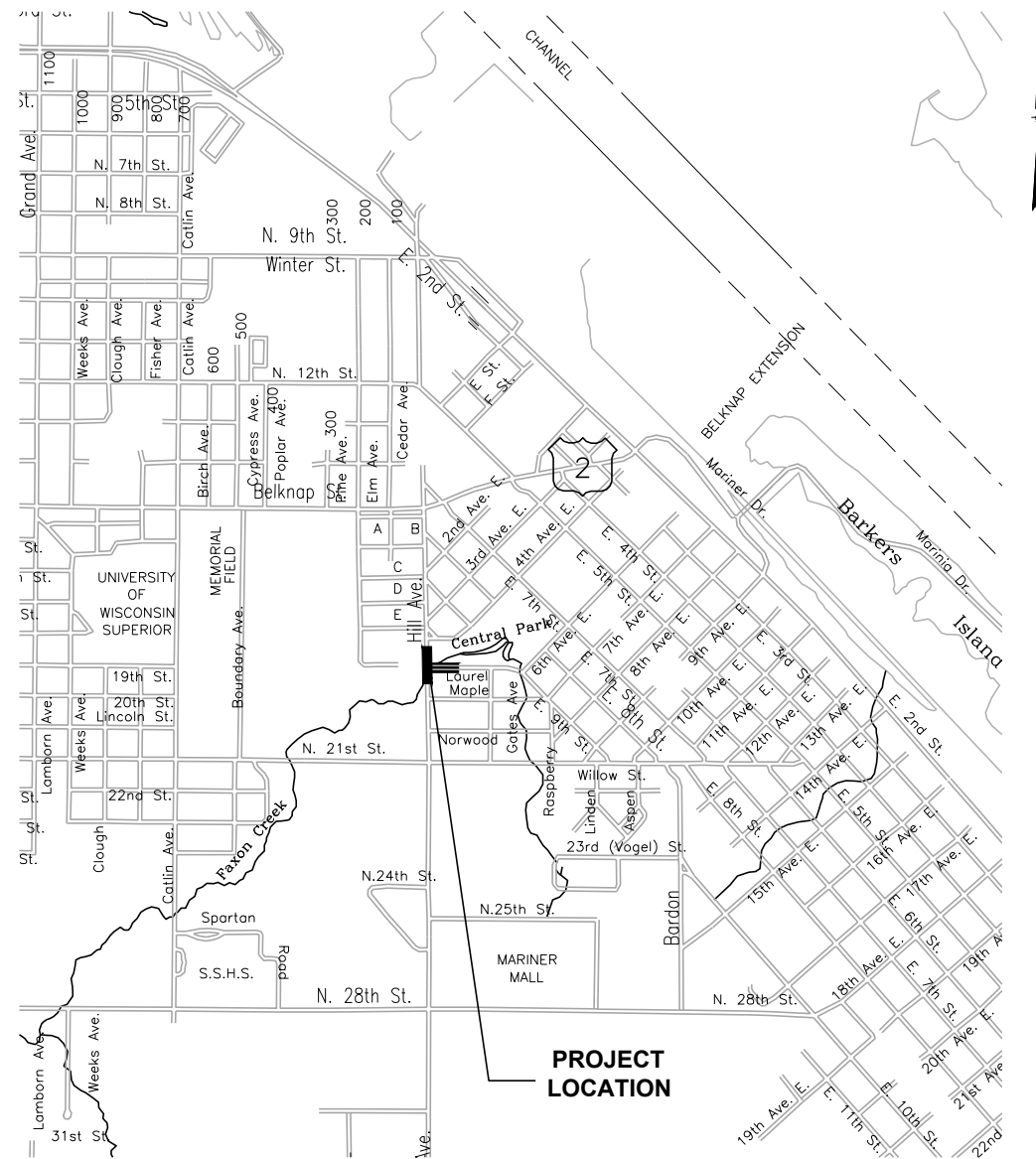


# CITY OF SUPERIOR FAXON CREEK CULVERT REPLACEMENT HILL AVENUE RECORD DRAWINGS SUPERIOR, WISCONSIN FEBRUARY 2016



**LOCATION MAP**

NTS

**RECORD DRAWING NOTE**  
 THE RECORD DRAWINGS ARE A COMPILED REPRESENTATION OF THE CONSTRUCTED PROJECT BASED ON THE CONSTRUCTION INFORMATION PROVIDED BY THE FOLLOWING:  
 ● STACK BROS. MECHANICAL  
 THE ACCURACY OF THE INFORMATION CANNOT BE GUARANTEED.



PREPARED FOR:



Living up to our name.

CITY OF SUPERIOR  
 1316 NORTH 14TH STREET  
 SUPERIOR, WI 54880

PREPARED BY



3311 WEEDEN CREEK ROAD  
 SHEBOYGAN, WISCONSIN 53081  
 920-208-0296

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**ESTIMATED QUANTITIES**

FAXON CREEK CULVERT REPLACEMENT HILL AVENUE			
ITEM	ITEM DESCRIPTION	UNIT	EST QUANTITY
1	CONTRACT ADMIN/MOBILIZATION/DEM OBILIZATION	LS	1
2	TRAFFIC CONTROL	LS	1
3	TEMPORARY WATER DIVERSION	LS	1
4	CLEARING AND GRUBBING	STA	3
5	REMOVING SMALL PIPE CULVERTS	EA	2
6	REMOVING CONCRETE SIDEWALK	SY	1,690
7	REMOVING CURB AND GUTTER	LF	113
8	REMOVING STORM SEWER	LF	65
9	REMOVING CATCH BASINS	EA	3
10	REMOVING GUARDRAIL	LF	70
11	REMOVING EXISTING CONCRETE ARCH CULVERT	LS	1
12	REMOVING STONE WALL	LS	1
13	REMOVING EXISTING HEAD AND WING WALLS	LS	1
14	EXCAVATION COMMON (PLAN)	CY	860
15	BORROW (PLAN)	CY	452
16	BASE AGGREGATE DENSE 3/4" (PLAN)	TONS	90
17	BASE AGGREGATE DENSE 1 1/4" (PLAN)	TONS	710
18	SELECT CRUSHED MATERIAL (PLAN)	TONS	1,420
19	ASPHALTIC SURFACE	TONS	376
20	CONCRETE CURB AND GUTTER 30-INCH, TYPE D	LF	702
21	WARNING FIELDS	SF	16
22	CONCRETE SIDEWALK 4-INCH	SF	2,550
23	CONCRETE DRIVEWAY 6-INCH	SF	160
24	CATCH BASINS	EA	1
25	2'X3' INLETS	EA	3
26	5' DIA. MANHOLE	EA	1

27	STORM SEWER PIPE 12-INCH	LF	243
28	STORM SEWER PIPE 36-INCH	LF	10
29	CONCRETE BOX CULVERT 12'X10'	LF	100
30	CONCRETE HEAD AND WING WALLS	LS	1
31	TUBULAR RAILING (HEADWALL)	LF	48
32	TUBULAR RAILING (LAUREL AVE. RETAINING WALL)	LF	30
33	CONCRETE STAINING (LAUREL AVE. RETAINING WALL)	LS	1
34	LIGHT RIP RAP	CY	45
35	HEAVY RIP RAP	CY	32
36	INSULATION BOARD POLYSTYRENE, 2-INCH	SY	187
37	ADJUSTING MANHOLES AND INLETS	EA	3
38	PIPE UNDERDRAIN 6-INCH	LF	1020
39	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	14
40	TOPSOIL	SY	2,200
41	LAWN SEED	SY	2,030
42	WETLAND SEED	SY	170
43	SILT FENCE	LF	650
44	INLET PROTECTION	EA	9
45	TURBIDITY BARRIER	LF	150
46	SEDIMENT LOG	LF	100
47	EROSION MAT URBAN, CLASS I, TYPE B	SY	1,000
48	EROSION MAT, CLASS III, TYPE B	SY	70
49	STONE TRACKING PAD	EA	2
50	MULCH	SY	1,130
51	GEOTEXTILE FABRIC TYPE SAS	SY	2,010
52	INTERNAL CHIMNEY SEAL	EA	1
53	SANITARY SEWER MAIN 15-INCH	LF	420
54	SEWER BY-PASS PUMPING	LS	1
55	SEWER FIELD QUALITY CONTROL - TELEVISIONING	LF	663

Revision Number	Revision Description	Checked By	Date

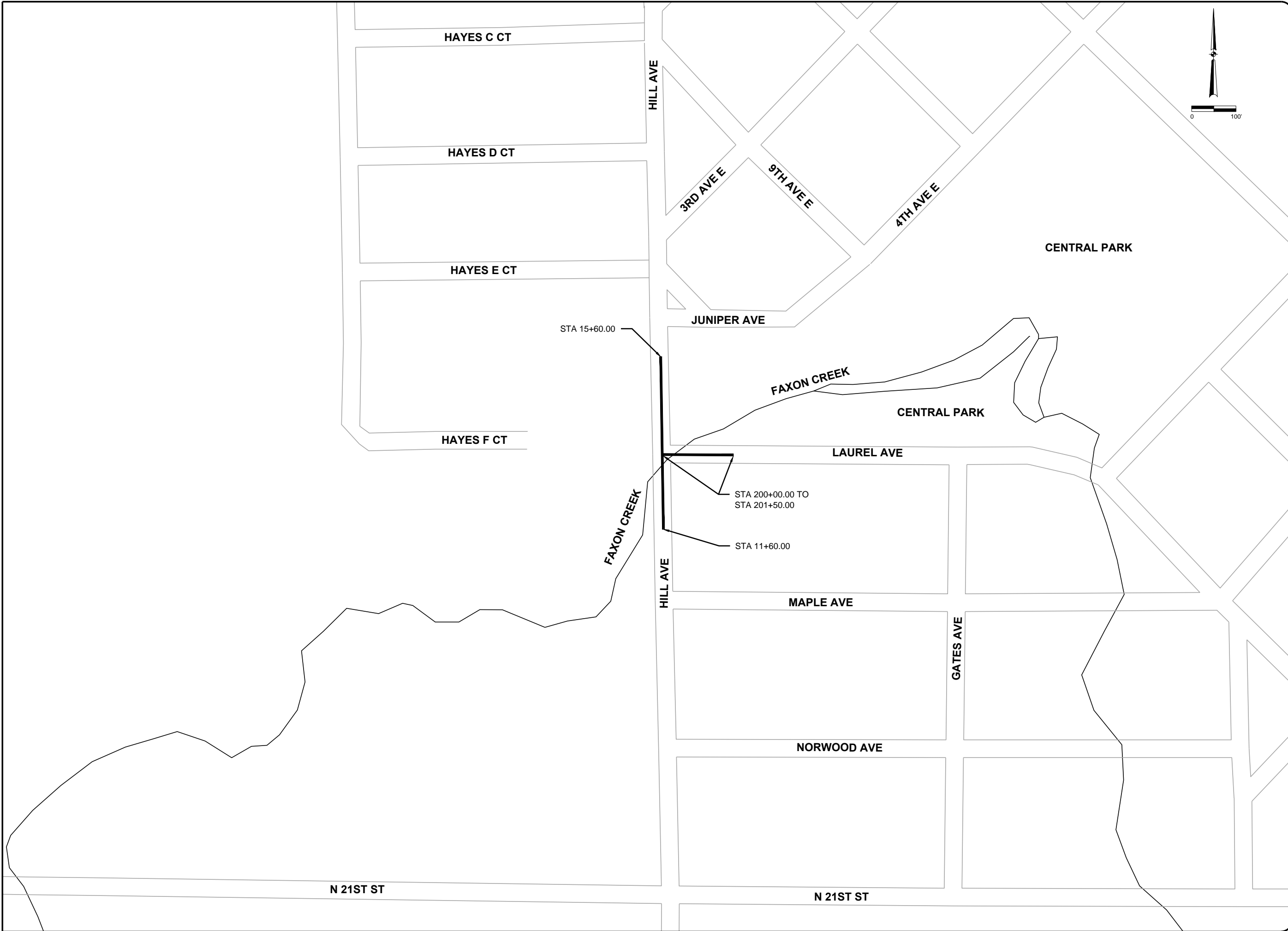
**RECORD DRAWING**  
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 BY: S.FREEMES DATE: DEC. 2017

Designed By	JCH
Drawn By	JCH
Checked By	RGL
Approved By	SJK
Filename	001-G-1.DWG
Project No.	12937
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**CITY OF SUPERIOR  
 FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE  
 INDEX OF SHEETS &  
 ESTIMATED QUANTITIES**

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CITY OF SUPERIOR  
 FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE

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OVERALL SITE PLAN

	Sheet No. <b>3</b>
Drawing No.	<b>001-CK-1</b>

**LEGEND**

EXISTING	PROPOSED

**ABBREVIATIONS**

AGG	AGGREGATE	NG	NATURAL GAS
B/C	BACK OF CURB	OH	OVERHEAD UTILITY
BIT	BITUMINOUS/ASPHALT	PC	POINT OF CURVATURE
CIP	CAST IRON PIPE	PE	POLYETHYLENE PIPE
CO	CLEANOUT	PI	POINT OF INTERSECTION
CONC	CONCRETE	PL	PROPERTY LINE
CMP	CORRUGATED METAL PIPE	PT	POINT OF TANGENCY
CSP	CONCRETE SEWER PIPE	PVC	POLYVINYL CHLORIDE PIPE
		PVI	POINT OF VERTICAL INTERSECTION
DIA	DIAMETER	R	RADIUS
DIP	DUCTILE IRON PIPE	RCP	REINFORCED CONCRETE PIPE
DW	DEWATERING PIPE	RIM	TOP OF CASTING ELEVATION
EXTG	EXISTING	ROW	RIGHT OF WAY
EOP	EDGE OF PAVEMENT	RT	RIGHT
F&C	FRAME AND COVER	SAN	SANITARY SEWER
F/C	FACE OF CURB	STM	STORM SEWER
F-F	FACE TO FACE	SD	SUMP DISCHARGE
F/G	FINISHED GRADE	T/C	TOP OF CURB
FES	FLARED END SECTION	T/W	TOP OF WALL
INV	INVERT	UD	UNDERDRAIN
L	LENGTH OF CURVE	VC	VERTICAL CURVE
LF	LINEAR FT		
LT	LEFT		

**LINE TYPE IDENTIFICATION**

EXISTING	PROPOSED	DESCRIPTION
		CABLE TV
		CENTERLINE OF ROAD
		CONTOUR
		CONDUIT AND WIRE
		DITCH/SWALE
		EASEMENT
		FENCE
		ELECTRIC
		ELECTRICAL DUCT
		FIBER OPTIC
		FORCEMAIN
		GAS
		GUARDRAIL
		OVERHEAD ELECTRIC
		PETROLEUM
		PIPE, ABANDON
		PIPE, PREVIOUSLY ABANDONED
		PIPE OVER 24" (SHOWN ACTUAL SIZE)
		PROPERTY LINE
		R.O.W.
		RAILROAD
		SANITARY SEWER
		SAWCUT
		SILT FENCE
		STORM SEWER
		TELEPHONE
		WATER
		WATERS EDGE
		WETLAND

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**GENERAL NOTES:**

1. THE TOPOGRAPHIC MAPPING IS BASED ON GROUND SURVEY PERFORMED BY LHB, IN THE SUMMER OF 2015.
2. THE VERTICAL DATUM USED FOR THE PROJECT IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). THE HORIZONTAL DATUM IS BASED ON DOUGLAS COUNTY COORDINATE SYSTEM (HPGN).
3. VERTICAL AND HORIZONTAL BENCHMARKS ARE BASED ON THE ABOVE DATUM AND ARE SHOWN ON THE DRAWINGS.
4. THE LOCATION OF IMPROVEMENTS HAS BEEN INDICATED WITH THE USE OF STATIONING ALONG A LINE WHICH CAN BE LOCATED WITH THE USE OF COORDINATES AS INDICATED ON THE DRAWINGS. OTHER DIMENSIONS ARE SHOWN ON THE DRAWINGS TO AID THE CONTRACTOR AND REVIEW AGENCIES WITH A DETERMINATION OF THE APPROXIMATE FIELD LOCATION REFERENCED FROM NEARBY SITE OBJECTS. COORDINATE VALUES AND STATIONING SUPERCEDE DIMENSIONAL REFERENCES IN CASE OF CONFLICTS. DIMENSIONS AND STATION OFFSET NOTATIONS ARE SHOWN TO THE FLANGE OF CURB.
5. DIMENSIONS OR COORDINATES TAKE PRECEDENCE OVER SCALE. CONTRACTORS TO VERIFY ALL DIMENSIONS AND COORDINATES IN THE FIELD FOR PROPER FIT AND ALIGNMENT.
6. WHEN COORDINATES ARE USED, THE COORDINATE REFERENCE IS AT THE INTERSECTION OF LINES, AT THE CENTER OF CIRCULAR STRUCTURES, RECTANGULAR STRUCTURES AND AT THE PIPE CENTERLINE.
7. THE CONTRACTOR SHALL CONTACT DIGGER'S HOTLINE AT 1-800-242-8511, 811, or [www.diggershotline.com](http://www.diggershotline.com) A MINIMUM OF 72 HOURS PRIOR TO PERFORMING ANY EARTH MOVING OR EXCAVATION ACTIVITIES. THE CONTRACTOR SHALL ALSO CONTACT ANY OTHER UTILITIES WHICH MAY BE PRESENT WHICH ARE NOT PART OF THE ONE CALL SYSTEM.
8. EXISTING BURIED UTILITIES SHOWN IN PLAN AND PROFILE ARE INDICATED IN ACCORDANCE WITH THE AVAILABLE RECORDS AND FIELD INFORMATION AVAILABLE TO THE ENGINEER. OTHER UTILITIES MAY ALSO BE PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING FROM THE OWNERS OF THE EXISTING UTILITIES THE LOCATION OF THEIR BURIED FACILITIES. ANY UTILITIES DAMAGED OR DESTROYED BY THE CONTRACTOR'S OPERATIONS WHETHER SHOWN ON THE DRAWINGS OR NOT, SHALL BE REPLACED OR REPAIRED TO THE UTILITY'S SATISFACTION AT NO COST TO THE OWNER.
9. IF UTILITY FACILITIES OTHER THAN THOSE SHOWN ARE LOCATED, OR IF UTILITIES ARE LOCATED WHICH ARE NOT IN ACCORDANCE WITH THE LOCATION SHOWN ON THE DRAWINGS, THE ENGINEER SHALL BE NOTIFIED IF PLAN REVISIONS ARE NEEDED. CONTRACTOR IS REQUIRED TO FIELD LOCATE ALL CROSSING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION ACTIVITIES TO ALLOW ENGINEER TO REVISE LOCATIONS OF NEW FACILITIES TO AVOID CONFLICTS WITHOUT ADDITIONAL COST TO OWNER.
10. TRAFFIC CONTROL REQUIREMENTS ARE SPECIFIED IN THE PROJECT MANUAL AND ON THE PLANS. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS LISTED THEREIN AND SHALL MAINTAIN VEHICULAR ACCESS AT ALL TIMES TO ALL PROPERTY ADJACENT TO THE CONTRACTOR'S WORK AREAS. THE CONTRACTOR SHALL COMPLY WITH THE CITY OF SUPERIOR AND STATE OF WISCONSIN REQUIREMENTS FOR TRAFFIC CONTROL. IN ADDITION TO THE SPECIFICATIONS, THE CONTRACTOR SHALL NOTIFY POLICE AND FIRE DEPARTMENT OFFICIALS OF ALL CLOSED OR BLOCKED STREETS AND ALLEYS.
11. ACCESS CONSTRAINTS TO BE PLACED ON THE CONTRACTOR FOR THE PROJECT ARE PROVIDED IN THE PROJECT MANUAL. LAUREL AVENUE SHALL NOT BE USED AS A HAUL ROAD.
12. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES DURING CONSTRUCTION. CONTRACTOR SHALL PLAN HIS WORK SEQUENCE AND ACTIVITIES TO ENSURE THAT HIS WORK DOES NOT INTERFERE WITH PUBLIC NEEDS OR PUBLIC FACILITIES OPERATIONS, DELIVERIES, PICKUPS OR OTHER ACCESS NEEDS.
13. THE CONTRACTOR SHALL COORDINATE THE ACTIVITIES OF THEIR PERSONNEL, SUBCONTRACTORS, AND UTILITIES PERFORMING WORK ON THIS PROJECT.
14. THE CONTRACTOR SHALL MAINTAIN ON FILE WITH THE OWNER AND ENGINEER A CURRENT LIST OF EMERGENCY TELEPHONE NUMBERS FOR THE CONTRACTORS SUPERVISORY PERSONNEL ASSIGNED TO THIS PROJECT. NO LESS THAN 2 NAMES WITH 24 HOUR PHONE NUMBERS SHALL BE INCLUDED.
15. THE CONTRACTOR SHALL CONFINE CONSTRUCTION ACTIVITIES TO EXISTING RIGHT-OF-WAYS AND EASEMENTS SHOWN ON THE DRAWINGS. ANY DAMAGE TO PUBLIC OR PRIVATE PROPERTY OUTSIDE OF THESE LIMITS SHALL BE REPAIRED OR REPLACED TO ITS ORIGINAL CONDITION OR BETTER AT NO COST TO THE OWNER.
16. THE CONTRACTOR SHALL PROTECT ALL TREES NOT SHOWN FOR REMOVAL FROM DAMAGE AND SHALL REPLACE TREES WHICH ARE DAMAGED SUFFICIENTLY TO ENDANGER THEIR SURVIVAL IN THE ENGINEERS SOLE OPINION.
17. ELEVATIONS CALLED OUT ON THE DRAWINGS ARE TYPICALLY AT THE "INVERT" OR BOTTOM OF PIPES AND STRUCTURES, ALONG THE FLOW LINE IN SWALES, AND AT THE "RIM" OR TOP (FINISHED GRADE) OF MANHOLE FRAMES AND COVERS AND AT CURB FLANGE FOR CURB INLETS. OTHER ELEVATIONS ARE SPECIFICALLY NOTED.
18. UNLESS NOTED OTHERWISE RESTORATION OF EXISTING SANITARY SEWERS AND SERVICE LINES, WATER MAINS AND SERVICE LINES, STORM SEWERS, OTHER UTILITIES, SIDEWALKS, CURBS, DRIVEWAYS, STREETS OR OTHER IMPROVEMENTS NOT SHOWN AS BEING REMOVED, REPLACED OR MODIFIED BY THE PROJECT IS REQUIRED ONLY TO THE EXTENT THEY ARE DAMAGED OR DISTURBED BY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL RESTORE ALL DAMAGED AND DISTURBED IMPROVEMENTS TO THE IMPROVEMENT OWNERS AND ENGINEERS SATISFACTION.
19. WHERE NEW WORK ABUTS EXISTING CURBS, SIDEWALK, DRIVES, OR OTHER PAVEMENTS WHICH ARE TO REMAIN IN PLACE, THE CONTRACTOR SHALL PROVIDE NEAT SAWCUTS, FULL DEPTH AT THE LIMIT OF CONSTRUCTION. PAYMENT FOR SAWCUTS SHALL BE INCIDENTAL TO THE PROJECT. DOWEL BARS AND PAVEMENT TIES ARE REQUIRED WHERE NEW CONCRETE PAVEMENT OR CURB AND GUTTER WILL ABUT EXISTING CONCRETE PAVEMENT OR CURB AND GUTTER. DOWEL BARS AND PAVEMENT TIES SHALL BE INCIDENTAL TO THE PROJECT.
20. CONTRACTOR SHALL PROVIDE SUPPORT AND SHALL MAINTAIN SERVICE TO ALL ABOVE AND BELOW GRADE UTILITIES INCLUDING POLES, CABLES, WIRES, WATER, GAS, STORM , AND SANITARY FACILITIES, OR WITH THE WRITTEN CONCURRENCE OF THE UTILITY OWNER, MAY REMOVE, STORE, REINSTALL AND REPLACE AS NECESSARY.
21. THE CONTRACTOR SHALL MAKE PROVISIONS TO MAINTAIN FLOWS IN ALL SANITARY SEWERS AND STORM SEWERS, INCLUDING FAXON CREEK.
22. CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING CONSTRUCTION OF THE PROJECT.
23. THE CONTRACTOR SHALL PROTECT ALL PROPERTY PINS (STEEL REBARS, PIPES, CAPPED PINS, ETC.) WHICH WERE FOUND OR LOCATED ON THE PROJECT SITE WHETHER SHOWN ON THE PLANS OR ENCOUNTERED DURING CONSTRUCTION FROM BEING DAMAGED, DESTROYED OR MOVED. IF PROPERTY PINS ARE DAMAGED, DESTROYED OR MOVED, THE CONTRACTOR SHALL REPLACE SUCH BY A WISCONSIN REGISTERED LAND SURVEYOR..
24. AS PART OF THE CONTRACTORS RESPONSIBILITIES A DETAILED SET OF RECORD DRAWINGS SHALL BE KEPT TO RECORD CHANGES OR DEVIATIONS FROM THE PLANS AND TO SHOW EXISTING UNDERGROUND UTILITIES OR OTHER FEATURES ENCOUNTERED DURING CONSTRUCTION.
25. CONTRACTOR IS RESPONSIBLE FOR OBTAINING PERMITS REQUIRED FOR THE PROJECT NOT IDENTIFIED IN THE CONTRACT DOCUMENTS AS OBTAINED BY OWNER, AND PAYING ALL PERMIT COSTS, BONDS AND OTHER FEES REQUIRED FOR THE WORK.

**BENCH MARKS**

1. MONUMENT G-152: FOUND ALUMINUM CAPPED MONUMENT IN PVC TUBE 20.6 FEET EAST OF EAST EDGE SIDEWALK HILL AVENUE AND 18.0 FEET NORTH OF BITUMINOUS JUNIPER AVENUE.  
ELEVATION = 630.62

**NOTE:**

1. THIS IS A STANDARD LEGEND. NOT ALL OF THE INFORMATION SHOWN ON THIS LEGEND IS NEEDED IN THESE CONTRACT DRAWINGS.

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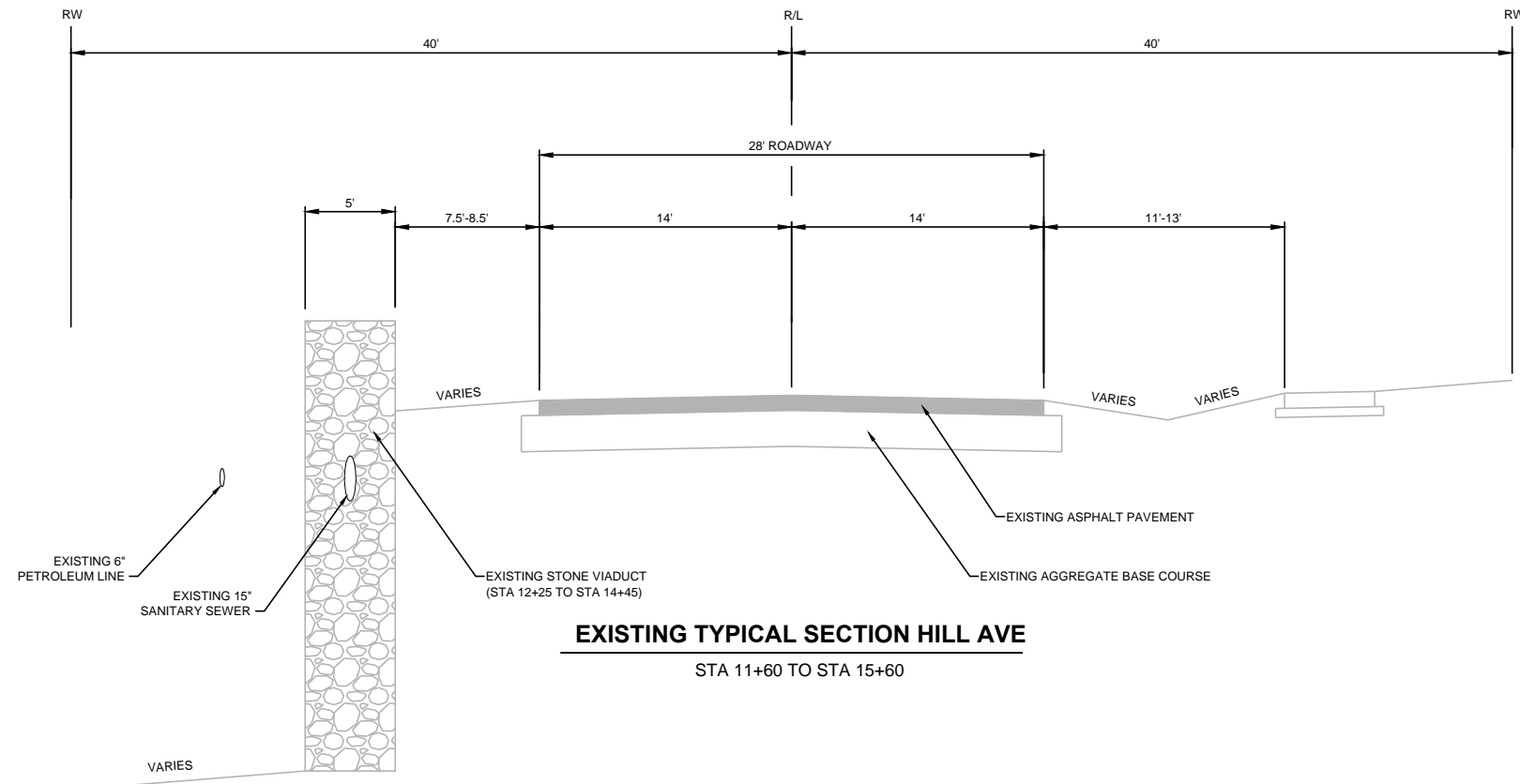
Designed By	JCH
Drawn By	JCH
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**CITY OF SUPERIOR  
FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE  
GENERAL LEGEND AND GENERAL NOTES**

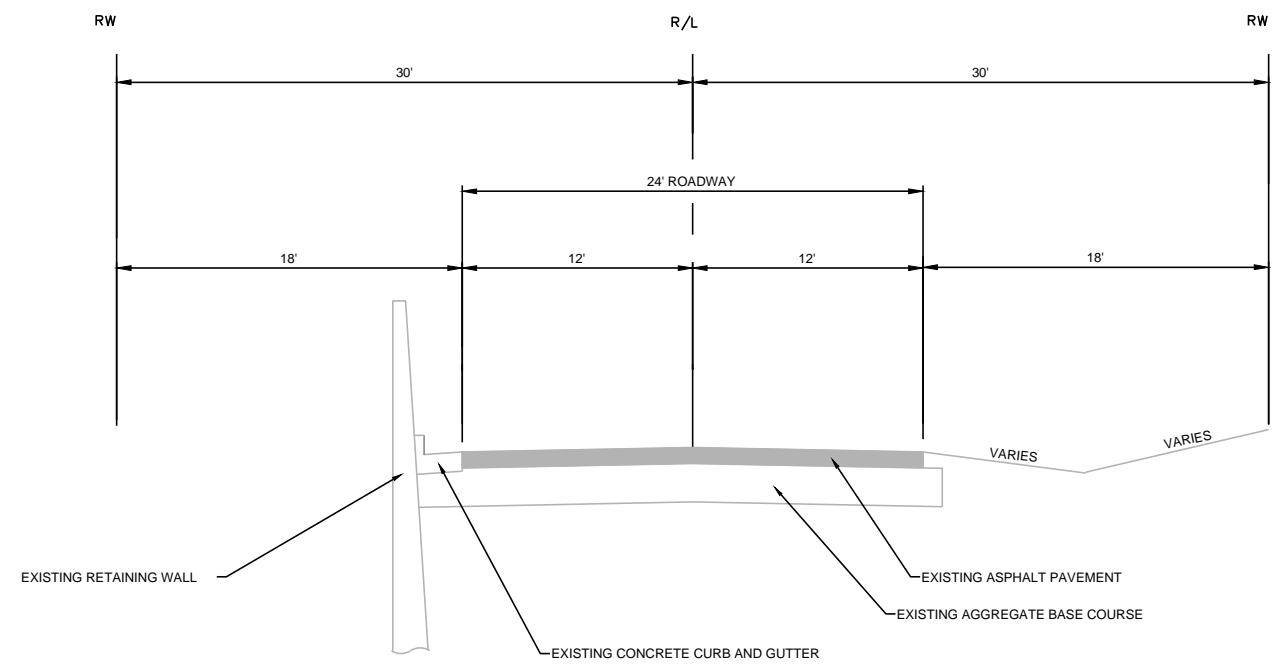


Sheet No. 4

Drawing No. 001-GN-1



**EXISTING TYPICAL SECTION HILL AVE**  
STA 11+60 TO STA 15+60

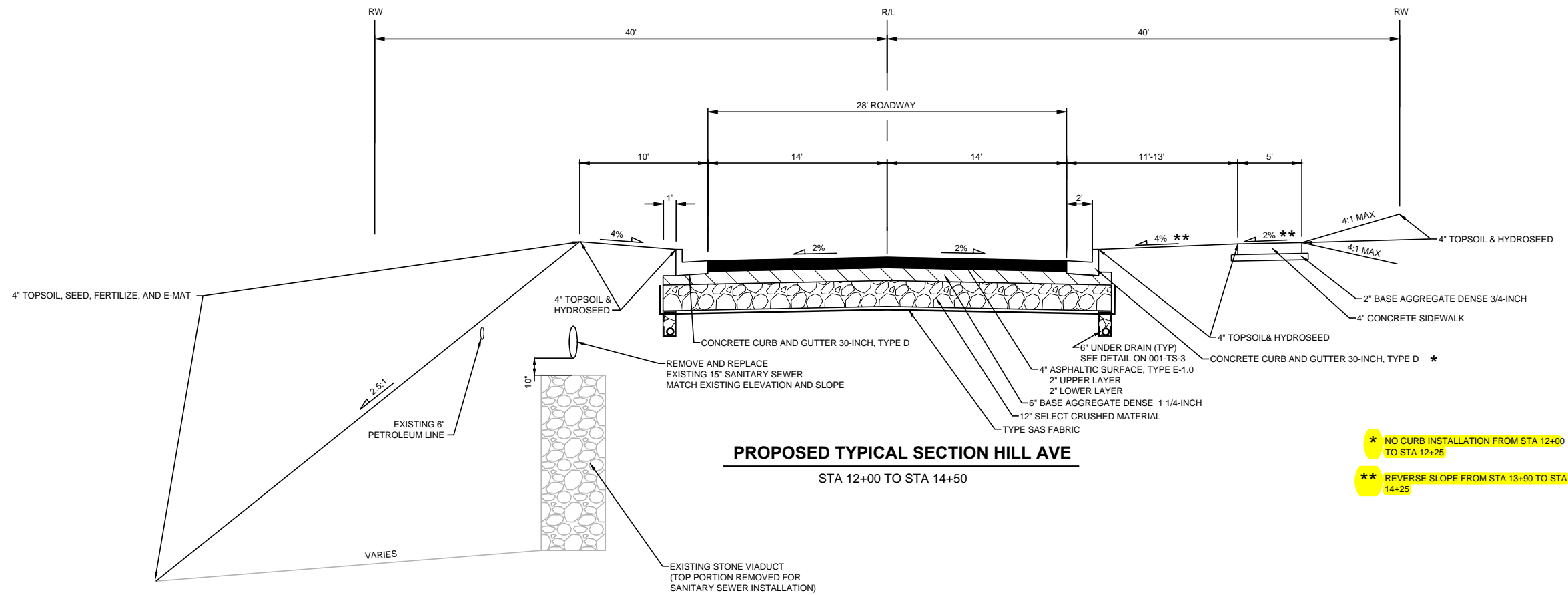


**EXISTING TYPICAL SECTION LAUREL AVE**  
STA 200+36 TO STA 201+50

Revision Number	Revision Description	Drawn By	Checked By	Date
	RECORD DRAWING REVISED TO CONFORM TO CONSTRUCTION RECORDS PROVIDED BY CONTRACTOR BY: S.FREEMES DATE: DEC. 2017			
Designated By	JCH			
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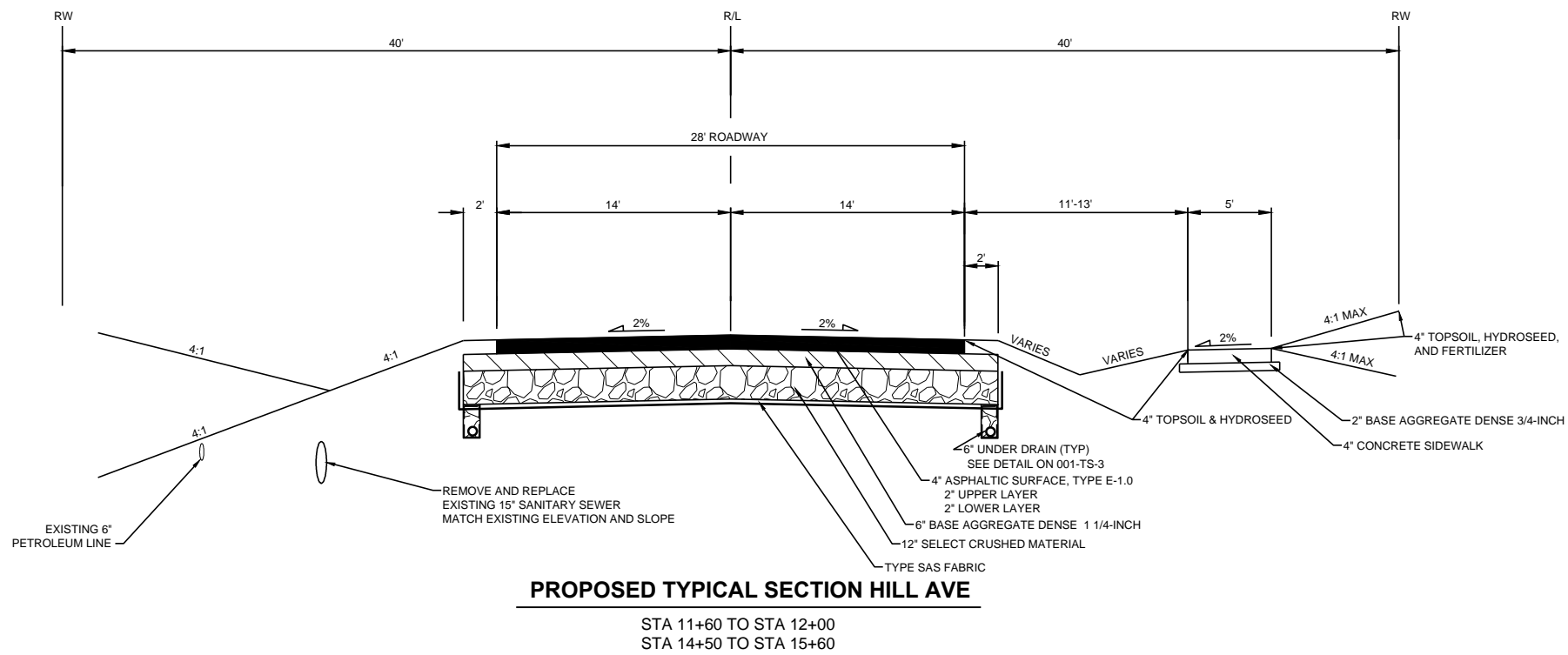
**CITY OF SUPERIOR**  
**FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE**  
**EXISTING TYPICAL SECTIONS**

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**PROPOSED TYPICAL SECTION HILL AVE**  
STA 12+00 TO STA 14+50

- \* NO CURB INSTALLATION FROM STA 12+00 TO STA 12+25
- \*\* REVERSE SLOPE FROM STA 13+90 TO STA 14+25



**PROPOSED TYPICAL SECTION HILL AVE**  
STA 11+60 TO STA 12+00  
STA 14+50 TO STA 15+60

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**CITY OF SUPERIOR**  
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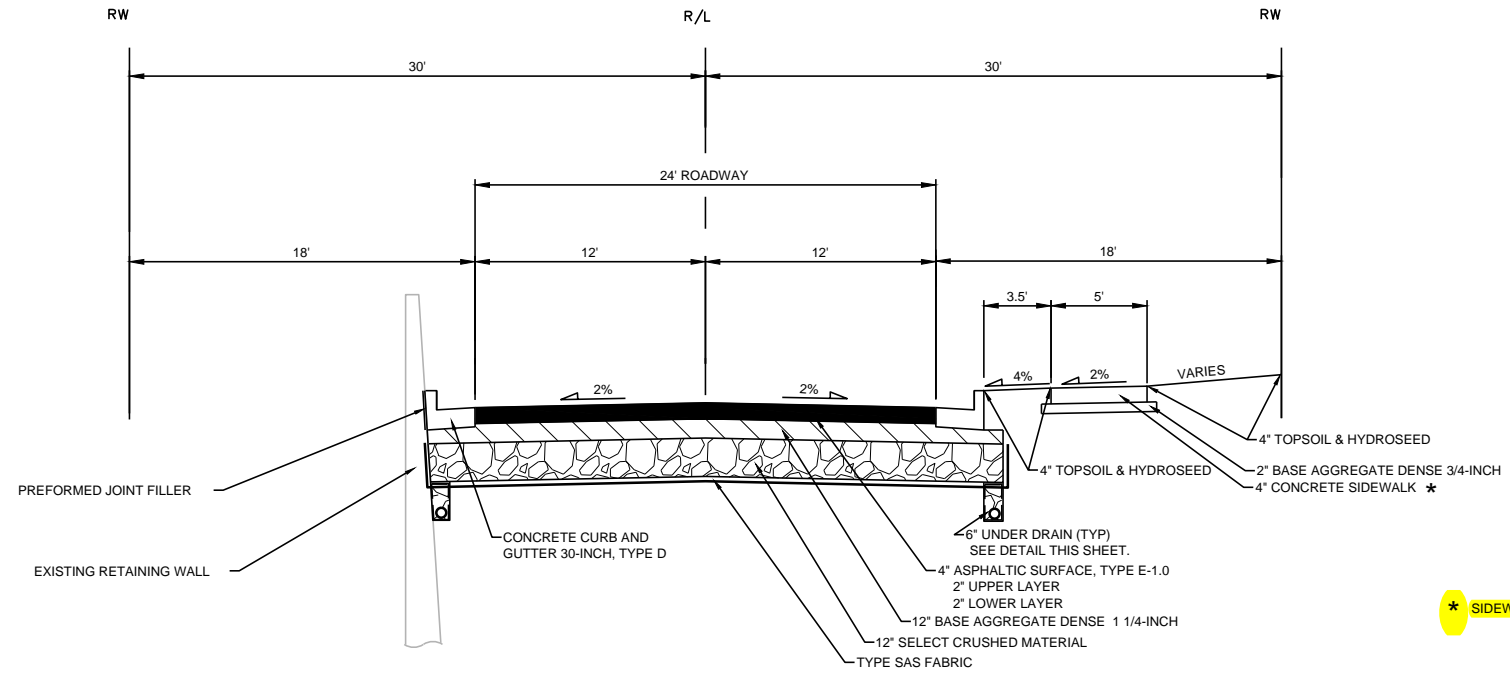
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**PROPOSED TYPICAL SECTIONS**

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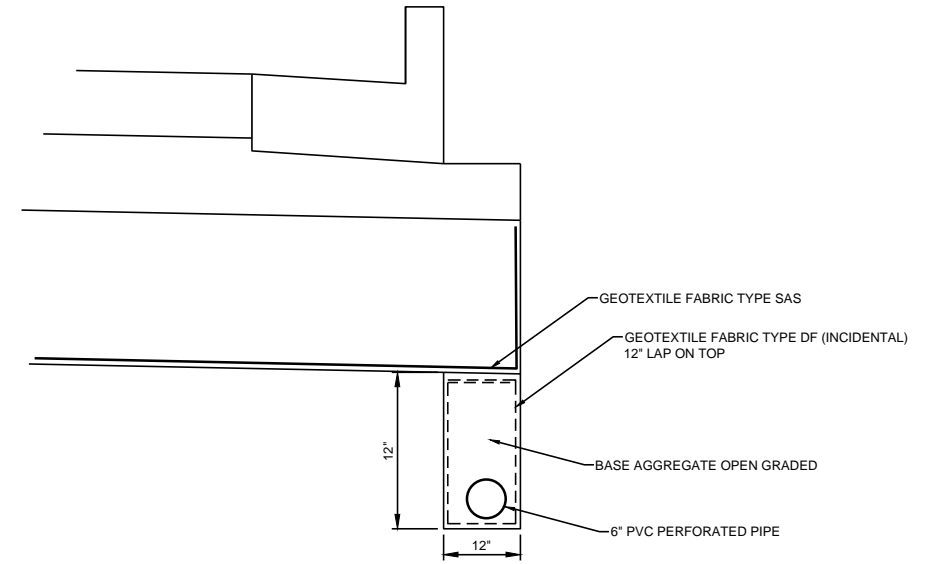
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Drawing No. **001-TS-2**

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**PROPOSED TYPICAL SECTION LAUREL AVE**

STA 200+36 TO STA 201+50



**TYPICAL UNDERDRAIN DETAIL**

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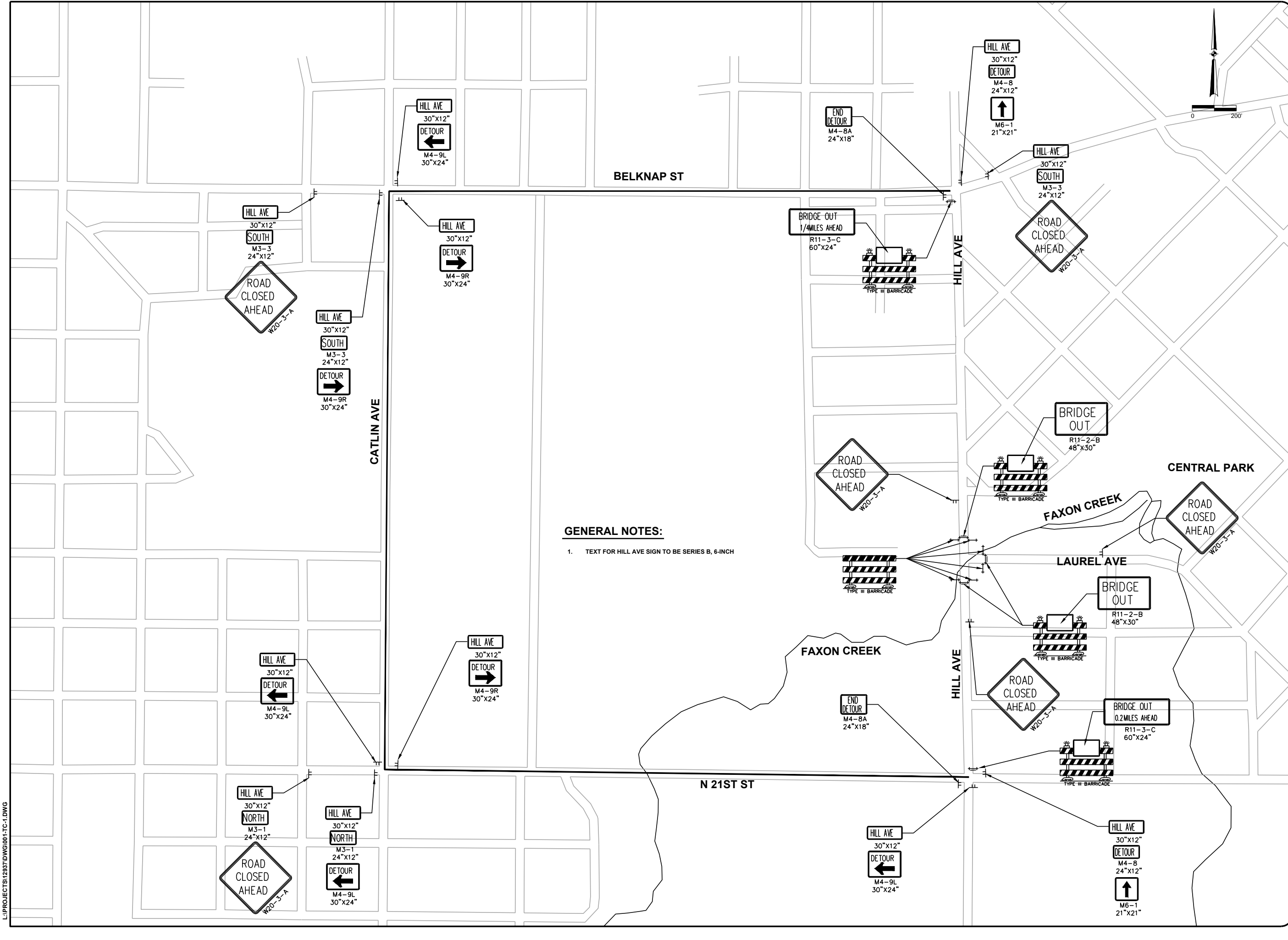
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**CITY OF SUPERIOR  
FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE**

**PROPOSED TYPICAL SECTIONS**

**DONOHUE**  
 Sheet No. 7  
 Drawing No. 001-TS-3

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**GENERAL NOTES:**  
 1. TEXT FOR HILL AVE SIGN TO BE SERIES B, 6-INCH

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Drawn By	
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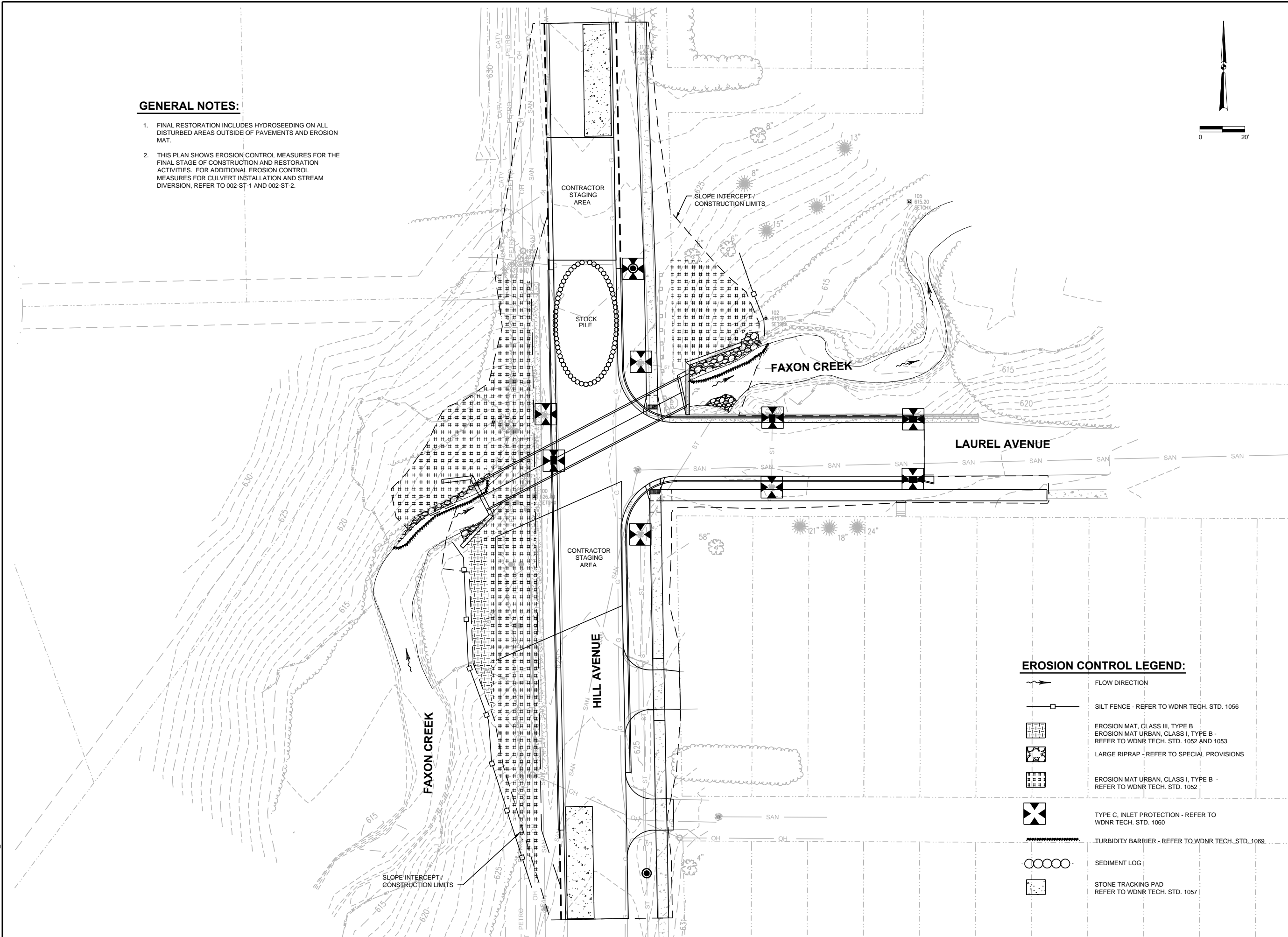
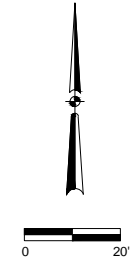
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**CITY OF SUPERIOR**  
**FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE**  
**TRAFFIC CONTROL AND DETOUR PLAN**



**GENERAL NOTES:**

1. FINAL RESTORATION INCLUDES HYDROSEEDING ON ALL DISTURBED AREAS OUTSIDE OF PAVEMENTS AND EROSION MAT.
2. THIS PLAN SHOWS EROSION CONTROL MEASURES FOR THE FINAL STAGE OF CONSTRUCTION AND RESTORATION ACTIVITIES. FOR ADDITIONAL EROSION CONTROL MEASURES FOR CULVERT INSTALLATION AND STREAM DIVERSION, REFER TO 002-ST-1 AND 002-ST-2.



**EROSION CONTROL LEGEND:**

- FLOW DIRECTION
- SILT FENCE - REFER TO WDNR TECH. STD. 1056
- EROSION MAT, CLASS III, TYPE B  
 EROSION MAT URBAN, CLASS I, TYPE B - REFER TO WDNR TECH. STD. 1052 AND 1053
- LARGE RIPRAP - REFER TO SPECIAL PROVISIONS
- EROSION MAT URBAN, CLASS I, TYPE B - REFER TO WDNR TECH. STD. 1052
- TYPE C, INLET PROTECTION - REFER TO WDNR TECH. STD. 1060
- TURBIDITY BARRIER - REFER TO WDNR TECH. STD. 1069
- SEDIMENT LOG
- STONE TRACKING PAD  
REFER TO WDNR TECH. STD. 1057

Revision Number	Revision Description	Date
	<b>RECORD DRAWING</b> REVISED TO CONFORM TO CONSTRUCTION RECORDS PROVIDED BY CONTRACTOR BY: S.FREEMES DATE: DEC. 2017	

Designed By	MAS
Drawn By	MAS
Checked By	RGL
Approved By	SJK
Filename	002_EC.DWG
Project No.	12937
Project Date	FEB 2016

**CITY OF SUPERIOR**  
**FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE**  
**EROSION CONTROL**

**DONOHUE**

Sheet No. **9**

Drawing No. **002-EC-1**

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**CONSTRUCTION SEQUENCING**

1. INSTALL SILT FENCE PARALLEL TO THE CONTOURS LOCATED DOWNHILL FROM THE WORK AREA.
2. INSTALL INLET PROTECTION, ROCK BAGS, AND SEDIMENT BALE BARRIERS.
3. REMOVE TOPSOIL FROM CONSTRUCTION AREA THAT SHALL BE WORKED ON FIRST. DO NOT REMOVE TOPSOIL FROM AREAS WHERE NO CONSTRUCTION ACTIVITIES SHALL OCCUR WITHIN 14 DAYS. TEMPORARILY STOCKPILE TOPSOIL ON THE SITE.
4. PROVIDE SEDIMENT LOG AROUND THE PERIMETER OF THE STOCKPILE(S).
5. SETUP BYPASS PUMPING OR DIVERSION OF WASTEWATER FLOW IN SANITARY SEWER AT CREEK CROSSING.
6. SUPPORT EXISTING UTILITIES NOT BEING REMOVED AND REPLACED.
7. AT THE LOCATION OF THE PROPOSED CULVERT, REMOVE EXISTING RETAINING WALL, STORM AND SANITARY SEWER, AND PAVEMENT.
8. CONSTRUCT DIVERSION CHANNEL, LINE WITH GEOTEXTILE FABRIC, STAKE LINER, AND DIVERT FAXON CREEK FLOW TO NORTH. INSTALL SILT FENCE AND TURBIDITY BARRIER.
9. REMOVE EXISTING ARCH CULVERT. CONSTRUCT FOOTINGS FOR NEW CULVERT. SET CULVERT AND CONSTRUCT HEAD AND SOUTH WING WALLS.
10. DIVERT FAXON CREEK FLOW THROUGH NEW BOX CULVERT.
11. REMOVE DIVERSION CHANNEL. INSTALL TURBIDITY BARRIER. CONSTRUCT NORTH WING WALLS.
12. BACKFILL CULVERT. CONSTRUCT ROADWAY EMBANKMENT ON WEST SIDE OF HILL AVENUE. SEED, PLACE RIPRAP AND PROVIDE TURF REINFORCEMENT MAT AND EROSION MAT AS SHOWN ON PLANS.
13. CONSTRUCT NEW SANITARY AND STORM SEWERS.
14. FINISH ROADWAY GRADING.
15. PLACE NEW CURB AND GUTTER AND ASPHALTIC PAVEMENT.
16. INSPECT SITE AND REPAIR ANY AREAS WHERE VEGETATION HAS BEEN DAMAGED OR VEGETATION THAT IS NOT ADEQUATELY ESTABLISHED.

**EROSION CONTROL NOTES**

1. POST WDNR CERTIFICATE OF PERMIT COVERAGE ON SITE AND MAINTAIN UNTIL CONSTRUCTION ACTIVITIES HAVE CEASED, THE SITE IS STABILIZED, AND A NOTICE OF TERMINATION IS FILED WITH WDNR.
2. KEEP A COPY OF THE CURRENT EROSION CONTROL PLAN ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
3. SUBMIT PLAN REVISIONS OR AMENDMENTS TO THE WDNR AT LEAST 5 DAYS PRIOR TO FIELD IMPLEMENTATION.
4. INSTALL SILT FENCE ON THE DOWNSIDE SLOPE OF ALL DISTURBED AREAS AND DOWNSIDE SLOPES OF STOCKPILE AREAS. REPAIR BREAKS AND GAPS IN SILT FENCES IMMEDIATELY.
5. STOCKPILES SHALL BE STABILIZED BY TEMPORARY SEEDING AND MULCHING IF THEY ARE TO REMAIN FOR MORE THAN 7 DAYS. STOCKPILES SHALL BE SETBACK A MINIMUM OF 25' FROM CHANNELIZED FLOW AND EROSION CONTROL DEVICES.
6. PLACE EROSION CONTROL MAT ON ALL SLOPES GREATER THAN 3H: 1V.
7. ALL ACTIVITIES SHALL BE CONDUCTED IN A LOGICAL SEQUENCE TO MINIMIZE THE AREA OF BARE SOIL EXPOSED AT ANY ONE TIME.
8. DISTURBED SOIL OUTSIDE OF THE DAY-TO-DAY CONSTRUCTION AREAS SHALL BE STABILIZED BY MULCHING, TEMPORARY SEEDING, AND COVERING WITH TARPS OR EQUIVALENT CONTROL MEASURES.
9. EROSION CONTROL PRACTICES SHOWN ARE MINIMUM REQUIREMENTS. CONTRACTOR MAY NEED TO SUPPLEMENT PRACTICES AS REQUIRED BY CONTRACTOR'S OPERATIONS, CONSTRUCTION SEQUENCE, OR WEATHER.
10. INSPECT THE EROSION CONTROL MEASURES WITHIN 24 HOURS AFTER EACH RAIN OF 0.5 INCHES OR MORE AND AT LEAST ONCE EACH WEEK. MAKE NEEDED REPAIRS AND DOCUMENT THE FINDINGS OF THE INSPECTIONS IN A SITE EROSION CONTROL LOG WITH THE DATE OF INSPECTION, THE NAME OF THE PERSON CONDUCTING THE INSPECTION, AND A DESCRIPTION OF THE PRESENT PHASE OF THE CONSTRUCTION AT THE SITE. KEEP INSPECTION REPORTS ON-SITE AND MAKE THEM AVAILABLE UPON REQUEST.
11. INSPECT AND MAINTAIN ALL INSTALLED EROSION CONTROL PRACTICES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.
12. WHENEVER POSSIBLE, PRESERVE EXISTING VEGETATION (ESPECIALLY ADJACENT TO SURFACE WATERS), MINIMIZE LAND-DISTURBING CONSTRUCTION ACTIVITY ON SLOPES OF 20% OR MORE, MINIMIZE SOIL COMPACTION, AND PRESERVE TOPSOIL.
13. INSTALL ALL BMPs IN ACCORDANCE WITH APPLICABLE WDNR TECHNICAL STANDARDS FOUND AT [HTTP://DNR.WI.GOV/TOPIK/STORMWATER/STANDARDS/CONST\\_STANDARDS.HTML](http://DNR.WI.GOV/TOPIK/STORMWATER/STANDARDS/CONST_STANDARDS.HTML).
 

NON-CHANNEL EROSION MAT	NO. 1052
CHANNEL EROSION MAT	NO. 1053
SILT FENCE	NO. 1056
STONE TRACKING PAD	NO. 1057
INLET PROTECTION	NO. 1060
TEMPORARY GRADING PRACTICES FOR EROSION CONTROL	NO. 1067
TURBIDITY BARRIER	NO. 1069
14. INSTALL PERIMETER EROSION CONTROLS PRIOR TO ANY LAND-DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRUBBING.
15. STAGE CONSTRUCTION GRADING ACTIVITIES TO MINIMIZE THE CUMULATIVE EXPOSED AREA.
16. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY STREET CLEANING (NOT FLUSHING) BEFORE END OF WORK EACH DAY.
17. INSTALL INLET PROTECTION PRIOR TO LAND-DISTURBING ACTIVITIES IN THE CONTRIBUTING DRAINAGE AREA AND/OR IMMEDIATELY UPON INLET INSTALLATION.
18. BUILT UP SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
19. IF DEWATERING IS NEEDED, CONTRACTOR SHALL PROVIDE FOR SEDIMENT REMOVAL ACCORDING TO WDNR TECHNICAL STANDARD 1061. WATER PUMPED FROM THE SITE SHALL BE TREATED BY TEMPORARY SEDIMENTATION BASINS, GRIT CHAMBERS, SAND FILTERS, UPSLOPE CHAMBERS, HYDRO-CYCLONES, SWIRL CONCENTRATORS, OR OTHER APPROPRIATE CONTROLS DESIGNED AND USED TO REMOVE PARTICLES OF 100 MICRONS OR GREATER FOR THE HIGHEST DEWATERING PUMPING RATE. IF THE WATER IS DEMONSTRATED TO HAVE NO PARTICLES GREATER THAN 100 MICRONS DURING DEWATERING OPERATIONS, THEN NO CONTROL IS NEEDED BEFORE DISCHARGE. WATER MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE OR RECEIVING CHANNELS.
20. THE FOLLOWING LATE SEASON CONSTRUCTION AND WINTER STABILIZATION MEASURES SHALL ALSO BE TAKEN:
  - A. SEED ALL DISTURBED AREAS WITH TEMPORARY SEED MIX (OATS, WINTER WHEAT, ANNUAL RYE) BY OCTOBER 15. SEEDING RATES AND MIXES SHALL CONFORM TO WISCONSIN DEPARTMENT OF TRANSPORTATION (WISDOT) ROADWAY STANDARD SECTION 630.
  - B. IF THE OCTOBER 15 DEADLINE IS MISSED, DORMANT SEED ALL AREAS DISTURBED, AS WELL AS PLACING EROSION MAT AND DITCH CHECKS AS APPROPRIATE. AS AN ALTERNATIVE TO DORMANT SEEDING, THE USE OF SOIL STABILIZERS MAY ALSO BE APPLIED TO THE DISTURBED AREAS.
  - C. AS SOON AS POSSIBLE IN THE SPRING, THE SITE SHALL BE EVALUATED AND RE-SEEDED AS NECESSARY.
21. EROSION CONTROL DETAILS SHOWN ON 999-C DRAWINGS.

**GENERAL CONSTRUCTION WASTES (DUST, SOLID WASTES, HAZARDOUS WASTES, ETC.)**

IN ADDITION TO EROSION CONTROL THE CONTRACTOR SHALL TAKE MEASURES TO PROPERLY MANAGE SOLID WASTES, HAZARDOUS WASTES, DUST GENERATION, AND ALL OTHER ACTIVITIES THAT SHALL GENERATE WASTES DURING THE CONSTRUCTION PHASE.

DUST - WATER TRUCKS OR OTHER DUST CONTROL AGENTS SHALL BE USED AS NEEDED DURING CONSTRUCTION TO REDUCE DUST GENERATED ON THE SITE.

SOLID WASTE MATERIALS - ALL WASTE MATERIAL SHALL BE COLLECTED ON-SITE IN ACCORDANCE WITH LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE WASTE SHALL BE EMPTIED AND HAULED OFF SITE AT REGULARLY SCHEDULED INTERVALS OR AS NECESSARY. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ONSITE. ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURES FOR WASTE DISPOSAL. WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES SHALL NOT BE ALLOWED ONSITE.

SANITARY WASTE - ALL SANITARY WASTE SHALL BE COLLECTED BY TEMPORARY SANITARY FACILITIES PROVIDED AT THE SITE THROUGH THE CONSTRUCTION PHASE. THEY MUST BE UTILIZED BY ALL CONSTRUCTION PERSONNEL AND SHALL BE SERVICED BY A COMMERCIAL OPERATOR.

**SPILL PREVENTION AND CONTROL PRACTICES**

IN ORDER TO REDUCE THE RISK OF SPILLS OF HAZARDOUS MATERIALS, THE FOLLOWING PRACTICES SHALL BE FOLLOWED:

1. AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE WORK.
2. ALL MATERIALS STORED ONSITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL. IF THE MATERIAL IS HAZARDOUS AND THE CONTAINER CANNOT BE RESEALED, THE ORIGINAL LABEL AND MATERIAL SAFETY DATA SHALL BE RETAINED.
3. PRODUCTS SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
4. WHENEVER POSSIBLE, ALL OF A PRODUCT SHALL BE USED BEFORE DISPOSING OF THE CONTAINER.
5. THE MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
6. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR STATE AND LOCAL RECOMMENDED METHODS FOR PROPER DISPOSAL SHALL BE FOLLOWED.

THESE PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

1. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF CLEANUP SUPPLIES.
2. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
3. PERSONNEL PERFORMING THE SPILL CLEAN-UP SHALL BE PROPERLY TRAINED AND SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING.
4. SPILL REPORTING - THE PERMITEE SHALL IMMEDIATELY NOTIFY THE WDNR IN ACCORDANCE WITH NR706 WISCONSIN ADMINISTRATIVE CODE. IN THE EVENT THAT A SPILL OR ACCIDENTAL RELEASE OF ANY MATERIAL OR SUBSTANCE RESULTS IN THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE. ANY SPILLS ABOVE THE REPORTABLE QUANTITIES LIMITS IN THE CODE OF FEDERAL REGULATIONS (CFR) TITLE 40, PART 302 SHALL BE REPORTED TO THE EPA NATIONAL RESPONSE CENTER (1-800-424-8802).

PETROLEUM PRODUCTS - ALL ONSITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.

FERTILIZERS - FERTILIZERS USED SHALL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED. ONCE APPLIED, FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. FERTILIZER SHALL BE STORED IN A COVERED LOCATION.

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	RECORD DRAWING REVISED TO CONFORM TO CONSTRUCTION RECORDS PROVIDED BY CONTRACTOR BY: S.FREEMES DATE: DEC. 2017				
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Approved By	SJK	Filename	002_EC.DWG	Project No.	12937
Project Date	FEB 2016				

**CITY OF SUPERIOR  
FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE  
SITE DEVELOPMENT  
STORM WATER & EROSION CONTROL NOTES**



Sheet No. 10  
Drawing No.

**002-EC-2**

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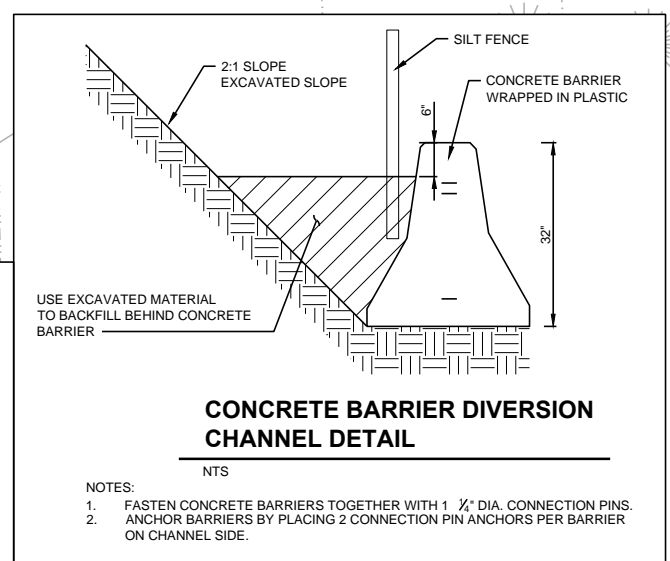
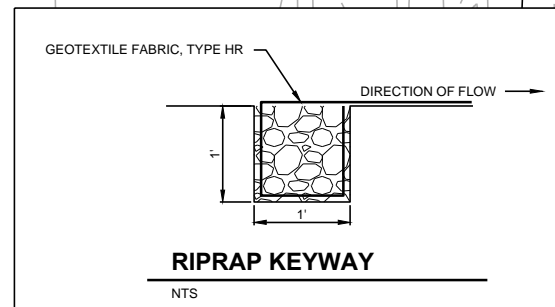
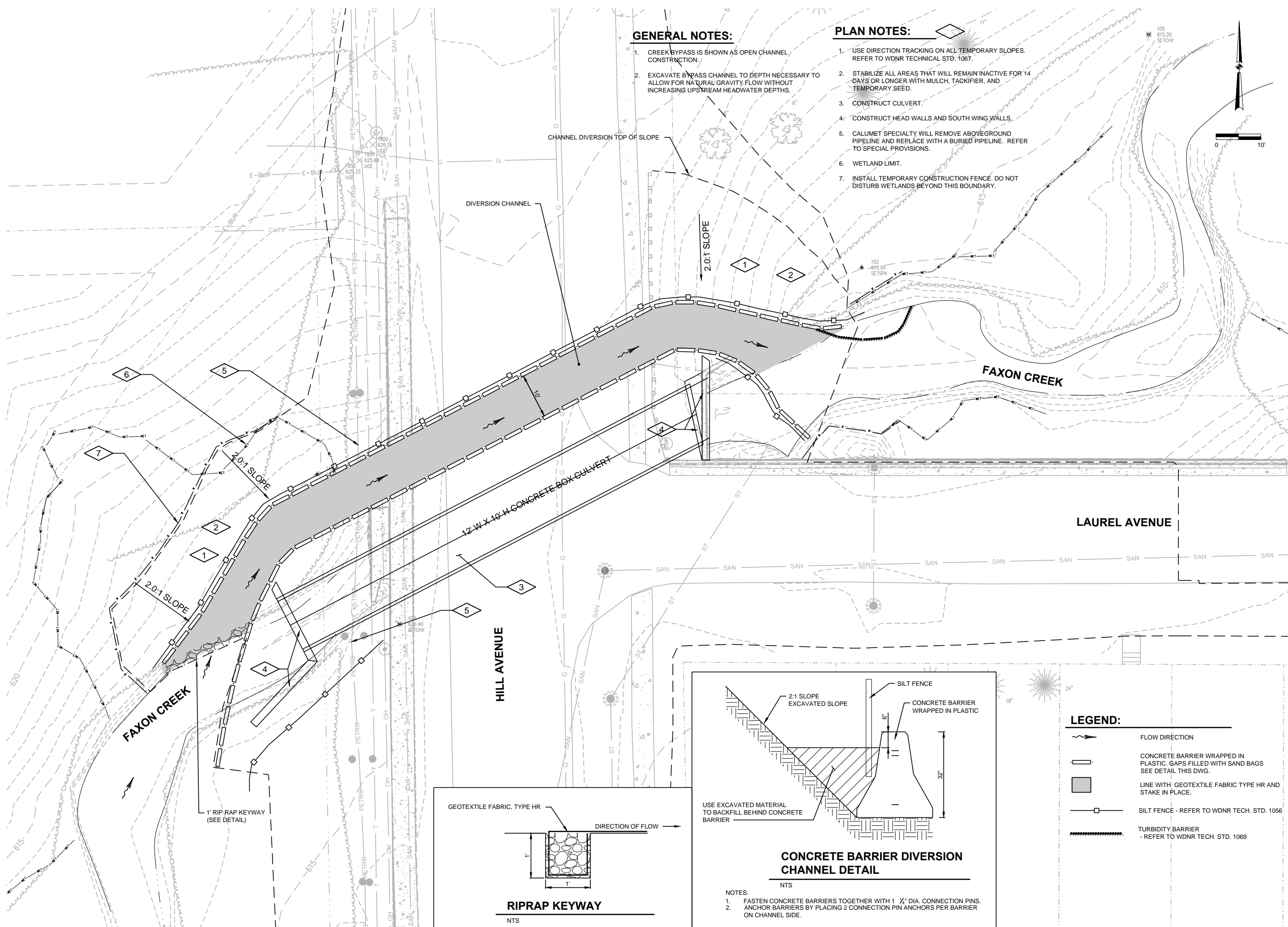
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**GENERAL NOTES:**

1. CREEK BYPASS IS SHOWN AS OPEN CHANNEL CONSTRUCTION.
2. EXCAVATE BYPASS CHANNEL TO DEPTH NECESSARY TO ALLOW FOR NATURAL GRAVITY FLOW WITHOUT INCREASING UPSTREAM HEADWATER DEPTHS.

**PLAN NOTES:**

1. USE DIRECTION TRACKING ON ALL TEMPORARY SLOPES. REFER TO WDNR TECHNICAL STD. 1067.
2. STABILIZE ALL AREAS THAT WILL REMAIN INACTIVE FOR 14 DAYS OR LONGER WITH MULCH, TACKIFIER, AND TEMPORARY SEED.
3. CONSTRUCT CULVERT.
4. CONSTRUCT HEAD WALLS AND SOUTH WING WALLS.
5. CALUMET SPECIALTY WILL REMOVE ABOVEGROUND PIPELINE AND REPLACE WITH A BURIED PIPELINE. REFER TO SPECIAL PROVISIONS.
6. WETLAND LIMIT.
7. INSTALL TEMPORARY CONSTRUCTION FENCE. DO NOT DISTURB WETLANDS BEYOND THIS BOUNDARY.

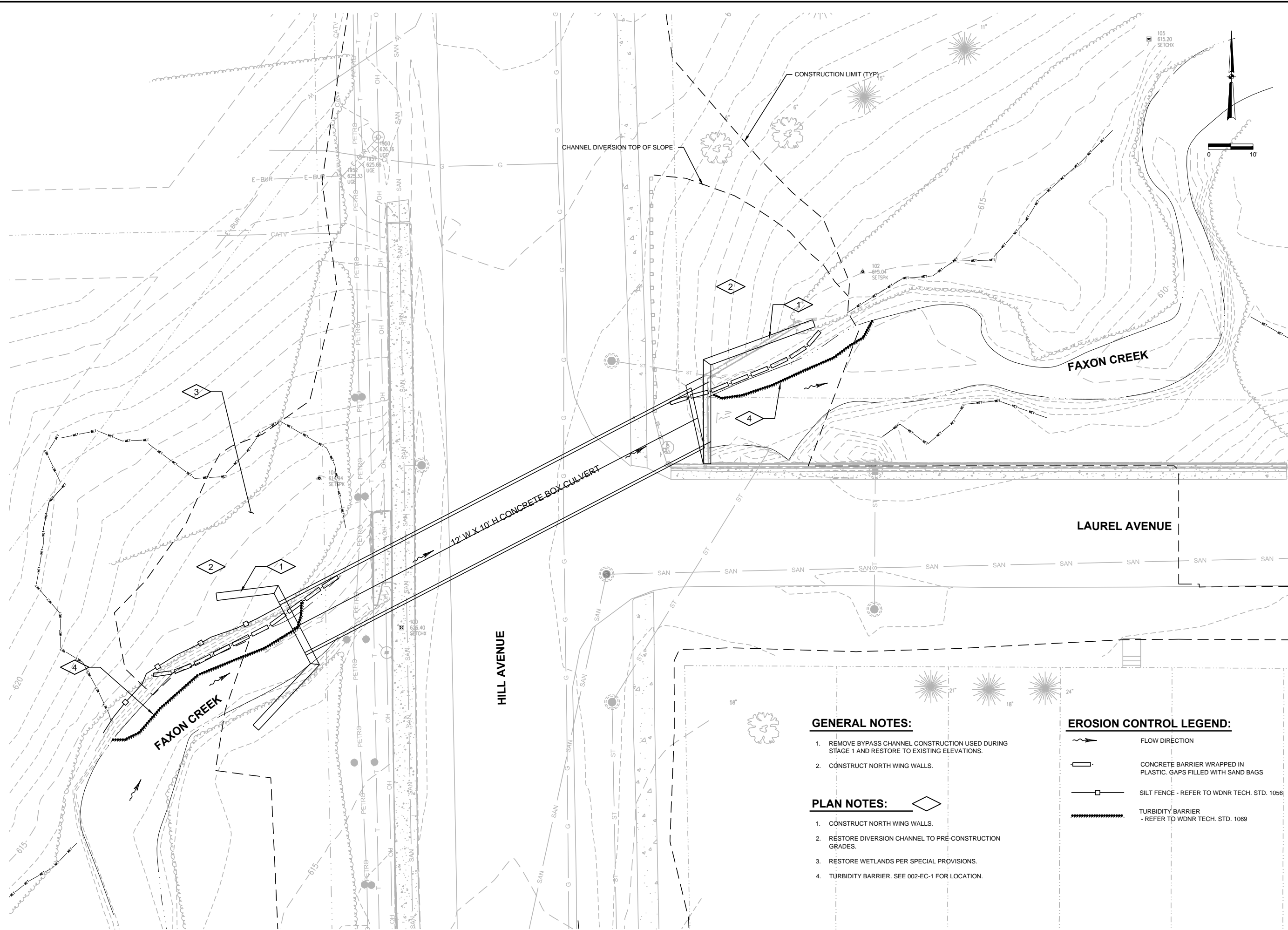


**LEGEND:**

- ➔ FLOW DIRECTION
- [Symbol] CONCRETE BARRIER WRAPPED IN PLASTIC. GAPS FILLED WITH SAND BAGS. SEE DETAIL THIS DWG.
- [Symbol] LINE WITH GEOTEXTILE FABRIC TYPE HR AND STAKE IN PLACE.
- [Symbol] SILT FENCE - REFER TO WDNR TECH. STD. 1056
- [Symbol] TURBIDITY BARRIER - REFER TO WDNR TECH. STD. 1069

Revision Number	Revision Description	Date
	<b>RECORD DRAWING</b> REVISED TO CONFORM TO CONSTRUCTION RECORDS PROVIDED BY CONTRACTOR BY: S.FREEMES DATE: DEC. 2017	
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CITY OF SUPERIOR  
**FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE**  
CHANNEL DIVERSION STAGING PLAN  
BOX CULVERT REPLACEMENT - STAGE 1



**GENERAL NOTES:**

1. REMOVE BYPASS CHANNEL CONSTRUCTION USED DURING STAGE 1 AND RESTORE TO EXISTING ELEVATIONS.
2. CONSTRUCT NORTH WING WALLS.

**PLAN NOTES:**

1. CONSTRUCT NORTH WING WALLS.
2. RESTORE DIVERSION CHANNEL TO PRE-CONSTRUCTION GRADES.
3. RESTORE WETLANDS PER SPECIAL PROVISIONS.
4. TURBIDITY BARRIER. SEE 002-EC-1 FOR LOCATION.

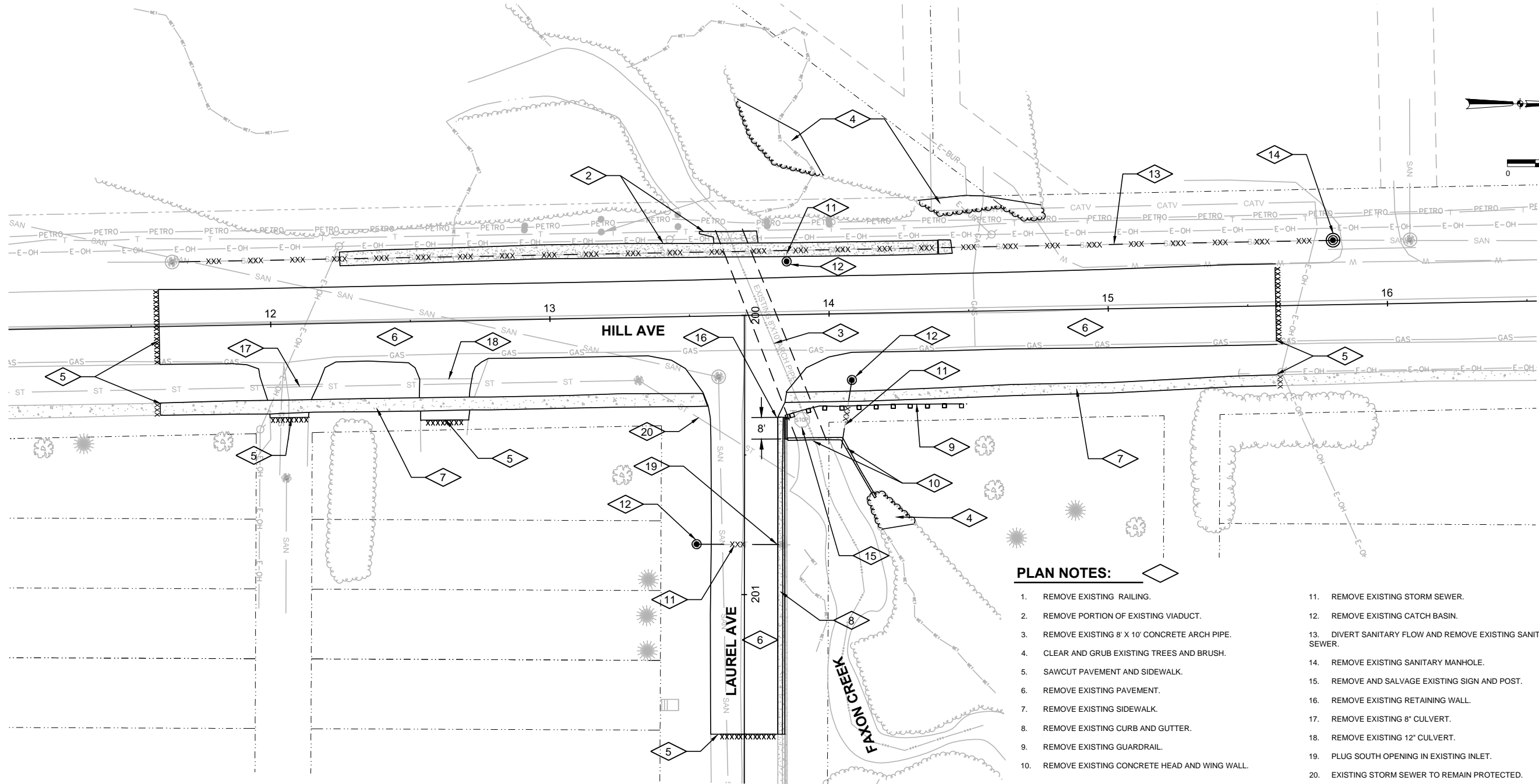
**EROSION CONTROL LEGEND:**

- FLOW DIRECTION
- CONCRETE BARRIER WRAPPED IN PLASTIC. GAPS FILLED WITH SAND BAGS
- SILT FENCE - REFER TO WDNR TECH. STD. 1056
- TURBIDITY BARRIER - REFER TO WDNR TECH. STD. 1069

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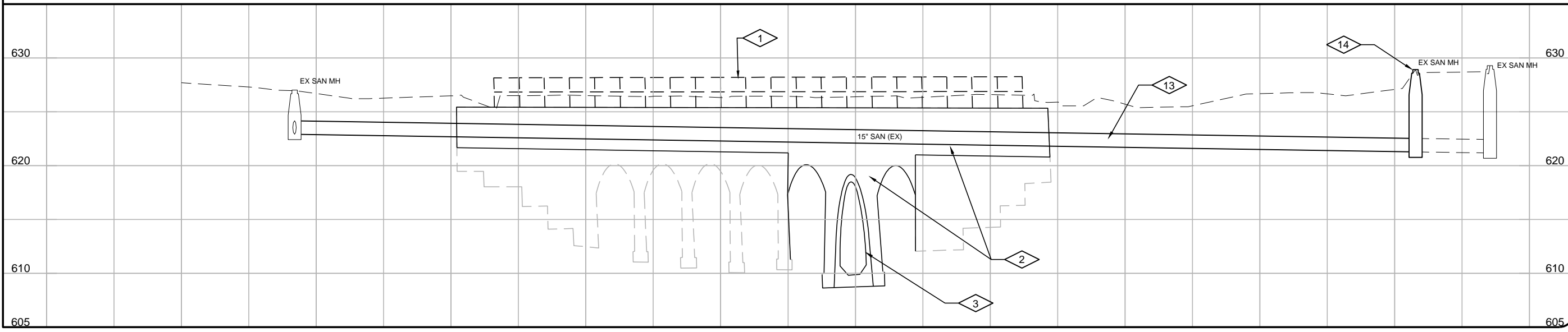
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**CITY OF SUPERIOR  
FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE  
CHANNEL DIVERSION STAGING PLAN  
BOX CULVERT INSTALLATION - STAGE 2**



**PLAN NOTES:**

1. REMOVE EXISTING RAILING.
2. REMOVE PORTION OF EXISTING VIADUCT.
3. REMOVE EXISTING 8' X 10' CONCRETE ARCH PIPE.
4. CLEAR AND GRUB EXISTING TREES AND BRUSH.
5. SAWCUT PAVEMENT AND SIDEWALK.
6. REMOVE EXISTING PAVEMENT.
7. REMOVE EXISTING SIDEWALK.
8. REMOVE EXISTING CURB AND GUTTER.
9. REMOVE EXISTING GUARDRAIL.
10. REMOVE EXISTING CONCRETE HEAD AND WING WALL.
11. REMOVE EXISTING STORM SEWER.
12. REMOVE EXISTING CATCH BASIN.
13. DIVERT SANITARY FLOW AND REMOVE EXISTING SANITARY SEWER.
14. REMOVE EXISTING SANITARY MANHOLE.
15. REMOVE AND SALVAGE EXISTING SIGN AND POST.
16. REMOVE EXISTING RETAINING WALL.
17. REMOVE EXISTING 8" CULVERT.
18. REMOVE EXISTING 12" CULVERT.
19. PLUG SOUTH OPENING IN EXISTING INLET.
20. EXISTING STORM SEWER TO REMAIN PROTECTED.

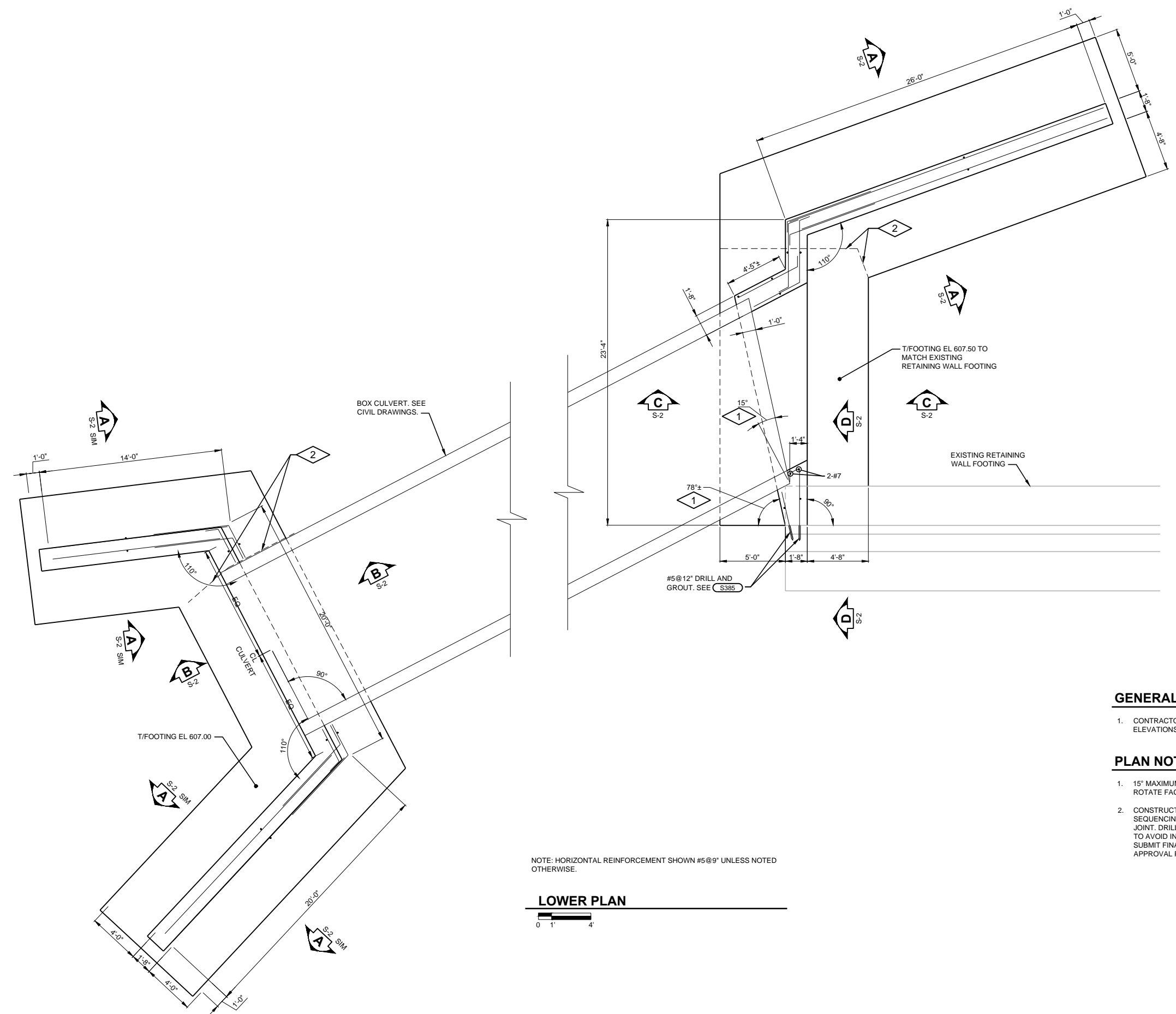


Revision Number	Revision Description	Drawn By	Checked By	Date
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Checked By	XXX			
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**CITY OF SUPERIOR  
FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE  
REMOVAL PLAN  
HILL AND LAUREL AVENUE**

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NOTE: HORIZONTAL REINFORCEMENT SHOWN #5@9" UNLESS NOTED OTHERWISE.

**LOWER PLAN**

0 1' 4'

- GENERAL NOTES:**
- CONTRACTOR TO FIELD VERIFY PERTINENT EXISTING DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
- PLAN NOTES:**
- 15" MAXIMUM ALLOWABLE MITER AT END OF CULVERT SECTION. ROTATE FACE OF WALL AS REQUIRED.
  - CONSTRUCTION JOINT AS REQUIRED FOR CONSTRUCTION SEQUENCING. WALL REINFORCEMENT TO BE CONTINUOUS THROUGH JOINT. DRILL AND GROUT FOOTING REINFORCEMENT FOR FINAL POUR TO AVOID INTERFERENCE WITH DIVERSION CHANNEL. SEE (S385) SUBMIT FINAL JOINT LOCATION AND REBAR LAYOUT TO ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.

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**CITY OF SUPERIOR**

**FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE**

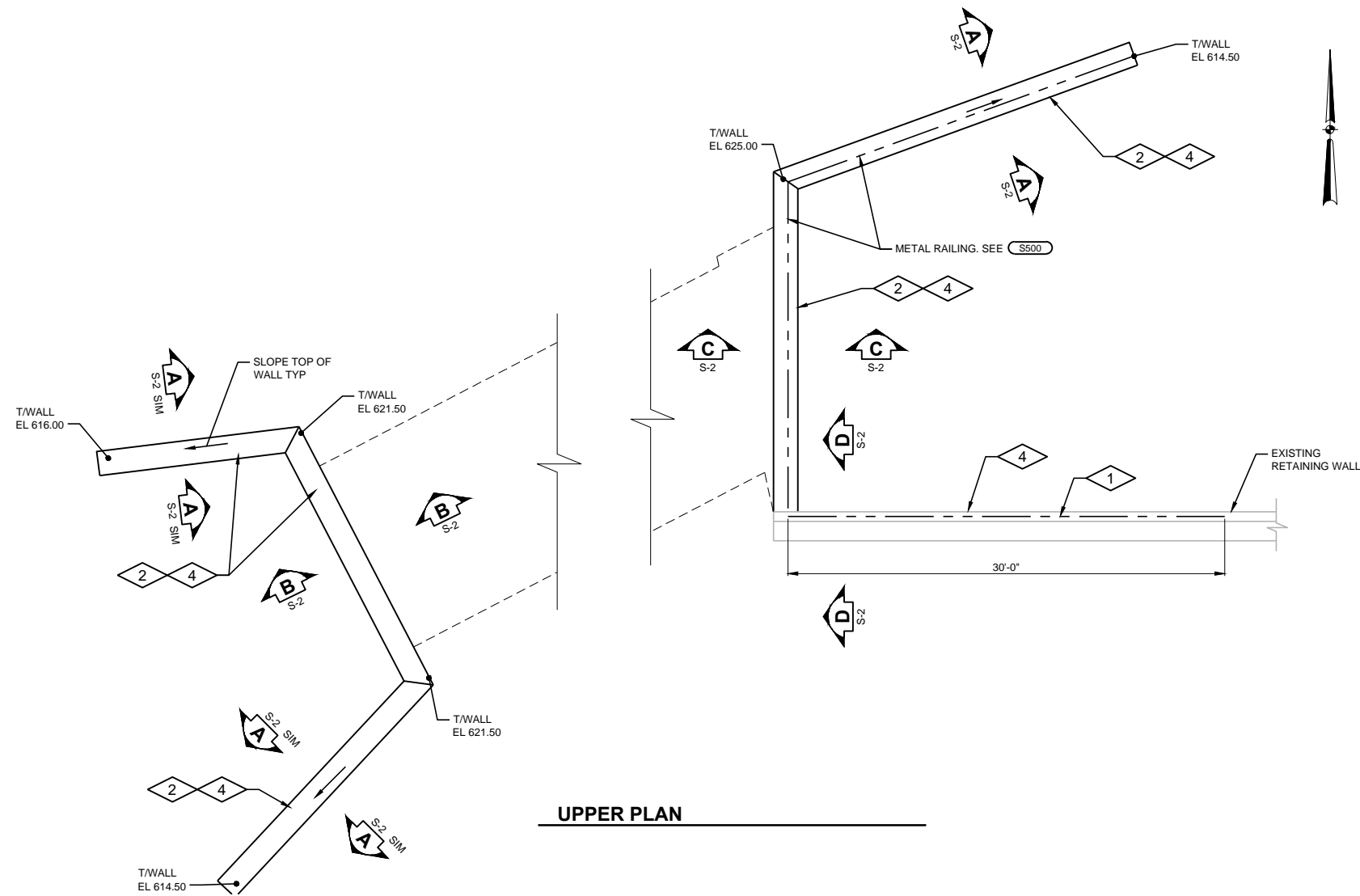
**STRUCTURAL PLAN**

**GENERAL NOTES:**

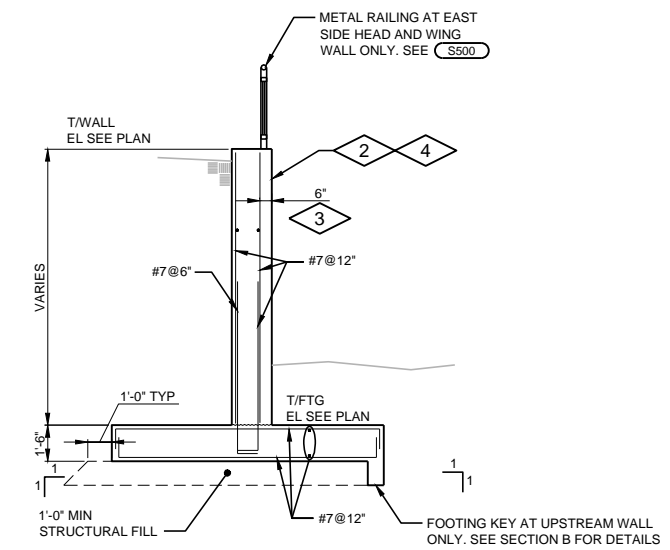
- CONTRACTOR TO FIELD VERIFY PERTINENT EXISTING DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.

**PLAN NOTES:**

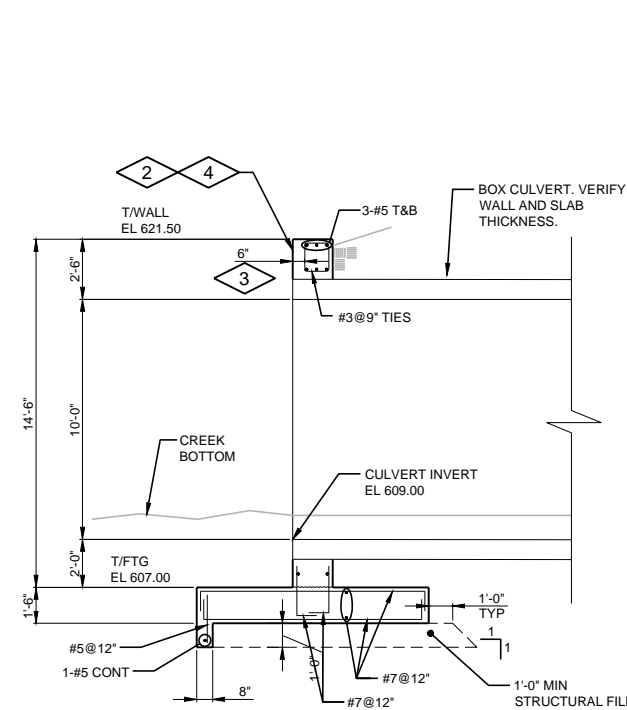
- NEW RAILING ON TOP OF EXISTING RETAINING WALL. SEE (S500) AT OWNER'S OPTION, EXTEND RAILING TO EAST END OF EXISTING RETAINING WALL.
- EXPOSED SURFACE OF CONCRETE WALL TO HAVE "RUSTIC ASHLAR" FORM LINER SIZE 8" TO 32" AND MAXIMUM RELIEF DEPTH OF 4" AT ALL LOCATIONS. EXTEND TO 6" BELOW FINISHED GRADE.
- PROVIDE 6" TOTAL CONCRETE COVER AT ALL SURFACES TO RECEIVE FORM LINER(4" LINER + 2" ADDL COVER).
- CONCRETE STAIN: MANUFACTURED FOR USE ON EXTERIOR CONCRETE SURFACES, CONSISTING OF AN ACRYLIC BASE COAT AND TOPCOAT, AND A PIGMENTED SEALER FINISH COAT. COLOR TO MATCH MARINA DRIVE HEAD AND WING WALLS. APPLY CONCRETE STAIN IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.



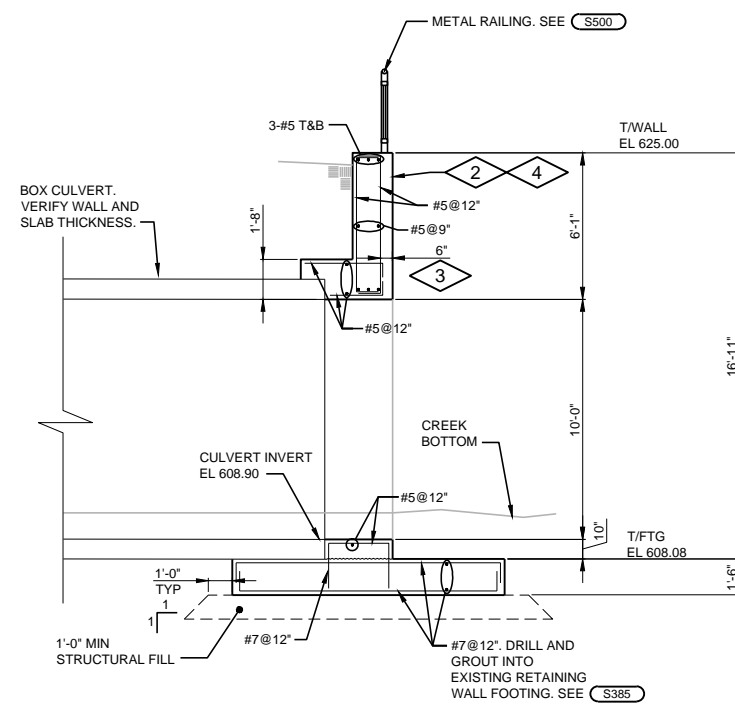
**UPPER PLAN**



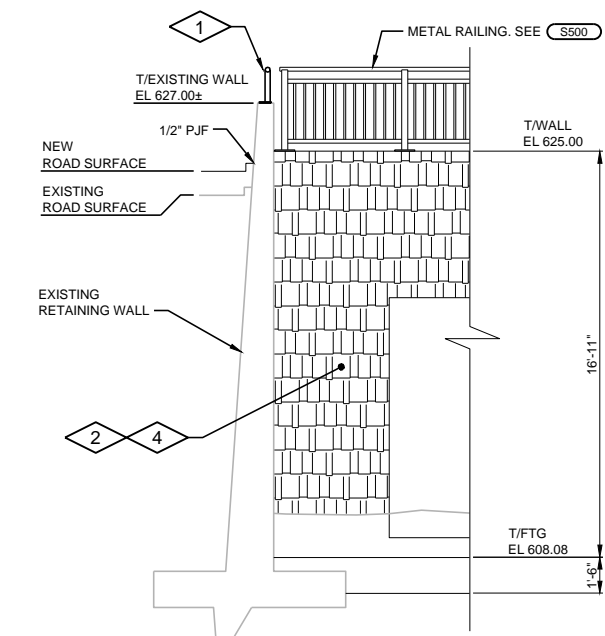
**SECTION A**



**SECTION B**



**SECTION C**

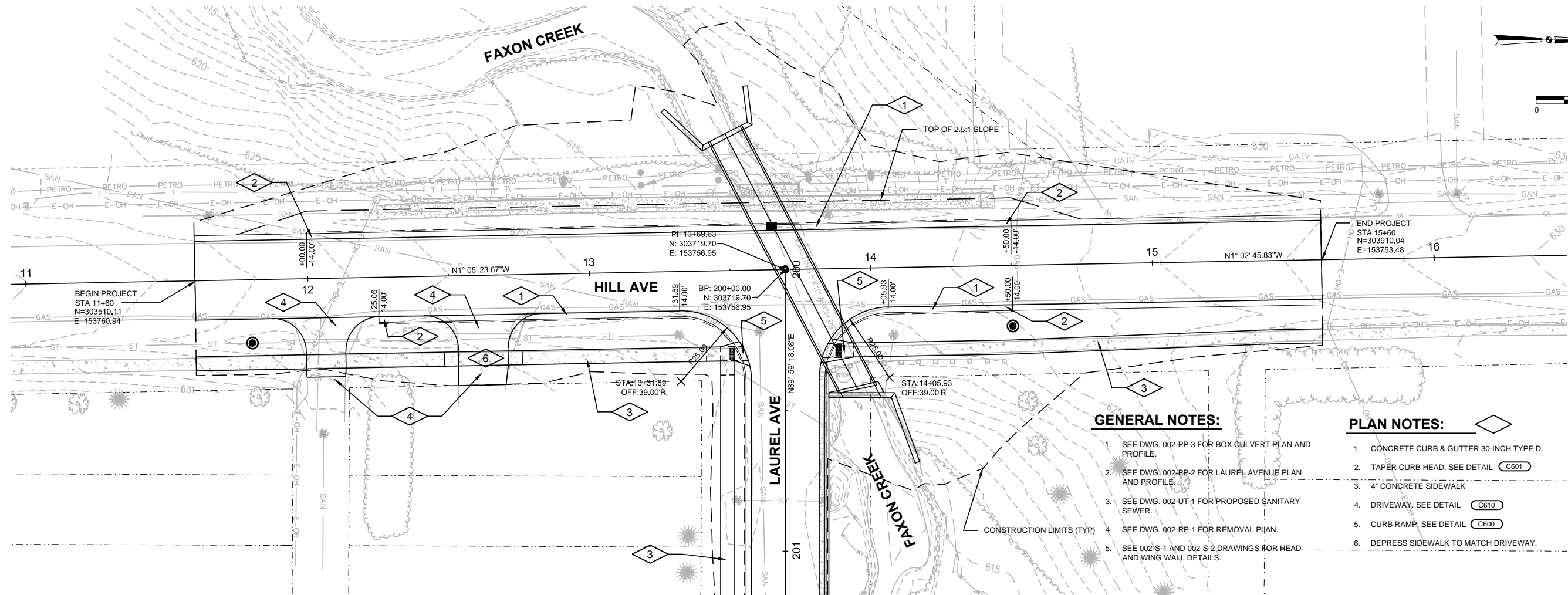


**SECTION D**

Revision Number	Revision Description	Checked By	Date

**CITY OF SUPERIOR**  
**FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE**  
**STRUCTURAL**  
**PLAN AND SECTIONS**



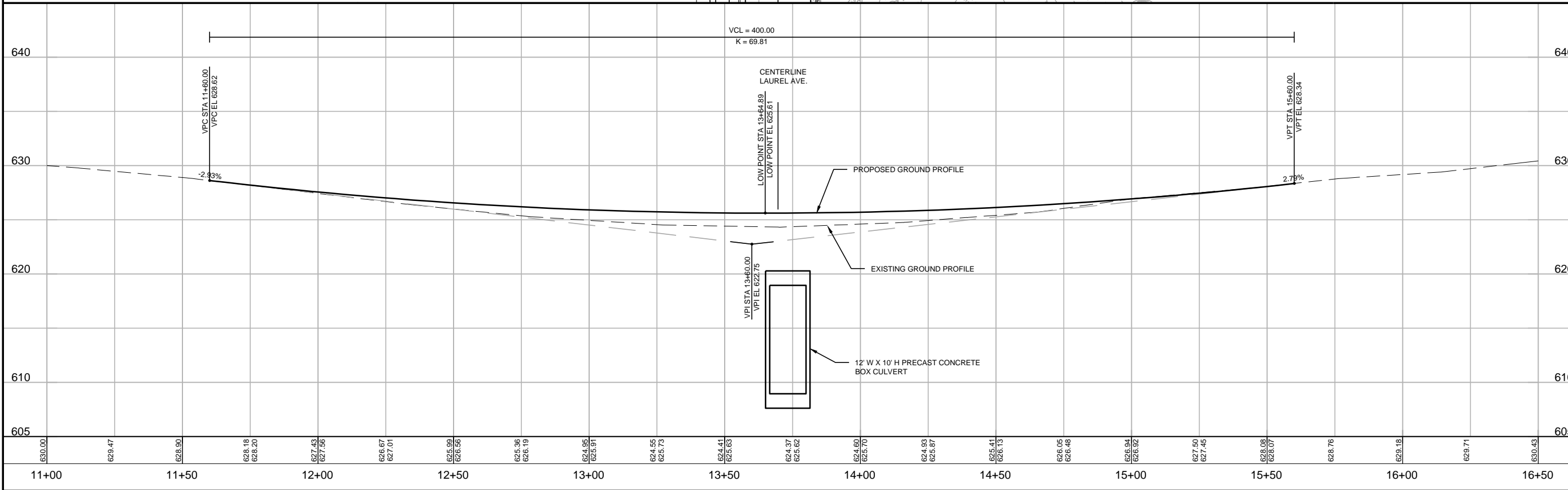


**GENERAL NOTES:**

1. SEE DWG. 002-PP-3 FOR BOX CULVERT PLAN AND PROFILE.
2. SEE DWG. 002-PP-2 FOR LAUREL AVENUE PLAN AND PROFILE.
3. SEE DWG. 002-UT-1 FOR PROPOSED SANITARY SEWER.
4. SEE DWG. 002-RP-1 FOR REMOVAL P.U.J.A.N.
5. SEE 002-S-1 AND 002-S-2 DRAWINGS FOR HEAD AND WING WALL DETAILS.

**PLAN NOTES:**

1. CONCRETE CURB & GUTTER 30-INCH TYPE D.
2. TAPER CURB HEAD. SEE DETAIL (C601)
3. 4" CONCRETE SIDEWALK
4. DRIVEWAY. SEE DETAIL (C610)
5. CURB RAMP. SEE DETAIL (C600)
6. DEPRESS SIDEWALK TO MATCH DRIVEWAY.



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 Project No.: 12937  
 Project Date: FEB 2016

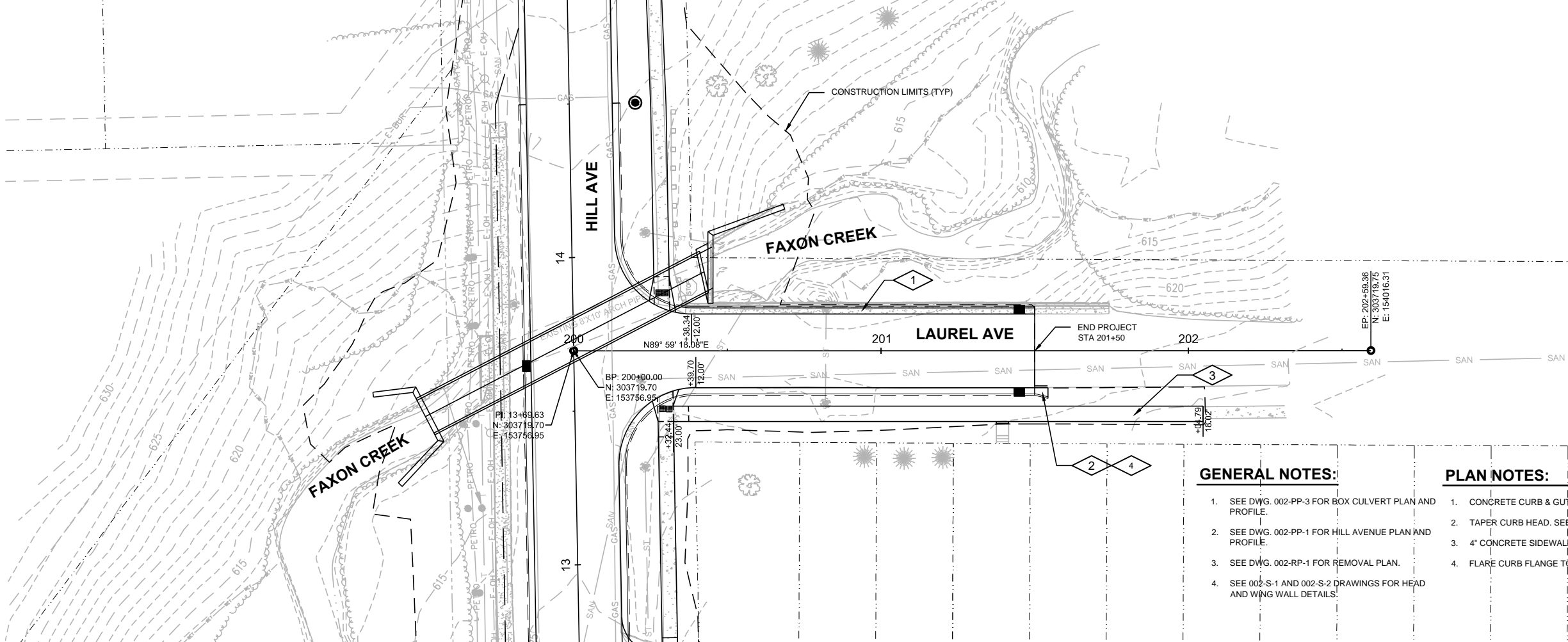
**CITY OF SUPERIOR**  
**FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE**  
**PLAN AND PROFILE**  
**HILL AVENUE**

**DONOHUE**

Sheet No. 16  
 Drawing No. 002-PP-1

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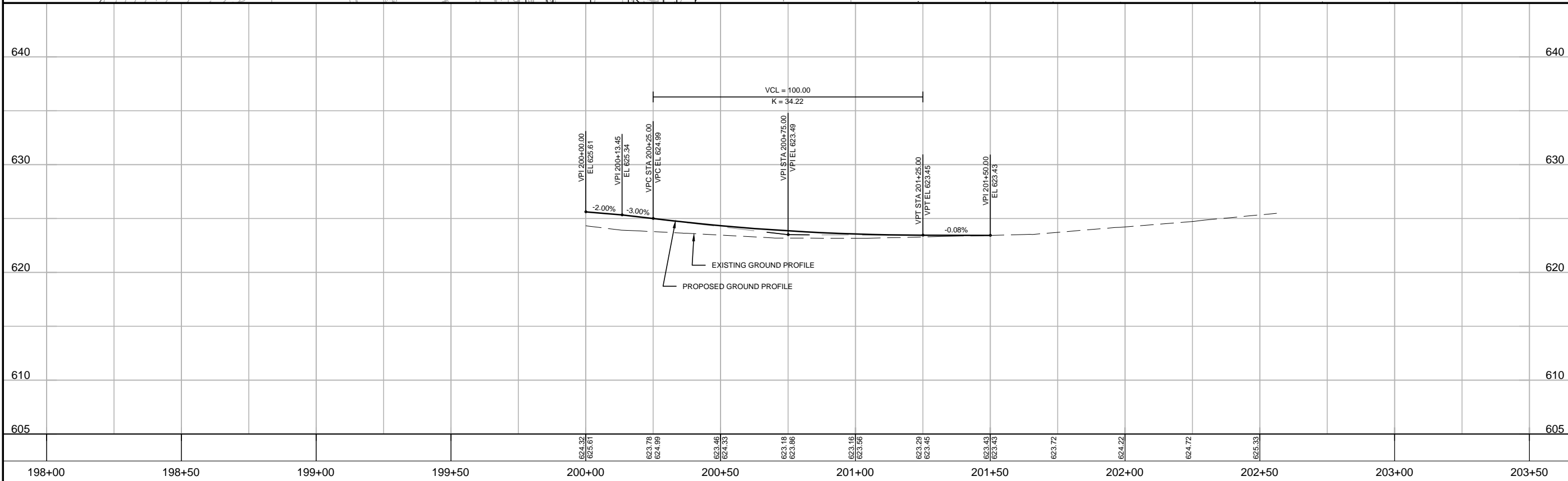


**GENERAL NOTES:**

1. SEE DWG. 002-PP-3 FOR BOX CULVERT PLAN AND PROFILE.
2. SEE DWG. 002-PP-1 FOR HILL AVENUE PLAN AND PROFILE.
3. SEE DWG. 002-RP-1 FOR REMOVAL PLAN.
4. SEE 002-S-1 AND 002-S-2 DRAWINGS FOR HEAD AND WING WALL DETAILS.

**PLAN NOTES:**

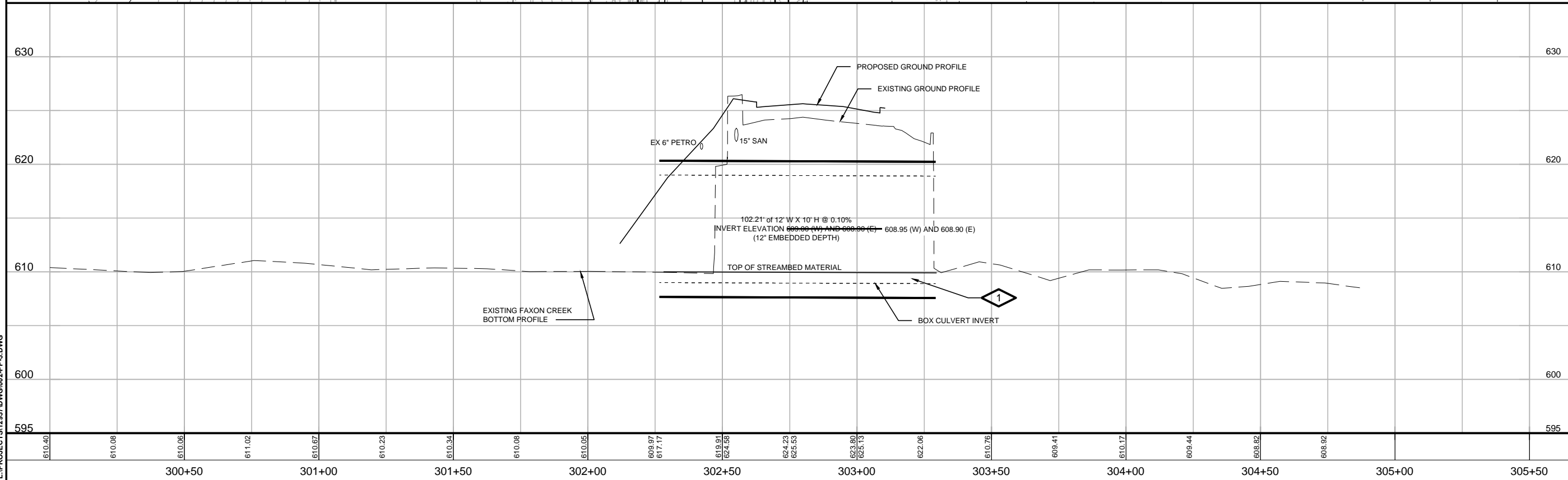
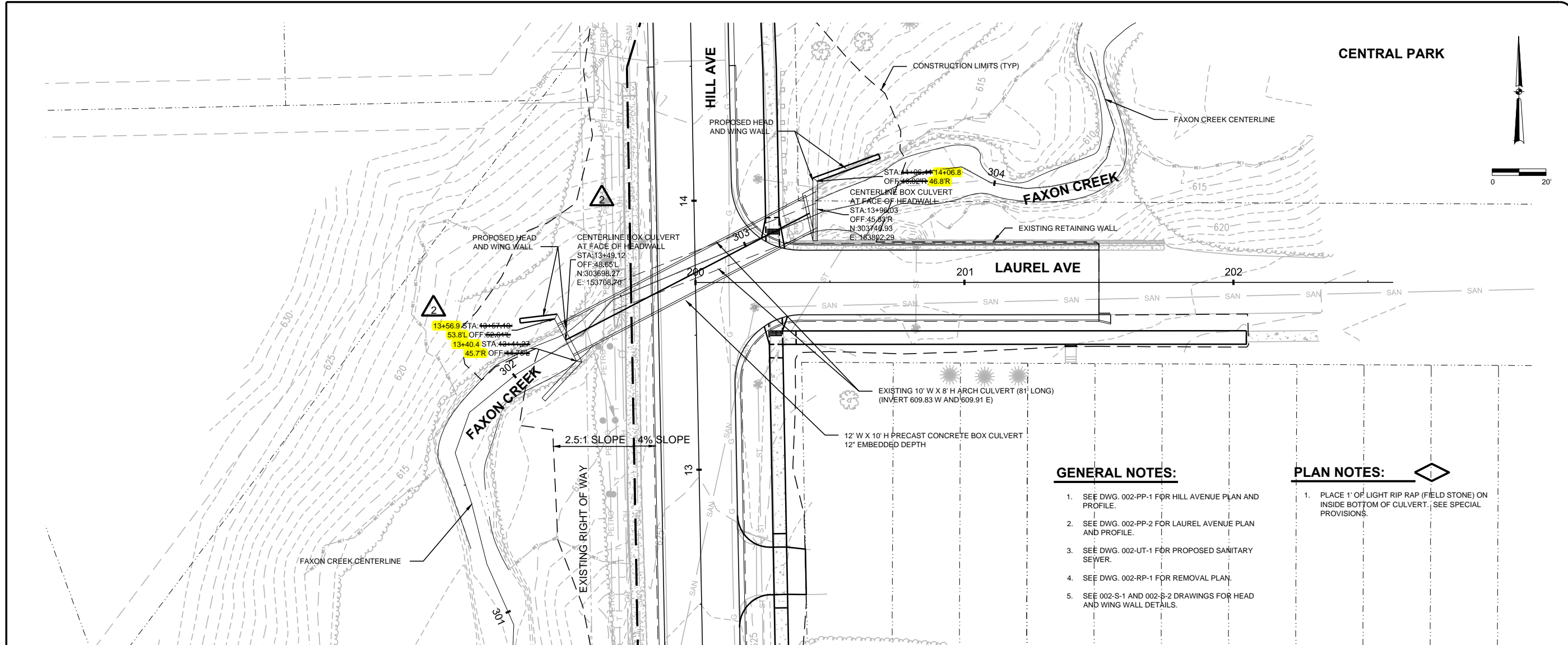
1. CONCRETE CURB & GUTTER 30-INCH TYPE D.
2. TAPER CURB HEAD. SEE DETAIL C601
3. 4" CONCRETE SIDEWALK
4. FLARE CURB FLANGE TO INTERCEPT DITCH FLOW.



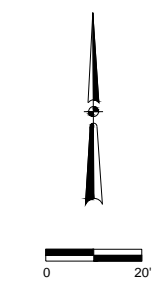
Revision Number	Revision Description	Drawn By	Checked By	Date
	RECORD DRAWING REVISED TO CONFORM TO CONSTRUCTION RECORDS PROVIDED BY CONTRACTOR BY: S.FREEMES DATE: DEC. 2017			
1	DESIGNED BY	JCH		
2	DRAWN BY	JCH		
3	CHECKED BY	RGL		
4	APPROVED BY	SJK		
	FILENAME	002-PP-1.DWG		
	PROJECT NO.	12937		
	PROJECT DATE	FEB 2016		

CITY OF SUPERIOR  
**FAXTON CREEK CULVERT REPLACEMENT AT HILL AVENUE**  
 PLAN AND PROFILE  
 LAUREL AVENUE

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CENTRAL PARK

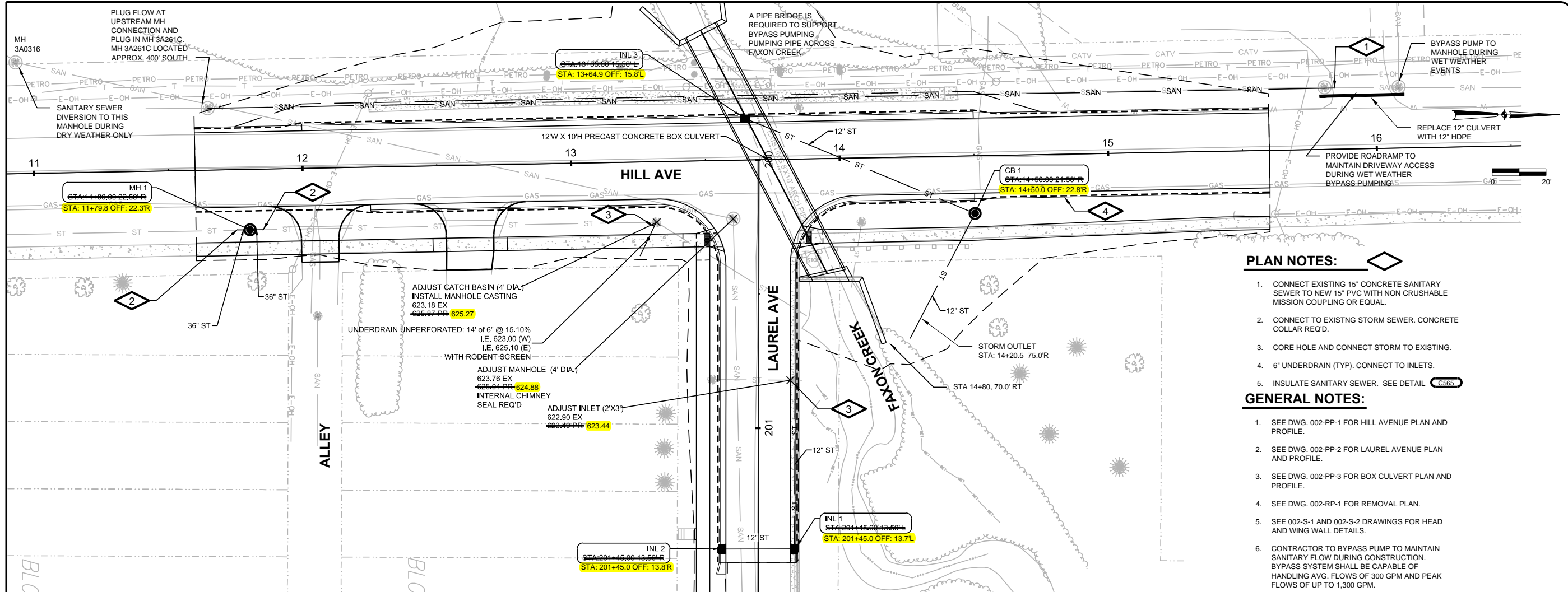


Revision Number	Revision Description	Date
1	BOX CULVERT CENTERLINE	06/14/2016
2	BOX CULVERT WEST HEADWALL	07/12/2016

Designed By: JCH  
 Drawn By: JCH  
 Checked By: RGL  
 Approved By: SJK  
 Filename: 002-PP-3.DWG  
 Project No.: 12937  
 Project Date: FEB 2016

CITY OF SUPERIOR  
 FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE  
 PLAN AND PROFILE  
 BOX CULVERT

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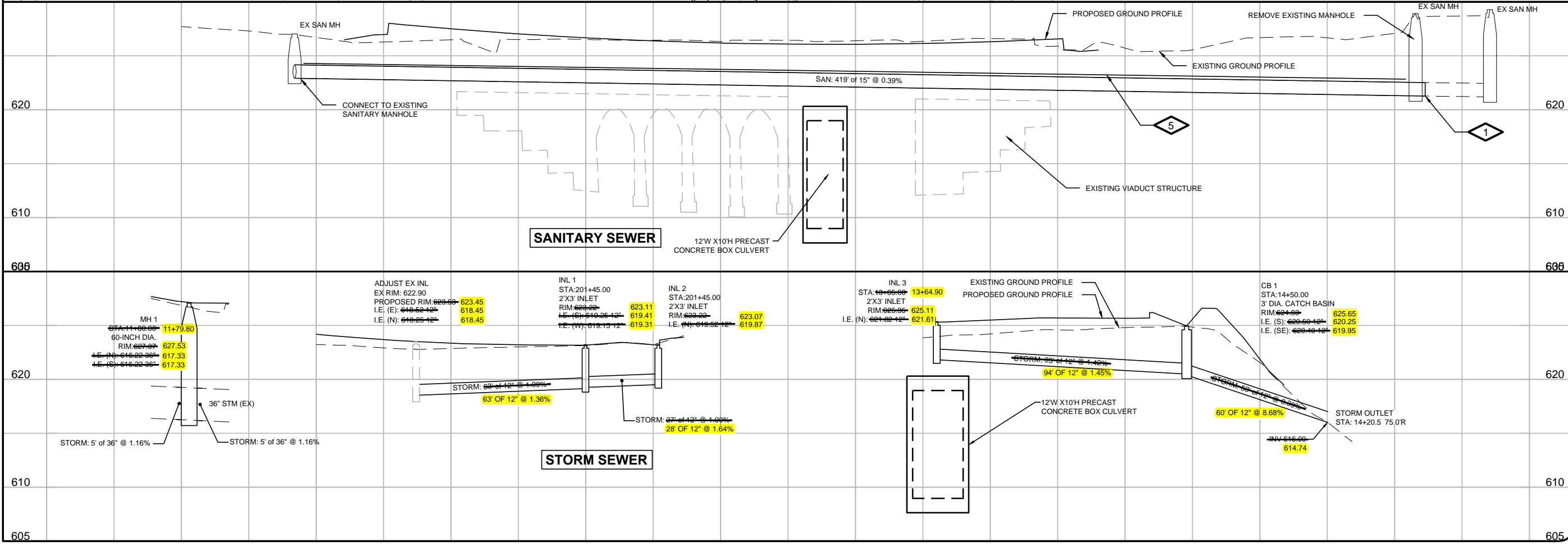


**PLAN NOTES:**

1. CONNECT EXISTING 15" CONCRETE SANITARY SEWER TO NEW 15" PVC WITH NON CRUSHABLE MISSION COUPLING OR EQUAL.
2. CONNECT TO EXISTING STORM SEWER. CONCRETE COLLAR REQ'D.
3. CORE HOLE AND CONNECT STORM TO EXISTING.
4. 6" UNDERDRAIN (TYP). CONNECT TO INLETS.
5. INSULATE SANITARY SEWER. SEE DETAIL C555

**GENERAL NOTES:**

1. SEE DWG. 002-PP-1 FOR HILL AVENUE PLAN AND PROFILE.
2. SEE DWG. 002-PP-2 FOR LAUREL AVENUE PLAN AND PROFILE.
3. SEE DWG. 002-PP-3 FOR BOX CULVERT PLAN AND PROFILE.
4. SEE DWG. 002-RP-1 FOR REMOVAL PLAN.
5. SEE 002-S-1 AND 002-S-2 DRAWINGS FOR HEAD AND WING WALL DETAILS.
6. CONTRACTOR TO BYPASS PUMP TO MAINTAIN SANITARY FLOW DURING CONSTRUCTION. BYPASS SYSTEM SHALL BE CAPABLE OF HANDLING AVG. FLOWS OF 300 GPM AND PEAK FLOWS OF UP TO 1,300 GPM.



**SANITARY SEWER**

**STORM SEWER**

Date	
Checked By	
Drawn By	
Revision Description	
Revision Number	
Designed By	JCH
Drawn By	JCH
Checked By	RGL
Approved By	SJK
Filename	002-UT-1.DWG
Project No.	12937
Project Date	FEB 2016

**RECORD DRAWING**  
REVISED TO CONFORM TO  
CONSTRUCTION RECORDS  
PROVIDED BY CONTRACTOR  
BY: S.FREEMES DATE: DEC. 2017

**CITY OF SUPERIOR**  
**FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE**  
**STORM AND SANITARY SEWER**  
**HILL AND LAUREL AVENUE**

Sheet No. 19  
Drawing No. 002-UT-1

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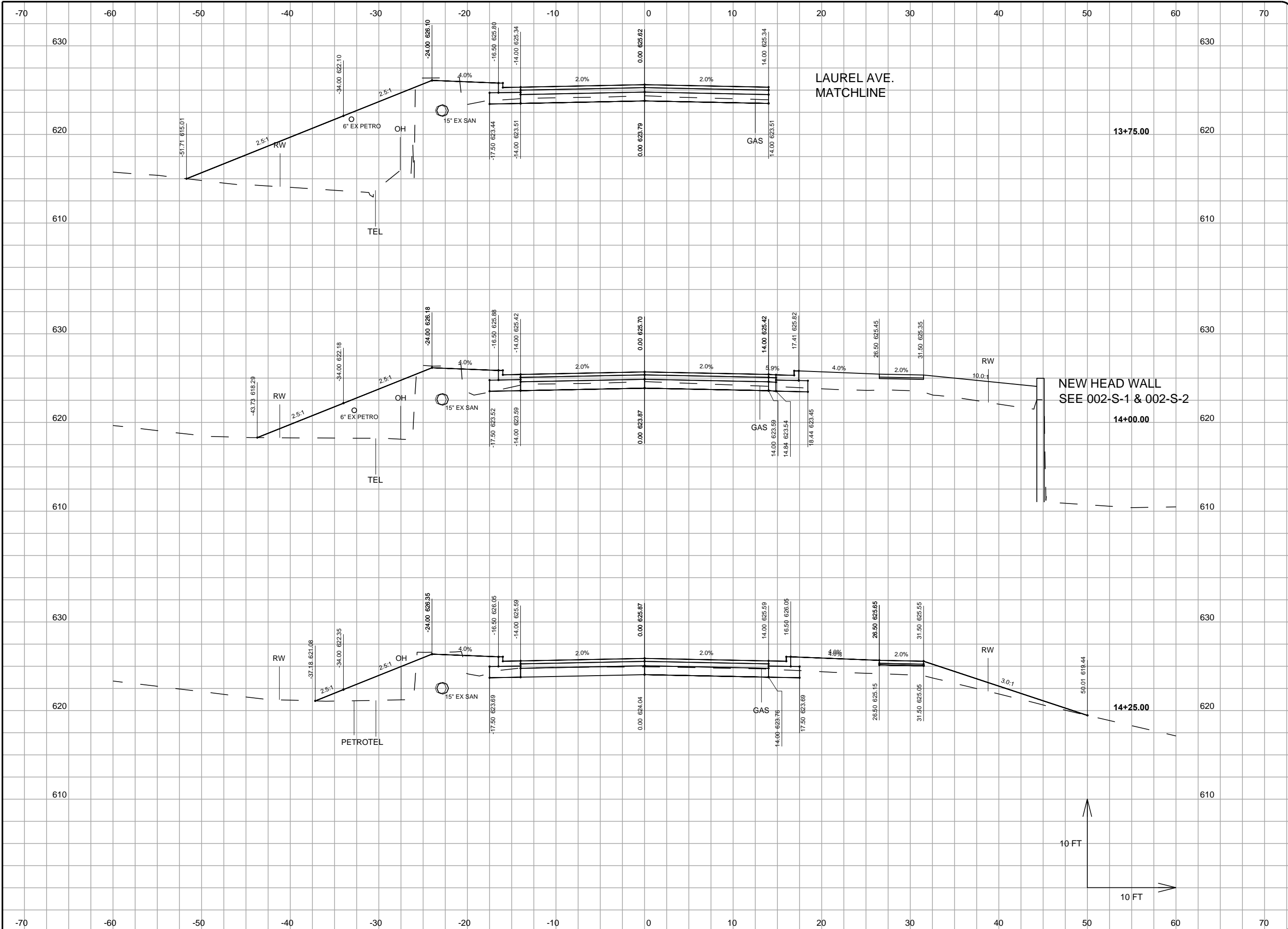








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Revision Number	Revision Description	Drawn By	Checked By	Date	
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Designed By	JCH	Drawn By	JCH	Checked By	RGL
Approved By	SJK	Filename	002-XS-1.DWG	Project No.	12937
Project Date	FEB 2016				

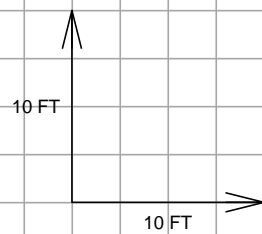
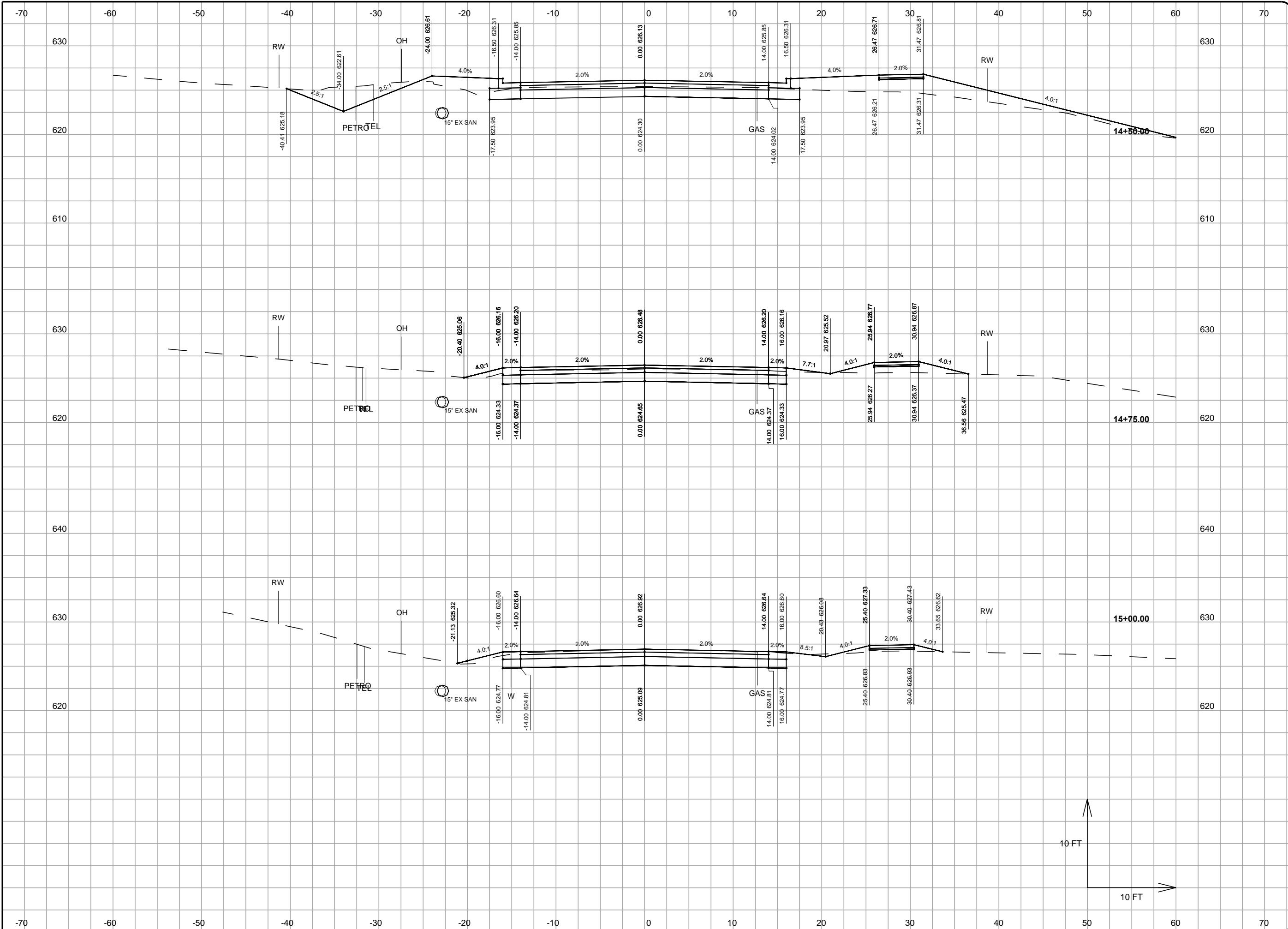
**CITY OF SUPERIOR**  
**FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE**  
**CROSS SECTIONS**  
**HILL AVENUE**

**DONOHUE**

Sheet No. **24**  
 Drawing No. **002-XS-5**



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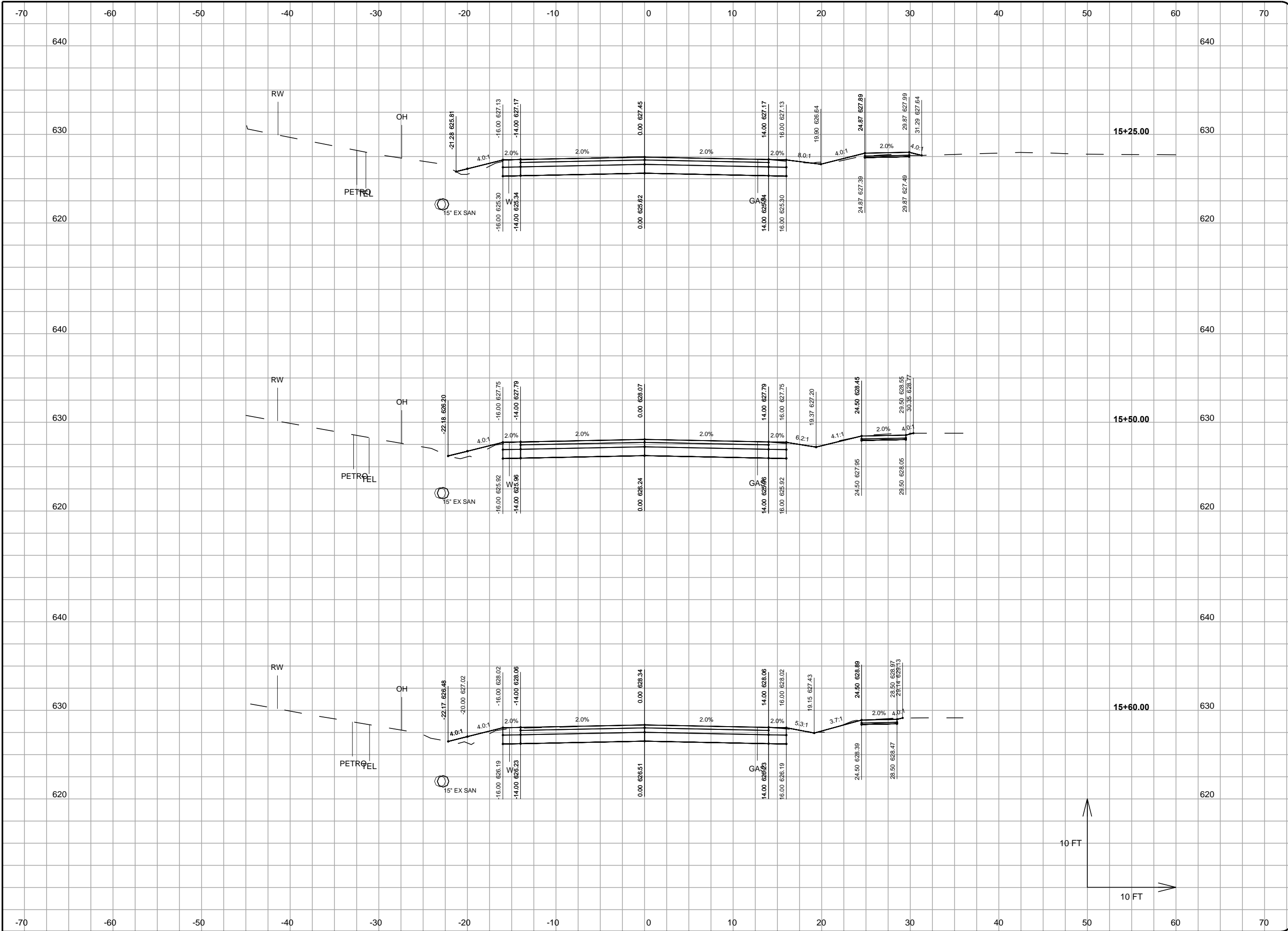
Revision Number	Revision Description	Checked By	Date

**RECORD DRAWING**  
 REVISED TO CONFORM TO CONSTRUCTION RECORDS PROVIDED BY CONTRACTOR  
 BY: S.FREEMES DATE: DEC. 2017

Designed By	JCH
Drawn By	JCH
Checked By	RGL
Approved By	SJK
Filename	002-XS-1.DWG
Project No.	12937
Project Date	FEB 2016

**CITY OF SUPERIOR  
 FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE  
 CROSS SECTIONS  
 HILL AVENUE**

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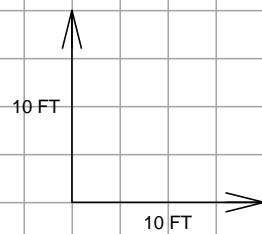
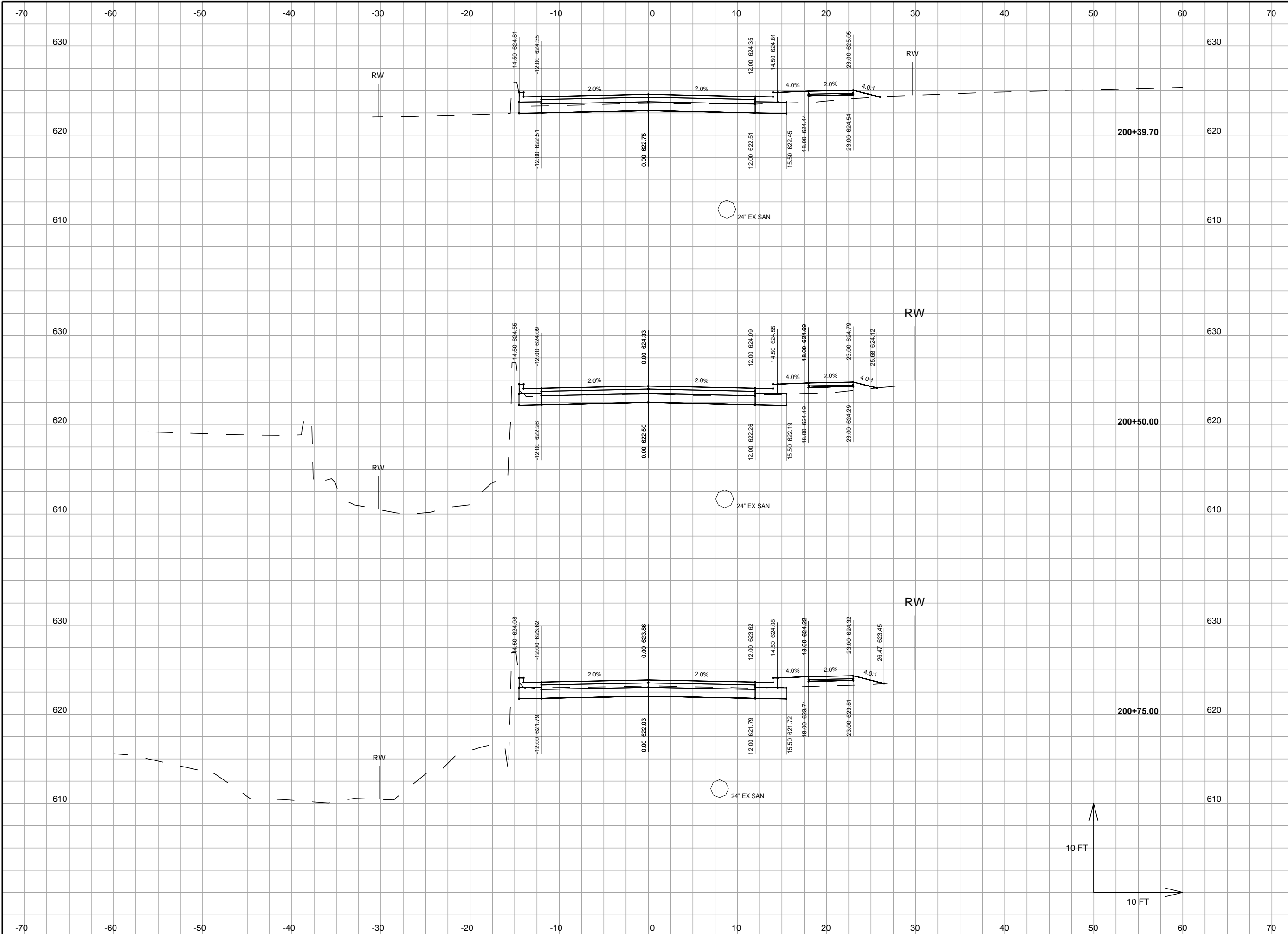


Revision Number	
Revision Description	
Designed By	JCH
Drawn By	JCH
Checked By	RGL
Approved By	SJK
Filename	002-XS-1.DWG
Project No.	12937
Project Date	FEB 2016

RECORD DRAWING  
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 BY: S.FREEMES DATE: DEC. 2017

**CITY OF SUPERIOR**  
**FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE**  
**CROSS SECTIONS**  
**HILL AVENUE**

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Revision Number	Revision Description	Drawn By	Checked By	Date

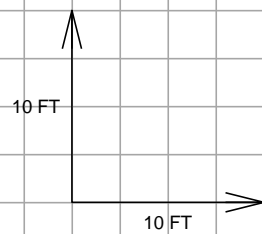
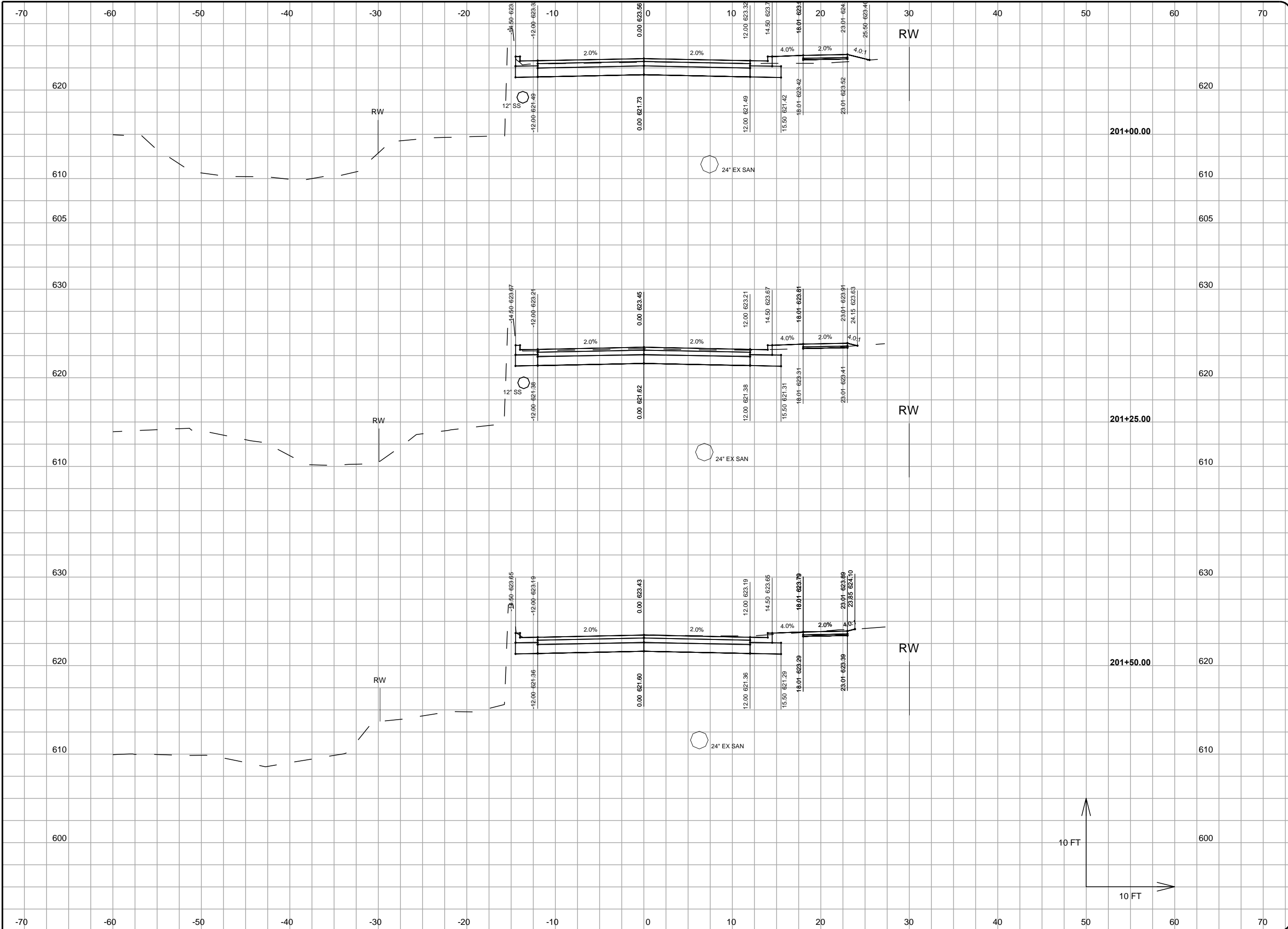
Designed By: JCH  
 Drawn By: JCH  
 Checked By: RGL  
 Approved By: SJK  
 Filename: 002-XS-1.DWG  
 Project No.: 12937  
 Project Date: FEB 2016

**CITY OF SUPERIOR**  
**FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE**  
**CROSS SECTIONS**  
**LAUREL AVENUE**

Sheet No. **27**  
 Drawing No. **002-XS-8**

**RECORD DRAWING**  
 REVISED TO CONFORM TO  
 CONSTRUCTION RECORDS  
 PROVIDED BY CONTRACTOR  
 BY: S.FREEMES DATE: DEC. 2017

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Revision Number	Revision Description	Drawn By	Checked By	Date

Designed By	JCH
Drawn By	JCH
Checked By	RGL
Approved By	SJK
Filename	002-XS-1.DWG
Project No.	12937
Project Date	FEB 2016

**RECORD DRAWING**  
REVISED TO CONFORM TO  
CONSTRUCTION RECORDS  
PROVIDED BY CONTRACTOR  
BY: S.REIMES DATE: DEC. 2017

**CITY OF SUPERIOR**  
**FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE**

**CROSS SECTIONS**  
**LAUREL AVENUE**



Sheet No. 28  
Drawing No.

002-XS-9

## GENERAL STRUCTURAL NOTES

### GENERAL

- THE GENERAL STRUCTURAL NOTES AND STANDARD STRUCTURAL DETAILS APPLY TO THE ENTIRE PROJECT UNLESS SPECIFICALLY NOTED OTHERWISE.

### DESIGN CRITERIA

- DESIGN AND CONSTRUCT IN CONFORMANCE WITH THE INTERNATIONAL BUILDING CODE, 2009 EDITION.
- SUPERIMPOSED DESIGN LOADS
  - RETAINING WALL SURCHARGE 100 PSF

### FOUNDATIONS

- NET ALLOWABLE SOIL BEARING CAPACITY 2500 PSF ASSUMED
- PLACE FOOTINGS ON NATURAL UNDISTURBED EARTH OR STRUCTURAL FILL
- TO MINIMIZE LATERAL FORCES AGAINST THE STRUCTURE DUE TO WEDGING ACTION OF THE SOIL, BEGIN COMPACTION OF EACH LAYER AT THE STRUCTURE WALL.

### REINFORCEMENT

- REINFORCEMENT STEEL
  - DEFORMED BARS: ASTM A615 - GRADE 60
- UNLESS NOTED OTHERWISE PROVIDE CLEAR COVER FOR REINFORCEMENT AS FOLLOWS:
  - CAST AGAINST:
    - EARTH: 3 INCHES
    - MUD SLAB: 2 INCHES
  - EXPOSED TO EARTH, WEATHER, OR WATER
    - SLABS
      - #5 BARS OR SMALLER: 1 1/2 INCHES
      - #6 THROUGH #11 BARS: 2 INCHES
    - WALLS AND BEAMS: 2 INCHES
- PLACE DOWELS BEFORE PLACING CONCRETE.
- DO NOT FIELD WELD OR FIELD BEND REINFORCING BARS.

### CONCRETE

- DESIGN STRENGTH
  - ALL LOCATIONS, CLASS A F'C = 4500 PSI
- UNLESS NOTED OTHERWISE, CONSTRUCTION JOINTS SHOWN ARE OPTIONAL CONSTRUCTION JOINTS NOT SHOWN SHALL BE APPROVED BY ENGINEER.
- BEFORE CONCRETE IS PLACED, CONSTRUCTION JOINTS SHALL BE CLEANED, LAITANCE REMOVED, AND SURFACE WETTED. REMOVE STANDING WATER.
- CONSTRUCTION JOINTS SHALL HAVE ROUGHENED SURFACES. SURFACE SHALL HAVE AMPLITUDE OF 1/4 IN. MIN.
- PROVIDE 3/4 IN. CHAMFER ON EXTERNAL CORNERS OF EXPOSED EDGES OF CONCRETE.

### METALS

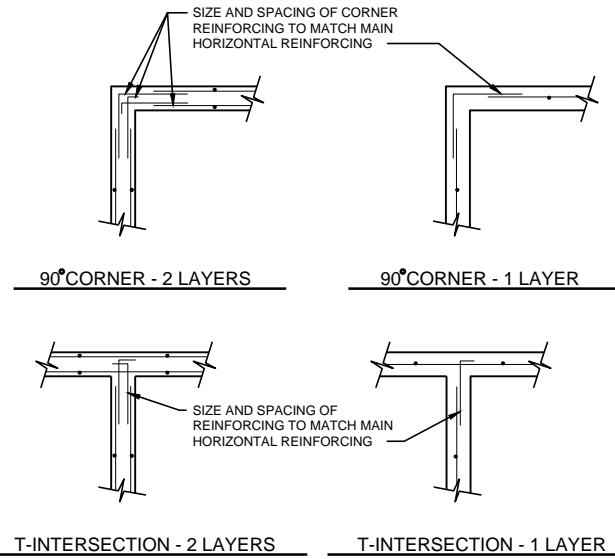
- STEEL
  - STRUCTURAL STEEL: ASTM A36
  - SQUARE OR RECTANGULAR TUBE: ASTM A500
  - PIPE: ASTM A53
  - BOLTED CONNECTIONS: ASTM A325
- WELD STRUCTURAL STEEL WITH E70XX ELECTRODES IN ACCORDANCE WITH AWS REQUIREMENTS.

## MINIMUM REINFORCEMENT BAR SPLICE AND ANCHORAGE LENGTH (INCHES) S010

BAR SIZE	LAPPED SPLICE LENGTH		EMBEDMENT LENGTH		COMPRESSION LAP LENGTH
	TOP BARS	OTHERS	TOP BARS	OTHERS	
3	24	19	19	15	12
4	32	25	25	19	15
5	40	31	31	24	19
6	48	37	37	29	23
7	70	54	54	42	26
8	80	62	62	48	30
9	91	70	70	54	34
10	102	78	78	61	38
11	113	87	87	67	42

### NOTES:

- TOP BARS ARE HORIZONTAL BARS SO PLACED THAT MORE THAN 12" OF CONCRETE IS CAST IN THE MEMBER BELOW THE BAR.
- FOR BARS SPACED LESS THAN 6 BAR DIAMETER OC INCREASE LENGTH BY 25%.
- WHEN LAPPING TWO DIFFERENT SIZE BARS USE THE LAP LENGTH OF THE SMALLER BAR UNLESS NOTED OTHERWISE.
- EMBEDMENT LENGTH IS MINIMUM LENGTH OF EMBEDMENT FOR STRAIGHT DOWELS WHERE END HOOK IS NOT SHOWN, UNLESS OTHERWISE NOTED.
- COMPRESSION LAP LENGTH FOR VERTICAL COLUMN BARS ONLY.
- HOOKS SHALL BE ACI STANDARD UNLESS OTHERWISE NOTED.
- FOR EPOXY COATED REINFORCEMENT, INCREASE LENGTH BY 20% FOR TOP BARS AND 50% FOR OTHERS.



Date	Checked By	Drawn By	Revision Description	Revision Number	Designed By	Drawn By	Checked By	Approved By	Filename	Project No.	Project Date
			RECORD DRAWING REVISED TO CONFORM TO CONSTRUCTION RECORDS PROVIDED BY CONTRACTOR BY: S.FEMMES DATE: DEC. 2017		SDR	SDR	CLS	SJK	999SD1.DWG	12937	FEB 2016

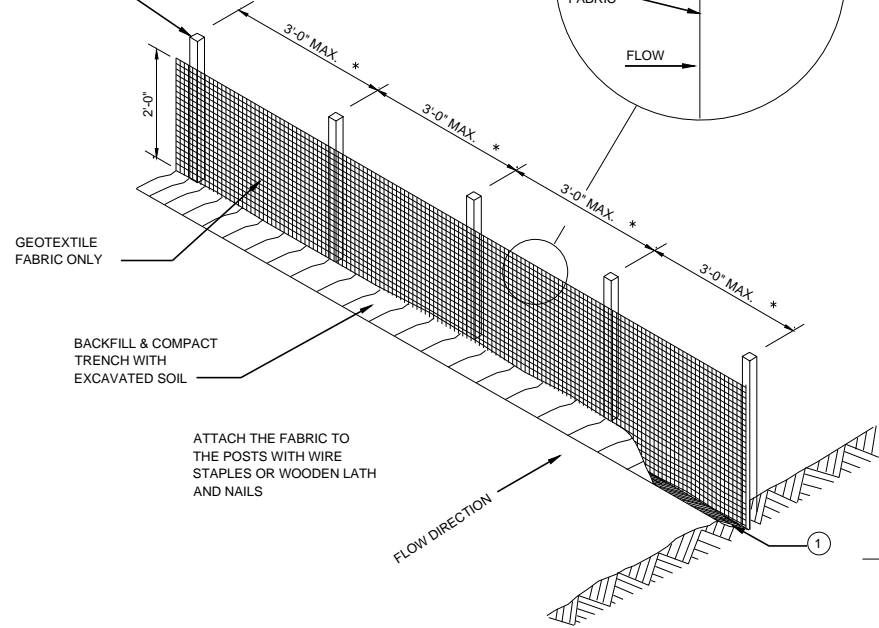
CITY OF SUPERIOR  
FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE

STRUCTURAL  
GENERAL NOTES AND STANDARD DETAILS



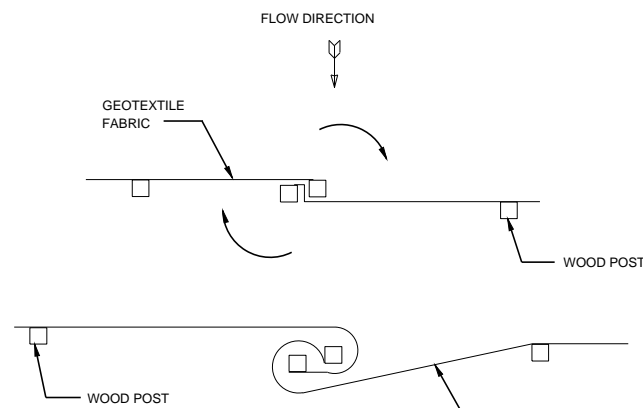
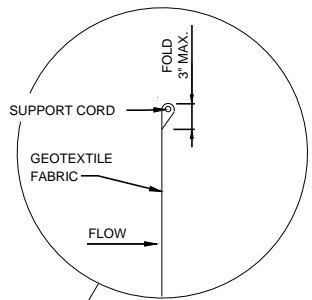
NOTE: ADDITIONAL POST DEPTH OF TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

WOOD POSTS OR STEEL POSTS LENGTH 5'-0" 20" DEPTH IN GROUND

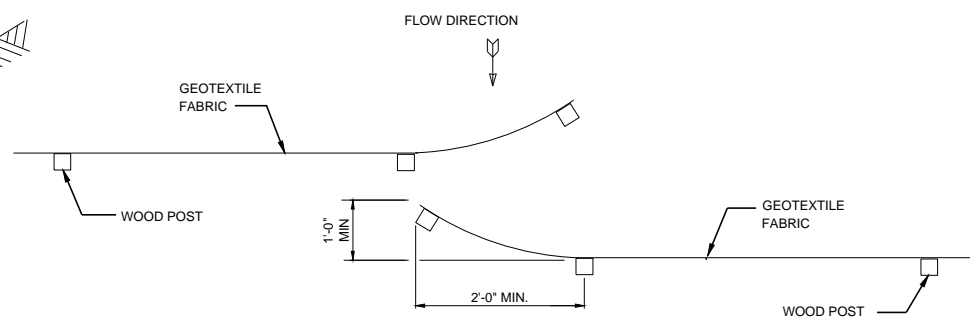


**SILT FENCE**

\* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.



**TWIST METHOD ③**

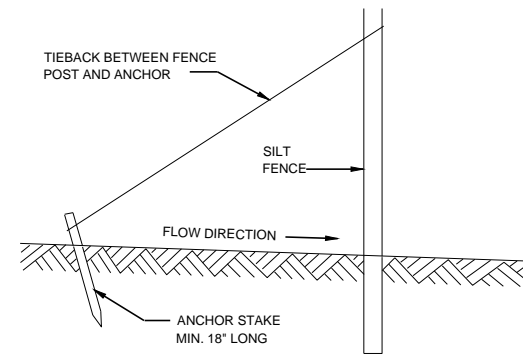


**HOOK METHOD**

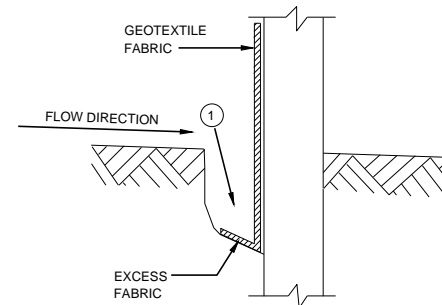
**JOINING TWO LENGTHS OF SILT FENCE ③**

**SILT FENCE DETAIL (WISCONSIN DNR) C030**

NTS (WDNR TECH STANDARD 1056)



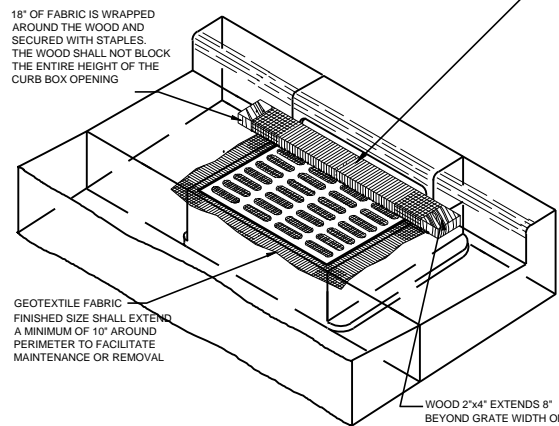
**SILT FENCE TIE BACK**  
(WHEN ADDITIONAL SUPPORT REQUIRED)



**TRENCH DETAIL**

- ① TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ② WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/2" X 1 1/2" OF OAK OR HICKORY. 3 FT. LONG FOR 24" SILT FENCE AND 4 FT. LONG FOR 36" SILT FENCE.
- ③ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

NOTE: TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

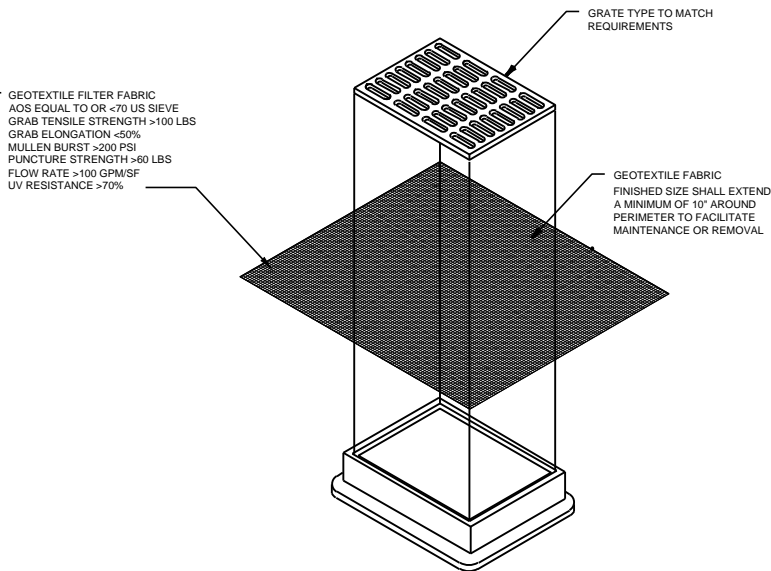


GEOTEXTILE FABRIC FINISHED SIZE SHALL EXTEND A MINIMUM OF 10" AROUND PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL

WOOD 2"x4" EXTENDS 8" BEYOND GRATE WIDTH ON BOTH SIDES. LENGTH VARIES. SECURE TO GRATE WITH WIRE OR PLASTIC TIES

**INLET PROTECTION DETAIL C044**

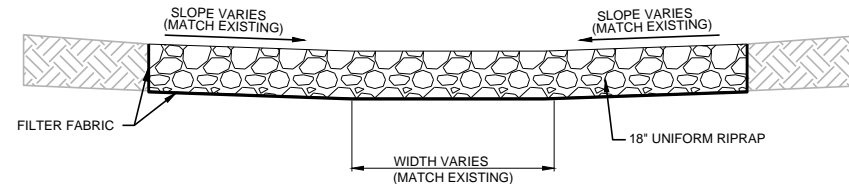
NTS (WDNR TECH STANDARD 1060)



GEOTEXTILE FILTER FABRIC ADS EQUAL TO OR <70 US SIEVE GRAB TENSILE STRENGTH >100 LBS GRAB ELONGATION <50% MULLEN BURST >200 PSI PUNCTURE STRENGTH >60 LBS FLOW RATE >100 GPM/SF UV RESISTANCE >70%

GEOTEXTILE FABRIC FINISHED SIZE SHALL EXTEND A MINIMUM OF 10" AROUND PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL

NOTE:  
1. TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE. THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.  
2. CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX



**RIPRAP W/ FABRIC DETAIL C010**

NTS

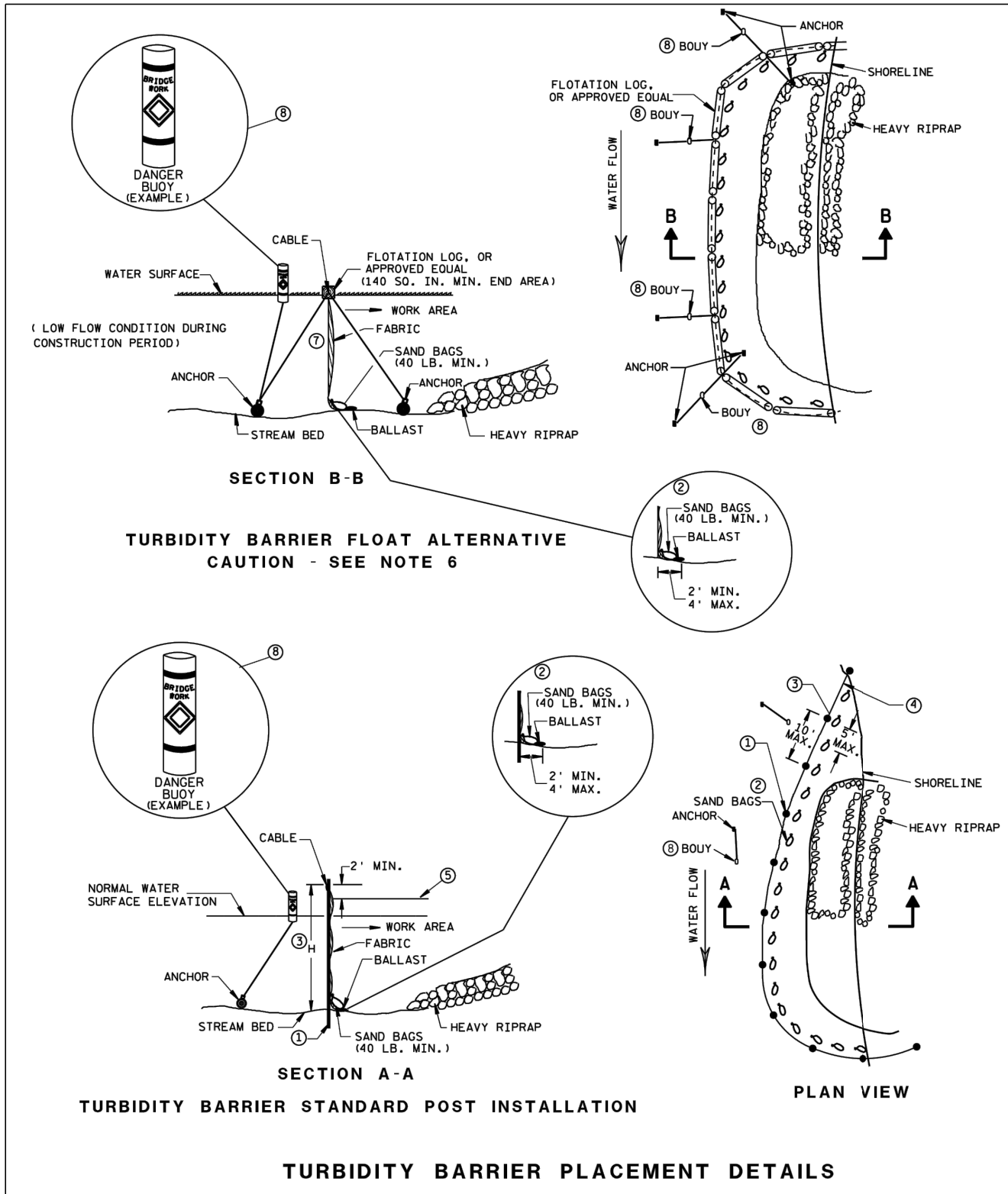
Date	Checked By	Drawn By	Revision Description	Revision Number	Designed By	Drawn By	Checked By	Approved By	Filename	Project No.	Project Date
					JCH	JCH	SJK	SJK	999CD1.DWG	12937	FEB 2016

CITY OF SUPERIOR FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE	CIVIL STANDARD DETAILS
	RECORD DRAWING REVISED TO CONFORM TO CONSTRUCTION RECORDS PROVIDED BY CONTRACTOR BY: S.FEMMES DATE: DEC. 2017



Sheet No. 31  
Drawing No.

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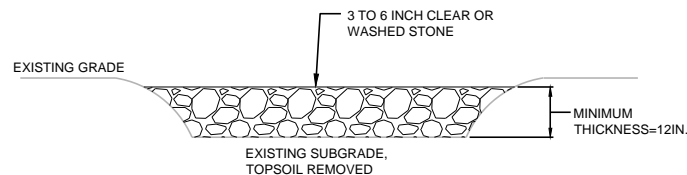
**TURBIDITY BARRIER DETAIL** C050  
NTS (WDNR TECH STANDARD 1069)

**GENERAL NOTES**

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

- ① DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.
- ② SANDBAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.
- ③ WHEN BARRIER HEIGHT, H, EXCEEDS 8 FT., POST SPACING MAY NEED TO BE DECREASED.
- ④ IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.
- ⑤ ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE O2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.
- ⑥ FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BED ROCK PREVENTS THE INSTALLATION OF POSTS.
- ⑦ ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.
- ⑧ USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



- NOTES:
- 1. MINIMUM LENGTH - 50 FT
  - 2. FULL WIDTH OF EGRESS DRIVE
  - 3. TRACKING PAD SHALL BE IN PLACE PRIOR TO BEGINNING ANY GRADING ACTIVITIES.
  - 4. INSPECT WEEKLY AND AFTER RAINFALL EVENTS.
  - 5. MAINTAIN BY SCRAPING OR TOPDRESSING WITH ADDITIONAL AGGREGATE IF NECESSARY.

**TRACKING PAD DETAIL** C060  
NTS (WDNR TECH STANDARD 1057)

Date	
Checked By	
Drawn By	
Revision Description	
Revision Number	
Designed By	JCH
Drawn By	JCH
Checked By	SJK
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Filename	999CD1.DWG
Project No.	12937
Project Date	FEB 2016

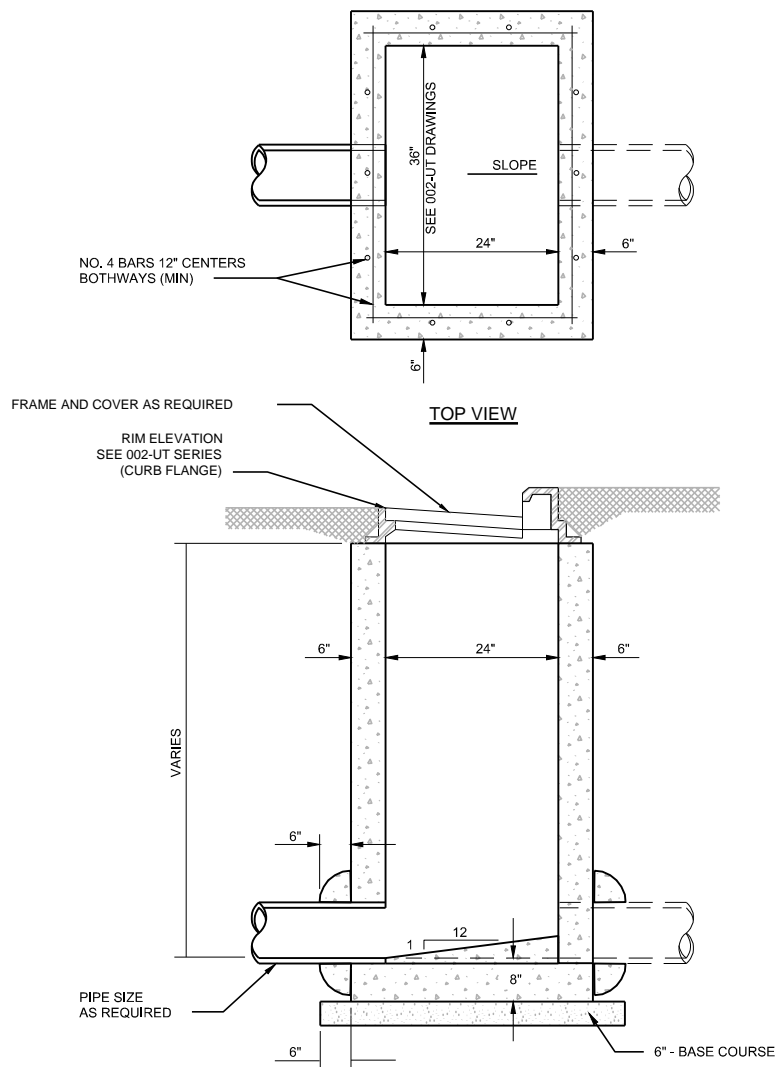
RECORD DRAWING  
REVISED TO CONFORM TO  
CONSTRUCTION RECORDS  
PROVIDED BY CONTRACTOR  
BY: S.FEMMES DATE: DEC. 2017

CITY OF SUPERIOR  
FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE  
CIVIL  
STANDARD DETAILS



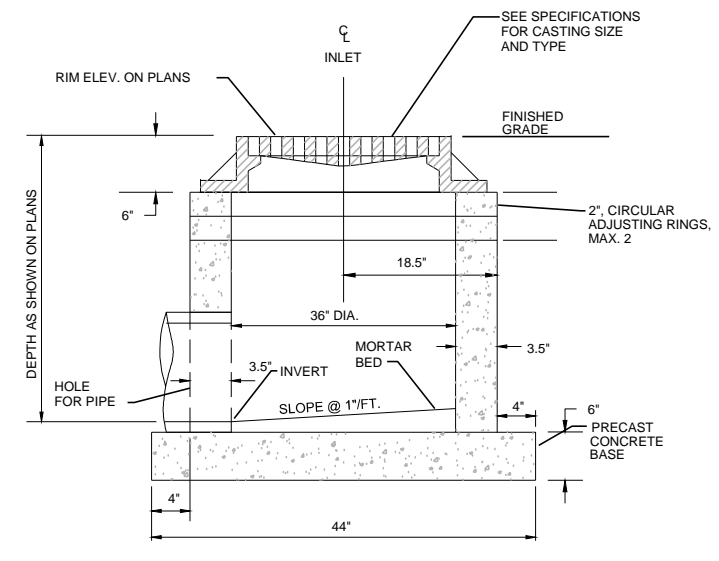
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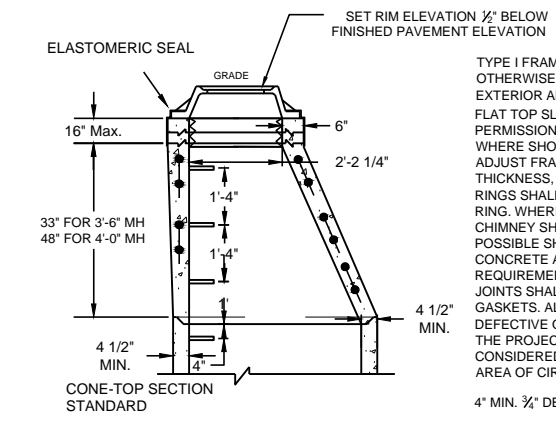
- NOTES:**
1. SEE SPECIFICATIONS FOR CASTING SIZE AND TYPE.
  2. ALL CONNECTING PIPES SHALL BE GROUTED WITH A 6" CONCRETE COLLAR WITH 3500 psi CONCRETE.
  3. REINFORCEMENTS SHALL CONFORM TO ASTM A-615, GRADE 40. CONCRETE FOR PRECAST UNITS SHALL CONFORM TO ASTM C-478.
  4. CASTING TO BE PLACED 1/2" BELOW CURB FLANGE ELEVATION.

**CURB INLET DETAIL C333**  
NTS



- NOTES:**
1. 6" MIN. THICKNESS FOR NON-REINFORCED CONCRETE WALL OR WHEN USING CONCRETE BLOCK

**CATCH BASIN C332**  
NTS



TYPE I FRAME/CHIMNEY JOINT REQUIRED ON ALL SANITARY MANHOLES UNLESS OTHERWISE SPECIFIED. ELASTOMERIC WATERPROOFING SEALER APPLIED TO EXTERIOR AND INTERIOR CHIMNEY SEAL.

FLAT TOP SLAB MAY ONLY BE USED FOR 5'-0" AND 6'-0" DIA. MANHOLES AND WITH PERMISSION OF THE ENVIRONMENTAL SERVICES DIVISION OF PUBLIC WORKS OR WHERE SHOWN ON THE PLANS.

ADJUST FRAME TO GRADE WITH BRICK OR CONCRETE RINGS OF VARIABLE THICKNESS, MAXIMUM RING HEIGHT = 6", MINIMUM RING HEIGHT = 2". CONCRETE RINGS SHALL BE REINFORCED WITH ONE LINE OF STEEL CENTERED WITHIN THE RING. WHERE NECESSARY, RINGS SHALL BE GROOVED TO RECEIVE STEP. THE CHIMNEY SHALL BE CONSTRUCTED SO THAT AS FEW ADJUSTING RINGS AS POSSIBLE SHALL BE USED TO BRING MANHOLE TO GRADE.

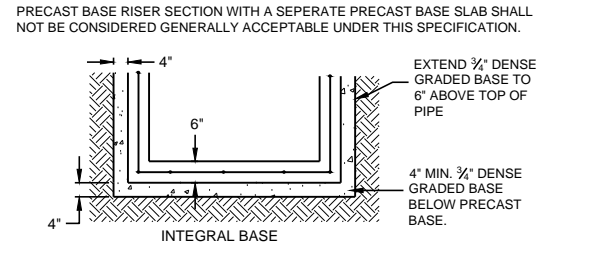
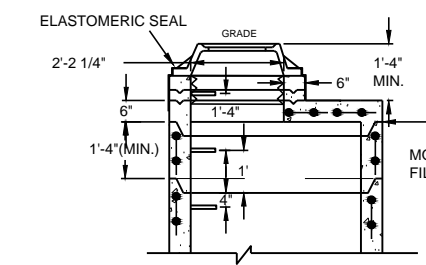
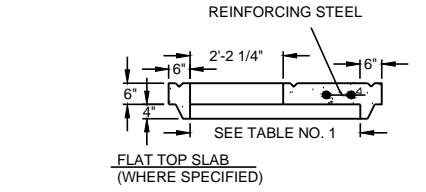
CONCRETE AND STEEL REINFORCEMENT SHALL CONFORM TO DESIGNATION C-478 REQUIREMENTS OF ASTM SPECIFICATIONS.

JOINTS SHALL BE WATERTIGHT AND SHALL BE MADE USING BUTYL RUBBER GASKETS. ALL JOINTS SHALL CONFORM TO ASTM-C443 VARIATIONS IN DIAMETER, DEFECTIVE OR DAMAGED ENDS, OR OTHER CONDITIONS WHICH, IN THE OPINION OF THE PROJECT ENGINEER, PREVENT MAKING A SATISFACTORY JOINT SHALL BE CONSIDERED CAUSE FOR REJECTION.

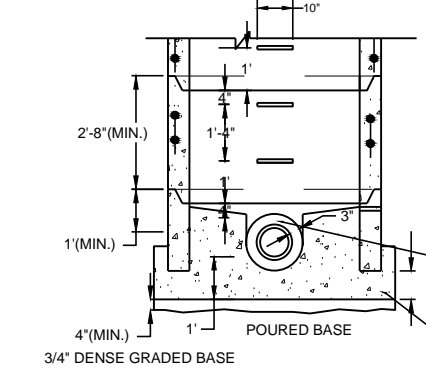
AREA OF CIRCUMFERENTIAL STEEL = 0.12 SQ INCH PER LINEAL FOOT.

4" MIN. 3/4" DENSE GRADED BASE UNDER CONCRETE BASE.

PRECAST BASE RISER SECTION WITH A SEPERATE PRECAST BASE SLAB SHALL NOT BE CONSIDERED GENERALLY ACCEPTABLE UNDER THIS SPECIFICATION.



THE STEPS, FRAME, AND COVER SHALL BE CENTERED OVER THE DISCHARGE PIPE.



THE FLOW CHANNEL THROUGH MANHOLES SHALL BE MADE TO CONFORM TO THE SHAPE AND SLOPE OF THE SEWERS AND SHALL EXTEND VERTICALLY FROM THE SPRINGLINE TO THE CROWN OF THE DISCHARGE PIPE. THE THROUGH MANHOLE FLOW CHANNEL SHALL BE THE SAME DIAMETER AS THE LARGER OF THE ADJOINING SEWERS.

BENCH SLOPE { STORM MANHOLE 1 INCH PER FOOT  
SANITARY MANHOLE 2 INCH PER FOOT

SPACE BETWEEN PIPE AND PRECAST MANHOLE WALL TO BE FILLED WITH BRICK MORTARED IN PLACE EXCEPT THAT AN APPROVED FLEXIBLE WATERTIGHT PIPE TO MANHOLE SEAL IS REQUIRED FOR ALL SANITARY SEWER CONNECTIONS. THE ANNULAR SPACE BETWEEN THE PIPE AND MANHOLE WALL SHALL BE FILLED WITH FLEXIBLE BUTYL RUBBER GASKET MATERIAL.

CLASS "D" CONCRETE, 12" MIN. BELOW BOTTOM OF PIPE

PIPE DIA	MANHOLE DIA	WALL THICKNESS
8" THRU 30"	4'-0"	5"
36"	5'-0"	6"
42"	6'-0"	7"

**PRECAST MANHOLE C201**  
NTS

Revision Number	Revision Description	Checked By	Date
1	RECORD DRAWING REVISION TO CONFORM TO CONSTRUCTION RECORDS PROVIDED BY CONTRACTOR		

Designed By	JCH
Drawn By	JCH
Checked By	SJK
Approved By	SJK
Filename	999CD1.DWG
Project No.	12937
Project Date	FEB 2016

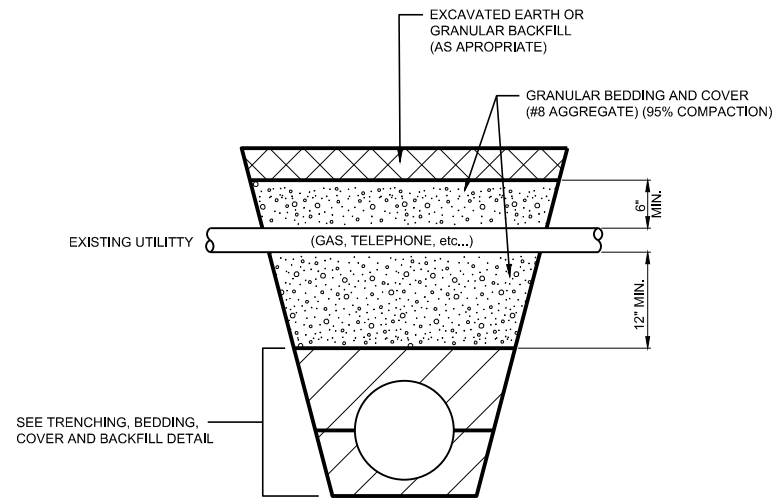
CITY OF SUPERIOR  
FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE

CIVIL  
STANDARD DETAILS

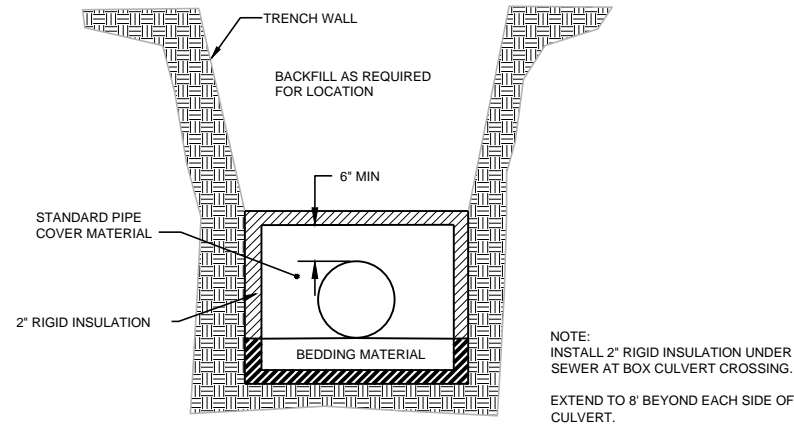


Sheet No.	33
Drawing No.	

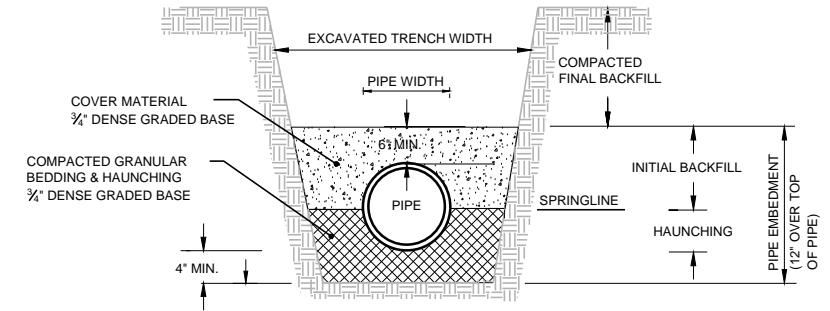
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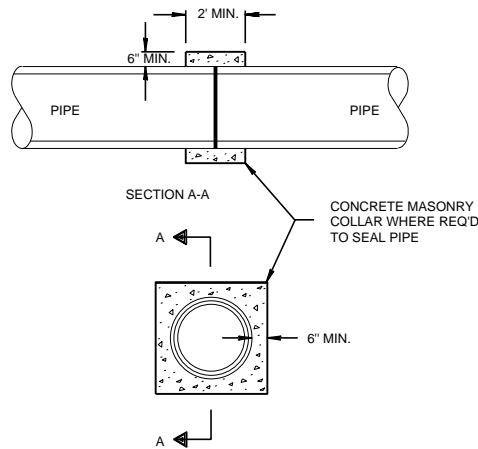
**BACKFILLING DETAIL  
AROUND EXISTING UTILITIES C507**  
NTS



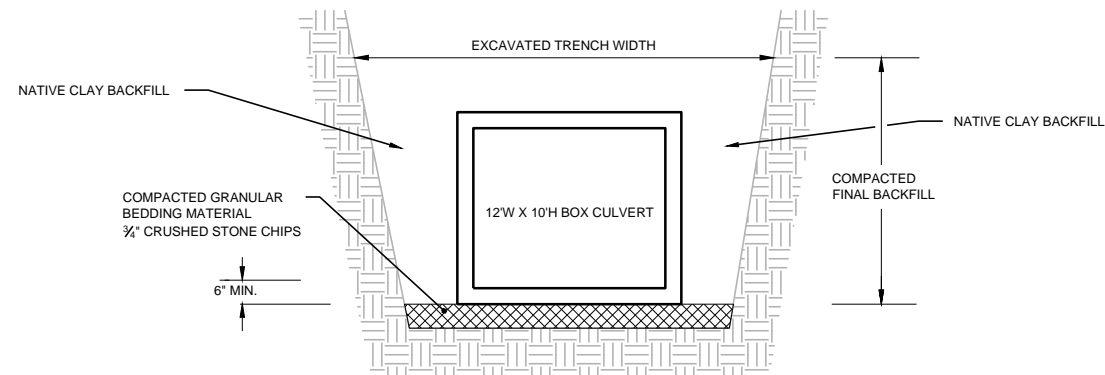
**BURIED PIPING  
INSULATION DETAIL C565**  
NTS



**PIPE BEDDING DETAILS C500**  
NTS



**CONCRETE COLLAR DETAIL**  
NTS

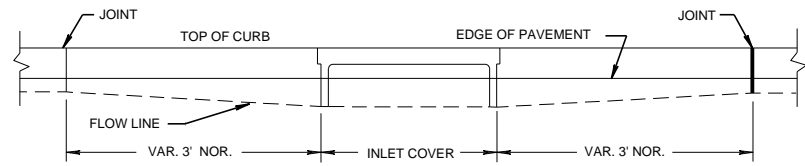


**BOX CULVERT SECTION C501**  
NTS

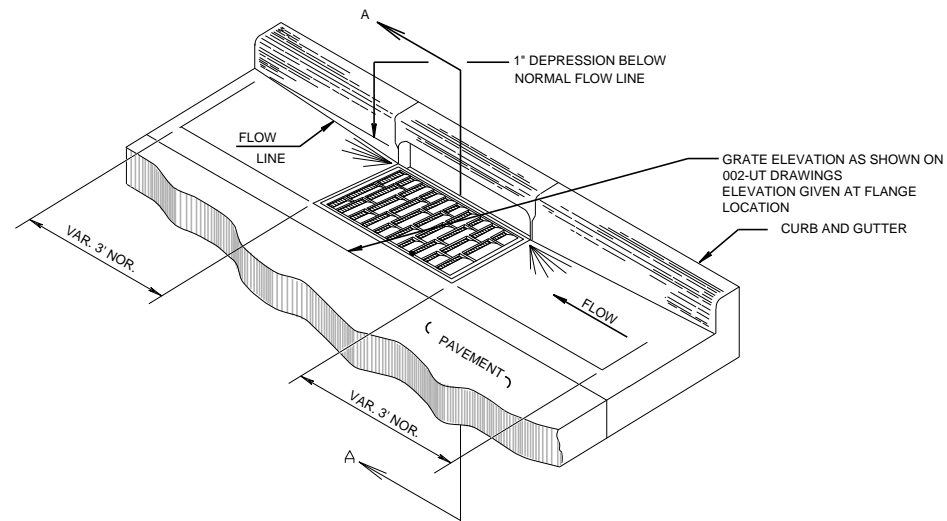
Revision Number	Revision Description	Drawn By	Checked By	Date
	RECORD DRAWING REVISED TO CONFORM TO CONSTRUCTION RECORDS PROVIDED BY CONTRACTOR BY: S.FEMES DATE: DEC. 2017	JCH	SJK	
Designed By	JCH			
Drawn By	JCH			
Checked By	SJK			
Approved By	SJK			
Filename	999CD1.DWG			
Project No.	12937			
Project Date	FEB 2016			

**CITY OF SUPERIOR  
FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE**

**CIVIL  
STANDARD DETAILS**

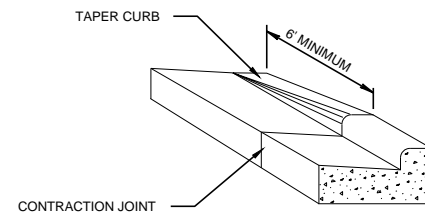


**ELEVATION**



**DETAIL OF CURB AND GUTTER AT INLETS**

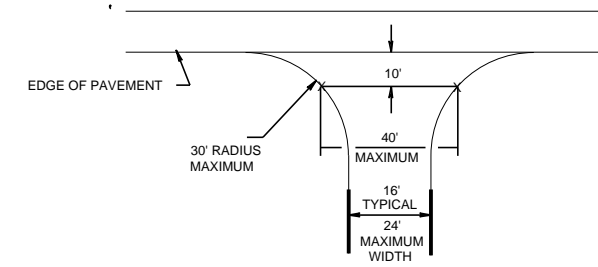
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**CURB TAPER DETAIL**

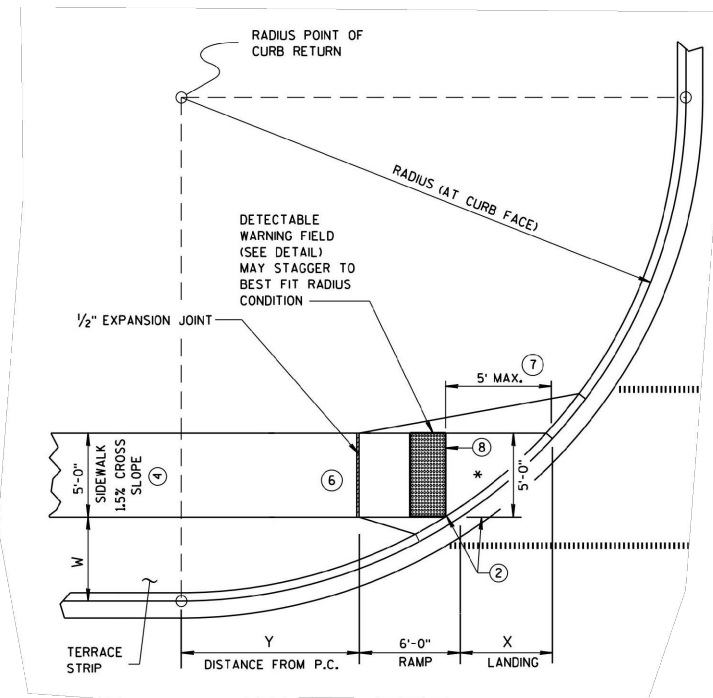
**C601**

NTS



**DRIVEWAY DETAIL**

NTS



**CURB RAMP DETAIL**

**C600**

NTS

**GENERAL NOTES**

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS. DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 1%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 1% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET (MINIMUM 4 FEET X 4 FEET).
- ⑦ WHEN THIS DISTANCE EXCEEDS 5 FEET, USE MULTIPLE DETECTABLE WARNING PANELS ACROSS THE RAMP AND STAGGER ADDITIONAL DETECTABLE WARNING PANEL(S) FORWARD TO REDUCE THIS DISTANCE.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑩ INSTALL TRANSITION NOSE, (INCIDENTAL TO OTHER PAY ITEMS), DO NOT MARK TRANSITION NOSE.

Revision Number	Revision Description	Date
	RECORD DRAWING REVISED TO CONFORM TO CONSTRUCTION RECORDS PROVIDED BY CONTRACTOR BY: S.FEMMES DATE: DEC. 2017	
1	DESIGNED BY	JCH
2	DRAWN BY	JCH
3	CHECKED BY	SJK
4	APPROVED BY	SJK
5	FILENAME	999CD1.DWG
6	PROJECT NO.	12937
7	PROJECT DATE	FEB 2016

**CITY OF SUPERIOR**  
**FAXON CREEK CULVERT REPLACEMENT AT HILL AVENUE**  
**CIVIL**  
**STANDARD DETAILS**



Sheet No. 35  
Drawing No.

999-C-5

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