

SITE PLAN SET FOR PROPOSED 11 UNIT RESIDENTIAL DEVELOPMENT TOWER HILL LANDINGS ANNEX, LLC

**PLAT MAP 32-4, LOT 32
ZONING DISTRICTS: CN and R-10
COMMERCIAL NEIGHBORHOOD and
MEDIUM HIGH DENSITY RESIDENTIAL DISTRICT
and KINGSTOWN ROAD SPECIAL MANAGEMENT DISTRICT**

**2095 KINGSTOWN ROAD (ROUTE 108)
SOUTH KINGSTOWN, R.I.**

OWNER

**TOWER HILL LANDINGS, LLC
543 THAMES STREET
NEWPORT, RHODE ISLAND
02840**

ENGINEERS and LAND SURVEYORS



- Civil
- Transportation
- Environmental
- Site Planning
- Surveying
- Permitting
- Landscape Architecture

CROSSMAN ENGINEERING

<u>Rhode Island</u>	<u>Massachusetts</u>
151 Centerville Road	103 Commonwealth Avenue
Warwick, RI 02886	North Attleboro, MA 02763
Phone: (401) 738-5660	Phone: (508) 695-1700

Email: cei@crossmaneng.com

**JULY 2020
SHEET 1 of 18**



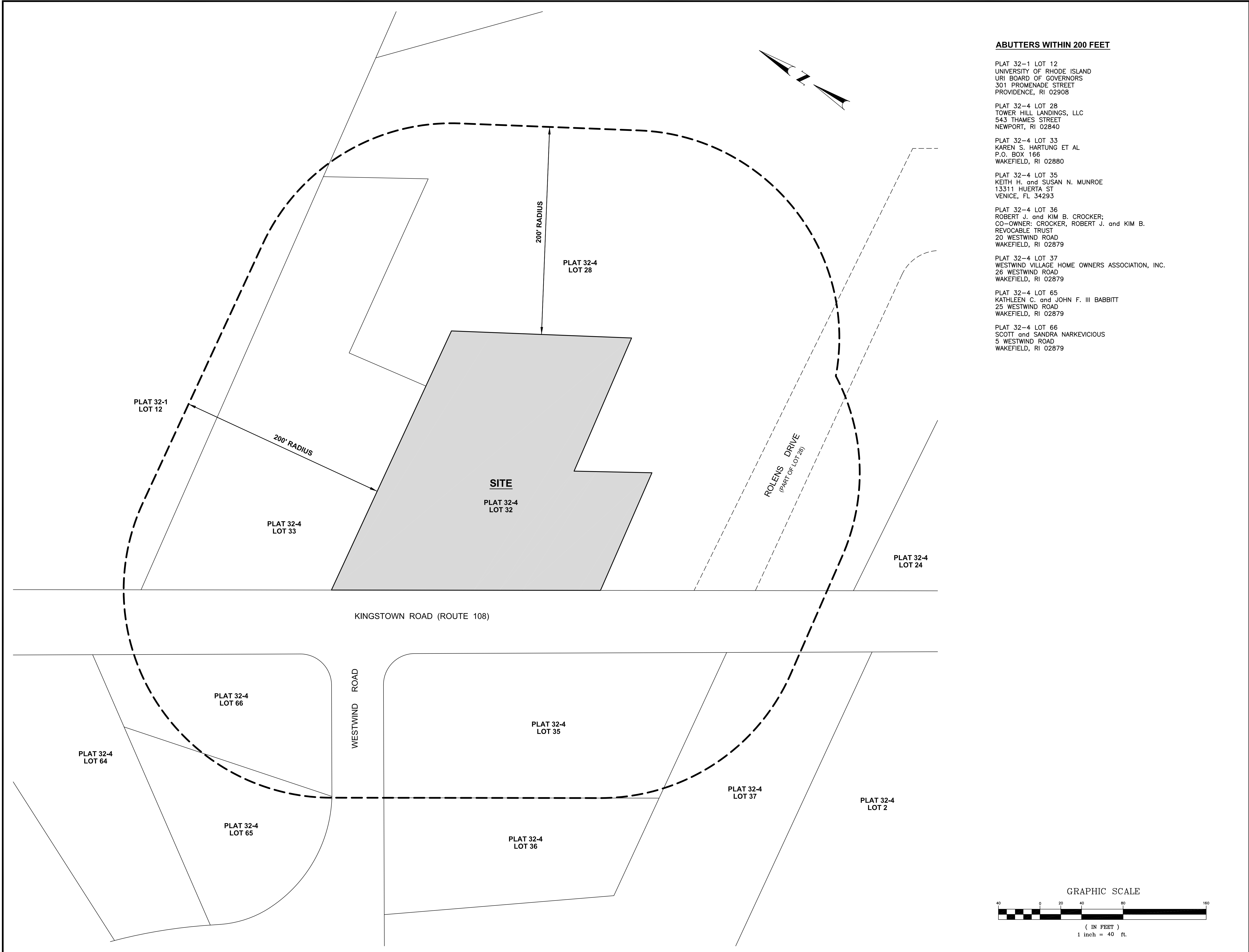
LOCATION MAP
NOT TO SCALE

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REVISIONS:

No.:	DESCRIPTION:	DATE:
-	-	-



ABUTTERS WITHIN 200 FEET

PLAT 32-1 LOT 12
UNIVERSITY OF RHODE ISLAND
URI BOARD OF GOVERNORS
301 PROMENADE STREET
PROVIDENCE, RI 02908

PLAT 32-4 LOT 28
TOWER HILL LANDINGS, LLC
543 THAMES STREET
NEWPORT, RI 02840

PLAT 32-4 LOT 33
KAREN S. HARTUNG ET AL
P.O. BOX 166
WAKEFIELD, RI 02880

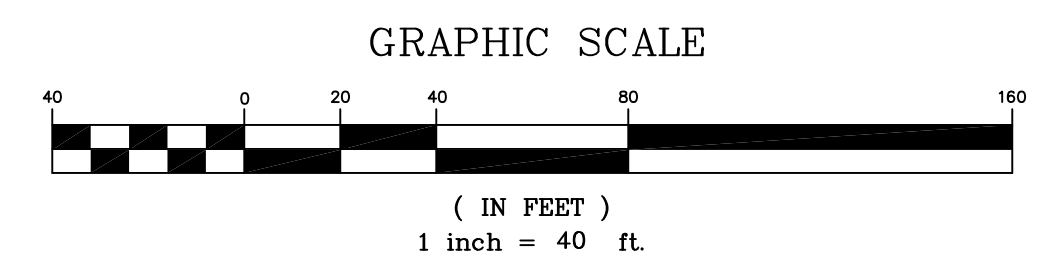
PLAT 32-4 LOT 35
KEITH H. and SUSAN N. MUNROE
13311 HUERTA ST
VENICE, FL 34293

PLAT 32-4 LOT 36
ROBERT J. and KIM B. CROCKER;
CO-OWNER: CROCKER, ROBERT J. and KIM B.
REVOCABLE TRUST
20 WESTWIND ROAD
WAKEFIELD, RI 02879

PLAT 32-4 LOT 37
WESTWIND VILLAGE HOME OWNERS ASSOCIATION, INC.
26 WESTWIND ROAD
WAKEFIELD, RI 02879

PLAT 32-4 LOT 65
KATHLEEN C. and JOHN F. III BABBITT
25 WESTWIND ROAD
WAKEFIELD, RI 02879

PLAT 32-4 LOT 66
SCOTT and SANDRA NARKEVICIOUS
5 WESTWIND ROAD
WAKEFIELD, RI 02879



CROSSMAN ENGINEERING
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TOWER HILL LANDINGS ANNEX LLC

PLAT MAP 32-4, LOT 32
ZONING DISTRICT: CN and R-10
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MEDIUM HIGH DENSITY RESIDENTIAL DISTRICT
and KINGSTOWN ROAD
SPECIAL MANAGEMENT DISTRICT
2095 KINGSTOWN ROAD (ROUTE 108)
SOUTH KINGSTOWN, R.I.

PREPARED FOR:

TOWER HILL LANDINGS, LLC

543 THAMES STREET
NEWPORT, RHODE ISLAND
02840

DRAWING TITLE:
RADIUS MAP

DATE: JULY 2020 **SCALE:** 1"=20'
DWG. NAME: 2449-C03-RADIUS.dwg

REVISIONS

NUMBER	REMARKS	DATE

DRAWING NUMBER
C3
SHEET: 4 OF 18



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02840

SITE LAYOUT PLAN

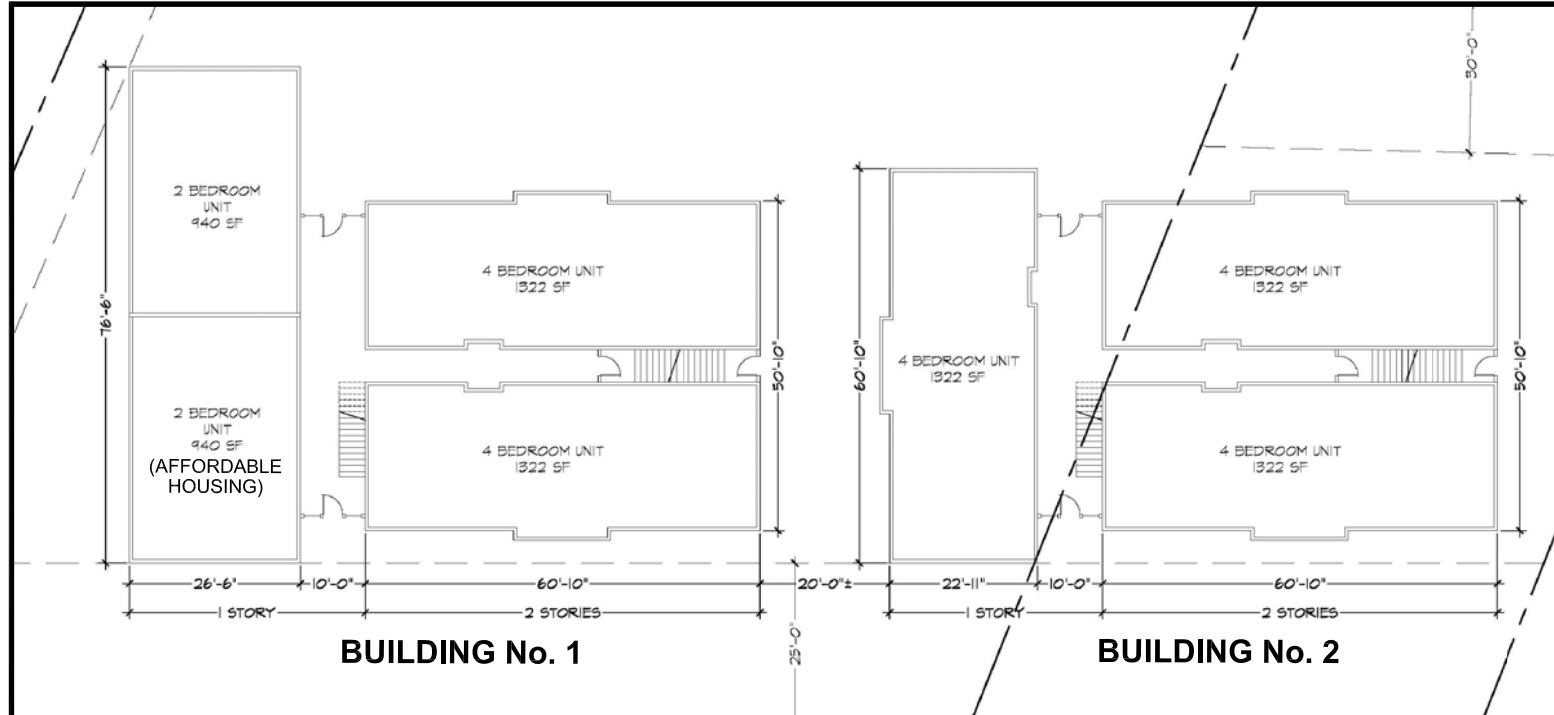
DATE: JULY 2020 SCALE: 1"=20'
DWG. NAME: 2449-C05-SITE.dwg

REVISIONS	NUMBER	REMARKS	DATE
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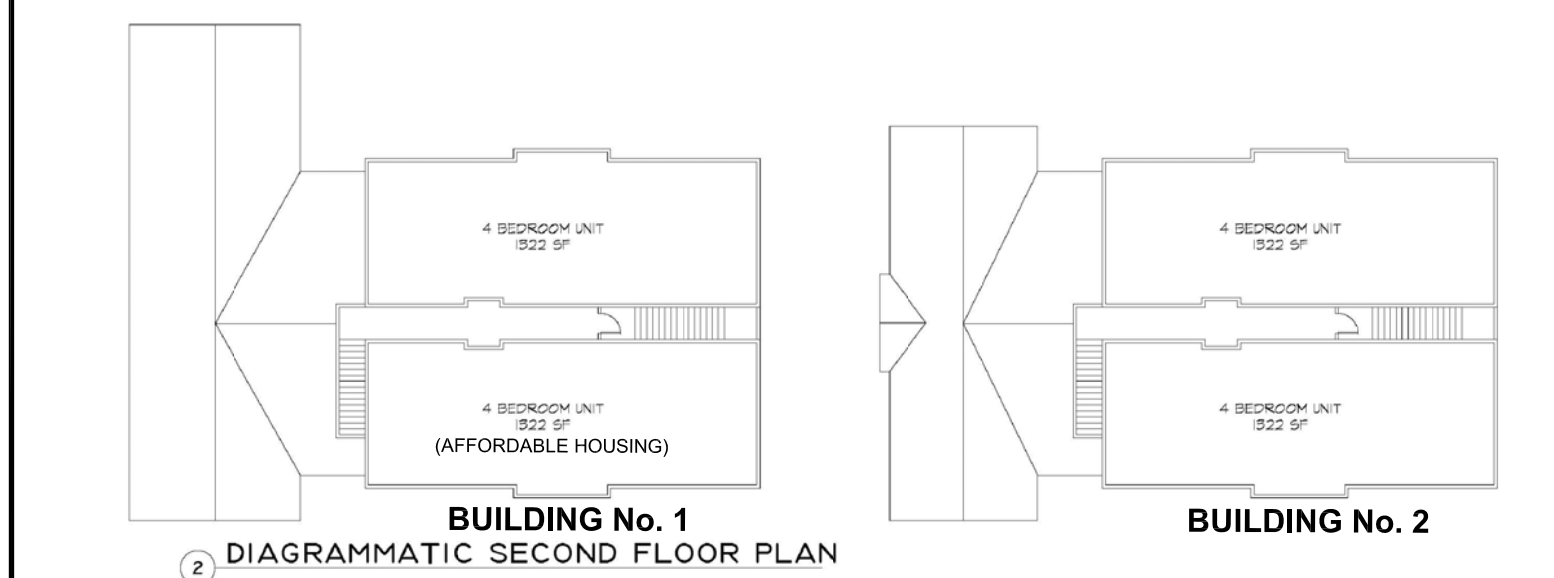
DRAWING NUMBER

C5

SHEET: 6 OF 18



DIAGRAMMATIC FIRST FLOOR PLAN



DIAGRAMMATIC SECOND FLOOR PLAN

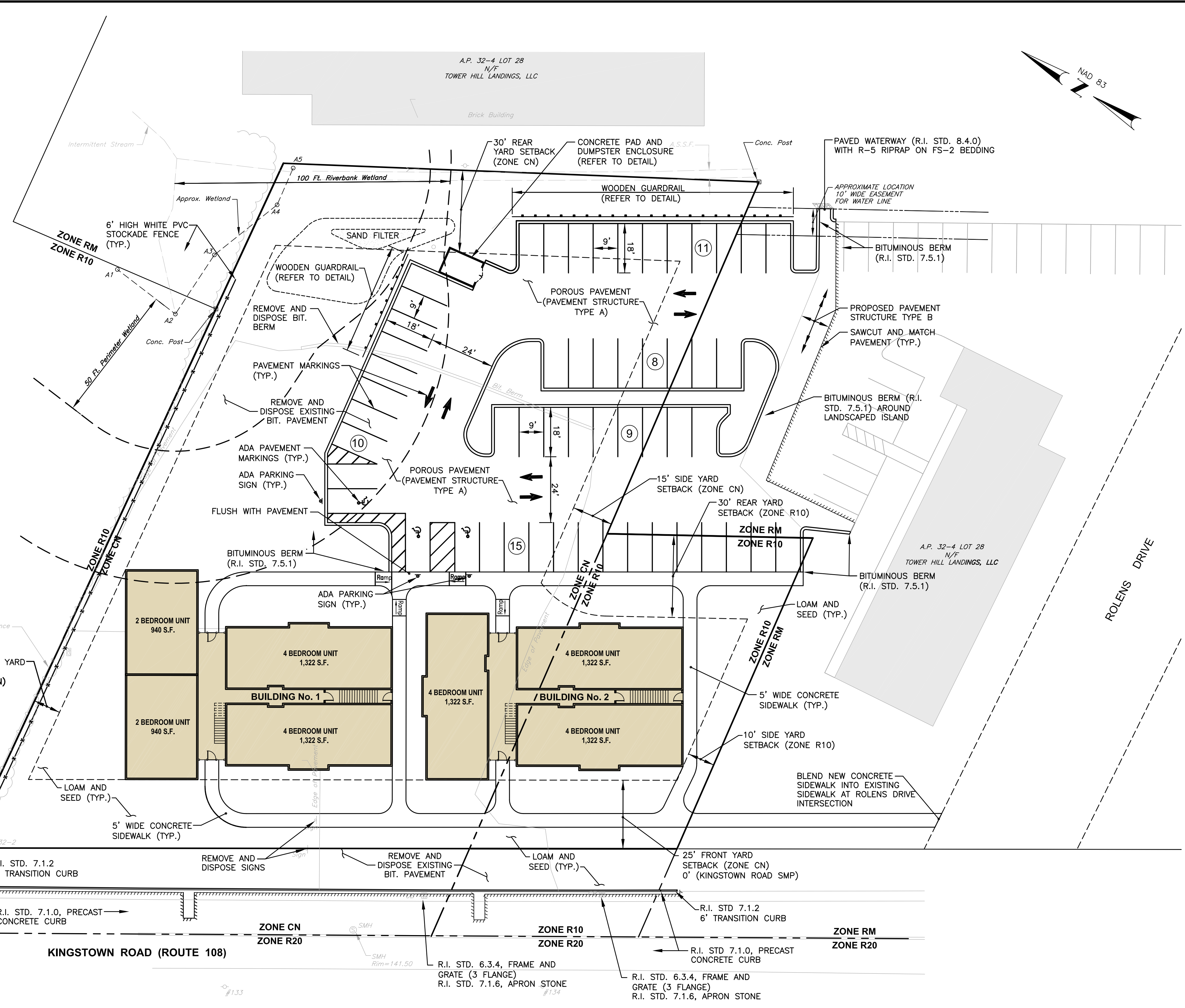
FLOOR PLANS
NOT TO SCALE

BUILDING NOTES:

EACH BUILDING HAS 2 STORIES.
NET UNIT AREA (EXCLUDING COMMON HALLS):
BUILDING 1 = 7,168 S.F.
BUILDING 2 = 6,610 S.F.

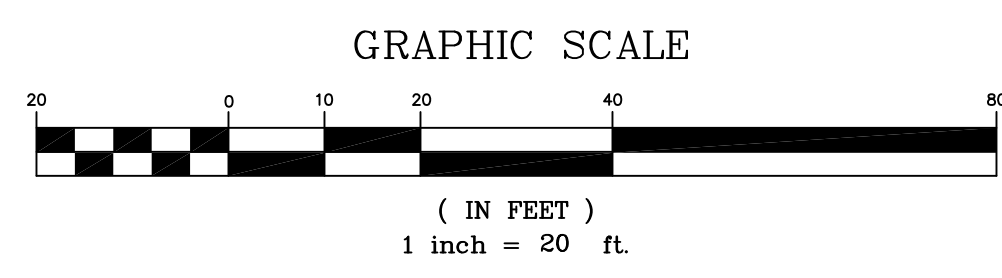
PARKING REQUIREMENTS

ARTICLE 7, SECTION 7.111: 2 SPACES PER APARTMENT OR MULTI-HOUSEHOLD DWELLINGS
11 PROPOSED UNITS = 22 SPACES REQUIRED
ARTICLE 5, SECTION 504.14.B.4: 1 SPACE PER HOUSEHOLD OCCUPANCY BY >3 UNRELATED INDIVIDUALS
40 OCCUPANTS (MAX.) = 40 SPACES REQUIRED
EXISTING SPACES REMOVED = 11 SPACES
TOTAL SPACES REQUIRED = 40 + 11 = 51 SPACES
TOTAL SPACES PROVIDED = 53 SPACES



SUBDIVISION AND LAND DEVELOPMENT REGULATIONS REQUIRED WAIVERS

- G.3: NO LESS THAN 10' PERIMETER LANDSCAPING SHALL BE PROVIDED WHEN PARKING AREA CONTAINS FIVE (5) OR MORE SPACES. (0' PROVIDED)
- H.7: MULTI-HOUSEHOLD DEVELOPMENT PROJECTS WHEN LOCATED ALONG ANY PUBLIC STREET, SHALL PROVIDE A SETBACK OF 100 FEET ALONG SAID STREET. (25' PROVIDED)
IN ADDITION, A 50' WIDTH LANDSCAPED BUFFER SHALL BE MAINTAINED ALONG THE STREET. (25' PROVIDED)
- H.9: DISTANCE BETWEEN BUILDINGS ON SAME LOT ALONG THE SAME PLANE SHALL BE 25 FEET IF ABUTTING ENDS CONTAIN NO WINDOWS. IF WALLS CONTAIN WINDOWS, THE SEPARATION SHALL BE 50 FEET. (10' PROVIDED)



ZONING REQUIREMENTS				
ZONING DISTRICT: R10 MEDIUM HIGH DENSITY RESIDENTIAL DISTRICT CN COMMERCIAL NEIGHBORHOOD KINGSTOWN ROAD SPECIAL MANAGEMENT DISTRICT				
USE: MULTI-HOUSEHOLD LAND DEVELOPMENT, USE CODE 12.1				
LOT REQUIREMENT	REQUIRED-ZONE R10	REQUIRED-ZONE CN	KINGSTOWN RD SMD	PROPOSED
MINIMUM LOT AREA	15,000 S.F. +5,000 S.F./UNIT MORE THAN 2'	15,000 S.F. +5,000 S.F./UNIT MORE THAN 2'	--	52,985 S.F.
LOT WIDTH AT FRONT YARD SETBACK LINE	150'	150'	--	230'
YARD DIMENSIONS				
FRONT YARD SETBACK	25'	25'	0*	25'
REAR YARD SETBACK	30'	30'	--	149'
SIDE YARD SETBACK	10'	10'	--	10'
MAXIMUM LOT BUILDING COVERAGE	30%	30%	--	20%
MAXIMUM BUILDING SIZE	---	---	7,500 GLFA/BUILDING	<7,500 GLFA/BUILDING
BUILDING HEIGHT-PRINCIPLE	35'	35'	---	<35'
BUILDING HEIGHT-ACCESSORY	15'	---	---	---

* SUBJECT TO DEVELOPMENT PLAN REVIEW

UTILITY NOTES

- PRIOR TO ANY UTILITY CONSTRUCTION, THE CONTRACTOR MUST PERFORM ADDITIONAL TESTS TO:
 - CONFIRM THE EXISTING DEPTHS OF UTILITIES AT ALL PROPOSED CONNECTION POINTS AND POTENTIAL CROSSOVER (CONFLICT) POINTS.
 - CONFIRM THE EXTENT OF LEDGE WHICH MAY EXIST IN ALL ANTICIPATED UTILITY TRENCH AREAS. PRIOR TO CONSTRUCTION, THE FINDINGS ARE TO BE REVIEWED BY THE OWNER AND THE ENGINEER. IF NECESSARY, ALTERNATIVES TO MINIMIZE LEDGE REMOVAL AND UTILITY CONFLICTS WILL BE DEVELOPED. NO CONSTRUCTION WILL BE ALLOWED WITHOUT THE OWNERS AUTHORIZATION.
 - THE CONTRACTOR SHALL DIG TEST HOLES TO VERIFY THE ELEVATIONS AND PIPE MATERIAL OF THE EXISTING SANITARY SERVICE LATERAL AT THE PROPOSED TIE-IN LOCATION.
- ANY MODIFICATIONS TO THE PROPOSED UTILITIES TO AVOID CONFLICTS MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. NO EXTRA PAYMENT TO THE CONTRACTOR DUE TO RELOCATIONS WILL BE AUTHORIZED.
- THE UTILITY PLAN DOES NOT DEPICT THE NECESSARY IRRIGATION PIPING OR ELECTRICAL CONDUIT/WIRING TO SERVICE THE PROPOSED LIGHTING AND SIGNS, WHICH WILL BE PERFORMED BY THE CONTRACTOR FOR NO ADDITIONAL COST.
- THE CONTRACTOR MUST LOCATE THE EXISTING WATER MAIN TO OBTAIN THE PROPER OUTSIDE DIAMETER TO SIZE THE SLEEVE.
- THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL UTILITY PIPE SIZES INCLUDING WATER, SEWER AND GAS ARE VERIFIED BY THE ARCHITECT AND ENGINEER PRIOR TO ORDERING PIPE OR RELATED MATERIAL.
- THE "UTILITY PLAN" DOES NOT REPRESENT THE SITE ELECTRIC/TELEPHONE/ COMMUNICATION SYSTEM DESIGNS.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO ORDERING ANY MATERIAL.
- ALL WASTEWATER MATERIALS AND INSTALLATION OF THE SAME SHALL BE IN STRICT CONFORMANCE WITH THE TOWN OF SOUTH KINGSTOWN PUBLIC SERVICES DEPARTMENT WASTEWATER SPECIFICATIONS CURRENT AT THE TIME OF CONSTRUCTION/INSTALLATION.
- SHOP DRAWING SUBMITTAL IS REQUIRED FOR ALL PROPOSED WASTEWATER SYSTEM COMPONENTS PRIOR TO RECEIPT OF THE SEWER CONNECTION PERMIT BY TOWN OF SOUTH KINGSTOWN DEPARTMENT OF PUBLIC SERVICES.
- WATER CONNECTION DETAILS/DESIGN FOR POTABLE AND FIRE SUPPRESSION LINES MUST BE REVIEWED AND APPROVED BY KINGSTON WATER DISTRICT.

UTILITY DEMOLITION NOTE

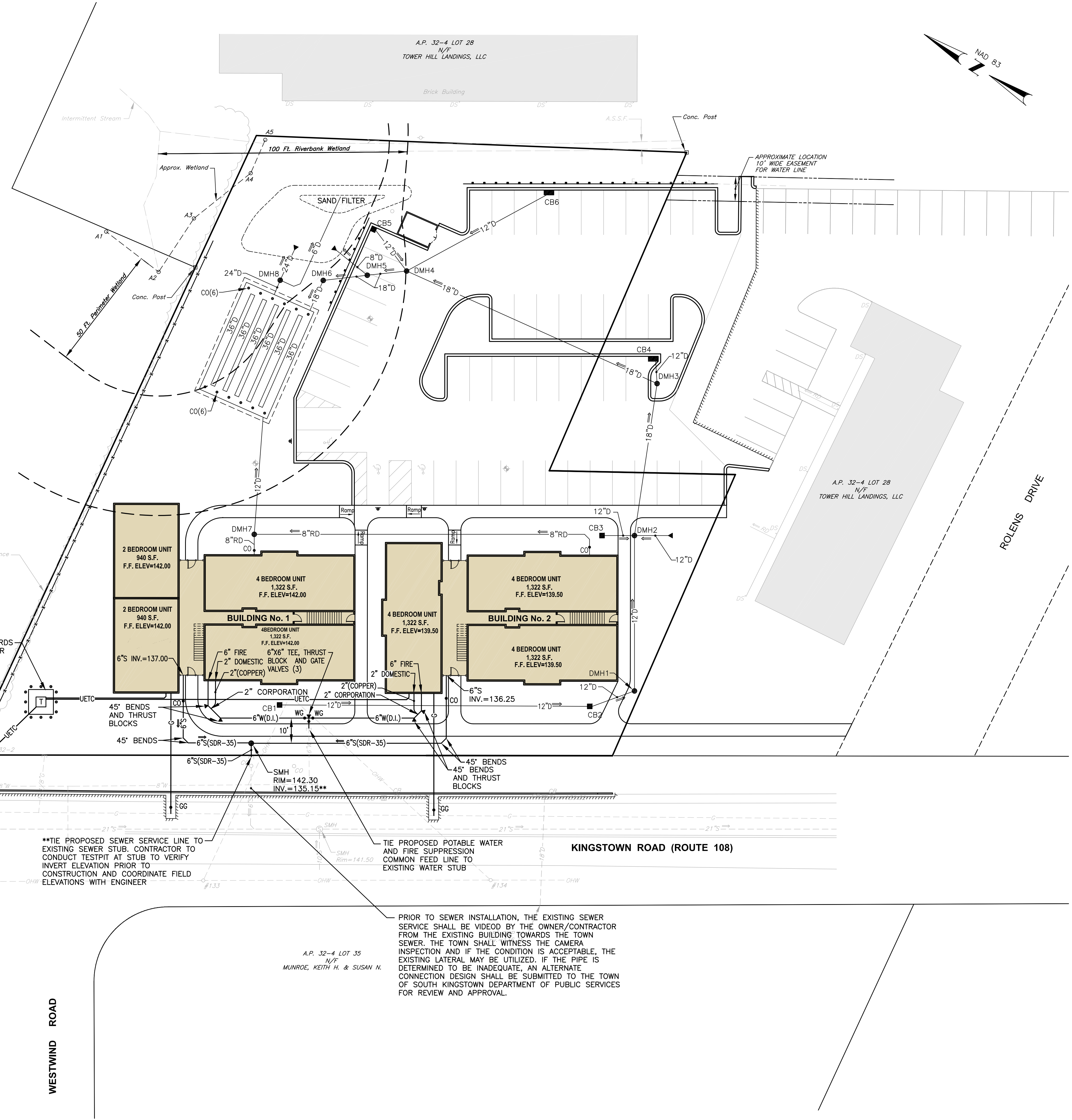
ALL EXISTING UNDERGROUND UTILITY LINES AND COMPONENTS SHALL BE REMOVED AND PROPERLY DISPOSED PRIOR TO COMMENCEMENT OF NEW/PROPOSED CONSTRUCTION ACTIVITIES. SOME COMPONENTS MAY REQUIRE PUMPING OF SOLIDS/LIQUIDS PRIOR TO REMOVAL.

PIPE MATERIAL NOTE:
THE PROPOSED SEWER PIPE SHALL BE SDR-35 AND WATER PIPE SHALL BE DOUBLE CEMENT MORTAR LINED DUCTILE IRON PIPE CL52

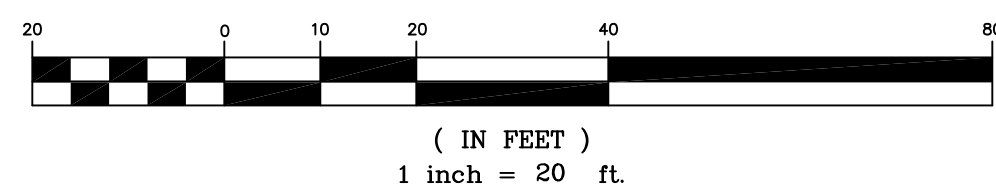
CONCRETE PAD AND BOLLARDS FOR ELECTRIC TRANSFORMER (DESIGN BY OTHERS)

**TIE PROPOSED SEWER SERVICE LINE TO EXISTING SEWER STUB. CONTRACTOR TO CONDUCT TESTPIT AT STUB TO VERIFY INVERT ELEVATION PRIOR TO CONSTRUCTION AND COORDINATE FIELD ELEVATIONS WITH ENGINEER

PRIOR TO SEWER INSTALLATION, THE EXISTING SEWER SERVICE SHALL BE VIDEOED BY THE OWNER/CONTRACTOR FROM THE EXISTING BUILDING TOWARDS THE TOWN SEWER. THE TOWN SHALL WITNESS THE CAMERA INSPECTION AND IF THE CONDITION IS ACCEPTABLE, THE EXISTING LATERAL MAY BE UTILIZED. IF THE PIPE IS DETERMINED TO BE INADEQUATE, AN ALTERNATE CONNECTION DESIGN SHALL BE SUBMITTED TO THE TOWN OF SOUTH KINGSTOWN DEPARTMENT OF PUBLIC SERVICES FOR REVIEW AND APPROVAL.



GRAPHIC SCALE



WESTWIND ROAD

ROLENS DRIVE

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PREPARED FOR:
TOWER HILL LANDINGS, LLC

543 THAMES STREET
NEWPORT, RHODE ISLAND
02840

DRAWING TITLE:
UTILITY PLAN

DATE: JULY 2020 SCALE: 1"=20'
DWG. NAME: 2449-C07-UTILITY.dwg

REVISIONS	NUMBER	REMARKS	DATE
△			

DRAWING NUMBER
C7
SHEET: 8 OF 18

DUST CONTROL NOTES

ON AN AS-NEEDED BASIS OR AS DIRECTED BY RIDEM OR OWNER, THE CONTRACTOR SHALL UTILIZE ONE OF THE FOLLOWING METHODS TO CONTROL DUST:

- A. THE EXPOSED SOIL SURFACE SHOULD BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.
- B. CALCIUM CHLORIDE SHOULD BE EITHER LOOSE DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH A SPREADER AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE.

THE METHODS SHOULD BE REPEATED AS NEEDED, AND SPECIAL ATTENTION MUST BE GIVEN TO THE ACCESS DRIVES.

INSPECTION/MAINTENANCE NOTES

1. PRIOR TO COMMENCING GRUBBING OPERATIONS AND EARTHWORK, FILTERSOXX SHALL BE PLACED INSIDE SAWCUT EDGE TO PREVENT SEDIMENT FROM ENTERING EXISTING ROADWAY DRAINAGE SYSTEM, WETLAND AREAS AND ADJUTING PROPERTIES.
2. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE DRAINAGE SYSTEM.
3. ALL DISTURBED AREAS WHICH BECOME SUBJECT TO EROSION TENDENCIES WHETHER THEY BE NEWLY FILLED OR EXCAVATED SHALL RECEIVE SLOPE PROTECTION - SUCH AS RIP-RAP.
4. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUNOFF FLOW DURING PERIODS OF RAINFALL.
5. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT / REPLACE DAILY DURING CONSTRUCTION, FOLLOWING RAINFALL AND WEEKLY DURING NON CONSTRUCTION PERIODS.
6. ADDITIONAL FILTERSOXX OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
7. THE LATEST VERSION OF THE "RHODE ISLAND SOIL EROSION AND SEDIMENT CONTROL HANDBOOK" PREPARED BY THE RHODE ISLAND STATE CONSERVATION COMMITTEE (REVISION 2014), MUST BE UTILIZED BY THE CONTRACTOR AS A GUIDE.
8. THE CONTRACTOR IS RESPONSIBLE FOR ALL DUST CONTROL AND FOR THE ENTIRE PROJECT DURATION, INCLUDING TEMPORARY SHUT-DOWN PERIODS, MUST MONITOR AND REPAIR, AS NEEDED, ALL SLOPES TO ENSURE A STABLE PRODUCT.

GENERAL PROJECT WIDE NOTES

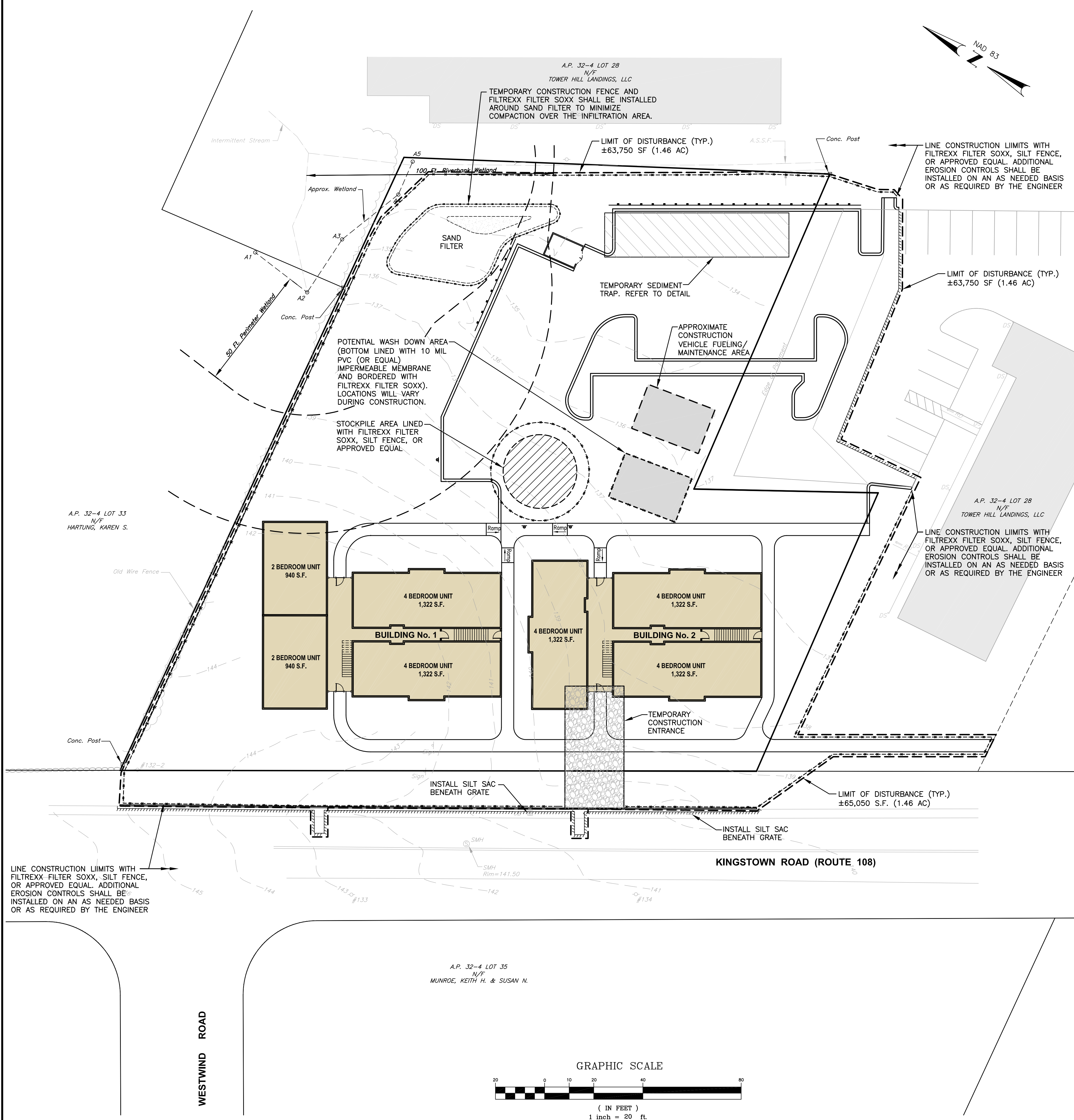
1. CONTRACTOR SHALL INSTALL TEMPORARY MEASURES SUCH AS; FIBER MATTING, CRUSHED STONE, HAY OR STRAW IN AREAS WHERE SLOPES OR STABILIZATION HAS FAILED.
2. IF SEDIMENT IS TRACKED OR ERODED INTO THE ROADWAY, THE CONTRACTOR WILL BE REQUIRED TO INSTALL SILT SACK OR APPROVED EQUAL UNDER THE EXISTING CATCH BASIN GRATES. REMOVE AFTER CONSTRUCTION.
3. FILTER SOXX (OR SILT FENCE OR STAKED HAYBALES) SHALL BE INSTALLED AROUND THE PERIMETER OF THE AREA TO BE DISTURBED BY CONSTRUCTION. ADDITIONAL APPLICATIONS OF THESE CONTROLS MEASURES MAY BE REQUIRED DURING THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL INSPECT THE SITE AT A MINIMUM OF ONCE PER WEEK OR WITHIN 24 HOURS AFTER A STORM EVENT.
4. IF EROSION OR EROSION TENDENCIES ARE APPARENT ON THE SITE, THE CONTRACTOR IS RESPONSIBLE TO INSTALL ADDITIONAL CONSTRUCTION BMP'S SUCH AS SAND BAGS AS DIRECTED BY THE TOWN OR ENGINEER DURING CONSTRUCTION.
5. IF SEDIMENT OR DEBRIS IS TRACKED ONTO EXISTING PAVED AREAS ADJACENT TO THE CONSTRUCTION AREA, THE CONTRACTOR IS REQUIRED TO SWEEP THE PAVEMENT ON A DAILY BASIS. THE AREA SHALL BE INSPECTED DAILY.
6. THE CONTRACTOR IS RESPONSIBLE TO KEEP THE SITE CLEAN OF TRASH. RECOMMENDED DAILY PATROL OF THE CONSTRUCTION SHOULD BE CONDUCTED TO PICK-UP TRASH. THE OPERATOR SHALL REQUIRE THE CONTRACTOR TO HAVE PORTABLE SANITARY FACILITIES ON SITE. ROUTING CLEANING AND WASTE DISPOSAL OF THESE PORTABLE SANITARY FACILITIES IS REQUIRED.

FILTREXX SOXX NOTE

CONTRACTOR IS RESPONSIBLE TO BECOME FAMILIAR WITH THE FILTREXX PRODUCTS AND COORDINATE INSTALLATION SCHEDULES AND METHODS WITH THE ENGINEER PRIOR TO PLACEMENT.

EROSION CONTROL AND SOIL STABILIZATION PROGRAM

1. EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING THE DRAINAGE SYSTEM, WETLAND AREAS, ADJACENT PROPERTY, WETLANDS AND ROADWAYS.
2. TEMPORARY TREATMENTS SHALL CONSIST OF A HAY, STRAW, OR FIBER MULCH PROTECTIVE COVERS, SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK AS WARRANTED OR AS ORDERED BY THE OWNER.
3. HAY OR STRAW APPLICATIONS SHALL BE IN THE AMOUNT OF 3,000-4,000 LBS/ACRE.
4. STOCKPILES SHALL HAVE NO SLOPE STEEPER THAN 2:1 AND SHALL BE SURROUNDED BY STAKED HAY BALES OR SILT FENCING.
5. STOCKPILES EXPOSED FOR EXCESSIVE PERIODS SHALL RECEIVE TEMPORARY TREATMENT CONSISTING OF HAY, STRAW OR FIBER MATTING.
6. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT/REPLACE AS NEEDED.
7. ADDITIONAL HAY BALES OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER, OWNER, MUNICIPAL REPRESENTATIVES OR LOCAL D.O.T.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DUST CONTROL AT NO ADDITIONAL COST TO THE OWNER.
9. ALL CATCH BASINS ADJACENT TO THE CONSTRUCTION AREA SHALL BE PROTECTED BY SILT SACKS.
10. ALL PROPOSED CATCH BASINS SHALL BE PROTECTED BY STAKED HAY BALES, SILT FENCING OR SILT SACKS.
11. THE FILTREXX FILTER SOXX MAY BE INSTALLED ON THE EXISTING PAVEMENT /IMPERVIOUS AREAS WITH OUT STAKES. CONTRACTOR SHALL INSPECT DAILY, IF SOIL EROSION OR SEDIMENT IS OBSERVED IN THESE AREAS, THE CONTRACTOR SHALL RELOCATE OR INSTALL ADDITIONAL FILTREXX FILTER SOXX IN LOCATIONS THAT CAN BE STAKED. THIS WORK IS INCLUDED IN THE PROJECT SCOPE.
12. SILT FENCE OR STAKED HAYBALES MAY BE USED IN LIEU OF FILTREXX FILTER SOXX.
13. AN ALTERNATE COMPOST SOCK OR STRAW WATTLE PRODUCT MAY BE USED IN LIEU OF FILTREXX FILTER SOCK UPON APPROVAL OF THE ENGINEER.
14. RUNOFF SHALL NOT BE DIRECTED TO THE STORMWATER MANAGEMENT SYSTEM UNTIL THE SITE IS STABLE.



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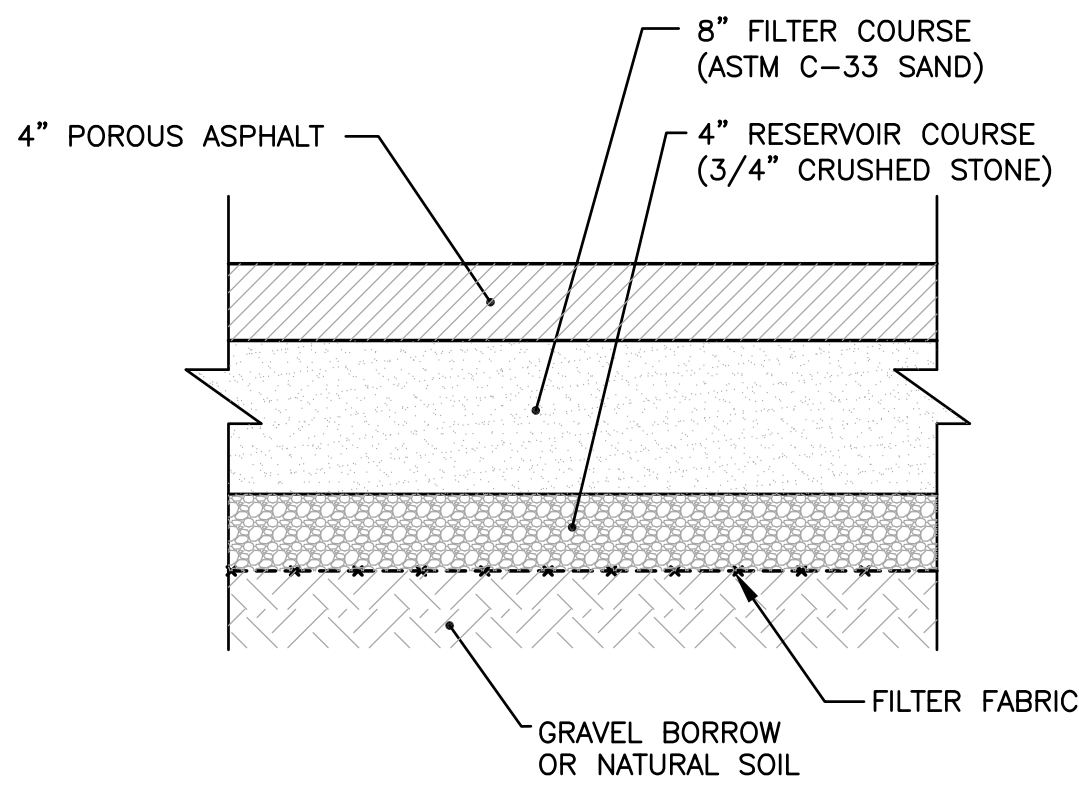
PREPARED FOR:
TOWER HILL LANDINGS, LLC
 543 THAMES STREET NEWPORT, RHODE ISLAND 02840

DRAWING TITLE:
SOIL EROSION and SEDIMENT CONTROL PLAN

DATE: JULY 2020 SCALE: 1"=20'
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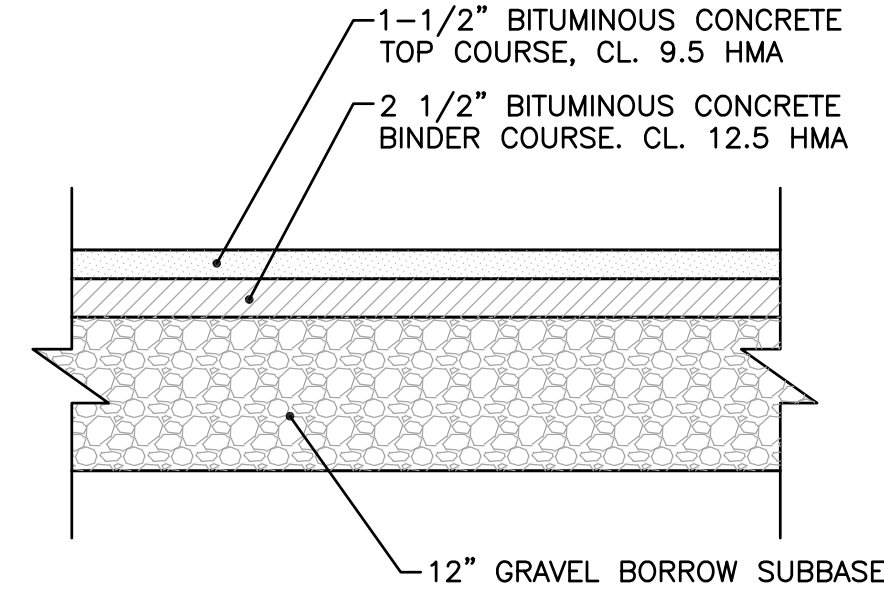
REVISIONS	NUMBER	REMARKS	DATE

DRAWING NUMBER
C8
 SHEET: 9 OF 18



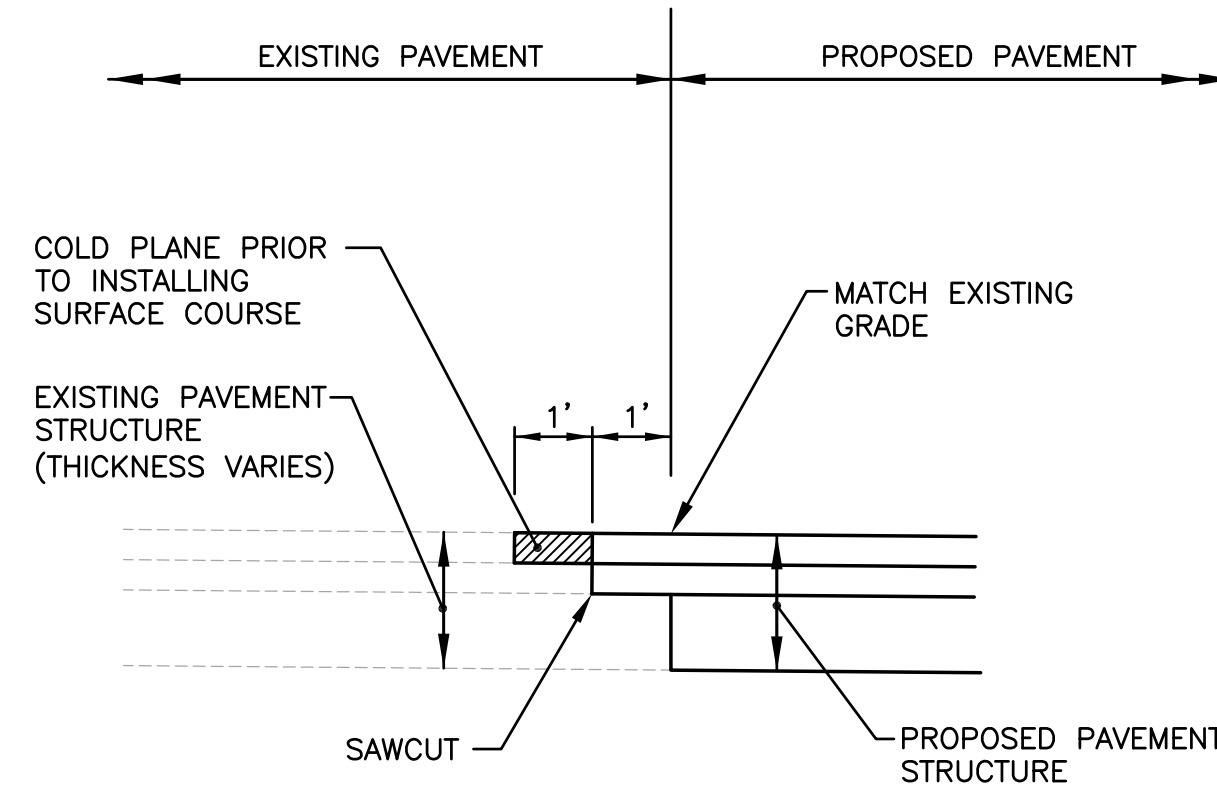
NOTE
 POROUS PAVEMENT SHALL HAVE AT LEAST 15% OPEN SURFACE AREA. PAVEMENT MIX SHALL BE SUBMITTED TO ENGINEER PRIOR TO PAVING.

TYPICAL POROUS PAVEMENT STRUCTURE (TYPE A) DETAIL
 NOT TO SCALE



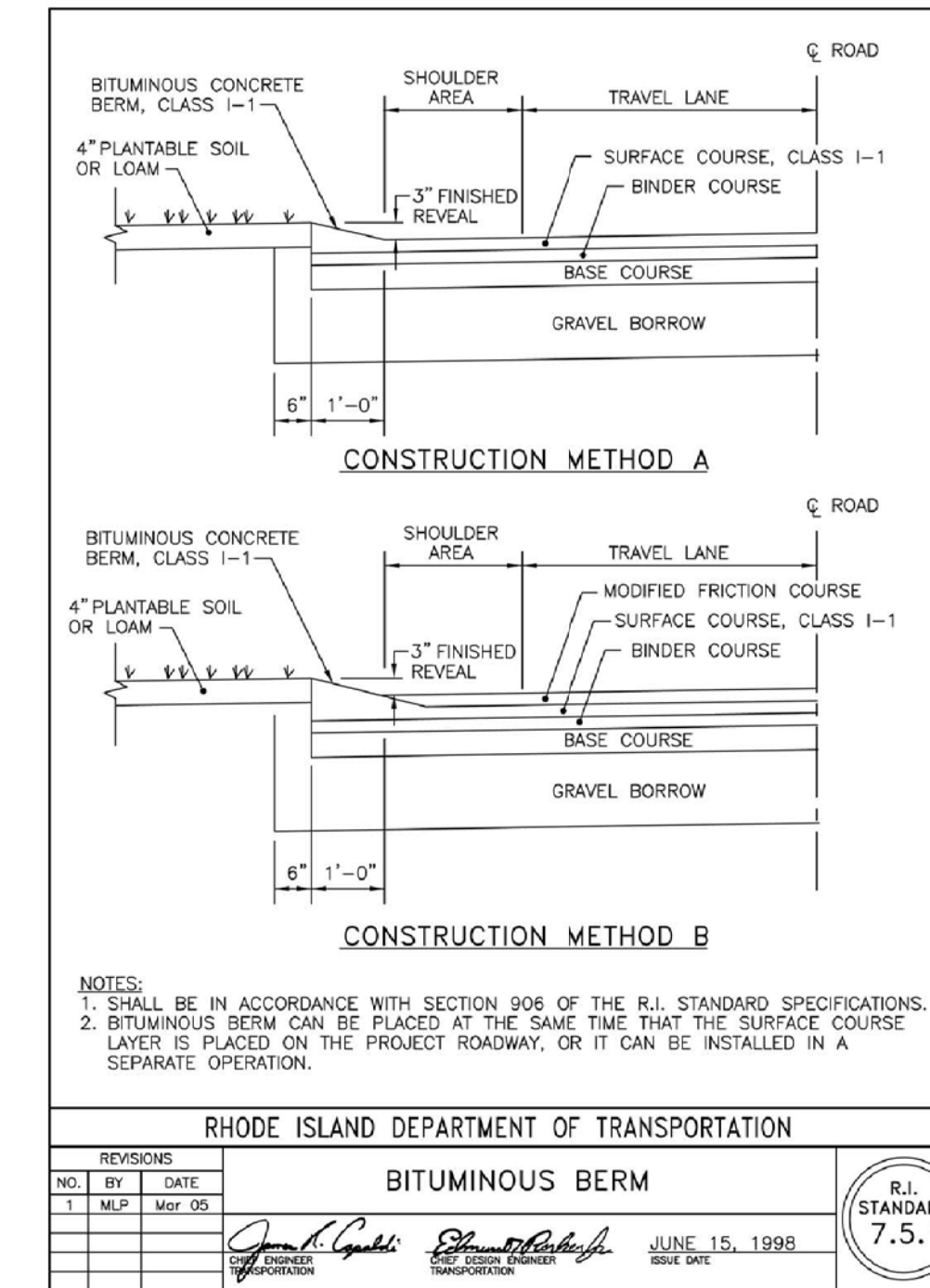
NOTES
 1. THE ABOVE PAVEMENT THICKNESS REPRESENTS THE MINIMUM THICKNESS FOR PASSENGER VEHICLE AREAS.
 2. PROPOSED BITUMINOUS PAVEMENT SHALL BE CLASS 12.5 OR CLASS 9.5 HMA

TYPICAL PAVEMENT STRUCTURE (TYPE B) DETAIL
 NOT TO SCALE



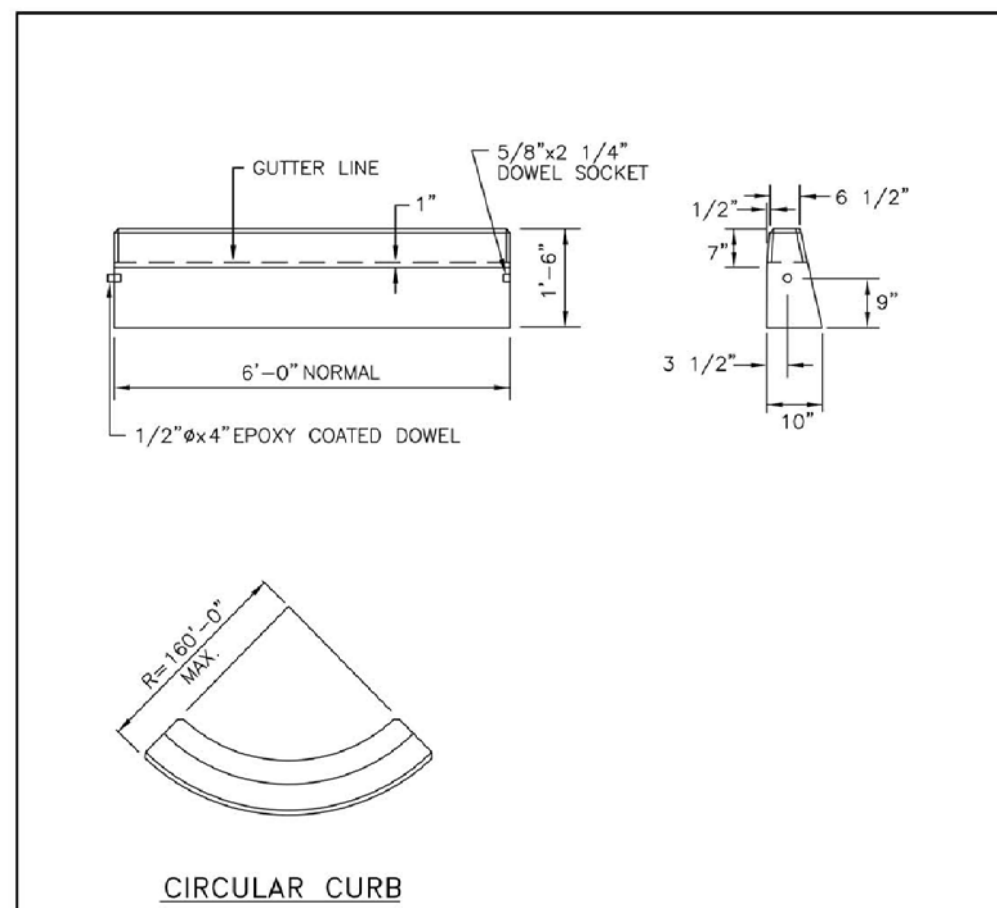
NOTE
 PROPOSED BITUMINOUS PAVEMENT SHALL BE CLASS 12.5 OR CLASS 9.5 HMA

PROPOSED PAVEMENT MATCH AT EXISTING PAVEMENT
 NOT TO SCALE



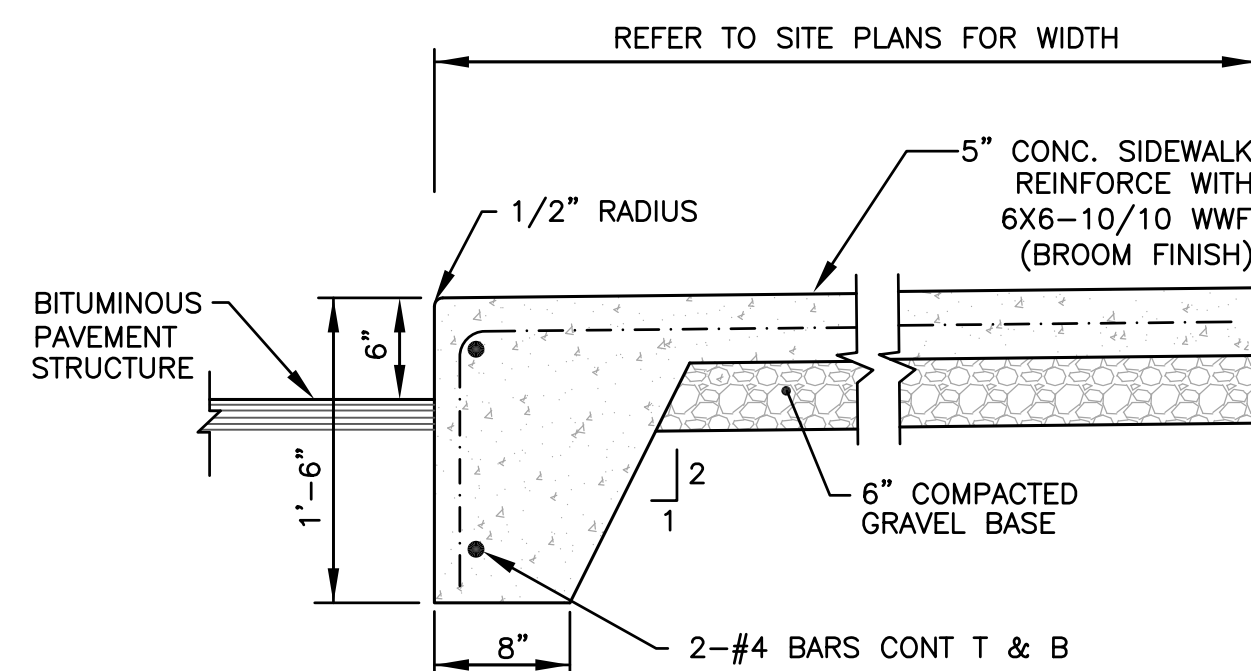
NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
 2. BITUMINOUS BERM CAN BE PLACED AT THE SAME TIME THAT THE SURFACE COURSE LAYER IS PLACED ON THE PROJECT ROADWAY, OR IT CAN BE INSTALLED IN A SEPARATE OPERATION.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
 BITUMINOUS BERM
 R.I. STANDARD 7.5.1
 JUNE 15, 1998
 REVISIONS: 1. BY DATE

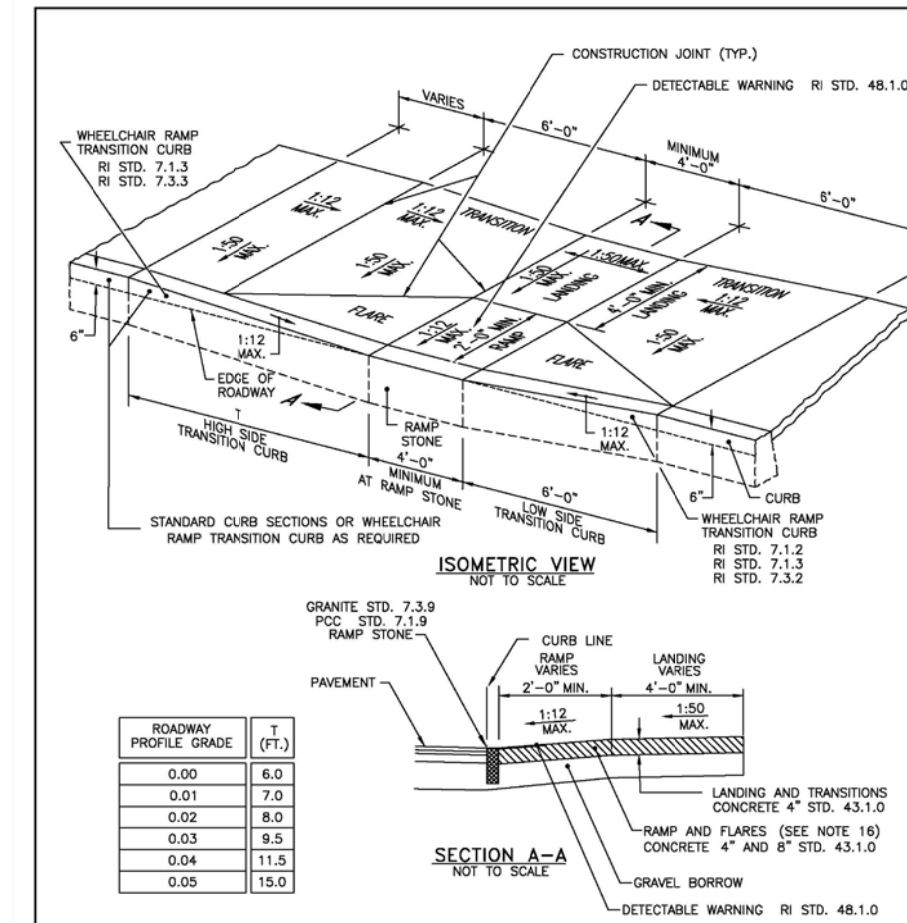


NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
 2. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0".
 3. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
 4. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADIUS OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.
 5. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
 PRECAST CONCRETE CURB
 R.I. STANDARD 7.1.0
 JUNE 15, 1998

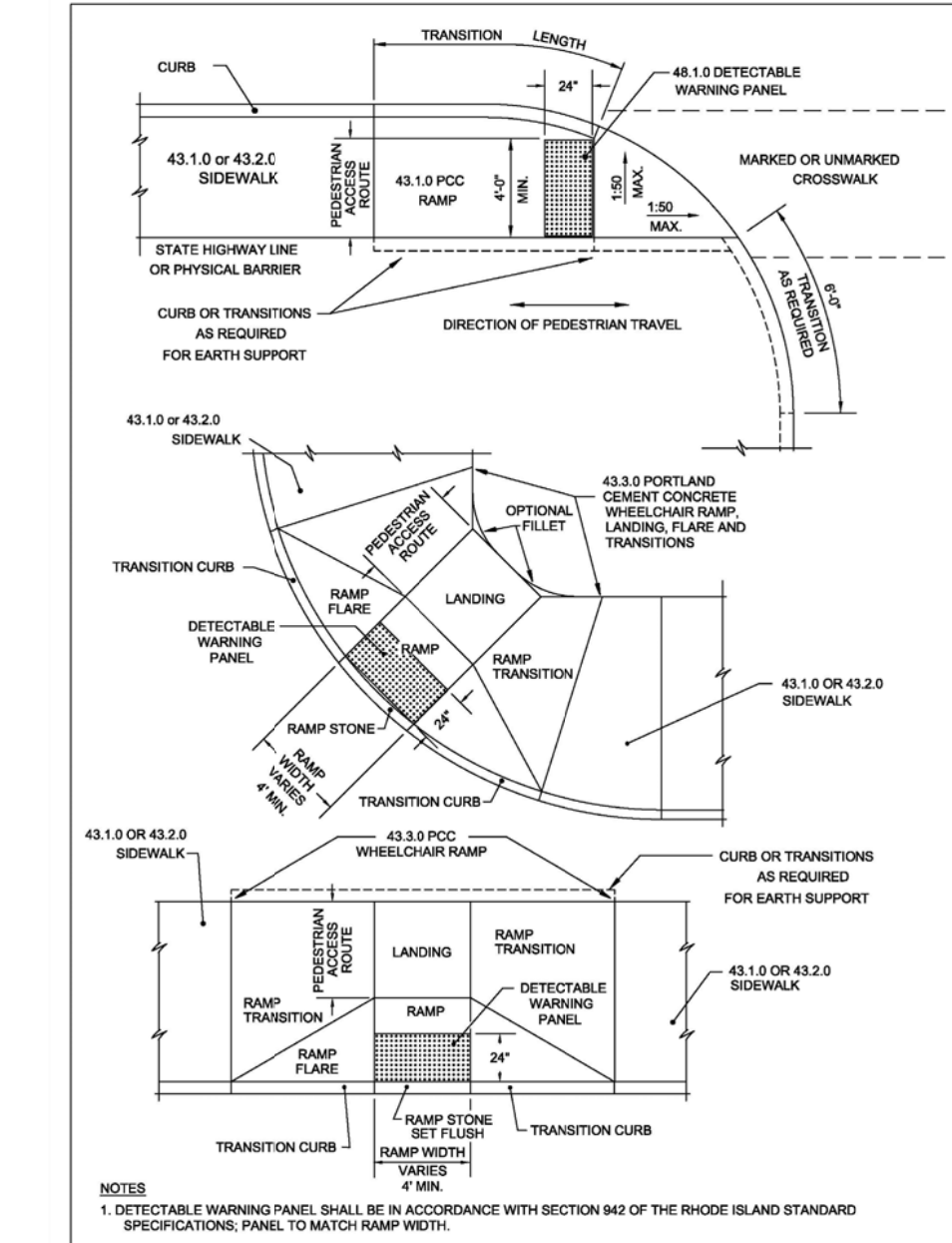


TYPICAL CONCRETE WALK WITH CAST-IN-PLACE CURB
 NOT TO SCALE

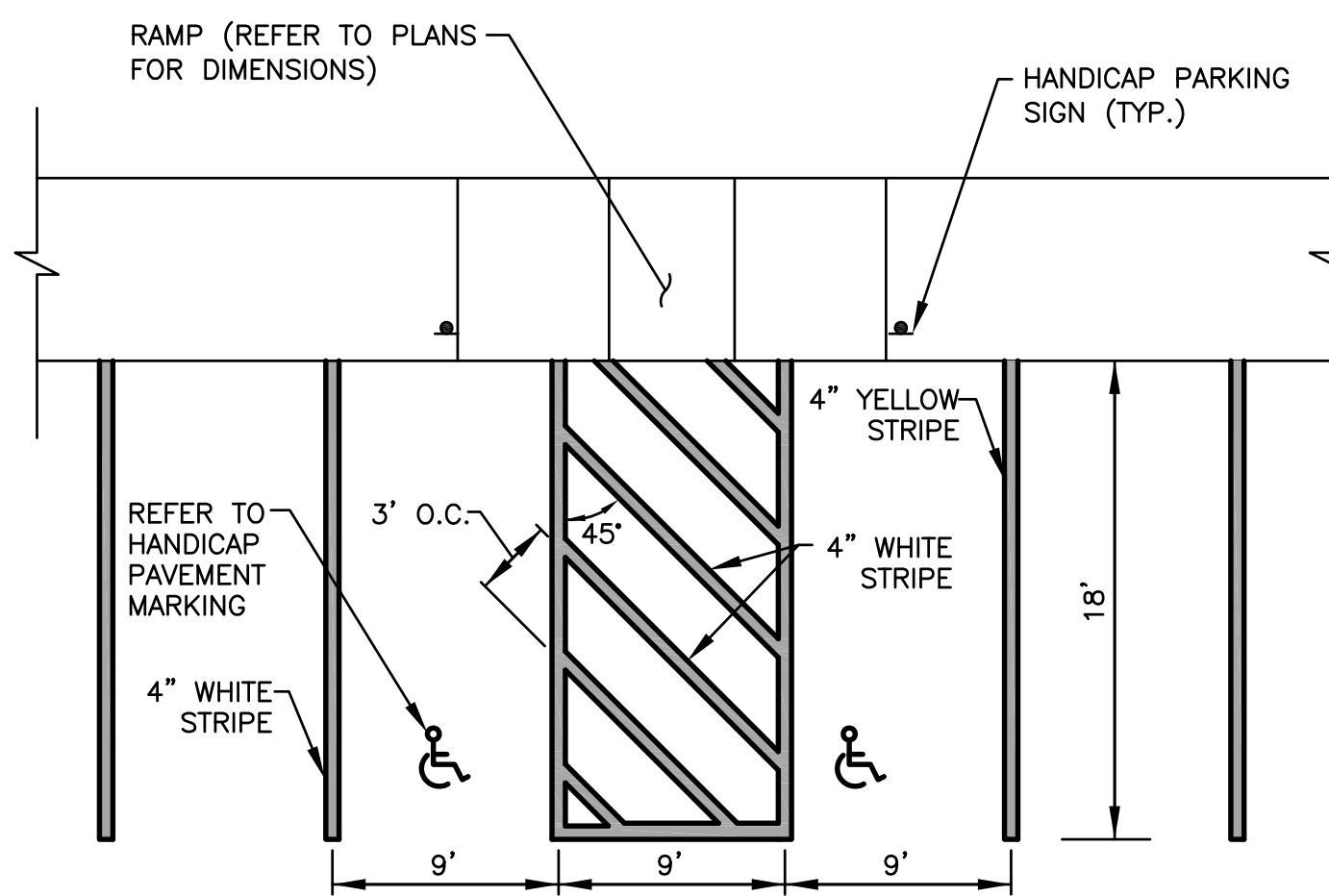


NOTES:
 1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
 2. WHEN ANY OBSTACLE LOCATED ON THE SIDEWALK FALLS WITHIN A CROSSWALK AREA, THE WHEELCHAIR RAMP SHALL BE PLACED SUCH THAT THE OBSTACLE FALLS OUTSIDE OF THE RAMP.
 3. AT NO TIME IS ANY PART OF THE WHEELCHAIR RAMP TO BE LOCATED OUTSIDE OF THE CROSSWALK, AND IT IS TO BE CONSIDERED A PART OF THE CROSSWALK.
 4. LOCATION OF WHEELCHAIR RAMP TO BE LOCATED OUTSIDE OF CROSSWALK.
 5. NO RAMP SHALL BE LOCATED OVER A CROSSWALK.
 6. THE WHEELCHAIR RAMP SHALL BE LOCATED ON THE SIDEWALK.
 7. THE WHEELCHAIR RAMP SHALL BE LOCATED ON THE SIDEWALK.
 8. THE WHEELCHAIR RAMP SHALL BE LOCATED ON THE SIDEWALK.
 9. THE WHEELCHAIR RAMP SHALL BE LOCATED ON THE SIDEWALK.
 10. THE WHEELCHAIR RAMP SHALL BE LOCATED ON THE SIDEWALK.
 11. THE WHEELCHAIR RAMP SHALL BE LOCATED ON THE SIDEWALK.
 12. THE WHEELCHAIR RAMP SHALL BE LOCATED ON THE SIDEWALK.
 13. THE WHEELCHAIR RAMP SHALL BE LOCATED ON THE SIDEWALK.
 14. THE WHEELCHAIR RAMP SHALL BE LOCATED ON THE SIDEWALK.
 15. THE WHEELCHAIR RAMP SHALL BE LOCATED ON THE SIDEWALK.
 16. THE WHEELCHAIR RAMP SHALL BE LOCATED ON THE SIDEWALK.
 17. THE WHEELCHAIR RAMP SHALL BE LOCATED ON THE SIDEWALK.
 18. THE WHEELCHAIR RAMP SHALL BE LOCATED ON THE SIDEWALK.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
 WHEELCHAIR RAMP
 R.I. STANDARD 4.3.3.0
 JUNE 15, 1998

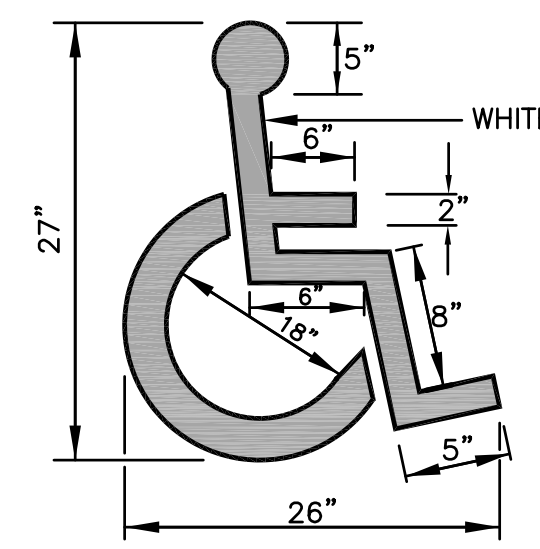


RHODE ISLAND DEPARTMENT OF TRANSPORTATION
 DETECTABLE WARNING PANEL PLACEMENT
 R.I. STANDARD 4.3.1.0
 JUNE 15, 1998



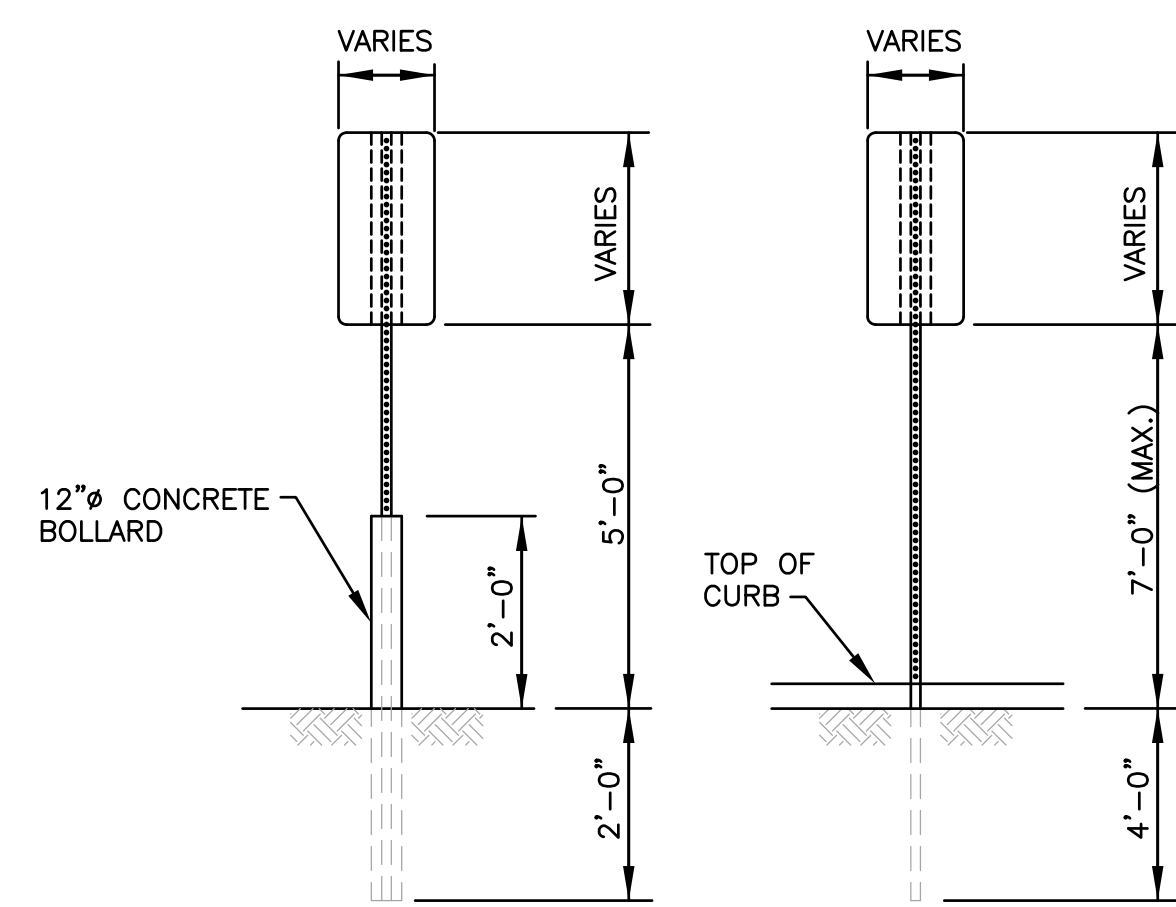
NOTE
 ALL HANDICAP PARKING SPACES SHALL BE IN ACCORDANCE WITH THE LOCAL AND STATE BUILDING CODE AND ADA REQUIREMENTS.

ADA PARKING STALLS
 NOT TO SCALE



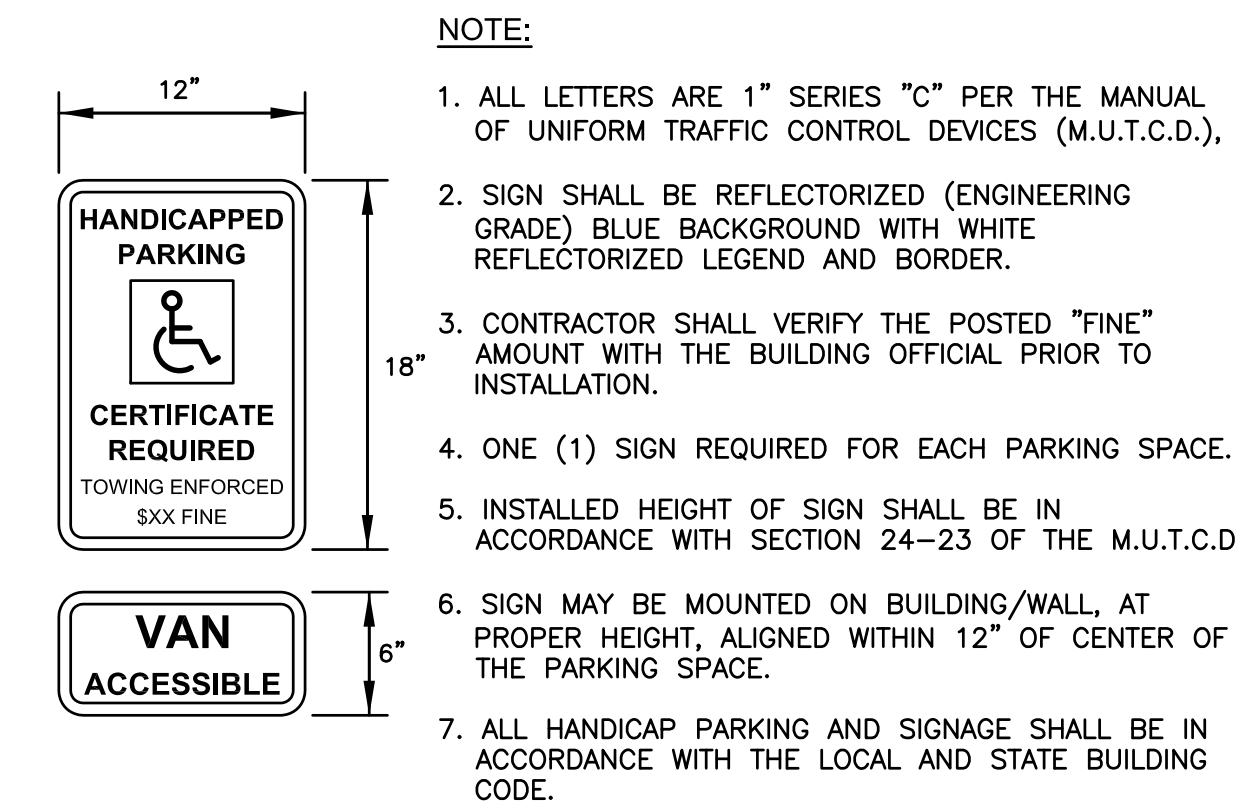
NOTE
 ALL ADA PARKING SPACES SHALL BE IN ACCORDANCE WITH THE LOCAL AND STATE BUILDING CODE AND ADA REQUIREMENTS.

ADA PAVEMENT MARKING
 NOT TO SCALE



(MOUNTING DETAIL FOR SIGNS WITH NO SIDEWALK) (MOUNTING DETAIL FOR SIGNS BEHIND SIDEWALK)

SIGN MOUNTING DETAIL
 NOT TO SCALE



NOTE:
 1. ALL LETTERS ARE 1" SERIES "C" PER THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).
 2. SIGN SHALL BE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
 3. CONTRACTOR SHALL VERIFY THE POSTED "FINE" AMOUNT WITH THE BUILDING OFFICIAL PRIOR TO INSTALLATION.
 4. ONE (1) SIGN REQUIRED FOR EACH PARKING SPACE.
 5. INSTALLED HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24-23 OF THE M.U.T.C.D.
 6. SIGN MAY BE MOUNTED ON BUILDING/WALL, AT PROPER HEIGHT, ALIGNED WITHIN 12" OF CENTER OF THE PARKING SPACE.
 7. ALL HANDICAP PARKING AND SIGNAGE SHALL BE IN ACCORDANCE WITH THE LOCAL AND STATE BUILDING CODE.

PROPOSED HANDICAPPED PARKING SIGNS
 NOT TO SCALE

CROSSMAN ENGINEERING
 Rhode Island: 151 Centerville Road, Warwick, RI 02886, Phone: (401) 738-5660
 Massachusetts: 103 Commonwealth Avenue, North Attleboro, MA 02763, Phone: (508) 695-1700
 Email: ce@crossmaneng.com

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PROJECT TITLE:
TOWER HILL LANDINGS ANNEX LLC

PLAT MAP 32-4, LOT 32
 ZONING DISTRICT: CN and R-10
 COMMERCIAL NEIGHBORHOOD and MEDIUM HIGH DENSITY RESIDENTIAL DISTRICT and KINGSTOWN ROAD SPECIAL MANAGEMENT DISTRICT
 2095 KINGSTOWN ROAD (ROUTE 108) SOUTH KINGSTOWN, R.I.

PREPARED FOR:
TOWER HILL LANDINGS, LLC

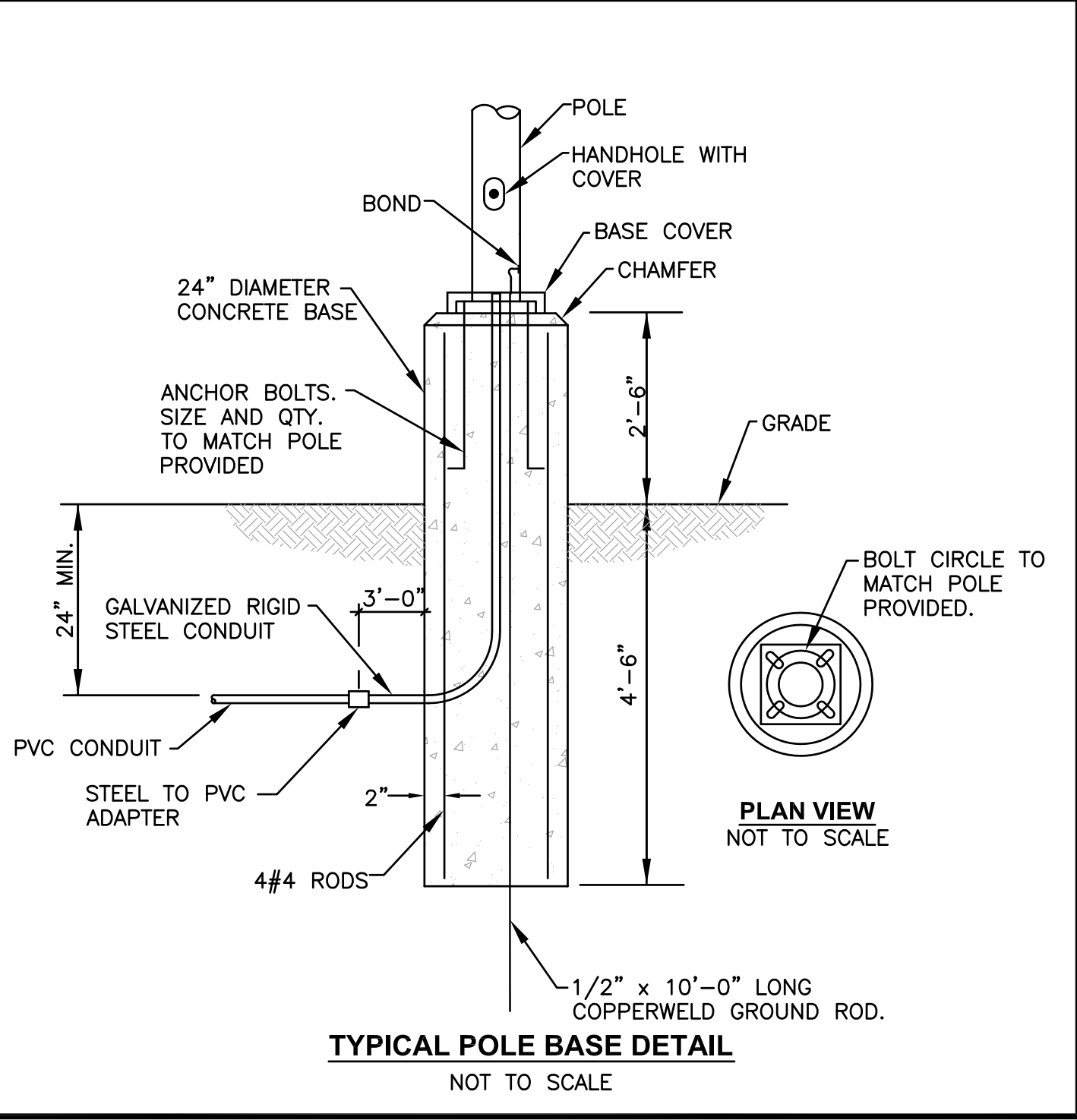
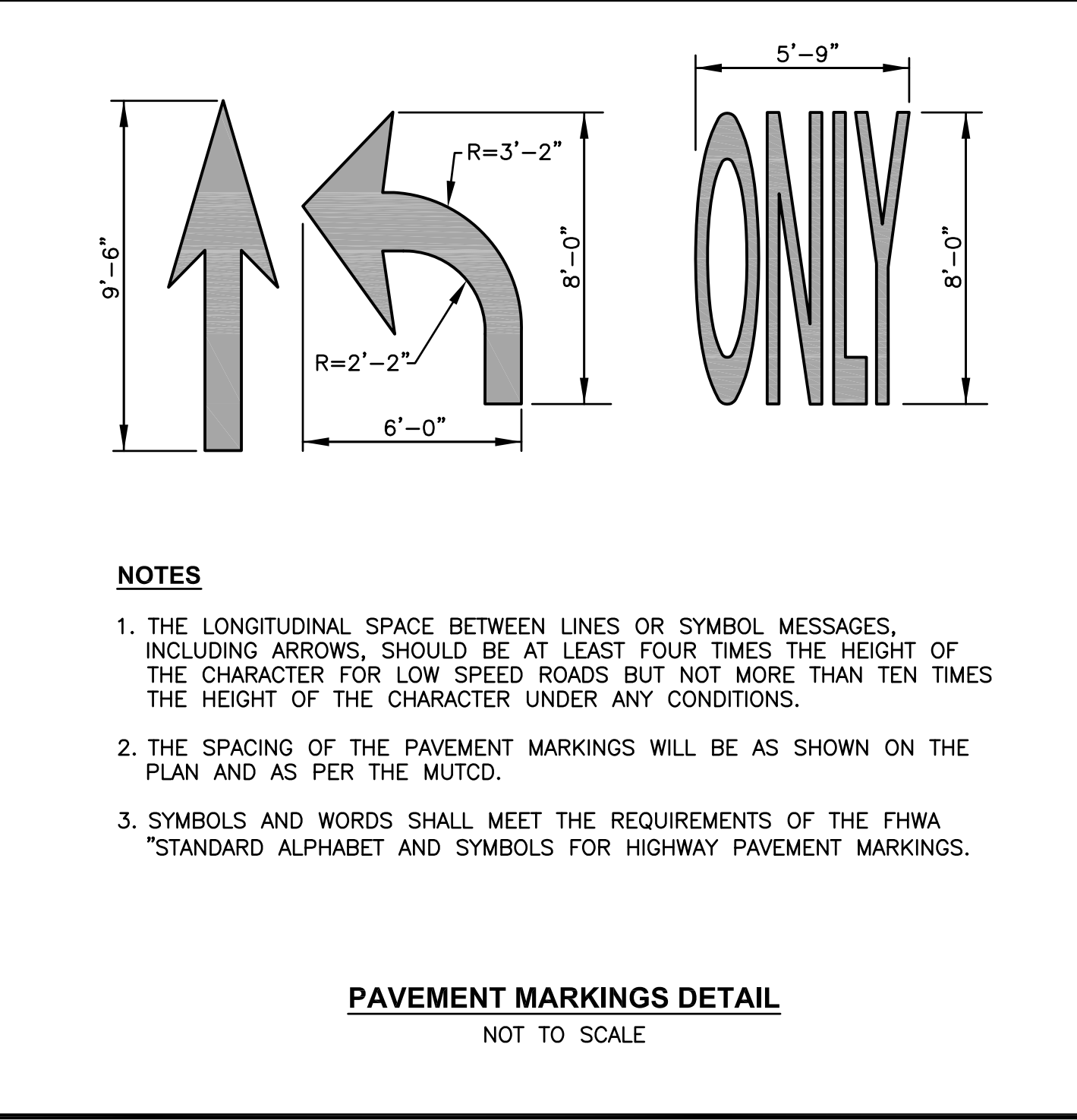
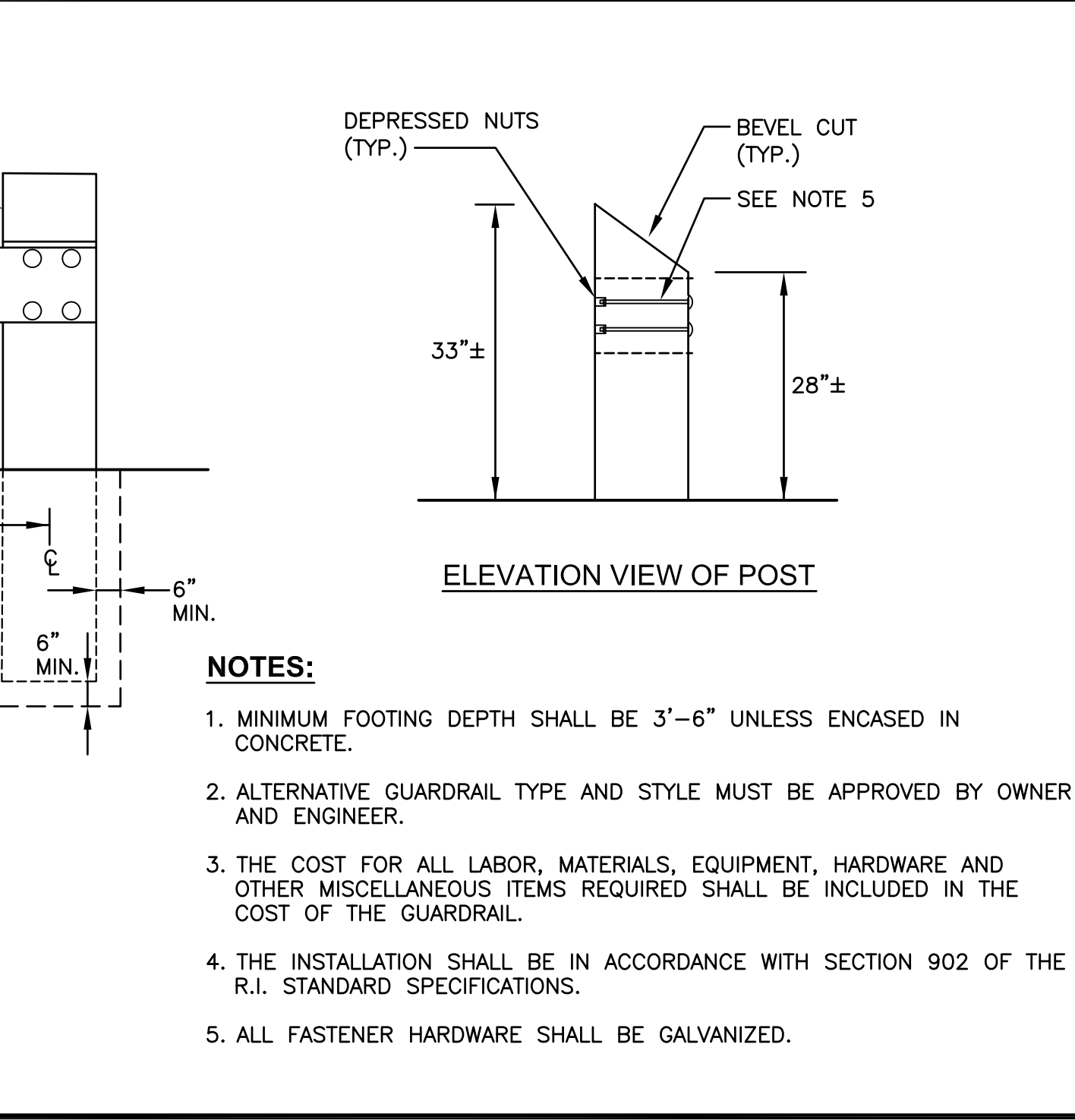
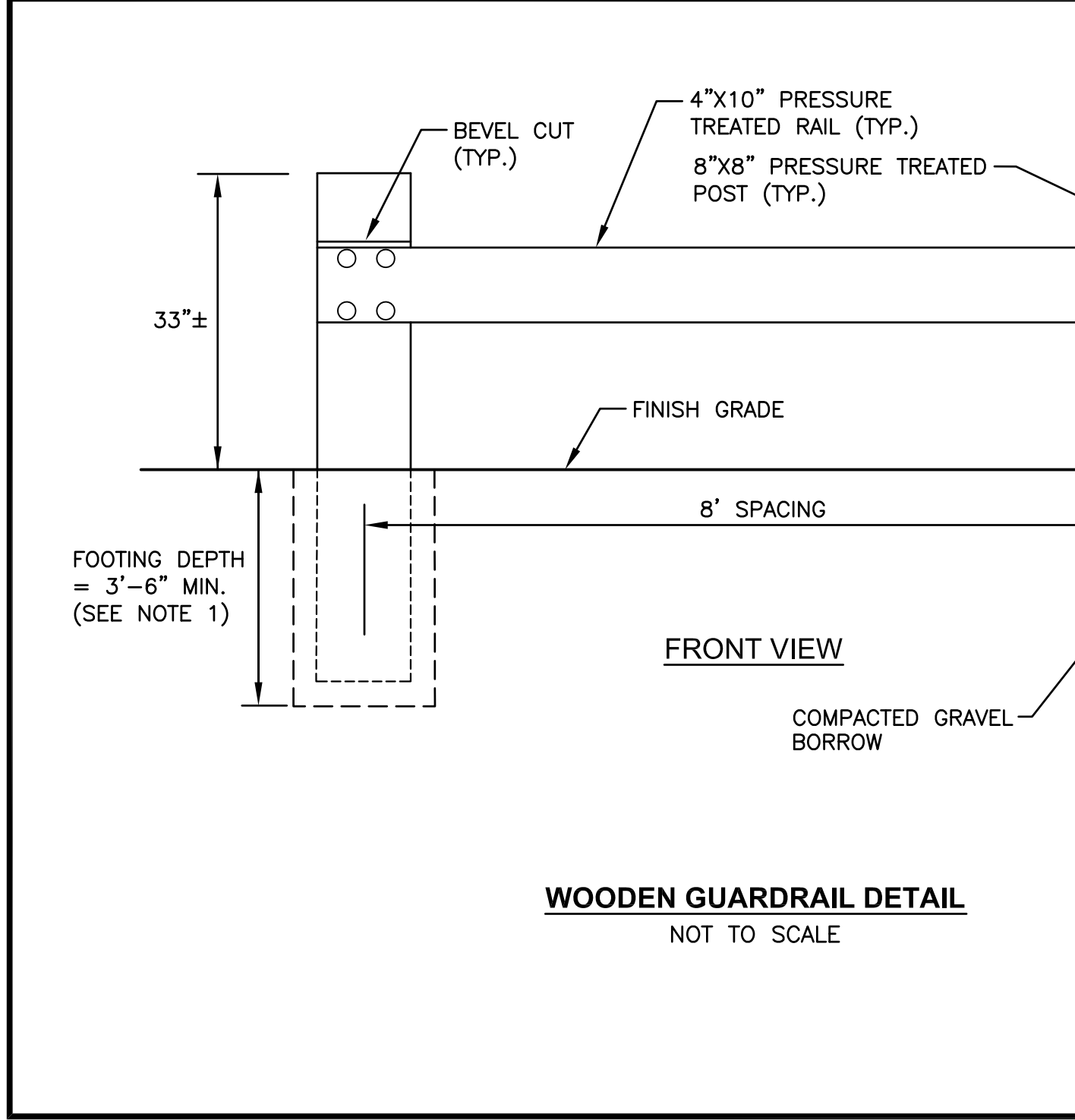
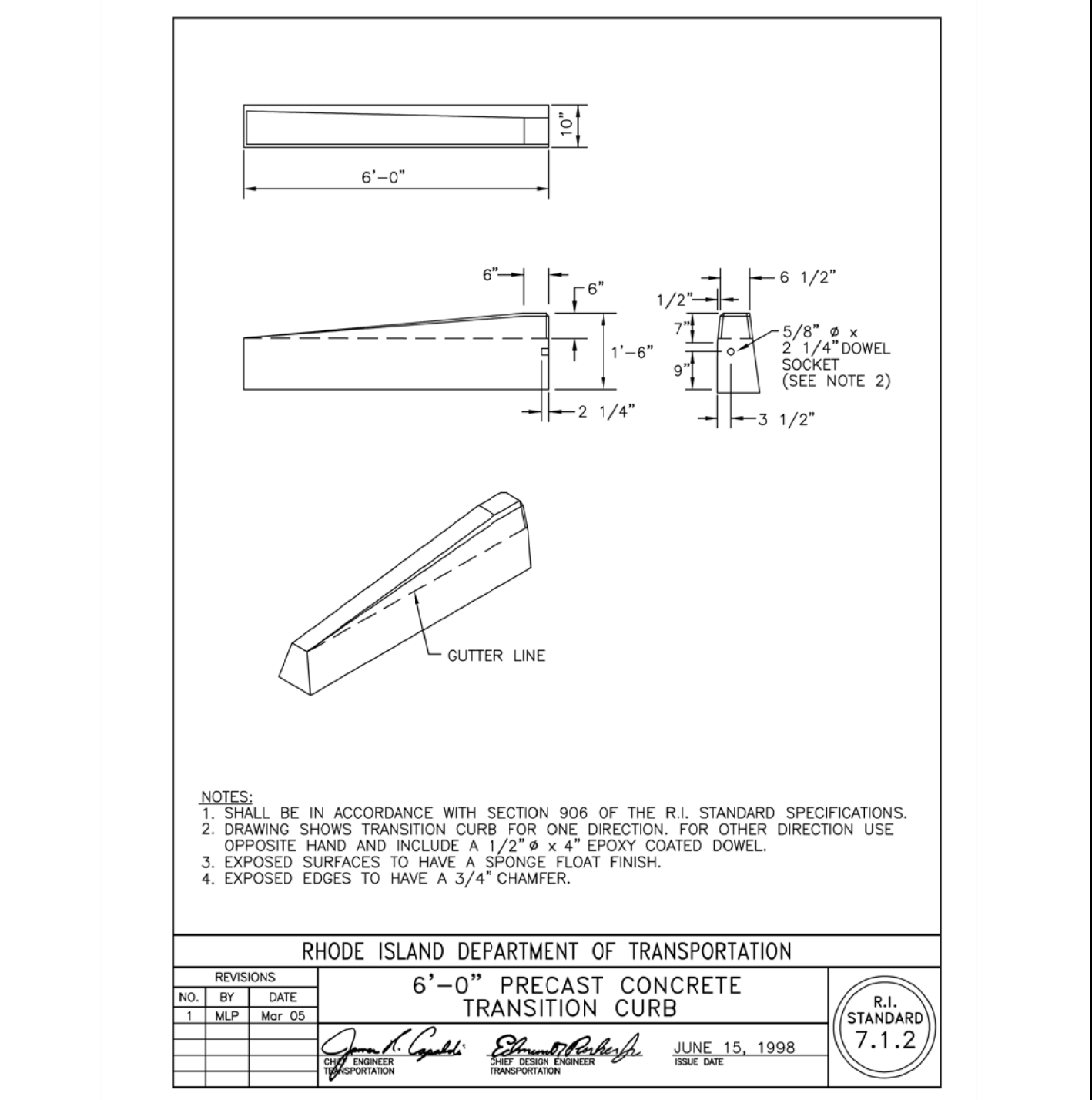
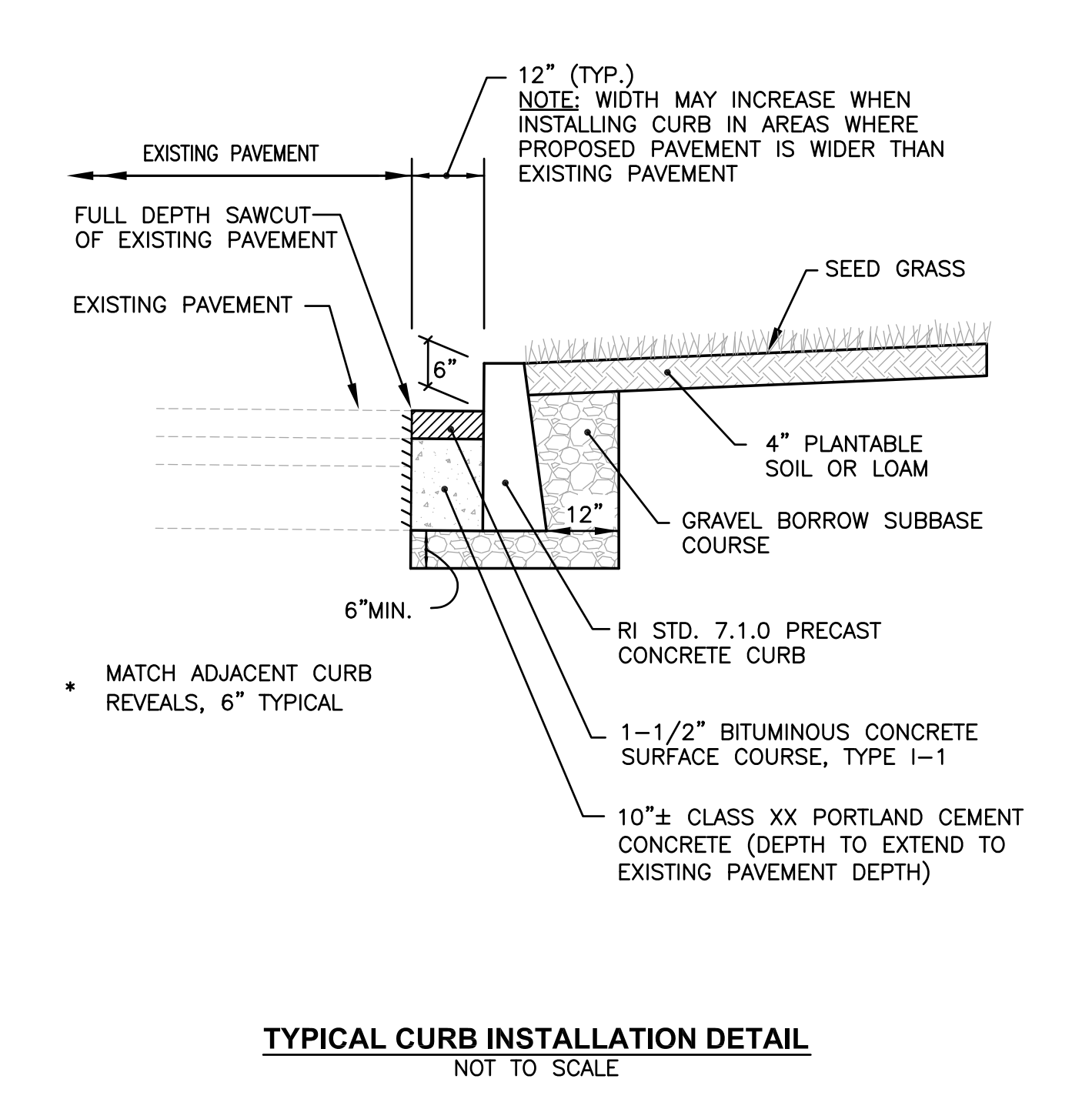
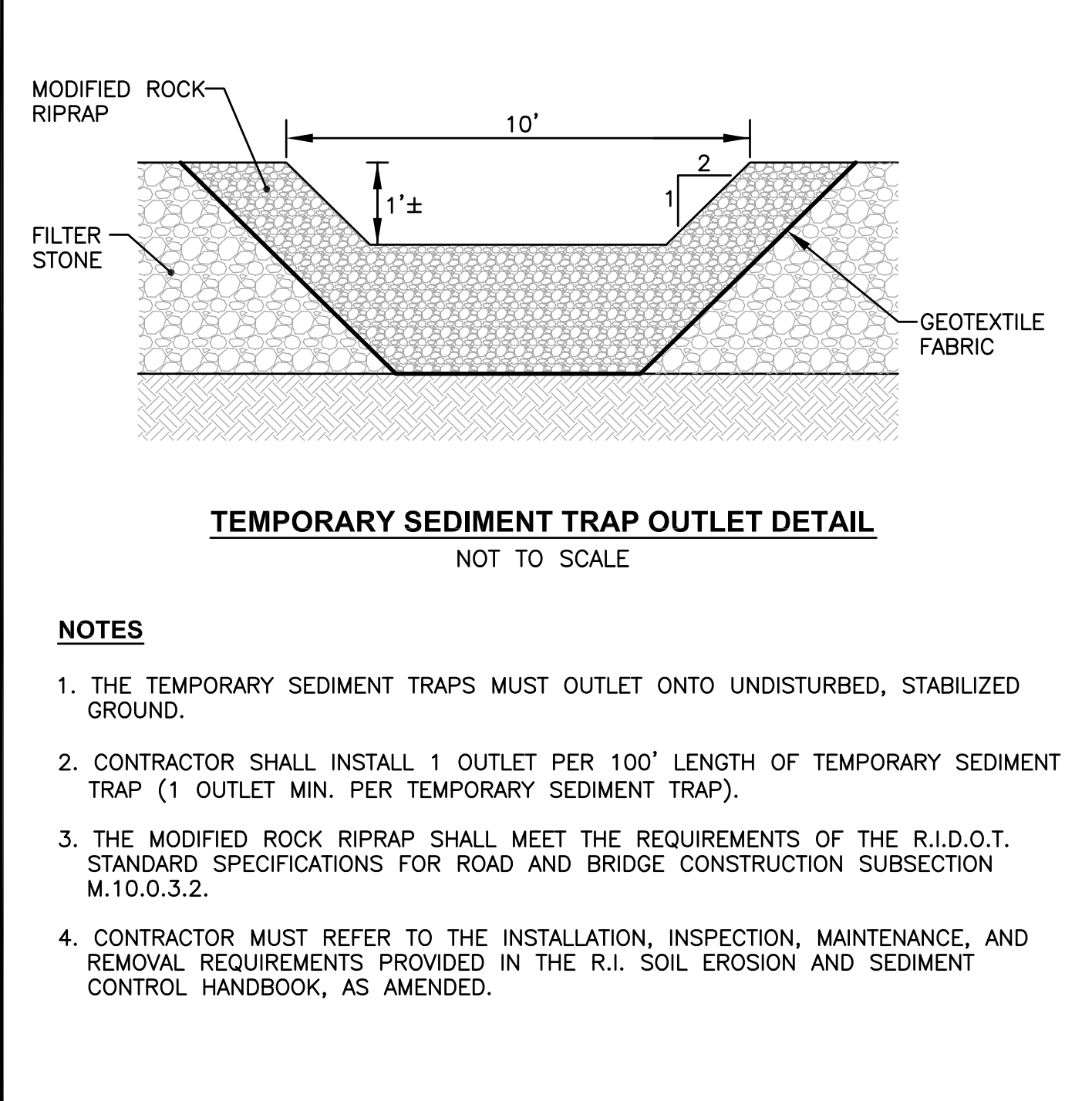
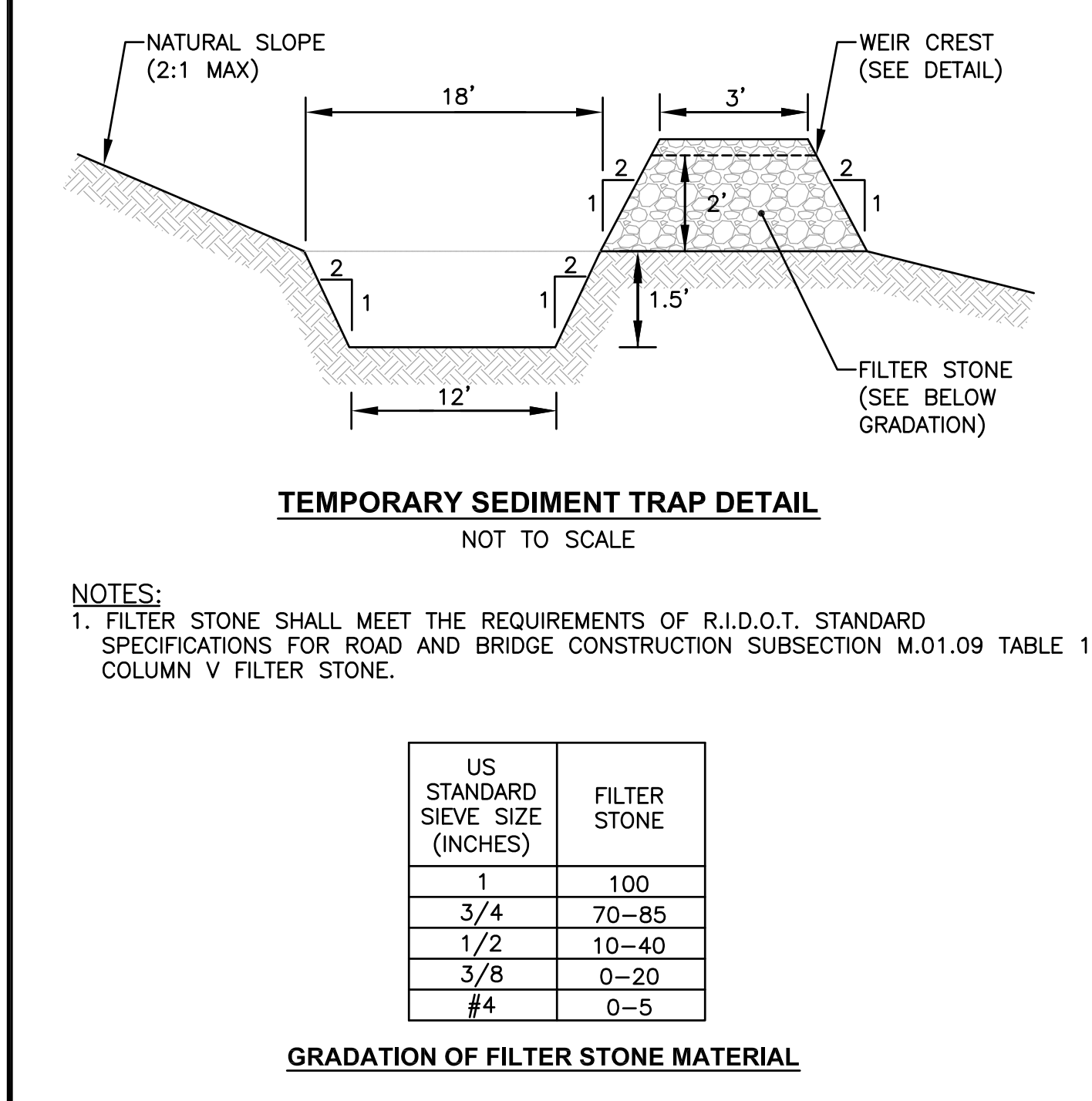
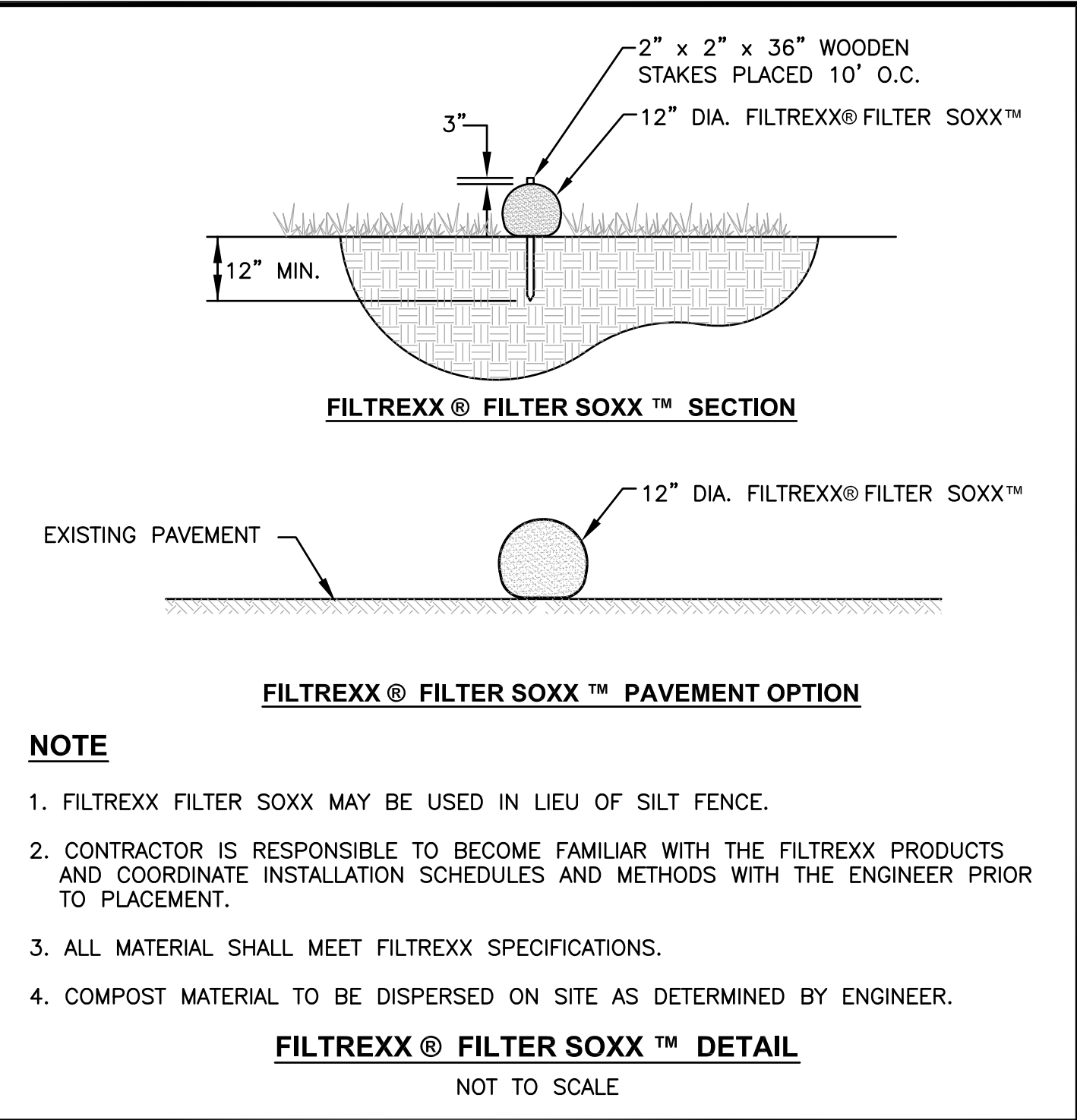
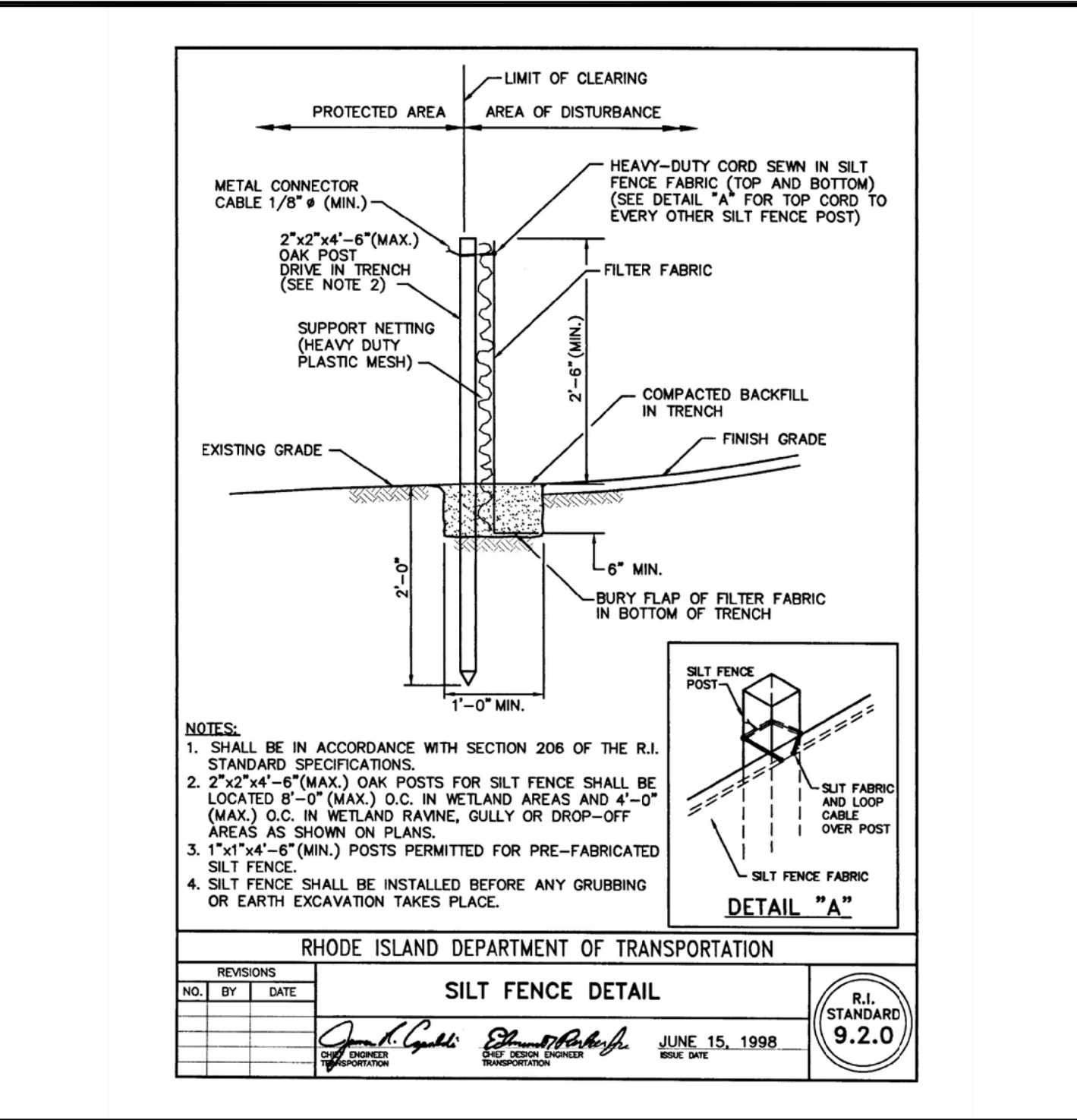
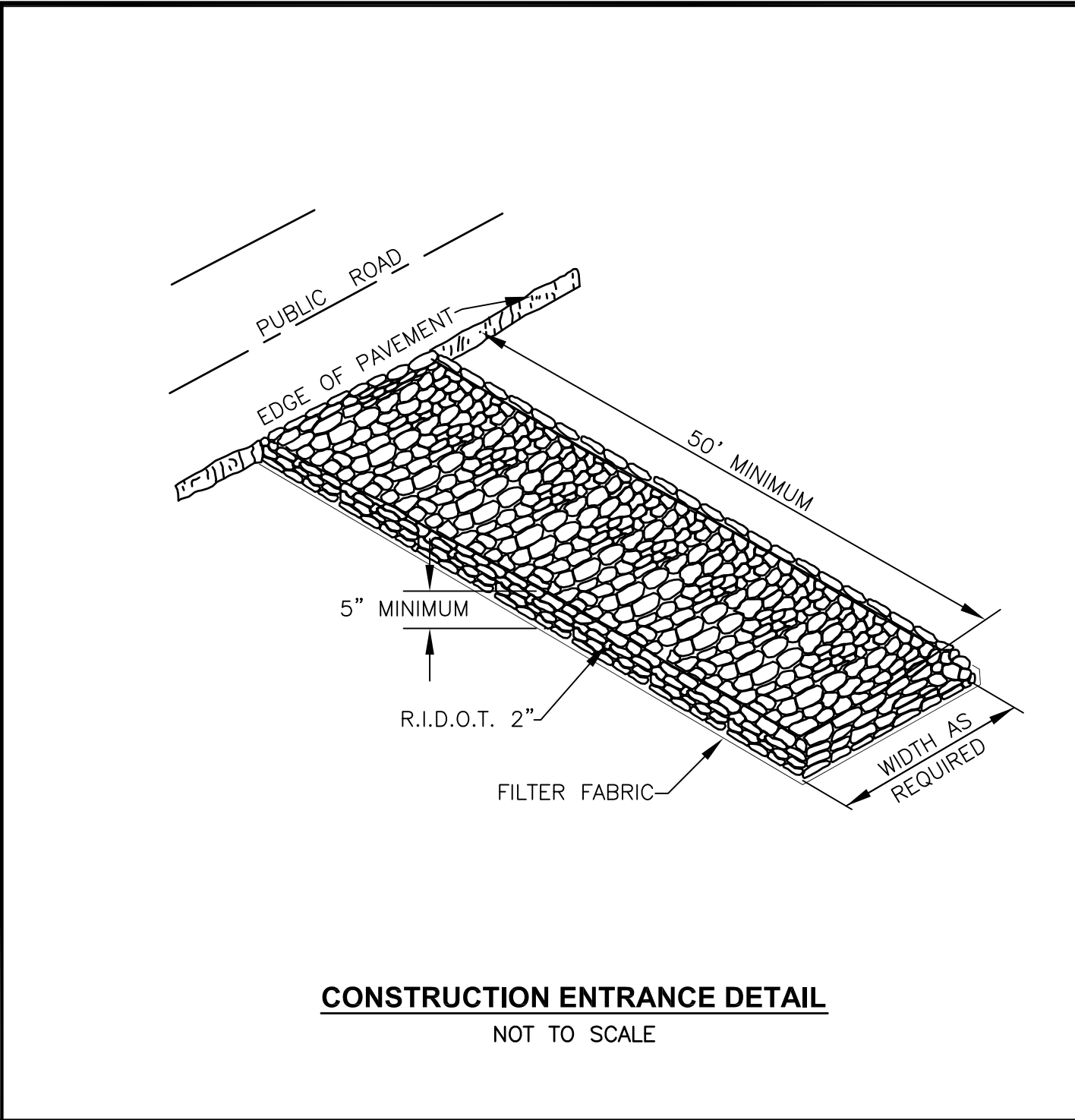
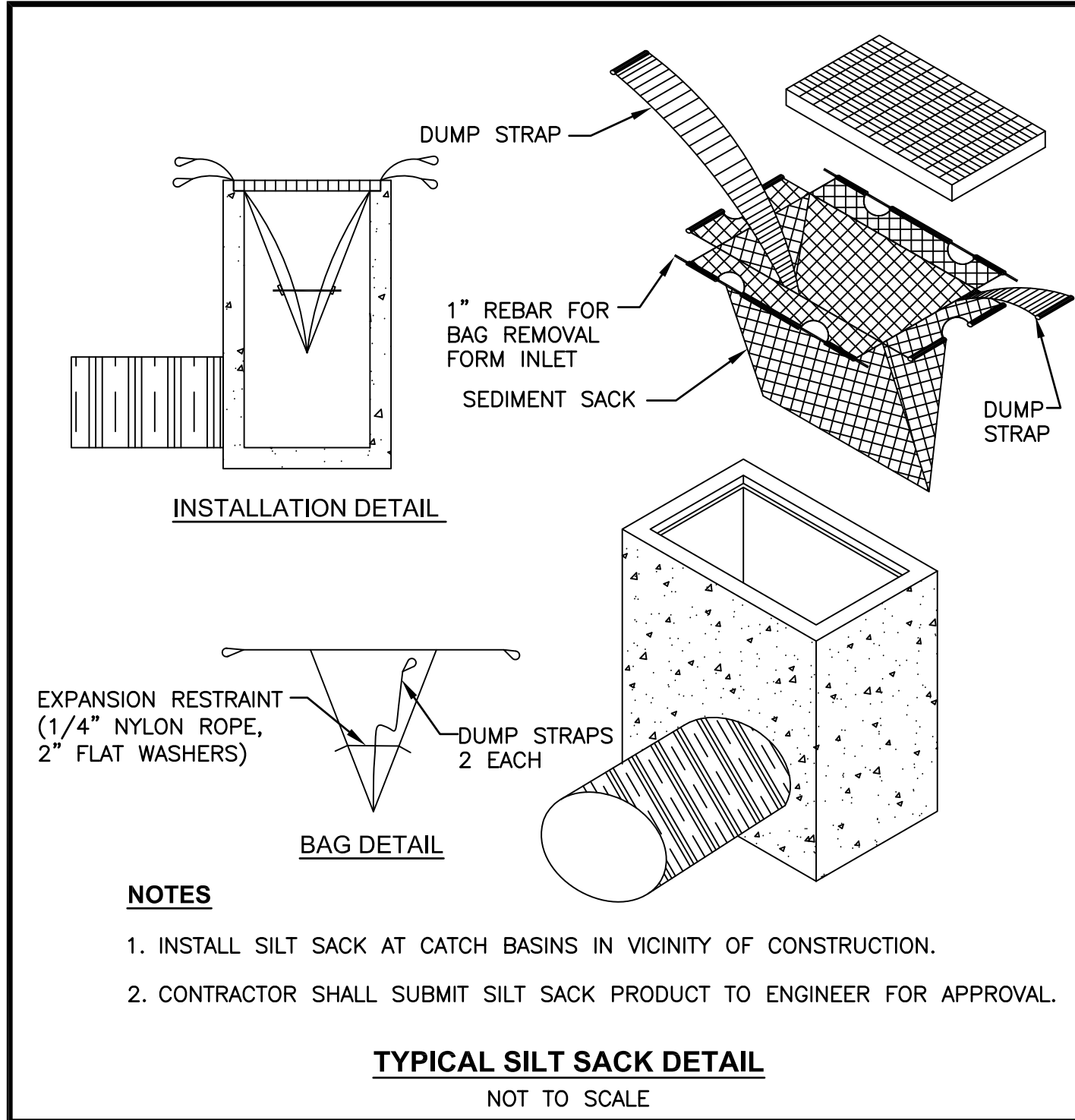
543 THAMES STREET
 NEWPORT, RHODE ISLAND 02840

DRAWING TITLE:
MISCELLANEOUS DETAIL PLAN No. 1

DATE: JULY 2020 SCALE: AS SHOWN
 DWG. NAME: 2449-C09-DETAIL1.dwg

REVISIONS	NUMBER	REMARKS	DATE
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DRAWING NUMBER: **C9**
 SHEET: 10 OF 18



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• Civil
• Transportation
• Environmental
• Site Planning
• Surveying
• Permitting
• Landscape Architecture

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PLAT MAP 32-4, LOT 32
ZONING DISTRICT: CN and R-10
COMMERCIAL NEIGHBORHOOD and
MEDIUM HIGH DENSITY RESIDENTIAL DISTRICT
and KINGSTOWN ROAD
SPECIAL MANAGEMENT DISTRICT
2095 KINGSTOWN ROAD (ROUTE 108)
SOUTH KINGSTOWN, R.I.

PREPARED FOR:
TOWER HILL LANDINGS, LLC

543 THAMES STREET
NEWPORT, RHODE ISLAND
02840

DRAWING TITLE:
**MISCELLANEOUS DETAIL
PLAN No. 2**

DATE: JULY 2020
SCALE: AS SHOWN

DWG. NAME: 2449-C10-DETAIL2.dwg

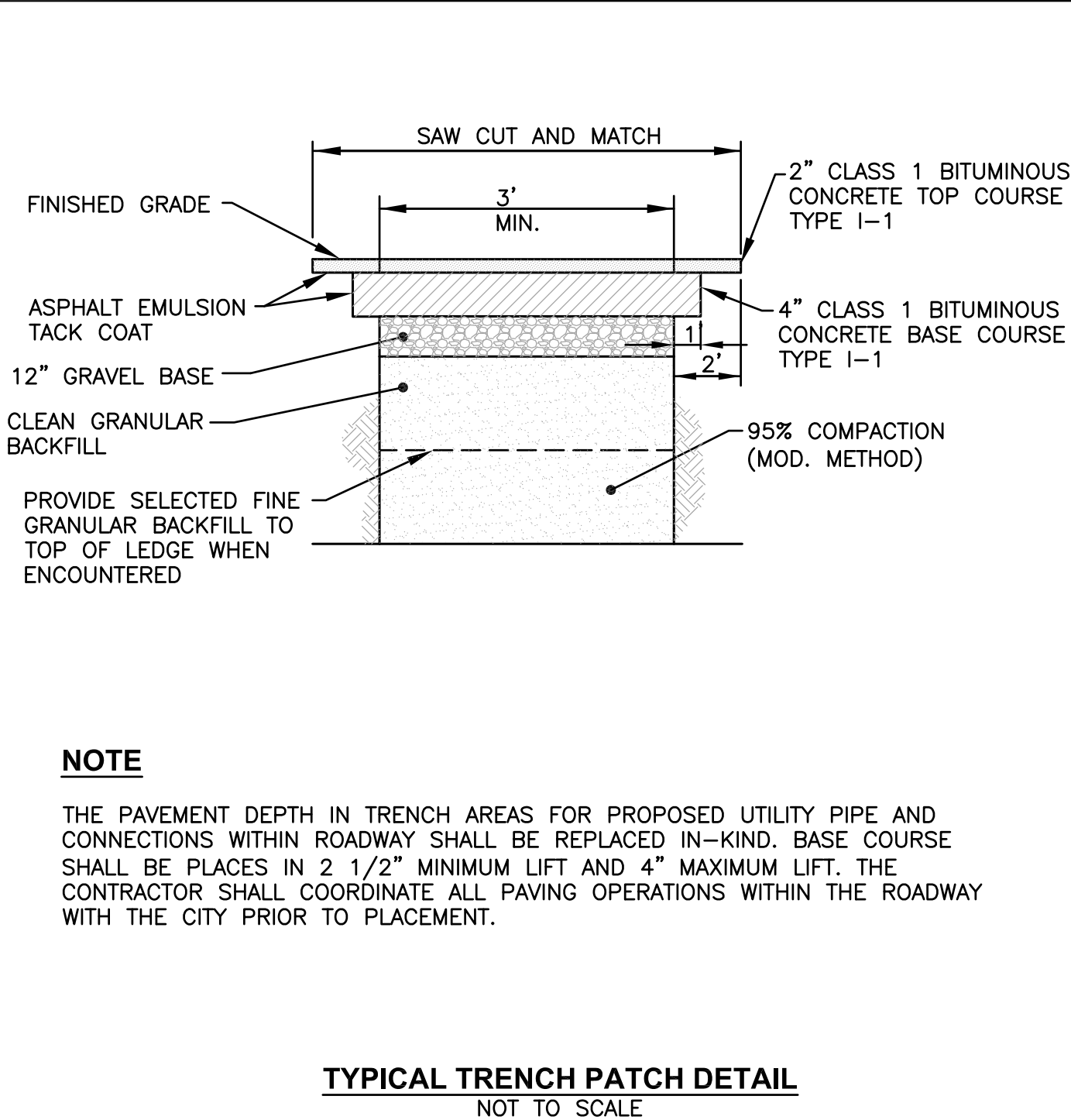
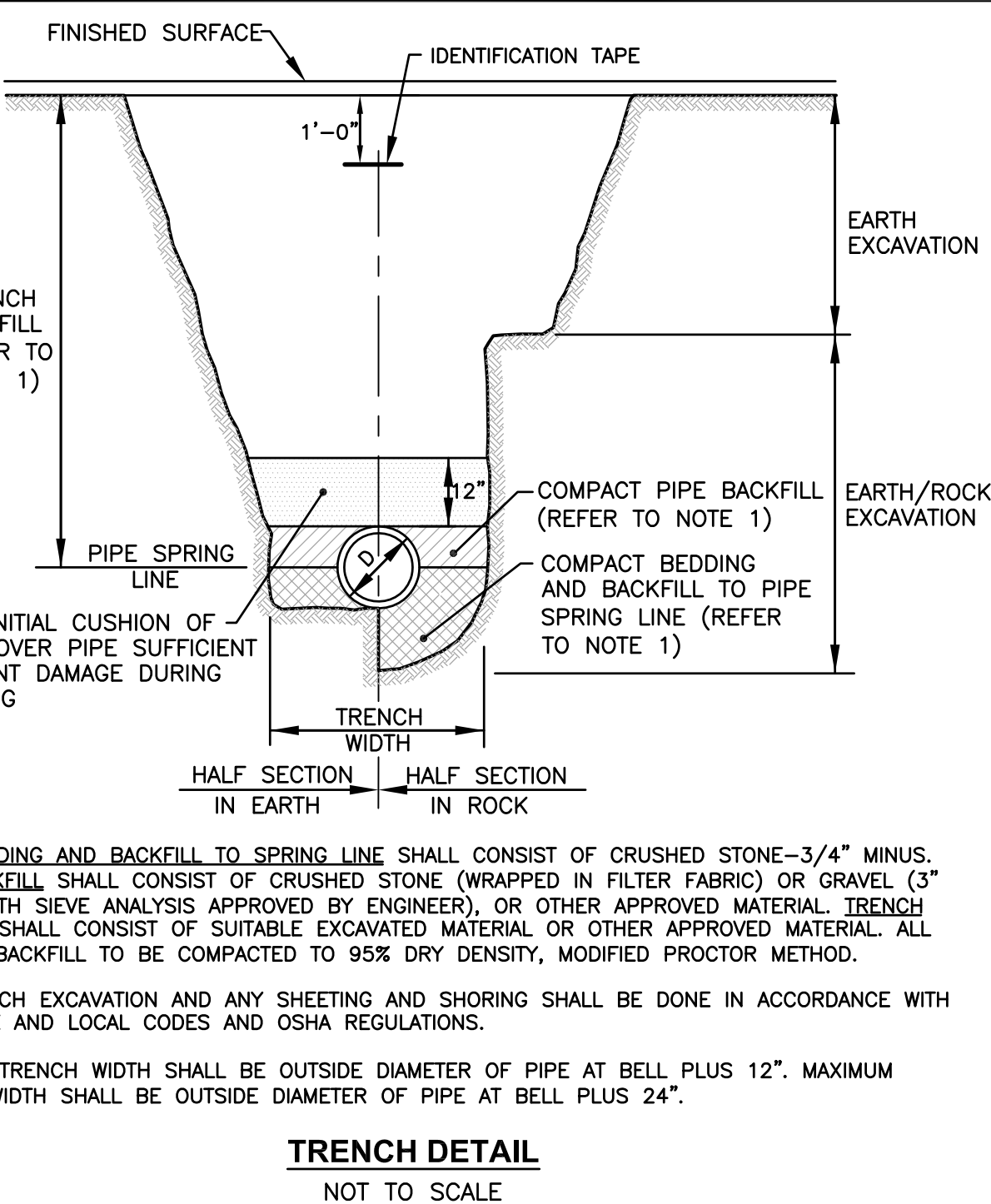
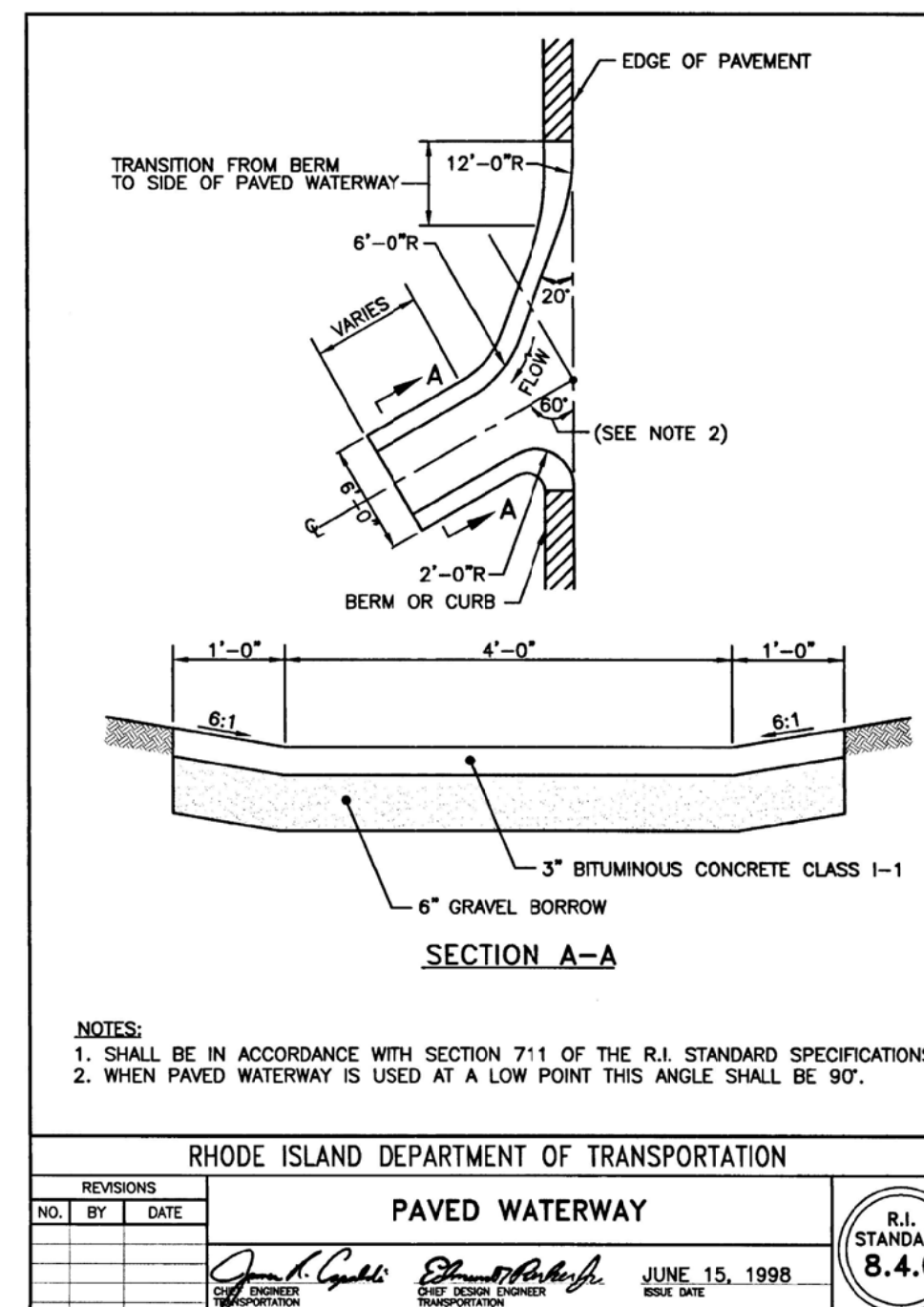
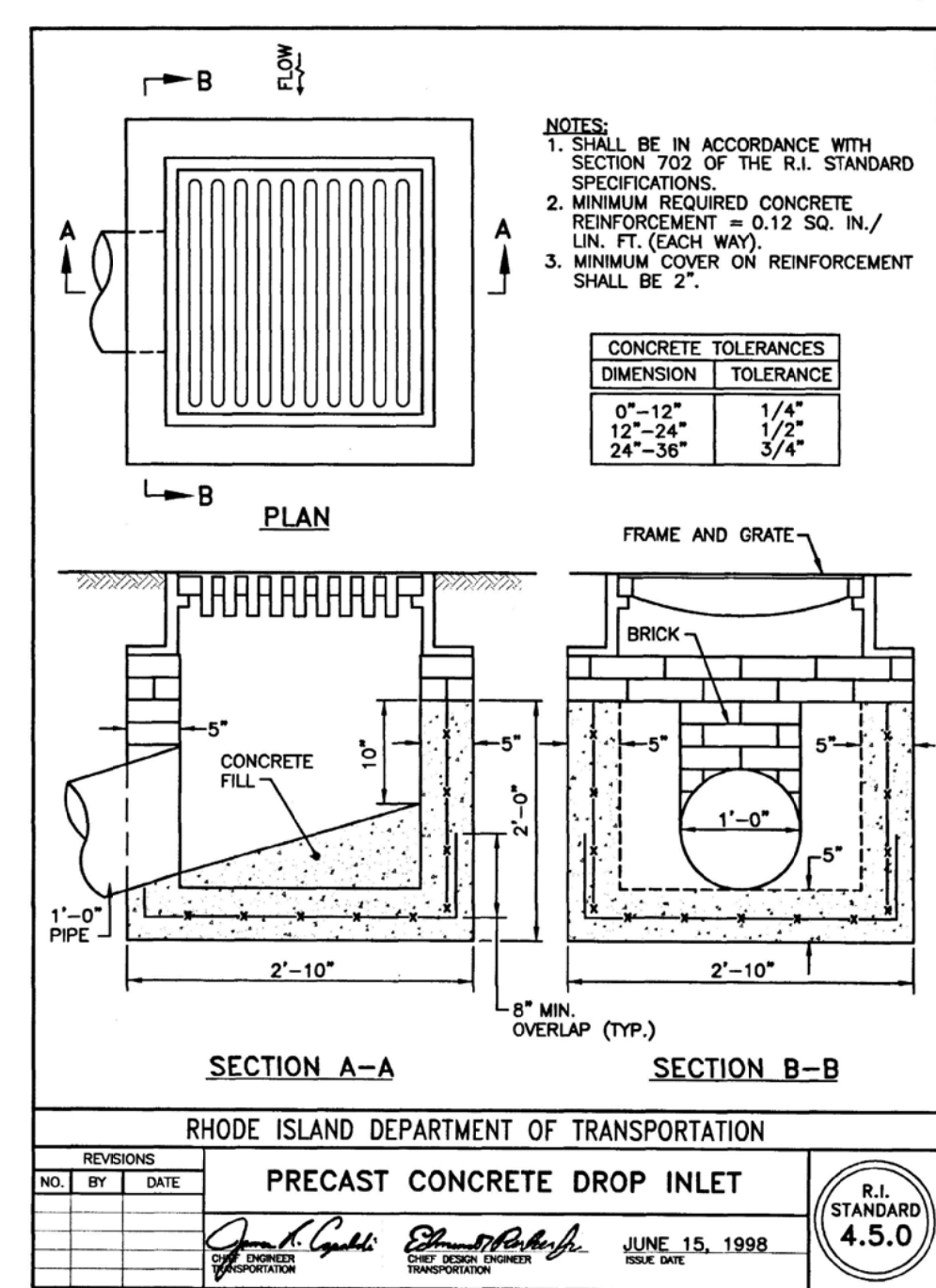
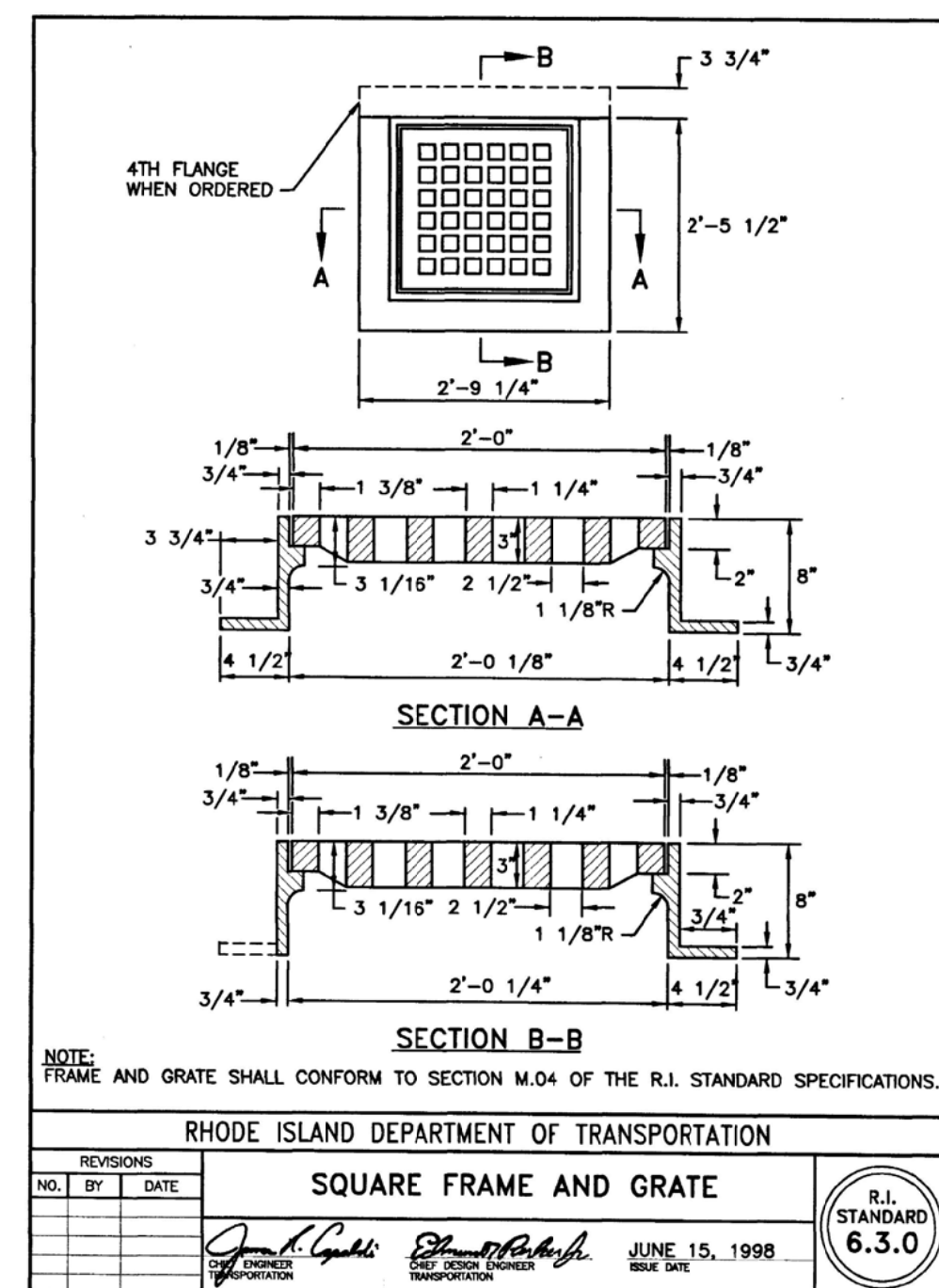
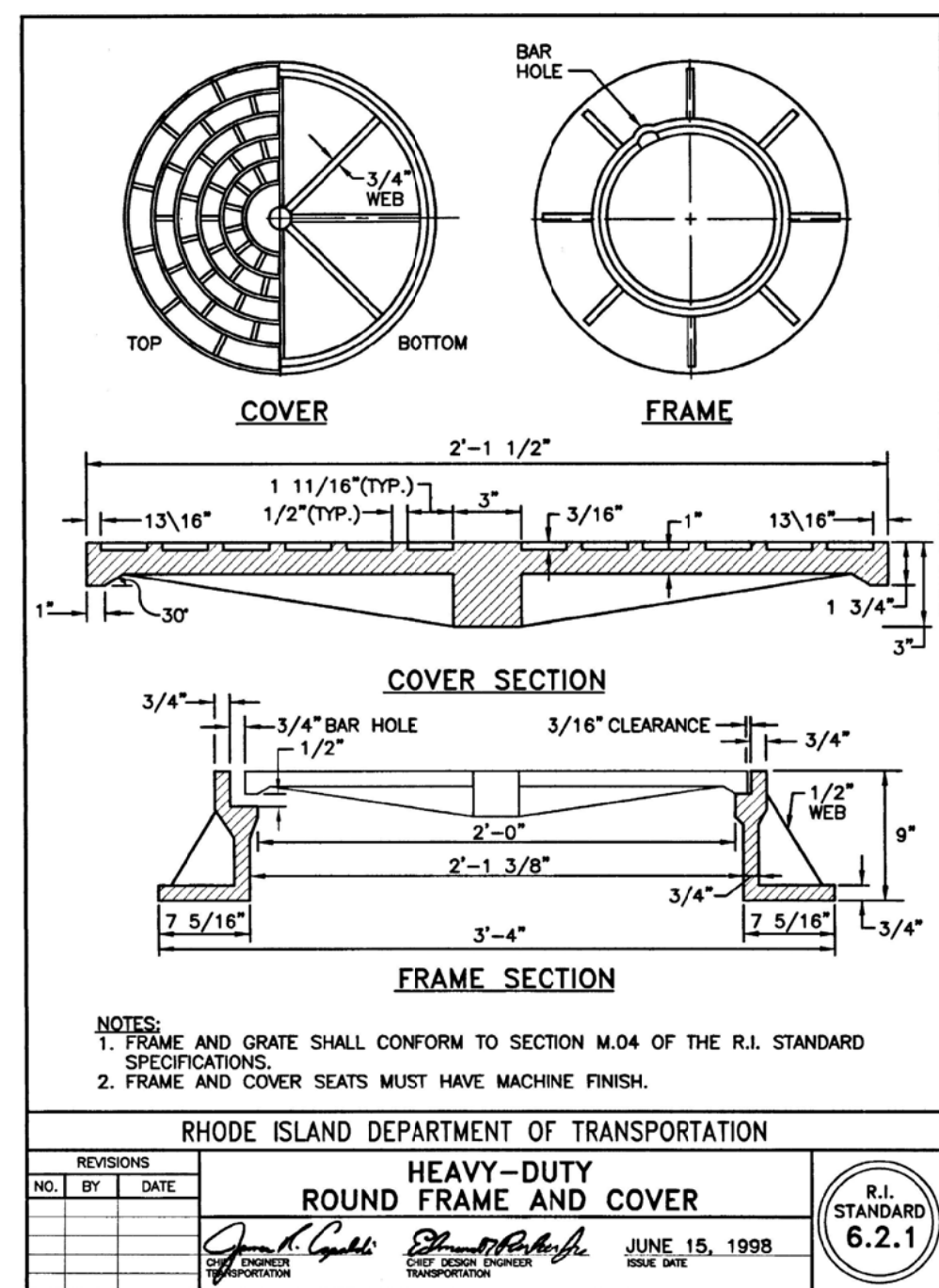
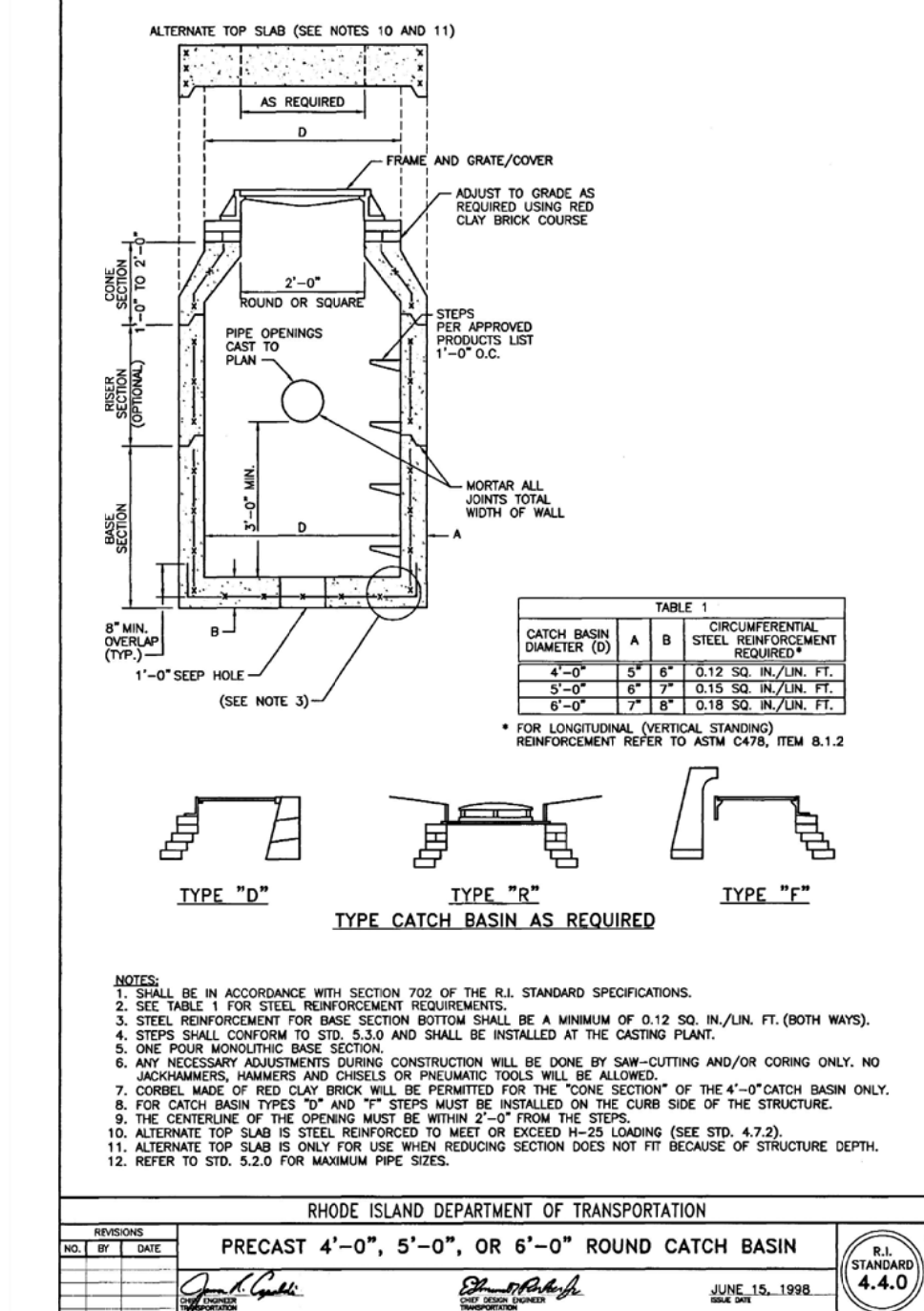
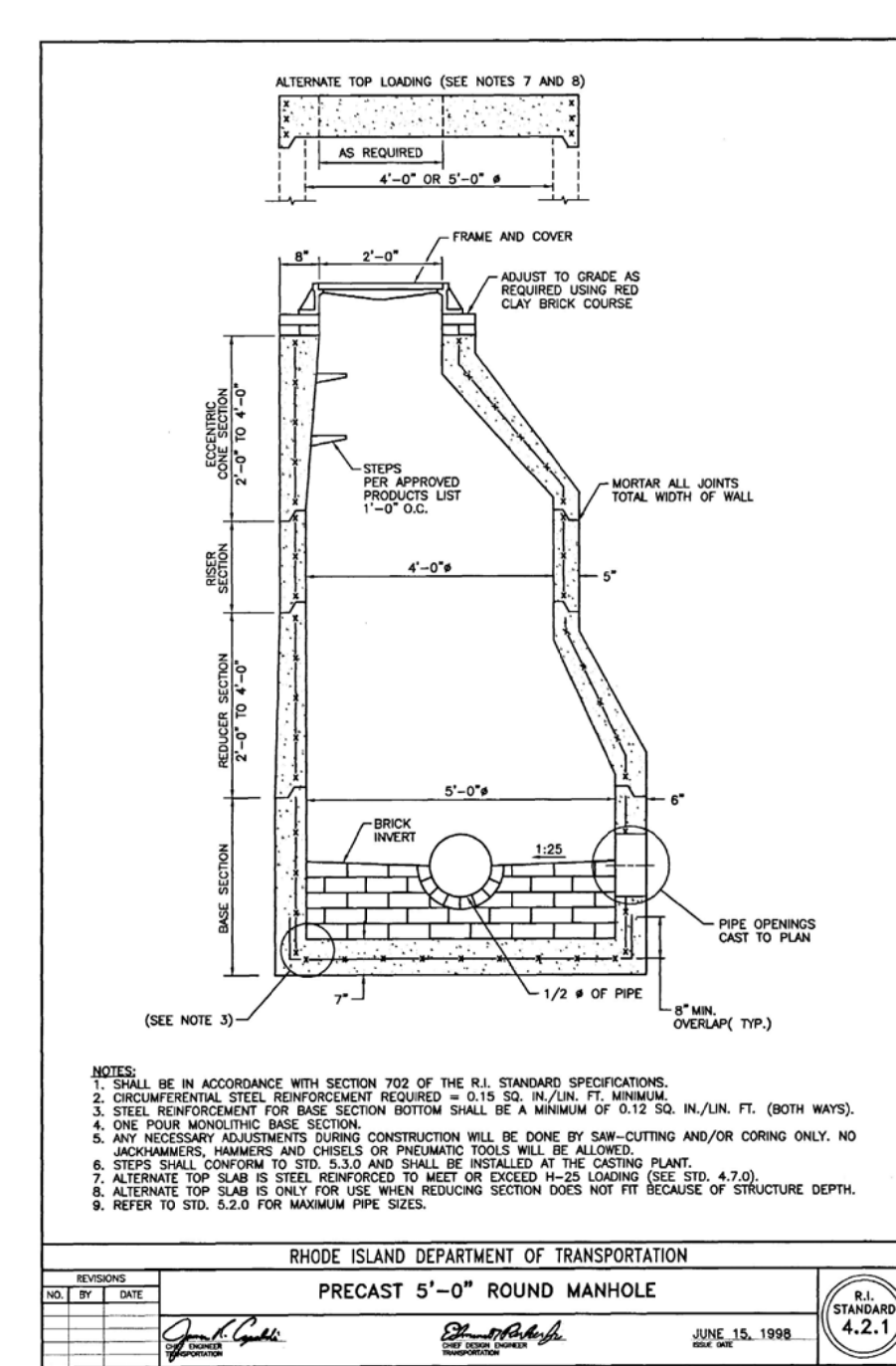
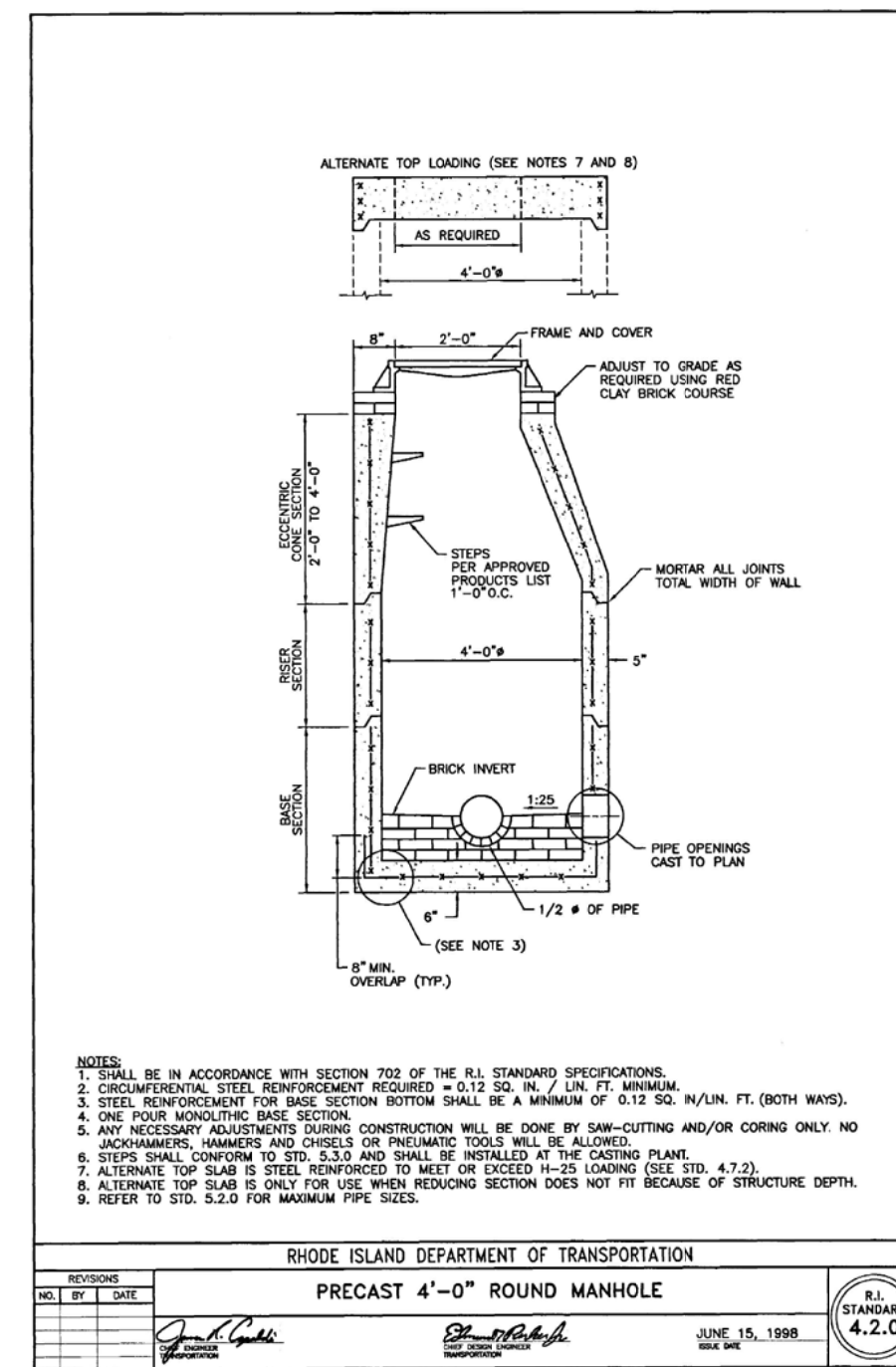
REVISIONS	NUMBER	REMARKS	DATE
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DRAWING NUMBER
C10

SHEET: 11 OF 18

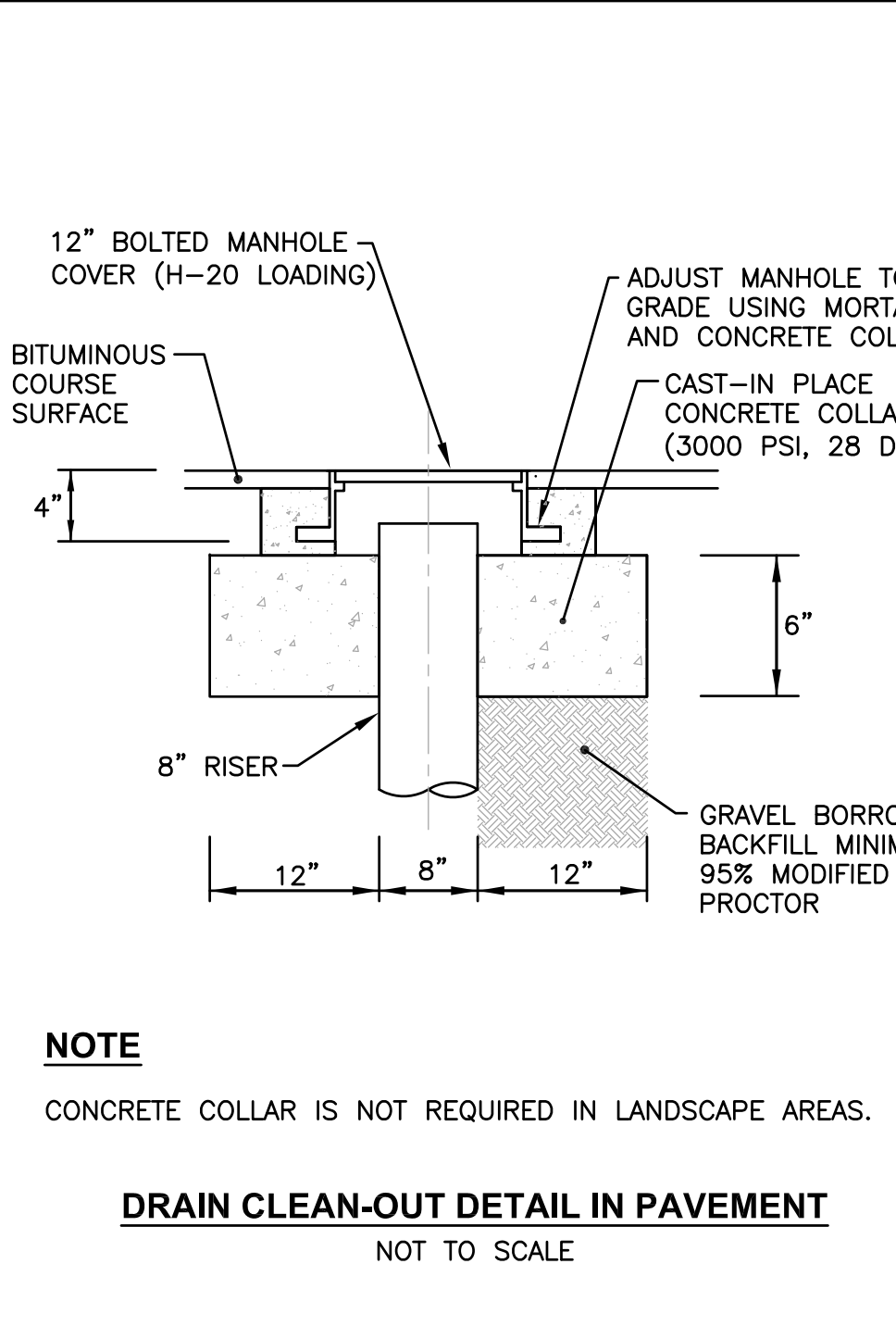
DRAINAGE NOTES

1. CONTRACTOR TO VERIFY THAT ALL STRUCTURES ARE COMPATIBLE WITH FRAME AND GRATE.
2. CONTRACTOR IS RESPONSIBLE TO PROVIDE SHOP DRAWINGS AND SPECIFICATIONS FOR ALL DRAINAGE RELATED ITEMS FOR REVIEW AND APPROVAL BY THE ENGINEER, PRIOR TO ORDERING. CONCRETE MANUFACTURER SHALL REVIEW RIM TO TOP OF PIPE ELEVATIONS AND PROVIDE SPECIFIC DETAILS.
3. ALL STRUCTURES SHALL BE DESIGNED FOR H-20 LOADING.
4. ALL CATCH BASINS SHALL BE PRECAST CONCRETE WATER TIGHT STRUCTURES. (NO WEEP HOLES).
5. UNLESS OTHERWISE NOTED, ALL SOLID DRAINAGE PIPE SHALL BE ADS N-12 HDPE OR APPROVED EQUAL. PIPE BEDDING SHALL BE IN CRUSHED STONE OR GRAVEL BORROW COMPACTED TO 95% DRY DENSITY (MODIFIED PROCTOR METHOD). ADS PIPE SHALL BE INSTALLED ACCORDING TO MANUFACTURERS' REQUIREMENTS. PIPES SHALL BE INSTALLED WITH CLAY TRENCH DAMS EVERY 50' (MINIMUM 1 PER PIPE).
6. GRADES WITHIN HANDICAP ACCESSIBLE PARKING SPACES AND AISLES SHALL NOT BE LESS THAN 1% OR GREATER THAN 2%.
7. ALL ROOF DRAINS SHALL BE INSTALLED AT A 1.0% MINIMUM SLOPE.
8. CONTRACTOR MAY NEED TO RELOCATE PIPE TO AVOID CONFLICTS WITH EXISTING UTILITIES. COORDINATE RELOCATION WITH ENGINEER. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR DAMAGE TO EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE TO INCLUDE ALL WORK NECESSARY TO INSTALL THIS PIPE, INCLUDING TRANSPLANTING OR PLANTING NEW TREES IF NECESSARY.



TRENCH WIDTH W_s OR W_u

DIAMETER OF PIPE D	W_u	
	UNSHEETED	SHEETED
12" AND SMALLER	3'-4"	4'-6"
15"	3'-6"	4'-8"
18"	3'-10"	5'-0"
21"	4'-2"	5'-4"
24"	4'-6"	5'-8"
27"	4'-10"	6'-0"
30"	5'-6"	6'-8"
36"	6'-2"	7'-4"
42"	6'-10"	8'-0"
48"	7'-6"	8'-8"



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PLAT MAP 32-4, LOT 32
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2095 KINGSTOWN ROAD (ROUTE 108) SOUTH KINGSTOWN, R.I.

PREPARED FOR:
TOWER HILL LANDINGS, LLC

543 THAMES STREET
NEWPORT, RHODE ISLAND 02840

DRAWING TITLE:
MISCELLANEOUS DETAIL PLAN No. 3

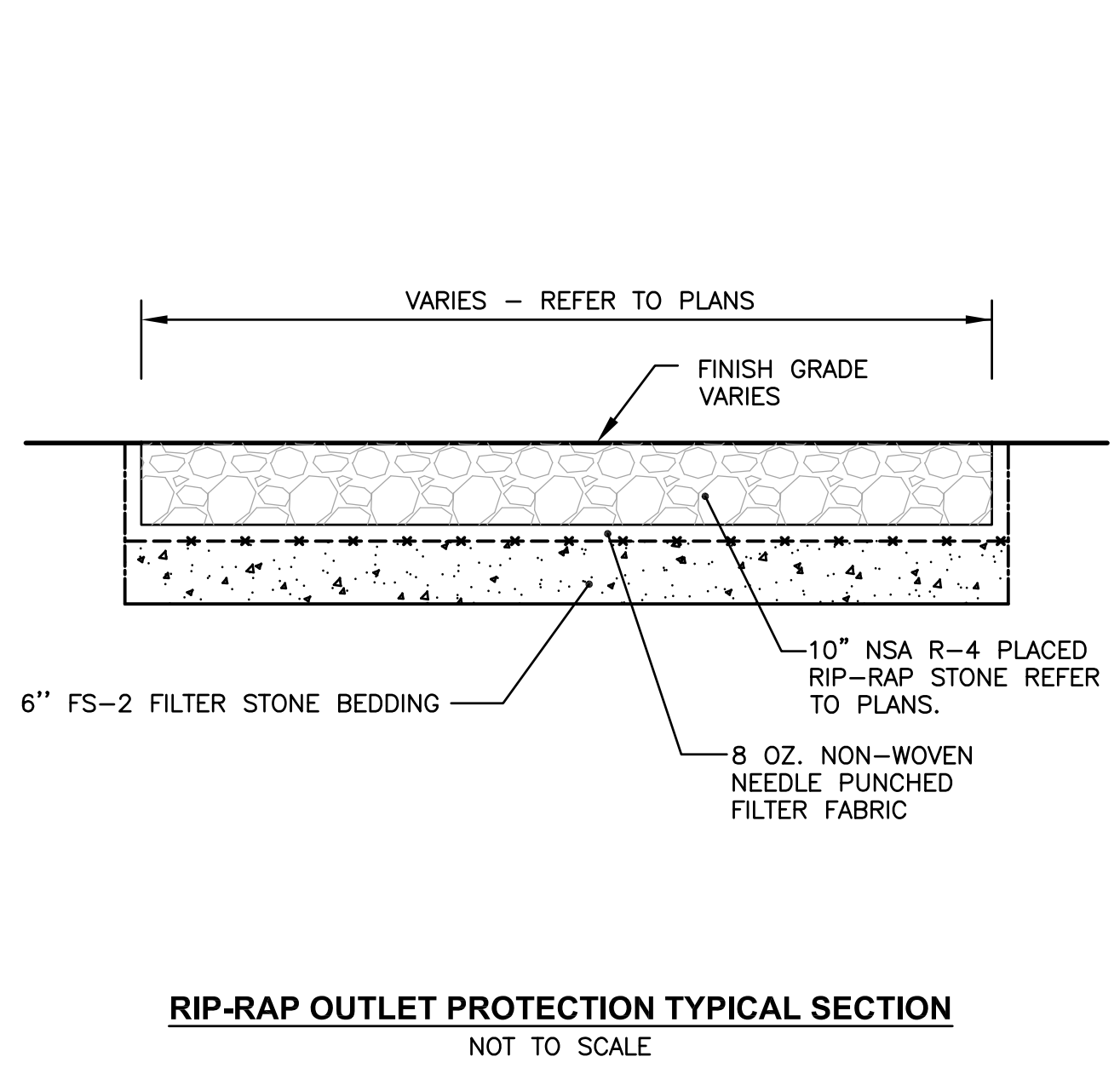
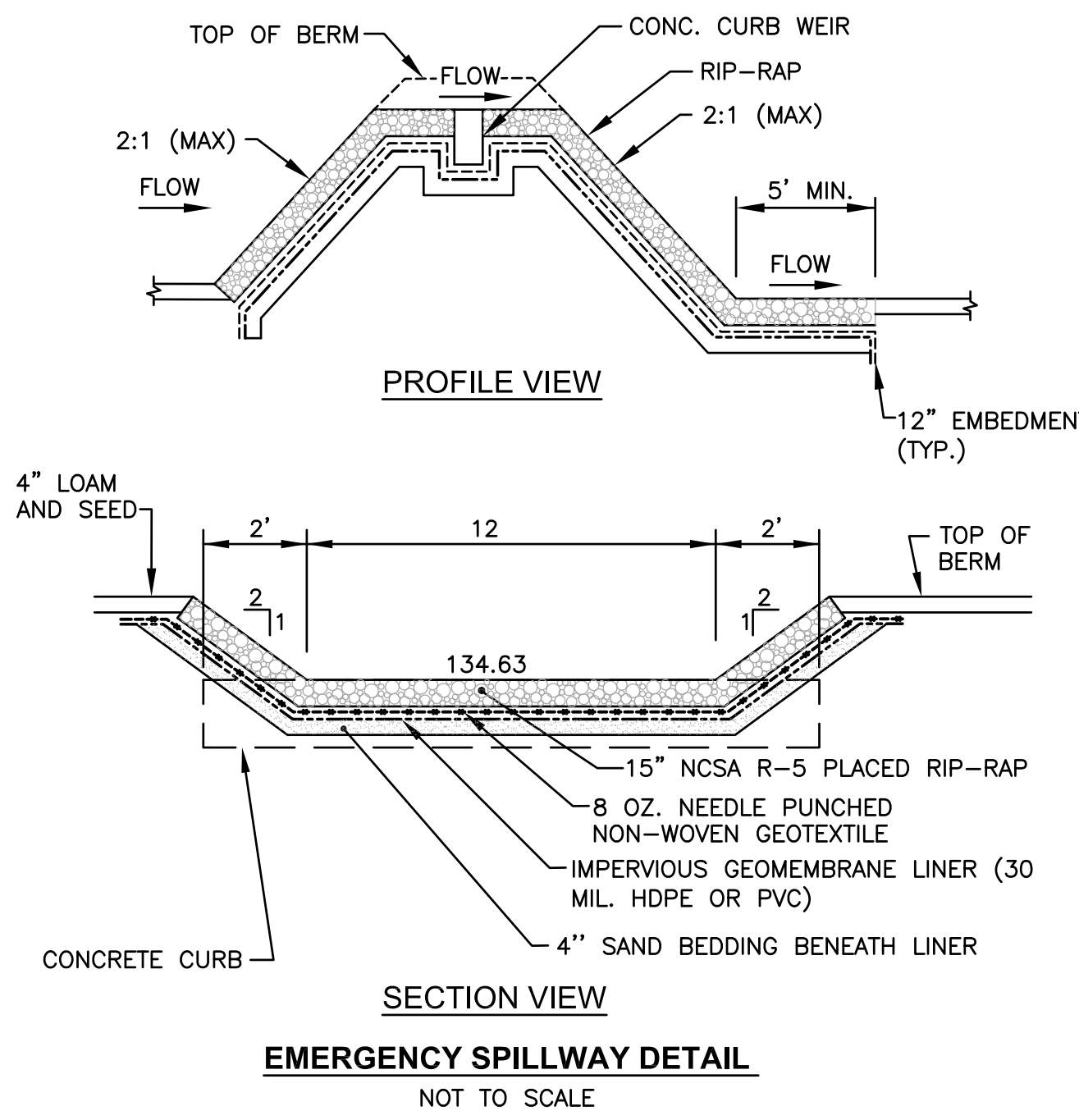
DATE: JULY 2020 SCALE: AS SHOWN
DWG. NAME: 2449-C11-DETAIL3.dwg

REVISIONS	NUMBER	REMARKS	DATE
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DRAWING NUMBER
C11
SHEET 12 OF 18

SAND FILTER and DETENTION SYSTEM CONSTRUCTION NOTES

- WITHIN THE SAND FILTER, THE CONTRACTOR SHALL REMOVE ALL TOPSOIL AND SUBSOIL AREAS (A AND B HORIZONS) AND ANY EXISTING SOILS THAT YIELD A PERMEABILITY RATE <0.27 INCHES/HOUR. CONTRACTOR SHALL COORDINATE A BOTTOM BED INSPECTION WITH OWNER AND ENGINEER. IF NECESSARY THE AREA SHALL BE PREPARED WITH SAND FILL SOIL MEETING THE MEDIA REQUIREMENTS OF SAND FILTERS, AS DESCRIBED IN THE RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, LATEST EDITION. THE DEPTH OF EXISTING SOIL REMOVAL SHALL BE VERIFIED BY THE ENGINEER. PLACEMENT OF THE SAND FILL (ASTM C-33 SAND), SHALL BE USED TO BRING THE BOTTOM OF BASIN TO THE DESIGN ELEVATIONS.
- SAND FILTER CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, LATEST EDITION. AFTER CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE FINAL INSPECTIONS WITH THE OWNER.
- THE CONTRACTOR IS REQUIRED TO SUBMIT A LIST OF MATERIALS, GRADATIONS AND THE NAME AND ADDRESS OF THE SUPPLIERS TO THE ENGINEER FOR APPROVAL PRIOR TO BRINGING MATERIAL ON SITE. MATERIAL CERTIFICATIONS SHALL ALSO BE REQUIRED FOR REVIEW AND APPROVAL.
- THE CONTRACTOR IS RESPONSIBLE TO BECOME FAMILIAR WITH THE ABOVE REFERENCED MANUAL. THE MANUAL CAN BE FOUND AT: <http://www.dem.ri.gov/pubs/regs/regs/water/swmanual15.pdf>
- GREAT CARE MUST BE TAKEN TO PREVENT THE INFILTRATION AREA FROM COMPACTION; BY MARKING OFF THE SAND FILTER PERIMETER BEFORE THE START OF CONSTRUCTION, AND BY CONNECTING UPSTREAM DRAINAGE AREAS ONLY AFTER CONSTRUCTION IS COMPLETE AND THE CONTRIBUTING AREA IS STABILIZED.
- IF LARGE ROCKS OR BOULDERS ARE FOUND WITHIN 36" BELOW THE INFILTRATION SYSTEMS, OR WITHIN A 10' PERIMETER AROUND SYSTEM, THE CONTRACTOR SHALL REMOVE THE ROCKS/BOULDERS AND REPLACE WITH GRAVEL BORROW. CONTRACTOR SHALL COORDINATE WITH ENGINEER.
- THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS FOR THE PIPES TO BE USED IN THE UNDERGROUND DETENTION SYSTEM TO THE ENGINEER PRIOR TO CONSTRUCTION. THE SHOP DRAWINGS MUST VERIFY THAT THE PIPES CAN SUPPORT H-20 LOADING WITH THE SYSTEM SPECIFIC COVER.
- ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE MANUFACTURER'S REQUIREMENTS AND SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATE WITH A STORMTRAP REPRESENTATIVE FOR INSTALLATION SPECIFICATIONS AND PROCEDURES.



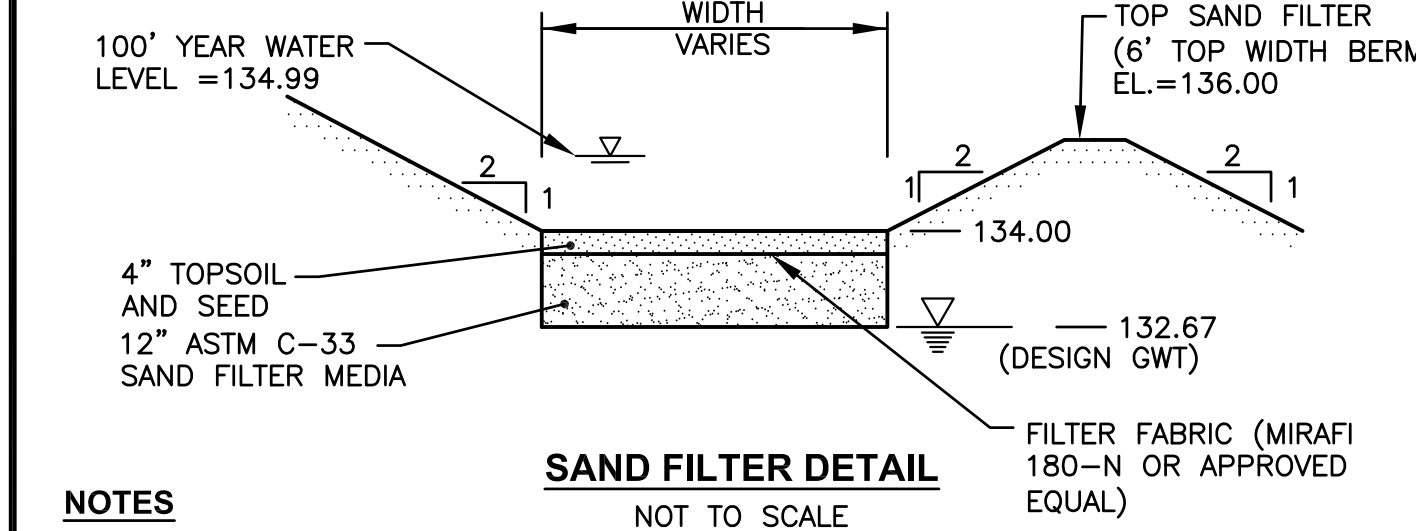
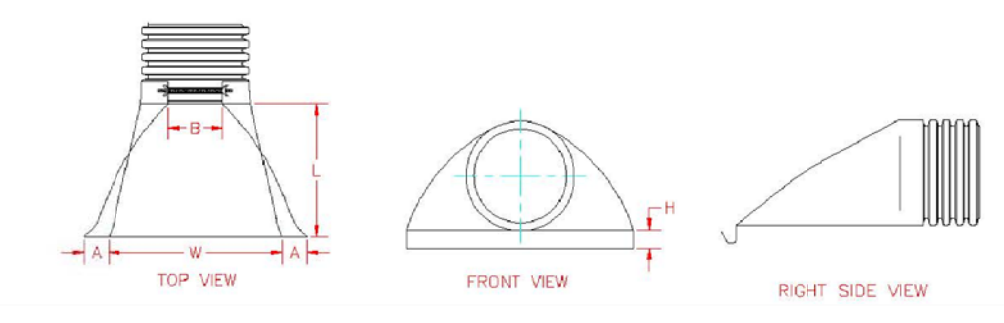
ADS FLARED END SECTION SPECIFICATION

Scope
This specification describes 12- through 36-inch (300 to 900mm) ADS Flared End Sections for use in culvert and drainage outlet applications.

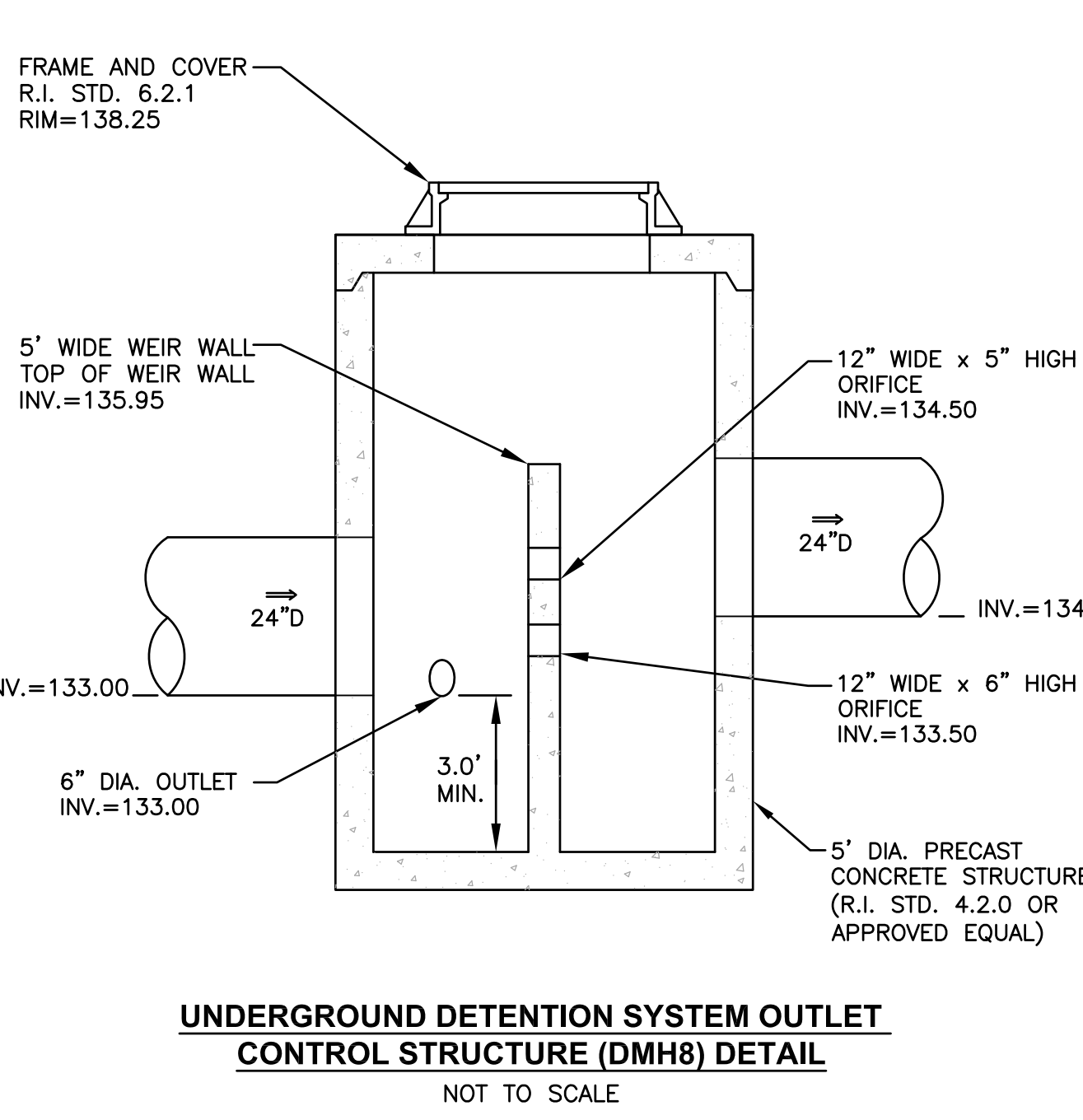
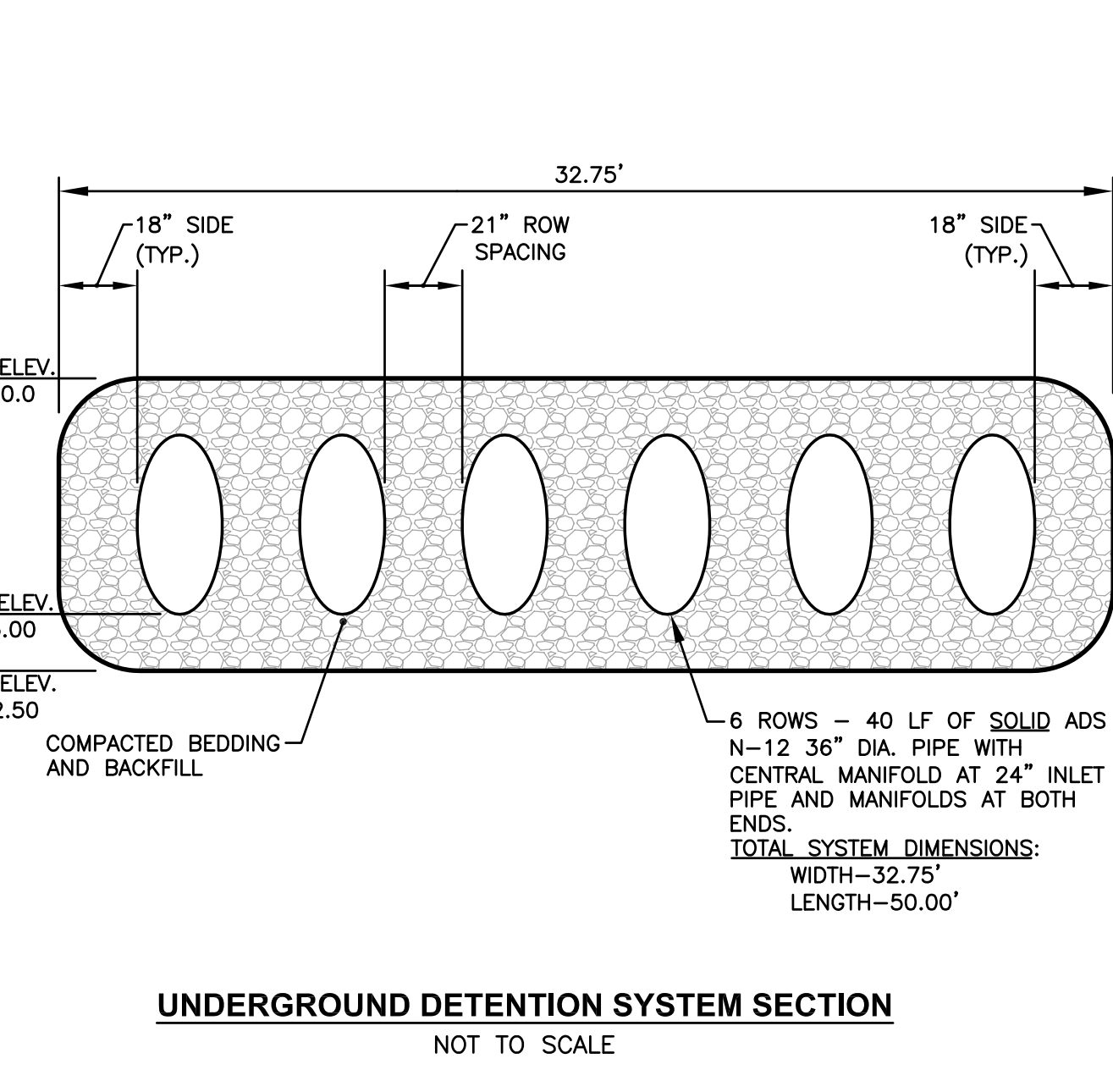
Requirements
The ADS Flared End Section shall be high density polyethylene meeting ASTM D3350 minimum cell classification 213320C; contact manufacturer for additional cell classification information. When provided, the metal threaded fastening rod shall be stainless steel.

Installation
Installation shall be in accordance with ADS installation instructions and with those issued by state or local authorities. Contact your local ADS representative or visit www.acis-pipe.com for the latest installation instructions.

Diameter in (mm)	PIPE DIAMETER, in (mm)					
	12 (300)	15 (375)	18 (450)	24 (600)	30 (750)	36 (900)
A' in (mm)	6.3 (155)	8.5 (215)	10.5 (267)	13.5 (343)	16.5 (419)	19.5 (491)
B in (mm)	10.0 (254)	10.0 (254)	15.0 (381)	18.0 (457)	22.0 (559)	25.0 (635)
H in (mm)	4.5 (115)	4.5 (115)	5.5 (139)	6.5 (165)	8.5 (215)	10.5 (267)
L in (mm)	25.0 (635)	25.0 (635)	32.0 (813)	35.0 (891)	58.0 (1473)	58.0 (1473)
W in (mm)	29.0 (737)	29.0 (737)	36.0 (914)	45.0 (1143)	63.0 (1600)	63.0 (1600)



- NOTES**
- PREPARE THE 4" TOPSOIL WITH THE FOLLOWING SAND, LOAM AND ORGANIC SOIL MIX: USDA LOAMY SAND OR SANDY LOAM SOIL TYPE MEETING THE FOLLOWING SPECIFICATION:
ORGANIC MATTER: 2-5% CLAY: 0-2%
SILT: 0-12% SAND: 85-88%
 - CONTRACTOR SHALL BE IN ACCORDANCE WITH THE RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, APPENDIX F.5, CONSTRUCTION STANDARDS/SPECIFICATIONS FOR FILTER BMP'S.
 - MATERIAL USED FOR SAND FILTER SHALL MEET THE REQUIREMENTS OF TABLE F-16 IN APPENDIX F.5 OF THE RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL.
 - CONTRACTOR IS RESPONSIBLE TO SUBMIT SHOP DRAWINGS AND SPECIFICATIONS FOR SAND FILTER MATERIAL PRIOR TO START OF CONSTRUCTION.



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2095 KINGSTOWN ROAD (ROUTE 108) SOUTH KINGSTOWN, R.I.

PREPARED FOR:
TOWER HILL LANDINGS, LLC
543 THAMES STREET
NEWPORT, RHODE ISLAND 02840

DRAWING TITLE:
MISCELLANEOUS DETAIL PLAN No. 4
DATE: JUNE 2020 SCALE: AS SHOWN
DWG. NAME: 2449-C12-DETAIL4.dwg

REVISIONS

NUMBER	REMARKS	DATE
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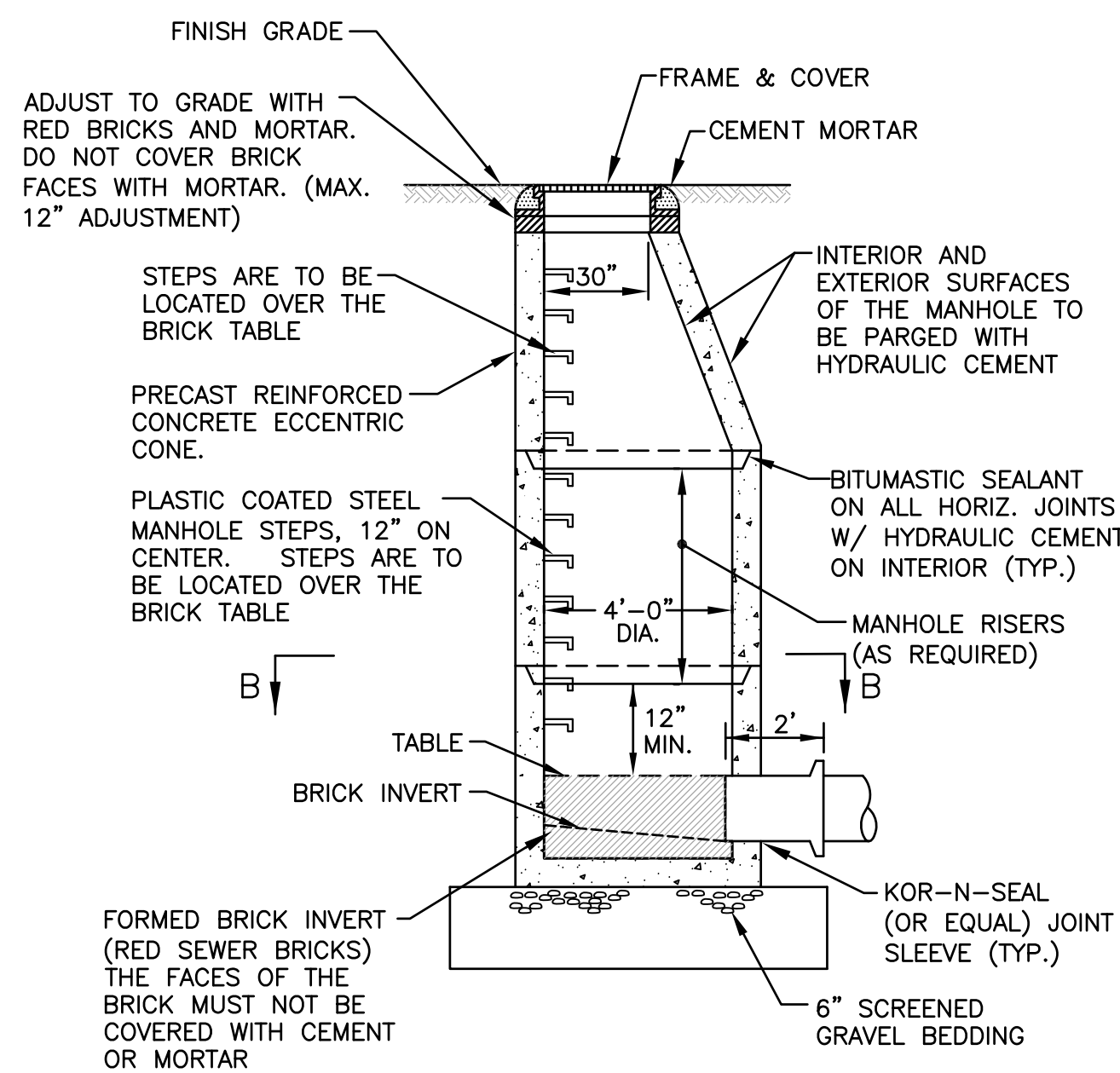
DRAWING NUMBER
C12
SHEET: 13 OF 18

GENERAL SEWER NOTES

- INSTALLATION OF THE SEWERAGE FACILITIES SHALL BE IN ACCORDANCE WITH THE TOWN OF SOUTH KINGSTOWN SPECIFICATIONS AND REQUIREMENTS.
- PRIOR TO RECEIVING AUTHORIZATION TO CONSTRUCT, ALL MATERIALS SHALL MEET THE STANDARDS AND RECEIVE THE WRITTEN APPROVAL, BASED ON MANUFACTURER'S DRAWINGS AND OTHER DATA, OF THE TOWN OF SOUTH KINGSTOWN.
- ALL SEWERAGE FACILITIES SHALL MEET TESTING AND CLEANING REQUIREMENTS PRIOR TO ACCEPTANCE.
- THE CONTRACTOR IS RESPONSIBLE TO COORDINATE AS-BUILT LOCATIONS PRIOR TO PIPE BACKFILL. AS-BUILT DRAWINGS SHALL BE FURNISHED AS A CONDITION FOR ACCEPTANCE OF THE NEW SEWERAGE FACILITIES. PLANS SHALL INCLUDE LOCATION OF WYES.
- NO FLOW WILL BE ACCEPTED UNTIL ALL ABOVE STEPS ARE COMPLETED AND COMPLETION CERTIFICATE IS ISSUED.
- AFTER THE CONTRACTOR HAS "STAKED OUT" THE FACILITIES TO BE CONSTRUCTED AND HAS THE APPROVED MATERIALS ON THE JOB, THE WASTEWATER DIVISION SHALL BE NOTIFIED IN ADVANCE OF CONSTRUCTION IN ORDER FOR THEM TO ARRANGE FOR THEIR INSPECTOR. THE NOTIFICATION MUST MEET THE TOWN OF SOUTH KINGSTOWN WASTEWATER DIVISION REQUIREMENTS.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED PLANS AND MATERIALS, STANDARDS AND SPECIAL DETAILS, AND STANDARD SPECIFICATIONS, ANY WORK NOT MEETING THE APPROVED STANDARDS SHALL BE IMMEDIATELY REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL CONFINE HIS OPERATIONS AND ACTIVITIES FOR CONSTRUCTION WITHIN THE LIMITS OF WORK AS SHOWN ON THE DRAWINGS.
- ALL AREAS DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO EXTRA COST TO THE OWNER. ALL GRASSED AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE LOAMED AND SEED.
- LOCATION AND DEPTHS OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UTILITIES AND NOTIFY THE APPROPRIATE UTILITY AUTHORITIES INCLUDING "DIG-SAFE" PRIOR TO STARTING WORK. ANY DAMAGE TO UTILITIES CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THE COST OF REPAIRS SHALL BE BORNE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- RELATION TO WATER LINES:
 - HORIZONTAL SEPARATION: WHENEVER POSSIBLE, SEWERS SHOULD BE LAID AT A MINIMUM OF 10 FEET (3.0 m), HORIZONTALLY, FROM ANY EXISTING OR PROPOSED WATER LINE. SHOULD LOCAL CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET, A SEWER MAY BE LAID CLOSER THAN 10 FEET TO A WATER LINE IF:
 - IT IS LAID IN A SEPARATE TRENCH, OR IF
 - IT IS LAID IN THE SAME TRENCH WITH THE WATER LINE LOCATED AT ONE SIDE ON A BENCH OF UNDISTURBED EARTH, AND IF
 - IN EITHER CASE THE ELEVATION OF THE TOP (CROWN) OF THE SEWER IS AT LEAST 18 INCHES (46 cm) BELOW THE BOTTOM (INVERT) OF THE WATER LINE.
 - VERTICAL SEPARATION: WHENEVER A SEWER MUST CROSS UNDER WATER LINES, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE TOP OF THE SEWER IS AT LEAST 18 INCHES (46 cm) BELOW THE BOTTOM OF THE WATER LINE. WHEN THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THE ABOVE REQUIREMENTS, THE WATER LINE SHALL BE RELOCATED TO PROVIDE THIS SEPARATION OR RECONSTRUCTED WITH MECHANICAL-JOINT PIPE FOR A DISTANCE OF 10 FEET (3.0 m) ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATER LINE SHOULD BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE.
 - WHEN IT IS IMPOSSIBLE TO OBTAIN HORIZONTAL AND/OR VERTICAL SEPARATION AS STIPULATED ABOVE, BOTH THE WATER LINE AND SEWER SHALL BE CONSTRUCTED OF MECHANICAL-JOINT CEMENT LINED DUCTILE IRON PIPE OR OTHER EQUIVALENT BASED ON WATER TIGHTNESS AND STRUCTURAL SOUNDNESS. BOTH PIPES SHALL BE PRESSURE TESTED BY AN APPROVED METHOD TO ASSURE WATER TIGHTNESS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEWATERING REQUIRED IN THE SEWER INSTALLATION.
- THE PROPOSED GRAVITY SANITARY SEWER PIPE SHALL BE PVC ASTM 3034 SDR 35, UNLESS OTHERWISE SHOWN ON PLANS. PIPE SIZE TO MATCH UTILITY PLAN.
- THE CONTRACTOR IS RESPONSIBLE TO VERIFY THE ELEVATION OF EXISTING SEWER LINE PRIOR TO INSTALLATION.

SEWER TRENCH NOTES

- MINIMUM WIDTH (W) OF TRENCH IS EQUAL TO THE INSIDE DIAMETER OF THE PIPE PLUS 12" EACH SIDE.
- SOIL UNDER CRUSHED STONE FOUNDATION SHALL BE UNDISTURBED AND COMPACTED MATERIAL WITH SEVERAL PASSES OF A VIBRATORY PLATE COMPACTOR TO ATTAIN 95% MAX. DENSITY (MOD. METHOD).
- CRUSHED STONE FOUNDATION 3/4" MAXIMUM SIZE, SHALL BE PLACED 6" UNDER THE PIPE AND UP TO THE PIPE LAID THEREON, CRUSHED STONE PULLED AGAINST THE PIPE SIDES TO FIRMLY HOLD THE PIPE IN PLACE.
- CRUSHED STONE HAUNCHING 3/4" MAXIMUM SIZE SHALL BE BROUGHT LEVEL TO THE TOP OF THE PIPE AND OUT TO THE TRENCH WALL AT THIS ELEVATION FOR ALL PIPE.

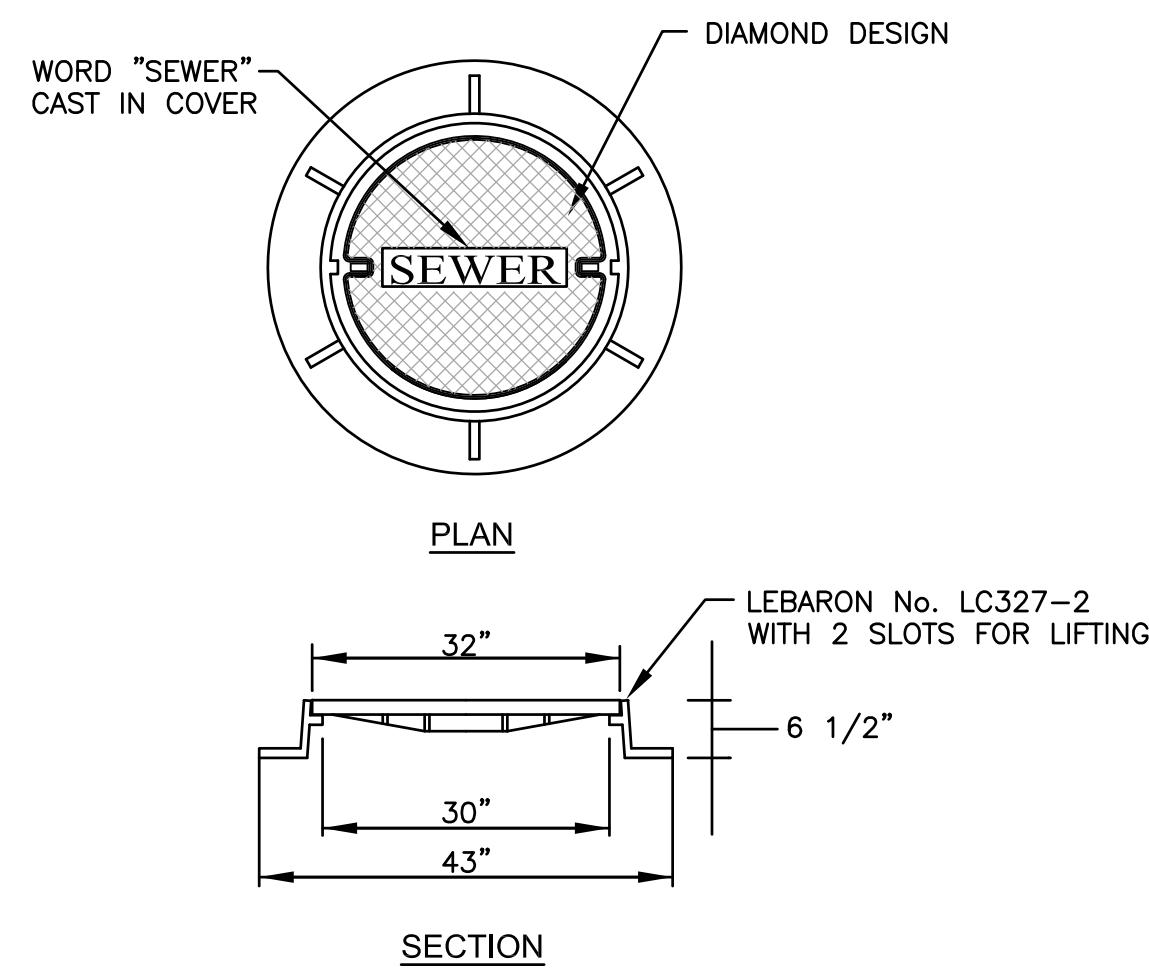


NOTES

- SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I.D.O.T. STANDARD SPECIFICATIONS.
- CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED = 0.12 SQ. IN. / LIN. FT. MINIMUM.
- STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ. IN./LIN. FT. (BOTH WAYS).
- ONE POUR MONOLITHIC BASE SECTION.
- ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
- STEPS SHALL CONFORM TO R.I.D.O.T. STD. 5.3.0 (OR AS SPECIFIED IN THE CONTRACT) AND SHALL BE INSTALLED AT THE CASTING PLANT.
- ALTERNATE FLAT TOP SLAB CAN BE USED WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
- ALTERNATE FLAT TOP SLAB IS STEEL REINFORCED TO MEET OR EXCEED H-25 LOADING (SEE R.I.D.O.T. STD. 4.7.2).
- ALL JOINTS AND PINHOLES TO BE PLUGGED INSIDE AND OUTSIDE WITH HYDRAULIC CEMENT.

SANITARY MANHOLE DETAIL - TYPICAL

NOT TO SCALE

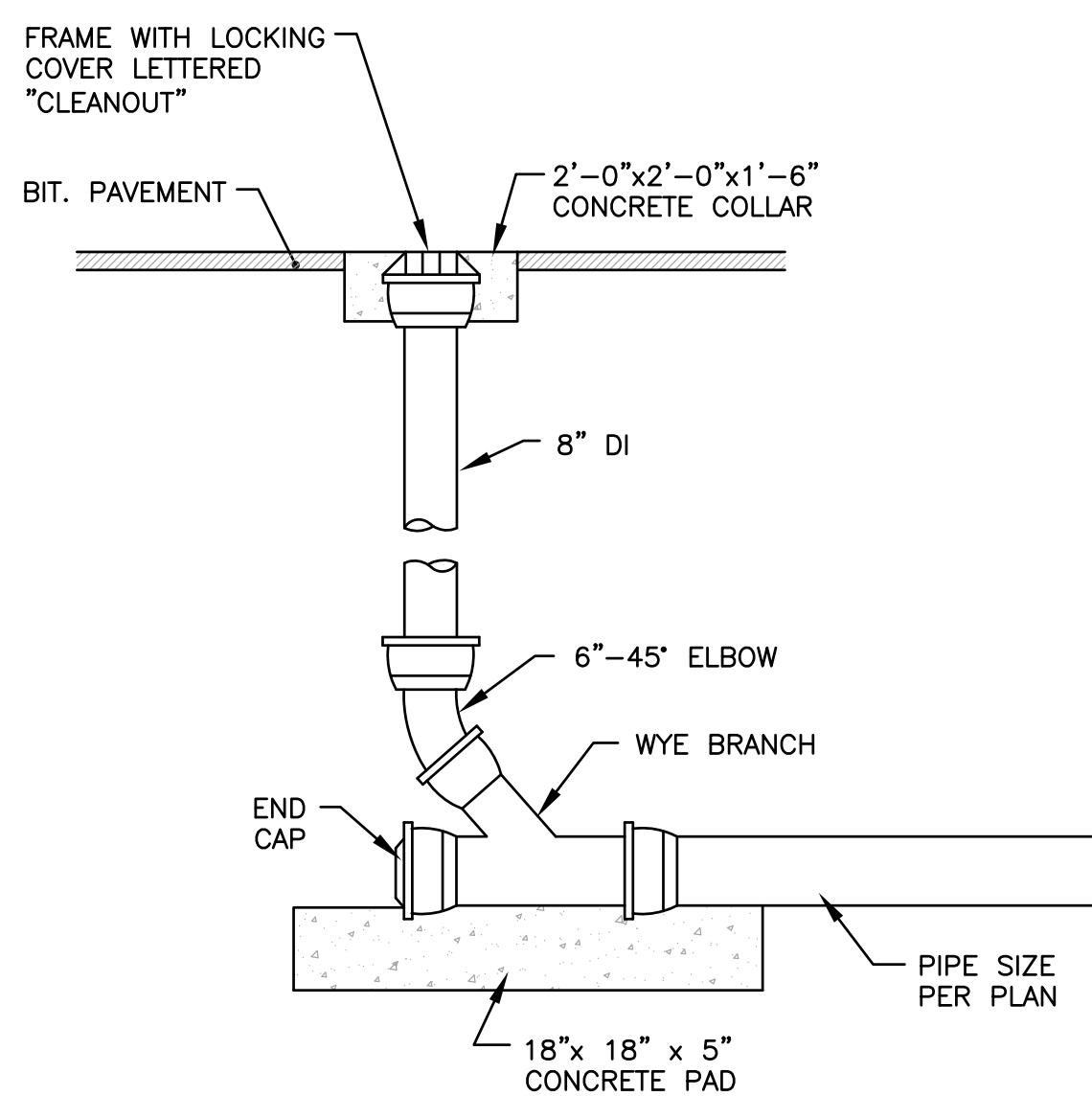


NOTES

- FRAME AND COVER SEATS MUST HAVE MACHINE FINISH.
- THE WORD "SEWER" SHALL BE CAST IN THE COVER.
- VENTILATION HOLES OF ANY SIZE ARE NOT ALLOWED.

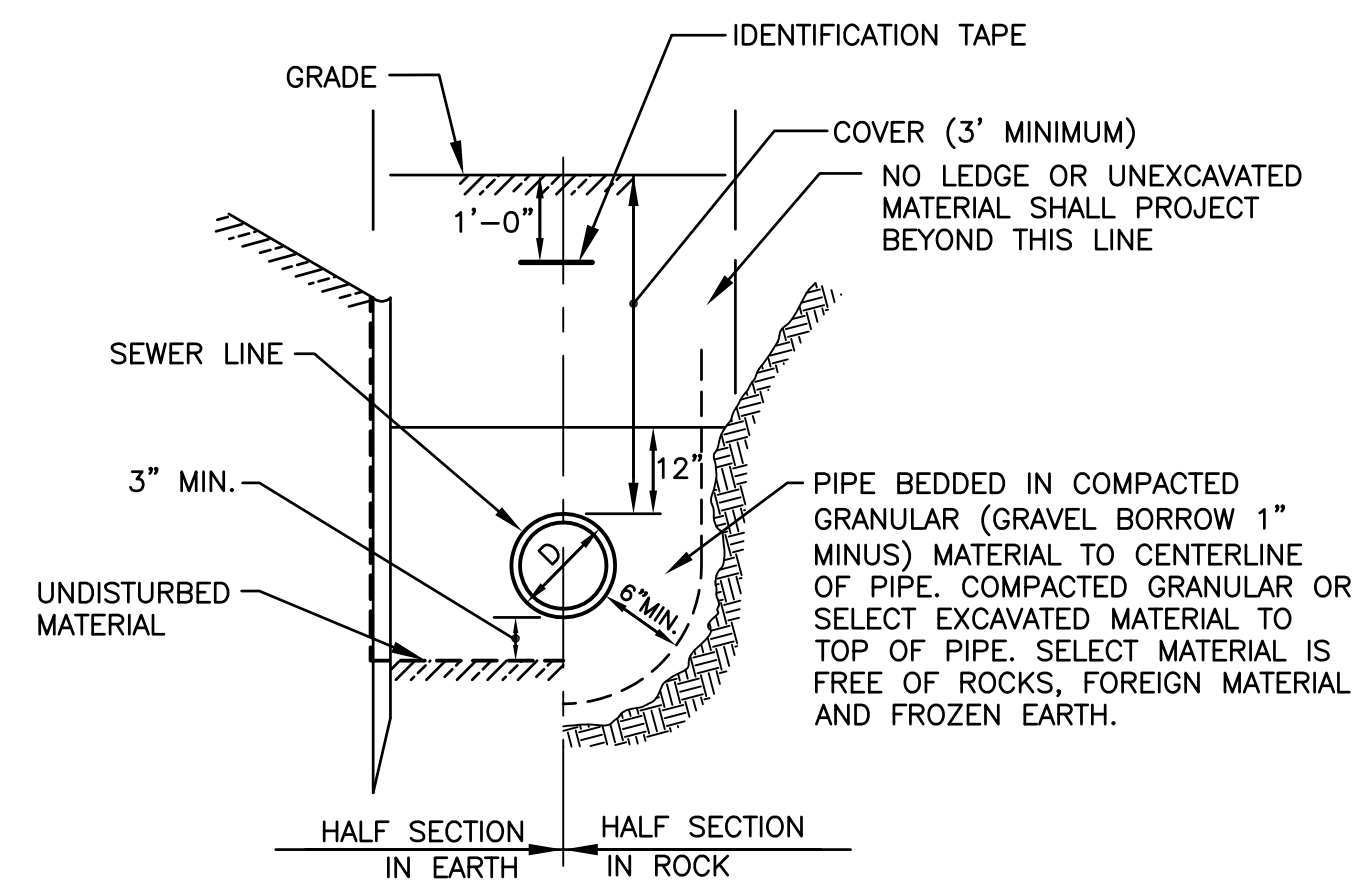
SANITARY MANHOLE FRAME AND COVER DETAIL

NOT TO SCALE



SEWER CLEANOUT DETAIL

NOT TO SCALE



TYPICAL SEWER LINE TRENCH DETAIL

NOT TO SCALE



- Civil
- Transportation
- Environmental
- Site Planning
- Surveying
- Permitting
- Landscape Architecture

CROSSMAN ENGINEERING

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PROJECT TITLE:

TOWER HILL LANDINGS ANNEX LLC

PLAT MAP 32-4, LOT 32
ZONING DISTRICT: CN and R-10
COMMERCIAL NEIGHBORHOOD and
MEDIUM HIGH DENSITY RESIDENTIAL DISTRICT
and KINGSTOWN ROAD
SPECIAL MANAGEMENT DISTRICT
2095 KINGSTOWN ROAD (ROUTE 108)
SOUTH KINGSTOWN, R.I.

PREPARED FOR:

TOWER HILL LANDINGS, LLC

543 THAMES STREET
NEWPORT, RHODE ISLAND
02840

DRAWING TITLE:

MISCELLANEOUS DETAIL PLAN No. 5

DATE: JULY 2020 SCALE: AS SHOWN

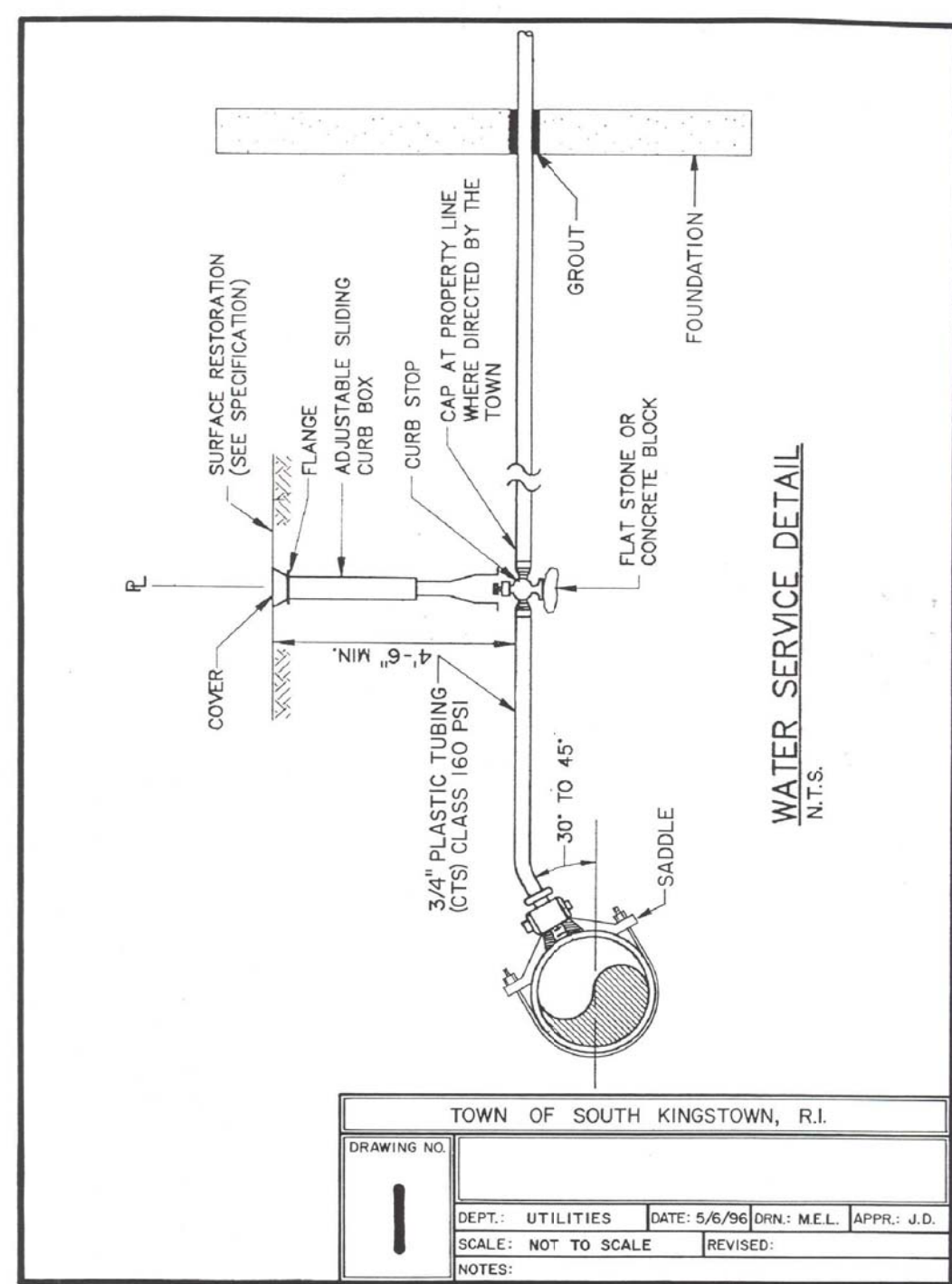
DWG. NAME: 2449-C13-DETAIL5.dwg

REVISIONS		
NUMBER	REMARKS	DATE
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DRAWING NUMBER

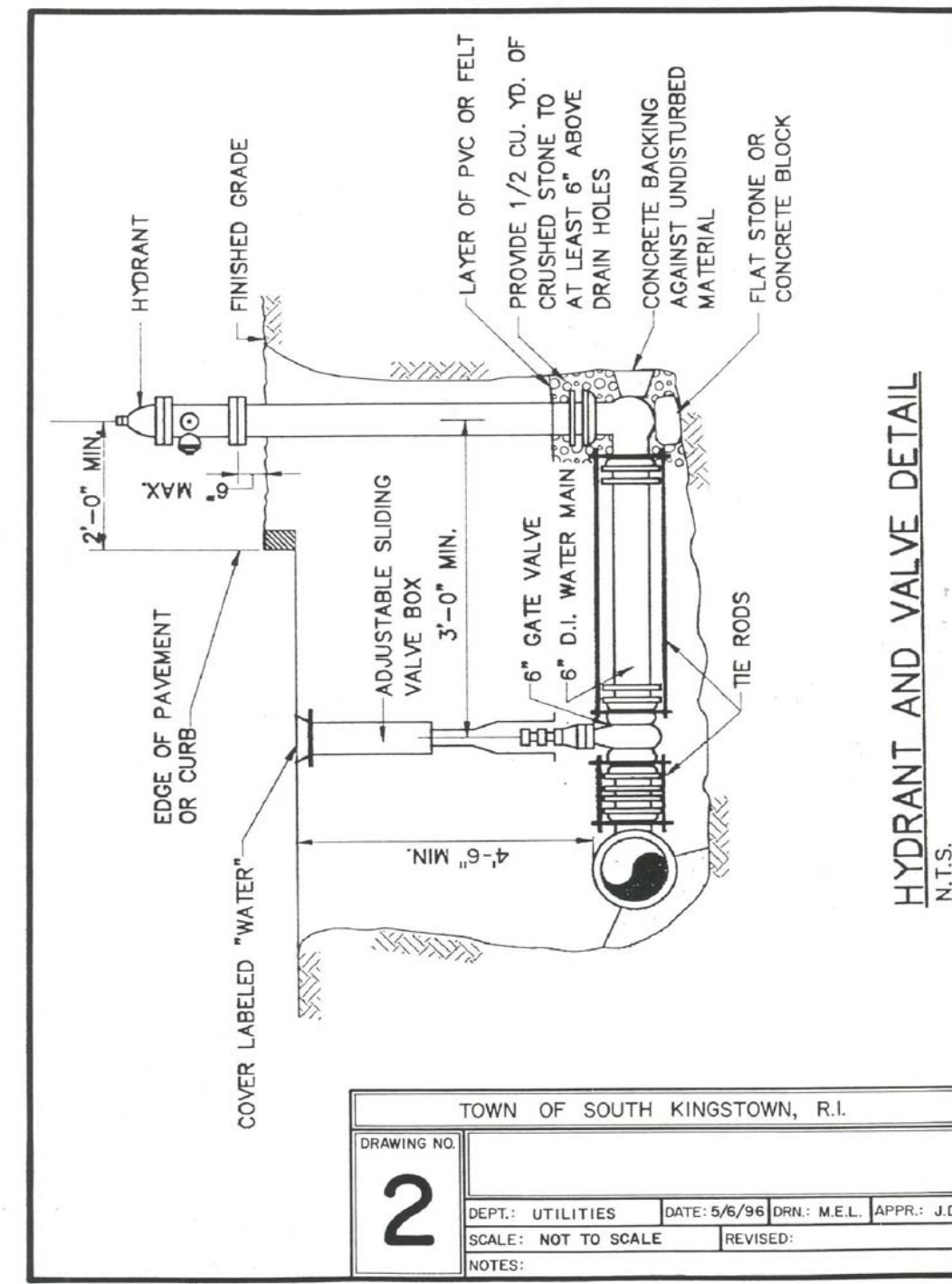
C13

SHEET: 14 OF 18



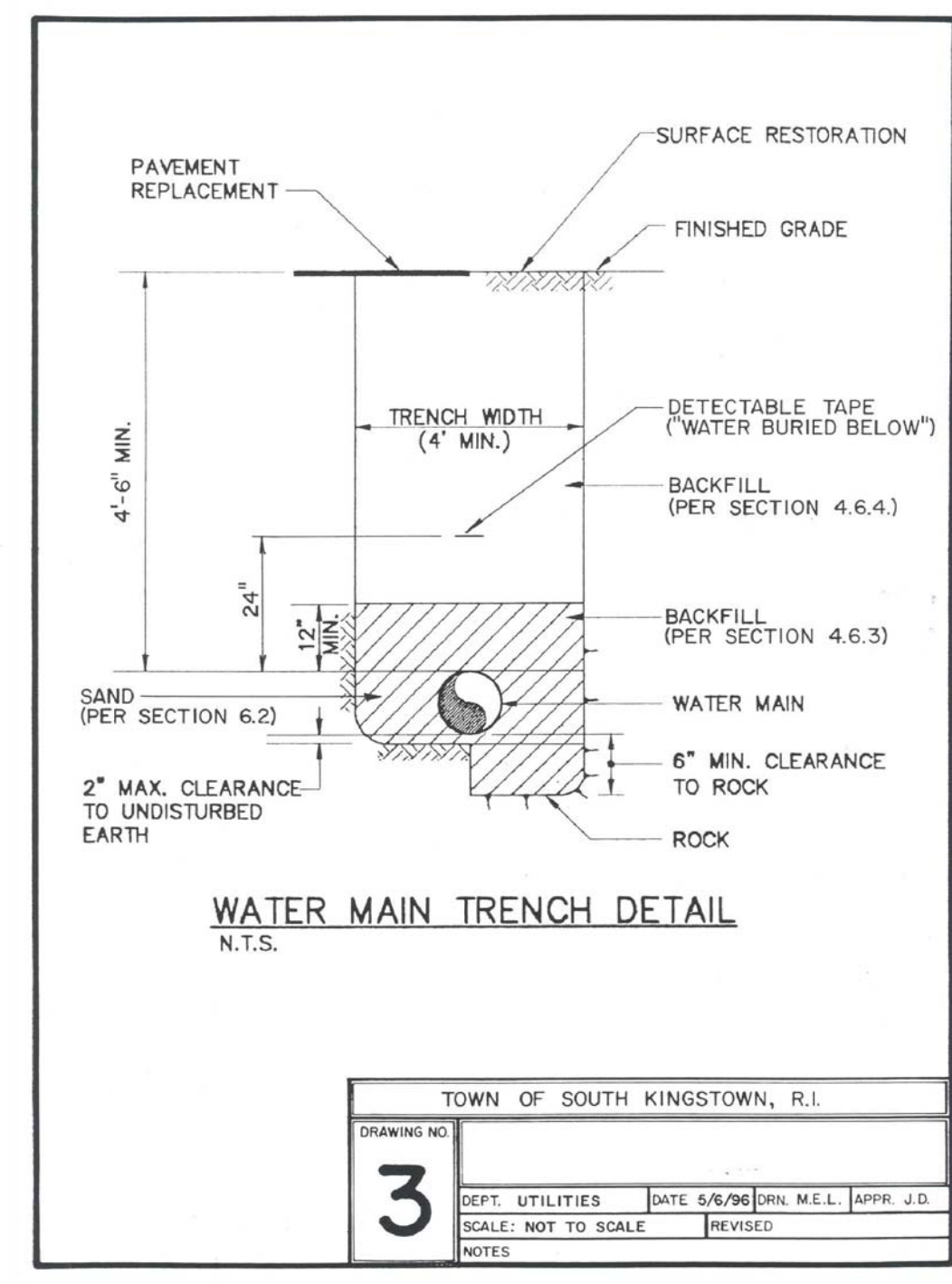
TOWN OF SOUTH KINGSTOWN, R.I.

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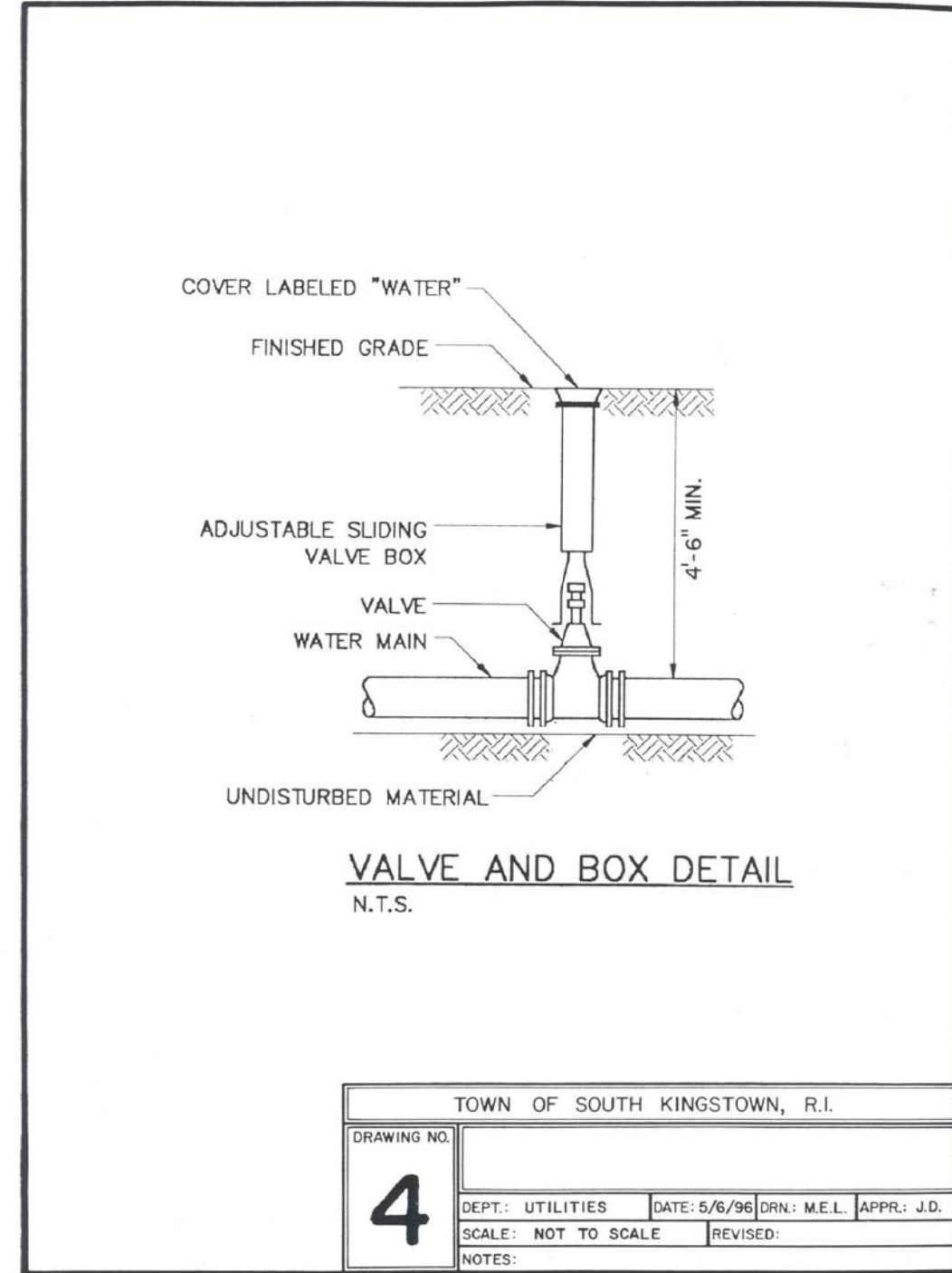
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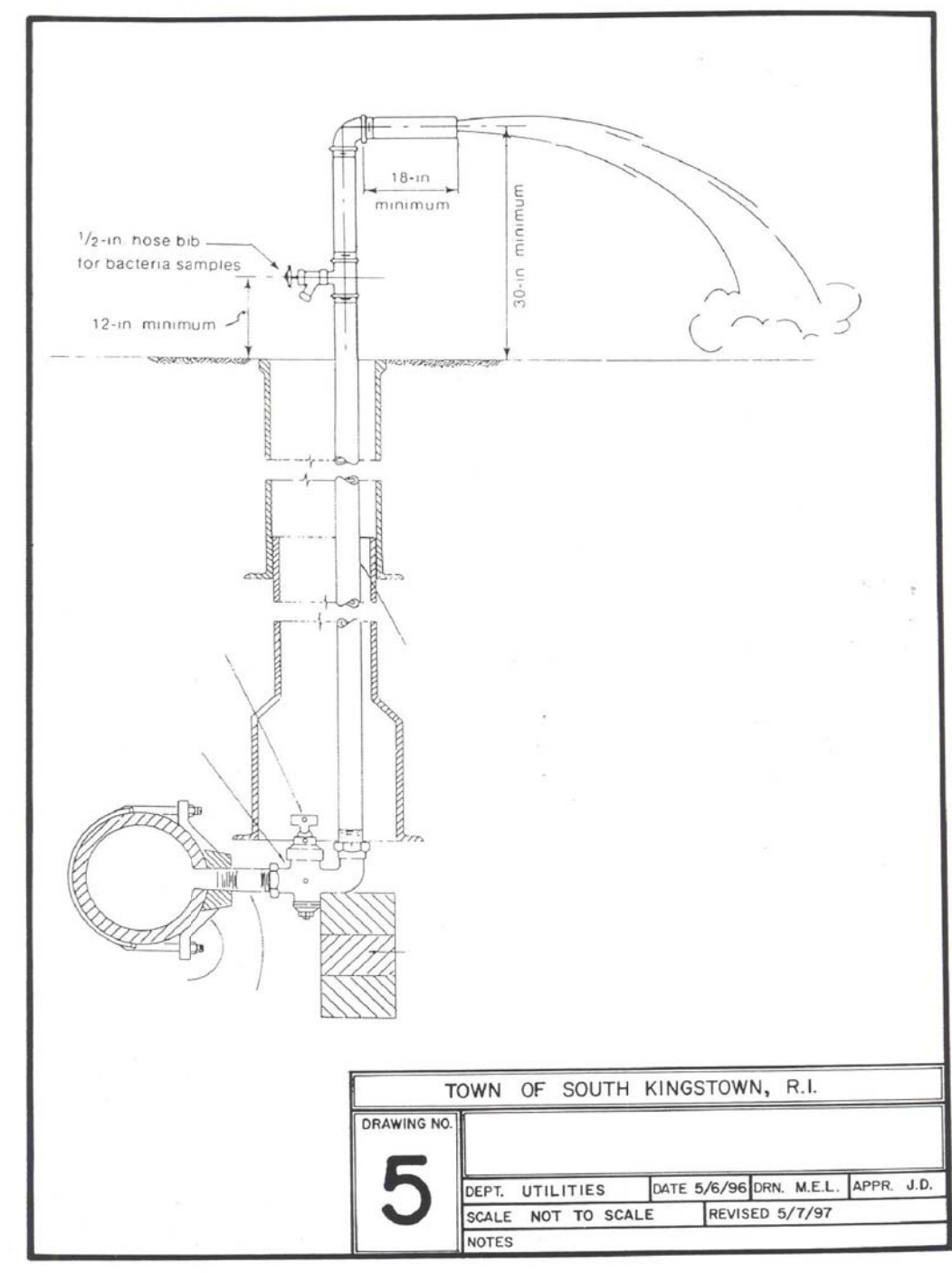
TOWN OF SOUTH KINGSTOWN, R.I.

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DEPT. UTILITIES	DATE: 5/6/96
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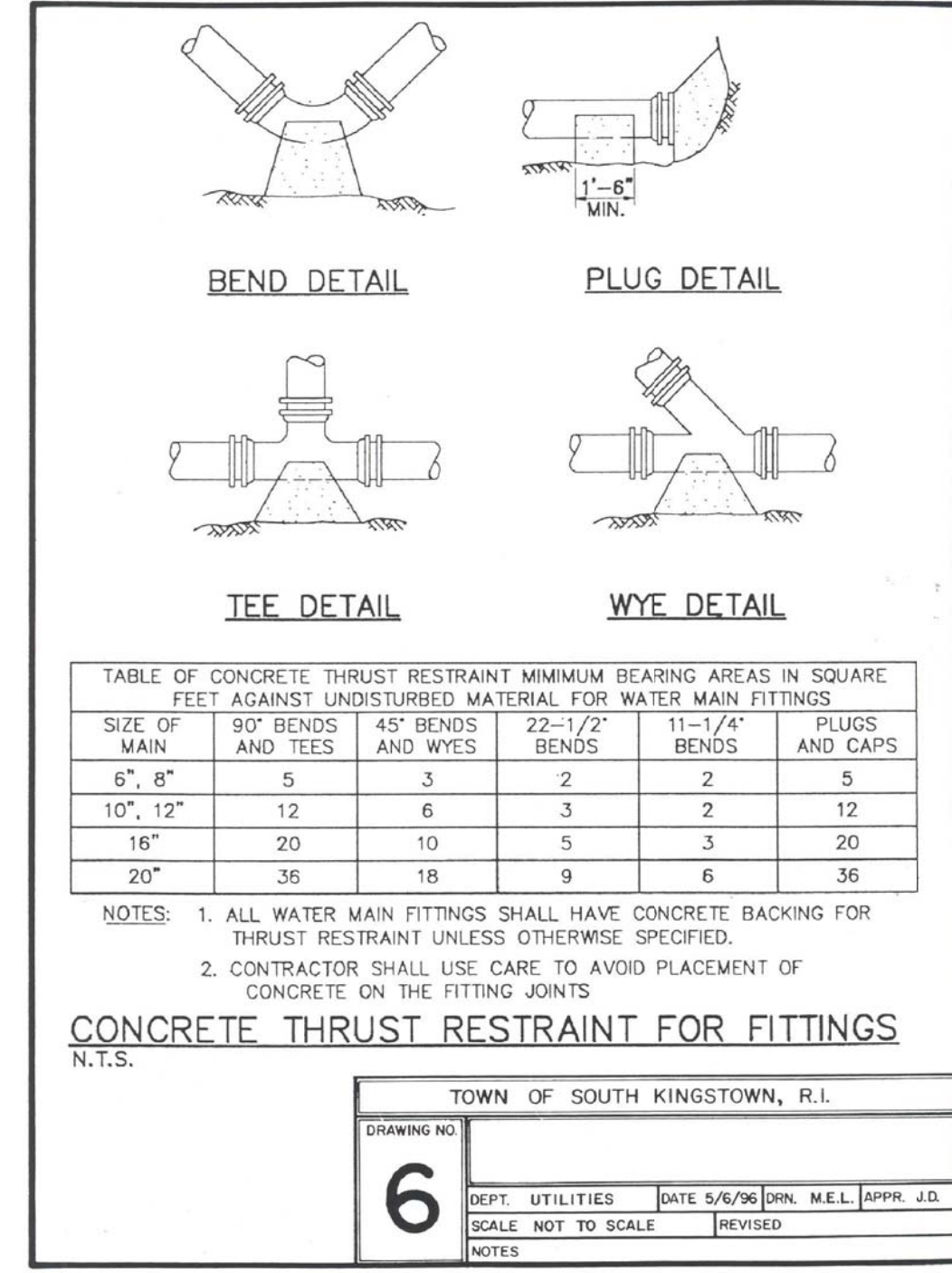
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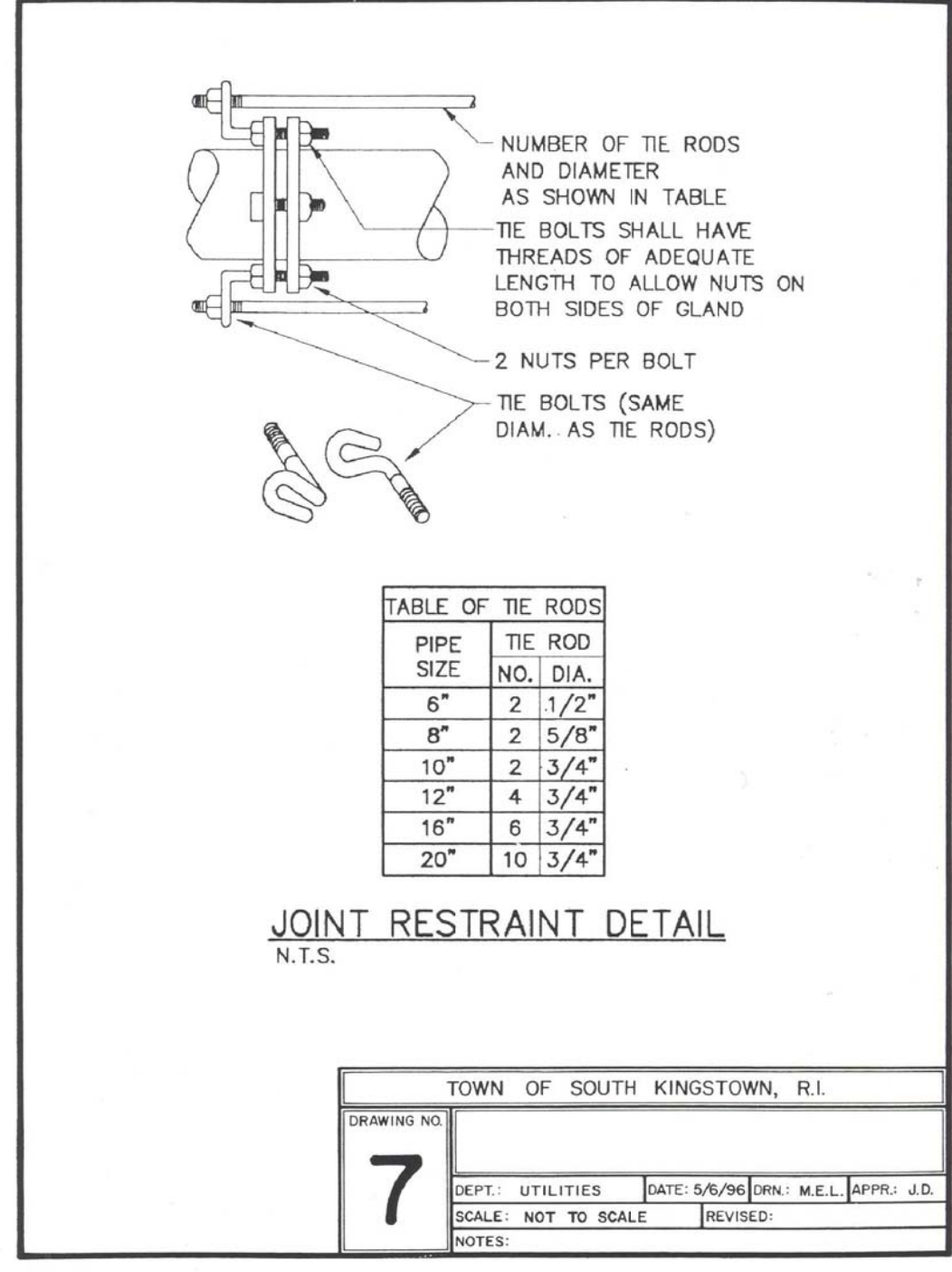
TOWN OF SOUTH KINGSTOWN, R.I.

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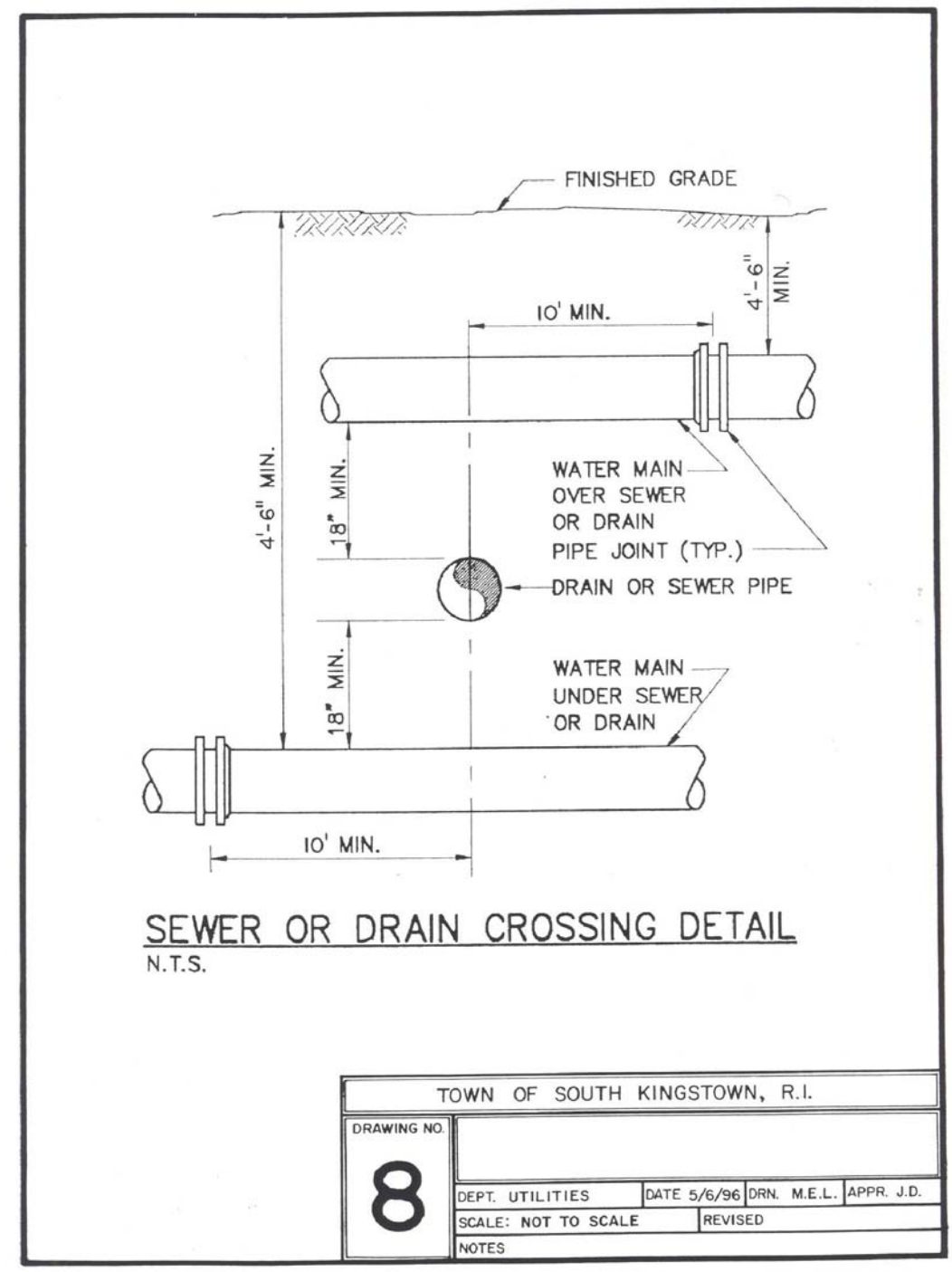
TOWN OF SOUTH KINGSTOWN, R.I.

DRAWING NO.	6
DEPT. UTILITIES	DATE: 5/6/96
SCALE: NOT TO SCALE	REVISED:



TOWN OF SOUTH KINGSTOWN, R.I.

DRAWING NO.	7
DEPT. UTILITIES	DATE: 5/6/96
SCALE: NOT TO SCALE	REVISED:



TOWN OF SOUTH KINGSTOWN, R.I.

DRAWING NO.	8
DEPT. UTILITIES	DATE: 5/6/96
SCALE: NOT TO SCALE	REVISED:

WATER NOTES

- ALL INSTALLATION, JOINTS, CONSTRUCTION METHODS AND MATERIALS SHALL BE ACCORDING TO THE KINGSTON WATER DISTRICT AND SOUTH KINGSTOWN WATER DIVISION REQUIREMENTS, AWWA STANDARDS AND GOVERNMENTAL REQUIREMENTS.
- ALL FITTINGS SHALL BE DUCTILE IRON MECHANICAL JOINT CLASS 350 CEMENT MORTAR LINED COMPACT STYLE (BY AMERICAN MANUFACTURER ONLY). FITTINGS SHALL MEET THE REQUIREMENTS OF ANSI/AWWA C153/A21.53. MECHANICAL JOINTS SHALL MEET THE REQUIREMENTS OF ANSI/AWWA C111/A21.11.
- WATER PIPE SHALL BE DOUBLE CEMENT MORTAR LINED DUCTILE IRON PIPE CL52 AND SHALL MEET THE REQUIREMENTS OF ANSI/AWWA C151/A21.51.
- CONSTRUCTION SHALL INCLUDE ALL PIPE, JOINTS, BENDS, TEES, FITTINGS, "MEGA-LUG" RESTRAINED MECHANICAL JOINTS, SERVICE CONNECTIONS AND ALL MISCELLANEOUS ITEMS REQUIRED TO CONSTRUCT THE PROPOSED SYSTEM.
- "MEGA-LUG" RESTRAINED MECHANICAL JOINTS SHALL BE INSTALLED IN LOCATIONS INDICATED AND AT ALL BENDS, FITTINGS, PLUGS, ETC.
- PRESSURE AND LEAKAGE TESTS AND DISINFECTING PIPES SHALL BE PERFORMED BY THE CONTRACTOR IN CONFORMANCE TO AMERICAN WATER WORKS ASSOCIATION (AWWA) RECOMMENDATIONS, KINGSTON WATER DISTRICT REQUIREMENTS, AND GOVERNMENTAL AGENCIES HAVING JURISDICTION.
- ALL FITTINGS, PIPE, JOINTS, ETC. SHALL BE DESIGNED FOR 1.5 TIMES WORKING PRESSURE BUT NOT LESS THAN 150 PSI.
- WATER PIPE SHALL TYPICALLY BE LOCATED AT LEAST TEN (10) FEET HORIZONTALLY FROM SEWER PIPE, AND AT A MINIMUM DEPTH OF COVER EQUAL TO 5'. WHERE A NEW WATER MAIN IS LESS THAN 18 INCHES CLEAR DISTANCE ABOVE A SEWER OR WHERE A WATER MAIN PASSES BENEATH A SEWER OR STORM DRAIN, ENCASE THE SEWER OR WATER IN 6" OF CONCRETE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE CROSSING WATER MAIN. THE USE OF DUCTILE IRON TIGHT JOINT SEWER PIPE IN LIEU OF CONCRETE ENCASEMENT WILL BE CONSIDERED UPON CONTRACTORS SUBMITTAL OF SPECIFICATIONS TO ENGINEERS FOR APPROVAL.
- ALL SYSTEM COMPONENTS AND CONSTRUCTION METHODS, SUCH AS PIPE, RESTRAINED MECHANICAL JOINTS, FITTINGS, CASTINGS, ETC. SHALL BE SUBMITTED TO THE WOONSOCKET WATER DEPARTMENT AND ENGINEER FOR APPROVAL PRIOR TO PURCHASE AND INSTALLATION. THIS SUBMISSION SHALL INCLUDE MANUFACTURER'S LITERATURE, SHOP DRAWINGS, PROPOSED CONSTRUCTION METHODS, ETC.
- WATER LINE TRENCH TO BE AWWA TYPE 5. A METALIZED DETECTABLE IDENTIFICATION TAPE 2" IN WIDTH, BLUE IN COLOR AND PRINTED WITH "CAUTION WATERLINE BURIED BELOW" SHALL BE UTILIZED OVER ALL MAINS. TAPE SHALL BE SET AT APPROXIMATELY 1'-0" BELOW FINISHED GRADE.
- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL COMPLETE AND SUBMIT THE "CONTRACTOR'S MATERIAL AND TEST CERTIFICATE" FOR UNDERGROUND PIPING TO THE KINGSTON WATER DISTRICT AND SOUTH KINGSTOWN WATER DIVISION. IN ADDITION, THE CONTRACTOR IS REQUIRED TO SUBMIT THE FOLLOWING ITEMS TO THE ENGINEER FOR THEIR REVIEW AND APPROVAL:
 - TYPE AND MANUFACTURER OF SERVICE BOXES
 - TYPE AND MANUFACTURER OF CORPORATIONS AND CURB STOPS
 - TYPE AND MANUFACTURER OF VALVE BOXES (OPEN LEFT)
 - TYPE AND MANUFACTURER OF D.I. MECHANICAL JOINTS AND FITTINGS
 - TYPE AND MANUFACTURER OF TAPPING SLEEVES
 - TYPE AND MANUFACTURER OF DI PIPING
 - TYPE AND MANUFACTURER OF RESILIENT SEALED GATE VALVES (OPEN LEFT)
 - TYPE AND MANUFACTURER OF COPPER SERVICE LINE
- WHEN THIS PROJECT IS COMPLETE, THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE WATER DEPARTMENT AND ENGINEER TWO SETS OF AS BUILT PLANS (ONE BLUE LINE, ONE REPRODUCIBLE COPY-MYLAR OR SEPIA) WHICH INDICATES:
 - ALL CURB STOPS WITH APPROPRIATE LOCATING MEASUREMENTS AND MEASUREMENTS FROM PERMANENT STRUCTURES.
 - A SCHEDULE OF MATERIALS WHICH INDICATES:
 - ITEM QUANTITY
 - MANUFACTURER
 - DESCRIPTION
 - INCLUDE SERIAL #'S AS APPLICABLE
 - MATERIAL
 - OPERATION CHARACTERISTICS
 AND MEASUREMENTS FROM PERMANENT STRUCTURES.
- THE CONTRACTOR SHALL VERIFY THE FIRE SERVICE PIPE SIZE REQUIREMENT WITH THE BUILDING ARCHITECT AND PLUMBING/FIRE SPRINKLER CONTRACTOR PRIOR TO ORDERING PIPE, METERS AND BACKFLOW PREVENTORS. COORDINATION WITH THE SOUTH KINGSTOWN FIRE CHIEF, KINGSTON WATER DIVISION AND SOUTH KINGSTOWN WATER DIVISION IS REQUIRED TO DETERMINE THE EXISTING WATER PRESSURE AVAILABLE.
- ALL VALVES TO BE RESILIENT WEDGE GATE VALVES (OPEN LEFT).
- ALL FITTINGS TO BE RESTRAINED WITH MECHANICAL JOINTS. RESTRAINTS TO BE MEGA-LUG OR EQUAL. ALL DESIGN AND/OR PLACEMENT SHALL BE REVIEWED AND APPROVED BY THE WOONSOCKET WATER DEPARTMENT.
- RESTRAIN ALL PUSH-ON BELL JOINTS WITHIN 20 FEET OF MECHANICAL JOINTS. RESTRAINTS TO BE SERIES 800 COVER-ALL BY EBAA IRON OR EQUAL.
- DOMESTIC WATER SERVICE LINES SHALL BE DUCTILE IRON OR COPPER.
- ALL HYDRANTS SHALL OPEN LEFT.

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 Massachusetts: 103 Commonwealth Avenue, North Attleboro, MA 02763, Phone: (508) 695-1700
 Email: ce@crosmaneng.com

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PROJECT TITLE:
TOWER HILL LANDINGS ANNEX LLC

PLAT MAP 32-4, LOT 32
 ZONING DISTRICT: CN and R-10
 COMMERCIAL NEIGHBORHOOD and MEDIUM HIGH DENSITY RESIDENTIAL DISTRICT and KINGSTOWN ROAD SPECIAL MANAGEMENT DISTRICT
 2095 KINGSTOWN ROAD (ROUTE 108) SOUTH KINGSTOWN, R.I.

PREPARED FOR:
TOWER HILL LANDINGS, LLC

543 THAMES STREET
 NEWPORT, RHODE ISLAND 02840

DRAWING TITLE:
MISCELLANEOUS DETAIL PLAN No. 6

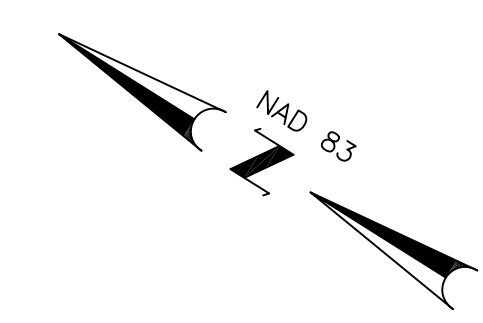
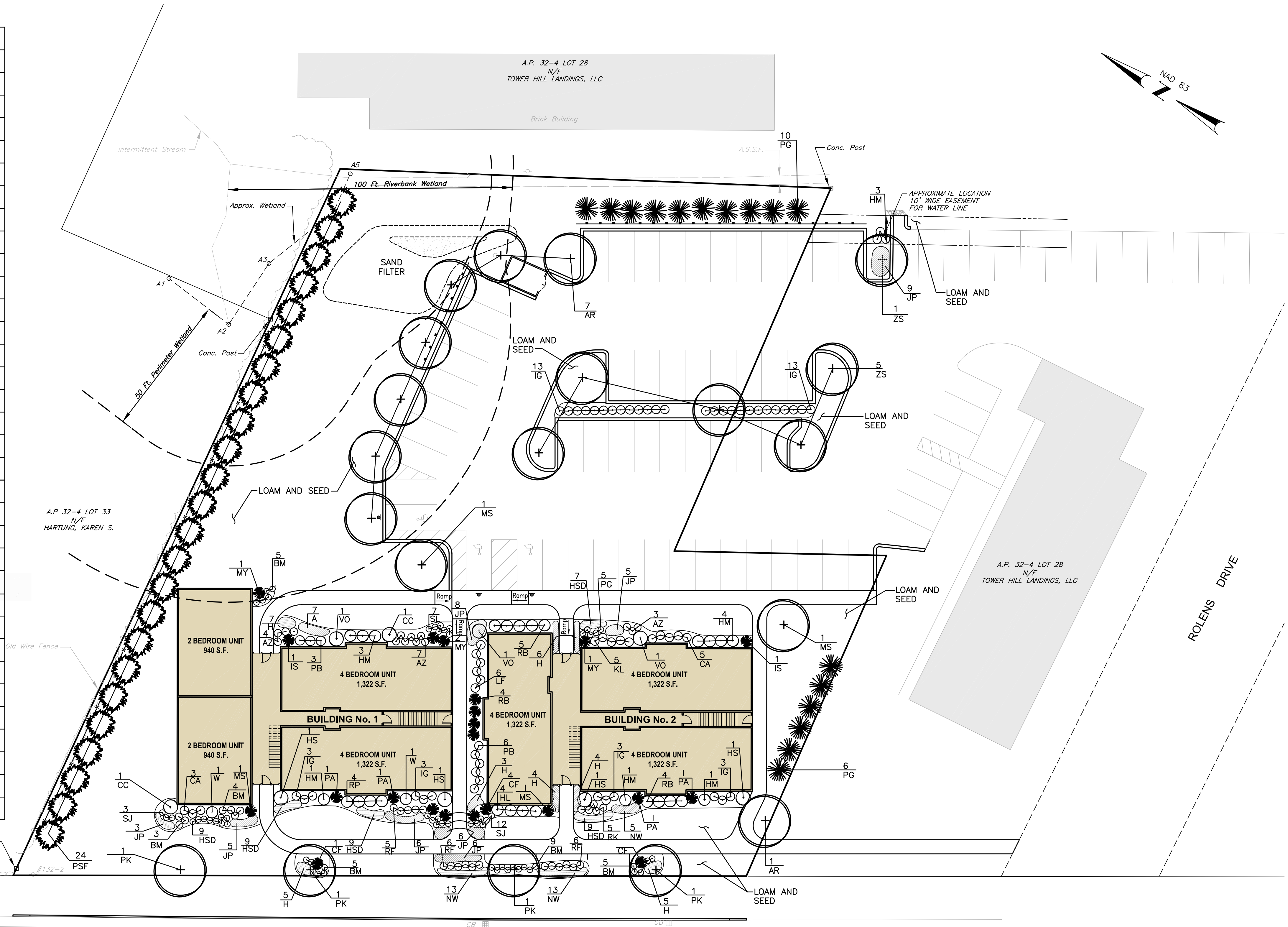
DATE: JULY 2020 SCALE: AS SHOWN
 DWG. NAME: 2449-C14-DETAIL6.dwg

REVISIONS	NUMBER	REMARKS	DATE
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DRAWING NUMBER
C14
 SHEET: 15 OF 18

PLANTING SCHEDULE

TREES				
Key	Botanical Name Common Name	Size	Remarks	
AR	Acer rubrum 'October Glory' October Glory Red Maple	2 - 2 1/2" cal.	B & B	as shown
PG	Picea pungens 'Glauca' Colorado Blue Spruce	8 - 10' ht.	B & B	as shown
PS	Pinus strobus 'Fastigiata' Columnar White Pine	8 - 10'	B & B	as shown
PK	Prunus serrulata 'Kwanzan' Kwanzan Cherry	2 - 2 1/2" cal.	B & B	as shown
MS	Magnolia stellata 'Royal Star' Star Magnolia	8 - 10' ht.	B & B	as shown
SHRUBS				
AZ	Azalea 'Mother's Day' Dark Pink Azalea	#5	Cont.	as shown
BM	Buxus microphylla 'Green Velvet' Green Velvet Boxwood	#3	Cont.	as shown
CF	Chamaecyparis p. 'Filifera Aurea' Gold Threadleaf Falsecypress	#5	Cont.	as shown
CA	Clethra alnifolia Summersweet Clethra	#3	Cont.	as shown
CC	Cotinus cogyria 'Atrorubra' Red leaf Smokebush	#5	Cont.	as shown
HS	Hybiscus syriacus 'Aphrodite' Pink Rose of Sharon	4 - 5'	B & B	as shown
HM	Hydrangea macrophylla 'Nikko Blue' Blue Hydrangea	#5	Cont.	as shown
HL	Hydrangea p. 'Little Lime' Green Hydrangea	#3	Cont.	as shown
IS	Ilex crenata 'Steeds' Steeds Upright Japanese Holly	#5	Cont.	as shown
IG	Ilex glabra 'Compacta' Compact Inkberry	#5	Cont.	as shown
LF	Leucothoe fontansiana Drooping Leucothoe	#3	Cont.	as shown
PA	Picea abies 'Conica' Dwarf Alberta Spruce	4 - 5'	B & B	as shown
PB	Pieris 'Brouwer's Beauty' Brouwer's Beauty Andromeda	#5	Cont.	as shown
RB	Rhododendron 'Boule de Neige' White Compact Rhododendron	#5	Cont.	as shown
RP	Rhododendron 'PJM Compacta' Compact Lavender Rhododendron	#5	Cont.	as shown
SL	Spiraea japonica 'Little Princess' Little Princess Spiraea	#3	Cont.	as shown
VO	Viburnum opulus Snowball Viburnum	#5	Cont.	as shown
W	Weigela F. 'Variegata' Variegated Weigela	#5	Cont.	as shown
GROUND COVER/PERENNIALS/GRASSES				
A	Alchemilla mollis Lady's Mantle	#2	Cont.	24" o.c.
HSD	Hemerocallis 'Stella D'Oro' Dwarf Yellow Daylily	#1	Cont.	24" o.c.
H	Hosta 'Sum and Substance' Chartreuse Large Hosta	#1	Cont.	24" o.c.
JP	Juniperus procumbens 'Nana' Japanese Garden Juniper	#2	Cont.	8" o.c.
MS	Miscanthus sinensis 'Gracilmus' Maiden Hair Grass	#3	Cont.	as shown
NW	Nepeta 'Walker's Low' Catmint	#1	Cont.	24" o.c.
RF	Rosa 'Scarlet Flower Carpet' Scarlet Flower Carpet Rose	#2	Cont.	24" o.c.
SJ	Sedum s. 'Autumn Joy' Autumn Joy Stonecrop	#1	Cont.	as shown



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TOWER HILL LANDINGS ANNEX LLC

PLAT MAP 32-4, LOT 32
ZONING DISTRICT: CN and R-10
COMMERCIAL NEIGHBORHOOD and
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and KINGSTOWN ROAD
SPECIAL MANAGEMENT DISTRICT
2095 KINGSTOWN ROAD (ROUTE 108)
SOUTH KINGSTOWN, R.I.

PREPARED FOR:
TOWER HILL LANDINGS, LLC

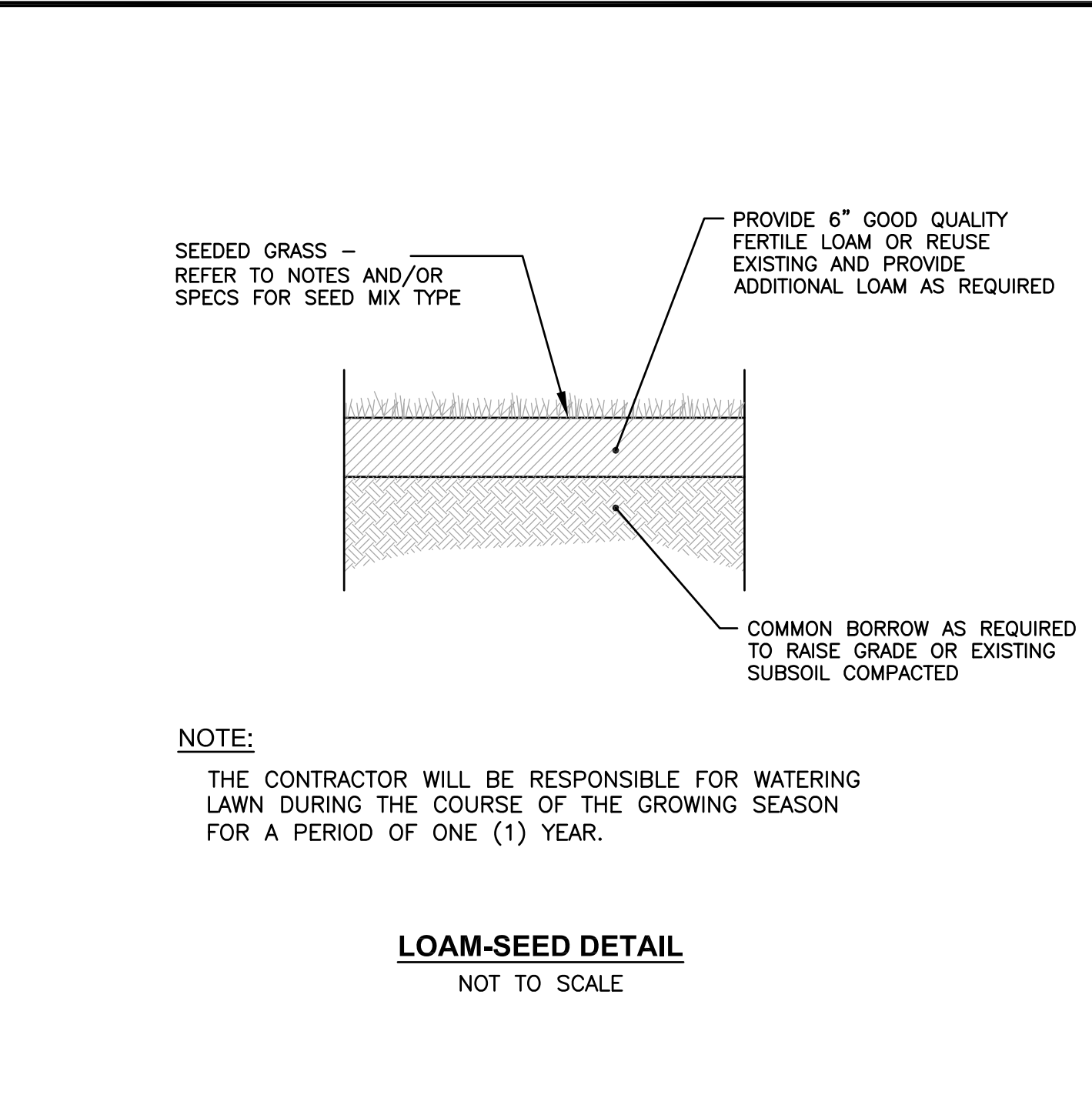
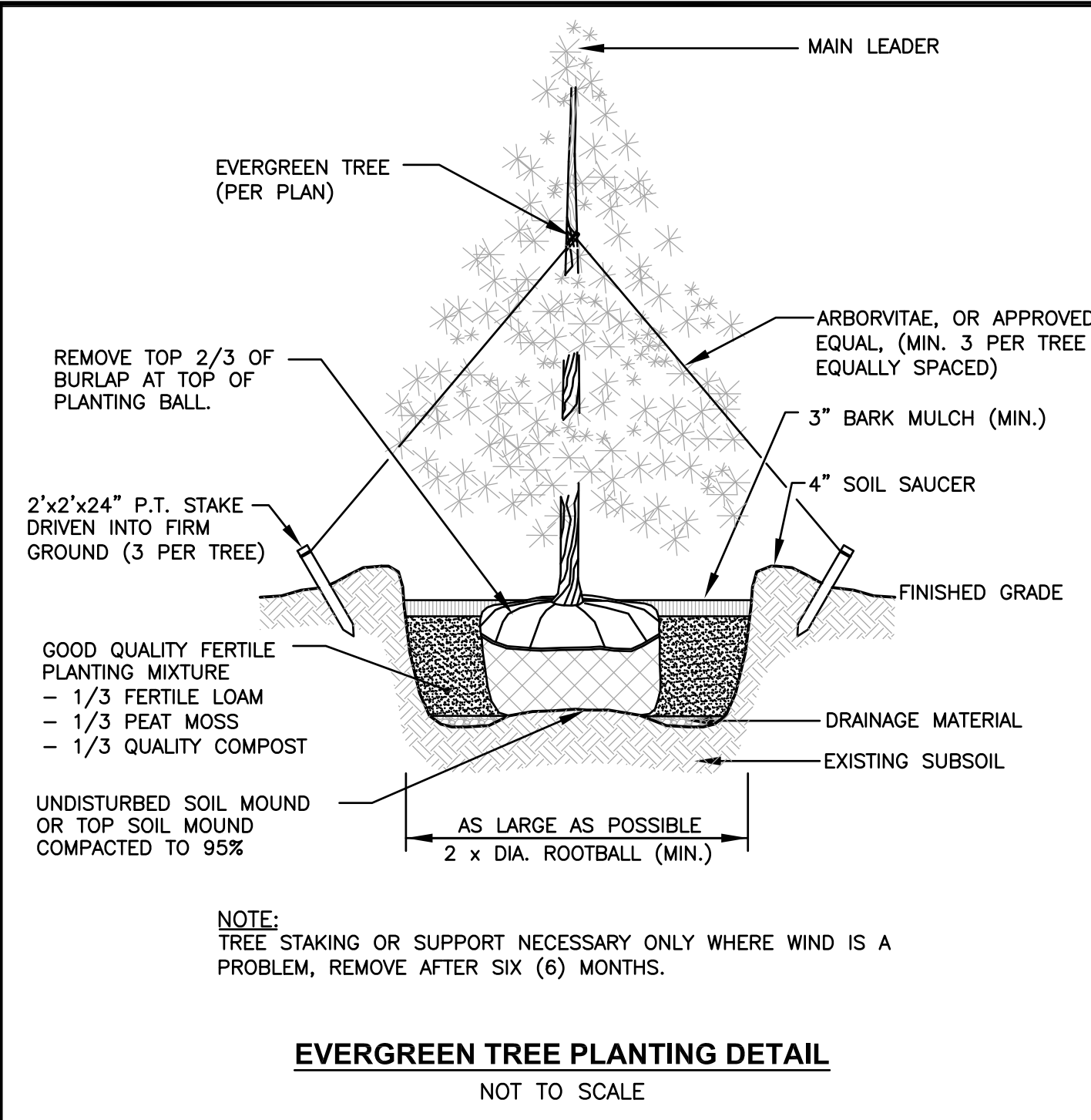
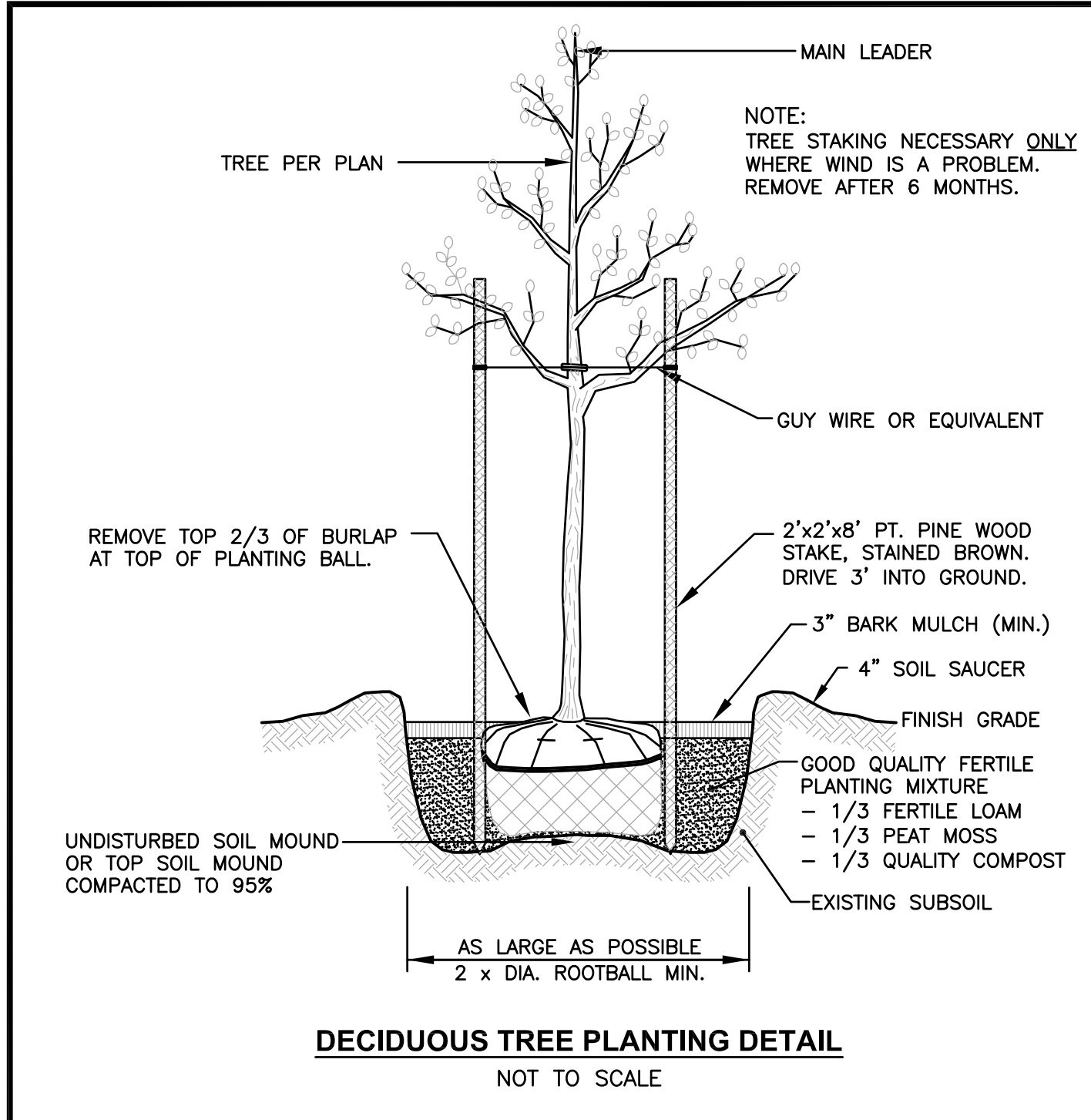
543 THAMES STREET
NEWPORT, RHODE ISLAND
02840

DRAWING TITLE:
LANDSCAPE PLAN

DATE: JULY 2020 SCALE: 1"=20'
DWG. NAME: 2449-L01-LAND.dwg

REVISIONS	NUMBER	REMARKS	DATE
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DRAWING NUMBER
L1
SHEET: 17 OF 18



SEEDING NOTES

- LOAM SHALL BE SPREAD TO A MINIMUM DEPTH OF 6" OVER ALL AREAS DESIGNATED ON PLANS.
- SHAPE AND SMOOTH THE SURFACE TO THE LINES AND GRADES AS SHOWN ON PLANS.
- FERTILIZE WITH 10-10-10 OR EQUIVALENT ANALYSIS, AT LEAST 40% OF THE FERTILIZER NITROGEN SHALL BE IN A SLOW RELEASE FORM. INCORPORATE THE FERTILIZER INTO THE TOP 3 TO 4 INCHES OF THE PLANTING SOIL. APPLY AT THE RATE OF 8 POUNDS PER 1,000 SQUARE FEET AT SEEDING.
- LIME: SPREAD EVENLY AND WORK INTO THE SOIL DURING PREPARATION OF SEED BED AT THE RATE OF ONE TON PER ACRE. INCORPORATE INTO THE SOIL BY DIGGING OR OTHER APPROVED METHOD. DISTRIBUTE LIME UNIFORMLY AND WORK INTO TOP 4 INCHES OF TOP SOIL (MINIMUM) AND UNIFORMLY BLEND BY DIGGING OR ROTOTILLING.
- APPLICATION OF SEED:
 - RATE OF APPLICATION OF SEED SHALL BE 8 POUNDS PER 1,000 SQUARE FEET OR AS INDICATED ON PLANS.
 - SEEDING SHALL BE DONE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS, AND ONLY DURING THE FOLLOWING DATES:
 - SPRING SEEDING: MARCH 15 TO MAY 31
 - FALL SEEDING: AUGUST 15 TO OCTOBER 15
 - THE CONTRACTOR SHALL KEEP ALL SEEDED AREAS WATERED AND IN GOOD CONDITION, RESEEDING IF AND WHEN NECESSARY FOR AN 8 WEEK PERIOD OR UNTIL A GOOD, HEALTHY, UNIFORM GROWTH IS ESTABLISHED OVER THE ENTIRE AREA. THE CONTRACTOR SHALL ALSO MAINTAIN THESE AREAS IN AN APPROVED CONDITION UNTIL PROVISIONAL ACCEPTANCE.
 - DURING THIS PERIOD, WATER TURF AS NECESSARY TO MAINTAIN AN ADEQUATE SUPPLY OF MOISTURE WITHIN THE ROOT ZONE. AN ADEQUATE SUPPLY OF MOISTURE IS EQUIVALENT OF ONE INCH OF ABSORBED WATER PER WEEK THAT IS DELIVERED AT WEEKLY INTERVALS IN THE FORM OF NATURAL RAIN OR IS AUGMENTED AS REQUIRED BY PERIODIC WATERING.
 - OVERSEED WHEN NECESSARY TO PROMOTE GRASS GROWTH.
 - REPLANT AREAS VOID OF TURF ONE SQUARE FOOT OR LARGER.
- SEED:
 - SEED ALL AREAS DESIGNATED ON PLAN AS WELL AS ALL DISTURBED EXISTING AREAS WITH THE FOLLOWING SEED MIX:

SEED MIX No. 1
(SLOPES, MEADOWS AND GENERAL RESTORATION AREA)

TYPE	% BY WEIGHT
CREeping RED FESCUE	70%
ASTORIA BENTGRASS	5%
BIRDSFOOT TREFOIL	15%
PERENNIAL RYE GRASS	10%

APPLICATION RATE = 200 lbs. / ACRE

SEED MIX No. 2
(ENDOPHYTE ENHANCED MIX)
(MOWED AREAS)

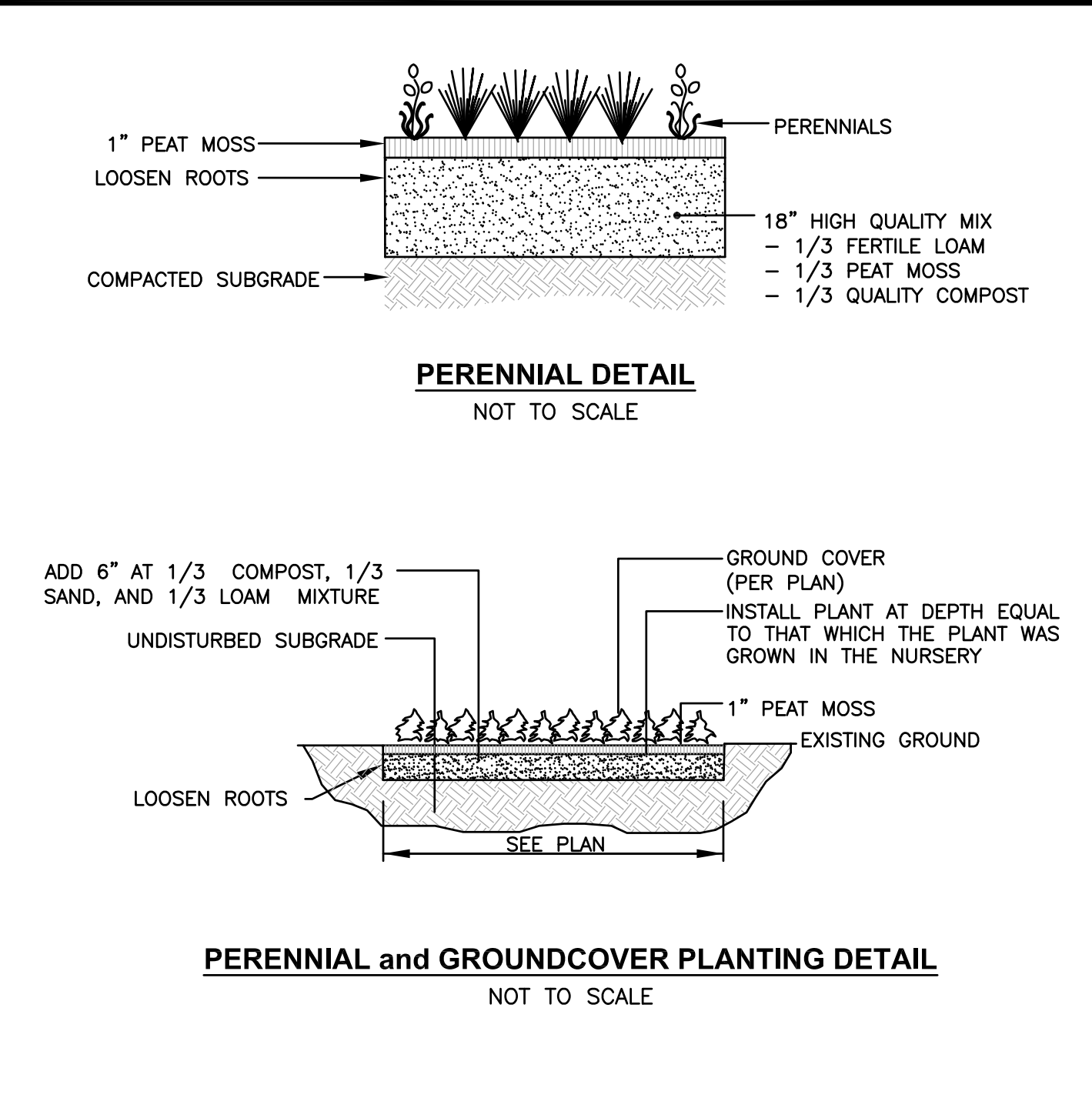
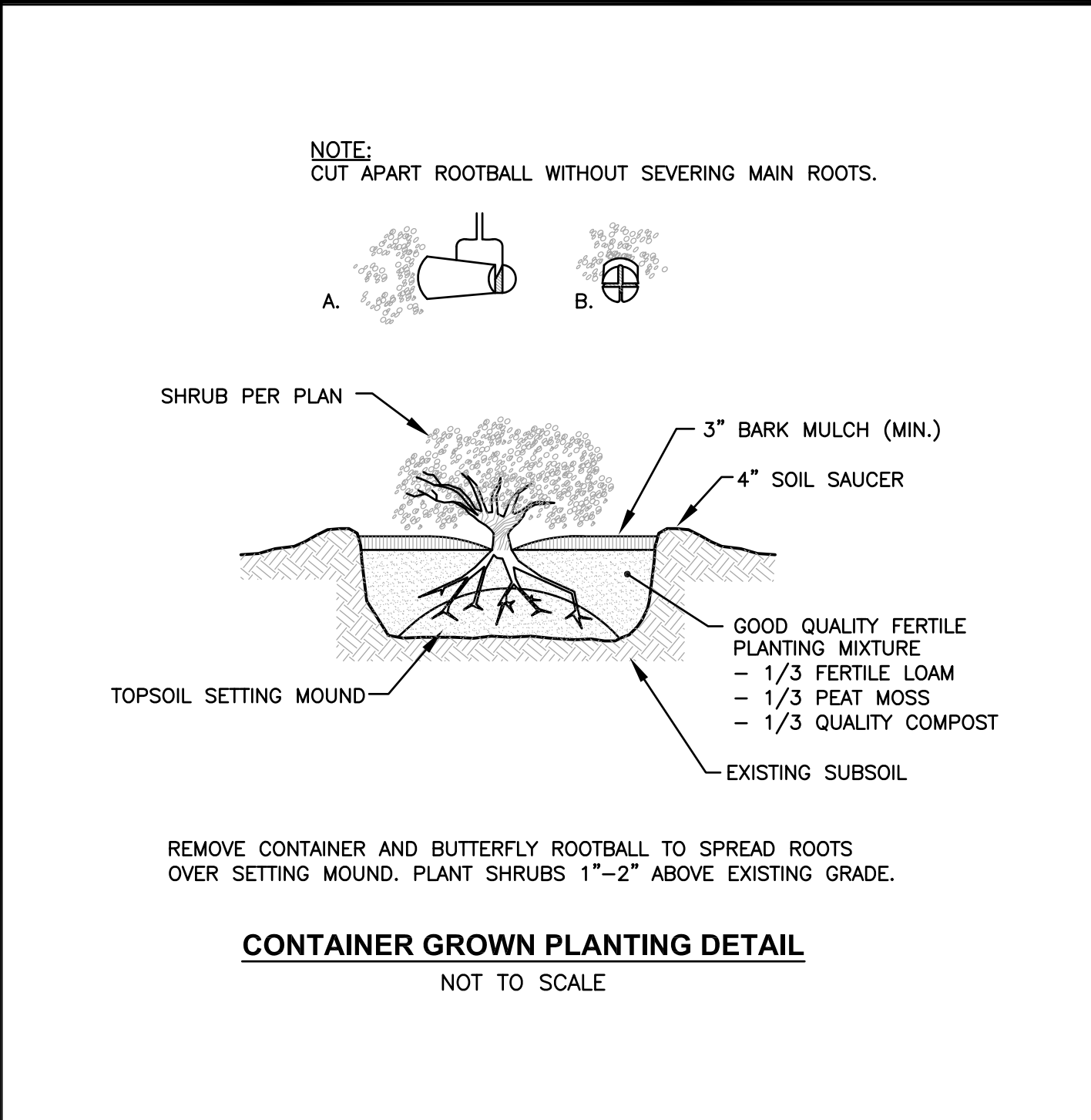
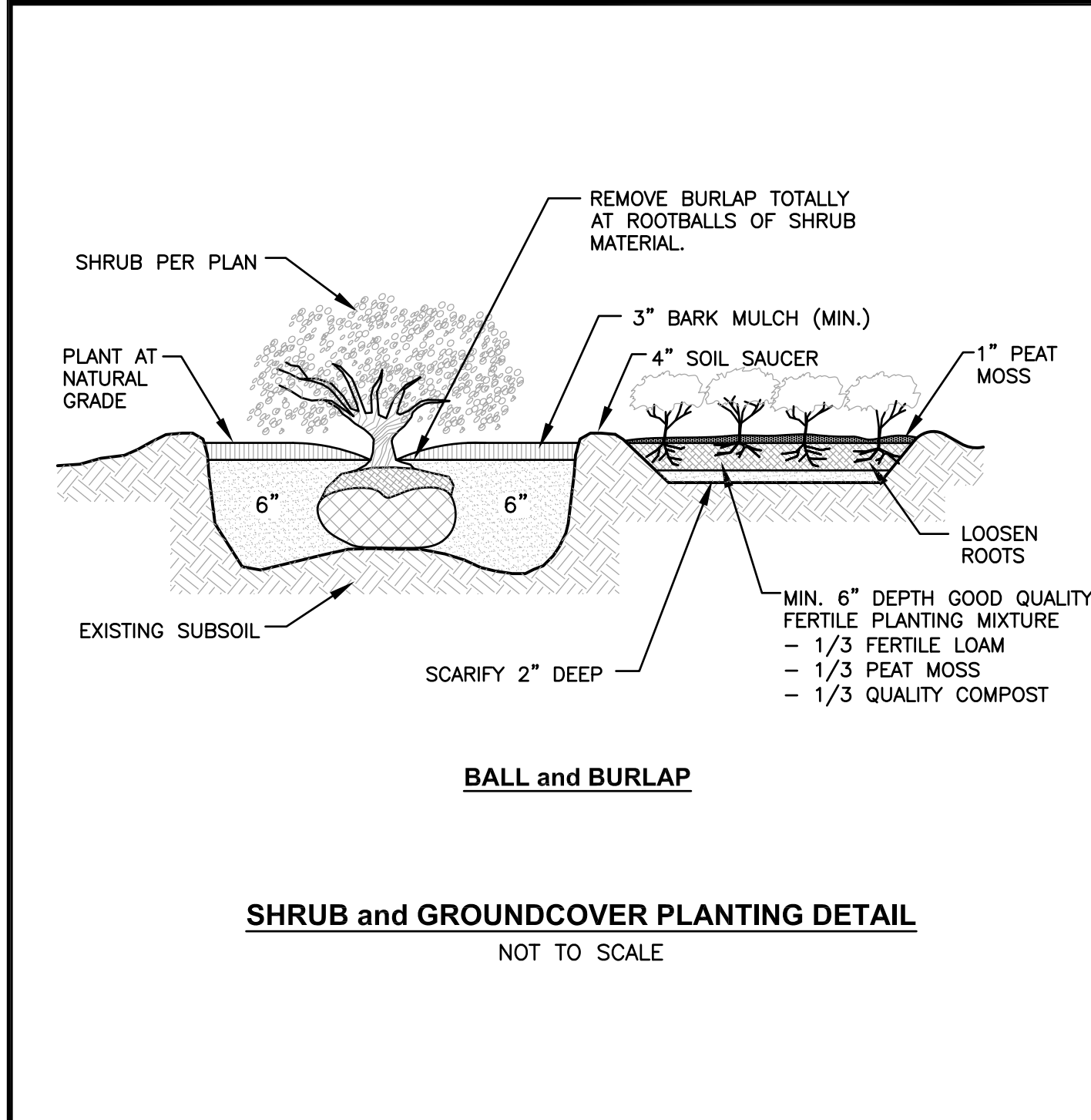
TYPE	% BY WEIGHT
IMPROVED PERENNIAL RYE	30%
TURF TYPE TALL FESCUE	30%
CHEWINGS FESCUE	30%
KENTUCKY BLUEGRASS 98/85	10%

APPLICATION RATE = 200 lbs. / ACRE

SEED MIX No. 3
(DETENTION/RETENTION AREAS)

TYPE	% BY WEIGHT
CREeping RED FESCUE	28%
TALL FESCUE	24%
PERENNIAL RYE GRASS	18%
LITTLE BLUESTEM	15%
REDTOP	4%
NORTHEAST WILDFLOWER MIX	4%

APPLICATION RATE = 220 lbs. / ACRE OR 5 LBS. PER 1,000 S.F.



LANDSCAPE CONSTRUCTION NOTES

- FURNISH AND INSTALL ALL PLANTS SHOWN ON THE DRAWINGS SPECIFIED HEREIN, AND IN THE QUANTITIES LISTED ON THE PLANT LIST. NO SUBSTITUTIONS WILL BE PERMITTED, UNLESS APPROVED BY THE LANDSCAPE ARCHITECT.
- LOAM TO BE SCREENED, GOOD QUALITY, FERTILE, FREE OF WEEDS, STICKS, STONES OVER 3/4", AND ROOTS. SPREAD TO A MINIMUM OF 6" OVER ALL PLANTED AREAS.
- BIO-RETENTION AREAS-PLANTING SOIL AND MULCH: LOAMY SAND TO A SANDY LOAM-80% SAND <20% SILT, <2% CLAY. WELL AGED GRADED COMPOST (25% OF SOIL MIX). WELL AGED, AERATED DARK BROWN HARD-WOOD MULCH (AGED 6 MONTHS).
- NURSERY STOCK SHALL MEET THE STANDARDS OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION AS TO GRADING AND QUALITY.
- ONLY NURSERY-GROWN PLANTS, GROWN IN ACCORDANCE WITH ACCEPTED HORTICULTURAL PRACTICES, AND GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT FOR AT LEAST TWO (2) YEARS, WILL BE ACCEPTED.
- CALIPER MEASUREMENTS FOR ALL NEW PLANT STOCK SHALL BE TAKEN SIX (6) INCHES ABOVE GRADE FOR TREES UNDER FOUR (4) INCHES AND TWELVE (12) INCHES ABOVE GRADE FOR TREES OVER FOUR (4) INCHES.
- ALL TREES SHALL BE A MINIMUM OF SEVEN (7) FEET ABOVE FINISHED GRADE WHEN TREES ARE LOCATED WITHIN VEHICULAR AND PEDESTRIAN TRAVEL WAYS.
- SET PLANTS PLUMB AND AT A LEVEL THAT AFTER SETTLEMENT THEY BEAR THE SAME RELATION TO THE SURROUNDING GROUND AS THEY BORE TO THE GROUND FROM WHICH THEY WERE DUG. SETTLE BACKFILL MATERIAL FOR PLANTS, THOROUGHLY AND PROPERLY BY FIRING OR TAMPING. FORM SAUCERS, CAPABLE OF HOLDING WATER ABOUT INDIVIDUAL PLANTS, BY PLACING RIDGES OF PLANTING SOIL AROUND EACH.
- STAKE ALL TREES OVER 5 FEET AS SHOWN ON PLANS. REMOVE STAKES AT THE END OF THE GUARANTEE PERIOD.
- WATERING: WATER ALL PLANTS WITHIN 48 HOURS AFTER PLANTING. IF CONDITIONS WARRANT, AND AS MANY TIMES THEREAFTER TO SUSTAIN HEALTHY CONDITIONS UNTIL LANDSCAPE INSTALLATION IS COMPLETED. SATURATE THE SOIL AROUND EACH PLANT THOROUGHLY AT EACH WATERING.
- PRUNING: PRUNE PLANTS, AS DIRECTED BY OWNER, AT THE PROJECT SITE BEFORE OR IMMEDIATELY AFTER PLANTING IN ACCORDANCE WITH THE BEST HORTICULTURAL PRACTICE. CUT BROKEN, DEAD OR INJURED BRANCHES IMMEDIATELY ABOVE THE STEM COLLAR ON THE TRUNK OR LIMB. PRUNE ALL BROKEN ROOTS ON THE PLANT SIDE OF THE BREAK. PAINT CUTS OVER 3/4" IN DIAMETER WITH TREE WOUND PAINT. PRUNING SHALL NOT DEFORM OR OTHERWISE DESTROY THE TYPICAL SHAPE OR SYMMETRY OF THE PLANT, AND SHALL NOT REDUCE THE HEIGHT BY MORE THAN ONE-THIRD. DO NOT CUT BACK THE LEADER OF THE PLANT UNLESS DIRECTED BY THE LANDSCAPE ARCHITECT.
- FERTILIZING: FERTILIZE SHRUB BEDS WITH 10-10-10 FERTILIZER BROADCAST AT A RATE OF THREE POUNDS PER 100 SQUARE FEET OF SURFACE AREA BROADCAST. APPLY THE FERTILIZER UNIFORMLY TO THE SURFACE BEDS AND WORK INTO THE UPPER TWO INCHES OF SOIL. FERTILIZE INDIVIDUAL TREES AS PER MANUFACTURER'S INSTRUCTIONS. APPLY A SECOND APPLICATION OF FERTILIZER TO ALL PLANT ITEMS AT THE SAME SPECIFIED RATES OVER THE MULCH AT THE END OF AN EIGHT WEEK PERIOD.
- LIMING: ADD POWDERED LIME EVERY SIX MONTHS - OR SLOW RELEASE GRANULAR LIME-AS PER MANUFACTURER'S INSTRUCTION.
- MULCHING: WITHIN A 72 HOUR PERIOD AFTER PLANTING, COVER ALL PLANTED AREAS WITH 3" SHREDED BARK MULCH. NO RED OR DYED MULCH IS TO BE USED. MULCH SHOULD BE PULLED ONE INCH AWAY FROM PLANT TRUNK OR STEM, AND NOT ALLOWED TO REST DIRECTLY AGAINST THE TRUNK OR STEM.
- GUARANTEE: ALL PLANTS FURNISHED BY THE CONTRACTOR SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER PRELIMINARY INSPECTION AND SHALL BE ALIVE AND IN SATISFACTORY GROWTH AT THE END OF THE GUARANTEE PERIOD. ALL DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED AT ONCE BY THE CONTRACTOR, AT NO ADDITIONAL COST TO THE OWNER.

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PROJECT TITLE:
TOWER HILL LANDINGS ANNEX LLC

PLAT MAP 32-4, LOT 32
ZONING DISTRICT: CN and R-10
COMMERCIAL NEIGHBORHOOD and MEDIUM HIGH DENSITY RESIDENTIAL DISTRICT and KINGSTOWN ROAD SPECIAL MANAGEMENT DISTRICT

2095 KINGSTOWN ROAD (ROUTE 108)
SOUTH KINGSTOWN, R.I.

PREPARED FOR:
TOWER HILL LANDINGS, LLC

543 THAMES STREET
NEWPORT, RHODE ISLAND 02840

DRAWING TITLE:
LANDSCAPE DETAIL PLAN

DATE: JULY 2020
SCALE: AS SHOWN

DWG. NAME: 2449-L02-LNDET.dwg

REVISIONS

NUMBER	REMARKS	DATE
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DRAWING NUMBER
L2

SHEET: 18 OF 18