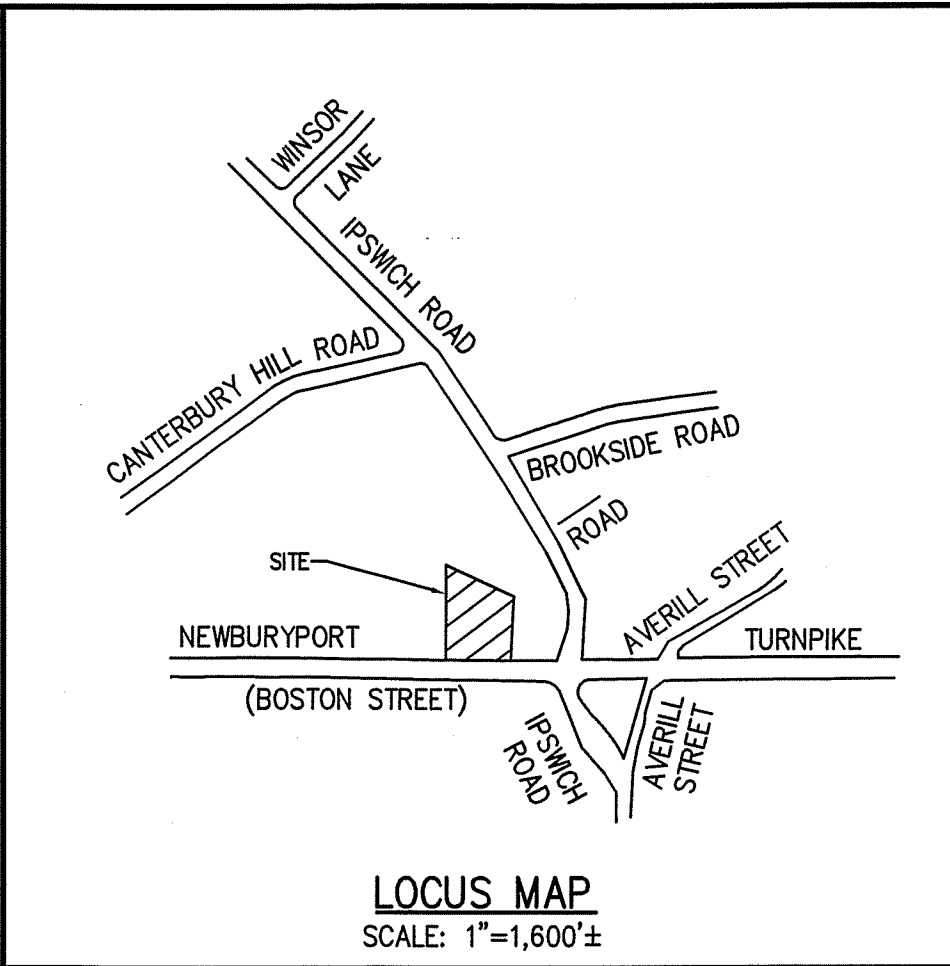


SITE RE-DEVELOPMENT PLANS

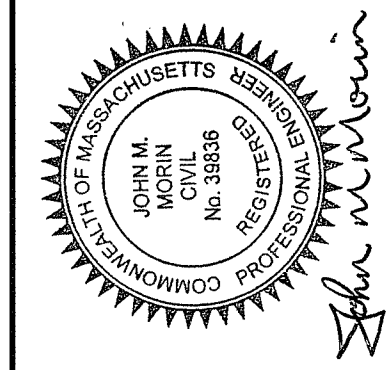
SCHEDULE OF PLAN SET DRAWINGS:

- SHEET 1 COVER SHEET
SHEET 2 EXISTING CONDITIONS
SHEET 3 SITE LAYOUT PLAN
SHEET 4 GRADING, UTILITY & DRAINAGE PLAN
SHEET 5 CONSTRUCTION DETAILS
SHEET 6 CONSTRUCTION DETAILS

371 BOSTON STREET TOPSFIELD, MASSACHUSETTS (ASSESSOR'S MAP 26, LOT 14)



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APPLICANT/RECORD OWNER:
MAUREEN & RANDY SABINO
447 BOSTON STREET, SUITE 4
TOPSFIELD MA, 01983
DEED BOOK 27280 PAGE 543
ASSESSORS MAP 26 LOT 14

CIVIL ENGINEER:
THE MORIN-CAMERON GROUP, INC.
66 ELM STREET
DANVERS, MA 01923
PHONE: 978-777-8586

ZONING DISTRICT:
INNER RESIDENTIAL AND AGRICULTURAL DISTRICT (IRA)
BUSINESS DISTRICT HIGHWAY NORTH (BHN)
GROUNDWATER PROTECTION OVERLAY DISTRICT

SURVEY BY: PM/SR
DRAFTED BY: WAS
CHECKED BY: JMM
APPROVED BY: JMM
SCALE: AS NOTED
DATE: OCTOBER 23, 2019

REVISIONS	
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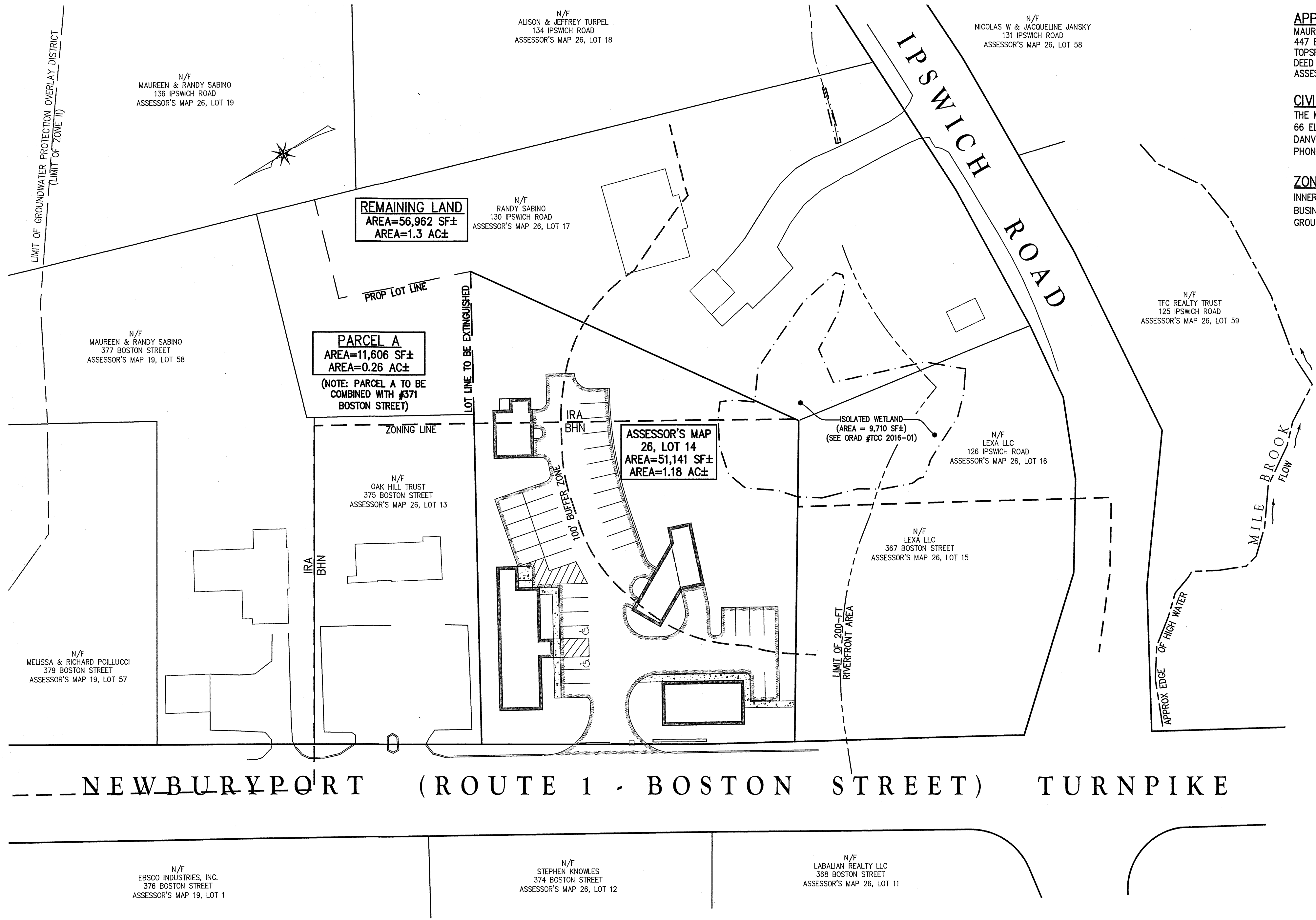
SITE PLAN OF LAND
IN
TOPSFIELD, MASSACHUSETTS
371 BOSTON STREET
(ASSESSOR'S MAP 26, LOT 14)
PREPARED FOR:
MAUREEN & RANDY SABINO

COVER SHEET
DRAWING NO.
1 OF 6

GENERAL NOTE:
THESE PLANS ARE PREPARED FOR OUR CLIENTS USE ONLY FOR THE SPECIFIC PURPOSE OF OBTAINING PERMITS AND LOCAL APPROVALS, AND ARE NOT TO BE USED OR RELIED UPON AS A CONSTRUCTION DOCUMENT OR ANY OTHER USE BY OTHERS WITHOUT THE WRITTEN CONSENT OF THE MORIN-CAMERON GROUP, INC.

ABBREVIATIONS

- AC ACRES
APPROX APPROXIMATE
BIT BITUMINOUS
BLDG BUILDING
BOT BOTTOM
BSMT BASEMENT SLAB
BWV BORDERING VEGETATED WETLAND
CCB CAPE COD BERM
CLDI CONCRETE LINED DUCTILE IRON
CONC CONCRETE
DI DUCTILE IRON
DIA DIAMETER
EL/ELEV ELEVATION
EP EDGE OF PAVEMENT
EXIST EXISTING
FG FINISHED GRADE
FM FORCE MAIN
FT FEET
GAL GALLON
GF GARAGE FLOOR
H HORIZONTAL
ID INNER DIAMETER
INV INVERT
LF LINEAR FEET
MAX MAXIMUM
MIN MINIMUM
N/F NOW OR FORMERLY
OC ON CENTER
OCS OUTLET CONTROL STRUCTURE
PROP PROPOSED
PSI POUNDS PER SQUARE INCH
PVC POLYVINYL CHLORIDE
R RADIUS
RG RAIN GARDEN
S SEWER/SLOPE
SF SQUARE FEET
SMH SEWER MANHOLE
TOF TOP OF FOUNDATION
TP TEST PIT
TYP TYPICAL
V VERTICAL
WS WATER SERVICE



PLAN
SCALE: 1" = 40'
0 20 40 80

GENERAL NOTES:

1. THE EXISTING CONDITION DEPICTED HEREON IS THE RESULT OF AN ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY THE MORIN-CAMERON GROUP, INC.
2. PROPERTY LINE INFORMATION COMPILED FROM RECORD PLANS AND AN ON GROUND SURVEY.
3. EXISTING SEPTIC SYSTEM INFORMATION OBTAINED FROM FILES ON RECORD WITH THE TOPSFIELD BOARD OF HEALTH. SIZE AND LOCATIONS DEPICTED SHOULD BE CONSIDERED APPROXIMATE.
4. THE ABUTTER INFORMATION SHOWN HEREON IS COMPILED FROM THE TOPSFIELD GIS DATABASE AND ASSESSOR'S RECORDS.
5. UNDERGROUND UTILITY INFORMATION AND LOCATIONS WERE NOT AVAILABLE AT THE TIME OF SURVEY. LOCATIONS OF ALL UTILITIES SHOULD BE CONFIRMED WITH THE UTILITY PROVIDED PRIOR TO THE COMMENCEMENT OF ANY SITE WORK. 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.

RECORD OWNER:

- MAUREEN & RANDY SABINO
447 BOSTON STREET, SUITE 4
TOPSFIELD MA, 01983
DEED BOOK 27280 PAGE 543
ASSESSORS MAP 26 LOT 14

ZONING DISTRICT:

- INNER RESIDENTIAL AND AGRICULTURAL DISTRICT (IRA)
- BUSINESS DISTRICT HIGHWAY NORTH (BHN)

WETLAND NOTE:

- WETLAND RESOURCE AREA APPROVED BY THE TOPSFIELD CONSERVATION COMMISSION UNDER ORDER OF RESOURCE AREA DELINEATION (TCC 2016-01) WITH AN ISSUANCE DATE OF NOVEMBER 17, 2016.

FLOOD NOTE:

- THE SUBJECT PROPERTY IS LOCATED IN A ZONE X: AREA OF MINIMAL FLOOD HAZARD ABOVE THE 500-YEAR FLOOD LEVEL AS ILLUSTRATED ON THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 25009C0268F, WHICH HAS AN EFFECTIVE DATE OF JULY 3, 2012.

DATUM:

- ELEVATIONS HEREON REFER TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29).

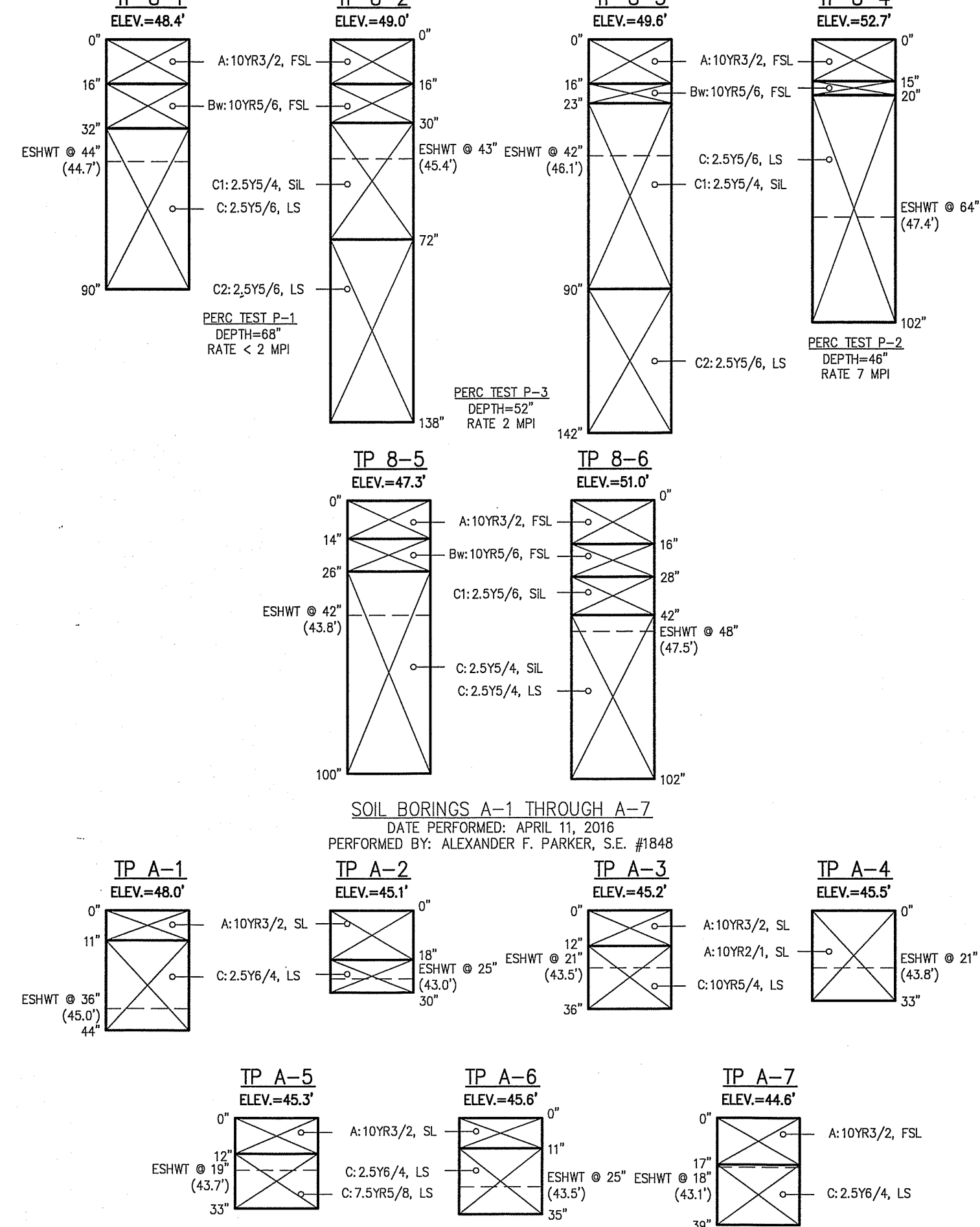
SOIL LOGS

TEST PITS 8-1 THROUGH 8-6

DATE PERFORMED: APRIL 30, 2008

PERFORMED BY: GREG HOCHMUTH

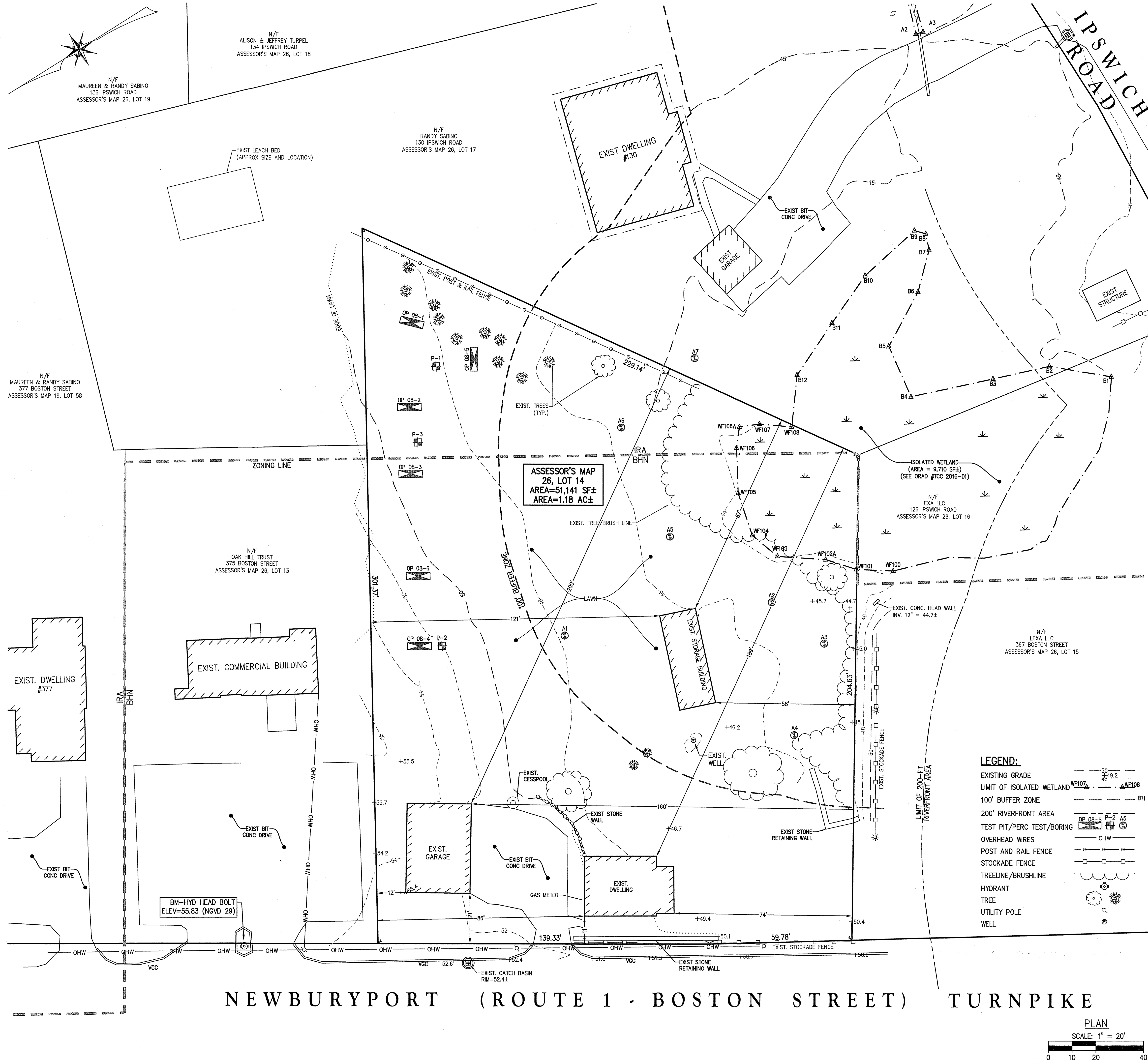
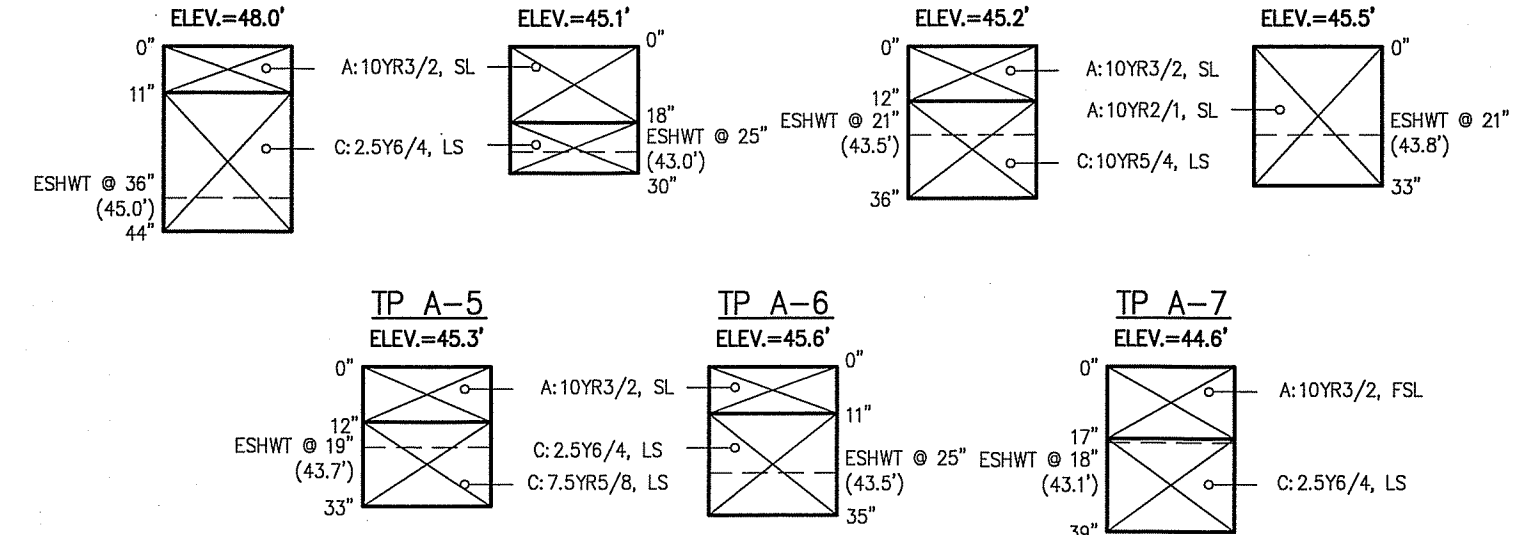
WITNESSED BY: JOHN COULON, TOPSFIELD BOARD OF HEALTH AGENT



SOIL BORINGS A-1 THROUGH A-7

DATE PERFORMED: APRIL 11, 2016

PERFORMED BY: ALEXANDER F. PARKER, S.E. #1848



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JOHN COULON
COMM. #0000000000
REGISTERED PROFESSIONAL

SURVEY BY: PM/SR	DATE
DRAFTED BY: WAS	
CHECKED BY: JMM	
APPROVED BY: JMM	
SCALE: AS NOTED	
DATE: OCTOBER 23, 2019	

NO.	DESCRIPTION
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SITE PLAN OF LAND IN TOPSFIELD, MASSACHUSETTS 371 BOSTON STREET (ASSESSOR'S MAP 26 LOT 14) PREPARED FOR MAUREEN & RANDY SABINO

EXISTING CONDITIONS

DRAWING NO. 2 OF 6

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 BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCHMARKS NECESSARY FOR THE WORK.
- DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN A RECORD OF ALL BURIED UTILITIES. THE "AS-BUILT" RECORDS SHALL BE PROVIDED TO THE DESIGN ENGINEER AT THE COMPLETION OF THE PROJECT.

DEMOLITION NOTES:

- ALL MATERIALS REMOVED FROM THE PREMISES SHALL BE DONE SO IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS FOR HAULING AND DISPOSAL.
- COORDINATE ANY UTILITY DISCONNECTIONS WITH APPROPRIATE SERVICE PROVIDERS.
- ALL TREES TO REMAIN SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. AVOID HEAVY MACHINERY WITHIN ROOT BALL AREAS.

WATER AND SEWER NOTES:

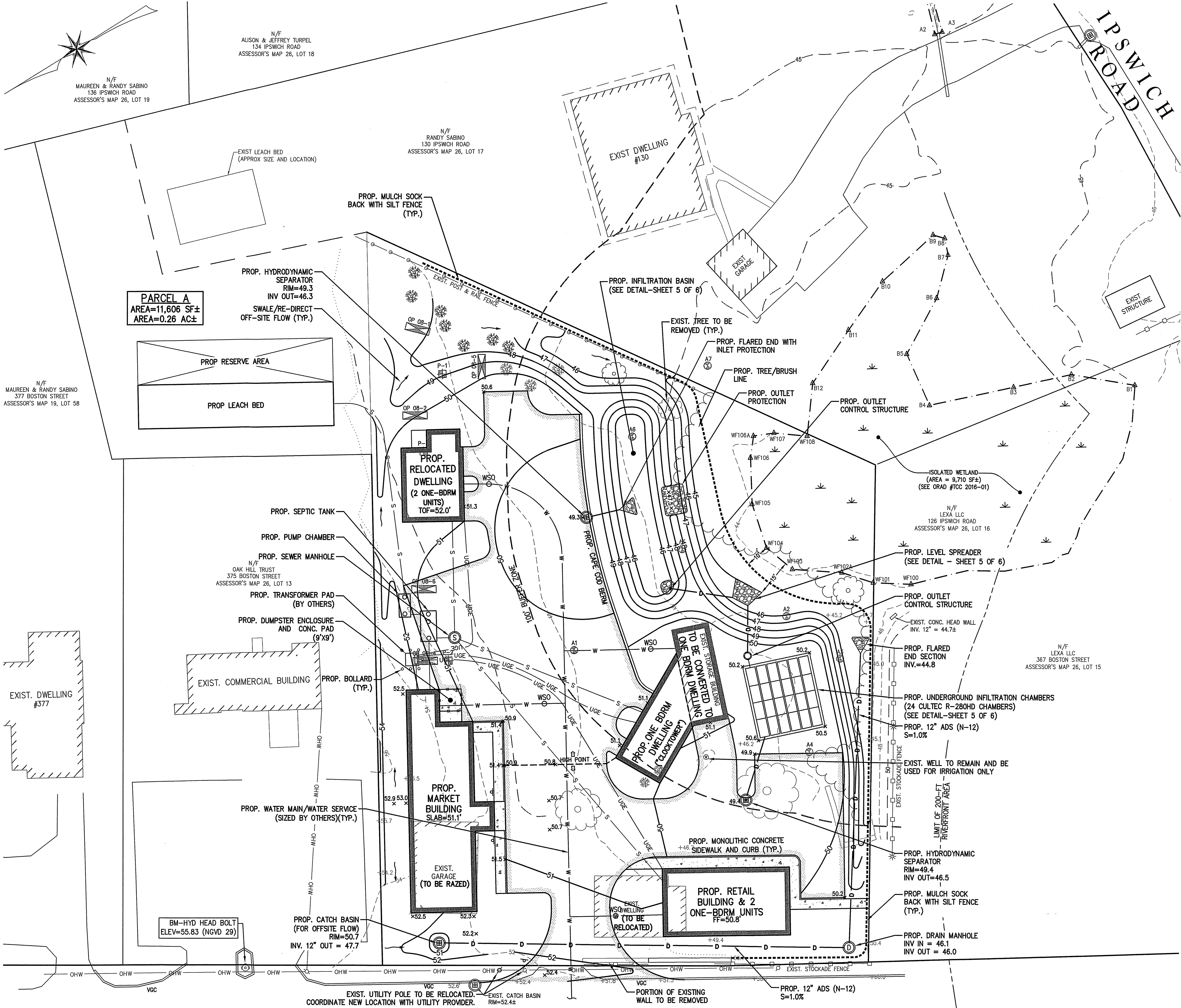
- THE ONSITE SEWAGE DISPOSAL SYSTEM DESIGN SHALL BE APPROVED BY THE TOPSFIELD BOARD OF HEALTH.
- A MINIMUM OF 10 FEET CLEAR HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN SANITARY SEWER PIPES AND WATER PIPES UNLESS CONDITIONS PREVENT A LATERAL SEPARATION OF LESS THAN 10 FEET. WHERE SANITARY SEWERS CROSS WATER SERVICES OR A MINIMUM OF 10 FEET LATERAL SEPARATION CANNOT BE ACHIEVED THE WATER PIPE SHALL BE SLEEVED IN PVC FOR A MINIMUM DISTANCE OF 10 FEET FROM THE CROSSING POINT OF THE SEWER PIPE AND SEALED AT EACH END.
- ALL GRAVITY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SCH40 UNLESS OTHERWISE NOTED.
- WATER SERVICE CONNECTIONS SHALL HAVE A MINIMUM 5' OF COVER TO PREVENT FREEZING. THE TOPSFIELD WATER DEPARTMENT SHALL BE NOTIFIED PRIOR TO WATER SERVICE INSTALLATION.

STORM DRAIN NOTES:

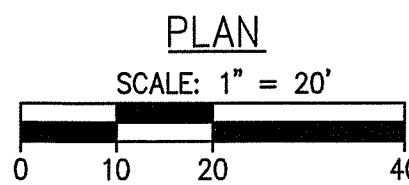
- BACKFILL SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY BY AASHTO T-180D METHOD.
- SHEETING, IF USED, SHALL BE REMOVED PRIOR TO BACKFILLING TRENCH.
- UNSATURABLE SOIL BELOW THE INVERT SHALL BE REMOVED AND REPLACED WITH APPROVED MATERIAL AND SHALL NOT BE USED AS BACKFILL.
- UNSATURABLE MATERIALS SHALL BE REMOVED FROM BENEATH THE INFILTRATION BASIN AND CHAMBER SYSTEM AND REPLACED WITH CLEAN, GRANULAR FILL MEETING THE ASTM C33 SPECIFICATIONS (CONCRETE SAND).

LEGEND:

- EXISTING GRADE ——— 50.2 ——— 48.2 ——— 50.2 ——— 50.2
- PROPOSED GRADE ——— 50.2 ——— 50.2 ——— 50.2 ——— 50.2
- LIMIT OF ISOLATED WETLAND ——— W107 ——— W108
- 100' BUFFER ZONE ———
- 200' RIVERFRONT AREA ———
- UNDERGROUND ELECTRIC ——— UGE
- SEWER SERVICE ——— S
- SEWER MANHOLE ——— (S)
- WATER SERVICE ——— W
- WATER SHUT OFF ——— WSO
- DRAIN LINE ——— D
- CATCH BASIN ——— (CB)
- DRAIN MANHOLE ——— (DM)



NEWBURYPORT (ROUTE 1 - BOSTON STREET) TURNPIKE



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PROJ. #2669

REVISIONS

NO.	DESCRIPTION	DATE

SITE PLAN OF LAND IN TOPSFIELD, MASSACHUSETTS
371 BOSTON STREET
(ASSESSOR'S MAP 26, LOT 14)
MAUREEN & RANDY SABINO
PREPARED FOR:

GRADING, UTILITY & DRAINAGE

DRAWING NO. **4 OF 6**

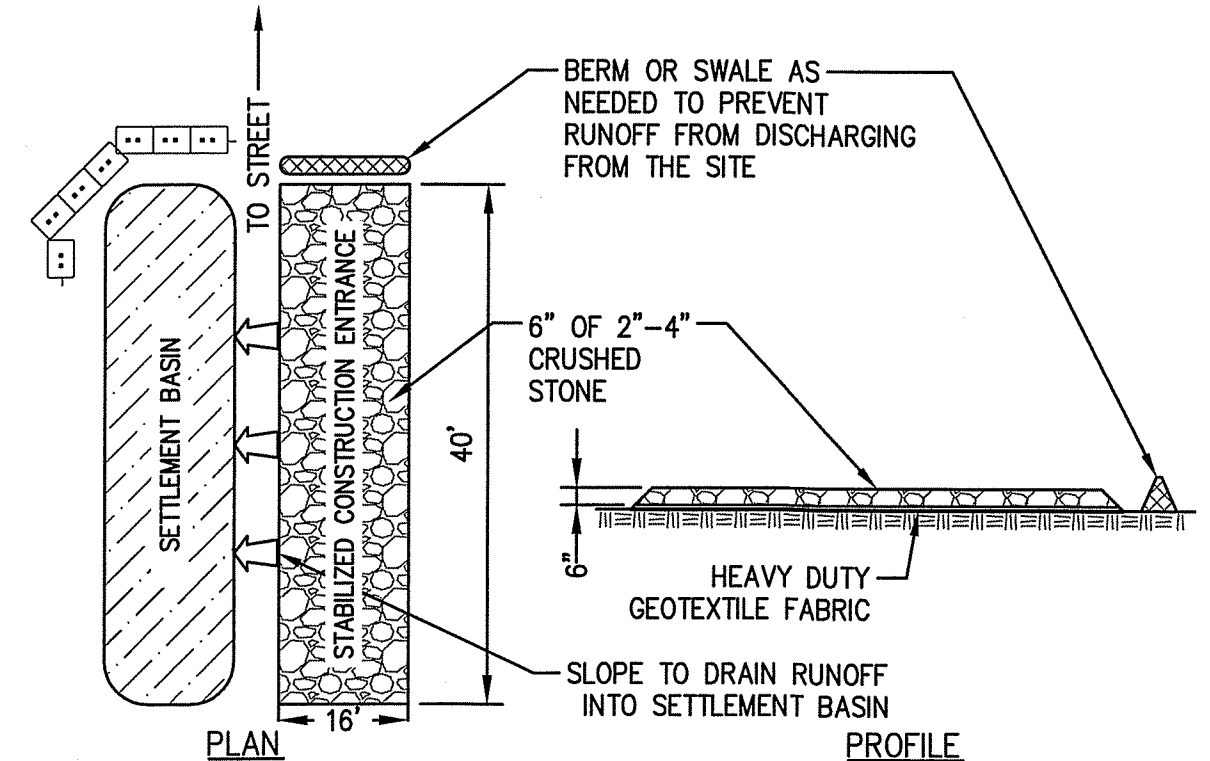
SURVEY BY: PM/SR
DRAFTED BY: WAS
CHECKED BY: JMM
APPROVED BY: JMM
SCALE: AS NOTED
DATE: OCTOBER 23, 2019

EROSION AND SEDIMENTATION CONTROL:

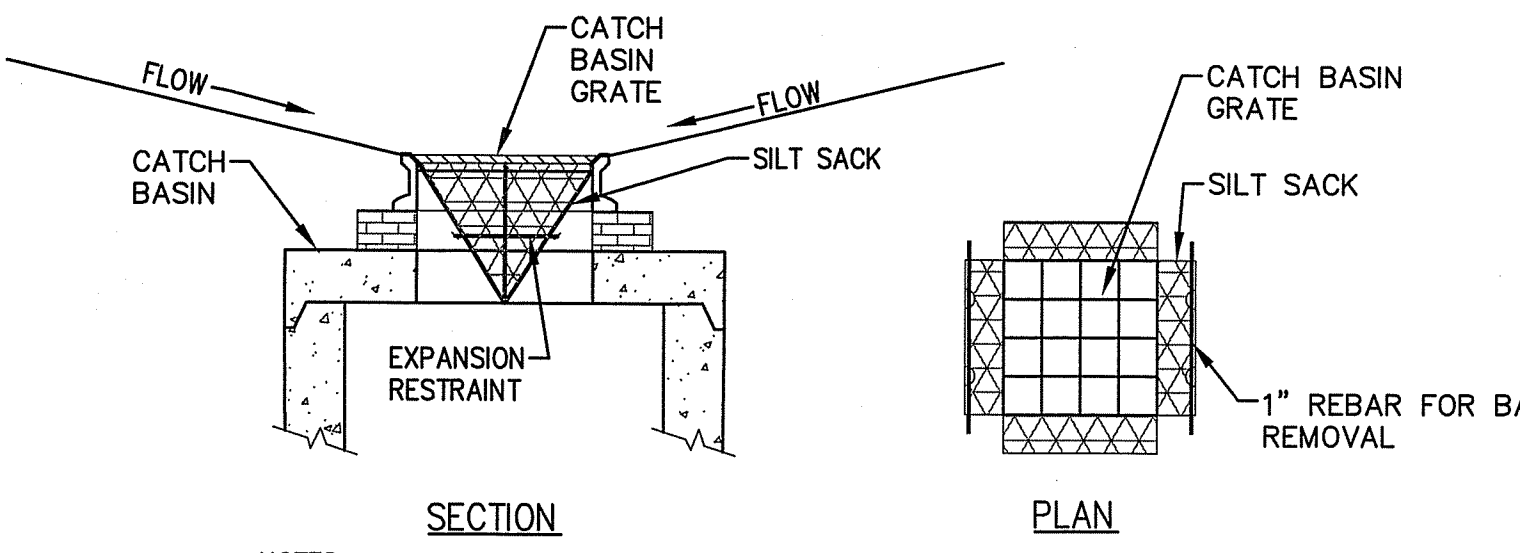
WIDELY ACCEPTED PRACTICES FOR REDUCING EROSION AND SEDIMENTATION WILL BE EMPLOYED IN THE DEVELOPMENT OF THIS SITE. REFER TO THE CONSTRUCTION PERIOD POLLUTION PREVENTION PLAN FOR THE PROJECT.

1. THE DEVELOPMENT OF THE SITE HAS BEEN PLANNED TO MATCH EXISTING TOPOGRAPHY AND GROUND COVER. EXISTING DRAINAGE PATTERNS OF THE SITE HAVE BEEN MAINTAINED TO THE EXTENT PRACTICABLE.
2. STEEP SLOPES, WHERE POSSIBLE, WILL NOT BE DISTURBED.
3. NATURAL WETLANDS WILL BE PRESERVED AND PROTECTED, AND EXISTING VEGETATION WILL BE RETAINED AND PROTECTED TO THE EXTENT POSSIBLE.
4. THE CONTRACTOR SHALL MINIMIZE THE AREA OF DISTURBED LAND TO THE EXTENT FEASIBLE.
5. SEDIMENT CONTROL MEASURES WILL BE APPLIED TO CONTROL ANY SEDIMENTS THAT MAY BE PRODUCED AS A RESULT OF SITE CONSTRUCTION ACTIVITIES. EROSION AND DEPOSITION OF SEDIMENT WILL BE CLOSELY MONITORED DURING CONSTRUCTION.
6. TEMPORARY EROSION CONTROL MEASURES WILL INCLUDE, BUT NOT BE LIMITED TO, FILTER FABRIC SILT FENCES, SEEDING AND MULCHING, SEEDING FILTER STRIPS AND SILT SACKS IN CATCH BASINS(EXISTING AND NEWLY INSTALLED).
7. TOPSOIL STRIPPED FROM THE SITE WILL BE STOCKPILED FOR LOAMING AND SEEDING AT LATER CONSTRUCTION STAGES. THE STOCKPILES SHALL BE LOCATED SO AS TO ACT AS TEMPORARY DIVERSIONS, GENERALLY ON AN UPHILL SLOPE.
8. SITE DEVELOPMENT WILL NOT COMMENCE UNTIL ALL TEMPORARY EROSION CONTROL MEASURES ARE IN PLACE. THESE MEASURES SHALL BE EMPLOYED UNTIL FINAL PAVING AND ADEQUATE VEGETATION HAS BEEN ESTABLISHED.
9. THE OWNER IS RESPONSIBLE FOR CONDUCTING WEEKLY ENVIRONMENTAL MONITORING DURING CONSTRUCTION AS REQUIRED BY THE NORTH ANDOVER WETLANDS PROTECTION BYLAW AND REGULATIONS.
10. THE TOPSFIELD CONSERVATION COMMISSION SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO INSPECT EROSION CONTROLS TO BE IMPLEMENTED DURING CONSTRUCTION.
11. THE CONSTRUCTION PHASE MUST COMPLY WITH THE ENVIRONMENTAL PROTECTION AGENCY(EPA) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PROTOCOLS. AN EPA NOTICE OF INTENT SHALL BE FILLED OUT AT LEAST 2 WEEKS PRIOR TO THE START OF CONSTRUCTION.

- CONSTRUCTION ENTRANCE SPECIFICATIONS FOR:
1. STONE FOR STABILIZATION CONSTRUCTION ENTRANCE SHALL BE 2-4" STONE.
 2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 40 FEET.
 3. THE WIDTH OF THE ENTRANCE SHALL BE NO LESS THAN THE WIDTH OF THE INGRESS OR EGRESS DRIVE, OR 16 FEET, WHICHEVER IS GREATER.
 4. GEOTEXTILE FILTER FABRIC SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
 5. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARDS THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH MINIMUM 1 TO 5 SLOPES THAT CAN BE CROSSED BY VEHICLES CAN BE SUBSTITUTED.
 6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO RIGHTS OF WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. SEDIMENT SPILLED, WASHED OR TRACKED ONTO THE RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.

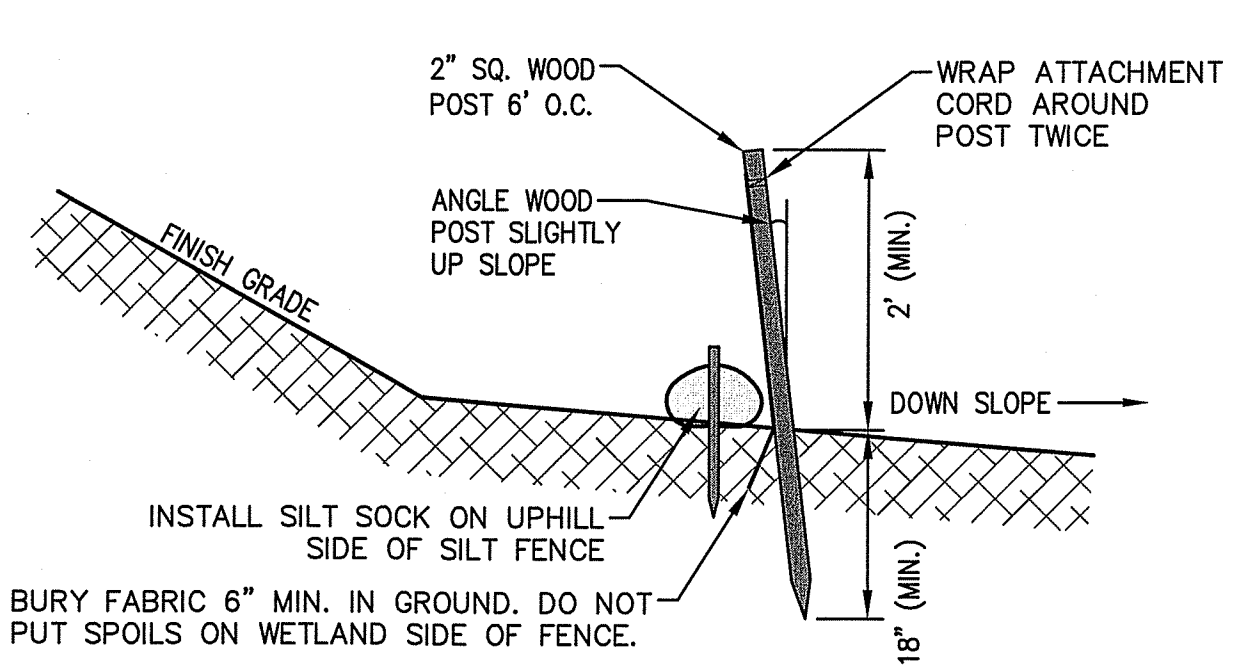


STABILIZED CONSTRUCTION ENTRANCE DETAIL
(NOT TO SCALE)

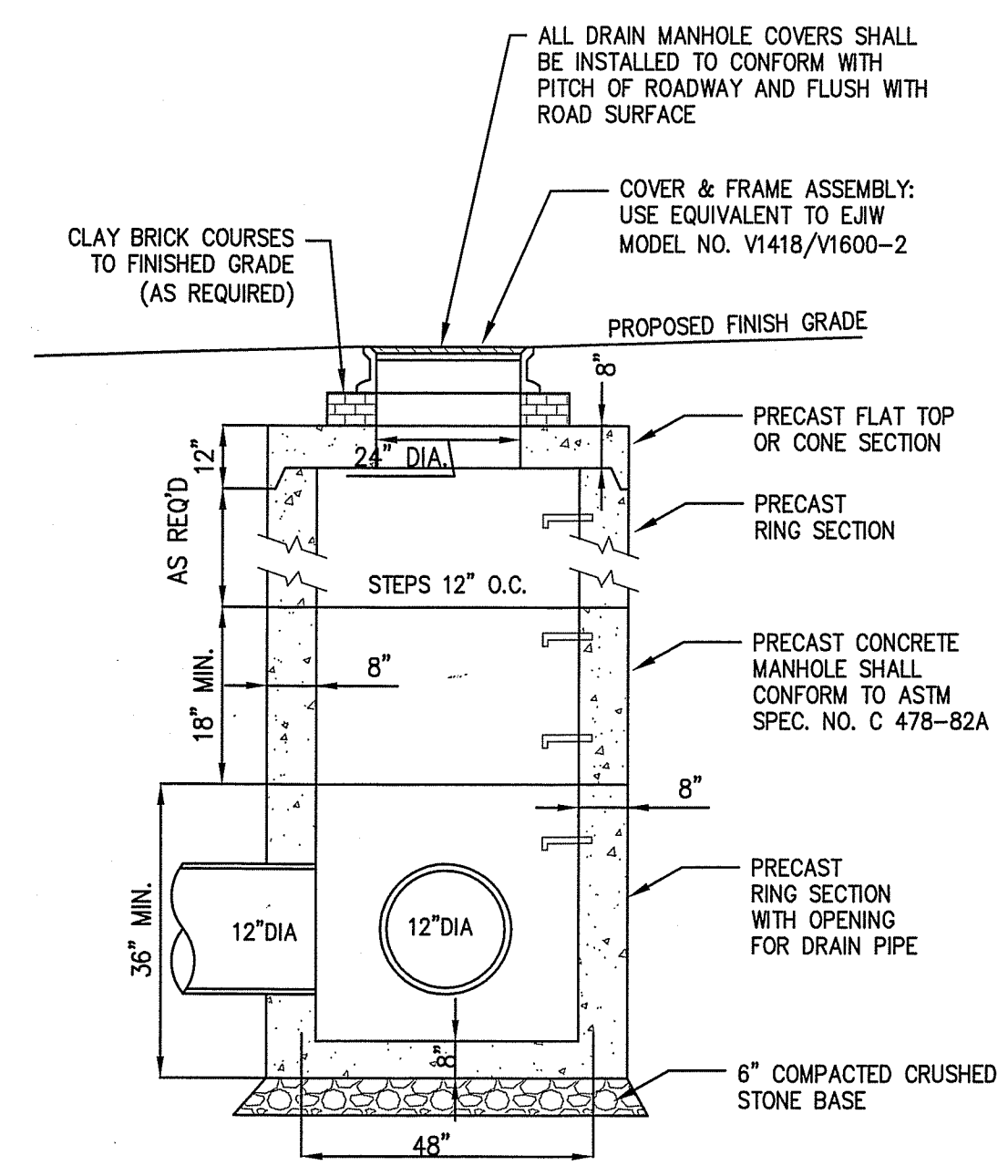


- NOTES:
1. INSTALL SILT SACKS IN EXISTING CATCH BASINS. INSTALL SILT SACKS IN NEW CATCH BASINS AFTER INSTALLATION.
 2. GRATES TO BE PLACED OVER SILT SACKS.
 3. SILT SACK SHALL BE INSPECTED PERIODICALLY AND AFTER ALL STORM EVENTS AND CLEANING OR REPLACEMENT SHALL BE PERFORMED WHEN DEPTH OF SEDIMENT IS WITHIN 6\"/>

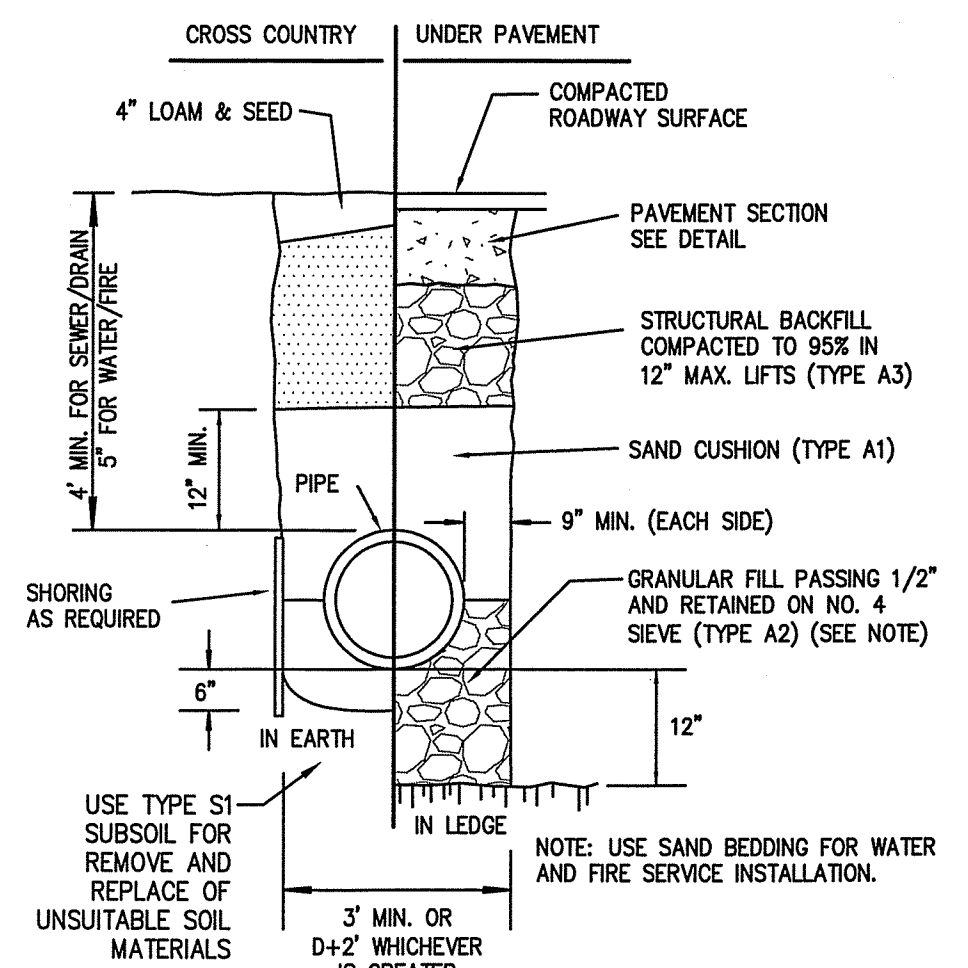
SILT SACK SEDIMENT TRAP (TO BE INSTALLED ON NEW CATCH BASINS AND HYDRODYNAMIC SEPARATOR UNITS DURING CONSTRUCTION)
(NOT TO SCALE)



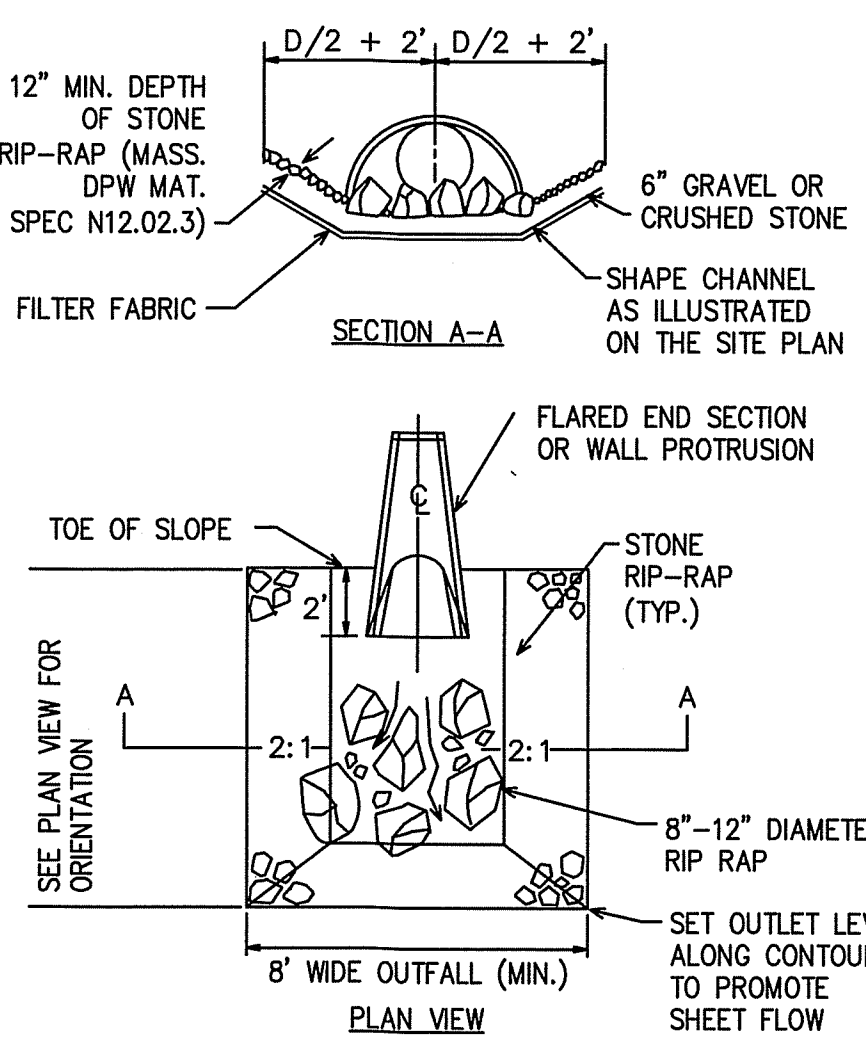
- NOTES
1. SILT FENCE TO BE INSTALLED AROUND LIMIT OF WORK TO PREVENT OFFSITE MIGRATION OF SEDIMENT DURING CONSTRUCTION.
- MULCH SOCK BACKED WITH SILT FENCE
(NOT TO SCALE)



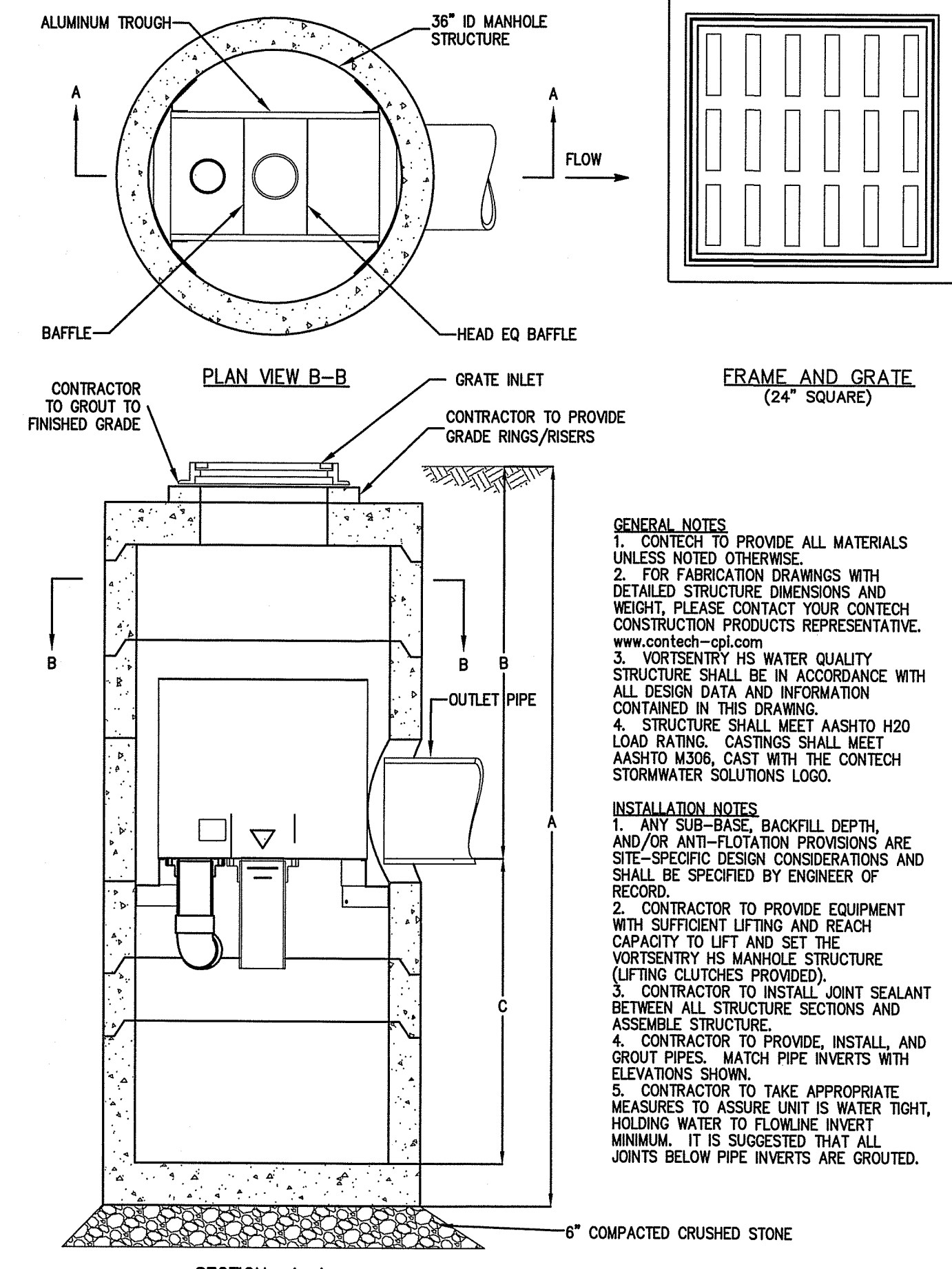
TYPICAL DRAIN MANHOLE
(NOT TO SCALE)



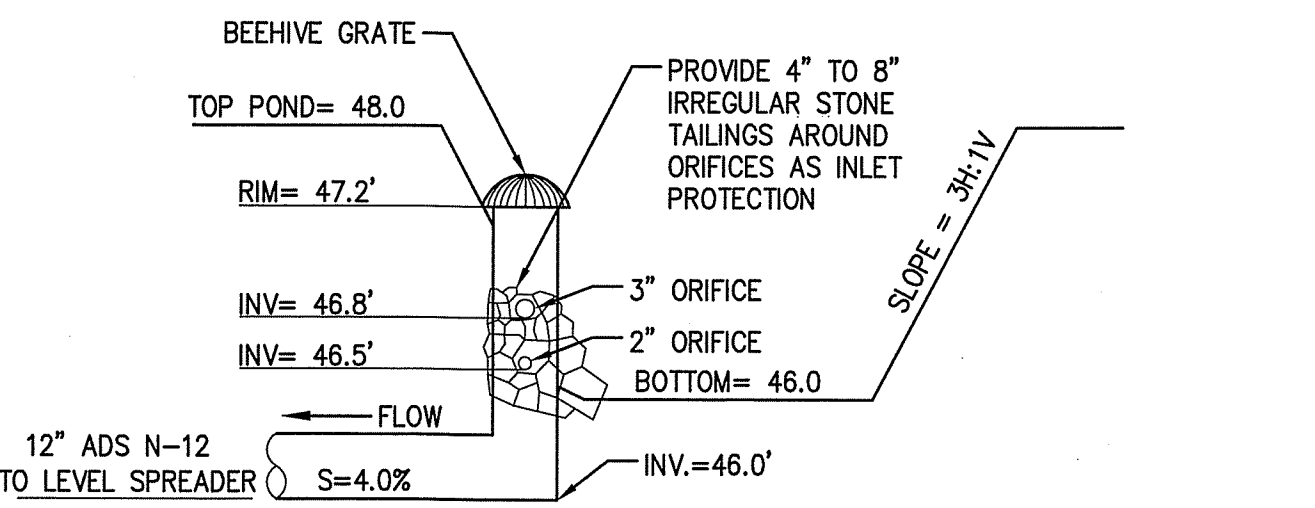
UTILITY TRENCH DETAIL
(NOT TO SCALE)



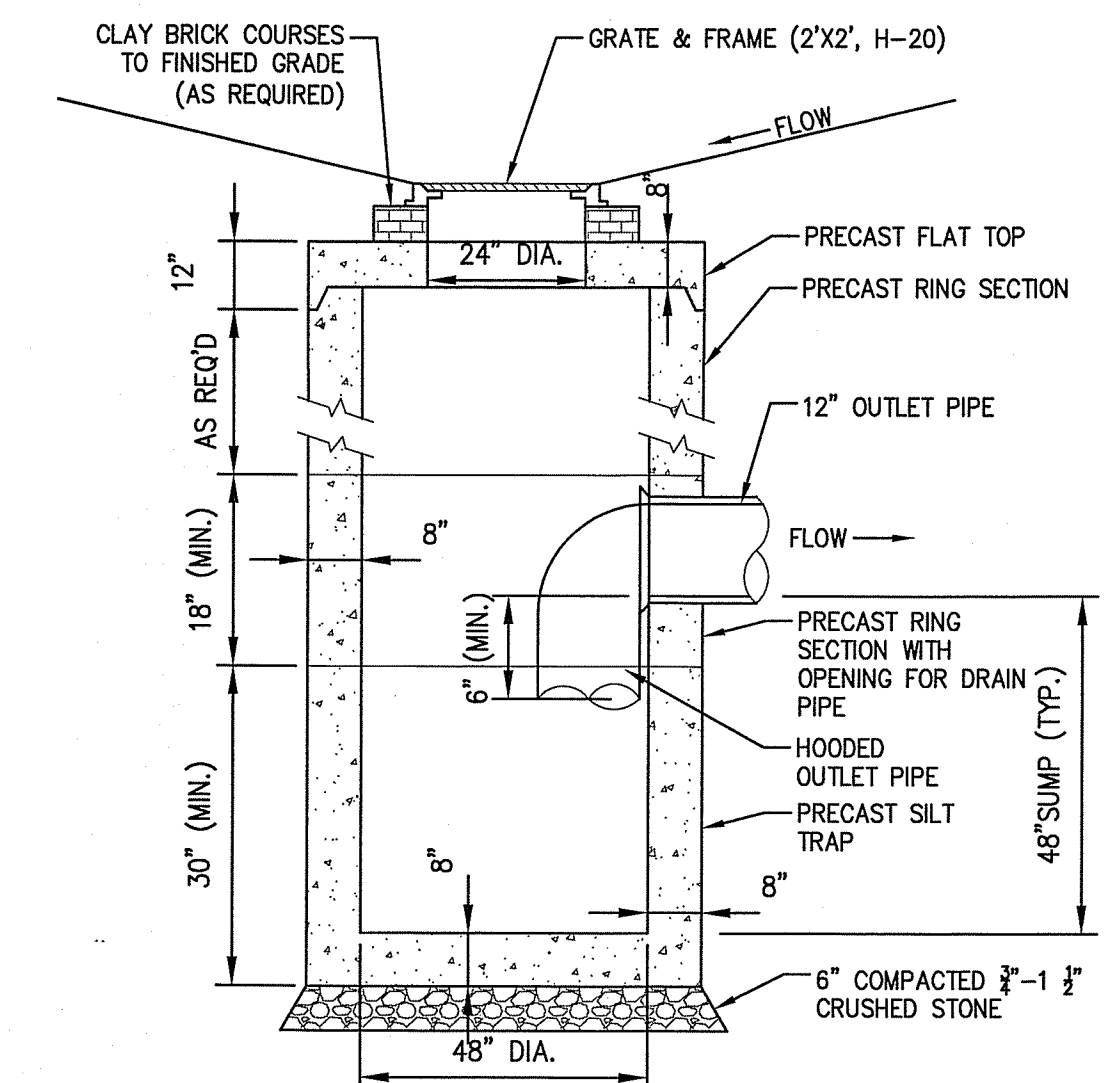
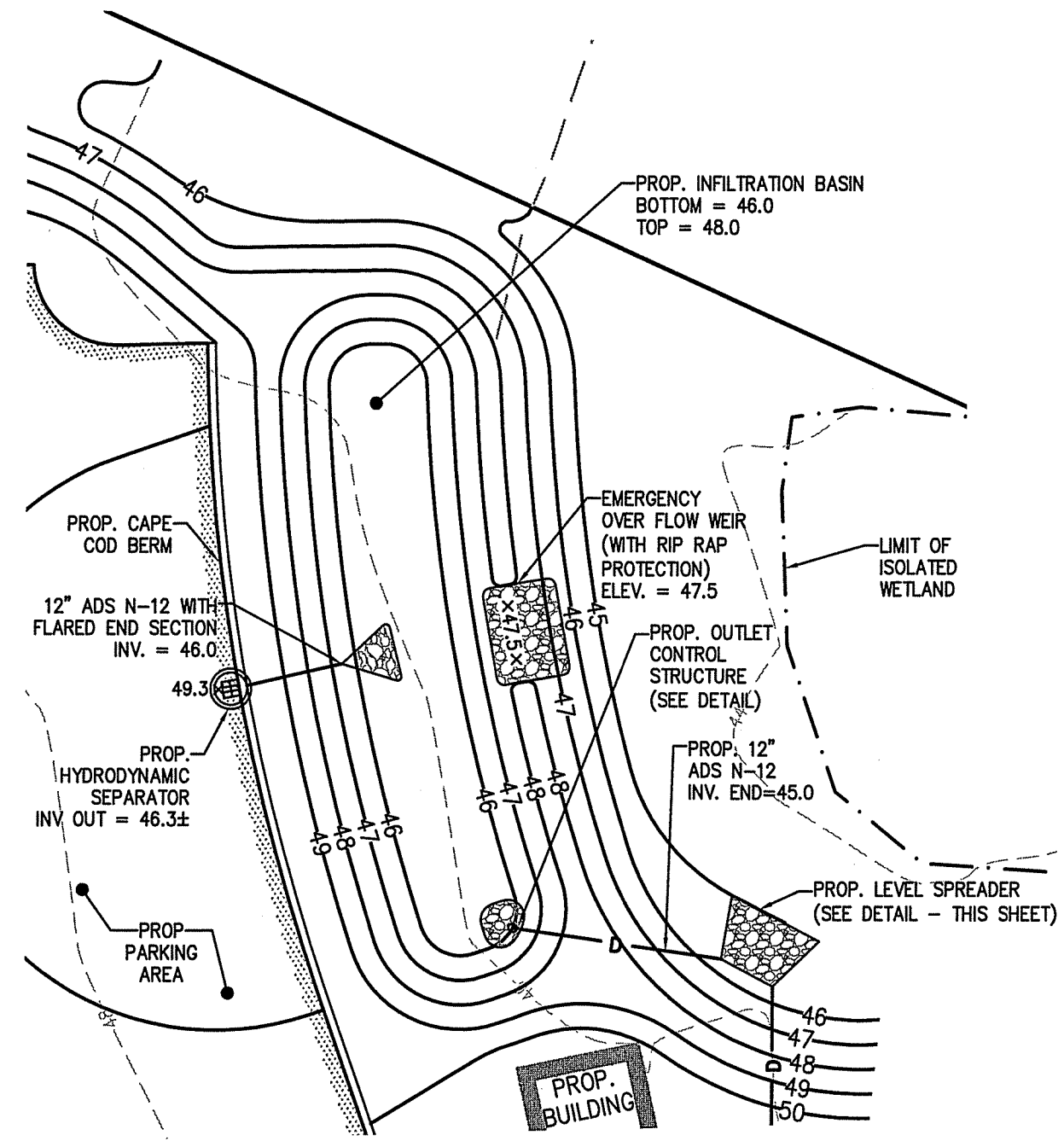
INLET/OUTLET PROTECTION WITH STONE ENERGY DISSIPATER
(NOT TO SCALE)



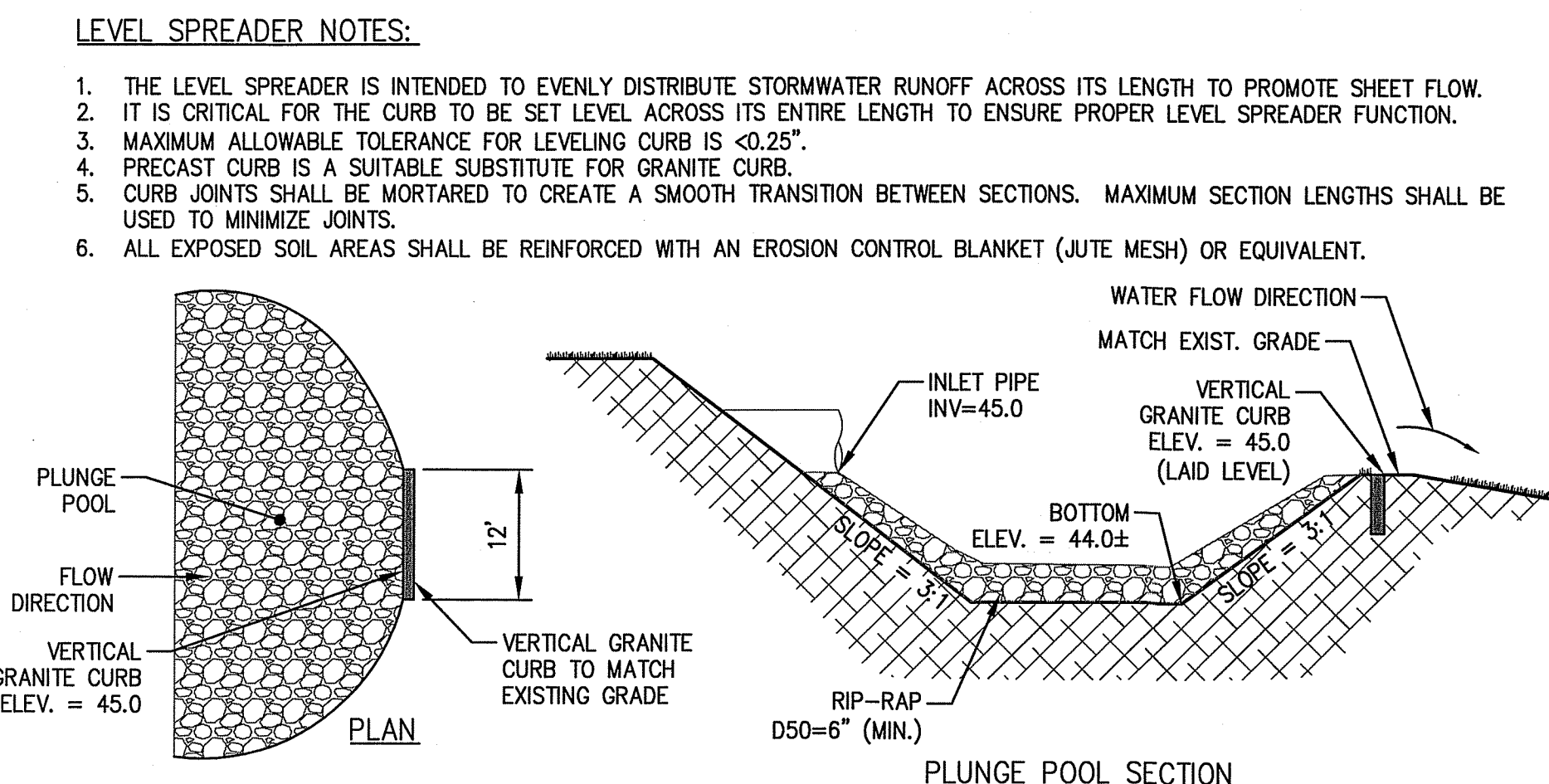
HYDRODYNAMIC SEPARATOR (CONTECH VORTENSITY OR APPROVED EQUAL)
(NOT TO SCALE)



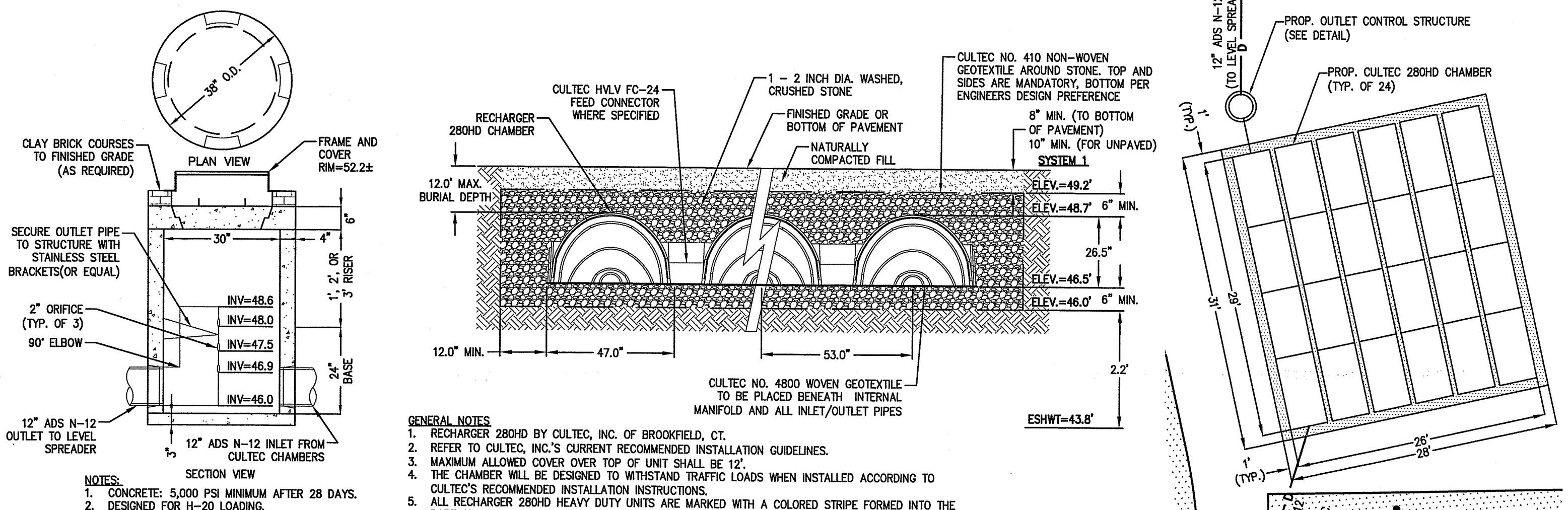
OUTLET CONTROL STRUCTURE (INFILTRATION BASIN)
(NOT TO SCALE)



TYPICAL CATCH BASIN
(NOT TO SCALE)



LEVEL SPREADER DETAIL
(NOT TO SCALE)



UNDERGROUND INFILTRATION CHAMBERS (CULTEC 280HD OR APPROVED EQUAL)
(NOT TO SCALE)

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10 ELM STREET, DAWES, MASSACHUSETTS 01923
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REVISIONS

NO.	DESCRIPTION	DATE

SITE PLAN OF LAND IN TOPSFIELD, MASSACHUSETTS 371 BOSTON STREET (ASSESSOR'S MAP 26, LOT 14)

CONSTRUCTION DETAILS

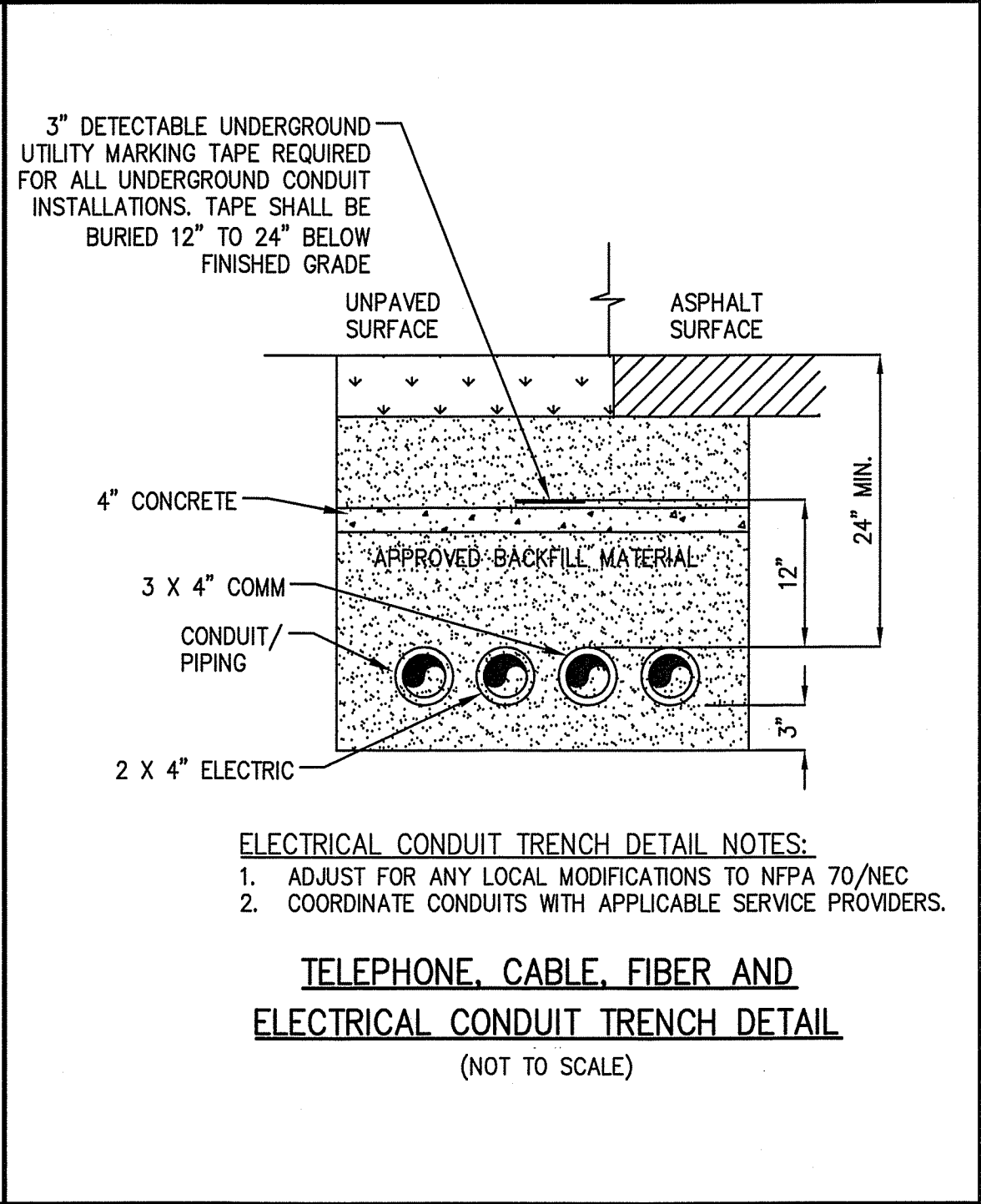
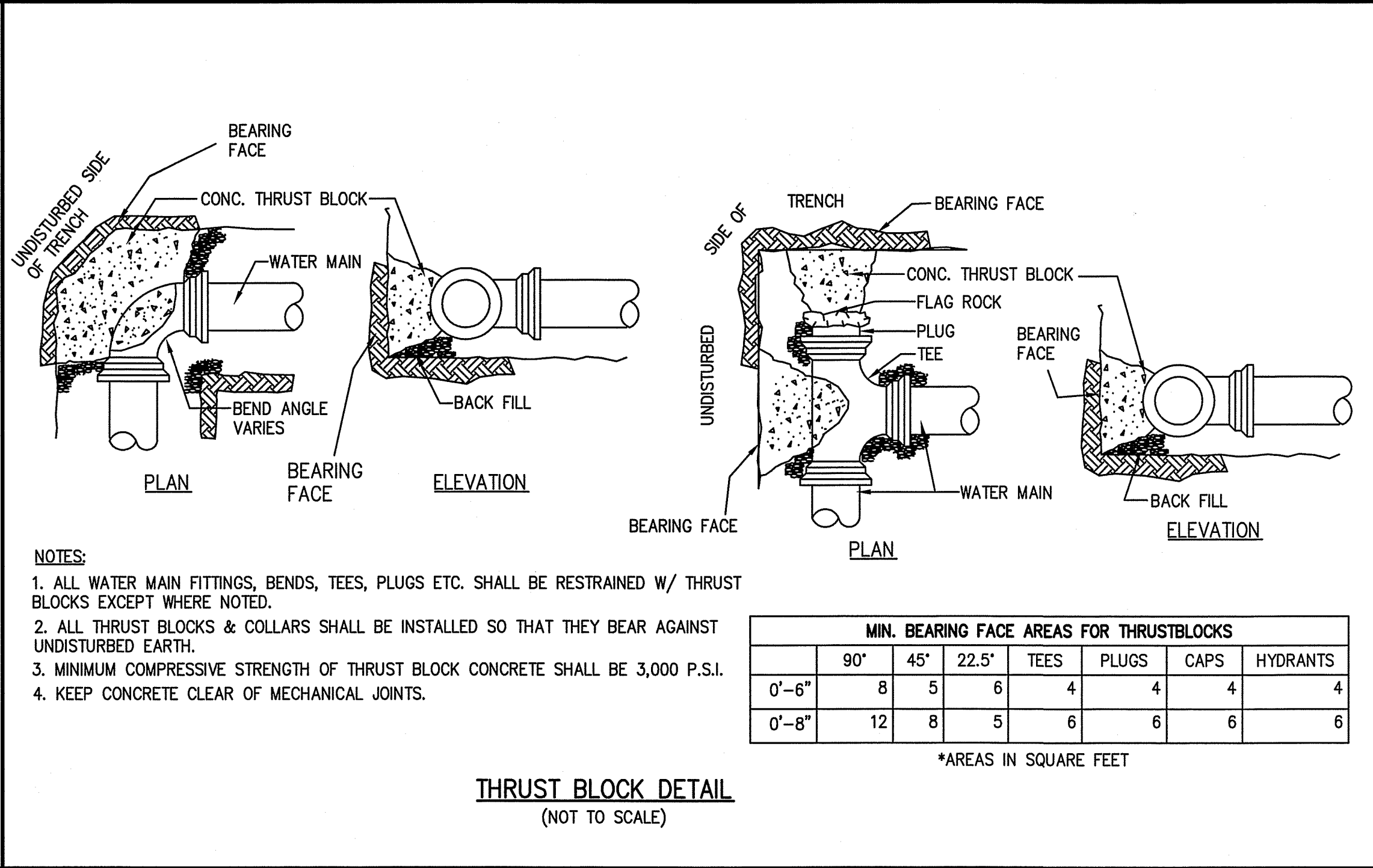
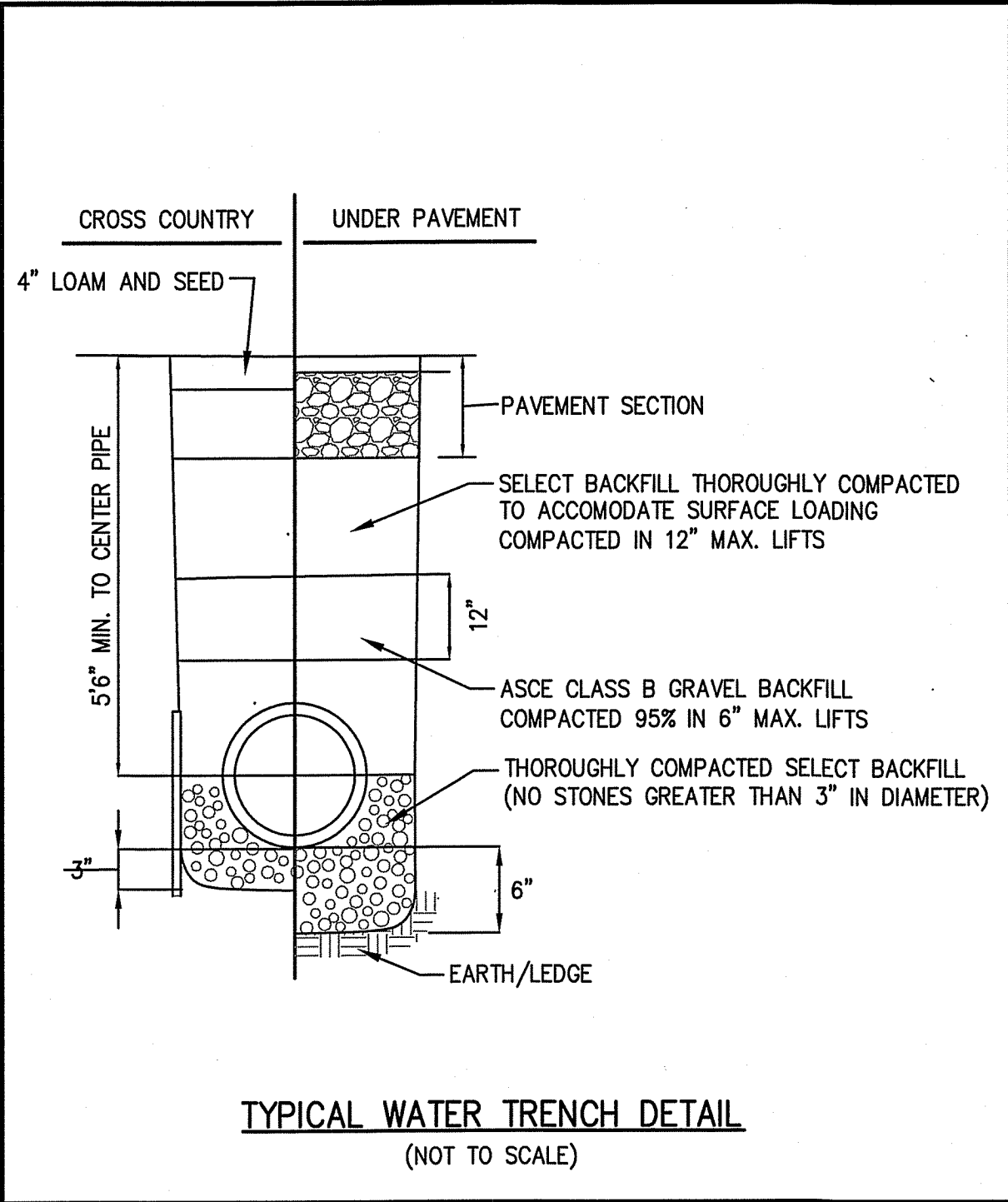
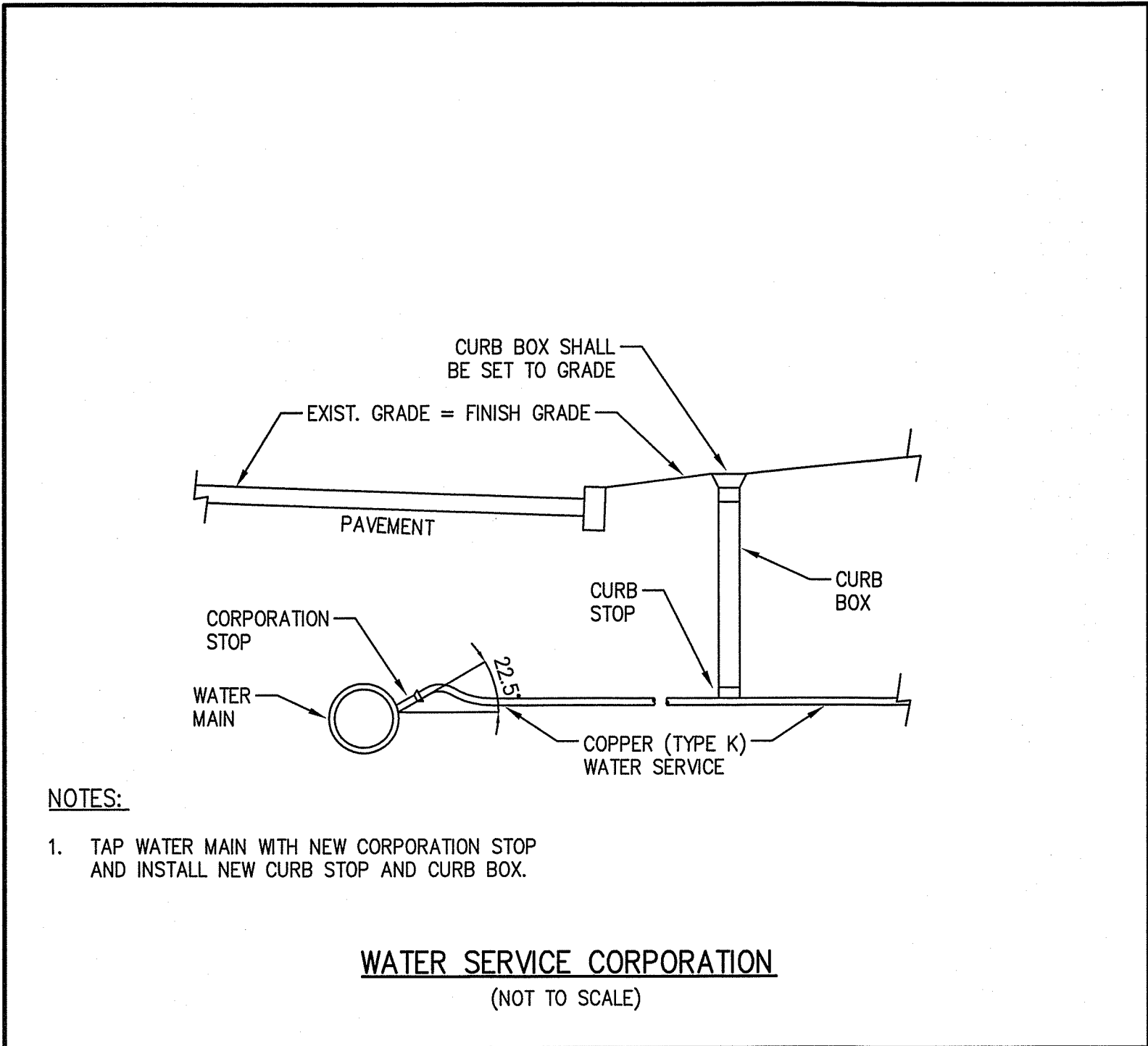
MAUREEN & RANDY SABINO

PREPARED FOR: MAUREEN & RANDY SABINO

DATE: OCTOBER 23, 2019

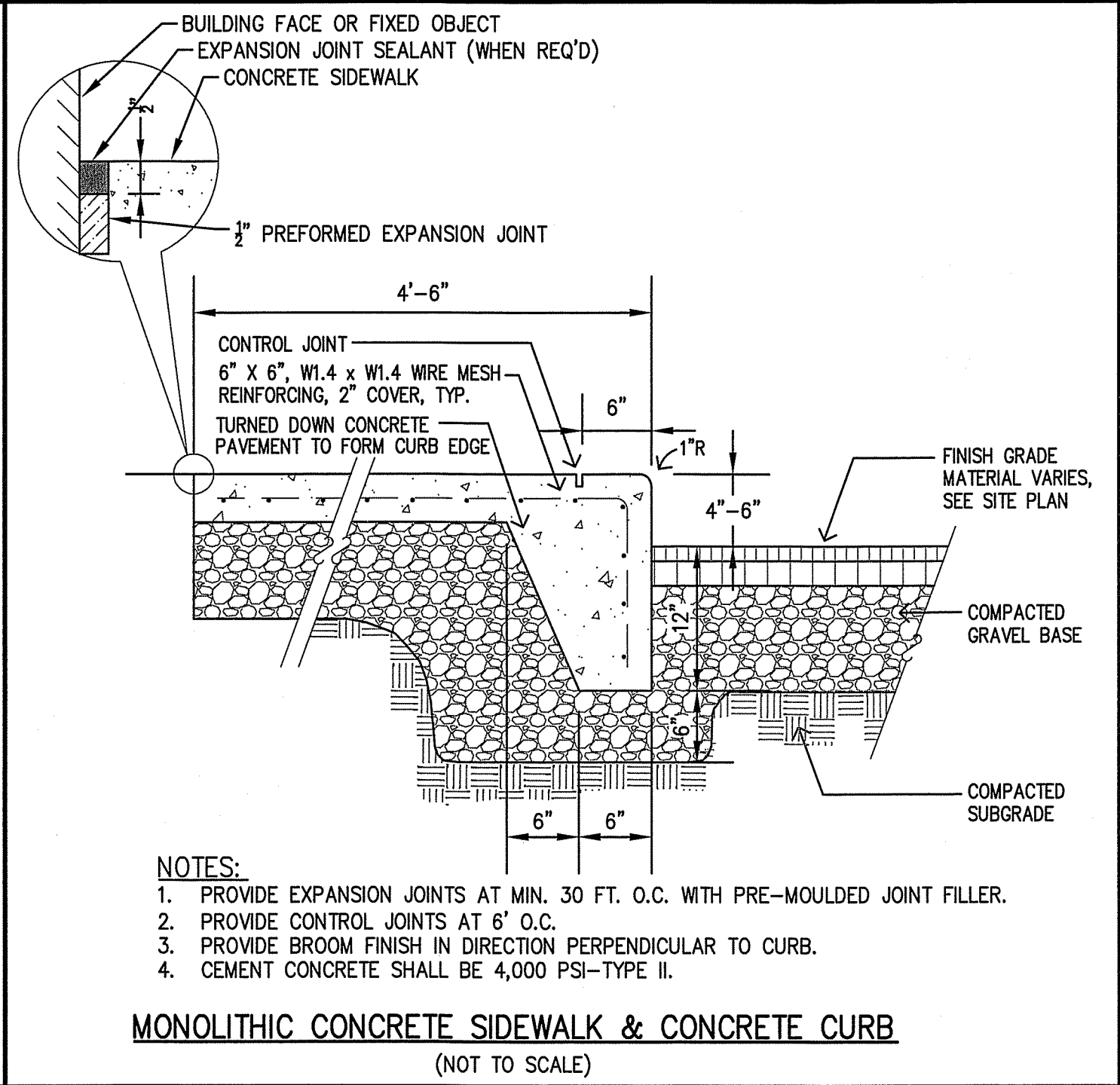
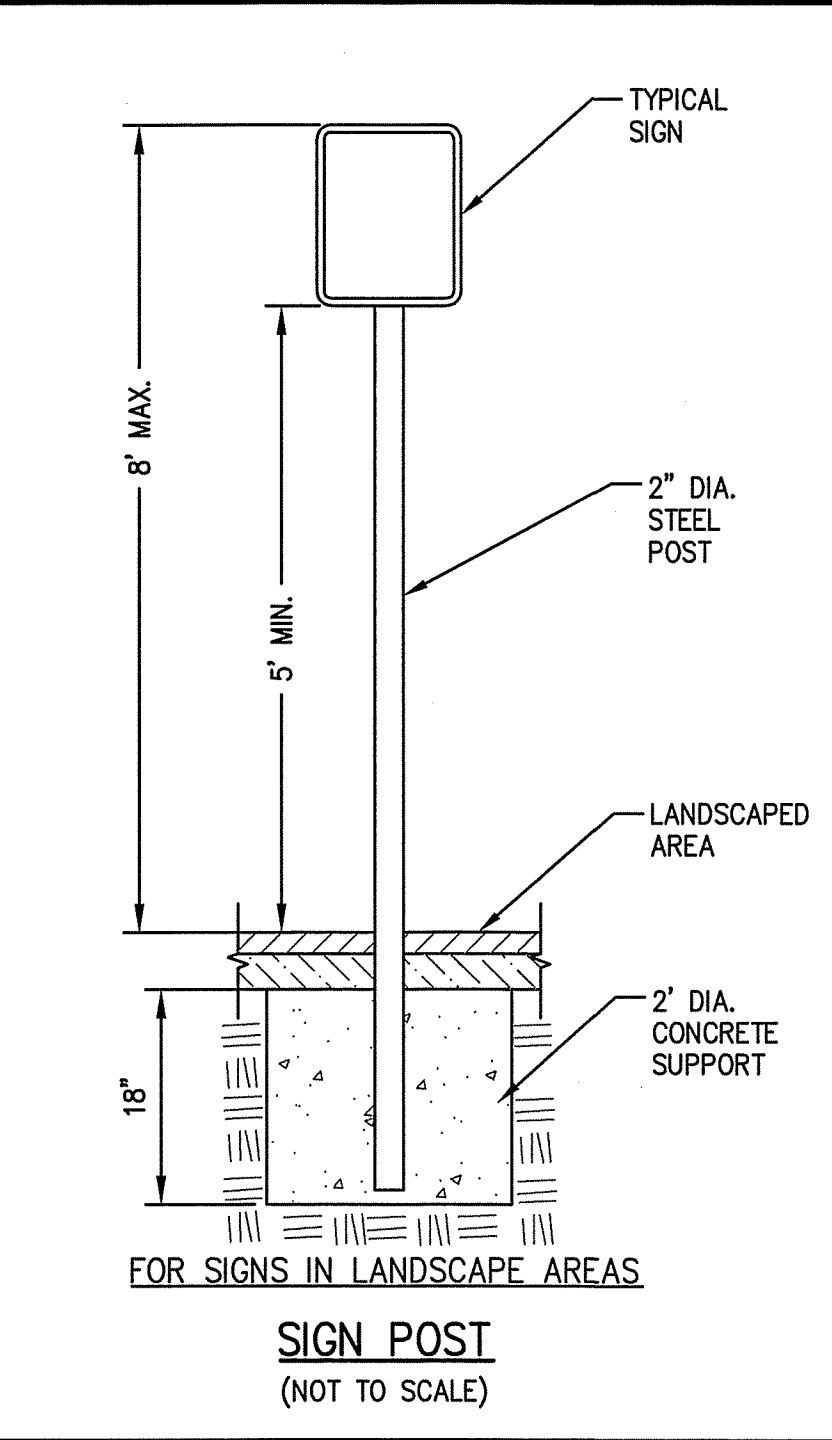
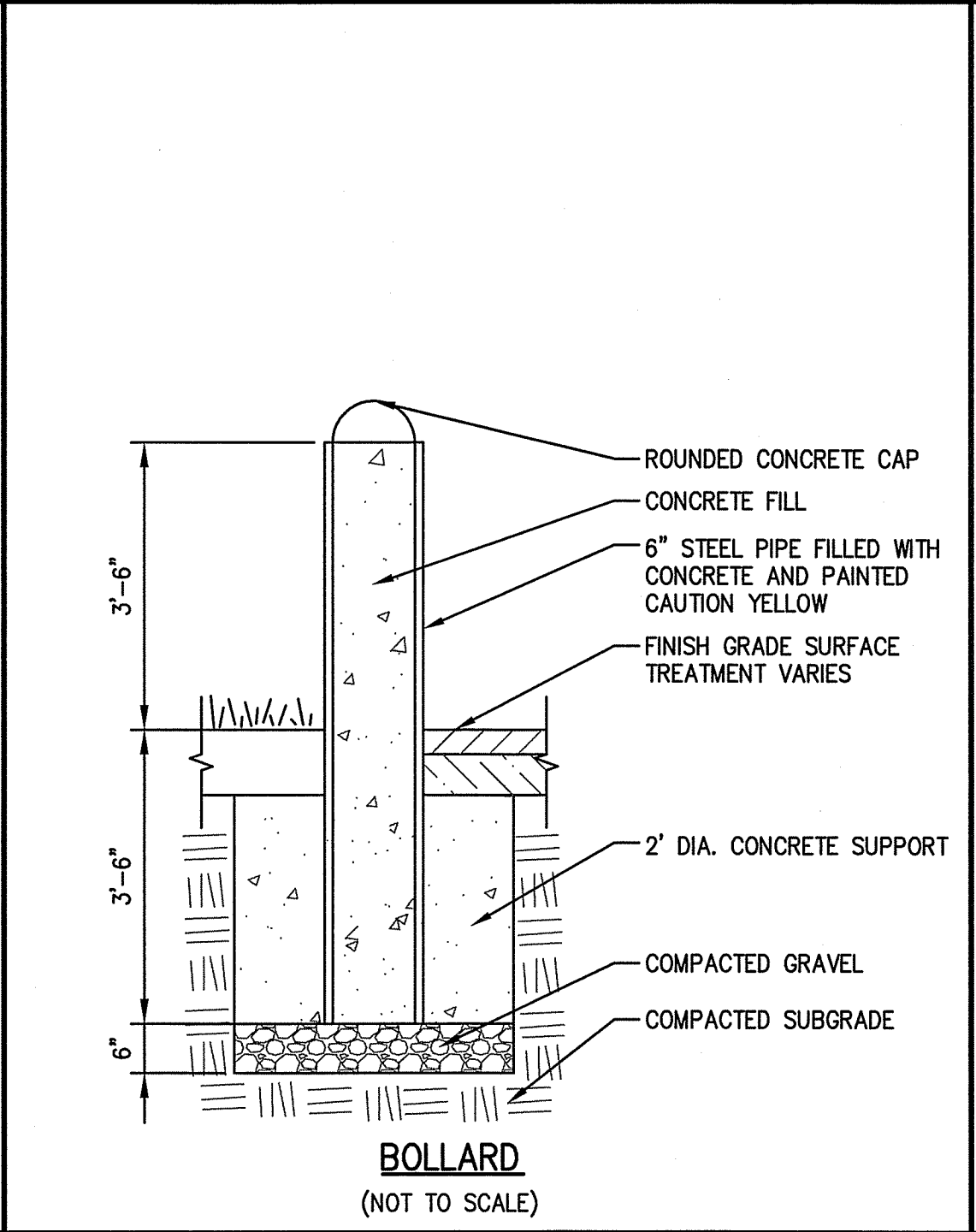
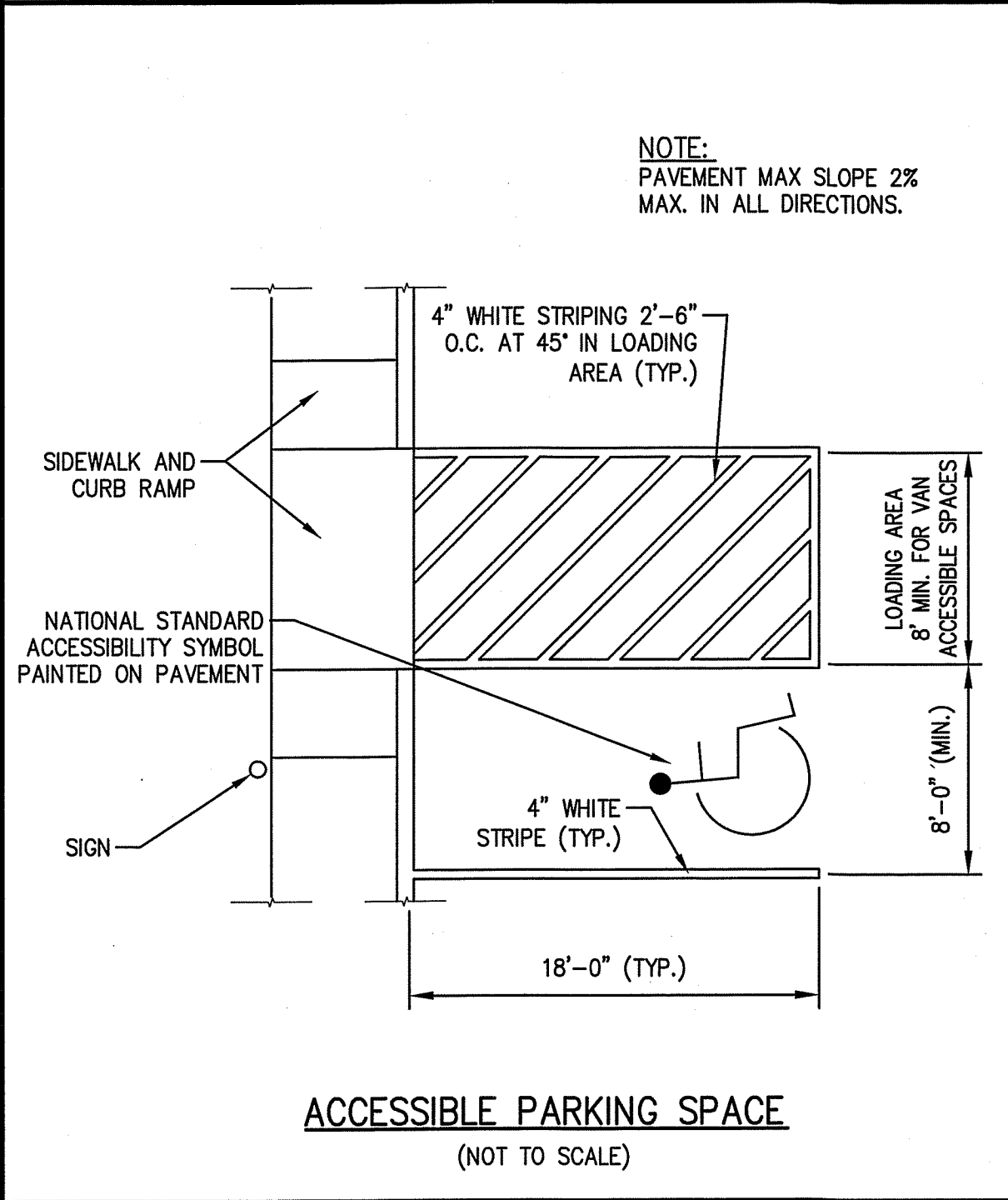
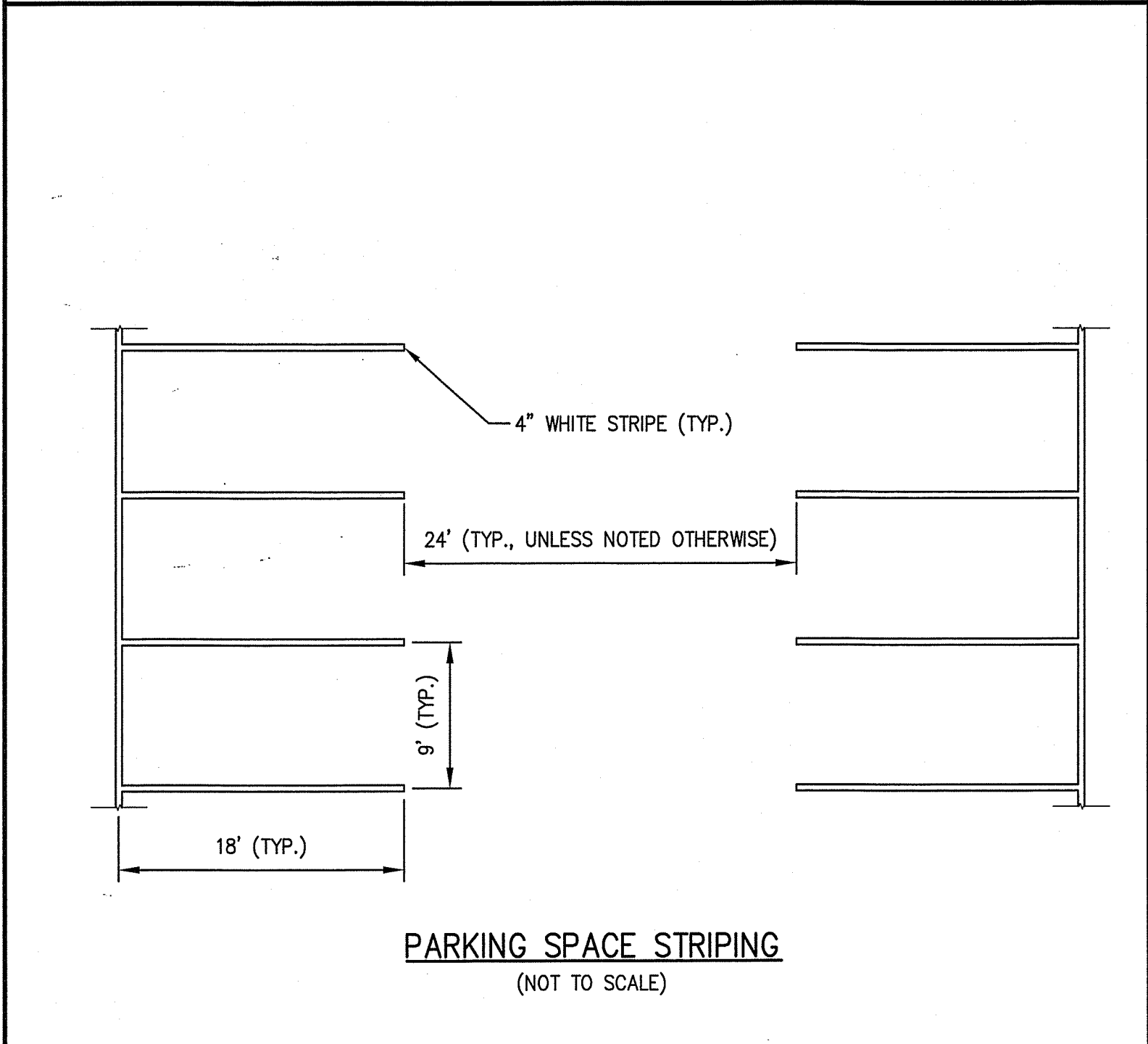
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APPROVED BY: JMM
SCALE: AS NOTED

DRAWING NO. 5 OF 6

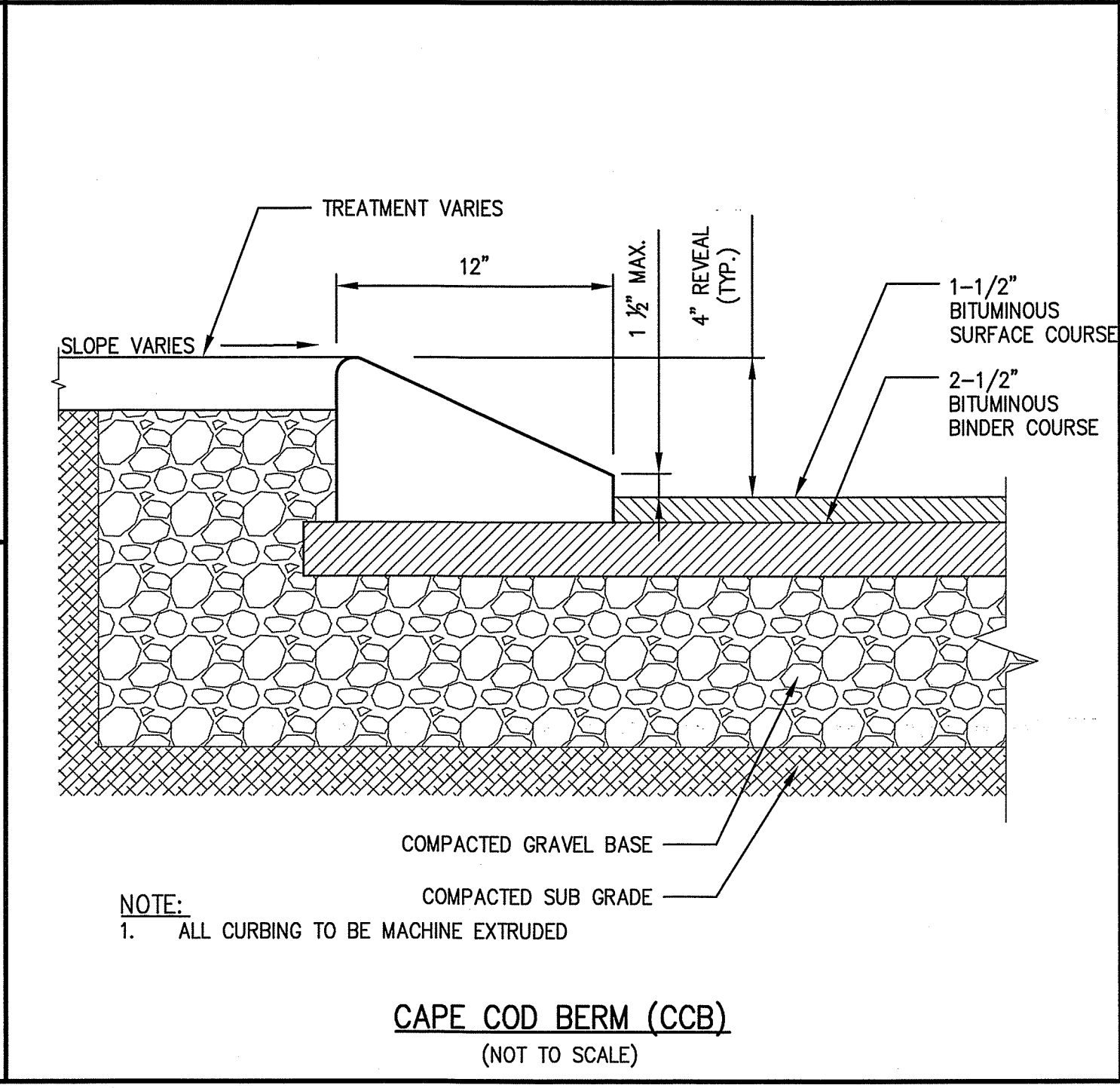
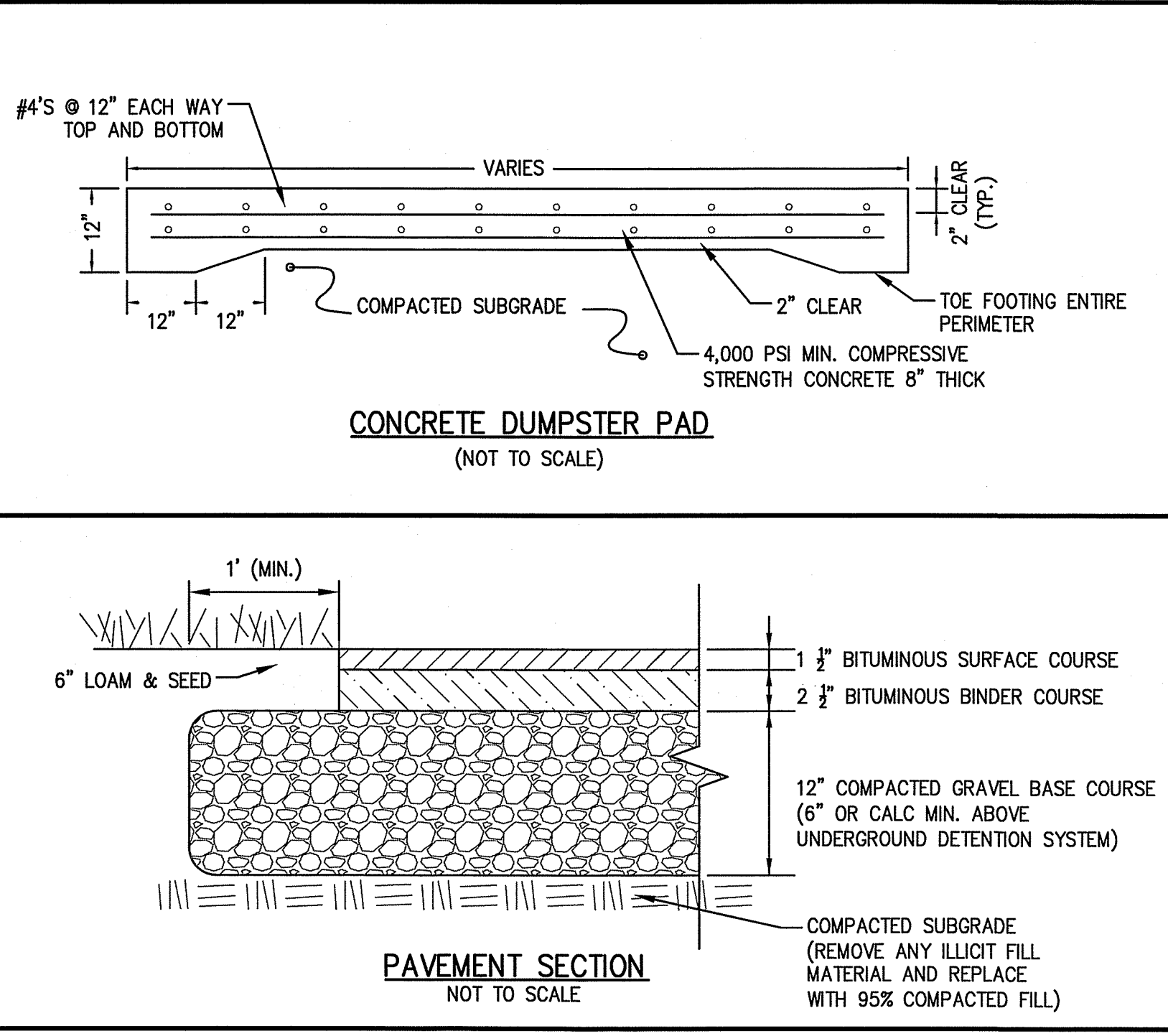
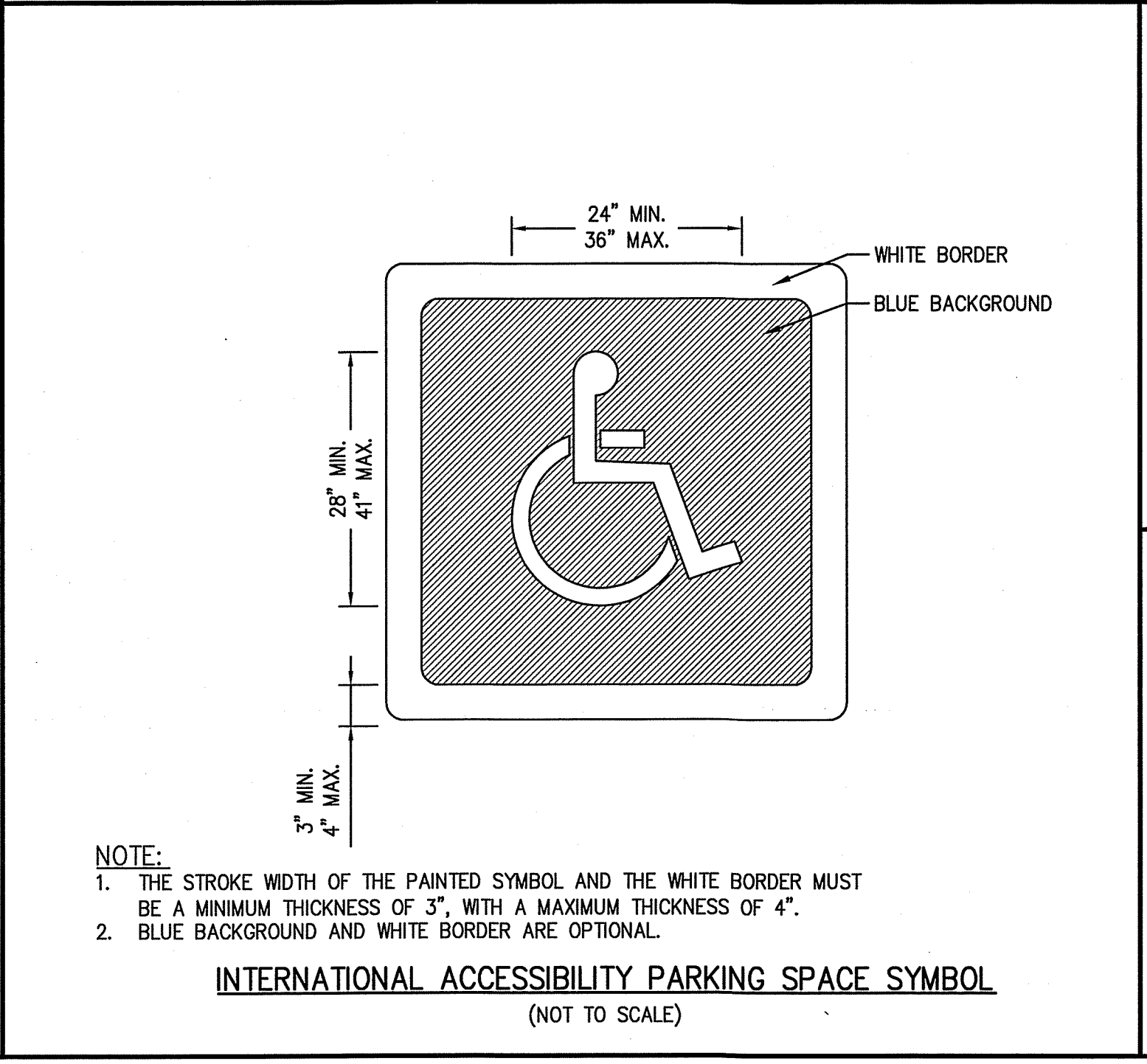
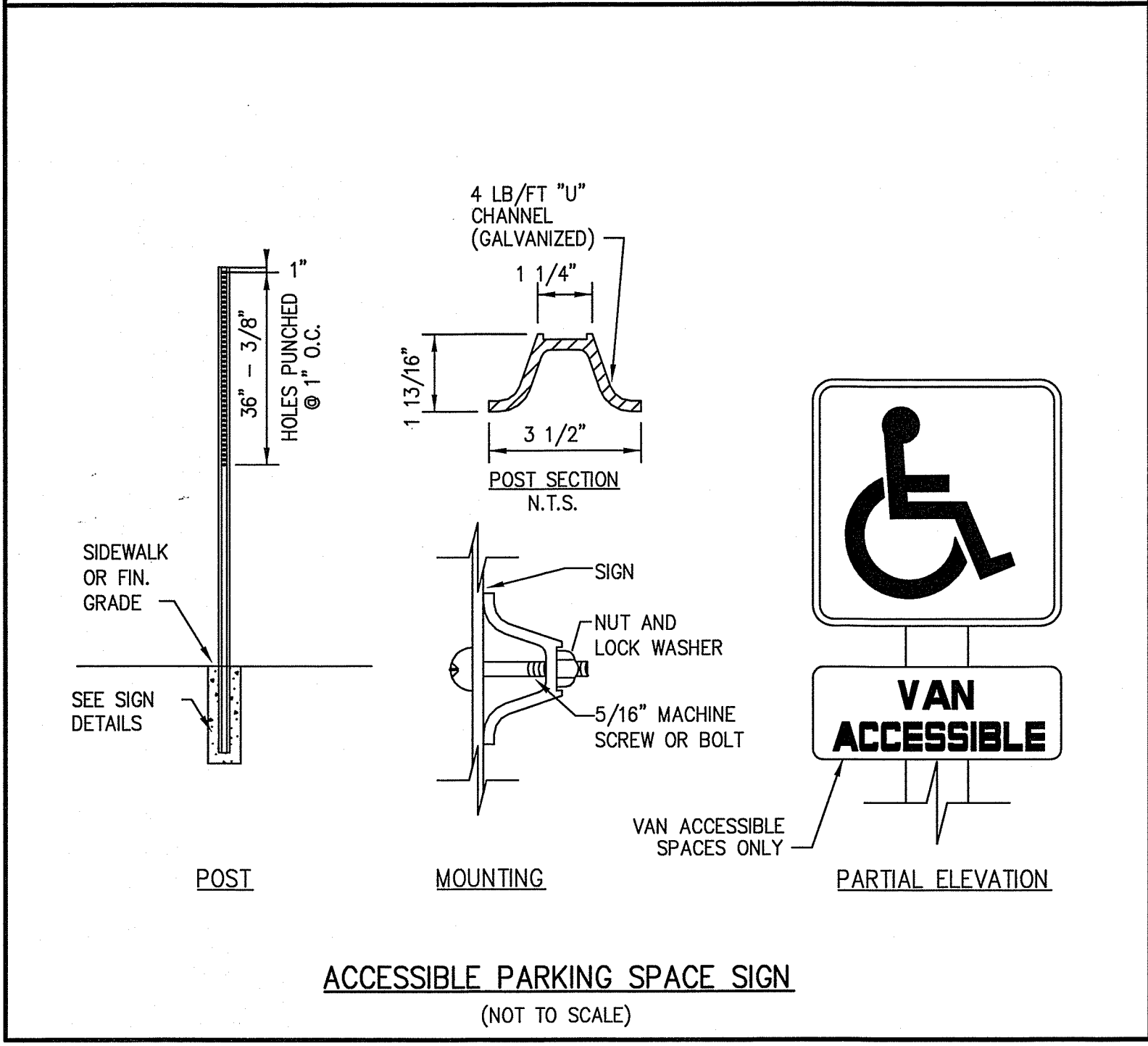


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John Morin
REGISTERED PROFESSIONAL ENGINEER
MASSACHUSETTS
LICENSE NO. 38836



SURVEY BY: PM/SR		DATE	
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CHECKED BY: JMM		DATE	
APPROVED BY: JMM		DATE	
SCALE: AS NOTED		DATE	
DATE: OCTOBER 23, 2019		DATE	



SITE PLAN OF LAND
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TOPSFIELD, MASSACHUSETTS
371 BOSTON STREET
(ASSESSOR'S MAP 26, LOT 14)
PREPARED FOR:
MAUREEN & RANDY SABINO

CONSTRUCTION DETAILS
DRAWING NO. **6 OF 6**