



ADDENDUM SUMMARY

Addendum #6

Date: 03/05/2024

Project: 2024 – Fishers Elementary School Addition & Renovations

This Addendum is issued in accordance with the provisions of “The General Conditions of the Contract for Construction,” Article 1, “Contract Documents” and becomes a part of the Contract Documents as provided therein.

This Addendum includes the following attachments:

1. CSO Cover Sheet “Addendum #6” dated 3/01/24
2. Cripe reissue of Civil “C” drawings dated 3/01/24 Addendum #6
3. Bid Package 32A – Paving & Stone Pricing Evaluation (Add this to BP 32A to review revised pricing instructions)

End Addendum

ADDENDUM

ADDENDUM NO: 06

BID PACKAGE NO: N/A

PROJECT: 2024 – Fishers Elementary School Addition and Renovations

PROJECT NO: 2021119

DATE: 03/01/2024

BY: Josh Cannaday

This Addendum is issued in accordance with the provisions of “The General Conditions of the Contract for Construction,” Article 1, “Contract Documents” and becomes a part of the Contract Documents as provided therein. This Addendum includes:

ATTACHMENTS

CSO Addendum No.6 Cover Page, page 1
See attached Addendum by: CRIPE

PART 1 - GENERAL INFORMATION

1.1 NOT USED

PART 2 - BIDDING REQUIREMENTS

2.1 NOT USED

PART 3 - SPECIFICATIONS

3.1 NOT USED

PART 4 - DRAWINGS

4.1 NOT USED

PART 5 - QUESTIONS AND ANSWERS

5.1 NOT USED

END ADDENDUM

HSE Fishers Elementary School

Bid Package 32A- Paving & Stone

Pricing Evaluations:

I. Asphalt: The base project will be bid with 2024 pricing information.

1. Upon BP 32A award the contractor will define the base, surface tonnage per year 2024, 2025 and 2026.
2. The 2024 tonnage pricing will be defined that the BP 32A contractor used for the bid
 - a. Asphalt
 - i. INDOT HMA 19mm intermediate Type B
 - ii. INDOT HMA 9.5 mm Surface Type B
3. 2025 and 2026 Pricing Evaluation: The INDOT PG asphalt binder index will be used to increase/decrease the BP contract for the 2025/2026 tonnages:
 - a. The binder index will be compared to the 2024 May-July average and the % increase/decrease will be adjusted.
 - i. Example- 2024 Binder Index May-July avg \$558/TN

The amount in 2025 the month of paving ends up being \$575/TN

Then the tonnage price will be increased by:

$$\$575/\text{TN} - \$558/\text{TN} = \$17/\text{TN} / \$558/\text{TN} = 3.0\%$$

II. Stone: Figure based on the 2024 pricing with a 5% increase for years 2025 & 2026.

1. Upon BP 32A award the contractor will define the stone tonnage/Pricing in 2024, 2025 and 2026.
2. If the local pricing at the time of placement in 2025 & 2026 exceeds the 5% then the contract will be adjusted.

OWNER:

HAMILTON SOUTHEASTERN SCHOOLS
13485 CUMBERLAND ROAD
FISHERS, IN 46038
DISTRICT OFFICE: (317) 594-4100
(317) 594-4109 FAX

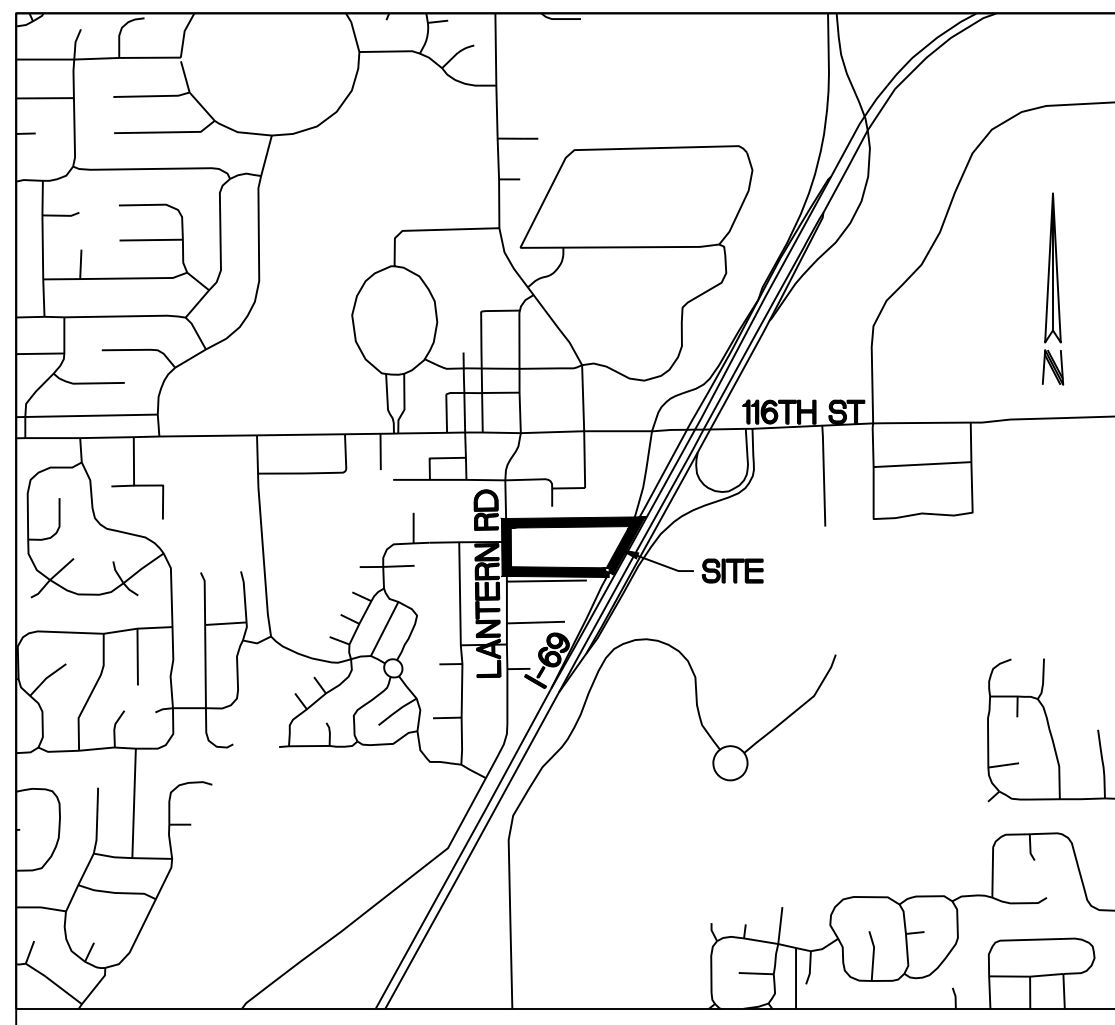
ENGINEER:



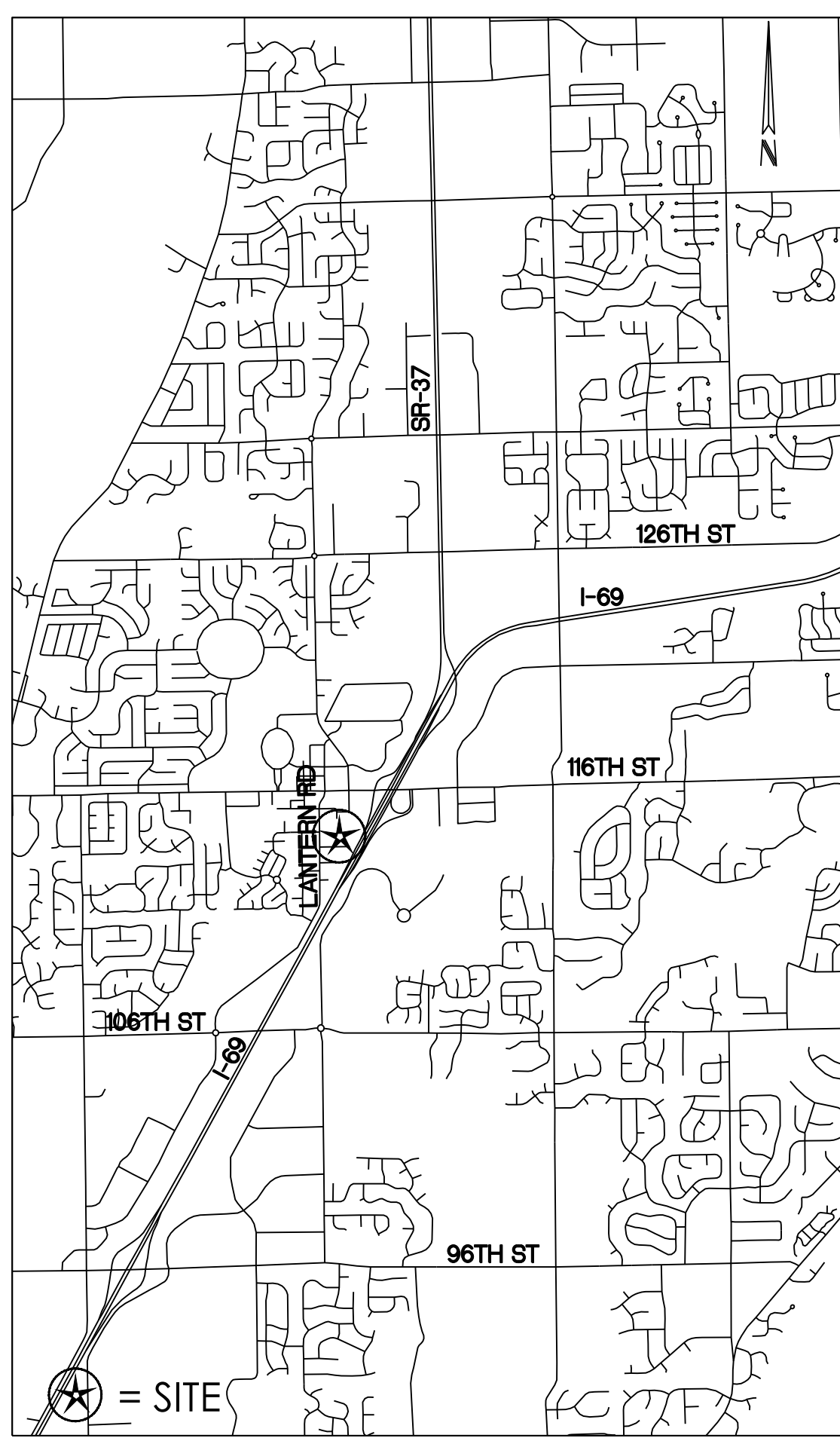
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9339 PRIORITY WAY WEST DRIVE, SUITE 100
INDIANAPOLIS, INDIANA 46240
CONTACT: DAVID LACH
P: (317) 706-6361 E-MAIL: DLACH@CRIPE.BIZ

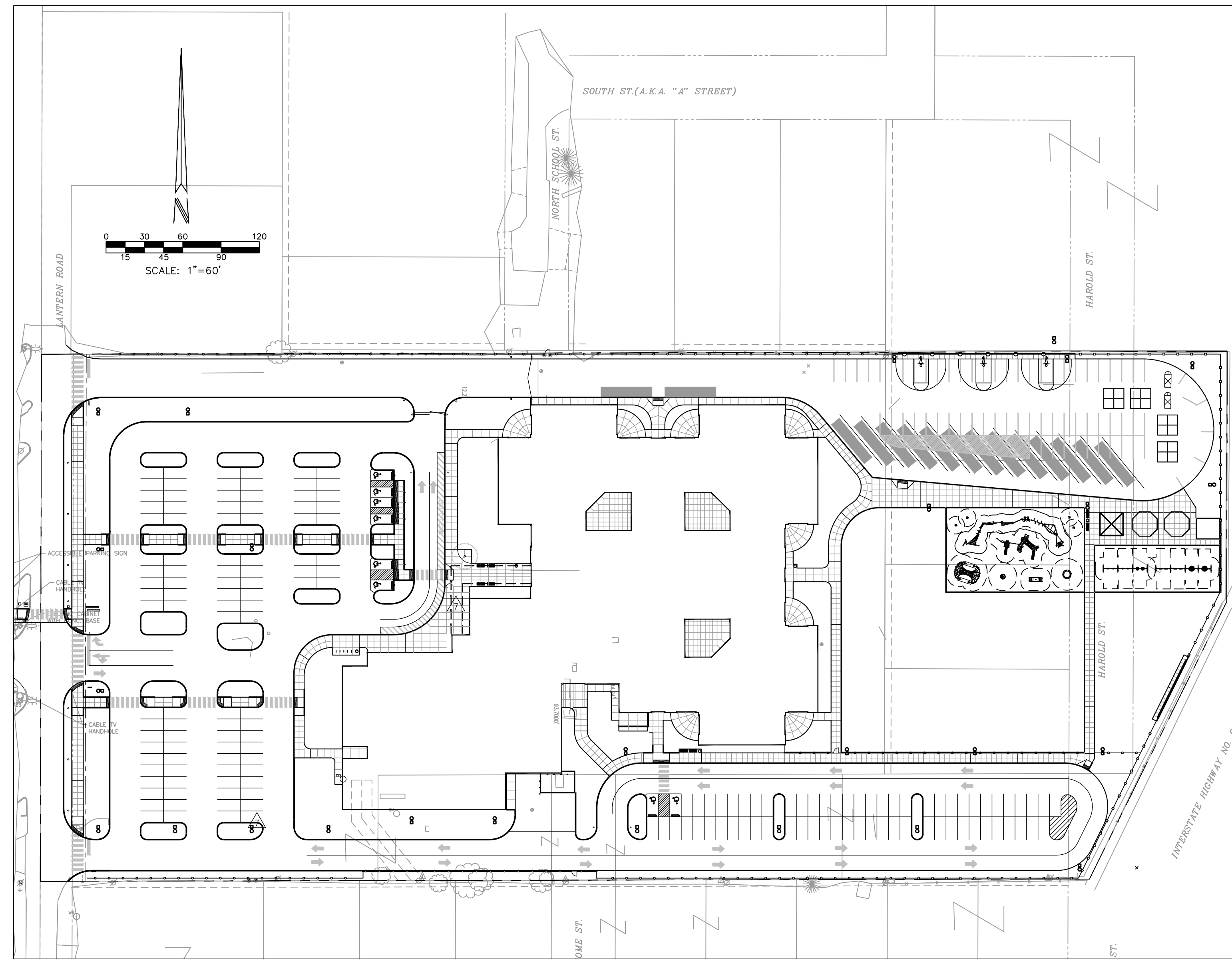
LOCATION MAP:



VICINITY MAP:



CONSTRUCTION PLANS FOR FISHERS ELEMENTARY SCHOOL FISHERS, IN



LEGAL DESCRIPTION:

Corporate Warranty Deed (Inst. No.: 88-11592)

Property at Fishers Elementary School:

Part of the Northwest Quarter of Section 6, Township 17 North, Range 5 East, in Delaware Township, Hamilton County, Indiana described as follows:

Commencing at the Northwest corner of the Northwest Quarter of Section 6, Township 17 North, Range 5 East; thence South 00 degrees 00 minutes 00 seconds East (assumed bearing) on the West line of said Northwest Quarter 693.00 feet to the POINT OF BEGINNING of the real estate herein described; thence continuing South 00 degrees 00 minutes 00 seconds East on said West line 412.50 feet; thence North 89 degrees 44 minutes 02 seconds East parallel with the North line of said Northwest Quarter 804.22 feet to the Southeast corner of Lot 36, in Richard E. Harold 1st subdivision recorded in Deed Record 132, Pages 359-360 in the Office of the Recorder of Hamilton County, Indiana; thence South 89 degrees 47 minutes 00 seconds East 16.16 feet to the Northeasterly right-of-way line of Interstate #69 as established per the plans for Project # I-69-1(330); thence North 26 degrees 11 minutes 56 seconds East on said right-of-way line 241.98 feet; thence North 00 degrees 00 minutes 00 seconds West parallel with the West line of said Northwest Quarter 196.01 feet to a point which extends North 89 degrees 44 minutes 02 seconds East 927.22 feet from the Point of Beginning; thence South 89 degrees 44 minutes 02 seconds West parallel with the North line of said Northwest Quarter 927.22 feet to the Point of Beginning; containing 8.515 acres, more or less.

Subject to any and all liens, easements, agreements and restrictions of record.

THE DESIGN AND CONSTRUCTION SHALL COMPLY WITH THE CURRENT FISHERS CONSTRUCTION SPECIFICATIONS AND STANDARD CONSTRUCTION DETAILS. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.

THE DESIGN AND CONSTRUCTION SHALL COMPLY WITH ALL ADA STANDARDS.

THE CONTRACTOR SHALL SCHEDULE A SITE PRE-CONSTRUCTION MEETING WITH THE FISHERS DEPARTMENT OF PUBLIC WORKS PRIOR TO ANY CONSTRUCTION ON THE SITE BEING STARTED.

THE FINAL SITE INSPECTION WILL NOT BE PERFORMED BY THE FISHERS DEPARTMENT OF ENGINEERING INSPECTOR UNTIL ALL SITE AND RIGHT-OF-WAY WORK IS COMPLETED.

SITE RECORD DRAWINGS ARE REQUIRED TO BE SUBMITTED IN THE FISHERS STANDARD FORMAT PRIOR TO ENGINEERING DEPARTMENT RELEASE OF THE COMPLETED SITE.

A CITY OF FISHERS RIGHT-OF-WAY ACTIVITY PERMIT IS REQUIRED FOR UTILITY WORK CROSSING EXISTING PUBLIC RIGHT-OF-WAY.

UTILITY WORK WITHIN EXISTING PUBLIC RIGHT-OF-WAY OR WITHIN 5' OF EXISTING PUBLIC RIGHT-OF-WAY PAVEMENT REQUIRES REMOVABLE FLOWABLE FILL.

ALL ROADS MUST BE BROUGHT BACK TO ORIGINAL OR BETTER CONDITION, INCLUDING BUT NOT LIMITED TO PAVEMENT MARKINGS, CURB / STONE SHOULDERS, SIGNAGE, ETC. REPAIRS SHALL COINCIDE WITH THE ADJOINING ROAD.

PROJECT DATA:

PROJECT ADDRESS	11442 LATERN RD FISHERS, IN 46038
PROJECT AREA	xx AC
BUILDING AREA	xx SF
STANDARD SPACES PROPOSED	172 SPACES
ACCESSIBLE SPACES PROPOSED	8 SPACES
BUS SPACES PROPOSED	13 SPACES
TOTAL PARKING SPACES	185 SPACES

SHEET INDEX:

SHEET	DESCRIPTION
CS	COVER SHEET
C001-C002	ALTA/NSPS LAND TITLE AND TOPOGRAPHIC SURVEY
C101-C102	DEMOLITION PLAN
C201	SITE PLAN
C301-C302	GRADING PLAN
C401-C403A	EROSION CONTROL PLAN
C404	STORMWATER POLLUTION PREVENTION PLAN
C501-C502	UTILITY PLAN
C601	MAINTENANCE OF TRAFFIC PLAN
C701-C705	STORM SEWER PLAN AND PROFILES
C706-C708	STORM SEWER DETAILS
C801	SANITARY PLAN AND PROFILE
C901	WATER DETAILS
C902-930	CITY OF FISHERS STANDARD DETAILS
L100-L103	LANDSCAPE PLAN

CITY OF FISHERS STANDARD CONSTRUCTION DETAILS:

1 / 29	TITLE SHEET
2-3 / 29	TYPICAL SECTIONS AND PAVEMENT
4 / 29	CURB DETAILS
5 / 29	DRIVEWAY AND MICELANEOUS ROADWAY DETAILS
6 / 29	SIDEWALK AND CURB RAMP DETAILS
7 / 29	ROUNDBOUT DESIGN DETAILS
8 / 29	HANDRAIL AND FENCE DETAILS
9-12 / 29	TIMBER GUARDRAIL DETAILS
13-15 / 29	STORM SEWER DETAILS
16-17 / 29	DETENTION BASIN DETAILS
18-23 / 29	SANITARY SEWER DETAILS
24-27 / 29	EROSION CONTROL DETAILS
28 / 29	SIGN AND PAVEMENT MARKING DETAILS
29 / 29	LIGHTING DETAILS

BENCHMARKS:

HSE 15 - SET DISK BY HSE UTILITIES - 4INCH DIAMETER ALUMINUM DISK STAMPED "HAMILTON SOUTHEASTERN UTILITIES" hse 15, SET IN CONCRETE ± 45 FEET SOUTH AND ± 11 FEET EAST OF THE SOUTHEAST CORNER OF CUMBERLAND ROAD BRIDGEABUTMENT OVER I-69, YEAR ESTABLISHED 1997.

ELEV. = 846.46 [NAVD 1988(CEOID12A)]

TBM #1 MAGSPIKE SET IN A POWERPOLE LOCATED AT THE NORTHWEST CORNER OF LOT 26, R.E. HAROLDS 1ST SUBDIVISION.

ELEV. = 820.33

AGENCY & UTILITY INFO:

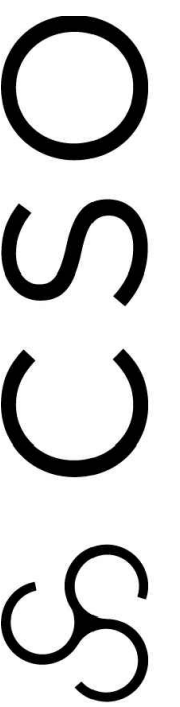
AGENCY/UTILITY	PHONE NUMBER
FISHERS PLANNING & ZONING	317-595-3155
FISHERS DEPARTMENT OF ENGINEERING	317-595-3160
FISHERS FIRE DEPARTMENT	317-595-3200
HAMILTON COUNTY SURVEYOR	317-776-8495
DUKE ENERGY	317-776-5348
CENTERPOINT ENERGY	317-776-5532
AT&T	317-610-5472
COMCAST	317-774-3384
CITIZENS ENERGY GROUP	317-927-4377

CAUTION

LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES, INLETS, VALVES, AND MARKS MADE UPON THE GROUND BY OTHERS) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND UTILITIES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL CONSTRUCTION.

CRIPE TEAM:

PROJECT MANAGER	DAVID LACH, PE	317-706-6361
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8831 Keystone Crossing, Indianapolis, IN 46240
317.948.7800 | csoinc.net



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FISHERS ELEMENTARY SCHOOL
ADDITIONS & RENOVATIONS
DESIGN DEVELOPMENT
11442 LATERN
RD, FISHERS, IN
46038

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the project. On the basis of the general scope indicated or described, the contractor shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

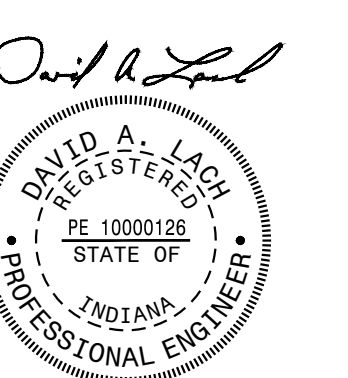
4	02/12/24 ADDENDUM #4
6	03/01/24 ADDENDUM #6

ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:

COVER SHEET

CERTIFIED BY:



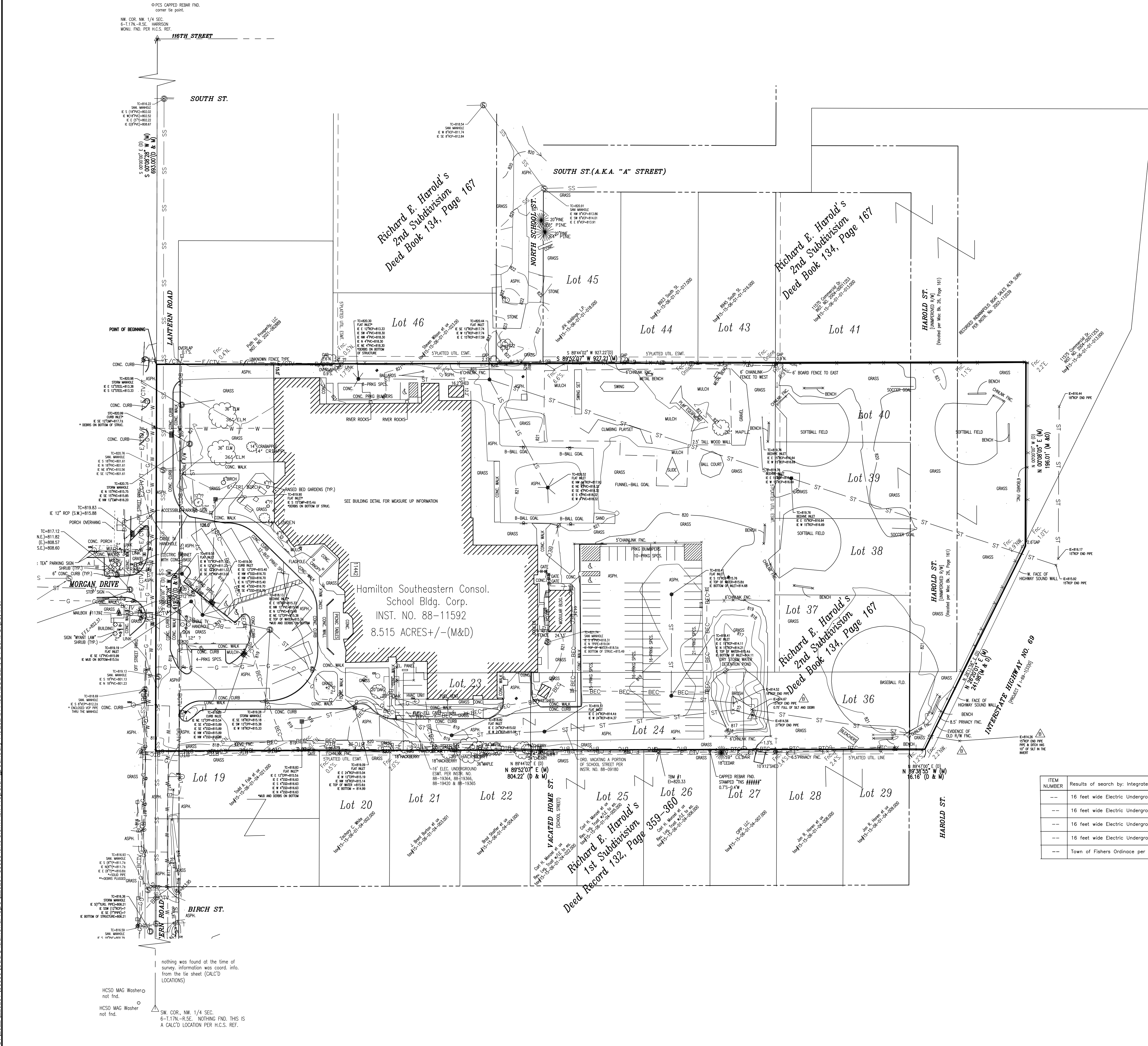
DRAWING NUMBER

CS

PROJECT NUMBER

2021119

C:\2022\220201\30000\cd\Additional Topo\220201-30000.fstx elem ALTA Topo.dwg, January 11, 2024, PAUL KLODIEN © Paul L. Cripe, Inc.



EXISTING FEATURES LEGEND

SS	SANITARY SEWER & MANHOLE	⊕	POWER POLE
ST	STORM SEWER, END SECTION, INLET & MANHOLE	—	UTILITY RISER, TELE, ELEC. & CTV
G	GAS LINE	—	ELECTRIC TRANSFORMER
W	WATER LINE	—	AIR CONDITIONER UNIT
E	ELECTRIC LINE (AERIAL)	—	STREET LIGHT
T	TELEPHONE LINE (AERIAL)	—	FLOOD LIGHT
CTV	CABLE TELEVISION (AERIAL)	—	TRAFFIC MANHOLE AND SIGNAL POLE
BTC	BURIED TELE. CABLE	—	FIRE HYDRANT
BEC	BURIED ELEC. CABLE	—	VALVE, GAS & WATER
X	FENCE LINE (FNC)	—	STREET SIGN
BCTV	BURIED CABLE TV	—	WATER, TELE, AND ELEC. MANHOLE
—	RIGHT OF WAY LINE (R/W)	—	SEWER CLEANOUT
—	EASEMENT LINE	—	ELECTRIC, GAS AND WATER METER
—	CENTER LINE	—	PIPELINE MARKER POST
—	SMILE LINE	—	MAILBOX
D	DEED DIMENSION	—	GUARD POST
M	MEASURED DIMENSION	—	SPRINKLER HEAD
P	PLAT DIMENSION	—	IRRIGATION CONTROL BOX
R	RADIUS	—	SPOT GRADE
L	ARC LENGTH	—	TOP CURB OVER OUTER GRADE
H	HANDHOLE	—	MONITORING WELL
FND	FOUND	—	FIRE SERVICE STAND PIPE
CONC.	CONCRETE	—	GAS VENT PIPE
ASPH.	ASPHALT	—	SEPTIC TANK LID
TC	TOP OF CASTING ELEVATION	—	WELL CAP
E	INVERT ELEVATION	—	SITE ADDRESS
FFE	FINISH FLOOR ELEVATION	—	AIR RELIEF VALVE
TEM	TEMPORARY BENCHMARK	—	UNDERGROUND TANK FILLER PIPE

● DENOTES A 5/8" DIA. REBAR WITH YELLOW PLASTIC CAP SET. CAP STAMPED "CRIFE FRM NO. 0055" UNLESS OTHERWISE NOTED.
○ DENOTES A MAG NAIL WITH WASHER SET. WASHER STAMPED "CRIFE FRM NO. 0055" UNLESS OTHERWISE NOTED.

NOTES:
 (1) THIS SURVEY REFLECTS ABOVE GROUND INDICATIONS OF UTILITIES (INCLUDING, BUT NOT LIMITED TO, MANHOLES, INLETS, VALVES, AND MARKS MADE UPON THE GROUND BY OTHERS), AS WELL AS 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. FURTHER, THE SURVEYOR DOES NOT WARRANT THE UNDERGROUND UTILITIES SHOWN ARE OF THE SIZE, CAPACITY, OR IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION PROVIDED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES, THE EXACT LOCATION, SIZES, AND CAPACITIES OF EXISTING UNDERGROUND UTILITIES SHOULD BE FIELD VERIFIED PRIOR TO ANY CONSTRUCTION ACTIVITIES.
 (2) EXCEPT AS EXPLICITLY SHOWN, DETAILED, OR LISTED ON THE FACE OF THIS DOCUMENT, PAUL L. CRIFE, INC. HAS NOT INVESTIGATED THIS SITE FOR FLOOD PLAINS, WETLANDS, ZONING, ENVIRONMENTAL CONTAMINATION, OR ANY OTHER ISSUES NOT SPECIFICALLY SET FORTH HEREIN. ANY ADDITIONAL ISSUES NOT EXPLICITLY DESCRIBED IN THE CONTRACTED SCOPE OF SERVICES FOR THE PREPARATION OF THE CURRENT VERSION OF THIS DOCUMENT WERE NOT INVESTIGATED.

I, THE UNDERSIGNED, HEREBY CERTIFY THAT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF THE WITHIN PLAT REPRESENTS A TOPOGRAPHIC SURVEY COMPLETED UNDER MY SUPERVISION ON DECEMBER 29, 2022. I FURTHER CERTIFY THAT THE ELEVATIONS SHOWN ARE ACCURATE WITHIN THE FOLLOWING LIMITS UNLESS OTHERWISE NOTED:
 ELEVATIONS ON PAVEMENT, CURBS, OR OTHER HARD SURFACES: ±0.05 FEET
 BUILDING FLOOR ELEVATIONS, MANHOLES AND OTHER STRUCTURES: ±0.10 FEET
 ELEVATIONS ON SOIL, GRASS OR OTHER NATURAL SURFACES: ±0.10 FEET
 CONTOUR LINES SHOWN ARE PLOTTED WITHIN ± ONE-HALF INTERVAL.

ITEM NUMBER	Results of search by: Integrated Search Technologies, LLC, per Invoice #2022-025676, dated Dec. 21, 2022	AFFECTS PARCEL
---	16 feet wide Electric Underground Line Easmt. by Public Service Indiana, Inc. under Inst. No. 88-19420	YES
---	16 feet wide Electric Underground Line Easmt. by Public Service Indiana, Inc. under Inst. No. 88-19366	YES
---	16 feet wide Electric Underground Line Easmt. by Public Service Indiana, Inc. under Inst. No. 88-19365	YES
---	16 feet wide Electric Underground Line Easmt. by Public Service Indiana, Inc. under Inst. No. 88-19364	YES
---	Town of Fishers Ordinance per Inst. No. 88-09180, 82.5 feet of school street was vacated.	YES

DRAWN BY: CMQ
 CHECKED BY: []
 DATE: 2-22-23
 PROJECT NO.: 220201-30000

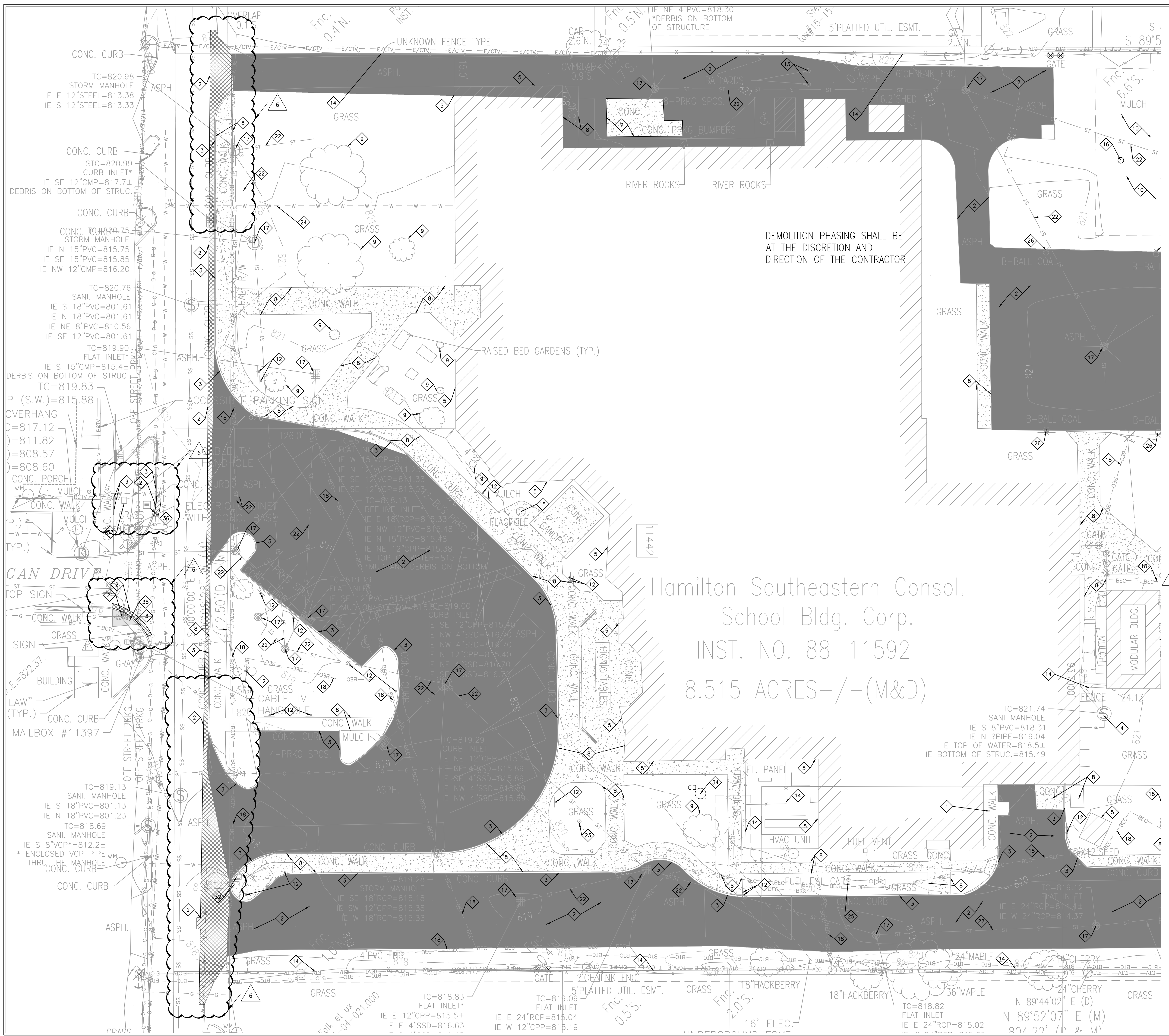
9339 Priority Way West Drive, Suite 100
 Indianapolis, Indiana 46240
 (317) 944-6777
 E-Mail: crife@crife.biz

CRIFE
 Architects + Engineers
 Civil Engineering
 Survey + Construction Engineering
 Energy + Facilities
 Real Estate Services

ALTA/NPS Land Title and Topographic Survey
 Fishers Elementary School
 Hamilton Southeastern Schools
 13845 Cumberland Road
 Fishers, IN 46038

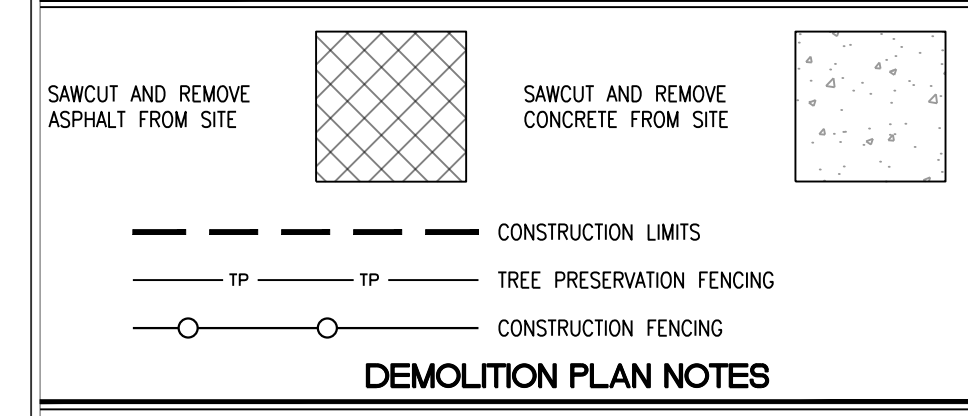
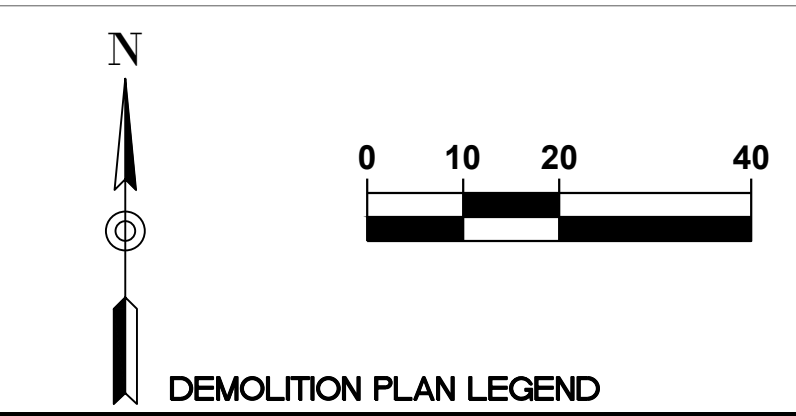
DELAWARE TWP., HAMILTON CO.
 Section: 6 Township: 17-N Range: 5-E
 Record Name: HAMILTON SOUTHEASTERN CONSOL. SCHOOL BLDG. CORP.

Scale: 1" = 50'
 Sheet No: 1 of 2
 Project Number: 220201-30000



Hamilton Southeastern Consol.
 School Bldg. Corp.
 INST. NO. 88-11592
 8.515 ACRES +/- (M&D)

DEMOLITION PHASING SHALL BE
 AT THE DISCRETION AND
 DIRECTION OF THE CONTRACTOR



- DEMOLITION PLAN NOTES**
- UTILITY LOCATIONS ARE APPROXIMATE. THE CONTRACTOR IS TO DETERMINE AND FIELD VERIFY ALL HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 - THE CONTRACTOR SHALL COORDINATE ALL WORK ASSOCIATED WITH THE ABANDONMENT, REMOVAL, RELOCATION, AND INSTALLATION OF UTILITIES WITH EVERY UTILITY COMPANY AND OBTAIN THEIR APPROVAL PRIOR TO PERFORMING ANY UTILITY WORK.
 - ALL DEMOLISHED MATERIAL TO BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED, AND SHALL BE LEGALLY DISPOSED OF OFF-SITE.
 - CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES PER SHEET C401-C403 PRIOR TO COMMENCING DEMOLITION.
 - MAINTAIN PROPER DRAINAGE IN DEMOLITION AREAS.
 - SAWCUT CONCRETE AND ASPHALT SURFACES FOR REMOVAL AS NOTED.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING DAMAGE TO ALL BUILDINGS AND/OR SITE ENTITIES THAT ARE TO REMAIN.
 - THE CONCRETE TO BE SAWCUT SHALL BE SAWCUT TO THE NEAREST CONCRETE JOINT BEYOND THE LIMITS ILLUSTRATED. NOTIFY ENGINEER IF JOINT IS OVER ONE (1) FOOT FROM LINE SHOWN.
 - REMOVAL OR RELOCATION OF ALL LANDSCAPING MUST BE COORDINATED WITH OWNER.
 - OVERHEAD AND/OR UNDERGROUND ELECTRIC AND TELEPHONE CABLES THAT ARE SHOWN TO BE ABANDONED IN PLACE MAY BE CUT AS NECESSARY TO FACILITATE NEW CONSTRUCTION. CONTRACTOR SHALL ENSURE THAT LINES ARE NOT ACTIVE PRIOR TO CUTTING AND OBTAIN UTILITY COMPANY APPROVAL PRIOR TO PERFORMING ANY DEMOLITION.
 - WATER LINES SHALL NOT BE ABANDONED OR DEMOLISHED UNTIL PROPOSED WATER MAINS HAVE BEEN INSTALLED TO A POINT SUCH THAT ONLY MINIMAL DISRUPTION IN WATER SERVICE TO THE EXISTING OCCUPIED BUILDINGS WILL OCCUR. CONTRACTOR TO COORDINATE ANY SERVICE SHUT DOWN WITH THE BUILDING OWNER AT LEAST 72 HOURS PRIOR TO SCHEDULING SHUT DOWN.
 - CONTRACTOR TO ESTABLISH NEW LOCAL SURVEY CONTROL SYSTEM (VERTICAL AND HORIZONTAL) PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY. MANY TEMPORARY BENCHMARKS UTILIZED IN THE PREPARATION OF THE TOPOGRAPHIC SURVEY FOR THE DESIGN WILL BE RELOCATED AS PART OF CONSTRUCTION.
 - ANY DISCREPANCIES OR CONFLICTS WHICH BECOME APPARENT BEFORE OR DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.

- KEYNOTE LEGEND**
- SAWCUT AND REMOVE CONCRETE SIDEWALK TO THE NEAREST CONCRETE JOINT BEYOND THE LIMITS ILLUSTRATED. NOTIFY ENGINEER IF JOINT IS OVER ONE (1) FOOT FROM LINE SHOWN.
 - SAWCUT AND REMOVE ASPHALT AND GRANULAR SUBBASE
 - SAWCUT AND REMOVE CONCRETE CURB FOR PROPOSED SIDEWALK. CURB REMOVAL SHALL INCLUDE EX. CURB TAPERS, WHERE APPLICABLE.
 - REMOVE AND REPLACE GREASE TRAP (SEE C500S AND PLUMBING PLANS)
 - BUILDING DEMOLITION SHALL BE BY THE CONTRACTOR. CONTRACTOR SHALL COORDINATE ALL BUILDING DEMOLITION WITH THE ARCHITECT AND THE OWNER.
 - REMOVE CANOPY, COLUMNS AND SUPPORTING FOUNDATION (REFER TO ARCHITECTURAL PLANS FOR DEMOLITION SPECIFICATIONS)
 - REMOVE CONCRETE PAD
 - REMOVE CONCRETE PAVEMENT
 - REMOVE TREE, SHRUBS, UNDERBRUSH, LANDSCAPING AND VEGETATION INCLUDING ROOT BALLS
 - REMOVE MULCH BED AND EDGING
 - REMOVE CONCRETE PARKING BUMPERS AND REBAR ANCHORS
 - REMOVE EXISTING SIGN, POLE AND FOUNDATION AND LIGHTS
 - REMOVE PIPE BOLLARDS AND FOUNDATION
 - REMOVE FENCE, POSTS AND FOUNDATION
 - REMOVE FLAGPOLE AND FOUNDATION
 - REMOVE PLAYGROUND EQUIPMENT AND RETURN TO OWNER FOR REUSE. CONTRACTOR TO HAUL TO LOCATION DETERMINED BY OWNER. (SEE LANDSCAPE PLANS)
 - REMOVE STORM SEWER STRUCTURE AND CASTING
 - REMOVE CABLE LINE AND CONDUITS IN THEIR ENTIRETY
 - REMOVE CABLE TELEVISION PEDESTAL. CONTRACTOR TO COORDINATE REMOVAL WITH UTILITY COMPANY PRIOR TO PERFORMING ANY DEMOLITION.
 - ADJUST WATER VALVE AND BOX TO PROPOSED GRADE
 - ADJUST GAS VALVE AND BOX TO PROPOSED GRADE
 - REMOVE EXISTING PIPE
 - RELOCATE TREE (SEE LANDSCAPE PLANS)
 - DISCONNECT AND REMOVE WATER SERVICE. COORDINATE WITH UTILITY COMPANY AND PHASED CONSTRUCTION
 - UNDERGROUND FUEL TANK TO BE REMOVED BY OWNER
 - REMOVE PLAYGROUND EQUIPMENT AND FOUNDATIONS
 - REMOVE BENCH AND FOUNDATIONS
 - REMOVE BLEACHERS AND RETURN TO OWNER FOR RE-USE. CONTRACTOR TO HAUL TO LOCATION TO BE DETERMINED BY OWNER.
 - REMOVE EXISTING GAS LINES. COORDINATE WITH UTILITY COMPANY
 - REMOVE EXISTING FUEL TANK TO BE REMOVED BY OWNER
 - REMOVE EXISTING MULCH
 - MALBOXES TO BE REMOVED AND RELOCATED (SEE LANDSCAPE PLANS)
 - DEMOLISH WESTERN MOST 6" BOARD FENCE. INDOT R/W FENCE AND SOUND WALL TO REMAIN UNDISTURBED.
 - REMOVE EXISTING CLEANOUT
 - REMOVE EXISTING CURB RAMP
 - RELOCATE GAS MARKER. COORDINATE WITH UTILITY COMPANY
 - RELOCATE FIBER JUNCTION BOX. COORDINATE WITH METRONET.

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Cripe
 Solutions by Design Since 1937
 11442 LANTERN RD., FISHERS, IN 46038

FISHERS ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS DESIGN DEVELOPMENT

SCOPE DRAWINGS:
 These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the project. On the basis of the general scope indicated or described, the contractor shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

4	02/12/24	ADDENDUM #4
6	03/01/24	ADDENDUM #6

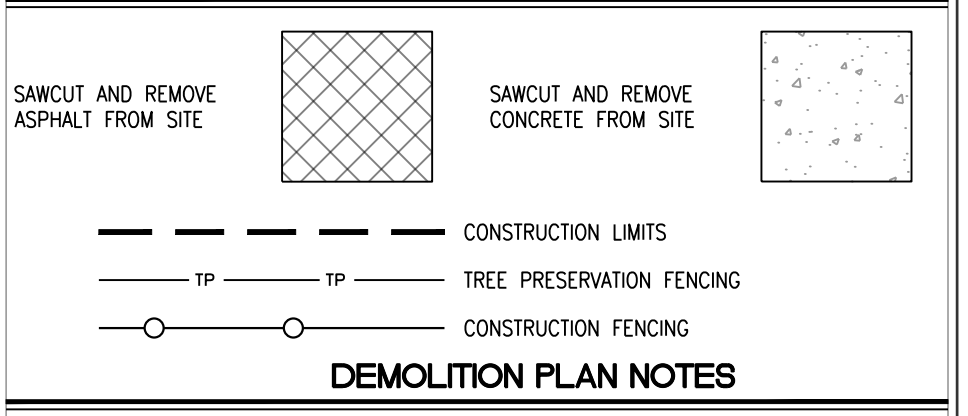
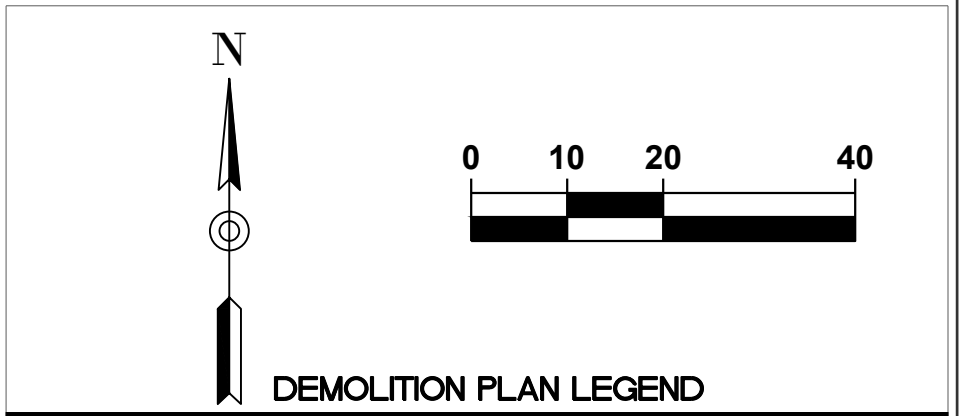
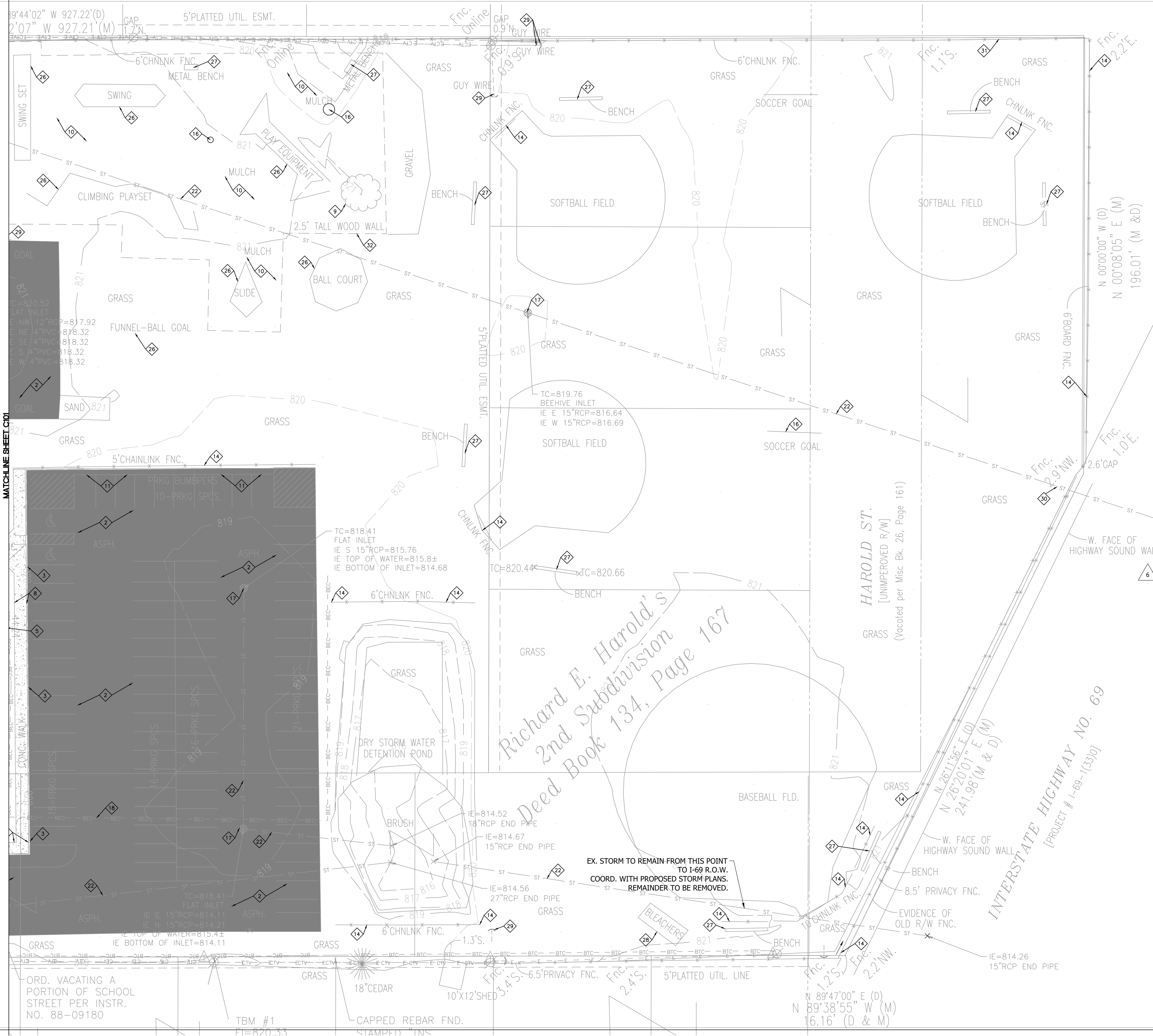
ISSUE DATE 01/15/2023 **DRAWN BY** HKK **CHECKED BY** JAD

DRAWING TITLE:
DEMOLITION PLAN

CERTIFIED BY:
 DAVID A. LACH
 REGISTERED PROFESSIONAL ENGINEER
 INDIANA
 NO. 10000126

DRAWING NUMBER:
C101

PROJECT NUMBER:
2021119



- DEMOLITION PLAN NOTES**
- UTILITY LOCATIONS ARE APPROXIMATE. THE CONTRACTOR IS TO DETERMINE AND FIELD VERIFY ALL HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 - THE CONTRACTOR SHALL COORDINATE ALL WORK ASSOCIATED WITH THE ABANDONMENT, REMOVAL, RELOCATION, AND INSTALLATION OF UTILITIES WITH EVERY UTILITY COMPANY AND OBTAIN THEIR APPROVAL PRIOR TO PERFORMING ANY UTILITY WORK.
 - ALL DEMOLISHED MATERIAL TO BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE NOTED, AND SHALL BE LEGALLY DISPOSED OF OFF-SITE.
 - CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES PER SHEET C401-C403 PRIOR TO COMMENCING DEMOLITION.
 - MAINTAIN PROPER DRAINAGE IN DEMOLITION AREAS.
 - SAWCUT CONCRETE AND ASPHALT SURFACES FOR REMOVAL AS NOTED.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING DAMAGE TO ALL BUILDINGS AND/OR SITE ENTITIES THAT ARE TO REMAIN.
 - THE CONCRETE TO BE SAWCUT SHALL BE SAWCUT TO THE NEAREST CONCRETE JOINT BEYOND THE LIMITS ILLUSTRATED. NOTIFY ENGINEER IF JOINT IS OVER ONE (1) FOOT FROM LINE SHOWN.
 - REMOVAL OR RELOCATION OF ALL LANDSCAPING MUST BE COORDINATED WITH OWNER.
 - OVERHEAD AND/OR UNDERGROUND ELECTRIC AND TELEPHONE CABLES THAT ARE SHOWN TO BE ABANDONED IN PLACE MAY BE CUT AS NECESSARY TO FACILITATE NEW CONSTRUCTION. CONTRACTOR SHALL ENSURE THAT LINES ARE NOT ACTIVE PRIOR TO CUTTING AND OBTAIN UTILITY COMPANY APPROVAL PRIOR TO PERFORMING ANY DEMOLITION.
 - WATER LINES SHALL NOT BE ABANDONED OR DEMOLISHED UNTIL PROPOSED WATER MAINS HAVE BEEN INSTALLED TO A POINT SUCH THAT ONLY MINIMAL DISRUPTION IN WATER SERVICE TO THE EXISTING OCCUPIED BUILDINGS WILL OCCUR. CONTRACTOR TO COORDINATE ANY SERVICE SHUT DOWN WITH THE BUILDING OWNER AT LEAST 72 HOURS PRIOR TO SCHEDULING SHUT DOWN.
 - CONTRACTOR TO ESTABLISH NEW LOCAL SURVEY CONTROL SYSTEM (VERTICAL AND HORIZONTAL) PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITY. MANY TEMPORARY BENCHMARKS UTILIZED IN THE PREPARATION OF THE TOPOGRAPHIC SURVEY FOR THE DESIGN WILL BE RELOCATED AS PART OF CONSTRUCTION.
 - ANY DISCREPANCIES OR CONFLICTS WHICH BECOME APPARENT BEFORE OR DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.

- KEYNOTE LEGEND**
- | | |
|----|---|
| 1 | SAWCUT AND REMOVE CONCRETE SIDEWALK TO THE NEAREST CONCRETE JOINT BEYOND THE LIMITS ILLUSTRATED. NOTIFY ENGINEER IF JOINT IS OVER ONE (1) FOOT FROM LINE SHOWN. |
| 2 | SAWCUT AND REMOVE ASPHALT AND GRANULAR SURFACE. |
| 3 | SAWCUT AND REMOVE CONCRETE CURB FOR PROPOSED SIDEWALK. CURB REMOVAL SHALL INCLUDE EX. CURB TAPERS, WHERE APPLICABLE. |
| 4 | REMOVE AND RELOCATE GAS VALVE AND BOX TO PROPOSED GRADE. |
| 5 | BUILDING DEMOLITION SHALL BE BY THE CONTRACTOR. CONTRACTOR SHALL COORDINATE ALL BUILDING DEMOLITION WITH THE ARCHITECT AND THE OWNER. |
| 6 | REMOVE CANOPY, COLUMNS AND SUPPORTING FOUNDATION (REFER TO ARCHITECTURAL PLANS FOR DEMOLITION SPECIFICATIONS) |
| 7 | REMOVE CONCRETE PAD |
| 8 | REMOVE CONCRETE PAVEMENT |
| 9 | REMOVE TREE, SHRUBS, UNDERBRUSH, LANDSCAPING AND VEGETATION INCLUDING ROOT BALLS |
| 10 | REMOVE MULCH BED AND EDGING |
| 11 | REMOVE CONCRETE PARKING BUMPERS AND REBAR ANCHORS |
| 12 | REMOVE EXISTING SIGN, POLE AND FOUNDATION AND LIGHTS |
| 13 | REMOVE PIPE BOLLARDS AND FOUNDATION |
| 14 | REMOVE FENCE, POSTS AND FOUNDATION |
| 15 | REMOVE FLAGPOLE AND FOUNDATION |
| 16 | REMOVE PLAYGROUND EQUIPMENT AND RETURN TO OWNER FOR REUSE. CONTRACTOR TO HAUL TO LOCATION DETERMINED BY OWNER. (SEE LANDSCAPE PLANS) |
| 17 | REMOVE STORM SEWER STRUCTURE AND CASTING |
| 18 | REMOVE CABLE LINE AND CONDUITS IN THEIR ENTIRETY |
| 19 | REMOVE CABLE TELEVISION PEDESTAL. CONTRACTOR TO COORDINATE REMOVAL WITH UTILITY COMPANY PRIOR TO PERFORMING ANY DEMOLITION. |
| 20 | ADJUST WATER VALVE AND BOX TO PROPOSED GRADE |
| 21 | ADJUST GAS VALVE AND BOX TO PROPOSED GRADE |
| 22 | REMOVE EXISTING PIPE |
| 23 | RELOCATE TREE (SEE LANDSCAPE PLANS) |
| 24 | DISCONNECT AND REMOVE WATER SERVICE. COORDINATE WITH UTILITY COMPANY AND PHASED CONSTRUCTION |
| 25 | UNDERGROUND FUEL TANK TO BE REMOVED BY OWNER |
| 26 | REMOVE PLAYGROUND EQUIPMENT AND FOUNDATIONS |
| 27 | REMOVE BENCH AND FOUNDATIONS |
| 28 | REMOVE BLEACHERS AND RETURN TO OWNER FOR RE-USE. CONTRACTOR TO HAUL TO LOCATION TO BE DETERMINED BY OWNER. |
| 29 | REMOVE EXISTING GUY WIRES. COORDINATE WITH UTILITY COMPANY |
| 30 | ABANDON STORM SEWERS IN PLACE. ADD BRICK BULKHEAD TO THE UPSTREAM END OF PIPE TO REMAIN. |
| 31 | REMOVE EXISTING MULCH |
| 32 | MAILBOXES TO BE REMOVED AND RELOCATED (SEE LANDSCAPE PLANS) |
| 33 | DEMOLISH WESTERN MOST 6' BOARD FENCE. INDOT R/W FENCE AND SOUND WALL TO REMAIN UNDISTURBED. |
| 34 | REMOVE EXISTING CLEANOUT |
| 35 | REMOVE EXISTING CURB RAMP |
| 36 | RELOCATE GAS MARKER. COORDINATE WITH UTILITY COMPANY |
| 37 | RELOCATE FIBER JUNCTION BOX. COORDINATE WITH METRONET. |

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**FISHERS ELEMENTARY SCHOOL
ADDITIONS & RENOVATIONS
DESIGN DEVELOPMENT**

11442 LANTERN
RD., FISHERS, IN
46038

SCOPE DRAWINGS:

These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the project or the construction of the building. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

4	02/12/24	ADDENDUM #4
6	03/01/24	ADDENDUM #6

ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:

**DEMOLITION
PLAN**

CERTIFIED BY:

David A. Lach

DAVID A. LACH
REGISTERED
PE 10000126
STATE OF
INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER

C102

PROJECT NUMBER

2021119

*Richard E. Harold's
2nd Subdivision
Deed Book 134, Page 167*

EX. STORM TO REMAIN FROM THIS POINT TO I-69 R.O.W. COORD. WITH PROPOSED STORM PLANS. REMAINDER TO BE REMOVED.

ORD. VACATING A PORTION OF SCHOOL STREET PER INSTR. NO. 88-09180

TBM #1
FI=820.33

18" CEDAR
CAPPED REBAR FND.
STAMPED TINS

N 89°47'00" E (D)
N 89°38'55" W (M)
16.16' (D & M)

INTERSTATE HIGHWAY NO. 69
[PROJECT # I-69-1(33)0]

HAROLD ST.
[UNIMPERVED R/W]
(Vacated per Misc Bk. 26, Page 161)

R920-E

Solar-Powered Rectangular Rapid Flashing Beacon Data Sheet



Rectangular rapid flashing beacons (RRFBs) improve pedestrian safety by increasing yield rates to 72-96% at crosswalks*:

- ✓ The benchmark for RRFBs, the R920-E meets MUTCD requirements, including IAW-21, and is Buy America compliant
- ✓ Compact and lightweight solar engine
- ✓ Audible pushbutton activation with all ADA compliance features
- ✓ Solar Power Report™ (SPR) prepared for every location to ensure battery longevity

Superior Design and Technology
The R920-E utilizes a self-contained solar engine integrating the Energy Management System (EMS) with an on-board user interface, housed in a compact enclosure together with the batteries and solar panel. MUTCD interim approval IAW-21 flash pattern and multiple configurations enable the R920-E to handle all crosswalk applications.

Easy Installation
With its highly efficient and compact design, installation is quick and uncomplicated, dramatically reducing installation costs. Retrofitting can be done where existing sign bases are used to enhance existing marked crosswalks in minutes, and new installations can be completed without the cost of larger poles, new bases, and trenching.

Advanced User Interface
The R920-E comes with an on-board user interface for quick configuration and status monitoring. It allows for simple in-the-field adjustment of flash pattern, duration, intensity, ambient auto adjust, night dimming, and many more. Settings are automatically sent wirelessly to all units in the system.

Reliable
Every solar-powered model is solar-sized by location to ensure year-after-year operation. Carmanah includes a Solar Power Report to prove sustainability over a 12-month period.



*U.S. Department of Transportation Federal Highway Administration, Publication No. FHWA-04-10-042
"Effect of Rectangular Rapid Flashing Beacons on Yielding at Midway Intersected Crosswalks"

carmanah.com | 1.844.412.8395 | traffic@carmanah.com

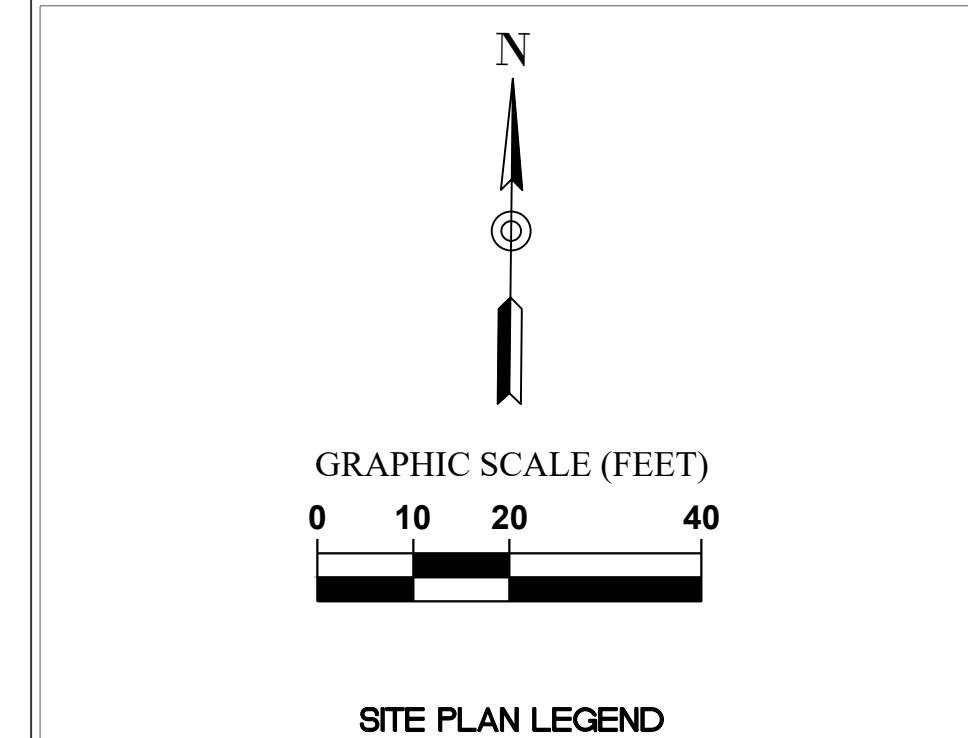
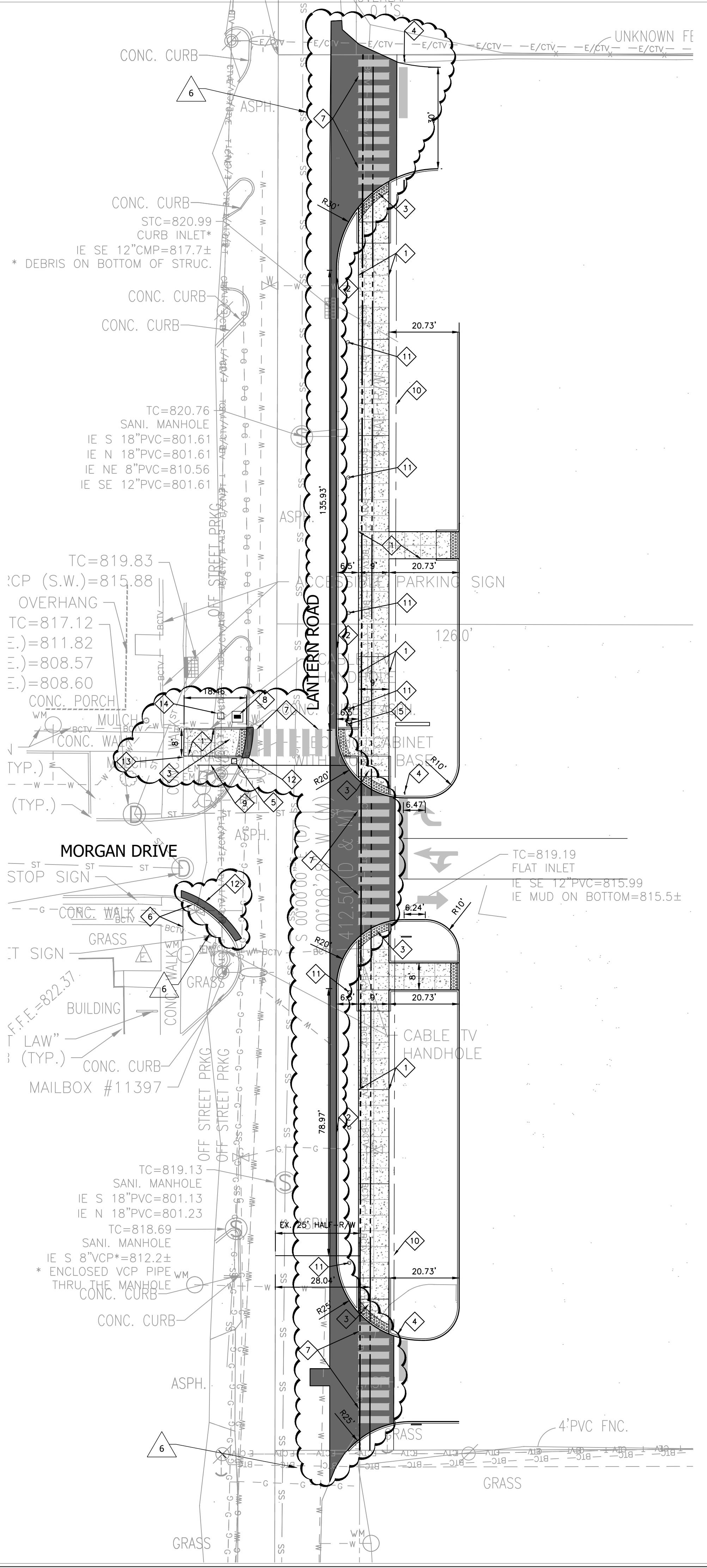
R920-E

Solar-Powered Rectangular Rapid Flashing Beacon Data Sheet

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SOLAR ENGINE DIMENSIONS		SYSTEM SPECIFICATIONS	
Side View	4.5" (K2.0)	Adjustable system settings with auto-reading LED display on rear panel EMS	
Bottom View	13.5" (K2.0)	System test, status, and fault detection battery, solar, battery, beacons, cables, daylight	
Front View	14.5" (K1.1)	Flash pattern: RR8 (WW-V), RR9 (WW-V) legend, RR2 (WW-V), RR3 (WW-V), RR4 (WW-V), RR5 (WW-V), RR6 (WW-V), RR7 (WW-V), RR8 (WW-V), RR9 (WW-V), RR10 (WW-V), RR11 (WW-V), RR12 (WW-V), RR13 (WW-V), RR14 (WW-V), RR15 (WW-V), RR16 (WW-V), RR17 (WW-V), RR18 (WW-V), RR19 (WW-V), RR20 (WW-V), RR21 (WW-V), RR22 (WW-V), RR23 (WW-V), RR24 (WW-V), RR25 (WW-V), RR26 (WW-V), RR27 (WW-V), RR28 (WW-V), RR29 (WW-V), RR30 (WW-V), RR31 (WW-V), RR32 (WW-V), RR33 (WW-V), RR34 (WW-V), RR35 (WW-V), RR36 (WW-V), RR37 (WW-V), RR38 (WW-V), RR39 (WW-V), RR40 (WW-V), RR41 (WW-V), RR42 (WW-V), RR43 (WW-V), RR44 (WW-V), RR45 (WW-V), RR46 (WW-V), RR47 (WW-V), RR48 (WW-V), RR49 (WW-V), RR50 (WW-V), RR51 (WW-V), RR52 (WW-V), RR53 (WW-V), RR54 (WW-V), RR55 (WW-V), RR56 (WW-V), RR57 (WW-V), RR58 (WW-V), RR59 (WW-V), RR60 (WW-V), RR61 (WW-V), RR62 (WW-V), RR63 (WW-V), RR64 (WW-V), RR65 (WW-V), RR66 (WW-V), RR67 (WW-V), RR68 (WW-V), RR69 (WW-V), RR70 (WW-V), RR71 (WW-V), RR72 (WW-V), RR73 (WW-V), RR74 (WW-V), RR75 (WW-V), RR76 (WW-V), RR77 (WW-V), RR78 (WW-V), RR79 (WW-V), RR80 (WW-V), RR81 (WW-V), RR82 (WW-V), RR83 (WW-V), RR84 (WW-V), RR85 (WW-V), RR86 (WW-V), RR87 (WW-V), RR88 (WW-V), RR89 (WW-V), RR90 (WW-V), RR91 (WW-V), RR92 (WW-V), RR93 (WW-V), RR94 (WW-V), RR95 (WW-V), RR96 (WW-V), RR97 (WW-V), RR98 (WW-V), RR99 (WW-V), RR100 (WW-V)	
Solar Engine Mounting		Intensity setting: 20 to 1400 nch for multiple RRFBs, circular beacons, or LED array or sign	
Light Bar Configuration		Nighttime flashing: 10 to 100% of daytime intensity	
On-Board User Interface (UBI)		Ambient Auto Adjust: increases intensity during bright daytime	
In-Field Adjust		Automatic light control: reduces intensity if the battery is extremely low	
Beacon Communication		Temperature correction: yellow beacons	
Energy Collection		Calendar: internal time clock function	
Energy Storage		Each setting: adjustable, selectively disabled from 1 to 14	
Solar Engine Construction		Output: enabled when beacons flashing daytime and nighttime, or nighttime only	
Environmental		Activation counts and data reporting via UBI or optional USB connection	
Activation		Unencrypted, wireless radio with 2.4 GHz mesh technology	
Warranty		Wireless update of settings from any unit to all systems on the same radio channel	
Customer		Use: replaceable multiple channels to group different beacons and ensure a robust wireless signal	
		Communications with all other Carmanah radio-enabled systems including our R920-E, C, and C-Classic beacons	
		Instantaneous wireless activation <100 ms	
		Wireless range: 1000 ft (300 m)	
		Integrated, sealed, weatherproof antenna	
		15 W high efficiency photovoltaic solar panel	
		40 amp hr for optimal energy collection	
		Maximum Power Point Tracking with Temperature Compensation (MPPT) I2C battery charger for optimal energy collection in all solar and battery conditions	
		12 V/8 Ah battery system	
		Replaceable, recyclable, sealed, maintenance free, lead-acid AGM batteries offer the widest temperature range and longest life	
		Battery design life: >5 yrs	
		Tool-less battery change with quick connect terminals and strapping for easy installation	
		Weatherproof, gasketed enclosure with vents for ambient air transfer	
		IP68/IK08	
		Lockable, hinged lid for access to on-board user interface and batteries	
		Corrosion-resistant aluminum with stainless steel hardware	
		Non-abrasive finish or white, black, or green powder coated	
		Powered to minimize installation time	
		High efficiency status and EMS, the most compact, lightweight system	
		10 to 95 lbs including batteries, excluding beacons and pushbutton	
		35 to 100" x 1.5" to 2" x 2" system operating temperature	
		40 to 140" x 1.5" to 2" x 2" system operating temperature	
		150 mph (241 km/h) wind speed as per AASHTO U15-6	
		Pullout force: ADA-compliant, push-driven with visual LED and two-tone audible optophone	
		Audible pushbutton station: ADA-compliant, push-driven with visual LED and customizable vocal message confirmation	

Specifications subject to local environmental conditions, and may be subject to change.
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Document: Carmanah_R920_E_Rev0



SITE PLAN LEGEND

(---)	PROPERTY LINE
(---)	EASEMENT LINE
(---)	RIGHT-OF-WAY
(---)	CONSTRUCTION LIMITS
(---)	FENCE
(---)	GUARD RAIL
(---)	BUILDING LIMITS
(---)	BICYCLE ROUTE
(---)	PARKING COUNT

- #### SITE WORK GENERAL NOTES AND SPECIFICATIONS
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, OR VERIFYING, THAT ALL PERMITS AND APPROVALS ARE OBTAINED FROM THE RESPECTIVE CITY, COUNTY, STATE AND ANY OTHER REGULATORY AGENCIES PRIOR TO STARTING CONSTRUCTION.
 - EXISTING UTILITY LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL DETERMINE AND FIELD VERIFY ALL HORIZONTAL AND VERTICAL LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY AND OBTAIN APPROVAL FROM EACH RESPECTIVE UTILITY COMPANY PRIOR TO PERFORMING ANY WORK ON OR IN THE VICINITY OF EXISTING UTILITIES LINES AND APPURTENANCES.
 - IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND CONTRACTOR TO MAINTAIN QUALITY CONTROL THROUGHOUT THE PROJECT; FAILURE TO DO SO MAY RESULT IN REMOVAL AND REPLACEMENT OF THE DEFECTIVE WORK. IT IS RECOMMENDED THAT THE DEVELOPER HAVE A QUALIFIED INSPECTOR ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
 - ALL QUANTITIES GIVEN ON THE PRINTS, VERBALLY OR IN THE SCOPE OF WORK SECTION ARE ESTIMATES AND SHALL BE CONFIRMED BY THE BIDDING CONTRACTOR.
 - OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS FINAL RULE 29 CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH.
 - EXCAVATIONS EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRE THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER.
 - IT IS ESSENTIAL THAT THE WORK TO BE COMPLETED IN CONJUNCTION WITH THIS PROJECT SHALL BE INSTALLED ACCORDING TO THESE PLANS AND SPECIFICATIONS. THE ENGINEER WILL BE REQUIRED TO CERTIFY TO CERTAIN PORTIONS OF THIS PROJECT UPON COMPLETION. THEREFORE, IT IS NECESSARY TO OBTAIN APPROVAL AND ACCEPTANCE BY THE CITY THAT CONSTRUCTION WAS COMPLETED IN COMPLIANCE WITH THESE PLANS AND SPECIFICATIONS.
 - LOCATIONS & ELEVATIONS OF "FLOODWAY LIMITS" AND "100 YEAR FLOOD LIMITS" ARE SHOWN FOR REFERENCE ONLY. DEVELOPER/BUILDER/INDIVIDUAL LOT OWNER TO REFER TO NATIONAL FLOOD HAZARD INSURANCE MAP (F.E.M.A.) TO DETERMINE FLOOD HAZARD POTENTIAL PRIOR TO PROJECT CONSTRUCTION.

- #### SITE PLAN NOTES
- ALL RADI AND STREET DIMENSIONS SHALL BE MEASURED TO BACK OF CURB OR FACE OF INTERNAL CURB AND WALK. ALL DIMENSIONS TO THE BUILDING ARE TO THE OUTSIDE OF BUILDING FOUNDATION WALL.
 - ALL PAVEMENT AND/OR CURB RADI TO BE FIVE (5) FOOT UNLESS OTHERWISE NOTED.
 - READING DIMENSIONS AND EASEMENTS ARE SHOWN FOR REFERENCE ONLY. REFER TO RECORDED BOUNDARY SURVEYS, ALIENS AND SECONDARY PLANS FOR EXACT INFORMATION.
 - ALL PARKING SPACES SHALL BE 9' X 20' OR 10' X 18' WHERE ADJACENT TO SIDEWALK OR DRIVEWAY. WHERE INTERNAL CURB AND WALK IS ADJACENT TO A PARKING SPACE TWO (2) FEET MINIMUM CLEARANCE FROM PARKING AREA OVERHANGING PARKING SPACES ARE DIMENSIONED TO THE FACE OF CURB.
 - SEE ELECTRICAL PLANS FOR DETAILS OF BUILDINGS AND BUILDING OWNERS USE.
 - TEMPORARY TRAFFIC CONTROL DURING CONSTRUCTION SHALL CONFORM TO APPLICABLE LOCAL STANDARDS.
 - REFER TO UTILITY PLAN FOR SANITARY AND STORM STRUCTURE LOCATIONS.
 - ANY DISCREPANCIES OR CONFLICTS WHICH BECOME APPARENT BEFORE OR DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.

- #### KEYNOTE LEGEND
- | | |
|----|--|
| 1 | CONCRETE SIDEWALK (LIMITS ILLUSTRATED MAY BE DIFFERENT AT SAWCUT LOCATIONS DUE TO EXISTING JOINT LOCATIONS AND DEMOLITION LIMITS). |
| 2 | COMBINED WALK AND CURB (LIMITS ILLUSTRATED MAY BE DIFFERENT AT SAWCUT LOCATIONS DUE TO EXISTING JOINT LOCATIONS AND DEMOLITION LIMITS). |
| 3 | PERPENDICULAR CURB RAMPS WITH RETURNED CURBS PER FISHERS STANDARDS. |
| 4 | STOP SIGN, WITH "CROSS TRAFFIC DOES NOT STOP" |
| 5 | R920-E SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON BI-DIRECTIONAL CONFIGURATION MOUNTED ON 4-INCH FISHERS GREEN (FM 50MA) PEDESTAL POLES |
| 6 | NEW 6-INCH CONCRETE CURB: CURB SHALL BE FLUSH ALONG EAST SIDE OF EX. CURB RAMP |
| 7 | MAX. 6-FOOT TAPER TO 6-INCH CURB HEIGHT FROM EX. RAMP TO EX. CURB. MAX. 2-INCH CONC. BETWEEN NEW CURB AND EX. DETECTABLE WARNING SURFACE. |
| 8 | PAVEMENT MARKINGS IN R/W AND TRANSPORTATION EASEMENT TO BE THERMOPLASTIC. |
| 9 | RELOCATED GAS TANKER |
| 10 | DIRECT BORE 2-INCH CONDUIT - SEE ELECTRICAL PLANS |
| 11 | TRANSPORTATION EASEMENT |
| 12 | LANTERN ROAD STREET LIGHTS - SEE ELECTRICAL PLANS |
| 13 | HAND TOoled JOINT TO ALIGN WITH CURBS NORTH AND SOUTH ACROSS NEW WALK |
| 14 | RELOCATED FIBER BOX. COORDINATE WITH METRONET. |

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SCOPE DRAWINGS:
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The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.
On the basis of the general scope indicated or described the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

4	02/12/24	ADDENDUM #4
6	03/01/24	ADDENDUM #6

ISSUE DATE DRAWN BY CHECKED BY

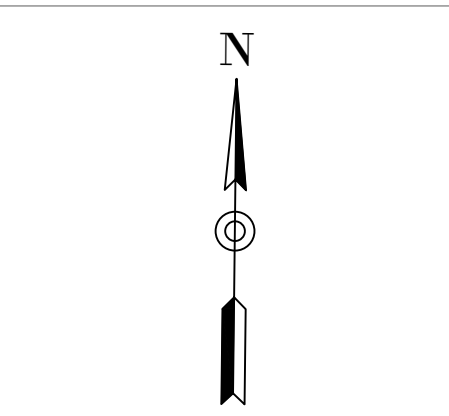
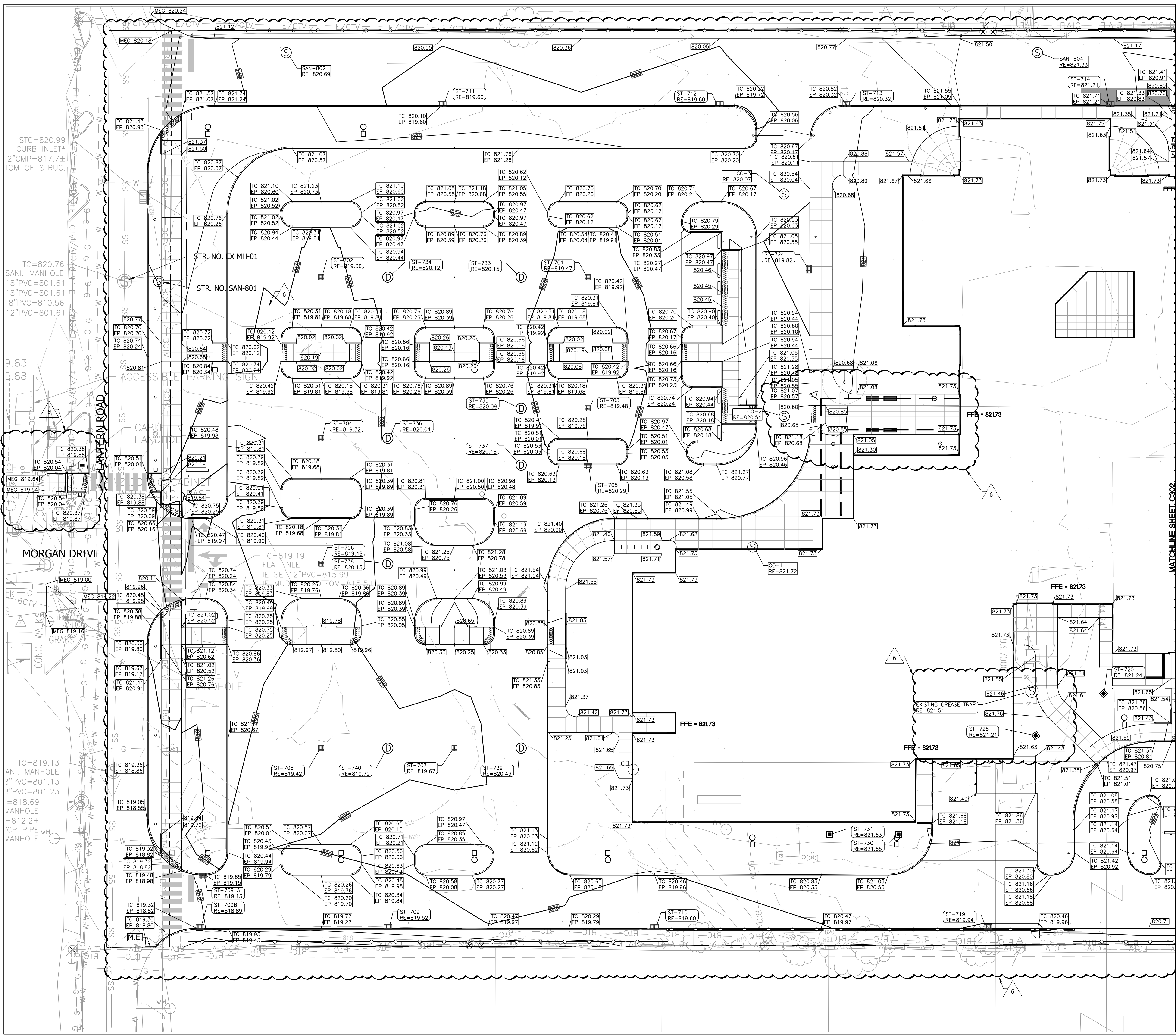
01/15/2023	KDK	JAD
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DRAWING TITLE:
LANTERN ROAD IMPROVEMENT PLAN

CERTIFIED BY:
DAVID A. LASH
REGISTERED PROFESSIONAL ENGINEER
NO. 10000126
STATE OF INDIANA

DRAWING NUMBER
C201

PROJECT NUMBER
2021119



GRADING PLAN LEGEND

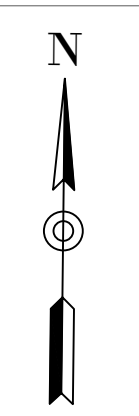
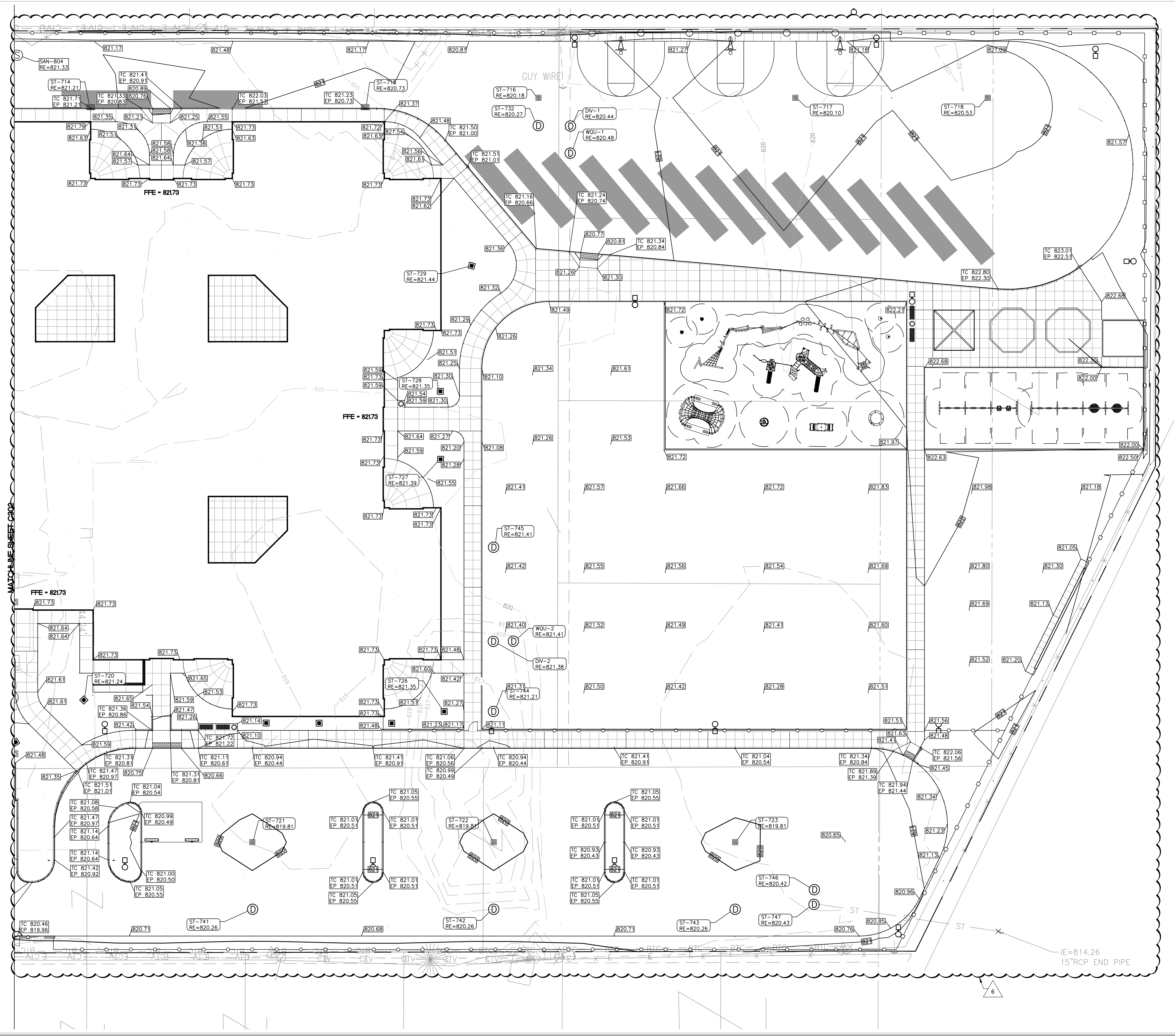
- PROPOSED 1' CONTOUR
- PROPOSED 5' CONTOUR
- PROPOSED SWALE
- PROPOSED SWALE WITH SUB-SURFACE DRAIN
- GRADE BREAK LINE
- PROPOSED GRADE
- MATCH EXISTING GRADE
- PROPOSED TOP OF CURB
- PROPOSED EDGE OF PAVEMENT
- PROPOSED TOP OF WALL
- PROPOSED BOTTOM OF WALL
- FINISHED FLOOR ELEVATION
- RIM ELEVATION
- FLOOD ROUTE PATH
- DRAINAGE FLOW ARROW

GRADING PLAN NOTES

1. UTILITY LOCATIONS ARE APPROXIMATE. THE CONTRACTOR IS TO DETERMINE AND FIELD VERIFY ALL HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. ALL GRADES AT BOUNDARY SHALL MEET EXISTING GRADES.
3. RIM ELEVATION (RE) SHALL INDICATE THE ELEVATION THAT WATER WOULD ENTER THE GRATE FOR ALL CASTINGS. IF CASTING HAS SOLID LID, THE RE IS THE LID ELEVATION.
4. BUILDING PAD AREAS AND PAVED AREAS DESIGNATED FOR FILL SHALL BE CONSTRUCTED OF SUITABLE FILL MATERIAL AND COMPACTED PER SPECIFICATIONS. ALL FILL AREAS SHALL BE STRIPPED OF TOPSOIL PRIOR TO PLACEMENT OF FILL.
5. ANY EXCESS SOIL MATERIAL SHALL BE EXPORTED FROM THE SITE AFTER CONSTRUCTION IS COMPLETED.
6. TOPSOIL SHALL BE PLACED IN LAWN, LANDSCAPE, MOUNDING AND NONSTRUCTURAL FILL AREAS. UPON COMPLETION OF MASS EARTHWORK, TOPSOIL SHALL BE SPREAD TO A DEPTH OF FOUR TO SIX (4 TO 6) INCHES IN AREAS LISTED ABOVE. TOPSOIL SHALL NOT BE UTILIZED AS STRUCTURAL FILL IN PAVED AREAS.
7. CONTRACTOR SHALL PRESERVE EXISTING TREES WHEREVER POSSIBLE. CLEARING LIMITS SHALL CONSIST OF ALL TREES WITHIN PAVED AREAS, UTILITY INSTALLATION LIMITS, AND CUT/FILL AREAS.
8. A GEOTECHNICAL REPORT HAS BEEN PROVIDED FOR THIS PROJECT FOR REFERENCE. CONTRACTOR TO REVIEW PRIOR TO START OF CONSTRUCTION.

FLOODPLAIN NOTES

1. THE SITE IS LOCATED WITHIN THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 18057C0234G, REVISED NOVEMBER 19, 2014.



GRADING PLAN LEGEND

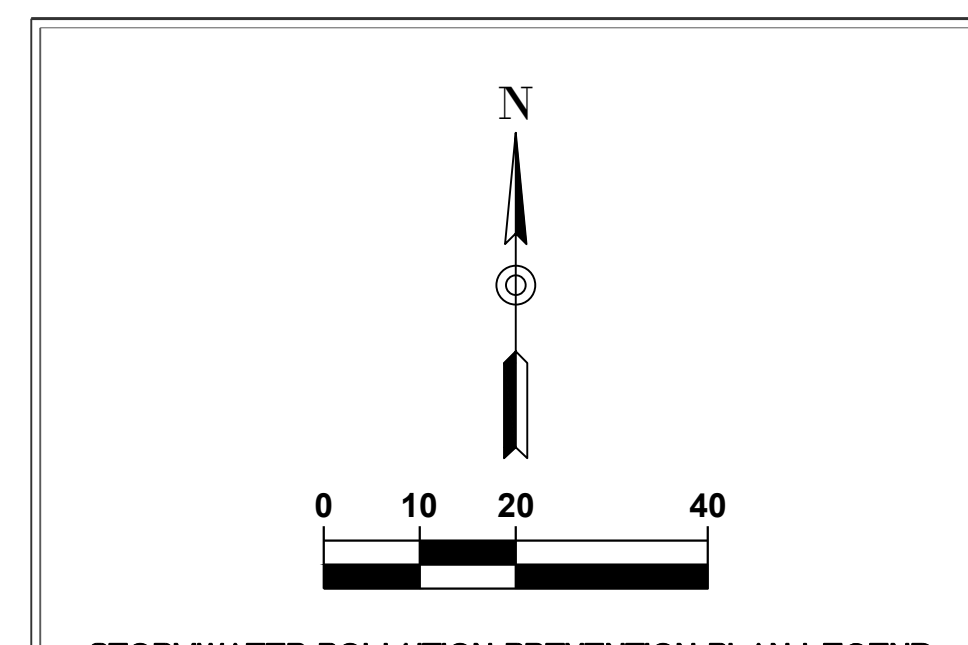
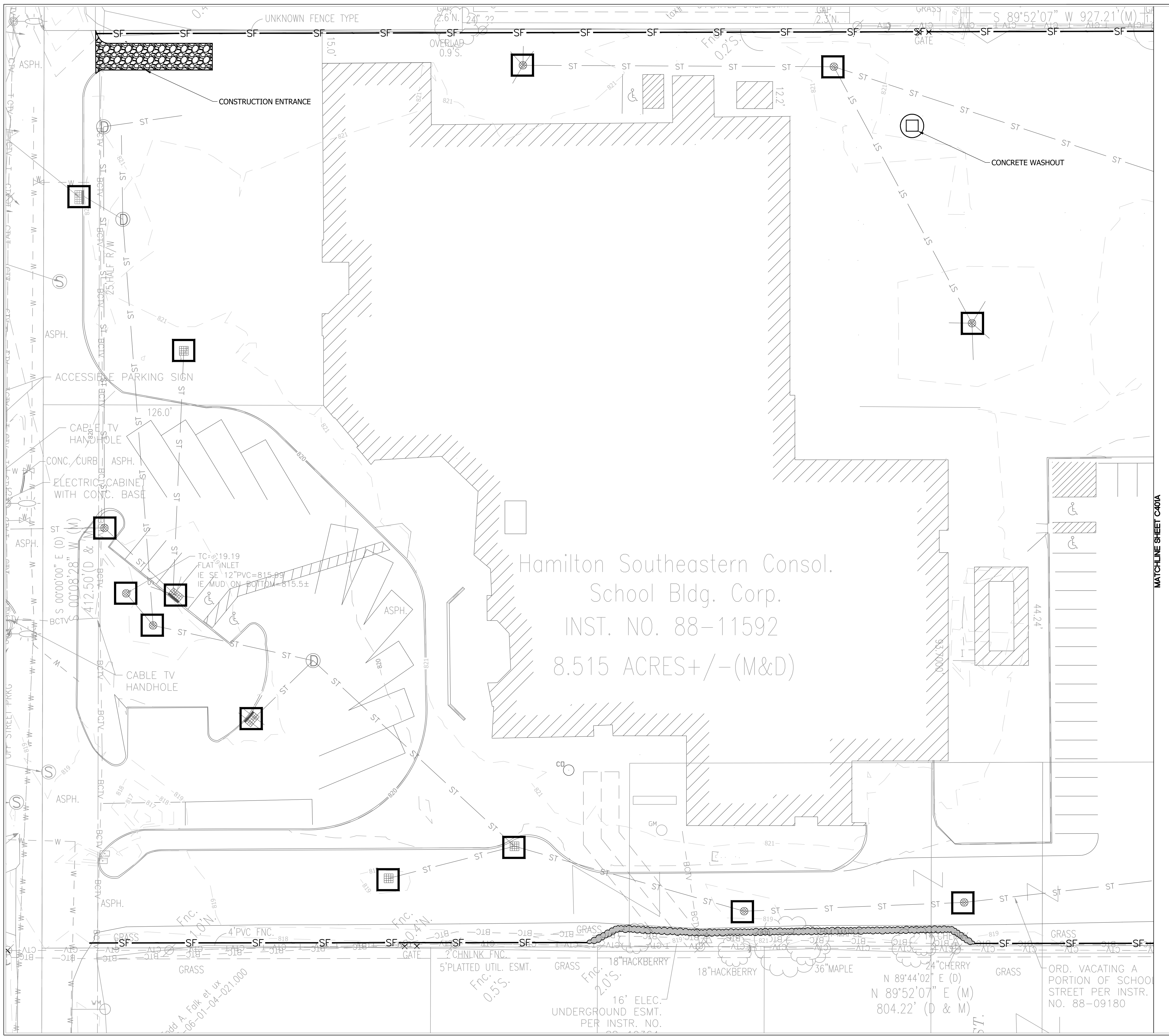
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1. UTILITY LOCATIONS ARE APPROXIMATE. THE CONTRACTOR IS TO DETERMINE AND FIELD VERIFY ALL HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
2. ALL GRADES AT BOUNDARY SHALL MEET EXISTING GRADES.
3. RIM ELEVATION (RE) SHALL INDICATE THE ELEVATION THAT WATER WOULD ENTER THE GRATE FOR ALL CASTINGS. IF CASTING HAS SOLID LID, THE RE IS THE LID ELEVATION.
4. BUILDING PAD AREAS AND PAVED AREAS DESIGNATED FOR FILL SHALL BE CONSTRUCTED OF SUITABLE FILL MATERIAL AND COMPACTED PER SPECIFICATIONS. ALL FILL AREAS SHALL BE STRIPPED OF TOPSOIL PRIOR TO PLACEMENT OF FILL.
5. ANY EXCESS SOIL MATERIAL SHALL BE EXPORTED FROM THE SITE AFTER CONSTRUCTION IS COMPLETED.
6. TOPSOIL SHALL BE PLACED IN LAWN, LANDSCAPE, MOUNDING AND NONSTRUCTURAL FILL AREAS. UPON COMPLETION OF MASS EARTHWORK, TOPSOIL SHALL BE SPREAD TO A DEPTH OF FOUR TO SIX (4 TO 6) INCHES IN AREAS LISTED ABOVE. TOPSOIL SHALL NOT BE UTILIZED AS STRUCTURAL FILL IN PAVED AREAS.
7. CONTRACTOR SHALL PRESERVE EXISTING TREES WHEREVER POSSIBLE. CLEARING LIMITS SHALL CONSIST OF ALL TREES WITHIN PAVED AREAS, UTILITY INSTALLATION LIMITS, AND CUT/FILL AREAS.
8. A GEOTECHNICAL REPORT HAS BEEN PROVIDED FOR THIS PROJECT FOR REFERENCE. CONTRACTOR TO REVIEW PRIOR TO START OF CONSTRUCTION.

FLOODPLAIN NOTES

1. THE SITE IS LOCATED WITHIN THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 18057C0234G, REVISED NOVEMBER 19, 2014.



STORMWATER POLLUTION PREVENTION PLAN LEGEND

---	CONSTRUCTION LIMITS
TP	TREE PRESERVATION FENCING
SF	SILT FENCE BARRIER INSTALLATION
[Hatched Box]	PERMANENT SEEDING WITH EROSION CONTROL BLANKET (NAG SC150 OR EQUAL)
[Dotted Box]	PERMANENT SEEDING
[Solid Grey Box]	TEMPORARY SEEDING
[Stippled Box]	TEMPORARY CONSTRUCTION DRIVE. UTILIZE EXISTING PAVED DRIVE AS CONSTRUCTION ENTRANCE.
[Cross-hatched Box]	CONTRACTOR STAGING AREA SHALL UTILIZE THE EXISTING ASPHALT AREA. CONTRACTOR SHALL REPAIR ALL DAMAGED ASPHALT WITHIN THE AREA UPON COMPLETION OF THE PROJECT AND SHALL MEET THE STANDARDS AS DICTATED ON DETAILS.
[Circle with X]	CONCRETE WASHOUT
[Rectangular Box]	ROCK CHECK DAM
[Vertical Line with Dots]	NPDES PUBLIC POSTING SIGN
[Rectangular Box]	CONSTRUCTION TRAILER
[Square with X]	CONSTRUCTION DUMPSTER
[Square with Circle]	GEOTEXTILE FABRIC YARD DROP INLET PROTECTION
[Square with X]	INSERT (BAG) INLET PROTECTION
[Square with Circle]	INSERT (BAG) CURB INLET PROTECTION WITH CURB FILTER
[Trapezoidal Shape]	CONCRETE END SECTION RIPRAP (UPPER AND LOWER INV)
[Cloud Shape]	COIR LOG EROSION CONTROL

- STORMWATER POLLUTION PREVENTION PLAN NOTES**
- REFER TO SHEET C404 FOR SOILS MAP AND SOIL CHARACTERISTICS.
 - REFER TO SHEET C405 FOR STORMWATER POLLUTION PREVENTION DETAILS.
 - REFER TO LANDSCAPE PLANS FOR PLANTING DETAILS. ANY MOUNDING NOTED ON LANDSCAPE PLANS SHALL NOT CHANGE THE DRAINAGE PATTERN NOTED IN THE GRADING PLAN SERIES C300'S.
 - SILT FENCE BARRIER TO BE INSTALLED PRIOR TO CONSTRUCTION.
 - EROSION CONTROL MEASURES TO BE MAINTAINED THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS.
 - REFER TO THE STORMWATER POLLUTION PREVENTIONS NOTES SHEET C404 FOR ALL EROSION CONTROL MEASURES, SCHEDULES, AND SEQUENCES.
 - CONTRACTOR TO MAINTAIN A STABLE TEMPORARY CONSTRUCTION DRIVE FROM THE SITE TO KEEP MUD AND SEDIMENT OFF PUBLIC ROADS.
 - EROSION CONTROL MAINTENANCE - SITE TO BE INSPECTED AT LEAST ONCE A WEEK AND MAKE REPAIRS IMMEDIATELY AFTER PERIODS OF 1/2" RAINFALL OR GREATER.
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 - THIS SITE IS NOT IMPACTED BY THE 100 YEAR FLOODPLAIN.
 - PRESENCE OF HYDRIC SOILS: NONE.
 - CONTRACTOR SHALL PROVIDE THE CITY OF FISHERS WITH A NARRATIVE DESCRIBING THE CONSTRUCTION SEQUENCE, INCLUDING START DATES FOR EACH LAND DISTURBING ACTIVITY.
 - THE ACTUAL PERSON RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF THE EROSION CONTROL SHALL BE DETERMINED DURING THE BIDDING PROCESS. THE AWARD WINNING CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES. ONCE DETERMINED, CONTRACTOR SHALL COORDINATE WITH THE CITY.
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- PRE-CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN SEQUENCE AND IMPLEMENTATION**
- INSTALL CONSTRUCTION FENCING AND GATES IF REQUIRED.
 - INSTALL SILT FENCING, COIR LOGS, & INLET PROTECTION. DUST SHALL BE KEPT TO A MINIMUM BY UTILIZING SPRINKLING WATER OR OTHER APPROVED METHODS.
 - IDENTIFY CONSTRUCTION STAGING AREA, CONCRETE WASHOUT AREAS, MATERIAL STORAGE AND TOPSOIL STOCKPILE AREAS. EACH AREA SHALL BE PROPERLY PROTECTED AND DELINEATED PRIOR TO CONSTRUCTION.
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 - IDEM AND THE LOCAL CITY AGENCY MUST BE NOTIFIED WITHIN 48 HOURS OF COMMENCING CONSTRUCTION.
 - CONTACT INDIANA UNDERGROUND PLANNED PROTECTION SYSTEMS, INC. ("INDIANA 811") FOR UNDERGROUND UTILITY LOCATIONS. (1-800-382-5544).
 - BEFORE OPENING UP THE SITE, FIRST EVALUATE, MARK AND PROTECT IMPORTANT TREES AND ASSOCIATED ROOT ZONES, UNIQUE AREAS TO BE PRESERVED (I.E. WETLANDS), STREAMS, LAKES OR EXISTING VEGETATION SUITABLE FOR USE AS FILTER STRIPS (ESPECIALLY IN PERIMETER AREAS). SEE LANDSCAPE PLANS FOR PROPOSED PLANTING SCHEDULE.

Hamilton Southeastern Consol.
School Bldg. Corp.
INST. NO. 88-11592
8.515 ACRES+/- (M&D)

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**FISHERS ELEMENTARY SCHOOL
ADDITIONS & RENOVATIONS
DESIGN DEVELOPMENT**
11442 LANTERN
RD, FISHERS, IN
46038

SCOPE DRAWINGS:
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REVISIONS:

4	02/12/24	ADDENDUM #4
6	03/01/24	ADDENDUM #6

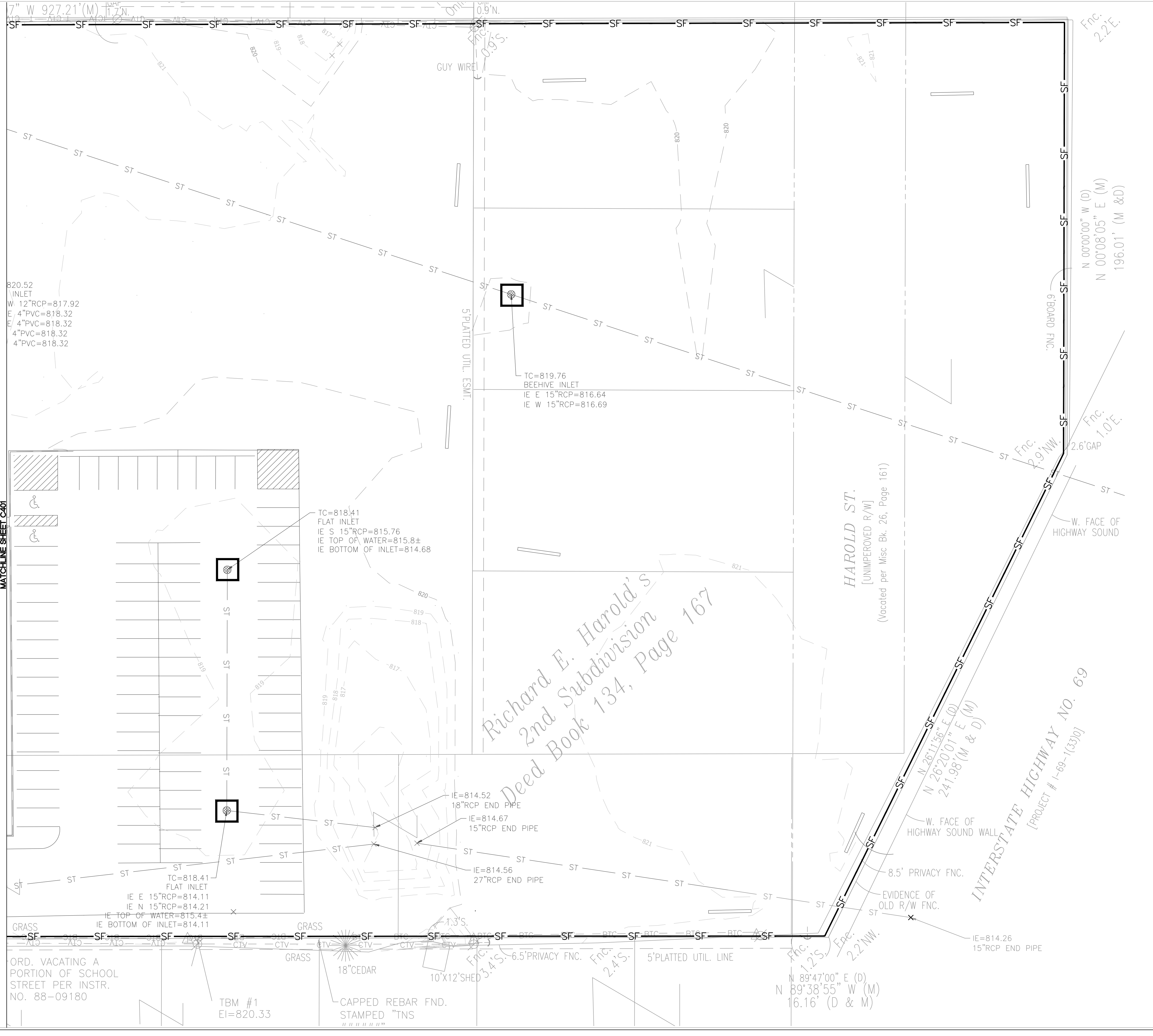
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
PRE-CONSTRUCTION EROSION CONTROL PLAN

CERTIFIED BY:
David A. Lach
DAVID A. LACH
REGISTERED PROFESSIONAL ENGINEER
STATE OF INDIANA
PE 10000126

DRAWING NUMBER
C401

PROJECT NUMBER
2021119



MATCHLINE SHEET C401

ORD. VACATING A PORTION OF SCHOOL STREET PER INSTR. NO. 88-09180

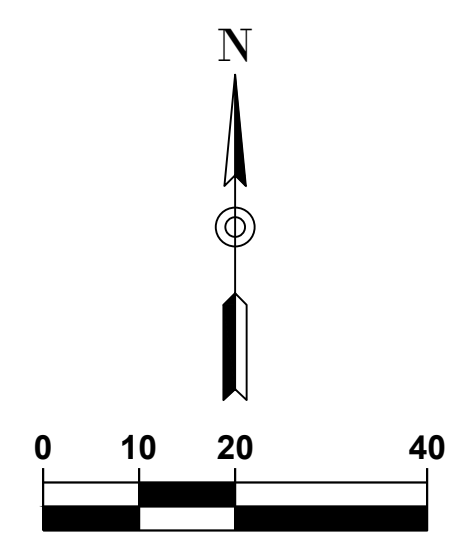
TBM #1
E1=820.33

18" CEDAR
CAPPED REBAR FND.
STAMPED "TNS"

*Richard E. Harold's
2nd Subdivision
Deed Book 134, Page 167*

HAROLD ST.
[UNIMPROVED R/W]
(Vacated per Misc Bk. 26, Page 161)

INTERSTATE HIGHWAY NO. 69
[PROJECT # 1-69-1(33)0]



STORMWATER POLLUTION PREVENTION PLAN LEGEND

- CONSTRUCTION LIMITS
- TP TREE PRESERVATION FENCING
- SF SILT FENCE BARRIER INSTALLATION
- PERMANENT SEEDING WITH EROSION CONTROL BLANKET (NAG SC150 OR EQUAL)
- PERMANENT SEEDING
- TEMPORARY SEEDING
- TEMPORARY CONSTRUCTION DRIVE, ONCE CONSTRUCTION IS COMPLETE, CONTRACTOR SHALL REMOVE STONE, GEOTEXTILE, RESPREAD TOPSOIL, AND PERMANENT SEED ENTIRE AREA.
- CONTRACTOR STAGING AREA SHALL UTILIZE THE EXISTING ASPHALT AREA. CONTRACTOR SHALL REPAIR ALL DAMAGED ASPHALT WITHIN THE AREA UPON COMPLETION OF THE PROJECT AND SHALL MEET THE STANDARDS AS DICTATED ON DETAILS.
- CONCRETE WASHOUT
- ROCK CHECK DAM
- NPDES PUBLIC POSTING SIGN
- CONSTRUCTION TRAILER
- CONSTRUCTION DUMPSTER
- GEOTEXTILE FABRIC YARD
- DROP INLET PROTECTION
- INSERT (BAG) INLET PROTECTION
- INSERT (BAG) CURB INLET PROTECTION WITH CURB FILTER
- CONCRETE END SECTION RIPRAP (UPPER AND LOWER INV)
- COIR LOG EROSION CONTROL

STORMWATER POLLUTION PREVENTION PLAN NOTES

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2. REFER TO SHEET C405 FOR STORMWATER POLLUTION PREVENTION DETAILS.
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PRE-CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN SEQUENCE AND IMPLEMENTATION

1. INSTALL CONSTRUCTION FENCING AND GATES IF REQUIRED.
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**FISHERS ELEMENTARY SCHOOL
ADDITIONS & RENOVATIONS
DESIGN DEVELOPMENT**
11442 LANTERN
RD, FISHERS, IN
46038

SCOPE DRAWINGS:
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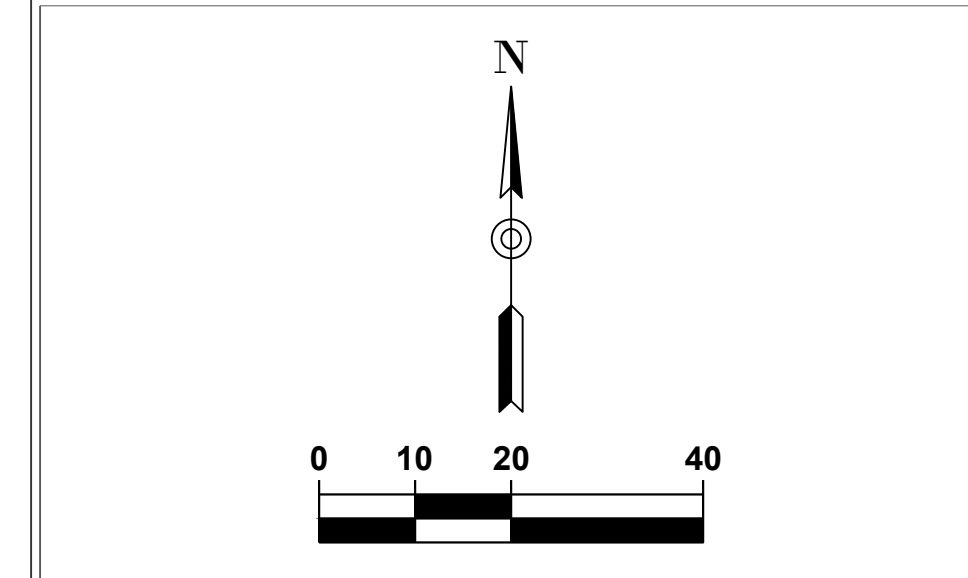
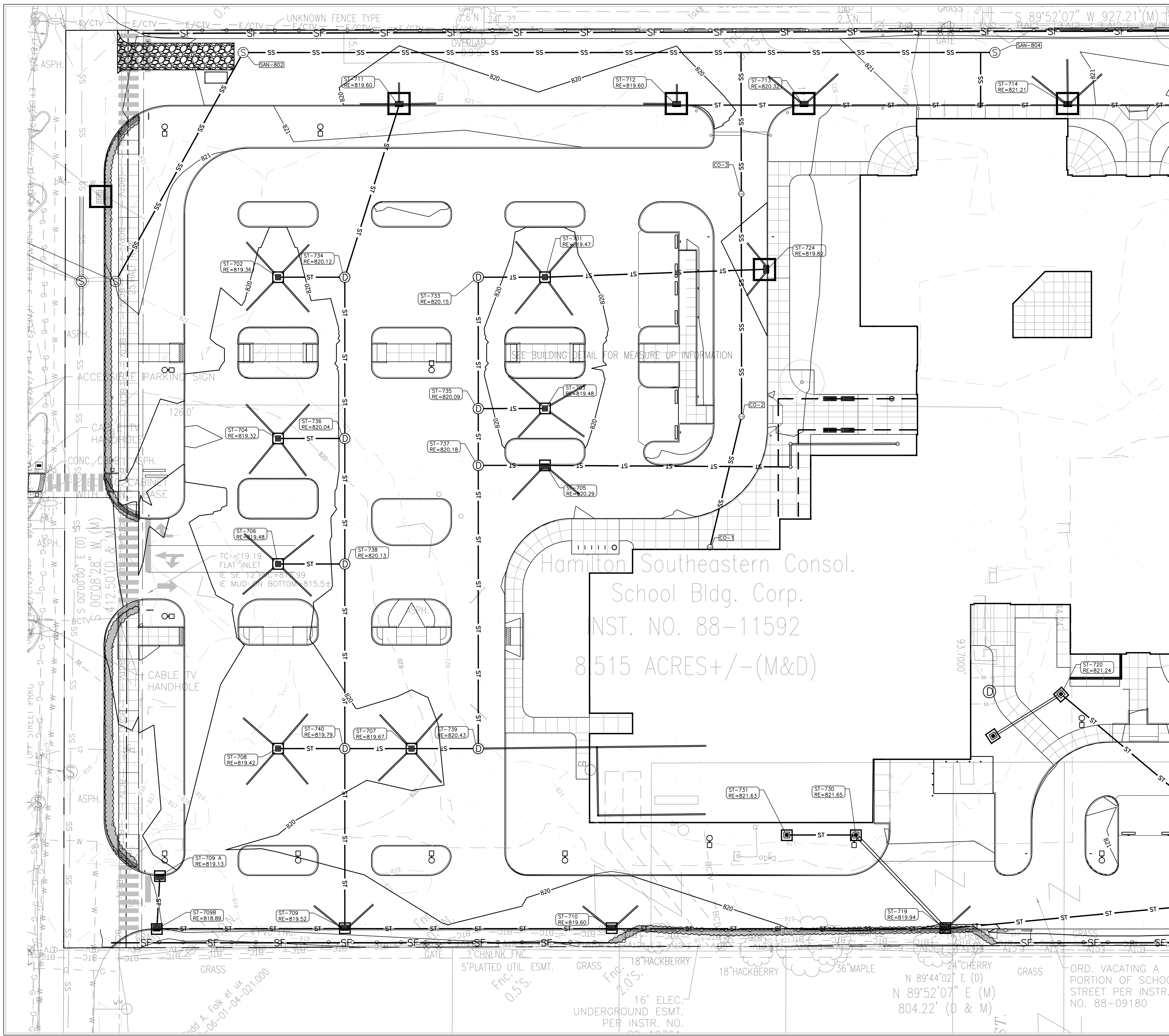
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
PRE-CONSTRUCTION EROSION CONTROL PLAN

CERTIFIED BY:
David A. Lach
DAVID A. LACH
REGISTERED
P.E. 10000126
STATE OF
INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
C401A

PROJECT NUMBER
2021119



STORMWATER POLLUTION PREVENTION PLAN LEGEND

---	CONSTRUCTION LIMITS
TP	TREE PRESERVATION FENCING
SF	SILT FENCE BARRIER INSTALLATION
[Hatched Box]	PERMANENT SEEDING WITH EROSION CONTROL BLANKET (BAG SC150 OR EQUAL)
[Dotted Box]	PERMANENT SEEDING
[Solid Grey Box]	TEMPORARY SEEDING
[Cross-hatched Box]	TEMPORARY CONSTRUCTION DRIVE. ONCE CONSTRUCTION IS COMPLETE, CONTRACTOR SHALL REMOVE STONE, GEOTEXTILE, RESPREAD TOPSOIL, AND PERMANENT SEED ENTIRE AREA.
[Grid Box]	CONTRACTOR STAGING AREA SHALL UTILIZE THE EXISTING ASPHALT AREA. CONTRACTOR SHALL REPAIR ALL DAMAGED ASPHALT WITHIN THE AREA UPON COMPLETION OF THE PROJECT AND SHALL MEET THE STANDARDS AS DICTATED ON DETAILS.
[Circle with X]	CONCRETE WASHOUT
[Rectangular with X]	ROCK CHECK DAM
[Sign]	NPDES PUBLIC POSTING SIGN
[Trailer]	CONSTRUCTION TRAILER
[Dumpster]	CONSTRUCTION DUMPSTER
[Fabric]	GEOTEXTILE FABRIC YARD
[Drop Inlet]	DROP INLET PROTECTION
[Bag]	INSERT (BAG) INLET PROTECTION
[Curb]	INSERT (BAG) CURB INLET PROTECTION WITH CURB FILTER
[Riprap]	CONCRETE END SECTION RIPRAP (UPPER AND LOWER INV)
[Log]	COIR LOG EROSION CONTROL

STORMWATER POLLUTION PREVENTION PLAN NOTES

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CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN SEQUENCE AND IMPLEMENTATION

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- MAINTAIN CONSTRUCTION ENTRANCE, INLET PROTECTION, AND CONCRETE WASHOUT.
- TEMPORARY SEEDING SHALL BE PLACED ON ANY DISTURBED AREA THAT WILL REMAIN OPEN FOR MORE THAN SEVEN DAYS. SEE SHEET C404.
- ALL AREAS THAT ARE TO BE PAVED IN THE FINAL PHASE OF CONSTRUCTION SHALL HAVE THE BASE MATERIAL PLACED AS SOON AS PRACTICABLE.

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FISHERS ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS DESIGN DEVELOPMENT

11442 LANTERN RD., FISHERS, IN 46038

SCOPE DRAWINGS:

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CONSTRUCTION EROSION CONTROL PLAN

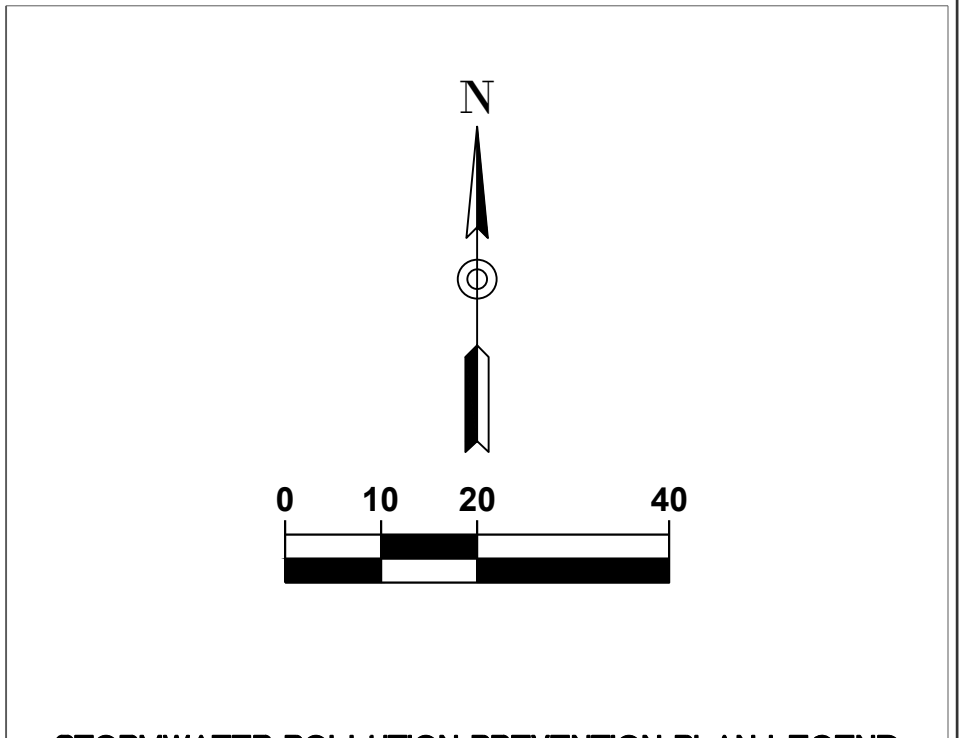
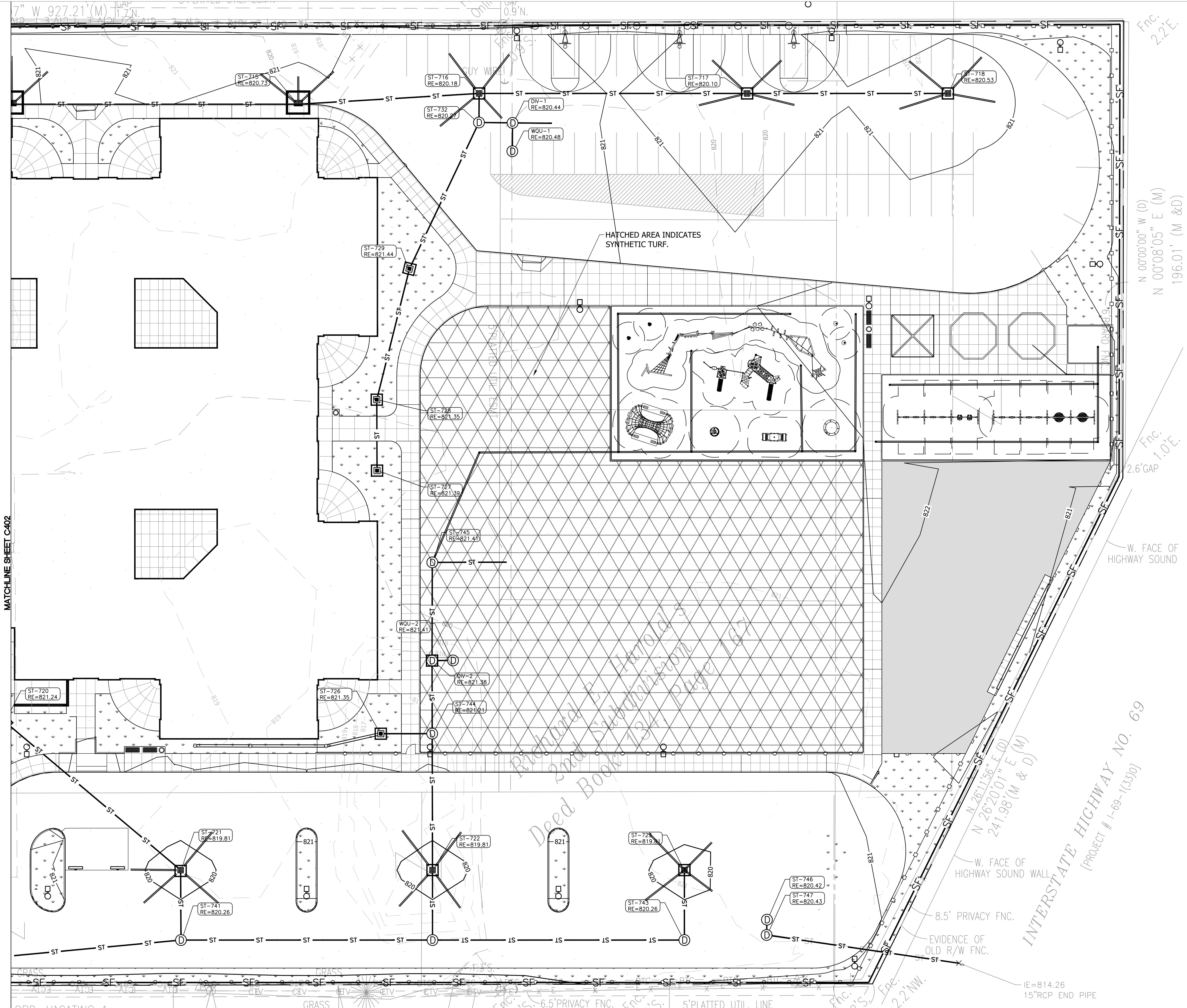
CERTIFIED BY:

David A. Lach

DAVID A. LACH
REGISTERED PROFESSIONAL ENGINEER
STATE OF INDIANA
PE 10000126

DRAWING NUMBER
C402

PROJECT NUMBER
2021119



STORMWATER POLLUTION PREVENTION PLAN LEGEND

---	CONSTRUCTION LIMITS
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SF	SILT FENCE BARRIER INSTALLATION
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[Rectangular with X]	ROCK CHECK DAM
[Vertical Line]	NPDES PUBLIC POSTING SIGN
[Rectangular]	CONSTRUCTION TRAILER
[Square with X]	CONSTRUCTION DUMPSTER
[Square with Dotted]	GEOTEXTILE FABRIC YARD DROP INLET PROTECTION
[Square with Grid]	INSERT (BAG) INLET PROTECTION
[Square with Grid]	INSERT (BAG) CURB INLET PROTECTION WITH CURB FILTER
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CERTIFIED BY:
David A. Lach
REGISTERED PROFESSIONAL ENGINEER
STATE OF INDIANA

DRAWING NUMBER:
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PROJECT NUMBER:
2021119

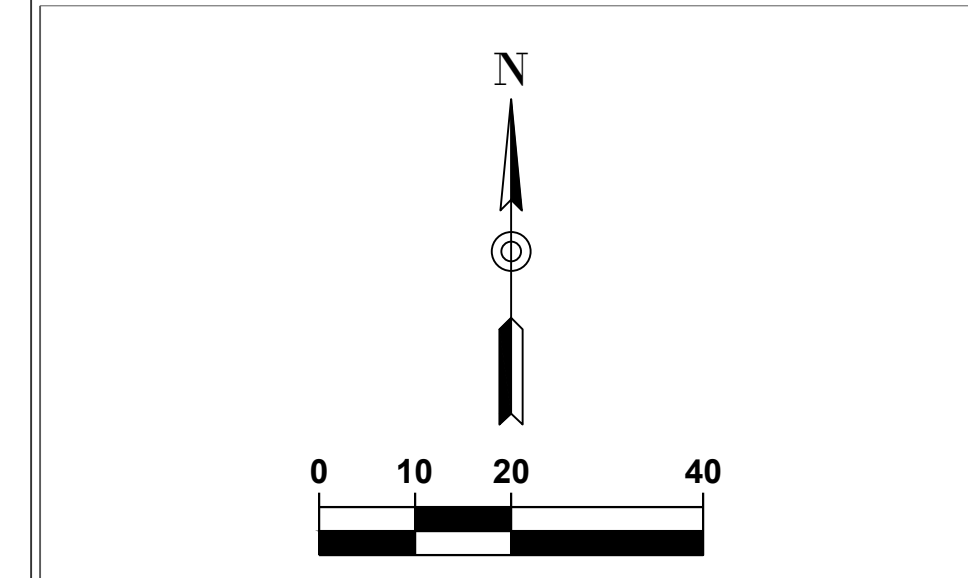
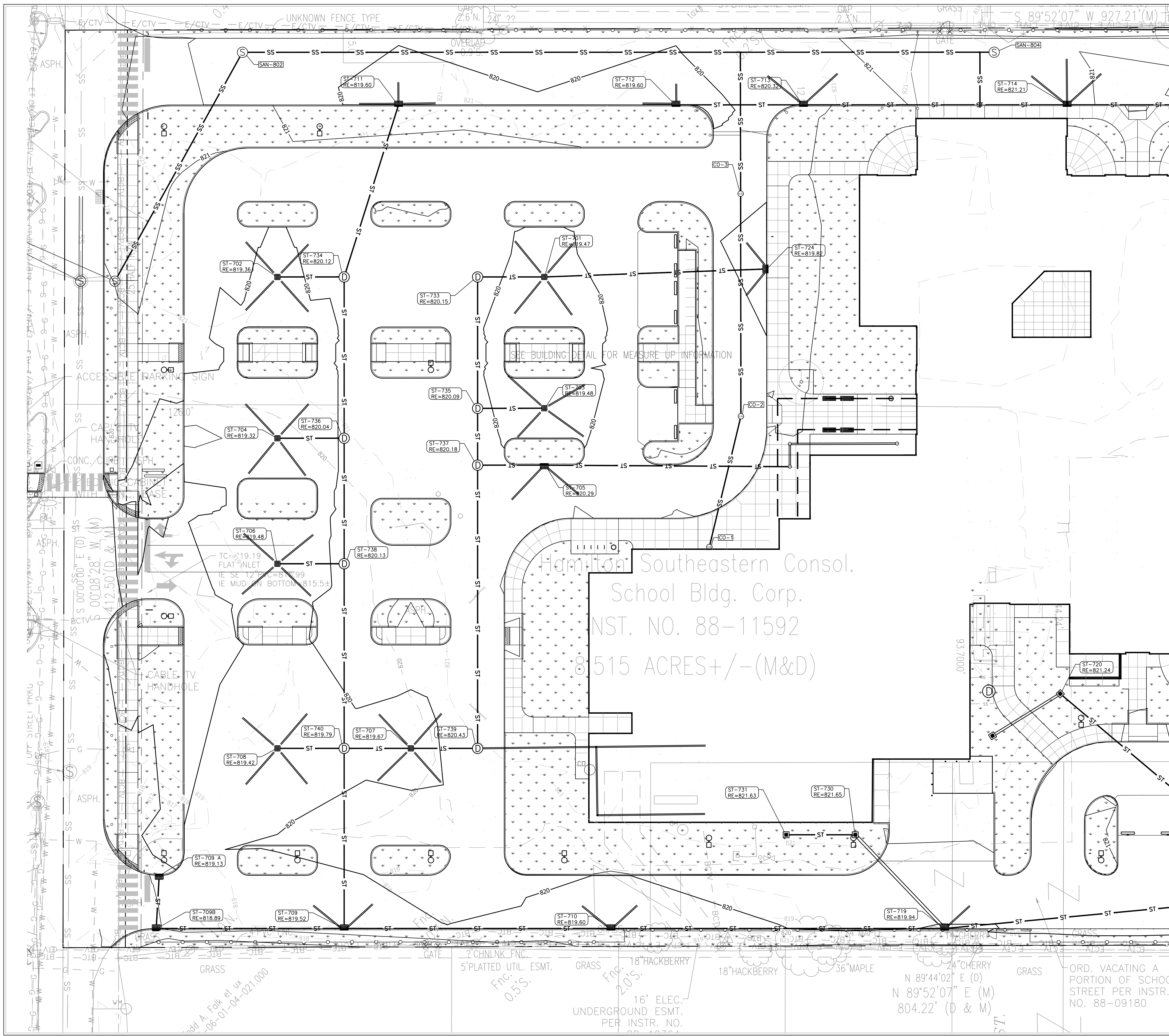
ORD. VACATING A PORTION OF INCH. STREET PER INSTR. NO. 88-09180

TBM #1
EI=820.33

CAPPED REBAR FND.
STAMPED "TNS"

N 89°47'00" E (D)
N 89°38'55" W (M)
16.16' (D & M)

INTERSTATE HIGHWAY NO. 69
[PROJECT # 1-69-1(33)0]



STORMWATER POLLUTION PREVENTION PLAN LEGEND

- CONSTRUCTION LIMITS
- TREE PRESERVATION FENCING
- SF SILT FENCE BARRIER INSTALLATION
- PERMANENT SEEDING WITH EROSION CONTROL BLANKET (NAG SC150 OR EQUAL)
- PERMANENT SEEDING
- TEMPORARY SEEDING
- TEMPORARY CONSTRUCTION DRIVE. ONCE CONSTRUCTION IS COMPLETE, CONTRACTOR SHALL REMOVE STONE, GEOTEXTILE, RESURFACE TOPSOIL, AND PERMANENT SEED ENTIRE AREA.
- CONTRACTOR STAGING AREA SHALL UTILIZE THE EXISTING ASPHALT AREA. CONTRACTOR SHALL REPAIR ALL DAMAGED ASPHALT WITHIN THE AREA UPON COMPLETION OF THE PROJECT AND SHALL MEET THE STANDARDS AS DICTATED ON DETAILS.
- CONCRETE WASHOUT
- ROCK CHECK DAM
- NPDES PUBLIC POSTING SIGN
- CONSTRUCTION TRAILER
- CONSTRUCTION DUMPSTER
- GEOTEXTILE FABRIC YARD
- DROP INLET PROTECTION
- INSERT (BAG) INLET PROTECTION
- INSERT (BAG) CURB INLET PROTECTION WITH CURB FILTER
- CONCRETE END SECTION RIPRAP (UPPER AND LOWER INV)
- COIR LOG EROSION CONTROL

STORMWATER POLLUTION PREVENTION PLAN NOTES

1. REFER TO SHEET C404 FOR SOILS MAP AND SOIL CHARACTERISTICS.
2. REFER TO SHEET C405 FOR STORMWATER POLLUTION PREVENTION DETAILS.
3. REFER TO LANDSCAPE PLANS FOR PLANTING DETAILS. ANY MOUNDING NOTED ON LANDSCAPE PLANS SHALL NOT CHANGE THE DRAINAGE PATTERN NOTED IN THE GRADING PLAN SERIES C300'S.
4. SILT FENCE BARRIER TO BE INSTALLED PRIOR TO CONSTRUCTION.
5. EROSION CONTROL MEASURES TO BE MAINTAINED THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS.
6. REFER TO THE STORMWATER POLLUTION PREVENTIONS NOTES SHEET C404 FOR ALL EROSION CONTROL MEASURES, SCHEDULES, AND SEQUENCES.
7. CONTRACTOR TO MAINTAIN A STABLE TEMPORARY CONSTRUCTION DRIVE FROM THE SITE TO KEEP MUD AND SEDIMENT OFF PUBLIC ROADS.
8. EROSION CONTROL MAINTENANCE - SITE TO BE INSPECTED AT LEAST ONCE A WEEK AND MAKE REPAIRS IMMEDIATELY AFTER PERIODS OF 1/2" RAINFALL OR GREATER.
9. STORMWATER DISCHARGE WILL NOT ENTER THE GROUNDWATER FOR THIS PROJECT.
10. THIS SITE IS NOT IMPACTED BY THE 100 YEAR FLOODPLAIN.
11. PRESENCE OF HYDRIC SOILS: NONE.
12. CONTRACTOR SHALL PROVIDE THE CITY OF FISHERS WITH A NARRATIVE DESCRIBING THE CONSTRUCTION SEQUENCE, INCLUDING START DATES FOR EACH LAND DISTURBING ACTIVITY.
13. THE ACTUAL PERSON RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF THE EROSION CONTROL SHALL BE DETERMINED DURING THE BIDDING PROCESS. THE AWARD WINNING CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES. ONCE DETERMINED, CONTRACTOR SHALL COORDINATE WITH THE CITY.
14. ANY DISCREPANCIES OR CONFLICTS WHICH BECOME APPARENT BEFORE OR DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.

POST-CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN SEQUENCE AND IMPLEMENTATION

1. REMOVE CONSTRUCTION FENCING.
2. REMOVE SILT FENCING.
3. REMOVE INLET PROTECTION.
4. ALL AREAS OF PERMANENT SEEDING SHALL BE ESTABLISHED AND MAINTAINED.

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FISHERS ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS DESIGN DEVELOPMENT
11442 LANTERN RD., FISHERS, IN 46038

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

4	02/12/24	ADDENDUM #4
6	03/01/24	ADDENDUM #6

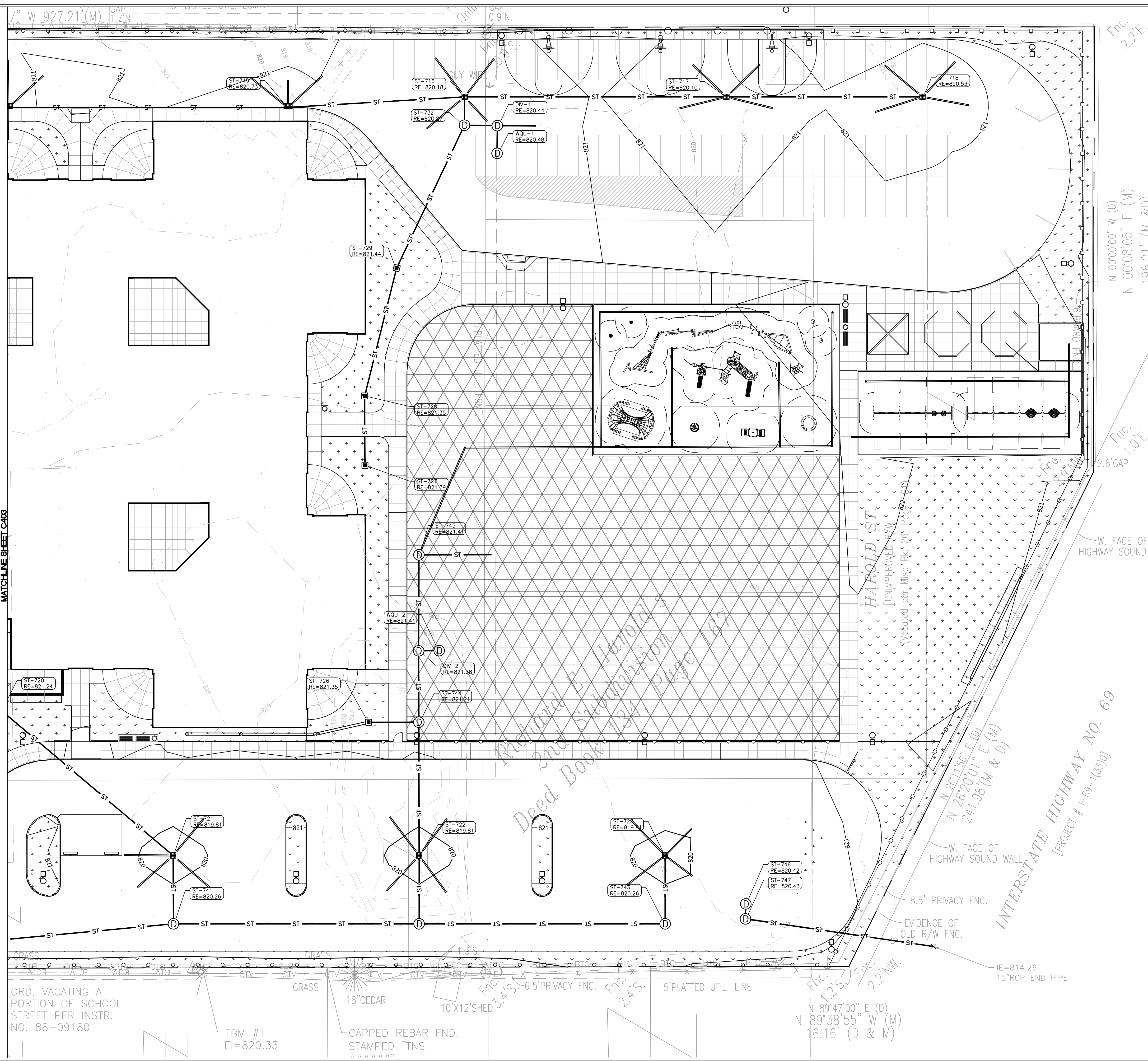
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
POST CONSTRUCTION EROSION CONTROL PLAN

CERTIFIED BY:
David A. Lach
REGISTERED PROFESSIONAL ENGINEER
STATE OF INDIANA

DRAWING NUMBER:
C403

PROJECT NUMBER:
2021119



Fnc. 2.2'E.

N 00°00'00" W (D)
N 00°08'05" E (M)
196.01' (M & D)

Fnc. 1.0'E.
2.6' GAP

W. FACE OF HIGHWAY SOUND

N 26°11'56" E (D)
N 26°20'01" E (M)
241.98' (M & D)

W. FACE OF HIGHWAY SOUND WALL

8.5' PRIVACY FNC.

EVIDENCE OF OLD R/W FNC.

IE=814.26
15" RCP END PIPE

MATCHLINE SHEET C403

ORD. VACATING A PORTION OF SCHOOL STREET PER INSTR. NO. 88-09180

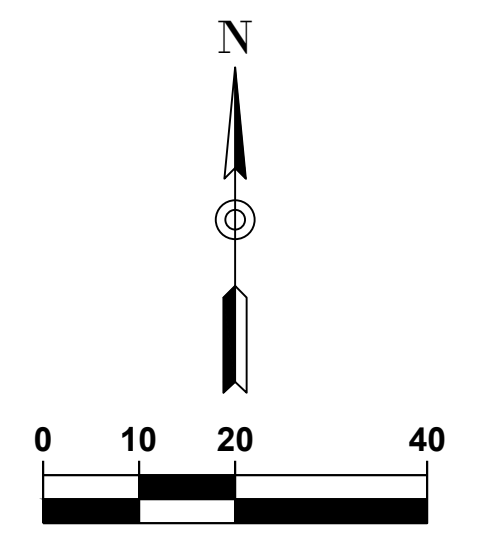
TBM #1
EI=820.33

18" CEDAR
CAPPED REBAR FND.
STAMPED "TNS"

10' X 12' SHED

5" PLATTED UTIL. LINE

N 89°47'00" E (D)
N 89°38'55" W (M)
16.16' (D & M)



STORMWATER POLLUTION PREVENTION PLAN LEGEND

- CONSTRUCTION LIMITS
- TP --- TREE PRESERVATION FENCING
- SF --- SILT FENCE BARRIER INSTALLATION
- PERMANENT SEEDING WITH EROSION CONTROL BLANKET (NAG SC150 OR EQUAL)
- PERMANENT SEEDING
- TEMPORARY SEEDING
- TEMPORARY CONSTRUCTION DRIVE, ONCE CONSTRUCTION IS COMPLETE, CONTRACTOR SHALL REMOVE STONE, GEOTEXTILE, RESPREAD TOPSOIL, AND PERMANENT SEED ENTIRE AREA.
- SYNTHETIC TURF
- CONCRETE WASHOUT
- ROCK CHECK DAM
- NPDES PUBLIC POSTING SIGN
- CONSTRUCTION TRAILER
- CONSTRUCTION DUMPSTER
- GEOTEXTILE FABRIC YARD DROP INLET PROTECTION
- INSERT (BAG) INLET PROTECTION
- INSERT (BAG) CURB INLET PROTECTION WITH CURB FILTER
- CONCRETE END SECTION RIPRAP (UPPER AND LOWER INV)
- COIR LOG EROSION CONTROL

STORMWATER POLLUTION PREVENTION PLAN NOTES

1. REFER TO SHEET C404 FOR SOILS MAP AND SOIL CHARACTERISTICS.
2. REFER TO SHEET C405 FOR STORMWATER POLLUTION PREVENTION DETAILS.
3. REFER TO LANDSCAPE PLANS FOR PLANTING DETAILS. ANY MOUNDING NOTED ON LANDSCAPE PLANS SHALL NOT CHANGE THE DRAINAGE PATTERN NOTED IN THE GRADING PLAN SERIES C300'S.
4. SILT FENCE BARRIER TO BE INSTALLED PRIOR TO CONSTRUCTION.
5. EROSION CONTROL MEASURES TO BE MAINTAINED THROUGHOUT THE ENTIRE CONSTRUCTION PROCESS.
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8. EROSION CONTROL MAINTENANCE - SITE TO BE INSPECTED AT LEAST ONCE A WEEK AND MAKE REPAIRS IMMEDIATELY AFTER PERIODS OF 1/2" RAINFALL OR GREATER.
9. STORMWATER DISCHARGE WILL NOT ENTER THE FLOODPLAIN FOR THIS PROJECT.
10. THIS SITE IS NOT IMPACTED BY THE 100 YEAR FLOODPLAIN.
11. PRESENCE OF HYDRIC SOILS: NONE.
12. CONTRACTOR SHALL PROVIDE THE CITY OF FISHERS WITH A NARRATIVE DESCRIBING THE CONSTRUCTION SEQUENCE, INCLUDING START DATES FOR EACH LAND DISTURBING ACTIVITY.
13. THE ACTUAL PERSON RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF THE EROSION CONTROL SHALL BE DETERMINED DURING THE BIDDING PROCESS. THE AWARDED WINNING CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES. ONCE DETERMINED, CONTRACTOR SHALL COORDINATE WITH THE CITY.
14. ANY DISCREPANCIES OR CONFLICTS WHICH BECOME APPARENT BEFORE OR DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY SO THAT CLARIFICATION OR REVISION MAY OCCUR.

POST-CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN SEQUENCE AND IMPLEMENTATION

1. REMOVE CONSTRUCTION FENCING.
2. REMOVE SILT FENCING.
3. REMOVE INLET PROTECTION.
4. ALL AREAS OF PERMANENT SEEDING SHALL BE ESTABLISHED AND MAINTAINED.

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FISHERS ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS DESIGN DEVELOPMENT
11442 LANTERN RD, FISHERS, IN 46038

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the project or the construction. On the basis of the general scope indicated or described, the contractor shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

4	02/12/24	ADDENDUM #4
6	03/01/24	ADDENDUM #6

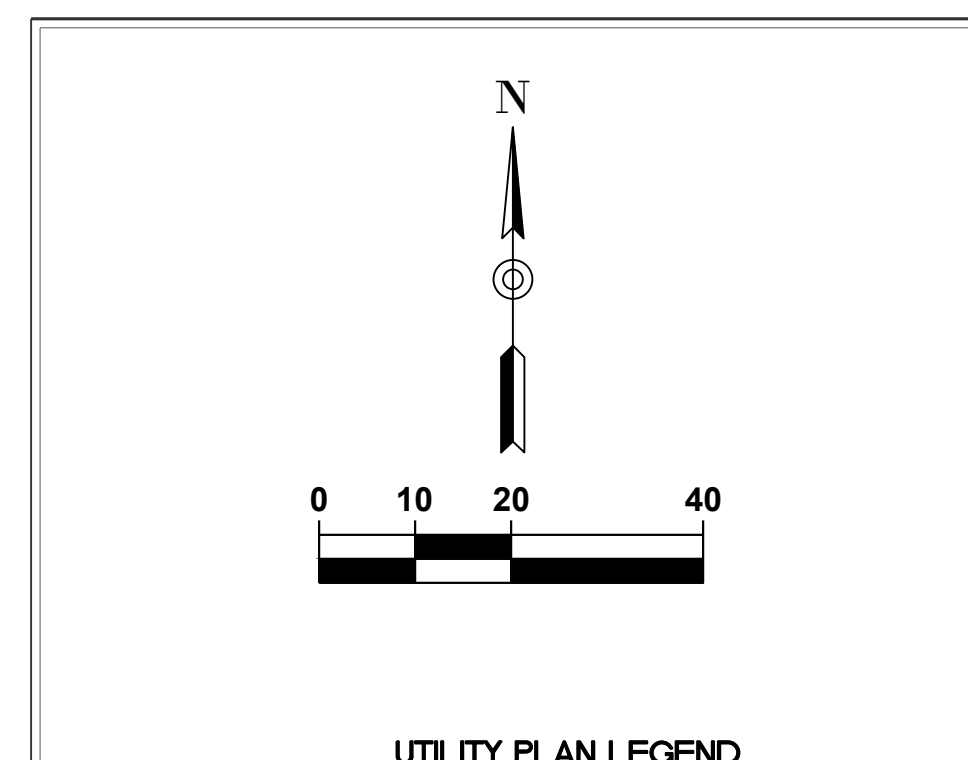
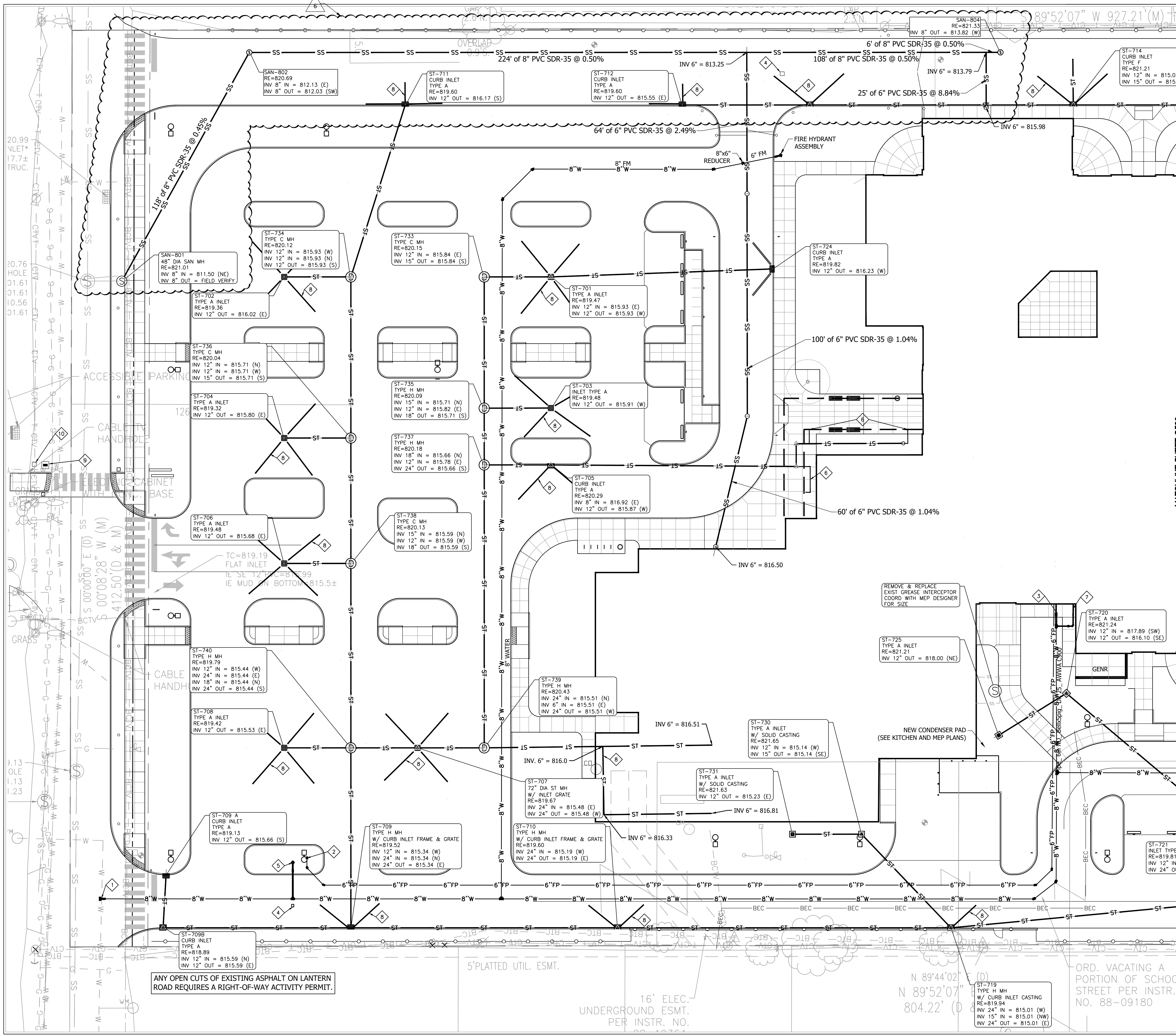
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
POST CONSTRUCTION EROSION CONTROL PLAN

CERTIFIED BY:
David A. Lach
DAVID A. LACH
REGISTERED PROFESSIONAL ENGINEER
NO. 10000126
STATE OF INDIANA

DRAWING NUMBER
C403A

PROJECT NUMBER
2021119



UTILITY PLAN LEGEND

ST	STORM SEWER, MANHOLE
SS	SANITARY SEWER, MANHOLE
RD	ROOF DRAIN, CLEANOUT
W	WATER LINE, METER, VALVE
G	GAS LINE, METER, VALVE
SS	SANITARY LATERAL, CLEAN OUT
E	EASEMENT LINE
C	OVERHEAD ELECTRIC, POLE
BEC	BURIED ELECTRIC, MANHOLE
CTV	OVERHEAD CABLE TELEVISION
BCTV	BURIED CABLE TELEVISION
T	OVERHEAD TELEPHONE LINE
BTC	BURIED TELEPHONE LINE
END SECTION	END SECTION
CURB INLET	CURB INLET
STORM SEWER INLETS	STORM SEWER INLETS
"TEE" FITTING	"TEE" FITTING
TAPPING SLEEVE & VALVE	TAPPING SLEEVE & VALVE
FIRE HYDRANT	FIRE HYDRANT
FIRE DEPARTMENT CONNECTION	FIRE DEPARTMENT CONNECTION
POST INDICATOR VALVE	POST INDICATOR VALVE
STREET LIGHT	STREET LIGHT
TRANSFORMER	TRANSFORMER
ELECTRIC METER	ELECTRIC METER
CABLE RISER PEDESTAL	CABLE RISER PEDESTAL

- UTILITY PLAN NOTES:**
- SEE ARCHITECTURAL PLUMBING PLANS FOR PLUMBING DETAILS TO AREAS FIVE (5) FEET OUTSIDE AND INSIDE OF THE PROPOSED STRUCTURE.
 - SITE CONTRACTOR TO VERIFY ALL BUILDING LATERALS WITH PLUMBING DRAWINGS PRIOR TO CONSTRUCTION.
 - SITE UTILITY CONTRACTOR TO VERIFY BUILDING CONNECTION LOCATIONS AND ELEVATIONS WITH MEP AND ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
 - EXISTING UTILITY LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL DETERMINE AND FIELD VERIFY ALL HORIZONTAL AND VERTICAL LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 - RIM ELEVATION (RE) SHALL INDICATE THE ELEVATION THAT WATER WOULD ENTER THE GRATE FOR ALL CASTINGS. IF CASTING HAS SOLID LID, THE RE IS THE LID ELEVATION.
 - WATER AND SEWER CROSSINGS AND SEPARATIONS SHALL BE IN ACCORDANCE WITH "TEN STATE STANDARDS" AND LOCAL CODES.
 - WATER LINES THROUGHOUT THE PROJECT SHALL BE INSTALLED WITH AT LEAST 54 INCHES OF COVER TO PROVIDE PROTECTION FROM FREEZING.
 - PLASTIC WATER LINES SHALL BEAR THE NSF SEAL OF APPROVAL AND MEET COMMERCIAL STANDARD NO. 256-3, PRODUCT STANDARD 22-70, OR ASTM D 2441.
 - ALL SUB-SURFACE DRAIN (SSD) SHALL BE 6" PERFORATED DUAL WALL HDPE UNLESS NOTED OTHERWISE.
 - INVERT ELEVATION OF SUB-SURFACE DRAIN (SSD) AT STRUCTURE TO BE THREE (3) FEET BELOW RIM ELEVATION. ALL STORM STRUCTURES MUST HAVE AT LEAST 3 SUB SURFACE DRAIN CONNECTIONS.
 - REFER TO TOWN OF FISHERS DETAIL SHEETS C914 & C919 FOR BACKFILL REQUIREMENTS FOR STORM & SANITARY SEWERS.
 - REFER TO TOWN OF SHEETS C919-C924 FOR TOWN OF FISHERS SANITARY SEWER DETAILS.
 - REFER TO DETAIL SHEETS C914-C918 FOR TOWN OF FISHERS STORM SEWER DETAILS.
 - REFER TO SHEETS IN THE C900 SERIES FOR ALL OTHER TOWN OF FISHERS DETAILS.
 - SEE STRUCTURE DATA TABLE DETAILS ON SHEETS C705 (STORM) & C801 (SANITARY).
 - CONNECTIONS TO EXISTING STRUCTURES REQUIRE THAT THE STRUCTURE BE REHABILITATED TO CURRENT DFW DESIGN STANDARDS.
 - ANY DISCREPANCIES OR CONFLICTS WHICH BECOME APPARENT BEFORE OR DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY SO THAT CLARIFICATION OR REVISION MAY OCCUR.
 - ALL EXISTING STRUCTURES, MANHOLES, AND CATCH BASIN GRATES SHALL BE ADJUSTED TO NEW FINISH GRADE ELEVATIONS.
 - ALL UTILITY STRUCTURES IN PAVED AREAS SHALL BE TRAFFIC BEARING AND SHALL BE FLUSH WITH ADJACENT PAVEMENT.

KEYNOTE LEGEND

1	CONNECT WATER TO EXISTING WITH STAINLESS STEEL TAPPING SLEEVE AND VALVE.
2	FIRE DEPARTMENT CONNECTION TO BE 5-INCH STORZ AND PAINTED RED.
3	POST INDICATOR VALVE - SEE FIRE PROTECTION PLANS AND ELECTRICAL PLANS FOR LOW VOLTAGE WIRING.
4	BLUE FIRE HYDRANT SNOWFLOWABLE MARKER
5	FIRE HYDRANT ASSEMBLY
6	DOWN SPOUT AT COLUMN WITH BOOT FOR UNDERGROUND DRAINAGE
7	2-2-INCH WATER METERS ON A TREE INSIDE BUILDING-SEE PLUMBING PLANS.
8	SUBSURFACE DRAIN, TYP.
9	RELOCATED GAS LINE MARKER
10	RELOCATED UTILITY HANDHOLE BOX

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**FISHERS ELEMENTARY SCHOOL
ADDITIONS & RENOVATIONS
DESIGN DEVELOPMENT**
11442 LANTERN
RD., FISHERS, IN
46038

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.
The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.
On the basis of the general scope indicated or described the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

4	02/12/24 ADDENDUM #4
6	03/01/24 ADDENDUM #6

ISSUE DATE **DRAWN BY** **CHECKED BY**

01/15/2023	KDK	JAD
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DRAWING TITLE:
UTILITY PLAN

CERTIFIED BY:
David A. Lach
DAVID A. LACH
REGISTERED
PE 10000126
STATE OF
INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
C501

PROJECT NUMBER
2021119

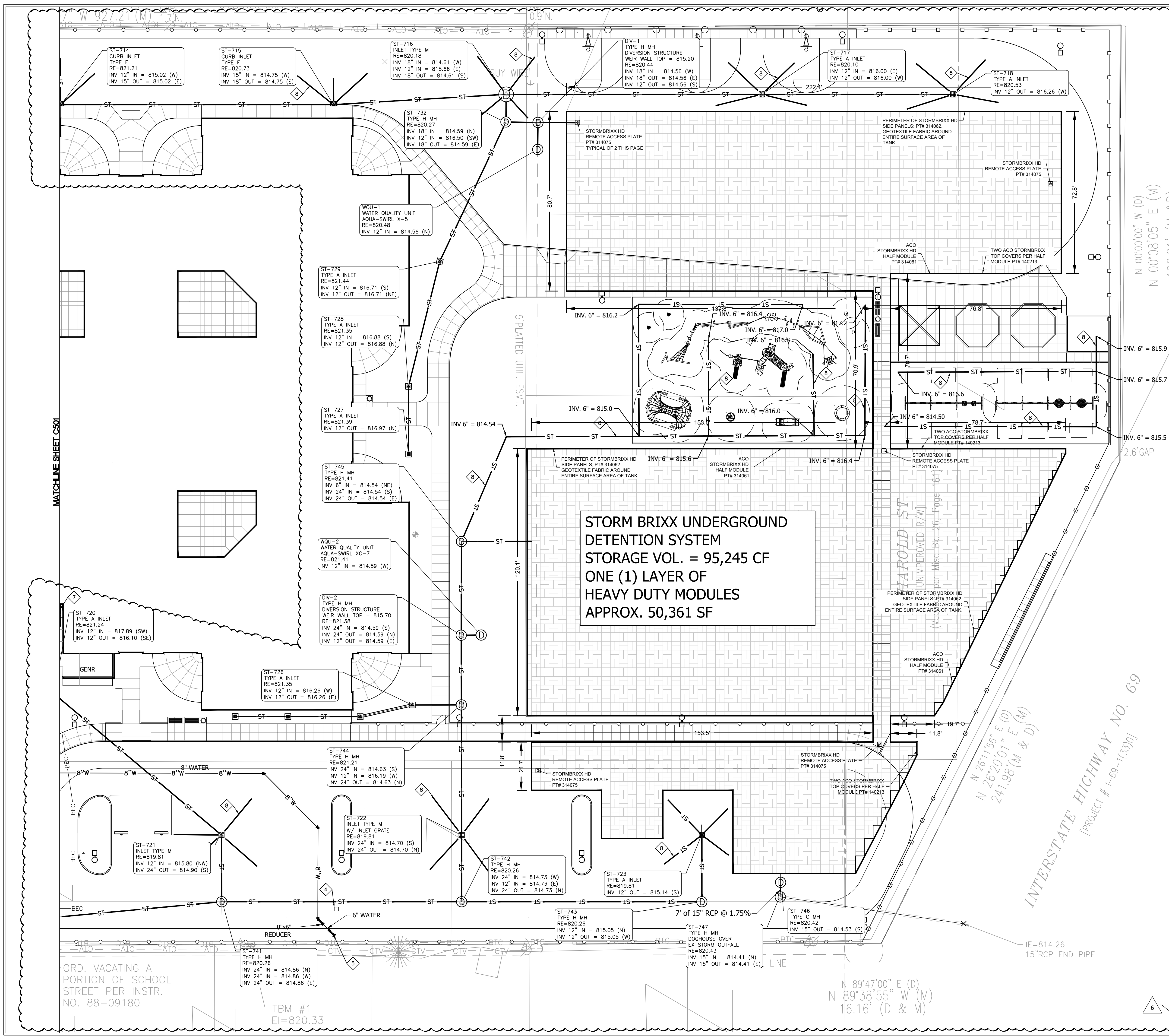
ANY OPEN CUTS OF EXISTING ASPHALT ON LANTERN ROAD REQUIRES A RIGHT-OF-WAY ACTIVITY PERMIT.

5' PLATTED UTIL. ESMT.

16' ELEC. UNDERGROUND ESMT. PER INSTR. NO.

N 89°44'02" E (D)
N 89°52'07" E (D)
804.22' (D)

ORD. VACATING A PORTION OF SCHOOL STREET PER INSTR. NO. 88-09180

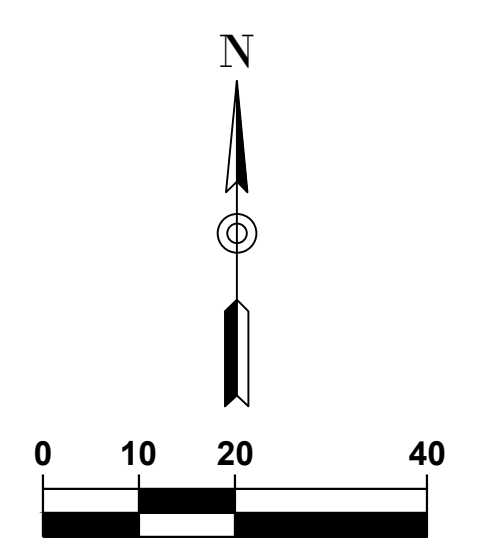


MATCHLINE SHEET C501

ORD. VACATING A PORTION OF SCHOOL STREET PER INSTR. NO. 88-09180

TBM #1
El=820.33

**STORM BRIXX UNDERGROUND
DETENTION SYSTEM**
STORAGE VOL. = 95,245 CF
ONE (1) LAYER OF
HEAVY DUTY MODULES
APPROX. 50,361 SF



UTILITY PLAN LEGEND

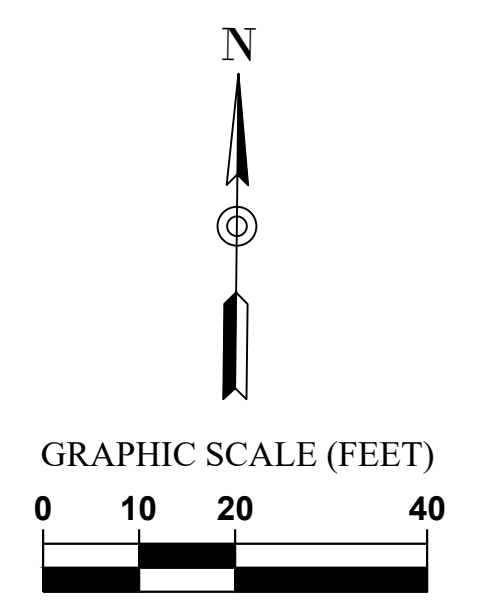
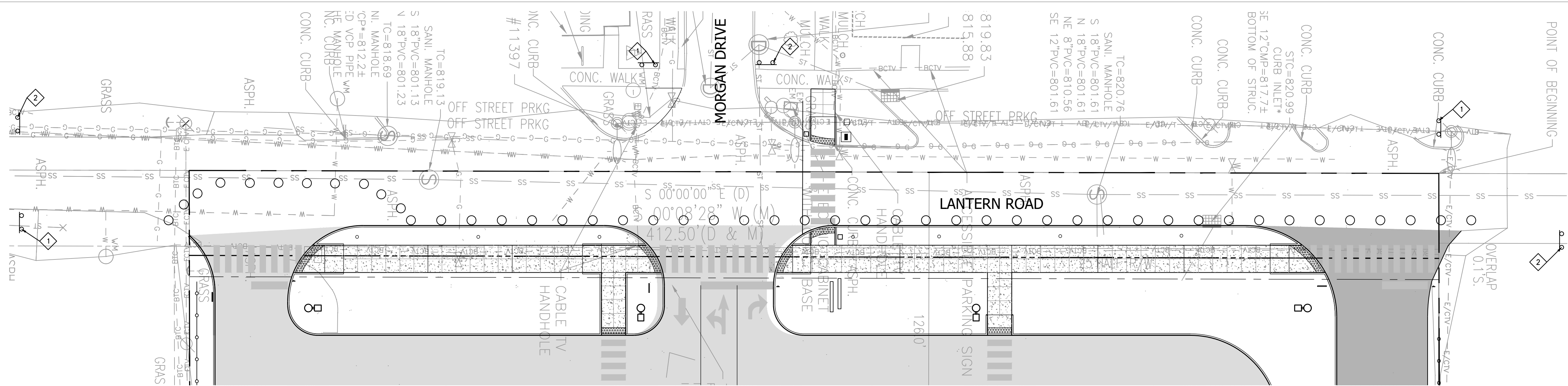
- ST - STORM SEWER, MANHOLE
- SSD - SUBSURFACE DRAIN (SSD)
- RD - ROOF DRAIN, CLEANOUT
- W - WATER LINE, METER, VALVE
- SS - SANITARY SEWER, MANHOLE
- SS - SANITARY LATERAL, CLEAN OUT
- E - OVERHEAD ELECTRIC, POLE
- BEC - BURIED ELECTRIC, MANHOLE
- CTV - OVERHEAD CABLE TELEVISION
- BCTV - BURIED CABLE TELEVISION
- G - GAS LINE, METER, VALVE
- T - OVERHEAD TELEPHONE LINE
- BTC - BURIED TELEPHONE LINE
- END SECTION
- CURB INLET
- STORM SEWER INLETS
- "TEE" FITTING
- TAPPING SLLEEVE & VALVE
- FIRE HYDRANT
- FIRE DEPARTMENT CONNECTION
- POST INDICATOR VALVE
- STREET LIGHT
- TRANSFORMER
- ELECTRIC METER
- CABLE RISER PEDESTAL

UTILITY PLAN NOTES

1. SEE ARCHITECTURAL PLUMBING PLANS FOR PLUMBING DETAILS TO AREAS FIVE (5) FEET OUTSIDE AND INSIDE OF THE PROPOSED STRUCTURE.
2. SITE CONTRACTOR TO VERIFY ALL BUILDING LATERALS WITH PLUMBING DRAWINGS PRIOR TO CONSTRUCTION.
3. SITE UTILITY CONTRACTOR TO VERIFY BUILDING CONNECTION LOCATIONS AND ELEVATIONS WITH MEP AND ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
4. EXISTING UTILITY LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL DETERMINE AND FIELD VERIFY ALL HORIZONTAL AND VERTICAL LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. RIM ELEVATION (RE) SHALL INDICATE THE ELEVATION THAT WATER WOULD ENTER THE GRATE FOR ALL CASTINGS. IF CASTING HAS SOLID LID, THE RE IS THE LID ELEVATION.
6. WATER AND SEWER CROSSINGS AND SEPARATIONS SHALL BE IN ACCORDANCE WITH "TEN STATE STANDARDS" AND LOCAL CODES.
7. WATER LINES THROUGHOUT THE PROJECT SHALL BE INSTALLED WITH AT LEAST 54 INCHES OF COVER TO PROVIDE PROTECTION FROM FREEZING.
8. PLASTIC WATER LINES SHALL BEAR THE NSF SEAL OF APPROVAL AND MEET COMMERCIAL STANDARD NO. 256-3, PRODUCT STANDARD 22-70, OR ASTM D 2441.
9. ALL SUB-SURFACE DRAIN (SSD) SHALL BE 6" PERFORATED DUAL WALL HDPE UNLESS NOTED OTHERWISE.
10. INVERT ELEVATION OF SUB-SURFACE DRAIN (SSD) AT STRUCTURE TO BE THREE (3) FEET BELOW RIM ELEVATION. ALL STORM STRUCTURES MUST HAVE AT LEAST 3 SUB SURFACE DRAIN CONNECTIONS.
11. REFER TO TOWN OF FISHERS DETAIL SHEET XX FOR BACKFILL REQUIREMENTS FOR ALL UTILITIES.
12. REFER TO TOWN OF FISHERS DETAIL SHEET 18-23 FOR SANITARY SEWER DETAILS.
13. REFER TO TOWN OF FISHERS DETAIL SHEETS 13-15 FOR STORM SEWER DETAILS.
14. REFER TO TOWN OF FISHERS DETAIL SHEET XX FOR ALL OTHER UTILITY DETAILS.
15. SEE STRUCTURE DATA TABLE DETAIL ON SHEET C60X FOR STRUCTURE AND CASTING TYPE AND SIZE.
16. CONNECTIONS TO EXISTING STRUCTURES REQUIRE THAT THE STRUCTURE BE REHABILITATED TO CURRENT DPW DESIGN STANDARDS.
17. ANY DISCREPANCIES OR CONFLICTS WHICH BECOME APPARENT BEFORE OR DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD IMMEDIATELY SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
18. ALL EXISTING STRUCTURES, MANHOLES, AND CATCH BASIN GRATES SHALL BE ADJUSTED TO NEW FINISH GRADE ELEVATIONS.
19. ALL UTILITY STRUCTURES IN PAVED AREAS SHALL BE TRAFFIC BEARING AND SHALL BE FLUSH WITH ADJACENT PAVEMENT.

KEYNOTE LEGEND

- 1 CONNECT WATER TO EXISTING WITH STAINLESS STEEL TAPPING SLEEVE AND VALVE.
- 2 FIRE DEPARTMENT CONNECT
- 3 POST INDICATOR VALVE - SEE FIRE PROTECTION PLANS AND ELECTRICAL PLANS FOR LOW VOLTAGE WIRING.
- 4 BLUE FIRE HYDRANT SNOWBLOWABLE MARKER
- 5 FIRE HYDRANT ASSEMBLY
- 6 DOWN SPOUT AT COLUMN WITH BOOT FOR UNDERGROUND DRAINAGE
- 7 4" DOMESTIC WATER
- 8 SUBSURFACE DRAIN, TYP.



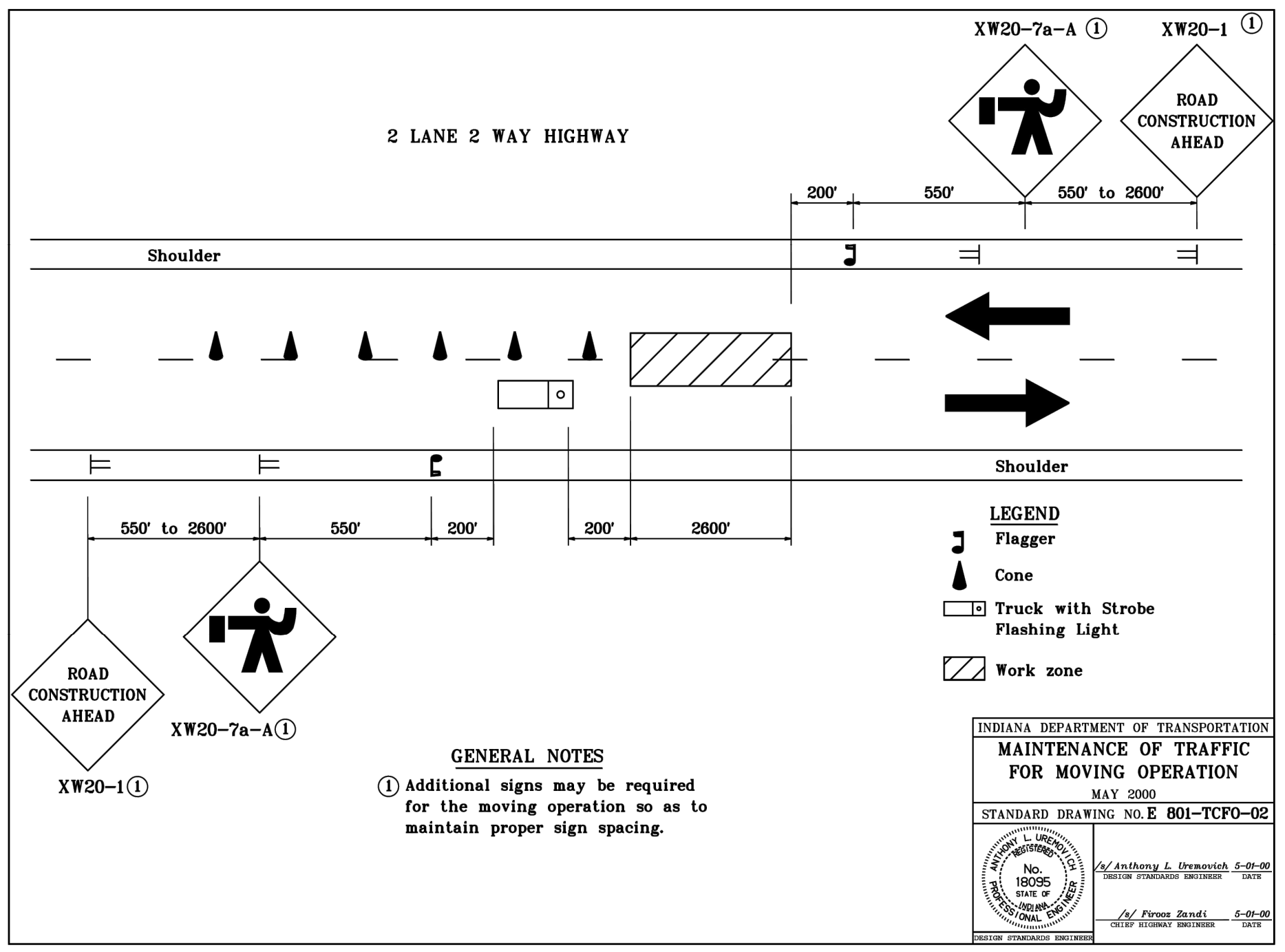
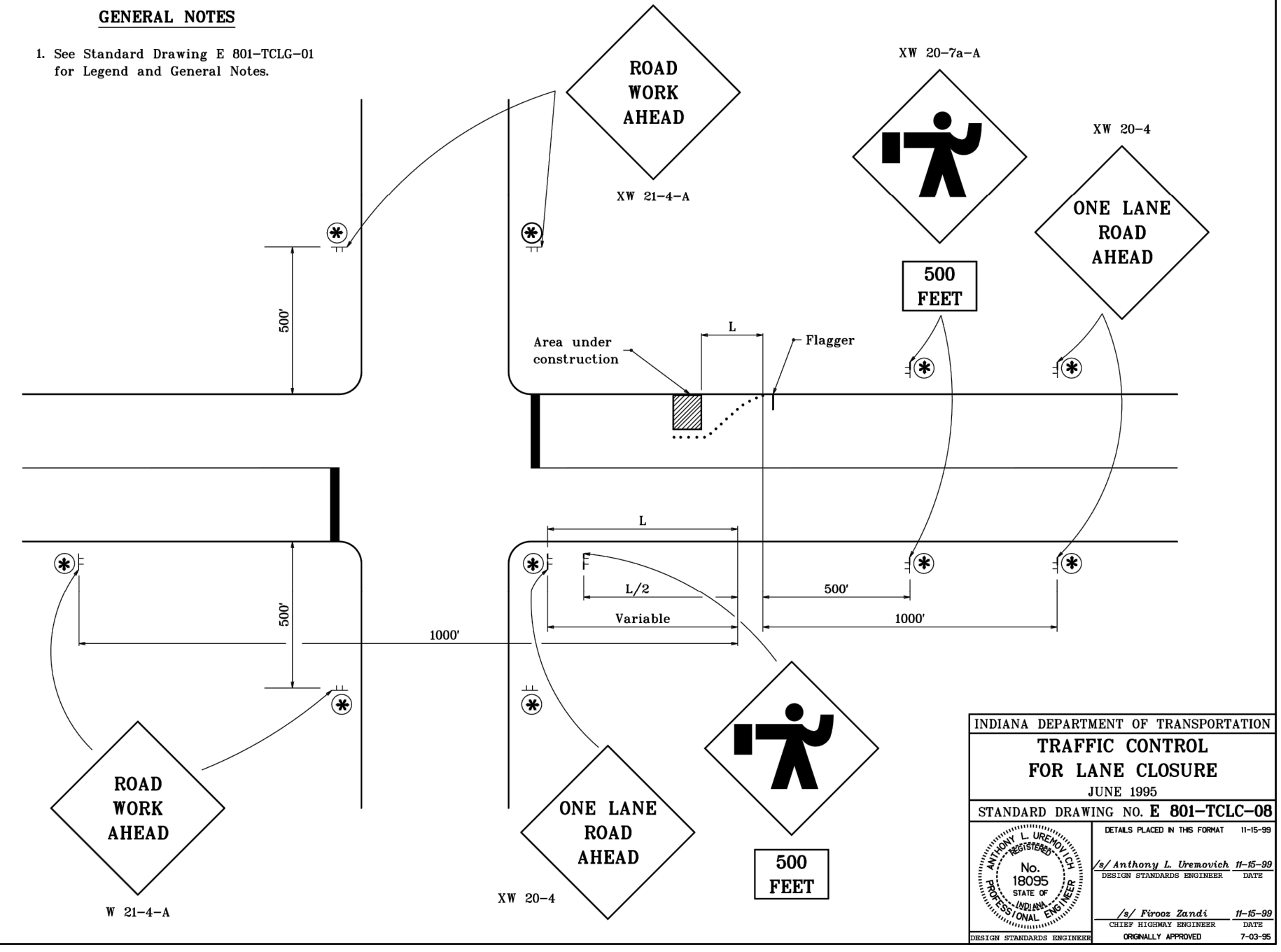
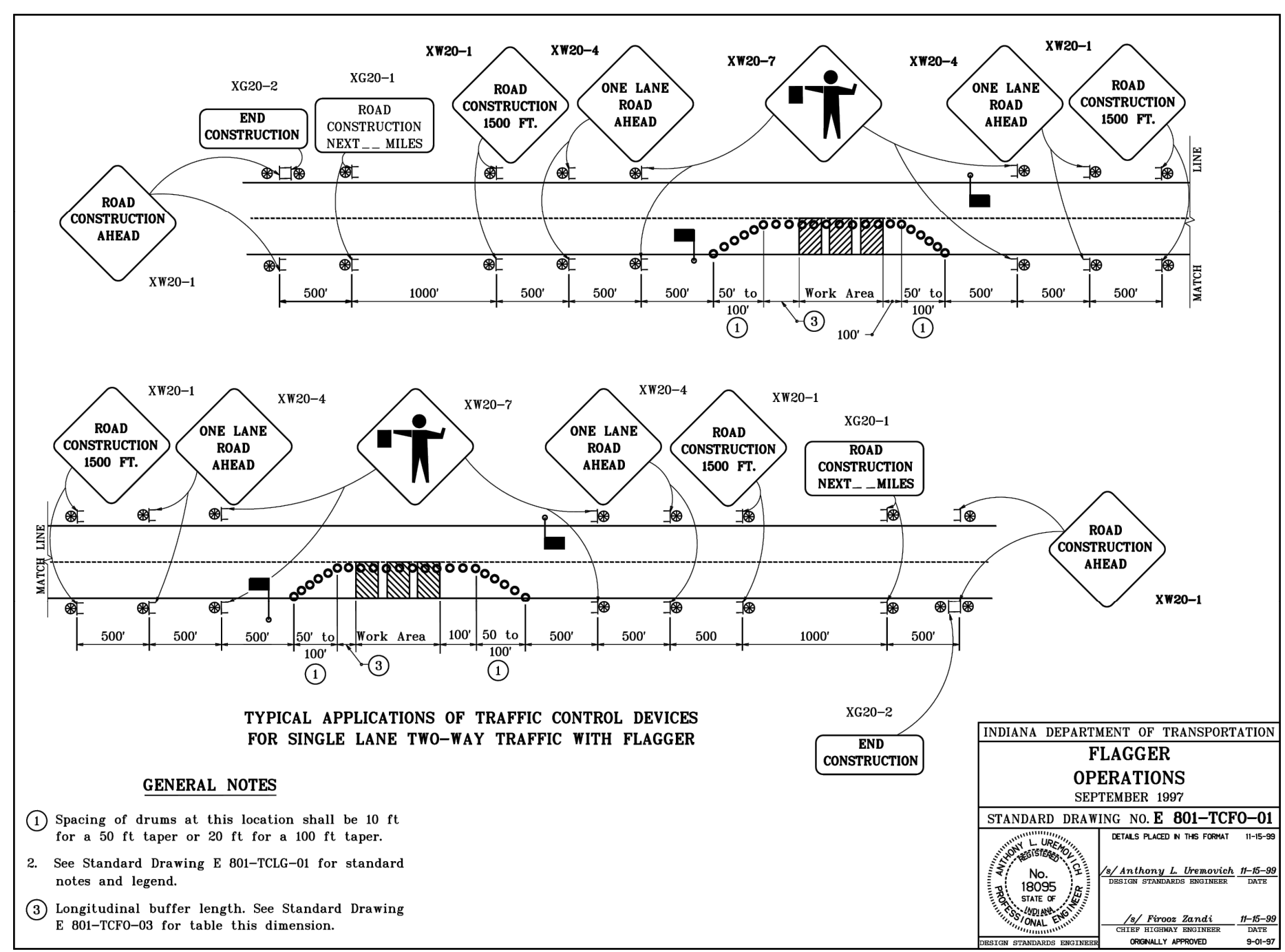
KEYNOTE LEGEND

- ① ROAD CONSTRUCTION AHEAD SIGN
- ② END CONSTRUCTION SIGN
- TRAFFIC BARRELS

GENERAL NOTES

1. ALL CONSTRUCTION SIGNS SHALL HAVE A BLACK MESSAGE ON FEDERAL ORANGE REFLECTIVE SHEETING.
2. THE ONLY COLOR COMBINATION ON BARRICADES TYPE II IS ORANGE AND WHITE. THE ORANGE STRIPES SHALL BE ENCAPSULATED LENS REFLECTIVE SHEETING. THE WHITE STRIPES SHALL BE EITHER ENCAPSULATED LENS OR ENCLOSED LENS REFLECTIVE SHEETING.
3. UNLESS OTHERWISE SPECIFIED, CONSTRUCTION SIGNS SHALL BE MOUNTED ON PORTABLE OR NON-PORTABLE SUPPORTS. A PORTABLE SUPPORT IS DEFINED AS A TYPICAL SIGN STANDARD AS SHOWN ON THIS SHEET, OR A SMALL LIGHT WEIGHT TRAILER. A NON-PORTABLE SUPPORT IS DEFINED AS IRON METAL OR WOODEN POSTS. ALL SIGNS, REGARDLESS OF THE TYPE OF SUPPORT USED, SHALL BE MOUNTED SUCH THAT THE MESSAGE ON THE SIGN IS LEVEL IN THE HORIZONTAL PLANE AFTER PLACEMENT. THE COST OF SUPPORTS, ANY NECESSARY HARDWARE AND, WHERE SPECIFIED, CONSTRUCTION WARNING LIGHTS SHALL BE INCLUDED IN THE COST OF THE CONSTRUCTION SIGNS.
4. MINIMUM VERTICAL CLEARANCE FOR CONSTRUCTION SIGNS SHALL BE - 5 FEET BETWEEN THE EDGE OF PAVEMENT AND THE BOTTOM OF THE SIGN.
5. MINIMUM HORIZONTAL CLEARANCE FOR THE CONSTRUCTION SIGNS SHALL BE AS FOLLOWS:
 - A. THE GREATER OF 12 FEET FROM THE EDGE OF PAVEMENT OR 6 FEET FROM THE EDGE OF THE PAVED SHOULDER TO THE NEAR EDGE OF THE SIGN FOR NON-PORTABLE SUPPORT MOUNTED SIGNS.
 - B. PORTABLE SUPPORT MOUNTED SIGNS DURING DAYLIGHT HOURS - 6 FEET FROM THE EDGE OF PAVEMENT TO THE NEAR EDGE OF THE SIGN OR 6 FEET FROM THE EDGE OF PAVED SHOULDER TO THE NEAR EDGE OF SIGN.
6. BARRICADES TYPE II IN PLACE FROM DUSK TO DAWN SHALL HAVE TYPE "C" STEADY BURNING LIGHTS.
7. WARNING LIGHTS, TYPE "A" AND TYPE "C":
 - A. AS USED HEREIN, WARNING LIGHTS ARE PORTABLE, LENS DIRECTED, ENCLOSED LIGHT. THE COLOR OF THE LIGHT EMITTED SHALL BE YELLOW. THEY MAY BE USED IN EITHER A STEADY BURN OR FLASHING MODE. WARNING LIGHTS SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

WARNING LIGHTS		
TYPE A	TYPE C	
LOW INTENSITY	STEADY BURN	
LENS DIRECTIONAL FACES	1 OR 2	1 OR 2
FLASHING RATE PER MINUTE	55 TO 75	CONSTANT
FLASH DURATION	10%	CONSTANT
MINIMUM EFFECTIVE INTENSITY	4 CANDELAS	2 CANDELAS
MINIMUM BEAM CANDLE POWER		
HOURS OF OPERATION	DUSK TO DAWN	DUSK TO DAWN
8. ALL CONSTRUCTION SIGN AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE INDIANA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS.
9. COORDINATE ALL LANE RESTRICTIONS WITH CITY OF FISHERS ENGINEERING INSPECTOR AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO BEGINNING WORK.



SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems.
The drawings do not necessarily indicate or describe all work required for full performance and completion of the project or the details of the construction.
On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

④	02/12/24	ADDENDUM #4
⑥	03/01/24	ADDENDUM #6

ISSUE DATE **DRAWN BY** **CHECKED BY**

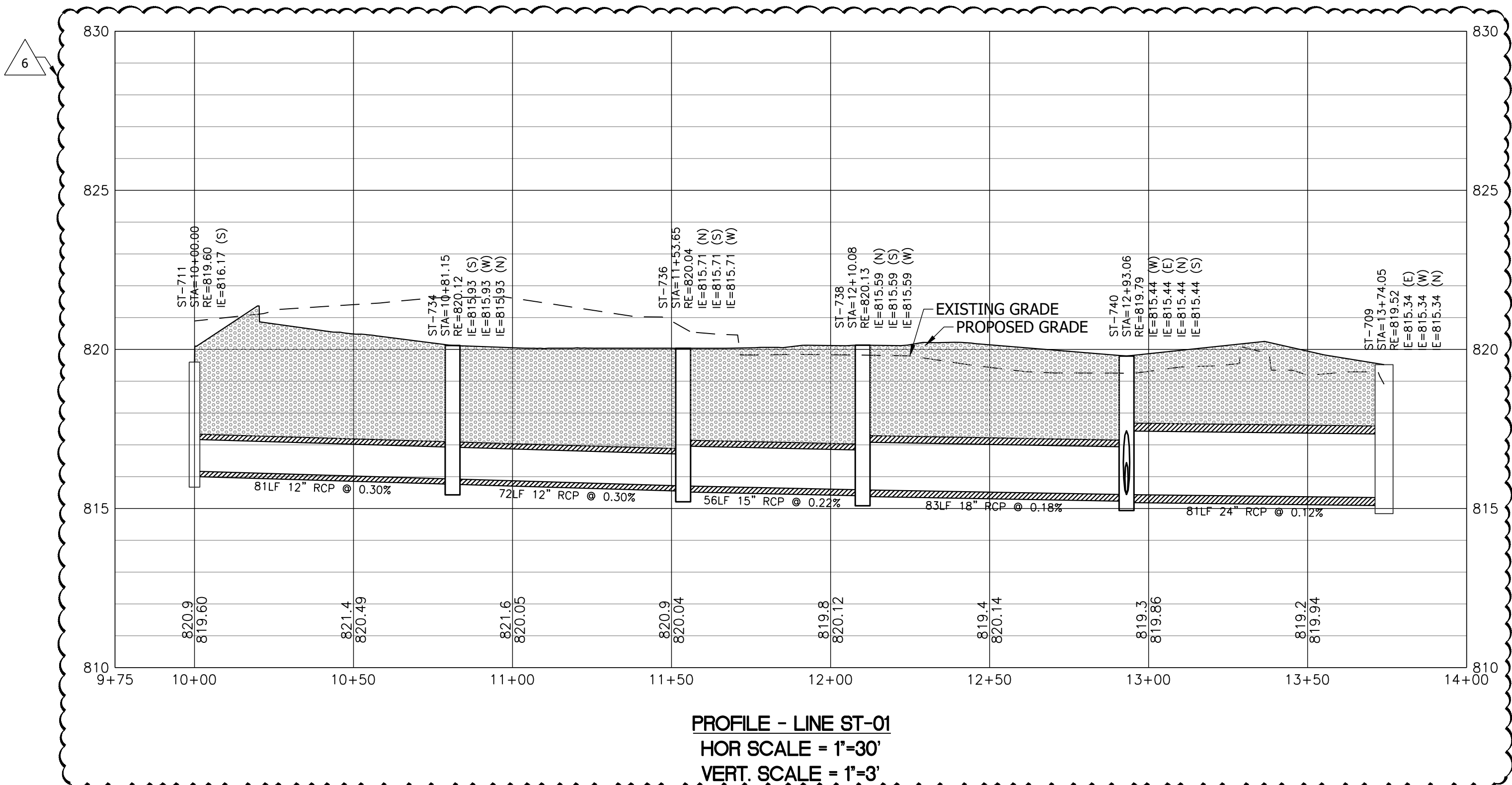
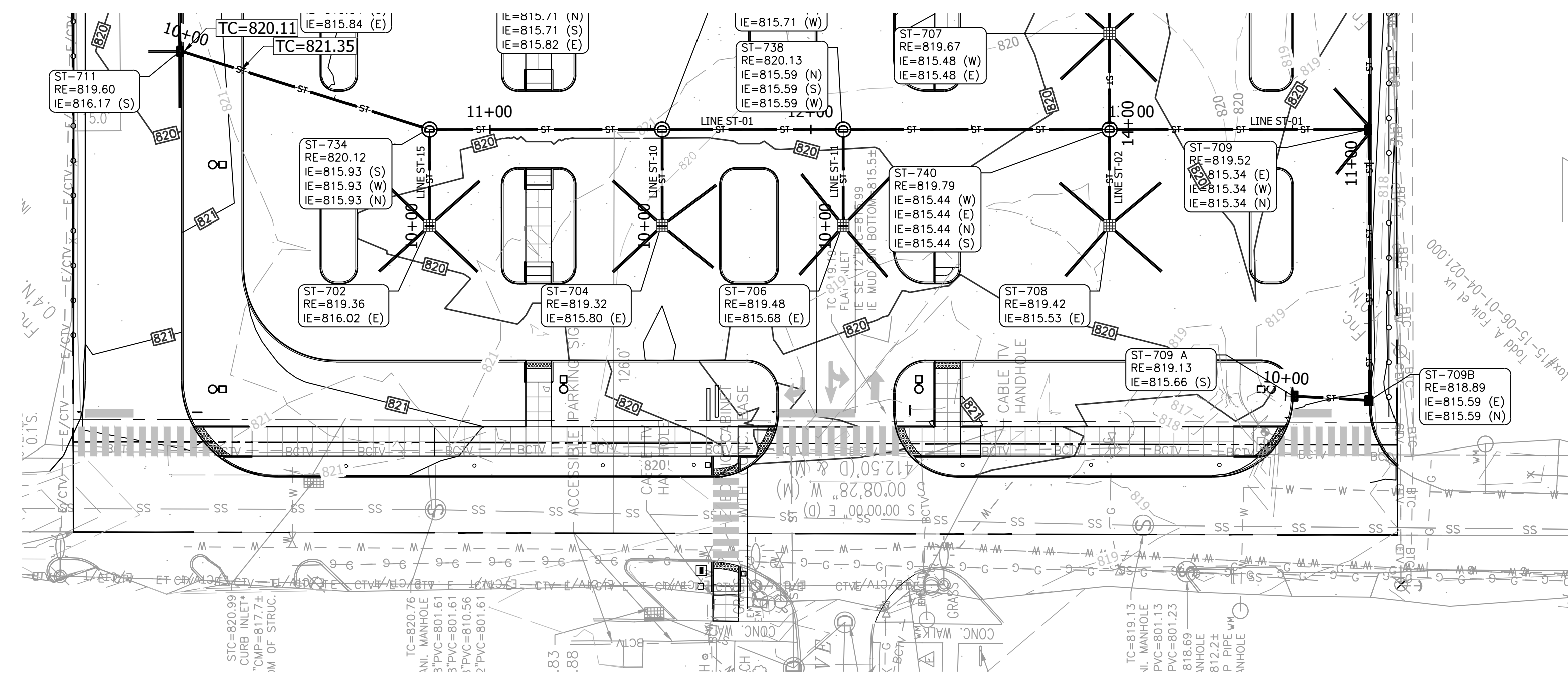
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**MAINTENANCE
OF
TRAFFIC
PLAN**

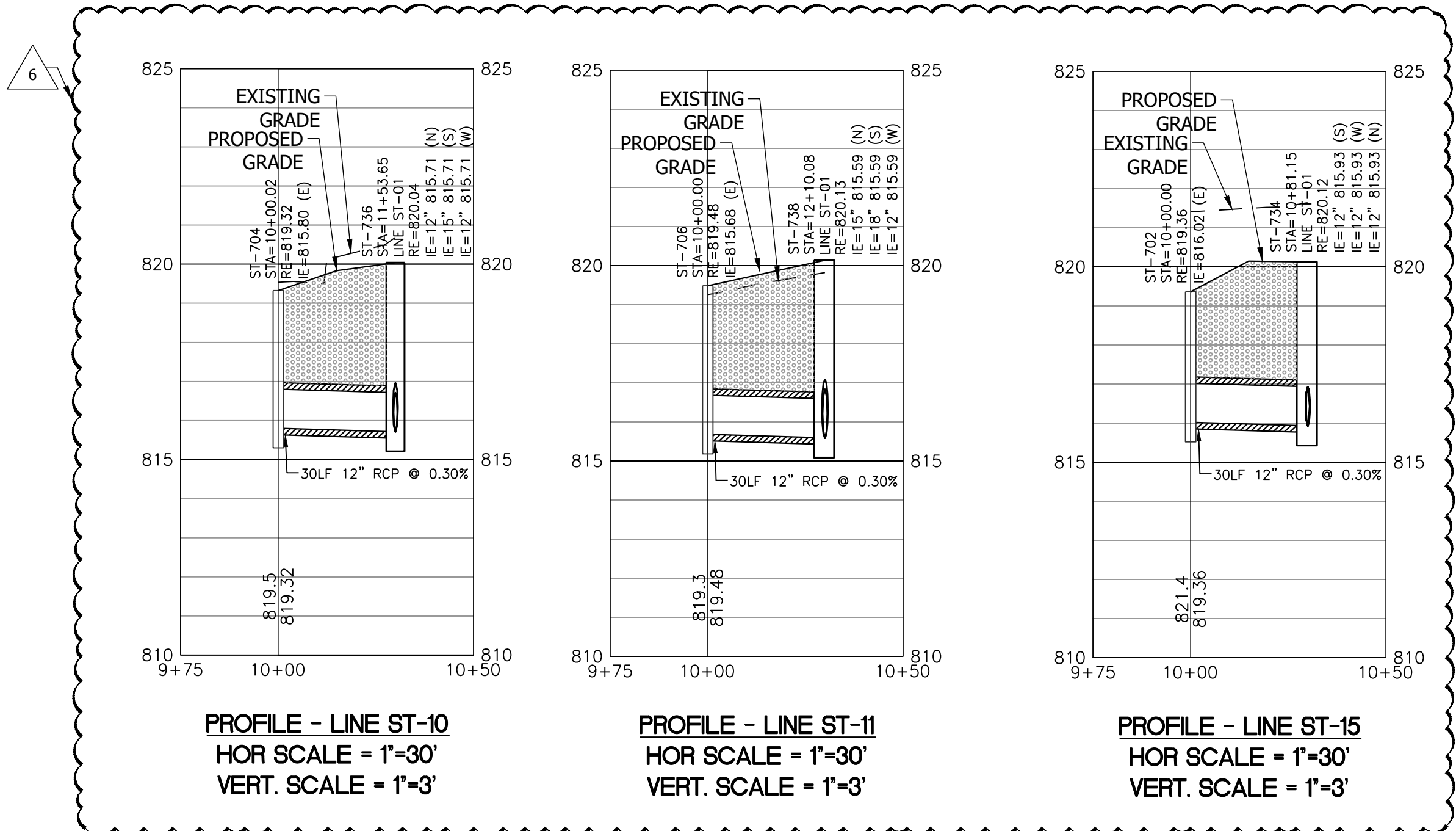
CERTIFIED BY:
David A. Lach
DAVID A. LACH
REGISTERED
PE 10000126
STATE OF
INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
C601

PROJECT NUMBER
2021119



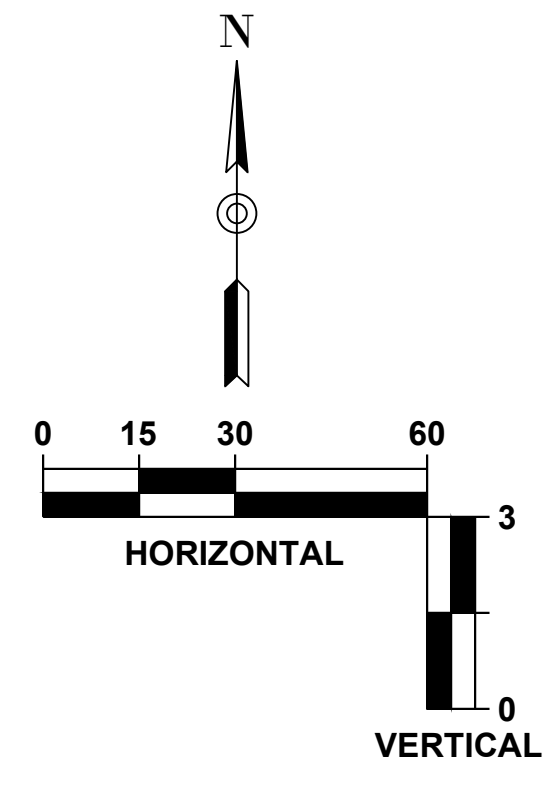
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PROFILE - LINE ST-15
HOR SCALE = 1"=30'
VERT. SCALE = 1"=3'



STORM SEWER PLAN AND PROFILE GENERAL NOTES

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STORM-BRIXX UNDERGROUND DETENTION

REVISIONS:

4	02/12/24 ADDENDUM #4
6	03/01/24 ADDENDUM #6

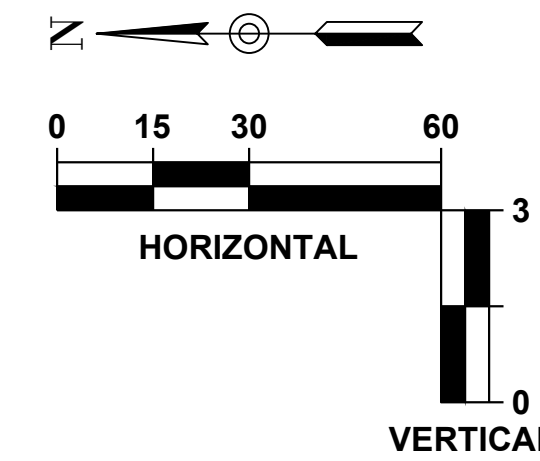
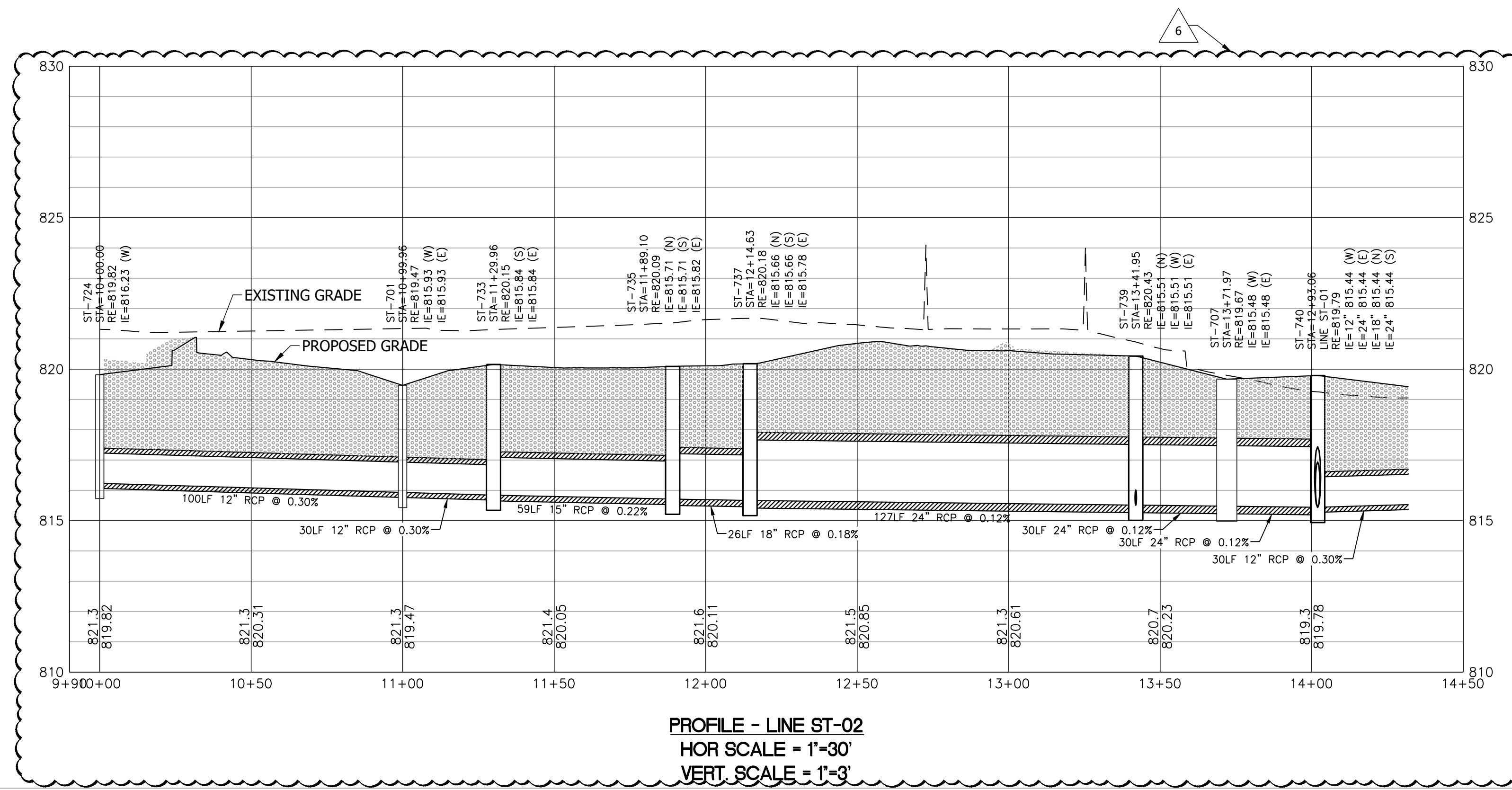
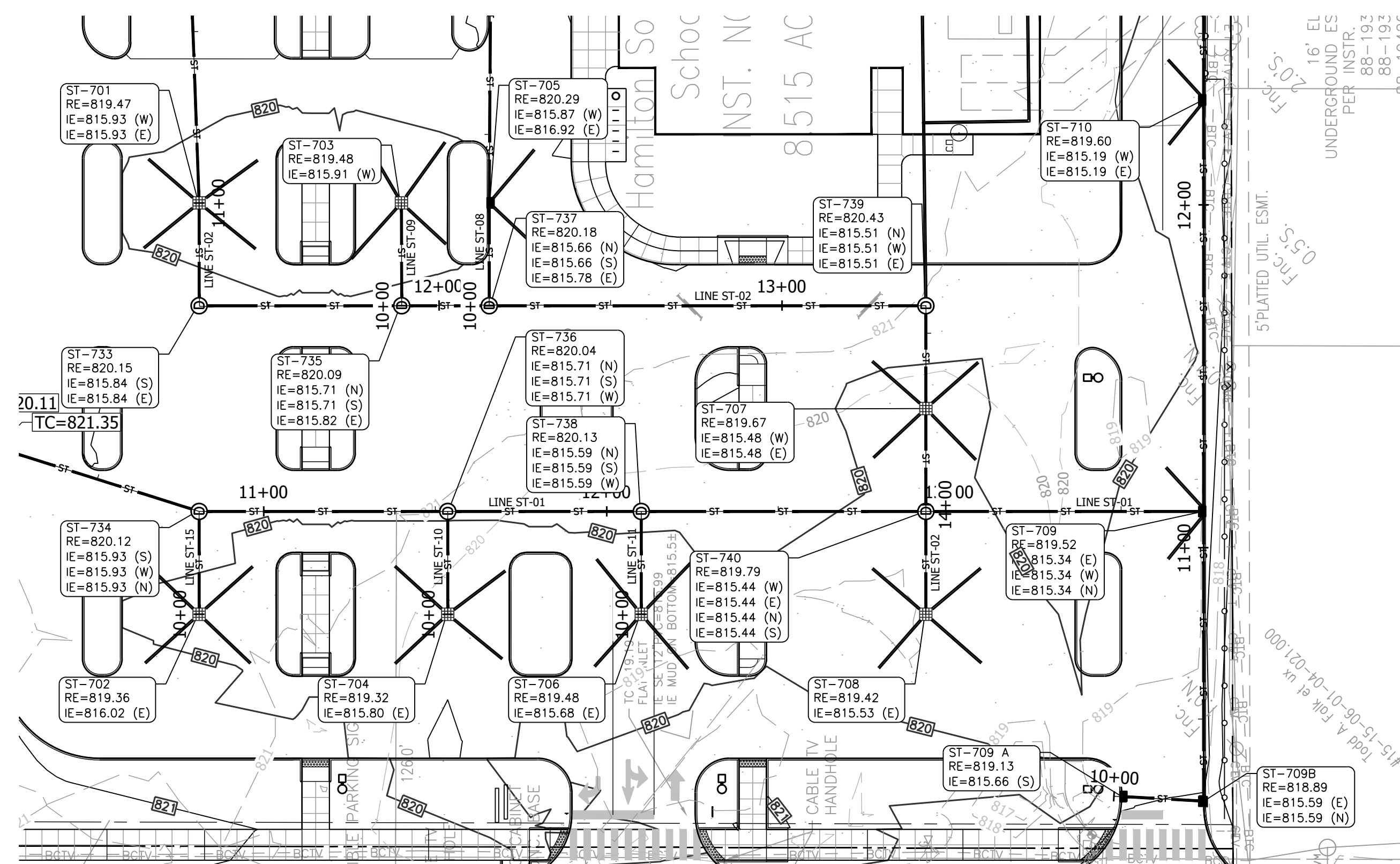
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01/15/2023	KDK	JAD

DRAWING TITLE:
**STORM
SEWER
PLAN AND
PROFILES**

CERTIFIED BY:
David A. Lach
DAVID A. LACH
REGISTERED
PE 10000126
STATE OF
INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
C701

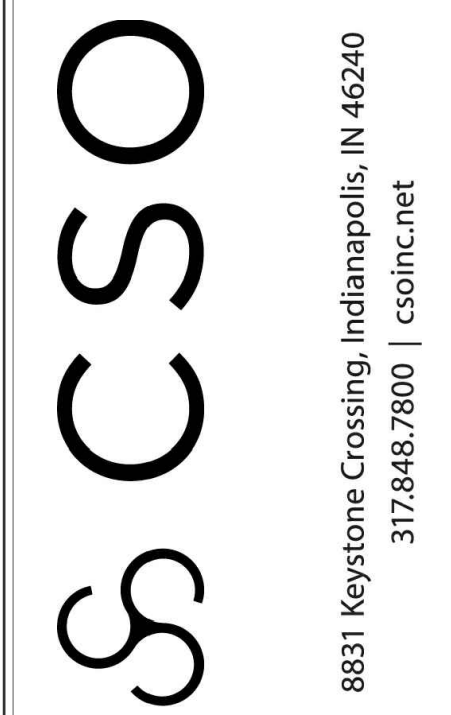
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STORM SEWER PLAN AND PROFILE GENERAL NOTES

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STORM-BRXX UNDERGROUND DETENTION



**FISHERS ELEMENTARY SCHOOL
 ADDITIONS & RENOVATIONS
 DESIGN DEVELOPMENT**
 11442 LANTERN
 RD., FISHERS, IN
 46038

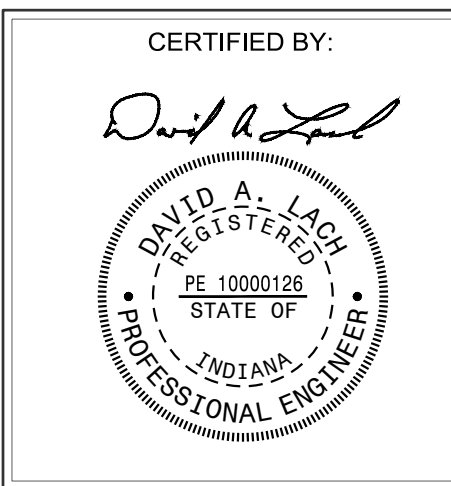
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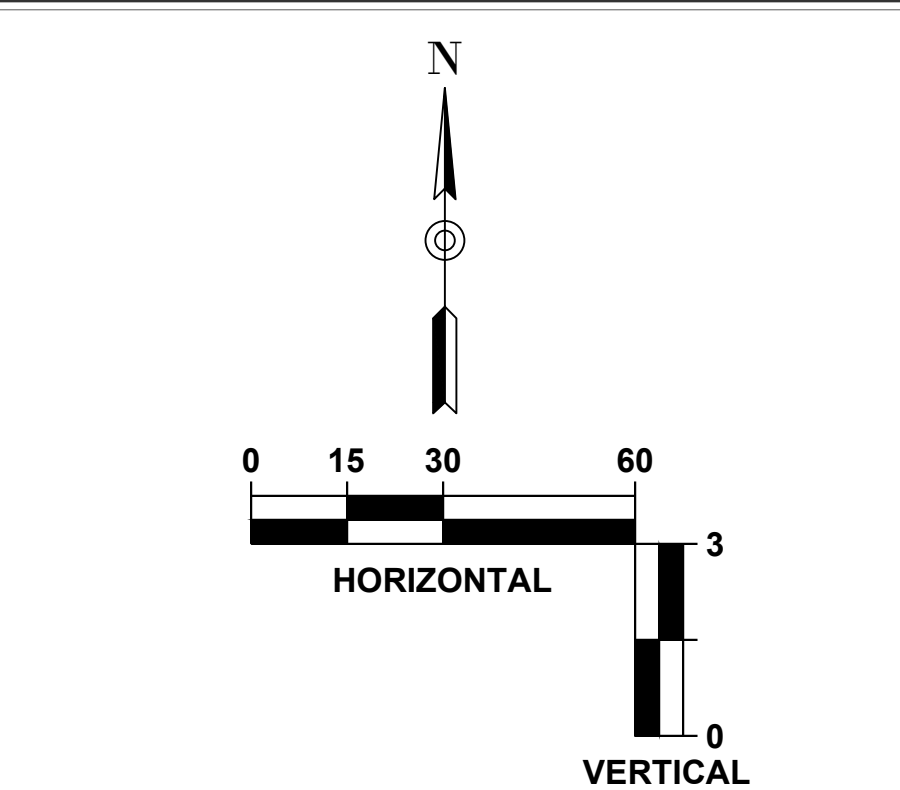
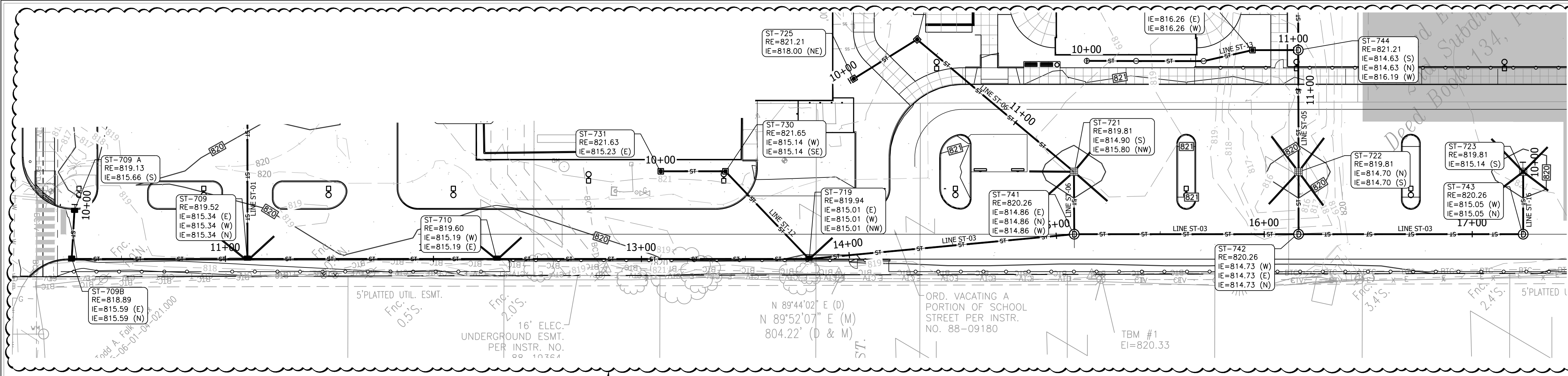
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**STORM
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 PLAN AND
 PROFILES**



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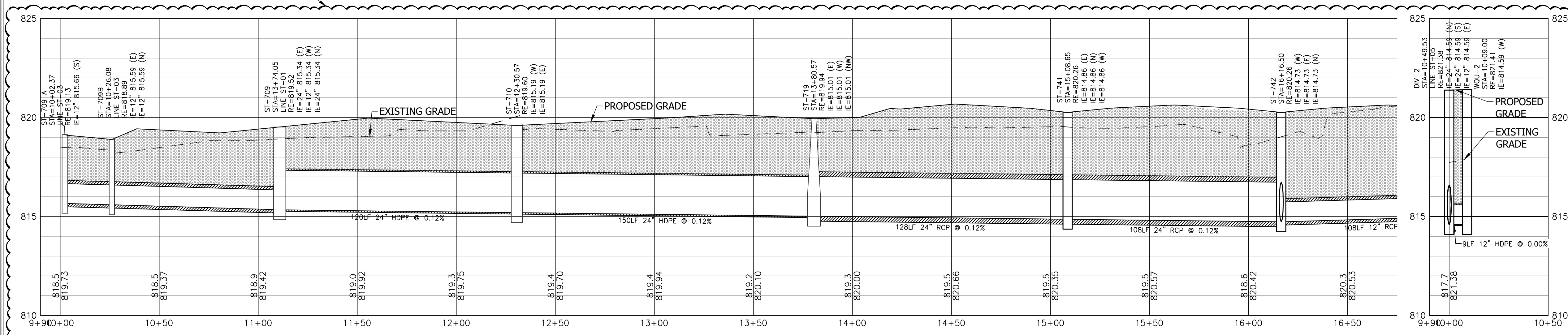
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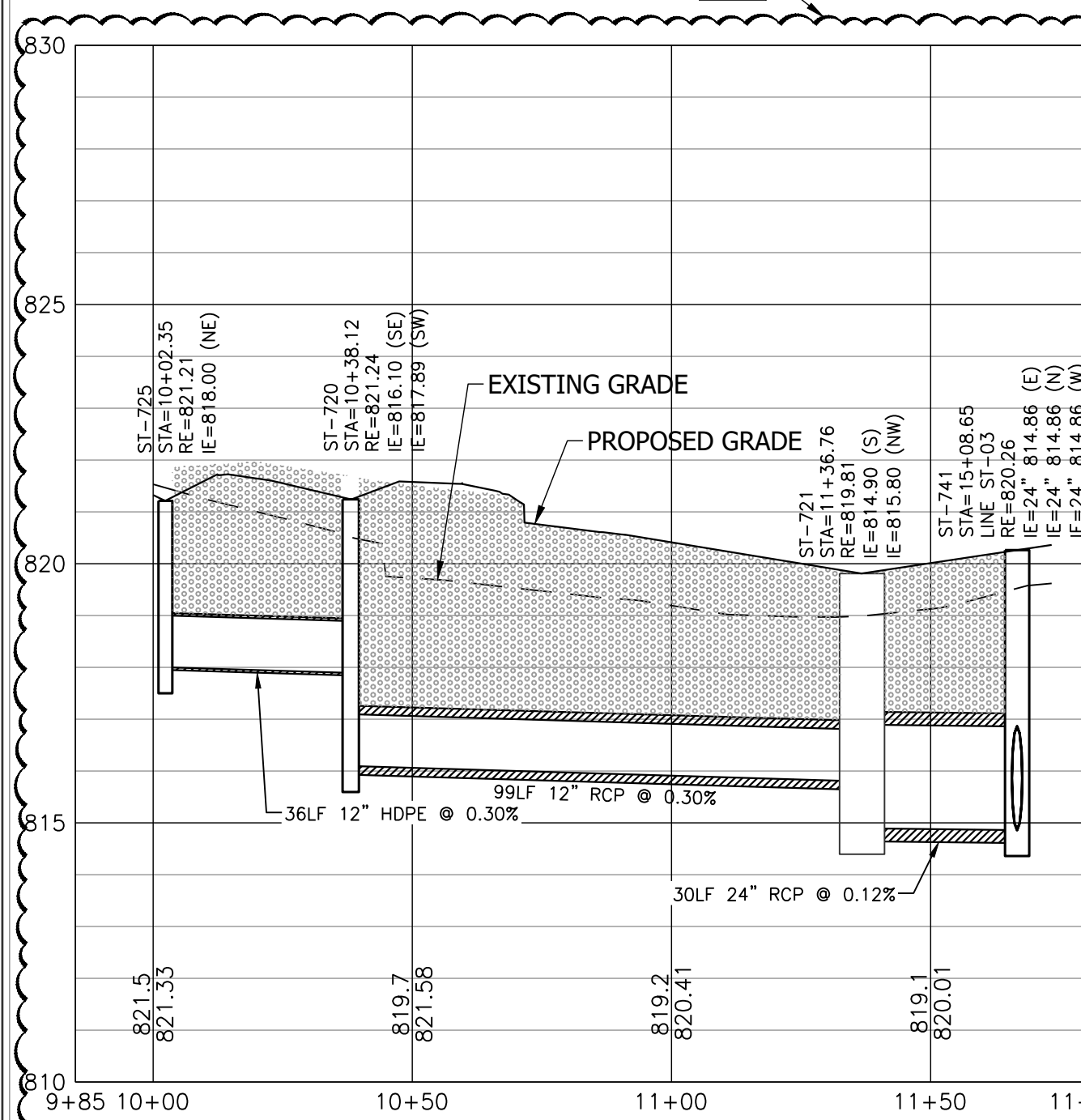
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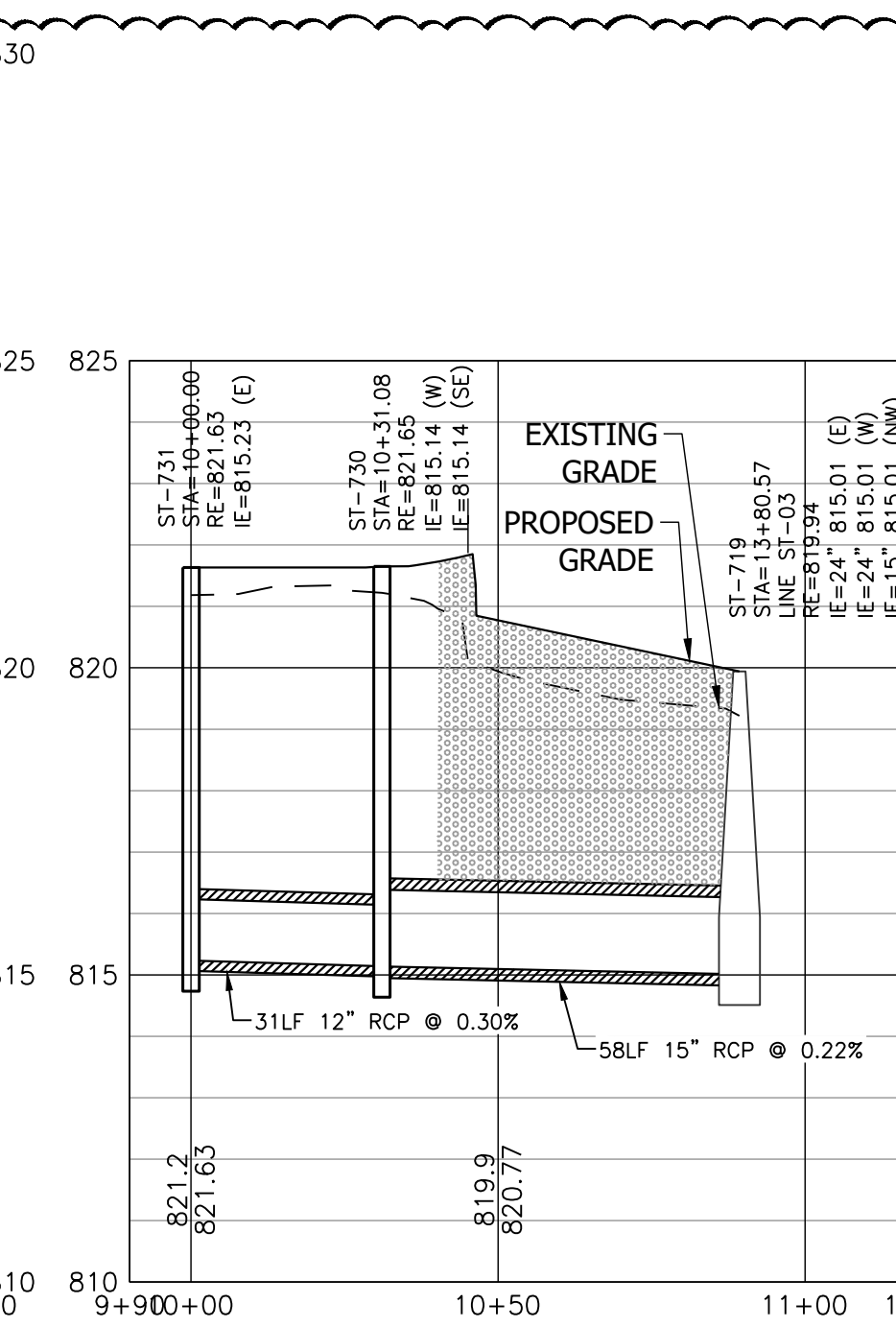


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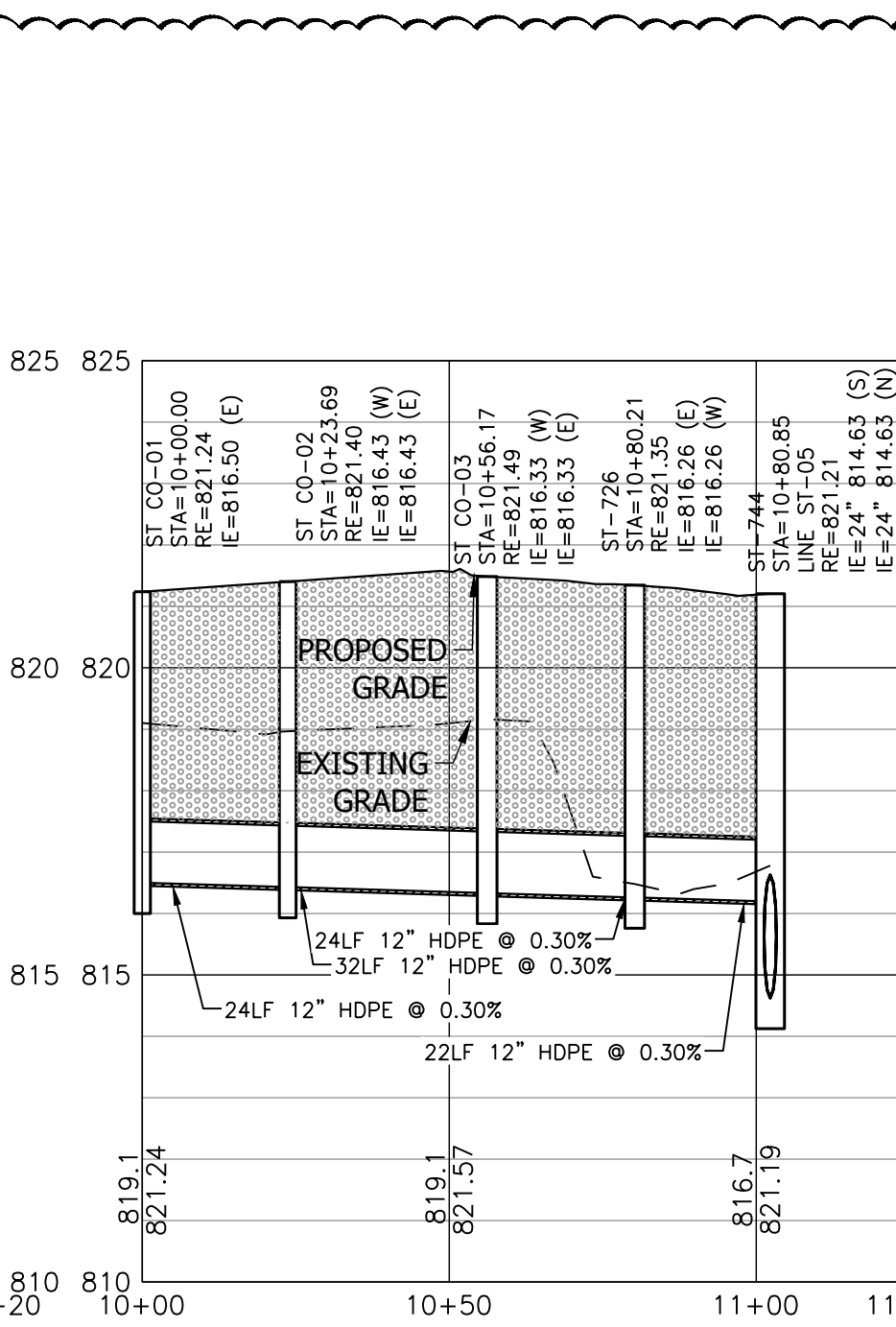
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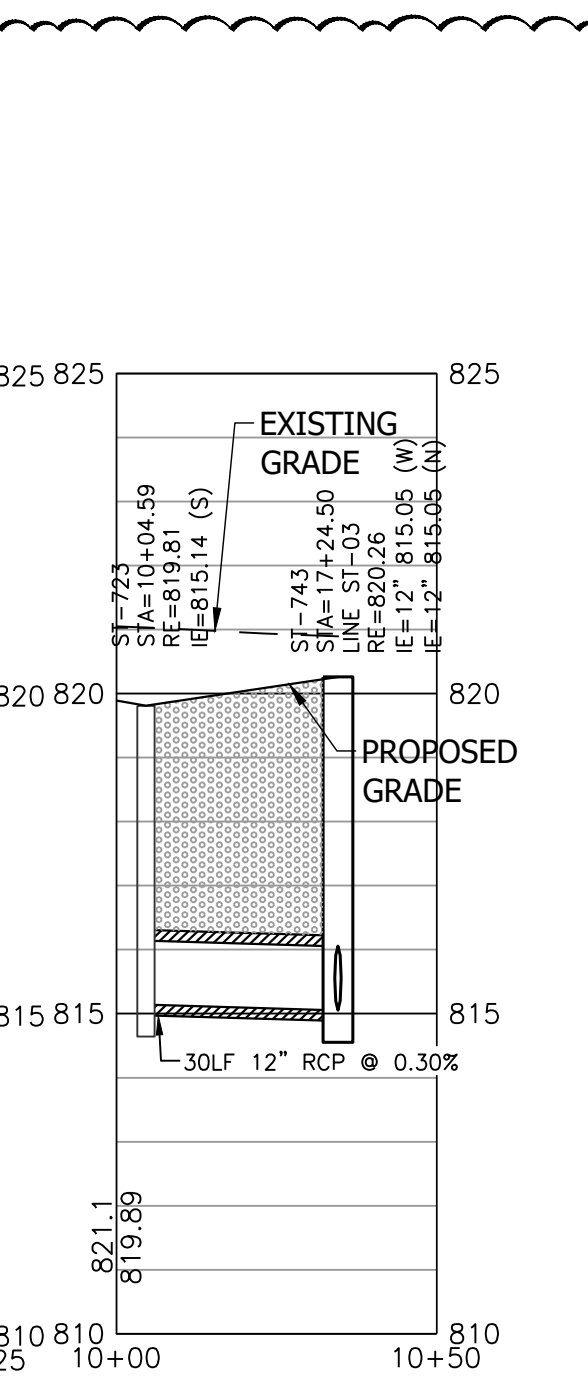
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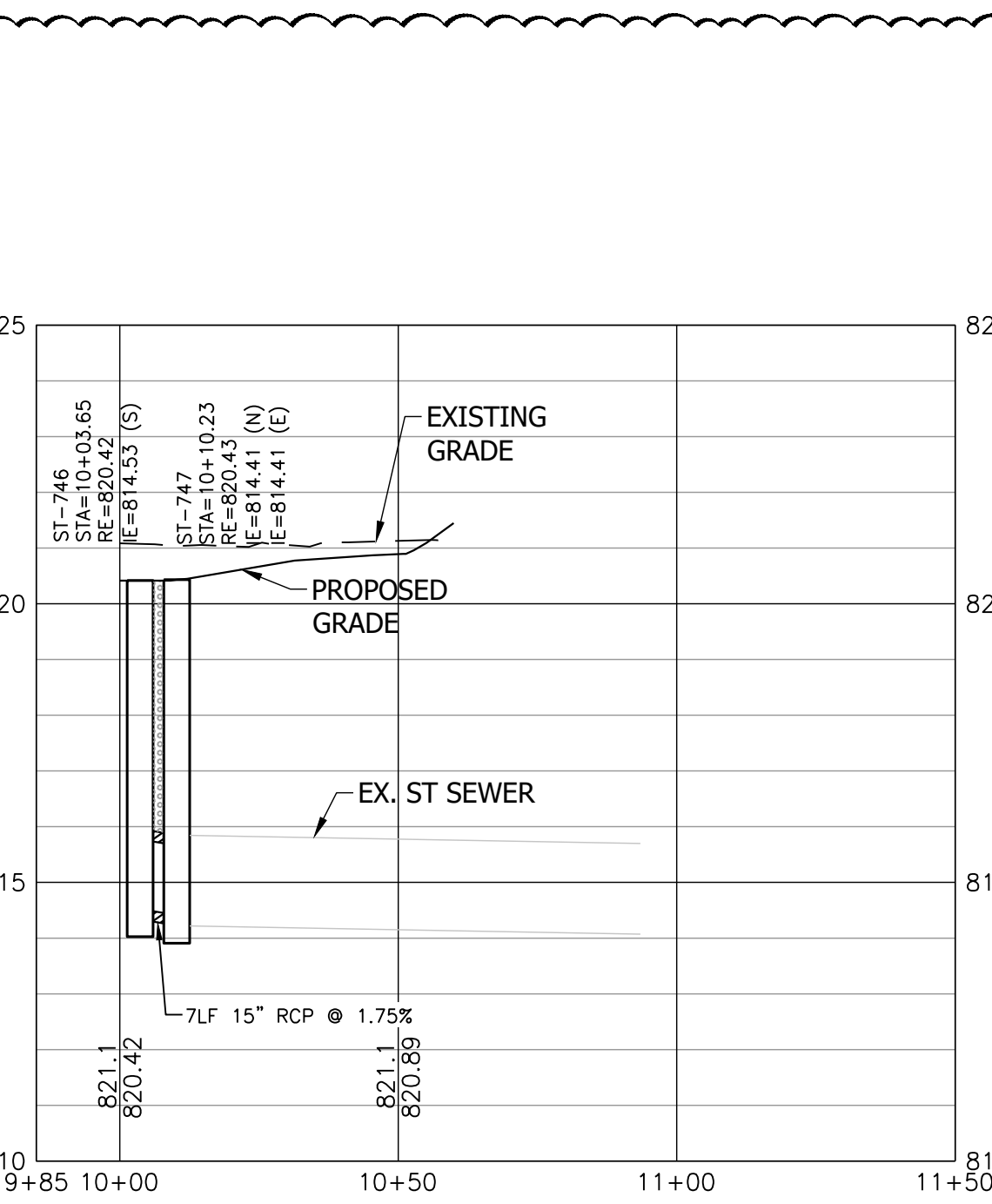
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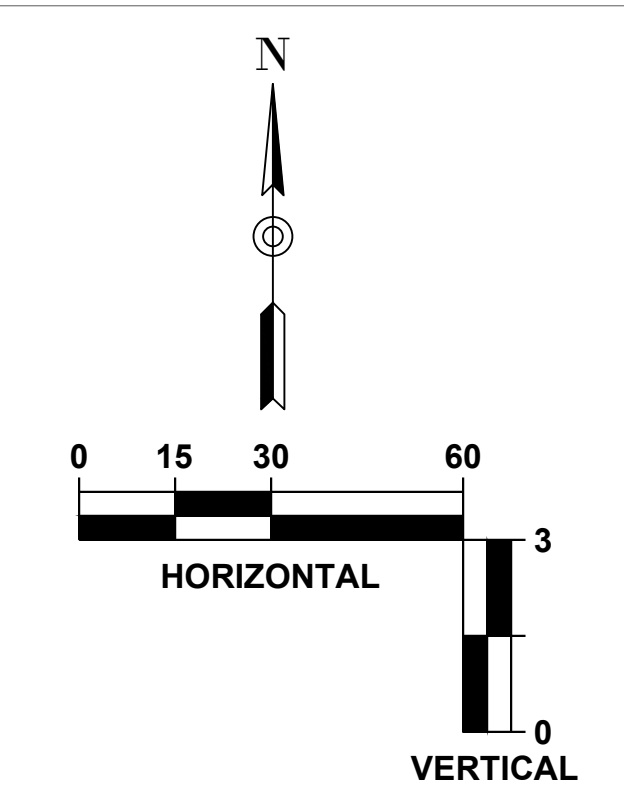
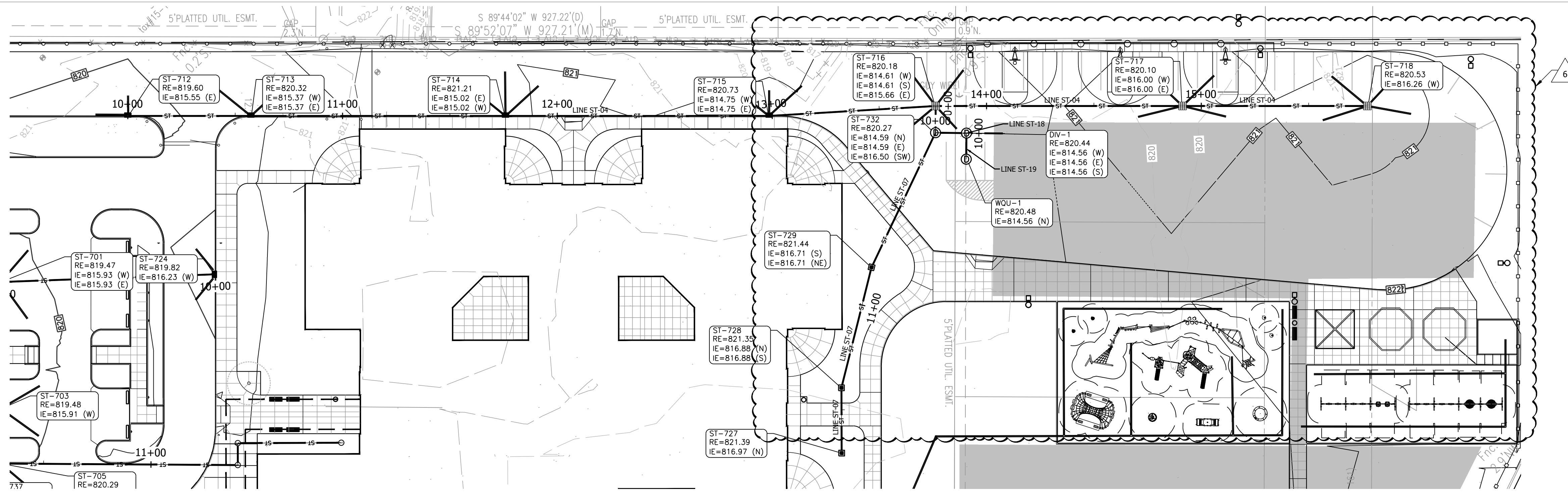
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PROFILE - LINE ST-17
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VERT. SCALE = 1"=3'



STORM SEWER PLAN AND PROFILE GENERAL NOTES

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 8831 Keystone Crossing, Indianapolis, IN 46240
 317.948.7800 | csoinc.net

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 317.444.6277
 CRIPE000000

**FISHERS ELEMENTARY SCHOOL
 ADDITIONS & RENOVATIONS
 DESIGN DEVELOPMENT**
 11442 LANTERN
 RD, FISHERS, IN
 46038

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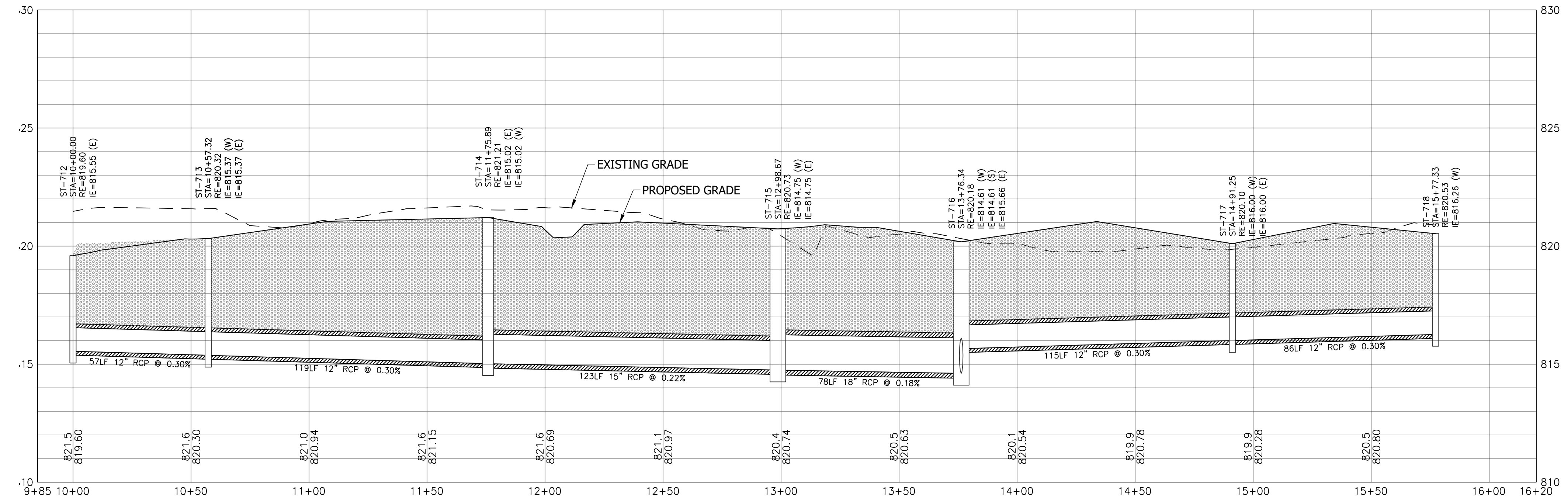
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01/15/2023	KDK	JAD

DRAWING TITLE:
**STORM
 SEWER
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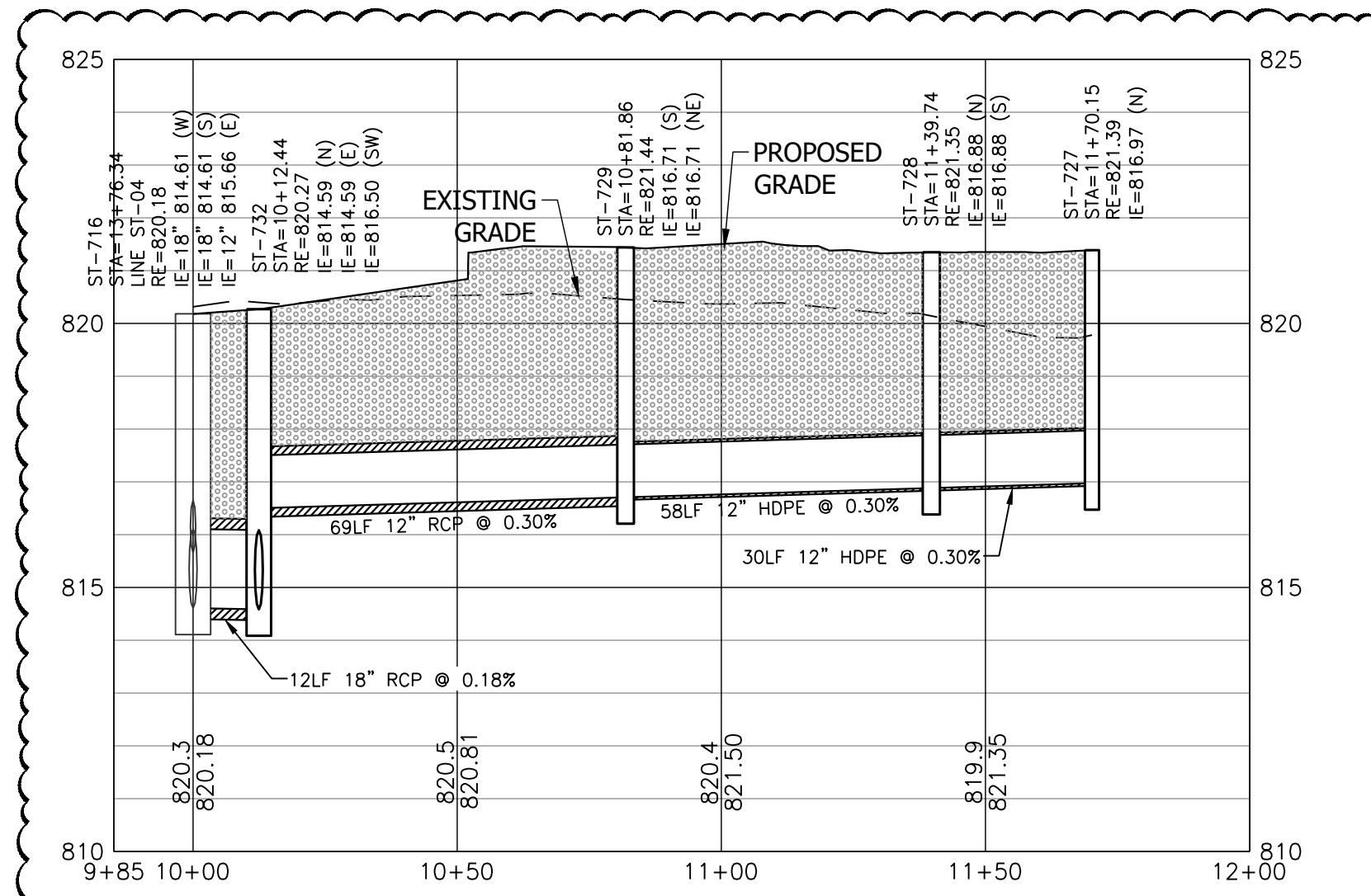
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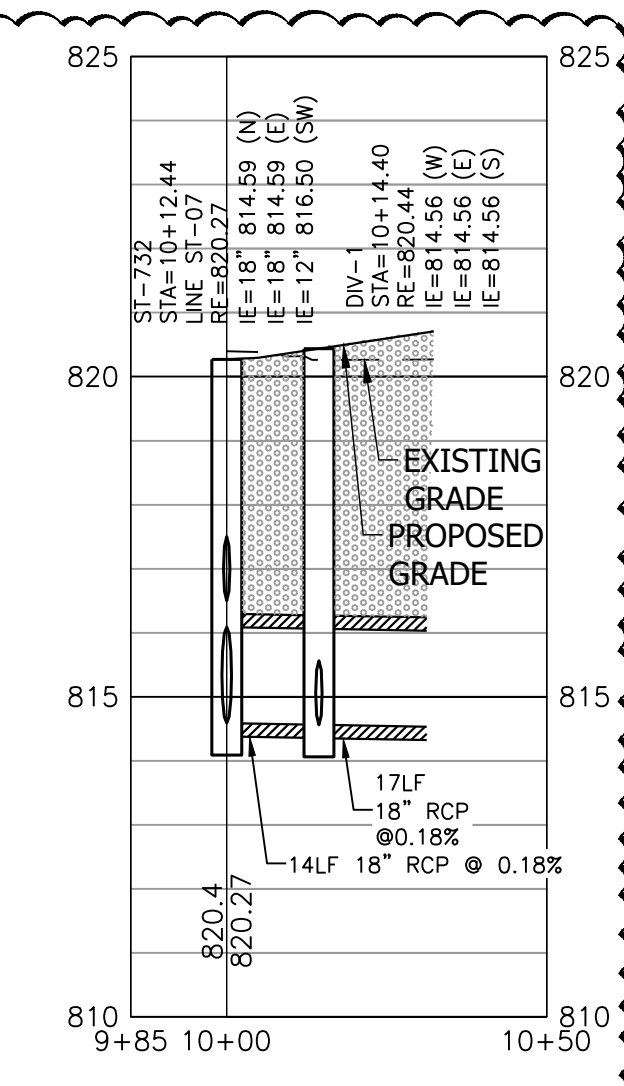
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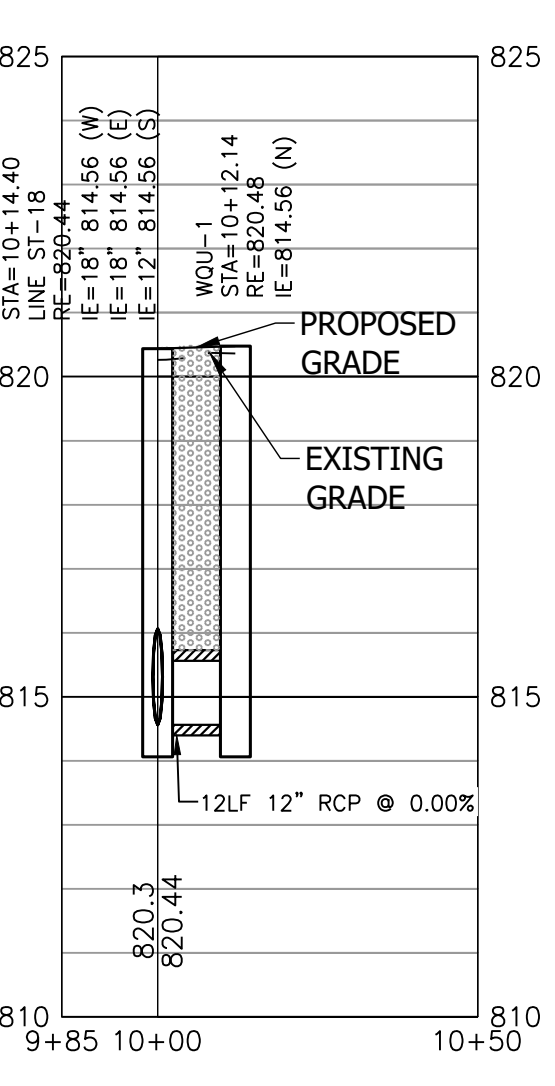
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 VERT. SCALE = 1"=3'



PROFILE - LINE ST-19
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STORM-BRIXX UNDERGROUND DETENTION

GENERAL NOTES

- IT IS CUSTOMERS RESPONSIBILITY TO ENSURE THAT EACH PRODUCT IS FIT FOR ITS INTENDED PURPOSE AND THAT THE ACTUAL CONDITIONS ARE SUITABLE.
- IT IS THE CUSTOMERS RESPONSIBILITY TO FOLLOW ACO, INC. INSTALLATION INSTRUCTIONS FOR EACH PRODUCT. SEEK ENGINEERING ADVICE FOR INSTALLATIONS NOT ILLUSTRATED IN THE INSTALLATION GUIDELINES.
- FOR FURTHER PRODUCT INFORMATION, CUT SHEETS, SPECIFICATIONS AND INSTALLATION INSTRUCTIONS, PLEASE VISIT US AT OUR WEBSITE: ACOSTORMBRXX.US

STORMBRXX NOTES

- ALL FABRICATIONS TO BE COMPLETED BY INSTALLING CONTRACTOR. HE/SHE TO VERIFY THE ENTIRE SCOPE OF STORMBRXX HD HAS BEEN PROVIDED FOR THIS PROJECT.
- DIMENSIONS ARE FROM OUTSIDE TO OUTSIDE.
- LAYOUT IS BASED ON CAD PLANS PROVIDED TO THE ACO, INC. TECHNICAL SERVICES DEPARTMENT.
- THIS PLAN VIEW REPRESENT ONE OF TWO STORMBRXX HD HALF LAYER ORIENTATIONS REQUIRED FOR THIS TANK. FOR COMPLETE, BRICK-BONDED INSTALLATION DRAWINGS, PLEASE REQUEST THIS SERVICE FROM THE ACO, INC. SALES DEPARTMENT.
- THE NUMBER OF ACCESS/INSPECTION LOCATIONS DISPLAYED ARE RECOMMENDATIONS, AND MORE/LESS CAN BE ADDED WITH EASE VIA REVISION.
- ACCESS UNITS OCCUPY A PROFILE EQUIVALENT TO HALF OF ON HALF MODULE AND ALLOW FOR DIRECT ACCESS TO UP 18" PIPE CONNECTIONS.
- ACCESS PLATES OCCUPY THE EQUIVALENT PROFILE OF HALF OF ONE HALF MODULE AND MUST BE SURROUNDED BY BRICK BONDED MODULES. ACCESS PLATES CAN BE PLACED ANYWHERE BESIDES THE EDGE OF THE SYSTEM.
- HOLDING CAPACITY OF ONE FULLY ASSEMBLED STORMBRXX HD MODULE = 14.73 CF

INSTALLATION NOTES

- ALL FABRICATIONS TO BE COMPLETED BY INSTALLING CONTRACTOR.
- EXCAVATE AWAY FROM TANK'S PROFILE PER OSHA STANDARDS.
- UP TO 15" PIPE CONNECTIONS CAN BE CORED DIRECTLY INTO STORMBRXX HD SIDE PANELS.
- USE LAYER CONNECTORS TO RESTRICT SHEARING MOVEMENT BETWEEN BRICK-BONDED LAYERS/HALF LAYERS.
- USE LAYER CONNECTORS TO ADHERE ACCESS UNITS TO BRICK-BONDED HALF MODULES.
- A VOID AREA EQUIVALENT TO HALF OF ONE HALF MODULE IS PRESENT UNDER EACH ACCESS PLATE.

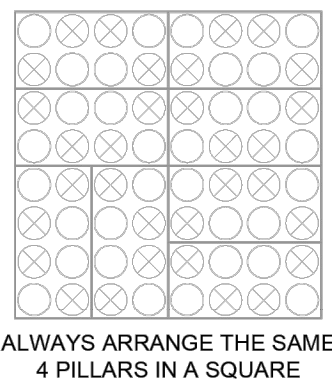
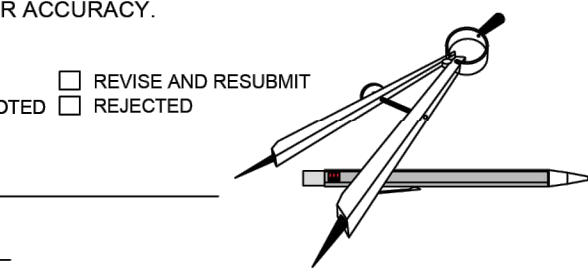
ALL DRAWINGS ARE AS ACCURATE AS THE INFORMATION SUPPLIED. ALL REASONABLE CARE HAS BEEN TAKEN IN COMPLYING THE INFORMATION WITHIN. PLEASE REVIEW THIS INFORMATION FOR ACCURACY.

- APPROVED REVISE AND RESUBMIT
 APPROVED AS NOTED REJECTED

SIGNED: _____

DATE: _____

COMMENTS:



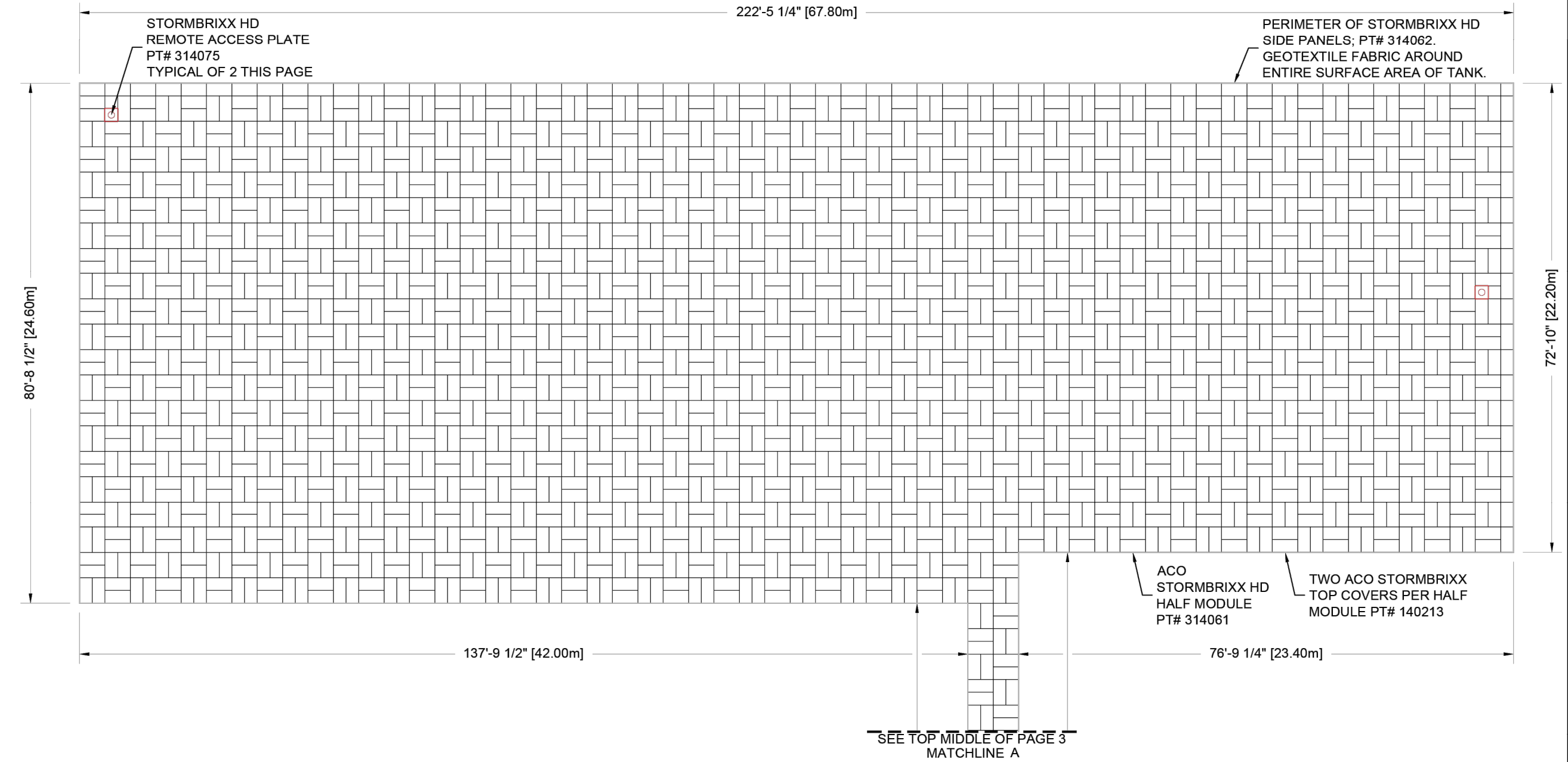
SHEET INDEX

SHEET NO.	DESCRIPTION
1	NOTES
2	TRENCH DRAIN LAYOUT I
3	TRENCH DRAIN LAYOUT II
4	TRENCH DRAIN LAYOUT III

DRAWN BY:		EMAIL:		SYSTEM HD		NOTES		ACO, INC.			
FISHERS ELEMENTARY FISHERS, IN		Jason.Jonke@aco.com		LAYER(S) 1		REVISIONS		ACO, INC.			
DATE	9/27/23	CHECKED BY	-	NO.	1	DESCRIPTION	CORRECTED SD REFERENCE	DATE	09-28-23	BY	JJ
SHEET NO.	DESIGN SERV. NO.	REV.	3	NO.	2	DESCRIPTION	MOVED BLOCKS FROM FENCE LINE	DATE	02/14/24	BY	JJ
SHEET 1 OF 4	1231128C			NO.	3	DESCRIPTION	CUTOUT FROM ISLAND	DATE	02/15/24	BY	JJ

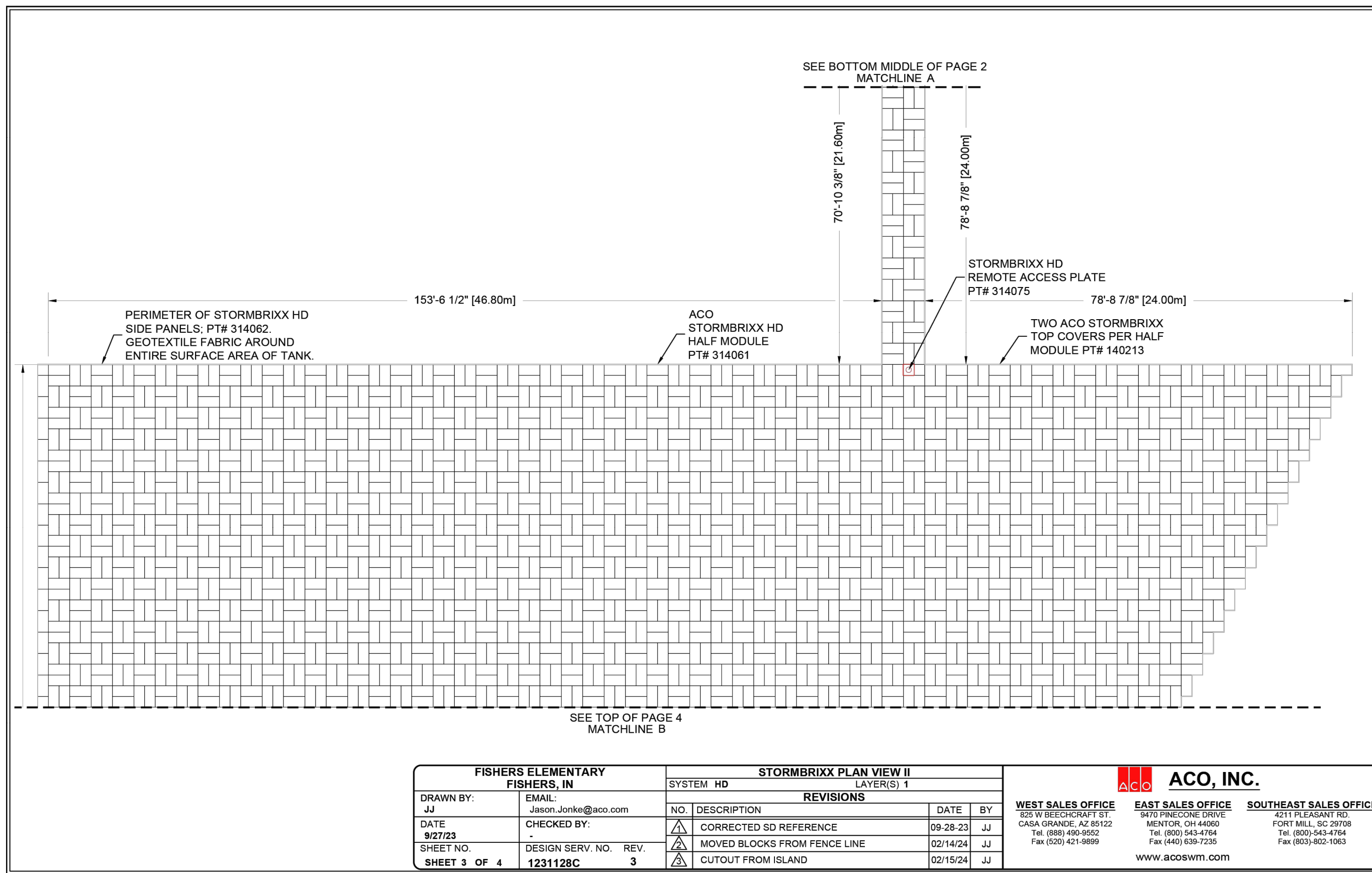
WEST SALES OFFICE	EAST SALES OFFICE	SOUTHEAST SALES OFFICE
255 W BEECHCRAFT ST. CASA GRANDE, AZ 85122 Tel: (888) 490-9552 Fax: (520) 421-9899	9470 PINECONE DRIVE MONTICELLO, OH 44890 Tel: (800) 543-4764 Fax: (440) 539-7235	4211 PLEASANT RD. FORT MILL, SC 29709 Tel: (800) 543-4764 Fax: (803) 602-1063

ACO STORMBRXX HD TANK
 TANK STRUCTURAL VOLUME 100,258 FT³
 TOTAL HOLDING VOLUME 95,245 FT³
 NUMBER OF LAYERS = 1 (2FT)



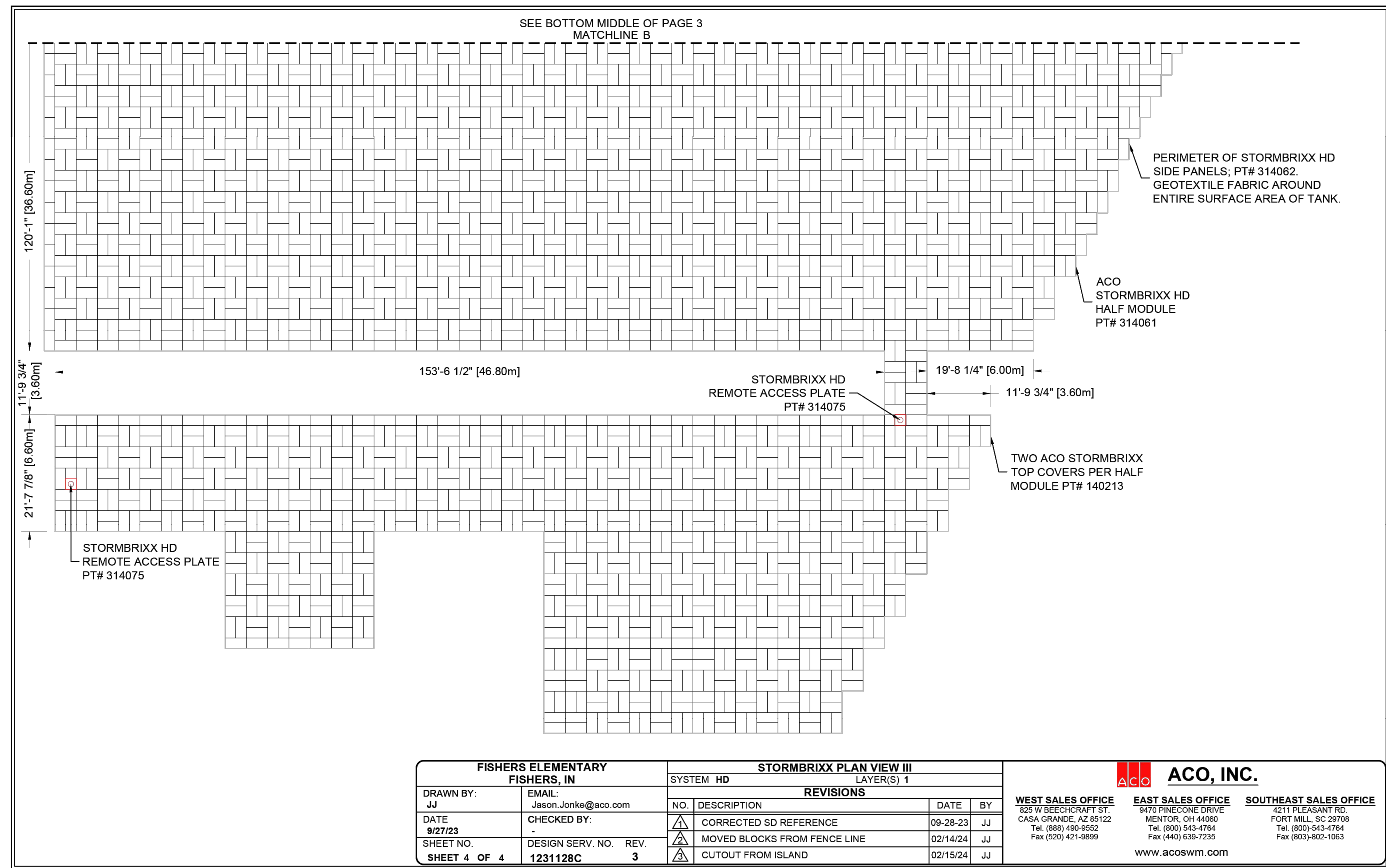
DRAWN BY:		EMAIL:		SYSTEM HD		NOTES		ACO, INC.			
FISHERS ELEMENTARY FISHERS, IN		Jason.Jonke@aco.com		LAYER(S) 1		REVISIONS		ACO, INC.			
DATE	9/27/23	CHECKED BY	-	NO.	1	DESCRIPTION	CORRECTED SD REFERENCE	DATE	09-28-23	BY	JJ
SHEET NO.	DESIGN SERV. NO.	REV.	3	NO.	2	DESCRIPTION	MOVED BLOCKS FROM FENCE LINE	DATE	02/14/24	BY	JJ
SHEET 2 OF 4	1231128C			NO.	3	DESCRIPTION	CUTOUT FROM ISLAND	DATE	02/15/24	BY	JJ

WEST SALES OFFICE	EAST SALES OFFICE	SOUTHEAST SALES OFFICE
255 W BEECHCRAFT ST. CASA GRANDE, AZ 85122 Tel: (888) 490-9552 Fax: (520) 421-9899	9470 PINECONE DRIVE MONTICELLO, OH 44890 Tel: (800) 543-4764 Fax: (440) 539-7235	4211 PLEASANT RD. FORT MILL, SC 29709 Tel: (800) 543-4764 Fax: (803) 602-1063



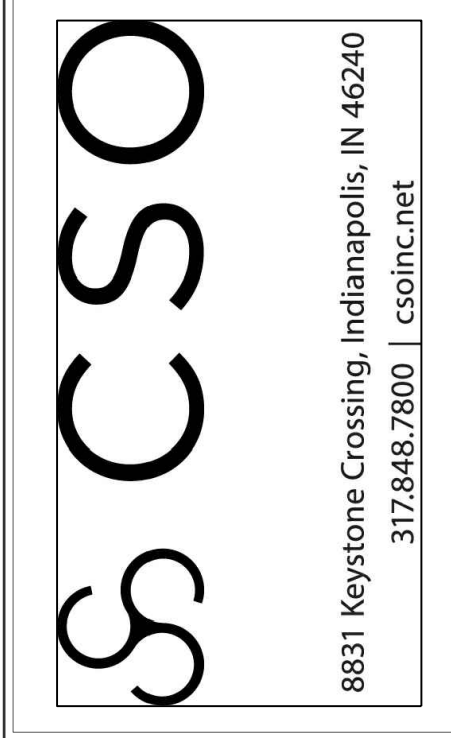
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FISHERS ELEMENTARY FISHERS, IN		Jason.Jonke@aco.com		LAYER(S) 1		REVISIONS		ACO, INC.			
DATE	9/27/23	CHECKED BY	-	NO.	1	DESCRIPTION	CORRECTED SD REFERENCE	DATE	09-28-23	BY	JJ
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WEST SALES OFFICE	EAST SALES OFFICE	SOUTHEAST SALES OFFICE
255 W BEECHCRAFT ST. CASA GRANDE, AZ 85122 Tel: (888) 490-9552 Fax: (520) 421-9899	9470 PINECONE DRIVE MONTICELLO, OH 44890 Tel: (800) 543-4764 Fax: (440) 539-7235	4211 PLEASANT RD. FORT MILL, SC 29709 Tel: (800) 543-4764 Fax: (803) 602-1063



DRAWN BY:		EMAIL:		SYSTEM HD		NOTES		ACO, INC.			
FISHERS ELEMENTARY FISHERS, IN		Jason.Jonke@aco.com		LAYER(S) 1		REVISIONS		ACO, INC.			
DATE	9/27/23	CHECKED BY	-	NO.	1	DESCRIPTION	CORRECTED SD REFERENCE	DATE	09-28-23	BY	JJ
SHEET NO.	DESIGN SERV. NO.	REV.	3	NO.	2	DESCRIPTION	MOVED BLOCKS FROM FENCE LINE	DATE	02/14/24	BY	JJ
SHEET 4 OF 4	1231128C			NO.	3	DESCRIPTION	CUTOUT FROM ISLAND	DATE	02/15/24	BY	JJ

WEST SALES OFFICE	EAST SALES OFFICE	SOUTHEAST SALES OFFICE
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FISHERS ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS DESIGN DEVELOPMENT
 11442 LANTERN RD., FISHERS, IN 46038

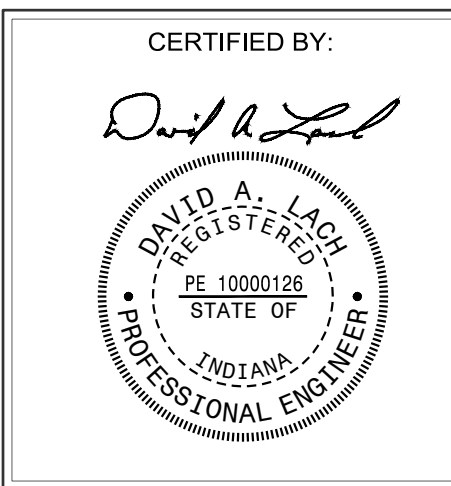
SCOPE DRAWINGS:
 These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract. On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

4	02/12/24	ADDENDUM #4
6	03/01/24	ADDENDUM #6

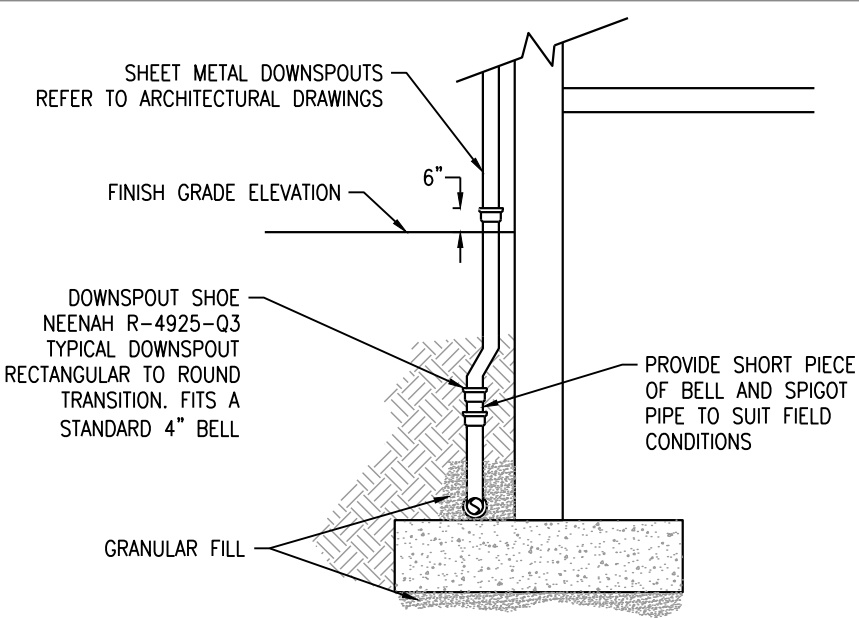
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
STORM SEWER DETAILS



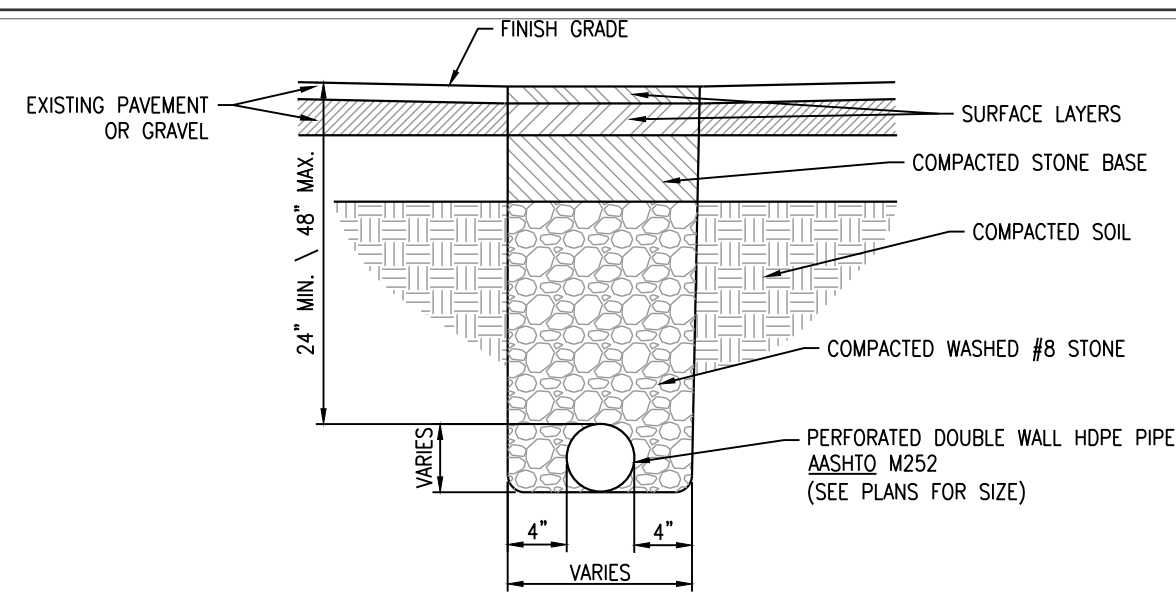
DRAWING NUMBER
C706

PROJECT NUMBER
2021119



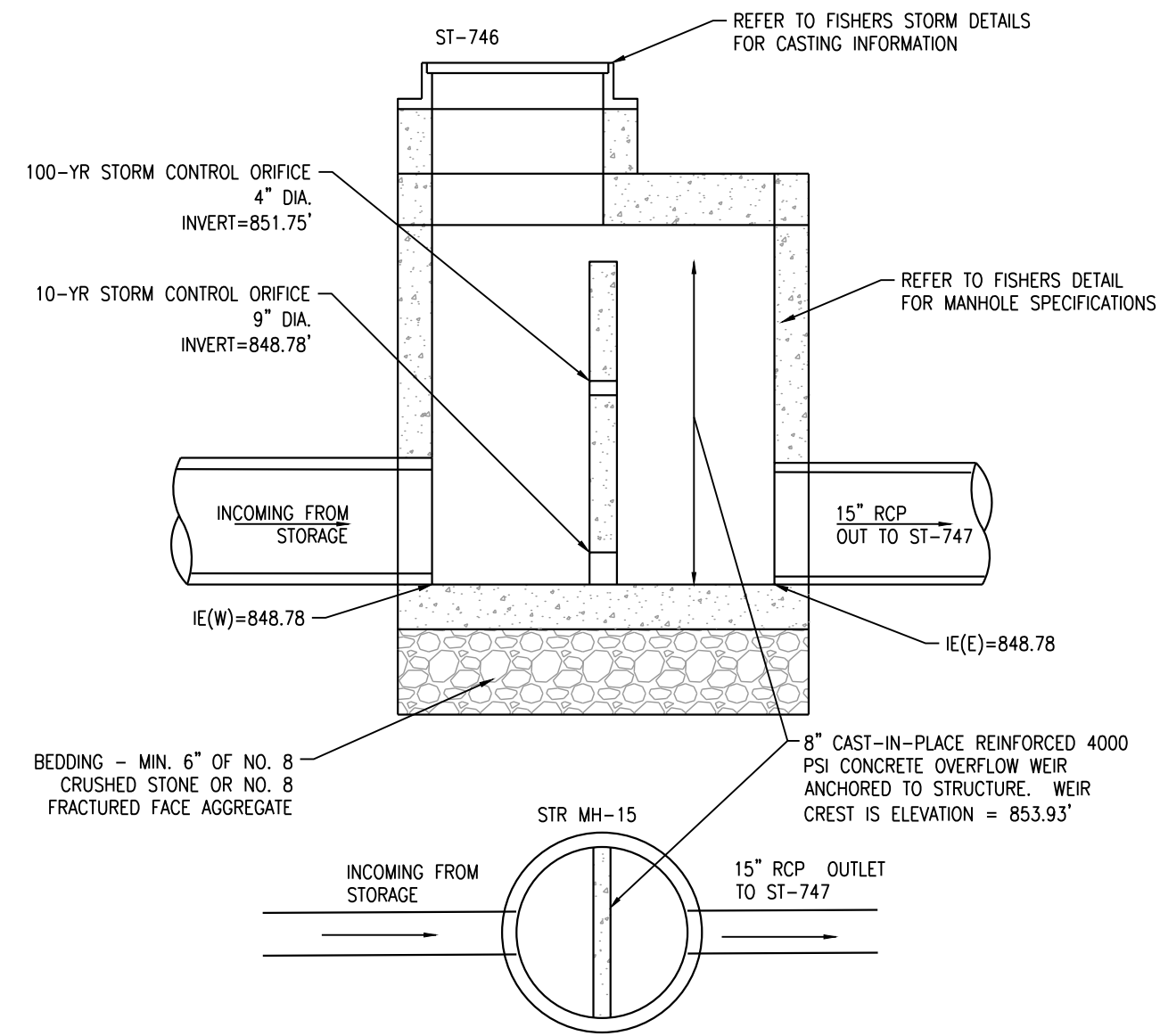
DOWNSPOUT BOOT DETAIL

NOT TO SCALE



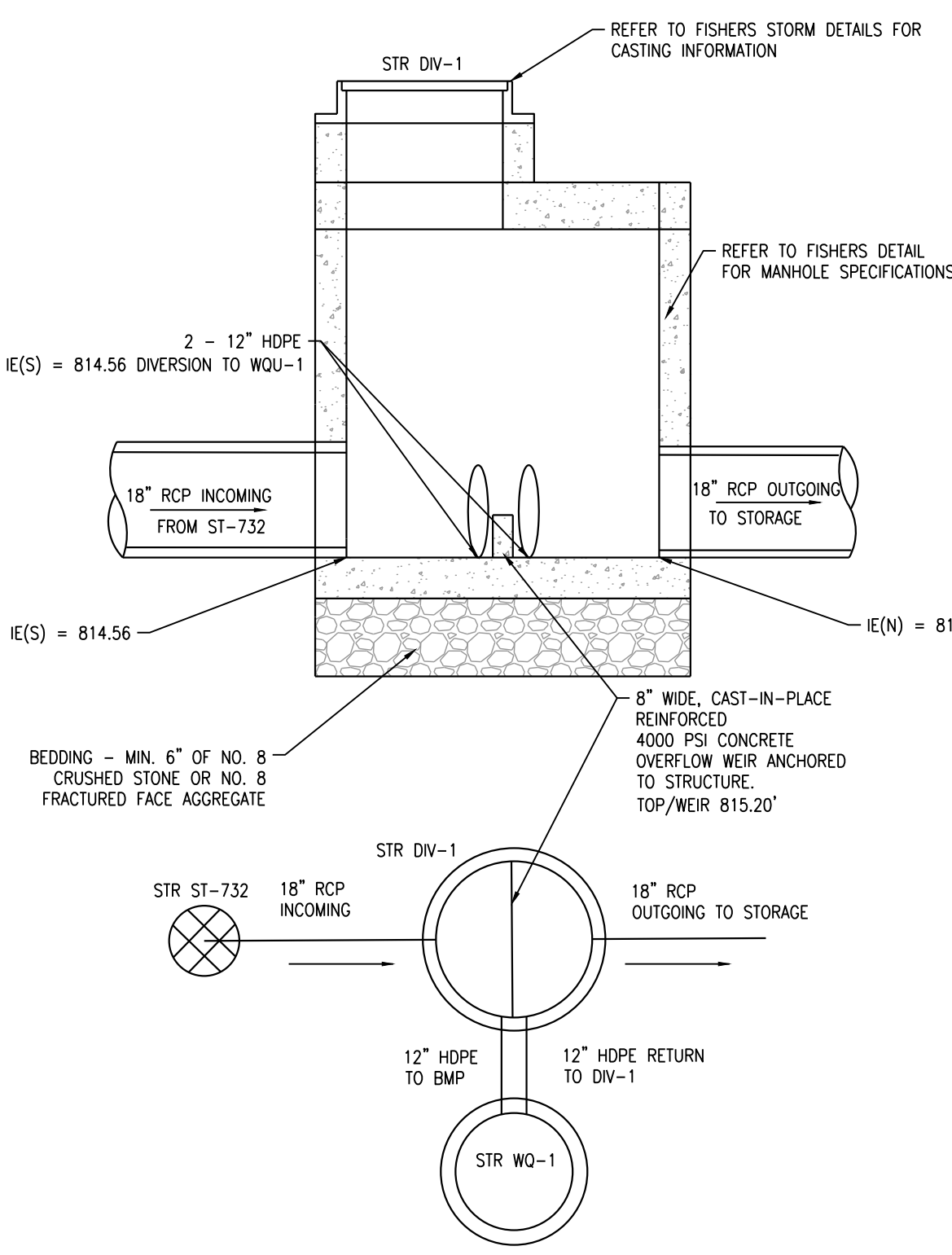
PERFORATED UNDERDRAIN (SSD) UNDER PAVEMENT OR GRAVEL AREA

NOT TO SCALE



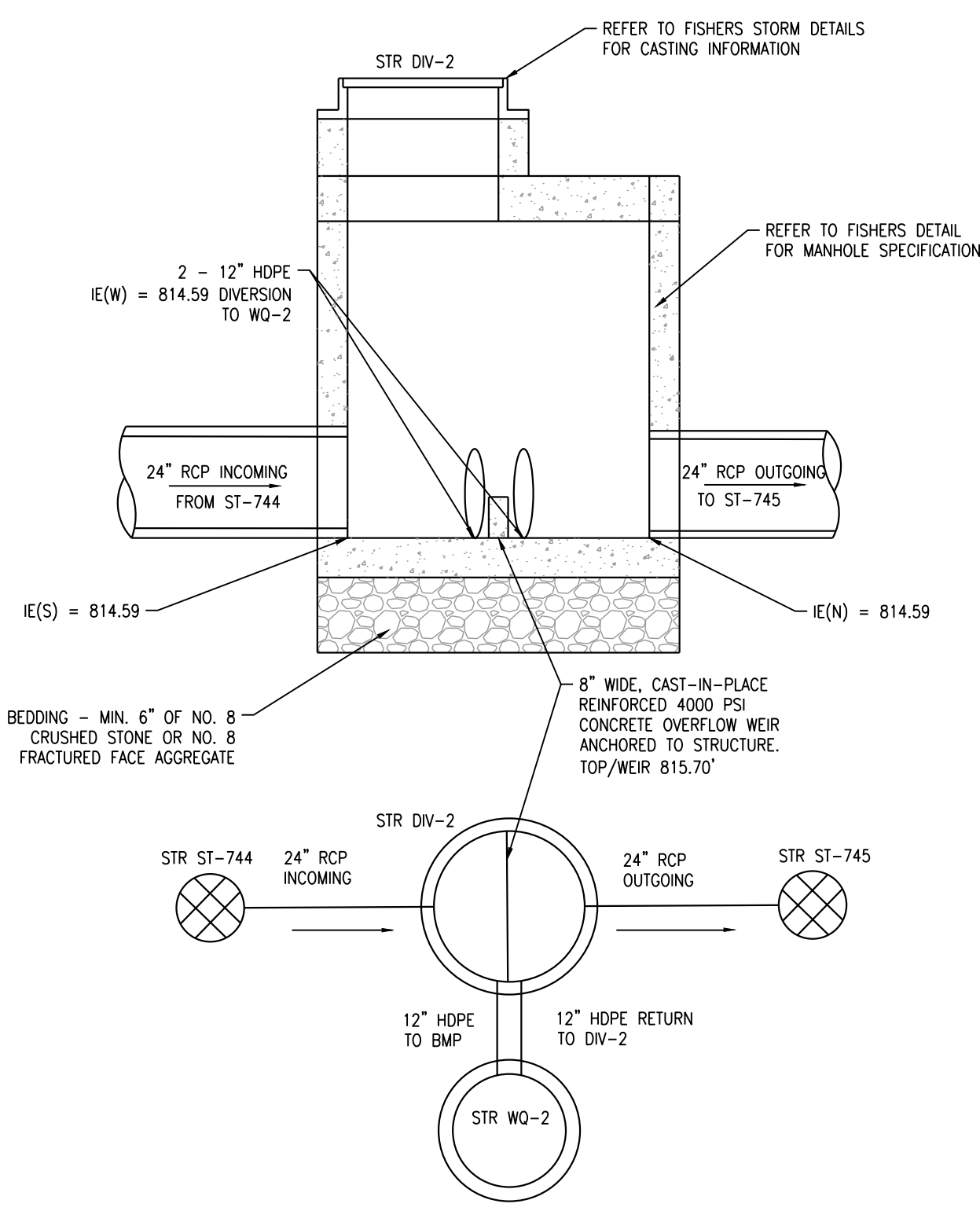
UNDERGROUND DETENTION OUTLET CONTROL STRUCTURE

NOT TO SCALE



STORM SEWER MANHOLE WITH DIVERSION WEIR (STR DIV-1)

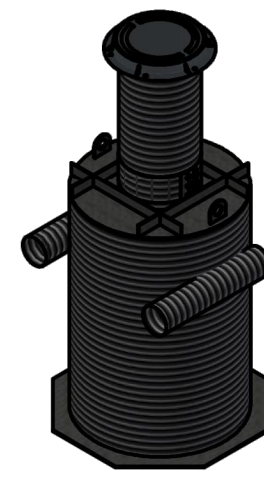
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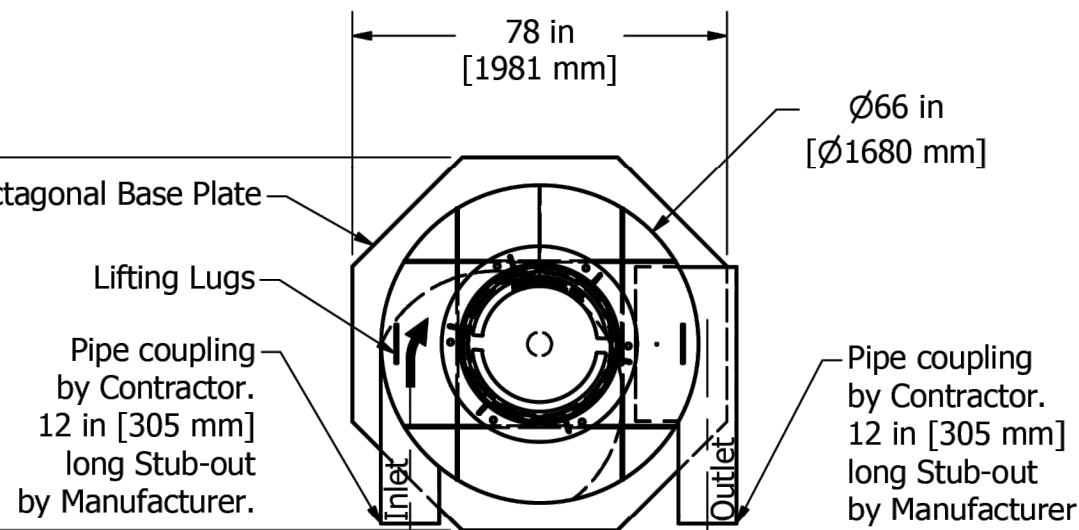
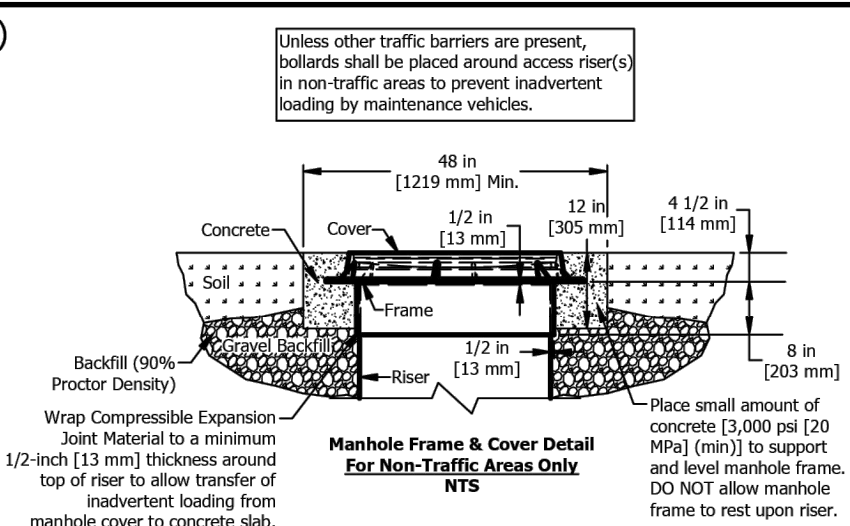
STORM SEWER MANHOLE WITH DIVERSION WEIR (STR DIV-2)

NOT TO SCALE

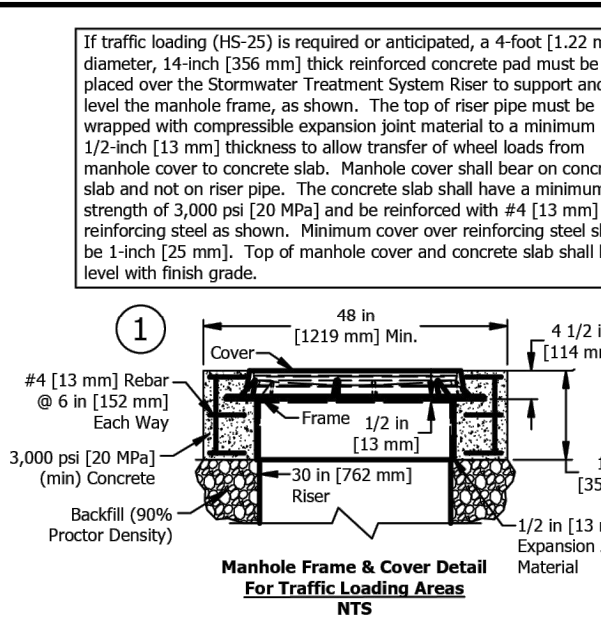
Aqua-Swirl® Polymer Coated Steel (PCS) Stormwater Treatment System



Projected View SCALE 1:70

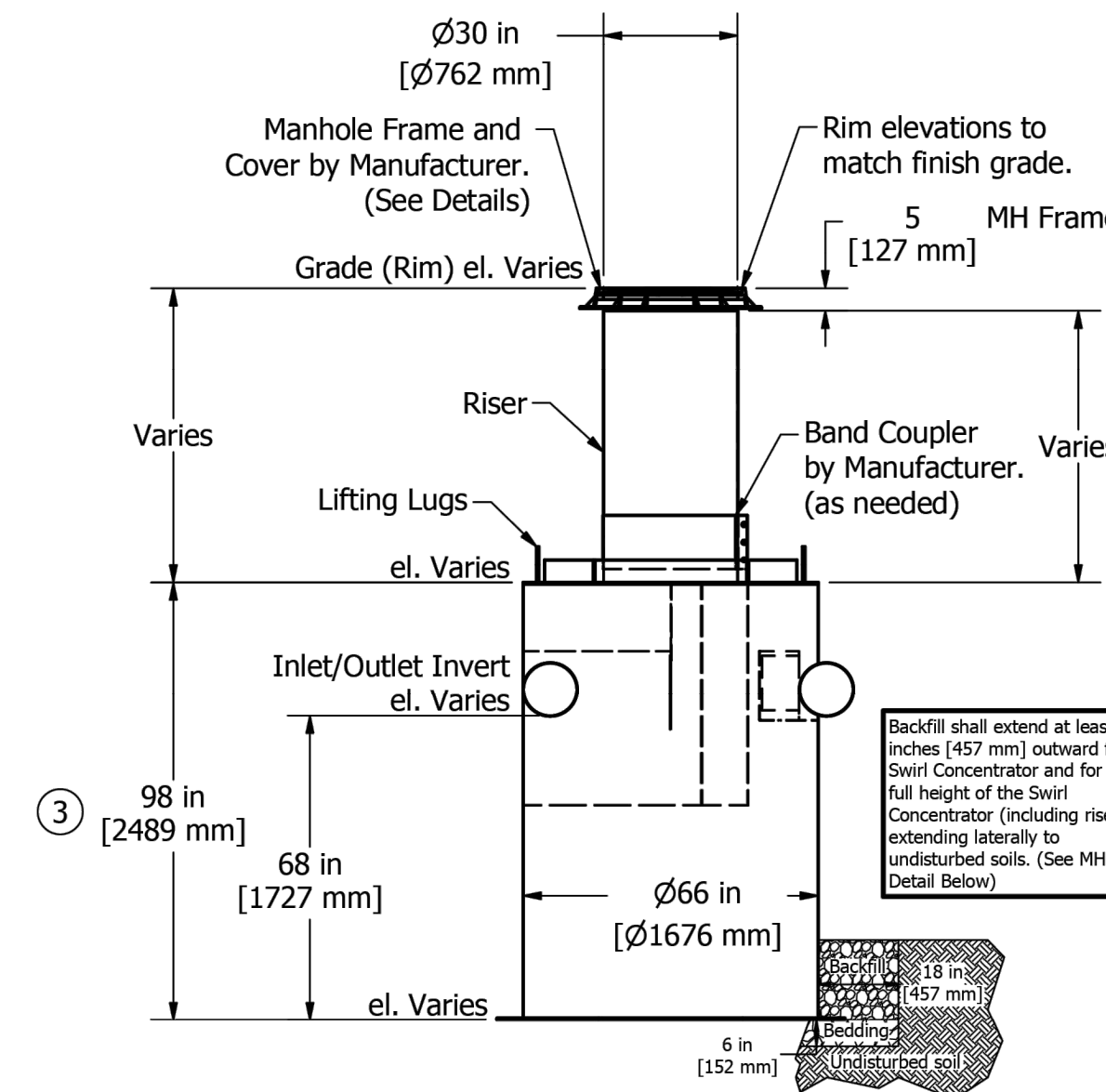


Plan View SCALE 1:40



Please see accompanied Aqua-Swirl® specification notes. See Site Plan for actual System orientation. Approximate dry (pick) weight: 2200 lbs 1000 kg.

- As an alternative, 42 in [1067 mm] diameter, HS-20/25 rated precast concrete rings may be substituted. 14 in [356 mm] thickness must be maintained.
- XC-5 inlet/outlet pipe size ranges up to 30 in [762 mm].
- XC-5 chamber height may vary up to 116 in [2946 mm], depending on inlet/outlet pipe size.
- Clockwise or counterclockwise orientation as needed.

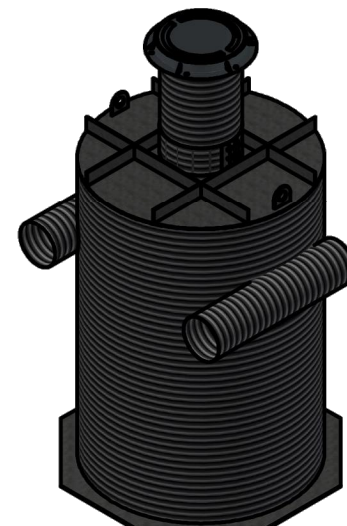


Elevation View SCALE 1:40

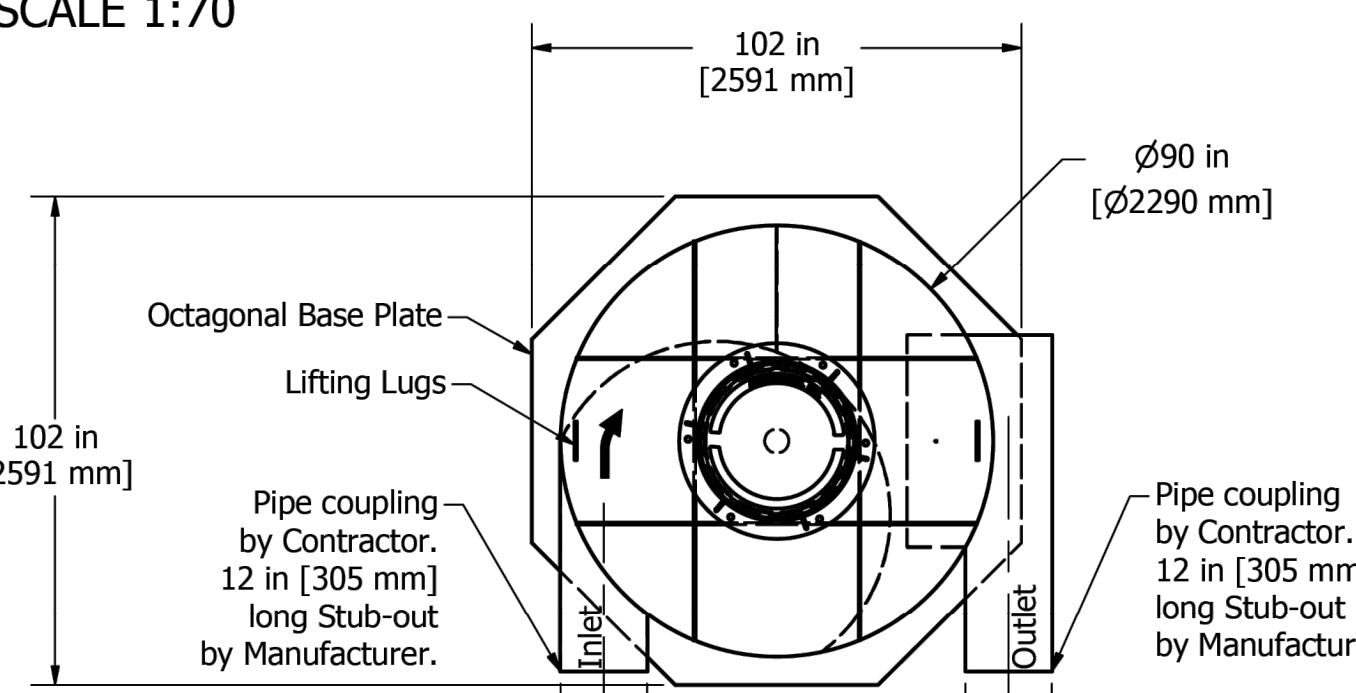
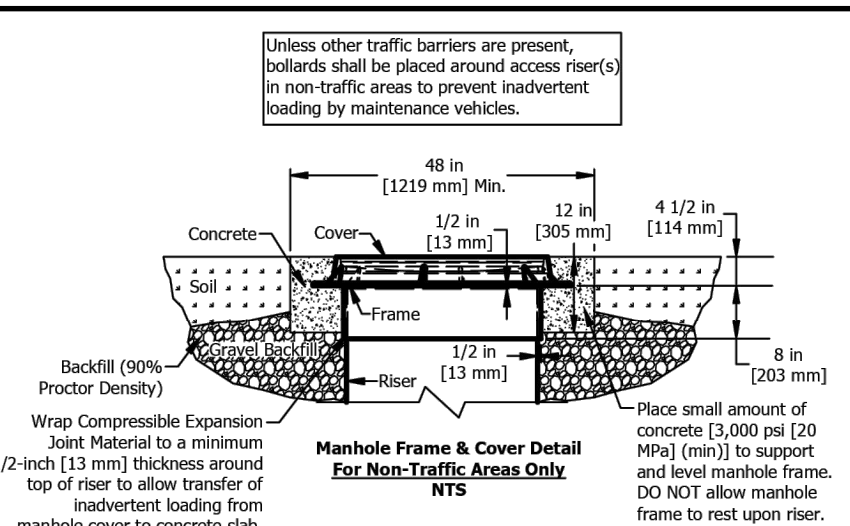


Structure #:	XC-5 STD	Rvwed	Rvw. Date
Drawn By:	Offices		
Scale:	As Shown		
Date:	3/28/2022		
	U.S. Patent No. 1,100,2000		

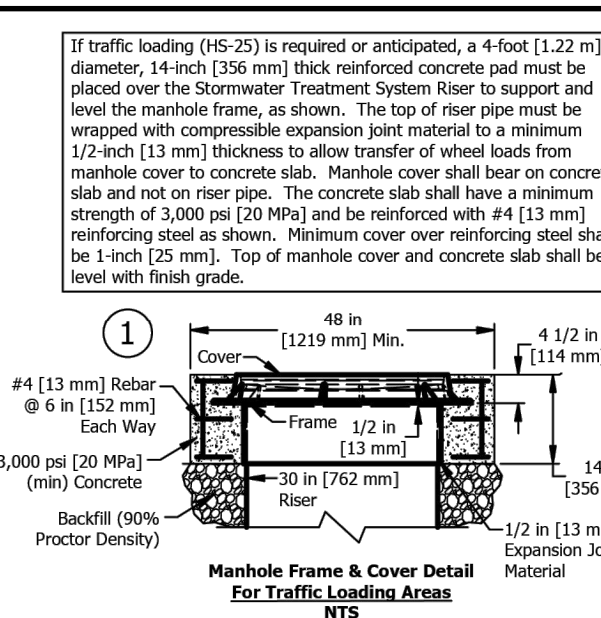
Aqua-Swirl® Polymer Coated Steel (PCS) Stormwater Treatment System



Projected View SCALE 1:70

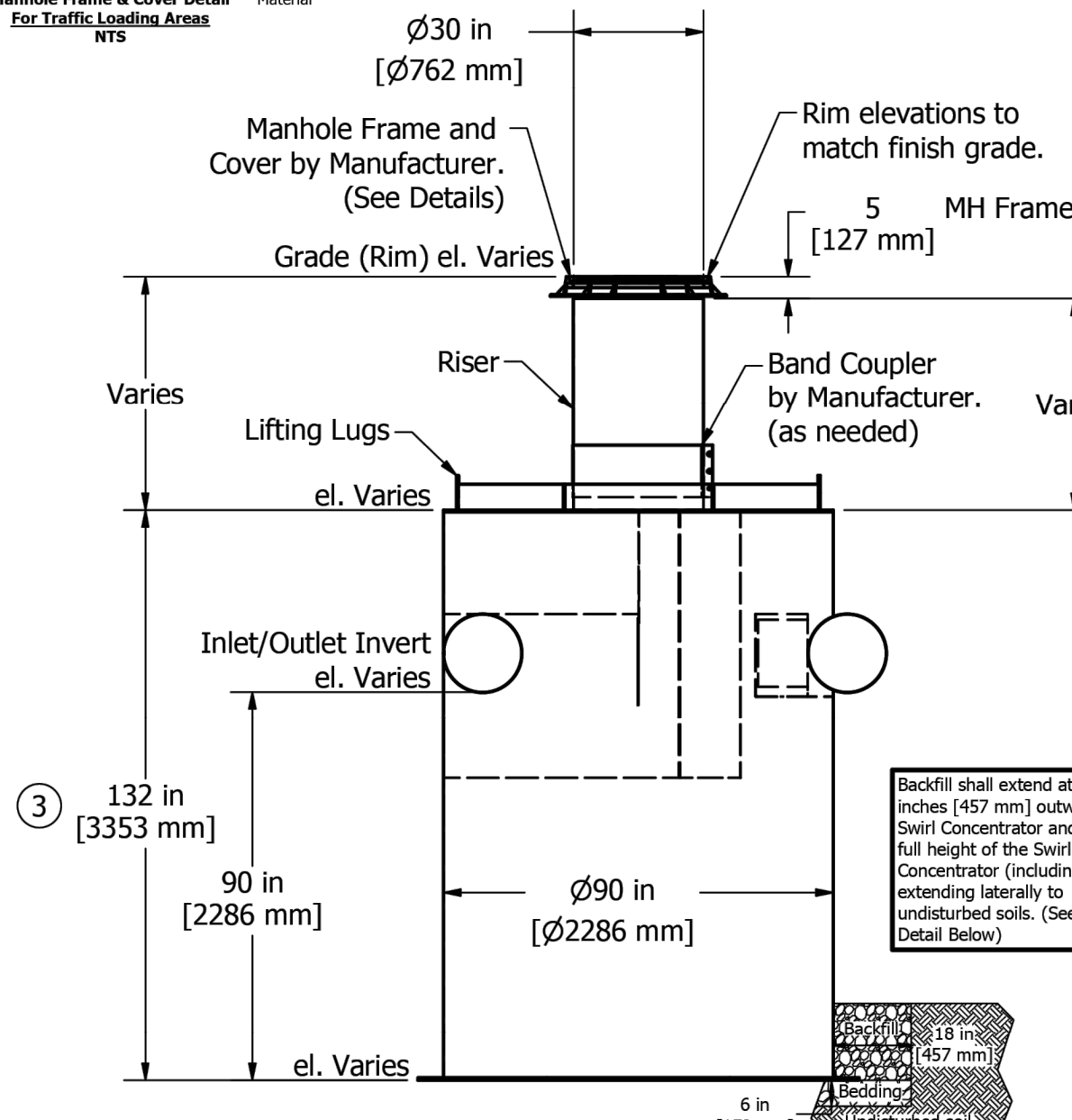


Plan View SCALE 1:40



Please see accompanied Aqua-Swirl® specification notes. See Site Plan for actual System orientation. Approximate dry (pick) weight: 3800 lbs [1700 kg].

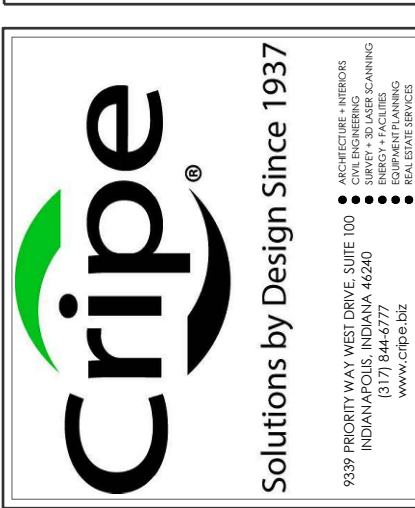
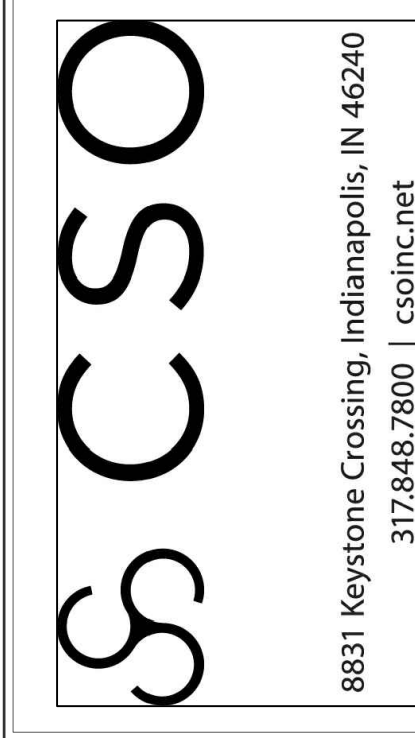
- As an alternative, 42 in [1067 mm] diameter, HS-20/25 rated precast concrete rings may be substituted. 14 in [356 mm] thickness must be maintained.
- XC-7 inlet/outlet pipe size ranges up to 42 in [1067 mm].
- XC-7 chamber height may vary up to 156 in [3962 mm], depending on inlet/outlet pipe size.
- Clockwise or counterclockwise orientation as needed.



Elevation View SCALE 1:40



Structure #:	XC-7 STD	Rvwed	Rvw. Date
Drawn By:	Offices		
Scale:	As Shown		
Date:	3/29/2022		
	U.S. Patent No. 1,100,2000		



FISHERS ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS DESIGN DEVELOPMENT
11442 LANTERN RD, FISHERS, IN 46038

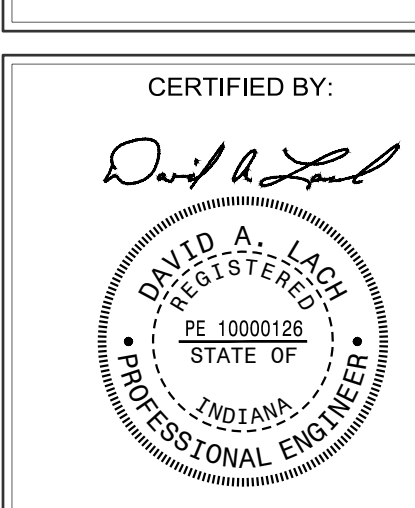
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REVISIONS:

4	02/12/24	ADDENDUM #4
6	03/01/24	ADDENDUM #6

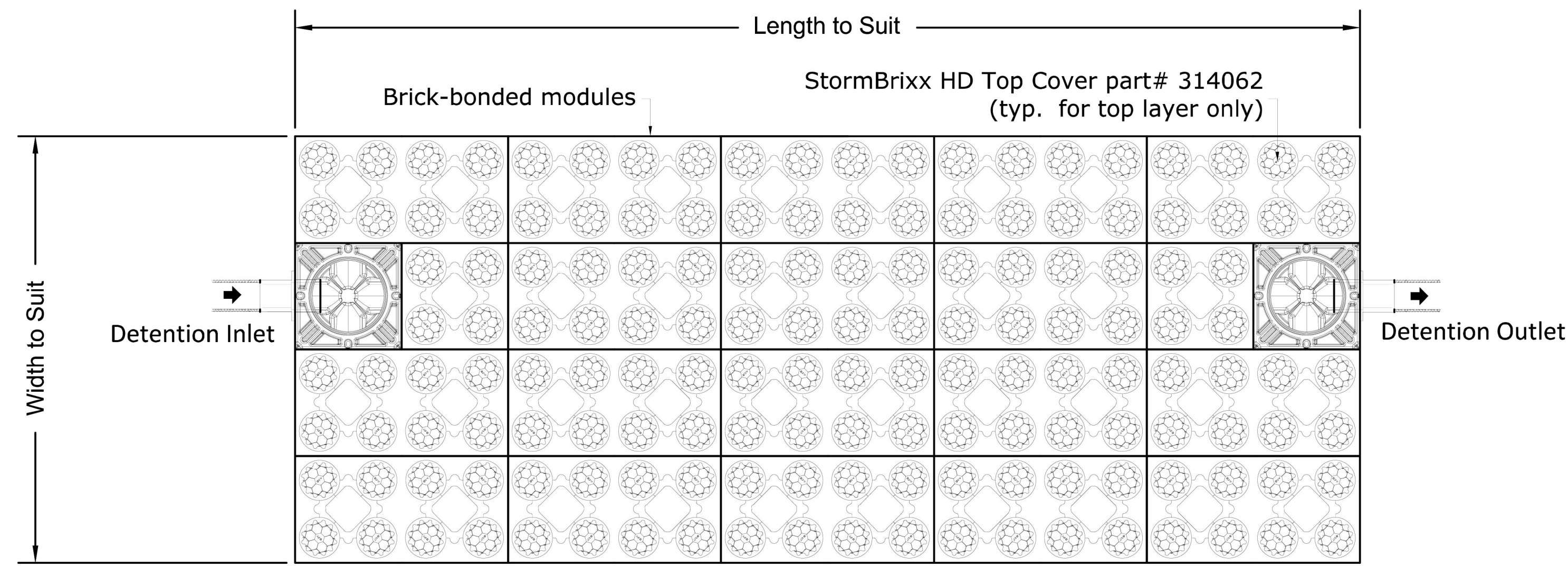
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
STORM SEWER DETAILS

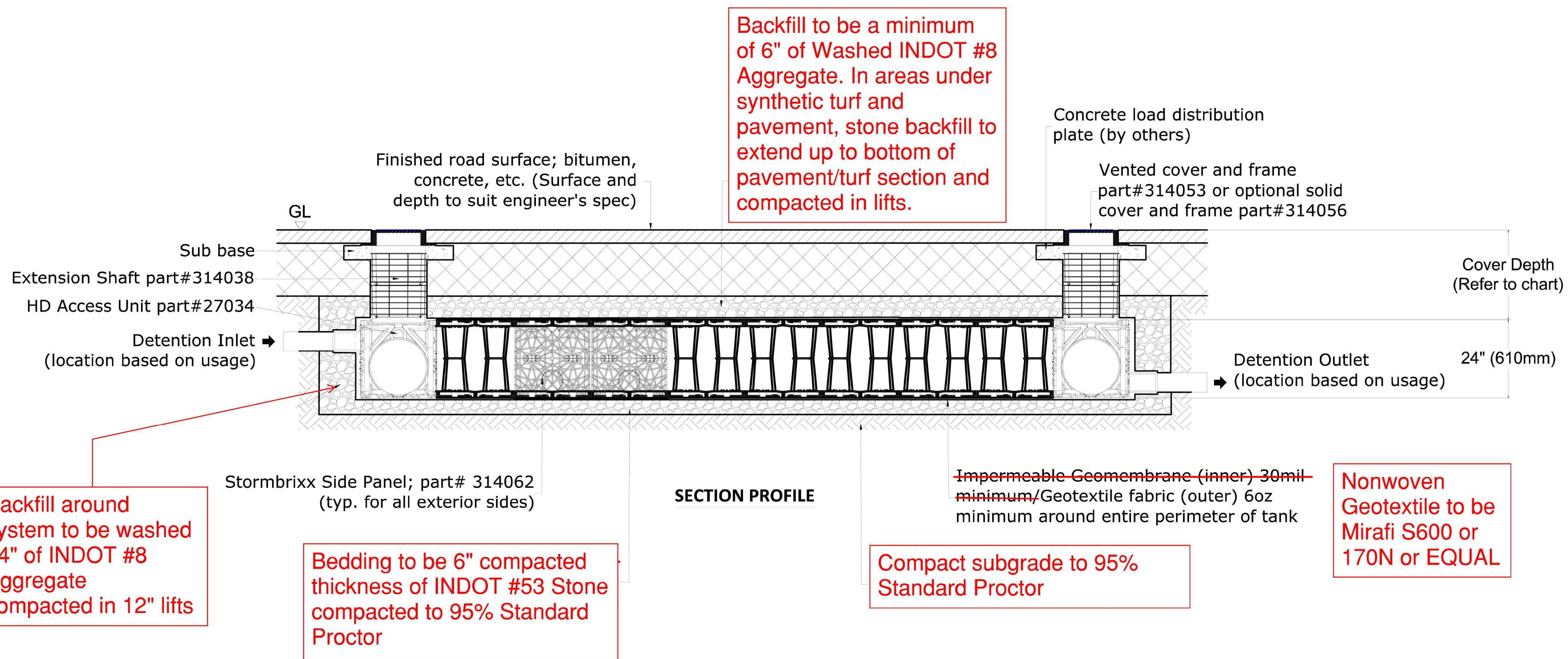


DRAWING NUMBER
C707

PROJECT NUMBER
2021119



PLAN



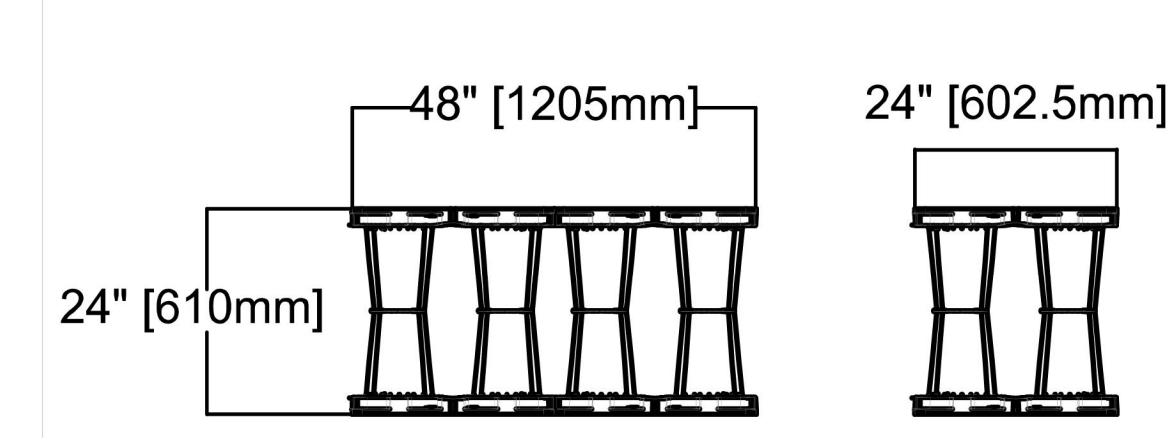
SECTION PROFILE

Installation depths of ACO StormBrixx HD	
Installation Location	Minimum cover depth ⁽⁴⁾ ft (m)
Non-trafficked areas i.e. landscaping ⁽²⁾	1.65 (0.5)
Parking lots, vehicles up to 5,512lbs gross mass ⁽¹⁾	1.8 (0.55)
Parking lots, occasional vehicles greater than 5,512lbs gross mass ⁽³⁾	2.00 (0.6)
Occasional heavy truck traffic up to HS-25 loading	Please consult with ACO
Maximum cover depth of ACO StormBrixx HD	11.16 (3.4)
Maximum depth to invert of ACO StormBrixx HD one layer system	13.16 (4)

Notes

- (1) Assumes 27 degree load distribution through fill material and overlaying surface asphalt or block paving
- (2) Minimum cover depth to avoid accidental damage from gardening/landscaping work
- (3) Occasional sanitation trucks or similar vehicles (typically one per week)
- (4) Please check minimum frost cover depths and water table heights for geographical location

ACO StormBrixx HD Module
 48"x24"x36" [1205x602.5x914mm (H)]
 14.85cuft [0.42m³] net volume per completed module
 Brick or Cross Bonded (where applicable)
 part# 314061



*All systems must be designed and installed to meet or exceed ACO StormBrixx minimum requirements. Although ACO StormBrixx offers support during the design, review, and construction phases of the module system, it is the ultimate responsibility of the Engineer of Record to design the system in full compliance with all applicable engineering practices, laws, and regulations.

D-HD-1L-DVT

DATE: 07/31/2019

ISSUE: D

DETENTION - STORMBRIXX HD ONE LAYER WITH ACCESS UNITS
 INSTALLATION DRAWING - ACO STORMBRIXX HD

ACO, Inc.

825 W. Beechcraft St Casa Grande, AZ 85122 Tel: 520-421-9988 Fax: 520-421-9899	9470 Pinecone Drive Mentor, OH 44060 Tel: 440-639-7230 Fax: 440-639-7235	4211 Pleasant Rd. Fort Mill, SC 29708 Tel: 440-639-7230 Fax: 803-802-1063
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Arizona Tel: 888-490-9552 e-mail: info@acousa.com Ohio Tel: 800-543-4764 WWW.ACOSTORMBRIXX.US South Carolina Tel: 800-543-4764

8831 Keystone Crossing, Indianapolis, IN 46240
 317.948.7800 | csoinc.net

Solutions by Design Since 1937
 1539 Northway Blvd, Suite 100
 Blythe, IN 46717
 Phone: 317.464.6777
 Fax: 317.464.6778

FISHERS ELEMENTARY SCHOOL
 ADDITIONS & RENOVATIONS
 DESIGN DEVELOPMENT
 11442 LANTERN
 RD, FISHERS, IN
 46038

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4	02/12/24	ADDENDUM #4
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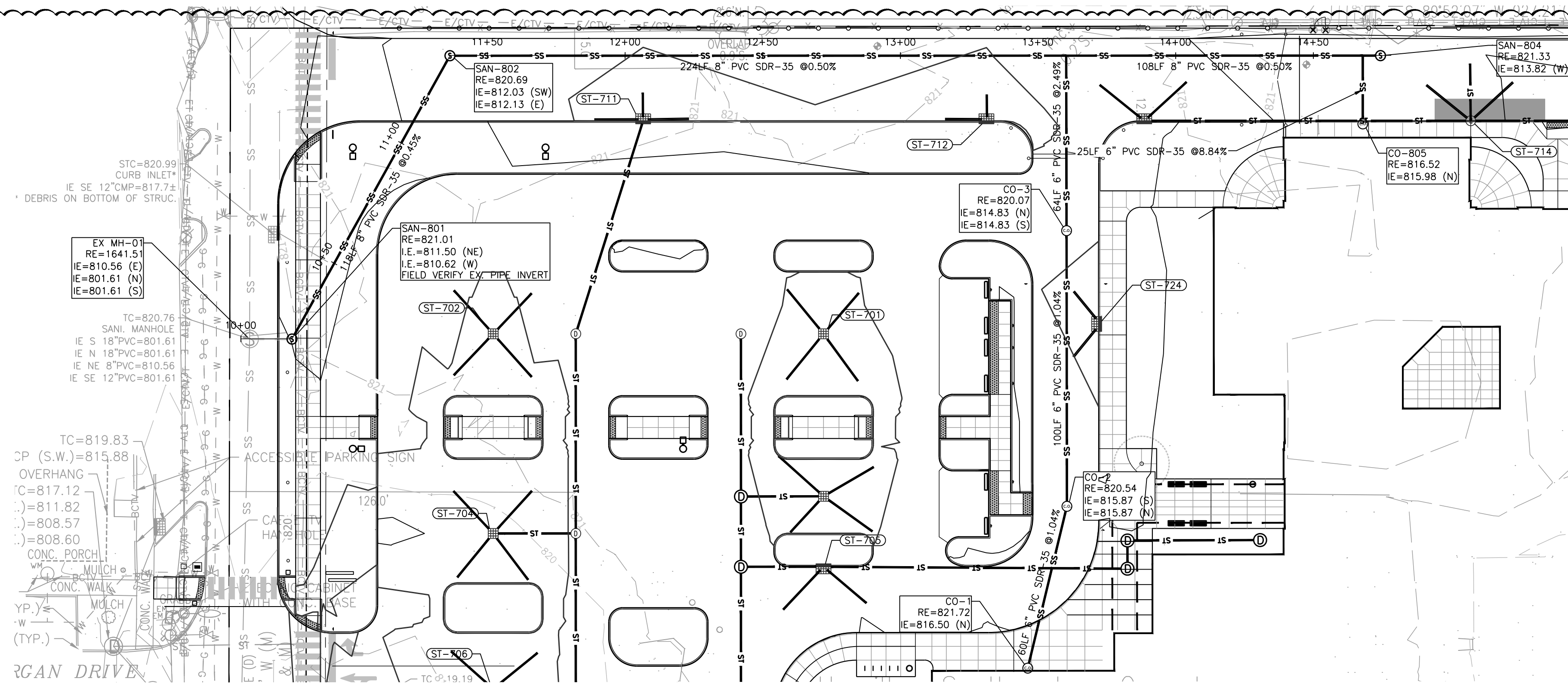
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
**STORM BRIX
 INSTALLATION
 DRAWING**

CERTIFIED BY:

DRAWING NUMBER
C708

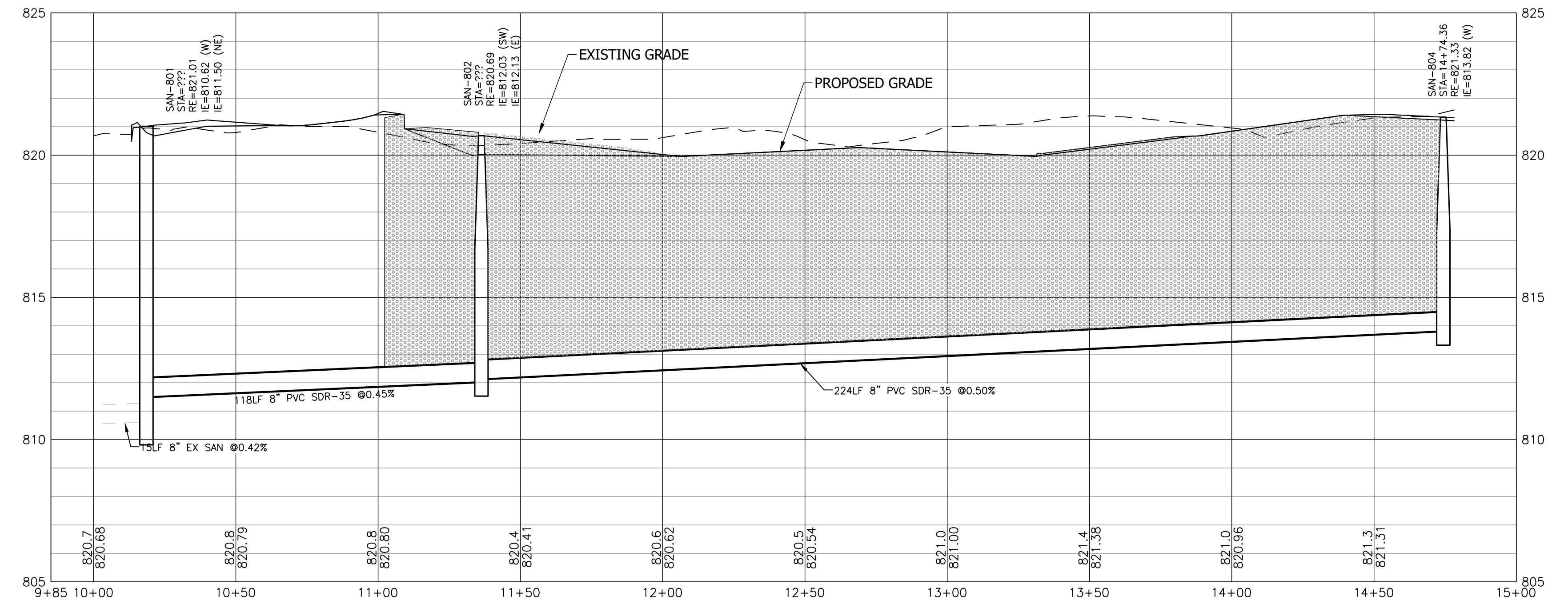
PROJECT NUMBER
 2021119



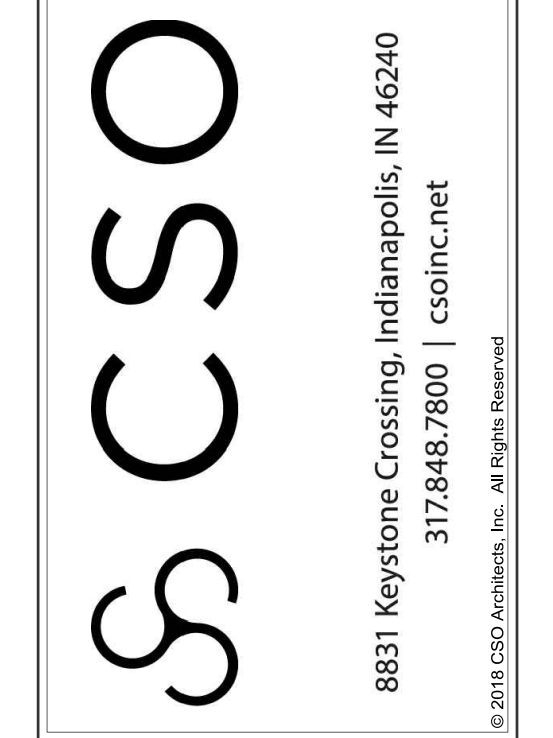
SANITARY SEWER PLAN AND PROFILE GENERAL NOTES

- OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29 CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING FIVE (5) FEET IN DEPTH.
- IN ADDITION, EXCAVATIONS EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRE THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER.
- ALL STRUCTURES SHALL HAVE CASTINGS, JOINTS, LIFT RINGS, STEPS AND PIPE CONNECTIONS WELL GROUTED, TROWELED SMOOTH AND BRUSH FINISHED.
- ALL STRUCTURES (IE: MANHOLES, INLETS) SHALL HAVE POURED FLOW LINES AND BENCH WALLS. THE FLOW LINES AND BENCH WALLS SHALL BE TROWELED SMOOTH AND BRUSH FINISHED.
- FIELD ADJUSTMENTS (RM ELEVATIONS (RE) OF STRUCTURES MAY BE REQUIRED TO MEET FIELD CONDITIONS. ADJUSTMENTS EXCEEDING FIVE TENTHS (0.5) OF A FOOT MUST BE APPROVED BY THE ENGINEER TO DETERMINE THE INTEGRITY OF THE STRUCTURE. AT NO COST TO THE OWNER.
- PIPE LENGTHS MAY REQUIRE FIELD ADJUSTMENTS TO MEET ACTUAL FIELD CONDITIONS.
- FULL DEPTH GRANULAR BACKFILL SHALL BE REQUIRED UNDER AND WITHIN (5) FEET OF ALL PAVED AREAS, INCLUDING CURBS, EDGE OF PAVEMENT, AND SIDEWALKS. THIS IS INDICATED BY THE HATCHING ON THE PROFILE.
- PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- ANY DISCREPANCIES OR CONFLICTS WHICH BECOME APPARENT BEFORE OR DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER PRIOR TO CONSTRUCTION SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
- CITY OF FISHERS IS THE LOCAL SANITARY UTILITY COMPANY. ADDRESS: 3 MUNICIPAL DRIVE, FISHERS, IN 46038. PHONE: 317-593-3140
- MANHOLE OR CLEAN-OUT CASTINGS MAY NEED TO BE ELEVATED AFTER FINAL GRADING TO INSURE DRAINAGE AWAY FROM STRUCTURES.
- PAVEMENT OR CONCRETE, INCLUDING DRIVEWAYS AND SIDEWALKS, MUST NOT BE CONSTRUCTED ON OR WITHIN ONE (1) FOOT HORIZONTAL DISTANCE OF SANITARY SEWER CASTINGS.
- ALL ROUGH GRADING (ON-SITE AND OFF-SITE) MUST BE FINISHED TO WITHIN ONE (1) FOOT OF FINAL GRADE PRIOR TO THE START OF CONSTRUCTION OF THE SANITARY SEWER INFRASTRUCTURE.
- ALL LATERALS SHALL TERMINATE WITHIN A SANITARY EASEMENT.
- AT THE INSPECTOR'S DISCRETION, A CONCRETE CRADLE MAY BE REQUIRED FOR ALL LATERAL/UTILITY CROSSINGS.
- CONTRACTOR MUST FIELD VERIFY INVERT ELEVATIONS OF EXISTING MANHOLES PRIOR TO CONSTRUCTION.
- SANITARY SEWER FACILITIES, INCLUDING MAINS AND LATERALS, MUST MAINTAIN FIVE (5) FEET OF COVER FROM THE TOP OF PIPE TO GRADE. IF ADEQUATE COVER CAN NOT BE MAINTAINED, THEN CONCRETE CAPPING MUST BE INSTALLED WHEN COVER IS FOUR (4) TO FIVE (5) FEET AND CONCRETE ENCASUREMENT MUST BE INSTALLED WHEN COVER IS THREE (3) TO FOUR (4) FEET. UNDER NO CIRCUMSTANCES WILL COVER BE PERMITTED TO BE LESS THAN THREE (3) FEET.
- ALL BENCH WALLS SHALL EXTEND TO THE CROWN OF THE HIGHEST INFLUENT PIPE.
- THE TEE WYES LOCATED ON THE SANITARY SEWER MAINLINE MUST BE DESIGNATED AND INSTALLED TO OBTAIN A 1:1 RATIO AWAY FROM STRUCTURES (DEPTH OF MANHOLE : DISTANCE OF TEE WYE FROM MANHOLE), DUE TO PROBLEMS ENCOUNTERED IN THE FIELD WITH THE TEE WYES FAILING WHEN LOCATED IN THE OVER DIG OF MANHOLES.

STORM STRUCTURE DATA TABLE						
STRUCTURE NUMBER	STRUCTURE TYPE	TOP OF CASTING	INVERT (DIRECTION)	PIPE LENGTH	PIPE SLOPE	CONNECT TO STRUCTURE
CO-2	SAN C.O.	RIM = 820.54	INV. 6" IN = 815.87 (S) INV. 6" OUT = 815.87 (N)	60'	1.04%	CO-1 CO-3
CO-3	SAN C.O.	RIM = 820.07	INV. 6" IN = 814.83 (S) INV. 6" OUT = 814.83 (N)	100'	1.04%	CO-2
CO-805	SAN C.O.	RIM = 816.52	INV. 6" OUT = 815.98 (N)	25'	8.84%	
EX MH-01	EX SAN MH	RIM = 1641.51	INV. 8" IN = 810.56 (E) INV. 18" OUT = 801.61 (N) INV. 18" OUT = 801.61 (S)	15' 38' 29'	0.42% -0.18% -0.18%	SAN-801
EXISTING GREASE TRAP	REMOVE & REPLACE EXIST GREASE INTERCEPTOR COORD WITH MEP DESIGNER FOR SIZE	RIM = 821.51				
SAN-801	48" DIA SAN MH	RIM = 821.01	INV. 8" IN = 811.50 (NE) INV. 8" OUT = 810.62 (W)	118' 15'	0.45% 0.42%	SAN-802 EX MH-01
SAN-802	48" DIA SAN MH	RIM = 820.69	INV. 8" IN = 812.13 (E) INV. 8" OUT = 812.03 (SW)	224' 118'	0.50% 0.45%	SAN-801
SAN-804	48" DIA SAN MH	RIM = 821.33	INV. 8" OUT = 813.82 (W)	6'	0.50%	



PROFILE - LINE SAN-01
HOR. SCALE = 1"=30'
VERT. SCALE = 1"=3'



FISHERS ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS DESIGN DEVELOPMENT
11442 LANTERN RD, FISHERS, IN 46038

SCOPE DRAWINGS:
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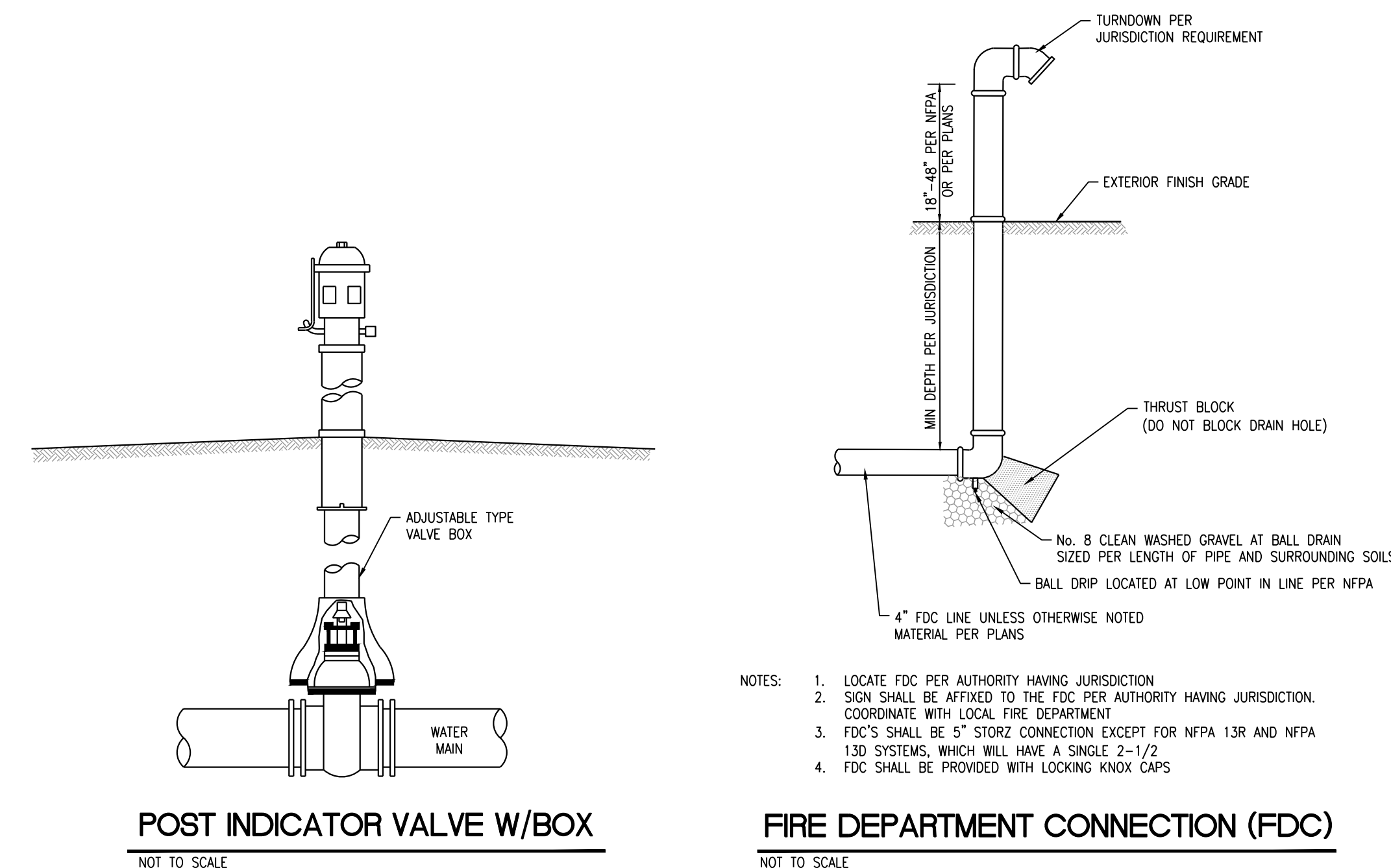
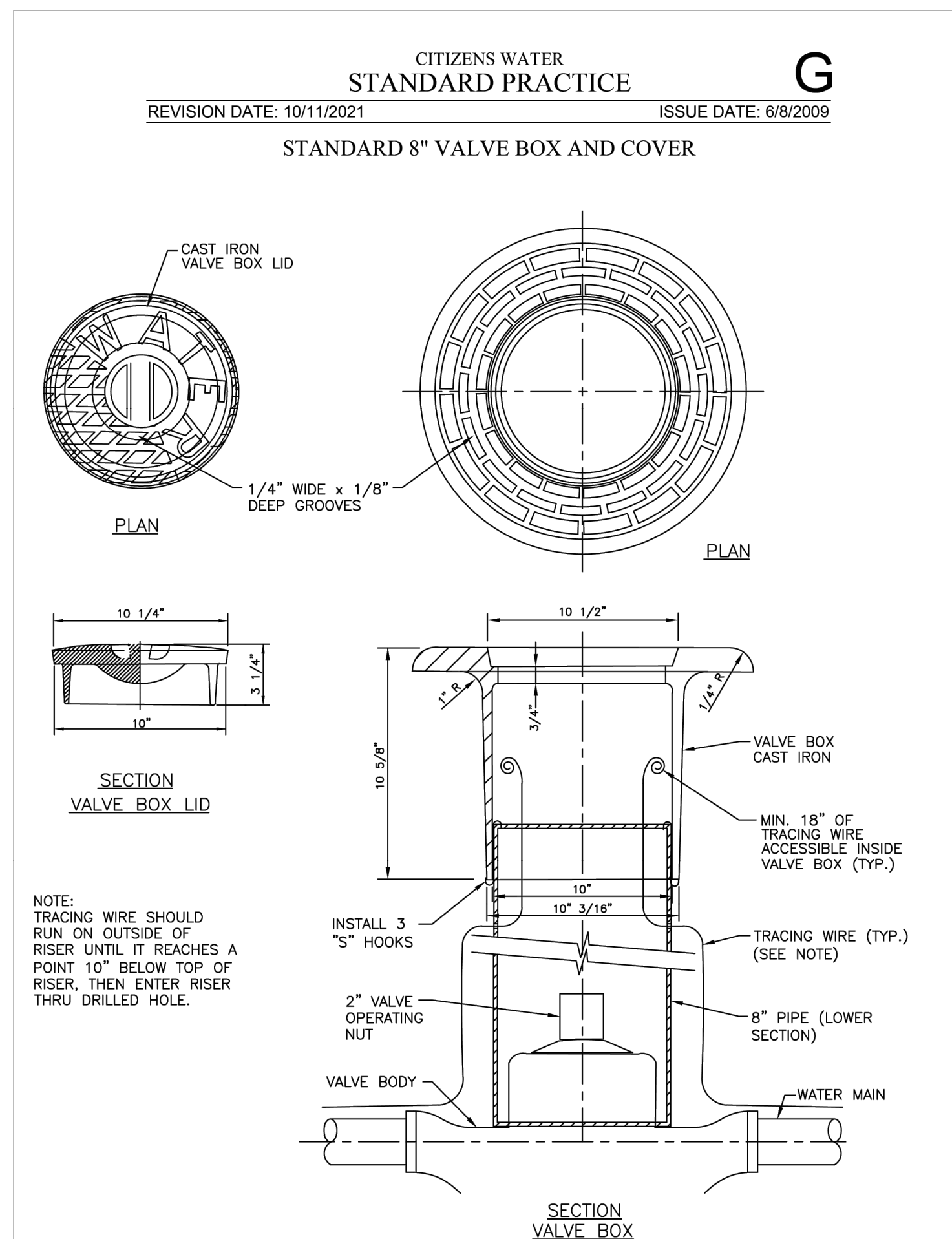
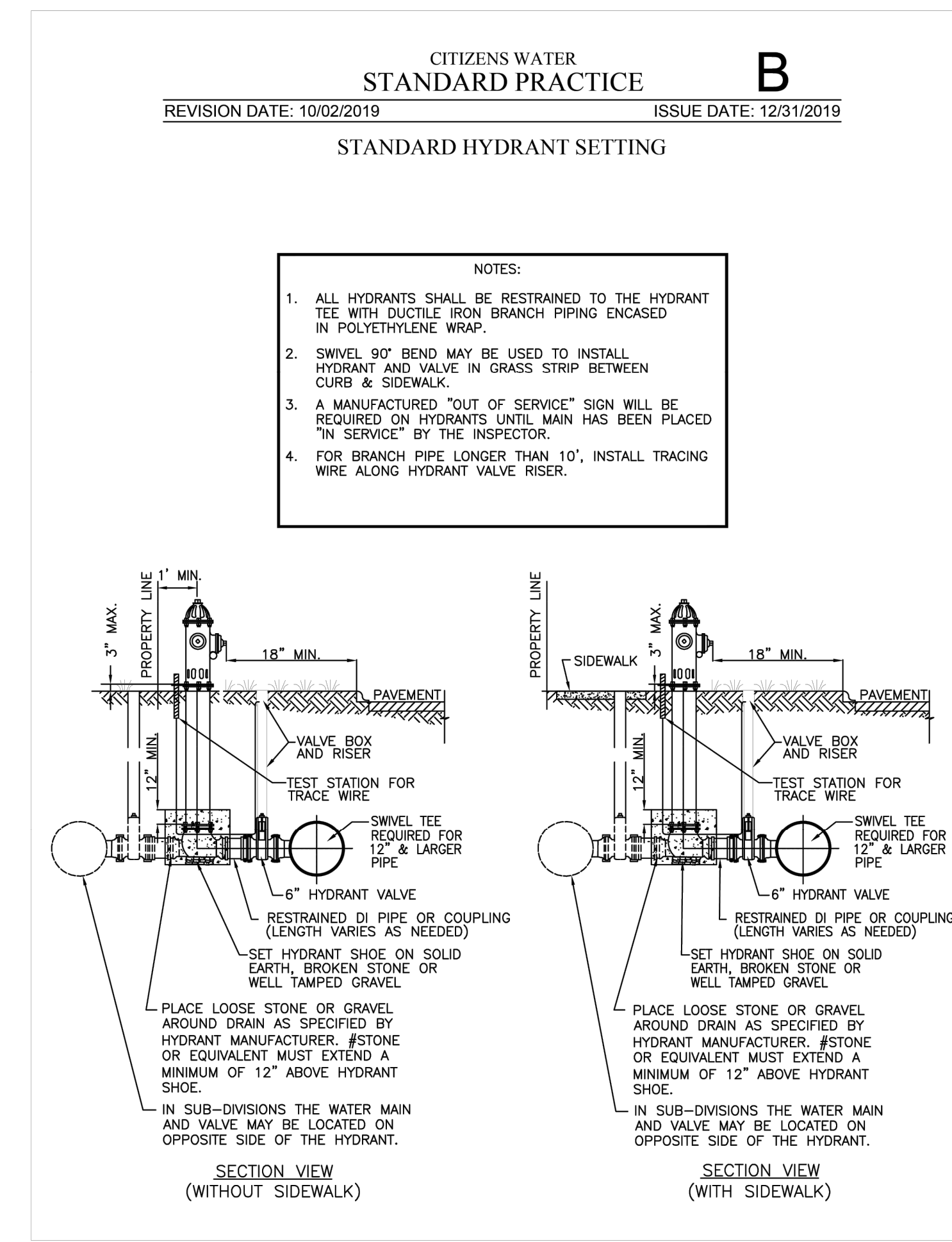
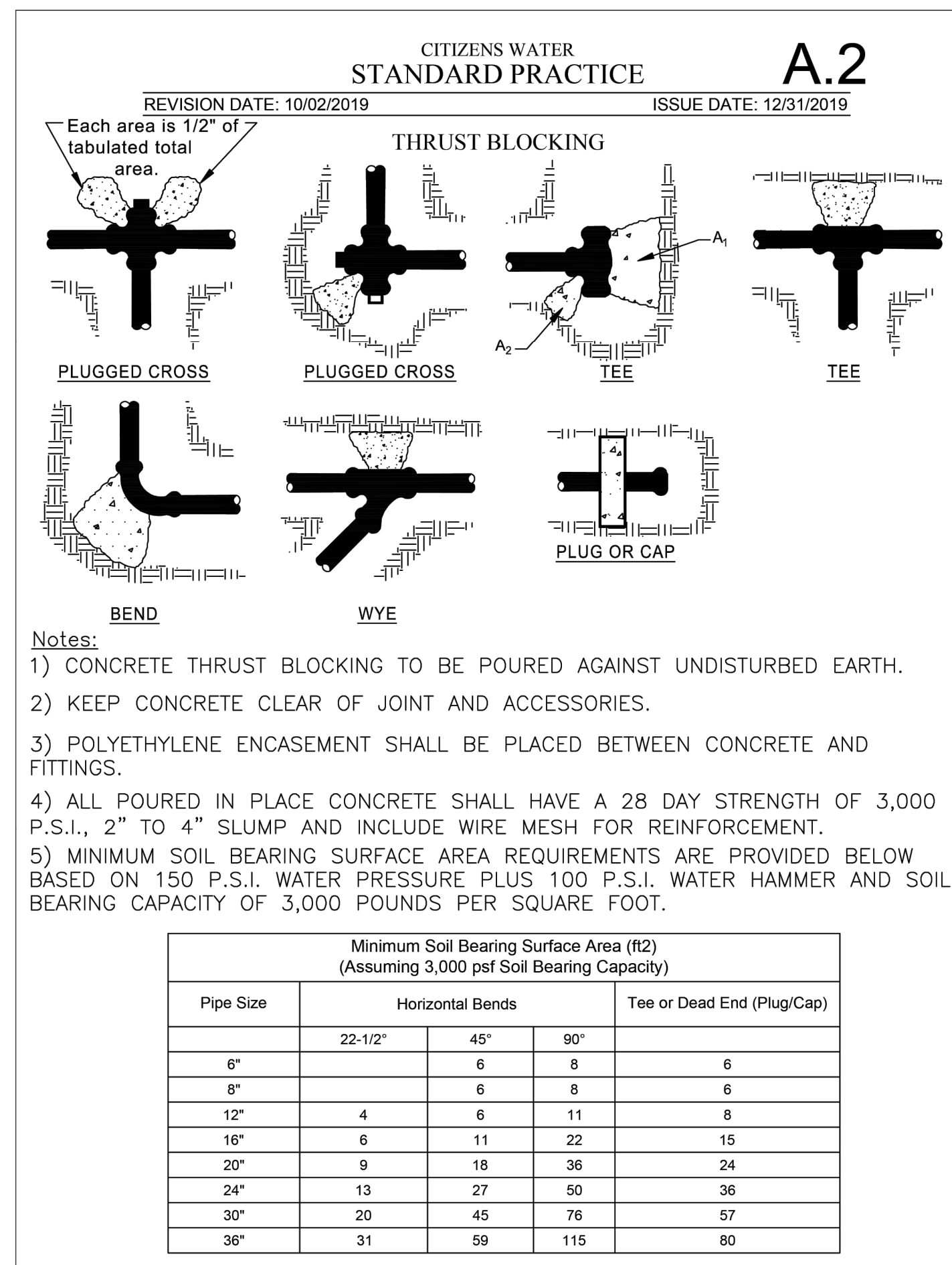
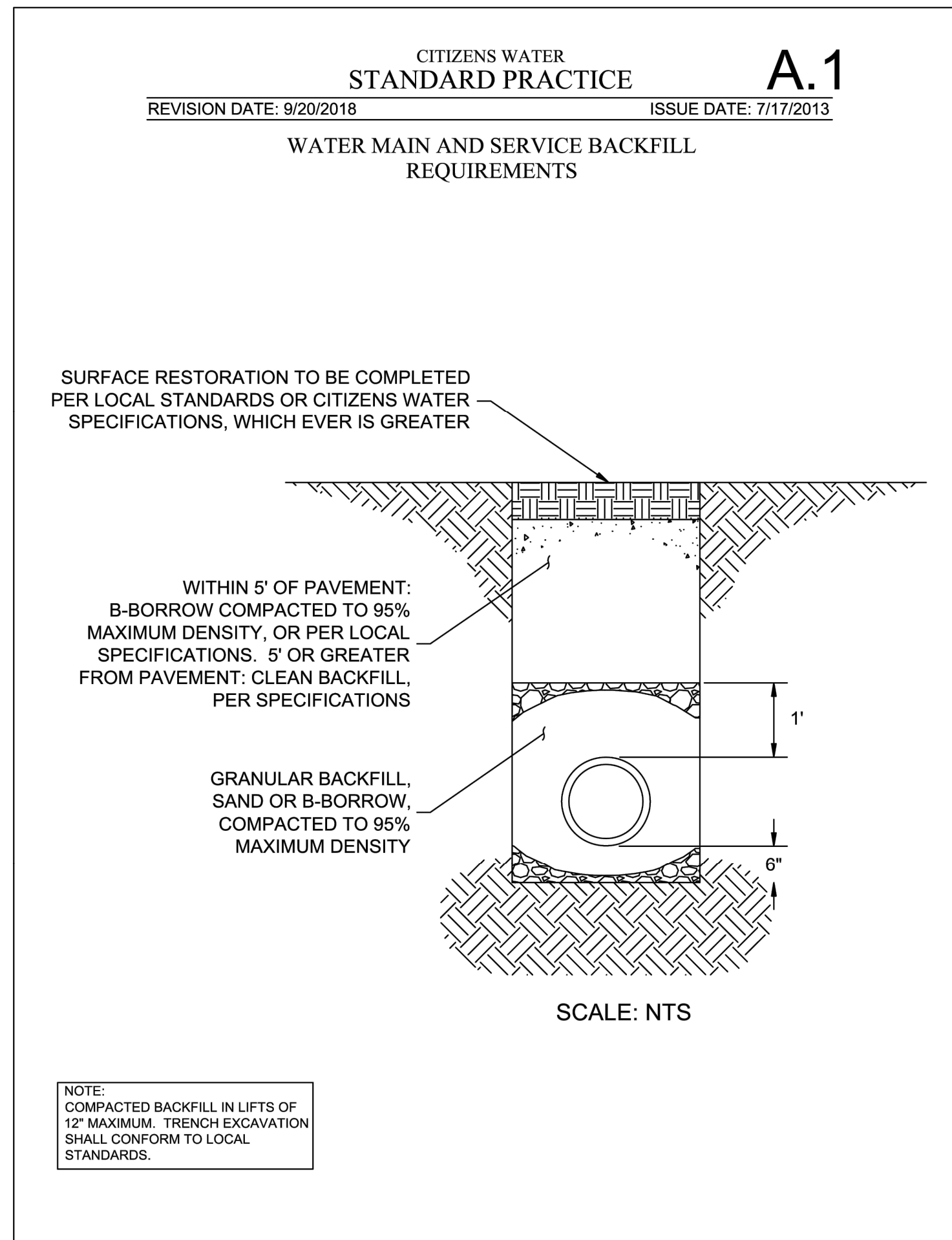
REVISIONS:	
4	02/12/24 ADDENDUM #4
6	03/01/24 ADDENDUM #6

DRAWING TITLE:
SANITARY SEWER PLAN AND PROFILES



DRAWING NUMBER
C801

PROJECT NUMBER
2021119



SCOPE DRAWINGS:
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REVISIONS:

4	02/12/24 ADDENDUM #4
6	03/01/24 ADDENDUM #6

ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
WATER DETAILS

CERTIFIED BY:

 DAVID A. LACH
 REGISTERED PROFESSIONAL ENGINEER
 NO. 10000126
 STATE OF INDIANA

DRAWING NUMBER
C901

PROJECT NUMBER
2021119

CITY STANDARDS APPLY TO
PUBLIC PROPERTY & PRIVATE
PROPERTY



STANDARD CONSTRUCTION DETAILS

AMENDED JANUARY 2022

DIRECTIONS FOR USE

- Applicable sheets from the City Standards shall be attached to the construction drawings and shall be considered part thereto. Individual City Standards that do not apply may be crossed out by design engineer by placing 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.
- Details prepared by outside sources shall not be included in the construction drawings when said details are covered by City Standards.
- Details prepared by outside sources covering work which is not covered by City Standards are the sole responsibility of the design engineer and shall be placed on sheets other than the City Standard sheets.
- Failure to properly execute the above directions for use will not affect the applicability nor the enforcement of the City Standards.
- City of Fishers shall be contacted when required by calling the Director of Engineering.
- City Standards shall be used in conjunction with the Transportation Plan and Construction Specifications.
- The use of INDOT refers to Indiana Department of Transportation Standard Drawings and Specifications (Current Version).

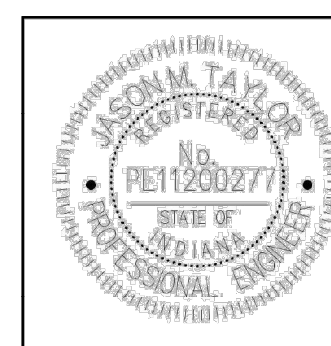
NOTES

- A City of Fishers Right-of-Way Activity Permit is required for utilities crossing existing public right-of-way or encroaching into right-of-way pavement.
- Utility work within existing public right-of-way or within 5 feet of existing right-of-way pavement requires removable flowable fill as backfill.

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1/18/2022

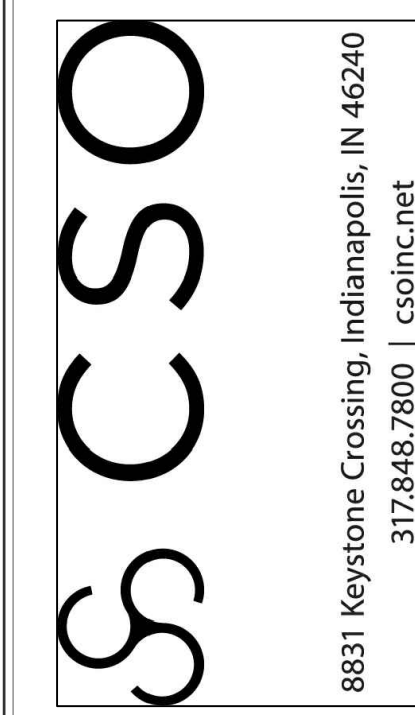


CITY OF FISHERS STANDARD CONSTRUCTION DETAILS	RO11822A RESOLUTION NO.
TITLE SHEET	1/18/2022 DATE OF ADOPTION

RO11822A RESOLUTION NO.	1/18/2022 DATE OF ADOPTION
-----------------------------------	--------------------------------------

SHEET

1
of
29



FISHERS ELEMENTARY SCHOOL
ADDITIONS & RENOVATIONS
DESIGN DEVELOPMENT
11442 LANTERN
RD, FISHERS, IN
46038

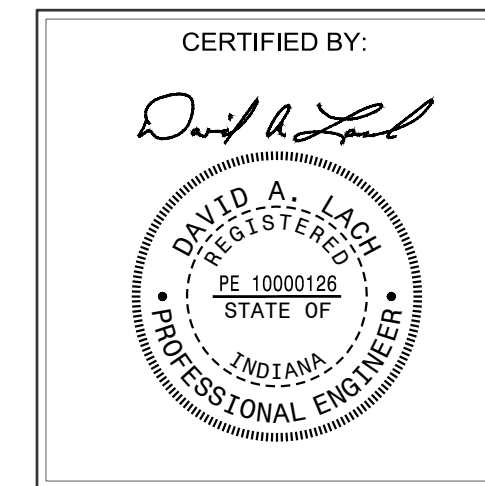
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4	02/12/24 ADDENDUM #4
6	03/01/24 ADDENDUM #6

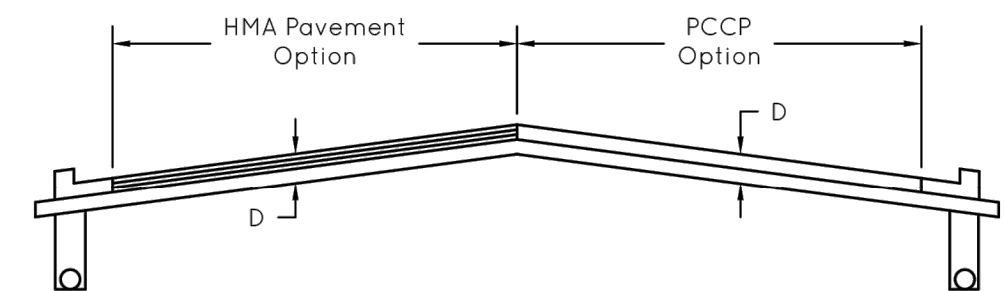
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
**FISHERS
STANDARD
DETAILS**



DRAWING NUMBER
C902

PROJECT NUMBER
2021119



- Notes:
- Asphalt pavement shall be in accordance with the most current INDOT Standard Specifications Section 401. For all local (non-Federal Aid) projects, all HMA acceptance and testing requirements shall be in accordance with Section 402. Patching and Widening shall be in accordance with Section 304.
 - PCCP pavement shall be in accordance with the most current INDOT Standard Specifications Section 502.
 - Any other pavement design will need Director of Engineering approval.
 - Where existing roads have SMA surface pavement, material is to be matched.

PRIMARY ARTERIAL AND COLLECTOR

HMA Pavement Option
 D = 1.5" - 165lb/syd QC/QA-HMA, 2, 64, Surface, 9.5mm, on 2.5" - 275lb/syd QC/QA-HMA, 2, 64, Intermediate, 19.0 mm, on 3.75" - 413lb/syd QC/QA-HMA, 2, 64, Base, 25.0mm, on 3" - 300lb/syd QC/QA-HMA, 3, 76, Intermediate, Base, 19.0mm, on 6" - Compacted Aggregate, No. 53, on 14" - INDOT Subgrade Treatment, Type IBC

PCCP Option (Requires Engineering Approval)
 D = 13" - PCCP, on 3" - Compacted Aggregate, No. 8, on 3" - Compacted Aggregate, No. 53, on 14" - INDOT Subgrade Treatment, Type IBC

Roundabout
 D = 2" - 220lb/syd QC/QA-HMA, 2, 64, Surface, 9.5mm, on 2.5" - 275lb/syd QC/QA-HMA, 2, 64, Intermediate, 19.0 mm, on 3.5" - 385lb/syd QC/QA-HMA, 2, 64, Base, 25.0mm, on 3" - 300lb/syd QC/QA-HMA, 3, 76, Intermediate, Base, 19.0mm, on 6" - Compacted Aggregate, No. 53, on 14" - INDOT Subgrade Treatment, Type IBC

SECONDARY ARTERIAL

HMA Pavement Option
 D = 1.5" - 165lb/syd QC/QA-HMA, 2, 64, Surface, 9.5mm, on 2.5" - 275lb/syd QC/QA-HMA, 2, 64, Intermediate, 19.0 mm, on 3.75" - 413lb/syd QC/QA-HMA, 2, 64, Base, 25.0mm, on 9" - Compacted Aggregate, No. 53, on 14" - INDOT Subgrade Treatment, Type IBC

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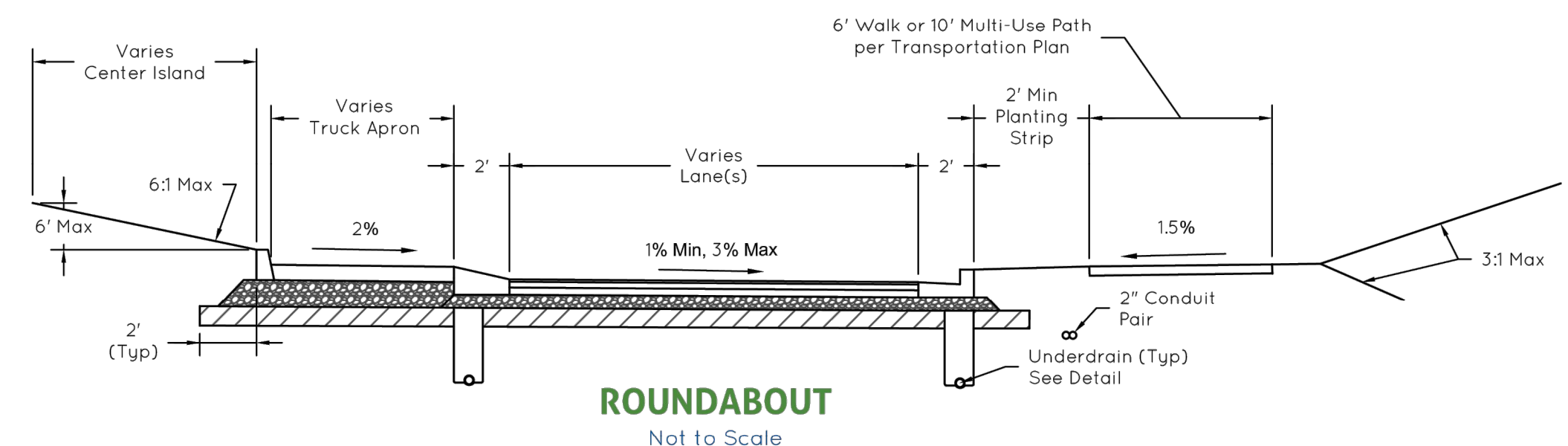
Roundabout
 D = 2" - 220lb/syd QC/QA-HMA, 2, 64, Surface, 9.5mm, on 2.5" - 275lb/syd QC/QA-HMA, 2, 64, Intermediate, 19.0 mm, on 3.5" - 385lb/syd QC/QA-HMA, 2, 64, Base, 25.0mm, on 9" - Compacted Aggregate, No. 53, on 14" - INDOT Subgrade Treatment, Type IBC

COLLECTOR

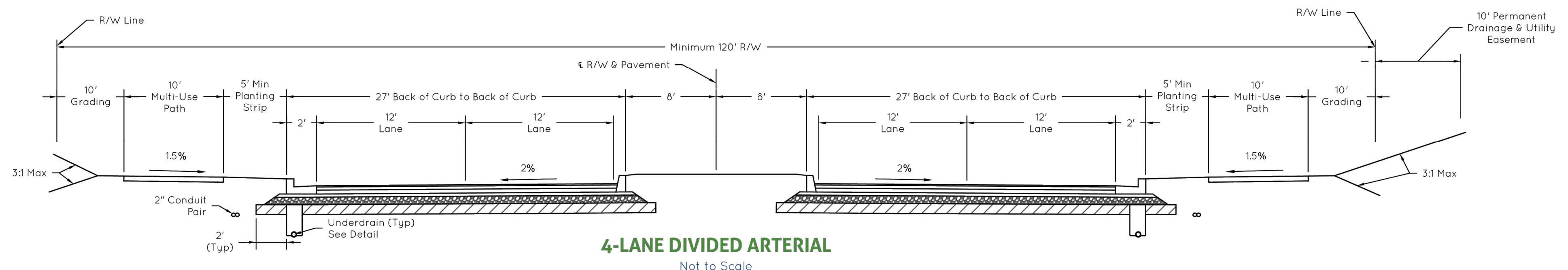
HMA Pavement Option
 D = 1.5" - 165lb/syd QC/QA-HMA, 2, 64, Surface, 9.5mm, on 2.5" - 275lb/syd QC/QA-HMA, 2, 64, Intermediate, 19.0 mm, on 3.75" - 413lb/syd QC/QA-HMA, 2, 64, Base, 25.0mm, on 8" - Compacted Aggregate, No. 53, on 14" - INDOT Subgrade Treatment, Type IBC

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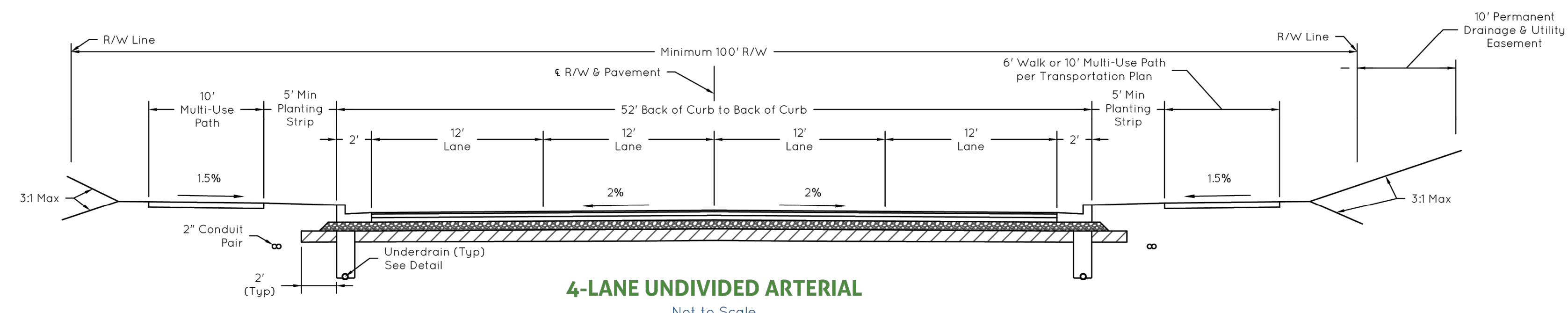
Roundabout
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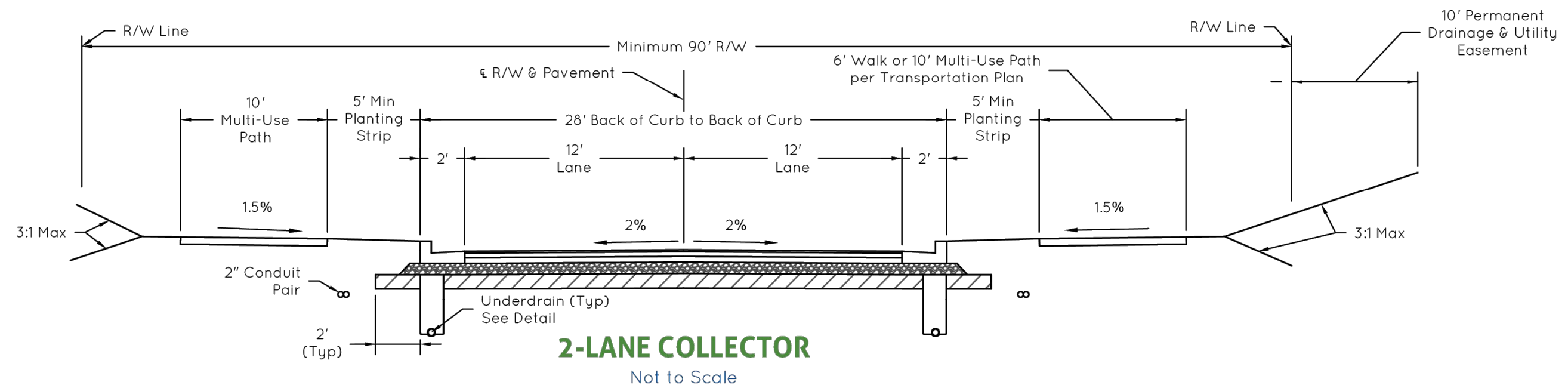
ROUNDABOUT
Not to Scale



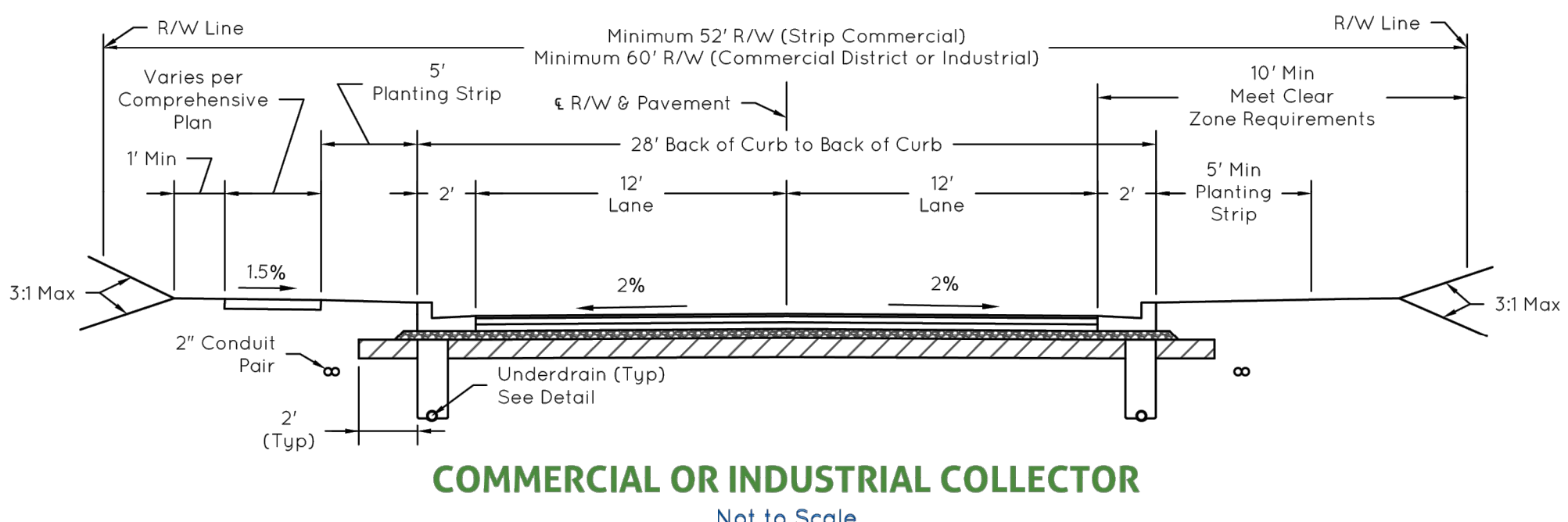
4-LANE DIVIDED ARTERIAL
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4-LANE UNDIVIDED ARTERIAL
Not to Scale

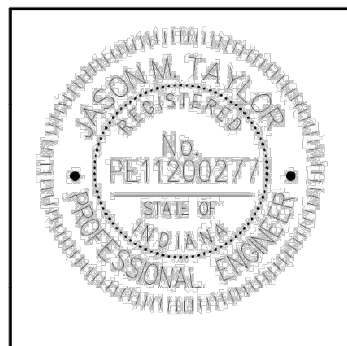


2-LANE COLLECTOR
Not to Scale



COMMERCIAL OR INDUSTRIAL COLLECTOR
Not to Scale

JMS
1/18/2022



CITY OF FISHERS		SHEET 2 of 29
STANDARD CONSTRUCTION DETAILS		
ARTERIAL AND COLLECTOR TYPICAL PAVEMENT AND ROADWAY SECTIONS		

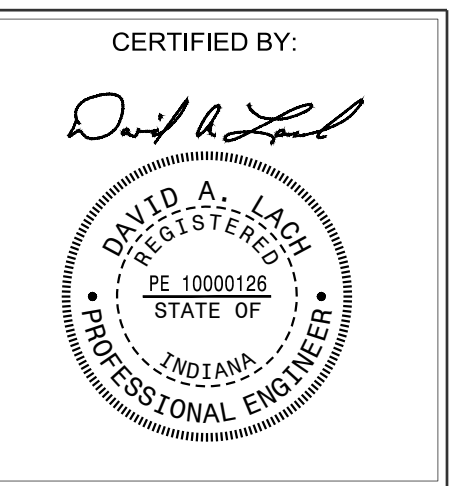
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4	02/12/24	ADDENDUM #4
6	03/01/24	ADDENDUM #6

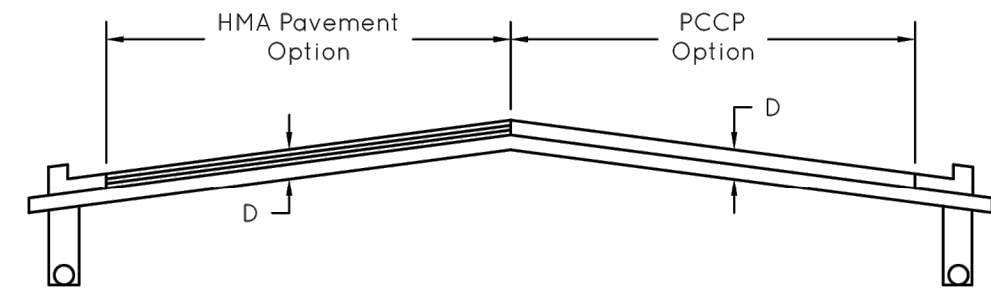
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
**FISHERS
STANDARD
DETAILS**



DRAWING NUMBER
C903

PROJECT NUMBER
2021119

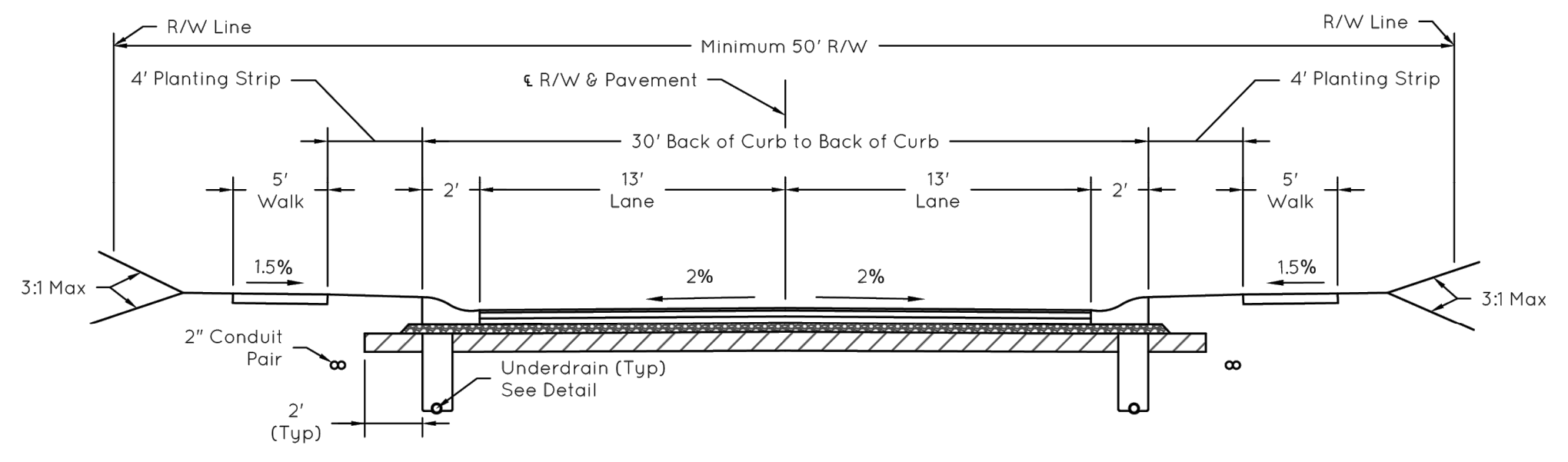


- Notes:
- 1) Asphalt pavement shall be in accordance with the most current INDOT Standard Specifications Section 401. For all local (non-Federal Aid) projects, all HMA acceptance and testing requirements shall be in accordance with Section 402. Patching and Widening shall be in accordance with Section 304.
 - 2) PCCP pavement shall be in accordance with the most current INDOT Standard Specifications Section 502.
 - 3) Any other pavement design will need Director of Engineering approval

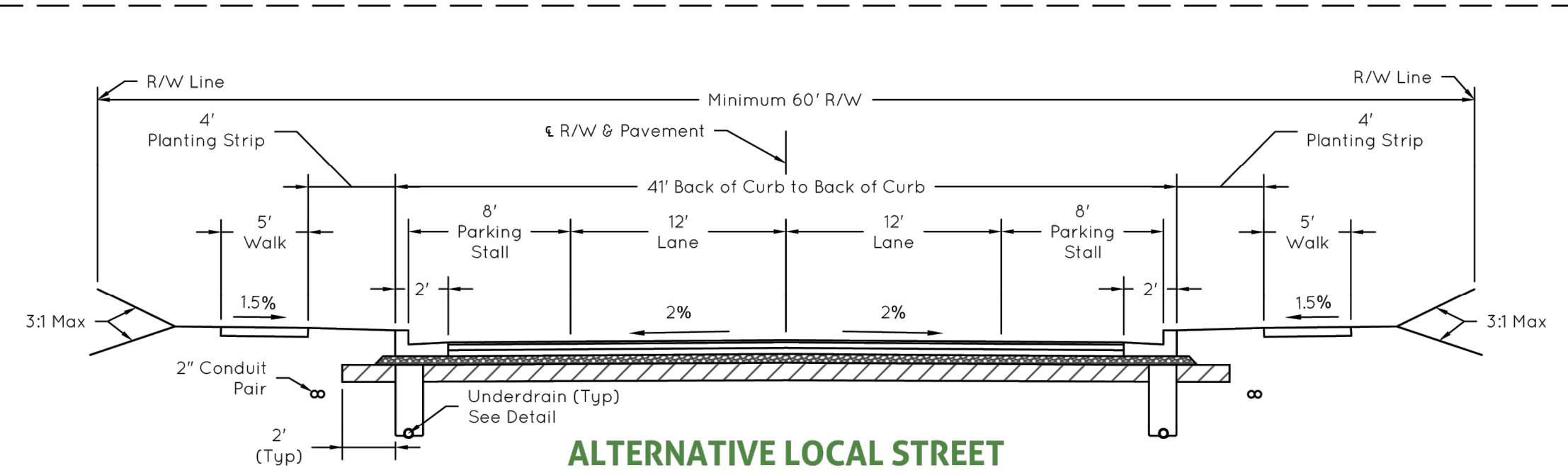
LOCAL STREET

- HMA Pavement Option
- D = 1.5" - 165lb/syd QC/QA-HMA, 2, 6.4, Surface, 9.5mm, on
 2.5" - 275lb/syd QC/QA-HMA, 2, 6.4, Intermediate, 19.0 mm, on
 3.75" - 413lb/syd QC/QA-HMA, 2, 6.4, Base, 19.0mm, on
 6" - Compacted Aggregate, No. 53, on
 14" - INDOT Subgrade Treatment, Type IBC
- PCCP Option (Requires Engineering Approval)
- D = 13" - PCCP, on
 3" - Compacted Aggregate, No. 8, on
 3" - Compacted Aggregate, No. 53, on
 14" - INDOT Subgrade Treatment, Type IBC

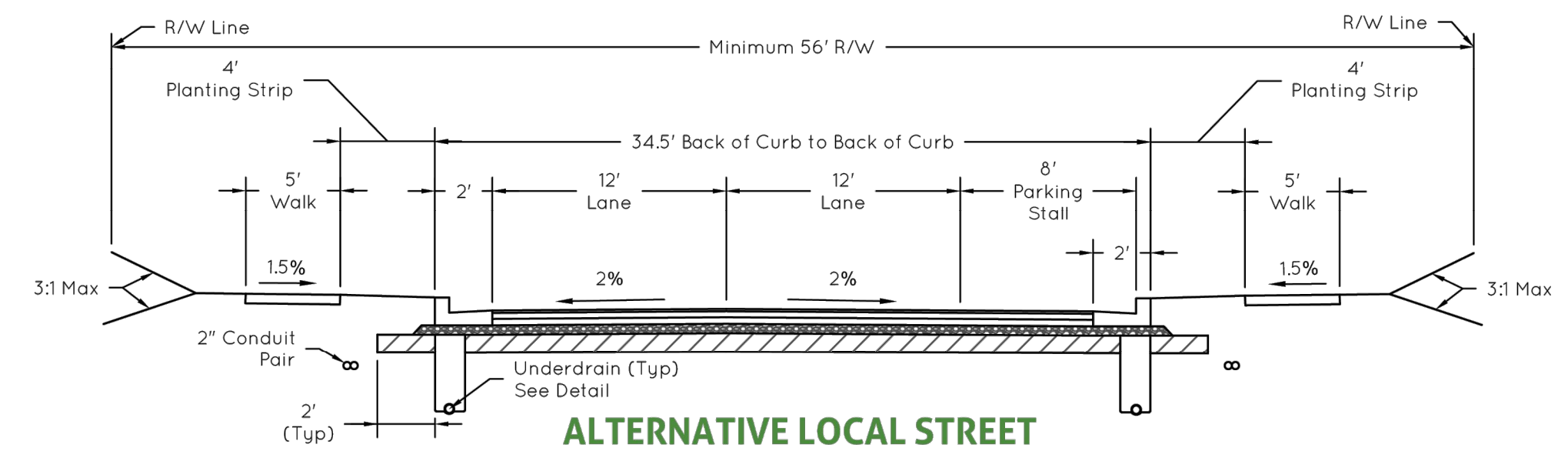
- Minor Subdivision
- D = 1.5" - 165lb/syd QC/QA-HMA, 2, 6.4, Surface, 9.5mm, on
 3.5" - 385lb/syd QC/QA-HMA, 2, 6.4, Intermediate, 19.0 mm, on
 12" - Compacted Aggregate, No. 53, on
 14" - INDOT Subgrade Treatment, Type IBC



LOCAL STREET
Not to Scale

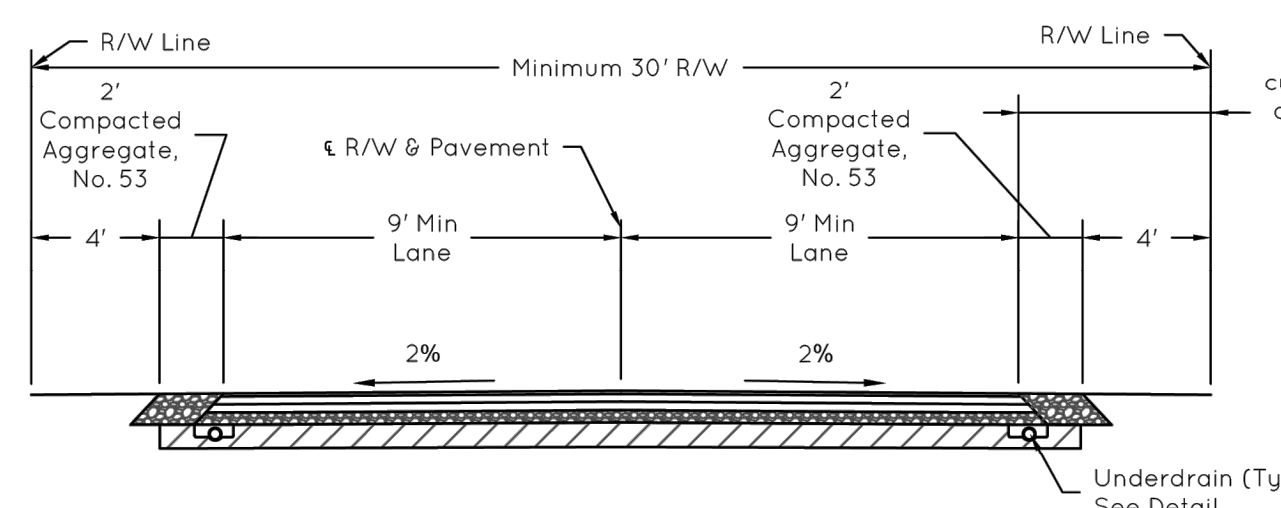


**ALTERNATIVE LOCAL STREET
TRADITIONAL SECTION WITH 2 PARKING LANES**
Not to Scale



**ALTERNATIVE LOCAL STREET
TRADITIONAL SECTION WITH 1 PARKING LANE**
Not to Scale

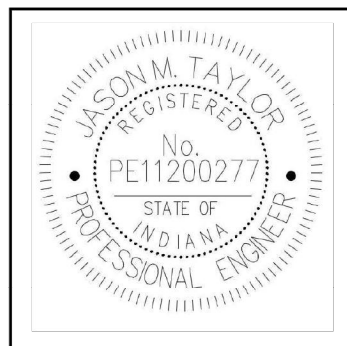
**MODIFICATIONS TO THESE SECTIONS
MUST BE APPROVED BY
THE DIRECTOR OF ENGINEERING**



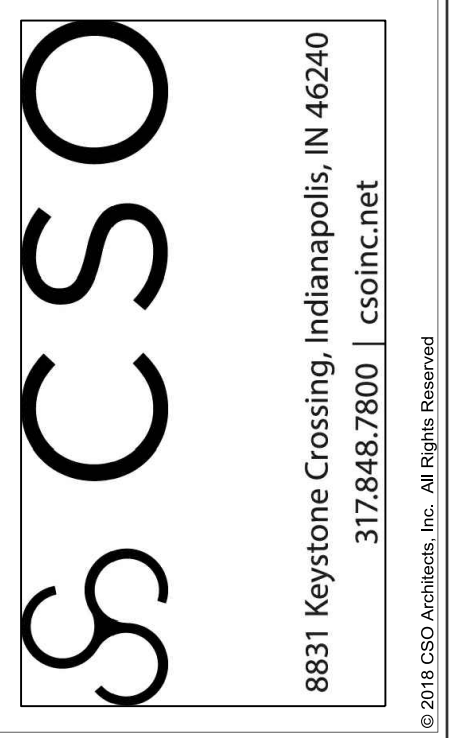
**ALTERNATIVE LOCAL STREET
MINOR SUBDIVISION**
Not to Scale

Road sections without curbs shall require special consideration for storm drainage, underdrain, side ditch depth, etc.

J. Taylor
1/18/2022



CITY OF FISHERS STANDARD CONSTRUCTION DETAILS	SHEET
LOCAL STREET TYPICAL PAVEMENT AND ROADWAY SECTIONS	3 of 29



**FISHERS ELEMENTARY SCHOOL
ADDITIONS & RENOVATIONS
DESIGN DEVELOPMENT**
11442 LANTERN
RD., FISHERS, IN
46038

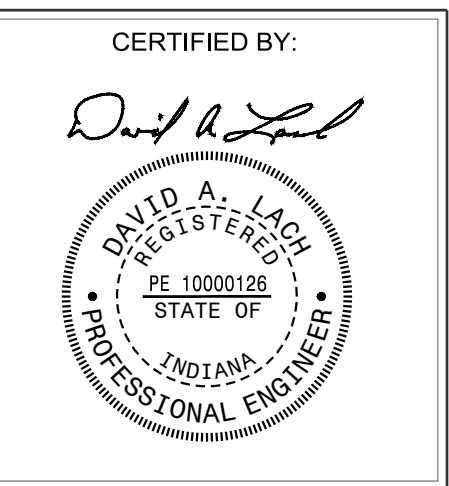
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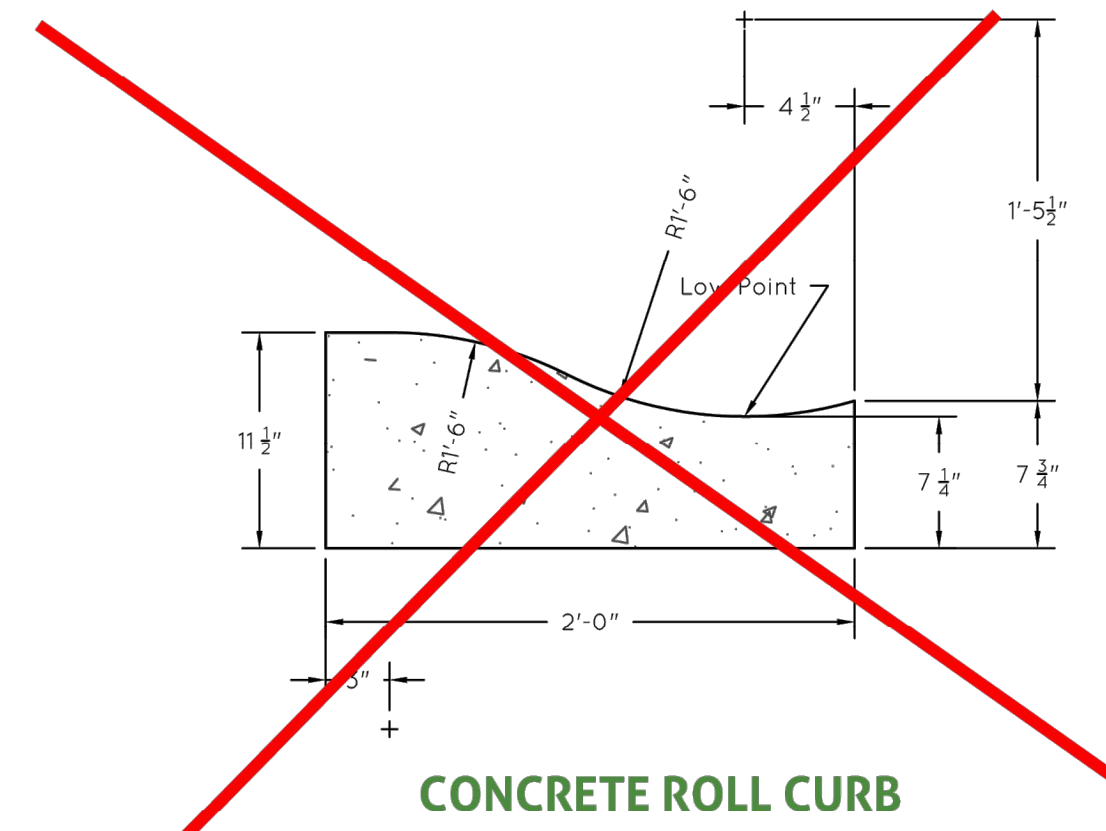
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
**FISHERS
STANDARD
DETAILS**

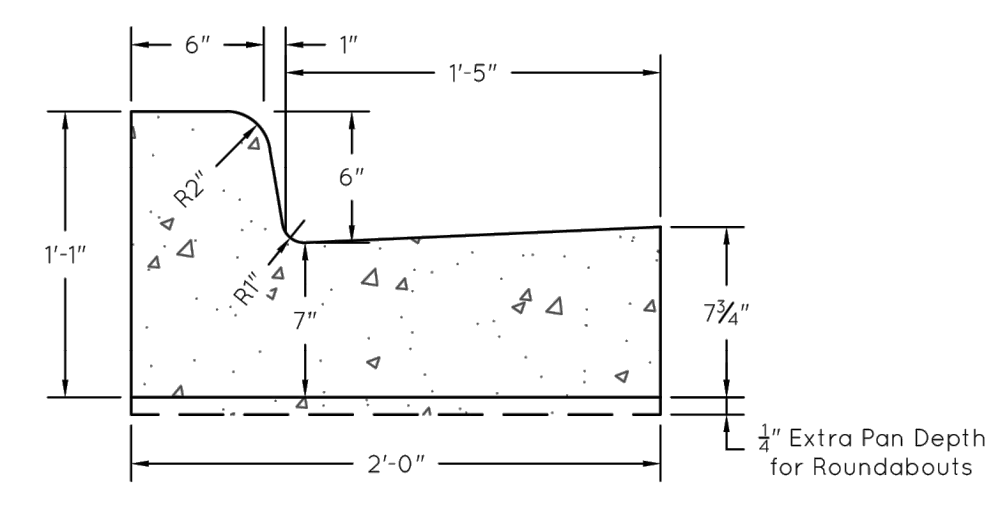


DRAWING NUMBER
C904

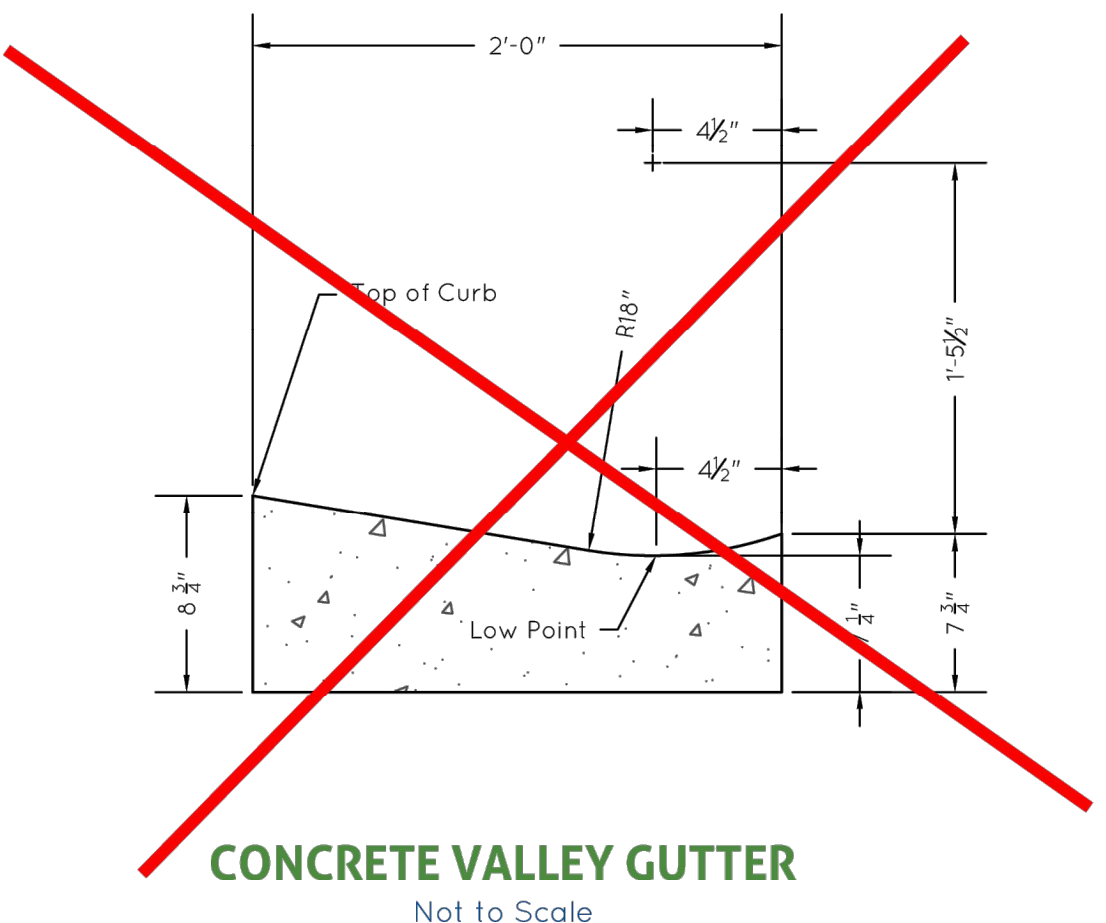
PROJECT NUMBER
2021119



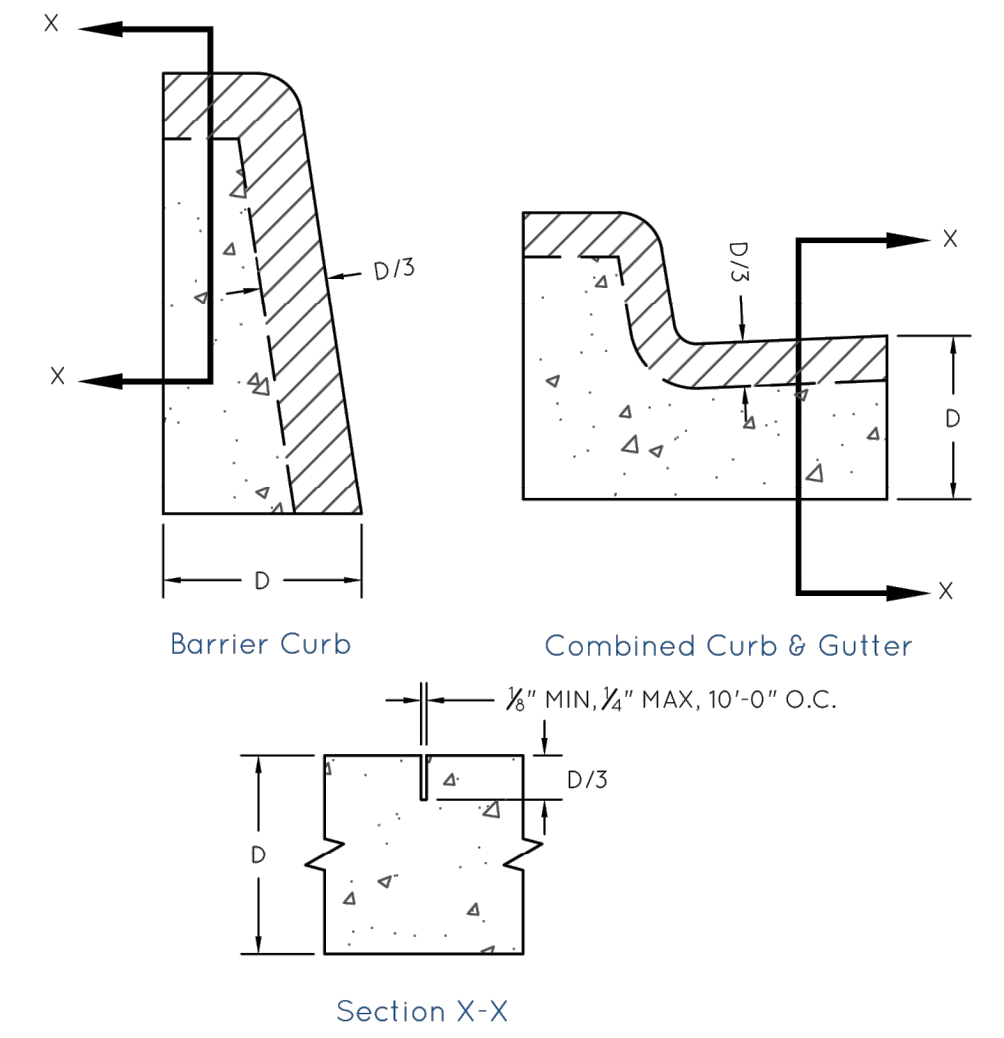
CONCRETE ROLL CURB
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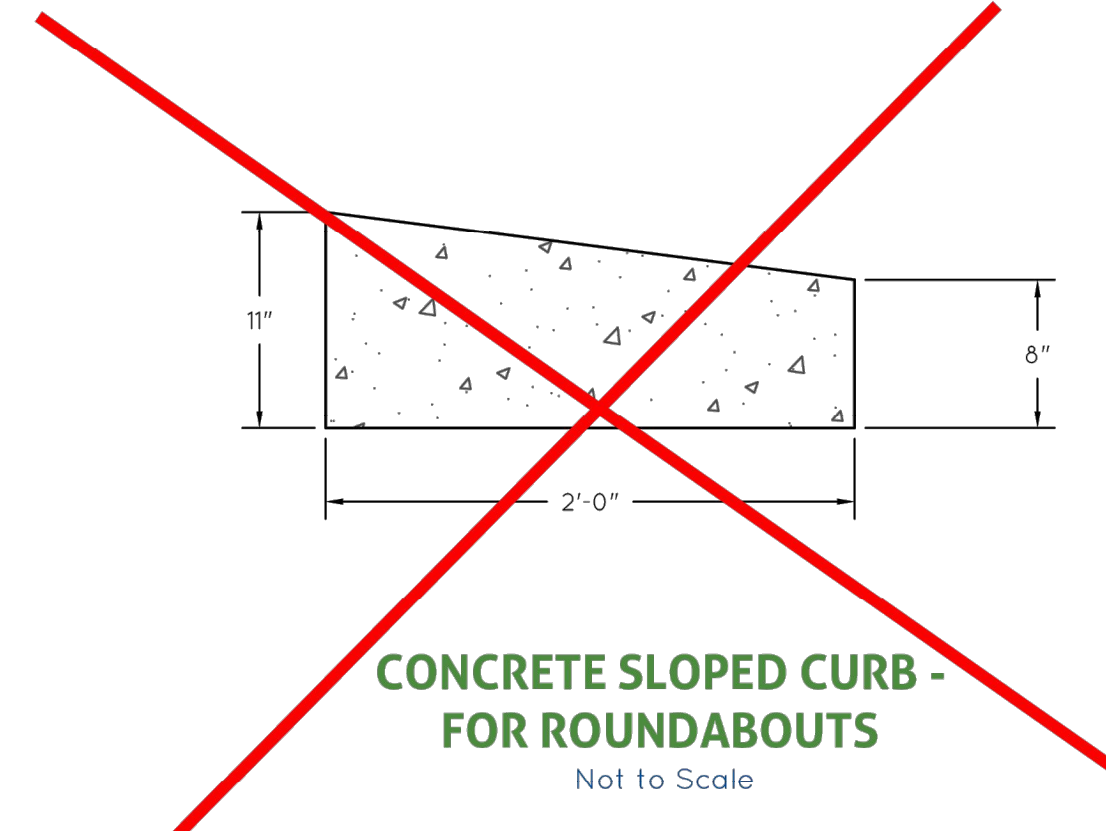
CONCRETE COMBINED CURB & GUTTER
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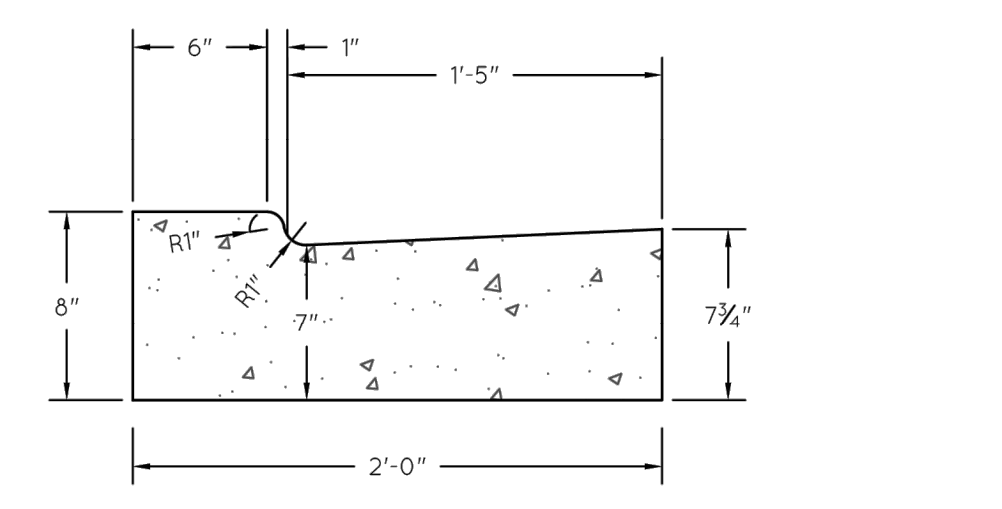
CONCRETE VALLEY GUTTER
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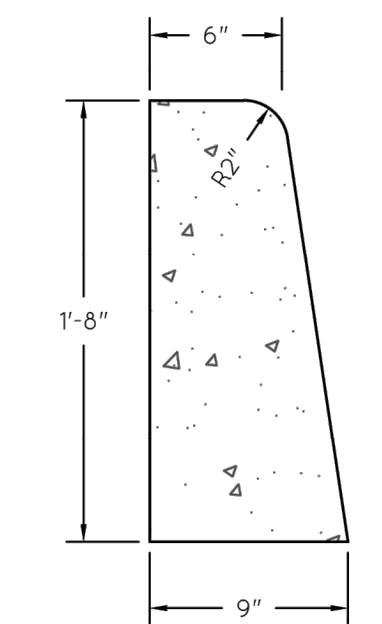
CONTRACTION JOINTS - CONCRETE CURB
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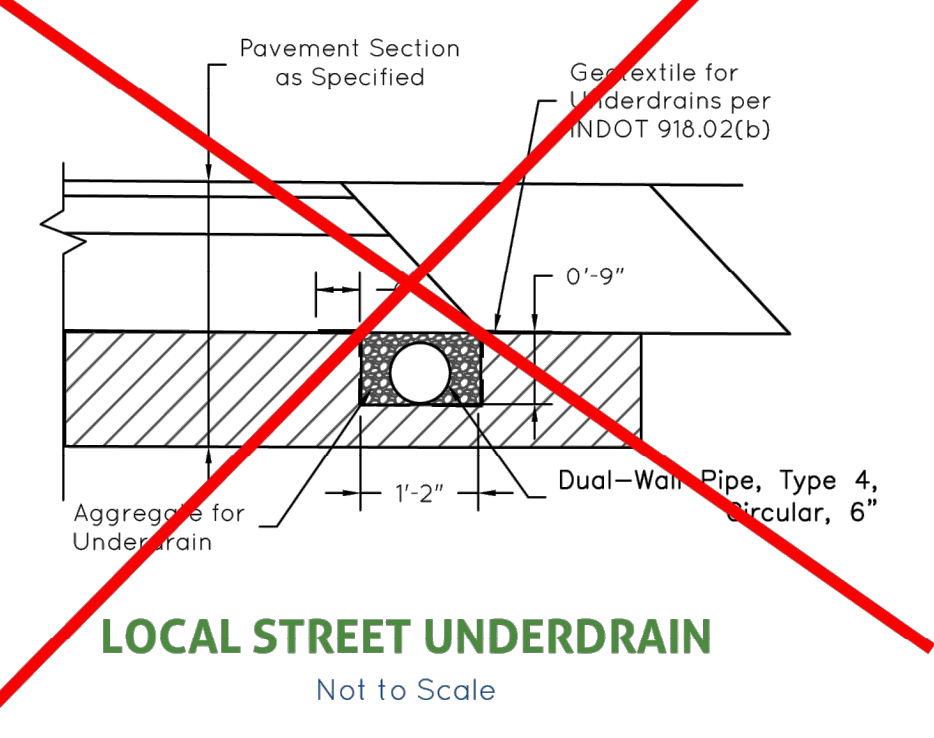
CONCRETE SLOPED CURB - FOR ROUNDABOUTS
Not to Scale



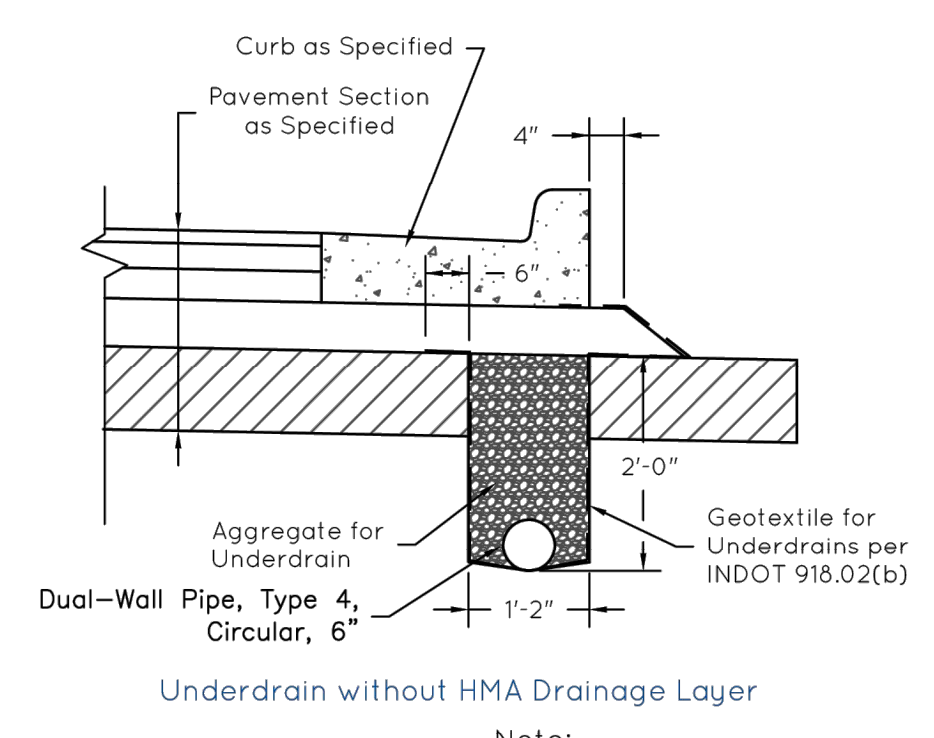
CONCRETE COMBINED CURB & GUTTER - DEPRESSED
Not to Scale



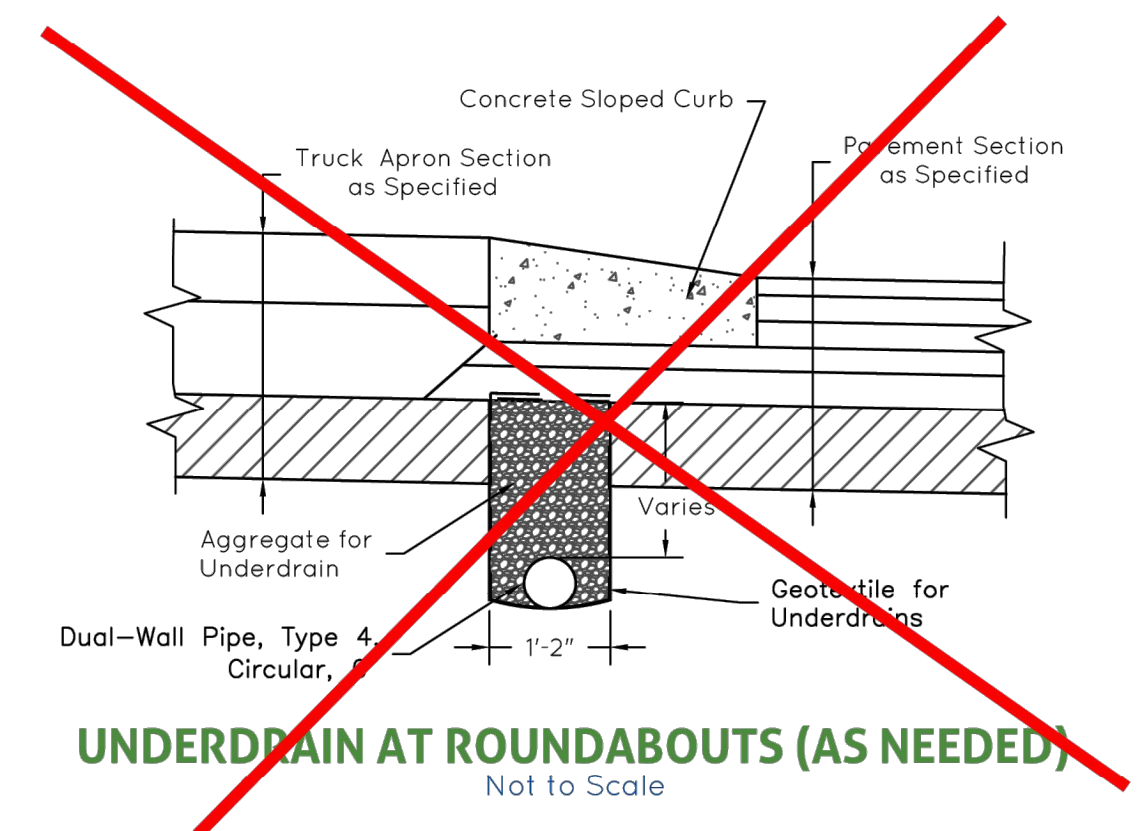
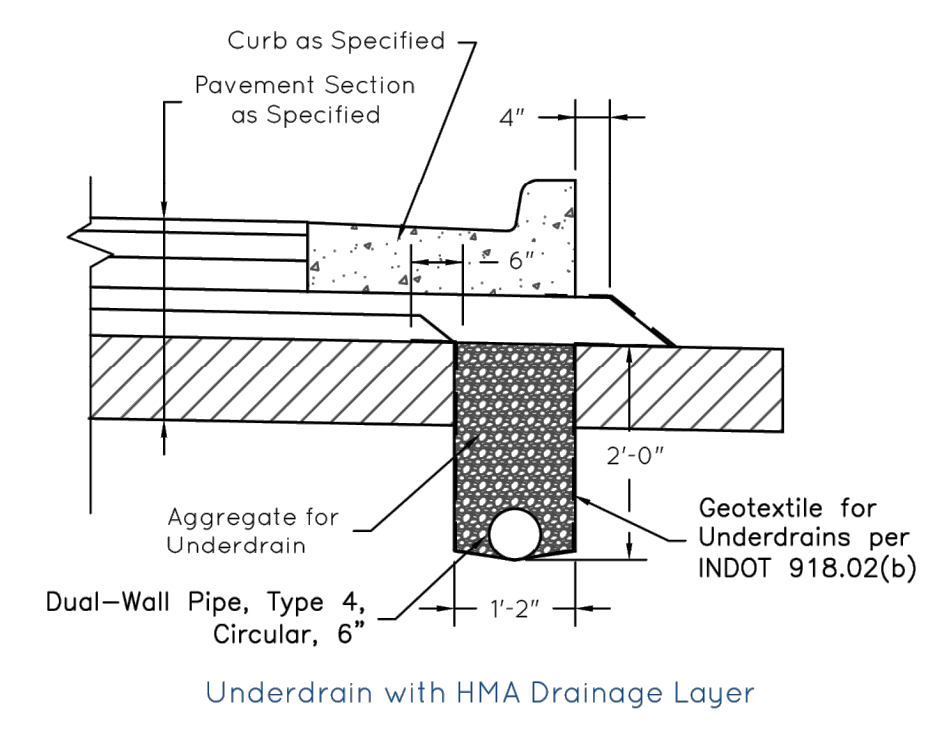
CONCRETE BARRIER CURB
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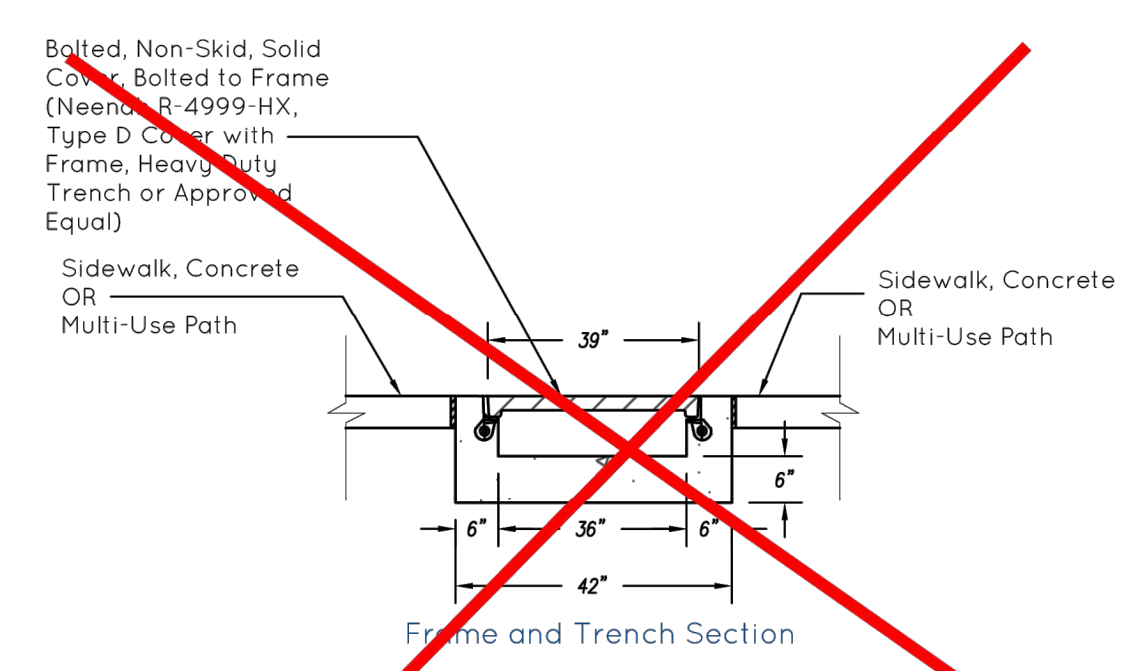
LOCAL STREET UNDERDRAIN
Not to Scale



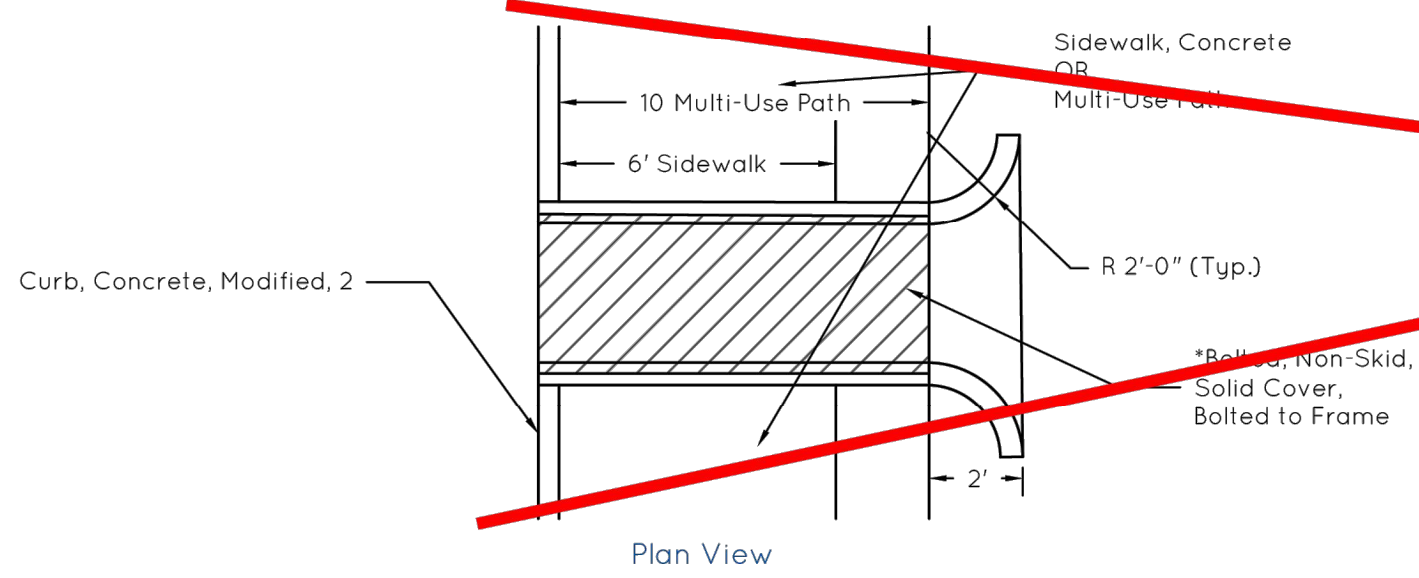
CURB UNDERDRAIN
Not to Scale



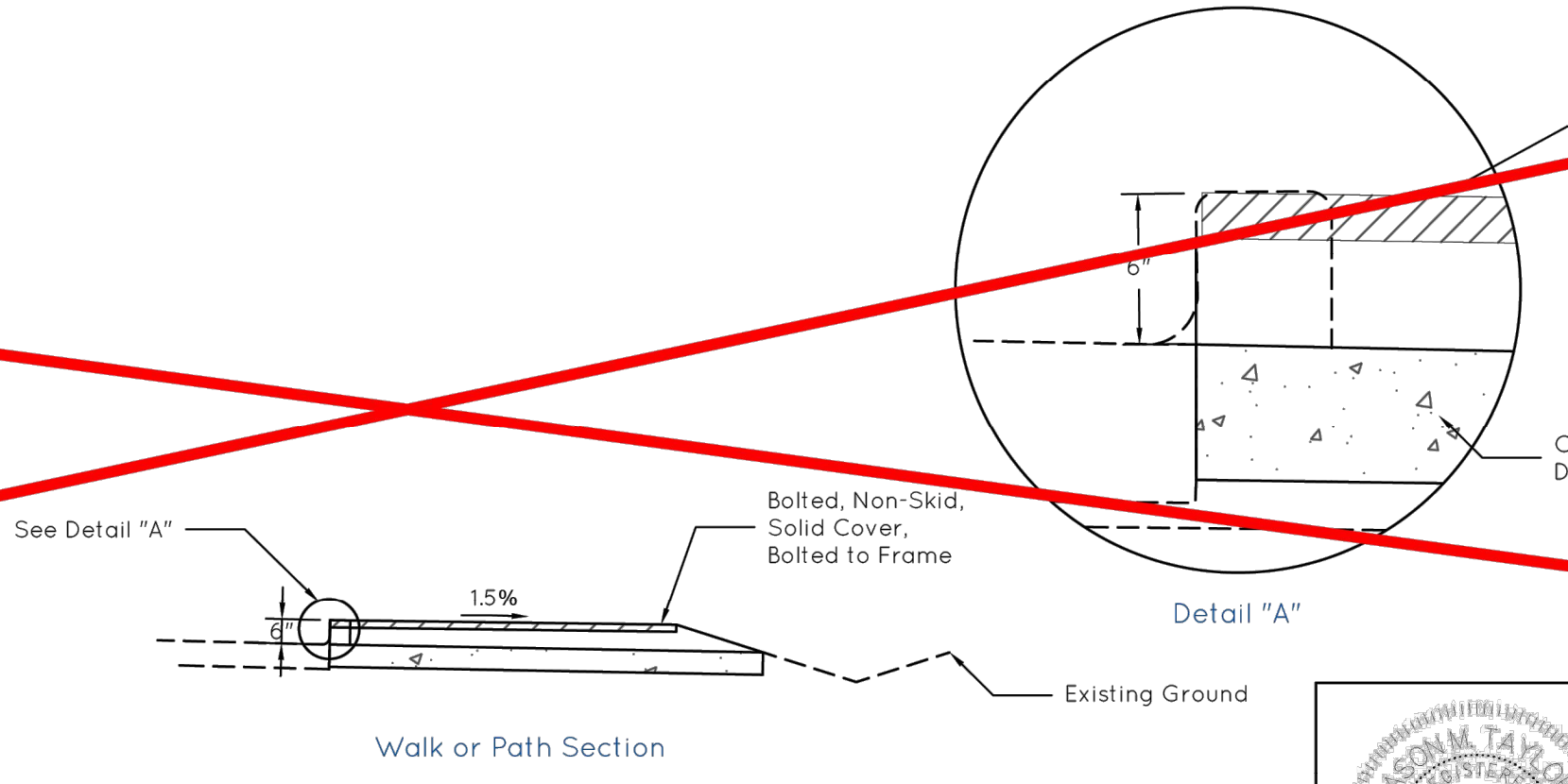
UNDERDRAIN AT ROUNDABOUTS (AS NEEDED)
Not to Scale



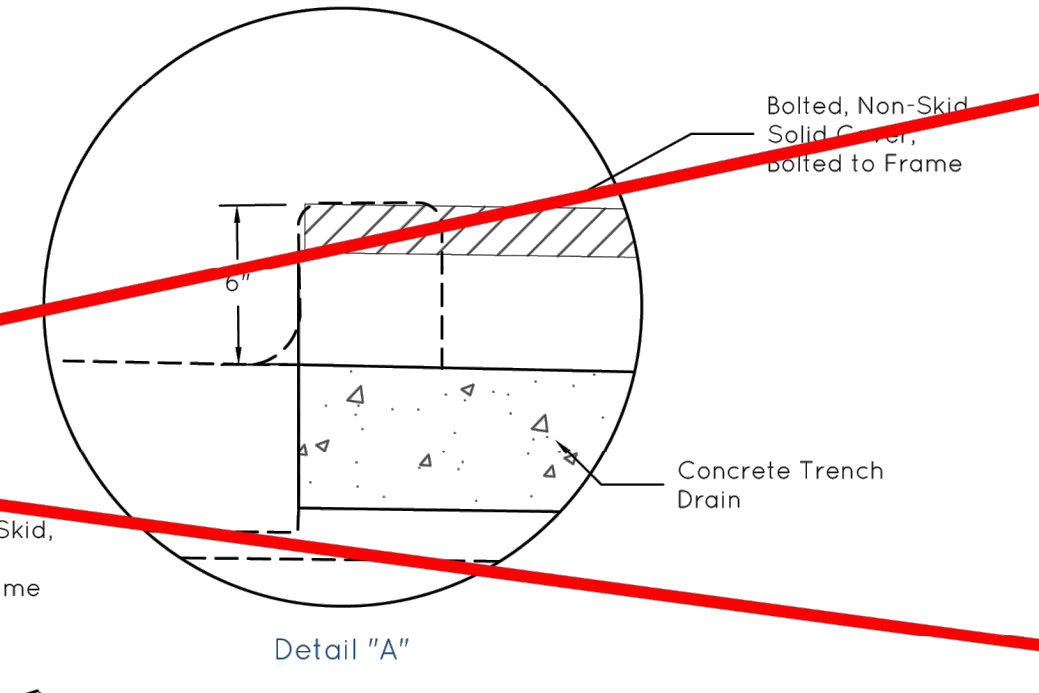
Frame and Trench Section



TRENCH DRAIN DETAIL W/ SIDEWALK OR MULTI-USE PATH
Not to Scale

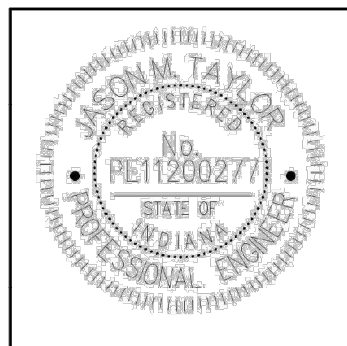


Walk or Path Section



Detail "A"

JMS
1/18/2022



CITY OF FISHERS
STANDARD CONSTRUCTION DETAILS
CURB AND UNDERDRAIN DETAILS

SHEET
4
of
29

REVISIONS:	
4	02/12/24 ADDENDUM #4
6	03/01/24 ADDENDUM #6

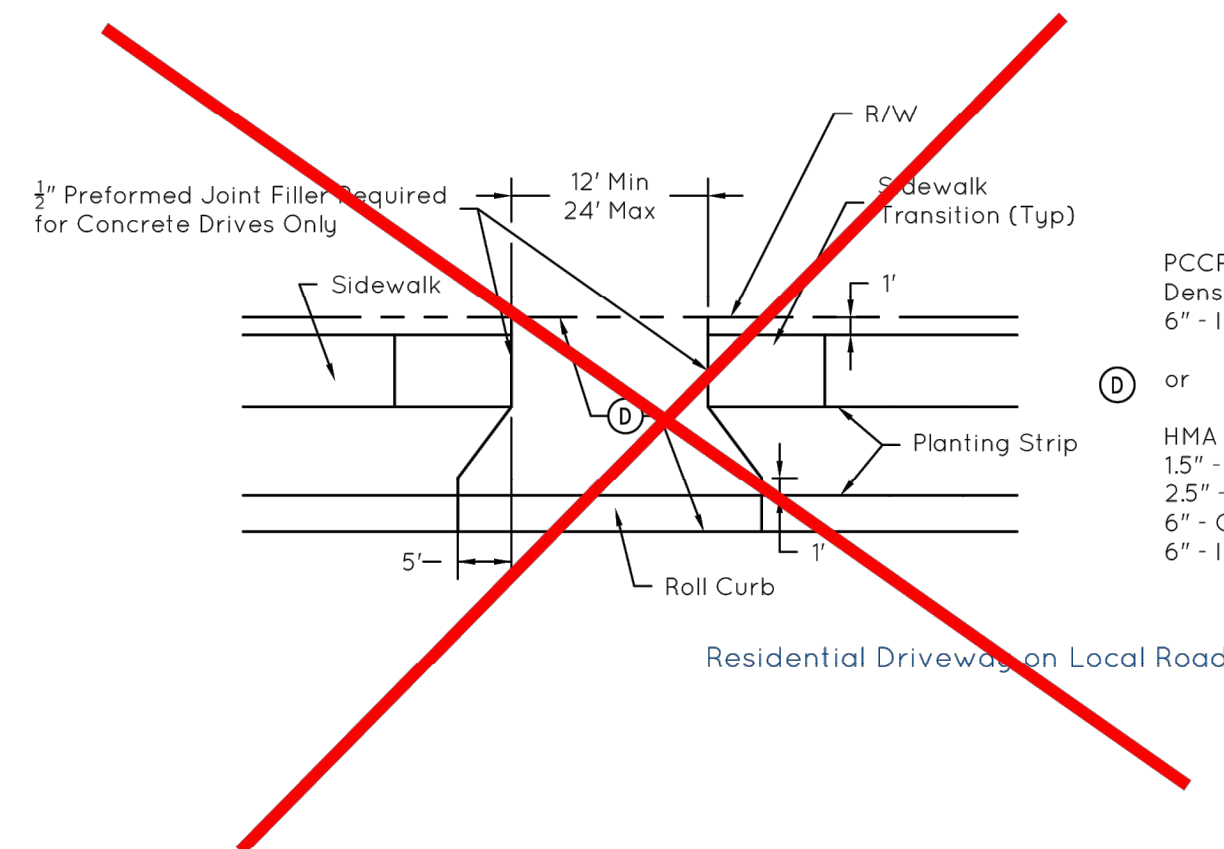
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
FISHERS
STANDARD
DETAILS

CERTIFIED BY:
David A. Lach
DAVID A. LACH
REGISTERED
PE 10000126
STATE OF
INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
C905

PROJECT NUMBER
2021119

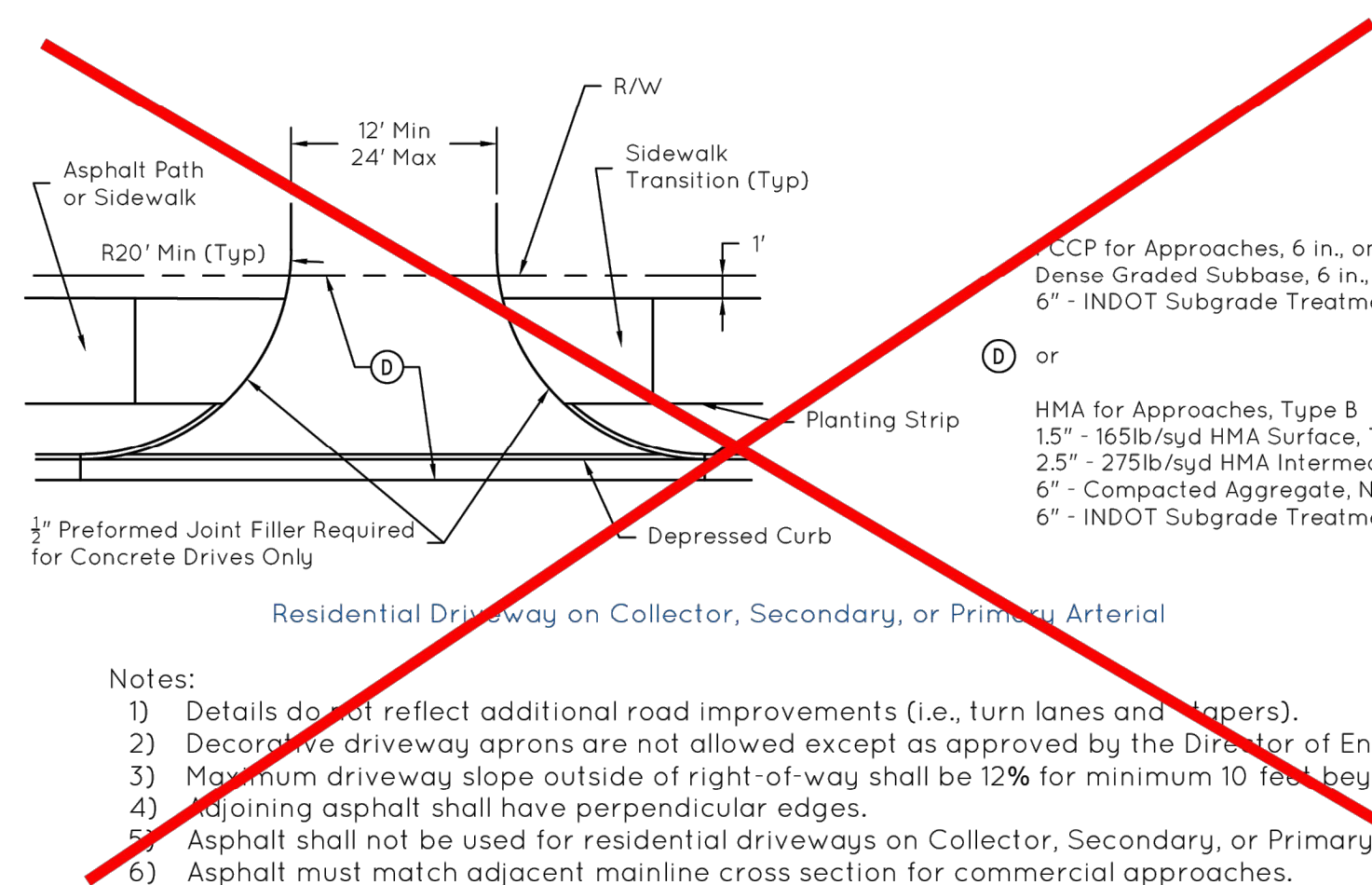


PCCP for Approaches, 6 in., on Dense Graded Subbase, 6 in., on 6" - INDOT Subgrade Treatment, Type II

or

HMA for Approaches, Type B
 1.5" - 165lb/syd HMA Surface, Type B on 2.5" - 275lb/syd HMA Intermediate, Type B on 6" - Compacted Aggregate, No. 53, on 6" - INDOT Subgrade Treatment, Type II

Residential Driveway on Local Road



PCCP for Approaches, 6 in., on Dense Graded Subbase, 6 in., on 6" - INDOT Subgrade Treatment, Type II

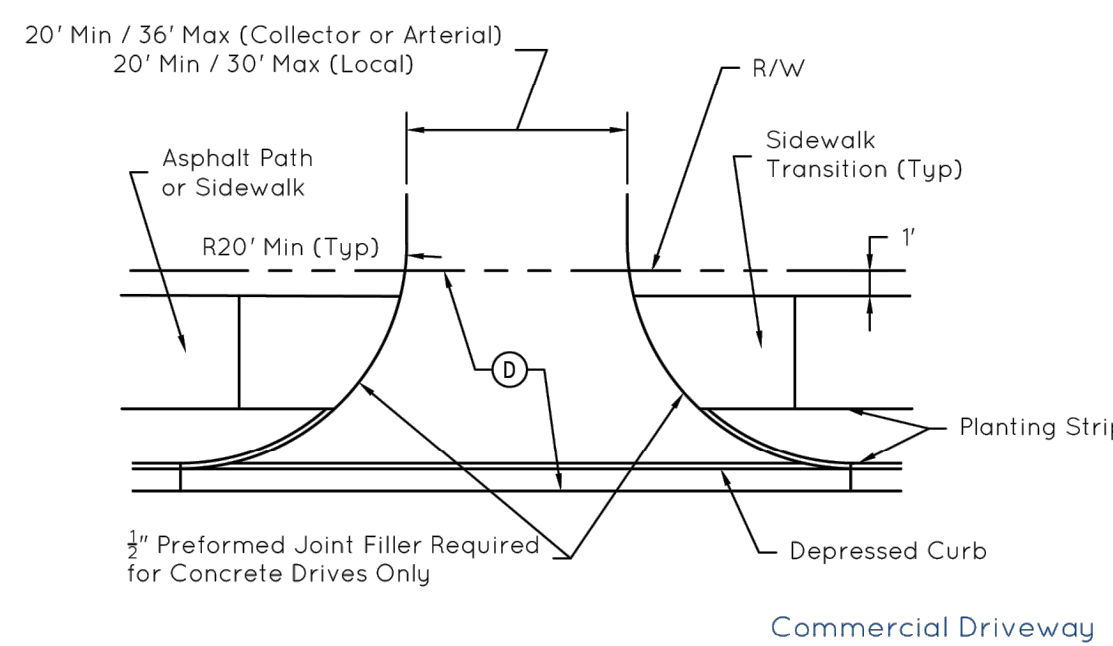
or

HMA for Approaches, Type B
 1.5" - 165lb/syd HMA Surface, Type B on 2.5" - 275lb/syd HMA Intermediate, Type B on 6" - Compacted Aggregate, No. 53, on 6" - INDOT Subgrade Treatment, Type II

Residential Driveway on Collector, Secondary, or Primary Arterial

- Notes:
- 1) Details do not reflect additional road improvements (i.e., turn lanes and tapers).
 - 2) Decorative driveway aprons are not allowed except as approved by the Director of Engineering.
 - 3) Maximum driveway slope outside of right-of-way shall be 12% for minimum 10 feet beyond R/W line.
 - 4) Joining asphalt shall have perpendicular edges.
 - 5) Asphalt shall not be used for residential driveways on Collector, Secondary, or Primary arterials.
 - 6) Asphalt must match adjacent mainline cross section for commercial approaches.

DRIVEWAY DETAILS
Not to Scale

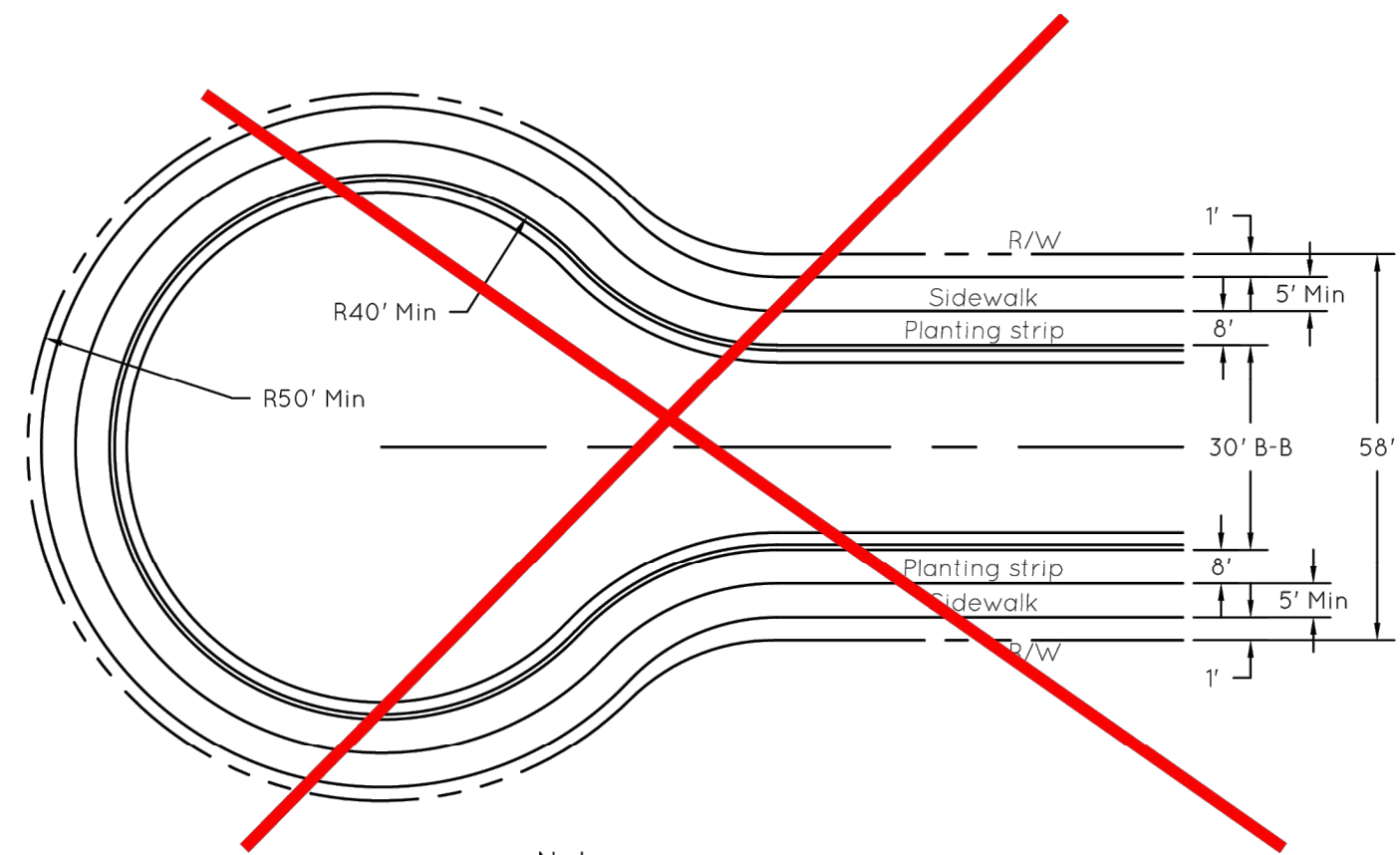


PCCP for Approaches, 9 in., on Dense Graded Subbase, 6 in., on Geogrid, Type IB, on 6" - INDOT Subgrade Treatment, Type II

or

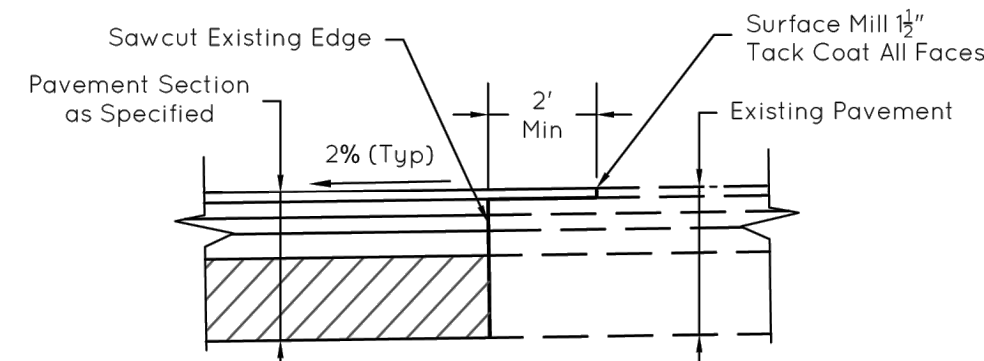
HMA for Approaches, Type B
 1.5" - 165lb/syd HMA Surface, Type B on 2.5" - 275lb/syd HMA Intermediate, Type B on 6" - 660lb/syd HMA Base, Type B on 6" - INDOT Subgrade Treatment, Type II on Geogrid, Type IB

Commercial Driveway

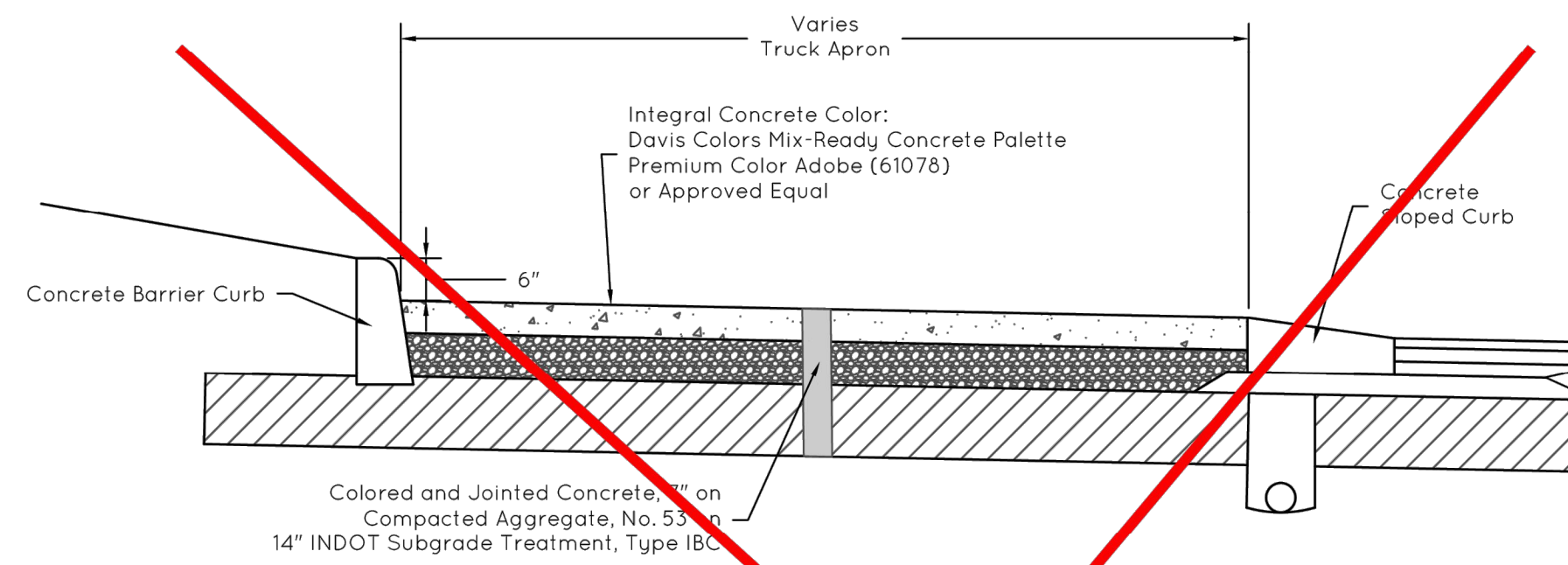


Note:
1) 'Eyebrows' are not allowed

CUL-DE-SAC
Not to Scale

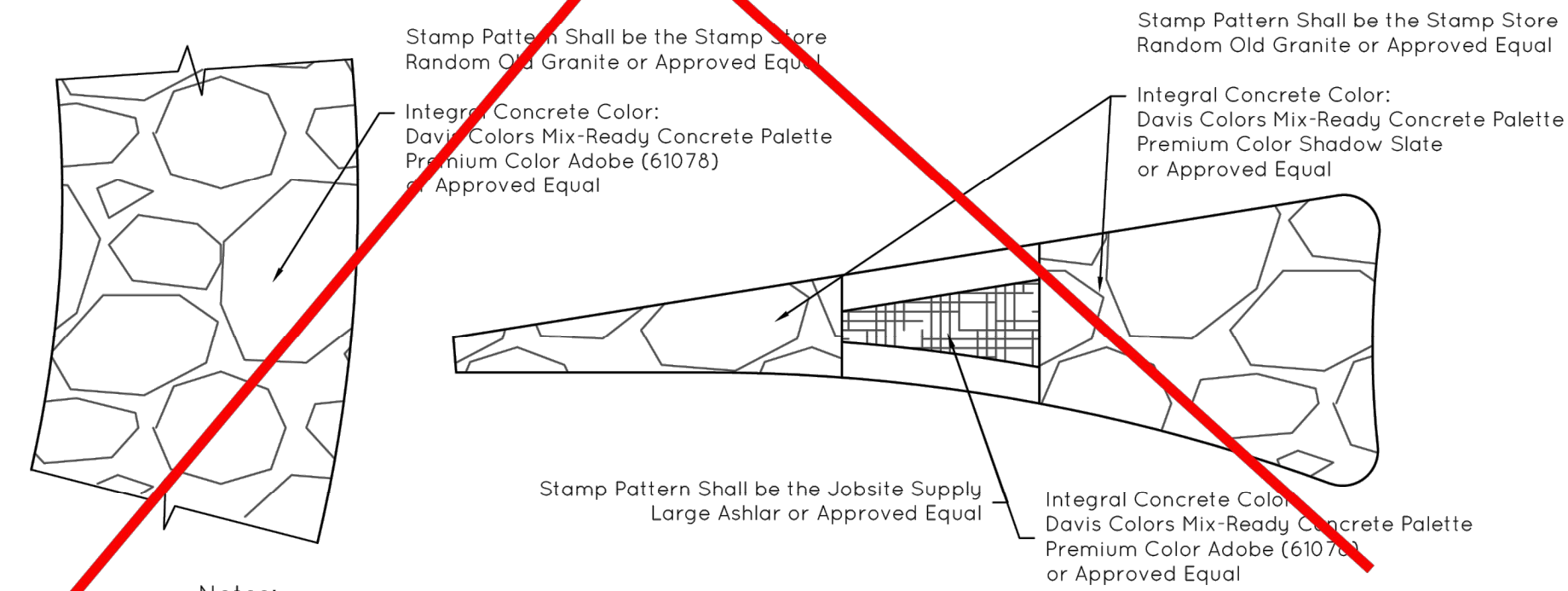


LONGITUDINAL PAVEMENT TIE-IN SECTION
Not to Scale



Note:
1) Type D-1 Contraction Joints not required unless otherwise directed by Dept. of Engineering.

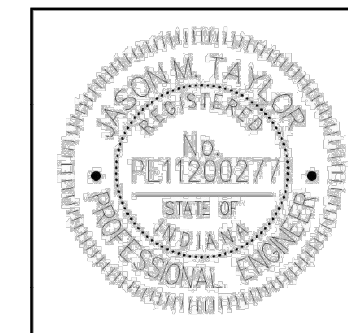
CONCRETE TRUCK APRON DETAIL
Not to Scale



Notes:
1) Pattern shall be submitted to ENGINEER prior to construction.
2) A 4' x 4' mock-up is required for ENGINEER approval.
3) Concrete shall cure for a minimum of four days prior to applying sealant.

ROUNDABOUT TRUCK APRON AND SPLITTER ISLAND STAMP DETAIL
Not to Scale

JAD
1/18/2022



CITY OF FISHERS
STANDARD CONSTRUCTION DETAILS

DRIVEWAY, CUL-DE-SAC, AND MISC. TRANSPORTATION DETAILS

SHEET
5 of 29

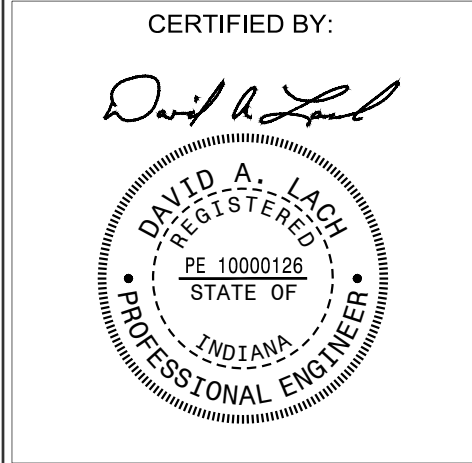
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FISHERS STANDARD DETAILS

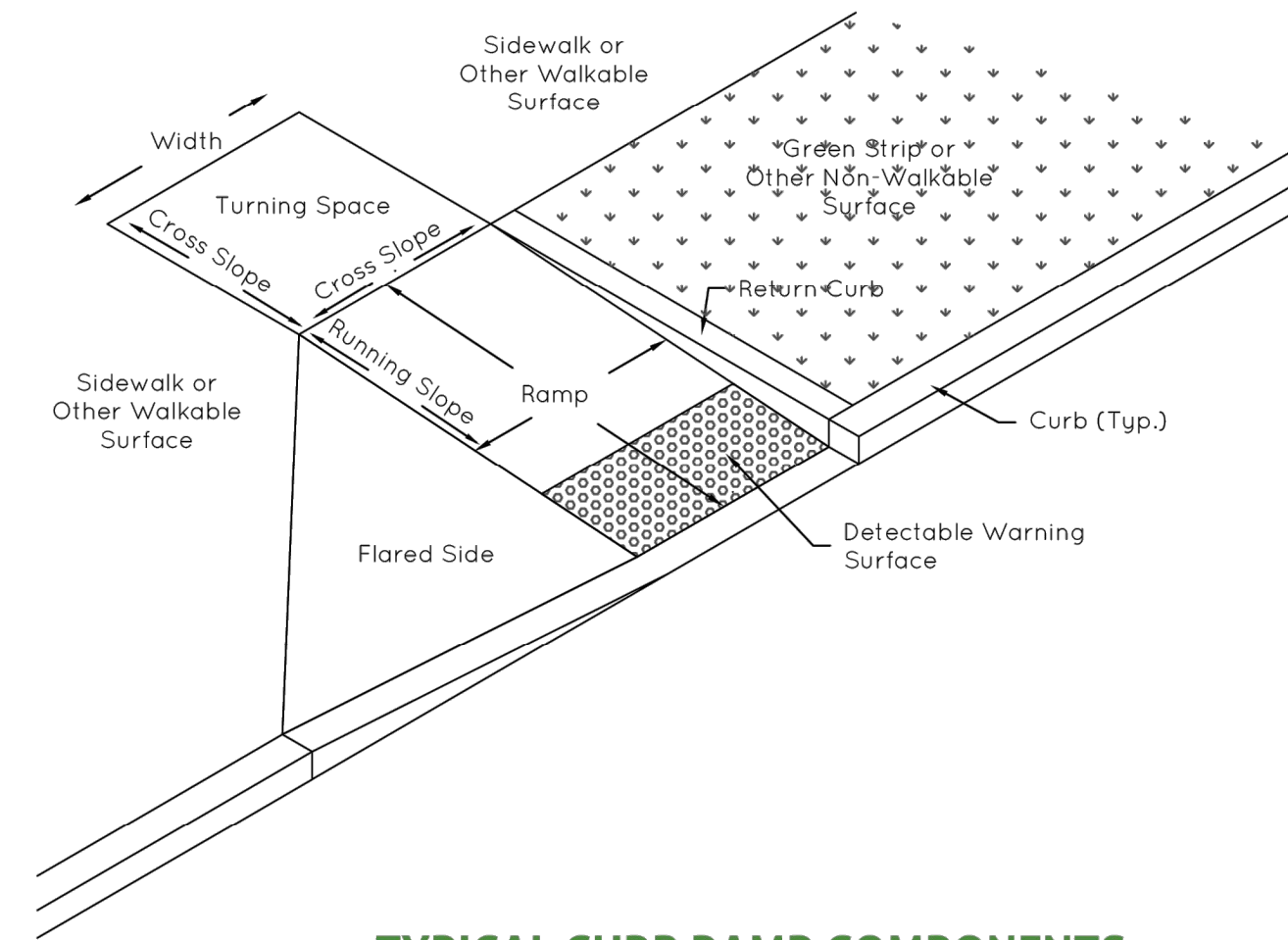


DRAWING NUMBER
C906

PROJECT NUMBER
2021119

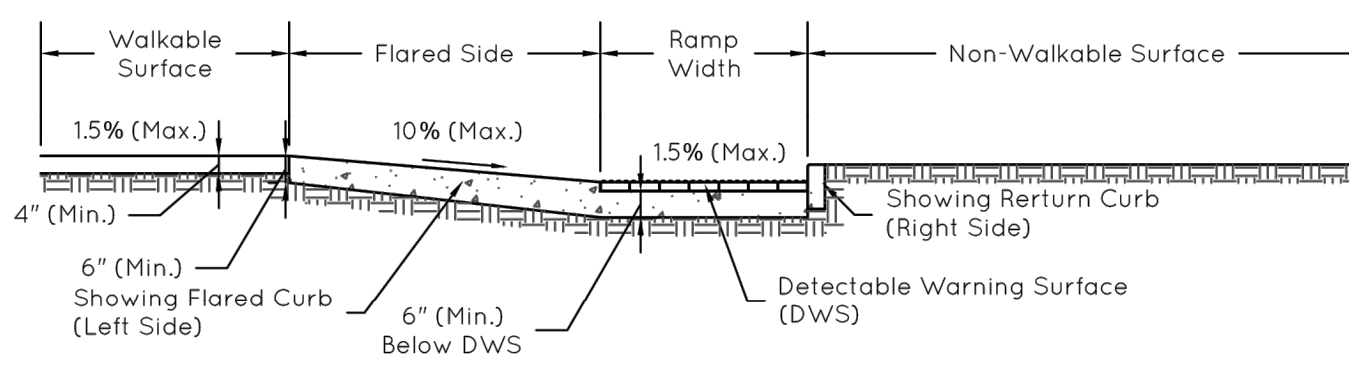
NOTES

- 1) Curb ramps and sidewalks shall be constructed in accordance with INDOT Standard Specifications, Section 604.
- 2) All sidewalks and curb ramps within Fishers Right-of-Way shall be ADA compliant.
- 3) Detectable Warning Surfaces shall be cast iron type and shall be powder coated black.
- 4) Detectable Warning Surfaces shall not be installed at commercial or private driveways unless traffic warrants or approved by City Engineer.
- 5) Transverse joints shall be cut with a jointer having a radius of 1/2-inch of spacing.
- 6) Decorative sidewalks are not permitted unless prior approval has been given by the Director of Engineering.
- 7) When sidewalk is built in conjunction with concrete pavement, expansion and contraction joints should be placed at the same location as the pavement slab. The curb and gutter shall be tied to the pavement by 1/2-in round preformed epoxy coated bars at approximate 3-foot intervals. If concrete pavement is not being built at the same time the curb is constructed, expansion joints should be placed at the ends of all returns and at intervals not to exceed 100 feet. Contraction joints should be installed at 20-foot intervals.
- 8) Curb inlets shall not be allowed within 2 feet of curb ramps or at the apex of corner radii.



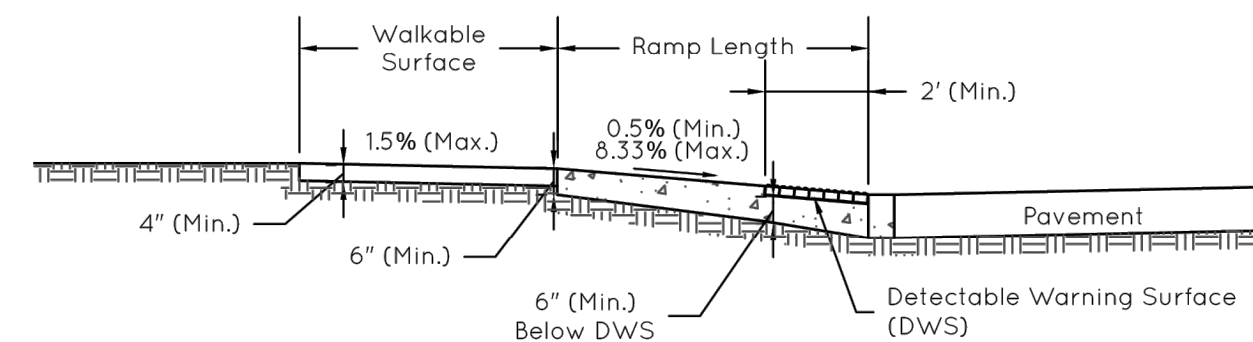
TYPICAL CURB RAMP COMPONENTS

Not to Scale



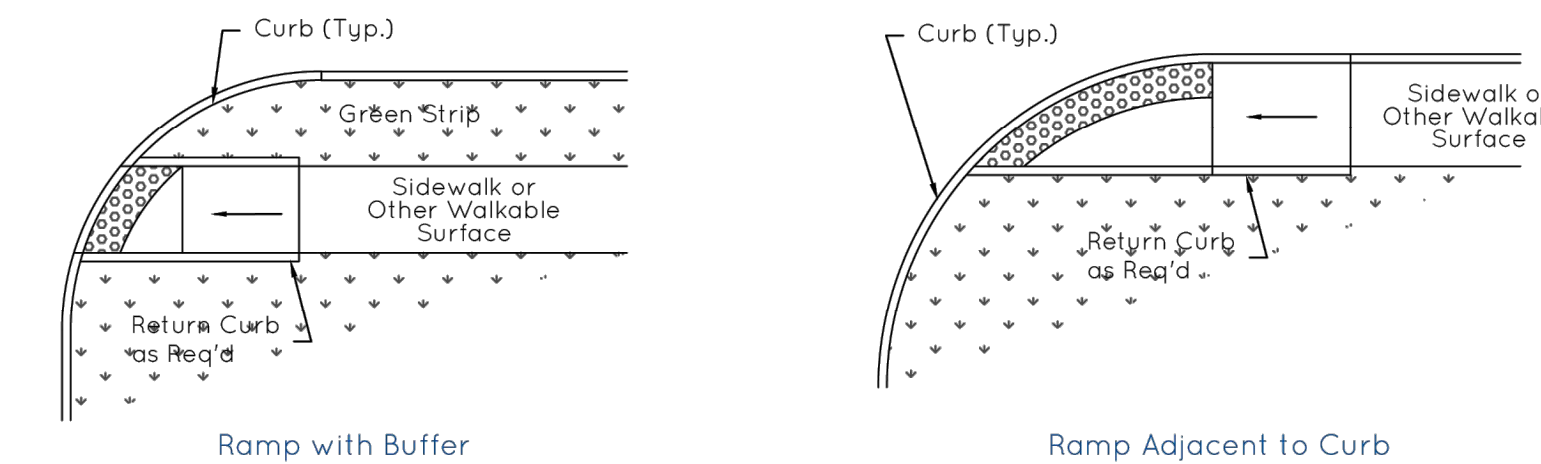
TYPICAL CURB RAMP CROSS SLOPE SECTION

Not to Scale



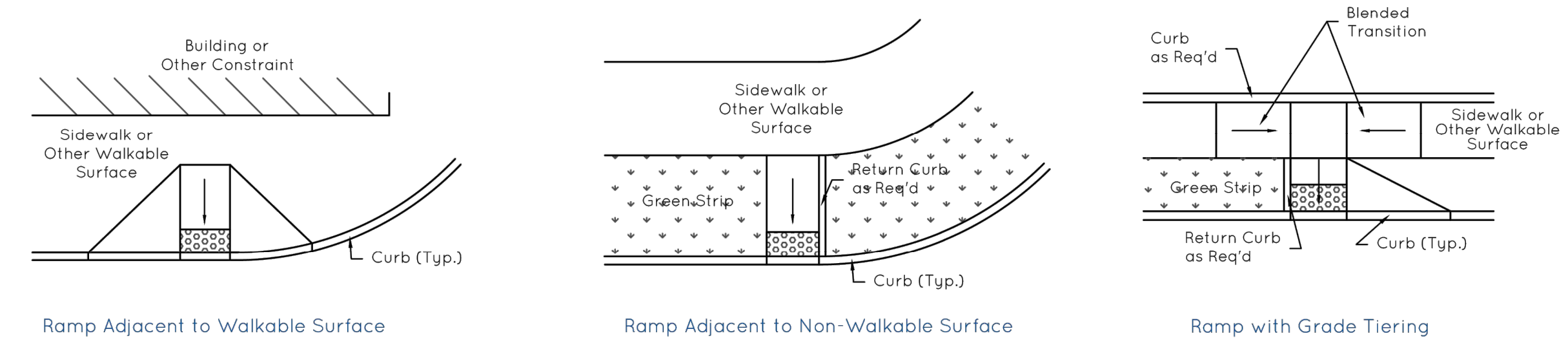
TYPICAL CURB RAMP RUNNING SLOPE SECTION

Not to Scale



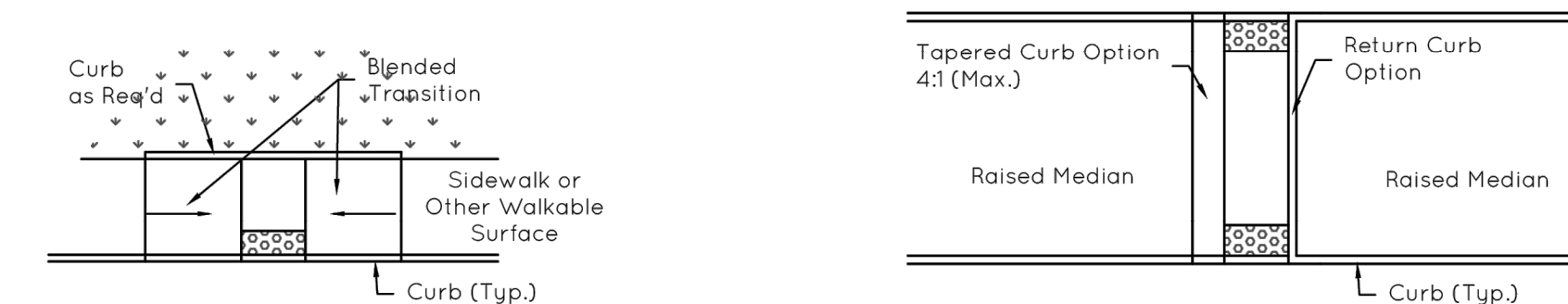
ONE-WAY DIRECTIONAL PERPENDICULAR CURB RAMP EXAMPLES

Not to Scale



PERPENDICULAR CURB RAMP EXAMPLES

Not to Scale

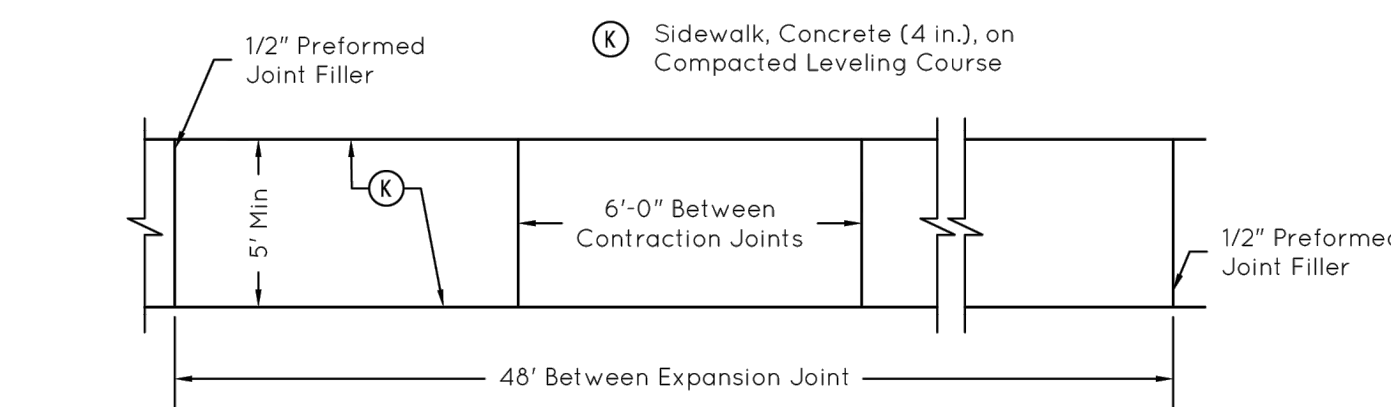


PARALLEL CURB RAMP EXAMPLE

Not to Scale

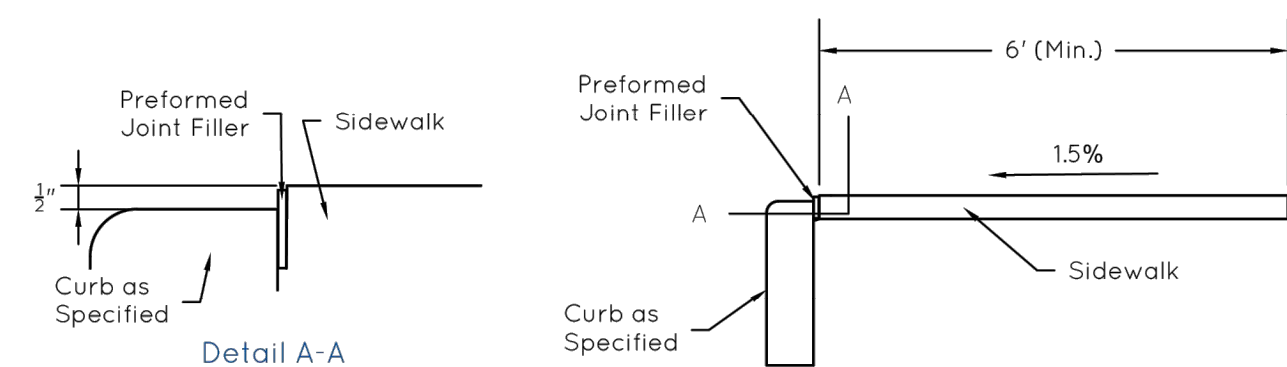
MEDIAN CURB RAMP EXAMPLE

Not to Scale



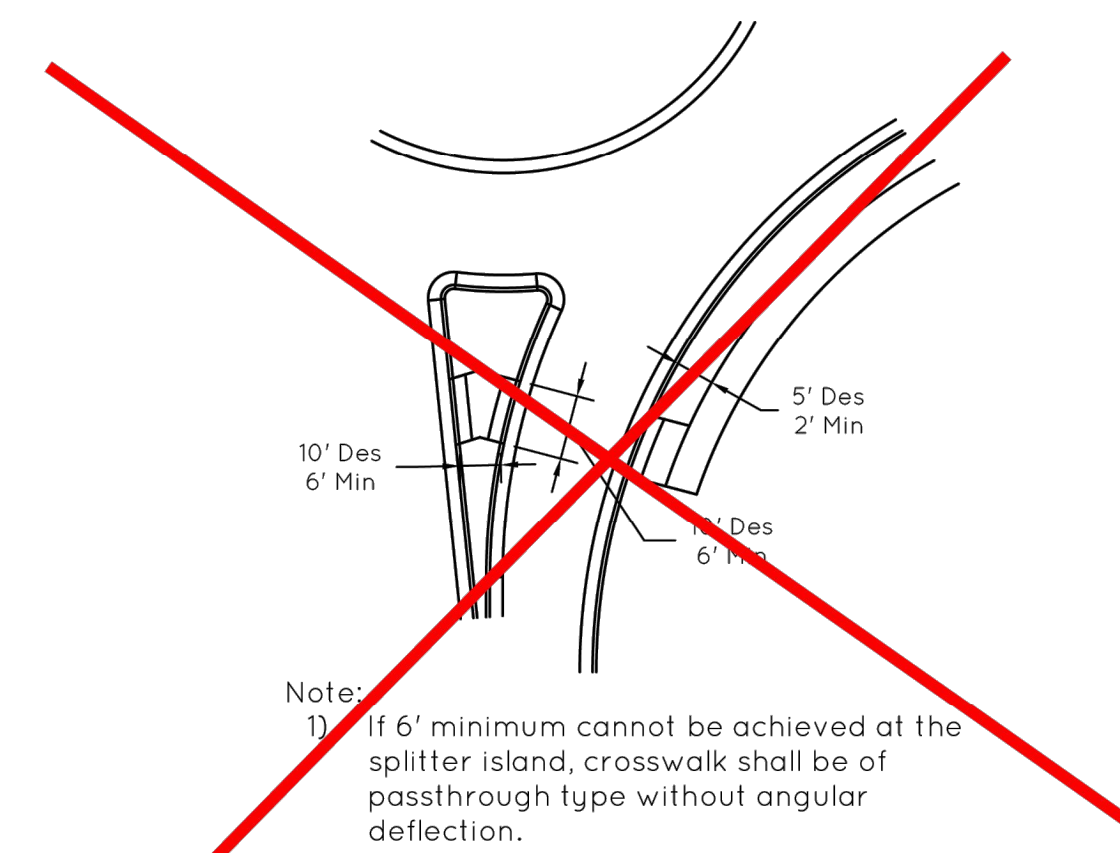
SIDEWALK DETAIL

Not to Scale



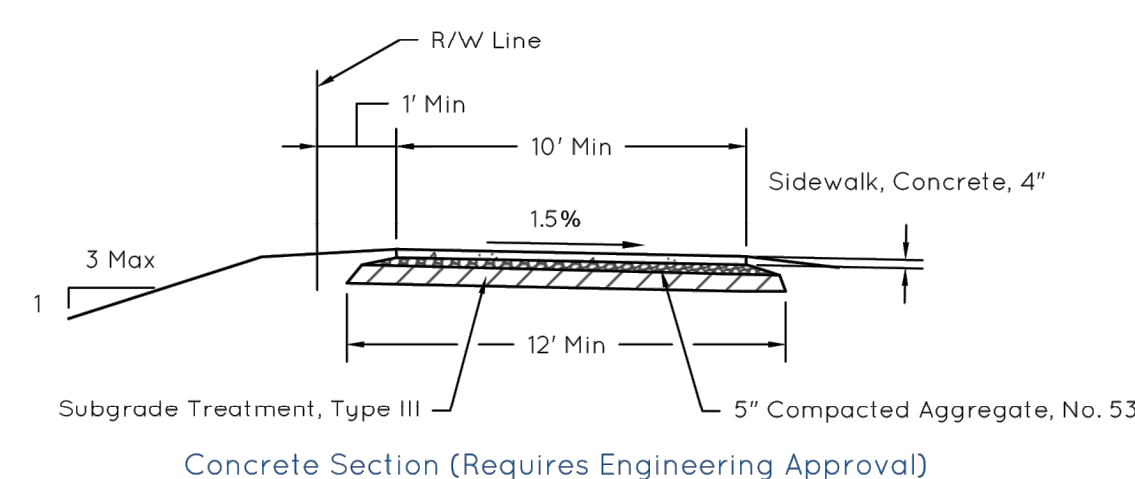
SIDEWALK ADJACENT TO CURB

Not to Scale



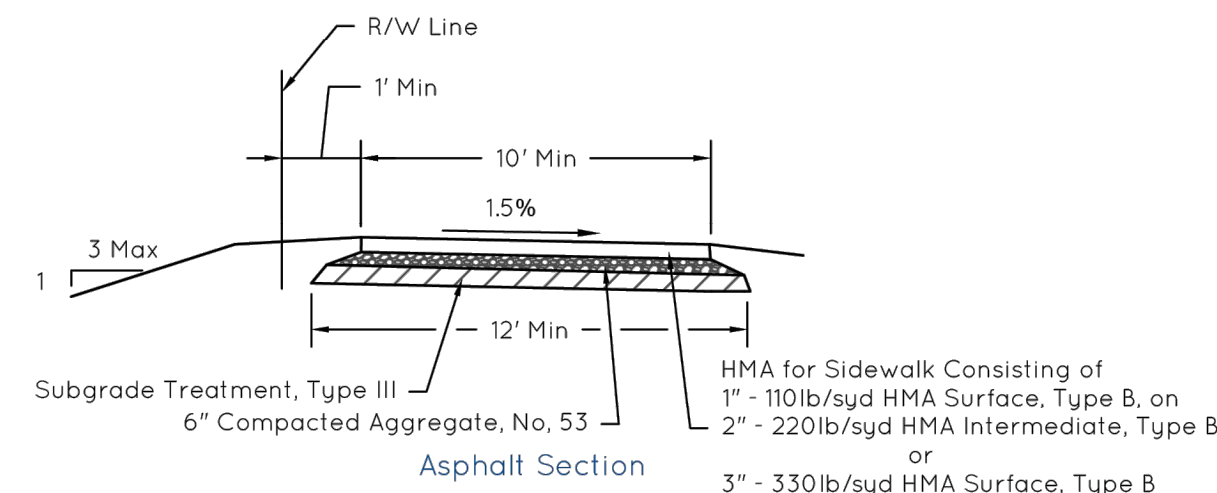
ROUNDABOUT SIDEWALK AND CURB RAMP PLACEMENT

Not to Scale



PERIMETER PATH

Not to Scale

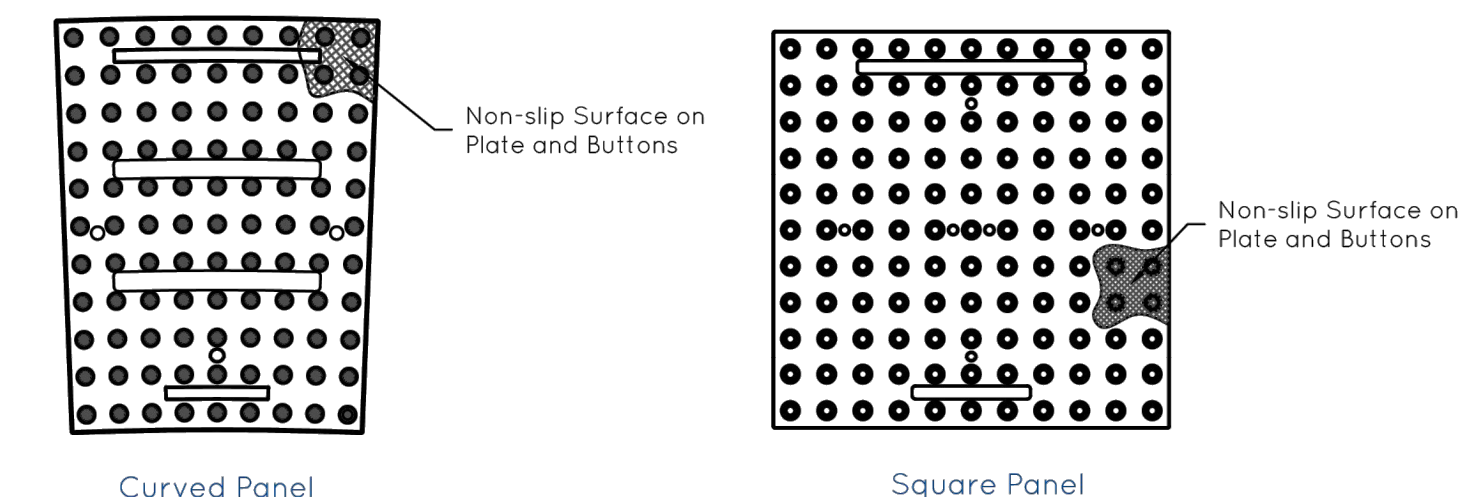


Note:

- 1) Detectable warning surfaces by East Jordan Iron Works, Neenah, or approved equal shall be cast iron, have a heavy duty load rating, and be powder coated black.
- 2) Detectable warning surfaces shall be ADA compliant.

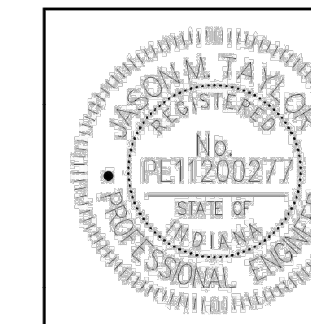
DETECTABLE WARNING SURFACE

Not to Scale



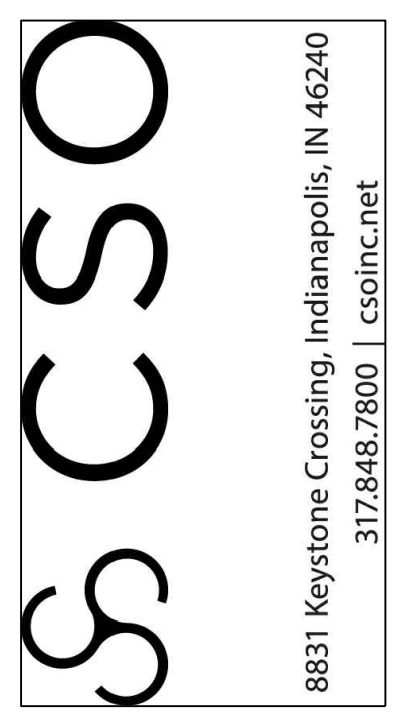
Curved Panel

Square Panel



1/18/2022

CITY OF FISHERS STANDARD CONSTRUCTION DETAILS	SHEET
	6 of 29



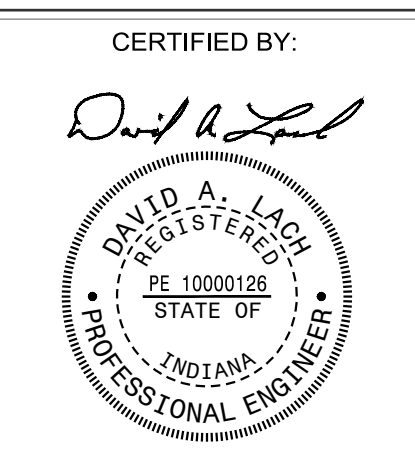
**FISHERS ELEMENTARY SCHOOL
ADDITIONS & RENOVATIONS
DESIGN DEVELOPMENT**
11442 LANTERN
RD, FISHERS, IN
46038

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4	02/12/24 ADDENDUM #4
6	03/01/24 ADDENDUM #6

ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
**FISHERS
STANDARD
DETAILS**



DRAWING NUMBER
C907

PROJECT NUMBER
2021119

PRINCIPLES AND OBJECTIVES

Several overarching principles should guide the development of all roundabout designs. Achieving these principles should be the goal of any roundabout design:

- Provide slow entry speeds and consistent speeds through the roundabout by using deflection.
- Provide the appropriate number of lanes and lane assignment to achieve adequate capacity, lane volume balance, and lane continuity.
- Provide smooth channelization that is intuitive to drivers and results in vehicles naturally using the intended lanes.
- Provide adequate accommodation for the design vehicles.
- Design to meet the needs of pedestrians and cyclists.
- Provide appropriate sight distance and visibility for driver recognition of the intersection and conflicting users.

Note that some features of multi-lane roundabout design are significantly different from single-lane roundabout design, and some techniques used in single-lane roundabout design may not directly transfer to multi-lane design. Each of the principles described above affects the safety and operations of the roundabout. When developing a design, the trade-offs of safety, capacity, cost, and so on must be recognized and assessed throughout the design process.

DESIGN GUIDELINES

Submittals

All roundabout designs shall be submitted for review at the following stages of development:

- 1) Conceptual
 - 1)1) Preliminary layout
 - 1)2) Planned roundabout capacity analysis for construction year, 10-year, and 20-year traffic review
- 2) Stage 1 or 25% plans
 - 2)1) Refined geometrics
 - 2)2) Turning movement and design vehicle selection review
 - 2)3) Striping review
- 3) Stage 2 or 50% plans
 - 3)1) Drainage and grade review
 - 3)2) Roundabout sight distance review
- 4) Stage 3 or 75% plans
 - 4)1) Landscaping review
 - 4)2) Lighting review
 - 4)3) Signage review

Speed Management

The maximum allowable fastest path entry speeds shall be as indicated below unless prior approval has been given by the Department.

- 1) Single-lane roundabouts - 25 mph
- 2) Multi-lane roundabouts - 30 mph

Design Vehicle Selection

- 1) The WB-62 shall be the minimum design vehicle for sizing the roundabout unless prior approval has been given by the Department.
 - 1)1) At multi-lane approaches it shall be assumed that the WB-62 will straddle the lane line to make a through and right-turn movement.
- 2) At a minimum, the WB-62 shall be able to travel through a roundabout without over-tracking any curb with the exception of the truck apron roll curb unless prior approval has been given by the Department.
- 3) The circulatory roadway and all lanes within a multi-lane roundabout shall accommodate a city-bus, fire truck, and school bus unless prior approval has been given by the Department.

Inscribed Circle Diameter (ICD)

Unless prior approval is given by the Department, the smallest ICD used for design shall be 110 ft.

Entry Geometry and Path Alignment

- 1) If horizontal deflection is utilized on an approach to a roundabout it should be a 6 ft offset minimum and, ideally, 10 to 12 ft to ensure drive path is influenced.
- 2) Entries shall be designed such that path overlap is eliminated.

Profiles and Grades

Vertical profiles and roundabout grading should take into consideration low clearance vehicles, especially on heavy truck routes.

Splitter Islands

- 1) Splitter islands for single-lane roundabouts should be 50 feet or greater in length and 100 feet or greater in length for multi-lane roundabouts measured from the circulatory roadway.
- 2) On high speed approaches (design speed of approaching roadways above 45 mph) consideration should be given for the splitter island length to be the SSD of that design speed.

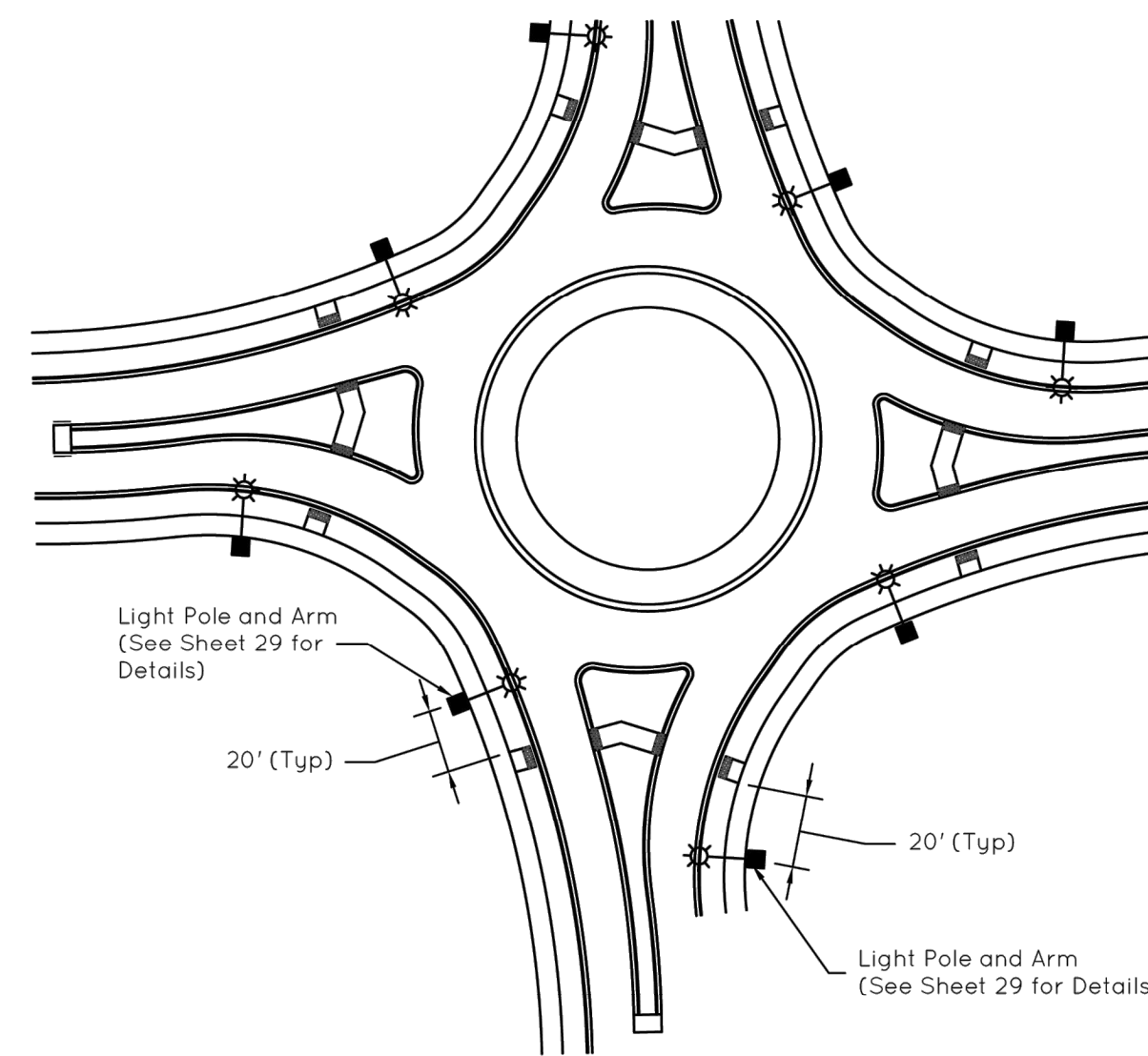
Drainage

No drainage structures shall be located within the circulatory roadway unless prior approval has been given by the Department.

Landscape

Any landscaping or object located within the center island shall be approved by the City of Fishers.

- 1) If no landscaping is proposed in the center island, fill should be placed at a 6:1 slope in order to provide a sight obstruction mound.
- 2) All splitter islands less than 8 ft in width and between the pedestrian crosswalk and circulatory roadway shall not be landscaped and shall be in stamped concrete unless prior approval has been given by the Department.
- 3) The minimum median width shall be 52 inches. If 52 inches cannot be achieved, then median must be stamped concrete or landscaped with typical Fishers narrow median landscape plan as provided by City during plan review.

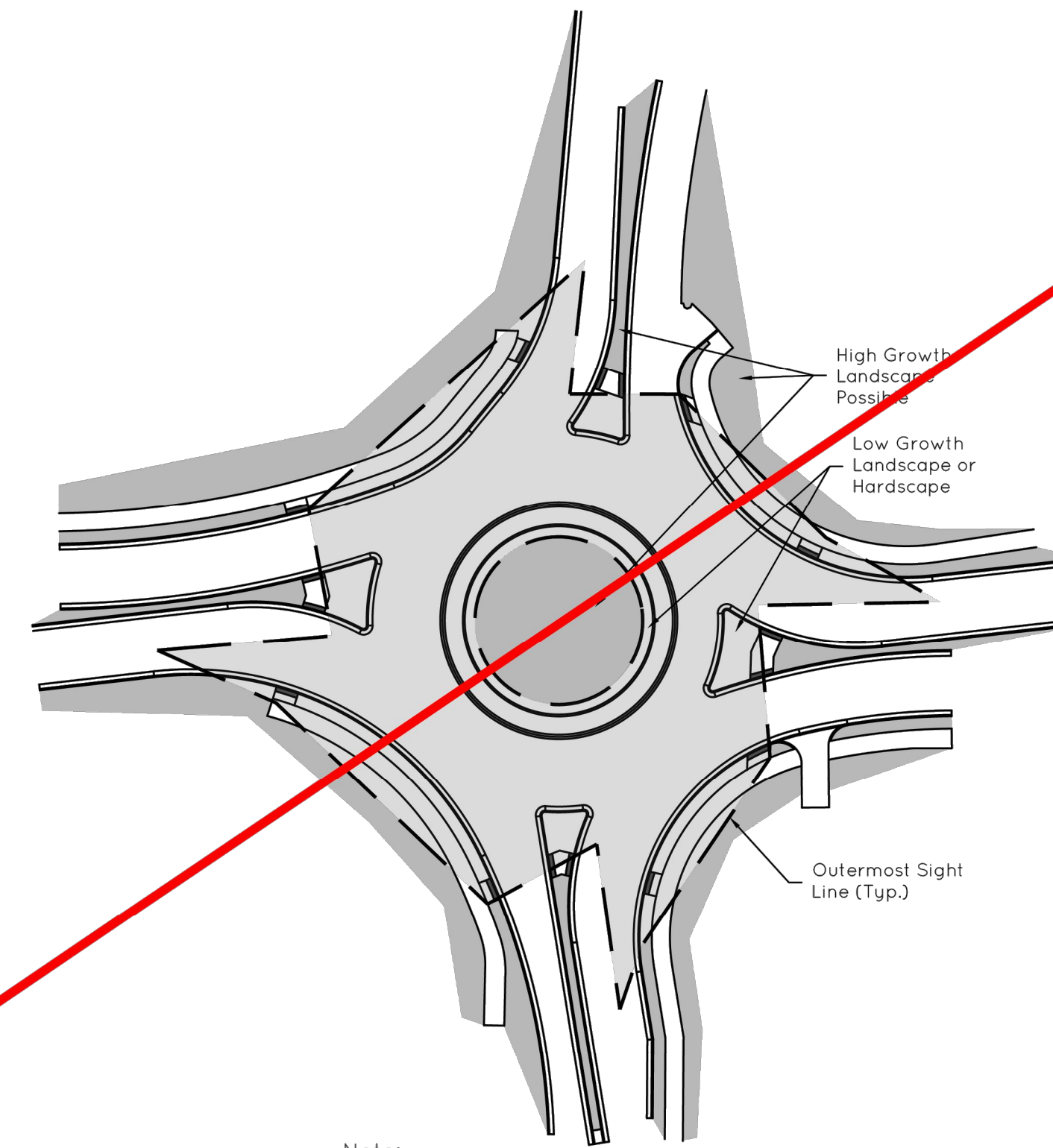


Notes:

- 1) Lighting design shall be in conformance with the IES Design Guide (IES DG-19-08) and City of Fishers standards.
- 2) Luminaire, pole, and placement shall be coordinated for installation by Duke Energy.
- 3) Do not backlight pedestrians.
- 4) The full length of splitter islands shall be illuminated unless prior approval has been given by the Department.
- 5) Additional poles should be provided as required to meet appropriate photometric results for complex geometry.

TYPICAL LIGHTING PLACEMENT

Not to Scale

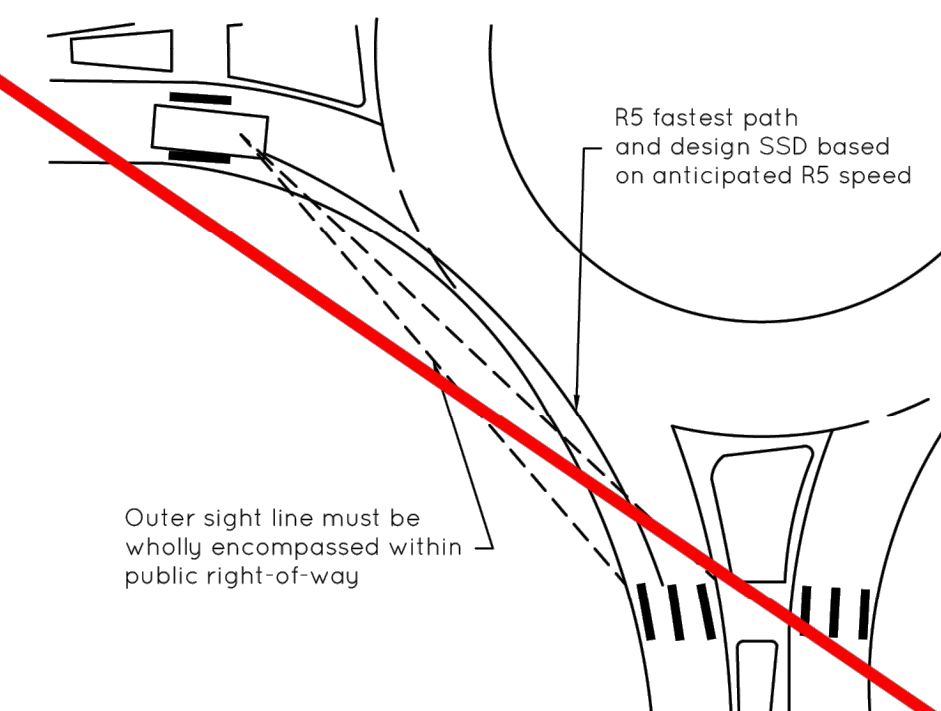


Note:

- 1) A scalable plan sheet and CAD file shall be provided to the Dept. of Engineering upon completion of final plans.

EXAMPLE LANDSCAPE AREAS DIAGRAM

Not to Scale

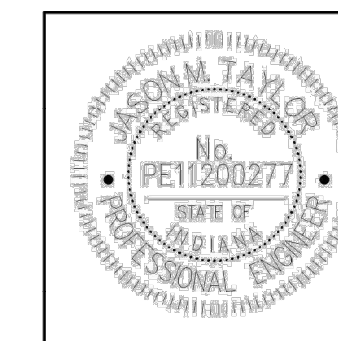


Notes:

- 1) This detail is to provide additional guidance to designers. Designer shall not arbitrarily place vehicle at yield line or circulatory roadway edge line to check visibility.
- 2) All roundabout sight lines shall be checked in accordance with NCHRP 672.

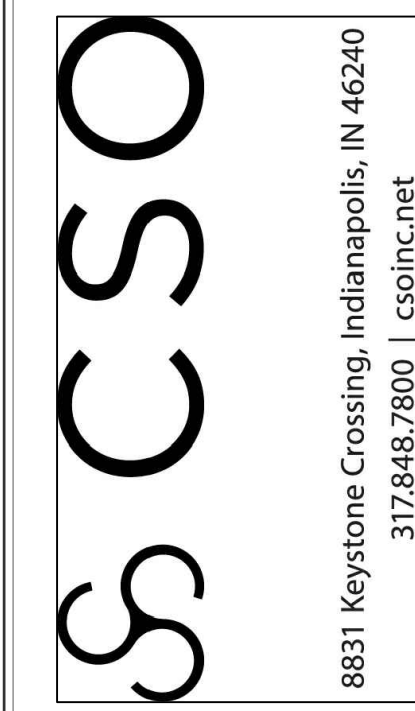
STOPPING SIGHT DISTANCE (SSD) TO CROSSWALK

Not to Scale



JMT
1/18/2022

CITY OF FISHERS		SHEET
STANDARD CONSTRUCTION DETAILS		7
ROUNDABOUT DESIGN STANDARDS		of 29



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DESIGN DEVELOPMENT
11442 LANTERN
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46038

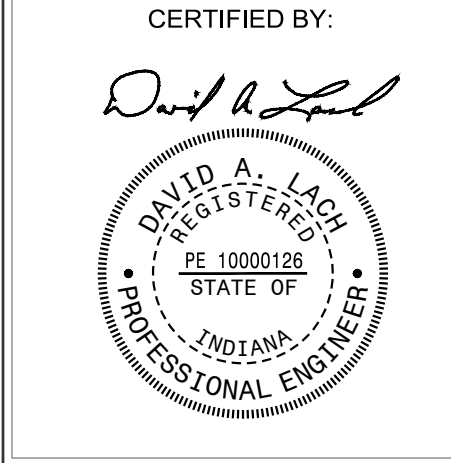
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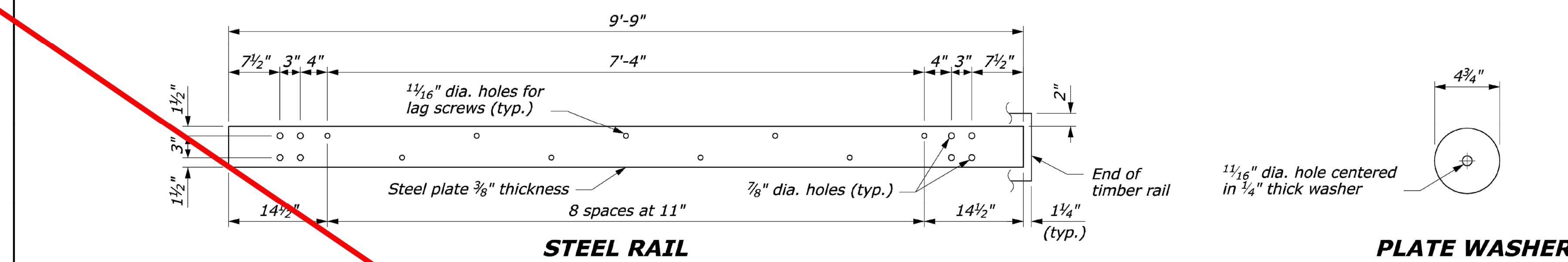
DRAWING TITLE:
FISHERS
STANDARD
DETAILS



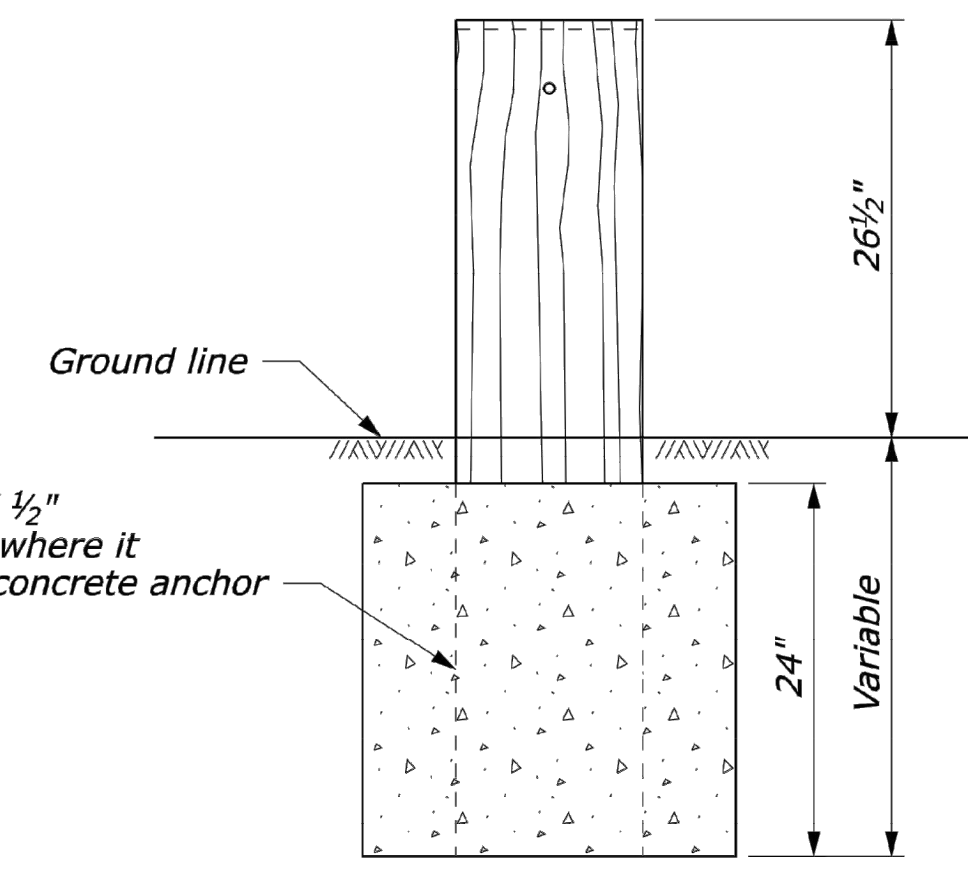
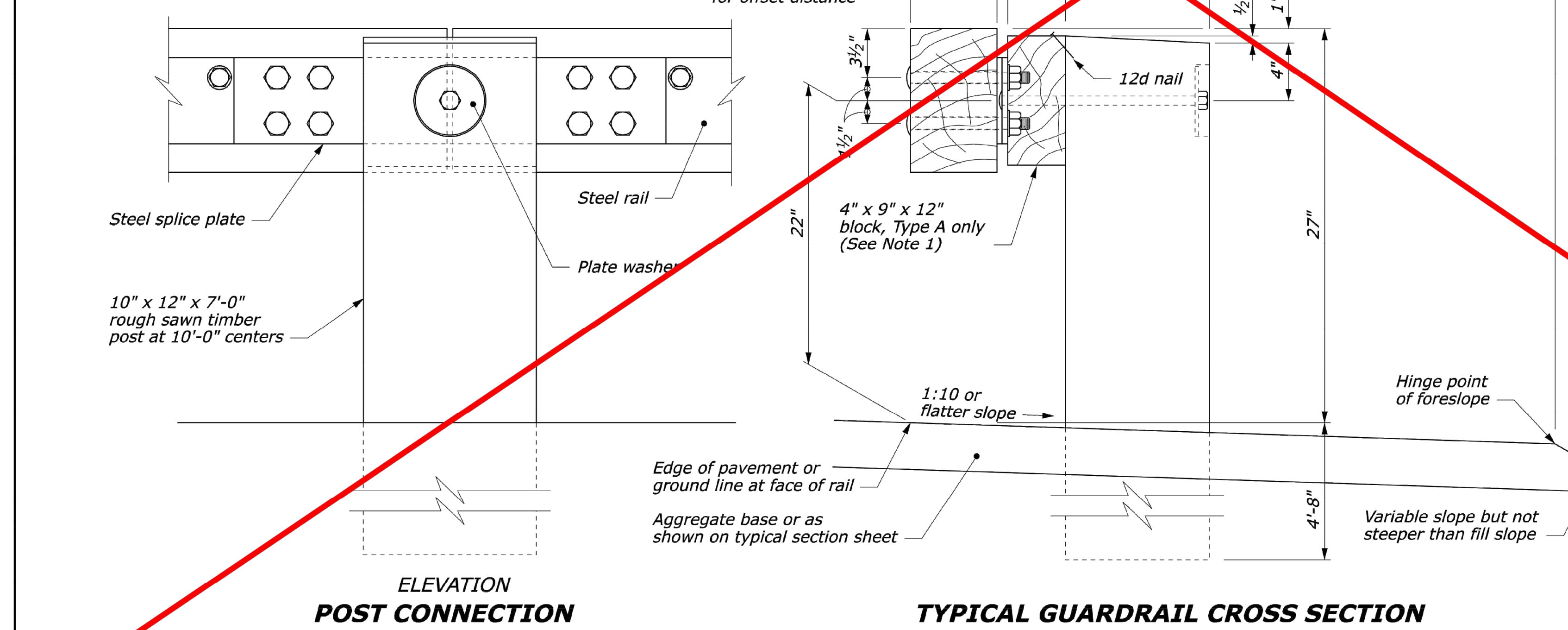
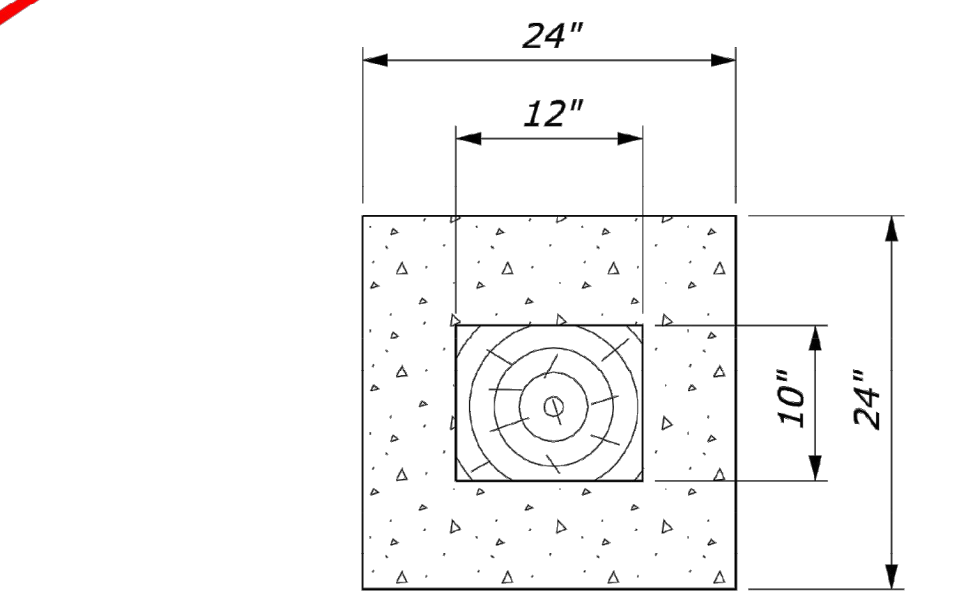
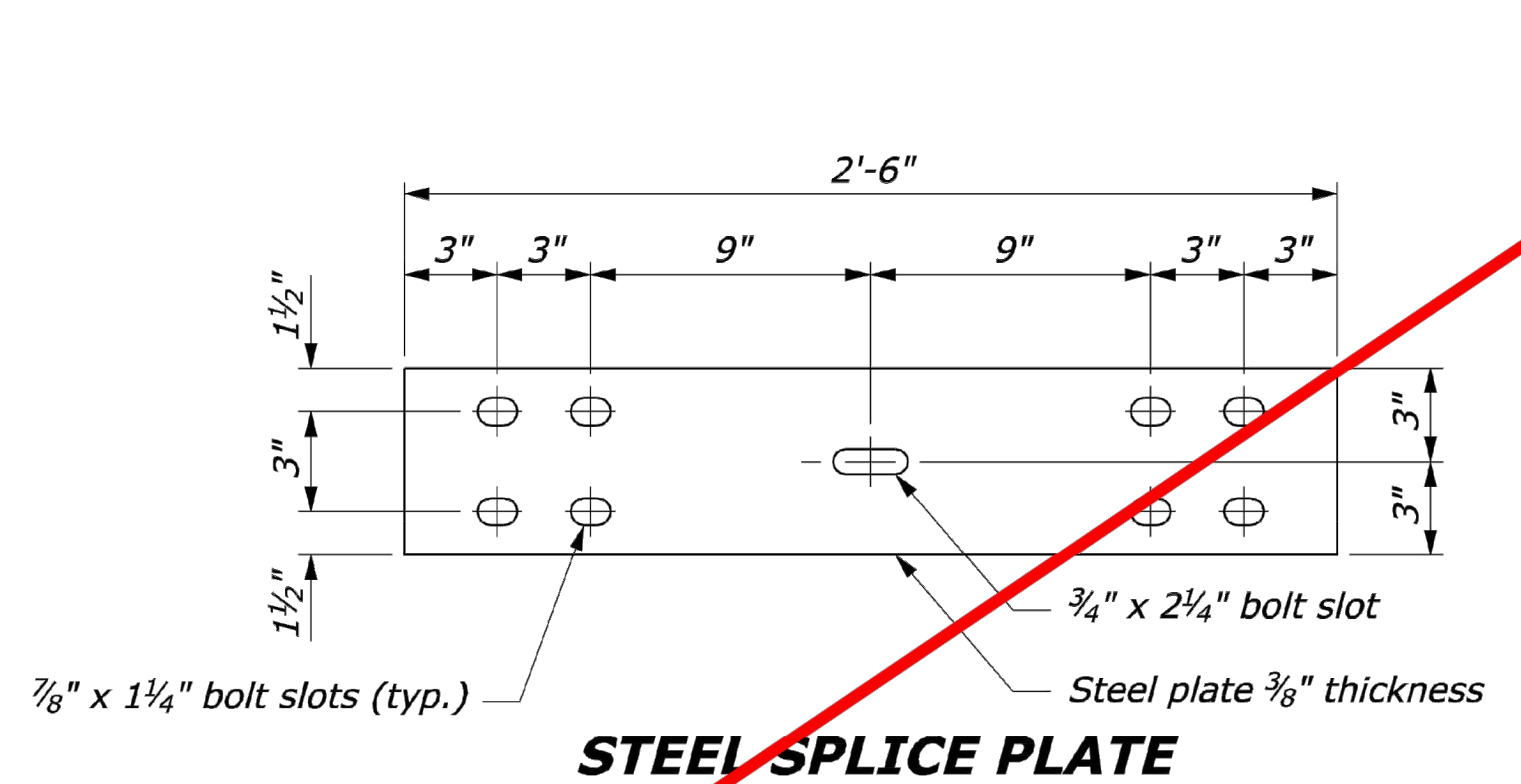
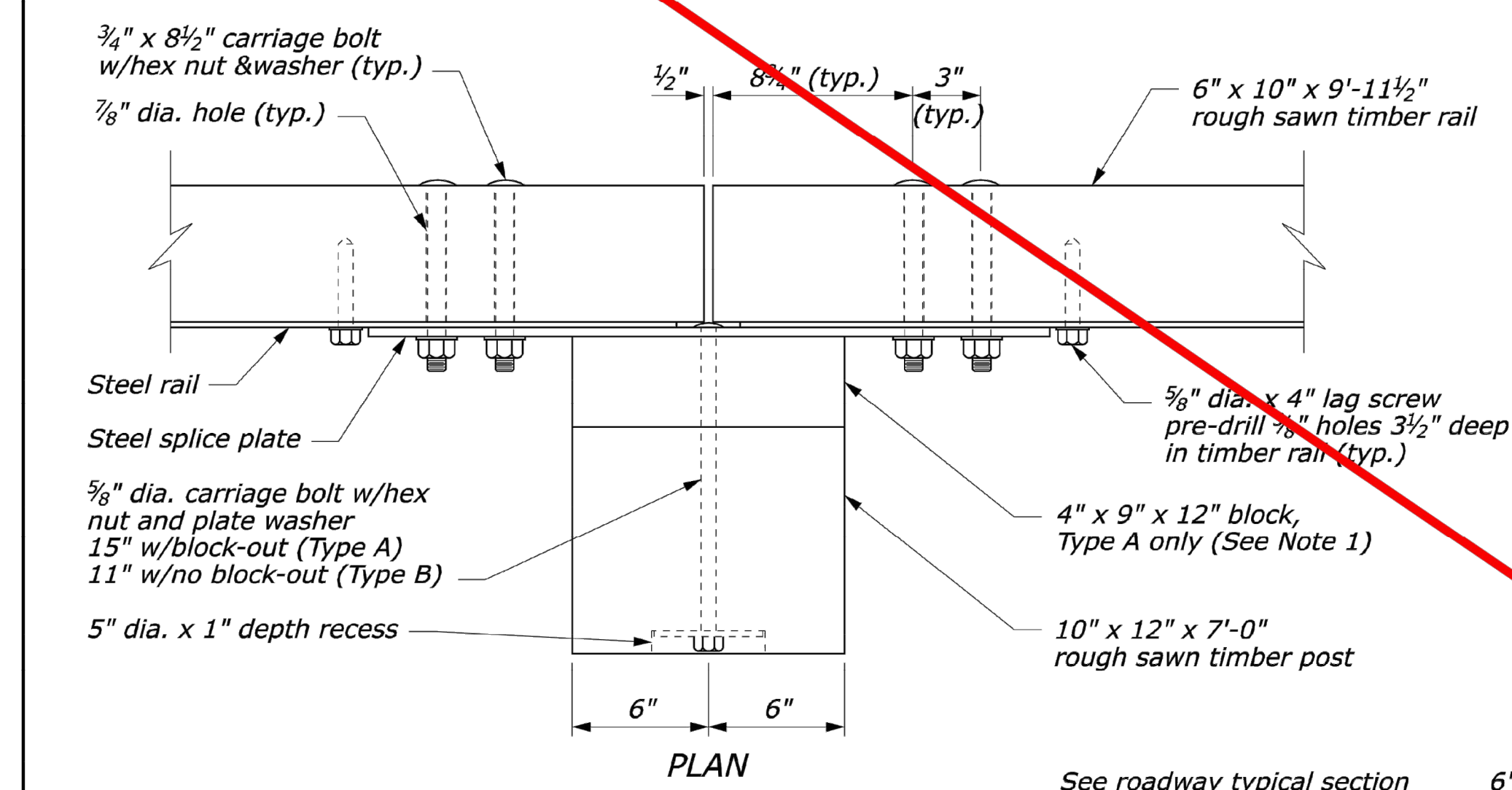
DRAWING NUMBER
C909

PROJECT NUMBER
2021119

STATE	PROJECT	SHEET NUMBER



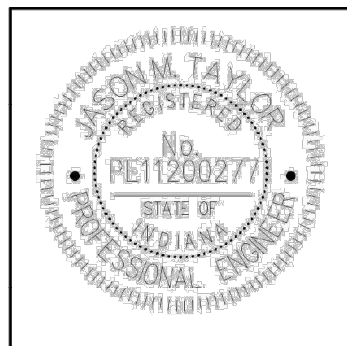
- NOTE:**
1. Use the Type A, blocked-out, system or the Type B, non-blocked-out, system as specified in the plans.
 2. Use weathering steel for all structural steel and fastener hardware as specified.
 3. Place a terminal section (See Standards 617-61 and 617-62) on both approach and trailing ends of barrier installations.



CONCRETE ANCHOR FOR SHORT GUARDRAIL POST

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY	
U.S. CUSTOMARY STANDARD	
STEEL-BACKED TIMBER GUARDRAIL TYPE A & TYPE B	
STANDARD APPROVED FOR USE 3/1992 REVISED: 4/1994 6/2005	STANDARD 617-60

JMS
1/18/2022



CITY OF FISHERS STANDARD CONSTRUCTION DETAILS	SHEET 9 of 23
FHWA TIMBER GUARDRAIL DETAILS	

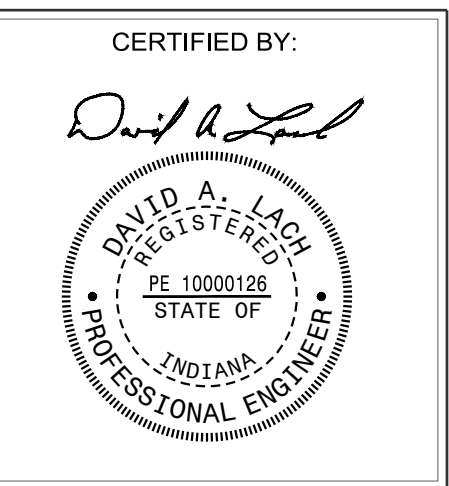
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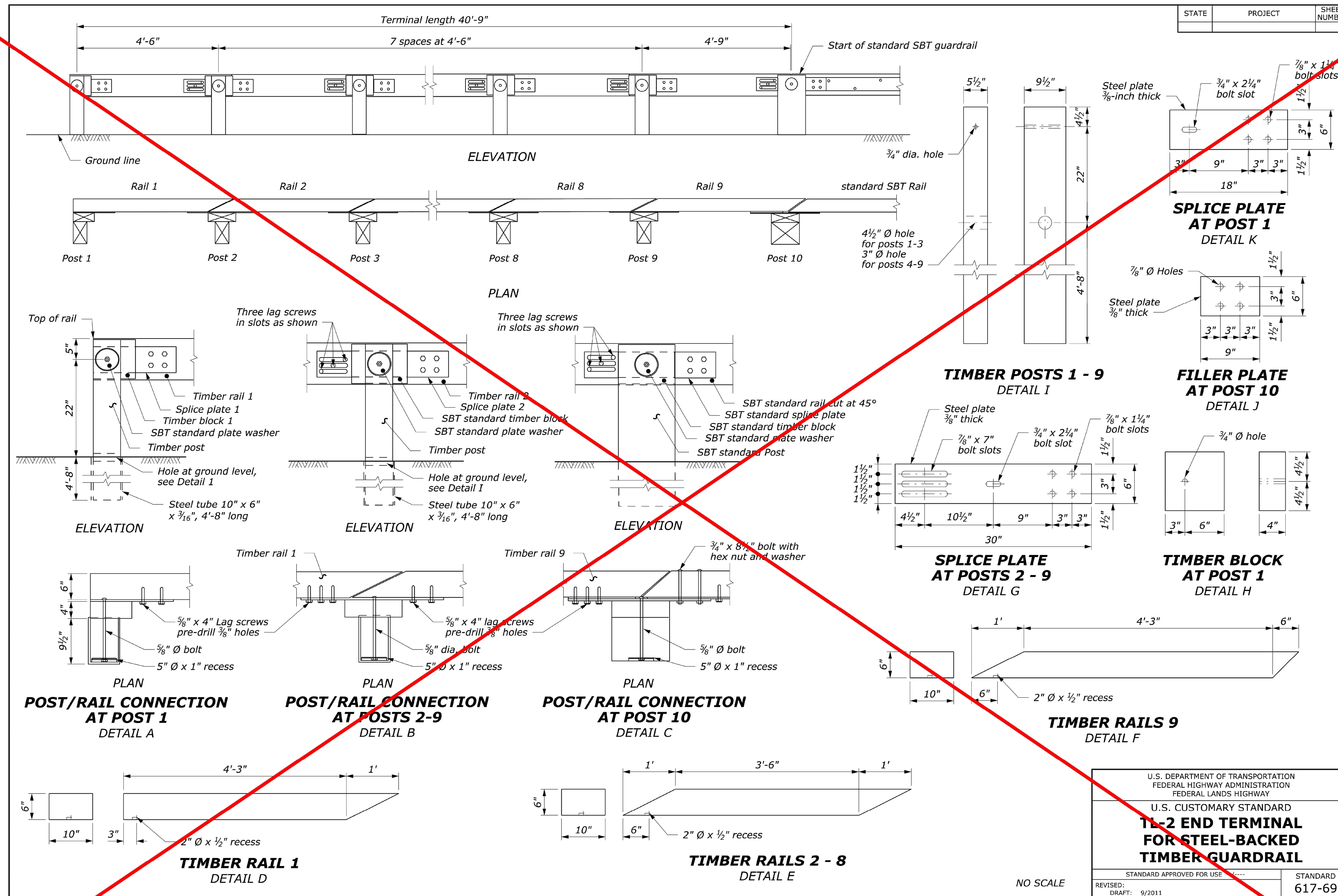
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
**FISHERS
STANDARD
DETAILS**



DRAWING NUMBER
C910

PROJECT NUMBER
2021119



STATE	PROJECT	SHEET NUMBER

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY	
U.S. CUSTOMARY STANDARD	
11-2 END TERMINAL FOR STEEL-BACKED TIMBER GUARDRAIL	
STANDARD APPROVED FOR USE	STANDARD 617-69
REVISED: DRAFT: 9/2011	

	CITY OF FISHERS	SHEET
	STANDARD CONSTRUCTION DETAILS	10 of 29
	FHWA TIMBER GUARDRAIL DETAILS	

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STANDARD
DETAILS**

CERTIFIED BY:

DAVID A. LACH
REGISTERED PROFESSIONAL ENGINEER
PE 10000126
STATE OF INDIANA

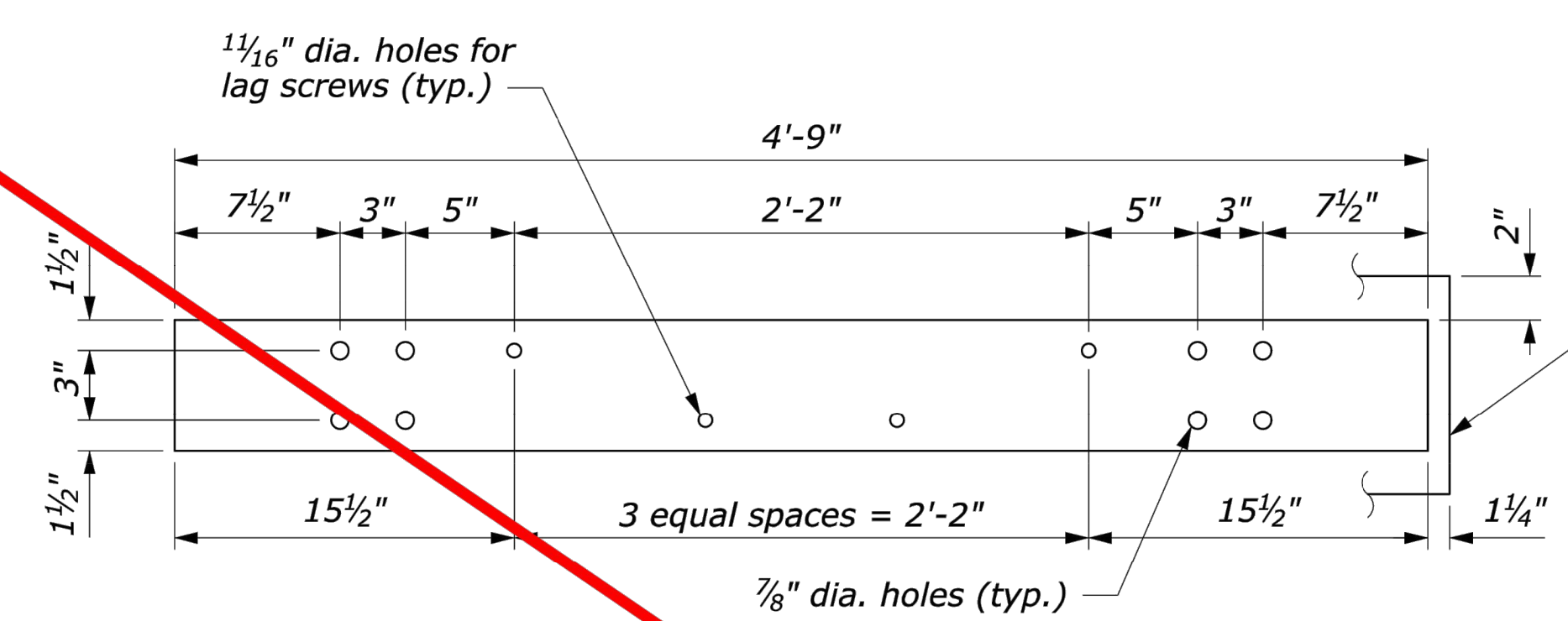
DRAWING NUMBER
C911

PROJECT NUMBER
2021119

JAD
1/18/2022

NO SCALE

STATE	PROJECT	SHEET NUMBER
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STEEL RAIL
6" x 3/8" x 4'-9"

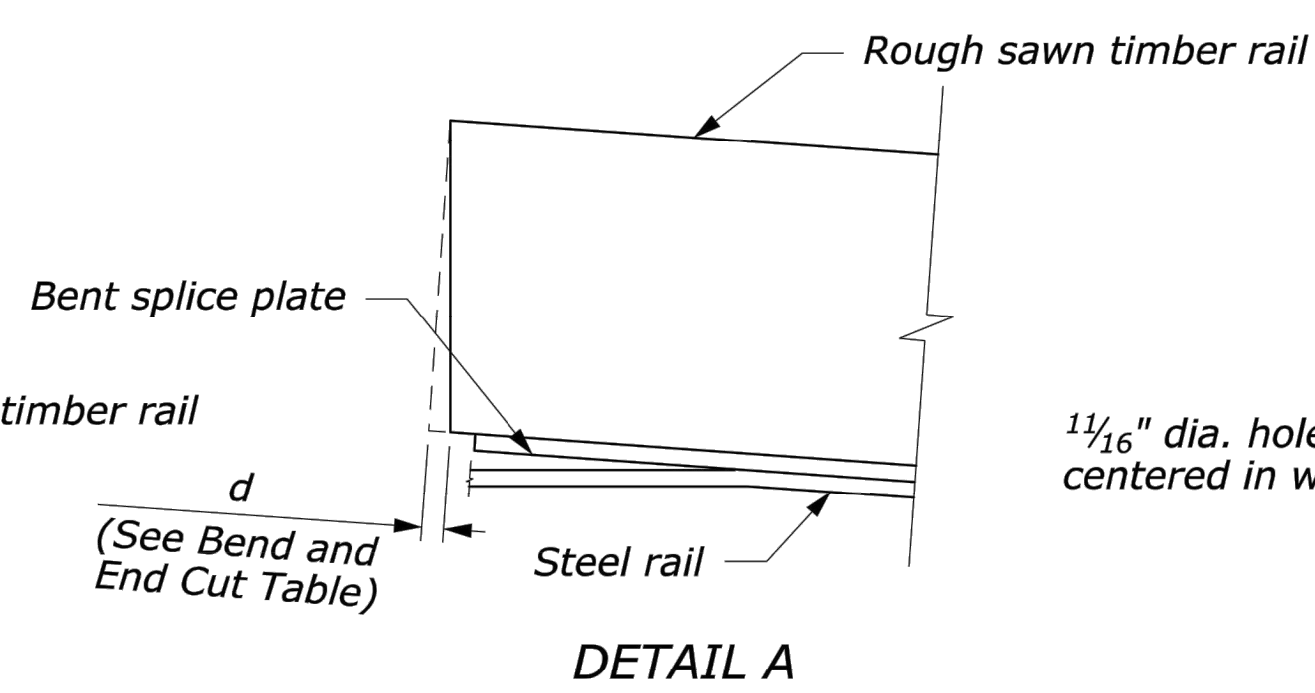
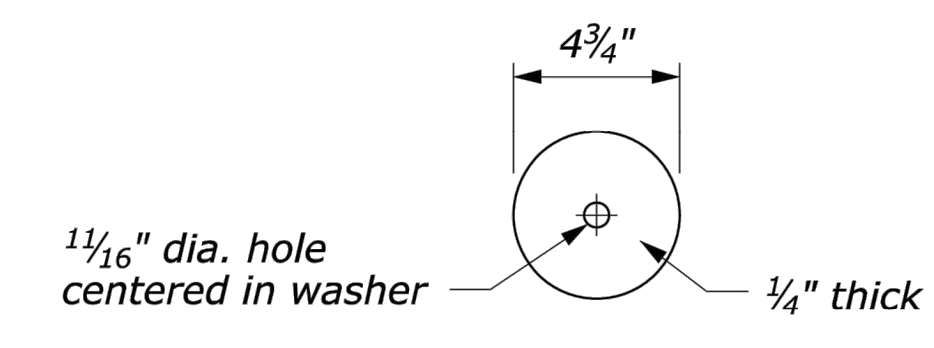
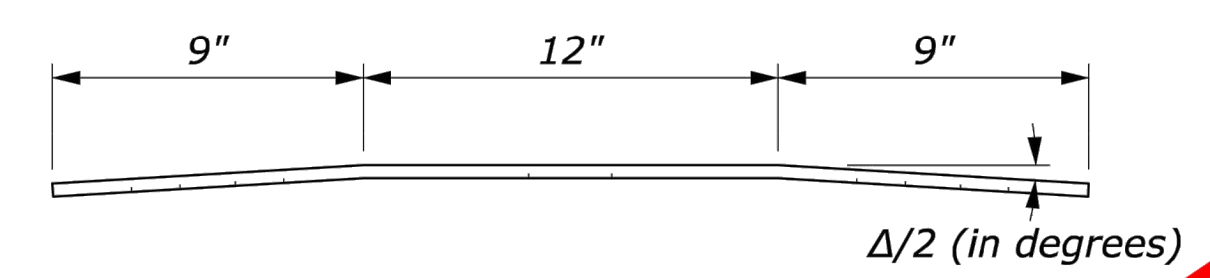


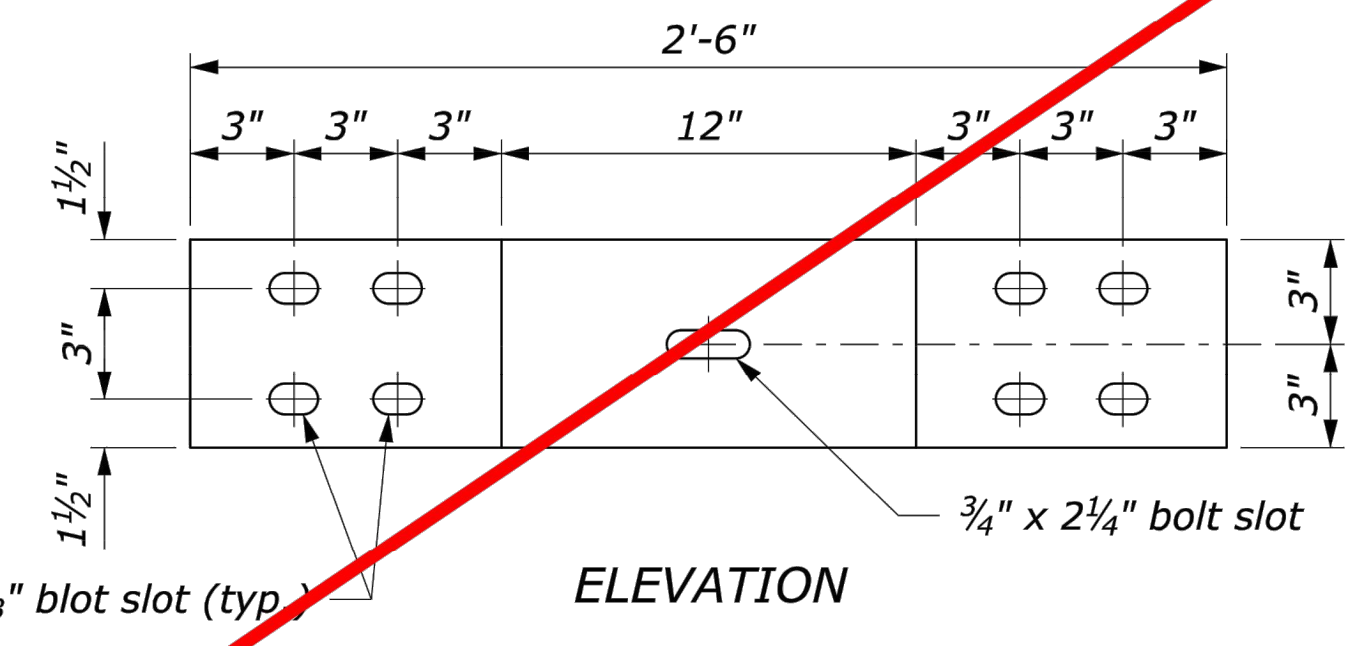
PLATE WASHER DETAIL



- NOTE:**
1. Use the Type A, blocked-out, system or the Type B, non-blocked-out, system as specified.
 2. Use the weathering steel for all structural steel and fastener hardware.
 3. Furnish shop bent splice plates. Use the minimum bend angle shown in the table below.
 4. See Sheet 2 of 2 for Plan View Layout.



PLAN



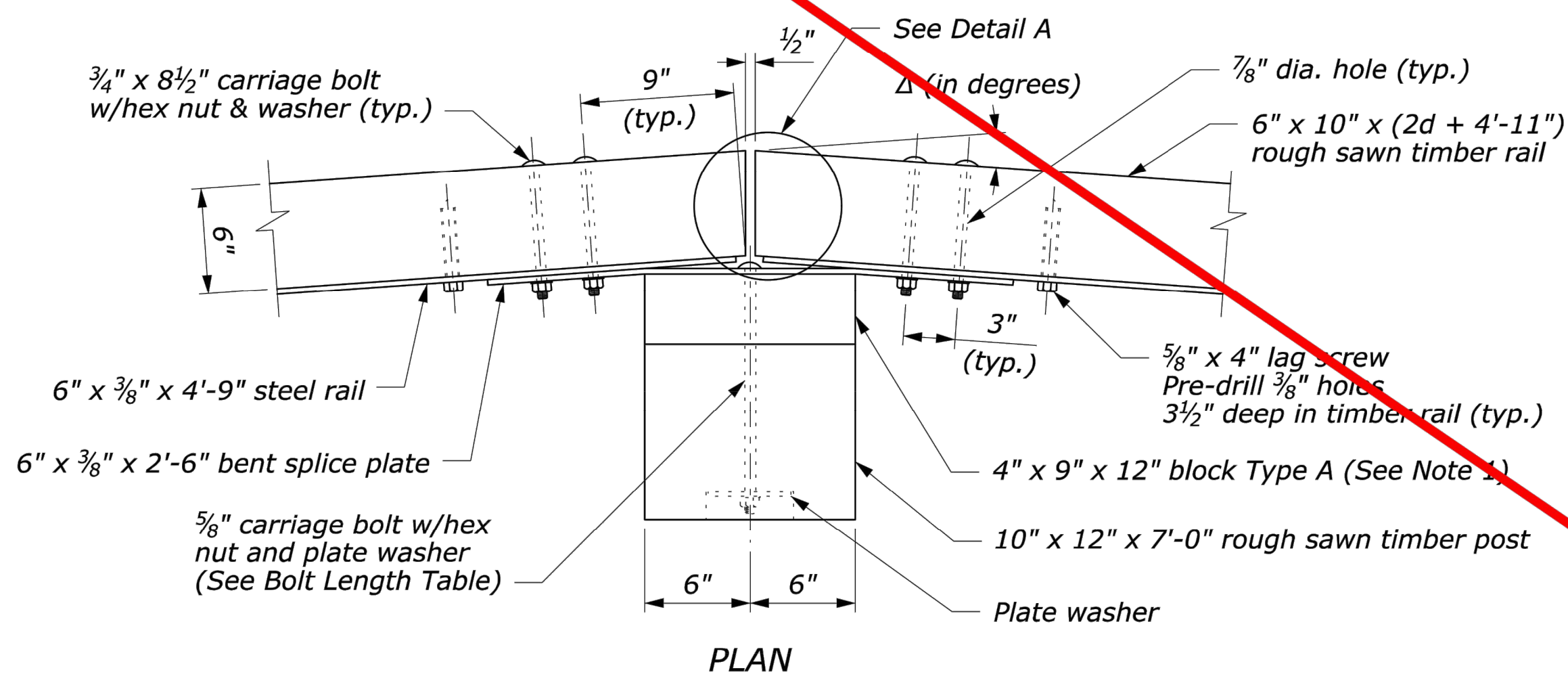
ELEVATION
BENT SPLICE PLATE
6" x 3/8" x 2'-6"

BEND AND END CUT TABLE

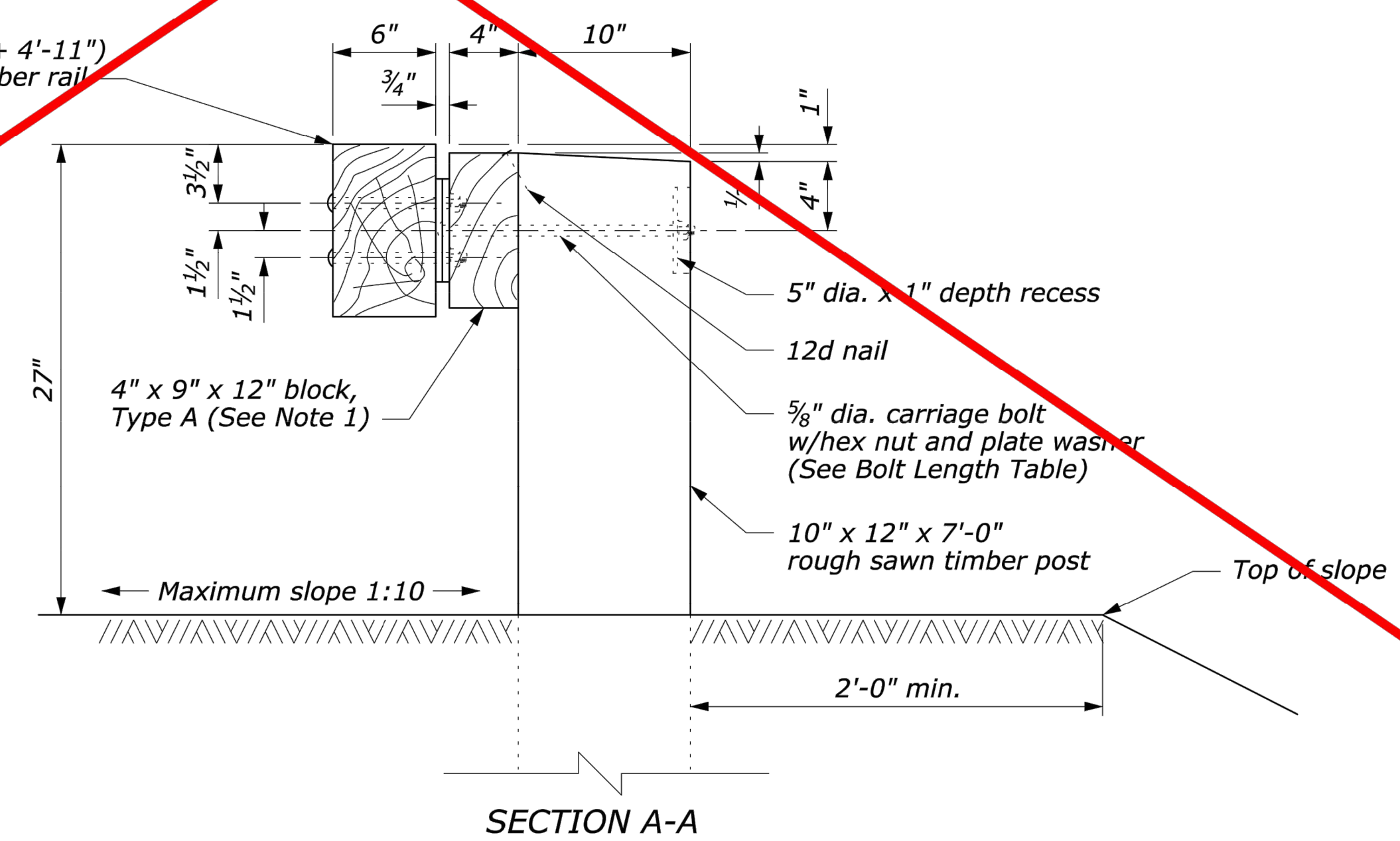
Radius R ft	$\Delta/2$ degrees	d in
20	7.18	3/4
25	5.74	5/8
30	4.78	1/2
35	4.10	7/16
40	3.58	3/8
45	3.18	1/3
50	2.87	5/16
55	2.61	1/4
60	2.39	1/4
65	2.20	1/4
70	2.05	1/4
over 70	flat	0

BOLT LENGTH TABLE

Type A (Block-out)	Type B (No Block-out)
15"	11"

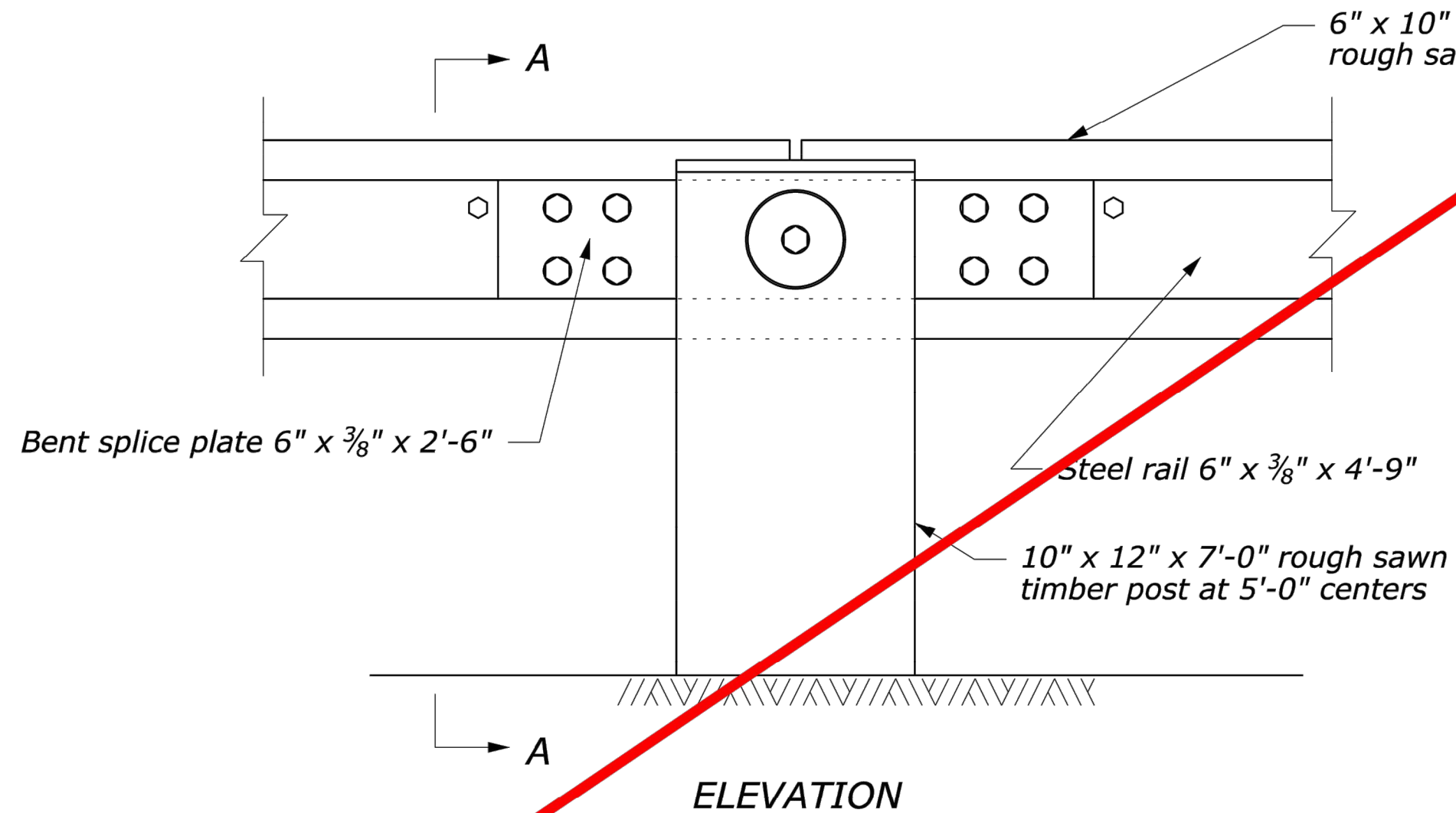


PLAN



SECTION A-A

POST CONNECTION



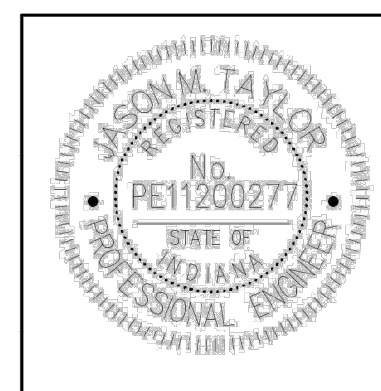
ELEVATION

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
FEDERAL LANDS HIGHWAY

U.S. CUSTOMARY STANDARD
**STEEL-BACKED TIMBER GUARDRAIL
AROUND CIRCULAR CURVES
70 FOOT RADIUS AND BELOW**
Sheet 1 of 2

STANDARD APPROVED FOR USE 6/1/2005
REVISED: STANDARD 617-63

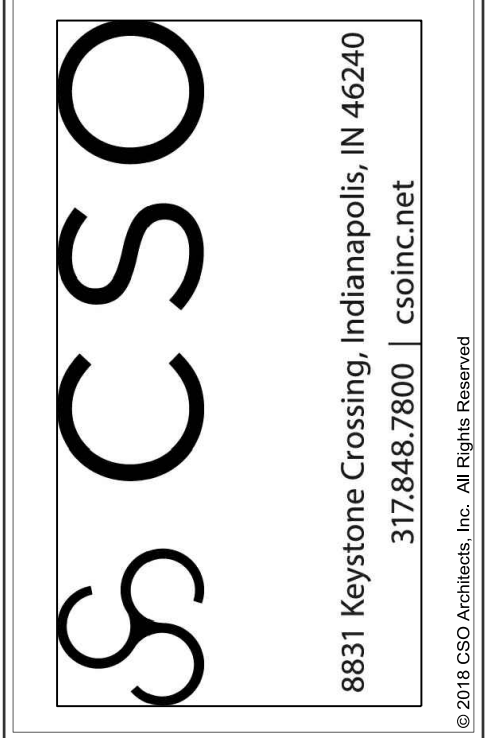
NO SCALE



CITY OF FISHERS
STANDARD CONSTRUCTION DETAILS

FHWA TIMBER GUARDRAIL DETAILS

SHEET
11
of
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**FISHERS ELEMENTARY SCHOOL
ADDITIONS & RENOVATIONS
DESIGN DEVELOPMENT**
11442 LANTERN
RD, FISHERS, IN
46038

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract. On the basis of the general scope indicated or described, the contractor shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

4	02/12/24	ADDENDUM #4
6	03/01/24	ADDENDUM #6

ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
**WATER
DETAILS**



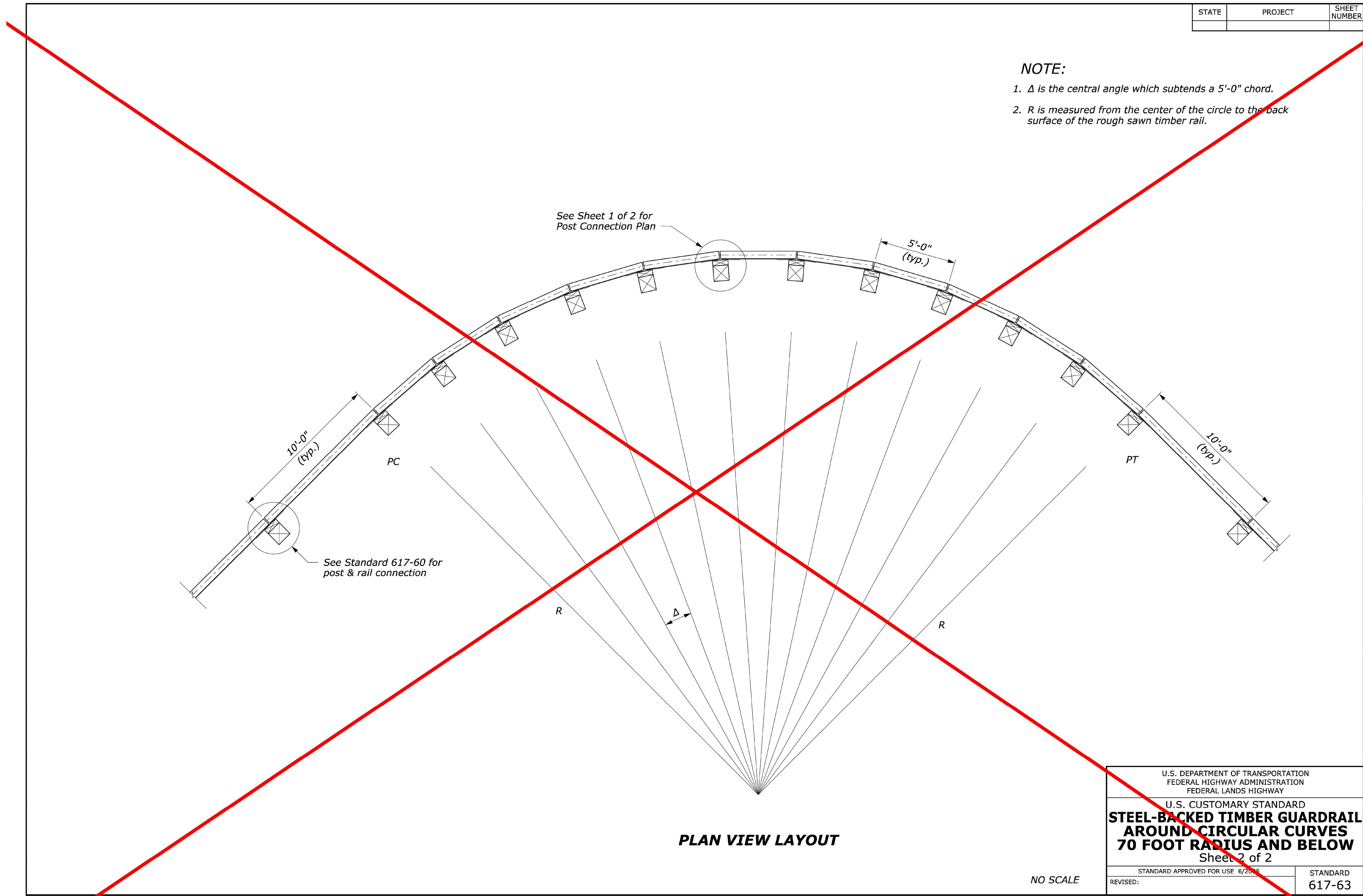
DRAWING NUMBER
C912

PROJECT NUMBER
2021119

JAD
1/18/2022

STATE	PROJECT	SHEET NUMBER
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- NOTE:**
- Δ is the central angle which subtends a 5'-0" chord.
 - R is measured from the center of the circle to the back surface of the rough sawn timber rail.



See Sheet 1 of 2 for Post Connection Plan

See Standard 617-60 for post & rail connection

PLAN VIEW LAYOUT

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 FEDERAL LANDS HIGHWAY

U.S. CUSTOMARY STANDARD
**STEEL-BACKED TIMBER GUARDRAIL
 AROUND CIRCULAR CURVES
 70 FOOT RADIUS AND BELOW**
 Sheet 2 of 2

STANDARD APPROVED FOR USE 6/2016	STANDARD 617-63
REVISED:	

CSO

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 ADDITIONS & RENOVATIONS
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11442 LANTERN
 RD., FISHERS, IN
 46038

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01/15/2023	KDK	JAD

DRAWING TITLE:

**WATER
 DETAILS**

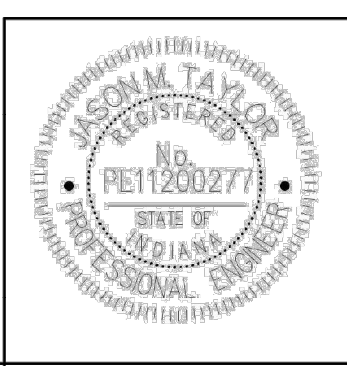
CERTIFIED BY:

David A. Lach

DAVID A. LACH
 REGISTERED
 PE 10000126
 STATE OF INDIANA
 PROFESSIONAL ENGINEER

JAD

1/18/2022



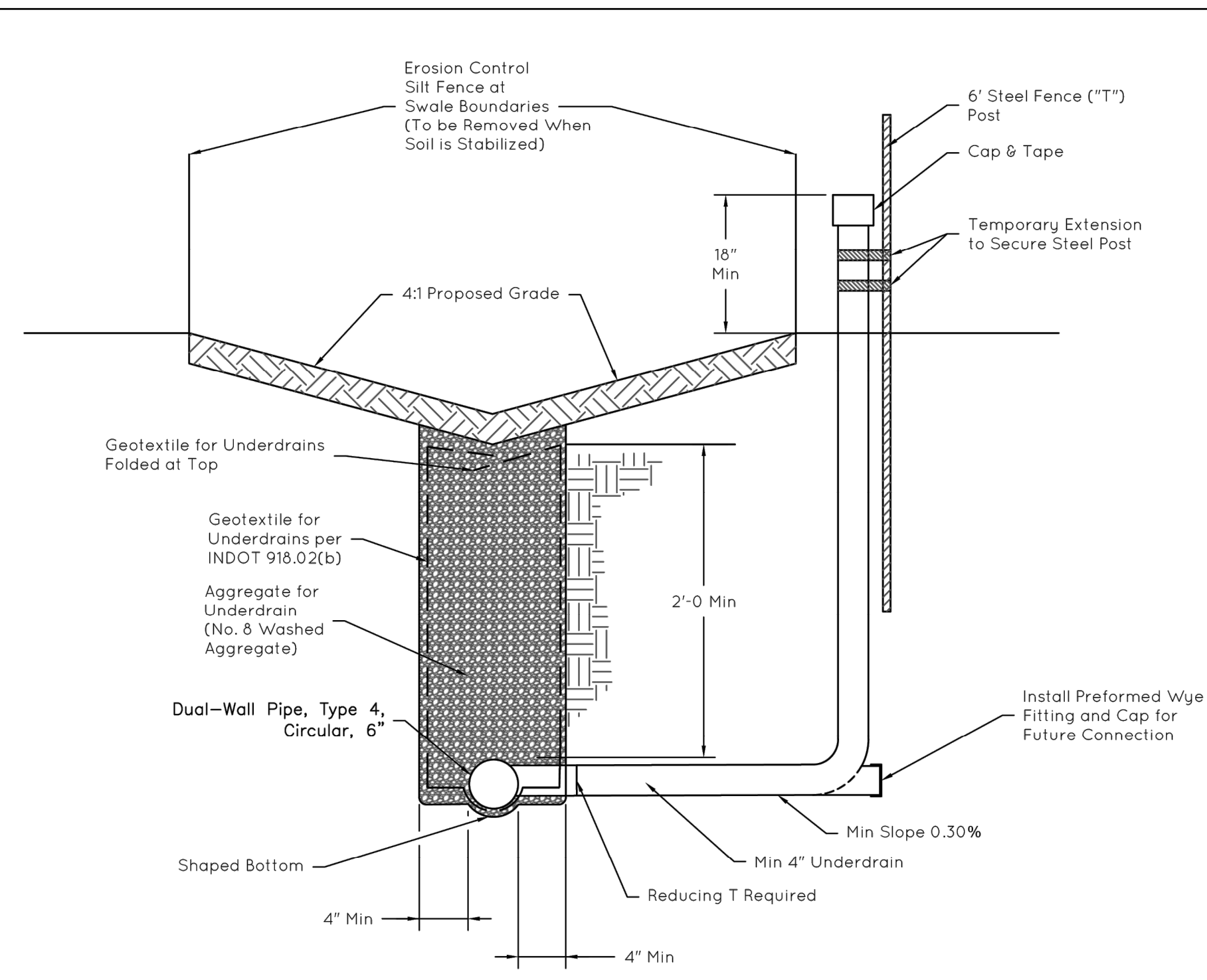
CITY OF FISHERS	SHEET
STANDARD CONSTRUCTION DETAILS	12
FHWA TIMBER GUARDRAIL DETAILS	of 20

DRAWING NUMBER

C913

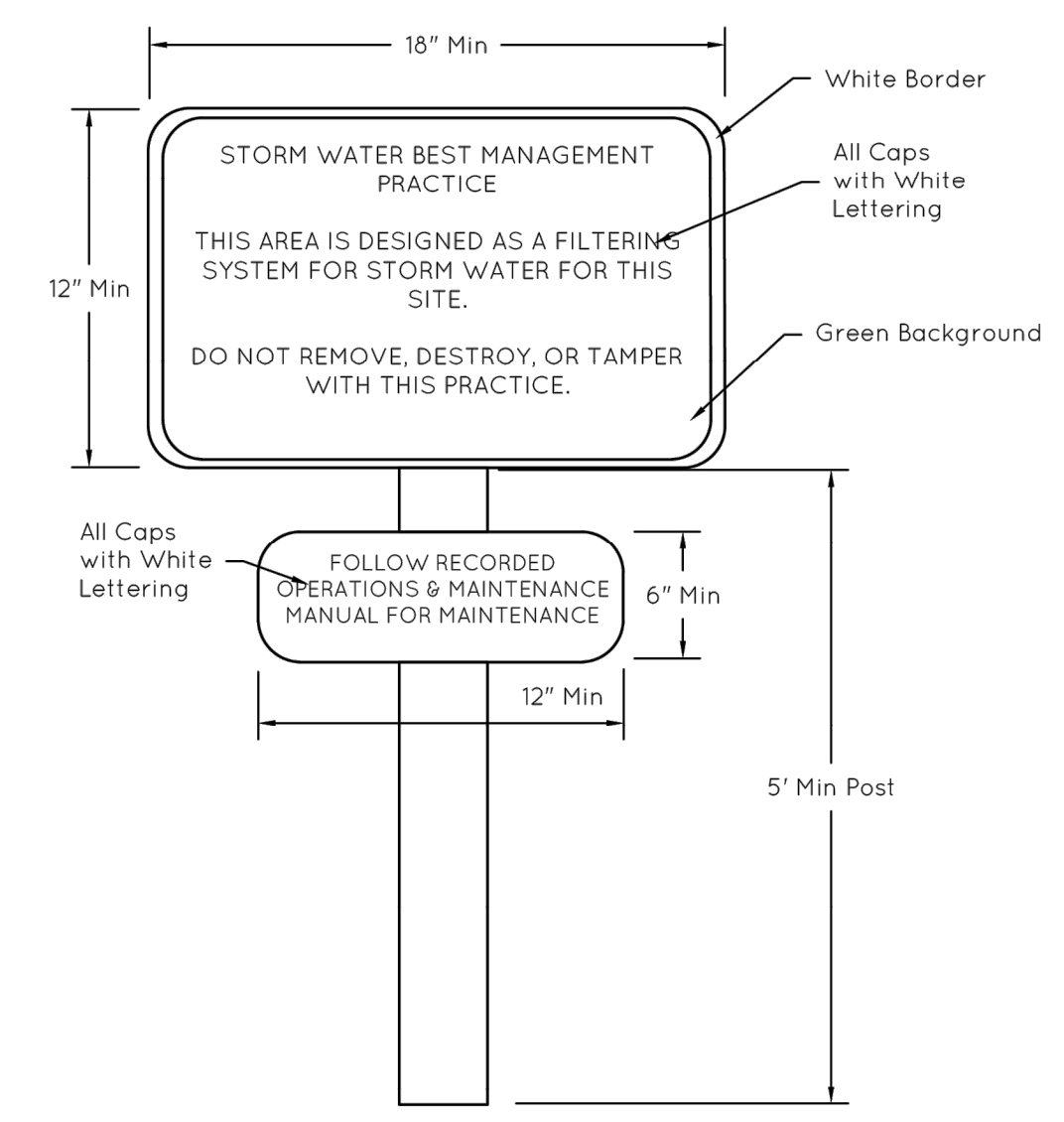
PROJECT NUMBER

2021119



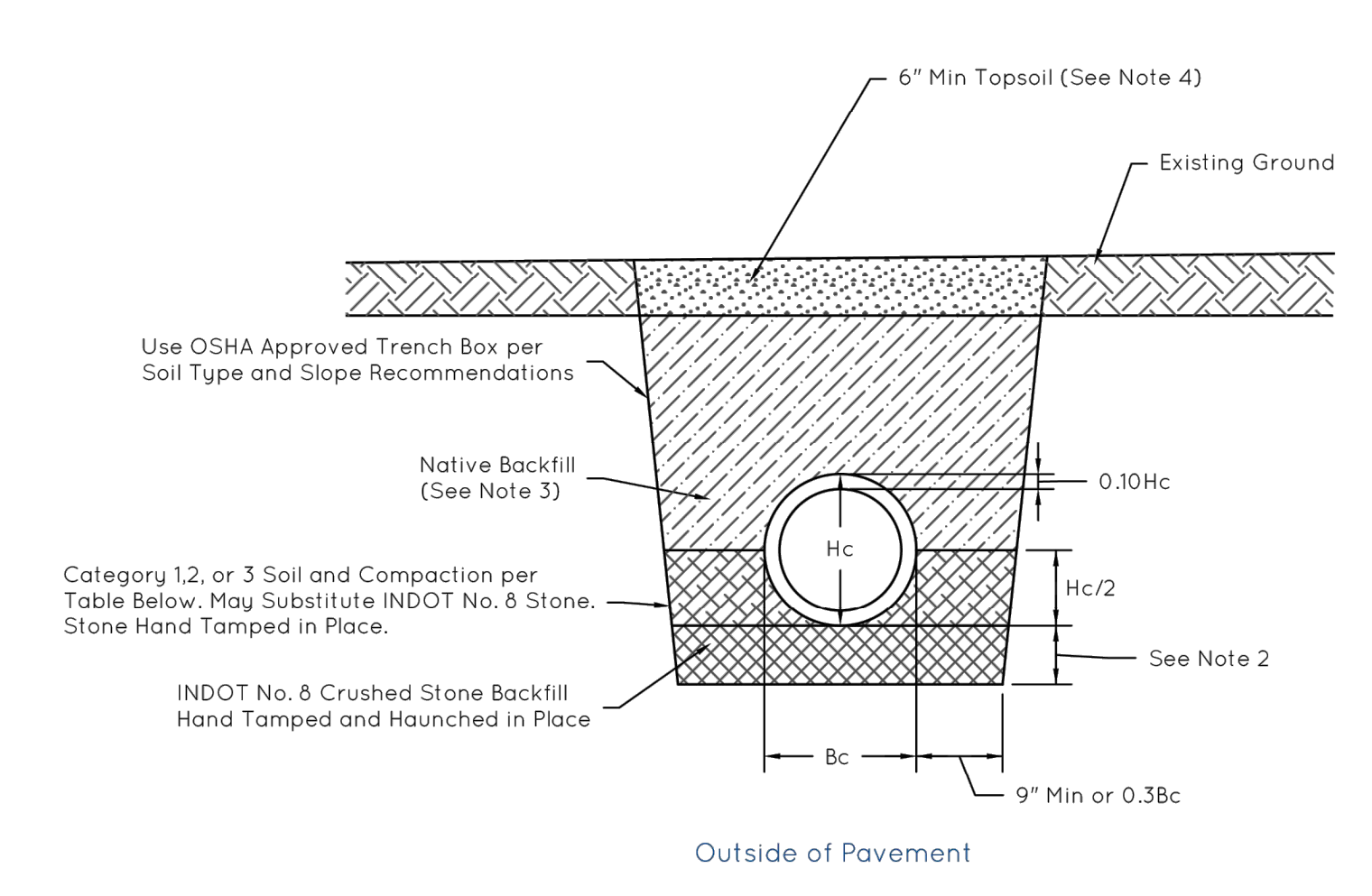
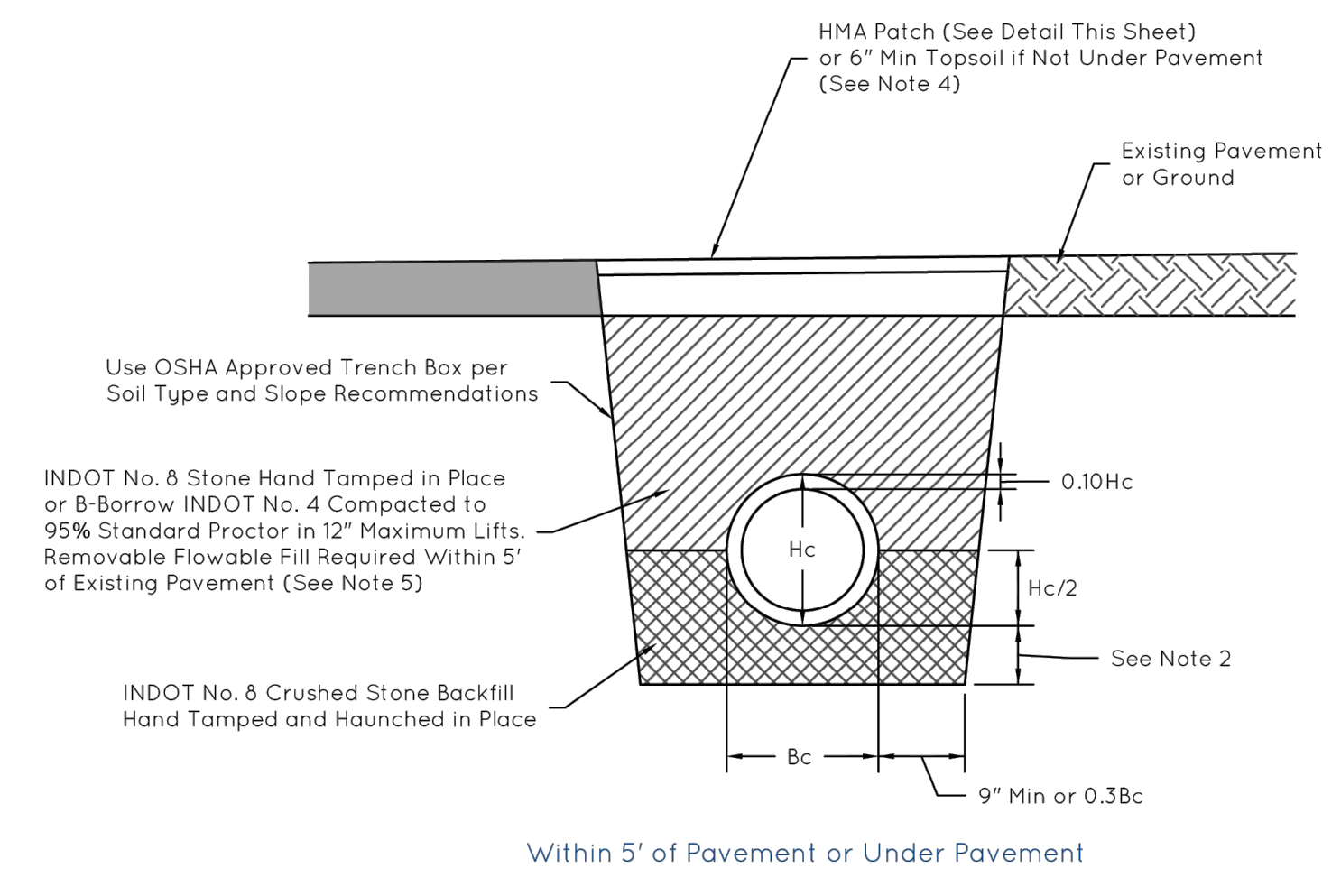
- Notes:
- 1) Temporary extension above ground to be removed upon connection to house. If extension is not utilized, it shall be capped below ground level.
 - 2) Location of structures shall be shown on as-built plans.
 - 3) Must connect sump pumps to underdrain.
 - 4) Required for all rear yard drainage swales unless waived in writing by the Director of Engineering.

REAR YARD UNDERDRAIN
Not to Scale



- Notes:
- 1) BMP signs should be placed immediately adjacent or within the practice.
 - 2) Signs should be aluminum and meet minimum IMUTCD standards.
 - 3) Total number of signs required for each BMP is subject to plan review.

BMP SIGN
Not to Scale

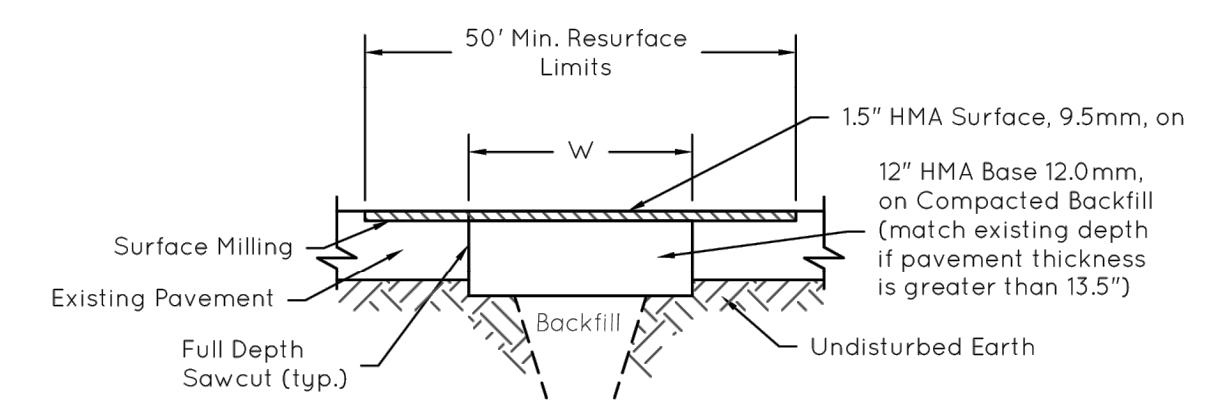


SOIL CATEGORY	SOIL NAME	USCS SOIL TYPE	AASHTO SOIL TYPE	STANDARD PROCTOR	MODIFIED PROCTOR
CATEGORY 1	CLEAN GRAVEL OR SAND	SW, SP, GW, GP	A1, A3	85	80
CATEGORY 2	SILTY GRAVEL OR SAND	GM, SM, ML & GC/SC W/LESS THAN 20% PASSING #200 SIEVE	A2, A4	90	85
CATEGORY 3	SILTY CLAY	CL, MH, GC, SC	A5, A6	95	85

Reference: American Concrete Pipe Association Standard Installation Manual

- Notes:
- 1) For backfill purposes, paved shoulders and curbs are considered pavement. If paving is to occur within 30 days of placement of INDOT No.#4 B-Borrow, contractor shall provide City of Fishers with Professional Engineer certified compaction results.
 - 2) Depth of bedding material below pipe shall be minimum of 3" or hc/24, whichever is greater.
 - 3) Native backfill material must be free of aggregate greater than 6" diameter.
 - 4) Topsoil material shall be mounded to accommodate settlement.
 - 5) Removable flowable backfill shall be required for all open cuts across existing pavement and will also be allowed as a substitute for other backfill requirements.
 - 6) Pipe and fittings used in storm sewer construction shall be RCP (AASHTO M170) and meet the fill height and load requirements according to the latest fill height tables of INDOT. Refer to Chapter 4.J of the City of Fishers Stormwater Technical Standards Manual for other approved pipe materials that may be used in commercial parking lots or private, non-paved areas. Any alternative pipe materials shall be in accordance with the requirements of Chapter 4.J, and shall be installed in accordance with manufacturer's specifications.
 - 7) A minimum of Class III RCP (D-load 1350 lb/ft²/ft) is required for all pipe within the City of Fishers Right-of-Way, or areas subject to loading. An alternate pipe class (Class IV or V) may be required by the design engineer or Director of Engineering for special pavement loading circumstances.
 - 8) For pavement bores, alternative materials will be considered.
 - 9) For elliptical or arch pipe installations, see installation specifications from the American Concrete Pipe Association.
 - 10) For all excavation work, OSHA approved safety standards shall be followed.

TRENCH BACKFILL DETAILS
Not to Scale



- Notes:
- 1) Sawcuts shall provide a vertical, neat, and uniform edge.
 - 2) All materials shall comply with specifications as required by the City of Fishers.
 - 3) Contractor shall surface mill (1.5") existing pavement 25 ft. in each direction from trench centerline from face-of-curb to face-of-curb or edge-of-roadway, replace with 1.5" HMA Surface, 9.5mm, and appropriate pavement markings.
 - 4) The existing milled surface and HMA base layer is to be tack coated prior to the placement of new asphalt. The new surface pavement grade shall match the existing surface pavement grade.
 - 5) A two (2) inch wide band of crack sealant is to be applied along the joint between the existing and new asphalt surface. Sealant is to be applied in accordance with INDOT Standard Specifications, Section 305.
 - 6) Refer to Pavement Restoration Table for W.

UTILITY DEPTH RANGE (FEET)	MAXIMUM TRENCH WIDTH AT FINISHED GRADE, W (FEET)
0 to 5	I.D. +5
5 to 8	I.D. +8
8 to 10	I.D. +10
10 to 12	I.D. +12
12 to 14	I.D. +14
14 to 16	I.D. +16
16 to 18	I.D. +18
18 to 20	I.D. +20

I.D. = Pipe or Conduit Inside Diameter

HMA PATCH DETAIL
Not to Scale



CITY OF FISHERS
STANDARD CONSTRUCTION DETAILS

STORM SEWER BACKFILL, SWALE UNDERDRAIN, EXCAVATION DETAILS AND NOTES

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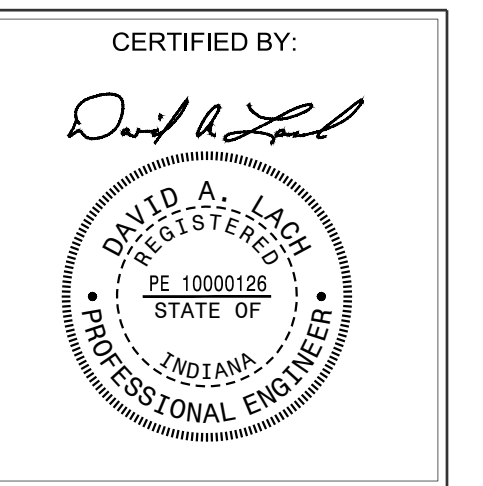
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6	03/01/24	ADDENDUM #6

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DRAWING TITLE:
WATER
DETAILS



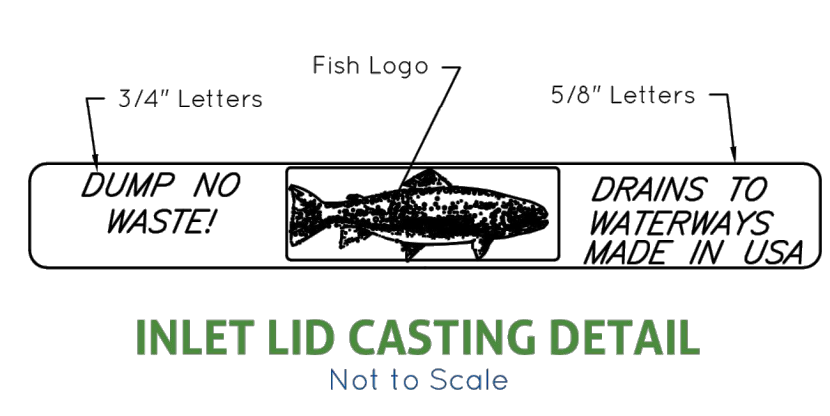
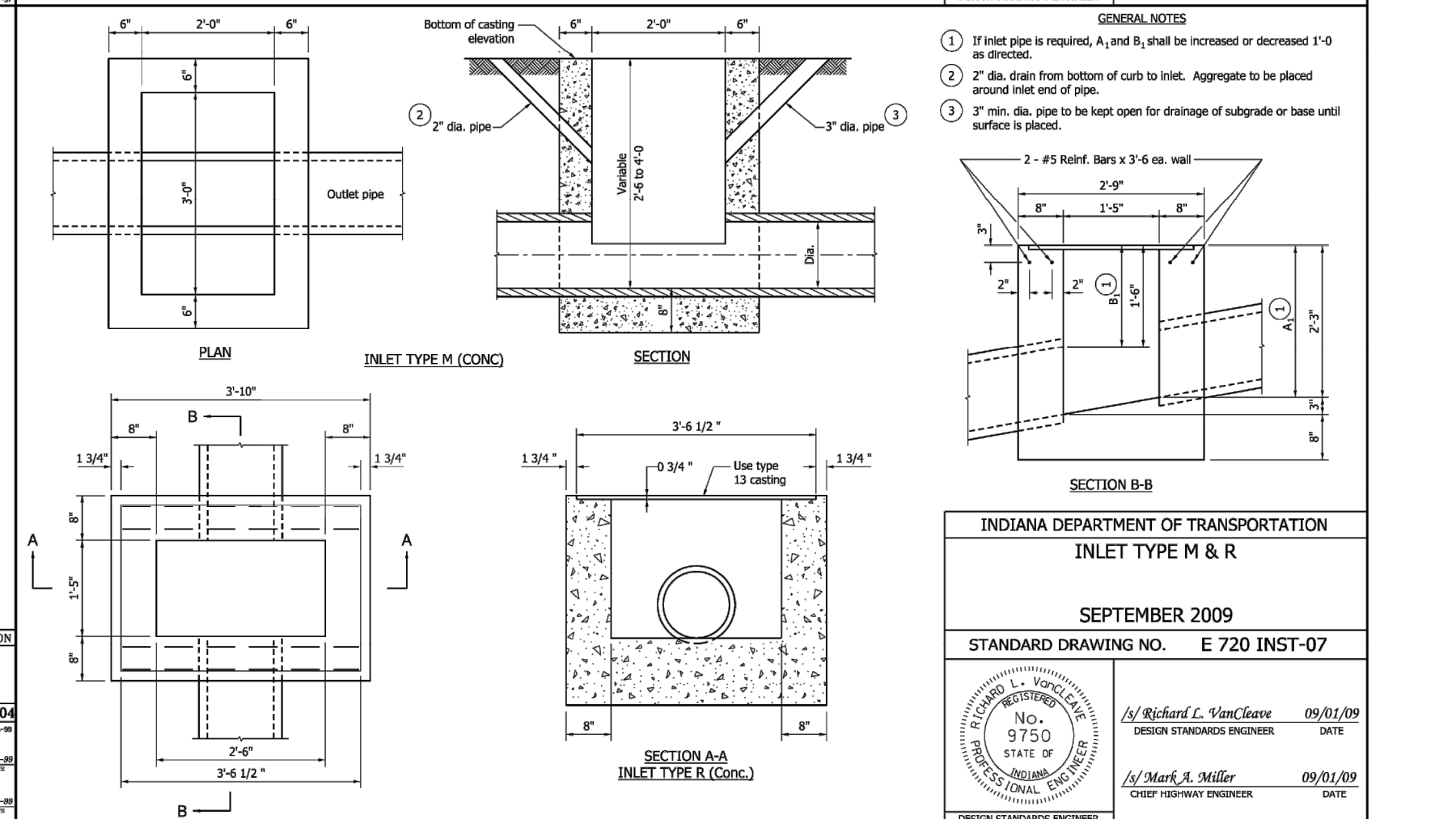
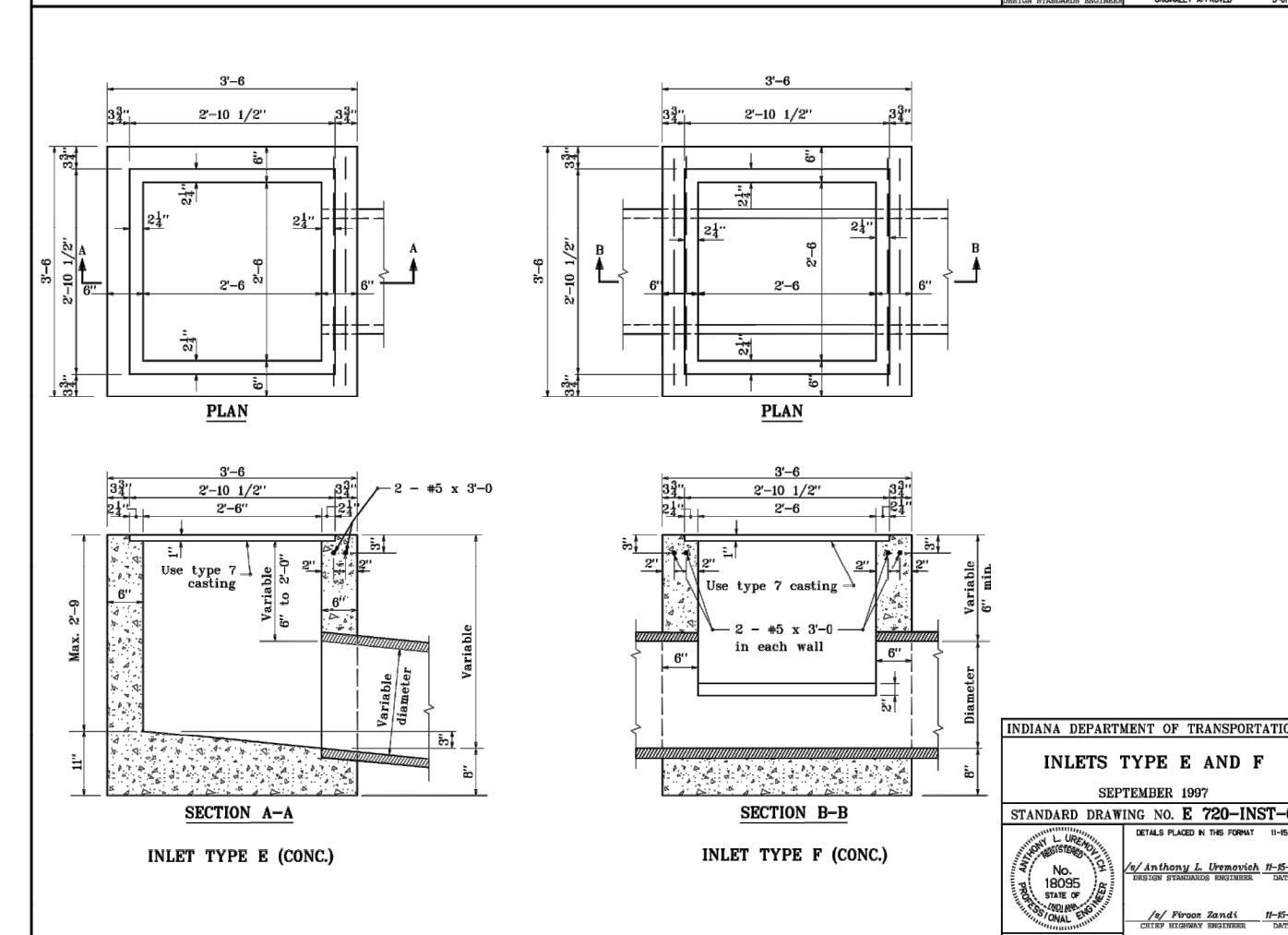
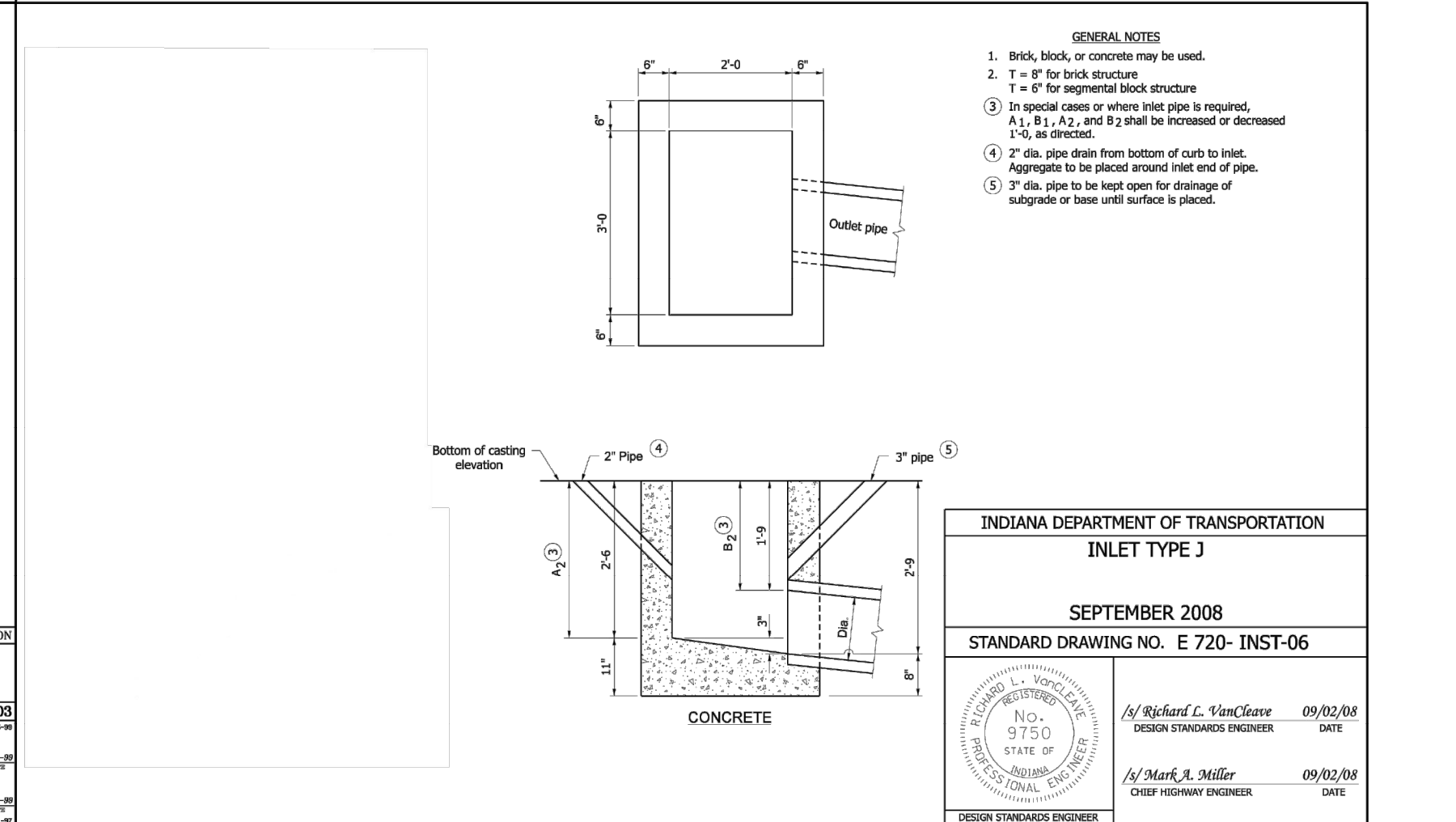
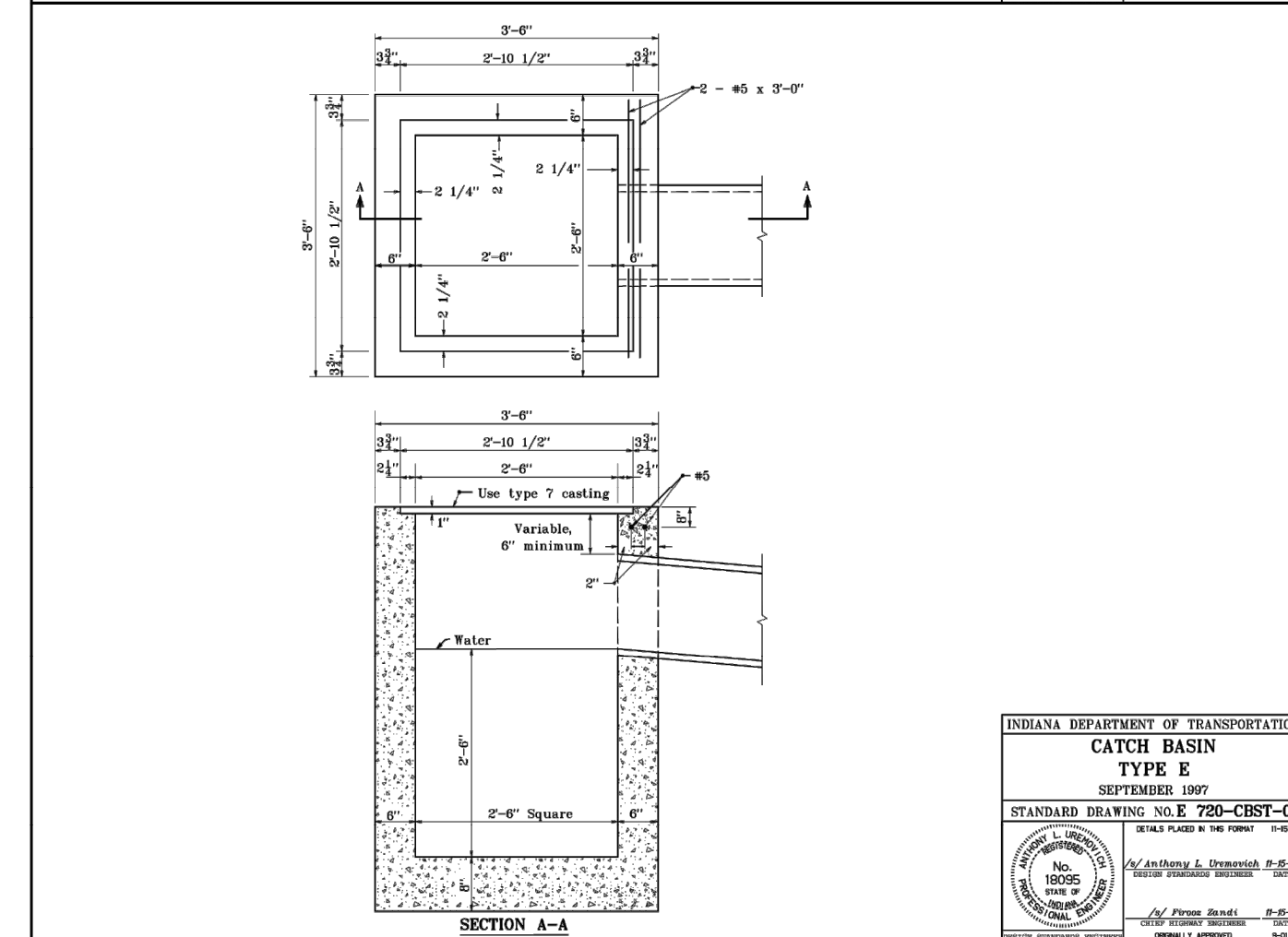
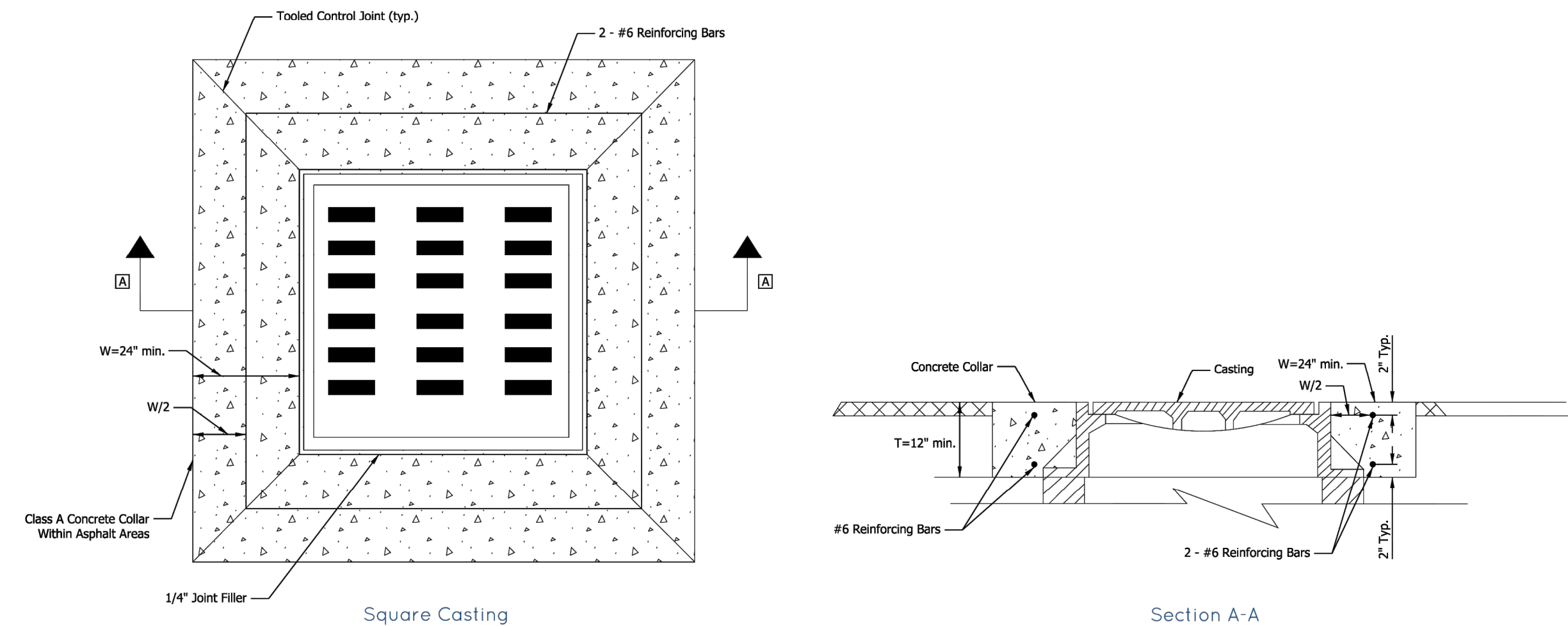
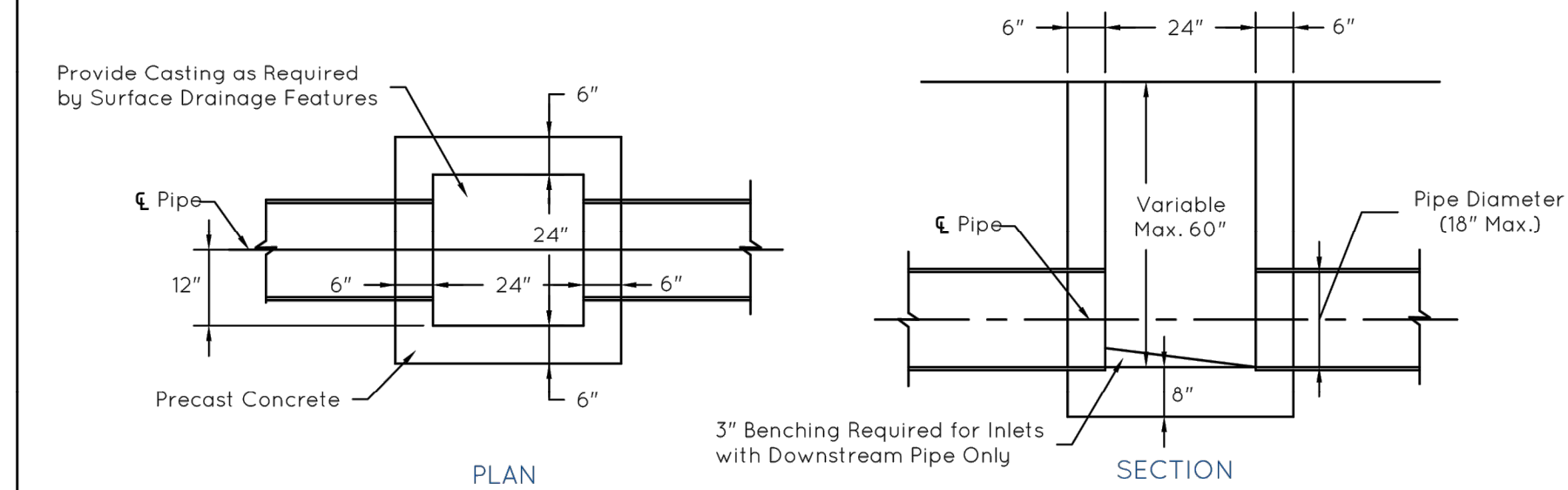
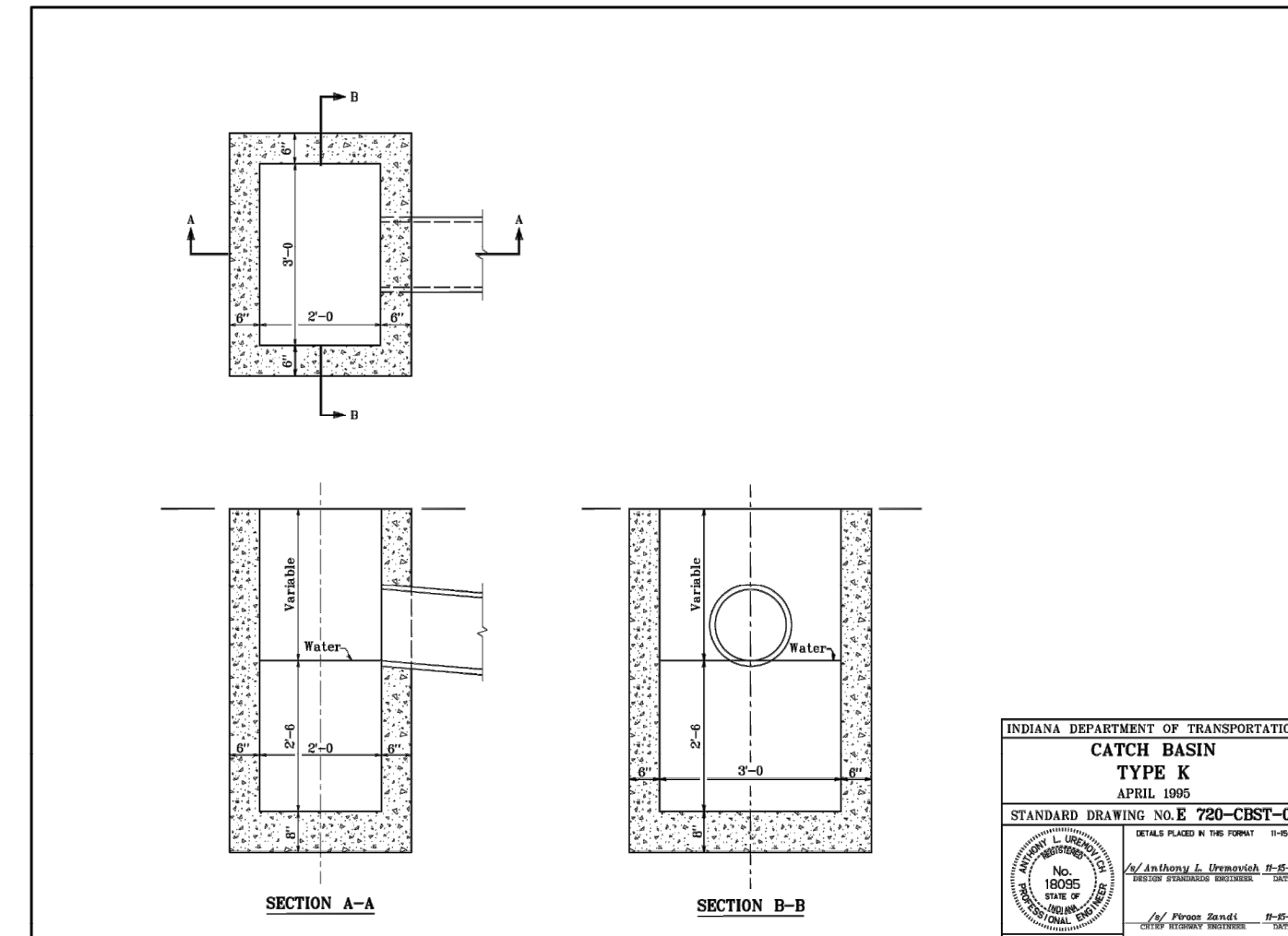
DRAWING NUMBER
C914

PROJECT NUMBER
2021119

NOTES

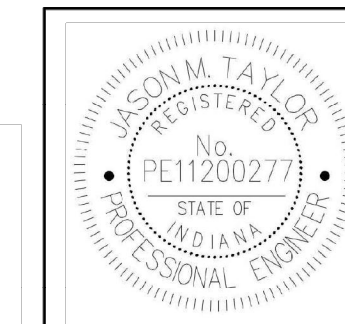
- 1) Inlet boxes shall not extend into the pavement section beyond the width of the wall thickness which shall be a maximum of 6 inches. Square or rectangular structures shall be utilized for all pipe connections along the curb line. The maximum inlet box size shall be limited to 24"x36". Mainline pipe shall be defined as all pipe greater than 15" in diameter. No mainline pipe shall be allowed in direct connection to the inlet box. Details and manufacturer shop drawings shall be provided for all pipe connections less than 90 degrees to the box edge. Field changes to structures shall be cut or cored. Round structures shall only be allowed for areas outside of the curb line and outside of road section pavement.
- 2) 24"x24" inlet boxes shall be limited to depths of 5 feet. Inlet boxes greater than 5 feet in depth shall be 24"x36" (inside dimensions), or greater, and include steps.
- 3) The downstream most structure that collects runoff from within the Right-of-Way shall be sumped (2 feet) prior to the detention basin and is required to be placed within 15 feet of the curb, where practical, and equipped with a snout to catch floatables.
- 4) The contractor shall use precast inlets or catch basins, unless otherwise approved by the Director of Engineering, that are in accordance with INDOT Standard Specifications.
- 5) A 6" cushion of INDOT No. 8 crushed stone shall be required when the precast bottom section is used.
- 6) If a precast inlet, catch basin, or manhole is used and the adjoining pipes are field connected directly to the precast unit, the connection shall be made using a Class "A" concrete collar of 6" minimum longitudinal and radial thickness. Brick should be used as a filler for concrete patching for inlets that are not precast.
- 7) Waterproofing material shall conform to AASHTO M115 and INDOT Standard Specifications.
- 8) All curb inlets and catch basins shall be equipped for underdrains.
- 9) All structures receiving sub-surface drain (SSD) shall have both ports core drilled. T or Y blind connections are not allowed.
- 10) Expansion joints are required around castings for all structures located within PCCP, PCC sidewalk, PCC multi-use paths, or concrete curb and/or gutter.
- 11) All castings shall be checked to meet inlet design and ensure compatibility with curb specified, swales, ponds, etc. All castings shall be in accordance with the Compatibility of Inlet Structures and Castings Table, this sheet, unless otherwise approved by the Director of Engineering.
- 12) All inlet castings shall contain a "NO DUMPING, DRAINS TO WATERWAY" or equivalent clean water message to educate and warn against illegal dumping. Casting openings should be grated or otherwise designed to limit floatables and debris from entering the inlet box.
- 13) No inlet castings shall be installed within wheel paths, unless otherwise approved by the Director of Engineering.

INLET TYPE	COMPATIBILITY OF INLET STRUCTURES AND CASTINGS															
	INDOT CASTING TYPES					NEENAH CASTING TYPES					EAST JORDAN IRON WORKS CASTING TYPES					
	2	3	7	8	10	R-3287-10V	R-3405-A	R-3501-TR	R-3501-TL	R-4215-C	5250	6610	7030 w/ M2 Grate & T1 Back	7495M1	7495M2	7495M4
A	X	X		X			X				X					
E			X							X		X				
F			X							X		X				
J					X	X		X	X				X	X	X	X
M					X	X		X	X				X	X	X	X

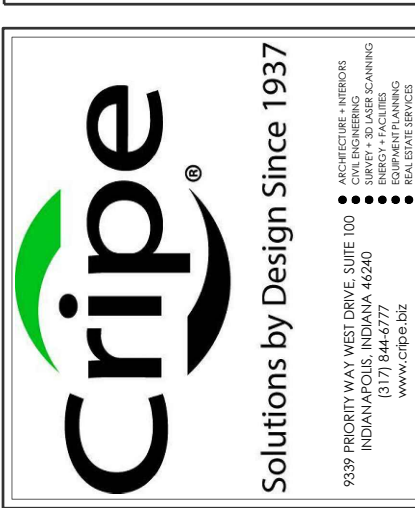
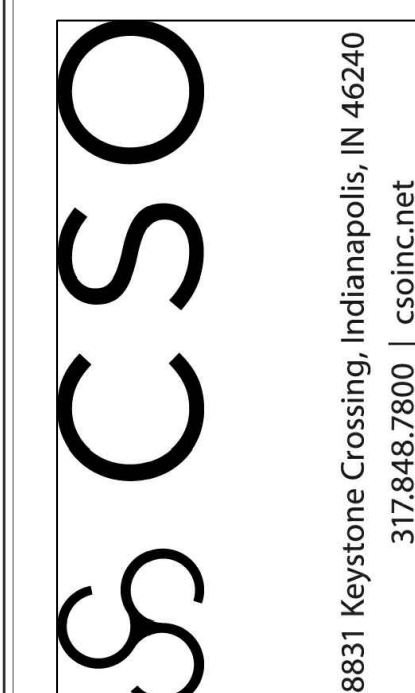


CITY OF FISHERS
STANDARD CONSTRUCTION DETAILS
STORM SEWER INLET STRUCTURE
DETAILS AND NOTES

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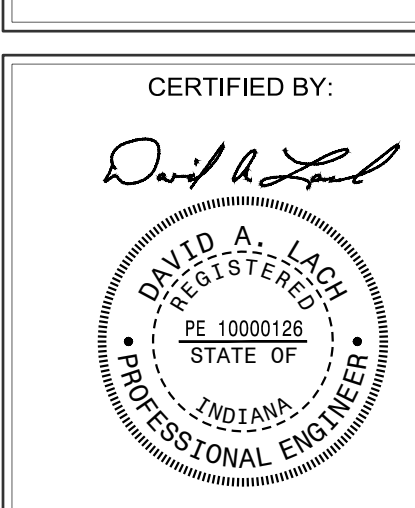
FISHERS ELEMENTARY SCHOOL
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DRAWING TITLE:
WATER
DETAILS



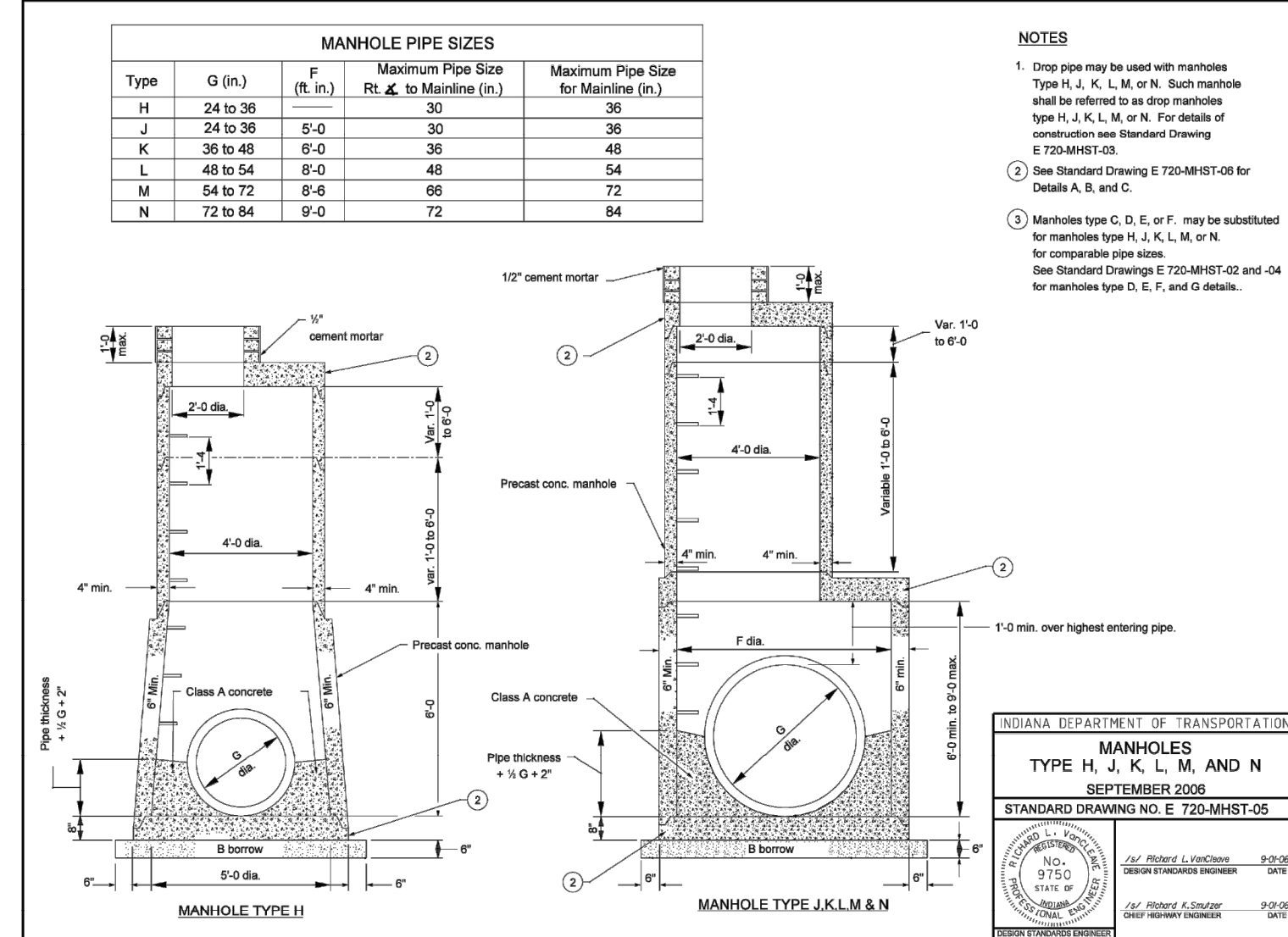
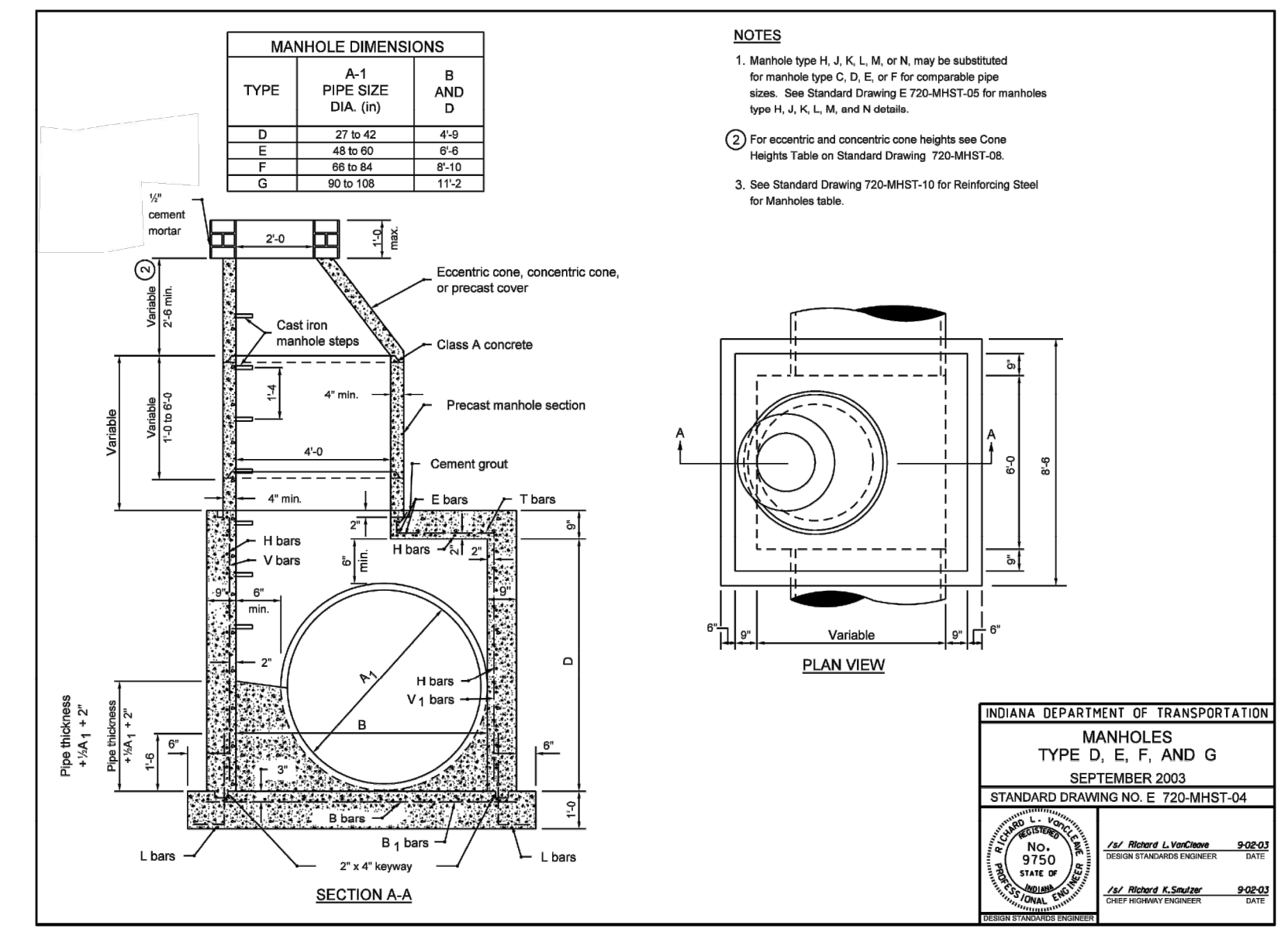
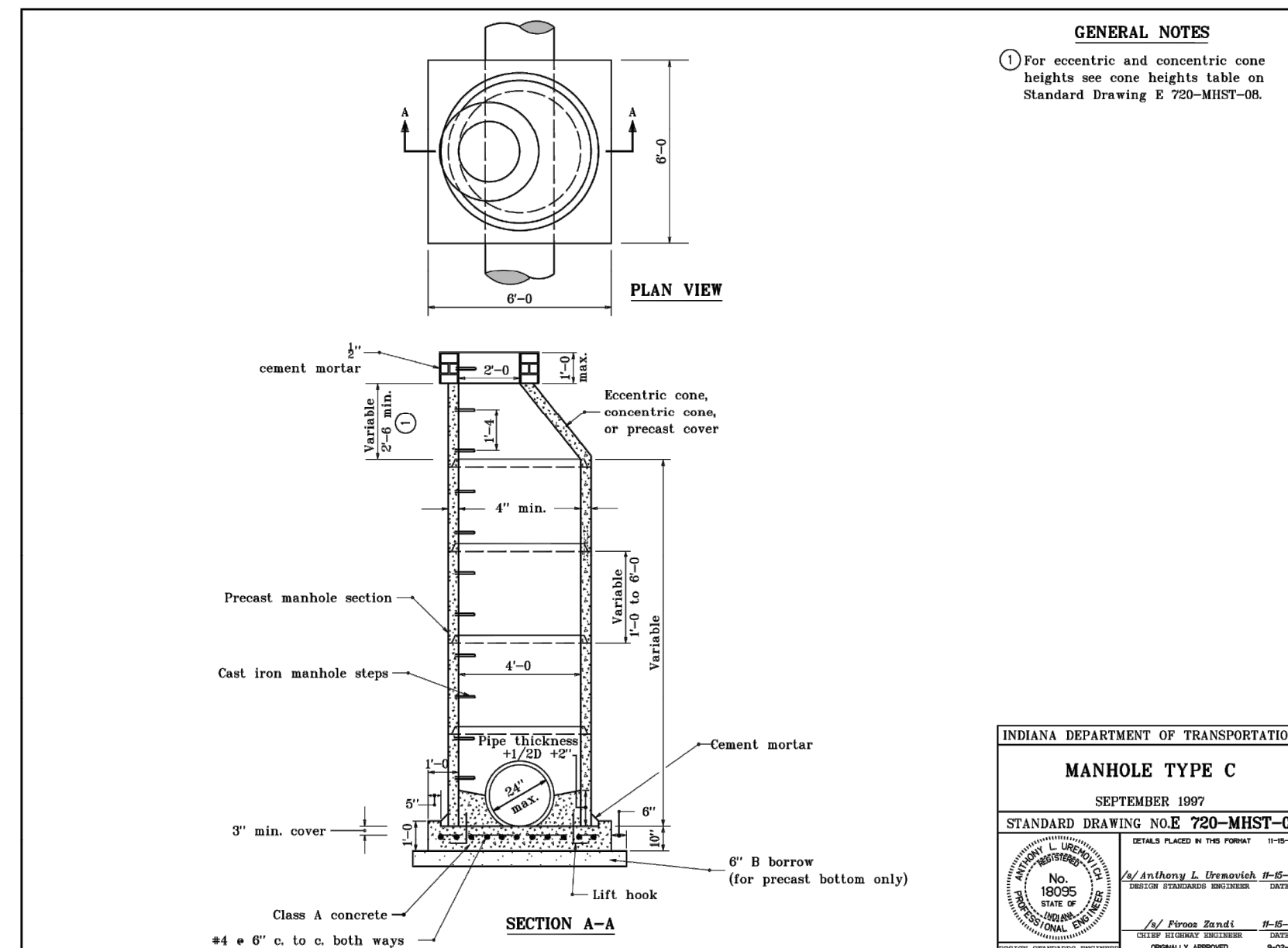
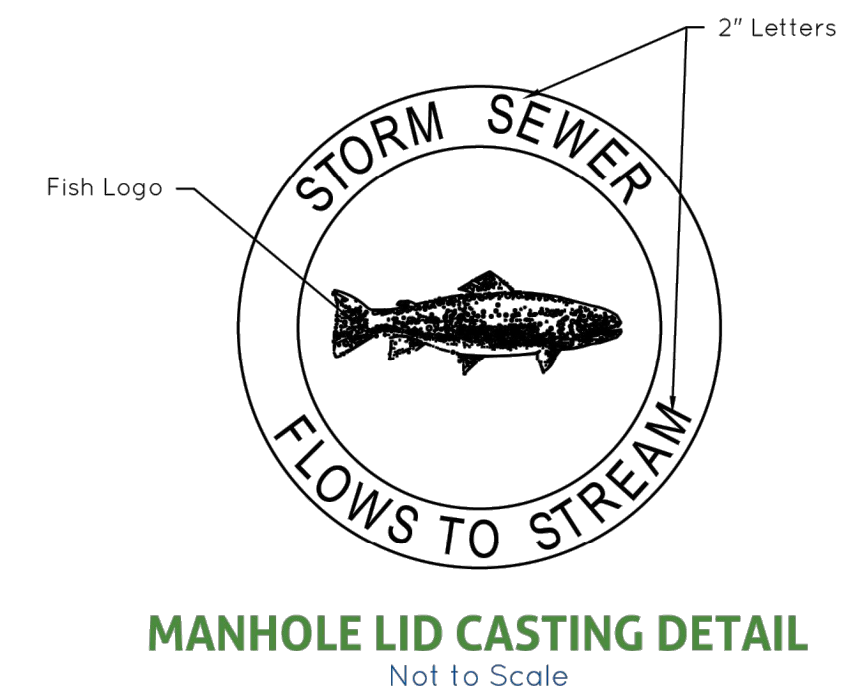
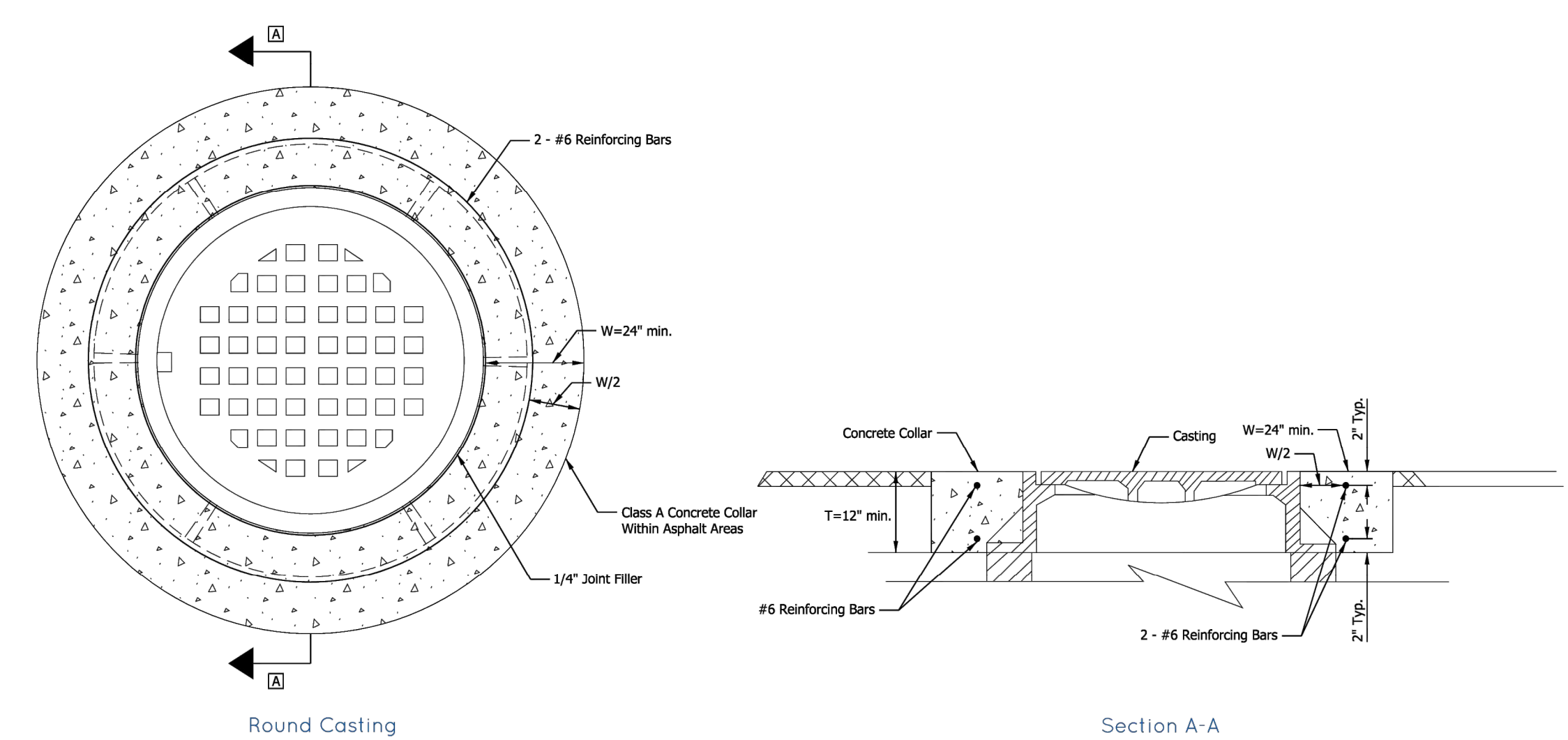
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PROJECT NUMBER
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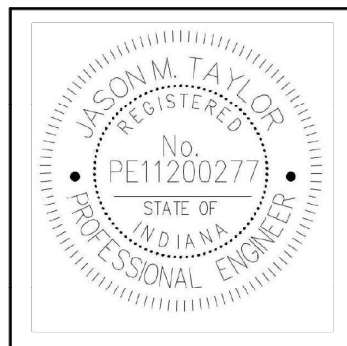
NOTES

- 1) All precast manhole materials shall conform to ASTM C-478 and INDOT Standard Specifications (min. sq. in. of reinforcing steel per lineal foot of barrel shall be 0.12).
- 2) A 6" cushion of INDOT No. 8 crushed stone shall be required when the precast bottom section is used.
- 3) Joints between sections of precast manholes shall be in accordance with ASTM C-443.
- 4) If the contractor uses a precast manhole and the adjoining pipes are field connected directly to the precast unit, the connection shall be made using a Class "A" concrete collar of 6" minimum longitudinal and radial thickness. Brick should be used as a filler for concrete patching for manholes that are not precast.
- 5) Drop pipe may be used with Manhole, Type D, E, F, or G and referred to as Drop Manhole, Type D, E, F, or G as approved by the Director of Engineering.
- 6) Bottom may be constructed of precast bottom section or Class "A" concrete formed in place.
- 7) Benchwalls shall be Class "A" concrete.
- 8) Waterproofing material shall conform to AASHTO M115 and INDOT Standard Specifications.
- 9) Flat precast covers shall be used where headroom is limited.
- 10) The downstream most structure that collects runoff from within the Right-of-Way shall be sumped (2 feet) prior to the detention basin and is required to be placed within 15 feet of the curb, where practical, and equipped with a snout to catch floatables.
- 11) All structures receiving sub-surface drain (SSD) shall have both ports core drilled. T or Y blind connections are not allowed.
- 12) Expansion joints around castings are required at all structures located within PCCP, PCC sidewalk, PCC multi-use paths, or concrete curb and/or gutter.
- 13) All manhole castings shall be checked to meet inlet grate design and ensure compatibility with curb specified, swales, ponds, etc. In accordance with the Compatibility of Manhole Structures and Castings Table, this sheet, unless otherwise approved by the Director of Engineering.
- 14) All manhole castings shall contain a "NO DUMPING, DRAINS TO WATERWAY" or equivalent clean water message to educate and warn against illegal dumping. Casting openings should be grated or otherwise designed to limit floatables and debris from entering the manhole.
- 15) All manhole steps shall conform to INDOT Standard Drawing 720-MHST-09.
- 16) No manhole castings shall be installed within wheel paths, unless otherwise approved by the Director of Engineering.

MANHOLE TYPE	COMPATIBILITY OF MANHOLE STRUCTURES AND CASTINGS								
	INDOT CASTING TYPES			NEENAH CASTING TYPES			EAST JORDAN IRON WORKS CASTING TYPES		
	2	4	8	R-2502-D	R-4342	R-1772	1022 w/ Type A Lid	1022 w/ M1 or M3 Grate	6489
C	X	X	X	X	X	X	X	X	X
H	X	X	X	X	X	X	X	X	X
J	X	X	X	X	X	X	X	X	X
K	X	X	X	X	X	X	X	X	X
L	X	X	X	X	X	X	X	X	X
M	X	X	X	X	X	X	X	X	X
N	X	X	X	X	X	X	X	X	X

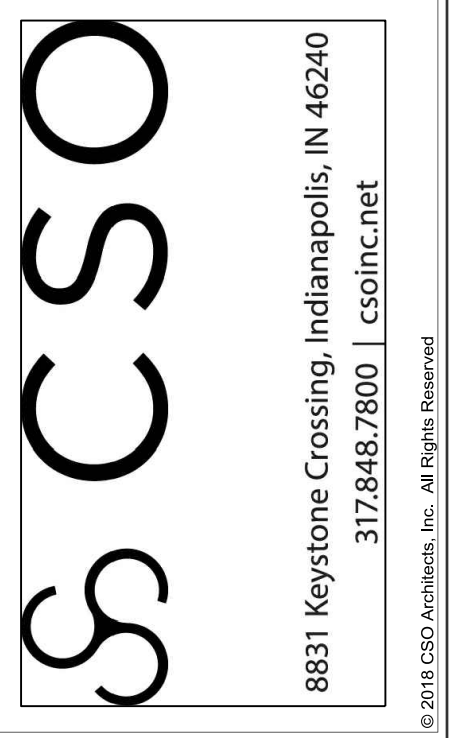


J. M. G.
1/18/2022



CITY OF FISHERS
STANDARD CONSTRUCTION DETAILS
STORM SEWER MANHOLE STRUCTURE DETAILS AND NOTES

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of
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FISHERS ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS DESIGN DEVELOPMENT
11442 LANTERN RD., FISHERS, IN 46038

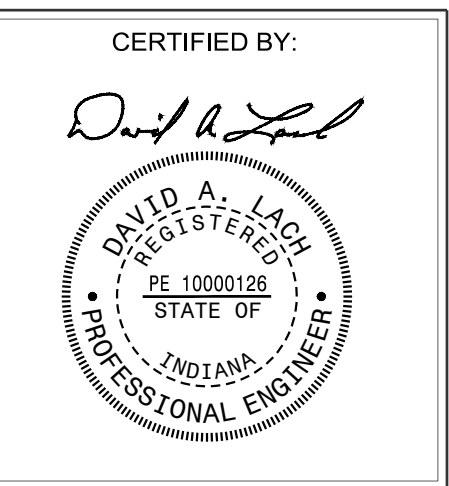
SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the requirements of the Contract.

REVISIONS:

4	02/12/24	ADDENDUM #4
6	03/01/24	ADDENDUM #6

ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
WATER DETAILS



DRAWING NUMBER
C916

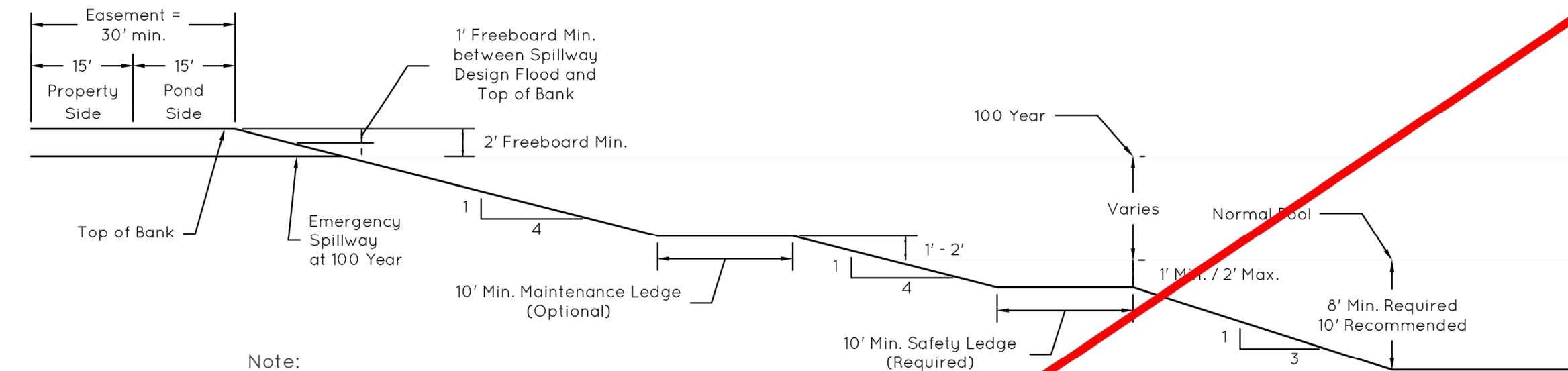
PROJECT NUMBER
2021119

GENERAL WET-BOTTOM DETENTION BASIN NOTES

- 1) All detention basins shall be designed in accordance with Chapters 3, 6 and 8 of the City of Fishers Stormwater Technical Standards Manual (STSM).
- 2) Per Section 6.C.4 of the STSM, all detention facilities shall be separated from edge of pavement of parking lots by a minimum of 50 feet and a minimum of 150 feet from roadway, unless structural measures, such as guardrails, berms, or other physical barriers are provided that prevent passage of a vehicle. See Guardrail Details, Sheets 9 - 12.
- 3) Regardless of physical barriers, minimum separation of all stormwater detention facilities shall be according to the Minimum Detention Pond Setbacks in Table 1.
- 4) The design of all wet-bottom detention facilities should include methods to prevent pond stagnation, including but not limited to, surface or sub-surface aeration (diffusers) or destratification facilities.

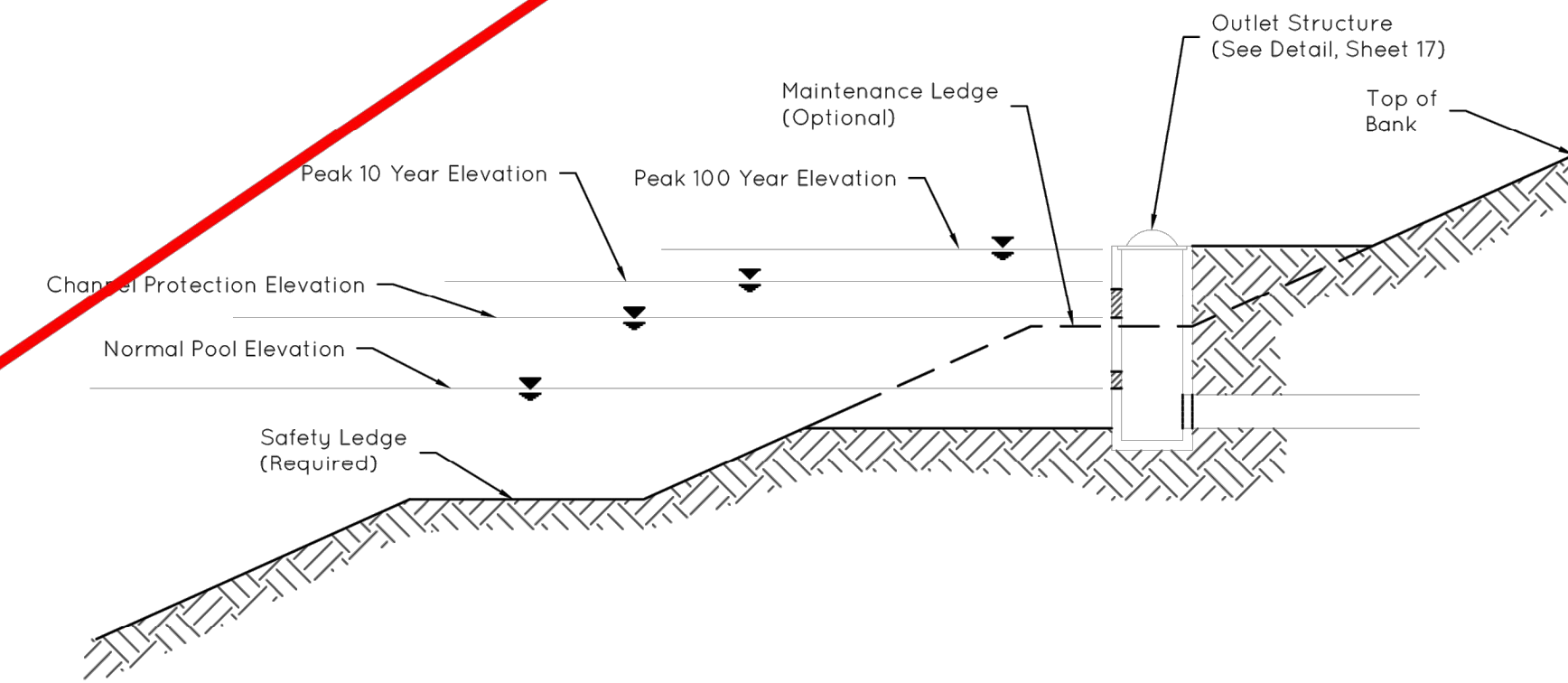
Table 1. Detention Facility Minimum Separations

FUNCTIONAL CLASSIFICATION OF ROADWAY	MINIMUM DETENTION POND SETBACK
Principal Arterial	50 Ft. From Right-of-Way to the Top of Bank -Or- 50 Ft. From Right-Of-Way to Maximum 100-Year Elevation, Whichever is Greater.
Minor Arterial	
Rural Major Collector	
Rural Minor Collector	
Urban Collector	
Local	80 Ft. From Centerline of Roadway to the Top of Bank -Or- 80 Ft. From Centerline of Roadway to Maximum 100-Year Elevation, Whichever is Greater.
Private Roadways	



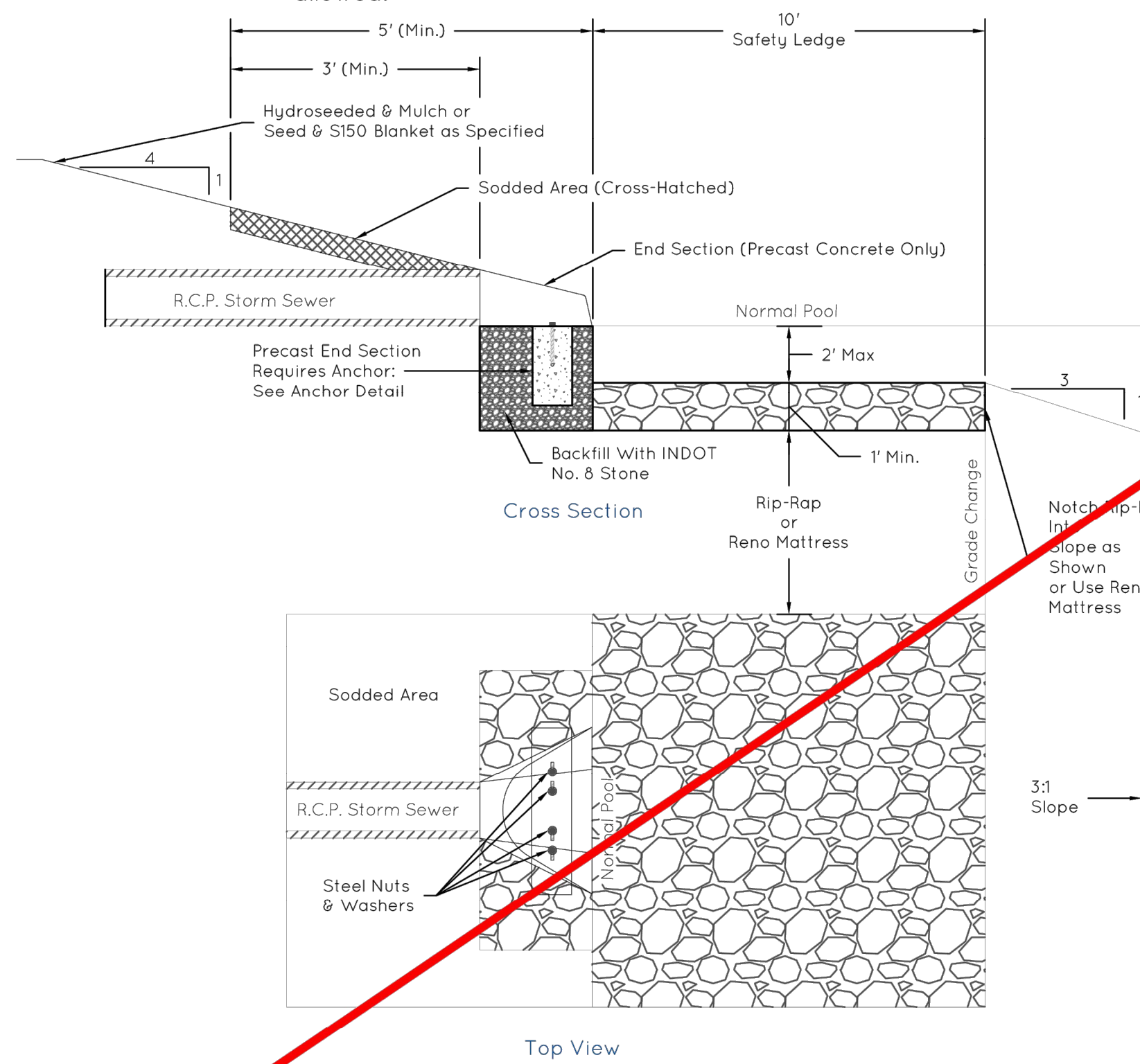
Note:
1) If a Safety Fence is Provided, Pond Slopes Above the Safety Ledge May be Changed to 3:1 Versus 4:1.

DETENTION BASIN CROSS-SECTION
Not to Scale

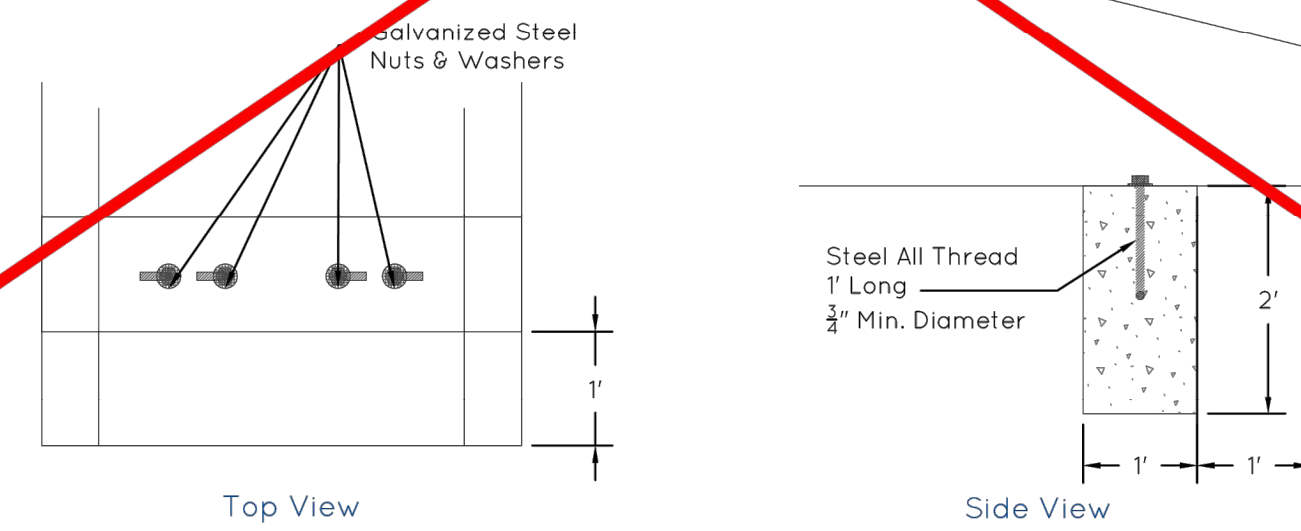


TYPICAL OUTLET STRUCTURE PLACEMENT
Not to Scale

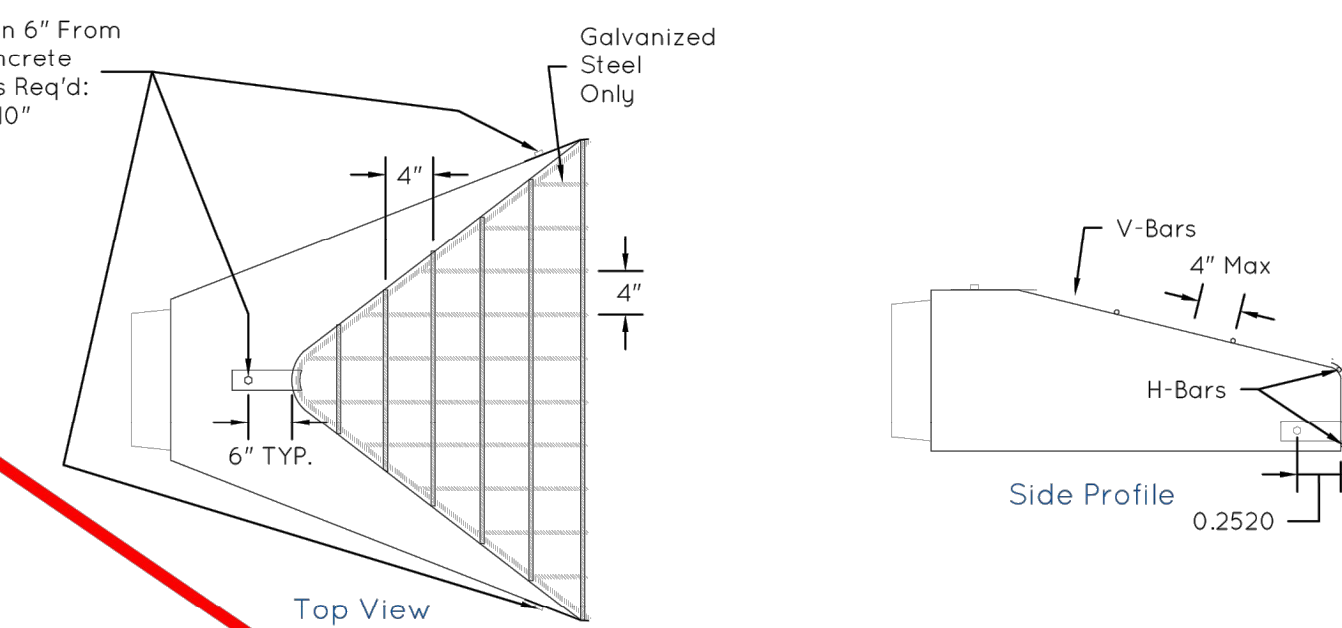
Note:
1) Underwater discharge not allowed.



OUTLET TO DETENTION BASIN
Not to Scale



END SECTION ANCHOR
Not to Scale



Notes:
1) Trash guards should be galvanized steel only.
2) To be placed on upstream end of detention basin outlet pipe only.

TRASH/DEBRIS GUARD
Not to Scale



CITY OF FISHERS		SHEET
STANDARD CONSTRUCTION DETAILS		
DETENTION BASIN & END SECTION DETAILS		16 of 29

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On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

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DRAWING NUMBER
C917

PROJECT NUMBER
2021119

GENERAL OUTLET STRUCTURE NOTES

- 1) Use of a circular or rectangular orifice is at the discretion of the designer. The minimum opening height or diameter shall be 6", unless written approval of a smaller opening is provided during the stormwater review process. Openings shall be consolidated as much as is practicable while meeting the remaining requirements to reduce the potential for clogging. The minimum 6" dimension requirement does not apply to CPv or WQ orifice sizing. Coordinate with City of Fishers for minimum CPv / WQ orifice sizing.
- 2) If an overland emergency flow route cannot be created, the structure shall be sized to allow the open casting and outlet pipe to serve as a drop-inlet capable of carrying 125% of the peak inflow to the detention pond.
- 3) The maximum opening size for trash racks shall be 3" for outlets less than 24" in diameter or smaller than a 24" x 24" rectangle. Larger outlets shall have a 6" opening size.

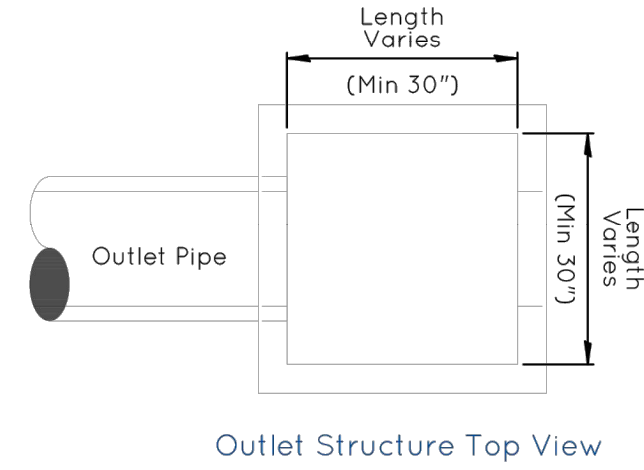
DESCRIPTION OF OUTLETS

Outlet 1: Extended Detention / Channel Protection Outlet
The purpose of this outlet is to detain the flow and provide for settlement of suspended solids and to attenuate the outflow from the detention basin to meet the water quality or channel protection requirements of Ch. 8 of the STSM.

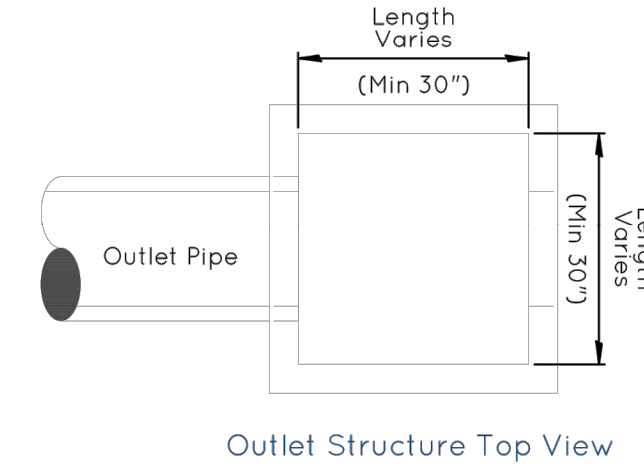
Outlet 2: Peak Flow Control Orifice (10-year)
The purpose of this outlet is to restrict the flow leaving the detention pond when the volume of runoff exceeds the water quality or channel protection volume. This outlet is typically used to control the release of runoff for events between the 2-year and 10-year events to meet peak flow control requirements. This outlet has an invert elevation at the elevation of when the water quality or channel protection is fully stored assuming no outflow from Outlet 1.

Outlet 3: Peak Flow Control Orifice (100-year)
The purpose of this outlet is to supplement Outlet 2 when the 100-year peak flow control requirements cannot be met using a single peak flow control orifice. This outlet typically has an invert elevation above the 10-year maximum water surface elevation.

Outlet 4: Emergency Overflow
The purpose of this outlet is to allow the outlet to convey flow downstream even if the peak flow control orifice(s) are completely blocked. It may also serve as a part of the emergency flood route in special circumstances.



Outlet Structure Top View



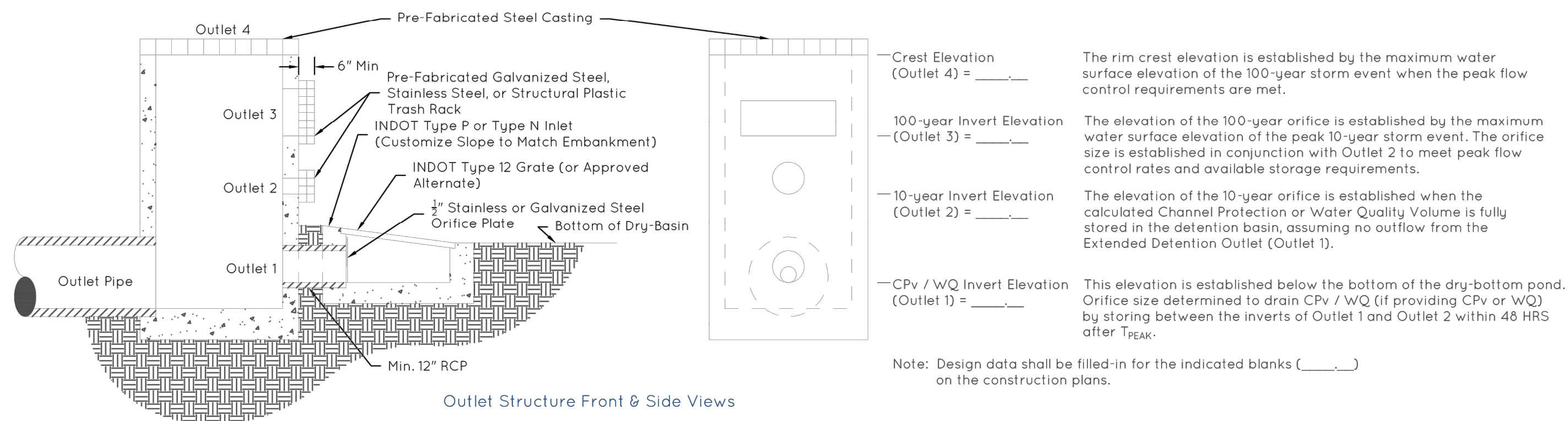
Outlet Structure Top View

DESCRIPTION OF OUTLETS

Outlet 1: Peak Flow Control Orifice (10-year)
The purpose of this outlet is to control the release of runoff for events between the 2-year and 10-year storm events to meet peak flow control requirements per Ch. 3 and 6 of the STSM. This outlet has an invert elevation at the normal pool of a wet pond or below the bottom of a dry-bottom facility.

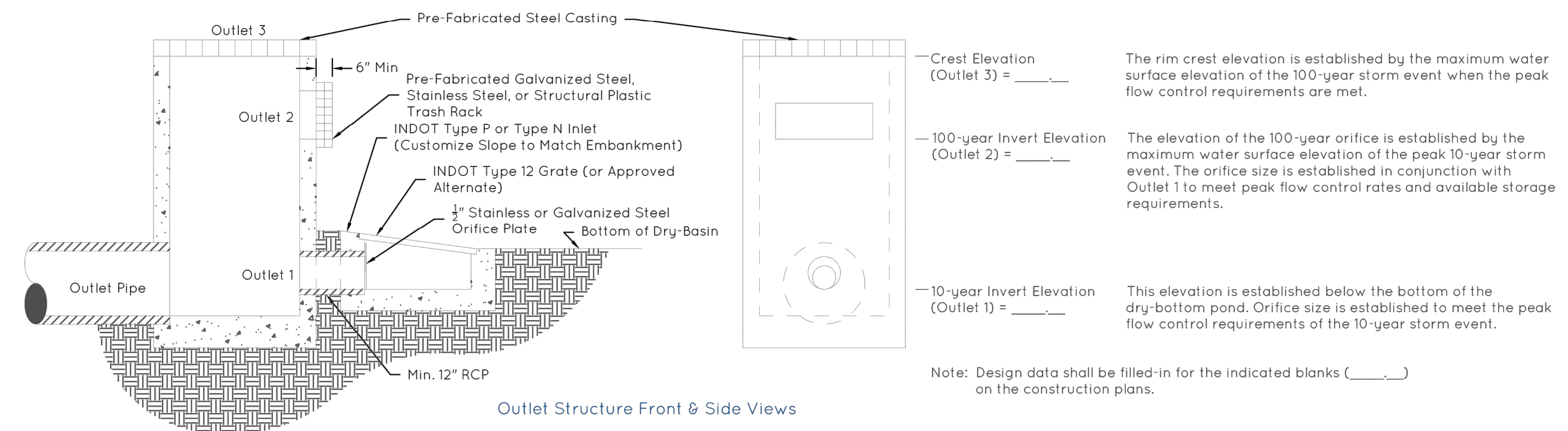
Outlet 2: Peak Flow Control Orifice (100-year)
The purpose of this outlet is to supplement Outlet 1 when the 100-year peak flow control requirements cannot be met using a single peak flow control orifice. This outlet typically has an invert elevation above the 10-year maximum water surface elevation.

Outlet 3: Emergency Overflow
The purpose of this outlet is to allow the outlet to convey flow downstream even if the peak flow control orifice(s) are completely blocked. It may also serve as a part of the emergency flood route in special circumstances.



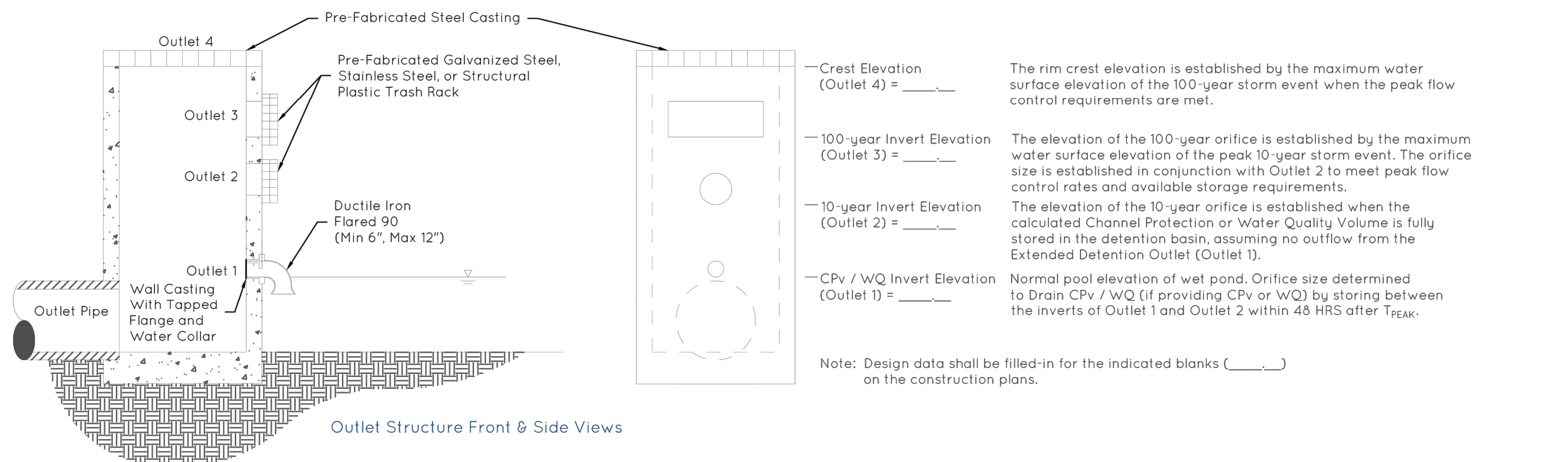
DRY-BOTTOM DETENTION BASIN OUTLET DETAILS - COMBINED PEAK FLOW AND CHANNEL PROTECTION / WATER QUALITY BASIN

Not to Scale



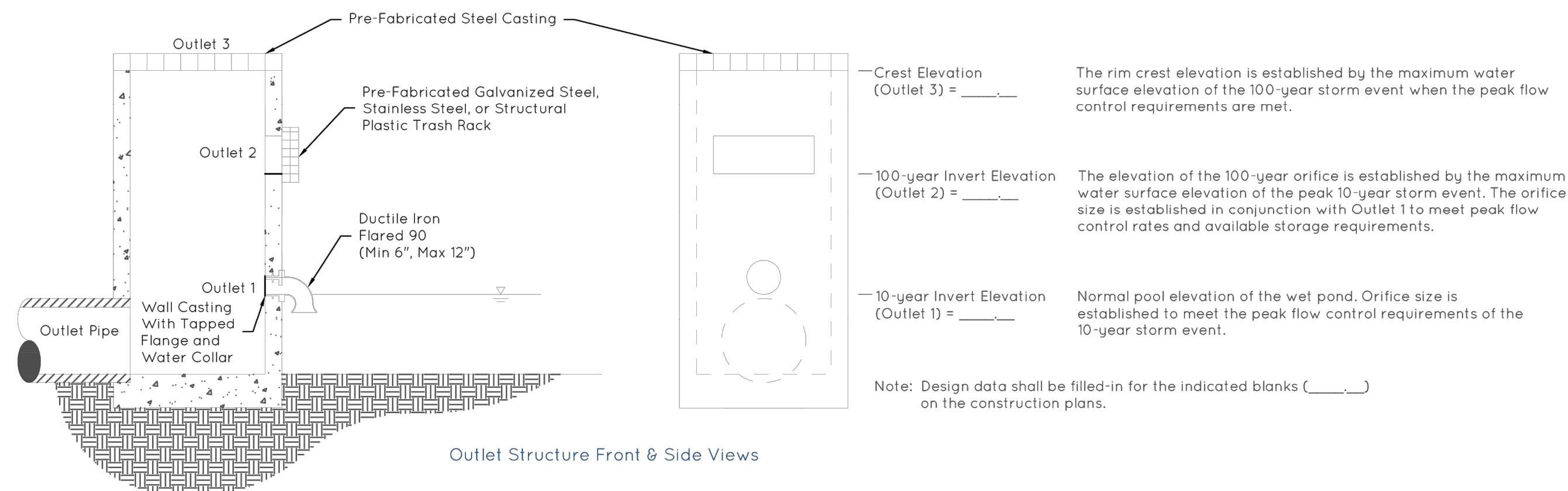
DRY-BOTTOM DETENTION BASIN OUTLET DETAILS - PEAK FLOW CONTROL FACILITY (SINGLE USE)

Not to Scale



WET-BOTTOM DETENTION BASIN OUTLET DETAILS - COMBINED PEAK FLOW AND CHANNEL PROTECTION / WATER QUALITY BASIN

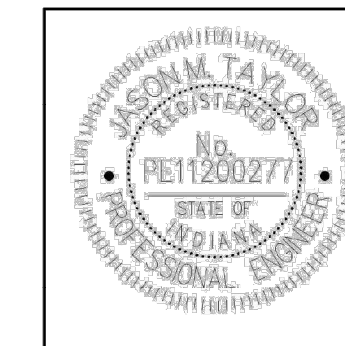
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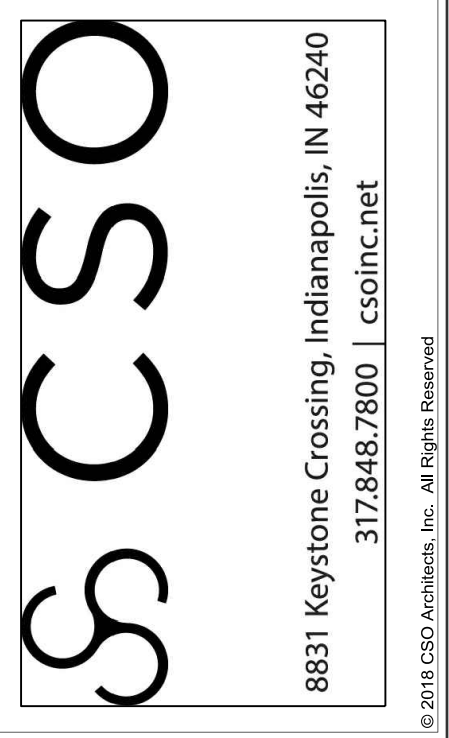
WET-BOTTOM DETENTION BASIN OUTLET DETAILS - PEAK FLOW CONTROL FACILITY (SINGLE USE)

Not to Scale

JAD
1/18/2022



CITY OF FISHERS		SHEET
STANDARD CONSTRUCTION DETAILS		
DETENTION BASIN - OUTLET CONTROL STRUCTURE DETAILS		17 of 29



FISHERS ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS DESIGN DEVELOPMENT
 11442 LANTERN RD, FISHERS, IN 46038

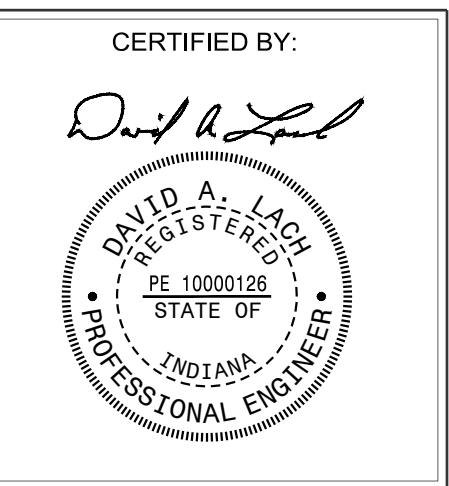
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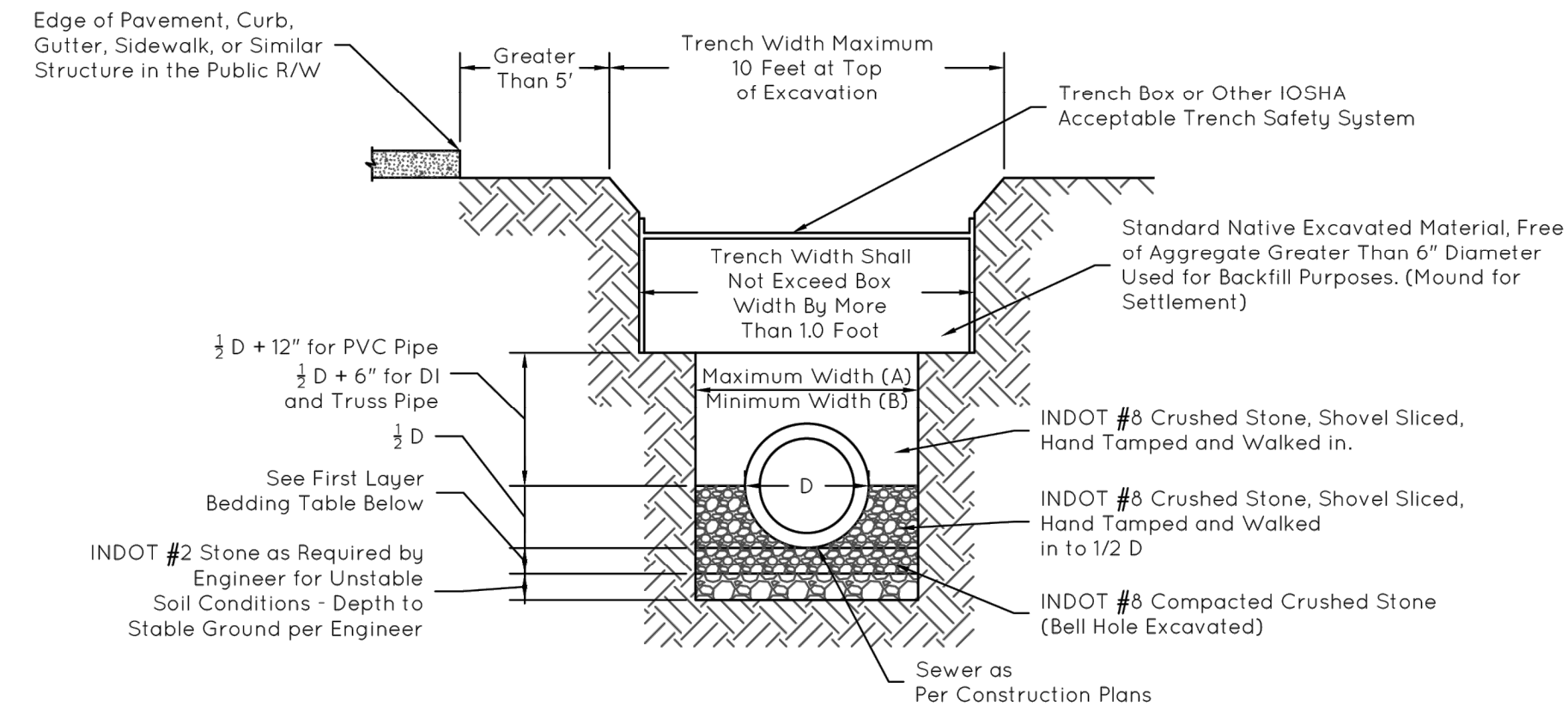
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
WATER DETAILS



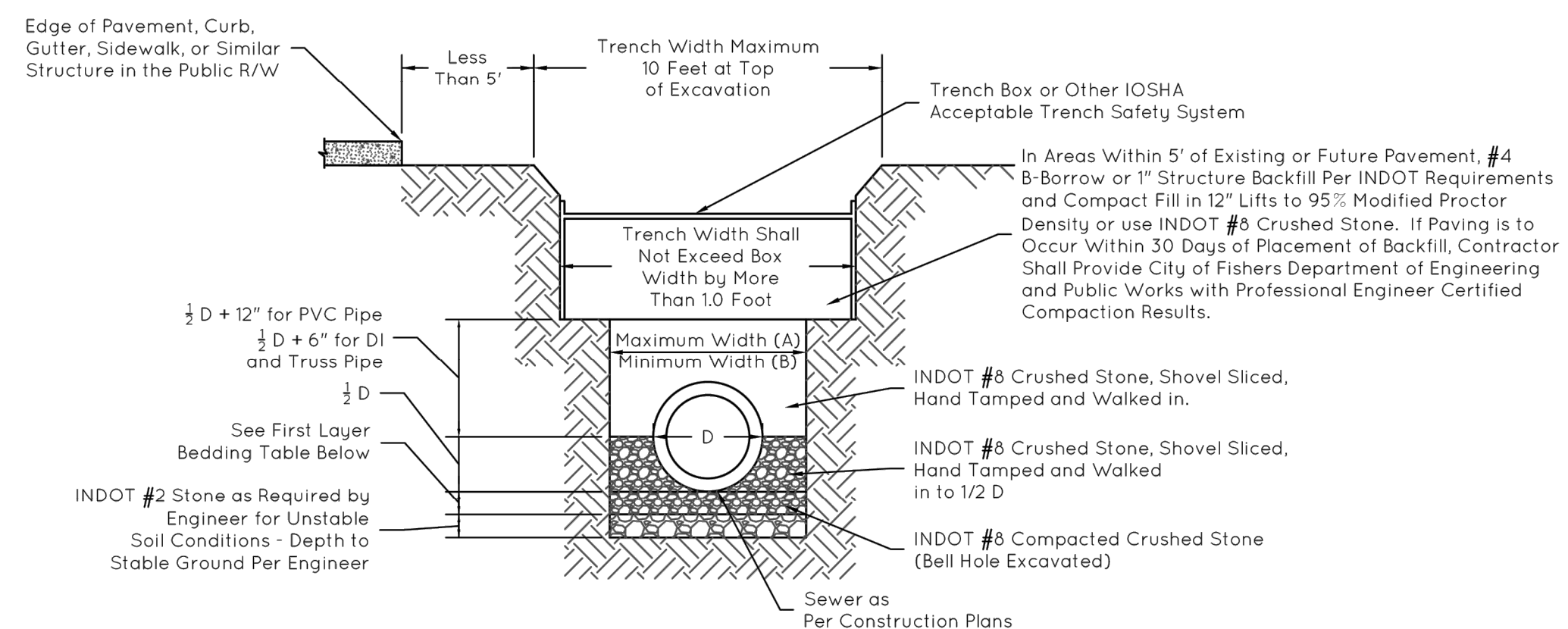
DRAWING NUMBER
C918

PROJECT NUMBER
2021119



FIRST LAYER BEDDING TABLE			PIPE SIZE		
Pipe Size	6" TO 15"	18" & Over	A	B	
Bedding Below the Pipe Barrel and Bell	Minimum = 6"	Minimum = 10"	Up to 18"	3' - 0"	2' - 6"
			18" and Greater	D + 24"	D + 18"

Greater Than 5' From Edge of Pavement

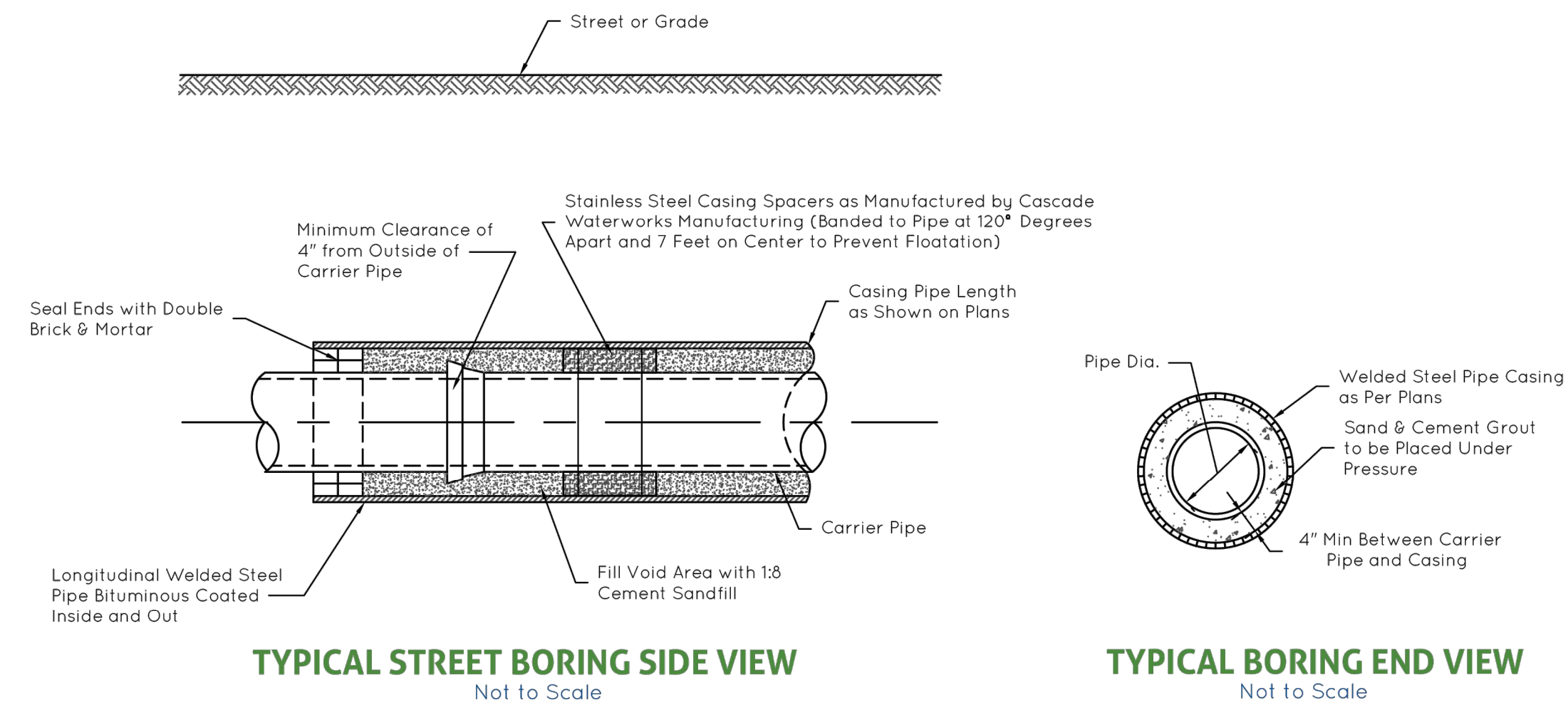


FIRST LAYER BEDDING TABLE			PIPE SIZE		
Pipe Size	6" TO 15"	18" & Over	A	B	
Bedding Below the Pipe Barrel and Bell	Minimum = 6"	Minimum = 10"	Up to 18"	3' - 0"	2' - 6"
			18" and Greater	D + 24"	D + 18"

Within 5' of Existing or Future Pavement

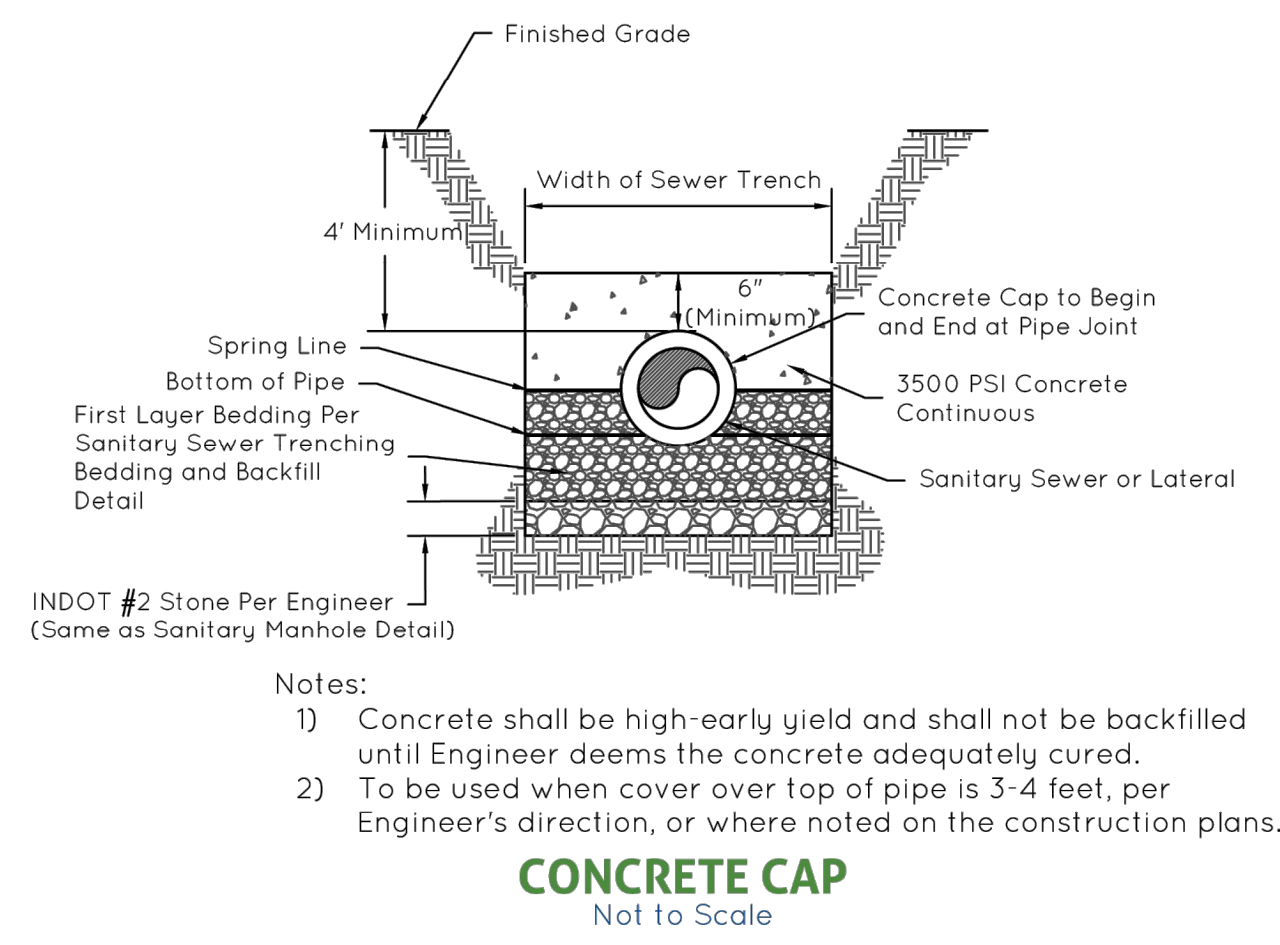
SANITARY SEWER TRENCHING, BEDDING AND BACKFILL

Not to Scale



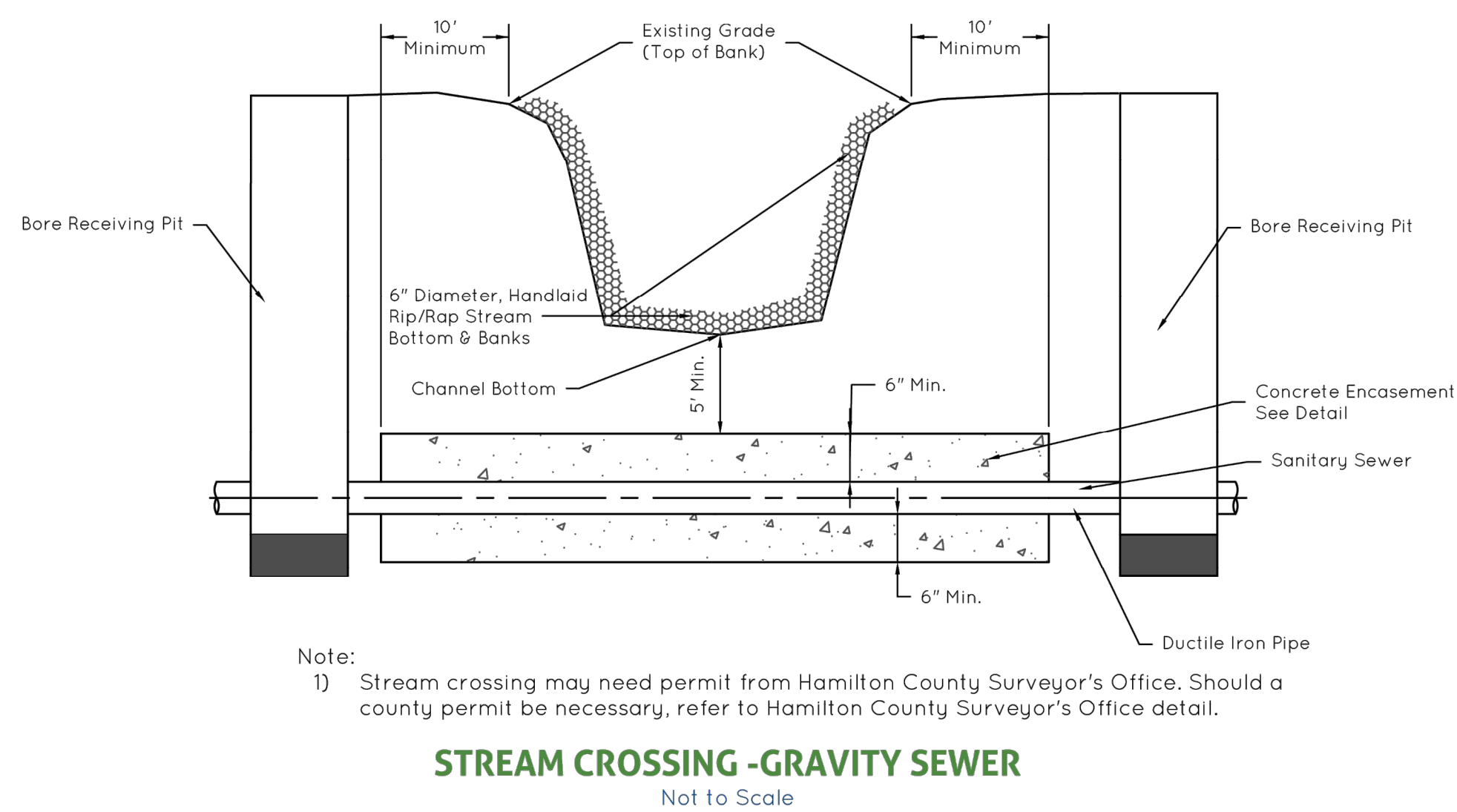
TYPICAL STREET BORING SIDE VIEW
Not to Scale

TYPICAL BORING END VIEW
Not to Scale



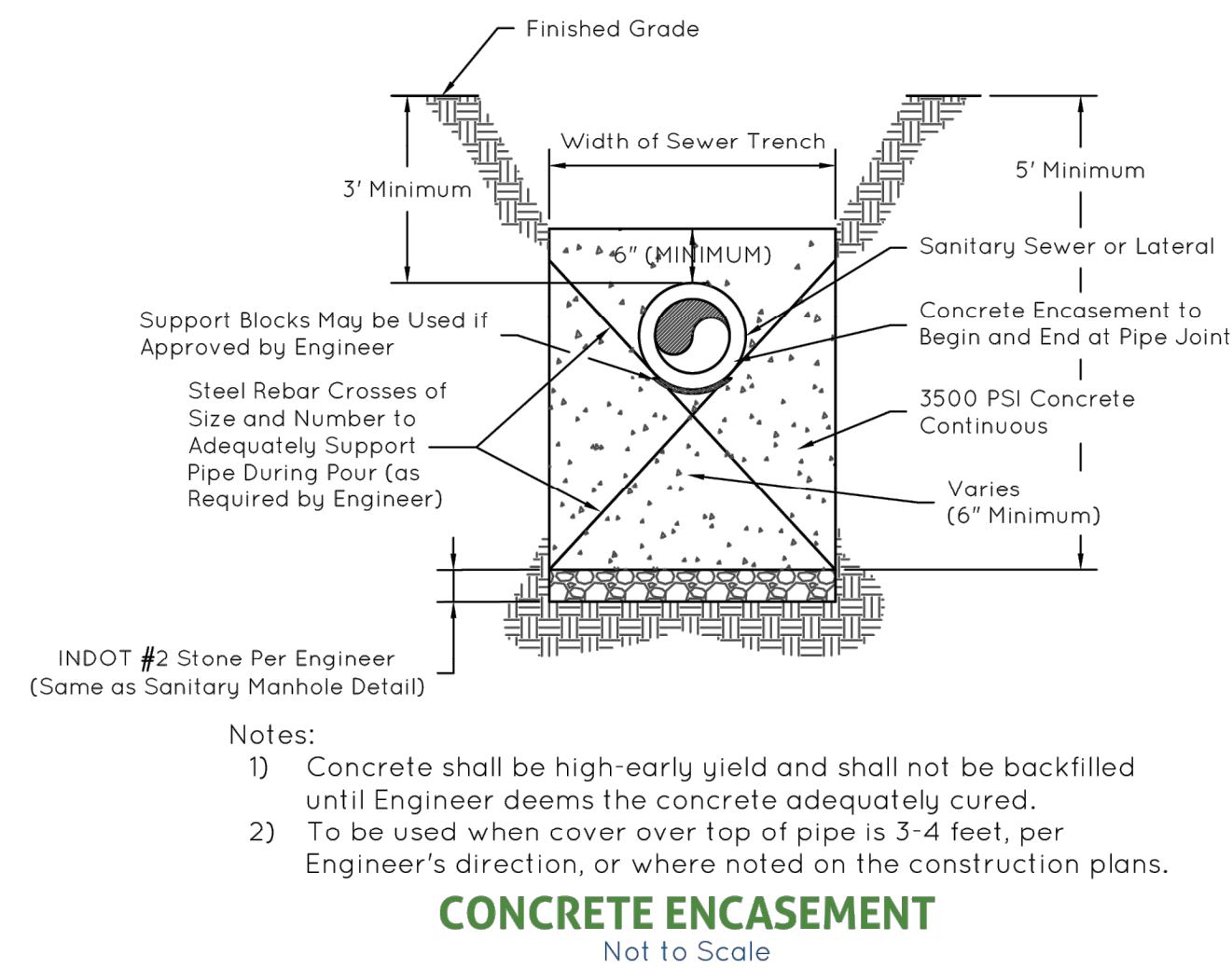
CONCRETE CAP
Not to Scale

- Notes:
- Concrete shall be high-early yield and shall not be backfilled until Engineer deems the concrete adequately cured.
 - To be used when cover over top of pipe is 3-4 feet, per Engineer's direction, or where noted on the construction plans.



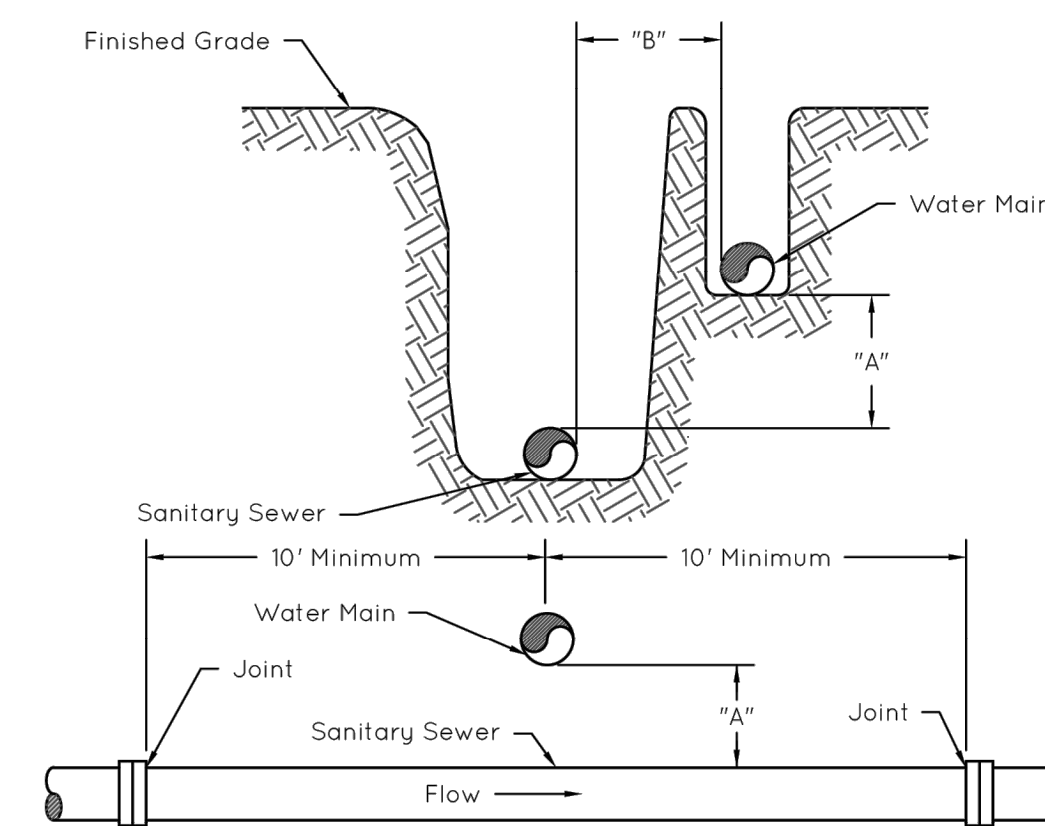
STREAM CROSSING - GRAVITY SEWER
Not to Scale

- Note:
- Stream crossing may need permit from Hamilton County Surveyor's Office. Should a county permit be necessary, refer to Hamilton County Surveyor's Office detail.



CONCRETE ENCASEMENT
Not to Scale

- Notes:
- Concrete shall be high-early yield and shall not be backfilled until Engineer deems the concrete adequately cured.
 - To be used when cover over top of pipe is 3-4 feet, per Engineer's direction, or where noted on the construction plans.



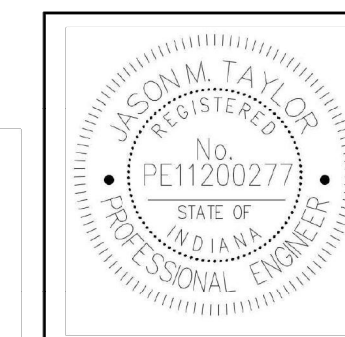
WATER SUPPLY & SEWER CROSSING
Not to Scale

IF "A" IS	IF "B" IS	THEN SANITARY SEWER PIPE SEGMENT SHALL BE
18" or More	10' or More	No Special Pipe Material or Grade Requirements
Less Than 18"	Less Than 10'	PVC (Either ASTM D 2241 (SDR 21 Minimum) or ANSI/AWWA C900 (DR 16 Minimum) or ANSI/AWWA C905 (DR 21 Minimum)) or Ductile Iron (Class 51 Minimum)

- Notes:
- Water mains shall not be located in the same trench as sanitary sewers.
 - Separation distances from water supplies and pipe classifications shall conform to Indiana State Board of Health's "On-Site Water Supply and Wastewater Disposal for Public and Commercial Establishments - Bulletin S.E. 13".

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J. M. G.
1/18/2022

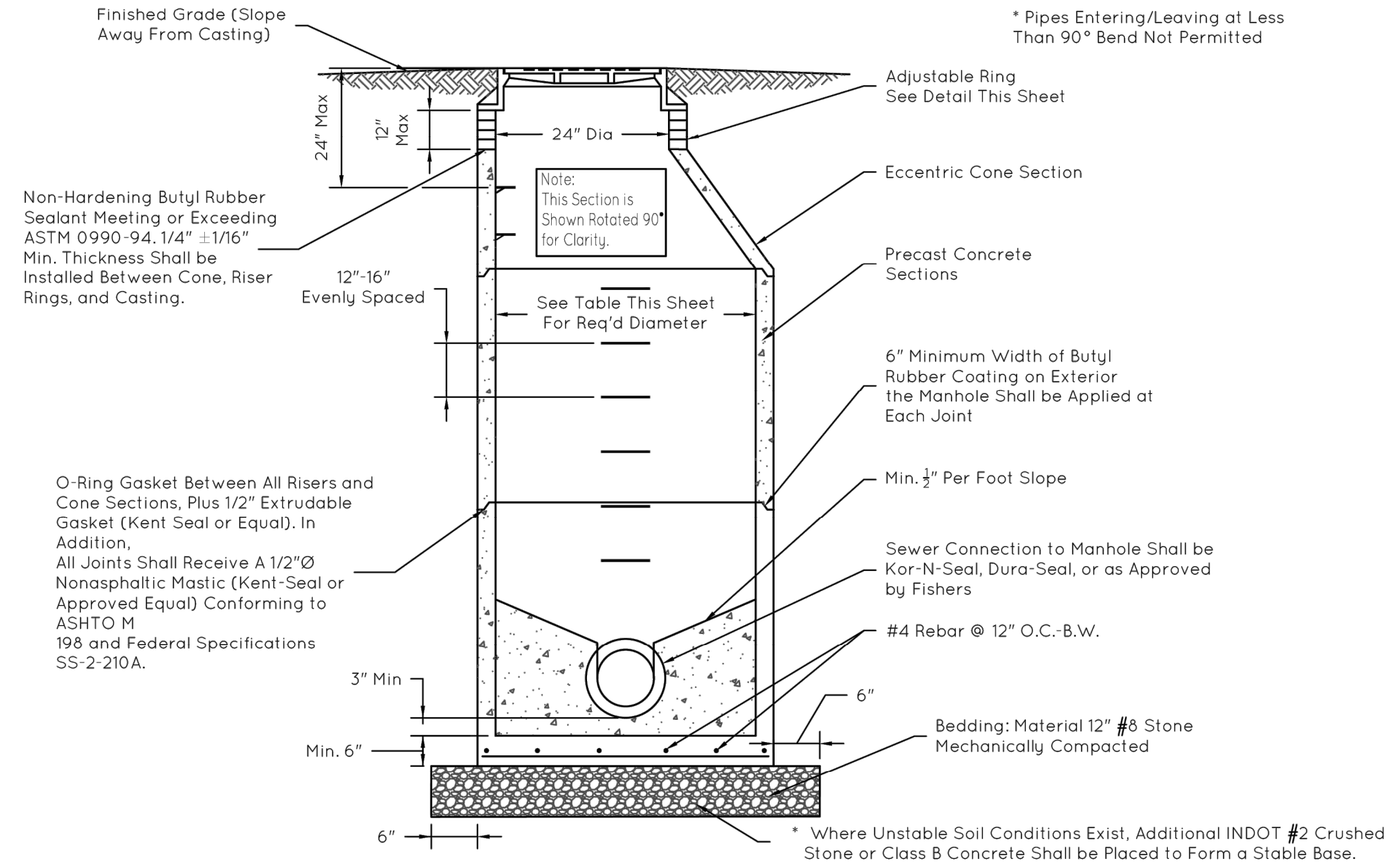


CITY OF FISHERS STANDARD CONSTRUCTION DETAILS	SHEET
SANITARY SEWER PIPE BEDDING & CROSSING DETAILS	18 of 29

MANHOLE DIAMETERS

Pipe Size	Pipes Entering/Leaving at *45°-90°
8"-24"	48"
27"-30"	60"

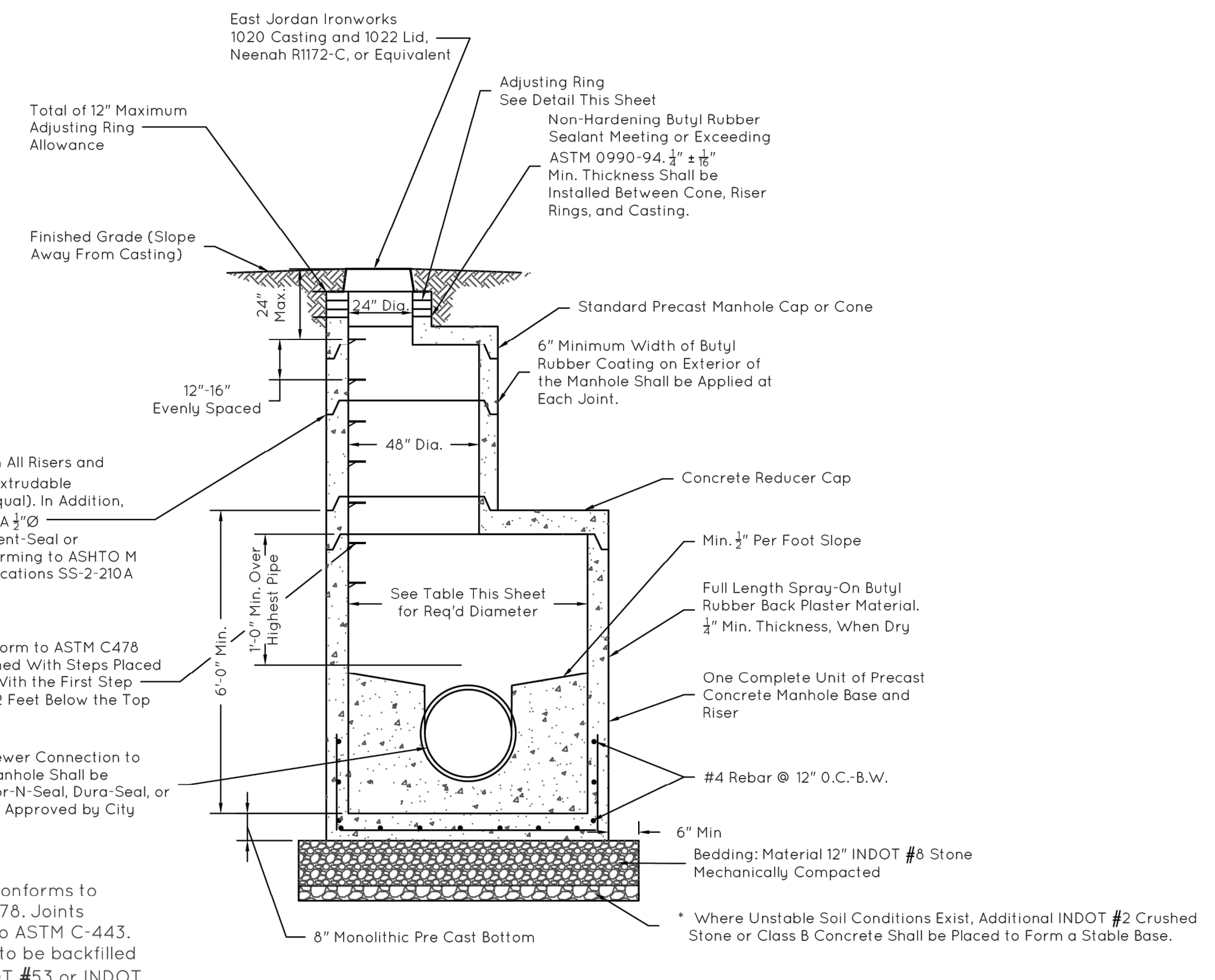
* Pipes Entering/Leaving at Less Than 90° Bend Not Permitted



STANDARD MANHOLE FOR PIPE SIZES 8" THRU 24"

Not to Scale

Flow channels within manholes shall be an integral part of the precast base. The channels shall be shaped and formed for a clean transition with proper hydraulics to allow the smooth conveyance of the flow through the manhole. The bench wall shall be formed to the crown of the inlet and outlet pipes to form a "U" shaped channel. The bench wall shall slope back from the crown at 1/2" per foot to the manhole wall.

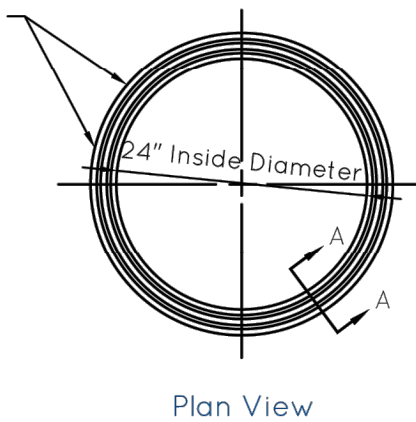


STANDARD MANHOLE FOR PIPE SIZES 27" THRU "30"

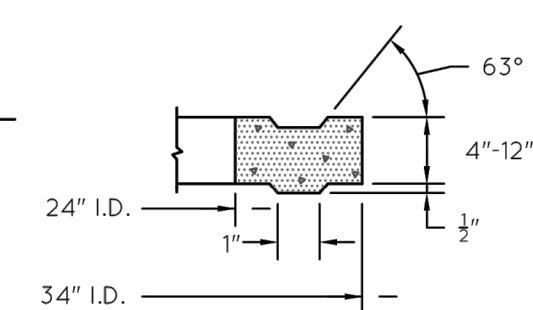
Not to Scale

Flow channels within manholes shall be an integral part of the precast base. The channels shall be shaped and formed for a clean transition with proper hydraulics to allow the smooth conveyance of the flow through the manhole. The bench wall shall be formed to the crown of the inlet and outlet pipes to form a "U" shaped channel. The bench wall shall slope back from the crown at 1/2" per foot to the manhole wall.

Place 1/2" Diameter Extrudable Preformed Gasket Material in Each Keyway (See Detail)

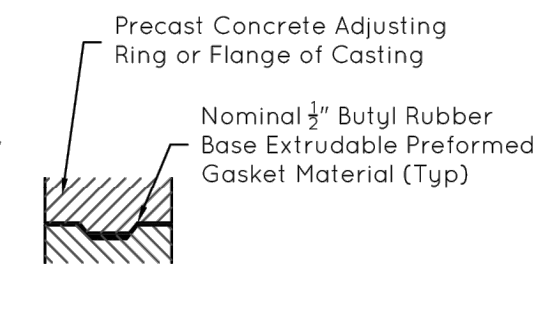


Plan View

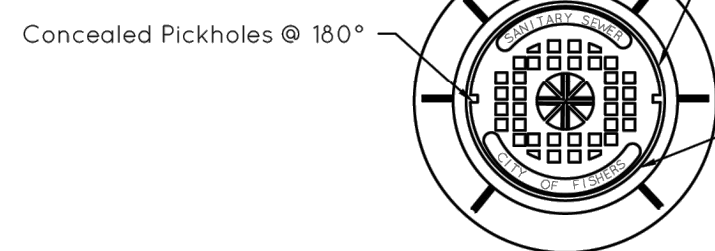


ADJUSTING RING

Not to Scale

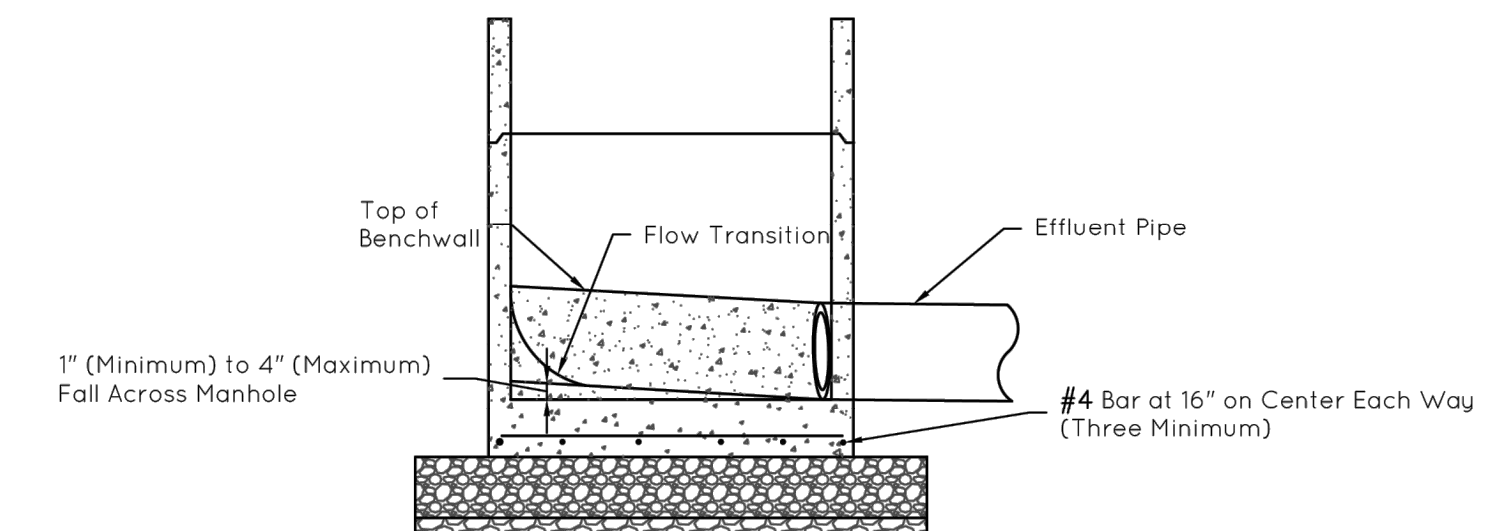


Gasket Detail



FRAME AND COVER

Not to Scale

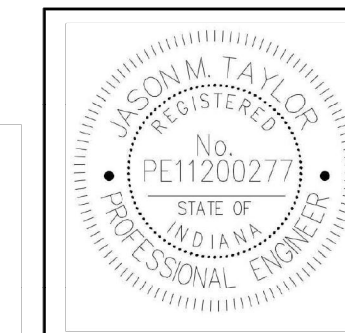


TERMINATION MANHOLE

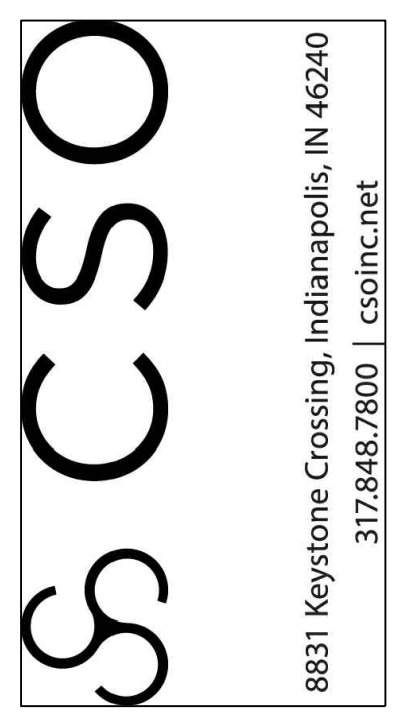
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1/18/2022



CITY OF FISHERS STANDARD CONSTRUCTION DETAILS	SHEET
SANITARY SEWER STRUCTURE DETAILS	19 of 29



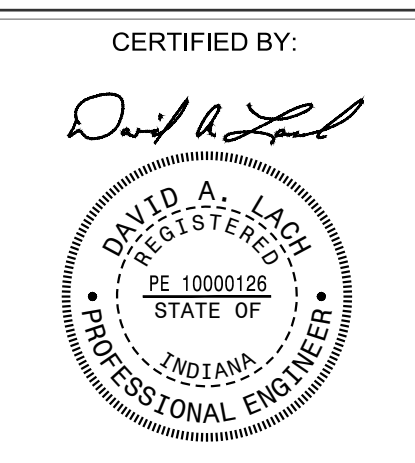
FISHERS ELEMENTARY SCHOOL
ADDITIONS & RENOVATIONS
DESIGN DEVELOPMENT
11442 LANTERN
RD, FISHERS, IN
46038

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DETAILS



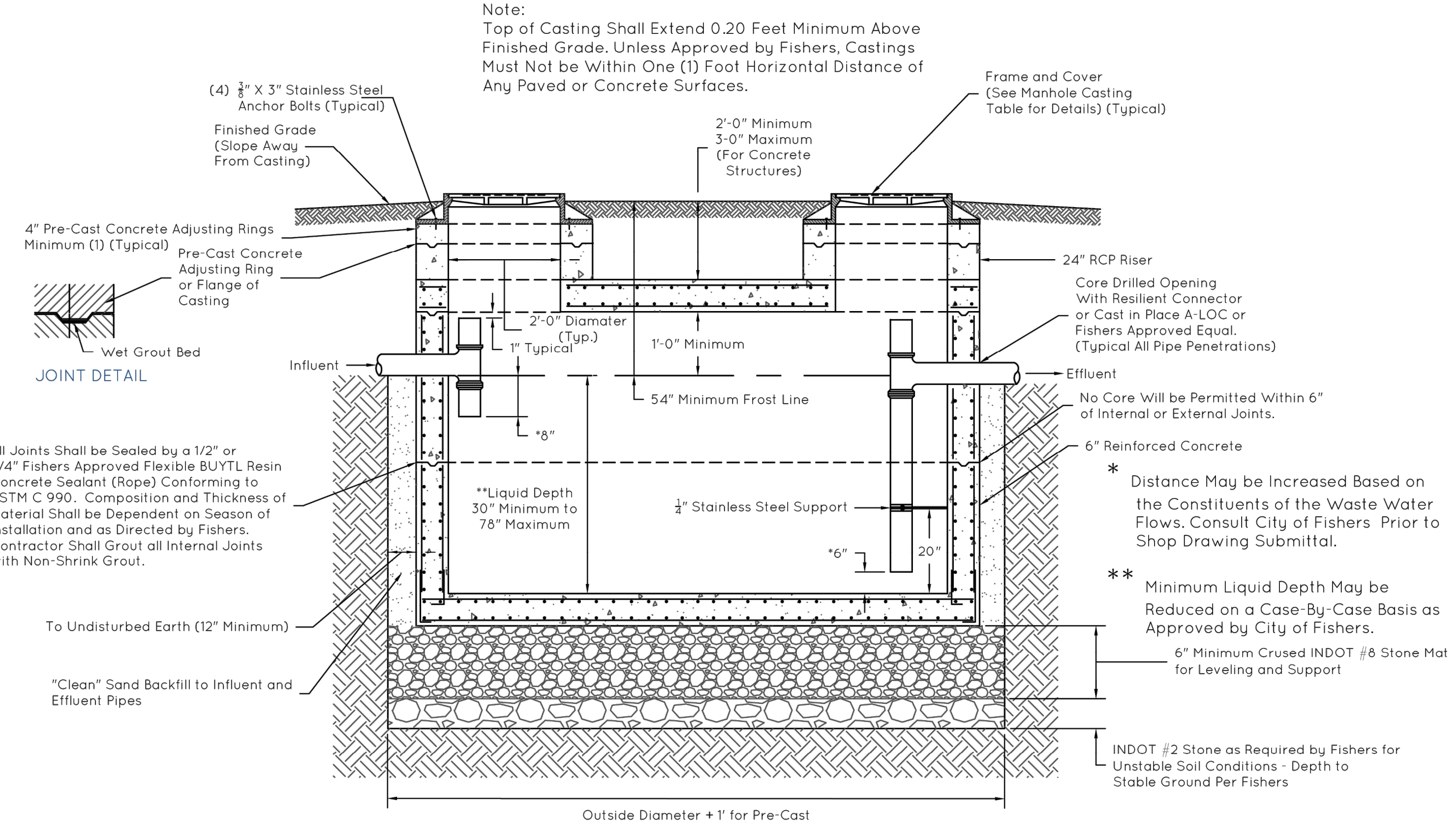
DRAWING NUMBER
C920

PROJECT NUMBER
2021119

MANHOLE CASTING TABLE		
LOCATION	MODEL	COVER
18" Inches or More Above 100 Year Flood Elevation of All Waterway	East Jordan 1060-ZI or Neenah R-1712-B OR Equivalent	Heavy Duty Solid
Less Than 18" Above 100 Year Flood Elevation of All Waterways	East Jordan 1050-ZIWT OR Neenah R-1916-E OR Equivalent	Heavy Duty Solid
LID		
OWNERSHIP	LETTERING	
Private or Fishers	"Sanitary Sewer"	

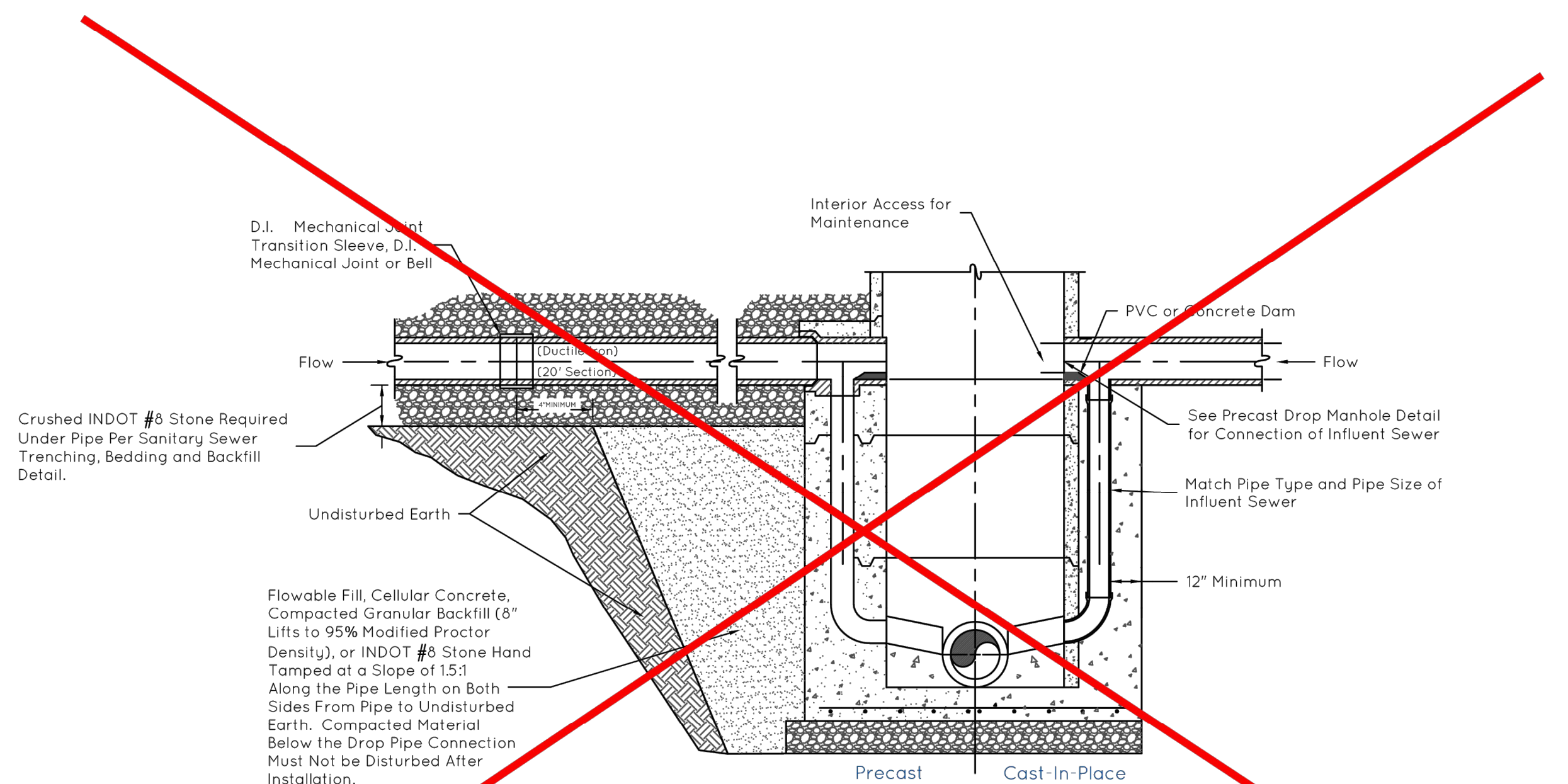
All Castings to be Supplied With Four (4) Anchor Bolt Holes

- Notes:
- Grease Trap Shall Conform to ASTM C 478 Utilizing 4,000 PSI Concrete. Contractor May Supply Grease Trap as Manufactured by ZURN SERIES Z-1170 or Jay R. Smith Manufacturing Company Series 8000.
 - Exterior Installation Must be Concrete or Cast Iron. Steel Grease Traps Shall Only be Installed Inside a Building.

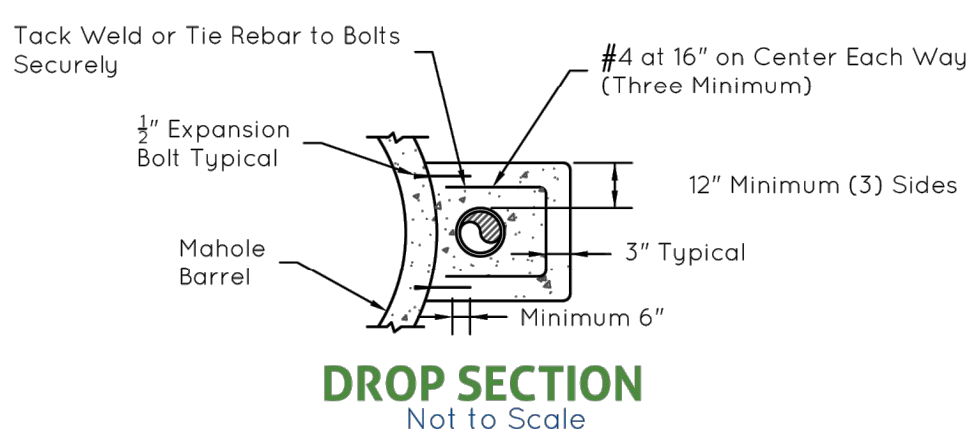


- Notes:
- Exterior grease traps must be sized according to the Indiana State Department of Health, Environmental Public Health Division Rule 410 IAC 6-10.1, "Commercial On-Site Sewage Systems" and per local requirements and codes. The sizing method for all structures must be approved by City of Fishers.
 - Top of casting shall extend 0.20 feet minimum above finished grade. Unless approved by City of Fishers, castings must not be within one (1) foot horizontal distance of any paved or concrete surfaces.
 - Shop drawings must be submitted to City of Fishers for review and approval.
 - Alternate equivalent must be approved by Director of Public Works.

EXTERIOR GREASE INTERCEPTOR
 Not to Scale



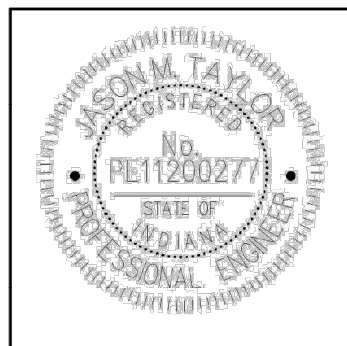
TYPICAL EXTERIOR DROP MANHOLE
 Not to Scale



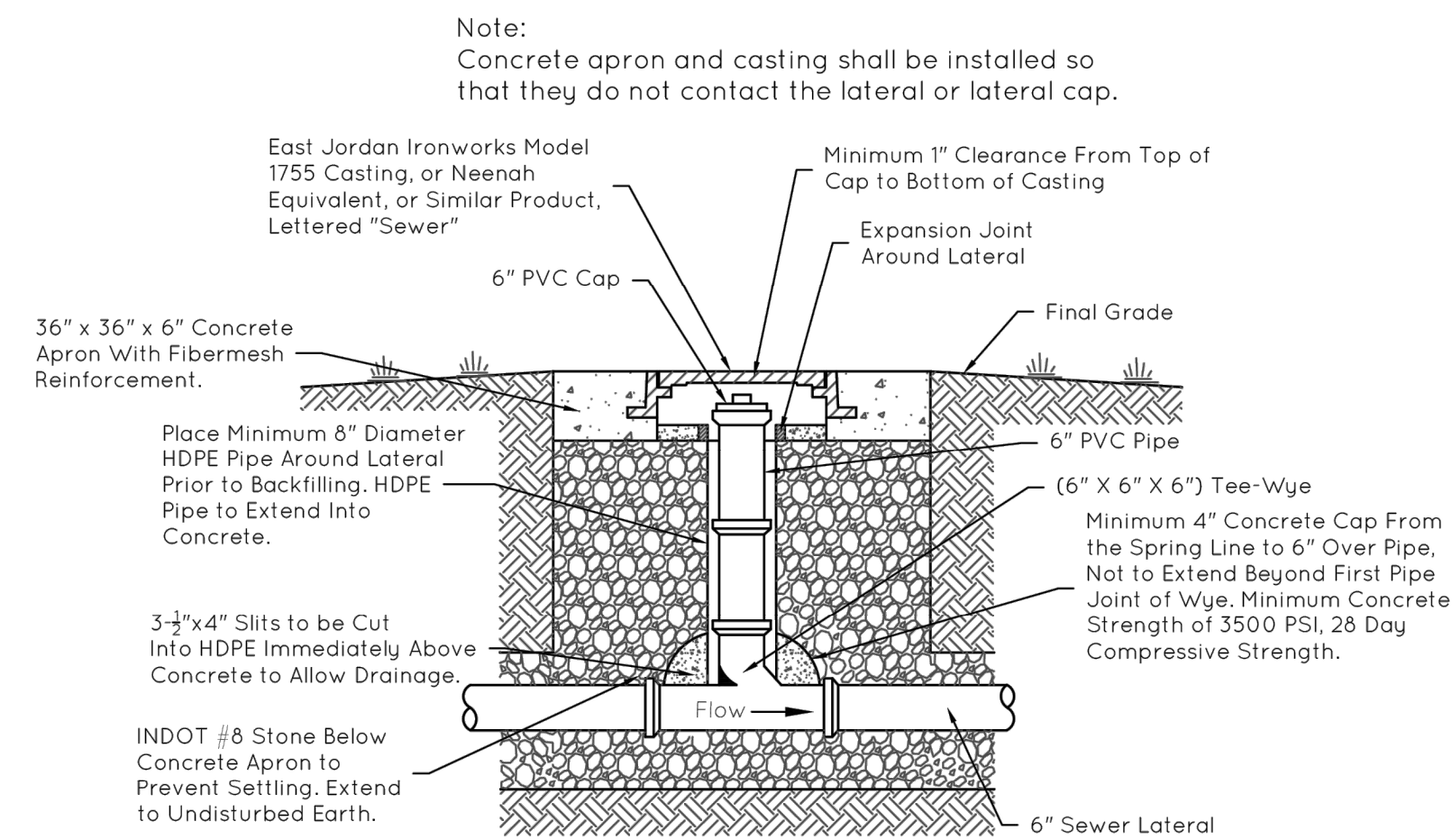
DROP SECTION
 Not to Scale

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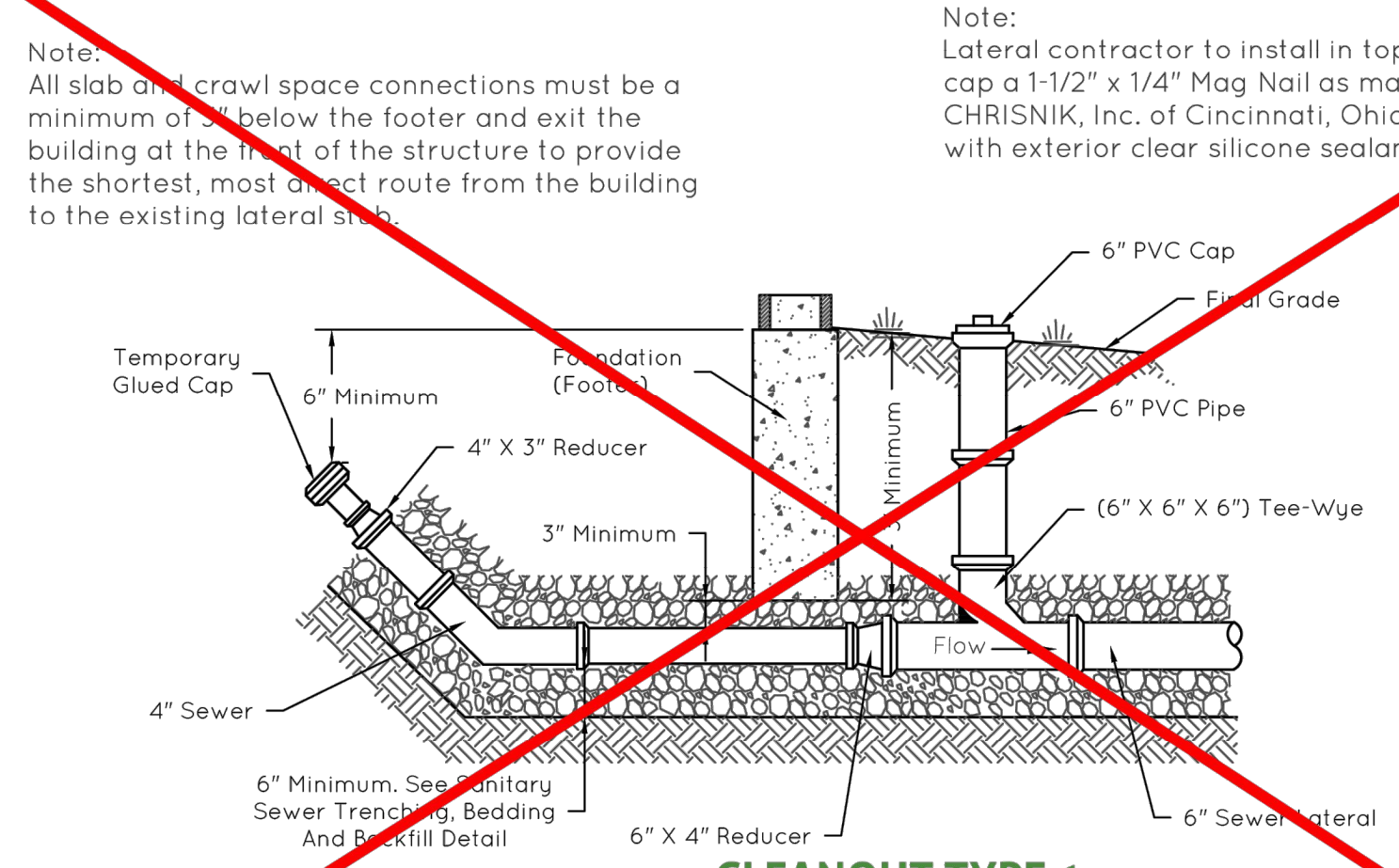
CITY OF FISHERS STANDARD CONSTRUCTION DETAILS		SHEET
SANITARY SEWER STRUCTURE DETAILS		20 of 29



CLEANOUT TYPE 2
(Hardscape Surfaces and All Other Installations Beyond Three Feet of Building)

- Notes:
- 1) Top of casting or cleanout cap shall extend 0.20 feet minimum above finished grade unless constructed within pedestrian or vehicular traffic way. Unless approved by Engineer, sanitary sewer castings or cleanouts must not be within one (1) foot horizontal distance of any paved or concrete surfaces.
 - 2) All cleanout pipes and fittings to be PVC Schedule 40 or SDR 35 when shallower than twelve (12) feet. At depths greater than twelve (12) feet, material of construction will be determined by Engineer.

TYPICAL CLEANOUTS
Not to Scale

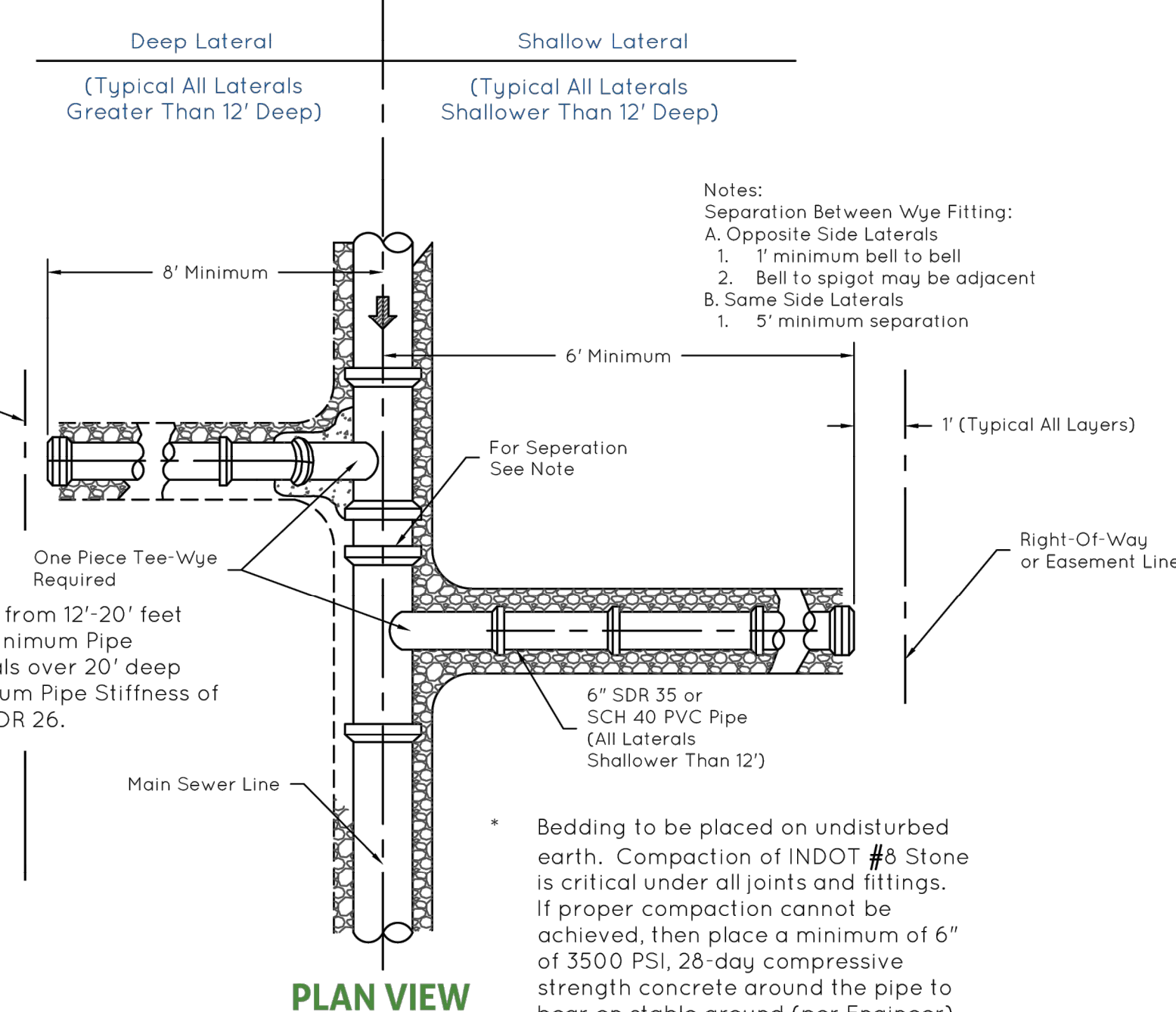


CLEANOUT TYPE 1
(Only Landscaped Surfaces Within Three Feet of Building)

Note:
Concrete apron and casting shall be installed so that they do not contact the lateral or lateral cap.

Note:
All slab on grade crawl space connections must be a minimum of 3\"/>

Note:
Lateral contractor to install in top of cleanout cap a 1-1/2\"/>

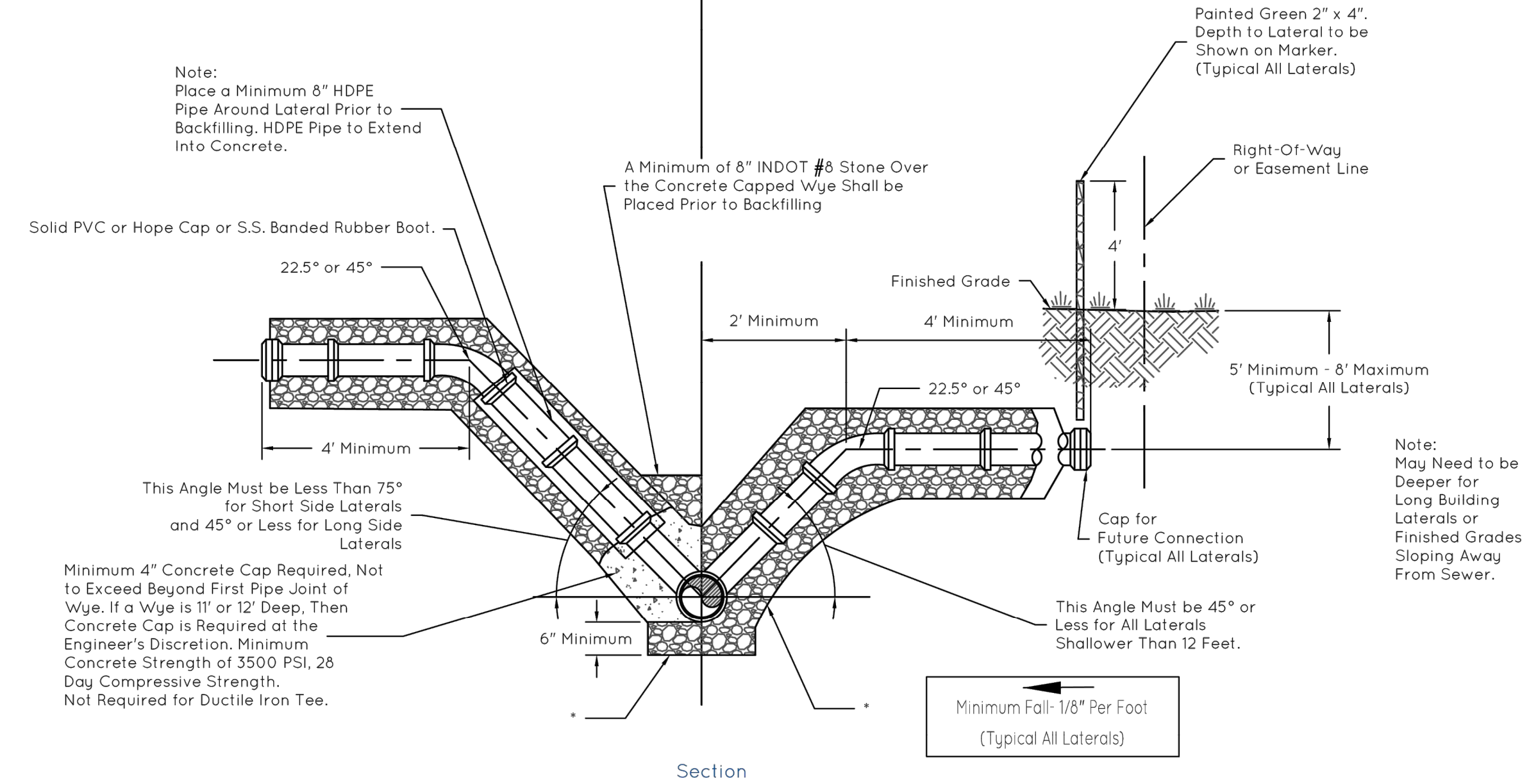


Note:
All wyes and lateral pipe from 12'-20' feet deep shall be SDR 26 (minimum Pipe Stiffness of 115). All laterals over 20' deep shall be SDR 23.5 (minimum Pipe Stiffness of 153) and wyes shall be SDR 26.

- Notes:
Separation Between Wye Fitting:
A. Opposite Side Laterals
1. 1' minimum bell to bell
2. Bell to spigot may be adjacent
B. Same Side Laterals
1. 5' minimum separation

* Bedding to be placed on undisturbed earth. Compaction of INDOT #8 Stone is critical under all joints and fittings. If proper compaction cannot be achieved, then place a minimum of 6\"/>

PLAN VIEW



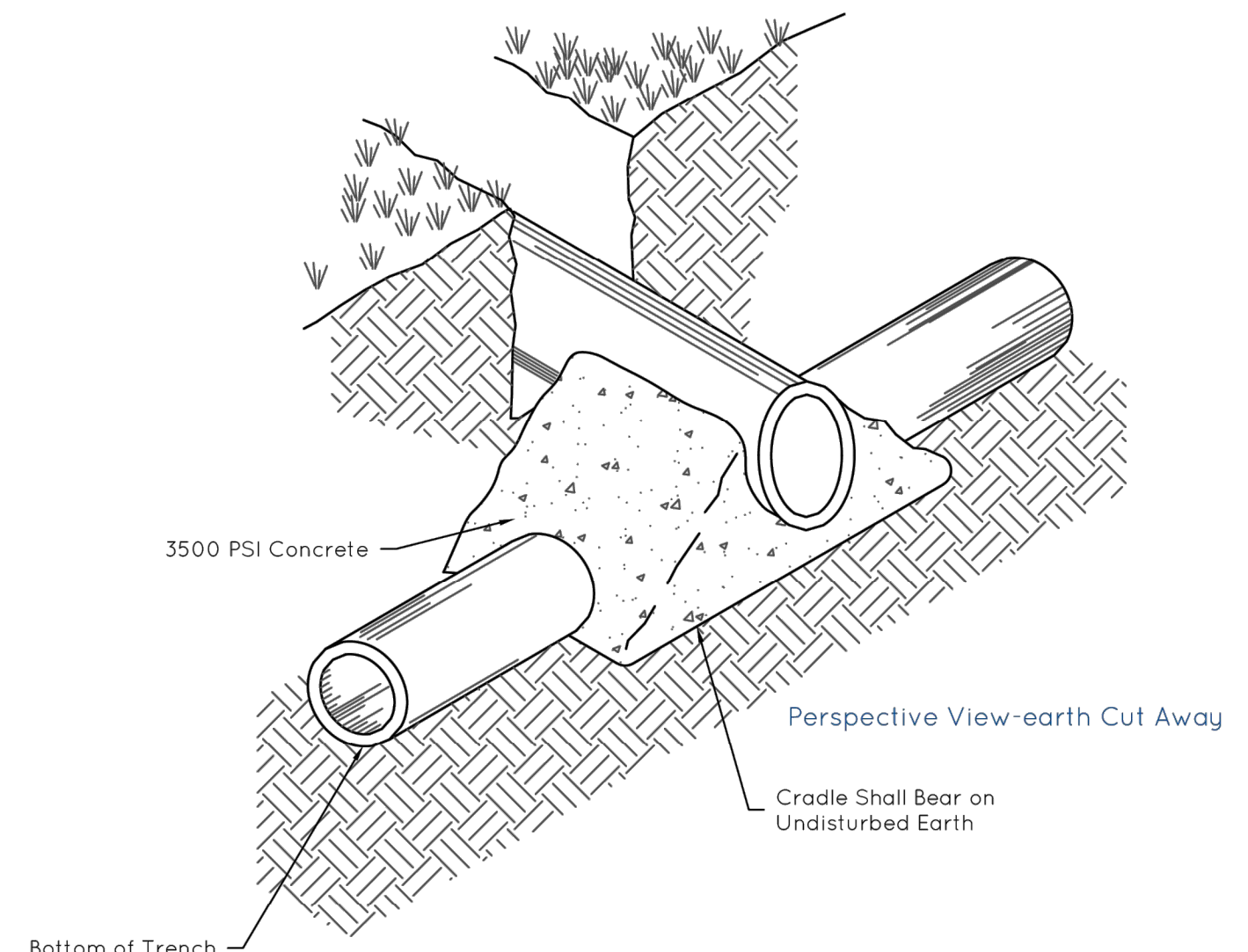
Note:
Place a Minimum 8\"/>

Section

- Notes:
- 1) Depth of service lateral shall be measured from finished grade to the top of main sewer line.
 - 2) All piping from wye to 45°/22.5° fitting at 5'-8' below grade shall be SDR 26 to 20' deep or SDR 23.5 greater than 20' deep.
 - 3) All lateral bedding shall be against undisturbed trench.

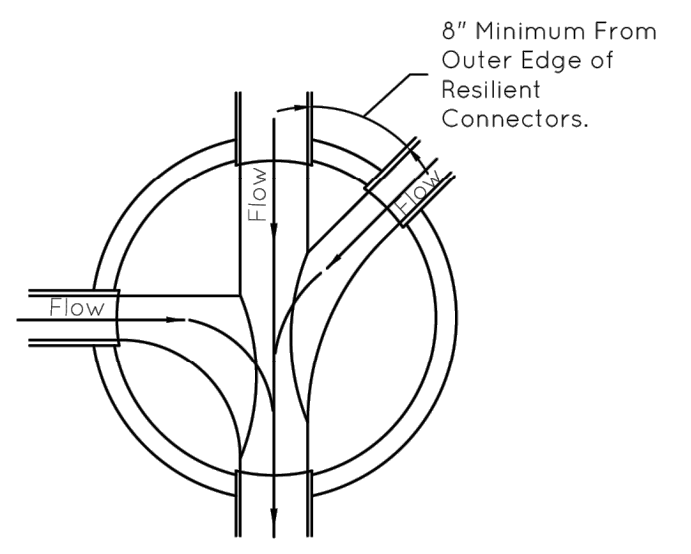
SERVICE LATERAL

Not to Scale



- Note:
- 1) To be used when clear distance (from exterior pipe diameter to exterior pipe diameter) between sanitary sewer piping (mains, laterals, force mains, etc.) and all other pipes is 18\"/>

CONCRETE CRADLE
Not to Scale

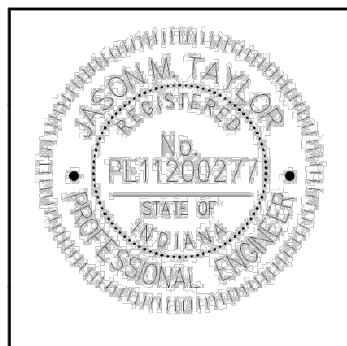


- Note:
- 1) If manhole has only one (1) influent pipe which is approximately 90 degrees to effluent pipe, then contractor shall maintain a radiused channel of same width as influent pipe.
 - 2) If separation is between 8\"/>

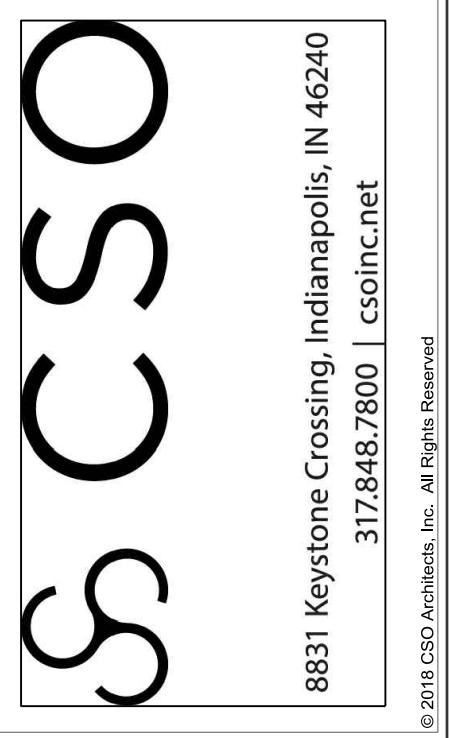
FLOW CHANNEL
Not to Scale

THESE SANITARY SEWER DETAILS AND FISHERS SANITARY SEWER SPECIFICATIONS ARE COMPLEMENTARY IN NATURE AND SHOULD NOT BE INTERPRETED INDIVIDUALLY WITHOUT REFERENCE TO THE OTHER.

JMS
1/18/2022



CITY OF FISHERS		SHEET
STANDARD CONSTRUCTION DETAILS		
SANITARY LATERAL CONNECTION, CLEAN OUT, & MISC. DETAILS		21 of 29



FISHERS ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS DESIGN DEVELOPMENT
11442 LANTERN RD, FISHERS, IN 46038

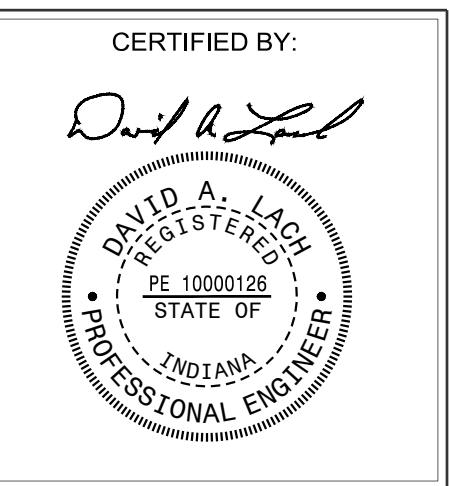
SCOPE DRAWINGS:
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REVISIONS:

4	02/12/24 ADDENDUM #4
6	03/01/24 ADDENDUM #6

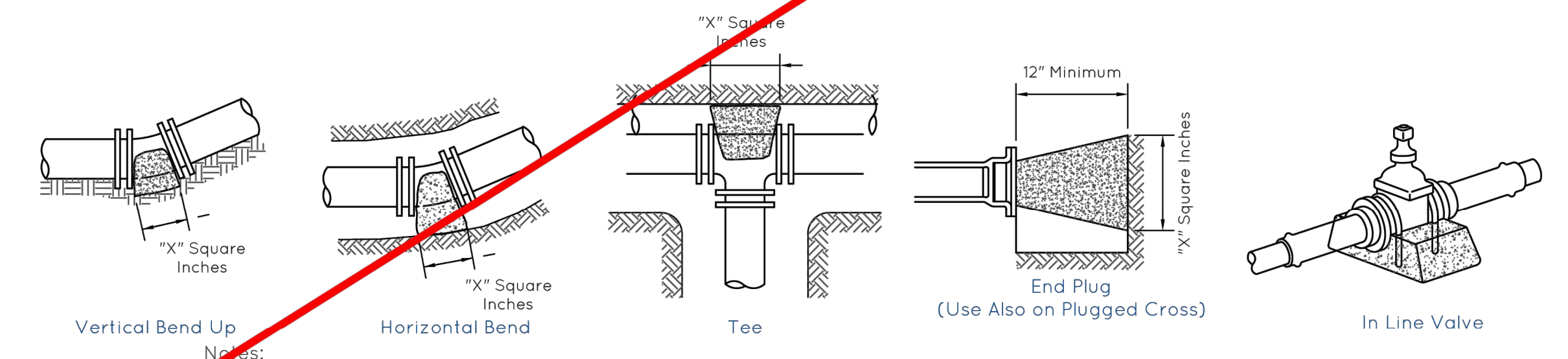
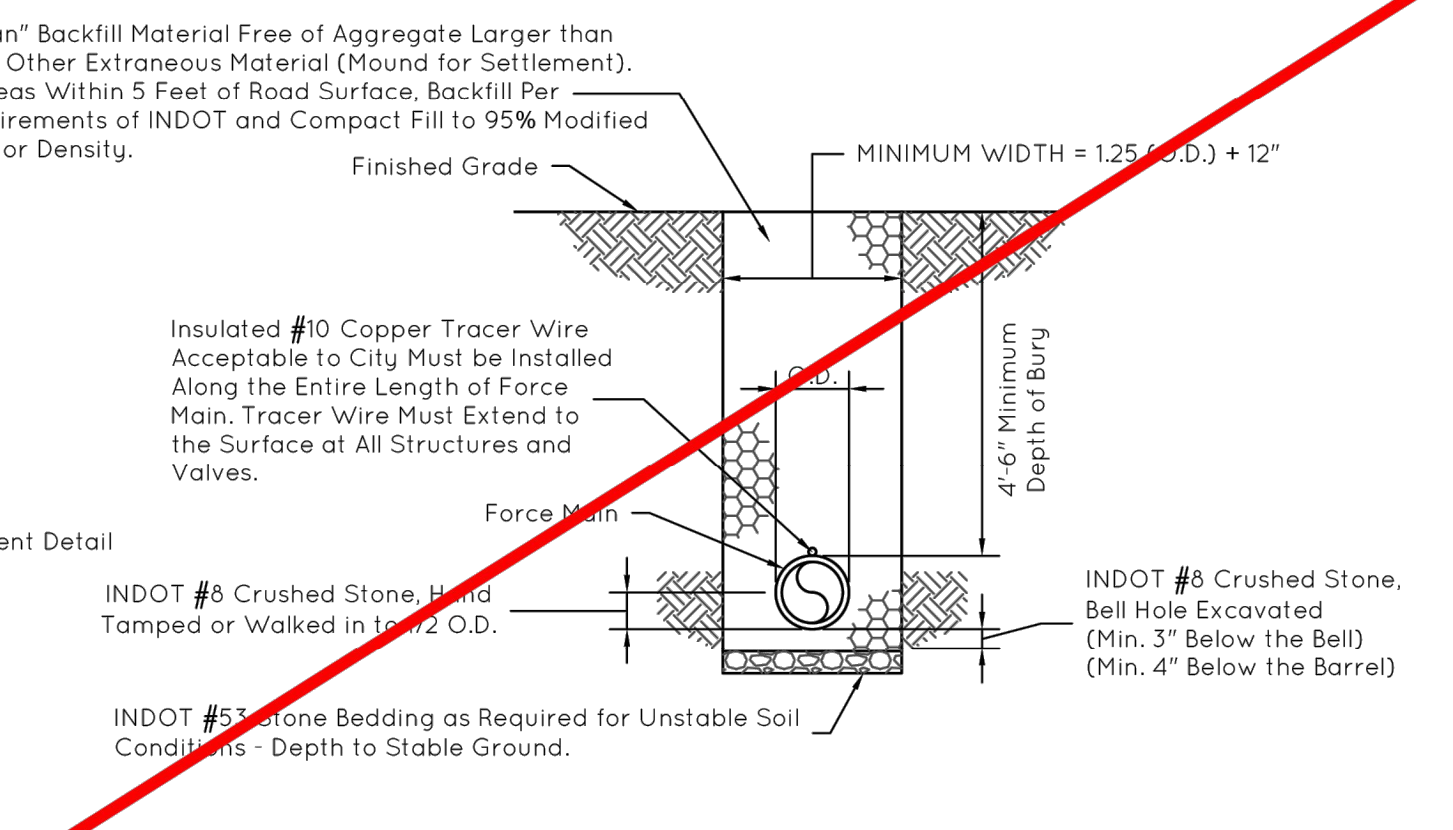
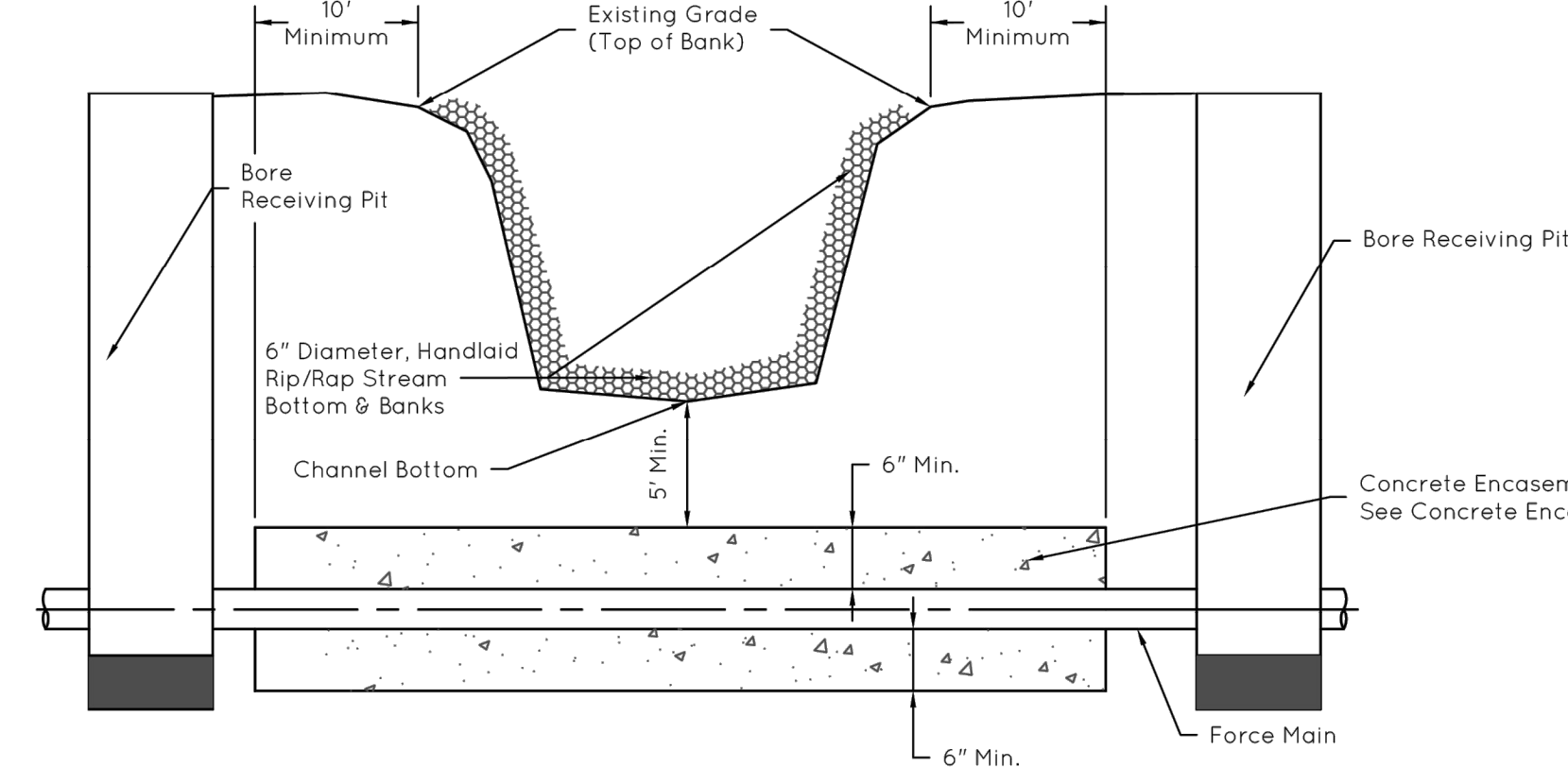
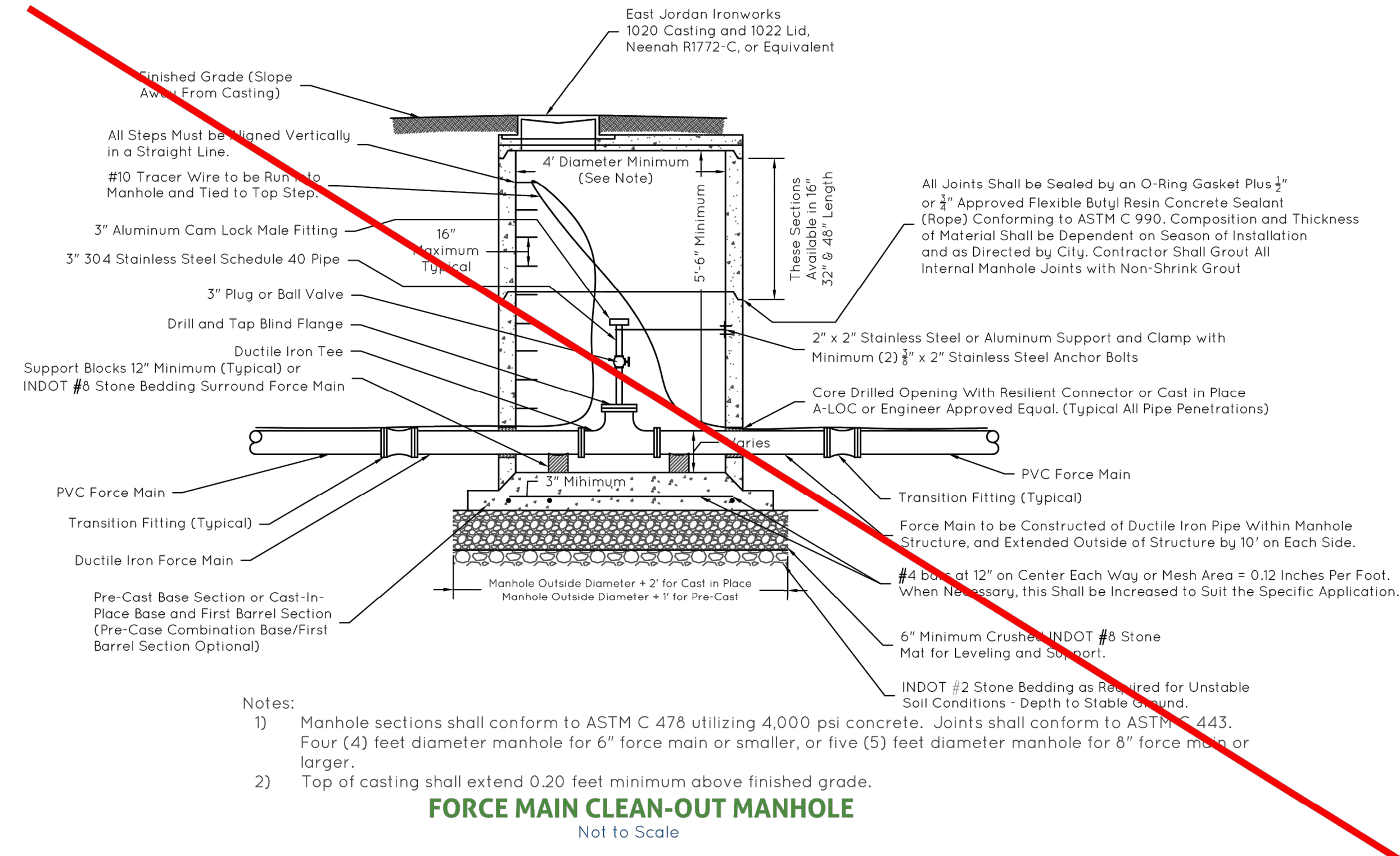
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
WATER DETAILS



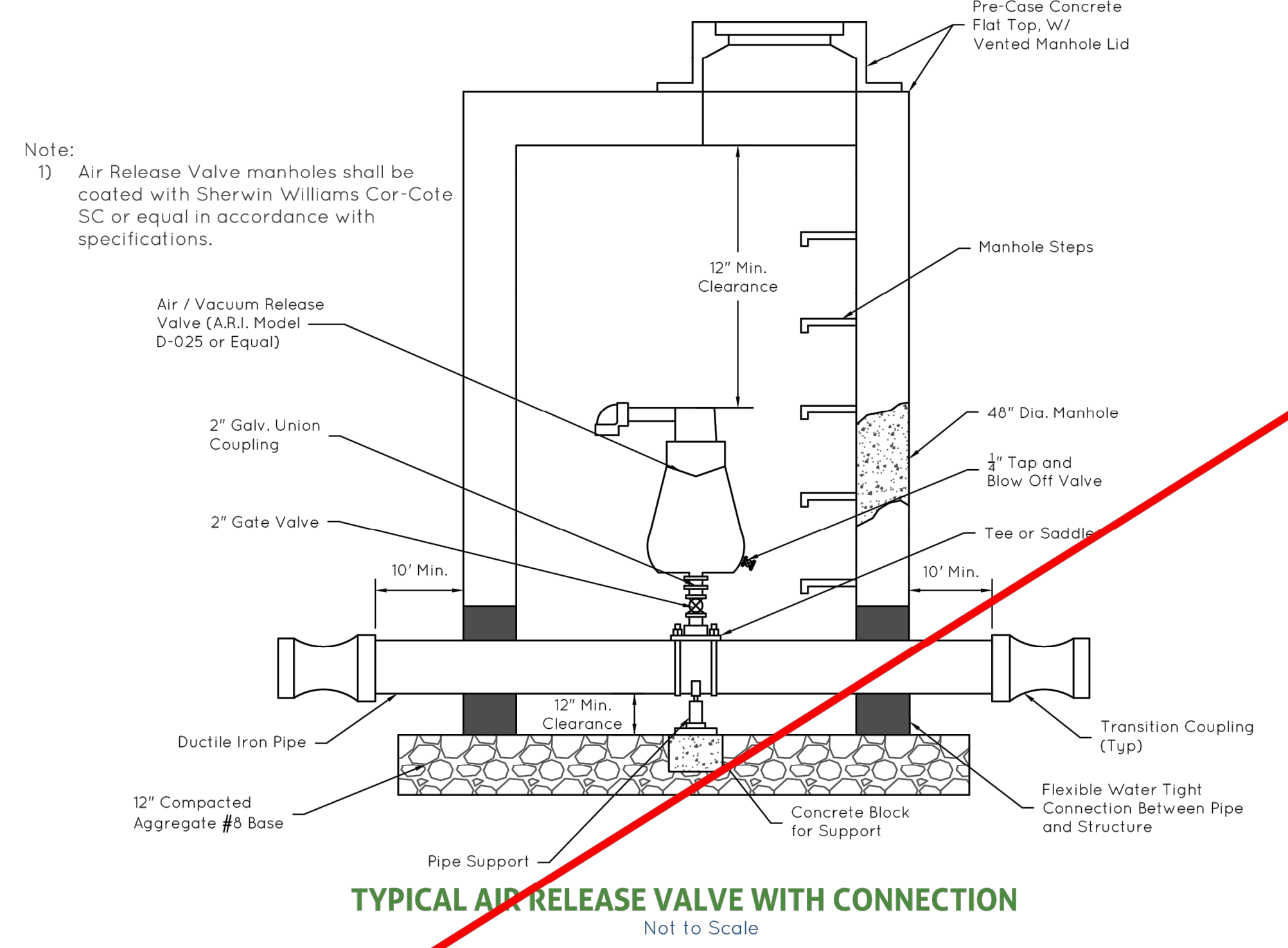
DRAWING NUMBER
C922

PROJECT NUMBER
2021119



SIZE OF THRUST BLOCK IN SQUARE INCHES

Type of Soil	1/2 (11 1/4°) & 3/8 (22 1/2°) Bend					1/4 (45°) Bend					1/4 (90°) Bend					Tee & End Plug					In Line Valve
	1.5"	2"	2.5"	3"	4"	1.5"	2"	2.5"	3"	4"	1.5"	2"	2.5"	3"	4"	1.5"	2"	2.5"	3"	4"	
Loose Sand & Gravel, Soft Clay	20	30	40	60	100	40	60	80	110	190	70	100	140	210	340	50	70	100	150	240	
Compacted Sand & Gravel, Dense Silt, Firm Till & Stiff Clay	10	20	20	30	50	20	30	40	60	100	40	50	70	110	170	30	40	50	80	120	
Very Stiff Clay, Dense Till, Shale or Rock	10	10	20	20	40	20	20	30	40	70	30	40	50	70	120	20	30	40	50	80	



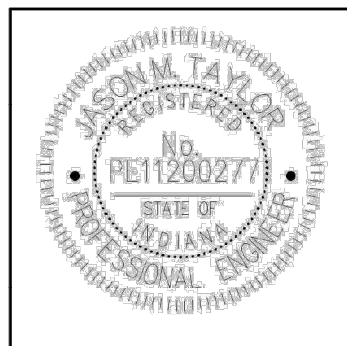
Note:
1) Manhole sections shall conform to ASTM C 478 utilizing 4,000 psi concrete. Joints shall conform to ASTM C 443. Four (4) feet diameter manhole for 6" force main or smaller, or five (5) feet diameter manhole for 8" force main or larger.

DUCTILE IRON PIPE SIZE	DEPTH OF COVER (INVERT TO FINAL GRADE)	THICKNESS CLASS
6" - 8"	Up to 20 Feet Over 20 Feet Contact Engineer	Class 50
10" - 12"	Up to 20 Feet Over 20 Feet Contact Engineer	Class 51
14" - 16"	Up to 20 Feet Over 20 Feet Contact Engineer	Class 52
18" - 20"	Up to 20 Feet Over 20 Feet Contact Engineer	Class 54
24"	Up to 20 Feet Over 20 Feet Contact Engineer	Class 55
Greater Than 24" Diameter	Greater Than 20 Feet Deep	Contact Engineer (Either Case)

NOTE: No Pressure Rated Pipe Will be Permitted

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JAD
1/18/2022

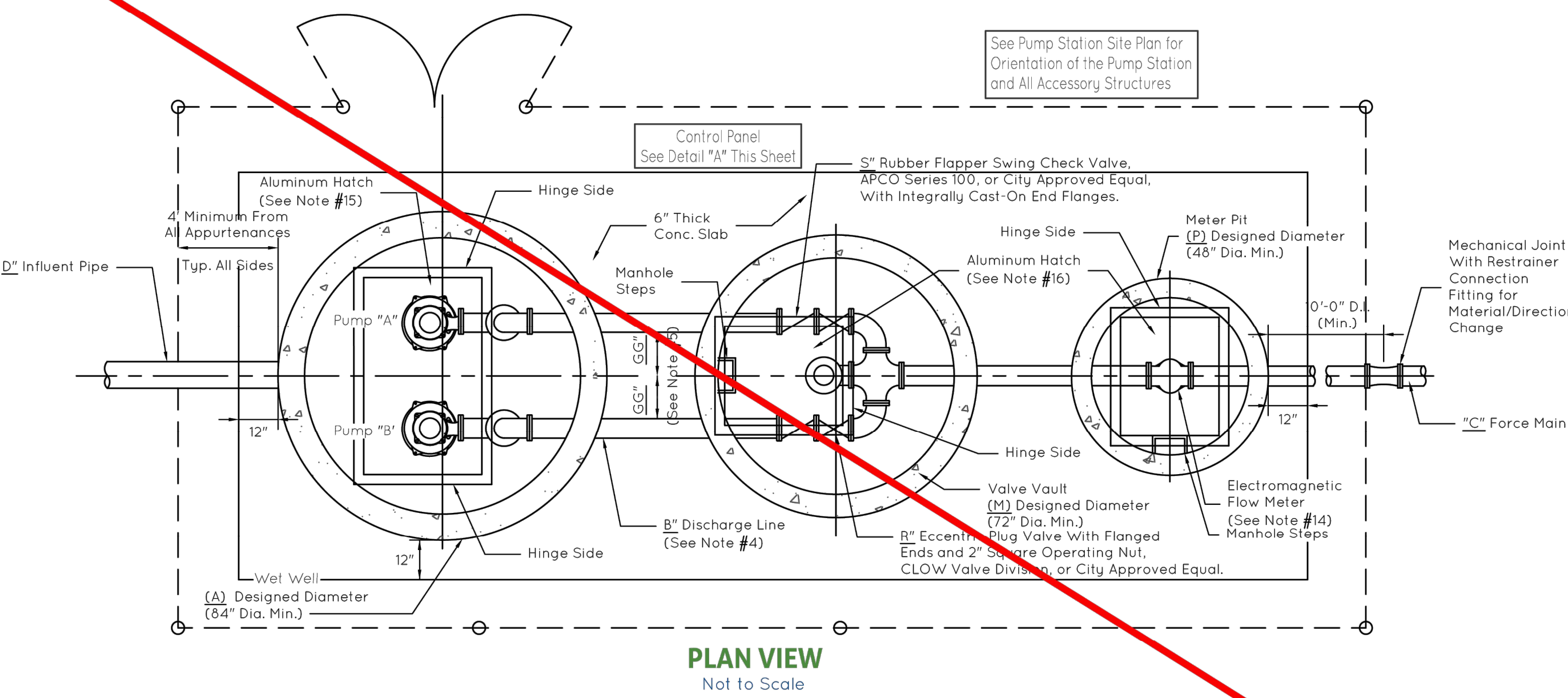


CITY OF FISHERS
STANDARD CONSTRUCTION DETAILS

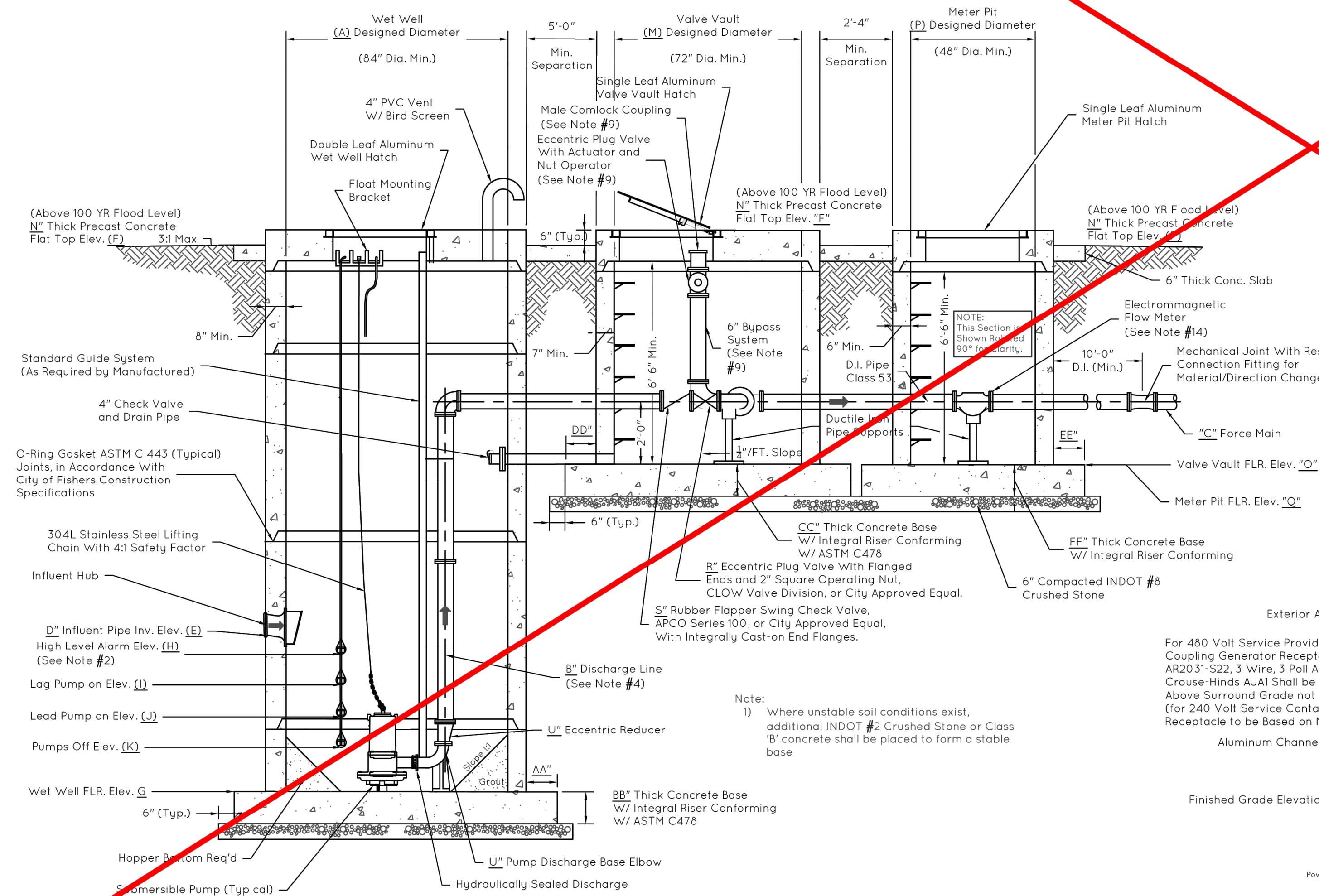
SANITARY SEWER FORCE MAIN DETAILS

SHEET
22
of
29

NOTE: *ONLY FOR LIFT STATIONS COVEYED TO FISHERS*



PLAN VIEW
Not to Scale



SECTION VIEW
Not to Scale

SUBMERSIBLE PUMP STATION SCHEDULE			
DESCRIPTION	SYMBOL	DATA (1)	ADDITIONAL INFORMATION
Pump Model Number			
Pump Capacity - GPM Each			
Total Dynamic Head - FT.			
Pump Discharge Size Ø			
Motor H.P.			
Motor RPM			
Wet Well Diameter	A		
Discharge Pipe Diameter	B		
Force Main Diameter	C		
Gravity Influent Pipe Diameter	D		
Gravity Influent Inv. EL. - FT.	E		
Wet Well, Valve Vault, & Meter Pit Top of Str. EL.	F		
Wet Well Floor EL.	G		
High Water Alarm EL. Level	H		
Lag Pump Start EL. Level	I		
Lead Pump Start EL. Level	J		
Pumps Off EL. Level	K		
(Not Used)	L		
Valve Vault Diameter	M		
Precast Concrete Flat Top (Min. 12")	N		
Valve Vault Floor EL.	O		
Meter Pit Diameter	P		
Meter Pit Floor EL.	Q		
Plug Valve	R		
Check Valve	S		
(Not Used)	T		
Eccentric Reducer	U		
Discharge Elbow Size	V		
Design Engineer to Set Dimension, Supported by Buoyancy Calculations	AA		
Design Engineer to Set Dimension, Supported by Buoyancy Calculations	BB		
Design Engineer to Set Dimension, Supported by Buoyancy Calculations	CC		
Design Engineer to Set Dimension, Supported by Buoyancy Calculations	DD		
Design Engineer to Set Dimension, Supported by Buoyancy Calculations	EE		
Design Engineer to Set Dimension, Supported by Buoyancy Calculations	FF		
Spacing Between Discharge Piping	GG		

STANDARD PUMP STATION NOTES

- Actual pump station dimensions, control settings, and pump selection to be as indicated by the design engineer's certification of the data written into the Submersible Pump Station Schedule, this sheet.
- High level alarm elevation shall be set at least 6" below the lowest incoming gravity pipe.
- Glycerin-filled pressure gauges shall be provided or manufactured by Ashcroft, or equal. The gauges shall have an operating range appropriate for the system pressure and shall display in both feet and psi. Each gauge shall be provided with an in-line snubber and a shut-off valve. The pipe shall be drilled and tapped wherever possible.
- Piping in and within the zone of influence of the excavation of the wet well, valve vault, and meter pit structure, shall be Class 53 flanged D.I. pipe or Class 50 D.I. pipe for direct bury. The minimum dimension for D.I. pipe outside of a structure is ten (10) feet. All fasteners within pump station structures, shall be 316 S.S.
- Design engineer shall space discharge piping in accordance with pump and piping dimensions and pump manufacturer's recommendations.
- Piping and fittings in wet well, valve vault, and meter pit shall be in accordance with City of Fishers construction specifications.
- Butyl rubber shall be applied to all exterior structure joints that are below grade. The Butyl rubber shall extend six (6) inches above and below the joint.
- Pump Station wet well, valve vault, and meter pit manholes shall be pre-cast concrete in accordance with ASTM C-478, with rubber gaskets, in accordance with the City of Fishers Construction Specifications.
- Comlock coupling and eccentric plug valve on by-pass line shall be 6 inch diameter with transition to force main size occurring with concentric reducer placed on the top of base elbow. The plug valve's operating nut shall be directly accessible with a standard lee wrench. Show location on the structure layout sketch required in Note 15.
- Sewer connections and force main penetrations of wet well, valve vault, and meter pit structure shall be KOR-N-SEAL, A-LOK, or Dura-Seal, in accordance with the City of Fishers Construction Specifications. Portland cement grout may be used to seal penetrations on non-sewer connections.
- Generator receptacle, with factory sealed switch, shall match to receive of the City of Fishers' portable generator set.
- Provide an Allen Bradley or "Engineer Approved" SCADA System that incorporates: 1 spare input/output, 1 input for flowmeter 4-20mA signal, 5 outputs to control being lead remote on, lead remote off, lag remote on, lag remote off and remote alarm acknowledge, and 10 inputs from control being hatch(es) open alarm, panel(s) open alarm, Pump "A" on, Pump "B" on, Pump "A" fail, Pump "B" fail, phase fail alarm, power fail alarm, high water alarm and pump(s) seal failure, remote lead pump override and remote lag pump override.
- Electromagnetic Flowmeter shall be a Siemens series 5100 W or "Engineer Approved", flanged, with remote transmitter and accidental submergence kit. Interconnecting cable for power to transmitter shall be provided of appropriate length for application. Flowmeter transmitter shall be integral mounted and shall produce a 4-20mA signal for use by the SCADA System. Flowmeter size shall be based upon the projected flow through the force main, the force main size, and per the manufacturer's recommendation for highest accuracy over the operational range of the lift station.
- Provide an aluminum double-door access hatch and frame assembly with safety man catches for pump station wet well to be installed in concrete top. Pump manufacturer shall size door opening in order to facilitate ease in removing pumps from wet well. Contractor and pump manufacturer shall coordinate to match size and location of opening in concrete top to dimensions of hatch provided by pump manufacturer.
- Provide an aluminum single-door access hatch and frame assembly with safety man catches for valve vault and meter pit, respectively, to be installed in concrete top. The contractor and pump manufacturer shall provide a dimensionally accurate sketch of the valve vault and meter pit showing all valves, piping, and equipment to confirm the proper location and size of the access hatch for the structure.

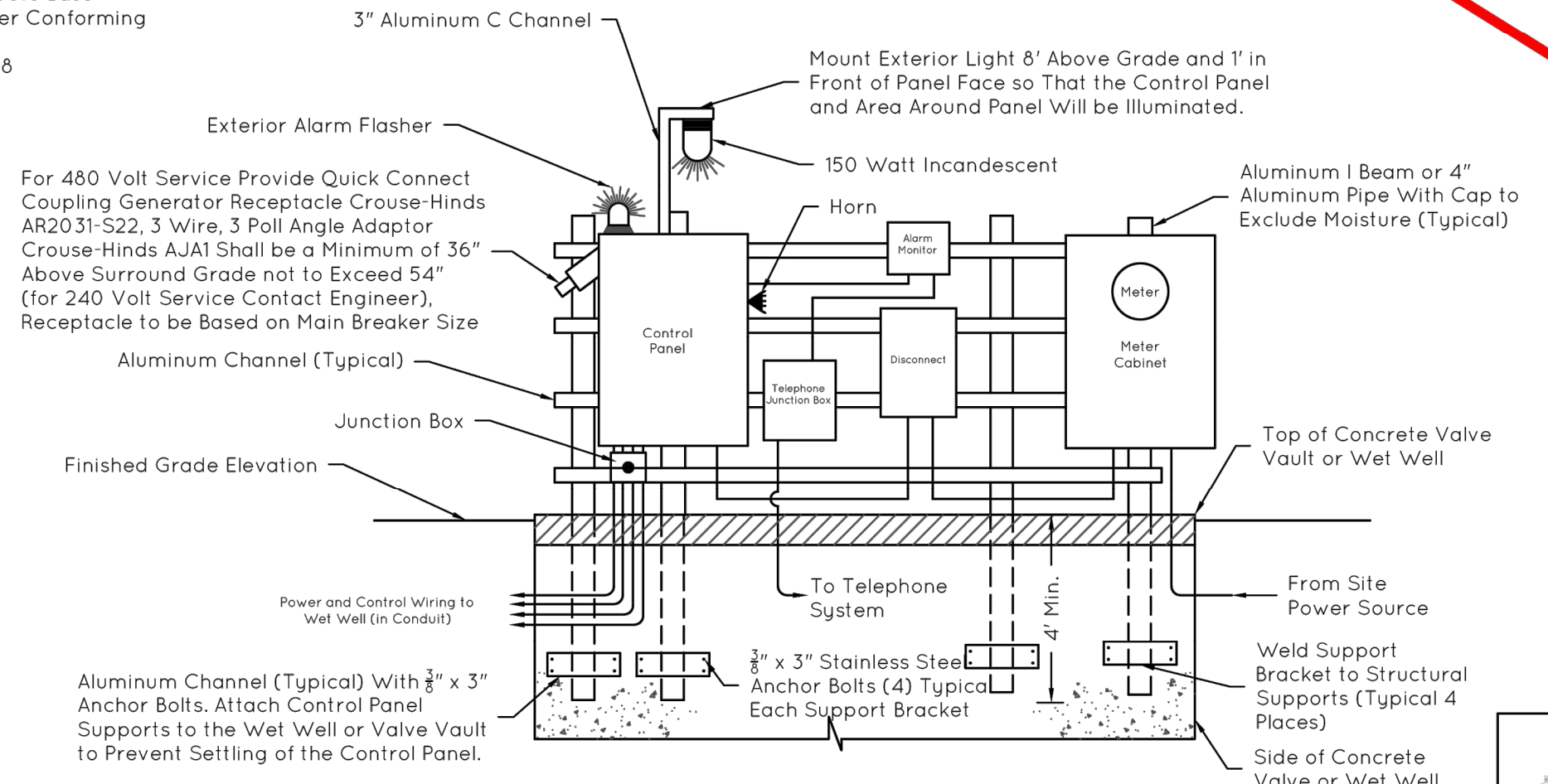
Design Engineers Certification of Actual Pump Station Dimensions, Control Settings, & Pump Selection as Indicated on Pump Station Schedule.

Reminder - For Pump Station Site Plan Data Project Engineer Shall Provide:

- Wet Well and Valve Vault Orientation
- Control Panel Location
- Fencing and Gate Locations
- Asphalt Access Drive from Public Right-of-Way
- Parking Stops
- Grading and Drainage Arrows
- Boundary of Pump Station Parcel to be Granted to Fishers'
- Area for Emergency Generator
- All Other Information That Will Allow for a Detailed Review of the Site Plan

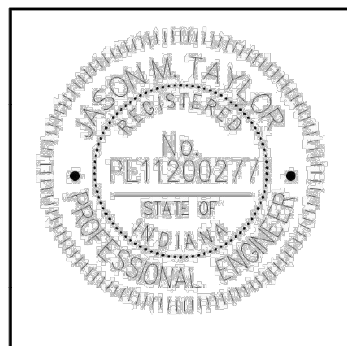
DATE

Notice: This certification is limited to those standards and guidelines per this sheet, and does not include information written into Pump Station Schedule. Construction is subject to construction drawings, shop drawings, and Design Engineer's design data written into Pump Station Schedule, and its certification thereof.

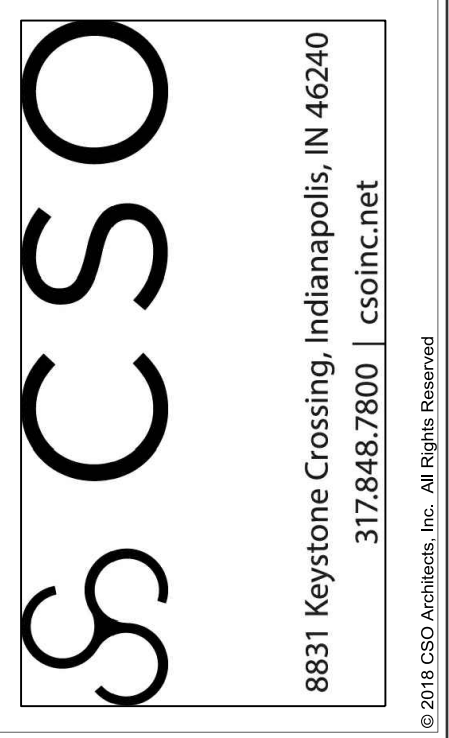


CONTROL PANEL DETAIL "A"
Not to Scale

THESE SANITARY SEWER DETAILS AND FISHERS SANITARY SEWER SPECIFICATIONS ARE COMPLEMENTARY IN NATURE AND SHOULD NOT BE INTERPRETED INDIVIDUALLY WITHOUT REFERENCE TO THE OTHER.



CITY OF FISHERS STANDARD CONSTRUCTION DETAILS SANITARY SEWER DUPLEX PUMP STATION DETAILS AND NOTES	SHEET
	23 of 29



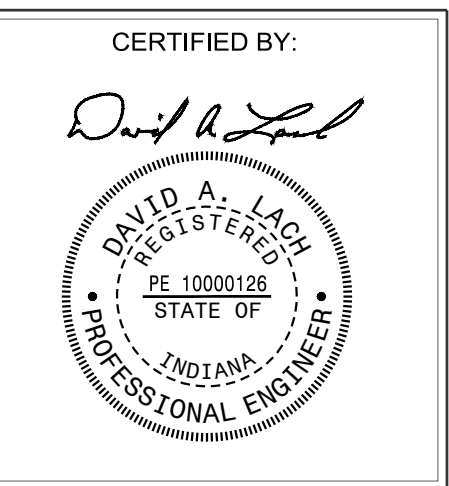
FISHERS ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS DESIGN DEVELOPMENT
11442 LANTERN RD., FISHERS, IN 46038

SCOPE DRAWINGS:
These drawings indicate the general scope of the project in terms of architectural design concept, the dimensions of the building, the major architectural elements and the type of structural, mechanical and electrical systems. The drawings do not necessarily indicate or describe all work required for full performance and completion of the project.

REVISIONS:		
4	02/12/24	ADDENDUM #4
6	03/01/24	ADDENDUM #6

ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
WATER DETAILS



DRAWING NUMBER
C924

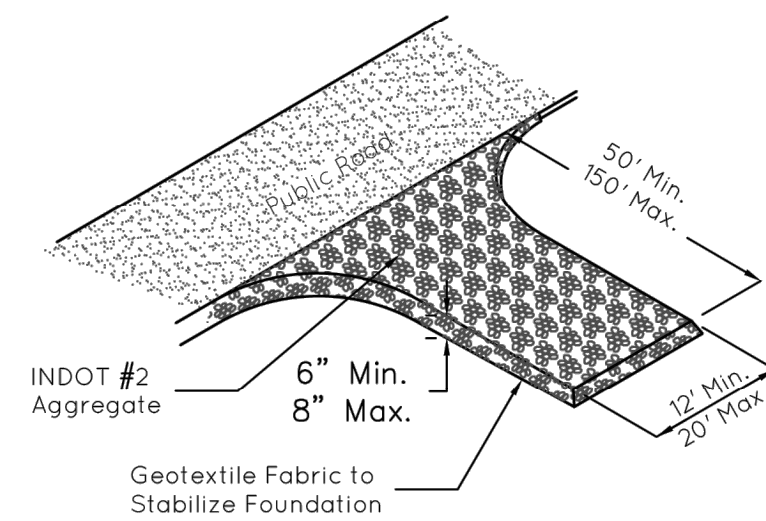
PROJECT NUMBER
2021119

GENERAL SWWP NOTES FOR INDIVIDUAL LOTS

- All storm water quality measures, including erosion and sediment control, necessary to comply with the requirements for 327 IAC 15-5, Rule 5, City of Fishers, and/or general construction practices must be implemented in accordance with the plan and sufficient to satisfy Chapter 7 of the City of Fishers STSM.
- Provisions for erosion and sediment control on individual building lots regulated under the original permit of a project site owner must include the following requirements:
 - The individual lot operator, whether owning the property or acting as the agent of the property owner, shall be responsible for erosion and sediment control requirements associated with activities on individual lots.
 - Installation and maintenance of a stable construction site access.
 - Installation and maintenance of appropriate perimeter erosion and sediment control measures prior to land disturbance.
 - Sediment discharge and tracking from each lot must be minimized throughout the land disturbing activities on the lot until permanent stabilization has been achieved.
 - Clean-up of sediment must be redistributed or disposed of in a manner that is in compliance with all applicable statutes and rules.
 - Adjacent lots disturbed by an individual lot operator must be repaired and stabilized with temporary or permanent surface stabilization.
- In accordance with Chapter 7 of the City of Fishers STSM, final stabilization of an individual lot project site is achieved when:
 - All land disturbing activities have been completed
 - The establishment, at a uniform density of seventy percent (70%) across one-hundred percent (100%) of the disturbed area, of vegetative cover or permanent non-erosive material that will ensure the resistance of the soil to erosion, sliding, or other movement.

CONSTRUCTION SEQUENCE FOR INDIVIDUAL LOTS

- Clearly delineate areas of trees, shrubs, and vegetation that are to be undisturbed. To prevent root damage, the areas delineated for tree protection should be at least the same diameter as the crown.
- Install perimeter silt fence at construction limits. Position the fence to intercept runoff prior to entering drainage swales.
- Avoid disturbing drainage swales if vegetation is established. If drainage swales are bare, install erosion control blankets or sod to immediately stabilize.
- Install appropriate inlet protection for all inlets on the property.
- Install curb inlet protection, on both sides of the road, for all inlets along the property frontage and along the frontage of adjacent lots, or install temporary catch basin inserts in each inlet and frequently clean.
- Install gravel construction entrance flush with the back of existing curb, extending from the street to the building pad.
- Perform primary grading operations.
- Contain erosion from any soil stockpiles created on-site with silt fence around the base.
- Establish temporary seeding and straw mulch on disturbed areas.
- Construct the home and install utilities.
- Install downspout extenders once the roof and gutters have been constructed. Extenders should outlet to a stabilized area.
- Re-seed any areas disturbed by construction and utilities installation with temporary seed mix that will be left inactive for seven (7) days.
- Grade the site to final elevations. Add topsoil as needed to minimize erosion of underlying soil and to quickly establish grass.
- Install permanent seeding or sod.

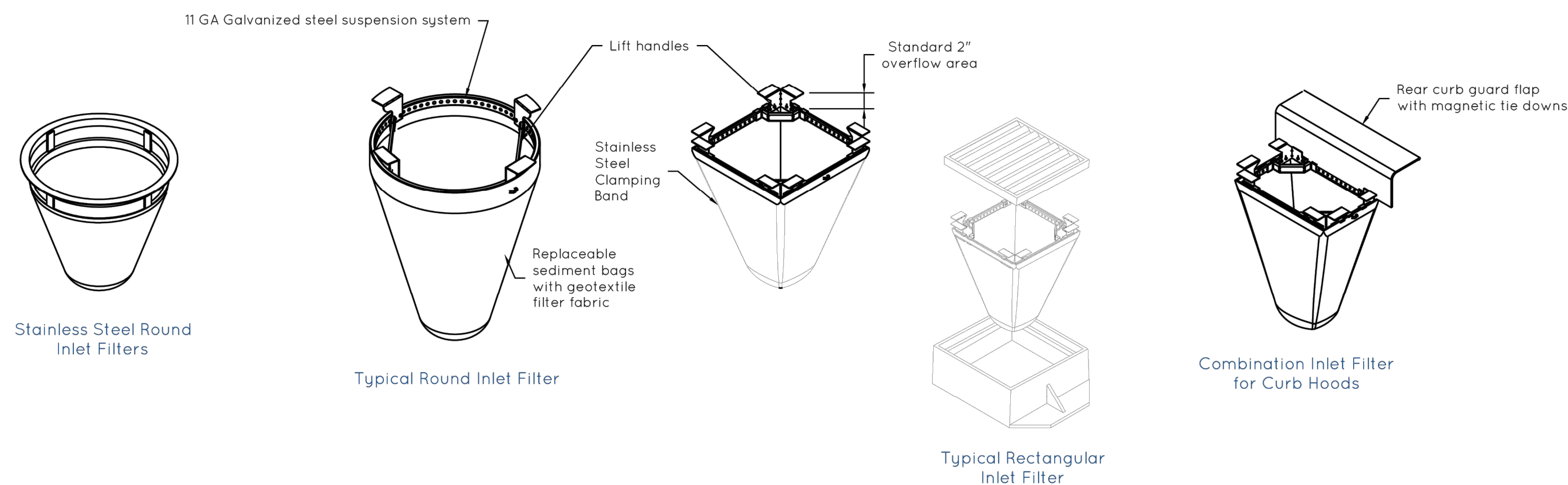


- Notes:
- Must keep top of stone at road elevation.
 - Width to be adjusted to match wider entrance, if required.

Site Size	Entrance Width	Entrance Length	Stone Depth
Less than 2 acres	12' min	50' min	6" min
2 acres or more	20' min	150' min	8" min

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

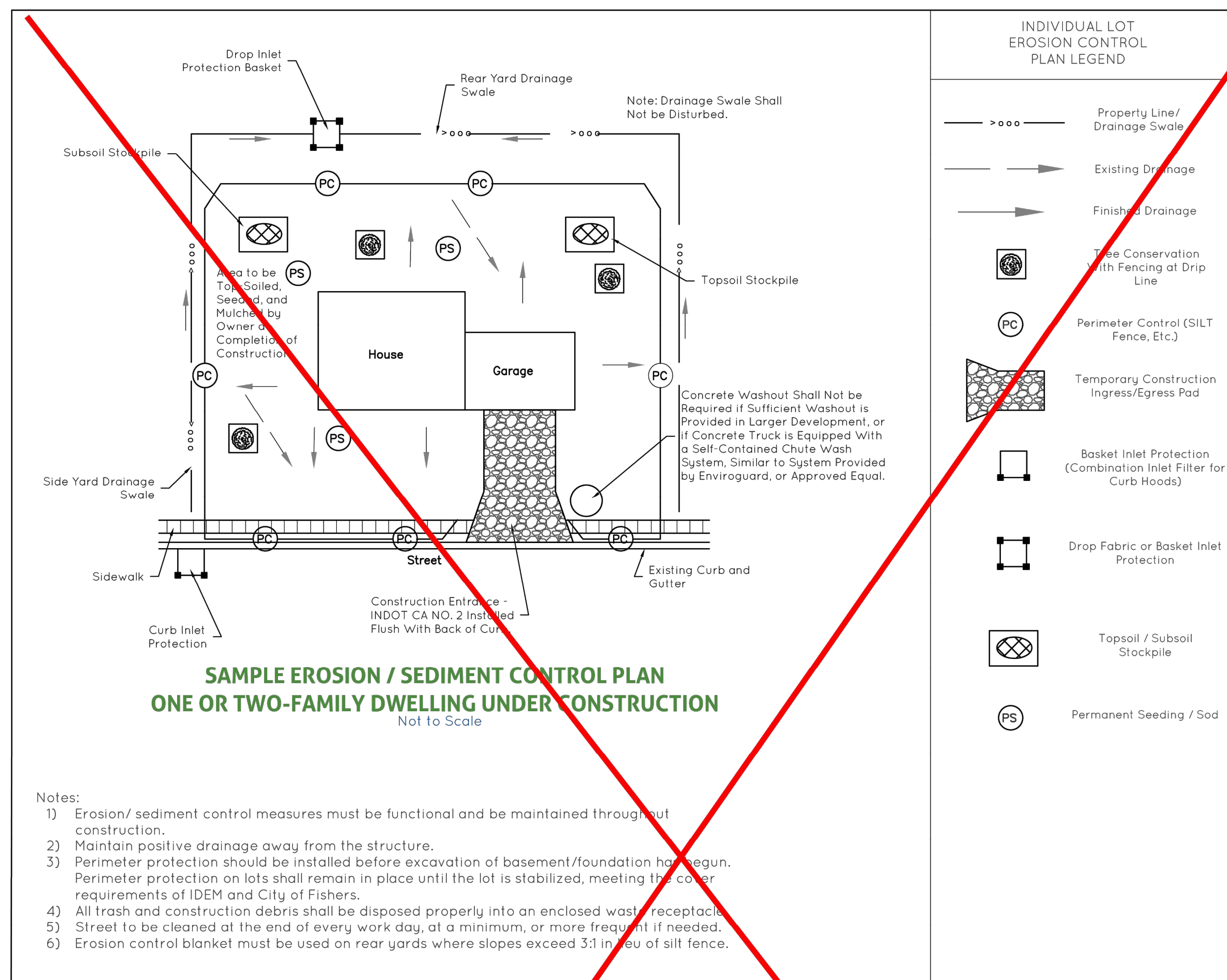
Not to Scale



- Note:
- Measures to be used in accordance with manufacturer's stated installation and maintenance specifications, and limitations

BASKET INLET PROTECTION

Not to Scale



SAMPLE EROSION / SEDIMENT CONTROL PLAN
ONE OR TWO-FAMILY DWELLING UNDER CONSTRUCTION

Not to Scale

- Notes:
- Erosion / sediment control measures must be functional and be maintained throughout construction.
 - Maintain positive drainage away from the structure.
 - Perimeter protection should be installed before excavation of basement/foundation has begun. Perimeter protection on lots shall remain in place until the lot is stabilized, meeting the requirements of IDEM and City of Fishers.
 - All trash and construction debris shall be disposed properly into an enclosed waste receptacle.
 - Street to be cleaned at the end of every work day, at a minimum, or more frequent if needed.
 - Erosion control blanket must be used on rear yards where slopes exceed 3:1 in lieu of silt fence.

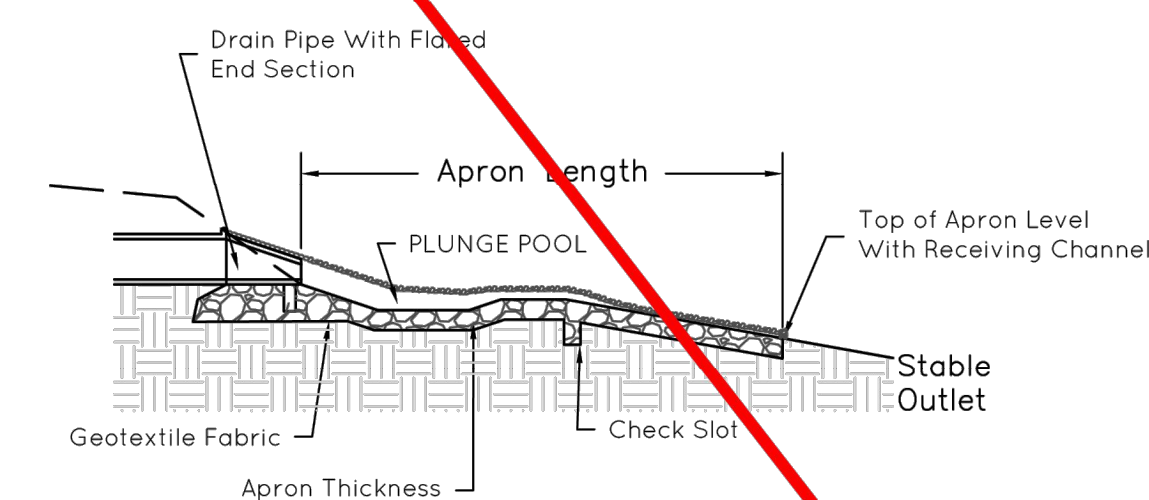
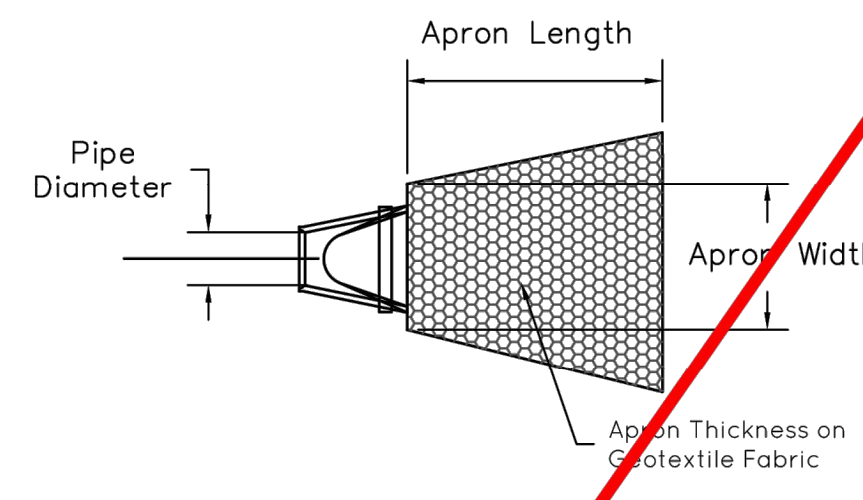
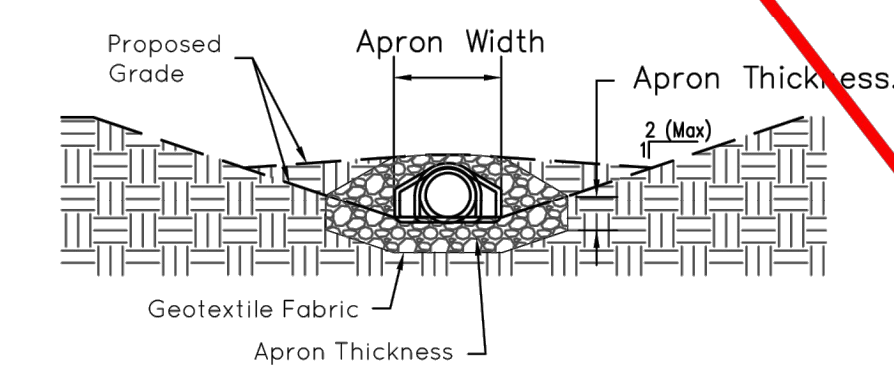


Table 1. Sizing for Flow Dissipaters at end Sections¹

PIPE SIZE	AVG. RIPRAP DIAMETER	APRON ² WIDTH	APRON ³ LENGTH
8 in.	3 in.	2 to 3 ft.	5 to 7 ft.
12 in.	5 in.	3 to 4 ft.	6 to 12 ft.
18 in.	8 in.	4 to 6 ft.	8 to 18 ft.
24 in.	10 in.	6 to 8 ft.	12 to 22 ft.
30 in.	12 in.	8 to 10 ft.	14 to 28 ft.
36 in.	14 in.	10 to 12 ft.	16 to 32 ft.

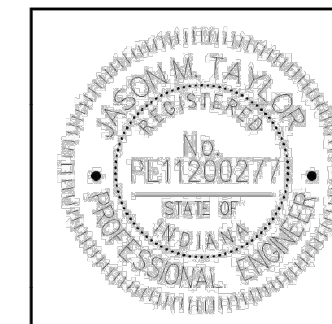
- For Larger or Higher Flows Consult a Registered Engineer
- Apron Width of the Narrow End of Apron (Pipe or Channel Outlet)
- Select Length Taking Into Consideration the Low Flow (Nor Pressure Head) or High Flow (Pressure Head) Conditions of the Culvert Pipe.



Apron Thickness = 1.2 Times the Max Stone Diameter for a D50 Stone Size of 15 Inches or Larger
Apron Thickness = 1.5 Times the Max Stone Diameter for a D50 Stone Size of 15 Inches or Smaller

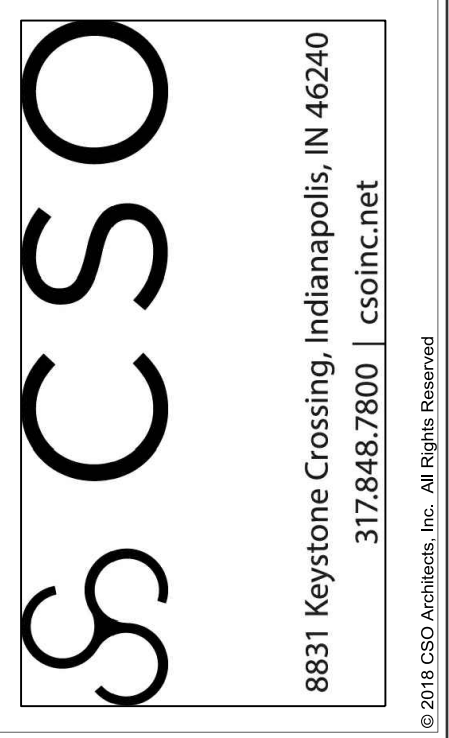
ENERGY DISSIPATER (OUTLET PROTECTION)

Not to Scale



JMT
1/18/2022

CITY OF FISHERS STANDARD CONSTRUCTION DETAILS	SHEET
	24 of 29
EROSION CONTROL DETAILS	



FISHERS ELEMENTARY SCHOOL
ADDITIONS & RENOVATIONS
DESIGN DEVELOPMENT
11442 LANTERN RD., FISHERS, IN 46038

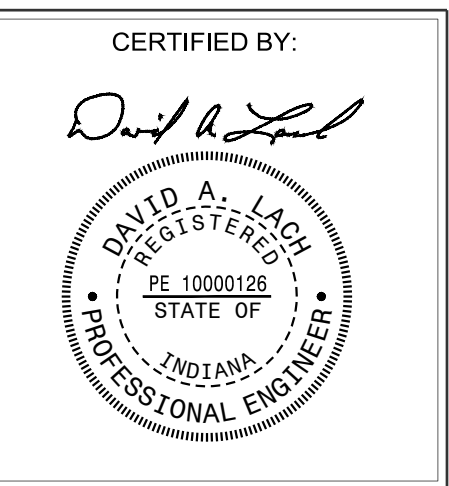
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REVISIONS:

4	02/12/24	ADDENDUM #4
6	03/01/24	ADDENDUM #6

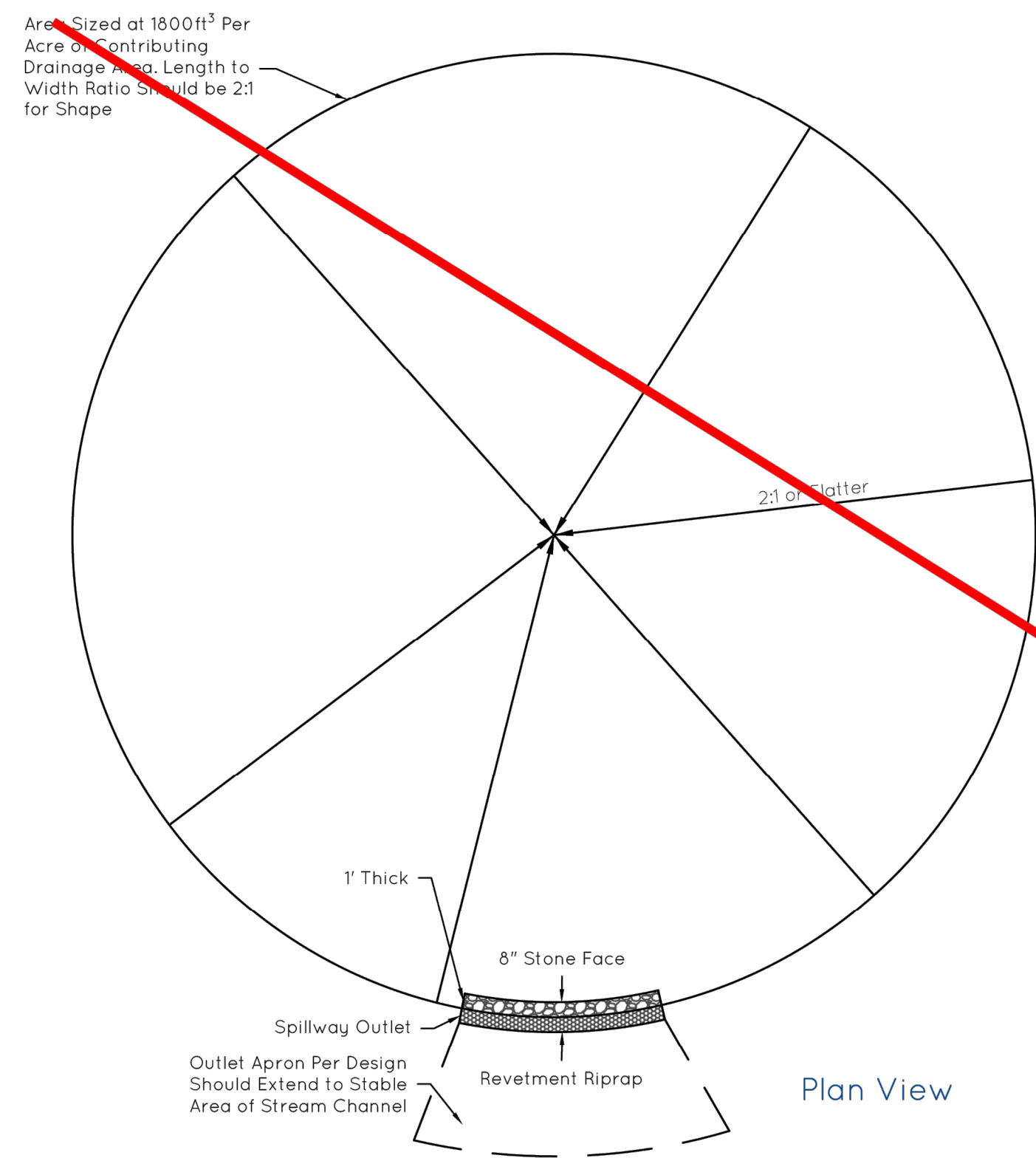
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
WATER
DETAILS

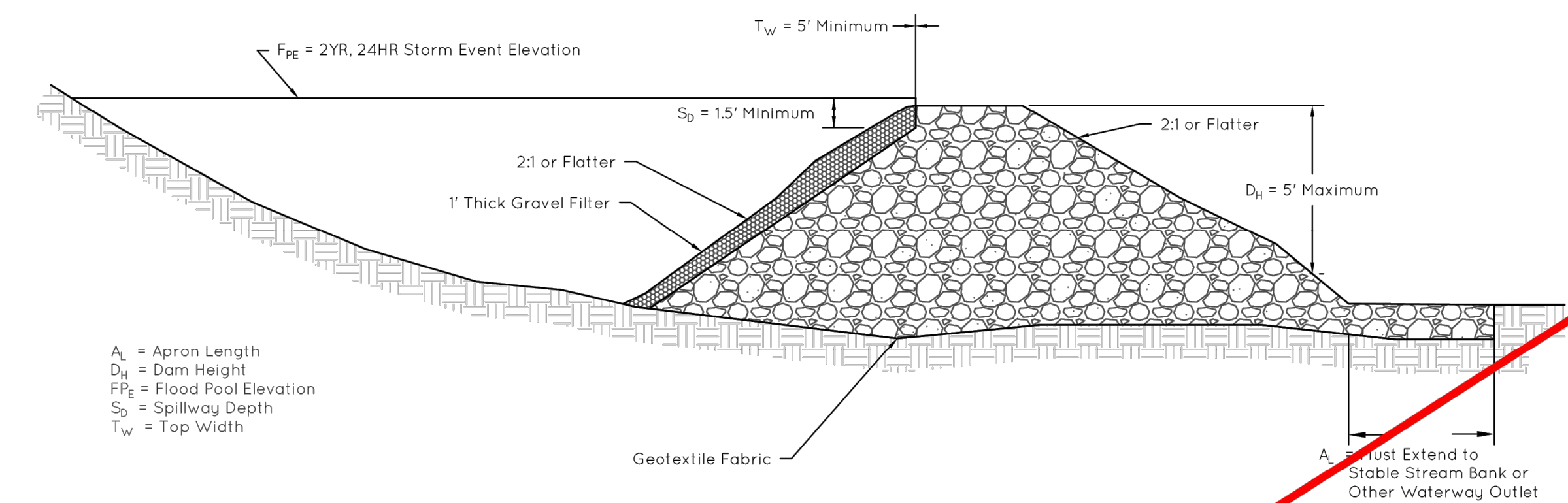


DRAWING NUMBER
C925

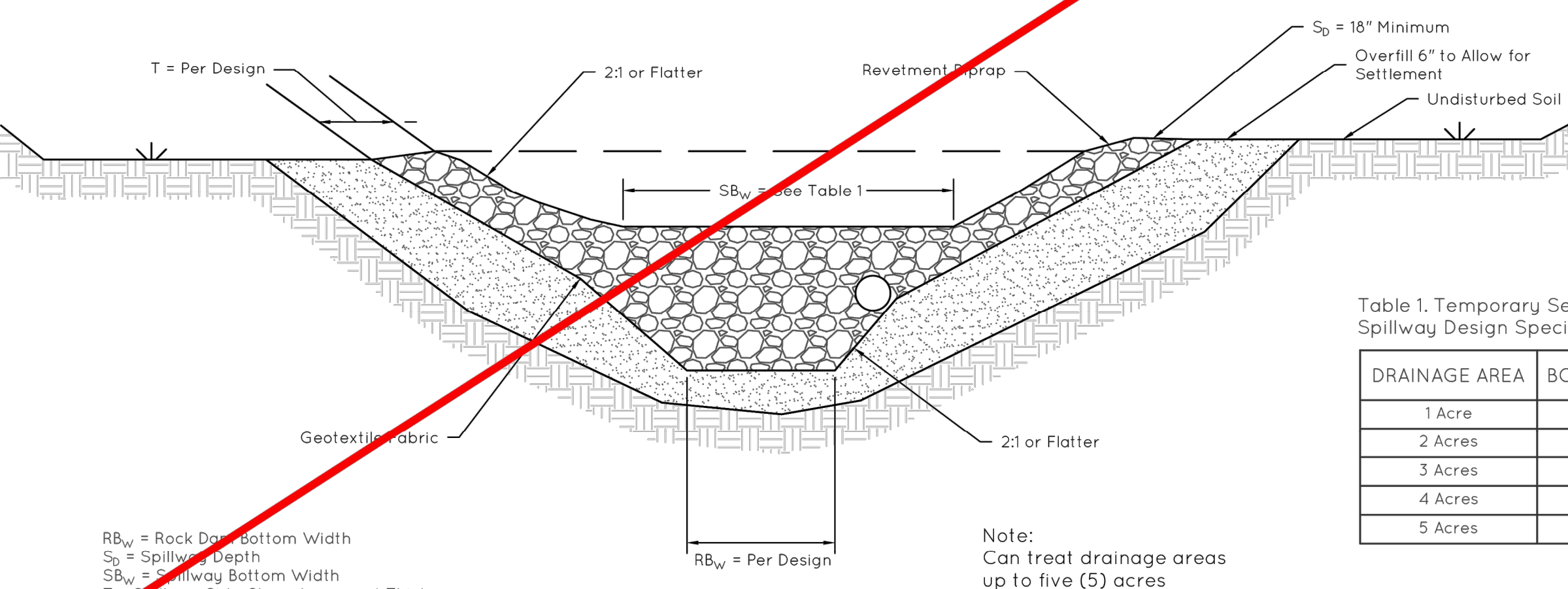
PROJECT NUMBER
2021119



Plan View



Profile View



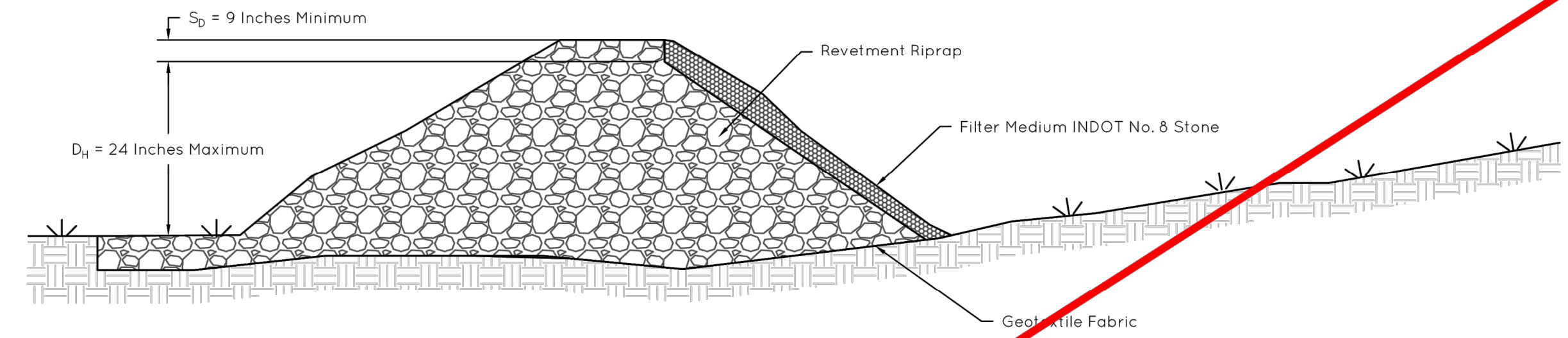
Cross-Section View

TEMPORARY SEDIMENT TRAP
Not to Scale

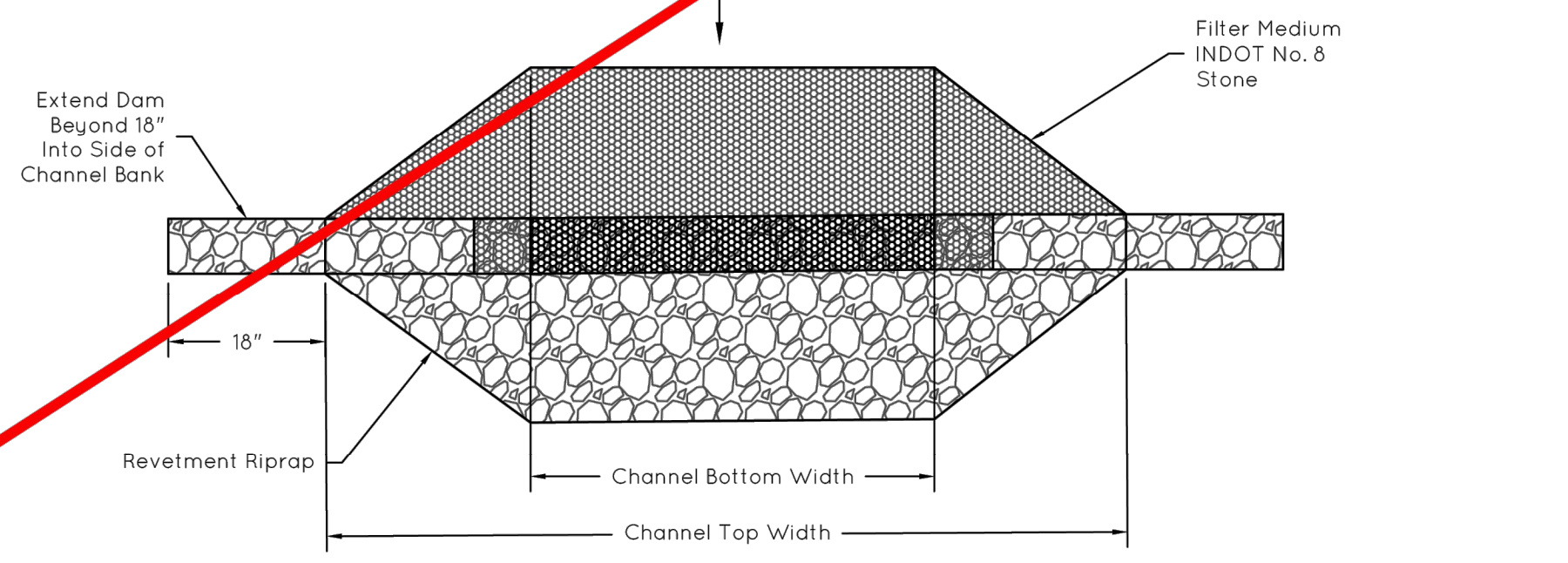
Table 1. Temporary Sediment Trap Spillway Design Specifications

DRAINAGE AREA	BOTTOM WIDTH
1 Acre	4 Feet
2 Acres	6 Feet
3 Acres	8 Feet
4 Acres	10 Feet
5 Acres	12 Feet

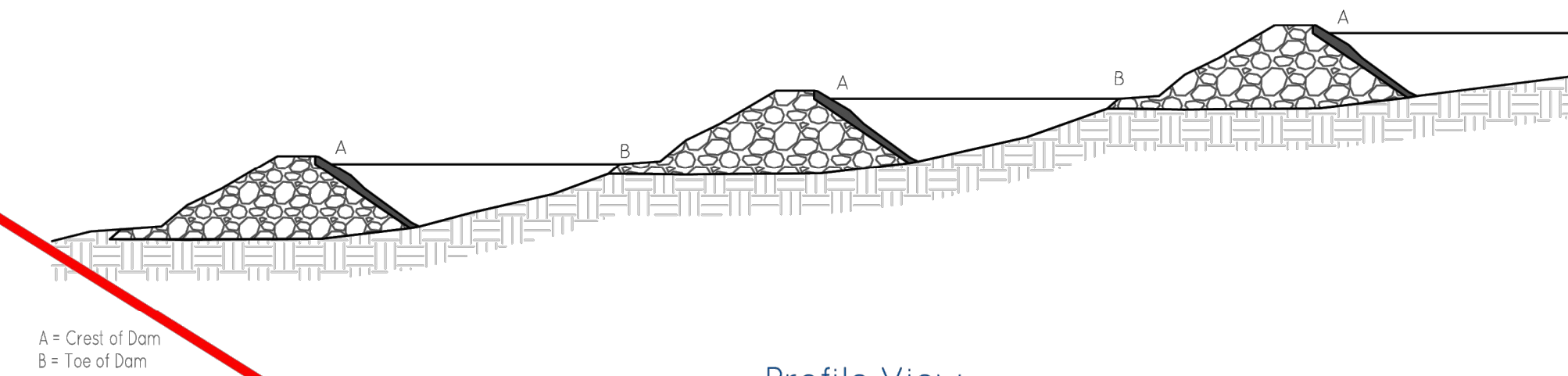
Note:
Can treat drainage areas up to five (5) acres



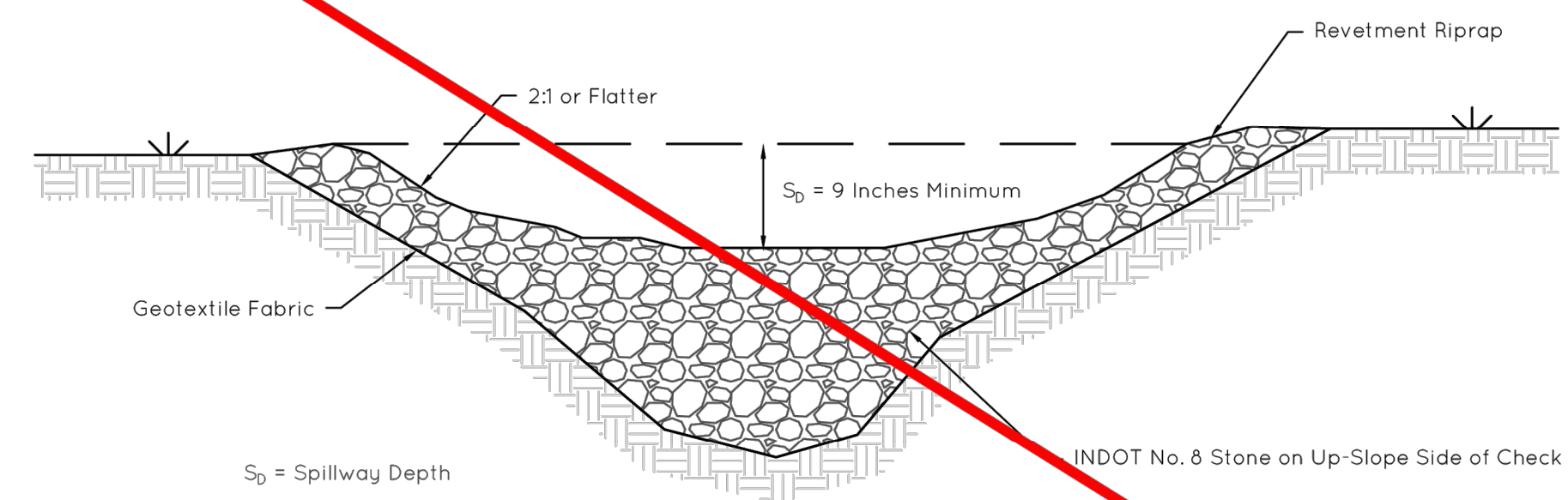
Profile View



Plan View



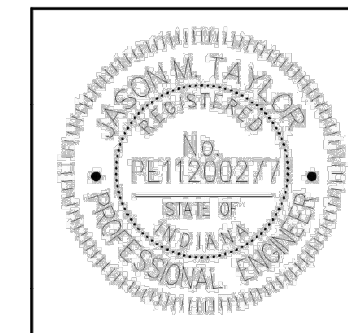
Profile View



Cross Section View

TEMPORARY ROCK CHECK DAM
Not to Scale

JAD
1/18/2022



CITY OF FISHERS STANDARD CONSTRUCTION DETAILS	SHEET
	25 of 29
EROSION CONTROL DETAILS	

SCOPE DRAWINGS:
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On the basis of the general scope indicated or described, the trade contractors shall furnish all items required for the proper execution and completion of the work.

REVISIONS:

4	02/12/24 ADDENDUM #4
6	03/01/24 ADDENDUM #6

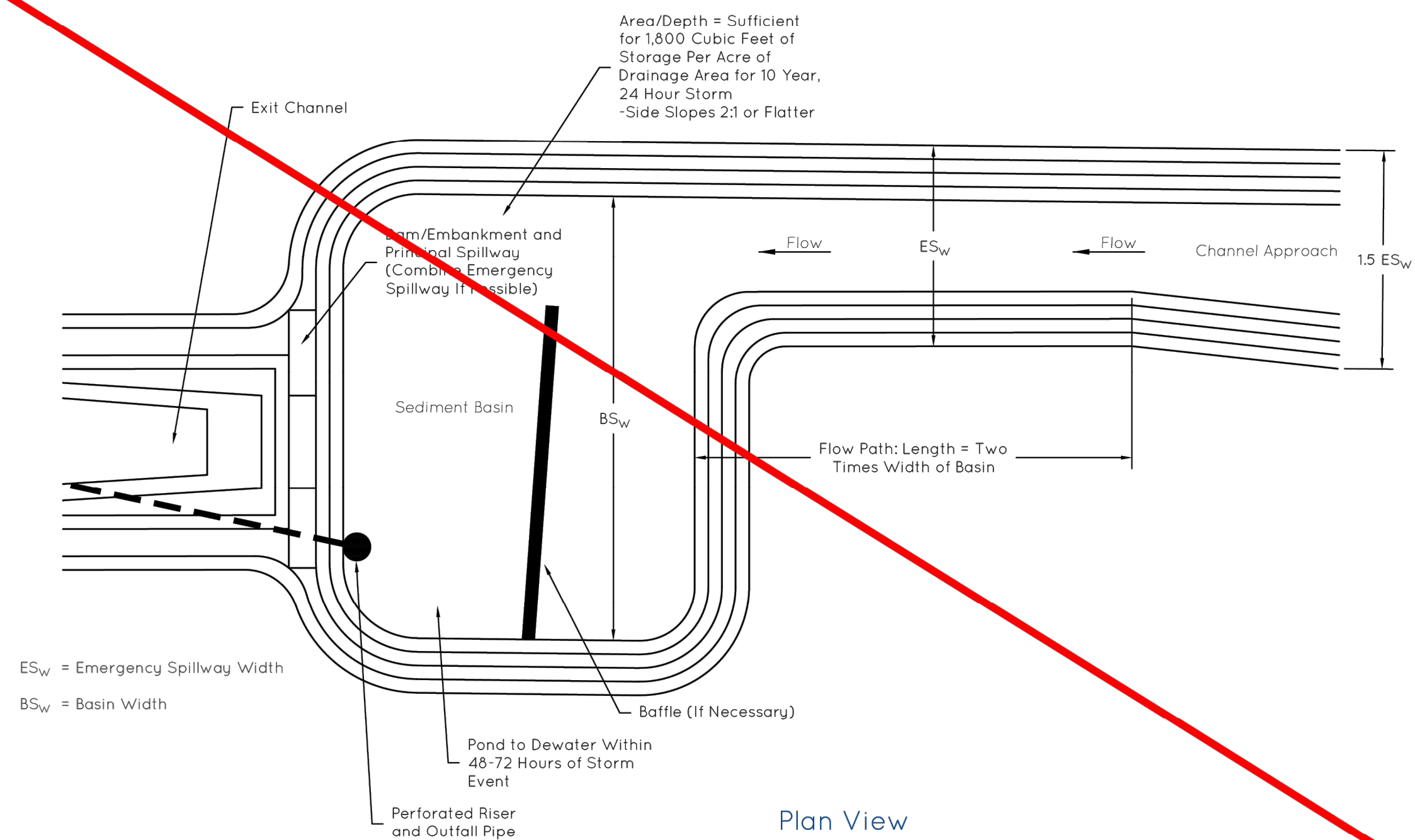
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
WATER
DETAILS

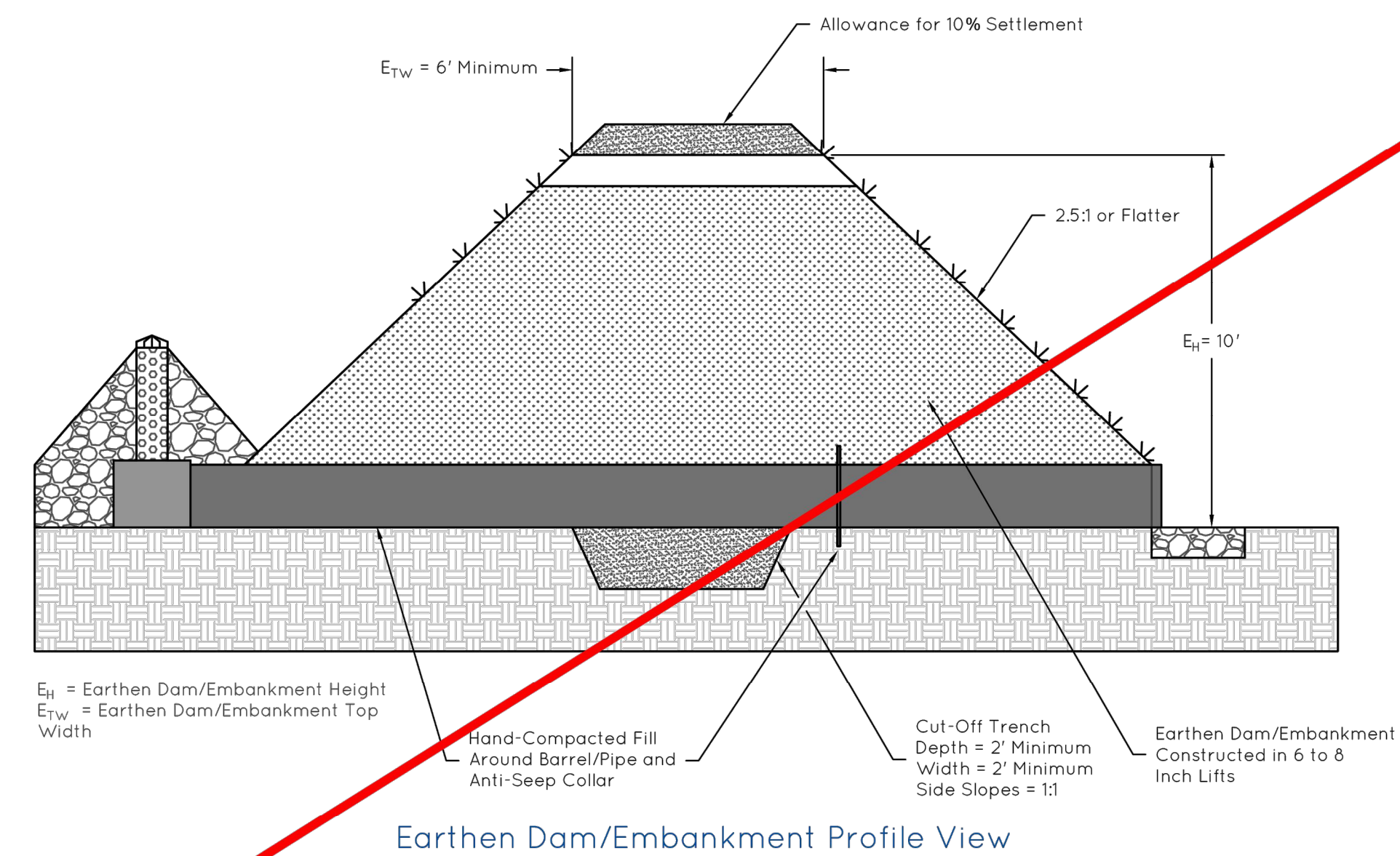
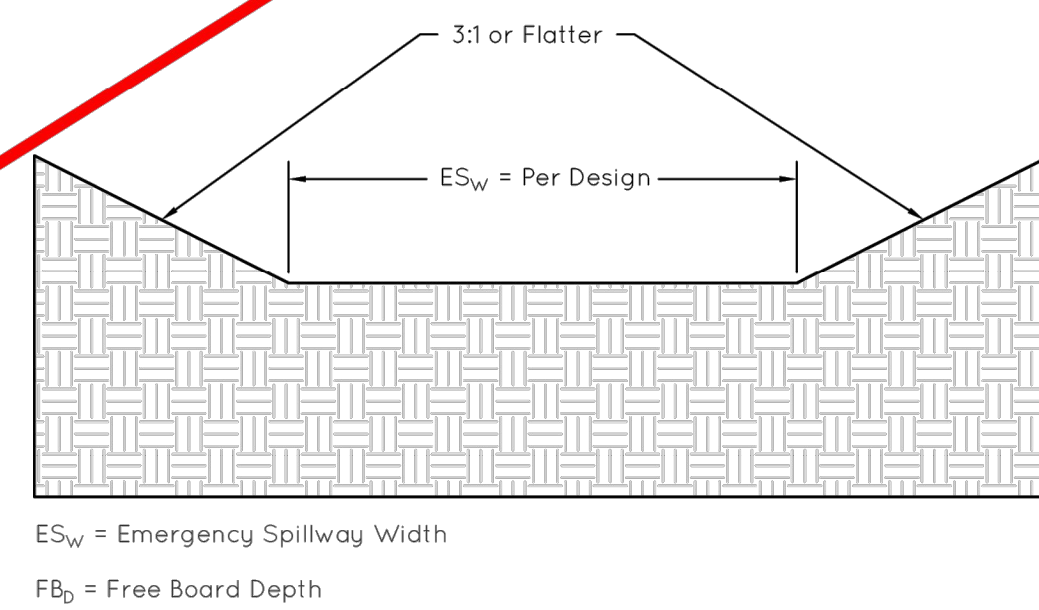
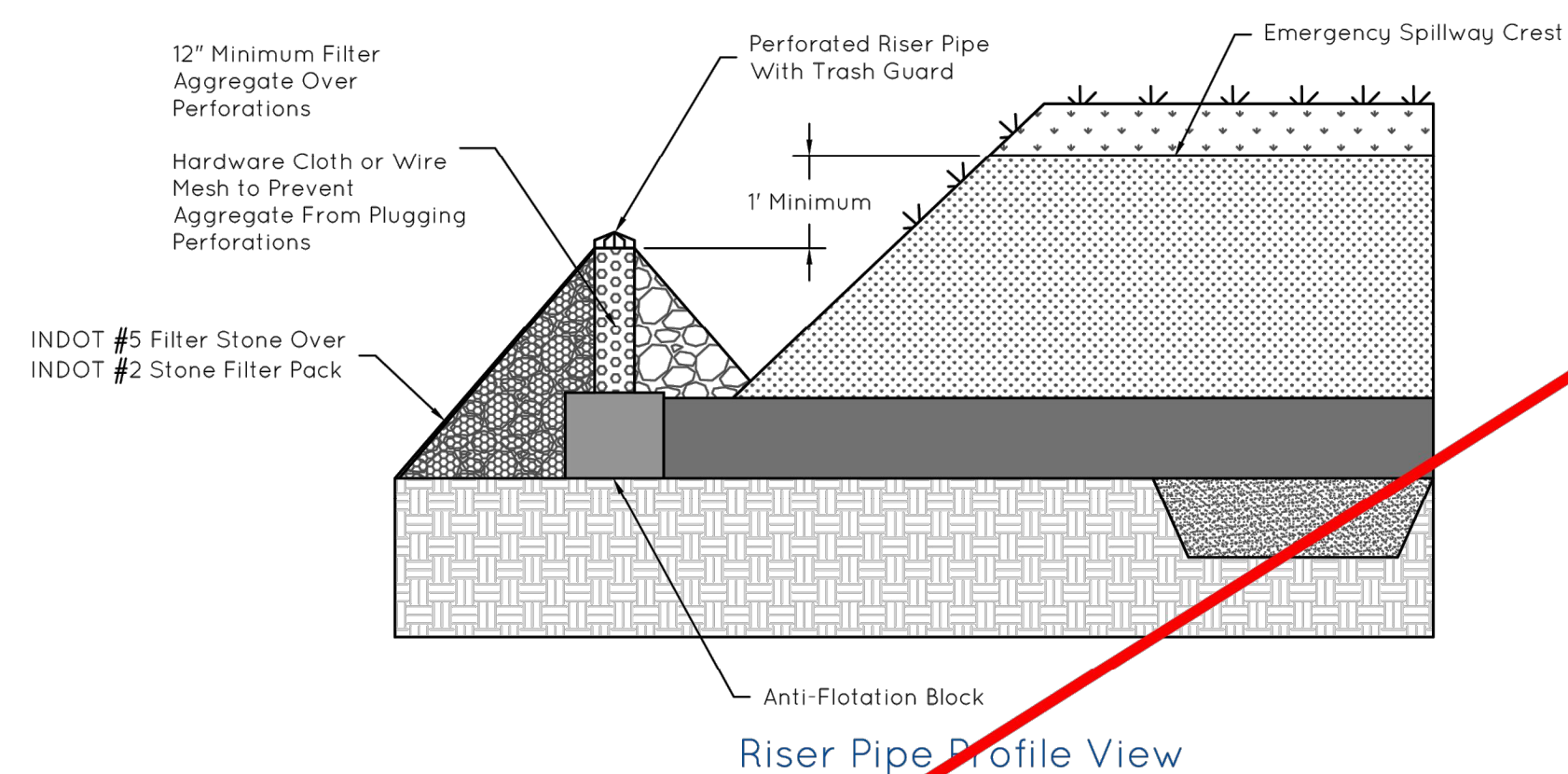


DRAWING NUMBER
C926

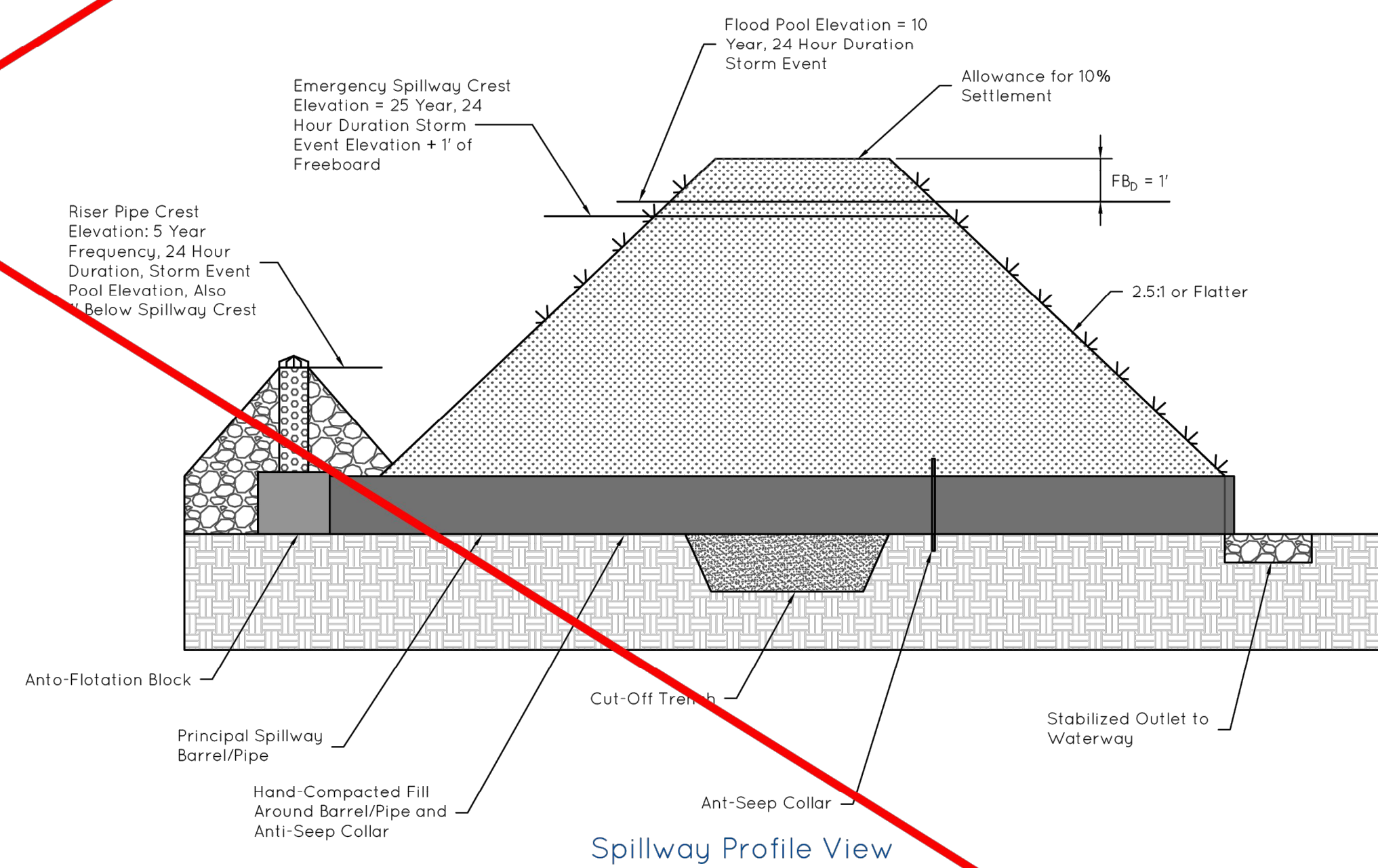
PROJECT NUMBER
2021119



TEMPORARY SEDIMENT BASIN
Not to Scale

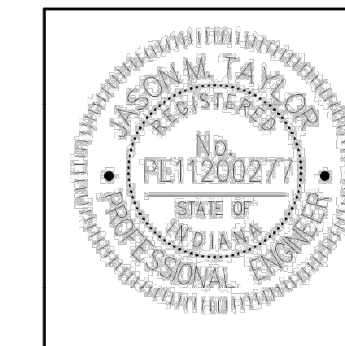


Earthen Dam/Embankment Profile View



Spillway Profile View

JMS
1/18/2022



CITY OF FISHERS		SHEET
STANDARD CONSTRUCTION DETAILS		
EROSION CONTROL DETAILS		26 of 29

SCOPE DRAWINGS:
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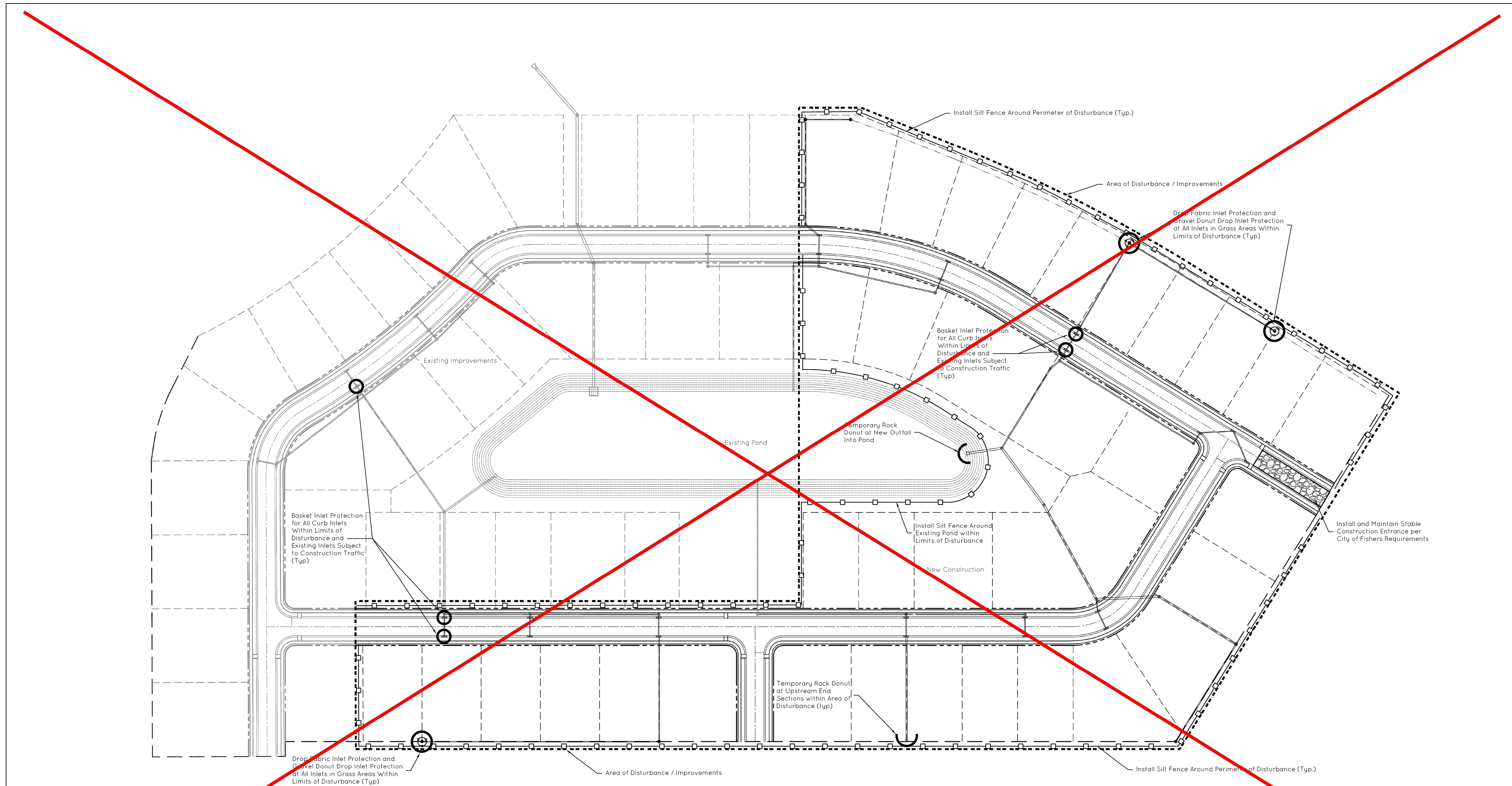
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
WATER
DETAILS

CERTIFIED BY:
David A. Lach
DAVID A. LACH
REGISTERED
PE 10000126
STATE OF
INDIANA
PROFESSIONAL ENGINEER

DRAWING NUMBER
C927

PROJECT NUMBER
2021119



Basket Inlet Protection for All Curb Inlets Within Limits of Disturbance and Existing Inlets Subject to Construction Traffic (Typ.)

Drop Fabric Inlet Protection and Gravel Donut Drop Inlet Protection at All Inlets in Grass Areas Within Limits of Disturbance (Typ.)

Install Silt Fence Around Perimeter of Disturbance (Typ.)

Area of Disturbance / Improvements

Drop Fabric Inlet Protection and Gravel Donut Drop Inlet Protection at All Inlets in Grass Areas Within Limits of Disturbance (Typ.)

Basket Inlet Protection for All Curb Inlets Within Limits of Disturbance and Existing Inlets Subject to Construction Traffic (Typ.)

Temporary Rock Donut at New Outfall Into Pond

Install Silt Fence Around Existing Pond within Limits of Disturbance

New Construction

Temporary Rock Donut at Upstream End of Sections within Area of Disturbance (Typ.)

Install and Maintain Stable Construction Entrance per City of Fishers Requirements

Area of Disturbance / Improvements

Install Silt Fence Around Perimeter of Disturbance (Typ.)

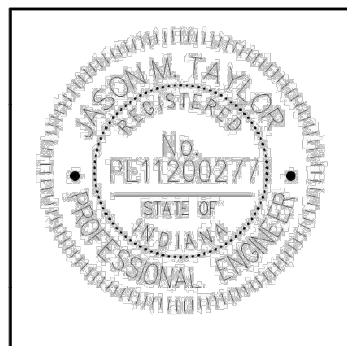
Notes:

- 1) Individual lot erosion control measures to be installed per details on Sheet 24, and in accordance with Indiana Stormwater Quality Manual.
- 2) Measures to be used in accordance with manufacturer's stated installation and maintenance specifications, and limitations.
- 3) Temporary and permanent stabilization to be installed as soon as possible. Re-seed any areas disturbed by construction and utilities installation that will be left inactive for seven (7) days with temporary seed mix.
- 4) Pond protection measures shown are example only. Additional measures may be required. Site specific SWPPP to be prepared and approved by the City of Fishers.

PROTECTION OF EXISTING DETENTION POND - EXAMPLE MEASURES

Not to Scale

JMT
1/18/2022



CITY OF FISHERS		SHEET
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		29

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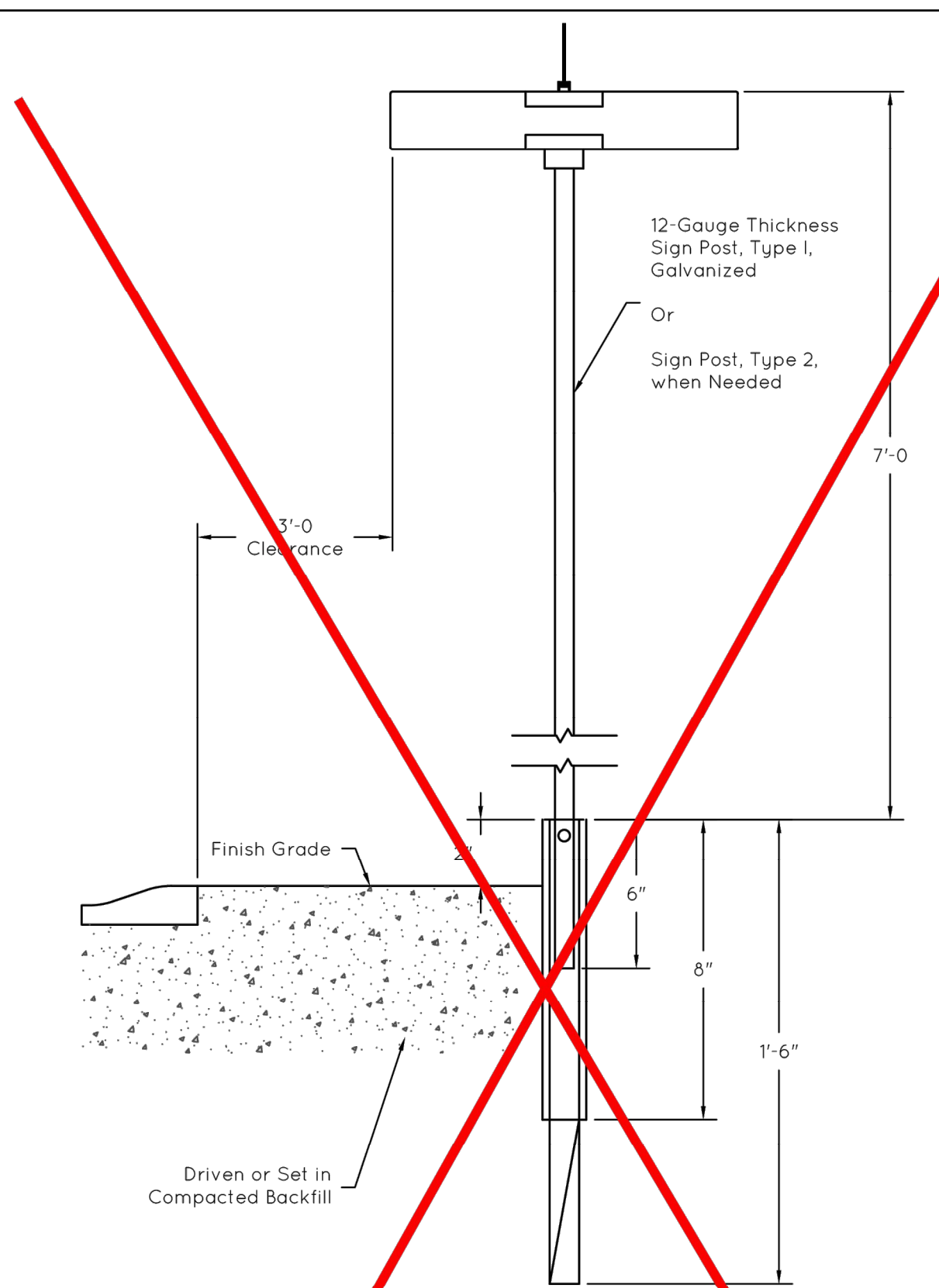
ISSUE DATE	DRAWN BY	CHECKED BY
01/15/2023	KDK	JAD

DRAWING TITLE:
**WATER
DETAILS**



DRAWING NUMBER
C928

PROJECT NUMBER
2021119



- Notes:
- Streets shall be signed per latest approved edition of IMUTCD.
 - Street name signs shall be 8" tall 0.1 gauge extruded aluminum sign blanks. The sign face material shall be Diamond grade retroreflective green background with white lettering and shall be mix-cased in accordance with the IMUTCD.
 - All public regulatory street signs shall be diamond grade retroreflective background, including letters and border where appropriate.
 - Font and letter height shall be in accordance with IMUTCD and FHWA Standard Highway Signs.
 - Street signs shall have rounded corners and be tall enough to accommodate the above noted minimum letter heights.
 - Supr-lok cap shall be model #91UX-NU180 or equal. Supr-lok cross shall be model #990X or equal.
 - Street name signs shall be mounted on Type 1 or 2 12-gauge steel galvanized post. Whichever is required according to INDOT Standard Drawings.
 - Street name signs on roundabouts shall be on decorative 2 1/2" round post with finial, with Fishers Green finish, and with Z238 aluminum interlocking bracket set by Hall Signs or approved equal.
 - Private streets must include a vertical "PVT" symbol in 3" white lettering to the left of the street name.
 - Public street signs must include City of Fishers logo (does not have to be multi-colored) to the left of the street name.
 - Optional white privately owned/maintained signs on public roads:
 - 11) White retroreflective background with black font may be used for street name signs, however, a maintenance agreement must be signed and submitted as these are considered privately owned and maintained signs. These signs will not be maintained by the City.
 - 11)2) The City of Fishers logo is still required to the left of the street name.
 - 11)3) No other logo or picture is permitted.
 - 12) Optional black/green or decorative post/poles on public roads:
 - 12)1) Any painted or coated street name or regulatory sign post/pole is permitted; however, a maintenance agreement must be signed and submitted as these are considered privately owned and maintained posts/poles. These posts/poles will not be maintained by the City.

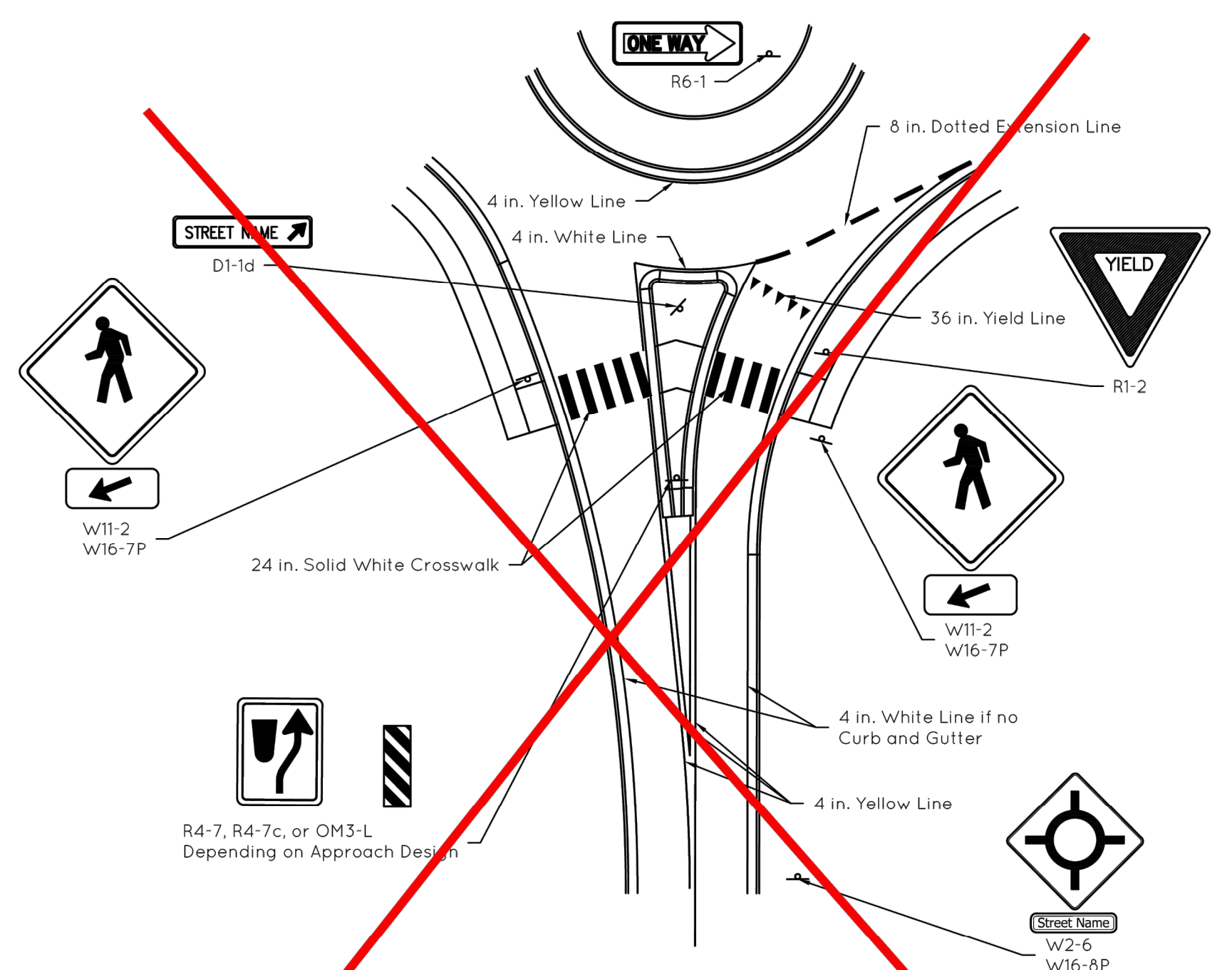
STREET NAME AND PUBLIC STREET SIGNS
Not to Scale



Public street signs must include City of Fishers logo (white lettering and green background) to the left of the street name. The logo size should be based on the following table.

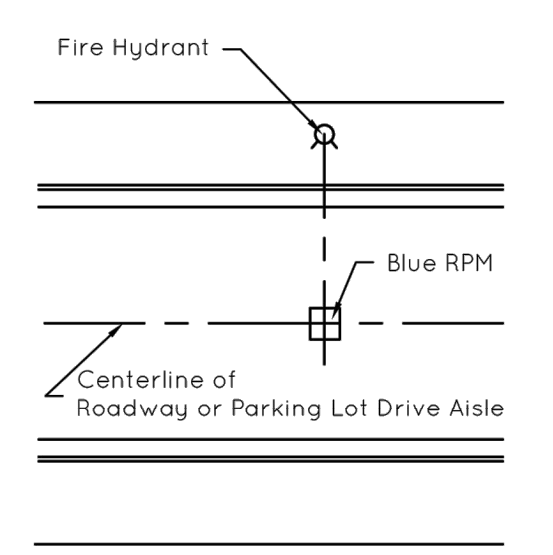
Sign Lettering Height	Max Logo Dimension
12"	10"X10"
9"	7"X7"
8"	6"X6"
6"	4"X4"
4"	3"X3"

CITY LOGO FOR STREET SIGNS
Not to Scale

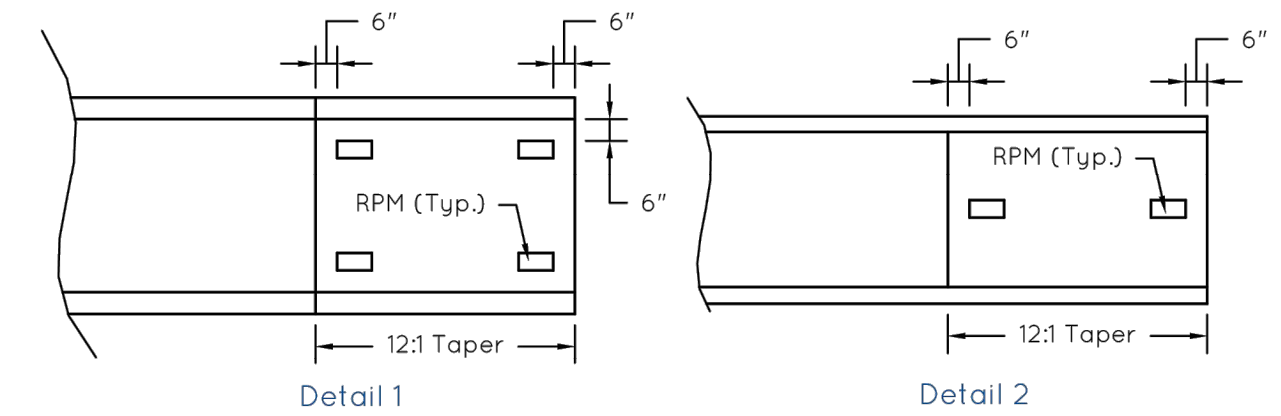


- Notes:
- Signs and striping shown for only one leg of single-lane roundabout.
 - Striping and signs indicated may be optional per the latest IMUTCD, but shall be required for all roundabouts designed in the City of Fishers unless prior approval has been given by the Dept. of Engineering.
 - All striping shall be thermoplastic on asphalt pavement and multi-component on concrete pavement.
 - All white striping on concrete pavement shall have black contrast border.
 - Sign post heights and lateral offsets shall be in accordance with latest IMUTCD guidance. R6-4a signs shall not exceed 4 feet from bottom of sign to edge of circulatory roadway traveled way.
 - Lighting adjacent to roundabouts shall be per the "LAMP POSTS AND LUMINAIRES ADJACENT TO ROUNDABOUTS" detail on next sheet.

SINGLE-LANE ROUNDABOUT STRIPING EXAMPLE
Not to Scale

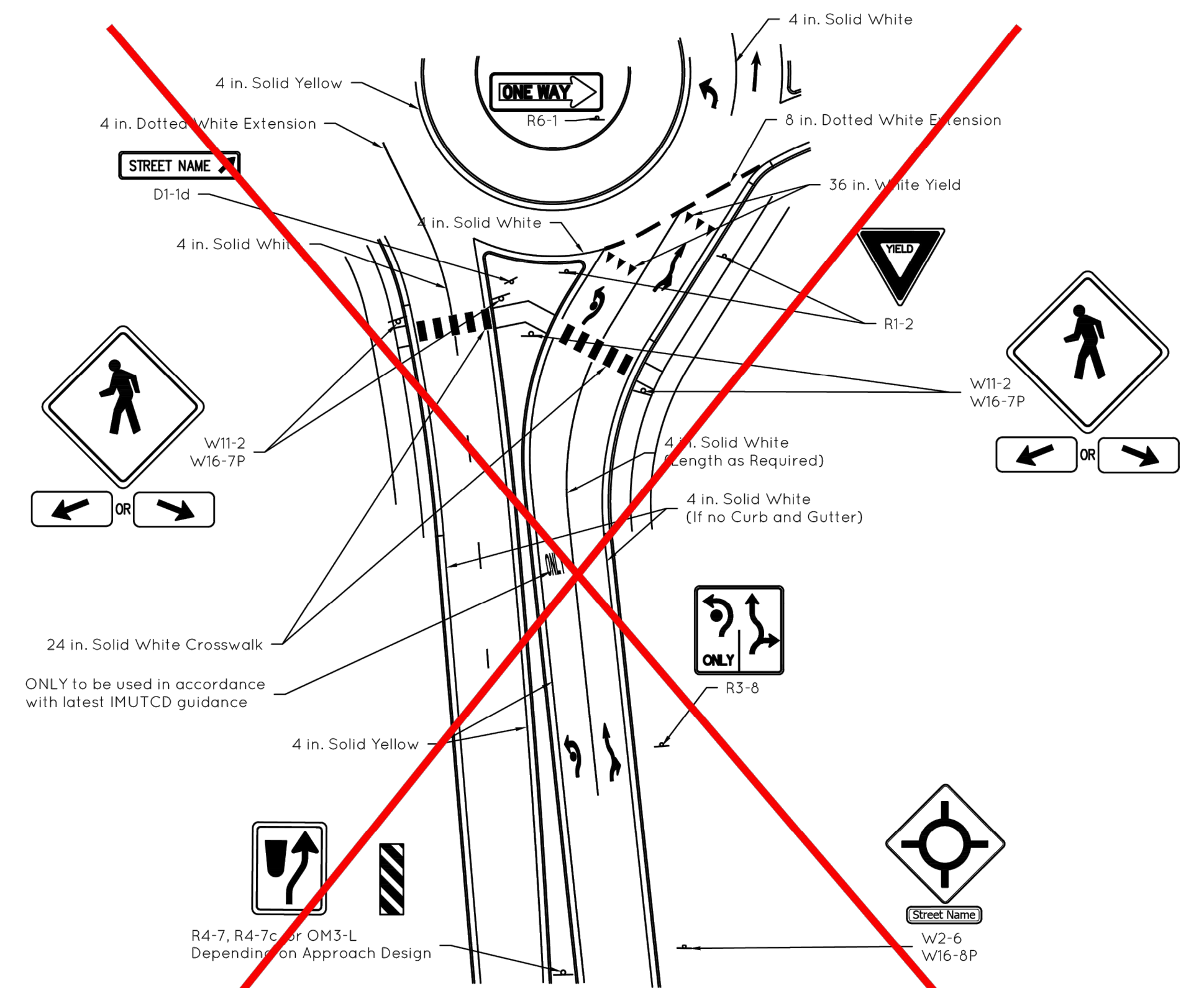


RAISED PAVEMENT MARKERS FOR HYDRANTS
Not to Scale



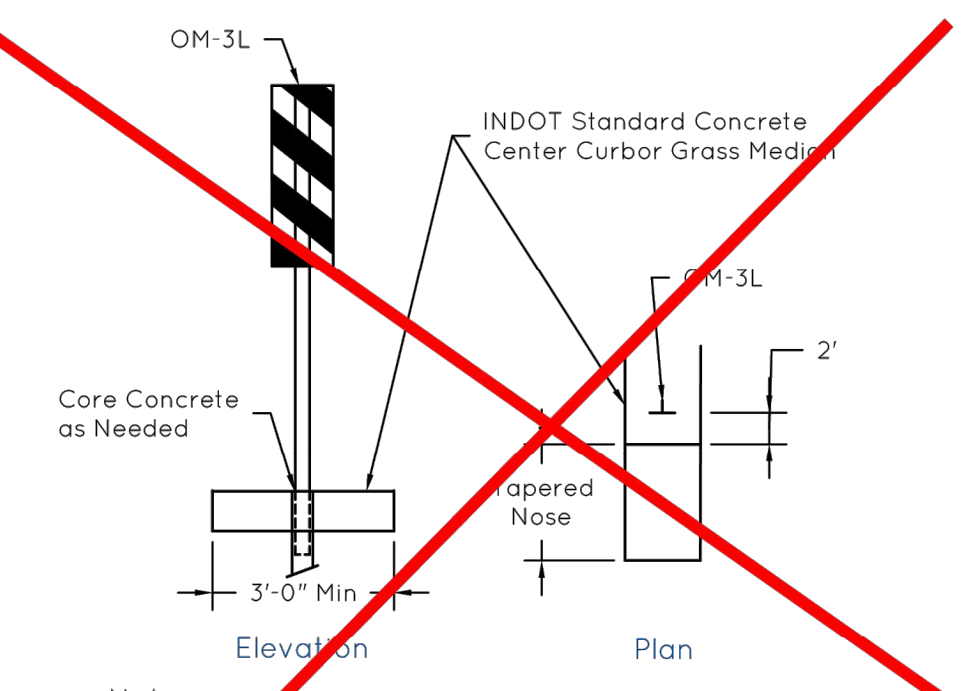
- Notes:
- Width greater than 3 feet requires 4 RPMs per Detail 1. Width less than 3 feet requires 2 RPMs per Detail 2 centered on width of median.
 - RPMs shall be yellow and Ennis Flint model 101LP or approved equal.
 - RPMs on top of concrete shall be epoxied and RPMs in pavement shall be grooved and epoxied according to manufacturer specifications.

RAISED PAVEMENT MARKERS
Not to Scale



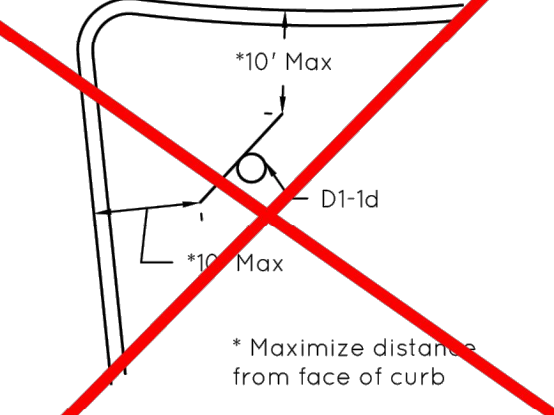
- Notes:
- Signs and striping shown for only one leg of multi-lane roundabouts.
 - Striping and signs indicated may be optional per the latest IMUTCD, but shall be required for all roundabouts designed in the City of Fishers unless prior approval has been given by the Dept. of Engineering.
 - Lane Indication Arrows and circulatory roadway striping are for example. Actual lane configurations may vary.
 - All striping shall be thermoplastic on asphalt pavement and multi-component on concrete pavement.
 - All white striping on concrete pavement shall have black contrast border.
 - Sign post heights and lateral offsets shall be in accordance with latest IMUTCD guidance. R6-4a signs shall not exceed 4 feet from bottom of sign to edge of circulatory roadway traveled way.
 - Lighting adjacent to roundabouts shall be per the "LAMP POSTS AND LUMINAIRES ADJACENT TO ROUNDABOUTS" detail on next sheet.

TWO-LANE ROUNDABOUT STRIPING EXAMPLE
Not to Scale

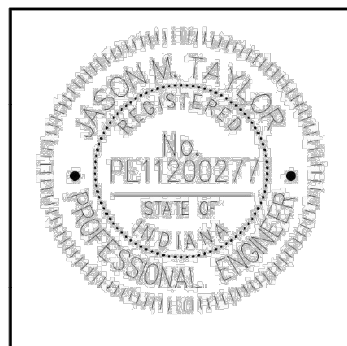


- Notes:
- All medians shall have an end treatment.
 - Medians greater than four feet in width may contain approved landscaping or grass.

MEDIAN END TREATMENT
Not to Scale



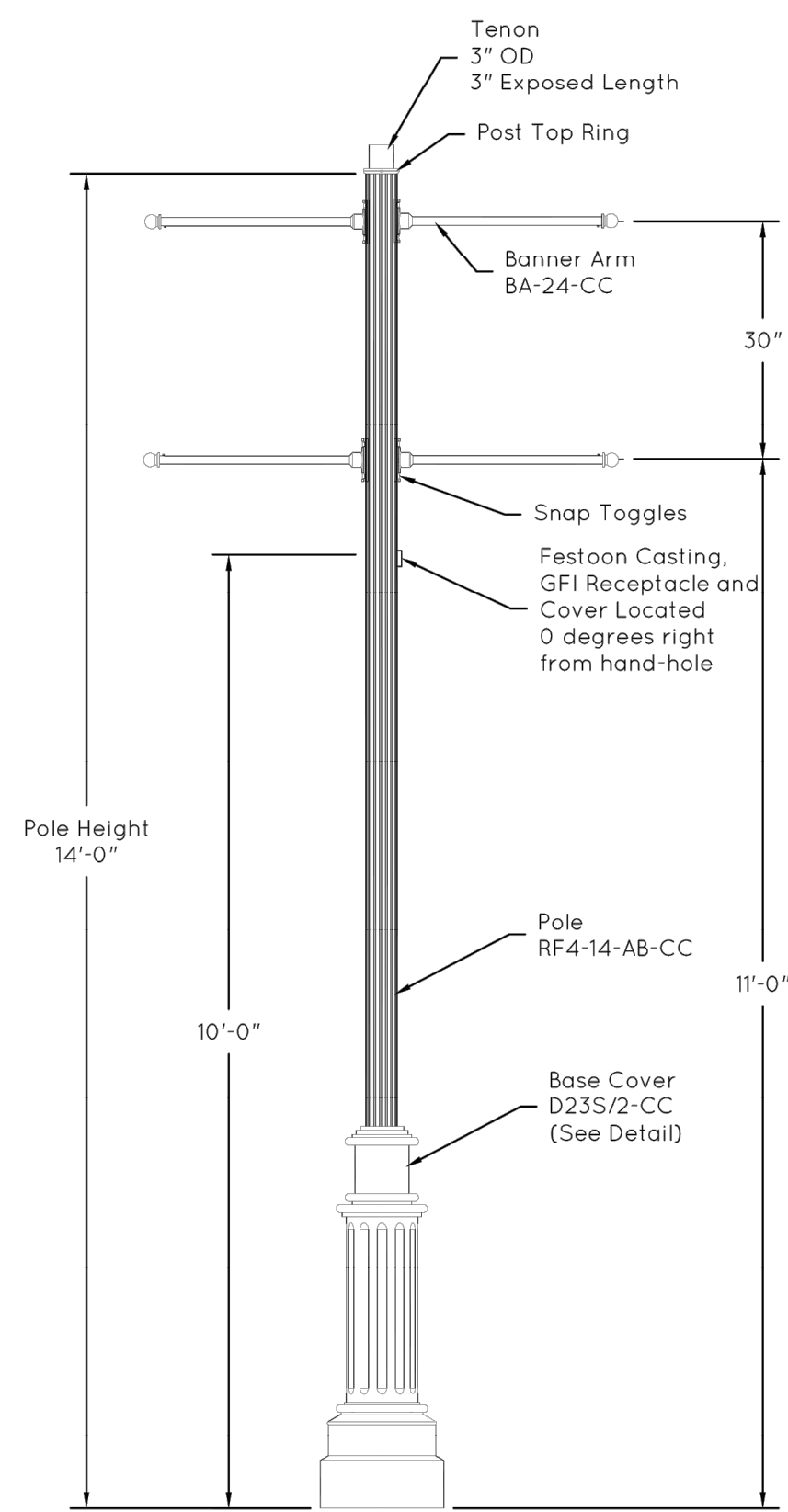
ROUNDABOUT D1-1d SPLITTER ISLAND PLACEMENT
Not to Scale



CITY OF FISHERS
STANDARD CONSTRUCTION DETAILS
SIGN, PAVEMENT MARKING AND RPM DETAILS

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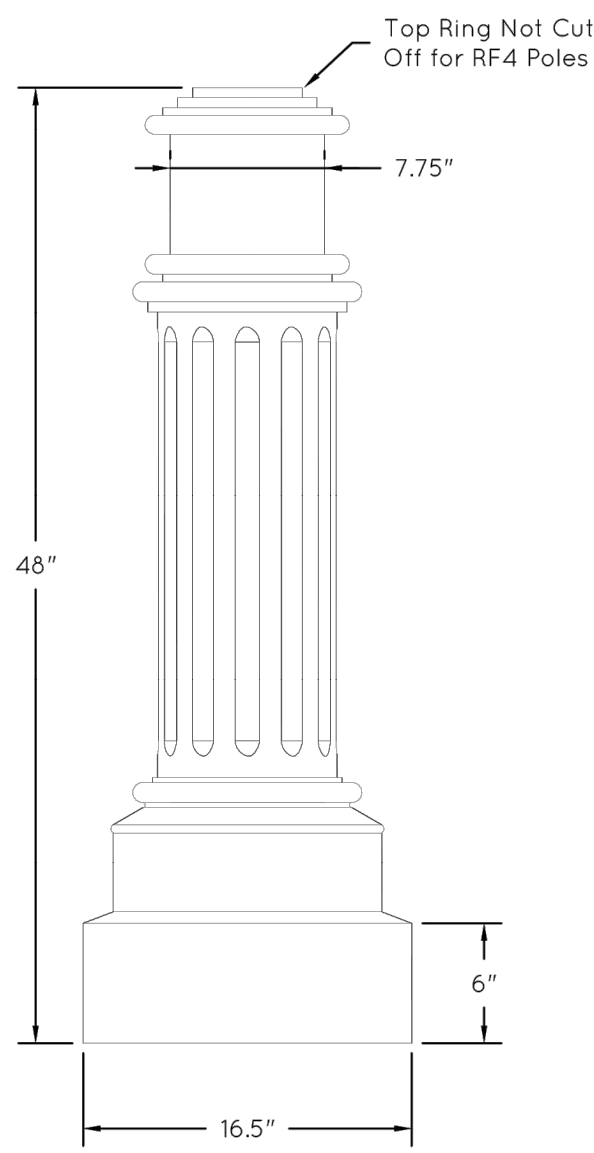
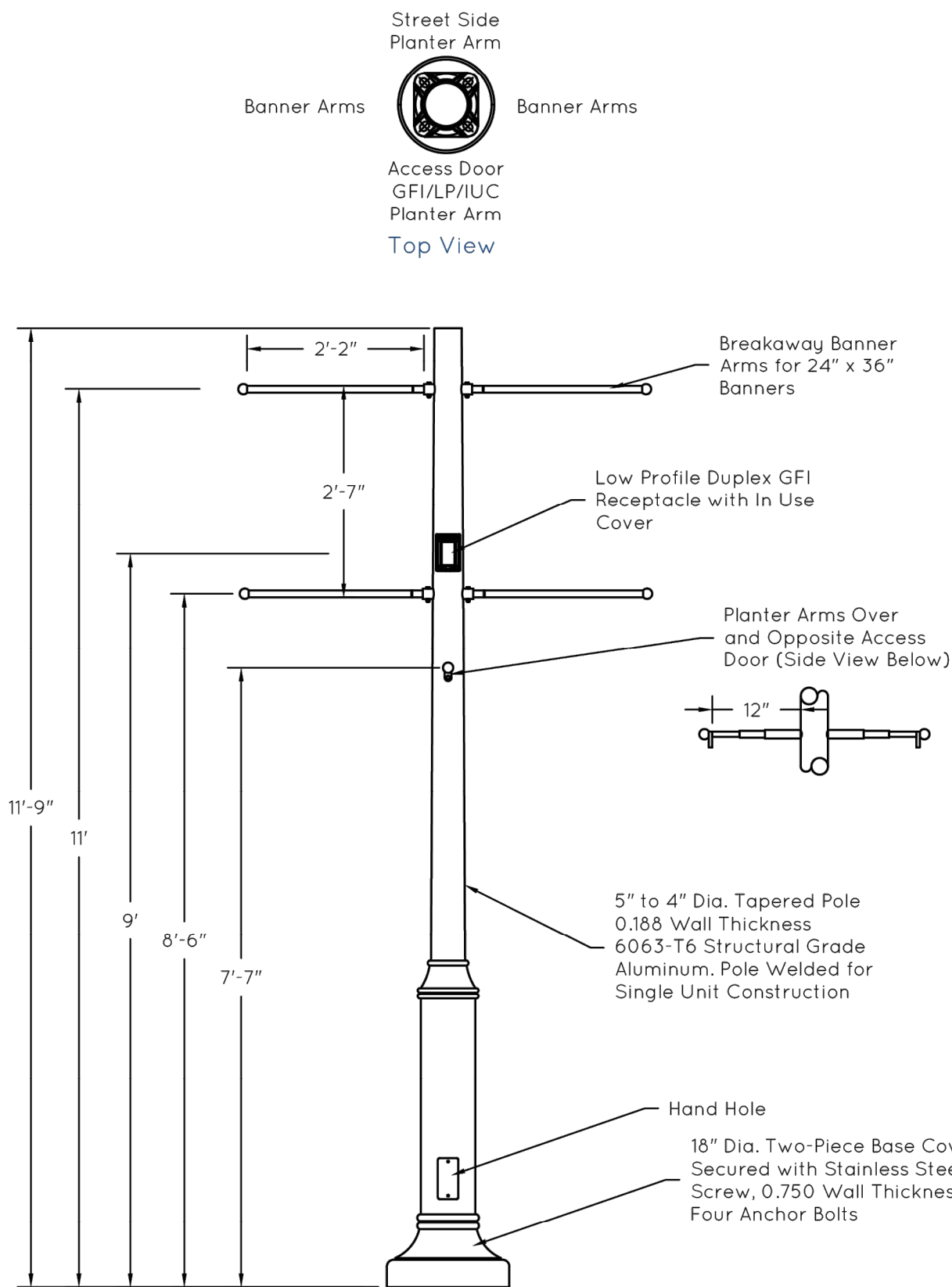


POLE
 Model: FR4
 Top Dia: 4"
 Taper: None
 Construction: Pultruded fiberglass reinforced isophthalic polyester resin utilizing longitudinal glass roving, continuous strand mat and off-axis fibers.
 Anchor Base: Custom Top Hat Plate-ASTM A36
 Tenon: 3" OD 3" Exposed 6061-T6 Alum
 Post Top Ring: Cast Alum
 Bolt Circle: 11 1/2"
 Hand Hole: 5"x6" in anchor base.
 Cover to match
 Paint: UV & Cleaning chemical resistant
 Color: CC-Fishers Green
 MAX Attachment Weight: 100 lbs
 MAX Attachment EPA: 15.2
 Pole Weight: 72 lbs approx

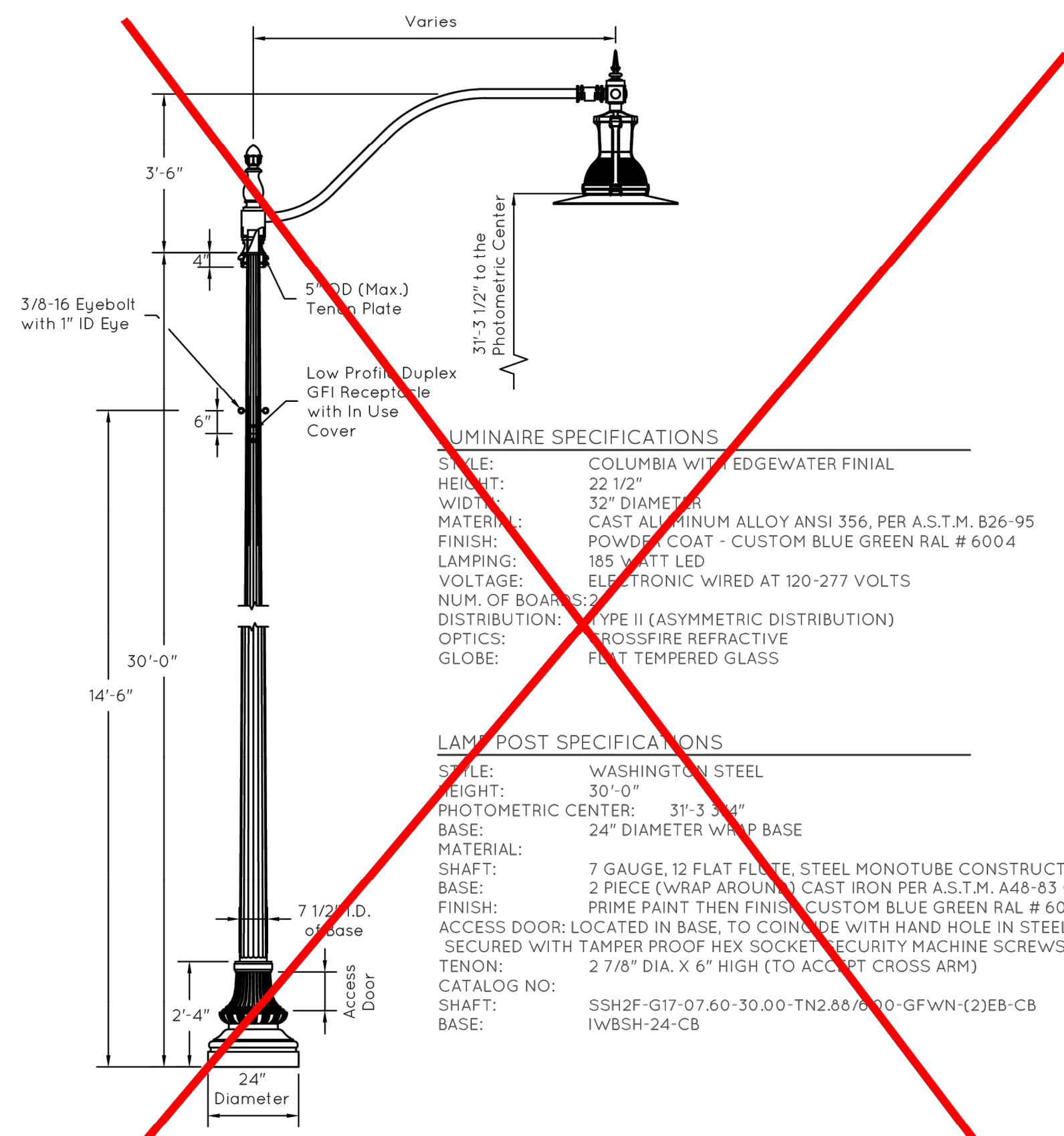
BASE COVER
 Model: D235/2
 Style: 2-Piece Clamshell
 Material: Elastomeric Urethane
 Color: CC-Fishers Green
 Height: 48"
 Width: 16.38"
 Weight: 52 lbs approx

- Notes:
 1) All poles to be Fishers Green RAL 6004
 2) Outlet wiring on lamp posts shall be such that the top outlet to be on only when lights are on. Bottom outlet shall remain on continuously

LAMP POSTS
 Not to Scale



BASE COVER
 Not to Scale



LUMINAIRE SPECIFICATIONS
 STYLE: COLUMBIA WITH EDGEWATER FINIAL
 HEIGHT: 22 1/2"
 WIDTH: 32" DIAMETER
 MATERIAL: CAST ALUMINUM ALLOY ANSI 356, PER A.S.T.M. B26-95
 FINISH: POWDER COAT - CUSTOM BLUE GREEN RAL # 6004
 LAMPING: 185 WATT LED
 VOLTAGE: ELECTRONIC WIRED AT 120-277 VOLTS
 NUM. OF BAYS: 1
 DISTRIBUTION: TYPE II (ASYMMETRIC DISTRIBUTION)
 OPTICS: CROSSFIRE REFRACTIVE
 GLOBE: FELT TEMPERED GLASS

LAMP POST SPECIFICATIONS
 STYLE: WASHINGTON STEEL
 HEIGHT: 30'-0"
 PHOTOMETRIC CENTER: 31'-3 1/2"
 BASE: 24" DIAMETER W/WRAP BASE
 MATERIAL: 7 GAUGE, 12 FLAT FINE, STEEL MONOTUBE CONSTRUCTION
 SHAFT: 2 PIECE (WRAP AROUND) CAST IRON PER A.S.T.M. A48-83 CLASS 30
 BASE: PRIME PAINT THEN FINISH CUSTOM BLUE GREEN RAL # 6004
 ACCESS DOOR: LOCATED IN BASE, TO COINCIDE WITH HAND HOLE IN STEEL SHAFT, SECURED WITH TAMPER PROOF HEX SOCKET SECURITY MACHINE SCREWS
 TENON: 2 7/8" DIA. X 6" HIGH (TO ACCOMMODATE CROSS ARM)
 CATALOG NO: SSH2F-G17-07.60-30.00-TN2.88/010-GFWN-(2)EB-CB
 SHAFT: IWBSH-24-CB

- Note:
 1) Outlet wiring on lamp posts shall be such that the top outlet to be on only when lights are on while the bottom outlet shall remain on continuously.

LAMP POSTS AND LUMINAIRES ADJACENT TO ROUNDABOUTS
 Not to Scale

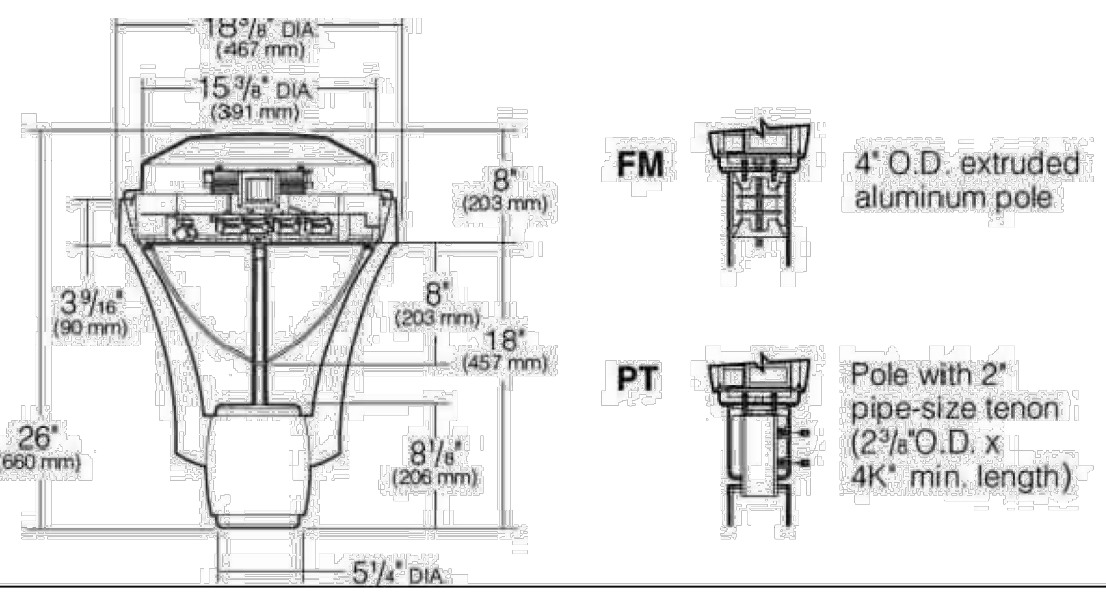
POLE
 MODEL: RF4
 TOP: DIA: 4"
 TAPER: NONE
 CONSTRUCTION: Pultruded fiberglass reinforced isophthalic polyester resin utilizing longitudinal glass roving, continuous strand mat and off-axis fibers.
 ANCHOR BASE: Custom Top Hat Plate-ASTM A36
 TENON: 3" OD 3" Exposed 6061-T6 Alum
 POST TOP RING: Cast Alum
 BOLT CIRCLE: 11 1/2"
 HAND HOLE: 5"x6" in Anchor Base; Cover to Match
 PAINT: UV & Cleaning chemical resistant
 COLOR: CC-Fishers Green
 MAX ATTACHMENT WEIGHT: 100 LBS
 MAX ATTACHMENT EPA: 15.2
 POLE WEIGHT: 72 LBS approx

BASE COVER
 MODEL: D235/2
 STYLE: 2-Piece Clamshell
 MATERIAL: Elastomeric Urethane
 COLOR: CC-Fishers Green
 HEIGHT: 48"
 WIDTH: 16.38"
 WEIGHT: 52 LBS approx

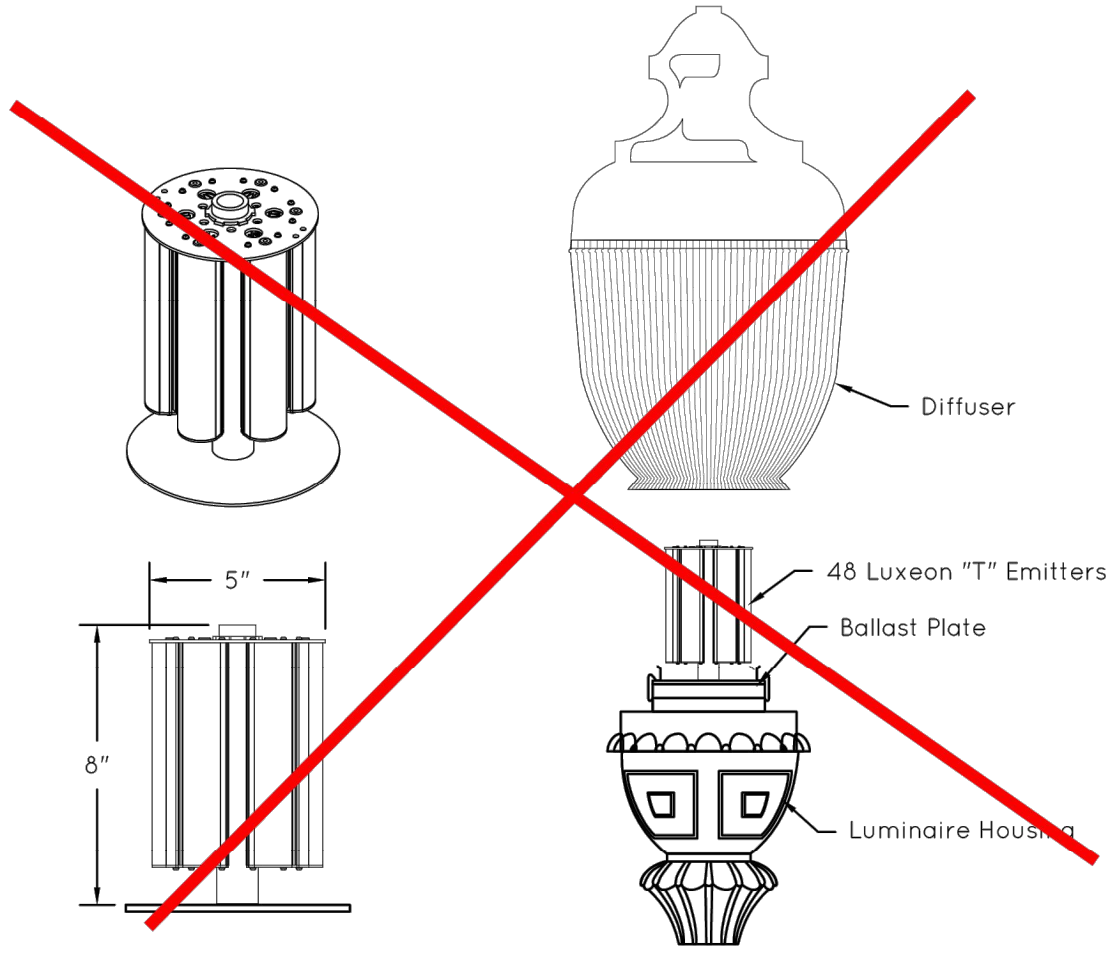
SPECIFICATIONS



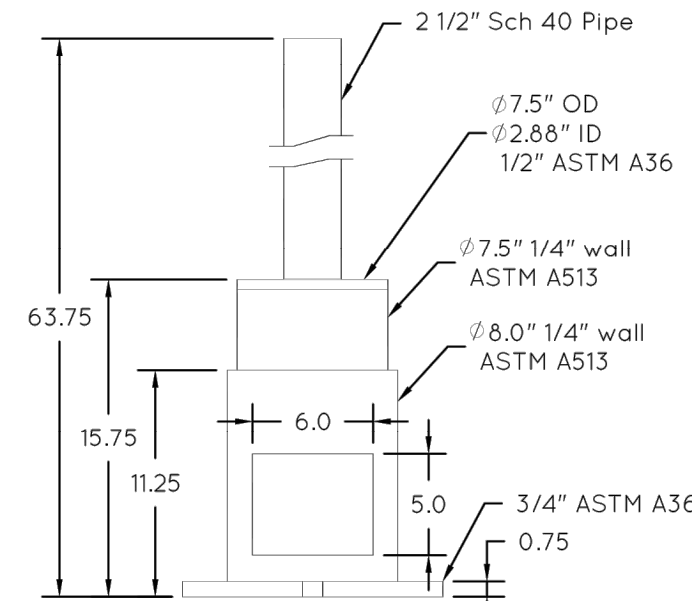
Approx. Weight = 45 lbs EPA 2.5 for 1SA
 See Configuration for Additional EPAs.



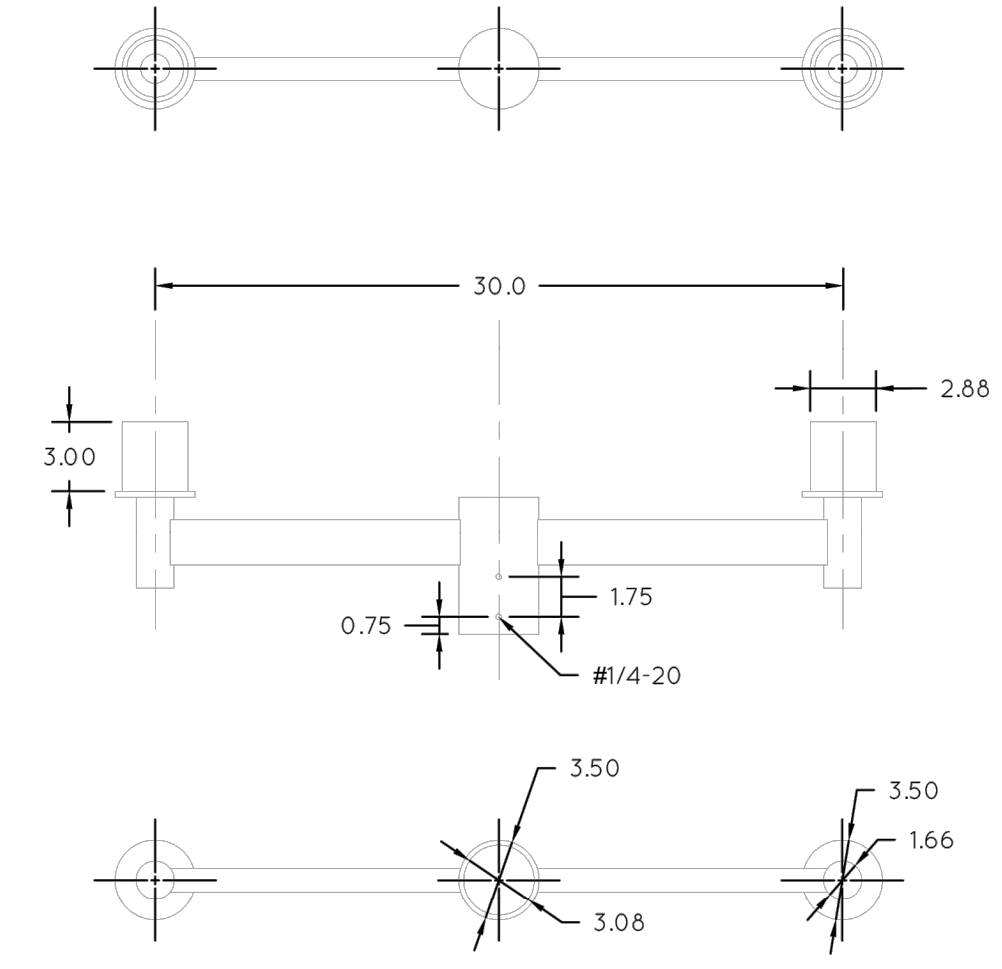
KIM LIGHTING-SOLITAIRE
 Not to Scale



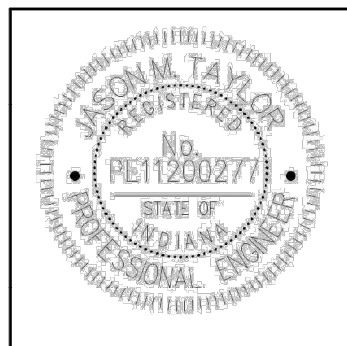
LED FIXTURES
 Not to Scale



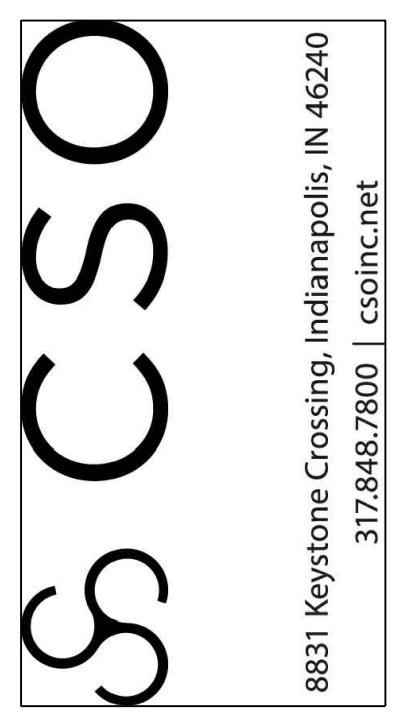
CUSTOM HAT BASE ASSEMBLY
 Not to Scale



CROSS ARM
 Not to Scale



CITY OF FISHERS		SHEET
STANDARD CONSTRUCTION DETAILS		
LAMP POST & LED FIXTURE DETAILS		29 of 29



FISHERS ELEMENTARY SCHOOL ADDITIONS & RENOVATIONS DESIGN DEVELOPMENT
 11442 LANTERN RD, FISHERS, IN 46038

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ISSUE DATE	DRAWN BY	CHECKED BY
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DRAWING TITLE:
WATER DETAILS



DRAWING NUMBER
C930

PROJECT NUMBER
2021119