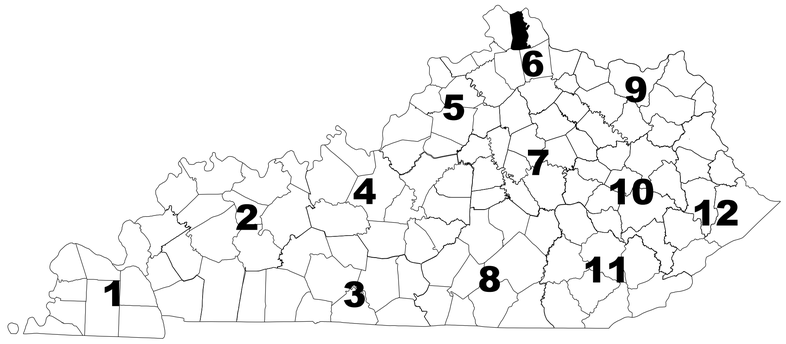
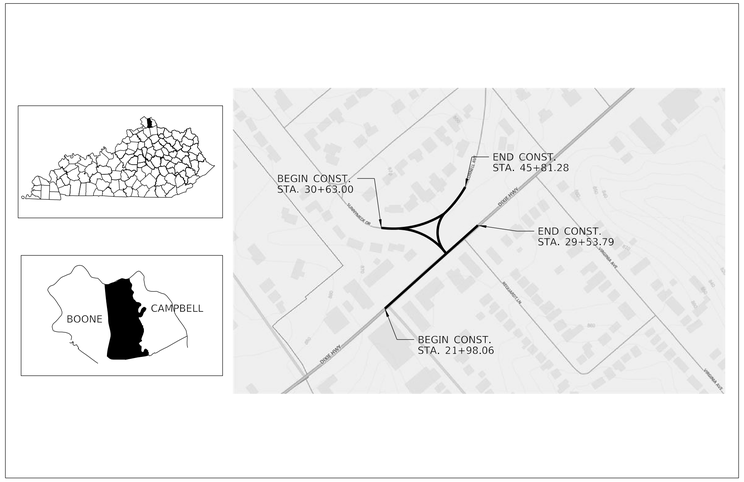
SUNNYMEDE INTERSECTION REALIGNMENT

Kenton County

CITY OF FORT MITCHELL





LAYOUT MAP

INDEX OF SHEETS

PROJECT NUMBER: 10174

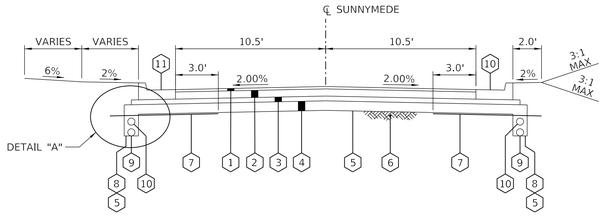
PROJECT DESCRIPTION: SUNNYMEDE DRIVE/CORNELL AVENUE/US 25 INTERSECTION REALIGNMENT

RECOMMENDED BY: MSY X
PROJECT MANAGER DATE:

PLAN APPROVED BY:
STATE HIGHWAY ENGINEER DATE:

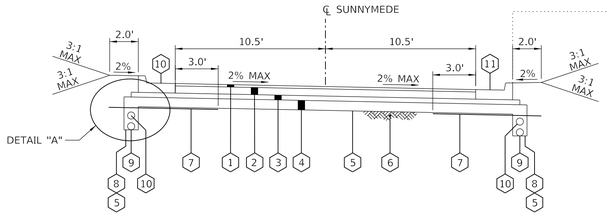
ITEM NO. 10174 COUNTY OF Kenton

SHEET NO. R1



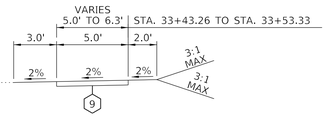
SUNNYMEDE - NORMAL SECTION

STA. 30+63.00 TO 31+49.18

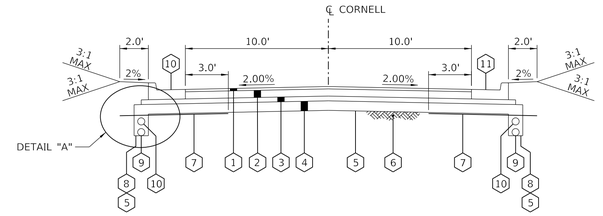


SUNNYMEDE - SUPERELEVATION

STA. 31+49.18 TO STA. 33+53.33

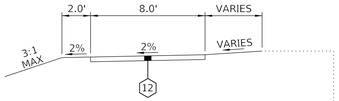


STA. 32+65.88 TO STA. 33+53.33

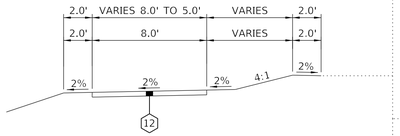


CORNELL - NORMAL SECTION

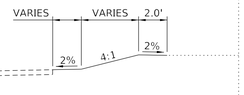
STA. 40+76.86 TO 45+81.28



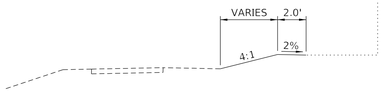
STA. 25+32.22 TO 25+45.00



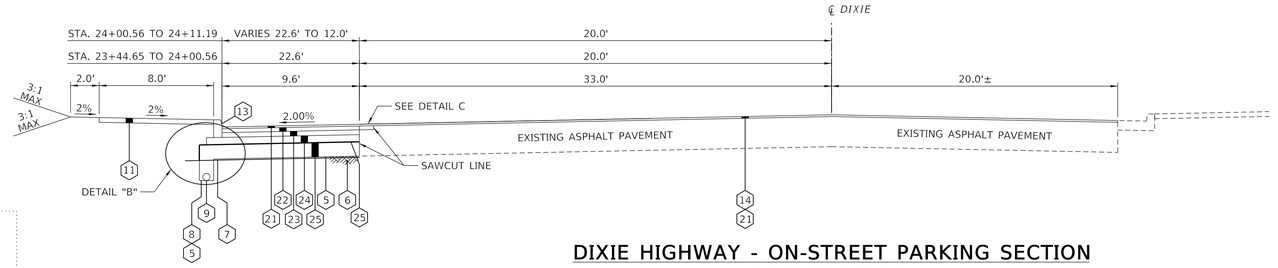
STA. 25+45.00 TO 26+15.12



STA. 26+15.12 TO 28+00.00

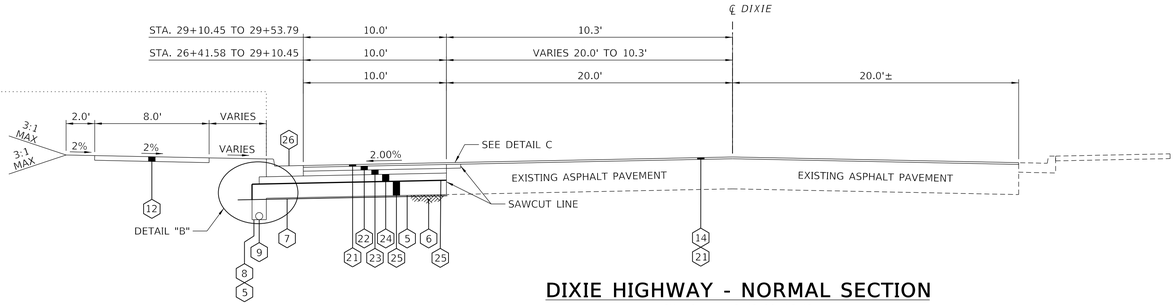


STA. 28+00.00 TO 29+53.79



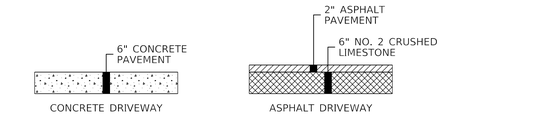
DIXIE HIGHWAY - ON-STREET PARKING SECTION

STA. 22+04.56 TO 24+11.19

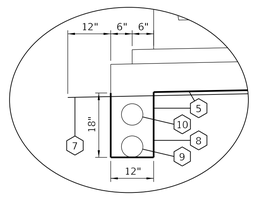


DIXIE HIGHWAY - NORMAL SECTION

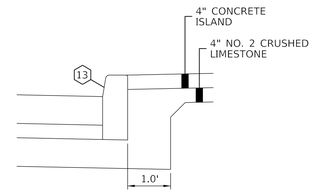
STA. 24+11.19 TO 29+53.79



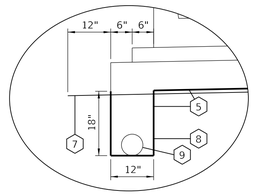
ENTRANCE PAVEMENT



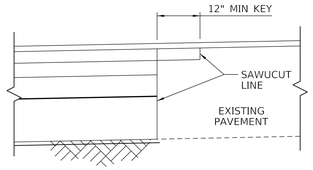
DETAIL A



CONCRETE ISLAND DETAIL



DETAIL B



DETAIL C - LONGITUDINAL EDGE KEY

ALL SAW CUT FOR LONGITUDINAL EDGE KEY IS INCIDENTAL TO LONGITUDINAL EDGE KEY. CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING PAVEMENT DEPTHS AND VERIFYING THE EXISTING PAVEMENT ELEVATIONS.

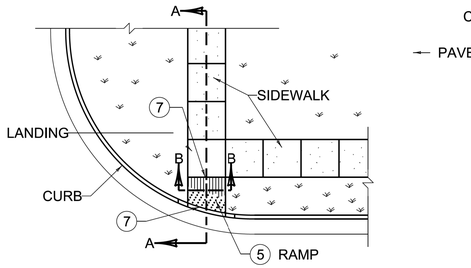
1. 2" - CL 2 ASHPALT SURFACE 0.38A PG64-22
2. 6" - CL 2 ASPHALT BASE 1.00D PG64-22 (PLACED IN TWO (2) - 3" LIFTS)
3. 4" DENSE GRADED AGGREGATE, COMPACTED TO 100% (ASTM D698).
4. 8" NO. 2 CRUSHED LIMESTONE, COMPACTED. ADDITIONAL (THICKER) NO.2 CRUSHED STONE TO BE USED AT ENGINEER'S DISCRETION TO REPLACE DEEPER POOR SUBGRADE SOILS.
5. MIRAFI® 600X OR EQUIVALENT WOVEN GEOTEXTILE, PLACED CONTINOUSLY BETWEEN EDGES OF DRAIN TRENCHES ON BOTH SIDES. ALL OVERLAPS TO BE 18" INCHES MINIMUM.
6. SUBGRADE RESHAPING AND COMPACTION OF EXISTING CLAY SUBGRADE - TRIMMED AND ROLLED SMOOTH FOR DRAINAGE SO THAT THE GEOTEXTILE CAN BE SPREAD SMOOTH, TAUT AND EVEN BEFORE NO. 2 STONE IS PLACED.
7. MIRAFI® 140N OR EQUIVALENT NONWOVEN GEOTEXTILE, COVERING DRAINAGE BACKFILL, LAPPED 12" INCHES ONTO CLAY EACH SIDE, AND 4" INCHES ONTO BACK OF CURB WHERE APPLICABLE. (COST SHALL BE INCIDENTAL TO CONCRETE CURB AND GUTTER, 6" DIA. RIGID PERFORATED PVC PIPE.)
8. CLEAN NO. 57 CRUSHED STONE (LESS THAN 35 FINES), COMPACTED IN 6" TO 8" LIFTS TO 80 DENSITY (ASTM D4253, D4254) W/A VIBRATORY COMPACTOR. (COST SHALL BE INCIDENTAL TO THE PERTINENT ITEM, SUCH AS 6" DIA. RIGID PERFORATED PVC PIPE, 4" CONCRETE SIDEWALK).
9. 6" DIA. RIGID PERFORATED PVC PIPE
10. 6" DIA. RIGID PVC PIPE
11. CONCRETE CURB AND GUTTER
12. 4" CONCRETE WALK
13. CONCRETE CURB
14. ASPHALT MILLING (DEPTH=1.5")
21. 1.5" ASHPALT SURFACE
22. 3.25" ASPHALT BASE
23. 4" ASPHALT BASE
24. 6" DENSE GRADED AGGREGATE, COMPACTED TO 100% (ASTM D698).
25. 12" NO. 2 CRUSHED LIMESTONE, COMPACTED. ADDITIONAL (THICKER) NO.2 CRUSHED STONE TO BE USED AT ENGINEER'S DISCRETION TO REPLACE DEEPER POOR SUBGRADE SOILS.
26. MODIFIED CONCRETE CURB AND GUTTER (GUTTER HEIGHT = 8.75")
27. GEOGRID REINFORCEMENT

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

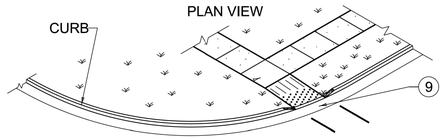
TEAM KENTUCKY TRANSPORTATION CABINET

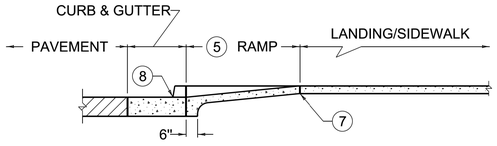
DRAWING TITLE: TYPICAL SECTIONS

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. R2

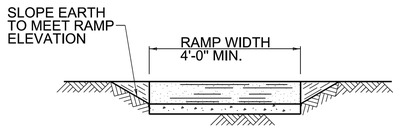


PLAN VIEW



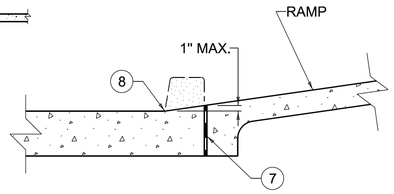


SECTION A-A

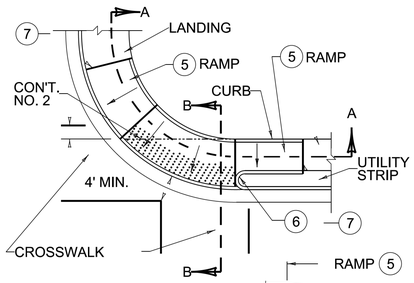


SECTION B-B

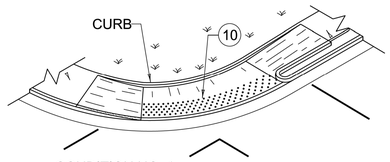
RAMP TYPE 1



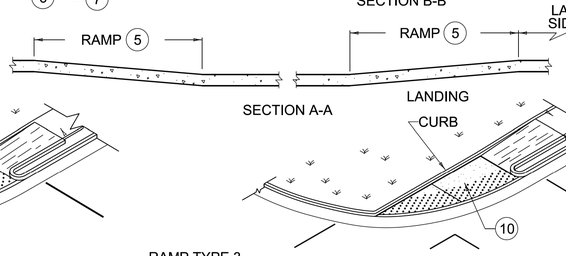
DROP CURB FOR RAMP



PLAN VIEW



CONDITION NO. 1

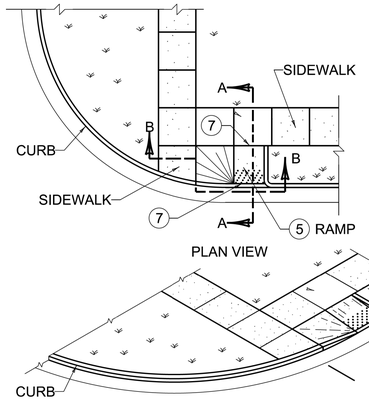


SECTION B-B

SECTION A-A

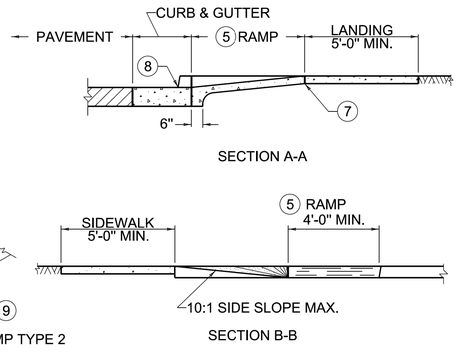
RAMP TYPE 3

CONDITION NO. 2



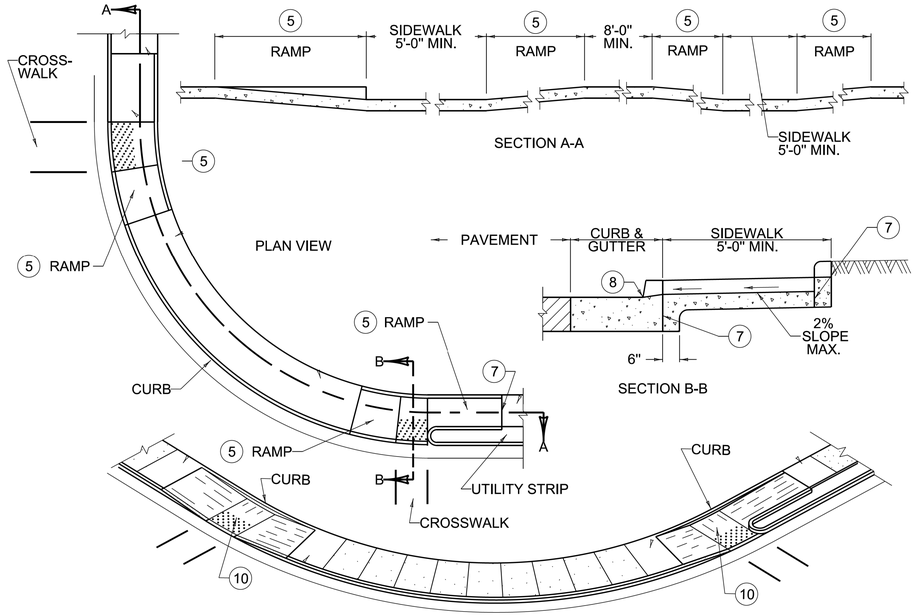
PLAN VIEW

RAMP TYPE 2



SECTION A-A

SECTION B-B



SECTION A-A

SECTION B-B

RAMP TYPE 4

~ NOTES ~

1. *THE RAMP SHALL BE CONSTRUCTED OF CLASS "A" CONCRETE. A BROOM FINISH OR EQUAL NON-SKID FINISH IS REQUIRED. DETECTABLE WARNINGS SHALL BE A SEPARATE BID ITEM.*
2. *RAMPS SHALL BE PAID PER SQ. YD. OF 4" CONCRETE SIDEWALK AND THE UNIT PRICE SHALL INCLUDE ALL MATERIALS, FORMS, CURB BEHIND RAMP AND LANDING, AND INCIDENTALS NECESSARY FOR CONSTRUCTION.*
3. *THE NORMAL GUTTER LINE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP.*
4. *RAMP TYPE 3 SHOULD BE USED PRIMARILY IN A RETROFIT TYPE CONDITION.*
5. *CURB RAMP GRADE SHALL NOT EXCEED 12:1, CROSS SLOPE SHALL NOT EXCEED 2.00%. ON RETROFIT CURB RAMPS, GRADES OF 12.5% for 2'-0" OR 10% FOR 5'-0" ARE PERMISSABLE.*
6. *CURB RETURN REQUIRED WHEN UTILITY STRIP IS 4' OR GREATER. FOR UTILITY STRIPS LESS THAN 4', THE AREA IS TO BE SURFACED WITH SIDEWALK WITHIN THE RAMP.*
7. *½" EXPANSION JOINT AT BACK OF CURB LINE AND AT SIDEWALK LINE.*
8. *NO BUMP PERMITTED. SAME SLOPE AS RAMP AND NOT TO EXCEED 1" IN HEIGHT. RAMPS SHALL BE CONSTRUCTED SO THAT WATER WILL NOT ACCUMULATE ON WALKING SURFACES.*
9. *LANDINGS WILL PROVIDE A LEVEL AREA (MAX. 5% GRADE OR CROSS SLOPE) AT APPROXIMATE STREET ELEVATION. A 4' SQUARE LEVEL LANDING IS THE REQUIRED MINIMUM.*
10. *LANDINGS WILL PROVIDE A LEVEL AREA (MAX. 2.00% GRADE OR CROSS SLOPE) AT APPROXIMATE STREET ELEVATION. A 4' SQUARE LEVEL LANDING IS THE REQUIRED MINIMUM.*

ROADWAY												
ITEM	DESCRIPTION	UNIT	SUNNYMEDE DRIVE	CORNELL AVENUE	DIXIE HIGHWAY					ENTRANCES		PROJECT TOTALS
00001	DENSE GRADED AGGREGATE	TON	122	189	388							699
00005	MIRAFI 140N, OR EQUIVALENT, NON-WOVEN GEOTEXTILE	SQYD	507	1042	1309							2858
00005	MIRAFI 600X, OR EQUIVALENT, WOVEN GEOTEXTILE	SQYD	3446	6637	4115							14198
00005	GEOGRID REINFORCEMENT	SQYD			1309							1309
00071	CRUSHED LIMESTONE, NO. 57	TON	28	60	40							128
00078	CRUSHED LIMESTONE, NO.2	TON	504	793	806					20		2123
00212	ASPHALT BASE	TON	299	428	363							1090
00520	12" PIPE	LF	141	65	270							476
00522	18" PIPE	LF	8		8							16
00524	24" PIPE	LF	247	104	395							746
00526	30" PIPE	LF			246							246
01310	PIPE REMOVED	LF	380	368	336							1084
01456	CURB BOX INLET (KYTC)	EACH			4							4
01568	STANDARD CURB DOUBLE INLET (SD1)	EACH	6	4								10
01577	STANDARD INLET (SD1)	EACH		1								1
01577	DROP BOX INLET (KYTC)	EACH			1							1
01706	INLET REMOVED	EACH	5	3	3							11
01756	STANDARD MANHOLE (SD1)	EACH	3	2								5
01756	MANHOLE, TYPE A (KYTC)	EACH			2							2
01761	MANHOLE, TYPE B (KYTC)	EACH			1							1
01787	MANHOLE REMOVED	EACH	3	3	2							8
01810	CONCRETE CURB AND GUTTER	LF	592	1170								1762
01811	MODIFIED CONCRETE AND CURB GUTTER	LF			760							760
01812	REMOVE CONCRETE CURB AND GUTTER	LF	432	1482								1914
01875	CONCRETE CURB	LF		72	200							272
01904	REMOVE CONCRETE CURB	LF			322							322
02091	REMOVE PAVEMENT	SQYD	707	2022	996					464		4189
02099	CONCRETE PAVEMENT	SQYD								274		274
02200	EXCAVATION	CUYD										109
02230	EMBANKMENT	CUYD										511
02568	MOBILIZATION	LUMP										1
02569	DEMOBILIZATION	LUMP										1
02625	HEADWALL REMOVED	EACH			1							1
02650	MAINTAIN AND CONTROL TRAFFIC	LUMP										1
02720	PROPOSED SIDEWALK	SQYD	7	17	320							344
02721	REMOVE SIDEWALK	SQYD	7	73	119							199
04793	CONDUIT 1 1/4 INCH	LF										10
04795	CONDUIT 2 INCH	LF										10
04795	2" SCHEDULE 40 GRAY ELECTRICAL CONDUIT	LF	181									181
04811	ELECTRICAL JUNCTION BOX TYPE B	EACH			1							1
04820	TRENCHING AND BACKFILLING	LF			15							15
04830	LOOP WIRE	LF			750							750
04895	LOOP SAW SLOT AND FILL	LF			135							135
05990	SODDING	SQYD	1412	1359	830							3601
06406	ALUMINIUM SHEET SIGN	SQFT	13	9	5							27
06410	STEEL POST, TYPE 1	LF	37	36	13							86
06540	PARKING STALL LINE	LF			70							70
06543	DOUBLE YELLOW CENTERLINE-THERMO-6 IN	LF	70	50	1521							1641
06543	LANE LINE-THERMO-WHITE-6 IN	LF			160							160
06543	CHANNELIZING LINE-THERMO-WHITE-6 IN	LF	44		262							306
06543	CROSSWALK-THERMO-WHITE-6 IN	LF	105									105
06546	TRANSVERSE LINE-THERMO-YELLOW-12 IN	LF			195							195
06568	STOP LINE-THERMO-WHITE-24 IN	LF	24	14								38
06574	LANE ARROW	EACH	4		6							10
15012	SANITARY LINE ENCASEMENT	LF										16
15094	MANHOLE RECONSTRUCTED TO GRADE	EACH	1	1								2
15094	MANHOLE ADJUSTED TO GRADE	EACH	2									2
16064	VALVE ADJUSTED TO GRADE	EACH	2									2
20194	REMOVE AND RELOCATE DECORATIVE STREET NAME SIGNS	EACH	1	1								2
20359	GALVANIZED STEEL CABINET	EACH			1							1
20360	WOOD POST	EACH			2							2
21289	LONGITUDIONAL EDGE KEY	LF			771							771
21373	REMOVE SIGN	EACH	3	3	1							7
23019	ASPHALT MILLING	SQYD			3847							3847
23556	JUNCTION BOX ADJUSTED TO GRADE	EACH	3									3
24685	ASPHALT SURFACE	TON	100	143	75					7		325
24790	SUBGRADE RESHAPING AND COMPACTION	SQYD	1215	1947	1262							4424
40002	STRAW/SEED	ACRE	0.3									0.3
40179	PERFORATED PIPE, 6-IN	LF	527	1115	669							2311
40180	NON-PERFORATED PIPE, 6-IN	LF	394	803								1197

WATER MAIN			
ITEM	DESCRIPTION	UNIT	PROJECT TOTALS
6.03	C-900, C-909 Poly Vinyl Chloride (PVC) (8") (Detail 103, 103a, 104, 104a, 110)	LF	460
6.03B	C-900, C-909 Poly Vinyl Chloride (PVC) (8") - RESTRAINED JOINT	LF	380
7.01	CONNECT TO EXISTING MAIN/TIE-IN (6")	EACH	2
8.01	INSTALL FIRE HYDRANT ASSEMBLY	EACH	1
8.03	REMOVE FIRE HYDRANT	EACH	1
9.01	DUCTILE IRON RESILIENT SEATED GATE VALVE (6")	EACH	3
10.02	REPLACE SERVICE LINE AND INSTALL WATER METER SETTING (3/4") (Service line materials provided by NKWD)	EACH	11
11.06	ANCHORING TEE AND BLOCK (6"x6"x6")	EACH	1
11.06	ANCHORING TEE AND BLOCK (8"x8"x6")	EACH	1
11.09	REDUCER (8"x6")	EACH	2
11.15	SLEEVE OUT EXISTING WYE	EACH	1
12.09	CONCRETE PAVEMENT (4" temporary trench restoration)	SY	260
12.14	BEST MANAGEMENT PRACTICE	LS	1

ITEM	SUNNYMEDE DRIVE	CORNELL AVENUE	DIXIE HIGHWAY		ENTRANCES													TOTAL PROJECT
	SQUARE YARDS																	
1.5" ASPHALT SURFACE			909															909
2" ASPHALT SURFACE	907	1296			60													2264
3.25" ASPHALT BASE			909															909
4" ASPHALT BASE			909															909
6" ASPHALT BASE	907	1296																2204
6" CONCRETE PAVEMENT					274													274
CEMENT CONCRETE ISLAND		31																31
4" DENSE GRADED AGGREGATE	1112	1721																2833
6" DENSE GRADED AGGREGATE			1177															1177
2" CRUSHED LIMESTONE, NO. 2		24																24
6" CRUSHED LIMESTONE, NO. 2					60													60
8" CRUSHED LIMMESTONE, NO. 2	1145	1797																2942
12" CRUSHED LIMMESTONE, NO. 2			1221															1221
MIRAFI 600X, OR EQUIVALENT, WOVEN GEOTEXTILE	1340	2177	1441															4958
MIRAFI 140N, OR EQUIVALENT, NON-WOVEN GEOTEXTILE	507	1042	1309															2858
SUBGRADE RESHAPING AND COMPACTION	1215	1947	1262															4424
GEOGRID REINFORCEMENT			1309															1309

ITEM CODE	ITEM	UNIT	SUNNYMEDE DRIVE	CORNELL AVENUE	DIXIE HIGHWAY		ENTRANCES													TOTAL PROJECT
	ASPHALT SURFACE	TON	100	143	75		7													324
	ASPHALT BASE	TON	299	428	363															1090
	CONCRETE PAVEMENT ①	TON					92													92
	CEMENT CONCRETE ISLAND ①	TON		7																7
	DENSE GRADED AGGREGATE ②	TON	122	189	388															700
	CRUSHED LIMMESTONE, NO. 2 ②	TON	504	793	806		20													2123
	CONCRETE CURB AND GUTTER	LF	592	1170																1762
	MODIFIED CONCRETE CURB AND GUTTER	LF			760															
	CONCRETE CURB	LF		72	200															272

NOTES:

ALL ASPHALT MIXTURES SHALL BE ESTIMATED AT 110 LBS. PER SQ. YD. PER INCH OF DEPTH, UNLESS NOTED OTHERWISE.

① ESTIMATED AT 150 LBS. PER CU. FT.
② ESTIMATED AT 110 LBS. PER CU. FT.

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: PAVING SUMMARY

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. R5

SHEET NO.	ID	STATION	OFFSET	RT/LT	REFERENCE CENTERLINE	PIPE				DBI	CBI	KYTC MANHOLES		SD1			MISC	REMARKS
						12''	18"	24''	30''	TYPE 14	TYPE A	TYPE A	TYPE B	MANHOLE	STANDARD CURB DOUBLE INLET	STANDARD INLET		
ITEM CODE																		
UNIT TO BID						LF				EACH								
R10	D01	30+80	19.54'	RT	SUNNYMEDE		8 *	86						1				
R10	D02	31+63	20.66'	RT	SUNNYMEDE			65						1				
R10	D03	32+26	21.69'	RT	SUNNYMEDE			96						1				
R10	D04	41+01	37.05'	RT	CORNELL			8 *								1		
R10	D05	43+61	25.61'	RT	CORNELL			8 *	246					1				
R10	D06	40+36	5.63'	RT	CORNELL			63						1				
R10	D21	30+81	12.50'	LT	SUNNYMEDE	25									1			
R10	D22	30+80	12.33'	RT	SUNNYMEDE	8									1			
R10	D23	31+79	12.50'	LT	SUNNYMEDE	29									1			
R10	D24	32+26	12.58'	RT	SUNNYMEDE	9									1			
R10	D25	41+00	12.00'	LT	CORNELL	24									1			
R10	D26	41+00	12.00'	RT	CORNELL			25							1			
R10	D27	43+47	12.00'	LT	CORNELL	27									1			
R10	D28	43+59	12.00'	RT	CORNELL	14									1			
R10	D29	33+28	23.00'	RT	SUNNYMEDE	62									1			
R10	D30	31+64	12.50'	RT	SUNNYMEDE	8									1			
R10	D31	24+46	44.74'	LT	DIXIE			60 *				1						
R10	D32	23+98	42.63'	LT	DIXIE			124			1							
R10	D33	25+23	49.16'	LT	DIXIE			48					1					
R10	D34	25+68	32.00'	LT	DIXIE			73			1							
R10	D37	25+13	28.86'	RT	DIXIE	8 *	8 *	25				1						
R10	D38	28+22	39.80'	LT	DIXIE	138				1								
R10	D39	26+84	30.48'	LT	DIXIE	116					1							
R10	D40	25+38	24.03'	RT	DIXIE	8 *		65			1							
PROJECT TOTAL						476	16	746	246	1	4	2	1	5	10	1		

SHEET NO.	ID	STATION	OFFSET	RT/LT	REFERENCE CENTERLINE	PIPE REMOVED	INLET REMOVED	MANHOLE REMOVED	HEADWALL REMOVED	MISC	REMARKS
ITEM CODE											
UNIT TO BID						LF	EACH	EACH	EACH		
R9	DR1	30+81	12.9'	LT	SUNNYMEDE	26	1				
R9	DR2	30+80	12.6'	RT	SUNNYMEDE	10	1				
R9	DR3	30+85	20.5'	RT	SUNNYMEDE	89 *		1			
R9	DR4	31+63	20.7'	RT	SUNNYMEDE	62		1			
R9	DR5	31+63	20.7'	RT	SUNNYMEDE	6	1				
R9	DR6	31+94	44.6'	RT	SUNNYMEDE	41	1				
R9	DR7	32+17	13.6'	LT	SUNNYMEDE	31	1				
R9	DR8	32+23	17.1'	RT	SUNNYMEDE	115		1			
R9	DR9	40+73	53.8'	RT	CORNELL	37	1				
R9	DR10	40+57	5.8'	RT	CORNELL	45		1			
R9	DR11	41+01	12.9'	RT	CORNELL	24	1				
R9	DR12	41+01	37.1'	RT	CORNELL	8 *		1			
R9	DR13	41+47	12.9'	LT	CORNELL		1				
R9	DR14	43+61	25.6'	RT	CORNELL	254 *		1			
R9	DR15	23+46	44.7'	LT	DIXIE	203	1				
R9	DR16	25+50	43.1'	LT	DIXIE	47		1			
R9	DR17	25+56	33.7'	LT	DIXIE	11	1				
R9	DR18	25+88	35.4'	LT	DIXIE	39			1		
R9	DR19	25+13	28.9'	RT	DIXIE	16 *		1			
R9	DR20	25+32	25.6'	RT	DIXIE	20	1				
PROJECT TOTAL						1084	11	8	1		

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY
TRANSPORTATION CABINET

DRAWING TITLE: PIPE SUMMARY

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. R6

GENERAL NOTES

BEFORE YOU DIG

THE CONTRACTOR IS INSTRUCTED TO CALL 1-800-752-6007 TO REACH KY 811, THE ONE-CALL SYSTEM FOR INFORMATION ON THE LOCATION OF EXISTING UNDERGROUND UTILITIES. THE CALL IS TO BE PLACED A MINIMUM OF TWO (2) AND NO MORE THAN TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION. THE CONTRACTOR SHOULD BE AWARE THAT OWNERS OF UNDERGROUND FACILITIES ARE NOT REQUIRED TO BE MEMBERS OF THE KY 811 ONE-CALL BEFORE-U-DIG (BUD) SERVICE. THE CONTRACTOR MUST COORDINATE EXCAVATION WITH THE UTILITY OWNERS, INCLUDING THOSE WHOM DO NOT SUBSCRIBE TO KY 811. IT MAY BE NECESSARY FOR THE CONTRACTOR TO CONTACT THE COUNTY COURT CLERK TO DETERMINE WHAT UTILITY COMPANIES HAVE FACILITIES IN THE AREA.

THE CONTRACTOR IS ADVISED THAT THE UTILITY LOCATIONS AND ELEVATIONS SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND NO GUARANTEE IS MADE AS TO THEIR ACCURACY.

160 N.G.S (U.S.G.S.) BENCH MARKS

DO NOT DISTURB N.G.S. (U.S.G.S.) BENCH MARKS IN ANY MANNER UNLESS DIRECTED BY THE ENGINEER.

444 ASPHALT PAVEMENT RIDE QUALITY

PAVEMENT RIDEABILITY REQUIREMENTS, IN ACCORDANCE WITH SECTION 410 OF THE CURRENT STANDARD SPECIFICATIONS. CATEGORY 'X' SHALL APPLY ON THIS PROJECT.

447 COMPACTION OF ASPHALT MIXTURES

WILL ACCEPT THE COMPACTION OF ASPHALT MIXTURES FURNISHED FOR DRIVING LANES AT ONE INCH (25 MM) OR GREATER ON THIS PROJECT BY OPTION A ACCORDING TO SUBSECTIONS 402 AND 403 OF THE CURRENT STANDARD SPECIFICATIONS. USE JOINT CORES AS DESCRIBED IN SUBSECTION 402.03.02 FOR SURFACE MIXTURES ONLY. WILL ACCEPT THE COMPACTION OF ALL ASPHALT MIXTURES BY OPTION B.

445 EDGE KEY

THIS WORK INCLUDES CUTTING OUT THE EXISTING ASPHALT SURFACE TO A MINIMUM DEPTH AND WIDTH AS DETAILED ELSEWHERE IN THE PLANS SO THAT THE NEW SURFACE MAY HEEL INTO THE EXISTING SURFACE. THE CONTRACT UNIT PRICE BID LINEAR FOOT FOR "EDGE KEY" INCLUDES ALL NECESSARY MATERIALS, LABOR AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND DISPOSE OF THE REMOVED ASPHALT MATERIAL.

PIPE TRENCHING AND BEDDING

THE CONTRACTOR SHALL REFER TO THE STANDARD SPECIFICATIONS FOR ALL WORK ASSOCIATED WITH PIPE TRENCHING AND BEDDING.

SODDING

A QUANTITY FOR SODDING HAS BEEN INCLUDED IN THE PLANS. ALL DISTURBED AREAS NOT DESIGNATED IN THE PLANS TO BE STRAW/SEED SHALL BE SODDED. ALL WORK ASSOCIATED WITH SODDING SHALL BE IN COMPLIANCE WITH THE STANDARD SPECIFICATIONS.

STRAW/SEED

A QUANTITY FOR STRAW/SEED HAS BEEN INCLUDED IN THE PLANS. LOCATIONS FOR ITS USE WILL BE AS SHOWN ON THE PLANS, SPECIFIED IN THE CONTRACT, OR BY THE ENGINEER. ALL WORK ASSOCIATED WITH STRAW/SEED SHALL BE IN COMPLIANCE WITH THE STANDARD SPECIFICATIONS.

650 STANDARD DRAWINGS

STANDARD DRAWINGS ARE NOT ATTACHED TO THESE PLANS. FOR KYTC STANDARD DRAWINGS, A STANDARD DRAWING BOOK AND THE HEADWALL SUPPLEMENTAL BOOK MAY BE OBTAINED FROM THE POLICY SUPPORT BRANCH OF THE DEPARTMENT OF ADMINISTRATIVE SERVICES IN FRANKFORT, KY. AT (502) 564-3670.

SANITATION DISTRICT 1 (SD1)

STANDARD DRAWINGS CAN BE OBTAINED FROM THE SD1 WEBSITE.

TYPICAL SECTION

DIMENSIONS SHOWN ON THE TYPICAL SECTIONS FOR PAVEMENT WIDTH AND THICKNESS ARE NOMINAL OR TYPICAL DIMENSIONS. THE ACTUAL DIMENSIONS TO BE CONSTRUCTED MAY BE VARIED TO FIT EXISTING CONDITIONS AS DIRECTED OR APPROVED BY THE ENGINEER.

DRAINAGE STRUCTURES

ALL EXISTING DRAINAGE STRUCTURES THAT ARE TO BE REUSED SHALL BE INSPECTED FOR BLOCKAGE AND STRUCTURAL INTEGRITY. THEY SHALL BE CLEANED AND REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER.

ALL DRAINAGE STRUCTURES THAT ARE TO BE EXTENDED IN-KIND AND ON THE SAME SLOPE UNLESS OTHERWISE SPECIFIED.

EXISTING LANDSCAPE MATERIAL

DO NOT DISTURB LANDSCAPE PLANTS UNLESS ABSOLUTELY NECESSARY.

DO NOT DISTURB ANY PLANTS WITHOUT PRIOR APPROVAL OF THE PROJECT ENGINEER.

THE PROJECT ENGINEER SHALL NOTIFY THE DISTRICT AGRONOMIST FOR POSSIBLE DEPARTMENT SALVAGE OF ANY PLANTS NEEDING REMOVAL.

SAW CUTTING

SAW CUTTING WILL BE INCIDENTAL TO THE PAVEMENT BID ITEMS.

SANITARY/STORM SEWER ABANDONMENTS

1. EVERY LATERAL ABANDONMENT, TEMPORARY OR PERMANENT, MUST HAVE A PERMIT AND BE INSPECTED BY SD1. IF A BUILDING IS DEMOED A PERMIT IS REQUIRED.
2. ALL SEWER LATERALS (SANITARY AND STORM) THAT ARE ABANDONED MUST BE CAPPED AS CLOSE AS POSSIBLE TO THE SEWER MAIN. IF THE SEWER MAIN IS IN THE STREET OR ON THE OTHER SIDE OF THE STREET FROM THE LATERAL IT SHOULD BE CAPPED AS CLOSE TO THE CURB AS POSSIBLE.
3. THE LATERAL MUST BE CAPPED WITH A MANUFACTURED CAP OF THE SAME MATERIAL AS THE SEWER LATERAL OR A RUBBER CAP SPECIFICALLY MANUFACTURED FOR THE PURPOSE OF CAPPING PIPE. THE CAP AND THE END OF THE LATERAL SHALL THEN BE ENCASED IN CONCRETE.
4. AN SD1 REPRESENTATIVE MUST INSPECT ALL SEWERS THAT ARE ABANDONED AT THE TIME OF ABANDONMENT.
5. ANY LINE TO BE ABANDONED THAT CONNECTS TO AN SD1 STRUCTURE (STORM OR SANITARY) MUST COMPLETE THE FOLLOWING: THIS WILL REQUIRE A CONFINED SPACE ENTRY PROCEDURE TO BE ON FILE WITH SD1.
   A. EXISTING PIPES HAVE TO BE REMOVED AND OPENING GROUTED TO CONFORM TO THE STRUCTURE WALL.
   B. LATERALS - ALL MATERIALS USED IN A DROP PIPE LATERAL, PIPE, S/S HARDWARE, AND ANCHORS TO BE REMOVED.

SUPERELEVATION TABLE - SUNNYMEDE DRIVE

P.I. STA. 33+18.83 — Dc = 64° 23' 02"

LEFT SIDE				CENTERLINE CONTROL		RIGHT SIDE				REMARKS
EDGE ELEVATION	ELEVATION CORRECTION	CROSS SLOPE	WIDTH	STATION	PROFILE GRADE	WIDTH	CROSS SLOPE	ELEVATION CORRECTION	EDGE ELEVATION	
853.48	-0.21	-0.0200	10.50	31+49.18	853.69	10.50	-0.0200	-0.21	853.48	NC
853.48	-0.20	-0.0195	10.50	31+50.00	853.68	10.50	-0.0200	-0.21	853.47	
853.33	-0.03	-0.0028	10.50	31+75.00	853.36	10.50	-0.0200	-0.21	853.15	
853.31	0.00	0.0000	10.50	31+79.21	853.31	10.50	-0.0200	-0.21	853.10	HALF FLAT
853.20	0.14	0.0138	10.50	32+00.00	853.06	10.50	-0.0200	-0.21	852.85	
853.20	0.21	0.0200	10.50	32+09.24	852.99	10.50	-0.0200	-0.21	852.78	FS
853.15	0.21	0.0200	10.50	32+25.00	852.94	10.50	-0.0200	-0.21	852.73	
853.26	0.21	0.0200	10.50	32+50.00	853.05	10.50	-0.0200	-0.21	852.84	
853.61	0.21	0.0200	10.50	32+75.00	853.40	10.50	-0.0200	-0.21	853.19	
854.19	0.21	0.0200	10.50	33+00.00	853.98	11.84	-0.0200	-0.24	853.74	
854.95	0.21	0.0200	10.50	33+23.30	854.74	21.00	-0.0200	-0.42	854.32	FS
855.01	0.20	0.0189	10.50	33+25.00	854.81	21.00	-0.0189	-0.40	854.41	
855.84	0.02	0.0022	10.50	33+50.00	855.82	21.00	-0.0022	-0.05	855.77	
855.94	0.00	0.0000	10.50	33+53.33	855.94	21.00	0.0000	0.00	855.94	FLAT

MAINTENANCE OF TRAFFIC NOTES

MAINTENANCE OF TRAFFIC AND PHASING PLAN

TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE MOST CURRENT EDITIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND THE KENTON COUNTY SUBDIVISION REGULATIONS. ALL TRAFFIC CONTROL DEVICES AND ALL MATERIALS SHALL CONFORM TO THE MOST RECENT EDITIONS OF THE MANUAL OF UNIFORM CONTROL DEVICES (MUTCD) AND THE KENTON COUNTY SUBDIVISION REGULATIONS. ALL TRAFFIC CONTROL ITEMS UTILIZIED FOR THIS PROJECT SHALL REMAIN THE PROPERTY OF THE CONTRACTOR. UNLESS AN ITEM IS SPECIFICALLY IDENTIFIED, ALL WORK ASSOCIATED WITH MAINTAINING TRAFFIC FOR THE DURATION OF THE PROJECT SHALL BE INCLUDED IN THE BID ITEM FOR "MAINTAIN AND CONTROL TRAFFIC".

WORK ZONE SPEED LIMIT

THE POSTED SPEED LIMIT IN THE CONSTRUCTION AREA SHALL BE 15 MPH ALONG SUNNYMEDE DRIVE AND CORNELL AVENUE.

PROPERTY ACCESS

REASONABLE MEANS OF INGRESS AND EGRESS SHALL BE MAINTAINED TO THE BEST EXTENT POSSIBLE DURING CONSTRUCTION. ACCESS MAY BE RESTRICTED TO LOCAL ACCESS ONLY. PARKING MAY BE RESTRICTED TEMPORARILY IN PHASES TO ACCOMDATE CONSTRUCTION AND MOT. 'NO PARKING' SHALL BE PLACED 48 HOURS IN ADVANCE OF ANY RESTRICTIONS. IF WEATHER IMPACTS SCHEDULE, SIGNS SHALL BE COVERED. ACCOMDATIONS FOR MAIL DELIVERY AND GARBAGE COLLECTION SHALL BE PROVIDED AND MAINTAINED.

LANE WIDTHS

MINIMUM LANE WIDTHS SHALL BE MAINTAINED - 8 FEET FOR SUNNYMEDE DRIVE AND CORNELL AVENUE AND NO LESS THAN EXISTING LANE WIDTHS FOR ALL APPROACH ROADS WITHIN THE PROJECT LIMITS.

LANE CLOSURES

THE CONTRACTOR WILL BE ALLOWED TO TEMPORARILY CLOSE ONE LANE OF TRAFFIC ALONG SUNNYMEDE DRIVE AND CORNELL AVENUE DURING WORK HOURS AS LONG AS ADEQUATE SIGNING AND FLAGPERSONS ARE PROVIDED. LOCAL ACCESS SHALL BE MAINTAINED TO THE EXTENT POSSIBLE THROUGHOUT THE ENTIRETY OF CONSTRUCTION. ALL LANE CLOSURES MUST BE PRE-APPROVED BY THE ENGINEER.

THE CONTRACTOR WILL BE ALLOWED TO TEMPORARILY CLOSE ONE LANE OF TRAFFIC ALONG US-25 (DIXIE HIGHWAY) DURING THE HOURS OF 9:00 AM - 3:00 PM AS LONG AS ADEQUATE SIGNING AND FLAGPERSONS ARE PROVIDED. LOCAL ACCESS SHALL BE MAINTAINED TO THE EXTENT POSSIBLE THROUGHOUT THE ENTIRETY OF CONSTRUCTION. ALL LANE CLOSURES MUST BE PRE-APPROVED BY THE ENGINEER.

DRUMS/CONES

DRUMS/CONES SHALL BE USED FOR TYPICAL LANE CLOSURES AND TO SEPARATE TRAFFIC FROM CONSTRUCTION ACTIVITIES. DRUMS/CONES SHALL MEET ALL SPECIFICATIONS OF AND BE INSTALLED IN ACCORDANCE WITH THE MOST CURRENT EDITION OF MUTCD.

CONTRACTOR'S VEHCLES

THE CONTRACTOR'S VEHICLES SHALL ALWAYS MOVE WITH AND NOT AGAINST THE FLOW OF TRAFFIC. VEHICLES SHALL ENTER AND LEAVE THE WORK AREAS IN A MANNER WHICH WILL NOT BE HAZARDOUS TO OR INTERFERE WITH NORMAL TRAFFIC. VEHICLES SHALL NOT PARK OR STOP EXCEPT WITHIN WORK AREAS DESIGNATED BY THE ENGINEER.

TEMPORARY SIGNING

THE SIGNING FOR THE CONSTRUCTION AND TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE MOST CURRENT EDITIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND THE KENTON COUNTY SUBDIVISION REGULATIONS. PAYMENT FOR FURNISHING, ERECTING, MAINTAINING, AND REMOVING THESE SIGNS IS PAID FOR THE UNDER THE BID ITEM "MAINTAIN & CONTROL TRAFFIC". THE SIGNS AND POSTS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SIGNS REQUIRED BY THE ABOVE-REFERENCED PUBLICATIONS, WHETHER SHOWN IN THESE PLANS OR NOT.

THE CONTRACTOR SHALL INSTALL TEMPORARY "NO PARKING" SIGNS AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.

TEMPORARY DRAINAGE

ALL MATERIAL, LABOR, EQUIPMENT, AND INCIDENTALS ARE NECESSARY TO PROVIDE ADEQUATE TEMPORARY DRAINAGE, WHETHER SHOWN IN THESE PLANS OR NOT, AT THE DISCRETION OF THE ENGINEER, SHALL BE CONSIDERED INCIDENTAL TO THE LUMP SUM PRICE BID FOR "MAINTAIN & CONTROL TRAFFIC".

ACCESS MANAGEMENT

THE CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS WITHIN THE PROJECT AREA TO ENSURE ACCESS IS MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.

TRAFFIC CONTROL GENERAL NOTES

1. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE STANDARD DRAWINGS, CURRENT EDITIONS.
2. EXCEPT FOR THE ROADWAY AND TRAFFIC CONTROL BID ITEMS LISTED, ALL ITEMS OF WORK NECESSARY TO MAINTAIN AND CONTROL TRAFFIC WILL BE PAID FOR AT THE LUMP SUM BID PRICE TO "MAINTAIN AND CONTROL TRAFFIC" AS SET FORTH IN THE CURRENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION UNLESS OTHERWISE PROVIDED FOR IN THESE NOTES.
3. THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE LANE IN EACH DIRECTION WITH A MINIMUM LANE WIDTH OF 10 FEET ON U.S. 25 (DIXIE HIGHWAY) DURING CONSTRUCTION.
4. CONTRARY TO SECTION 106.01 OF THE STANDARD SPECIFICATIONS, TRAFFIC CONTROL DEVICES USED ON THIS PROJECT MAY BE NEW, OR USED BUT IN LIKE-NEW CONDITION, AT THE BEGINNING OF THE WORK AND MAINTAINED IN LIKE-NEW CONDITION UNTIL COMPLETION OF THE WORK. TRAFFIC CONTROL DEVICES USED ON THIS PROJECT SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

PAVEMENT DROP-OFFS

A MINIMUM WIDTH OF 10 FEET WITH A MINIMUM WEDGE OF 3:1 WILL BE MAINTAINED TO ANY EXCAVATED DROP OFF AREA AT THE END OF ANY WORK PERIOD WHILE LEAVING BARRELS IN PLACE IN THE RESPECTIVE AREA. ANY OTHER PAVEMENT EDGE THAT TRAFFIC IS NOT EXPECTED TO CROSS, EXCEPT ACCIDENTALLY, SHOULD BE TREATED AS FOLLOWS:

*LESS THAN TWO INCHES - NO PROTECTION REQUIRED, WARNING SIGNS SHOULD BE PLACED IN ADVANCE AND THROUGHOUT THE DROP-OFF AREA.

*TWO TO FOUR INCHES - PLASTIC DRUMS, VERTICAL PANELS OR BARRICADES EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MPH OR GREATER. CONES MAY BE USED IN PLACE OF PLASTIC DRUMS, PANELS AND BARRICADES DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEED LESS THAN 50 MPH AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING OF DEVICES ON TAPERED SECTIONS BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

*GREATER THAN FOUR INCHES - POSITIVE SEPARATION OR WEDGE WITH 3:1 OR FLATTER SLOPE NEEDED. IF THERE IS EIGHT FEET OR MORE DISTANCE BETWEEN THE EDGE OF THE PAVEMENT AND DROP-OFFS THEN DRUMS, PANEL, OR BARRICADES MAY BE USED. IF THE DROP-OFF IS GREATER THAN 12 INCHES, POSITIVE SEPARATION IS STRONGLY ENCOURAGED. IF CONCRETE BARRIERS ARE USED SPECIAL REFLECTIVE DEVICES OR STEADY BURN LIGHTS SHOULD BE USED FOR OVERNIGHT INSTALLATIONS.

FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN FOUR INCHES MAY BE PROTECTED WITH PLASTIC DRUMS, VERTICAL PANELS OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.

LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.

PAYMENT FOR TEMPORARY WEDGING AND MAINTAINING ACCESS (IF NECESSARY) IS INCLUDED IN CRUSHED STONE BASE-SEE PAVEMENT SUMMARY SHEET.

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: GENERAL NOTES AND MAINTENANCE OF TRAFFIC NOTES

ITEM NO. 10174 COUNTY OF Kenton

SHEET NO. R7

Corporate Limits
County Line
Easement
Fence COA
Mineral Parcel
Property Line
Right of Way Line
All Overhead Utility Lines
Cable Underground Electric With Quality Levels
Duct Underground Electric With Quality Levels
Cable Underground Fiber With Quality Levels
Cable Underground Telephone With Quality Levels
Duct Underground Telephone With Quality Levels
Cable Underground TV With Quality Levels
Main Gas With Quality Levels
Main Water With Quality Levels
Main Water Greater Than 12 With Quality Levels
Sewer Sanitary With Quality Levels
Sewer Sanitary Force Main With Quality Levels
Sewer Storm WIth Quality Levels
Multi Utility Bank Quality Levels
Oil Line Quality Levels
Steam Line Quality Levels
Cable Underground Electric Marker
Duct Underground Electric Marker
Cable Underground Fiber Marker
Cable Underground Telephone Marker
Duct Underground Telephone Marker
Cable Underground TV Marker
Main Gas Marker

Main Water Marker
Main Water Greater Than 12 Marker
Sewer Sanitary Marker
Sewer Sanitary Force Main Marker
Sewer Storm Marker
Multi Utility Bank Marker
Oil Line Marker
Steam Line Marker
Cable Guardrail
Ditch
Edge of Water
Fence Hedge
Fence
Flow Line/Thalweg/ Int. Stream or Ditch
Guardrail
Railroad
Shrub Line
Sink Hole
Tree Line
Wall (WSM or DSM)
Blue Line Stream
Lakes and Ponds
Regulated Floodway
RDZ Line
ADA Ramp
Anchor Pole
Benchmark
Bike Lane Symbol
Bollard
Centerline
Centerline Stationing
Control Monument
Control Point
Core Hole
Crash Cushion TY 6 D
Crash Cushion TY 6 A
Crash Cushion TY 9A

Crash Cushion TY 9
Cross Notch
Curb Box Inlet
Curb Notch
Combination Pole
Delineator Post
Drop Box
Existing Spring
Electric Manhole
Electric Meter
Electric Pedestal
Electric Pole
Electric Junction Box
Fire Hydrant
Flag Pole
Force Main Sewer Valve
Fuel Tank Inlet
Fuel Tank Vent
Gas Meter
Gas Monitoring Well
Gas Valve
Gas Vent
Gas Well
Guidewires & Anchors
Headstone
Interstate Shield
Iron Pin
Light Pole
Low Wire
Mag Nail
Mailbox
Manhole
Mile Marker Post
Mineral Parcel
Misc Location Point
Monitoring Well
Parking Meter
Pedestrian Signal
Pins/Pipes
PK Nail

Point (Misc)
Pole
Pole (Light)
Post
Power Pole
Quarry
Random (Ground Shot)
Railroad Mile Marker
Railroad Spike
Right of Way Marker
Right of Way Monument
RR Traffic Signal Pole
RW Parcel
Sanitary Cleanout
Sanitary Manhole
Satelite Dish
Septic Tank Cleanout
Service Pole
Sewer Air Release Valve
Shrub
Sign
Sign Post (Single)
Sign with 2 posts
Sign group (4)
Station Stamp
Storm Manhole
Stub Power
Stub Telephone
Survey Cross Notch
Survey Curb Notch
Survey Nail
Survey Spike
Survey Stone Marker
Swamp
Telephone Booth
Telephone Junction Box
Telephone Line Overhead
Telephone Manhole

Telephone Pedestal
Telephone Pole
Temporary Benchmark
Traffic Light
Traffic Signal Control Box
Traffic Signal Junction Box
Traffic Signal Pole
Traverse Point
Tree
TV Junction Box
Utility Pole
Underground Storage Tank
Utility Test Hole
Water Line Marker
Water Meter
Water Spigot
Water Valve
Water Well
Yard Light
Yard Sprinkler
Yard Sprinkler Water Valve

Utility Owners

Duke Gas
Scott Pfefferman
Mobile: 513-315-4593
Email: scott.pfefferman@duke-energy.com

Duke Electric
Zach Hofstetter
Mobile: 513-256-6726
Email: zach.hofstetter@duke-energy.com

Altafiber
Sarah.Brewer
sarah.brewer@altafiber.com

Sanitation District 1
Andy Aman
Office: 859-578-6880
Email: aaman@sd1.org

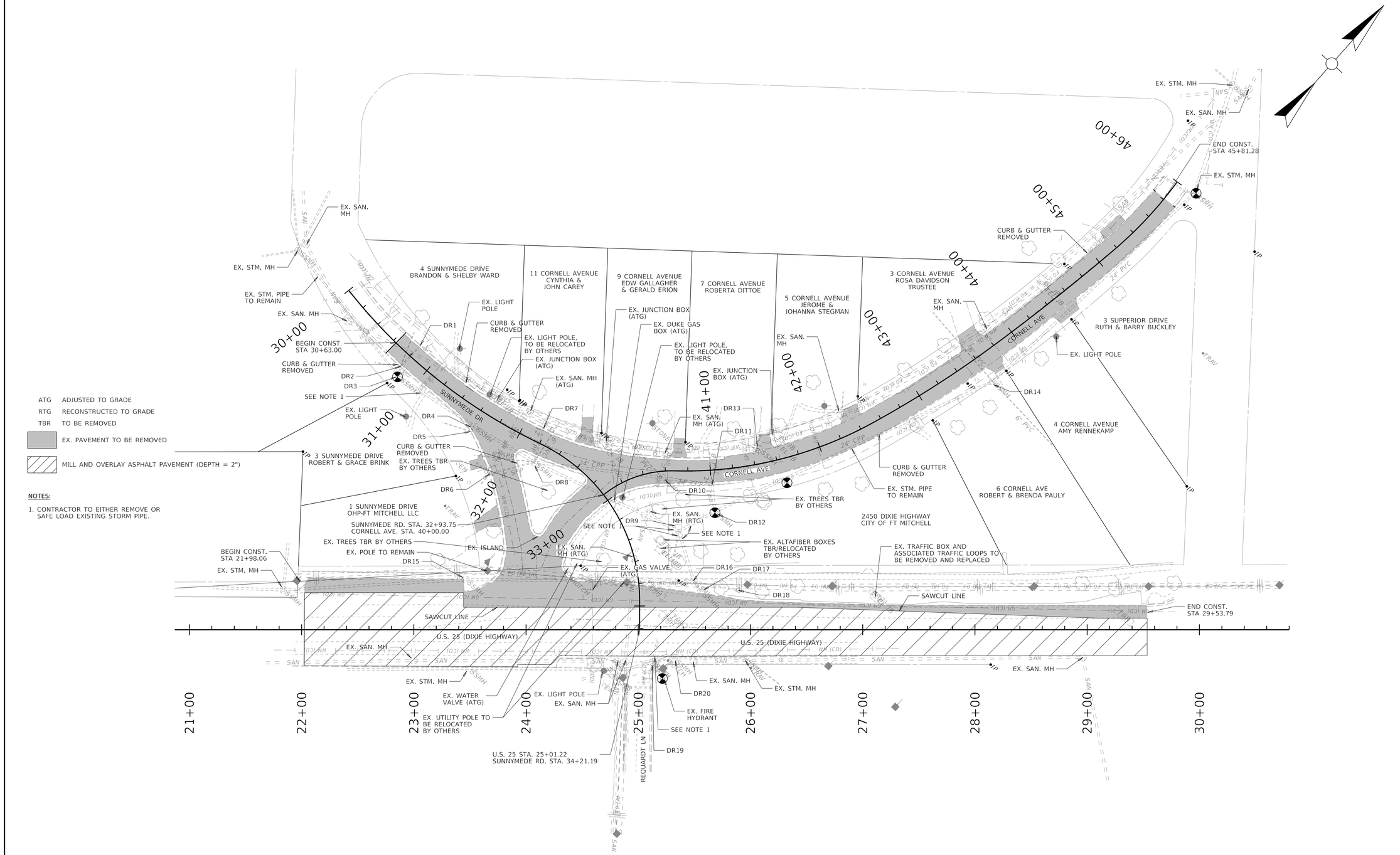
Northern Kentucky Water District
Kyle Ryan
Office: 859-426-2713
Email: kryan@nkywater.org

Spectrum
Chris Gapinski
Chris.Gapinski@charter.com

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY

DRAWING TITLE: LEGEND SHEET

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. R8



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: REMOVAL PLAN SHEET

HORIZONTAL SCALE
SCALE: 1"=40'

0' 40' 80' 160'

STA. 21+00.00 TO STA. 30+80.00

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. R9

OpenRoads Designer v10.12.02.4
USER: jyerramsetty
FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_PLAN SHEET 40 SCALE.DGN

ENTRANCE PAVEMENT CONSTRUCTION RIGHT OF ℄ SUNNYMEDE				
STATION	WIDTH (FT)	ASPHALT (SY)	CONCRETE (SY)	GRAVEL (SY)
31+88.57	10		34	
32+12.71	10		85	
32+49.43	24		27	

CONSTRUCT SIDEWALK RIGHT OF ℄ SUNNYMEDE			
STATION TO STATION	SY	RAMP	DET. WAR.
STA. 32+65.88 TO STA. 33+62.44	53	TY. 1	10 S.F.

CONSTRUCT SODDING RIGHT OF ℄ SUNNYMEDE	
STATION TO STATION	SY
STA. 30+31.60 TO STA. 32+07.84	101
STA. 32+65.88 TO STA. 33+73.03	247

CONSTRUCT STANDARD CURB & GUTTER RIGHT OF ℄ SUNNYMEDE	
STATION TO STATION	LF
STA. 30+60.00 TO STA. 33+89.17	382

ENTRANCE PAVEMENT CONSTRUCTION LEFT OF ℄ SUNNYMEDE				
STATION	WIDTH (FT)	ASPHALT (SY)	CONCRETE (SY)	GRAVEL (SY)
32+52.47	10		38	

CONSTRUCT SIDEWALK LEFT OF ℄ SUNNYMEDE			
STATION TO STATION	SY	RAMP	DET. WAR.
STA. 31+22.03 TO STA. 31+25.99	7		

CONSTRUCT SODDING LEFT OF ℄ SUNNYMEDE	
STATION TO STATION	SY
STA. 30+63.00 TO STA. 31+22.03	209
STA. 31+25.99 TO STA. 32+45.07	169

CONSTRUCT STANDARD CURB & GUTTER LEFT OF ℄ SUNNYMEDE	
STATION TO STATION	LF
STA. 30+63.00 TO STA. 32+60.80	195
STA. 33+44.94 TO STA. 33+92.15	69

ENTRANCE PAVEMENT CONSTRUCTION LEFT OF ℄ CORNELL				
STATION	WIDTH (FT)	ASPHALT (SY)	CONCRETE (SY)	GRAVEL (SY)
40+71.75	10	30		
41+47.75	9	31		
42+27.89	15		15	
43+59.80	17		22	
45+30.41	23		22	

CONSTRUCT SIDEWALK LEFT OF ℄ CORNELL			
STATION TO STATION	SY	RAMP	DET. WAR.
STA. 40+90.18 TO STA. 40+94.33	11		

CONSTRUCT SODDING LEFT OF ℄ CORNELL	
STATION TO STATION	SY
STA. 40+06.54 TO STA. 40+67.04	244
STA. 40+77.25 TO STA. 41+16.83	34
STA. 40+94.33 TO STA. 41+54.86	93
STA. 41+57.47 TO STA. 42+31.92	86
STA. 42+44.35 TO STA. 43+58.48	34
STA. 43+73.34 TO STA. 45+18.38	233
STA. 45+42.44 TO STA. 45+81.28	62

CONSTRUCT STANDARD CURB & GUTTER LEFT OF ℄ CORNELL	
STATION TO STATION	LF
STA. 40+05.55 TO STA. 45+81.28	564

CONSTRUCT STANDARD CURB & GUTTER RIGHT OF ℄ CORNELL	
STATION TO STATION	LF
STA. 40+00.80 TO STA. 45+81.28	582

CONSTRUCT SODDING RIGHT OF ℄ CORNELL	
STATION TO STATION	SY
STA. 42+77.73 TO STA. 43+66.65	132
STA. 43+76.50 TO STA. 44+39.60	76
STA. 44+59.83 TO STA. 45+81.28	108

CONSTRUCT SIDEWALK RIGHT OF ℄ CORNELL			
STATION TO STATION	SY	RAMP	DET. WAR.
STA. 42+66.43 TO STA. 42+80.18	5		

ENTRANCE PAVEMENT CONSTRUCTION RIGHT OF ℄ CORNELL				
STATION	WIDTH (FT)	ASPHALT (SY)	CONCRETE (SY)	GRAVEL (SY)
43+72.44	10		11	
44+51.51	21		21	

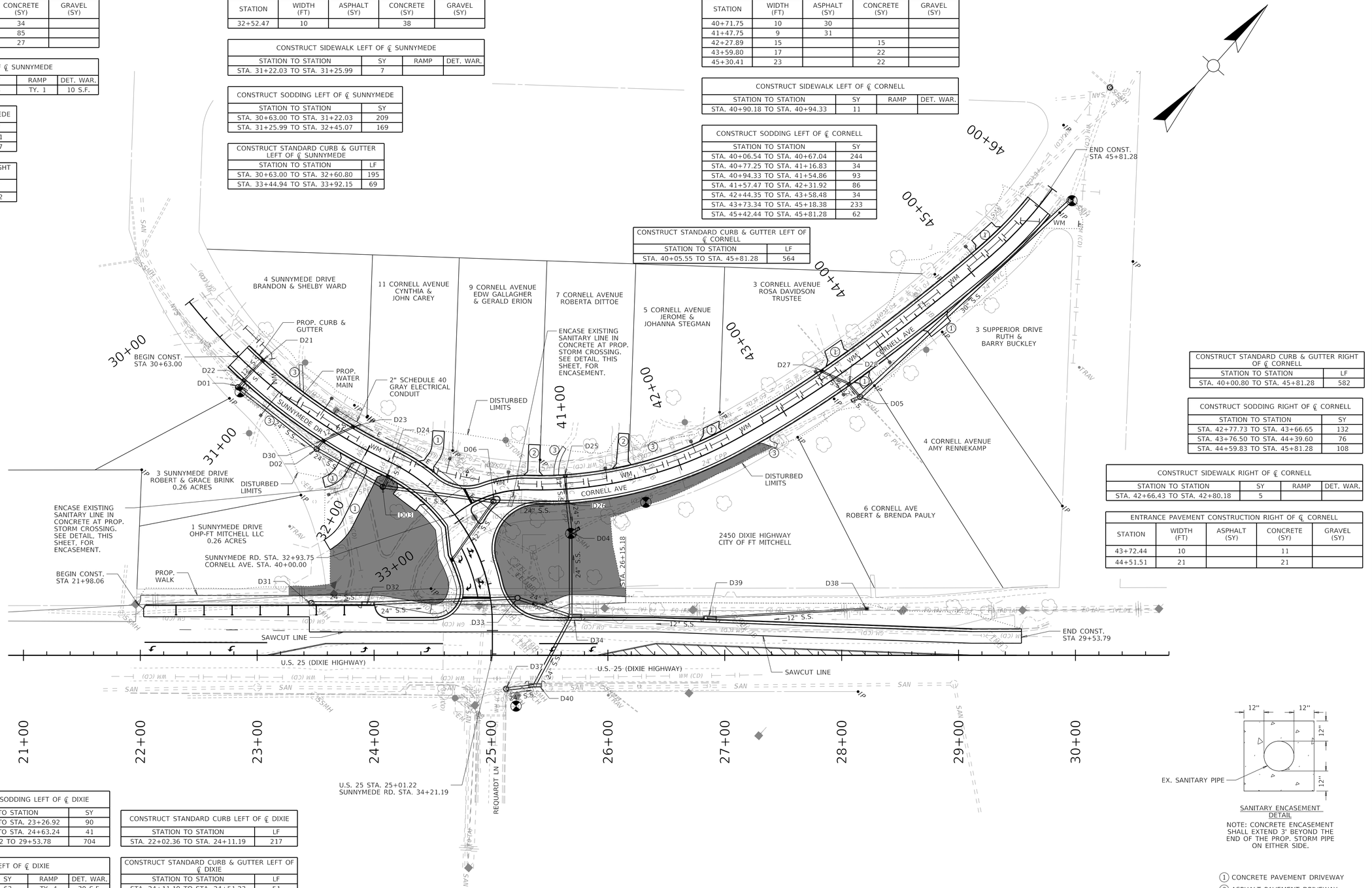
CONSTRUCT SODDING LEFT OF ℄ DIXIE	
STATION TO STATION	SY
STA. 22+00.29 TO STA. 23+26.92	90
STA. 24+01.14 TO STA. 24+63.24	41
STA. 25+32.22 TO 29+53.78	704

CONSTRUCT STANDARD CURB LEFT OF ℄ DIXIE	
STATION TO STATION	LF
STA. 22+02.36 TO STA. 24+11.19	217

CONSTRUCT SIDEWALK LEFT OF ℄ DIXIE			
STATION TO STATION	SY	RAMP	DET. WAR.
STA. 21+98.36 TO STA. 24+70.69	63	TY. 4	30 S.F.
STA. 25+20.40 TO STA. 26+15.18	77	TY. 3	31 S.F.

CONSTRUCT STANDARD CURB & GUTTER LEFT OF ℄ DIXIE	
STATION TO STATION	LF
STA. 24+11.19 TO STA. 24+51.23	51
STA. 25+46.90 TO STA. 25+46.90	365

STRAW/SEED AREA



SANITARY ENCASEMENT DETAIL

NOTE: CONCRETE ENCASEMENT SHALL EXTEND 3' BEYOND THE END OF THE PROP. STORM PIPE ON EITHER SIDE.

1. CONCRETE PAVEMENT DRIVEWAY
2. ASPHALT PAVEMENT DRIVEWAY
3. 4" CONCRETE WALKWAY RESTORATION

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

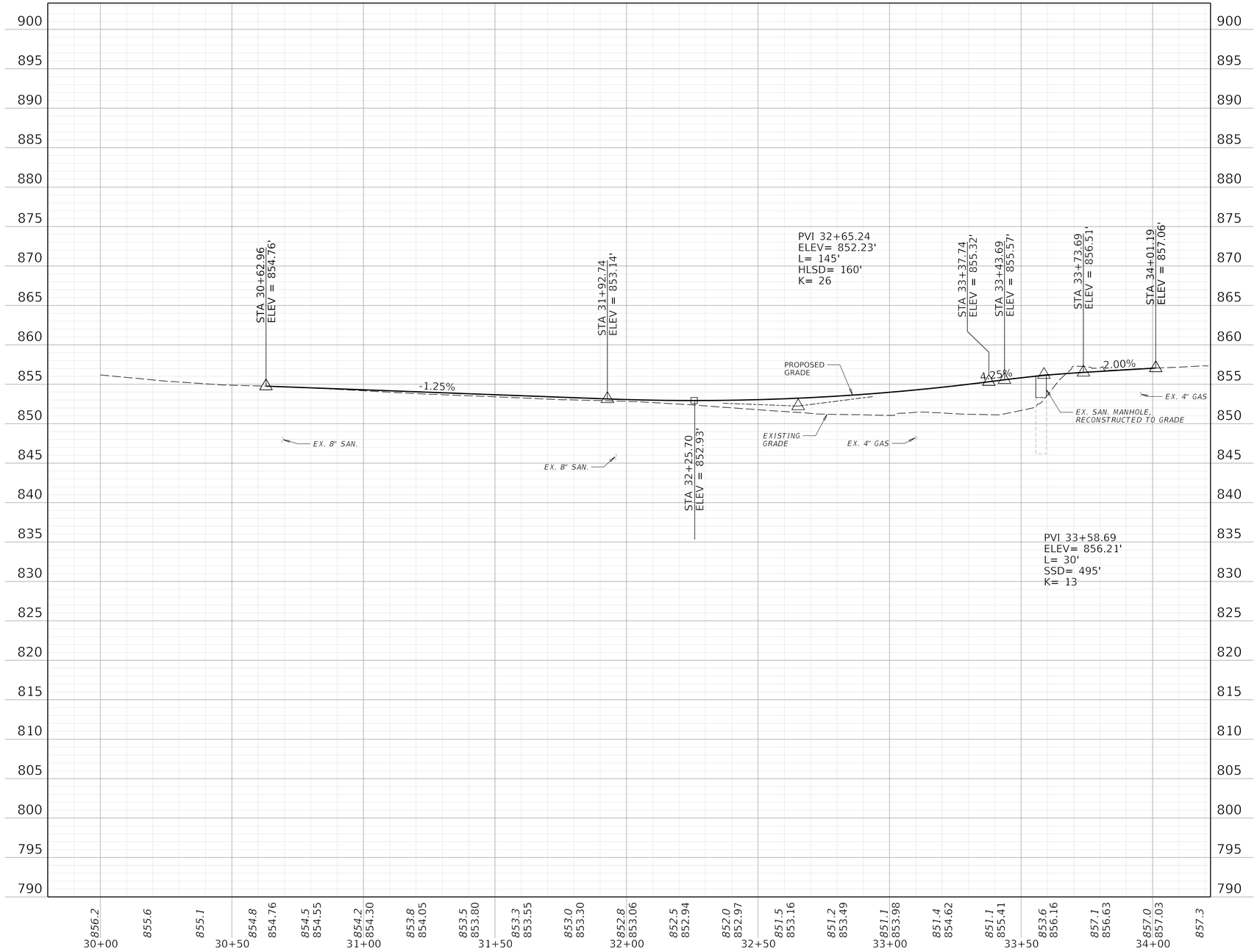
DRAWING TITLE: PLAN SHEET

HORIZONTAL SCALE
SCALE: 1"=40'
0' 40' 80' 160'

STA. 21+00.00 TO STA. 30+80.00

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. R10

OpenRoads Designer v10.12.02.4
USER: jyerramsetty
FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_PLAN SHEET 40 SCALE.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY
TRANSPORTATION CABINET

DRAWING TITLE: SUNNYMEDE DRIVE PROFILE

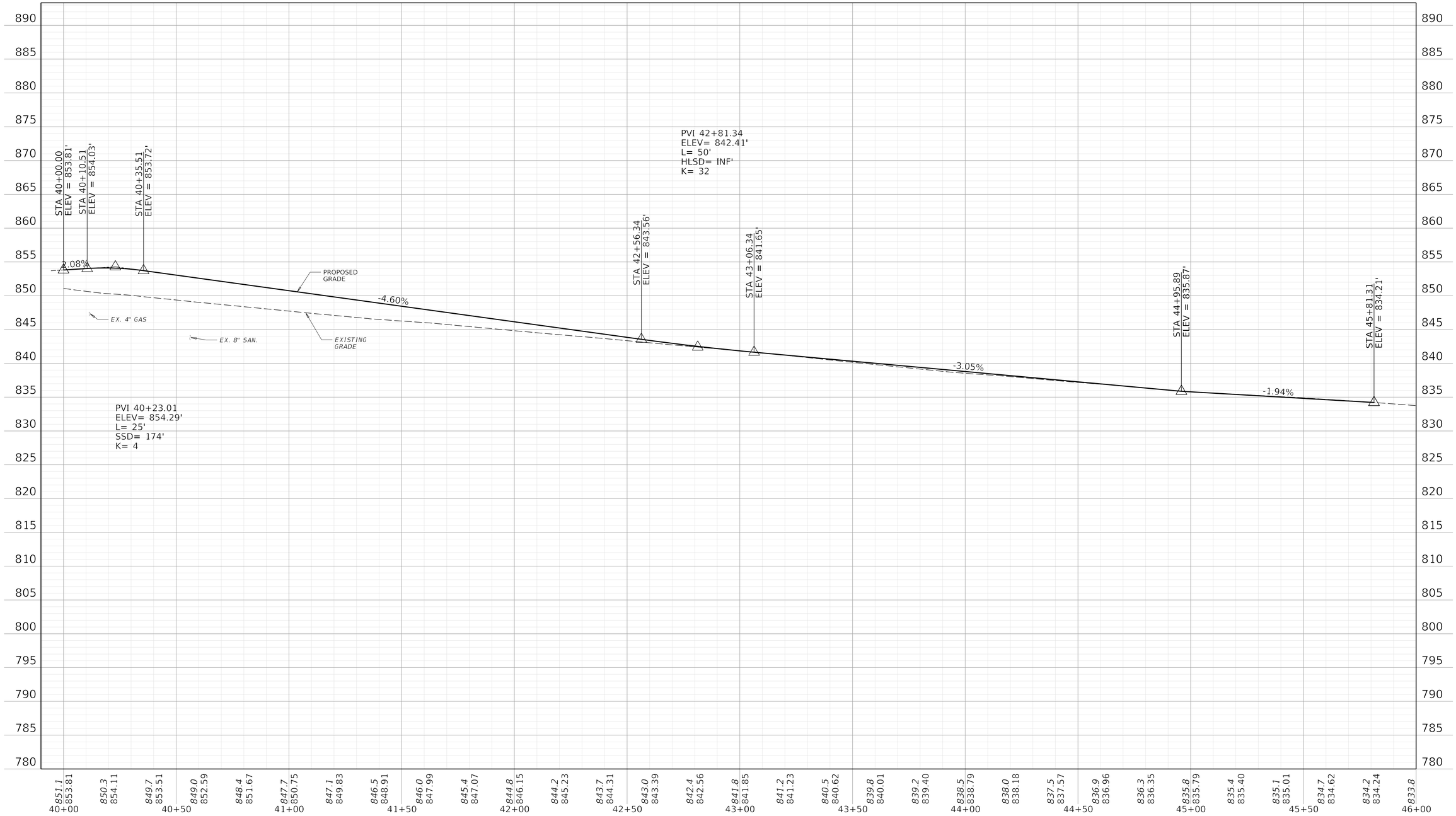
HORIZONTAL SCALE: 1"=20'
0' 20' 40' 80'

VERTICAL SCALE: 1"=2'
0' 2' 4' 8'

STA. 29+80.00 TO STA. 34+22.00

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. R11

OpenRoads Designer v10.12.02.4
USER: jyerramsetty
FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_SUNNYMEDE PROFILE.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: CORNELL AVENUE PROFILE

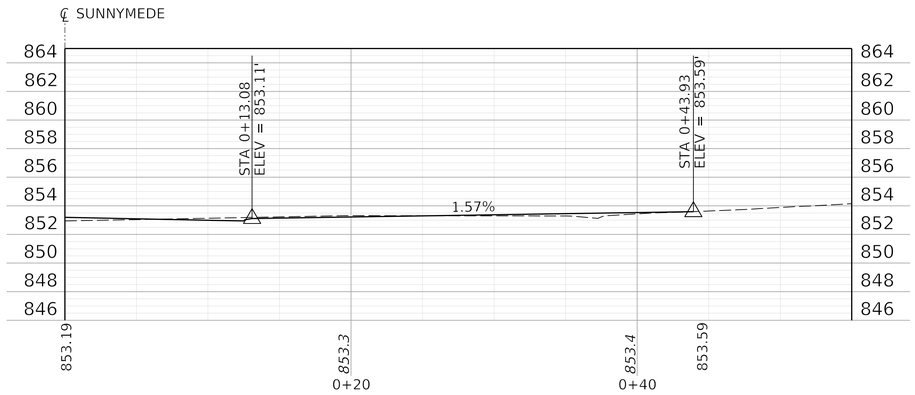
0′ 20′ 40′ 80′
HORIZONTAL SCALE: 1"=20′

0′ 2′ 4′ 8′
VERTICAL SCALE: 1"=2′

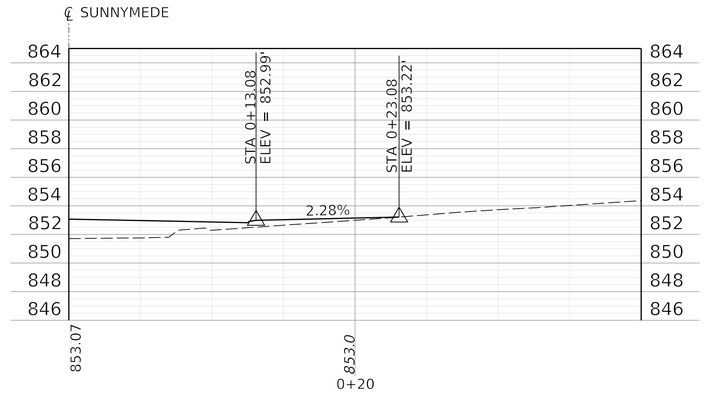
STA. 39+90.00 TO STA. 46+00.00

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. R12

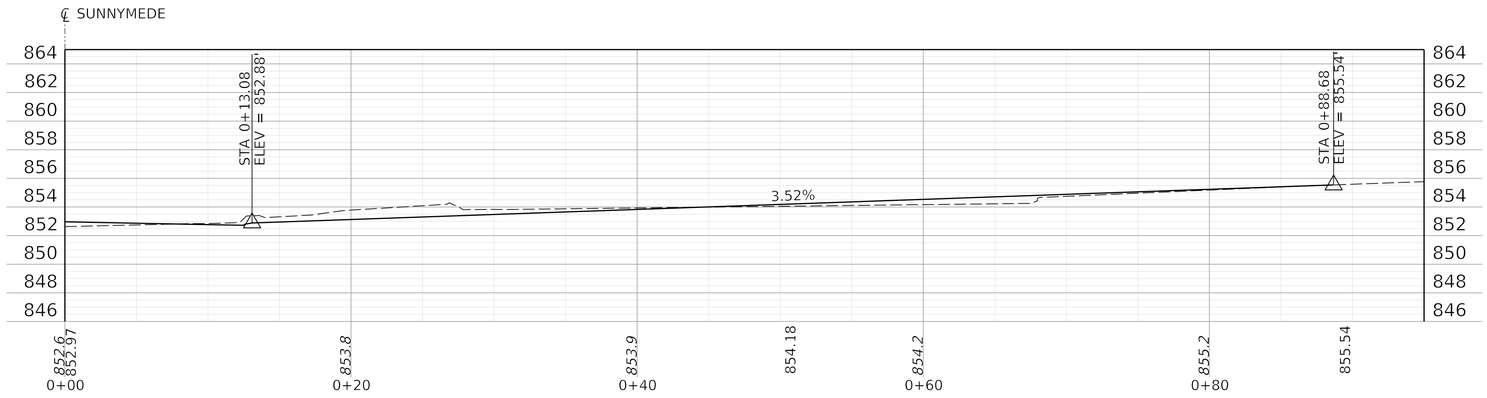
OpenRoads Designer v10.12.02.4
USER: jyerramsetty
FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_CORNELL PROFILE.DGN



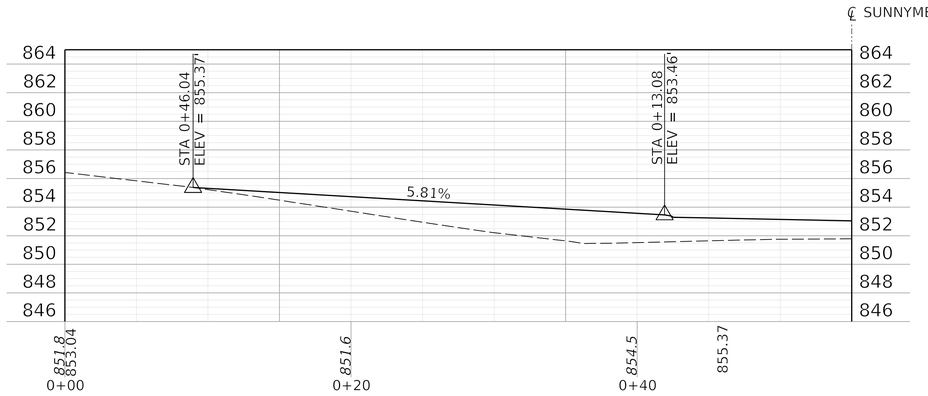
SUNNYMEDE - ENTRANCE RIGHT - STA. 31+88.57



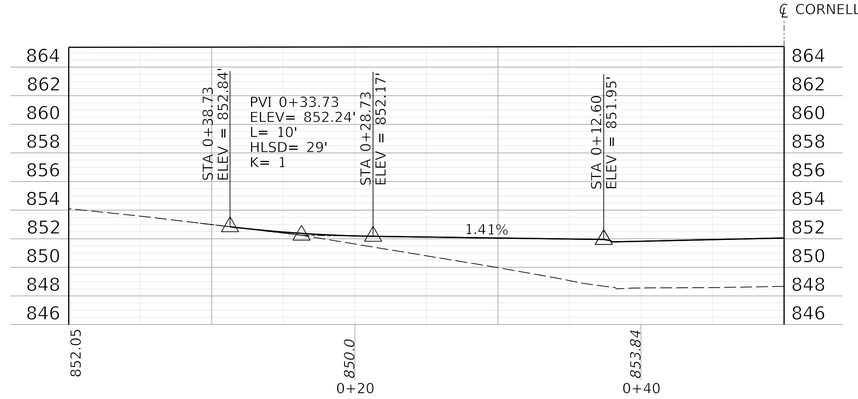
SUNNYMEDE - ENTRANCE RIGHT - STA. 32+52.47



SUNNYMEDE - ENTRANCE RIGHT - STA. 32+12.71



SUNNYMEDE - ENTRANCE LEFT - STA. 32+49.43



CORNELL - ENTRANCE LEFT - STA. 40+72.83

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: ENTRANCE PROFILES

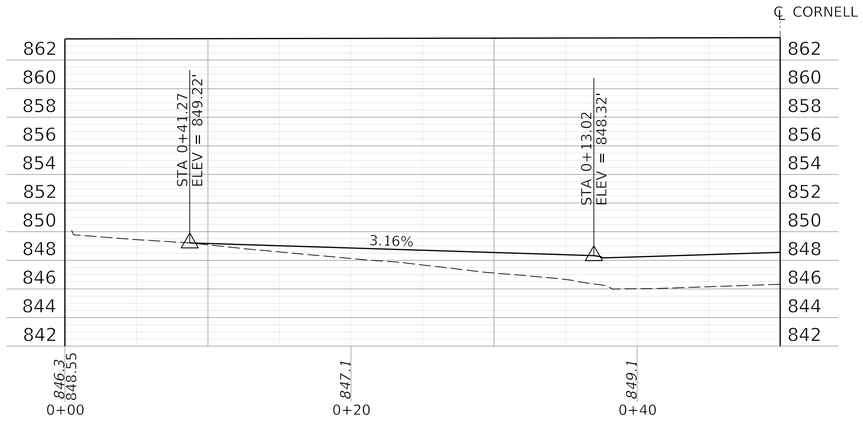
HORIZONTAL SCALE: 1"=20'

VERTICAL SCALE: 1"=2'

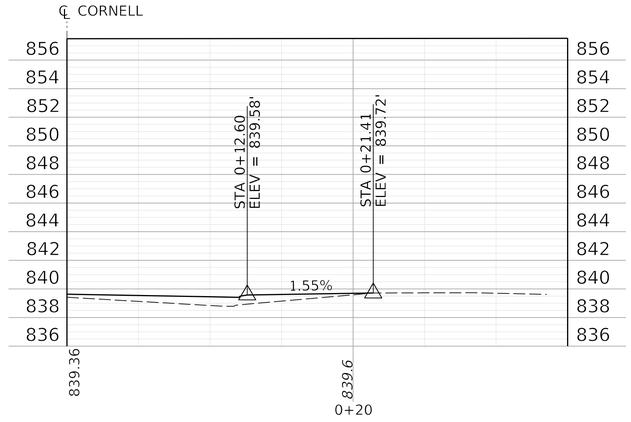
ITEM NO. 10174

COUNTY OF Kenton

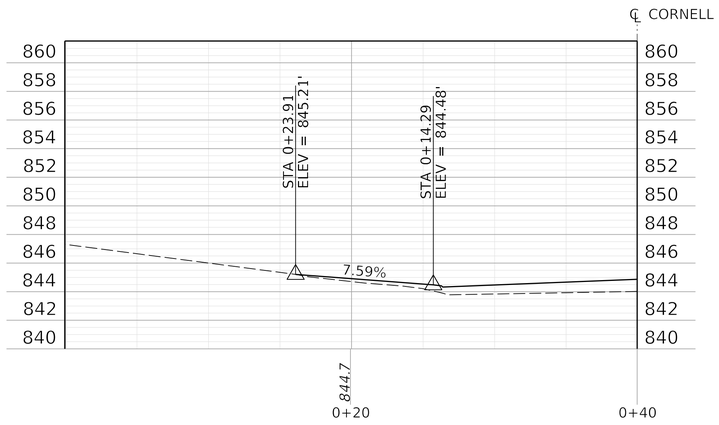
SHEET NO. R13



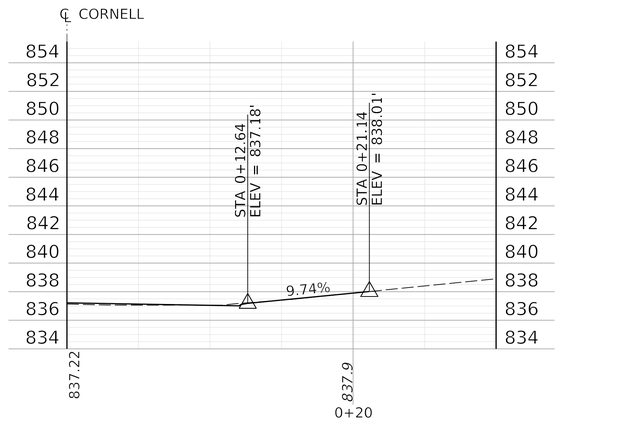
CORNELL - ENTRANCE LEFT - STA. 41+49.17



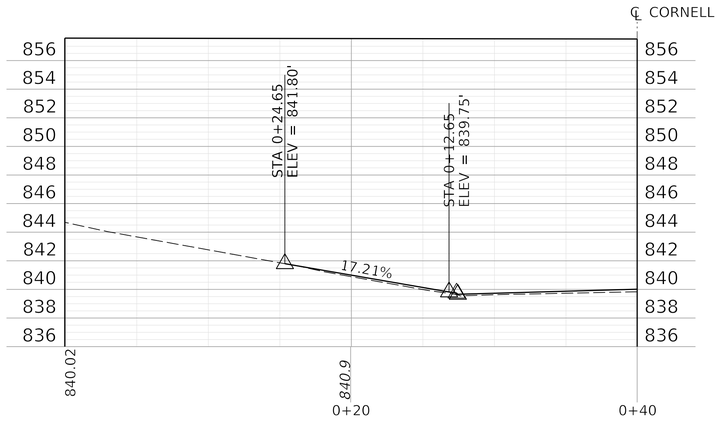
CORNELL - ENTRANCE RIGHT - STA. 43+65.96



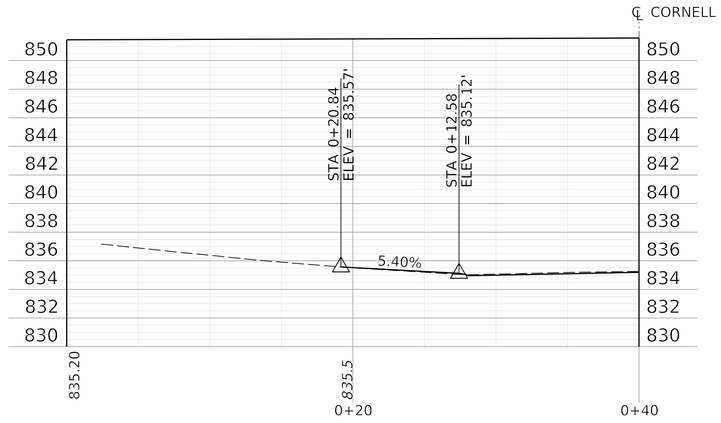
CORNELL - ENTRANCE LEFT STA. 42+27.44



CORNELL - ENTRANCE RIGHT - STA. 44+44.7



CORNELL - ENTRANCE LEFT - STA. 43+56.16



CORNELL - ENTRANCE LEFT - STA. 45+22.9

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

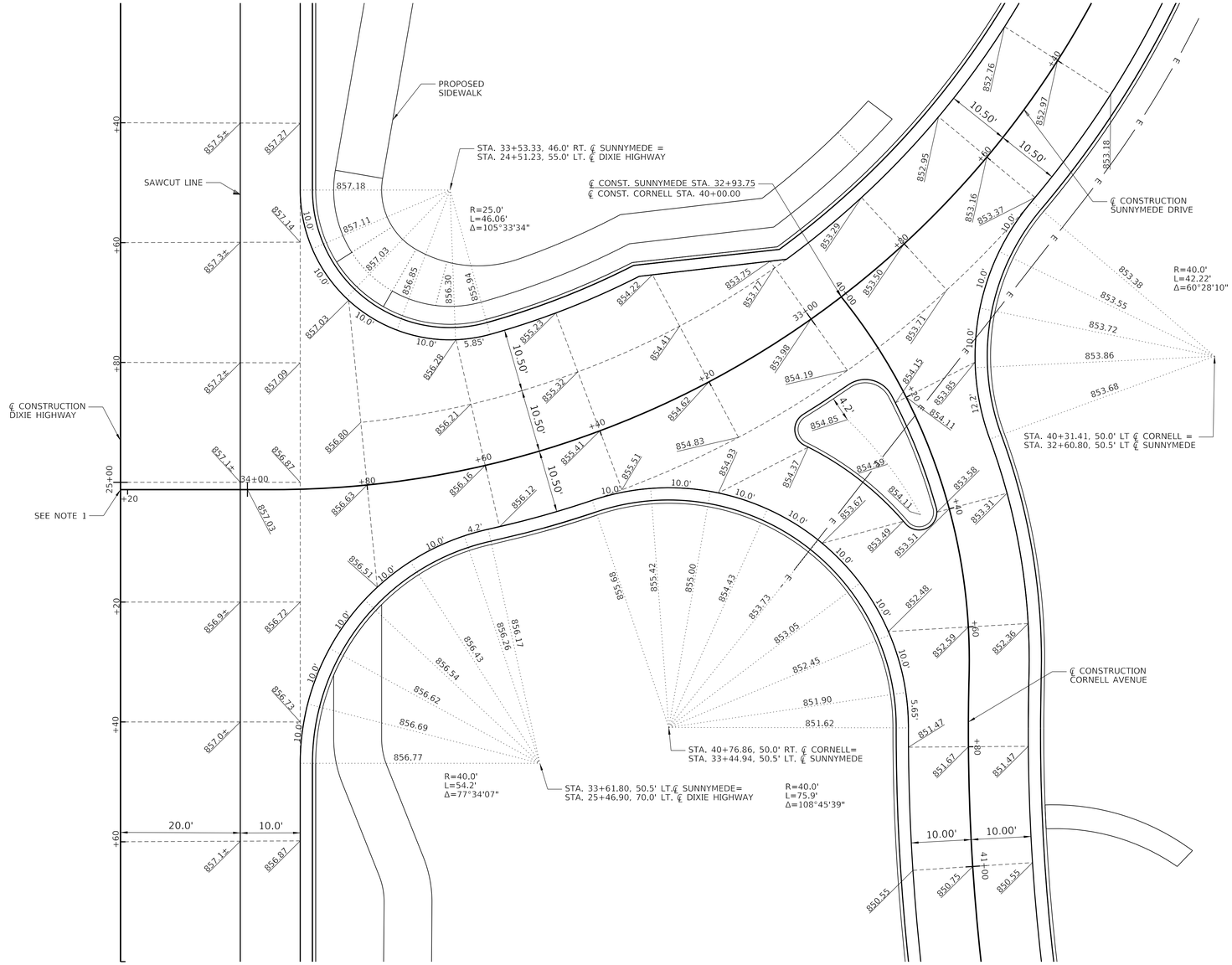
TEAM KENTUCKY TRANSPORTATION CABINET

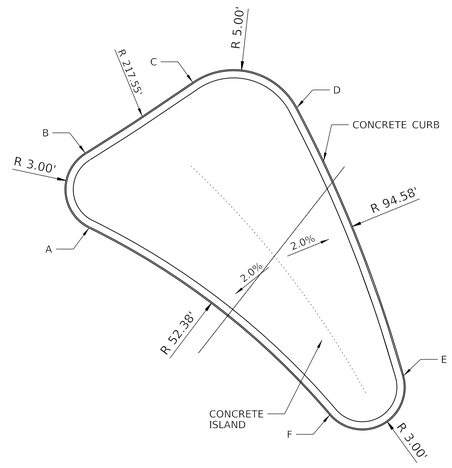
DRAWING TITLE: ENTRANCE PROFILES

0' 20' 40' 80'
HORIZONTAL SCALE: 1"=20'

0' 2' 4' 8'
VERTICAL SCALE: 1"=2'

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. R14





INTERSECTION ISLAND DETAIL

POINT	NORTHING	EASTING	TOP OF CURB ELEVATION	GUTTER ELEVATION
A	560111.669	1552462.390	854.89	854.39
B	560107.993	1552458.641	855.02	854.52
C	560110.332	1552449.960	854.77	854.27
D	560116.947	1552446.449	854.65	854.15
E	560134.968	1552455.494	854.09	853.59
F	560132.929	1552460.987	853.96	853.46

NOTES
1. ℄ CONST. SUNNYMEDE STA. 34+21.19 = ℄ CONST. DIXIE HIGHWAY STA. 25+01.22

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

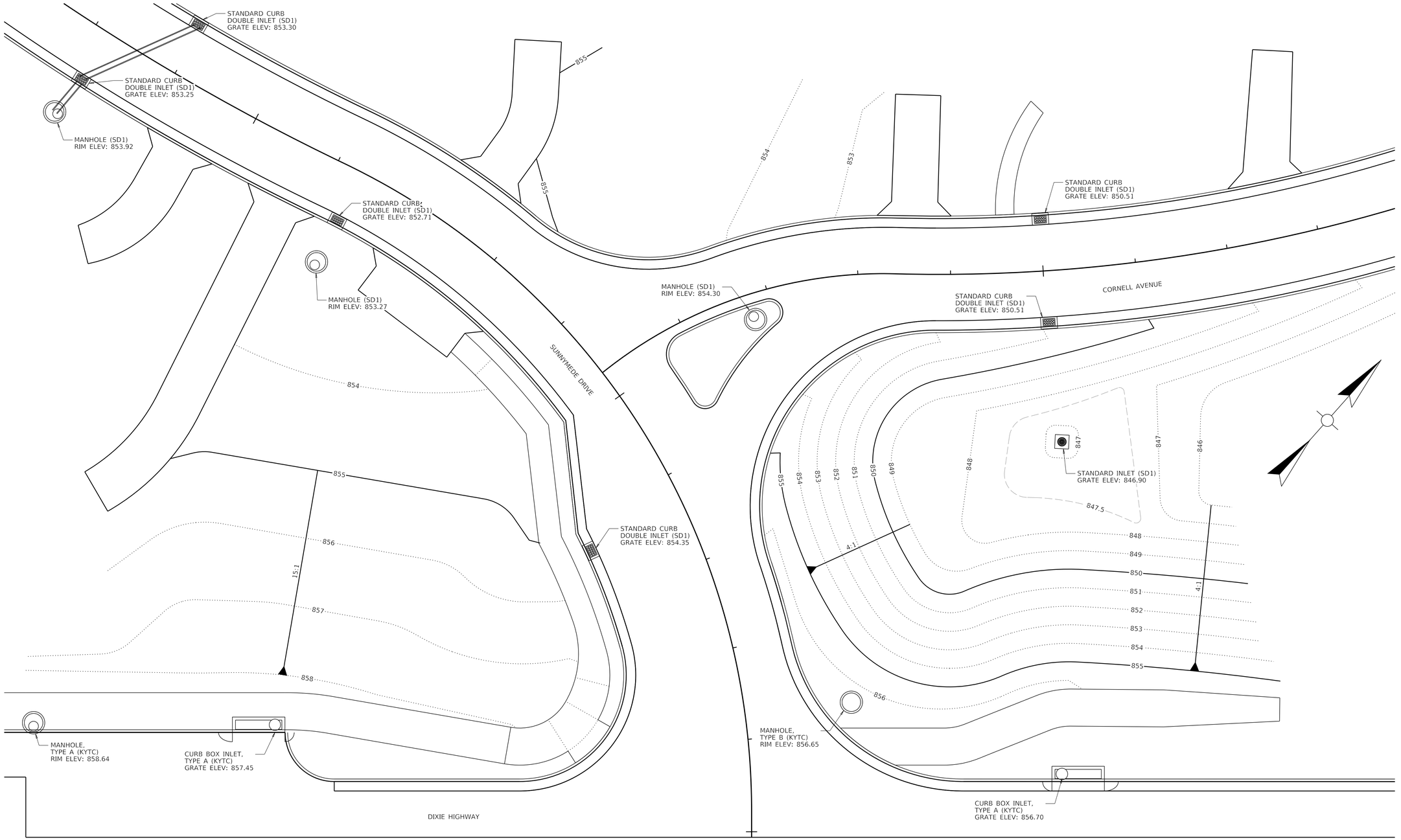
DRAWING TITLE: INTERSECTION DETAIL SHEET

HORIZONTAL SCALE
SCALE: 1"=10'

0' 10' 20' 40'

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. R15

OpenRoads Designer v10.12.02.4
USER: DGohs
FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_INTERSECTION DETAIL SHEET.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY
TRANSPORTATION CABINET

DRAWING TITLE: GRADING PLAN

HORIZONTAL SCALE
SCALE: 1"=10'

0' 5' 10' 20'

STA. 23+40.00 TO STA. 26+40.00

ITEM NO. 10174

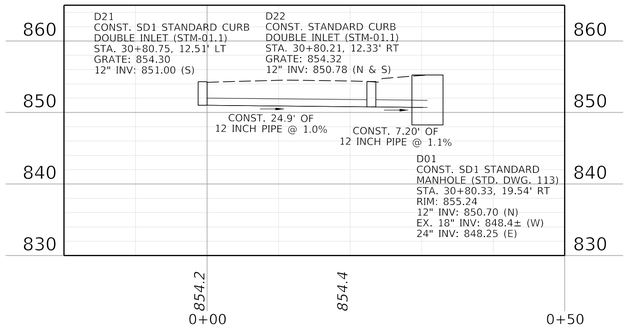
COUNTY OF Kenton

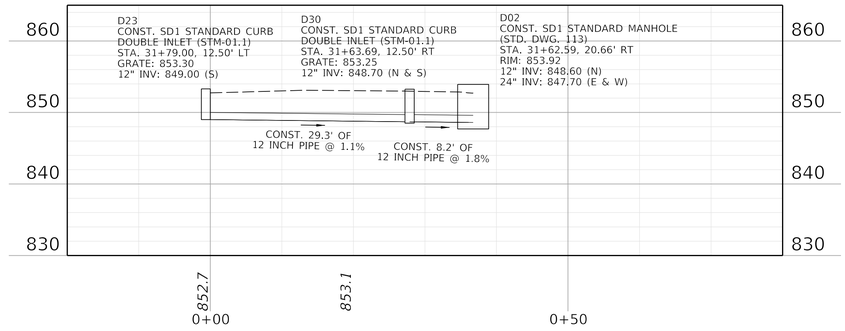
SHEET NO. R16

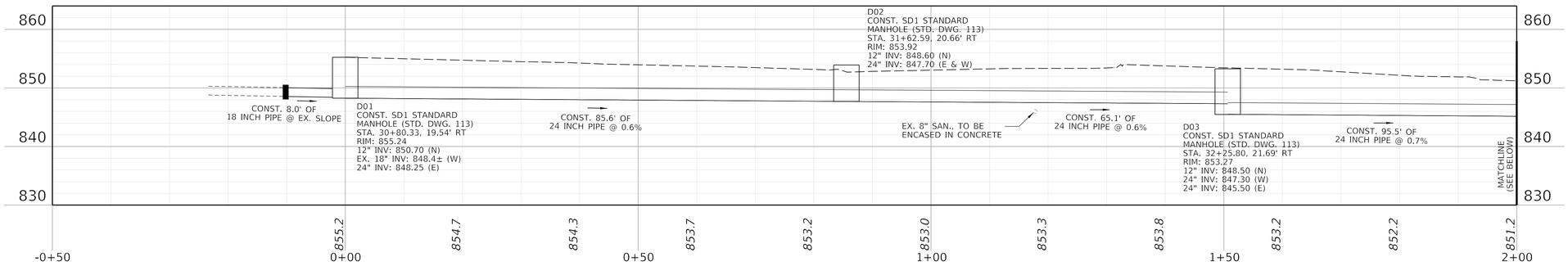
OpenRoads Designer v10.12.02.4

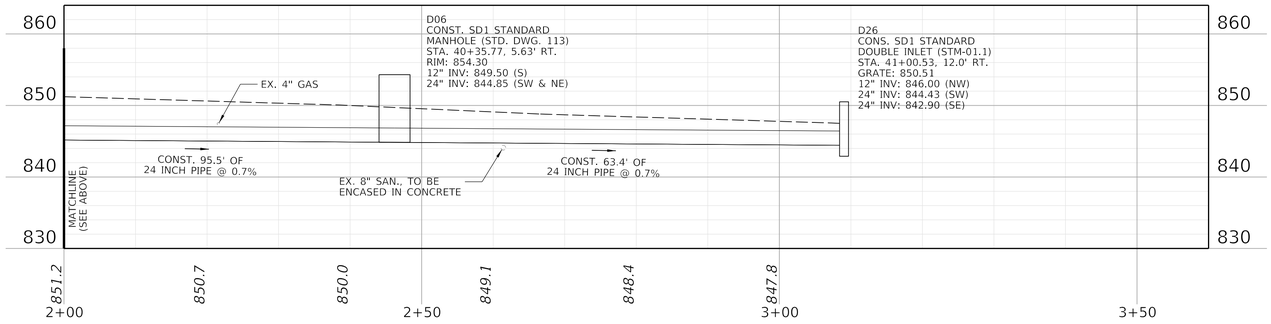
USER: jyerramsetty

FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_GRADING PLAN.DGN









COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

DRAWING TITLE: PIPE PROFILES

HORIZONTAL SCALE: 1"=10'

VERTICAL SCALE: 1"=1'

ITEM NO. 10174

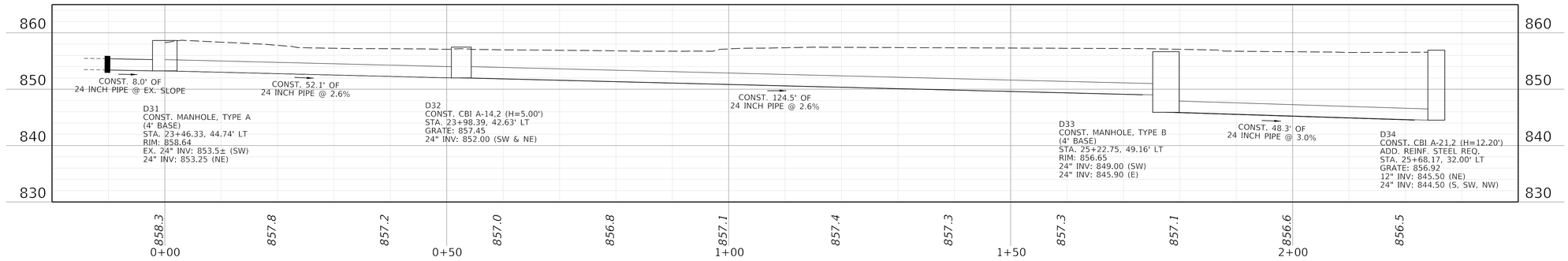
COUNTY OF Kenton

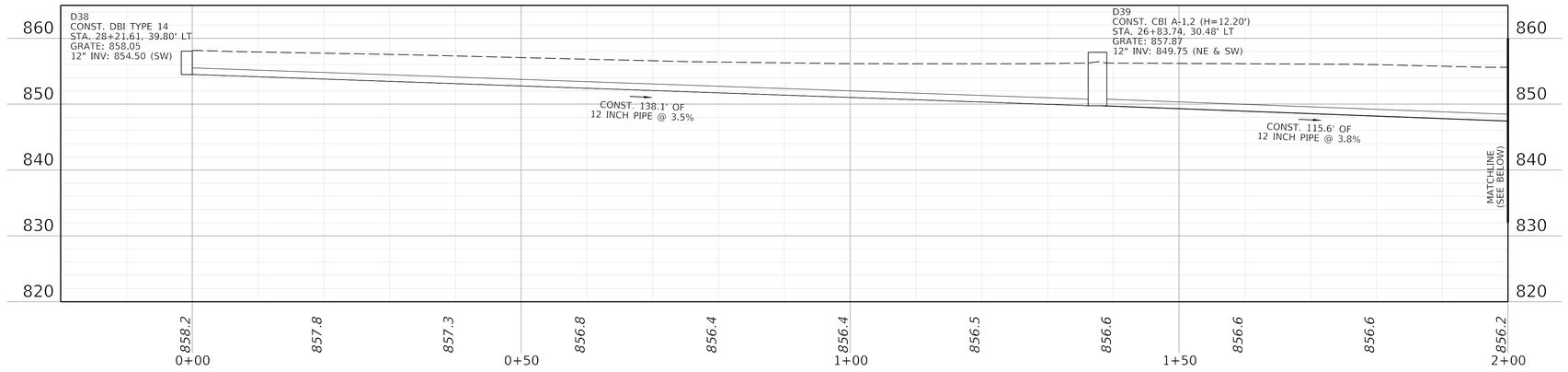
SHEET NO. R17

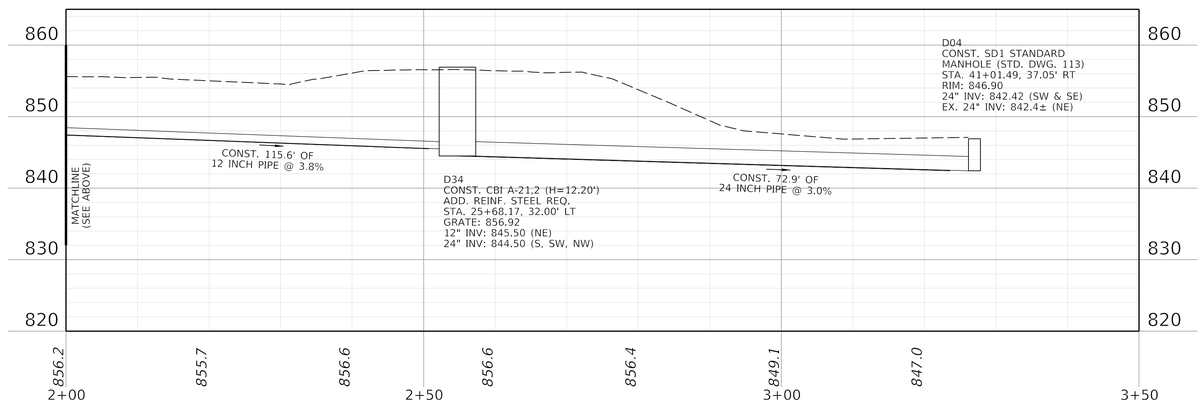
OpenRoads Designer v10.12.02.4

USER: ALockhart

FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_DRAINAGE SHEETS.DGN







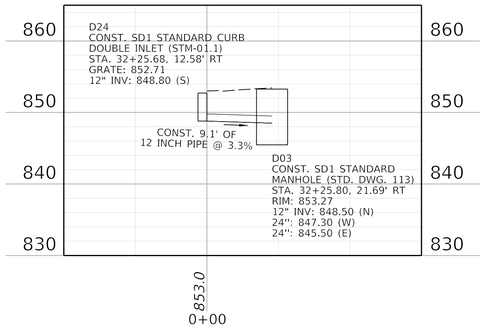
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

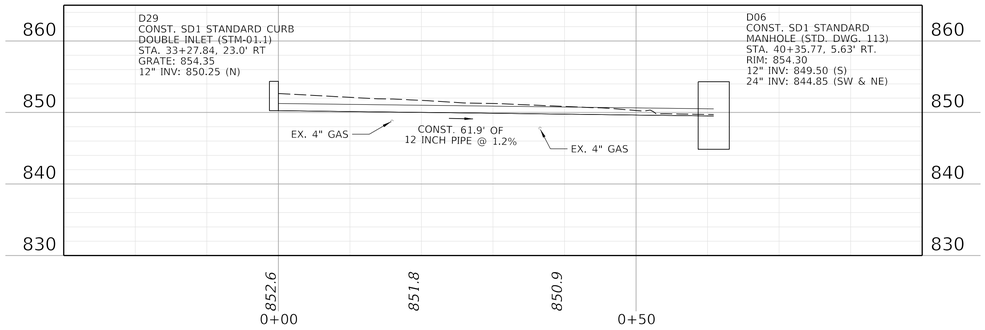
DRAWING TITLE: PIPE PROFILES

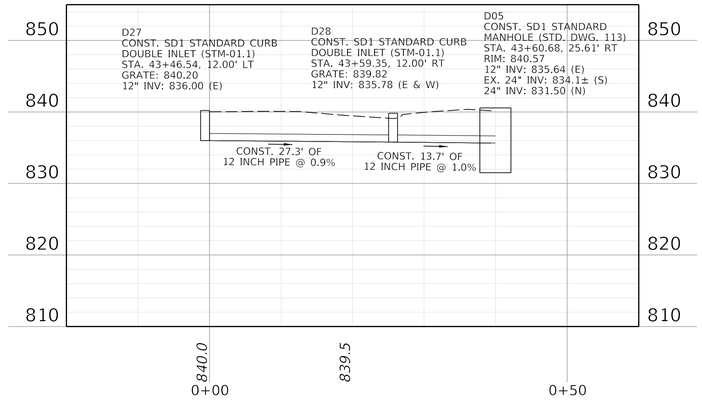
0' 10' 20' 40'
HORIZONTAL SCALE: 1"=10'

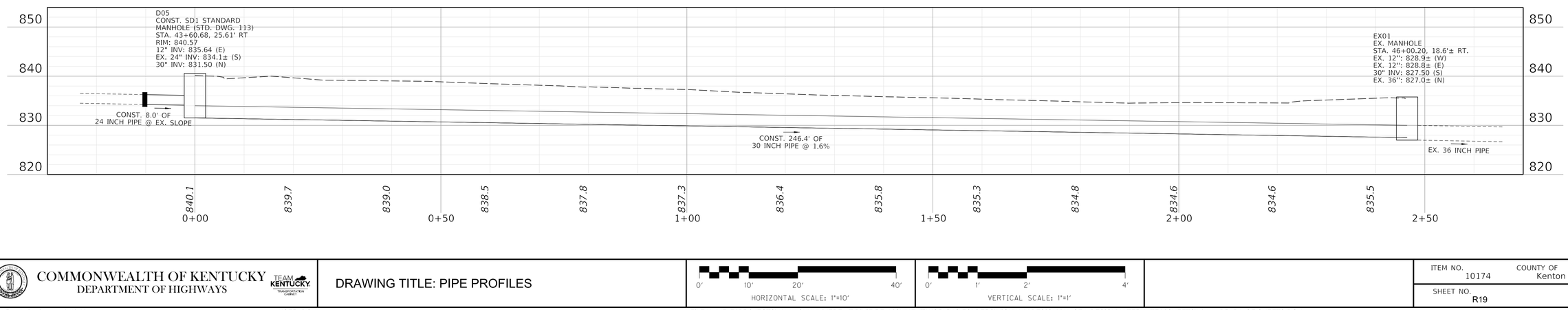
0' 1' 2' 4'
VERTICAL SCALE: 1"=1'

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. R18









COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY
TRANSPORTATION CABINET

DRAWING TITLE: PIPE PROFILES

0' 10' 20' 40'
HORIZONTAL SCALE: 1"=10'

0' 1' 2' 4'
VERTICAL SCALE: 1"=1'

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. R19

OpenRoads Designer v10.12.02.4
USER: DGohs
FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_DRAINAGE SHEETS.DGN

LT/RT	STATION (4) FROM	STATION (4) TO	OFFSET	REFERENCE LINE	CRUSHED STONE BASE NO. 57	NON-PERFORATED PIPE 6-IN	PERFORATED PIPE 6-IN	MIRAFI 600X OR EQUIVALENT WOVEN GEOTEXTILE	NOTES
UNIT TO BID					TON	LF	LF	SQYD	
LT	21+98	23+46	45	DIXIE	8.93		148	592	Tie into D31 @ 23+46
LT	23+46	23+99	43	DIXIE	3.20		53	212	Tie into D32 @ 23+99
RT	23+99	33+25	23	SUNYNMEDE	7.24		120	480	Tie into D29 @ 33+25
RT	33+25	32+26	12	SUNYNMEDE	5.43		90	360	Tie into D24 @ 32+26
RT	32+26	31+63	12	SUNYNMEDE	3.23	63	63	252	Tie into D24 @ 32+26
RT	31+63	30+80	21	SUNYNMEDE	4.25	83	83	332	Tie into D30 @ 31+63
RT	30+80	30+63	12	SUNYNMEDE	0.87	17	17	68	Tie into D22 @ 30+80
LT	30+63	30+80	12	SUNYNMEDE	0.87	17	17	68	Tie into D21 @ 30+80
LT	30+80	31+79	12	SUNYNMEDE	5.08	99	99	396	Tie into D23 @ 31+79
LT	31+79	32+94	12	SUNYNMEDE	5.90	115	115	460	Tie into D23 @ 31+79
LT	40+00	41+00	12	CORNELL	5.13	100	100	400	Tie into D25 @ 41+00
LT	41+00	43+46	12	CORNELL	12.61	246	246	984	Tie into D27 @ 41+46
LT	43+46	45+81	12	CORNELL	12.05	235	235	940	Tie into CBX01 @ 45+81
RT	45+81	43+59	12	CORNELL	11.38	222	222	888	Tie into CBX02 @ 45+81
RT	43+59	41+00	12	CORNELL	15.63		259	1036	Tie into D28 @ 43+59
RT	41+00	25+19	12	CORNELL	7.73		128	512	Tie into D26 @ 41+00
LT	25+19	25+60	32	DIXIE	2.47		41	164	Tie into D34 @ 25+60
LT	25+60	26+83	32	DIXIE	7.42		123	492	Tie into D34 @ 25+60
LT	26+83	29+54	30	DIXIE	16.36		271	1084	Tie into D39 @ 26+83
				TOTAL	136	1197	2430	9720	
					(5)	(5)	(5)	(5)	

NOTES:

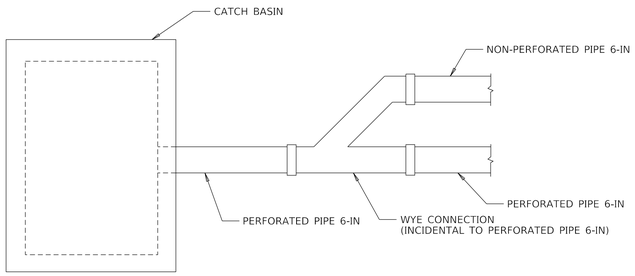
(1) DOWNSPOUT COLLECTOR: 6" DIAMETER RIGID NON-PERFORATED PVC PIPE.

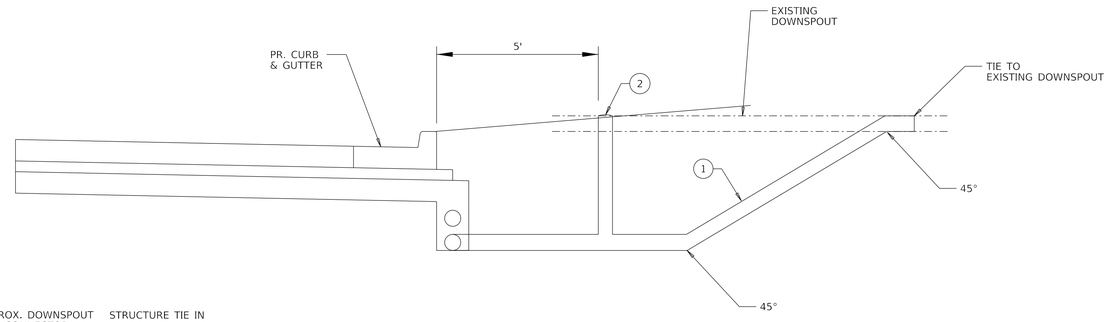
(2) CLEANOUT: CLEANOUT WITH REMOVALBE CAP. SEE DETAIL "A".

(3) ALL LATERAL PVC PIPE, FITTINGS, AND CLEANOUTS NEEDED FOR WORK SHALL INCIDENTAL TO NONPERFORATED PVC PIPE.

(4) STATION AND LOCATION ARE APPROXIMATE, CONTRACTOR TO VERIFY FIELD LOCATION .

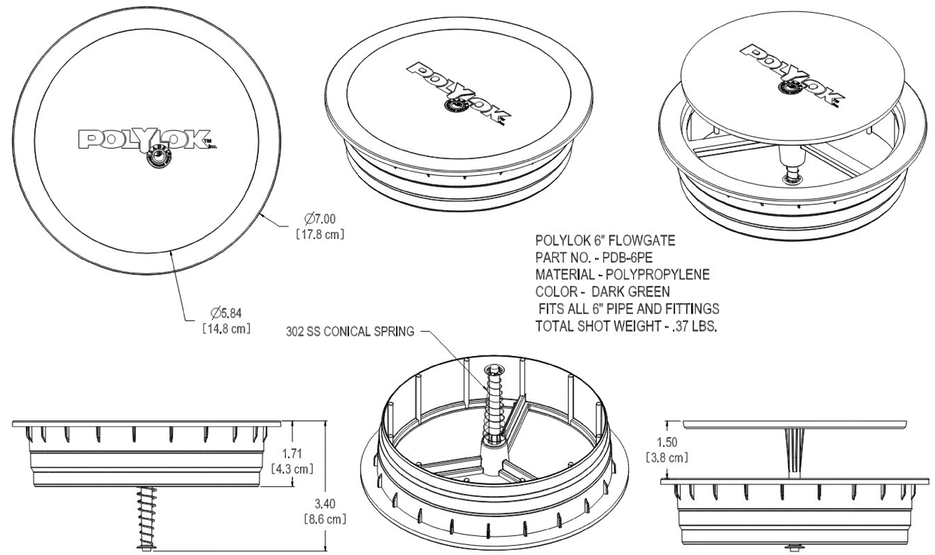
(5) QUANTITIES ARE CRARRIED OVER AND INCLUDED IN GENERAL SUMMARY.





(3) APPROX. DOWNSPOUT CONNECTOR — STRUCTURE TIE IN

RT. STA. 32+20	D24
RT. STA. 31+63	D02
RT. STA. 30+80	D22
LT. STA. 30+71	D21
LT. STA. 32+16	D23
LT. STA. 40+45	D25
LT. STA. 41+00	D25
LT. STA. 43+57	D27
RT. STA. 43+61	D05



POLYLOK 6" FLOWGATE
PART NO. - PDB-6PE
MATERIAL - POLYPROPYLENE
COLOR - DARK GREEN
FITS ALL 6" PIPE AND FITTINGS
TOTAL SHOT WEIGHT - .37 LBS.

DETAIL "A"

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: PVC PIPE UNDERDRAIN AND EDGE DRAIN SUMMARY

ITEM NO. 10174 | COUNTY OF Kenton | SHEET NO.

EROSION CONTROL NOTES

ALL SILT CONTROL DEVICES SHALL BE SIZED TO RETAIN A VOLUME OF 3,600 CUBIC FEET PER DISTURBED CONTRIBUTING ACRE.

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED GROUND DURING EACH PHASE OF CONSTRUCTION. THE CONTRACTOR SHALL COMPUTE THE VOLUME NECESSARY TO CONTROL SEDIMENT DURING EACH PHASE OF CONSTRUCTION. AS WORK PROCEEDS, SILT TRAPS MAY BE ADDED OR REMOVED IN ORDER TO ACHIEVE THE BEST MANAGEMENT PLAN. THE REQUIRED VOLUME AT EACH ADDED SILT TRAP SHALL BE COMPUTED AS UP GRADIENT CONTRIBUTING AREAS ARE DISTURBED OR ARE STABILIZED TO THE SATISFACTION OF THE ENGINEER. THE REQUIRED VOLUME CALCULATION FOR EACH SILT TRAP SHALL BE DETERMINED BY THE CONTRACTOR AND VERIFIED BY THE ENGINEER. THE REQUIRED VOLUME AT EACH SILT TRAP MAY BE REDUCED BY THE FOLLOWING AMOUNTS:

- UP GRADIENT AREAS NOT DISTURBED (ACRES).
- UP GRADIENT AREAS THAT HAVE BEEN RECLAIMED AND PROTECTED BY EROSION CONTROL BLANKET OR OTHER GROUND PROTECTION MATERIAL SUCH AS TEMPORARY MULCH.(ACRES).
- THE USE OF TEMPORARY MULCH IS ENCOURAGED.
- UP GRADIENT AREAS THAT HAVE BEEN PROTECTED BY SILT FENCE (ACRES). AREAS PROTECTED BY SILT FENCE SHALL BE COMPUTED AT A MAXIMUM RATE OF 100 SQUARE FOOT PER LINEAR FOOT OF SILT FENCE.
- UP GRADIENT AREAS THAT HAVE BEEN PROTECTED BY THE SILT TRAPS (ACRES).

THE EROSION CONTROL PLAN SHALL BE ANNOTATED AS THE WORK PROCEEDS BY THE CONTRACTOR TO DETAIL THE SELECTION OF EACH EROSION CONTROL DEVICE USED AND THE VOLUME PROVIDED BY EACH SILT TRAP IN ACCORDANCE WITH THE DOCUMENTATION PROCEDURES ESTABLISHED BY THE DIVISION OF CONSTRUCTION.

IF A SILT BASIN IS NOT USED THEN ONE SILT TRAP TYPE A, ALTERNATE NUMBER 2 OR SILT TRAP TYPE B SHALL ALWAYS BE PLACED AT THE MOST REMOTE DOWNSTREAM COLLECTION POINT PRIOR TO DISCHARGING INTO A BLUE LINE STREAM OR ONTO AN ADJACENT PROPERTY OWNER. WHERE OVERLAND FLOW EXIST, A SILT FENCE OR OTHER FILTER DEVICES MAY BE USED OR THE OVERLAND FLOW MAY BE DIVERTED TO ONE OF THE AFOREMENTED SILT BASIN OR TRAPS.

THE EROSION CONTROL PLANS DO NOT CONSTITUTE A BMP BY THEMSELVES. THEY PROVIDE A STARTING POINT FOR THE CONTRACTOR AND SECTION ENGINEER TO DEVELOP THE BMP ACCORDING TO SECTION 213.03.01 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE SUPPLEMENTAL SPECS EFFECTIVE WITH THE OCTOBER, 2004 LETTING.

EROSION CONTROL MEASURES SHALL BE IN PLACE AND FUNCTIONING PRIOR TO ANY EXCAVATION OR DISTURBANCE WITHIN A DRAINAGE AREA.

THE CONTRACTOR SHALL BE REQUIRED TO CLEAN OUT (REMOVE SEDIMENT FROM) SILT TRAPS AND SILT FENCES WHENEVER THEY BECOME ONE-HALF FULL AND PROPERLY DISPOSE OF THE MATERIAL AT SITES APPROVED BY THE SECTION ENGINEER.

EROSION CONTROL MEASURES EMPLOYED BY THE CONTRACTOR WILL BE UNIQUE TO THE PROJECT AND WORK CONDITIONS AND SHALL BE APPROVED BY THE SECTION ENGINEER. THE DEVELOPMENT AND UTILIZATION OF THESE MEASURES WILL BE RECORDED AS PART OF THE BMP, KEPT ON SITE, AND AVAILABLE FOR PUBLIC INSPECTION.

BASIS OF ELEVATION

Elevations were derived from GPS methods and are adjusted to the NAVD88 (2011) Vertical Datum. Geoid model used was Geoid18.

COORDINATE SYSTEM

Coordinates for horizontal control were obtained from GPS methods and adjusted to the National NAD83 (2011) System.

Coordinates are based on the State Plane Coordinate System North Zone and in U.S. Survey Feet.

BENCHMARKS AND CONTROL POINTS								
POINT	DESCRIPTION	STATION	OFFSET	SIDE	REFERENCE CENTERLINE	PROJECT COORDINATES		
						NORTH (Y)	EAST (X)	ELEV. (Z)
BM A	"X" CUT ON STORM SEWER MANHOLE	30+84.24	21.29'	RT.	SUNNYMEDE	560056.384	1552232.688	855.20
BM B	"X" ON BOLT ON FIRE HYDRANT	25+21.42	43.49'	RT.	DIXIE	560012.080	1552587.698	860.05
BM C	"X" CUT ON STORM SEWER MANHOLE	41+01.51	38.12'	RT.	CORNELL	560153.693	1552524.558	846.93
BM D	"X" ON BOLT ON WATER METER	41+63.83	21.88'	RT.	CORNELL	560216.278	1552554.839	848.08
BM E	"X" ON STORM SEWER MANHOLE	46+01.63	19.58'	RT.	CORNELL	560651.318	1552655.938	836.02
CP100	5/8" IRON PIN	31+70.16	28.16'	LT.	SUNNYMEDE	560112.749	1552313.365	854.09
CP101	5/8" IRON PIN	33+80.77	35.66'	LT.	SUNNYMEDE	560087.012	1552540.678	856.96
CP102	5/8" IRON PIN	28+14.04	31.09'	RT.	DIXIE	560215.688	1552798.228	861.19
CP103	5/8" IRON PIN	43+41.86	14.35'	RT.	CORNELL	560389.411	1552616.508	840.53
CP104	5/8" IRON PIN	45+87.82	17.38'	RT.	CORNELL	560636.730	1552654.906	835.34

NOTE:

BMA, BMC, AND BMD ARE STORM STRUCTURES THAT WILL BE REMOVED AS A PART OF THIS PROJECT.

CURVE DATA - SUNNYMEDE

CURVE #1
PI STA 31+12.58
Δ = 26°06'25" LT
T = 112.58'
L = 221.25'
R = 485.57'
E = 12.88'

CURVE #2
PI STA 33+18.83
Δ = 64°23'02" RT
T = 97.58'
L = 174.18'
R = 155.00'
E = 28.16'
e = 2.0%

CURVE DATA - CORNELL

CURVE #3
PI STA 40+35.54
Δ = 40°24'22" RT
T = 35.54'
L = 68.11'
R = 96.58'
E = 6.33'

CURVE #4
PI STA 41+62.05
Δ = 30°16'05" LT
T = 93.94'
L = 183.48'
R = 347.32'
E = 12.48'

CURVE #5
PI STA 43+16.32
Δ = 07°47'59" LT
T = 64.72'
L = 129.25'
R = 949.42'
E = 2.20'

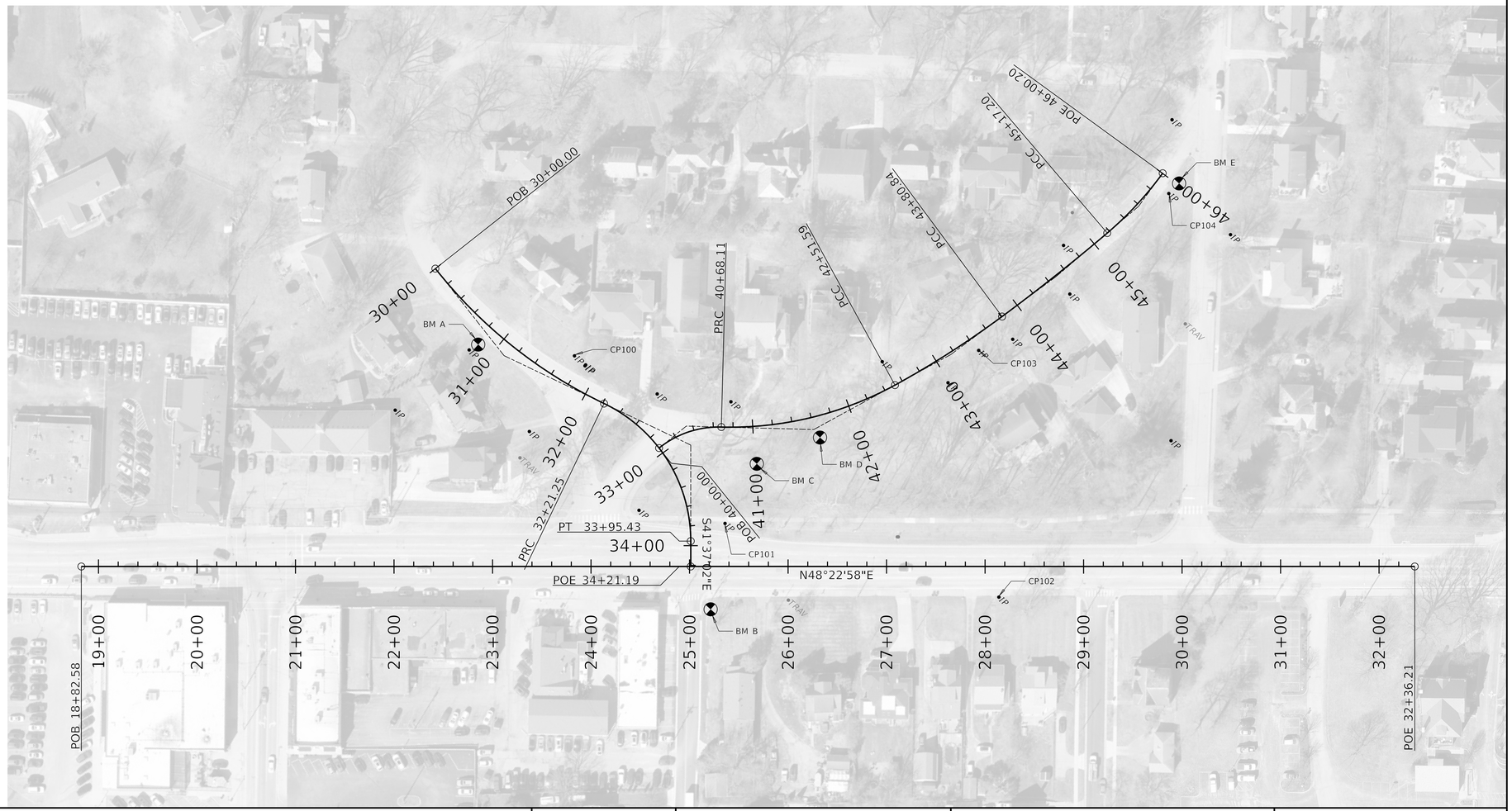
CURVE #6
PI STA 44+49.04
Δ = 03°54'23" LT
T = 68.21'
L = 136.36'
R = 2000.00'
E = 1.16'

CURVE #7
PI STA 45+58.89
Δ = 13°29'18" LT
T = 41.70'
L = 83.00'
R = 352.59'
E = 2.46'

SUNNYMEDE DRIVE		
DESCRIPTION	PROJECT COORDINATES	
	NORTH (Y)	EAST (X)
P.O.B. STA. 30+00.00	560085.206	1552148.951
P.I. STA. 31+12.58	560065.452	1552259.784
P.R.C. STA. 32+21.25	560096.486	1552368.002
P.I. STA. 33+18.83	560123.384	1552461.800
P.T. STA. 33+95.43	560050.435	1552526.607
P.O.E. STA. 34+21.19	560031.175	1552543.716

CORNELL AVENUE		
DESCRIPTION	PROJECT COORDINATES	
	NORTH (Y)	EAST (X)
P.O.B. STA. 40+00.00	560099.746	1552439.771
P.I. STA. 40+35.54	560134.798	1552445.648
P.R.C. STA. 40+68.11	560157.680	1552472.845
P.I. STA. 41+62.05	560218.155	1552544.724
P.C.C. STA. 42+51.59	560306.616	1552576.322
P.I. STA. 43+16.32	560367.567	1552598.094
P.C.C. STA. 43+80.84	560430.908	1552611.392
P.I. STA. 44+49.04	560497.659	1552625.406
P.C.C. STA. 45+17.20	560565.208	1552634.840
P.I. STA. 45+58.89	560606.503	1552640.608
P.O.E. STA. 46+00.20	560648.003	1552636.584

DIXIE HIGHWAY		
DESCRIPTION	PROJECT COORDINATES	
	NORTH (Y)	EAST (X)
P.O.B. STA. 18+82.58	559620.303	1552081.220
P.O.E. STA. 32+36.21	560519.319	1553093.194



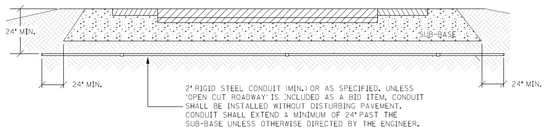
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: PROJECT CONTROL SHEET

HORIZONTAL SCALE
SCALE: 1" = 60'

0' 30' 60' 120'

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. R22

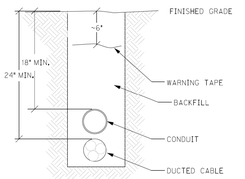


CONDUIT UNDER PAVEMENT

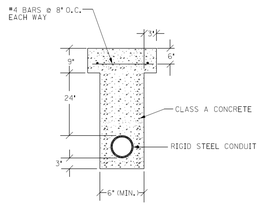
TOTAL TRENCH WIDTH SHALL BE 3" (NOM.) WIDER THAN THE SUM OF THE OUTSIDE DIAMETER(S) OF THE CONDUIT(S) INSTALLED. CONDUIT(S) SHALL BE CENTERED IN TRENCH.

CONTRACTOR SHALL PLACE BACKFILL IN LIFTS (9" MAX.) COMPACT BACKFILL, AND RESTORE DISTURBED AREA TO THE SATISFACTION OF THE ENGINEER

CONTRACTOR SHALL INSTALL UNDERGROUND UTILITY WARNING TAPE ABOVE CONDUIT AS SHOWN.

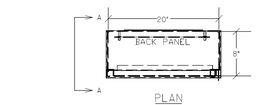


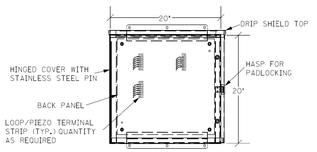
CONDUIT TRENCH



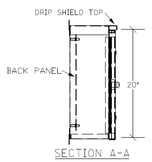
OPEN CUT PAVEMENT DETAIL

CONDUIT INSTALLATION



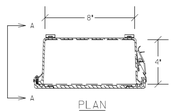


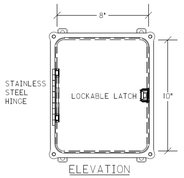
ELEVATION



SECTION A-A

GALVANIZED STEEL CABINET





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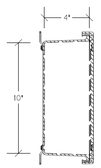
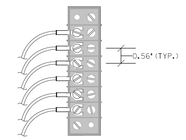
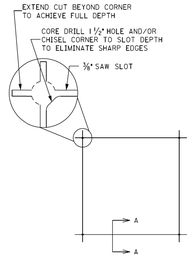


SECTION A-A

JUNCTION BOX 10"x8"X4"



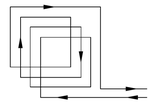
TERMINAL STRIP (TYP.)



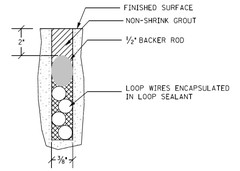
SAW CUT PLAN

UNLESS SPECIFIED OTHERWISE, ALL LOOPS SHALL BE 6' x 6' SQUARE, CENTERED IN EACH LANE, WITH FOUR (4) TURNS OF 14 AWG LOOP WIRE.

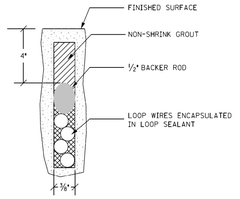
ADJACENT SAW SLOTS SHALL BE A MINIMUM OF 12" APART.



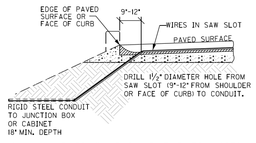
WIRING PLAN



SECTION A-A (CONCRETE)



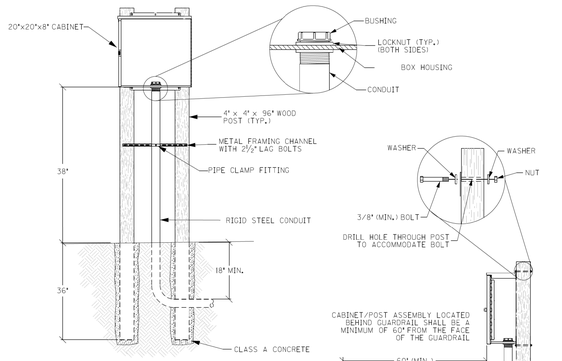
SECTION A-A (ASPHALT)



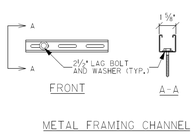
SAW SLOT EDGE OF PAVEMENT TRANSITION

INDUCTIVE LOOP DETECTOR

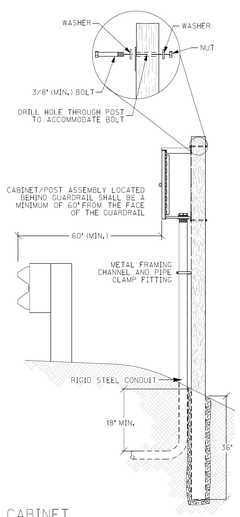
Bid Item	Item Description	Unit	Quantity
4793	CONDUIT 1 1/4 INCH	LIN FT	10
4795	CONDUIT 2 INCH	LIN FT	10
4811	ELECTRICAL JUNCTION BOX TYPE B	EACH	1
4820	TRENCHING AND BACKFILLING	LIN FT	15
4830	LOOP WIRE	LIN FT	750
4895	LOOP SAW SLOT AND FILL	LIN FT	135
20359NN	GALVANIZED STEEL CABINET	EACH	1
20360ES818	WOOD POST	EACH	2



FRONT VIEW

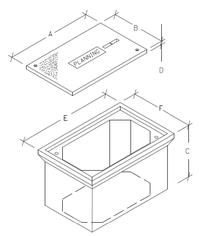


METAL FRAMING CHANNEL



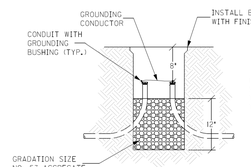
RIGHT VIEW

GALVANIZED STEEL CABINET DOUBLE POST ASSEMBLY



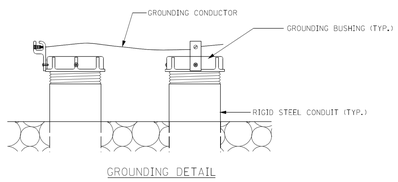
JUNCTION BOX DIMENSIONS (NOMINAL)						
	A	B	C	D•	E	F
TYPE A	23"	14"	18"	2"	25"	16"
TYPE B	18"	11"	12"	1¾"	20"	13"
TYPE C	36"	24"	30"	3"	38"	26"

• MINIMUM
STACKABLE BOXES ARE PERMITTED



WHERE REQUIRED, JUNCTION BOX SHALL BE ORIENTED SUCH THAT THE DIMENSIONS COMPLY WITH THE NATIONAL ELECTRICAL CODE.

ELEVATION



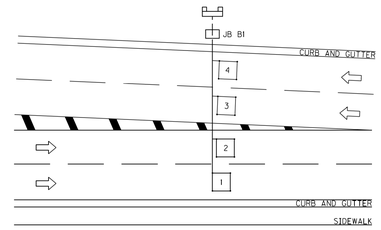
GROUNDING DETAIL

JUNCTION BOX - TYPE A, TYPE B, TYPE C

PROPOSED CO. US 25 ~m.p 8.80
LAT/LONG: N39.03806, W 84.55850
COUNT STATION B67
STA 28+50

NOTES:

1. SITE LOCATION IS APPROXIMATE AND WILL BE DETERMINED IN THE FIELD AND APPROVED BY DIVISION OF PLANNING PERSONNEL PRIOR ANY CONSTRUCTION.
2. ALL LOOPS SHALL BE 5'X5' SQUARE AND SHALL BE INSTALLED SPLICE-FREE TO THE CABINET. A MINIMUM OF 2' OF WIRE FOR EACH SENSOR SHALL BE COILED AND ;LABELED INSIDE THE JUNCTION BOX AND CABINET. DIVISION OF PLANNING PERSONNEL WILL CONNECT THE LOOPS INSIDE THE CABINET.
3. INSTALL ONE (1) 1¼" RIGID CONDUIT FROM SAW SLOT TO JUNCTION BOX.
4. INSTALL ONE (1) TYPE B JUNCTION BOX (JB B1)
5. INSTALL ONE (1) 20"X20"X8" CABINET ON TWO (2) WOOD POSTS.
6. INSTALL ONE (1) RIGID 2" RIGID CONDUIT FROM JUNCTION BOX TO CABINET.
7. REMOVE ANY OLD EXISTING COUNT STATION EQUIPMENT AND DISPOSE OF OFF THE PROJECT.



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

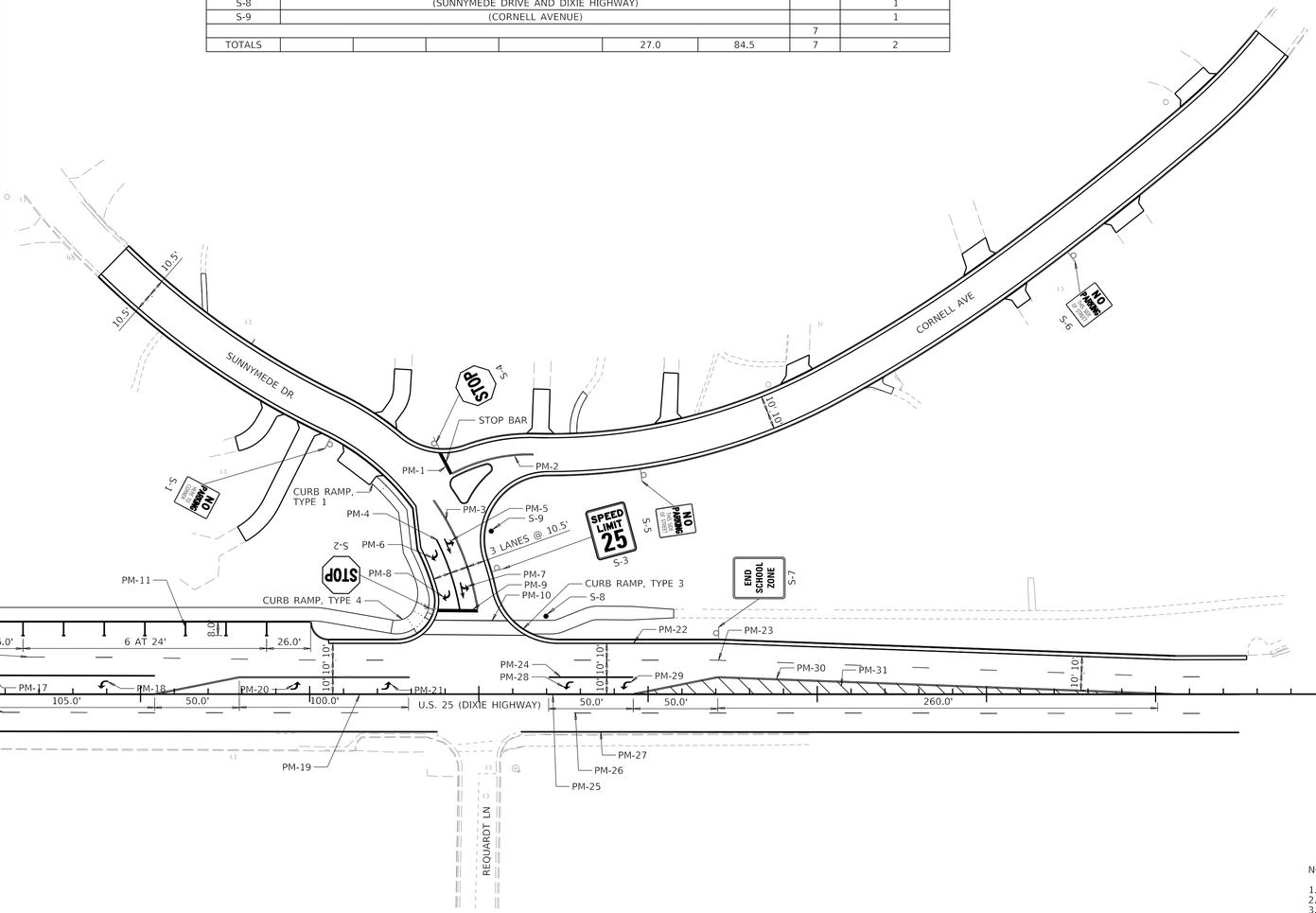
TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: PERMANENT TRAFFIC DATA ACQUISITION STATION DETAILS

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. R23

PAVEMENT MARKING NUMBER	BEGIN STATION	END STATION	REFERENCE LINE	TYPE	COLOR	QUANTITY	UNIT
PM-1	32+78	32+94	SUNNYMEDE	STOP BAR	WHITE	14	FT
PM-2	40+18	40+68	CORNELL	DOUBLE YELLOW	YELLOW	50	FT
PM-3	33+01	33+71	SUNNYMEDE	DOUBLE YELLOW	YELLOW	70	FT
PM-4	33+22	33+80	SUNNYMEDE	CHANNELIZING LINE	WHITE	44	FT
PM-5	32+26	33+36	SUNNYMEDE	LANE ARROW	WHITE	1	EACH
PM-6	33+28	33+39	SUNNYMEDE	LANE ARROW	WHITE	1	EACH
PM-7	33+53	33+63	SUNNYMEDE	LANE ARROW	WHITE	1	EACH
PM-8	33+56	33+63	SUNNYMEDE	LANE ARROW	WHITE	1	EACH
PM-9	33+71	33+73	SUNNYMEDE	STOP BAR	WHITE	24	FT
PM-10	24+56	24+65	DIXIE	CROSSWALK LINE	WHITE	105	FT
PM-11	22+30	23+76	DIXIE	PARKING STALL LINE	WHITE	70	FT
PM-12	22+33	24+44	DIXIE	LANE LINE	WHITE	60	FT
PM-13	22+04	23+34	DIXIE	CHANNELIZING LINE	WHITE	130	FT
PM-14	22+03	24+60	DIXIE	DOUBLE YELLOW	YELLOW	257	FT
PM-15	22+19	24+29	DIXIE	LANE LINE	WHITE	60	FT
PM-16	22+00	24+77	DIXIE	EDGE LINE	WHITE	277	FT
PM-17	22+07	22+13	DIXIE	LANE ARROW	WHITE	1	EACH
PM-18	22+74	22+81	DIXIE	LANE ARROW	WHITE	1	EACH
PM-19	23+76	24+60	DIXIE	CHANNELIZING LINE	WHITE	82	FT
PM-20	23+89	23+95	DIXIE	LANE ARROW	WHITE	1	EACH
PM-21	24+42	24+49	DIXIE	LANE ARROW	WHITE	1	EACH
PM-22	25+47	29+54	DIXIE	EDGE LINE	WHITE	407	FT
PM-23	25+56	29+26	DIXIE	LANE LINE	WHITE	100	FT
PM-24	25+41	25+92	DIXIE	CHANNELIZING LINE	WHITE	50	FT
PM-25	25+41	29+50	DIXIE	DOUBLE YELLOW	YELLOW	409	FT
PM-26	25+56	29+26	DIXIE	LANE LINE	WHITE	100	FT
PM-27	25+26	29+54	DIXIE	EDGE LINE	WHITE	428	FT
PM-28	25+50	25+56	DIXIE	LANE ARROW	WHITE	1	EACH
PM-29	25+83	25+90	DIXIE	LANE ARROW	WHITE	1	EACH
PM-30	25+91	29+10	DIXIE	DOUBLE YELLOW	YELLOW	310	FT
PM-31	26+04	28+77	DIXIE	TRANVERSE LINES	YELLOW	195	FT

1	SIZE	STATION	SIDE	REFERENCE LINE	ALUMINUM SHEET SIGN (SQ. FT.)	STEEL POST, TYPE 1 (LN. FT.)	REMOVE SIGN (EACH)	REMOVE AND RE-ERECT DECORATIVE STREET SIGN (EACH)
S-1	12" X 30"	32+27	RT	SUNNYMEDE	1.5	11.5		
S-2	36" X 36"	33+65	RT	SUNNYMEDE	6.25	12.5		
S-3	24" X 30"	33+52	LT	SUNNYMEDE	5.0	12.5		
S-4	36" X 36"	41+19	LT	CORNELL	6.25	12.5		
S-5	12" X 18"	41+30	RT	CORNELL	1.5	11.5		
S-6	12" X 18"	44+10	RT	CORNELL	1.5	11.5		
S-7	24" X 30"	26+42	LT	DIXIE	5.0	12.5		
S-8	(SUNNYMEDE DRIVE AND DIXIE HIGHWAY)							1
S-9	(CORNELL AVENUE)							1
							7	
TOTALS					27.0	84.5	7	2



NOTES:

1. STRIPING TO BE 6" THERMOPLASTIC
2. STOP BAR TO BE 24" THERMOPLASTIC
3. TRANVERSE LINES TO BE 12" WITH 10' SPACING

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY TRANSPORTATION CABINET

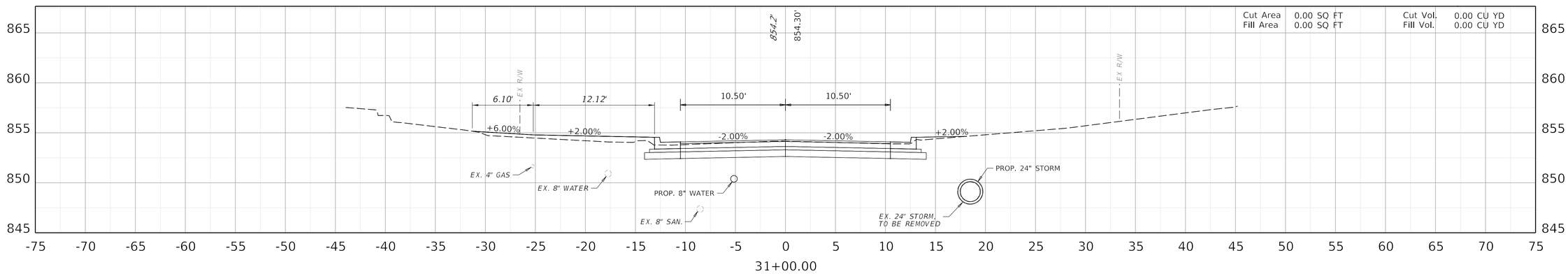
DRAWING TITLE: SIGNING AND STRIPING PLAN SHEET

HORIZONTAL SCALE
SCALE: 1"=40'

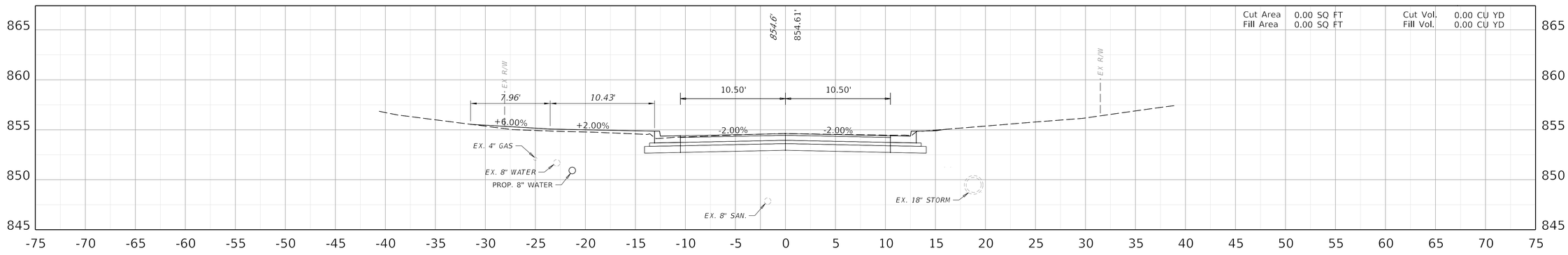
0' 40' 80' 160'

STA. 21+00.00 TO STA. 30+80.00

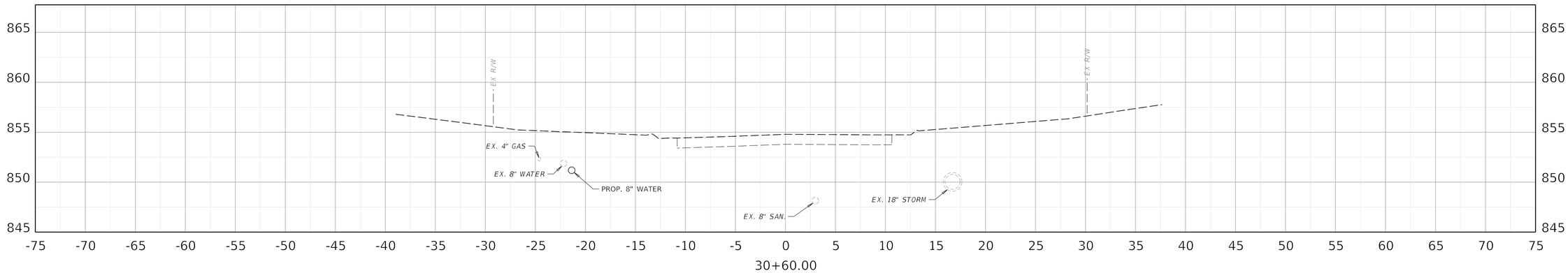
ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. T1



31+00.00



30+75.00



30+60.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: SUNNYMEDE DRIVE CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

STA. 30+60.00 TO STA. 31+00.00

ITEM NO. 10174

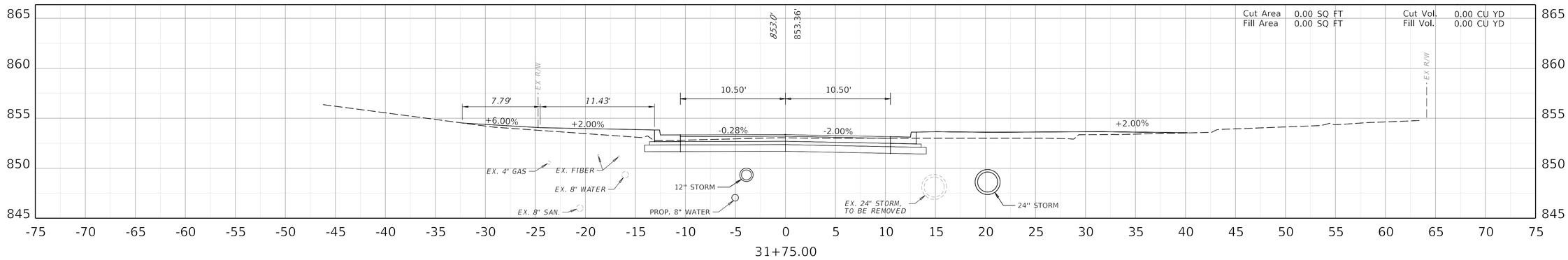
COUNTY OF Kenton

SHEET NO. X1

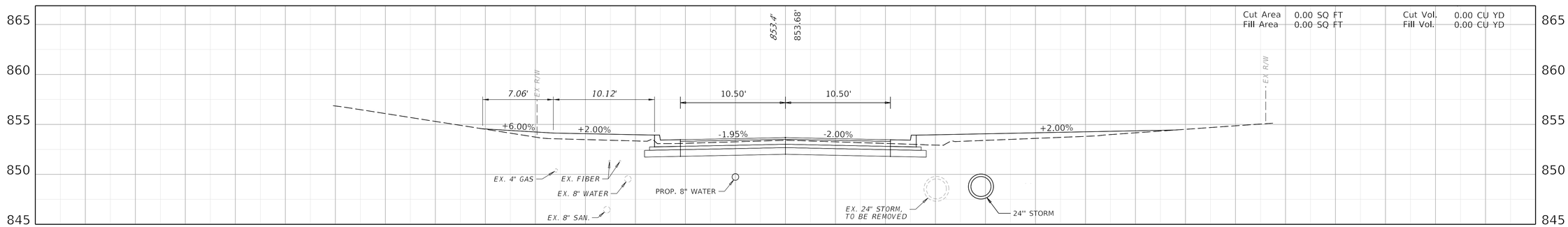
OpenRoads Designer v10.12.02.4

USER: jyerramsetty

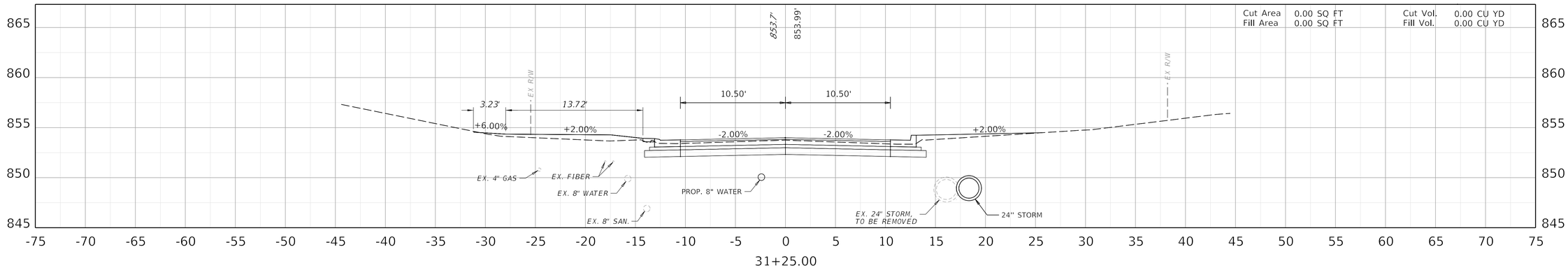
FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_SUNNYMEDE CROSS SECTION.DGN



31+75.00



31+50.00



31+25.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: SUNNYMEDE DRIVE CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

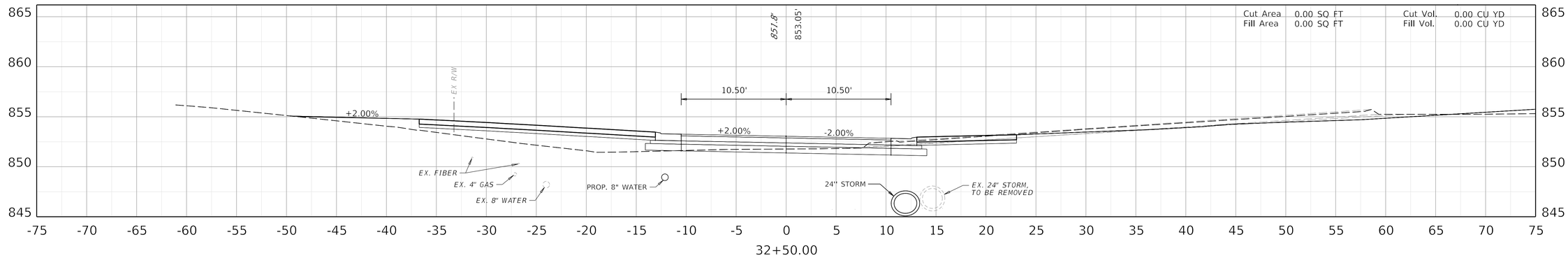
STA. 31+25.00 TO STA. 31+75.00

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. X2

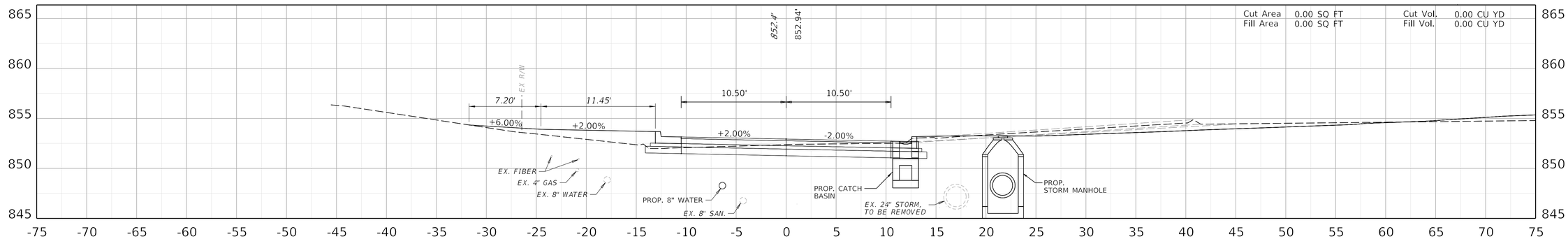
OpenRoads Designer v10.12.02.4

USER: jyerramsetty

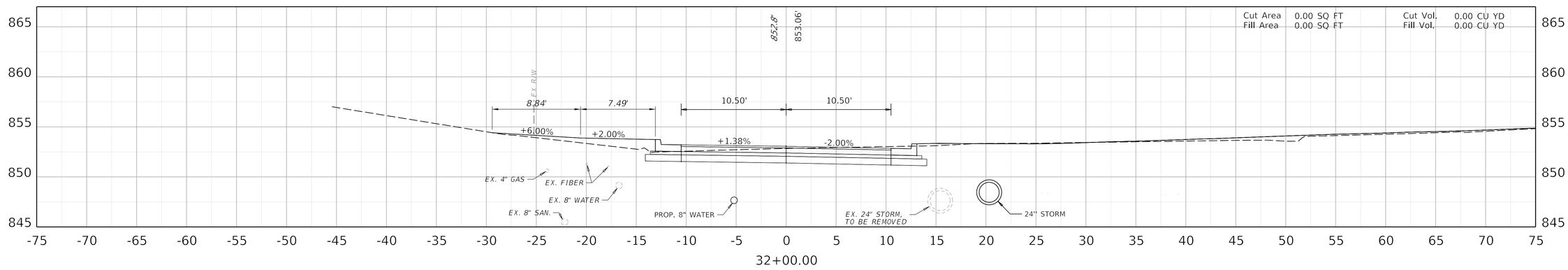
FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_SUNNYMEDE CROSS SECTION.DGN



32+50.00



32+25.00



32+00.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY Transportation Cabinet

DRAWING TITLE: SUNNYMEDE DRIVE CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

STA. 32+00.00 TO STA. 32+50.00

ITEM NO. 10174

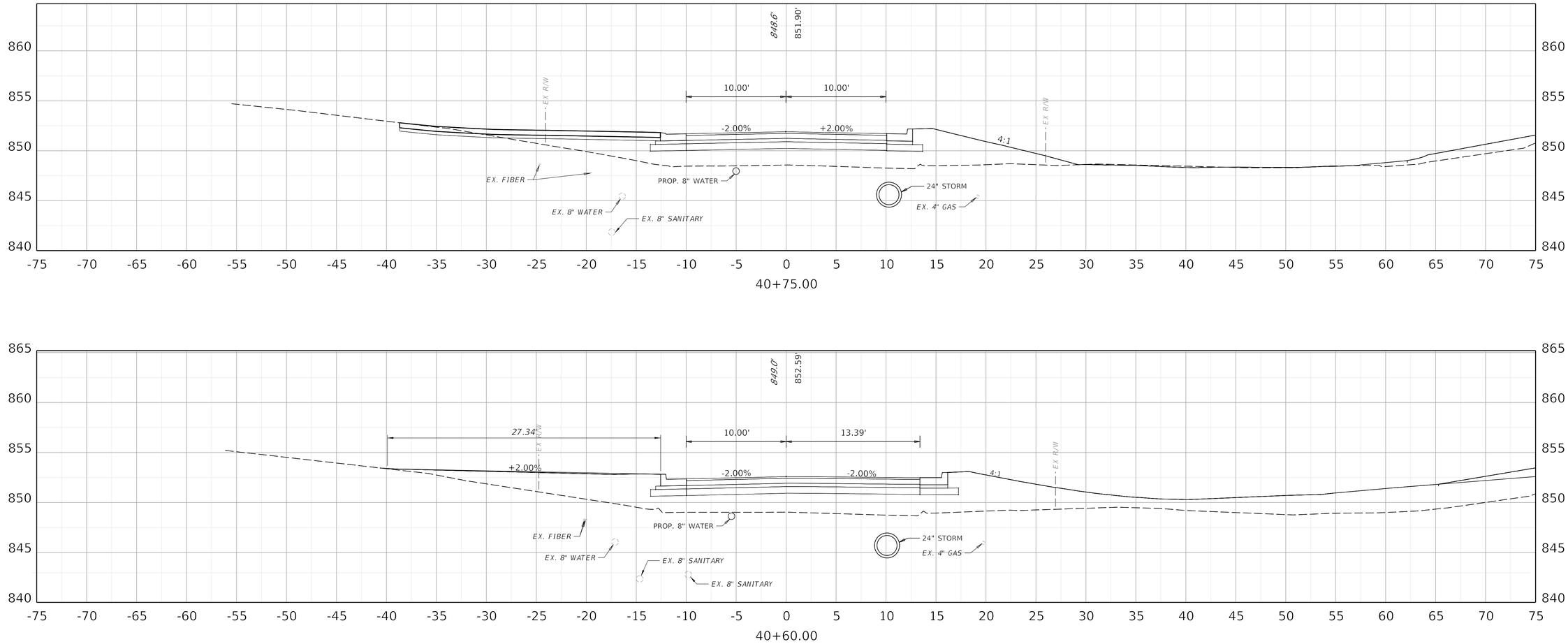
COUNTY OF Kenton

SHEET NO. X3

OpenRoads Designer v10.12.02.4

USER: jyerramsetty

FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_SUNNYMEDE CROSS SECTION.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: CORNELL AVENUE CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

STA. 40+60.00 TO STA. 40+75.00

ITEM NO. 10174

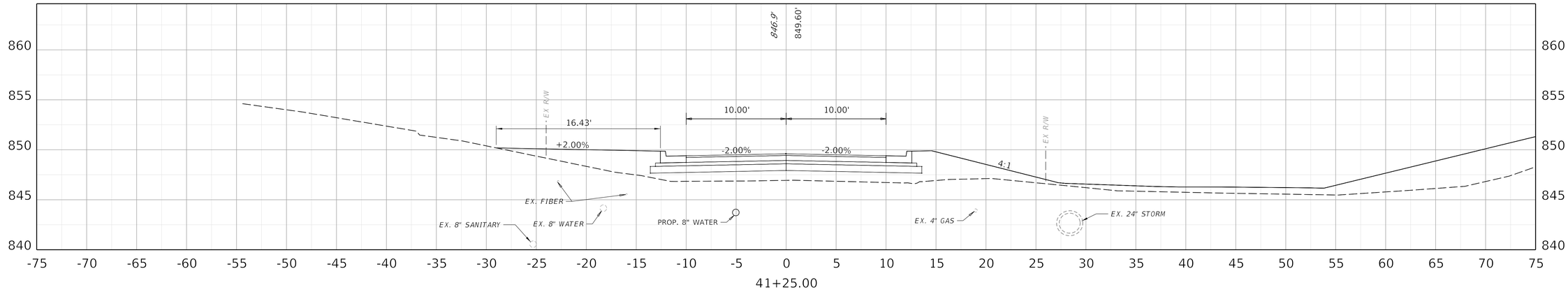
COUNTY OF Kenton

SHEET NO. X4

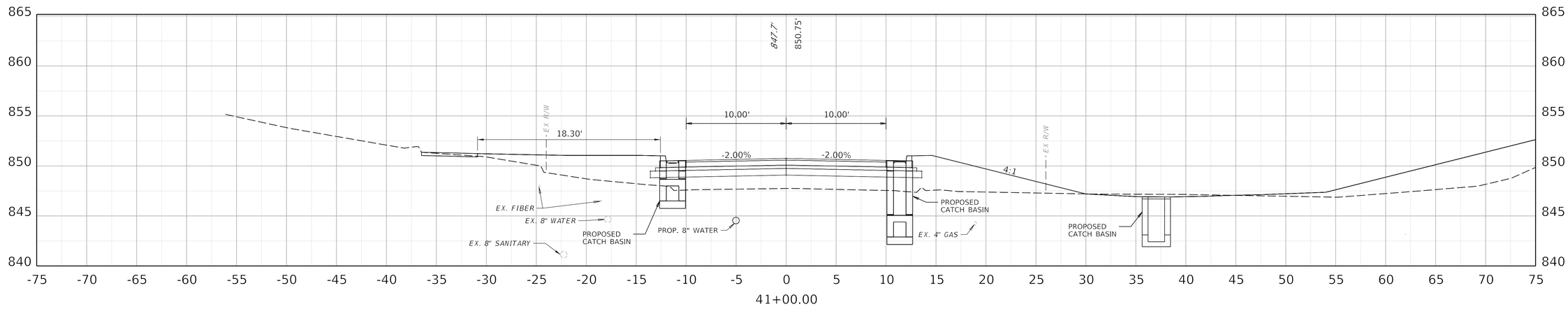
OpenRoads Designer v10.12.02.4

USER: dgohs

FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_CORNELL CROSS SECTION.DGN



41+25.00



41+00.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: CORNELL AVENUE CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

STA. 41+00.00 TO STA. 41+25.00

ITEM NO. 10174

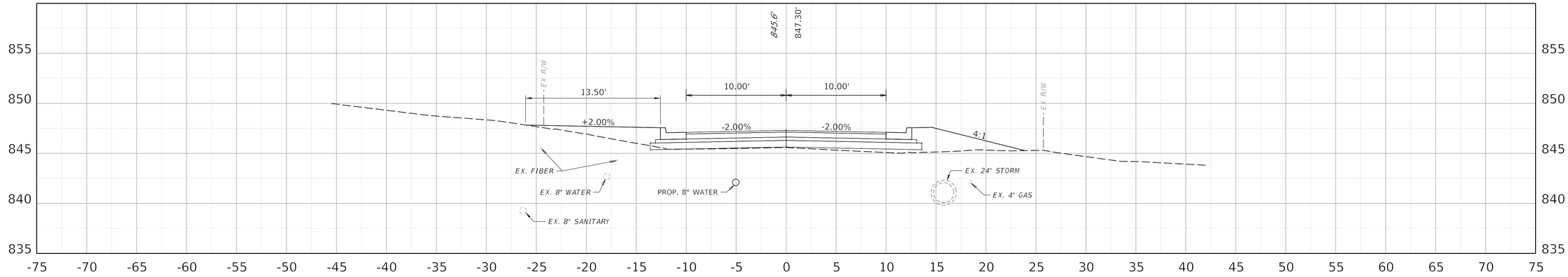
COUNTY OF Kenton

SHEET NO. X5

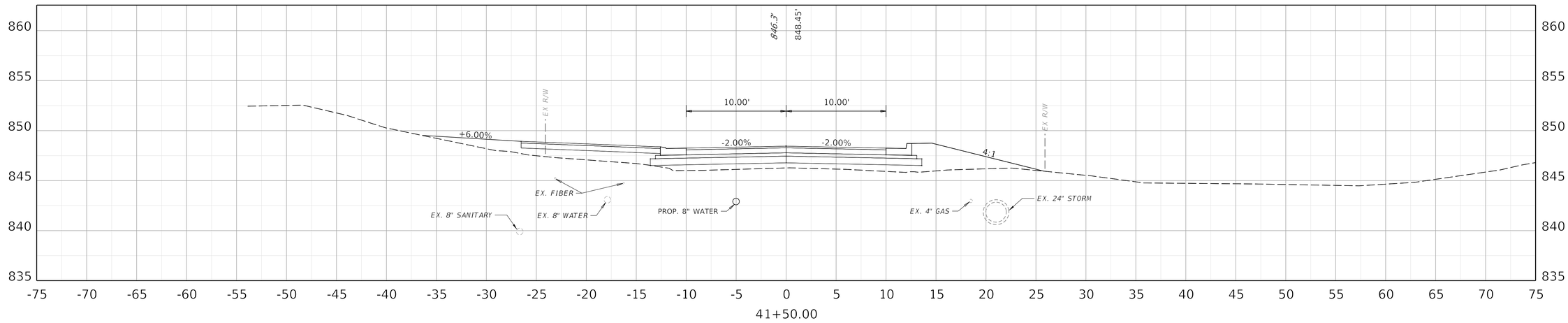
OpenRoads Designer v10.12.02.4

USER: dgohs

FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_CORNELL CROSS SECTION.DGN



41+75.00



41+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: CORNELL AVENUE CROSS SECTIONS

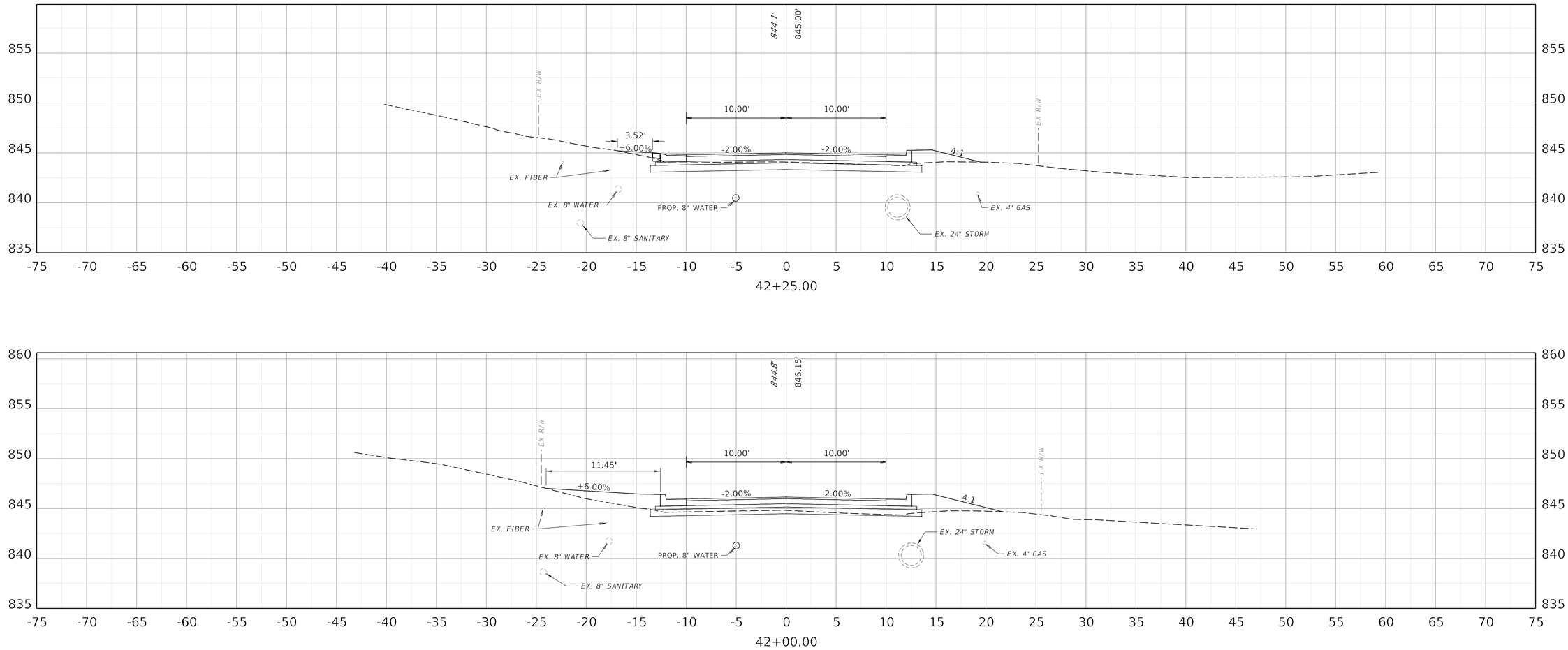
HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

STA. 41+50.00 TO STA. 41+75.00

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. X6

OpenRoads Designer v10.12.02.4
USER: dgohs
FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_CORNELL CROSS SECTION.DGN



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY

DRAWING TITLE: CORNELL AVENUE CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

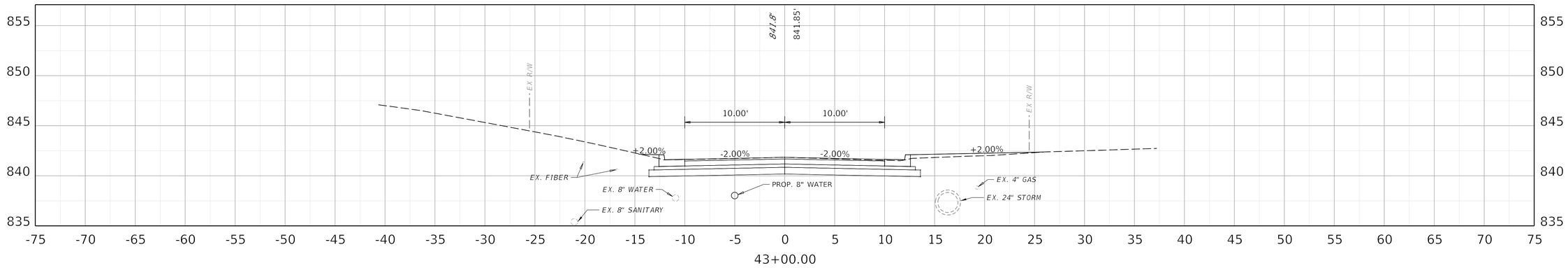
STA. 42+00.00 TO STA. 42+25.00

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. X7

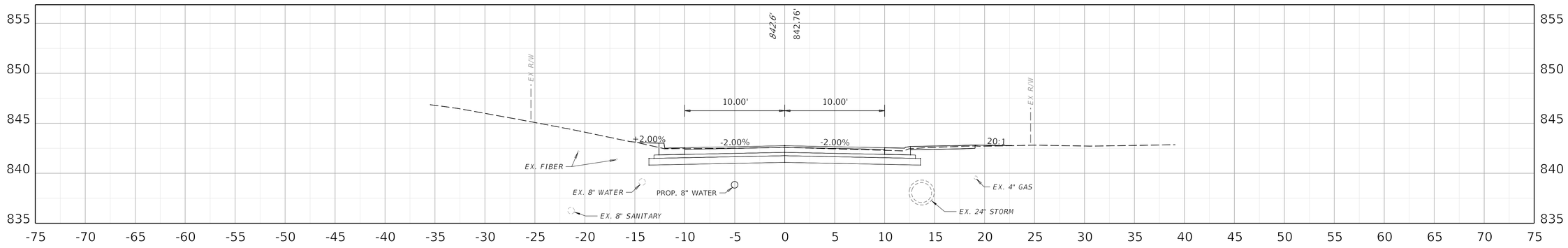
OpenRoads Designer v10.12.02.4

USER: dgohs

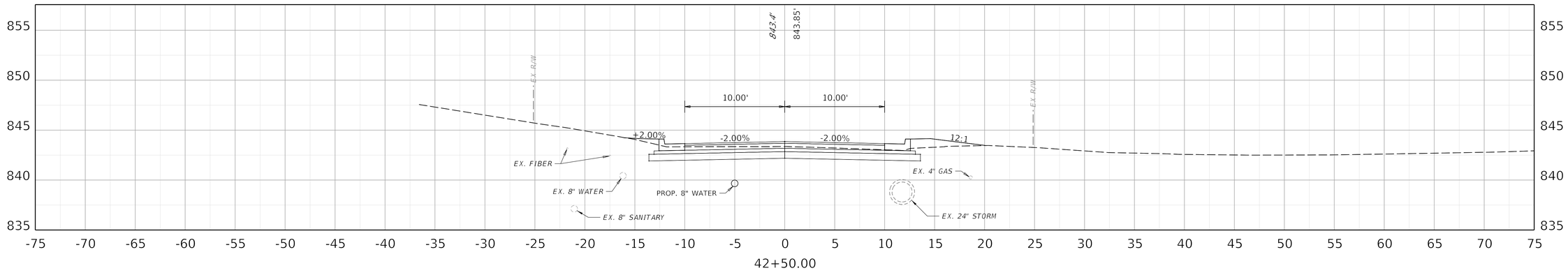
FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_CORNELL CROSS SECTION.DGN



43+00.00



42+75.00



42+50.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: CORNELL AVENUE CROSS SECTIONS

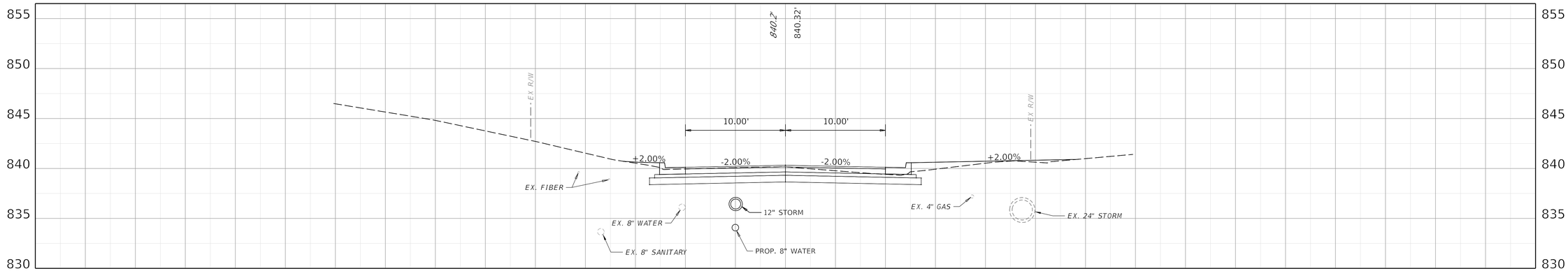
HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

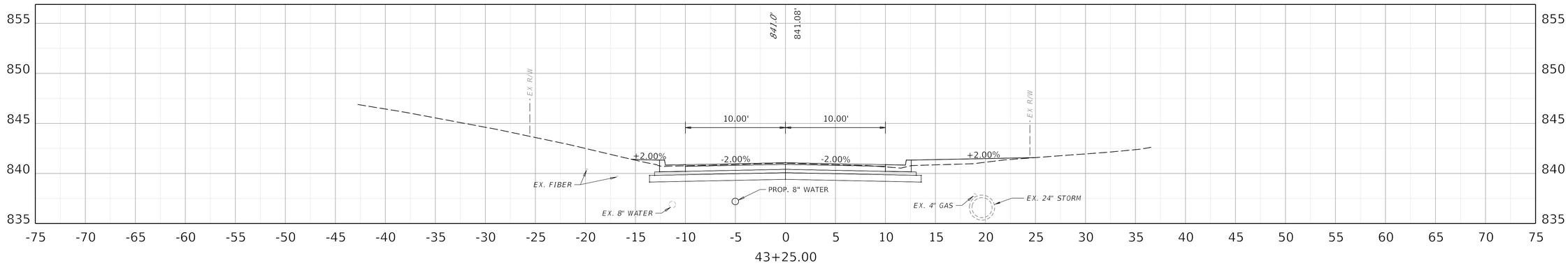
STA. 42+50.00 TO STA. 43+00.00

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. X8

OpenRoads Designer v10.12.02.4
USER: dgohs
FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_CORNELL CROSS SECTION.DGN



43+50.00



43+25.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: CORNELL AVENUE CROSS SECTIONS

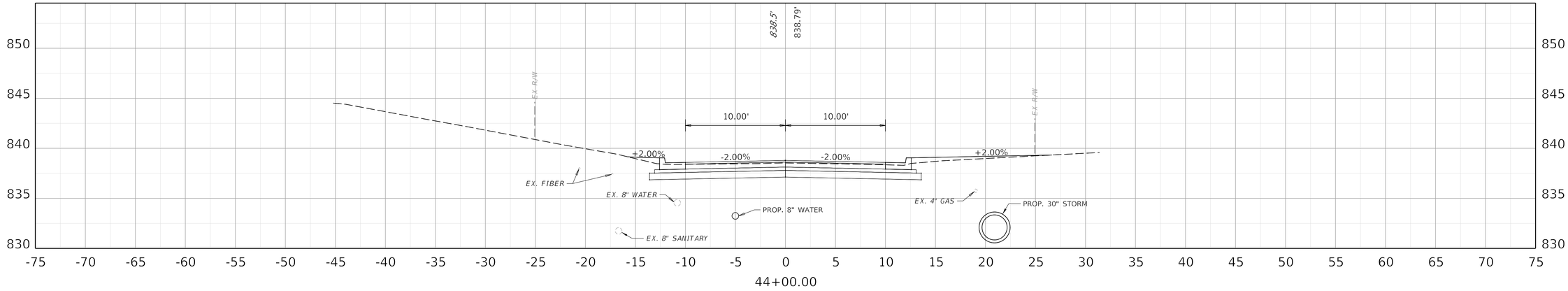
HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

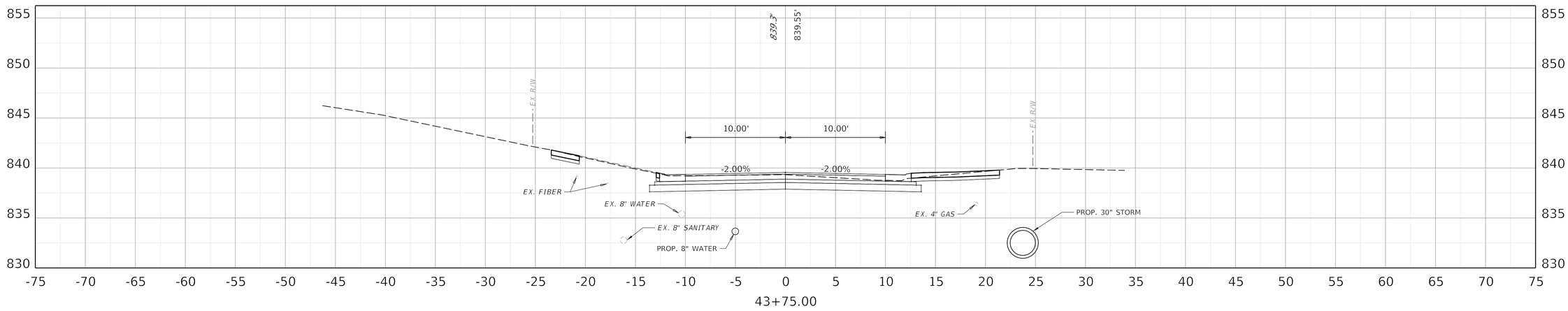
STA. 43+25.00 TO STA. 43+50.00

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. X9

OpenRoads Designer v10.12.02.4
USER: dgohs
FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_CORNELL CROSS SECTION.DGN



44+00.00



43+75.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: CORNELL AVENUE CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

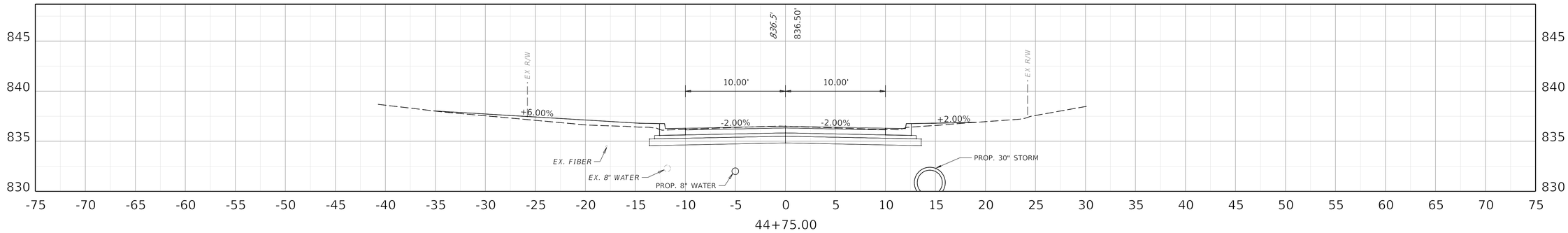
STA. 43+75.00 TO STA. 44+00.00

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. X10

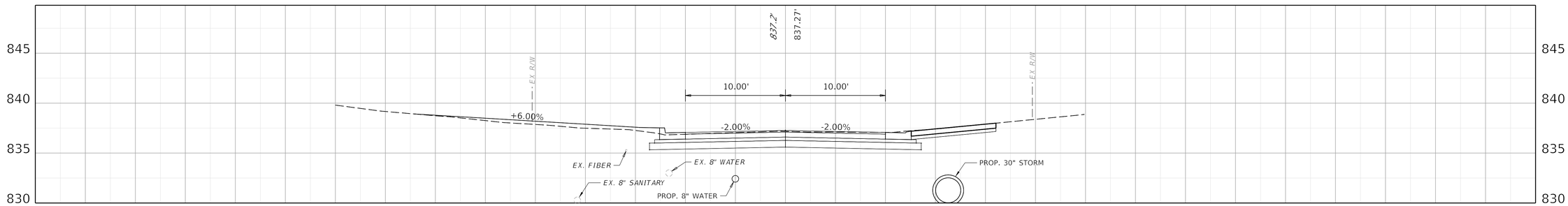
OpenRoads Designer v10.12.02.4

USER: dgohs

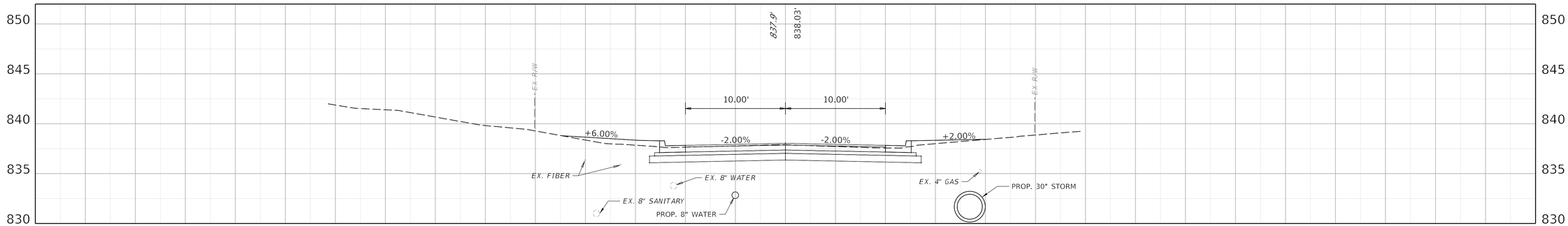
FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_CORNELL CROSS SECTION.DGN



44+75.00



44+50.00



44+25.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY
TRANSPORTATION COST

DRAWING TITLE: CORNELL AVENUE CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

STA. 44+25.00 TO STA. 44+75.00

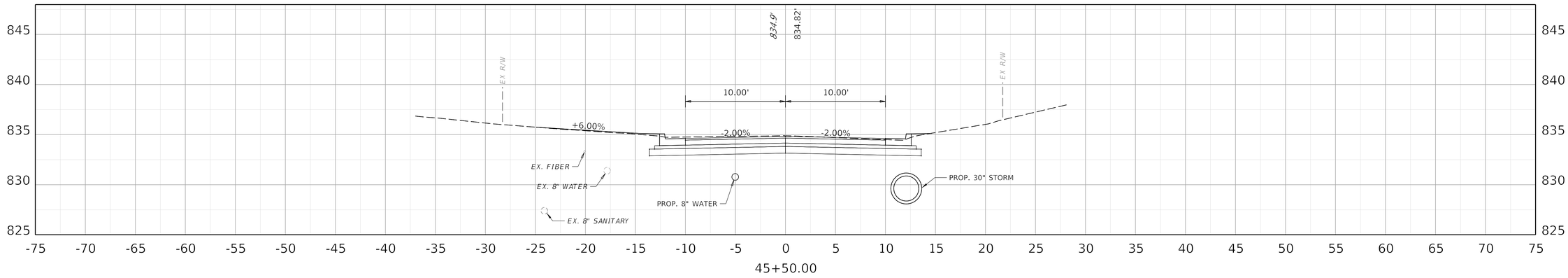
ITEM NO. XX-XXXX.XX
COUNTY OF Kenton

SHEET NO. X11

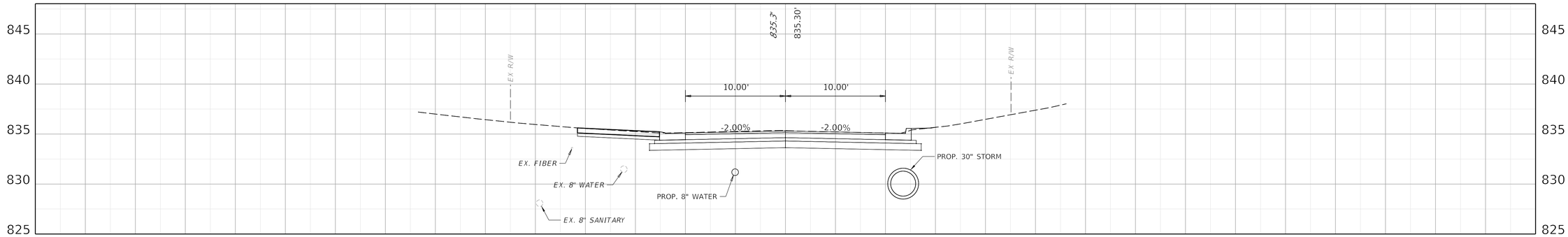
OpenRoads Designer v10.12.02.4

USER: MWright

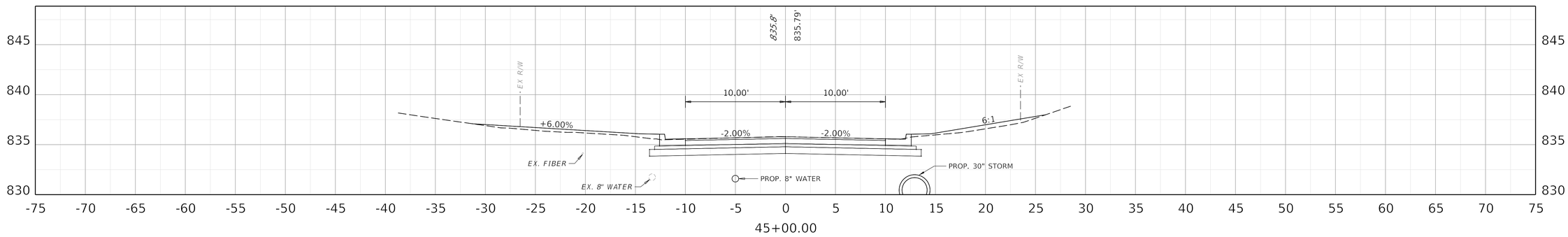
FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_CORNELL CROSS SECTION.DGN



45+50.00



45+25.00



45+00.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: CORNELL AVENUE CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

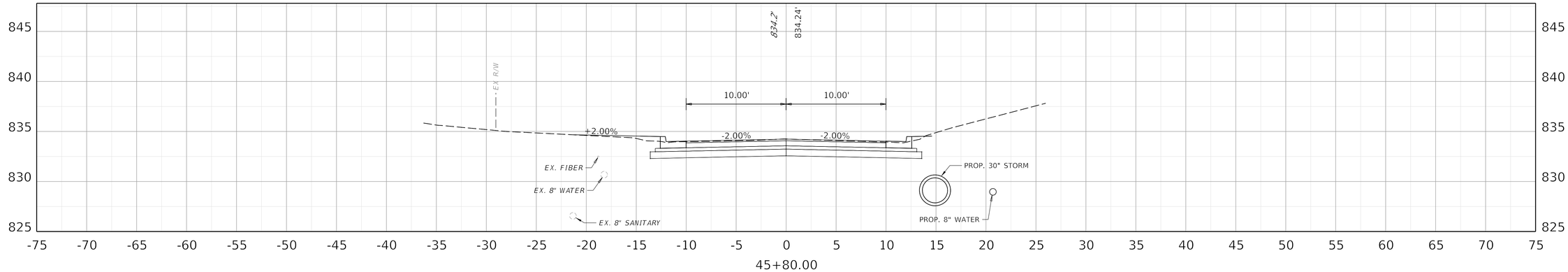
0' 5' 10' 20'

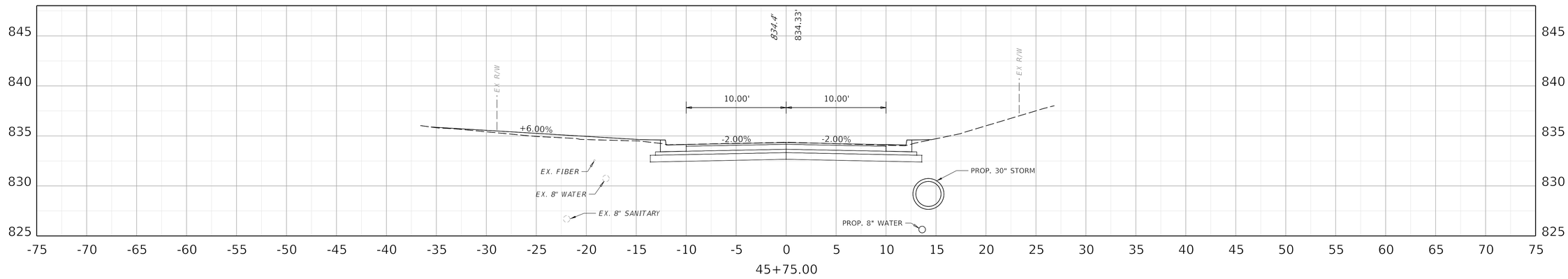
STA. 45+00.00 TO STA. 45+50.00

ITEM NO. 10174

COUNTY OF Kenton

SHEET NO. X12





COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: CORNELL AVENUE CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

STA. 45+75.00 TO STA. 45+80.00

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. X13

OpenRoads Designer v10.12.02.4

USER: jyerramsetty

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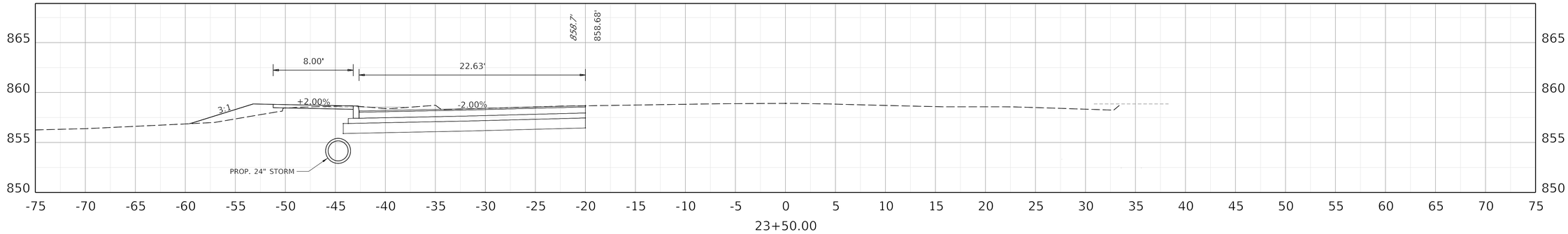

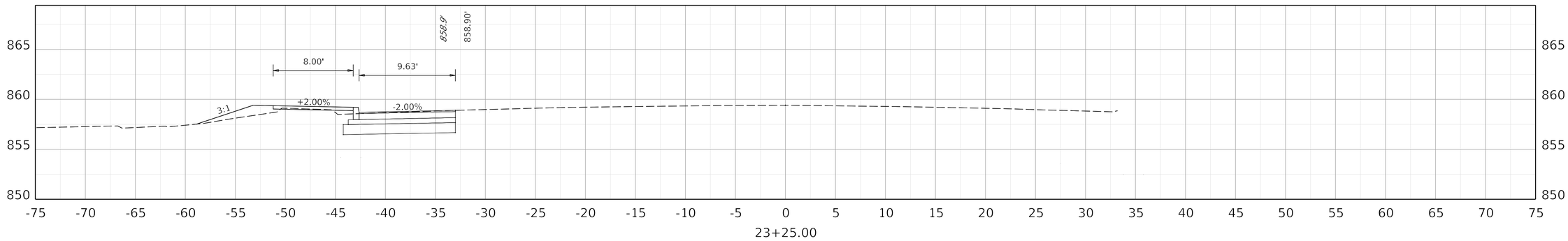

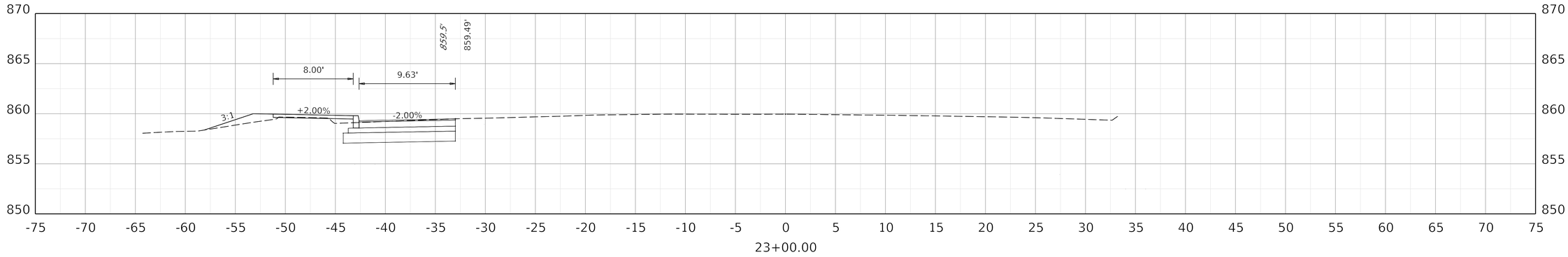

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY
TRANSPORTATION CABINET

DRAWING TITLE: DIXIE HIGHWAY CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

STA. 23+00.00 TO STA. 23+50.00

ITEM NO. 10174

COUNTY OF Kenton

SHEET NO. X14

OpenRoads Designer v10.12.02.4

USER: jyerramsetty

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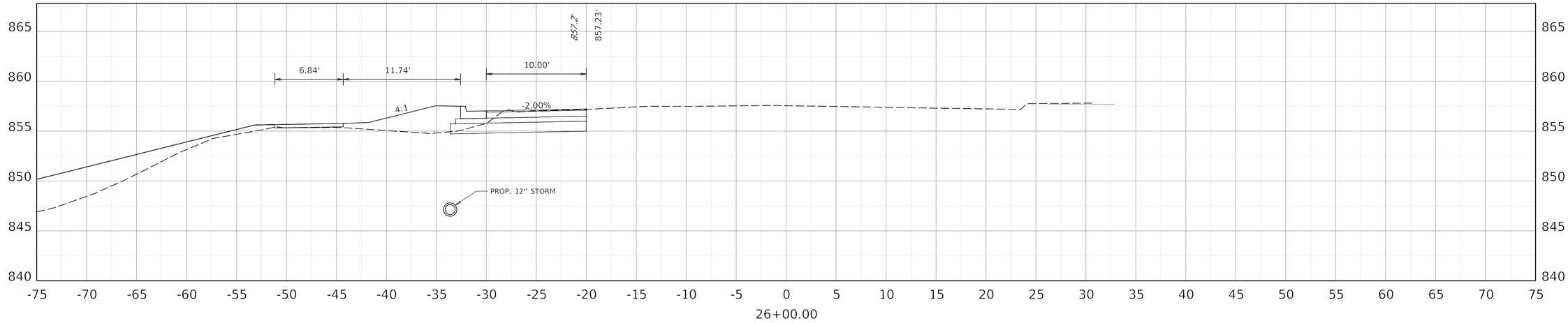

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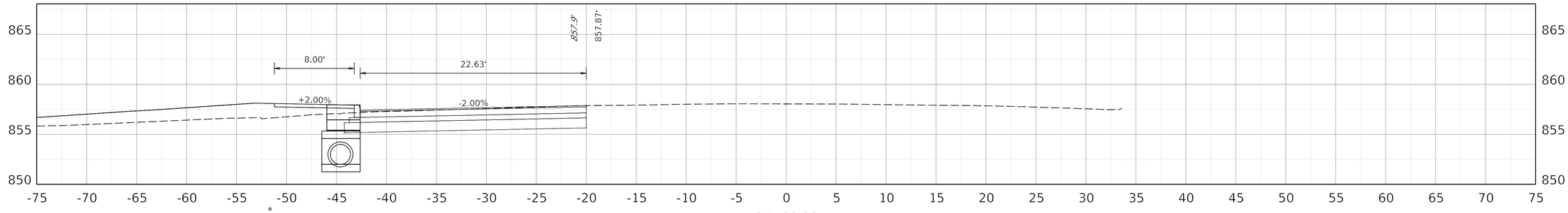
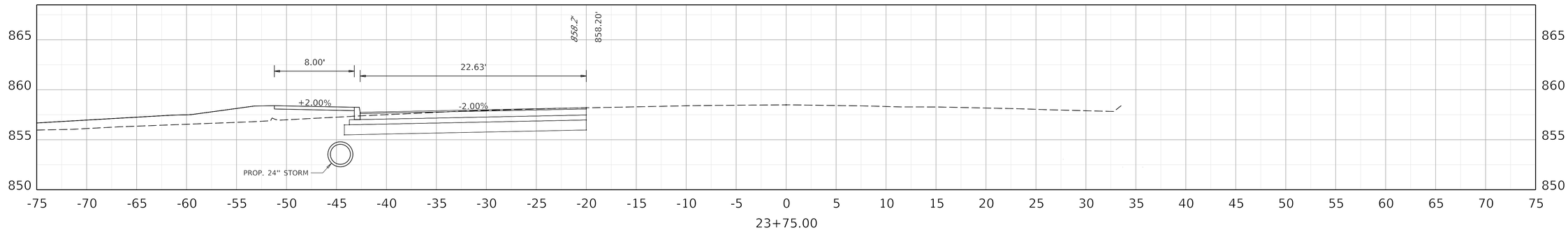


24+00.00



23+75.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

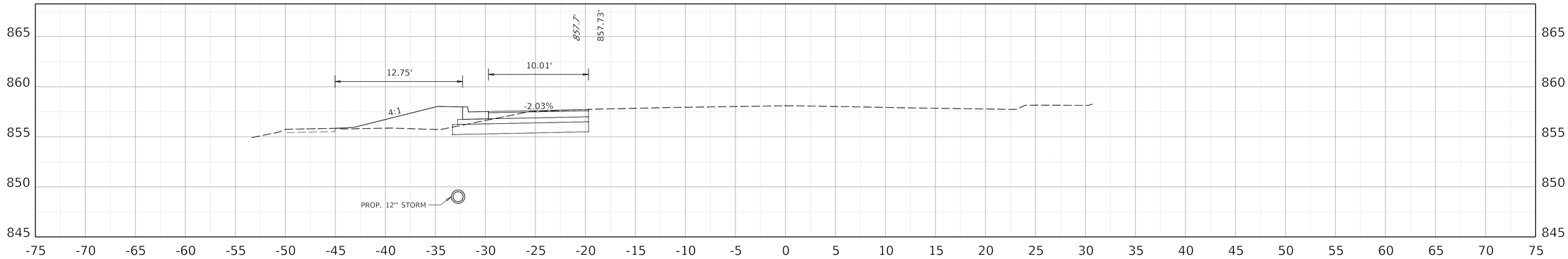
DRAWING TITLE: DIXIE HIGHWAY CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

STA. 23+75.00 TO STA. 26+00.00

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. X15



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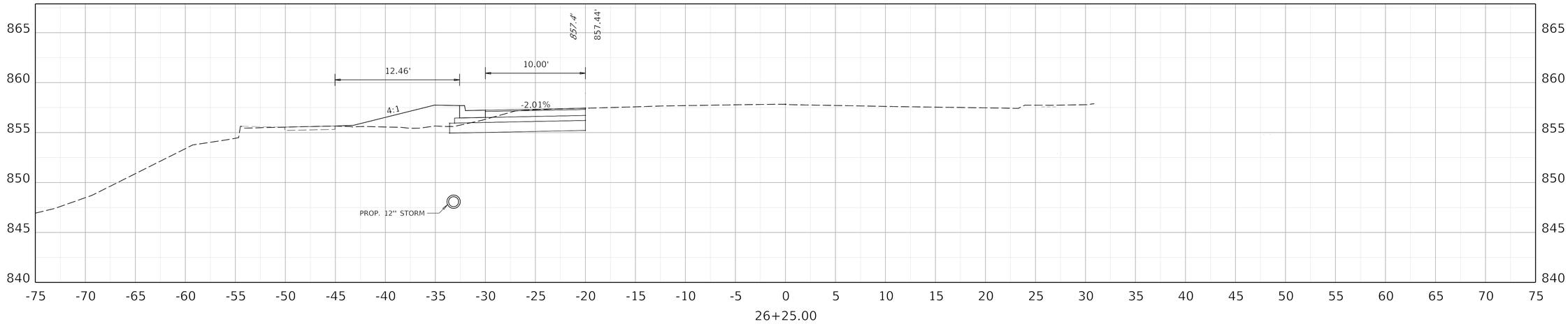


26+25.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: DIXIE HIGHWAY CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

STA. 26+25.00 TO STA. 26+50.00

ITEM NO. 10174

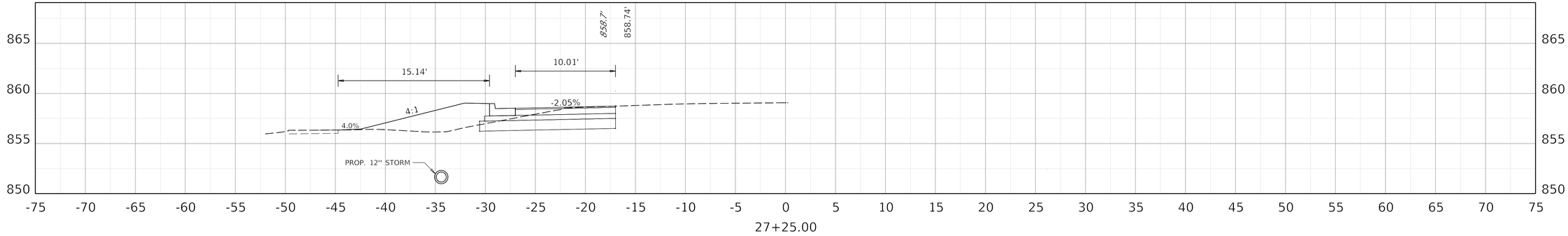
COUNTY OF Kenton

SHEET NO. X16

OpenRoads Designer v10.12.02.4

USER: jyerramsetty

FILE NAME: Z:\PROJECTS\10174-SUNNYMEDE AT DIXIE REALIGNMENT\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10174_DIXIE CROSS SECTION SHEET.DGN



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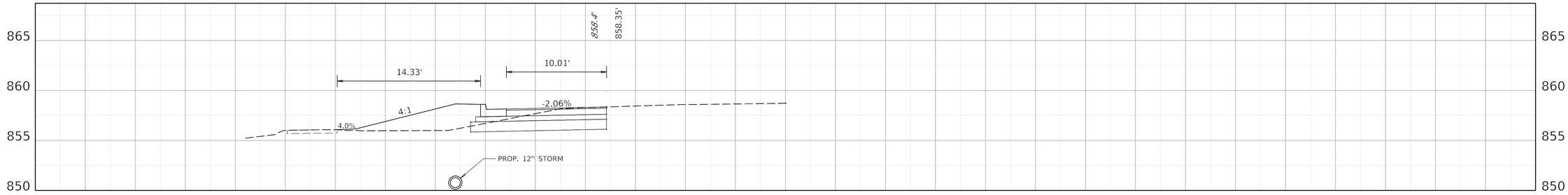

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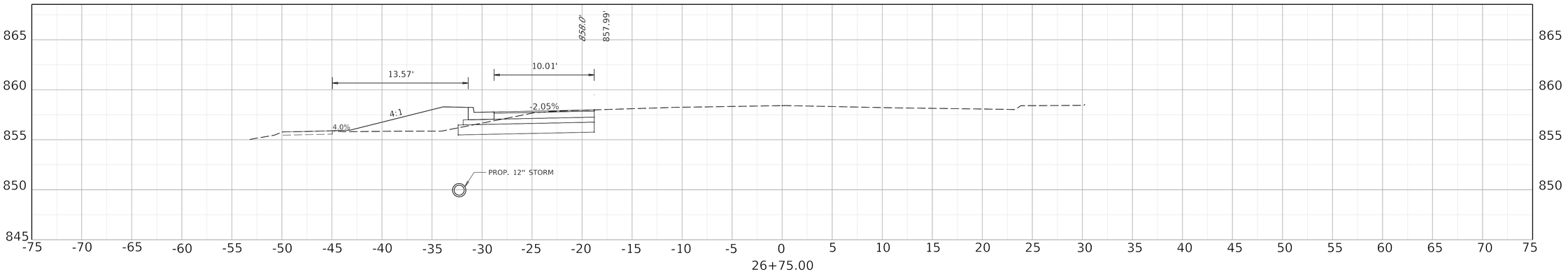

26+75.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY Transportation Cabinet

DRAWING TITLE: DIXIE HIGHWAY CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

STA. 26+75.00 TO STA. 27+25.00

ITEM NO. 10174

COUNTY OF Kenton

SHEET NO. X17

OpenRoads Designer v10.12.02.4

USER: jyerramsetty

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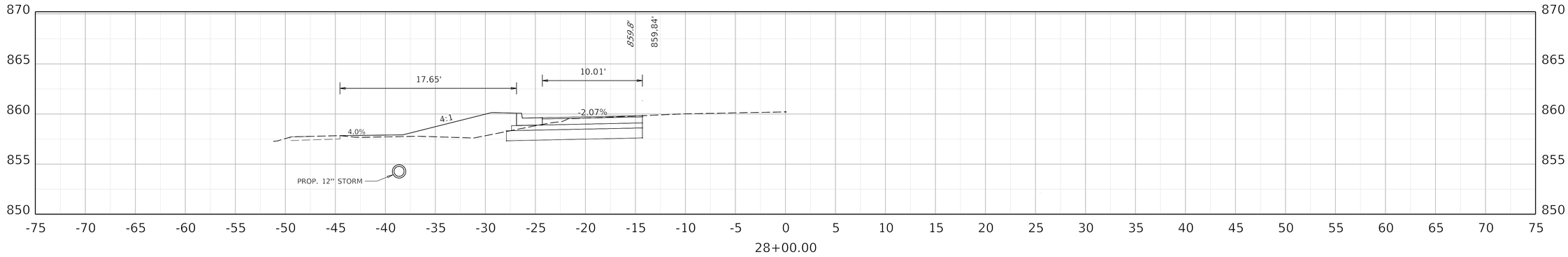

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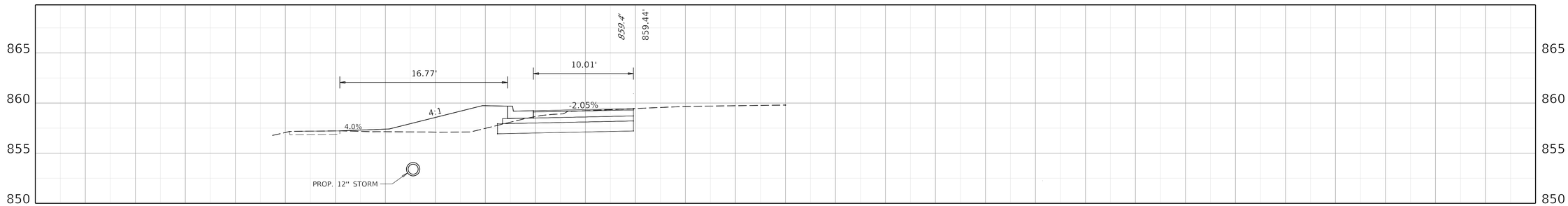

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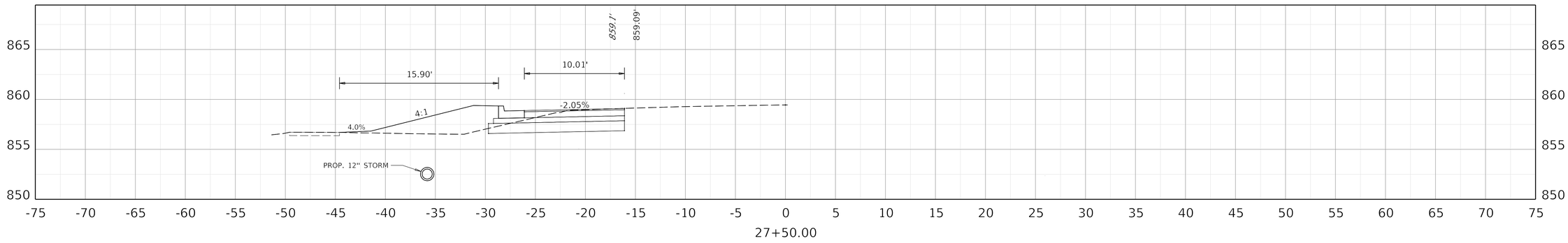

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COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: DIXIE HIGHWAY CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

STA. 27+50.00 TO STA. 28+00.00

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. X18

OpenRoads Designer v10.12.02.4

USER: jyerramsetty

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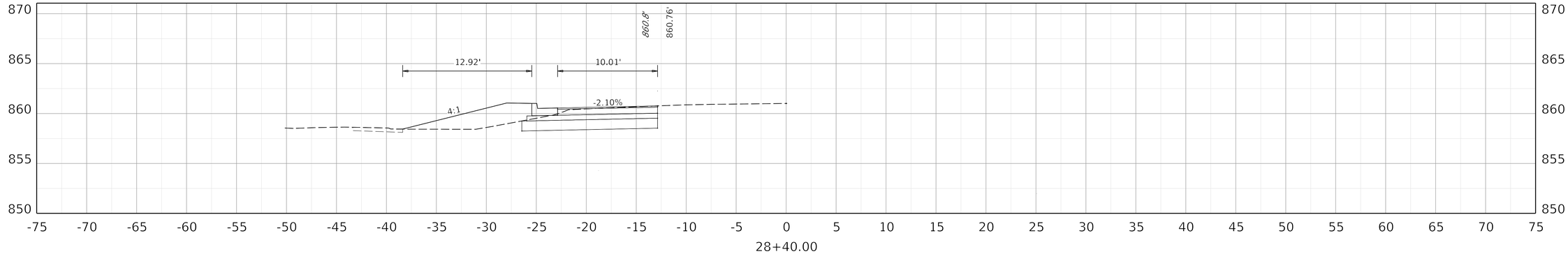

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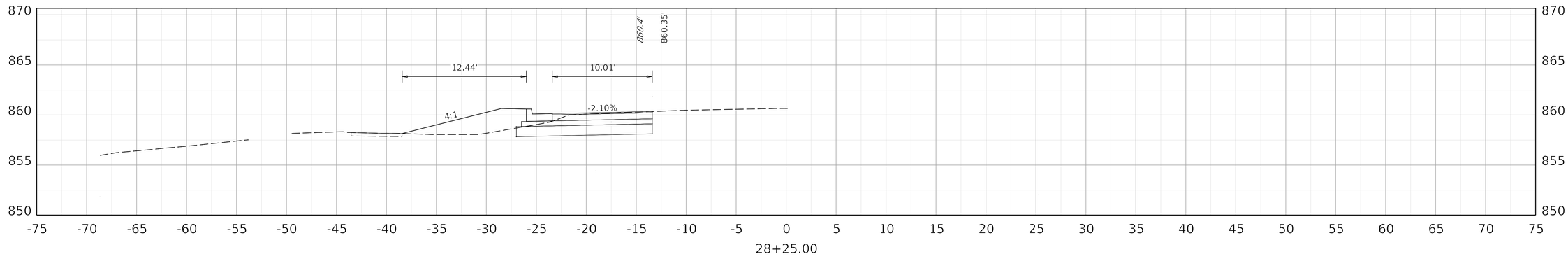

28+25.00

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

TEAM KENTUCKY
TRANSPORTATION CABINET

DRAWING TITLE: DIXIE HIGHWAY CROSS SECTIONS

HORIZONTAL SCALE
SCALE: 1" = 5'

0' 5' 10' 20'

STA. 28+25.00 TO STA. 28+40.00

ITEM NO. 10174

COUNTY OF Kenton

SHEET NO. X19

OpenRoads Designer v10.12.02.4

USER: jyerramsetty

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WATER MAIN CONSTRUCTION NOTES:

1.) The Contractor must submit documentation of similar experience to the Northern Kentucky Water District (NKWD) for their approval for consideration of the bid. The contractor will schedule a preconstruction meeting with the NKWD prior to starting construction.

2.) Prior to starting construction of the main, the contractor shall expose the existing main at the tie-in points at the ends of the project and at the intersecting streets for verification by NKWD.

3.) The shutdown period for transfer to the new main will be coordinated with NKWD.

4.) The existing watermains shall remain in service at all times during construction. The contractor shall obtain approval and coordinate all temporary disconnection of service, shut downs, transfer to the new main or taps of the watermain with the NKWD. Every reasonable effort shall be made to provide water service at all times during construction.

5.) All watermain construction shall conform to the latest edition of the NKWD Standard Specifications & Drawings for the installation of watermains.

6.) All water main shall be C 900 PVC push on joint pipe (DR 18, pressure class 150) AWWA C-900 w/tracing wire and DIP Class 50 push on joint pipe with polyethylene wrap and tracing wire as noted on the plans.

7.) Maximum deflection at pipe joints shall be per manufacturer's specifications but not to exceed five degrees (5°) for 6", 8", & 12" watermains and three degrees (3°) for 16" watermains.

8.) All fittings, bends, valves & fire hydrant leads shall be ductile iron with ployethhylene wrap.

9.) All thrust blocking shall be constructed per NKWD Standard Specifications and Drawings.

10.) Trenching, bedding & backfilling shall be completed per the NKWD Specifications with low strength mortar backfill required in pavement limits and within 2' of the edge of pavement.

11.) Concrete for drives, sidewalks, curbs & pavement shall be KDOT 601 Class AA, fc' = 4000 psi 28 day compressive strength mix. Concrete for pavement replacement areas shall be a minimum 8" thick.

12.) Expansion material shall be 1/2" thick & installed at the following:
A.) At all concrete pavement, drives, curbs, walks, etc,
B.) At all fixed objects (i.e. - utility covers, valves, mahnoles, etc.)
C.) At all rigid structures (i.e. - drives, curbs, steps, etc.)

13.) Asphalt surface mixture for pavement replacement areas shall be 1/2" depth per Kentucky Transportation Cabinet Spec. 403. Tack coat & edge sealing shall be provided at all sawcuts and joints.

14.) Contractor to provide sufficient signs, warning lights, barricades or other necessary devices to maintain traffic at all times per the Manual on Uniform Traffic Control Devices (MUTCD). Every reasonable effort shall be made to keep all roads open at all times & written approval is required for any proposed closure. Residents should also be provided access to their drives at all times & in the event of driveway reconstruction, the homeowner shall be notified & on street parking shall be provided.

15.) All disturbed areas are to be restored (seeded and mulched) by the contractor & shall proceed with job progression. The contractor shall also be responsible for removing any excess materials at the site & shall maintain all seeded and mulched area until project completion & final inspection. A residential yard shall be restored within thirty (30) days after construction.

16.) All trenches shall be properly secured and barricaded during construction and at the end of each construction day.

17.) All O.S.H.A., State , & local safety regulations shall be followed during construction of this project.

18.) All water main shall have a minimum 42" of cover for 6" & 8" and 48" for 12" & 16" unless otherwise shown or noted on the plans.

19.) The proposed water main profile has been provided in these plans. The price of all fittings, valves, hydrants etc. shall include all required extensions for proper finish elevation.

20.) The location of the existing utilities shown are approximate. All utilities should be feild marked & their loaction (horz & vert.) be verified prior to construction.

21.) The cover on all existing water mains are assumed to be 3' to the top of the main. The depths of all mains at crossovers, etc. shall be feild verified. Lower water main under utilities as required.

22.) Water mains crossing sewers shall be laid to provide a vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either abobve or below the sewer. The crossing shall be arranged so that the water main joints will be equidistant and as far as possible from the sewer joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to prevent damage to the water main.

23.) Water mains shall be laid at least 10 feet horizontally from any existing or proposed sewer. The distance shall be measured edge to edge.

24.) Please contact the design engineer before making any deviations greater than reasonable construction tolerances from the plans or specifications.

25.) The contractor shall be responsible for abandoning the existing main upon installation of and transfer of water service to the new water main. The contractor shall also remove and abandon all existing valve boxes, covers and assemblies and fire hydrants and backfill with low strength mortar at the direction of NKWD. Cost is incidental to the contract and no additional payments will be made.

26.) The details shown on this page are for information purposes only. Refer to the latest edition of the NKWD Standard Specifications and Drawings for the installion of Water Mains for the most current details and notes.

27.) All applicable recommendations in Kentucky's Best Management Practices manual shall be followed by the contractor, including inlet protection and seeding of distured ground.

28.) The contractor shall limit their work area to the rights-of-way & easements as shown on these plans unless written permission is given by the property owner an approved by N.K.W.D.

UTILITIES:

1. The Contractor shall verify the locations and elevations of all existing utilities prior to construction. The locvations and elevations of existing utilities, as indicated on the drawings, are for informational purposes only. No responsibility is assumed for the accuracy or completeness of this information. All utilities must be marked and their horizontal and vertical loaction feild verified by the Contractor prior to starting construction. The Contractor shall not cut or disconnect any existing utilities without prior approval from the appropriate agency.

2. During construction the contractor shall protect from damage all existing, whether shown on the contract drawings or not. If damage is caused, the contractor shall be responsible for the repair or restoration of same to the satisfaction of the Owner or Utility Owner at the contractor's sole expense. Electric service, gas service,water service, telephone and cable service, and other utility lines may be located in the proximity of the work area. The Contractor shall be responsible for:

a. Contacting the individual utility owner ten (10) days prior to construction and advising them of the work to take place.
b. Solicting their aid in locating and protecting or relocating any utility that may interfere with construction.
c. Test pitting and verifying the horizontal and vertical location for each utility in the project vicnity before starting construction.
d. All damage to any existing utility, and repair thereof.
e. Contacting the Kentucky Underground Protection Inc. (KUPI 1-800-752-6007) 48 hours minimum prior to construction.
f. Contractor shall perform all work necessary to restore all existing utilities whether shown or not, encountered or disturbed during construction to before construction conditions or better, as acceptable to the utility owner.

3. Where potential elevation conflicts may occur with existing utilities, the Contractor shall uncover such utilities sufficiently in advance of construction in order that exact elevations may be determined and the necessary adjustment made. The cost of the location and adjustment work, if any, shall be included in total cost for the project. No additional payments will be made.

4. Adjustments to line and grade of the new piping or existing utilities shall be made by the Contractor to avoid conflicts with the existing utilities and new piping.
a. Any adjustments in line of the new piping shall be at the Contractor's sole expense. No additional payment will be made.
b. Adjustments in depth of 24.0-inches or less necessary for the new pipeline or existing utility or grade conflicts shall be installed as directed by the Owner's representative. All Costs for this work shall be included in the Contractor's Bid. No additional costs will be paid by the Owner.

5. The following are known owners of utilities in the project area, and shall be notified 48 hours prior to construction to feild-locate said utilities:

GAS AND ELECTRIC
Duke Energy
Elecr: Zach Hofstetter zach.hofstetter@duke-energy.com
Gas: Scott Pfefferman scott.pfefferman@duke-energy.com
2010 Dana Avenue - EF 324
Cincinnati, OH 45207

CABLE TV
Spectrum
Chris Gapinski
10920 Kenwood Road
Blue Ash, OH 45242
chris.gapinski@charter.com

SANITARY SEWER
Sanitation District No. 1
Andy Aman (859) 578-6880
1045 Eaton Drive
Fort Wright, KY 41017

TELEPHONE
Altafiber
Sarah Brewer
201 E. Fourth Street, Bldg. 343
Cincinnati, OH 45202
sarah.brewer@altafiber.com

WATER
NORTHERN KENTUCKY WATER DISTRICT
2835 Crescent Springs Road
P.O. Box 18640
Erlanger, KY 41018
(859) 426-2718

STORM WATER
Sanitation District No. 1
Jason Burlage (859) 578-6892
1045 Eaton Drive
Fort Wright, KY 41017

6. Contractor shall be responsible for coordinating support or temporary relocation of all existing overhead utilities affected by the proposed construction.

a. Where pole or anchors that support overhead electric facilities are exposed or otherwise interfered with, the contractor shall coordinate with the utility to protect them from damage and provide temporary support to insure the integrity of the system. As soon as feasible, the contractor shall take additional appropriate steps to provide permanent measures to restore support. The methods used shall be based on conditions to be determined by the utility.

b. Where the depth of excavation for the proposed work is greater thhan 5 feet, the contractor shall sheet and shore the trench and coordinate with the utility to continuously maintain the support of electric facilities at loaction where the electric facilities are within the zone of influence adjacent to the excavation as determined by the natural angle of the repose of the soil.

c. All damages to electric facilities and services requiring adjustments, relocations and/or repairs will be made at the contractor's cost.

Contractor shall not backfill exposed electric facilities until the company has inspected its facility or performed any adjustments and/or maintenance that may be required.

PAVING

1. All pavement cuts shall be saw cut and neatly patched to match existing pavement section. All costs for such pavement cuts, patching, and overlays as required shall be included in contractor's bid.

2. Contractor shall restore disturbed pavement after construction, shall minimize inconvenience to traffic during construction, and shall provide smooth transitions to existing pavement. paving materials and construction there of shall be in accordance with the KYTC standard specifications and the project specifications.

3. Construction access roads, existing pavement or gravel roads, and driveways if removed, disturbed, or damaged by contractor's work shall be maintained by contractor and restored or replaced to existing or better than pre-construction conditions after work is complete. the cost of this restoration or replacement shall be included in the total cost for the project. No additional payment will be made.

SAFETY ADVISORY:

1. Protection of persons and property: Barricade open excavations occuring as part of this work as required to maintain vehicular and pedestrian safety. Provide all necessary barriers, warning lights, signage, flagman, and other measures as required to maintain public safety as designated on the plans, directed by the owner, and as recommended by other authorities having jurisdiction.

PROHIBITED CONSTRUCTION ACTIVITIES:

1. Indiscriminate or arbitary operation of equipment outside the easement/right-of-way limits is prohibited.

2. Pumping of sediment-laden water from trenches or other excavtaion directly into storm sewers is prohibited; all such water shall be properly filtered or settled to remove silt prior to discharging into any drain.

CLEARING & GRUBBING & PROTECTION OF TREES:

1. Clearing and grubbing shall not commence until the contractor is prepared to start construction, and erosion control measures are installed and in place. Contractor shall be responsible to dispose of all stumps, brush, debris, and trees in a legal and environmentally sound manner. Items shall be removed only as directed by the owner or engineer.

2. The contractor shall avoid any unnecessary damage to trees, within temporary construction limit or easement areas without the prior approval of the owner and engineer; this includes work and staging areas obtained by the contractor by means of private agreement with property owners. Tree branches which overhang the construction limits and which interfere with the operation of equipment shall be tied back to avoid damage. Where injury to branches is unavoidable, the branches shall be sawed off nearly at the trunk or main branch and the cut area shall be painted with approved tree paint immediately. Any trees damaged beyond saving shall be removed by contractor at his own expense. In the case of trees located outside the construction limit area, restitution acceptable to the property owner shall be provided by the contractor.

EROSION AND SEDIMENTATION CONTROL:

1. Provide and maintain erosion protection using straw bales, inlet protection, etc. and any other erosion prone areas as directed by the Owner or Engineer. This requirement pertains also to haul and access roads. Note details for erosion protection elsewhere within the drawings and specifications. Erosion control measures shall be installed prior to intial construction activities or as soon as practical.

2. The Contractor shall control wastes, garbage, debris, wastewater, and other substances on the site in such a way that they shall not be transported from the site by the action of winds, storm water runoff, or other forces. Proper disposal or management of all wastes and unused building material, appropriate to the nature of the waste or material, is required. Compliance is required with all state or local regulations regarding waste disposal, sanitary sewer, or septic systems.

3. Remove only those trees required for actual construction.

4. Immediately following trench backfill, rough grade all disturbed areas and permanently stabilize each disturbed area with perennial vegetation installed according to the landscaping section of the specifications. If final grading and seeding will not occur within 15 days, all disturbed areas shall be temporarily seeded and/or mulched immediately.

5. Final grading shall be considered with pre-construction topography. Final grading shall be completed in any given area as soon as it ius no longer needed for trafficking of equipment and materials. Final restoration shall immediately follow final grading.

6. All excess spoil material is to be removed promptly and disposed of in an environmentally sound manner. If such material is wasted on site, it shall be seeded immediately, waste or disposal areas and construction roads shall be located and constructed in a manner that shall keep sediment from roadways.

7. All temporary erosion and sediment control practices shall be removed and disposed of within thirty days after final site stabilization is achieved or after the temporary practices are no longer needed. Trapped sediment shall be permanently stabilized to prevent further erosion.

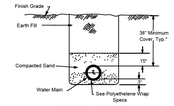
8. If work is suspended for any reason, the Contractor shall maintain the erosion and sedimentation controls during the suspension at no additional cost to the Owner.

WATER MAIN			
ITEM	DESCRIPTION	UNIT	PROJECT TOTALS
6.03	C-900, C-909 Poly Vinyl Chloride (PVC) (8") (Detail 103, 103a, 104, 104a, 110)	LF	460
6.03B	C-900, C-909 Poly Vinyl Chloride (PVC) (8") - RESTRAINED JOINT	LF	380
7.01	CONNECT TO EXISTING MAIN/TIE-IN (6")	EACH	2
8.01	INSTALL FIRE HYDRANT ASSEMBLY	EACH	1
8.03	REMOVE FIRE HYDRANT	EACH	1
9.01	DUCTILE IRON RESILIENT SEATED GATE VALVE (6")	EACH	3
10.02	REPLACE SERVICE LINE AND INSTALL WATER METER SETTING (3/4") (Service line materials provided by NKWD)	EACH	11
11.06	ANCHORING TEE AND BLOCK (6"x6"x6")	EACH	1
11.06	ANCHORING TEE AND BLOCK (8"x8"x6")	EACH	1
11.09	REDUCER (8"x6")	EACH	2
11.15	SLEEVE OUT EXISTING WYE	EACH	1
12.09	CONCRETE PAVEMENT (4" temporary trench restoration)	SY	260
12.14	BEST MANAGEMENT PRACTICE	LS	1

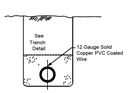
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: WATER MAIN NOTES

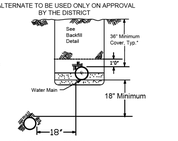
ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. W1



EARTH CUTS
TRENCH DETAIL

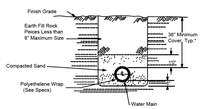


PVC PIPE

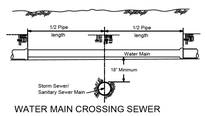


Water Main must be located a minimum of 10 feet lateral distance from anyexisting or future sewer lines or manholes, or as shown in the above alternate.

WATER MAIN PARALLELING
SEWER MAIN



ROCK CUTS
& UNSTABLE SUBGRADE
TRENCH DETAIL



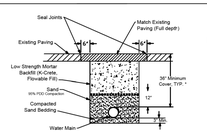
WATER MAIN CROSSING SEWER

SUBDIVISION CONSTRUCTION

* Unless Otherwise Noted

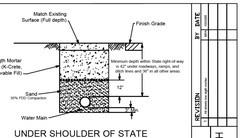
N. KY. WATER DISTRICT
TYPICAL PIPELINE TRENCH DETAIL

BY: DATE
REVISION
DRAWN BY: SAR
APPROVED:
DATE: 2/1/2021
STANDARD DRAWING NO. 103

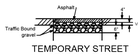


UNDER ASPHALT CONCRETE
PAVEMENT

PDD= Standard Proctor Dry Density
-ASTM D698

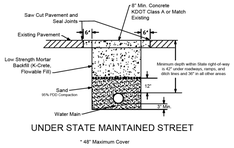


UNDER SHOULDER OF STATE
MAINTAINED STREET



TEMPORARY STREET
RESTORATION

UNDER CONCRETE PAVEMENT



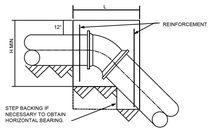
UNDER STATE MAINTAINED STREET

* 48" Maximum Cover

ALL CONSTRUCTION

N. KY. WATER DISTRICT
TYPICAL PIPELINE TRENCH DETAIL

BY: DATE
REVISION
DRAWN BY: SAR
APPROVED:
DATE: 2/1/2021
STANDARD DRAWING NO. 103-A



SECTION A-A

CONCRETE BACKING FOR VERTICAL BENDS

1. BACKING DESIGNED FOR 3000 POUNDS PER SQUARE FOOT SOIL BEARING AND 150 POUNDS PER SQUARE INCH INTERNAL PRESSURE.

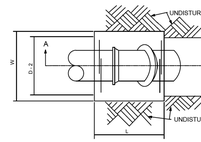
2. PROVIDE MINIMUM CONCRETE REINFORCEMENT OF 2 PAIR OF TWO 5'' ''U'' BARS @ 12'' C.

3. CENTER BACKING ON BEND.

BLOCKING FOR SIZES NOT SHOWN SHALL USE THE NEXT LARGER SIZE.

SIZE OF PIPE	DEGREE OF BEND											
	11 1/4				22 1/2				45			
	L'	W'	H'	VOL	L'	W'	H'	VOL	L'	W'	H'	VOL
4"	12	24	16	2.7	15	30	18	4.7	22	36	24	11.0
8"	12	43	18	5.4	16	48	34	15.1	30	55	24	22.9
8"	12	54	24	9.0	18	57	36	21.4	36	57	33	39.2
12"	20	63	36	26.3	37	62	37	49.2	48	61	51	88.9
16"	31	65	38	44.4	60	65	38	88.2	65	65	65	159.2
20"	45	70	40	73.0	66	70	80	136.4	72	76	78	247.6
24"	47	72	54	106.0	67	74	88	198.4	88	84	84	360.1

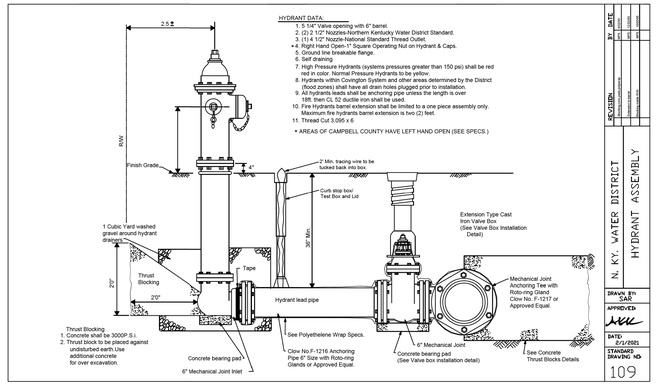
NOTE: VOLUMES GIVEN IN CUBIC FEET



PLAN

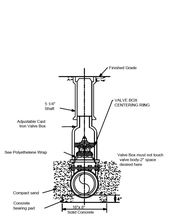
N. KY. WATER DISTRICT
CONCRETE THRUST BLOCKING FOR VERTICAL BENDS

BY: DATE
REVISION
DRAWN BY: SAR
APPROVED:
DATE: 2/1/2021
STANDARD DRAWING NO. 104-A



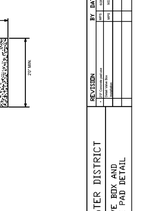
N. KY. WATER DISTRICT
HYDRANT ASSEMBLY

BY: DATE
REVISION
DRAWN BY: SAR
APPROVED:
DATE: 2/1/2021
STANDARD DRAWING NO. 109



Detail Valve Box Installation

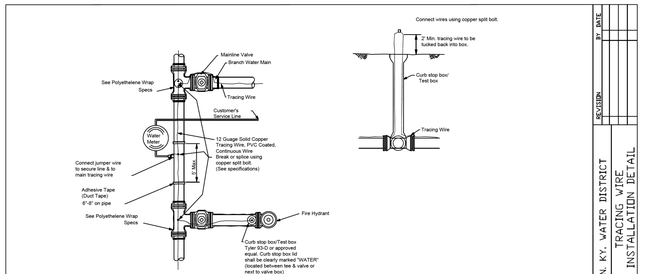
Note:Valve box shall not transmit shock or stress to the valve



ELEVATION

N. KY. WATER DISTRICT
VALVE BOX AND VALVE PAD DETAIL

BY: DATE
REVISION
DRAWN BY: SAR
APPROVED:
DATE: 2/1/2021
STANDARD DRAWING NO. 105

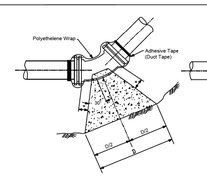


DUCTILE IRON AND PVC PIPE
WITH DUCTILE IRON FITTINGS

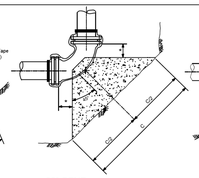
Note: Curb stop box/test box shall not be installed in paved areas.

N. KY. WATER DISTRICT
TRACING WIRE INSTALLATION DETAIL

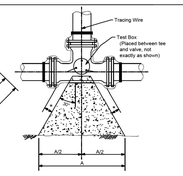
BY: DATE
REVISION
DRAWN BY: SAR
APPROVED:
DATE: 2/1/2021
STANDARD DRAWING NO. 111



45° BEND



90° BEND

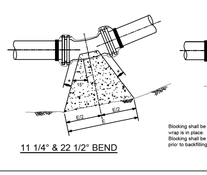


TEE (DEAD END OR FIRE HYDRANT SIMILAR

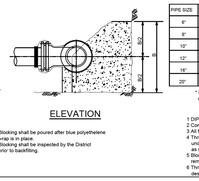
150 PSI/250 PSI

PIPE SIZE	A	B	C	D	E
6"	2'0"/2'6"	1'6"/1'8"	3'0"/3'6"	1'6"/2'0"	1'0"/1'0"
8"	2'6"/3'0"	2'0"/2'0"	3'6"/4'0"	2'0"/2'6"	1'0"/1'6"
10"	3'0"/4'0"	2'6"/2'6"	4'0"/5'0"	2'6"/3'0"	1'6"/1'6"
12"	4'0"/5'0"	3'0"/3'0"	5'0"/6'0"	3'0"/3'6"	1'6"/2'0"
16"	5'0"/6'0"	3'0"/4'0"	7'0"/8'0"	4'0"/4'6"	2'0"/2'0"
20"	6'0"/7'6"	4'0"/5'0"	7'0"/10'0"	4'0"/6'0"	2'0"/3'0"

* Distance to be 1/2" longer than entire length of the bolt used.



11 1/4° & 22 1/2° BEND



ELEVATION

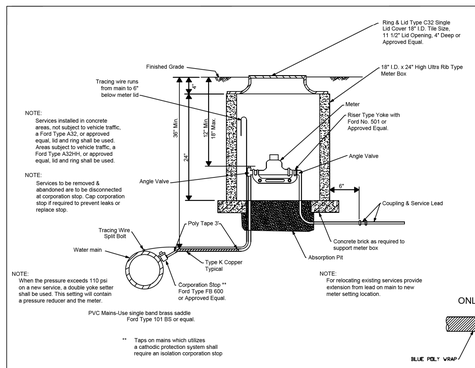
Blocking shall be poured after blue polyethelene wrap is in place.
Blocking shall be inspected by the District prior to backfilling.

NOTES

1 DIP Fittings shall be per specifications.
2 Concrete to be 3500 psi.
3 All fittings to be Mechanical Joint.
4 Thrust blocks to be placed against undisturbed earth - use additional concrete as required for over excavation.
5 Blocking to be placed in a manner so that bolts can be removed without disturbing the fitting.
6 Thrust block bearing surface must be suitable for a design bearing pressure of 2,500 psf.

N. KY. WATER DISTRICT
CONCRETE THRUST BLOCK DETAIL

BY: DATE
REVISION
DRAWN BY: SAR
APPROVED:
DATE: 2/1/2021
STANDARD DRAWING NO. 104

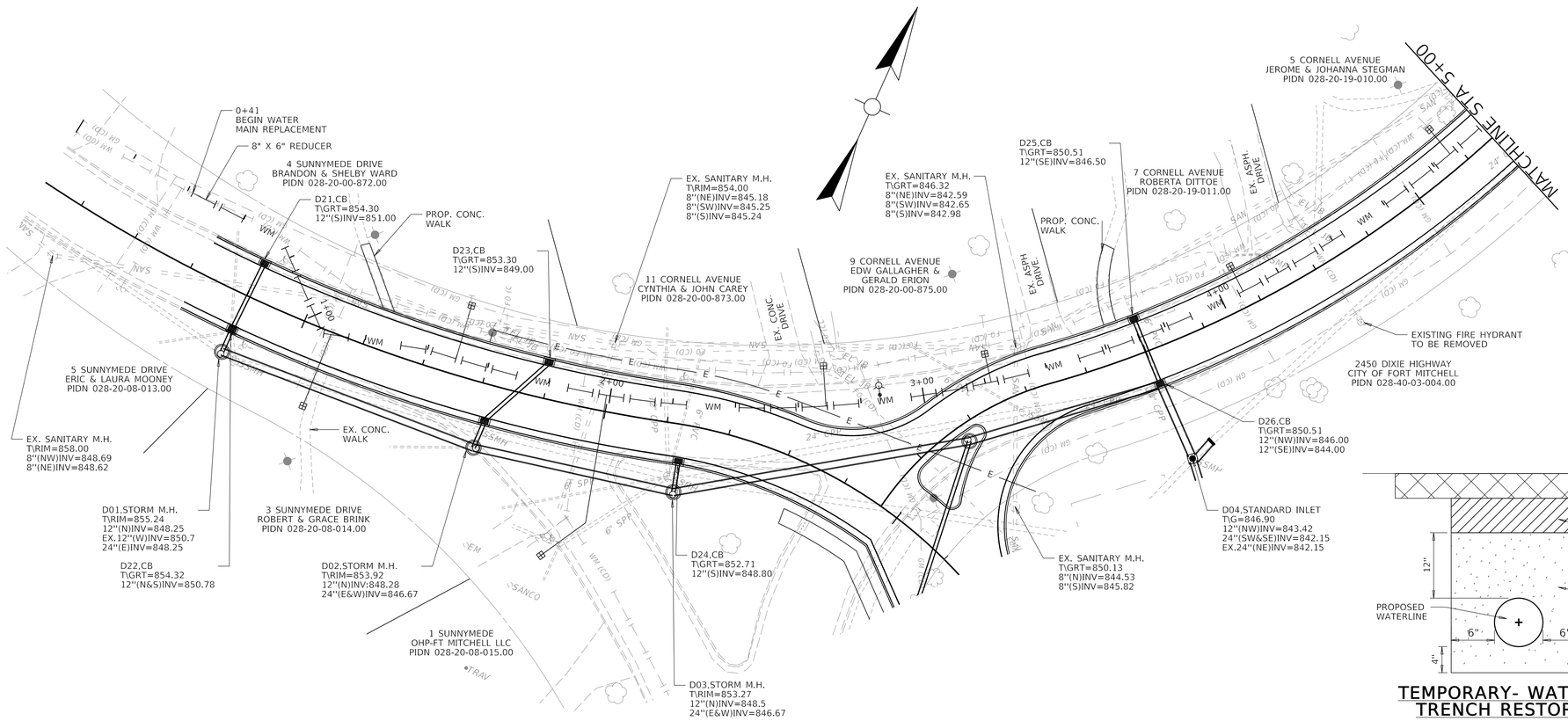


N. KY. WATER DISTRICT
5/8" & 1" METER SETTING COPPER

BY: DATE
REVISION
DRAWN BY: SAR
APPROVED:
DATE: 2/1/2021
STANDARD DRAWING NO. 107

NOTE:

DETAILS ON THIS SHEET ARE FOR REFERENCE ONLY.
CONTRACTOR TO REFER TO THE MOST CURRENT NORTHERN KENTUCKY WATER DISTRICT STANDARD DETAILS AND DRAWINGS.



① PIPE BEDDING
A. COMPACT SAND IN TRENCH LAYERS 6" OR LESS TO WIDTH AND ELEVATION SHOWN.
B. EXCAVATE A GROOVE IN COMPACTED SAND TO CONFORM TO PIPE SHAPE WITH APPROX. 4" OF SAND BELOW BOTTOM OF THE PIPE.
C. INSTALL PIPE AT CORRECT ALIGNMENT AND ELEVATION. RE-COMPACT ANY LOOSE SAND DISTURBED DURING INSTALLATION.

② UNDER ROADWAY PAVEMENT AND WITHIN RIGHT-OF-WAY BACKFILL MATERIAL SHALL BE FLOWABLE FILL.

③ CONTRACTOR TO INSTALL 4" CONCRETE CAP ON TOP OF FLOWABLE FILL.

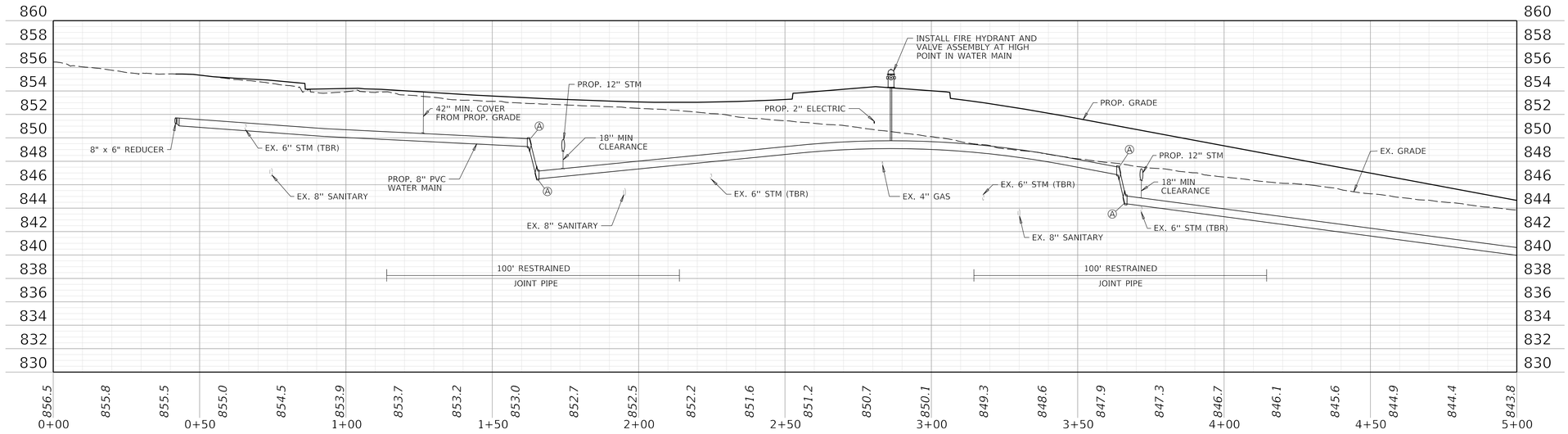
TEMPORARY- WATER MAIN TRENCH RESTORATION

GENERAL NOTES

1. STATIONING FOLLOWS THE LENGTH OF WATER MAIN REPLACEMENT STARTING WITH 0+41 AT THE BEGINNING OF THE NEW MAIN.
2. THE CONTRACTOR SHALL ADJUST ALL WATER METERS TO GRADE UPON COMPLETION OF THE ROADWAY WORK & PRIOR TO FINAL RESTORATION. THE COST TO ADJUST NEW METERS TO GRADE SHALL BE INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL PAYMENT WILL BE MADE.

WATER MAIN REPLACEMENT NOTES

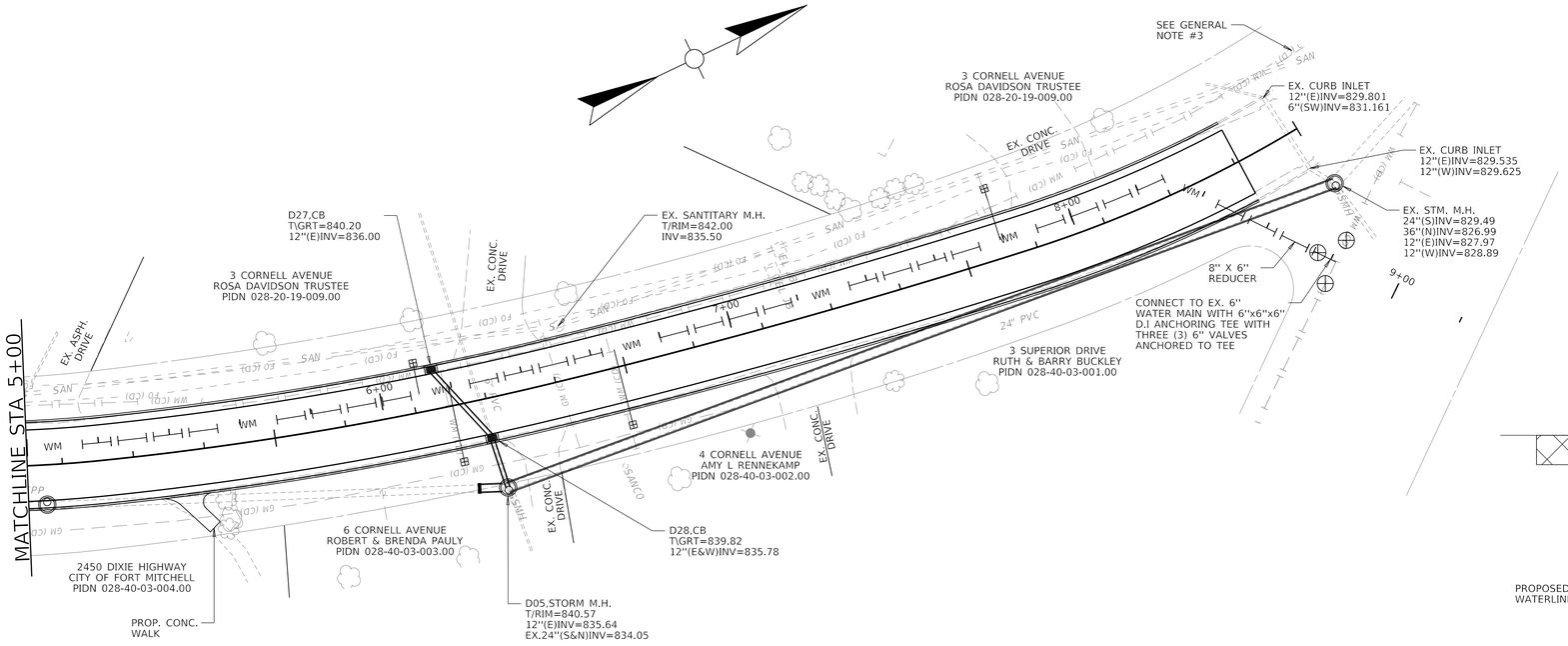
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD LOCATING ALL SANITARY SEWER LATERALS PRIOR TO STARTING WORK AND MAINTAINING SERVICE DURING CONSTRUCTION. THE CONTRACTOR SHALL PRACTICE CARE DURING TRENCH EXCAVATION AND SHALL BE RESPONSIBLE FOR REPLACING ANY SEWER LATERALS THAT ARE DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.
2. ALL WATER METERS SHALL BE PLACED WITHIN THE RIGHT-OF-WAY. IF RIGHT-OF-WAY DOES NOT EXIST, THE NEW METER SHALL BE PLACED IN THE SAME LOCATION AS THE EXISTING METER. THE FINAL METER LOCATION SHALL BE FIELD VERIFIED BY A NKWD REPRESENTATIVE.
3. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE EXISTING WATER MAIN AND ADJUST AS NEEDED TO AVOID POTENTIAL CONFLICTS AS DIRECTED BY THE ENGINEER.
4. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 42" OF COVER, FROM THE PROPOSED ROADWAY PROFILE, FOR ALL SERVICE LINES CROSSING UNDER THE ROADWAY TO AVOID CONFLICTS WITH EDGE DRAIN CONSTRUTCION.
5. THE COST OF TESTING THE MAIN, TEMPORARY FLUSHING DEVICES, TEMPORARY PLUG AND BLOCKS, AND ABANDONING THE EXISTING WATER MAIN SHALL BE INCIDENTAL TO THE PROJECT.
6. ALL DIEMENSIONS TO THE CENTERLINE OF THE PROPOSED WATER MAIN ARE MADE FROM THE BACK OF THE EXISTING CURB OR THE CENTERLINE OF THE STREET.
7. REMOVAL AND REPLACEMENT OF MAILBOXES, LANDSCAPING, HARDSCAPING, ETC. IS INCIDENTAL TO THE PROJECT.



Ⓐ 45° BEND AND BLOCK (VERT)

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	DRAWING TITLE: SUNNYMEDE/CORNELL WATER MAIN REPLACEMENT PLANS	HORIZONTAL SCALE SCALE: 1"=20'	0' 20' 40' 80'	STA. 0+00.00 TO STA. 5+00.00	ITEM NO. 10174 COUNTY OF Kenton SHEET NO. W3

OpenRoads Designer v10.12.02.4 USER: DGohs FILE NAME: Z:\PROJECTS\10192-SUNNYMEDE WATER MAIN RELOCATION\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10192_SHEET NAMED BOUNDARIES.DGN

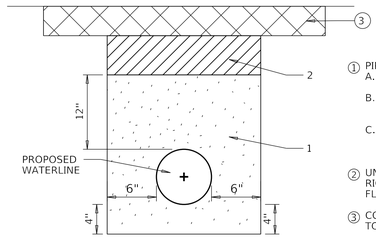


GENERAL NOTES

1. STATIONING FOLLOWS THE LENGTH OF WATER MAIN REPLACEMENT STARTING WITH 0+41 AT THE BEGINNING OF THE NEW MAIN.
2. THE CONTRACTOR SHALL ADJUST ALL WATER METERS TO GRADE UPON COMPLETION OF THE ROADWAY WORK & PRIOR TO FINAL RESTORATION. THE COST TO ADJUST NEW METERS TO GRADE SHALL BE INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL PAYMENT WILL BE MADE.
3. THE CONTRACTOR SHALL REMOVE THE EXISTING WATER MAIN UP TO AND INCLUDING THE EXISTING WYE NEAR PRINCETON AVENUE. THE CONTRACTOR SHALL SLEEVE OUT THE EXISTING WYE.

WATER MAIN REPLACEMENT NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD LOCATING ALL SANITARY SEWER LATERALS PRIOR TO STARTING WORK AND MAINTAINING SERVICE DURING CONSTRUCTION. THE CONTRACTOR SHALL PRACTICE CARE DURING TRENCH EXCAVATION AND SHALL BE RESPONSIBLE FOR REPLACING ANY SEWER LATERALS THAT ARE DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.
2. ALL WATER METERS SHALL BE PLACED WITHIN THE RIGHT-OF-WAY. IF RIGHT-OF-WAY DOES NOT EXIST, THE NEW METER SHALL BE PLACED IN THE SAME LOCATION AS THE EXISTING METER. THE FINAL METER LOCATION SHALL BE FIELD VERIFIED BY A NKWD REPRESENTATIVE.
3. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THE EXISTING WATER MAIN AND ADJUST AS NEEDED TO AVOID POTENTIAL CONFLICTS AS DIRECTED BY THE ENGINEER.
4. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 42" OF COVER, FROM THE PROPOSED ROADWAY PROFILE, FOR ALL SERVICE LINES CROSSING UNDER THE ROADWAY TO AVOID CONFLICTS WITH EDGE DRAIN CONSTRUTCION.
5. THE COST OF TESTING THE MAIN, TEMPORARY FLUSHING DEVICES, TEMPORARY PLUG AND BLOCKS, AND ABANDONING THE EXISTING WATER MAIN SHALL BE INCIDENTAL TO THE PROJECT.
6. ALL DIEMENSIONS TO THE CENTERLINE OF THE PROPOSED WATER MAIN ARE MADE FROM THE BACK OF THE EXISTING CURB OR THE CENTERLINE OF THE STREET.
7. REMOVAL AND REPLACEMENT OF MAILBOXES, LANDSCAPING, HARDSCAPING, ETC. IS INCIDENTAL TO THE PROJECT.

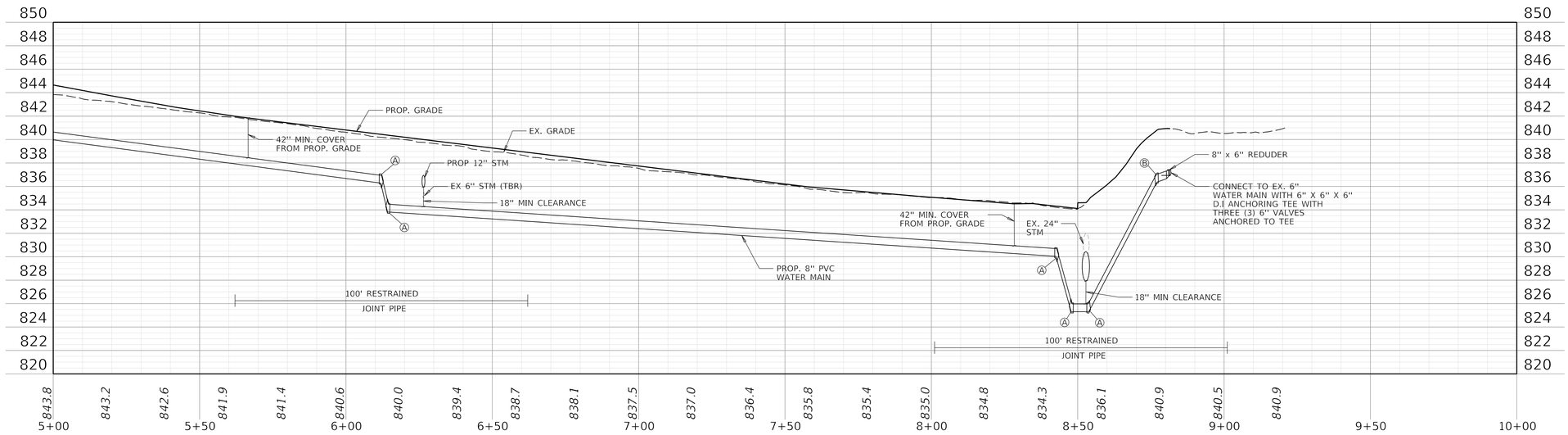


① PIPE BEDDING
A. COMPACT SAND IN TRENCH LAYERS 6" OR LESS TO WIDTH AND ELEVATION SHOWN.
B. EXCAVATE A GROOVE IN COMPACTED SAND TO CONFORM TO PIPE SHAPE WITH APPROX. 4" OF SAND BELOW BOTTOM OF THE PIPE.
C. INSTALL PIPE AT CORRECT ALIGNMENT AND ELEVATION. RE-COMPACT ANY LOOSE SAND DISTURBED DURING INSTALLATION.

② UNDER ROADWAY PAVEMENT AND WITHIN RIGHT-OF-WAY BACKFILL MATERIAL SHALL BE FLOWABLE FILL.

③ CONTRACTOR TO INSTALL 4" CONCRETE CAP ON TOP OF FLOWABLE FILL.

TEMPORARY- WATER MAIN TRENCH RESTORATION



Ⓐ 45° BEND AND BLOCK (VERT.)
Ⓑ 22.5° BEND AND BLOCK (VERT.)

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
TEAM KENTUCKY TRANSPORTATION CABINET

DRAWING TITLE: SUNNYMEDE/CORNELL WATER MAIN REPLACEMENT PLANS

HORIZONTAL SCALE
SCALE: 1"=20'
0' 20' 40' 80'

STA. 5+00.00 TO STA. 10+00.00

ITEM NO. 10174
COUNTY OF Kenton
SHEET NO. W4

OpenRoads Designer v10.12.02.4
USER: DGohs
FILE NAME: Z:\PROJECTS\10192-SUNNYMEDE WATER MAIN RELOCATION\WORKING FOLDERS\HIGHWAY DESIGN\PHASE 1 DESIGN\ALTERNATE X\SHEETS\10192_SHEET NAMED BOUNDARIES.DGN