

REVIEW OF DRAINAGE FACILITIES

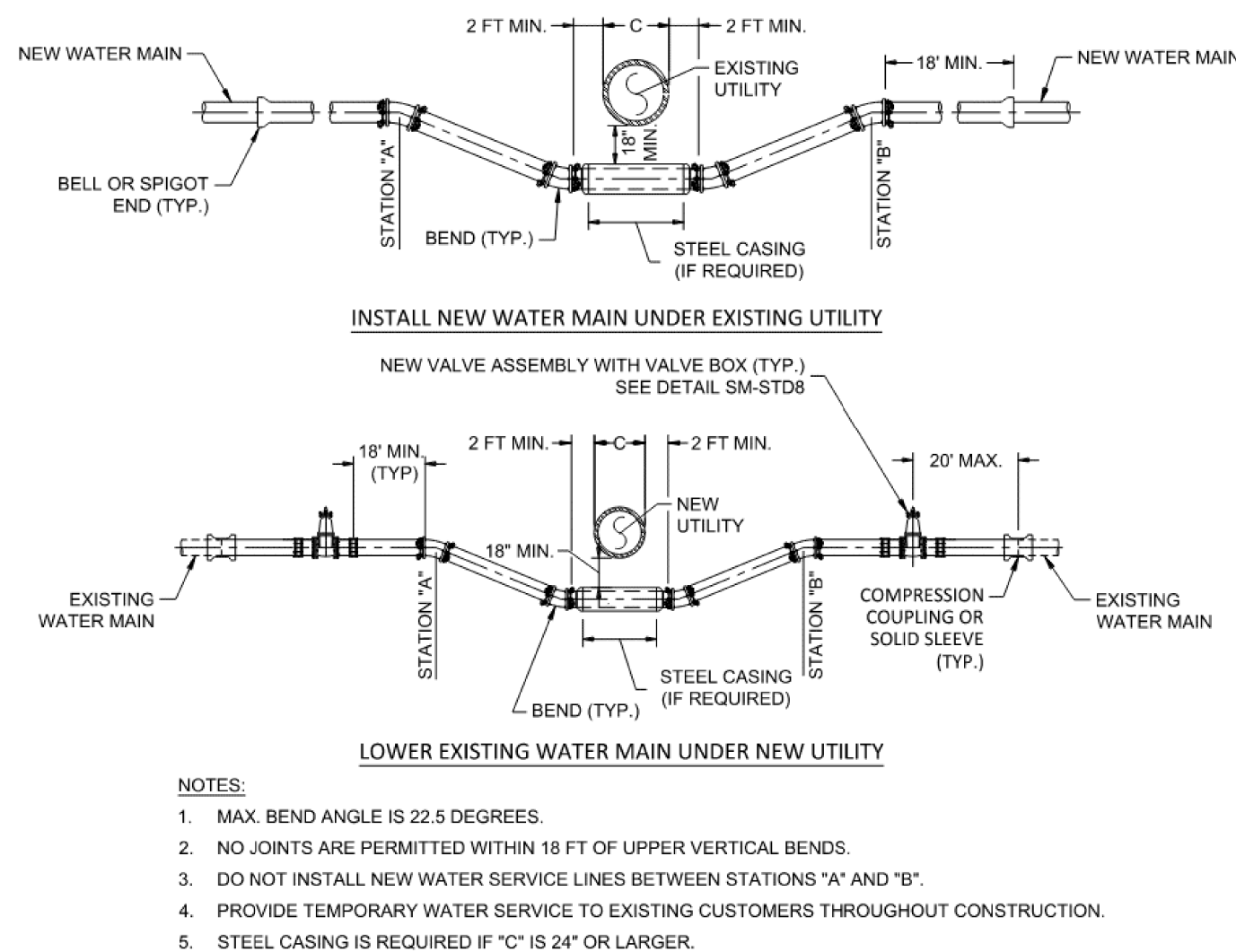
PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

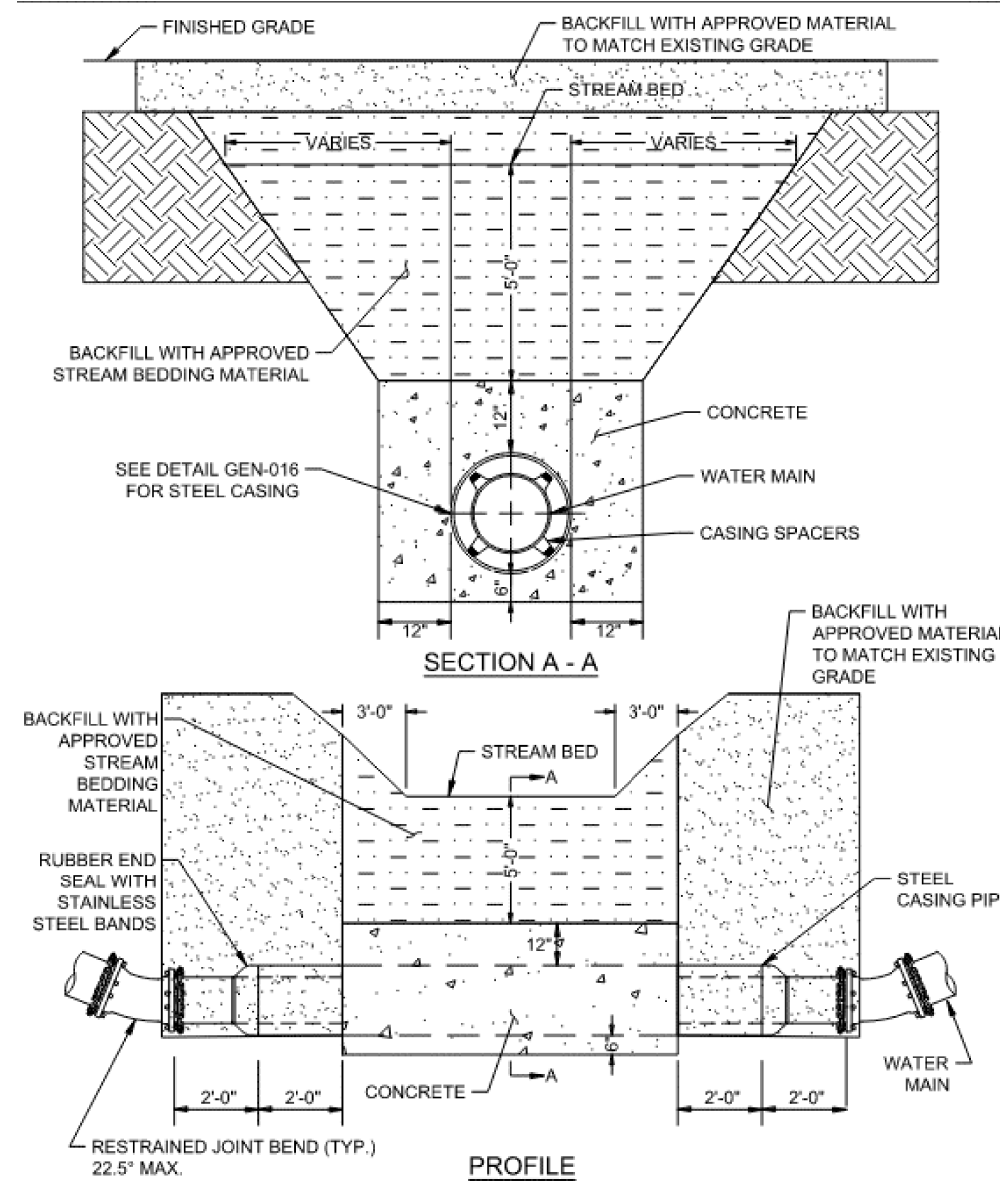
WATER MAINS UNDER UTILITIES

THESE DETAILS ARE PROVIDED FOR USE AS DIRECTED BY THE PROJECT ENGINEER, IN THE CASE WHERE THERE IS A CONFLICT BETWEEN THE PROPOSED AND THE EXISTING ITEMS AS DETAILED BELOW.



CROSSING LARGE DITCHES OR SMALL STREAMS (OPEN CUT METHOD)

THESE DETAILS ARE PROVIDED FOR USE AS DIRECTED BY THE PROJECT ENGINEER, IN THE CASE WHERE THERE IS A CONFLICT BETWEEN THE PROPOSED AND THE EXISTING ITEMS AS DETAILED BELOW.



DAMAGE TO UTILITIES PRIOR TO CONSTRUCTION

AT THE SUM-303-3.216 LOCATION, A LEAK IN AN EXISTING WATERLINE OR ARTESIAN WELL WAS OBSERVED DURING FIELD VISITS TO THE PROJECT SITE.

THE CONTRACTOR SHALL DOCUMENT THE CURRENT CONDITION OF EXISTING UTILITIES WHERE DAMAGE IS SUSPECTED PRIOR TO CONSTRUCTION. ACCEPTABLE FORMS OF DOCUMENTATION INCLUDE PHOTOGRAPHS, VIDEO, AND/OR FIELD NOTES TO BE SUBMITTED TO THE DISTRICT. THE DISTRICT SHALL COORDINATE WITH FACILITY OWNERS TO REPAIR ANY SUSPECTED DAMAGE PRIOR TO THE BEGINNING OF CONSTRUCTION.

ITEM 202 - STRUCTURE REMOVED, AS PER PLAN (SUM-303-3.216)

STRUCTURE REMOVAL FOR SUM-303-3.216 SHALL INCLUDE THE REMOVAL OF THE EXISTING BOX CULVERT AND OUTLET HEADWALLS/WINGWALLS, INCLUDING THE ADJOINING CONCRETE AT THE OUTLET. PAYMENT FOR ALL OF THE ABOVE AS DESCRIBED SHALL BE INCLUDED FOR PAYMENT UNDER THE LUMP SUM BID FOR ITEM 202 - STRUCTURE REMOVED, AS PER PLAN.

ITEM 408 - PRIME COAT, AS PER PLAN

APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.

CONDUIT IDENTIFICATION SIGNS

CONDUIT IDENTIFICATION SIGNS (I-H25b) WILL BE PLACED ON EACH APPROACH OFF THE RIGHT SHOULDER, FACING TRAFFIC, AND BEHIND THE GUARDRAIL IF APPLICABLE. A QUANTITY OF ONE SIGN PER APPROACH WILL BE INSTALLED. THE SIGNS WILL HAVE A NON-REFLECTIVE WHITE SHEETING BACKGROUND.

THE SIGNS WILL BE MOUNTED ON NEW NO. 2 POSTS AND WILL BE INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-41.20, MOST CURRENT REVISION. EACH POST WILL BE 7.5 IN LENGTH.

INSTALL SIGNS FOR THE FOLLOWING CONDUITS: POR-422-0.934, POR-225-9.196, SUM-176-5.094 & SUM-303-3.216

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR EACH APPROACH:

- ITEM 630 SIGN, FLAT SHEET, 730.20, 1 SQ FT
- ITEM 630 GROUND MOUNTED SUPPORT, NO. 2 POST, 7.5 FT
- ITEM 630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, 1 EACH
- ITEM 630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 1 EACH

TOTALS TO BE CARRIED TO GENERAL SUMMARY (2 APPROACHES FOR 4 LOCATIONS):

- ITEM 630 SIGN, FLAT SHEET, 730.20, 8 SQ FT
- ITEM 630 GROUND MOUNTED SUPPORT, NO. 2 POST, 60 FT
- ITEM 630 REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL, 8 EACH
- ITEM 630 REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL, 8 EACH

ITEM 642 PAVEMENT MARKINGS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER TO INSTALL THE FINAL PAVEMENT MARKINGS AT THE FOLLOWING LOCATIONS:

POR-422-0.934	ITEM 642 EDGE LINE, 6", TYPE 1	0.05 MILE
	ITEM 642 CENTER LINE, TYPE 1	0.03 MILE
POR-225-9.196	ITEM 642 EDGE LINE, 6" TYPE 1	0.01 MILE
	ITEM 642 CENTER LINE, TYPE 1	0.01 MILE
SUM-176-5.094	ITEM 621 RAISED PAVEMENT MARKER REMOVED	2 EACH
	ITEM 642 EDGE LINE, 6" TYPE 1	0.02 MILE
	ITEM 642 CENTER LINE, TYPE 1	0.01 MILE
SUM-303-3.216	ITEM 621 RAISED PAVEMENT MARKER REMOVED	9 EACH
	ITEM 642 EDGE LINE, 6", TYPE 1	0.03 MILE
	ITEM 642 CENTER LINE, TYPE 1	0.02 MILE

TOTALS CARRIED TO GENERAL SUMMARY

- ITEM 621 RAISED PAVEMENT MARKER REMOVED **11 EACH**
- ITEM 642 EDGE LINE, 6", TYPE 1 **0.11 MILE**
- ITEM 642 CENTER LINE, TYPE 1 **0.07 MILE**

ITEM 203 EXCAVATION / EMBANKMENT

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS PER ITEM 203, AS INDICATED ON THE CROSS SECTIONS FOR THIS PROJECT.

LOCATION	ITEM 203 - EXCAVATION (CY)	ITEM 203 - EMBANKMENT (CY)
POR-422-0.934	356	74
POR-225-9.196	240	170
SUM-176-5.094	247	190
TOTAL (ABOVE LOCATIONS)	843	434
TOTAL (SUM-303-3.216)	1067	1552

PAVING UNDER GUARDRAIL

THIS OPERATION SHALL INCLUDE PREPARATION OF THE GRADED SHOULDER USING ITEM 209, LINEAR GRADING, AS PER PLAN AND PAVING UNDER THE GUARDRAIL USING 441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), UNDER GUARDRAIL, AS PER PLAN.

ITEM 209, LINEAR GRADING, AS PER PLAN SHALL CONSIST OF EXCAVATING TOPSOIL, AND PLACING GRANULAR MATERIAL.

ALL COLLECTED DEBRIS AND TOPSOIL, INCLUDING RHIZOMES, ROOTS AND OTHER VEGETATIVE PLANT MATERIAL SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED IN 105.17.

THE REMOVED MATERIAL SHALL BE REPLACED WITH COMPACTABLE GRANULAR MATERIAL CONFORMING TO 703.16 PLACED TO GRADE AS DETAILED ON THE TYPICAL SECTION OR AS APPROVED BY THE ENGINEER.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 209, LINEAR GRADING, AS PER PLAN.

PAVING UNDER GUARDRAIL SHALL CONSIST OF PLACING ITEM 441 TO THE DEPTH SPECIFIED USING ONE OF THE FOLLOWING METHODS:

METHOD A:

1. SET GUARDRAIL POSTS
2. PLACE ITEM 441

METHOD B:

1. PLACE ITEM 441
2. BORE ASPHALT AT POST LOCATIONS (MAY BE OMITTED IF STEEL POSTS ARE USED)
3. SET GUARDRAIL POSTS
4. PATCH AROUND POSTS. THE MATERIALS USED FOR PATCHING SHALL BE AN ASPHALT CONCRETE APPROVED BY THE ENGINEER. PATCHED AREAS SHALL BE COMPACTED USING EITHER HAND OR MECHANICAL METHODS. FINISHED SURFACES SHALL BE SMOOTH AND SLOPED TO DRAIN AWAY FROM THE POSTS.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE, WITH THE EXCEPTION OF SETTING GUARDRAIL POSTS, SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 441, ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 1 (449), UNDER GUARDRAIL, AS PER PLAN.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE SAFETY EDGE, OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:

SIEVE	TOTAL PERCENT PASSING	SIEVE	TOTAL PERCENT PASSING
1- 1/2"	100	NO. 30	9-33
3/4"	50-100	NO. 200	0-13
NO. 4	35-70		

WORK LIMITS

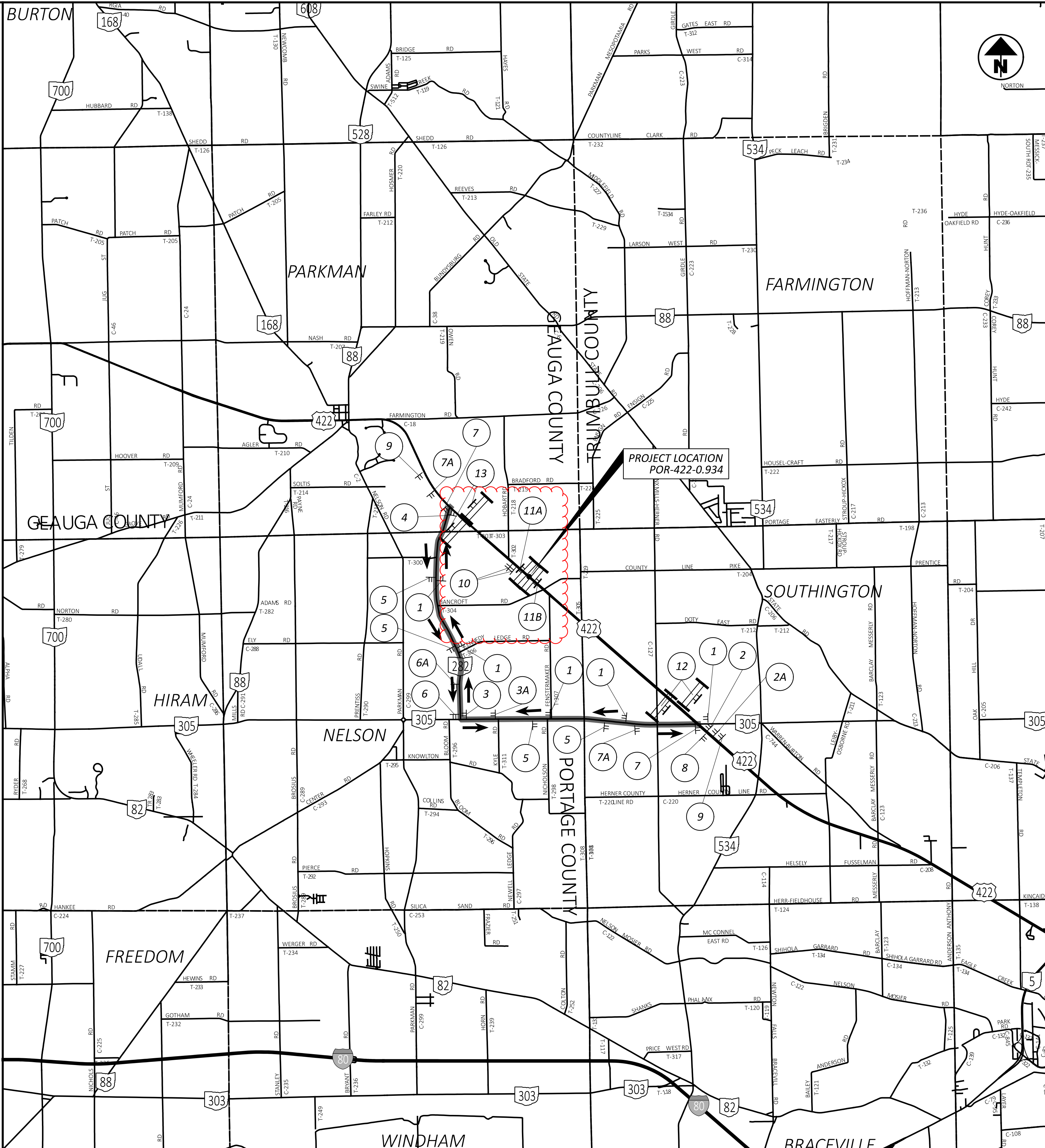
THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

	POR-422-0.934	POR-225-9.196	SUM-176-5.094	SUM-303-3.216	TOTALS CARRIED TO GENERAL SUMMARY
659, TOPSOIL	229.6 CU. YDS	107.4 CU. YDS	114.5 CU. YDS	256.9 CU. YDS	710 CU. YDS
659, SOIL ANALYSIS TEST	2 EACH	2 EACH	2 EACH	2 EACH	8 EACH
659, SEEDING AND MULCHING	2,069 SQ. YDS	967 SQ. YDS	1,032 SQ. YDS	2,315 SQ. YDS	6383 SQ. YDS
659, REPAIR SEEDING AND MULCHING				116 SQ. YDS	116 SQ. YDS
659, INTER-SEEDING				116 SQ. YDS	116 SQ. YDS
659, COMMERCIAL FERTILIZER	0.29 TONS	0.13 TONS	0.14 TONS	0.32 TONS	0.88 TONS
659, LIME	0.43 ACRES	0.20 ACRES	0.21 ACRES	0.48 ACRES	1.32 ACRES
659, WATER	11 M. GALLONS	5 M. GALLONS	6 M. GALLONS	13 M. GALLONS	35 M. GALLONS

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON THESE LIMITS.



LEGEND

TT - DETOUR ROUTE MARKER SIGN LOCATION

→ STATE DETOUR

→ DIRECTION OF STATE DETOUR

— TYPE III BARRICADES AND SIGNING, AS PER STANDARD CONSTRUCTION DRAWING MT-101.60

NOTES

1. THE CONTRACTOR SHALL PLACE CONSTRUCTION DRUMS SPACED AT 50' C/C TO SERVE AS CHANNELIZERS WITHIN LIMITS OF 700' CLOSURE FROM 12649 US 422 DRIVE TO MEDIAN CROSSOVER IMMEDIATELY NORTH OF DRIVE. CONSTRUCTION DRUMS SHALL BE IN PLACE FOR FULL DURATION OF CONSTRUCTION.
2. THE CONTRACTOR SHALL COMMUNICATE WITH PROPERTY OWNERS TO COORDINATE TEMPORARY ACCESS TO PROPERTIES AT LEAST 14 DAYS IN ADVANCE OF CONSTRUCTION OPERATIONS.
3. CONSTRUCTION DRUMS AND TEMPORARY W6-3 SIGNS SHALL BE REMOVED PRIOR TO REOPENING EASTBOUND US 422.

1 DETOUR M4-8-24 NORTH M3-1-30 422 M1-4-30-3 M6-3-21 2A DETOUR M4-8-24 NORTH M3-1-30 422 M1-4-30-3 M5-1-24

2 DETOUR M4-8-24 NORTH M3-1-30 422 M1-4-30-3 M6-1-21 3A DETOUR M4-8-24 NORTH M3-1-30 422 M1-4-30-3 M5-1-24

3 DETOUR M4-8-24 NORTH M3-1-30 422 M1-4-30-3 M6-1-21 6A DETOUR M4-8-24 SOUTH M3-3-30 422 M1-4-30-3 M5-1-24

4 END DETOUR M4-8a-24 NORTH M3-1-30 422 M1-4-30-3 M6-1-21 7A DETOUR M4-8-24 SOUTH M3-3-30 422 M1-4-30-3 M5-1-24

5 DETOUR M4-8-24 SOUTH M3-3-30 422 M1-4-30-3 M6-3-21 9 PROVIDE W6-3 SIGN AT 12649 US 422 DRIVE AND AT MEDIAN CROSSOVER IMMEDIATELY NORTH OF DRIVE

6 DETOUR M4-8-24 SOUTH M3-3-30 422 M1-4-30-3 M6-1-21 10 PROVIDE BARRICADES AT CULVERT SITE, MEDIAN CROSSOVER IMMEDIATELY NORTH OF DRIVE AT 12649 US 422, AND HOBART RD INTERSECTION ALONG US 422

7 DETOUR M4-8-24 SOUTH M3-3-30 422 M1-4-30-3 M6-1-21 11A ROAD CLOSED R11-2-48 MOUNTED ON TYPE 3 BARRICADES ACROSS ENTIRE ROADWAY PLACE ADVANCE WARNING SIGNS PER SCD MT-101.630

8 END DETOUR M4-8a-24 SOUTH M3-3-30 422 M1-4-30-3 M6-1-21 11B ROAD CLOSED R11-2-48 MOUNTED ON TYPE 3 BARRICADES ACROSS ENTIRE ROADWAY PLACE ADVANCE WARNING SIGNS PER SCD MT-101.630

9 DETOUR AHEAD W20-2-48

10 PROVIDE BARRICADES AT CULVERT SITE, MEDIAN CROSSOVER IMMEDIATELY NORTH OF DRIVE AT 12649 US 422, AND HOBART RD INTERSECTION ALONG US 422

11A ROAD CLOSED R11-2-48 MOUNTED ON TYPE 3 BARRICADES ACROSS ENTIRE ROADWAY PLACE ADVANCE WARNING SIGNS PER SCD MT-101.630

11B ROAD CLOSED R11-2-48 MOUNTED ON TYPE 3 BARRICADES ACROSS ENTIRE ROADWAY PLACE ADVANCE WARNING SIGNS PER SCD MT-101.630

12 ROAD CLOSED 1/2 MILE AHEAD LOCAL TRAFFIC ONLY R11-3a-60 MOUNTED ON TYPE 3 BARRICADE M4-10L-48 or M4-10R-48 TYPE 3 BARRICADE

13 ROAD CLOSED 1/2 MILE AHEAD LOCAL TRAFFIC ONLY R11-3a-60 MOUNTED ON TYPE 3 BARRICADE M4-10L-48 or M4-10R-48 TYPE 3 BARRICADE

SHEET NUMBER											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.03	P.04	P.13	P.14	P.15	P.16	P.17	P.26	P.36	P.43	P.56	01/NHS	02/S>2	03/STR						
LS											LS			201	11001	LS	ROADWAY	P.07	
LS													LS	201	11001	LS	CLEARING AND GRUBBING, AS PER PLAN (POR-422-0.934)	P.07	
LS													LS	201	11001	LS	CLEARING AND GRUBBING, AS PER PLAN (POR-225-9.196)	P.07	
LS												LS		201	11001	LS	CLEARING AND GRUBBING, AS PER PLAN (SUM-176-5.094)	P.07	
												LS		201	11001	LS	CLEARING AND GRUBBING, AS PER PLAN (SUM-303-3.216)	P.07	
									LS				LS	202	11000	LS	STRUCTURE REMOVED (SUM-176-5.094)		
										LS		LS		202	11001	LS	STRUCTURE REMOVED, AS PER PLAN (SUM-303-3.216)	P.04	
									2	1		1	2	202	20010	3	EACH	HEADWALL REMOVED	
			294	65	74	177					294	177	139	202	23000	610	SY	PAVEMENT REMOVED	
		50					60				60	50		202	35100	110	FT	PIPE REMOVED, 24" AND UNDER	
							103	48			103		48	202	35200	151	FT	PIPE REMOVED, OVER 24"	
		1,175									387.5	412.5	375	202	38000	1,175	FT	GUARDRAIL REMOVED	
		9										5	4	202	42010	9	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E	
							1				1			202	58100	1	EACH	CATCH BASIN REMOVED	
	843										356		487	203	10000	843	CY	EXCAVATION	
	1,067											1,067		203	10000	1,067	CY	EXCAVATION (SUM-303-3.216)	
	434										74		360	203	20000	434	CY	EMBANKMENT	
	1,552											1,552		203	20000	1,552	CY	EMBANKMENT (SUM-303-3.216)	
			242	74	84	199					242	199	158	204	10000	599	SY	SUBGRADE COMPACTION	
			4								4			209	60201	4	STA	LINEAR GRADING, AS PER PLAN	P.04
		575										375	200	606	15050	575	FT	GUARDRAIL, TYPE MGS	
		675									387.5		287.5	606	15100	675	FT	GUARDRAIL, TYPE MGS WITH LONG POSTS	
		8										4	4	606	26150	8	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	
		2											2	606	26550	2	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
LS												LS		SPECIAL	69021000	LS		MAINTAIN EXISTING SANITARY LINE	P.03
LS												LS		SPECIAL	69091000	LS		AS-BUILT CONSTRUCTION PLANS	P.03
																		EROSION CONTROL	
							3	4	6	36	3	36	10	601	11000	49	SY	RIPRAP, TYPE D	
												121		601	32000	121	CY	ROCK CHANNEL PROTECTION, TYPE A WITH FILTER	
													13	601	32100	13	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
		1					9	3	13		9	1	3	601	32200	13	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
	8										2	2	4	659	00100	8	EACH	SOIL ANALYSIS TEST	
	710										230	257	223	659	00300	710	CY	TOPSOIL	
	6,383										2,069	2,315	1,999	659	00500	6,383	SY	SEEDING AND MULCHING, CLASS 1	
	116											116		659	14000	116	SY	REPAIR SEEDING AND MULCHING	
	116											116		659	15000	116	SY	INTER-SEEDING	
	0.88										0.29	0.32	0.27	659	20000	0.88	TON	COMMERCIAL FERTILIZER	
	1.32										0.43	0.48	0.41	659	31000	1.32	ACRE	LIME	
	35										11	13	11	659	35000	35	MGAL	WATER	
											232			670	00500	232	SY	SLOPE EROSION PROTECTION	
											94			670	00720	94	SY	DITCH EROSION PROTECTION MAT, TYPE B	
											22,500	113,500	23,500	832	30000	159,500	EACH	EROSION CONTROL	
											196		209	836	10000	405	SY	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 1	
													67	836	10020	67	SY	SEEDING AND EROSION CONTROL WITH TURF REINFORCING MAT, TYPE 2	
																		DRAINAGE	
							LS				LS			503	11100	LS		COFFERDAMS AND EXCAVATION BRACING (POR-422-0.934)	
								LS					LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING (POR-225-9.196)	
									LS				LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING (SUM-176-5.094)	
										LS		LS		503	11100	LS		COFFERDAMS AND EXCAVATION BRACING (SUM-303-3.216)	
		0.4					2.1	1.9	3	8.8	2.1	9.2	4.9	602	20000	16.2	CY	CONCRETE MASONRY	
40											10	10	20	611	04400	40	FT	12" CONDUIT, TYPE B	
40											10	10	20	611	04600	40	FT	12" CONDUIT, TYPE C	
40											10	10	20	611	05100	40	FT	12" CONDUIT, TYPE E	
40											10	10	20	611	05200	40	FT	12" CONDUIT, TYPE F	
							8				8			611	06100	8	FT	15" CONDUIT, TYPE C, 706.02	
		84										84		611	07600	84	FT	18" CONDUIT, TYPE C	
							39				39			611	07600	39	FT	18" CONDUIT, TYPE C, 706.02	
							140				140			611	19200	140	FT	42" CONDUIT, TYPE A, 706.02, 707.33 OR 707.01 (0.064) ALUMINIZED	
									71				71	611	22200	71	FT	54" CONDUIT, TYPE A, 706.02, 707.33 OR 707.01 (0.079) ALUMINIZED	
										90		90		611	29001	90	FT	90" CONDUIT, TYPE A, AS PER PLAN, 707.02 (0.138) WITH FIELD PAVING OF PIPE	P.03
							60						60	611	53000	60	FT	38" X 60" CONDUIT, TYPE A, 706.04	
							2				2			611	99574	2	EACH	MANHOLE, NO. 3	

GENERAL SUMMARY

DESIGN AGENCY

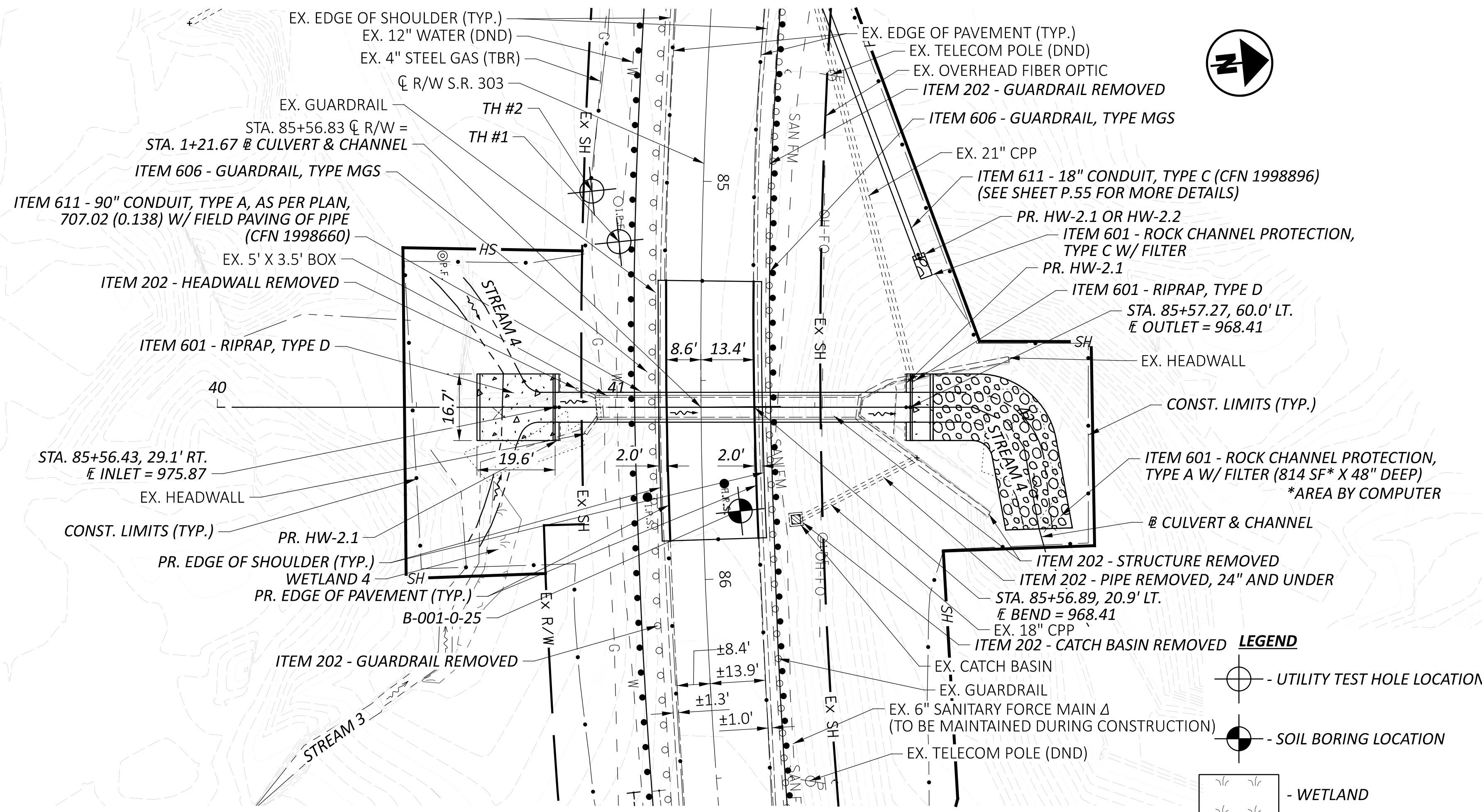
2LMN

DESIGNER
MAK

REVIEWER
JAB 01/14/26

PROJECT ID
112177

SHEET TOTAL
P.11 | 59



Δ - SEE SHEET P.07 FOR MORE DETAILS

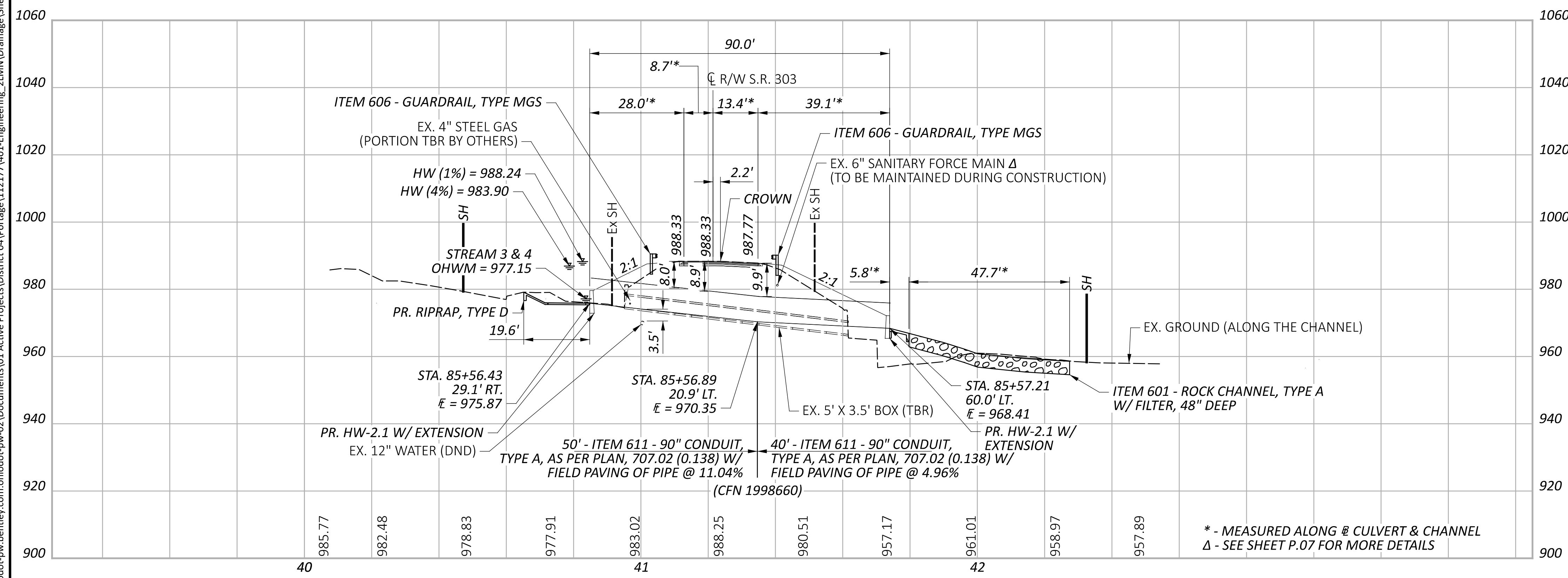
ESTIMATED QUANTITIES			
ITEM	QUANTITY	LIMIT	DESCRIPTION
202	LS	LS	STRUCTURE REMOVED, AS PER PLAN
202	1	EACH	HEADWALLS REMOVED
503	1	LS	COFFERDAMS AND EXCAVATION BRACING
601	36	SY	RIPRAP, TYPE D
601	121	CY	ROCK CHANNEL PROTECTION, TYPE A WITH FILTER
602	8.8	CY	CONCRETE MASONRY
611	90	FT	90" CONDUIT, TYPE A, AS PER PLAN, 707.02 (0.138) W/ FIELD PAVING OF PIPE

ESTIMATED QUANTITIES CARRIED TO GENERAL SUMMARY

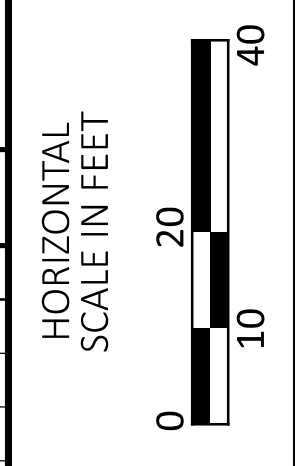
HYDRAULIC DATA			
DRAINAGE AREA =	531.2 ACRES		
Q (4%) =	411.00 CFS	V (4%) =	18.99 FT/S HW (4%) = 983.90 FT
Q (1%) =	625.00 CFS	V (1%) =	21.27 FT/S HW (1%) = 988.24 FT
ORDINARY HIGH WATER MARK:	977.15 FT		
DESIGN SERVICE LIFE:	75 YEARS		
ABRASION LEVEL:	1		
pH:	7.6		

EXISTING STRUCTURE	
TYPE:	CONCRETE BOX
SIZE:	67' - 5' X 3.5'
SKEW:	NONE
ALIGNMENT:	CURVE
DATE BUILT:	1/1/1959
CONDITION:	POOR
CFN:	1847716

PROPOSED STRUCTURE	
TYPE:	90' - 90" CONDUIT, TYPE A, AS PER PLAN, 707.02 (0.138) W/ FIELD PAVING OF PIPE
SKEW:	NONE
ALIGNMENT:	CURVE
CFN:	1998660



* - MEASURED ALONG @ CULVERT & CHANNEL
 Δ - SEE SHEET P.07 FOR MORE DETAILS



CULVERT DETAILS - SUM-303-3.216
 STA. 85+56.83

DESIGN AGENCY
2LMN

DESIGNER
 MAK

REVIEWER
 JAB 01/14/26

PROJECT ID
 112177

SHEET TOTAL
 P.56 59