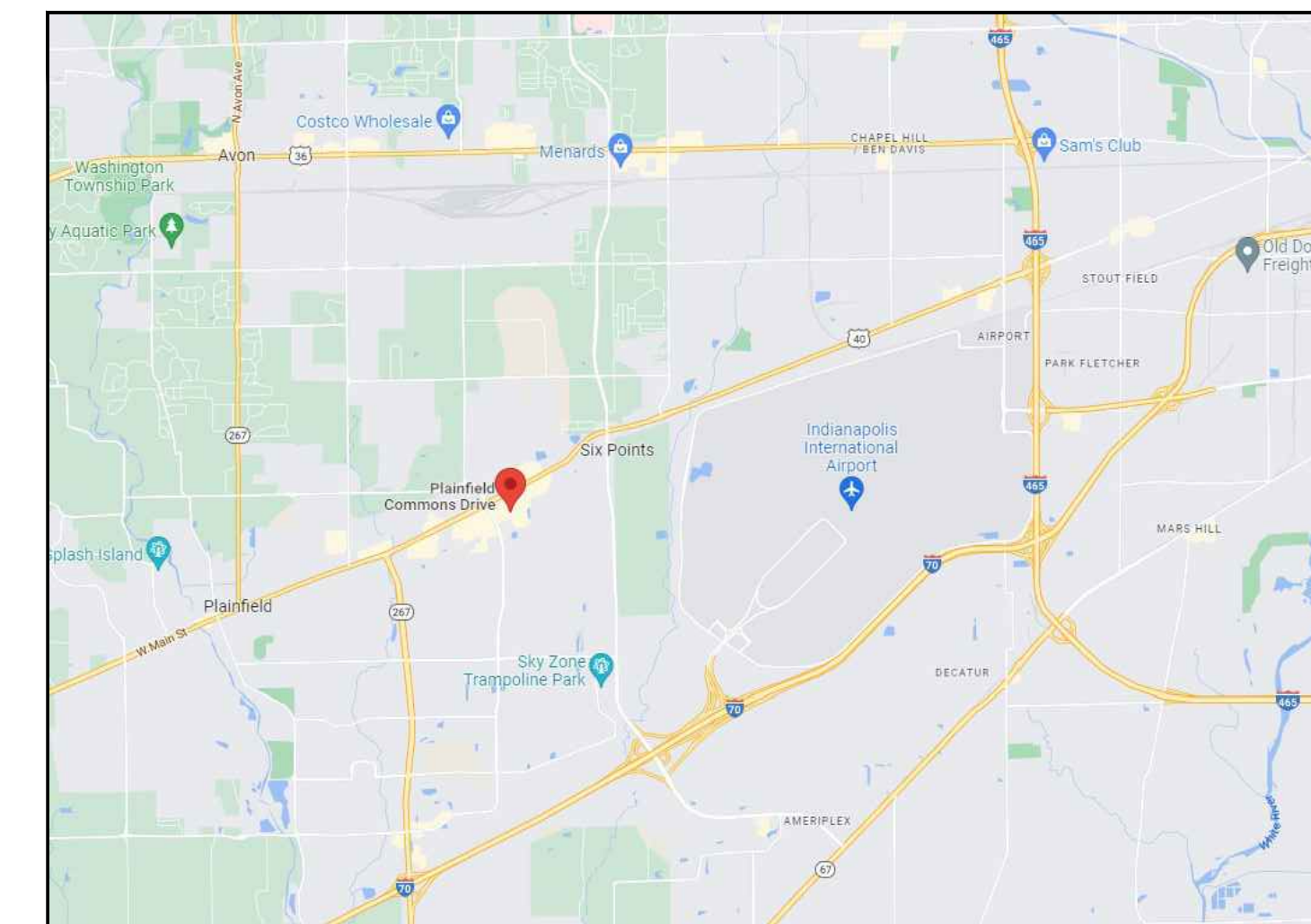


VICINITY MAP

URBAN AIR

385 S. PERRY ROAD PLAINFIELD, INDIANA, 46168



LOCATION MAP

CONSTRUCTION DOCUMENTS

COVER SHEET		C500	SITE IMPROVEMENT PLAN
1 OF 1	SURVEY	C510	SITE IMPROVEMENT DETAILS
		C511	SITE IMPROVEMENT DETAILS
C001	PROJECT INFORMATION SHEET	C600	SITE LANDSCAPE PLAN
C100	STORMWATER POLLUTION PREVENTION PLAN - INITIAL	C610	SITE LANDSCAPE DETAILS
C101	STORMWATER POLLUTION PREVENTION PLAN - CONSTRUCTION		(27 SHEETS) TOWN OF PLAINFIELD TOWN STANDARDS
C102	STORMWATER POLLUTION PREVENTION PLAN - FINAL		
C110	STORMWATER POLLUTION PREVENTION NOTES		
C200	SITE DEMOLITION PLAN		
C300	SITE GRADING & DRAINAGE PLAN		
C400	SITE UTILITY PLAN		

JPS CONSULTING ENGINEERS, LLC
 9365 Counselors Row, Suite 116
 Indianapolis, IN 46240
 ph 317.617.4270
 www.jpsconsultingengineers.com

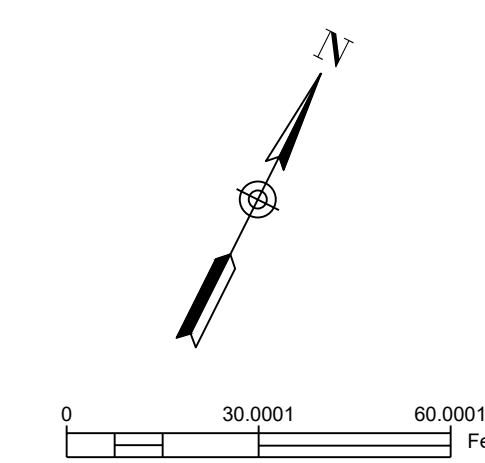
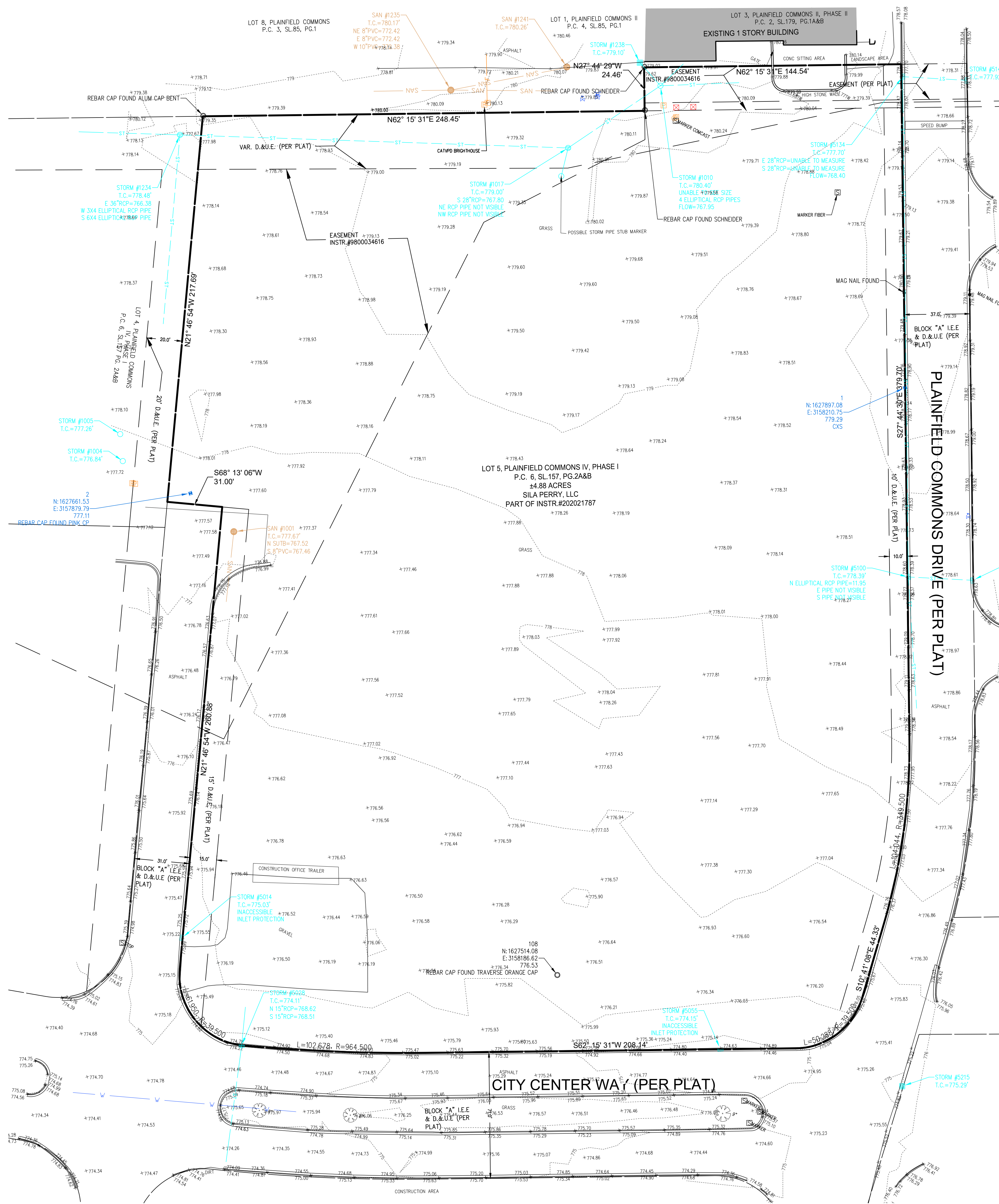


Andrew D. Swanson

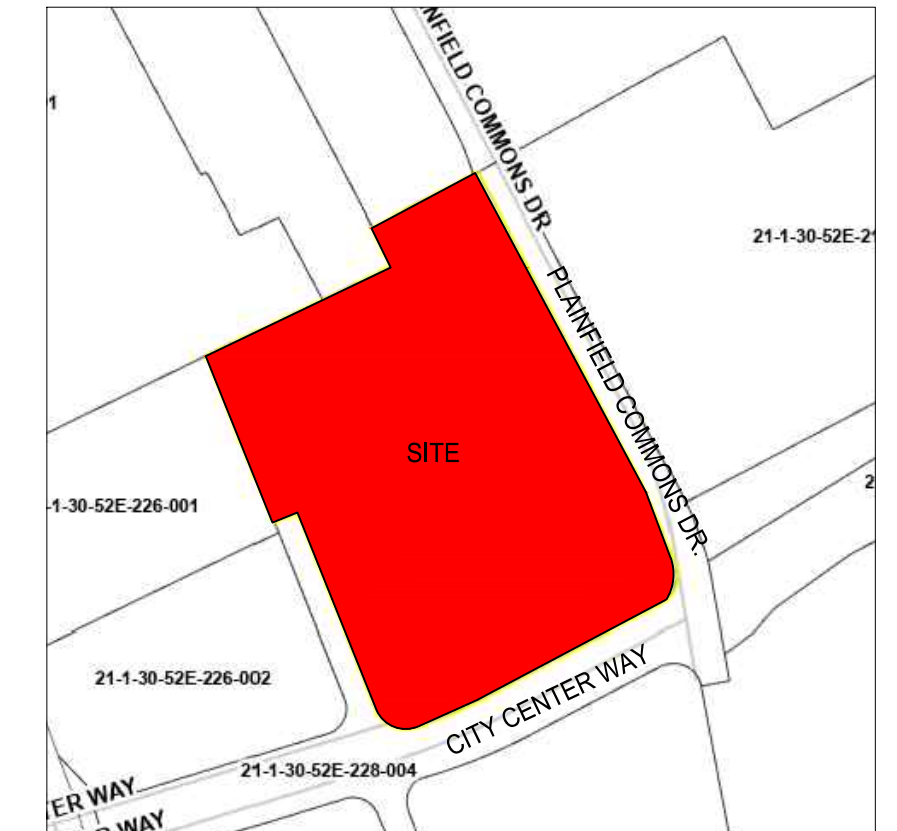
ANDREW D. SWANSON, P.E.

CONSTRUCTION DOCUMENTS
NOVEMBER 18, 2022
22JPSC75
TAC SUBMITTAL

△	12-08-2022	TAC RESUBMITTAL
△	12-15-2022	TAC RESUBMITTAL
△	02-23-2023	TAC RESUBMITTAL
△	03-28-2023	TAC RESUBMITTAL



- LEGEND**
- △ SECTION CORNER AS NOTED
 - MONUMENT SET AS NOTED
 - IRON PIN FOUND
 - MAG NAIL SET OR FOUND
 - ⊕ BENCHMARK
 - BUILDING ENTRANCE
 - ⊞ INLET OR CATCH BASIN
 - MANHOLE
 - SANITARY MANHOLE
 - ⊞ TELEPHONE PEDESTAL
 - ⊞ ELECTRIC TRANSFORMER
 - ⊞ HYDRANT
 - ⊞ WATER VALVE
 - WATER METER
 - ⊞ WATER METER PIT MANHOLE
 - ⊞ FIRE PROTECTION VALVE
 - ⊞ SIGN
 - UNDERGROUND FIBER LINES
 - UNDERGROUND WATER LINE



LOCATION MAP N.T.S.

GENERAL NOTES:

This drawing is not intended to be represented as a retracement or original boundary survey, a route survey or a Surveyor Location Report. The topographic data was gathered using 3D high definition laser scanning, and by global positioning equipment, utilizing the Real Time Kinematic Rovers on the Indiana GPS Network, NTRIP using State Plane NAD83 and NAVD88 Geoid12. The elevations on natural surfaces are accurate to within 0.10 feet and on hard surfaces to within 0.05 feet.

FLOOD STATEMENT

The accuracy of any Flood Hazard Data shown on this survey is subject to map scale uncertainty and to any other uncertainty in location or elevation on the referenced flood insurance rate map. The Subject survey area lies within that Special Flood Hazard Zone X (areas outside of the annual 1% chance of flooding) per COMMUNITY PANEL # 18063C0278D of the flood insurance rate maps for Hendricks County, Indiana dated 9/25/2009.

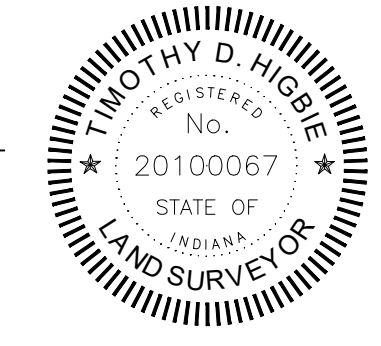
UTILITIES

This survey reflects above ground indications of utilities and information available from utility companies. The surveyor makes no guarantee that the underground utilities shown comprise all such utilities in the area either in service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated, although they are located as well as possible based upon the information provided. Except as indicated by invert elevations on sewer lines the surveyor has not physically located the underground utilities. IUPPS #2210060903. Few utility markings were found in field. A private utility location is advised for the property before any construction occurs.

CERTIFICATION

I, the undersigned hereby certify that to the best of my professional knowledge and belief that the within topographic survey plat accurately represents a survey performed under my supervision. The field survey was completed 10/21/22.

Timothy D. Higbie
 Timothy D. Higbie, P.S.
 Professional Surveyor #20100067
 State of Indiana
 DATE: 10/25/2022
 tim@surveyfirst.net



UTILITY COORDINATION CONTACT INFORMATION					
COMMUNICATION	AT&T - DISTRIBUTION	ATT Indiana Utility Coordination	No address provided	g09871@att.com	no contact provided
GAS	CENTERPOINT ENERGY (SOUTH) (FORMERLY VECTREN)	Jon Eastham	1800 W 26th St. Muncie, IN 47302	publicproject@centerpointenergy.com	(765)287-2119
CABLE TV	CHARTER COMMUNICATIONS INDIANAPOLIS (FORMERLY BRIGHT HOUSE)	Dan Bielaczyc	1392 Trade Centre Traverse City, MI 49696	dan.bielaczyc@charter.com	(231)941-3819
	COMCAST CABLE (INDIANAPOLIS)	No contact provided	No address provided	No contact provided	no contact provided
ELECTRIC	DUKE ENERGY	April Edwards Don McDuffy	1000 E. Main St. Plainfield, IN 46168 100 S Mill Creek Rd. Noblesville, IN 46062	die-dline-coord@duke-energy.com die-dline-coord@duke-energy.com	(317)838-1564 (317)776-5320
	HENDRICKS POWER COOPERATIVE	Jason Edwards	PO Box 309 Danville, IN 46122	jstewart@hendrickspower.com	(317)745-5473
SEWER, STORM, WATER	TOWN OF PLAINFIELD	Steve Luckey	PO Box 309 Danville, IN 46122	sluckey@hendrickspower.com	(317)745-5473
	JASON CASTETTER	Jason Castetter	986 S Center Street Plainfield, IN 46168	icastetter@town.plainfield.in.us	(317)839-3490
FIBER OPTIC	CHARTER COMMUNICATIONS INDIANAPOLIS (FORMERLY BRIGHT HOUSE)	Dan Bielaczyc	1392 Trade Centre Traverse City, MI 49696	dan.bielaczyc@charter.com	(231)941-3819
	IN FIBER NETWORK DBA DENVER_CO 80202	George Huss	1401 Wynkoop St., Floor 4, RM-DATA Denver, Co 80202	george.huss@zayo.com	(443)403-2023
	INTELLIGENT FIBER NETWORK	Henry Klobucar	130 N Main St., Floor 3, STE-300 Butte, MT 59701	henry.klobucar@zayo.com	(406)490-6138
	LEVEL 3 NOW CENTURYLINK	Level 3 Communications Network Relocation	No address provided	nationalrelo@centurylink.com	(877)366.8344 x2
ZAYO BANDWIDTH	Waylon Higgins	722 N High School Rd. Indianapolis, IN 46214	waylon.higgins@zayo.com		(765)341-1199
MCI	No contact provided	No address provided	No address provided	No contact provided	no contact provided

SURVEY FIRST LLC
 Surveying • Engineering • 3D Laser Scanning • Modeling
 64 East Marion Street Danville, IN 46122
 phone (317) 745-9000

TOPOGRAPHIC SURVEY

SILA PERRY LLC
 0 CITY CENTER WAY & 0 PLAINFIELD COMMONS DR. PLAINFIELD, IN 46168
 SEC.30, T.15N, R.2E- HENDRICKS COUNTY, GUILFORD TOWNSHIP

REVISIONS

PROJ. NO.	2022-0072
DATE	10/25/22
DRAWING	2022-0072V-TOPO
DRAWN BY	MMH
SURVEYED BY	Timothy D. Higbie P.S.
EMAIL	tim@surveyfirst.net

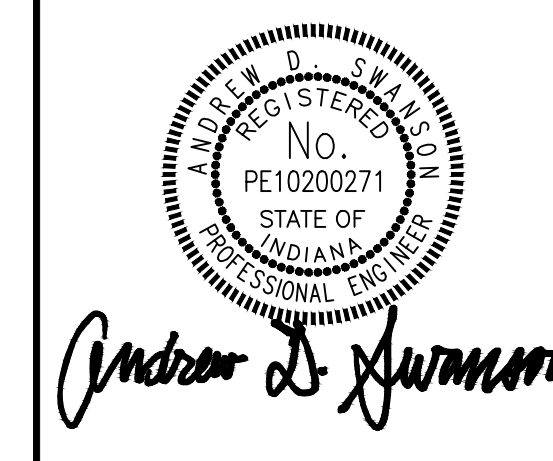
TOPOGRAPHIC SURVEY

SURVEY

SHEET NO.:
1 OF 1

CONSTRUCTION DOCUMENTS

NUMBER	DATE	DESCRIPTION
1	11-18-22	TAC SUBMITTAL
2	12-08-22	TAC RESUBMITTAL
3	12-15-22	TAC RESUBMITTAL
4	02-23-23	TAC RESUBMITTAL
5	03-28-23	TAC RESUBMITTAL



Andrew D. Swanson

PROJECT INFORMATION SHEET

SCALE: NO SCALE
 DATE: NOV 18, 2022
 PROJECT #: 22JPS075
 DRAWN: CLM
 COORD: RAB
 APPROVED: ADS

C001

GENERAL NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, AND VERIFYING, THAT ALL PERMITS AND APPROVALS ARE OBTAINED FROM THE RESPECTIVE CITY, COUNTY, STATE AND FEDERAL AGENCIES PRIOR TO STARTING CONSTRUCTION.
- CONTRACTOR SHALL VERIFY LOCATION AND INVERT ELEVATIONS OF EXISTING SEWERS PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN A COMPLETE AND OPERABLE UTILITY SYSTEM AT ALL TIMES.
- CONTRACTOR SHALL INCLUDE COSTS FOR CUTTING AND PATCHING AS REQUIRED IN THEIR BID PROPOSAL TO COMPLETELY INSTALL THE WORK INDICATED.
- CONTRACTOR SHALL INCLUDE ALL TAP FEES, PERMIT FEES AND APPLICATION FEES IN THEIR BID PROPOSAL AS NECESSARY TO COMPLETELY INSTALL THE WORK INDICATED.
- INFORMATION SHOWN WAS OBTAINED FROM AN OWNER FURNISHED SITE SURVEY OF EXISTING CONDITIONS AND IS UNCONFIRMED. CONTRACTOR IS REQUIRED TO FIELD VERIFY THIS INFORMATION AND NOTIFY ARCHITECT OF ANY DISCREPANCIES SO MODIFICATION CAN BE MADE.
- CONTRACTOR SHALL COORDINATE EXACT UTILITY LOCATIONS WITH THE OWNER AND LOCAL UTILITY COMPANIES PRIOR TO COMMENCING ANY WORK. UTILIZE THE INDIANA UNDERGROUND UTILITY LOCATION SERVICE AT 811 OR 800-382-5544 PRIOR TO ANY EXCAVATION ON THE SITE.

SITE SYMBOLS AND ABBREVIATIONS

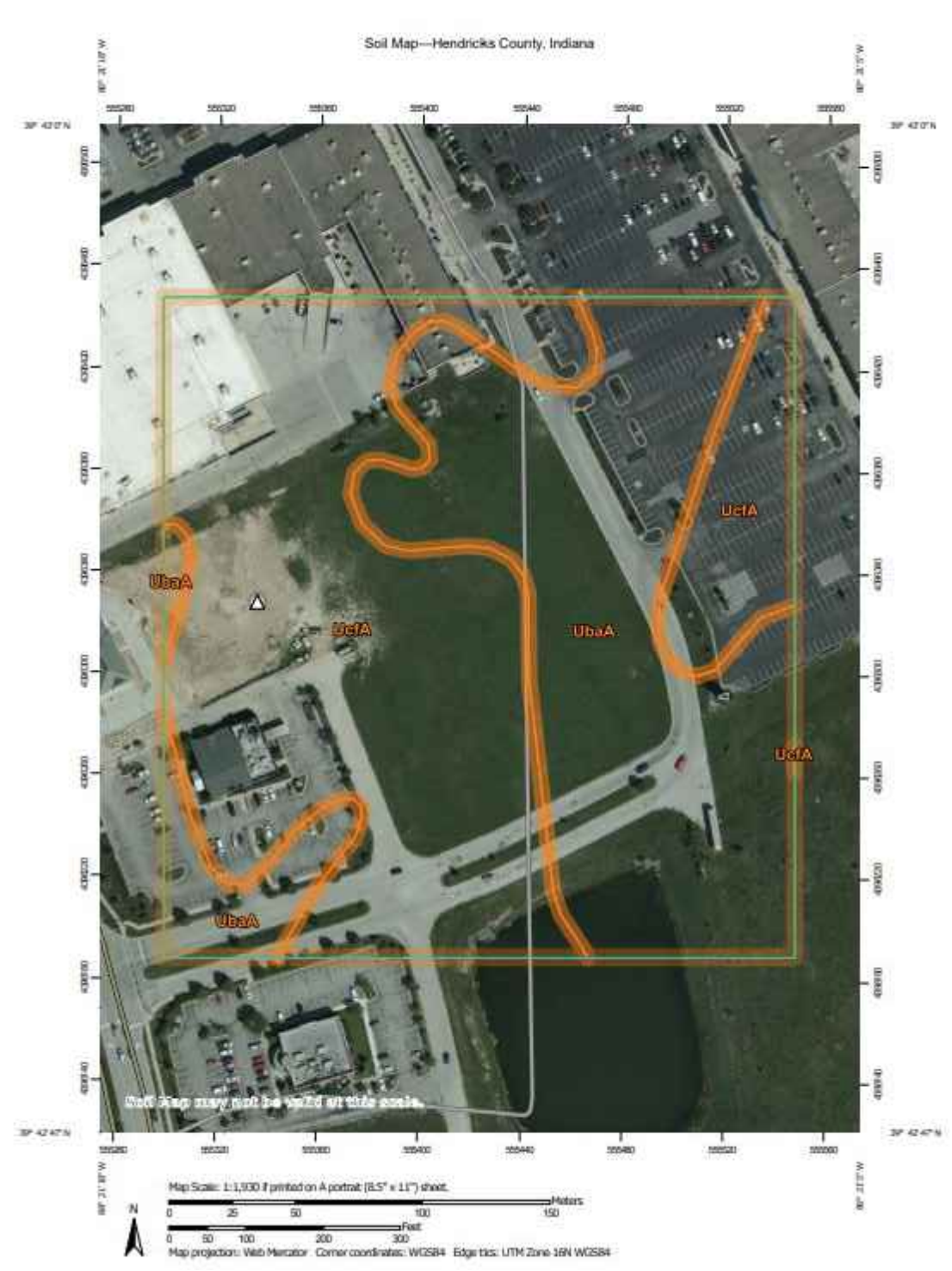
REFER TO SHEET ES1 FOR EXISTING SURVEY SYMBOLS AND ABBREVIATIONS

678	NEW CONTOUR LINE	INV. 123.45	INVERT ELEVATION	☒	LIGHTED BOLLARD
123.45	NEW SPOT ELEVATION	STR	NEW STRUCTURE	⬆	HELIPAD LIGHT
123.45	TOP OF NEW CURB	---	CONSTRUCTION LIMIT LINE	⊙	LIGHT POLE BASE
123.45	CURB GUTTER	←	SWALE	⊙	POWER POLE
⊙	BOLLARD	→	DIRECTION OF FLOW	⊙	SEWER STRUCTURE
⊙	CLEANOUT	⊙	NEW UTILITY TO EXISTING UTILITY	⊙	WATER METER
⊙	DOWNSPOUT	⊙	VALVE	▽	END SECTION
⊙	AREA DRAIN	×	FENCE	⊙	WIND SOCK
SAN	NEW UTILITY	⊙	FIRE HYDRANT	⊙	SIGN
(RCP)	PIPE MATERIAL	⊙	FLAG POLE	⊙	HANDHOLE/PULL BOX
⊙	FIRE DEPARTMENT CONNECTION	⊙	TEE	⊙	PARKING BUMPER
⊙	GAS METER	⊙	TRANSFORMER	⊙	ADA RAMP
⊙	ELECTRIC MANHOLE	⊙	POST INDICATOR VALVE	⊙	
		⊙	ACCESSIBLE PARKING SYMBOL		

AD	AREA DRAIN	HDPE	HIGH DENSITY POLYETHYLENE PIPE	TW	TOP OF WALL
BW	BOTTOM OF WALL	ME	MATCH EXISTING	(TYP)	TYPICAL
CB	CATCH BASIN	INV	INVERT ELEVATION	UG	UNDERGROUND
CD	CLEANOUT	MH	MANHOLE	W	WATER
DIP	DUCTILE IRON PIPE	O/H	OVERHEAD	WV	WATER VALVE
DS	DOWNSPOUT	P	POST INDICATOR VALVE	C	CONDUIT
E	ELECTRIC	PVC	POLYVINYL CHLORIDE PIPE	COMM	COMMUNICATION/FIBER OPTICS
EG	EXISTING GRADE	RCP	REINFORCED CONCRETE PIPE	GV	GAS VALVE
EX	EXISTING	STM	SANITARY SEWER	HP	HIGH POINT
FDC	FIRE DEPARTMENT CONNECTION	ST	STORM SEWER	LP	LOW POINT
GH	GAS	T	TELEPHONE		
G	GAS	TOC	TOP OF CASTING ELEVATION		
ST	STEAM	CWR	CHILLED WATER RETURN		
CWS	CHILLED WATER SUPPLY				

UTILITY COORDINATION CONTACT INFORMATION

COMMUNICATION	AT&T - DISTRIBUTION	ATT Indiana Utility Coordination	No address provided	g09871@att.com	no contact provided
GAS	CENTERPOINT ENERGY (SOUTH) (FORMERLY VECTREN)	Jon Eastham	1800 W 26th St. Muncie, IN 47302	publicproject@centerpointenergy.com	(765)287-2119
CABLE TV	CHARTER COMMUNICATIONS (INDIANAPOLIS) (FORMERLY BRIGHT HOUSE)	Dan Bielaczyc	1392 Trade Centre Traverse City, MI 49696	dan.bielaczyc@charter.com	(231)941-3819
	COMCAST CABLE (INDIANAPOLIS)	No contact provided	No address provided	No contact provided	no contact provided
ELECTRIC	DUKE ENERGY	April Edwards	1000 E. Main St. Plainfield, IN 46168	die-dline-coord@duke-energy.com	(317)838-1564
	HENDRICKS POWER COOPERATIVE	Don McDuffy	100 S Mill Creek Rd. Noblesville, IN 46062	die-dline-coord@duke-energy.com	(317)776-5320
	HENDRICKS POWER COOPERATIVE	Jason Edwards	PO Box 309 Danville, IN 46122	jstewart@hendrickspower.com	(317)745-5473
	HENDRICKS POWER COOPERATIVE	Steve Luckey	PO Box 309 Danville, IN 46122	sluckey@hendrickspower.com	(317)745-5473
SEWER, STORM, WATER	TOWN OF PLAINFIELD	Jason Castetter	986 S Center Street Plainfield, IN 46168	jcasetter@town.plainfield.in.us	(317)839-3490
FIBER OPTIC	CHARTER COMMUNICATIONS (INDIANAPOLIS) (FORMERLY BRIGHT HOUSE)	Dan Bielaczyc	1392 Trade Centre Traverse City, MI 49696	dan.bielaczyc@charter.com	(231)941-3819
	IN FIBER NETWORK DBA INTELLIGENT FIBER NETWORK	George Huss	1401 Wynkoop St., Floor 4, RM-DATA Denver, Co 80202	george.huss@rayo.com	(443)403-2023
	LEVEL 3 NOW CENTURYLINK	Henry Klobucar	130 N Main St., Floor 3, STE-300 Butte, MT 59701	henry.klobucar@zayo.com	(406)490-6138
	ZAYO BANDWIDTH	Waylon Higgins	722 N High School Rd. Indianapolis, IN 46214	waylon.higgins@zayo.com	(765)341-1199
	MCI	No contact provided	No address provided	No contact provided	no contact provided



MAP LEGEND

Area of Interest (AOI)	Soil Area	Soil Spot	Very Silty Spot
Soils	Water Features	Streams and Canals	
Soil Map Unit Polygons	Transportation	Rails	
Soil Map Unit Lines	US Routes	Interstate Highways	
Soil Map Unit Points	Local Roads	Major Roads	
Special Point Features	Background	Aerial Photography	
Blowout			
Blowout Pit			
Clay Spot			
Closed Depression			
Gravel Pit			
Gravelly Spot			
Landslide			
Leak Flow			
Mud or silt			
Mine or Quarry			
Miscellaneous Water			
Perennial Water			
Rock Outcrop			
Saltine Spot			
Sandy Spot			
Severely Eroded Spot			
Siltstone			
Silt or Clay			
Stalk Spot			

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,000.

Warning: Soil Map may not be valid at this scale. Enlargement of maps beyond the scale of mapping can cause misrepresentation of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: <http://websoilsurvey.sc.egov.usda.gov>

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Hendricks County, Indiana
 Survey Area Date: Version 26, Sep 3, 2022

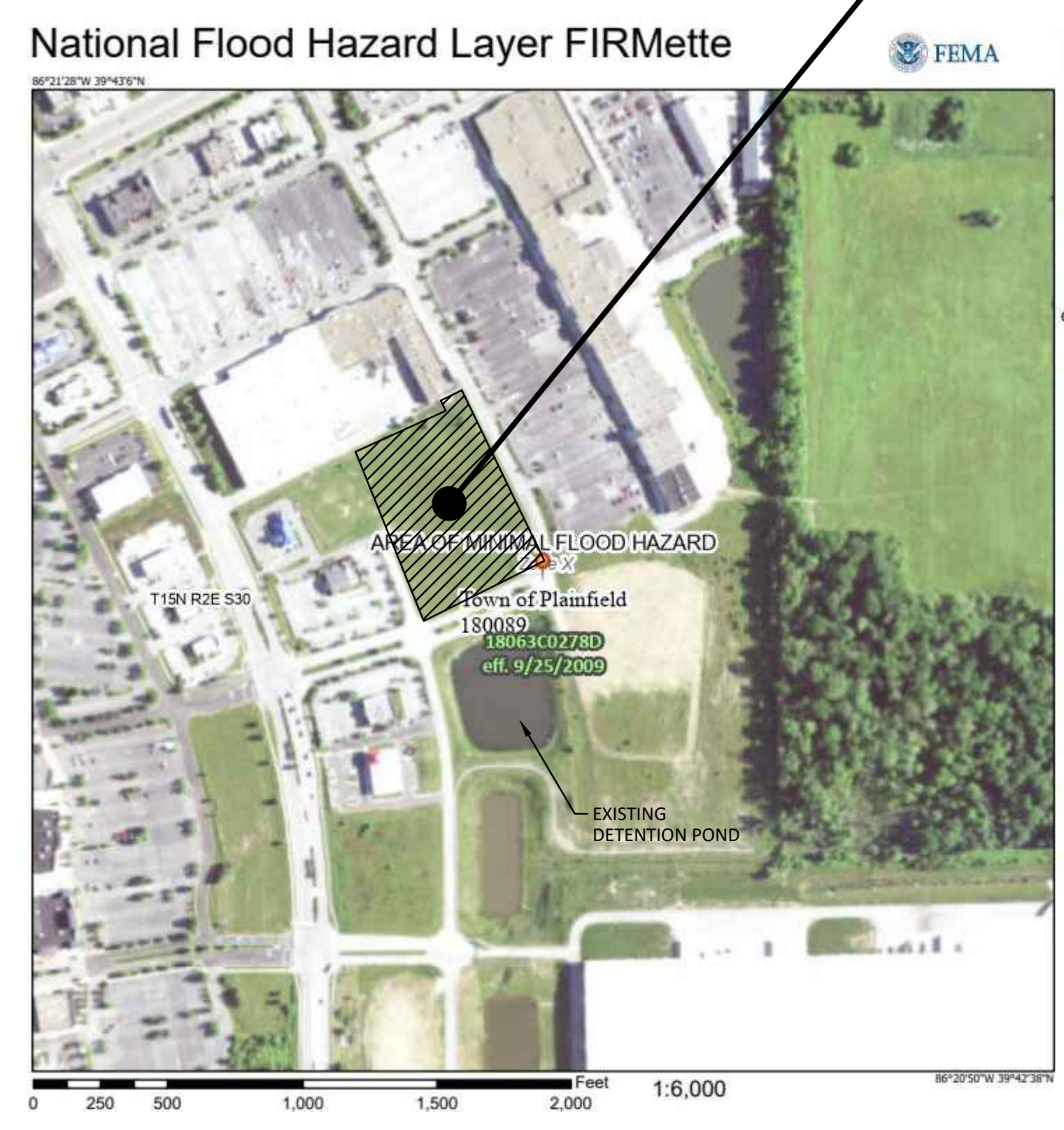
Soil map units are labeled (see space allows) for map scales 1:50,000 or larger.

(Date(s) aerial images were photographed: Aug 1, 2018--Sep 30, 2018)

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
UbaA	Urban land-Draination complex, 0 to 2 percent slopes	7.1	44.4%
Uba	Urban land-Croby all loam complex, 0 to 2 percent slopes	8.9	55.6%
Totals for Area of Interest		16.0	100.0%

SOILS MAP



Legend

SEE FIG REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE)
 - With BFE or Depth (Zone A1, A2, A3, X1, X2, X3)
 - Regulatory Floodway
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile (Zone 1)
- Future Conditions 1% Annual Chance Flood Hazard (Zone 2)
- Area with Reduced Flood Risk due to Levees (Zone 3)
- Area with Flood Risk due to Levees (Zone 4)
- Area of Minimal Flood Hazard (Zone 5)
- Effective LOMR (Zone 6)
- Area of Undetermined Flood Hazard (Zone 7)

OTHER AREAS OF FLOOD HAZARD

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

GENERAL STRUCTURES

- Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Traverset
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Traverset Baseline
- Profile Baseline
- Hydrographic Feature

OTHER FEATURES

- Digital Data Available
- No Digital Data Available
- Unmapped

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was reported on 10/25/2022 at 3:34 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

FLOOD MAP

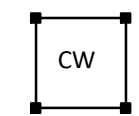
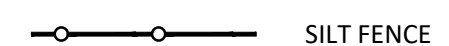


GENERAL NOTES

- A. TEMPORARILY SEED ALL DISTURBED AREA.
- B. REFER TO LANDSCAPE SHEETS FOR AREAS OF PERMANENT SEEDING AND/OR SOD.
- C. REFER TO STORMWATER POLLUTION PREVENTION NOTES AND DETAIL SHEETS.
- D. ALL PROPOSED EROSION AND SEDIMENT CONTROL SHALL BE IN CONFORMANCE WITH THE TOWN OF PLAINFIELD TOWN STANDARDS. DISCREPANCIES BETWEEN THE PLANS AND THE STANDARDS SHALL NOT ALLEVIATE THE CONTRACTOR FROM ADHERING TO THE REQUIREMENTS AS SET FORTH IN THE TOWN OF PLAINFIELD TOWN STANDARDS. ADDITIONAL EROSION CONTROL AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY THE INSPECTOR.
- E. BUILDING LOT CONSTRUCTION SILT FENCE, INLET PROTECTION, STREET SWEEPING, AND CONSTRUCTION ENTRANCE, AND CONCRETE WASHOUT IS TO BE MAINTAINED THROUGHOUT LOT CONSTRUCTION BE THE DEVELOPER BUILDERS.

PLAN NOTES

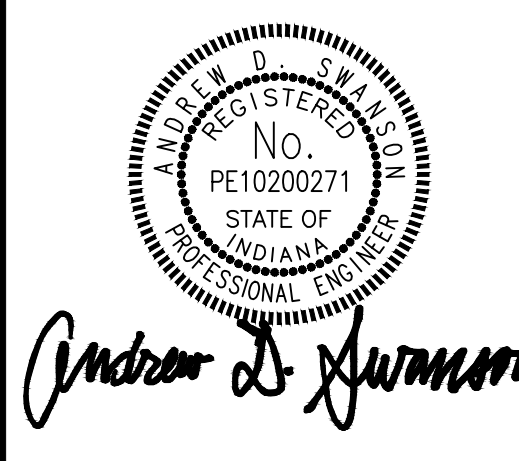
1. CONSTRUCTION ENTRANCE.
2. BASKET INLET PROTECTION. INLET PROTECTION WILL BE INSTALLED AS SOON AS THE STORM DRAIN IS INSTALLED.
3. SILT FENCE INLET PROTECTION.
4. DEWATERING BAG. REMOVE ONCE BUILDING EXCAVATION IS ENCLOSED.
5. ROCK DONUT CHECK DAM WITH UP-CHANNEL CHECK DAMS ON DRAINAGE SWALE. REMOVE ONCE NEW IMPROVEMENTS ARE CONSTRUCTED.
6. CONSTRUCTION STAGING AND STORAGE AREA FOR TRAILERS, PORT-O-LETS, CONTRACTOR PARKING
7. TOP SOIL STOCKPILE LOCATION. MAINTAIN PROTECTIVE COVERING AT ALL TIMES.

PLAN SYMBOLS

-  CONCRETE WASHOUT AREA
-  SILT FENCE
-  CONSTRUCTION/GRADING LIMITS
-  CONSTRUCTION FENCE

CONSTRUCTION DOCUMENTS

NUMBER	DATE	DESCRIPTION
1	11-18-22	TAC SUBMITTAL
2	12-08-22	TAC RESUBMITTAL
3	12-15-22	TAC RESUBMITTAL
4	02-23-23	TAC RESUBMITTAL
5	03-28-23	TAC RESUBMITTAL

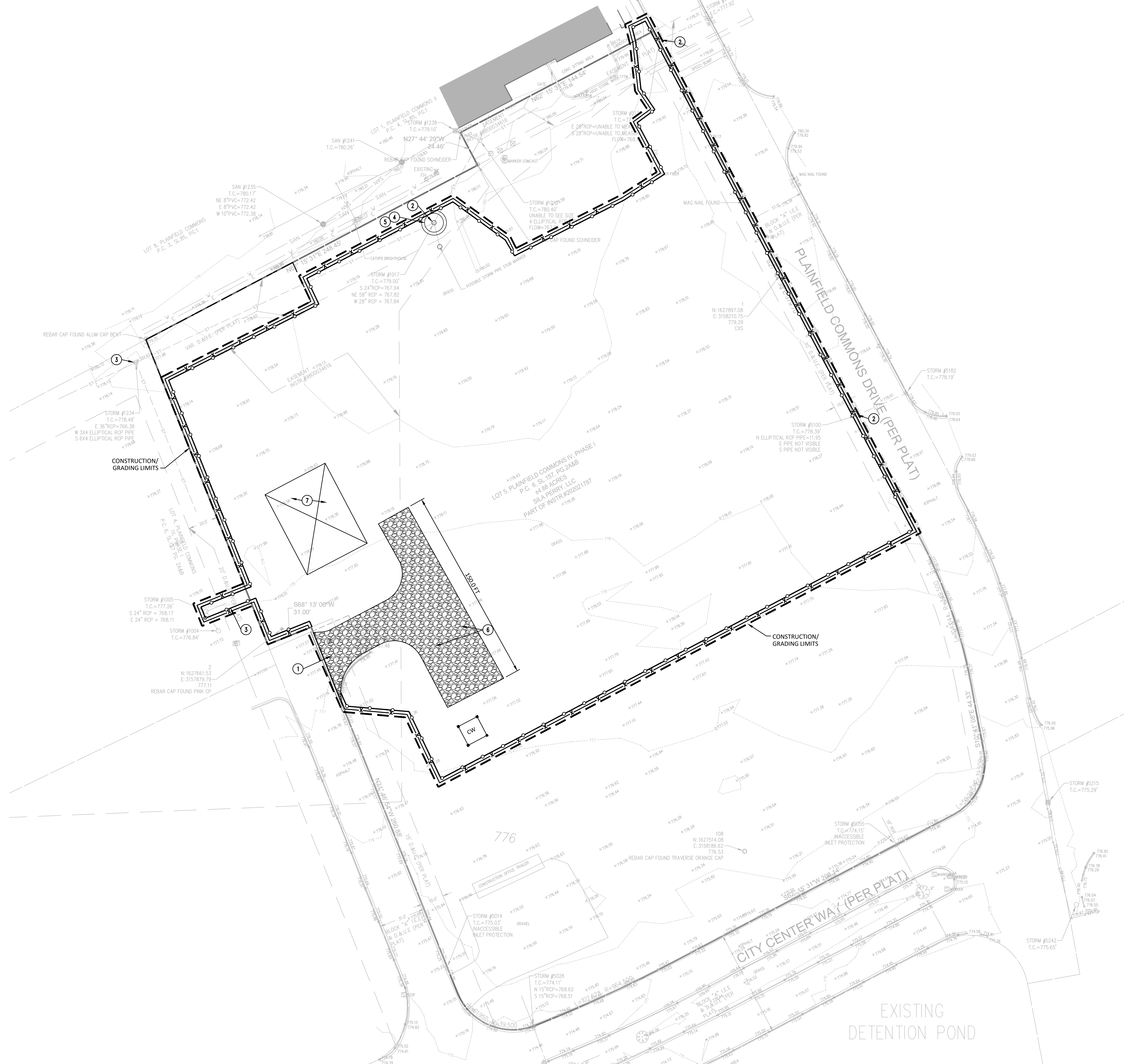
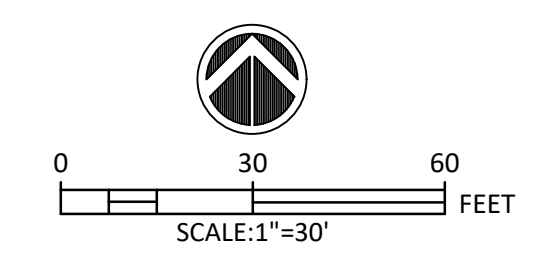


STORMWATER POLLUTION PREVENTION PLAN INITIAL CONTROLS

SCALE:	1" = 30'
DATE:	NOV 18, 2022
PROJECT #:	22JPS075
DRAWN:	CLM
COORD:	RAB
APPROVED:	ADS

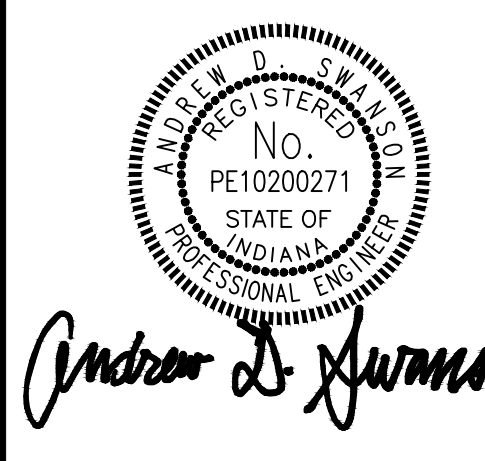
C100

SEE SHEET C001 FOR GENERAL NOTES.



CONSTRUCTION DOCUMENTS

NUMBER	DATE	DESCRIPTION
1	11-18-22	TAC SUBMITTAL
2	12-08-22	TAC RESUBMITTAL
3	12-15-22	TAC RESUBMITTAL
4	02-23-23	TAC RESUBMITTAL
5	03-28-23	TAC RESUBMITTAL



STORMWATER POLLUTION PREVENTION PLAN DURING CONSTRUCTION

SCALE: 1" = 30'
 DATE: NOV 18, 2022
 PROJECT #: 22JPSC75
 DRAWN: CLM
 COORD: RAB
 APPROVED: ADS

C101

GENERAL NOTES

- TEMPORARILY SEED ALL DISTURBED AREA.
- REFER TO LANDSCAPE SHEETS FOR AREAS OF PERMANENT SEEDING AND/OR SOD.
- REFER TO STORMWATER POLLUTION PREVENTION NOTES AND DETAIL SHEETS.
- ALL PROPOSED EROSION AND SEDIMENT CONTROL SHALL BE IN CONFORMANCE WITH TOWN OF PLAINFIELD TOWN STANDARDS. DISCREPANCIES BETWEEN THE PLANS AND THE STANDARDS SHALL NOT ALLEVIATE THE CONTRACTOR FROM ADHERING TO THE REQUIREMENTS AS SET FORTH IN THE TOWN OF PLAINFIELD TOWN STANDARDS.
- ADDITIONAL EROSION CONTROL AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY THE INSPECTOR.
- RESIDENTIAL BUILDING LOT CONSTRUCTION SILT FENCE, INLET PROTECTION, STREET SWEEPING, AND CONSTRUCTION ENTRANCE, AND CONCRETE WASHOUT IS TO BE MAINTAINED THROUGHOUT LOT CONSTRUCTION BY THE DEVELOPER AND BUILDERS.
- EROSION CONTROL BLANKET AND PERMANENT SEED IN ALL CHANNELS, SWALES AND POND BANKS OR STEEP SLOPES IN COMMON AREA.

PLAN NOTES

- CONSTRUCTION ENTRANCE.
- BASKET INLET PROTECTION. INLET PROTECTION INSTALLED AS SOON AS THE STORM DRAIN IS INSTALLED.
- SILT FENCE INLET PROTECTION.
- DEWATERING BAG. REMOVE ONCE BUILDING EXCAVATION IS ENCLOSED.
- ROCK DONUT CHECK DAM WITH UP-CHANNEL CHECK DAMS ON DRAINAGE SWALE. REMOVE ONCE NEW IMPROVEMENTS ARE CONSTRUCTED.
- CONSTRUCTION STAGING AND STORAGE AREA.
- TOP SOIL STOCKPILE. MAINTAIN TEMPORARY COVER AT ALL TIMES.

PLAN SYMBOLS

CW CONCRETE WASHOUT AREA

SILT FENCE

PROPOSED STORM SEWERS

CONSTRUCTION/GRADING LIMITS

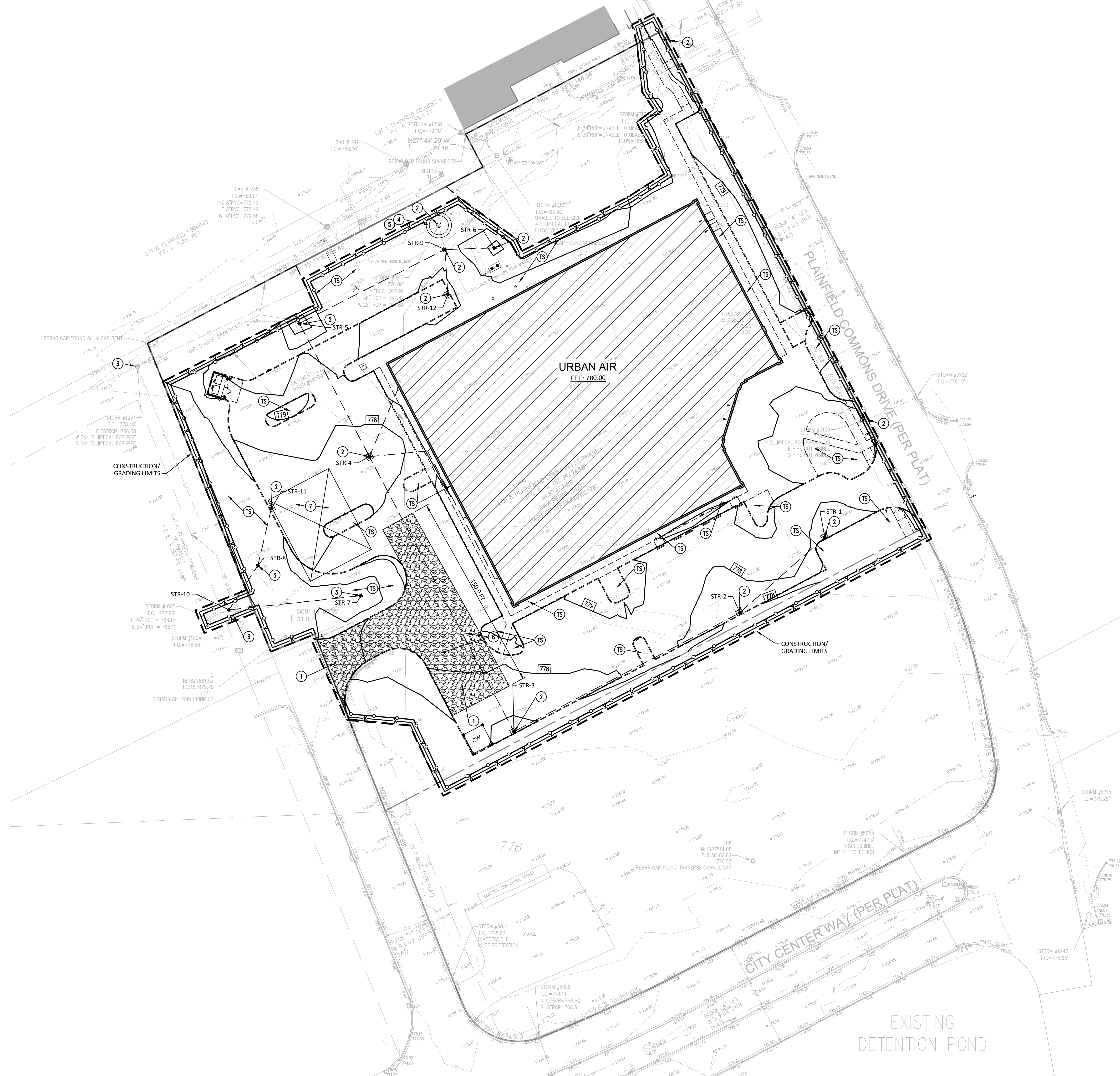
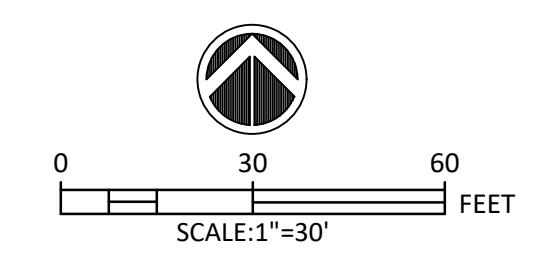
PROPOSED CONTOURS

PROPOSED IMPROVEMENTS

TS TEMPORARY SEED

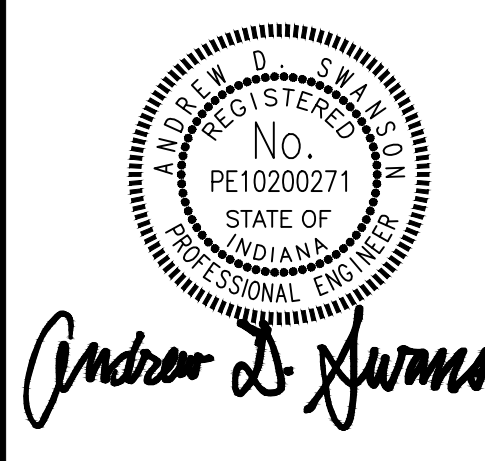
CONSTRUCTION FENCE

SEE SHEET C001 FOR GENERAL NOTES.



CONSTRUCTION DOCUMENTS

NUMBER	DATE	DESCRIPTION	TAC SUBMITTAL
1	11-18-22	TAC SUBMITTAL	
2	12-08-22	TAC RESUBMITTAL	
3	12-15-22	TAC RESUBMITTAL	
4	02-23-23	TAC RESUBMITTAL	
5	03-28-23	TAC RESUBMITTAL	



STORMWATER POLLUTION PREVENTION PLAN FINAL CONSTRUCTION

SCALE: 1" = 30'
 DATE: NOV 18, 2022
 PROJECT #: 22JPSC75
 DRAWN: CLM
 COORD: RAB
 APPROVED: ADS

C102

GENERAL NOTES

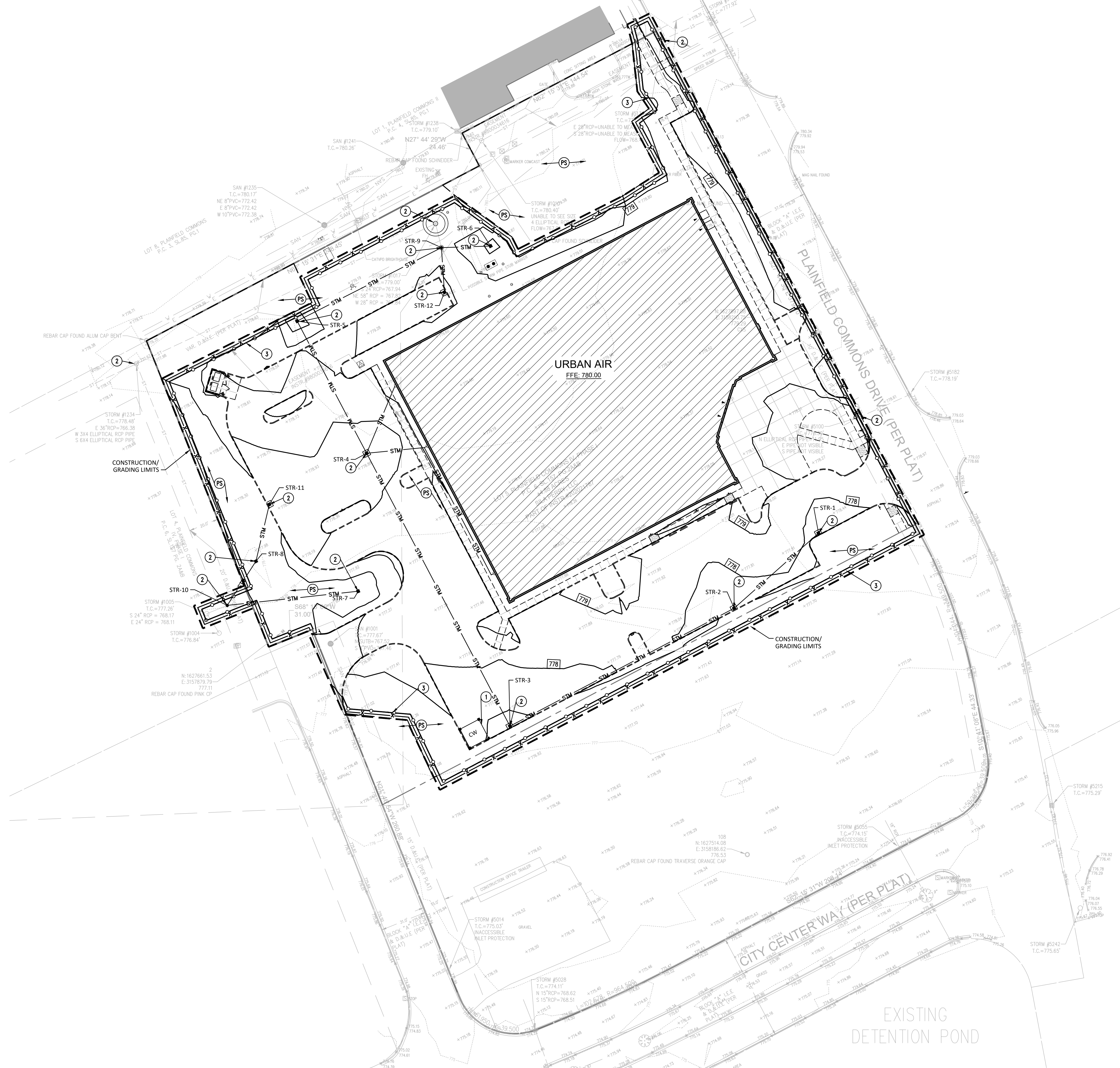
- A. TEMPORARILY SEED ALL DISTURBED AREA.
- B. REFER TO LANDSCAPE SHEETS FOR AREAS OF PERMANENT SEEDING AND/OR SOD.
- C. REFER TO STORMWATER POLLUTION PREVENTION NOTES AND DETAIL SHEETS.
- D. ALL PROPOSED EROSION AND SEDIMENT CONTROL SHALL BE IN CONFORMANCE WITH THE TOWN OF PLAINFIELD TOWN STANDARDS. DISCREPANCIES BETWEEN THE PLANS AND THE STANDARDS SHALL NOT ALLEVIATE THE CONTRACTOR FROM ADHERING TO THE REQUIREMENTS AS SET FORTH IN THE TOWN OF PLAINFIELD TOWN STANDARDS.
- E. ADDITIONAL EROSION CONTROL AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED BY THE INSPECTOR.
- F. RESIDENTIAL BUILDING LOT CONSTRUCTION SILT FENCE, INLET PROTECTION, STREET SWEEPING, AND CONSTRUCTION ENTRANCE, AND CONCRETE WASHOUT IS TO BE MAINTAINED THROUGHOUT LOT CONSTRUCTION BE THE DEVELOPER AND BUILDERS.

PLAN NOTES

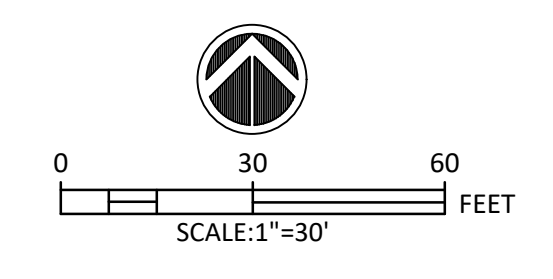
- 1. REMOVE CONCRETE WASHOUT PIT WHEN ALL AREA IS VEGETATED AND STABILIZED (END OF PROJECT).
- 2. REMOVE BASKET INLET PROTECTION AND SILT FENCE INLET PROTECTION AFTER ALL DISTURBED AREA IS VEGETATED AND STABILIZED (END OF PROJECT).
- 3. REMOVE ALL SILT FENCE AFTER ALL DISTURBED AREA IS VEGETATED AND STABILIZED (END OF PROJECT).
- 4. REMOVE CONSTRUCTION FENCE AFTER ALL DISTURBED AREA IS VEGETATED AND STABILIZED (END OF PROJECT).

PLAN SYMBOLS

- REMOVE CONCRETE WASHOUT AREA
- REMOVE SILT FENCE
- PROPOSED STORM SEWERS
- PROPOSED CONTOURS
- PROPOSED IMPROVEMENTS
- PERMANENT SEED
- REMOVE CONSTRUCTION FENCE



SEE SHEET C001 FOR GENERAL NOTES.



STORMWATER POLLUTION PREVENTION MAINTENANCE NOTES

- SILT FENCE:** INSPECT SILT FENCE WEEKLY AND AFTER EACH STORM EVENT. IF FENCE FABRIC TEARS, STARTS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE, REPLACE THE AFFECTED PORTION IMMEDIATELY. REMOVE DEPOSITED SEDIMENT WHEN IT REACHES HALF THE HEIGHT OF THE FENCE AT ITS LOWEST POINT OR IS CAUSING THE FABRIC TO BULGE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT. AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE THE FENCE AND SEDIMENT DEPOSITS, BRING THE DISTURBED AREA TO GRADE AND STABILIZE.
- CATCH BASIN FILTER:** INSPECT WEEKLY AND AFTER EACH STORM EVENT. REMOVE BUILT-UP SEDIMENT AND REPLACE THE GEOTEXTILE FABRIC AFTER EACH STORM EVENT. PERIODICALLY REMOVE SEDIMENT AND TRACKED ON SOIL FROM THE STREET (BUT NOT BY FLUSHING WITH WATER) TO REDUCE THE SEDIMENT LOAD ON THIS CURB INLET PRACTICE.
- EROSION CONTROL BLANKETS:** DURING VEGETATIVE ESTABLISHMENT, INSPECT AFTER STORM EVENTS FOR ANY EROSION BELOW THE BLANKET. IF ANY AREA SHOWS EROSION, PULL BACK THAT PORTION OF THE BLANKET COVERING IT, ADD SOIL, RE-SEED THE AREA, RE-LAY AND STAPLE THE BLANKET. CHECK THE TREATED AREAS PERIODICALLY.
- STONE CONSTRUCTION ENTRANCE:** INSPECT ENTRANCE PAD AND SEDIMENT DISPOSAL AREA WEEKLY AND AFTER STORM EVENTS OR HEAVY USE. RESHAPE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL. TOP DRESS WITH CLEAN STONE AS NEEDED. IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED IF THE WATER IS CONVEYED INTO A SEDIMENT TRAP OR BASIN. REPAIR ANY BROKEN ROAD PAVEMENT IMMEDIATELY.
- CONCRETE WASHOUT:** INSPECT DAILY FOR DAMAGE. REPAIR ANY DAMAGE IMMEDIATELY. MAINTAIN 12" MINIMUM FREEBOARD. CLEAN OR CONSTRUCT NEW WASHOUT ONCE EXISTING WASHOUT IS 75% FULL.

STORMWATER POLLUTION PREVENTION GENERAL NOTES

- THE CONTRACTOR SHALL CONTROL WASTE, GARBAGE, DEBRIS, WASTEWATER, AND OTHER SUBSTANCES ON THE SITE IN SUCH A WAY THAT THEY SHALL NOT BE TRANSPORTED FROM THE SITE BY THE ACTION OF WINDS, STORM WATER RUNOFF, OR OTHER FORCES. PROPER DISPOSAL OR MANAGEMENT OF ALL WASTES AND UNUSED BUILDING MATERIAL, APPROPRIATE TO THE NATURE OF THE WASTE OR MATERIAL, IS REQUIRED.
- PUBLIC OR PRIVATE ROADWAY SHALL BE KEPT CLEARED OF ACCUMULATED SEDIMENT. BULK CLEARING OF ACCUMULATED SEDIMENT SHALL NOT INCLUDE FLUSHING THE AREA WITH WATER. CLEARED SEDIMENT SHALL BE RETURNED TO THE POINT OF LIKELY ORIGIN OR OTHER SUITABLE LOCATION.
- THE STORMWATER POLLUTION PREVENTION PLAN SHALL BE IMPLEMENTED ON ALL DISTURBED AREAS. ALL MEASURES INVOLVING POLLUTION PREVENTION PRACTICES SHALL BE INSTALLED UNDER THE GUIDANCE OF QUALIFIED PERSONNEL EXPERIENCED IN POLLUTION PREVENTION, AND FOLLOWING THE PLANS AND SPECIFICATIONS INCLUDED HEREIN.
- ALL STORMWATER POLLUTION PREVENTION PLAN PRACTICES SHALL BE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REQUIREMENTS FOR MATERIALS, INSTALLATION AND MAINTENANCE STANDARDS.
- SEED ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING SOIL. REFER TO SPECIFICATIONS FOR SEASONAL REQUIREMENTS AND SOIL PREPARATION.

SEASONAL SOIL PROTECTION CHART												
STABILIZATION PRACTICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
PERMANENT SEEDING *		A	A	A	A			A	A			
DORMANT SEEDING **	A	A									A	A
TEMPORARY SEEDING		B	B	B	B			C	C			

- A = REFER TO SPECIFICATIONS FOR PERMANENT SEEDING MIXTURE. FERTILIZE AS RECOMMENDED BY SOIL TEST, IF TESTING IS NOT DONE, APPLY 400-600 LBS./ACRE OF 12-12-12 ANALYSIS, OR EQUIVALENT, FERTILIZER.
- B = SPRING OATS 3 BUSHELS/ACRE (2.3lbs. / 1000 Sq ft) FERTILIZE AS RECOMMENDED BY SOIL TEST. IF TESTING IS NOT DONE, APPLY 400- 600 LBS./ACRE OF 12-12-12 ANALYSIS, OR EQUIVALENT, FERTILIZER.
- C = WHEAT OR RYE 2 BUSHELS/ACRE (3.5lbs. / 1000 Sq. ft) FERTILIZE AS RECOMMENDED BY SOIL TEST. IF TESTING IS NOT DONE, APPLY 400- 600 LBS./ACRE OF 12-12-12 ANALYSIS, OR EQUIVALENT, FERTILIZER.
- D = ANNUAL RYEGRASS 40 LBS./ACRE (1 LB./1000 SQ. FT.)

- * IRRIGATION NEEDED DURING JUNE, JULY, AUGUST AND SEPTEMBER
- ** INCREASE SEEDING APPLICATION BY 50%

PLAN REVIEWER USE ONLY			IDEM STANDARD PLAN REVIEW CHECKLIST			
ADJUDICATE	DEFICIENT	N/A	SECTION A: BASIC PLAN ELEMENTS	ITEM	DESCRIPTION	ITEM INFORMATION / MISCELLANEOUS
				A1	PLAN INDEX SHOWING LOCATIONS OF REQUIRED ITEMS	THIS SHEET
				A2	VICINITY MAP DEPICTING THE PROJECT SITES LOCATION IN RELATIONSHIP TO RECOGNIZABLE LOCAL LANDMARK, CITIES, TOWNS, MAJOR ROADS, AND RAILWAYS.	PROJECT INFORMATION SHEET
				A3	NARRATIVE DESCRIBING PROJECT NATURE AND PURPOSE	THIS SHEET
				A4	LATITUDE AND LONGITUDE TO THE NEAREST (15) SECONDS.	39°42'53"N 86°21'12"W
				A5	LEGAL DESCRIPTION OF THE PROJECT SITE. THE DESCRIPTION MUST BE TO THE NEAREST QUARTER SECTION, TOWNSHIP, AND RANGE, AND INCLUDE THE CIVIL TOWNSHIP. (INCLUDE LATITUDE AND LONGITUDE - NOI REQUIREMENT.)	SURVEY SHEET
				A6	PLAT DRAWING SHOWING BUILDING LOT NUMBERS/ BOUNDARIES AND ROAD LAYOUT/NAMES.	SURVEY SHEET
				A7	100 YEAR FLOODPLAIN, FLOODWAYS, AND FLOODWAY FRINGES.	N/A
				A8	LAND USE OF ALL ADJACENT PROPERTIES	COMMERCIAL USES
				A9	IDENTIFICATION OF A U.S. EPA APPROVED OR ESTABLISHED TMDL.	N/A
				A10	NAME(S) OF THE RECEIVING WATER(S)	GEORGE'S CREEK
				A11	IDENTIFICATION OF DISCHARGES TO A WATER ON THE CURRENT 303 (d) LIST OF IMPAIRED WATERS AND POLLUTANTS) FOR WHICH IT IS IMPAIRED.	SITE GRADING AND DRAINAGE PLAN
				A12	A SOILS MAP OF THE PREDOMINANT SOIL TYPES	SOIL MAP IS SHOWN ON PROJECT SHEET.
				A13	IDENTIFICATION AND LOCATION OF ALL KNOWN WETLANDS, LAKES, AND WATER COURSES ON OR ADJACENT TO THE PROJECT SITE.	SOIL MAP IS SHOWN ON PROJECT SHEET.
				A14	IDENTIFICATION OF ANY STATE OR FEDERAL WATER QUALITY PERMITS OR AUTHORITIES THAT REQUIRED FOR CONSTRUCTION ACTIVITIES.	N/A
				A15	IDENTIFICATION AND DELINEATION OF EXISTING COVER, INCLUDING NATURAL BUFFERS.	SURVEY SHEETS
				A16	EXISTING SITE TOPOGRAPHY AT INTERVAL APPROPRIATE TO INDICATE DRAINAGE PATTERNS.	SURVEY SHEETS
				A17	LOCATION(S) WHERE RUN-OFF ENTERS THE PROJECT SITE	SEE GRADING & DRAINAGE PLAN FOR EXISTING STORM SEWERS WHERE RUN-OFF ENTERS THE SITE.
				A18	LOCATION(S) WHERE RUN-OFF DISCHARGES FROM THE PROJECT SITE PRIOR TO LAND DISTURBANCE.	SEE SURVEY SHEETS FOR EXISTING STORM SEWERS WHERE RUN-OFF DISCHARGES FROM THE SITE.
				A19	LOCATION OF ALL EXISTING STRUCTURES ON THE PROJECT SITE. REFER TO THE EXISTING CONDITIONS PLAN OR TOPOGRAPHIC SURVEY	SURVEY SHEET
				A20	EXISTING PERMANENT RETENTION OR DETENTION FACILITIES, INCLUDING MANMADE WETLAND, DESIGNED FOR THE PURPOSE OF STORM WATER MANAGEMENT	REFER TO FIRM MAP SHEET C001.
				A21	LOCATIONS WHERE STORM WATER MAY BE DIRECTLY DISCHARGED INTO GROUND WATER, SUCH AS ABANDONED WELL, SINKHOLES, OR KARST FEATURES.	N/A
				A22	SIZE OF THE PROJECT AREA EXPRESSED IN ACRES	3.24 ACERS
				A23	TOTAL EXPECTED LAND DISTURBANCE EXPRESSED IN ACRES	2.80 ACERS
				A24	PROPOSED FINAL TOPOGRAPHY.	SEE SITE GRADING AND DRAINAGE PLAN
				A25	LOCATIONS AND APPROXIMATE BOUNDARIES OF ALL DISTURBED AREAS.	SEE STORMWATER POLLUTION PREVENTION PLAN
				A26	LOCATION, SIZE, AND DIMENSIONS OF ALL STORM WATER DRAINAGE SYSTEM SUCH AS CULVERTS, STORMWATER SEWER, AND CONVEYANCE CHANNELS.	SEE SITE GRADING AND DRAINAGE PLAN
				A27	LOCATIONS OF SPECIFIC POINTS WHERE STORM WATER AND NON-STORM WATER DISCHARGES WILL LEAVE THE PROJECT SITE.	SEE SITE GRADING AND DRAINAGE PLAN
				A28	LOCATION OF ALL PROPOSED SITE IMPROVEMENTS, INCLUDING ROADS, UTILITIES, LOT DELINEATION AND IDENTIFICATION, PROPOSED STRUCTURES, AND COMMON AREAS	SEE SITE IMPROVEMENT & SITE UTILITY PLANS
				A29	LOCATION OF ALL ON-SITE AND OFF-SITE SOIL STOCKPILES AND BORROW AREAS. EXCESS SOIL IT TO BE IMMEDIATELY STOCK PILED, SURROUNDED WITH SILT FENCE, AND SEEDED WHERE INDICATED IN GRADING PLAN.	STOCK PILES TO BE SHOWN ON THE EROSION CONTROL PLAN.
				A30	CONSTRUCTION SUPPORT ACTIVITIES THAT ARE EXPECTED TO BE PART OF THE PROJECT.	REFER TO EROSION CONTROL PLAN
				A31	LOCATION OF ANY IN-STREAM ACTIVITIES THAT ARE PLANNED FOR THIS PROJECT INCLUDING, BUT NOT LIMITED TO, STREAM CROSSINGS AND PUMP AROUND.	N/A
ADJUDICATE	DEFICIENT	N/A	SECTION B: ACTIVE CONSTRUCTION COMPONENT	ITEM	DESCRIPTION	ITEM INFORMATION / MISCELLANEOUS
				B1	A DESCRIPTION OF POTENTIAL POLLUTANT SOURCES ASSOCIATED WITH CONSTRUCTION ACTIVITIES, WHICH MAY REASONABLY BE EXPECTED TO ADD A SIGNIFICANT AMOUNT OF POLLUTANTS TO STORM WATER DISCHARGES.	POTENTIAL POST CONSTRUCTION POLLUTANTS TO INCLUDE FUEL AND OIL FROM VEHICLES AND TRASH FROM PARKING LOT USERS.
				B2	STABLE CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS.	SEE STORMWATER POLLUTION PREVENTION PLAN
				B3	SPECIFICATIONS FOR TEMPORARY AND PERMANENT STABILIZATION	REFER TO PLANS FOR PERMANENT GROUND COVER
				B4	SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS	EROSION CONTROL BLANKETS WILL BE INSTALLED TO CONTROL CONCENTRATED FLOW AREAS.
				B5	SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS.	SILT FENCE WILL BE INSTALLED AROUND PERMANENT OF THE SITE CONTROL SHEET FLOW AREAS. LOCATIONS ARE SHOWN ON STORMWATER POLLUTION PLANS.
				B6	RUNOFF CONTROL MEASURES	REFER TO STORMWATER POLLUTION PREVENTION PLANS
				B7	STORM WATER OUTLET PROTECTION MEASURES	REFER TO STORMWATER POLLUTION PREVENTION PLANS
				B8	GRADE STABILIZATION STRUCTURE LOCATIONS	EROSION CONTROL BLANKETS WILL BE USED ON STEEP SLOPES AND SILT FENCE TO CONTROL EROSION.
				B9	DEWATERING APPLICATIONS AND MANAGEMENT METHODS.	DURING DEWATERING FOR EXCAVATIONS, UTILIZE FILTER BAGS AND ROCK CHECK DAMS TO CONTAIN SEDIMENT AT PUMP DISCHARGE.
				B10	MEASURES UTILIZED FOR WORK WITHIN WATERBODIES	N/A
				B11	MAINTENANCE GUIDELINES FOR EACH PROPOSED STORMWATER QUALITY MEASURE	SEE STORMWATER POLLUTION PREVENTION MAINTENANCE NOTES AND SPECIFICATION 31-25-00, ON SHEET C703, FOR SELF MONITORING PROCESS.
				B12	SEQUENCE DESCRIBING STORMWATER QUALITY MEASURE IMPLEMENTATION RELATIVE TO LAND-DISTURBING ACTIVITIES	REFER TO STORMWATER POLLUTION PREVENTION PLAN, SEQUENCE SCHEDULE.
				B13	PROVISIONS FOR EROSION AND SEDIMENT CONTROL ON INDIVIDUAL RESIDENTIAL BUILDING LOTS REGULATED UNDER THE PROPOSED PROJECT.	N/A
				B14	MATERIAL HANDLING AND SPILL PREVENTION AND SPILL RESPONSE PLAN MEETING THE REQUIREMENTS IN 327 IAC 2-6.1	SEE SECTION 13 ON THE STORMWATER POLLUTION PREVENTION CONSTRUCTION SEQUENCE SCHEDULE AND SPEC SECTION 31-25-00, ON SHEET C701, FOR SELF MONITORING PROCESS.
				B15	MATERIAL HANDLING AND STORAGE PROCEDURES ASSOCIATED WITH CONSTRUCTION ACTIVITY	REFER TO STORMWATER POLLUTION PREVENTION PLANS
ADJUDICATE	DEFICIENT	N/A	SECTION C: POST CONSTRUCTION COMPONENT	ITEM	DESCRIPTION	ITEM INFORMATION / MISCELLANEOUS
				C1	A DESCRIPTION OF POTENTIAL POLLUTANT SOURCES FROM THE PROJECT SITE'S PROPOSED LAND USE, WHICH SOURCES MAY REASONABLY BE EXPECTED TO ADD A SIGNIFICANT AMOUNT OF POLLUTANTS TO STORM WATER DISCHARGES FROM THE POST-CONSTRUCTION PROJECT SITE.	POTENTIAL POST CONSTRUCTION POLLUTANTS TO INCLUDE FUEL AND OIL FROM VEHICLES AND TRASH FROM PARKING LOT USERS.
				C2	DESCRIPTION OF PROPOSED POST-CONSTRUCTION STORMWATER QUALITY MEASURES	EROSION CONTROL MEASURES WILL BE INSTALLED PRIOR TO CONSTRUCTION. STORMWATER QUALITY CONTROL WILL BE MAINTAINED BY TWO CATCH BASINS LOCATED PRIOR TO THE STORMWATER ENTERING THE POND.
				C3	PLAN DETAILS FOR EACH STORMWATER MEASURES	2 CATCH BASINS
				C4	SEQUENCE DESCRIBING STORM WATER QUALITY MEASURE IMPLEMENTATION	REFER TO SITE GRADING AND DRAINAGE PLAN FOR LOCATION OF THE PROPOSED AQUASWIRL UNITS. REFER TO SITE UTILITY DETAILS
				C5	DESCRIPTION OF MAINTENANCE GUIDELINES FOR POST-CONSTRUCTION STORM WATER QUALITY MEASURES	EVERY 3 MONTHS A DIPSTICK IS LOWERED INTO CHAMBER TO CHECK SEDIMENT VOLUME. ONCE SEDIMENT IS AT THE MAX HEIGHT, A VAC TRUCK IS USED TO CLEAN OUT THE SEDIMENT. SEDIMENT SHOULD BE REMOVED EVERY 12 MONTHS REGARDLESS OF SEDIMENT VOLUME.
				C6	ENTITY THAT WILL BE RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE POST -CONSTRUCTION STORMWATER MEASURES	MR. ARPIT PATEL, SHREEJI COMMONS REALTY, LLC ARPITP_03@YAHOO.COM, 317-937-5800

SWPPP NARRATIVE:

THE PROJECT SITE IS LOCATED IN THE PLAINFIELD COMMONS DEVELOPMENT AND CONTAINS APPROXIMATELY 3.23 ACRES. THE SITE IS UNDEVELOPED AND PART OF THE OVERALL STORM WATER DRAINAGE MASTERPLAN FOR THE DEVELOPMENT. THE PROJECT WILL DISRUPT < 3.0 ACRES OF LAND AND UTILIZE CATCH BASINS TO COLLECT FLOATABLES AND THE EXISTING DETENTION POND FOR STORM WATER QUALITY.

THE PROPOSED STORM WATER MANAGEMENT SYSTEM CONSISTS OF INLETS AND CATCH BASINS WITH UNDERGROUND STORM SEWERS CONNECTING TO EXISTING STORM SEWER STUBS THAT DISCHARGE INTO THE SURROUNDING EXISTING STORM SEWERS AND DETENTION POND SOUTH OF THE PROPERTY.

THE EXISTING POND WAS DESIGNED TO PROVIDE STORM WATER QUANTITY AND QUALITY CONTROL FOR THIS SITE.

RESPONSIBLE PERSON:

MR. ARPIT PATEL
SHREEJI COMMONS REALTY, LLC
49 BOONE VILLAGE #131
ZIONSVILLE, INDIANA 46277
317.937.5800
ARPITP_03@YAHOO.COM

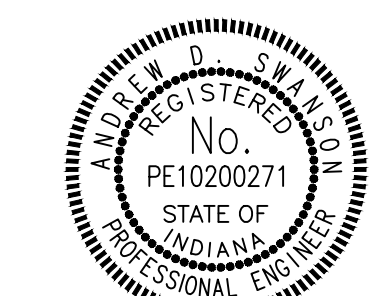
STORMWATER POLLUTION PREVENTION PLAN - CONSTRUCTION COMPONENT CONSTRUCTION SEQUENCE SCHEDULE

NUMBER	DATE	DESCRIPTION
1	11-18-22	TAC SUBMITTAL
2	12-08-22	TAC RESUBMITTAL
3	12-15-22	TAC RESUBMITTAL
4	02-23-23	TAC RESUBMITTAL
5	03-28-23	TAC RESUBMITTAL

- DESCRIPTION OF POTENTIAL POLLUTANT SOURCES ASSOCIATED WITH CONSTRUCTION ACTIVITIES
POTENTIAL POLLUTION SOURCES ASSOCIATED WITH CONSTRUCTION ACTIVITY INCLUDE: SEDIMENT IN RUNOFF FROM EXPOSED SOILS, RUNOFF FROM CONSTRUCTION MATERIAL STORAGE, AND SPILLAGE FROM CONSTRUCTION EQUIPMENT AND FUELING SITES. CONTRACTOR SHALL CONTAIN ALL SEDIMENT BY PROPER EROSION CONTROL PRACTICES AS INDICATED IN THE STORM WATER POLLUTION PREVENTION PLAN. CONTRACTOR SHALL CONTROL POLLUTION FROM MATERIAL STORAGE BY PROPER STORAGE PROCEDURES. MATERIALS THAT ARE A POTENTIAL SOURCE OF POLLUTION SHALL BE STORED IN CONTAINERS PROTECTED FROM ELEMENTS, OR IN THE JOB TRAILER. POLLUTION FROM REFUELING SHALL BE PREVENTED BY PROPER REFUELING PRACTICES. PROPER CONTAINMENT AND CLEANUP SHALL BE EMPLOYED IF A SPILL OCCURS.
- SEQUENCE DESCRIBING STORMWATER QUALITY MEASURES IMPLEMENTATION RELATIVE TO LAND DISTURBING ACTIVITIES.
CONSTRUCTION PHASE (SPECIFIC ACTIVITIES OR EROSION CONTROL PRACTICES)* CONSTRUCTION OPERATIONS
PRE-CONSTRUCTION ACTIONS (EVALUATION/PROTECTION OF IMPORTANT SITE CHARACTERISTICS) BEFORE CONSTRUCTION, EVALUATE, MARK, AND PROTECT IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, UNIQUE AREAS (E.G. WETLANDS) TO BE PRESERVED, ON-SITE SEPTIC SYSTEM ABSORPTION FIELDS, AND VEGETATION SUITABLE FOR FILTER STRIPS, ESPECIALLY IN PERIMETER AREAS.
LAND CLEARING AND GRADING (CUTTING/FILLING/STOCKPILING, GRADING, DRAINS, SEDIMENT TRAPS, BARRIERS, DIVERSIONS, SURFACE ROUGHENING) BEGIN MAJOR CLEARING AND GRADING AFTER INSTALLING THE KEY SEDIMENT AND RUNOFF MEASURES. CLEAR BORROW AND DISPOSAL AREAS AS NEEDED. INSTALL ADDITIONAL CONTROL MEASURES AS GRADING PROGRESSES AND AROUND STOCKPILED AREAS.
BUILDING CONSTRUCTION (BUILDINGS, UTILITIES, PAVING) INSTALL NECESSARY EROSION AND SEDIMENT CONTROL PRACTICES AS WORK TAKES PLACE.
LANDSCAPING AND FINAL STABILIZATION (TOP SOILING, TREES AND SHRUBS, PERMANENT SEEDING, MULCHING, SODDING, RIP RAP) STABILIZE ALL OPEN AREAS, INCLUDING BORROW AND SPOIL AREAS.
REMOVE TEMPORARY CONTROL MEASURES AND STABILIZE.
- STABILIZE CONSTRUCTION ENTRANCE LOCATIONS AND SPECIFICATIONS (AT ALL POINTS OF INGRESS AND EGRESS)
CONSTRUCTION PHASE (SPECIFIC ACTIVITIES OR EROSION CONTROL PRACTICES)* CONSTRUCTION OPERATIONS
CONSTRUCTION ACCESS (CONSTRUCTION ENTRANCES, CONSTRUCTION ROUTES, EQUIPMENT PARKING AREAS) STABILIZE BARE AREAS IMMEDIATELY WITH GRAVEL AND TEMPORARY VEGETATION AS WORK TAKES PLACE. (UTILIZE EXISTING PAVEMENT SURFACES THROUGHOUT CONSTRUCTION)
- SEDIMENT CONTROL MEASURES FOR SHEET FLOW AREAS
CONSTRUCTION PHASE (SPECIFIC ACTIVITIES OR EROSION CONTROL PRACTICES)* CONSTRUCTION OPERATIONS
SURFACE STABILIZATION (TEMPORARY AND PERMANENT SEEDING, MULCHING, SODDING, RIP RAP) APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS WHERE WORK IS DELAYED OR COMPLETED. (NO AREA IS TO BE LEFT UNCOVERED MORE THAN 5 DAYS.)
- SEDIMENT CONTROL MEASURES FOR CONCENTRATED FLOW AREAS
CONSTRUCTION PHASE (SPECIFIC ACTIVITIES OR EROSION CONTROL PRACTICES)* CONSTRUCTION OPERATIONS
STORMWATER CONVEYANCE SYSTEM (STABILIZED SWALES, STORM DRAINS, INLET AND OUTLET PROTECTION) WHERE NECESSARY, STABILIZE SWALES AS EARLY AS POSSIBLE. INSTALL PRINCIPAL CONVEYANCE SYSTEM WITH RUNOFF CONTROL MEASURES. INSTALL REMAINDER OF SYSTEM AFTER GRADING.
- STORM SEWER INLET PROTECTION MEASURE LOCATIONS AND SPECIFICATIONS
REFER TO STORMWATER POLLUTION PREVENTION PLAN AND INLET STRUCTURE FILTER DETAIL
- RUNOFF CONTROL MEASURES (E.G. DIVERSIONS, ROCK CHECK DAMS, SLOPE DRAINS, ETC.)
8. STORMWATER OUTLET PROTECTION SPECIFICATIONS
CONSTRUCTION PHASE (SPECIFIC ACTIVITIES OR EROSION CONTROL PRACTICES)* CONSTRUCTION OPERATIONS
RUNOFF CONTROL (DIVERSIONS, PERIMETER DITCHES, DAMS, OUTLET PROTECTION) INSTALL PRACTICES AFTER PRINCIPAL SEDIMENT TRAPS AND BARRIERS ARE INSTALLED BUT BEFORE LAND GRADING. INSTALL ADDITIONAL RUNOFF CONTROL MEASURES DURING GRADING AS NEEDED.
- GRADE STABILIZATION STRUCTURE LOCATIONS AND SPECIFICATIONS
CONSTRUCTION PHASE (SPECIFIC ACTIVITIES OR EROSION CONTROL PRACTICES)* CONSTRUCTION OPERATIONS
SEDIMENT BARRIERS AND TRAPS (BASIN TRAPS, SILT FENCES, OUTLET PROTECTION) INSTALL PRINCIPAL BASINS AFTER CONSTRUCTION SITE IS ASSESSED. INSTALL ADDITIONAL TRAPS AND BARRIERS AS NEEDED DURING GRADING.
- LOCATION, DIMENSIONS, SPECIFICATIONS AND CONSTRUCTION DETAILS OF EACH STORM WATER QUALITY MEASURE
REFER TO STORMWATER POLLUTION PREVENTION PLAN AND DETAILS
- TEMPORARY SURFACE STABILIZATION METHODS APPROPRIATE FOR EACH SEASON
- PERMANENT SURFACE STABILIZATION SPECIFICATIONS (INCLUDE SEQUENCING)
REFER TO SEASONAL SOIL PROTECTION CHART
- MATERIAL HANDLING AND SPILL PREVENTION PLAN
CONTRACTOR SHALL CONTAIN ANY SPILL OF MATERIALS IN SUCH A MANNER TO PREVENT LEAKAGE INTO A STORM SEWER OR DRAINWAY. CONTACT THE INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (IDEM) OFFICE OF LAND QUALITY EMERGENCY RESPONSE SECTION, IDEM 24-HOUR SPILL LINE AT 888-233-7745, OR 317-233-7745 UPON DISCOVERY OF AN ACCIDENT TO DETERMINE IDEM'S INVOLVEMENT AND PROCEDURES FOR CLEANUP.
- MONITORING AND MAINTENANCE GUIDELINES FOR EACH PROPOSED STORMWATER QUALITY MEASURE.
* MONITORING AND MAINTENANCE: (1) INSPECT PRACTICES AND REPAIR AS REQUIRED AT LEAST ONCE A WEEK, & (2) WITHIN 24 HOURS OF EVERY 1/2" RAIN EVENT
- SOIL STOCKPILE AND STAGING AREA
ALL DISTURBED GROUND SHALL NOT BE LEFT IDLE FOR MORE THAN 2 WEEKS WITHOUT SEEDING FOR STABILIZATION. SOIL STOCKPILES SHALL BE SURROUNDED WITH SILT FENCE AND SEEDED IF NOT USED WITHIN 2 WEEKS.

CONSTRUCTION DOCUMENTS

NUMBER	DATE	DESCRIPTION
1	11-18-22	TAC SUBMITTAL
2	12-08-22	TAC RESUBMITTAL
3	12-15-22	TAC RESUBMITTAL
4	02-23-23	TAC RESUBMITTAL
5	03-28-23	TAC RESUBMITTAL



Andrew D. Swanson

STORMWATER POLLUTION PREVENTION NOTES

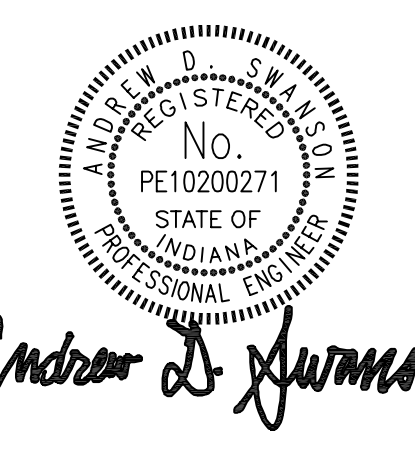
SCALE: SCALE NOTED
DATE: NOV 18, 2022
PROJECT #: 22JPC575
DRAWN: CLM
COORD: RAB

APPROVED: ADS

C110

CONSTRUCTION DOCUMENTS

NUMBER	DATE	DESCRIPTION	TAC RESUBMITTALS				
			11-18-22	12-08-22	12-15-22	02-23-23	03-28-23
1		TAC SUBMITTAL					
2		TAC RESUBMITTAL					
3		TAC RESUBMITTAL					
4		TAC RESUBMITTAL					
5		TAC RESUBMITTAL					



Andrew D. Swanson

SITE GRADING & DRAINAGE PLAN

SCALE: 1" = 30'
 DATE: NOV 18, 2022
 PROJECT #: 22JPSC75
 DRAWN: CLM
 COORD: RAB
 APPROVED: ADS

C300

GENERAL NOTES

- REFER TO UTILITY DETAILS FOR NOTE REFERENCES.
- ALL PUBLIC STORM MANHOLE CASTINGS SHALL HAVE THE WORDS "TOWN OF PLAINFIELD", CAST IN RAISED OR RECESSED LETTERS AT A MINIMUM OF 2" HEIGHT AND "STORM SEWER" CAST IN RAISED OR RECESSED LETTERS AT A MINIMUM OF 1" HEIGHT. ALL PRIVATE STORM MANHOLE CASTINGS SHALL HAVE THE WORDS "STORM SEWER", CAST IN RAISED OR RECESSED LETTERS AT A MINIMUM OF 2" HEIGHT. CASTINGS TO BE NEENAH R-1642, EJ 104522 OR US FOUNDRY 755-NC.
- CONTRACTOR TO VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION.
- REFER TO TOWN OF PLAINFIELD STANDARD DRAWINGS FOR DETAILS.
- REFER TO PLAINFIELD STANDARDS FOR UTILITY DETAILS.
- REFER TO FLEXIBLE PIPE BEDDING DETAIL ON SHEET 08 OF TOWN STANDARDS. DENOTE REQUIRED STRUCTURE BACKFILL ACCORDING TO INDOT SPECIFICATION 211 WHEN TRENCH OPENING ENCLOSES WITH 5' OF AND EXISTING OR PROPOSED STREET OR SIDEWALK.

PLAN NOTES

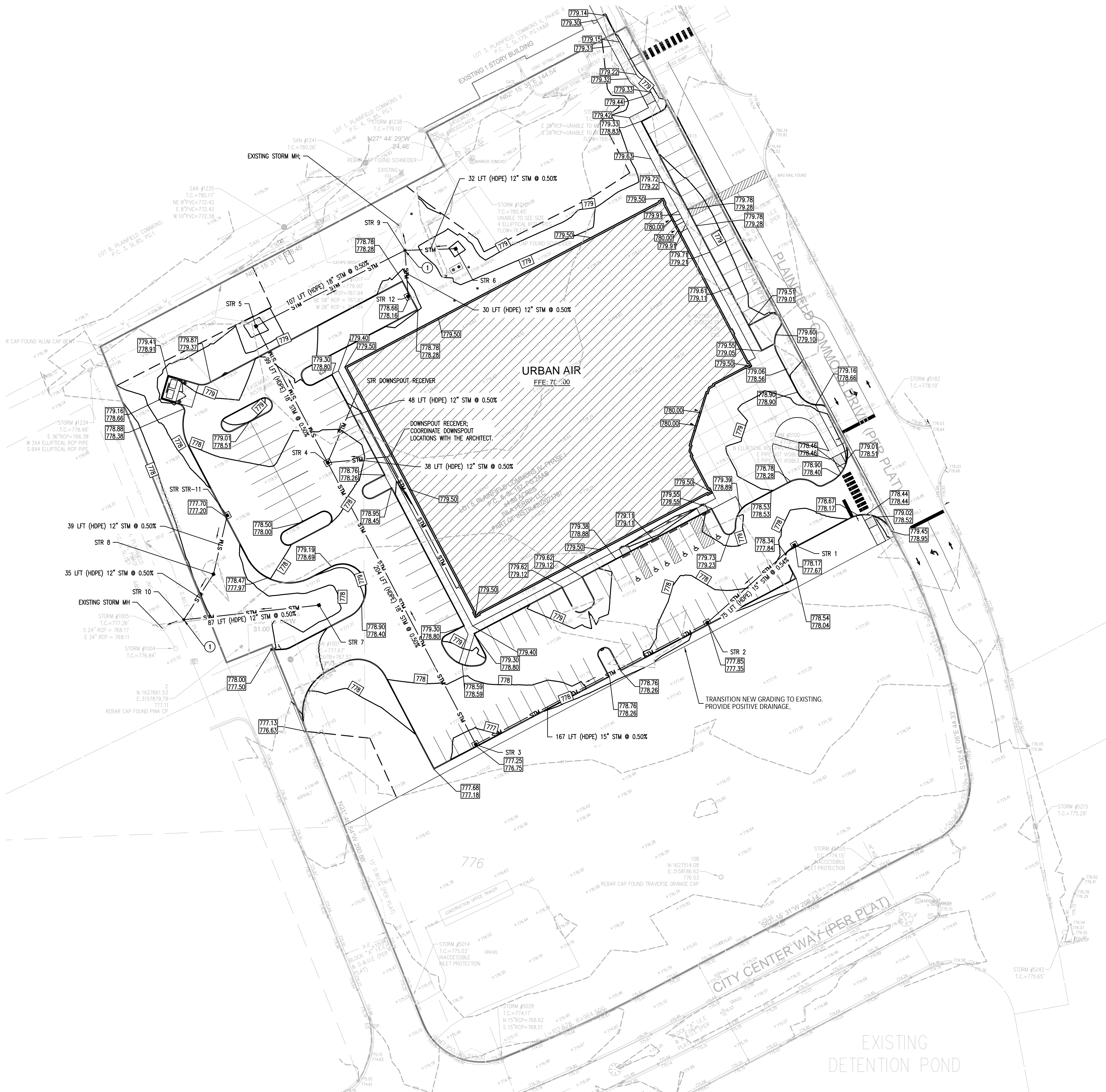
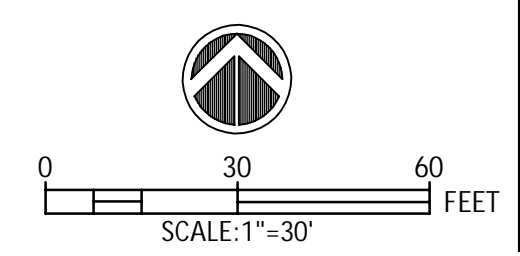
- CONTRACTOR TO FIELD VERIFY EXISTING STORM SEWER LOCATION, ELEVATION AND SIZE.
- COORDINATE SIZE, LOCATION AND ELEVATION OF PIPING WITH PLUMBING PLANS.
- NEW EXTERIOR CLEANOUT.
- WATER AND SEWER CROSSING, MINIMUM 18" CLEARANCE OR USE CONCRETE CRADLE.

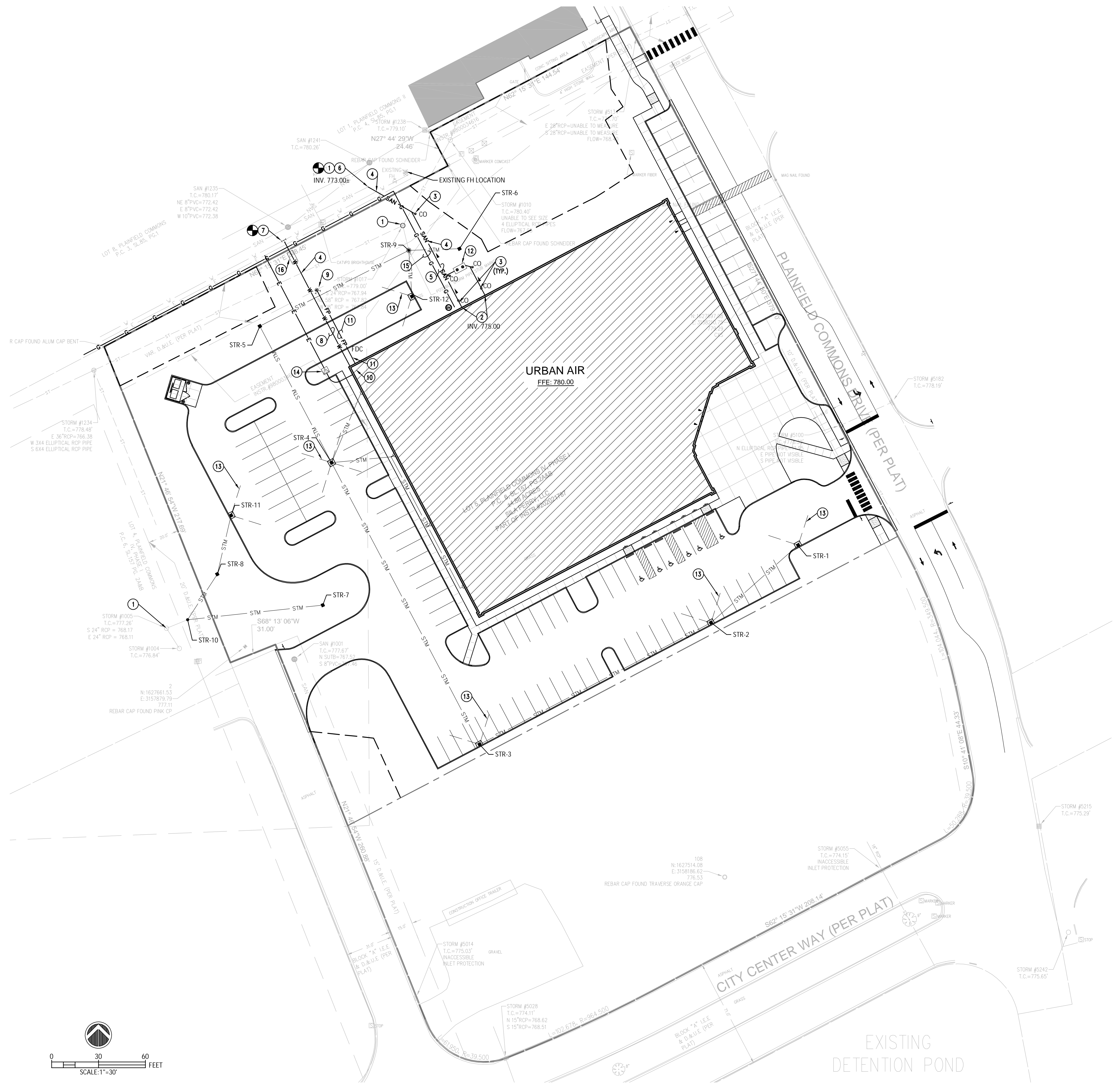
STRUCTURE SCHEDULE

MARK	INVERT		CASTING		STRUCTURE	
	INLET	OUTLET	ELEVATION	TYPE	TYPE	TYPE
STR-1	-	774.43	777.67	R-3287-10	INLET	TYPE B
STR-2	774.03	774.03	777.35	R-3287-10	INLET	TYPE B
STR-3	773.19	772.94	776.75	R-3287-10	INLET	TYPE B
STR-4	NE 773.5 E 773.5 SE 771.92	NW 771.92	777.4	R-3405	MANHOLE	TYPE C
STR-5	771.43	771.43	778.0	R-4342	MANHOLE	TYPE C
STR-6	-	775.00	778.0	R-4342	INLET	TYPE A
STR-7	-	774.25	777.5	R-4342	INLET	TYPE A
STR-8	774.01	774.01	777.5	R-4342	INLET	TYPE A
STR-9	E 774.84 S 774.85 SW 770.89	NW 768.39	779.28	R-1642	MANHOLE W/ SUMP	TYPE C W/ HOOD
STR-10	E 773.81 NE 773.83	W 769.35	778.08	R-1642	MANHOLE W/ SUMP	TYPE C W/ HOOD
STR-11	-	774.2	777.2	R-3287-10	INLET	TYPE B
STR-12	-	775	778.17	R-3287-10	INLET	TYPE B

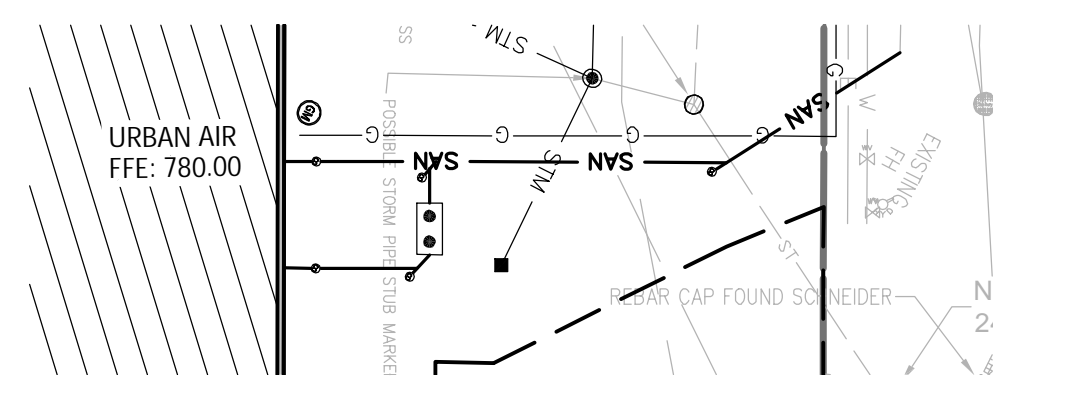
ALL HOODS TO BE NEENAH R-3701 WITH ANTI-SIPHON VENT. REFER TO TOWN STANDARDS.

SEE SHEET C001 FOR GENERAL NOTES.

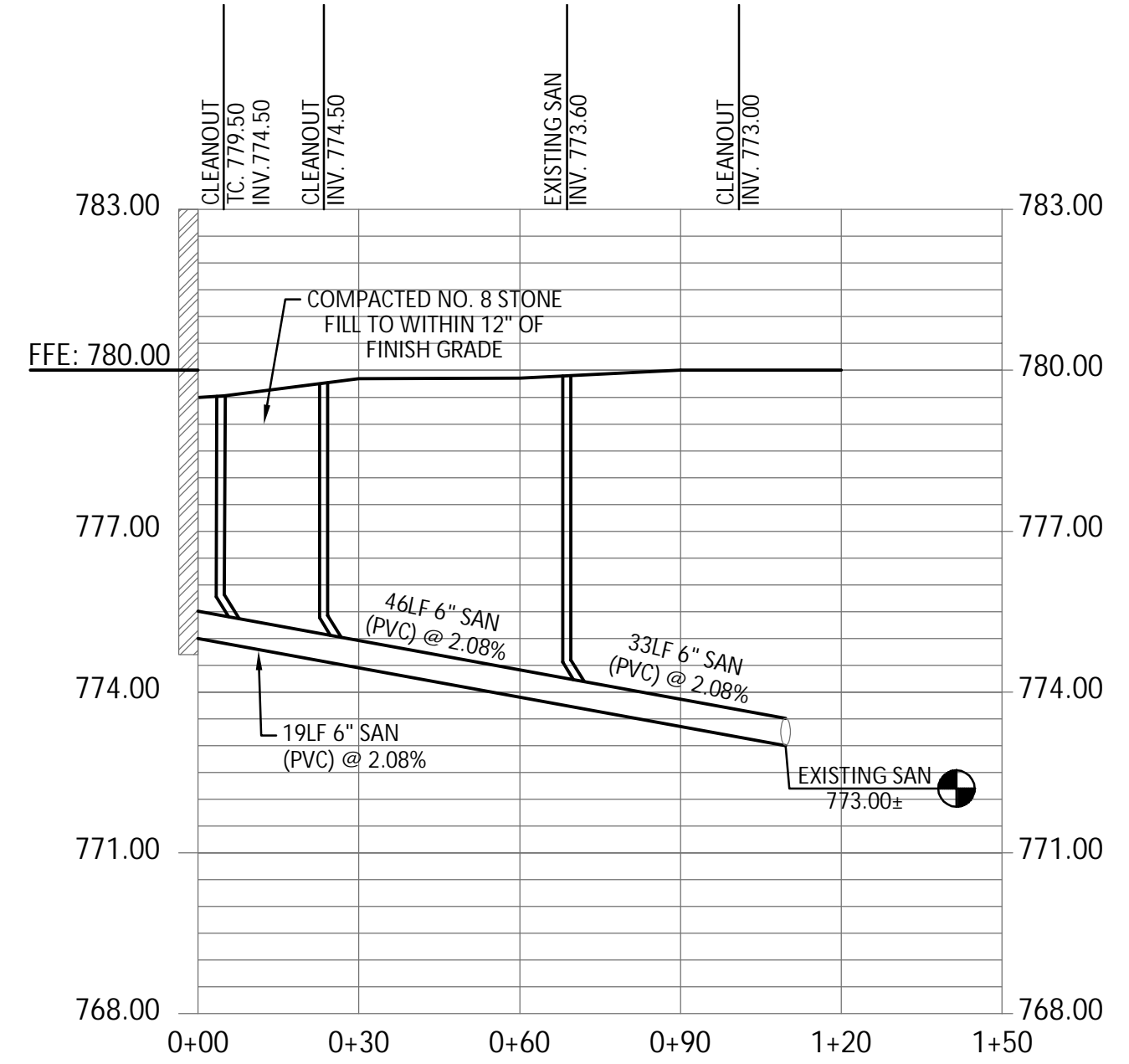




- ### GENERAL NOTES
- REFER TO UTILITY DETAILS FOR NOTE REFERENCES.
 - ALL SANITARY CASTINGS SHALL HAVE THE WORDS "TOWN OF PLAINFIELD", CAST IN RAISED OR RECESSED LETTERS AT A MINIMUM OF 2" HEIGHT. ALL PRIVATE SANITARY CASTINGS SHALL HAVE THE WORDS "SANITARY SEWER", CAST IN RAISED OR RECESSED LETTERS AT A MINIMUM OF 2" HEIGHT. CASTINGS TO BE NEENAH R-1916-F, EJ 1045ZPT AND 1040APT OR US FOUNDRY 755-NC BWT.
 - CONTRACTOR TO VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION.
 - REFER TO TOWN OF PLAINFIELD TOWN STANDARD DRAWINGS FOR DETAILS.
- ### PLAN NOTES
- CONTRACTOR TO FIELD VERIFY EXISTING STORM & SANITARY SEWER LOCATION, ELEVATION AND SIZE.
 - COORDINATE SIZE, LOCATION AND ELEVATION OF PIPING WITH PLUMBING PLANS.
 - NEW EXTERIOR CLEANOUT.
 - WATER AND SEWER CROSSING, MINIMUM 18" CLEARANCE.
 - 6" PVC-SDR 26 SANITARY LATERAL AT 2.08% SLOPE. MAINTAIN 10FT HORIZONTAL OR 18" VERTICAL SEPARATION FROM WATER LINES.
 - LATERAL CONNECTION TO THE MAINLINE SEWER AND REFERENCE THE CONNECTION DETAIL ON DS-502 ON SHEET 17 OF THE TOWN STANDARDS.
 - WATER SERVICE TAP - REFER TO DEVELOPMENT STANDARD, DETAIL DS-W01 ON SHEET 13 OF TOWN STANDARDS.
 - 6" DUCTILE IRON-CLASS 50 WATER PIPE WITH MECHANICAL JOINTS (60° COVER). REFER TO TOWN STANDARDS.
 - FIRE DEPARTMENT CONNECTION (FDC) WITH BALL DRIP.
 - WATER SERVICE RPZ - FIRE PROTECTION DOUBLE CHECK VALVE AND BACK-FLOW PREVENTOR IN BUILDING.
 - 4" DUCTILE IRON-CLASS 50 FIRE DEPARTMENT CONNECTION SERVICE PIPE WITH MECHANICAL JOINTS (36° COVER) SLOPE TO FDC TO DRAIN.
 - GREASE TRAP. REFER TO TOWN STANDARD DETAIL DS-504.
 - NEW INLET SUBSURFACE DRAIN.
 - NEW TRANSFORMER AND PRIMARY ELECTRIC SERVICE. COORDINATE WITH UTILITY COMPANY.
 - NEW NATURAL GAS SERVICE AND METER. COORDINATE WITH UTILITY COMPANY.
 - WATER METER VAULT. REFER TO TOWN STANDARD DETAIL DS-W02.



2 SANITARY LATERAL PLAN
SCALE 1"=30'

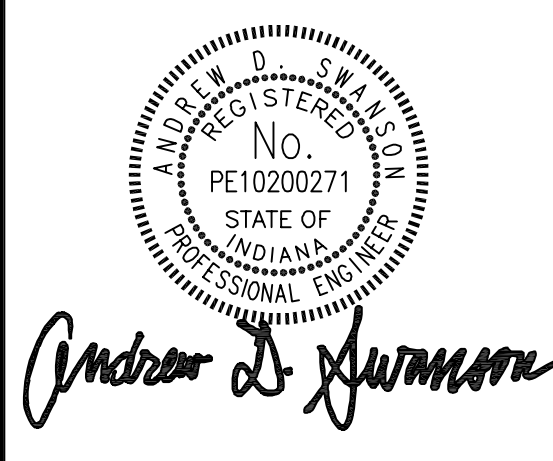


2 SANITARY LATERAL PROFILE
H 1"=30' V 1"=3'

SEE SHEET C001 FOR GENERAL NOTES.

CONSTRUCTION DOCUMENTS

NUMBER	DATE	DESCRIPTION
1	11-18-22	TAC SUBMITTAL
2	12-08-22	TAC RESUBMITTAL
3	12-15-22	TAC RESUBMITTAL
4	02-23-23	TAC RESUBMITTAL
5	03-28-23	TAC RESUBMITTAL



SITE UTILITY PLAN

SCALE: 1" = 30'
 DATE: NOV 18, 2022
 PROJECT #: 22JPSC75
 DRAWN: CLM
 COORD: RAB
 APPROVED: ADS

C400

- GENERAL NOTES**
- REFER TO IMPROVEMENT DETAILS FOR NOTE REFERENCES.
 - REFER TO TOWN STANDARDS FOR DEVELOPMENT STANDARDS.
- PLAN NOTES**
- ASPHALT PAVEMENT.
 - CONCRETE CURB AND WALK.
 - ACCESSIBLE RAMP.
 - 4" WIDE PAINTED PARKING STRIPE.
 - CONCRETE WALK.
 - STRAIGHT CONCRETE CURB.
 - ACCESSIBLE PARKING SPACE.
 - CONCRETE STOOP.
 - 6" CONCRETE PAVEMENT.
 - PAINTED CROSSWALK STRIPING.
 - WASTE CONTAINER PAD AND ENCLOSURE.
 - BIKE RACK AS SOLD BY HUNTCO SITE FURNISHINGS. MODEL NAME THE CITY OF PORTLAND STAPLE. IN BLACK FINISH. IN-GROUND.
 - CONCRETE INLET COLLAR.
 - STOP SIGN.
 - EXTEND NEW SIDEWALK AND CONNECT TO EXISTING. MAINTAIN POSITIVE DRAINAGE.
 - CURB TAPER.
 - CROSSWALK WITH SPEED HUMP.
 - TRANSFORMER SUPPORT PAD.
 - COORDINATE ROAD RESURFACING AND STRIPING WITH PROPERTY DEVELOPER.

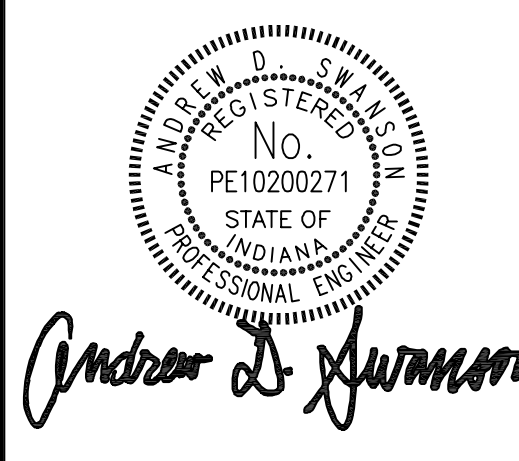
SITE DESIGN DATA

SITE AREA	3.24 acres
URBAN AIR BUILDING	38,250 SF
PARKING REQUIRED	
URBAN AIR (1 sp/ 250sf)	96 spaces
PARKING HC PARKING	90 spaces
TOTAL PARKING	6 spaces
	96 spaces

**URBAN AIR
 385 S. PERRY ROAD
 PLAINFIELD, IN 46168**

CONSTRUCTION DOCUMENTS

NUMBER	DATE	DESCRIPTION
1	11-18-22	TAC SUBMITTAL
2	12-08-22	TAC RESUBMITTAL
3	12-15-22	TAC RESUBMITTAL
4	02-23-23	TAC RESUBMITTAL
5	03-28-23	TAC RESUBMITTAL

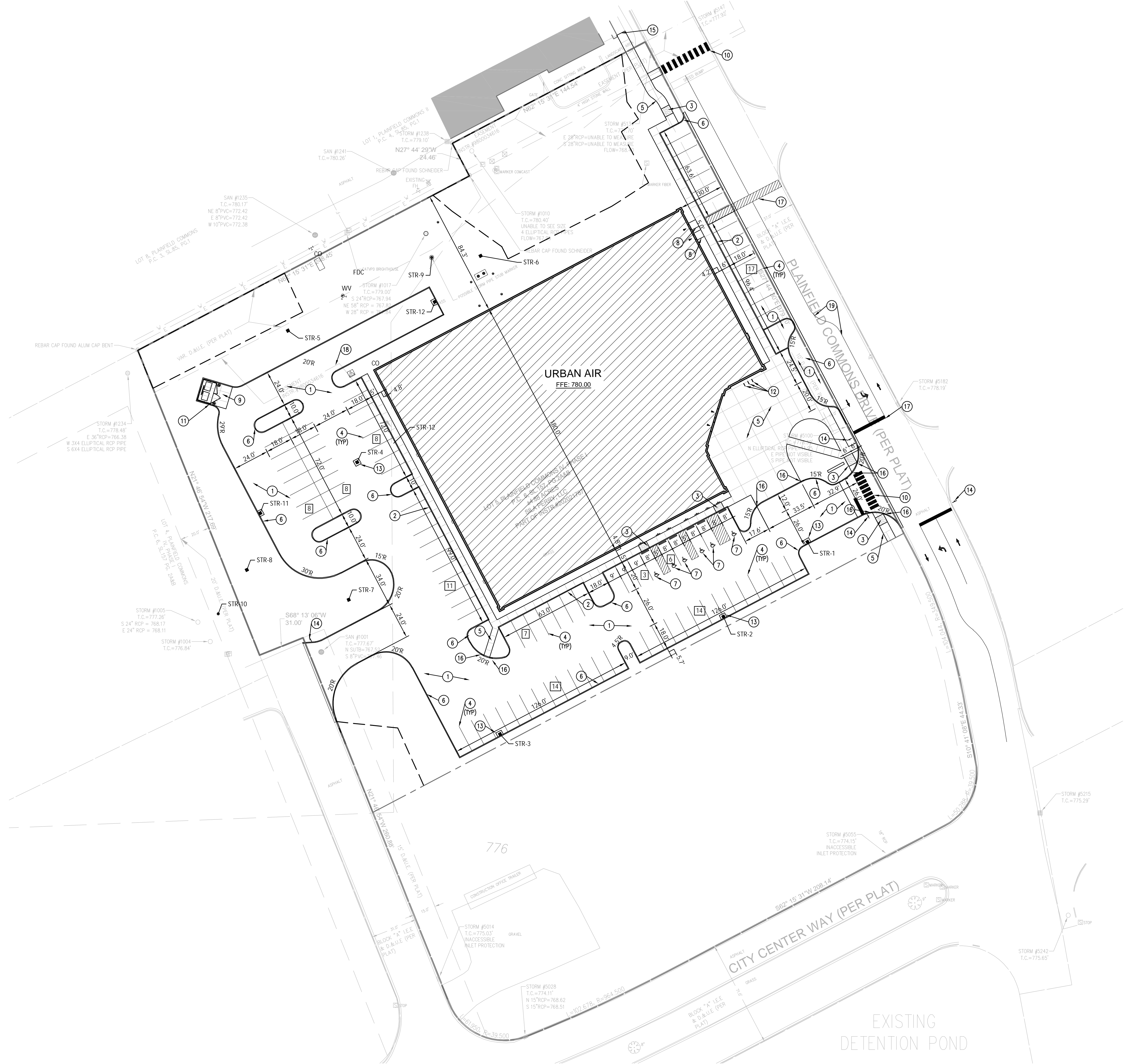
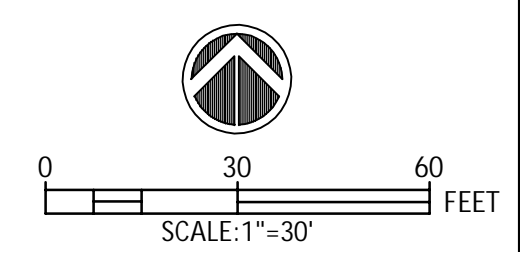


SITE IMPROVEMENT PLAN

SCALE: 1" = 30'
 DATE: NOV 18, 2022
 PROJECT #: 22JPSC75
 DRAWN: CLM
 COORD: RAB
 APPROVED: ADS

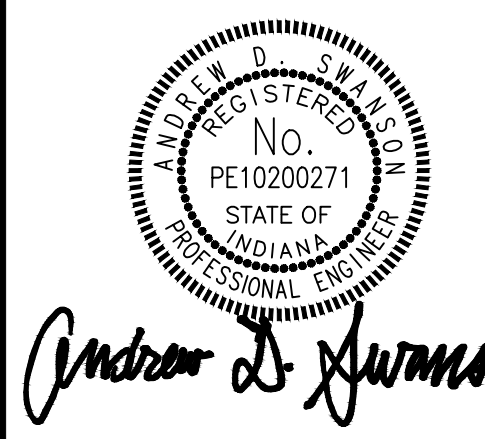
C500

SEE SHEET C001 FOR GENERAL NOTES.



CONSTRUCTION DOCUMENTS

NUMBER	DATE	DESCRIPTION
1	11-18-22	TAC SUBMITTAL
2	12-08-22	TAC RESUBMITTAL
3	12-15-22	TAC RESUBMITTAL
4	02-23-23	TAC RESUBMITTAL
5	03-28-23	TAC RESUBMITTAL

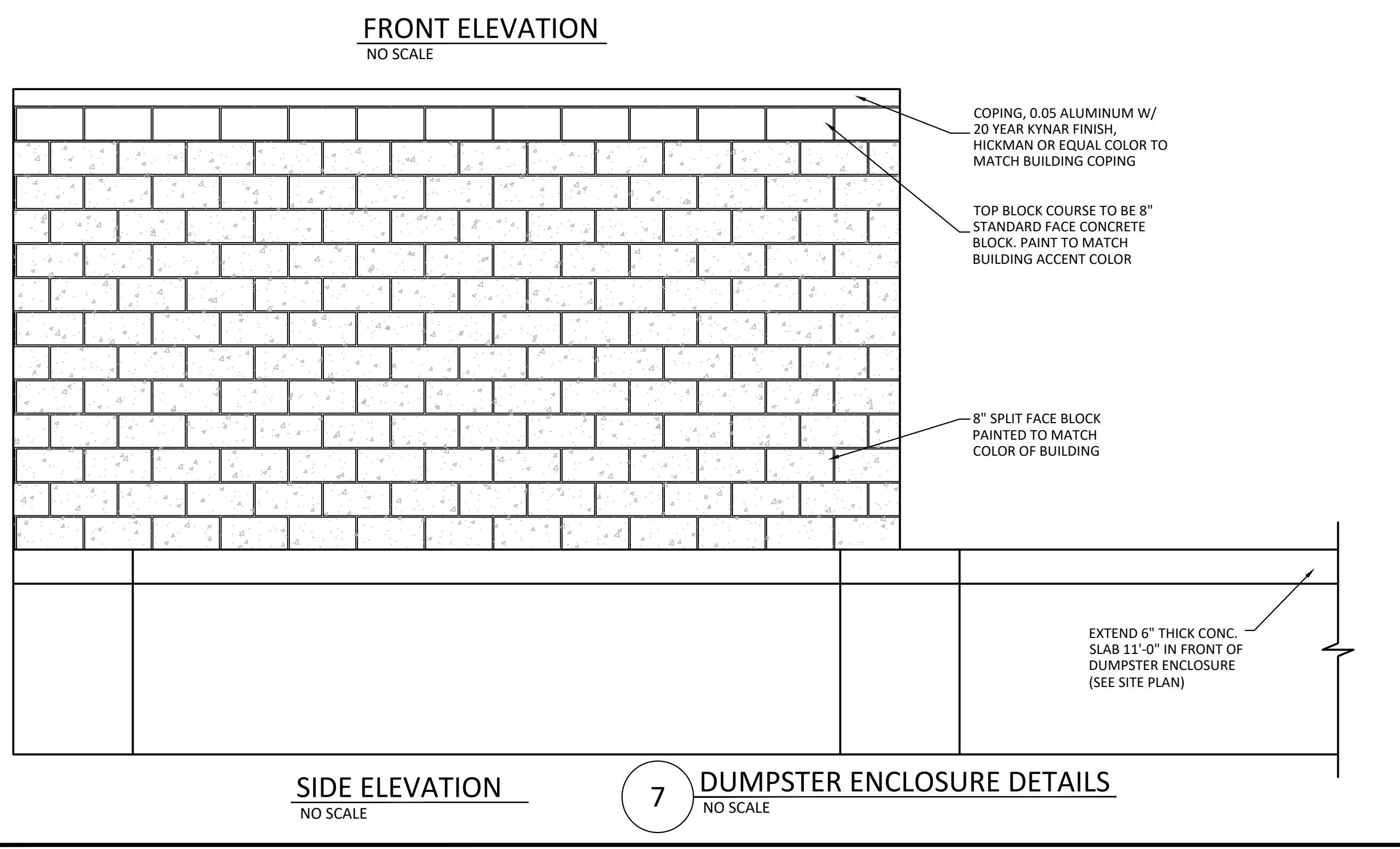
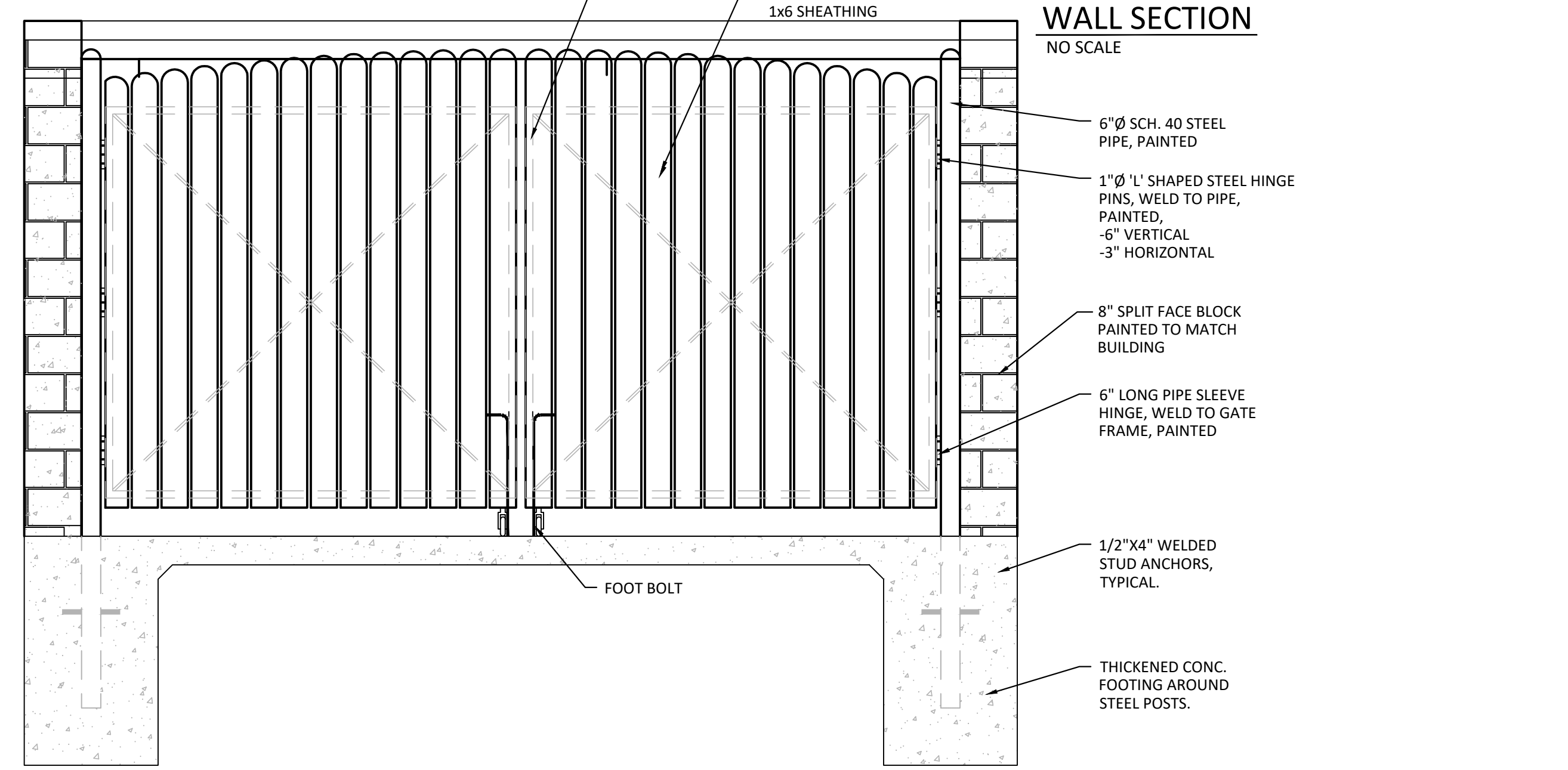
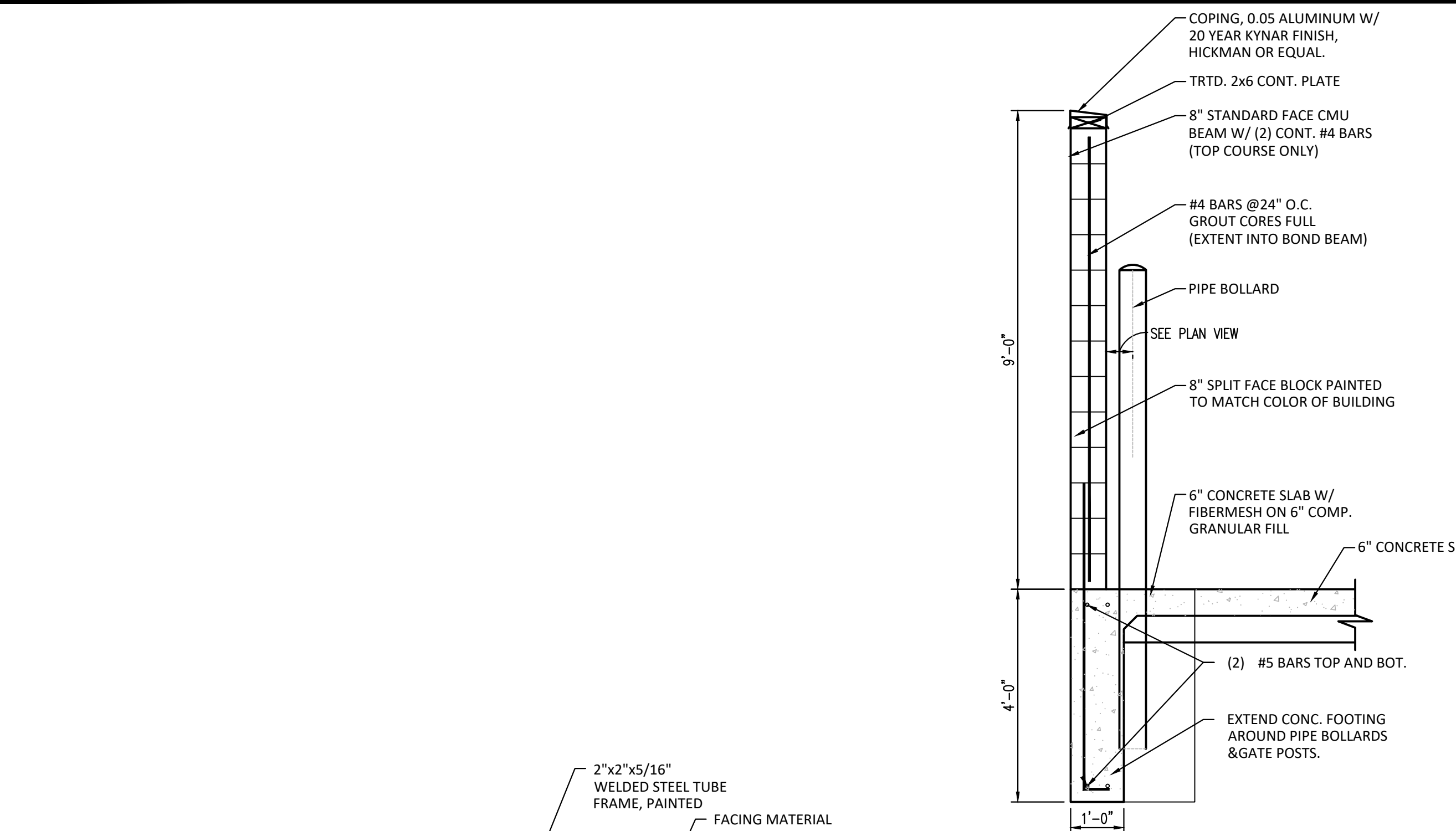
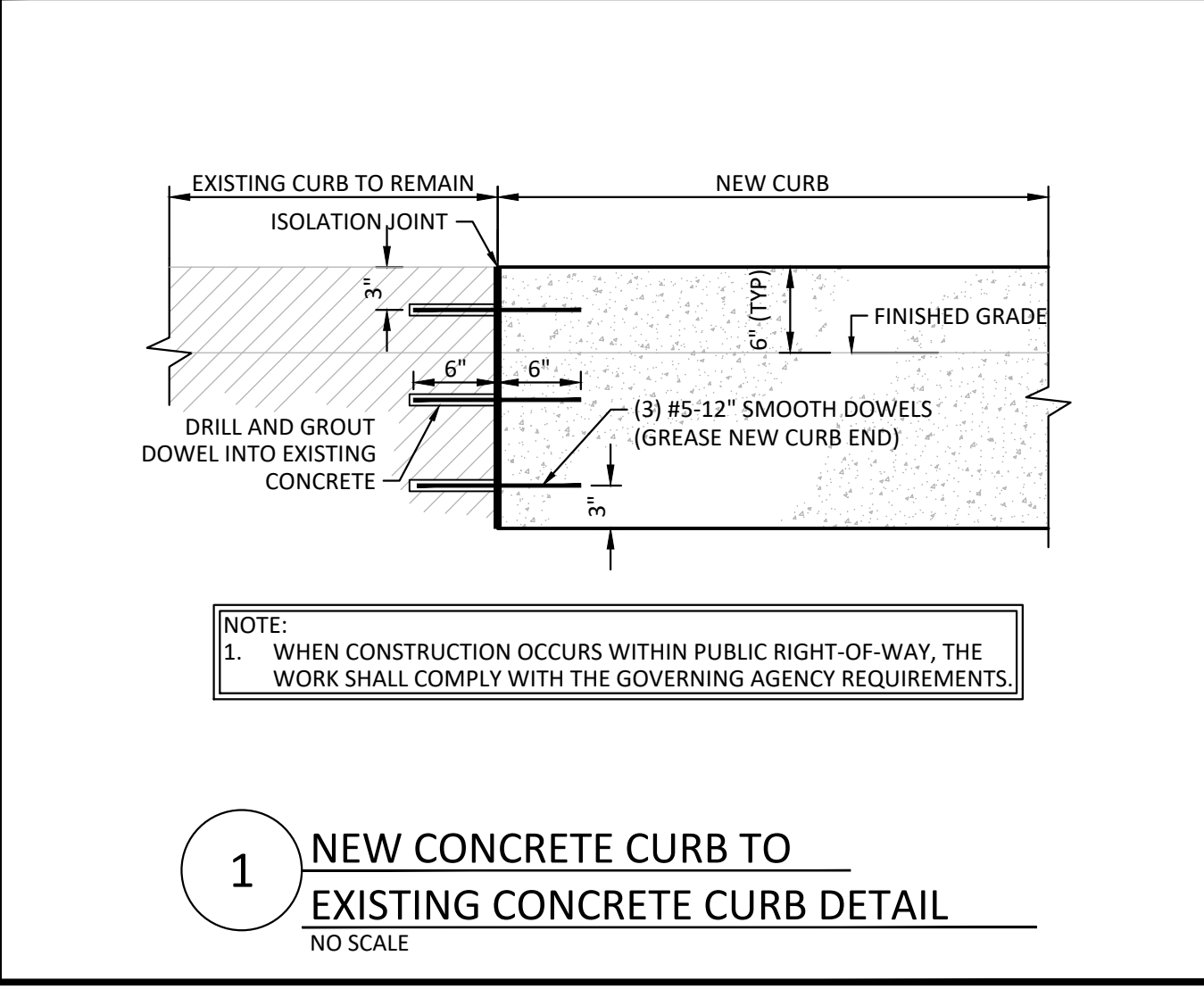
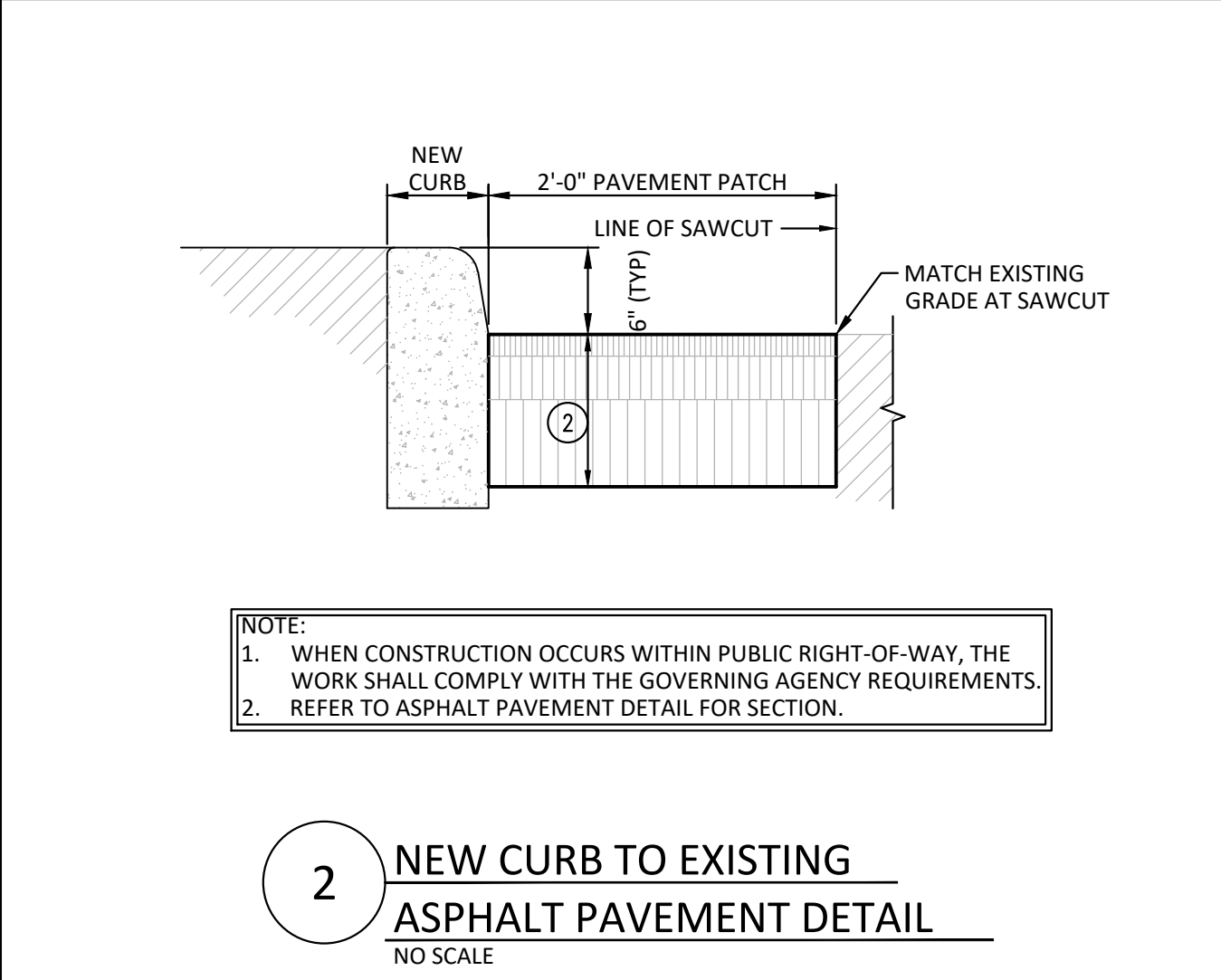
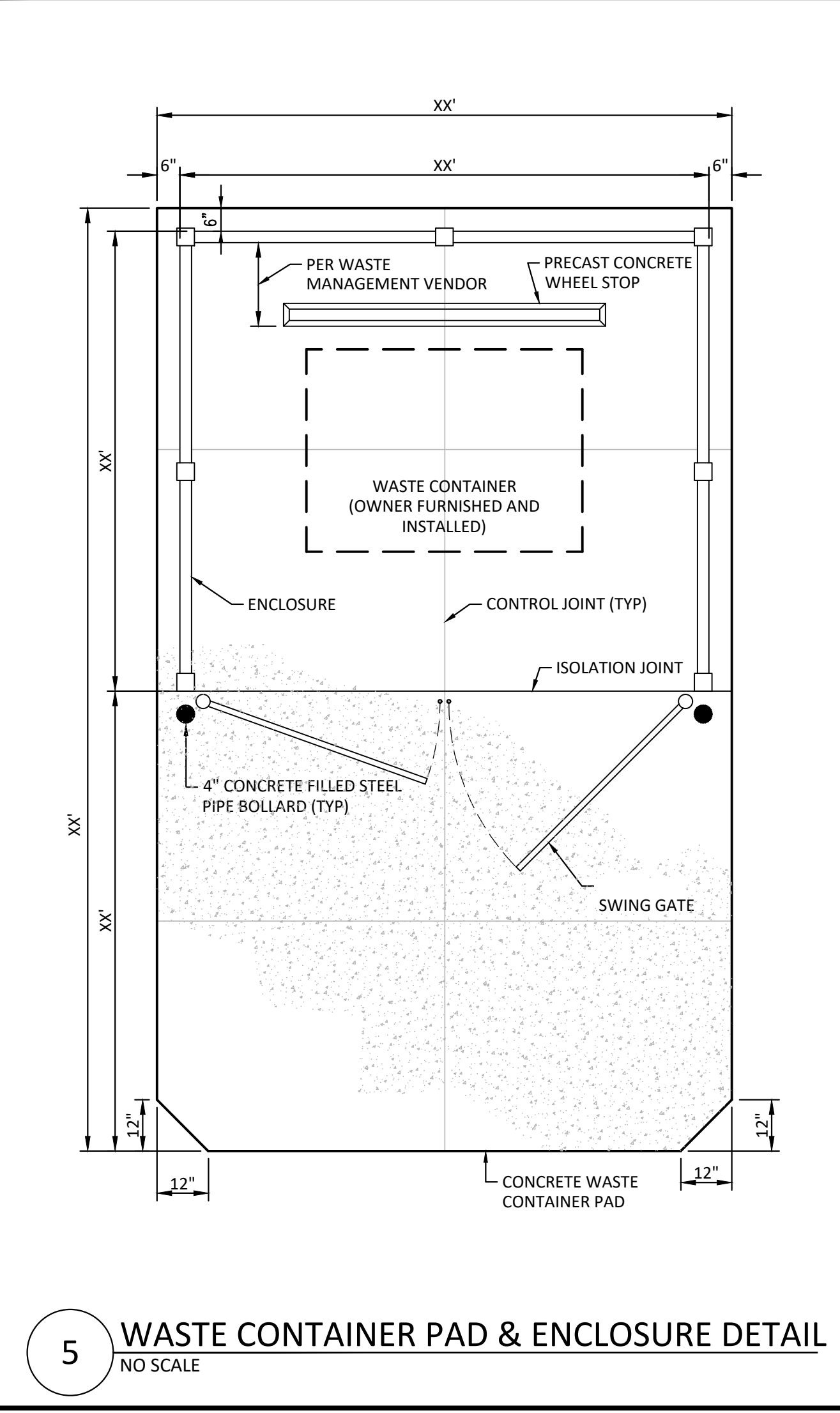
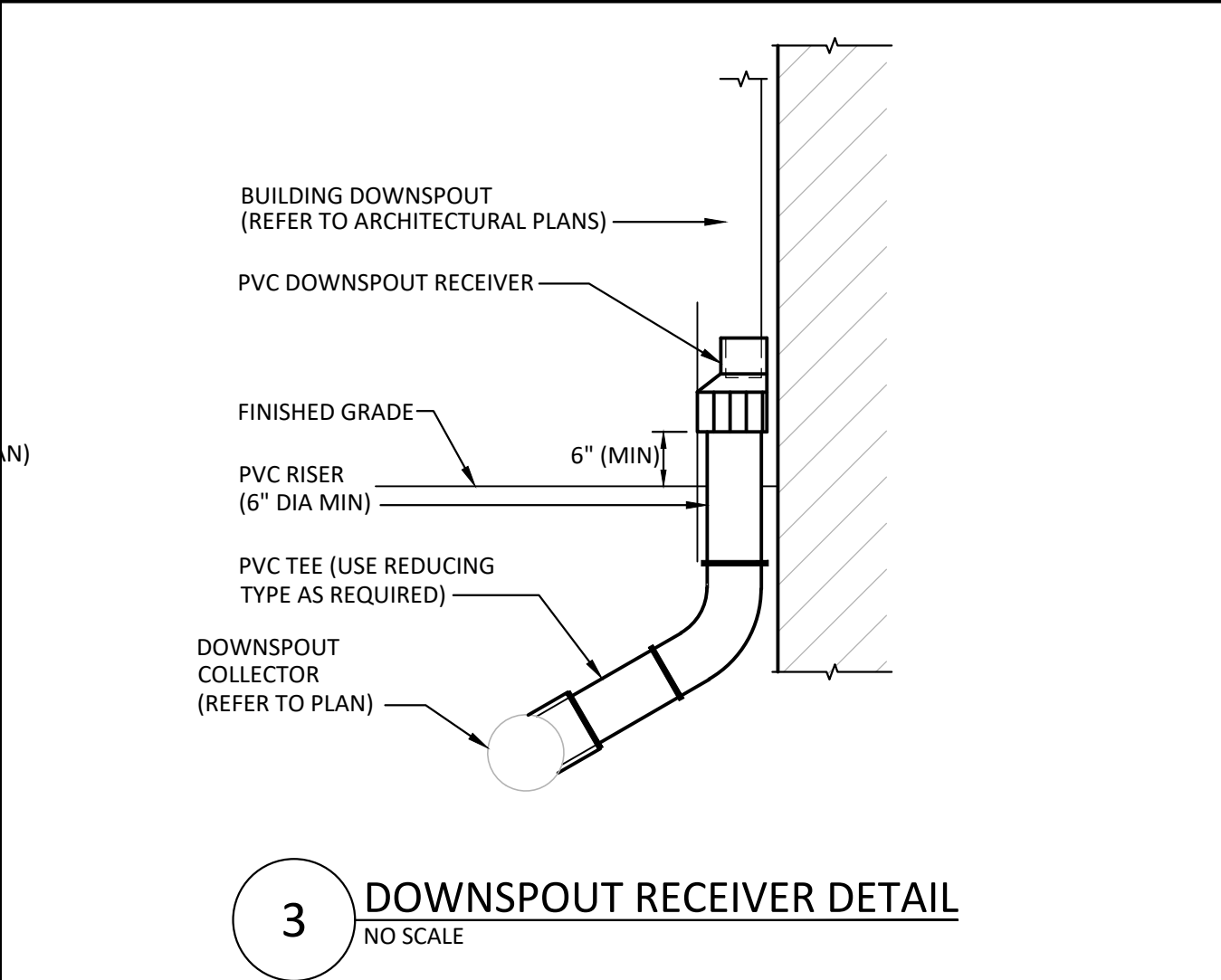
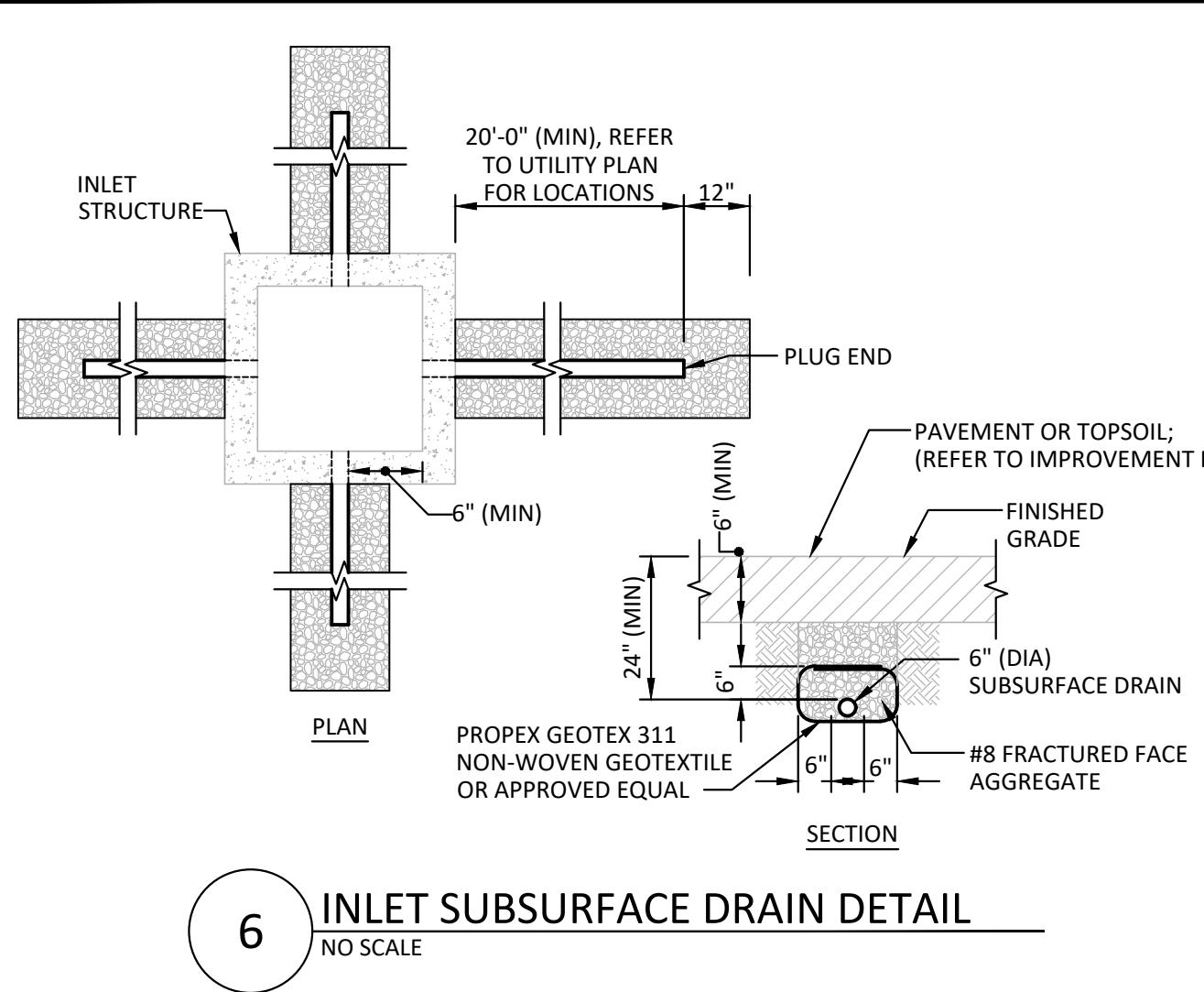
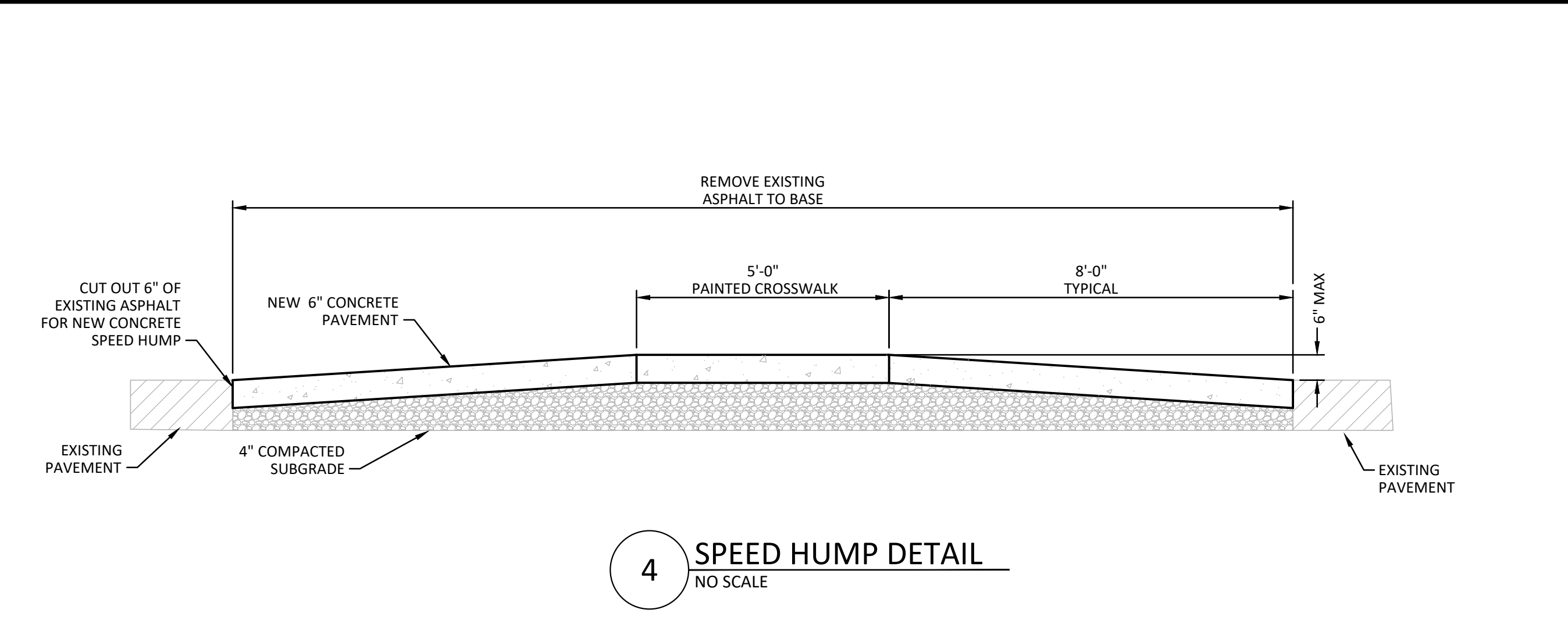


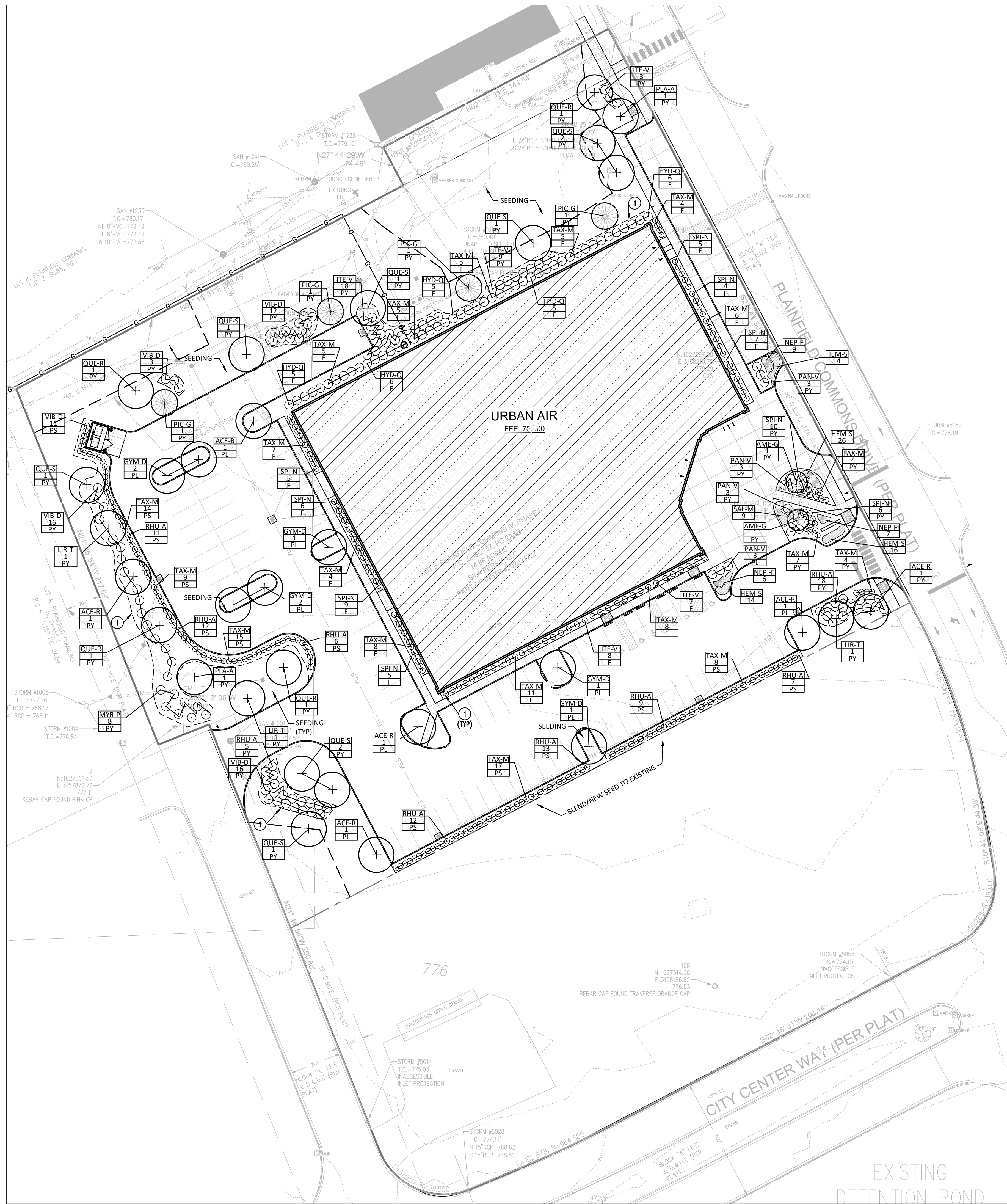
Andrew D. Sumner

SITE IMPROVEMENT DETAILS

SCALE: SCALE NOTED
 DATE: NOV 18, 2022
 PROJECT #: 22JPS075
 DRAWN: CLM
 COORD: RAB
 APPROVED: ADS

C511





PLANT LIST

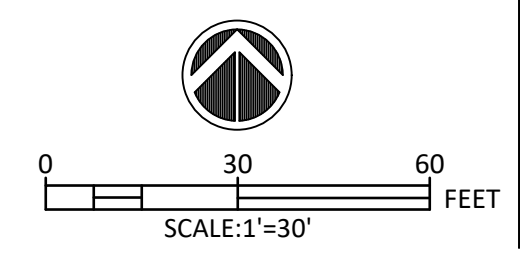
COUNT	MARK	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
SHADE TREES					
6	ACE-R	ACER RUBRUM 'FRANKSRED'	RED SUNSET MAPLE	2 1/2"-3" CAL.	B&B
7	GYM-T	GYMNOCLADUS DIOICUS 'ESPRESSO'	ESPRESSO KENTUCKY COFFEE TREE	2 1/2"-3" CAL.	B&B
3	LIR-T	LIRIODENDRON TULIPIFERA	TULIP TREE	2 1/2"-3" CAL.	B&B
2	PLA-A	PLATANUS x ACERIFOLIA 'BLOODGOOD'	BLOODGOOD LONDON PLANETREE	2 1/2"-3" CAL.	B&B
4	QUE-R	QUERCUS RUBRA	RED OAK	2 1/2"-3" CAL.	B&B
9	QUE-S	QUERCUS SHUMARDII	SHUMARD OAK	2 1/2"-3" CAL.	B&B
ORNAMENTAL TREES					
2	AME-G	AMELANCHIER x GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	8' HEIGHT	MULTI-STEM, B&B
EVERGREEN TREE					
4	PIC-G	PICEA GLAUCA 'DENSATA'	BLACK HILLS SPRUCE	8' HEIGHT	B&B
EVERGREEN SHRUBS					
144	TAX-M	TAXUS x MEDIA 'DENSIFORMIS'	DENSE SPREADING YEW	18"-24"	3' O.C.
SHRUBS					
27	HYD-Q	HYDRANGEA QUERCIFOLIA 'RUBY SLIPPERS'	OAKLEAF HYDRANGEA 'RUBY SLIPPERS'	30"-36"	3' O.C.
46	ITE-V	ITEA VIRGINICA 'SPRICH'	LITTLE HENRY SWEET SPIRE	18"-24"	3' O.C.
93	RHU-A	RHUS AROMATICA 'GRO-LOW'	GRO-LOW SUMAC	18"-24"	3' O.C.
57	SPI-N	SPIRAEA NIPPONICA 'SNOWMOUND'	SNOWMOUND SPIREA	18"-24"	3' O.C.
58	VIB-D	VIBURNUM DENTATUM 'SYNNESTVEDT'	CHICAGO LUSTRE VIBURNUM	24"-30"	3' O.C.
8	MYR-P	MYRICA PENNSYLVANICA 'MORTON'	SILVER SPRITE BAYBERRY	30"-36"	3' O.C.
		MYRICA PENNSYLVANICA 'MORTON MALE'	MALE SILVER SPRITE BAYBERRY	30"-36"	PROVIDE ONE MALE FOR EVERY 5 FEMALES
GRASSES					
15	PAN-V	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	#5 CONT.	5' O.C.
PERENNIALS					
70	HEM-S	HEMEROCALLIS 'STELLA D'ORO'	STELLA D'ORO DAYLILY	#1 CONT.	2' O.C.
22	NEP-F	NEPETA FAASSENII 'WALKERS LOW'	WALKER'S LOW CATMINT	#1 CONT.	2' O.C.
9	SAL-M	SALVIA 'MAINACHT'	MAY NIGHT SALVIA	#1 CONT.	2' O.C.

LANDSCAPE ORDINANCE CHART

ORDINANCE SECTION	DESCRIPTION	MEASUREMENT	PLANTINGS REQUIRED	PLANTINGS PROVIDED
4.7-B	FRONTAGE / FRONT YARD ANY COMBINATION OF PLANTS SELECTED FROM THE PLANT CATEGORIES LISTED IN TABLE 4.7-C WHICH EQUALS OR EXCEEDS A PLANT UNIT VALUE OF 2.0 FOR EACH ONE-HUNDRED (100) LINEAL FEET.	549 LF	8 TREES 65 SHRUBS	8 TREES 66 SHRUBS
4.7-B	WEST SIDE YARD ANY COMBINATION OF PLANTS SELECTED FROM THE PLANT CATEGORIES LISTED IN TABLE 4.7-C WHICH EQUALS OR EXCEEDS A PLANT UNIT VALUE OF 2.0 FOR EACH ONE-HUNDRED (100) LINEAL FEET.	539 LF	11 TREES 54 SHRUBS	11 TREES 54 SHRUBS
4.7-B	REAR YARD ANY COMBINATION OF PLANTS SELECTED FROM THE PLANT CATEGORIES LISTED IN TABLE 4.7-C WHICH EQUALS OR EXCEEDS A PLANT UNIT VALUE OF 2.0 FOR EACH ONE-HUNDRED (100) LINEAL FEET.	417 LF	9 TREES 42 SHRUBS	9 TREES 42 SHRUBS
4.7-C (2)	PERIMETER LANDSCAPING OF PARKING LOTS IN ADDITION TO LANDSCAPING PROVIDED IN REQUIRED YARDS, A COMPACT HEDGE ROW LOCATED BETWEEN THE FRONT YARD OR A BUFFERYARD AND THE EDGE OF THE PARKING AREA PLANTED THREE FEET ON CENTER AND BETWEEN 24 AND 30 INCHES IN HEIGHT AT THE TIME OF PLANTING	N/A	N/A	N/A
4.7-D	INTERIOR PARKING LOT LANDSCAPING INCLUDE AT LEAST ONE INTERIOR LANDSCAPE ISLAND MEASURING EIGHT FEET BY EIGHTEEN FEET MINIMUM FOR EVERY FIFTEEN PARKING SPACES. EACH ISLAND SHALL CONTAIN AT LEAST ONE TREE.	95 SPACES = 7 ISLANDS	7 ISLANDS	8 ISLANDS
4.7-D	FOUNDATION PLANTING FOUNDATION PLANTING AREAS SHALL BE LANDSCAPED WITH GRASS AND SHRUBBERY, TREES OR HEDGE, OR IN COMBINATION WITH OTHER SUITABLE GROUND COVER MATERIALS AND MAINTAINED AS A FOUNDATION PLANTING STRIP IN COMPLIANCE WITH THE REQUIREMENTS FOR A LEVEL 1 PLANTINGS AS SET FORTH IN TABLE 4.7-B.	705 LF	152 SHRUBS	152 SHRUBS

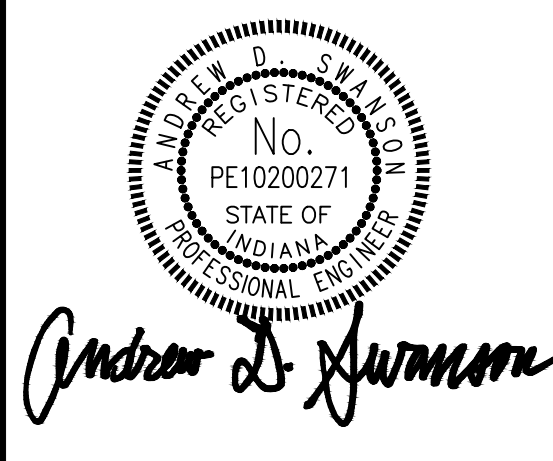
- #### GENERAL NOTES
- ALL DISTURBED LAWN AREAS TO BE SEEDDED UNLESS OTHERWISE NOTED.
 - ALL LANDSCAPE AND LAWN AREAS TO BE IRRIGATED WITH FULL COVERAGE IRRIGATION. IRRIGATION DRAWINGS BY OTHERS.
- #### PLAN NOTES
- SPADE EDGE.

SEE SHEET C001 FOR GENERAL NOTES.



CONSTRUCTION DOCUMENTS

NUMBER	DATE	DESCRIPTION
1	11-18-22	TAC SUBMITTAL
2	12-08-22	TAC RESUBMITTAL
3	12-15-22	TAC RESUBMITTAL
4	02-23-23	TAC RESUBMITTAL
5	03-28-23	TAC RESUBMITTAL



SITE LANDSCAPE PLAN

SCALE: 1" = 30"
 DATE: NOV 18, 2022
 PROJECT #: 22JPSC75
 DRAWN: TPJ
 COORD: RAB
 APPROVED: RKF

C600

CONSTRUCTION DOCUMENTS

NUMBER	DATE	DESCRIPTION
1	11-18-22	TAC SUBMITTAL
2	12-08-22	TAC RESUBMITTAL
3	12-15-22	TAC RESUBMITTAL
4	02-23-23	TAC RESUBMITTAL
5	03-28-23	TAC RESUBMITTAL

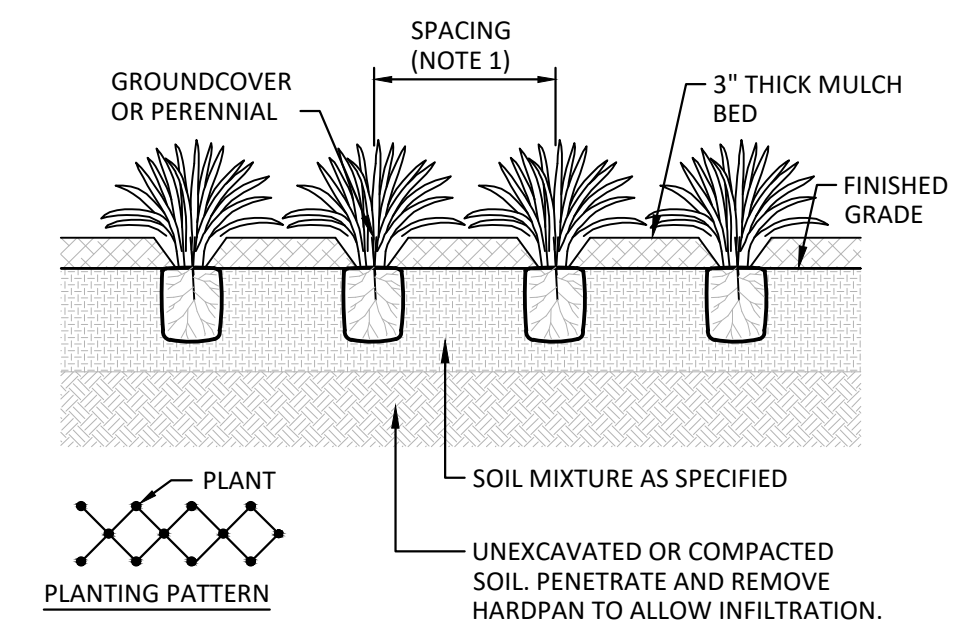


Andrew D. Johnson

SITE LANDSCAPE DETAILS

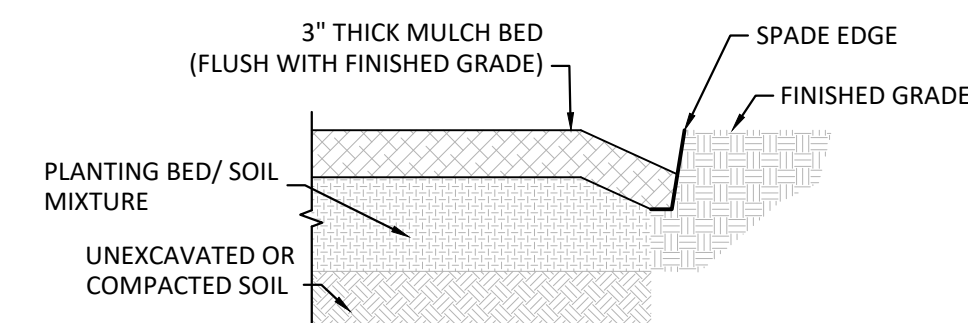
SCALE: 1" = 30"
 DATE: NOV 18, 2022
 PROJECT #: 22JPSCT75
 DRAWN: TPJ
 COORD: RAB
 APPROVED: RKF

C610



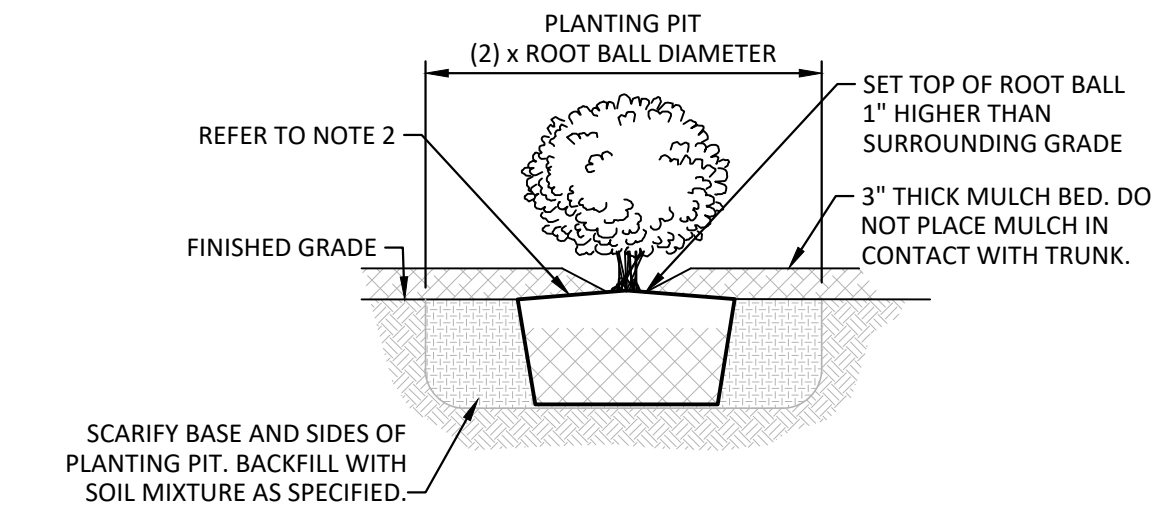
- NOTE:
 1. PLANT IN DIAGONAL PLANTING PATTERN. REFER TO PLANT LIST FOR SPACING REQUIREMENTS.
 2. REFER TO PLANT LIST FOR GROUND COVER OR PERENNIAL TYPE.

4 GROUND COVER / PERENNIAL PLANTING DETAIL
 NO SCALE



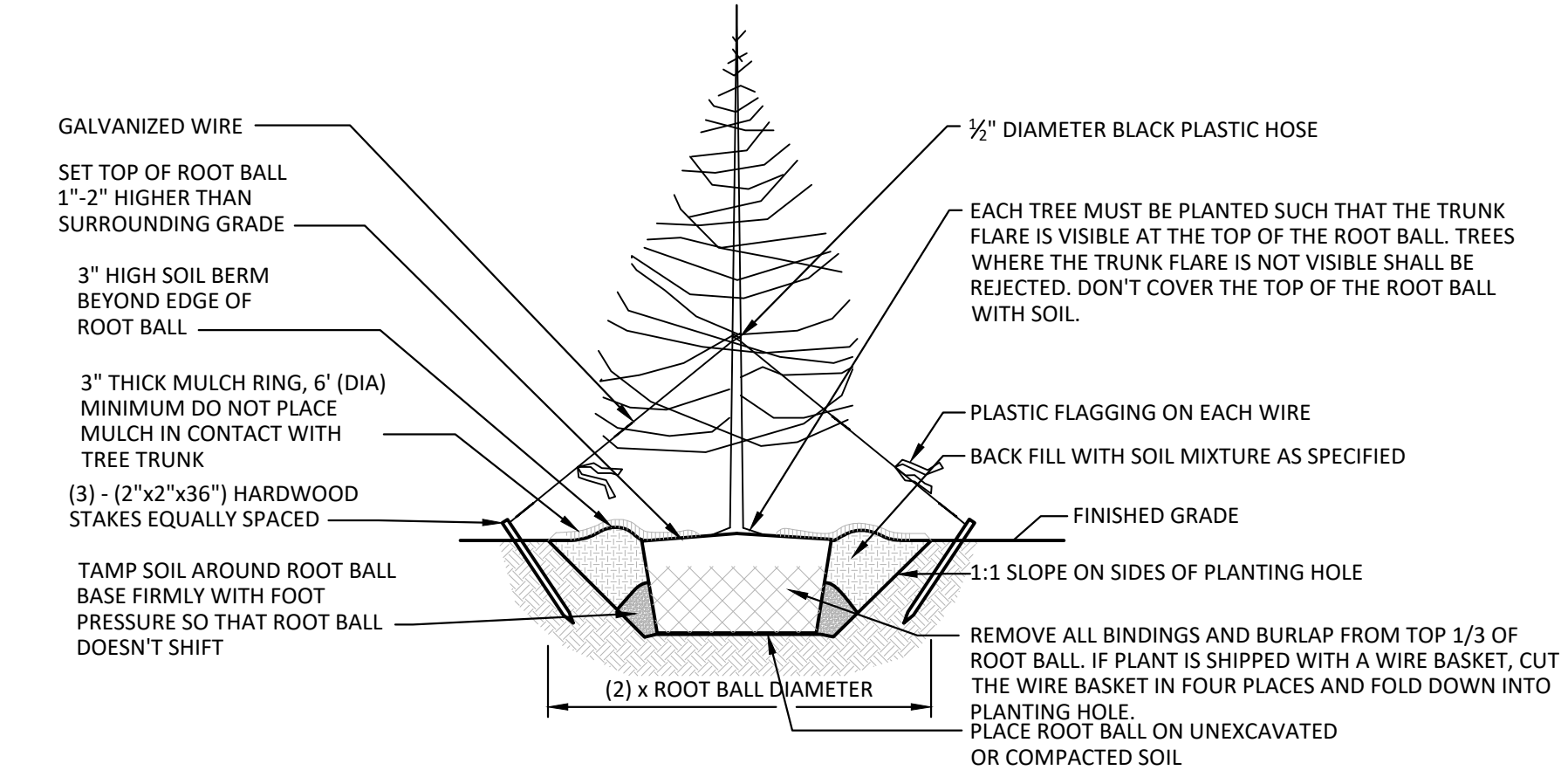
- NOTES:
 1. SPADE EDGE SHALL CREATE A CLEAN SEPARATION BETWEEN AREAS USING SMOOTH EVEN LINES AS INDICATED ON THE PLANS.
 2. REFER TO SPECIFICATIONS FOR MULCH AND SOIL MIXTURE REQUIREMENTS.
 3. CUT TO A MINIMUM DEPTH OF 4 INCHES.

5 SPADE EDGE DETAIL
 NO SCALE



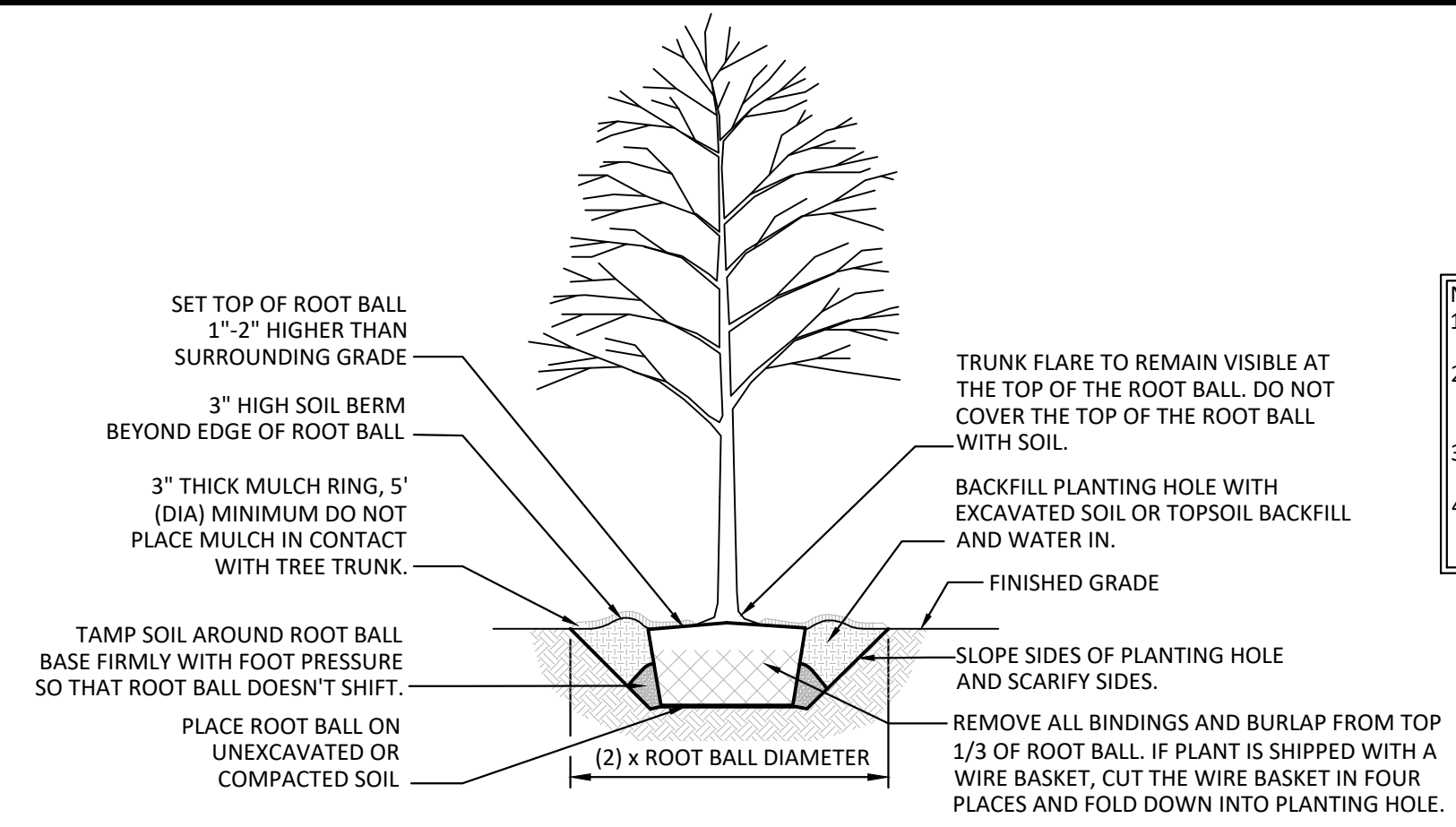
- NOTE:
 1. CONTRACTOR SHALL VERIFY THAT PLANTING PIT IS FREE DRAINING PER SPECIFICATION PRIOR TO PLANTING.
 2. REMOVE ALL BINDINGS AND BURLAP FROM THE TOP 1/3 OF ROOT BALL. PLACE ROOT BALL ON UNEXCAVATED OR COMPACTED SOIL.

3 SHRUB PLANTING DETAIL
 NO SCALE



- NOTES:
 1. CONTRACTOR SHALL VERIFY THAT PLANTING HOLE IS FREE DRAINING PER SPECIFICATION PRIOR TO PLANTING.
 2. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES.
 3. MARK THE NORTH SIDE OF THE TREE IN THE NURSERY, AND ROTATE TREE TO FACE NORTH.

2 EVERGREEN TREE PLANTING DETAIL
 NO SCALE



- NOTES:
 1. CONTRACTOR SHALL VERIFY THAT PLANTING HOLE IS FREE DRAINING PER SPECIFICATION PRIOR TO PLANTING.
 2. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. LEAVE MAIN LEADER INTACT.
 3. MARK THE NORTH SIDE OF THE TREE IN THE NURSERY, AND ROTATE TREE TO FACE NORTH.
 4. STAKE AND GUY TREE PER SPECIFICATIONS ONLY IF DEEMED NECESSARY BY LANDSCAPE ARCHITECT IN THE FIELD.

1 DECIDUOUS TREE PLANTING DETAIL
 NO SCALE

PLAINFIELD, INDIANA

TOWN STANDARDS

DIRECTIONS FOR USE

- 1.) Details Prepared By Outside Sources Shall Not Be Included In The Construction Drawings When Said Details Cover Work Which Is Covered By Town Standards.
- 2.) Individual Town Standards That Do Not Apply May Be Crossed-Out By Design Engineer Through The Placement Of A Single Large X Over The Detail. Minor Reference Notations May Be Placed Adjacent To Individual Standard Titles For Coordination However, The Standards Themselves Shall Not Be Modified In Any Way.
- 3.) Details Prepared By Outside Sources Covering Work Which Is Not Covered By Town Standards Are The Sole Responsibility Of The Design Engineer And Shall Be Placed On Sheets Other Than The Town Standards Sheets.
- 4.) Failure To Properly Execute The Above Directions For Use Will Not Effect The Applicability Nor The Enforcement Of The Town Standards.
- 5.) Town Of Plainfield Shall Be Contacted When Required By Calling 317-839-3490.

GENERAL NOTES

- 1.) Contractor Shall Verify The Exact Location Of All Existing Utilities At Least 24 Hours Prior To Any Construction Or Excavation. During Construction, All Utilities Shall Be Adequately Supported To Minimize Damage. The Contractor Shall Be Responsible For Repairing Or Replacing Damaged Utilities To The Satisfaction Of The Town Of Plainfield And The Owner Of The Affected Utility.
- 2.) Installation Of Or Provisions For The Installation Of All Underground Utilities (Including Service Laterals) To Be Placed Under Pavement Areas Shall Be Established Prior To The Construction Of The Pavement. The Town Reserves The Right To Require Trenchless Construction For Crossing Of Existing Streets.
- 3.) All Benchmarks And Elevations Shall Be U.S.C. & G.S. Datum.
- 4.) Wherever Proprietary Equipment Is Specified, All Proposals For Substitution Shall Be Submitted In Writing To The Plainfield DPW And Shall Be Subject To The Findings Of The Plainfield DPW.
- 5.) Whenever A Non-Parallel Trench Opening Encroaches Within 5' Of An Existing Street Or Whenever Centerline Of Water Main Is Within 3' Of An Existing Street, Flowable Fill Shall Be Used For Trench Backfill.
- 6.) Except For Water Main Construction, Whenever A Non-Parallel Trench Opening Encroaches Within 5' Of A Proposed Street, Private Drive Or Sidewalk, Granular Backfill If Testing Confirms Compaction. Coarse Aggregate No. 8, Or Flowable Fill Shall Be Used For Trench Backfill.
- 7.) For Water Main Parallel With Adjacent Pavement And Having A Centerline Of Pipe At Least 3' Behind Back-Of-Curb, Approved Backfill Material May Be Used For Trench Backfill. Whenever Centerline Of Water Main Encroaches Within 3' Of A Proposed Street, Private Drive Or Sidewalk, Coarse Aggregate No. 8, Or Flowable Fill Shall Be Used For Trench Backfill.
- 8.) Approved Excavated Material May Be Used For Backfill Outside Of Limits Specified Herein And Under Proposed Sidewalks Provided Sidewalks Are Constructed 6 Months After Backfilling Of Trench. In Order For Excavated Material To Be Approved For Backfill It Shall Be Free Of Organic Material, Rocks Larger Than 6 Inches, Frozen Material, Debris, Excessive Water, Or Other Unsuitable Material As Determined By Plainfield DPW.
- 9.) Black Foundry Sand Is NOT Approved For Use In The Town Of Plainfield.
- 10.) Whenever Granular Backfill Is Placed In A Trench, Contractor Shall Compact Material To A Minimum Of 95% Maximum Dry Density As Per AASHTO T99. The Contractor Shall Demonstrate That Compaction Is Achieved By Means Of In Place Density Tests Performed By An Independent Testing Firm. Testing Frequency Shall Be One Test Per Trench Or 1 Test Per 100 Linear Feet Of Trench, Whichever Is Greater.
- 11.) In Order To Mitigate The Impact Of Land Disturbing Activities On The Public, The Town Currently Allows Two Options. Option 1: Preparation, Implementation, & Maintenance Of A Lime Stabilization Plan For Building Area, Activity Area Adjacent To Building, Access Road(s), & Staging Area Utilizing A Minimum Of 4" Of Compacted Aggregate No. 53 Over A Minimum Of 8" Thickness Lime Subgrade Treatment. Option 2: Preparation, Implementation, & Maintenance Of A Sufficient Washbay Area. If Option 2 Is Deemed Insufficient At The Sole Discretion Of The Town Engineer, Option 1 Will Need To Be Implemented Prior To Any Other Construction Activity Proceeding At The Site.
- 12.) The Construction Of New Combined Sewers Within The Town Of Plainfield's Service Area Is Prohibited. New Construction That Is Tributary To An Existing Combined Sewer Shall Be Designed To Minimize Or Delay The Inflow Contribution To The Existing Combined Sewer. Where New Construction Is Served By Existing Combined Sewers, The Inflow/Clear Water Connection To The Existing Combined Sewer Shall Be Made Separate And Distinct From The Sanitary Waste Connection To Facilitate Disconnection Of The Former If A Separate Storm Sewer Subsequently Becomes Available.
- 13.) AS-BUILT DRAWING Plans In DWG Format In AutoCAD File Version 2004 Or Higher And GIS Shapefiles Shall Be Submitted. AutoCAD File Shall Be In Horizontal Datum NAD83 Indiana State Plane West And Vertical Datum NGVD 1988. GPS Collected Coordinates Shall Depict Actual Horizontal And Vertical Locations Of Utility Assets Such As, But Not Limited To: Manholes, System Valves, Hydrants, Blow-Offs, Air Release Valves, Master Meters, Cleanouts, Risers, Pump Stations/Wet Wells And BMPs.

Town Standards Apply To Public Property & Private Property.

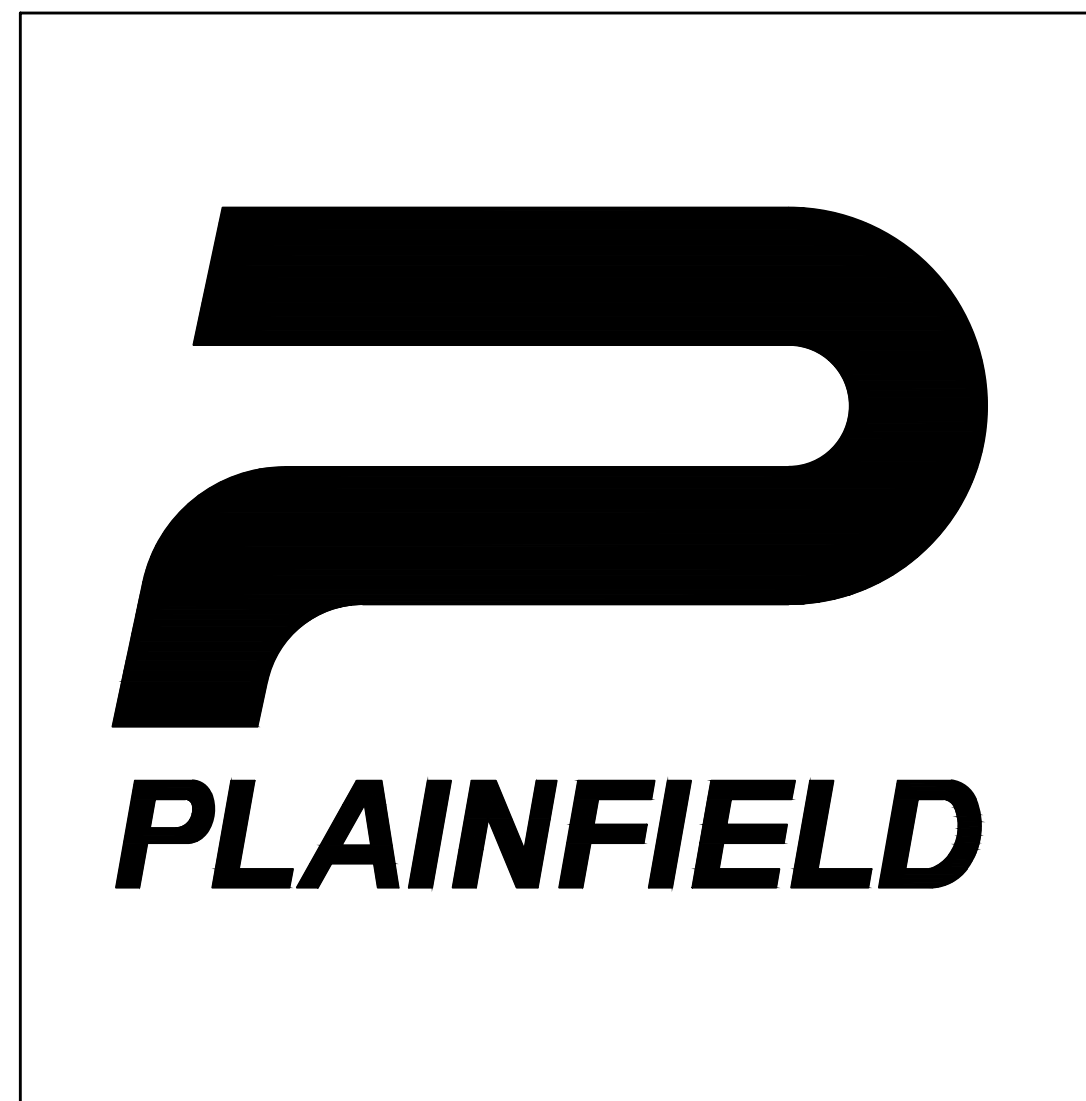
Developed In Accordance With Subdivision Control Ordinance & Zoning Ordinance.

The Entire Set Of Full Size Town Standards Shall Be Attached To The Construction Drawings And Shall Be Considered Part Thereto.

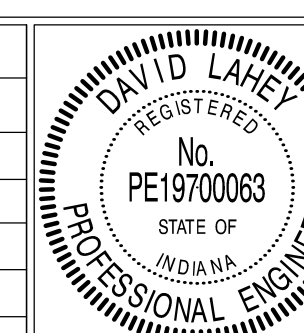
DATE OF CURRENT ISSUANCE: 03/01/2022

INDEX

SHEET NO.	DESCRIPTION
1	DIRECTIONS FOR USE, GENERAL NOTES
2	RIGHT-OF-WAY, UTILITY EASEMENT & UTILITY LOCATION GUIDELINES
3	PAVEMENT, CURB & SIDEWALK DETAILS & NOTES
4	ROADWAY (R) DEVELOPMENT STANDARDS
5	BUS SHELTER DETAILS AND MISCELLANEOUS DETAILS
6	MISCELLANEOUS DETAILS AND NOTES
7	GENERAL (G) DEVELOPMENT STANDARDS
8	STORM SEWER BEDDING DETAILS AND NOTES
9	STORM SEWER DETAILS AND NOTES
10	STORM DRAINAGE (D) DEVELOPMENT STANDARDS
11	WATER MAIN BEDDING DETAILS & NOTES
12	WATER MAIN DETAILS & NOTES
13	WATER (W) DEVELOPMENT STANDARDS
14	SANITARY SEWER BEDDING DETAILS AND NOTES
15	SANITARY SEWER DETAILS AND NOTES
16	SANITARY SEWER LIFT STATION STANDARDS & GUIDELINES
17	SANITARY SEWER (S) DEVELOPMENT STANDARDS
18	SANITARY SEWER (S) DEVELOPMENT STANDARDS
19-22	EROSION CONTROL MEASURES & EROSION CONTROL (E) DEVELOPMENT STANDARDS
23	LOW SPEED URBAN / SUBURBAN ROUNDABOUT DETAIL
24-25	STREET LIGHTING DETAILS
26	TRAFFIC SIGNAL DETAILS
27	WIRELESS DETECTION DETAILS



Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL	<i>[Signature]</i>	03/01/2022
DESIGN ENGINEER		DATE
APPROVED	<i>[Signature]</i>	03/01/2022
EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES		DATE
APPROVED	<i>[Signature]</i>	3/1/2022
DIRECTOR OF TRANSPORTATION		DATE

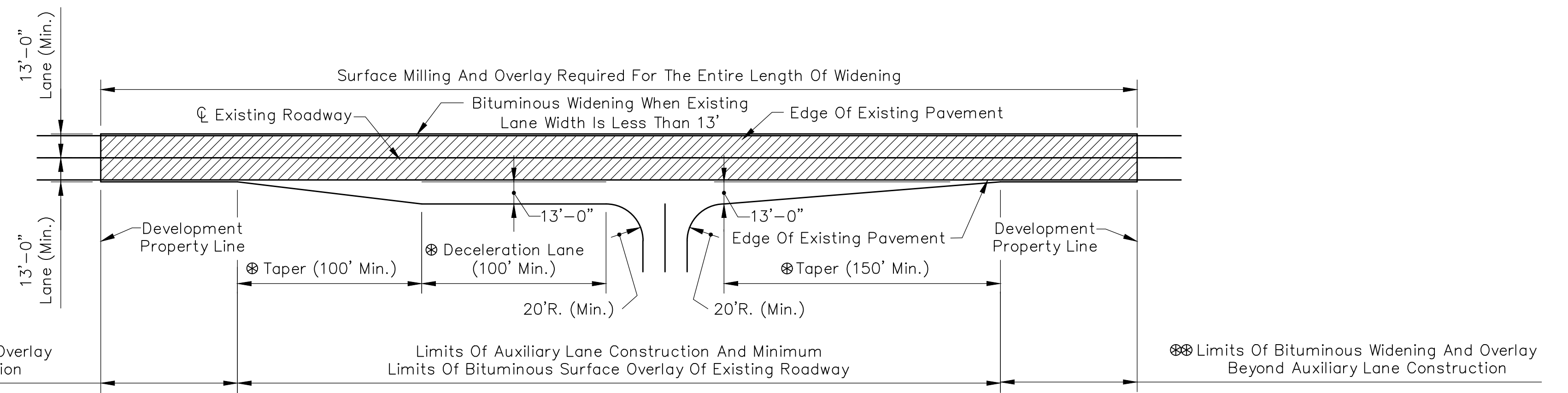
TOWN OF PLAINFIELD

DIRECTIONS FOR USE,
GENERAL NOTES

SHEET
01
OF
27

GENERAL NOTES

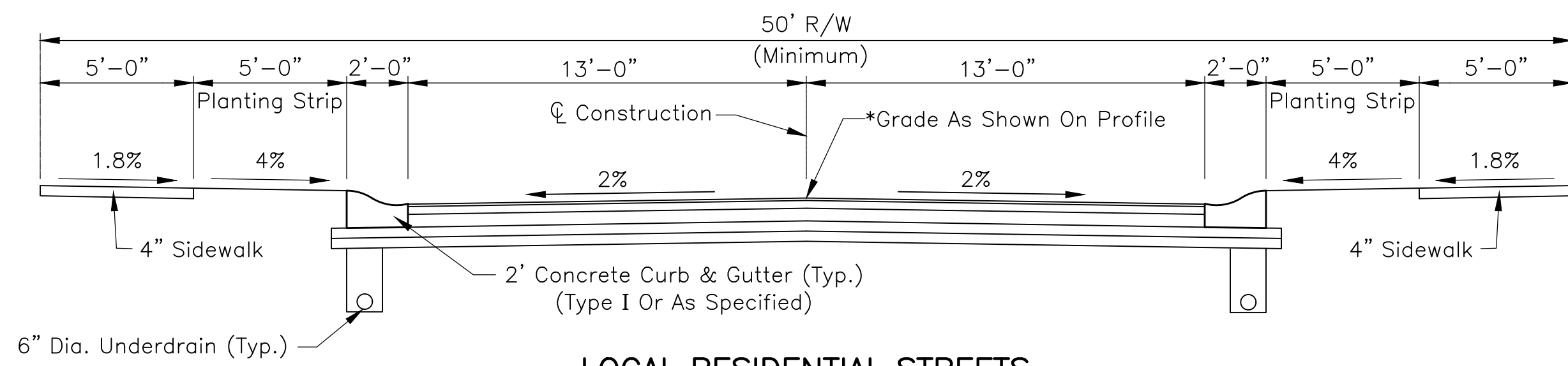
1. The Right-Of-Way Widths, Pavement Widths, And Easement Widths Indicated On This Sheet Are Minimum Distances Required By The Town Of Plainfield. Greater Widths May Be Provided. The Contractor Shall Review The Plat And The Plans To Confirm The Various Widths Indicated On This Sheet And Shall Report Any Discrepancy To The Town Engineer Prior To Proceeding With Construction.
2. The Location Of Proposed Utilities As Indicated Hereon Are Based Upon The Experience Of The Town Of Plainfield And Are So Indicated To Ensure The Orderly Development Of The Land. Strict Adherence To The Indicated Location Is Required. Requests To Change The Location Of The Proposed Utilities Shall Be Submitted In Writing To The Town Engineer And The Superintendent Of Public Works. Utilities Not Meeting These Requirements Shall Be Removed And Replaced As Directed By The Town Engineer.
3. Arterial Streets And Divided Arterial Streets Are To Be Coordinated With The Town Engineer And Shall Be In Accordance With The Minimum Design Standards Outlined By The Subdivision Control Ordinance.
4. Local Residential Streets Require Only Stop Bars And Crosswalk Marking. Markings Shall Be Thermoplastic In Accordance With The Most Recent INDOT Standard Specification. Refer To Such Drawings Covering Pavement Markings, Street Signs, And Traffic Control Signs. A Plan Of Proposed Pavement Markings Shall Be Submitted To The Plainfield DPW For Approval. For Streets Requiring Resurfacing With Surface Overlay, Mill 8 Feet Wide Along Sides Of Street To A Depth Of 2". Overlay Terminations Shall Also Be Milled 2".
5. Vertical Curves Of A Minimum Length Of 20 Feet Shall Be Provided At All Grade Changes In Accordance With The Town Of Plainfield Subdivision Control Ordinance. For Phased Development, The Vertical Curve Shall Be Constructed To The EVC.
6. Provide A Minimum 0.5% Grade At Curb Flowlines.
7. Selection Of Combination Of Sidepath, Sidewalk, And Planting Strip Widths Shall Be Selected And Approved By The Town Of Plainfield.



NOTES:
 * Taper and Deceleration Lane Length Shall Be Designed Based Upon Design Speed Of Existing Roadway
 ** Bituminous Widening And Overlay Required When Development's Frontage Extends Beyond The Limits Of The Auxiliary Lane Construction

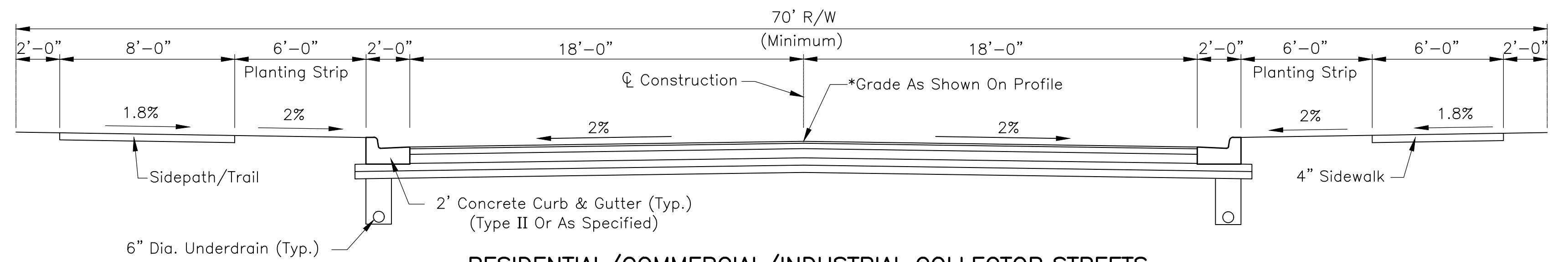
AUXILIARY LANE CONSTRUCTION

Scale: 1/4" = 1'-0"



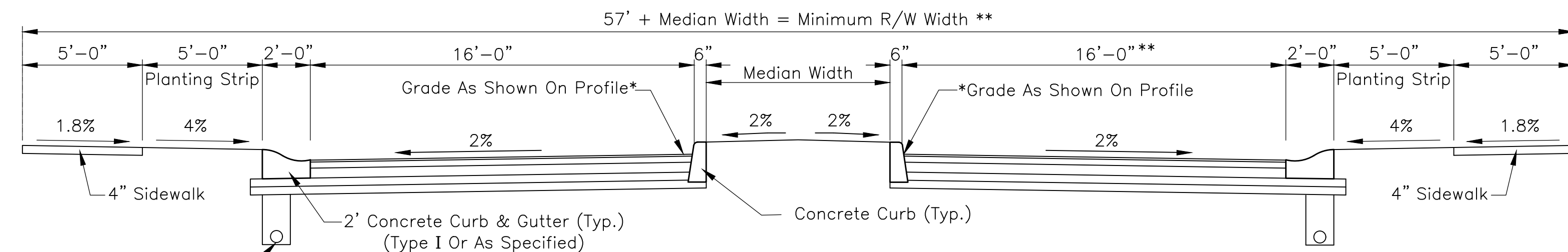
LOCAL RESIDENTIAL STREETS

Scale: 1/4" = 1'-0"



RESIDENTIAL/COMMERCIAL/INDUSTRIAL COLLECTOR STREETS

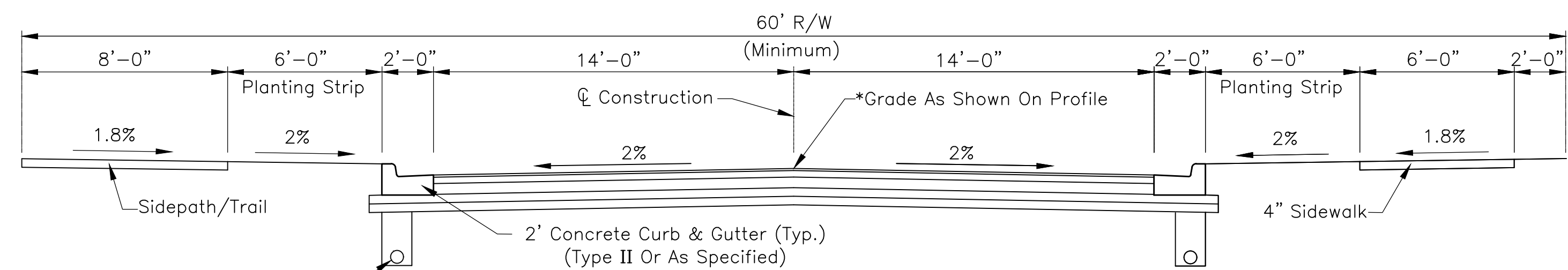
Scale: 1/4" = 1'-0"



LOCAL RESIDENTIAL STREETS ENTRY MEDIAN DETAIL

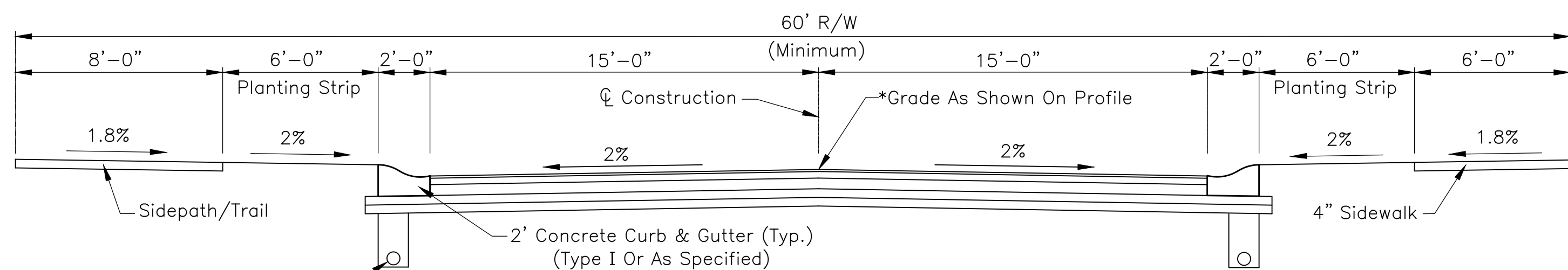
Scale: 1/4" = 1'-0"

** Dual Exit Lane Requires 24'-0" And 8'-0" Additional R/W



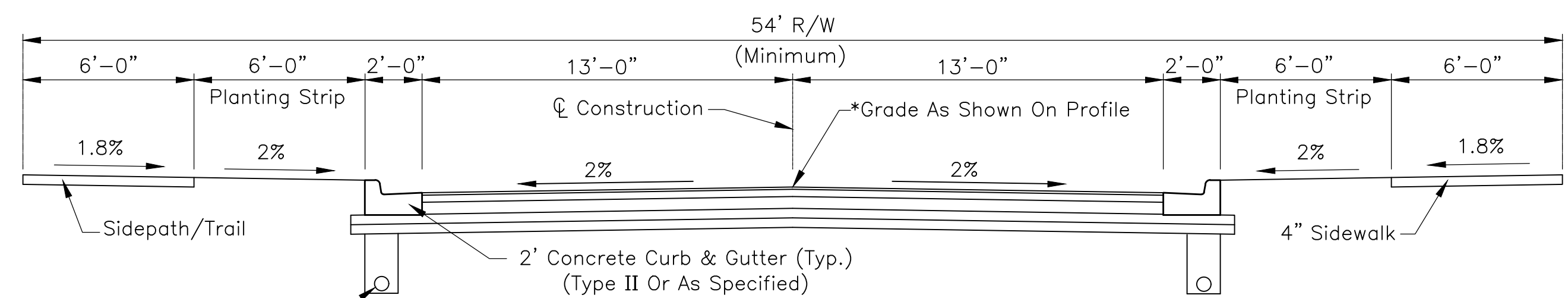
LOCAL INDUSTRIAL STREETS

Scale: 1/4" = 1'-0"



LOCAL RESIDENTIAL COLLECTOR STREETS

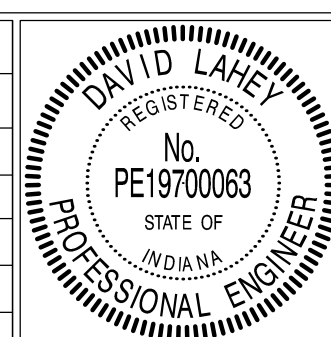
Scale: 1/4" = 1'-0"



LOCAL COMMERCIAL STREETS

Scale: 1/4" = 1'-0"

REVISIONS		
Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL: *David Laney*, DESIGN ENGINEER, 03/10/2022
 APPROVED: *David Laney*, EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES, 03/10/2022
 APPROVED: *Steve Smith*, DIRECTOR OF TRANSPORTATION, 3/1/2022

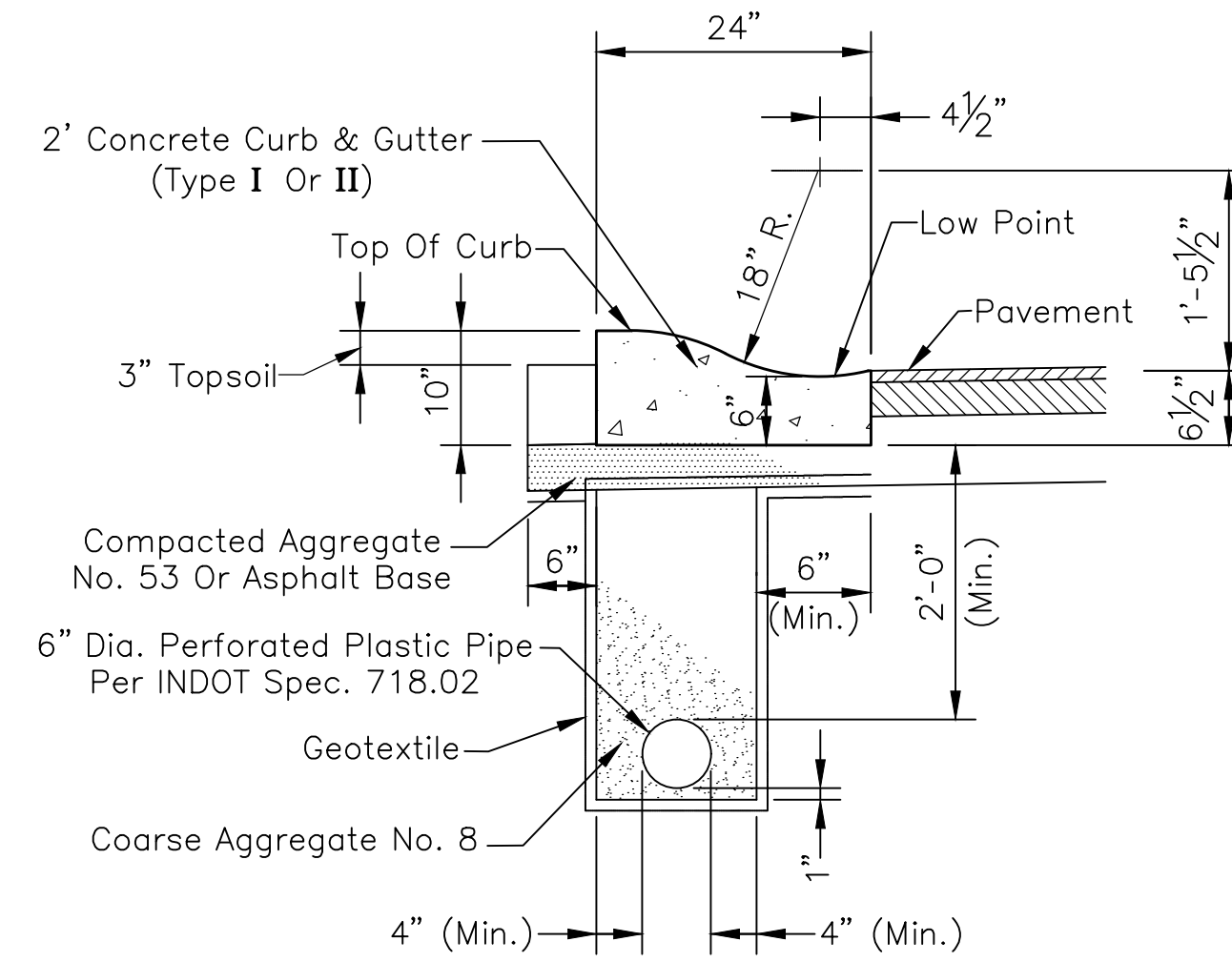
TOWN OF PLAINFIELD
 RIGHT-OF-WAY,
 UTILITY EASEMENT & UTILITY LOCATION
 GUIDELINES

SHEET
 02
 OF
 27

PAVEMENT CONSTRUCTION

- Subbase And Subgrade Shall Be At Least 100 Percent Of The Maximum Dry Density In Accordance With AASHTO T99. Compaction Testing Shall Be At The Contractor's Expense And Shall Be Performed By An Independent Laboratory. Test Results Shall Be Submitted To The Superintendent Of Public Works Prior To Placing Any Material On The Subbase Subgrade. One In-Place Density Test Shall Be Completed For Each Lift For Every 400 Linear Feet Of Traffic Lanes.
- For Local Residential Streets With Concrete Pavement, Four Inch Compacted Aggregate No. 53 Is Optional If Adequate Subgrade Is Present. Adequacy Of Subgrade Shall Be Determined Solely By The Town Based On A Contractor Performed Proof-Roll With A Fully Loaded Tri Axle Dump Truck.
- Hot Poured Joint Adhesive Shall Be Applied To Longitudinal Joints Constructed Between Two Adjacent HMA Surface And Intermediate Courses In Accordance With The Most Recent INDOT Standard Specifications.

Liquid Asphalt Sealant Shall Be Applied To Longitudinal Joints A Minimum Width Of 24 In., Centered On The Joint Line In Accordance With The Most Recent INDOT Standard Specifications.
- Wherever Rigid Pavement Is To Be Used, The Contractor Shall Submit A Detailed Paving Plan To The Town Engineer. The Paving Plan Shall Show The Location And Type Of Jointing To Be Used In The Construction. The Location And Type Of Jointing Shall Meet The Requirements Of The Most Recent INDOT Standard Details.
- Upon Approval Of The Mix Design By The Town Engineer, Chemical Modification Of Soils Per INDOT Standard Specifications Section 215, Shall Be Performed To A Minimum Depth Of 14 Inches. Following Soil Modification, Compaction Shall Be Performed Until The Modified Layer Has A Density Not Less Than 100% Of The Maximum Dry Density Or The Zone Below The Modified Layer Has A Density Not Less Than 95% Of The Maximum Dry Density. Maximum Dry Densities Shall Be Determined In Accordance With AASHTO T99. The Mix Design Shall Be Determined In Accordance With INDOT Design Procedures For Soil Modification Or Stabilization. The Proposed Design And Construction Procedure Shall Be Submitted To The Town Engineer. Unsatisfactory Soil Modifications, As Determined By The Town Engineer, May Require An Increase In Depth Of The Aggregate Base Or Binder. Tensar TX160 Geogrid May Be Used In Lieu Of, Or In Conjunction With, The Chemical Modification Of Soils, As Directed By The Town Engineer. In Conjunction With The Usage Of Tensar TriAx Geogrid, A Modified Pavement Section May Be Provided By The Town Engineer.

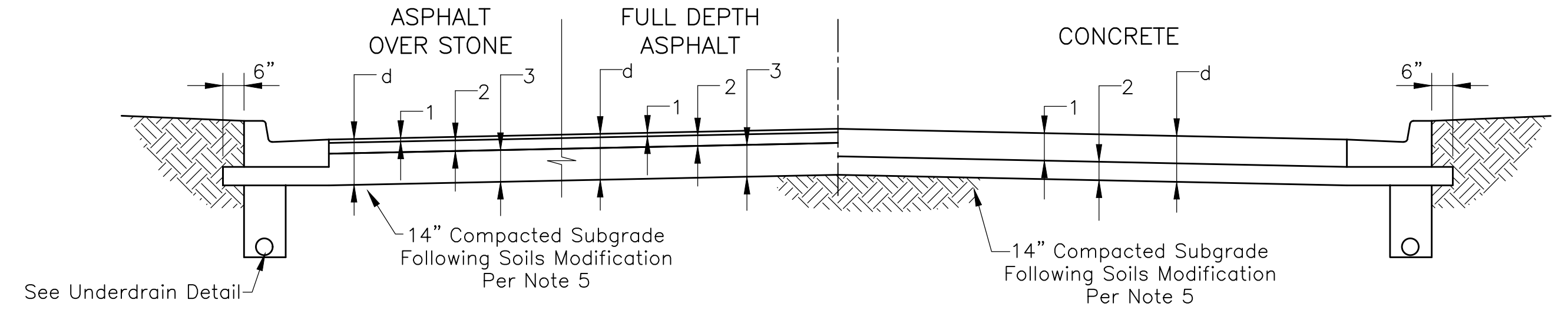


TYPE I

See Development Standards For Depressed Concrete Roll Curb If Desired At A Private Drive That Intersects A Public Road With Type I Curb.

2' CONCRETE ROLL CURB & GUTTER

Scale: 3/4"=1'-0"



LOCAL RESIDENTIAL STREETS

- d=11"
- 165 lbs/sys, QC/QA-HMA, 2, 64, Surface, 9.5mm
 - 385 lbs/sys, QC/QA-HMA, 2, 64, Inter., 19.0mm
 - 6" Compacted Aggregate No. 53 (2 Lifts)

- d=10"
- 6", PCCP
 - 4" Compacted Aggregated No. 53 (See Note 2)

LOCAL RESIDENTIAL COLLECTOR AND LOCAL COMMERCIAL/INDUSTRIAL STREETS

- d=12"
- 220 lbs/sys, QC/QA-HMA, 2, 64, Surface, 12.5mm
 - 275 lbs/sys, QC/QA-HMA, 2, 64, Inter., 19.0mm
 - Over 385 lbs/sys, QC/QA-HMA, 2, 64, Base, 25.0mm
 - 4" Compacted Aggregate No. 53

- d=10"
- 220 lbs/sys, QC/QA-HMA, 2, 64, Surface, 12.5mm
 - 275 lbs/sys, QC/QA-HMA, 2, 64, Inter., 19.0mm
 - 275 lbs/sys, QC/QA-HMA, 2, 64, Base, 19.0mm
 - Over 330 lbs/sys, QC/QA-HMA, 2, 64, Base, 25.0mm
- d=11"
- 7", PCCP
 - 4" Compacted Aggregated No. 53

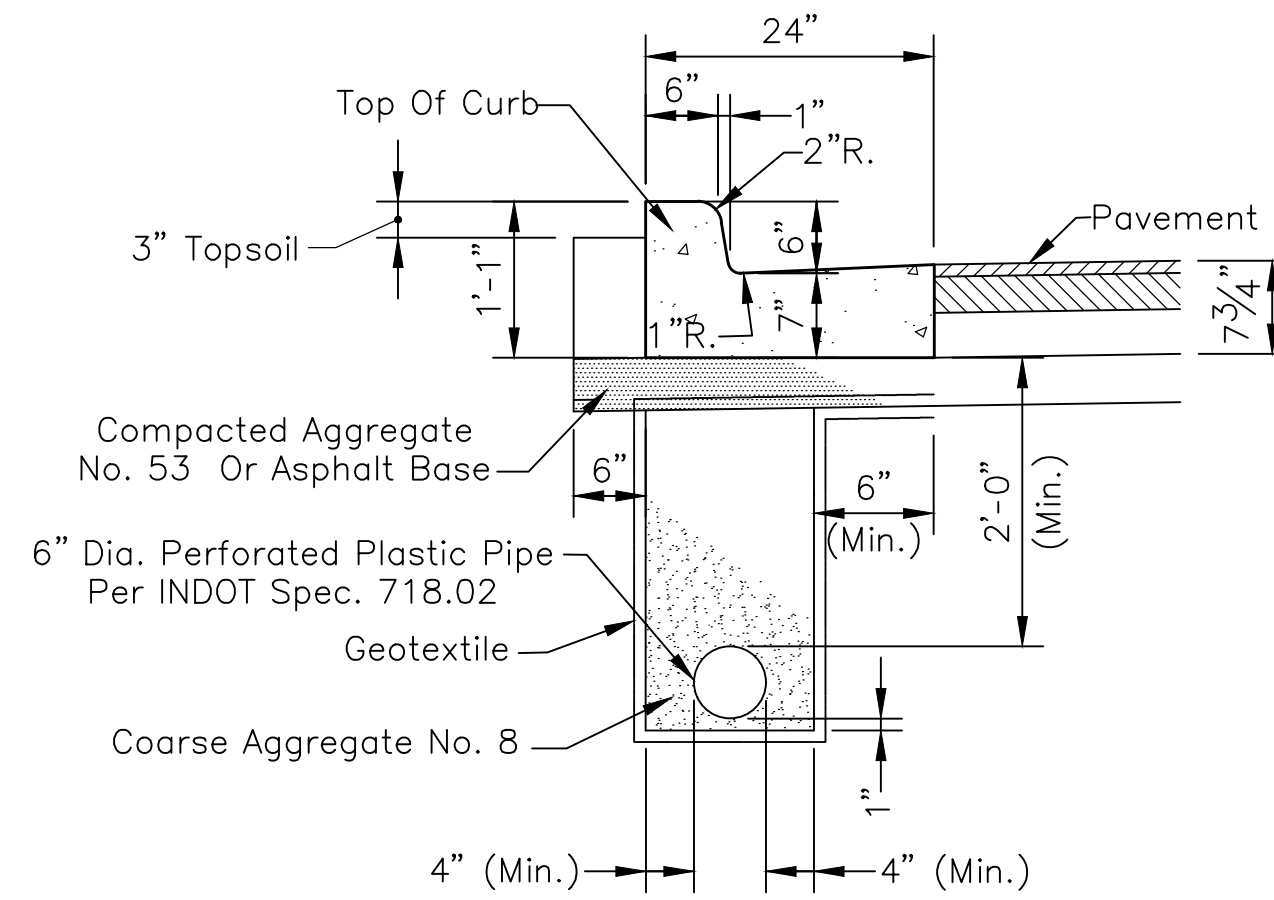
RESIDENTIAL/COMMERCIAL/INDUSTRIAL COLLECTOR AND SECONDARY ARTERIAL STREETS

- d=13"
- 220 lbs/sys, QC/QA-HMA, 3, 76, Surface, 12.5mm
 - 275 lbs/sys, QC/QA-HMA, 3, 64, Inter., 19.0mm
 - Over 385 lbs/sys, QC/QA-HMA, 3, 64, Base, 25.0mm
 - 5" Compacted Aggregate No. 53

- d=12"
- 220 lbs/sys, QC/QA-HMA, 3, 76, Surface, 12.5mm
 - 330 lbs/sys, QC/QA-HMA, 3, 64, Inter., 19.0mm
 - 330 lbs/sys, QC/QA-HMA, 3, 64, Base, 25.0mm
 - Over 440 lbs/sys, QC/QA-HMA, 3, 64, Base, 25.0mm
- d=11 1/2"
- 7.5", PCCP
 - 4" Compacted Aggregated No. 53

CURB RAMP CONSTRUCTION

- All Curb Ramps Shall Meet The Requirements Of The Americans With Disabilities Act, The Most Recent INDOT Standard Specifications And The Town Of Plainfield's Most Recent Standards. Curb Swipes Required For Handicap Ramps Shall Be Provided With Initial Curb Construction.
- Minimum Width Of Curb Ramp Shall Be 4 Feet, Not Including Flares. Maximum Slope Of Ramps Shall Be 8.33% (12:1). Handicap Ramps Are To Be Located As Shown On The Plans, Or As Directed By The Town Engineer Or Superintendent Of Public Works.
- Type E Ramps Shall Be Provided At The Center Line Of The Radius At All Corners Of Every Street Intersection Where There Is An Existing Or Proposed Sidewalk And Curb. In Case Of "T" Intersection, A Type C Ramp Shall Be Provided Adjacent To Each Corner Ramp. Type C Ramps Also Shall Be Provided At Walk Locations At Mid-Block In Hospital, Medical Center Or Athletic Stadium Vicinities. The Use Of Details Contrary To Those Shown Hereon Shall Require The Prior Written Approval Of The Town Engineer.
- Surface Texture Of The Ramp Shall Be That Obtained By A Coarse Brooming Transverse To The Slope Of The Ramp.
- Ramps Shall Be Provided Where The Driveway Curb Extends Across The Sidewalk.
- Care Shall Be Taken To Assure A Uniform Grade On All Ramps With No Grade Breaks.
- Drainage Structures Shall Not Be Placed In Line With The Ramps Except Where Existing Drainage Structures Are Being Utilized In The New Construction. Location Of The Ramps Shall Take Precedence Over Location Of Drainage Structures.
- The Normal Gutter Line Profile Shall Be Maintained Through The Area Of The Ramp.
- Expansion Joint For The Ramp Shall Be A Maximum 1/2" Wide. The Top Of The Joint Filler For All Ramp Types Shall Be Flush With Adjacent Concrete.
- Slope Of Ramp May Be Warped When Field Conditions Warrant And When Approved By The Town Engineer Or Superintendent Of Public Works.

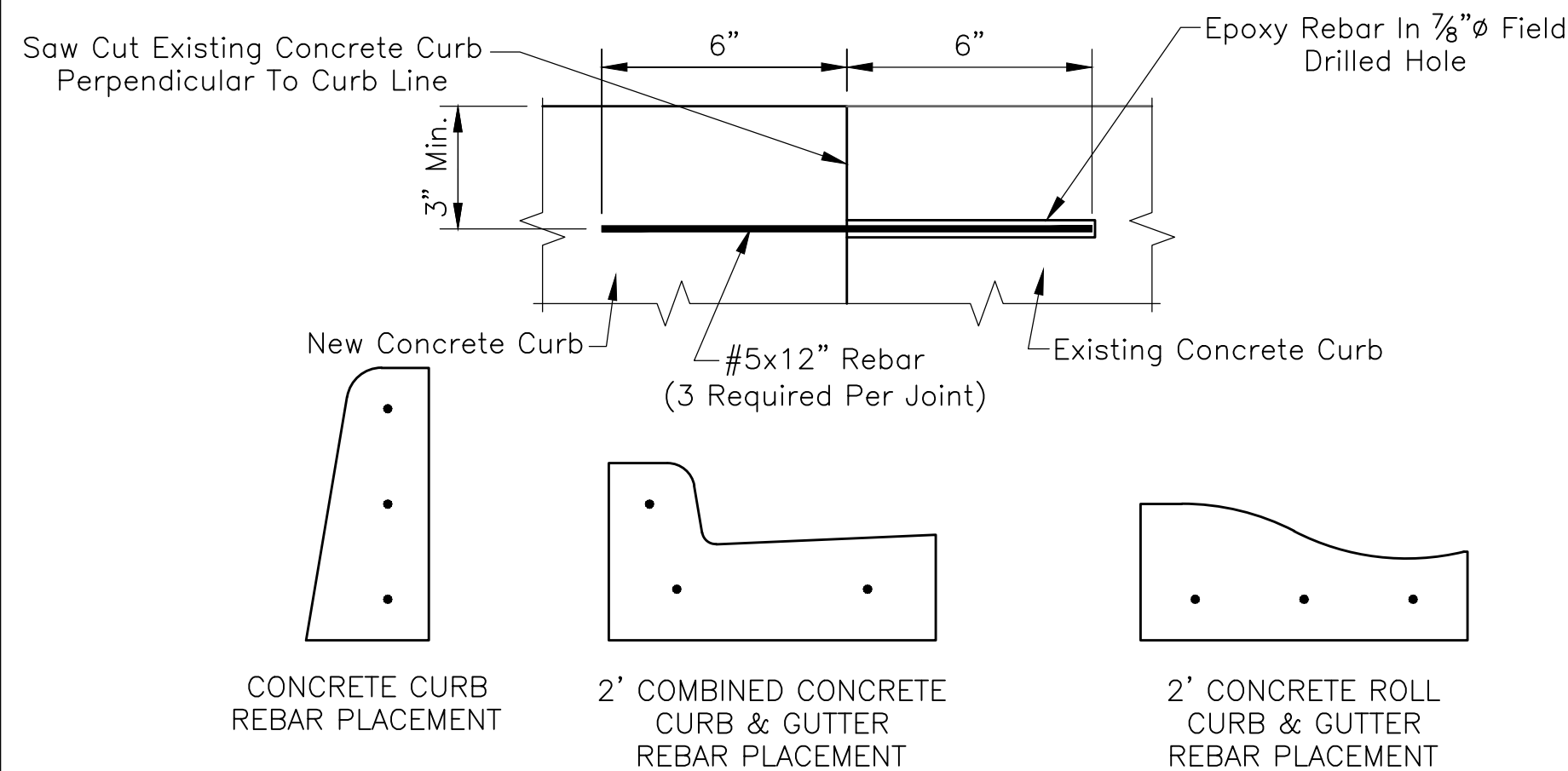


TYPE II

See Development Standards For Reinforced Concrete Gutter Which Is Required At All Private Drives That Intersect A Public Road With Type II Curb Or Similar.

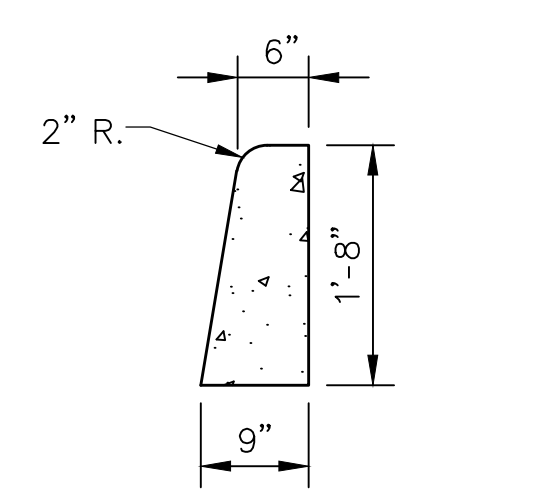
2' COMBINED CONCRETE CURB & GUTTER

Scale: 3/4"=1'-0"



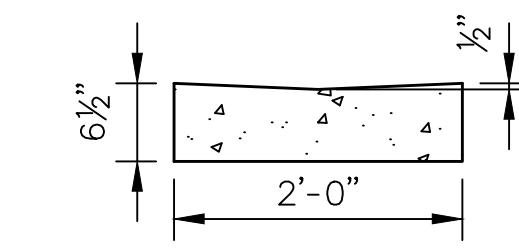
CONCRETE CURB REPLACEMENT CONNECTION DETAIL

Not To Scale



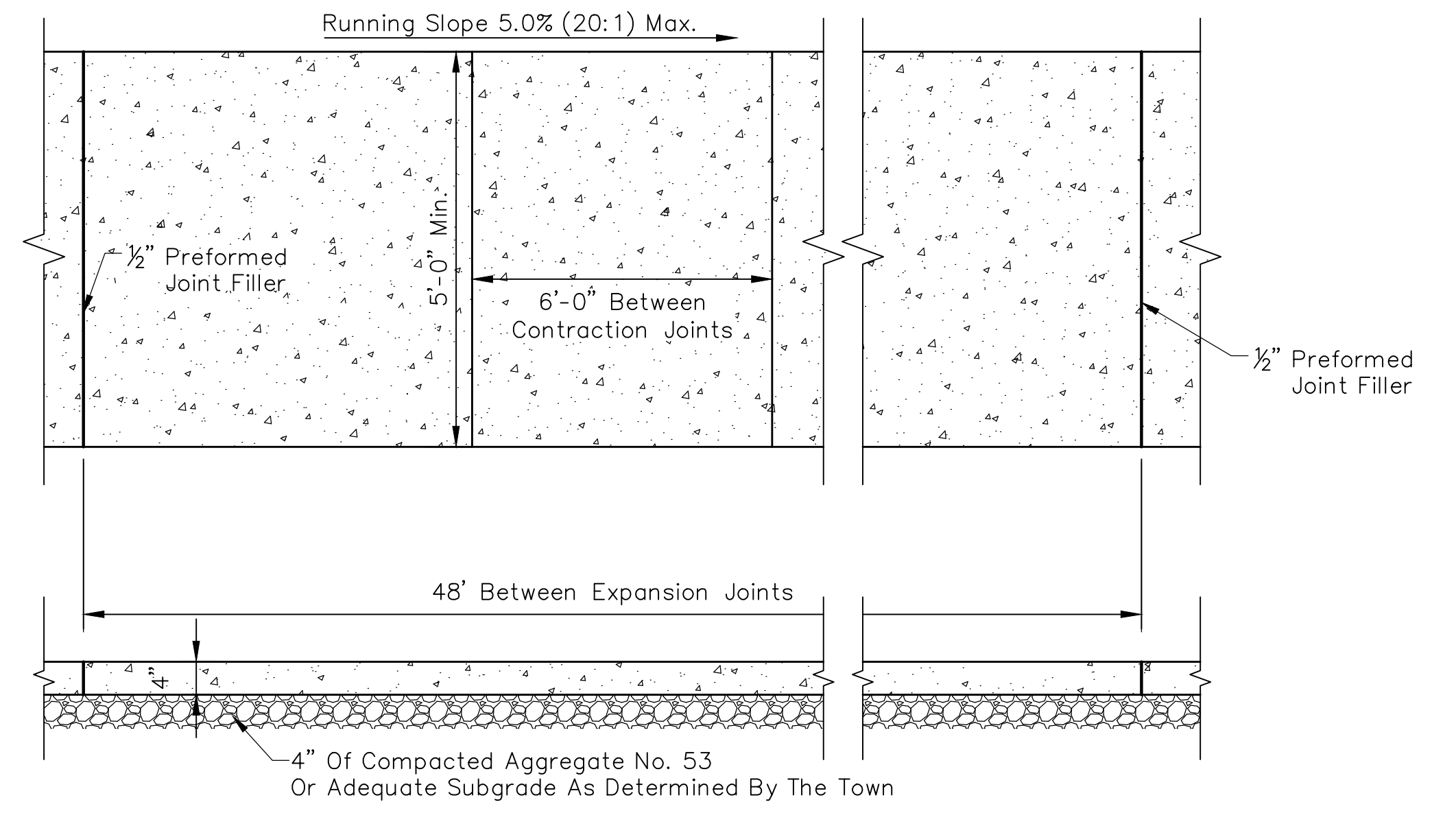
CONCRETE CURB DETAIL

Scale: 3/4"=1'-0"



SPECIAL CURB DETAIL

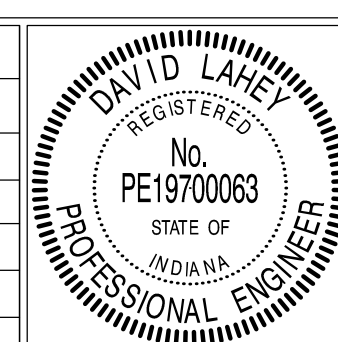
Scale: 3/4"=1'-0"



TYPICAL SIDEWALK DETAIL

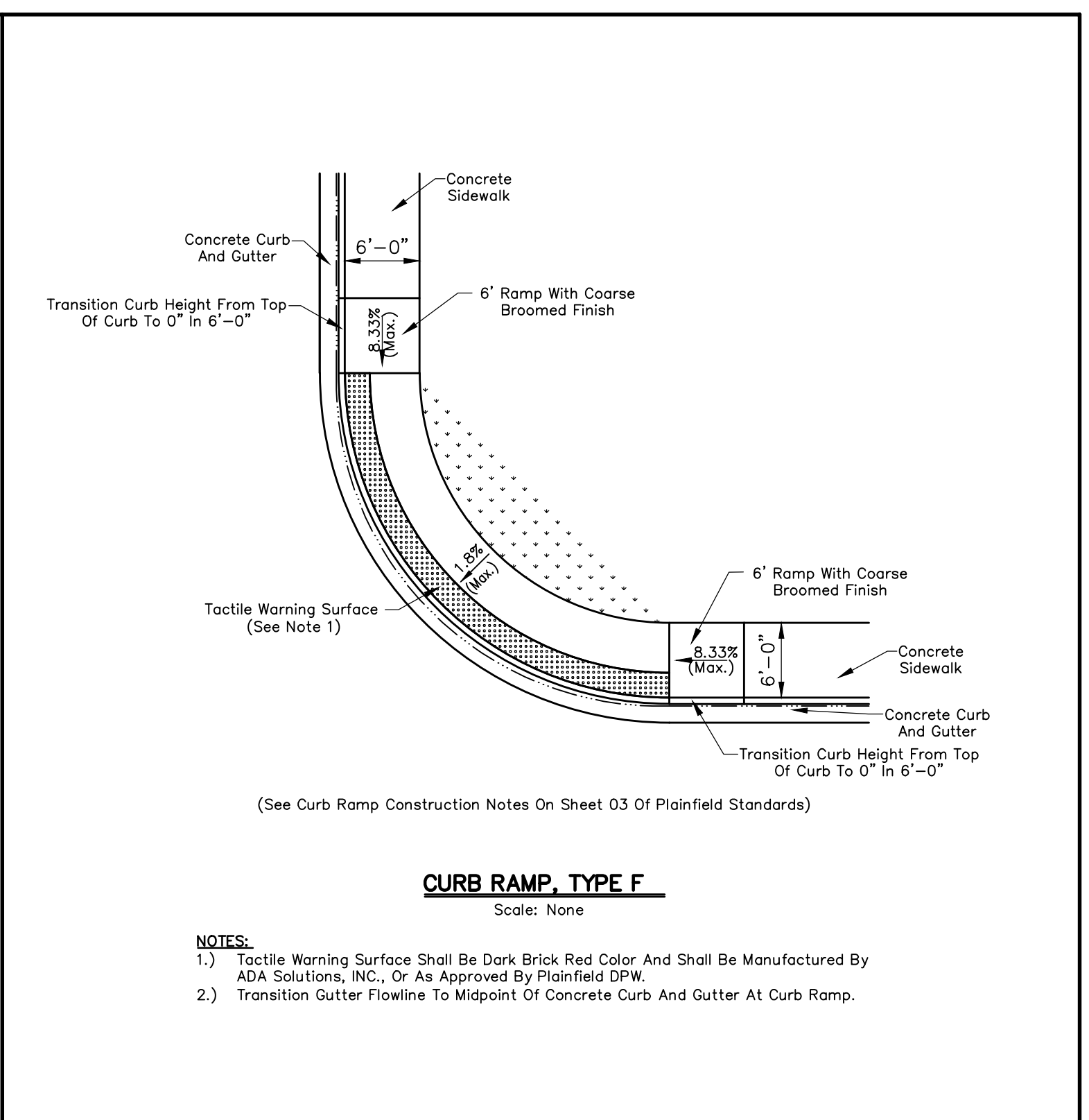
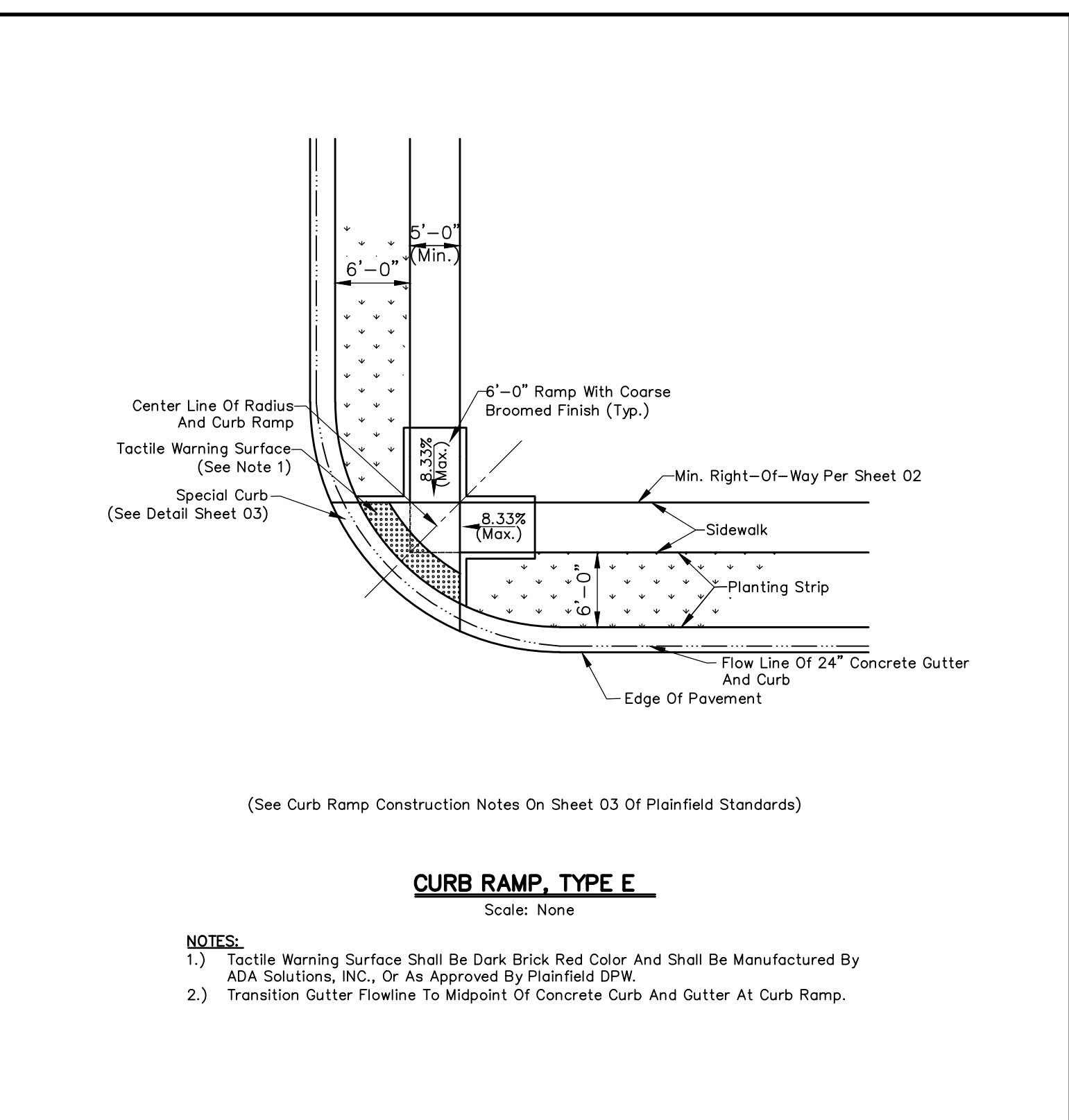
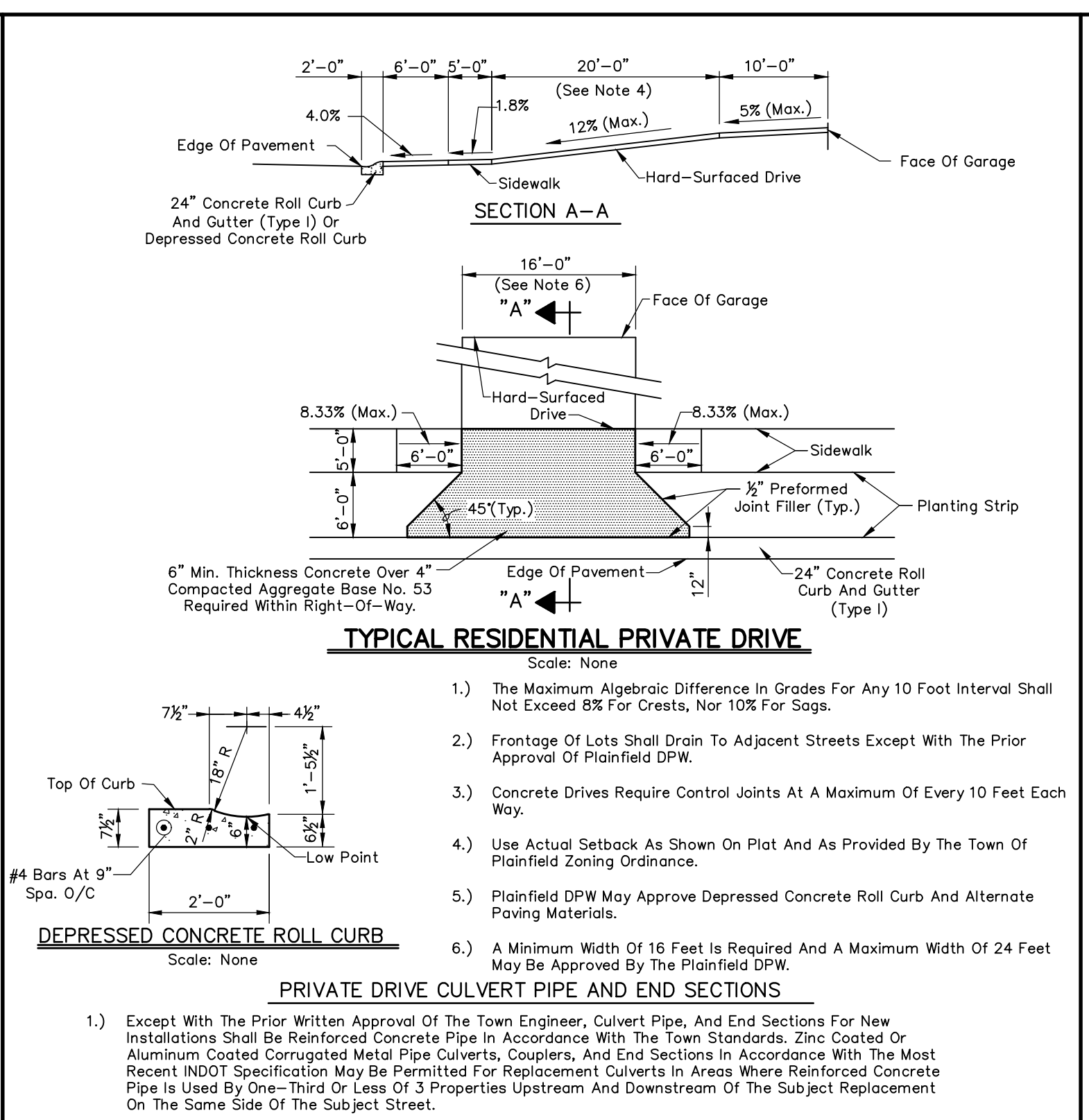
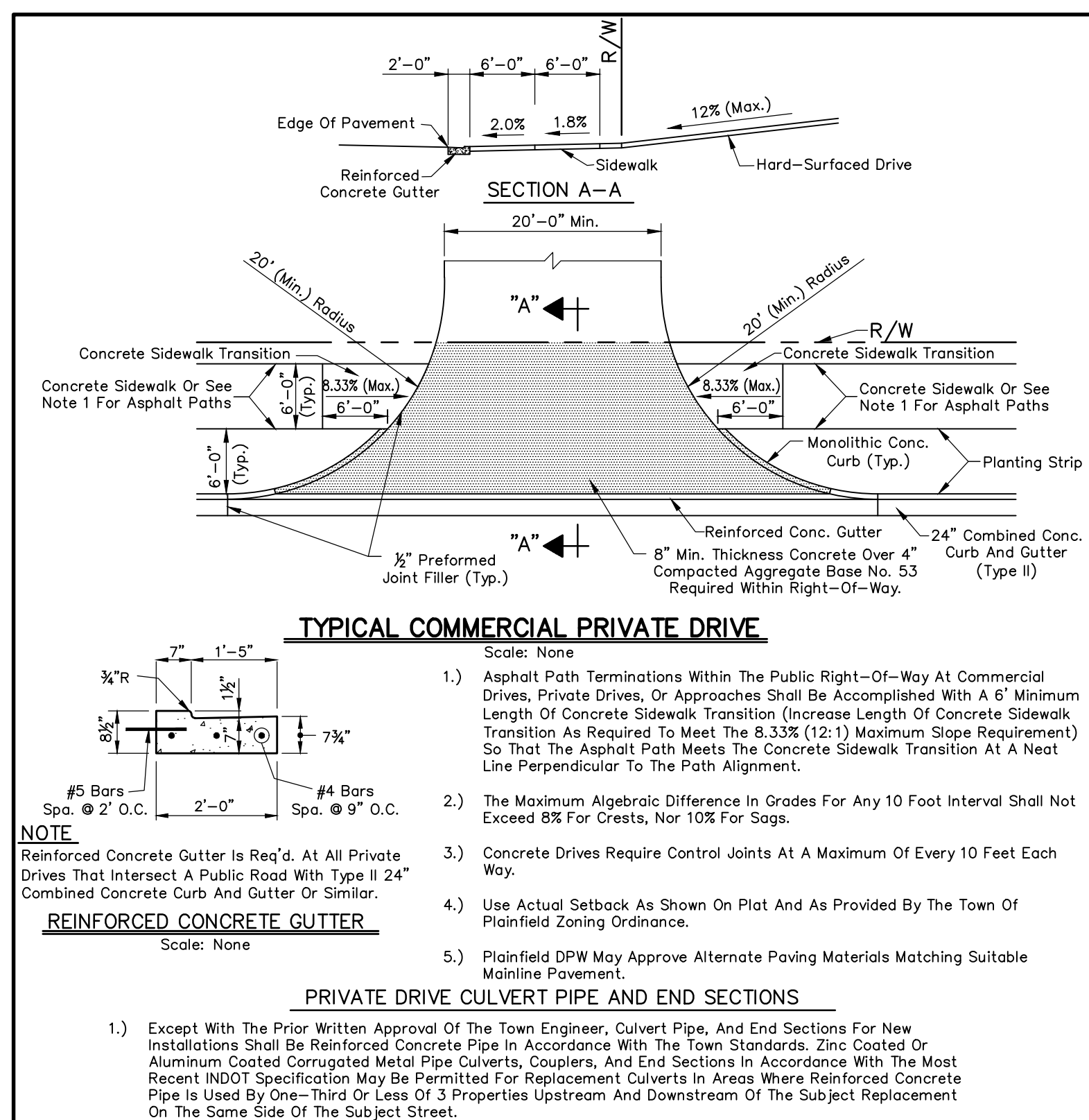
Not To Scale

REVISIONS		
Rev. No.	Description	Date

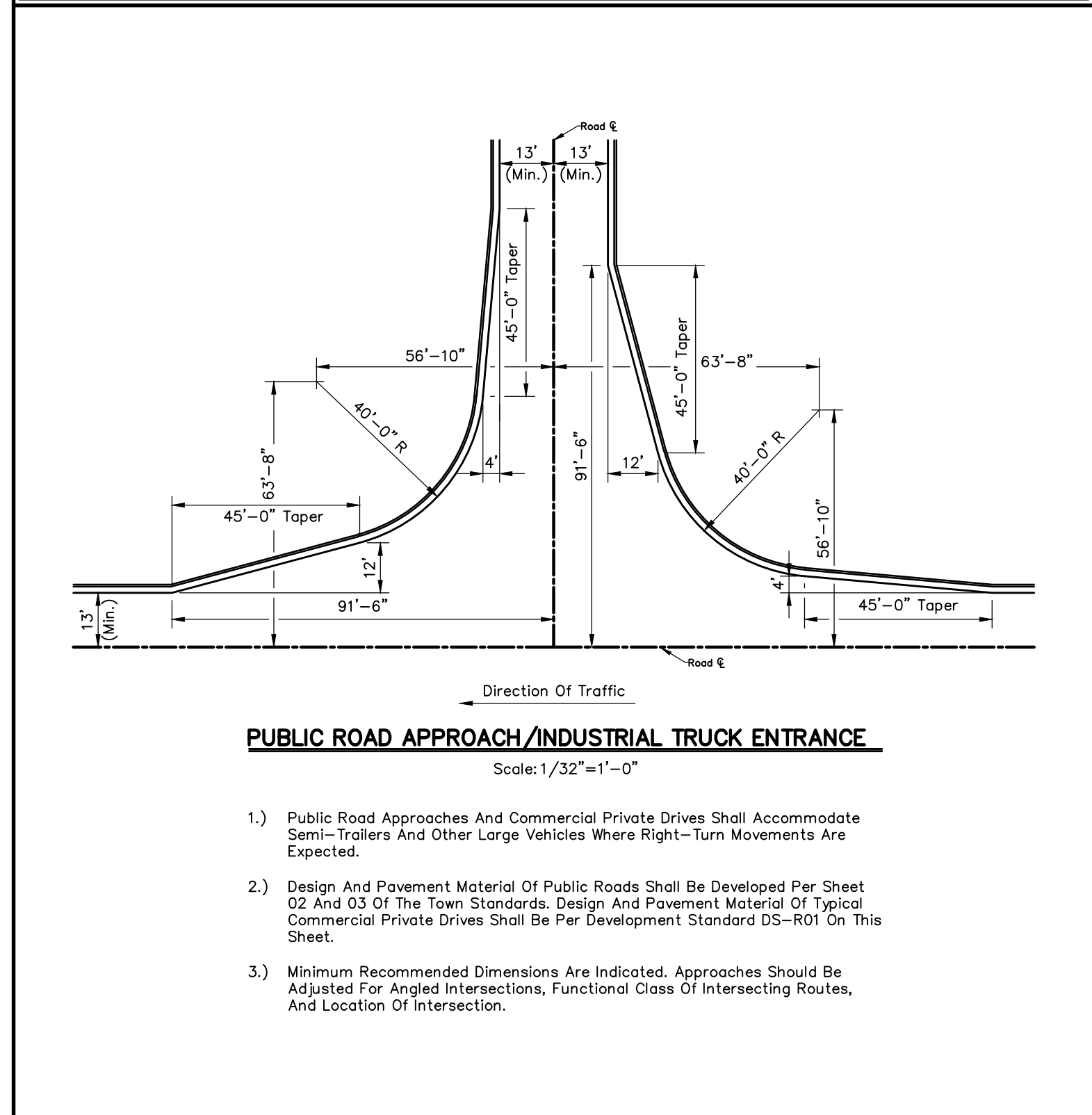


RECOMMENDED FOR APPROVAL	<i>[Signature]</i>	03/10/2022
DESIGN ENGINEER		DATE
APPROVED	<i>[Signature]</i>	03/10/2022
EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES		DATE
APPROVED	<i>[Signature]</i>	3/1/2022
DIRECTOR OF TRANSPORTATION		DATE

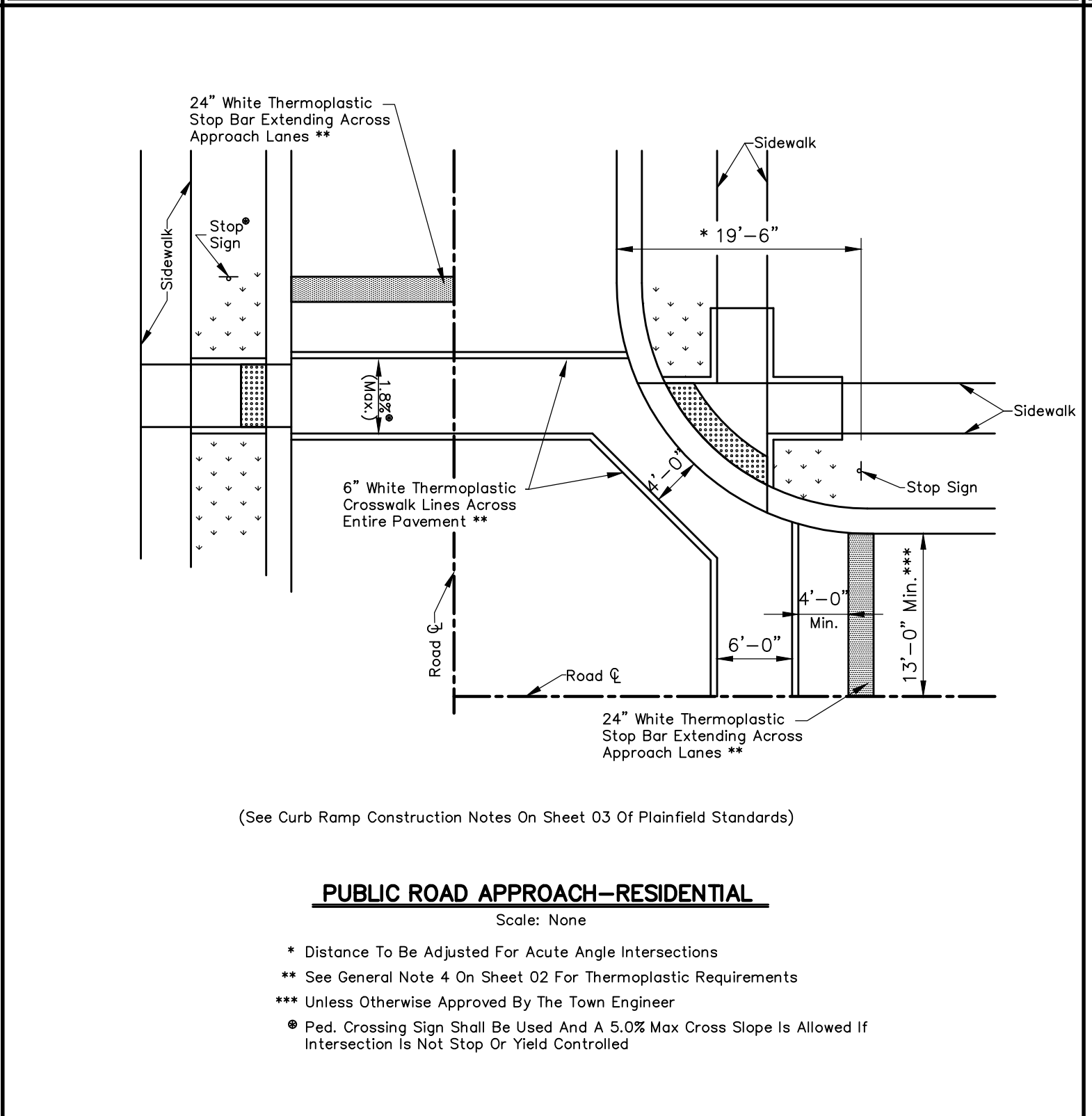
TOWN OF PLAINFIELD	SHEET
PAVEMENT, CURB & SIDEWALK DETAILS & NOTES	03 OF 27



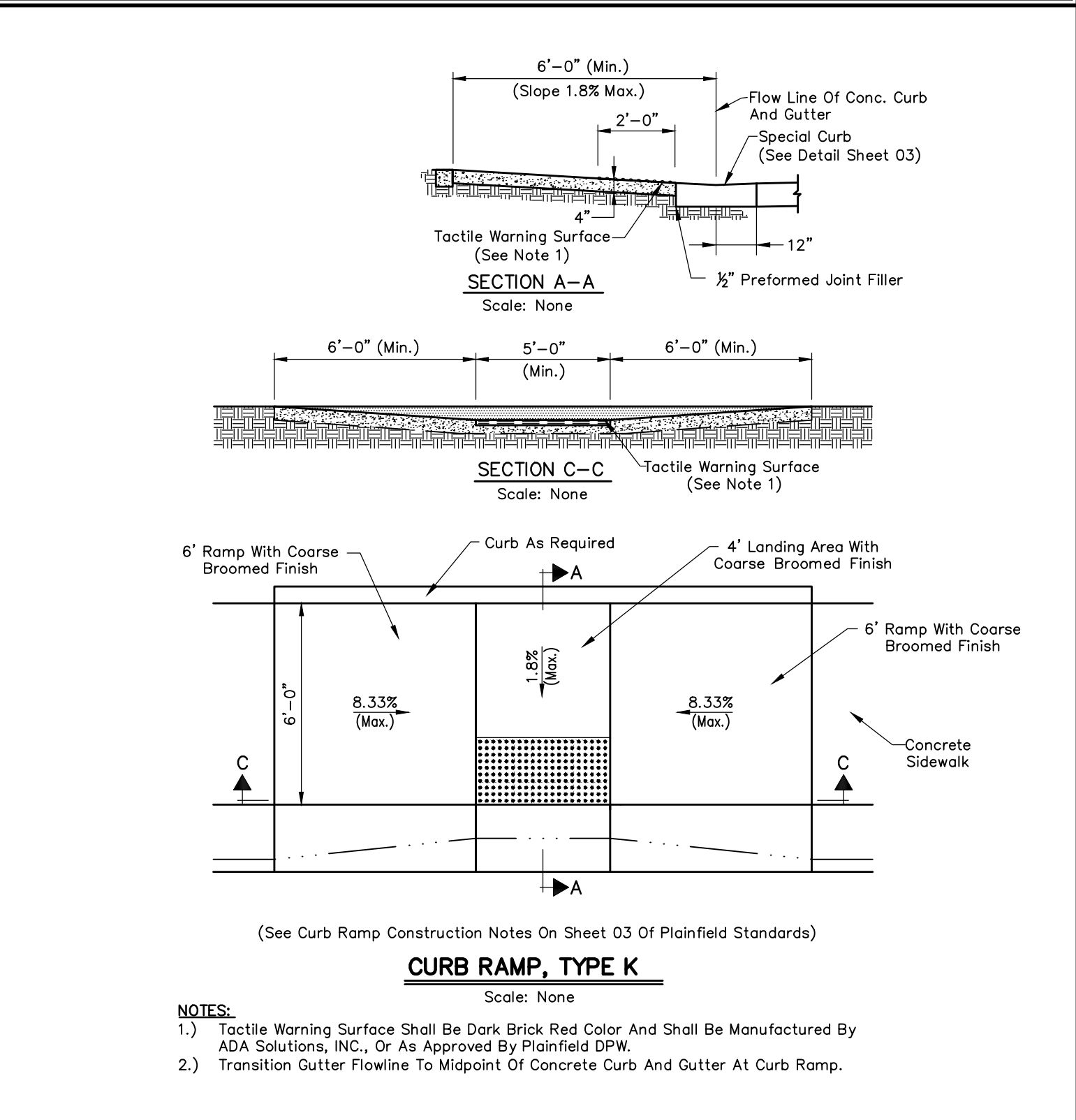
DEVELOPMENT STANDARD - DETAIL DS-R01



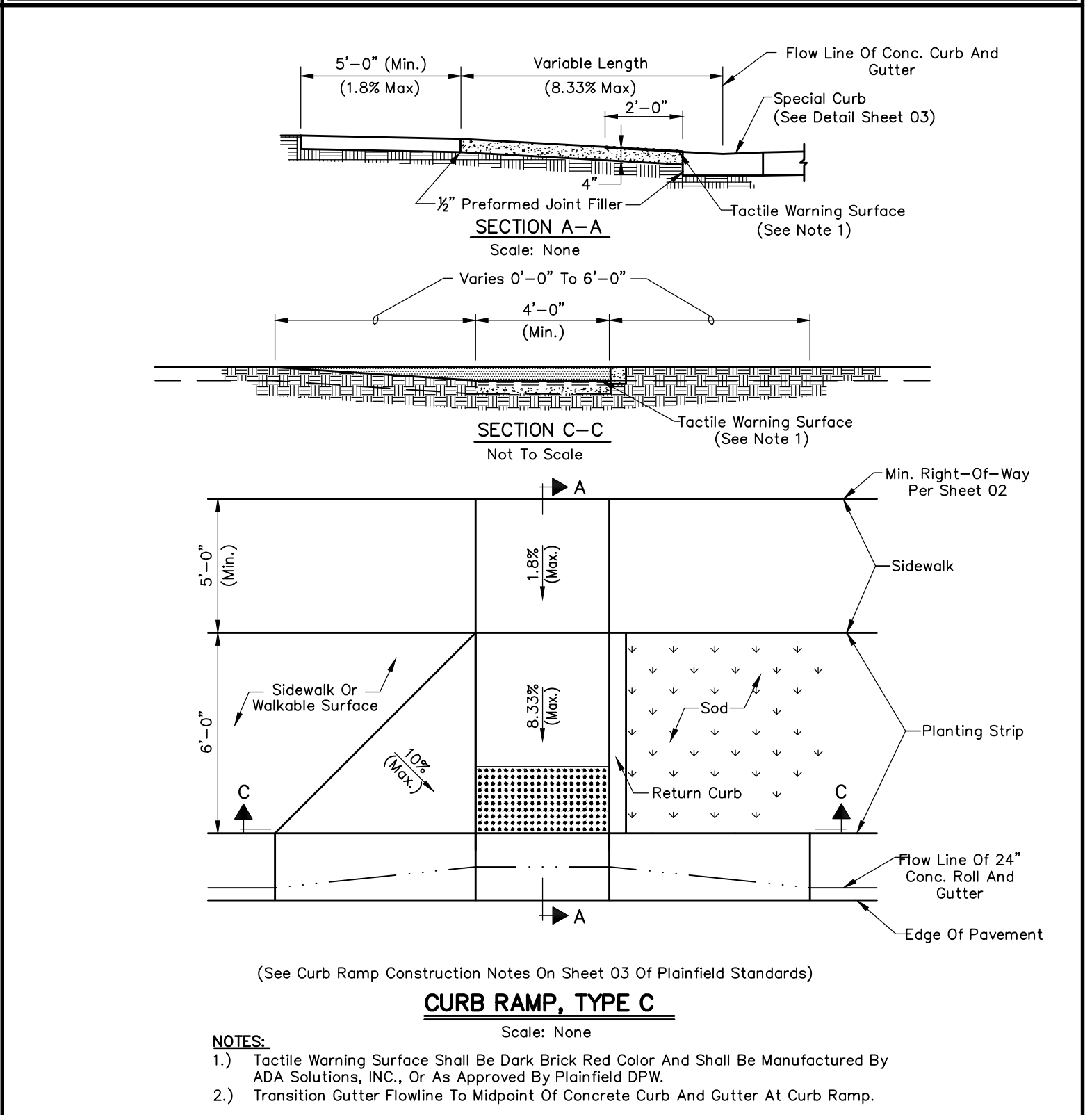
DEVELOPMENT STANDARD - DETAIL DS-R02



DEVELOPMENT STANDARD - DETAIL DS-R03



DEVELOPMENT STANDARD - DETAIL DS-R04



DEVELOPMENT STANDARD - DETAIL DS-R05

DEVELOPMENT STANDARD - DETAIL DS-R06

DEVELOPMENT STANDARD - DETAIL DS-R07

DEVELOPMENT STANDARD - DETAIL DS-R08

REVISIONS		
Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL: *[Signature]* 03/10/2022 DATE

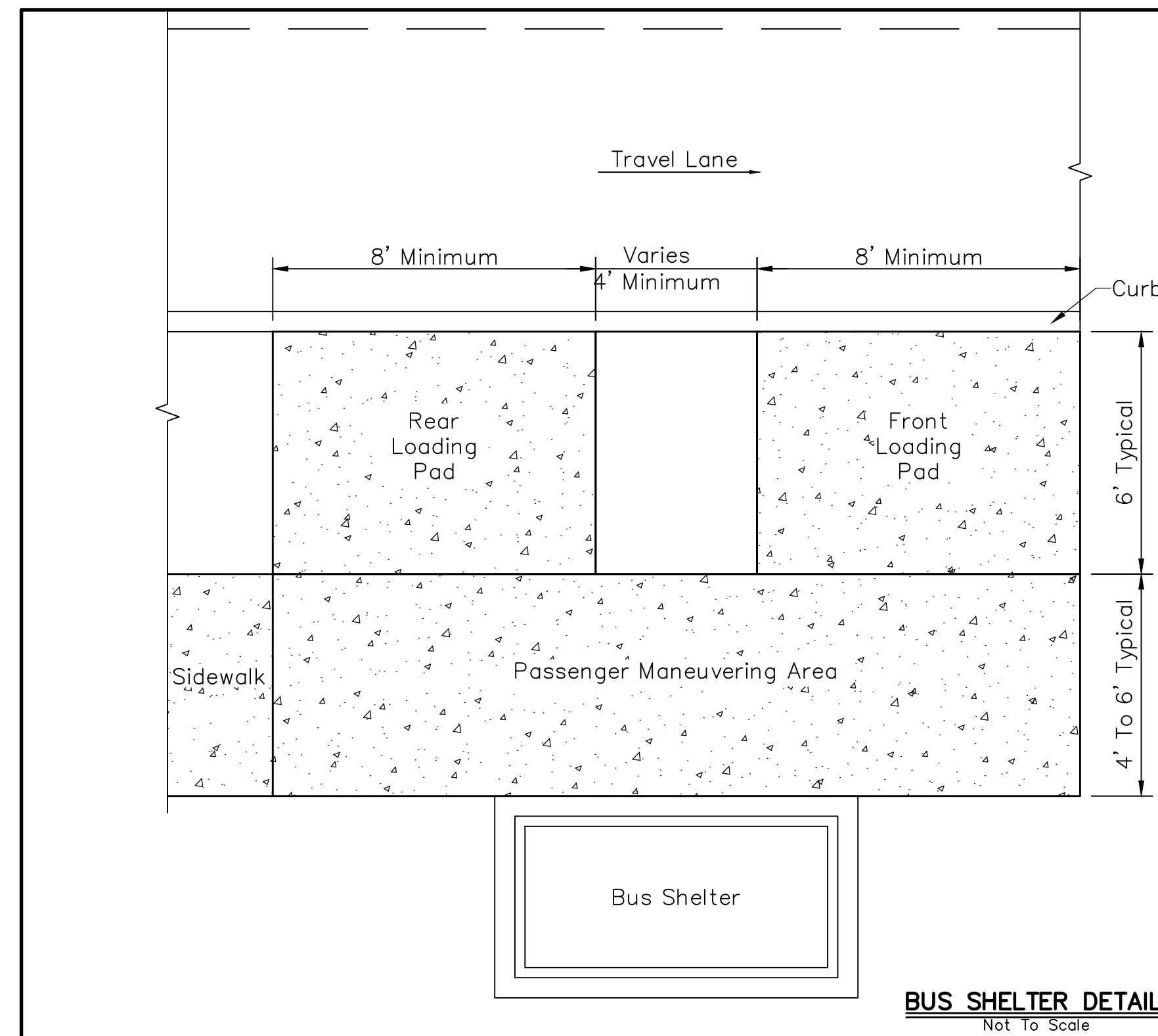
APPROVED: *[Signature]* 03/10/2022 DATE
EXCLUSIVE DIRECTOR OF DEVELOPMENT SERVICES

APPROVED: *[Signature]* 3/1/2022 DATE
DIRECTOR OF TRANSPORTATION

TOWN OF PLAINFIELD

ROADWAY (R)
DEVELOPMENT STANDARDS

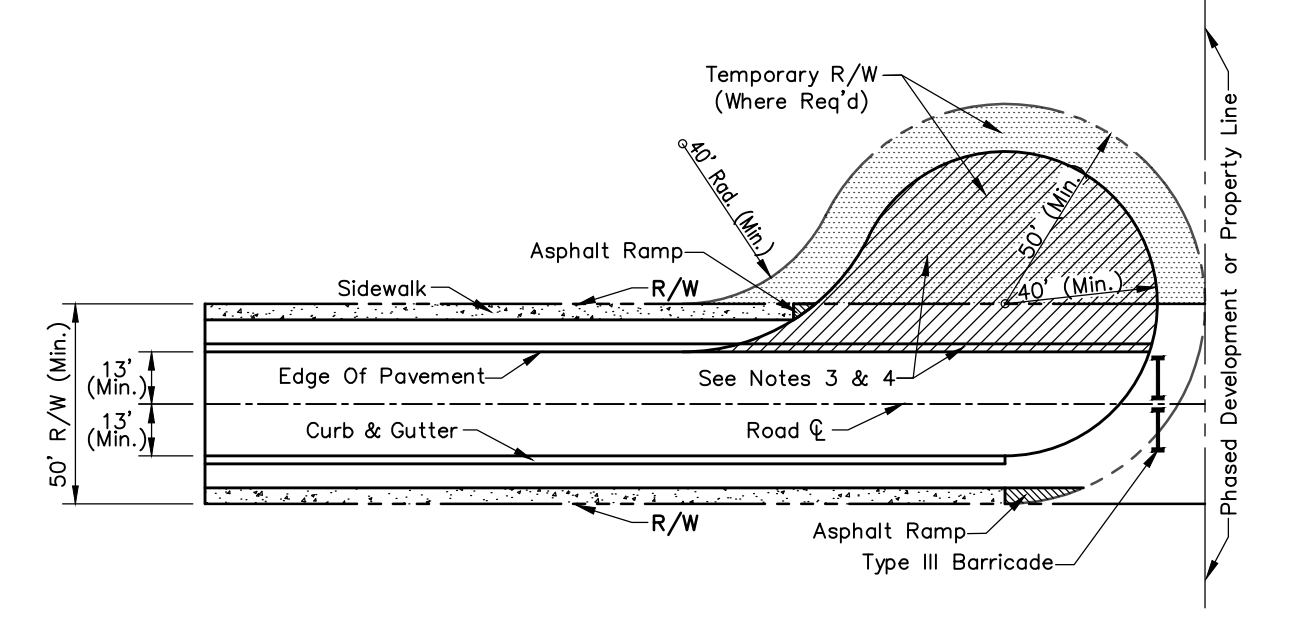
SHEET
04
OF
27



- Bus Shelter Location And Pad Notes:**
- Shelters Shall Be Located A Minimum Of 100 Feet From Any Intersection Measured Mid-Radius From The Intersection Curb Subject To Town Review.
 - The Shelter Opening Shall Be Oriented Toward The Passenger Maneuvering Area.
 - Loading Pads And Passenger Maneuvering Area Shall Be 4 Inches Of Concrete On Top Of 4 Inches Of Compacted Aggregate Base, No. 53.
 - The Pad For The Bus Shelter Shall Be A Minimum Of 1 Foot Wider And 1 Foot Longer Than The Dimensions Of The Bus Shelter. The Pad Shall Be Engineered Per Manufacturer's Recommendations Based Upon The Sizing Of The Shelter.
- Bus Shelter Notes:**
- Shelter And Wall Accessories Shall Be The Slimline Arched Model As Manufactured By Brasco International Or A Town Approved Equal. Shelters Shall Be Engineered By The Manufacturer To Meet Wind, Snow, And Seismic Loadings. Shelters May Vary In Size Between 4 Feet Wide By 8 Feet Long And 6 Feet Wide By 18 Feet Long Depending On The Amount Of Passengers Estimated At An Individual Stop.
 - Shelter Frame Shall Be Powder Coated Signal Gray (RAL 7004).
 - Shelter Roof Shall Be Shed Style With A Minimum 6 Inches Of Overhang Past The Opening, Acrylic, And Shall Be Signal White (RAL 9003).
 - Shelter Wall Panels Shall Be Glass. Shelter Wall Side Wall Panels Shall Include The Plainfield "P" Logo Ceramic Baked Into The Glass. An Advertisement Box May Be Included As One Of The Shelter Wall Panels.
 - Shelters Shall Be Provided With Wall Mount Benches On The Interior Of All Walls. Wall Mount Benches Shall Be Powder Coated Signal Gray (RAL 7004).
 - Shelters Shall Include A Solar Powered Lighting Package And Wall-Mounted Map Case.
 - A Signal White (RAL 9003) "Stop Name" Plate With Luminous Bright Red (RAL 3026) Lettering Shall Be Provided On The Front Of The Shelter.

BUS SHELTER DETAIL
Not To Scale

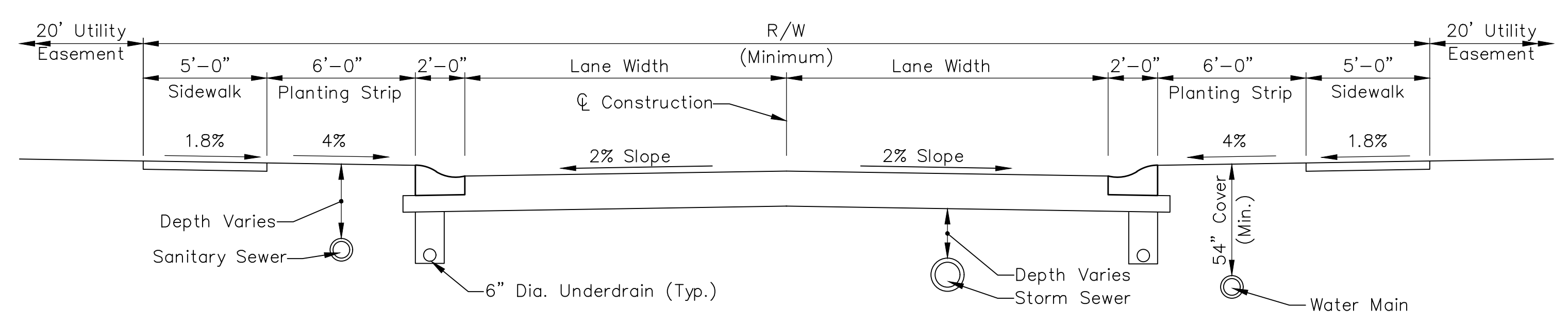
DEVELOPMENT STANDARD – DETAIL DS-R09



TEMPORARY CUL-DE-SAC
Scale: None

- When Streets Are Temporarily Dead-End, A Temporary Cul-De-Sac Shall Be Constructed. Permanently Dead-End Streets Are Prohibited By The Subdivision Control Ordinance.
- Right-Of-Way And Back-Of-Curb Diameter Shall Be In Conformance With The Minimum Design Standards For Streets In The Subdivision Control Ordinance.
- For Residential Streets, Continue Proposed Pavement and Curb Through The Temporary Cul-De-Sac To The End Of Pavement. Concrete Roll Curb & Gutter Shall Be Used Through The Temporary Cul-De-Sac And Mainline Pavement Shall Be Used Beyond The Proposed Curb And Gutter.
- For Industrial Streets, Continue Proposed Pavement Through The Temporary Cul-De-Sac. Extending Concrete Roll Curb & Gutter Through The Temporary Cul-De-Sac Is Optional. 8" Of INDOT No. 2 Stone May Be Used Throughout The Temporary Cul-De-Sac.
- Typical Cross Slope To Be Maintained Through The Temporary Cul-De-Sac And Temporary Drainage Should Be Provided.

DEVELOPMENT STANDARD – DETAIL DS-R10

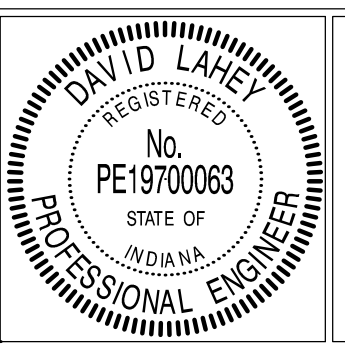


TYPICAL ROAD UTILITY SECTION
Scale: 1/4" = 1'-0"

1.) Utility easements located along a Street Right-of-Way shall have a minimum width of twenty (20) feet, provided, however, the first five (5) feet of such utility easement measured from the Street Right-of-Way shall be reserved exclusively for use as a Town utility easement for sewer and water.

DEVELOPMENT STANDARD – DETAIL DS-R11

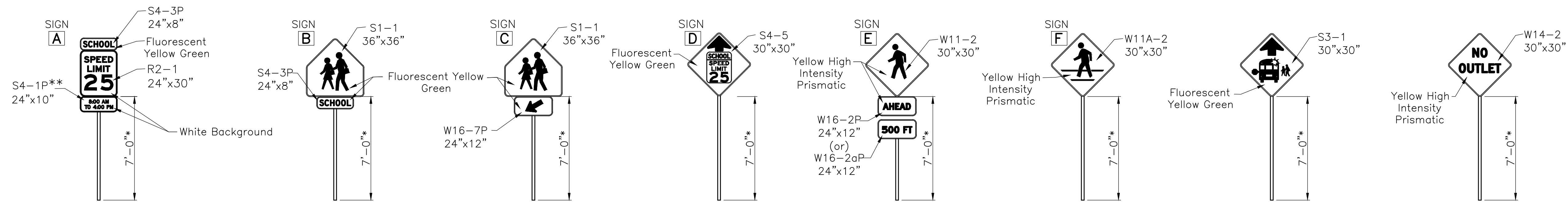
REVISIONS		
Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL	<i>[Signature]</i>	03/01/2022
APPROVED	<i>[Signature]</i>	03/01/2022
APPROVED	<i>[Signature]</i>	3/1/2022

TOWN OF PLAINFIELD
BUS SHELTER DETAILS & MISCELLANEOUS DETAILS

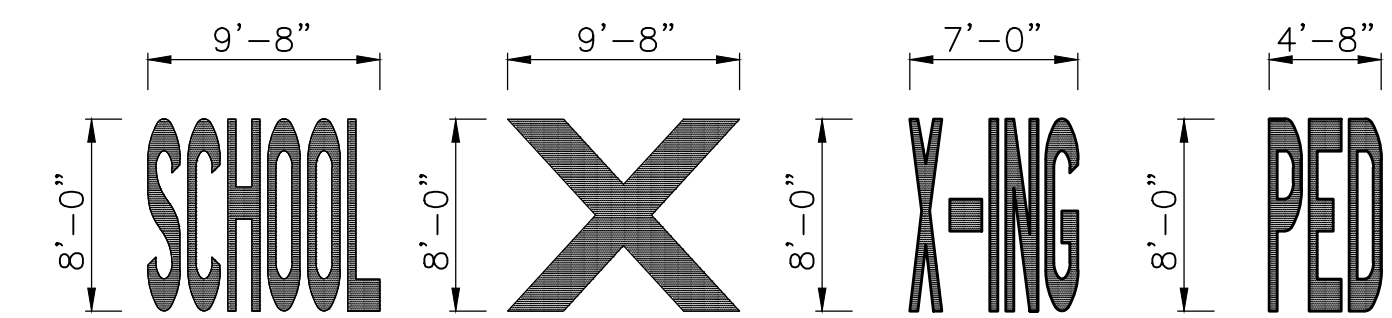
SHEET
05
OF
27



- NOTES:**
- *) * Mounting Height From Roadway Edge Of Pavement. (Typ. 2.)
 - **) ** Confirm Times With Plainfield DPW
 - 3.) All Black Lettering Is Scotchcal 7725 (Or Equal)

REGULATORY/WARNING SIGN DETAILS

Scale: None

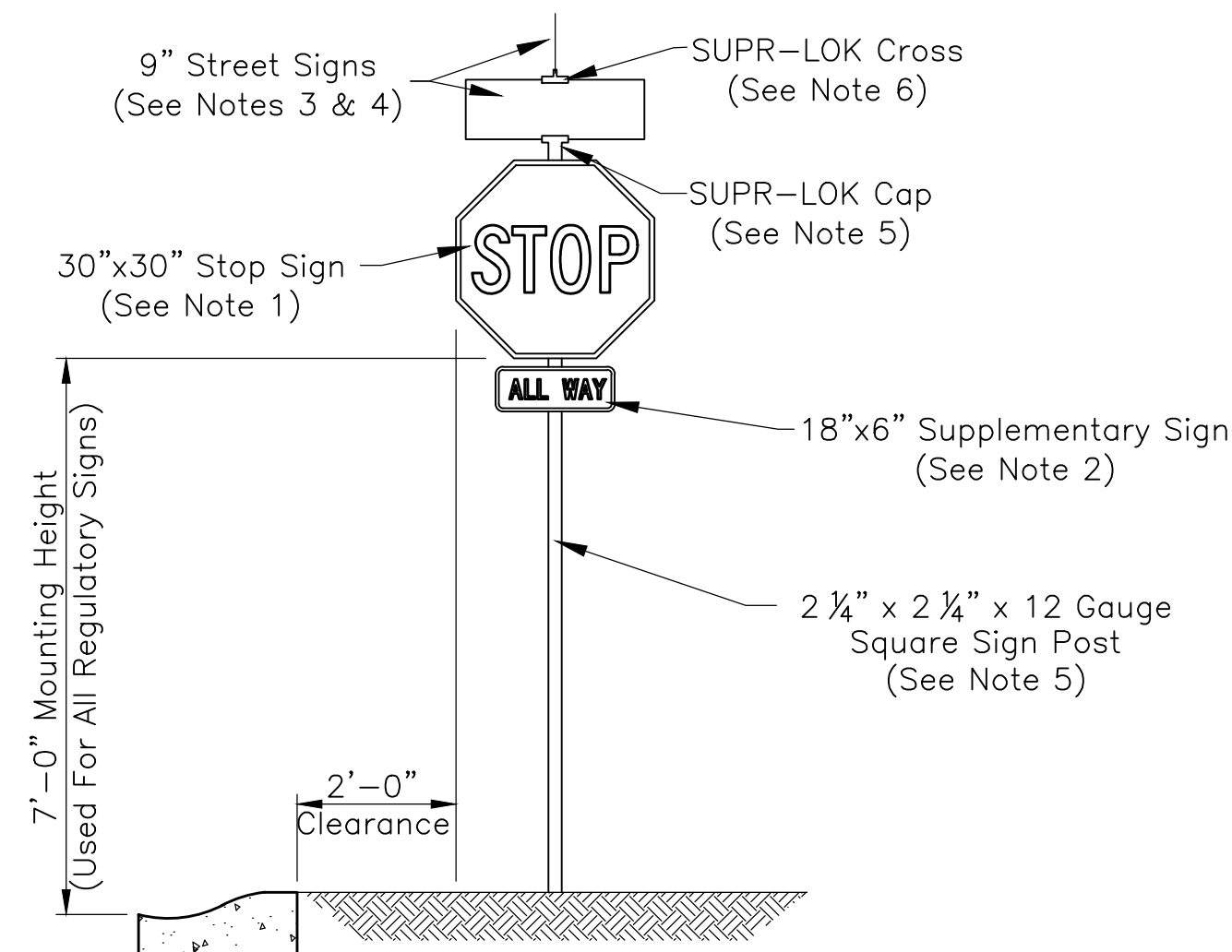


PAVEMENT MARKING DETAIL

Scale: 1/8" = 1'-0"

GENERAL NOTES:

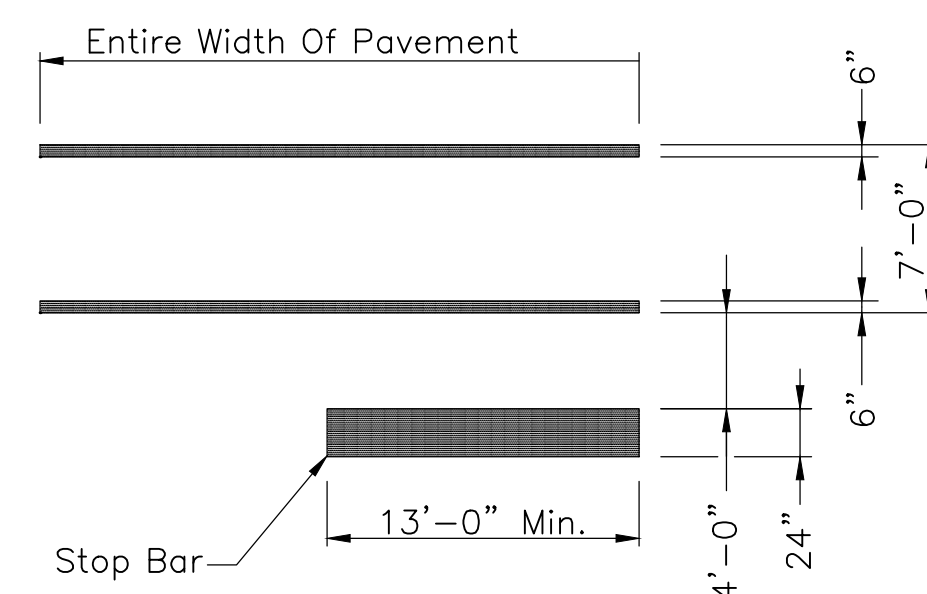
- 1.) All Regulatory Signs Shall Be High Intensity And In Accordance With The Indiana Manual On Uniform Traffic Control Devices, Most Recent Edition.
- 2.) All Pavement Markings Shall Be White Thermoplastic And Span Across Approach Lanes.
- 3.) Signs S3-1 & W14-2 To Be Installed When Required By The Town Of Plainfield.
- 4.) Where Pedestrian Cross Traffic Is Not Established, School Crossing Pavement Markings And Sign "C" May Be Omitted At The Discretion Of The Town Engineer.



TYPICAL REGULATORY/WARNING SIGN REQUIREMENTS

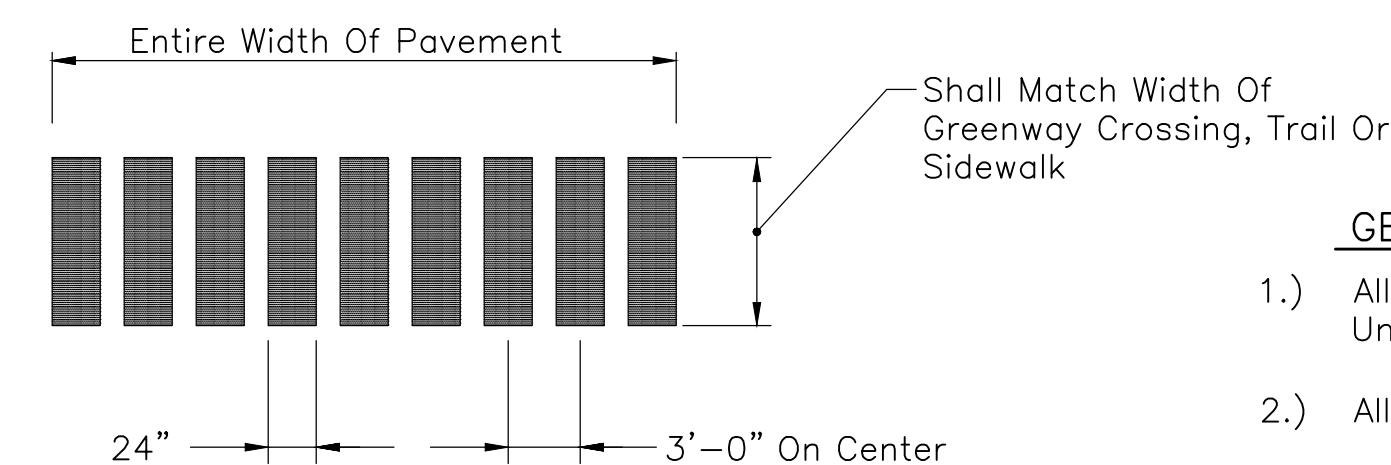
Scale: None

- 1.) Stop Sign (R1-1) Shall Be High Intensity And In Accordance With Most Recent Indiana Manual On Uniform Traffic Control Devices. Unless Otherwise Detailed On This Sheet, Other Regulatory Signs Shall Be A Minimum Of 18"x24".
- 2.) A Multi-Way Stop Intersection Requires An "ALL WAY" (R1-3P) Supplementary Sign 18" Wide By 6" Tall In Accordance With Said Manual. Streets Shall Be So Signed At Non-Signalized Intersections With Two Such Street Sign Assemblies Typically Required. Separate 12" Square Sign Post For Street Signs Permitted Only At Signalized Intersections.
- 3.) Street Signs Shall Be 9" Tall Extruded Aluminum (6063-T6) Green Background With White Letters.
- 4.) Regulatory Signs, Other Than Stop Signs, Shall Be Mounted On 12" - 2 1/4" x 2 1/4" x 12 Gauge Square Sign Posts. SUPR-LOK Cap Shall Be Model #975QX. Regardless If Material For Posts Is Other Than As Shown Hereon, Mounting Height Shall Be 7'-0" From Roadway Edge Of Pavement
- 5.) SUPR-LOK Cross Shall Be Model #990X. For Non-Urban Intersections, Stop Sign To Be Placed A Minimum Of 6' From Cross-Street.
- 6.) For Urban Intersections See Handicap Ramp Detail On Sheet 4 Of The Town Standards.



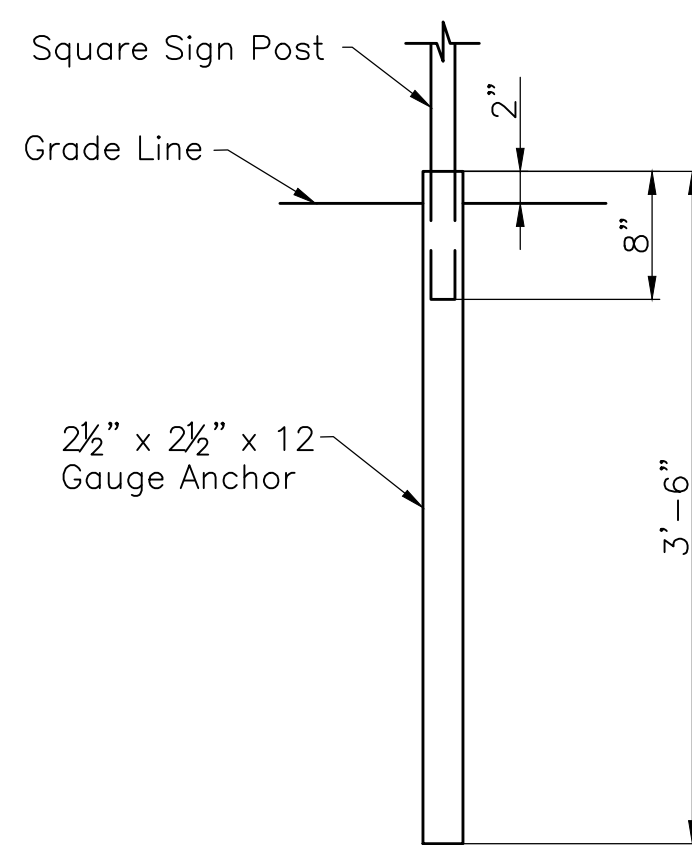
INTERSECTION CROSSWALK DETAIL

Scale: 1/8" = 1'-0"



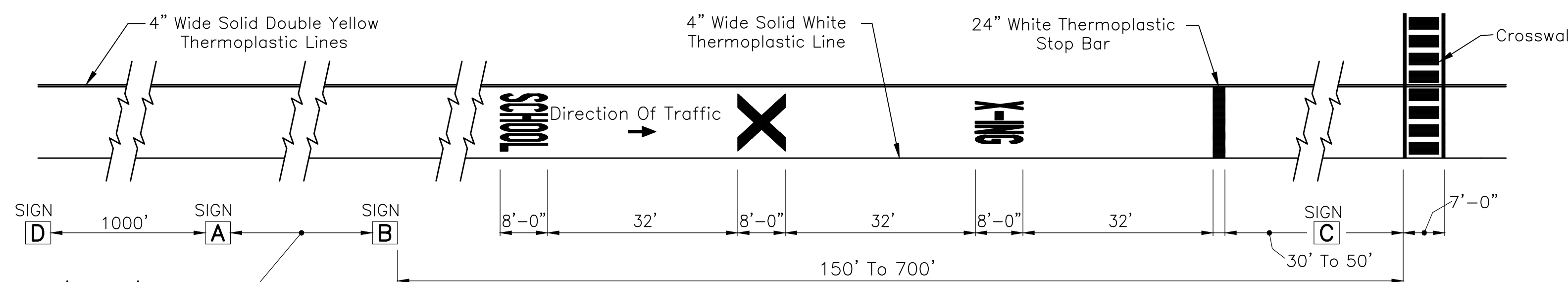
SPECIAL CROSSWALK DETAIL

Scale: 1/8" = 1'-0"



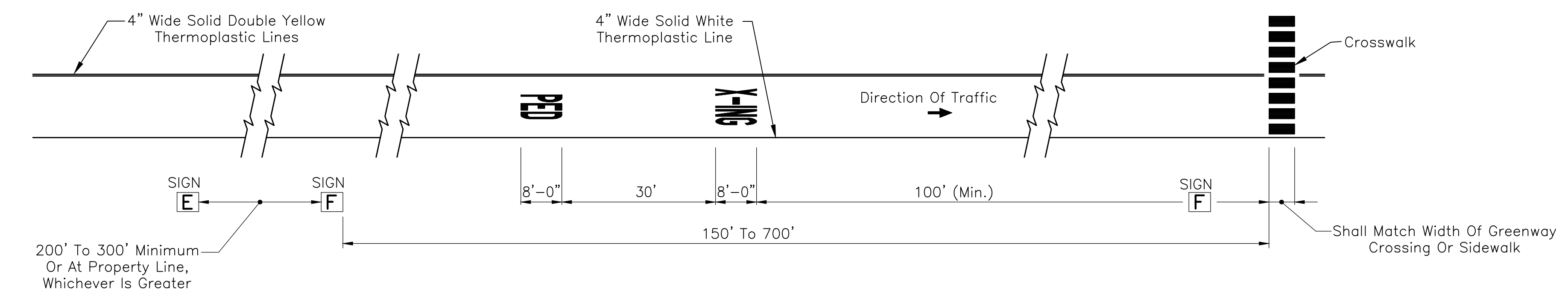
UNREINFORCED ANCHOR BASE

Scale: 1" = 1'-0"



SCHOOL ZONE APPROACH DETAIL

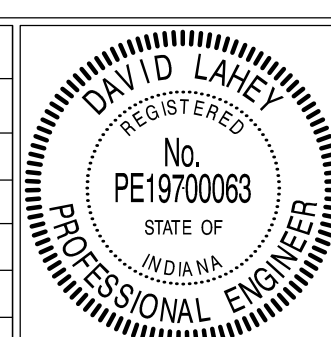
Scale: 1/6" = 1'-0"



PEDESTRIAN CROSSING APPROACH DETAIL - COLLECTOR OR ABOVE

Scale: 1/6" = 1'-0"

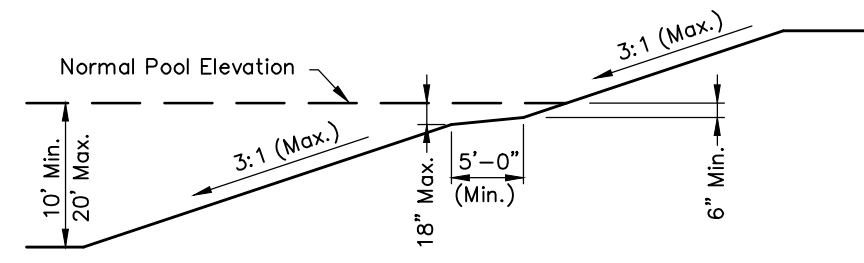
REVISIONS		
Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL	<i>[Signature]</i>	03/10/2022
DESIGN ENGINEER		DATE
APPROVED	<i>[Signature]</i>	03/01/2022
EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES		DATE
APPROVED	<i>[Signature]</i>	3/1/2022
DIRECTOR OF TRANSPORTATION		DATE

TOWN OF PLAINFIELD
MISCELLANEOUS DETAILS AND NOTES

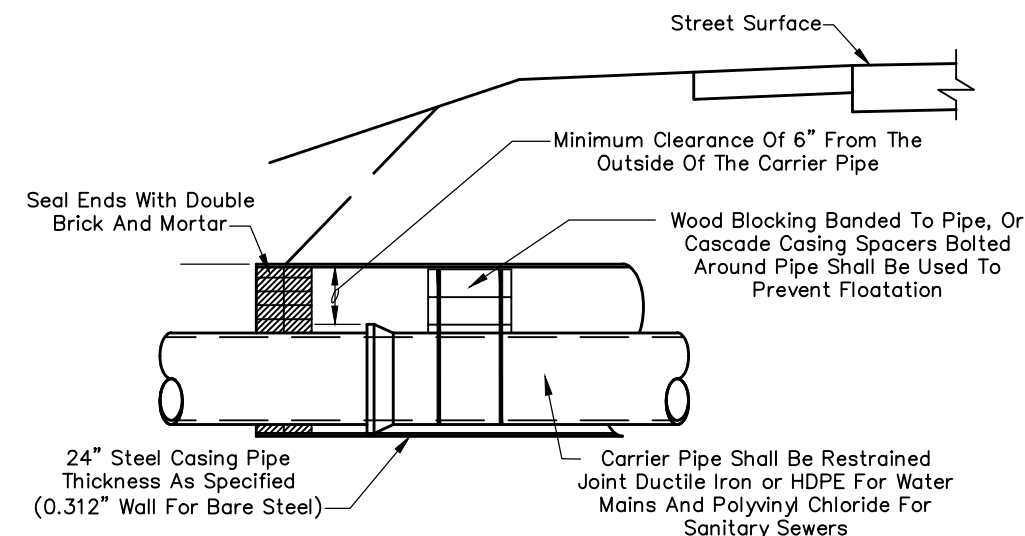
SHEET
06
OF
27



TYPICAL DETENTION POND SECTION
Not To Scale

NOTES:

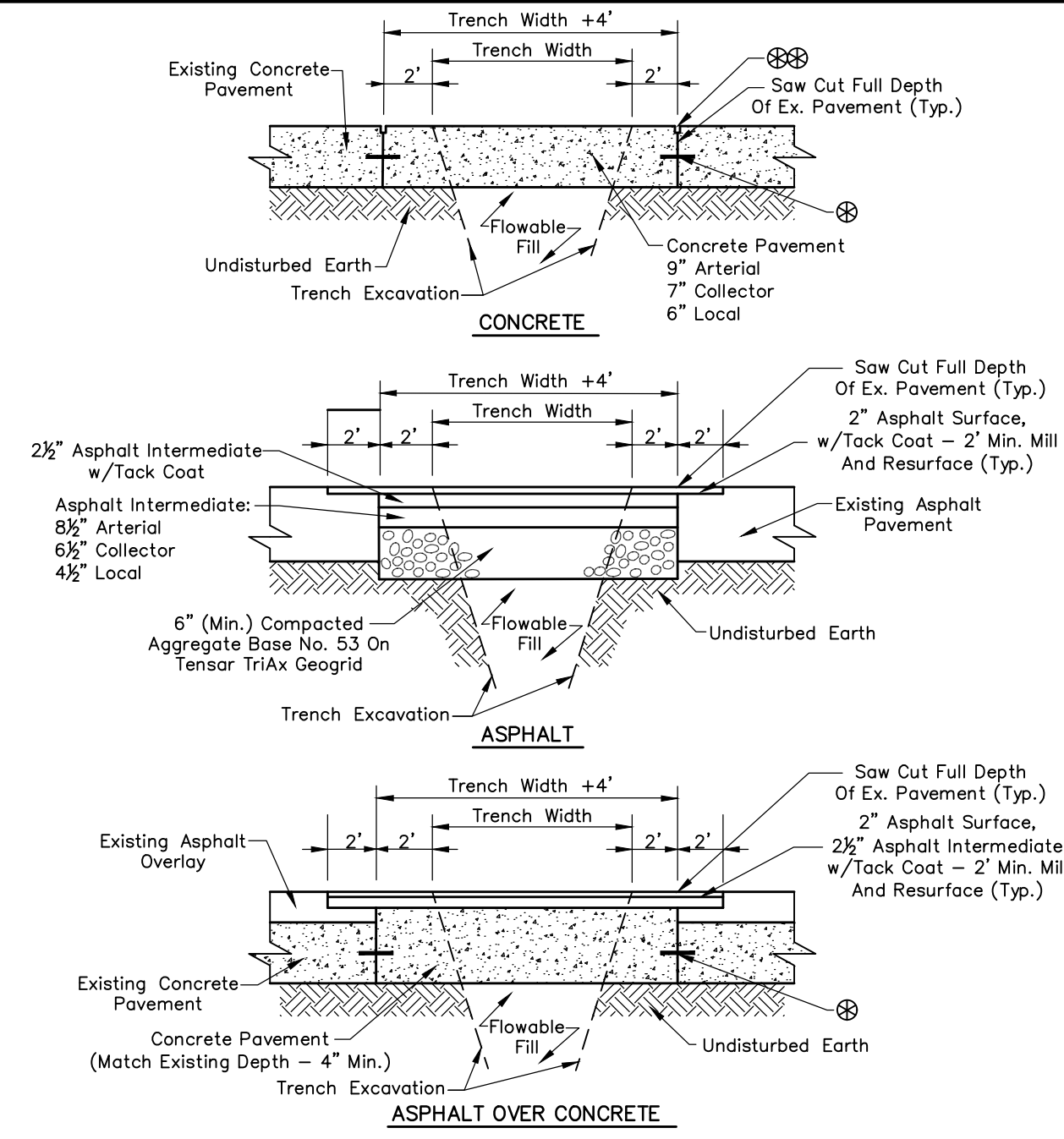
- 1.) Dry Bottom Basins Shall Be Subject To The Maximum Of 3:1 Slope Above The Basin Floor. The Longitudinal Slope Shall Be Subject To General Note 1 As Set Out On Sheet 09. The Transverse Grade Shall Be 2% Minimum.
- 2.) Emergency Overflow Facilities Such As A Weir Or Spillway Shall Be Provided For The Release Of Exceptional Storm Runoff Or In Emergency Conditions Should The Normal Discharge Devices Become Totally Or Partially Inoperative.
- 3.) Plainfield DPW May Approve Alternate Detention Pond/Basin Sections.



TYPICAL STREET CASING DETAIL FOR UP TO 12" CARRIERS
Not To Scale

NOTES:

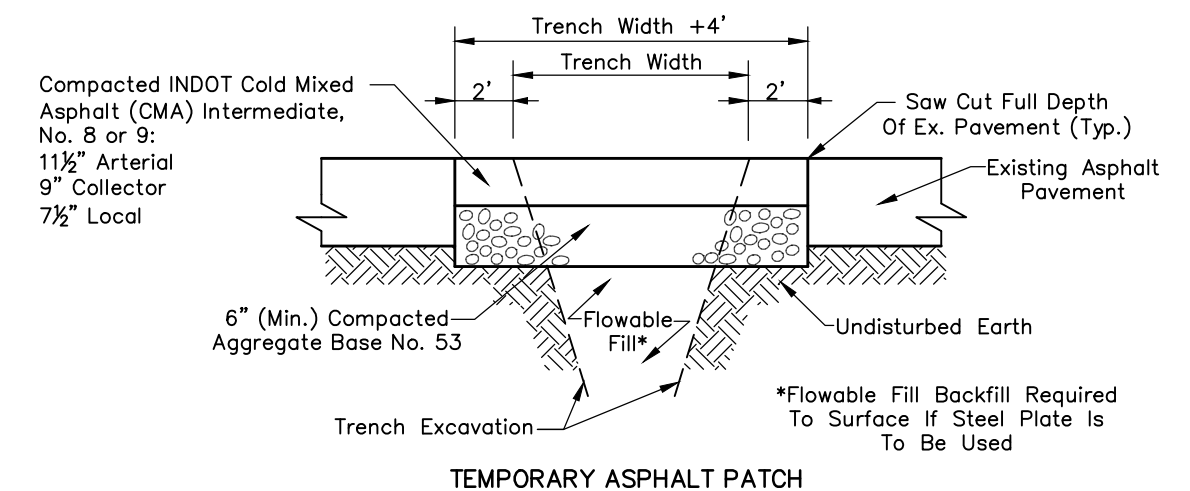
- 1.) Bored Or Jacked Crossings Require Intimate Knowledge Of Site Conditions; Therefore, Construction Is Subject To Certified Special Provisions Prepared By The Design Engineer.
- 2.) Casings Depicted Hereon Do Not Necessarily Comply With INDOT Permit Requirements, But Are Intended To Be Used For Crossings Of Public Roads Under The Jurisdiction Of The Town Of Plainfield When Open Cut Of Such Roads Is Not Permitted.
- 3.) Refer To Appropriate Plainfield Standards For Carrier Pipe Requirements.



PAVEMENT RECONSTRUCTION DETAILS
Not To Scale

NOTES:

- 1.) All Concrete Shall Be Air Entrained, 6 Bag Per Cubic Yard With 4,000 PSI Minimum 28 Day Strength. Concrete Surface Shall Be Broom Finished Perpendicular To Traffic Flow.
- 2.) Refer To INDOT Standard Drawing E506-COP-01 For Dowel Bar Spacing and Diameter And E505-COP-08 For Retrofit Tie Bar Spacing and Diameter.
- 3.) Refer To INDOT Standard Drawing E503-COP-03 For Joint Seal Details. Joint Seals Are Not Required If Concrete Pavement Is Overlay.

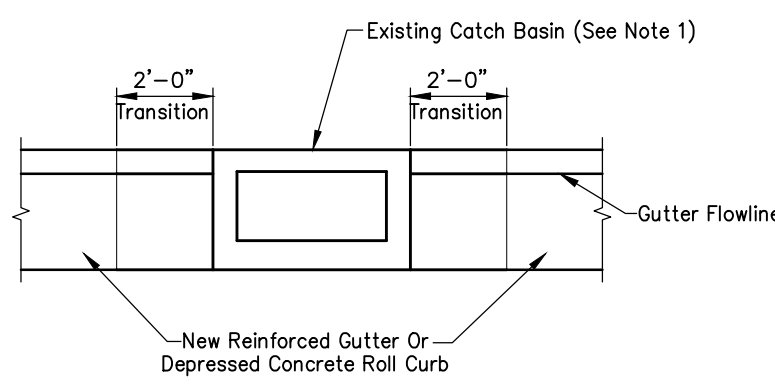


TEMPORARY ASPHALT PATCH
Not To Scale

NOTES:

- 1.) Steel Plate Required Over Trench To Open Roadway To Traffic. Pavement Reconstruction Or Temporary Asphalt Patch To Be Placed Within 48 Hours.
- 2.) Cold Mixed Asphalt (CMA) Shall Not Be Used When The Ambient Temperature Is Less Than 40F. Use Flowable Fill To Surface.

DEVELOPMENT STANDARD - DETAIL DS-G01

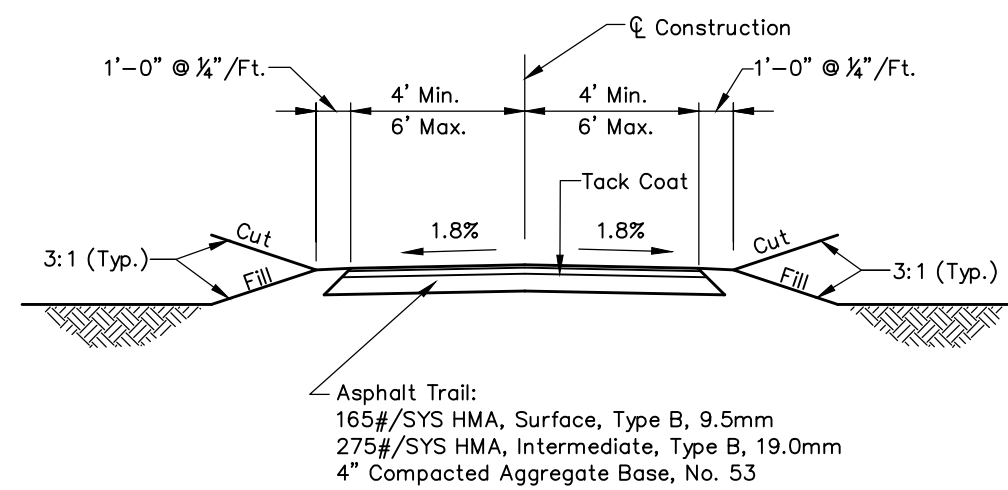


EXISTING CATCH BASIN MODIFICATION
Scale: 3/4"=1'-0"

NOTES:

- 1.) Existing Catch Basin Within Limits Of New Approach That Can Not Be Relocated Due To Existing Gutter Flow, As Approved By Plainfield DPW.
- 2.) Provide Flat Cap And Cut Structure Height As Required To Accept Neenah R-3287-S, EJ 5425 Or US Foundry 4628-6132 B.L.D.
- 3.) Contractor To Verify Existing Casting Size To Determine Replacement.

DEVELOPMENT STANDARD - DETAIL DS-G02

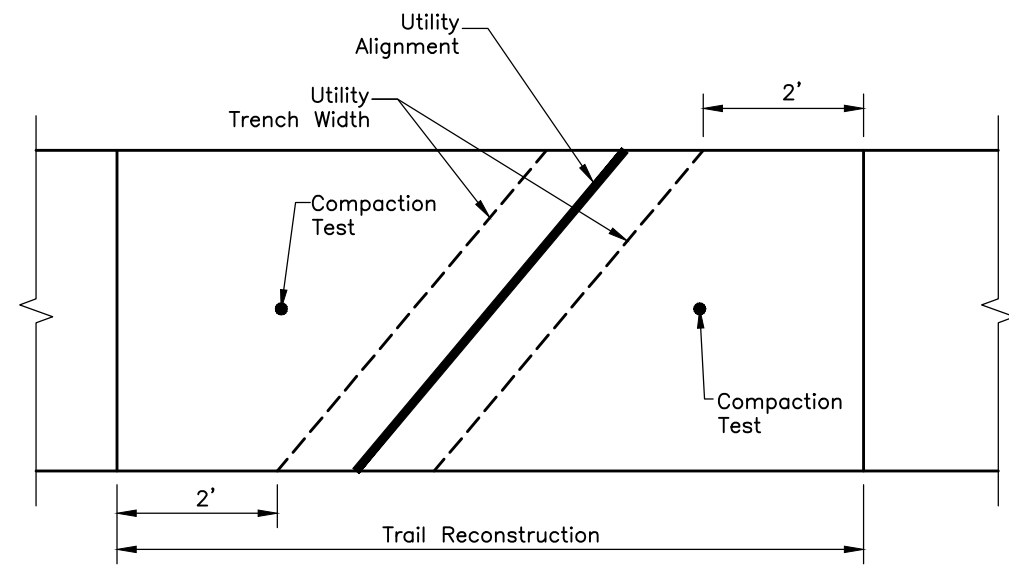


TYPICAL SIDEPATH/TRAIL CROSS SECTION
Not To Scale

NOTES:

- 1.) Cross Slope Shall Be 1.8% Maximum For Crowns, Transitions, And Superelevations.

DEVELOPMENT STANDARD - DETAIL DS-G03

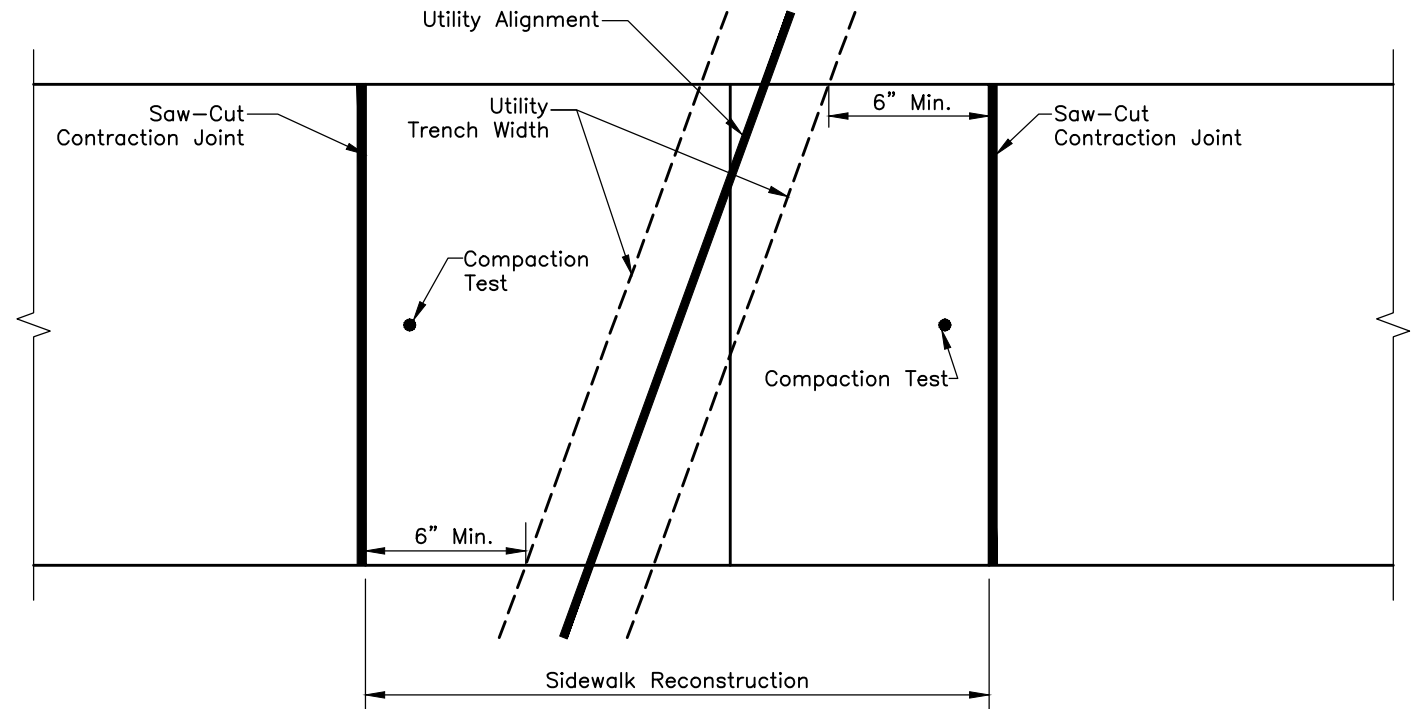


EXISTING TRAIL RECONSTRUCTION
Not To Scale

NOTES:

- 1.) Full Depth Saw-Cut 2 Feet On Either Side Of The Outer Limits Of The Utility Trench And Remove Pavement. Saw-Cut Should Be Made Perpendicular To The Trail's Centerline.
- 2.) Backfill Utility Trench With Flowable Fill Per Pavement Reconstruction Detail DS-G03.
- 3.) Aggregate Subbase Compaction Adjacent To The Utility Trench Shall Not Be Less Than 95% Of The Maximum Dry Density As Determined By AASHTO 192. One Compaction Test On Each Side Of The Utility Trench Shall Be Performed.
- 4.) Replace Asphalt Per Typical Trail Cross Section Detail DS-G06 Making Sure To Match Existing Grades.

DEVELOPMENT STANDARD - DETAIL DS-G04



EXISTING SIDEWALK RECONSTRUCTION
Not To Scale

NOTES:

- 1.) Full Depth Saw-Cut Nearest Contraction Joints Outside Of Utility Trench And Remove Existing Sidewalk.
- 2.) Backfill Utility Trench With Flowable Fill Per Pavement Reconstruction Detail DS-G03.
- 3.) Aggregate Subbase Compaction Adjacent To The Utility Trench Shall Not Be Less Than 95% Of The Maximum Dry Density As Determined By AASHTO 199. One Compaction Test On Each Side Of The Utility Trench Shall Be Performed.
- 4.) Replace Preformed Joint Filler If Removed During Sidewalk Removal.
- 5.) If Utility Alignment Follows The Sidewalk Joint Take Adjacent Sidewalk Panels Out.
- 6.) If Utility Trench Encroaches Within 6" Inches Of Contraction Joint Take Adjacent Sidewalk Panel Out.
- 7.) Replace Sidewalk Per Typical Sidewalk Detail On Sheet 03 Making Sure To Match Existing Grades.

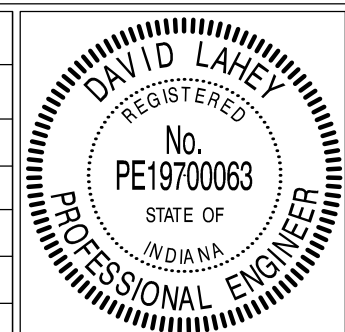
DEVELOPMENT STANDARD - DETAIL DS-G05

DEVELOPMENT STANDARD - DETAIL DS-G06

DEVELOPMENT STANDARD - DETAIL DS-G07

DEVELOPMENT STANDARD - DETAIL DS-G08

REVISIONS		
Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL: *David Laney* 03/10/2022
DESIGN ENGINEER DATE

APPROVED: *Christopher B. ...* 03/10/2022
EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES DATE

APPROVED: *Steve ...* 3/1/2022
DIRECTOR OF TRANSPORTATION DATE

TOWN OF PLAINFIELD

GENERAL (G)
DEVELOPMENT STANDARDS

SHEET
07
OF
27

STORM SEWER GENERAL NOTES AND AS-BUILT DRAWINGS

- Storm Sewer Pipe Of Other Material Or Material Not Meeting These Specifications Shall Require The Prior Written Approval Of Plainfield DPW.
- The Contractor Shall Submit Information To The Town Engineer Showing Conformance With These Specifications Upon Request.
- To Get Relief From The Town's Inlet And Manhole Requirements, A Structural Best Management Practice Or Isolation From The Town's System Is Required. The Town Standards For Bedding Of Pipe And Pipe Material For Storm Sewers Are Required Regardless.
- The Centerline Of Storm Water Quality Structures Shall Be Located As Required So As To Be Within 15' From Edge Of Pavement. Structure Cone Sections Shall Be Rotated Towards The Street.
- As-Built Drawings Shall Be Submitted To Plainfield DPW. GPS Collected Coordinates Shall Depict Actual Horizontal And Vertical Locations Of Utility Assets Such As: Manholes, Catch Basins, End Sections, Outfalls, And BMPs.

STORM SEWER REINFORCED CONCRETE PIPE

- Reinforced Concrete Pipe Shall Be Class III, IV, Or V As Specified In ASTM C76.
- Reinforced Elliptical Concrete Pipe Shall Be Class HE-II Or HE-IV As Specified In ASTM C507.
- Lift Holes Are Not Allowed For Pipe Less Than 24 Inches In Diameter. A Maximum Of Two Lift Holes Are Allowed For Pipe 24 Inches In Diameter Or Larger. Lift Holes Shall Be Repaired According To Most Recent INDOT Standard Specifications.
- Fittings And Specialties Shall Be In Accordance With The Specifications For The Type Of Pipe Being Used.
- Each Pipe Section Shall Be Marked With Date Of Manufacture, Size And Class Of Pipe, Specification Designation, Manufacturer And Plant Identification.
- Pipe Shall Be Furnished With A Bell Or Groove On One End Of A Unit Of Pipe And A Spigot Or Tongue On The Adjacent End Of The Adjoining Pipe. All Joints Shall Have A Groove On The Spigot For Placement Of A Rubber "O"-Ring Or Profile Gasket In Accordance With ASTM C443. The Gasket Shall Be A Continuous Ring Which Fits Snugly Into The Annular Space Between The Overlapping Surfaces Of The Assembled Pipe Joint.

STORM SEWER POLYVINYL CHLORIDE (PVC) PIPE

- Pipe Diameters Of 12 Inches Through 15 Inches Shall Meet Or Exceed All The Requirements Of ASTM D3034, And Shall Have A Minimum Cell Classification Of 12454. Reference Should Be Made To ASTM D1784 For A Summarization Of Cell Class Properties. Pipe Diameters Greater Than 15 Inches Shall Meet Or Exceed All Requirements Of ASTM F679, And Shall Have A Minimum Cell Classification Of 12454. PVC Ribbed Sewer Pipe Shall Meet Or Exceed All Requirements Of ASTM F794, And Shall Have A Minimum Cell Classification Of 12454.
- The Minimum Wall Thickness Of Pipe 10 Inches Through 15 Inches In Diameter Shall Conform To SDR-26, Type PSM, As Specified In ASTM D3034. The Minimum Wall Thickness For Pipe Diameters Greater Than 15 Inches Shall Conform To PS 46 As Specified In ASTM F679. PVC Pipe Shall Have A Minimum Pipe Stiffness Of 46 Pounds Per Square Inch For Each Diameter When Measured At Five Percent Deflection And Tested In Accordance With ASTM D2412.
- Pipe Joints Shall Have A Bell Wall, Gasket Groove, And Spigot Which Are Integral With The Pipe. The Assembly Of Joints Shall Be In Accordance With The Pipe Manufacturer's Recommendations And ASTM D3212. No Solvent Cement Joints Shall Be Allowed. Gasket Material Shall Be Constructed Of Styrene Butadiene Or Butyl Rubber And Meet The Requirements Of ASTM F477.
- Each Pipe Section Shall Be Marked With Name Of Manufacturer, Trademark Or Tradename, Nominal Pipe Size, Production/Extrusion Code, Material And Cell Classification, And ASTM Number.
- Installation Shall Be In Accordance With Recommended Practice ASTM D2321.

STORM SEWER HIGH DENSITY POLYETHYLENE (HDPE) CORRUGATED PIPE

- Requirements For Test Methods, Dimensions, And Markings Are Those Found In AASHTO Specifications M-252 And M-294.
- Pipe And Fittings Shall Be Made Of Polyethylene Compounds Which Meet Or Exceed The Requirements Of Type III, Category 4 Or 5, Grade P33 Or P34, Class C Per ASTM D1248.
- Minimum Pipe Stiffness Values Shall Be In Accordance With AASHTO Specifications M-294.
- The HDPE Corrugated Pipe Shall Have An Integrally Formed Smooth Interior. Male And Female Pipe Ends Which Allow The Construction Of Overlapping Gasket Joints Shall Be Made In Conformance With ASTM D3212. Neoprene Gaskets Shall Meet ASTM F477.
- Installation Shall Be In Accordance With Recommended Practice ASTM D2321.
- HDPE Pipe Greater Than 36 Inches In Diameter Shall Not Be Allowed For Use In The Town Of Plainfield.
- HDPE Pipe 12 Inches Through 18 Inches In Diameter May Be Used Within The Public Right-Of-Way Subject To The Bedding Requirements For Flexible Pipe. HDPE Pipe Greater Than 18 Inches In Diameter Shall Not Be Allowed For Use Within The Public Right-Of-Way In The Town Of Plainfield.

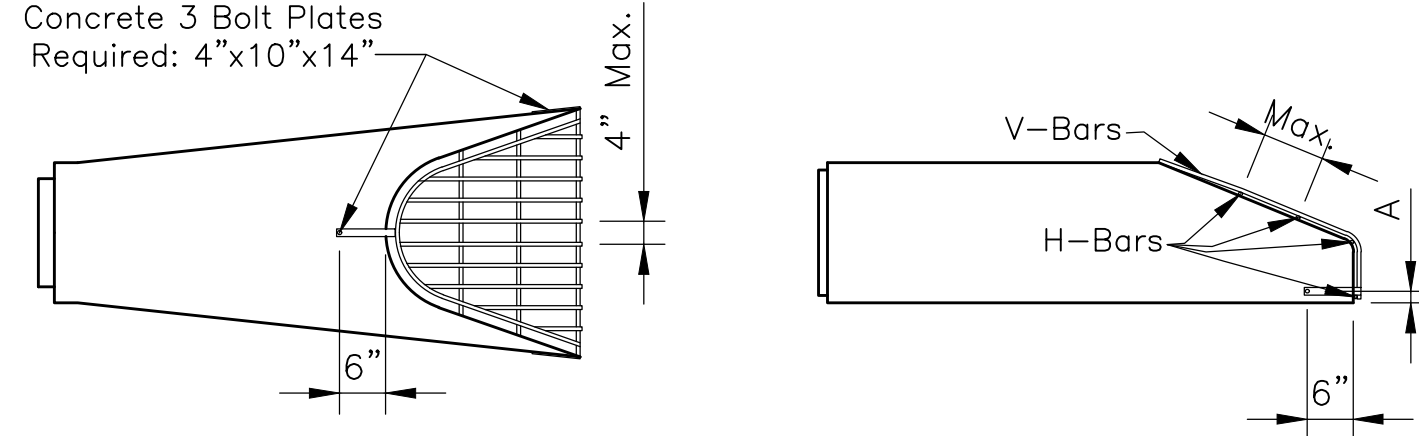
STORM SEWER CORRUGATED POLYPROPYLENE (PP) PIPE

- 12-inch through 60-inch Pipe Shall Be Smooth Interior And Annular Exterior Corrugated Polypropylene (PP) Pipe Meeting The Requirements Of ASTM F2764, ASTM F2881 or AASHTO M330 Type S (Double-Wall) Or D (Triple-Wall), For Respective Diameters.
- Material For Pipe And Fitting Production Shall Be An Impact Modified Copolymer Meeting The Material Requirements Of ASTM F2764, ASTM F2881 And AASHTO M330, For Respective Pipe Diameters.
- Watertight Joints Shall Be Bell-And-Spigot Meeting The Watertight Requirements Of ASTM D3212. Gaskets Shall Comply With The Requirements Of ASTM F477. Gaskets Shall Be Installed By The Pipe Manufacturer And Covered With A Removable Wrap To Ensure The Gasket Is Free From Debris. A Joint Lubricant Supplied By The Manufacturer Shall Be Used On The Gasket And Bell During Assembly.
- Fittings Shall Conform To ASTM F2764, ASTM F2881 Or AASHTO M330, With The Exception Of Meeting The Watertight Joint Performance Requirements Of ASTM D3212. Gasketed Bell And Spigot Connections Shall Utilize A Spun-on, Welded Or Integral Bell And Spigot With Gaskets Meeting ASTM F477.
- Each Pipe Section Shall Be Marked With Nominal Pipe Size, Class Size And Wall, Date Of Manufacture, Trademark Or Tradename and ASTM Specification

STORM SEWER DEFLECTION TESTING AND TELEVISION

- Deflection Testing Is Required For All Mainline Flexible Pipe And Plainfield DPW Shall Be Given 24 Hour Written Notice Of Deflection Testing. An Allowable Deflection Of 5 Percent Inside Pipe Diameter Will Be Acceptable After All Backfilling Has Been In Place For 30 Days. A Nine-Point "Go-No-Go" Mandrel Shall Be Used For The Deflection Test. A Proving Ring Shall Be Provided For Each Mandrel. All Pipe Exceeding The Allowable Deflection Shall Be Televised To Determine The Extent Of Replacement Or Rerouting Required. The Reworked Section Shall Be Retested 30 Days After Completion. Contractor Shall Bear All Testing Costs. The "Go-No-Go" Mandrel Shall Be Manually Pulled Without The Use Of Mechanical Devices.
- Televising Is Required For All Pipe Installations. Plainfield DPW Shall Be Given 24 Hour Written Notice Of Televising. A Camera Equipped With Remote Control Devices To Adjust Light Intensity And 1,000 Linear Feet Of Sewer Cable Shall Be Provided. The Camera Shall Transmit A Continuous Image To The Television Monitor As It Is Being Pulled Through Pipe. The Image Shall Be Clear Enough To Enable The Town Of Plainfield Representative And Others Viewing The Monitor To Easily Evaluate The Interior Condition Of The Pipe. The Camera Shall Stamp The Video Tape With Linear Footage And Project Number, And An Audio Voice-Over Shall Be Made During The Inspection Identifying Problems. Contractor Shall Bear All Televising Costs.
- The Pipe Shall Be Thoroughly Cleaned Before Installing Camera And Commencing Televising.
- If Any Pipe And/Or Joint Is Found To Be Leaking In Such A Way As Soil Migration Is Likely In The Sole Judgment Of The Town, The Contractor Shall Repair That Portion Of The Work To The Satisfaction And Approval Of The Town Of Plainfield.

Bolt To Apron 6" From Edge Of Concrete 3 Bolt Plates Required: 4"x10"x14"



APRON SIZE	V-BAR SIZE (Ø)	H-BAR SIZE (Ø)	No. OF H-BARS	BOLT DIA.	"A" DIM
12	1/2	3/8	3	1/2	4
15	1/2	3/8	3	1/2	4 1/2
18	1/2	3/8	4	1/2	4 1/2
21	1/2	3/8	4	1/2	5
24	3/4	3/4	4	1/2	5
27	3/4	3/4	4	1/2	5 1/2
30	3/4	3/4	4	1/2	5 1/2
36	3/4	1	4	3/4	8
42	3/4	1	4	3/4	8
48	3/4	1	5	3/4	8
54	3/4	1 1/2	5	3/4	8
60	3/4	1 1/2	5	3/4	8
66	3/4	1 1/2	5	3/4	9
72	3/4	1 1/2	5	3/4	9
84	3/4	1 1/2	5	3/4	10
90	3/4	1 1/2	5	3/4	10

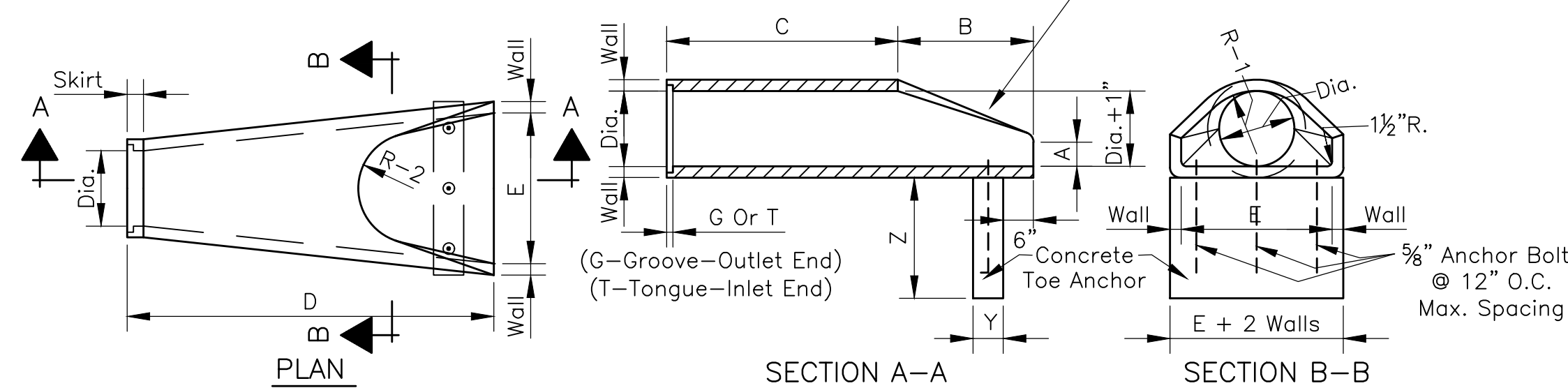
NOTES:

- Animal Guard Is Not Required For Culvert Crossings

ANIMAL GUARD

Scale: None

End Section End Treatment (Per Animal Guard Detail) Involving Hot Dipped Galvanized Steel Tubes Of Suitable Diameter And Suitably Affixed To Sloping Portion Of The End Section Shall Be Provided

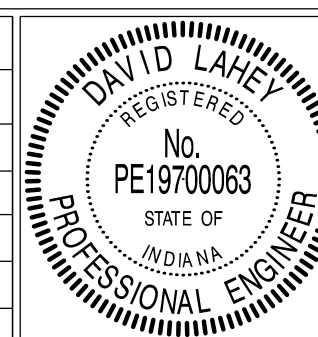


DIA.	WALL	G or T	WT. SEC.	A	B	C	D	E	DIA.+1"	R-1	R-2	SKIRT	Y	Z
12	2	1 1/2	530	4	24	48 7/8	72 7/8	24	13	10 1/16	9	3 1/2	12	24
15	2 1/4	2	740	6	27	46	73	30	16	12 1/2	11	3 1/2	12	24
18	2 1/2	2 1/2	990	9	27	46	73	36	19	15 1/2	12	4	12	24
21	2 3/4	2 1/2	1280	9	35	38	73	42	22	16 1/8	13	4	12	36
24	3	2 1/2	1520	9 1/2	43 1/2	30	73 1/2	48	25	16 11/16	14	4 1/2	18	36
27	3 1/4	2 1/2	1930	10 1/2	48	25 1/2	73 1/2	54	28	17 3/4	14 1/2	4 1/2	12	36
30	3 1/2	3	2190	12	54	19 3/4	73 3/4	60	31	18 5/16	15	5	12	36
33	3 3/4	3 3/8	3150	13 1/2	58 1/2	39 1/4	97 3/4	66	34	23 3/4	17 1/2	5 1/2	18	36
36	4	3 1/2	4100	15	63	34 3/4	97 3/4	72	37	24 1/16	20	5 1/2	18	36
42	4 1/2	3 3/4	5380	21	63	35	98	78	43	27 1/4	22	5 1/2	24	36
48	5	4 1/4	6550	24	72	26	98	84	49	28 1/8	22	5 3/4	24	36
54	5 1/2	4 3/4	8040	27	65	35	100	90	55	32 7/8	24	6 1/4	30	36
60	6	5	8750	30	60	39	99	96	61	36 3/4	24	6 3/4	30	36
66	6 1/2	5 1/2	10630	24	78	21	99	102	67	35 11/16	24	7 1/4	30	36
72	7	6	12520	34	78	21	99	108	73	38 5/8	24	7 3/4	36	36
78	7 1/2	6 1/2	14430	24	78	21	99	114	79	41 15/16	24	8 1/2	36	36
84	8	7	16350	24	78	21	99	120	85	44 13/16	24	9	39	36

PRECAST CONCRETE PIPE END SECTION

Scale: None

Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL: *David Laney*, DESIGN ENGINEER, 03/10/2022 DATE

APPROVED: *James A. B...*, EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES, 03/10/2022 DATE

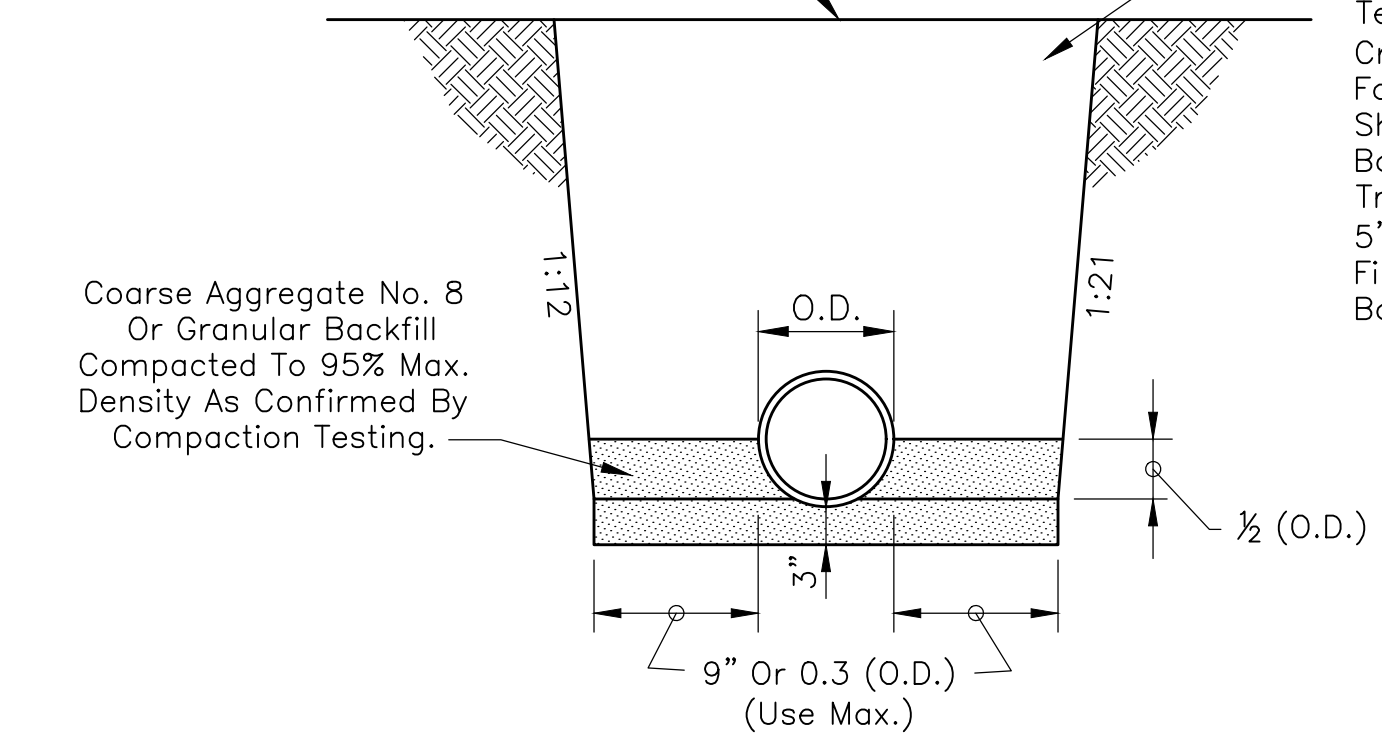
APPROVED: *James C...*, SUPERINTENDENT OF PUBLIC WORKS, 3/1/22 DATE

TOWN OF PLAINFIELD

STORM SEWER BEDDING DETAILS AND NOTES

SHEET
08
OF
27

Finished Ground; However, Contractor Shall Coordinate Grade To Ensure Proper Pavement Section Or To Allow Placement Of Approved Loom Material To A Depth Of 8" For Seeding Or Sodding.

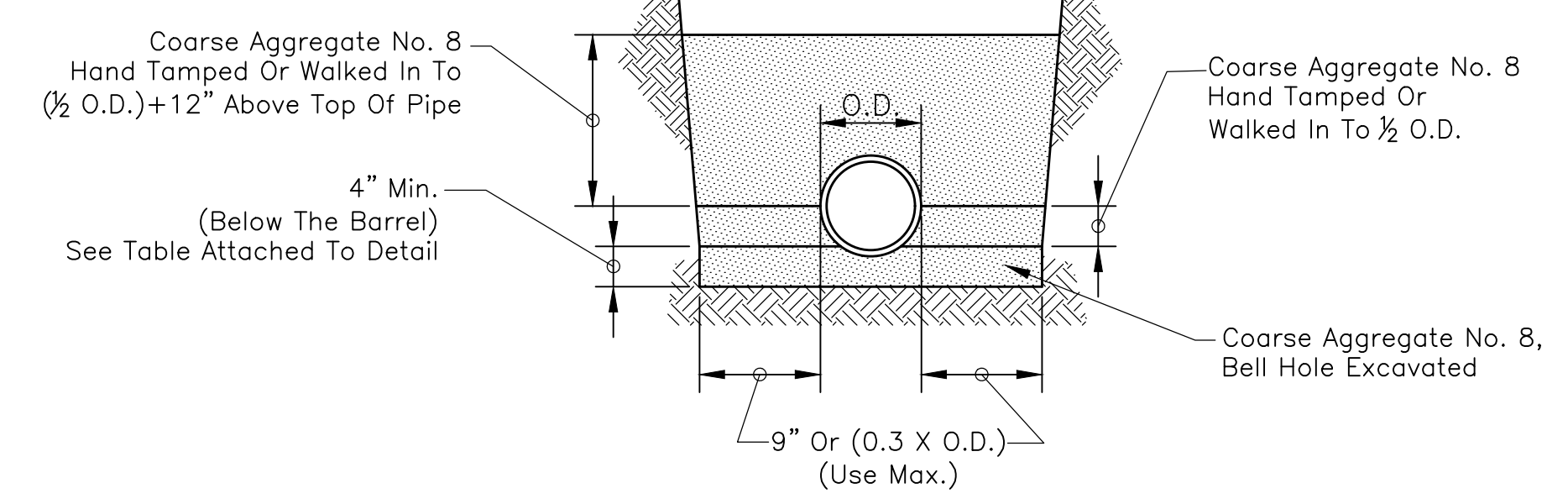


RCP PIPE BEDDING DETAIL

Scale: None

Whenever A Non-Parallel Trench Opening Encroaches Within 5' Of A Proposed Street, Private Drive Or Sidewalk, Granular Backfill If Testing Confirms Compaction, #8 Crushed Stone Or #8 Fractured Face Aggregate Or Flowable Fill Shall Be Used For Trench Backfill. Whenever A Non-Parallel Trench Opening Encroaches Within 5' Of An Existing Street, Flowable Fill Shall Be Used For Trench Backfill.

Structure Backfill According To INDOT Specification 211 When Trench Opening Encroaches Within 5' Of An Existing Or Proposed Street Or Sidewalk. Approved Backfill Material Outside Of Borrow Backfill Limits. Approved Backfill Material May Be Used Under Proposed Sidewalks Provided Sidewalks Are Constructed 6 Months After Backfilling Of Trenches Up To 6' Deep, 8 Months For Trenches 6'-10' Deep, 10-12 Months For Trenches Greater Than 10' Deep.



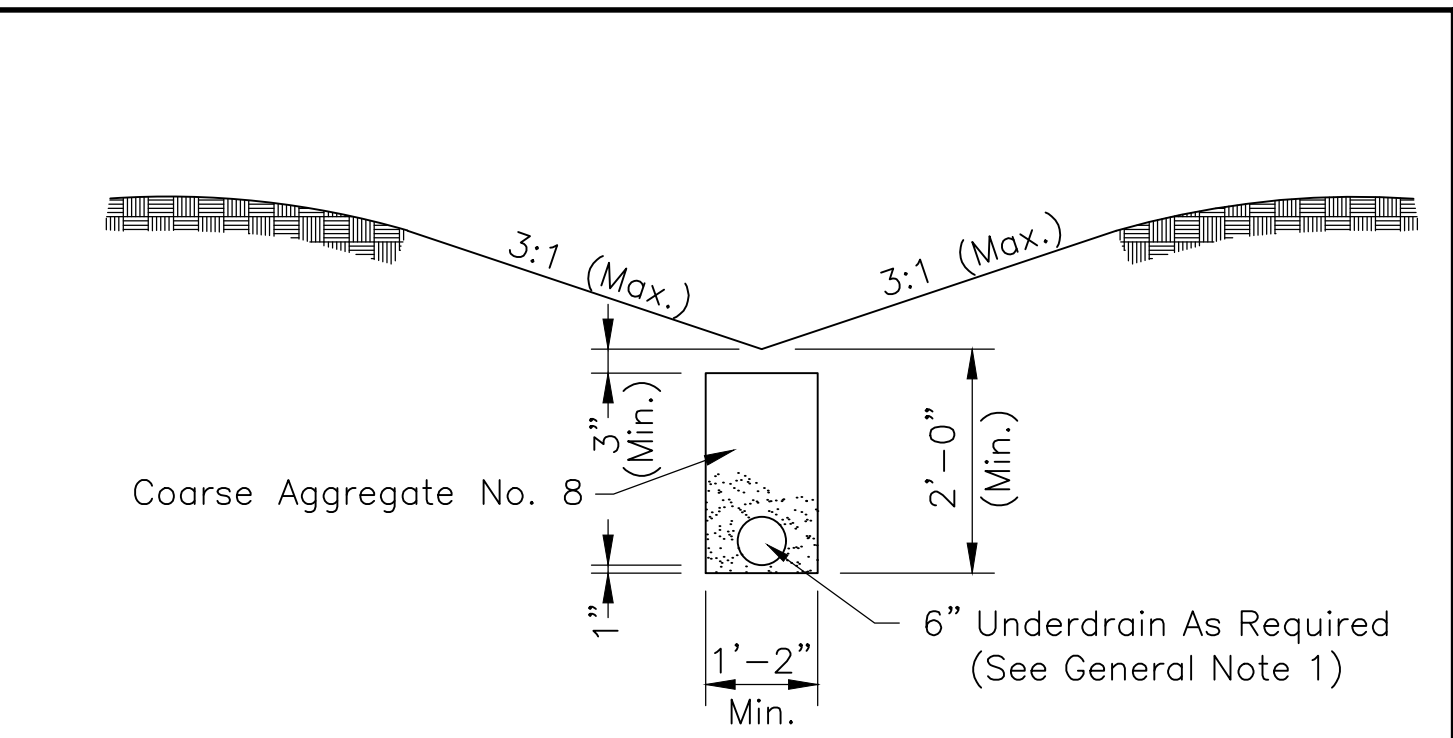
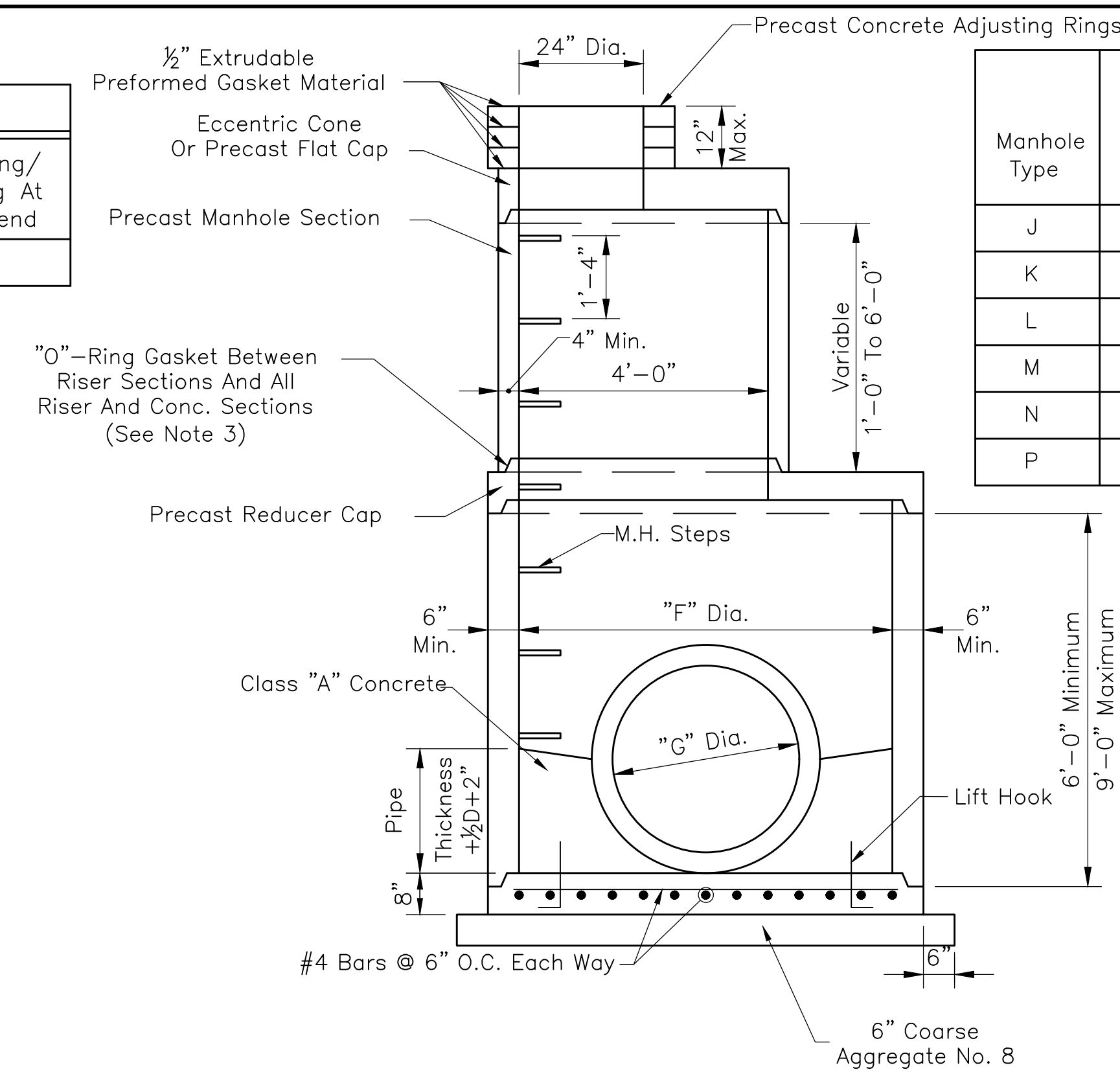
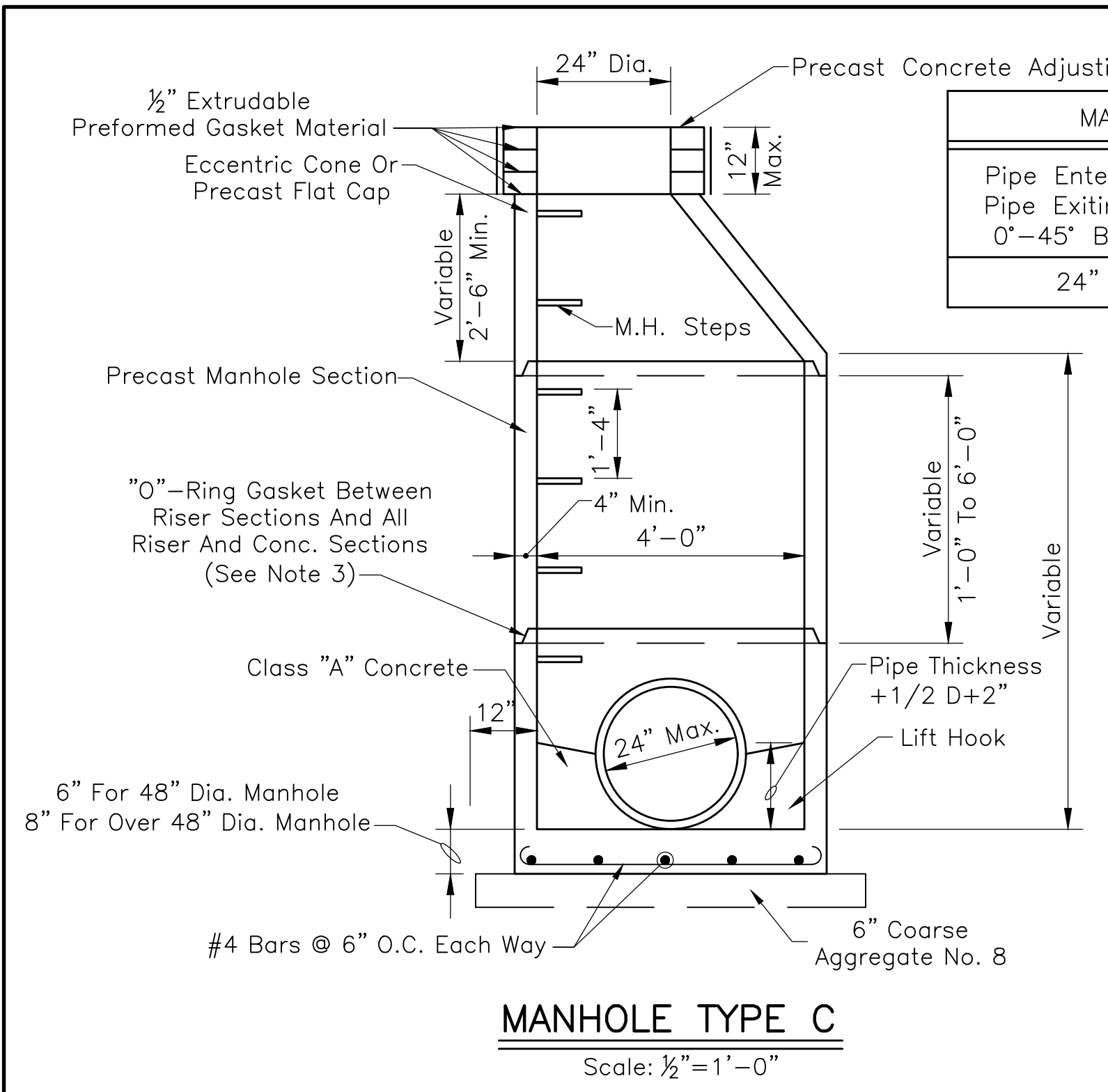
Pipe Size	12" TO 15"	18" And Over
Bedding Below The Pipe Barrel	O.D./4 Min.=4"	O.D./4 Min.=8"

FLEXIBLE (PVC, PP OR HDPE) PIPE BEDDING DETAIL

Scale: None

NOTES:

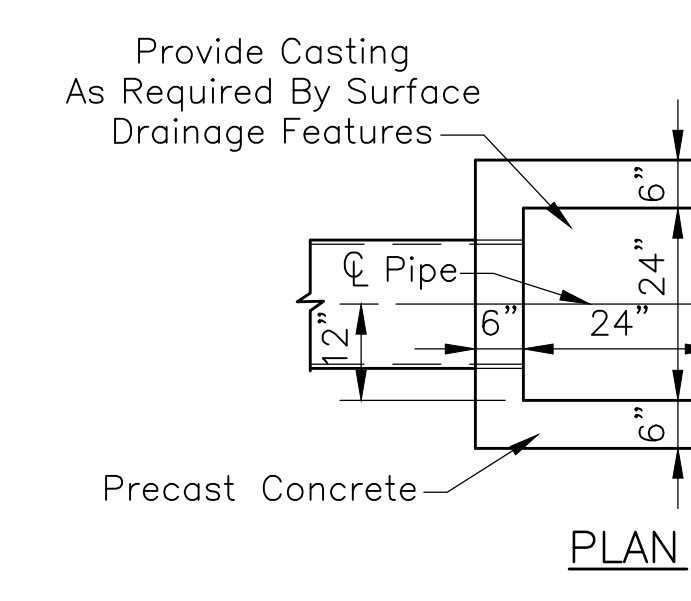
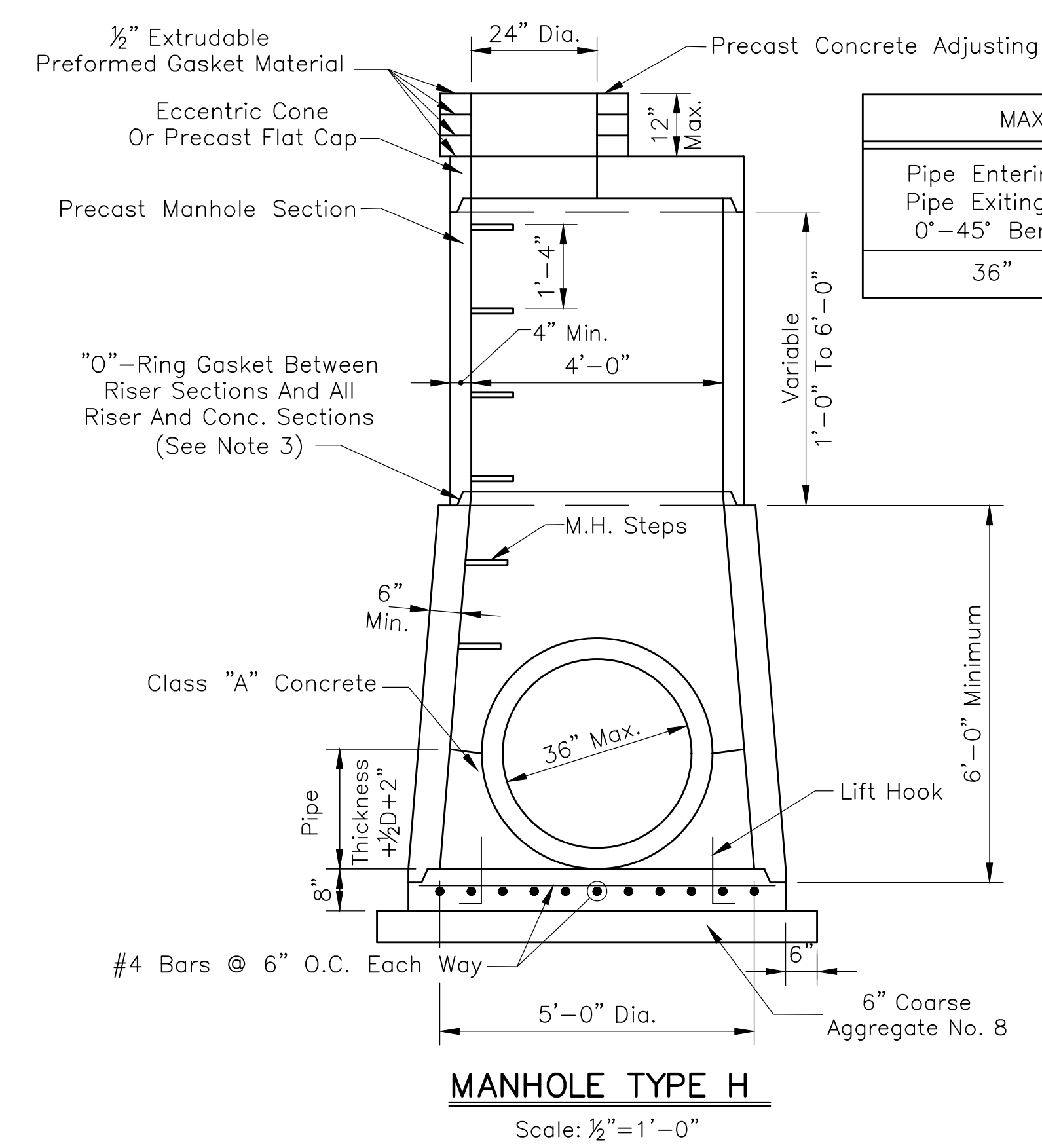
- Special Consideration Should Be Made For Shallow Depth Flexible Pipe Where Flotation Is A Possibility.
- Anti-Flotation Measures Should Be Considered Per Manufacturers Recommendation.
- Precast Flared Reinforced Concrete Pipe End Sections Shall Be Used At Exposed Pipe Ends. Concrete Toe Anchors Shall Be Required. Plastic Pipe Shall Require A Full Length Section Of Reinforced Concrete Pipe Jointed By A Concrete Collar Prior To The Precast Concrete Pipe End Section.
- Retrofitment Riprap In Accordance With The Most Recent INDOT Channel Design Guide Set On Geotextile In Accordance With The Most Recent INDOT Standard Specifications Shall Be Required At Inlet And Outlet Precast Flared Reinforced Concrete Pipe End Sections.
- Pipe End Sections Shall Have Appropriately Designed Riprap Outlet Protection. Refer To Outlet Protection Detail On Sheet 18.



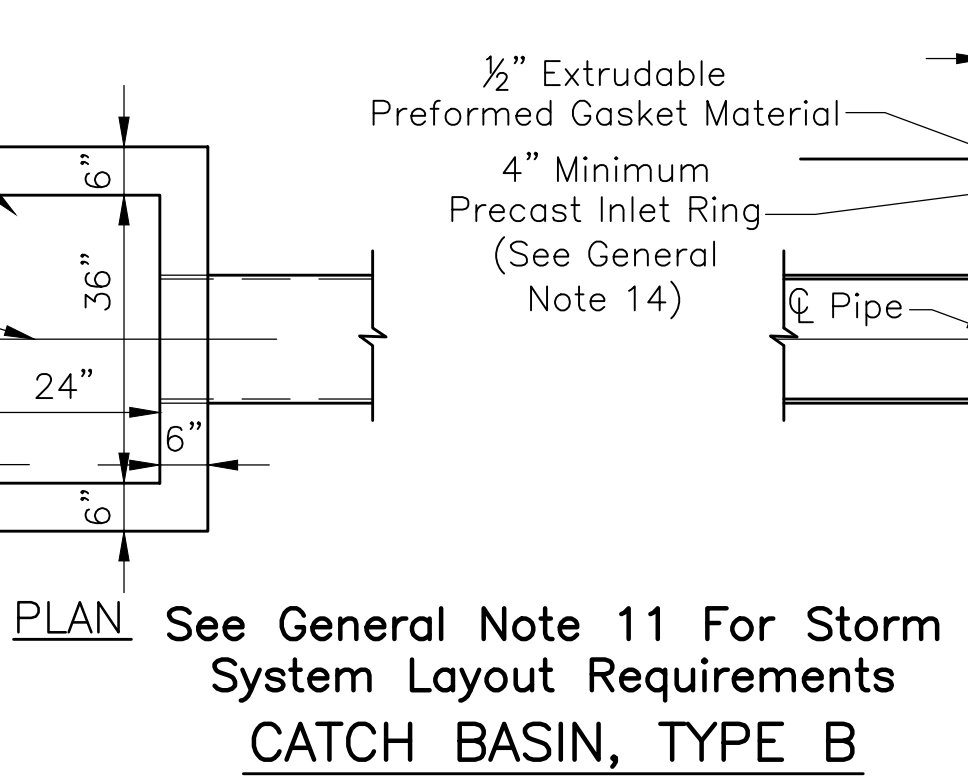
GENERAL NOTES

- Swales Shall Be Constructed With A Minimum 0.3 Percent Profile Grade Provided That A 6 Inch Diameter Underdrain Is Provided For Residential Swales And Commercial/Industrial Swales With Less Than A 0.5 Percent Profile Grade. See Detail On This Sheet.
- Type J, K, L, M, N, And P Manholes As Detailed Hereon Require A Certain Minimum Depth. In Cases Where The Depth Of The Storm Sewer Is Not Sufficient To Meet The Minimum Depth As Required By The Detail, "F" Diameter Manhole Section May Be Used Throughout The Depth Of The Manhole.
- Manholes Shall Conform To ASTM C478. Joints Shall Conform To ASTM C443. The Use Of Cast-In-Place Concrete Structures Shall Require The Prior Written Approval Of The Town Engineer. Regardless Of The Type Of Casting Used, The Casting Shall Be Centered Over The Manhole Steps.
- Manhole Steps Shall Be Neenah R-1981-J, M.A. Industries PS 1-PF, Or As Approved By Plainfield DPW.
- For Drainage Of Roll Curb And Gutter, Type I, Provide As Per Development Standard Detail DS-D01 Or As Approved By Plainfield DPW.
- For Drainage Of Combined Curb And Gutter, Type II, Provide As Per Development Standard Detail DS-D02 Or As Approved By Plainfield DPW. For Additional Capacity As Directed By The Engineer, Provide As Per Development Standard Detail DS-D03 Or As Approved By Plainfield DPW. Manholes Shall NOT Directly Drain Type II Curb.
- For Drainage Of Open Pavement Areas Without Curbing At An Inlet, Provide As Per Development Standard Detail DS-D04 Or As Approved By Plainfield DPW.
- For Drainage Of Open Pavement Areas Without Curbing At A Manhole, Provide As Per Development Standard Detail DS-D05 Or As Approved By Plainfield DPW.
- Castings For Use On Inlets Or Manholes Which Drain Swales Or Dry Bottom Detention Basins Shall Be As Per Development Standard Detail DS-D06 Or As Approved By Plainfield DPW.
- Castings For Manholes Which Do Not Drain Surface Water Shall As Per Development Standard Detail DS-D07 Or As Approved By Plainfield DPW.
- Mainline Pipe Shall NOT Connect To Catch Basins. Catch Basin Connections Occur At A Manhole. Mainline Pipe Is Any Pipe Downstream Of A Single Set Of Two Catch Basins Or Any Pipe Larger Than Or Equal To 15 Inch Diameter. Pipe Less Than Or Equal To 15 Inch Diameter Which Drains One Swale Inlet May Be Connected To Catch Basins When The Invert Depth Of Such Catch Basin Is Not Greater Than Shown On The Catch Basin Detail. A 10'-15' Offset Is Required For Inlet Pipes Parallel To Mainline Pipe. It Is Noted That On Commercial Sites No Pipe Is Considered Mainline Pipe Until It Enters The Public R-0-W. Further, On Commercial Sites Precast Concrete Structures, As Detailed By Outside Sources, May Be Used Subject To The Providing Of A Suitable Transition So That Castings Prescribed For Use Within Plainfield Are Used, And Subject To Storm Sewer General Note 4 On Sheet 7.
- Catch Basins Require Back Plaster Inside And Out. Castings May Be Adjusted As Much As 1 1/2" Using Cretek PenngROUT Or As Approved By Plainfield DPW. Special Adjustment Up To 6" Using Precast Adjusting Ring With 1/2" Butyl Rubber Gasket May Be Used If Approved By Plainfield DPW.
- All Castings Shall Be Per Sheet No. 10 Of The Town Standards.
- All Inlets And Catch Basins Shall Have A Minimum Of 3" Allowed For Riser Rings Or Adjustment; Manholes Shall Have A Minimum Of 4".
- When A Structure Encroaches Within 5' Of A Roadway, Or At The Discretion Of Plainfield DPW, It Shall Be Backfilled With Coarse Aggregate No. 8.

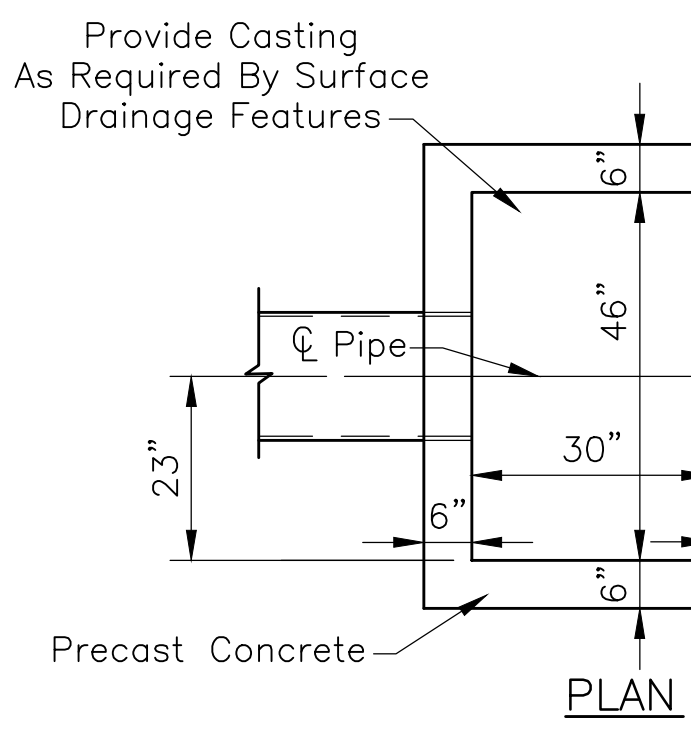
MANHOLES-TYPE J, K, L, M, N & P



CATCH BASIN, TYPE A

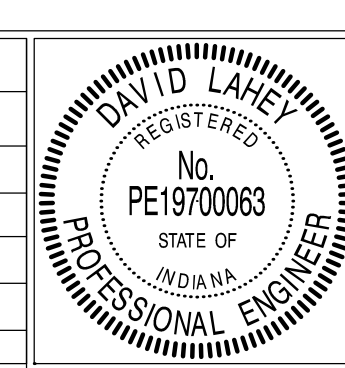


CATCH BASIN, TYPE B



CATCH BASIN, TYPE C

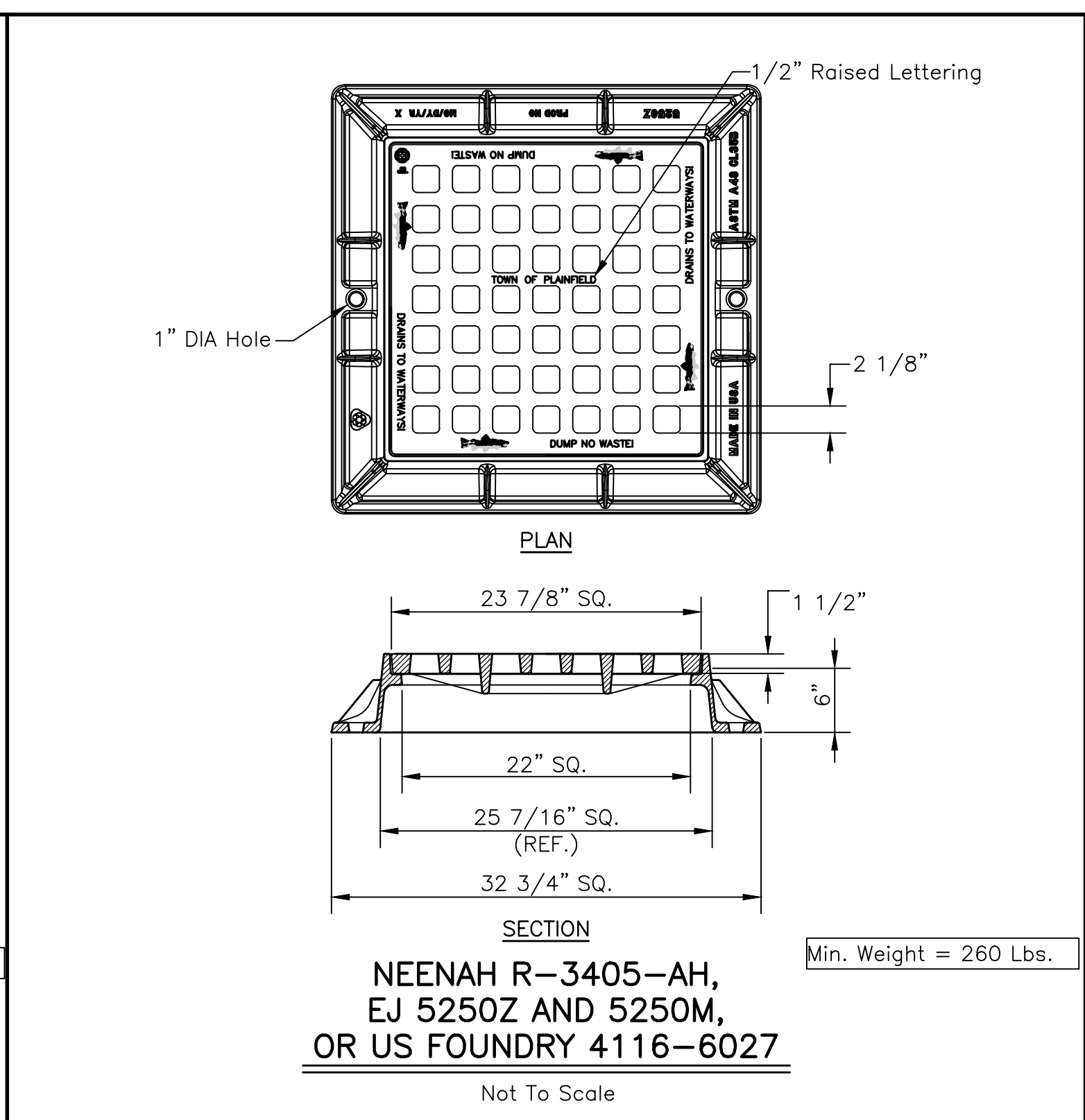
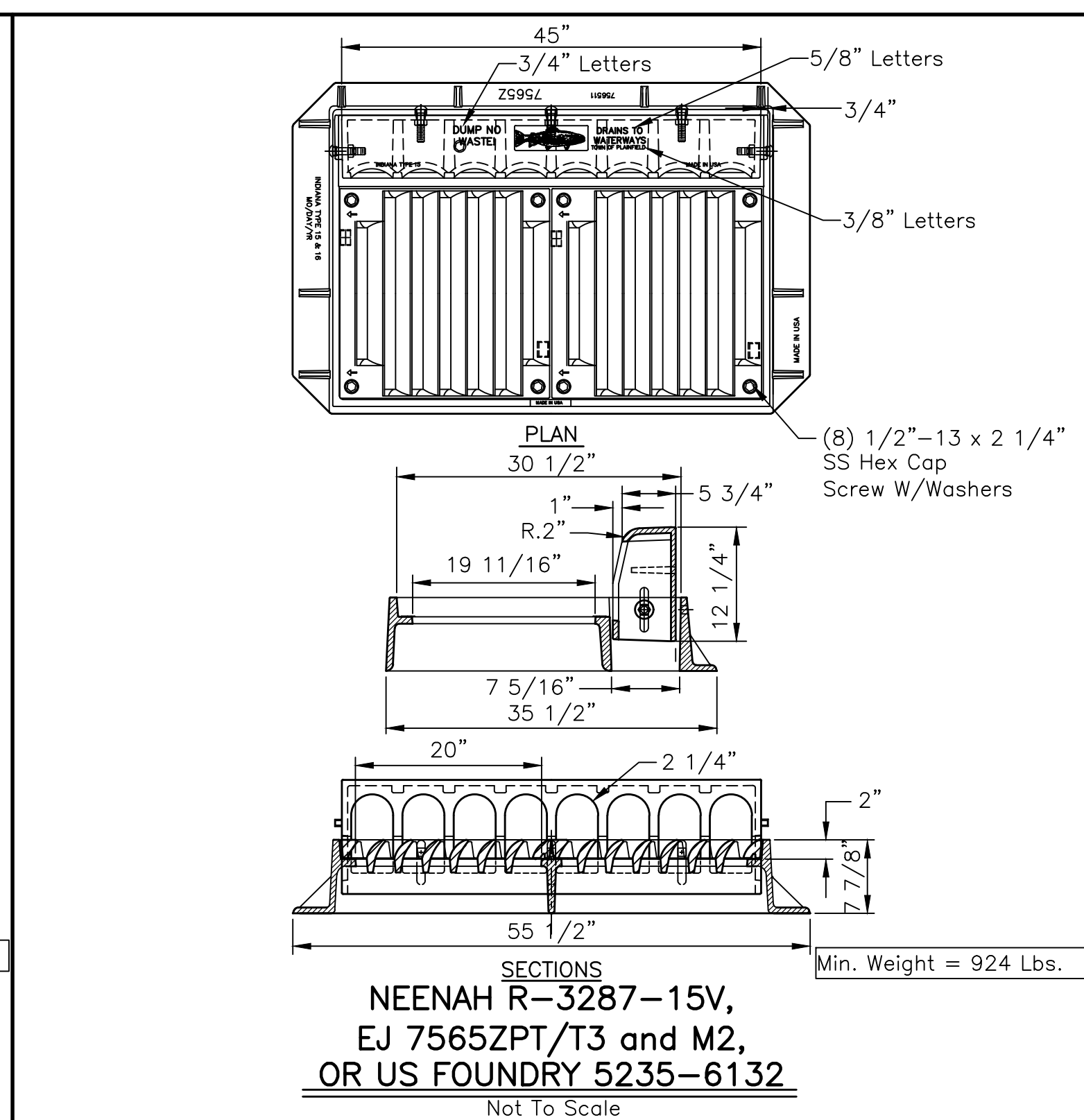
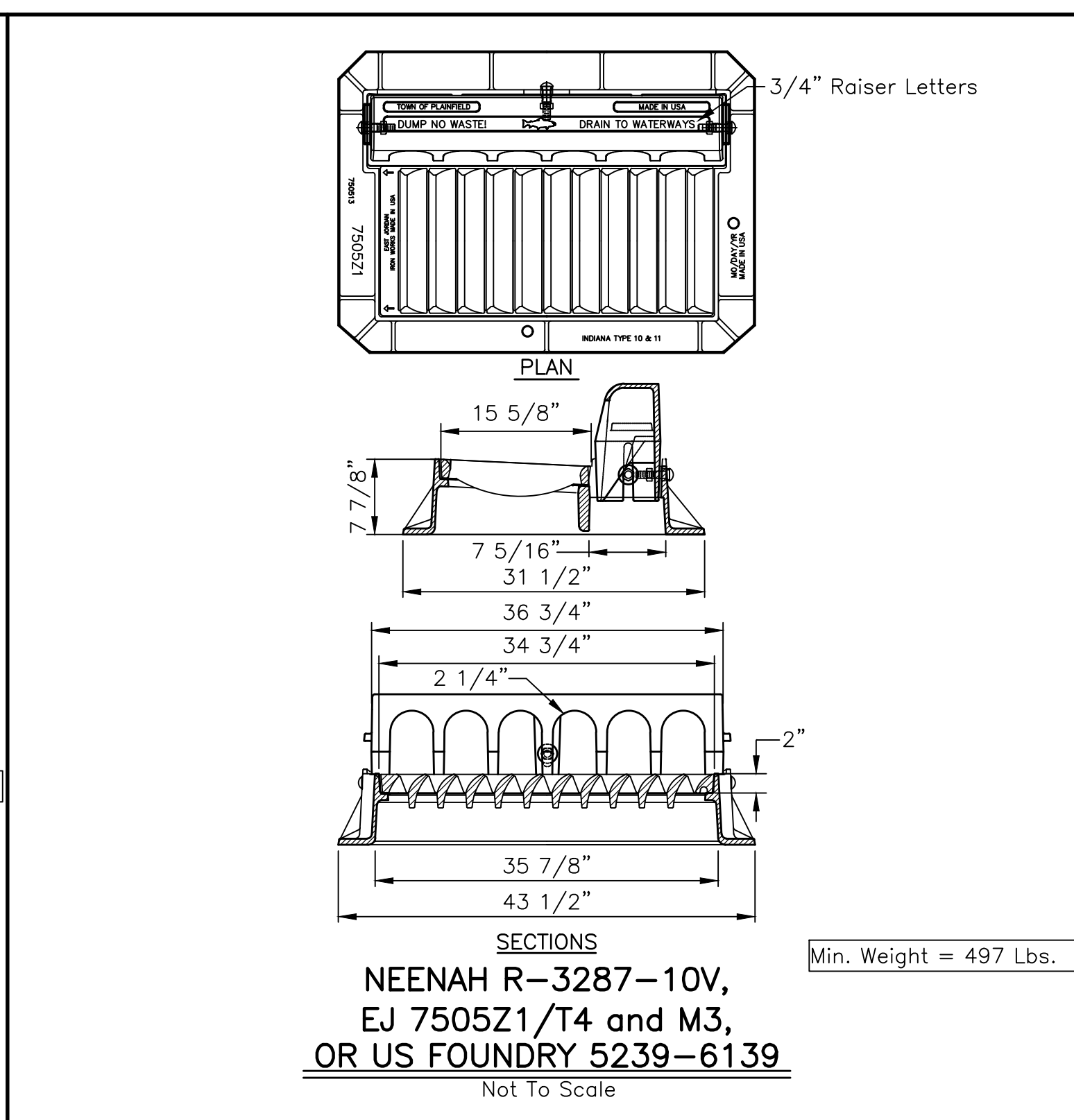
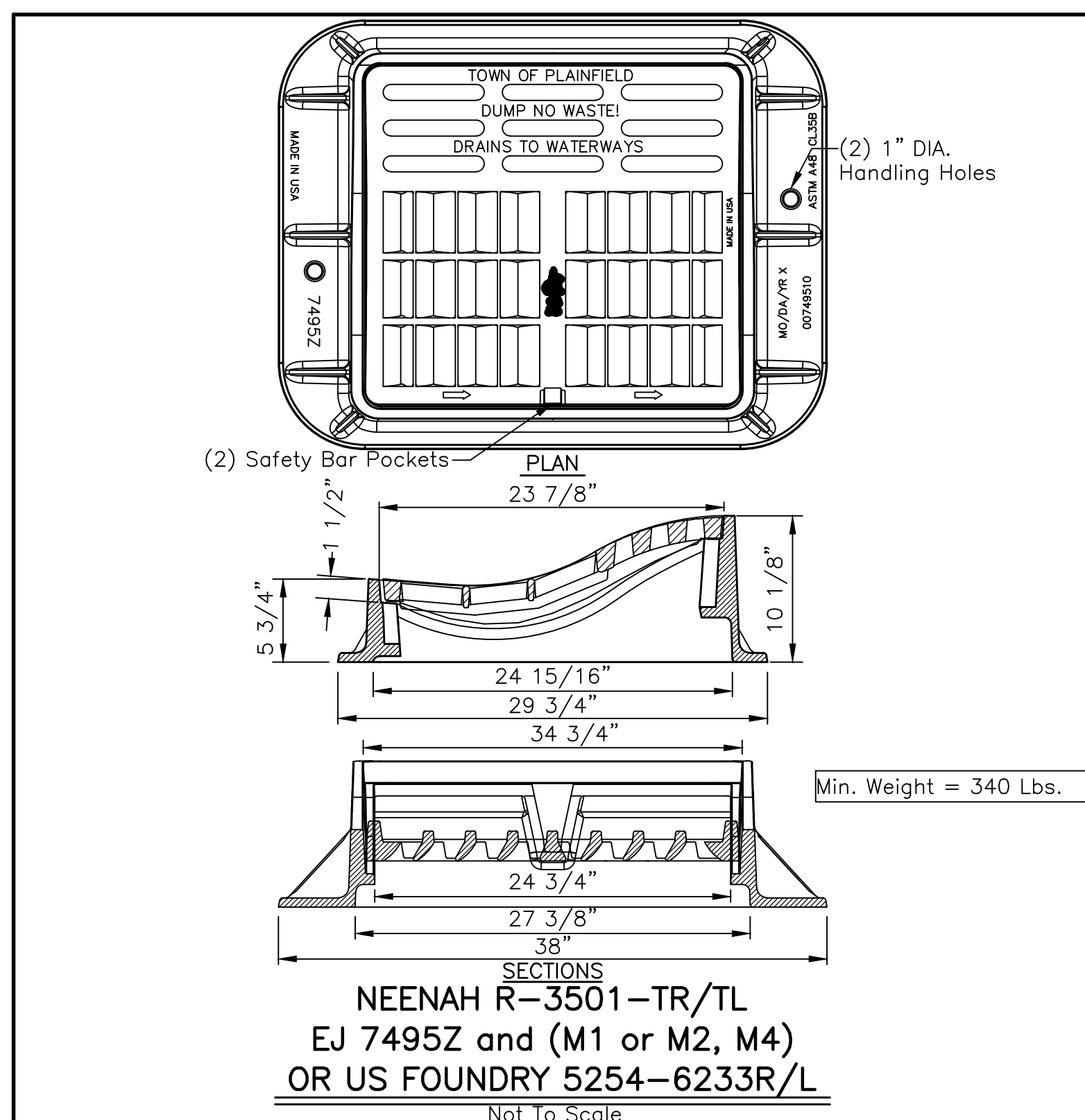
REVISIONS		
Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL: *[Signature]* DESIGN ENGINEER 03/10/2022 DATE

APPROVED: *[Signature]* EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES 03/10/2022 DATE

APPROVED: *[Signature]* SUPERINTENDENT OF PUBLIC WORKS 3/1/22 DATE

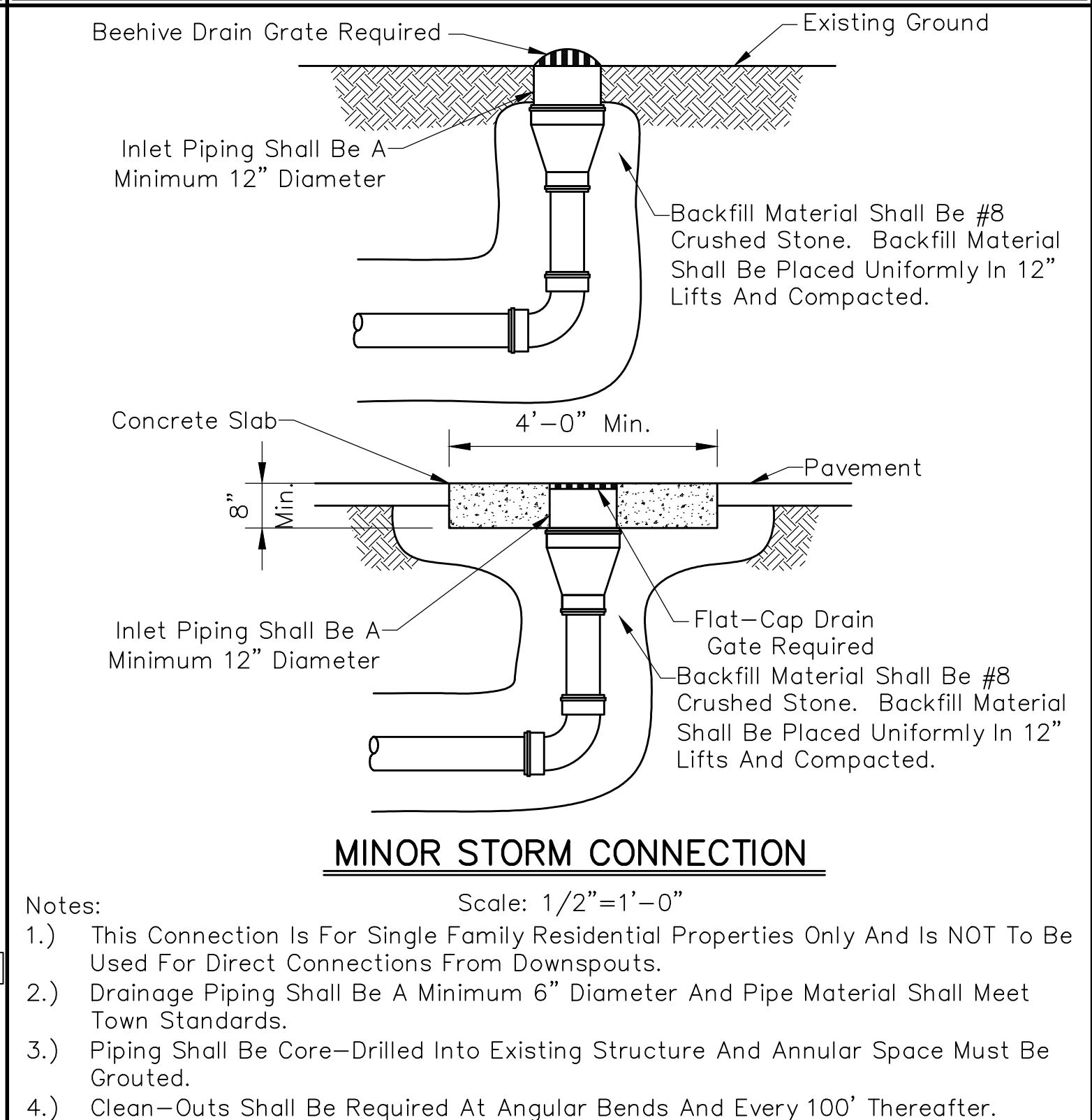
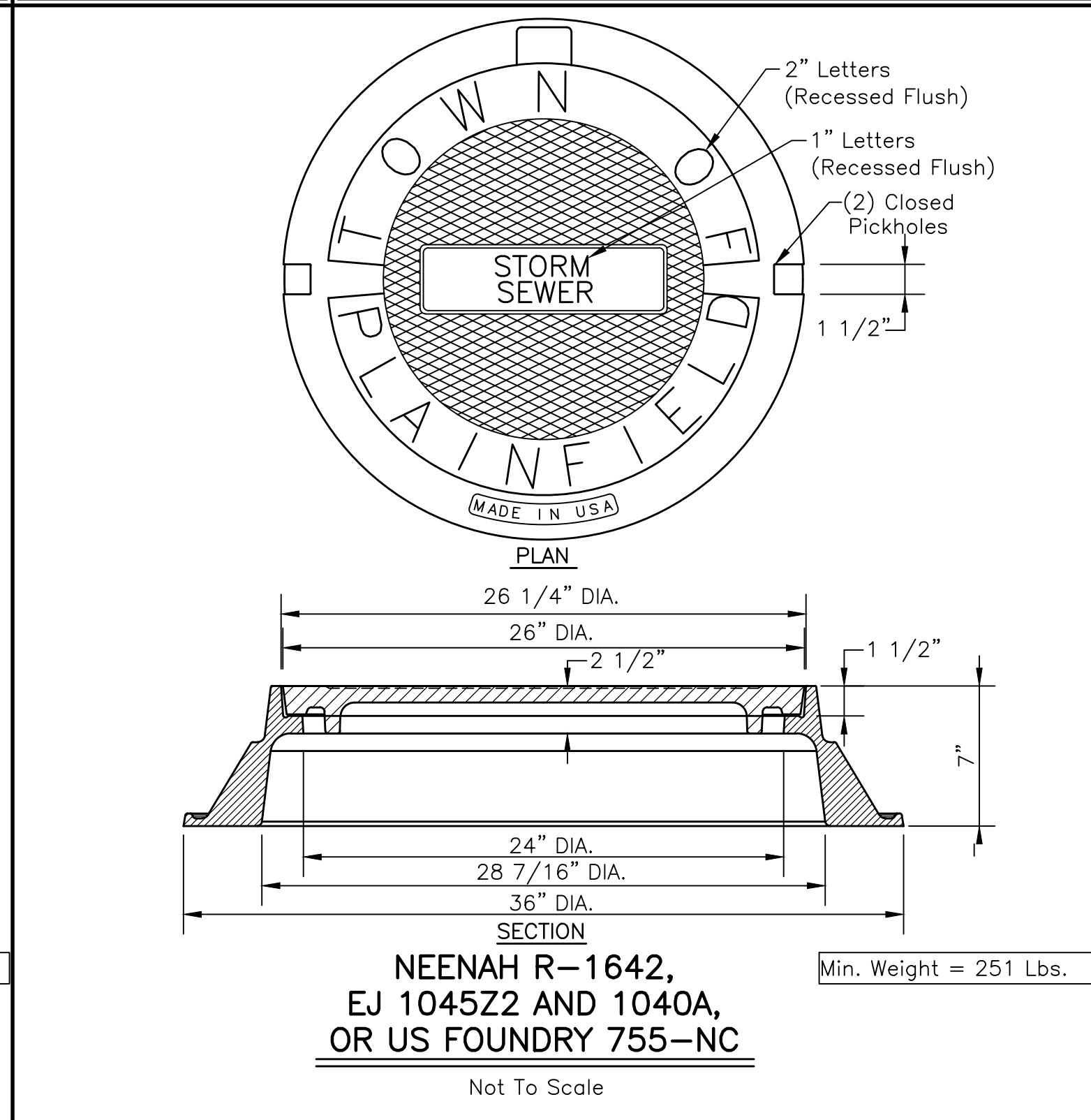
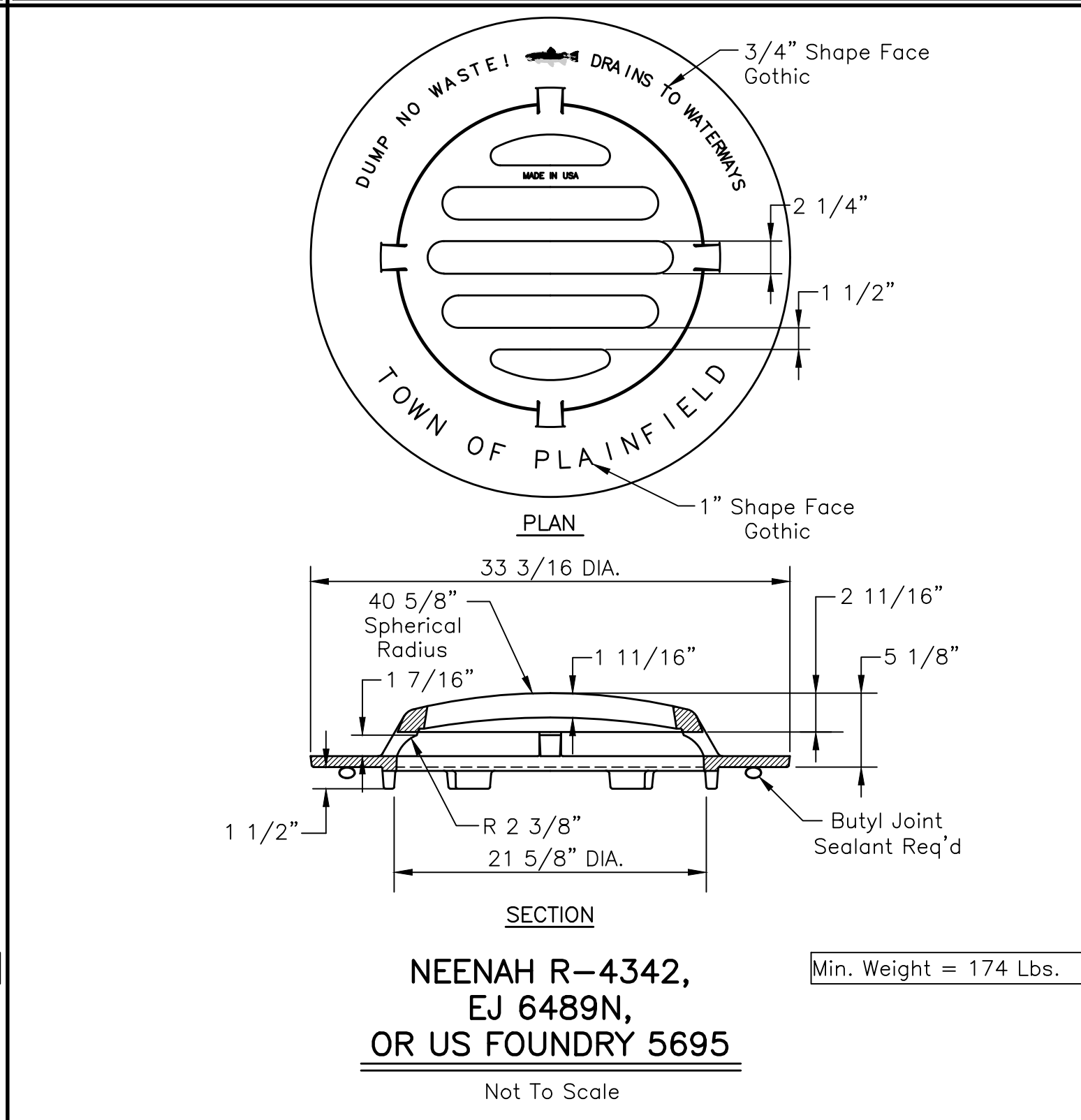
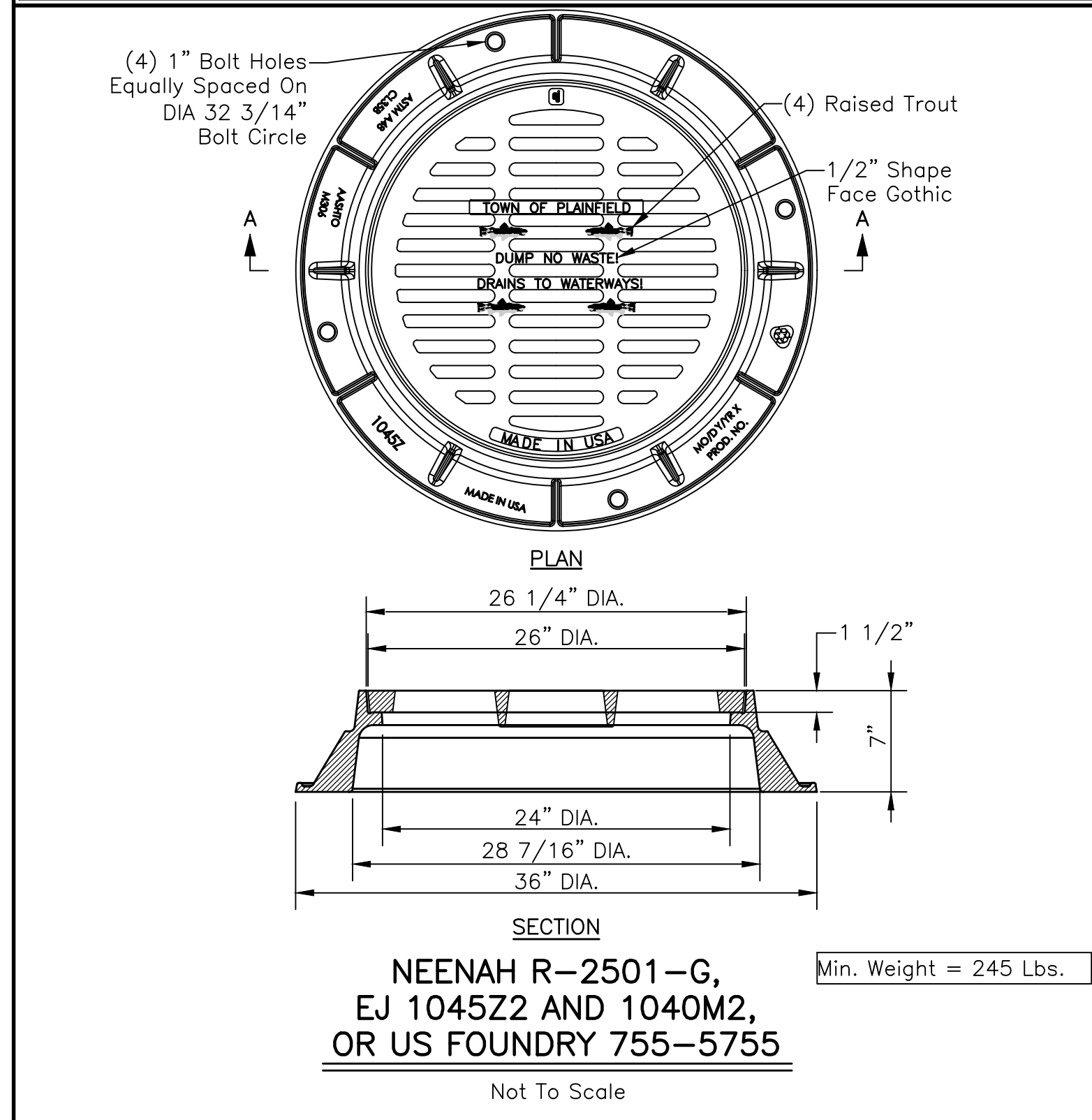


DEVELOPMENT STANDARD - DETAIL DS-D01

DEVELOPMENT STANDARD - DETAIL DS-D02

DEVELOPMENT STANDARD - DETAIL DS-D03

DEVELOPMENT STANDARD - DETAIL DS-D04



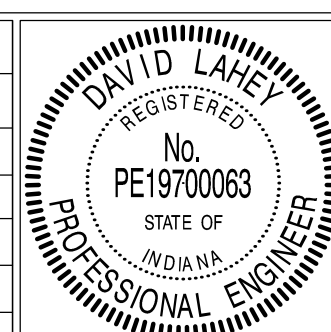
DEVELOPMENT STANDARD - DETAIL DS-D05

DEVELOPMENT STANDARD - DETAIL DS-D06

DEVELOPMENT STANDARD - DETAIL DS-D07

DEVELOPMENT STANDARD - DETAIL DS-D08

REVISIONS		
Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL: *David Laney* DESIGN ENGINEER 03/10/2022 DATE

APPROVED: *James Castelli* EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES 03/10/2022 DATE

APPROVED: *James Castelli* SUPERINTENDENT OF PUBLIC WORKS 3/1/22 DATE

TOWN OF PLAINFIELD

STORM DRAINAGE (D)
DEVELOPMENT STANDARDS

SHEET
10
OF
27

WATER MAIN MATERIALS

- All Pipe Provided For Use In The Town Of Plainfield Water System Shall Be Of U.S. Production Manufactured By American, U.S. Pipe, Or Town Approved Equal. All Fittings Provided For Use In The Town Of Plainfield Water System Shall Be Of U.S. Production Manufactured By Clow, Tyler, American, Or As Approved By Plainfield DPW.
- Ductile Iron Pipe For Water Mains Shall Be Centrifugally Cast And Shall Conform To The Latest Revision Of ANSI A21.5 And AWWA C151. Ductile Iron Pipe With Push-On Or Mechanical Joints Shall Be Special Thickness Class 50. The Pipe Shall Be Provided With A Minimum Laying Length Of 18 Feet.
- Ductile Iron Fittings 3 Inches Through 48 Inches Shall Conform To The Latest Revision Of ANSI A21.10 And AWWA C110. Ductile Iron Compact Fittings 3 Inches Through 16 Inches Shall Conform To The Latest Revision Of ANSI A21.53 And AWWA C153. Fittings In, And Within 2 Feet Of, Structures Shall Be Flanged. All Other Fittings Shall Be Mechanical Joint Type.
- Ductile Iron Pipe Coatings Shall Conform To The Latest Revision Of ANSI A21.51, AWWA C151, ANSI A21.4, And AWWA C104. Interior Pipe Lining Shall Be Cementitious Mortar With Asphaltic Seal Coat. Exterior Pipe Coating Shall Be Standard Asphaltic Coating, Except Exposed Piping Within Structures Shall Receive Shop Priming Compatible With Finish Coat.
- Mechanical Joints And Accessories Shall Conform To The Latest Revision Of ANSI A21.10 And AWWA C110. Rubber Gaskets Shall Be Vulcanized Synthetic Rubber And Shall Conform To The Latest Revision Of ANSI A21.11 And AWWA C111.
- Flanged Joints Shall Conform To The Latest Revision Of ANSI A21.15 And AWWA C115. Rubber Gaskets Shall Be Either Ring Or Full Face And Shall Be 1/8" Thick. Bolts And Nuts Shall Conform To ANSI B18.2.1 And ANSI B18.2.2.
- Push-On Joints Shall Conform To The Latest Revision Of ANSI A21.11 And AWWA C111. Rubber Gaskets Shall Be Vulcanized Synthetic Rubber And Shall Conform To The Latest Revision Of ANSI A21.11 And AWWA C111.
- Service Tubing To Customer Shall Be Copper Water Tube, Type K, Soft Temper For 3/4" Through 2" For Underground Service, Conforming To ASTM B88, ASTM B251, And AWWA C800. Pipe Shall Be Marked With The Manufacturer's Name Or Trademark And Mark Indicative Of The Type Of Pipe. Outside Diameter Of The Pipe And Minimum Weight Per Foot Of Pipe Shall Not Be Less Than Listed In ASTM B251, Table II.
- Gate Valves Shall Be In Accordance With AWWA C515 Having Fused Epoxy Coating Inside And Outside Assembled With S.S. Bolts And Shall Be American Flow Control Series 2500. Consult Plainfield DPW For Valves Larger Than 16 Inches. Valves Shall Pass A 250 PSI Factory Test. Valve Boxes Shall Be Furnished With Posi-Caps To Align Box Over Stem.

WATER MAIN PRESSURE AND LEAKAGE TESTING

- The Town Of Plainfield Shall Be Given 24 Hour Written Notice Of The Required Pressure And Leakage Test To Be Performed By The Contractor. The Pressure And Leakage Test Shall Be Performed In Accordance With The Basic Provisions Of AWWA C600. The Testing Procedure Shall Assume A 100 PSIG Working Pressure. The Test Pressure Shall Not Be Less Than 1.25 Times The Working Pressure At The Highest Point Along The Test Section But Not Less Than 1.5 Times The Assumed Working Pressure At The Point Of Testing. Test Pressure Shall Not Exceed Pipe Or Thrust Restraint Design Pressures Or Rated Pressure Of The Valves. The Test Pressure Shall Not Vary By More Than +5 PSI For The 2 Hour Test Duration.
- Valves Shall Not Be Operated In Either Direction At Differential Pressures Exceeding The Rated Valve Working Pressure.
- The Pressure And Leakage Test Shall Be Performed Following The General Form Of The Following:
 - Record Time And Line Pressure Prior To Start Of Test.
 - Pump Water Into New Main Until Pressure Reaches 150 PSIG, Stop Pumping When Pressure Reaches 150 PSIG, Record Time And Line Pressure.
 - Contractor Shall Remain At Site For One Hour. The Test Shall Be Voided If Any Adjustments Are Made To The Main, Test Equipment, Or Appurtenances. Tightening Of Fittings On Test Equipment Is Allowed. Following The One Hour Period, Record Time And Line Pressure.
 - Pump Water Into New Main From A Calibrated Container Of Water Until Pressure Reaches 150 PSIG, Stop Pumping When Pressure Reaches 150 PSIG, Record Time, Line Pressure, And Amount Of Water Pumped To The Nearest 1/100 Gallon. The Calibrated Container Shall Have Markings At 1/10 Gallon Increments.
 - Repeat Steps C And D One Additional Time.
- A Test Section Of Water Main Is Considered Satisfactory If It Meets The Following:

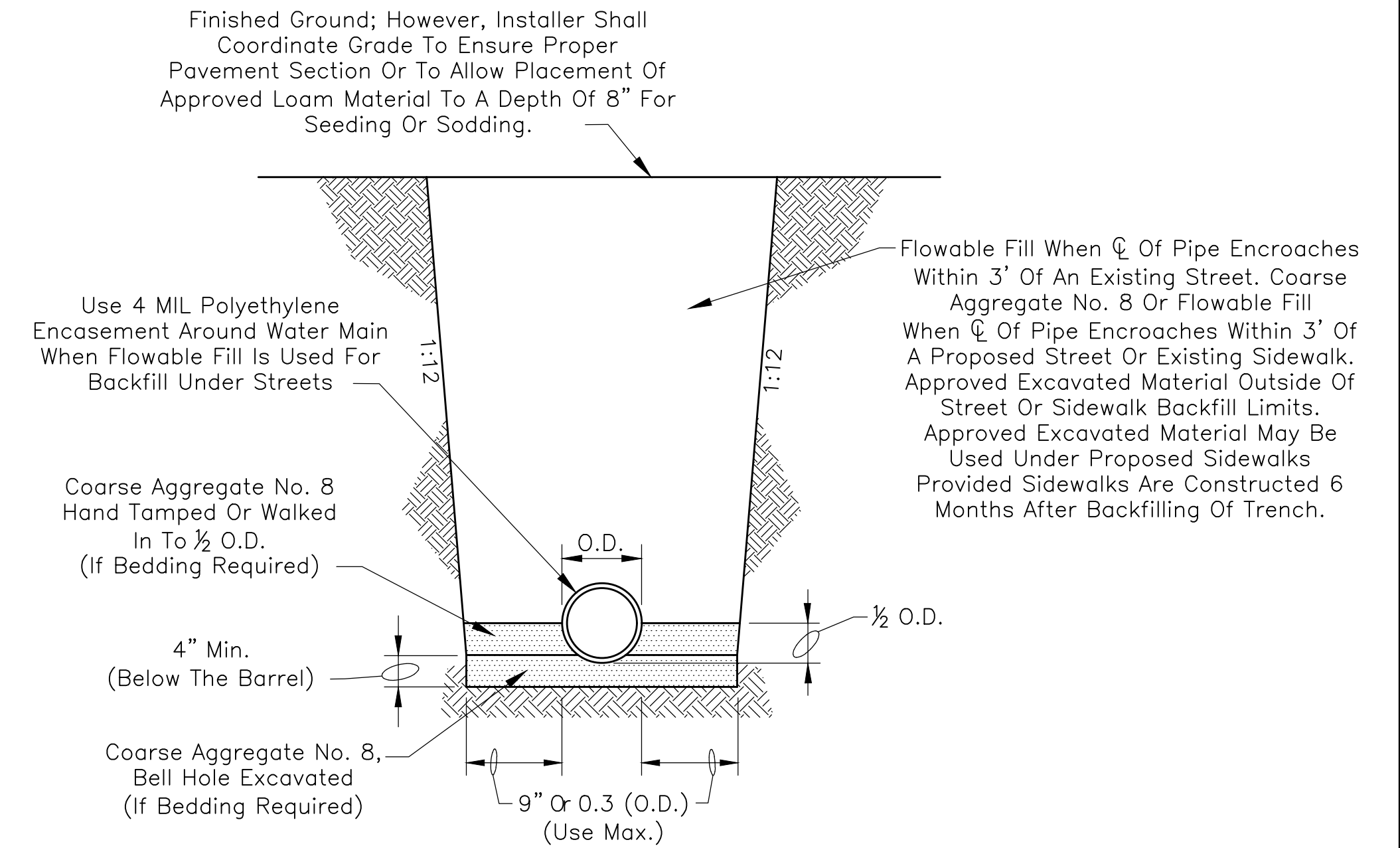
Main Size (Inches)	Allowable Leakage (Gal./Hr./1000 Ft.)
6	0.50
8	0.66
10	0.83
12	0.99
16	1.32
- If The Leakage From A Test Section Is Greater Than Permitted Under These Specifications, The Contractor Shall Locate And Repair The Defective Joints, Mains, And Appurtenances. The Pressure And Leakage Test Shall Then Be Repeated Until Satisfactory Results Are Obtained. All Labor And Materials Required To Meet The Requirements Of The Pressure And Leakage Test Shall Be At The Expense Of The Contractor.

WATER MAIN GENERAL NOTES AND AS-BUILT DRAWINGS

- Provide A Valve On All Runs And Branches Per The Connection Details On Sheet 12 Of The Plainfield Standards Even When Such Runs Or Branches Are Stubs For Future Extension.
- Storm Pipe Conflicts Require Special Attention In That Proposed Water Mains Shall Pass Over Proposed Mainline Storm Pipe. Such Situations May Require Upsizing Of Downstream Storm Pipes To Enable Flatter Slopes To The Point Of Conflict Such That 30 Inch Minimum Cover Is Maintained Over The Water Main. Vertical Water Main Fittings Shall Not Be Used. All Water Main Crossings Of Storm Pipe Shall Be Shown On Storm Sewer Profiles. When It Is Necessary To Decrease Water Main Cover To Less Than 54 Inches, Inlet Pipes That May Conflict With The Water Main Shall Be Laid At Such Slope To Pass Below The Water Main.
- Water Mains Shall Follow The Alignment Of The Road \bar{C} And Shall Remain 3 1/2 Feet Behind The Back Of Curb On One Side Of The Street Without Alternating From Such Side.
- All Water Pipe Shall Be Installed In Accordance With AWWA C600 And With A Minimum Depth Of Cover Of 54 Inches, Except As Provided By General Note No. 2.
- Terminate Dead End Mains With A Mainline Valve Followed By A Fire Hydrant Assembly. For Cul-De-Sacs, Eliminate Hydrant Assembly Tee And Terminate With 6" Valve And Fire Hydrant. As Directed Or Approved By The Plainfield DPW, Terminate Temporary Dead End Mains With A #2 Eclipse Post Hydrant With Tamper-Proof Options And Provide #492 Tamper-Proof Wrench With A Brass Street Elbow, Brass Nipple, Mueller B20283 Ball Curb Valve With Box, And A Brass Nipple Tapped Into Restrained Cap. See Development Standard DS-W05.
- Unless Unavoidable As Determined By Plainfield DPW, Double Tees Shall Not Be Permitted. Utilize A Cross At Intersection Of Four Water Mains With Cross Sized To Match The Largest Pipe.
- See Development Standard DS-W01 For Water Main Abandonment Procedure.
- As-Built Drawings Shall Be Submitted To Plainfield DPW. GPS Collected Coordinates Shall Depict Actual Horizontal And Vertical Locations Of Utility Assets Such As: System Valves, Hydrants, Blow-Offs, Air Release Valves, And Master Meters.

WATER MAIN DISINFECTION, BACTERIOLOGICAL TESTING

- The Town Of Plainfield Shall Be Given 24 Hour Written Notice Of The Required Disinfection, Flushing And Testing Procedures To Be Performed By The Contractor. All Newly Installed Water Mains Shall Be Disinfected In Accordance With ANSI/AWWA C-651. Liquid Chlorine, High-Test Calcium Hypochlorite (70 Percent Chlorine), Or High-Test Sodium Hypochlorite (14.7 Percent Chlorine) May Be Used To Provide An Initial Minimum Concentration Of 25 mg/L Of Free Chlorine In All Newly Installed Mains.
- A Minimum Concentration Of 10 mg/L Of Free Chlorine Shall Be Maintained In All Parts Of The Newly Installed Mains For 24 Hours Of Contact Time.
- Following The Initial 24 Hour Contact Time But Prior To 48 Hours Of Contact Time, All Treated Water Shall Be Properly Dechlorinated And Thoroughly Flushed From The Newly Laid Pipe At Its Extremity Until The Replacement Water Has A Chlorine Residual Of Less Than 1 mg/L.
- After Flushing, Water Samples Collected On Two Successive Days From The Treated Piping System, As Directed By The Town Of Plainfield, Shall Show Satisfactory Bacteriological Tests. Following Satisfactory Bacteriological Tests, Contractor Shall Submit 2 Copies Of The Results To Plainfield DPW And To IDEM Drinking Water Branch.
- The Taking Of Samples And The Testing Of Chlorine Residual Shall Be Carried Out By The Contractor At The Direction Of The Town Of Plainfield.



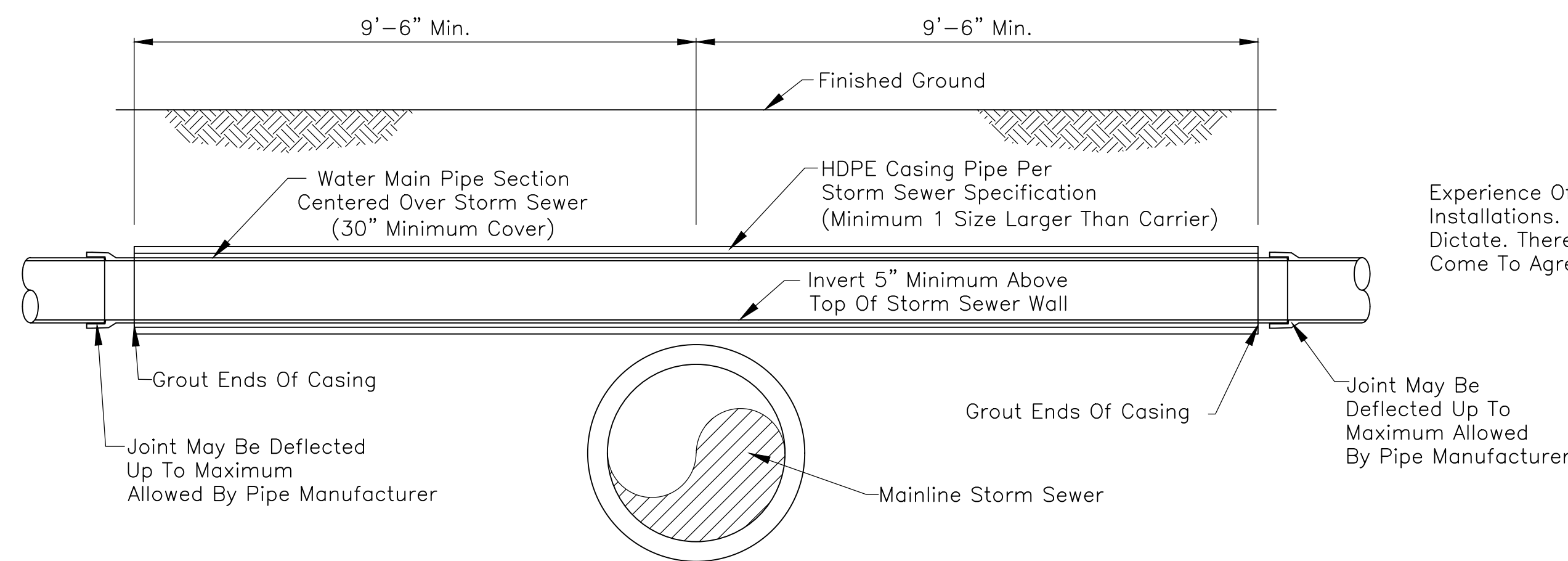
D.I. PIPE BEDDING TABLE		
Pipe Size (in)	Bedding Depth Below Barrel (in)	Cubic Yards Of Bedding Per Foot Of Pipe (cys/ft)
4	4	0.038
6	4	0.053
8	4	0.070
10	4	0.088
12	4	0.108
14	4	0.131
16	5	0.164
18	5	0.191
20	6	0.230
24	7	0.306
30	8	0.432

Note: Bedding Is Still Required Where Pipe Requires Structural Backfill (Flowable Fill, Coarse Aggregate No. 8, Etc.)

Experience Of Plainfield DPW Has Been That Bedding Has Not Been Required For Nearly All Installations. However, Plainfield DPW May Direct That Bedding Is Required As Trench Conditions Dictate. Therefore, It Is Recommended That The Project Owner And The Project Contractor Come To Agreement On Payment Methods In The Event That Bedding Is Required.

DI PIPE BEDDING DETAIL

Scale: None

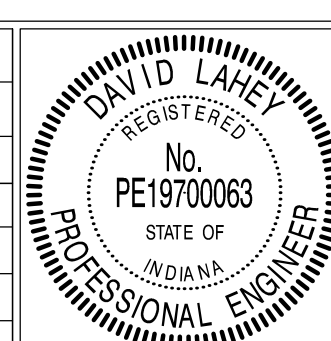


HDPE Casing Pipe Required At All Water Main/Sewer Crossings Which Violate The 18 Inch Minimum Vertical Separation Required By Ten States Standards. Refer To Water Main General Notes.

SPECIAL STORM SEWER CONFLICT TREATMENT

Scale: None

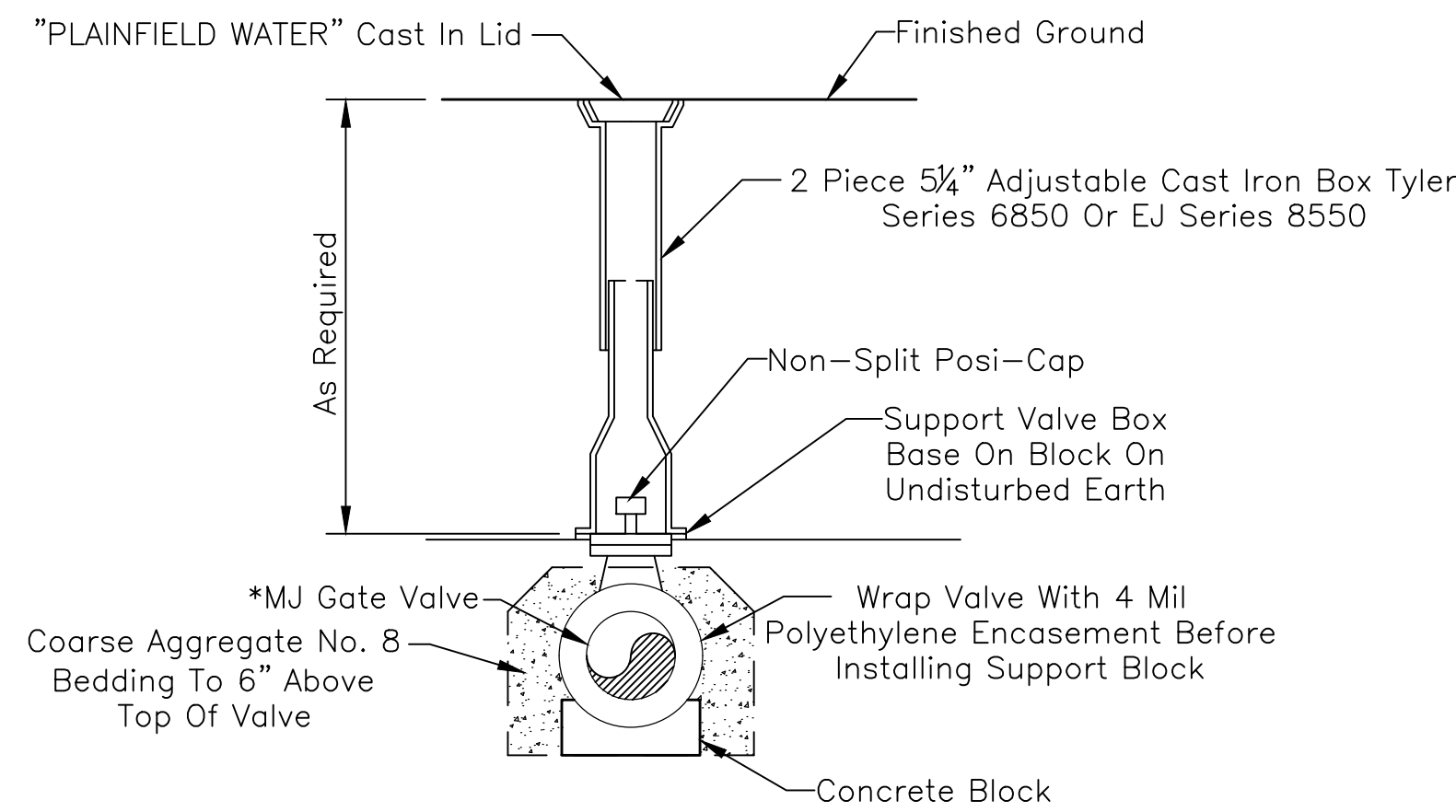
REVISIONS		
Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL	<i>David Laney</i>	DESIGN ENGINEER	03/10/2022	DATE
APPROVED	<i>James Castelli</i>	EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES	03/10/2022	DATE
APPROVED	<i>James Castelli</i>	SUPERINTENDENT OF PUBLIC WORKS	3/1/22	DATE

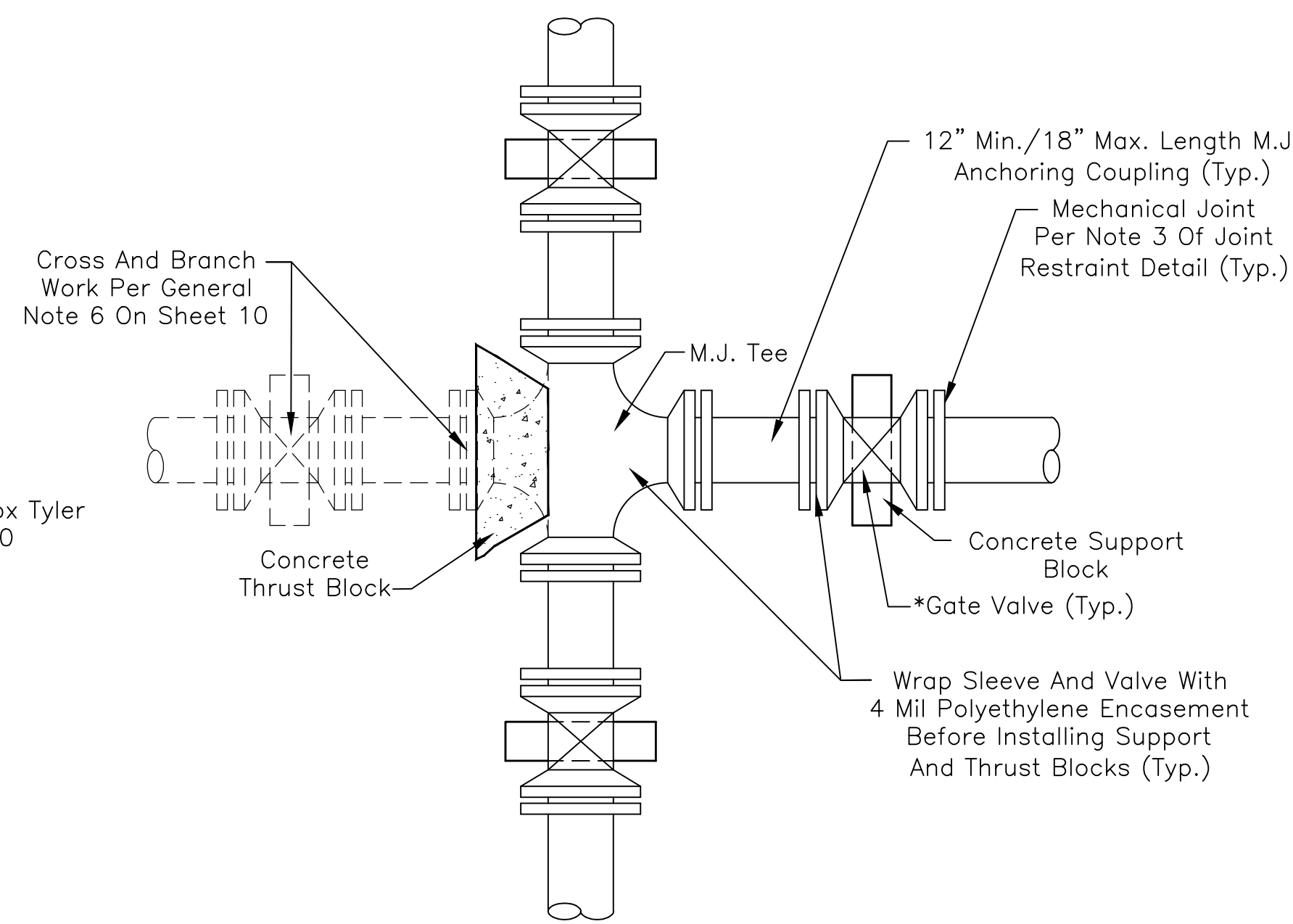
TOWN OF PLAINFIELD
WATER MAIN
BEDDING DETAILS AND NOTES

SHEET
11
OF
27



TYPICAL VALVE INSTALLATION DETAIL

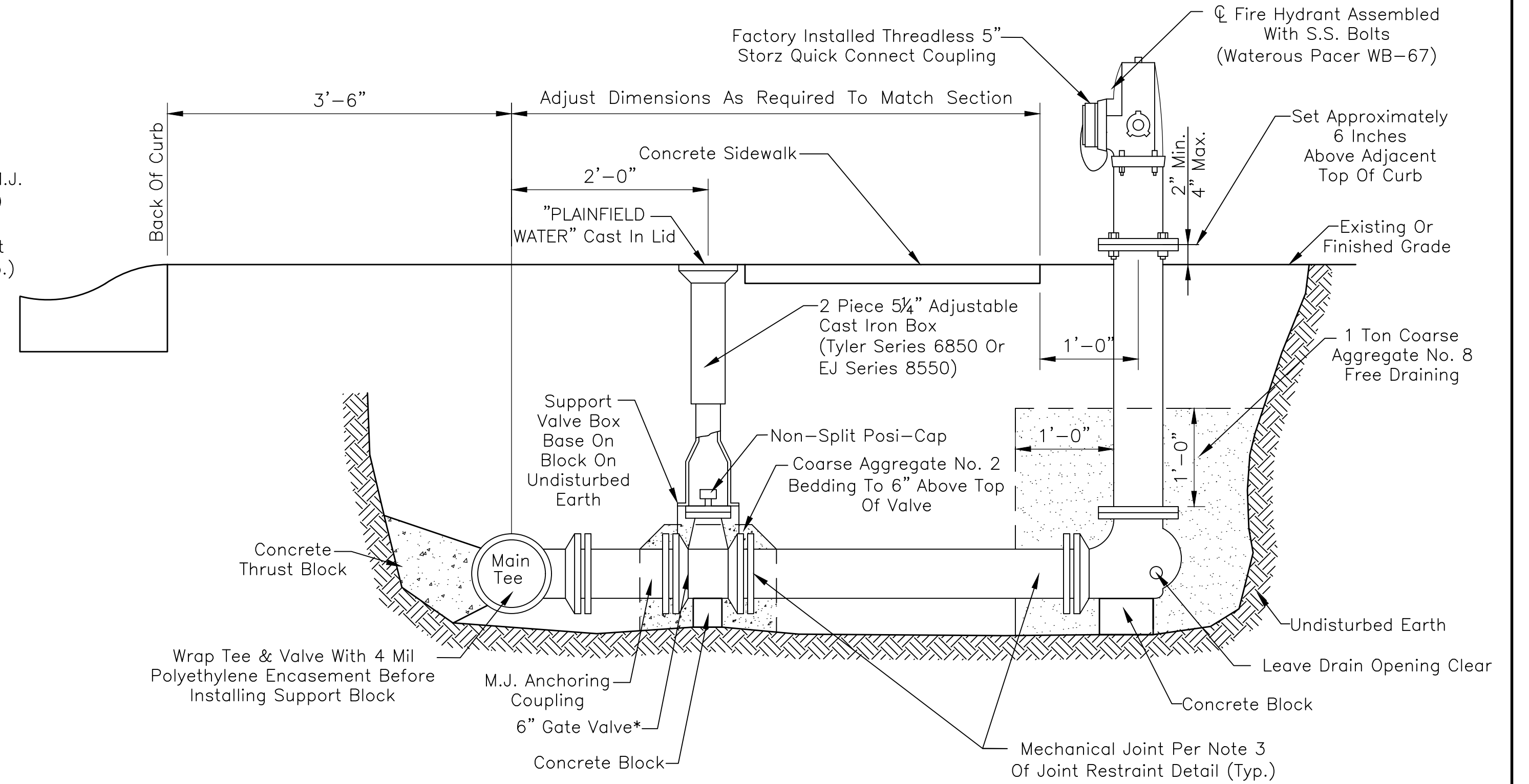
Scale: None



STANDARD NEW WORK BRANCH CONNECTION

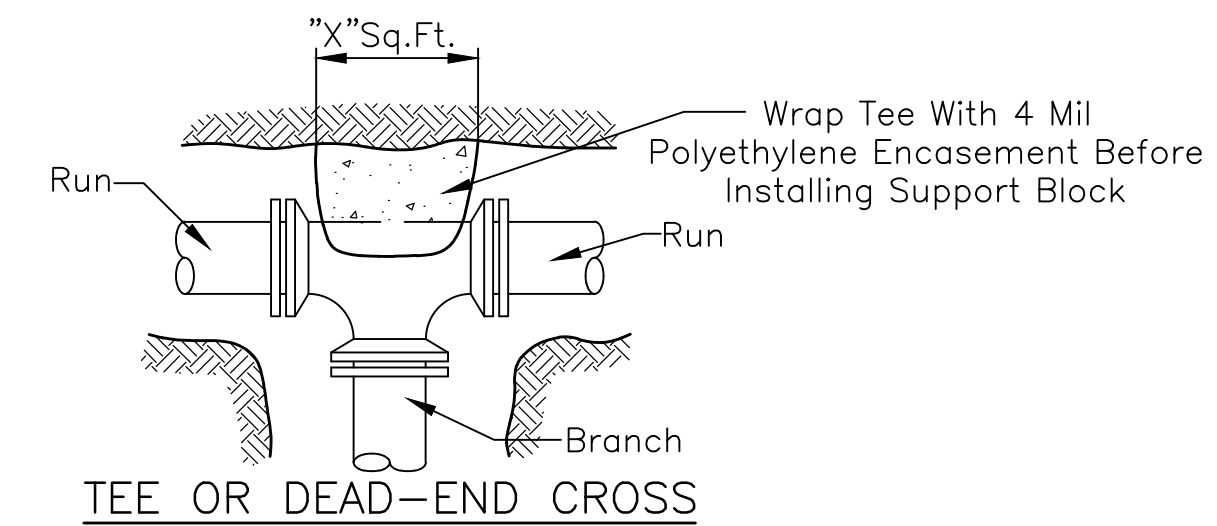
Scale: None

* All Gate Valves Shall Be American Flow Control Series 2500 Assembled With Factory Installed Stainless Steel Bolts & With Coarse Aggregate No. 8 Bedding To 6" Above Top Of Valve.



TYPICAL HYDRANT INSTALLATION DETAIL

Scale: None



TEE OR DEAD-END CROSS

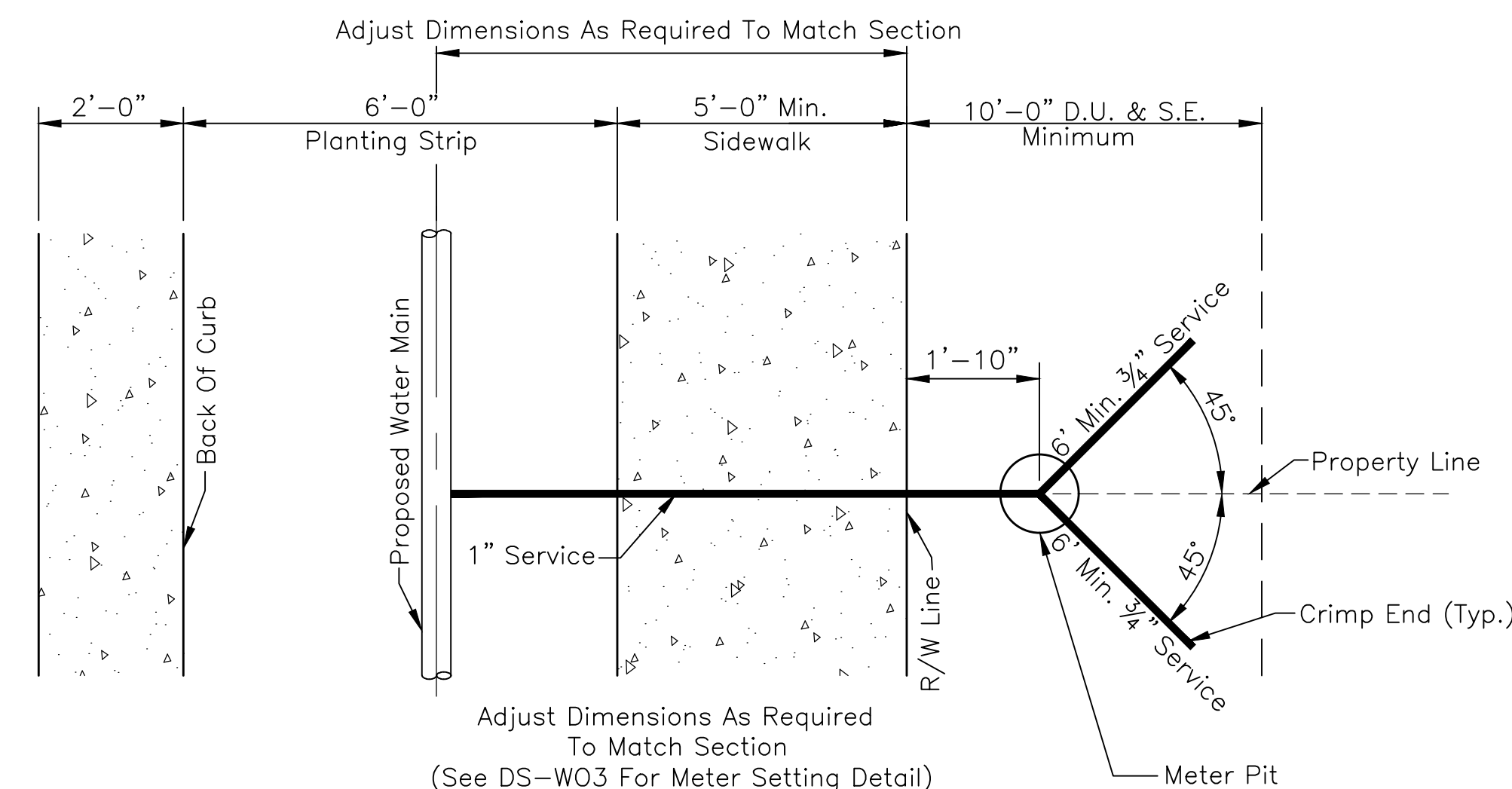
MINIMUM LENGTH OF RESTRAINED JOINT D.I. PIPE (WITHOUT POLY WRAP) EACH SIDE OF FITTING (FEET)				
PIPE SIZE	6"	8"	12"	16"
Tee Including Thrust Block (See Note 4)	15	20	28	36
Horizontal 90° OR Vertical 45° Down	15	20	28	36
Horizontal 45° OR Vertical 22½° Down	6	8	11	15
Horizontal 22½° OR Vertical 11¼° Down	3	4	6	7
Horizontal 11¼°	2	2	3	3
Dead End	27	35	50	65

NOTES:

- Length Of Restraint Measured From Centerline Of Fitting Requiring Restraint. Length Of Restraint For Vertical Bends Up Are Equal To That For Horizontal Bends.
- Length Of Restraint Based Upon 4'-6" Cover, 150 PSI Pressure, And ASTM D2487 Soil Types CL, ML, SC, SM, SP, SW, GC, GM, GP, & GW. For Less Cover, Higher Pressure, Or ASTM D2487 Soil Types PT, OH, CH, MH, & OL, Consult Plainfield DPW.
- Restraint To Be Accomplished With Field-Lok Gasket As Manufactured By U.S. Pipe Or Fast-Grip Gaskets As Manufactured By American For Push-On Joints, Anchoring Coupling For Valves And Adjacent Tees, Romac Grip Ring For All Mechanical Joints, Or As Approved By Plainfield DPW. Romac Grip Ring May Be Deleted On The Runs Of Hydrant Tees Unless A Mainline Valve Is Within 18 Feet Of The Hydrant Tee Or Unless Hydrant Tee Is Within Another Fitting's Restraint Length. All Restraints Shall Be Of U.S. Production.
- Tees And Dead-End Crosses Require Concrete Thrust Blocks In Addition To Branch Restraint Length, "X" Area For Concrete Thrust Blocks Per Detail Shall Be As Follows; 2, 4, 6, And 10 Square Feet For 6, 8, 12, And 16 Inch Pipe, Respectively. Other Than Restraint Of MJ Fittings Adjacent To Tee, No Run Restraint Length Is Required.

JOINT RESTRAINT DETAIL

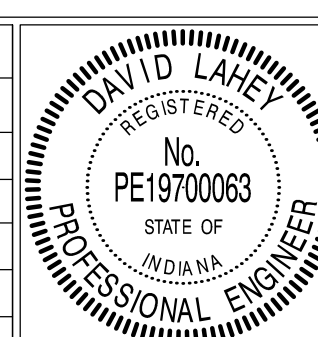
Scale: None



TYPICAL DUAL METER SETTING DETAIL

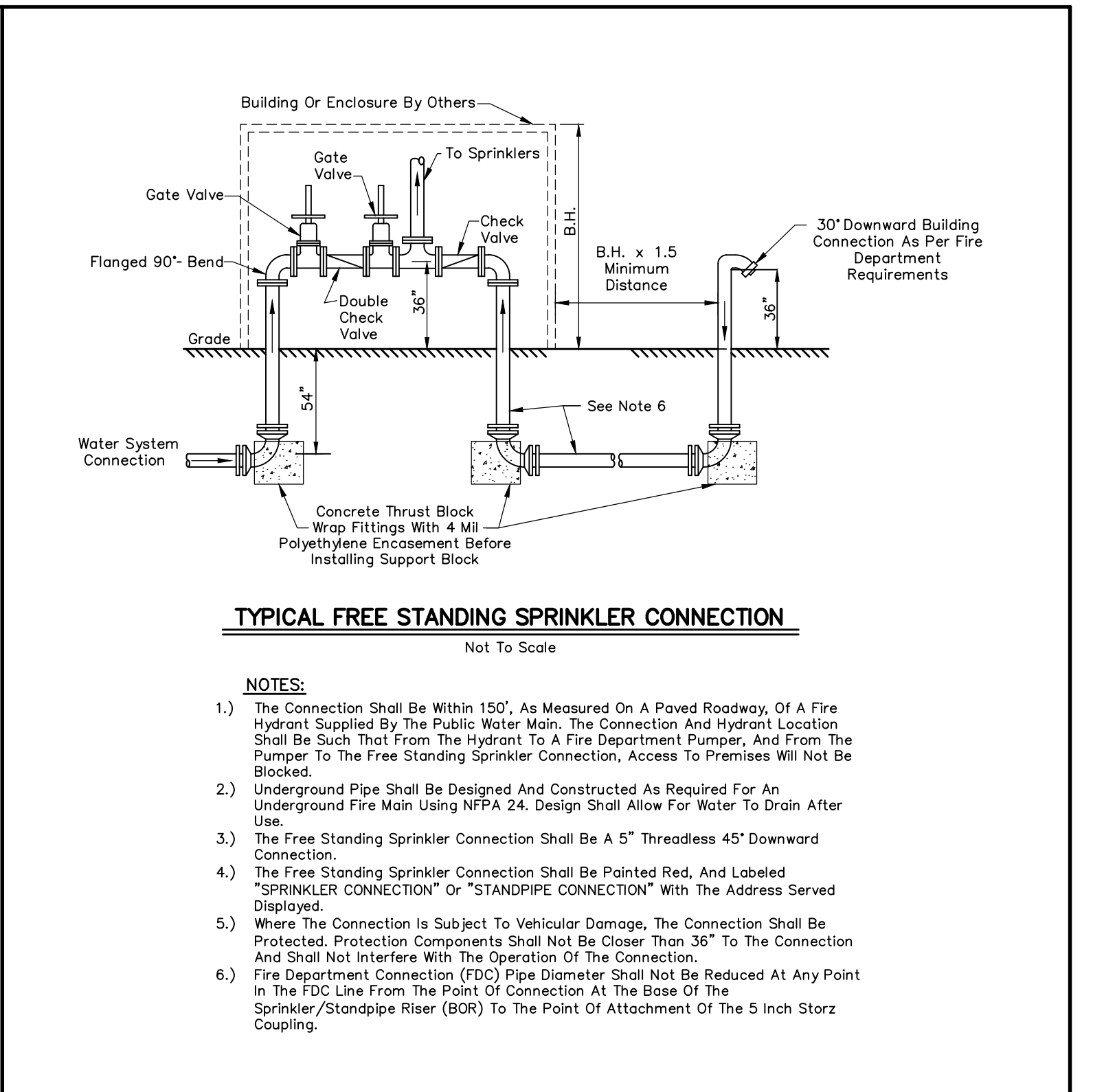
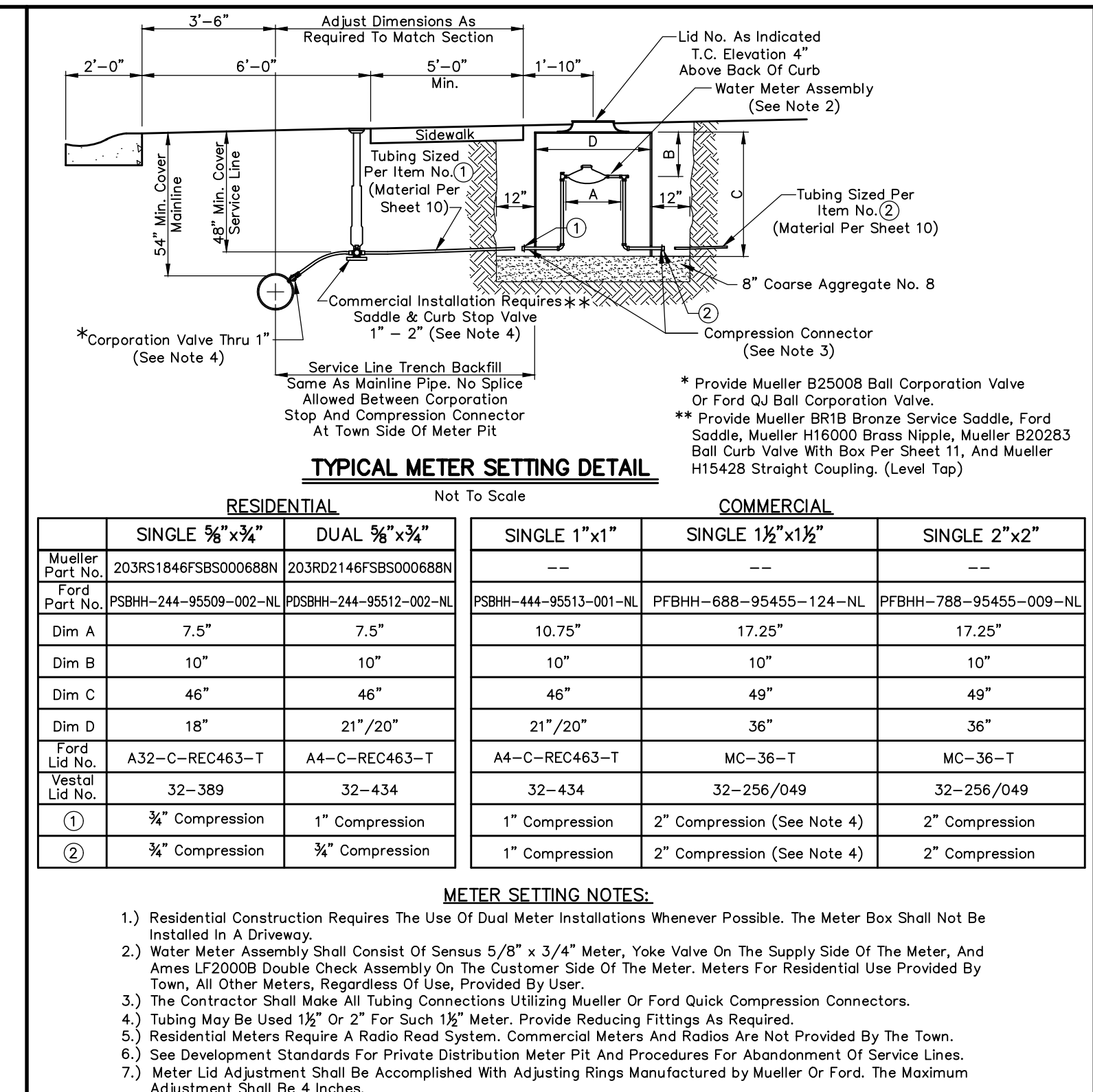
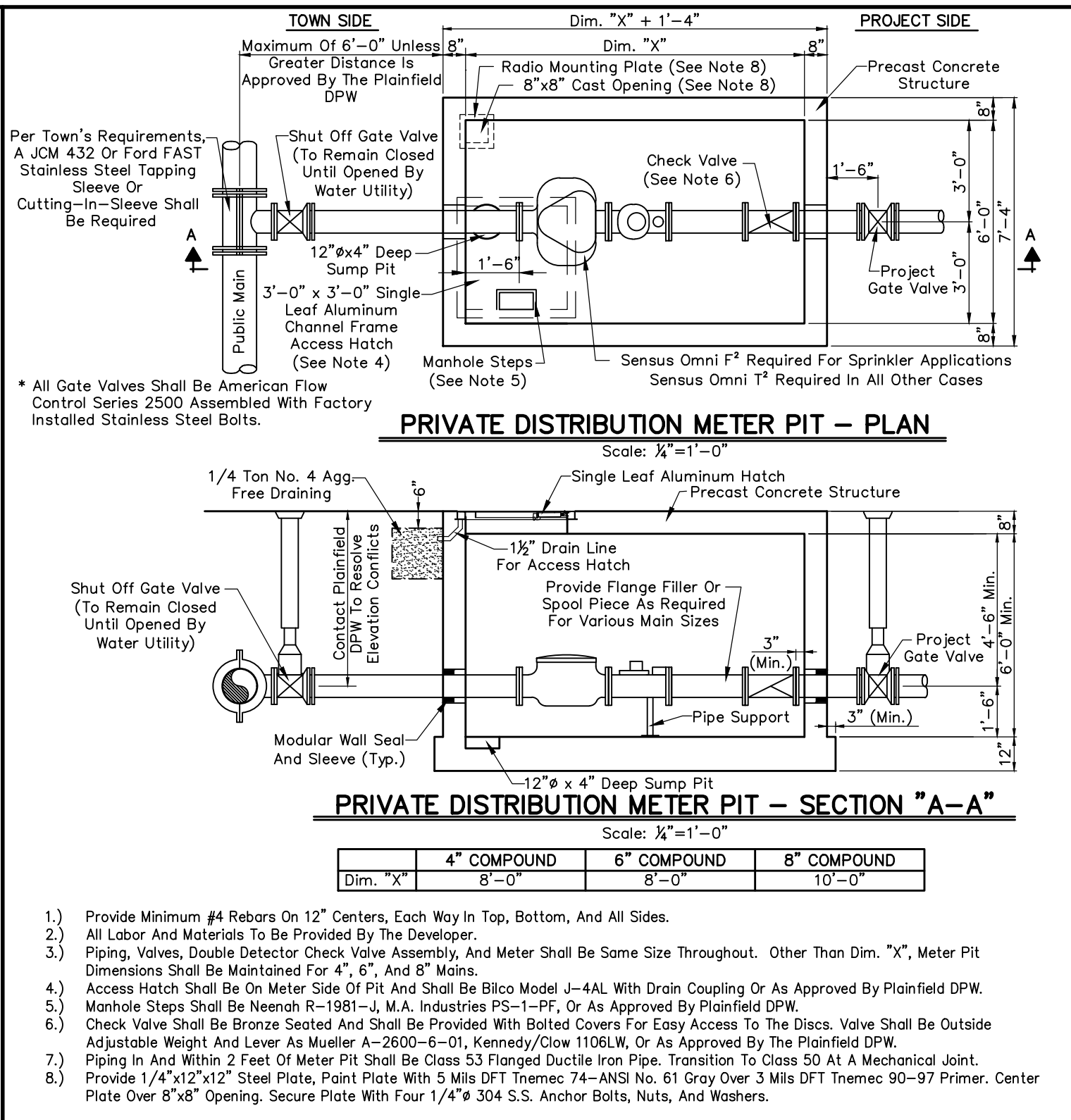
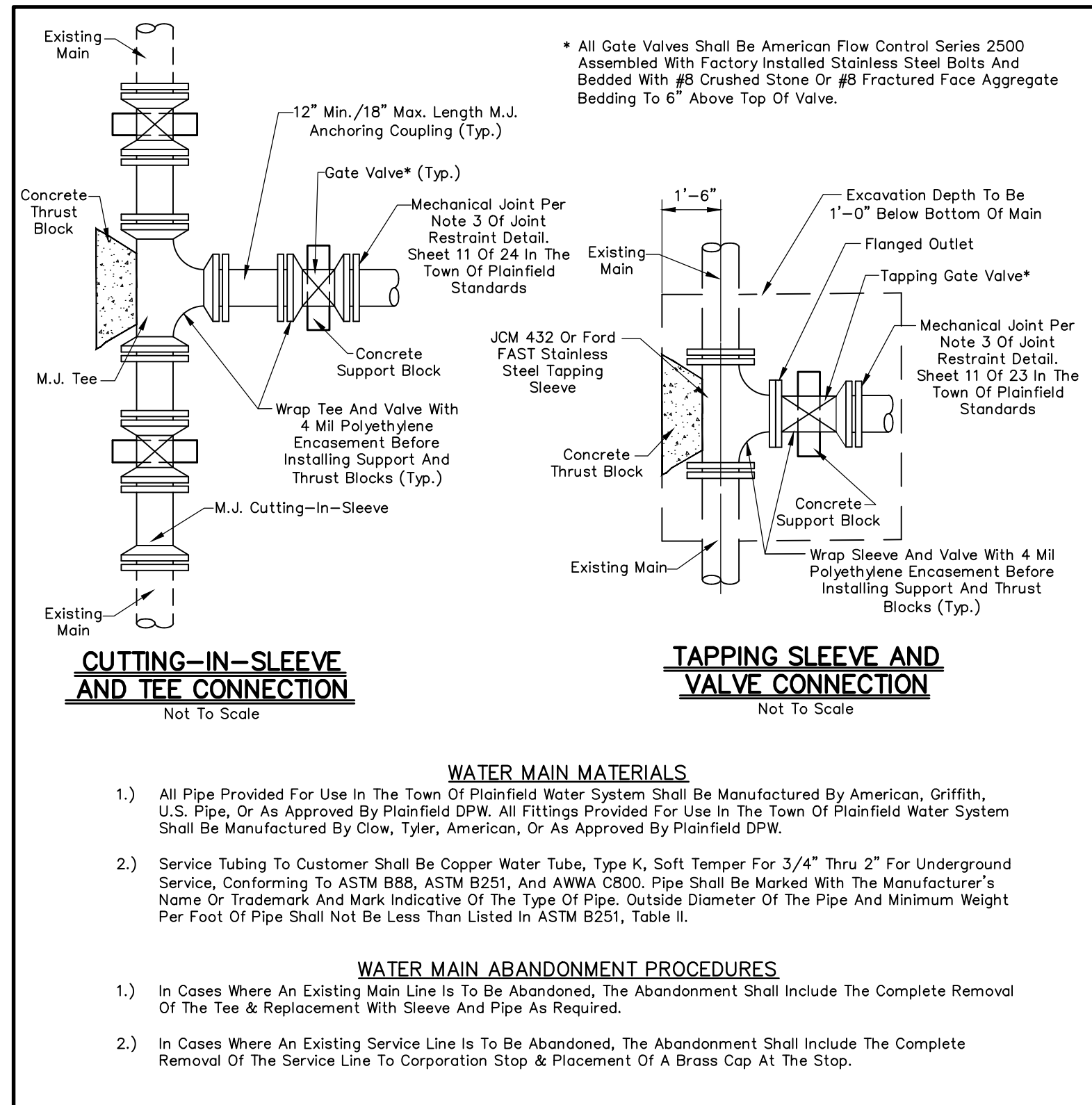
Scale: None

REVISIONS		
Rev. No.	Description	Date

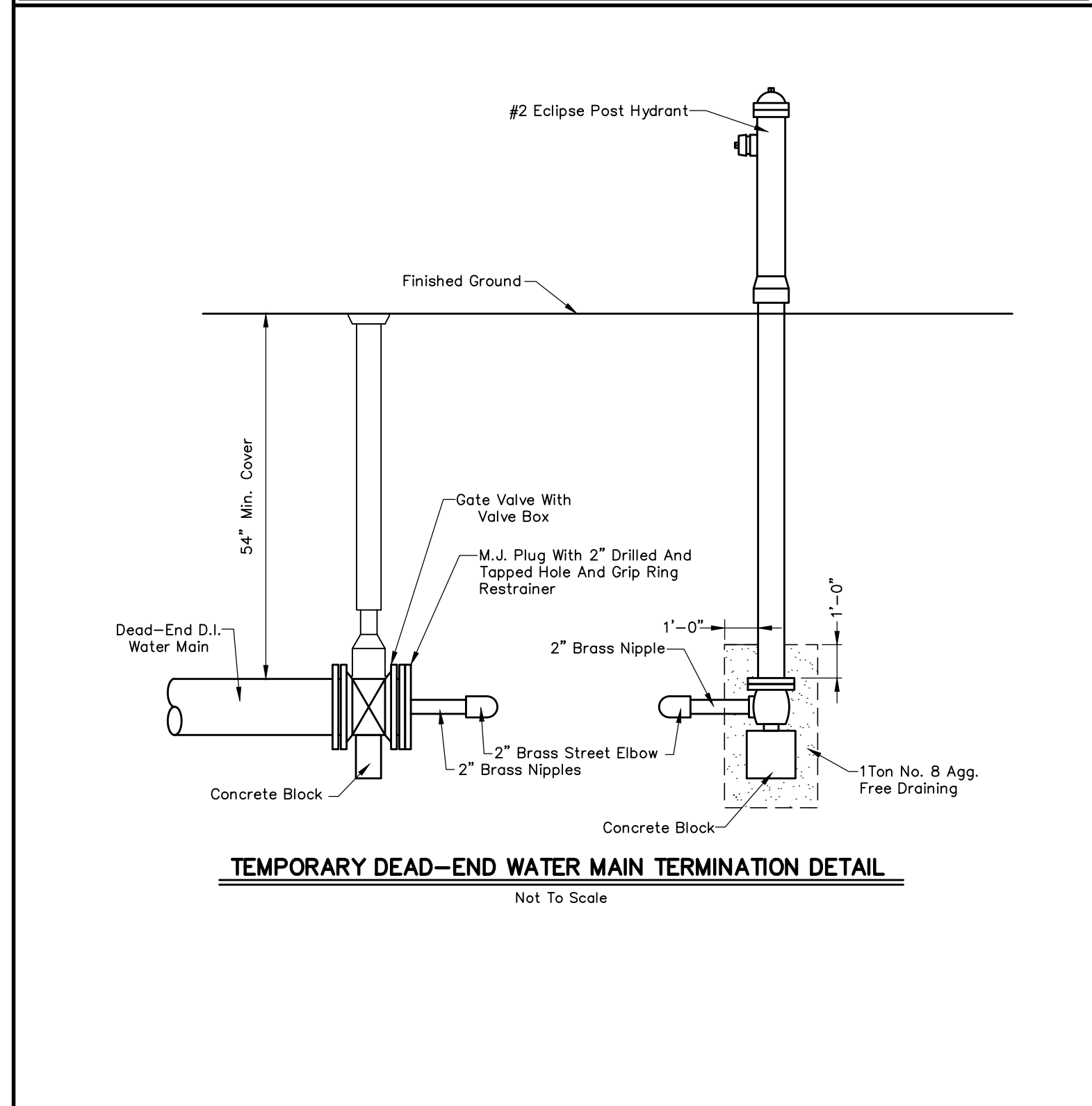


RECOMMENDED FOR APPROVAL	<i>David Laney</i>	DESIGN ENGINEER	03/10/2022	DATE
APPROVED	<i>Samuel A. B. ...</i>	EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES	03/10/2022	DATE
APPROVED	<i>John Castelli</i>	SUPERINTENDENT OF PUBLIC WORKS	3/1/22	DATE

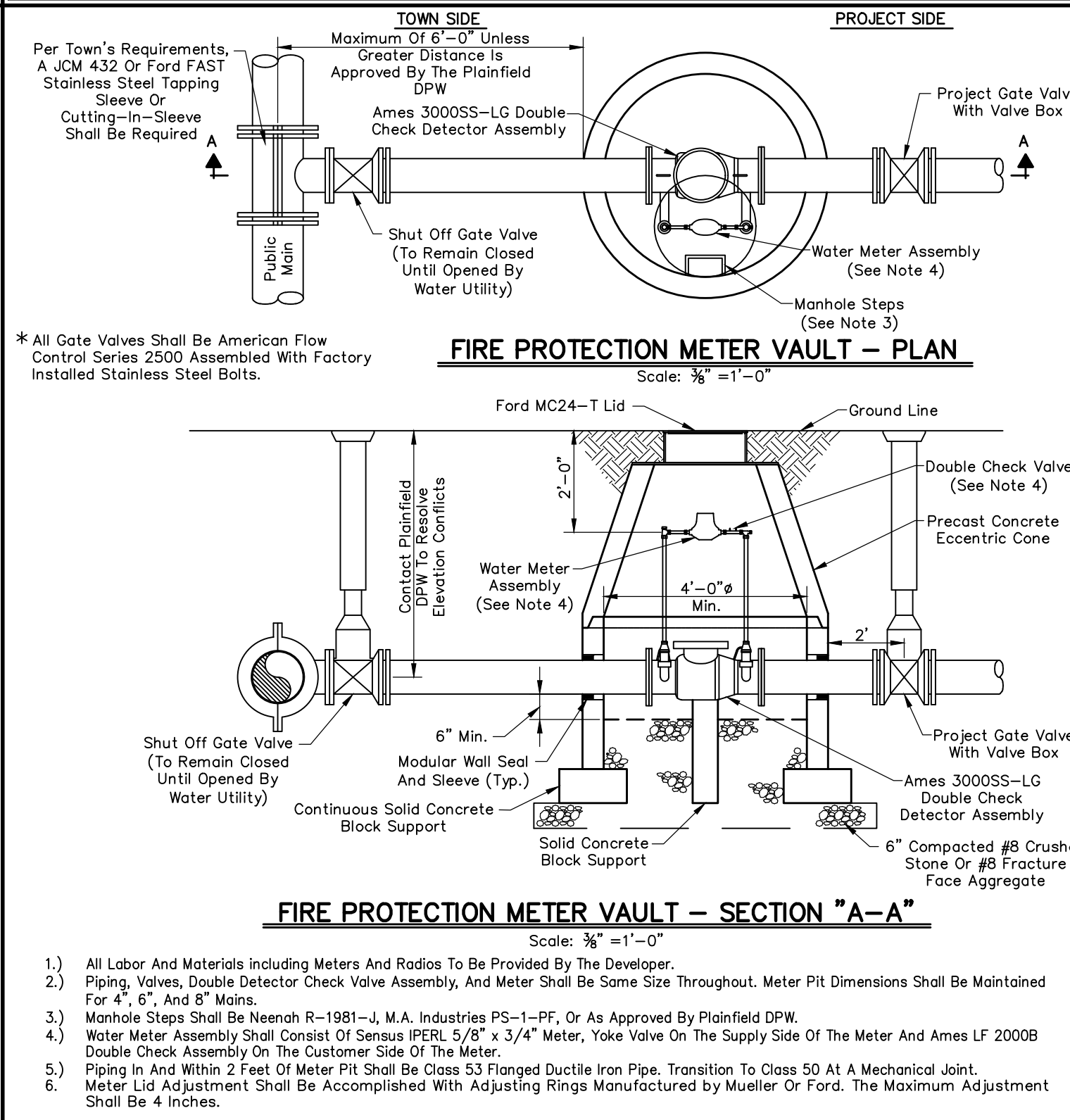
TOWN OF PLAINFIELD	SHEET 12 OF 27
WATER MAIN DETAILS & NOTES	



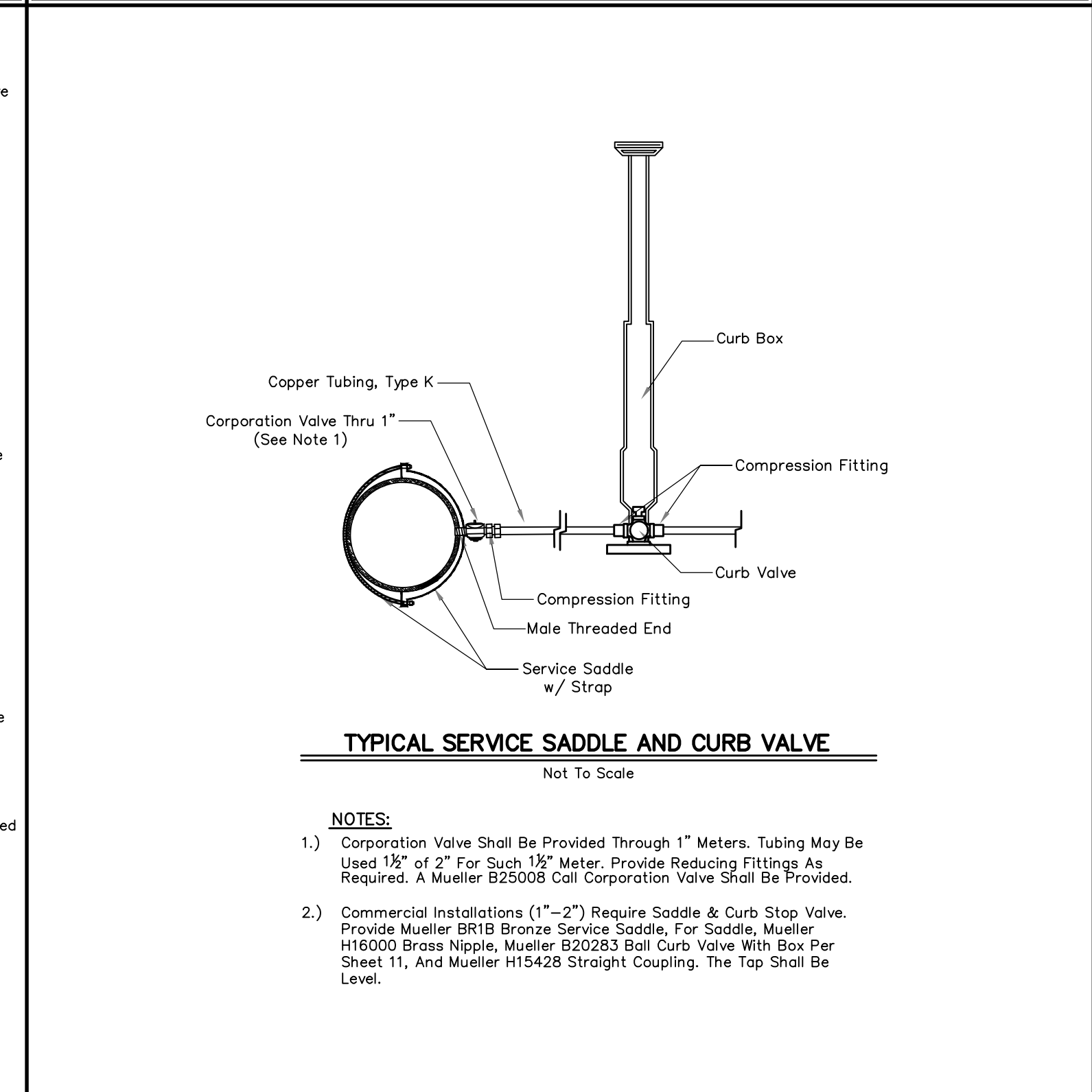
DEVELOPMENT STANDARD - DETAIL DS-W01



DEVELOPMENT STANDARD - DETAIL DS-W02



DEVELOPMENT STANDARD - DETAIL DS-W03



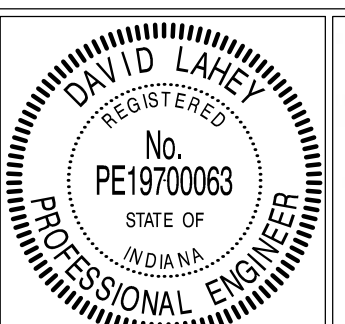
DEVELOPMENT STANDARD - DETAIL DS-W05

DEVELOPMENT STANDARD - DETAIL DS-W06

DEVELOPMENT STANDARD - DETAIL DS-W07

REVISIONS

Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL: *David Laney*, DESIGN ENGINEER, DATE: 03/10/2022

APPROVED: *James Castelli*, EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES, DATE: 03/10/2022

APPROVED: *James Castelli*, SUPERINTENDENT OF PUBLIC WORKS, DATE: 3/1/22

SANITARY SEWER REINFORCED CONCRETE PIPE

- Reinforced Concrete Pipe For Use As Sanitary Sewers Shall Be Class III, IV, Or V As Specified By Design Engineer Per ASTM C76. Lift Holes Shall Not Be Permitted.
- Each Section Of Reinforced Concrete Pipe Shall Be Vacuum Tested By The Manufacturer Prior To Delivery To The Job Site. Only Pipe Sections Passing Vacuum Test Shall Be Marked As "Vacuum Tested". Vacuum Test Requirements Are As Follows:
 - Each Section Of Pipe Shall Tested By Bringing The Internal Pressure Within The Pipe To 3.5 PSIG Below Atmospheric Pressure And The Pressure Must Not Drop To Less Than 2.5 PSIG Below Atmospheric Pressure Within The Time Limitation As Determined By The Following:

$$T = \frac{0.022 D^2 L}{2}$$
 Where: T = Time In Seconds
 D = Diameter Of Pipe In Inches
 L = Length Of Pipe In Feet
 - Any Pipe Section Failing To Meet This Test Shall Not Be Permitted For Use As Sanitary Sewers In The Town Of Plainfield.

- Lateral Connections Shall Be Made With KOR-N-Tee, Inserta-Tee, Or Town Approved Equal.
- Each Pipe Section Shall Be Marked With The Date Of Manufacture, Size, And Class Of Pipe, Specification Designation, Manufacturer And Plant Identification.
- Pipe Shall Be Furnished With A Bell Or Groove On One End Of A Unit Of Pipe And A Spigot Or Tongue On The Adjacent End Of The Adjoining Pipe. All Joints Shall Have A Groove On The Spigot For Placement Of A Rubber "O"-Ring Or Profile Gasket In Accordance With ASTM C443. The Gasket Shall Be A Continuous Ring Which Fits Snugly Into The Annular Space Between The Overlapping Surfaces Of The Assembled Pipe Joint To Form A Flexible, Watertight Joint Under All Conditions Of Service.

SANITARY SEWER POLYVINYL CHLORIDE (PVC) PIPE

- PVC Pipe Diameters Of 4 Inches Through 15 Inches Shall Meet Or Exceed All Requirements Of ASTM D3034, And Shall Have A Minimum Cell Classification Of 12454. Reference Should Be Made To ASTM D1784 For A Summarization Of Cell Class Properties. PVC Pipe Diameters Greater Than 15 Inches Shall Meet Or Exceed All Requirements Of ASTM F679, And Shall Have A Minimum Cell Classification Of 12454.
- The Minimum Wall Thickness Of PVC Pipe 4 Inches Through 15 Inches In Diameter Shall Conform To SDR-35, Type PSM, As Specified In ASTM D3034 (See Note 5 For Fittings). The Minimum Wall Thickness For P.V.C. Pipe Greater Than 15 Inches Shall Conform To PS 46 As Specified In ASTM F679. P.V.C. Pipe Shall Have A Minimum Pipe Stiffness Of 46 Pounds Per Square Inch For Each Diameter When Measured At Five Percent Deflection And Tested In Accordance With ASTM D2412.
- PVC Open Profile Or Closed Profile Sewer Pipe Shall Meet Or Exceed All Requirements Of ASTM F794 Or ASTM F949, And Shall Have A Minimum Cell Classification Of 12454 And A Minimum Uniform Pipe Stiffness Of 50 Pounds Per Square Inch For Each Diameter When Measured At Five Percent Deflection And Tested In Accordance With ASTM D2412 (See Note 5 For Fittings).
- Pipe Joints Shall Have A Bell Wall, Gasket Groove, And Spigot Which Is Integral With The Pipe. The Assembly Of Joints Shall Be In Accordance With Pipe Manufacturer's Recommendations And ASTM D3212. Solvent Cement Joints Shall Not Be Allowed For Mainline Pipe.
- Pipe Fittings Shall Be SDR-26 Manufactured Fittings Made Of PVC Plastic Having A Cell Classification Of 12454 As Defined In ASTM D1784. Saddle Connections Shall Not Be Allowed For New Construction. Lateral Connections Shall Occur At SDR-26 Tee-Wyes.
- Each Pipe Section Shall Be Marked With The Name Of Manufacturer, Trademark Or Tradename, Nominal Pipe Size, Production/Extrusion Code, Material And Cell Classification, And ASTM Number.
- Installation Shall Be In Accordance With Recommended Practice ASTM D2321.

SANITARY SEWER GENERAL NOTES AND AS-BUILT DRAWINGS

- See Development Standards DS-S01, DS-S02, For Sanitary Sewer Lateral Requirements.
- Sanitary Sewer Pipe Of Other Material Or Material Not Meeting These Specifications Shall Require The Prior Written Approval Of Plainfield DPW.
- The Contractor Shall Submit Information To The Town Engineer Showing Conformance With These Specifications Upon Request.
- As-Built Drawings Shall Be Submitted To Plainfield DPW. GPS Collected Coordinates Shall Depict Actual Horizontal And Vertical Locations Of Utility Assets Such As: Manholes, Laterals, Stubs, Air Release Valves, Flushing Stations, Cleanouts, Risers, And Pump Stations/Wet Wells.

SANITARY SEWER DEFLECTION TESTING AND TELEVISION

- Deflection Testing Is Required For All Mainline Flexible Pipe And Plainfield DPW Shall Be Given 24 Hour Written Notice Of Deflection Testing. An Allowable Deflection Of 5 Percent Inside Pipe Diameter Will Be Acceptable After All Backfilling Has Been In Place For 30 Days. A Nine Point "Go-No-Go" Mandrel Shall Be Used For The Deflection Test. A Proving Ring Shall Be Provided For Each Mandrel. All Pipe Exceeding The Allowable Deflection Shall Be Televised To Determine The Extent Of Replacement Or Rerouting Required. The Reworked Section Shall Be Retested 30 Days After Completion. Contractor Shall Bear All Testing Costs. The "Go-No-Go" Mandrel Shall Be Manually Pulled Without The Use Of Mechanical Devices.
- Following Air And Mandrel Testing, Televising Is Required. Plainfield DPW Shall Be Given 24 Hour Written Notice Of Televising. A Camera Equipped With Remote Control Devices To Adjust Light Intensity And 1,000 Linear Feet Of Sewer Cable Shall Be Provided. The Camera Shall Transmit A Continuous Image To The Television Monitor As It Is Being Pulled Through Pipe. The Image Shall Be Clear Enough To Enable The Town Of Plainfield Representative And Others Viewing The Monitor To Easily Evaluate The Interior Condition Of The Pipe. The Camera Shall Stamp The DVD With Manhole Number, Lateral Distance From Manhole, Linear Footage And Project Number, And An Audio Voice-Over Shall Be Made During The Inspection Identifying Problems. Contractor Shall Bear All Televising Costs.
- The Pipe Shall Be Thoroughly Cleaned Before Installing Camera And Commencing Televising.
- If Any Pipe And/Or Joint Is Found To Be Leaking, Regardless Of The Results Leakage Testing, In The Sole Judgement Of The Town, The Contractor Shall Repair That Portion Of The Work To The Satisfaction And Approval Of The Town Of Plainfield.

SANITARY SEWER LEAKAGE TESTING

- The Town Of Plainfield Shall Be Given 24 Hour Written Notice Of The Required Leakage Testing Procedure To Be Performed By The Contractor. Low Pressure Air Shall Be Slowly Introduced Into The Sealed Line Until The Internal Air Pressure Reaches 4 PSIG Plus The Groundwater Head Divided By 2.31 (Maximum Test Pressure Is 9 PSIG).
- At A Stable Internal Air Pressure Within 0.5 PSIG Of The Initial Internal Air Pressure, Timing Shall Commence With A Stopwatch Or Similar Device Of 99.8 Percent Accuracy. Timing Shall End When The Internal Air Pressure Drops 1 PSIG Below The Stable Internal Air Pressure.
- The Line Shall Be Accepted If The Time Shown In Table 1 For The Designated Pipe Size And Length Elapses Before The Air Pressure Drops 1 PSIG Below The Stable Internal Air Pressure At Which Time The Test Can Be Discontinued For The Accepted Line.

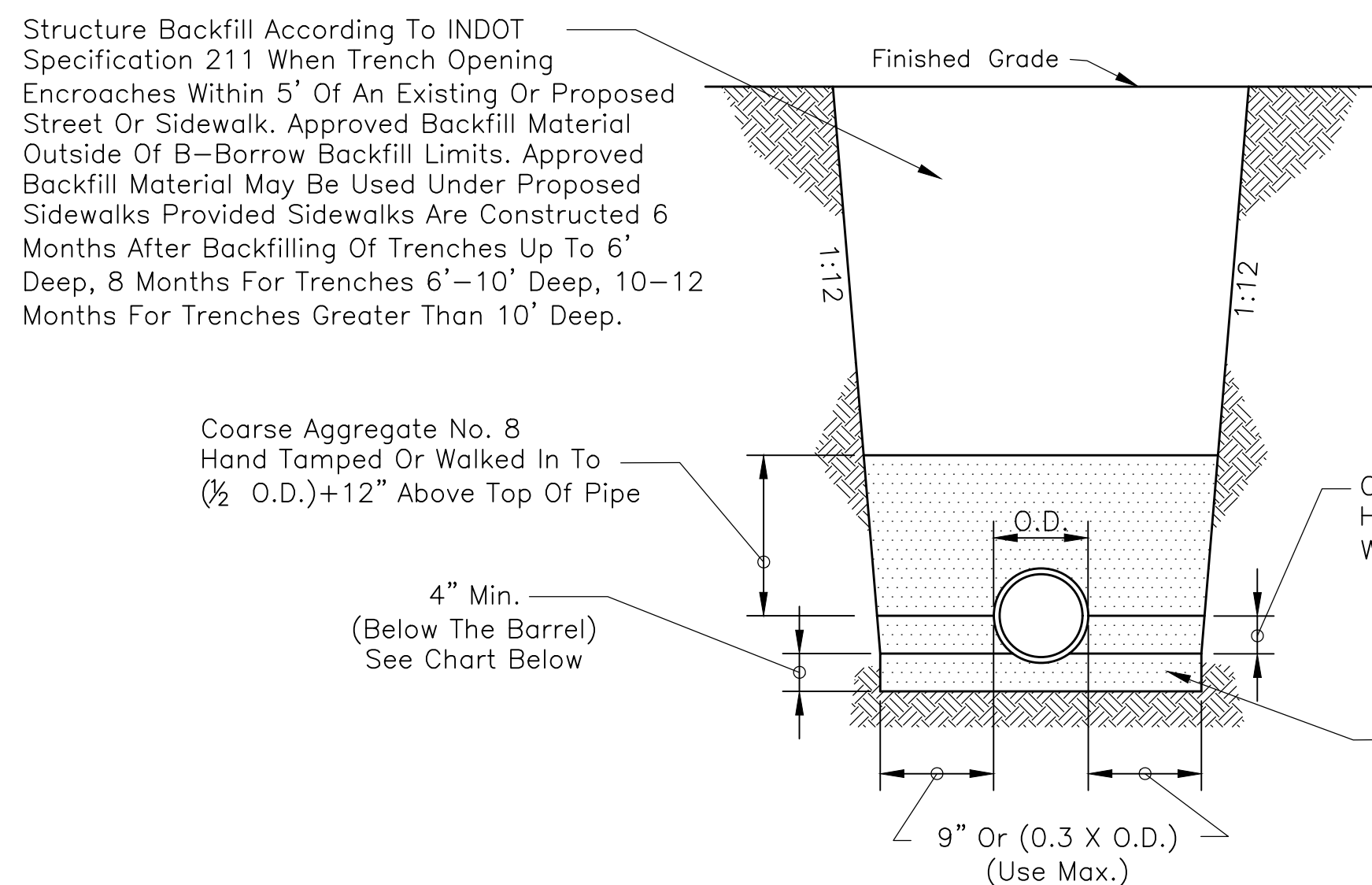
TABLE 1

SPECIFICATION TIME REQUIRED FOR A 1.0 PSIG PRESSURE DROP FOR SIZE AND LENGTH OF PIPE INDICATED FOR Q=0.0015

1 Pipe Diameter (In.)	2 Minimum Time (Min:Sec)	3 Length For Minimum Time (Ft.)	4 Time For Longer Length (Sec.)	Specification Time For Length (L) Shown (Min.:Sec.)								
				100 Ft.	150 Ft.	200 Ft.	250 Ft.	300 Ft.	350 Ft.	400 Ft.	450 Ft.	
4	3:46	597	.380L	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46	3:46
6	5:40	398	.854L	5:40	5:40	5:40	5:40	5:40	5:40	5:40	5:40	6:24
8	7:34	298	1.520L	7:34	7:34	7:34	7:34	7:34	7:36	8:52	10:08	11:24
10	9:26	239	2.374L	9:26	9:26	9:26	9:53	11:52	13:51	15:49	17:48	
12	11:20	199	3.418L	11:20	11:20	11:24	14:15	17:05	19:56	22:47	25:38	
15	14:10	159	5.342L	14:10	14:10	17:48	22:15	26:42	31:09	35:36	40:04	
18	17:00	133	7.692L	17:00	19:13	25:38	32:03	38:27	44:52	51:16	57:41	
21	19:50	114	10.470L	19:50	26:10	34:54	43:37	52:21	61:00	69:48	78:31	
24	22:40	99	13.674L	22:47	34:11	45:34	56:58	68:22	79:46	91:10	102:33	
27	25:30	88	17.306L	28:51	43:16	57:41	72:07	86:32	100:57	115:22	129:48	
30	28:20	80	21.366L	35:37	53:25	71:13	89:02	106:50	124:38	142:26	160:15	
33	31:10	72	25.852L	43:05	64:38	86:10	107:43	129:16	150:43	172:21	193:53	
36	34:00	66	30.768L	51:17	76:55	102:34	128:12	153:50	179:29	205:07	230:46	

NOTE:

For More Efficient Testing Of Long Test Sections And/Or Sections Of Larger Diameter Pipes, A Timed Pressure Drop Of 0.5 PSIG May Be Used In Lieu Of The 1.0 PSIG Timed Pressure Drop. If A 0.5 PSIG Pressure Drop Is Used, The Required Test Time Shall Be Exactly Half As Long As Those Shown Above.

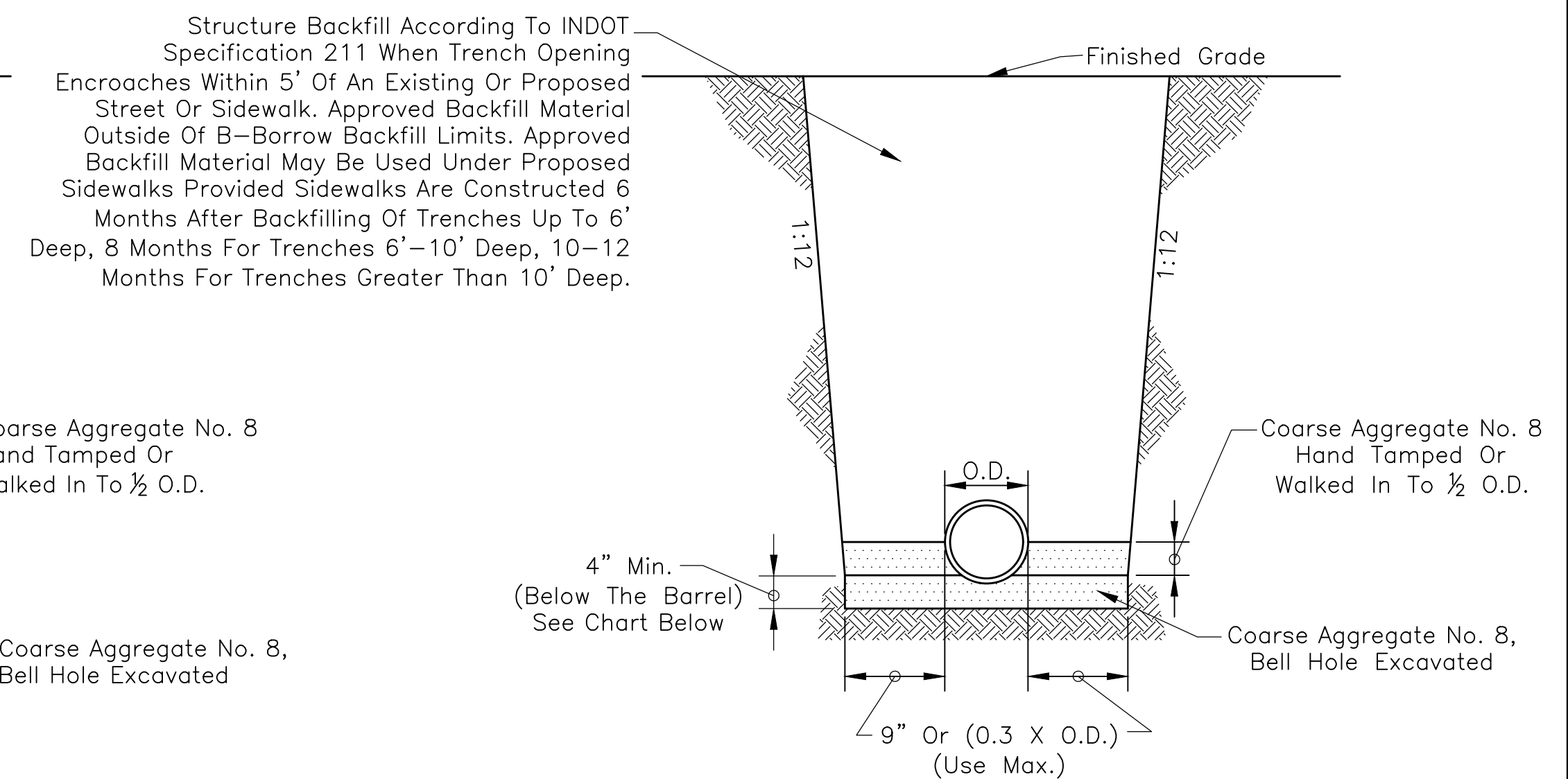


Pipe Size	8" To 15"	18" And Over
Bedding Below The Pipe Barrel	O.D./4 Min.=4"	O.D./4 Min.=8"

See Development Standard DS-S01 For Lateral Pipe Bedding

PVC PIPE BEDDING DETAIL

Scale: None

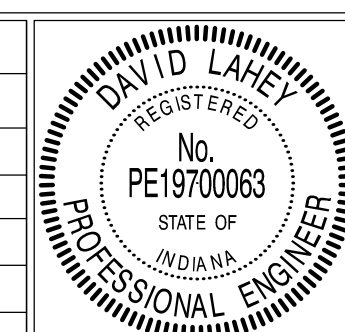


Pipe Size	8" To 15"	18" And Over
Bedding Below The Pipe Barrel	O.D./4 Min.=4"	O.D./4 Min.=8"

RCP BEDDING DETAIL

Scale: None

REVISIONS		
Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL: *[Signature]* DESIGN ENGINEER, 03/10/2022 DATE

APPROVED: *[Signature]* EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES, 03/10/2022 DATE

APPROVED: *[Signature]* SUPERINTENDENT OF PUBLIC WORKS, 3/1/22 DATE

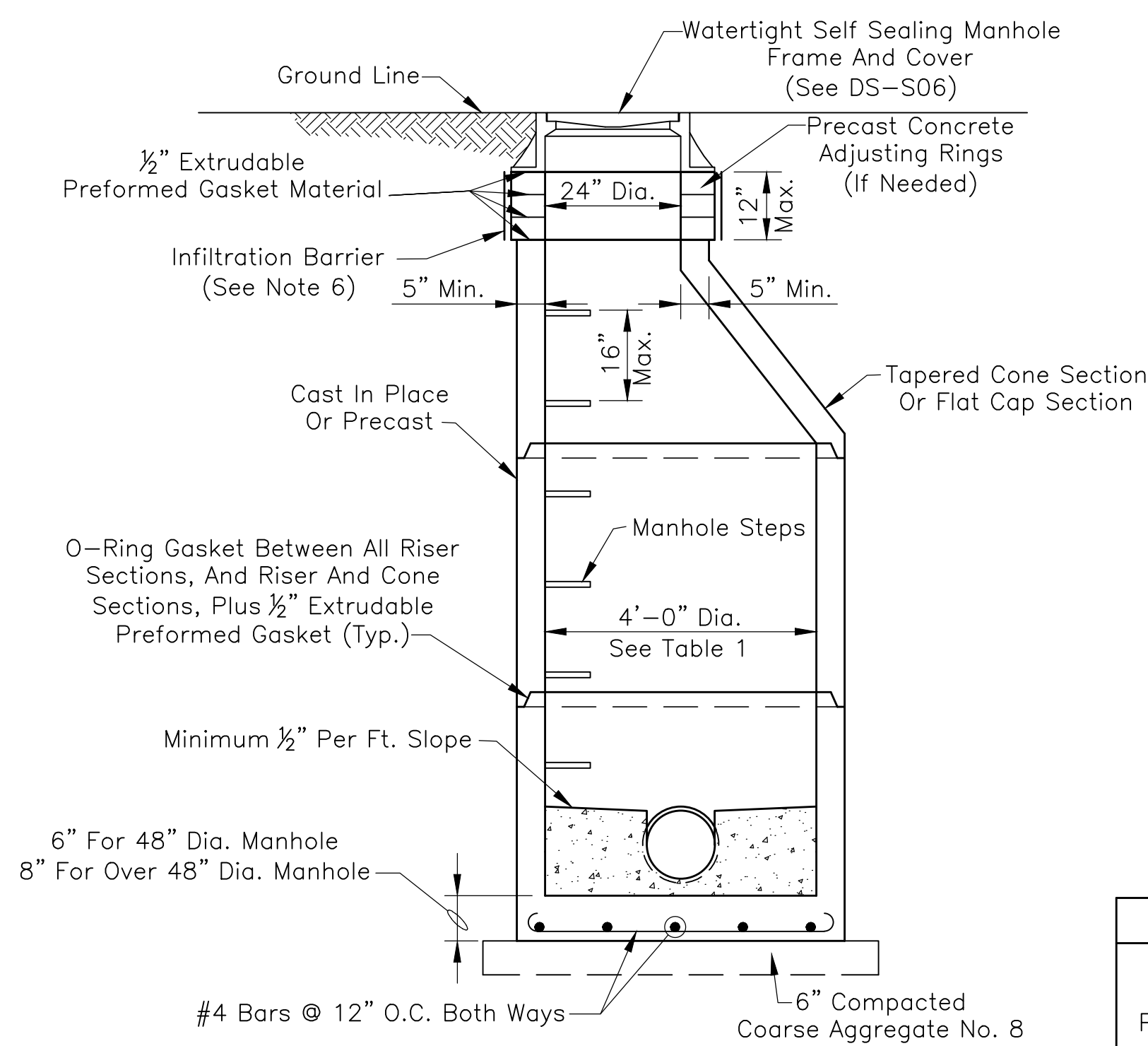
TOWN OF PLAINFIELD

SANITARY SEWER BEDDING DETAILS AND NOTES

SHEET 14 OF 27

SANITARY MANHOLE GENERAL NOTES

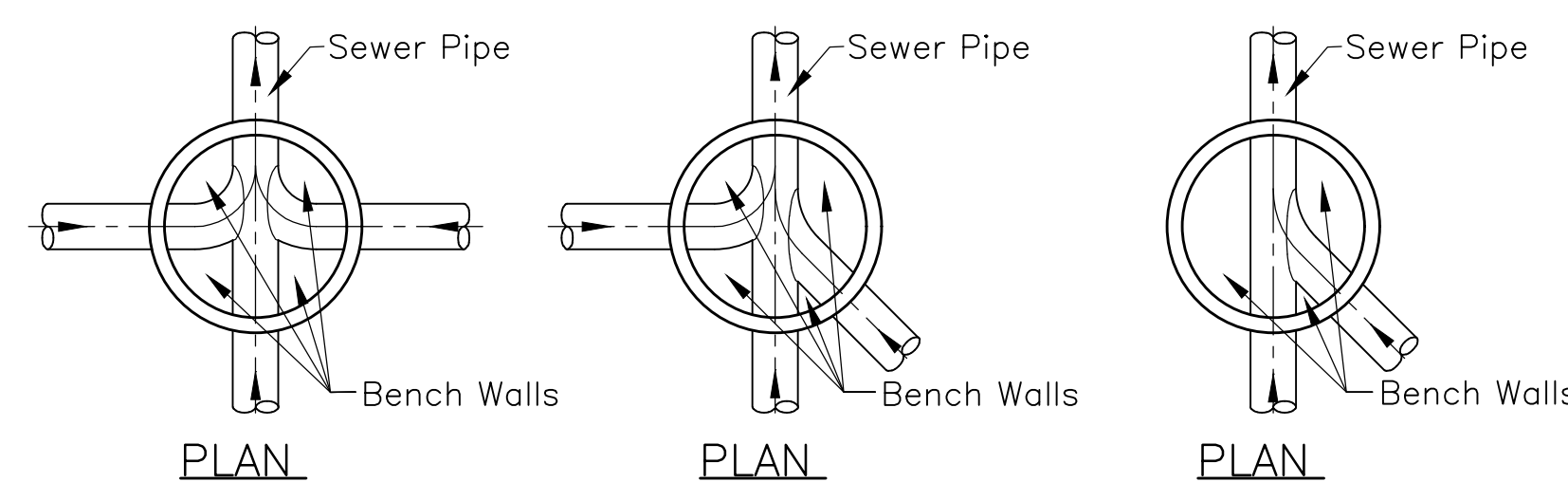
- 1.) Precast Concrete Manholes Shall Conform To ASTM C478, With Rubber Type Gaskets Equal To ASTM C443. Monolithic Cast In Place Manholes Shall Only Be Used With The Prior Written Approval Of The Town. The Base And First Riser Section Of The Precast Concrete Manhole Shall Be Integrally Cast As One Unit. Precast Concrete Cones Shall Be Of The Eccentric Cone Type. No "See Through" Lift Holes Shall Be Allowed On Precast Concrete Manholes 48 Inches In Diameter Or Less. In Addition To The Rubber Type Gaskets, All Joints Shall Receive A 1/2 Inch Diameter Non-Asphaltic Mastic (Kent-Seal Or As Approved By Plainfield DPW) Conforming To ASTM C990. Sewer Connection To Manhole Shall Be KOR-N-SEAL, A-LOK, Press-Seal, Or As Approved By Plainfield DPW.
- 2.) Where One Solid Riser Or Barrel Section Cannot Be Used, Final Adjustment In Elevation Of The Frame And Cover Shall Be Accomplished By The Use Of A 4 Inch Minimum Thickness Adjusting Ring As Detailed Herein To A Maximum Combined Thickness Of 12 Inches. Brick Or Block Shall NOT Be Used In The Construction Of A Manhole Or To Adjust The Elevation Of The Frame And Cover.
- 3.) Manhole Steps Shall Be Neenah No. R-1981-J, M.A. Industries No. PS 1-PF, Or As Approved By Plainfield DPW.
- 4.) Manhole Frame And Cover Shall Be Per Development Standards DS-S06 Or Town Approved Equal.
- 5.) The Lowest Elevation To Receive Gravity Sanitary Service Must Be One Foot Above The Top Of Manhole Casting Elevation Of Either The First Upstream Or Downstream Manhole On The Public Sewer To Which Connection Is To Be Made. Those Portions Of The Building Not Meeting The Stated Gravity Sanitary Service Requirement Shall Be Provided With A Grinder Pump System Or Town Approved Equal Discharging To The Gravity Building Connection Outside Of The Public Right-Of-Way.
- 6.) Infiltration Barrier Shall Be 60 Mils Minimum EPDM Sealed With A 2 Inch Mastic Strip To Cone (Manhole) And To Top Of Casting Lip And Shall Be Infi-Shield Or Town Approved Equal.
- 7.) Plainfield DPW May Approve Alternate Drop Connection If There Are Special Circumstances.
- 8.) Lateral Connections To A Manholes Are Prohibited.
- 9.) 10% Of All Sanitary Manholes Shall Be Vacuum Tested With Castings Per ASTM C1244 Following Full Installation. All Sanitary Manhole Sections Shall Be Vacuum Tested In The Shop Prior To Shipment. Dewatering Shall Continue In Order To Prevent Hydrostatic Pressures From Affecting The Test.



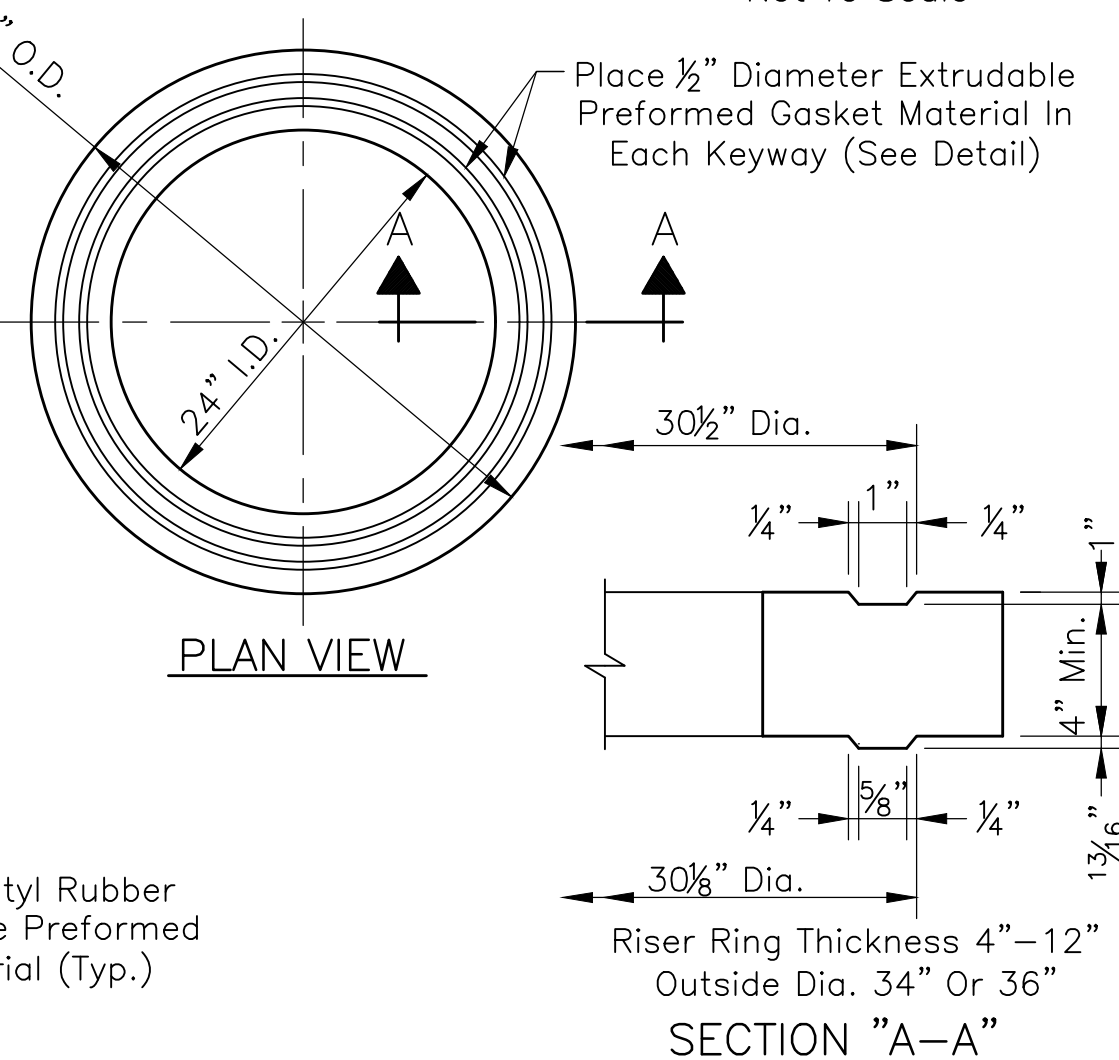
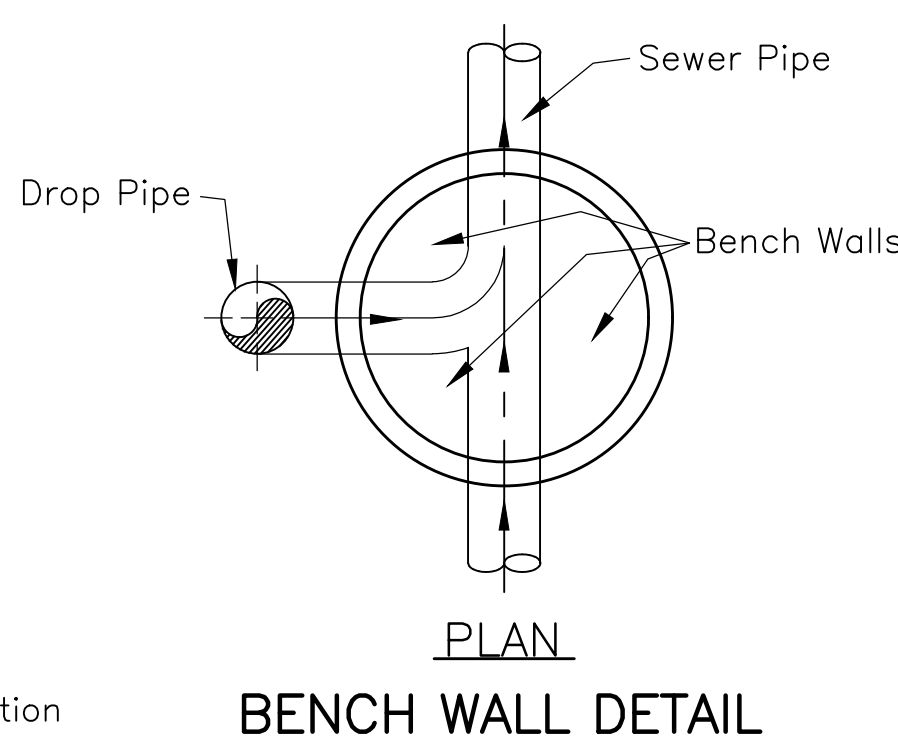
See Development Standards DS-S03 & DS-S05 On Sheet 17 For Connection To Existing Sanitary Manholes
SANITARY MANHOLE, TYPE A
 Scale: 1/2" = 1'-0"

Pipe Size	Minimum Manhole Diameter	
	Pipe Entering/ Pipe Exiting At 0° To 45° Bend	Pipe Entering/ Pipe Exiting At 45° To 90° Bend
8"-21"	48"	48"
24"	48"	60"
27"-30"	60"	60"
33"-36"	60"*	72"

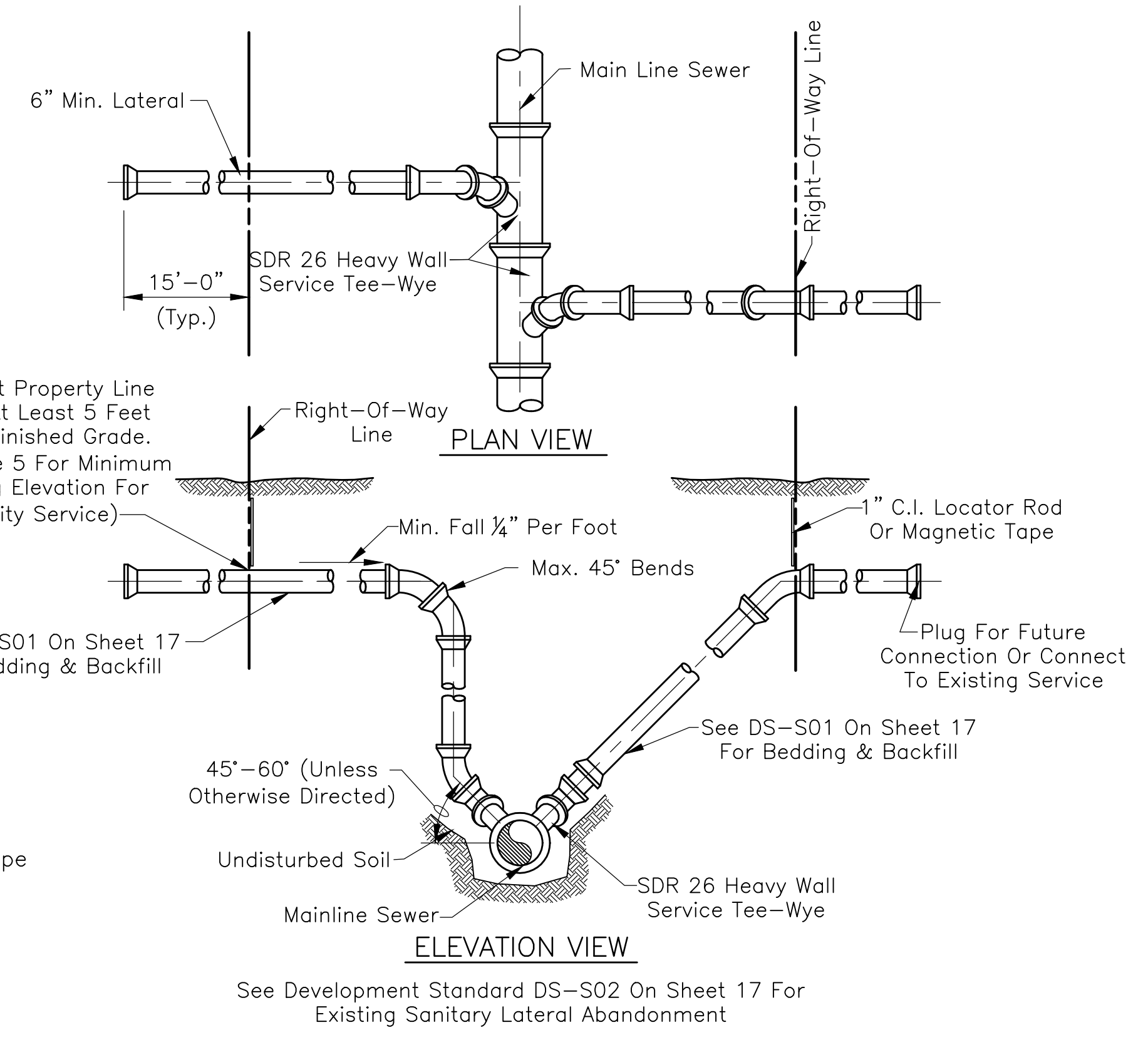
* 72" With A-Lock Connector



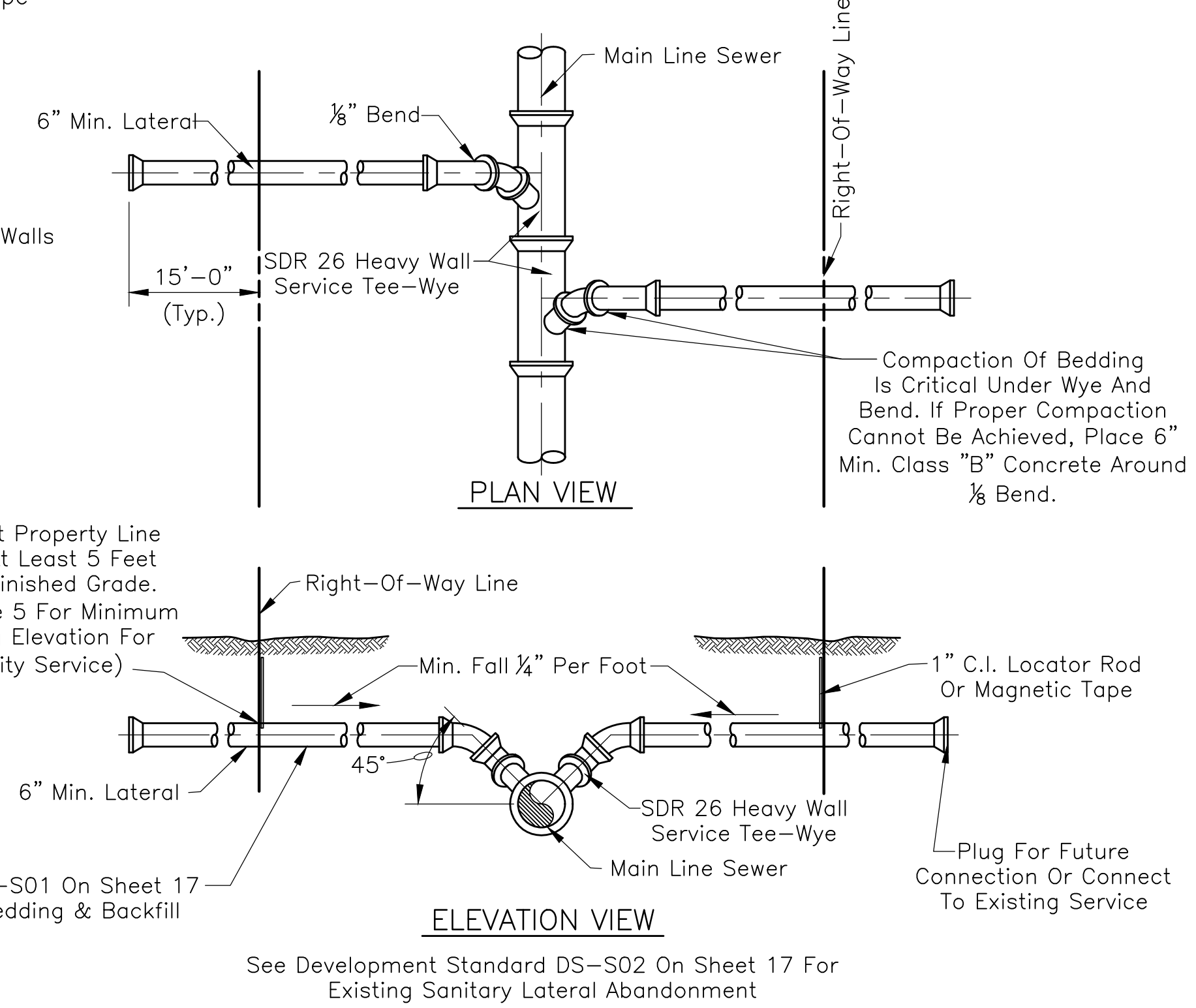
Note: All Bench Walls To Be Sloped @ 1/2"/Ft.
BENCH WALL DETAILS
 Not To Scale



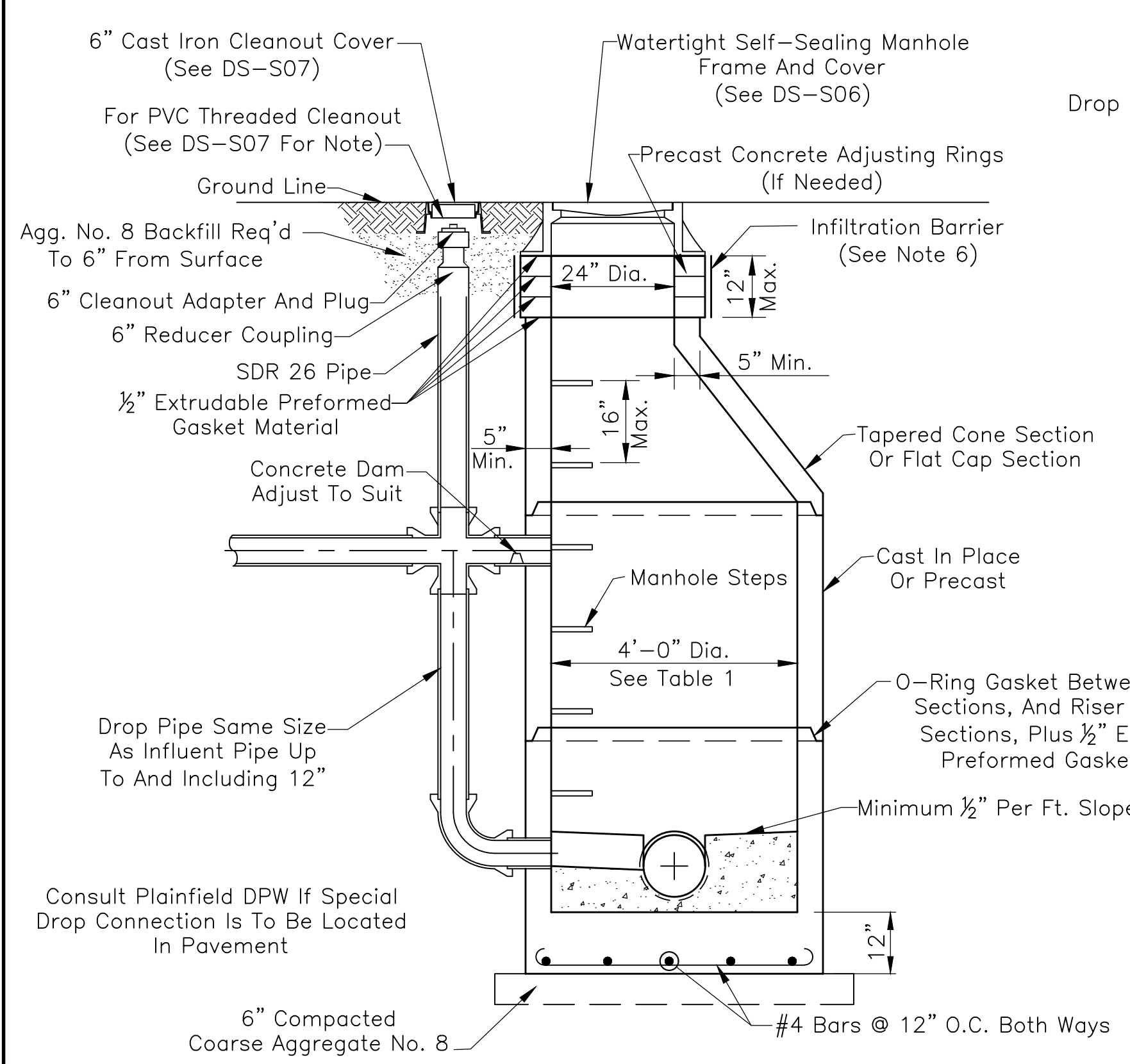
GASKET DETAIL
PRECAST CONCRETE ADJUSTING RING
 Not To Scale



See DS-S01 On Sheet 17 For Bedding & Backfill
SERVICE CONNECTION FOR DEEP SEWERS
(15' DEEP AND OVER)
 Not To Scale

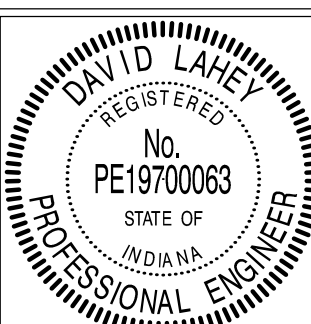


See DS-S01 On Sheet 17 For Bedding & Backfill
SERVICE CONNECTION FOR SHALLOW SEWERS
(LESS THAN 15' DEPTH)
 Not To Scale



See Development Standards DS-S03 & DS-S05 On Sheet 17 For Connection To Existing Sanitary Manholes
SPECIAL DROP CONNECTION
 Scale: 1/2" = 1'-0"
 (*For Use Outside Of Pavement Only*)

REVISIONS		
Rev. No.	Description	Date

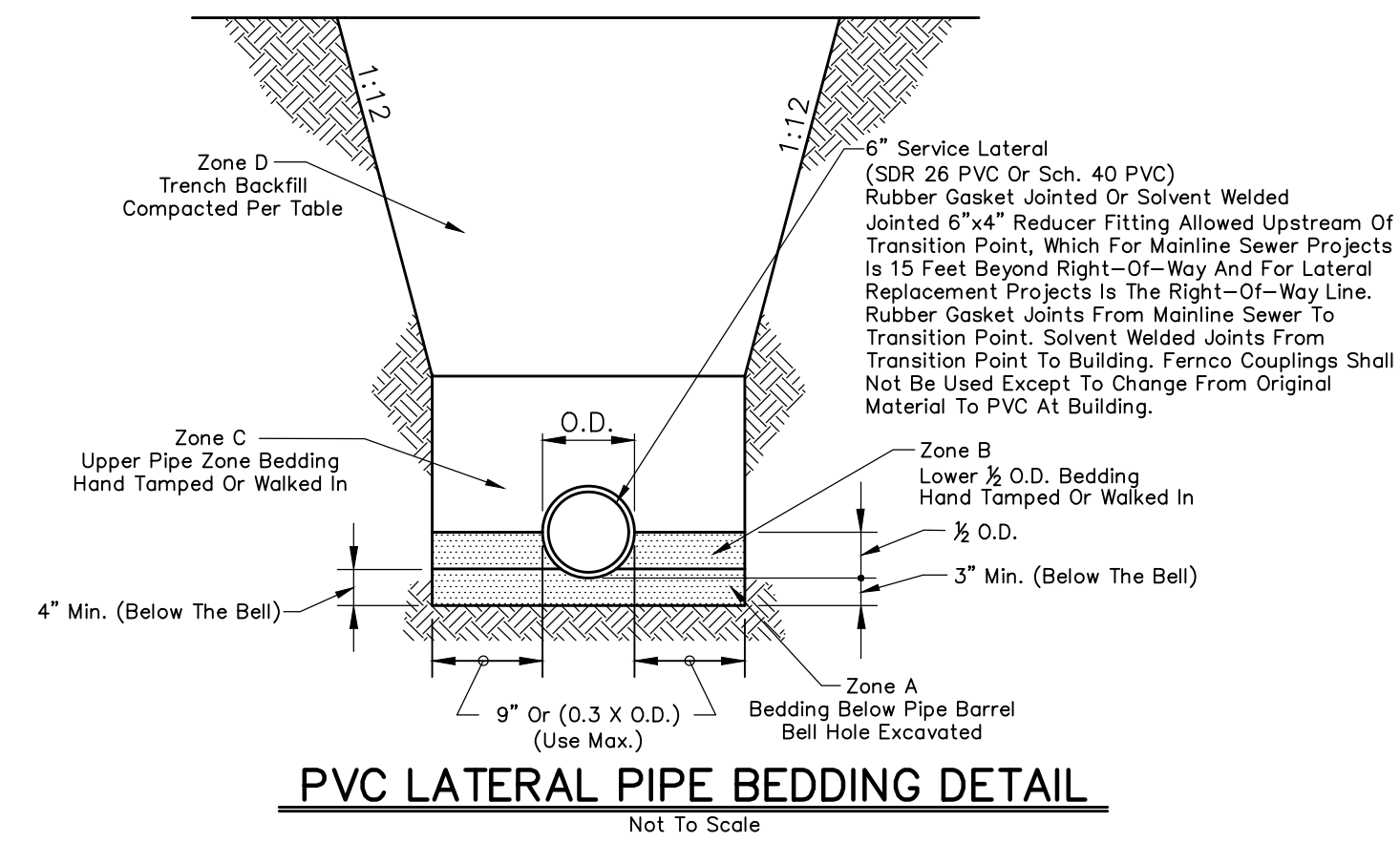


RECOMMENDED FOR APPROVAL: *David Laney* DESIGN ENGINEER 03/10/2022 DATE
 APPROVED: *James A. B. ...* EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES 03/10/2022 DATE
 APPROVED: *James Castelli* SUPERINTENDENT OF PUBLIC WORKS 3/1/22 DATE

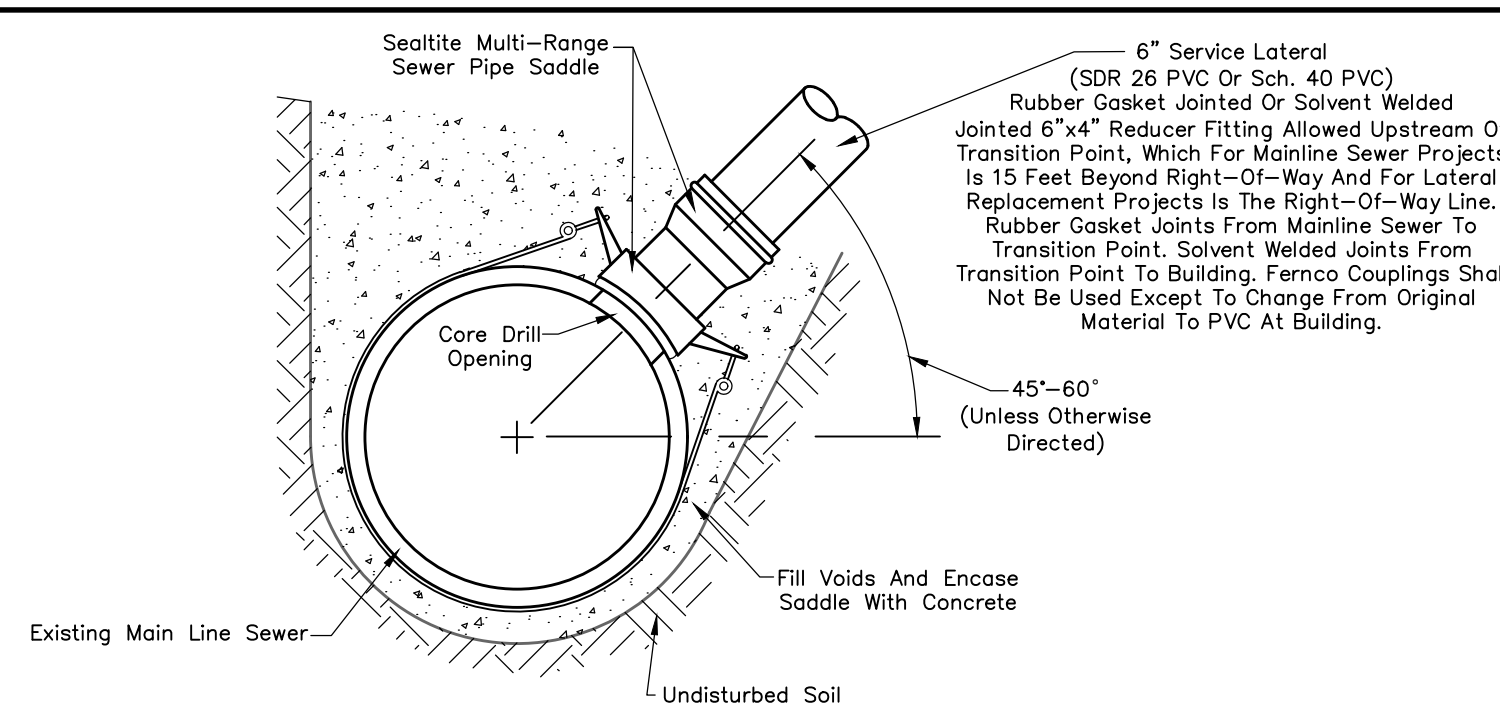
PVC LATERAL PIPE BEDDING & BACKFILL TABLE**					
Bedding/Backfill Zone As Indicated On Detail	Back Of Curb To Back Of Curb	Planting Strip Or Existing Sidewalk	Private Property For Repair/Replace	Future Sidewalk Under 6 Month Rule*	Private Property Under 6 Month Rule*
Zone D Trench Backfill Compacted Per Table	Flowable Fill Or Same As Zone 'B'	Flowable Fill Or Same As Zone 'B'	Approved Excavated Material @ 85% Standard Proctor	Approved Excavated Material @ 85% Standard Proctor	Approved Excavated Material @ 85% Standard Proctor
Zone C Upper Pipe Zone Bedding Hand Tamped Or Walked In	Flowable Fill Or Same As Zone 'B'	Flowable Fill Or Same As Zone 'B'	"B"-Borrow Or Well-Graded Sand	Coarse Aggregate No. 8	Coarse Aggregate No. 8
Zone B Lower 1/2 O.D. Bedding Hand Tamped Or Walked In	Coarse Aggregate No. 8	Coarse Aggregate No. 8	"B"-Borrow Or Well-Graded Sand	Coarse Aggregate No. 8	Coarse Aggregate No. 8
Zone A Bedding Below Pipe Barrel Bell Hole Excavated	Coarse Aggregate No. 8	Coarse Aggregate No. 8	"B"-Borrow Or Well-Graded Sand	Coarse Aggregate No. 8	Coarse Aggregate No. 8

*Approved Excavated Material May Be Used Under Proposed Sidewalks Provided Sidewalks Are Constructed 6 Months After Backfilling Of Trench And As Such Any Additional Lateral Pipe Built On Private Property Under Initial Sewer Construction Shall Be In Accordance With "Private Property Under 6 Month Rule" Column.

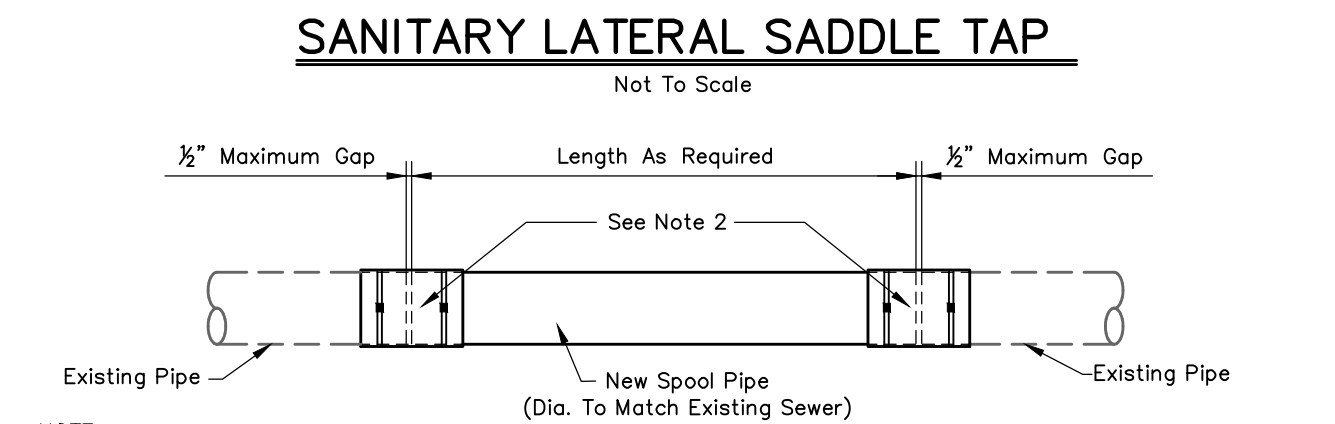
**The PVC Lateral Pipe Bedding And Backfill Table Is Intended To Show Minimum Material Requirements. Flowable Fill May Be Used For Any Zone C, Or Zone D Work. "B"-Borrow May Be Used Whenever Excavated Material Is Required By Table. #8 Crushed Stone Or #8 Fractured Face Aggregate May Be Used Whenever "B"-Borrow Is Required By Table.



DEVELOPMENT STANDARD - DETAIL DS-S01

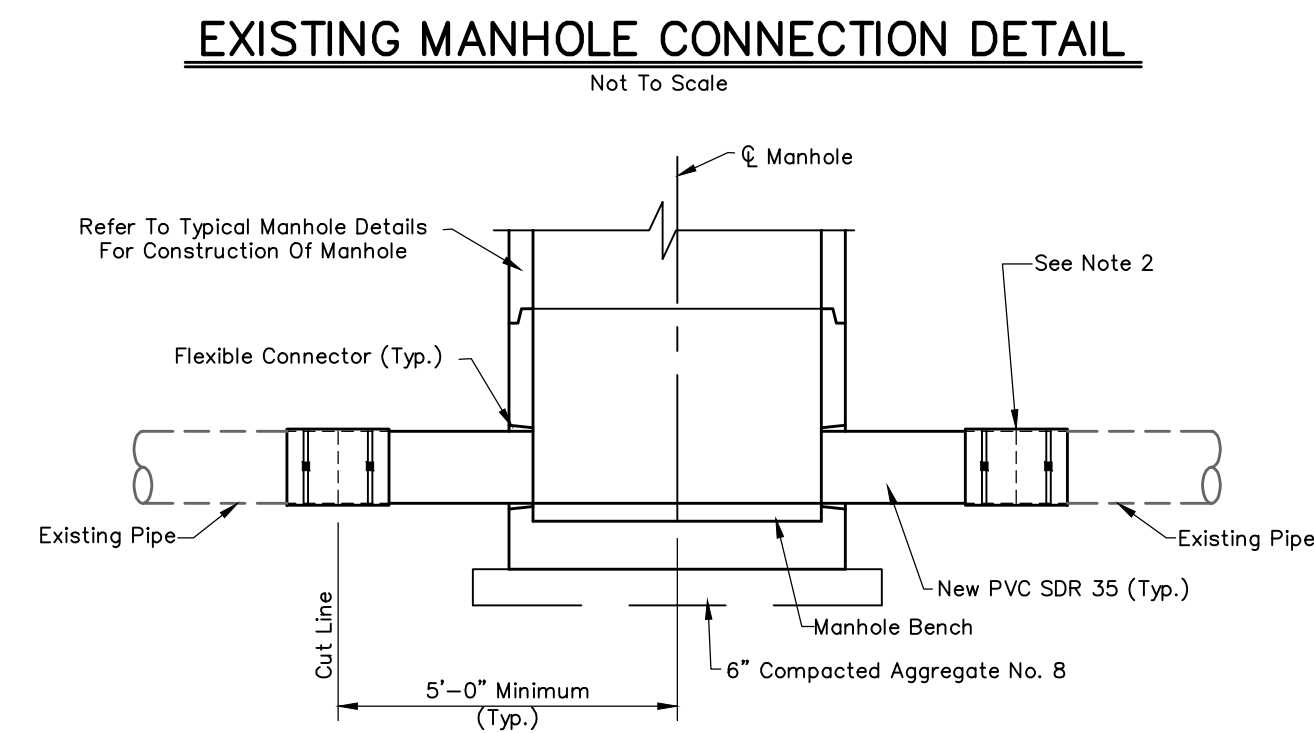
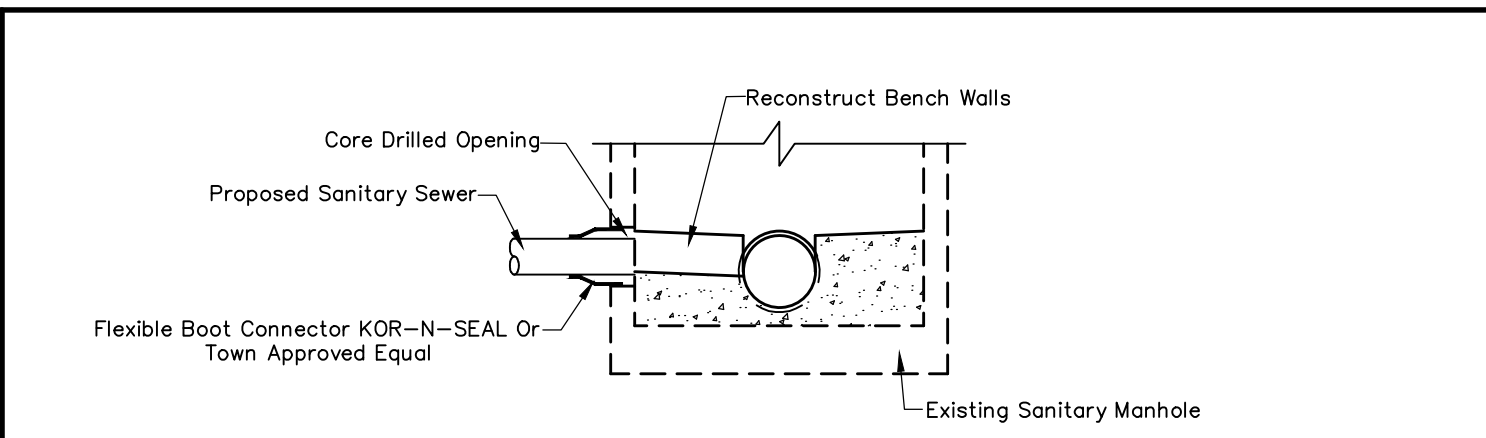


NOTE:
1.) Sewer Pipe Saddle Shall Be General Engineering Company Sealite Type "U" For Laterals Connecting To Existing Mainline Sanitary Sewer With A 6.275" OD To 30.00" OD.
2.) Sewer Pipe Saddle Shall Be General Engineering Company Sealite Type "C" For Laterals Connecting To Existing Mainline Sanitary Sewer Over 30.00" OD.



NOTE:
1.) Cut Existing Pipe(s) On Both Sides Of The Existing Lateral Service. Remove Existing Wye/Fitting(s) And Pipe(s) Section And Install New Spool Pipe As Detailed Above.
2.) An Unshielded Hubless Pipe Repair Coupling Or PVC/ABS Cover w/ Unshielded Flexible Transition Coupling Shall Be Used For Connections Of Plastic (PVC) To Clay Or Cast Iron Pipe. Where New PVC Pipe Is Being Connected To Existing PVC Pipe A Ductile Iron Repair Sleeve With Romac Grip Rings Shall Be Used.

DEVELOPMENT STANDARD - DETAIL DS-S02

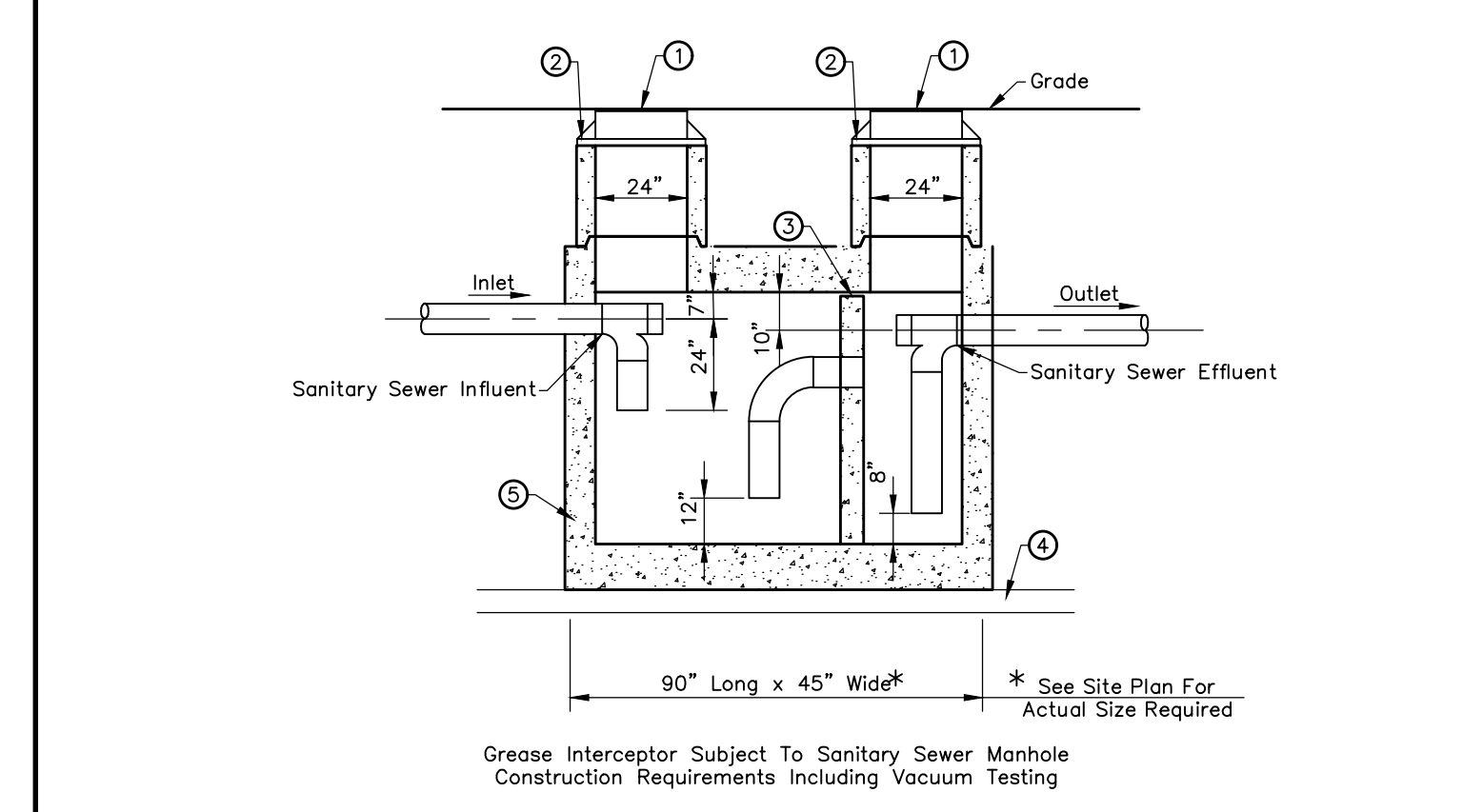


NOTE:
1.) Cut Existing Pipe(s) On The Side Of The Proposed Manhole. Remove Existing Pipe(s) Section And Install Manhole Base. Proceed With Typical Connections And Manhole Construction.
2.) An Unshielded Hubless Pipe Repair Coupling Or PVC/ABS Cover w/ Unshielded Flexible Transition Coupling Shall Be Used For Connections Of Plastic (PVC) To Clay Or Cast Iron Pipe. Where New PVC Pipe Is Being Connected To Existing PVC Pipe A Ductile Iron Repair Sleeve With Romac Grip Rings Shall Be Used.

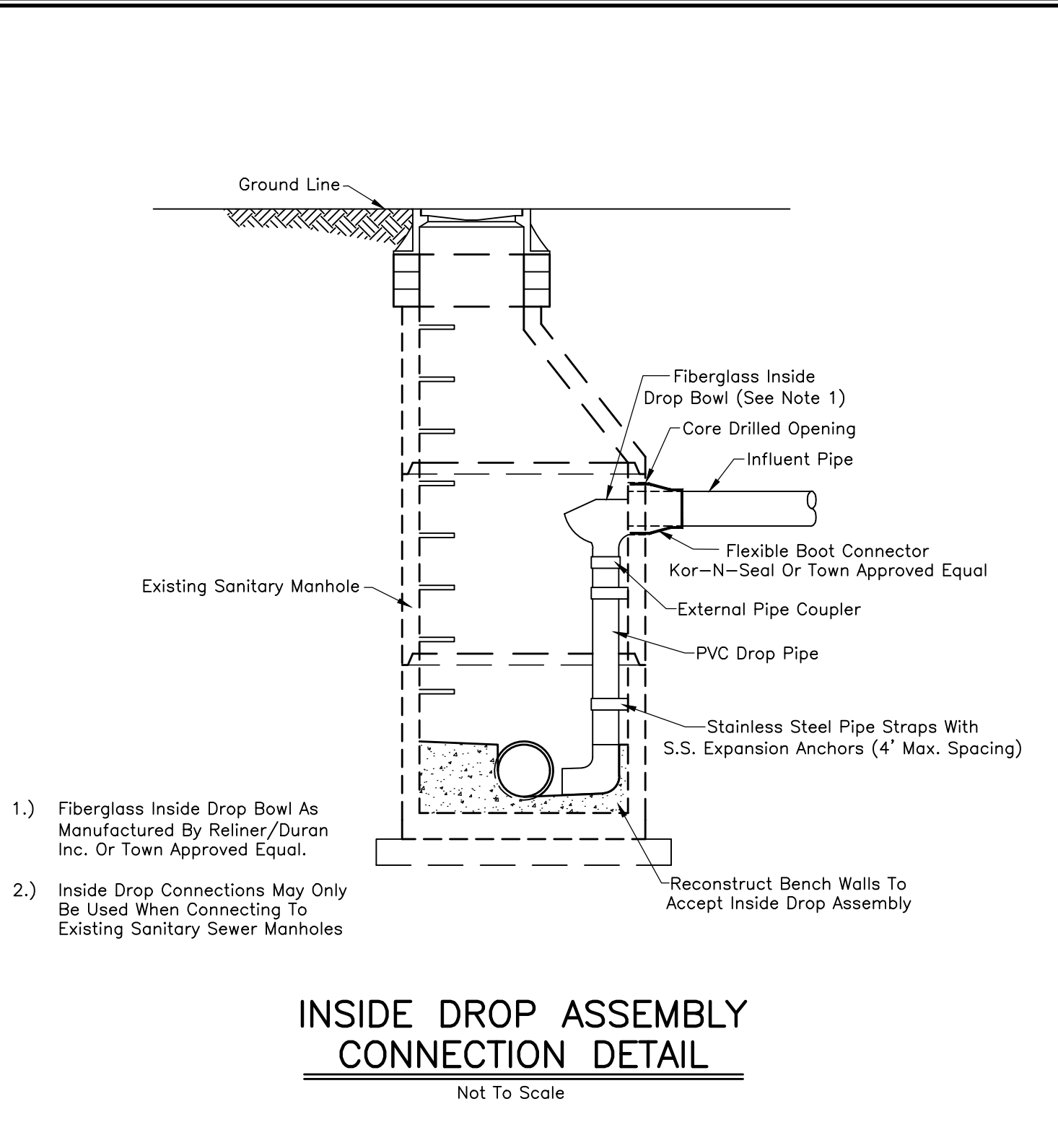
DEVELOPMENT STANDARD - DETAIL DS-S03

NOTES:

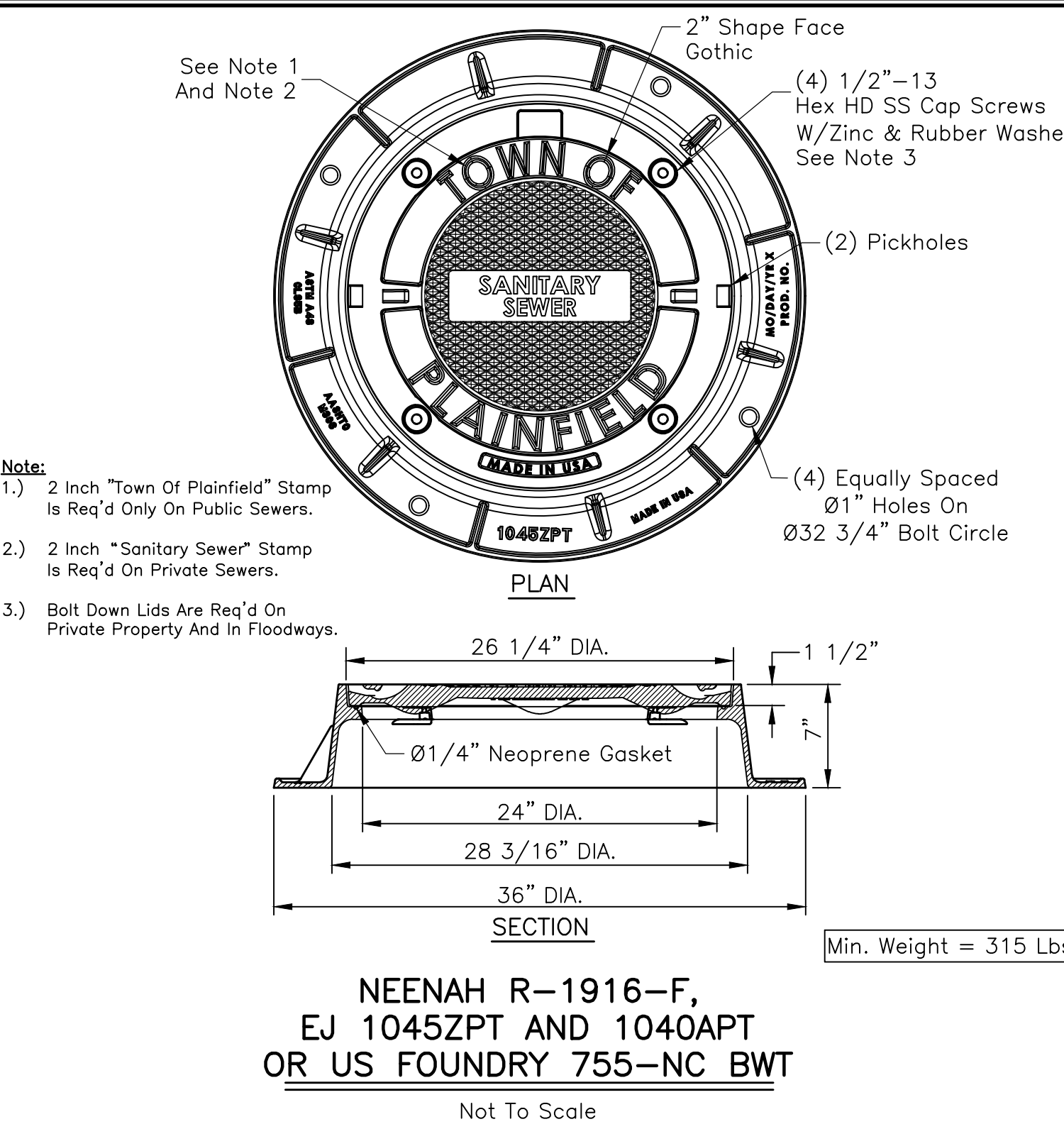
- Cast Iron Manhole Frame And Cover Neenah R-6462-FH Or Approved Equal
- 24" Diameter Concrete Pipe Riser
- Precast Concrete Baffle
- 6" Of Compacted Aggregate No. 8
- Precast Concrete Structure Designed For H-20 Loading. (Must Be Approved By The Authority Having Jurisdiction)



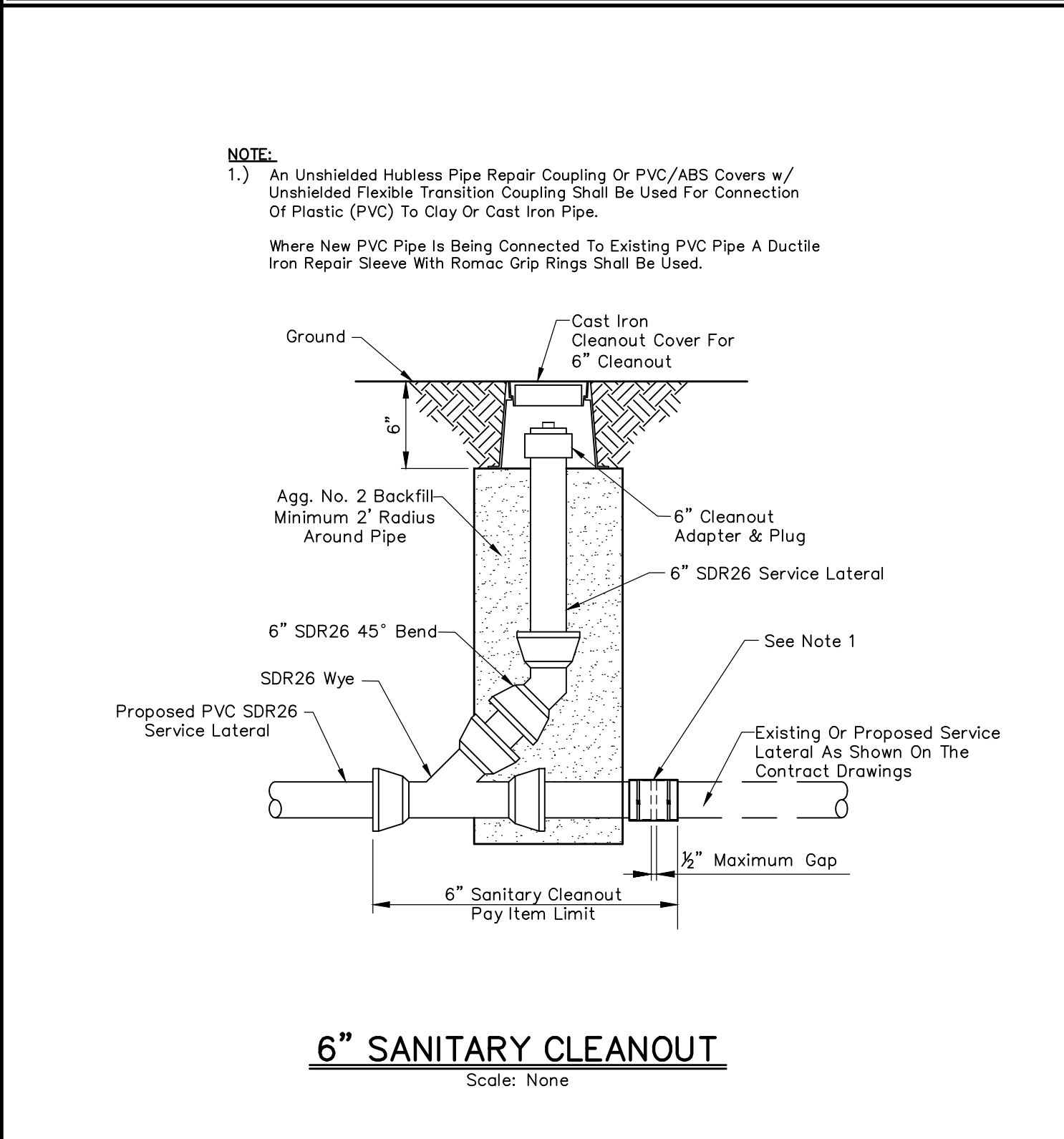
DEVELOPMENT STANDARD - DETAIL DS-S04



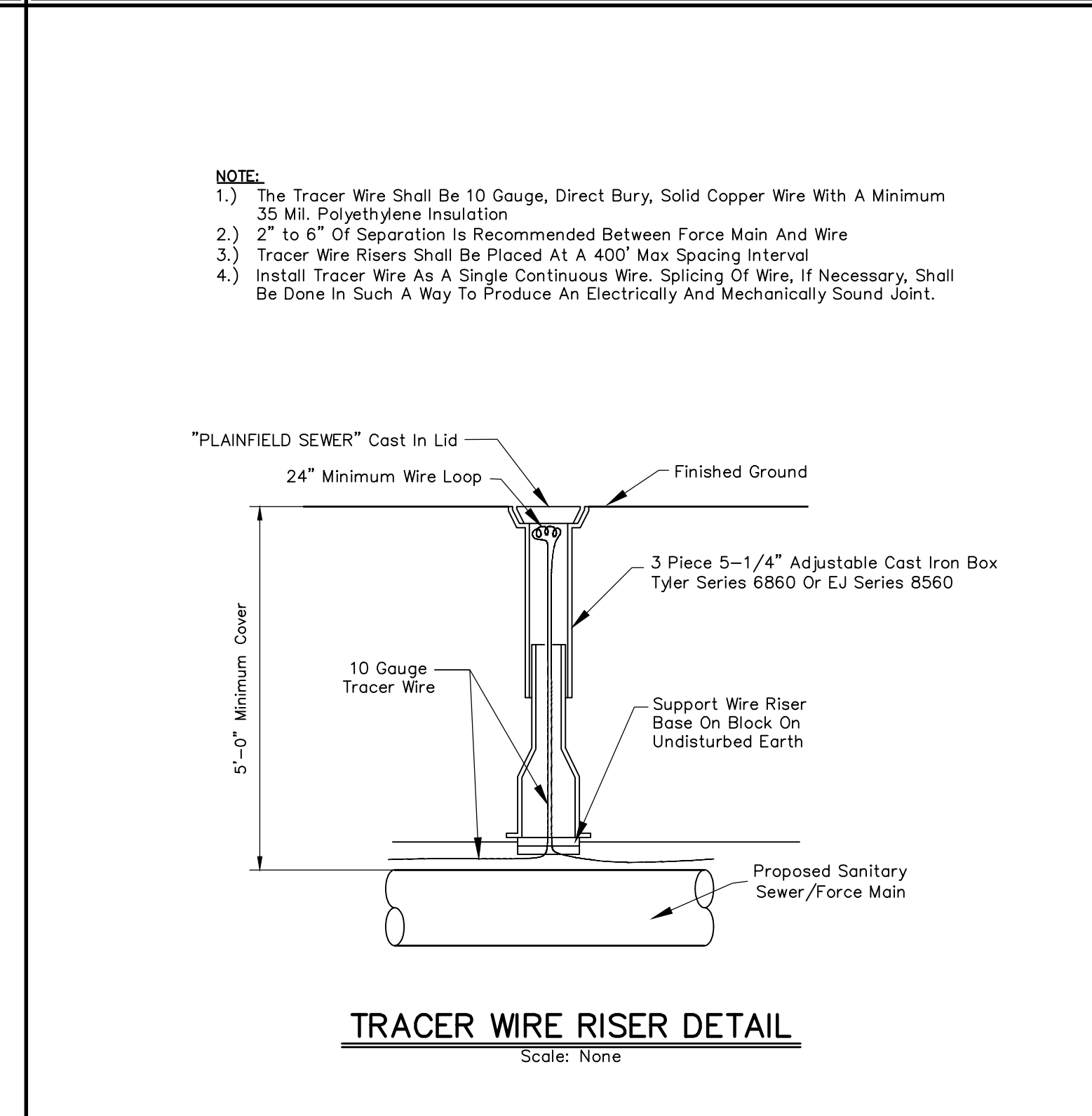
DEVELOPMENT STANDARD - DETAIL DS-S05



DEVELOPMENT STANDARD - DETAIL DS-S06



DEVELOPMENT STANDARD - DETAIL DS-S07



DEVELOPMENT STANDARD - DETAIL DS-S08

REVISIONS		
Rev. No.	Description	Date

RECOMMENDED FOR APPROVAL: *David Laney* DESIGN ENGINEER 03/10/2022 DATE

APPROVED: *James A. B. [Signature]* EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES 03/10/2022 DATE

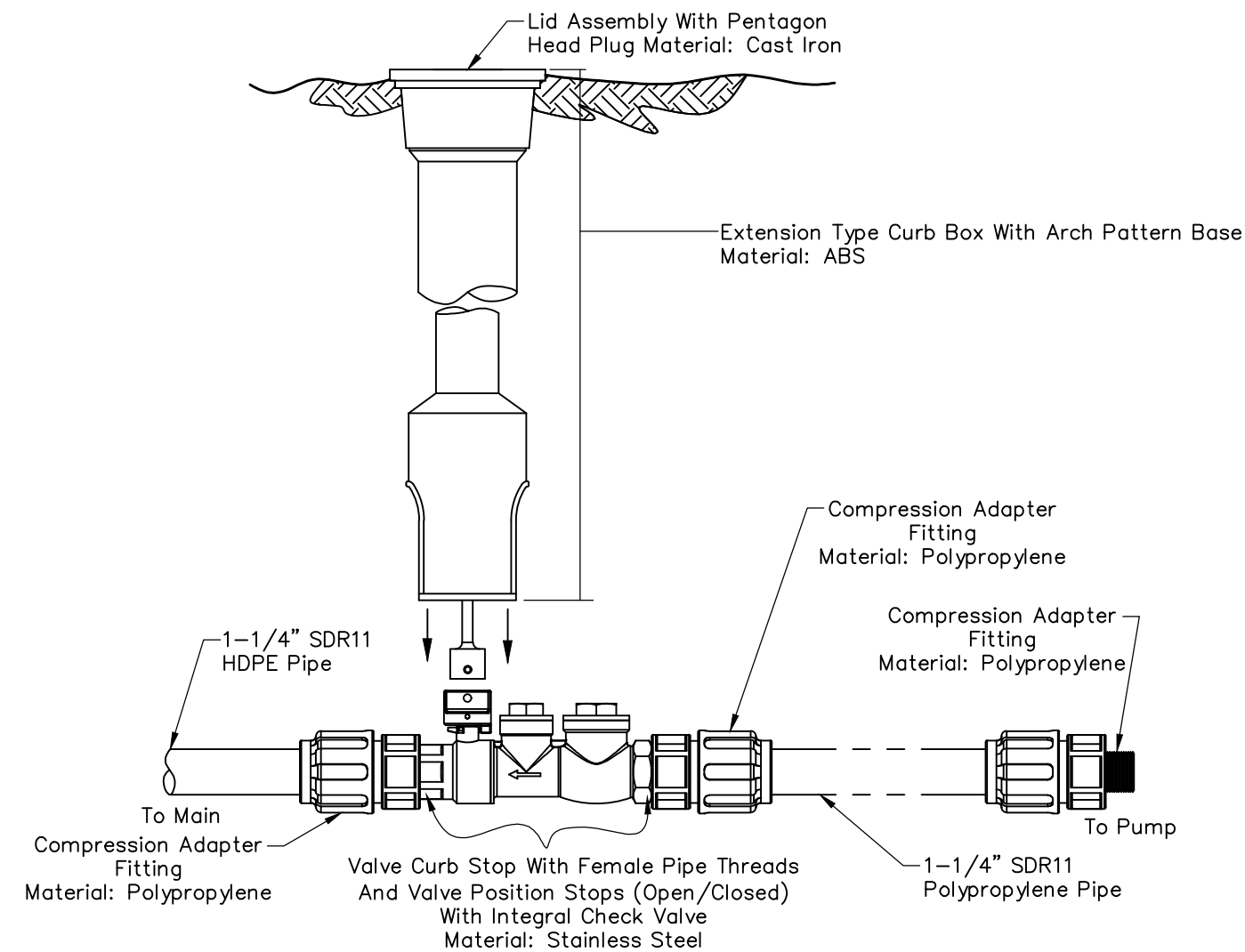
APPROVED: *John Costello* SUPERINTENDENT OF PUBLIC WORKS 3/1/22 DATE

LOW PRESSURE SEWER DESIGN:

- Calculations Shall Be Developed For LPS System Design Including The Following:
 - Topographical Map
 - Soil Conditions
 - Frost Depth
 - Water Table
 - Applicable Codes
 - Discharge Location
 - Lot Layout
 - Total Number Of Lots
 - Dwelling Types
 - Use And Flow Factors
 - Area Development Sequence And Timetable
- Grinder Pumps Shall Be Sized Based Upon Recommended Flow In GPD And Must Consider The Following:
 - Wet Well And Discharge Piping Must Be Protected From Freezing
 - Model And Basin Size Must Be Appropriate For Incoming Peak Flows
 - Appropriate Alarm Devices Must Be Used
- Grinder Pumps Shall Be Owned By The Property Owner, Not The Town Of Plainfield.
- Power For Grinder Pumps Shall Be Provide By Property Owner.
- Pipe Shall Be Either PVC SDR 21 Or HDPE DR 11.
- Air/Vacuum Valves Shall Be Installed At All System High Points And Significant Changes In Grade.
- Air Release Valves Shall Be Installed At Intervals Of 2,000 Feet On All Horizontal Runs That Lack A Clearly Defined High Point.
- Air Release Valves Shall Be Installed At The Beginning Of Each Downward Leg In The System That Exhibits A 30-Foot Or More Drop.
- Cleanout And Flushing Stations Shall Be Incorporated Into The Pipe Layout. Cleanouts Shall Be Installed At The Terminal End Of Each Main, At Every 1,000 Feet On Straight Runs Of Pipe, And Whenever Two Or More Mains Come Together And Feed Into Another Main.
- A Pipe Schedule And Zone Analysis Shall Be Developed To Ensure The Design Conforms With A Criteria Of Flow Velocity Greater Than Or Equal To 2.0 Feet Per Second And Total Design Head Of Less Than Or Equal To 185 Feet.

LOW PRESSURE SEWER DESIGN

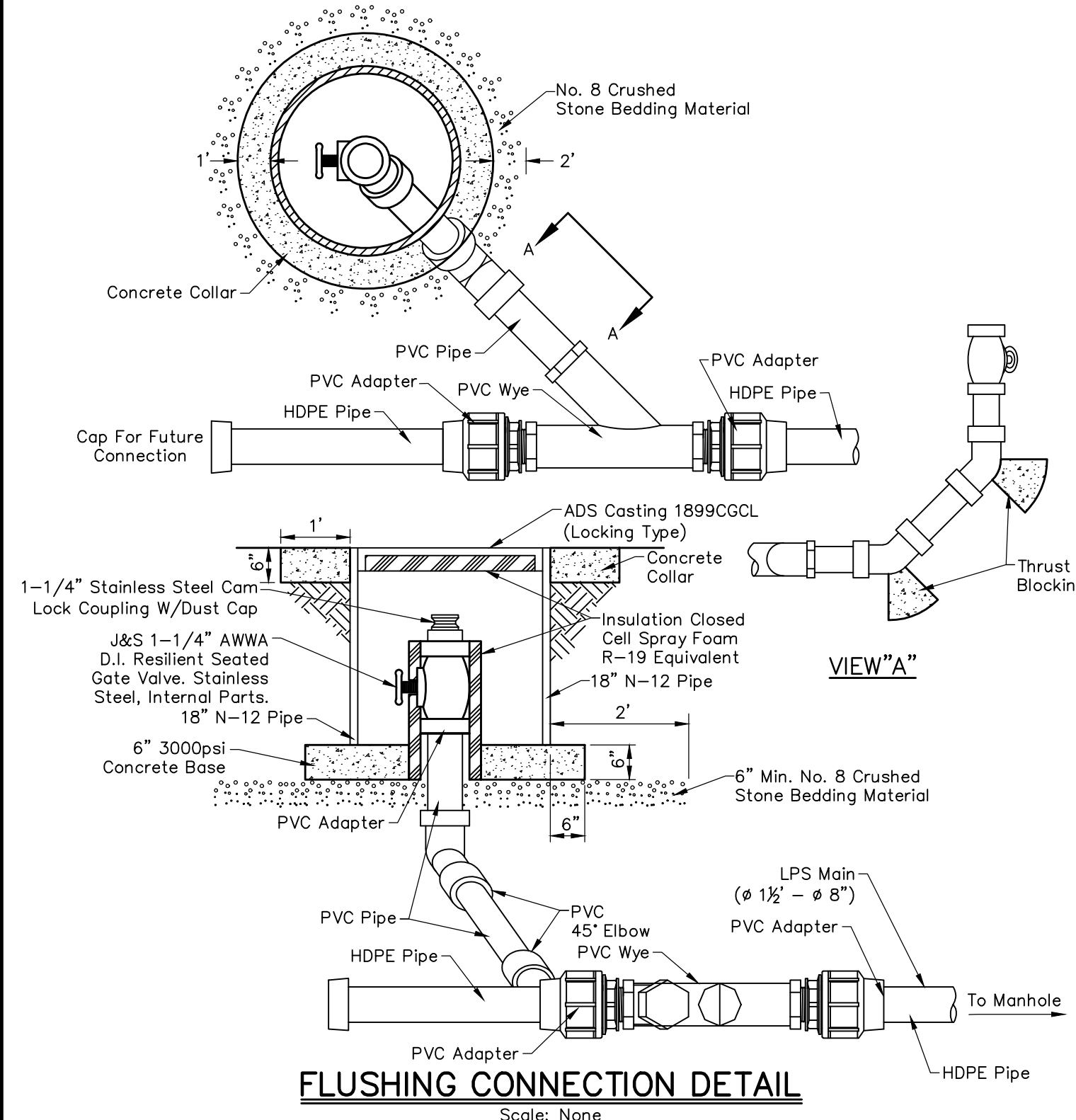
Scale: None



- NOTE:**
- SS Curb Stop/Check Valve And Fittings Are Provided Separately.
 - To Assemble, Apply A Double Layer Of Teflon Tape, And A Layer Of Pipe Dope To The Threads On Plastic Fittings And Install Per The Manufacturer's Instructions.
 - Assembly Is To Be Pressure Tested.
 - Assembly Is To Be Used With SDR11 HDPE Pipe.

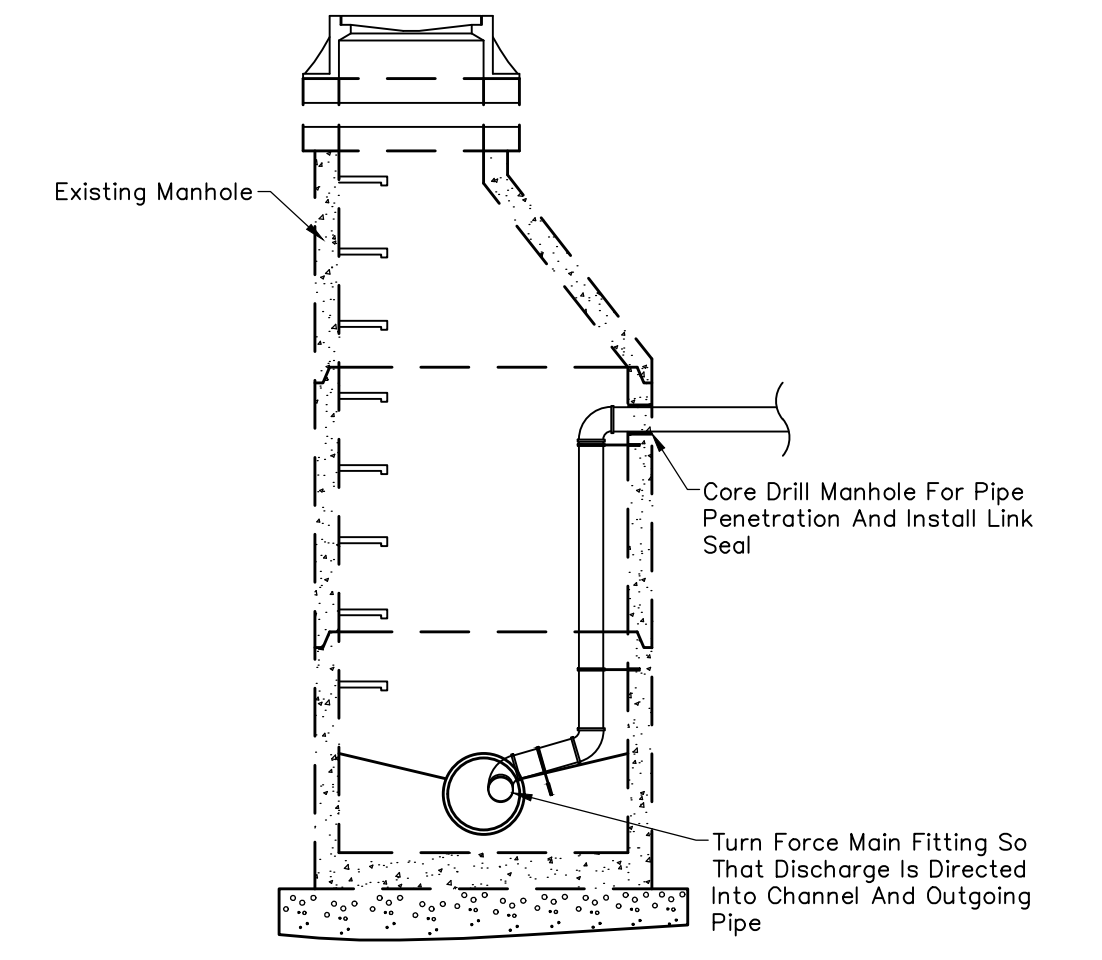
**STAINLESS STEEL LATERAL KIT
1-1/4" SDR 11 HDPE PIPE**

Scale: None



FLUSHING CONNECTION DETAIL

Scale: None



- NOTE:**
- Force Main As Specified To Be Anchored To Wall Opposite Steps With Corrosion Resistant Anchors.
 - Discharge From Force Main Shall Be Installed Over Or Directed To The Flow Line Of The Manhole With Appropriate Fittings Depending On The Orientation On The Force Main Penetration With The Flow Line.
 - Discharge Shall Not Be Directed Onto The Bench Wall.
 - Tracer Wire Shall Be Installed Per Tracer Wire Riser Detail on Sheet 17.

SANITARY MANHOLE CONNECTION DETAIL

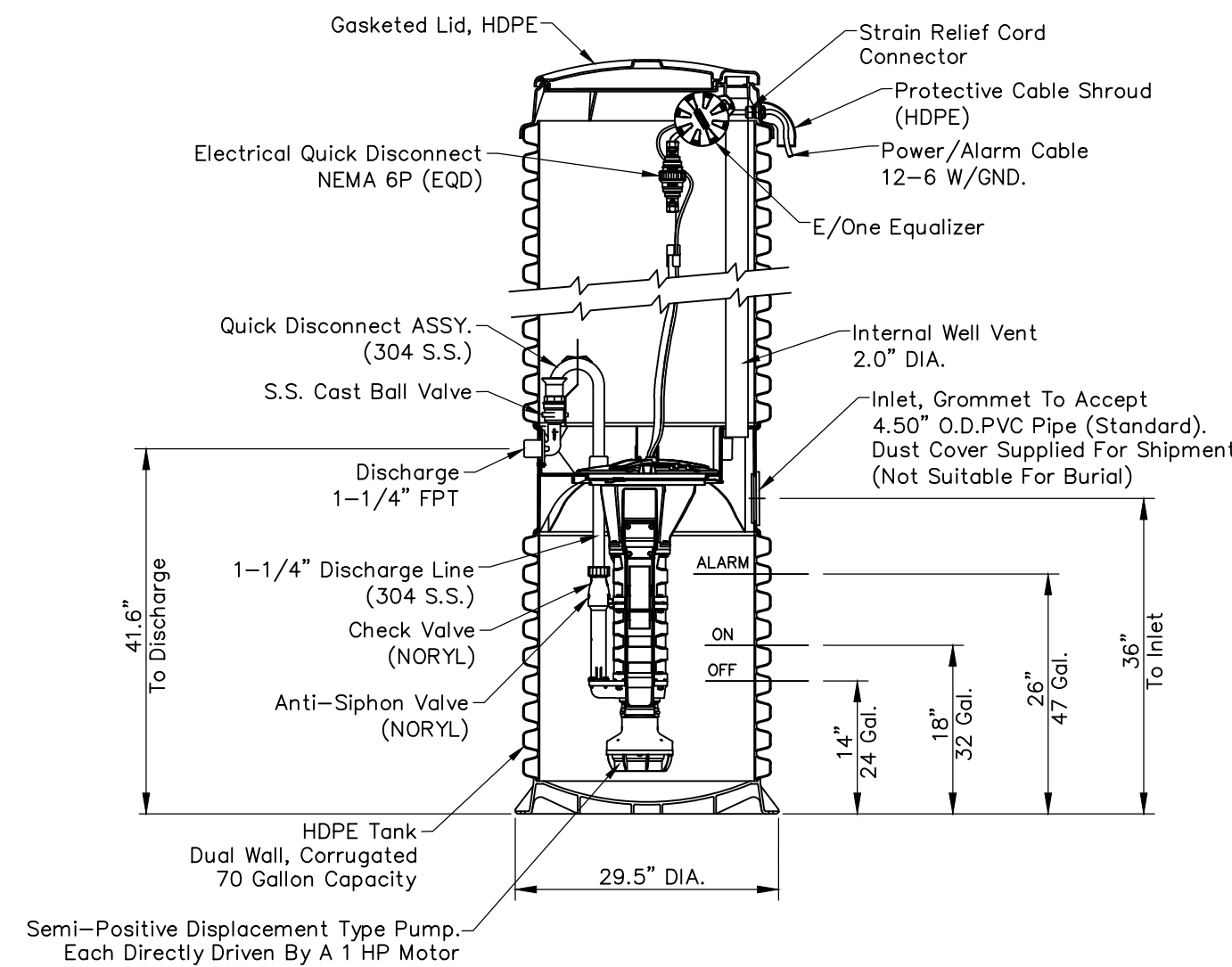
Scale: None

DEVELOPMENT STANDARD - DETAIL DS-S09

DEVELOPMENT STANDARD - DETAIL DS-S10

DEVELOPMENT STANDARD - DETAIL DS-S11

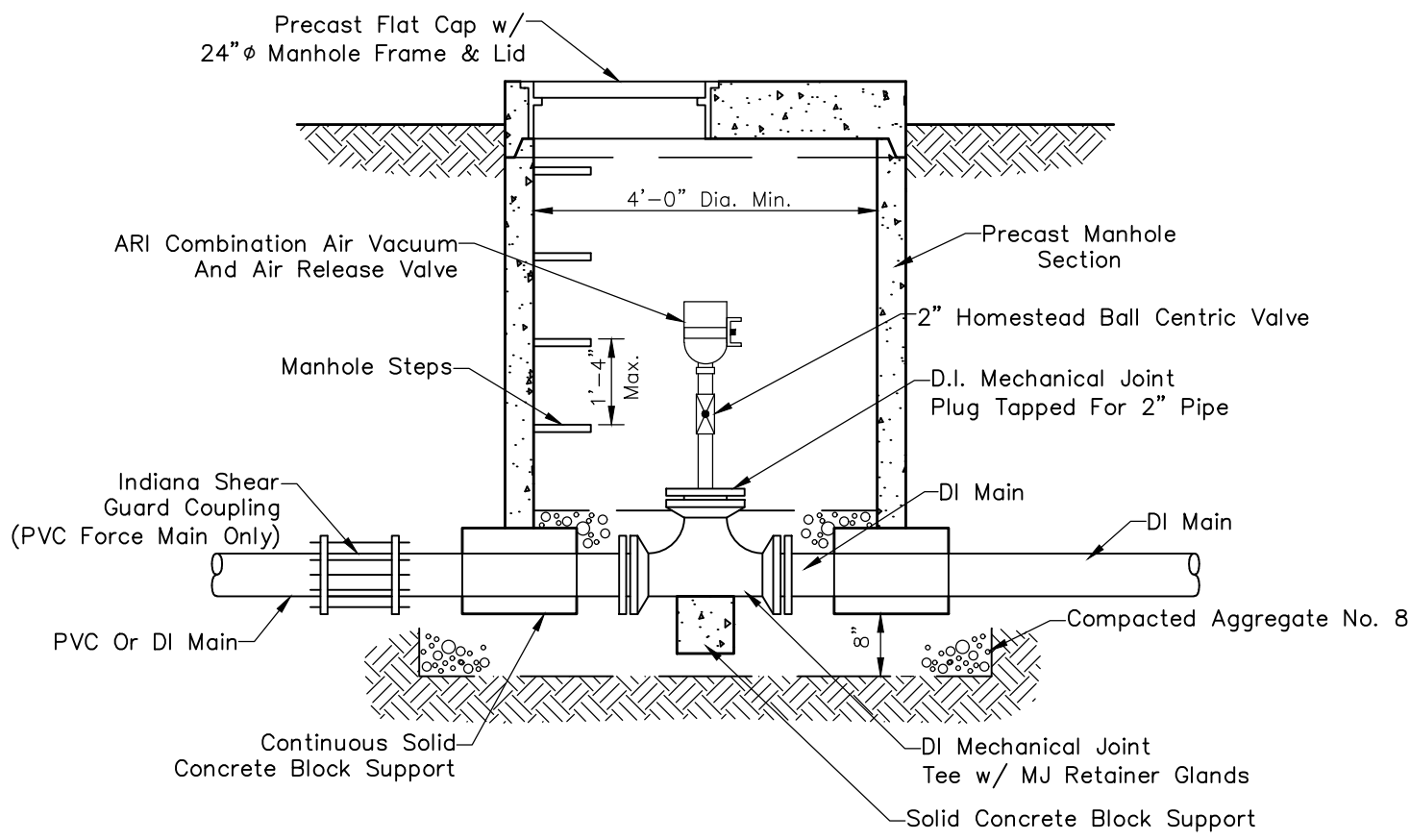
DEVELOPMENT STANDARD - DETAIL DS-S12



- NOTE:**
- Concrete Ballast May Be Required. See Manufacture Installation Instructions For Details.
 - Dimensions Are For Reference Only.

GRINDER PUMP STATION DETAIL

Scale: None



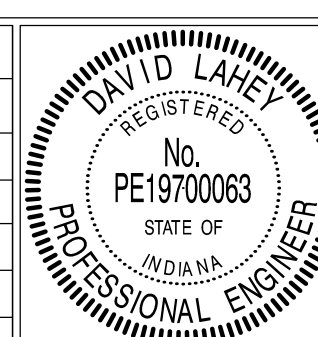
AIR/VACUUM RELEASE VALVE & STRUCTURE

Scale: None

DEVELOPMENT STANDARD - DETAIL DS-S13

DEVELOPMENT STANDARD - DETAIL DS-S14

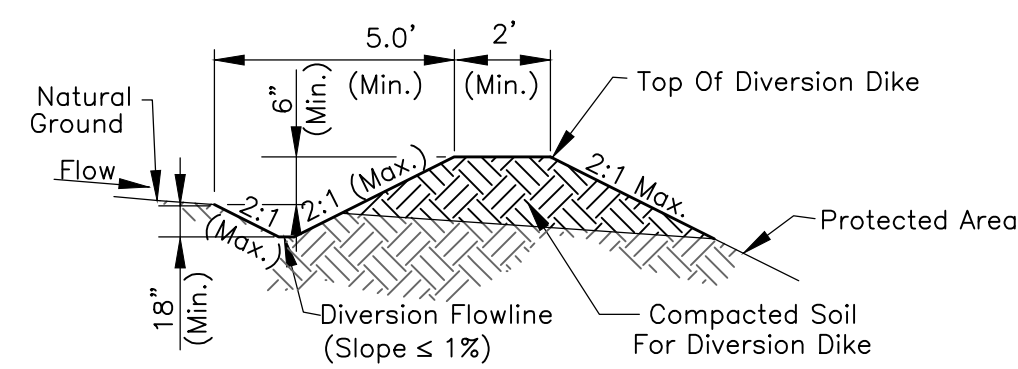
REVISIONS		
Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL	<i>David Laney</i> DESIGN ENGINEER	03/10/2022 DATE
APPROVED	<i>Samuel B. ...</i> EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES	03/10/2022 DATE
APPROVED	<i>Jean Castelli</i> SUPERINTENDENT OF PUBLIC WORKS	3/1/22 DATE

TOWN OF PLAINFIELD
SANITARY SEWER (S)
DEVELOPMENT STANDARDS

SHEET
18
OF
27



Notes:

Installation:

Lay Out The Diversion By Setting Grade And Alignment To Fit Site Needs And Topography, Maintaining A Stable, Positive Channel Grade Towards The Outlet.

Remove And Properly Dispose Of Brush, Trees, And Other Debris From The Foundation Area.

Construct The Diversion To Dimensions And Grades Shown In The Construction Plans.

Construct The Diversion Ridge In Six To Eight-Inch Lifts. Compact Each Lift By Driving Wheels Of Construction Equipment Along The Ridge. Overfill And Compact The Ridge To Design Height Plus 10 Percent To Allow For Settlement.

Stabilize Outlets Prior To Or During Construction Of The Diversion, Diverting Sediment-Laden Storm Water Flow To A Temporary Sediment Trap Or A Temporary Dry Sediment Basin.

Maintenance:

Inspect Within 24 Hours Of Each Rain Event And At Least Once Every Seven Calendar Days.

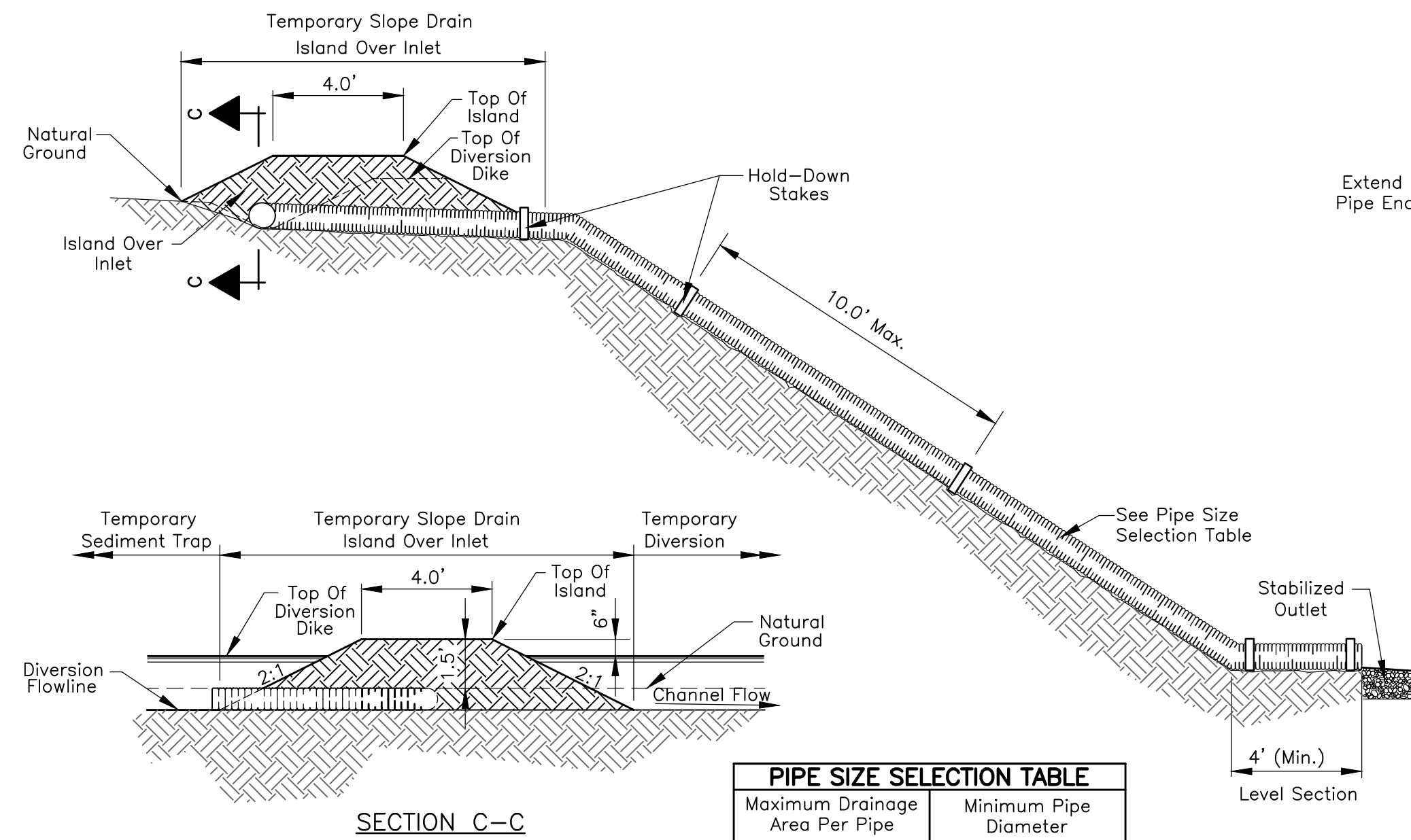
Remove Sediment From Channel To Maintain Positive Grade.

Check Outlets And Make Necessary Repairs Immediately.

Adjust Ridge Height To Prevent Overtopping.

TEMPORARY DIVERSION

Not To Scale



Notes:

Installation:

Place Temporary Slope Drains On Undisturbed Soil Or Well Compacted Fill. Set The Slope Drain Inlet At The Bottom Of The Diversion Channels. Connect The Pipe To The Inlet Section.

Construct The Diversion Ridge By Placing Fill Over The Pipe In 6 Inch Lifts. Compact Each Lift By Hand Tamping Under And Around The Inlet, And Along The Pipe.

Make The Top Of The Fill 6 Inches Higher Than The Adjoining Diversion.

Make All Pipe Connections Watertight And Secure So That Joints Will Not Separate In Use.

Anchor The Pipe To The Face Of The Slope With Stakes Spaced No More Than 10 Feet Apart. Extend The Pipe Beyond The Toe Of Slope To A Stable Grade. Protect The Outlet From Erosion.

Grade The Diversion Channel At The Top Of The Slope Toward The Temporary Slope Drain (Slope <2%).

Stabilize All Disturbed Areas Following Installation.

Maintenance:

Inspect Weekly And Following Each Storm Event. (Remove Sediment From The Channel And Reinforce The Ridge As Needed.)

Check The Inlet For Sediment Or Trash Accumulation.

Check The Fill Over The Pipe For Settlement, Cracking, Or Piping Holes; Repair Immediately.

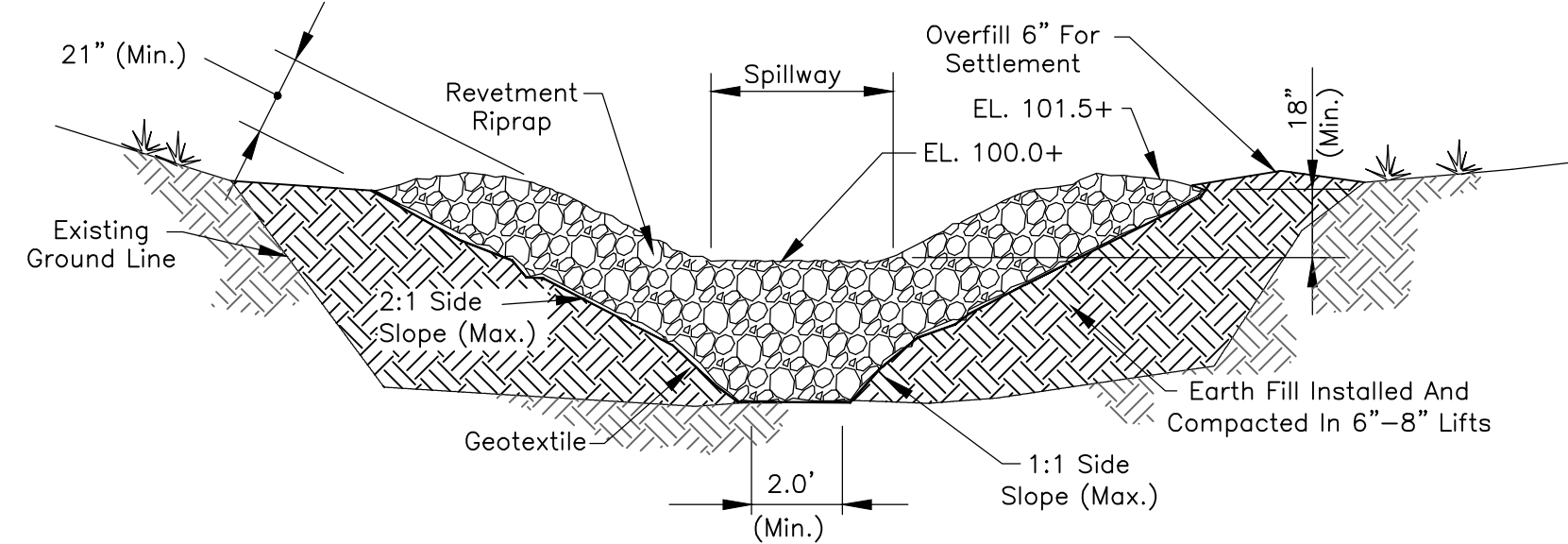
Check For Holes Where The Pipe Emerges From The Dike; Repair Immediately.

Check The Conduit For Evidence Of Leaks Or Inadequate Anchoring; Repair Immediately.

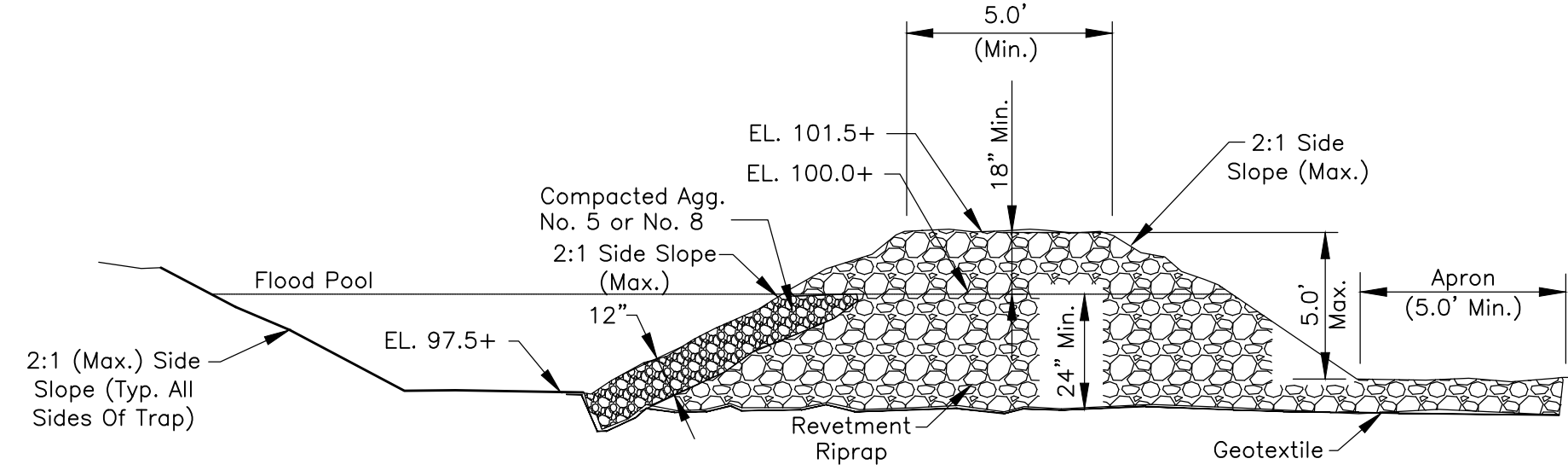
Check The Outlet For Erosion Or Sedimentation; Clean & Repair Or Extend If Necessary.

TEMPORARY SLOPE DRAIN

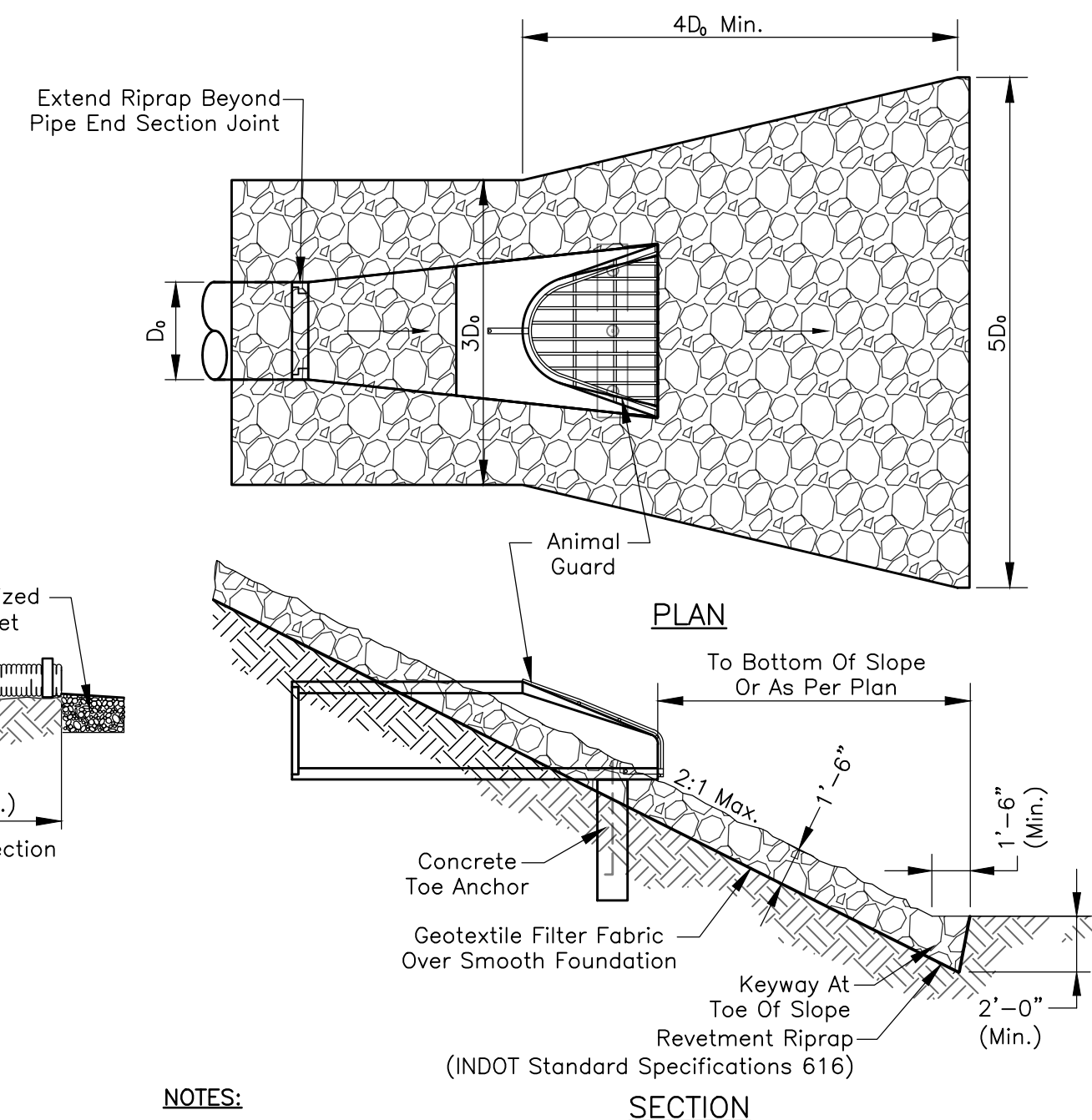
Not To Scale



EARTH EMBANKMENT AND STONE OUTLET SECTION



CROSS SECTION VIEW OF THE STONE OUTLET SECTION



Notes:

Installation:

Excavate Only Deep Enough For Both Filter And Riprap. Compact Any Fill Material To The Density Of The Surrounding Undisturbed Soil.

Cut A Keyway In Stable Material At The Base Of The Slope To Reinforce The Toe; Keyway Depth Should Be 1-2 Times The Design Thickness Of The Riprap And Should Extend A Horizontal Distance Equal To The Design Thickness.

Place Geotextile Fabric On The Smoothed Foundation, Overlapping The Edges 12 Inches Min. Secure With Anchor Pins Spaced Every 3 Feet Along The Overlap.

Immediately After Installing The Filter, Add The Riprap To Full Thickness In One Operation. Do Not Dump Through Chutes Or Use Any Method That Causes Segregation Of Rock Sizes Or That Will Dislodge Or Damage The Underlying Filter Material.

If Fabric Is Damaged, Remove The Riprap And Repair By Adding Another Layer Of Fabric, Overlapping The Damaged Area By 12 Inches.

Place Smaller Rock In Voids To Form A Dense, Uniform, Well Graded Mass. Blend The Rock Surface Smoothly With The Surrounding Area To Eliminate Protrusions Or Over-Falls.

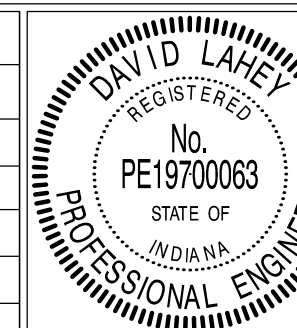
Inspect Periodically For Displaced Rock Material, Slumping, And Erosion At Edges, Especially Downstream Or Downslope.

Maintenance: Inspect Periodically For Displaced rock Material, Slumping And Erosion At Edges, Especially Downstream Or Downslope.

PRECAST CONCRETE END SECTION W/ RIP RAP

Not To Scale

REVISIONS		
Rev. No.	Description	Date



CONCRETE WASHOUT

Not To Scale

RECOMMENDED FOR APPROVAL: *[Signature]* DESIGN ENGINEER, 03/01/2022 DATE

APPROVED: *[Signature]* EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES, 03/01/2022 DATE

APPROVED: *[Signature]* MS4 OPERATOR, 03/01/2022 DATE

Notes:

The Spillway Width Varies With The Drainage Area Contributing To The Temporary Sediment Trap:

Drainage Area (acres)	Width (ft.)
2	4
3	8
4	10
5	12

The Length And Width Of The Basin Are As Shown On The Erosion Control Plan (Maximum Drainage Area Is 5 Acres).

See The Indiana Storm Water Quality Manual For Additional Information.

Installation:

Clear, Grub, And Strip All Vegetation And Root Mat From The Embankment Area.

Create Embankment Using Material Free Of Roots, Rocks, Brush, And Debris. Overfill The Embankment 6 Inches To Allow For Settling.

Excavate A Trapezoidal Stone Outlet Section From The Compacted Embankment (Section A-A).

Install Geotextile And Place Specified Stone To The Lines And Grades Shown.

Stabilize The Embankment And Other Disturbed Areas With Seed And Mulch Or Another Suitable Erosion Resistant Cover

Maintenance:

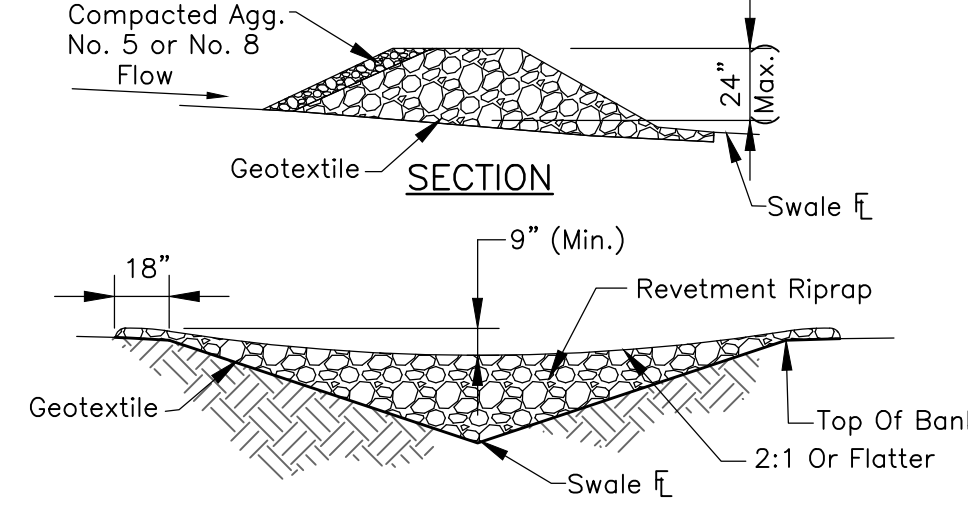
Inspect Traps Weekly And Following Each Storm Event And Immediately Repair. Check Embankment For Any Erosion And Repair.

Remove Sediment When It Has Accumulated To One Half The Design Depth. Check Pool Area Side Slopes For Erosion And Repair.

Replace Spillway Gravel Facing If Clogged.

Inspect Vegetation And Reseed Again, If Necessary.

Check The Spillway Depth Periodically To Ensure A Minimum 18 Inch Depth From The Lowest Point Of The Settled Embankment To Highest Point Of The Spillway Crest. Fill Any Low Areas To Maintain The Design Elevation.



ROCK CHECK DAM

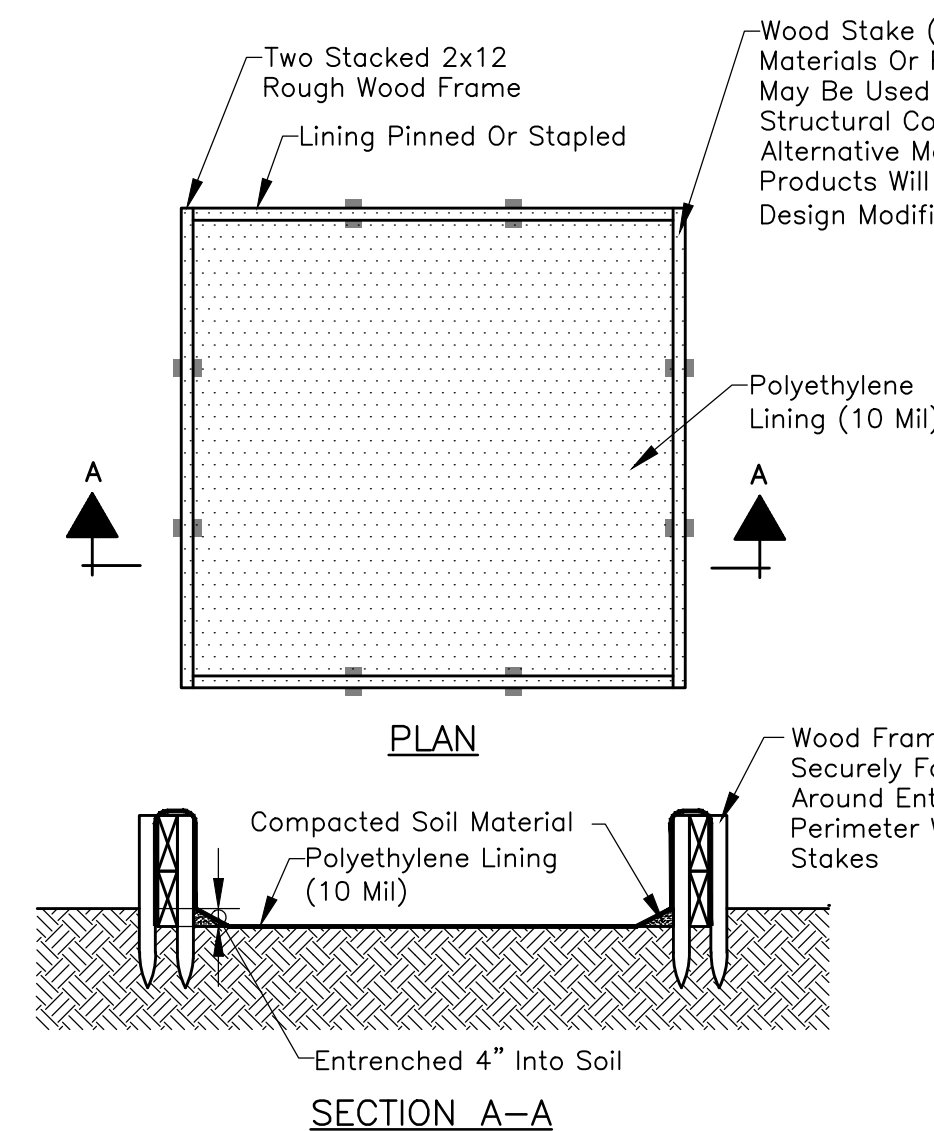
Not To Scale

ROCK CHECK DAM

Not To Scale

TEMPORARY SEDIMENT TRAP

Not To Scale



Notes:

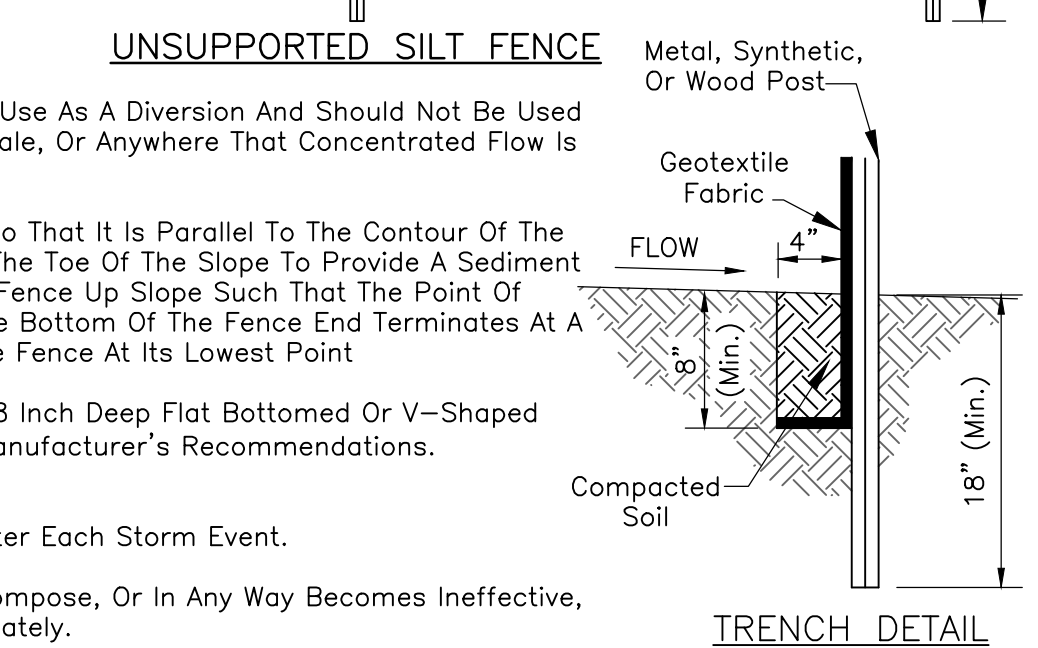
Prefabricated Washout Containers Or Roll-Off Dumpsters Are Preferred. Self-Installed Concrete Washouts With A Concrete Block Or Wood Frame Are Acceptable. Signage Should Be Installed Identifying Washout Areas.

Washouts Shall Not Be Used For Trash. Concrete Washouts Shall Be Located Away From Inlets, Open Drainage Facilities, Watercourses And Construction Traffic.

Concrete Washouts Shall Be Of Sufficient Volume And Quantity To Contain All Liquid And Concrete Waste Generated By Washout Operations.

Once Concrete Wastes Are Washed Into The Designated Area And Allowed To Harden, The Concrete Should Be Broken Up, Removed, And Disposed Of Offsite. Washouts Shall Be Monitored Daily. Arrange For Clean-out When 1/2 Full, Potential For Heavy Rainfall, Or Prior To A Large Pour.

Plastic Lining Material Should Be A Minimum Of 10 Mil. Polyethylene Sheeting And Should Be Free Of Holes, Tears, Or Other Defects That Compromise The Impermeability Of The Material



UNSUPPORTED SILT FENCE

Not To Scale

Notes:

Silt Fence Is Not Recommended For Use As A Diversion And Should Not Be Used Across A Stream, Channel, Ditch, Swale, Or Anywhere That Concentrated Flow Is Anticipated.

Lay Out The Location Of The Fence So That It Is Parallel To The Contour Of The Slope And At Least 10 Feet Beyond The Toe Of The Slope To Provide A Sediment Storage Area. Turn The Ends Of The Fence Up Slope Such That The Point Of Contact Between The Ground And The Bottom Of The Fence End Terminates At A Higher Elevation Than The Top Of The Fence At Its Lowest Point

Along The Entire Fence Line, Dig An 8 Inch Deep Flat Bottomed Or V-Shaped Trench. Place Fence According To Manufacturer's Recommendations.

Maintenance: Inspect The Silt Fence Weekly And After Each Storm Event.

If Fence Fabric Tears, Starts To Decompose, Or In Any Way Becomes Ineffective, Replace The Affected Portion Immediately.

Remove Deposited Sediment When It Reaches Half The Height Of The Fence At Its Lowest Point Or Is Causing The Fabric To Bulge. Take Care To Avoid Undermining The Fence During Clean Out.

After The Contributing Drainage Area Has Been Stabilized, Remove The Fence And Sediment Deposits, Bring The Disturbed Area To Grade, And Stabilize.

SILT FENCE (SEDIMENT FENCE)

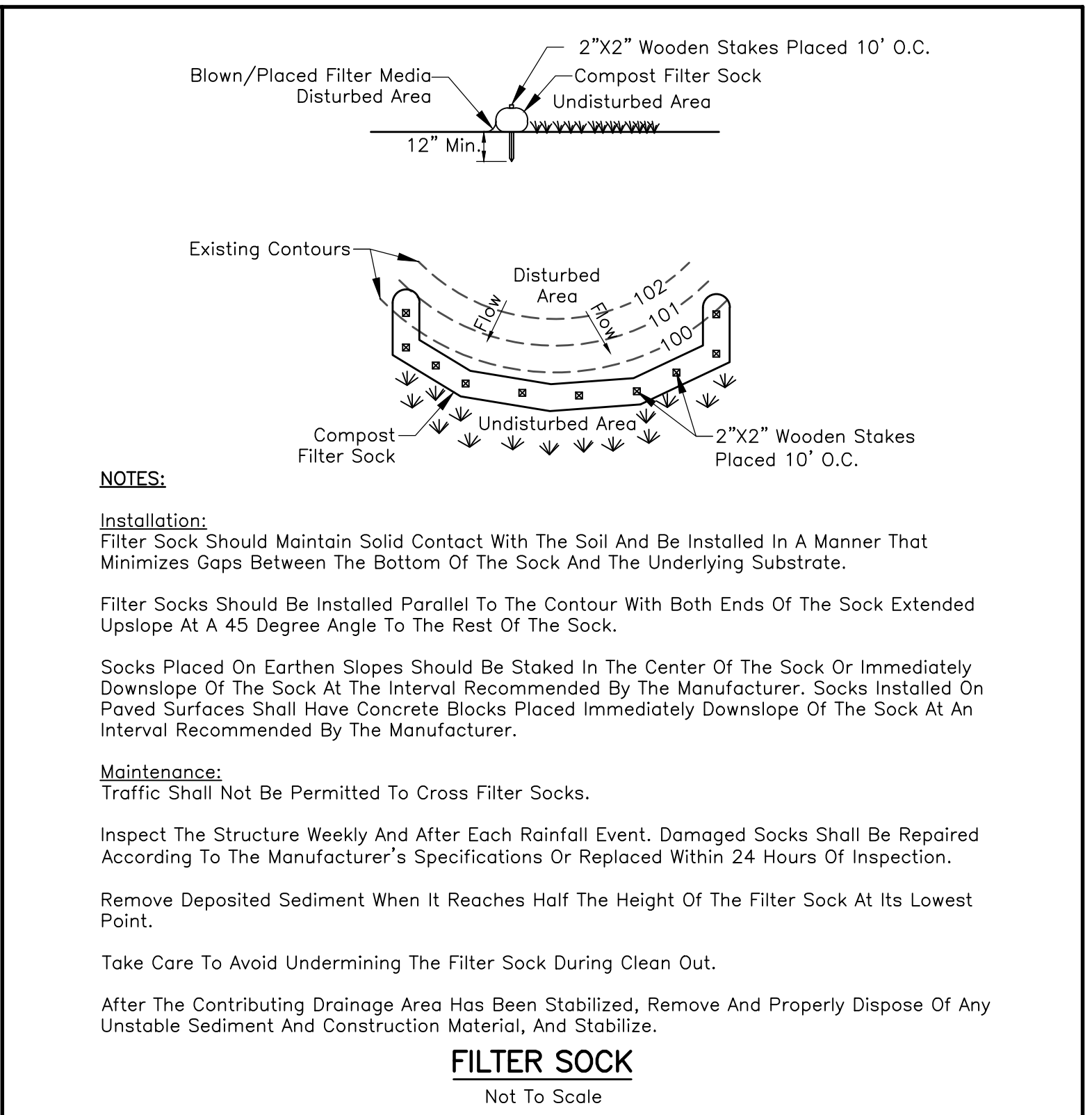
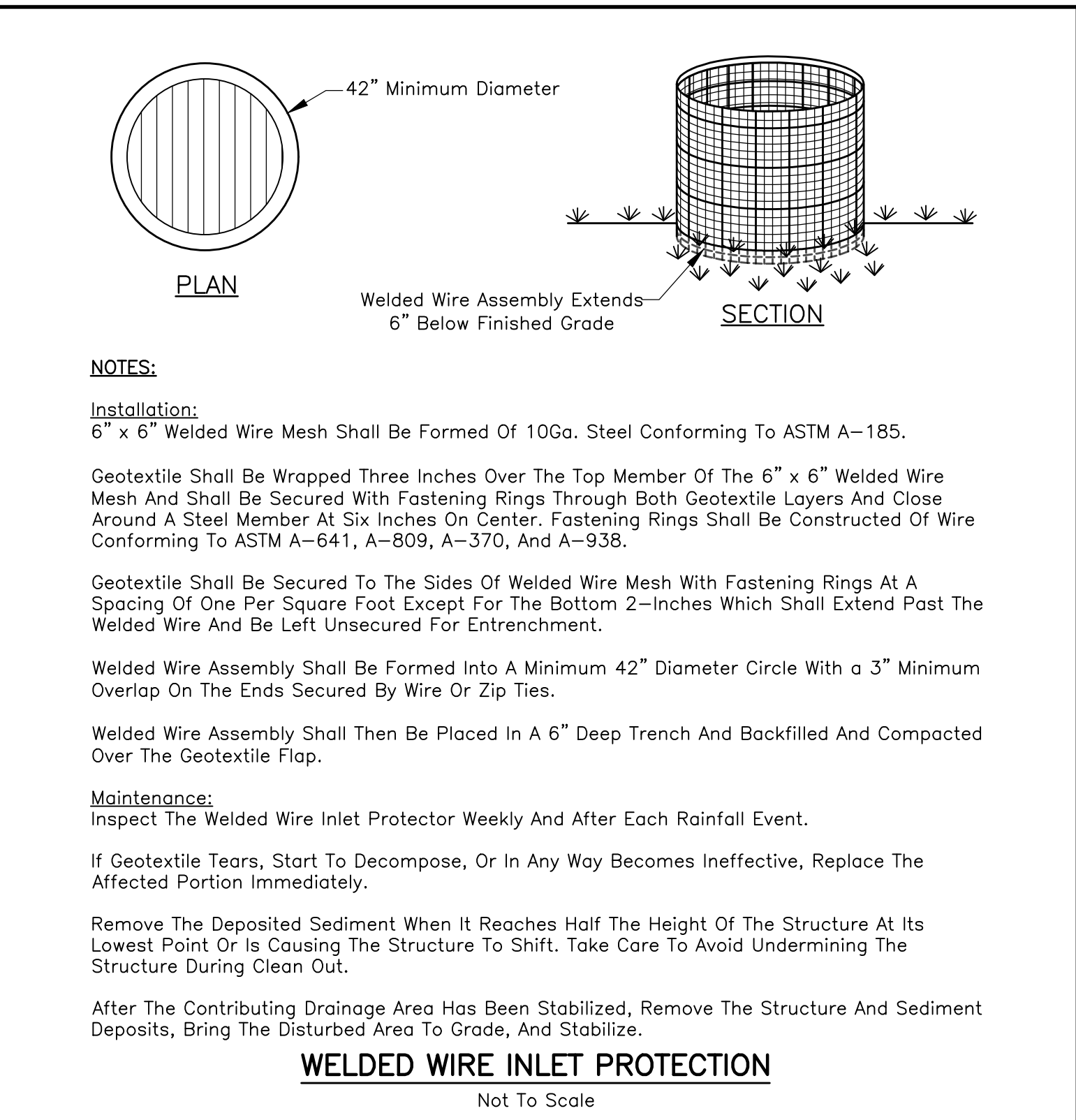
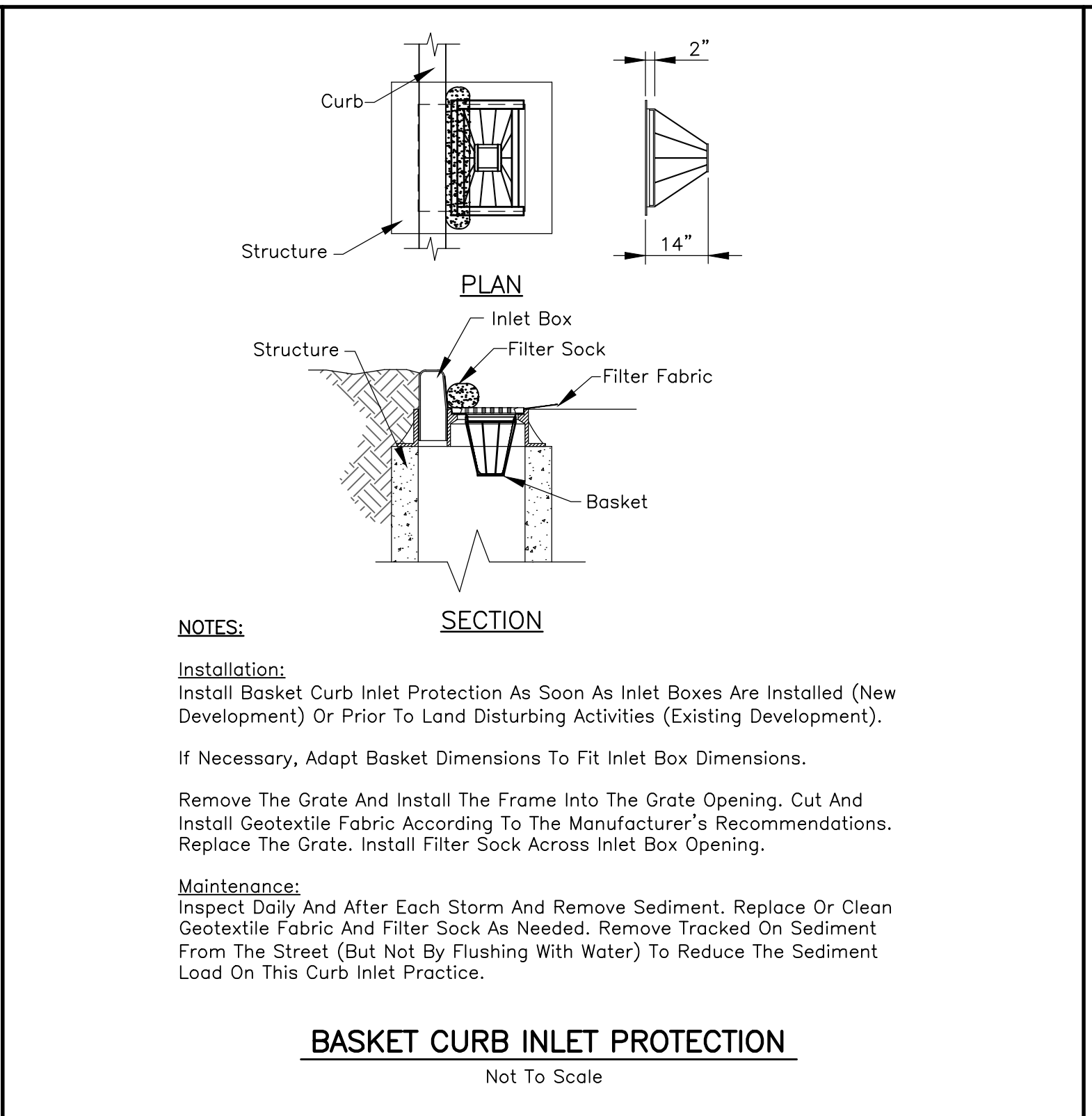
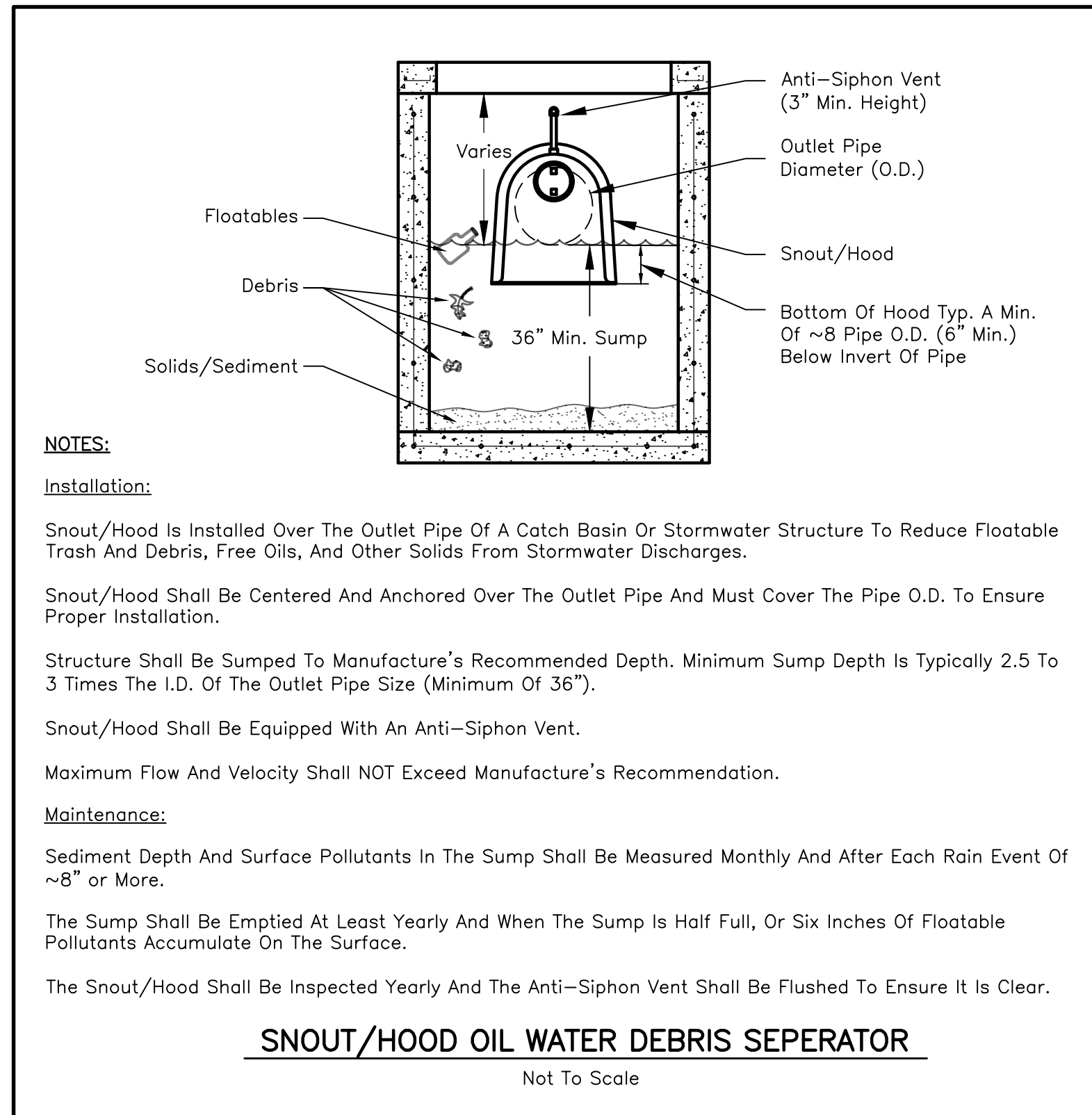
Not To Scale

TOWN OF PLAINFIELD

EROSION CONTROL MEASURES

SHEET

19
OF
27

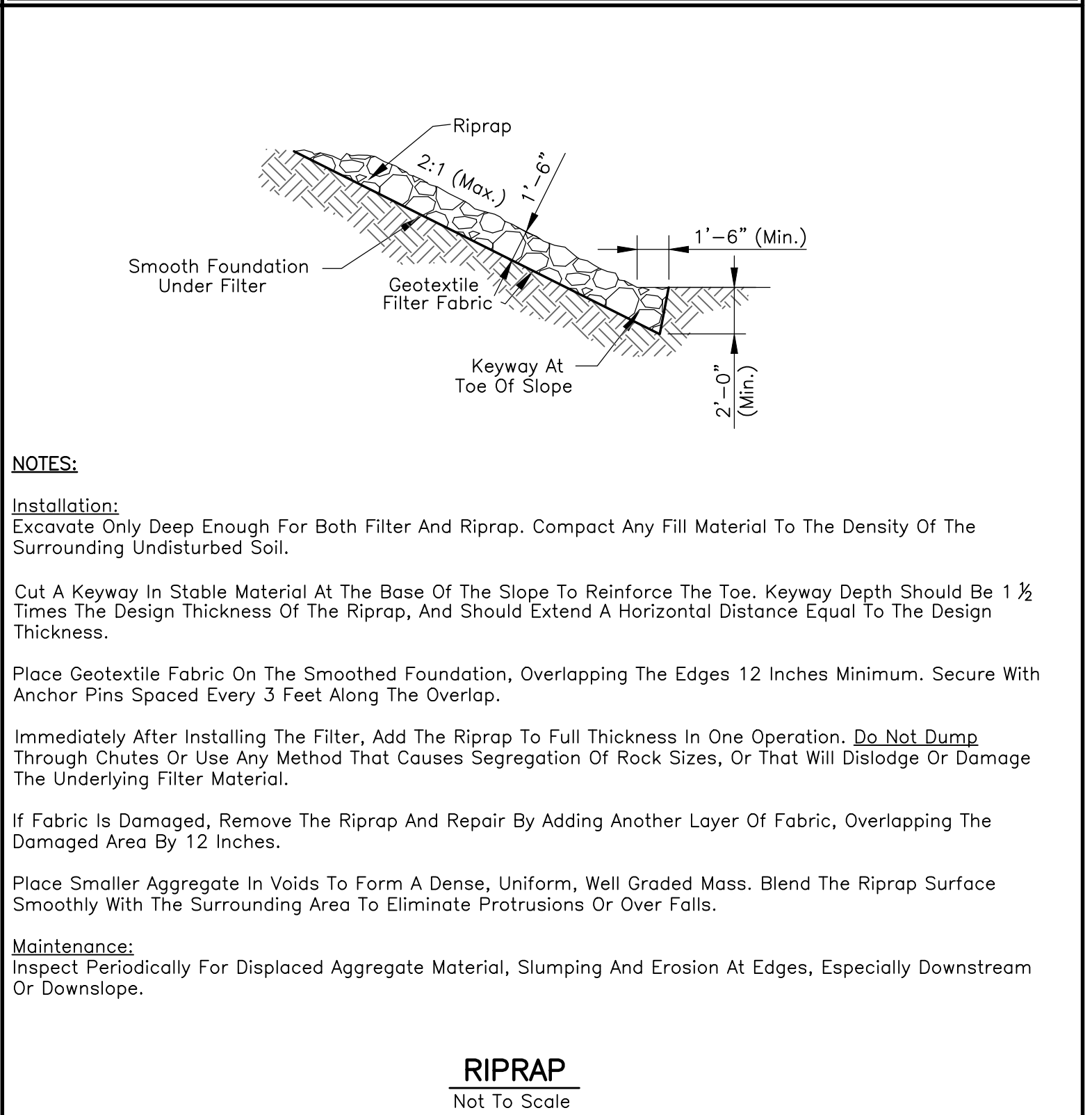
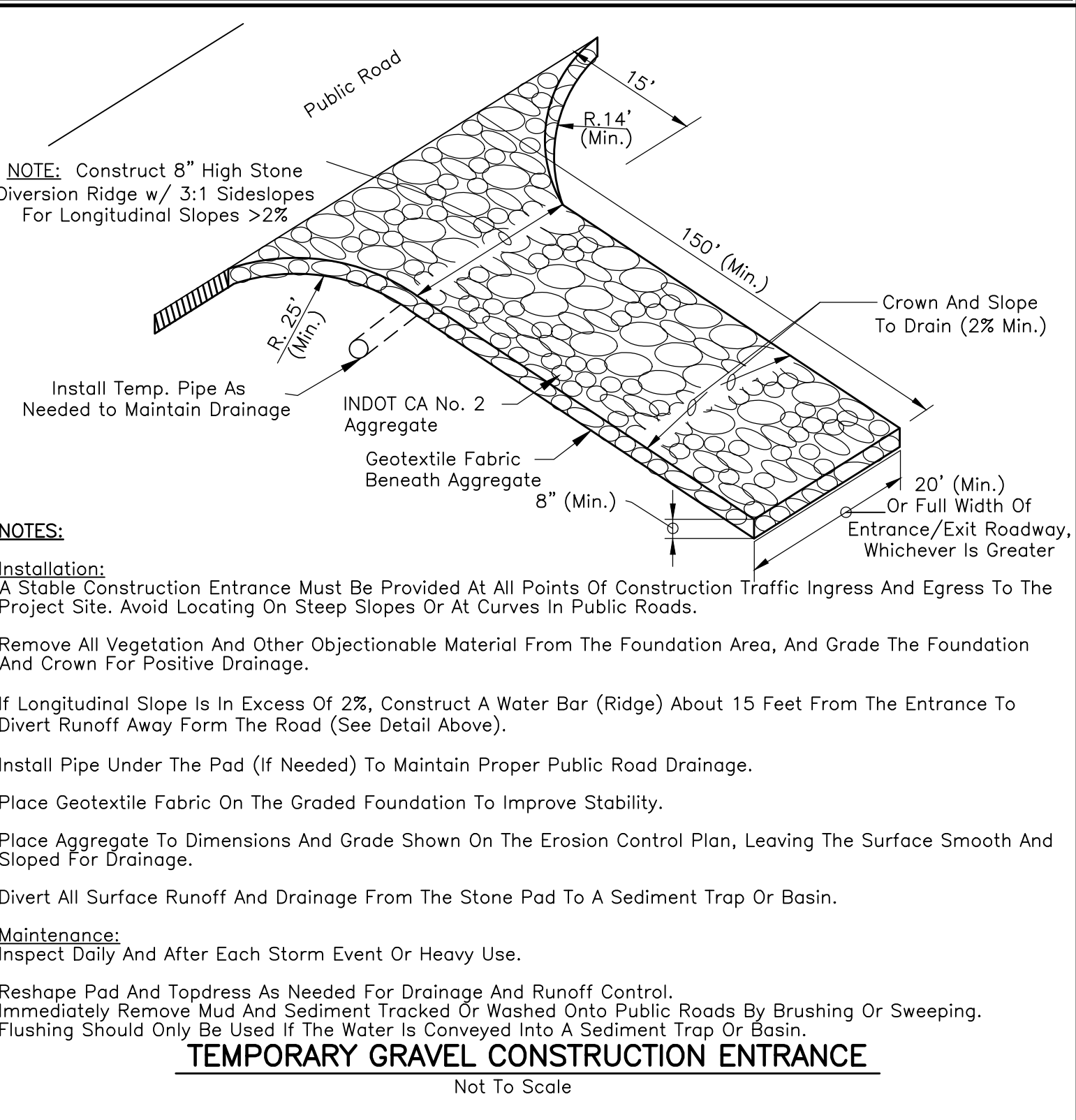
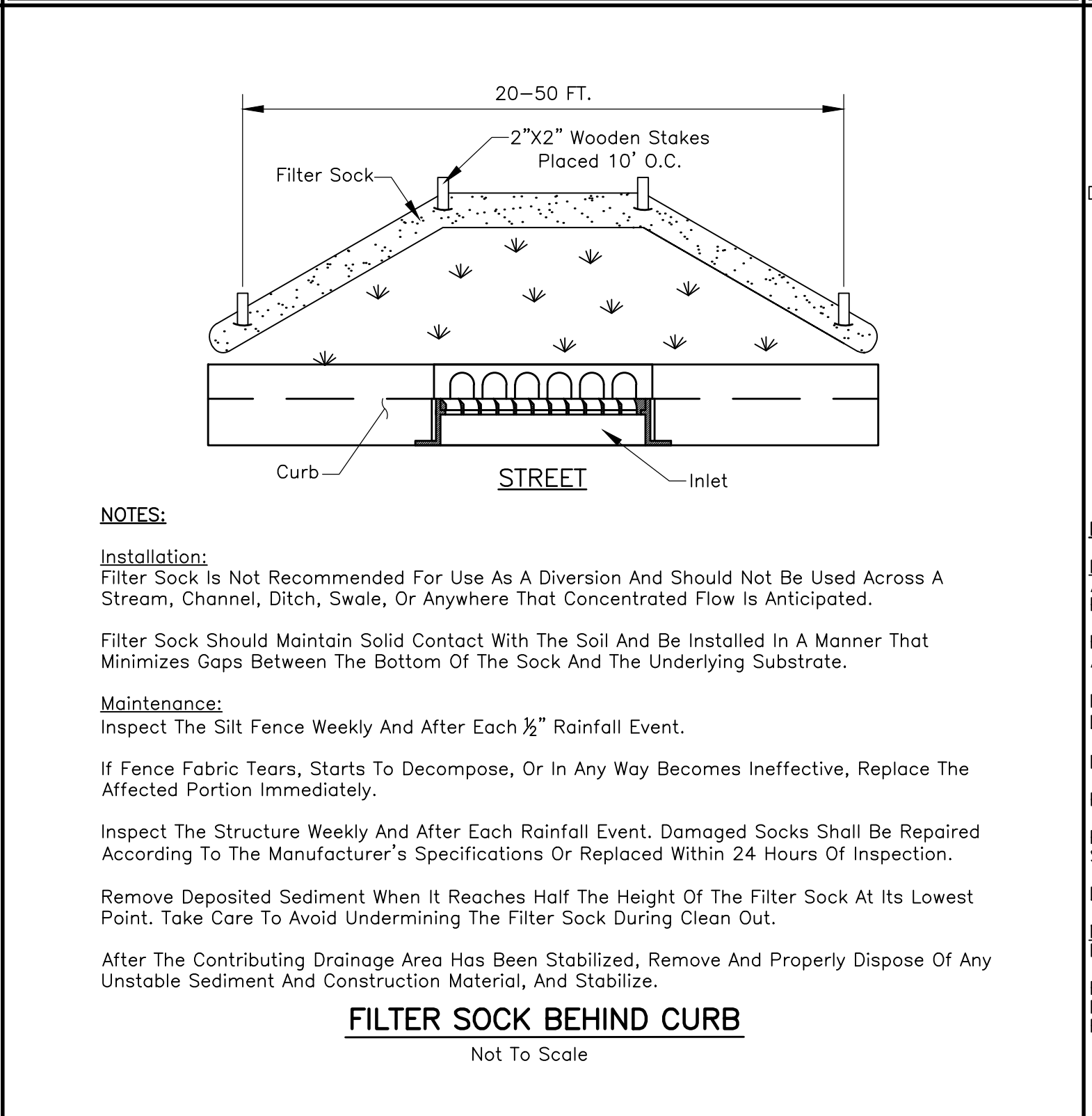
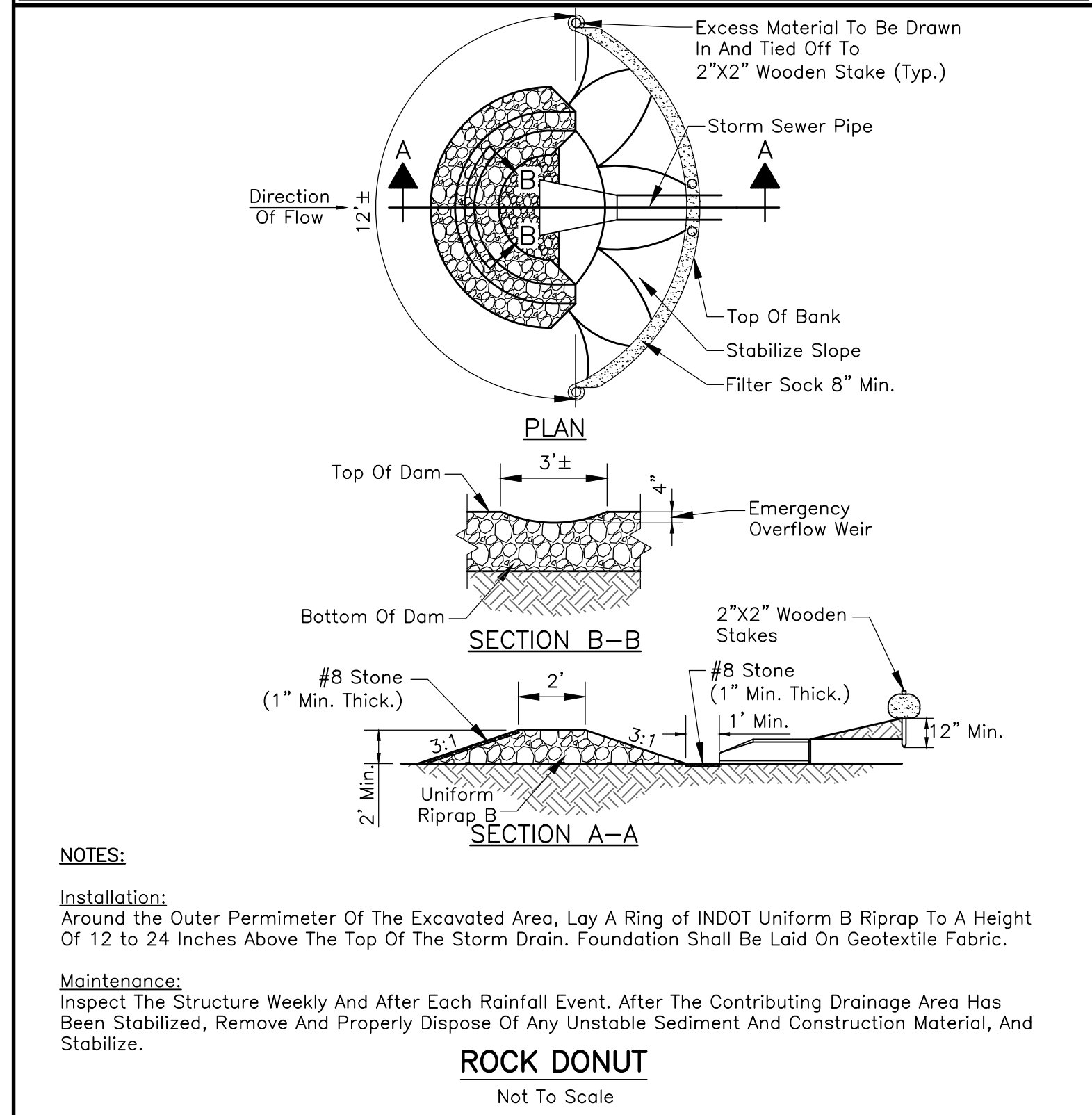


DEVELOPMENT STANDARD - DETAIL DS-E01

DEVELOPMENT STANDARD - DETAIL DS-E02

DEVELOPMENT STANDARD - DETAIL DS-E03

DEVELOPMENT STANDARD - DETAIL DS-E04



DEVELOPMENT STANDARD - DETAIL DS-E05

DEVELOPMENT STANDARD - DETAIL DS-E06

DEVELOPMENT STANDARD - DETAIL DS-E07

DEVELOPMENT STANDARD - DETAIL DS-E08

REVISIONS		
Rev. No.	Description	Date

RECOMMENDED FOR APPROVAL: *David Laney* DESIGN ENGINEER 03/01/2022 DATE

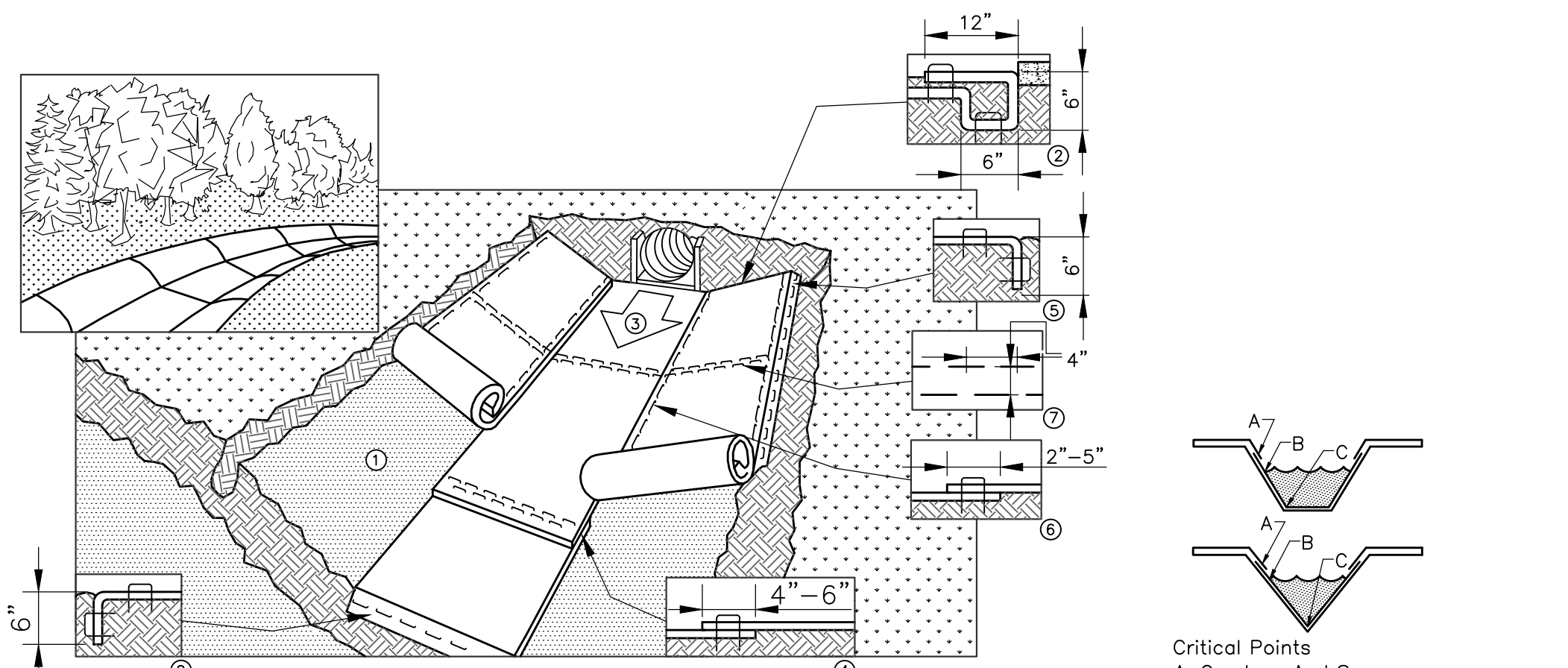
APPROVED: *Shawn Swann* EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES 03/01/2022 DATE

APPROVED: *Shawn Swann* MS4 OPERATOR 03/01/2022 DATE

TOWN OF PLAINFIELD

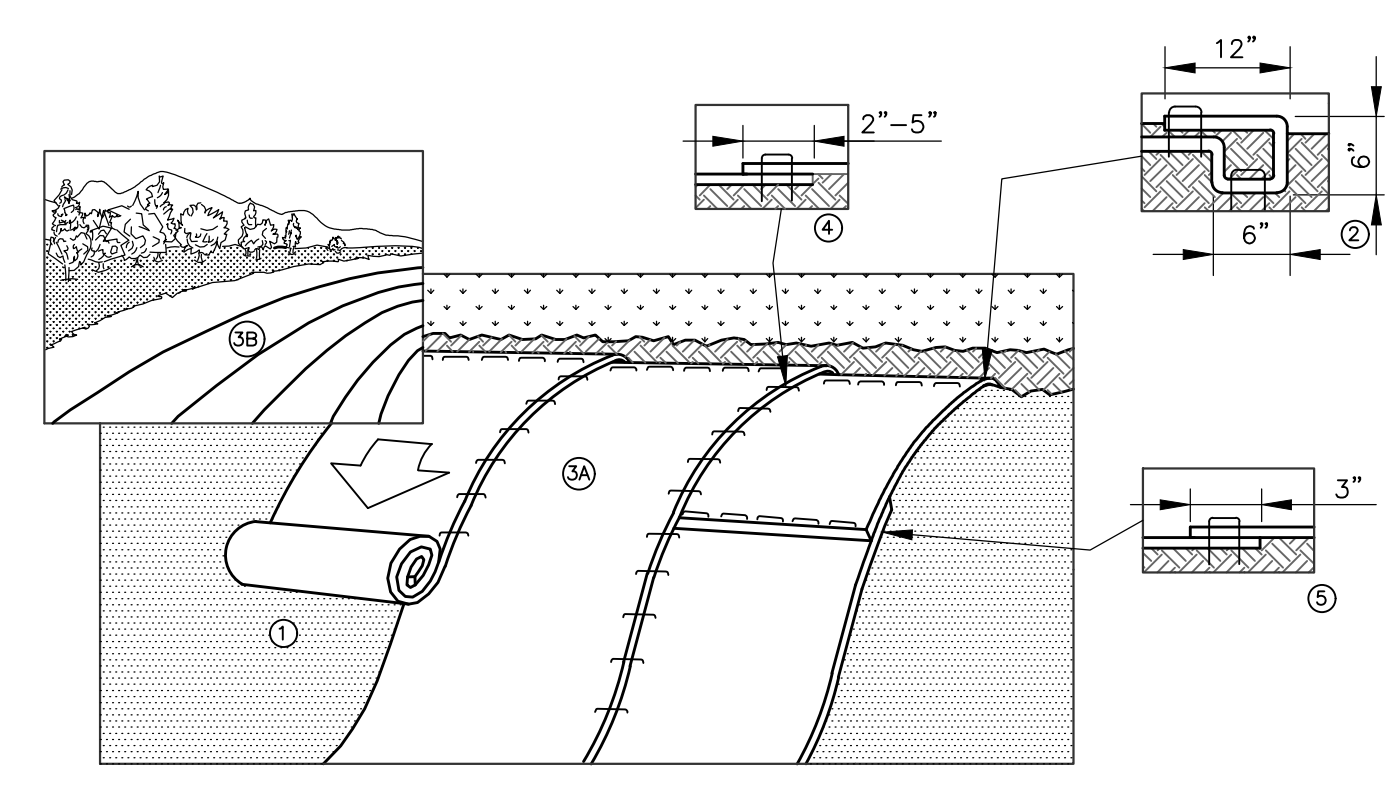
EROSION CONTROL (E) DEVELOPMENT STANDARDS

SHEET 20 OF 27



- Prepare Soil Before Installing Blankets, Including Any Necessary Application Of Lime, Fertilizer, Or Seed.
 - Begin At The Top Of The Channel By Anchoring The Blanket In A 6 Inch Deep By 6 Inch Wide Trench With Approximately 12 Inches Of Blanket Extended Beyond The Upslope Portion Of The Trench. Anchor The Blanket With A Row Of Staples/Stakes Approximately 12 Inches Apart In The Bottom Of The Trench. Backfill And Compact The Trench After Stapling. Apply Seed To Compacted Soil And Fold Remaining 12 Inch Portion Of Blanket Back Over Seed And Compacted Soil. Secure Blanket Over Compacted Soil With A Row Of Staples/Stakes Spaced Approximately 12 Inches Apart Across The Width Of The Blanket.
 - Roll Center Blanket In Direction Of Water Flow In Bottom Of Channel. Blankets Will Unroll With Appropriate Side Against The Soil Surface. All Blankets Must Be Securely Fastened To Soil Surface By Placing Staples/Stakes In Appropriate Locations As Shown In The Staple Pattern Guide. When Using Optional Dot System, Staples/Stakes Should Be Placed Through Each Of The Colored Dots Corresponding To The Appropriate Staple Pattern.
 - Place Consecutive Blankets End Over End (Shingle Style) With A 4-6 Inch Overlap. Use A Double Row Of Staples Staggered 4 Inches Apart And 4 Inches On Center To Secure Blankets.
 - Full Length Edge Of Blankets At Top Of Side Slopes Must Be Anchored With A Row Of Staples/Stakes Approximately 12 Inches Apart In A 6 Inch Deep By 6 Inch Wide Trench. Backfill And Compact The Trench After Stapling.
 - Adjacent Blankets Must Be Overlapped Approximately 2-5 Inches, (Depending On Blanket Type) And Stapled. To Ensure Proper Seam Alignment, Place The Edge Of The Overlapping Blanket (Blanket Being Installed On Top) Even With The Colored Seam Stitch On The Blanket Being Overlapped.
 - In High Flow Channel Applications, A Staple Check Slot Is Recommended At 30-40 Foot Intervals. Use A Double Row Of Staples Staggered 4 Inches Apart And 4 Inches On Center Over Entire Width Of The Channel.
 - The Terminal End Of The Blankets Must Be Anchored With A Row Of Staples/Stakes Approximately 12 Inches Apart In A 6 Inch Deep By 6 Inch Wide Trench. Backfill And Compact The Trench After Stapling.
- NOTE:
 * Horizontal Staple Spacing Should Be Altered If Necessary To Allow Staples To Secure The Critical Points Along The Channel Surface.
 ** In Loose Soil Conditions, The Use Of Staple Or Stake Lengths Greater Than 6 Inches May Be Necessary To Properly Anchor The Blankets.

EROSION CONTROL BLANKET – FLOWLINE APPLICATION
Not To Scale



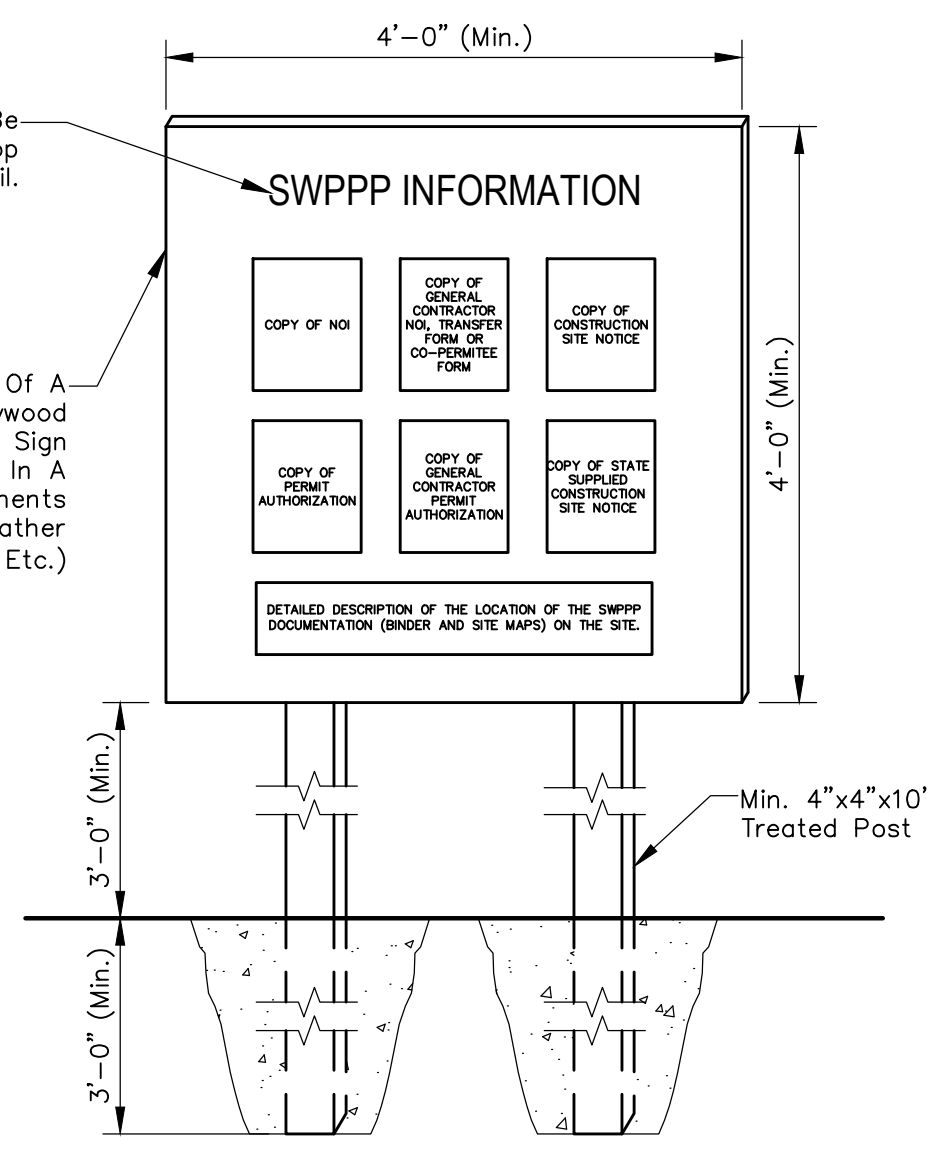
- Prepare Soil Before Installing Blankets, Including Any Necessary Application Of Lime, Fertilizer, And Seed.
 - Begin At The Top Of The Slope By Anchoring The Blanket In A 6 Inch Deep By 6 Inch Wide Trench With Approximately 12 Inches Of Blanket Extended Beyond The Upslope Portion Of The Trench. Anchor The Blanket With A Row Of Staples/Stakes Approximately 12 Inches Apart In The Bottom Of The Trench. Backfill And Compact The Trench After Stapling. Apply Seed To Compacted Soil And Fold Remaining 12 Inch Portion Of Blanket Back Over Seed And Compacted Soil. Secure Blanket Over Compacted Soil With A Row Of Staples/Stakes Spaced Approximately 12 Inches Apart Across The Width Of The Blanket.
 - Roll The Blankets (A.) Down Or (B.) Horizontally Across The Slope. Blankets Will Unroll With Appropriate Side Against The Soil Surface. All Blankets Must Be Securely Fastened To Soil Surface By Placing Staples/Stakes In Appropriate Locations As Shown In The Staple Pattern Guide. When Using Optional Dot System, Staples/Stakes Should Be Placed Through Each Of The Colored Dots Corresponding To The Appropriate Staple Pattern.
 - The Edges Of Parallel Blankets Must Be Stapled With Approximately 2-5 Inches Overlap Depending On Blanket Type. To Ensure Proper Seam Alignment, Place The Edge Of The Overlapping Blanket (Blanket Being Installed On Top) Even With The Colored Seam Stitch On The Previously Installed Blanket.
 - Consecutive Blankets Spliced Down The Slope Must Be Placed End Over End (Shingle Style) With An Approximate 3 Inch Overlap. Staple Through Overlapped Area, Approximately 12 Inches Apart Across Entire Blanket Width.
- Overlap The Blankets With The Direction Of The Flow Of The Water

NOTE:
 * In Loose Soil Conditions, The Use Of Staple Or Stake Lengths Greater Than 6 Inches May Be Necessary To Properly Secure The Blankets.

EROSION CONTROL BLANKET – SLOPE APPLICATION
Not To Scale

"SWPPP INFORMATION" Must Be Displayed Prominently Across The Top Of The Sign, As Shown In The Detail.

Sign To Be Constructed Of A Rigid Material, Such As Plywood Or Outdoor Sign Board. Sign Must Be Constructed In A Manner To Protect Documents From Damage Due To Weather (Wind, Sun, Moisture, Etc.)



SWPPP INFORMATION SIGN
Not To Scale

- NOTES:
- The SWPPP Information Sign Must Be Located Near The Construction Entrance Of This Site, Such That It Is Accessible And Viewable By The General Public, But Not Obstructing Views As To Cause A Safety Hazard.
 - All Posted Documents Must Be Maintained In A Clearly Readable Condition At All Times Throughout Construction And Until The Notice-Of-Termination (NOT) Is Filed For The Permit.
 - Contractor Shall Post Other Storm Water And/Or Erosion And Sediment Control Related Permits On The Sign As Required.
 - Sign Shall Be Located Outside Of Public Right-Of-Way And Easements Unless Approved By The Plainfield MS4 Operator.

SEEDING:
 The Following Table Is For General Seeding Information Only. Consult The *Indiana Storm Water Quality Manual* For Recommendations Relating To Steep Banks And Cuts, High Maintenance Areas, And Channels And Areas Of Concentrated Flow.

SEEDS:	FERTILIZER:
40 Percent Kentucky Bluegrass	Commercial Fertilizer (12-12-12)
40 Percent Creeping Red Fescue	
20 Percent Annual Rye Grass	

Spread Fertilizer Uniformly Over Finish Graded Surfaces At A Rate Of 20 Pounds Per 1,000 Square Feet. Thoroughly Disk, Harrow, Or Rake Fertilizer Into Soil To Depth Not Less Than 2 Inches.

Distribute Seed Mix Same Day As Fertilizer Is Applied. Spread Evenly At A Rate Of 3 Pounds Per 1,000 Square Feet. Rake Lightly And Compact Areas With 100 Pound Roller.

Cover Areas With Straw Evenly Spread At A Rate Of 2 Tons Per Acre Immediately After Seeding. Water Areas With Fine Spray. Do Not Flood Or Create Washes. Protect Seeded Areas From Erosion.

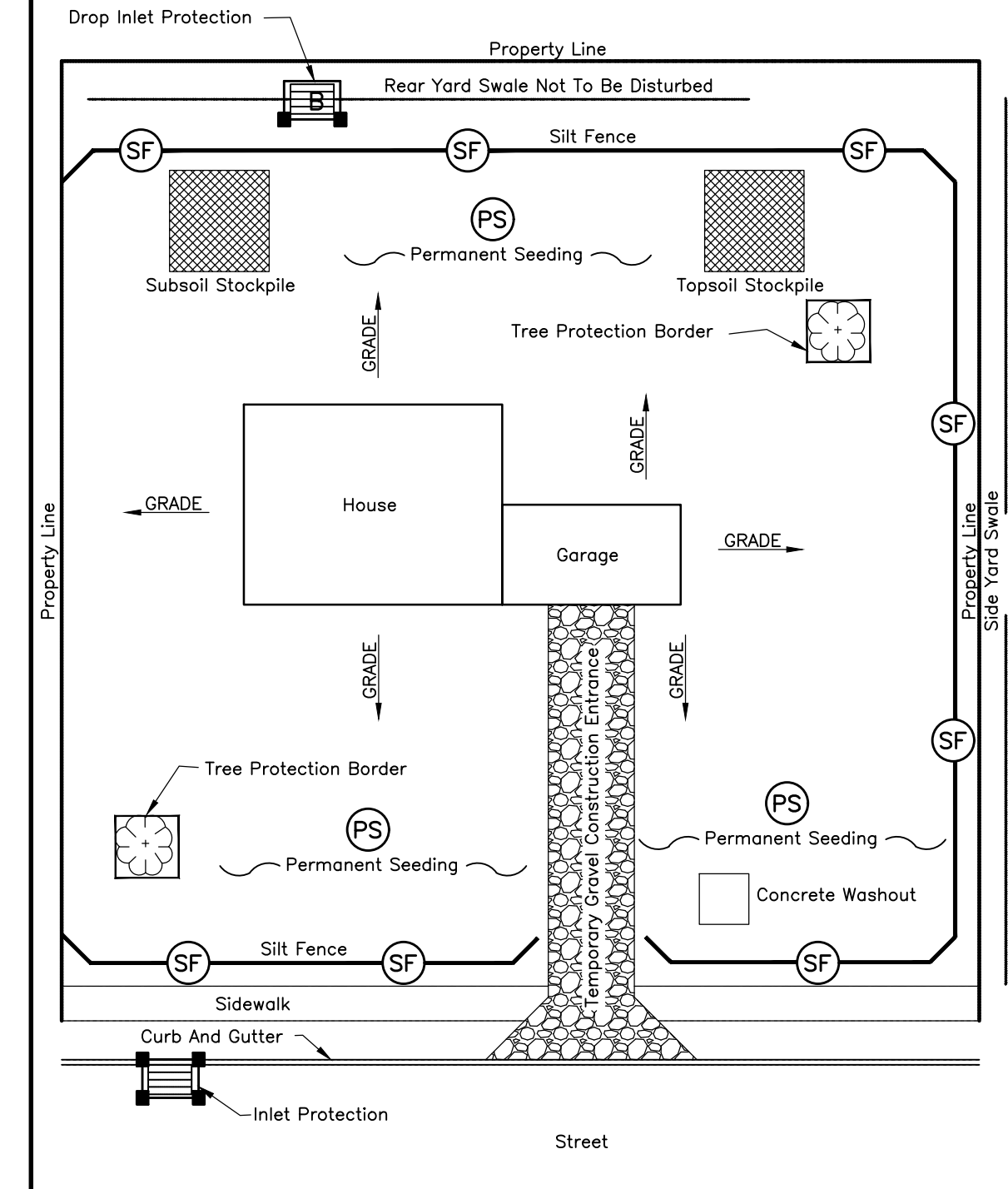
Continue Watering Of These Areas On A Daily Basis For The Remainder Of The Construction Period.

Hold Sloped Areas Steeper Than 2 (Horizontal) To 1 (Vertical) With Wire Mesh Or Stakes And Wire.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Temporary Seeding Dates												
Wheat Or Rye												
Oats												
Annual Rye Grass												
Permanent Seeding Dates												
Non-irrigated*												
Irrigated												
Dormant Seeding**												

- Legend:
 ■ Irrigation Required
 * Seeding Dates May Be Extended 5 Days If Mulch Applied And Planted Late Summer
 ** Increase Seeding Rate By 50%

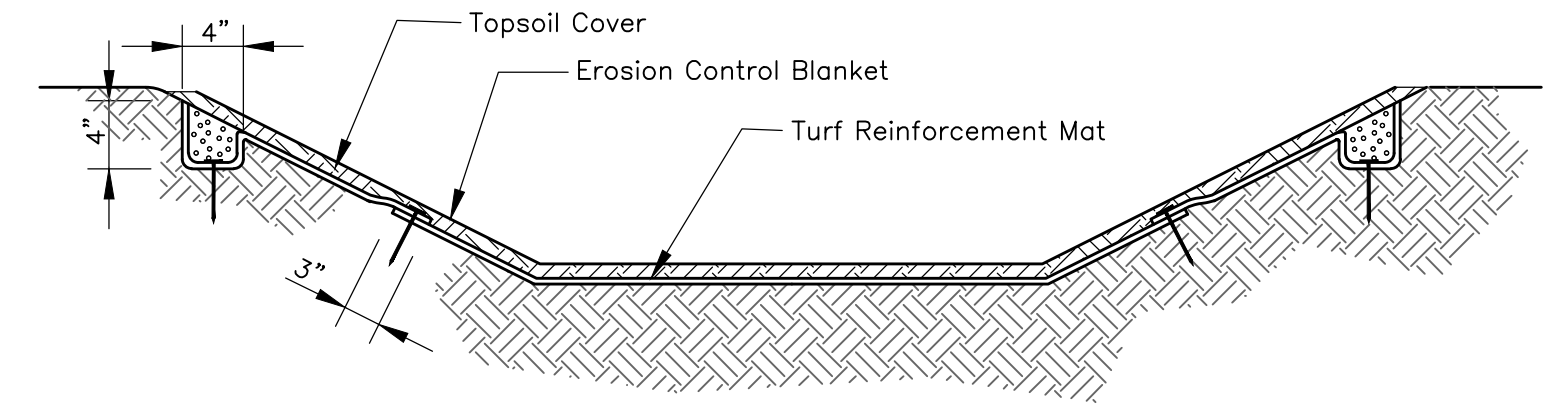
NOTES:
 If Construction Activities Take Place During The Months Of November Through February, Use Dormant Seeding Practices In Place Of Temporary And Permanent Seeding Practices.
 See Chapter 7 Of The *Indiana Storm Water Quality Manual* For Additional Seeding Recommendations.



SAMPLE EROSION CONTROL SITE PLAN
Not To Scale
(For Construction Of Typical Single Family Dwellings.)

- NOTES:
- It Is The Responsibility Of The Property Owner And Contractor To Comply With State Laws And Local And County Ordinances Regarding Construction Site Erosion And Sediment Control.
 - This Plan Is Only A Sample Plan And Is Not Intended To Be All Inclusive Or Address Every Situation, Additional Or Modified Practices May Be Required On Some Sites.
 - Erosion Or Sediment Control Measures Must Be Functional And Maintained Throughout Construction.
 - Maintain Positive Drainage Away From The Structure(s).
 - If Permanent Drive Having Prohibited Access Is Constructed Provide Separate Temporary Gravel Entrance For Access.

DEVELOPMENT STANDARD – DETAIL DS-E09

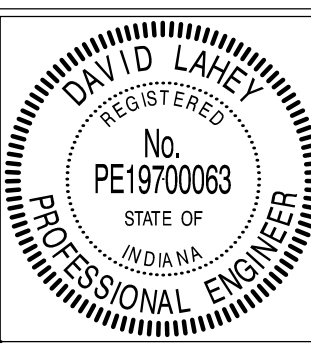


Extend Turf Reinforcement Mat To Accommodate Maximum Designed Flow Depth

- NOTES:
- Installation:**
 Select The Type Of Mat Recommended For The Site Conditions (Slope, Channel, Flow Velocity) And Problem To Be Addressed.
 Install Any Practices Needed To Control Erosion And Runoff, Such As Temporary Or Permanent Diversions, Slope Drains, Sediment Basins/Traps, Silt Fence Or Straw Bale Dams.
 Grade The Site As Specified.
 Install The Mat According To Manufacturer's Specifications.
 Backfill Topsoil To A Depth Equal To The Thickness Of The Mat.
 Seed The Area After The Mat Has Been Installed And Backfilled With Soil.
 Mulch The Area, Or Use Erosion Control Blankets To Stabilize The Surface.
- Maintenance:**
 Until The Surface Is Stabilized, Inspect Weekly And After Each Storm Event For Erosion Exposing The Mat.
 If A Specific Area Shows Erosion, Add Soil And Restabilize.

TURF REINFORCEMENT MAT
Not To Scale

REVISIONS		
Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL: *David Laney*, DESIGN ENGINEER, 03/10/2022 DATE

APPROVED: *Emily Q. [Signature]*, EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES, 03/01/2022 DATE

APPROVED: *Shannon [Signature]*, MS4 OPERATOR, 03/01/2022 DATE

EROSION CONTROL NOTES

GENERAL:

Take Measures To Control Erosion And Sedimentation By Storm/Wind Events To Assure That Sediment Is Not Transported From The Site By Storm Events. Practices Such As Silt Traps Or Filters Shall Be Installed Prior To Land Disturbing Activities. New Drainage Swales Shall Be Seeded And/Or Sodded, Or Other Protective Practices Applied, Immediately Following Construction. All Practices Shall Be Maintained To Remove Sediment From Runoff Leaving The Site As Long As Unstabilized Soil Conditions Exist.

After Land Disturbing Activities Cease And The Soil Is Stabilized, Temporary Erosion Control Measures May Be Eliminated If Their Purpose Has Been Fulfilled. Any Disturbed Soil Resulting From Removal Of Such Practices Shall Be Stabilized By Approved Methods.

Dispose Properly All Waste And Unused Building Materials Including, But Not Limited To, Garbage, Debris, Cleaning Wastes, Water, Toxic Materials, And Hazardous Substances. Do Not Allow Substances To Be Carried By Runoff Into A Receiving Channel Or Storm Sewer System.

Clean Public Or Private Roadways Daily And After Major Storms Using Acceptable Methods Such As Sweeping To Remove Any Accumulated Sediment. The Developer's Contractors Are Responsible For Supervision Of The Construction Activity Within The Development And Shall Take All Necessary Actions To Remove Sediment From The Streets.

For Construction Sequence, Maintenance, And Other Soil Erosion Requirements, See Specifications For Site Clearing, Slope Protection, Erosion Control, Landscaping, And Seeding.

Erosion And Sediment Control Practices Must Adhere To, Or Exceed Those Shown On The Erosion Control Plan, And Shall Be In Accordance With The Construction Stormwater General Permit, And Indiana Storm Water Quality Manual, Indiana Department Of Environmental Management.

SURFACE STABILIZATION:

Cut Slopes Which Are To Be Topsoiled Should Be Scarified To A Minimum Depth Of 4 Inches Prior To Placement Of Topsoil. Install Erosion Control Blankets On All Slopes Of 3 (Horizontal) To 1 (Vertical).

Stabilize All Disturbed Ground Within Fifteen Days Of Being Left Inactive By Seeding, Sodding, Mulching, Or By Other Equivalent Erosion Control Practices. Immediate Stabilization Shall Be Planned To Aid In Surface Runoff And Stabilization Shall Follow A Linear Progression As The Site Is Developed.

Un-vegetated Areas That Are Left Idle Or Scheduled To Be Left Inactive Must Be Temporarily Or Permanently Stabilized With Measures Appropriate For The Season To Minimize Erosion Potential. To Meet This Requirement, The Following Apply:

1. Stabilization Must Be Initiated By The End Of The Seventh Day The Area Is Left Idle. The Stabilization Activities Must Be Completed Within Fourteen Days After Initiation. Initiation Of Stabilization Includes, But Is Not Limited To, The Seeding And/Or Planting Of The Exposed Area And Applying Mulch Or Other Temporary Surface Stabilization Methods Where Appropriate. Areas That Are Not Accessible Due To An Unexpected And Disruptive Event That Prevents Construction Activities Are Not Considered Idle.
2. Areas That Have Been Compacted May Be Excluded From The Stabilization Requirement When The Areas Are Intended To Be Impervious Surfaces Associated With The Final Land Use, Provided Run-off From The Area Is Directed To Appropriate Sediment Control Measures.

See The Landscape Plan For Permanent Ground Cover Requirements Adjacent To The Building And Parking Areas.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT PAD:

Construct The Temporary Gravel Drive Using 6 Inches INDOT No. 2 Stone Over A Stable Foundation. Geotextile Fabric Shall Be Used Under All Drives Including Individual Lots. Grade For Positive Drainage.

Inspect The Entrance Pad Area Weekly And After Storm Events Or Heavy Use. Reshape The Pad As Needed For Drainage And Runoff Control. Top Dress Pad With Clean Stone.

SODDING:

Do Not Install Sod On Hot, Dry Soil, Frozen Soil, Compacted Clay, Loose Sand Or Gravel, Or Pesticide Treated Soil. Ideal Sodding Time Is May 1-June 1, Or September 1-October 20, Although It Can Be Installed As Early As March 15, If Available And Temperatures Are Above 32° F, Or June 1-September 1 If Irrigated.

Install Sod After Other Erosion Control Practices Have Been Completed. Break Up Compacted Soils Sufficiently To Create A Favorable Rooting Depth Of 6-8 Inches, Using A Chisel Plow, Disk, Harrow, Or Rake.

Soil Compaction Is To Be Minimized, Especially In Areas Where Permanent Vegetation Will Be Established. Topsoil Must Be Preserved, Unless Infeasible.

Apply Topsoil If The Site Is Otherwise Unsuitable For Establishing Vegetation. Shape, Smooth, And Firm The Soil Surface.

Have The Soil In The Sod Bed Tested To Determine Its pH And Nutrient Level. If The pH Is Too Acidic For The Grass Sod To Be Installed, Apply Lime According To Test Results Or At The Rate Recommended By The Sod Supplier.

Fertilize As Recommended By The Soil Test. If Testing Was Not Done, Consider Applying 400-600 Lbs./Acre Of 12-12-12 Analysis Fertilizer, Or Equivalent Fertilizer, As Recommended By The Soil Test. Work The Fertilizer Into The Soil To 2-4 Inches Deep.

Apply Fertilizer At An Appropriate Time Of Year For The Project Location, Taking Into Consideration Proximity To A Waterbody, And Preferably Timed To Coincide With The Period Of Maximum Vegetative Uptake And Growth.

Avoid Applying Fertilizer Immediately Prior To Precipitation Events That Are Anticipated To Result In Stormwater Run-off From The Application Area.

TREE CONSERVATION/PROTECTION:

Protect Trees From Construction Equipment By Fencing Off An Area Equivalent To The Tree's Crown With Temporary Construction Safety Fence. If A Fence Cannot Be Erected, Cushion The Rooting Area With 6 Inches Of Wood Chips, Or Wood Or Brick Paths.

Create Traffic Patterns Such As To Keep Soil Compaction To A Minimum. Store Supplies And Equipment Away From Protected Tree Areas. Aerate Soil Where Compaction Has Been Excessive.

When Clearing Areas Adjacent To Protected Trees, Use Equipment Such As A Brush Cutter Or Rotary Ax, Or Cut By Hand. Where Root Areas Must Be Graded, Cut Large Roots Instead Of Tearing Them With Equipment.

Minimize Changes In The Drainage Pattern. Avoid Putting Fill Over The Root System.

Prune Low Hanging Limbs That Could Otherwise Be Broken Off By Equipment.

EROSION CONTROL NOTES CONT'D

EROSION CONTROL BLANKETS:

Erosion Control Blankets Shall Be Selected Based Upon Application And Shear Strength.

Use Machine Produced Mat Of Straw Fiber Matrix Or Curled Wood Excelsior Of 80 Percent, 6 Inch Or Longer Fiber Length.

Evenly Distribute Fibers Over Entire Area Of Blanket To Provide Consistent Thickness.

Provide Blanket With Top Side Covered With Biodegradable Extruded Plastic Mesh.

Treat Blankets To Impart Smolder Resistance Without Use Of Chemical Additives.

Provide "Curlex Blankets" By American Excelsior Company, Or "S150" By North American Green, Or Accepted Substitute.

EROSION CONTROL BLANKET STAPLES:

Use Minimum 0.091 Inch Diameter Steel Wire "U" Shape With Legs 6 Inches In Length With 1 Inch Crown.

CONCRETE AND CEMENTITIOUS WASHWATER:

Cementitious Washwater Results From The Cleaning Of Tools And Equipment Used In The Delivery, Mixing, Handling, And Working Of Cementitious Materials Often Associated With Concrete, Mortar, Plaster, Stucco, Grout And Flowable Fill.

Concrete Washouts Shall Be Of Sufficient Volume And Quantity To Contain All Liquid And Concrete Waste Generated By Washout Operations. The System Shall Be Designed To Eliminate Run-off And Minimize Precipitation From Entering The Washwater Containment System. Covering Of Containment When Not In Use Is Recommended.

Locate Washwater Containments At Least 50 Feet From Any Creeks, Wetlands, Ditches, Karst Features, Or Storm Drains/manmade Conveyance Systems. Locate When Practical In Relatively Flat Areas With Established Vegetative Cover In Areas That Provide Easy Access For Equipment That Will Require The Use Of Washwater Containment Facilities.

Prefabricated Washout Containers Or Roll-off Dumpsters Are Preferred. Structure Must Be Watertight And Have The Strength To Resist Failure Or Collapse For The Duration Of Use. Below Grade Systems Are To Be Used Only When There Is No Other Feasible Way To Implement Containment. Waterproof Lining Is Required To Have A Minimum Thickness Of 10 Mil, Be A Single Continuous Sheet Sufficient To Adequately Line The Entire Containment And Be Free Of Defects, Holes, Rips, Or Tears. Signage Is Required To Identify Washout Areas.

Washouts Shall Not Be Used For Trash Or Construction Debris. Containers Should Not Be Filled Beyond 75 Percent Of Containment Capacity. When A Containment Is At Capacity And Can No Longer Accept Washwater, Identify With "closed" Sign. No Spillage Of Washwater Shall Occur From The Transport Of The Unit. Closure Of Washwater Shall Be Accomplished When All Fluids Are Removed Or Evaporated. The Remaining Solid Cementitious Material May Be Used As Clean Fill.

FLOATING OUTLET "SKIMMER":

Sediment Basins Where Feasible, Must Withdraw Water From The Surface Of The Water Column Unless Equivalent Sediment Reduction Can Be Achieved By Use Of Alternative Measures. Alternative Measures Include But Are Not Limited To Increasing The Basin Length To Width Ratio To 4:1 Or Greater, Implementation Of Porous Baffles, Use Of Flocculants/polymers, And Or Phasing Of Project Land Disturbance And Rapid Stabilization.

Floating Outlets Can Be Implemented With The Permanent Basin Outlet Structure. The Discharge Capacity:

Dewatering Zone Volume/Dewatering Time = Required Flow Rate Of Skimmer. Locate Floating Devices Where They Can Be Easily Accessed To Facilitate Maintenance Activities And To Be Appropriately Tethered Or Restrained To Prevent Flexible Boom Damage. If Ice Formation Is A Concern, Install Boom And Inlet At An Incline To Maintain Positive Drainage Through The Device. Install Following The Manufacturer's Recommendation.

The Floating Inlet Is Designed To Drain The Dewatering Zone In No Less Than 48 Hours And No Longer Than 72 Hours For The Minimum Required Storage Volume. Inspect Weekly And Prior To Anticipated Rain Events. The Floating Outlet Practice Shall Only Be Removed When The Contributing Drainage Area Has Been Properly Stabilized And No Longer Contributing Sediment-laden Run-off Or When Freezing Conditions Are Anticipated.

NATURAL BUFFERS:

Preserve Existing Natural Buffers That Are Adjacent To Waters Of The State To Promote Infiltration And Provide Protection Of The Water Resource. Natural Buffers Must Be Preserved, Including The Entire Buffer Bordering And/or Surrounding The Water Resource.

Buffers:

1. 50 Feet Or More In Width Must Be Preserved To A Minimum Of 50 Feet
2. Less Than 50 Feet In Width Must Be Preserved In Their Entirety.
3. May Be Enhanced With Vegetation That Is Native And Promotes Ecological Improvements And Sustainability.

Run-off Directed To The Natural Buffer Must Be Treated With Appropriate Erosion And Sediment Control Measures Prior To Discharging To The Buffer And Managed To Prevent Erosion From Occurring Within The Buffer Area.

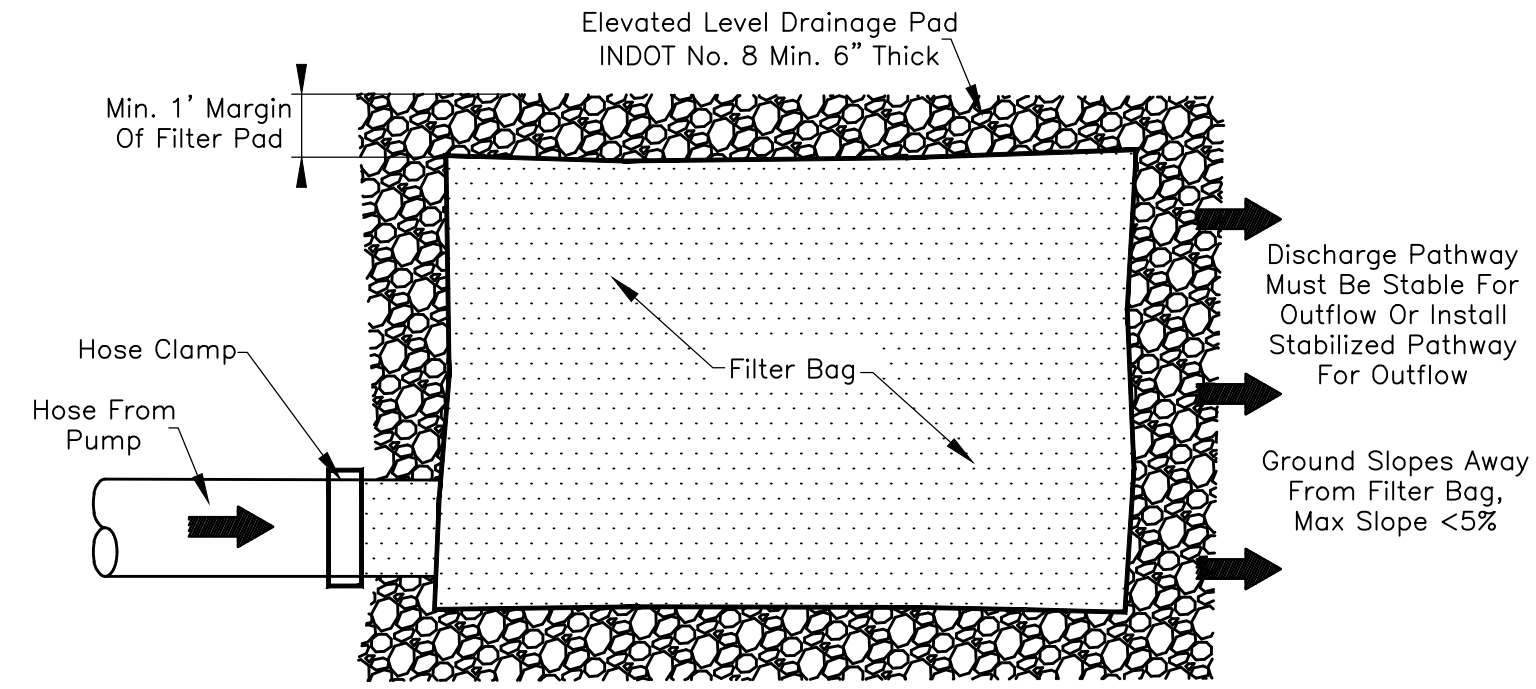
Stormwater Conveyances And Outfalls Are Allowed To Impact The Buffer And Must Be Designed To Minimize The Width Of Disturbance And Impact To The Buffer.

WASTE CONTAINERS (TRASH RECEPTACLES):

Must Be Managed To Reduce The Discharge Of Pollutants And Blowing Of Debris. If Stormwater Has The Potential To Come Into Contact With Waste, A Cover Is Required. Waste That Is Not Disposed Of In A Trash Receptacle Must Be Protected From Exposure To The Weather And/or Removed At The End Of The Day From The Site And Disposed Of Properly.

ANIONIC POLYMERS (FLOCCULANTS):

Are Authorized For Sediment Control Provided Their Use Is In Conformance With Current State Of Indiana Standards And Specifications, And The Use Is Identified In The Stormwater Pollution Prevention Plan (SWP3). The Manufacture Representative Or Properly Trained Individual Is Required To Oversee The Use Of All Polymers. Prior To The Use Of The Polymer, An Email Notification Must Be Made To The Town Of Plainfield.



NOTES:

Dewatering Bags Are Used To Minimize The Discharge Of Sediment For Pump Induced Dewatering Activities.

Bag Size Is Dependent On The Pumping Rate And Soil Conditions.

Clamp Pump Hose With Steel Hose Clamp Over The Rigid Hose Connector Area To A Tight Secure Connection To Filter Bag.

Locate Filter Bags Where Outflows Can Easily Drain. Preferred Locations Are Areas Of Undisturbed Densely Vegetated Areas. Locate For Ease Of Access, Monitoring, Maintenance, And Removal.

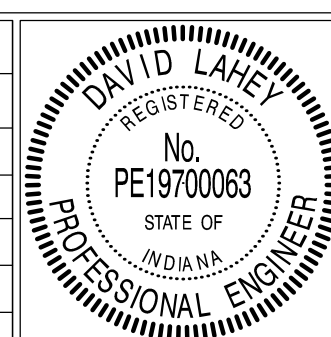
MATERIALS:

Nonwoven Polyethylene Geotextile Or Geotextile Bag.
Steel Hose Clamps Or Equivalent To Tightly Attach Pump Hose To The Filter Bag.
Elevated Drainage Pad (No. 8 Stone, Wood Mulch, Straw Bales, Wood Pallet).
Secondary Containment Berm (Optional)

FILTER BAGS (PUMP DISCHARGE FILTER BAGS)

Not To Scale

REVISIONS		
Rev. No.	Description	Date



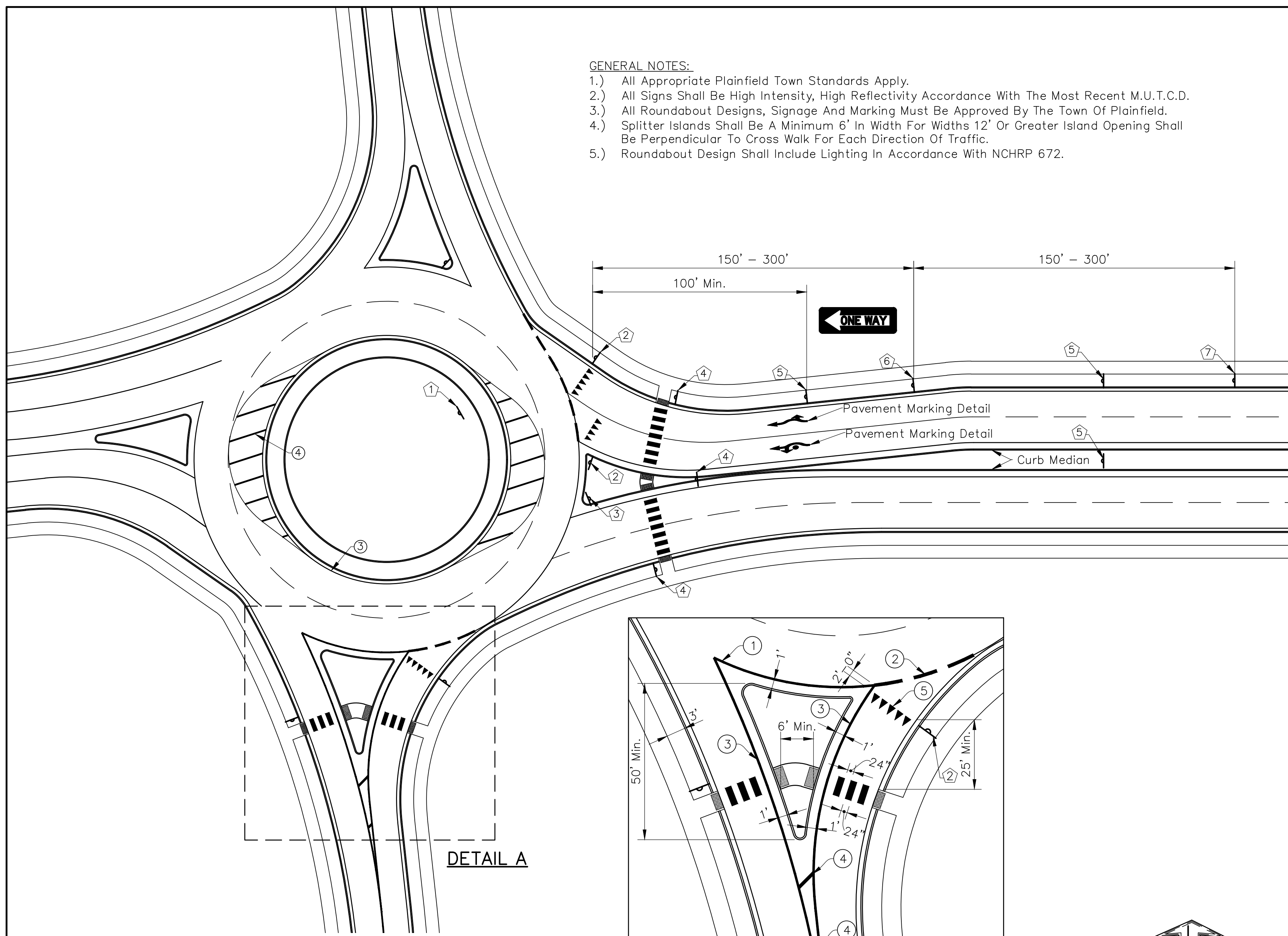
RECOMMENDED FOR APPROVAL	<i>David Laney</i> DESIGN ENGINEER	03/01/2022 DATE
APPROVED	<i>Shawn Swann</i> EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES	03/01/2022 DATE
APPROVED	<i>Shawn Swann</i> MS4 OPERATOR	03/01/2022 DATE

TOWN OF PLAINFIELD
EROSION CONTROL MEASURES

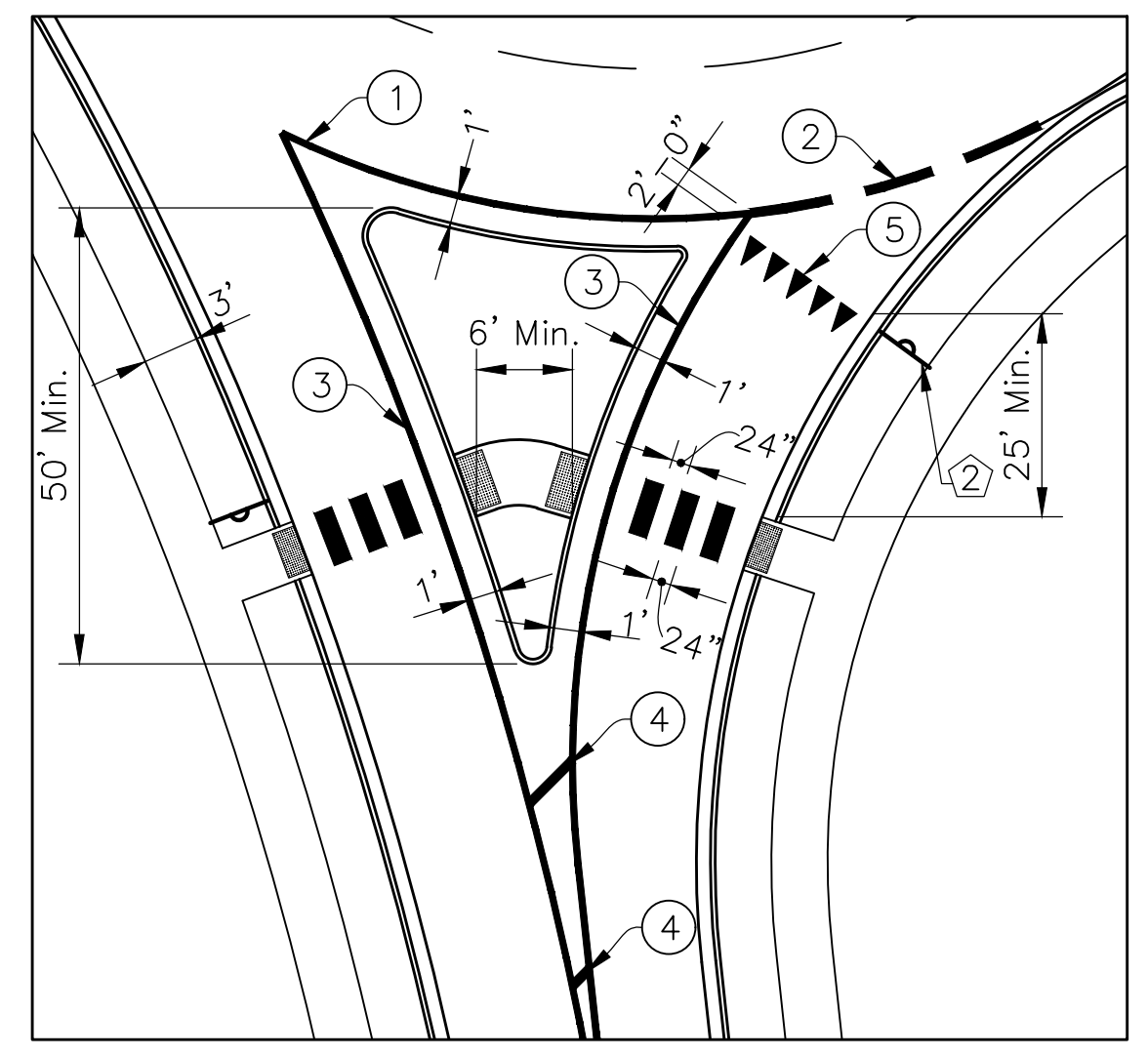
SHEET
22
OF
27

GENERAL NOTES:

- 1.) All Appropriate Plainfield Town Standards Apply.
- 2.) All Signs Shall Be High Intensity, High Reflectivity Accordance With The Most Recent M.U.T.C.D.
- 3.) All Roundabout Designs, Signage And Marking Must Be Approved By The Town Of Plainfield.
- 4.) Splitter Islands Shall Be A Minimum 6' In Width For Widths 12' Or Greater Island Opening Shall Be Perpendicular To Cross Walk For Each Direction Of Traffic.
- 5.) Roundabout Design Shall Include Lighting In Accordance With NCHRP 672.



LOW SPEED URBAN / SUBURBAN ROUNDABOUT DETAIL
Scale: 1"=30'



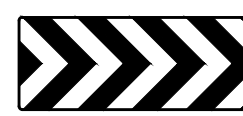
DETAIL A
Scale: 1"=20'

ST. NAME



TO BOTH LANES

R1-2

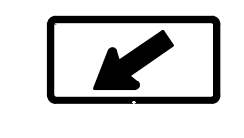


R6-1R

&
R6-4a

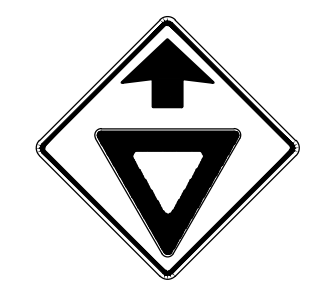


W11-2A

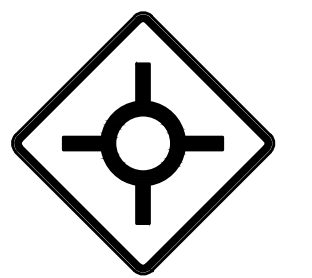


W16-7P

SIGN ASSEMBLY



W3-2A



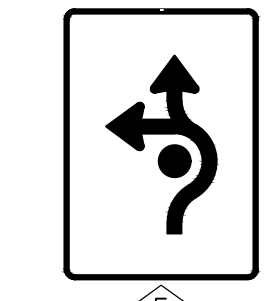
W2-6

ST. NAME

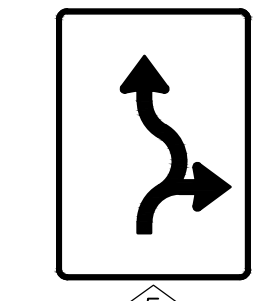


W13-1

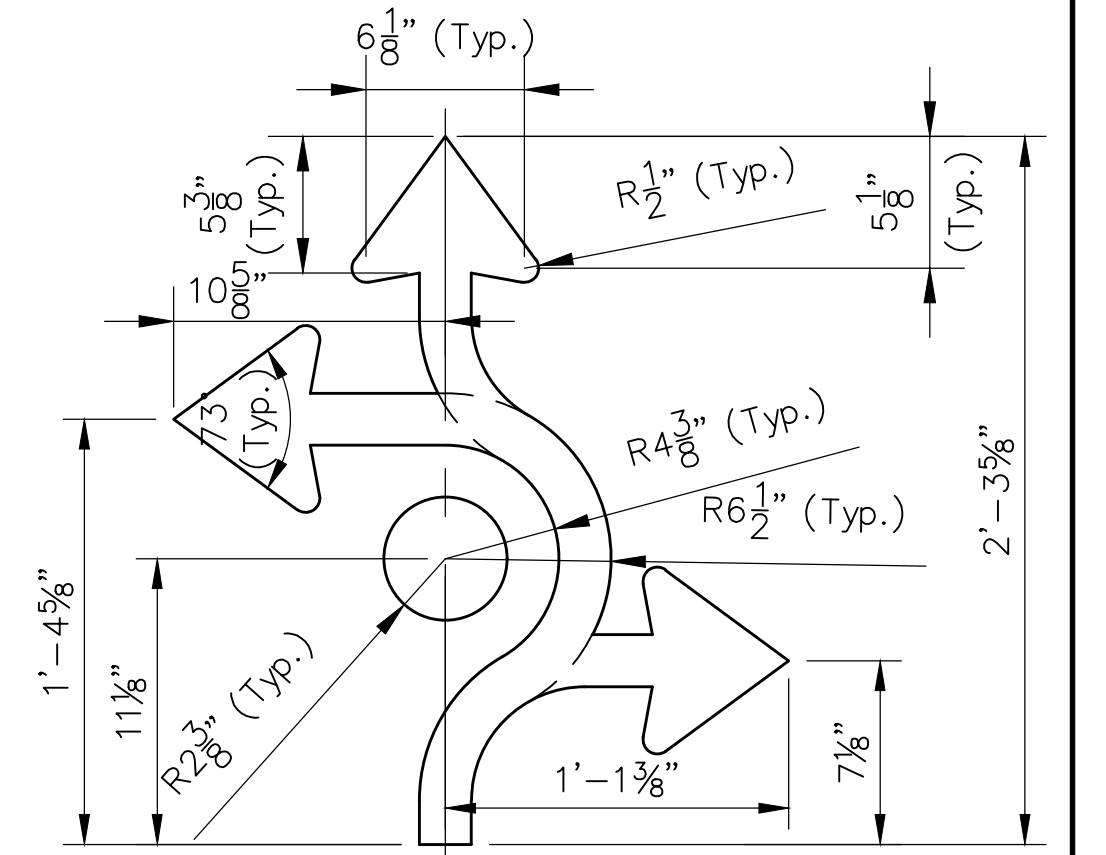
SIGN ASSEMBLY



RTA LTE



RTA TR



DETAIL

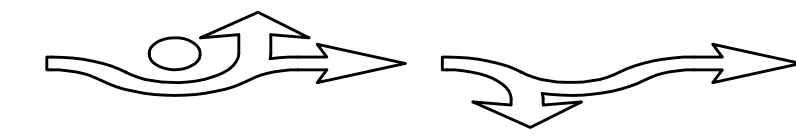
SIGN DETAILS
See Post Detail On Sheet 5



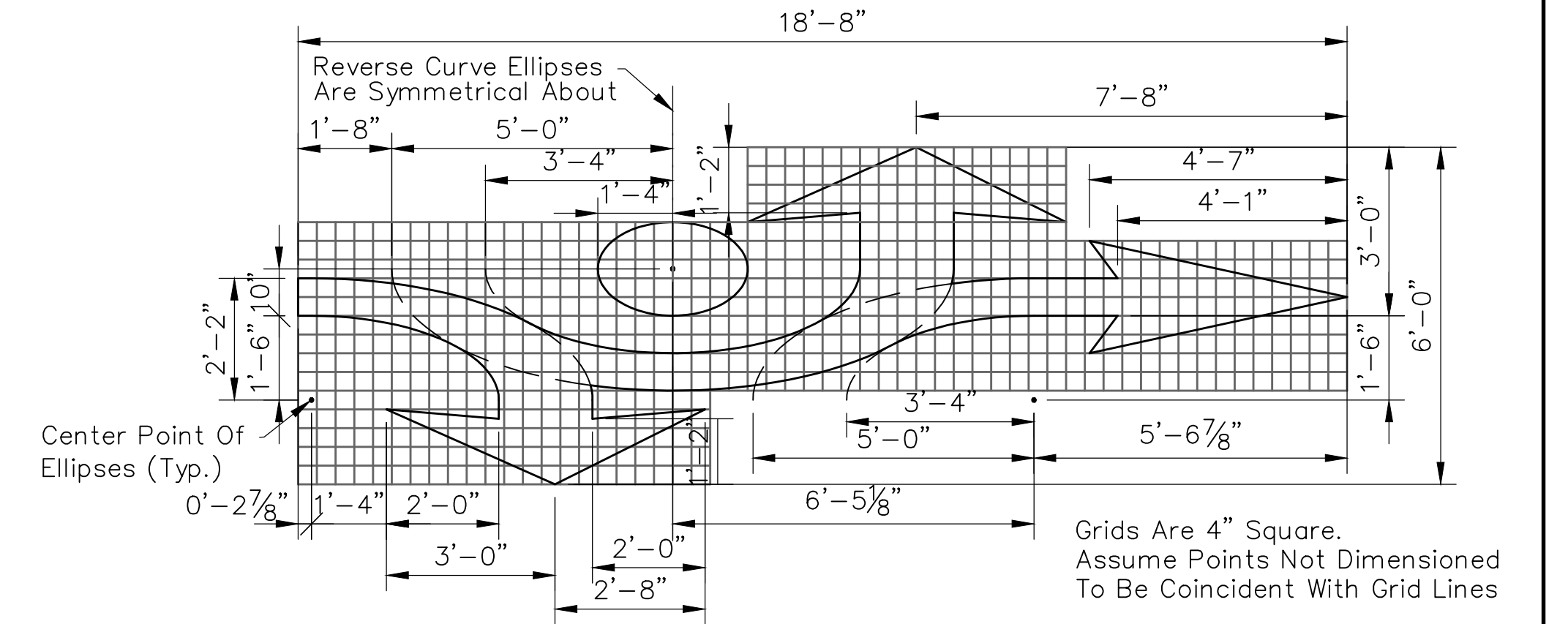
COMPONENT KEY

The Labeled Areas Above Correspond To The Portions Needed For Each Type Of Roundabout Traffic Arrow.

For Example: The Roundabout Traffic Arrow Type Requires The "Common", "T", "R", And "E" Areas.



MARKING DETAILS

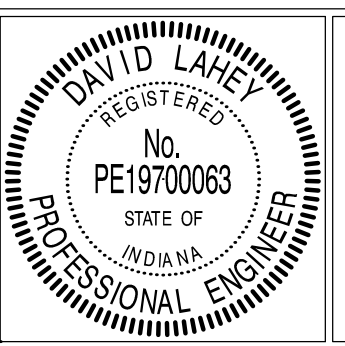


PAVEMENT MARKING DETAILS

DETAIL B

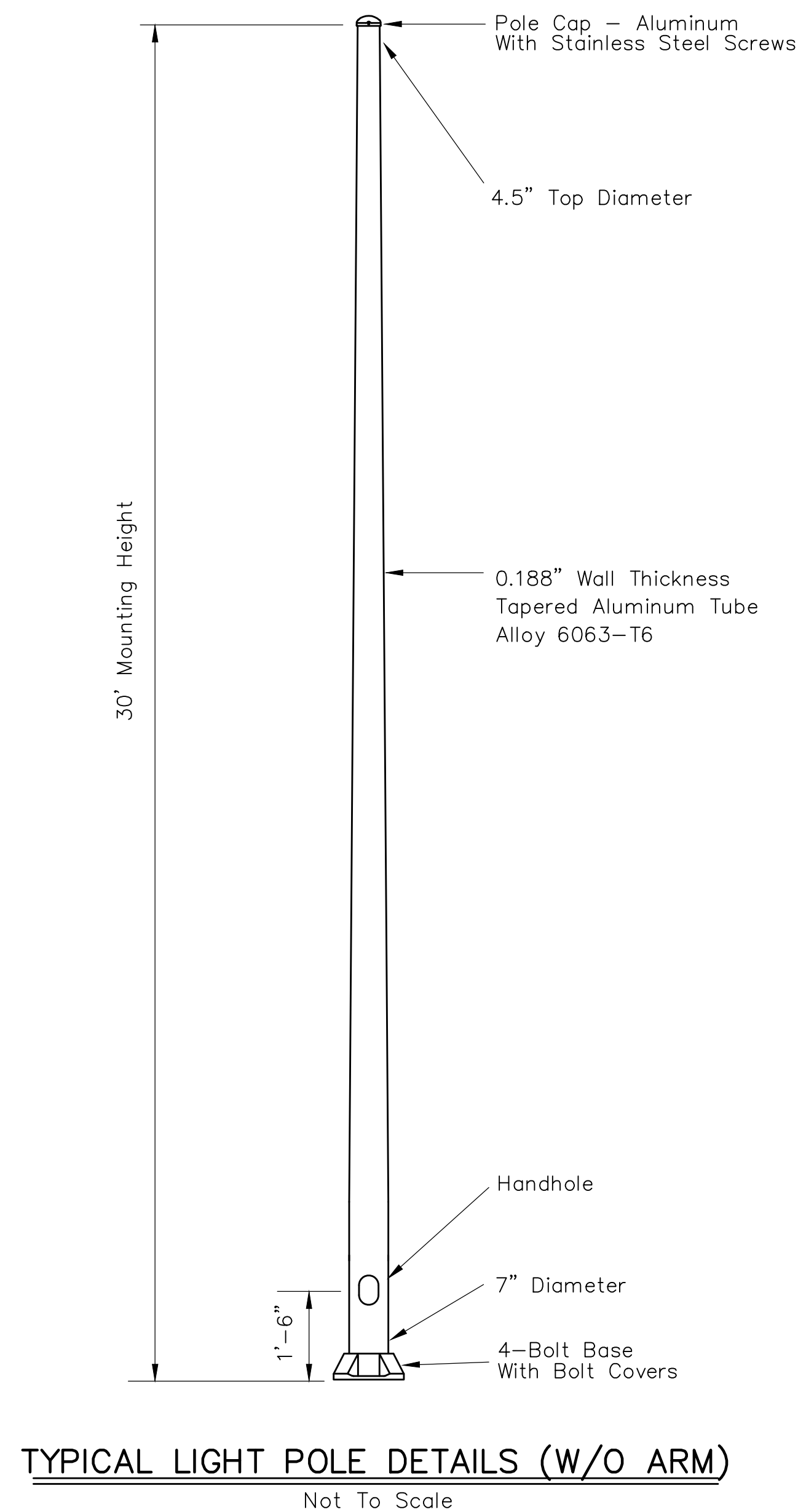
- LEGEND**
- ① Line, Solid White, 8"
 - ② Line, Broken White, 8"
 - ③ Line, Solid Yellow, 8"
 - ④ Crosshatch 45°, Solid Yellow, 12" (20' Spacing)
 - ⑤ Shark Tooth Yield Triangle 2'W x3'H
- Sign

REVISIONS		
Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL: *David Laney* 03/10/2022
 DESIGN ENGINEER
 APPROVED: *Steve Smith* 03/01/2022
 EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES
 APPROVED: *Steve Smith* 3/1/2022
 DIRECTOR OF TRANSPORTATION

TOWN OF PLAINFIELD
 LOW SPEED URBAN / SUBURBAN ROUNDABOUT DETAIL
 SHEET 23 OF 27

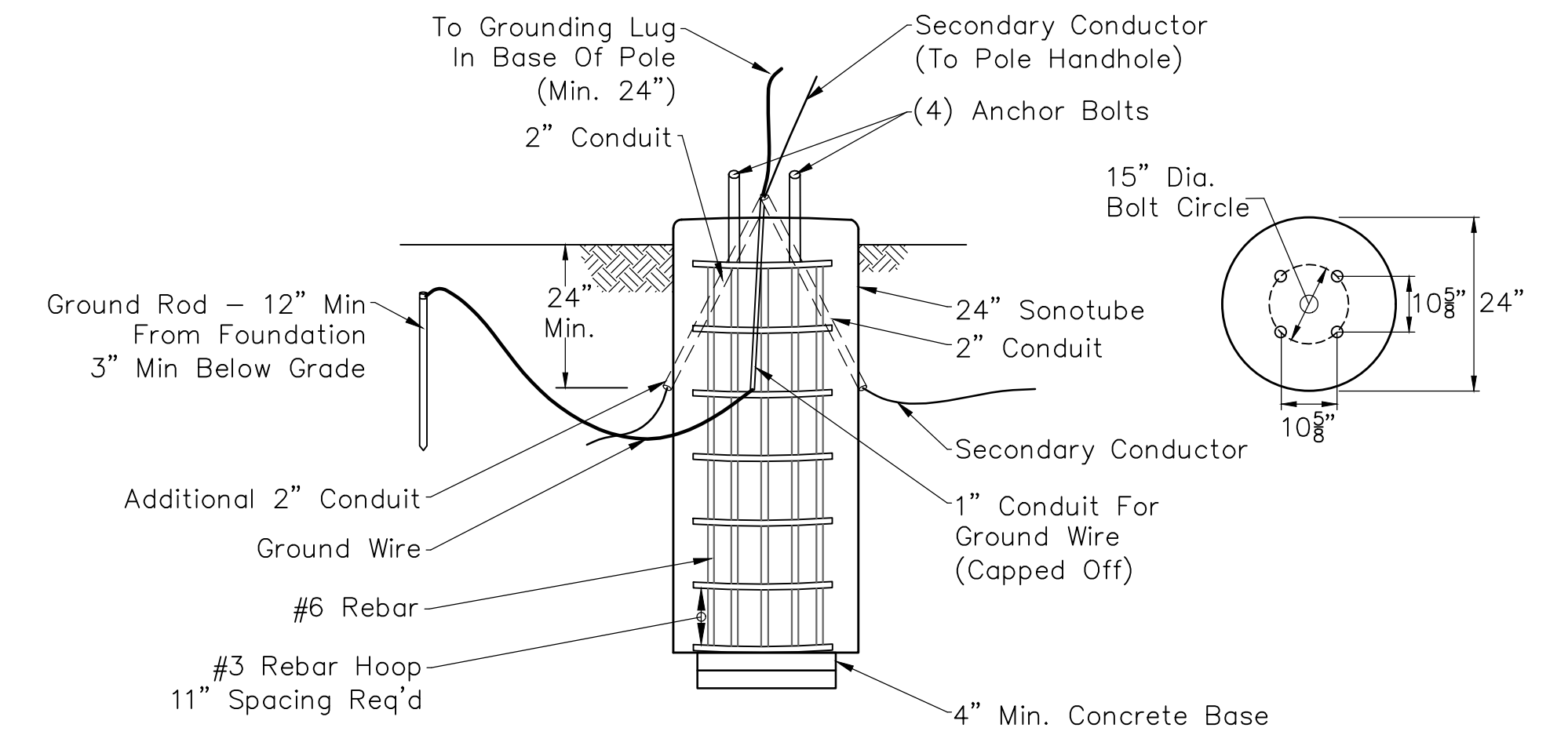


Lighting Component Notes:

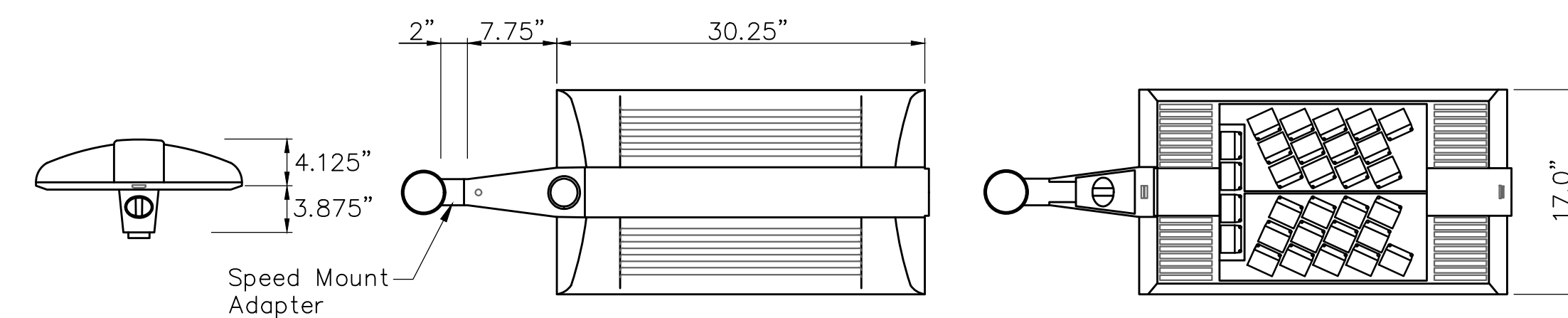
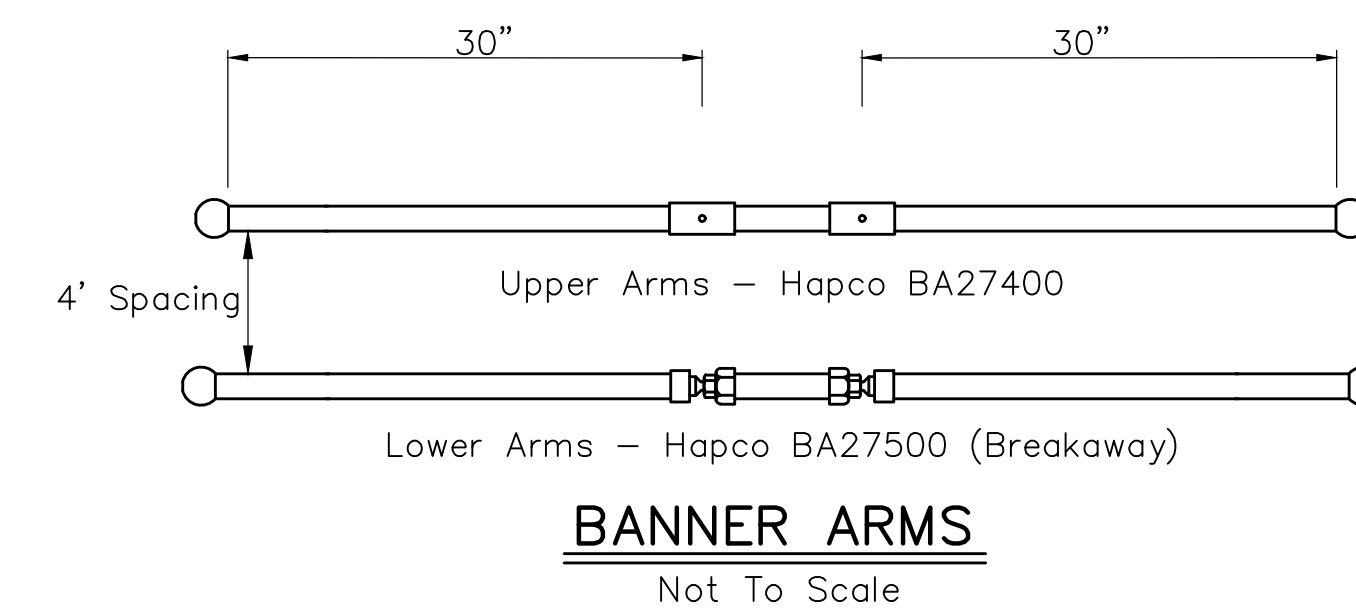
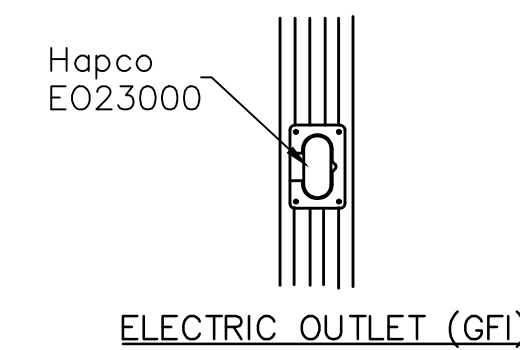
- Standard Light Poles Shall Meet INDOT Design Standards
- The Pole Shaft Will Be Constructed Of Seamless Extruded Tube Of 6063 Aluminum Alloy Per The Requirements Of ASTM B221. The Shaft Assembly Shall Be Full-Length Heat Treated After Base Weld To Produce A T6 Temper.
- Base Style Shall Be 4-Bolt Cast Aluminum Base Flange Of Alloy 356-T6 With Aluminum Bolt Covers (Alloy 356-F) And Stainless Steel Hex Head Attaching Screws.
- Steel Anchor Bolts Shall Conform To AASHTO M314-90 Grade 55. Ten Inches (10") Of Threaded End Will Be Galvanized Per ASTM A153.
- Lighting Fixture Shall Be KIM Lighting Alt120 270 Watt Altitude LED And 4000K Color Temperature.
- Structural Design Is To Be Completed By The Contractor Under The Direct Supervision Of An Experienced Professional Engineer Registered In The State Of Indiana. The Successful Bidder Is To Provide Shop Drawings, Which Bear, For All Structural Components The Professional Seal And Signature Of The Engineer Responsible For The Structural Design.
- Prior To Fabrication, Shop Drawings For All Lighting Components Shall Be Submitted To The Engineer For Approval.
- Technical Specification, Photometric Plan, And Visual File Shall Be Submitted To The Town Of Plainfield For Review Prior To Installation.

Duke Energy 30' Style A-TB Pole Anchor Base

- Depth Below Grade 66 Inches
- Bolt Height 3.5" Above Concrete Surface
- All Material Is To Be New, Unused And Meeting The Following Specifications:
 Conduit: Conduit, db-120 Heavy Wall, 2" 20' Long, NEMA LC-8, PVC Covered
 Bar: Bar, Reinforcing, #6, 3/4" Dia x 16'-6" Long, 1.502 lb/ft, Deformed, CS, ASTM
 Rebar Hoods: Bar, Reinforcing, #3, 3/8" Dia x 18" Hoop Dia, 0.376 lb/ft, Deformed, CS ASTM
 Sonotube: Mold, Cardboard, 24" Dia x 12' Long, Concrete, Heavy Duty Sonotube
 Conduit: Conduit, Rigid, Heavy Wall, 1", 8' Long, Sch 40, PVC, Rated f/ 90 Deg c Conductor
 Shim: Shim, Slotted, 1/16" Thk, Alum, f/ 3/4" Thru 1-1/4" Bolt Dia
 Ground Rod: Ground Rod, 5/8" Diameter, 8' Long, Steel, Hot Dip Galvanized
 Clamp: Clamp, Grounding, Cable To Rod, 8 Sol-1/0 Str Cond To 5/8" Ground Rod, CU
 Ground Wire: Wire/Cable, Electrical, Bare, Ground, Sol SD, 4 Awg.
 Flush Mounted Anchor Bolts: Bolt, Anchor, 1" Diameter, 8 UNC 36" Long, W/4" Hook

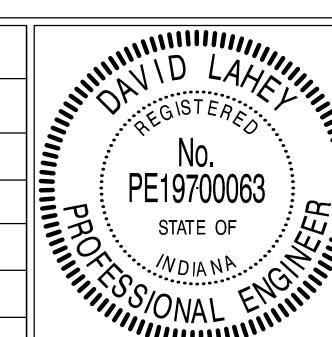


DUKE ENERGY 30' STYLE A-TB POLE ANCHOR BASE
Not To Scale



KIM LIGHTING ALT 120 ALTITUDE LED LIGHT FIXTURE DETAIL
Not To Scale

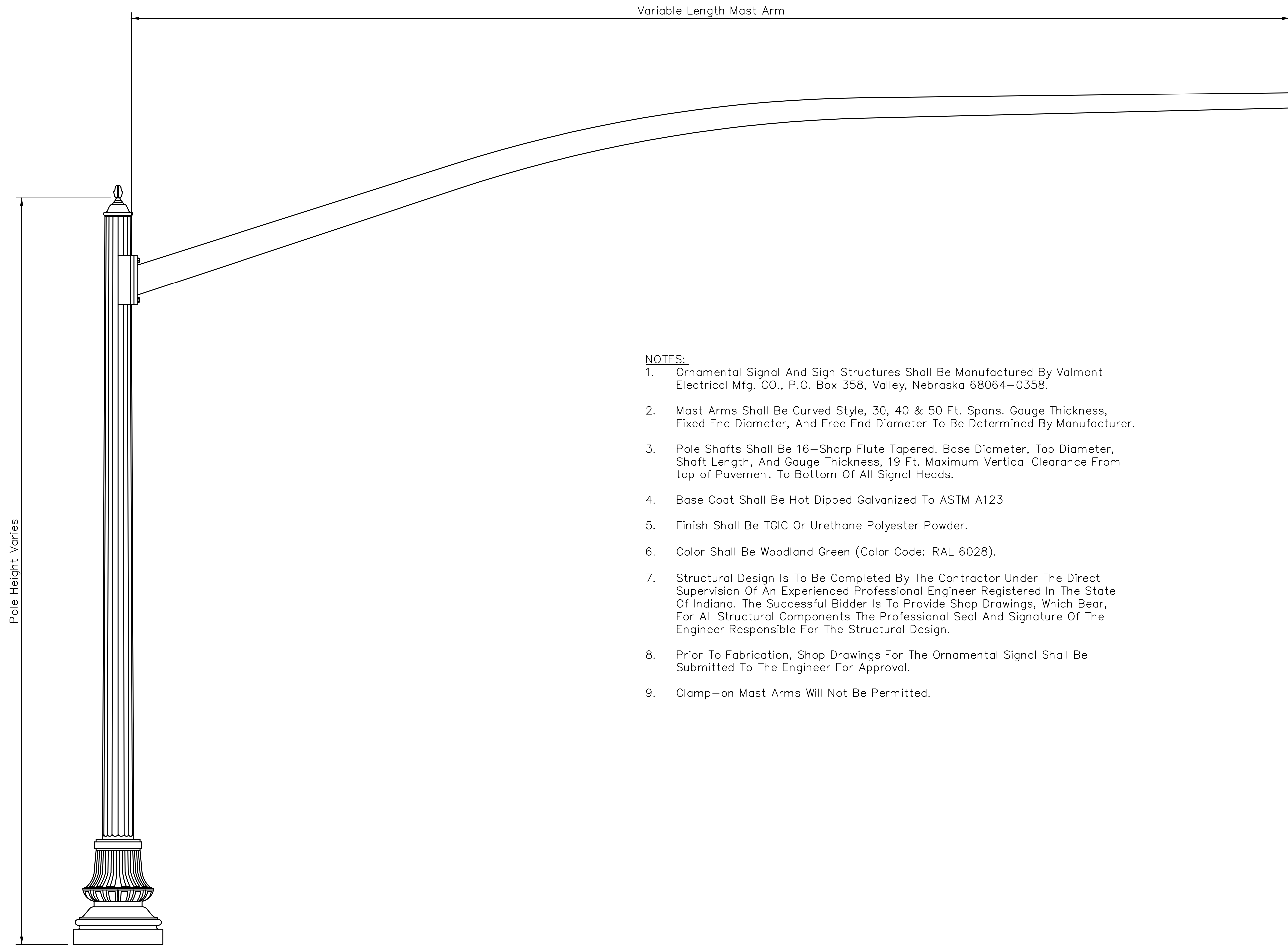
REVISIONS		
Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL	<i>David Laney</i>	03/01/2022
DESIGN ENGINEER		DATE
APPROVED	<i>David Laney</i>	03/01/2022
EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES		DATE
APPROVED	<i>Steve Smith</i>	3/1/2022
DIRECTOR OF TRANSPORTATION		DATE

TOWN OF PLAINFIELD
STREET LIGHTING DETAILS
APPLICABLE TO COLLECTORS &
ARTERIALS (2)

SHEET
25
OF
27



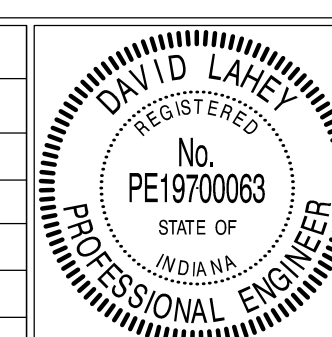
NOTES:

1. Ornamental Signal And Sign Structures Shall Be Manufactured By Valmont Electrical Mfg. CO., P.O. Box 358, Valley, Nebraska 68064-0358.
2. Mast Arms Shall Be Curved Style, 30, 40 & 50 Ft. Spans. Gauge Thickness, Fixed End Diameter, And Free End Diameter To Be Determined By Manufacturer.
3. Pole Shafts Shall Be 16-Sharp Flute Tapered. Base Diameter, Top Diameter, Shaft Length, And Gauge Thickness, 19 Ft. Maximum Vertical Clearance From top of Pavement To Bottom Of All Signal Heads.
4. Base Coat Shall Be Hot Dipped Galvanized To ASTM A123
5. Finish Shall Be TGIC Or Urethane Polyester Powder.
6. Color Shall Be Woodland Green (Color Code: RAL 6028).
7. Structural Design Is To Be Completed By The Contractor Under The Direct Supervision Of An Experienced Professional Engineer Registered In The State Of Indiana. The Successful Bidder Is To Provide Shop Drawings, Which Bear, For All Structural Components The Professional Seal And Signature Of The Engineer Responsible For The Structural Design.
8. Prior To Fabrication, Shop Drawings For The Ornamental Signal Shall Be Submitted To The Engineer For Approval.
9. Clamp-on Mast Arms Will Not Be Permitted.

DECORATIVE TRAFFIC SIGNAL POLE

Not To Scale

REVISIONS		
Rev. No.	Description	Date



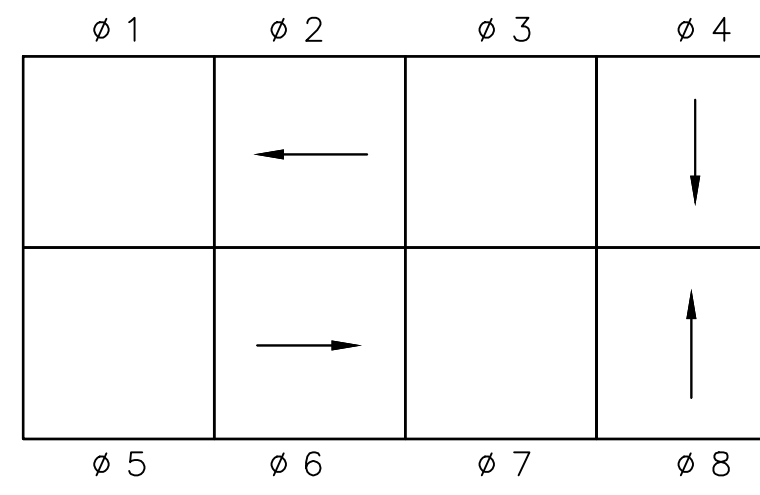
RECOMMENDED FOR APPROVAL	<i>[Signature]</i>	03/01/2022
	DESIGN ENGINEER	DATE
APPROVED	<i>[Signature]</i>	03/01/2022
	EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES	DATE
APPROVED	<i>[Signature]</i>	3/1/2022
	DIRECTOR OF TRANSPORTATION	DATE

TOWN OF PLAINFIELD
 TRAFFIC SIGNAL DETAILS
 APPLICABLE TO COLLECTORS &
 ARTERIALS

SHEET
 26
 OF
 27

LEGEND

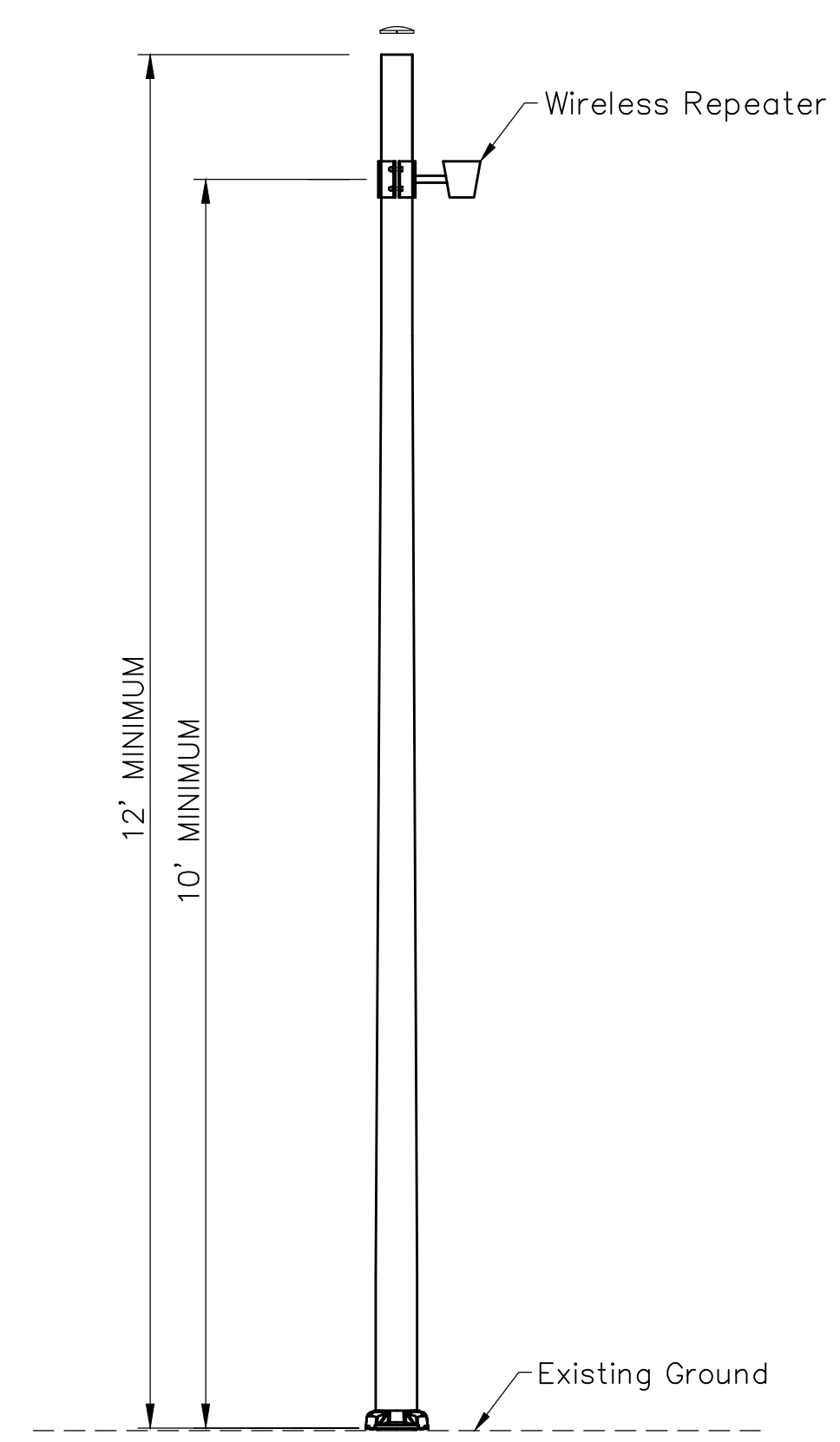
- ← I-way, 3 Section (12" Red, 12" Amber, 12" Green) Signal Indication (Polycarbonate Only) W/ Back Plate
- T5-2 Cabinet On Type "P-1" Foundation
- Steel Strain Pole And Foundation, 30 Ft
- 2" Conduit
- Proposed Handhole
- Span Mount Junction Box
- Span Mounted Sign
- Wireless Receiver Processor
- Accessible Pedestrian Signal Module And Push Button W/R10-3E Sign And Countdown Pedestrian Signal Head
- Wireless Vehicle Magnetometer Detector
- Service Point
- 2" Conduit, W/Tracer Wire, For CAT6 And/Or Fiber



PHASE DIAGRAM
No Preferentially
All Red Flash

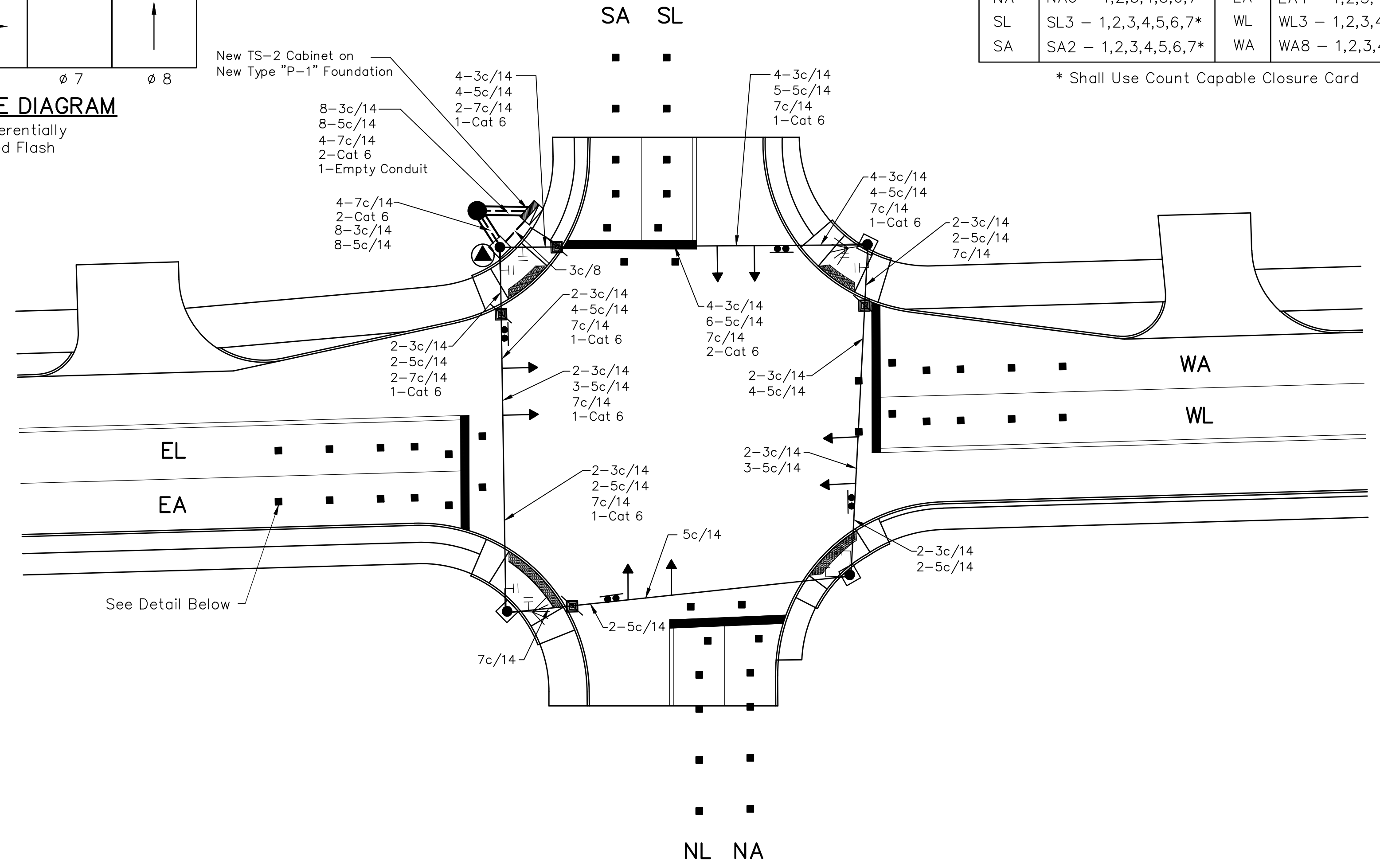
DETECTOR TAG TABLE			
LANE	TAG NUMBER	LANE	TAG NUMBER
NL	NL1 - 1,2,3,4,5,6,7*	EL	EL3 - 1,2,3,4,5,6,7*
NA	NA6 - 1,2,3,4,5,6,7*	EA	EA4 - 1,2,3,4,5,6,7*
SL	SL3 - 1,2,3,4,5,6,7*	WL	WL3 - 1,2,3,4,5,6,7*
SA	SA2 - 1,2,3,4,5,6,7*	WA	WA8 - 1,2,3,4,5,6,7*

* Shall Use Count Capable Closure Card

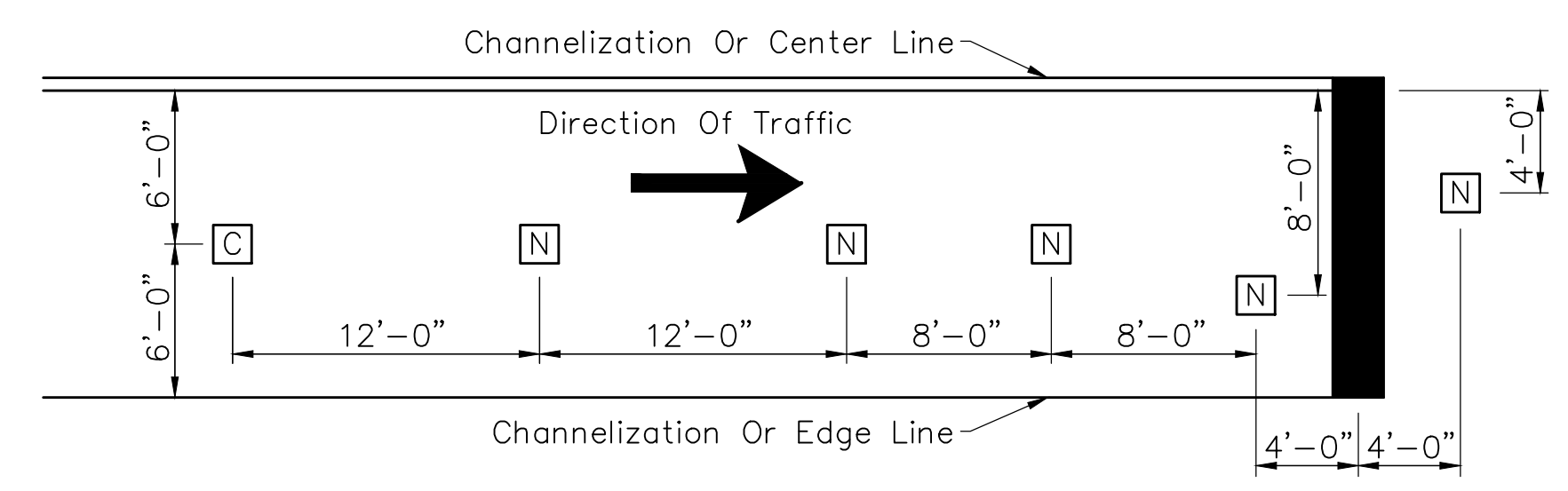


TYPICAL REPEATER POLE MOUNT DETAILS
Not To Scale

- NOTES:**
- The Wireless Vehicle Detection System Shall Be Manufactured By Sensys.
 - Back Detection Shall Be Used For All Approaches \geq 35 MPH In Accordance With The Indiana Design Manual And In Locations Approved By The Engineer.
 - Wireless Repeaters Not Designated On The Plans For Mounting On Steel Strain Poles Shall Be Mounted To An Aluminum Pole At Locations Approved By The Engineer.
 - The Pole Shall Be In Accordance With ASTM C 241 For Seamless Aluminum Alloy, Schedule 40, 6061-T6. The Outside Diameter Of The Pole Shall Be 4-1/2", Have A Unit Weight Of Approximately 3.7 LBS./Ft, And Have A Spun Finish.
 - A Pole Cap Shall Be Supplied For The Top Of The Pole. The Pole Cap Shall Be Spun Aluminum In Accordance With ASTM B 209, Alloy 1100-0.
 - All Hardware For Connection Of Repeater To The Pole Shall Be Stainless Steel
 - The Pole Shall Be Installed Plum On An INDOT Type A Foundation
 - Prior To Fabrication, Shop Drawings Shall Be Submitted To The Engineer For Approval.
 - Color Shall Be Woodland Green (Color Code: RAL 6028).



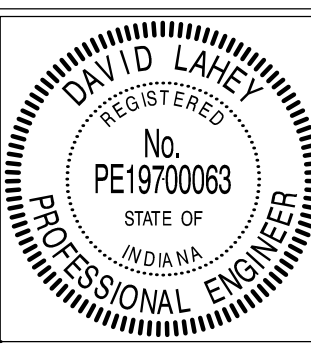
SIGNALIZATION DETAILS
Not To Scale



WIRELESS VEHICLE DETECTOR DETAILS
Not To Scale

- NOTES:**
- Type N Sensors Detect Only Vehicle Presence.
 - Type C Sensors Detect Vehicle Presence And Provide Vehicle Counts.
 - There Should Be At Least 1/4" And No More Than 1/2" Of Clearance Between The Top Of The Sensor And The Top Of The Pavement.

REVISIONS		
Rev. No.	Description	Date



RECOMMENDED FOR APPROVAL: *[Signature]* 03/01/2022
DESIGN ENGINEER DATE

APPROVED: *[Signature]* 03/01/2022
EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES DATE

APPROVED: *[Signature]* 3/1/2022
DIRECTOR OF TRANSPORTATION DATE