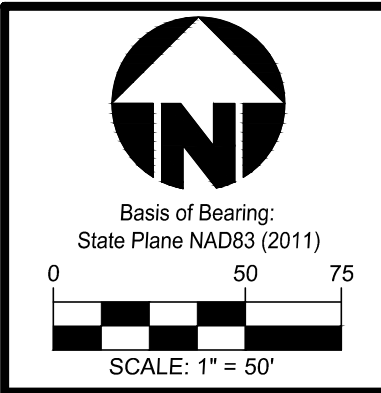
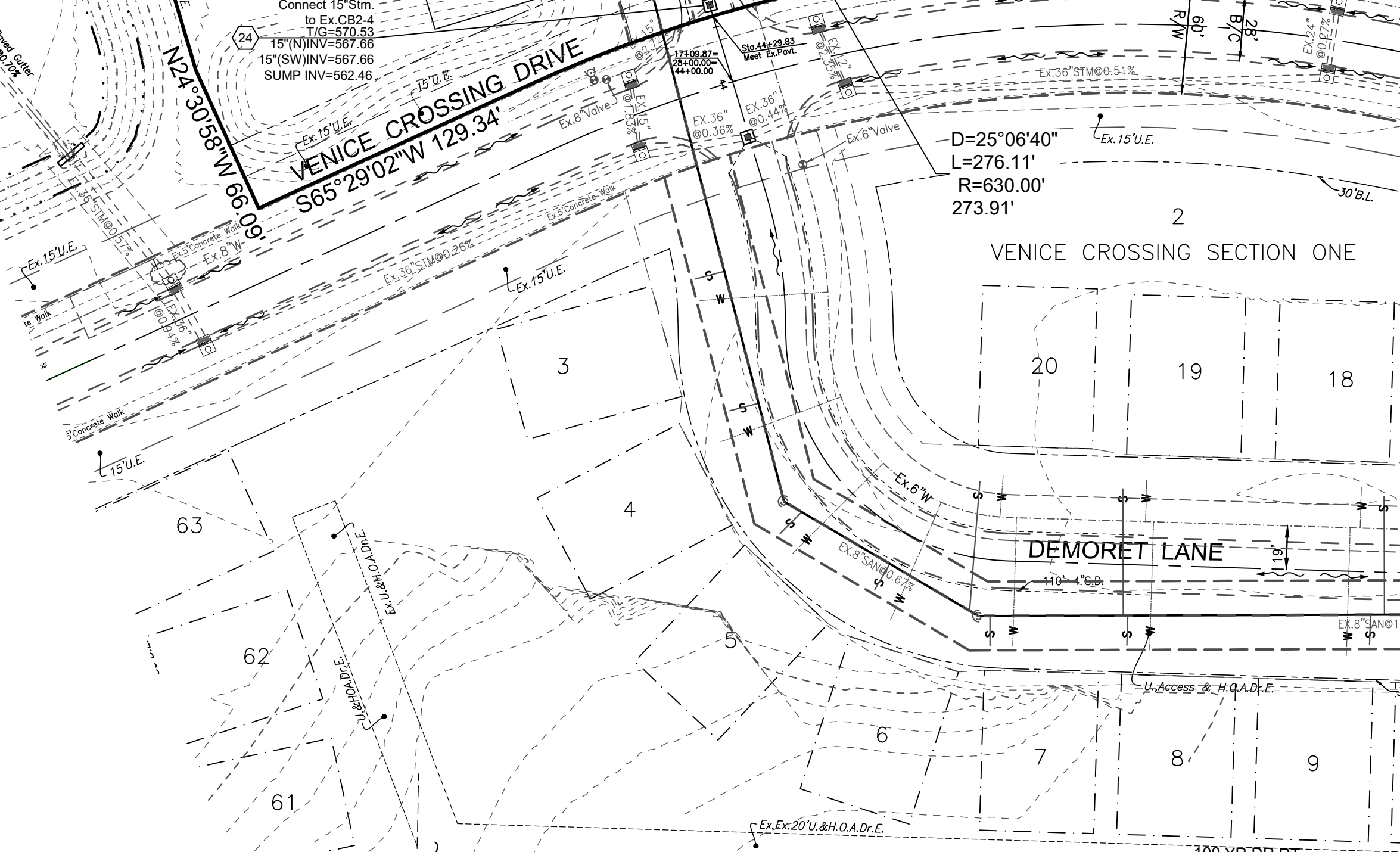
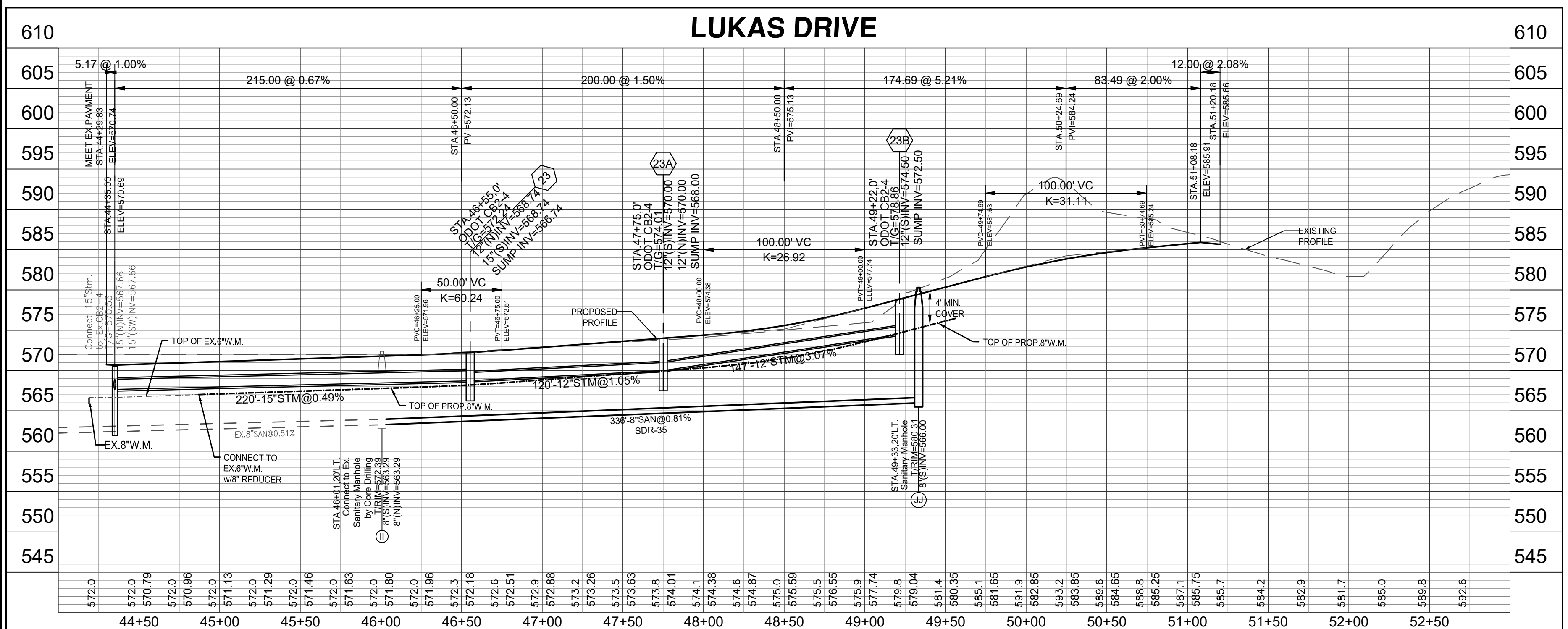
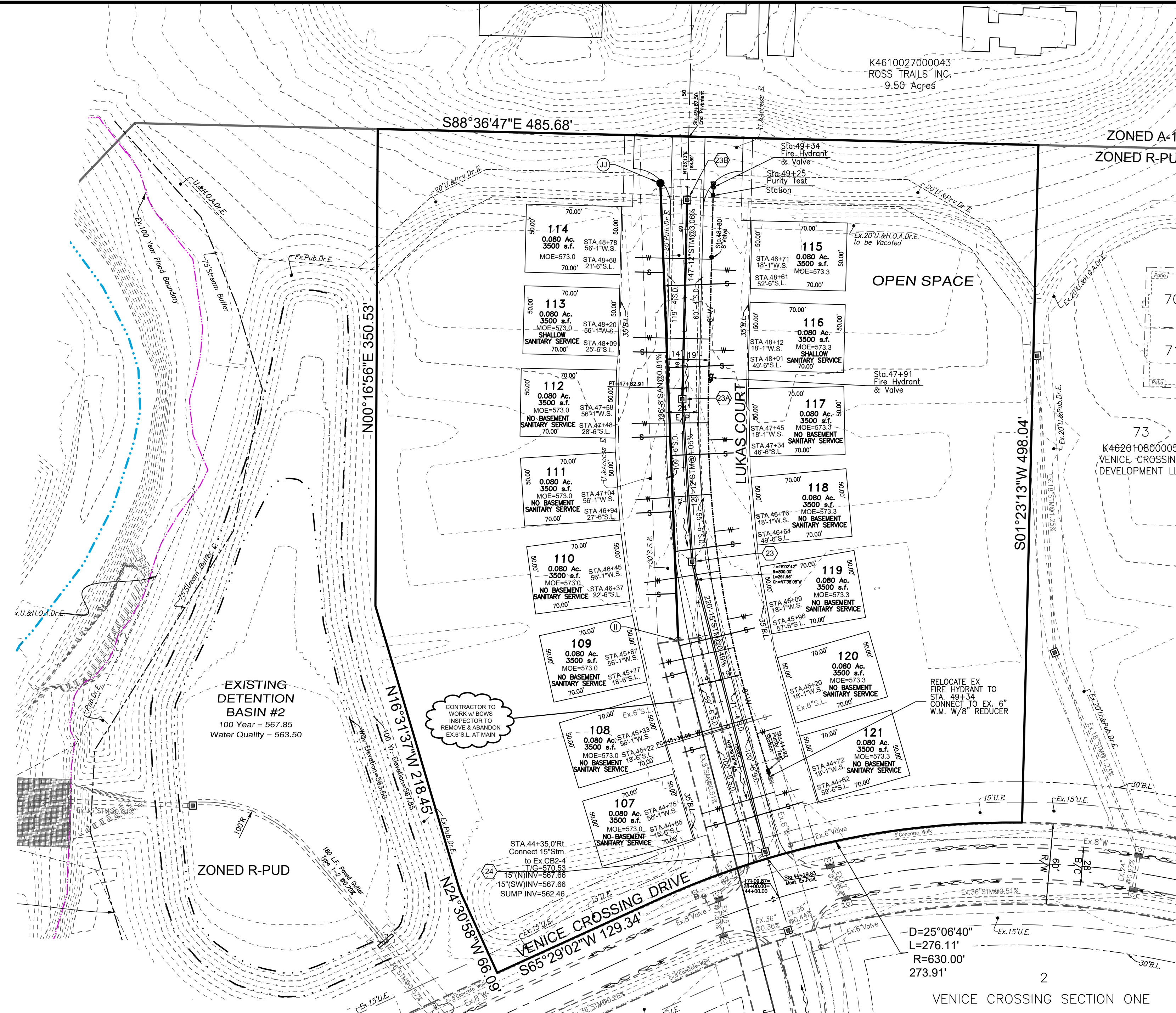


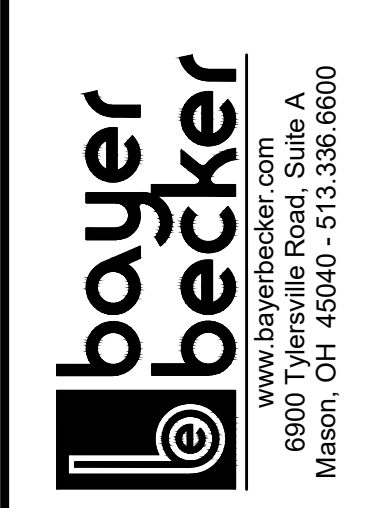
- NOTES:
- 48 hours notice to be given to affected residents before construction begins.
 - All Catch Basin B/C Elevations located within the curb are set to the Back of Curb Elevations.
 - Lower 1" Water Services as needed to avoid conflicts with Storm with Min. 4" Cover.
 - Location of existing utilities to be determined in the field prior to work beginning.
 - All lots Sump to Sump Drain unless otherwise noted in plan.
 - Sump Lines to be installed as per Standard Service Detail. Wyes or Tees are to be placed ten feet past lot line, on the low side of specified lots, and marked with Wye poles.
 - Contractors to accept all quantities as correct prior to beginning construction.

NOTE:
At Crossings, the water main shall have a minimum vertical distance of eighteen (18") inches from storm and sanitary sewers. Also, one full length of water main shall be located so the joints are as far from the storm and sanitary sewers as possible. Fittings, not joint deflection, must be used when water main is lowered at crossings.



Item	Revision Description	Date	Drawn	Chk
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VENICE CROSSING SECTION FOUR
ROSS TOWNSHIP, BUTLER COUNTY, OHIO
SECTION 26, TOWN 3, RANGE 2
PLAN & PROFILE

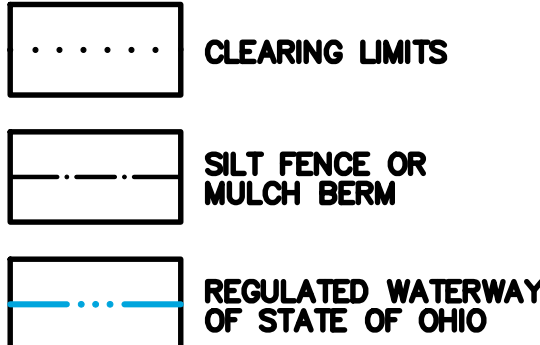


Drawing: 13M074-004 CD
Drawn by: JMW
Checked by: TAC
Issue Date: 4-27-22

Plot time: May 02, 2022 - 12:51pm
Drawing name: J:\2013\13M074-004\CD\DWG\13M074-004 CD.dwg - Layout Tab: 2PP

EROSION CONTROL NOTES

- SEEDING AND MULCHING
- SODDING
- PRESERVE EXISTING VEGETATION
- STRAW BALE
- SILT FENCE OR MULCH BERM
- SOIL PILES
- TEMPORARY STREAM CROSSING
- GRAVEL CURB INLET SEDIMENT FILTER
- GEOTEXTILE INLET SEDIMENT FILTER
- GABIONS
- STRAW BALE DROP INLET SEDIMENT FILTER
- SOD DROP INLET SEDIMENT FILTER
- GRAVEL & WIRE MESH DROP INLET SEDIMENT FILTER
- BLOCK & GRAVEL CURB INLET SEDIMENT FILTER
- TEMPORARY SEDIMENT TRAPS & DAMS
- DIKES & SLOPE PROTECTION
- ROLLED GRAVEL CURB INLET SEDIMENT FILTER
- CHECK DAM
- TEMPORARY DETENTION SEDIMENT FILTER/BASIN
- DANDY BAG/BEAVER DAM® OR EQUAL
- CONSTRUCTION ENTRANCE
- CONCRETE WASHOUT AREA
- SEE SOIL EROSION & SEDIMENTATION CONTROL DETAIL SHEET (Page #7)



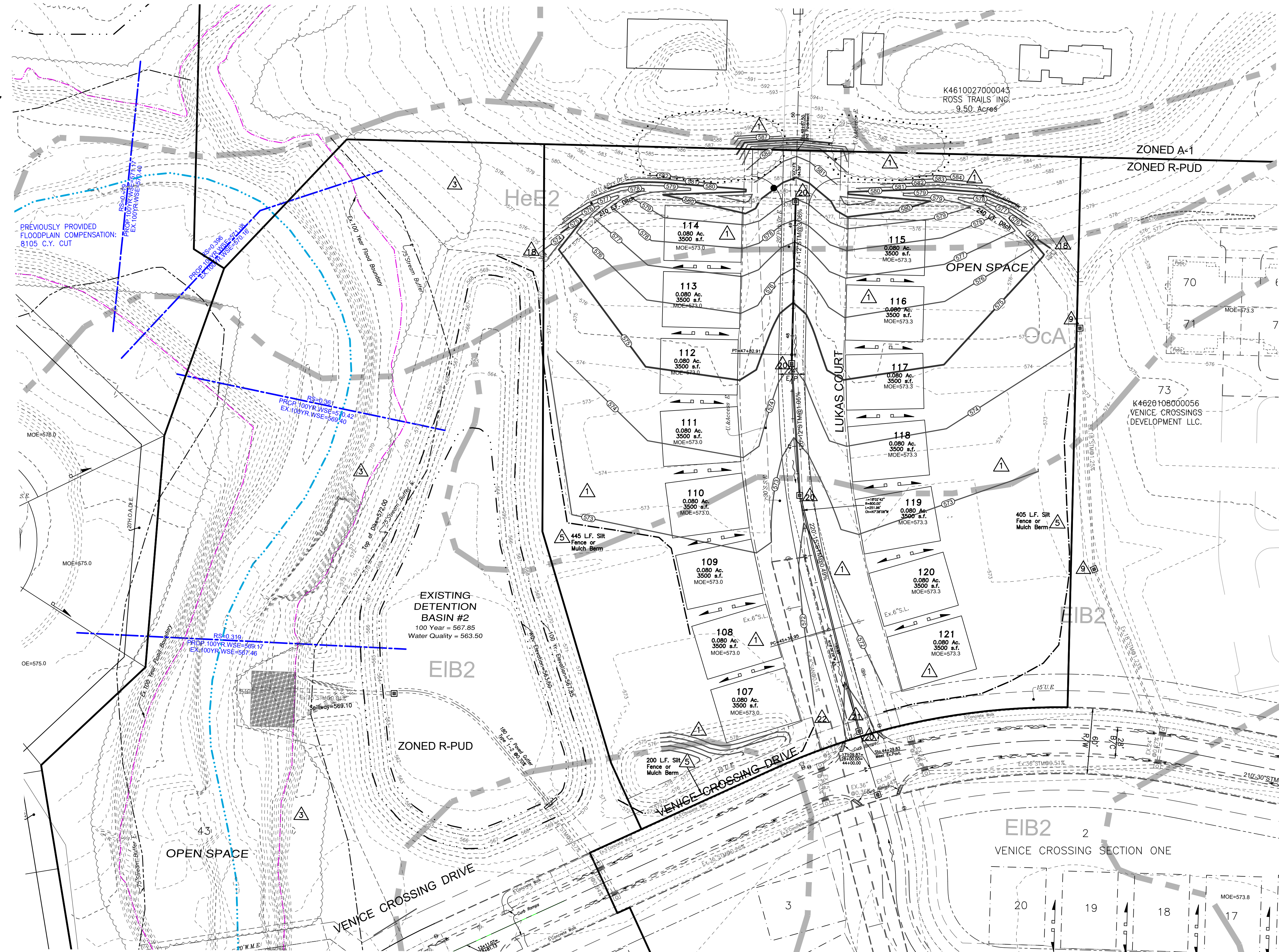
- NOTES:**
- Regular inspection and maintenance will be provided for all erosion and sediment control practices. Permanent records of maintenance and inspections must be kept throughout the construction period. Inspections must be made a minimum of once every seven (7) days and immediately after storm events greater than 0.5 inches of rain in a 24 hour period. Provided will be name of inspector, major observations, date of inspection and corrective measures taken.
 - All erosion and sediment control practices must conform to the specifications of Rainwater and Land Development, Ohio's standards for storm water management, land development and urban stream protection.
 - Perimeter Sedimentation control and basins/traps shall be implemented as the first step of grading and within seven (7) days of initial grubbing or grading and shall continue to function until upland areas are stabilized.
 - Disturbed areas which will remain unworked for a period of twenty-one (21) days or more, shall be stabilized with seeding and mulching or other approved means within seven (7) days. All disturbed areas within fifty (50) feet of an intermittent or solid blue line stream shall be stabilized within two (2) days. All areas of a site which are at final grade shall be stabilized with seeding and mulching or other approved means within seven (7) days.
 - Quantities for Erosion Control may vary between detailed plans and field conditions during construction. Plan quantities are a minimum; more erosion control may be necessary due to environmental conditions.
 - Sedimentation control and ditch swales are subject to change upon completion of entire set of construction drawings.
 - No solid or liquid waste shall be discharged into storm water runoff.
 - Home builders are responsible for erosion control on each individual lot.
 - Contractors to accept all quantities as correct prior to beginning construction.

PROJECT DATA		
Total Site Area	5.87 Ac.	
Sediment Basin Calculations:		
Drainage Area	27.97 Ac.	
Disturbed Tributary Area	4.50 Ac.	
Required Sediment Storage	0.10 Ac./Ft.	
Required Dewatering Storage	0.18 Ac./Ft.	
Water Quality Volume Provided	1.01 Ac./Ft.	
Pre-Developed Runoff Coefficient	0.32	
Post-Developed Runoff Coefficient	0.50	
Estimated Proposed Impervious Area	1.50 Ac.(25.0%)	
Immediate Receiving Waters	Dry Run Creek	
Subsequent Receiving Waters	Great Miami River	
SOIL TYPES		
Symbol	Name	Type
E1A	Eldon loam 0 to 2 percent slopes	B
E1B2	Eldon loam 2 to 6 percent slopes, moderately eroded	B
HeE2	Hennepin-Miamian silt loams 18 to 25 percent slopes, moderately eroded	B
OcA	Ockley silt loam 0 to 2 percent slopes	B

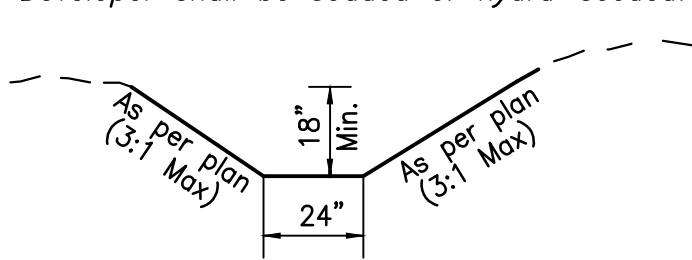
NOTE:
The Temporary Sediment Basins are to be cleaned out in accordance with the Rainwater and Land Development Manual and Butler County standards.

GRADING NOTES

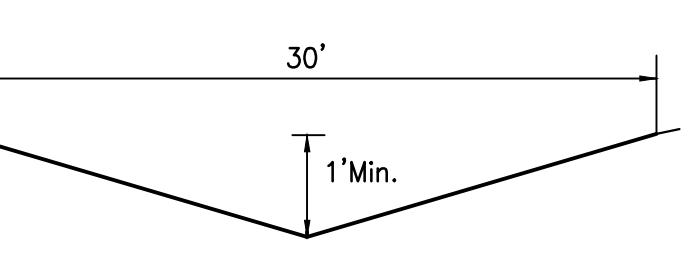
- LOCATION OF EXISTING UTILITIES TO BE DETERMINED IN THE FIELD PRIOR TO BEGINNING WORK.
- CONTRACTOR SHALL OBTAIN A COPY OF THE COMPLETE GEOTECHNICAL REPORT PRIOR TO BIDDING THE PROJECT.
- CONTRACTORS SHALL SET UP AN ONSITE PRE-CONSTRUCTION MEETING WITH THE BUTLER COUNTY STORM WATER DISTRICT/BCOE DEVELOPER, PROJECT GEOTECHNICAL ENGINEER, EARTHWORK CONTRACTOR, AND SITE CIVIL ENGINEER PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL ASSUME THE TOP 8" OF EXISTING GROUND IS TOPSOIL. TOPSOIL REMOVED TO DEPTHS GREATER THAN 8" SHALL BE DONE ONLY AFTER CONSULTATION WITH THE PROJECT GEOTECHNICAL ENGINEER AND APPROVAL OF THE DEVELOPER.
- ALL EARTHWORK AND CONSTRUCTION ACTIVITY SHALL BE PERFORMED PER THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER AS DESCRIBED IN THE GEOTECHNICAL EXPLORATION REPORT AND ALL ADDENDUMS.
- CONTRACTOR SHALL VERIFY ALL EARTHWORK QUANTITIES PRIOR TO AWARD OF CONTRACT. PAY QUANTITIES ARE FINAL EXCEPT FOR DOCUMENTED UNDERCUT APPROVED BY DEVELOPER PRIOR TO COMPLETION OF THE EXTRA WORK. UPON REQUEST, CONTRACTORS MAY HAVE ACCESS TO THE SITE TO FIELD CHECK TOPOGRAPHY.
- THE AREAS LABELED DENSE VEGETATION ARE WHERE THE EXISTING GROUND WAS OBSCURED FROM VIEW BY EXISTING VEGETATION. THE EXISTING CONTOURS SHOWN IN THIS AREA MAY VARY.



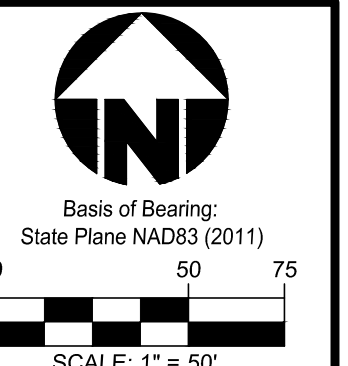
Note: All ditches constructed by the Developer shall be sodded or hydra-seeded.



TYPICAL DITCH SECTION



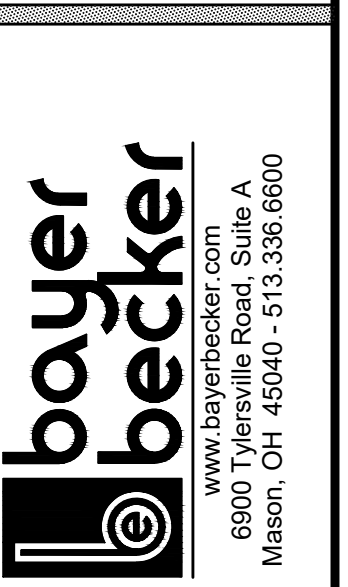
TYPICAL DRAINAGE ROUTE SECTION



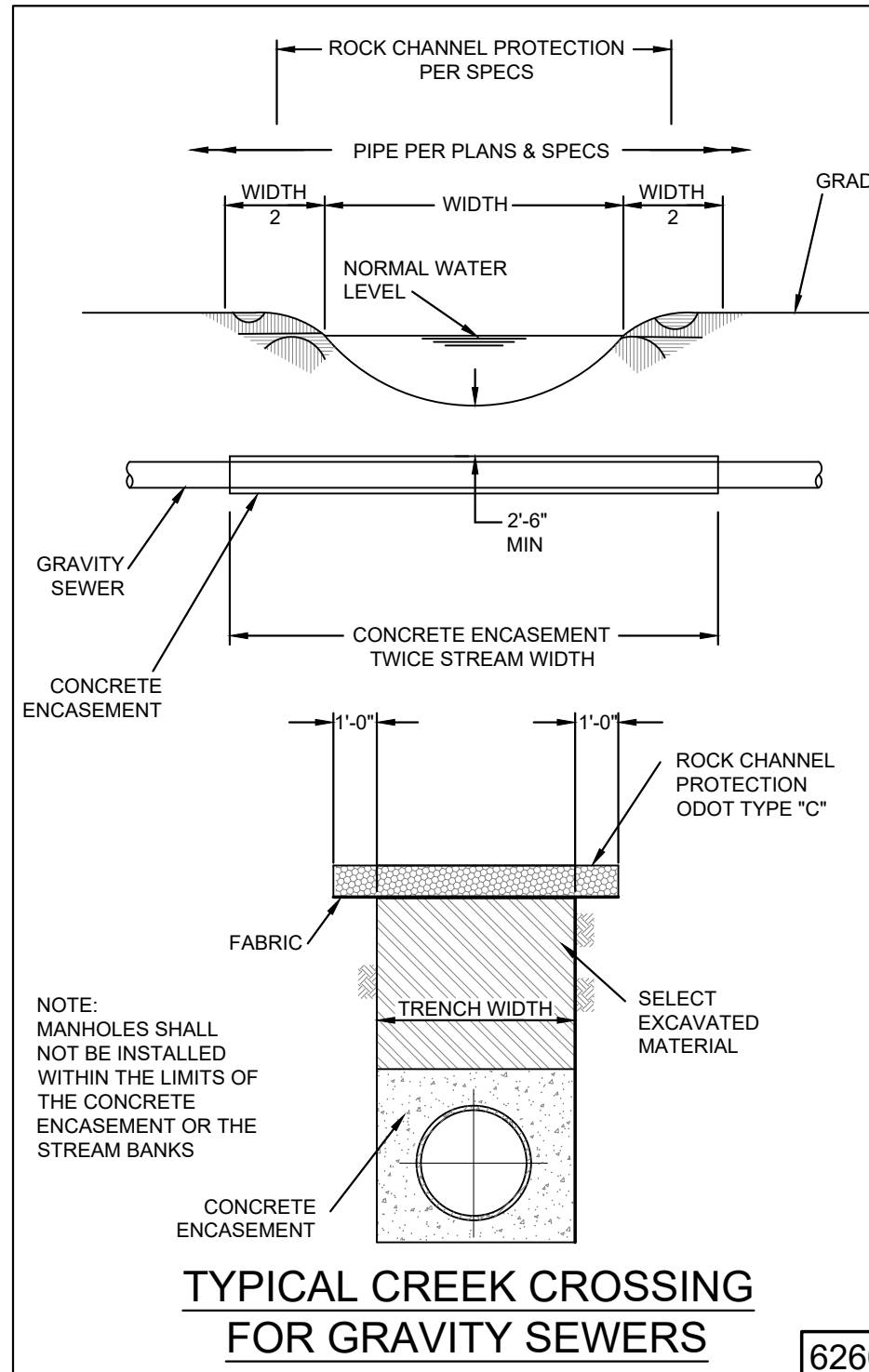
Date	Drawn	Chk.

Item	Revision Description
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VENICE CROSSING SECTION FOUR
ROSS TOWNSHIP, BUTLER COUNTY, OHIO
SECTION 26, TOWN 3, RANGE 2
GRADING PLAN

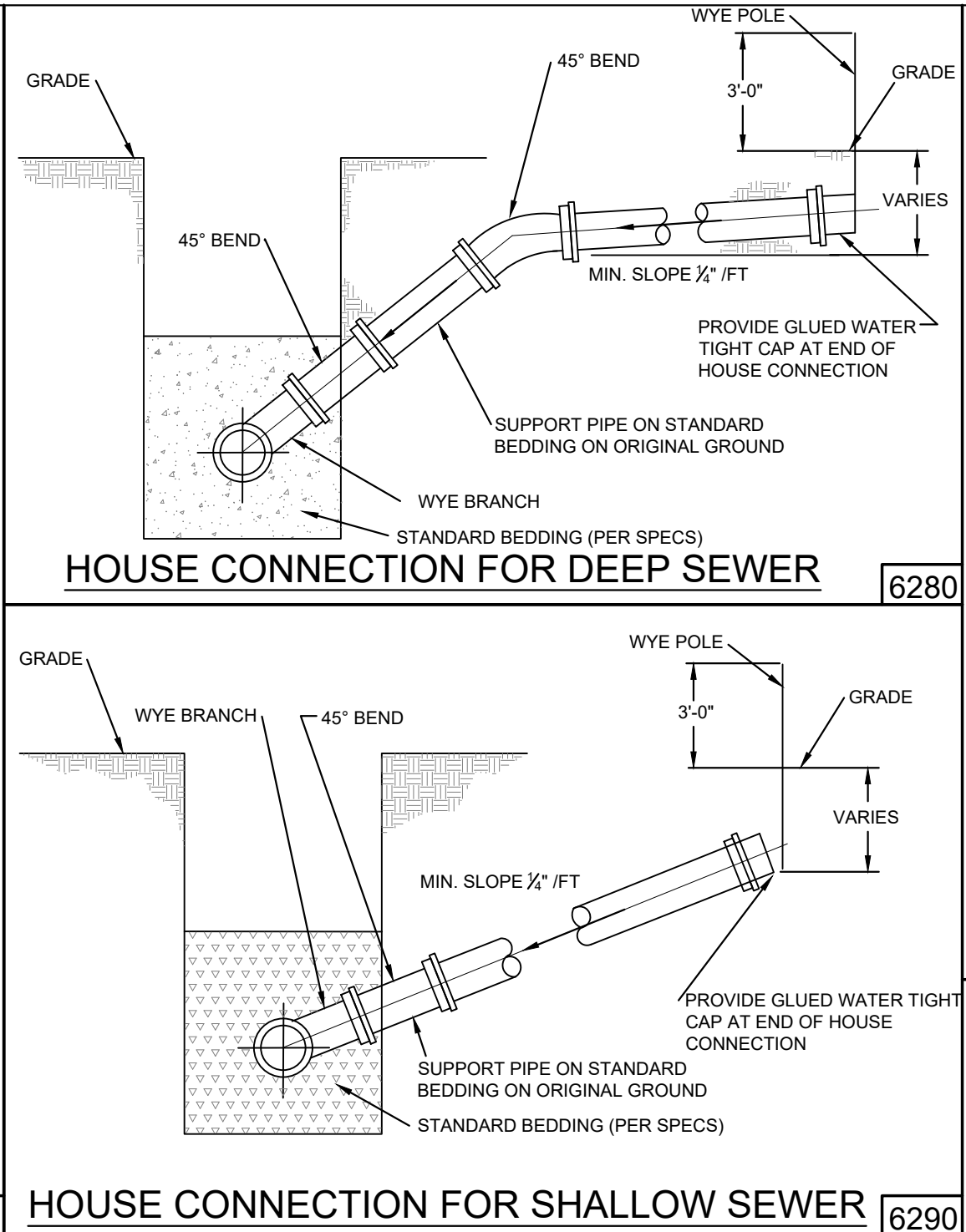


Drawing: 13M074-004 CD
Drawn by: JMW
Checked by: TAC
Issue Date: 4-27-22
Sheet: 3/7



TYPICAL CREEK CROSSING FOR GRAVITY SEWERS

6260

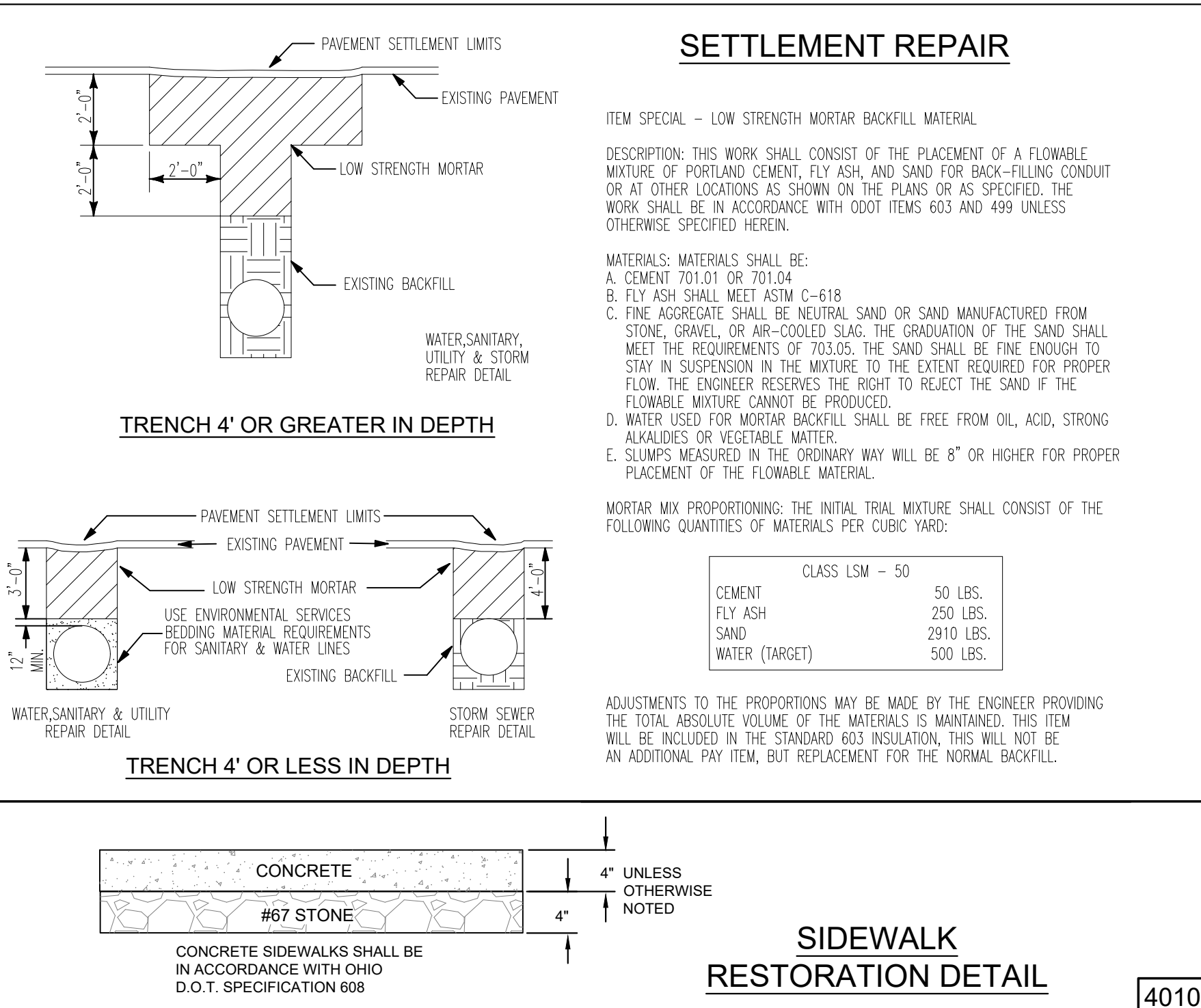


HOUSE CONNECTION FOR DEEP SEWER

6280

HOUSE CONNECTION FOR SHALLOW SEWER

6290



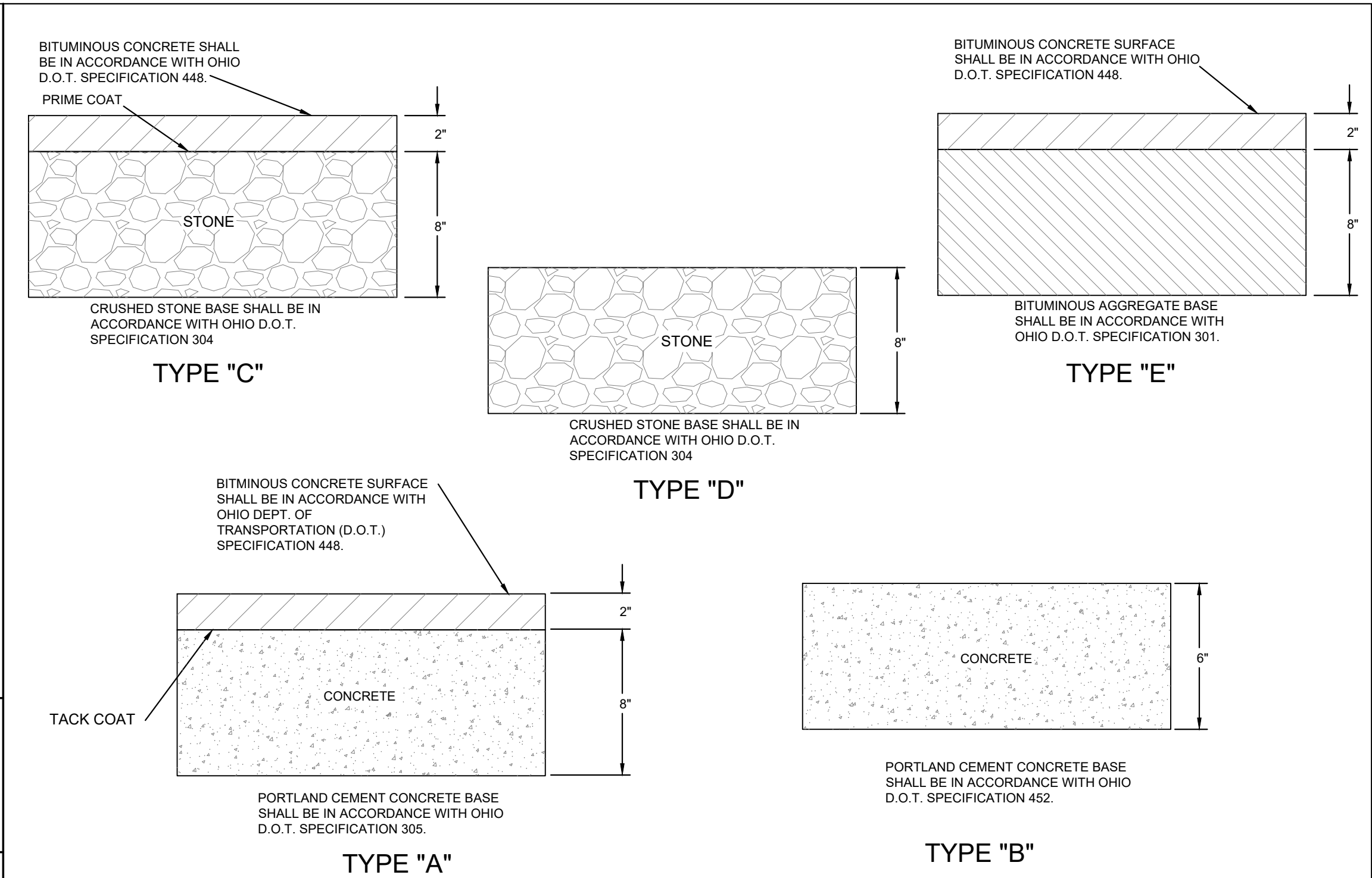
SETTLEMENT REPAIR

ITEM SPECIAL - LOW STRENGTH MORTAR BACKFILL MATERIAL
 DESCRIPTION: THIS WORK SHALL CONSIST OF THE PLACEMENT OF A FLOWABLE MIXTURE OF PORTLAND CEMENT, FLY ASH, AND SAND FOR BACK-FILLING CONDUIT OR AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS SPECIFIED. THE WORK SHALL BE IN ACCORDANCE WITH ODOT ITEMS 603 AND 499 UNLESS OTHERWISE SPECIFIED HEREIN.
 MATERIALS: MATERIALS SHALL BE:
 A. CEMENT 701.01 OR 701.04
 B. FLY ASH SHALL MEET ASTM C-618
 C. FINE AGGREGATE SHALL BE NEUTRAL SAND OR SAND MANUFACTURED FROM STONE, GRAVEL OR AIR-COOLED SLAG. THE GRADATION OF THE SAND SHALL MEET THE REQUIREMENTS OF 703.05. THE SAND SHALL BE FINE ENOUGH TO STAY IN SUSPENSION IN THE MIXTURE TO THE EXTENT REQUIRED FOR PROPER FLOW. THE ENGINEER RESERVES THE RIGHT TO REJECT THE SAND IF THE FLOWABLE MIXTURE CANNOT BE PRODUCED.
 D. WATER USED FOR MORTAR BACKFILL SHALL BE FREE FROM OIL, ACID, STRONG ALKALISIES OR VEGETABLE MATTER.
 E. SLUMPS MEASURED IN THE CROWNWAY MAY WILL BE 8" OR HIGHER FOR PROPER PLACEMENT OF THE FLOWABLE MATERIAL.
 MORTAR MIX PROPORTIONING: THE INITIAL TRIAL MIXTURE SHALL CONSIST OF THE FOLLOWING QUANTITIES OF MATERIALS PER CUBIC YARD:
 CLASS LSM - 50
 CEMENT 50 LBS.
 FLY ASH 250 LBS.
 SAND 2910 LBS.
 WATER (TARGET) 500 LBS.

ADJUSTMENTS TO THE PROPORTIONS MAY BE MADE BY THE ENGINEER PROVIDING THE TOTAL ABSOLUTE VOLUME OF THE MATERIALS IS MAINTAINED. THIS ITEM WILL BE INCLUDED IN THE STANDARD 603 INSULATION, THIS WILL NOT BE AN ADDITIONAL PAY ITEM, BUT REPLACEMENT FOR THE NORMAL BACKFILL.

SIDEWALK RESTORATION DETAIL

4010



TYPE "C"

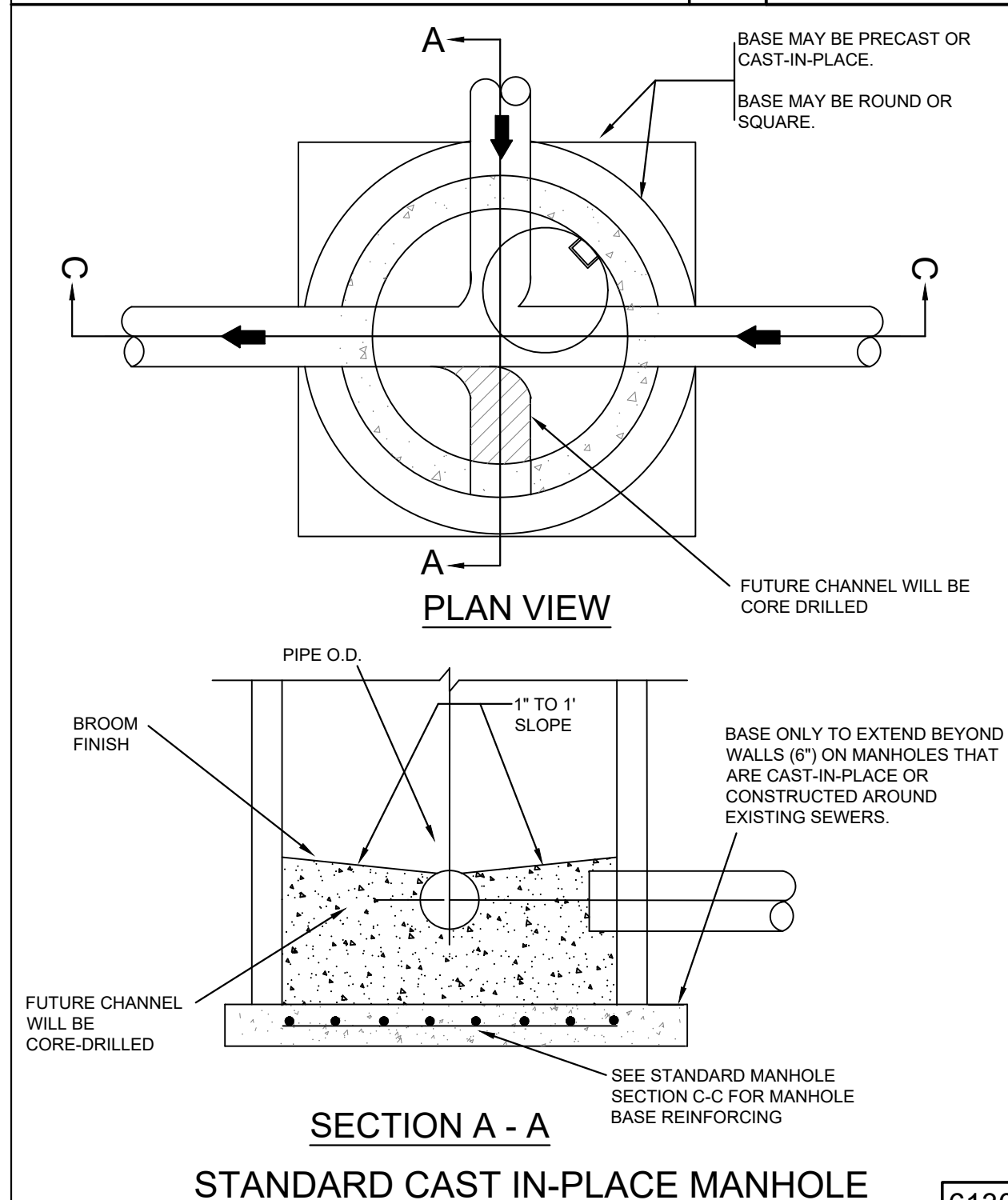
TYPE "D"

TYPE "A"

TYPE "B"

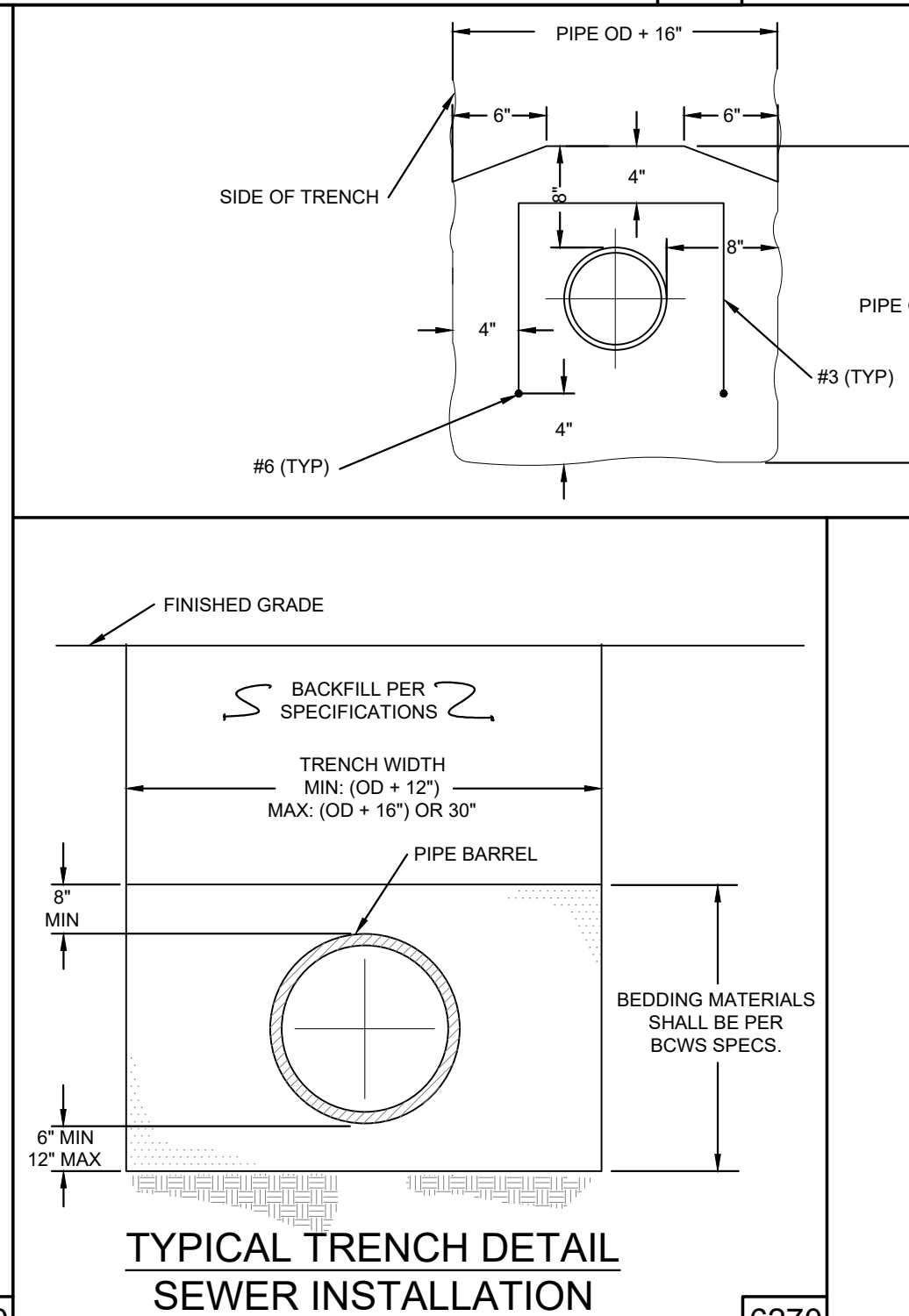
PAVEMENT REPLACEMENT DETAILS

4120



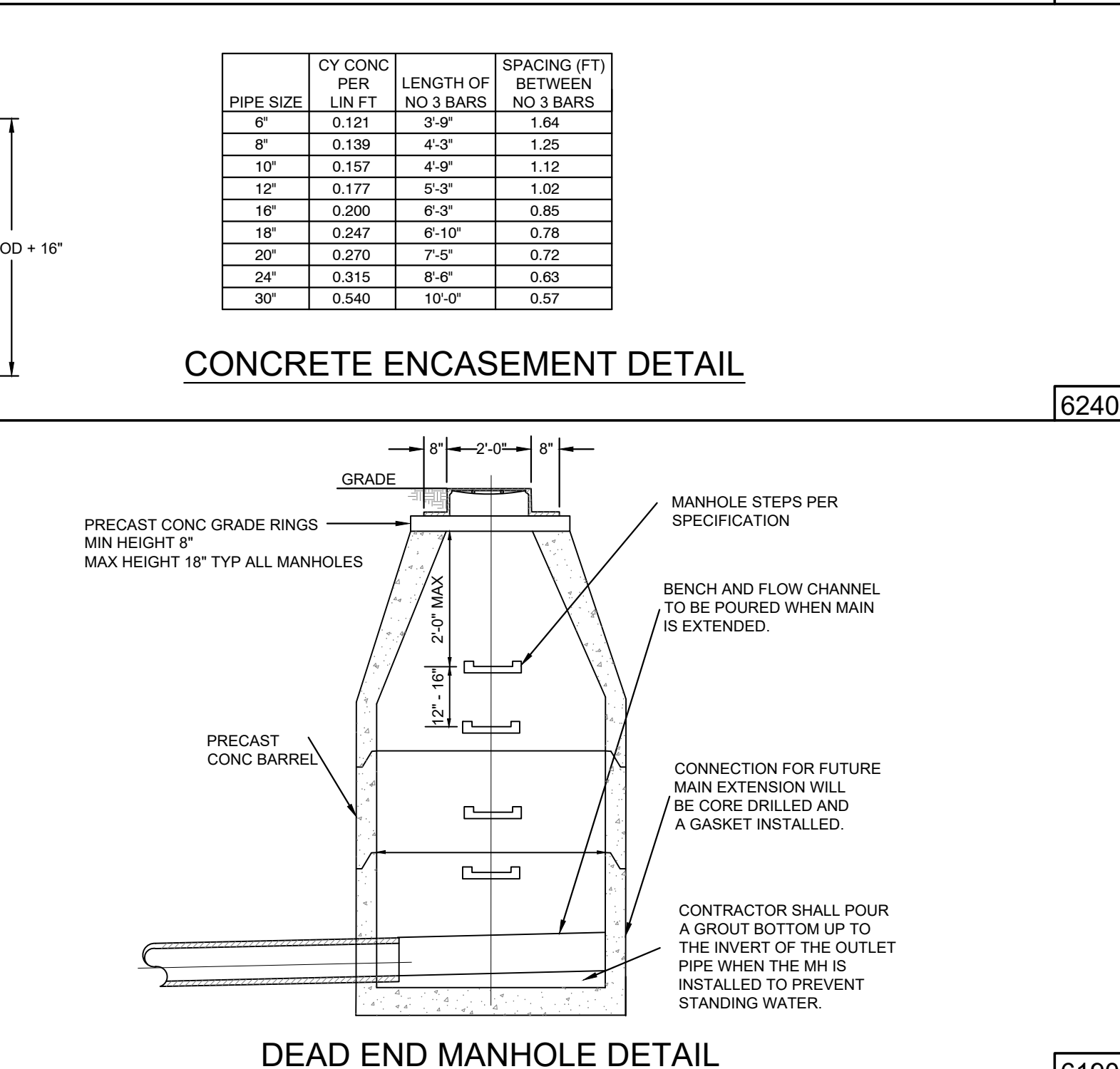
STANDARD CAST-IN-PLACE MANHOLE

6130



TYPICAL TRENCH DETAIL SEWER INSTALLATION

6270

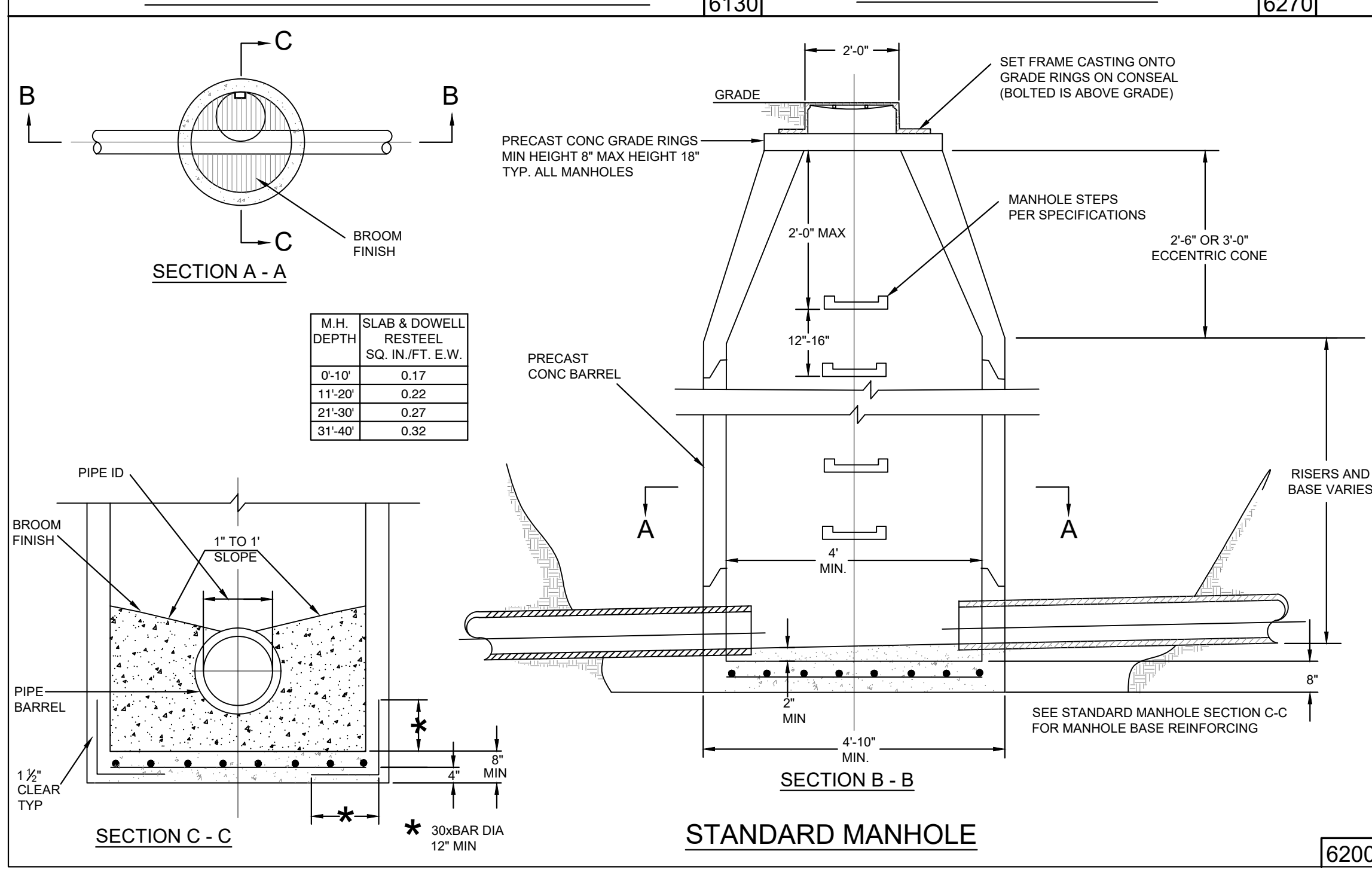


CONCRETE ENCASEMENT DETAIL

6240

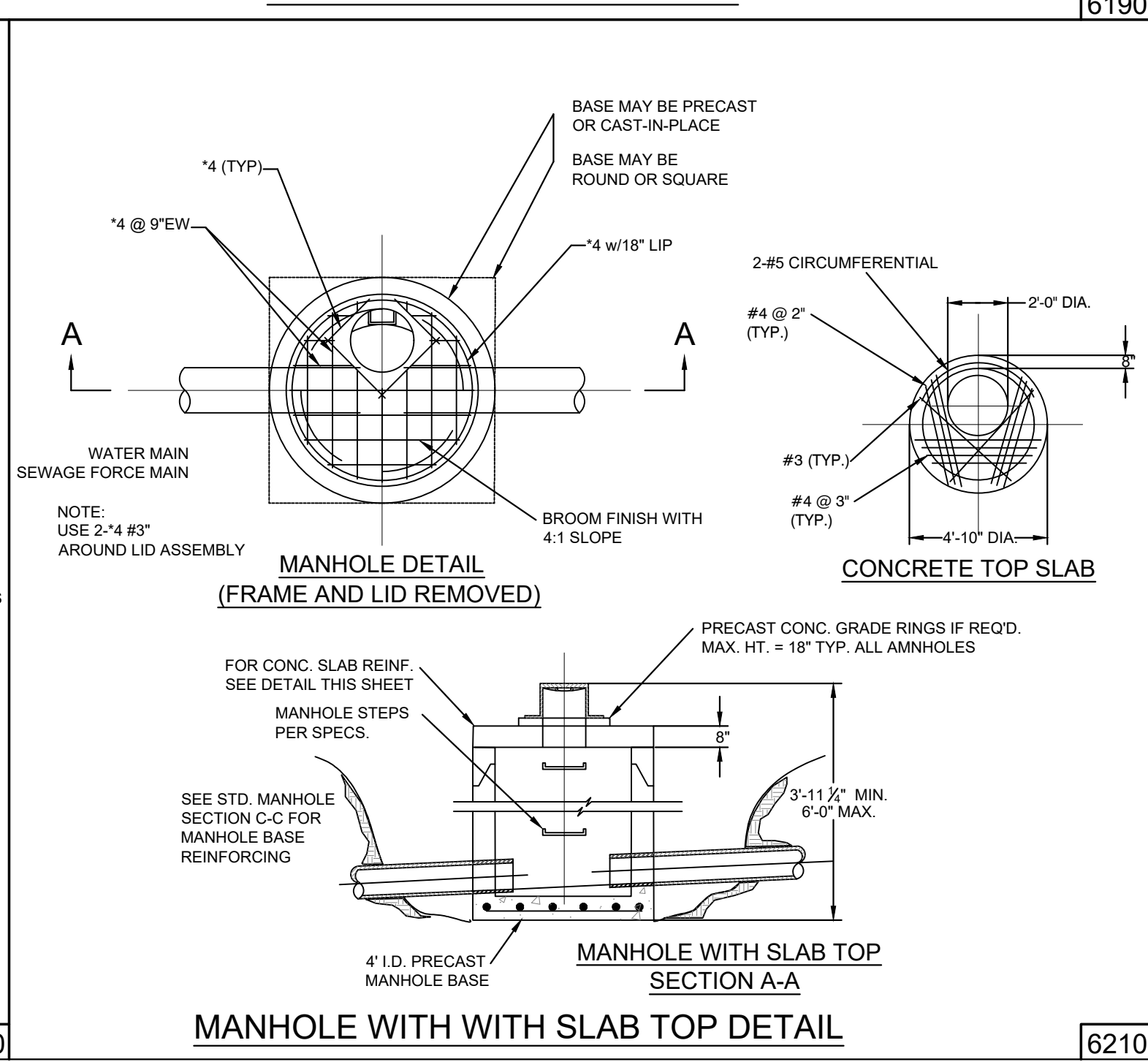
DEAD END MANHOLE DETAIL

6190



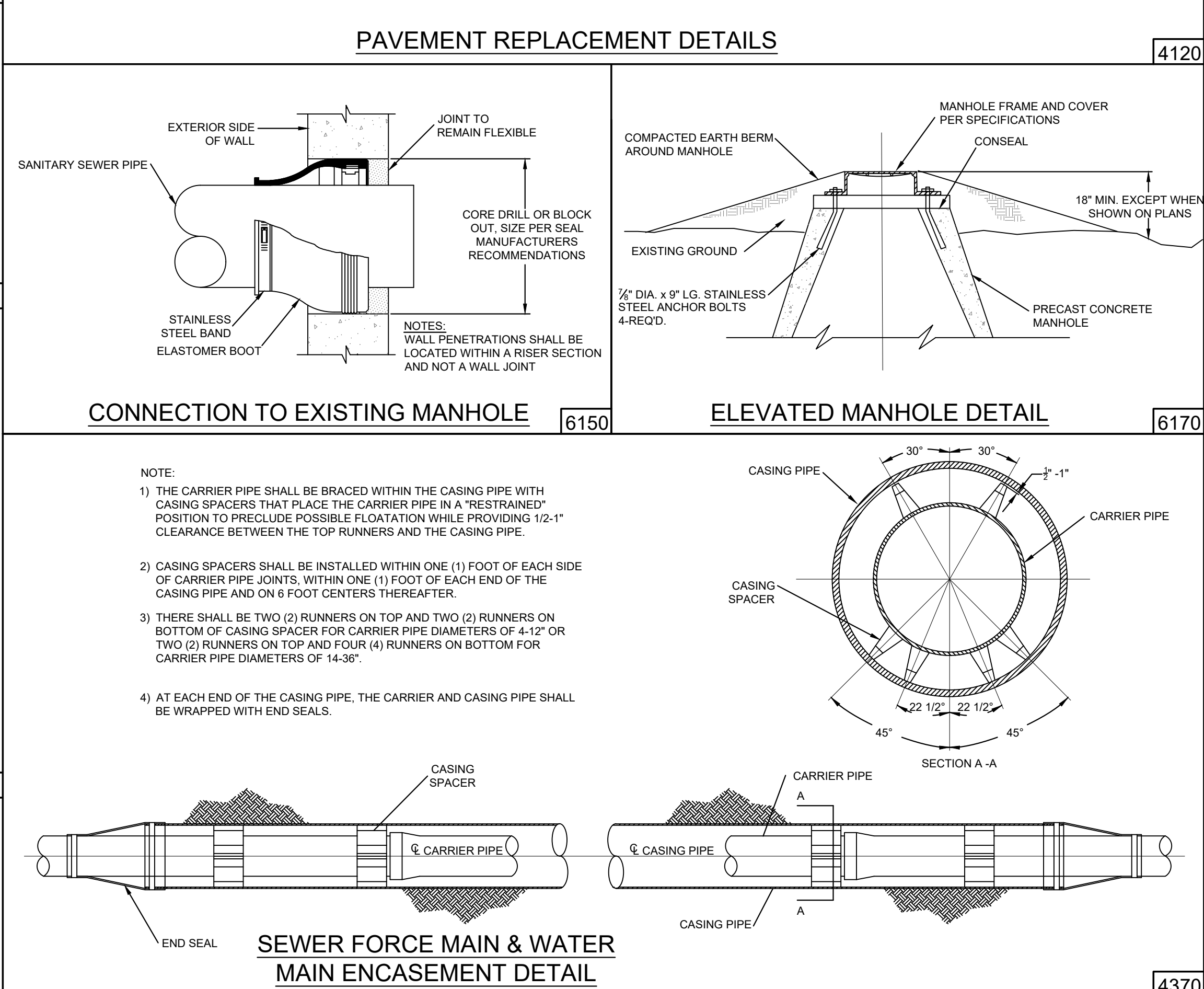
STANDARD MANHOLE

6200



MANHOLE WITH WITH SLAB TOP DETAIL

6210

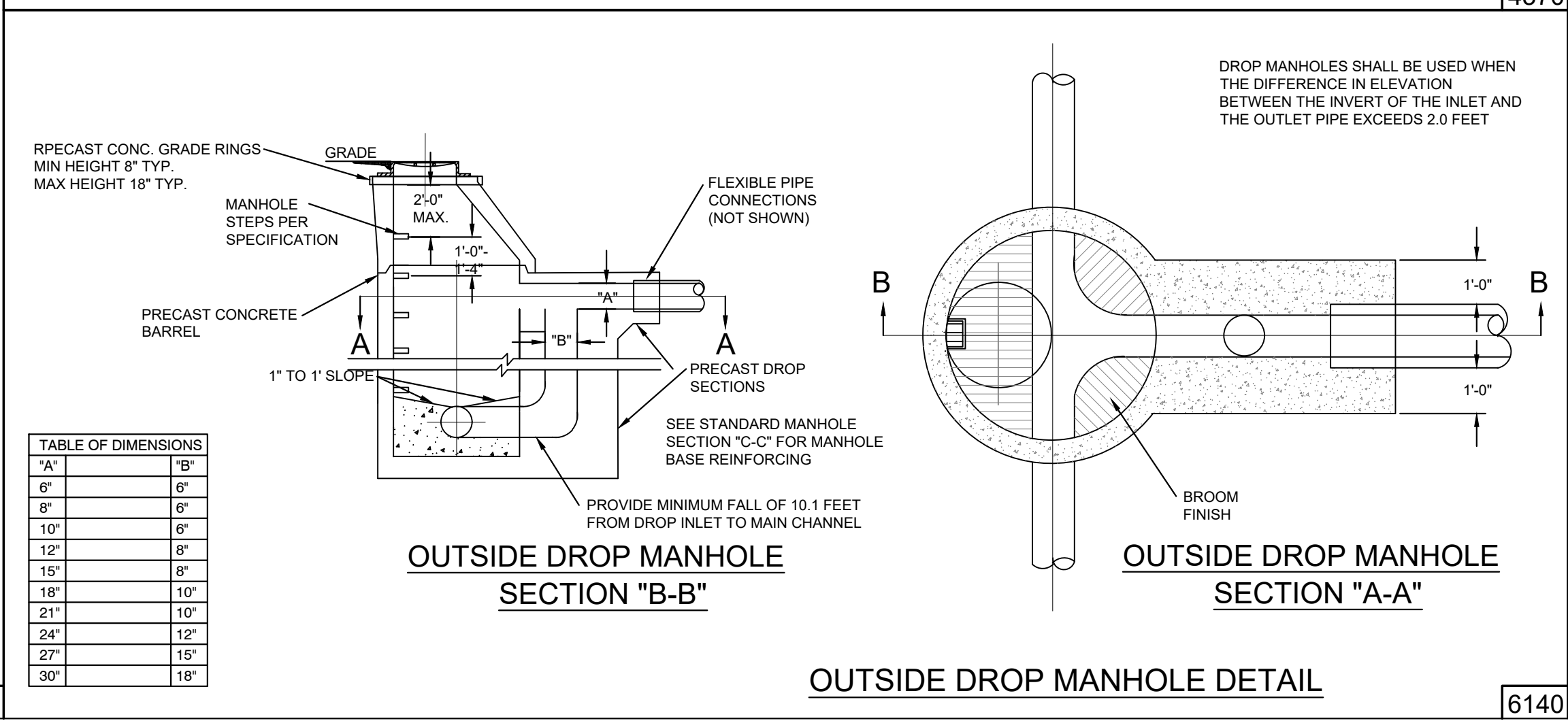


CONNECTION TO EXISTING MANHOLE

6150

ELEVATED MANHOLE DETAIL

6170



SEWER FORCE MAIN & WATER MAIN ENCASUREMENT DETAIL

4370

OUTSIDE DROP MANHOLE SECTION "B-B"

OUTSIDE DROP MANHOLE SECTION "A-A"

OUTSIDE DROP MANHOLE DETAIL

6140

Plot time: Apr 26, 2022 - 11:56am
 Drawing name: K:\OLD-K\Mason\FF BLOCKS\DETAILS\BUTLER\BC SAN.dwg - Layout: Tab: SAN

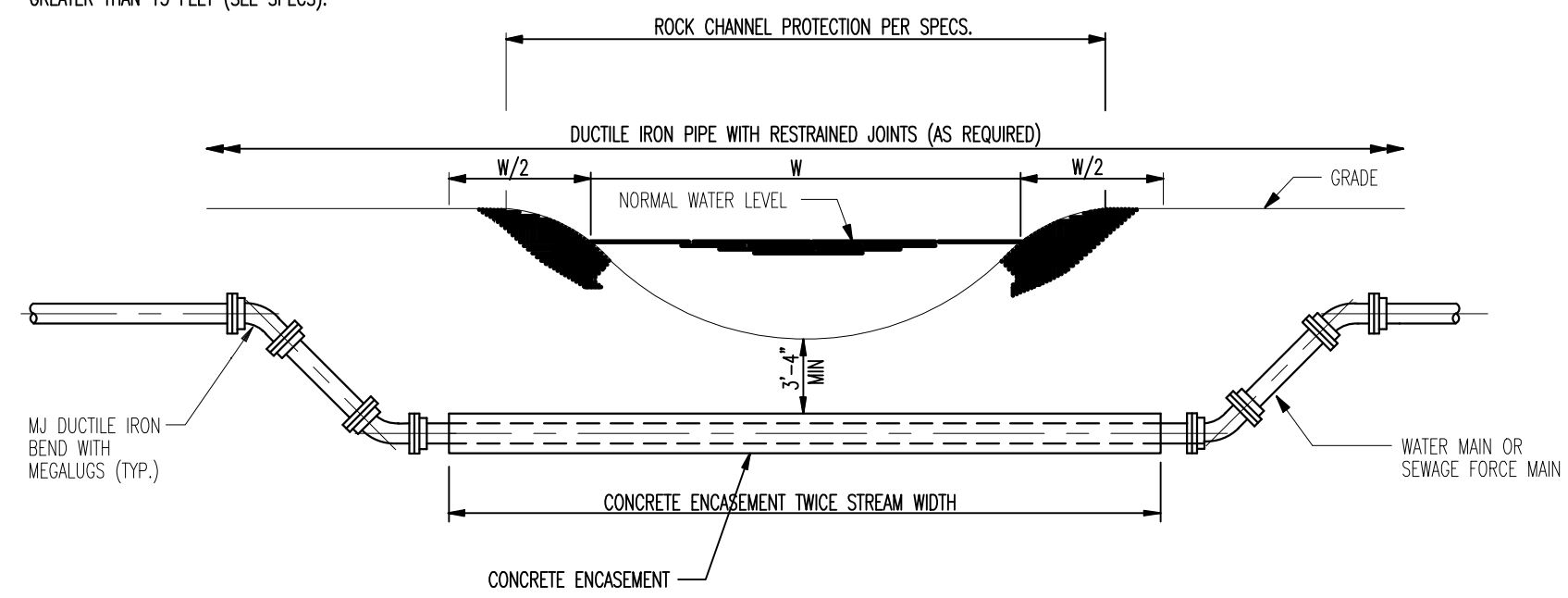
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Date: _____
 Item: _____
 Revision Description: _____
 Drawn by: _____
 Checked by: _____
 Issue Date: 12-28-17
 Sheet: 4/7

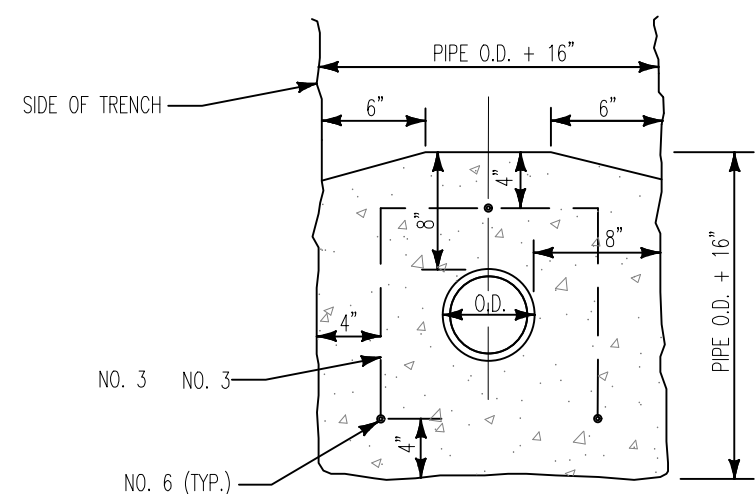
bayer becker
 www.bayerbecker.com
 6000 Tylerville Road Suite A
 Mason, Ohio 45040 - 513.336.6600

BUTLER COUNTY, OHIO
 MISCELLANEOUS & SANITARY DETAILS

NOTE: FOR WATER MAINS ONLY, MODIFICATIONS FROM THIS DETAIL MAY BE NECESSARY IF W IS GREATER THAN 15 FEET (SEE SPECS).

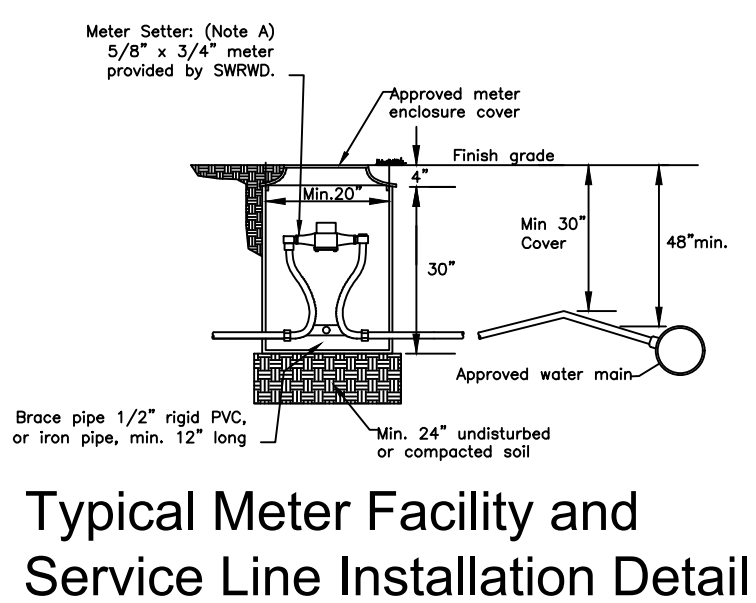


**TYPICAL CREEK CROSSING
FOR WATER MAINS & SEWAGE FORCE MAINS**
NTS



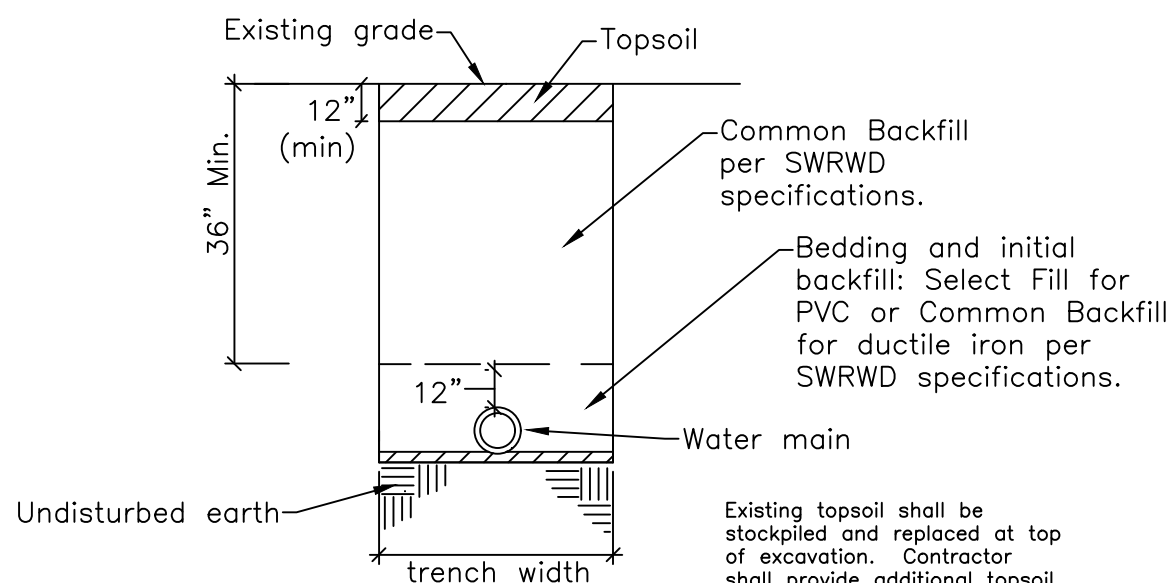
PIPE SIZE	C.Y. CONC. PER LIN. FT.	LENGTH OF NO. 3 BARS	SPACING (FT) BETWEEN NO. 3 BARS
6"	0.121	3'-9"	1.64
8"	0.139	4'-3"	1.25
10"	0.157	4'-9"	1.12
12"	0.177	5'-3"	1.02
16"	0.200	6'-3"	0.85
18"	0.247	6'-10"	0.78
20"	0.270	7'-5"	0.72
24"	0.315	8'-6"	0.63
30"	0.540	10'-0"	0.57

CONCRETE ENCASEMENT
NTS

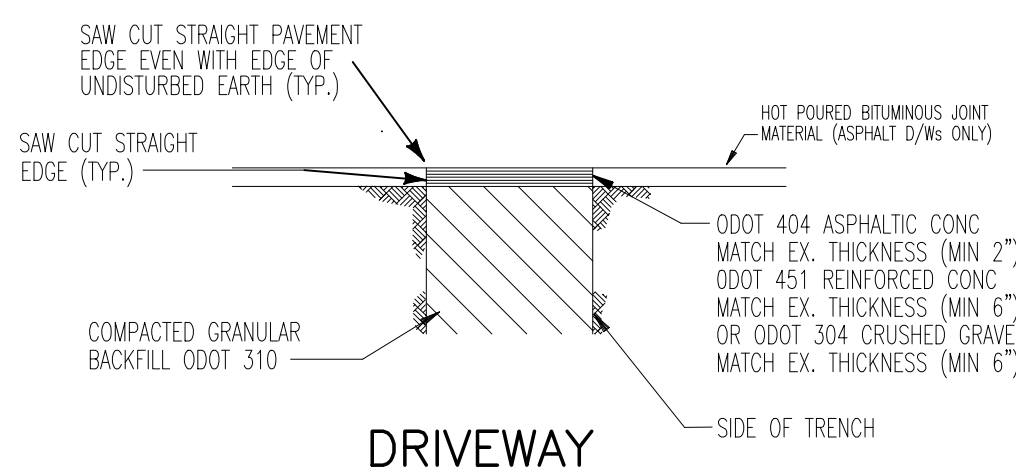


**Typical Meter Facility and
Service Line Installation Detail**
NTS

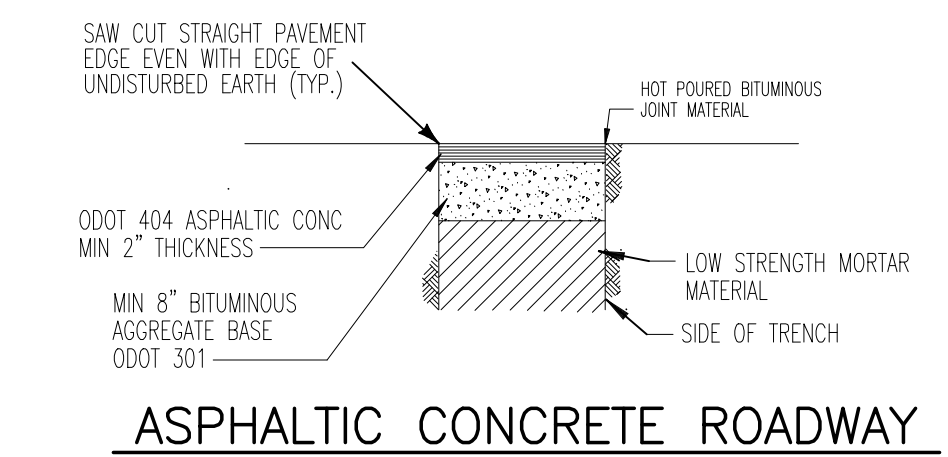
**Typical Meter Facility and
Service Line Installation Plan**
NTS



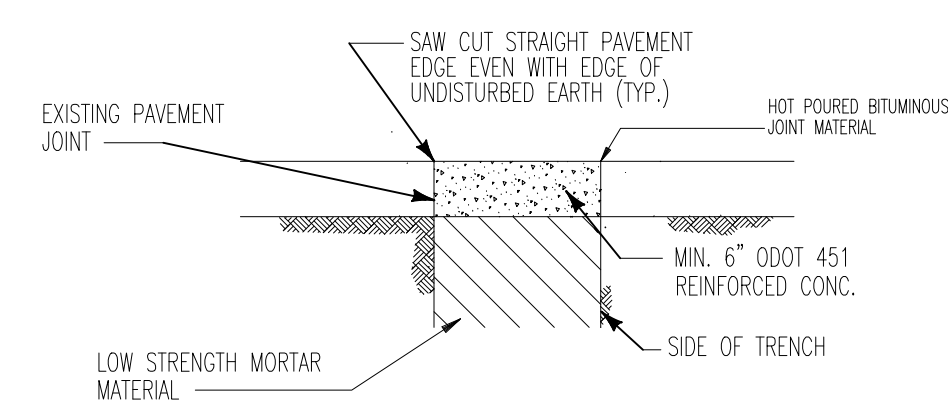
Typical Water Main Trench Detail
NTS



DRIVEWAY

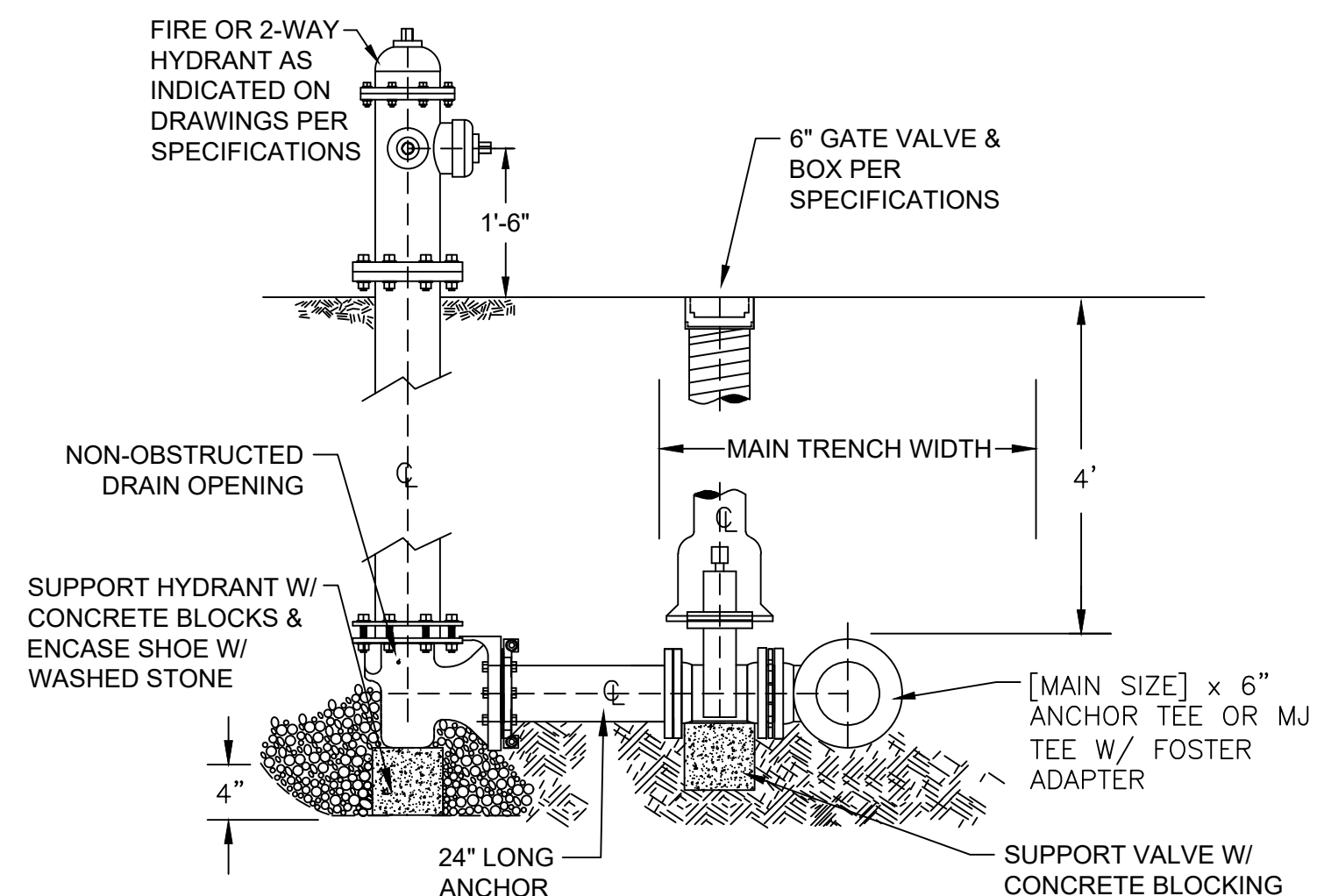


ASPHALTIC CONCRETE ROADWAY



CONCRETE ROADWAY

PAVEMENT REPLACEMENT DETAILS



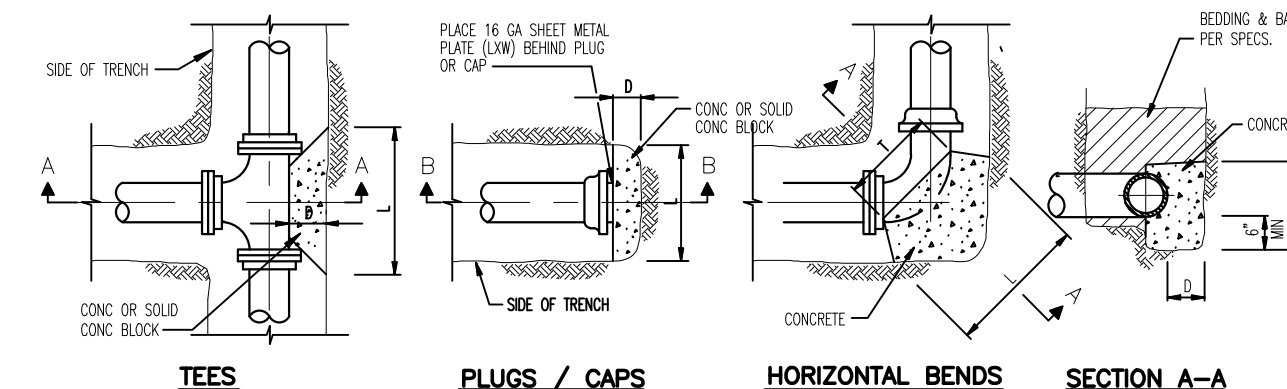
Typical Hydrant Installation
NTS

NOTE: Fire Hydrants shall be AWWA breakable type with 5 1/4" compression type main valve, 2-2 1/2" hose, nozzles, 1 - 4 1/2" pumper nozzle, 6" mechanical joint inlet and National Standard 1-1/2" Pentagon operating nut for installation on pipe with 48" of cover. Hydrant nozzle threading shall conform to specification B26-1925 of ASA for the National Standard fire hose thread. Hydrant shall open to "left and shall be rated for at least 200 lbs. working pressure."

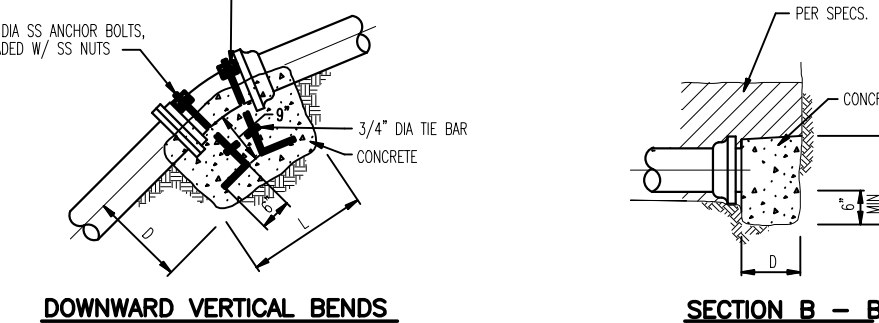
Contractor shall ensure that drain opening drains into crushed stone fill.

Gate valves shall conform to latest specifications of AWWA, Section C-515 for resilient seated valves. Valves shall be non-rising stem type, open left, 2" square operating nut, standard mechanical joint.

See Section SWRWD Specifications.



CONCRETE THRUST BLOCKS



CONCRETE ANCHOR BLOCKS

PLUGS, CAPS & TEES

SIZE	6"	8"	10"	12"	16"	18"	20"	24"	30"	36"
D	6"	8"	10"	12"	16"	18"	20"	24"	30"	36"
L & W	20"	22"	24"	24"	32"	36"	40"	54"	76"	102"

45° EIGHTH BENDS

SIZE	6"	8"	10"	12"	16"	18"	20"	24"	30"	36"
D	6"	8"	10"	12"	16"	18"	20"	24"	30"	36"
L	18"	20"	22"	24"	34"	40"	45"	58"	72"	98"
T	16"	18"	18"	28"	33"	37"	46"	52"	58"	
W	12"	14"	16"	18"	22"	25"	28"	36"	48"	76"

90° QUARTER BENDS

SIZE	6"	8"	10"	12"	16"	18"	20"	24"	30"	36"
D	6"	8"	10"	12"	16"	18"	20"	24"	26"	
L	24"	27"	30"	34"	48"	51"	54"	78"	92"	144"
T	16"	18"	20"	22"	36"	40"	44"	50"	56"	62"
W	12"	14"	16"	20"	24"	28"	34"	40"	50"	66"

VERTICAL BEND & STRAIGHT PIPE

SIZE	6"	8"	10"	12"	16"	18"	20"	24"	30"	36"
D	6"	8"	10"	12"	16"	18"	20"	24"	32"	38"
L	24"	24"	30"	30"	36"	36"	36"	42"	56"	68"

NOTES:

- ANCHORS TO BE FULL WIDTH OF TRENCH
- DEPTH "D" MAY BE GREATER THAN SPECIFIED TO ALLOW WORKING SPACE. CONC. MUST BE PLACED AGAINST UNDISTURBED EARTH.
- THESE ARE REPRESENTATIVE BLOCKING DIMENSIONS OTHER BENDS WILL ALSO NEED BLOCKING IF NOT UTILIZING RESTRAINED JOINTS.
- ENCASE ALL JOINTS, BOLTS, & NUTS WITH POLYETHYLENE BEFORE PLACING CONCRETE.
- CONCRETE TYPE AND STRENGTH PER SPECS.
- ALL ANCHOR BOLTS, NUTS, AND STRAPS TO BE STAINLESS STEEL.
- UPWARD VERTICAL BENDS TO HAVE THRUST BLOCKS WITH SAME DIMENSIONS AS FOR HORIZONTAL BENDS.
- 1 1/4 DEGREE AND 22 1/2 DEGREE BENDS TO HAVE THRUST BLOCKS WITH SAME DIMENSIONS AS FOR 45 DEGREE BENDS.

Plot time: Apr 26, 2022 - 11:56am Drawing name: K:\OLD-K\Mason\A-FF BLOCKS\DETAILS\SWRWD\SWRWD WAT.DWG - Layout Tab: NEWBORDERS-WATER

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Date	Drawn	Chk

Revision	Description

Item	

SOUTHWEST REGIONAL WATER DISTRICT DETAILS

www.bayerbecker.com
6800 Tyburne Road, Suite A
Mason, Ohio 45040-5313.5350.6600

Drawing: SWRWD WAT
Drawn by:
Checked by:
Issue Date: 8-26-21
Sheet:
5/7

