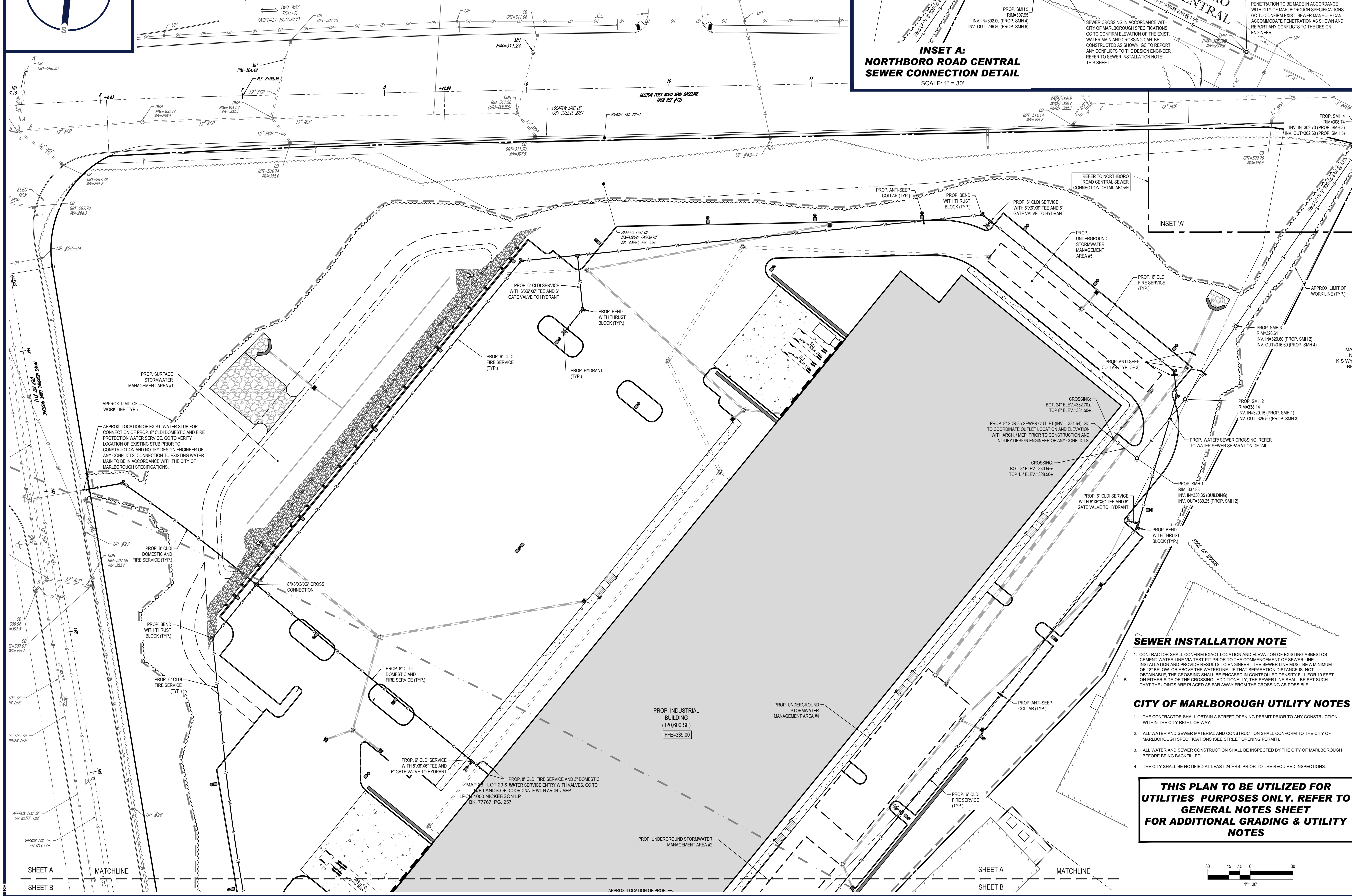
# BOSTON POST ROAD

(PUBLIC - VARIABLE WIDTH)



**INSET A:  
NORTHBORO ROAD CENTRAL  
SEWER CONNECTION DETAIL**

SCALE: 1" = 30'



**BOHLER**  
SITE CIVIL AND CONSULTING ENGINEERING  
PROGRAM MANAGEMENT  
LANDSCAPE ARCHITECTURE  
SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

**REVISIONS**

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CAD ID.: W211007-CVL-0

**PROPOSED SITE PLAN DOCUMENTS**

FOR

**LINCOLN PROPERTY COMPANY**

PROPOSED INDUSTRIAL BUILDING  
MAP #88, LOTS #29 & #36  
1000 NICKERSON ROAD  
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SHEET TITLE:  
**UTILITY PLAN A**

SHEET NUMBER:  
**C-501**

ORG. DATE - 06/08/2021

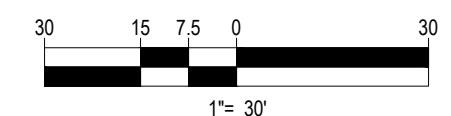
### SEWER INSTALLATION NOTE

- CONTRACTOR SHALL CONFIRM EXACT LOCATION AND ELEVATION OF EXISTING ASBESTOS CEMENT WATER LINE VIA TEST PIT PRIOR TO THE COMMENCEMENT OF SEWER LINE INSTALLATION AND PROVIDE RESULTS TO ENGINEER. THE SEWER LINE MUST BE A MINIMUM OF 18" BELOW OR ABOVE THE WATERLINE. IF THAT SEPARATION DISTANCE IS NOT OBTAINABLE, THE CROSSING SHALL BE ENCASED IN CONTROLLED DENSITY FILL FOR 3 FEET ON EITHER SIDE OF THE CROSSING. ADDITIONALLY, THE SEWER LINE SHALL BE SET SUCH THAT THE JOINTS ARE PLACED AS FAR AWAY FROM THE CROSSING AS POSSIBLE.

### CITY OF MARLBOROUGH UTILITY NOTES

- THE CONTRACTOR SHALL OBTAIN A STREET OPENING PERMIT PRIOR TO ANY CONSTRUCTION WITHIN THE CITY RIGHT-OF-WAY.
- ALL WATER AND SEWER MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE CITY OF MARLBOROUGH SPECIFICATIONS (SEE STREET OPENING PERMIT).
- ALL WATER AND SEWER CONSTRUCTION SHALL BE INSPECTED BY THE CITY OF MARLBOROUGH BEFORE BEING BACKFILLED.
- THE CITY SHALL BE NOTIFIED AT LEAST 24 HRS. PRIOR TO THE REQUIRED INSPECTIONS.

**THIS PLAN TO BE UTILIZED FOR UTILITIES PURPOSES ONLY. REFER TO GENERAL NOTES SHEET FOR ADDITIONAL GRADING & UTILITY NOTES**



SHEET A  
MATCHLINE

SHEET A  
MATCHLINE

P:\211007\DRAWINGS\PLAN SET\811\W211007-CVL-0-3-LAYOUT-C-491-UTL-A

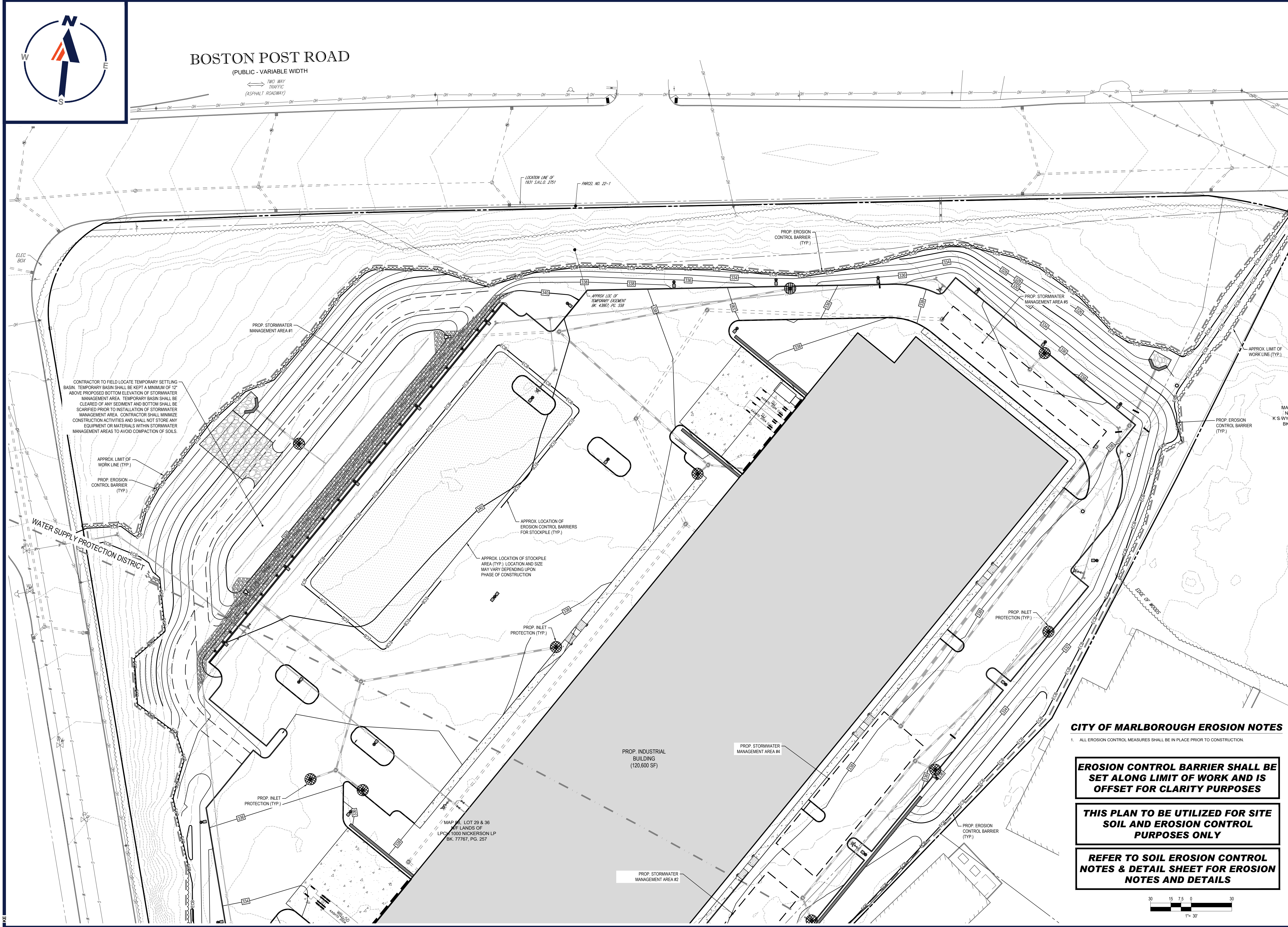




# BOSTON POST ROAD

(PUBLIC - VARIABLE WIDTH)

TWO WAY TRAFFIC (ASPHALT ROADWAY)



CONTRACTOR TO FIELD LOCATE TEMPORARY SETTLING BASIN. TEMPORARY BASIN SHALL BE KEPT A MINIMUM OF 12' ABOVE PROPOSED BOTTOM ELEVATION OF STORMWATER MANAGEMENT AREA. TEMPORARY BASIN SHALL BE CLEARED OF ANY SEDIMENT AND BOTTOM SHALL BE SCARIFIED PRIOR TO INSTALLATION OF STORMWATER MANAGEMENT AREA. CONTRACTOR SHALL MINIMIZE CONSTRUCTION ACTIVITIES AND SHALL NOT STORE ANY EQUIPMENT OR MATERIALS WITHIN STORMWATER MANAGEMENT AREAS TO AVOID COMPACTION OF SOILS.

PROP. STORMWATER MANAGEMENT AREA #1

APPROX. LOC. OF TEMPORARY EXCAVATION BK. 43807, PG. 508

PROP. EROSION CONTROL BARRIER (TYP.)

PROP. STORMWATER MANAGEMENT AREA #5

APPROX. LIMIT OF WORK LINE (TYP.)

PROP. EROSION CONTROL BARRIER (TYP.)

APPROX. LIMIT OF WORK LINE (TYP.)

PROP. EROSION CONTROL BARRIER (TYP.)

APPROX. LOCATION OF EROSION CONTROL BARRIERS FOR STOCKPILE (TYP.)

APPROX. LOCATION OF STOCKPILE AREA (TYP.) LOCATION AND SIZE MAY VARY DEPENDING UPON PHASE OF CONSTRUCTION

PROP. INLET PROTECTION (TYP.)

PROP. INLET PROTECTION (TYP.)

WATER SUPPLY PROTECTION DISTRICT

PROP. INDUSTRIAL BUILDING (120,600 SF)

PROP. STORMWATER MANAGEMENT AREA #4

MAP #8, LOT 29 & 36 THE LANDS OF LPC# 1000 NICKERSON LP BK. 77767, PG. 257

PROP. STORMWATER MANAGEMENT AREA #2

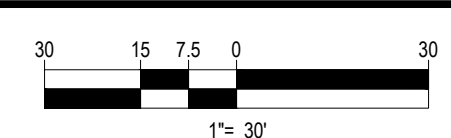
### CITY OF MARLBOROUGH EROSION NOTES

1. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO CONSTRUCTION.

**EROSION CONTROL BARRIER SHALL BE SET ALONG LIMIT OF WORK AND IS OFFSET FOR CLARITY PURPOSES**

**THIS PLAN TO BE UTILIZED FOR SITE SOIL AND EROSION CONTROL PURPOSES ONLY**

**REFER TO SOIL EROSION CONTROL NOTES & DETAIL SHEET FOR EROSION NOTES AND DETAILS**



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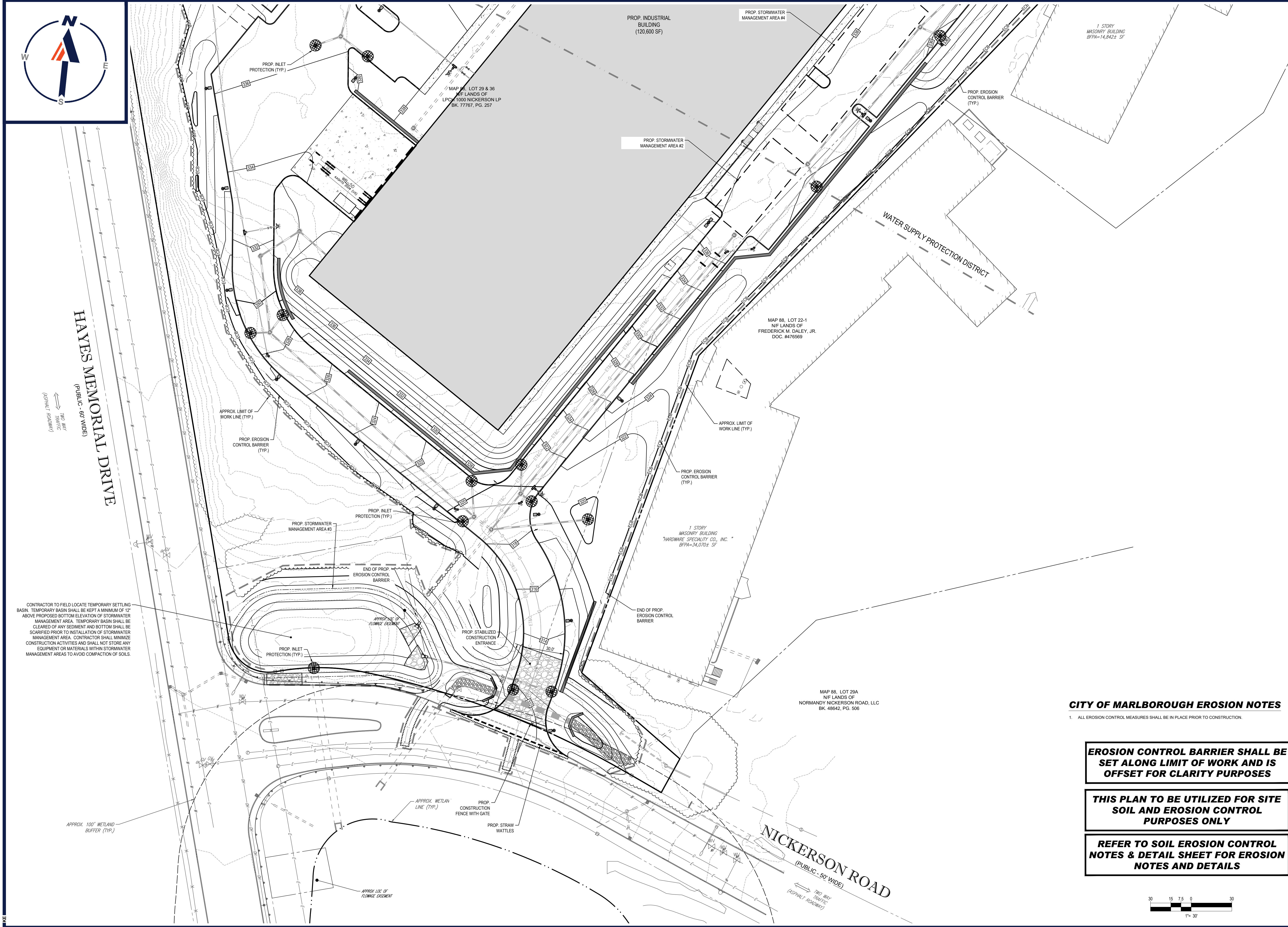
**PROPOSED SITE PLAN DOCUMENTS**  
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JOHN A. KUCUK  
 CIVIL ENGINEER  
 No. 41530  
 REGISTERED PROFESSIONAL ENGINEER  
 STATE OF MASSACHUSETTS  
 NEW HAVEN, CT 06511  
 CONNECTION NO. 2017  
 LICENSE NO. 2453

SHEET TITLE:  
**SOIL EROSION & SEDIMENT CONTROL PLAN A**  
 SHEET NUMBER:  
**C-601**  
 ORG. DATE - 06/08/2021

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CONTRACTOR TO FIELD LOCATE TEMPORARY SETTLING BASIN. TEMPORARY BASIN SHALL BE KEPT A MINIMUM OF 12" ABOVE PROPOSED BOTTOM ELEVATION OF STORMWATER MANAGEMENT AREA. TEMPORARY BASIN SHALL BE CLEARED OF ANY SEDIMENT AND BOTTOM SHALL BE SCARIFIED PRIOR TO INSTALLATION OF STORMWATER MANAGEMENT AREA. CONTRACTOR SHALL MINIMIZE CONSTRUCTION ACTIVITIES AND SHALL NOT STORE ANY EQUIPMENT OR MATERIALS WITHIN STORMWATER MANAGEMENT AREAS TO AVOID COMPACTION OF SOILS.

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**CITY OF MARLBOROUGH EROSION NOTES**

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**EROSION CONTROL BARRIER SHALL BE SET ALONG LIMIT OF WORK AND IS OFFSET FOR CLARITY PURPOSES**

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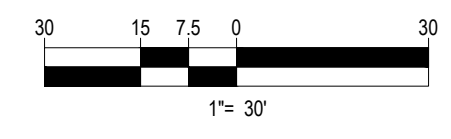
**REFER TO SOIL EROSION CONTROL NOTES & DETAIL SHEET FOR EROSION NOTES AND DETAILS**



SHEET TITLE:  
**SOIL EROSION & SEDIMENT CONTROL PLAN B**

SHEET NUMBER:  
**C-602**

ORG. DATE - 06/08/2021



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# EROSION AND SEDIMENT CONTROL NOTES

- ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE AS SET FORTH IN THE MOST CURRENT STATE SEDIMENT AND EROSION CONTROL MANUAL.
- THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE LEFT IN AN UNVEGETATED CONDITION FOR A MINIMUM TIME. AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL. IF THE DISTURBANCE IS WITHIN 100 FEET OF A STREAM OR POND, THE AREA SHALL BE STABILIZED WITHIN 7 DAYS OR PRIOR TO ANY STORM EVENT (THIS WOULD INCLUDE WETLANDS).
- SEDIMENT BARRIERS (SILT FENCE, STRAW BARRIERS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
- INSTALL SILTATION BARRIER AT TOE OF SLOPE TO FILTER SILT FROM RUNOFF. SEE SILTATION BARRIER DETAILS FOR PROPER INSTALLATION. SILTATION BARRIER WILL REMAIN IN PLACE PER NOTE #5.
- ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE STABILIZED BY TURF.
- NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO TO ONE (2:1).
- IF FINAL SEEDING OF THE DISTURBED AREAS IS NOT COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST, USE TEMPORARY MULCH (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
- TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINAL GRADED SHALL BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST TO PROTECT FROM SPRING RUNOFF PROBLEMS.
- DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS.
- REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND PREPARED FOR FINAL SEEDING AS FOLLOWS:
  - SIX INCHES OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE.
  - APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TESTING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 LB PER ACRE OR 18.4 LB PER 1,000 SF USING 10-20-20 OR EQUIVALENT. APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB PER 1,000 SF).
  - FOLLOWING SEED BED PREPARATION, DITCHES AND BACK SLOPES WILL BE SEED TO A MIXTURE OF 47% CREEPING RED FESCUE, 5% REDTOP, AND 48% TALL FESCUE. THE LAWN AREAS WILL BE SEED TO A PREMIUM TURF MIXTURE OF 44% KENTUCKY BLUE GRASS, 44% CREEPING RED FESCUE, AND 12% PERENNIAL RYEGRASS. SEEDING RATE IS 1.03 LBS PER 1,000 SF LAWN QUALITY SOD MAY BE SUBSTITUTED FOR SEED.
  - STRAW MULCH AT THE RATE OF 70-90 LBS PER 1,000 SF. A HYDRO-APPLICATION OF WOOD OR PAPER FIBER SHALL BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS WILL BE USED ON STRAW MULCH FOR WIND CONTROL.
- ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS STABILIZED.
- WETLANDS WILL BE PROTECTED W/ STRAW, COMPOST, AND/OR SILT FENCE BARRIERS INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.
- ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL HAVE AN EXPOSURE WINDOW OF NOT MORE THAN 7 DAYS.
- ALL AREAS WITHIN 100 FEET OF A FLAGGED WETLAND OR STREAM SHALL FOLLOW APPROPRIATE EROSION CONTROL MEASURES PRIOR TO EACH STORM IF NOT BEING ACTIVELY WORKED.

LOCATION	MULCH	RATE (1000 SF)
PROTECT AREA	STRAW	100 POUNDS
WINDY AREA	SHREDDED OR CHOPPED CORNSTALKS (STRAW ANCHORED)	185-275 POUNDS
MODERATE TO HIGH VELOCITY AREAS OR STEEP SLOPES GREATER THAN 3:1	JUTE MESH OR EXCELSIOR MAT	AS REQUIRED

GREATER THAN 3:1 (REFER TO GEOTECHNICAL REPORT FOR FINAL DESIGN REQUIREMENT)

\* A HYDRO-APPLICATION OF WOOD OR PAPER FIBER MAY BE APPLIED FOLLOWING SEEDING. A SUITABLE BINDER SUCH AS CURASOL OR RMB PLUS SHALL BE USED ON STRAW MULCH FOR WIND CONTROL.

MULCH ANCHORING  
ANCHOR MULCH WITH PEG AND TWINE (1 SQ. YD/BLOCK); MULCH NETTING (AS PER MANUFACTURER); WOOD CELLULOSE FIBER (750 LBS/ACRE); CHEMICAL TACK (AS PER MANUFACTURER'S SPECIFICATIONS); USE OF A SERRATED STRAIGHT DISK, WETTING FOR SMALL AREAS AND ROAD DITCHES MAY BE PERMITTED.

## EROSION CONTROL NOTES DURING WINTER CONSTRUCTION

- WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.
- WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
- EXPOSED AREA SHOULD BE LIMITED TO THAT WHICH CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.
- CONTINUATION OF EARTHWORK OPERATION ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
- AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR STRAW AT A RATE OF 100 LB PER 1,000 SQUARE FEET (WITH OR WITHOUT SEEDING) OR DORMANT SEED, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE.
- BETWEEN THE DATES OF OCTOBER 15 AND APRIL 15, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES SHALL BE FINELY GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 15TH AND IF THE EXPOSED AREA HAS BEEN LOADED, FINAL GRADED AND IS SMOOTH, THEN THE AREA MAY BE DORMANT SEED AT A RATE OF 200 - 300% HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF STRAW OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.
- MULCHING REQUIREMENTS:
  - BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 15TH ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING OR WOOD CELLULOSE FIBER.
  - MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPE EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%.
  - MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
- AFTER NOVEMBER 1ST THE CONTRACTOR SHALL APPLY DORMANT SEEDING OR MULCH AND ANCHORING ON ALL BARE EARTH AT THE END OF EACH WORKING DAY.
- DURING THE WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.
- STOCKPILING OF MATERIALS (DIRT, WOOD, CONSTRUCTION MATERIALS, ETC.) MUST REMAIN COVERED AT ALL TIMES TO MINIMIZE ANY DUST PROBLEMS THAT MAY OCCUR WITH ADJACENT PROPERTIES AND TO PROVIDE MAXIMUM PROTECTION AGAINST RUNOFF.
- EXISTING CATCH BASIN STRUCTURES SHALL BE PROTECTED UNTIL SUCH TIME AS THEY ARE REMOVED.



**EROSION CONTROL BARRIER (ECB) DETAIL**

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FOR LINCOLN PROPERTY COMPANY

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**EROSION AND SEDIMENT CONTROL NOTES AND DETAILS**  
SHEET NUMBER: **C-603**  
ORG. DATE - 06/08/2021

N.T.S.

CONSTRUCTION SEQUENCE

N.T.S.

REVISIONS

REV DATE COMMENT

PROJECT NO: W211007  
DRAWN BY: CFDMIA  
CHECKED BY: NEMJAK  
DATE: 08/29/2021  
CAD ID: W211007-CVL-0

PROJECT: PROPOSED SITE PLAN DOCUMENTS

FOR LINCOLN PROPERTY COMPANY

PROPOSED INDUSTRIAL BUILDING  
MAP #88, LOTS #29 & #36  
1000 NICKERSON ROAD  
CITY OF MARLBOROUGH  
MIDDLESEX COUNTY,  
MASSACHUSETTS

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

**EROSION AND SEDIMENT CONTROL NOTES AND DETAILS**  
SHEET NUMBER: **C-603**  
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REVISIONS

REV DATE COMMENT

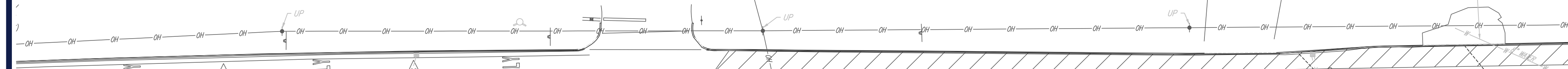
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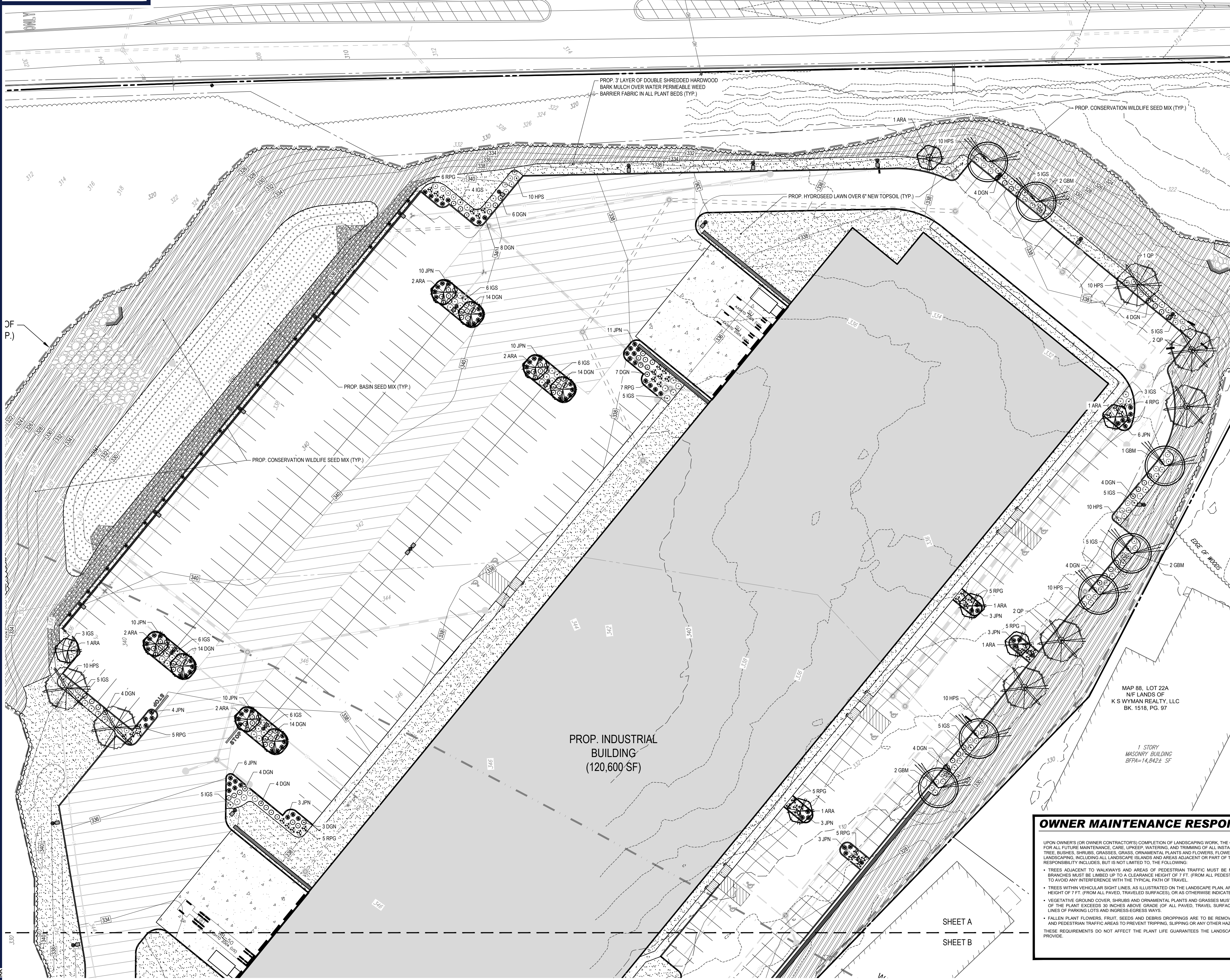
FOR LINCOLN



ST ROAD  
E WIDTH



# BOSTON POST ROAD



PROP. INDUSTRIAL BUILDING  
(120,600 SF)

MAP 88, LOT 22A  
N/F LANDS OF  
K.S. WYMAN REALTY, LLC  
BK. 1518, PG. 97

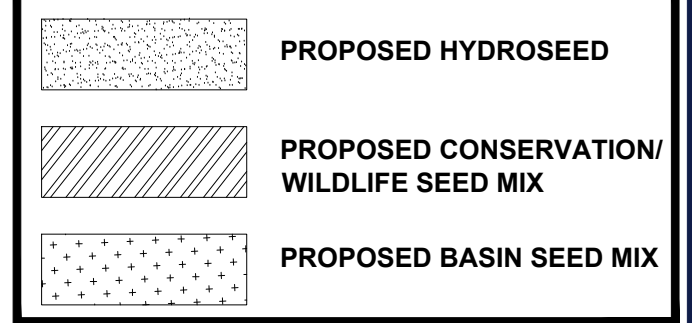
## CITY OF MARLBOROUGH LANDSCAPE REQUIREMENTS

SECTION	REQUIREMENTS	CALCULATIONS/PROPOSED
	(4) REQUIRED PLANTINGS SHALL INCLUDE BOTH TREES AND A MIX OF DECIDUOUS AND EVERGREEN SHRUBS AND PREFERABLY WILL INCLUDE VEGETATION EXISTING ON THE SITE. TREES MUST BE AT LEAST TWO INCHES CALIPER FOUR FEET ABOVE GRADE AT THE TIME OF PLANTING, BE OF A SPECIES COMMON IN THE AREA AND WHICH REACH AN ULTIMATE HEIGHT OF AT LEAST 20 FEET WHEN MATURE. SHRUBS MUST BE AT LEAST 12 INCHES IN HEIGHT AT THE TIME OF BUILDING OCCUPANCY AND BE OF A SPECIES COMMON IN THE AREA.	PROVIDED
650-47: D	(5) (A) PLANTINGS SHALL CONSIST OF AT LEAST ONE SHRUB PER FIVE LINEAR FEET OR 35 SQUARE FEET OF GROUND AREA, WHICHEVER RESULTS IN A GREATER NUMBER OF SHRUBS, AND AT LEAST ONE TREE PER 40 LINEAR FEET OF PLANTING AREA LENGTH, EXCEPT ONE TREE PER 30 LINEAR FEET OF STREET FRONTAGE PLANTING AREA ABUTTING ROUTES 20 AND 85.	PROVIDED THROUGH EXISTING VEGETATION TO REMAIN AND PROPOSED VEGETATION
	(6) IF LOCATED WITHIN THE STREET FRONTAGE PLANTING AREA REQUIRED BY THIS SECTION, NO EXISTING TREE OF SIX INCHES IN CALIPER OR GREATER (MEASURED FOUR FEET ABOVE GRADE), DENSE HEDGEROW OF FOUR OR MORE FEET IN BOTH DEPTH AND HEIGHT, OR EXISTING EARTH BERM PROVIDING SIMILAR VISUAL SCREENING SHALL BE REMOVED OR HAVE GRADE CHANGED MORE THAN ONE FOOT UNLESS REQUIRED BY PLANT HEALTH OR ACCESS SAFETY.	PROVIDED
650-47: E	(1YA) A CONTINUOUS LANDSCAPED STRIP SHALL BE PROVIDED ADJACENT TO THE RIGHT-OF-WAY LINE OF ANY STREET OR HIGHWAY	PROVIDED
650-47: F	SIDE LINE PLANTING AREAS ARE REQUIRED WITH THE FOLLOWING MINIMUM WIDTHS: (3) NONRESIDENTIAL AND MULTIFAMILY RESIDENTIAL USES ON LOTS WITH OVER 40,000 SQUARE FEET OF LOT AREA: SEVEN FEET.	EXISTING VEGETATION TO REMAIN
	(1) ON AT LEAST THREE SIDES OF THE PERIMETER OF AN OUTDOOR PARKING LOT CONTAINING 10 OR MORE PARKING SPACES, THERE SHALL BE A PLANTING AREA OR STRIP WITH A MINIMUM WIDTH EQUAL TO THE WIDTH REQUIRED FOR SIDE LINE PLANTING AREAS UNDER SUBSECTION F ABOVE.	PROVIDED
	(2) (A) A MINIMUM OF 3% OF THE INTERIOR AREA OF A PARKING LOT CONTAINING A TOTAL OF 50 OR MORE SPACES MUST BE PLANTED AS LANDSCAPED ISLANDS OR AREAS EXCLUSIVE OF PERIMETER LANDSCAPING.	PROVIDED
650-47: H	(B) PLANTING ISLANDS OR AREAS ON THE INTERIOR OF A PARKING LOT SHALL EACH CONTAIN NOT LESS THAN 100 SQUARE FEET OF UNPAVED SOIL AREA AND HAVE A MINIMUM DIMENSION OF SEVEN FEET. EACH ISLAND SHALL BE PLANTED WITH AT LEAST ONE TREE AND FOUR SHRUBS. A MINIMUM OF ONE TREE AND FOUR SHRUBS, EXCLUSIVE OF PERIMETER PLANTINGS, MUST BE PLANTED FOR EVERY 12 CARS IN THE INTERIOR AREA OF THE PARKING LOT.	TOTAL PARKING SPACES: 298 298 / 12 = 25 TREES REQUIRED 298 / 12 = 25 * 4 = 200 SHRUBS REQUIRED PROVIDED: 25 TREES AND 200 SHRUBS
	(C) THE LANDSCAPED ISLANDS SHALL BE SO LOCATED THAT SOME PART OF EVERY PARKING SPACE IS NOT MORE THAN 45 FEET FROM A LANDSCAPED AREA ON THE PERIMETER OR INTERIOR OF THE PARKING LOT.	PROVIDED
650-47: I	(1YA) ALL OUTDOOR STORAGE AREAS FOR NONRESIDENTIAL USES IN ALL DISTRICTS, AND ALL FACILITIES FOR REFUSE DISPOSAL FOR ALL USES IN ALL DISTRICTS, SHALL BE SCREENED FROM VIEW AT NORMAL EYE LEVEL FROM ANY PUBLIC OR PRIVATE STREET OR COMMON PARKING LOT THE EXTENT PRACTICABLE.	PROVIDED
650-47: J	(B) SCREENING SHALL CONSIST OF A SOLID WALL OR FENCE COMPATIBLE WITH SURROUNDING ARCHITECTURE AND MATERIALS, OF A HEIGHT SUFFICIENT TO COMPLETELY SCREEN THE AREA AT THE TIME OF INSTALLATION BUT NOT LESS THAN SIX FEET HIGH. THE FENCE OR WALL MAY BE SUPPLEMENTED BUT NOT REPLACED BY PLANTINGS.	PROVIDED

## LANDSCAPE SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONT.
<b>SHADE TREES</b>					
ARA	20	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG COLUMNAR RED MAPLE	MIN. 2" CAL.	B-B
GBM	7	GINKGO BLOSA 'MAYDAR'	MAYDAR UPRIGHT GINKGO	MIN. 2" CAL.	B-B
QP	7	QUERCUS PALUSTRIS	PIN OAK	MIN. 2" CAL.	B-B
SUBTOTAL:	34				
<b>DECIDUOUS SHRUBS</b>					
CSA	18	CORNUS STOLONIFERA 'ARCTIC FIRE'	COMPACT RED TWIG DOGWOOD	MIN. 12" HT.	B-B
DGN	104	DEUTZIA GRACILIS 'NIKO'	COMPACT DEUTZIA	MIN. 12" HT.	CONTAINER
HPS	70	HYPERICUM PATULUM 'SUNBURST'	SUNBURST ST. JOHNSWORT	MIN. 12" HT.	CONTAINER
SUBTOTAL:	190				
<b>EVERGREEN SHRUBS</b>					
IGS	84	ILEX GLABRA 'SHAMROCK'	SHAMROCK HOLLER	MIN. 12" HT.	B-B
RPQ	47	RHOODODENDRON 'PURPLE GEM'	PURPLE GEM RHODODENDRON	MIN. 12" HT.	CONTAINER
SUBTOTAL:	131				
<b>GROUND COVERS</b>					
JPN	90	JUNIPERUS PROCEUMBENS 'NANA'	JAPANESE GARDEN JUNIPER	12-15" SPRD.	CONTAINER
RAFBC	5	ROSA 'APPLE BLOSSOM FLOWER CARPET'	APPLE BLOSSOM CARPET ROSE	2 GAL.	CONTAINER
SUBTOTAL:	95				

## SEED MIX KEY



## OWNER MAINTENANCE RESPONSIBILITIES

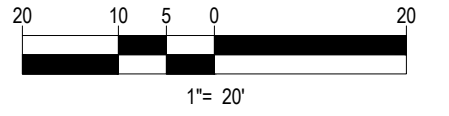
UPON OWNERS (OR OWNER CONTRACTORS) COMPLETION OF LANDSCAPING WORK, THE OWNER IS FULLY RESPONSIBLE FOR ALL FUTURE MAINTENANCE, CARE, WATERING, AND TRIMMING OF ALL INSTALLED VEGETATION, PLANTS, TREES, BUSHES, SHRUBS, GRASSES, GRASS, ORNAMENTAL PLANTS AND FLOWERS, FLOWERS, GROUND COVER, AND LANDSCAPING, INCLUDING ALL LANDSCAPE ISLANDS AND AREAS ADJACENT OR PART OF THE LANDSCAPE AREAS. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:

- TREES ADJACENT TO WALKWAYS AND AREAS OF PEDESTRIAN TRAFFIC MUST BE MAINTAINED TO ASSURE THAT ANY BRANCHES MUST BE LIMBED UP TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PEDESTRIAN SURFACES) OR PRUNED BACK TO AVOID ANY INTERFERENCE WITH THE TYPICAL PATH OF TRAVEL.
- TREES WITHIN VEHICULAR SIGHT LINES, AS ILLUSTRATED ON THE LANDSCAPE PLAN, ARE TO BE TRIMMED TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PAVED, TRAVELED SURFACES), OR AS OTHERWISE INDICATED ON THE PLANS.
- VEGETATIVE GROUND COVER, SHRUBS AND ORNAMENTAL PLANTS AND GRASSES MUST BE TRIMMED SO THAT NO PORTION OF THE PLANT EXCEEDS 30 INCHES ABOVE GRADE (OF ALL PAVED, TRAVELED SURFACES) ALONG AND WITHIN THE SIGHT LINES OF PARKING LOTS AND INGRESS/EGRESS WAYS.
- FALLEN PLANT FLOWERS, FRUIT, SEEDS AND DEBRIS DROPPINGS ARE TO BE REMOVED IMMEDIATELY FROM VEHICULAR AND PEDESTRIAN TRAFFIC AREAS TO PREVENT TRIPPING, SLIPPING OR ANY OTHER HAZARDS.

THESE REQUIREMENTS DO NOT AFFECT THE PLANT LIFE GUARANTEES THE LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE.

**THIS PLAN TO BE UTILIZED FOR  
LANDSCAPE PURPOSES ONLY**

**REFER LANDSCAPE NOTES &  
DETAILS SHEET FOR LANDSCAPE  
NOTES AND DETAILS**



**BOHLER**  
SITE CIVIL AND CONSULTING ENGINEERING  
LAND SURVEYING  
PROGRAM MANAGEMENT  
LANDSCAPE ARCHITECTURE  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

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**PRELIMINARY**

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT NO.: W211007  
DRAWN BY: CF/DJMA  
CHECKED BY: NEM/JAK  
DATE: 06/08/2021  
CAD I.D.: W211007-LND-0

PROPOSED SITE  
PLAN DOCUMENTS

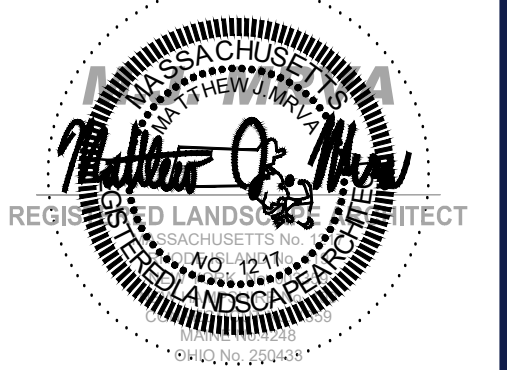
FOR

**LINCOLN  
PROPERTY  
COMPANY**

PROPOSED INDUSTRIAL BUILDING  
MAP #88, LOTS #29 & #36  
1000 NICKERSON ROAD  
CITY OF MARLBOROUGH  
MIDDLESEX COUNTY,  
MASSACHUSETTS

**BOHLER**

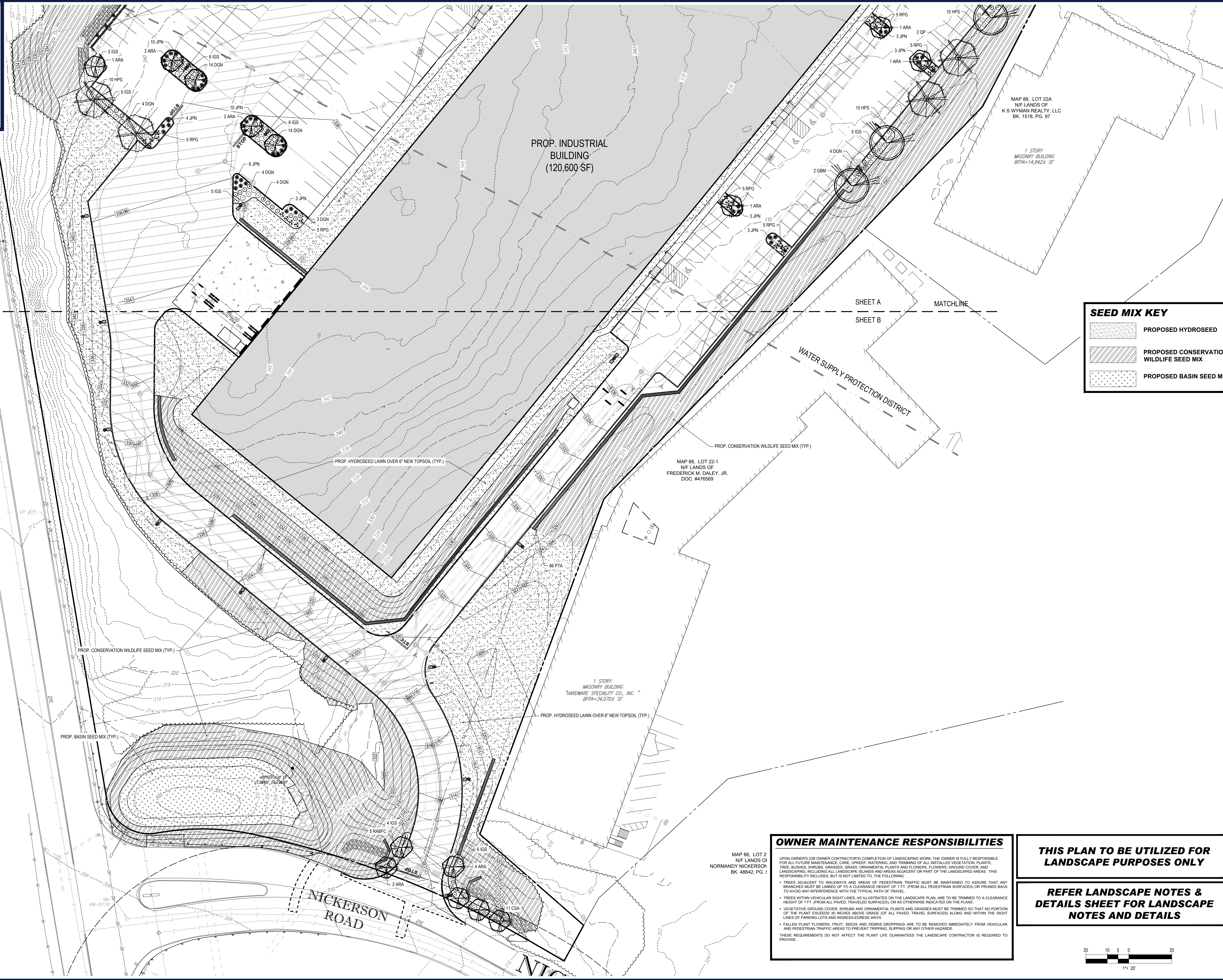
352 TURNPIKE ROAD  
SOUTHBOROUGH, MA 01772  
Phone: (508) 480-9900  
www.BohlerEngineering.com



SHEET TITLE:  
**LANDSCAPE  
PLAN A**

SHEET NUMBER:  
**C-701**

ORG. DATE - 06/08/2021



SHEET A  
SHEET B

SHEET A  
SHEET B

**SEED MIX KEY**

	PROPOSED HYDROSEED
	PROPOSED CONSERVATION/WILDLIFE SEED MIX
	PROPOSED BASIN SEED MIX

**BOHLER**  
SITE CIVIL AND CONSULTING ENGINEERING  
PROGRAM MANAGEMENT  
LANDSCAPE ARCHITECTURE  
SUSTAINABLE DESIGN  
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**REVISIONS**

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PROJECT No.: W211007  
DRAWN BY: CF/IMA  
CHECKED BY: NEM/JAK  
DATE: 08/08/2024  
CAD ID: W211007-LND-0

PROJECT:  
**PROPOSED SITE PLAN DOCUMENTS**  
FOR  
**LINCOLN PROPERTY COMPANY**  
PROPOSED INDUSTRIAL BUILDING  
MAP #88, LOTS #29 & #36  
1000 NICKERSON ROAD  
CITY OF MARLBOROUGH  
MIDDLESEX COUNTY,  
MASSACHUSETTS

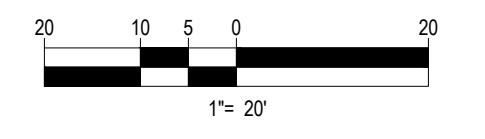
**BOHLER**  
352 TURNPIKE ROAD  
SOUTHBOROUGH, MA 01772  
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SHEET TITLE:  
**LANDSCAPE PLAN**  
SHEET NUMBER:  
**C-702**  
ORG. DATE - 06/08/2024

**OWNER MAINTENANCE RESPONSIBILITIES**  
UPON OWNER'S (OR OWNER CONTRACTOR'S) COMPLETION OF LANDSCAPING WORK, THE OWNER IS FULLY RESPONSIBLE FOR ALL FUTURE MAINTENANCE, CARE, UPKEEP, WATERING, AND TRIMMING OF ALL INSTALLED VEGETATION, PLANTS, TREE, BUSHES, SHRUBS, GRASSES, GRASS, ORNAMENTAL PLANTS AND FLOWERS, FLOWERS, GROUND COVER, AND LANDSCAPING, INCLUDING ALL LANDSCAPE ISLANDS AND AREAS ADJACENT OR PART OF THE LANDSCAPED AREAS. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:  
• TREES ADJACENT TO WALKWAYS AND AREAS OF PEDESTRIAN TRAFFIC MUST BE MAINTAINED TO ASSURE THAT ANY BRANCHES MUST BE LIMBED UP TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PEDESTRIAN SURFACES) OR PRUNED BACK TO AVOID ANY INTERFERENCE WITH THE TYPICAL PATH OF TRAVEL.  
• TREES WITHIN VEHICULAR SIGHT LINES, AS ILLUSTRATED ON THE LANDSCAPE PLAN, ARE TO BE TRIMMED TO A CLEARANCE HEIGHT OF 7 FT. FROM ALL PAVED, TRAVELED SURFACES, OR AS OTHERWISE INDICATED ON THE PLANS.  
• VEGETATIVE GROUND COVER, SHRUBS AND ORNAMENTAL PLANTS AND GRASSES MUST BE TRIMMED SO THAT NO PORTION OF THE PLANT EXCEEDS 30 INCHES ABOVE GRADE (OF ALL PAVED, TRAVELED SURFACES) ALONG AND WITHIN THE SIGHT LINES OF PARKING LOTS AND WALKWAYS.  
• FALLEN PLANT FLOWERS, FRUIT, SEEDS AND DEBRIS DROPPINGS ARE TO BE REMOVED IMMEDIATELY FROM VEHICULAR AND PEDESTRIAN TRAFFIC AREAS TO PREVENT TRIPPING, SLIPPING OR ANY OTHER HAZARDS.  
THESE REQUIREMENTS DO NOT AFFECT THE PLANT LIFE GUARANTEES THE LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE.

**THIS PLAN TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY**  
**REFER LANDSCAPE NOTES & DETAILS SHEET FOR LANDSCAPE NOTES AND DETAILS**



P:\211007\DRAWINGS\PLAN SET\REV\W211007-LND-0-3-LAYOUT-C-702-LAND B

**LANDSCAPE SPECIFICATIONS**

**1. SCOPE OF WORK**

- 1.1. THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SOODING, 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**

- 2.1. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.
- 2.2. TOPSOIL - NATURAL, FRIABLE, 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.
- 2.3. 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 SOODED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED ON THE LANDSCAPE PLAN.
- 2.3.1. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.
- 2.3.2. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/FREE WITH A UNIFORM THICKNESS. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.
- 2.4. 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.
- 2.5. FERTILIZER
- 2.5.1. 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 WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.
- 2.5.2. 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.
- 2.6. PLANT MATERIAL
- 2.6.1. 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).
- 2.6.2. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.
- 2.6.3. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND TAG. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
- 2.6.4. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1", WHICH HAVE NOT BEEN COMPLETELY CALLED, SHALL BE REJECTED. PLANTS SHALL NOT BE SOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.
- 2.6.5. 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.
- 2.6.6. 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 12" ABOVE THE NATURAL GRADE.
- 2.6.7. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.
- 2.6.8. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

**3. GENERAL WORK PROCEDURES**

- 3.1. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.
- 3.2. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.
- 4. SITE PREPARATIONS
- 4.1. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.
- 4.2. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE BRANCH COLLAR. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.
- 4.3. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.
- 5. TREE PROTECTION
- 5.1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.
- 5.2. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY "VISI-FENCE", OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.
- 5.3. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.
- 5.4. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

**6. SOIL MODIFICATIONS**

- 6.1. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.
- 6.2. LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS.
- 6.3. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.
- 6.3.1. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6"-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.
- 6.3.2. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.
- 6.3.3. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY (LOAM UP TO 30% OF THE TOTAL MIX).

**7. FINISHED GRADING**

- 7.1. 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.
- 7.2. 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"+).
- 7.3. 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.
- 7.4. 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.

**8. TOPSOILING**

- 8.1. 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.
- 8.2. 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.
- 8.3. 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.
- 8.4. ALL LAWN AREAS ARE TO BE CULтивATED 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 TILLED 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.A.]):
- 8.4.1. 20 POUNDS "GRO-POWER" OR APPROVED SOIL CONDITIONER/FERTILIZER
- 8.4.2. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHP OR APPROVED NITROGEN FERTILIZER
- 8.5. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

**9. PLANTING**

- 9.1. 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.
- 9.2. 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.
- 9.3. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.
- 9.4. 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.
- 9.5. 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.
- 9.6. 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:
- 9.6.1. PLANTS - MARCH 15 TO DECEMBER 15
- 9.6.2. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1
- 9.6.3. 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.
- 9.7. 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
- BETULA VARIETIES
- CARPINUS VARIETIES
- CRATAEGUS VARIETIES
- KOELREUTERIA
- LIQUIDAMBAR STYRACIFLUA
- LIRIODENDRON TULIPIFERA
- PLATANUS X ACERIFOLIA
- POPULUS VARIETIES
- PRUNUS VARIETIES
- PYRUS VARIETIES
- QUERCUS VARIETIES
- TILIA TOMENTOSA
- ZELKOVA VARIETIES

9.8. 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:

- 9.8.1. 1 PART PEAT MOSS
- 9.8.2. 1 PART COMPOSTED COW MANURE BY VOLUME
- 9.8.3. 3 PARTS TOPSOIL BY VOLUME
- 9.8.4. 21 GRAMS AGRIFORM PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
- 9.8.4.1. 2 TABLETS PER 1 GALLON PLANT
- 9.8.4.2. 3 TABLETS PER 5 GALLON PLANT
- 9.8.4.3. 4 TABLETS PER 15 GALLON PLANT
- 9.8.4.4. LARGER PLANTS: 2 TABLETS PER 1" CALIPER OF TRUNK

9.9. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.

9.10. 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.

9.11. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.

9.12. 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.

9.13. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.

9.14. 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.

9.15. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

**10. TRANSPLANTING (WHEN REQUIRED)**

- 10.1. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.
- 10.2. 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.
- 10.3. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.
- 10.4. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.
- 10.5. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.
- 10.6. F 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**

- 11.1. 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.
- 11.2. 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.
- 11.3. 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**

- 12.1. 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.
- 12.2. 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.
- 12.3. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.
- 12.4. 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 ERODED OR BARE AREAS.

**13. CLEANUP**

- 13.1. 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.
- 13.2. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

**14. MAINTENANCE (ALTERNATE BID)**

- 14.1. 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 BIDDER 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 MAINTAINED TO THE APPROVAL OF THE OWNER/OPERATOR.

**NEW ENGLAND CONSERVATION WILDLIFE SEED MIX**

<p>"NEW ENGLAND CONSERVATION WILDLIFE SEED MIX" AS PREPARED BY:</p> <p>NEW ENGLAND WETLAND PLANTS, INC 820 WEST STREET, AMHERST, MA 01002 PHONE: 413-548-8000 EMAIL: INFO@NEWP.COM WEBSITE: WWW.NEWP.COM</p>	<p>APPLICATION RATE: 25LB/SIACRE   1750 SQ FT/LB MINIMUM ORDER: 2 LBS</p> <p>SPECIES: VIRGINIA WILD RYE (Elymus virginicus), LITTLE BLUESTEM (Schizachyrium scoparium), BIG BLUESTEM (Andropogon gerardii), RED FESCUE (Festuca rubra), SWITCH GRASS (Panicum virgatum), PARTIDGE PEA (Chamaecrista fasciculata), PANICLED LEAF FICK TREFOIL (Desmodium paniculatum), INDIAN GRASS (Sorghastrum nutans), BLUE VERVAIN (Verbena hastata), BUTTERFLY MILKWEED (Asclepias tuberosa), BLACK EYED SUSAN (Rudbeckia hirta), COMMON SNEEZEWEED (Helenium autumnale), HEALTH ASTER (Aster pilosus), VIRGINIA PINE (Pinus strobus), EARLY GOLDENROD (Solidago juncea), UPLAND BENTGRASS (Agrostis perennans).</p>
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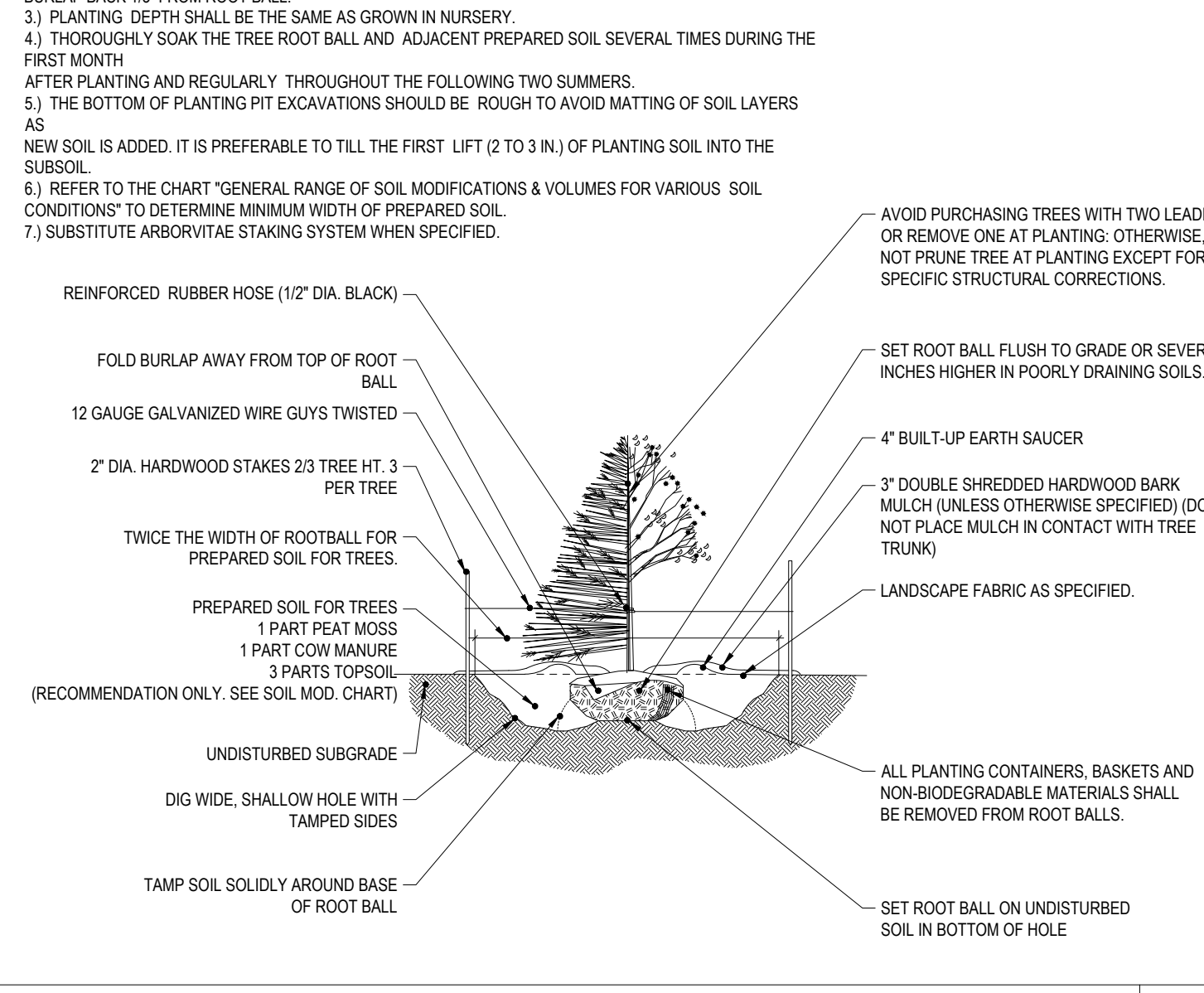
**NEW ENGLAND CONSERVATION WILDLIFE SEED MIX SPECIFICATIONS**

<p>"NATIVE DETENTION AREA MIX" AS PREPARED BY:</p> <p>ERNST CONSERVATION SEEDS, INC 884 MERCER Pkwy, Mt Airy, PA 16335 PHONE: 800-873-3321   814-336-2404 EMAIL: SALES@ERNSTSEED.COM WEBSITE: WWW.ERNSTSEED.COM</p>	<p>APPLICATION RATE: 1/2 LB. / 1000 SQ. FT. (30 LBS. / ACRE)</p> <p>MIX COMPOSITION:</p> <ul style="list-style-type: none"> <li>25.0% PANICUM VIRGATUM, 'SHELTHER' (SWITCHGRASS, 'SHELTHER')</li> <li>24.0% PANICUM CLAUDENSTINUM, 'TIGOA' (DEERTONGUE, 'TIGOA')</li> <li>22.0% CAREX VULPINOIDEA, PA ECOTYPE (FOX SEDGE, PA ECOTYPE)</li> <li>21.0% ELYMUS VIRGINICUS, PA ECOTYPE (VIRGINIA WILD RYE, PA ECOTYPE)</li> <li>6.0% AGROSTIS PERENNANS, ALBANY PINE BUSH-YANG ECOTYPE (AUTUMN BENTGRASS, ALBANY PINE BUSH-YANG ECOTYPE)</li> <li>1.0% JUNCUS EFFUSUS (SOFT RUSH)</li> <li>1.0% PANICUM RIGIDULUM, PA ECOTYPE (REDTOP PANICGRASS, PA ECOTYPE)</li> </ul>
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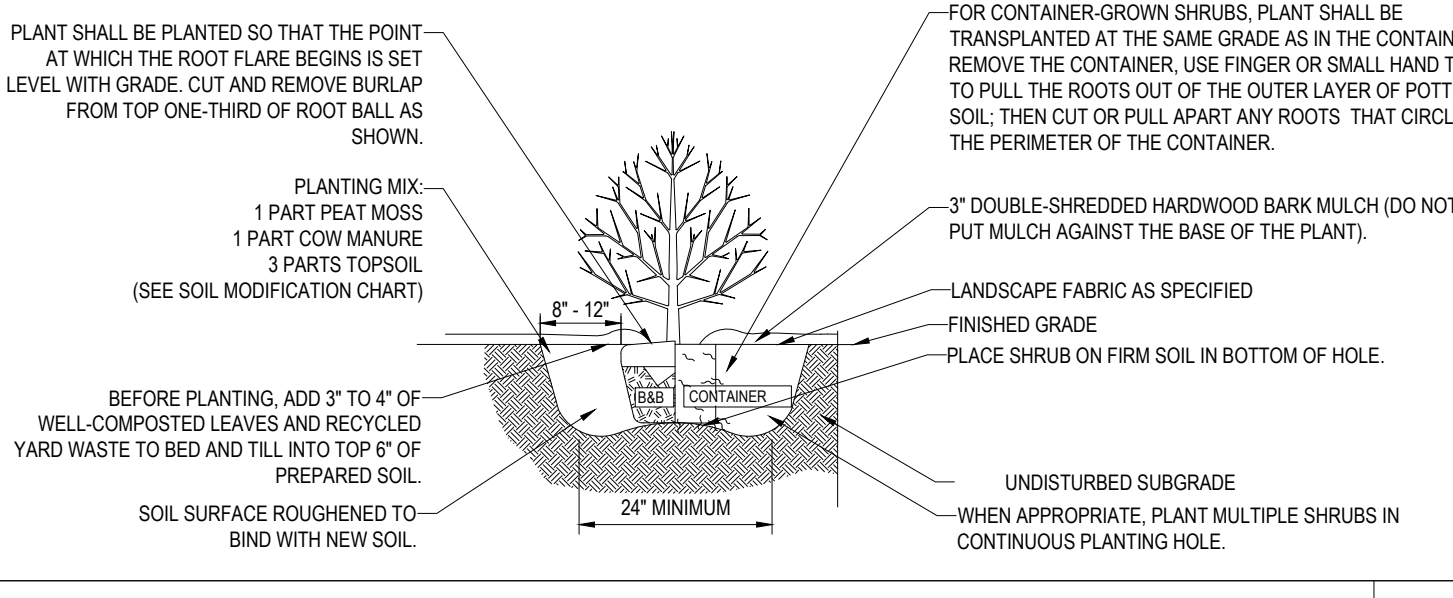
**BASIN SEED MIX SPECIFICATIONS**

NOTES:

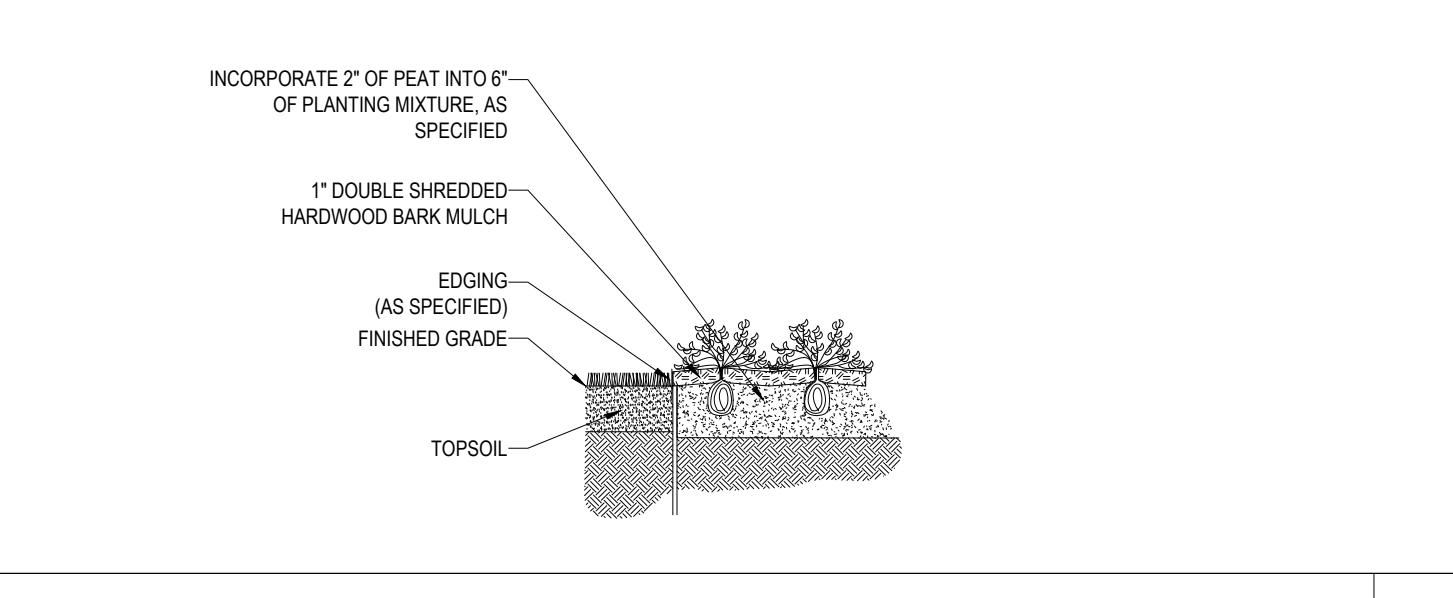
- 1) NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
- 2) REMOVE ALL NON-BIODEGRADABLE MATERIAL AND ROPE FROM TRUNK & TOP OF ROOT BALL. FOLD BURLAP BACK 10" FROM ROOT BALL.
- 3) PLANTING DEPTH SHALL BE THE SAME AS GROWN IN NURSERY.
- 4) THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
- 5) THE BOTTOM OF PLANTING PIT EXCAVATIONS SHOULD BE ROUGH TO AVOID MATTING OF SOIL LAYERS AS NEW SOIL IS ADDED. IT IS PREFERABLE TO TILL THE FIRST LIFT (2 TO 3 IN.) OF PLANTING SOIL INTO THE SUBSOIL.
- 6) REFER TO THE CHART "GENERAL RANGE OF SOIL MODIFICATIONS & VOLUMES FOR VARIOUS SOIL CONDITIONS" TO DETERMINE MINIMUM WIDTH OF PREPARED SOIL.
- 7) SUBSTITUTE ARBORVITAE STAKING SYSTEM WHEN SPECIFIED.



**TREE PLANTING DETAIL** N.T.S.

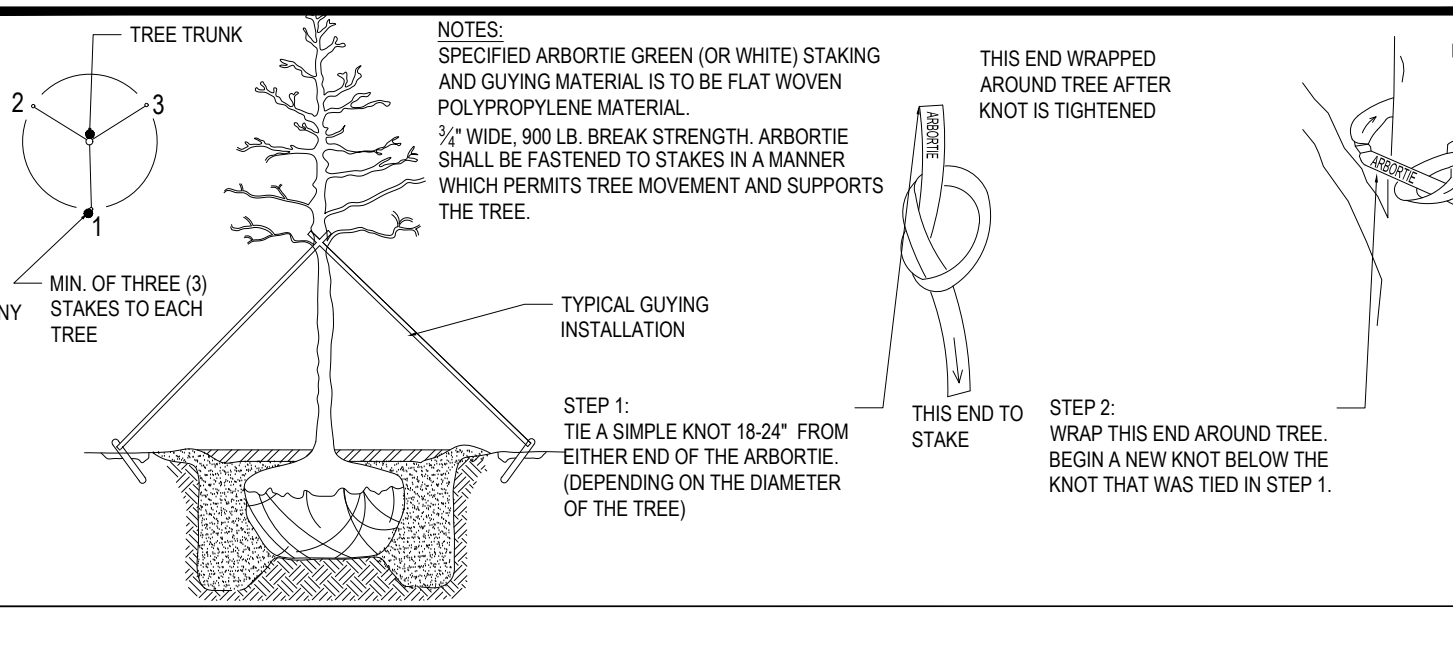


**SHRUB PLANTING DETAIL** N.T.S.

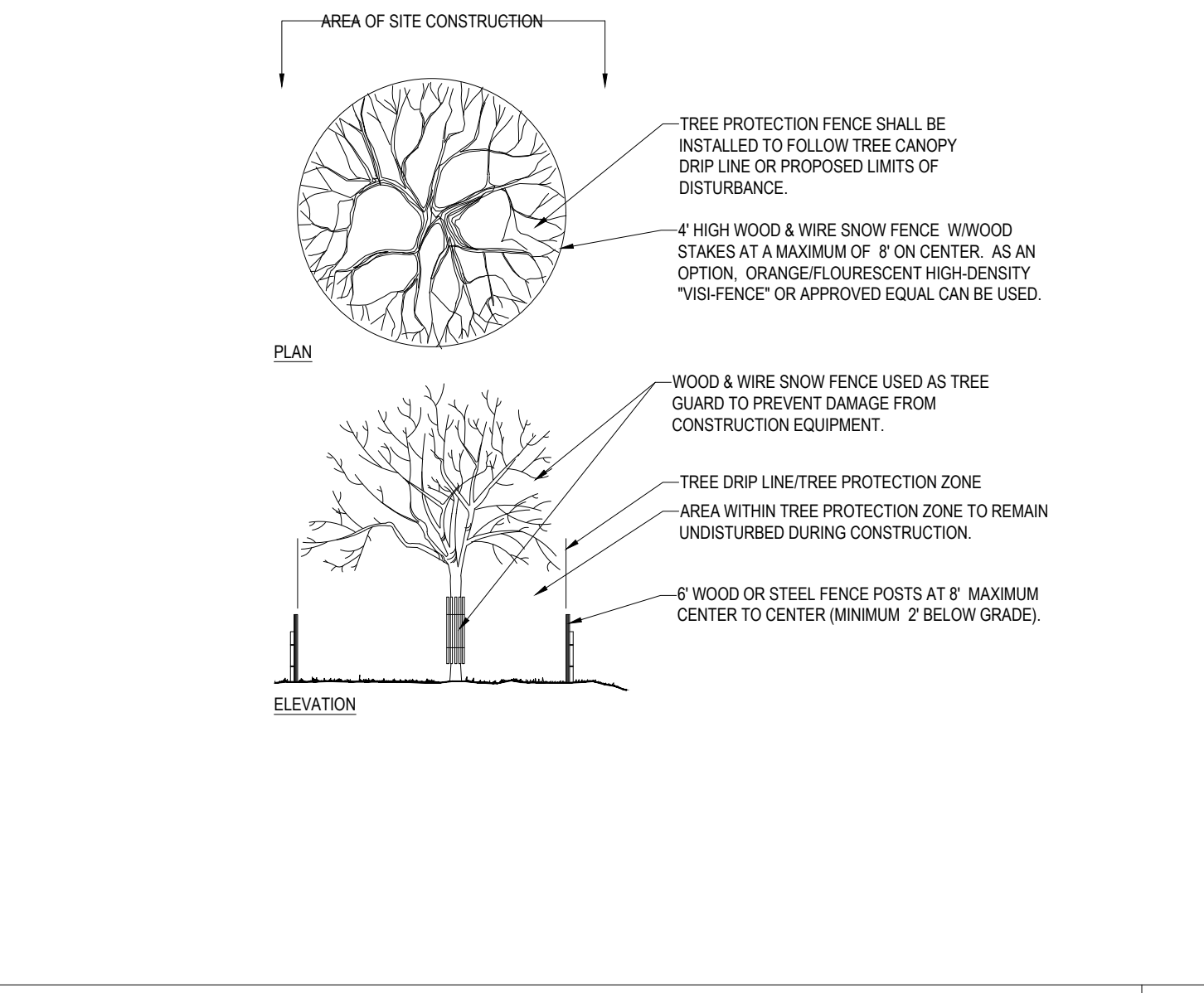


**GROUND COVER PLANTING** N.T.S.

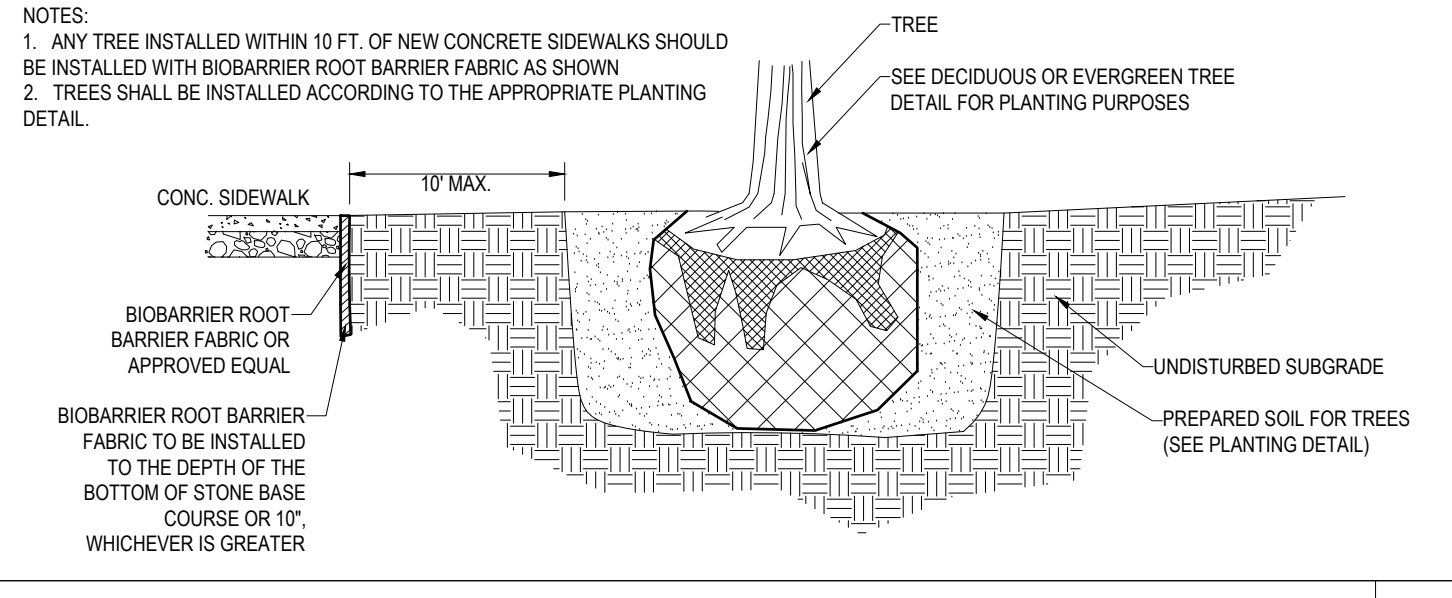
- HYDROSEED SPECIFICATIONS**
1. PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 2" DIAMETER.
  2. PRIOR TO SEEDING, CONSULT MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.
  3. SEEDING RATES:
    - PERENNIAL RYEGRASS 1/2 LB/1000 SQ FT
    - KENTUCKY BLUEGRASS 1 LB/1000 SQ FT
    - RED FESCUE 1/2 LB/1000 SQ FT
    - SPREADING FESCUE 1/2 LB/1000 SQ FT  4. FERTILIZER (16-32-16)
    - LIQUID LIME 1 GAL/800 GAL
    - TANK TACKIFIER 35 LB/800 GAL
    - TANK FIBER MULCH 30 LB/1000 SQ FT  4. GERMINATION RATES WILL VARY AS A TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL AN ACCEPTABLE STAND OF COVER IS ESTABLISHED BY OWNER.



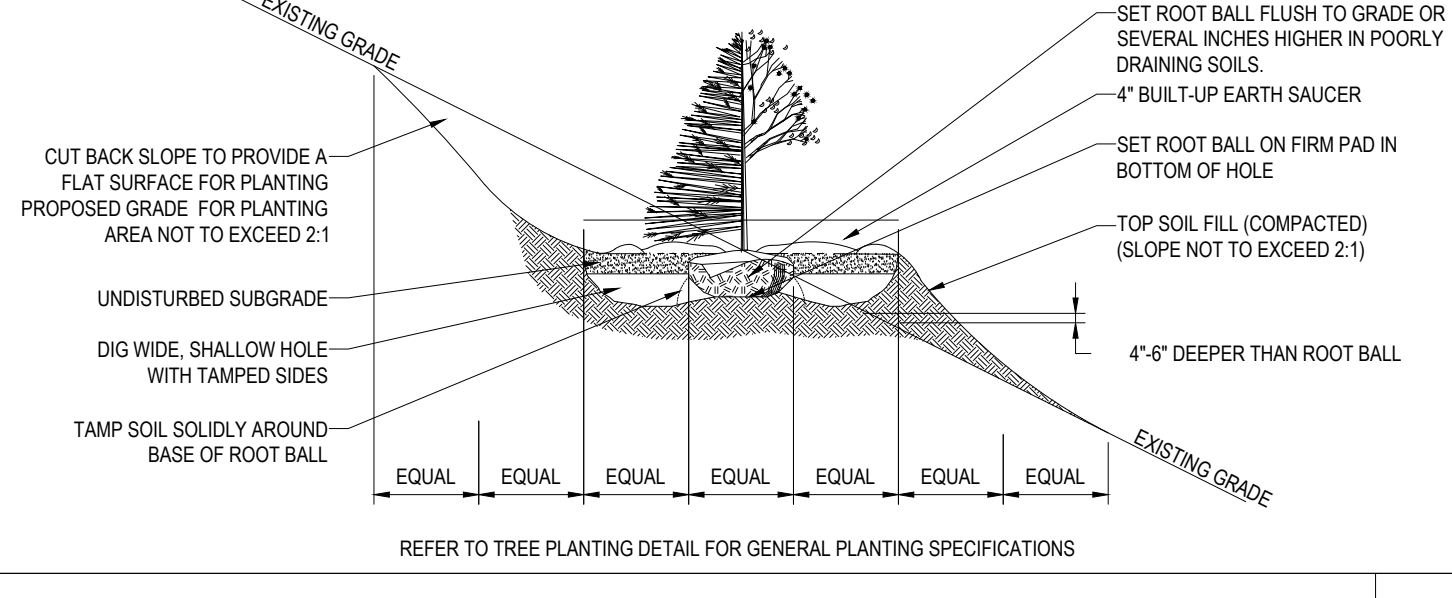
**ARBORVITAE STAKING DETAIL** N.T.S.



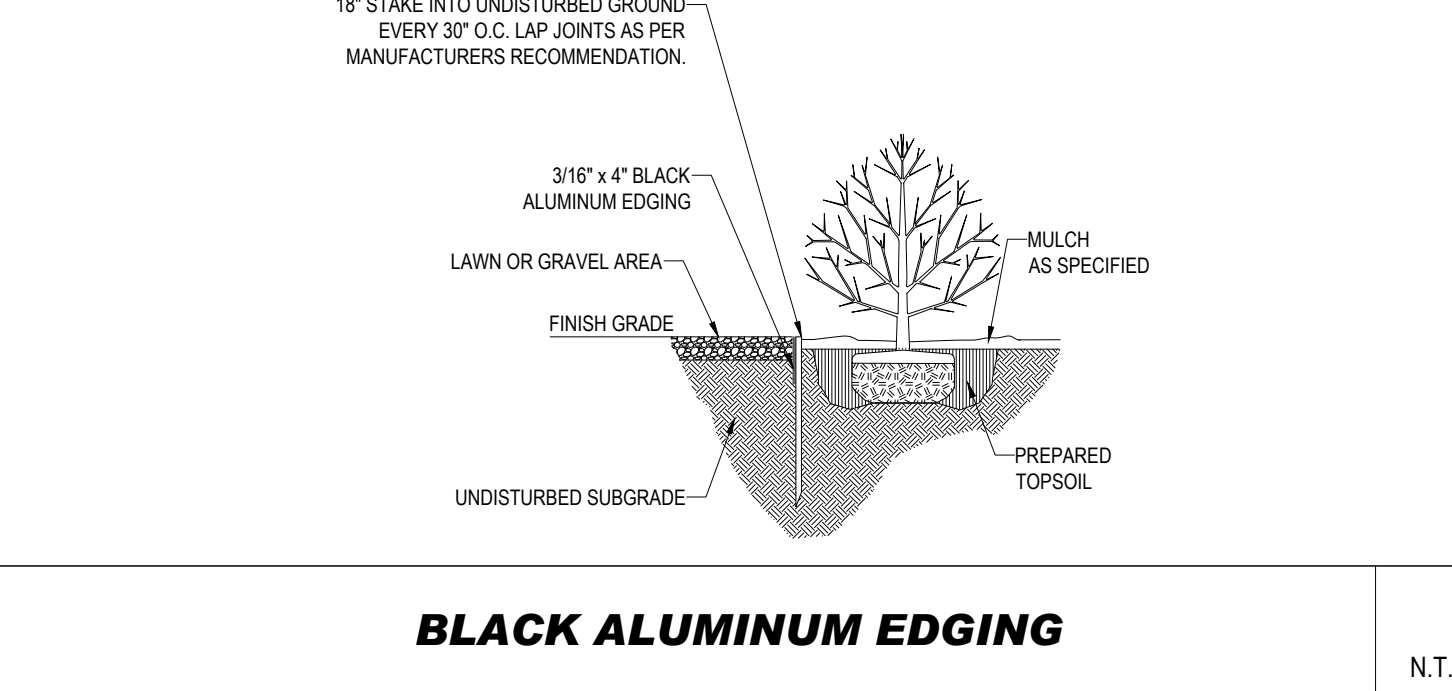
**TREE PROTECTION DURING SITE CONSTRUCTION** N.T.S.



**BIOBARRIER ROOT BARRIER DETAIL** N.T.S.



**TREE PLANTING DETAIL - ON SLOPE** N.T.S.



**BLACK ALUMINUM EDGING** N.T.S.

**BOHLER** ENGINEERING

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

**REVISIONS**

REV	DATE	COMMENT	DRAWN BY

**811**

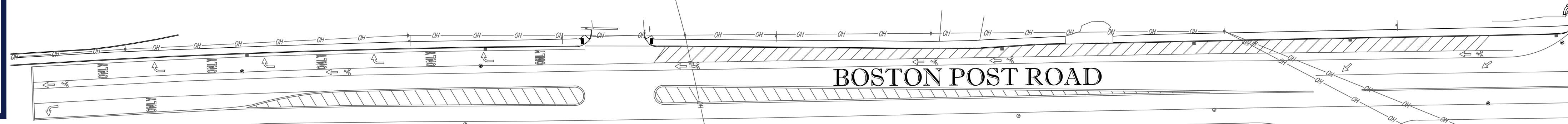
Know what's below.  
Call before you dig.  
ALWAYS CALL 811  
It's fast. It's free. It's the law.

**PRELIMINARY**

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	W211007
DRAWN BY:	CFD/MIA
CHECKED BY:	NEM/JAK
DATE:	06/08/2024





BOSTON POST ROAD

NORTHBORO ROAD CENTRAL

HAYES MEMORIAL DRIVE



PROP. INDUSTRIAL BUILDING (120,000 SF)

LANDS OF NICKERSON LP 1000 NICKERSON LP 77767, PG. 257

**LIGHTING NOTES**

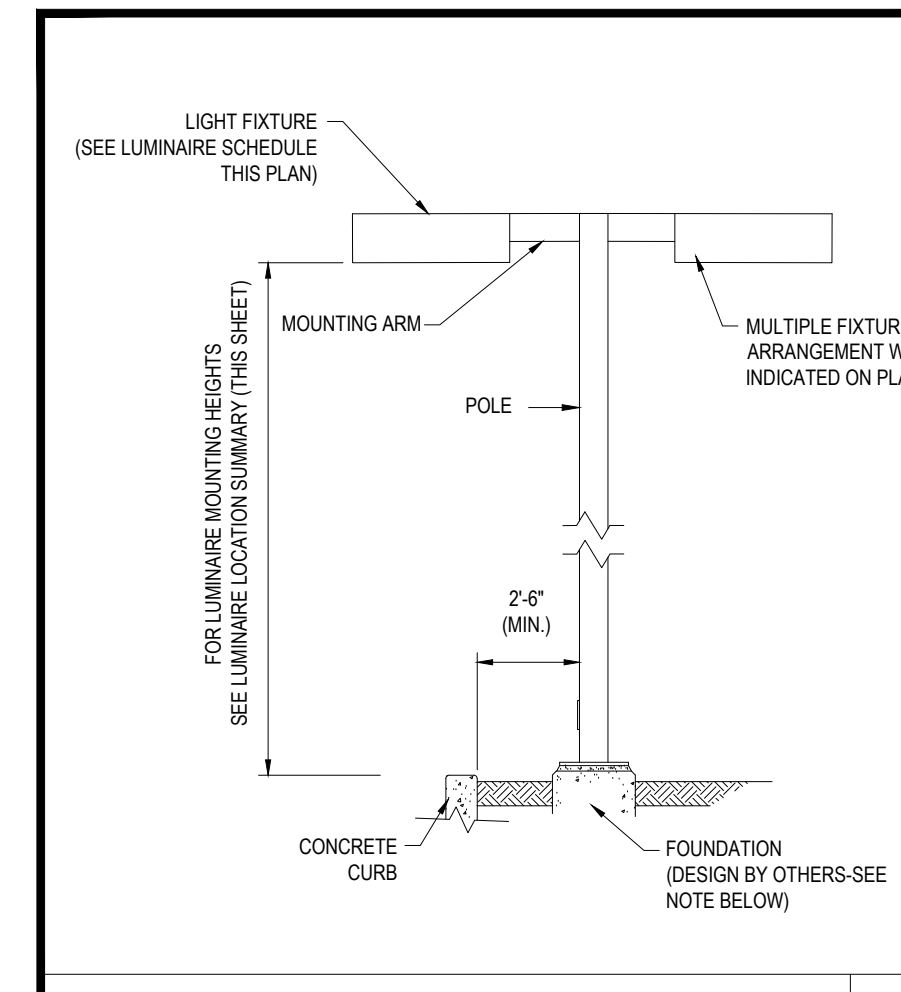
- THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER(S). ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRE MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRE AND OTHER RELATED VARIABLE FIELD CONDITIONS.
- THE LIGHT LOSS FACTORS USED IN THESE LIGHTING CALCULATIONS ARE 0.90 FOR ALL LED LUMINAIRE, 0.80 FOR ALL HIGH PRESSURE SODIUM LUMINAIRE OR 0.77 FOR ALL METAL HALIDE LUMINAIRE UNLESS OTHERWISE SPECIFIED. THESE FACTORS ARE INDICATIVE OF TYPICAL LIGHTING INDUSTRY MODELING STANDARDS.
- THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ALL ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT ELEVATION ZERO (GROUND LEVEL) UNLESS OTHERWISE NOTED. THE VALUES DEPICTED ON THIS PLAN ARE IN FOOTCANDELS.
- THE LUMINAIRE, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY. THIS WORK SHOULD INCLUDE, BUT NOT BE LIMITED TO, FREQUENT VISUAL INSPECTIONS, CLEANING OF LENSES, AND RELAMPING (IF NECESSARY) AT LEAST ONCE EVERY SIX (6) MONTHS. FAILURE TO FOLLOW THE ABOVE STEPS COULD CAUSE THE LUMINAIRE, LAMPS AND LENSES TO FAIL PROPERLY TO FUNCTION.
- WHERE APPLICABLE, THE EXISTING CONDITION LIGHT LEVELS ILLUSTRATED ARE REPRESENTATIVE OF AN APPROXIMATION UTILIZING LABORATORY DATA FOR SIMILAR FIXTURES, UNLESS ACTUAL FIELD MEASUREMENTS ARE TAKEN WITH A LIGHT METER AND ARE, CONSEQUENTLY, APPROXIMATIONS ONLY. DUE TO FACTORS SUCH AS FIXTURE MAINTENANCE, EQUIPMENT TOLERANCES, WEATHER CONDITIONS, ETC. ACTUAL LIGHT LEVELS MAY DIFFER. EXISTING LIGHT LEVELS DEPICTED ON THIS PLAN SHOULD BE CONSIDERED APPROXIMATE.
- THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRE ONLY. POWER SYSTEM, CONDUITS, WIRING, VOLTAGES AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT, MEP AND/OR LIGHTING CONTRACTOR, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. LIGHT POLE BASES ARE THE RESPONSIBILITY OF THE STRUCTURAL ENGINEER, AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR INSTALLING LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES AND ALL OTHER APPLICABLE RULES, REGULATIONS, LAWS AND STATUTES.
- CONTRACTOR MUST BRING TO DESIGNER'S ATTENTION, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES.
- IT IS THE LIGHTING CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE PROJECT ARCHITECT OR OWNER REGARDING THE POWER SOURCE(S) FROM WITHIN THE BUILDING, AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT.
- THE LIGHTING CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE SITE PLAN, INCLUDING BUT NOT LIMITED TO, GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL GOVERNMENTAL RULES, LAWS, ORDINANCES, REGULATIONS AND THE LIKE.
- THE CONTRACTOR MUST VERIFY THAT INSTALLATION OF LIGHTING FIXTURES COMPLIES WITH THE REQUIREMENTS FOR SEPARATION FROM OVERHEAD ELECTRICAL WIRES PER STATE REGULATIONS.
- UPON OWNER'S ACCEPTANCE OF THE COMPLETED PROJECT, THE OWNER SHALL BE RESPONSIBLE FOR ALL MAINTENANCE, SERVICING, REPAIR AND INSPECTION OF THE LIGHTING SYSTEM AND ALL OF ITS COMPONENTS AND RELATED SYSTEMS, TO ENSURE ADEQUATE LIGHTING LEVELS ARE PRESENT AND FUNCTIONING AT ALL TIMES.

**NUMERIC SUMMARY**

LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVGMIN	MAXMIN
AREA SUMMARY	ILLUMINANCE	FC	1.84	4.9	0.2	9.20	24.50

**LUMINAIRE SCHEDULE**

SYMBOL	QTY	ARRANGEMENT	LUMENS	ULF	DESCRIPTION
☐	28	SINGLE	17230	0.90	LED FORWARD THROW AREA LIGHT WITH SHIELD MOUNTED @ 30°; XGBM-FT-LED-SS-NW-HSS
☐	4	SINGLE	15170	0.90	LED TYPE V AREA LIGHT MOUNTED @ 30°; XGBM-S-LED-SS-NW
☐	2	DOUBLE @ 180	17230	0.90	LED FORWARD THROW AREA LIGHT MOUNTED @ 30°; XGBM-FT-LED-SS-NW



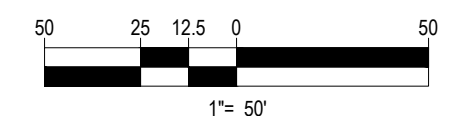
**AREA LIGHT DETAIL**

N.T.S.

NOTE: THIS DETAIL IS FOR BID AND BUDGETARY PURPOSES ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A FOUNDATION DESIGN PREPARED BY A QUALIFIED STRUCTURAL ENGINEER CONSIDERING LIGHTING MANUFACTURER REQUIREMENTS, LOCAL WIND LOADS AND SITE SPECIFIC SOIL PARAMETERS.

- SOME SITE CONDITIONS AND/OR LOCATIONS MAY REQUIRE VIBRATION DAMPENING MEASURES AS DETERMINED BY A STRUCTURAL ENGINEER.
- THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF THE INTENT TO MOUNT ANYTHING TO THE POLE, ASIDE FROM THE LIGHT FIXTURES, INCLUDING BUT NOT LIMITED TO CAMERAS, BANNERS, FLAGS, SIGNAGE, ETC. AS IT WILL IMPACT THE POLE AND FOUNDATION DESIGN.

**THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY**



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PROGRAM MANAGEMENT  
LANDSCAPE ARCHITECTURE  
SUSTAINABLE DESIGN  
TRANSPORTATION SERVICES

**REVISIONS**

REV	DATE	COMMENT	DRAWN BY

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**PRELIMINARY**

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PROJECT No.: W211007  
DRAWN BY: CFDM/AK  
CHECKED BY: NEM/JAK  
DATE: 06/08/2021  
CAD LID: W211007-CVL-0

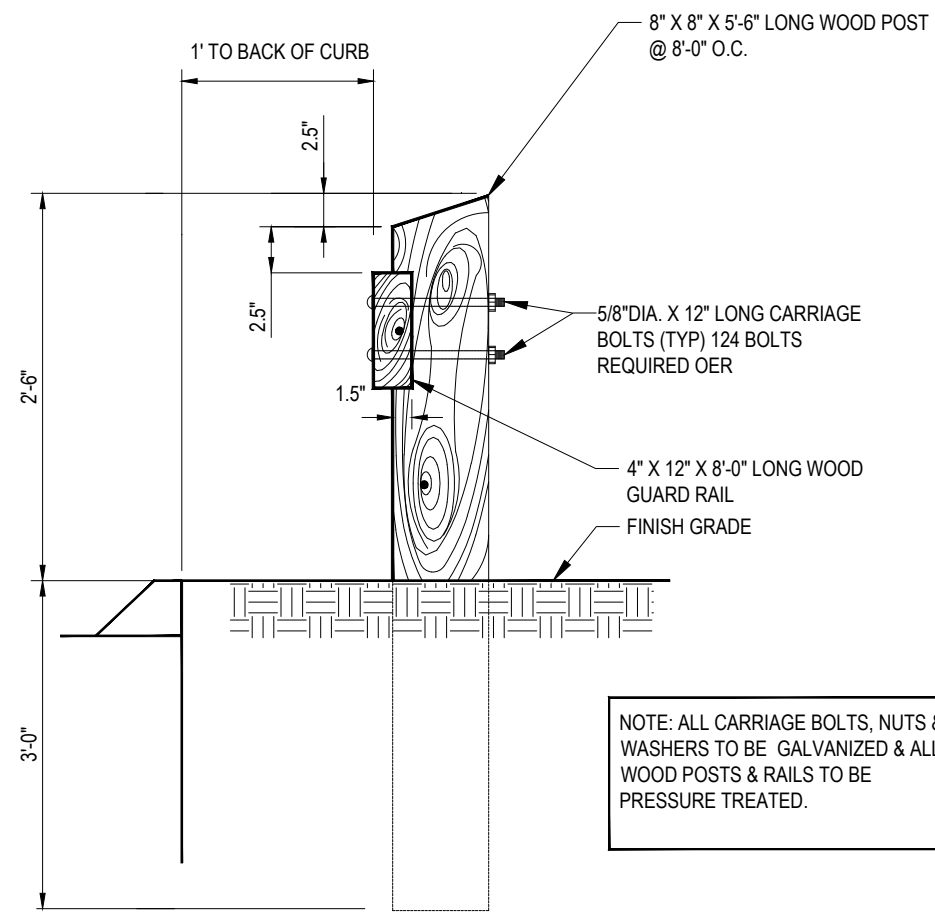
**PROPOSED SITE PLAN DOCUMENTS**

FOR  
**LINCOLN PROPERTY COMPANY**  
PROPOSED INDUSTRIAL BUILDING  
MAP #88, LOTS #29 & #36  
1000 NICKERSON ROAD  
CITY OF MARLBOROUGH  
MIDDLESEX COUNTY,  
MASSACHUSETTS

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

Professional Engineer Seal for John A. Kucurak, No. 41530, State of Massachusetts.

SHEET TITLE:  
**LIGHTING PLAN**  
SHEET NUMBER:  
**C-704**  
ORG. DATE - 06/08/2021



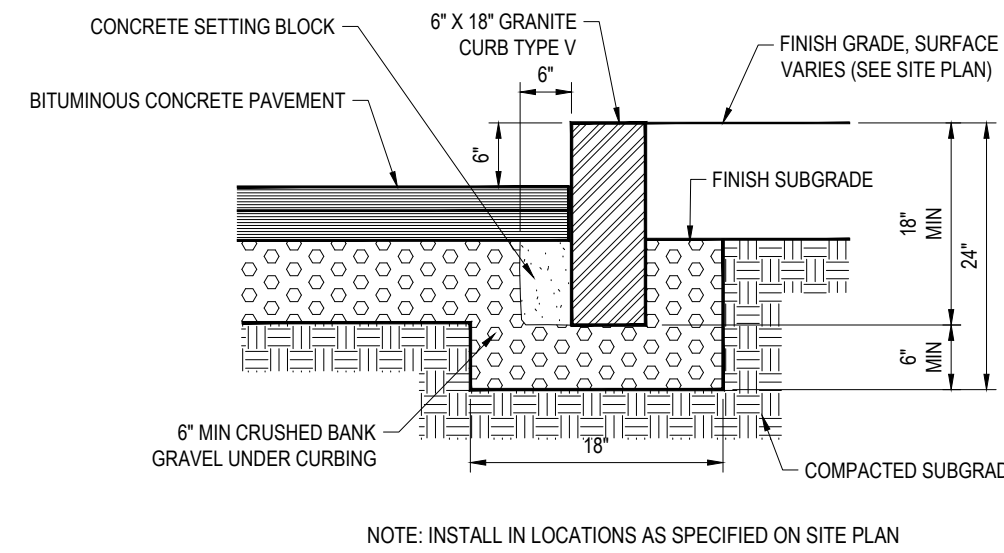
**WOOD GUIDE RAIL DETAIL**

NTS



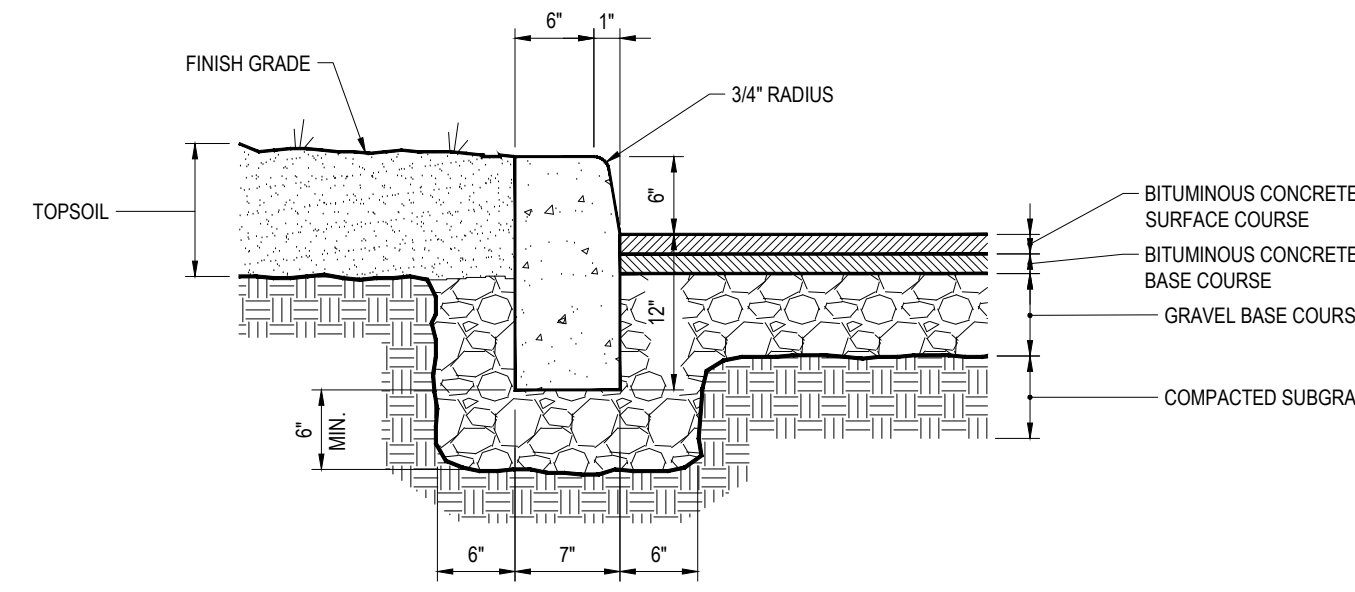
**"STOP" BAR DETAIL**

NTS



**VERTICAL GRANITE CURB**

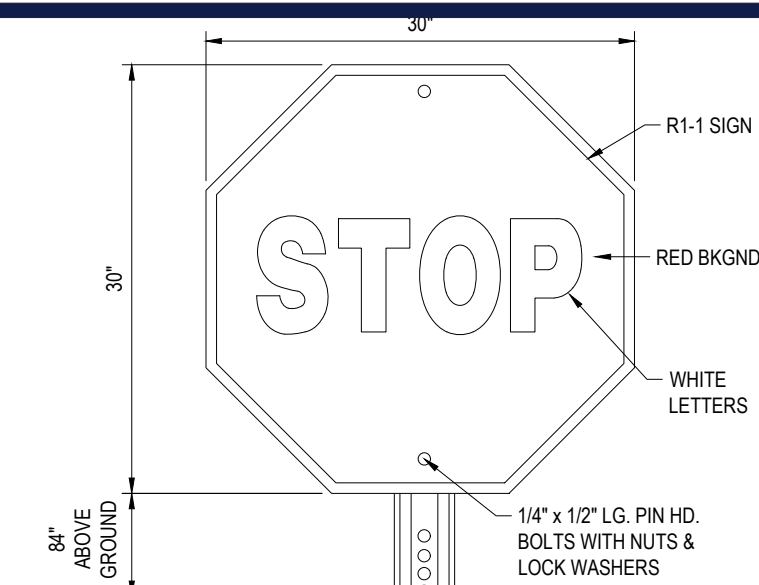
NTS



- NOTE:
1. CURB SHALL CONSIST OF 4,000 PSI AIR ENTRAINED CONCRETE. EXPOSED EDGES TO HAVE RUBBED FINISH AND SURFACE SHALL BE TREATED WITH A CONCRETE PENETRANT/SEALER.
  2. THE ENDS OF CURB SECTIONS SHALL BE CHAMFERED 1/4 INCH.
  3. THE CORNERS OF CURB SECTIONS SHALL MATCH THE ADJACENT CURB IN SIZE, COLOR AND FINISH.
  4. CURBS, CURB CORNERS OR EDGING SHALL BE FITTED TOGETHER AS CLOSELY AS POSSIBLE.
  5. EXPANSION JOINTS SHALL BE INSTALLED AT A MAXIMUM OF TWENTY FEET (20') ON CENTER USING PREFORMED EXPANSION JOINT FILLER HAVING A THICKNESS OF 1/2 INCH.

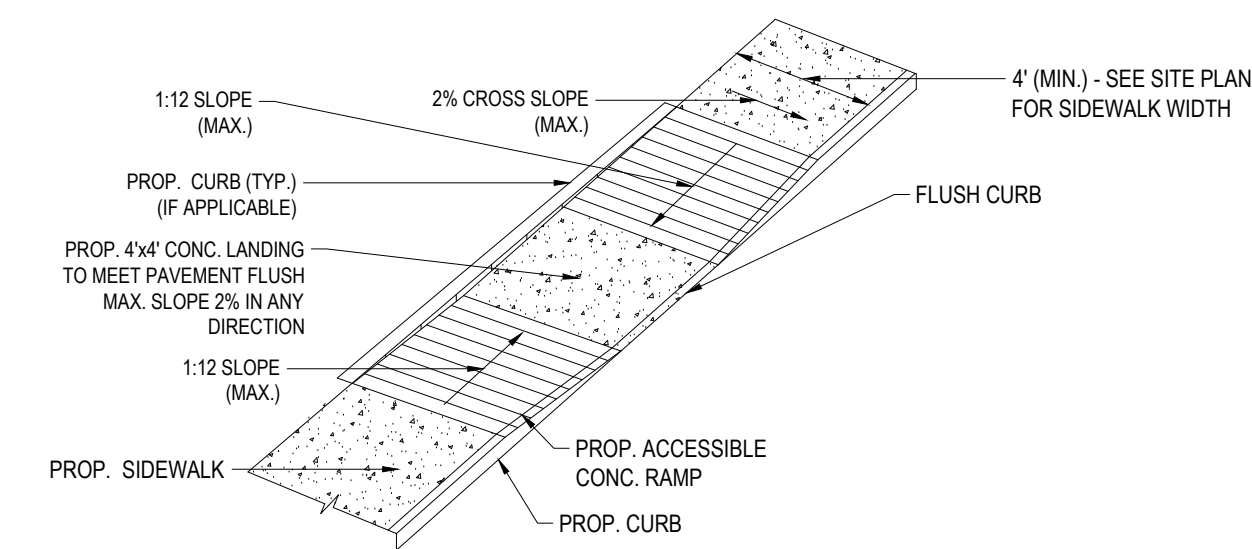
**PRECAST CONCRETE CURB**

NTS



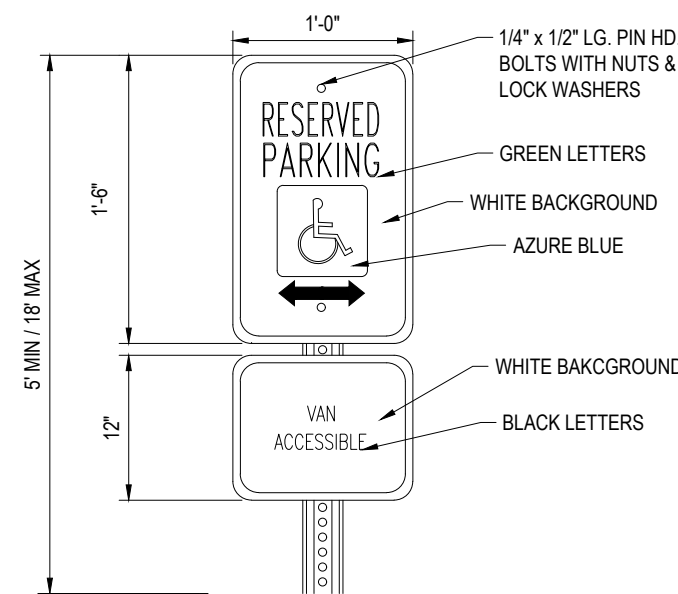
**STOP SIGN**

NTS



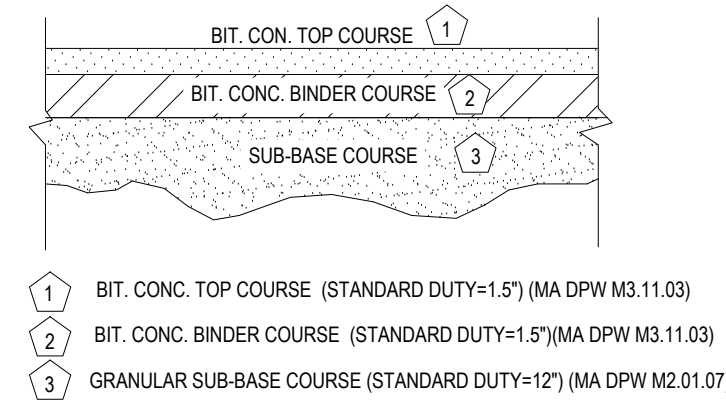
**ACCESSIBLE RAMP**

NTS



**ACCESSIBLE SIGN**

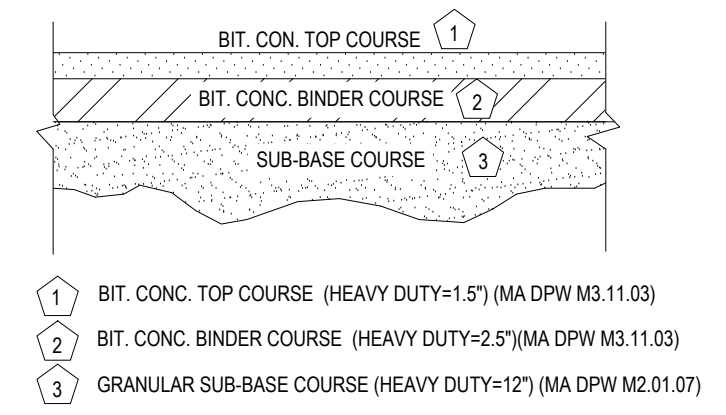
NTS



- NOTE:
1. PAVEMENT BASE AND SUBBASE COURSES TO CONFORM TO STATE DEPARTMENT OF TRANSPORTATION
  2. GC TO REFER TO GEOTECHNICAL REPORT FOR PAVEMENT SPECIFICATIONS.

**STANDARD DUTY PAVEMENT SECTION**

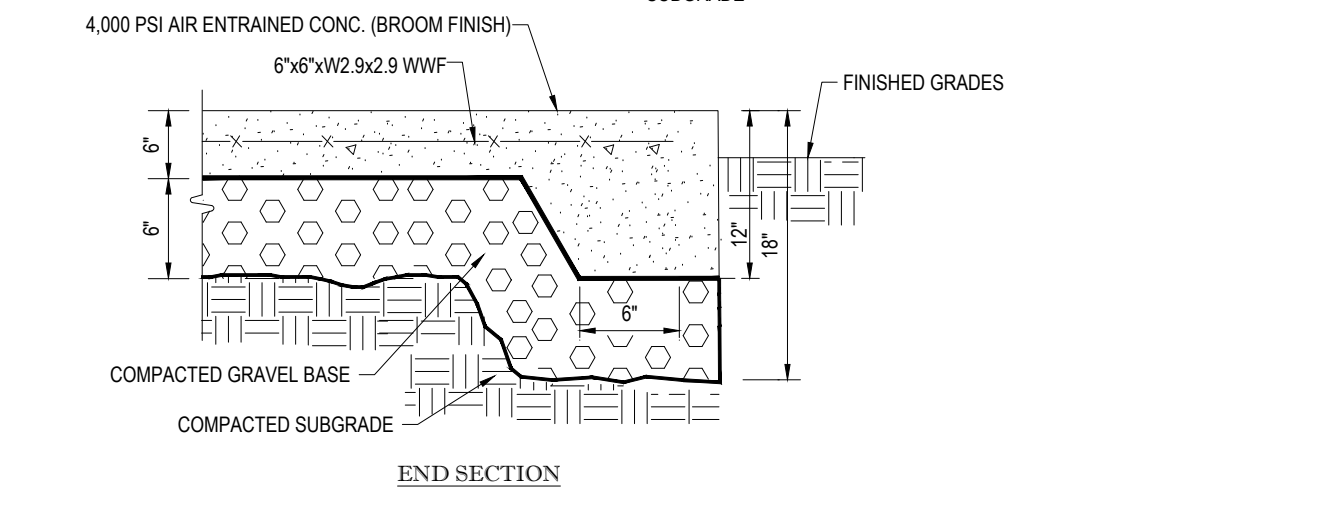
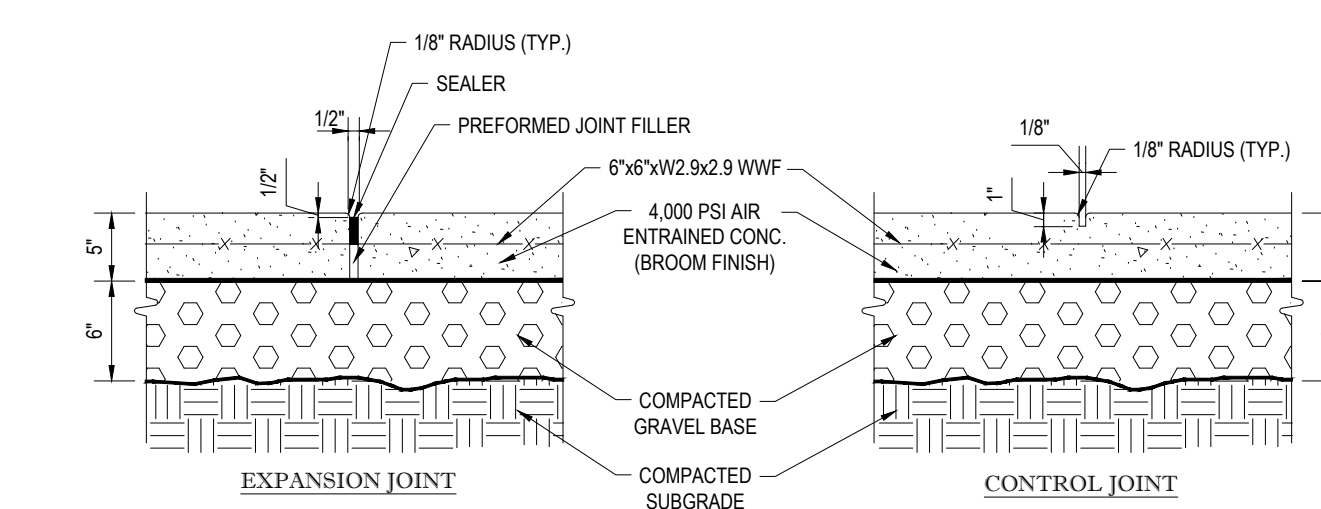
NTS



- NOTE:
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  2. GC TO REFER TO GEOTECHNICAL REPORT FOR PAVEMENT SPECIFICATIONS.

**HEAVY DUTY PAVEMENT SECTION**

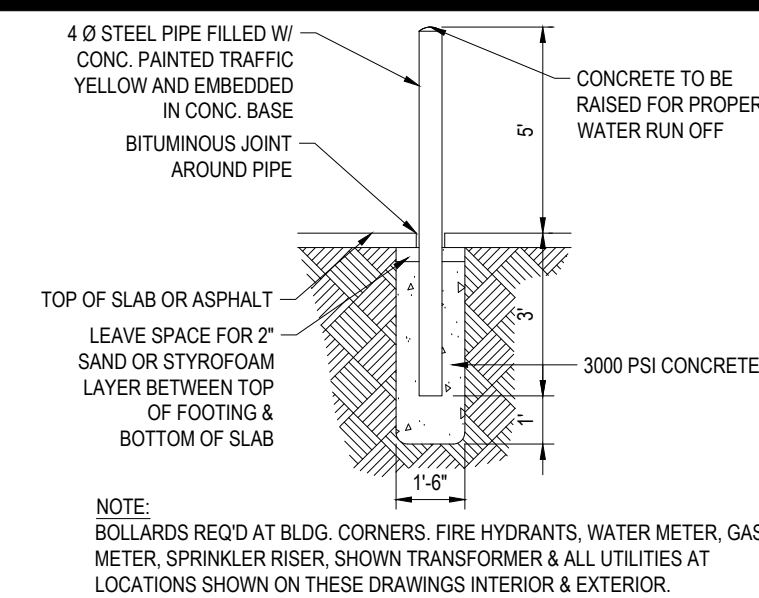
NTS



- NOTES: TO BE USED FOR BUILDING SURROUND AND OTHER CONCRETE WALKS. USE CHAIRS TO SUPPORT REINFORCING STEEL DURING POUR. VARIES SEE PLAN.
1. SEE SITE PLAN FOR WIDTH AND GRADES
  2. PROVIDE MINIMUM 1/8\"/>
  - 3. PROVIDE CONTROL JOINTS 5'-0\"/>
  - 4. PROVIDE EXPANSION JOINTS 20'-0\"/>

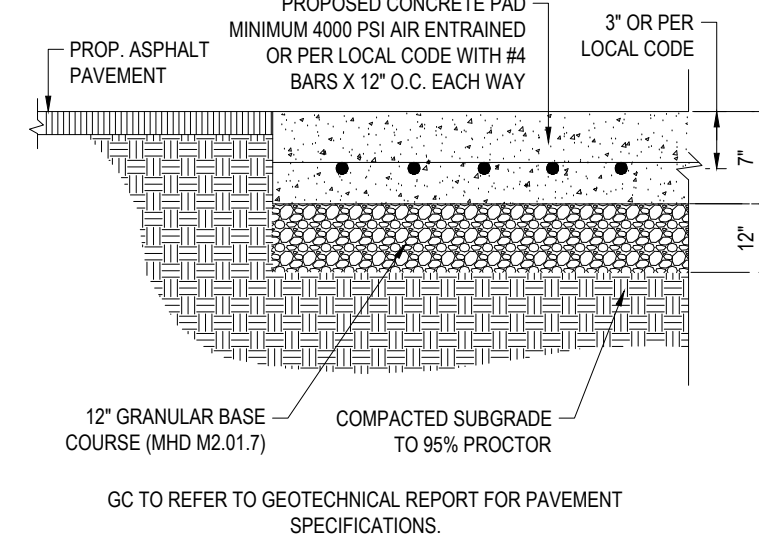
**TYPICAL MONOLITHIC CONCRETE SIDEWALK**

NTS



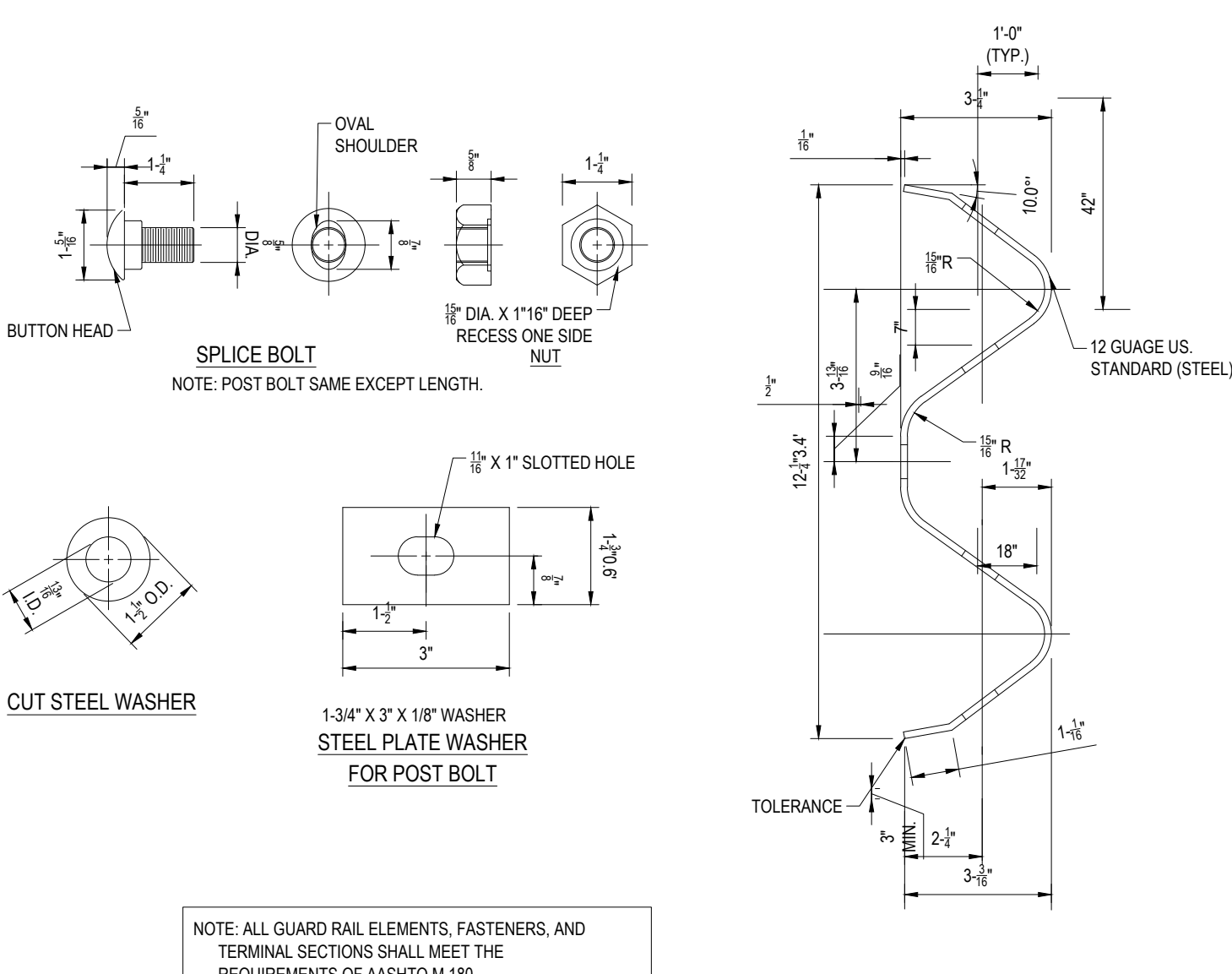
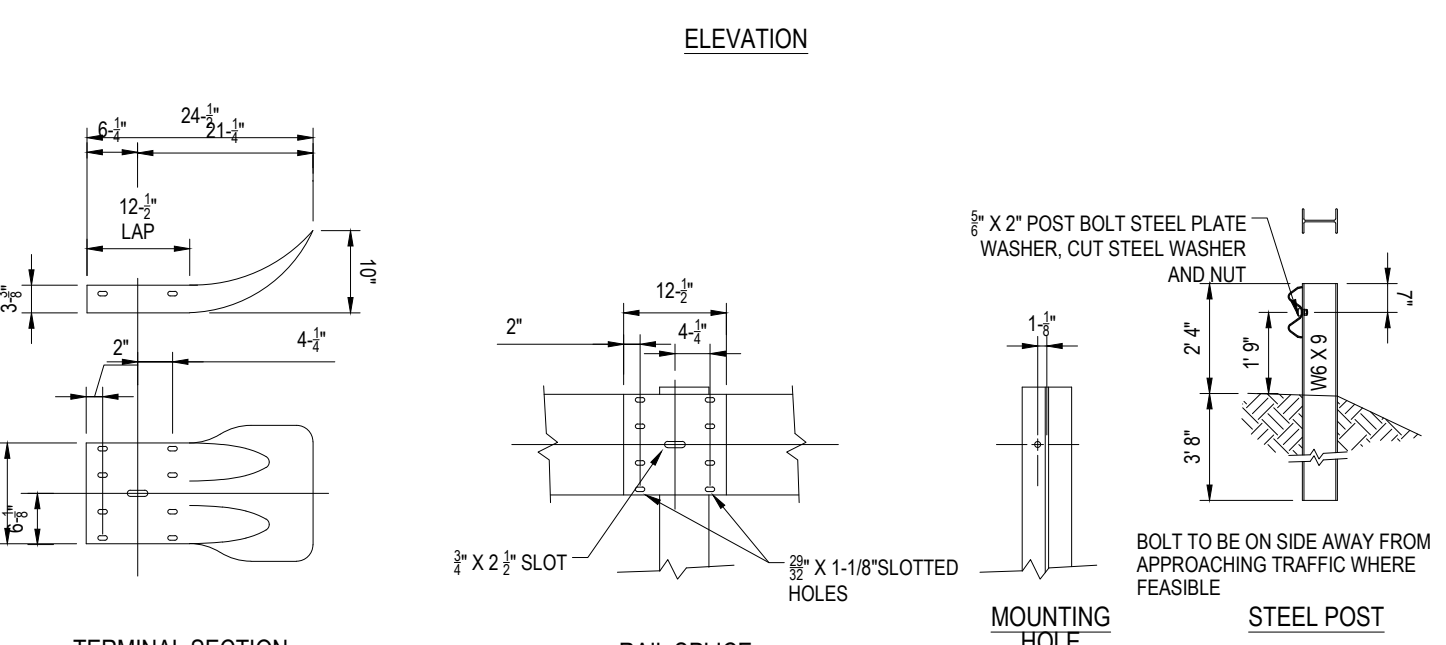
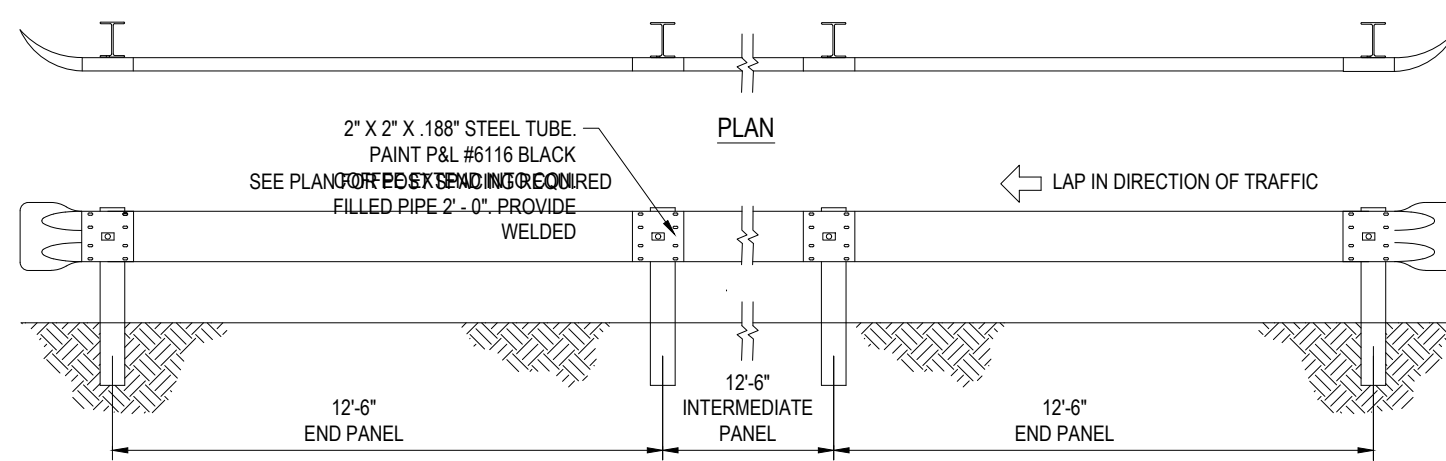
**BOLLARD**

NTS



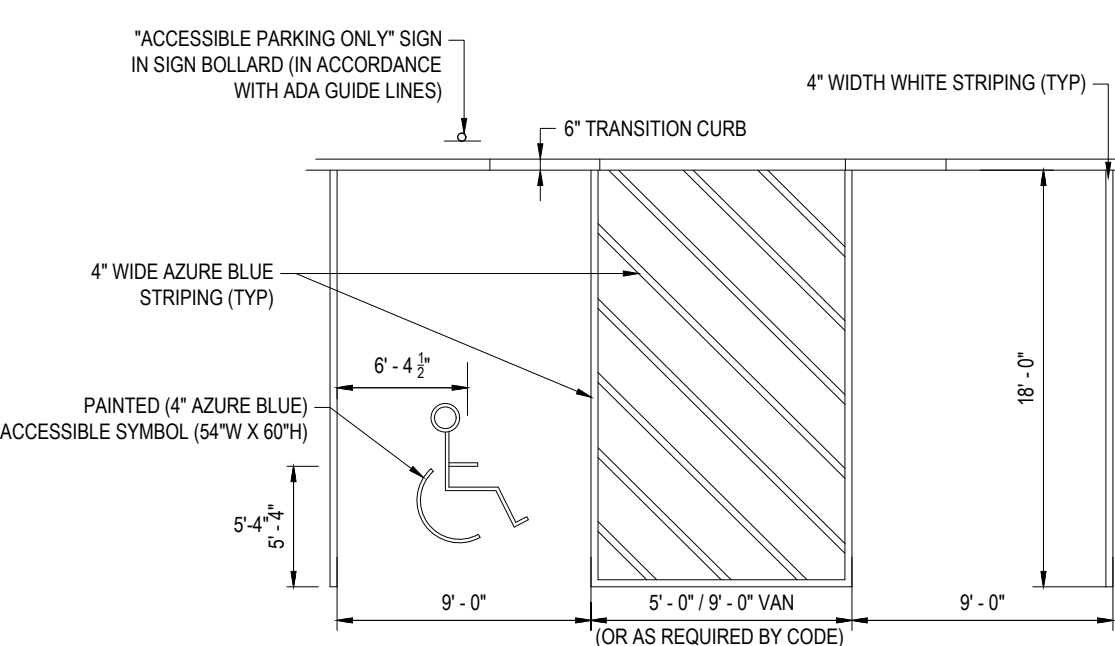
**CONCRETE PAD DETAIL**

NTS



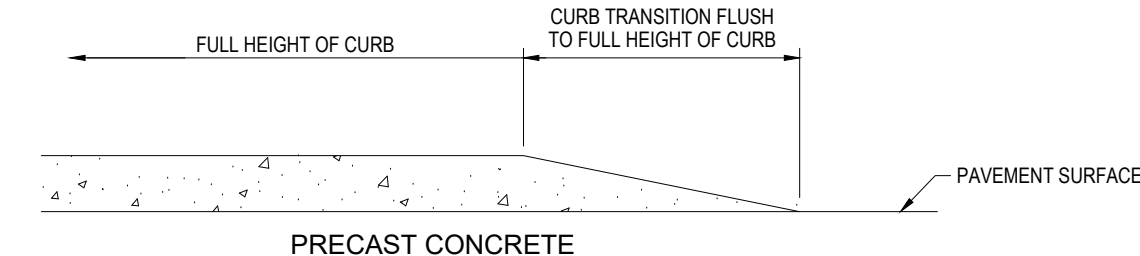
**METAL GUIDERAIL**

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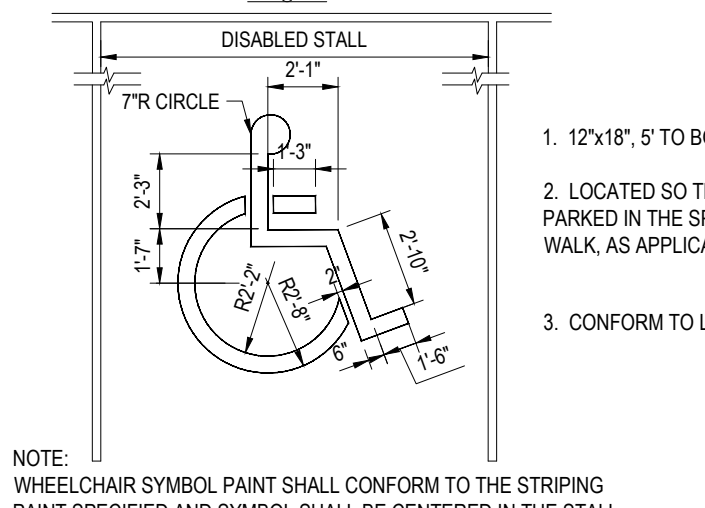
**ACCESSIBLE STALL MARKINGS & PARKING LOT STRIPING DETAIL**

NTS



**TRANSITION CURB**

NTS



**ACCESSIBLE PARKING SPACE PAINTING DETAIL**

NTS

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**REVISIONS**

REV	DATE	COMMENT	DRAWN BY	CHECKED BY

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**PRELIMINARY**

PROJECT No.: W211007  
 DRAWN BY: CF/IMA  
 CHECKED BY: NEM/JAK  
 DATE: 06/08/2021  
 CAD LD.: W211007-DTL-0

**PROPOSED SITE PLAN DOCUMENTS**

FOR  
**LINCOLN PROPERTY COMPANY**

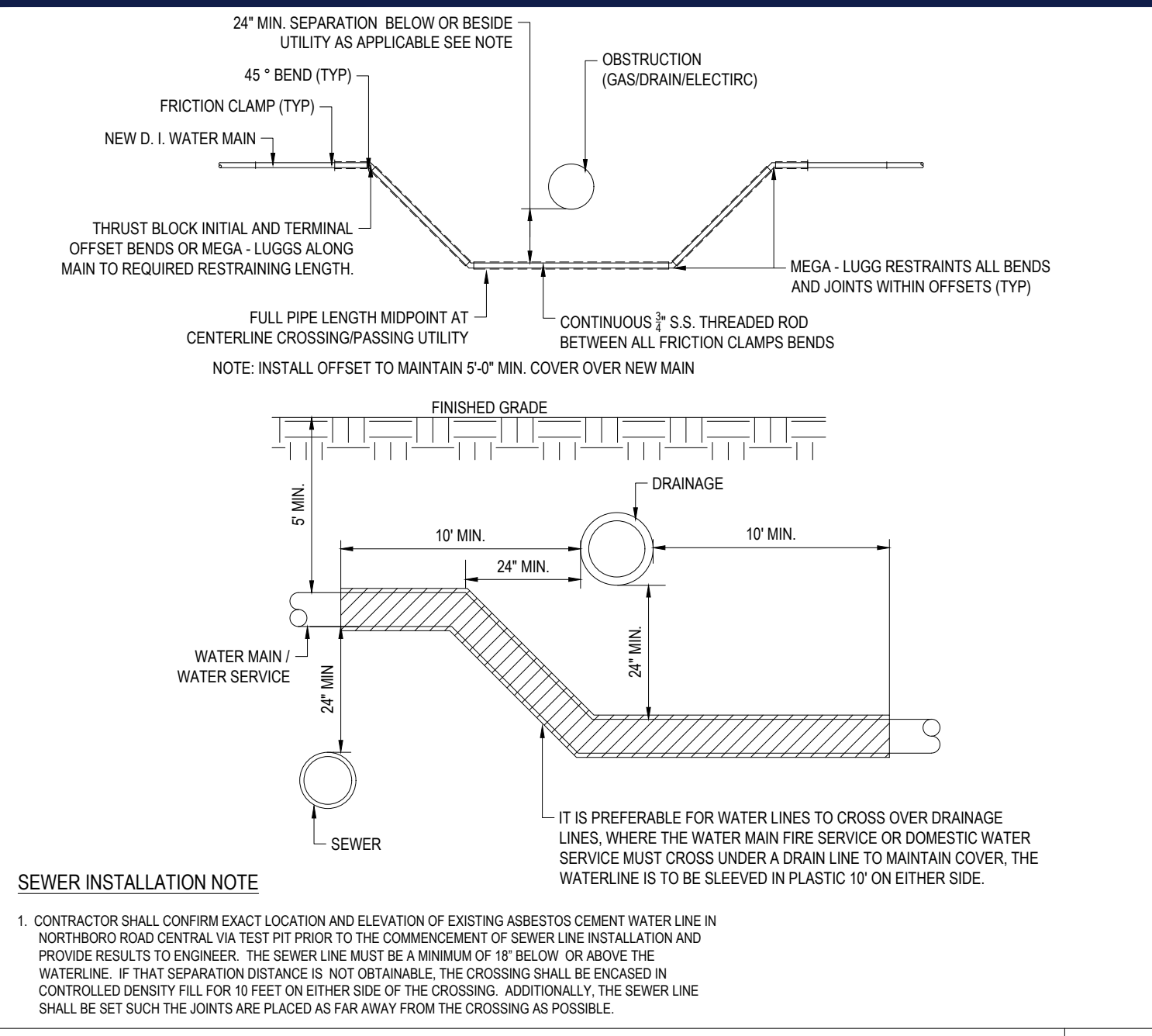
PROPOSED INDUSTRIAL BUILDING  
 MAP #88, LOTS #29 & #36  
 1000 NICKERSON ROAD  
 CITY OF MARLBOROUGH  
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 MASSACHUSETTS

**BOHLER**  
 352 TURNPIKE ROAD  
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Professional Engineer Seal for John A. Kucurak, No. 41530, State of Massachusetts.

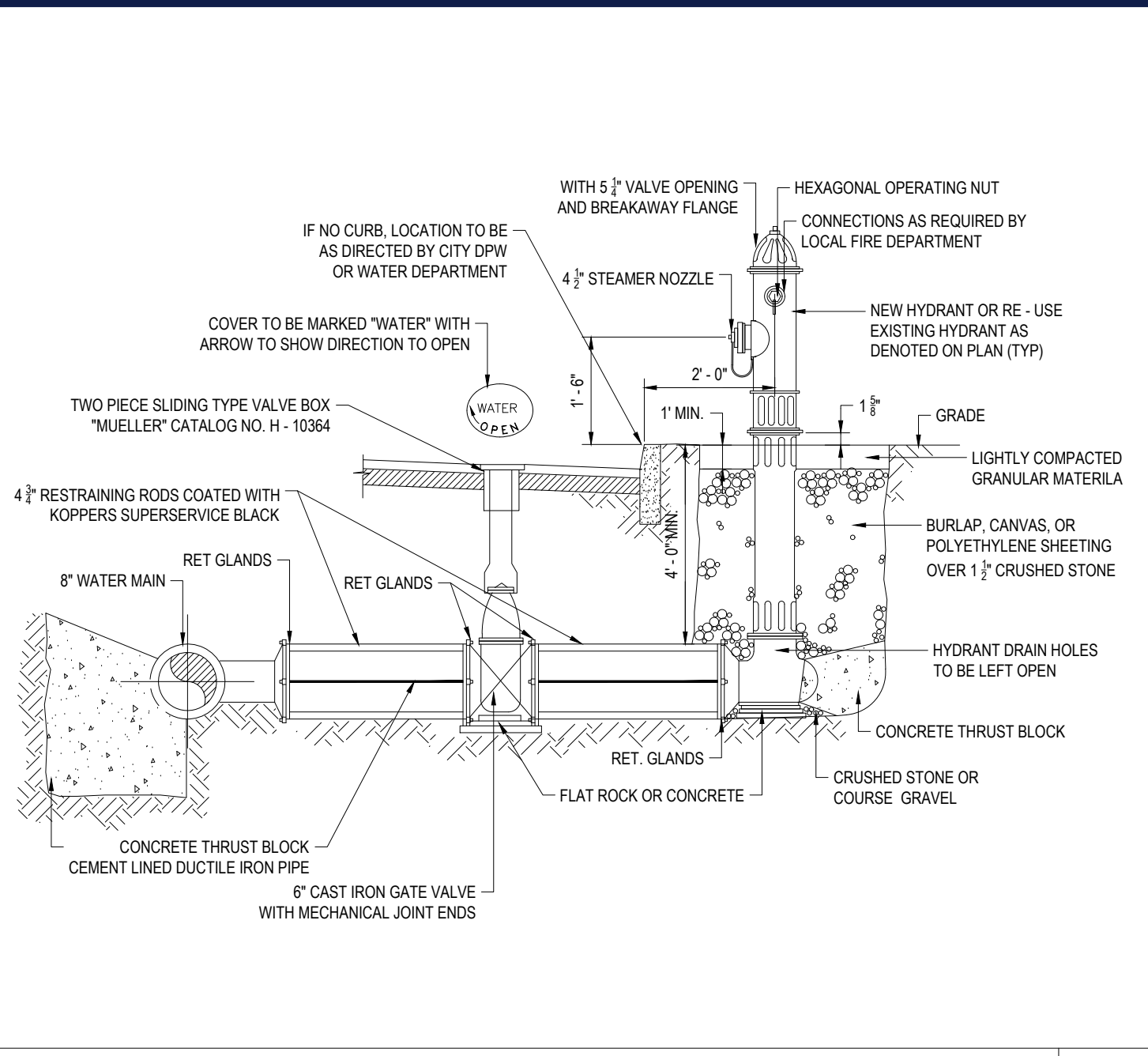
SHEET TITLE:  
**DETAIL SHEET**  
 SHEET NUMBER:  
**C-901**  
 ORG. DATE - 06/08/2021

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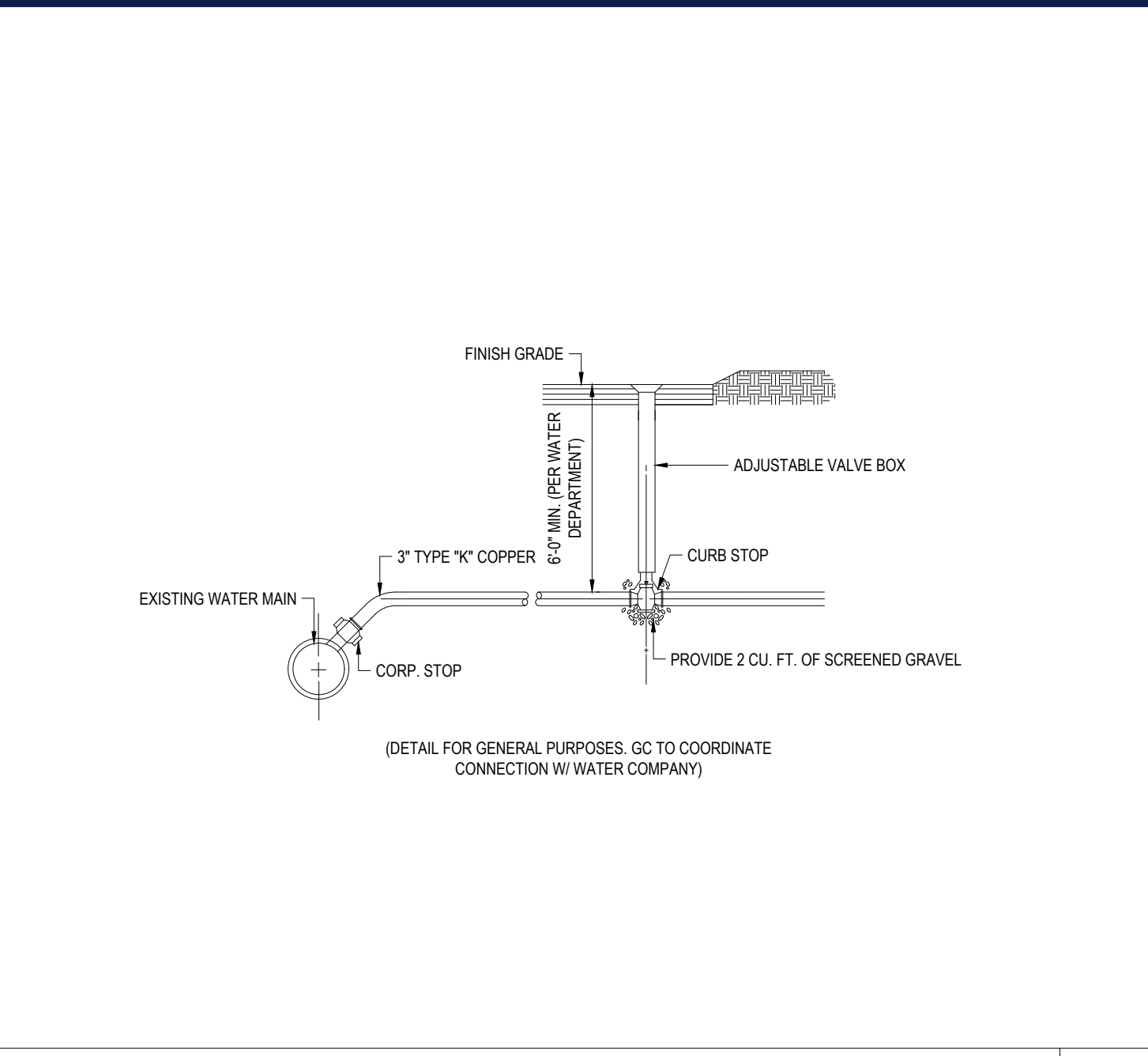
**WATER/SEWER CROSSING**

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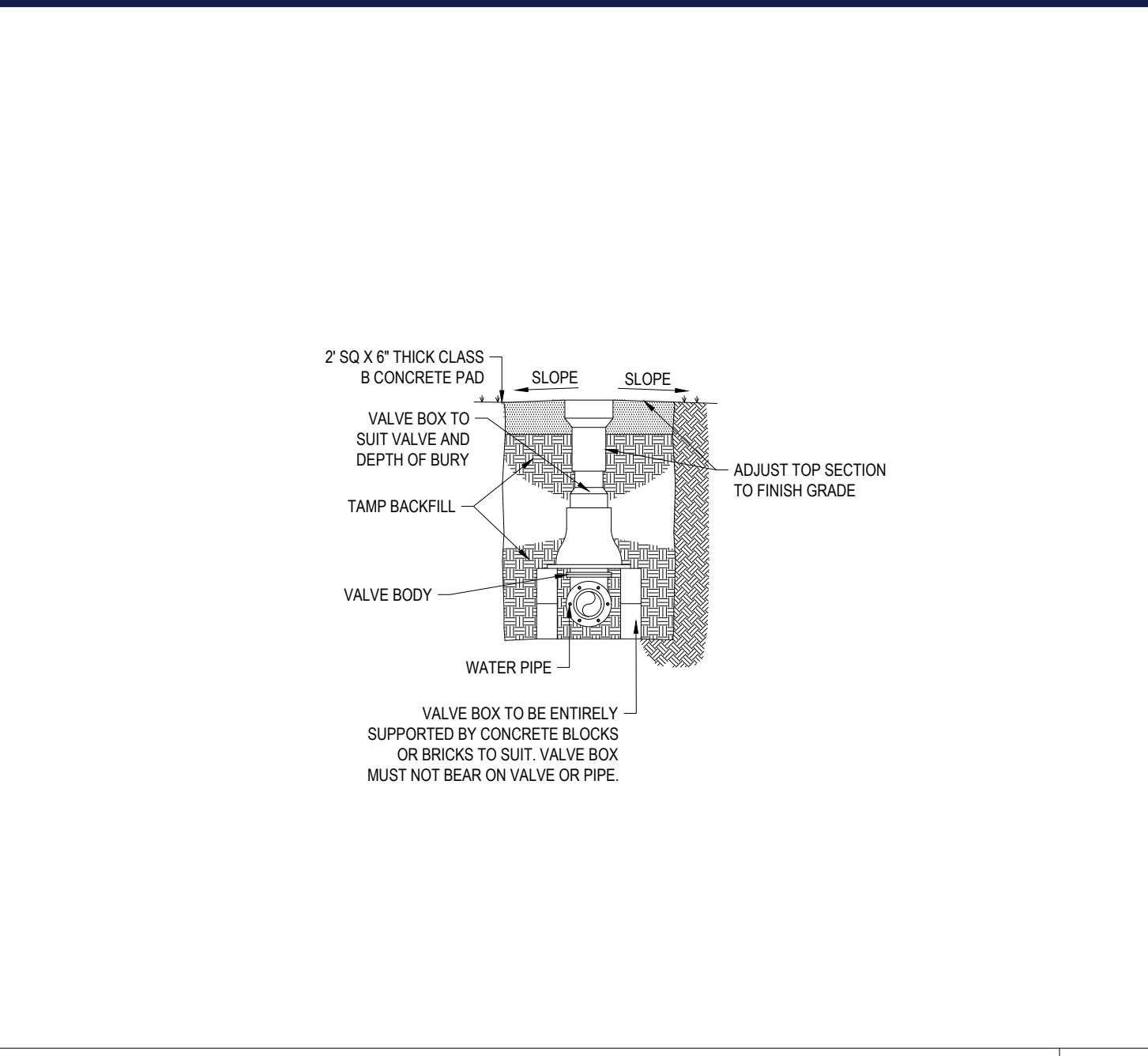
**HYDRANT & VALVE INSTALLATION**

NTS



**WATER/SERVICE CONSTRUCTION**

NTS

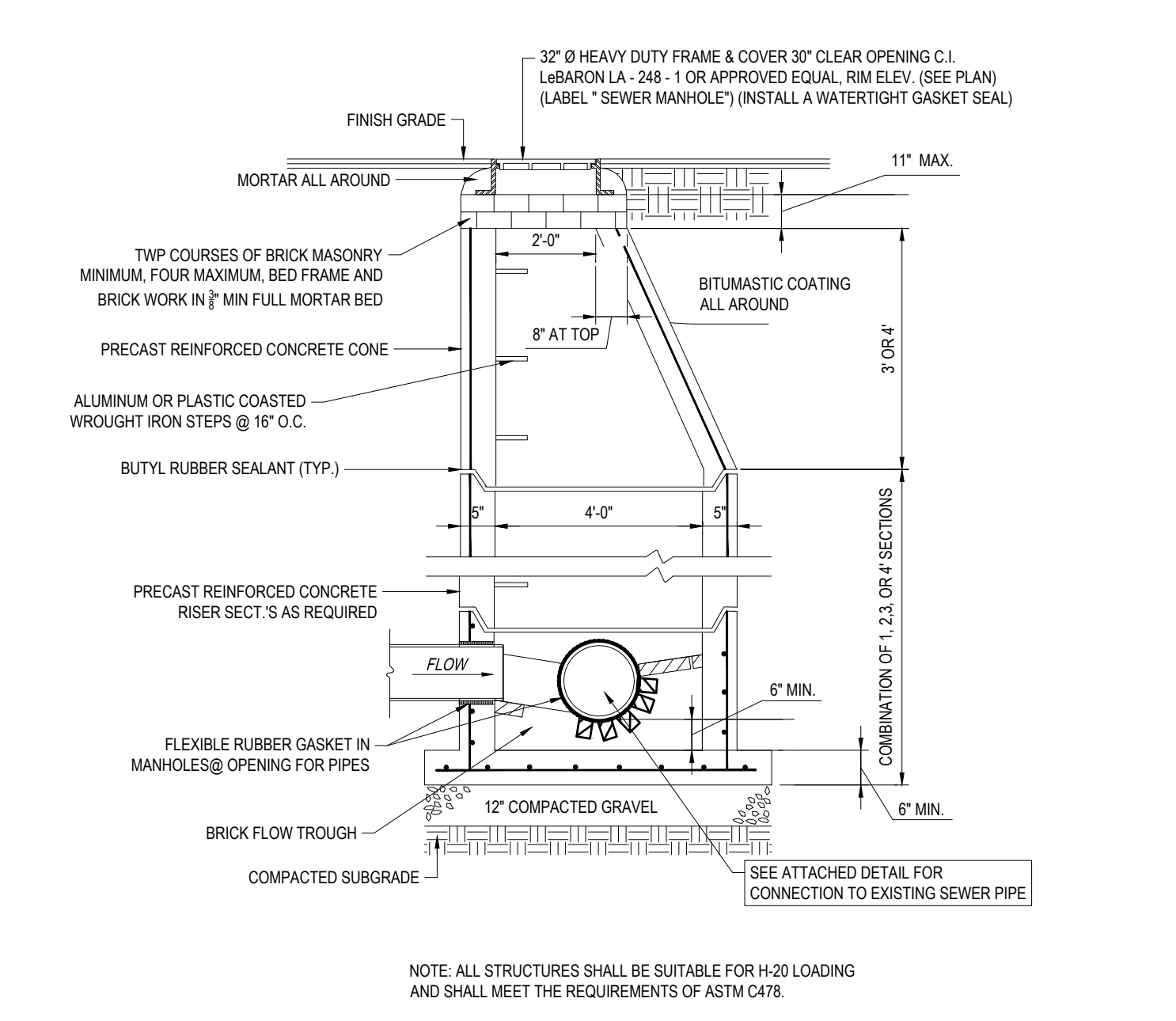


**GATE VALVE**

NTS

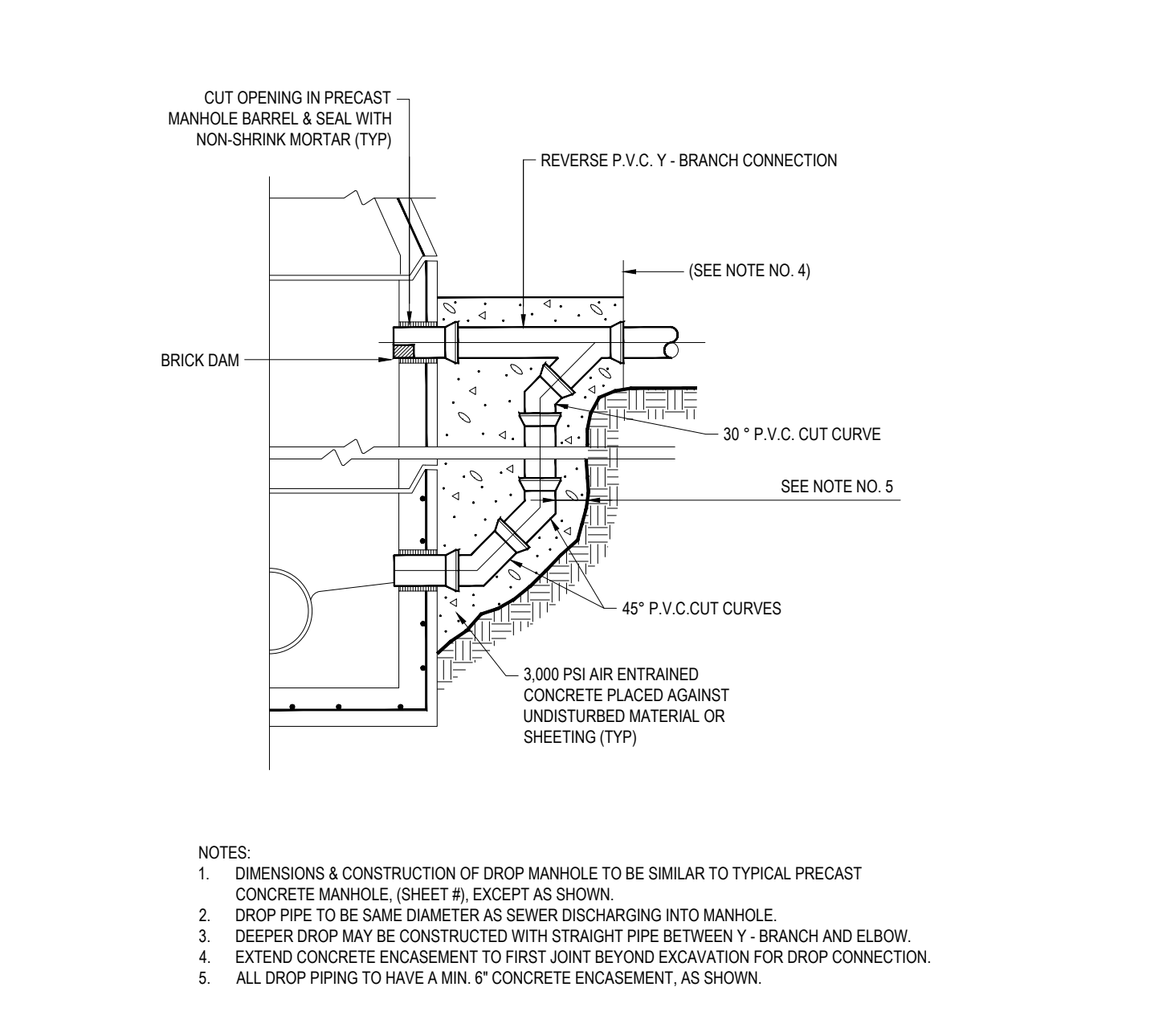
**REVISIONS**

REV	DATE	COMMENT	DRAWN BY



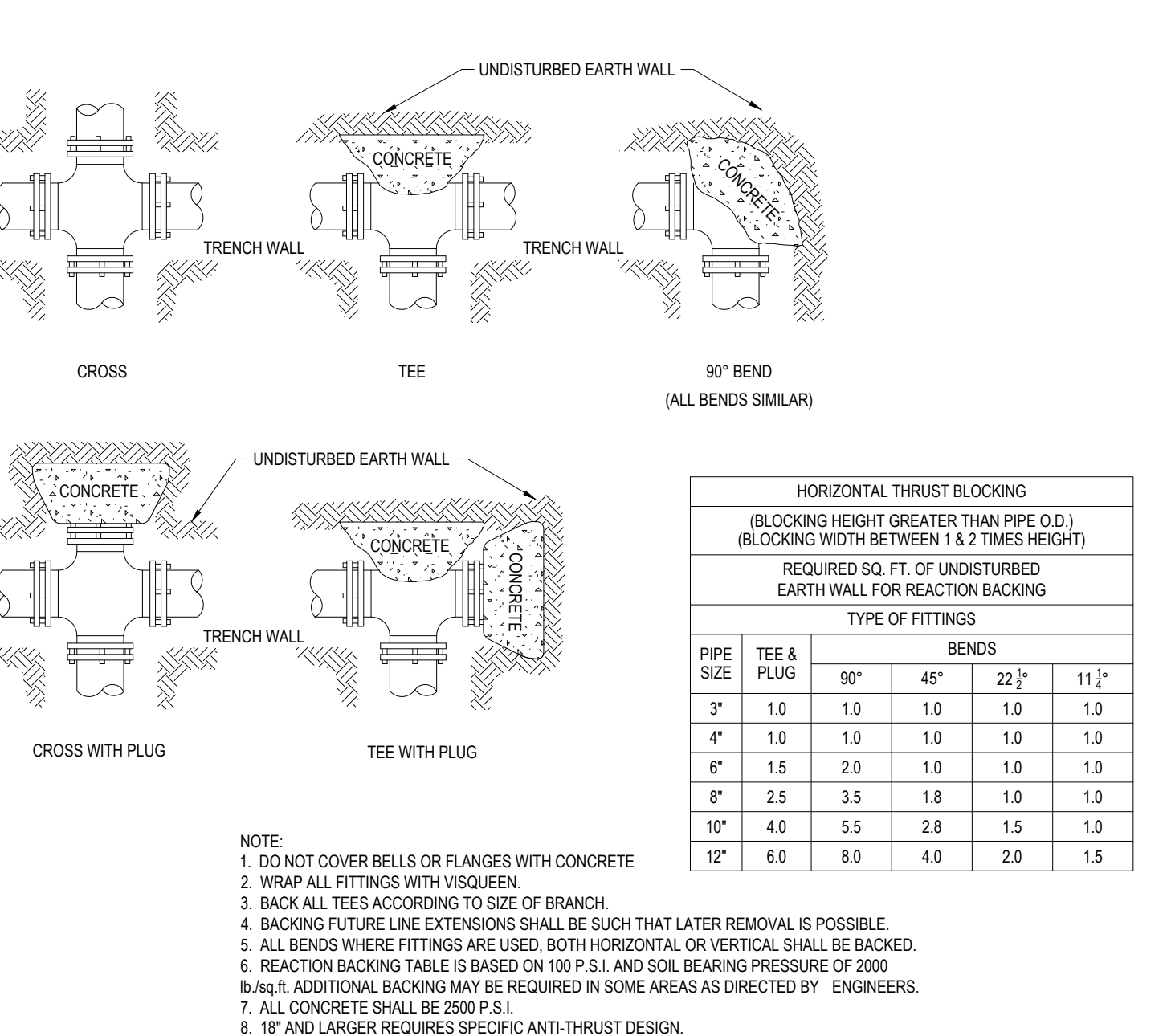
**TYP. PRECAST CONCRETE SANITARY MANHOLE**

NTS



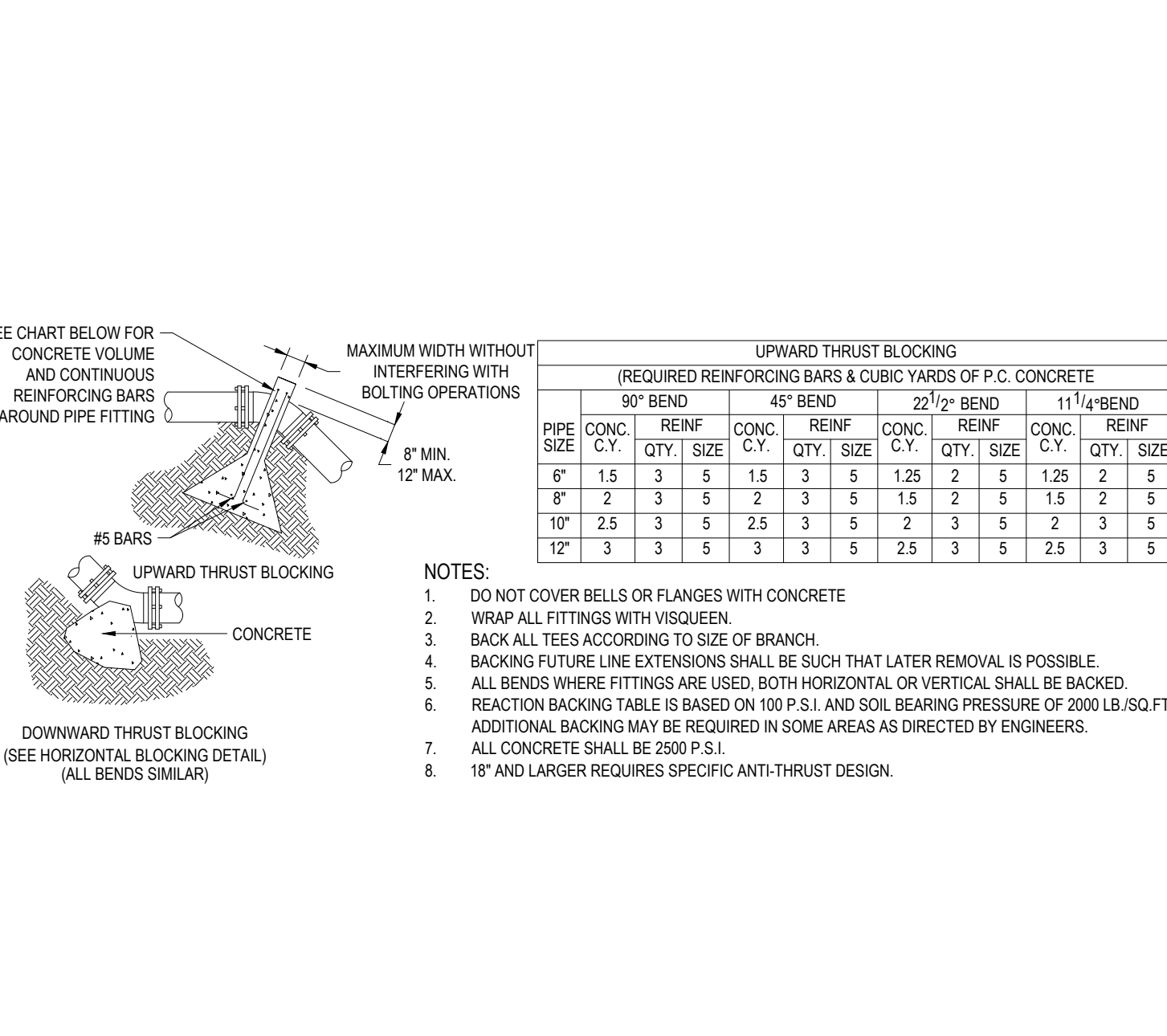
**SEWER DROP INLET**

NTS



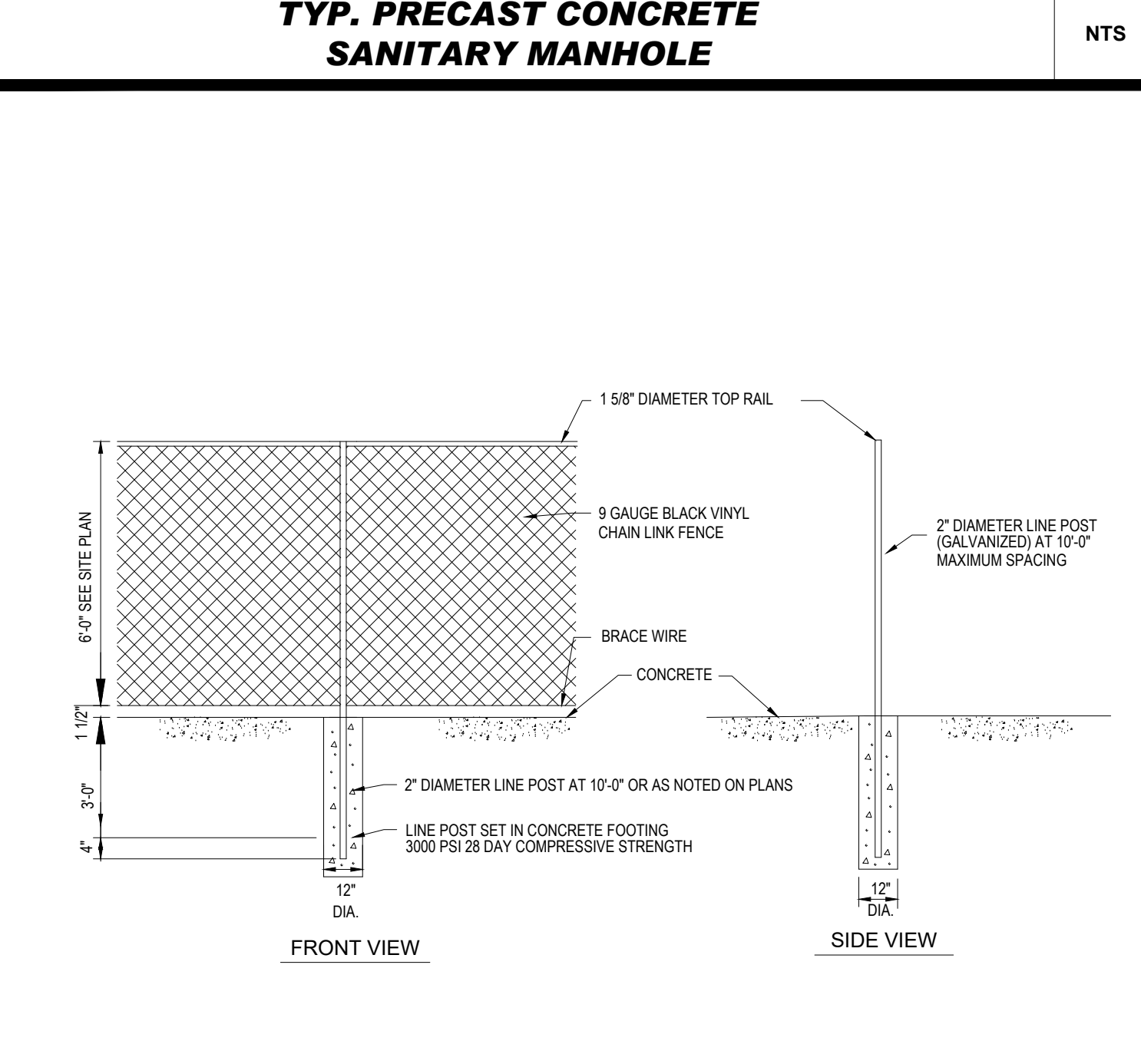
**HORIZONTAL THRUST BLOCKING**

NTS



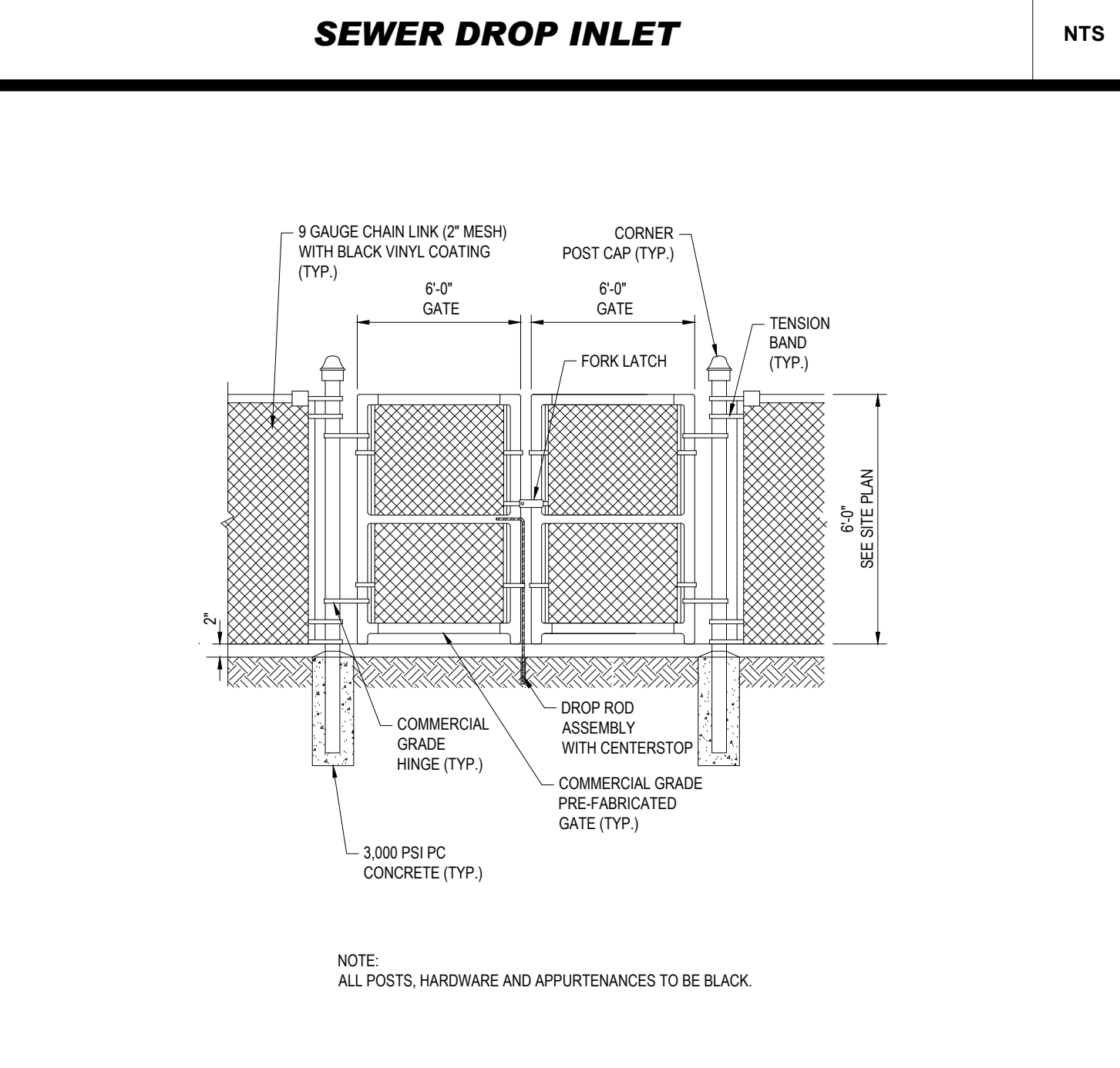
**VERTICAL THRUST BLOCKING**

NTS



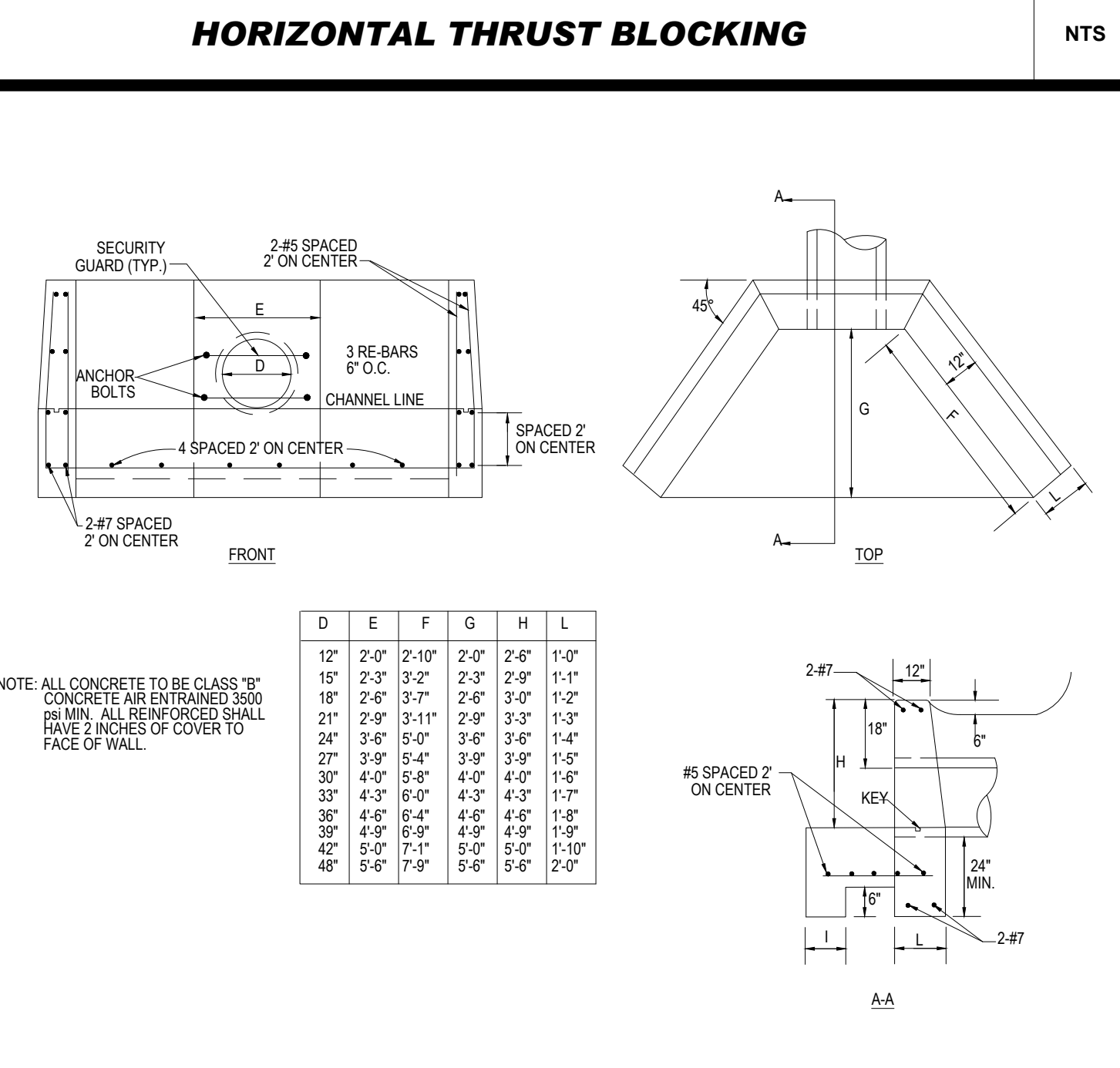
**BLACK VINYL CHAIN LINK FENCE DETAIL**

NTS



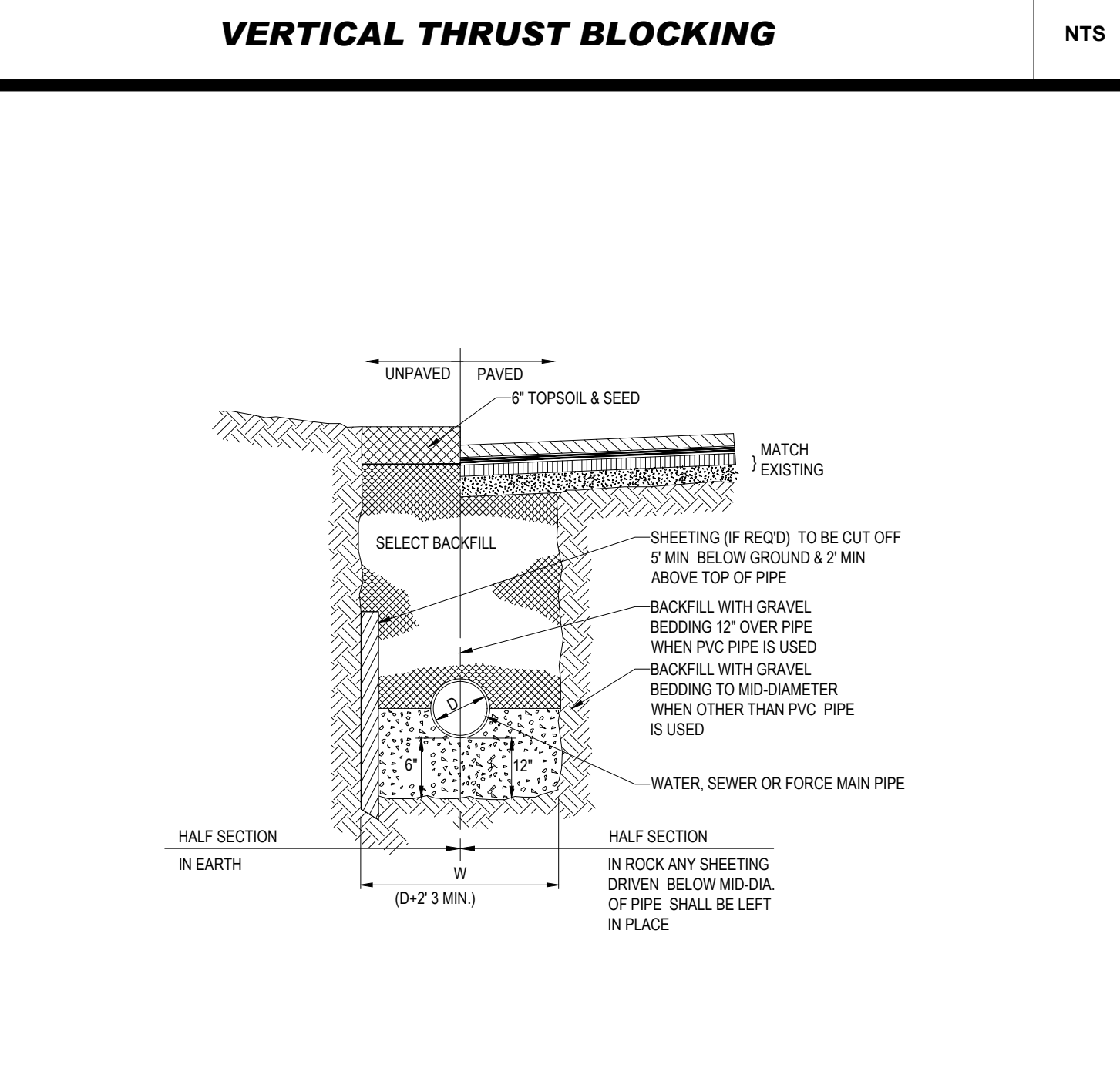
**BLACK VINYL CHAIN LINK FENCE WITH DOUBLE GATE**

NTS



**HEADWALL DETAIL**

NTS



**TYPICAL UTILITY TRENCH**

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**PROJECT No.:** W211007  
**DRAWN BY:** CF/DIMA  
**CHECKED BY:** NEM/JAK  
**DATE:** 06/08/2021  
**CAD ID.:** W211007-DTL-0

**PROPOSED SITE PLAN DOCUMENTS**

**FOR**

**LINCOLN PROPERTY COMPANY**

**PROPOSED INDUSTRIAL BUILDING**  
MAP #88, LOTS #29 & #36  
1000 NICKERSON ROAD  
CITY OF MARLBOROUGH  
MIDDLESEX COUNTY,  
MASSACHUSETTS

**BOHLER**

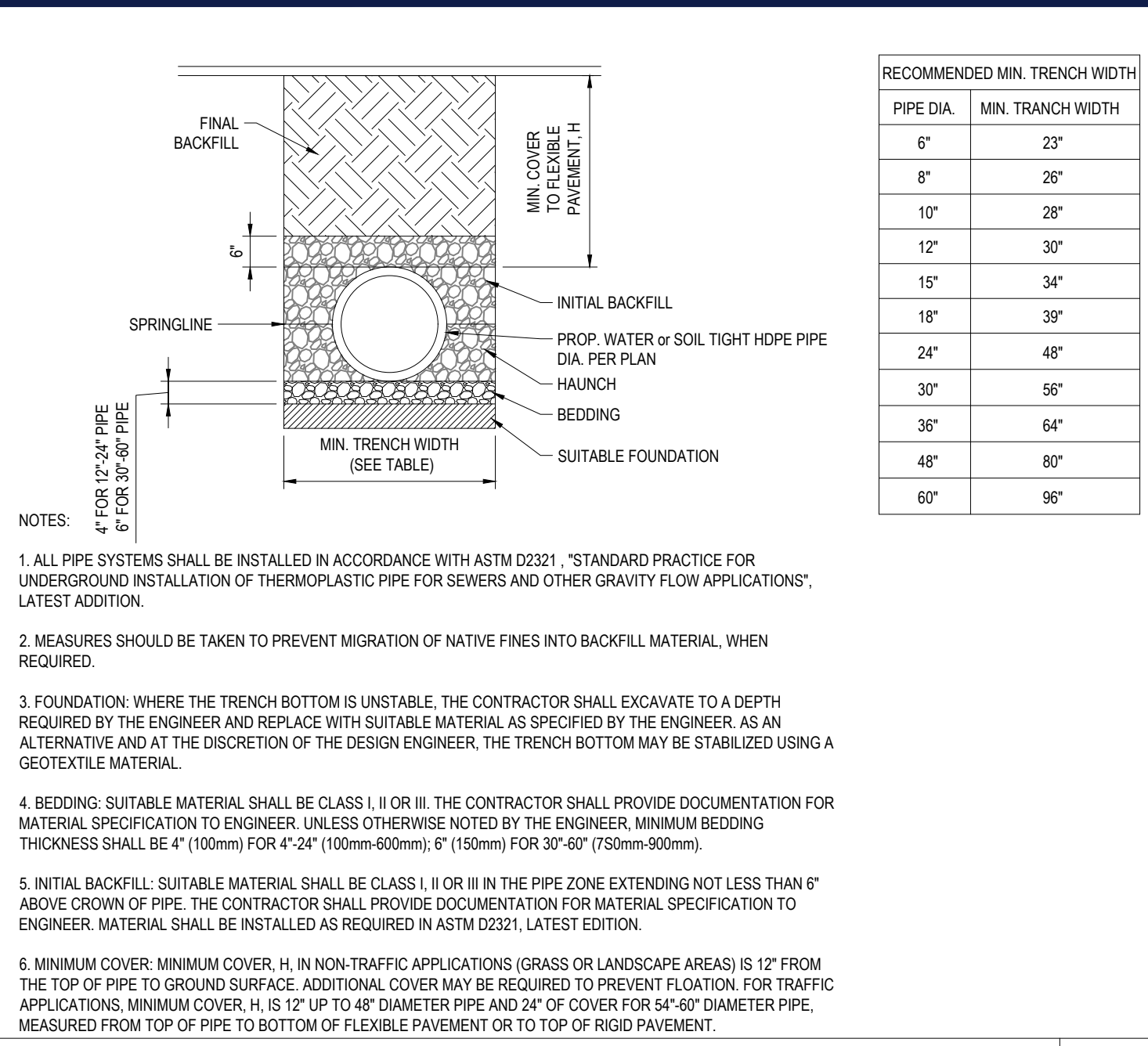
352 TURNPIKE ROAD  
SOUTHBOROUGH, MA 01772  
Phone: (508) 480-9900  
www.BohlerEngineering.com

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SITE CIVIL AND CONSULTING ENGINEERING  
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SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

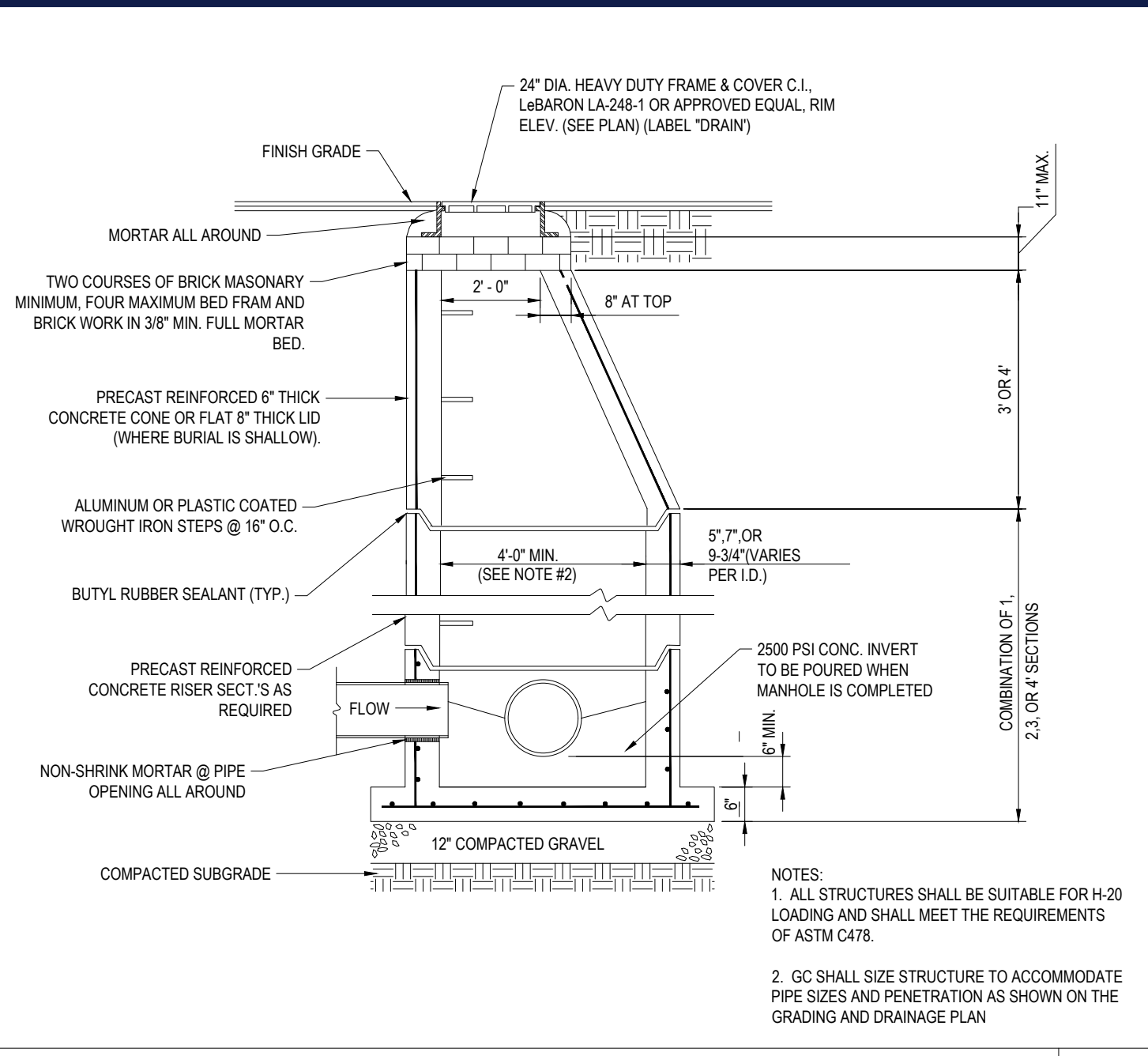
**DETAIL SHEET**

**SHEET NUMBER: C-902**

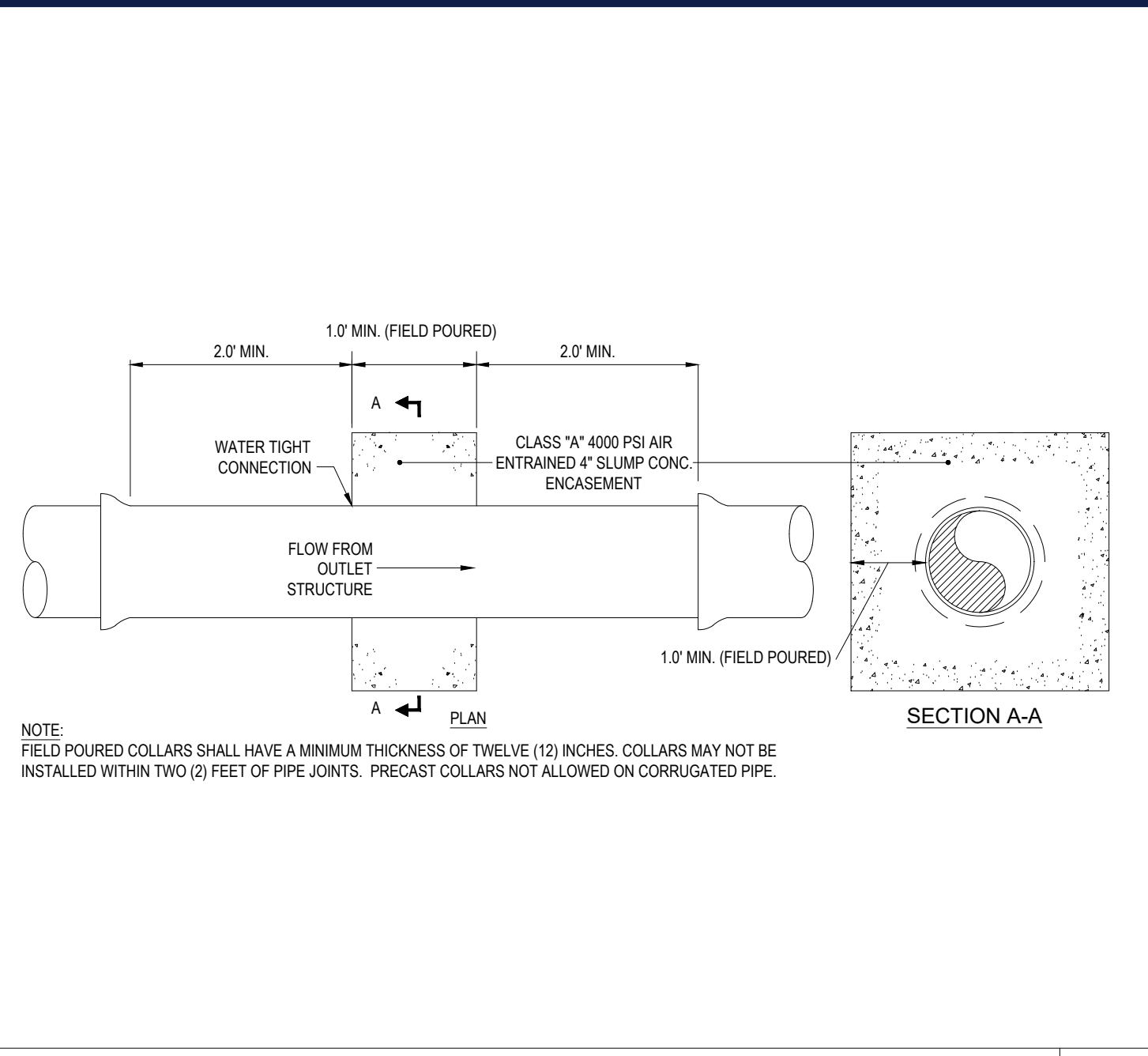
ORG. DATE - 06/08/2021



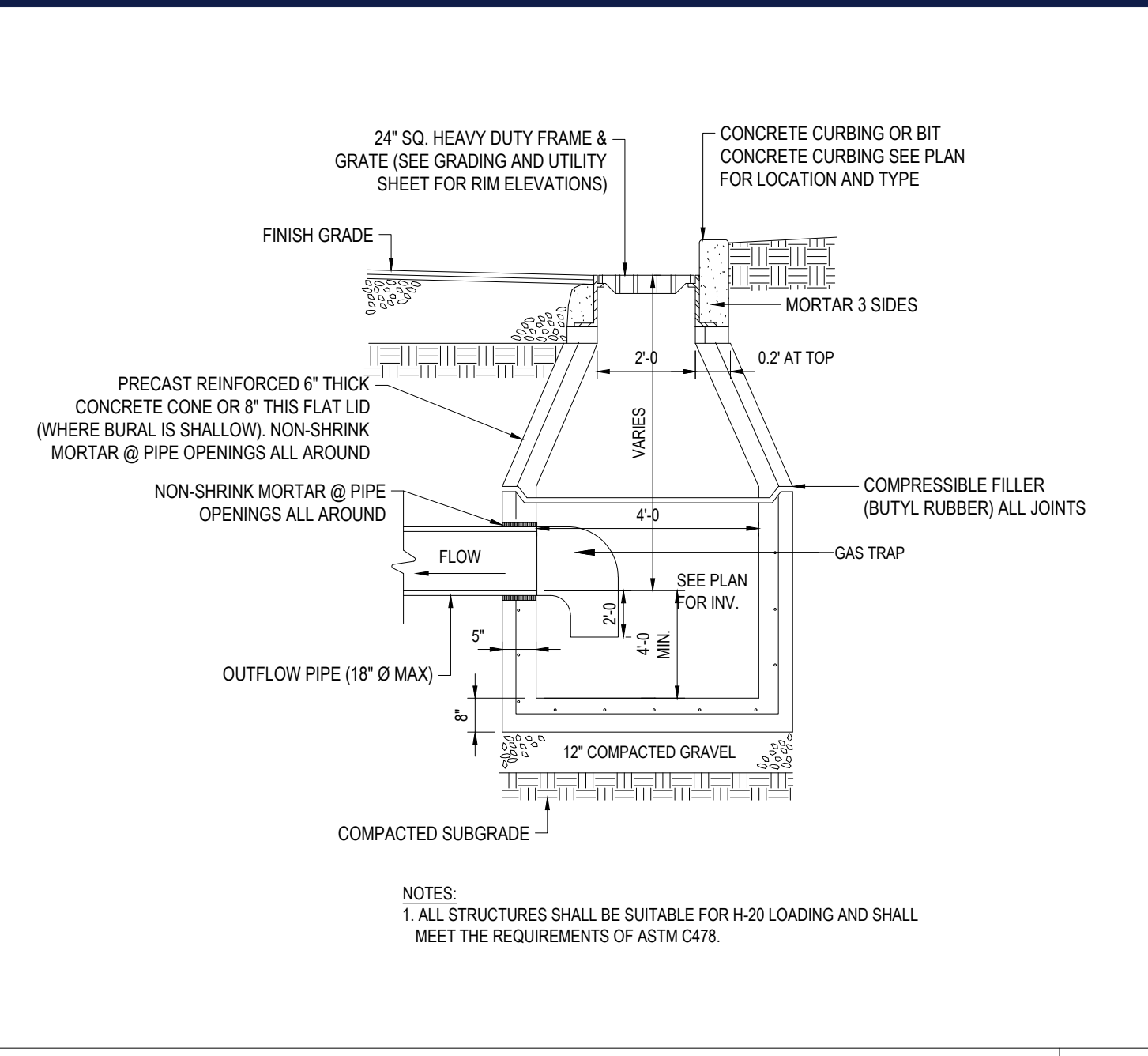
**HDPE STORM DRAINAGE TRENCH** NTS



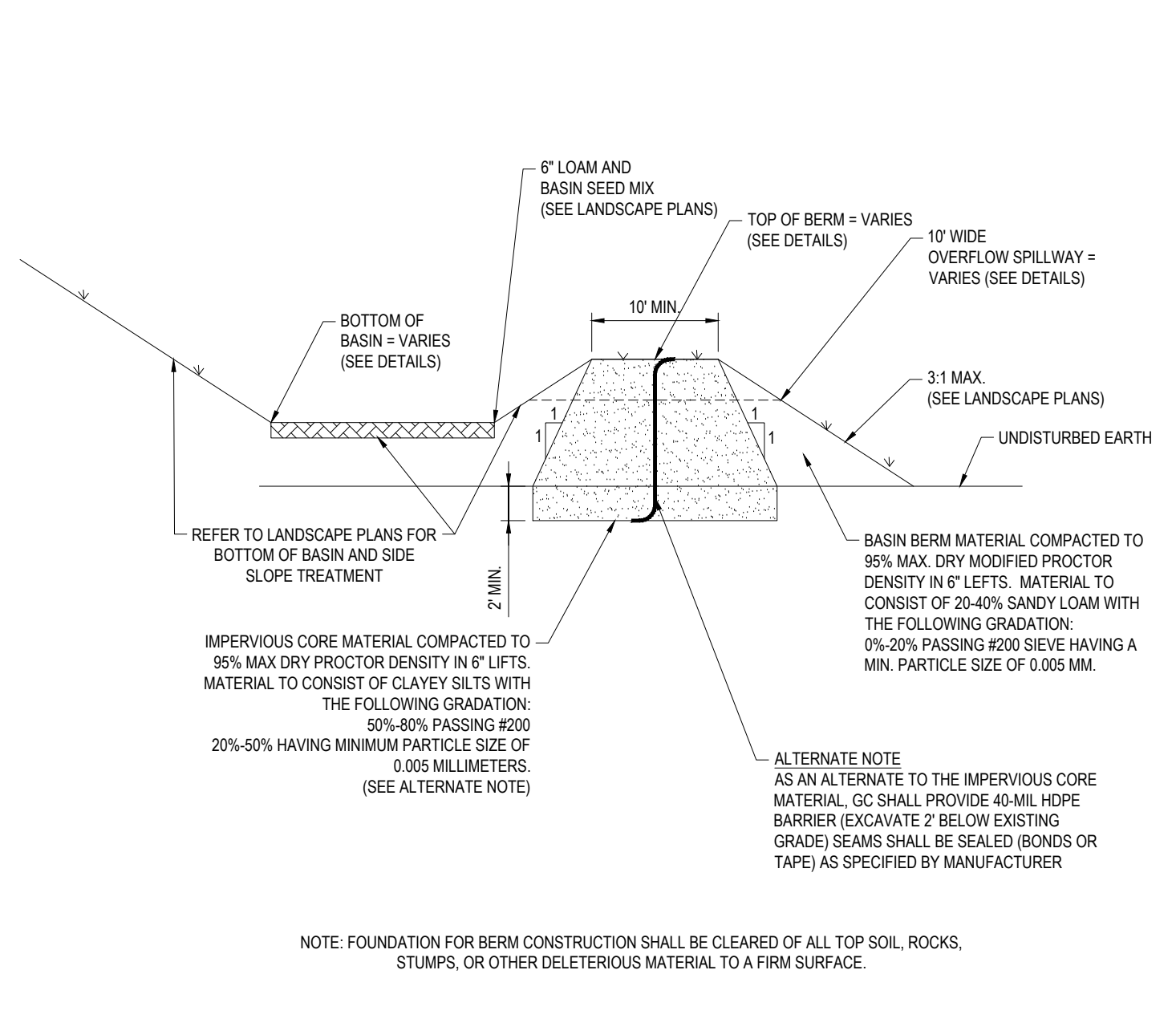
**PRECAST CONCRETE STORM DRAIN MANHOLE** NTS



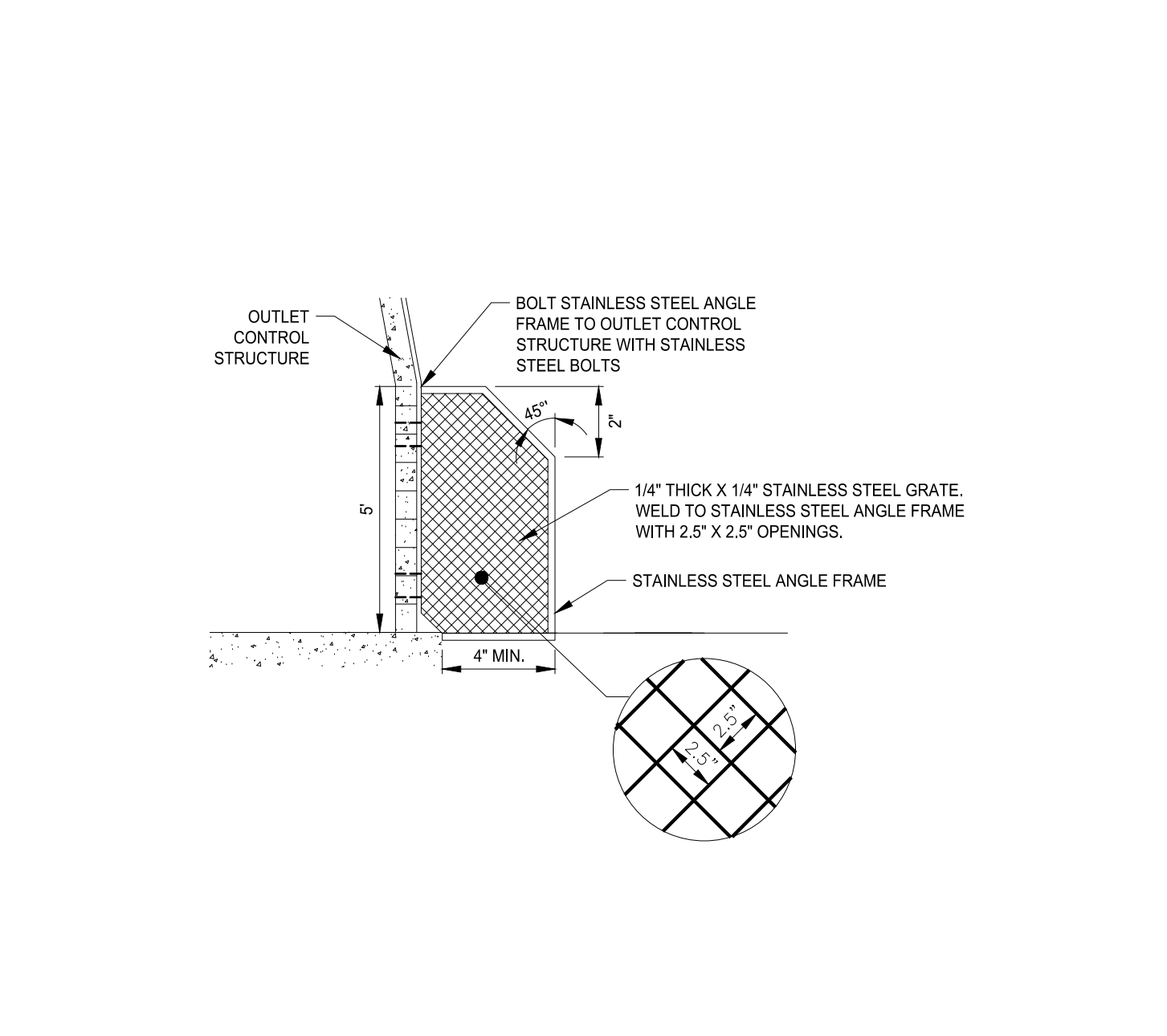
**ANTI-SEEP COLLAR DETAIL** NTS



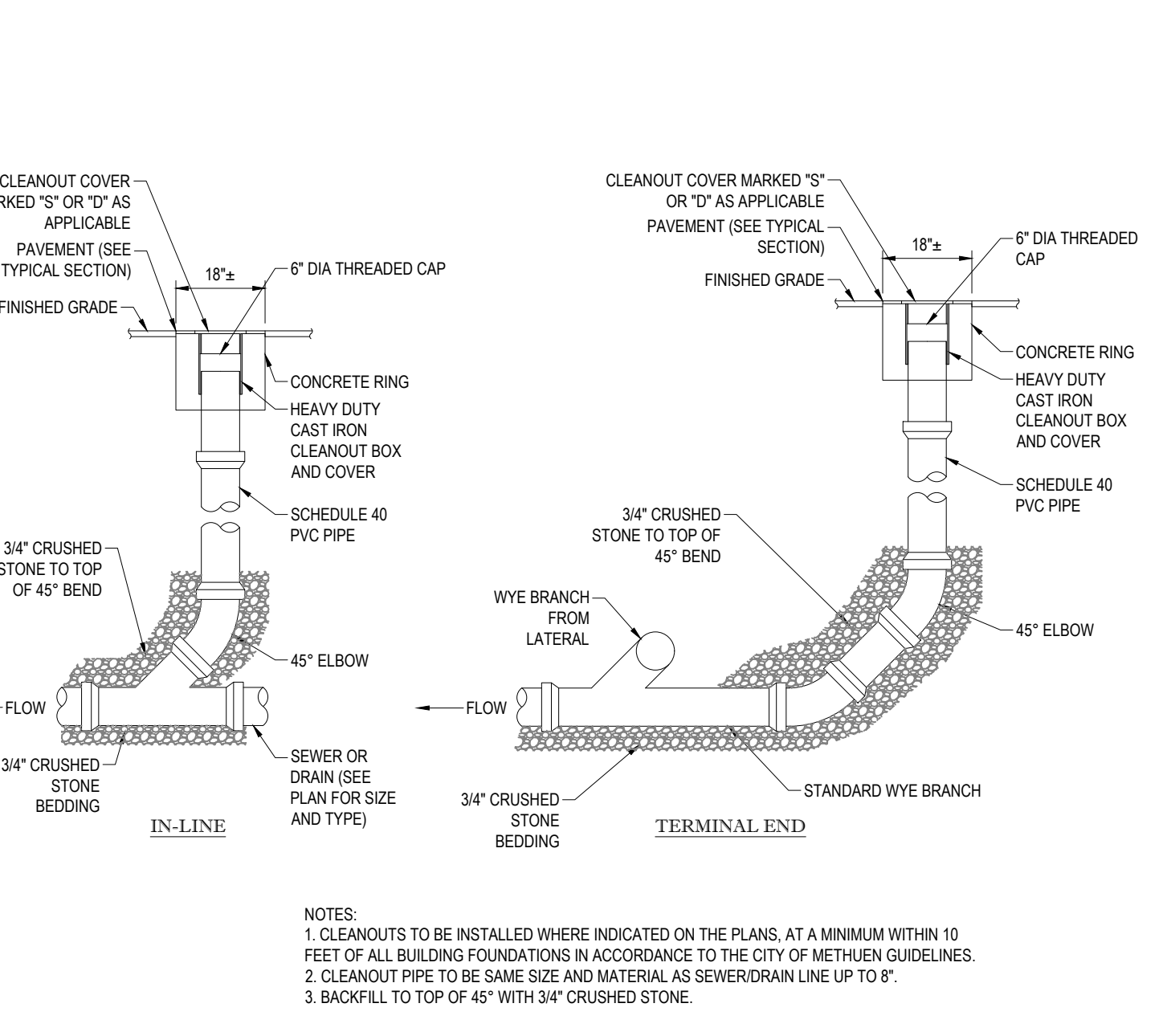
**PRECAST CONCRETE DEEP SUMP CATCH BASIN** NTS



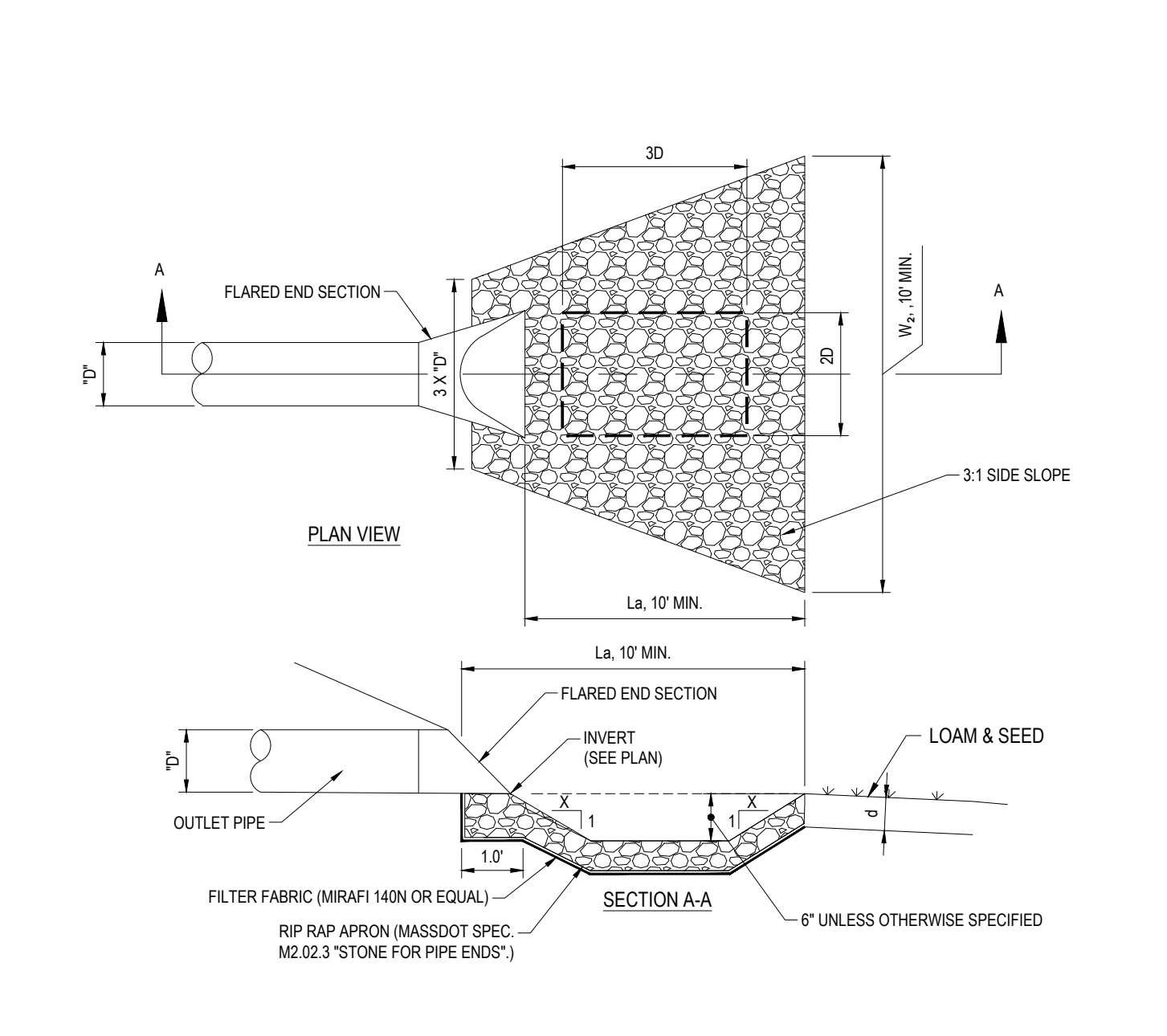
**BASIN IMPERIOUS CORE DETAIL** NTS



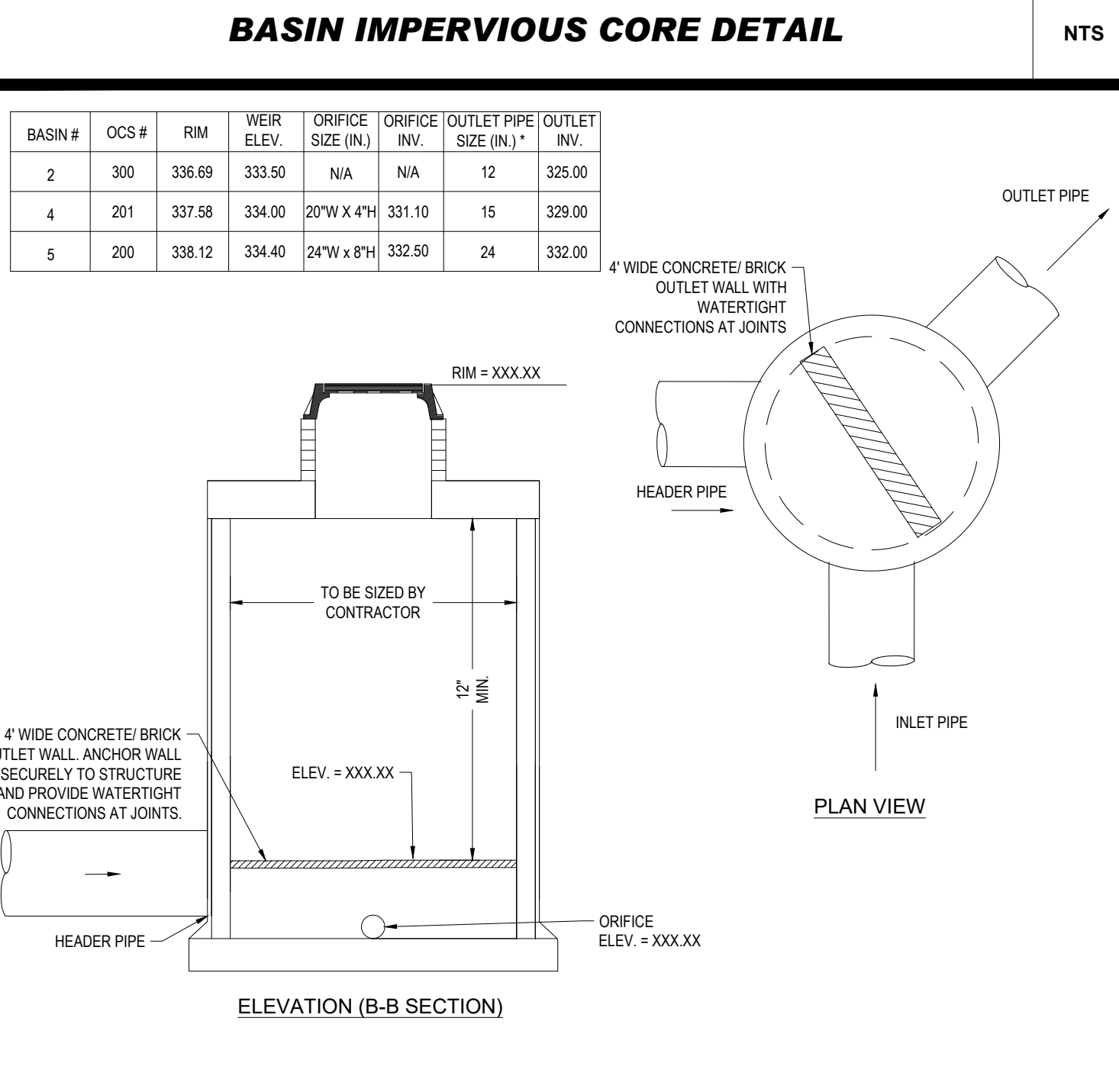
**TRASH RACK** NTS



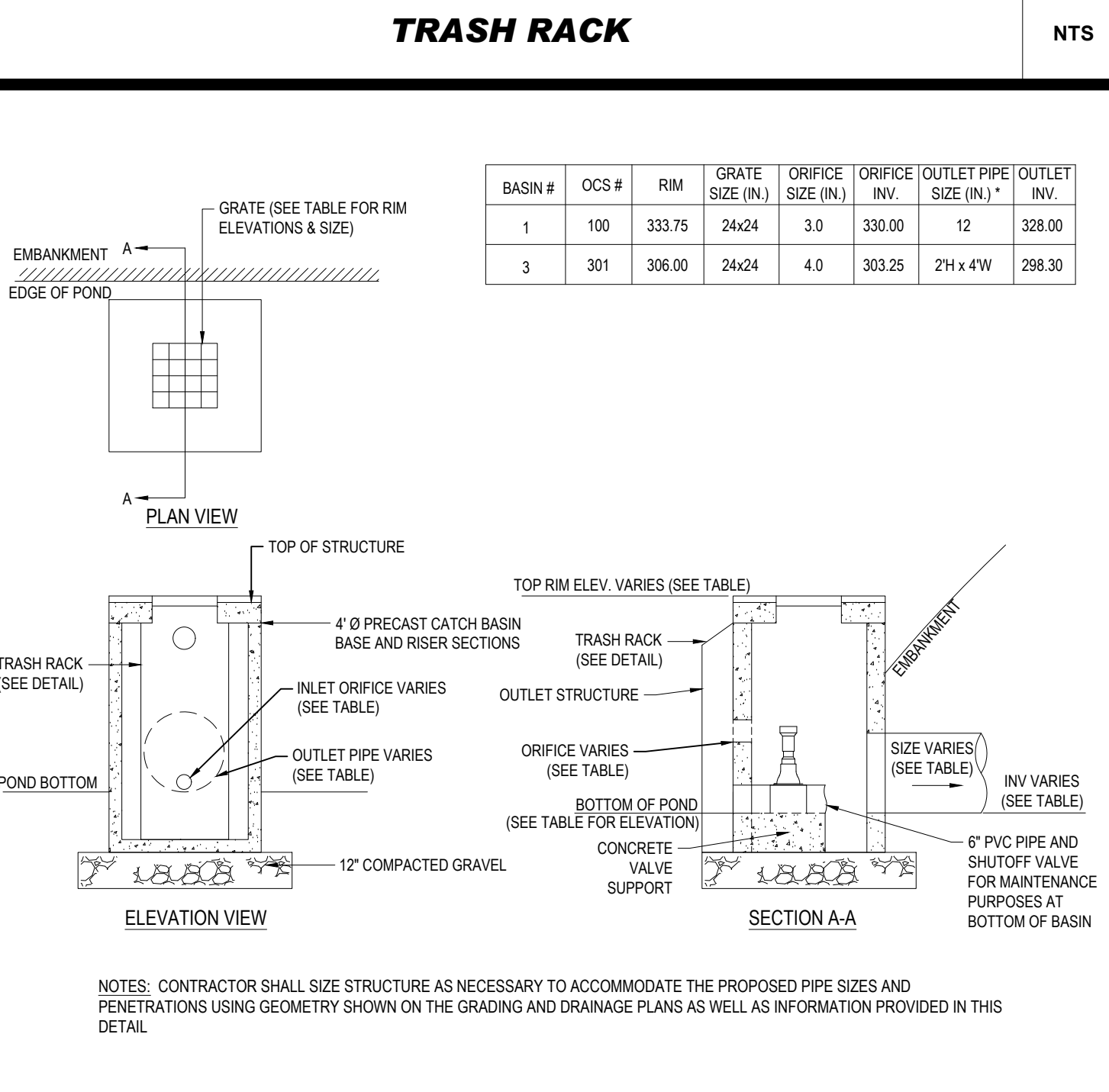
**SEWER / DRAIN CLEANOUT DETAIL** NTS



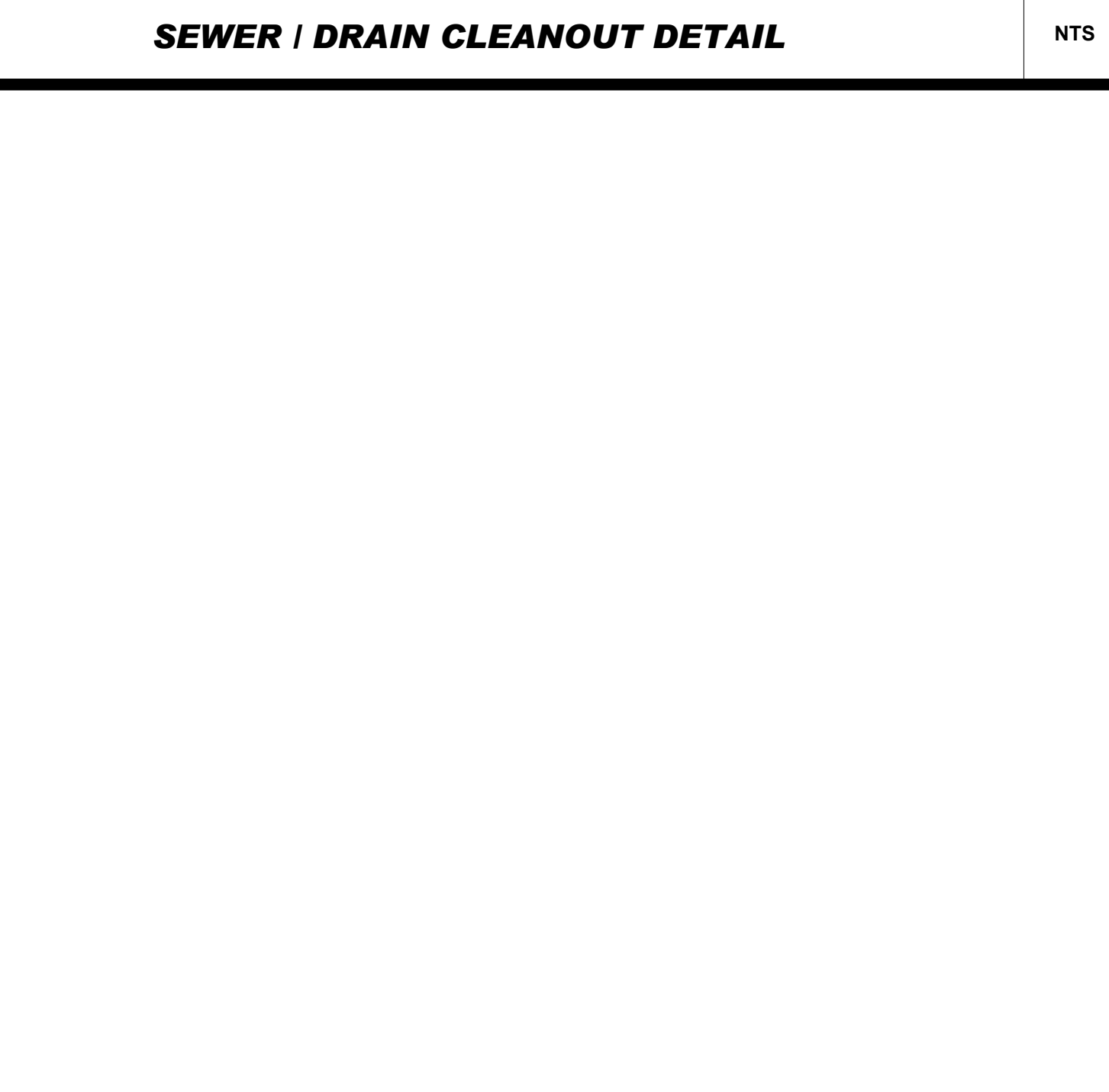
**FLARED END SECTION WITH RIP RAP APRON / SCOUR HOLE DETAIL** NTS



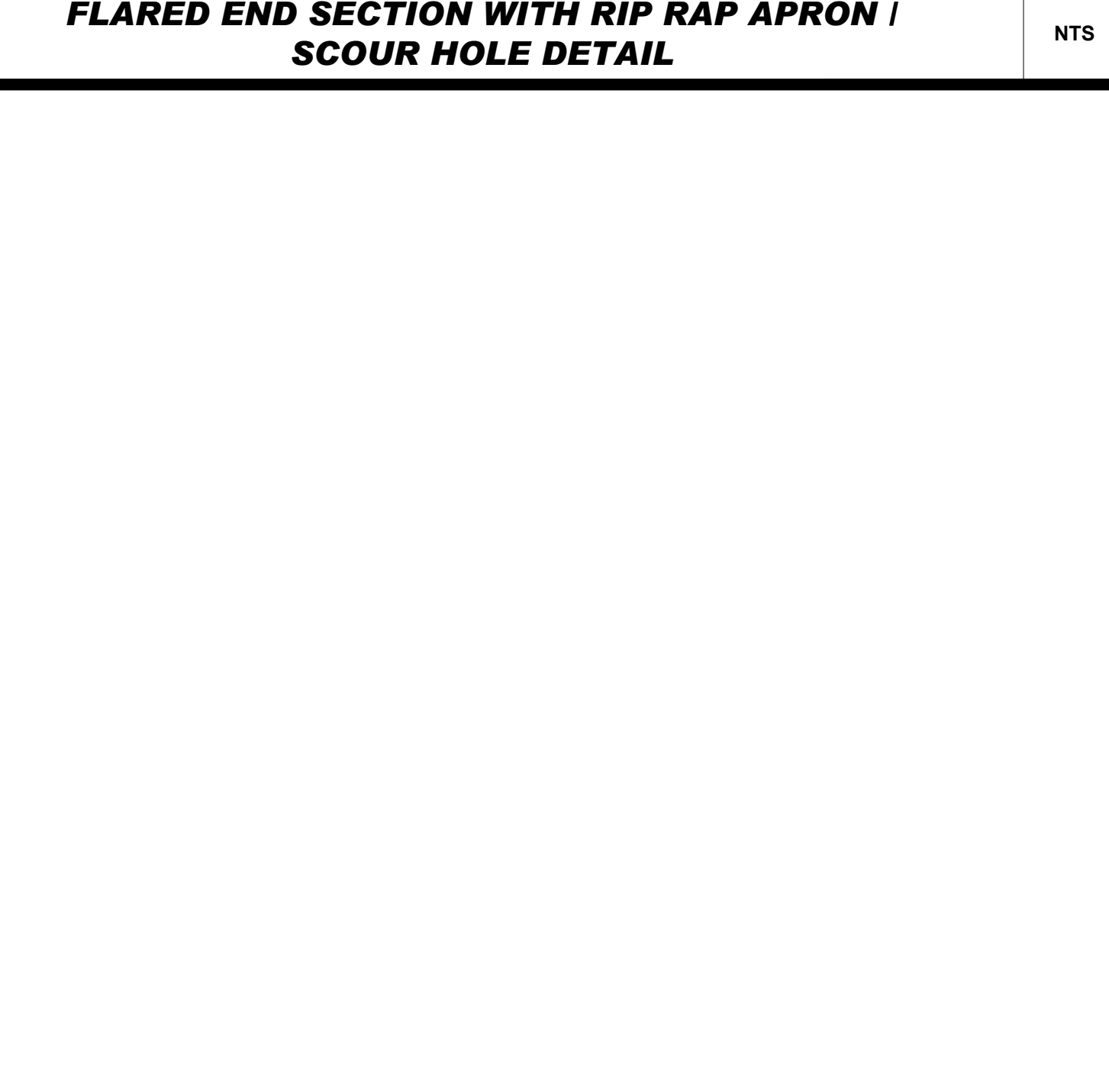
**SUBSURFACE SYSTEM OUTLET CONTROL STRUCTURE DETAIL** NTS



**SURFACE BASIN OUTLET CONTROL STRUCTURE DETAIL** NTS



**SEWER / DRAIN CLEANOUT DETAIL** NTS



**FLARED END SECTION WITH RIP RAP APRON / SCOUR HOLE DETAIL** NTS

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**REVISIONS**

REV	DATE	COMMENT	DRAWN BY	CHECKED BY

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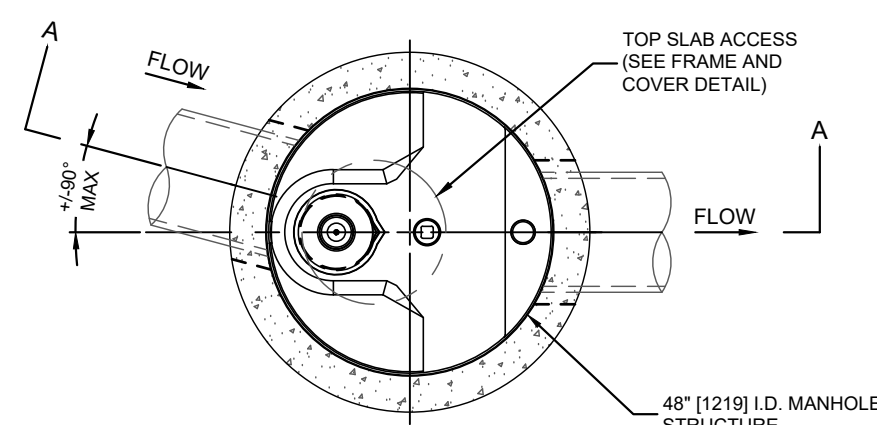
PROJECT No.: W211007  
 DRAWN BY: CF/DIMA  
 CHECKED BY: NEM/JAK  
 DATE: 06/08/2021  
 CAD ID: W211007-DTL-0

**PROPOSED SITE PLAN DOCUMENTS**  
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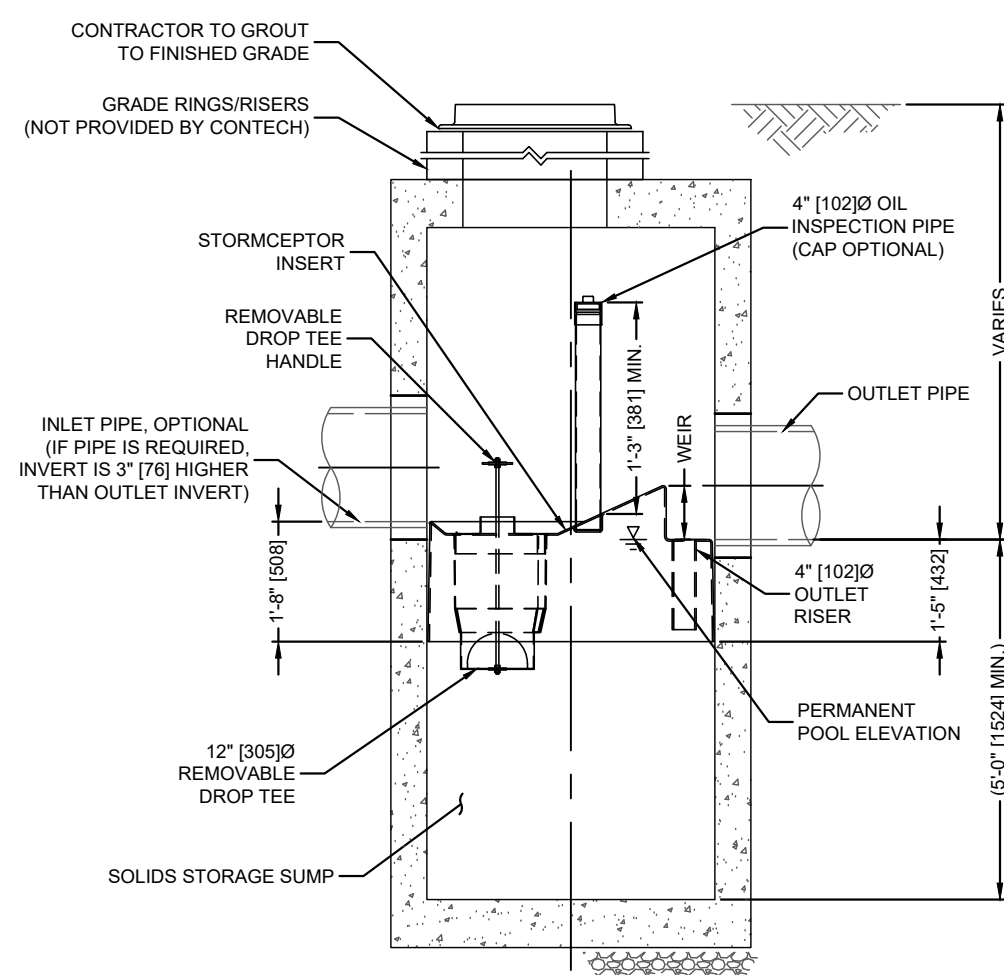
**BOHLER**  
 352 TURNPIKE ROAD  
 SOUTHBOROUGH, MA 01772  
 Phone: (508) 480-9900  
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SHEET TITLE:  
**DETAIL SHEET**  
 SHEET NUMBER:  
**C-903**  
 ORG. DATE - 06/08/2021

P:\211007\DRAWINGS\PLAN SET\SET S\RE\W211007-DTL-0---JAY\OUT-C-903-DTEL



PLAN VIEW  
TOP SLAB NOT SHOWN



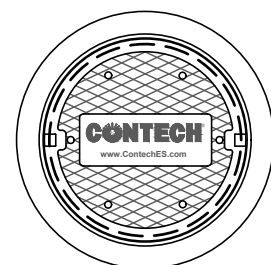
SECTION A-A

**STORMCEPTOR DESIGN NOTES**

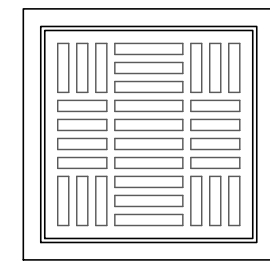
THE STANDARD STC450I CONFIGURATION WITH ROUND, SOLID FRAME AND COVER, AND INLET PIPE IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

**CONFIGURATION DESCRIPTION**

GRATED INLET ONLY (NO INLET PIPE)  
 GRATED INLET WITH INLET PIPE OR PIPES  
 CURB INLET ONLY (NO INLET PIPE)  
 CURB INLET WITH INLET PIPE OR PIPES



FRAME AND COVER  
(MAY VARY)  
NOT TO SCALE



FRAME AND GRATE  
(MAY VARY)  
NOT TO SCALE

**SITE SPECIFIC DATA REQUIREMENTS**

STRUCTURE ID	
WATER QUALITY FLOW RATE (cfs [L/s])	
PEAK FLOW RATE (cfs [L/s])	
RETURN PERIOD OF PEAK FLOW (YRS)	
RIM ELEVATION	
PIPE DATA:	
INLET PIPE 1	
INLET PIPE 2	
OUTLET PIPE	
NOTES/SPECIAL REQUIREMENTS:	

**GENERAL NOTES**

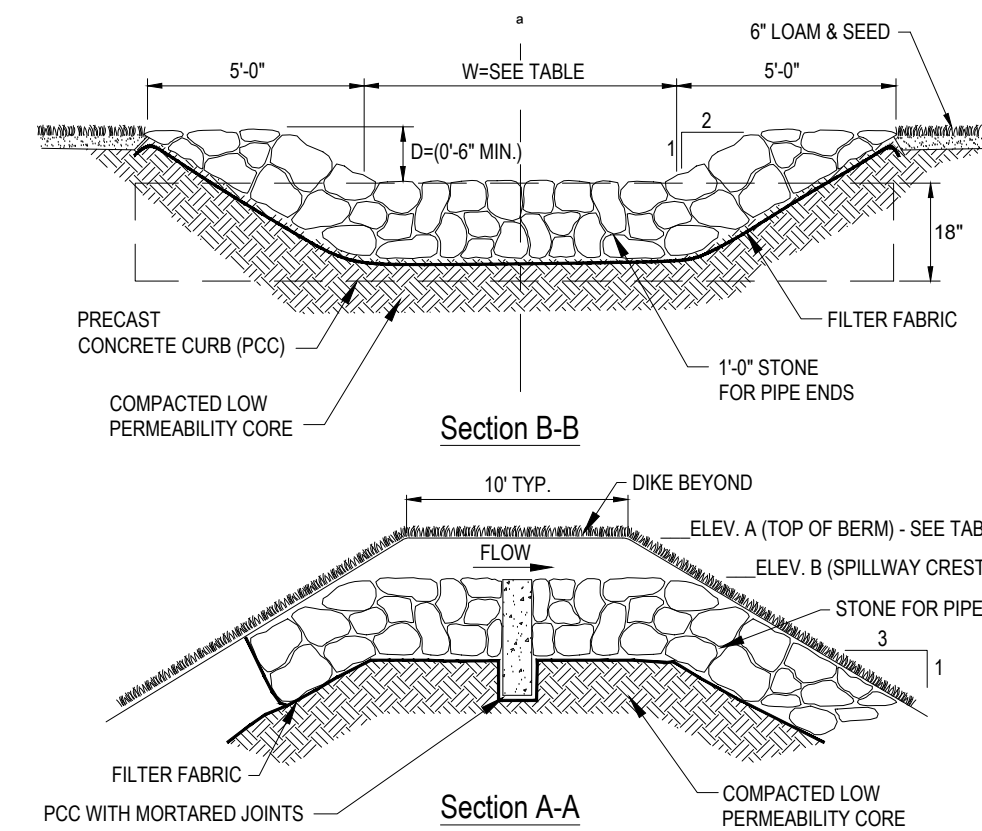
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. [www.conteches.com](http://www.conteches.com)
- STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- STORMCEPTOR STRUCTURE SHALL MEET AASHTO H200 LOAD RATING, ASSUMING EARTH COVER OF 0'-2' (610), AND GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
- STORMCEPTOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
- ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].

**INSTALLATION NOTES**

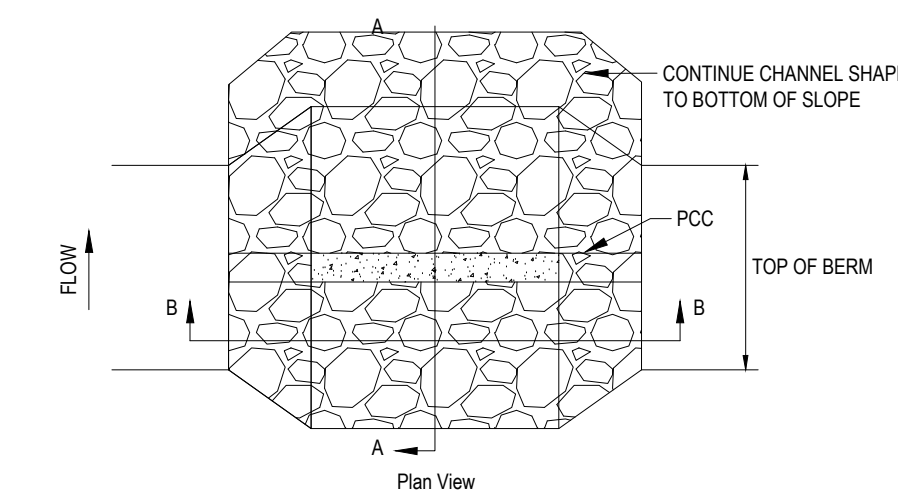
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMCEPTOR MANHOLE STRUCTURE.
- CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

**STORMCEPTOR 450I DETAIL**

NTS

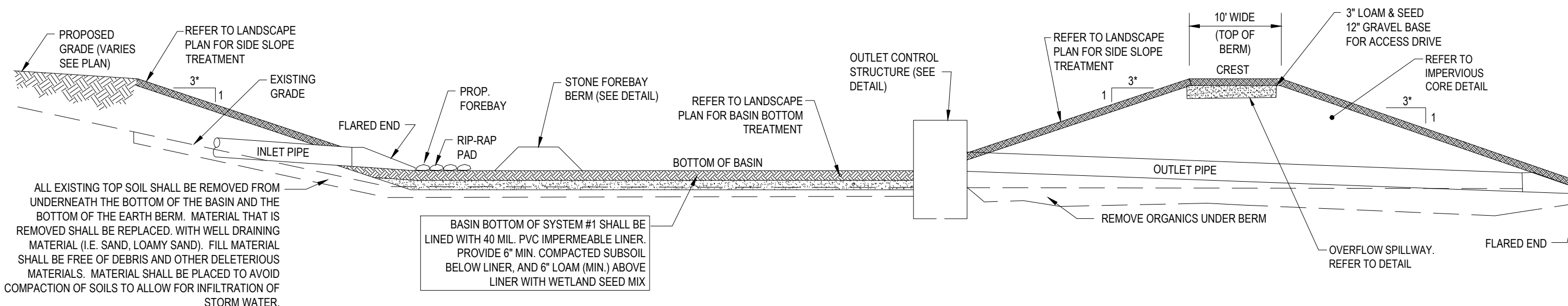


BASIN #	TOP OF BERM ELEV. A	SPILLWAY CREST ELEV. B	LENGTH OF SPILLWAY (W) (FT)
1	335.00	334.00	20
3	308.50	308.50	20+



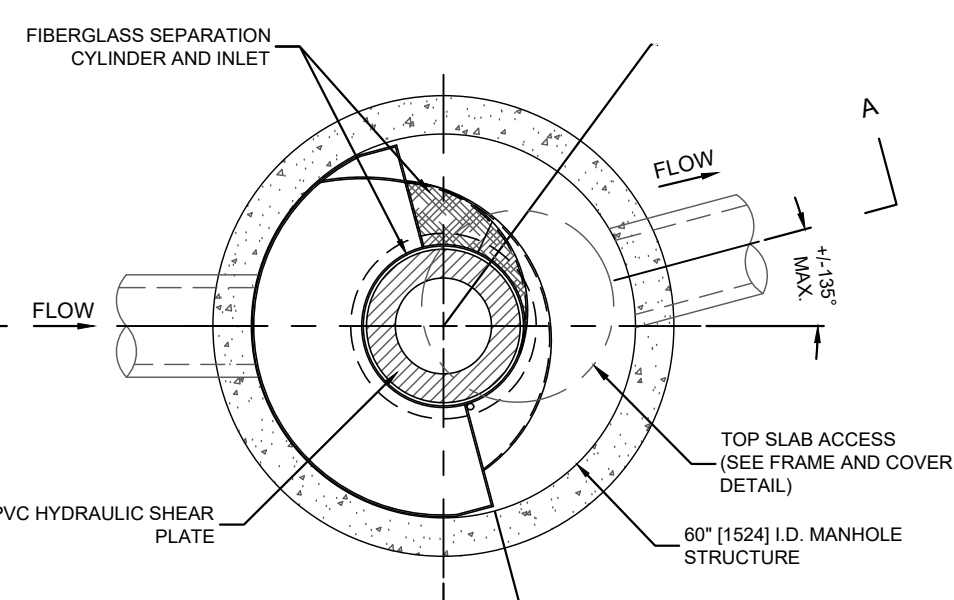
**SURFACE BASIN EMERGENCY SPILLWAY**

NTS

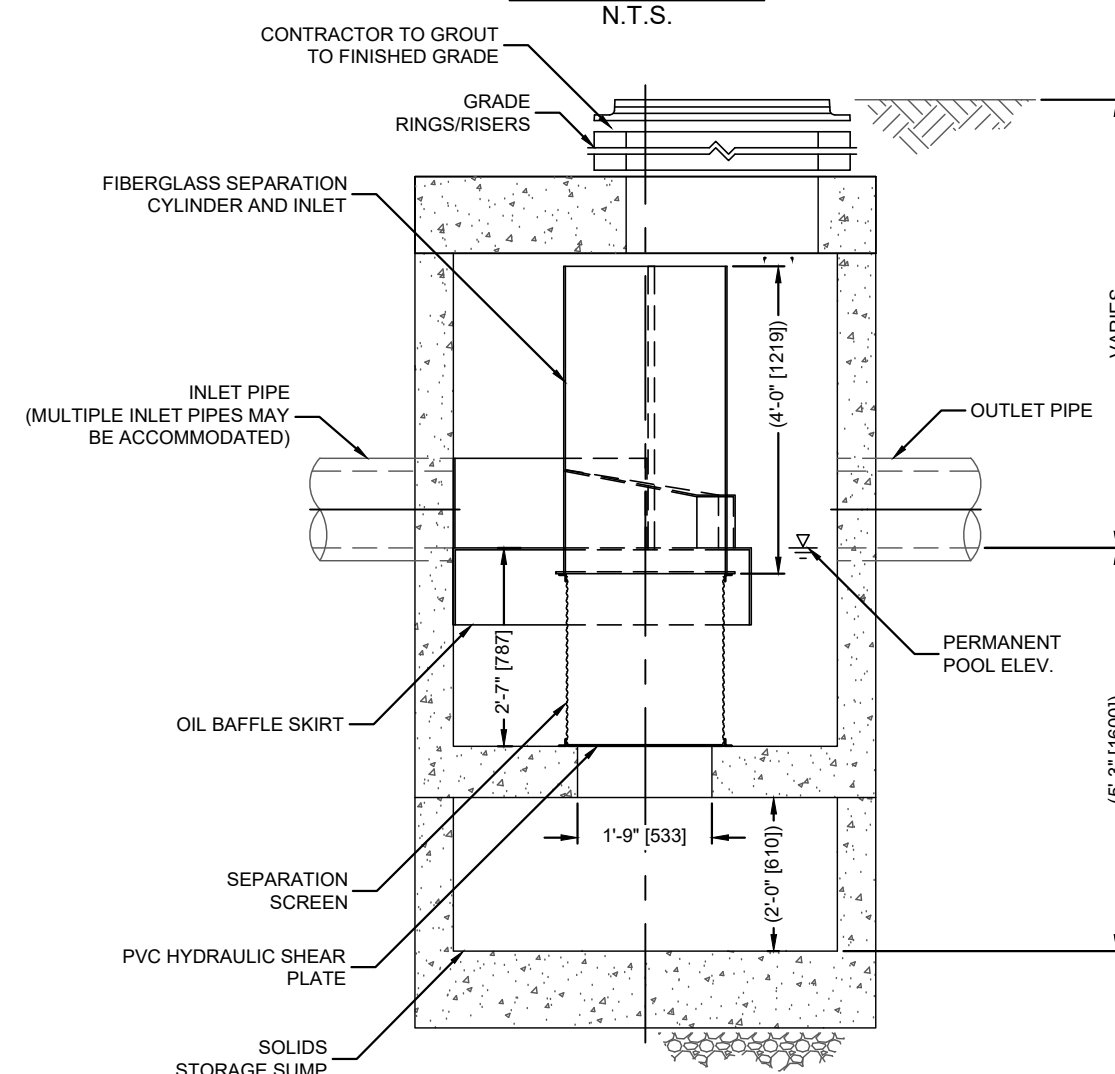


**TYPICAL STORMWATER MANAGEMENT BASIN CROSS SECTION DETAIL**

NTS



PLAN VIEW B-B  
N.T.S.



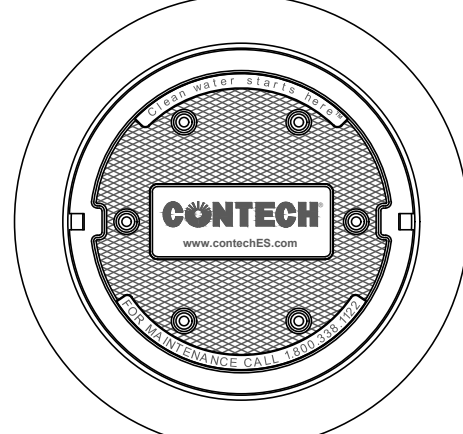
ELEVATION A-A  
N.T.S.

**CDS2020-5-C DESIGN NOTES**

THE STANDARD CDS2020-5-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

**CONFIGURATION DESCRIPTION**

GRATED INLET ONLY (NO INLET PIPE)  
 GRATED INLET WITH INLET PIPE OR PIPES  
 CURB INLET ONLY (NO INLET PIPE)  
 CURB INLET WITH INLET PIPE OR PIPES  
 SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)  
 SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS



**SITE SPECIFIC DATA REQUIREMENTS**

STRUCTURE ID	
WATER QUALITY FLOW RATE (CFS OR L/s)	
PEAK FLOW RATE (CFS OR L/s)	
RETURN PERIOD OF PEAK FLOW (YRS)	
SCREEN APERTURE (2400 OR 4700)	
PIPE DATA:	
INLET PIPE 1	
INLET PIPE 2	
OUTLET PIPE	
RIM ELEVATION	
ANTI-FLOTATION BALLAST	
WIDTH	
HEIGHT	
NOTES/SPECIAL REQUIREMENTS:	
* PER ENGINEER OF RECORD	

**GENERAL NOTES**

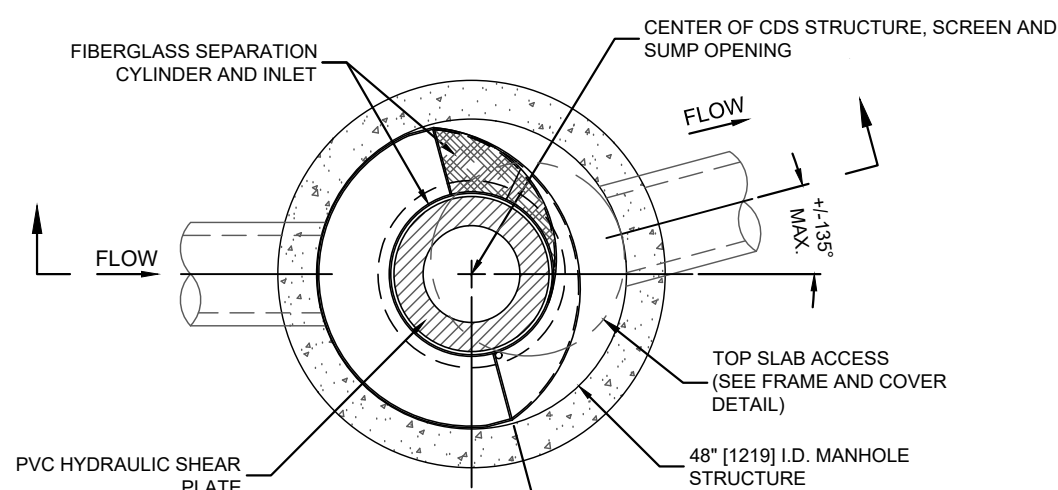
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. [www.conteches.com](http://www.conteches.com)
- CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- STRUCTURE SHALL MEET AASHTO H200 AND CASTINGS SHALL MEET H200 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
- PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

**INSTALLATION NOTES**

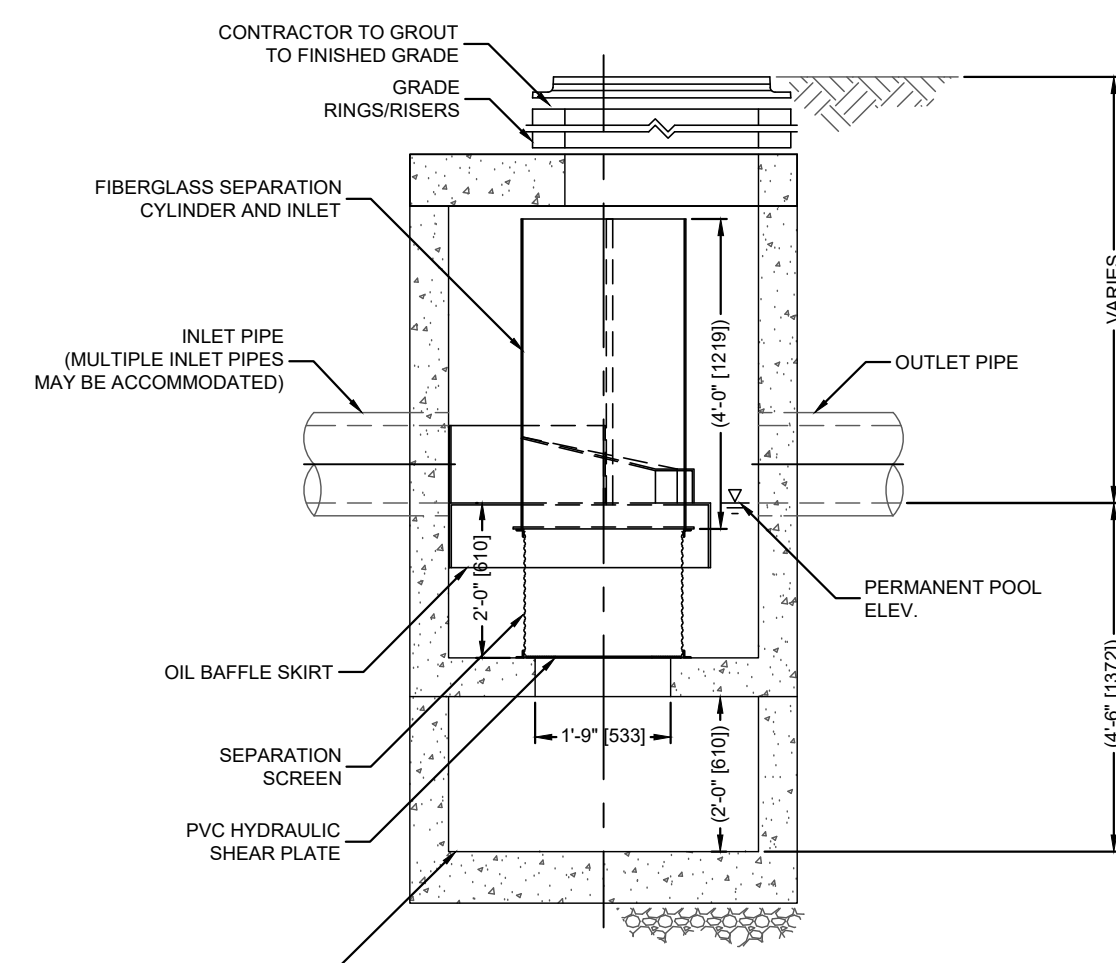
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

**CONTECH 2020 STANDARD WATER QUALITY UNIT DETAIL**

NTS



PLAN VIEW B-B  
N.T.S.



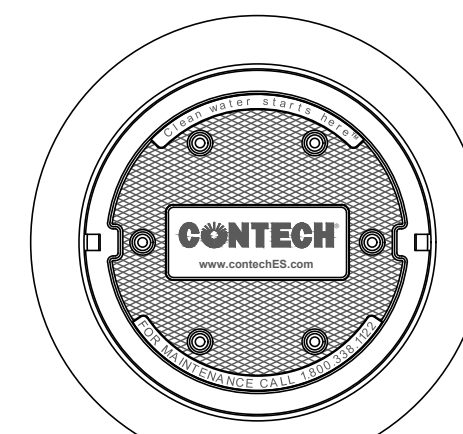
ELEVATION A-A  
N.T.S.

**CDS2015-4-C DESIGN NOTES**

THE STANDARD CDS2015-4-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

**CONFIGURATION DESCRIPTION**

GRATED INLET ONLY (NO INLET PIPE)  
 GRATED INLET WITH INLET PIPE OR PIPES  
 CURB INLET ONLY (NO INLET PIPE)  
 CURB INLET WITH INLET PIPE OR PIPES  
 SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)  
 SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS



**SITE SPECIFIC DATA REQUIREMENTS**

STRUCTURE ID	
WATER QUALITY FLOW RATE (CFS OR L/s)	
PEAK FLOW RATE (CFS OR L/s)	
RETURN PERIOD OF PEAK FLOW (YRS)	
SCREEN APERTURE (2400 OR 4700)	
PIPE DATA:	
INLET PIPE 1	
INLET PIPE 2	
OUTLET PIPE	
RIM ELEVATION	
ANTI-FLOTATION BALLAST	
WIDTH	
HEIGHT	
NOTES/SPECIAL REQUIREMENTS:	
* PER ENGINEER OF RECORD	

**GENERAL NOTES**

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
- FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. [www.conteches.com](http://www.conteches.com)
- CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
- STRUCTURE SHALL MEET AASHTO H200 AND CASTINGS SHALL MEET H200 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
- PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

**INSTALLATION NOTES**

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

**CONTECH 2015-4 STANDARD WATER QUALITY UNIT DETAIL**

NTS



**REVISIONS**

REV	DATE	COMMENT	DRAWN BY



Know what's below.  
Call before you dig.  
ALWAYS CALL 811  
It's fast. It's free. It's the law.

**PRELIMINARY**

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W211007  
 DRAWN BY: CF/DMA  
 CHECKED BY: NEM/JAK  
 DATE: 06/08/2021  
 CAD ID: W211007-DTL-0

**PROPOSED SITE PLAN DOCUMENTS**



PROPOSED INDUSTRIAL BUILDING  
 MAP #88, LOTS #29 & #36  
 1000 NICKERSON ROAD  
 CITY OF MARLBOROUGH  
 MIDDLESEX COUNTY,  
 MASSACHUSETTS



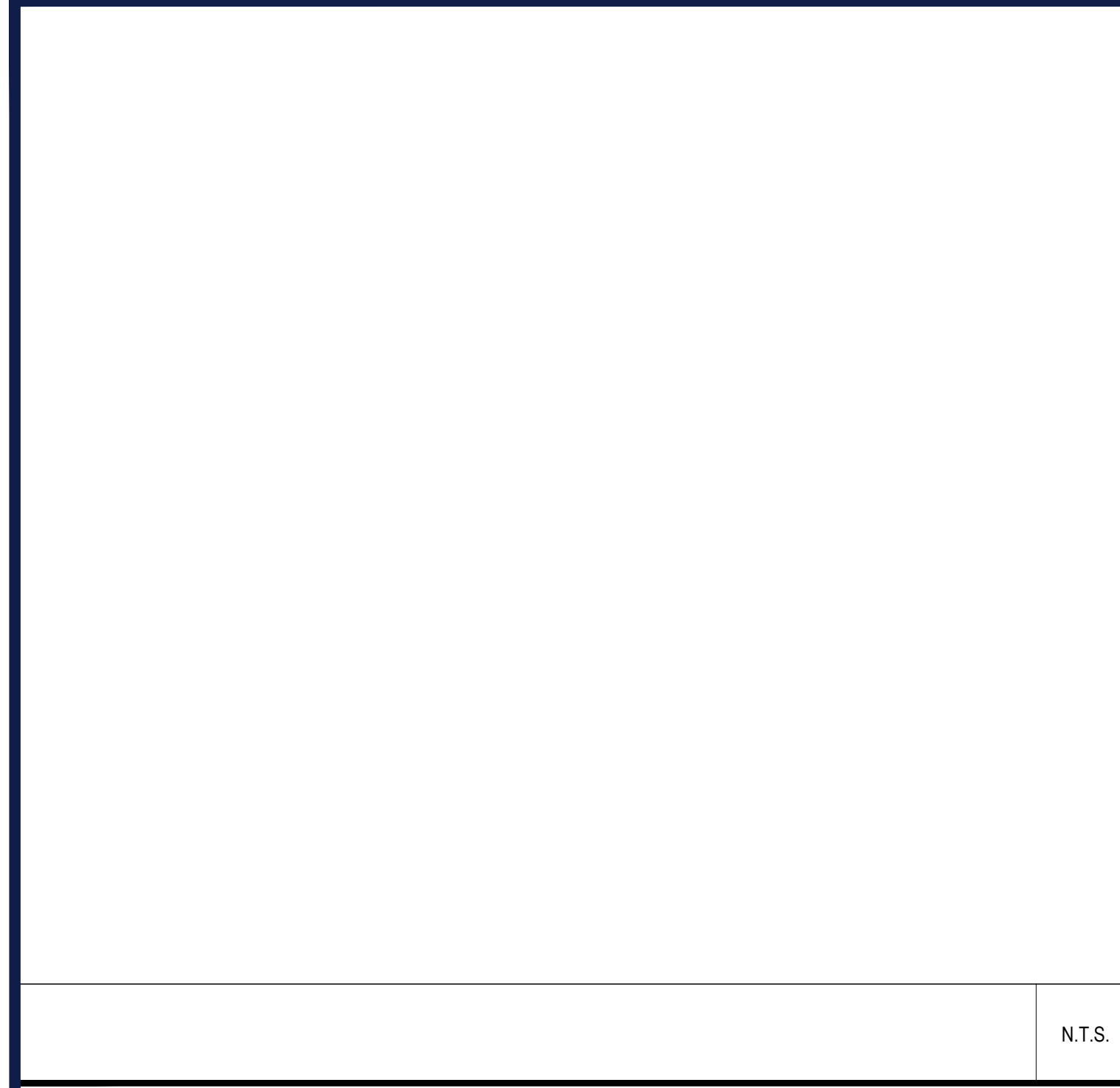
352 TURNPIKE ROAD  
 SOUTHBOROUGH, MA 01772  
 Phone: (508) 480-9900  
[www.BohlerEngineering.com](http://www.BohlerEngineering.com)



**DETAIL SHEET**

SHEET NUMBER:  
**C-904**

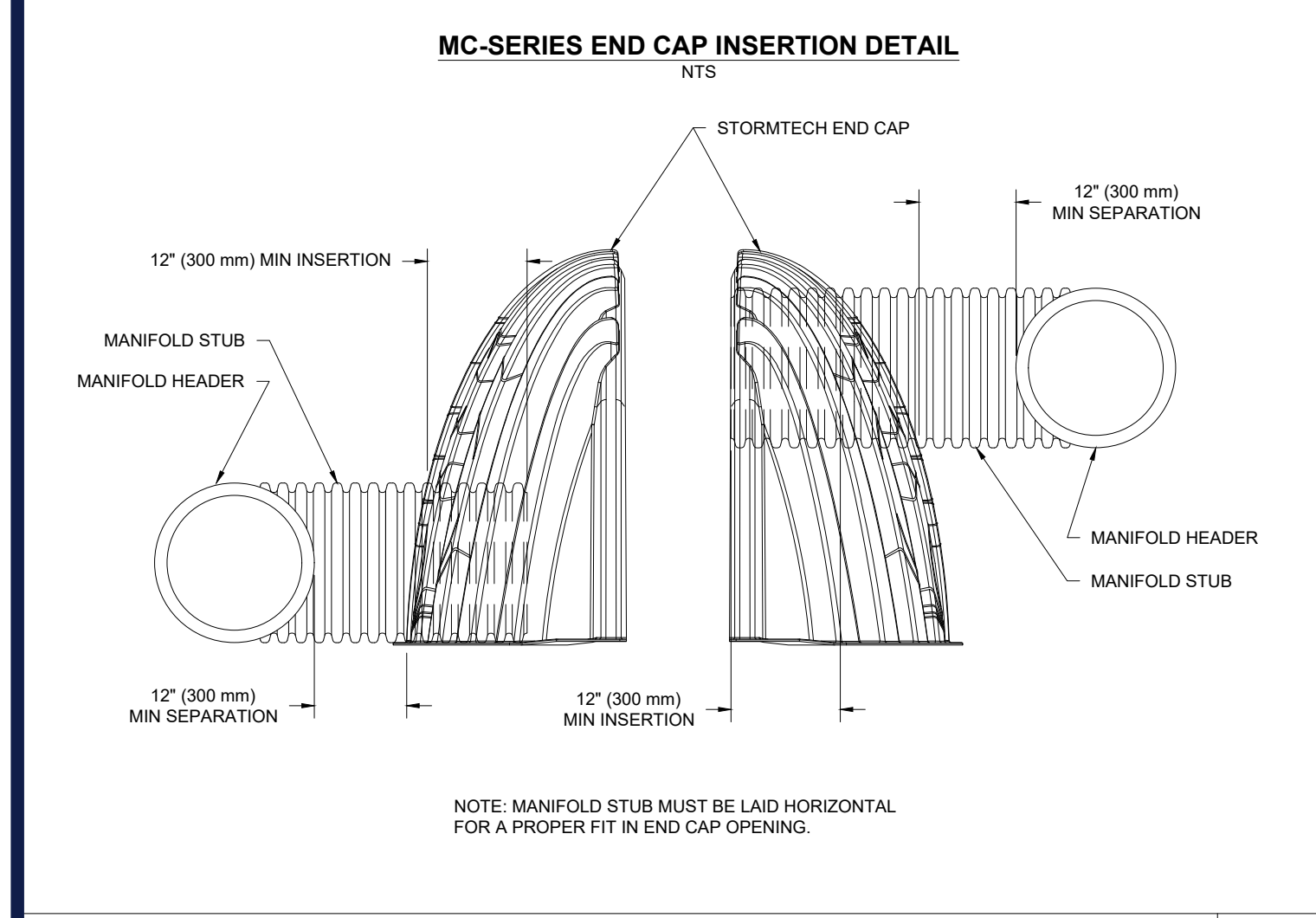
ORG. DATE - 06/08/2021



**NOMINAL CHAMBER SPECIFICATIONS**  
 SIZE (W X H X INSTALLED LENGTH) 77.0" X 45.0" X 86.0" (1956 mm X 1143 mm X 2184 mm)  
 CHAMBER STORAGE 109.9 CUBIC FEET (3.11 m³)  
 MINIMUM INSTALLED STORAGE\* 178.3 CUBIC FEET (5.06 m³)  
 WEIGHT 134 lbs. (60.8 kg)

**NOMINAL END CAP SPECIFICATIONS**  
 SIZE (W X H X INSTALLED LENGTH) 75.0" X 45.0" X 22.2" (1905 mm X 1143 mm X 564 mm)  
 END CAP STORAGE 14.9 CUBIC FEET (0.42 m³)  
 MINIMUM INSTALLED STORAGE\* 46.8 CUBIC FEET (1.32 m³)  
 WEIGHT 49 lbs.

\*ASSUMES 12" (305 mm) STONE ABOVE, 6" (152 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 6" (152 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY



**STORMTECH MC-3500 MC-SERIES END CAP INSERTION DETAIL** N.T.S.

**INSPECTION & MAINTENANCE**

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT

A. INSPECTION PORTS (IF PRESENT)

A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN

A.2. REMOVE AND CLEAN FLEXFORM FILTER IF INSTALLED

A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG

A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)

A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2; IF NOT, PROCEED TO STEP 3.

B. ALL ISOLATOR ROWS

B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW

B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE

B.3. MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY

B.4. FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE

B.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2; IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS

A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED

B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN

C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

**NOTES**

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.

2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

**STORMTECH MC-3500 ISOLATOR ROW DETAIL** N.T.S.

**STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"**  
**STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"**  
 END CAPS WITH A WELDED CROWN PLATE END WITH "C"  
 END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC3500IEPP06T	6" (150 mm)	33.21" (844 mm)	---
MC3500IEPP06B	---	---	0.66" (17 mm)
MC3500IEPP08T	8" (200 mm)	31.16" (791 mm)	---
MC3500IEPP08B	---	---	0.81" (21 mm)
MC3500IEPP10T	10" (250 mm)	29.04" (738 mm)	---
MC3500IEPP10B	---	---	0.93" (24 mm)
MC3500IEPP12T	12" (300 mm)	28.36" (670 mm)	---
MC3500IEPP12B	---	---	1.35" (34 mm)
MC3500IEPP15T	15" (375 mm)	23.39" (594 mm)	---
MC3500IEPP15B	---	---	1.50" (38 mm)
MC3500IEPP18TC	---	20.03" (509 mm)	---
MC3500IEPP18TW	---	---	---
MC3500IEPP18BC	---	---	1.77" (45 mm)
MC3500IEPP18BW	---	---	---
MC3500IEPP24TC	---	14.48" (368 mm)	---
MC3500IEPP24TW	---	---	---
MC3500IEPP24BC	---	---	2.06" (52 mm)
MC3500IEPP24BW	---	---	---
MC3500IEPP30BC	---	---	2.75" (70 mm)

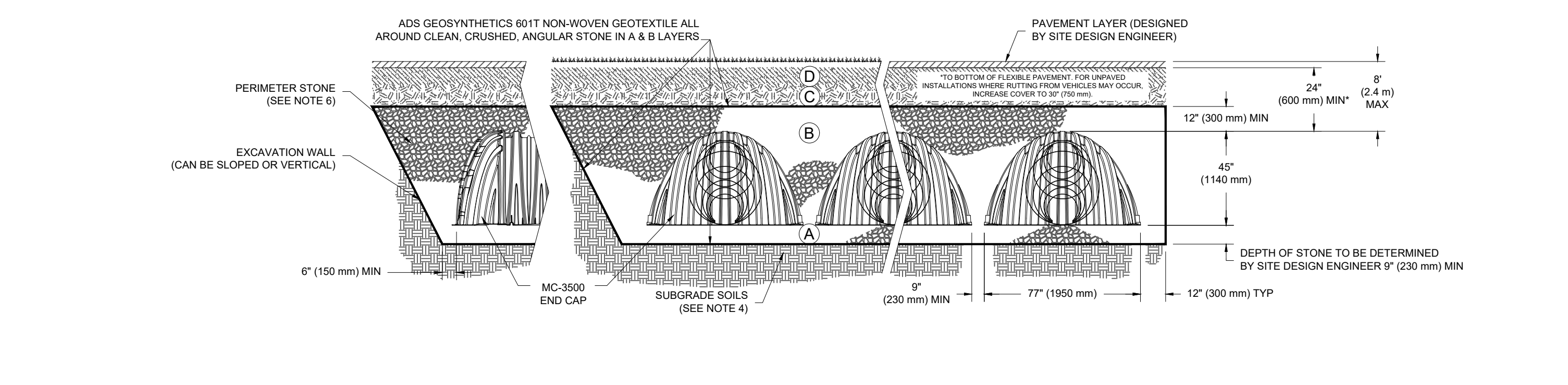
NOTE: ALL DIMENSIONS ARE NOMINAL.

**STORMTECH MC-3500 TECHNICAL SPECIFICATION** N.T.S.

**ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS**

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT	
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.	
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 <sup>1</sup> A-1, A-2-4, A-3 OR AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 <sup>1</sup> 3, 4	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43 <sup>1</sup> 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>2,3</sup>

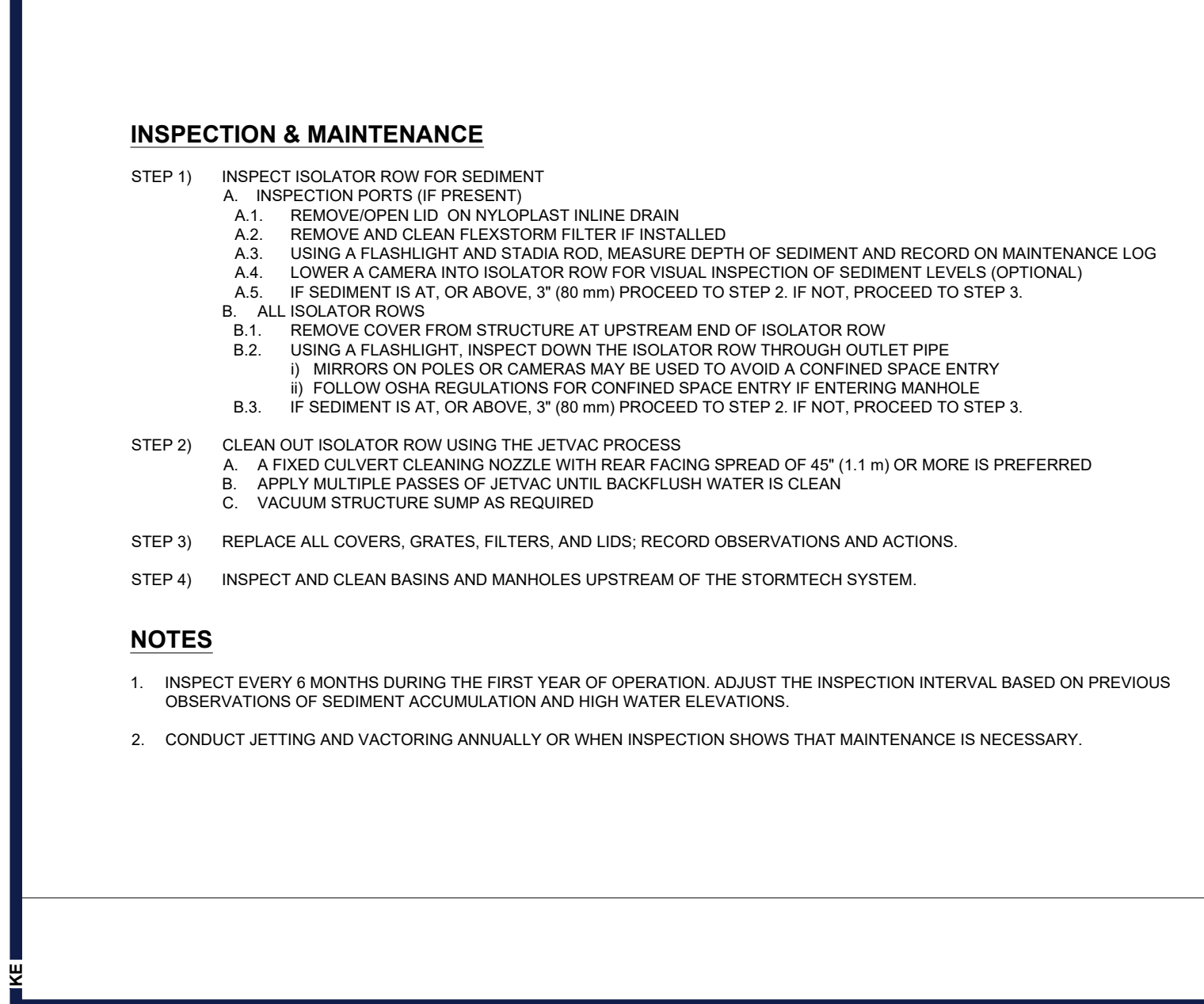
PLEASE NOTE:  
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE.  
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.  
 3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.



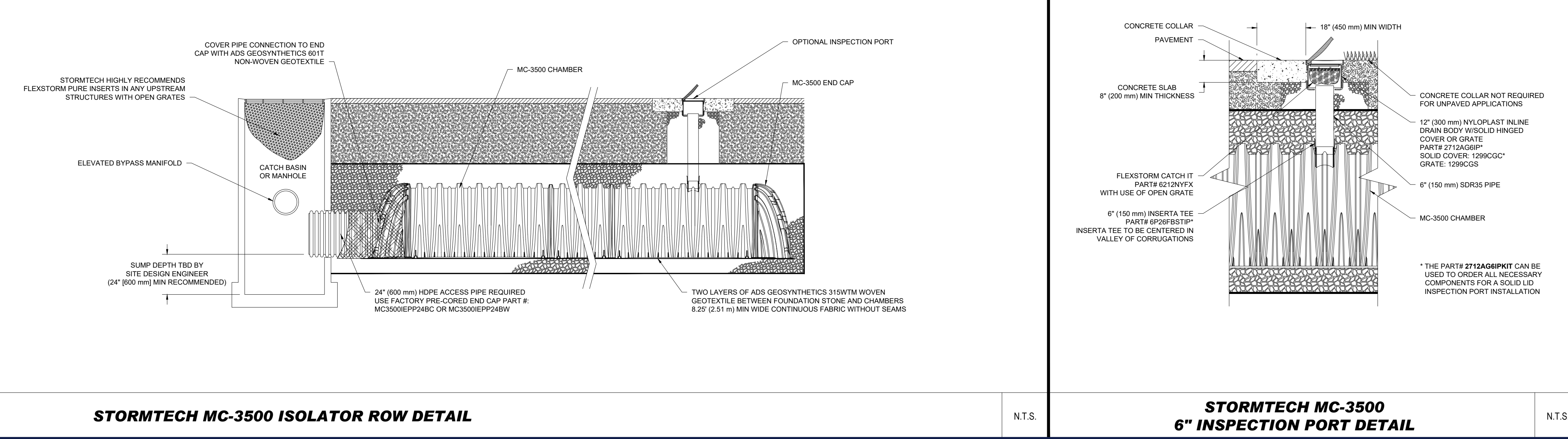
**NOTES:**

- MC-3500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.

**STORMTECH MC-3500 STANDARD CROSS SECTION** N.T.S.



**STORMTECH MC-3500 ISOLATOR ROW DETAIL** N.T.S.



**STORMTECH MC-3500 6\"/>**



**REVISIONS**

REV	DATE	COMMENT	DRAWN BY	CHECKED BY



**PRELIMINARY**

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PROJECT No.: W211007  
 DRAWN BY: CF/DMA  
 CHECKED BY: NEM/JAK  
 DATE: 06/08/2021  
 CAD LID: W211007-DTL-0

**PROPOSED SITE PLAN DOCUMENTS**

FOR

**LINCOLN PROPERTY COMPANY**

PROPOSED INDUSTRIAL BUILDING  
 MAP #88, LOTS #29 & #36  
 1000 NICKERSON ROAD  
 CITY OF MARLBOROUGH  
 MIDDLESEX COUNTY,  
 MASSACHUSETTS

**BOHLER**

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



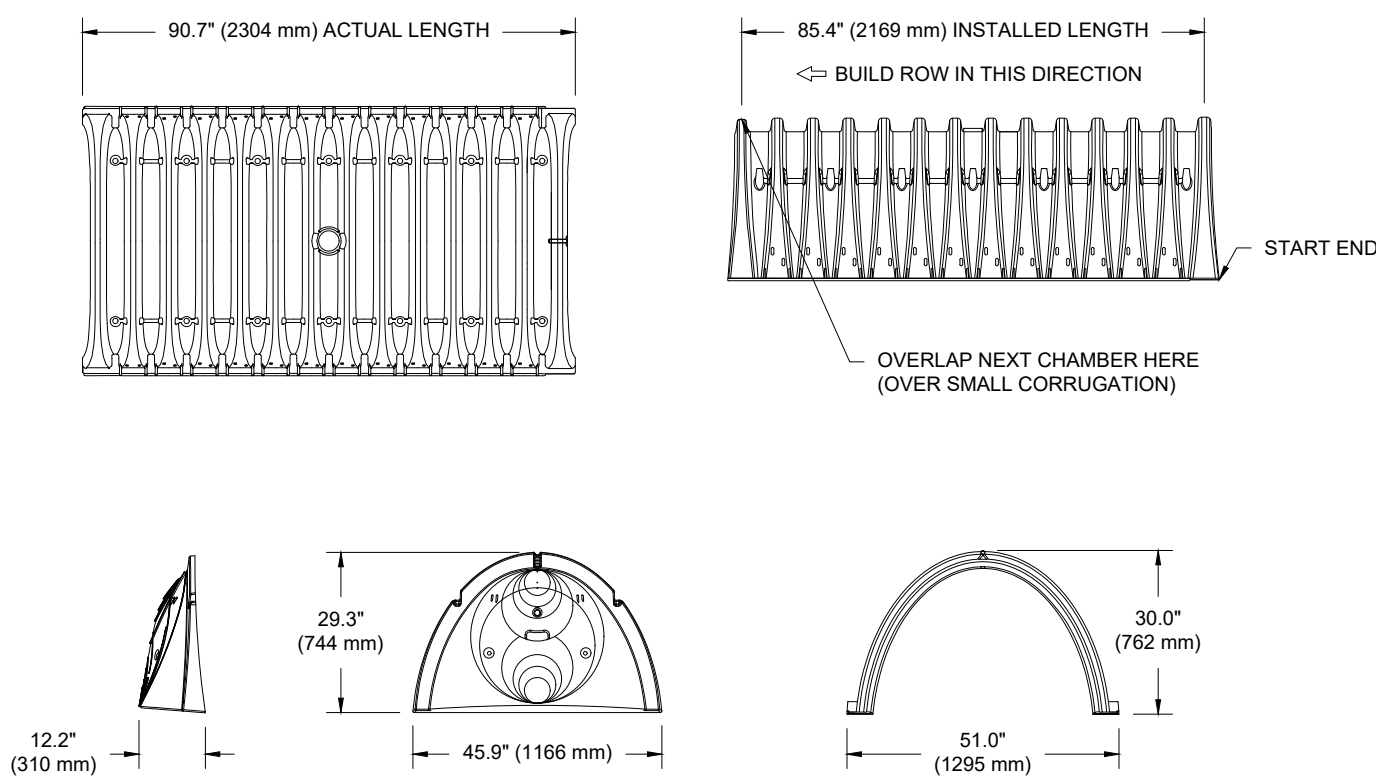
**DETAIL SHEET**

SHEET NUMBER:  
**C-905**

ORG. DATE - 06/08/2021

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**SC-740 TECHNICAL SPECIFICATION**  
NTS



**NOMINAL CHAMBER SPECIFICATIONS**

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m³)
WEIGHT	75.0 lbs.	(33.6 kg)

\*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS

PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"  
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"  
PRE-CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC740EPE00T / SC740EPE00TPC	0" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE00B / SC740EPE00BPC	0" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	0.5" (13 mm)
SC740EPE08T / SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-889-2894.

\* FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

**STORMTECH SC-740 TECHNICAL SPECIFICATION**

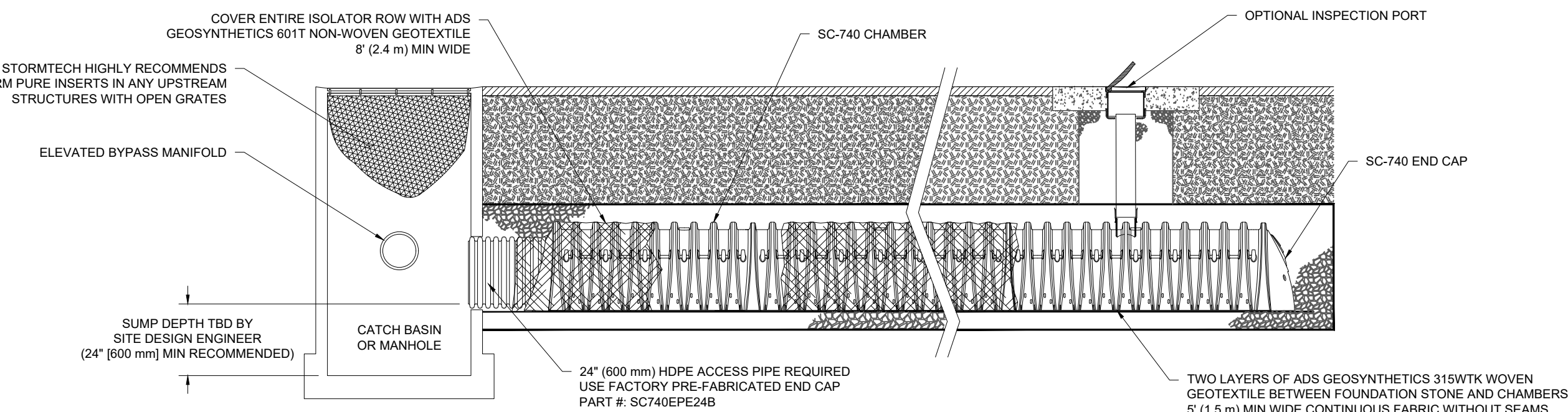
N.T.S.

**INSPECTION & MAINTENANCE**

- STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
- A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
- A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
- A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
- A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
- A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
- B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
- B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
- i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
- ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
- B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

**NOTES**

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



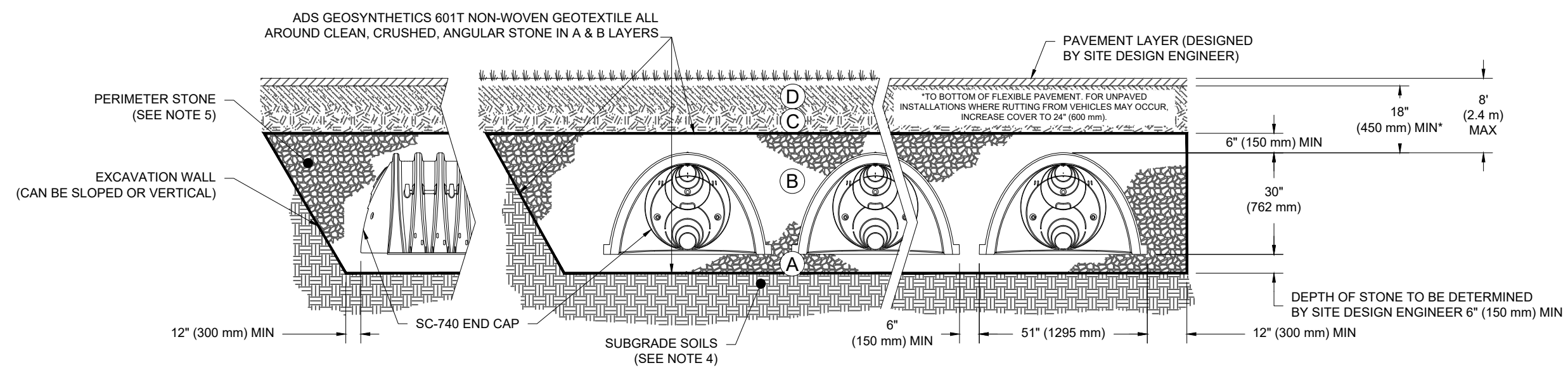
**STORMTECH SC-740 ISOLATOR ROW DETAIL**

N.T.S.

**ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS**

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	INITIAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (B LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>2,3</sup>

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE"
  - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
  - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

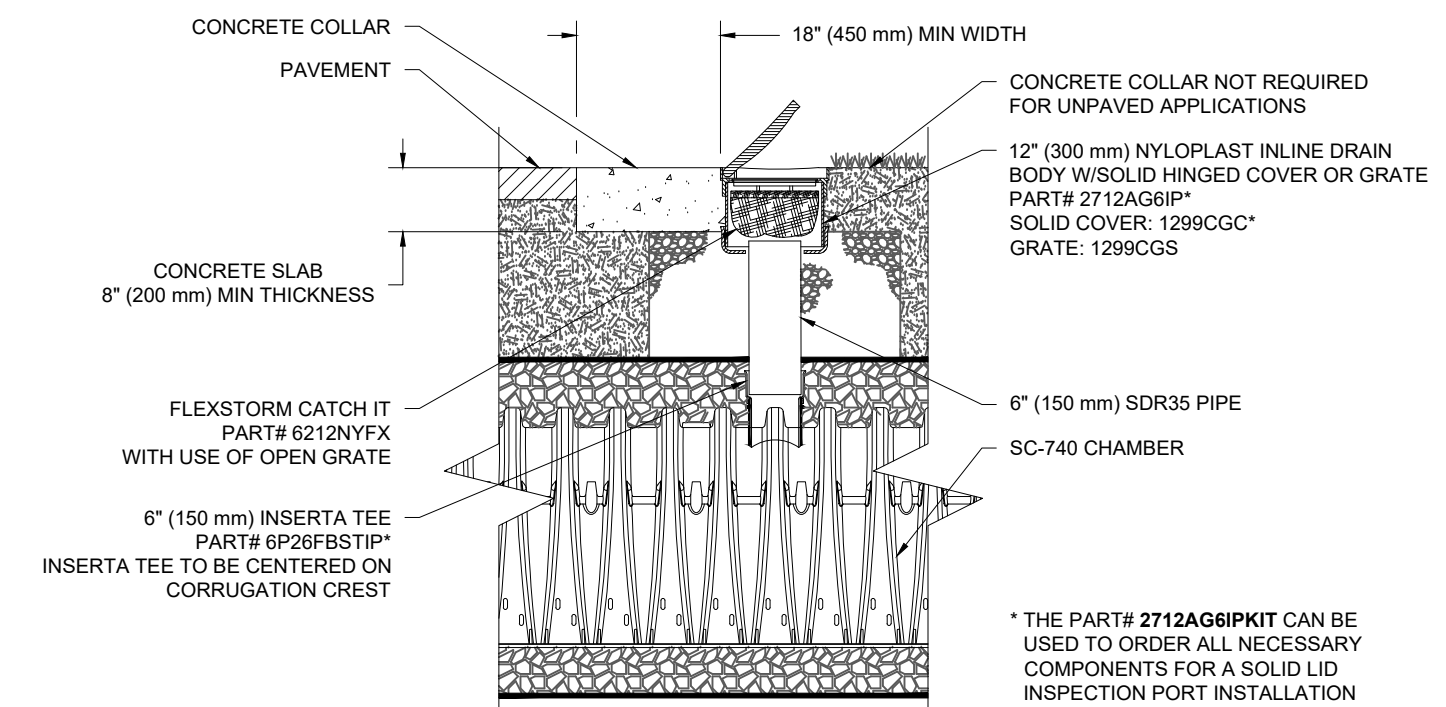


**NOTES:**

- SC-740 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" OR ASTM F2922 "STANDARD SPECIFICATION FOR POLYETHYLENE (PE) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

**STORMTECH SC-740 STANDARD CROSS SECTION**

N.T.S.



**STORMTECH SC-740  
6" INSPECTION PORT DETAIL**

N.T.S.



**REVISIONS**

REV	DATE	COMMENT	DRAWN BY	CHECKED BY



**811**  
Know what's below.  
Call before you dig.  
ALWAYS CALL 811  
It's fast. It's free. It's the law.

**PRELIMINARY**

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: W211007  
DRAWN BY: CFDMIA  
CHECKED BY: NEMJAK  
DATE: 06/08/2021  
CAD LID: W211007-DTL-0

**PROJECT:**

**PROPOSED SITE PLAN DOCUMENTS**

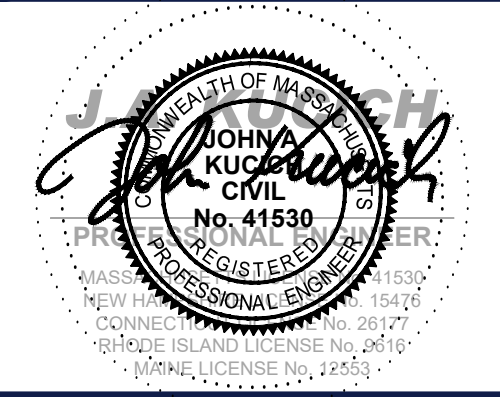
**FOR**



PROPOSED INDUSTRIAL BUILDING  
MAP #88, LOTS #29 & #36  
1000 NICKERSON ROAD  
CITY OF MARLBOROUGH  
MIDDLESEX COUNTY,  
MASSACHUSETTS

**BOHLER**

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



**SHEET TITLE:**

**DETAIL SHEET**

**SHEET NUMBER:**

**C-906**

ORG. DATE - 06/08/2021

EXHIBIT 'A'

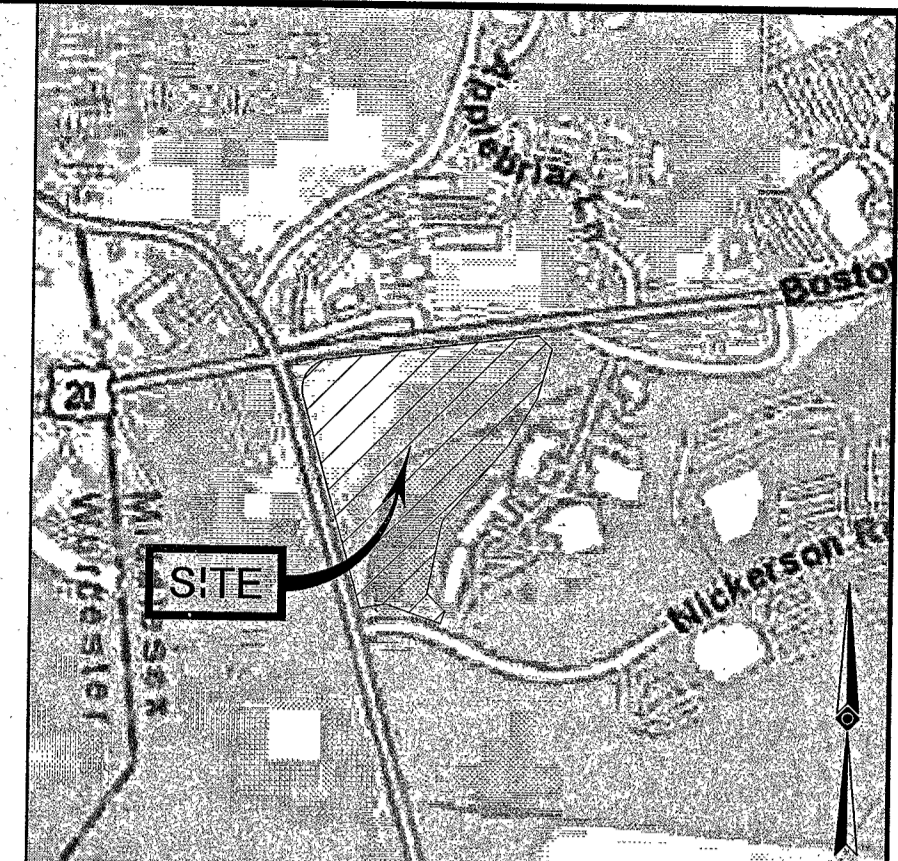
LOT #1 AND LOT #2 AS SHOWN ON A PLAN ENTITLED PLAN OF LAND IN MARLBOROUGH, MA, DATED JULY 8, 2013, PREPARED BY BRUCE SALK & ASSOCIATES, INC., AND RECORDED WITH THE MIDDLESEX SOUTH COUNTY REGISTRY OF DEEDS AS PLAN NO. 535 OF 2013.

THE PROPERTY IS ALSO SHOWN AS LOT 88 AS SHOWN ON A PLAN ENTITLED PLAN OF LAND IN MARLBOROUGH, MA (MIDDLESEX COUNTY), DATED AUGUST 4, 2004, PREPARED BY PRECISION LAND SURVEYING, INC., AND RECORDED WITH THE MIDDLESEX SOUTH COUNTY REGISTRY OF DEEDS AS PLAN NO. 1515 OF 2004.

BOSTON POST ROAD

(PUBLIC - VARIABLE WIDTH) ⑥

TWO WAY TRAFFIC (ASPHALT ROADWAY)



LOCUS MAP © 2013 ESRI WORLD STREET MAPS NOT TO SCALE

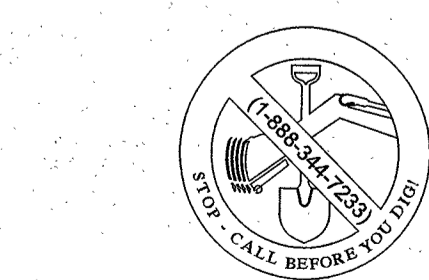
SURVEYOR'S METES AND BOUNDS DESCRIPTION LOTS 29 & 36, ASSESSOR'S MAP 88 CITY OF MARLBOROUGH MIDDLESEX COUNTY, COMMONWEALTH OF MASSACHUSETTS

- BEGINNING AT A STONE FOUND ALONG THE EASTERLY LINE OF HAYES MEMORIAL DRIVE (PUBLIC - 60' WIDE), AT THE POINT OF TANGENCY WITH THE INTERSECTION OF THE NORTHERLY LINE OF NICKERSON ROAD (PUBLIC - 50' WIDE), THENCE:
1. NORTH 15 DEGREES - 32 MINUTES - 59 SECONDS WEST, A DISTANCE OF 780.28 FEET TO A STONE BOUND FOUND, THENCE;
2. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 73.44 FEET, A CENTRAL ANGLE OF 073 DEGREES - 06 MINUTES - 06 SECONDS, AN ARC LENGTH OF 93.70 FEET, A CHORD BEARING OF NORTH 20 DEGREES - 40 MINUTES - 03 SECONDS EAST, AND A CHORD LENGTH OF 87.47 FEET TO THE SOUTHERLY LINE OF BOSTON POST ROAD (PUBLIC - VARIABLE WIDTH), THENCE ALONG SAID SOUTHERLY LINE THE FOLLOWING THREE (3) COURSES;
3. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 6527.73 FEET, A CENTRAL ANGLE OF 002 DEGREES - 04 MINUTES - 37 SECONDS, AN ARC LENGTH OF 236.63 FEET, A CHORD BEARING OF NORTH 81 DEGREES - 25 MINUTES - 33 SECONDS EAST, AND A CHORD LENGTH OF 236.61 FEET, THENCE;
4. NORTH 82 DEGREES - 27 MINUTES - 51 SECONDS EAST, A DISTANCE OF 578.11 FEET, THENCE;
5. ALONG A NON-TANGENT CURVE TO THE RIGHT, HAVING A RADIUS OF 402.24 FEET, A CENTRAL ANGLE OF 010 DEGREES - 31 MINUTES - 58 SECONDS, AN ARC LENGTH OF 73.84 FEET, A CHORD BEARING OF SOUTH 84 DEGREES - 16 MINUTES - 15 SECONDS EAST, AND A CHORD LENGTH OF 73.84 FEET TO AN IRON ROD FOUND, THENCE DEPARTING SAID SOUTHERLY LINE, RUNNING ALONG THE DIVIDING LINE WITH MAP 88, LOT 22A (NFK K S WYMAN REALTY, LLC) THE FOLLOWING THREE (3) COURSES;
6. SOUTH 19 DEGREES - 57 MINUTES - 52 SECONDS WEST, A DISTANCE OF 215.01 FEET, THENCE;
7. SOUTH 11 DEGREES - 04 MINUTES - 14 SECONDS WEST, A DISTANCE OF 198.00 FEET, THENCE;
8. SOUTH 37 DEGREES - 34 MINUTES - 14 SECONDS WEST, A DISTANCE OF 380.40 FEET, THENCE;
9. ALONG THE DIVIDING LINE WITH MAP 88, LOT 22-1 (NFK FREDERICK M. DALEY, JR.) SOUTH 13 DEGREES - 53 MINUTES - 48 SECONDS WEST, A DISTANCE OF 249.56 FEET, THENCE;
10. CONTINUING ALONG SAID DIVIDING LINE, SOUTH 55 DEGREES - 09 MINUTES - 40 SECONDS EAST, A DISTANCE OF 96.37 FEET, THENCE;
11. ALONG THE DIVIDING LINE WITH MAP 88, LOT 29A (NFK NORMANDY NICKERSON ROAD, LLC), SOUTH 22 DEGREES - 26 MINUTES - 43 SECONDS WEST, A DISTANCE OF 28.41 FEET TO A POINT ON THE NORTHERLY LINE OF NICKERSON ROAD, THENCE ALONG THE NORTHERLY LINE THE FOLLOWING FIVE (5) COURSES;
12. ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 2,575.00 FEET, A CENTRAL ANGLE OF 000 DEGREES - 33 MINUTES - 59 SECONDS, AN ARC LENGTH OF 25.34 FEET, A CHORD BEARING OF NORTH 86 DEGREES - 17 MINUTES - 56 SECONDS WEST, AND A CHORD LENGTH OF 25.34 FEET TO A STONE BOUND FOUND, THENCE;
13. ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 656.04 FEET, A CENTRAL ANGLE OF 018 DEGREES - 20 MINUTES - 56 SECONDS, AN ARC LENGTH OF 210.10 FEET, A CHORD BEARING OF NORTH 75 DEGREES - 11 MINUTES - 35 SECONDS WEST, AND A CHORD LENGTH OF 209.20 FEET TO A STONE BOUND FOUND, THENCE;
14. ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 170.98 FEET, A CENTRAL ANGLE OF 021 DEGREES - 15 MINUTES - 29 SECONDS, AN ARC LENGTH OF 83.44 FEET, A CHORD BEARING OF SOUTH 85 DEGREES - 00 MINUTES - 12 SECONDS WEST, AND A CHORD LENGTH OF 83.07 FEET TO A STONE BOUND FOUND, THENCE;
15. SOUTH 74 DEGREES - 22 MINUTES - 28 SECONDS WEST, A DISTANCE OF 4.93 FEET TO A STONE BOUND FOUND, THENCE;
16. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 30.00 FEET, A CENTRAL ANGLE OF 089 DEGREES - 44 MINUTES - 33 SECONDS, AN ARC LENGTH OF 46.99 FEET, A CHORD BEARING OF NORTH 86 DEGREES - 45 MINUTES - 15 SECONDS WEST, AND A CHORD LENGTH OF 42.33 FEET TO THE POINT AND PLACE OF BEGINNING.

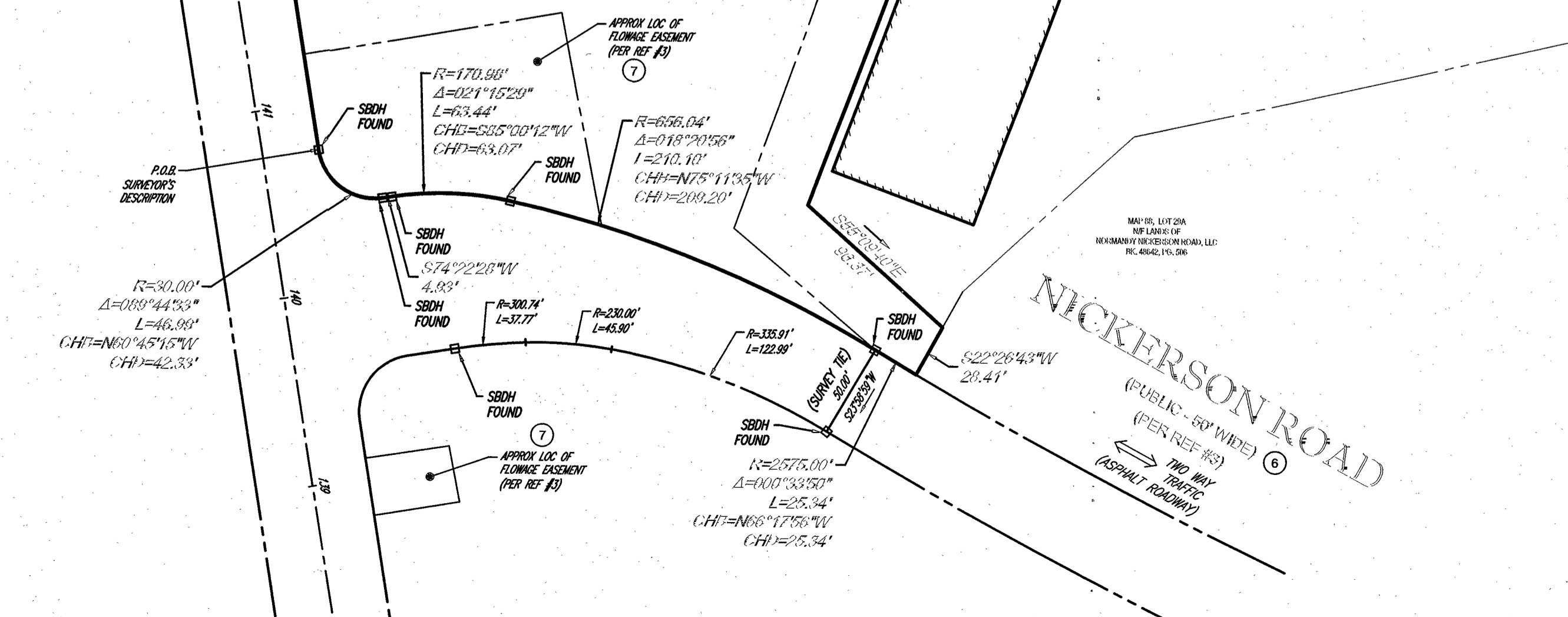
CONTAINING 535,539 SQUARE FEET OR 12.284 ACRES.

HAYES MEMORIAL DRIVE (PUBLIC - 60' WIDE) ⑥

- REFERENCES:
1. THE TAX ASSESSOR'S MAP OF MARLBOROUGH, MIDDLESEX COUNTY, MAP #8.
2. MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, MIDDLESEX COUNTY, MASSACHUSETTS (ALL JURISDICTIONS) PANEL 478 OF 656," MAP NUMBER 2501705478F, MAP REVISED: JULY 7, 2014.
3. MAP ENTITLED "PLAN OF LAND IN MARLBOROUGH, MA (MIDDLESEX COUNTY)," PREPARED BY PRECISION LAND SURVEYING, INC., DATED AUGUST 4, 2004. LAST REVISED NOVEMBER 23, 2004. RECORDED WITH THE MIDDLESEX COUNTY REGISTRY OF DEEDS AS PLAN 1515 OF 2004.
4. MAP ENTITLED "PLAN OF LAND IN MARLBOROUGH, MASSACHUSETTS, PREPARED FOR: METROPOLITAN LIFE INSURANCE COMPANY," PREPARED BY VANASSE HANGEN BRUSTLIN, INC., DATED NOVEMBER 5, 1999. THREE SHEETS. RECORDED WITH THE MIDDLESEX COUNTY REGISTRY OF DEEDS AS PLAN 1346 OF 1999.
5. MAP ENTITLED "PLAN OF LAND IN MARLBOROUGH, MASS., PROPERTY OF: METROPOLITAN LIFE INSURANCE COMPANY," PREPARED BY GUERRIERE & HALNON, INC., DATED DECEMBER 16, 1995. THREE SHEETS. RECORDED WITH THE MIDDLESEX COUNTY REGISTRY OF DEEDS AS PLAN 1174 OF 1995.
6. MAP ENTITLED "PLAN OF LAND IN MARLBOROUGH, MASS., PROPERTY OF: METROPOLITAN LIFE INSURANCE COMPANY," PREPARED BY GUERRIERE & HALNON, INC., DATED AUGUST 11, 1986. ELEVEN SHEETS. RECORDED WITH THE MIDDLESEX COUNTY REGISTRY OF DEEDS AS PLAN 1135 OF 1986.
7. MAP ENTITLED "PLAN OF LAND IN MARLBOROUGH, MASS., OWNED BY: MARLBORO INVESTMENT CORP.," PREPARED BY HIGHLAND LAND SURVEYORS, INC., DATED MARCH 5, 1974. RECORDED WITH THE MIDDLESEX COUNTY REGISTRY OF DEEDS AS PLAN 1051 OF 1974.
8. MAP ENTITLED "PLAN OF LAND IN MARLBOROUGH, MASS., OWNED BY: MARLBORO INVESTMENT CORP.," PREPARED BY HIGHLAND LAND SURVEYORS, INC., DATED APRIL 23, 1970. RECORDED WITH THE MIDDLESEX COUNTY REGISTRY OF DEEDS AS PLAN 553 OF 1970.
9. MAP ENTITLED "PLAN OF LAND IN MARLBOROUGH, MASS., OWNED BY: MARLBORO INVESTMENT CORP.," PREPARED BY HIGHLAND LAND SURVEYORS, INC., DATED MARCH 31, 1970. RECORDED WITH THE MIDDLESEX COUNTY REGISTRY OF DEEDS AS PLAN 311 OF 1970.
10. MAP ENTITLED "CONSTRUCTION PLAN, PROJECT FILE NO. 601133," PREPARED BY THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF HIGHWAYS, DATED 1998. SHEETS 12 THROUGH 16 OF 111.
11. MAP ENTITLED "MARLBOROUGH, STIRRUP BROOK HIGHWAY NO. 5," PREPARED BY THE CITY OF MARLBOROUGH DEPARTMENT OF PUBLIC WORKS. RECORDED WITH THE MIDDLESEX COUNTY REGISTRY OF DEEDS AS PLAN 555 OF 1990.
12. MAP ENTITLED "AMENDED PLAN IN MARLBOROUGH, MIDDLESEX COUNTY," PREPARED BY THE MASSACHUSETTS DEPARTMENT OF HIGHWAYS, DATED SEPTEMBER 24, 2004. LAYOUT NO. 7436, SHEETS 1 THROUGH 4 OF 15.
13. UNDERGROUND ELECTRIC FACILITY MAPPING PROVIDED BY NATIONAL GRID.
14. UNDERGROUND GAS FACILITY MAPPING PROVIDED BY NSTAR GAS.
15. UNDERGROUND DRAINAGE AND WATER FACILITY MAPPING OBTAINED BY THE CITY OF MARLBOROUGH ONLINE GEOGRAPHIC INFORMATION SYSTEM, PROVIDED BY THE DEPARTMENT OF PUBLIC WORKS.
16. MAP ENTITLED "GRADING PLAN, PRELIMINARY, LOTS 1 & 2, NICKERSON & BOSTON POST ROAD WEST, MARLBOROUGH, MA, PREPARED FOR: DBK REALTY, LLC," PREPARED BY BRUCE SALK & ASSOCIATES, INC., DATED FEBRUARY 12, 2014.
17. MAP ENTITLED "HAYES MEMORIAL DRIVE AS-BUILT," PREPARED BY THE CITY OF MARLBOROUGH DEPARTMENT OF PUBLIC WORKS, SHEET 1 OF 5.



THE COMMONWEALTH OF MASSACHUSETTS REQUIRES NOTIFICATION BY EXAMINATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE COMMONWEALTH.



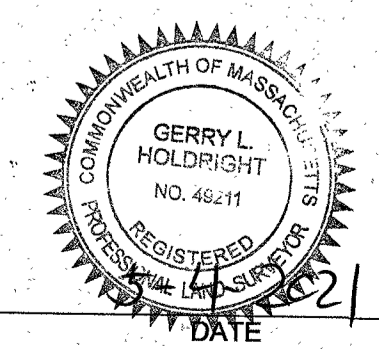
- NOTES:
1. PROPERTY KNOWN AS LOTS 29 & 36 AS SHOWN ON THE CITY OF MARLBOROUGH, MIDDLESEX COUNTY, COMMONWEALTH OF MASSACHUSETTS, MAP NO. 88.
2. AREA: LOT 29 = 264,134 SQUARE FEET OR 6.064 ACRES LOT 36 = 271,405 SQUARE FEET OR 6.230 ACRES TOTAL = 535,539 SQUARE FEET OR 12.294 ACRES
3. LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE. LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD, AND THE MAPS AS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. AVAILABLE AS-BUILT PLANS AND UTILITY MARKOUT DOES NOT ENSURE MAPPING OF ALL UNDERGROUND UTILITIES AND STRUCTURES. LOCATION, SIZE AND TYPE BY THE PROPER UTILITY COMPANIES. CONTROL POINT ASSOCIATES, INC. DOES NOT GUARANTEE THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED.
4. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
5. THIS SURVEY WAS PREPARED WITH REFERENCE TO A TITLE REPORT PREPARED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY, HAVING A CASE NO. BLC-28020, WITH AN EFFECTIVE DATE OF JANUARY 12, 2021, WHERE THE FOLLOWING SURVEY RELATED EXCEPTIONS APPEAR IN SCHEDULE B - SECTION 2:
GENERAL EXCEPTIONS 1 THROUGH 5 ARE NOT SURVEY RELATED AND HAVE NOT BEEN COMMENTED ON AS PART OF THIS SURVEY.
6. TITLE TO AND RIGHTS OF THE PUBLIC AND OTHERS ENTITLED THERETO IN AND TO THOSE PORTIONS OF THE INSURED PREMISES LYING WITHIN THE BOUNDS OF ADJACENT STREETS, ROADS, AND WAYS - PUBLIC WAYS SHOWN HEREON.
7. BRIDLE WAY AND FLOWAGE EASEMENT SHOWN ON PLAN 535 OF 2013 - BRIDLE WAY AND FLOWAGE EASEMENT SHOWN.
8. DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS, DATED MAY 24, 2013, RECORDED WITH SAID DEEDS, BOOK 61865, PAGE 402 - NOT PLOTTABLE.
9. MATTERS SET FORTH IN DEED FROM NORMANDY NICKERSON ROAD, LLC, DATED MAY 24, 2013, RECORDED WITH SAID DEEDS, BOOK 61865, PAGE 419 - MATTERS SHOWN HEREON.
10. INTENTIONALLY OMITTED.
11. INTENTIONALLY OMITTED.
12. BY GRAPHIC PLOTTING ONLY PROPERTY IS LOCATED IN FLOOD HAZARD ZONE X-UNSHADED (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER REF. #2.
13. ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD83), BASED ON GPS OBSERVATIONS UTILIZING THE KEYSTONE VRS NETWORK (KEYNETGPS) TAKEN AT THE TIME OF THE FIELD SURVEY.
TEMPORARY BENCH MARKS SET:
TBM-A: MAG NAIL SET IN ASPHALT CURBING ON SOUTHERLY LINE OF NICKERSON ROAD. ELEVATION = 311.98'
TBM-B: IRON ROD WITH CAP SET ON SOUTHERLY SIDE OF BOSTON POST ROAD. ELEVATION = 307.34'
PRIOR TO CONSTRUCTION IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THAT THE BENCHMARKS ILLUSTRATED ON THIS SKETCH HAVE NOT BEEN DISTURBED AND THEIR ELEVATIONS HAVE BEEN CONFIRMED. ANY CONFLICTS MUST BE REPORTED PRIOR TO CONSTRUCTION.
14. THE OFFSETS SHOWN ARE NOT TO BE USED FOR THE CONSTRUCTION OF ANY STRUCTURE, FENCE, PERMANENT ADDITION, ETC.
15. NO BUILDINGS LOCATED ON THE PREMISES.
16. NO PARKING STRIPES OBSERVED ON LOCUS PROPERTY AT TIME OF SURVEY.
17. THE CURRENT ZONING CLASSIFICATION, ITEM 6(a), WAS NOT PROVIDED BY THE INSURER AS REQUIRED BY THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS.
18. THERE IS NO OBSERVABLE EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WITHIN RECENT MONTHS.
19. NO DELINEATION MARKERS OBSERVED AND NO DELINEATION SKETCH PROVIDED BY CERTIFIED WETLAND SCIENTIST.
20. SURVEYOR'S DESCRIPTION PREPARED PER CLIENT REQUEST.

SEE SHEETS 2-4 OF 4 FOR TOPOGRAPHY & UTILITIES

THIS SURVEY IS CERTIFIED TO: LPCH 1000 NICKERSON LP COMMONWEALTH LAND TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAN 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), 8, 9, 11, 13, 14, 16 & 17 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON JANUARY 28, 2021.

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



GERRY L. HOLDRIGHT, PLS MASSACHUSETTS PROFESSIONAL LAND SURVEYOR #4611

Table with columns: No., Description of Revision, Field Crew, Drawn, Approved, Date. Includes revision history and project details for ALTA/NSPS Land Title Survey by Control Point Associates, Inc.

ALTA/NSPS LAND TITLE SURVEY LINCOLN PROPERTY COMPANY 0 BOSTON POST ROAD WEST 1000 NICKERSON ROAD MAP 88, LOTS 29 & 36 CITY OF MARLBOROUGH, MIDDLESEX COUNTY COMMONWEALTH OF MASSACHUSETTS

CONTROL POINT ASSOCIATES, INC. ALBANY, NY 518-217-9010 CHALFONTE, PA 610-212-9000 HAITHPAUGE, NY 631-580-2645 MANHATTAN, NY 646-788-9111 MT LAUREL, NJ 609-857-3099 WARREN, NJ 908-668-0099

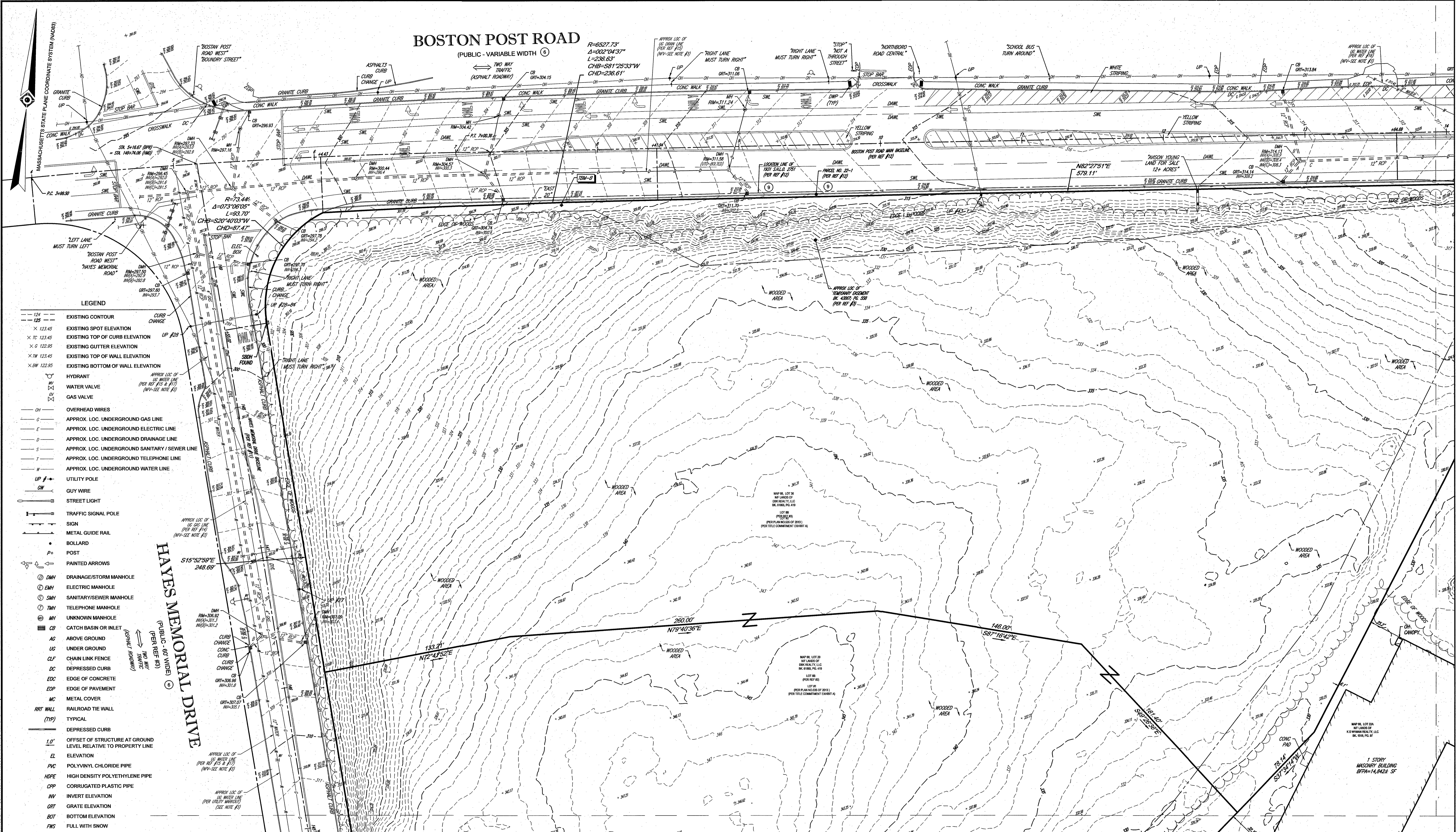
Table with columns: Reviewed, Approved, Date, Scale, File No., Dwg. No. Values: E.L.O.C., G.L.H., 2-17-2021, 1"=60', 03-200414, 1 OF 4



# BOSTON POST ROAD

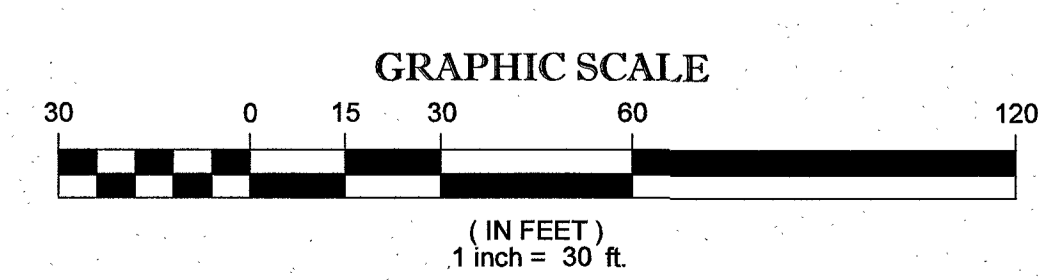
(PUBLIC - VARIABLE WIDTH)

$R=6527.73'$   
 $\Delta=002^{\circ}04'37''$   
 $L=236.63'$   
 $CHB=S81^{\circ}28'33''W$   
 $CHD=236.61'$



- LEGEND**
- EXISTING CONTOUR
  - CURB CHANGE
  - x 123.45 EXISTING SPOT ELEVATION
  - x 70 123.45 EXISTING TOP OF CURB ELEVATION
  - x G 122.95 EXISTING GUTTER ELEVATION
  - x TW 123.45 EXISTING TOP OF WALL ELEVATION
  - x BW 122.95 EXISTING BOTTOM OF WALL ELEVATION
  - HYDRANT
  - WATER VALVE
  - GAS VALVE
  - OH OVERHEAD WIRES
  - APPROX. LOC. UNDERGROUND GAS LINE
  - APPROX. LOC. UNDERGROUND ELECTRIC LINE
  - APPROX. LOC. UNDERGROUND DRAINAGE LINE
  - APPROX. LOC. UNDERGROUND SANITARY / SEWER LINE
  - APPROX. LOC. UNDERGROUND TELEPHONE LINE
  - APPROX. LOC. UNDERGROUND WATER LINE
  - UP UTILITY POLE
  - GW GUY WIRE
  - STREET LIGHT
  - TRAFFIC SIGNAL POLE
  - SIGN
  - METAL GUIDE RAIL
  - BOLLARD
  - POST
  - PAINTED ARROWS
  - DMH DRAINAGE/STORM MANHOLE
  - EMH ELECTRIC MANHOLE
  - SMH SANITARY/SEWER MANHOLE
  - TMH TELEPHONE MANHOLE
  - UMH UNKNOWN MANHOLE
  - CB CATCH BASIN OR INLET
  - AG ABOVE GROUND
  - UG UNDER GROUND
  - CL CHAIN LINK FENCE
  - DC DEPRESSED CURB
  - EDC EDGE OF CONCRETE
  - EOP EDGE OF PAVEMENT
  - MC METAL COVER
  - RTW RAILROAD TIE WALL
  - (TYP) TYPICAL
  - DEPRESSED CURB
  - 1.0' OFFSET OF STRUCTURE AT GROUND LEVEL RELATIVE TO PROPERTY LINE
  - ELEVATION
  - PVC POLYVINYL CHLORIDE PIPE
  - HDPE HIGH DENSITY POLYETHYLENE PIPE
  - CPP CORRUGATED PLASTIC PIPE
  - INV INVERT ELEVATION
  - GRT GRATE ELEVATION
  - BOT BOTTOM ELEVATION
  - FWS FULL WITH SNOW
  - FDD FULL OF DEBRIS
  - TDD TOP OF DEBRIS

**HAYES MEMORIAL DRIVE**  
 (PUBLIC - 60' WIDE)



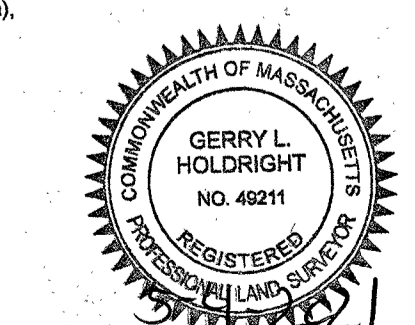
THIS SURVEY IS CERTIFIED TO:  
 LPHC 1000 NICKERSON LP  
 COMMONWEALTH LAND TITLE INSURANCE COMPANY

No.	REVISION PER CLIENT COMMENTS	FIELD CREW	DATE
3	REVISED PER CLIENT COMMENTS	E.L.O. G.L.H.	5-4-2021
2	REVISED PER UPDATED TITLE COMMITMENT	E.L.O. G.L.H.	4-1-2021
1	REVISED PER CLIENT COMMENTS	E.L.O. G.L.H.	3-15-2021

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

**GERRY L. HOLDRIGHT, PLS**  
 MASSACHUSETTS PROFESSIONAL LAND SURVEYOR #49211



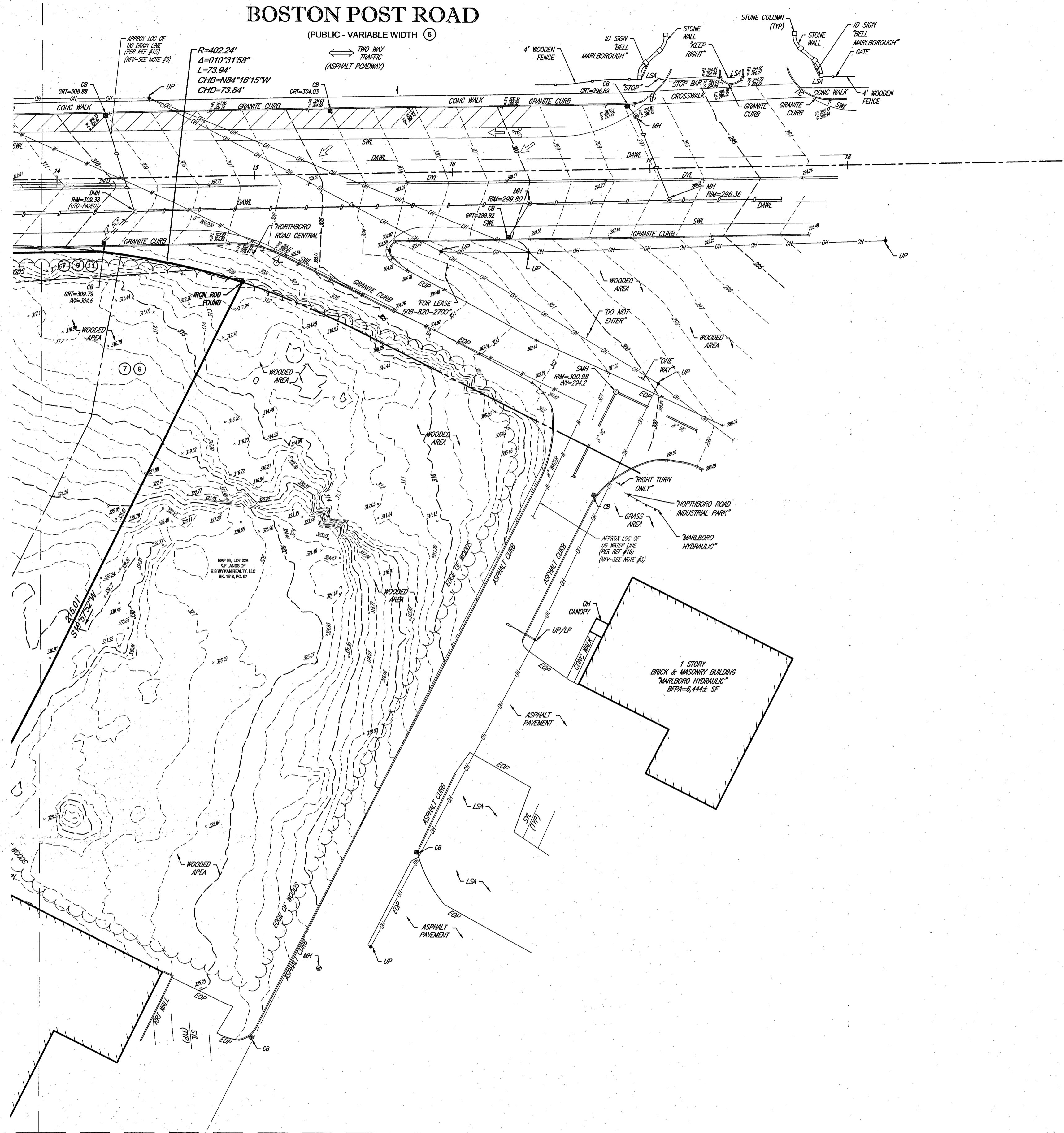
FIELD DATE	1-28-2021	ALTA/NSPS LAND TITLE SURVEY
FIELD BOOK NO.	20-18 MA	<b>LINCOLN PROPERTY COMPANY</b>
FIELD BOOK PG.	85	0 BOSTON POST ROAD WEST 1000 NICKERSON ROAD MAP 98, LOTS 29 & 36
FIELD CREW	J.D.O.	CITY OF MARLBOROUGH, MIDDLESEX COUNTY COMMONWEALTH OF MASSACHUSETTS
DRAWN	R.J.K.	<b>CONTROL POINT ASSOCIATES, INC.</b>
REVIEWED	E.L.O.	352 TURNPIKE ROAD SOUTHBOROUGH, MA 01772 508.948.3000 - 508.948.3003 FAX
APPROVED	G.L.H.	ALBANY, NY 518-217-5910 CHALFONT, PA 215-712-9800 HAUPPAUGE, NY 631-580-2645 MANHATTAN, NY 646-780-0411 MT LAUREL, NJ 609-857-2099 WARREN, NJ 908-668-0099
DATE	2-17-2021	SCALE
		1"=30'
FILE NO.	03-200414	DWG. NO.
		2 OF 4

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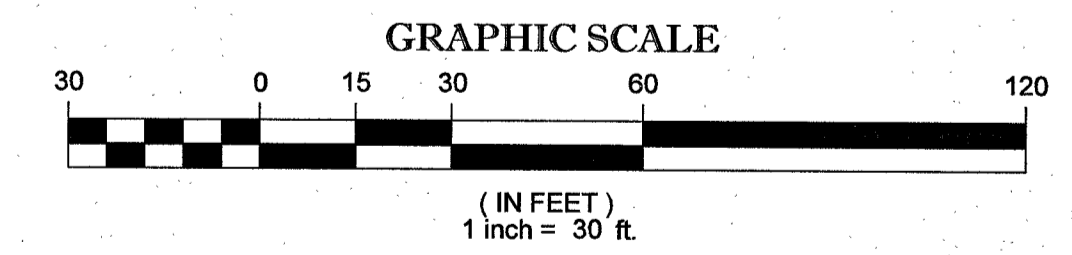
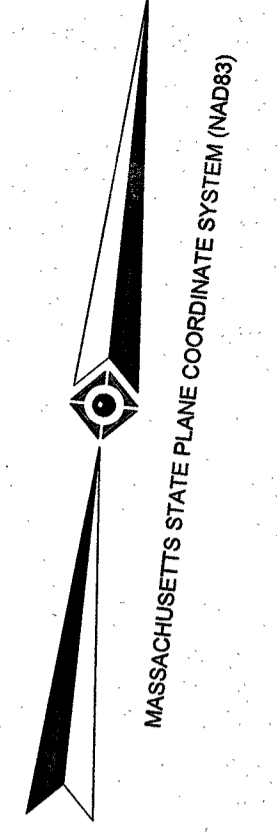
# BOSTON POST ROAD

(PUBLIC - VARIABLE WIDTH)



**LEGEND**

---	EXISTING CONTOUR
×	EXISTING SPOT ELEVATION
×	EXISTING TOP OF CURB ELEVATION
×	EXISTING GUTTER ELEVATION
×	EXISTING TOP OF WALL ELEVATION
×	EXISTING BOTTOM OF WALL ELEVATION
○	HYDRANT
○	WATER VALVE
○	GAS VALVE
—	OVERHEAD WIRES
—	APPROX. LOC. UNDERGROUND GAS LINE
—	APPROX. LOC. UNDERGROUND ELECTRIC LINE
—	APPROX. LOC. UNDERGROUND DRAINAGE LINE
—	APPROX. LOC. UNDERGROUND SANITARY / SEWER LINE
—	APPROX. LOC. UNDERGROUND TELEPHONE LINE
—	APPROX. LOC. UNDERGROUND WATER LINE
UP #	UTILITY POLE
GW	GUY WIRE
—	STREET LIGHT
—	TRAFFIC SIGNAL POLE
—	SIGN
—	METAL GUIDE RAIL
•	BOLLARD
P	POST
←	PAINTED ARROWS
DMH	DRAINAGE/STORM MANHOLE
EMH	ELECTRIC MANHOLE
SMH	SANITARY/SEWER MANHOLE
TMH	TELEPHONE MANHOLE
MH	UNKNOWN MANHOLE
CB	CATCH BASIN OR INLET
AG	ABOVE GROUND
UG	UNDER GROUND
CLF	CHAIN LINK FENCE
DC	DEPRESSED CURB
EDC	EDGE OF CONCRETE
EDP	EDGE OF PAVEMENT
MC	METAL COVER
RRT WALL	RAILROAD TIE WALL
(TYP)	TYPICAL
1.0'	OFFSET OF STRUCTURE AT GROUND LEVEL RELATIVE TO PROPERTY LINE
EL	ELEVATION
PVC	POLYVINYL CHLORIDE PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
CPP	CORRUGATED PLASTIC PIPE
INV	INVERT ELEVATION
GRT	GRATE ELEVATION
BOT	BOTTOM ELEVATION
FWS	FULL WITH SNOW
FOD	FULL OF DEBRIS
TOD	TOP OF DEBRIS
WC	VITRIFIED CLAY PIPE



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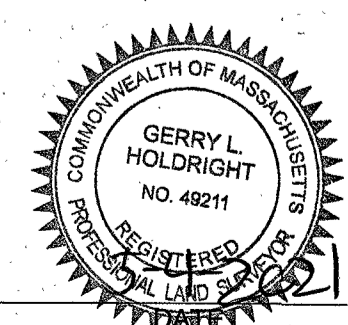


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THIS SURVEY IS CERTIFIED TO:  
 LPCH 1000 NICKERSON LP  
 COMMONWEALTH LAND TITLE INSURANCE COMPANY

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**GERRY L. HOLDRIGHT, PLS**  
 MASSACHUSETTS PROFESSIONAL LAND SURVEYOR #49211

3	REVISED PER CLIENT COMMENTS	E.LOC	G.L.H.	5-4-2021	
2	REVISED PER UPDATED TITLE COMMITMENT	E.LOC	G.L.H.	4-1-2021	
1	REVISED PER CLIENT COMMENTS	E.LOC	G.L.H.	3-15-2021	
No.	DESCRIPTION OF REVISION	FIELD CREW	DRAWN	APPROVED	DATE

FIELD DATE: 1-28-2021  
 FIELD BOOK NO.: 20-18 MA  
 FIELD BOOK PG.: 85

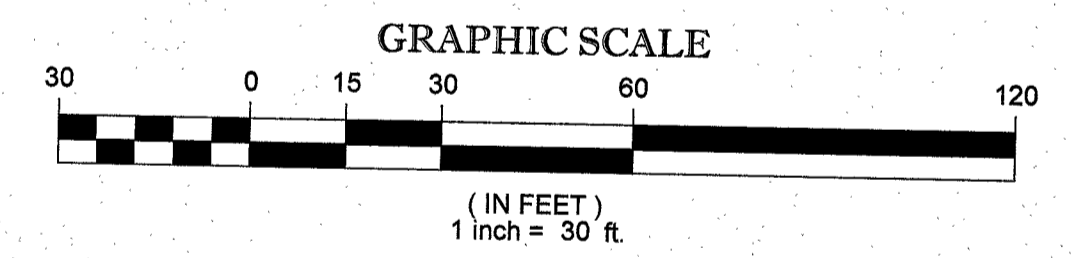
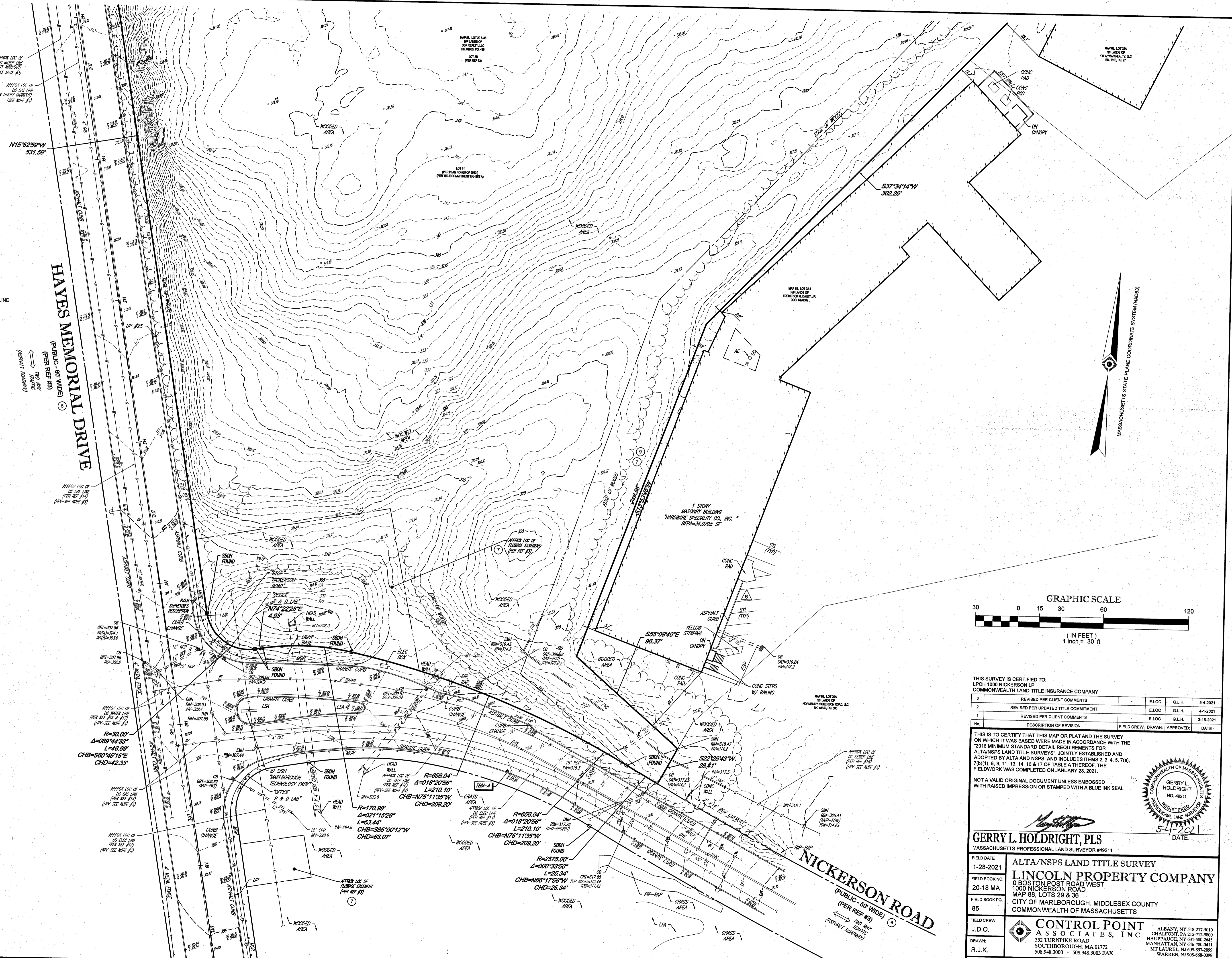
**ALTA/NSPS LAND TITLE SURVEY**  
**LINCOLN PROPERTY COMPANY**  
 0 BOSTON POST ROAD WEST  
 1000 NICKERSON ROAD  
 MAP 88, LOTS 29 & 36  
 CITY OF MARLBOROUGH, MIDDLESEX COUNTY  
 COMMONWEALTH OF MASSACHUSETTS

FIELD CREW: J.D.O.		ALBANY, NY 518-217-5010
DRAWN: R.J.K.		352 TURNPIKE ROAD SOUTHBOROUGH, MA 01772 508.948.3000 - 508.948.3003 FAX
REVIEWED: E.LOC	APPROVED: G.L.H.	DATE: 2-17-2021
		SCALE: 1"=30'
		FILE NO.:
		03-200414
		DWG. NO.:
		3 OF 4

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- LEGEND**
- 124 --- EXISTING CONTOUR
  - 125 --- EXISTING CONTOUR
  - X 123.45 EXISTING SPOT ELEVATION
  - X TO 123.45 EXISTING TOP OF CURB ELEVATION
  - X G 122.85 EXISTING GUTTER ELEVATION
  - X TW 123.45 EXISTING TOP OF WALL ELEVATION
  - X BW 122.85 EXISTING BOTTOM OF WALL ELEVATION
  - HYDRANT
  - WATER VALVE
  - GAS VALVE
  - OH OVERHEAD WIRES
  - G APPROX. LOC. UNDERGROUND GAS LINE
  - E APPROX. LOC. UNDERGROUND ELECTRIC LINE
  - D APPROX. LOC. UNDERGROUND DRAINAGE LINE
  - S APPROX. LOC. UNDERGROUND SANITARY / SEWER LINE
  - T APPROX. LOC. UNDERGROUND TELEPHONE LINE
  - W APPROX. LOC. UNDERGROUND WATER LINE
  - UP # UTILITY POLE
  - GW GUY WIRE
  - STREET LIGHT
  - TRAFFIC SIGNAL POLE
  - SIGN
  - METAL GUIDE RAIL
  - BOLLARD
  - POST
  - PAINTED ARROWS
  - DMH DRAINAGE/STORM MANHOLE
  - EMH ELECTRIC MANHOLE
  - SMH SANITARY/SEWER MANHOLE
  - TMH TELEPHONE MANHOLE
  - MH UNKNOWN MANHOLE
  - CB CATCH BASIN OR INLET
  - AC ABOVE GROUND
  - UG UNDER GROUND
  - CL CHAIN LINK FENCE
  - DC DEPRESSED CURB
  - EDC EDGE OF CONCRETE
  - EOP EDGE OF PAVEMENT
  - MC METAL COVER
  - RRT WALL RAILROAD TIE WALL
  - (TP) TYPICAL
  - DEPRESSED CURB
  - 1.0' OFFSET OF STRUCTURE AT GROUND LEVEL RELATIVE TO PROPERTY LINE
  - EL ELEVATION
  - PVC POLYVINYL CHLORIDE PIPE
  - HDPE HIGH DENSITY POLYETHYLENE PIPE
  - CPP CORRUGATED PLASTIC PIPE
  - IN INVERT ELEVATION
  - GRY GRATE ELEVATION
  - BOT BOTTOM ELEVATION
  - FWS FULL WITH SNOW
  - FDD FILL OF DEBRIS
  - TD TOP OF DEBRIS

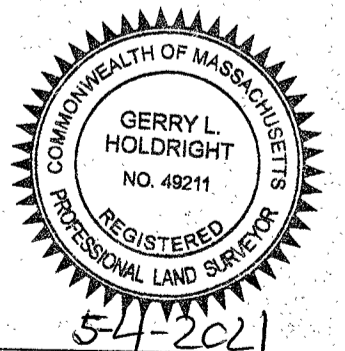


THIS SURVEY IS CERTIFIED TO:  
LPC# 1000 NICKERSON LP  
COMMONWEALTH LAND TITLE INSURANCE COMPANY

No.	DESCRIPTION OF REVISION	FIELD CREW	DRAWN	APPROVED	DATE	
3	REVISED PER CLIENT COMMENTS			E.L.O.C.	G.L.H.	4-4-2021
2	REVISED PER UPDATED TITLE COMMITMENT			E.L.O.C.	G.L.H.	4-1-2021
1	REVISED PER CLIENT COMMENTS			E.L.O.C.	G.L.H.	3-15-2021

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**GERRY L. HOLDRIGHT, PLS**  
MASSACHUSETTS PROFESSIONAL LAND SURVEYOR #49211

**ALTA/NSPS LAND TITLE SURVEY**  
**LINCOLN PROPERTY COMPANY**  
0 BOSTON POST ROAD WEST  
1000 NICKERSON ROAD  
MAP 88, LOTS 29 & 36  
CITY OF MARLBOROUGH, MIDDLESEX COUNTY  
COMMONWEALTH OF MASSACHUSETTS

FIELD DATE: 1-28-2021  
FIELD BOOK NO.: 20-18 MA  
FIELD BOOK PG.: 85

FIELD CREW: J.D.O.  
DRAWN: R.J.K.  
REVIEWED: E.L.O.C.

APPROVED: G.L.H. DATE: 2-17-2021 SCALE: 1"=30' FILE NO.: 03-200414 DWG. NO.: 4 OF 4

