

Smithfield Elementary School Improvements Old County Road School

AP 32 LOT 10 / AP 33 LOT 101

200 Old County Road
Smithfield, Rhode Island

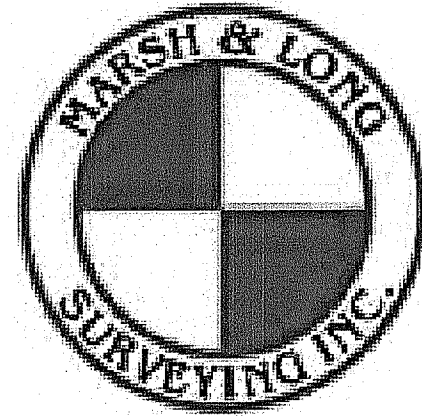
OWNER/APPLICANT:
Smithfield Elementary Schools
49 Farnum Pike
Smithfield, RI 02917

CIVIL ENGINEER:



PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100

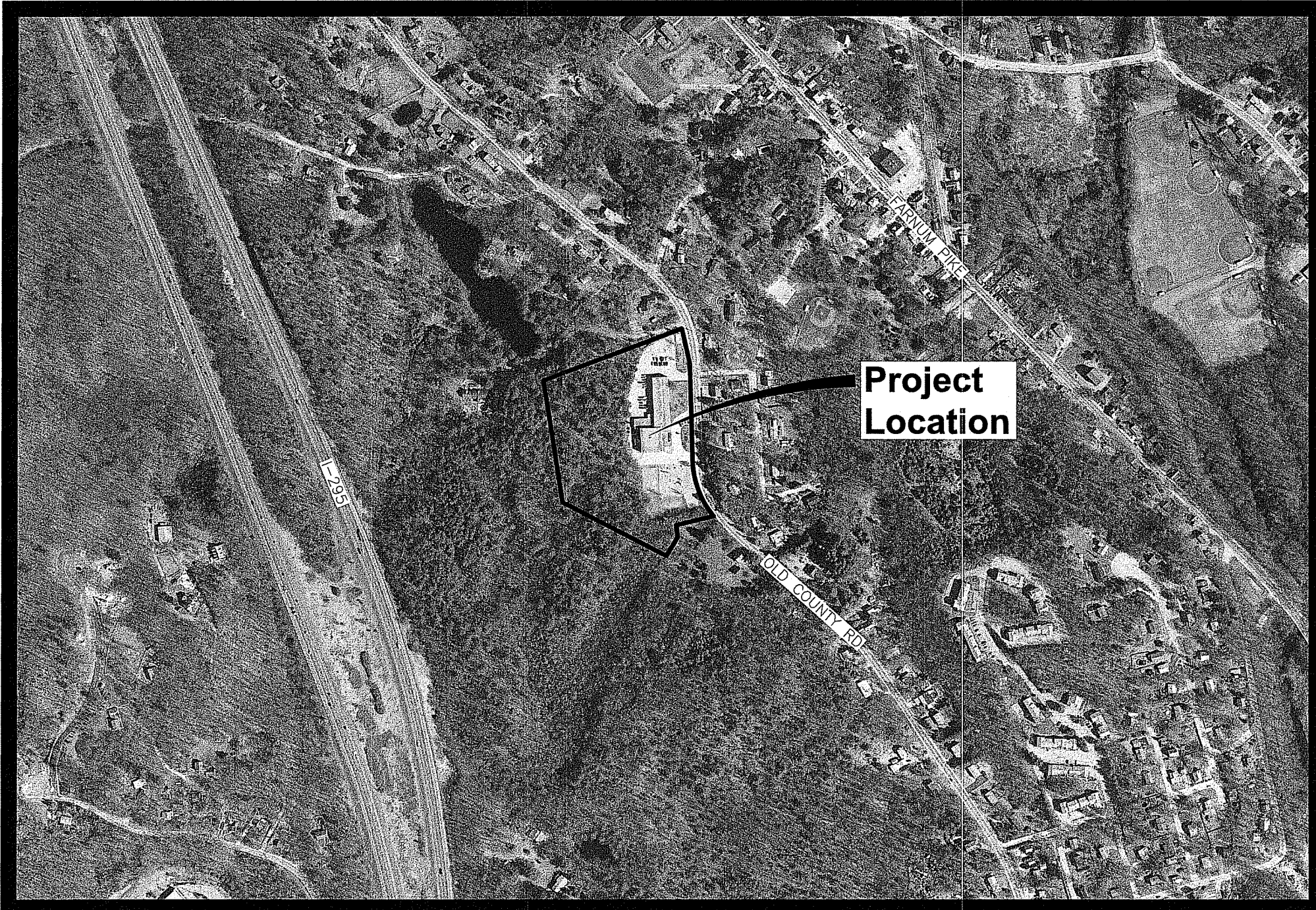
SURVEYOR:



450 GEO. WASH. HWY. SMITHFIELD, RI
(401) 231-0900

LANDSCAPE ARCHITECT:

Diane C. Soule & Associates, ASLA
Landscape Architecture
422 Farnum Pike
Smithfield, Rhode Island 02917
www.dianesouleandassociates.com
401-231-0236
email: diane@dcasa.com



Scale : N.T.S.

INDEX OF DRAWINGS

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RIDEM PERMIT SUBMISSION
December 13, 2019

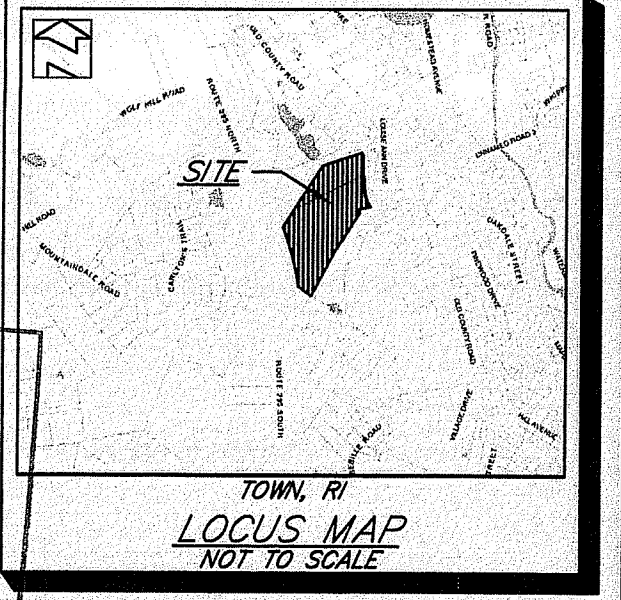
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAY 21 2020 FILE # 19-0348
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

LEGEND

- ⊙ DRAIN MANHOLE
- ⊕ CATCH BASIN
- ⊕ ROUND CATCH BASIN
- ⊕ UNKNOWN GATE
- ⊕ UNKNOWN MANHOLE
- ⊕ SEWER MANHOLE
- ⊕ GAS METER
- ⊕ GAS VALVE
- ⊕ WATER GATE
- ⊕ HYDRANT
- ⊕ UTILITY POLE
- ⊕ UTILITY POLE WITH LIGHT
- ⊕ FLAG POLE
- ⊕ ELECTRIC METER
- ⊕ WETLAND FLAG
- R.I.H.B. RHODE ISLAND HIGHWAY BOUND
- ASSF200 AREA SUBJECT TO STORM FLOWAGE
- DMH/DI DRAIN MANHOLE / DROP INLET
- VCC VERTICAL GRANITE CURB
- VCC VERTICAL CONCRETE CURB
- ⊕ WATER SHUT-OFF
- ⊕ CHAIN LINK FENCE

- NOTES:
1. THIS PARCEL LIES WITHIN ZONE 'X' AND ZONE 'A' AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR PROVIDENCE COUNTY, RHODE ISLAND, MAP NUMBER 4400700169H. ZONE 'X' = AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN. ZONE 'A' = SPECIAL FLOOD HAZARD AREA WITHOUT BASE FLOOD ELEVATION. MAP EFFECTIVE DATE: OCTOBER 2, 2015
 2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE CONTRACTOR SHALL NOTIFY "DIG-SAFE" PRIOR TO EXCAVATION AND SHALL NOTIFY LOCAL UTILITY COMPANIES BEFORE COMMENCEMENT OF WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND RELOCATE UTILITIES AS REQUESTED SHOULD THERE BE A CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
 3. HORIZONTAL DATA ON THIS PLAN WAS OBTAINED BY FIELD SURVEY AND REFERENCES THE RHODE ISLAND STATE PLANE COORDINATES.
 4. THE VERTICAL DATA ON THIS PLAN REFERENCES THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

- REFERENCES:
1. RHODE ISLAND HIGHWAY PLAT NO. 946.
 2. FINAL MINOR SUBDIVISION FOR PAMELA GOLOVICH ON OLD COUNTY ROAD IN SMITHFIELD, RI AP 32 LOT 9 BY INTERNATIONAL MAPPING & SURVEYING CORP. FOUND IN PLAT BOOK 6 PAGE 112.



Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

ZONING: R-20

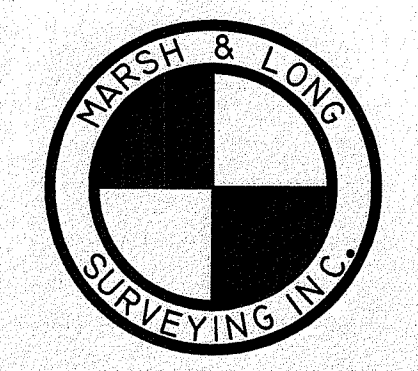
MIN. AREA = 20,000 S.F.
 MIN. LOT WIDTH = 125 FT.
 MIN. LOT FRONTAGE = 125 FT.
 MIN. FRONT YARD = 30 FT.
 MIN. SIDE YARD = 15 FT.
 MIN. REAR YARD = 30 FT.
 (SEE REGULATIONS FOR ADDITIONAL INF.)

ZONING: R-MED

MIN. AREA = 40,000 S.F.
 MIN. LOT WIDTH = 150 FT.
 MIN. LOT FRONTAGE = 150 FT.
 MIN. FRONT YARD = 30 FT.
 MIN. SIDE YARD = 20 FT.
 MIN. REAR YARD = 40 FT.
 (SEE REGULATIONS FOR ADDITIONAL INF.)

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SMITHFIELD, RI
EXISTING CONDITIONS PLAN
 PREPARED FOR
PARE CORP.
 SURVEY OF A PORTION OF
 AP 32 LOT 10 & AP 33 LOT 1
 OLD COUNTY ROAD
 ZONE R-20 AND R-MED
 MAY 10, 2019



450 GEO. WASH. HWY. SMITHFIELD, RI
 (401) 831-0900

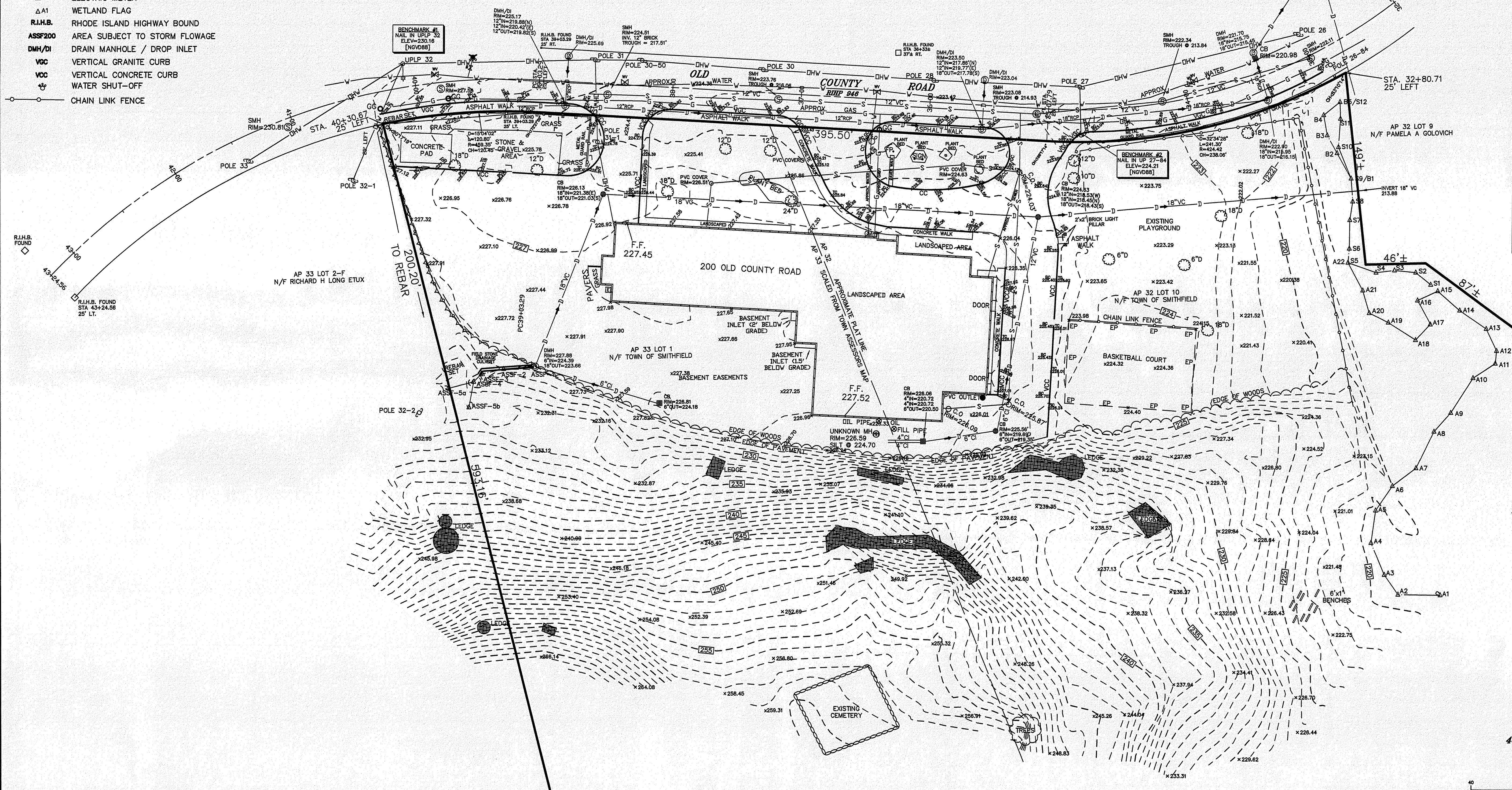
GRAPHIC SCALE



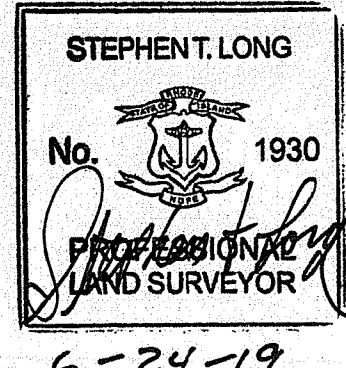
(IN FEET)
 1 inch = 40 ft.

NO.	DATE	DESCRIPTION	BY
1.	9/25/19	REQUESTED REVISIONS	NMS

THIS PLAN TO BE INDEXED BY THE FOLLOWING:
OLD COUNTY ROAD



THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS, EFFECTIVE: JANUARY 2016. THE PURPOSE FOR THE CONDUCT OF THE SURVEY AND FOR THE PREPARATION OF THIS PLAN IS AS FOLLOWS:
 EXISTING CONDITIONS PLAN
 COMPLETION PLAN CLASS 14
 * THIS COMPLETION PLAN HAS BEEN PREPARED FROM SOURCES OF INFORMATION AND DATA WHOSE POSITIONAL ACCURACY AND RELIABILITY HAS NOT BEEN VERIFIED. THE PROPERTY LINES DEPICTED HEREON DO NOT REPRESENT A BOUNDARY OPINION, AND OTHER INFORMATION DEPICTED IS SUBJECT TO SUCH CHANGES AS AN AUTHORITY FIELD SURVEY MAY DISCLOSE.
 TOPOGRAPHIC SURVEY ACCURACY T-2



BY: *Stephen T. Long*
 STEPHEN T. LONG NO. 1930
 C.O.A. LS-A538

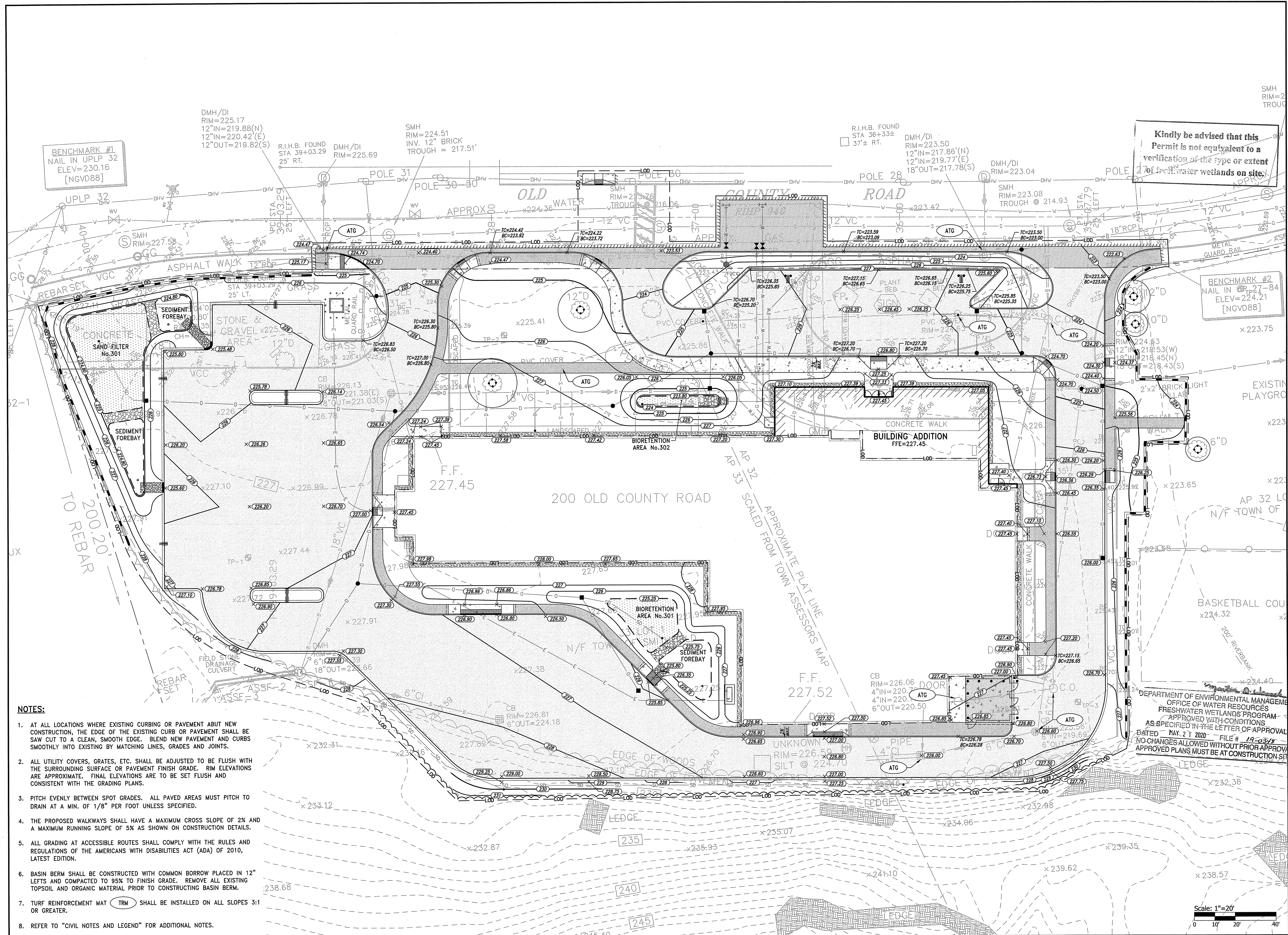
Smithfield Elementary School Improvements
Old County Road School
 200 Old County Road
 Smithfield, Rhode Island

REVISIONS:

PROJECT NO.: 19056.00
 DATE: DECEMBER 13, 2019
 SCALE: 1"=20'
 DESIGNED BY: VAH
 CHECKED BY: DLP
 DRAWN BY: AKL
 APPROVED BY: DLP

DRAWING TITLE:
**OLD COUNTY
 GRADING PLAN**

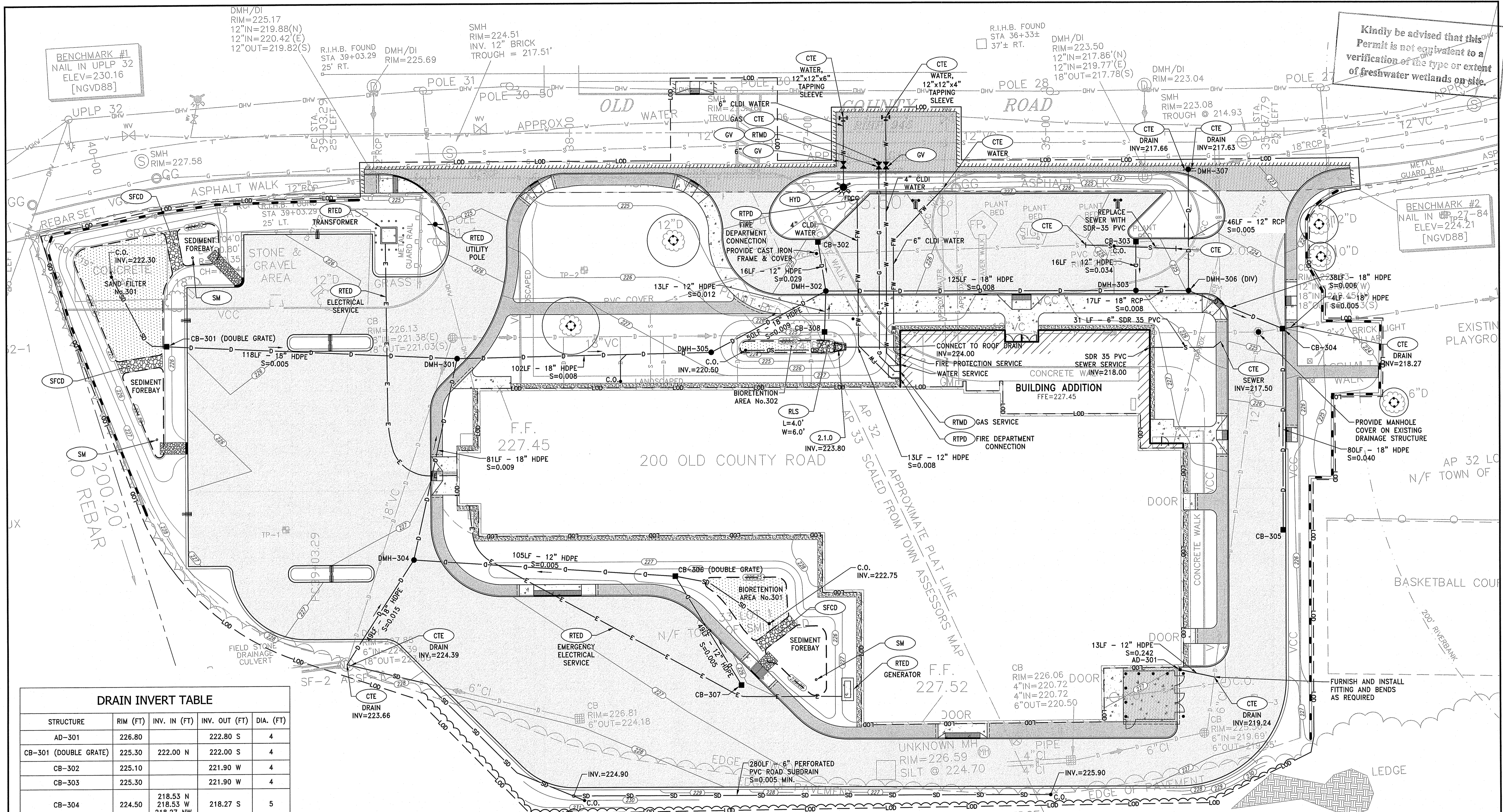
DRAWING NO.:
C5.1
 SHEET NO. 8 OF 23



- NOTES:**
1. AT ALL LOCATIONS WHERE EXISTING CURBING OR PAVEMENT ABUT NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE. BLEND NEW PAVEMENT AND CURBS SMOOTHLY INTO EXISTING BY MATCHING LINES, GRADES AND JOINTS.
 2. ALL UTILITY COVERS, GRATES, ETC. SHALL BE ADJUSTED TO BE FLUSH WITH THE SURROUNDING SURFACE OR PAVEMENT FINISH GRADE. RIM ELEVATIONS ARE APPROXIMATE. FINAL ELEVATIONS ARE TO BE SET FLUSH AND CONSISTENT WITH THE GRADING PLANS.
 3. PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MIN. OF 1/8" PER FOOT UNLESS SPECIFIED.
 4. THE PROPOSED WALKWAYS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2% AND A MAXIMUM RUNNING SLOPE OF 5% AS SHOWN ON CONSTRUCTION DETAILS.
 5. ALL GRADING AT ACCESSIBLE ROUTES SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) OF 2010, LATEST EDITION.
 6. BASIN BERM SHALL BE CONSTRUCTED WITH COMMON BORROW PLACED IN 12" LEFTS AND COMPACTED TO 95% TO FINISH GRADE. REMOVE ALL EXISTING TOPSOIL AND ORGANIC MATERIAL PRIOR TO CONSTRUCTING BASIN BERM.
 7. TURF REINFORCEMENT MAT (TRM) SHALL BE INSTALLED ON ALL SLOPES 3:1 OR GREATER.
 8. REFER TO "CIVIL NOTES AND LEGEND" FOR ADDITIONAL NOTES.

Scale: 1"=20'
 0 10' 20' 40'

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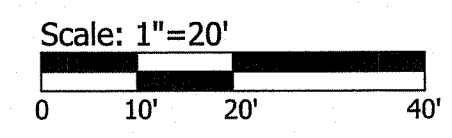
DRAIN INVERT TABLE

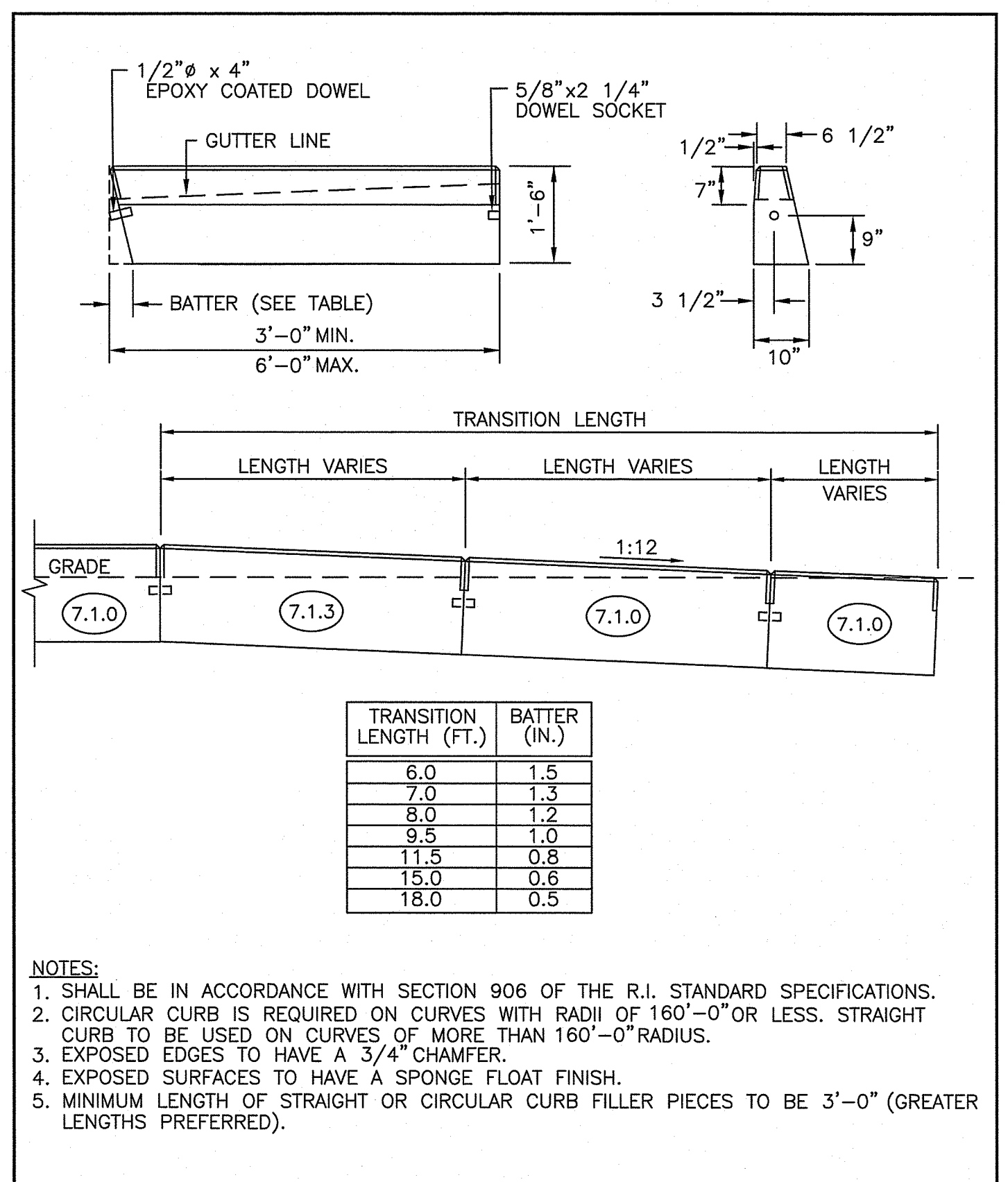
STRUCTURE	RIM (FT)	INV. IN (FT)	INV. OUT (FT)	DIA. (FT)
AD-301	226.80		222.80 S	4
CB-301 (DOUBLE GRATE)	225.30	222.00 N	222.00 S	4
CB-302	225.10		221.90 W	4
CB-303	225.30		221.90 W	4
CB-304	224.50	218.53 N 218.53 W 218.27 NW	218.27 S	5
CB-305	226.00		221.90 E	4
CB-306 (DOUBLE GRATE)	225.75	222.65 SW 222.75 S	222.65 N	4
CB-307	226.10		222.90 NE	4
CB-308	224.50		220.20 E 220.20 W	4
DMH-301	226.60	221.35 W 221.35 N	221.35 S	5
DMH-302	225.40	220.00 NW 221.30 E 220.00 W	220.00 S	5
DMH-303	225.70	218.95 N 221.20 E	218.95 S	5
DMH-304	227.15	222.90 NW 222.15 S	222.15 E	6
DMH-305	226.30	220.49 N	220.49 SE	5
DMH-306 (DIV)	225.00	218.77 N	218.77 S 218.77 E	5
DMH-307	223.05	218.52 W 217.66 N	217.63 S	5

NOTES:

- ALL CATCH BASINS AND DRAIN MANHOLES SHALL BE 4' DIA. PRECAST CONCRETE UNLESS NOTED OTHERWISE.
- ALL DRAIN PIPES SHALL BE SMOOTH INTERIOR CORRUGATED HIGH DENSITY POLYETHYLENE UNLESS NOTED OTHERWISE.
- REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III UNLESS NOTED OTHERWISE.
- ALL SLOPES PROVIDED ARE FT/FT.
- ALL CATCH BASINS AND AREA DRAINS SHALL BE INSTALLED WITH A SUMP AND OUTLET TEE PER THE DETAIL.
- REFER TO "CIVIL NOTES AND LEGEND" FOR ADDITIONAL NOTES.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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RHODE ISLAND DEPARTMENT OF TRANSPORTATION

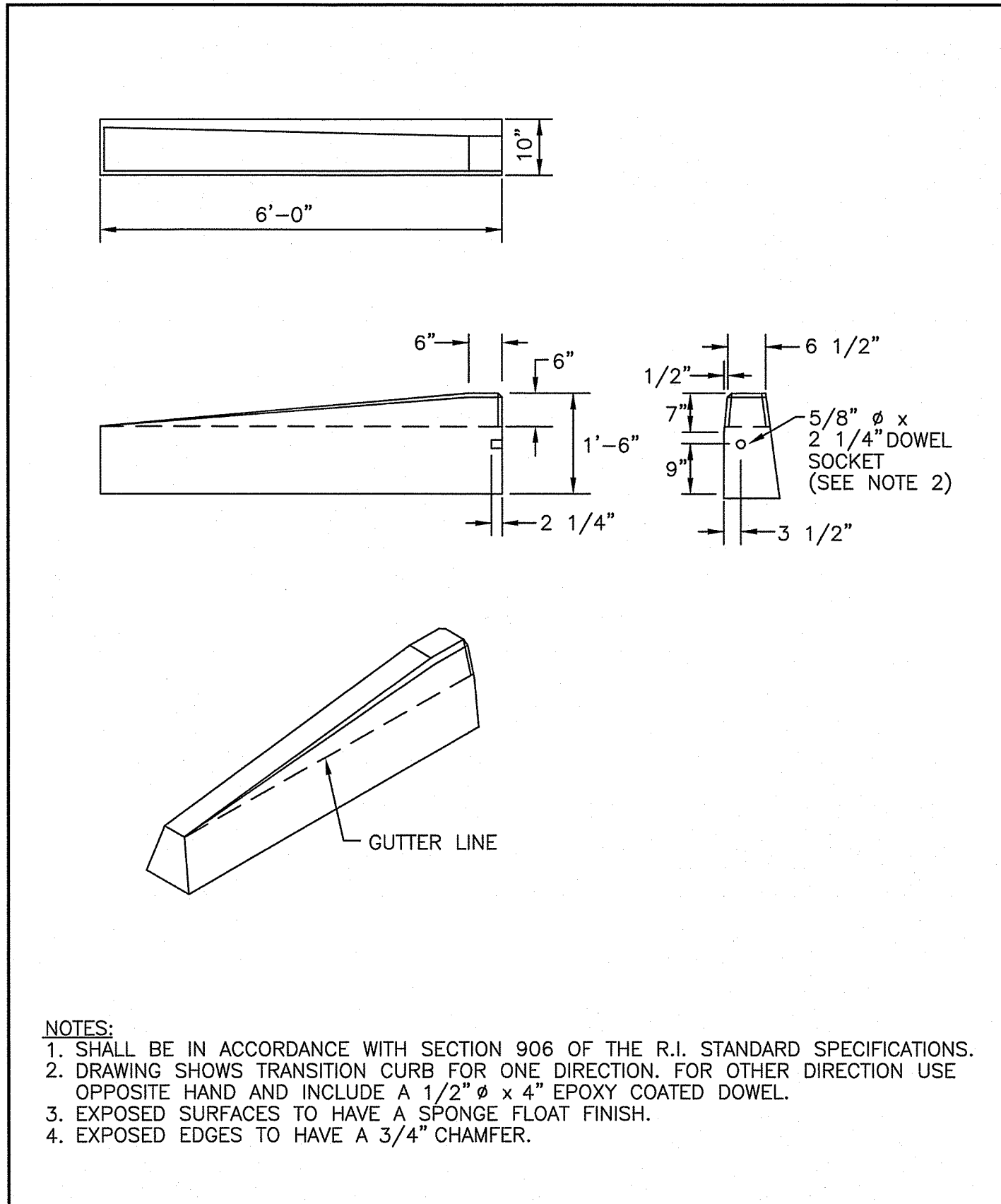
REVISIONS

NO.	BY	DATE
1	MLP	Mar 05

PRECAST CONCRETE WHEELCHAIR RAMP TRANSITION CURB

ISSUE DATE: JUNE 15, 1998

R.I. STANDARD 7.1.3



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

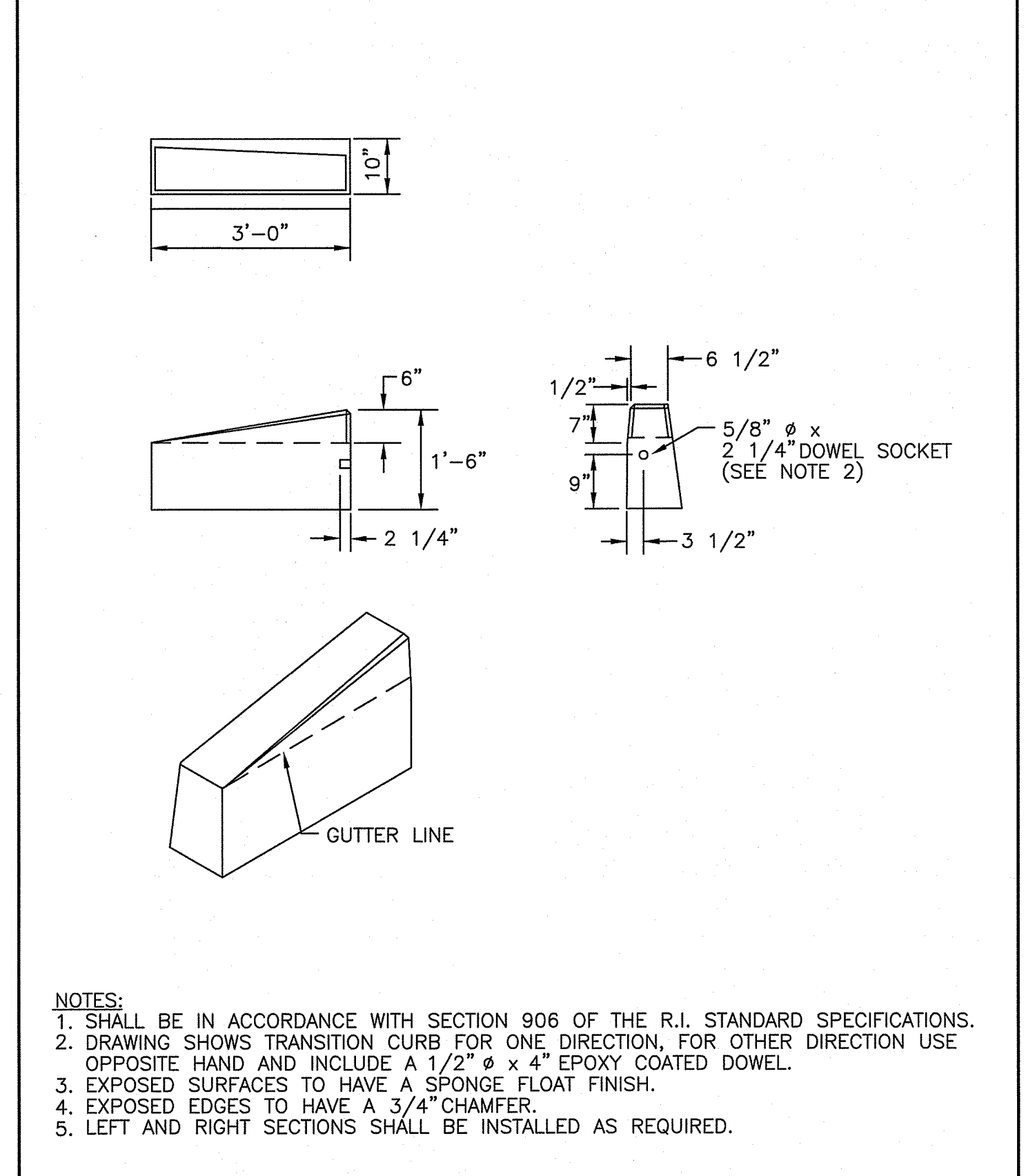
REVISIONS

NO.	BY	DATE
1	MLP	Mar 05

6'-0" PRECAST CONCRETE TRANSITION CURB

ISSUE DATE: JUNE 15, 1998

R.I. STANDARD 7.1.2



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

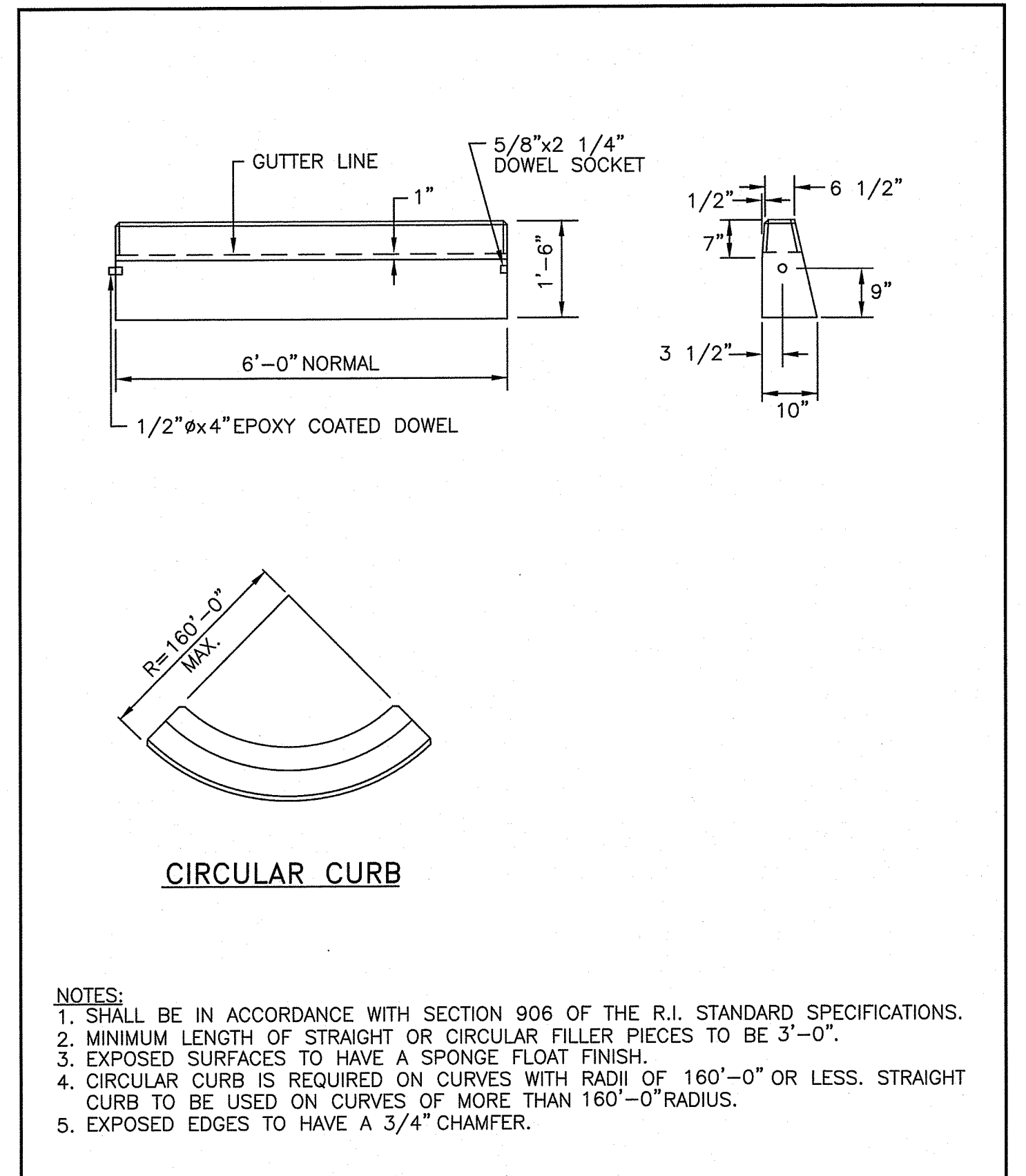
REVISIONS

NO.	BY	DATE
1	MLP	Mar 05
2	MLP	06/01/10

3'-0" PRECAST CONCRETE TRANSITION CURB

ISSUE DATE: JUNE 15, 1998

R.I. STANDARD 7.1.1



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

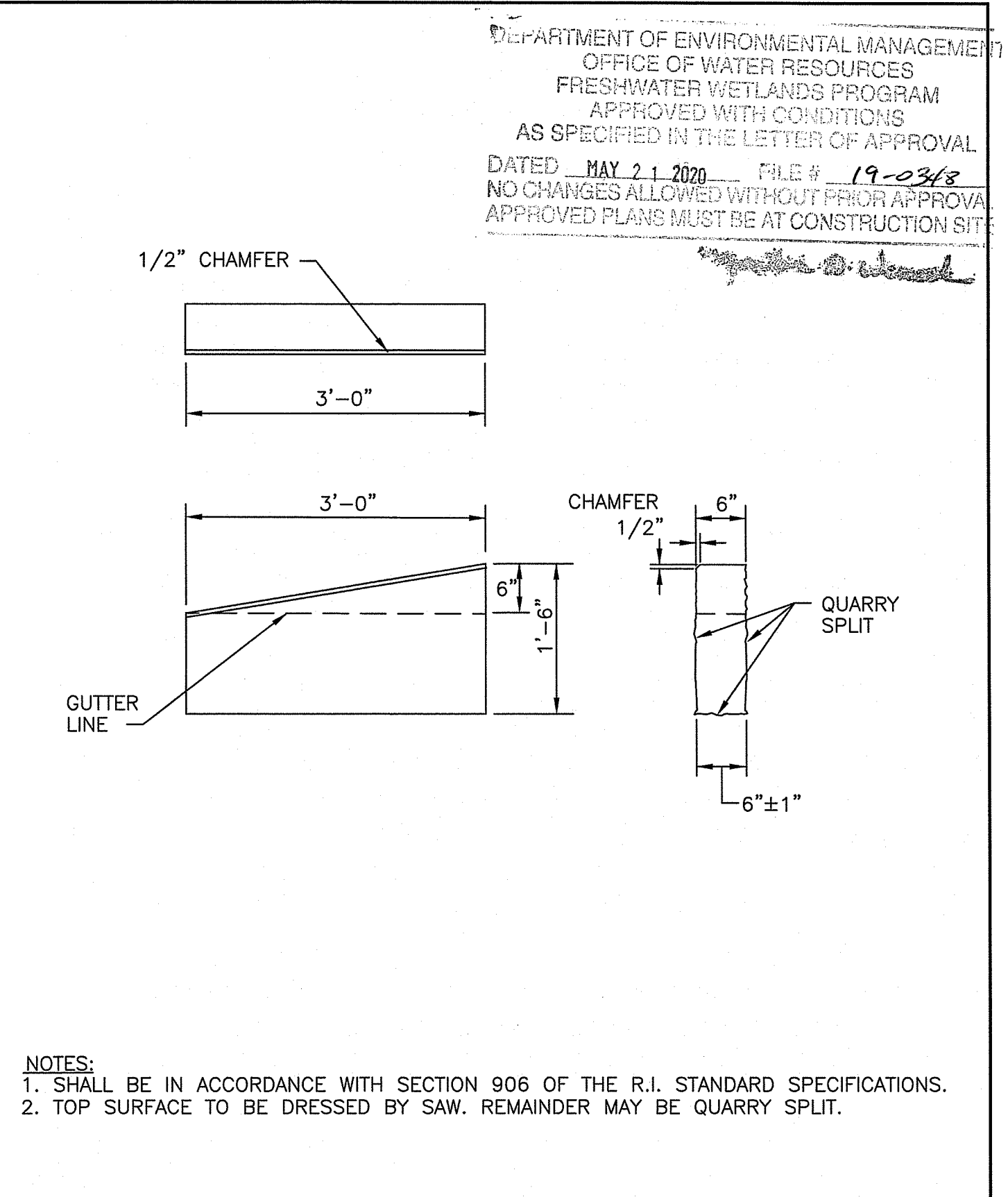
REVISIONS

NO.	BY	DATE
1	MLP	Mar 05

PRECAST CONCRETE CURB

ISSUE DATE: JUNE 15, 1998

R.I. STANDARD 7.1.0



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

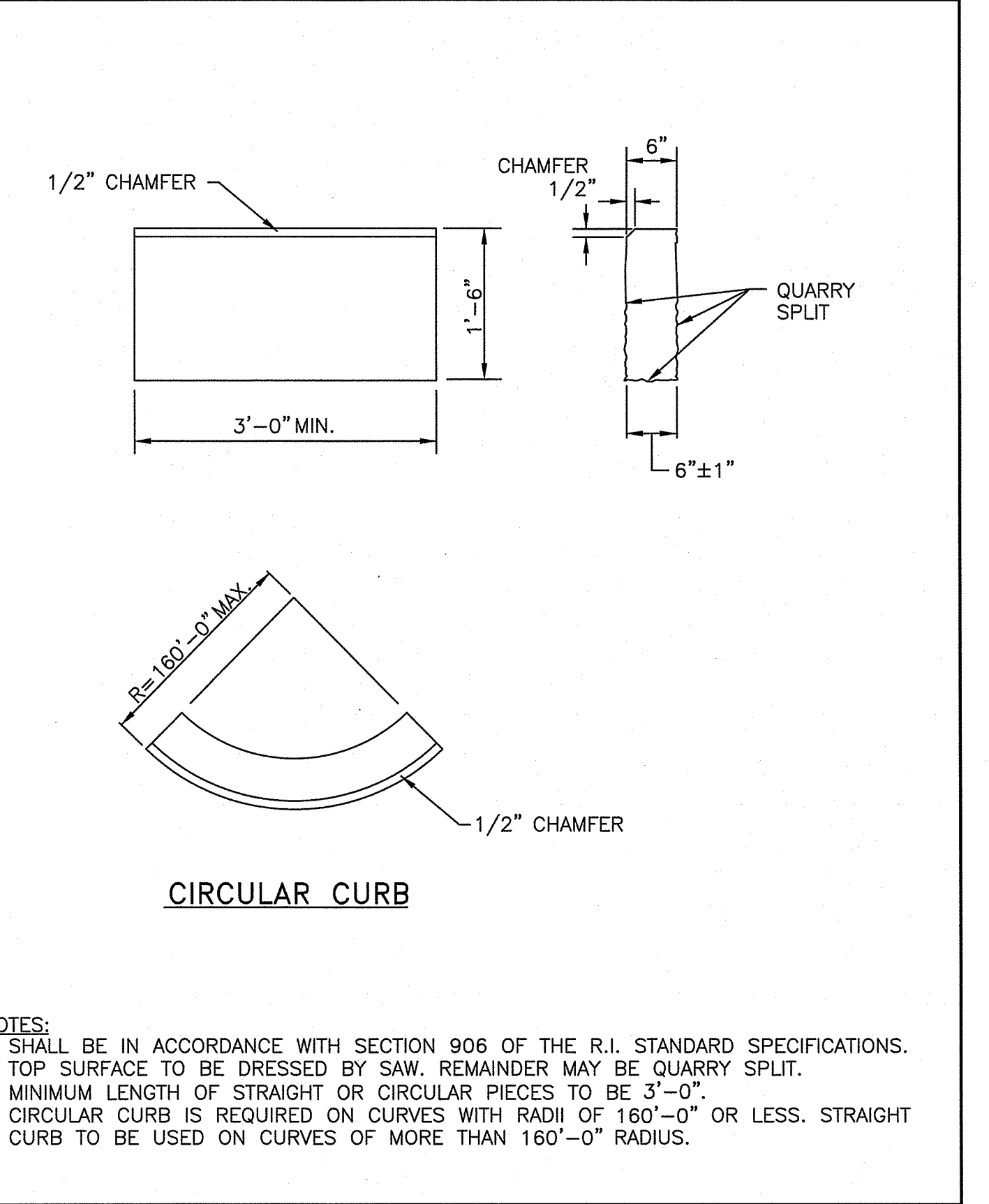
REVISIONS

NO.	BY	DATE
1	MLP	Mar 2005
2	MLP	Jun 2010
3	MLP	Sep 2012

3'-0" GRANITE TRANSITION CURB

ISSUE DATE: JUNE 15, 1998

R.I. STANDARD 7.3.1



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

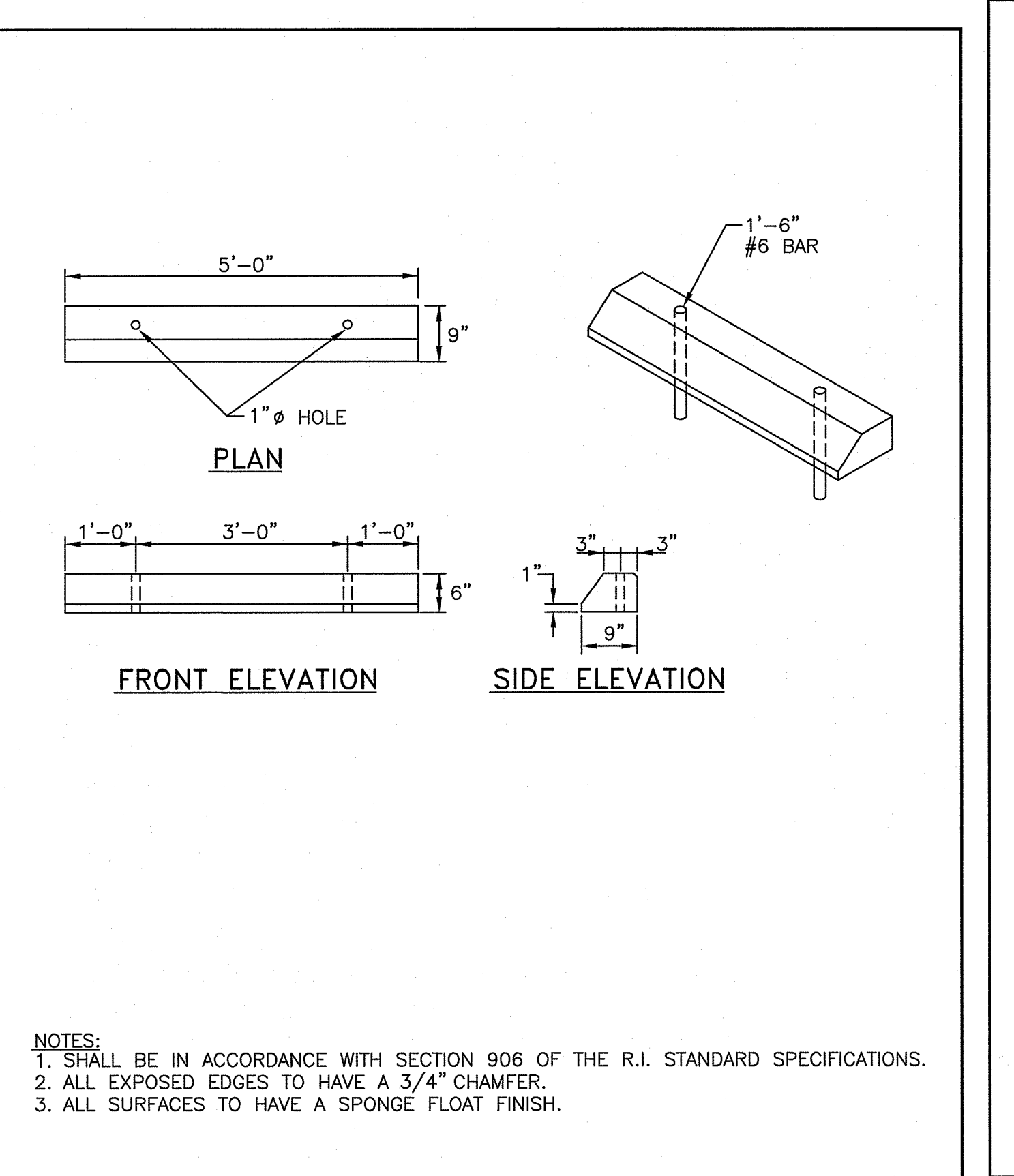
REVISIONS

NO.	BY	DATE
1	MLP	Mar 2005
2	MLP	Sep 2012

GRANITE CURB

ISSUE DATE: JUNE 15, 1998

R.I. STANDARD 7.3.0



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

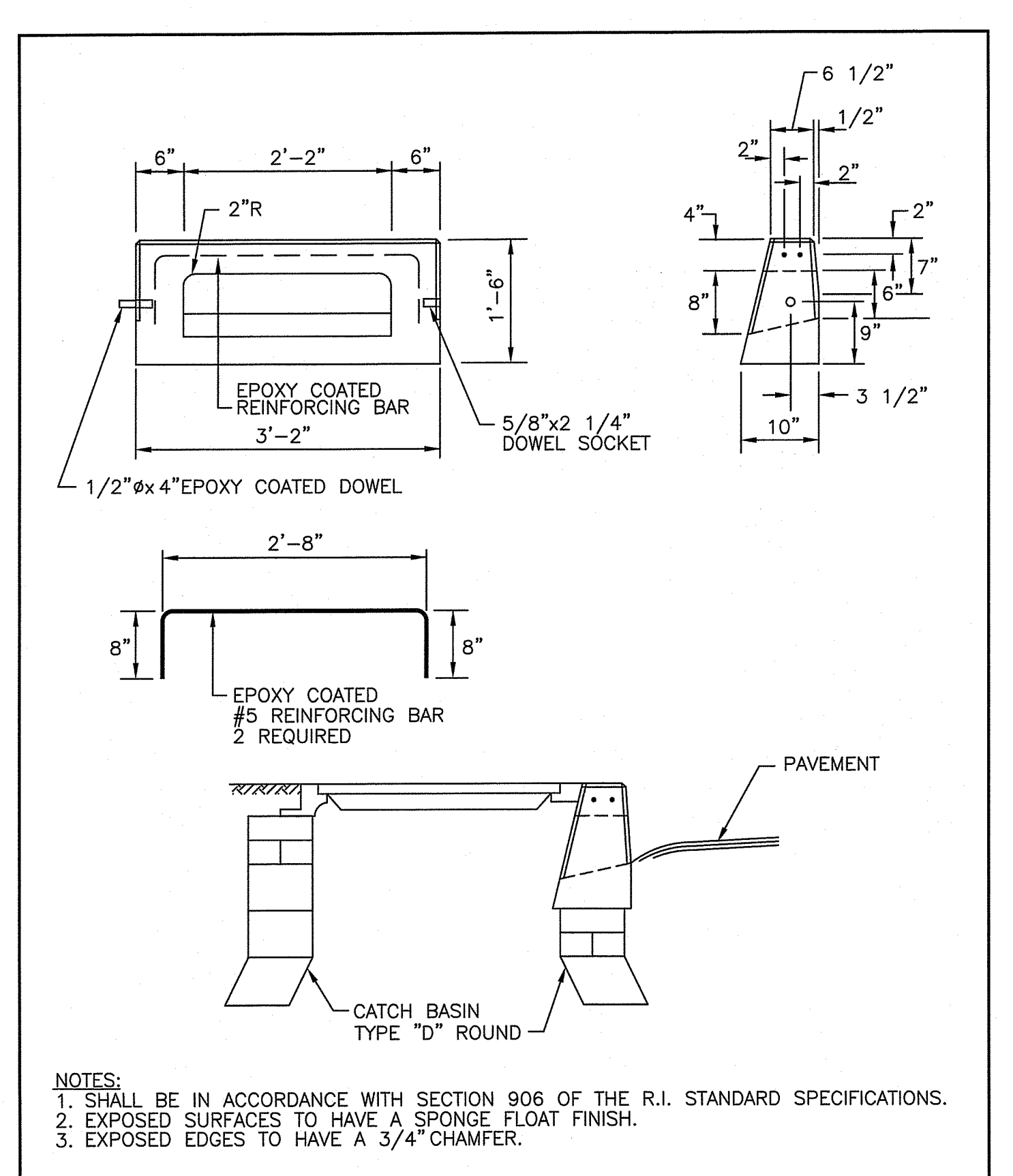
REVISIONS

NO.	BY	DATE
1	MLP	Mar 05

PRECAST CONCRETE CAR STOPS

ISSUE DATE: JUNE 15, 1998

R.I. STANDARD 7.2.4



RHODE ISLAND DEPARTMENT OF TRANSPORTATION

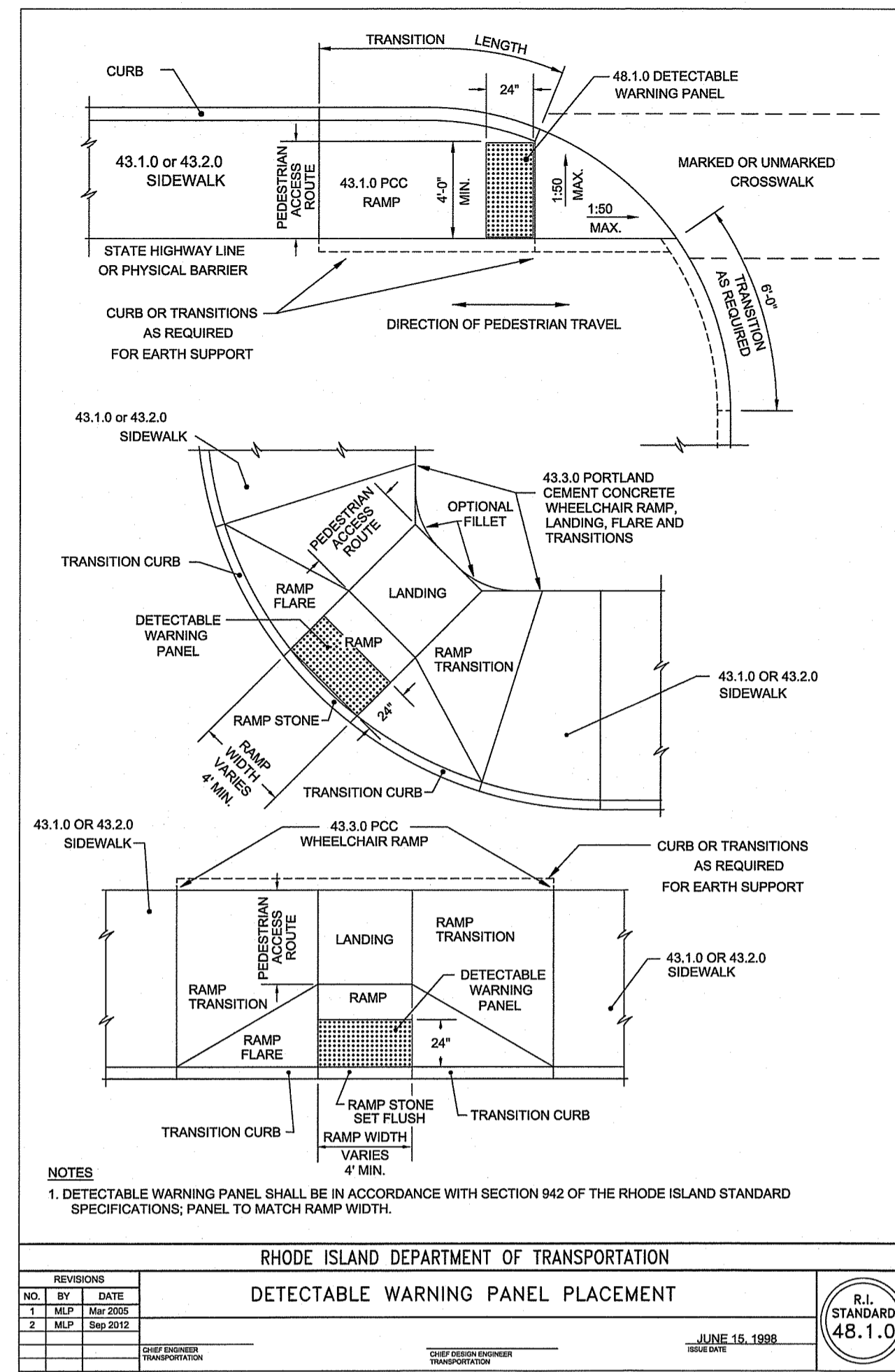
REVISIONS

NO.	BY	DATE
1	MLP	Mar 05

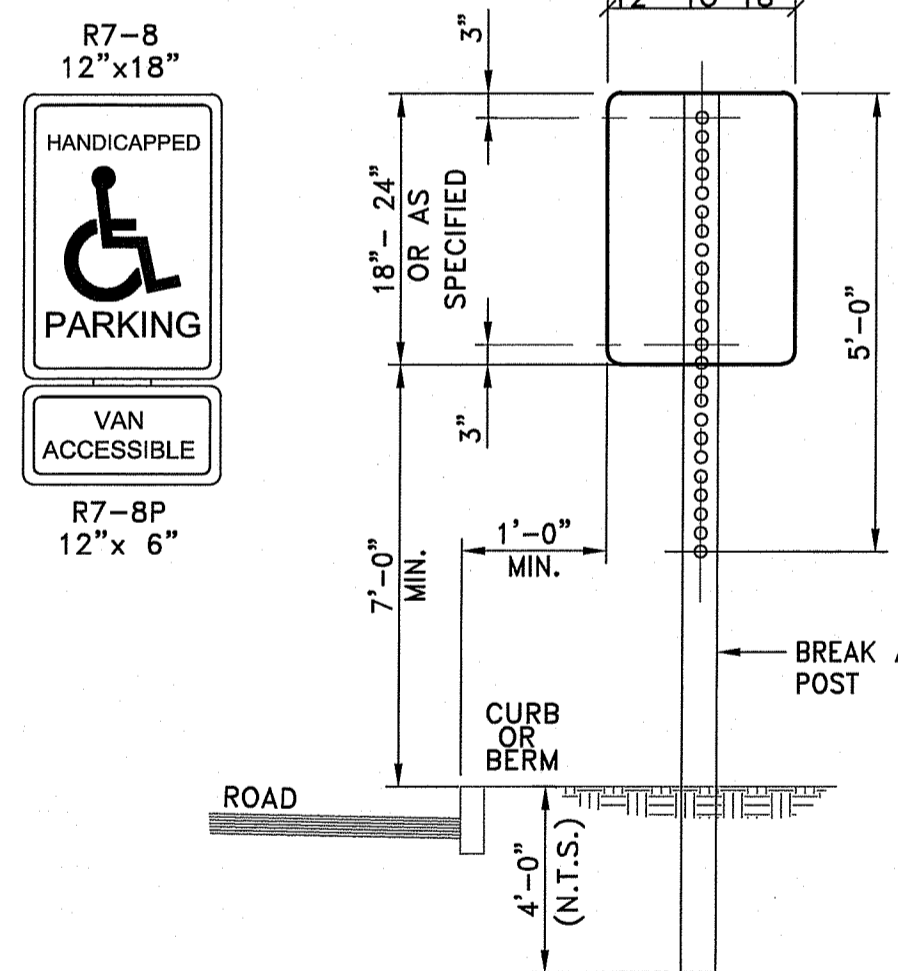
PRECAST CONCRETE INLET STONE (FOR ROUND CATCH BASIN)

ISSUE DATE: JUNE 15, 1998

R.I. STANDARD 7.1.6



- NOTES:**
- FOR ALL LOCATIONS WITHIN THE PROPERTY LIMITS, DETECTABLE WARNING PAVERS SHALL BE INSTALLED. PLASTIC PANEL WILL NOT BE ACCEPTED.
 - FOR ALL LOCATIONS WITHIN THE STATE RIGHT OF WAY, CAST IRON DETECTABLE WARNING PANELS SHALL BE INSTALLED.



NOTE:

5/16" x 2-1/2" GALVANIZED BOLTS & WASHERS

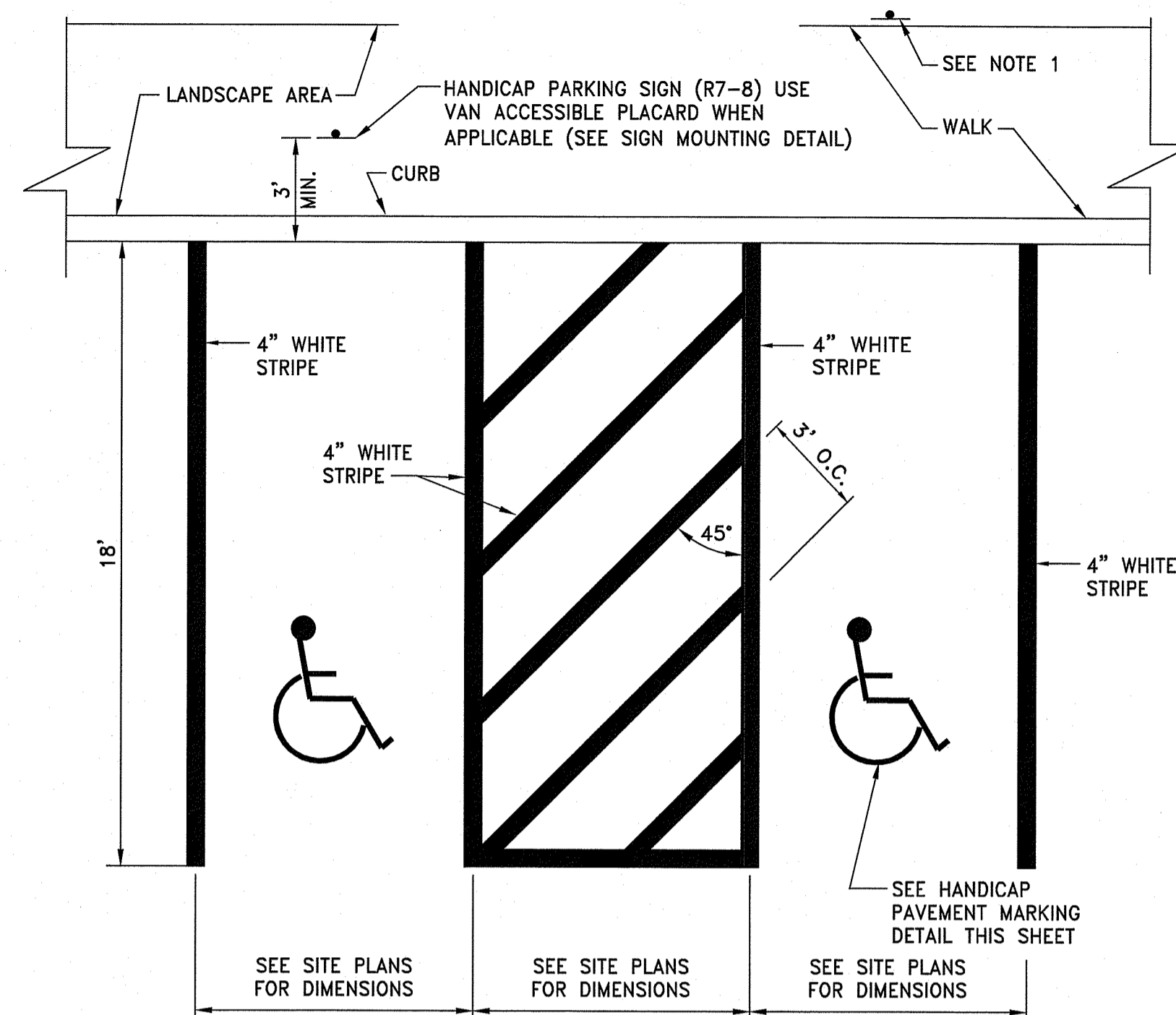
STEEL SPECIFICATION - A.S.T.M. DESIGNATION A499-64 ZINC (HOT GALVANIZED) SPECIFIED BY - A.S.T.M. A 123.

WT./FT.	3.00 #
Mom. lx-x	0.484in ⁴
Sec Mod x-x	0.569in ³
Mon ly-y	0.886in ⁴
Sec Mod y-y	0.506in ³

PARKING SIGNS SHALL BE SET AT AN ANGLE OF NOT LESS THAN 30° NOR MORE THAN 45° IN A LINE PARALLEL TO THE FLOW OF TRAFFIC.

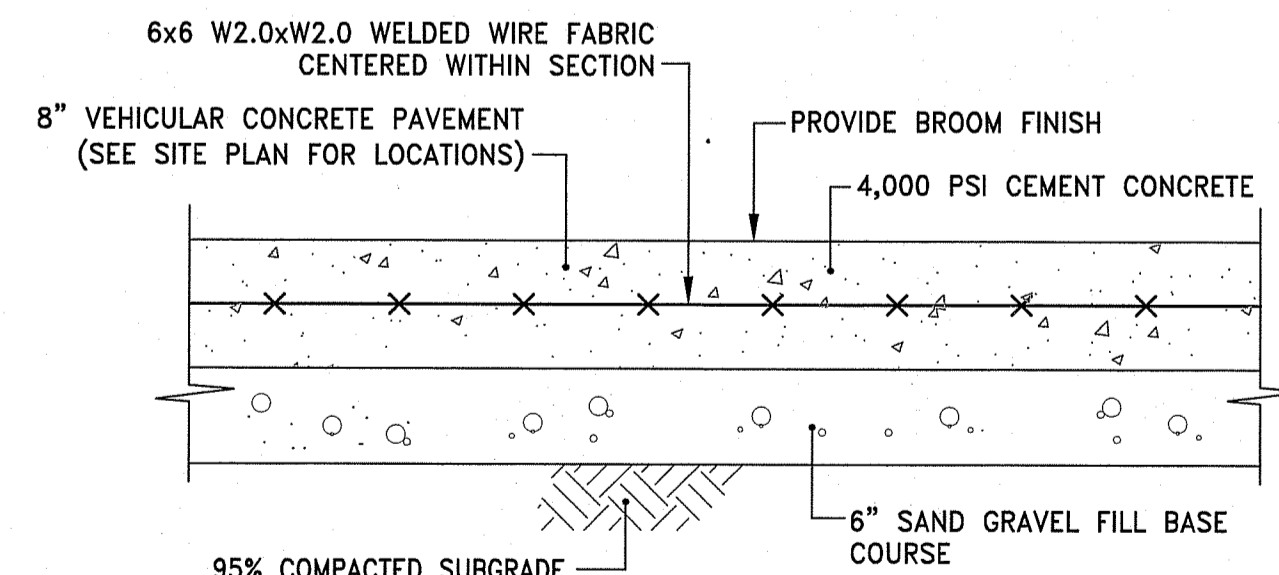
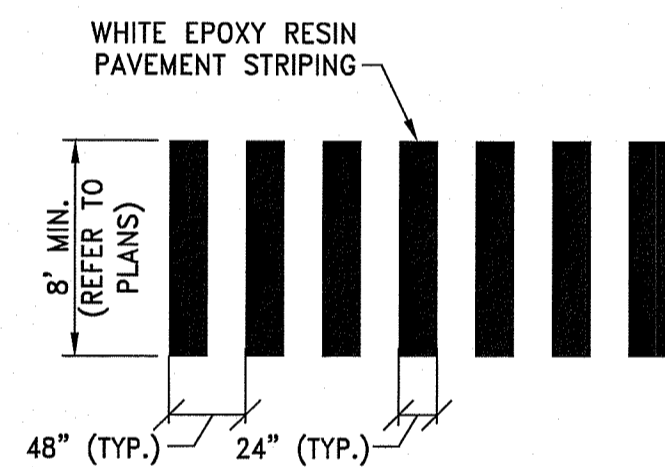
- NOTES:**
- ALL LAG SCREWS, BOLTS AND WASHERS SHALL BE GALVANIZED 5/16"x2 1/2" LONG UNLESS OTHERWISE NOTED.
 - WASHERS SHALL BE 0.07" THICK.
 - ALL SIGN COLORS, RADII AND BORDERS AS SPECIFIED IN "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
 - SHALL BE IN ACCORDANCE WITH SECTION T.15 OF THE STANDARD SPECIFICATIONS.
 - PARKING SIGNS SHALL BE SET AT AN ANGLE OF NOT LESS THAN 30° NOT MORE THAN 45° WITH A LINE PARALLEL TO FLOW OF TRAFFIC, 1'-6" (1'-0" MIN.) FROM THE EDGE OF CURB FACE.
 - ALL HANDICAP PARKING AND SIGNAGE SHALL BE IN CONFORMANCE WITH THE RULES & REGULATIONS AS SPECIFIED BY THE AMERICAN DISABILITIES ACT (ADA).
 - SIGN(S) SHALL BE LOCATED SO THEY CANNOT BE OBTSCURED BY A VEHICLE PARKED IN THE SPACE.
 - FOR HANDICAPPED VAN SPACE USE SIGN AS DETAILED.
 - FOR HANDICAPPED SPACE FOR AUTOMOBILES USE ONLY HANDICAPPED PARKING SIGN.

ACCESSIBLE SIGN MOUNTING
NOT TO SCALE

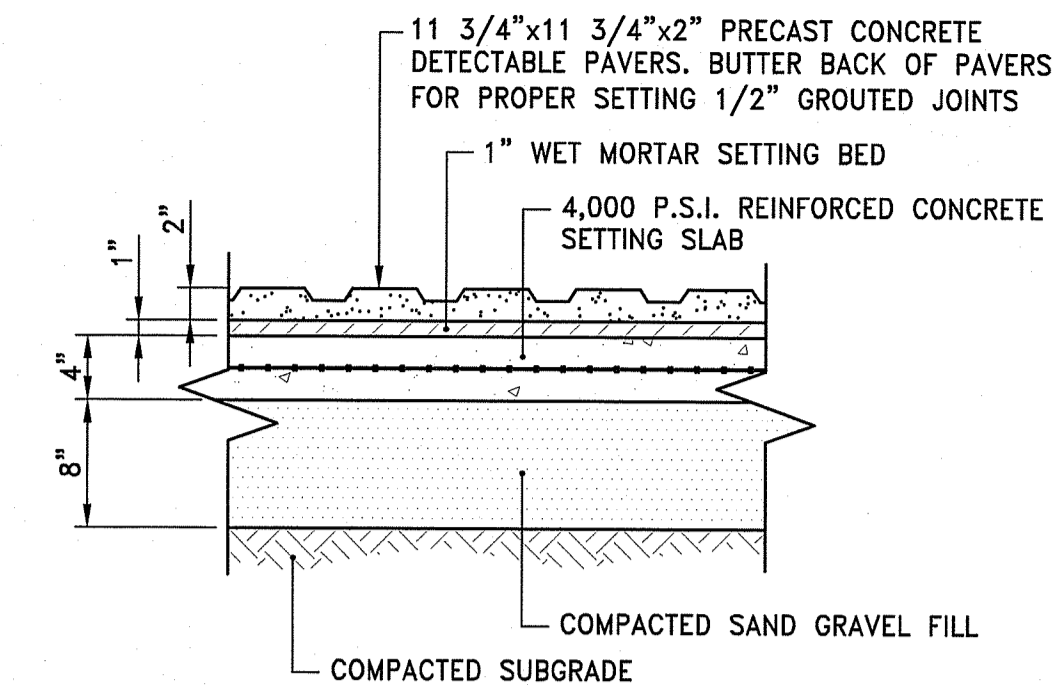


- NOTE:**
- WHERE STALLS ABUT SIDEWALK, PARKING SIGNS SHOULD BE PLACED AT BACK EDGE OF SIDEWALK, UNLESS NOTED OTHERWISE.
 - ALL PAVEMENT MARKINGS TO BE EPOXY RESIN.

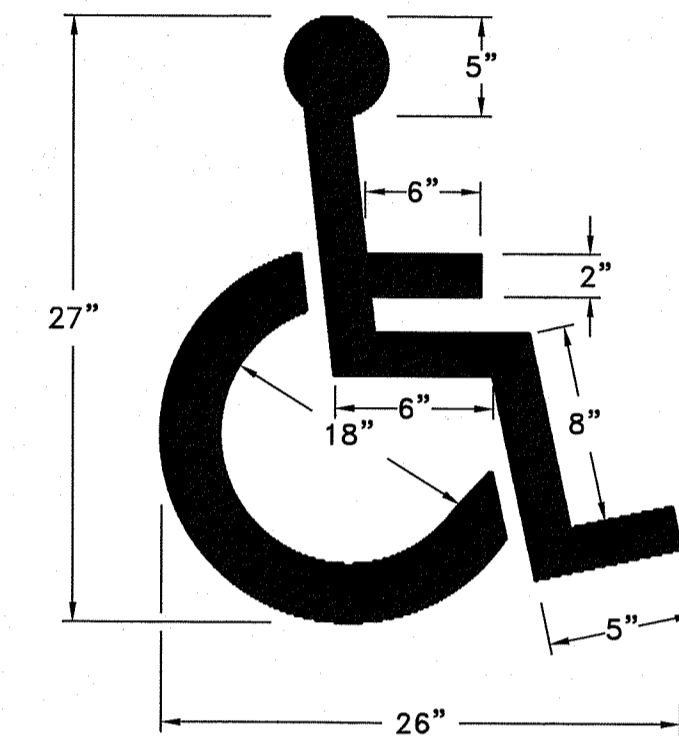
HANDICAP PARKING STALLS @ 90°
NOT TO SCALE



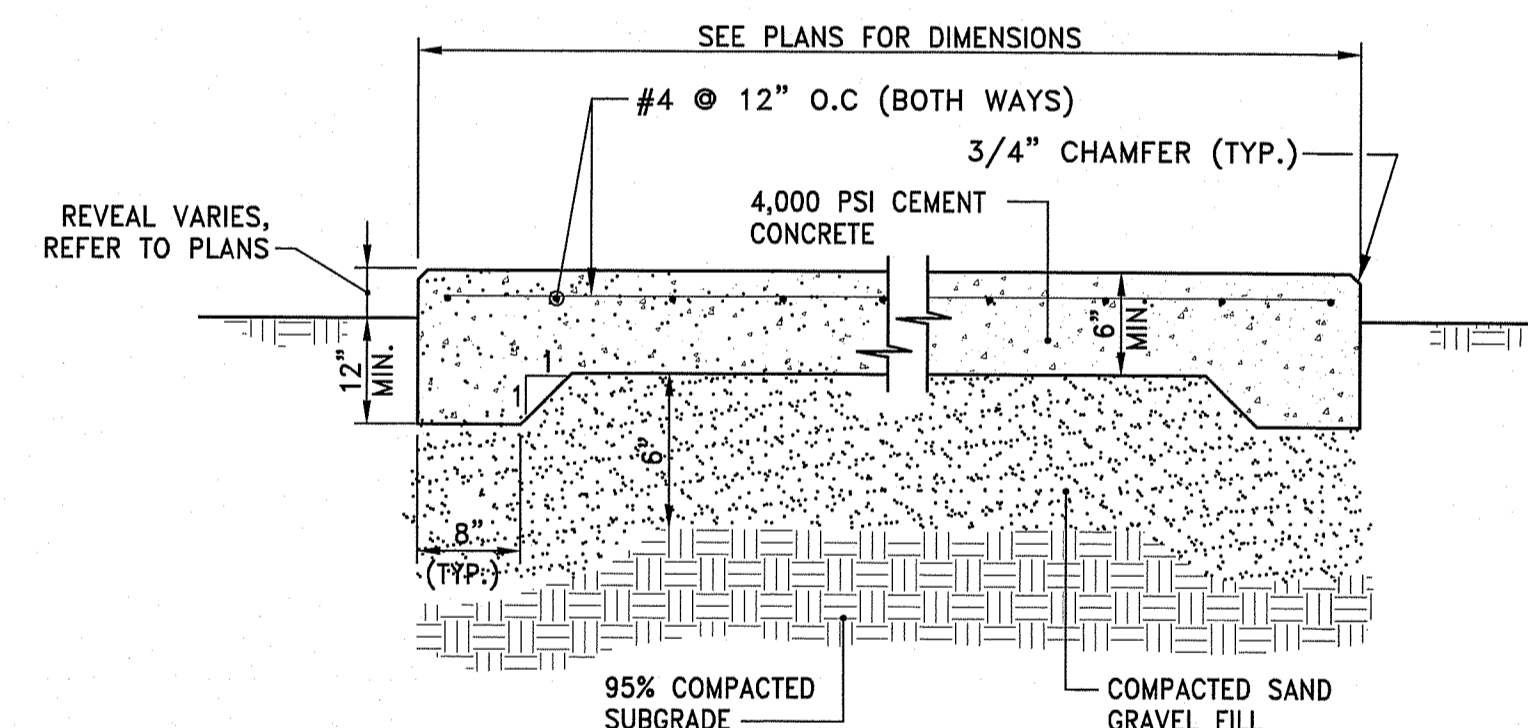
VCP VEHICULAR CONCRETE PAVEMENT DETAIL
NOT TO SCALE



DWP DETECTABLE WARNING PAVER
NOT TO SCALE



- NOTE:**
- HANDICAP PARKING AND SIGNAGE SHALL BE IN CONFORMANCE WITH THE RULES & REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT.



- NOTES:**
- REINFORCING TO BE #4 GRADE 60 BARS AND SHALL CONFORM TO ASTM STANDARD A-615 OF THE LATEST DATA. REINFORCING RODS TO BE LOCATED IN THE CENTER OF THE SLAB, WITH A MINIMUM OF 2" CLEARANCE FROM FACE OF CONCRETE.
 - CONTRACTOR SHALL COORDINATE LOCATIONS OF OPENINGS, FENCE POSTS, OR OTHER FEATURES IN SLAB.

CP CEMENT CONCRETE PAD
NOT TO SCALE

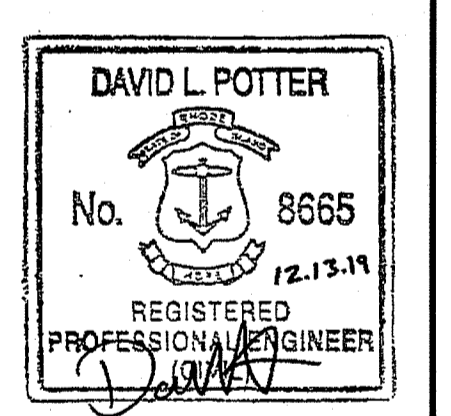
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
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 DATED MAY 21 2020 FILE # 19-238
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OWNER/APPLICANT:
 SMITHFIELD ELEMENTARY SCHOOLS
 49 FARNUM PIKE
 SMITHFIELD, RI 02917

SCALE ADJUSTMENT GUIDE
 0" 1"
 BAR IS ONE INCH ON ORIGINAL DRAWING

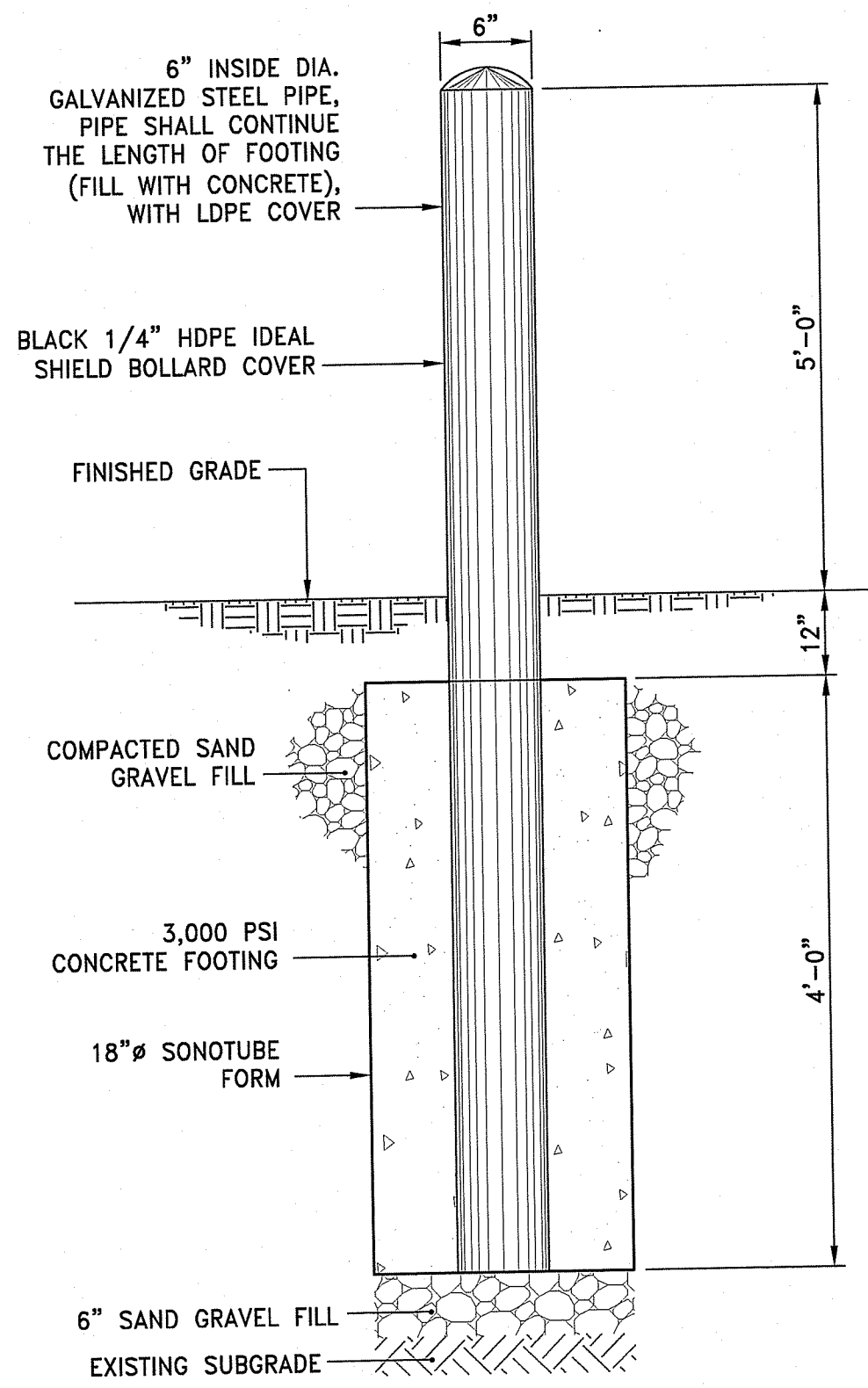
Smithfield Elementary School Improvements
Old County Road School
 200 Old County Road
 Smithfield, Rhode Island



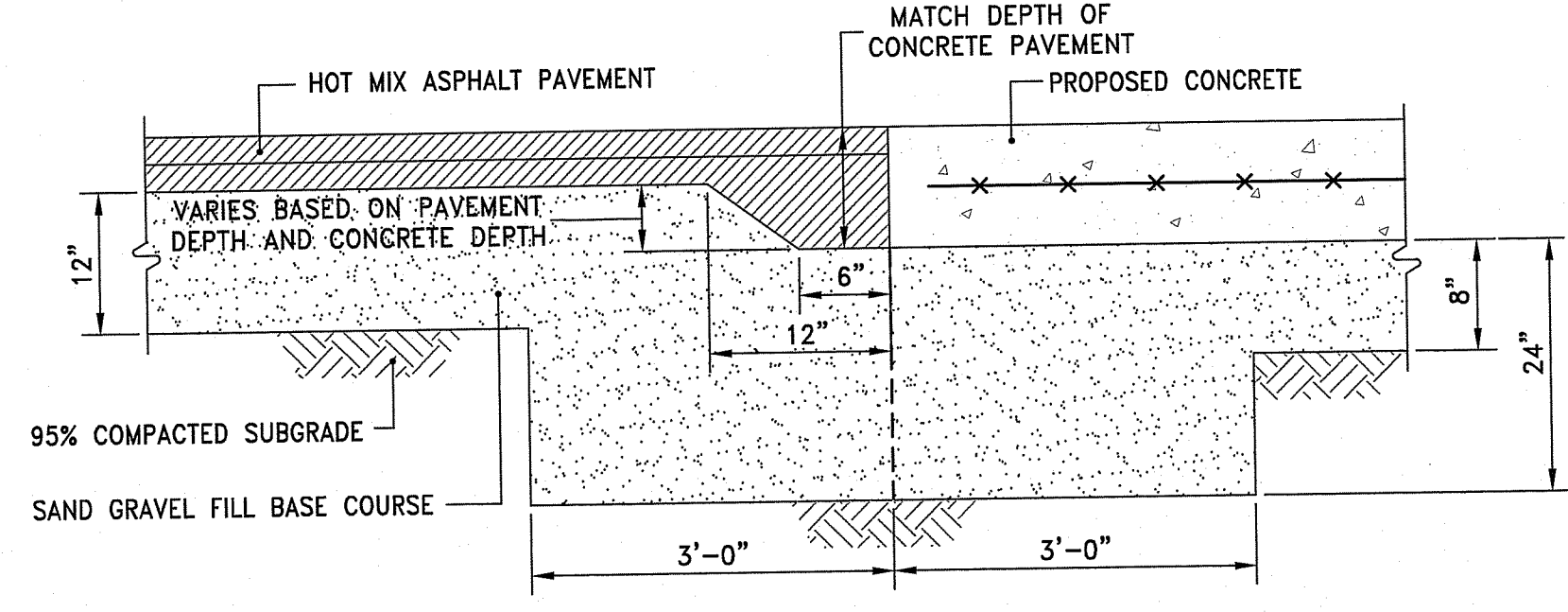
REVISIONS:

NO.	DATE	DESCRIPTION

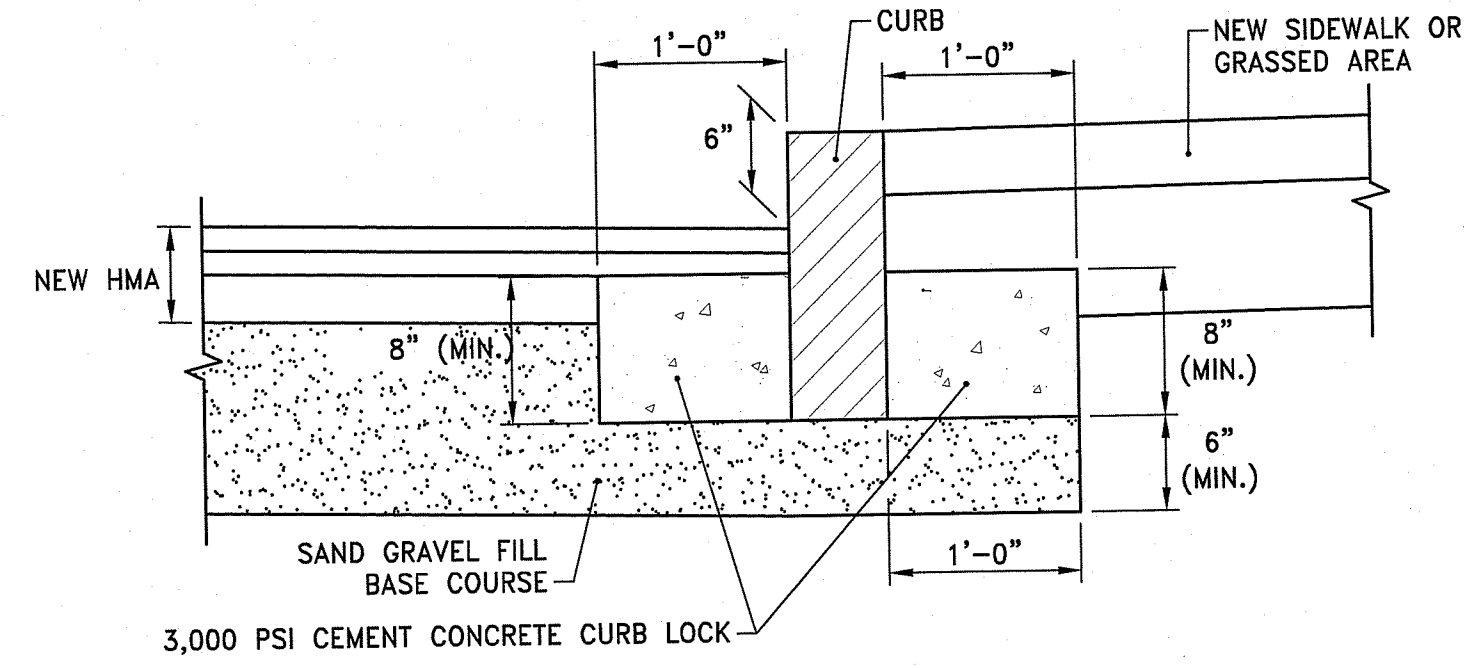
PROJECT NO.: 19056.00
 DATE: DECEMBER 13, 2019
 SCALE: NOT TO SCALE
 DESIGNED BY: VAH
 CHECKED BY: DLP
 DRAWN BY: AKL
 APPROVED BY: DLP
 DRAWING TITLE: DETAILS 4
 DRAWING NO.: C7.4
 SHEET NO.: 13 OF 23



BOL BOLLARD DETAIL
NOT TO SCALE

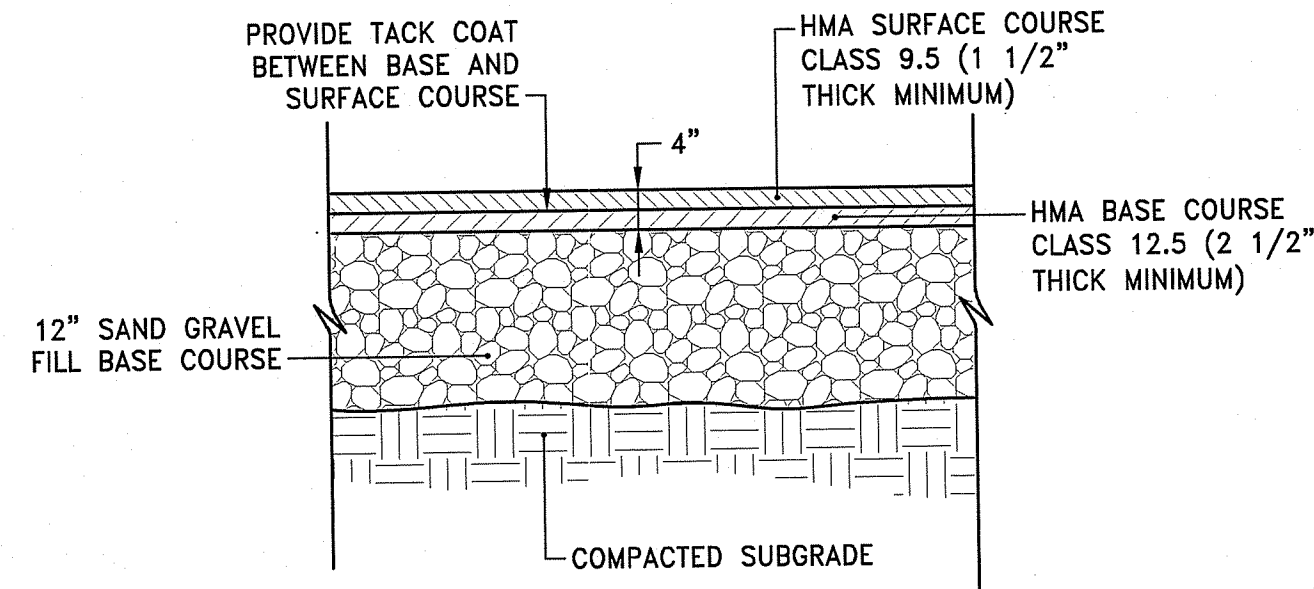


ASPHALT TURNDOWN DETAIL
NOT TO SCALE



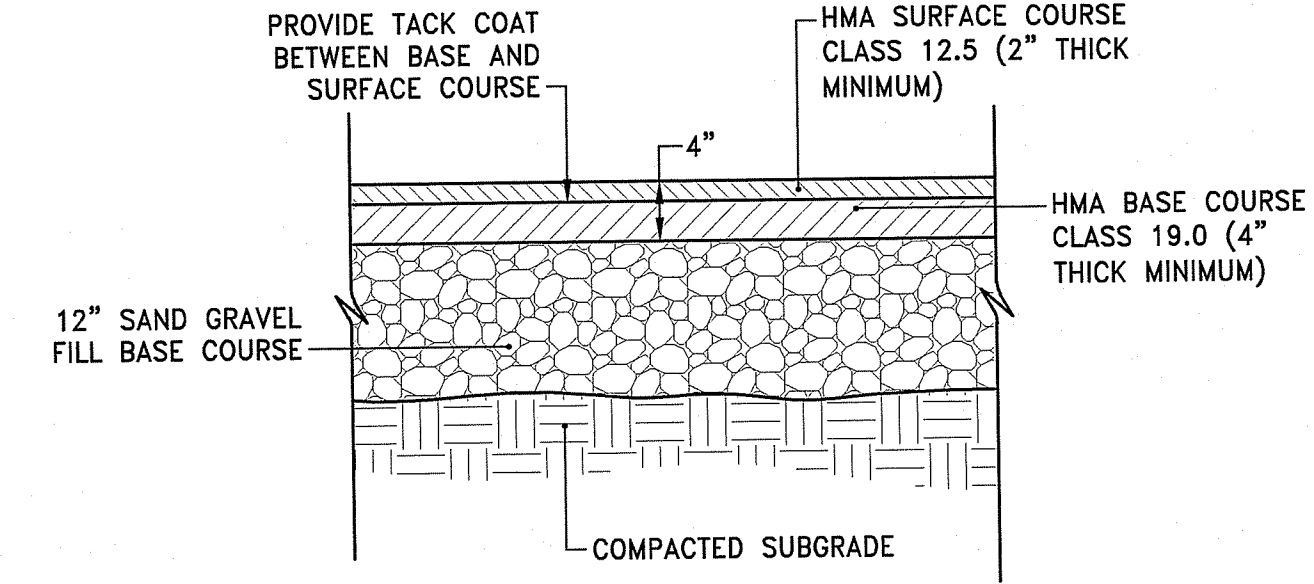
NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. PROVIDE CEMENT CONCRETE CURB LOCK ON ALL CURBS.

CURB SETTING DETAIL
NOT TO SCALE



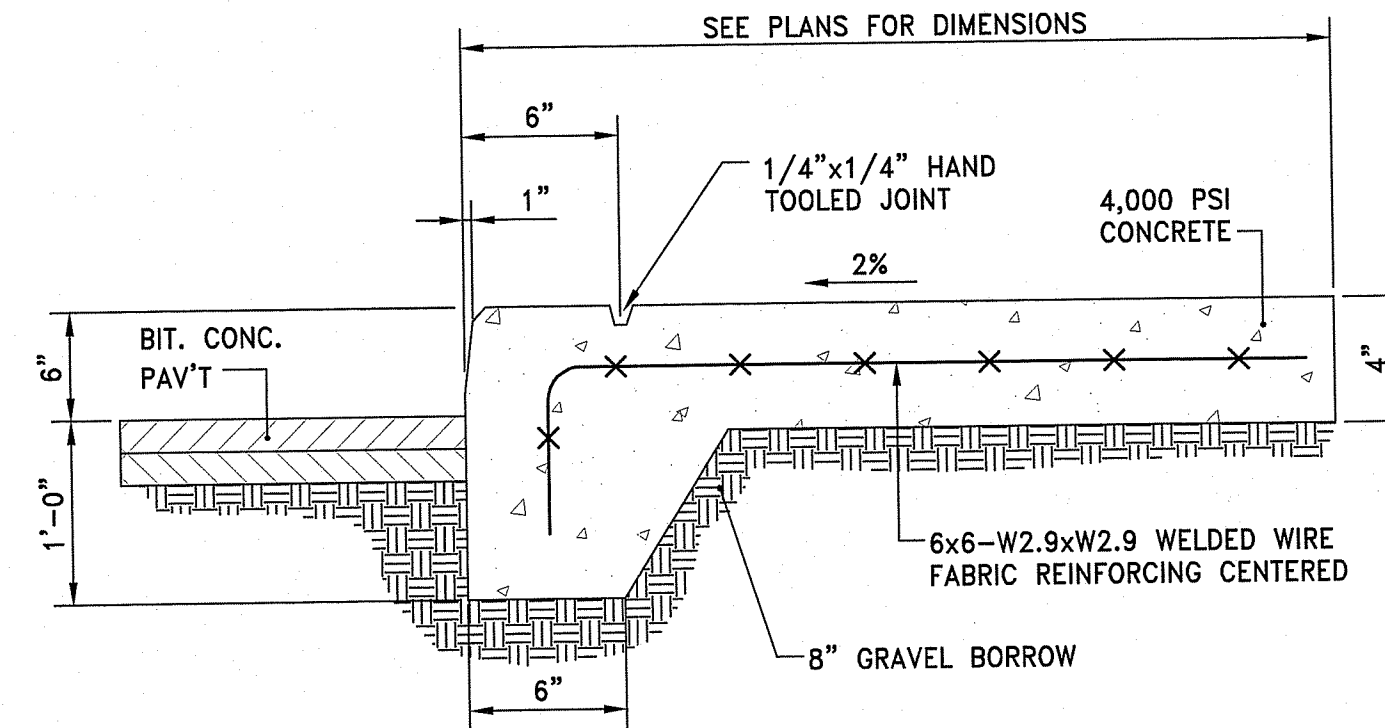
NOTE:
1. SUBMIT JOB MIX FORMULAS TO ENGINEER FOR APPROVAL PRIOR TO PLACEMENT.

HMA HOT MIX ASPHALT PAVEMENT
NOT TO SCALE



NOTE:
1. SUBMIT JOB MIX FORMULAS TO ENGINEER FOR APPROVAL PRIOR TO PLACEMENT.

HDHMA HEAVY DUTY HOT MIX ASPHALT PAVEMENT
NOT TO SCALE



MCW MONOLITHIC CURB AND CEMENT CONCRETE SIDEWALK
NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
APPROVED WITH CONDITIONS
AS SPECIFIED IN THE LETTER OF APPROVAL
DATED MAY 21 2020 FILE # 19-0378
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

LEGEND	DESIGNATION	SIZE
	R1-1	(30" x 30")
	R1-2	(30" x 30" x 30")
	R2-1	(18" x 24")
	R3-1	(24" x 24")
	R3-2	(24" x 24")
	R4-7	(18" x 24") (24" x 30")
	R5-1	(24" x 24") (30" x 30")
	R6-1	(12" x 36")
	W11-2	(30" x 30")
	W16-7P	(12" x 24")
	W16-9P	(12" x 24")
	GENERAL DIRECTIONAL SIGN, REFER TO PLANS FOR TEXT	(24" x 18") OR AS REQUIRED

LEGEND	DESIGNATION	SIZE
	R1-1	(30" x 30")
	R5-1	(24" x 24")
	W11-15	(30" x 30")
	W11-2	(30" x 30")
	W16-7P	(12" x 24")
	R1-2	(18" x 18" x 18")
	R9-7 (MOD)	(18" x 24")
	R7-8	(12" x 18")
	R7-8P	(12" x 6")
	CUSTOM SIGN	(24" x 18") OR AS REQUIRED

LEGEND	DESIGNATION	SIZE
	R3-5	(30" x 30")
	R5-1	(30" x 30")
	R3-5L	(12" x 18")
	R6-1L	(36" x 12")
	R6-1R	(36" x 12")
	GENERAL DIRECTIONAL SIGN, REFER TO PLANS FOR TEXT	(12" x 18")

LEGEND	DESIGNATION	SIZE
	R6-1	(12" x 36")
	R5-1A	(36" x 24")
	R5-2A	(24" x 24")

NOTE:
1. SIGNS SHALL BE CONSTRUCTED OF TYPE III REFLECTORIZED SHEETING AND IN ACCORDANCE WITH MUTCD REQUIREMENTS, LATEST REVISION.
2. THE CONTRACTOR SHALL SUBMIT SAMPLE SIGNS TO THE OWNER FOR APPROVAL PRIOR TO FURNISHING.
3. LETTERS, COLOR, AND FONT FOR NON-STANDARD SIGNS SHALL BE SELECTED BY THE OWNER.
4. ALL SIGN MOUNTING SHALL CONFORM TO R.I. STD. DETAIL 24.2.0 EXCEPT R7-8 AND R7-8P. R7-8 AND R7-8P SHALL CONFORM TO ACCESSIBLE SIGN MOUNTING DETAIL.

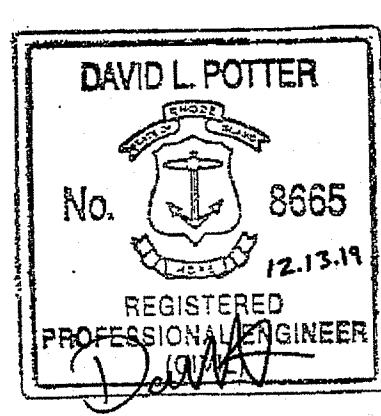
SIGN SCHEDULE



OWNER/APPLICANT:
SMITHFIELD ELEMENTARY SCHOOLS
49 FARNUM PIKE
SMITHFIELD, RI 02917

SCALE ADJUSTMENT GUIDE
1" = 10'
BAR IS ONE INCH ON ORIGINAL DRAWING

Smithfield Elementary School Improvements
Old County Road School
200 Old County Road
Smithfield, Rhode Island

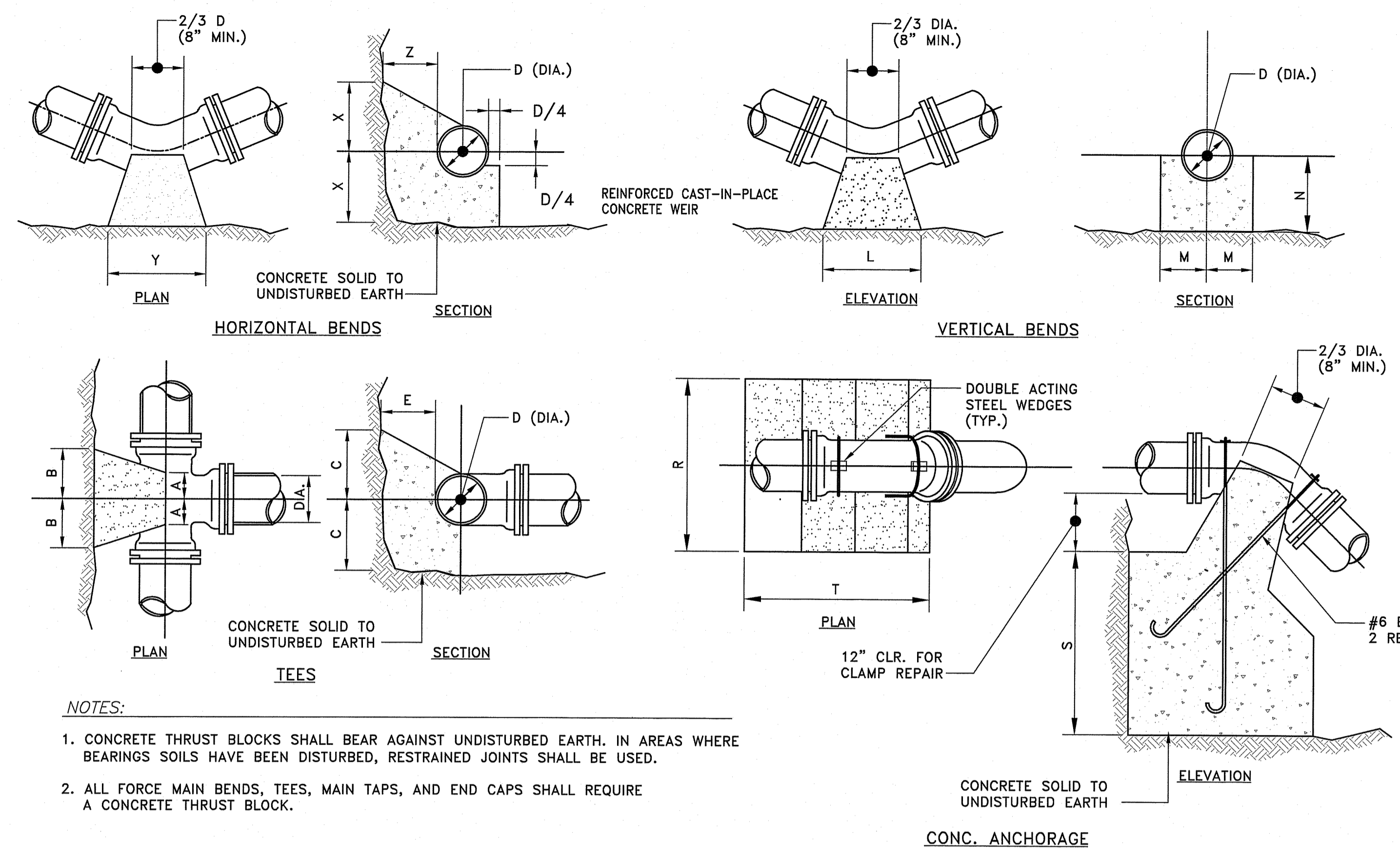


REVISIONS:

NO.	DESCRIPTION

PROJECT NO.: 19056.00
DATE: DECEMBER 13, 2019
SCALE: NOT TO SCALE
DESIGNED BY: VAH
CHECKED BY: DLP
DRAWN BY: AKL
APPROVED BY: DLP
DRAWING TITLE: DETAILS 6

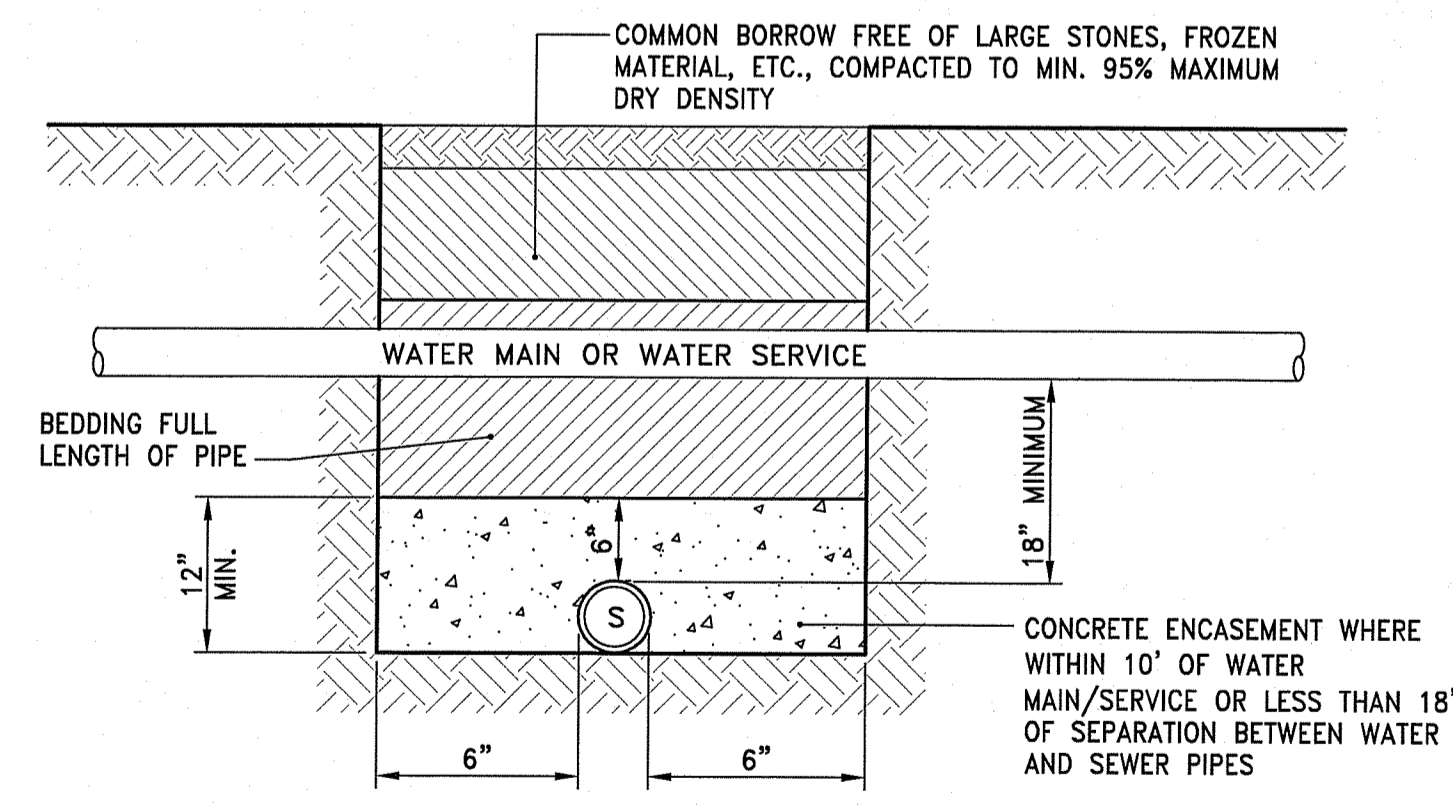
DRAWING NO.: C7.6
SHEET NO. 15 OF 23



- NOTES:
1. CONCRETE THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED EARTH. IN AREAS WHERE BEARINGS SOILS HAVE BEEN DISTURBED, RESTRAINED JOINTS SHALL BE USED.
 2. ALL FORCE MAIN BENDS, TEES, MAIN TAPS, AND END CAPS SHALL REQUIRE A CONCRETE THRUST BLOCK.

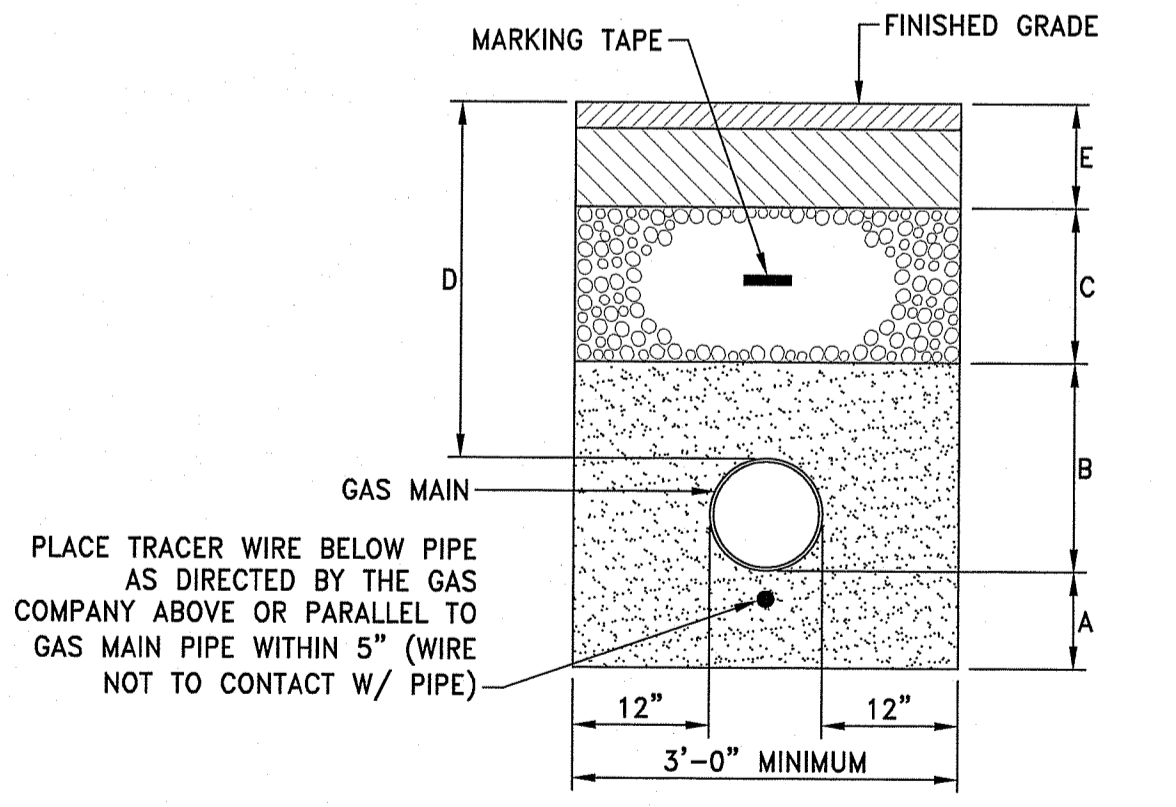
TEES					HORIZONTAL BENDS					VERTICAL BENDS					ANCHORAGES															
PIPE SIZE-D (DIA.)					PIPE SIZE-D (DIA.)					PIPE SIZE-D (DIA.)					PIPE SIZE-D (DIA.)															
	6"	8"	12"	16"	20"	BEND	6"	8"	12"	16"	20"	BEND	6"	8"	12"	16"	20"	BEND	6"	8"	12"	16"	20"	BEND	6"	8"	12"	16"	20"	
A	8"	10"	1'-0"	1'-3"	1'-6"	X	1'-0"	1'-0"	1'-0"	1'-3"	1'-6"	L	1'-3"	1'-8"	2'-6"	3'-6"	4'-8"	R	2'-6"	3'-0"	4'-6"	5'-4"	6'-0"	R	2'-6"	3'-0"	4'-6"	5'-4"	6'-0"	
B	8"	10"	1'-2"	1'-4"	1'-6"	Y	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	M	7"	8"	11"	1'-4"	1'-6"	S	2'-6"	2'-9"	3'-6"	2'-6"	3'-6"	S	2'-6"	2'-9"	3'-6"	2'-6"	3'-6"	
C	10"	1'-0"	1'-3"	1'-6"	1'-8"	Z	8"	10"	1'-2"	1'-4"	1'-6"	N	7"	8"	11"	1'-4"	1'-6"	T	3'-0"	4'-0"	4'-9"	7'-0"	9'-6"	T	3'-0"	4'-0"	4'-9"	7'-0"	9'-6"	
E	8"	10"	1'-2"	1'-6"	1'-10"	1/16	X	1'-0"	1'-0"	1'-0"	1'-3"	1'-6"	L	9"	1'-0"	1'-9"	2'-6"	3'-0"	R	2'-0"	2'-8"	4'-0"	4'-6"	5'-0"	R	2'-0"	2'-8"	4'-0"	4'-6"	5'-0"
						Y	1'-0"	1'-0"	1'-0"	1'-3"	1'-6"	M	7"	7"	10"	1'-0"	1'-2"	S	1'-9"	2'-3"	2'-6"	3'-2"	3'-8"	S	1'-9"	2'-3"	2'-6"	3'-2"	3'-8"	
						Z	8"	10"	1'-2"	1'-4"	1'-6"	N	7"	7"	8"	10"	1'-0"	T	2'-6"	3'-4"	4'-0"	6'-0"	8'-6"	T	2'-6"	3'-4"	4'-0"	6'-0"	8'-6"	
						1/32	X	1'-0"	1'-0"	1'-0"	1'-4"	1'-6"	L	8"	8"	10"	1'-0"	1'-2"	R	1'-8"	2'-0"	3'-0"	3'-8"	4'-3"	R	1'-8"	2'-0"	3'-0"	3'-8"	4'-3"
						Y	1'-0"	1'-0"	1'-2"	1'-4"	1'-6"	M	7"	7"	8"	10"	1'-2"	S	1'-3"	1'-9"	2'-0"	2'-4"	2'-8"	S	1'-3"	1'-9"	2'-0"	2'-4"	2'-8"	
						Z	8"	10"	1'-2"	1'-4"	1'-6"	N	7"	7"	8"	10"	1'-0"	T	2'-0"	2'-6"	3'-0"	4'-8"	5'-9"	T	2'-0"	2'-6"	3'-0"	4'-8"	5'-9"	

CONCRETE THRUST BLOCKS
 NOT TO SCALE



- NOTES:
1. THE VERTICAL SEPARATION BETWEEN THE WATER MAIN/SERVICE AND THE PROPOSED SEWER MAIN/SERVICE SHALL BE A MINIMUM OF 18 INCHES.
 2. THE HORIZONTAL SEPARATION BETWEEN THE WATER MAIN AND THE PROPOSED UTILITY SHALL BE A MINIMUM OF 10 FEET.
 3. IF 1 OR 2 CANNOT BE MAINTAINED THE PROPOSED SEWER MAIN/SERVICE SHALL BE INSTALLED WITHIN A CARRIER PIPE OR ENCASED IN CONCRETE.
 4. IF SEWER MAIN AND SERVICES CROSS OVER THE TOP OF WATER MAIN, INSTALL SEWER MAIN/SERVICE WITHIN A CARRIER PIPE. MINIMUM VERTICAL SEPARATION OF 18" SHALL BE PROVIDED.

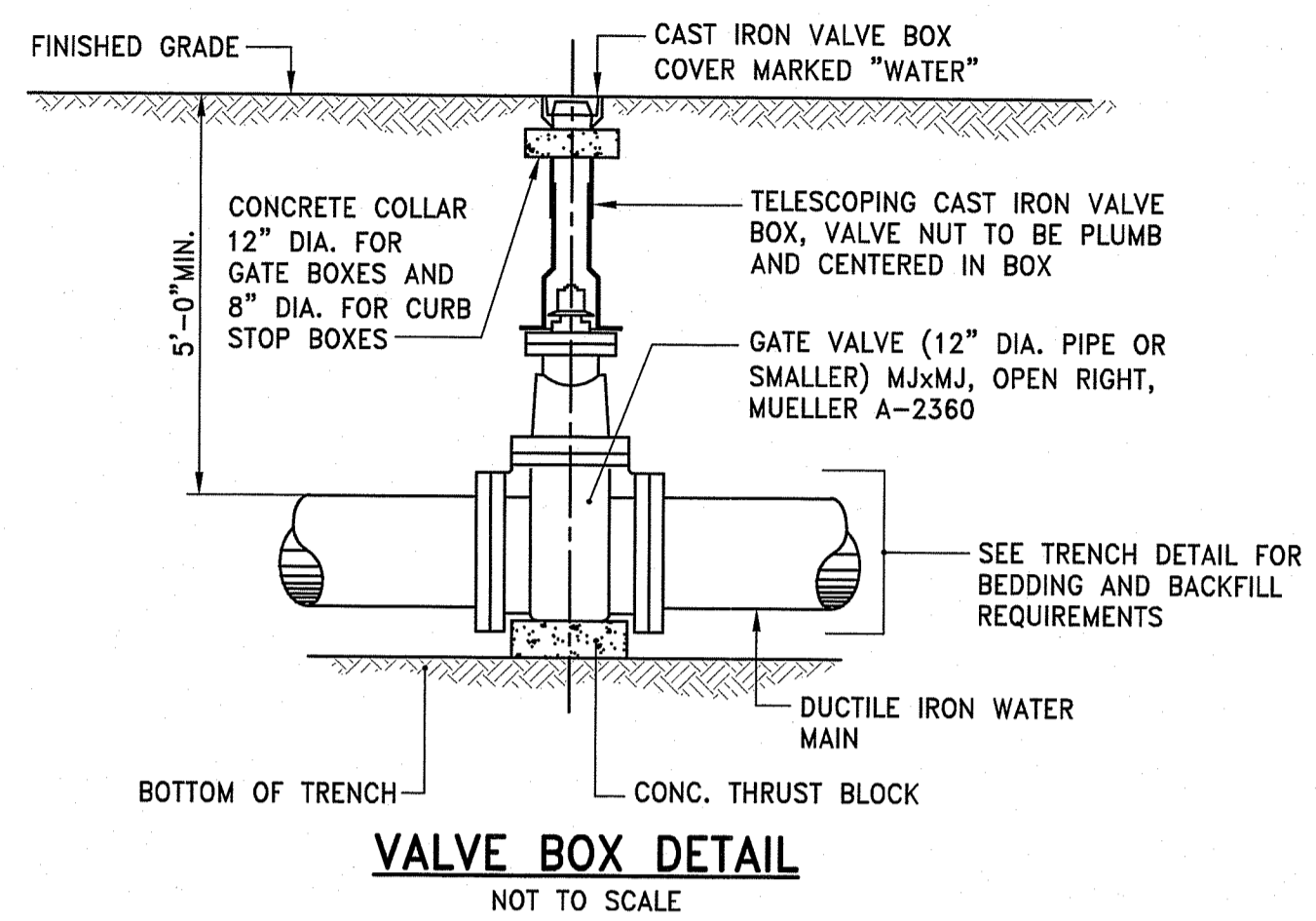
SEWER AND WATER LINE CROSSINGS
 NOT TO SCALE



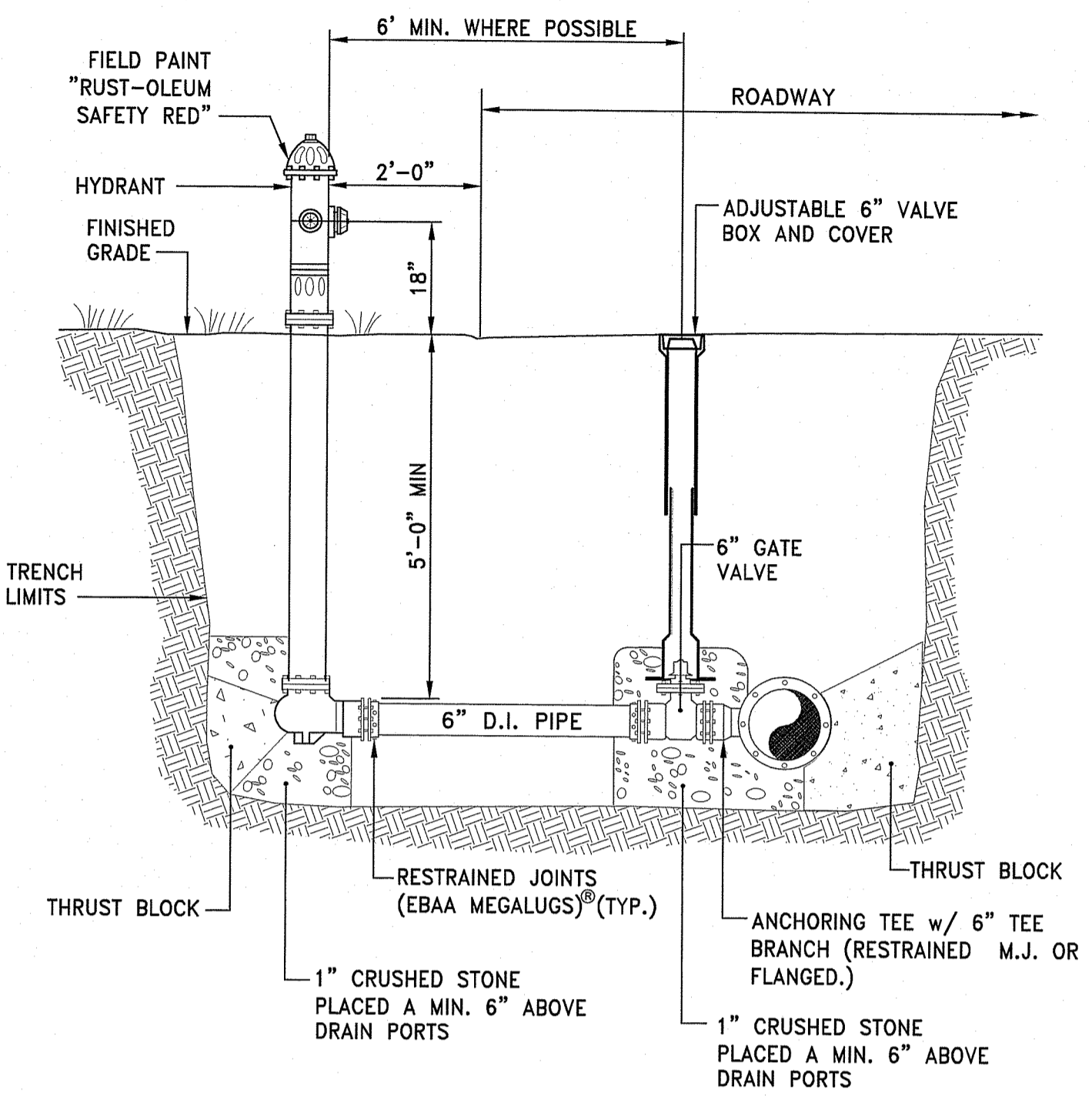
- A-COARSE SAND BEDDING 6"
 B-COARSE SAND BEDDING 12" OVER PIPE
 C-COMMON BORROW AS REQUIRED
 D-COVER 18" MINIMUM FOR SERVICES
 E-ROAD REPAIR 30" MINIMUM FOR MAINS
 SEE BITUMINOUS CONCRETE PAVEMENT

NOTE:
 THIS DETAIL REPRESENTS A TYPICAL GAS TRENCH DETAIL. FINAL TRENCH MATERIALS AND DIMENSIONS SHALL BE COORDINATED WITH THE GAS COMPANY.

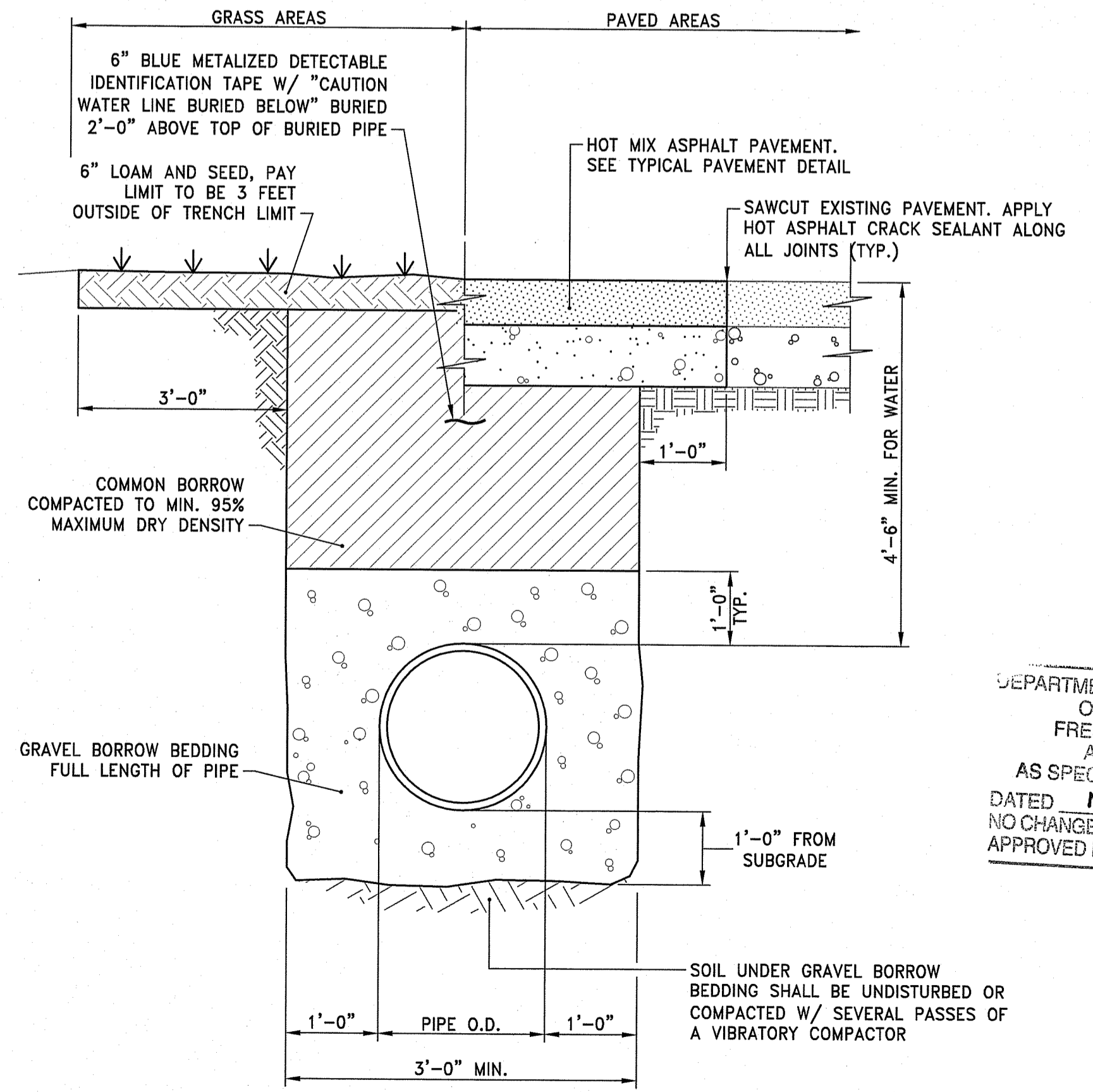
TYPICAL GAS MAIN TRENCH DETAIL
 NOT TO SCALE



VALVE BOX DETAIL
 NOT TO SCALE



HYD HYDRANT DETAIL
 NOT TO SCALE



WATER MAIN TRENCH DETAIL
 NOT TO SCALE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED MAY 21 2020 FILE # 19-0318
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

SECTION A-A

SECTION B-B

SECTION A-A'

NO.	BY	DATE
1	J. L. G.	JUN 15, 1998

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
CONCRETE HEADWALLS FOR PIPE CULVERTS
R.I. STANDARD 2.1.0

SECTION A-A

END ELEVATION

DIMENSIONS							REINFORCEMENT
DIA.	A	B	C	D	E	R	ONE LAYER REINFORCEMENT CENTER OF EACH WAY (SQ. IN./L.F.)
1'-0"	4"	2'-0"	4'-0"	7/8"	6'-0"	2'-0"	0.048
1'-3"	6"	2'-3"	3'-10"	6'-1"	2'-6"	11"	0.054
1'-6"	8"	2'-6"	3'-10"	6'-1"	3'-0"	12"	0.060
2'-0"	9 1/2"	3'-7 1/2"	2'-8"	6'-1 1/2"	4'-0"	1'-2"	0.072
2'-6"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	1'-3"	0.084
3'-0"	1'-3"	5'-3"	2'-10 3/4"	6'-1 3/4"	6'-0"	1'-8"	0.096
3'-6"	1'-6"	5'-3"	2'-11"	6'-2"	6'-0"	1'-10"	0.108
4'-0"	2'-0"	6'-0"	2'-2"	6'-2"	7'-0"	1'-10"	0.120
4'-6"	2'-3"	6'-0"	2'-11"	6'-4"	7'-6"	2'-0"	0.132
5'-0"	2'-6"	6'-0"	3'-3"	6'-3"	8'-0"	2'-0"	0.144

NOTE: SHALL BE IN ACCORDANCE WITH SECTION 701 OF THE R.I. STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
PRECAST CONCRETE FLARED END SECTION
R.I. STANDARD 2.3.0

PRECAST 4'-0" ROUND MANHOLE

ALTERNATE TOP LOADING (SEE NOTES 7 AND 8)

FRAME AND COVER

ADJUST TO GRADE AS REQUIRED USING RED CLAY BRICK COURSE

STEPS PER APPROVED PRODUCTS LIST 1'-0" O.C.

MORTAR ALL JOINTS TOTAL WIDTH OF WALL

BRICK INVERT

PIPE OPENINGS CAST TO PLAN

1/2" # OF PIPE

8" MIN. OVERLAP (TYP.)

NOTE: SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
PRECAST 4'-0" ROUND MANHOLE
R.I. STANDARD 4.2.0

PRECAST 5'-0" ROUND MANHOLE

ALTERNATE TOP LOADING (SEE NOTES 7 AND 8)

FRAME AND COVER

ADJUST TO GRADE AS REQUIRED USING RED CLAY BRICK COURSE

STEPS PER APPROVED PRODUCTS LIST 1'-0" O.C.

MORTAR ALL JOINTS TOTAL WIDTH OF WALL

BRICK INVERT

PIPE OPENINGS CAST TO PLAN

1/2" # OF PIPE

8" MIN. OVERLAP (TYP.)

NOTE: SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
PRECAST 5'-0" ROUND MANHOLE
R.I. STANDARD 4.2.1

PRECAST 6'-0" ROUND MANHOLE

ALTERNATE TOP LOADING (SEE NOTES 7 AND 8)

FRAME AND COVER

ADJUST TO GRADE AS REQUIRED USING RED CLAY BRICK COURSE

STEPS PER APPROVED PRODUCTS LIST 1'-0" O.C.

MORTAR ALL JOINTS TOTAL WIDTH OF WALL

BRICK INVERT

PIPE OPENINGS CAST TO PLAN

1/2" # OF PIPE

8" MIN. OVERLAP (TYP.)

NOTE: SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
PRECAST 6'-0" ROUND MANHOLE
R.I. STANDARD 4.2.2

PRECAST 4'-0", 5'-0", OR 6'-0" ROUND CATCH BASIN

ALTERNATE TOP SLAB (SEE NOTES 10 AND 11)

FRAME AND GRATE/COVER

ADJUST TO GRADE AS REQUIRED USING RED CLAY BRICK COURSE

STEPS PER APPROVED PRODUCTS LIST 1'-0" O.C.

MORTAR ALL JOINTS TOTAL WIDTH OF WALL

PROVIDE OUTLET HOOD ON ALL CATCH BASINS, SEE DETAIL

TABLE 1

CATCH BASIN DIAMETER	A	B	CIRCUMFERENTIAL STEEL REINFORCEMENT REQUIRED*
4'-0"	6"	6"	0.12 SQ. IN./LIN. FT.
5'-0"	8"	7"	0.15 SQ. IN./LIN. FT.
6'-0"	7"	8"	0.18 SQ. IN./LIN. FT.

* FOR LONGITUDINAL VERTICAL STANDING REINFORCEMENT REFER TO ASTM C478, ITEM 8.1.2

NOTE: SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
PRECAST 4'-0", 5'-0", OR 6'-0" ROUND CATCH BASIN
R.I. STANDARD 4.4.0

ALTERNATE TOP COVER FOR ROUND PRECAST MANHOLES AND CATCH BASINS

SEE ASTM SPECIFICATION C478, ITEM 8.1.3

2" R (TYP.) ALL CORNERS

2" MIN. COVER ON ALL BARS

TONGUE AND GROOVE EDGE

9" MIN. FOR SQUARE OPENING

9" MIN. FOR CIRCULAR OPENING

(2) #5 x 4'-0" LONG DIAGONAL (TYP. TOP AND BOTTOM)

#5 @ 1'-0" E.W., TOP

(2) #5 BARS, TOP (TYP.)

(3) #6 BARS, BOTTOM (TYP.)

1" TAPER

OPENING

#5 @ 7" E.W., BOTTOM

T/2

T=WALL THICKNESS

NOTE: SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
ALTERNATE TOP COVER FOR ROUND PRECAST MANHOLES AND CATCH BASINS
R.I. STANDARD 4.7.2

SOLID BLOCK SHALLOW DOUBLE GRATE CATCH BASIN GRATE PERPENDICULAR TO EDGE OF PAVEMENT

PLAN

SECTION A-A

SECTION B-B

SECTION C-C

FRAME DETAILS

NOTE: SHALL BE IN ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION
SOLID BLOCK SHALLOW DOUBLE GRATE CATCH BASIN GRATE PERPENDICULAR TO EDGE OF PAVEMENT
R.I. STANDARD 3.5.5

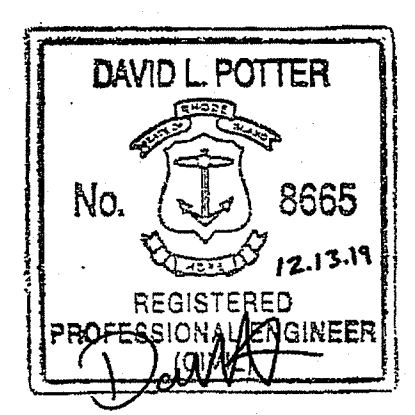


OWNER/APPLICANT:
SMITHFIELD ELEMENTARY SCHOOLS
49 FARNUM PIKE
SMITHFIELD, RI 02917

SCALE ADJUSTMENT GUIDE
0" = 1"
BAR IS ONE INCH ON ORIGINAL DRAWING

Smithfield Elementary School Improvements
Old County Road School
200 Old County Road
Smithfield, Rhode Island

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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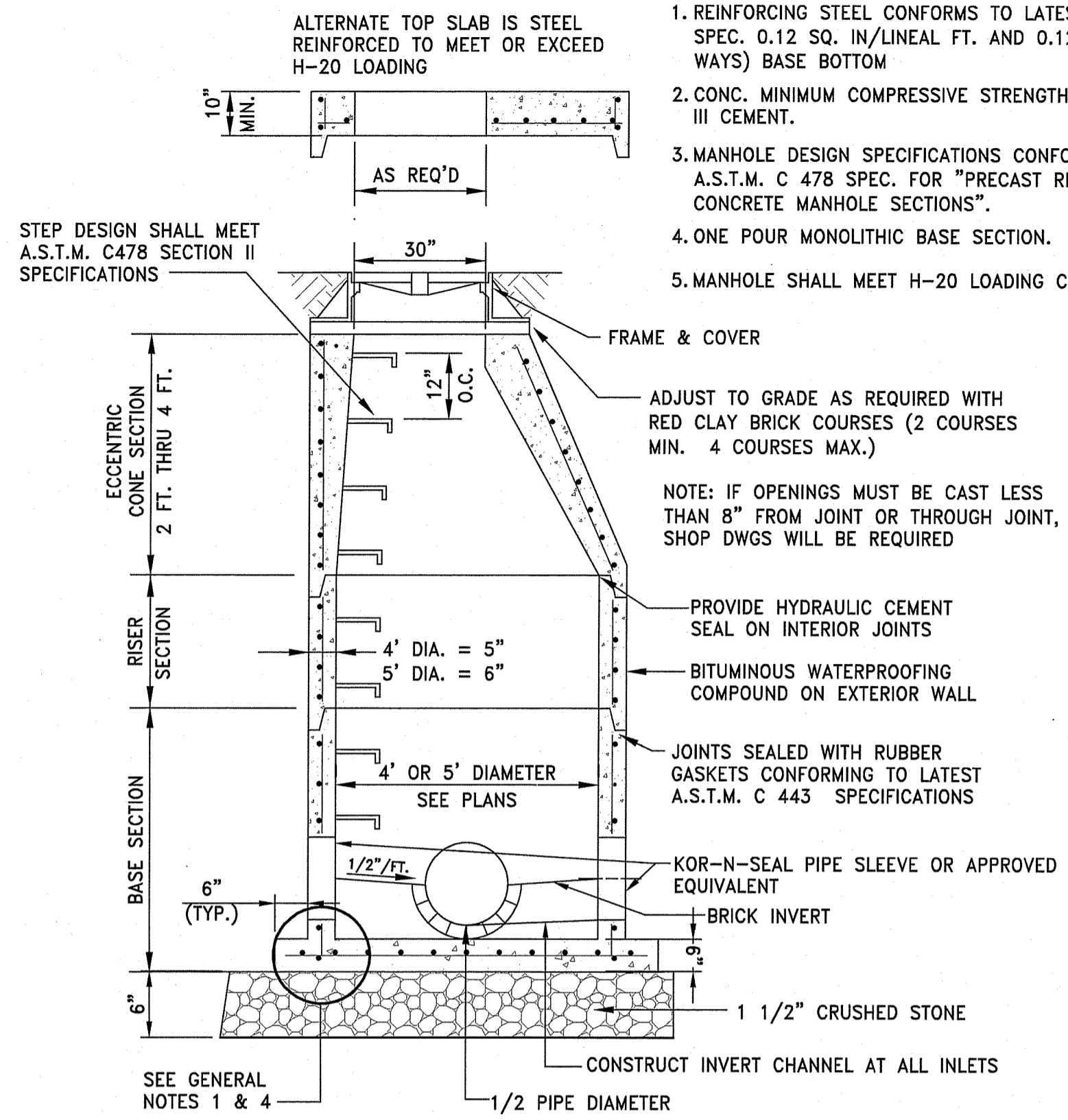
REVISIONS:

NO.	BY	DATE

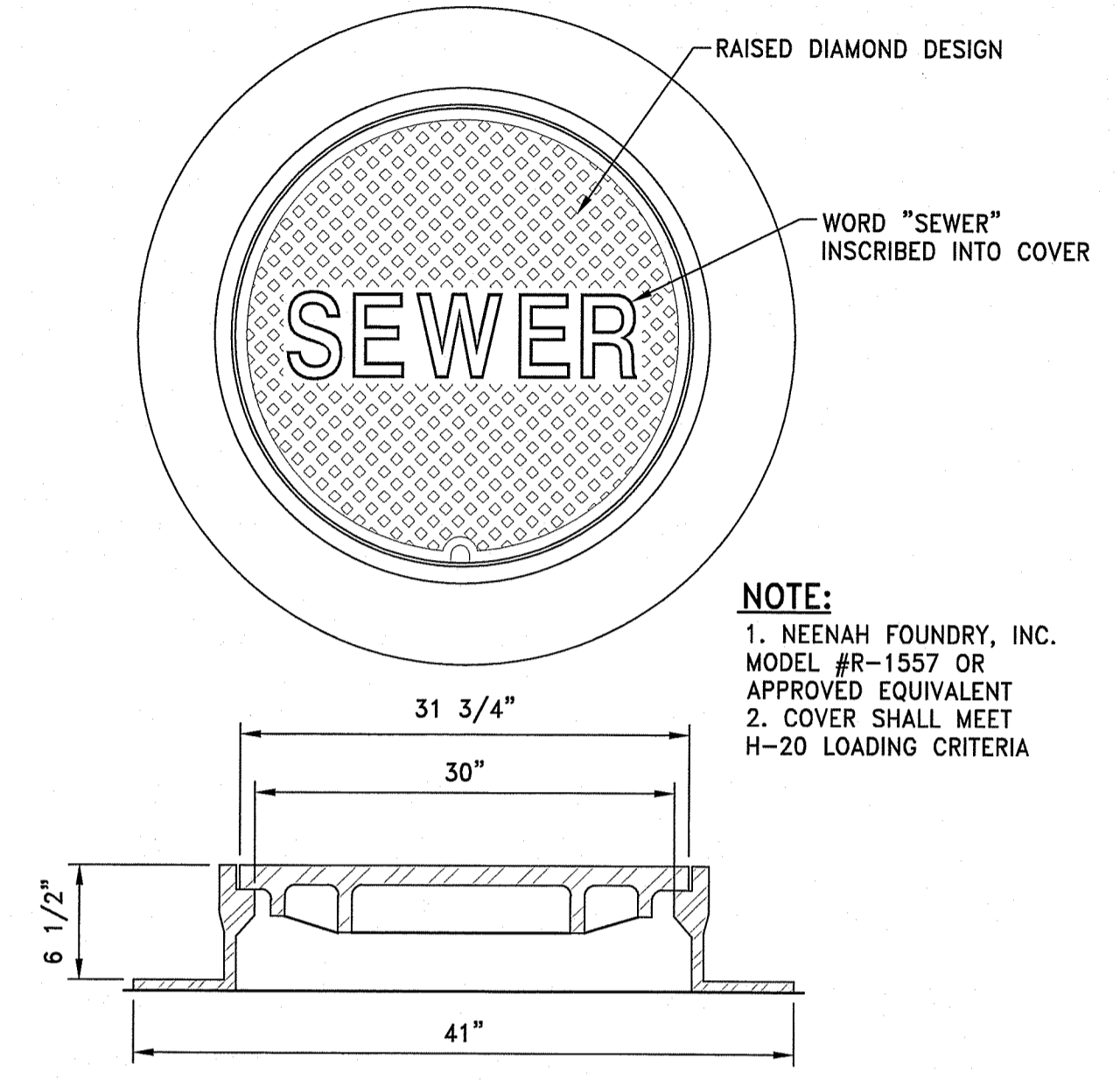
PROJECT NO.: 19056.00
DATE: DECEMBER 13, 2019
SCALE: NOT TO SCALE
DESIGNED BY: VAH
CHECKED BY: DLP
DRAWN BY: AKL
APPROVED BY: DLP
DRAWING TITLE: DETAILS 8
DRAWING NO.: C7.8
SHEET NO. 17 OF 23

GENERAL NOTES:

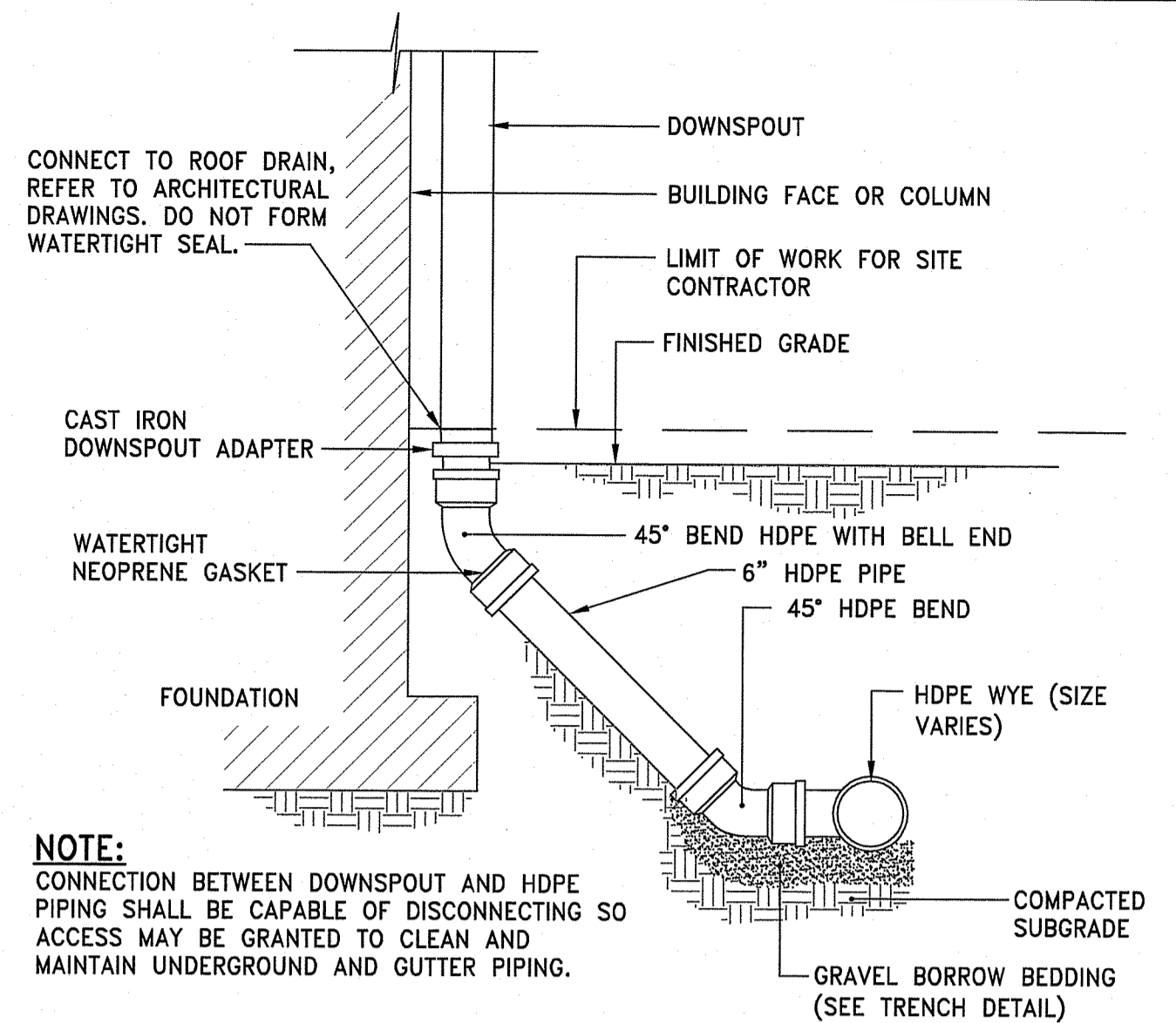
1. REINFORCING STEEL CONFORMS TO LATEST A.S.T.M. A 185 SPEC. 0.12 SQ. IN./LINEAL FT. AND 0.12 SQ. IN. (BOTH WAYS) BASE BOTTOM
2. CONC. MINIMUM COMPRESSIVE STRENGTH = 4000 PSI TYPE III CEMENT.
3. MANHOLE DESIGN SPECIFICATIONS CONFORM TO LATEST A.S.T.M. C 478 SPEC. FOR "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS".
4. ONE POUR MONOLITHIC BASE SECTION.
5. MANHOLE SHALL MEET H-20 LOADING CRITERIA.



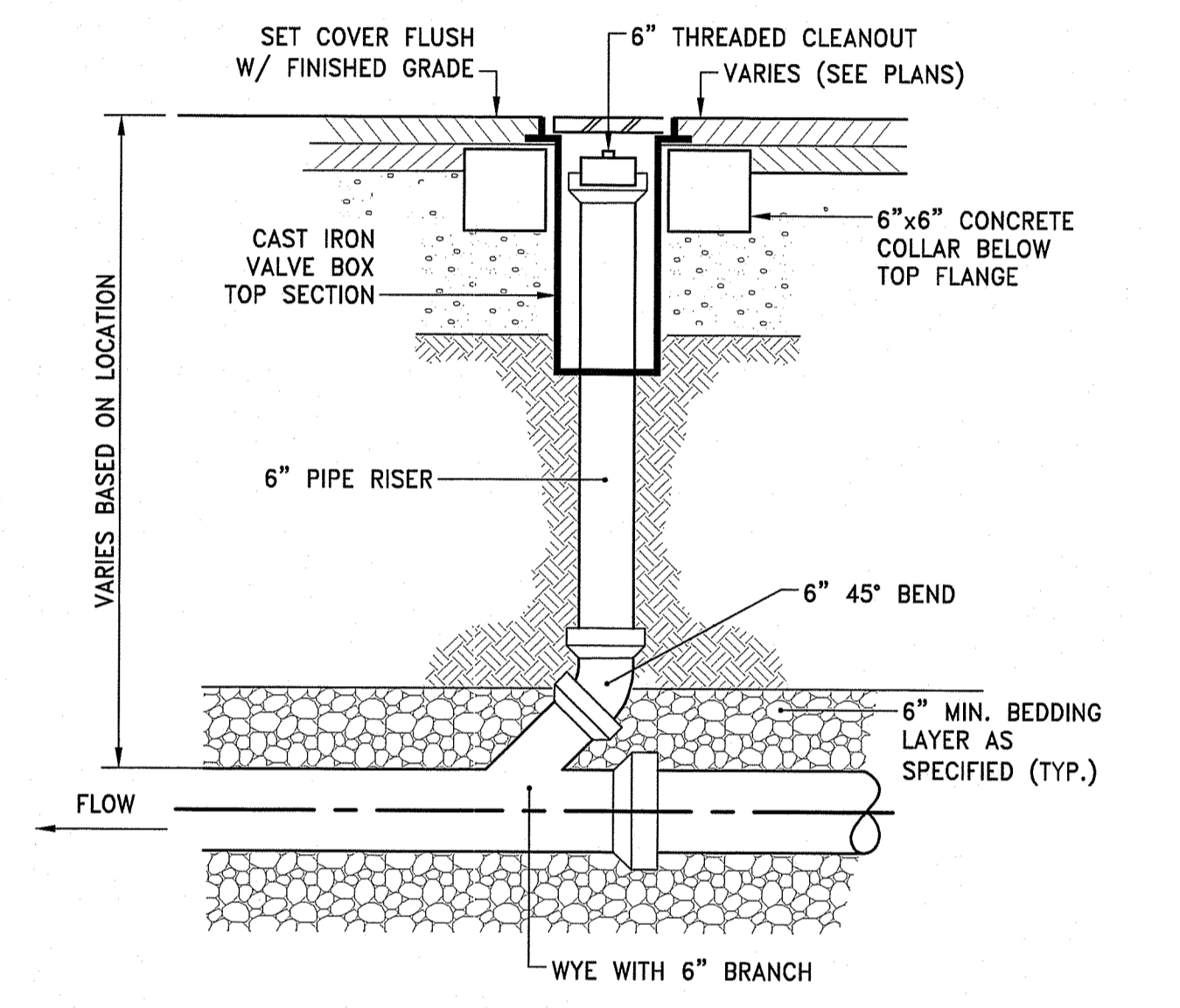
TYPICAL SEWER MANHOLE DETAIL
 NOT TO SCALE



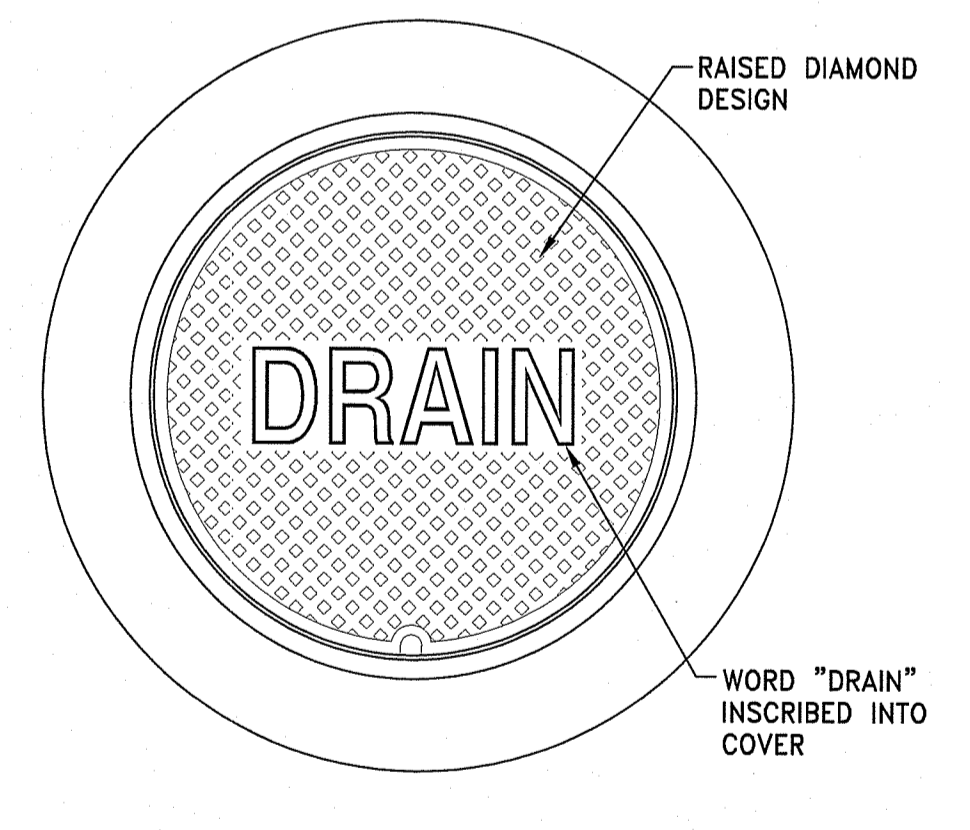
SANITARY MANHOLE FRAME & COVER
 NOT TO SCALE



DOWNSPOUT DETAIL
 NOT TO SCALE



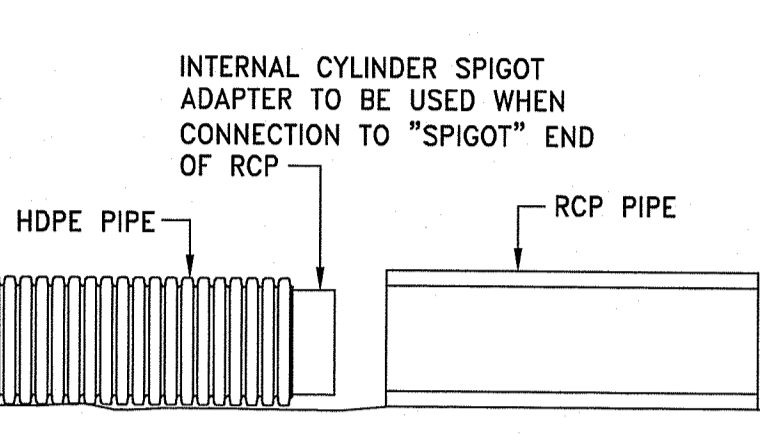
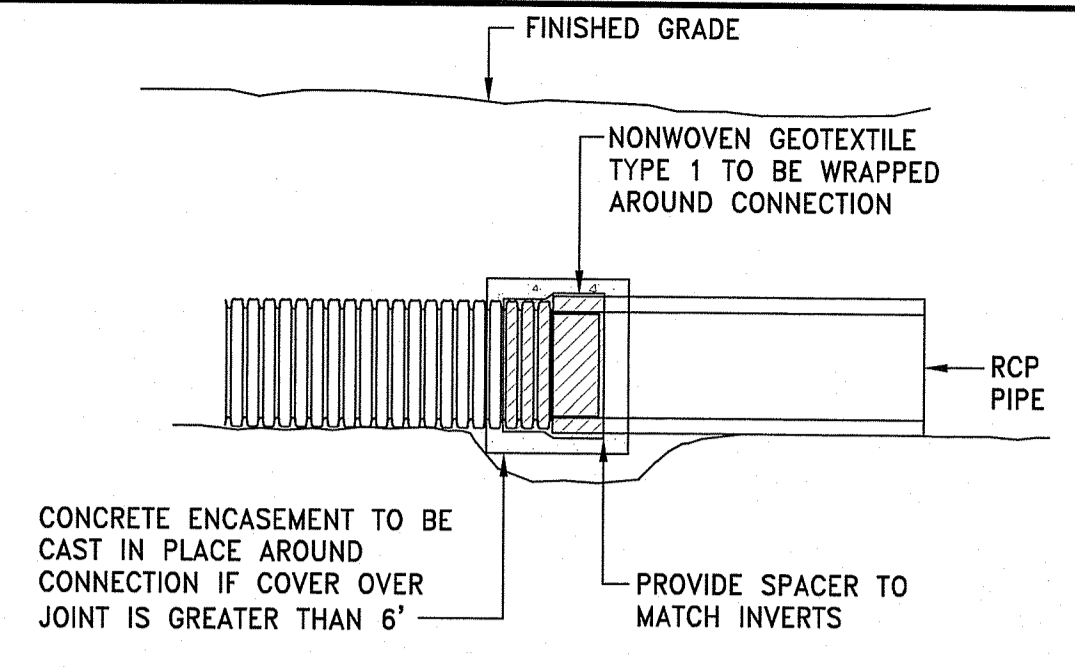
CLEANOUT DETAIL
 NOT TO SCALE



DRAIN MANHOLE FRAME & COVER
 NOT TO SCALE

NOTES:

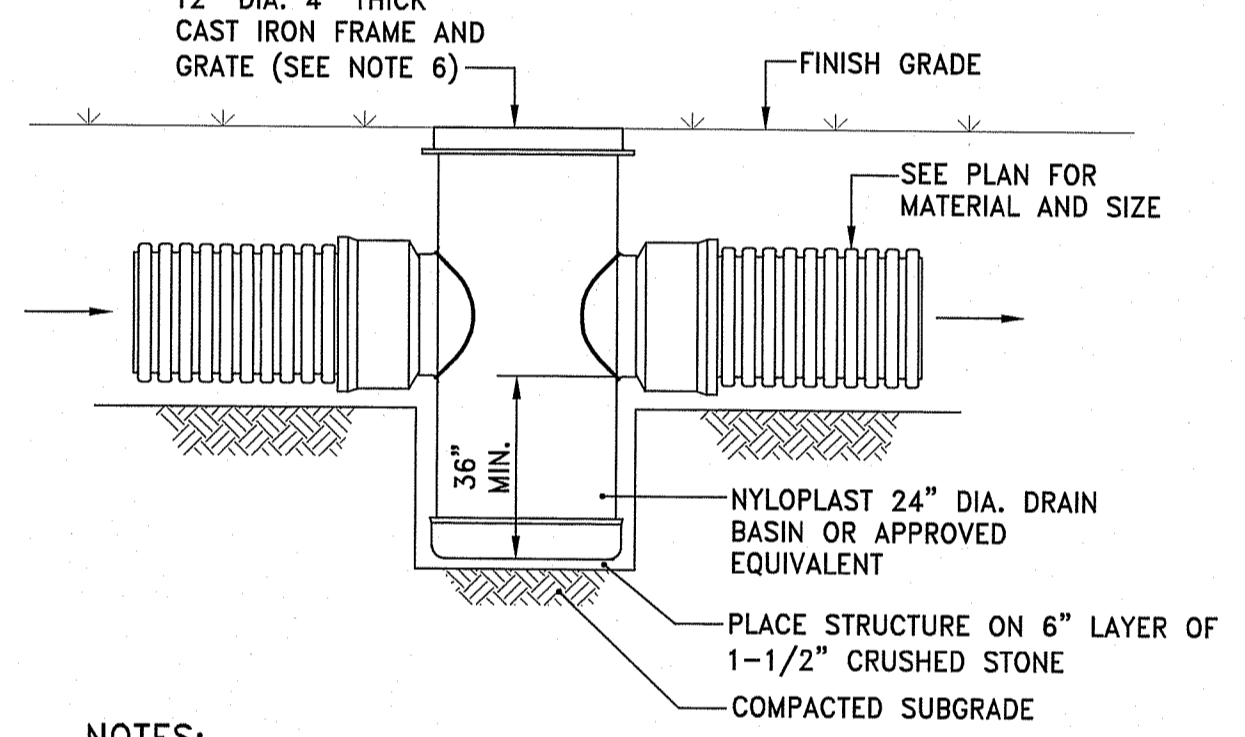
1. ALL FRAMES AND COVERS SHALL MEET H-20 LOADING CRITERIA.
2. PROVIDE:
 A: 30" DIA. DRAIN MANHOLE FRAME AND COVER SHALL BE NEENAH FOUNDRY, INC. MODEL #R-1557 OR APPROVED EQUIVALENT.
 B: 24" DIA. DRAIN MANHOLE FRAME AND COVER SHALL BE NEENAH FOUNDRY, INC. MODEL #R-1556 OR APPROVED EQUIVALENT.
3. ALL DRAIN MANHOLES SHALL HAVE 24" DIA. DRAIN MANHOLE COVER UNLESS NOTED OTHERWISE.



NOTES:

1. INTERNAL CYLINDER ADAPTER TO BE WELDED TO HDPE, OUTSIDE DIAMETER TO BE INSERTED INTO INSIDE DIAMETER OF CONCRETE PIPE.
2. NON-WOVEN GEOTEXTILE TO BE WRAPPED AROUND CONNECTION WITH FULL SEAM OVERLAP TO PROVIDE FULL PROTECTION FROM SOIL INTRUSION.
3. CONNECTION TO BE MADE IN ACCORDANCE WITH PIPE MANUFACTURER'S REQUIREMENTS.
4. INTERNAL CYLINDER SPIGOT ADAPTER NOT REQUIRED IF HDPE IS CONNECTION TO "BELL" END OF RCP.

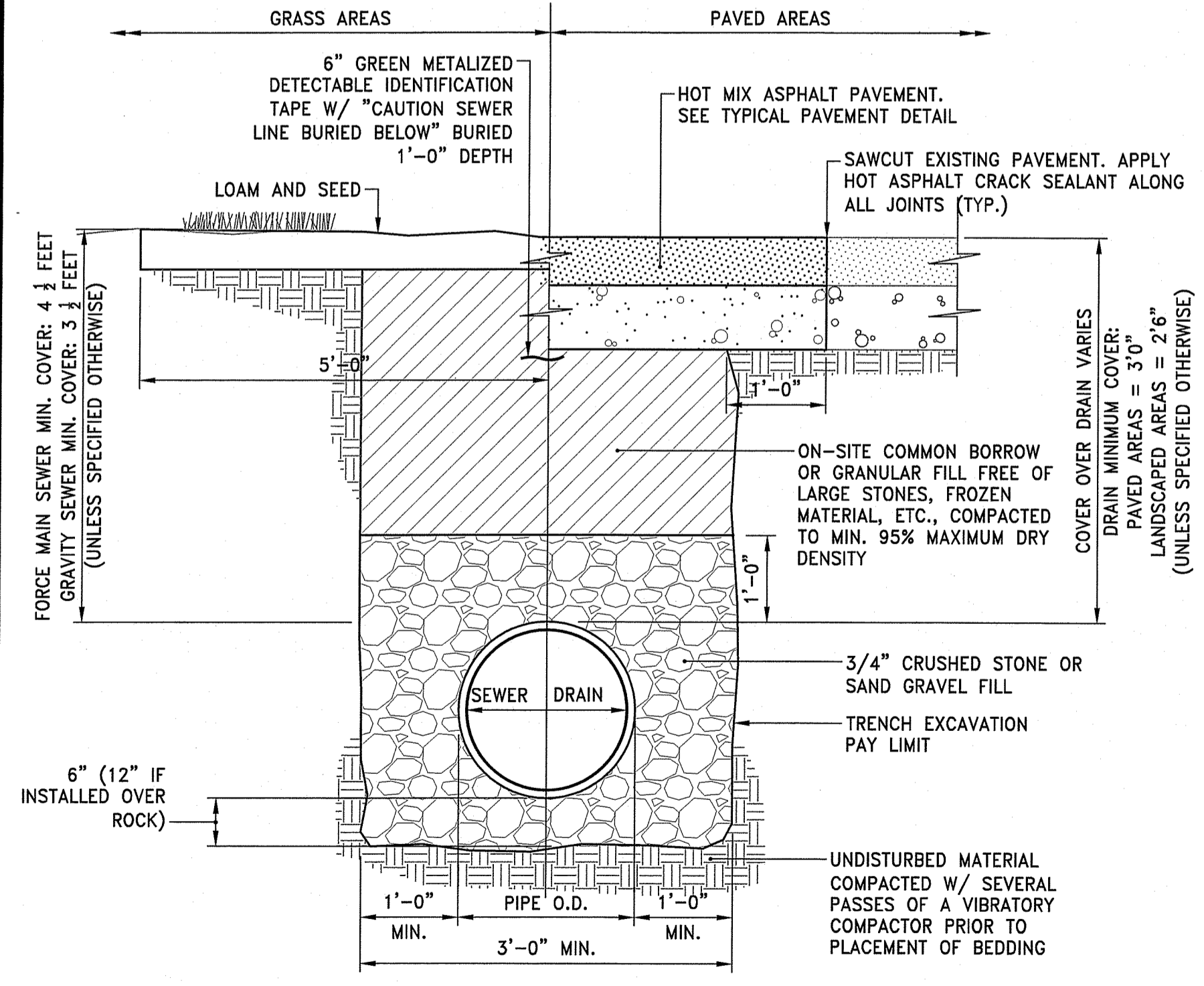
HDPE/RCP PIPE JOINT
 NOT TO SCALE



NOTES:

1. DRAIN BASIN SHALL BE CUSTOM MANUFACTURED FOR THE PROJECT WITH THE INLETS AND OUTLETS REQUIRED.
2. STRUCTURES SHALL BE CONSTRUCTED TO WITHSTAND LOADS IMPOSED BY CONSTRUCTION VEHICLES.
3. DRAIN BASIN SHALL BE CONSTRUCTED OF HIGH DENSITY POLYETHYLENE.
4. FRAME AND GRATE SHALL BE CONSTRUCTED OF DUCTILE IRON AND CONFORM TO ASTM A536 GRADE 70-50-05. PROVIDE NYLOPLAST S499CGS OR APPROVED EQUIVALENT UNLESS SPECIFIED OTHERWISE.
5. PROVIDE DOME GRATE FOR AD-1 AND AD-3, NYLOPLAST 2499CGD OR APPROVED EQUIVALENT. SET TOP FRAME AT RIM ELEVATION.

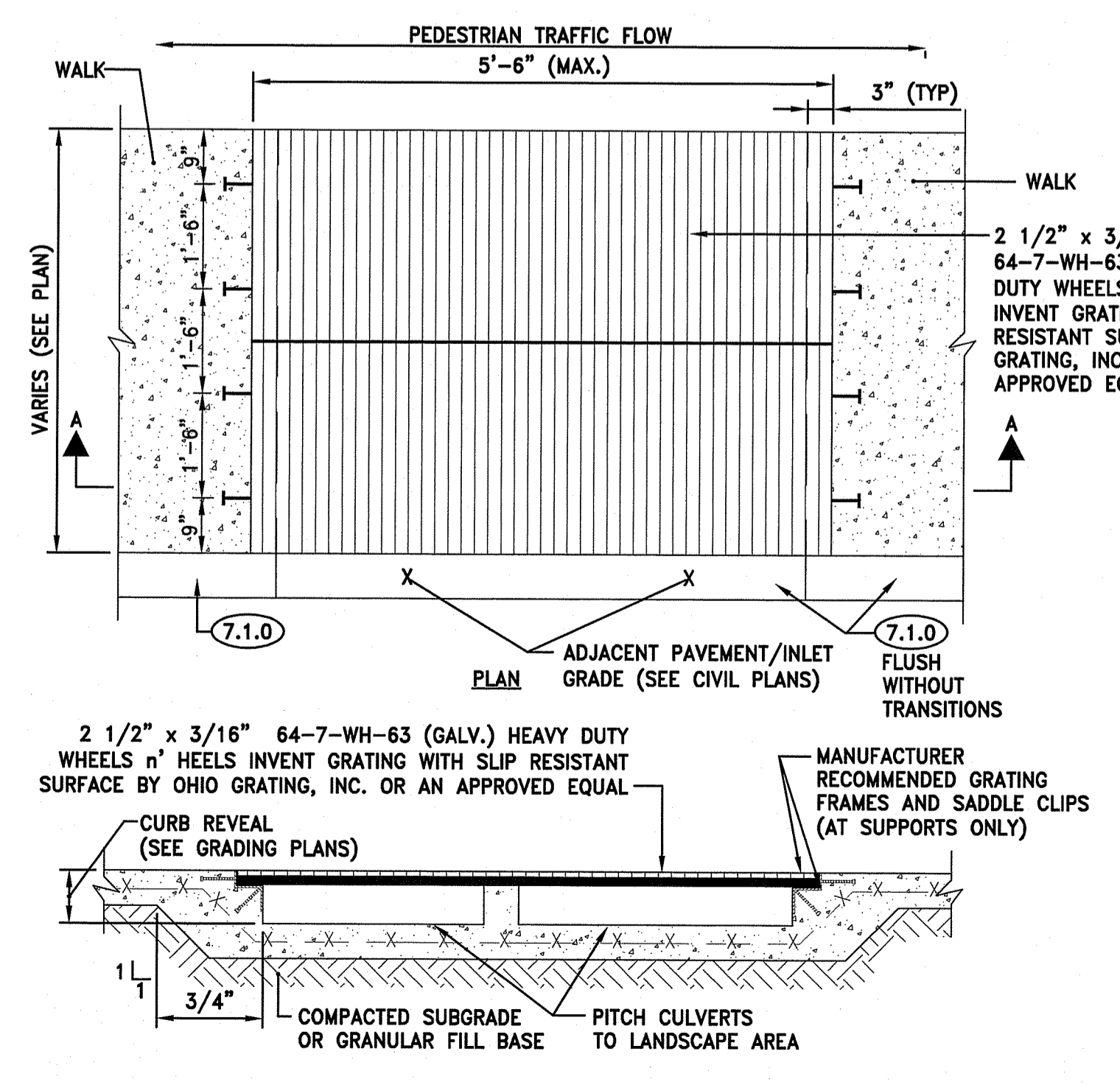
AREA DRAIN DETAIL
 NOT TO SCALE



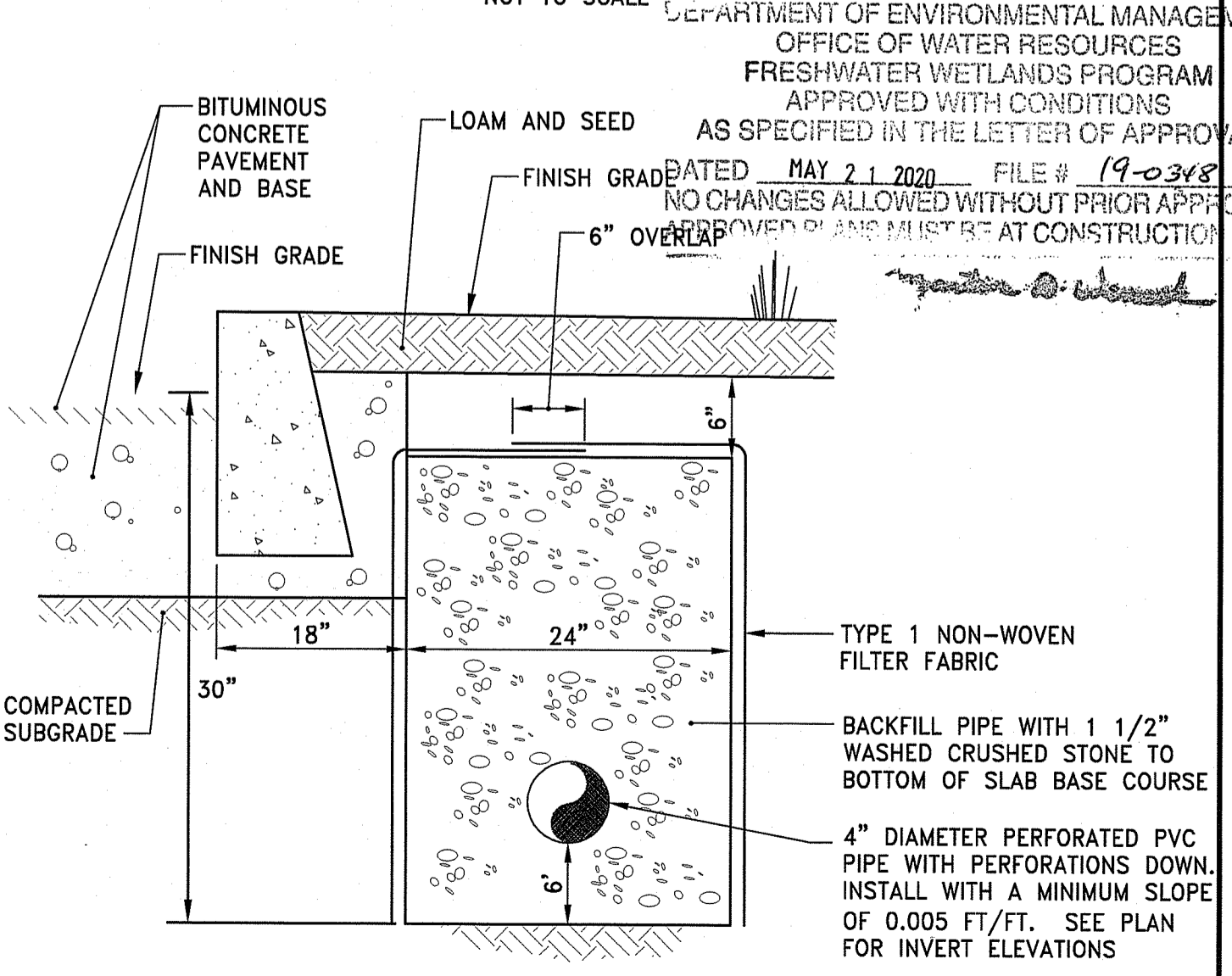
NOTES:

1. WHERE THE DISTANCE BETWEEN THE SAWCUT AND EDGE OF PAVEMENT IS 3" OR LESS, THE CONTRACTOR SHALL REPLACE THE PAVEMENT FROM THE TRENCH EDGE TO THE EXISTING EDGE OF PAVEMENT.
2. 3/4" DIA. CRUSHED STONE SHALL BE USED AS BEDDING WHERE TRENCH IS BELOW THE GROUND WATER TABLE.

SEWER/RAIN TRENCH DETAIL
 NOT TO SCALE

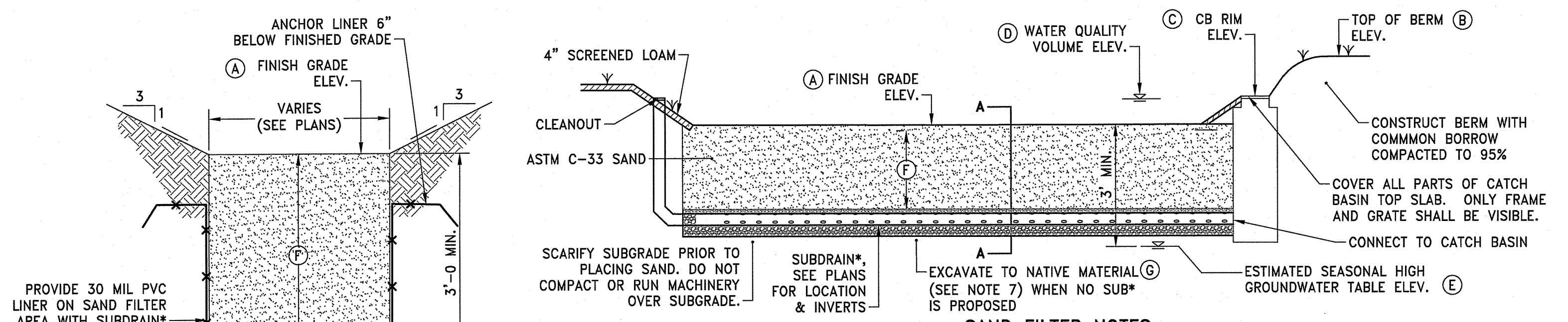


SIDEWALK GRATE
 NOT TO SCALE



ROAD SUBDRAIN DETAIL
 NOT TO SCALE

NO.	DESCRIPTION



OLD COUNTY

SF	301
(A)	224.80
(B)	225.48
(C)	225.30
(D)	225.30
(E)	224.50
(F)	24"
(G)	N/A
*SUB	Y

* SUB=SUBDRAIN, ALL SAND FILTERS WITH A SUBDRAIN SHALL ALSO BE LINED WITH 30 MIL PVC BARRIER.

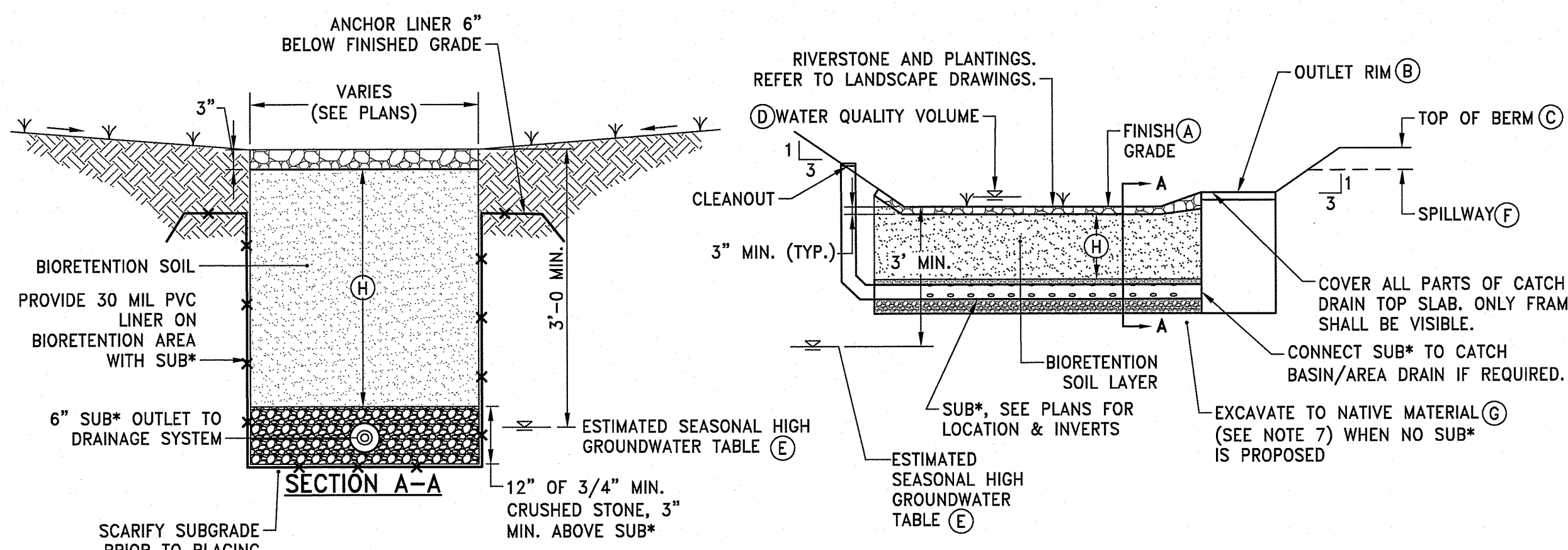
SAND FILTER DETAIL
 NOT TO SCALE

- SAND FILTER NOTES:**
1. ABSOLUTELY NO RUNOFF SHALL ENTER THE SAND FILTER AREA UNTIL ALL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED.
 2. CONSTRUCTION EQUIPMENT AND TRAFFIC SHALL BE RESTRICTED FROM TRAVELING OVER THE SAND FILTER AREA TO MINIMIZE COMPACTION OF THE SOILS.
 3. IF NECESSARY, UTILIZE LIGHT-TRACKED EQUIPMENT WHEN EXCAVATING WITHIN THE SAND FILTER AREA TO AVOID COMPACTION OF THE BASIN FLOOR.
 4. INITIAL EXCAVATION SHALL BE CARRIED TO WITHIN 1 FOOT OF THE SUBGRADE ELEVATION. FINAL EXCAVATION TO THE BASIN SUBGRADE SHALL BE DEFERRED UNTIL ALL UPSTREAM DISTURBED AREAS HAVE BEEN STABILIZED OR PROTECTED.
 5. CONTRACTOR SHALL CONTACT THE ENGINEER 48 HOURS PRIOR TO EXPOSING THE SUBGRADE TO COORDINATE ENGINEER'S OBSERVATION OF SUBGRADE.
 6. CONSTRUCTION OF THE SYSTEM SHALL NOT COMMENCE UNTIL ENGINEER OBSERVES SUBGRADE AND BACKFILL MEDIA AND GRANTS PERMISSION TO PROCEED.
 7. OVER EXCAVATION BELOW SUBGRADE SHALL BE REPLACED WITH ASTM C-33 SAND.
 8. SEE PLANS FOR LOCATIONS AND INVERTS OF CATCH BASINS/ AREA DRAINS.
 9. NOT ALL SAND FILTER AREAS INCLUDE A CATCH BASIN/ AREA DRAIN (SEE PLANS).

OLD COUNTY

BIO	301	302
(A)	225.25	223.80
(B)	225.75	224.50
(C)	225.80	226.00
(D)	225.75	224.50
(E)	222.50	223.50
(F)	N/A	N/A
(G)	N/A	N/A
(H)	24"	33.6"
*SUB	Y	Y

* SUB=SUBDRAIN, ALL BIORETENTION AREAS WITH A SUBDRAIN SHALL ALSO BE LINED WITH 30 MIL PVC BARRIER. 12" OF CRUSHED STONE IS NOT REQUIRED WHEN SUBDRAINS ARE NOT PROPOSED.



BIORETENTION SOIL: 85-88% SAND, 0-12% SILT, 3-5% ORGANIC MATTER, 0-2% CLAY.

BIORETENTION DETAIL
 NOT TO SCALE

- BIORETENTION NOTES:**
1. ABSOLUTELY NO RUNOFF SHALL ENTER THE BIORETENTION AREA UNTIL ALL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED.
 2. CONSTRUCTION EQUIPMENT AND TRAFFIC SHALL BE RESTRICTED FROM TRAVELING OVER THE BIORETENTION AREA TO MINIMIZE COMPACTION OF THE SOILS.
 3. IF NECESSARY, UTILIZE LIGHT-TRACKED EQUIPMENT WHEN EXCAVATING WITHIN THE BIORETENTION AREA TO AVOID COMPACTION OF THE BASIN FLOOR.
 4. INITIAL EXCAVATION SHALL BE CARRIED TO WITHIN 1 FOOT OF THE SUBGRADE ELEVATION. FINAL EXCAVATION TO THE BASIN SUBGRADE SHALL BE DEFERRED UNTIL ALL UPSTREAM DISTURBED AREAS HAVE BEEN STABILIZED OR PROTECTED.
 5. CONTRACTOR SHALL CONTACT THE ENGINEER 48 HOURS PRIOR TO EXPOSING THE SUBGRADE TO COORDINATE ENGINEER'S OBSERVATION OF SUBGRADE.
 6. CONSTRUCTION OF THE SYSTEM SHALL NOT COMMENCE UNTIL ENGINEER OBSERVES SUBGRADE AND BACKFILL MEDIA AND GRANTS PERMISSION TO PROCEED.
 7. OVER EXCAVATION BELOW SUBGRADE SHALL BE REPLACED WITH ASTM C-33 SAND.
 8. SEE PLANS FOR LOCATIONS AND INVERTS OF CATCH BASINS/ AREA DRAINS.
 9. NOT ALL BIORETENTION AREAS INCLUDE A CATCH BASIN/ AREA DRAIN (SEE PLANS).

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED MAY 21, 2020 FILE # 19-0348
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

