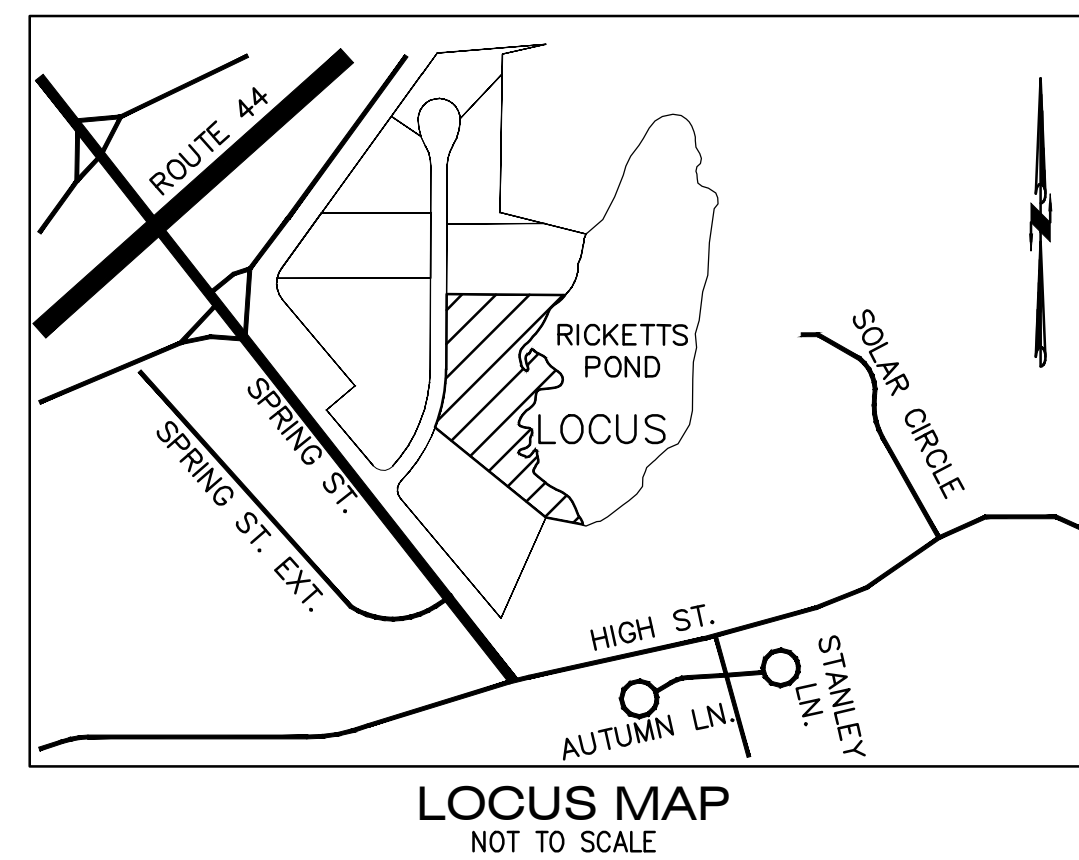


ABBREVIATIONS

ABAN	ABANDONED
ACP	ASBESTOS CEMENT PIPE
ACR	ACCESSIBLE CURB RAMP
ADJ	ADJUST
APPROX	APPROXIMATE
ASPH	ASPHALT
ACCOMP	ASPHALT COATED CORRUGATED METAL PIPE
B	BOLLARD
BD	BOUND
BLDG	BUILDING
BIT CONC	BITUMINOUS CONCRETE
BM	BENCHMARK
BS	BOTTOM OF SLOPE
CAP	CORRUGATED ALUMINUM PIPE
CB	CATCH BASIN
C&C	CUT AND CAPPED
CB/DH	CONC. BOUND/DRILL HOLE
CB/EPLP	CB/ESCUTCHEON
CIP	CAPE COD BERM
QIT	CAST IRON PIPE
Q	CHANGE IN TYPE
CLF	CENTERLINE
CO	CHAIN LINK FENCE
CONC	CLEAN OUT
COND	CONCRETE
CMP	CONDUIT
CPP	CORRUGATED METAL PIPE
CS	CORRUGATED POLYETHYLENE PIPE
CSMH	COMBINED SEWER
CULV	COMBINED SEWER MANHOLE
Δ	CULVERT
DCB	DELTA ANGLE
DIP	DRAIN
DMH	DOUBLE CATCH BASIN
E	DUCTILE IRON PIPE
ELEV	DRAIN MANHOLE
EMH	ELECTRIC
E/T/C	EXTRUDED CONCRETE CURB
EW	ELEVATION
EXIST	ELECTRIC MANHOLE
FAB	ELECTRIC, TELEPHONE, & CABLE TV
FES	END WALL
FND	EXISTING
FND	FIRE ALARM BOX
F&C	FLARED END SECTION
F&G	FOUND
G	FOUNDATION
GD	FRAME AND COVER
GG	FRAME AND GRATE
GIP	GAS
GP	GROUND
GS	GAS GATE
GR	GALVANIZED IRON PIPE
GRAN.	GUARD POST
HDPF	GAS SERVICE
HH	GRANITE
HOR	HIGH-DENSITY POLYETHYLENE PIPE
HP	HANDHOLE
HWL	HORIZONTAL
HYD	HIGH PRESSURE
INV	HEADWALL
I.P.	HYDRANT
I.R.	INVERT
L	IRON PIN
LSA	IRON ROD
LP	LEAD
MAX	LANDSCAPED AREA
MC	LIGHT POLE
MCC	MAXIMUM
MH	METAL COVER
MHB	MONOLITHIC CONCRETE CURB
MHP	MANHOLE
MPL	MASS. HIGHWAY BOUND
NIC	MINIMUM
NTS	METAL LIGHT POLE
OHW	NOT IN CONTRACT
PB	NOT TO SCALE
PE	OVERHEAD WIRE
P	PULL BOX
PROP	POLYETHYLENE PIPE
PVC	PROPERTY LINE
PWM	PROPOSED
RCP	POLYVINYL CHLORIDE PIPE
REM	PAVEMENT
REMODEL	PAVED WATER WAY
RET	REINFORCED CONCRETE PIPE
ROW	REMOVE
RR	REMODEL
R&R	RETAIN
S	RIGHT OF WAY
SB	RAILROAD
SB/DH	REMOVE AND RESET
SCE	REMOVE AND STACK
SMH	SEWER
STA	STONE BOUND
SS	STONE BOUND/DRILL HOLE
STL	SLOPED GRANITE EDGING
SW	SEWER MANHOLE
T	STATION
TCB	SEWER SERVICE
TL	STEE
TMH	SIDEWALK
Tr	TELEPHONE
TRANS	TRAFFIC CONTROL BOX
TS	TRAFFIC LIGHT
TSV	TELEPHONE MANHOLE
TYP	TREE
UP	TRANSFORMER
VCP	TOP OF SLOPE
VERT	TAPPING SLEEVE, VALVE AND BOX
VGC	TYPICAL
W	UTILITY POLE
WG	VITRIFIED CLAY PIPE
	VERTICAL
	VERTICAL GRANITE CURB
	WATER MAIN
	WATER GATE

LEGEND

Existing	Proposed	Description
x 100.50	+ 100.50	SPOT ELEVATIONS
100.50	100.50	TOP & BOTTOM ELEVATIONS
100.50	100.50	SPOT ELEVATIONS WITH LEADER
⊕	⊕	HYDRANT
⊕	⊕	WATER GATE VALVE
⊕	⊕	WELL
⊕	⊕	GAS GATE
⊕	⊕	ELECTRIC HANDHOLE
⊕	⊕	LIGHT POLE
⊕	⊕	UTILITY POLE
⊕	⊕	GUY POLE
⊕	⊕	GUY ANCHOR
⊕	⊕	DRAIN MANHOLE
⊕	⊕	SEWER MANHOLE
⊕	⊕	CATCH BASIN
⊕	⊕	DOUBLE CATCH BASIN
⊕	⊕	TEST PIT
⊕	⊕	BORING
⊕	⊕	SIGN SINGLE POST
⊕	⊕	GRANITE OR CONCRETE BOUND
⊕	⊕	WETLAND FLAG
⊕	⊕	EXISTING BUILDING
⊕	⊕	PROPOSED BUILDING
⊕	⊕	MAJOR CONTOUR
⊕	⊕	MINOR CONTOUR
⊕	⊕	CHAINLINK FENCE
⊕	⊕	CABLE TV LINE
⊕	⊕	ELECTRIC, TELEPHONE, CABLE TV DUCTBANK
⊕	⊕	UNDERGROUND ELECTRIC
⊕	⊕	OVERHEAD ELECTRIC
⊕	⊕	NATURAL GAS LINE
⊕	⊕	SANITARY SEWER MAIN
⊕	⊕	DRAIN PIPE
⊕	⊕	TELEPHONE LINE
⊕	⊕	WATER MAIN
⊕	⊕	FIRE PROTECTION LINE
⊕	⊕	RETAINING WALL
⊕	⊕	TREELINE
⊕	⊕	HAYBALE & SILT FENCE
⊕	⊕	LIMIT BORDERING VEGETATED WETLAND RESOURCE(1)
⊕	⊕	100' WETLAND BUFFER ZONE



GENERAL NOTES

- CARVER, ASSESSOR'S MAP 32, LOT 1-3
LOCUS OWNER:
RPBP, LLC
3 MARION DRIVE
CARVER, MASSACHUSETTS 02330
- DEED BOOK REFERENCE: PLYMOUTH COUNTY REGISTRY OF DEEDS BOOK 50438, PAGE 270 BOOK 51637, PAGE 211 PLAN BOOK 63, PAGE 848
 - LOCUS IS SHOWN ON THE TOWN OF CARVER'S ASSESSOR'S MAP 32 AS LOT 1-3, TOTAL AREA = 170,206± S.F. (3.91 AC)
 - LOCUS IS LOCATED WITHIN THE TOWN OF CARVER'S WATER RESOURCE PROTECTION DISTRICT.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCHMARKS NECESSARY FOR THE WORK.
 - THE CONTRACTOR SHALL PROVIDE INLET PROTECTION, SUCH AS SILT SACKS, AT ALL CATCH BASINS TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER INFILTRATION BASINS. INLET PROTECTION WILL ALLOW THE STORM DRAIN INLETS TO BE USED BEFORE FINAL STABILIZATION.
 - ALL EXISTING CONDITIONS INFORMATION, INCLUDING PERIMETER AND TOPOGRAPHIC INFORMATION WAS PREPARED FROM AN ON THE GROUND FIELD SURVEY PERFORMED BY MCKENZIE ENGINEERING GROUP, INC. IN FEBRUARY OF 2018.
 - BORDERING VEGETATED WETLANDS DELINEATED BY ENVIRONMENTAL CONSULTING & RESTORATION, LLC. ON FEBRUARY 6, 2018. DELINEATED BY METHODOLOGY ESTABLISHED BY THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION (MASS DEP) REGULATIONS FOUND AT 310 CMR 10.55. AN ORAD APPROVING THE LIMIT OF BORDERING VEGETATED WETLAND WAS ISSUED BY THE TOWN OF CARVER CONSERVATION COMMISSION ON JULY 9, 2018 (DEP FILE NO. SE 126-0566).
 - THE PROPERTY SHOWN HEREON IS LOCATED IN THE TOWN OF CARVER SPRING STREET INNOVATION ZONING DISTRICT PER ZONING MAP DATED 2016.
 - UTILITY INFORMATION FROM ABOVE GROUND OBSERVED EVIDENCE IN CONJUNCTION WITH DIG SAFE MARKINGS AND RECORD PLANS. THE LAND SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE LAND SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM AVAILABLE INFORMATION AND CONSTRUCTION AS THE LAND SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. BEFORE CONSTRUCTION CALL DIG SAFE SYSTEMS, INC. AT 1-888-344-7233.
 - ANY CHANGE IN THE FIELD CONDITIONS SHALL BE REPORTED TO THE ENGINEER TO ENSURE THAT ANY MODIFICATIONS TO THE ORIGINAL DESIGN ARE PROPER AND ADEQUATE TO SERVE THE PROJECT'S NEEDS, AND COMPLY WITH THE APPLICABLE STANDARDS AND REGULATION.
 - LOCALS FACTS WITHIN ZONE X AS SHOWN ON F.I.R.M. PANEL NO: 25023C0334K DATED JULY 6, 2021.
 - ALL ELEVATIONS SHOWN REFER TO NAVD 1988 DATUM.
 - NO MUNICIPAL WATER SERVICE IS LOCATED ON SPRING STREET. THE PROPOSED BUILDINGS WILL USE PRIVATE WELLS THAT WILL BE APPROVED AND INSTALLED PER THE TOWN OF CARVER BOARD OF HEALTH REGULATIONS.
 - SEE PLANS ENTITLED "DEFINITIVE SUBDIVISION PLANS, RICKETTS POND BUSINESS PARK, SPRING STREET, CARVER, MASSACHUSETTS" PREPARED BY MEG DATED JANUARY 10, 2019 AND REVISED APRIL 2, 2019 FOR EXISTING AND PROPOSED SITE CONDITIONS FOR THE ADJACENT SUBDIVISION.

GENERAL UTILITY NOTES

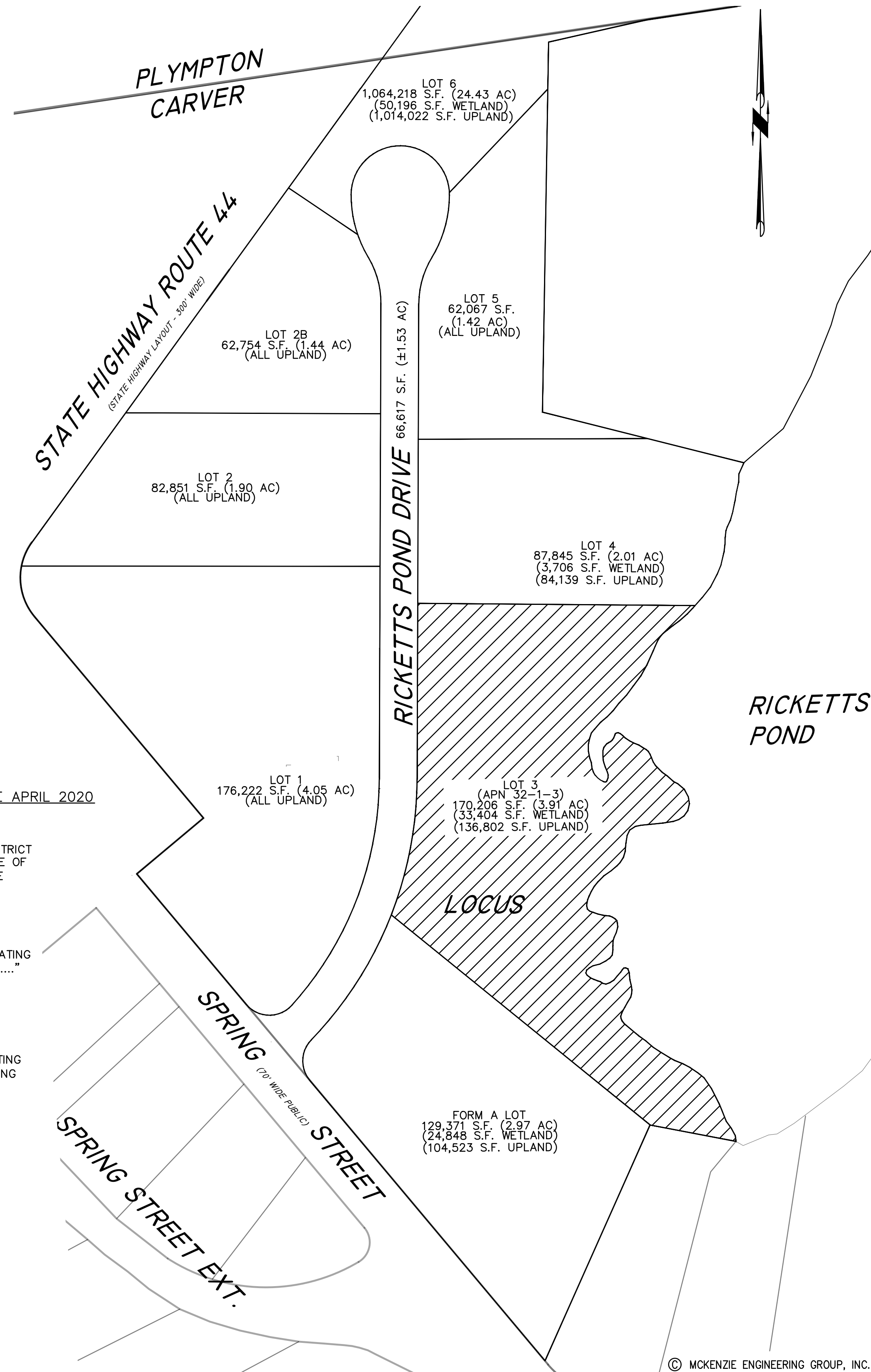
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.
- THE CONTRACTOR SHALL COORDINATE ALL STREET WORK WITH THE CARVER DPW.
- ALL WATER SERVICES SHALL BE INSTALLED WITH 5' OF COVER EXCEPT AS NOTED OR DETAILED OTHERWISE.
- ALL POTABLE WELL WATER SERVICE APPURTENANCES, MATERIALS, METHODS OF INSTALLATION SHALL MEET OR EXCEED ALL LOCAL MUNICIPAL REQUIREMENTS.
- AFTER PRESSURE TESTING AND CHLORINATION IS COMPLETED, SAMPLES SHALL BE TAKEN FROM THE WATER SERVICE AND SHALL BE TESTED AT 200 PSI FOR A MINIMUM OF 2 HOURS. THE CONTRACTOR IS REQUIRED TO NOTIFY THE CARVER DEPARTMENT OF PUBLIC WORKS AT LEAST 24 HOURS PRIOR TO THE TESTING.
- THE LOCATIONS OF PROPOSED ELECTRIC, TELEPHONE AND COMMUNICATION (E.T.C.) SERVICES ARE APPROXIMATE. THE PROJECT ELECTRICAL ENGINEER SHALL VERIFY THESE LOCATIONS PRIOR TO THE START OF CONSTRUCTION. COORDINATE ALL E.T.C. WORK WITH THE APPROPRIATE UTILITY COMPANIES.
- ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH CARVER DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS.

WAIVERS REQUESTED FROM THE TOWN OF CARVER ZONING BY-LAW EFFECTIVE APRIL 2020

- SEC 3341 PARKING LOT DESIGN:
REQUIRED: "TO THE EXTENT FEASIBLE, REQUIRED PARKING AREAS SHALL NOT BE LOCATED FORWARD OF ANY BUILDING FRONT LINE ON THE LOT. NOTWITHSTANDING THE ABOVE, ANY DISTRICT EXCEPT FOR RA, V AND PTCO, THE PLANNING BOARD MAY GRANT PERMISSION IN THE COURSE OF SITE PLAN REVIEW TO LOCATE NOT MORE THAN EIGHT (8) PARKING SPACES IN FRONT OF THE PRINCIPAL BUILDING...."
PROVIDED: 24 PARKING SPACES ARE PROVIDED IN FRONT OF THE TWO PRINCIPAL BUILDINGS.
- SEC 3345 PARKING LOT DESIGN:
REQUIRED: "FOR PARKING AREAS OF FIFTEEN (15) OR MORE SPACES, BICYCLE RACKS FACILITATING LOCKING SHALL BE PROVIDED TO ACCOMMODATE ONE BICYCLE PER FIVE (5) PARKING SPACES...."
PROVIDED: BICYCLE PARKING SPACES ARE NOT PROVIDED BY THIS SUBMISSION.
- SEC 3130.G. SUBMITTAL REQUIREMENTS:
REQUIRED: "EXISTING TREES 10" CALIPER OR BETTER AND EXISTING TREE/SHRUB MASSES; PROPOSED PLANTING, LANDSCAPING AND SCREENING;"
PROVIDED: DUE TO THE SIZE OF THE PROPOSED DEVELOPMENT, SPECIFIC LOCATIONS OF EXISTING TREES 10" CALIPER OR GREATER ARE NOT INCLUDED. OUR SUBMISSION WILL SHOW THE EXISTING TREELINE AS SURVEYED BY MCKENZIE ENGINEERING GROUP, INC.

Drawing Index:

No.	Drawing Title
G-1	LEGEND, ABBREVIATIONS & GENERAL NOTES
EX-1	EXISTING CONDITIONS PLAN
C-1	SITE LAYOUT PLAN
C-2	GRADING AND DRAINAGE PLAN
C-3	UTILITY PLAN
E-1	BUILDING ELEVATIONS
ESC-1	EROSION AND SEDIMENT CONTROL PLAN
LA-1	LANDSCAPING PLAN
D-1 - D-4	CONSTRUCTION DETAILS



REV	DATE	DESCRIPTION
1	6/29/22	LANDSCAPING

MG
MCKENZIE ENGINEERING GROUP
Assinippi Office Park
150 Longwater Drive, Suite 101
Norwell, MA 02061
P: 781.792.3900
F: 781.792.0333
www.mckeng.com

**SITE DEVELOPMENT PLANS
RICKETTS POND BUSINESS PARK
LOT 3 (APN 32-1-3)
OFF SPRING STREET
CARVER, MASSACHUSETTS**

PROFESSIONAL ENGINEER:

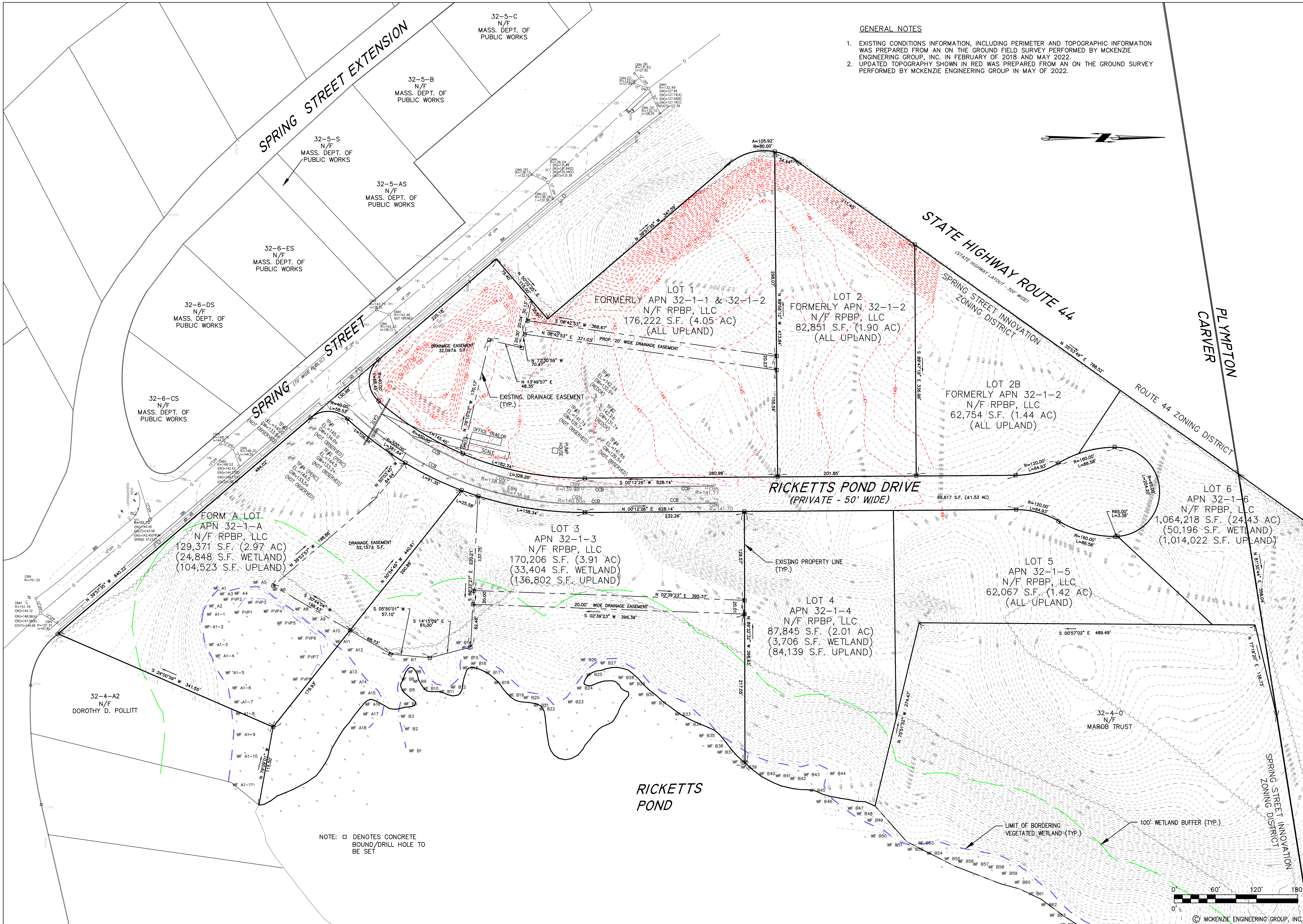
BRADLEY C. MCKENZIE
REGISTERED PROFESSIONAL ENGINEER

APPLICANT:
BRIDGESTONE DEVELOPMENT INC.
P.O. BOX 1384
PLYMOUTH, MASSACHUSETTS 02362

DRAWN BY:	ESS
DESIGNED BY:	ESS
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	MARCH 21, 2022
SCALE:	1"=100'
PROJECT NO.:	222-118
DWG. TITLE:	

LEGEND, ABBREVIATIONS & GENERAL NOTES

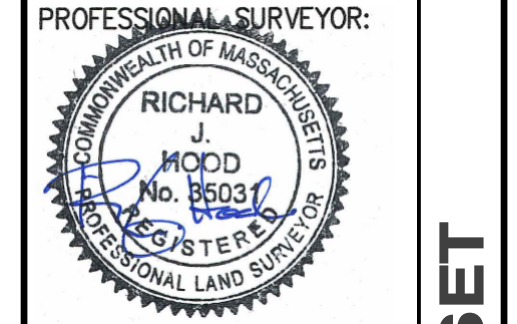
DWG. NO. **G-1**



REV	DATE	DESCRIPTION	BY
1	6/29/22	LANDSCAPING	ESS



SITE DEVELOPMENT PLANS
RICKETTS POND BUSINESS PARK
LOT 3 (APN 32-1-3)
OFF SPRING STREET
CARVER, MASSACHUSETTS

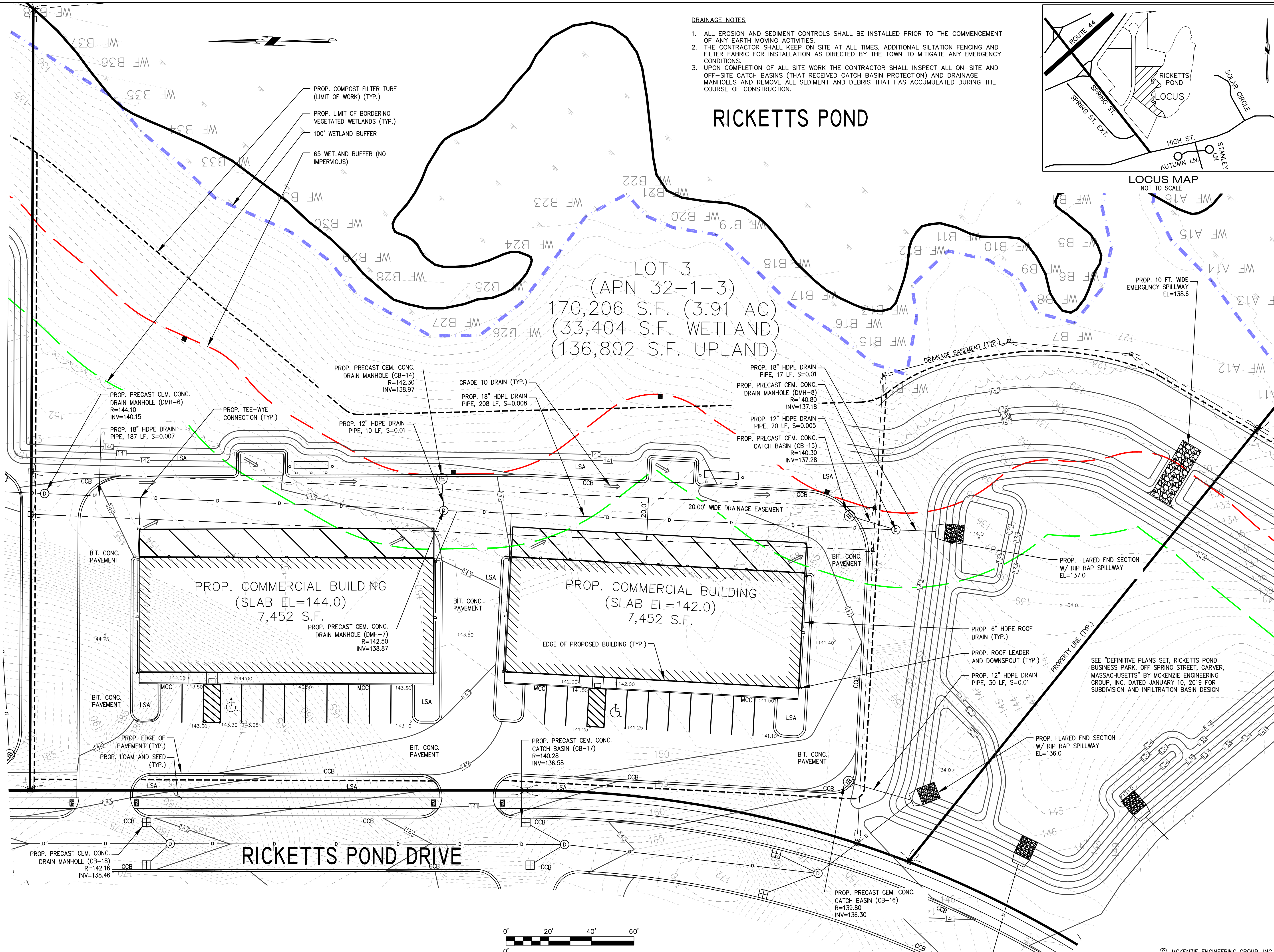


APPLICANT:
BRIDGESTONE DEVELOPMENT INC.
 P.O. BOX 1384
 PLYMOUTH, MASSACHUSETTS 02362

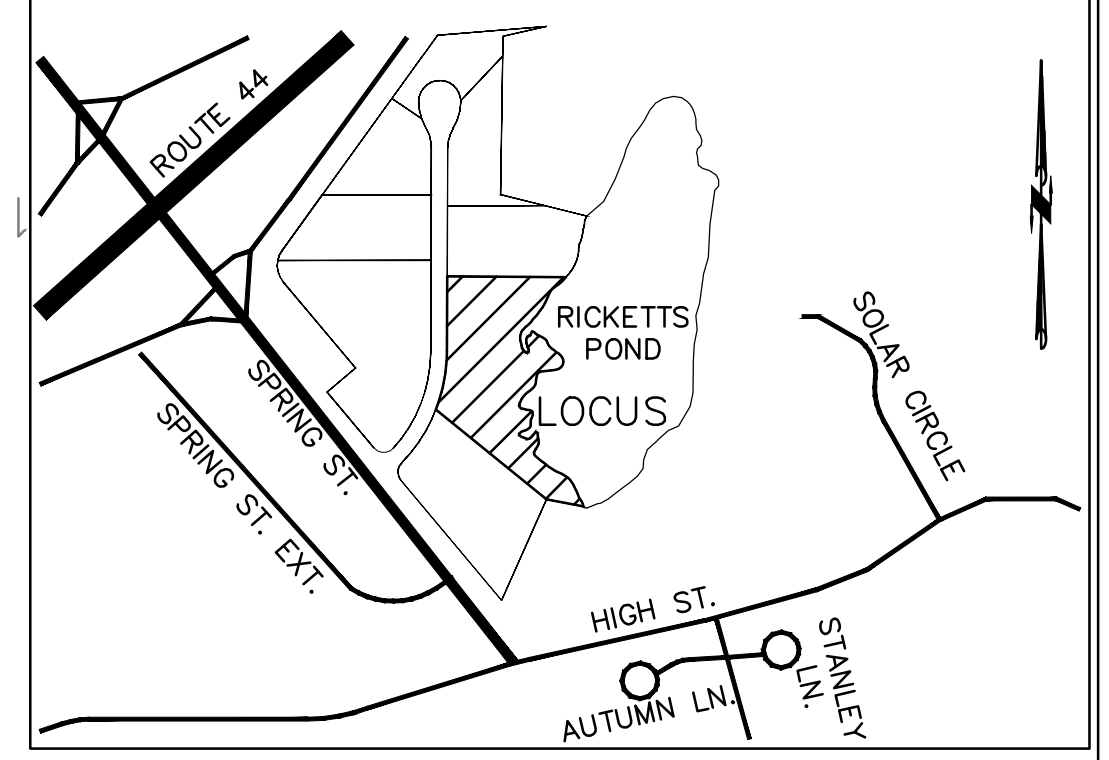
DRAWN BY: ESS
 DESIGNED BY: ESS
 CHECKED BY: BCM
 APPROVED BY: BCM
 DATE: MARCH 21, 2022
 SCALE: 1" = 60'
 PROJECT NO.: 222-118
 DWG. TITLE:

EXISTING CONDITIONS PLAN
 DWG. NO.: **EX-1**

PERMIT PLAN SET



- DRAINAGE NOTES**
1. ALL EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY EARTH MOVING ACTIVITIES.
 2. THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES, ADDITIONAL SILTATION FENCING AND FILTER FABRIC FOR INSTALLATION AS DIRECTED BY THE TOWN TO MITIGATE ANY EMERGENCY CONDITIONS.
 3. UPON COMPLETION OF ALL SITE WORK THE CONTRACTOR SHALL INSPECT ALL ON-SITE AND OFF-SITE CATCH BASINS (THAT RECEIVED CATCH BASIN PROTECTION) AND DRAINAGE MANHOLES AND REMOVE ALL SEDIMENT AND DEBRIS THAT HAS ACCUMULATED DURING THE COURSE OF CONSTRUCTION.

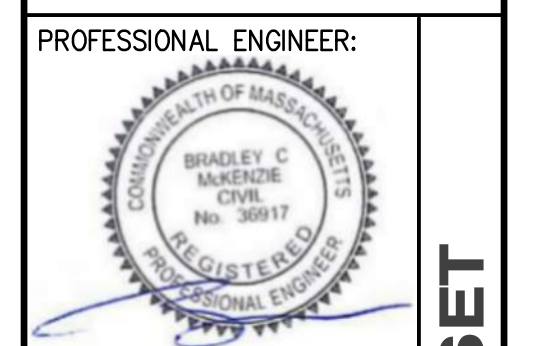


LOT 3
 (APN 32-1-3)
 170,206 S.F. (3.91 AC)
 (33,404 S.F. WETLAND)
 (136,802 S.F. UPLAND)

REV	DATE	DESCRIPTION	BY	APP
1	6/29/22	LANDSCAPING	ESS	BCM

MG
 MCKENZIE ENGINEERING GROUP
 Assinippi Office Park
 150 Longwater Drive, Suite 101
 Norwell, MA 02061
 P: 781.792.3900
 F: 781.792.0333
 www.mckeng.com

SITE DEVELOPMENT PLANS
RICKETTS POND BUSINESS PARK
LOT 3 (APN 32-1-3)
OFF SPRING STREET
CARVER, MASSACHUSETTS



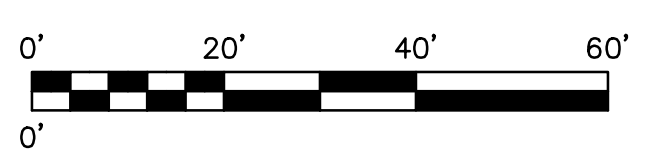
PROFESSIONAL ENGINEER:
 BRADLEY C. MCKENZIE
 LICENSE NO. 38817
 STATE OF MASSACHUSETTS

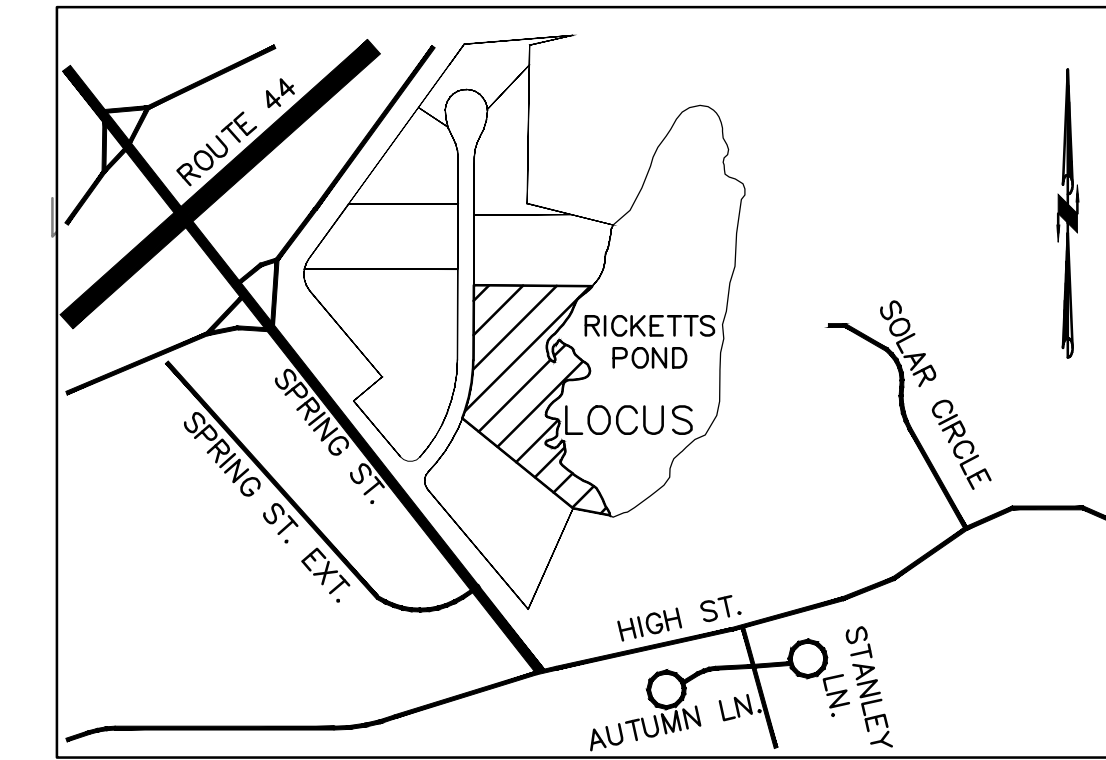
APPLICANT:
BRIDGESTONE DEVELOPMENT INC.
 P.O. BOX 1384
 PLYMOUTH, MASSACHUSETTS 02362

DRAWN BY:	ESS
DESIGNED BY:	ESS
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	MARCH 21, 2022
SCALE:	1" = 20'
PROJECT NO.:	222-118
DWG. TITLE:	

GRADING AND DRAINAGE PLAN

DWG. NO.: **C-2**





REV	DATE	DESCRIPTION	BY	APP
1	6/29/22	LANDSCAPING	ESS	BCM

MG
MCKENZIE ENGINEERING GROUP
 Assisippi Office Park
 150 Longwater Drive, Suite 101
 Norwell, MA 02061
 P: 781.792.3900
 F: 781.792.0333
 www.mckeng.com

SITE DEVELOPMENT PLANS
RICKETTS POND BUSINESS PARK
LOT 3 (APN 32-1-3)
OFF SPRING STREET
CARVER, MASSACHUSETTS

PROFESSIONAL ENGINEER:

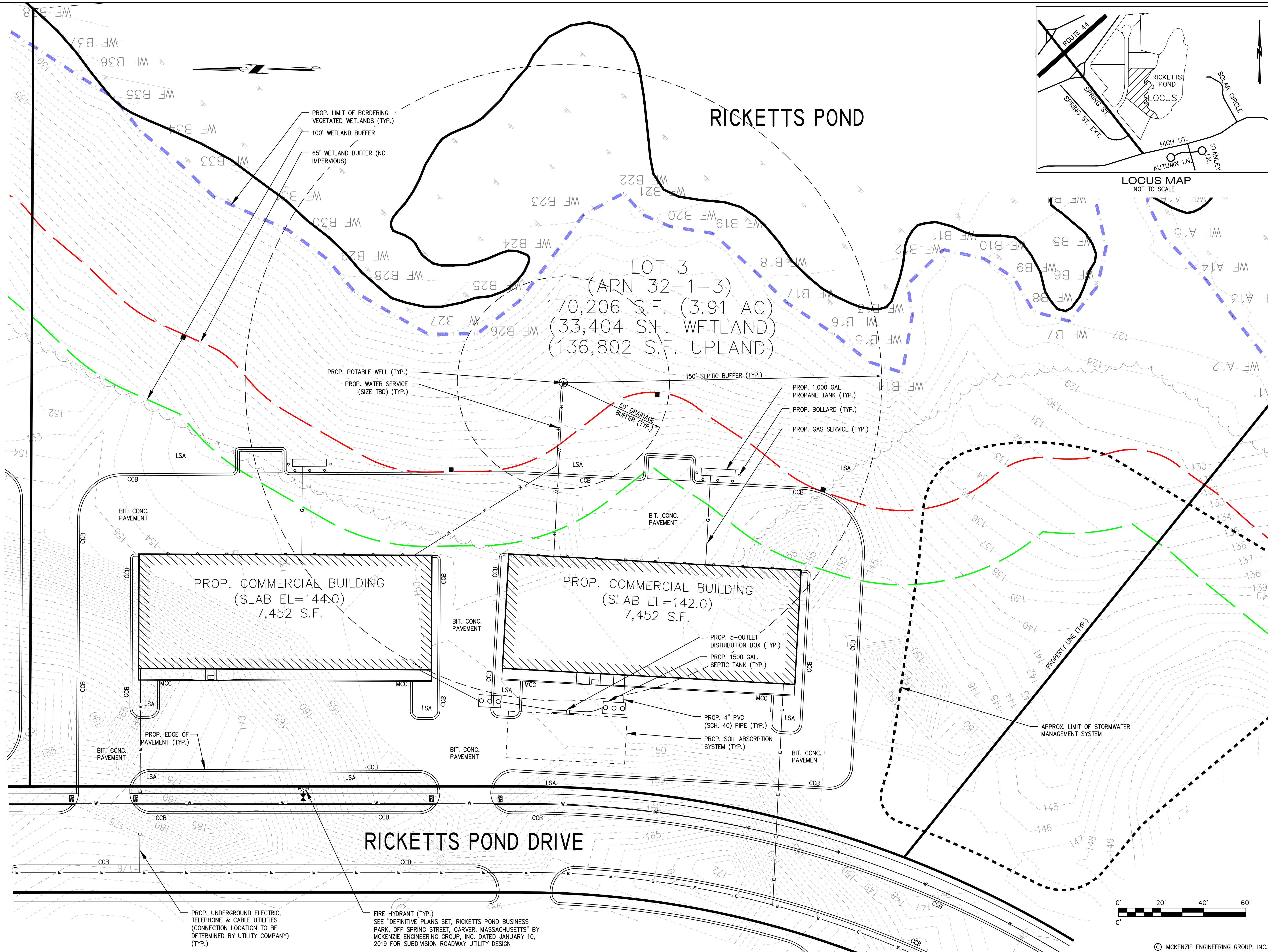
 BRADLEY C. MCKENZIE
 CIVIL ENGINEER
 No. 35817

APPLICANT:
BRIDGESTONE DEVELOPMENT INC.
 P.O. BOX 1384
 PLYMOUTH, MASSACHUSETTS 02362

DRAWN BY: ESS
 DESIGNED BY: ESS
 CHECKED BY: BCM
 APPROVED BY: BCM
 DATE: MARCH 21, 2022
 SCALE: 1" = 20'
 PROJECT NO.: 222-118
 DWG. TITLE:

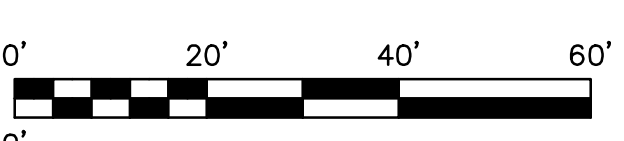
UTILITY PLAN

DWG. NO.: **C-3**



PROP. UNDERGROUND ELECTRIC, TELEPHONE & CABLE UTILITIES (CONNECTION LOCATION TO BE DETERMINED BY UTILITY COMPANY) (TYP.)

FIRE HYDRANT (TYP.)
 SEE "DEFINITIVE PLANS SET, RICKETTS POND BUSINESS PARK, OFF SPRING STREET, CARVER, MASSACHUSETTS" BY MCKENZIE ENGINEERING GROUP, INC. DATED JANUARY 10, 2019 FOR SUBDIVISION ROADWAY UTILITY DESIGN





FRONT ELEVATION
NOT TO SCALE



FRONT ELEVATION
NOT TO SCALE



SIDE ELEVATION
NOT TO SCALE



REAR ELEVATION
NOT TO SCALE

REV	DATE	DESCRIPTION	BY	APP
1	6/29/22	LANDSCAPING	ESS	BCM

MEG
MCKENZIE
ENGINEERING GROUP
Assinippi Office Park
150 Longwater Drive, Suite 101
Norwell, MA 02061
P: 781.792.3900
F: 781.792.0333
www.mckeng.com

SITE DEVELOPMENT PLANS
RICKETTS POND BUSINESS PARK
LOT 3 (APN 32-1-3)
OFF SPRING STREET
CARVER, MASSACHUSETTS

PROFESSIONAL ENGINEER:



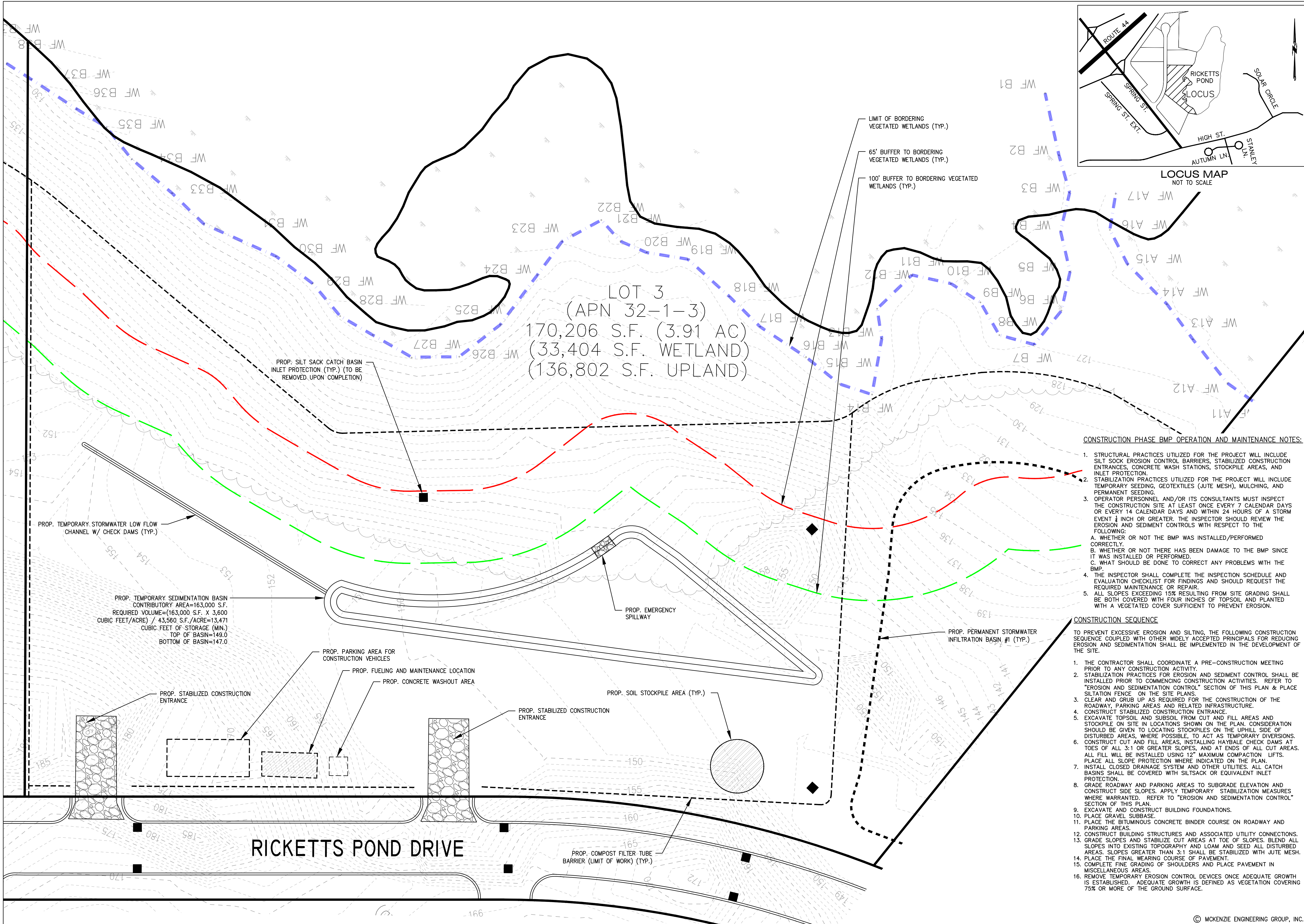
APPLICANT:
BRIDGESTONE DEVELOPMENT
INC.
P.O. BOX 1384
PLYMOUTH, MASSACHUSETTS 02362

DRAWN BY: ESS
DESIGNED BY: ESS
CHECKED BY: BCM
APPROVED BY: BCM
DATE: MARCH 21, 2022
SCALE:
PROJECT NO.: 222-118
DWG. TITLE:

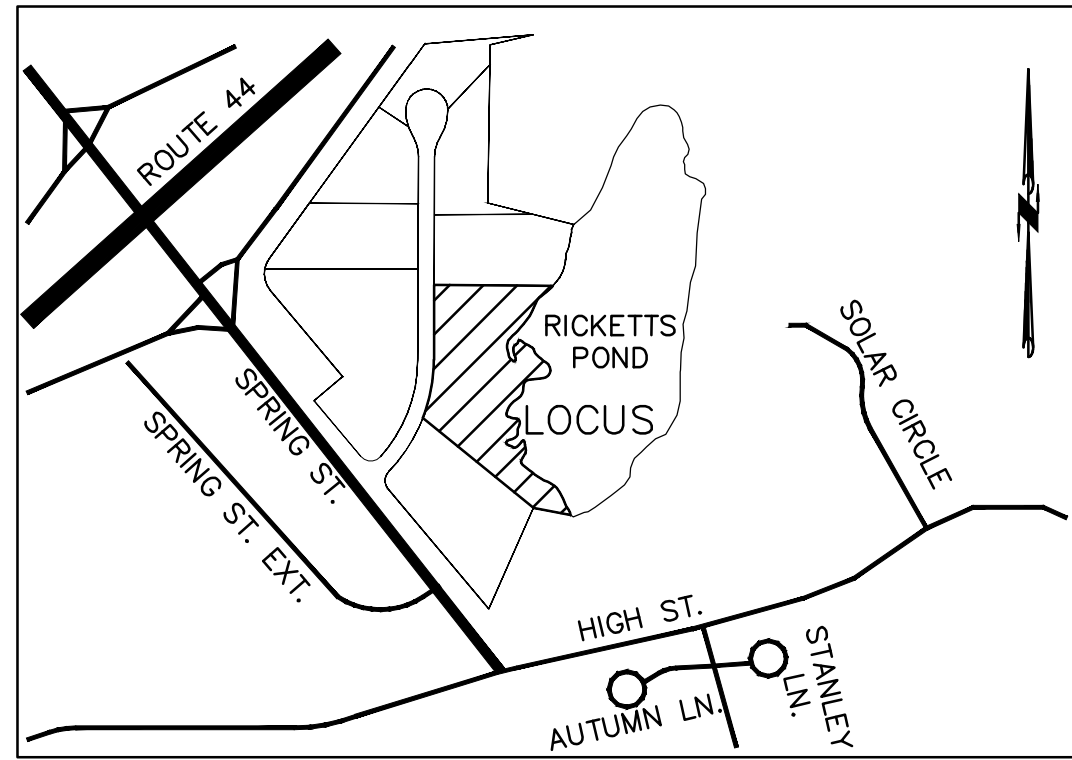
**BUILDING
ELEVATIONS**

DWG. NO:
E-1

PERMIT PLAN SET



LOT 3
(APN 32-1-3)
170,206 S.F. (3.91 AC)
(33,404 S.F. WETLAND)
(136,802 S.F. UPLAND)



CONSTRUCTION PHASE BMP OPERATION AND MAINTENANCE NOTES:

- STRUCTURAL PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE SILT SOCK EROSION CONTROL BARRIERS, STABILIZED CONSTRUCTION ENTRANCES, CONCRETE WASH STATIONS, STOCKPILE AREAS, AND INLET PROTECTION.
- STABILIZATION PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE TEMPORARY SEEDING, GEOTEXTILES (JUTE MESH), MULCHING, AND PERMANENT SEEDING.
- OPERATOR PERSONNEL AND/OR ITS CONSULTANTS MUST INSPECT THE CONSTRUCTION SITE AT LEAST ONCE EVERY 7 CALENDAR DAYS OR EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT 1 INCH OR GREATER. THE INSPECTOR SHOULD REVIEW THE EROSION AND SEDIMENT CONTROLS WITH RESPECT TO THE FOLLOWING:
 - WHETHER OR NOT THE BMP WAS INSTALLED/PERFORMED CORRECTLY.
 - WHETHER OR NOT THERE HAS BEEN DAMAGE TO THE BMP SINCE IT WAS INSTALLED OR PERFORMED.
 - WHAT SHOULD BE DONE TO CORRECT ANY PROBLEMS WITH THE BMP.
- THE INSPECTOR SHALL COMPLETE THE INSPECTION SCHEDULE AND EVALUATION CHECKLIST FOR FINDINGS AND SHOULD REQUEST THE REQUIRED MAINTENANCE OR REPAIR.
- ALL SLOPES EXCEEDING 15% RESULTING FROM SITE GRADING SHALL BE BOTH COVERED WITH FOUR INCHES OF TOPSOIL AND PLANTED WITH A VEGETATED COVER SUFFICIENT TO PREVENT EROSION.

CONSTRUCTION SEQUENCE

TO PREVENT EXCESSIVE EROSION AND SILTING, THE FOLLOWING CONSTRUCTION SEQUENCE COUPLED WITH OTHER WIDELY ACCEPTED PRINCIPALS FOR REDUCING EROSION AND SEDIMENTATION SHALL BE IMPLEMENTED IN THE DEVELOPMENT OF THE SITE.

- THE CONTRACTOR SHALL COORDINATE A PRE-CONSTRUCTION MEETING PRIOR TO ANY CONSTRUCTION ACTIVITY.
- STABILIZATION PRACTICES FOR EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. REFER TO "EROSION AND SEDIMENTATION CONTROL" SECTION OF THIS PLAN & PLACE SILTATION FENCE ON THE SITE PLANS.
- CLEAR AND GRUB UP AS REQUIRED FOR THE CONSTRUCTION OF THE ROADWAY, PARKING AREAS AND RELATED INFRASTRUCTURE.
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES.
- EXCAVATE TOPSOIL AND SUBSOIL FROM CUT AND FILL AREAS AND STOCKPILE ON SITE IN LOCATIONS SHOWN ON THE PLAN. CONSIDERATION SHOULD BE GIVEN TO LOCATING STOCKPILES ON THE UPHILL SIDE OF DISTURBED AREAS, WHERE POSSIBLE, TO ACT AS TEMPORARY DIVERSIONS.
- CONSTRUCT CUT AND FILL AREAS, INSTALLING HAYBALE CHECK DAMS AT TOES OF ALL 3:1 OR GREATER SLOPES, AND AT ENDS OF ALL CUT AREAS. ALL FILL WILL BE INSTALLED USING 12" MAXIMUM COMPACTION LIFTS. PLACE ALL SLOPE PROTECTION WHERE INDICATED ON THE PLAN.
- INSTALL CLOSED DRAINAGE SYSTEM AND OTHER UTILITIES. ALL CATCH BASINS SHALL BE COVERED WITH SILTSACK OR EQUIVALENT INLET PROTECTION.
- GRADE ROADWAY AND PARKING AREAS TO SUBGRADE ELEVATION AND CONSTRUCT SIDE SLOPES. APPLY TEMPORARY STABILIZATION MEASURES WHERE WARRANTED. REFER TO "EROSION AND SEDIMENTATION CONTROL" SECTION OF THIS PLAN.
- EXCAVATE AND CONSTRUCT BUILDING FOUNDATIONS.
- PLACE GRAVEL SUBBASE.
- PLACE THE BITUMINOUS CONCRETE BINDER COURSE ON ROADWAY AND PARKING AREAS.
- CONSTRUCT BUILDING STRUCTURES AND ASSOCIATED UTILITY CONNECTIONS.
- GRADE SLOPES AND STABILIZE CUT AREAS AT TOE OF SLOPES. BLEND ALL SLOPES INTO EXISTING TOPOGRAPHY AND LOAM AND SEED ALL DISTURBED AREAS. SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH JUTE MESH.
- PLACE THE FINAL WEARING COURSE OF PAVEMENT.
- COMPLETE FINE GRADING OF SHOULDERS AND PLACE PAVEMENT IN MISCELLANEOUS AREAS.
- REMOVE TEMPORARY EROSION CONTROL DEVICES ONCE ADEQUATE GROWTH IS ESTABLISHED. ADEQUATE GROWTH IS DEFINED AS VEGETATION COVERING 75% OR MORE OF THE GROUND SURFACE.

REV	DATE	DESCRIPTION	BY	APP
1	6/29/22	LANDSCAPING	ESS	BCM

MG
MCKENZIE
ENGINEERING GROUP
Assisippi Office Park
150 Longwater Drive, Suite 101
Norwell, MA 02061
P: 781.792.3900
F: 781.792.0333
www.mckeng.com

**SITE DEVELOPMENT PLANS
RICKETTS POND BUSINESS PARK
LOT 3 (APN 32-1-3)
OFF SPRING STREET
CARVER, MASSACHUSETTS**

PROFESSIONAL ENGINEER:

BRADLEY C. MCKENZIE
NO. 35917
STATE OF MASSACHUSETTS

APPLICANT:
**BRIDGESTONE
DEVELOPMENT INC.**
P.O. BOX 1384
PLYMOUTH, MASSACHUSETTS 02362

DRAWN BY:	ESS
DESIGNED BY:	ESS
CHECKED BY:	BCM
APPROVED BY:	BCM
DATE:	MARCH 21, 2022
SCALE:	1"=20'
PROJECT NO.:	222-118
DWG. TITLE:	

**EROSION AND
SEDIMENT
CONTROL PLAN**

DWG. NO:
ESC-1

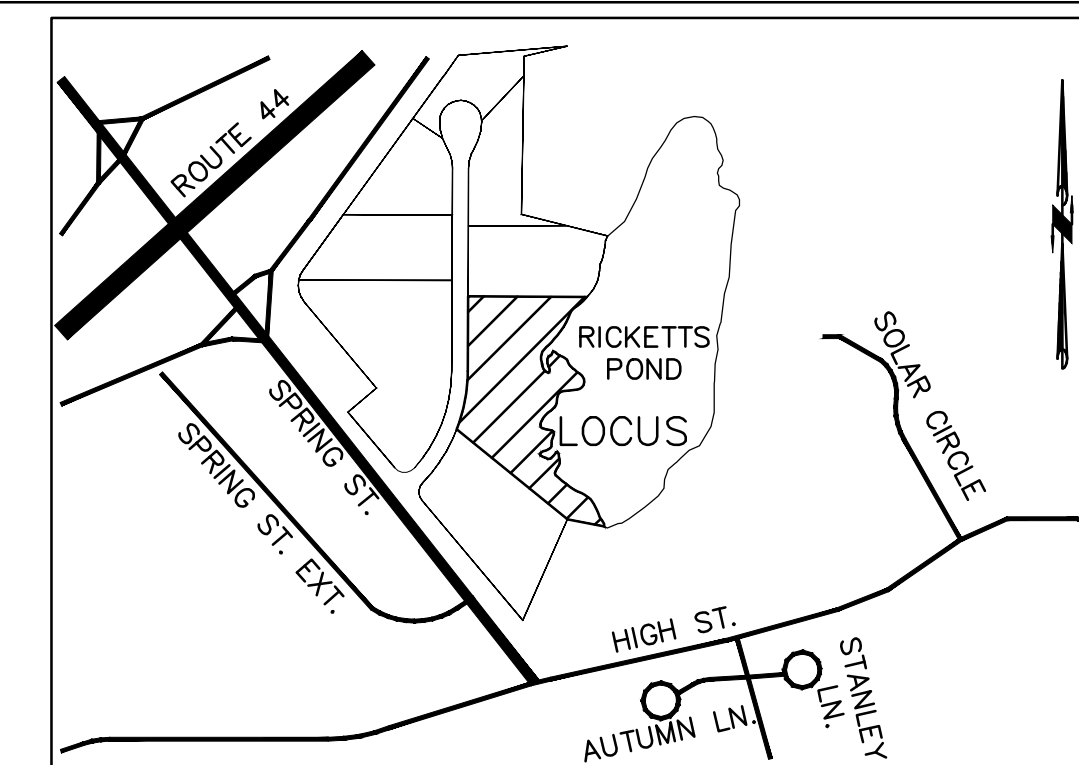
PERMIT PLAN SET

PROPOSED SURFACE TREATMENTS TABLE	
	CEMENT CONCRETE
	LANDSCAPED AREA (LOAM AND SEED)
	PROPOSED BUILDING

- LANDSCAPING NOTES:**
- TO THE GREATEST EXTENT POSSIBLE, EXISTING NATIVE TREES AND SHRUBS SHALL BE MAINTAINED.
 - NO TREE, SHRUB OR PLANT SHALL BE USED THAT HAS BEEN IDENTIFIED AS AN INVASIVE SPECIES BY THE MASSACHUSETTS PLANT ADVISORY GROUP IN THE MOST RECENT VERSION OF "THE EVALUATION OF NON-NATIVE PLANT SPECIES FOR INVASIVENESS IN MASSACHUSETTS" (WITH ANNOTATED LIST) OR HAS BEEN IDENTIFIED AS INVASIVE OR BANNED ON THE "MASSACHUSETTS PROHIBITED PLANT LIST" AS PERIODICALLY UPDATED BY THE MASSACHUSETTS DEPARTMENT OF AGRICULTURE.
 - EXISTING INVASIVE PLANTS SHALL BE REMOVED.

PLANTING LIST

QTY.	BOTANICAL NAME	COMMON NAME	SIZE	SYMBOL
TREES				
13	QUERCUS PALUSTRIS	PIN OAK	2.5"-3" CALIPER	
4	CERIS CANADENSIS	EASTERN REDBUD	20' HEIGHT	
8	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	7'-8' HEIGHT	
41	THUJA OCCIDENTALIS	EMERALD GREEN ABORVITAE	8' HEIGHT	
SHRUBS				
56	ROSA BLANDA	SMOOTH ROSE	5 GALLON POT	
18	SALIX DISCOLOR	PUSSY WILLOW (MALE)	5 GALLON POT	



REV	DATE	DESCRIPTION	BY	APP
1	6/29/22	LANDSCAPING	ESS	BCM

MG
MCKENZIE
ENGINEERING GROUP
 Assisippi Office Park
 150 Longwater Drive, Suite 101
 Norwell, MA 02061
 P: 781.792.3900
 F: 781.792.0333
 www.mckeng.com

SITE DEVELOPMENT PLANS
RICKETTS POND BUSINESS PARK
LOT 3 (APN 32-1-3)
OFF SPRING STREET
CARVER, MASSACHUSETTS

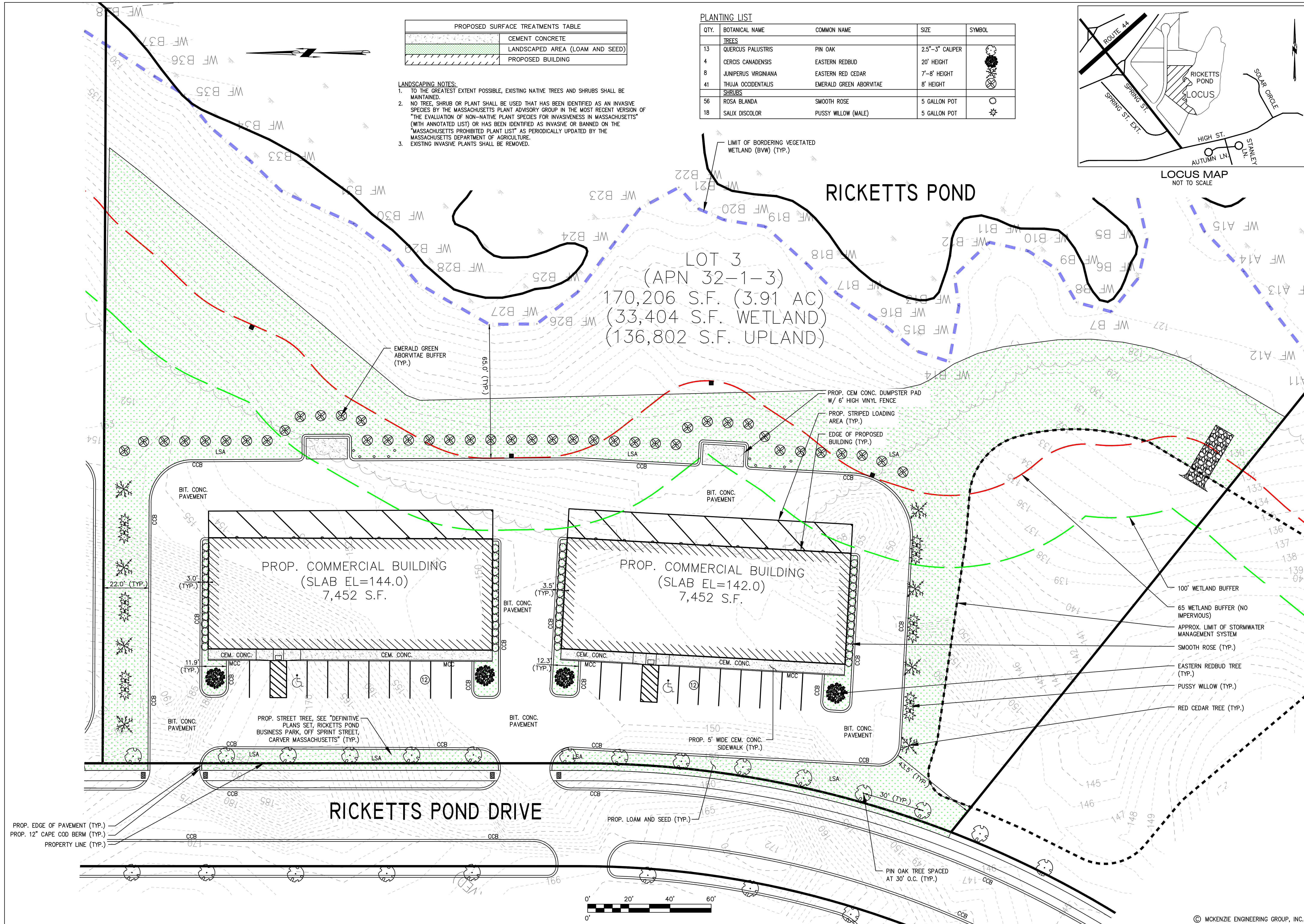
PROFESSIONAL ENGINEER:

APPLICANT:
BRIDGESTONE
DEVELOPMENT INC.
 P.O. BOX 1384
 PLYMOUTH, MASSACHUSETTS 02362

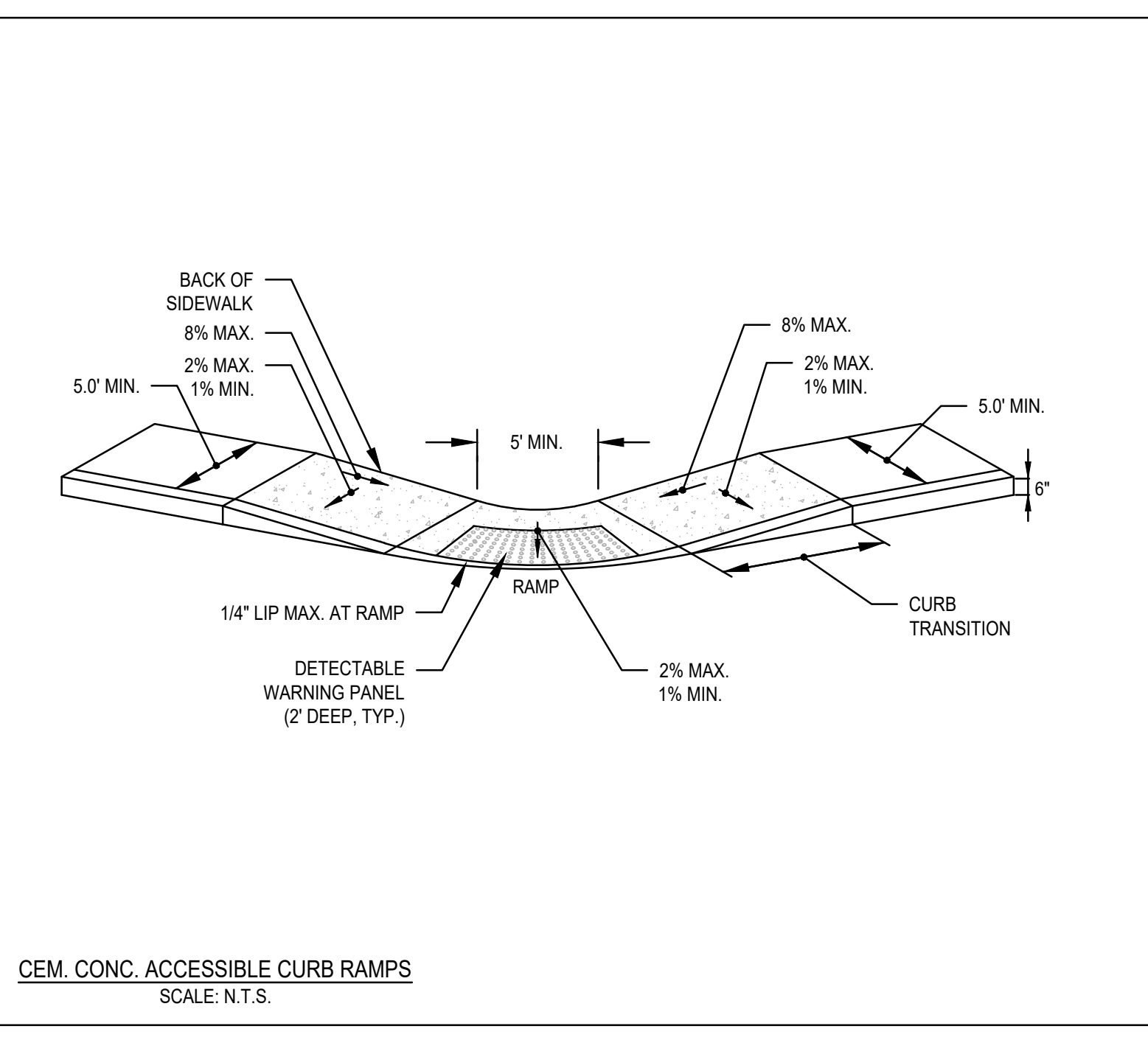
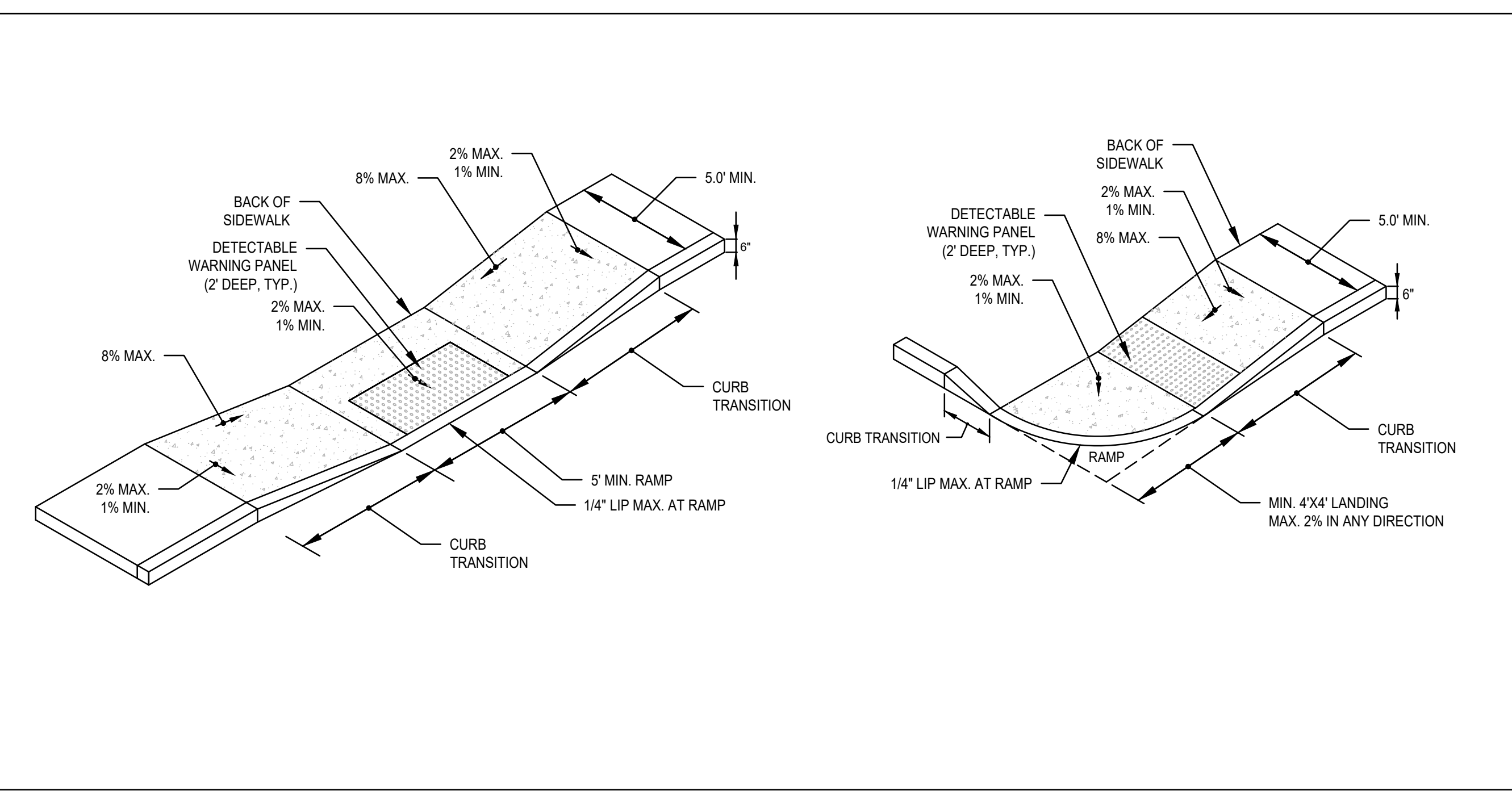
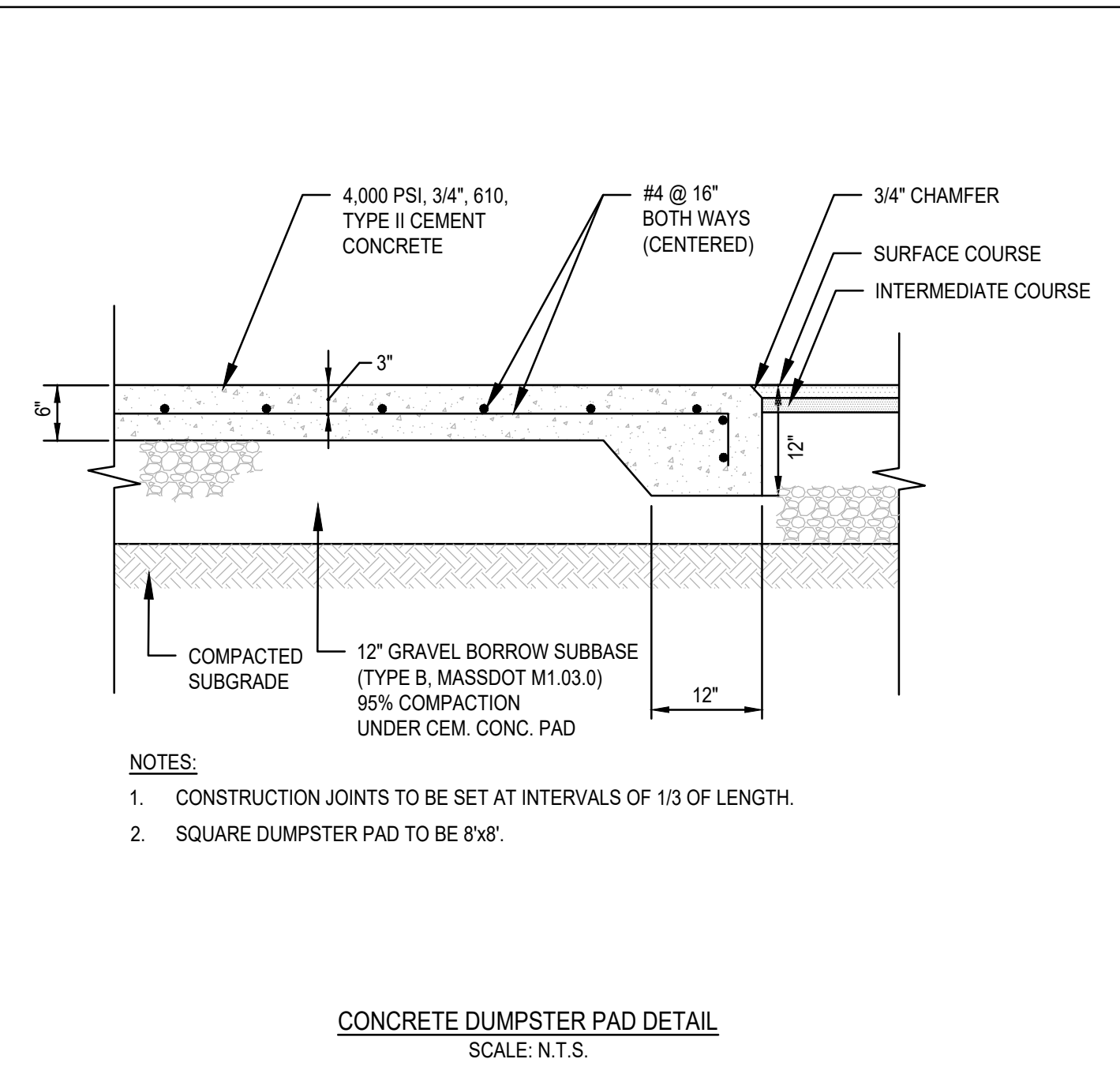
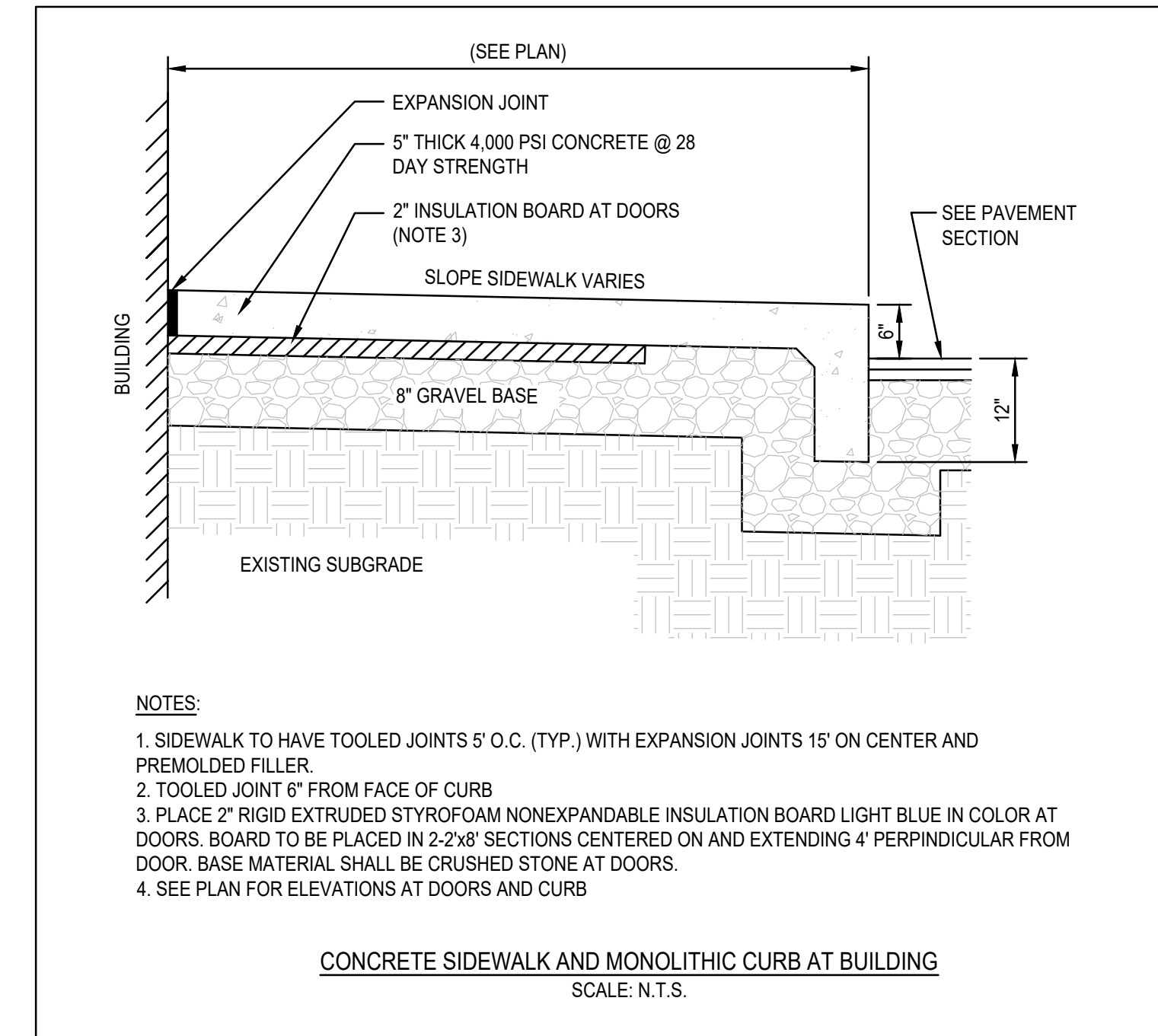
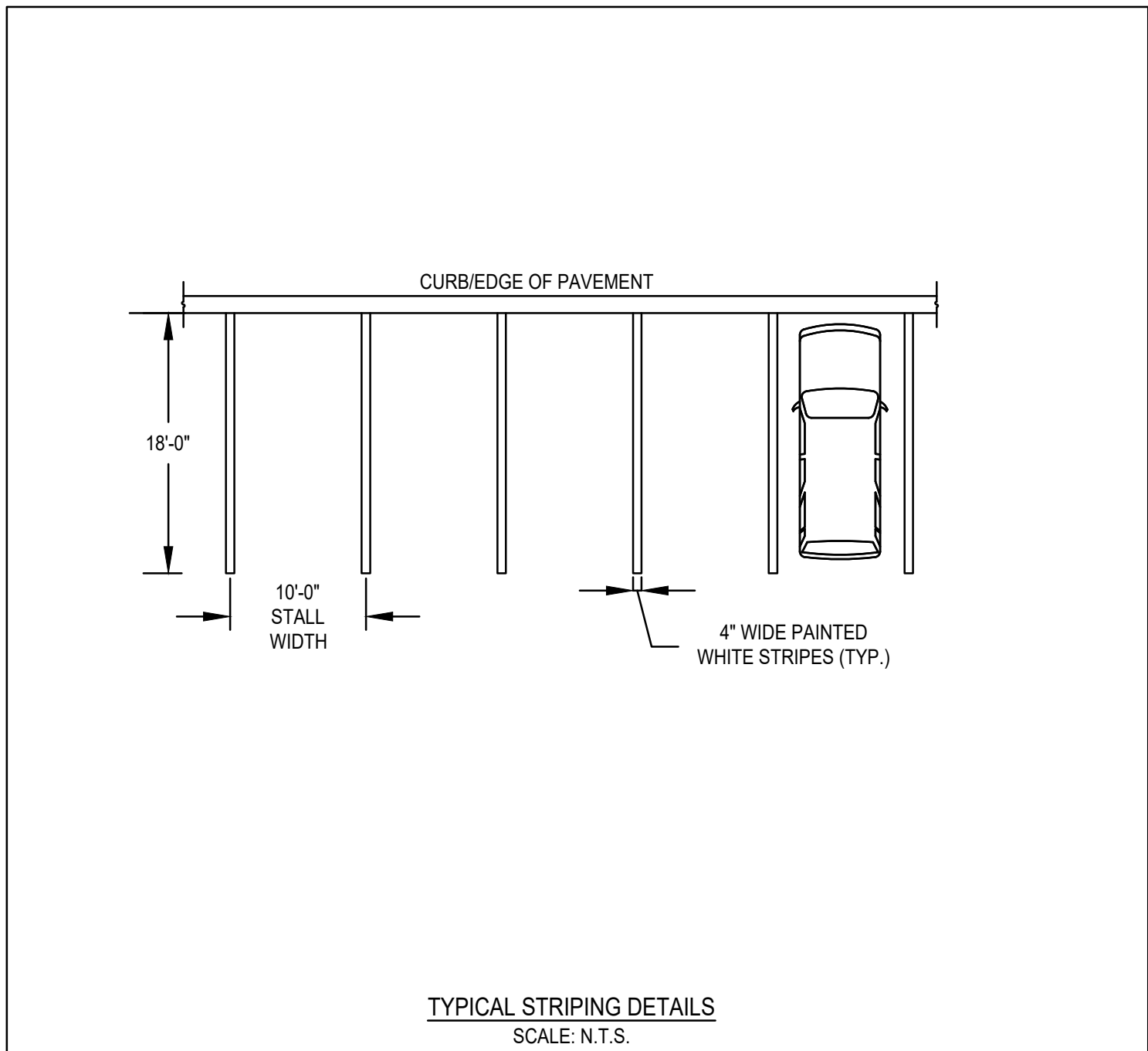
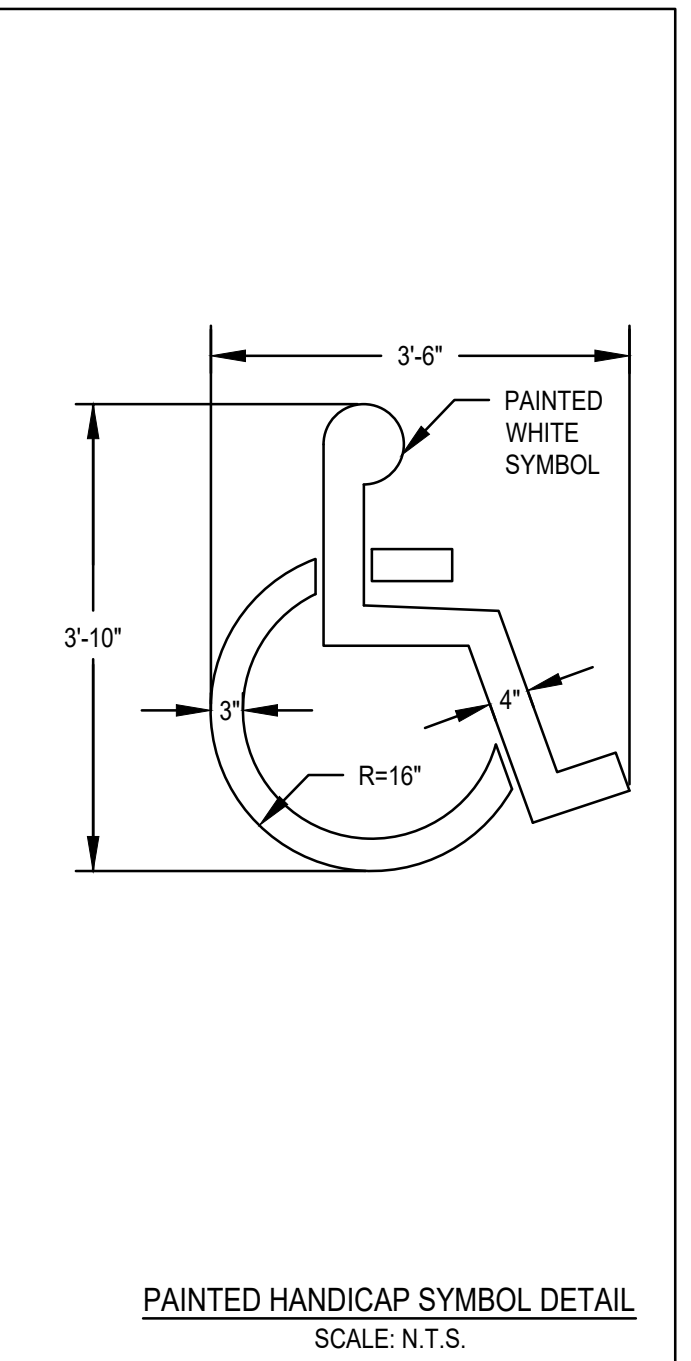
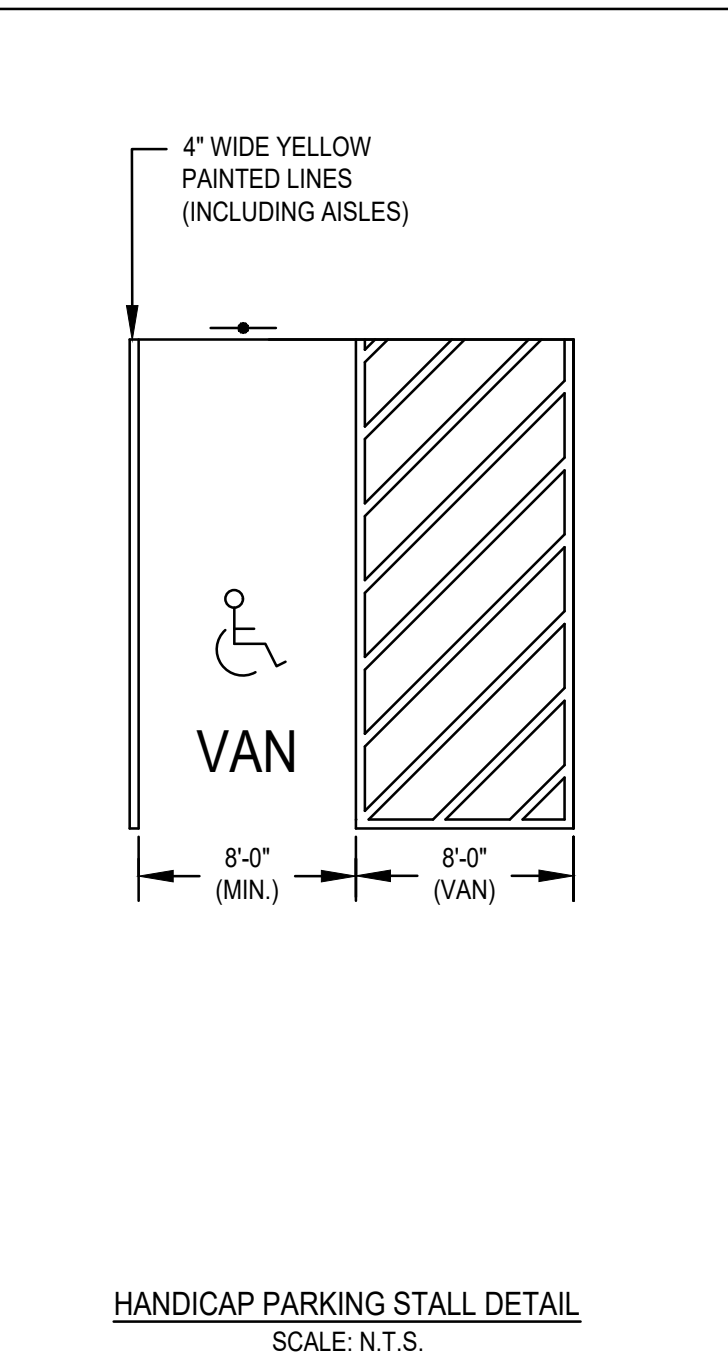
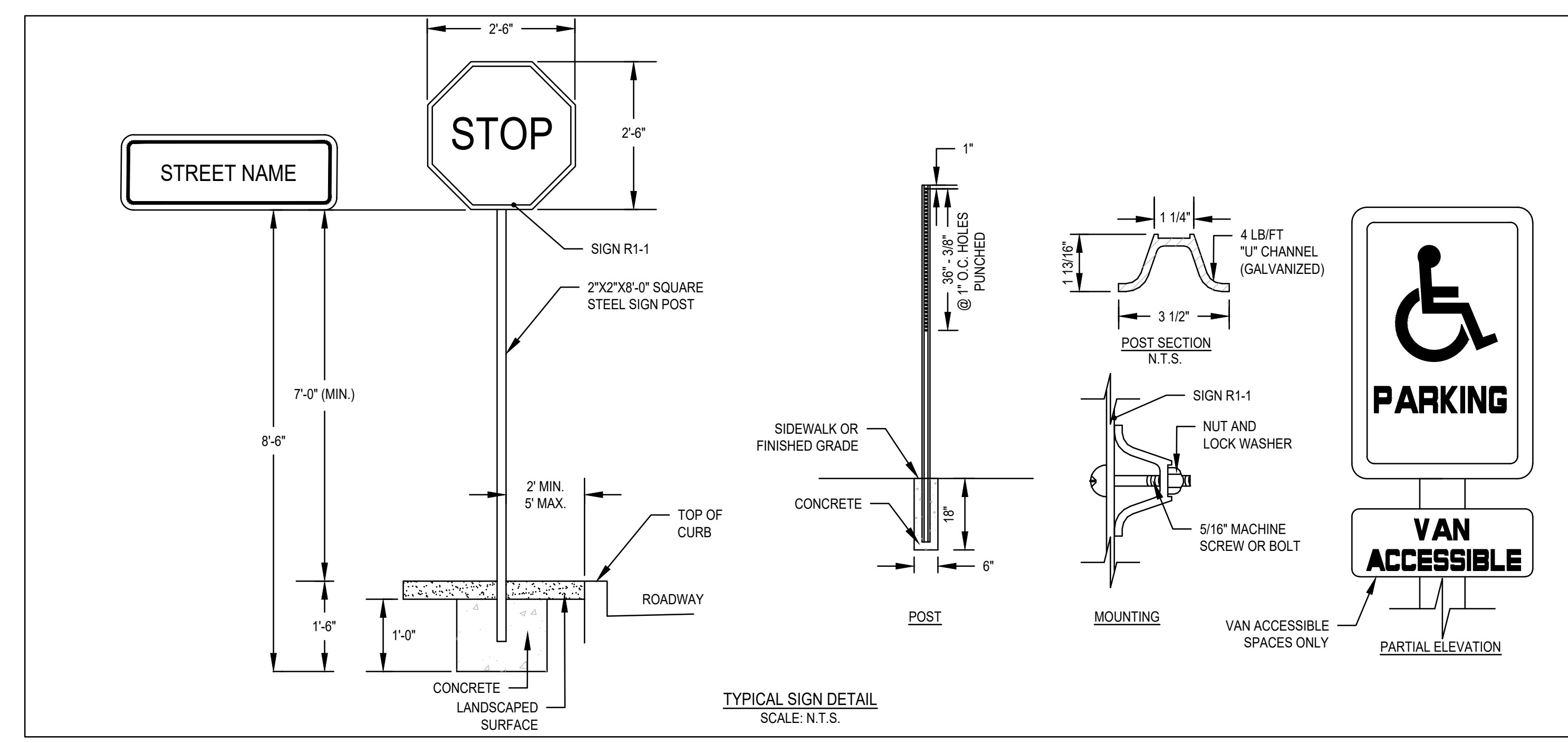
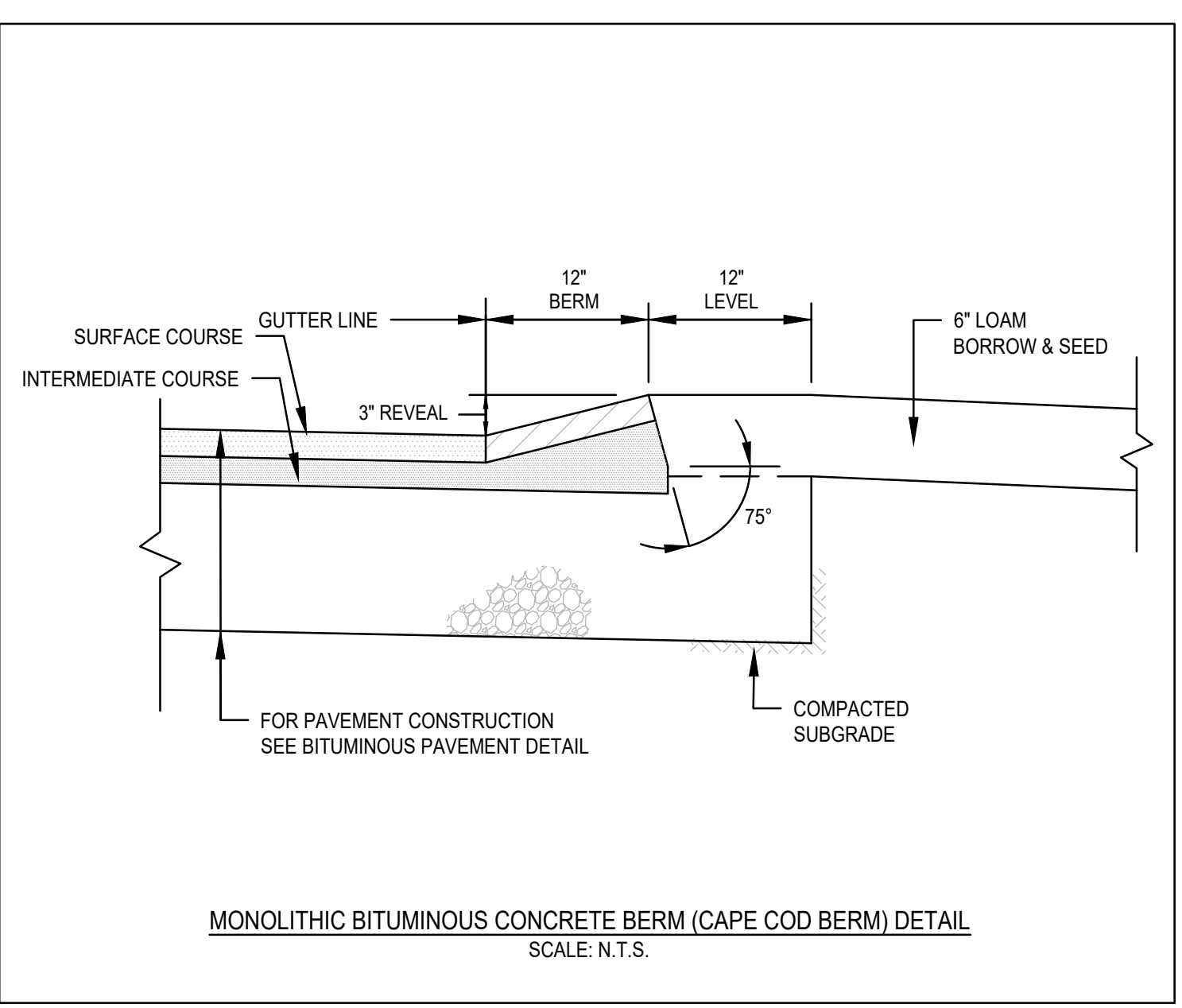
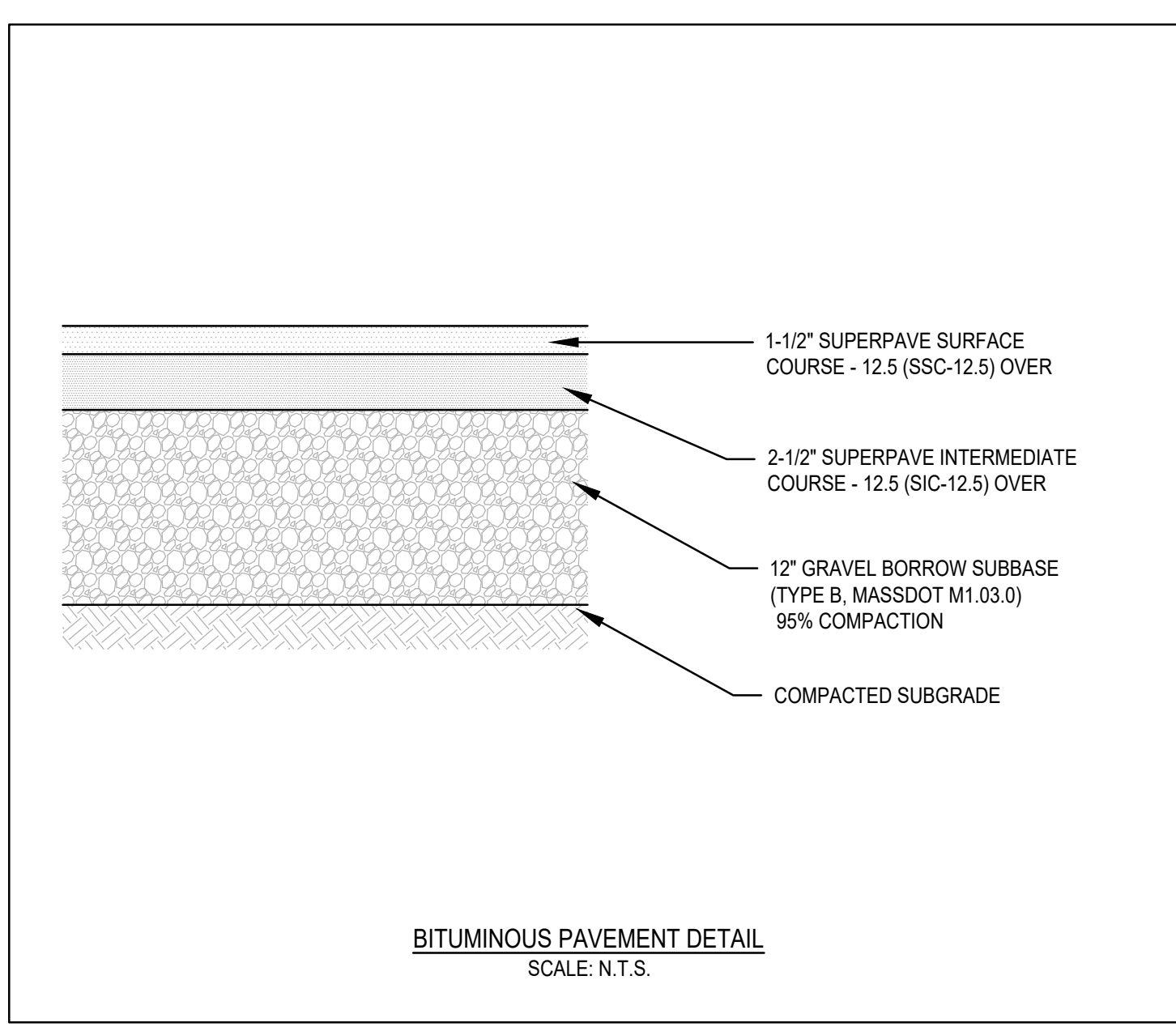
DRAWN BY: ESS
 DESIGNED BY: ESS
 CHECKED BY: BCM
 APPROVED BY: BCM
 DATE: MARCH 21, 2022
 SCALE: 1"=20'
 PROJECT NO.: 222-118
 DWG. TITLE:

LANDSCAPING PLAN

DWG. NO.: **LA-1**



PERMIT PLAN SET

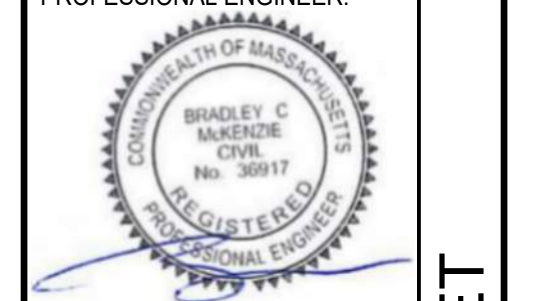


- NOTES:**
- CURBS AND WALKS ALONG ACCESSIBLE ROUTES SHALL MEET OR EXCEED THE APPLICABLE REGULATIONS OF THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD, FAIR HOUSING ACT AND ADA.
 - THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 2%.
 - THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
 - THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 7.5%.
 - MAINTAIN A MINIMUM OF 3 FEET CLEAR AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS ETC.).
 - GRADE BASE OF RAMP TO PREVENT PONDING.
 - RAMP CONSTRUCTION SHALL CONFORM TO TYPICAL SIDEWALK SECTION.
 - WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5'X5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
 - ALL CURBING AT RAMPS SHALL BE VERTICAL CURBING SET FLUSH WHERE IT ABUTS ROADWAY.
 - ALL RAMPS SHALL BE CEMENT CONCRETE WITH ROUGHENED NON-SLIP SURFACE.
 - ALL DETECTABLE WARNING PANELS SHALL BE CAST IN PLACE WITH A STAINLESS STEEL ANCHORING SYSTEM. MINIMUM DIMENSIONS SHALL BE 2-FEET WIDE BY 5-FEET LONG, OR AS APPROVED.
 - THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. DETECTABLE WARNINGS USED ON INTERIOR SURFACES SHALL DIFFER FROM ADJOINING WALKING SURFACES IN RESILIENCY OR SOUND-ON-CANE-CONTACT.
 - CEMENT CONCRETE TO BE 4000 PSI, 3/4", 610, TYPE II.

REV	DATE	DESCRIPTION	BY	APP
1	6/29/22	LANDSCAPING	ESS	BCM

MG
MCKENZIE ENGINEERING GROUP
Assisippi Office Park
150 Longwater Drive, Suite 101
Norwell, MA 02061
P: 781.792.3900
F: 781.792.0333
www.mckeng.com

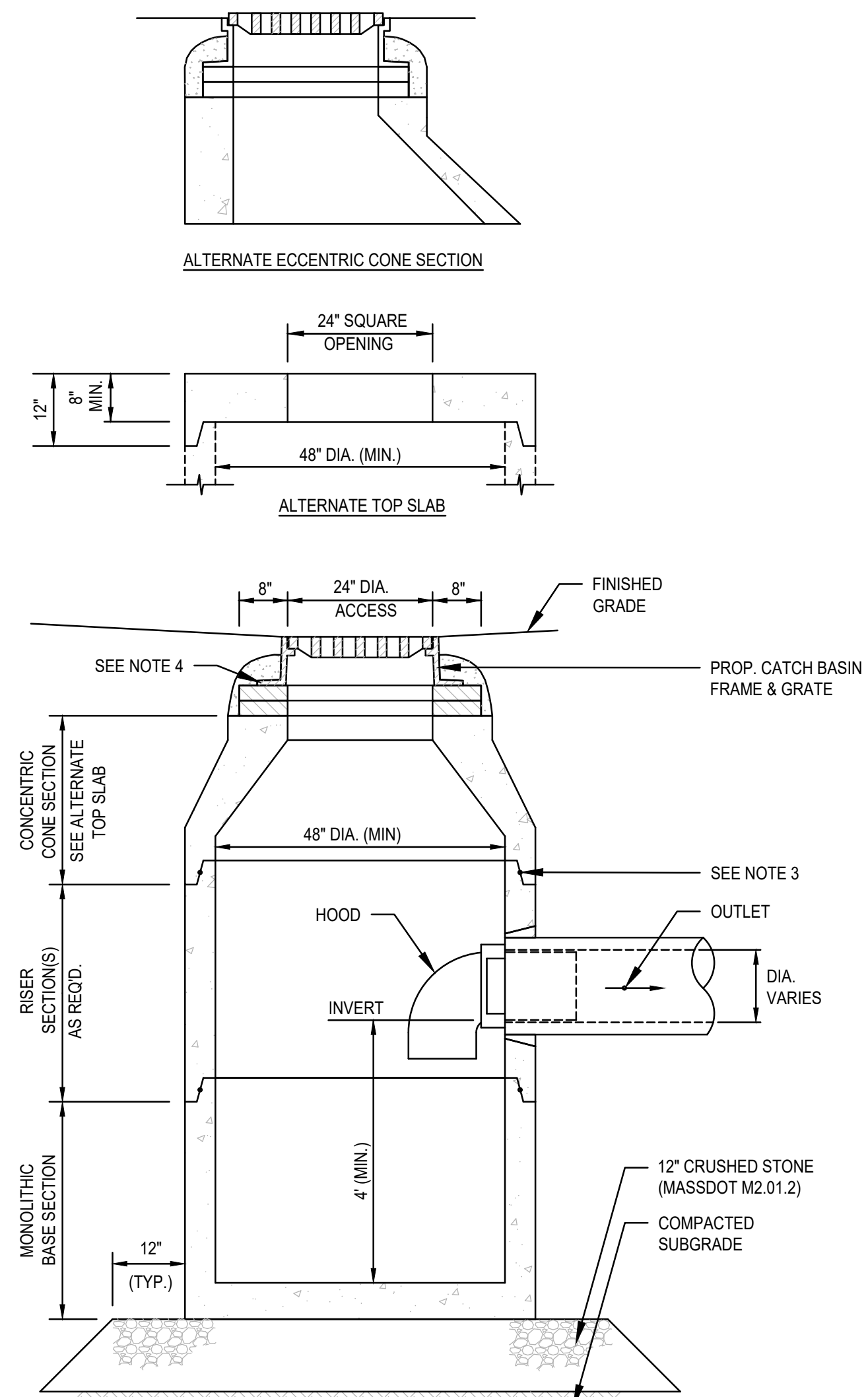
SITE DEVELOPMENT PLANS
RICKETTS POND BUSINESS PARK
LOT 3 (APN 32-1-3)
OFF SPRING STREET
CARVER, MASSACHUSETTS



APPLICANT: BRIDGESTONE DEVELOPMENT INC.
P.O. BOX 1384
PLYMOUTH, MASSACHUSETTS 02362

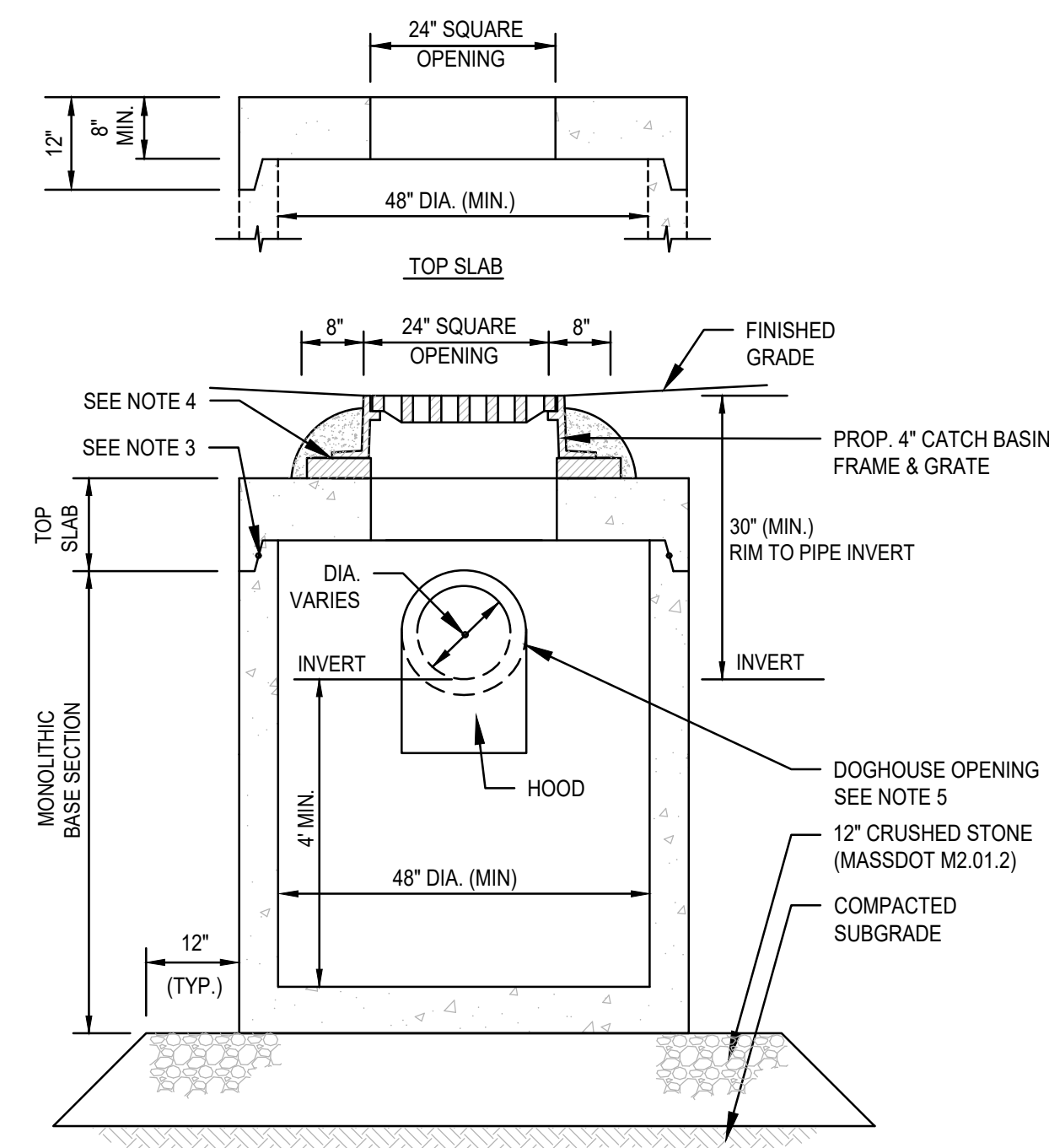
DESIGNED BY: ESS
CHECKED BY: BCM
APPROVED BY: BCM
DATE: MARCH 21, 2022
SCALE: AS NOTED
PROJECT NO.: 222-118
DWG. TITLE: CONSTRUCTION DETAILS
DWG. NO.: D-1

PERMIT PLAN SET



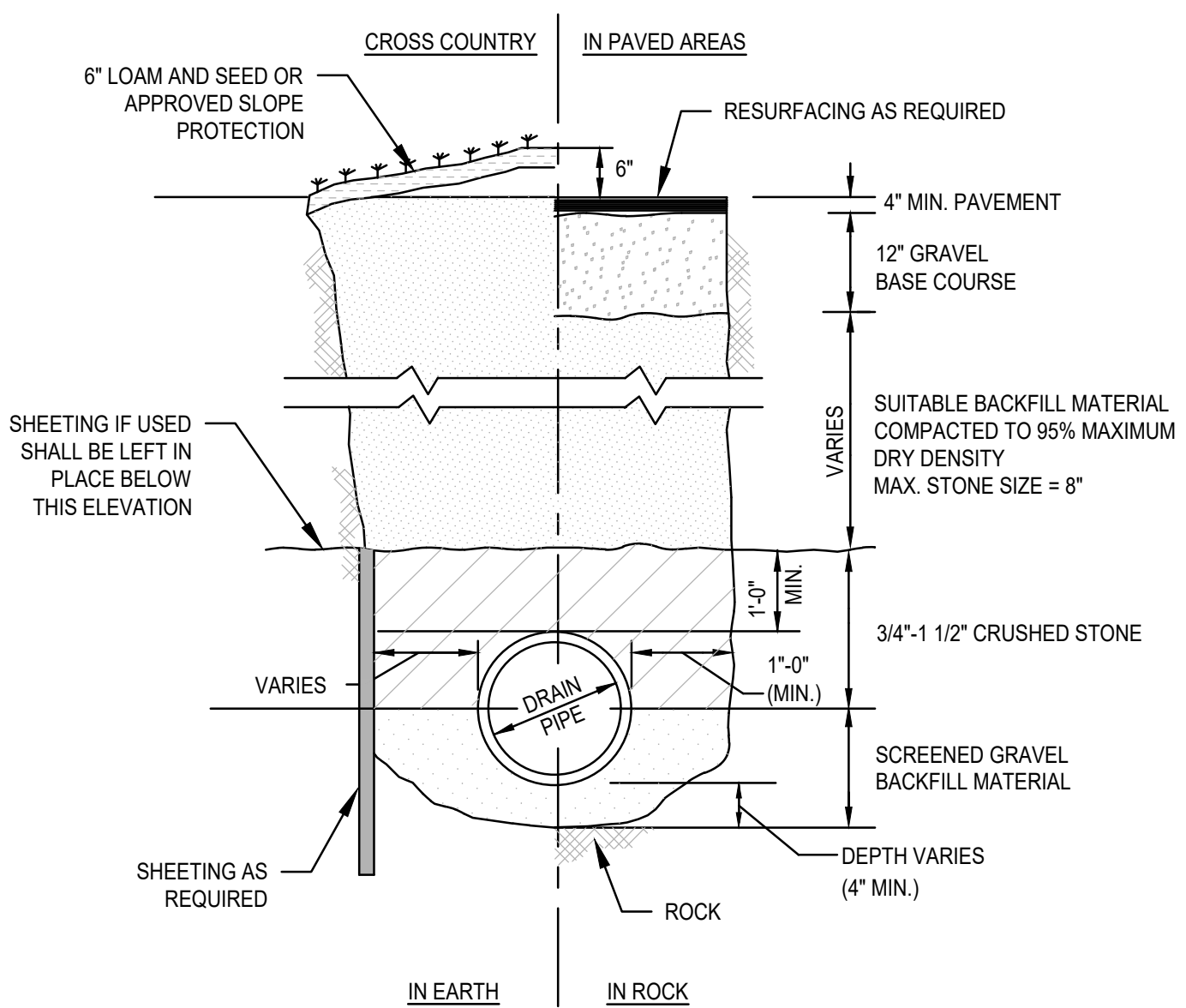
- NOTES:**
- ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
 - PROVIDE 1/2" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
 - MORTAR ALL PIPE CONNECTIONS. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
 - CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).

CATCH BASIN W/HOOD
SCALE: N.T.S.

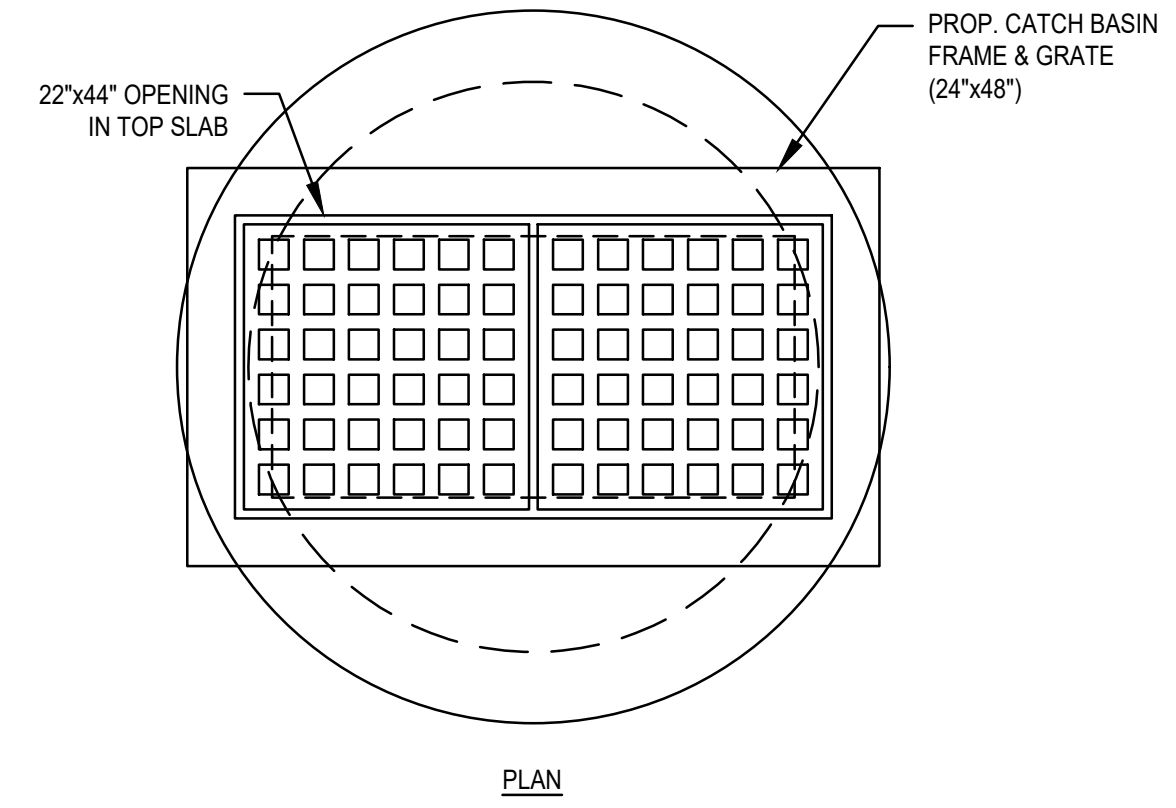


- NOTES:**
- ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
 - PROVIDE 1/2" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
 - MORTAR ALL PIPE CONNECTIONS. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
 - CATCH BASIN FRAME AND GRATE SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAXIMUM).
 - PROVIDE DOG HOUSE OPENING FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. TOP SLAB SHOULD NOT REST DIRECTLY ON PIPE. MORTAR ALL PIPE CONNECTIONS.

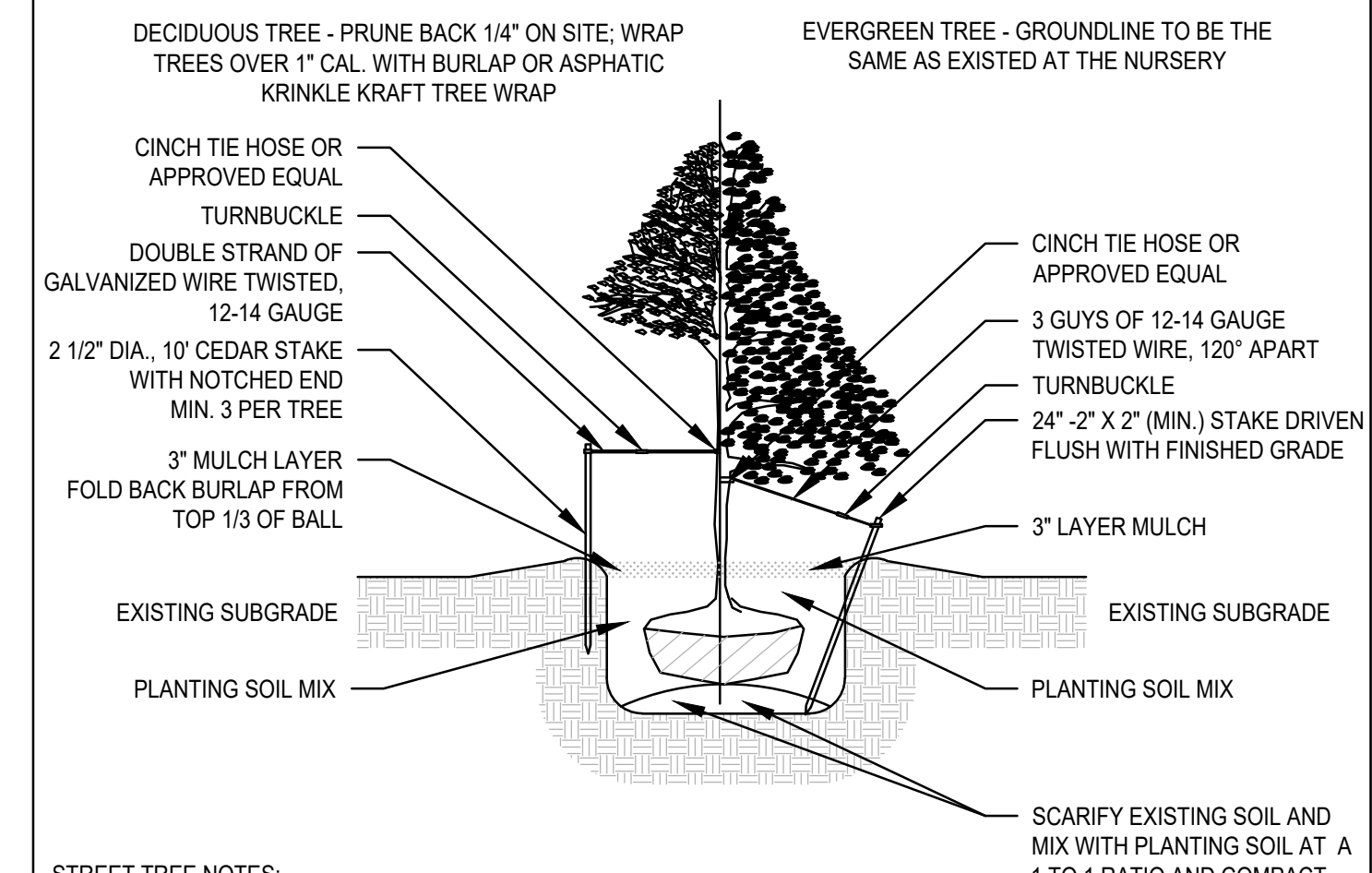
SHALLOW CATCH BASIN
SCALE: N.T.S.



TYPICAL DRAIN TRENCH DETAIL
SCALE: N.T.S.

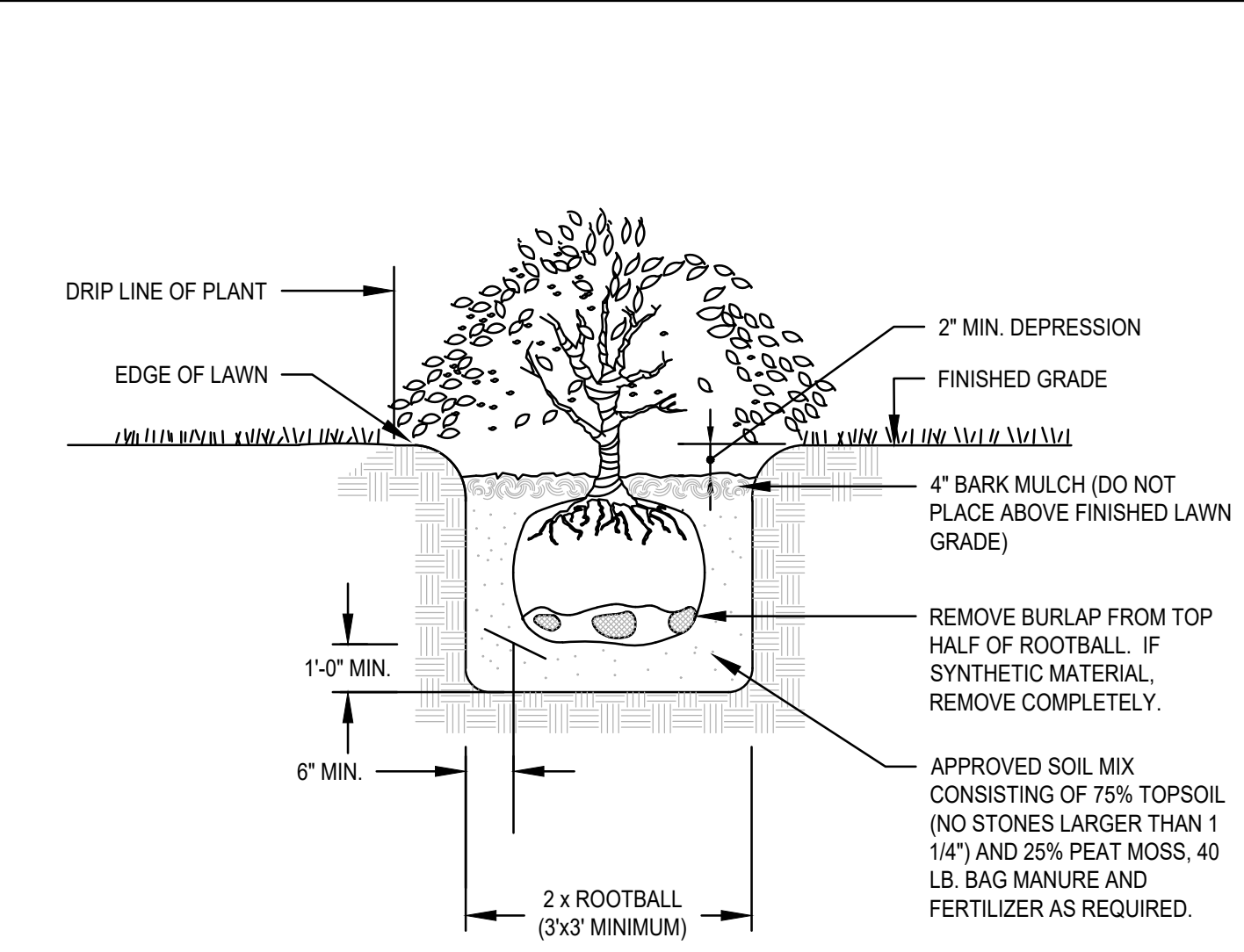


DOUBLE GRATE CATCH BASIN DETAIL
SCALE: N.T.S.



- STREET TREE NOTES:**
- NEW TREES SHALL BE NURSERY GROWN AND COMPLY WITH THE ASSOCIATION OF AMERICAN NURSERIES SPECIFICATIONS AND BE AT LEAST 3 INCHES IN CALIPER.
 - THE PRESERVATION OF EXISTING TREES AND THE VARIETIES OF NEW TREES FOR PLANTING SHALL BE SUBJECT TO THE APPROVAL OF THE PLANNING BOARD WHICH SHALL BE GUIDED BY THE RECOMMENDATION OF THE TOWN'S DIRECTOR OF LANDS AND NATURAL RESOURCES AS TO THE NUMBER, LOCATION, CONDITION AND SPECIES OF SUCH TREES AND UNDER APPENDIX III 0 DETAIL B.

DECIDUOUS AND EVERGREEN TREE PLANTING DETAIL
SCALE: N.T.S.



TYPICAL SHRUB PLANTING DETAIL
SCALE: N.T.S.

SEEDING SPECIFICATIONS

- SEEDING RECOMMENDATIONS**
- SEEDBED PREPARATION**
 - SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
 - STONES LARGER THAN FOUR INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT FOUR INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.
 - ESTABLISHING A STAND**
 - LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
 - AGRICULTURAL LIMESTONE: 2 TONS PER ACRE OR 100 LBS. PER 1000 SQ. FT.
 - NITROGEN (N): 50 LBS. PER ACRE OR 1.1 LBS. PER 1000 SQ. FT.
 - PHOSPHATE (P O): 100 LBS. PER ACRE OR 2.2 LBS. PER 1000 SQ. FT.
 - POTASH (K O): 100 LBS. PER ACRE OR 2.2 LBS. PER 1000 SQ. FT.

	SEEDING RATES	
	POUND / ACRE	POUNDS / 1,000 S.F.
A. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
REDTOP	2	0.05
TOTAL	42	0.95
B. TALL FESCUE	15	0.35
CREEPING RED FESCUE	10	0.35
BIRDSFOOT TREFOIL	15	0.40
TOTAL	40	0.95
C. TALL FESCUE	20	0.45
CREEPING RED FESCUE	20	0.45
BIRDSFOOT TREFOIL	8	0.20
TOTAL	48	1.10
D. BIRDSFOOT TREFOIL	10	0.25
REDTOP	5	0.10
TOTAL	15	0.35
E. TALL FESCUE	20	0.45
FLATPEA	30	0.75
TOTAL	50	1.20
F. CREEPING RED FESCUE 1/	85	2.00
KENTUCKY BLUEGRASS 1/	85	2.00
TOTAL	170	4.00
G. TALL FESCUE 1/	150	3.60

TEMPORARY SEEDING RATES

H. WINTER RYE	112	2.50 (BEST FOR FALL SEEDING, AUG 15 TO SEPT. 5)
OATS	80	2.00 (BEST FOR SPRING SEEDING, BEFORE MAY 15)
ANNUAL RYEGRASS	40	1.00 (BEST FOR FALL SEEDING, AUG 15 TO SEPT. 15)
TOTAL	232	5.50 (MAY BE USED EARLY SPRING ALSO)

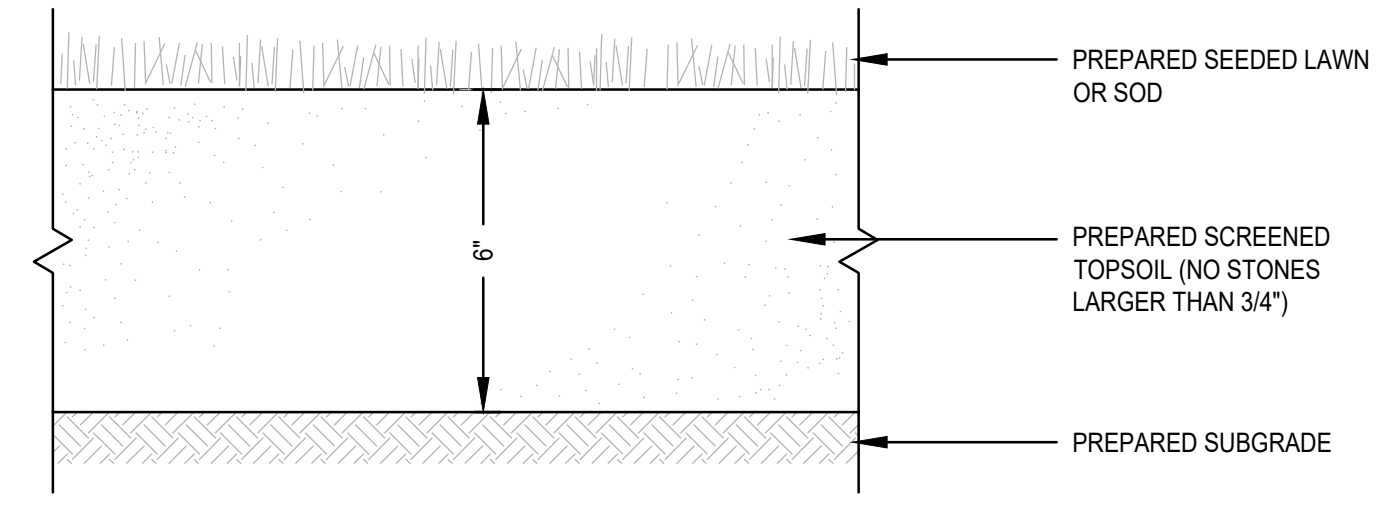
1/ FOR HEAVY USE ATHLETIC FIELDS CONSULT THE UNIVERSITY OF NEW HAMPSHIRE COOPERATIVE EXTENSION TURF SPECIALIST FOR CURRENT VARIETIES AND SEEDING RATES.

SEEDING GUIDE

USE	SEEDING MIXTURE 1/
STEEP CUTS AND FILLS, BORROW AND DISPOSAL AREAS	E
WATERWAYS, EMERGENCY SPILLWAYS, AND OTHER CHANNELS WITH FLOWING WATER	D
LAWN AREAS	F

- NOTES:**
- TOP OF LOAM (TOPSOIL) IS FINISHED GRADE.
 - TOPSOIL SHALL CONTAIN BETWEEN 5% AND 12% ORGANIC MATTER AND SHALL HAVE A MAXIMUM STONE SIZE OF 3/4" AND SHALL CONFORM TO THE FOLLOWING GRADATION:

SIEVE	% PASSING
1 1/4 INCH	100
No.4	85-100
No.40	60-85
No.100	38-60
No.200	28-40



SEEDING OR SODDED LAWN DETAIL
SCALE: N.T.S.

REV	DATE	DESCRIPTION	BY	APP
1	6/29/22	LANDSCAPING	ESS	BCM

MCKENZIE ENGINEERING GROUP
 Assinippi Office Park
 150 Longwater Drive, Suite 101
 Norwell, MA 02061
 P: 781.792.3900
 F: 781.792.0333
 www.mckeng.com

SITE DEVELOPMENT PLANS
RICKETTS POND BUSINESS PARK
LOT 3 (APN 32-1-3)
OFF SPRING STREET
CARVER, MASSACHUSETTS

PROFESSIONAL ENGINEER:

APPLICANT:
BRIDGESTONE DEVELOPMENT INC.
 P.O. BOX 1384
 PLYMOUTH, MASSACHUSETTS 02362

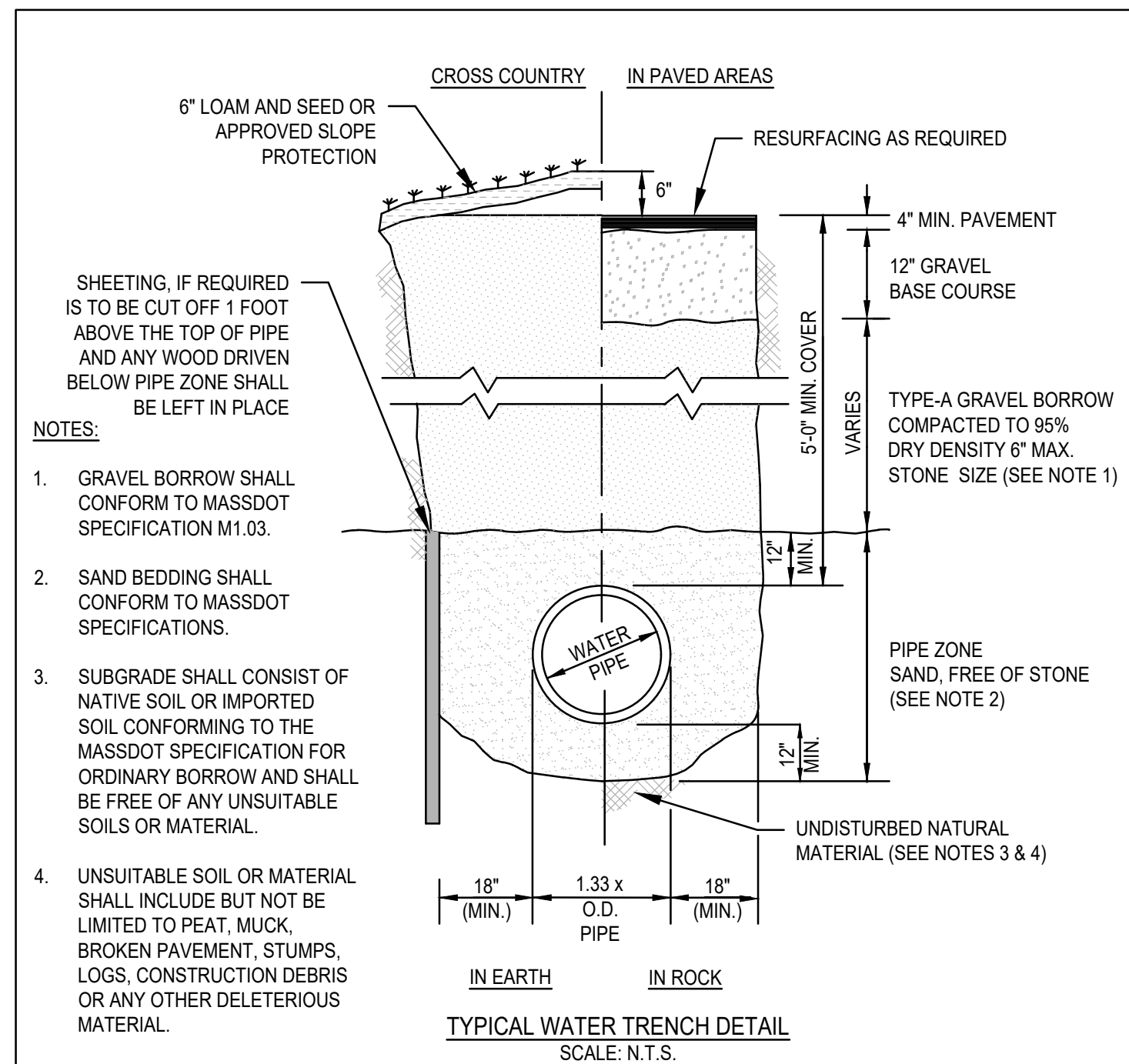
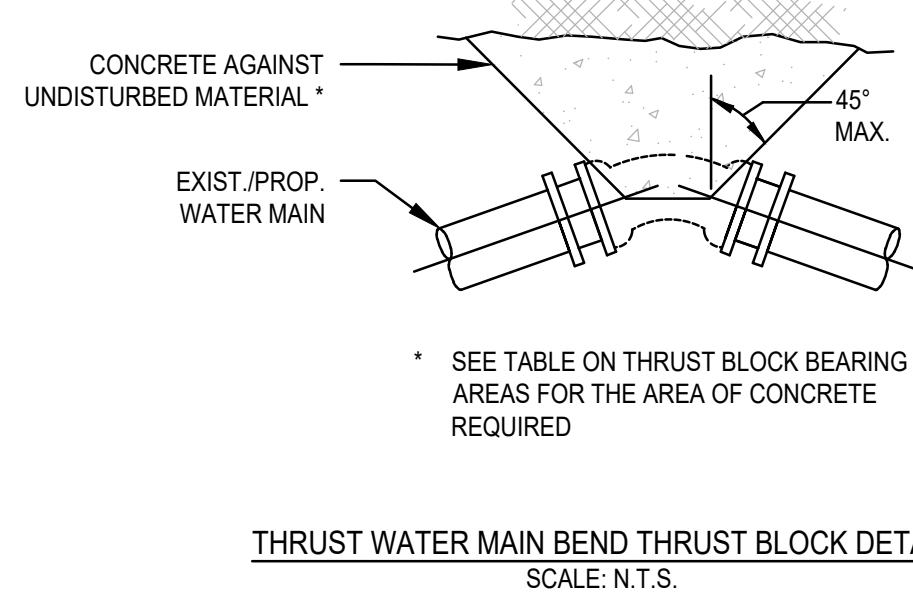
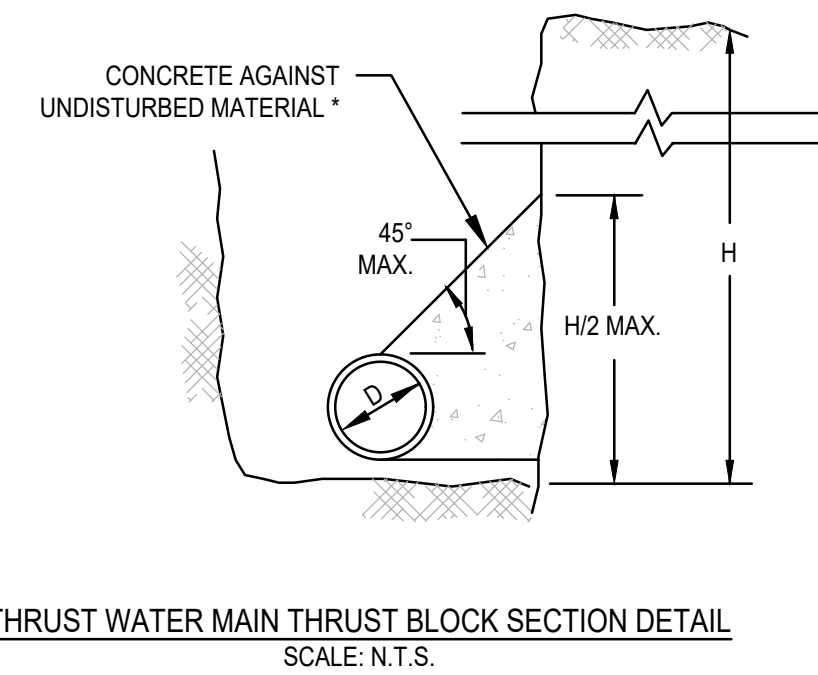
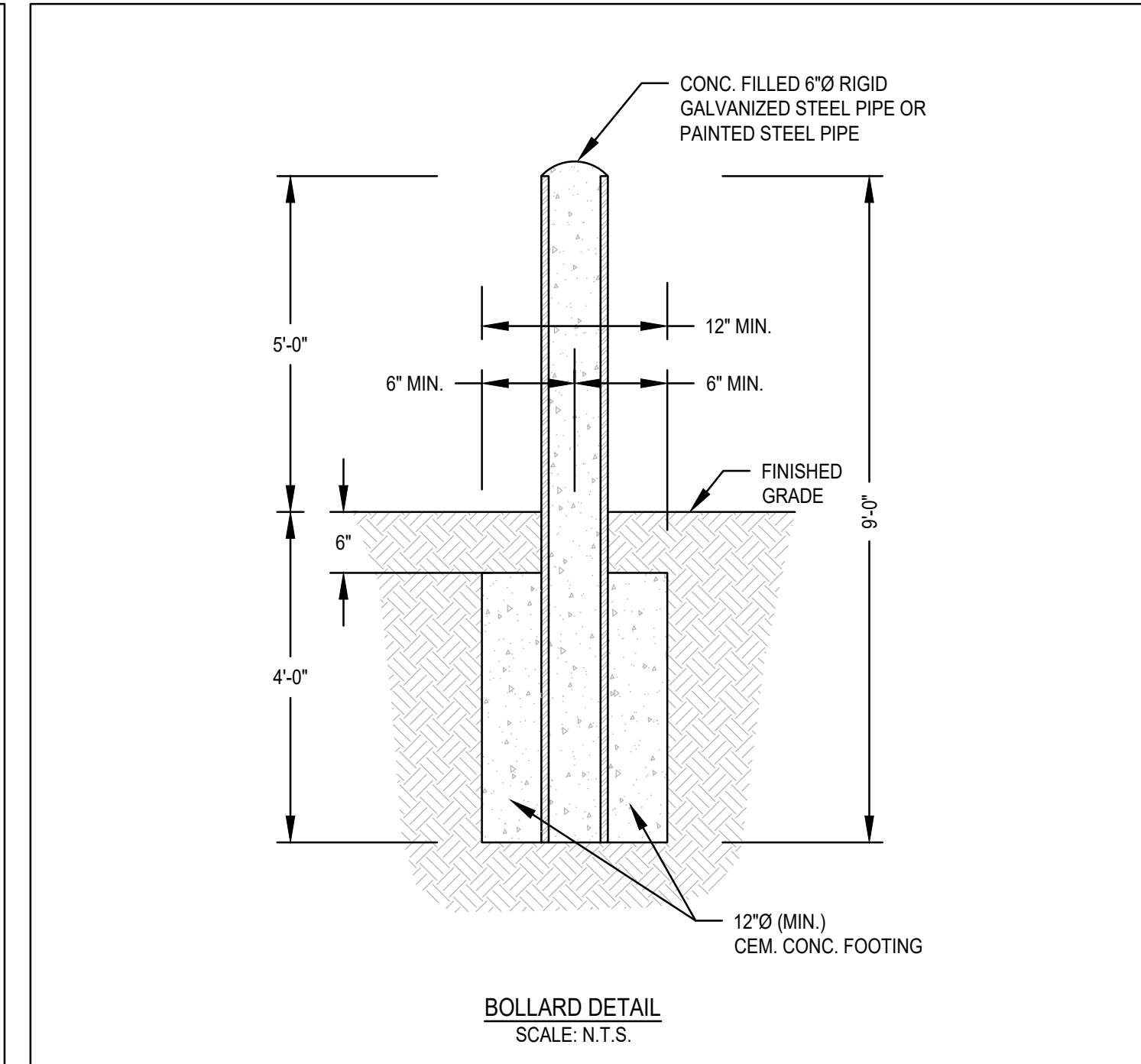
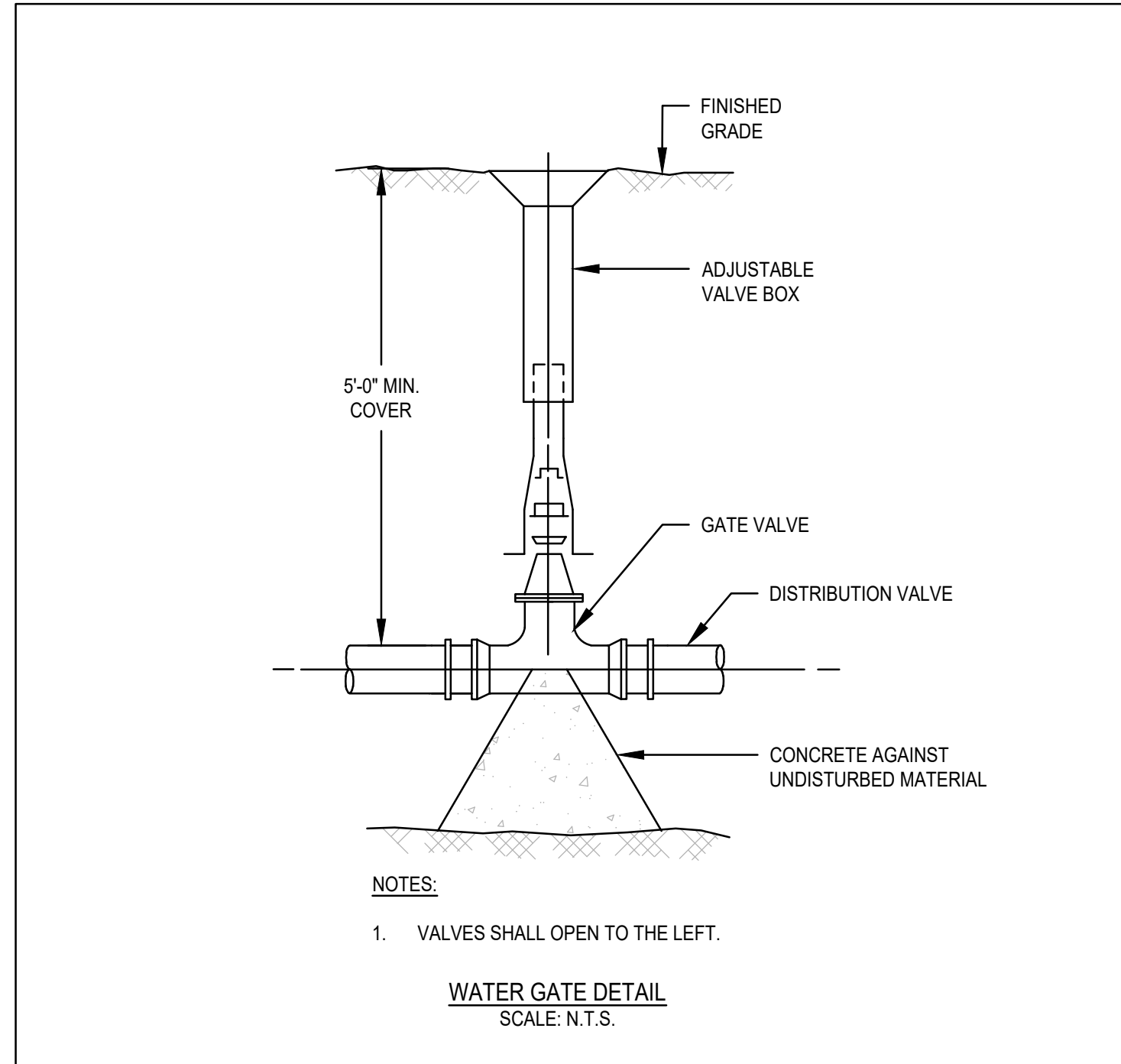
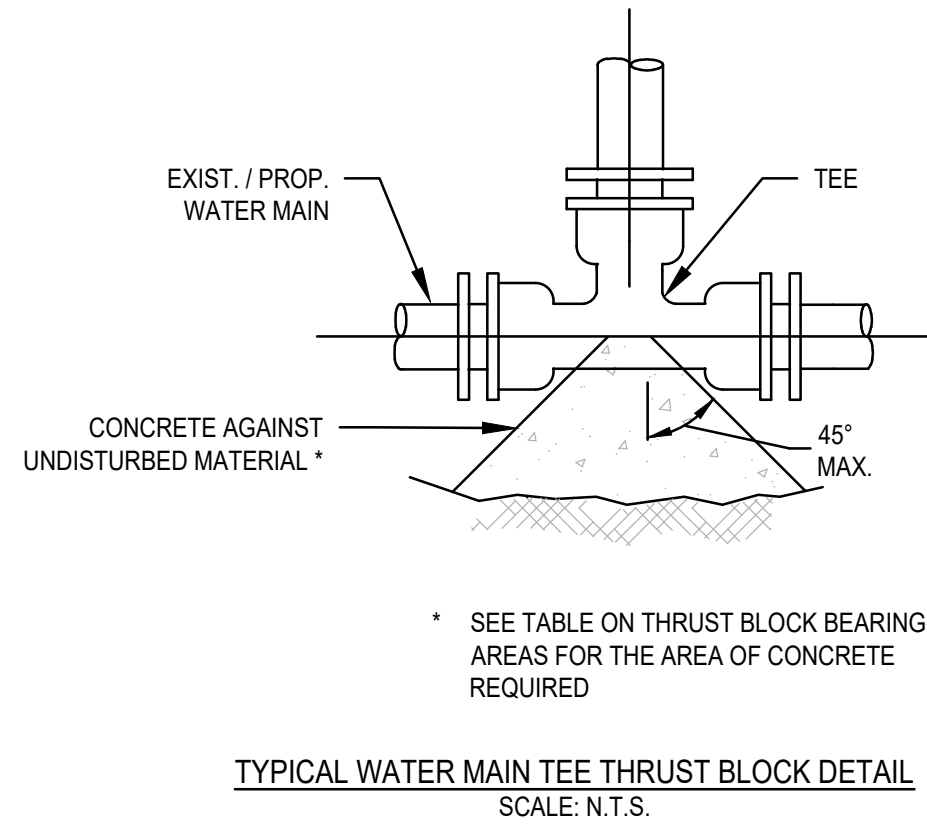
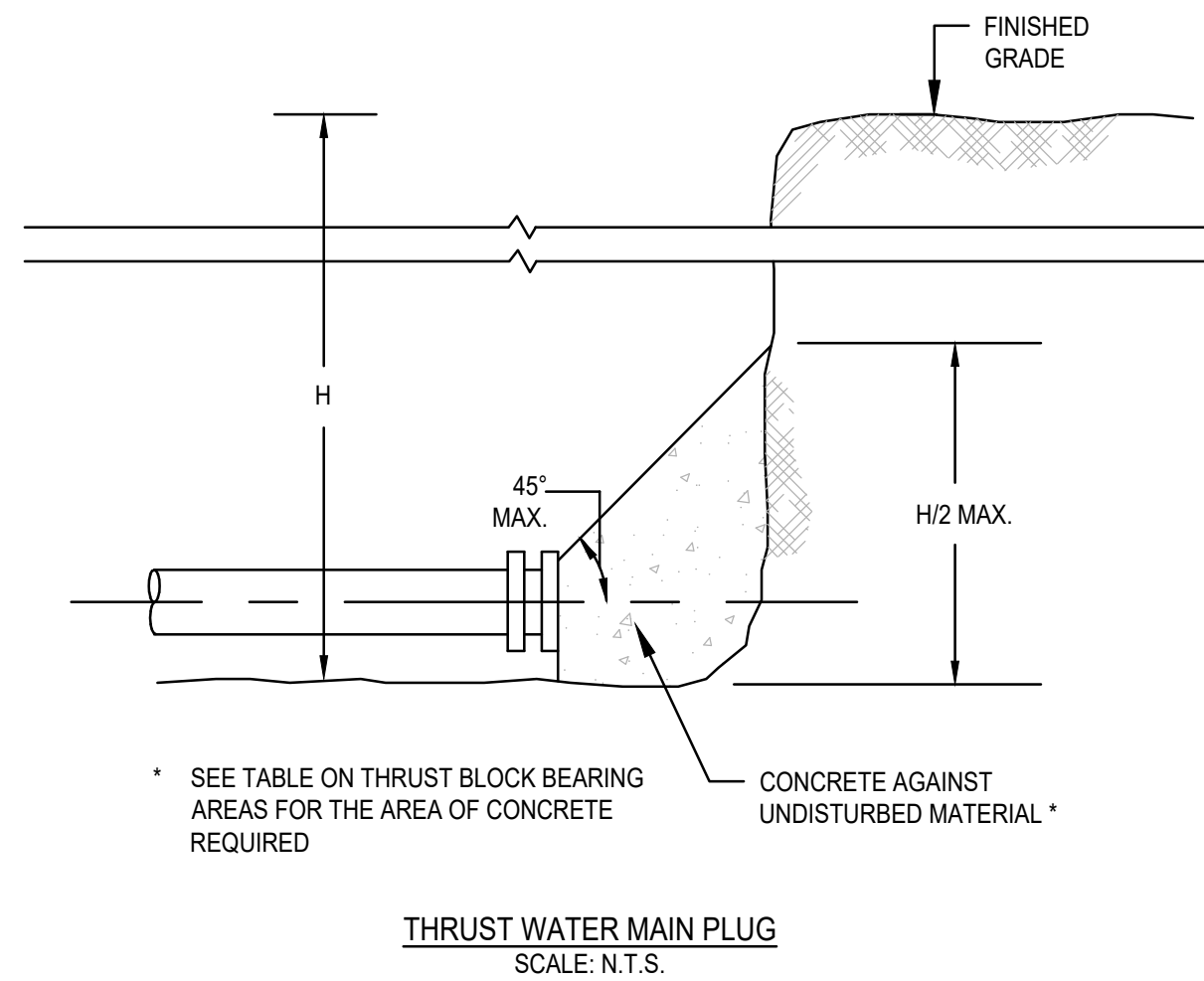
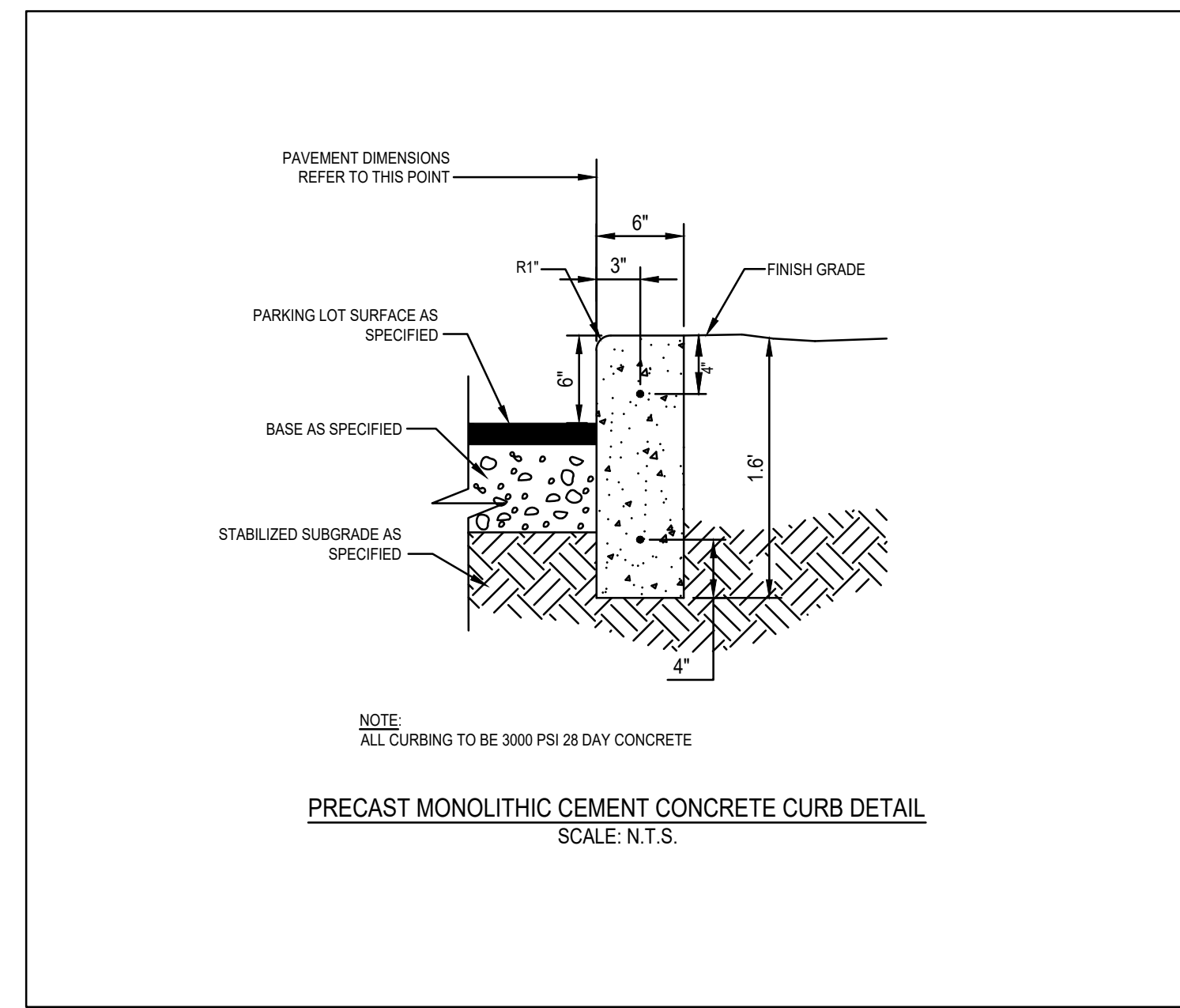
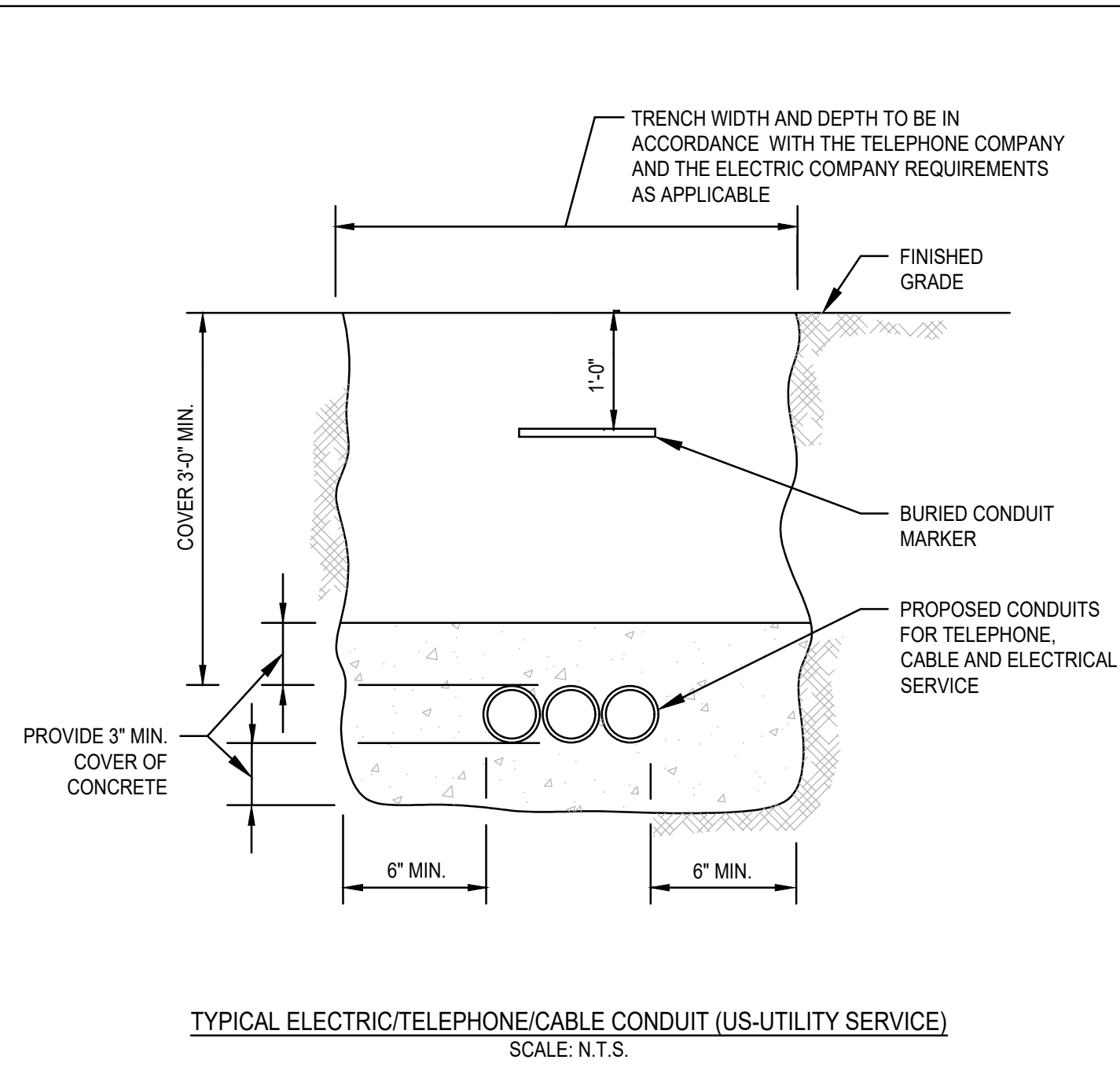
DRAWN BY: ESS
 DESIGNED BY: ESS
 CHECKED BY: BCM
 APPROVED BY: BCM
 DATE: MARCH 21, 2022
 SCALE: AS NOTED
 PROJECT NO.: 222-118
 DWG. TITLE:

CONSTRUCTION DETAILS

DWG. NO.: **D-2**

GENERAL NOTES

- IF SHEETING IS USED, IT SHALL BE CUT OFF NO MORE THAN 12" ABOVE TOP OF PIPE.
- ALL PIPES SHALL BE PRESSURE TESTED AT 200 PSI WORKING PRESSURE FOR A MINIMUM DURATION OF TWO HOUR.
- WATER SYSTEM IS TO BE DISINFECTED TO 50 P.P.M. AVAILABLE CHLORINE AND AFTER 24 HOURS TO 25 P.P.M. OR AS REQUIRED BY CARVER WATER SUPERINTENDENT/ENGINEER.
- WATER PIPE IS TO BE CEMENT LINED DUCTILE IRON "TYTON" OR EQUAL TYPE JOIN, CONFORMING TO A.N.S.I./A.W.W.A. C150/A21.50, CLASS 52, AS APPROVED BY THE TOWN'S WATER SUPERINTENDENT/ENGINEER.
- ALL PIPING SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH A.W.W.A. STANDARDS PRIOR TO PAVING IF PAVING ABOVE TRENCH IS REQUIRED.
- BACKFILL IS TO BE COMPACTED TO 90% MAXIMUM DRY DENSITY BY AASHTO T-180 D.
- ALL WATER PIPE SHALL BE LAID WITH A MINIMUM OF 5 FEET OF COVER OF APPROVED MATERIALS.
- RESULTS FROM PRESSURE TESTING AND DISINFECTION SHALL BE FURNISHED TO THE CARVER WATER DEPT. AND DIRECTOR OF PUBLIC WORKS FOR APPROVAL PRIOR TO WATER BEING TURNED ON.
- ALL WORK SHALL BE IN CONFORMANCE WITH CARVER WATER DEPT. STANDARDS.
- ALL PERMITS REQUIRED FOR STREET OPENINGS AND WATER MAIN TAPPING MUST BE OBTAINED.
- NO WATER WILL BE TURNED ON IN THE PROJECT WITHOUT CARVER WATER DEPT. APPROVAL.



THRUST BLOCK BEARING AREAS FOR WATER PIPE

TABLE OF BEARING AREAS IN SQ. FT. AGAINST UNDISTURBED MATERIAL FOR WATER MAIN FITTINGS*

SIZE OF MAIN (IN.)	90° BEND	TEES AND PLUGS	45° BEND
6	4	2.5	2
8	6	4	3
12	12	9	7
16	21	16	12

NOTES:

- FOR FITTINGS WITH LESS THAN 45° DEFLECTION, USE BEARING AREAS FOR 45° BEND.
- BEARING AREAS BASED ON HORIZONTAL PASSIVE SOIL PRESSURE OF 2000 P.S.F. AND INTERNAL WATER PRESSURE OF 150 P.S.I.G. JOINTS SHALL NOT BE ENCASED IN CONCRETE. BEARING AREAS MAY BE DREGARDED FOR TRENCHES IN ROCK WHERE THE TOP OF THE ROCK FACE IS AT OR ABOVE THE CROWN OF THE PIPE. HOWEVER, CONCRETE BACKING SHALL BE PLACED BETWEEN THE PIPE AND THE ROCK FACE.
- THE CONTRACTOR SHALL SUBMIT 2 WEEKS IN ADVANCE OF PLACEMENT, WORKING DRAWINGS FOR EACH THRUST BLOCK TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- ALL VALVES AND FITTINGS SHALL BE RODDED TOGETHER.

ASSUMPTIONS:

* TYPE OF SOIL IS MEDIUM CLAYEY, 6 OR MORE BLOWS PER FOOT, OR LOOSE GRANULAR, 9 OR MORE BLOWS PER FOOT. SOIL CONDITIONS OTHER THAN THOSE GIVEN WILL REQUIRE LARGER BEARING AREAS.

THRUST BLOCK DETAILS
SCALE: N.T.S.

REV	DATE	DESCRIPTION	BY	APP
1	6/29/22	LANDSCAPING	ESS	BCM

MCKENZIE ENGINEERING GROUP
 Assinippi Office Park
 150 Longwater Drive, Suite 101
 Norwell, MA 02061
 P: 781.792.3900
 F: 781.792.0333
 www.mckeng.com

SITE DEVELOPMENT PLANS
 RICKETTS POND BUSINESS PARK
 LOT 3 (APN 32-1-3)
 OFF SPRING STREET
 CARVER, MASSACHUSETTS

PROFESSIONAL ENGINEER:

 BRADLEY C. MCKENZIE
 CIVIL ENGINEER
 No. 38817

APPLICANT:
BRIDGESTONE DEVELOPMENT INC.
 P.O. BOX 1384
 PLYMOUTH, MASSACHUSETTS 02362

DRAWN BY: ESS
 DESIGNED BY: ESS
 CHECKED BY: BCM
 APPROVED BY: BCM
 DATE: MARCH 21, 2022
 SCALE: AS NOTED
 PROJECT NO.: 222-118
 DWG. TITLE:

CONSTRUCTION DETAILS

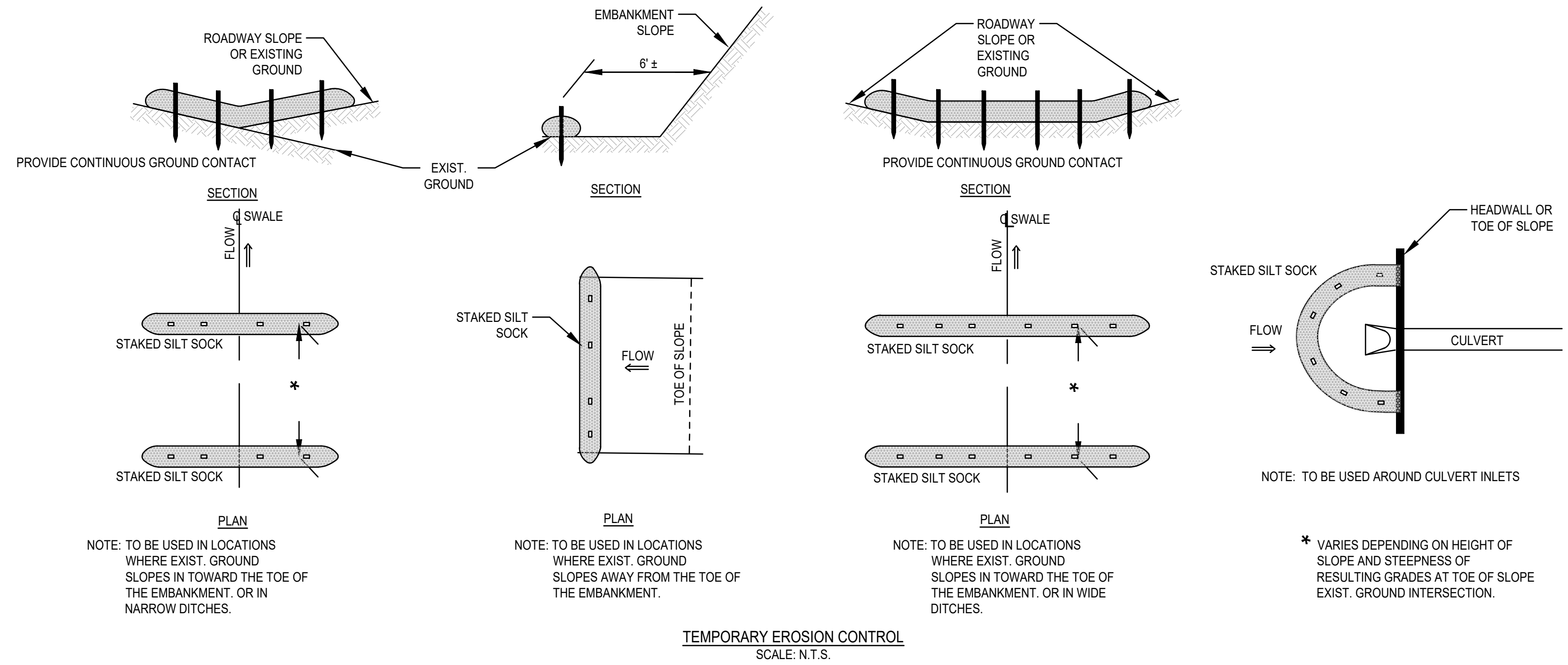
CONSTRUCTION SEQUENCE

TO PREVENT EXCESSIVE EROSION AND SILTING, THE FOLLOWING CONSTRUCTION SEQUENCE COUPLED WITH OTHER WIDELY ACCEPTED PRACTICES FOR REDUCING EROSION AND SEDIMENTATION SHALL BE IMPLEMENTED IN THE DEVELOPMENT OF THE SITE.

1. THE CONTRACTOR SHALL COORDINATE A PRE-CONSTRUCTION MEETING PRIOR TO ANY CONSTRUCTION ACTIVITY.
2. STABILIZATION PRACTICES FOR EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. REFER TO "EROSION AND SEDIMENTATION CONTROL" SECTION OF THIS PLAN & PLACE SILTATION FENCE ON THE SITE PLANS.
3. CLEAR AND GRUB UP AS REQUIRED FOR THE CONSTRUCTION OF THE ROADWAY, PARKING AREAS AND RELATED INFRASTRUCTURE.
4. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
5. EXCAVATE TOPSOIL AND SUBSOIL FROM CUT AND FILL AREAS AND STOCKPILE ON SITE IN LOCATIONS SHOWN ON THE PLAN. CONSIDERATION SHOULD BE GIVEN TO LOCATING STOCKPILES ON THE UPHILL SIDE OF DISTURBED AREAS, WHERE POSSIBLE, TO ACT AS TEMPORARY DIVERSIONS.
6. CONSTRUCT CUT AND FILL AREAS, INSTALLING HAYBALE CHECK DAMS AT TOES OF ALL 3:1 OR GREATER SLOPES, AND AT ENDS OF ALL CUT AREAS. ALL FILL WILL BE INSTALLED USING 12" MAXIMUM COMPACTION LIFTS. PLACE ALL SLOPE PROTECTION WHERE INDICATED ON THE PLAN.
7. INSTALL CLOSED DRAINAGE SYSTEM AND OTHER UTILITIES. ALL CATCH BASINS SHALL BE COVERED WITH SILTSACK OR EQUIVALENT INLET PROTECTION.
8. GRADE ROADWAY AND PARKING AREAS TO SUBGRADE ELEVATION AND CONSTRUCT SIDE SLOPES. APPLY TEMPORARY STABILIZATION MEASURES WHERE WARRANTED. REFER TO "EROSION AND SEDIMENTATION CONTROL" SECTION OF THIS PLAN.
9. EXCAVATE AND CONSTRUCT BUILDING FOUNDATIONS.
10. PLACE GRAVEL SUBBASE.
11. PLACE THE BITUMINOUS CONCRETE BINDER COURSE ON ROADWAY AND PARKING AREAS.
12. CONSTRUCT BUILDING STRUCTURES AND ASSOCIATED UTILITY CONNECTIONS.
13. GRADE SLOPES AND STABILIZE CUT AREAS AT TOE OF SLOPES. BLEND ALL SLOPES INTO EXISTING TOPOGRAPHY AND LOAM AND SEED ALL DISTURBED AREAS. SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH JUTE MESH.
14. PLACE THE FINAL WEARING COURSE OF PAVEMENT.
15. COMPLETE FINE GRADING OF SHOULDERS AND PLACE PAVEMENT IN MISCELLANEOUS AREAS.
16. REMOVE TEMPORARY EROSION CONTROL DEVICES ONCE ADEQUATE GROWTH IS ESTABLISHED. ADEQUATE GROWTH IS DEFINED AS VEGETATION COVERING 75% OR MORE OF THE GROUND SURFACE.

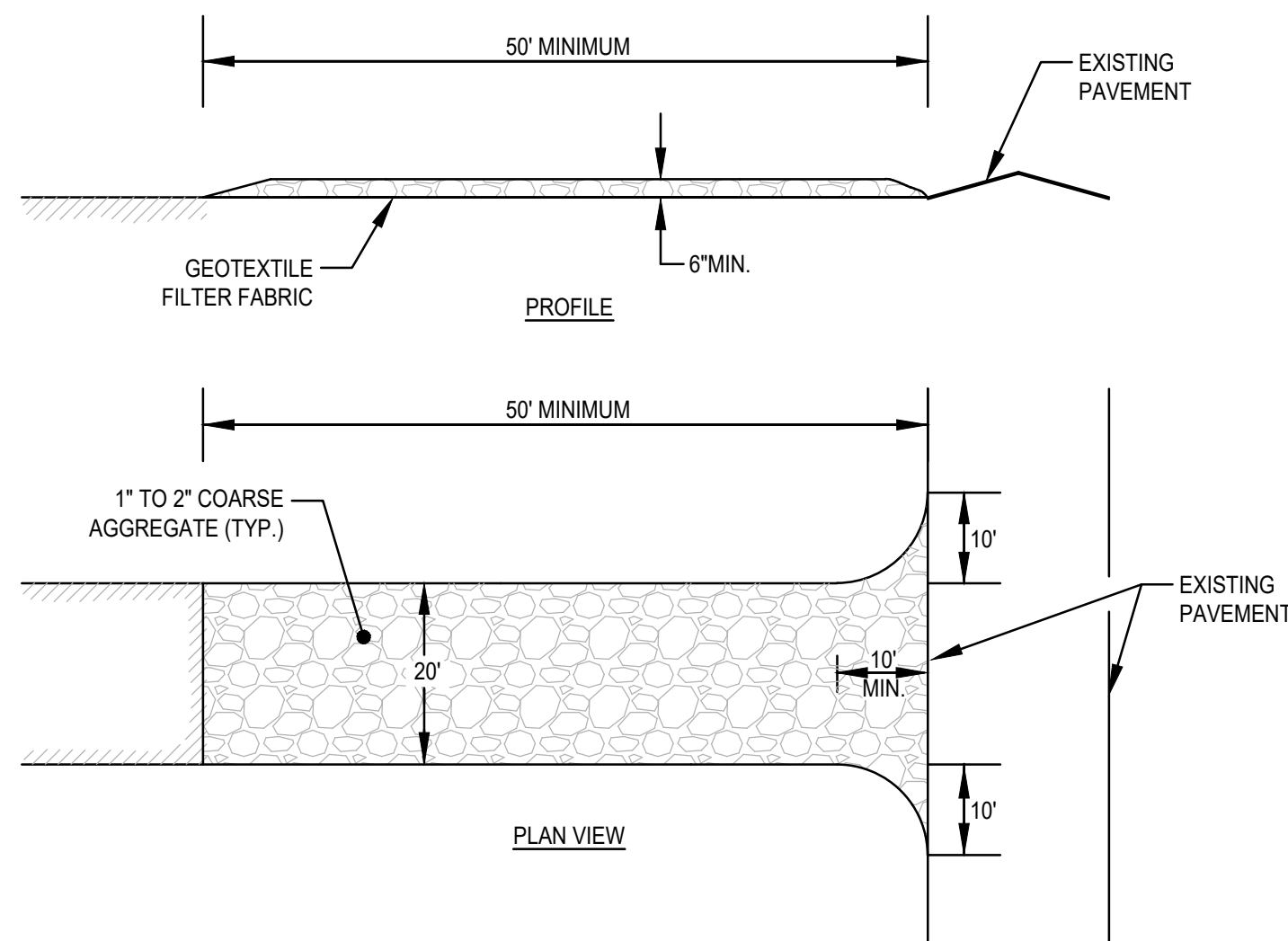
CONSTRUCTION PHASE BMP OPERATION AND MAINTENANCE NOTES:

1. STRUCTURAL PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE SILT SOCK BARRIER CONTROLS, STABILIZED CONSTRUCTION ENTRANCE, TEMPORARY DIVERSION SWALES WITH STONE CHECK DAMS, SEDIMENT BASINS, AND INLET PROTECTION.
2. STABILIZATION PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE TEMPORARY SEEDING, GEOTEXTILES (JUTE MESH), MULCHING, AND PERMANENT SEEDING.
3. OPERATOR PERSONNEL AND/OR ITS CONSULTANTS MUST INSPECT THE CONSTRUCTION SITE AT LEAST ONCE EVERY 7 CALENDAR DAYS OR EVERY 14 CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT 1/2 INCH OR GREATER. THE INSPECTOR SHOULD REVIEW THE EROSION AND SEDIMENT CONTROLS WITH RESPECT TO THE FOLLOWING:
 - A. WHETHER OR NOT THE BMP WAS INSTALLED/PERFORMED CORRECTLY.
 - B. WHETHER OR NOT THERE HAS BEEN DAMAGE TO THE BMP SINCE IT WAS INSTALLED OR PERFORMED.
 - C. WHAT SHOULD BE DONE TO CORRECT ANY PROBLEMS WITH THE BMP.
4. THE INSPECTOR SHALL COMPLETE THE INSPECTION SCHEDULE AND EVALUATION CHECKLIST FOR FINDINGS AND SHOULD REQUEST THE REQUIRED MAINTENANCE OR REPAIR.
5. ALL SLOPES EXCEEDING 15% RESULTING FROM SITE GRADING SHALL BE BOTH COVERED WITH FOUR INCHES OF TOPSOIL AND PLANTED WITH A VEGETATED COVER SUFFICIENT TO PREVENT EROSION.



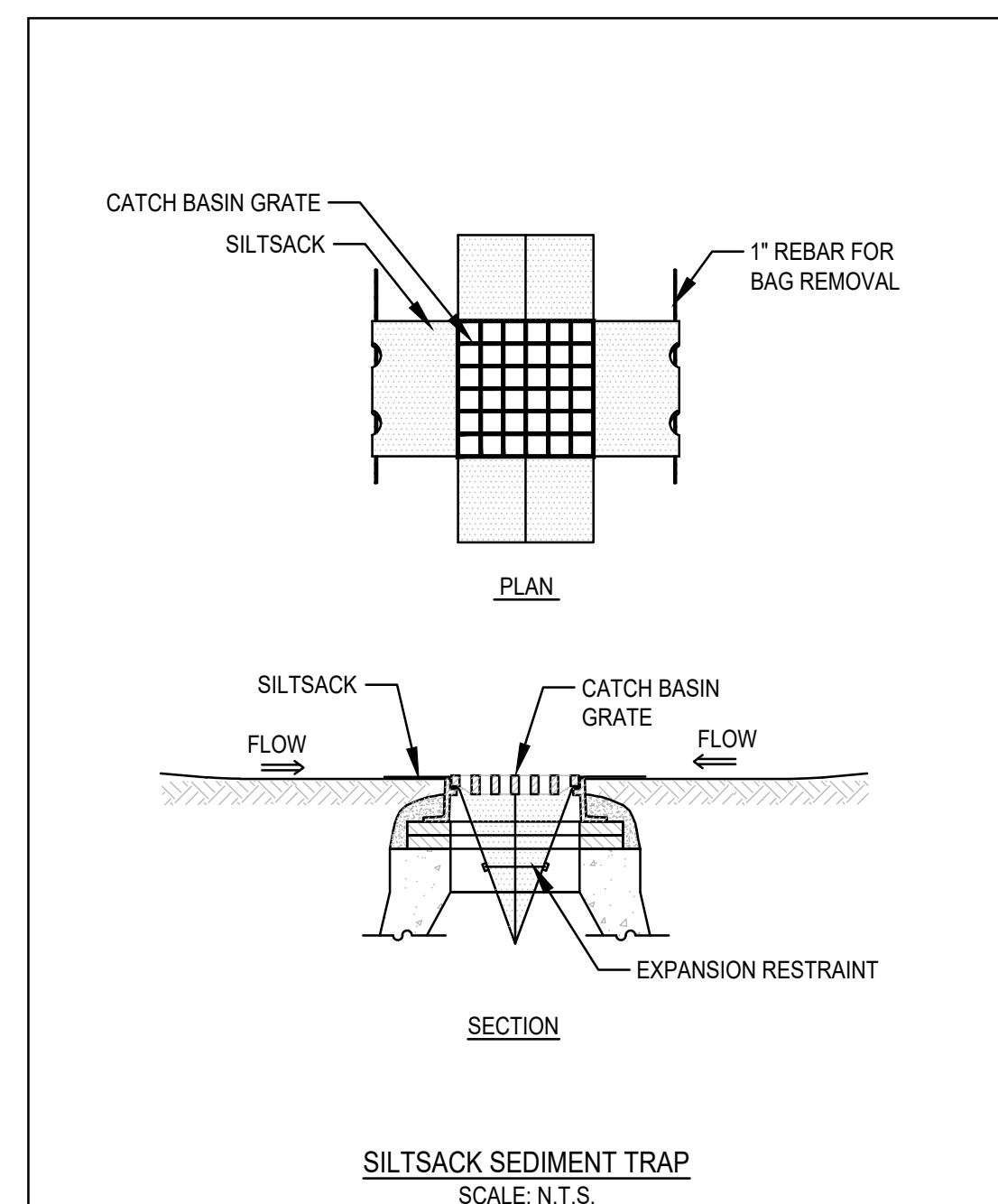
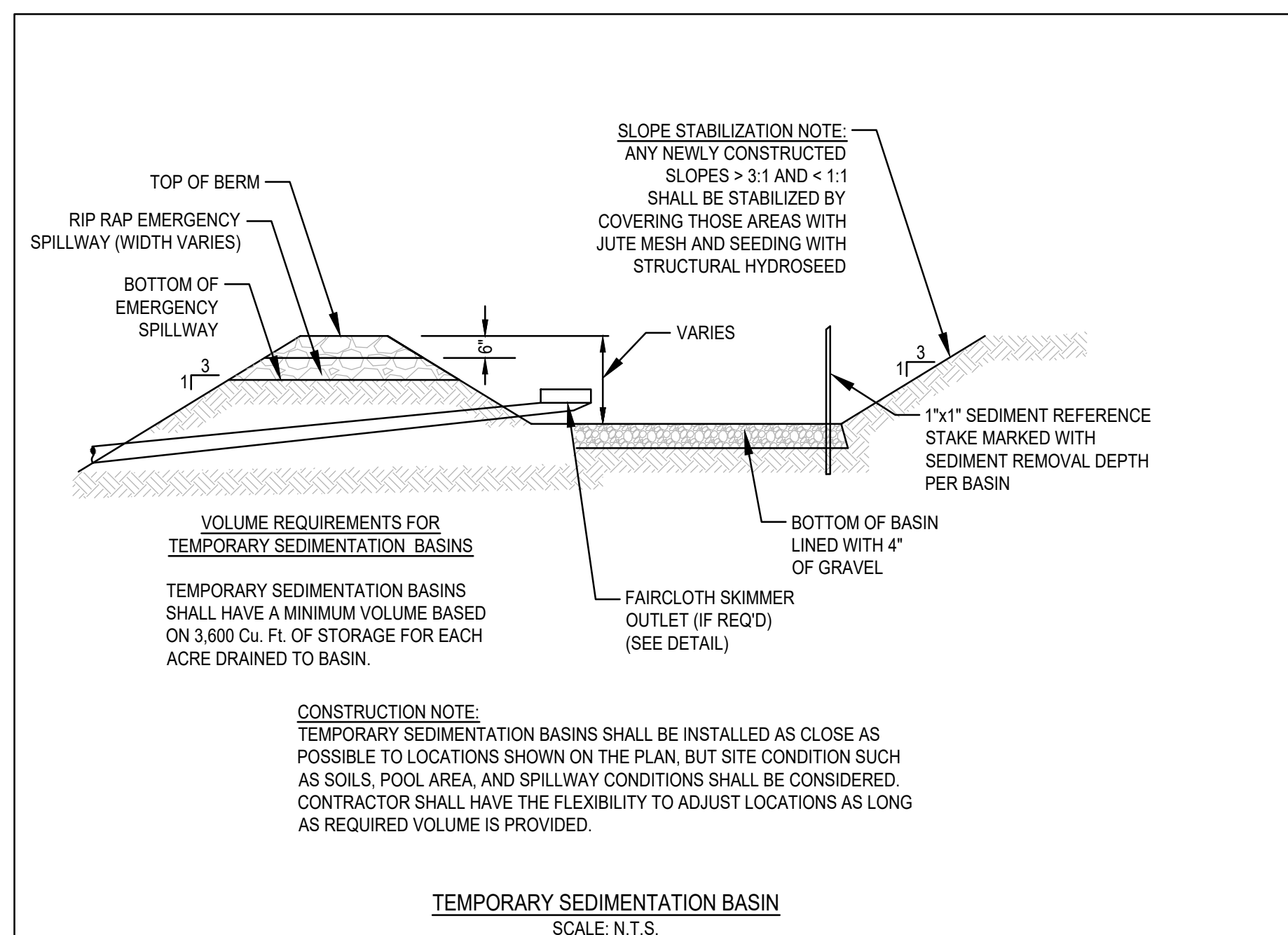
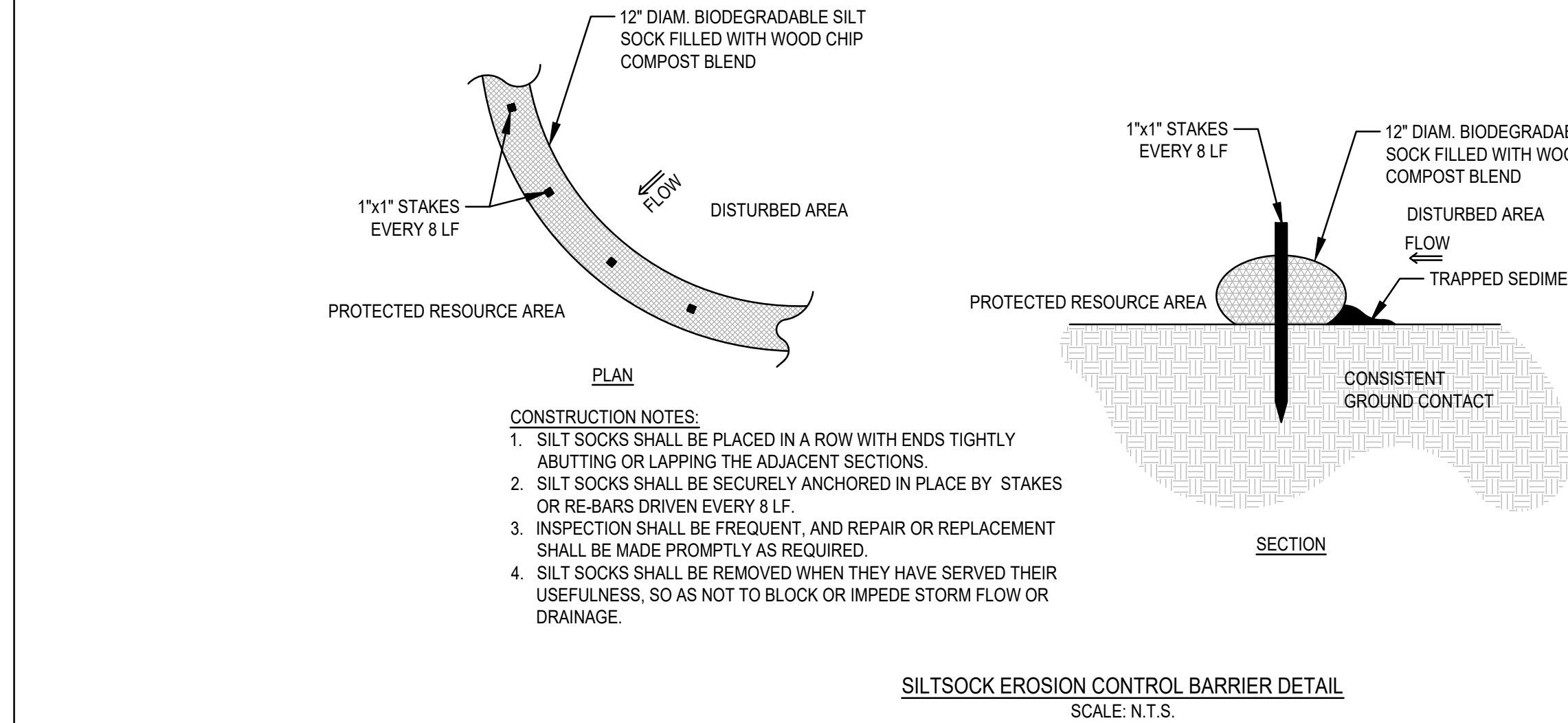
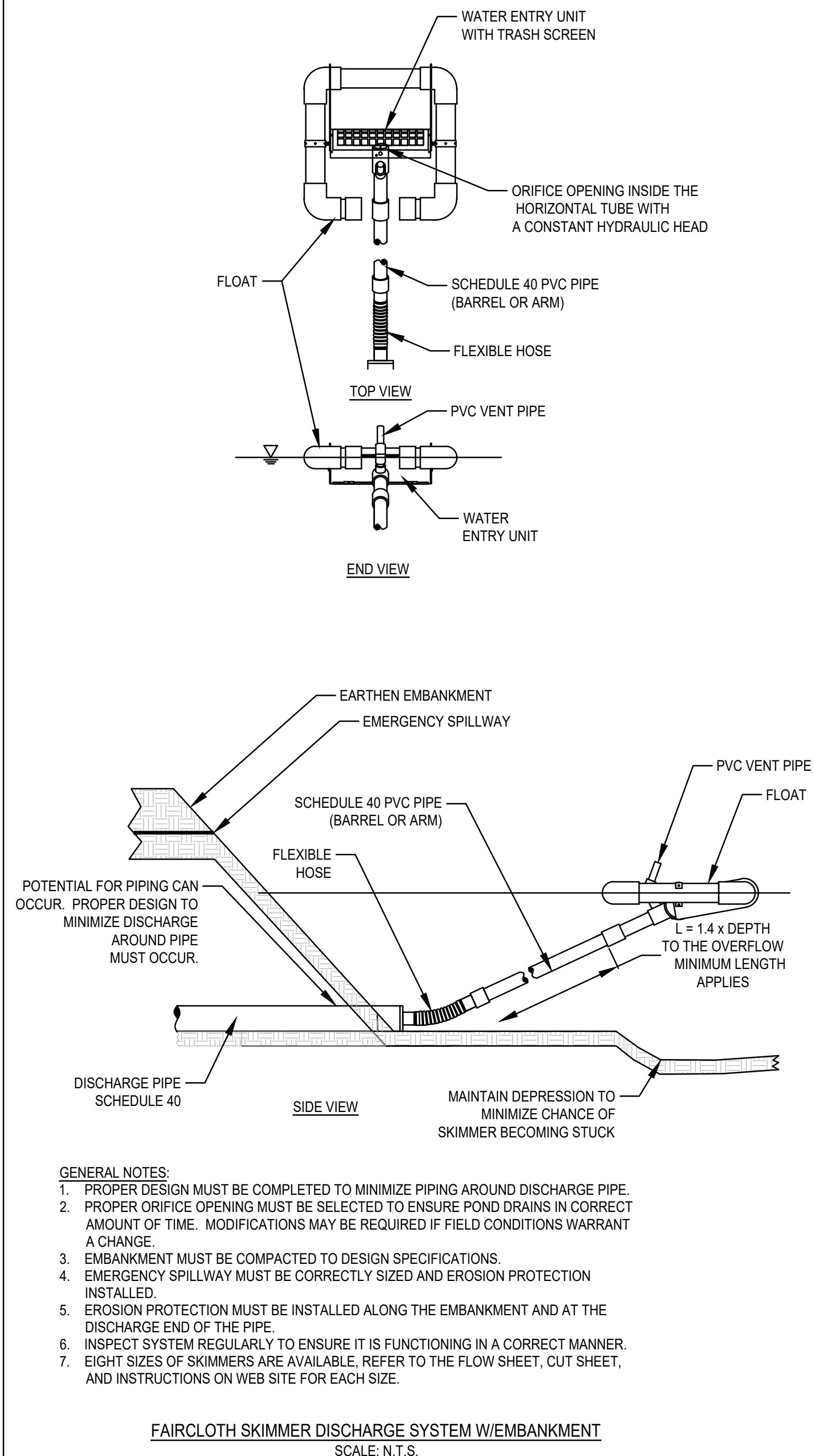
EROSION AND SEDIMENTATION CONTROL

1. STRUCTURAL PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE SILT SOCK BARRIER CONTROLS, STABILIZED CONSTRUCTION ENTRANCE, TEMPORARY DIVERSION SWALES WITH STONE CHECK DAMS, SEDIMENT BASINS, AND INLET PROTECTION.
2. STABILIZATION PRACTICES UTILIZED FOR THE PROJECT WILL INCLUDE TEMPORARY SEEDING, GEOTEXTILES (JUTE MESH), MULCHING, AND PERMANENT SEEDING.
3. IN GENERAL, THE SMALLEST POSSIBLE AREA OF LAND SHOULD BE EXPOSED AT ONE TIME. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHALL BE CONFINED TO A MAXIMUM PERIOD OF 3 MONTHS. LAND SHALL NOT BE EXPOSED DURING THE WINTER MONTHS. ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY AND THAT WILL BE REGRADED AT A LATER DATE SHALL BE MACHINE HAY MULCHED AND SEEDED WITH WINTER RYE TO PREVENT EROSION.



(SCE) CONSTRUCTION SPECIFICATIONS:

1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 1 TO 2 INCH STONE, RECLAIMED STONE.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE RESIDENTIAL LOT A 30 FOOT MINIMUM LENGTH WOULD APPLY.
3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN A FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICHEVER IS GREATER.
5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DEVERTED TOWARDS THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED PROMPTLY.



BY APP: []
DESCRIPTION: LANDSCAPING
DATE: 6/29/22
REV: 1

MCKENZIE ENGINEERING GROUP
Mississippi Office Park
150 Longwater Drive, Suite 101
Norwell, MA 02061
P: 781.792.3900
F: 781.792.0333
www.mckeng.com

SITE DEVELOPMENT PLANS
RICKETTS POND BUSINESS PARK
LOT 3 (APN 32-1-3)
OFF SPRING STREET
CARVER, MASSACHUSETTS



APPLICANT: BRIDGESTONE DEVELOPMENT INC.
P.O. BOX 1384
PLYMOUTH, MASSACHUSETTS 02362

DESIGNED BY: ESS
CHECKED BY: BCM
APPROVED BY: BCM
DATE: MARCH 21, 2022
SCALE: AS NOTED
PROJECT NO.: 222-118
DWG. TITLE:

EROSION AND SEDIMENTATION DETAILS

DWG. NO: **D-4**