

PRINT DATE: 03/02/2021 M:\City of Moore\8MOR03_NW_5th_Channel_Improvements\Design\Drawings\8MOR03_0001_Title.dwg

SYMBOL LEGEND

	- CONTROL POINT
	- SURVEYED BENCHMARK
	- AIR RELEASE VALVE
	- ELECTRIC CONTROL BOX
	- MONITORING WELL
	- ELECTRIC METER
	- FIRE HYDRANT
	- FLAG POLE
	- GATE POST
	- GUARD RAIL POST
	- GUY ANCHOR
	- GUY POLE
	- LIGHT POLE
	- MAIL BOX
	- POWER POLE/TELEPHONE POLE
	- MANHOLE SANITARY, STORM
	- SIGN
	- SPIGOT
	- SANITARY SEWER CLEAN OUT
	- SANITARY SEWER LAMPHOLE
	- WATER VALVE
	- WATER METER
	- TELEPHONE BOX
	- TELEPHONE RISER
	- GAS METER
	- GAS VALVE
	- BUSH/HEDGE
	- SMALL CONIFEROUS TREE
	- LARGE CONIFEROUS TREE
	- SMALL DECIDUOUS TREE
	- LARGE DECIDUOUS TREE
	- Fence Line (All Types)
	- OHE - Overhead Electric
	- UGE - Underground Electric
	- OHT - Overhead Telephone
	- UGT - Underground Telephone
	- CATV - Underground Cable Television
	- G - Natural Gas Line
	- FOC - Fiber Optic Cable
	- W - Water Line
	- Existing Storm Sewer
	- SS - Sanitary Sewer Line
	- Proposed C.R.L.

DRAWING REFERENCE LEGEND

	REFERS TO A PROFILE OR ELEVATION
	PROFILE NUMBER
	SHEET NUMBER ON WHICH IT IS LOCATED
	DETAIL DESCRIPTION
	SCALE: 1"=XX'

DATUM INFORMATION

HORIZONTAL DATUM
NAD83 (2011) OKLAHOMA
SOUTH ZONE (3502)

VERTICAL DATUM
NAVD88 (GEOID 12B)

NOTE:

ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH CURRENT CITY OF OKLAHOMA CITY SPECIFICATIONS.

THIS PROJECT COMPLIES WITH ALL OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ) REQUIREMENTS.

2009 OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION SHALL GOVERN. CITY OF MOORE AND CITY OF OKC CURRENT STANDARDS WILL BE USED AS APPLICABLE.

ENTIRE PROJECT IS WITHIN CORPORATE LIMITS OF CITY OF MOORE.

CONTACT INFORMATION

CITY OF MOORE

PUBLIC WORKS
DEPARTMENT
512 NW. 27TH
MOORE, OK 73160
405-793-5070

MOORE POLICE

117 E. MAIN ST.
MOORE, OK 73160
405-793-5171

AT&T

CHRIS BURGESS
(405) 291-6569

COX

MARK BOWLING
(405) 417-4064

OG&E

COLIN BROWN
(405) 831-9668

ONG

TOMMY BROWN
(405) 229-1847

WATER, SEWER, STORM SEWER

ROBERT PISTOLE,
VEOLIA
(405) 627-1842

APPLICABLE SPECIFICATIONS:

CURRENT OKLAHOMA DEPARTMENT OF TRANSPORTATION LATEST EDITION (O.D.O.T.) STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION SHALL BE USED FOR THE TECHNICAL SPECIFICATIONS.

CITY OF OKLAHOMA CITY STANDARD SPECIFICATIONS FOR CONSTRUCTION.

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) REGULATIONS SHALL APPLY FOR ALL WASTE AND SEWER RELATED WORK.

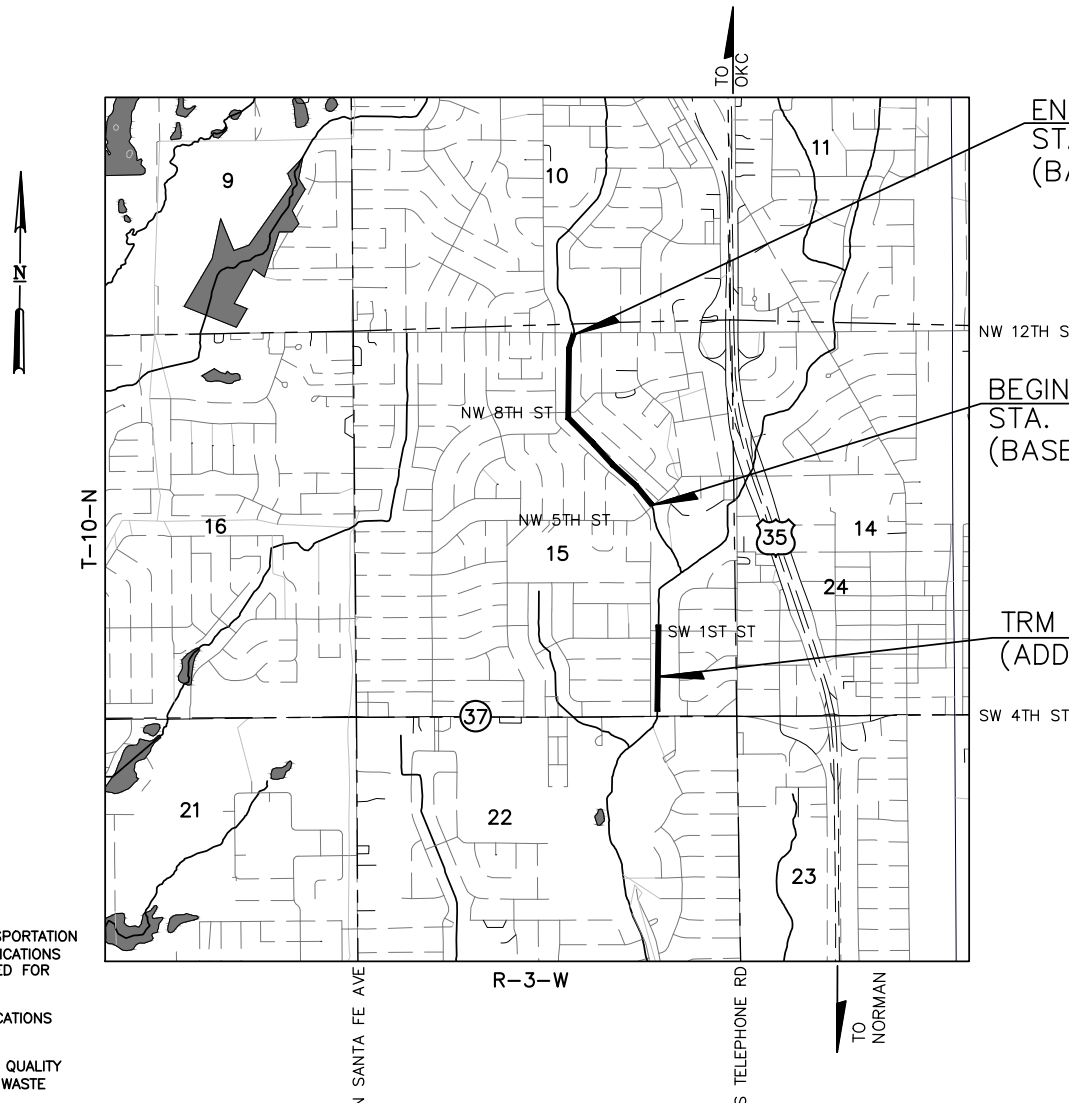
CITY OF MOORE, OKLAHOMA

CONSTRUCTION PLANS FOR

KELLY CREEK DRAINAGE REPLACEMENT

PROJECT NO. 2021-010

CLEVELAND COUNTY



DRAWING INDEX

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APPLICABLE STANDARDS:

ODOT

SSS-1-1	SOLID SLAB SODDING
TSC2-3-2	TEMPORARY SEDIMENT CONTROLS
TSD-2-0	TEMPORARY SILT DIKE
MFC-4-1	MANHOLE FRAME AND COVER
PRM-1-0	PRECAST ROUND MANHOLE
PMD-1-0	PRECAST MANHOLE DETAILS
SPI-4-1	STANDARD PIPE INSTALLATION
SPB-1-4	STANDARD PIPE BEDDING
SBI-5-2	STANDARD BOX INSTALLATION

CITY OF OKLAHOMA CITY

WATERLINE

W-01	BEDDING & TRENCHING DETAILS - PVC PIPE
W-10-11	CAST IRON VALVE BOX, LID & EXTENSION
W-13	PVC PIPE TRACER WIRE INSTALLATION
W-18-19	PIPE BORING AND CASING INSTALLATION
W-41-43	HORIZONTAL THRUST BLOCK - BENDS
W-46-47	VERTICAL THRUST BLOCK - BENDS

Prepared By:
MESHEK & ASSOCIATES, L.L.C.

Harris C. Wilson

HARRIS C. WILSON, P.E.
MESHEK & ASSOCIATES, L.L.C.



3-2-2021
DATE



MESHEK & ASSOCIATES, L.L.C.
C.A. 1487 EXPIRES 6/30/21
1437 S. BOULDER AVE, STE. 1550
TULSA, OK 74119
(PH) 918-392-5620
(FAX) 918-392-5621

SHEET 1 OF 76 SHEETS

2021 CITY OF MOORE, CLEVELAND COUNTY, OKLAHOMA PROJECT NO. 20-2 KELLY CREEK DRAINAGE REPLACEMENT

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GENERAL CONSTRUCTION NOTES

1.

ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE 2009 OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND THE CURRENT CITY OF OKLAHOMA CITY STANDARD SPECIFICATIONS AND STANDARD DETAILS AND STANDARD DRAWINGS.
2.

THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS GOVERNING SAFETY, HEALTH AND SANITATION. THE CONTRACTOR SHALL PROVIDE ALL SAFEGUARDS, SAFETY DEVICES AND PROTECTIVE EQUIPMENT, AND TAKE ANY OTHER NEEDED ACTION ON AS HIS OWN RESPONSIBILITY OR AS THE ENGINEER MAY DETERMINE REASONABLY NECESSARY TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACT.
3.

PAY ITEMS SHALL BE AS SPECIFIED ON THE CITY OF OKLAHOMA CITY OR ON THE ODOT STANDARD DRAWINGS EXCEPT AS MODIFIED BY THE CONTRACT.
4.

THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK IN EACH AREA. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM HIS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES.
5.

THE LOCATIONS OF THE UTILITIES ARE SHOWN ACCORDING TO ALL AVAILABLE INFORMATION. THE CONTRACTOR SHALL NOTIFY EACH UTILITY OWNER PRIOR TO COMMENCEMENT OF WORK TO VERIFY BOTH HORIZONTAL AND VERTICAL LOCATIONS. THE FOLLOWING IS A LIST OF UTILITY OWNERS; AT&T, OKLAHOMA NATURAL GAS (ONG), COX COMMUNICATIONS, CITY OF MOORE-WATER AND SEWER, OG&E. SEE TITLE SHEET FOR CONTACT INFORMATION
6.

THE CONTRACTOR SHALL GIVE THE NOTIFICATION CENTER OF OKLAHOMA ONE-CALL SYSTEM, INC. NOTICE OF ANY EXCAVATION NO SOONER THAN TEN DAYS NOR LATER THAN 48 HOURS , EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS, PRIOR TO THE COMMENCEMENT OF WORK. PHONE 1-800-522-6543.
7.

THE CONTRACTOR SHALL TAKE REASONABLE PRECAUTIONS TO PREVENT EXCESS MOISTURE FROM INCLEMENT WEATHER OR OTHER SOURCES FROM ENTERING ANY STREET EXCAVATION. IF EXCESS MOISTURE DOES ENTER THE EXCAVATION THROUGH THE NEGLIGENCE OF THE CONTRACTOR AND THE ADJOINING PAVEMENT IS ADVERSELY EFFECTED BY THE EXCESS MOISTURE, THE CONTRACTOR SHALL REPLACE THE ADJOINING PAVEMENT AND SUBBASE AT HIS SOLE EXPENSE.
8.

THE CONTRACTOR SHALL PRESERVE THE INTEGRITY OF THE SANITARY SEWER STRUCTURES AND ALL OTHER UTILITY STRUCTURES WITHIN THE PROJECT EXTENTS.
9.

THE CONTRACTOR SHALL WORK IN COOPERATION WITH THE CITY OF MOORE TO ESTABLISH, INSTALL, MAINTAIN, AND OPERATE COMPLETE, ADEQUATE, AND SAFE TRAFFIC CONTROLS DURING THE ENTIRE CONSTRUCTION PERIOD. ALL FLAGMEN, BARRICADES, AND TRAFFIC CONTROL DEVICES SHALL BE APPROVED BY THE FIELD ENGINEERING REPRESENTATIVE.
10.

CONSTRUCTION SIGNAGE WILL BE INSTALLED IN A MANNER APPROVED BY THE ENGINEER, IN ACCORDANCE WITH CHAPTER VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT ADDITION, AND APPLICABLE ODOT STANDARD DRAWINGS. THE CONTRACTOR SHALL PROVIDE A PROPOSED TRAFFIC CONTROL PLAN FOR APPROVAL BY THE ENGINEER PRIOR TO BEGINNING WORK.
11.

THE CONTRACTOR SHALL NOTIFY THE CITY OF MOORE, 405-793-5070, A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK OR PRIOR TO REMOVING TRAFFIC SIGNS.
12.

NOT USED.
13.

THE CONTRACTOR WILL BE RESPONSIBLE FOR PREPARATION AND DISTRIBUTION OF A WRITTEN NOTICE TO RESIDENTS 48 HOURS PRIOR TO BEGINNING PAVEMENT REMOVAL AND MILLING AND OVERLAY OPERATIONS.
14.

LOCAL AND THROUGH TRAFFIC SHALL BE MAINTAINED THROUGH THE PROJECT AT ALL TIMES.
15.

ALL PUBLIC AND PRIVATE STREETS AND DRIVES SHALL BE ACCESSIBLE AT ALL TIMES.
16.

ALL BROKEN CONCRETE, WASTE MATERIAL, AND OTHER DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE LIMITS OF THE PROJECT AND DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE DISPOSAL OF THIS MATERIAL.
17.

ALL EXCAVATED MATERIAL NOT REQUIRED IN THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN A MANNER ACCEPTABLE TO THE ENGINEER WITHOUT COST TO THE CITY. THE CONTRACTOR WILL BE REQUIRED TO OBTAIN AN EARTH CHANGE PERMIT IF ANY MATERIAL IS STORED ON THE PROJECT SITE AND/OR DISPOSED OF WITHIN THE CITY LIMITS.
18.

ALL TREES, BRUSH AND OTHER DEBRIS THAT MIGHT INTERFERE WITH THE FLOW OF WATER IS TO BE CLEANED OUT TO THE RIGHT-OF-WAY LINE IN A MANNER APPROVED BY THE ENGINEER. ALL COST TO BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF WORK. TREES OUTSIDE THE FILL SLOPES AND THE TOP OF CUT SLOPES SHALL NOT BE DISTURBED EXCEPT WITH THE WRITTEN APPROVAL OF THE ENGINEER.
19.

WHERE MATERIALS ARE TRANSPORTED IN THE PROSECUTION OF WORK, VEHICLES SHALL NOT BE LOADED BEYOND THE CAPACITY RECOMMENDED BY THE VEHICLE MANUFACTURER OR AS PRESCRIBED BY ANY FEDERAL, STATE OR LOCAL LAW OR REGULATION.
20.

ANY DAMAGE TO THE ROADWAY PAVEMENT, CURB, DRIVEWAYS OR SIDEWALK CAUSED BY THE CONTRACTOR'S OPERATION SHALL BE REPAIRED TO THE ENGINEER'S SATISFACTION AND SHALL BE ACCOMPLISHED AT THE CONTRACTOR'S SOLE EXPENSE. ALL DISTURBED ITEMS SHALL BE REPAIRED TO MATCH EXISTING MATERIALS AND PATTERNING.
21.

IF THE CONTRACTOR ENCOUNTERS VOIDS WHEN PATCHING STREETS, THE CONTRACTOR SHALL CALL THE CITY OF MOORE FOR AN INSPECTION BEFORE PROCEEDING WITH WORK.
22.

THE PROJECT SHALL BE CONSTRUCTED WITH CONTINUOUS FLOW OF MATERIAL SUPPLIED TO THE PROJECT SUCH THAT THE LAYDOWN MACHINE WILL REMAIN IN MOTION. ANY DELAY IN FORWARD PROGRESSION OF THE LAYDOWN MACHINE MAY REQUIRE A TRANSVERSE JOINT AS DIRECTED BY THE ENGINEER.
23.

NO FLY ASH IS ALLOWED TO BE USED ON THIS PROJECT.

24.

NOT USED.
25.

CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY QUALITY CONTROL TESTING TO ENSURE THAT PROJECT REQUIREMENTS ARE MET.
26.

MASONRY STRUCTURES SHALL NOT BE CONSTRUCTED WITHIN THE STREET RIGHT-OF-WAY.
27.

ALL CONCRETE CURB AND GUTTERS SHALL BE MONOLITHIC POURS. DOWELED-ON CURBS WILL NOT BE ALLOWED.
28.

NO LIFTING HOLES WILL BE ALLOWED ON ANY REINFORCED CONCRETE PIPES OR REINFORCED CONCRETE BOXES.
29.

NOT USED.
30.

REFLECTORIZED SHEETING ON SIGNS AND BARRICADES SHALL BE OF A CUBIC PRISMATIC TYPE AND SHALL MEET THE SPECIFICATIONS ESTABLISHED FOR ASTM D 4956-01 TYPE IX RETROREFLECTIVE SHEETING. REFLECTORIZED SHEETING ON DRUMS AND TUBE CHANNELIZERS SHALL BE OF A HIGH-INTENSITY TYPE AND SHALL MEET THE SPECIFICATIONS ESTABLISHED FOR ASTM D 4956-01 TYPE III RETROREFLECTIVE SHEETING.
31.

ALL SANITARY AND STORM SEWER MANHOLE CASTINGS AND LIDS THAT ARE LOCATED IN THE STREET AND ARE DISTURBED BY THE CONTRACTOR SHALL BE REPLACED WITH NEW LIDS AND CASTINGS AND THE OLD ONES SHALL BE SALVAGED AND DELIVERED TO THE CITY OF MOORE.
32.

NOT USED.
33.

NOT USED.
34.

NOT USED.
35.

THE CONTRACTOR SHALL REPLACE ANY SECTION CORNERS OR OTHER PERMANENT RIGHT OF WAY MARKERS REMOVED OR DISTURBED AS A RESULT OF THE CONSTRUCTION OF THIS PROJECT. REPLACEMENT OF SECTION CORNERS OR ANY OTHER MONUMENTS SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR AUTHORIZED TO PERFORM WORK IN THE STATE OF OKLAHOMA.
36.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL AND MAINTENANCE OF THE STORMWATER DRAINAGE. STORMWATER PONDING ON THE CONSTRUCTION SITE THAT IS THE RESULT OF CONSTRUCTION WILL NOT BE ALLOWED.
37.

STRAW OR HAY BALES AS STORMWATER BEST MANAGEMENT PRACTICES ARE NO LONGER ALLOWED ON CONSTRUCTION PROJECTS.
38.

THE CONTRACTOR MUST CALL 1-800-458-4251 IMMEDIATELY IF A NATURAL GAS PIPELINE IS CUT, DAMAGED, OR OTHERWISE DISTURBED.
39.

PRIOR TO FINAL ACCEPTANCE, ALL EXPOSED CURB SURFACES SHALL BE CLEANED OF ALL DISCOLORATION SUCH AS ASPHALT STAIN, TIRE MARKS, OR OTHER DISFIGUREMENT.
40.

NOT USED.
41.

ALL TRENCH WIDTHS & BEDDING MATERIAL SHALL BE AS SHOWN ON ODOT STANDARD PIPE INSTALLATION DETAIL, STANDARD SPI-4-0. SPECIFIED TRENCH WIDTHS SHALL BE MAINTAINED FULL DEPTH FROM THE FLOWLINE TO THE GRADING TEMPLATE. THE CONTRACTOR SHALL KEEP THE OPEN TRENCH DRAINED.
42.

THE CONTRACTOR SHALL NOTIFY THE CITY OF MOORE, A MINIMUM OF 48 HOURS PRIOR TO COMMENCING WORK, LANE CLOSURES OR PRIOR TO DETOURING TRAFFIC.
43.

CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIALS IN THE FLOODPLAIN.
44.

DUE TO CONSTRUCTION TAKING PLACE IN AN EXISTING DRAINAGE CHANNEL, DEWATERING SHOULD BE ANTICIPATED AND SHALL BE INCLUDED IN THE PRICE BID FOR UNCLASSIFIED EXCAVATION.

GENERAL CONSTRUCTION NOTES					
KELLY CREEK DRAINAGE REPLACEMENT					
CITY OF MOORE					
PLANS AND ESTIMATES PREPARED BY: MESHEK & ASSOCIATES, L.L.C. 1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620					
REVISION	BY	DATE	DRAWN	AD	08/19
			DESIGNED	AD	08/19
			SURVEY	AB	06/19
			C.A. 1487 EXPIRES 6/30/21		
			SHEET: 2 OF 76		

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PAY ITEM NOTES

EARTHWORK / EROSION CONTROL / SITE PREPARATION (E1 - E11)

- E-1:

ALL COSTS FOR REMOVING TREES, SHRUBS, STUMPS, POSTS, AND ALL OTHER DEBRIS AND/OR OBSTRUCTIONS NOT COVERED BY A SEPARATE PAY ITEM ARE INCLUDED IN THE PRICE BID.
- E-2:

ALL EXISTING DRAINAGE STRUCTURES SHALL BE CLEANED AND CLEARED OF ALL SEDIMENTATION AND DEBRIS TO THE RIGHT OF WAY. COST OF CLEARING SHALL BE INCLUDED IN THE PRICE BID.
- E-3:

THE CONTRACTOR SHALL BE PAID FOR UNCLASSIFIED EXCAVATION ON THE BASIS OF PLAN QUANTITY. ANY ADDITIONAL EXCAVATION REQUIRED OR OVERRUN OF PLAN QUANTITY WILL BE PAID FOR ON THE BASIS OF UNIT PRICE BID FOR THE ITEM. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SURVEY TO VERIFY ANY ADDITIONAL QUANTITIES.
- E-4:

UNCLASSIFIED EXCAVATION INCLUDES REMOVAL OF AGGREGATE BASE AND MODIFIED SUBGRADE UNDER EXISTING PAVEMENT TO BE REPAIRED.
- E-5:

THIS QUANTITY INCLUDES AN ADDITIONAL 10% ABOVE PLAN QUANTITY FOR UNDERCUTTING OF UNSUITABLE SUBGRADE MATERIAL OR ADDITIONAL PATCHING AS DIRECTED BY THE ENGINEER.
- E-6:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROL AND MAINTENANCE OF THE STORM WATER DRAINAGE FROM THE CONSTRUCTION SITE. STORM WATER PONDING ON THE CONSTRUCTION SITE THAT IS THE RESULT OF CONSTRUCTION WILL NOT BE ALLOWED. ALL COST ASSOCIATED WITH STORM WATER MANAGEMENT, AS WELL AS REMOVAL OF ALL SILT AND DEBRIS FROM ALL DRAINAGE STRUCTURES, STORM SEWER PIPES AND APPURTENANCES WITHIN THE PROJECT LIMITS AT END OF PROJECT, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THIS ITEM.
- E-7:

EROSION PROTECTION SHALL BE PLACED AS FOLLOWS:
A) AROUND INLETS TO PREVENT INFLOW OF ERODED MATERIAL INTO STORM SEWER SYSTEM;
B) IN LOCATIONS THROUGHOUT PROJECT SITE, AS DETERMINED BY THE ENGINEER, TO PREVENT WASH OF ERODED MATERIAL ONTO ADJACENT PROPERTY;
C) FOR ENTIRE DURATION OF PROJECT, WITH MAINTENANCE AND REPLACEMENTS, AS DIRECTED BY THE ENGINEER;
D) WITH PERIODIC REMOVAL OF SEDIMENT IN ACCORDANCE WITH STORMWATER MANAGEMENT PLAN.
ALL COST FOR ITEMS A-D ABOVE SHALL BE INCLUDED IN UNIT PRICE BID FOR THIS ITEM.
- E-10:

ESTIMATED QUANTITY IS BASED ON SODDING OF ALL DISTURBED AREAS OUTSIDE THE FINAL PAVING LIMITS AND WITHIN THE FINAL GRADING LIMITS AS INDICATED BY THE TOP-OF-CUT/TOE-OF-SLOPE LINE ON THE PLANS (EXCLUDING SURFACES OF STRUCTURES, FIXTURES AND APPURTENANCES). SOD SHALL BE OF LIKE-KIND TO EXISTING SOD. PRICE BID INCLUDES PLACEMENT AND COMPACTION OF SUITABLE BACKFILL. ANY EXISTING GRASSSED AREAS BEYOND THE ABOVE STATED LIMITS THAT ARE DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE RESODDED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S SOLE EXPENSE.
- E-11:

COST OF WATERING AND FERTILIZING SHALL BE INCLUDED. FERTILIZERS SHALL BE 10-20-10 AND SHALL BE APPLIED AT THE RATE OF 1.5 LBS PER 10 SQ YDS. FERTILIZER SHALL BE APPLIED PER SECTION 230.04H OF ODOT STANDARD SPECIFICATIONS. WATERING SHALL BE APPLIED AS NECESSARY UNTIL VEGETATION IS ESTABLISHED OR UNTIL THE WORK IS ACCEPTED AS COMPLETE.

SURFACING / STRUCTURES (S1 - S21)

- S-2:

INCLUDES COMPACTION OF AGGREGATE TO 98% AASHTO T180 MODIFIED PROCTOR.
- S-3:

SEPARATOR FABRIC SHALL BE USED AT ALL PAVEMENT PATCHES AND RECONSTRUCTION SECTIONS. THE SEPARATOR FABRIC SHALL BE CUT AND OVERLAPPED A MINIMUM OF 2 FT AT ALL EDGES OF THE REPAIR.
- S-10:

FOR P.C. CONCRETE TYPICAL SECTIONS, CONTRACTOR MAY SUBSTITUTE INTEGRAL CURB FOR CURB & GUTTER, AND VICE VERSA, ONLY WITH APPROVAL OF THE ENGINEER, WITH NO ADJUSTMENT MADE TO UNIT PRICE OR QUANTITY.
- S-11:

CONCRETE PAVEMENT SHALL BE COMPLETE IN PLACE. NO PARTIAL OR FINAL PAYMENT SHALL BE MADE UNTIL PAVEMENT HAS BEEN SAWED AND SEALED. ANY SECTIONS OF PAVEMENT WITH UNAPPROVED DEVIATIONS FROM THE JOINT LAYOUT PROVIDED IN THE PLANS MAY BE REJECTED AT THE DISCRETION OF THE ENGINEER.
- S-12:

THE USE OF FLY-ASH IN CONCRETE IS PROHIBITED.
- S-13:

INCLUDES ALL COST OF SAWED JOINTS AND SEALING OF ALL JOINTS INCLUDING LONGITUDINAL JOINTS.
- S-14:

UNIT PRICE SHALL INCLUDE COST OF ALL MATERIAL, LABOR, AND EQUIPMENT REQUIRED TO CONSTRUCT WALL PER MANUFACTURER'S RECOMMENDATIONS.
- S-15:

THIS ITEM SHALL BE MEASURED AS THE ACTUAL AMOUNT OF CURB AND/OR GUTTER INSTALLED. NO PAYMENT WILL BE MADE FOR CURB AND/OR GUTTER THROUGH DRIVEWAYS AND INLETS.
- S-16:

CURB, GUTTER, AND/OR SIDEWALK ASSOCIATED WITH THE DRIVEWAY AND THROUGH THE DRIVEWAY IS INCLUDED IN THE COST OF THE DRIVEWAY.

REMOVAL / ADJUSTMENT (R1 - R6)

- R-1:

WASTE MATERIAL TO BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE IN A MANNER APPROVED BY THE ENGINEER.
- R-2:

ALL SAW CUTTING AND REMOVAL SHALL BE INCLUDED IN THE COST OF THE ITEM TO BE ADJUSTED, REMOVED, REPAIRED, OR REPLACED.
- R-3:

PAY ITEM INCLUDES REMOVAL OF ALL STRUCTURES AND OBSTRUCTIONS WITHIN PROJECT LIMITS NOT SPECIFIED BY OTHER ITEMS OF WORK.
- R-4:

INCLUDES SAWING NOT INCLUDED IN OTHER ITEMS OF WORK.
- R-5:

ITEMS TO BE REMOVED MAY OR MAY NOT BE PRESENT IN ANY SPECIFIED CONDITION.
- R-6:

SHALL INCLUDE ALL COSTS ASSOCIATED WITH PLUGGING/ PATCHING HOLES IN EXISTING STRUCTURES TO REMAIN.

GENERAL (G1 - G10)

- G-1:

LOCATIONS TO BE DETERMINED IN THE FIELD AND WORK TO BE PERFORMED AT THE DIRECTION OF THE FIELD ENGINEER. QUANTITY IS ESTIMATED AND MAY BE OMITTED IN ITS ENTIRETY.
- G-3:

CONSTRUCTION STAKING SHALL INCLUDE SURVEYING AND THE FURNISHING, PLACING, AND MAINTAINING OF THE CONSTRUCTION LAYOUT STAKES NECESSARY FOR THE PROPER COMPLETION AND INSPECTION OF THE ENTIRE PROJECT.
- G-4:

THE COST TO REPLACE REMOVED OR DAMAGED SECTION CORNERS AND ALL OTHER PERMANENT RIGHT OF WAY MARKERS SHALL BE INCLUDED IN THE PRICE BID FOR THIS ITEM. NO ADDITIONAL PAYMENT WILL BE MADE.
- G-5:

CONTRACTOR SHALL REPAIR ANY IRRIGATION SYSTEMS DAMAGED OR REQUIRING RELOCATION DURING THE CONSTRUCTION OF THIS PROJECT TO THE SATISFACTION OF THE PROPERTY OWNER AND THE CITY. COST SHALL BE INCLUDED IN THE PRICE BID.
- G-6:

ALL HOUSE NUMBERS SHALL BE REPLACED/ REESTABLISHED THROUGHOUT PROJECT LIMITS. COST TO BE INCLUDED IN THIS PAY ITEM. CONTRACTOR SHALL REESTABLISH DRAINS, ROOF DRAINS AND OTHER DRAINAGE THROUGH THE CURBS IN ACCORDANCE WITH CITY STANDARDS. NO NEW CURB OUTLETS SHALL BE CONSTRUCTED WITHOUT APPROVAL OF THE ENGINEER.
- G-9:

CONTRACTOR SHALL COORDINATE WITH HOMEOWNERS TO RESET ALL PAVERS, LANDSCAPE STONE, PRIVATE SIDEWALKS AND FENCES THAT ARE DISTURBED DURING CONSTRUCTION OPERATIONS. ALL MATERIALS, LABOR, AND EQUIPMENT REQUIRED FOR RESETTING OF SUCH ITEMS IS TO BE INCLUDED IN PRICE BID FOR THIS PAY ITEM.
- G-10:

PAY ITEM INCLUDES ALL MOWING WITHIN THE RIGHT-OF-WAY AS DIRECTED DURING CONSTRUCTION.

DRAINAGE (D1 - D15)

- D-1:

THIS ITEM SHALL INCLUDE THE COST OF NEW MANHOLE FRAME AND COVER.
- D-3:

NO MASONRY STRUCTURES SHALL BE CONSTRUCTED WITHIN THE RIGHT OF WAY.
- D-4:

ADDITIONAL DEPTH IN A MANHOLE SHALL BE MEASURED FROM 6FT AS MEASURED FROM THE TOP OF RIM TO THE LOWEST FLOWLINE.
- D-5:

ALL MANHOLES SHALL BE COMPLETE IN PLACE. THIS PAY ITEM INCLUDES FRAME, COVER, CONCRETE AND ALL OTHER INCIDENTALS REQUIRED FOR PLACEMENT.
- D-6:

ALL SANITARY AND STORM SEWER MANHOLE CASTINGS AND LIDS THAT ARE LOCATED IN THE STREET AND ARE DISTURBED BY THE CONTRACTOR SHALL BE REPLACED WITH NEW LIDS AND CASTINGS AND THE OLD ONES SHALL BE SALVAGED AND DELIVERED TO THE CITY OF MOORE.
- D-8:

CLSM SHALL BE USED TO BACKFILL AROUND STREET CURB INLETS AND REINFORCED CONCRETE PIPE, AS NEEDED, AT THE DIRECTION OF THE ENGINEER.
- D-12:

REINFORCED CONCRETE PIPE TO BE CLASS III. ALL REINFORCED CONCRETE PIPE AND MANHOLES TO BE SUPPLIED WITH AN OMNI-FLEX JOINT GASKET OR APPROVED EQUAL. MASTIC JOINT SEALANT SHALL NOT BE ALLOWED.
- D-13:

THIS PAY ITEM SHALL BE COMPLETE IN PLACE AND SHALL INCLUDE ALL PIPE, STANDARD BEDDING MATERIAL AND TRENCH EXCAVATION, JOINT GASKETS AND ALL OTHER INCIDENTALS. NO ADDITIONAL COST WILL BE MADE. PRIOR TO ACCEPTANCE, INTERIOR OF PIPE SHALL BE INSPECTED FOR DEFECTS USING SELF-PROPELLED MOBILE CLOSED-CIRCUIT CAMERA SYSTEM.
- D-14:

WHERE CORRUGATED POLYPROPYLENE PIPE CONNECTS TO REINFORCED CONCRETE STRUCTURES, CONTRACTOR SHALL ENSURE CONNECTIONS ARE WATER-TIGHT AND FULLY SEALED AGAINST SOIL INFILTRATION.
- D-15:

WHERE CLSM IS USED TO BACKFILL AROUND CORRUGATED POLYPROPYLENE PIPE, THE CONTRACTOR SHALL UTILIZE AN ANCHORING SYSTEM APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. ALL COSTS FOR LABOR, EQUIPMENT AND MATERIALS REQUIRED TO IMPLEMENT APPROVED ANCHORING SYSTEM INCLUDED IN PRICE BID FOR CORRUGATED POLYPROPYLENE PIPE.

TRAFFIC (T1 - T7)

- T-2:

REFLECTORIZED SHEETING ON SIGNS AND BARRICADES SHALL BE OF A CUBIC PRISMATIC TYPE AND SHALL MEET THE SPECIFICATIONS ESTABLISHED FOR ASTM D 4956-01 TYPE IX RETROREFLECTIVE SHEETING. REFLECTORIZED SHEETING ON DRUMS AND TUBE CHANNELIZERS SHALL BE OF A HIGH-INTENSITY TYPE AND SHALL MEET THE SPECIFICATIONS ESTABLISHED FOR ASTM D 4956-01 TYPE III RETROREFLECTIVE SHEETING.
- T-4:

PAYMENT SHALL BE MADE ON A SIGN-DAY BASIS ONLY FOR TRAFFIC CONTROL DEVICES THAT ARE PROPERLY INSTALLED AND IN GOOD WORKING ORDER. COSTS FOR DELIVERY, INSTALLATION, RELOCATION, MAINTENANCE REMOVAL AND REPLACEMENT, AS NEEDED AT THE DISCRETION OF THE ENGINEER, INCLUDED IN UNIT PRICE BID.
- T-5:

IF WARNING LIGHTS ARE TO BE USED ON TRAFFIC CONTROL DEVICES, TYPE "A" LIGHTS SHALL ONLY BE USED ON DEVICES WARNING OF UNEXPECTED HAZARDS, AND SHALL NOT BE USED FOR DELINEATION OF THE TRAVELED WAY. ONLY TYPE "C" WARNING LIGHTS SHALL BE USED FOR DELINEATION OF THE TRAVELED WAY, AND TYPE "C" LIGHTS SHALL NOT BE USED FOR ANY OTHER PURPOSE.

SPECIAL PAY ITEMS

- SP-1:

STANDARD BEDDING MATERIAL TO BE TYPE A AGGREGATE BASE COMPACTED TO 95% STANDARD PROCTOR DENSITY. AGGREGATE BASE IN THE ROADWAY SHALL BE 98% MODIFIED PROCTOR..
- SP-2:

CONTRACTOR SHALL NOTIFY THE CITY PRIOR TO INSTALLATION OF SOD.
- SP-3:

CONTRACTOR SHALL PROVIDE A SEGMENTAL RETAINING WALL DESIGN WITH AN ENGINEER'S SEAL PROVIDED BY THE INSTALLER.

BASE BID

ROADWAY & DRAINAGE PAY ITEMS - BASE BID					
ITEM NUMBER	SPEC NUMBER	ITEM DESCRIPTION	NOTES	UNIT	QUANTITY
1	220	SWPPP DOCUMENTATION AND MANAGEMENT	E-6,7	LS	1.00
2	221(C)	TEMPORARY SILT FENCE	E-7	LF	6,023.00
3	221(F)	TEMPORARY SILT DIKE	E-7	LF	660.00
4	240(A)	REMOVING TREES 6" TO 12" IN DIAMETER		EA	9.00
5	240(A)	REMOVING TREES 19" TO 24" IN DIAMETER		EA	4.00
6	240(A)	REMOVING TREES 25" & MORE IN DIAMETER		EA	2.00
7	325	SEPARATOR FABRIC	S-3	SY	543.00
8	326(B)	GEOGRID REINFORCEMENT		SY	5,255.00
9	501(F)	GRANULAR BACKFILL (#57 CRUSHED STONE)		CY	1,672.00
10	501(G)	CLSM BACKFILL	G-1 D-8	CY	10.00
11	504(F)	HANDRAILING		LF	66.00
12	509(B)	CLASS A CONCRETE	S-12,S-13	CY	2,809.00
13	509(D)	CLASS C CONCRETE	S-12,S-13	CY	14.00
14	510(A)	RETAINING WALL	S-14 SP-3	SY	23.00
15	602(C)	FILTER FABRIC		SY	16,611.00
16	613(E)	(SP) 24" CORRUGATED POLYPROPYLENE PIPE	D-13,14,15 SP-1	LF	40.00
17	613(E)	(SP) 36" CORRUGATED POLYPROPYLENE PIPE	D 13,14,15 SP 1	LF	12.20
18	613(E)	(SP) 48" CORRUGATED POLYPROPYLENE PIPE	D-13,14,15 SP-1	LF	75.00
19	619(B)	REMOVAL OF FENCE	R-1,2,5,6	LF	4,177.00
20	619(B)	REMOVAL OF CONCRETE CHANNEL	R-1,2,5,6	SY	10,106.00
21	624	(PL) WOOD PRIVACY FENCE		LF	4,503.00
22	OKC-200	UNCLASSIFIED EXCAVATION	E-3,4,5 R-1	CY	6,255.00
23	OKC-220	SUBGRADE		SY	11,584.00
24	OKC-225	AGGREGATE BASE TYPE A	E-5 S-2	CY	120.00
25	OKC-304	PORTLAND CEMENT CONCRETE PAVEMENT (6" DOWEL JOINTED)	S-10,11,12,13	SY	418.00
26	OKC-305	CURB AND GUTTER (6" BARRIER)	S-12,13,15,16	LF	168.00
27	OKC-401	STRUCTURAL EXCAVATION		CY	40.00
28	OKC-411	REINFORCING STEEL		LBS	206,315.00
29	OKC-453	REINFORCED CONCRETE PIPE (21")	D 8,12,13 SP 1	LF	8.00
30	OKC-454	STORM SEWER MANHOLE (6' DIA.)	D-1,3,4,5	EA	1.00
31	OKC-454	STORM SEWER MANHOLE ADDED DEPTH (6' DIA.)	D 4	VF	4.00
32	OKC-801	CONSTRUCTION STAKING (CONSTRUCTION SURVEY)	G-3,4	LS	1.00
33	OKC-809	MOBILIZATION		LS	1.00
34	OKC-810	CLEARING AND GRUBBING	E-1,2 G-5,6,9,10 R-1,3,4	LS	1.00
35	OKC-811	STRUCTURE REMOVAL (10' X 6' HEADWALL)	R-1,2,5,6	EA	2.00
36	OKC-811	STRUCTURE REMOVAL (10' X 6' RCB)	R-1,2,5,6	LF	42.00
37	OKC-811	STRUCTURE REMOVAL (PIPE)	R-1,2,5,6	LF	114.00
38	OKC-811	STRUCTURE REMOVAL (MANHOLE)	R-1,2,5,6 D-6	EA	1.00
39	OKC-811	STRUCTURE REMOVAL (HEADWALL)	R-1,2,5,6	EA	4.00
40	OKC-812	REMOVE CURB & GUTTER	R-1,2,5,6	LF	94.00
41	OKC-812	REMOVE PAVEMENT (CONCRETE)	R-1,2,5,6	SY	464.00
42	OKC-813	REMOVE DRIVEWAY	R-1,2,5,6	SY	131.00
43	OKC-823	6" P.C. CONC. DRIVEWAY (HES)	S-12,13,16	SY	150.00
44	OKC-828	FENCE - TYPE II (STANDARD CHAIN LINK FENCE)		LF	416.00
45	OKC-840	SOLID SLAB SODDING (U-3 BERNUDA)	E-10,11 SP-2	SY	11,100.00

TRAFFIC CONTROL PAY ITEMS - BASE BID					
ITEM NUMBER	SPEC NUMBER	ITEM DESCRIPTION	NOTES	UNIT	QUANTITY
46	880(B)	CONSTRUCTION SIGNS 0 SF TO 6.25 SF	T-2,4,5	SD	180.00
47	880(B)	CONSTRUCTION SIGNS 6.26 SF TO 15.99 SF	T-2,4,5	SD	270.00
48	880(C)	CONSTRUCTION BARRICADES (TYPE III)	T-2,4,5	SD	180.00
49	880(E)	WARNING LIGHTS (TYPE A)	T-4,5	SD	360.00
50	880(F)	DRUMS	T-2,4,5	SD	1,800.00

ADD ALTERNATE

TRM PAY ITEMS - ADD ALTERNATE					
ITEM NUMBER	SPEC NUMBER	ITEM DESCRIPTION	NOTES	UNIT	QUANTITY
60	221(F)	TEMPORARY SILT DIKE	E 7	LF	264.00
61	227	(SP) TURF REINFORCEMENT MAT		SY	2,315.00
62	619(B)	REMOVAL OF FENCE	R 1,2,5,6	LF	749.00
63	624	(PL) WOOD PRIVACY FENCE		LF	616.00
64	OKC-200	UNCLASSIFIED EXCAVATION	E-3,4,5 R-1	CY	43.00
65	OKC-828	FENCE - TYPE II (STANDARD CHAIN LINK FENCE)		LF	19.00
66	OKC-840	SOLID SLAB SODDING (U-3 BERNUDA)	E-10,11 SP-2	SY	3,019.00

NOTE:

PAY ITEMS LISTED AS OKC ARE FROM THE OKLAHOMA CITY STANDARD CONSTRUCTION SPECIFICATIONS. ALL OTHER ITEMS SHALL REFER TO THE 2009 ODOT STANDARD SPECIFICATION FOR CONSTRUCTION.

PAY ITEMS & NOTES (ROADWAY AND DRAINAGE)					
KELLY CREEK DRAINAGE REPLACEMENT					
CITY OF MOORE					
PLANS AND ESTIMATES PREPARED BY: MESHEK & ASSOCIATES, L.L.C. 1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620					
REVISION	BY	DATE	DRAWN	AD	08/19
			DESIGNED	AD	08/19
			SURVEY	AB	06/19
			C.A. 1487 EXPIRES 6/30/21		
			SHEET: 3 OF 76		

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PRINT DATE: 03/08/2021

WATER CONSTRUCTION NOTES

1. THE CITY OF MOORE SHALL INSPECT ALL TRENCHING, BEDDING, PIPE INSTALLATION, BACKFILL AND COMPACTION.
2. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT STANDARD SPECIFICATIONS AND STANDARD DETAILS, CITY OF OKC.
3. EXISTING SERVICE CONNECTIONS ARE TO BE KEPT IN SERVICE UNTIL CONNECTIONS TO NEW MAIN ARE MADE. ALL SERVICE LINE RECONNECTIONS SHALL BE MADE BY THE CONTRACTOR. SERVICE RECONNECTIONS SHALL BE INSTALLED AS PER CITY OF OKC STANDARD SPECIFICATIONS AND STANDARD DETAILS.
4. MINIMUM COVER OVER WATER LINES SHALL BE AS NOTED ON PLANS.
5. CONTRACTOR SHALL REPLACE EXISTING GRASS WITH SEED/SOD OF SAME TYPE AND VARIETY OR AS NOTED ON PLANS.
6. CONTRACTOR SHALL BORE EXISTING TREES UNDER DRIP LINE, UNLESS DIRECTED OTHERWISE BY ENGINEER.
7. CONTRACTOR SHALL BORE EXISTING DRIVEWAYS, UNLESS DIRECTED OTHERWISE BY ENGINEER.
8. WATER OPERATIONS SHALL OPERATE ALL VALVES ON TRANSMISSION MAINS (16" AND LARGER). CONTRACTOR SHALL OPERATE ALL VALVES ON DISTRIBUTION MAINS (SMALLER THAN 16") WITH THE COORDINATION OF CITY OF MOORE AND IN THE PRESENCE OF A CITY OF MOORE INSPECTOR.

A. ATTEMPTS WILL BE MADE WITH ASSISTANCE FROM THE CONTRACTOR TO NOTIFY ALL AFFECTED CUSTOMERS 48-HOURS IN ADVANCE, PARTICULARLY IF COMMERCIAL OR INDUSTRIAL CUSTOMERS ARE INVOLVED. PRIOR TO SHUTDOWN, THE CONTRACTOR WILL NOTIFY CITY OF MOORE, GIVING AN ESTIMATED DOWNTIME. WATER OPERATIONS WILL NOTIFY THE FIRE DEPARTMENT OF ALL FIRE HYDRANTS OUT OF SERVICE AND WHEN THEY ARE BACK IN SERVICE, BY STREET ADDRESS OR INTERSECTION.

B. WHERE COMMERCIAL, INDUSTRIAL, OR CRITICAL CUSTOMERS ARE AFFECTED, AND FOR ALL LINES 16-INCH AND LARGER IN SIZE, THE CONTRACTOR WILL REQUEST CITY OF MOORE TO SHUT DOWN THE MAIN. THERE WILL BE A MINIMUM OF 48-HOUR NOTICE TO CITY OF MOORE.
9. CONTRACTOR SHALL PROVIDE AT LEAST 48 HOUR NOTICE TO ALL RESIDENTS OR BUSINESSES AFFECTED BEFORE TURNING OFF ANY WATER. CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING DOOR HANGERS ON AFFECTED HOMES AND BUSINESSES.
10. CONTRACTOR SHALL GIVE THE NOTIFICATION CENTER OF THE OKLAHOMA ONE-CALL SYSTEM, INC, NOTICE OF ANY EXCAVATION NO SOONER THAN 48 HOURS OR LATER THAN 10 DAYS, EXCLUDING SATURDAYS, SUNDAYS, LEGAL HOLIDAYS PRIOR TO COMMENCEMENT OF WORK, PHONE 1-800-522-6543.
11. LOCAL AND THROUGH TRAFFIC SHALL BE MAINTAINED THROUGH PROJECT AT ALL TIMES. OPEN CUT STREET CROSSINGS REQUIRE AN APPROVED TRAFFIC CONTROL PLAN WITH TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH CURRENT MUTCD REQUIREMENTS.
12. ANY DAMAGE CAUSED BY CONTRACTOR TO ADJACENT TRAFFIC SIGNAL INFRASTRUCTURE SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE TRAFFIC ENGINEER.
13. PRIOR TO PAVEMENT SAWING AND EXCAVATION NEAR SIGNALIZED INTERSECTION, CONTRACTOR SHALL CONTACT CITY OF MOORE FOR SITE SPECIFIC, UNDERGROUND TRAFFIC UTILITY LOCATES.
14. CONSTRUCTION FOR ALL ENGINEERING SERVICES FACILITIES SHALL BE IN COMPLIANCE WITH THE LATEST EDITION OF TITLE 252, DEPARTMENT OF ENVIRONMENTAL QUALITY, CHAPTER 626, PUBLIC WATER SUPPLY CONSTRUCTION STANDARDS, OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ).
15. ALL EXCAVATED MATERIAL NOT REQUIRED IN OTHER AREAS OF THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN A MANNER ACCEPTABLE TO THE ENGINEER WITHOUT COST TO THE CITY. THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN AN EARTH CHANGE PERMIT IF ANY EXCESS MATERIAL IS TO BE DISPOSED OF WITHIN THE CITY LIMITS OF MOORE.
16. ANY CHANGES FROM APPROVED PLANS SHALL BE SUBMITTED TO THE CITY OF MOORE FOR WRITTEN APPROVAL PRIOR TO INSTALLATION.

WATERLINE PAY ITEM NOTES

1. TESTING, CHLORINATION, AND FLUSHING SHALL BE DONE IN ACCORDANCE WITH THE CITY OF OKC STANDARD SPECIFICATIONS.

A. CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY PLUGS WITH ADEQUATE BLOCKING OR RESTRAINTS, PLUS CORPORATION STOPS, AS DIRECTED BY CITY TESTING PERSONNEL, THEN, ONCE TESTING, CHLORINATION AND FLUSHING BY IS COMPLETED, REMOVE TEMPORARY BLOCKING AND TIE INTO EXISTING SYSTEM, USING FITTINGS SWABBED INTERNALLY WITH 2% BLEACH SOLUTION.

B. TESTING, CHLORINATION, AND FLUSHING OF NEW WATER MAIN SHALL BE PERFORMED ON MAINS WHICH ARE PHYSICALLY DISCONNECTED FROM THE EXISTING WATER SYSTEM. TESTING, CHLORINATION, AND FLUSHING OF NEW WATER MAINS SHALL NOT BE PERFORMED AGAINST VALVES WHICH ARE PHYSICALLY CONNECTED TO EXISTING SYSTEM.

C. ALL COSTS FOR TEMPORARY PLUGS, BLOCKING, RESTRAINING, CORPORATION STOPS, TUBING, THREADED CONNECTIONS, BLEACH AND OTHER INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PIPE.
2. BURIED BOLTS, HARNESS LUGS, AND COUPLINGS SHALL BE GIVEN TWO COATS OF KOPPER'S BITUMASTIC 300-M (DRY MIL THICKNESS OF 16 MILS) OR EQUAL. COST TO BE INCLUDED IN UNIT PRICE BID FOR PIPE AND FITTINGS.
3. CONTRACTOR TO EXCAVATE ALL UTILITY CROSSINGS AHEAD OF PIPE LAYING SO THAT THE GRADES CAN BE ADJUSTED ON THE PROPOSED WATER MAIN TO AVOID UTILITY CONFLICTS. FAILURE TO DO SO SHALL NOT ENTITLE THE CONTRACTOR TO CLAIM EXTRA COMPENSATION FOR ADJUSTMENTS TO THE PROPOSED WATER MAIN. COST FOR EXCAVATING UTILITY CROSSINGS SHALL BE INCLUDED IN UNIT PRICE BID FOR PIPE.
4. CONTRACTOR SHALL ENSURE ALL POLES WHICH ARE AFFECTED BY TRENCHING CONDITIONS ARE BRACED BY OWNERS. PAYMENT SHALL BE INCLUDED IN "TRENCH EXCAVATION AND BACKFILL (0'-10)". NO ADDITIONAL PAYMENT SHALL BE MADE.
5. ALL HYDRANTS, VALVES AND OTHER FITTINGS FROM ABANDONED WATER MAINS SHALL BE SALVAGED AND DELIVERED TO CITY OF MOORE. PAYMENT TO BE MADE UNDER TRENCH EXCAVATION AND BACKFILL (0'-10'). NO ADDITIONAL PAYMENT SHALL BE MADE.
6. CONTRACTOR SHALL REPAIR ANY IRRIGATION SYSTEMS, ROOF DRAINS, AND FENCING DAMAGED IN THE ZONE OF CONSTRUCTION DURING THE COURSE OF CONSTRUCTION TO SATISFACTION OF THE PROPERTY OWNER. PAYMENT SHALL BE INCLUDED IN TRENCH EXCAVATION AND BACKFILL (0'-10'). NO ADDITIONAL PAYMENT SHALL BE MADE.

7. NOT USED.
8. ALL COSTS FOR COMPONENTS NECESSARY TO RESTRAIN JOINTS FOR PIPE AND FITTINGS DESIGNATED RESTRAINED JOINT ("RJ") SHALL BE INCLUDED IN UNIT PRICE BID FOR PIPE OR FITTINGS.

A. DUCTILE IRON PIPE RESTRAINED JOINT SYSTEMS: US PIPE TRFLEX, GRIFFIN SNAPLOK, MCWANE THRUSTLOCK, AMERICAN FLEXRING, EBAA MEGALUG, SMITH-BLAIR CAMLOCK, CLOW TUFGRIP OR EQUAL SHALL BE USED ON THIS PROJECT. SHOULD RJ PIPE BE SPECIFIED THROUGH UNCASSED BORES, ONLY USPIPE TRFLEX, GRIFFIN SNAPLOK, MCWANE THRUSTLOCK, OR AMERICAN FLEXRING IS TO BE USED. LOCKING GASKETS NOT PERMITTED;

B. POLYVINYL CHLORIDE (PVC) RESTRAINED JOINT SYSTEMS: EBAA MEGALUG, STAR STARGRIP OR EQUAL SHALL BE USED ON THIS PROJECT. LOCKING GASKETS NOT PERMITTED; SHOULD RJ PIPE BE SPECIFIED ON BORE CASING IS REQUIRED.

C. HIGH DENSITY POLYETHYLENE (HDPE) RESTRAINED JOINT SYSTEMS: EBAA MEGALUG, STAR STARGRIP OR EQUAL SHALL BE USED ON THIS PROJECT.

NO ADDITIONAL PAYMENT SHALL BE MADE.
9. ALL CUT ENDS AND WHERE SALVAGED FITTINGS HAVE BEEN REMOVED FROM ABANDONED WATER LINES LEFT IN PLACE, SHALL BE PLUGGED WITH 24-IN OF CONCRETE INSIDE THE PIPE. COST OF CONCRETE PLUGGING TO BE INCLUDED IN UNIT PRICE BID FOR PIPE. NO ADDITIONAL PAYMENT SHALL BE MADE.
10. NOT USED.
11. NOT USED.
12. ALL LABOR, MATERIALS, AND EQUIPMENT TO CONNECT PROPOSED WATER MAINS TO EXISTING WATER MAINS ARE INCLUDED IN COST OF SLEEVES/ADAPTORS. CONTRACTOR TO EXCAVATE ALL EXISTING WATER MAINS AHEAD OF PIPE LAYING SO THAT THE GRADES CAN BE ADJUSTED ACCORDINGLY. FAILURE TO DO SO SHALL NOT ENTITLE THE CONTRACTOR TO CLAIM EXTRA COMPENSATION FOR ADJUSTMENTS TO THE PROPOSED WATER MAIN. COST FOR EXCAVATING EXISTING WATER MAINS SHALL BE INCLUDED IN UNIT PRICE BID FOR SLEEVES. NO ADDITIONAL PAYMENT SHALL BE MADE.
13. NOT USED.
14. CONTRACTOR IS REMINDED TO BACKFILL ALL TRENCHES EXCAVATED ACROSS ANY EXISTING OR PROPOSED DRIVING OR PARKING SURFACE WITH 1½ -IN TYPE A AGGREGATE BASE, PLACED IN 8-INCH MAXIMUM LIFTS AND COMPACTED TO 98% MODIFIED PROCTOR DENSITY. COST TO BE INCLUDED IN COST OF TRENCH EXCAVATION AND BACKFILL (0'-10'). NO ADDITIONAL PAYMENT SHALL BE MADE.
15. NOT USED.
16. NOT USED.
17. NOT USED.
18. NOT USED.
19. NOT USED.
20. NOT USED.
21. TOP OF VALVE BOX SHALL BE FLUSH WITH FINISHED GRADE. PAY ITEM INCLUDES THE COST OF PERMANENT TAPS ON EACH SIDE OF THE VALVE WITHIN THE VALVE BOX TO ALLOW INSERTION OF A SMALL METER FOR TESTING TO DETERMINE LEAKAGE AND FOR SAMPLING PURPOSES.
22. THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING IMPROVEMENTS. LIMITS OF DISTURBANCE SHALL NOT EXCEED 9-FEET CENTERED ON THE WATERLINE. ANY DISTURBANCE OUTSIDE OF THIS AREA SHALL BE RESTORED AT THE CONTRACTORS EXPENSE. STREETS, DRIVEWAYS AND ASSOCIATED ITEMS SHALL BE PAID FOR UNDER TRENCH EXCAVATION AND BACKFILL (0'-10').
23. THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AREAS TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION. THE CONTRACTOR SHALL REPLACE THE SOD TO MATCH IN-KIND AND QUALITY. LIMITS OF DISTURBANCE SHALL NOT EXCEED 9-FEET CENTERED ON THE WATERLINE. ANY DISTURBANCE OUTSIDE OF THIS AREA SHALL BE RESTORED AT THE CONTRACTORS EXPENSE.
24. NOT USED.
25. NOT USED.
26. NOT USED.
27. PRESSURE TESTING AND CHLORINATION OF WATER MAINS SHALL NOT BE PERFORMED UNTIL THE CITY INSPECTOR HAS RECEIVED REQUIRED CONSTRUCTION AS-BUILT RECORDS.

SPECIAL PAY ITEMS

SP-1. TRACER WIRE SHALL BE INSTALLED ABOVE ALL PVC PIPE AS PER OKC DETAIL W-13. COST OF TRACER WIRE SHALL BE INCLUDED IN UNIT PRICE BID FOR PVC PIPE.

BASE BID

WATERLINE PAY ITEMS - BASE BID					
ITEM NUMBER	SPEC NUMBER	ITEM DESCRIPTION	NOTES	UNIT	QUANTITY
51	OKC-212	TRENCH EXCAVATION AND BACKFILL (0'-10')	4,5,6,14,22,23	LF	110.00
52	OKC-505	6" PVC AWWA C900 CLASS 200 DR-14 (RJ)	1,2,3,8,9,27 SP-1	LF	110.00
53	OKC-505	12" STEEL PIPE ENCASEMENT	2,3	LF	24.00
54	OKC-505	6" SOLID SLEEVE (RJ)	2,8,12	EA	2.00
55	OKC-505	6" 11.25" BEND (RJ)	2,8	EA	1.00
56	OKC-505	6" 22.5" BEND (RJ)	2,8	EA	1.00
57	OKC-505	6" 45" BEND (RJ)	2,8	EA	7.00
58	OKC-520	6" GATE VALVE AND VALVE BOX (RJ)	8,21	EA	1.00
59	OKC-522	HYDROSTATIC PRESSURE TESTING AND DISINFECTION	1,27	LS	1.00

AWWA STANDARDS FOR WATERLINE

AWWA C500 "Metal-Seated Gave Valves For Water Supply Service"
AWWA C509 "Resilient-Seated Gate Valves For Water Supply Service"
AWWA C515 "Reduced-Wall, Resilient-Seated Gave Valves For Water Supply Service"
AWWA C601 "Disinfecting Water Mains"
AWWA C605 "Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water."
AWWA C651 "Disinfecting Water Mains."
AWWA C900 "Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 in. Through 60 in."
AWWA M23 "PVC Pipe – Design and Installation."

PAY ITEMS & NOTES (WATERLINE)

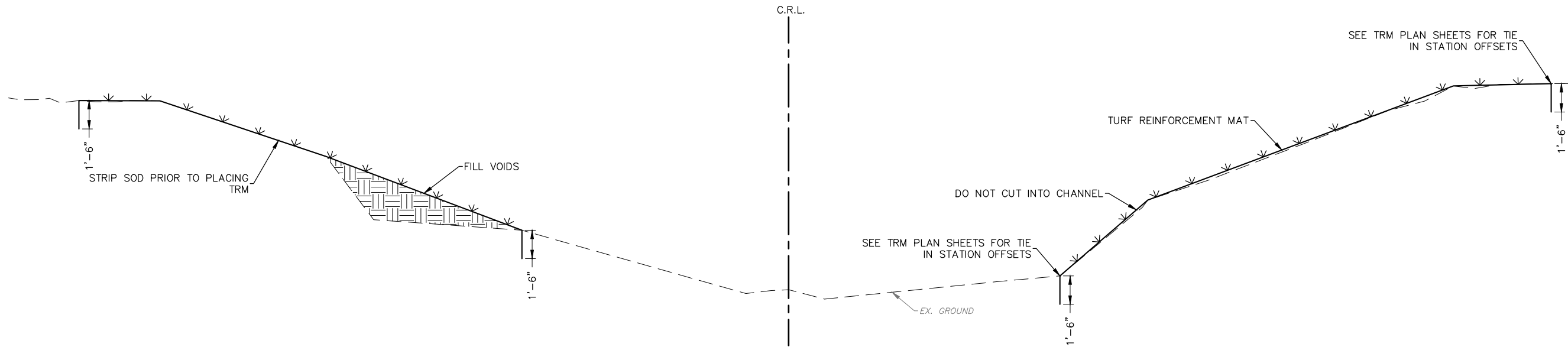
KELLY CREEK DRAINAGE REPLACEMENT

CITY OF MOORE

PLANS AND ESTIMATES PREPARED BY:
MESHEK & ASSOCIATES, L.L.C.
1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620

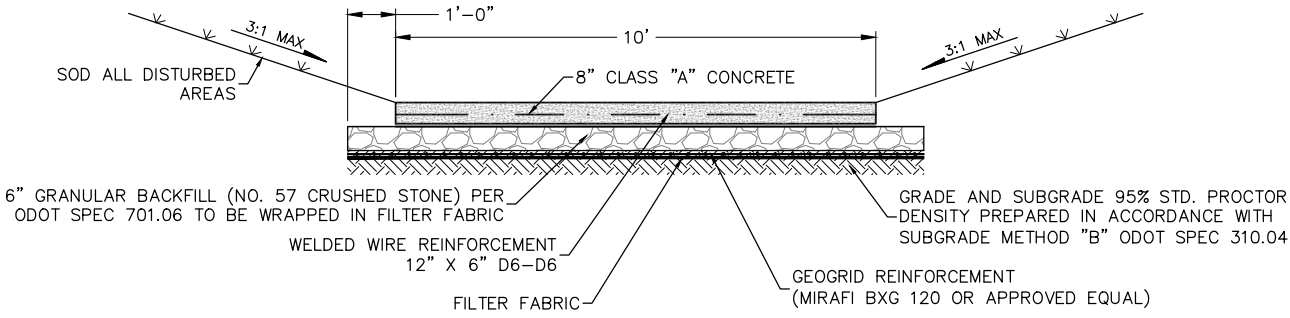
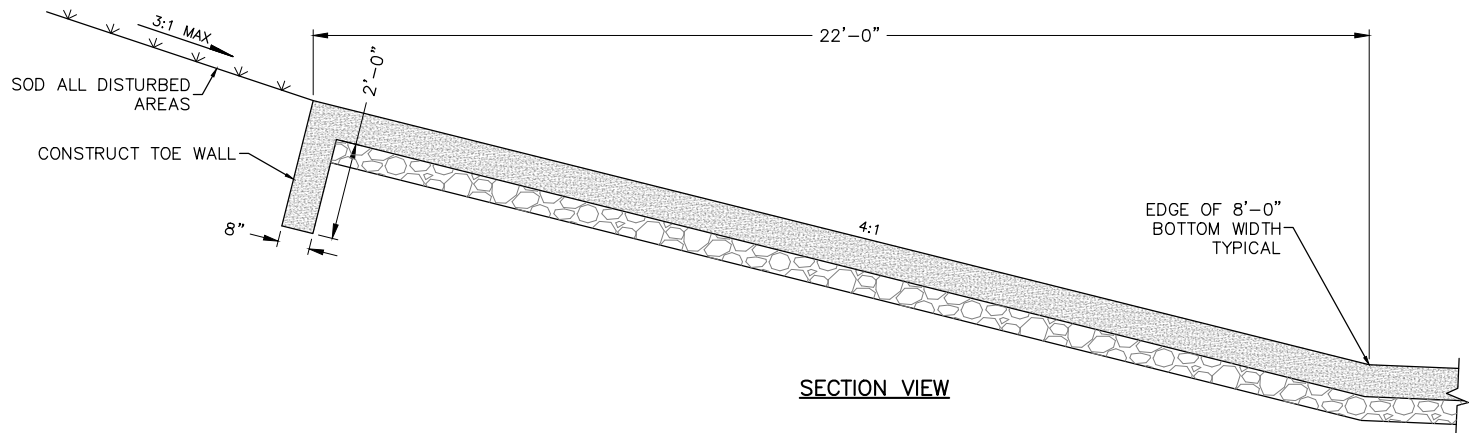
REVISION	BY	DATE	DRAWN	AD	08/19
			DESIGNED	AD	08/19
			SURVEY	AB	06/19
			C.A. 1487 EXPIRES 6/30/21		
			SHEET: 4 OF 76		

PLANS AND ESTIMATES PREPARED BY:					
MESHEK & ASSOCIATES, L.L.C.					
1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620					
REVISION	BY	DATE	DRAWN	AD	08/19
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			SURVEY	AB	06/19
			C.A. 1487 EXPIRES 6/30/21		
			SHEET: 5 OF 76		



1 TURF REINFORCEMENT MAT (TRM) (ADD ALTERNATE)
SCALE: NONE

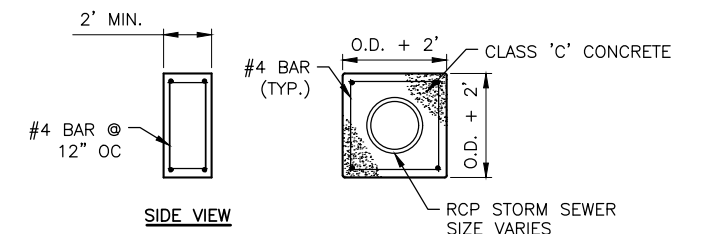
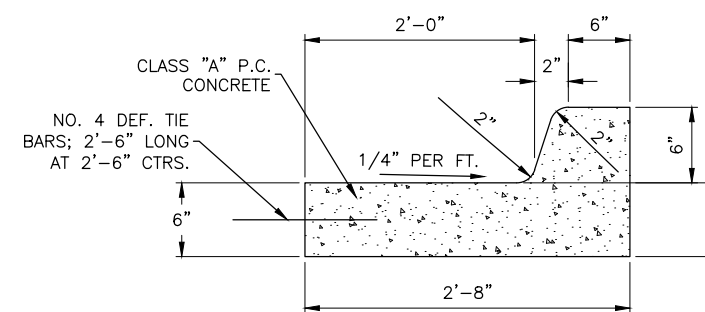
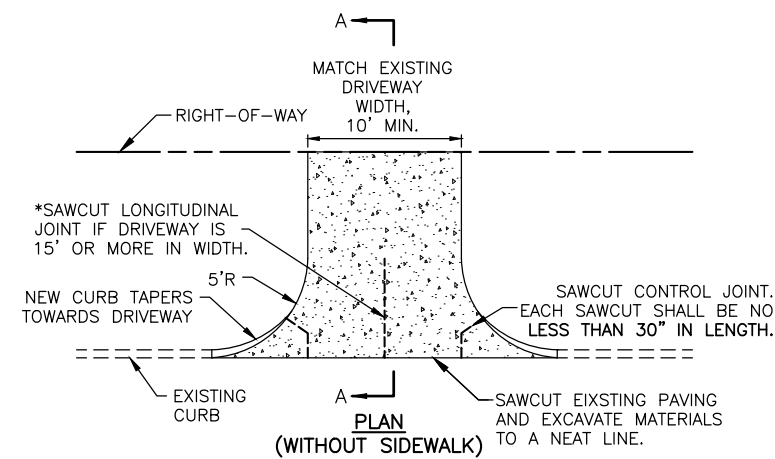
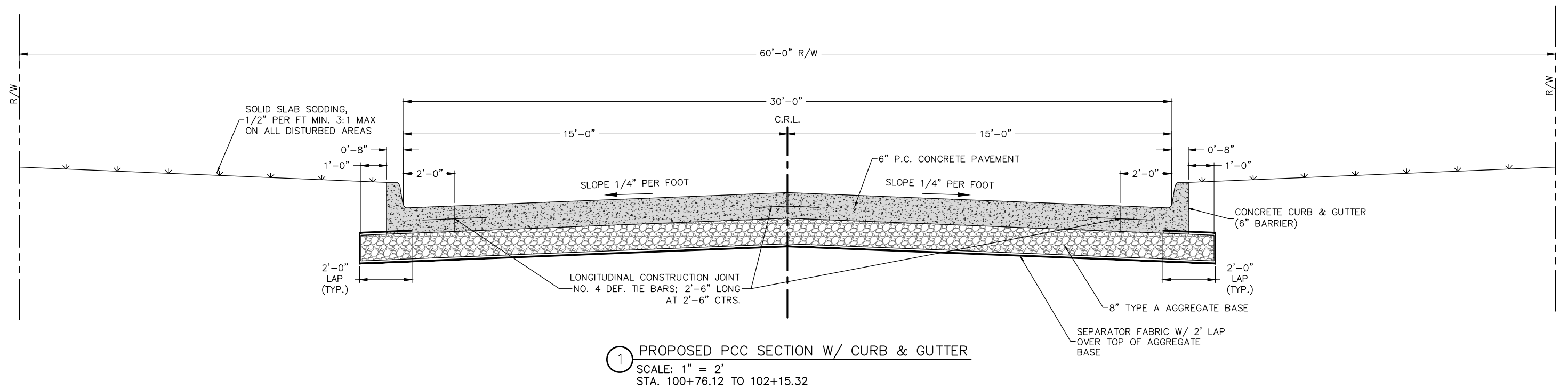
- NOTE:
1. INSTALL ACCORDING TO MANUFACTURER'S INSTRUCTIONS
 2. SEE TRM PLAN SHEETS FOR INSTALLATION LOCATIONS.
 3. TO BE MACMAT R1 8127G0 OR APPROVED EQUAL.



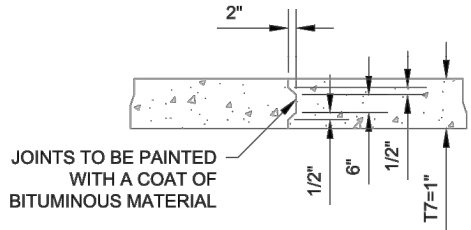
3 ACCESS RAMP
SCALE: NONE

STA. 71+50.00 TO 71+60.00 LT
NOTE: THE COST OF WELDED WIRE REINFORCEMENT TO BE INCLUDED IN THE COST OF CLASS "A" CONCRETE.

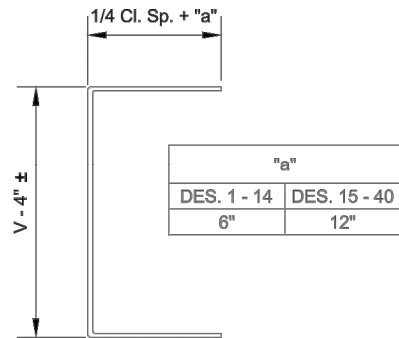
TYPICAL SECTIONS					
KELLY CREEK DRAINAGE REPLACEMENT					
CITY OF MOORE					
PLANS AND ESTIMATES PREPARED BY:					
MESHEK & ASSOCIATES, L.L.C.					
1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620					
REVISION	BY	DATE	DRAWN	AD	08/19
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			SURVEY	AB	06/19
C.A. 1487 EXPIRES 6/30/21					
SHEET: 6 OF 76					



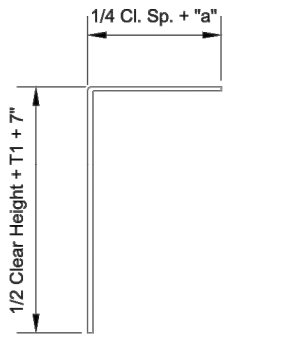
TYPICAL SECTIONS					
KELLY CREEK DRAINAGE REPLACEMENT					
CITY OF MOORE					
PLANS AND ESTIMATES PREPARED BY: MESHEK & ASSOCIATES, L.L.C. 1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620					
REVISION	BY	DATE	DRAWN	AD	08/19
			DESIGNED	AD	08/19
			SURVEY	AB	06/19
			C.A. 1487 EXPIRES 6/30/21		
			SHEET: 7 OF 76		



DETAIL OF CONSTRUCTION JOINT



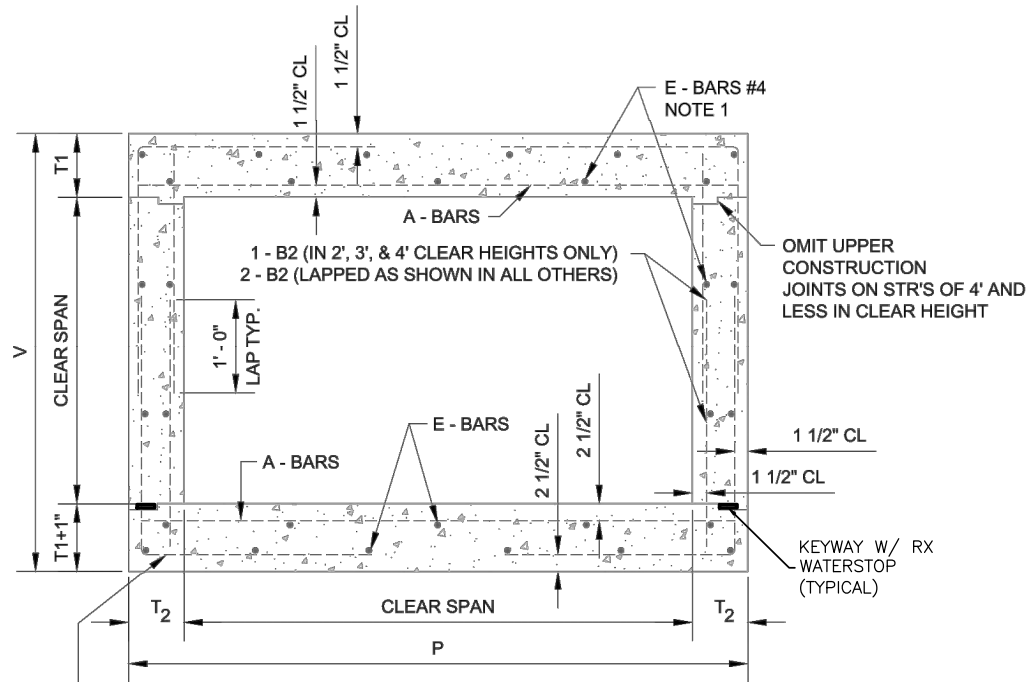
B - BAR
(SEE TABLE FOR TOTAL LENGTH)



B1 - BAR
(SEE TABLE FOR TOTAL LENGTH)

LIVE LOAD HS 20

Note:
R.C.B. DESIGN FOR
FILL FROM 0' TO 8'.



TYPICAL BARREL SECTION

* 0' - 9" ± ADDED TO EACH BAR FOR LAP.
1 SPACING FOR BOTTOM OF TOP SLAB. ALL OTHERS @ 18" MAXIMUM

R.C.B. DESIGN FOR FILL FROM 0' TO 8'.

CLEAR SPAN	CLEAR HEIGHT	AREA SQ. FT.	DES NO.	DIMENSIONS				REINFORCING														QUANTITIES FOR ONE PEDESTAL		QUANTITIES PER LINEAR FT. OF BARREL	
								A - BARS			B - BARS			B1 - BARS			B2 - BARS			E - BARS #4					
				T1	T2	V	P	SIZE	SPC.	LNG.	SIZE	SPC.	LNG.	SIZE	SPC.	LNG.	SIZE	SPC.	LENGTH	NO	1	STEEL - LB.	CONC. C.Y.	STEEL - LB.	CONC. C.Y.
2'	2	4	1	6"	6"	3' - 1"	3' - 0"	#5	9"	2' - 8"	#4	15"	4' - 9"				#4	18"	2 @ 2' - 9"	19	9 1/4"	30	.21	27.64	.194
3'	2	6	2	6 1/4"	6"	3' - 1 1/2"	4' - 0"	#6	10 1/2"	3' - 8"	#4	11 1/2"	5' - 4"				#4	18"	2 @ 2' - 10"	21	8"	30	.28	36.85	.241
	2.5	7.5	3	6 1/4"	6"	3' - 7 1/2"	4' - 0"	#6	10"	3' - 8"	#4	11 1/2"	5' - 10"				#4	18"	2 @ 3' - 4"	21	8"	30	.28	38.35	.259
	3	9	4	6 1/4"	6"	4' - 1 1/2"	4' - 0"	#6	10"	3' - 8"	#4	11 1/2"	6' - 4"				#4	18"	2 @ 3' - 10"	21	8"	30	.28	39.49	.278
4'	2	8	5	7"	6"	3' - 3"	5' - 0"	#6	9"	4' - 8"	#4	10 1/2"	5' - 11"				#4	18"	2 @ 2' - 11"	23	8 3/4"	40	.35	45.68	.305
	2.5	10	6	7"	6"	3' - 9"	5' - 0"	#6	9"	4' - 8"	#4	10 1/2"	6' - 5"				#4	18"	2 @ 3' - 5"	23	8 3/4"	40	.35	46.88	.324
	3	12	7	7"	6"	4' - 3"	5' - 0"	#6	9"	4' - 8"	#4	9 1/2"	6' - 11"				#4	18"	2 @ 3' - 11"	27	8 3/4"	40	.35	50.77	.342
	4	16	8	7"	6"	5' - 3"	5' - 0"	#6	8 1/2"	4' - 8"	#4	12"	7' - 11"				#4	18"	2 @ 4' - 11"	27	8 3/4"	40	.35	52.80	.379
5'	2	10	9	7 1/2"	6"	3' - 4"	6' - 0"	#6	8"	5' - 8"	#4	10 1/2"	6' - 6"				#4	18"	2 @ 3' - 0"	26	8"	50	.42	56.54	.370
	3	15	10	7 1/2"	6"	4' - 4"	6' - 0"	#6	8"	5' - 8"	#4	11"	7' - 6"				#4	18"	2 @ 4' - 0"	30	8"	50	.42	60.07	.407
	4	20	11	7 1/2"	6"	5' - 4"	6' - 0"	#6	7 1/2"	5' - 8"	#4	12"	8' - 6"				#4	18"	2 @ 5' - 0"	30	8"	50	.42	63.08	.444
	5	25	12	7 1/2"	6"	6' - 4"	6' - 0"	#6	7"	5' - 8"				#4	12"	5' - 6"	#4	18"	4 @ 3' - 9" *	34	8"	50	.42	73.26	.481
6'	3	18	13	8"	6"	4' - 5"	7' - 0"	#6	7"	6' - 8"	#4	11"	8' - 1"				#4	18"	2 @ 4' - 1"	31	8 1/2"	60	.49	70.45	.478
	4	24	14	8"	7"	5' - 5"	7' - 2"	#6	7"	6' - 10"	#4	10 1/2"	9' - 1"				#4	18"	2 @ 5' - 1"	31	8 1/2"	60	.50	74.27	.548
	5	30	15	8"	8"	6' - 5"	7' - 4"	#6	7 1/2"	7' - 0"				#5	10 1/2"	6' - 3"	#4	18"	4 @ 3' - 10" *	39	8 1/2"	60	.51	83.94	.631
	6	36	16	8"	8"	7' - 5"	7' - 4"	#6	7 1/2"	7' - 0"				#5	10 1/2"	6' - 9"	#4	18"	4 @ 4' - 4" *	39	8 1/2"	60	.51	86.22	.680
8'	3	24	17	9"	8"	4' - 7"	9' - 4"	#7	10"	9' - 0"	#5	9 1/2"	10' - 3"				#4	18"	2 @ 4' - 3"	37	9"	80	.65	99.66	.694
	4	32	18	9"	8"	5' - 7"	9' - 4"	#7	9 1/2"	9' - 0"	#5	11"	11' - 3"				#4	18"	2 @ 5' - 3"	37	9"	80	.65	101.48	.744
	5	40	19	9"	8"	6' - 7"	9' - 4"	#7	9"	9' - 0"				#5	11"	6' - 10"	#4	18"	4 @ 3' - 11" *	41	9"	80	.65	114.52	.793
	6	48	20	9"	9"	7' - 7"	9' - 6"	#7	9 1/2"	9' - 2"				#5	10"	7' - 4"	#4	18"	4 @ 4' - 5" *	41	9"	80	.66	119.32	.890
	7	56	21	9"	9"	8' - 7"	9' - 6"	#7	9 1/2"	9' - 2"				#5	10"	7' - 10"	#4	18"	4 @ 4' - 11" *	45	9"	80	.66	125.38	.945
	8	64	22	9"	9"	9' - 7"	9' - 6"	#7	9"	9' - 2"				#5	10"	8' - 4"	#4	18"	4 @ 5' - 4" *	49	9"	80	.66	133.91	1.001
10'	3	30	23	10"	8"	4' - 9"	11' - 4"	#7	9"	11' - 0"	#5	8 1/2"	11' - 5"				#4	18"	2 @ 4' - 5"	47	8 3/4"	90	.79	128.89	.882
	4	40	24	10"	8"	5' - 9"	11' - 4"	#7	8 1/2"	11' - 0"	#5	9"	12' - 5"				#4	18"	2 @ 5' - 5"	47	8 3/4"	90	.79	134.25	.931
	5	50	25	10"	8"	6' - 9"	11' - 4"	#7	8"	11' - 0"				#5	10"	7' - 5"	#4	18"	4 @ 4' - 0" *	51	8 3/4"	90	.79	145.78	.981
	6	60	26	10"	9"	7' - 9"	11' - 6"	#7	8 1/2"	11' - 2"				#5	9"	7' - 11"	#4	18"	4 @ 4' - 6" *	51	8 3/4"	90	.80	150.58	1.078
	7	70	27	10"	9"	8' - 9"	11' - 6"	#7	8 1/2"	11' - 2"				#5	9 1/2"	8' - 5"	#4	18"	4 @ 5' - 0" *	55	8 3/4"	90	.80	154.43	1.133
	8	80	28	10"	9"	9' - 9"	11' - 6"	#7	8"	11' - 2"				#5	10"	8' - 11"	#4	18"	4 @ 5' - 6" *	59	8 3/4"	90	.80	162.32	1.189
	9	90	29	10"	9"	10' - 9"	11' - 6"	#7	8"	11' - 2"				#5	10"	9' - 5"	#4	15"	4 @ 6' - 0" *	59	8 3/4"	90	.80	167.86	1.244
	10	100	30	10"	9"	11' - 9"	11' - 6"	#7	8"	11' - 2"				#5	10"	9' - 11"	#4	9 1/2"	4 @ 6' - 6" *	63	8 3/4"	90	.80	182.15	1.300
12'	12	120	31	10"	9"	13' - 9"	11' - 6"	#7	8"	11' - 2"				#5	10"	10' - 11"	#5	8 1/2"	4 @ 7' - 6" *	67	8 3/4"	90	.80	212.06	1.411
	5	60	32	11"	9"	6' - 11"	13' - 6"	#8	10 1/2"	13' - 2"				#5	8 1/2"	8' - 0"	#4	18"	4 @ 4' - 1" *	54	9 1/4"	110	.94	170.78	1.235
	6	72	33	11"	9"	7' - 11"	13' - 6"	#8	10 1/2"	13' - 2"				#5	9"	8' - 6"	#4	18"	4 @ 4' - 7" *	54	9 1/4"	110	.94	171.86	1.290
	7	84	34	11"	9"	8' - 11"	13' - 6"	#8	10"	13' - 2"				#5	9 1/2"	9' - 0"	#4	18"	4 @ 5' - 1" *	58	9 1/4"	110	.94	179.57	1.346
	8	96	35	11"	9"	9' - 11"	13' - 6"	#8	10"	13' - 2"				#5	9 1/2"	9' - 6"	#4	18"	4 @ 5' - 7" *	62	9 1/4"	110	.94	185.78	1.401
	9	108	36	11"	9"	10' - 11"	13' - 6"	#8	10"	13' - 2"				#5	9 1/2"	10' - 0"	#4	12"	4 @ 6' - 1" *	66	9 1/4"	110	.94	197.39	1.457
	10	120	37	11"	10"	11' - 11"	13' - 8"	#8	10"	13' - 4"				#5	9"	10' - 6"	#4	12"	4 @ 6' - 7" *	66	9 1/4"	110	.94	205.54	1.586
	11	132	38	11"	10"	12' - 11"	13' - 8"	#8	10"	13' - 4"				#5	9"	11' - 0"	#4	11"	4 @ 7' - 1" *	70	9 1/4"	110	.95	214.05	1.648
	12	144	39	11"	10"	13' - 11"	13' - 8"	#8	10"	13' - 4"				#5	8 1/2"	11' - 6"	#5	11 1/2"	4 @ 7' - 7" *	70	9 1/4"	110	.95	232.96	1.709
14	168	40	11"	11"	15' - 11"	13' - 10"	#8	10 1/2"	13' - 6"				#6	10"	12' - 6"	#5	8 1/2"	4 @ 8' - 7" *	78	9 1/4"	110	.96	275.12	1.931	

← 12'-6' RCB

NOTES:

ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE OKLAHOMA CITY STANDARD SPECIFICATIONS.

REINFORCING STEEL IN BOTTOM SLAB (FOOTING) SHALL BE SUPPORTED ON BAR CHAIRS. CHAIRS SHALL BE SUPPORTED ON TIMBER PLANK OR CLASS "C" CONCRETE STRIPS PLACED AT 4" CENTERS.

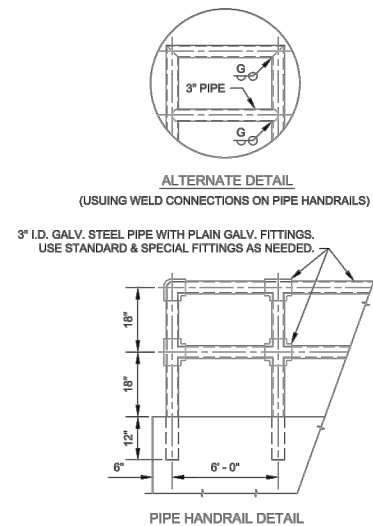
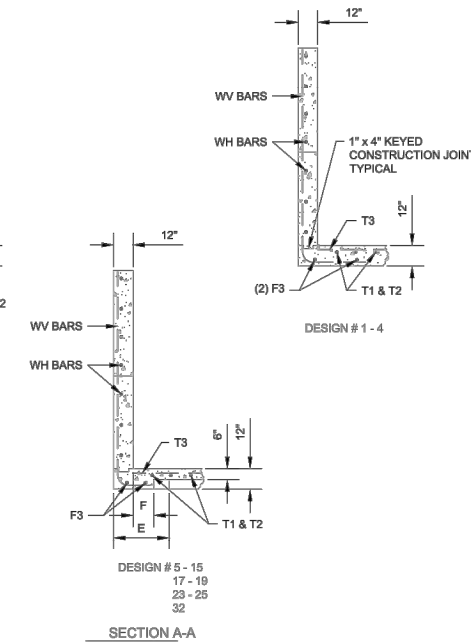
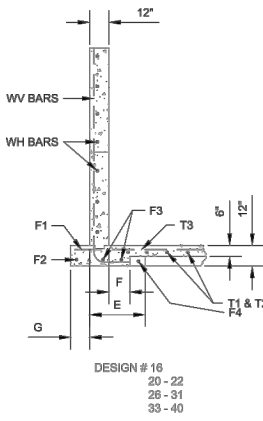
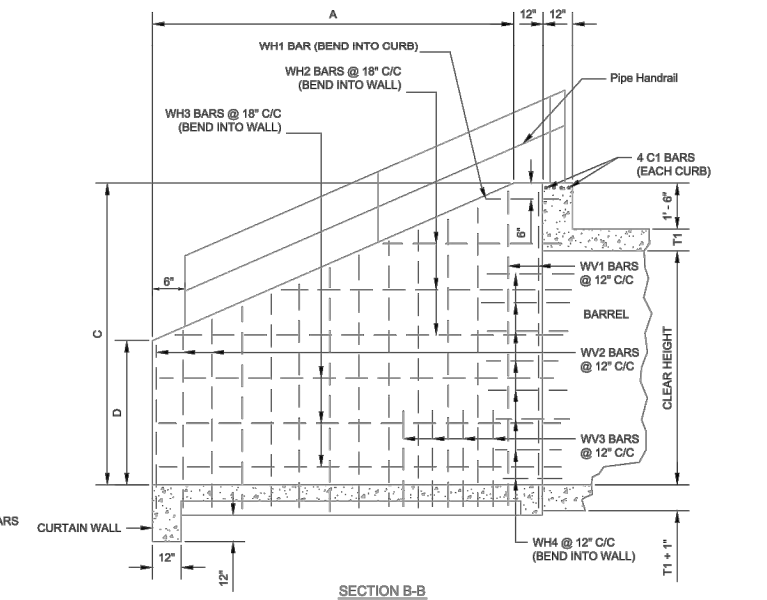
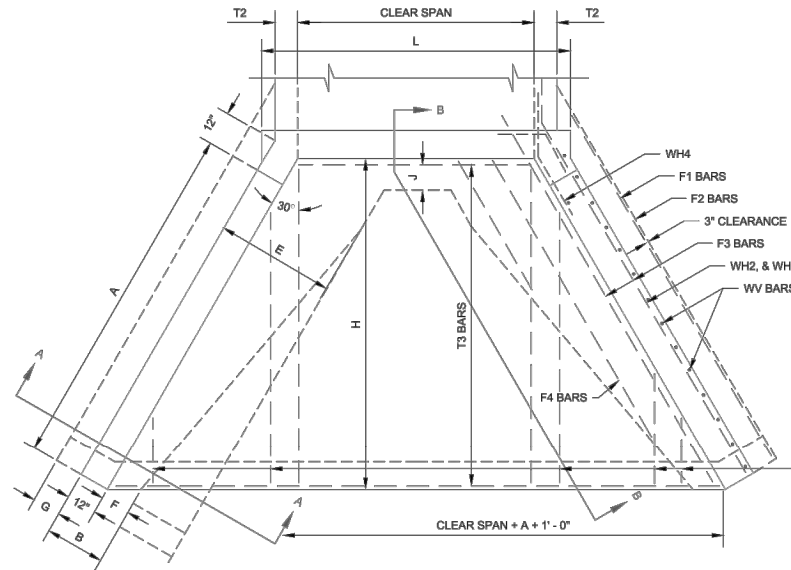
REINFORCING STEEL IN TOP SLAB SHALL BE SUPPORTED ON SLAB SPACERS.

REINFORCING STEEL IN THE WALLS SHALL BE HELD IN PLACE BY METAL CHAIRS. MAXIMUM SPACING OF THE CHAIRS SHALL BE 6'.

COST OF METAL CHAIRS, WOOD PLANK OR CONCRETE STRIPS SHALL BE INCLUDED IN OTHER ITEMS OF WORK.



DETAILS					
KELLY CREEK DRAINAGE REPLACEMENT					
CITY OF MOORE					
PLANS AND ESTIMATES PREPARED BY:					
MESHEK & ASSOCIATES, L.L.C.					
1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620					
REVISION	BY	DATE	DRAWN	AD	08/19
			DESIGNED	AD	08/19
			SURVEY	AB	06/19
C.A. 1487 EXPIRES 6/30/21					
SHEET: 8 OF 76					



ALTERNATE DETAIL
(USING WELD CONNECTIONS ON PIPE HANDRAILS)

3" I.D. GALV. STEEL PIPE WITH PLAIN GALV. FITTINGS.
USE STANDARD & SPECIAL FITTINGS AS NEEDED. ↗

HANDRAIL NOTES: WELD CONNECTIONS MAY BE USED FOR HANDRAIL. WELD CONNECTIONS SHALL BE THOROUGHLY CLEANED OF ALL LOOSE SCALE, GROUND SMOOTH & SPOT POINTED WITH TWO COATS OF ALUMINUM PAINT.

NOTE: PIPE HANDRAIL SHALL BE CONSTRUCTED ON TOP OF
HEADWALL AND ALONG BOTH WINGWALLS.

[illegible]

12'-6' 
RCB

3 ← 12'-6'
4 RCB

DETAILS

**KELLY CREEK DRAINAGE
REPLACEMENT**

CITY OF MOORE

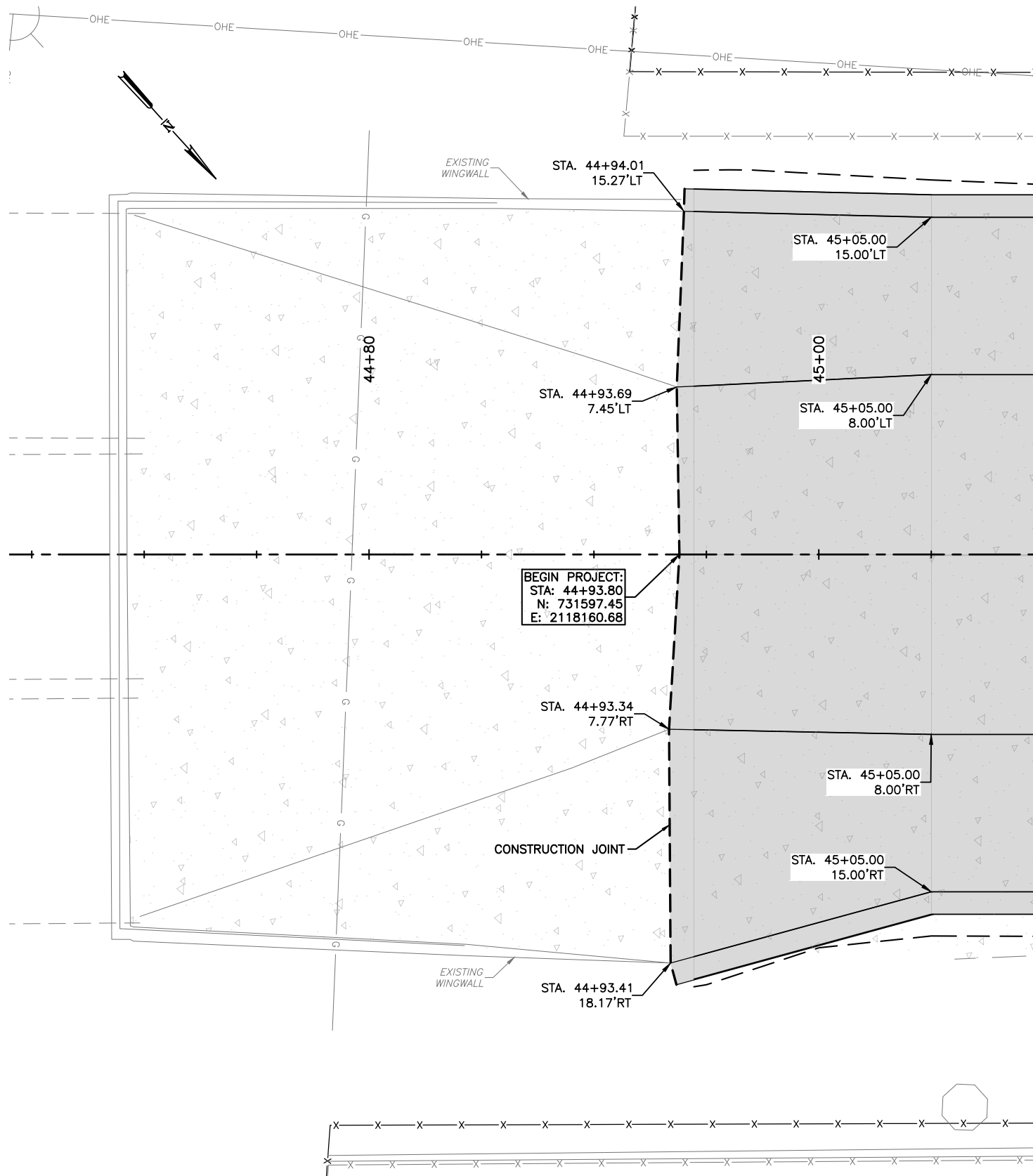
PLANS AND ESTIMATES PREPARED BY:
MESHEK & ASSOCIATES, L.L.C.
1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620

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			C.A. 1487 EXPIRES 6/30/21		
			SHEET: 9 OF 76		

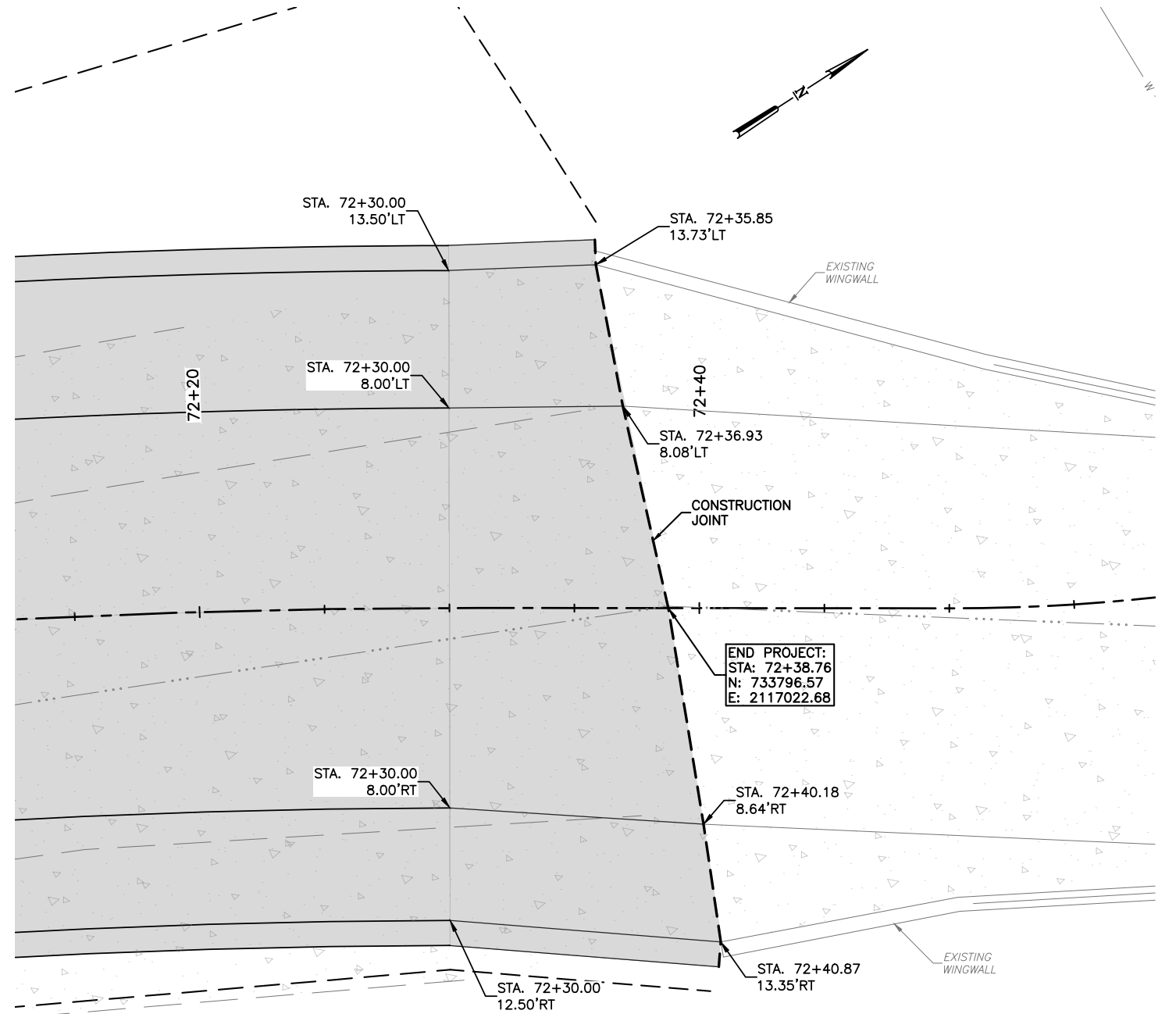


REVISION	BY	DATE	DRAWN	AD	08/19
			DESIGNED	AD	08/19
			SURVEY	AB	06/19
			C.A. 1487 EXPIRES 6/30/21		
			SHEET: 10 OF 76		

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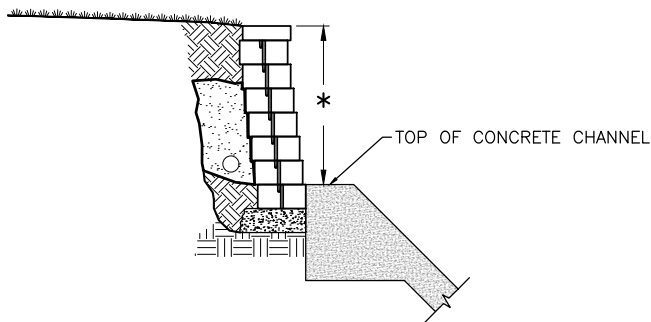
1 DOWNSTREAM TIE-IN DETAIL
SCALE: 1" = 3'



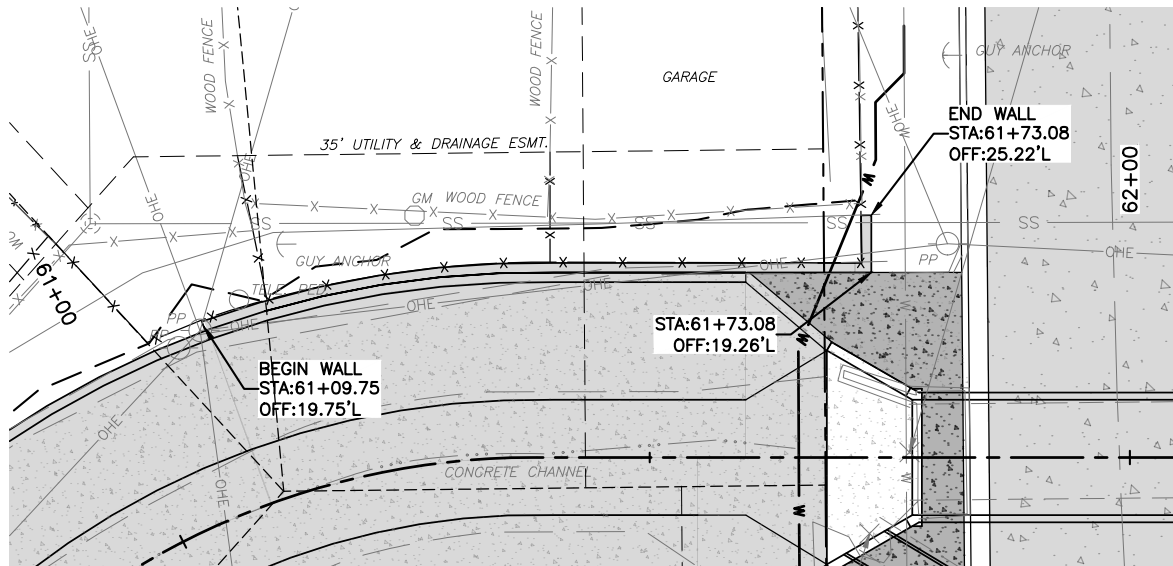
2 UPSTREAM TIE-IN DETAIL
SCALE: 1" = 3'



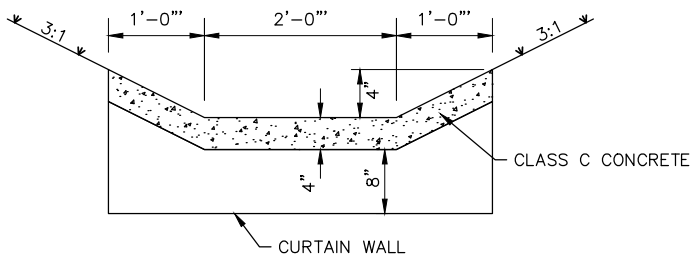
DETAILS					
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PLANS AND ESTIMATES PREPARED BY:					
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1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620					
REVISION	BY	DATE	DRAWN	AD	08/19
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C.A. 1487 EXPIRES 6/30/21					
SHEET: 11 OF 76					



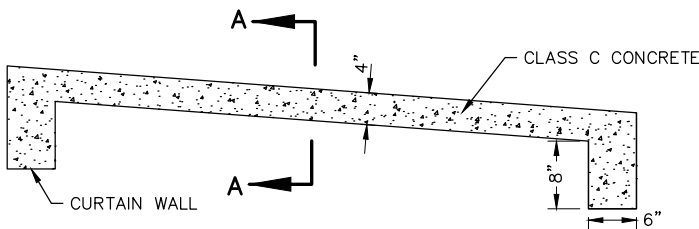
1 UNREINFORCED RETAINING WALL DETAIL
SCALE: NONE
*SEE PROFILES FOR WALL HEIGHTS



PLAN VIEW



SECTION A-A



LONGITUDINAL SECTION WITH CURTAIN WALLS

2 PAVED DITCH DETAIL
SCALE: NONE

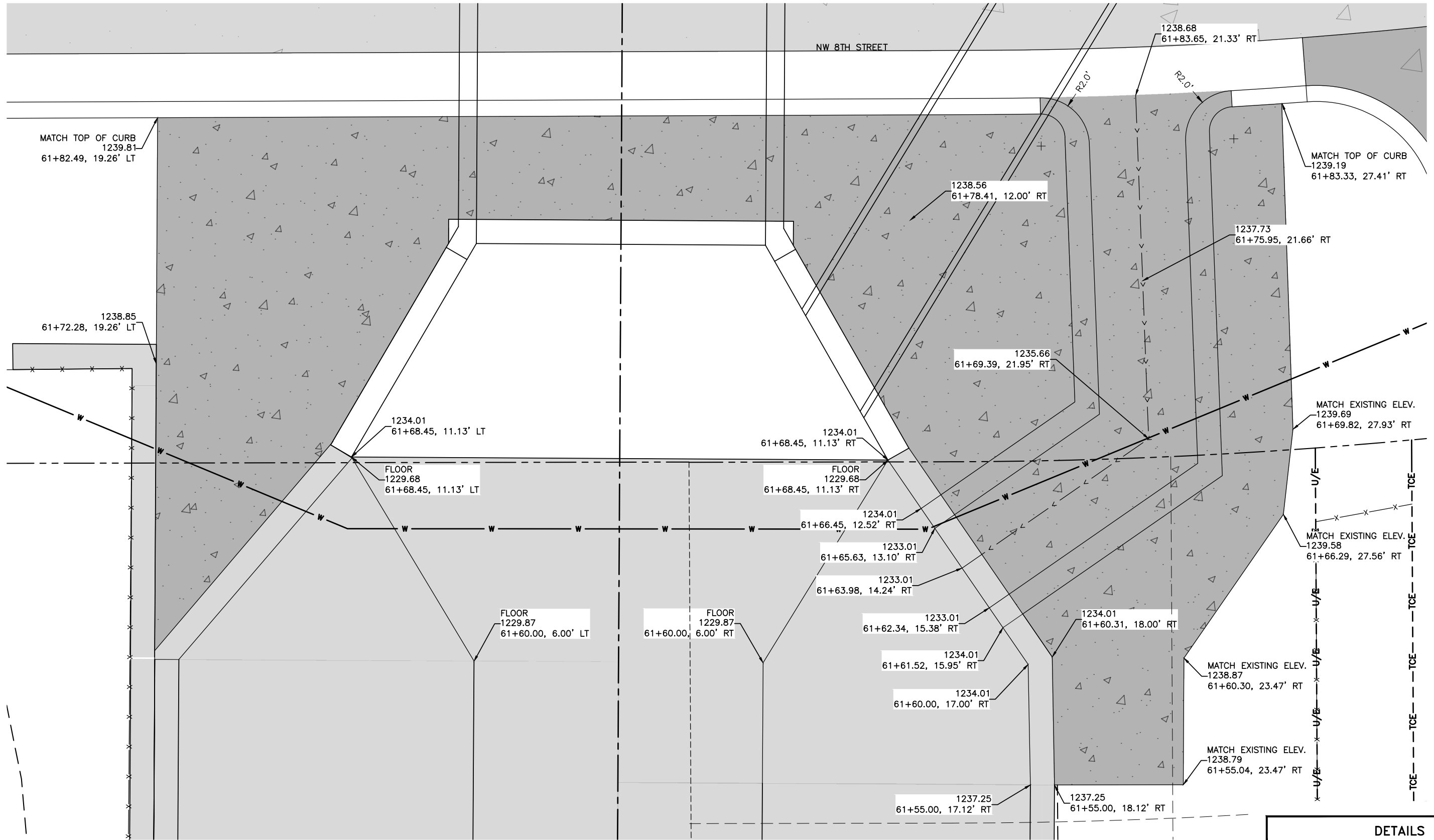
PAVED DITCH GENERAL NOTES:

1. ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE 2009 ODOT STANDARD SPECIFICATIONS.
2. ALL COST OF ADDITIONAL BORROW OR EXCAVATION REQUIRED FOR INSTALLING PAVED DITCH SHALL BE INCLUDED IN PRICE BID FOR CONCRETE VALLEY GUTTER.
3. THE DITCH SHALL BE WATERED AND COMPACTED BEFORE PLACING CLASS C CONCRETE.



DETAILS					
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SHEET: 12 OF 76					

PRINT DATE: 03/02/2021 M:\City_of_Moore\18MCR03_NW_5th_Channel_Improvements\Design\Drawings\18MCR03_0003_Details.dwg

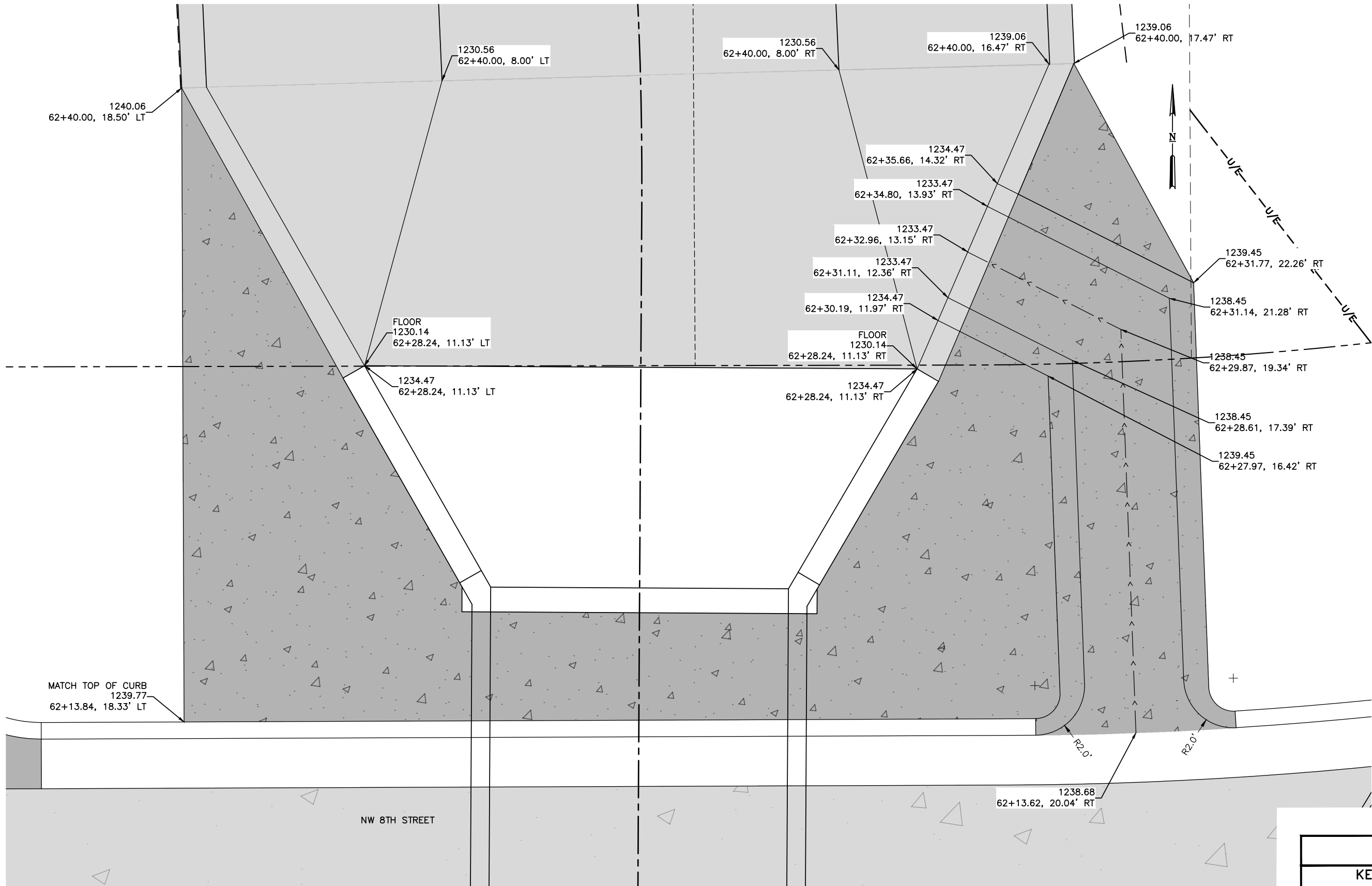


1 SOUTH PAVED DITCH DETAIL
SCALE: 1" = 2'



DETAILS					
KELLY CREEK DRAINAGE REPLACEMENT					
CITY OF MOORE					
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1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620					
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SHEET: 13 OF 76					

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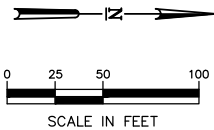
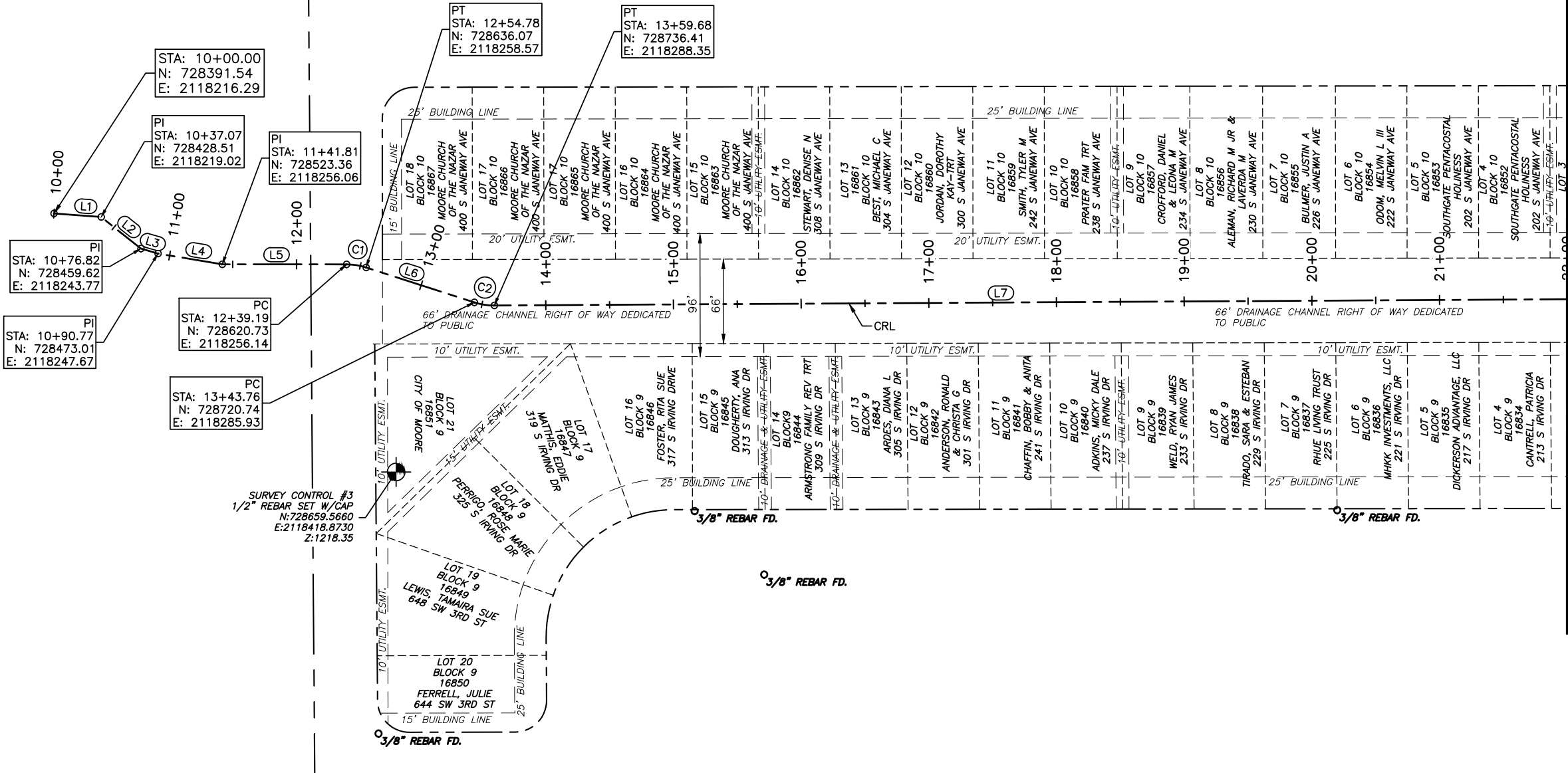
NW 8TH STREET

1 NORTH PAVED DITCH DETAIL
SCALE: 1" = 2'



DETAILS					
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1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620					
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C.A. 1487 EXPIRES 6/30/21					
SHEET: 14 OF 76					

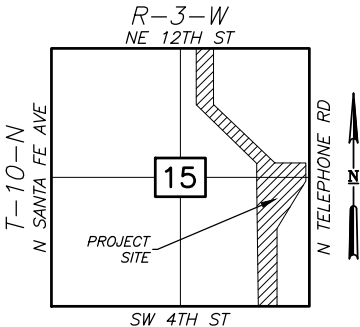
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LEGEND

- SECTION LINE
- RIGHT-OF-WAY
- LOT LINE
- EXISTING BUILDING LINE
- EXISTING EASEMENT LINE
- BENCHMARK
- FOUND PROP. MARKER
- C.R.L.
- CXX CURVE NUMBER
- LXX LINE NUMBER

LOCATION MAP



SURVEYOR'S CERTIFICATE

I, AARON BURNS, OF MESHEK & ASSOCIATES, LLC, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF OKLAHOMA, DO HEREBY CERTIFY THAT THIS HORIZONTAL/VERTICAL CONTROL AND BOUNDARY SURVEY WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION AND MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS."

I FURTHER CERTIFY, THE TOPOGRAPHICAL INFORMATION HEREON REPRESENTS A SURVEY PERFORMED UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF OUR KNOWLEDGE.

DATE: _____

AARON BURNS
REGISTERED PROFESSIONAL LAND SURVEYOR
OKLAHOMA L.S. 1923

CERTIFICATE OF AUTHORIZATION NO. 1487
EXPIRES JUNE 30, 2021

DATUM INFORMATION

HORIZONTAL DATUM
NAD83 (2011) OKLAHOMA
SOUTH ZONE (3502)

VERTICAL DATUM
NAVD88 (GEOID 12B)

NOTES

- ABSTRACT OF TITLE OR ATTORNEY'S TITLE OPINION NOT AVAILABLE TO SURVEYOR AT DATE OF SURVEY.
- THIS FIRM WAS NOT CONTRACTED TO RESEARCH EASEMENTS OR ENCUMBRANCES OF RECORD. NO ATTEMPT TO RESEARCH THE COUNTY RECORDS OR OTHER RECORD OFFICES WAS PERFORMED BY THIS FIRM, THEREFORE EASEMENTS MAY AFFECT THE SUBJECT TRACT THAT ARE NOT REFLECTED BY THIS PLAT.
- ALL UNDERGROUND UTILITIES MAY NOT BE SHOWN. (CALL "OKIE" BEFORE DIGGING!!)
- THE HORIZONTAL AND VERTICAL DATUMS FOR THIS SURVEY ARE BASED ON THE OKLAHOMA STATE PLANE COORDINATE SYSTEM OK SOUTH 3502 AND NAVD 88. THE SURVEYING METHODS USED ARE AVERAGED RTK GPS OBSERVATIONS FROM THE SOURCE BENCHMARKS ESTABLISHED BY STATIC OPUS SESSIONS AS BEING:

POINT ID.=1
NORTHING=731134.965
EASTING=2118417.331
ELEVATION=1227.750
DESCRIPTION=1/2 REBAR SET W/ MESHEK CAP

POINT ID.=2
NORTHING=734225.841
EASTING=2116864.198
ELEVATION=1249.720
DESCRIPTION=1/2 REBAR SET W/ MESHEK CAP

POINT ID.=3
NORTHING=728659.566
EASTING=2118418.873
ELEVATION=1218.350
DESCRIPTION=1/2 REBAR SET W/ MESHEK CAP

SURVEY CONTROL TABLE

POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	39+08.90	110.18' RT	731134.9520	2118417.3150	1227.75	1/2" REBAR SET W/ MESHEK CAP
2	N/A	N/A	734225.8410	2116864.1980	1249.72	1/2" REBAR SET W/ MESHEK CAP
3	13+26.39	145.31' RT	728659.5660	2118418.8730	1218.35	1/2" REBAR SET W/ MESHEK CAP
10240	44+02.39	32.03' RT	731560.1803	2118250.8002	1228.49	1/2" REBAR SET W/ MESHEK CAP
10679	23+70.22	26.16' LT	729746.8273	2118256.2933	1217.43	1/2" REBAR SET W/ MESHEK CAP



SURVEY DATA

KELLY CREEK DRAINAGE
REPLACEMENT

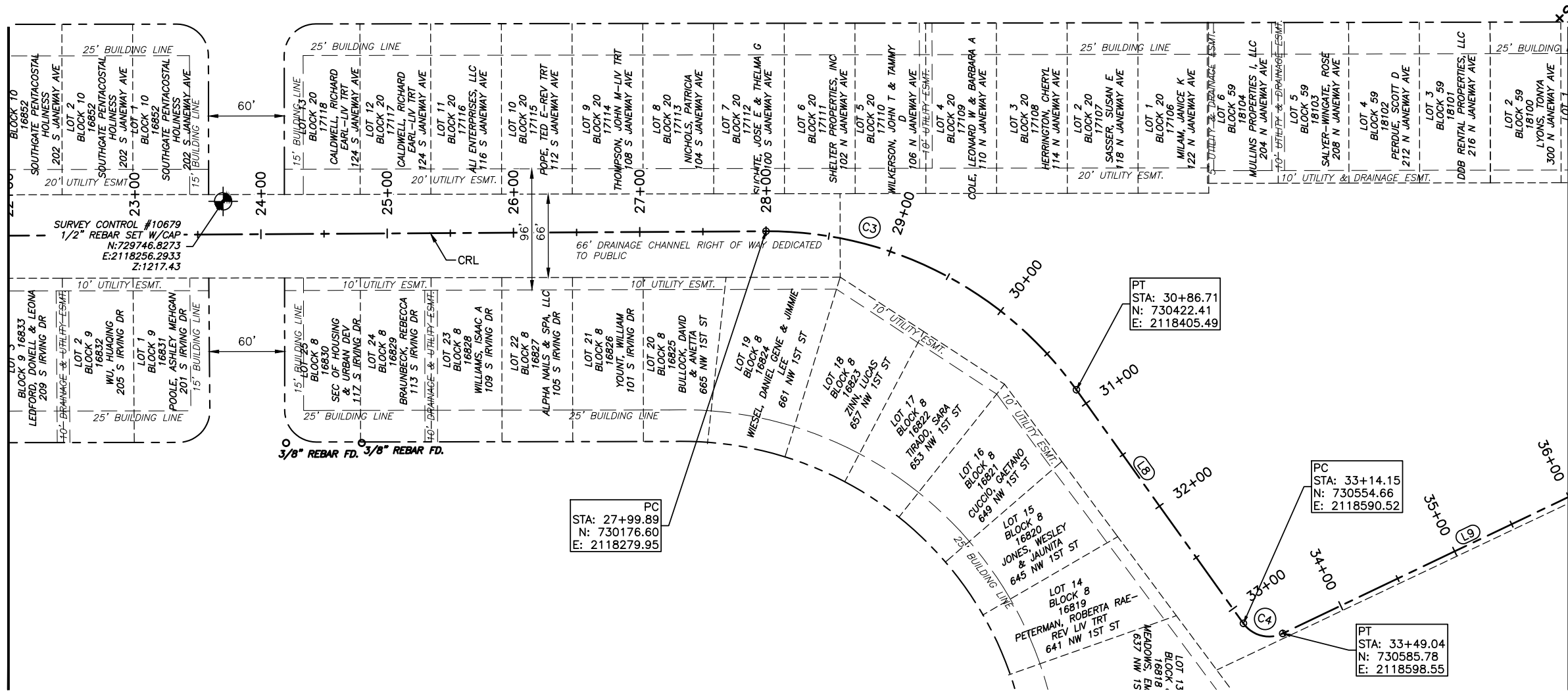
CITY OF MOORE

PLANS AND ESTIMATES PREPARED BY:
MESHEK & ASSOCIATES, L.L.C.
1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620

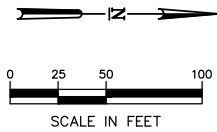
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			DESIGNED	AD	08/19
			SURVEY	AB	06/19
C.A. 1487 EXPIRES 6/30/21					
SHEET: 15 OF 76					

DATUM INFORMATION	
HORIZONTAL DATUM	
NAD83 (2011) OKLAHOMA	
SOUTH ZONE (3502)	
VERTICAL DATUM	
NAVD88 (GEOID 12B)	

MATCHLINE STA. 22+00.00



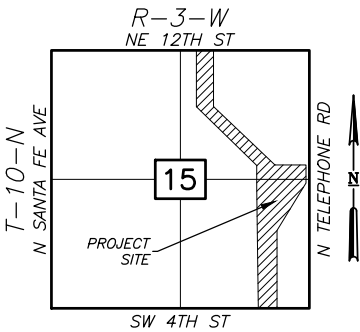
MATCHLINE STA. 36+00.00



LEGEND

- SECTION LINE
- RIGHT-OF-WAY
- LOT LINE
- EXISTING BUILDING LINE
- EXISTING EASEMENT LINE
- BENCHMARK
- FOUND PROP. MARKER
- C.R.L.
- CURVE NUMBER
- LINE NUMBER

LOCATION MAP



SURVEY DATA					
KELLY CREEK DRAINAGE REPLACEMENT					
CITY OF MOORE					
PLANS AND ESTIMATES PREPARED BY:					
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1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620					
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SHEET: 16 OF 76					

PRINT DATE: 03/02/2021 M:\City_of_Moore\18MCR03_NW_5th_Channel_Improvements\Survey\CAD\18MCR03_SURVEY_DATA_SHEETS.dwg

MATCHLINE STA. 36+00.00

3/8" REBAR FD. SPINNER

RISELED "X" FD.

BLOCK 59
18099
CROSSROADS YOUTH & FAMILY
SERVICES INC
312 N JANEWAY AVE
10' UTILITY & DRAINAGE ESMT.

20' DRAINAGE EASEMENT
BOOK 4953 PAGE 1050

LOT 4
BLOCK 52
17938
PERRY JERRY GARY & FAY M
574 N JANEWAY AVE
5' UTILITY ESMT.

LOT 3
BLOCK 52
17937
PRESOTT, KEVIN R &
KIMBERLY J
508 N JANEWAY AVE

LOT 2
BLOCK 52
17936
LOWELL CECIL
650 NW 5TH ST

LOT 1
BLOCK 52
17935
QUEZADA, ANTONIO OCHOA
646 NW 5TH ST

35' UTILITY & DRAINAGE ESMT.

MATCHLINE STA. 45+00.00

37+00

38+00

39+00

40+00

41+00

42+00

43+00

44+00

45+00

PI
STA: 36+64.93
N: 730870.83
E: 2118462.41

SURVEY CONTROL #1
1/2" REBAR SET W/CAP
N: 731134.9520
E: 21182417.3150
Z: 1227.75

PC
STA: 39+45.82
N: 731103.78
E: 2118305.46

PT
STA: 40+83.43
N: 731233.71
E: 2118267.10

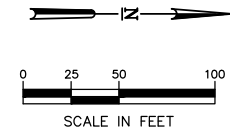
PC
STA: 43+23.63
N: 731473.86
E: 2118271.60

SURVEY CONTROL #10240
1/2" REBAR SET W/CAP
N: 731560.1803
E: 2118250.8802
Z: 1228.49

PT
STA: 43+66.30
N: 731511.86
E: 2118255.18

PK NAIL FD.

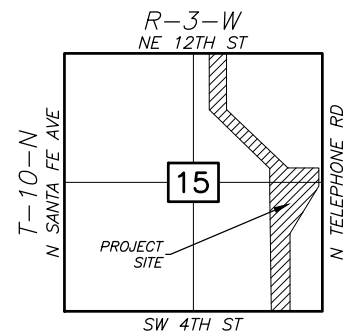
X CHISELED REBAR FOUND



LEGEND

- SECTION LINE
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- C.R.L.
- CXX CURVE NUMBER
- LXX LINE NUMBER

LOCATION MAP



DATUM INFORMATION

HORIZONTAL DATUM
NAD83 (2011) OKLAHOMA
SOUTH ZONE (3502)

VERTICAL DATUM
NAVD88 (GEOID 12B)



SURVEY DATA

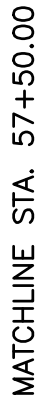
KELLY CREEK DRAINAGE
REPLACEMENT

CITY OF MOORE

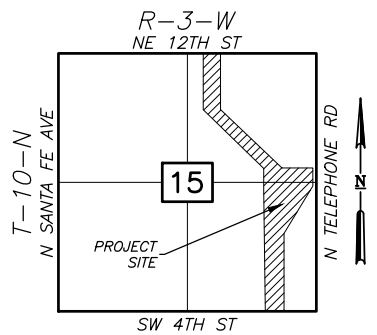
PLANS AND ESTIMATES PREPARED BY:
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1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620

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C.A. 1487 EXPIRES 6/30/21					
SHEET: 17 OF 76					

VERTICAL DATUM
NAVD88 (GEOID 12B)

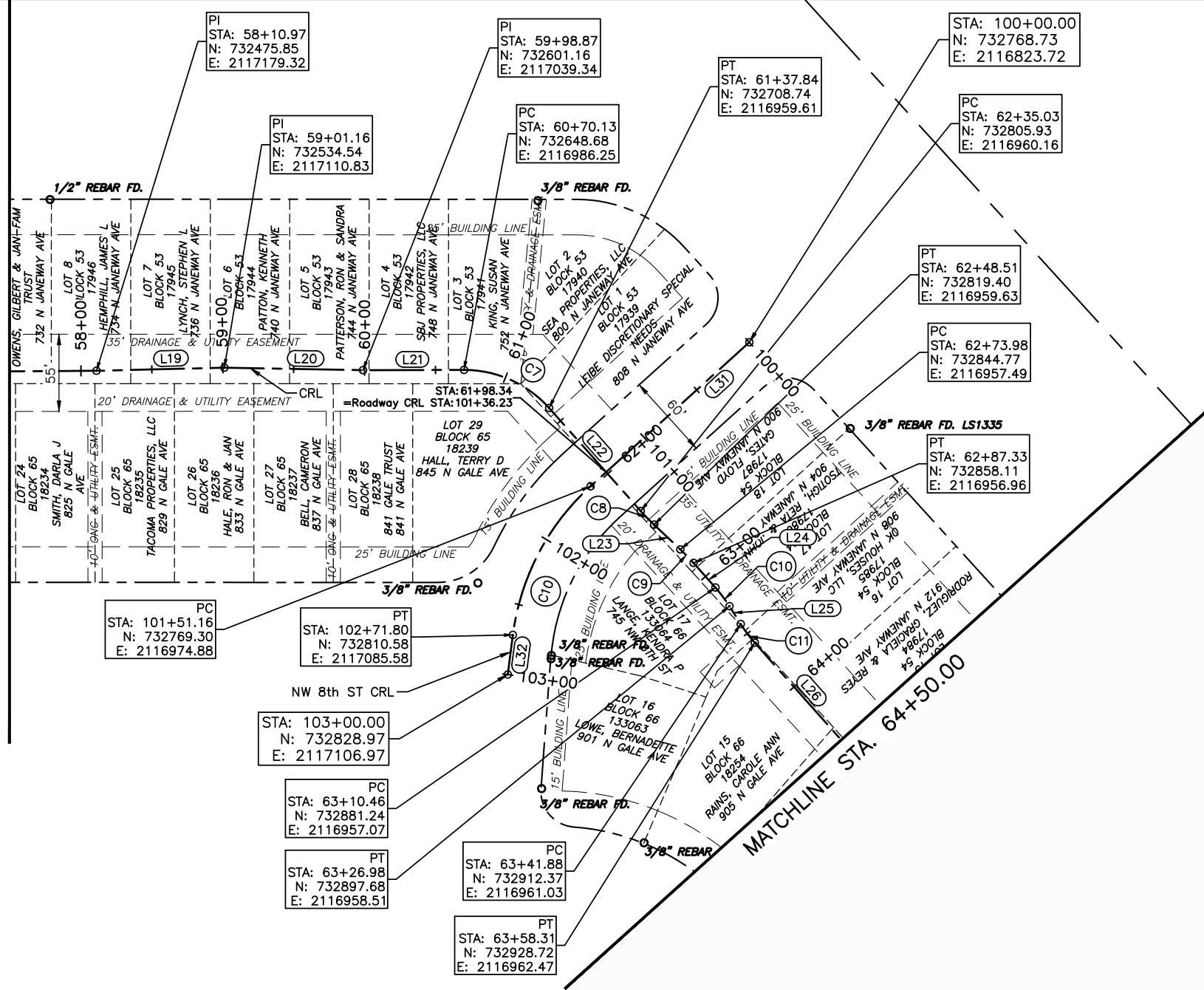


- ### LOCATION MAP



PRINT DATE: 03/02/2021 M:\City_of_Moore\18MCR03_NW_5th_Channel_Improvements\Survey\CAD\18MCR03_SURVEY_DATA_SHEETS.dwg

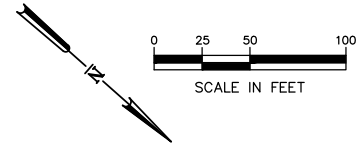
MATCHLINE STA. 57+50.00



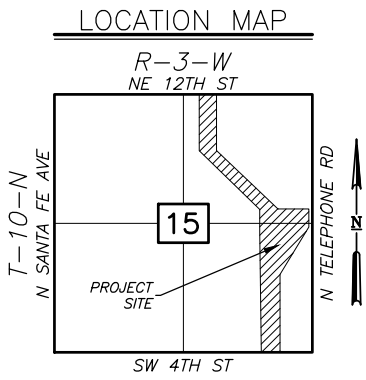
DATUM INFORMATION

HORIZONTAL DATUM
NAD83 (2011) OKLAHOMA
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NAVD88 (GEOID 12B)

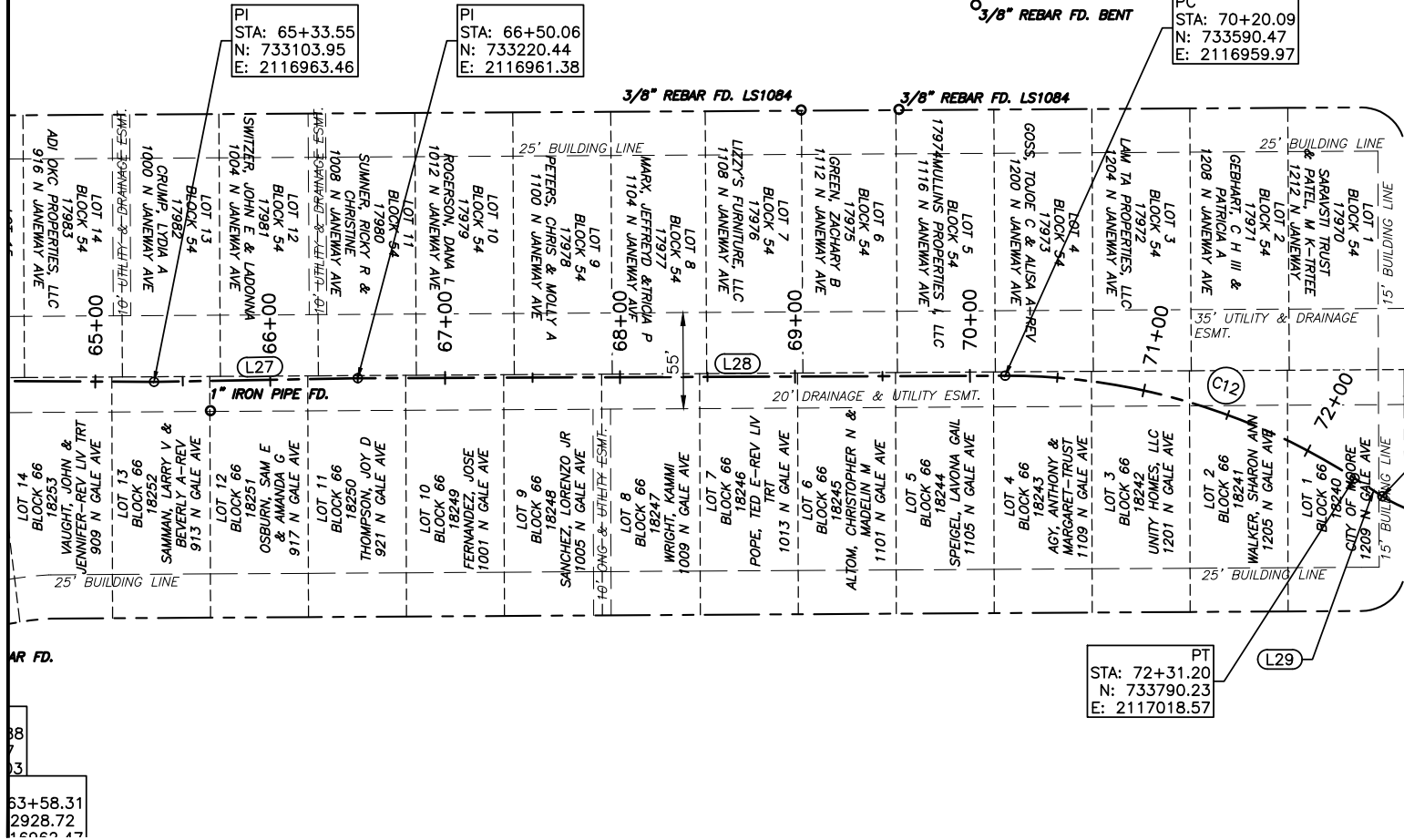


- LEGEND**
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SURVEY DATA					
KELLY CREEK DRAINAGE REPLACEMENT					
CITY OF MOORE					
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SHEET: 19 OF 76					

MATCHLINE STA. 64+50.00



DATUM INFORMATION

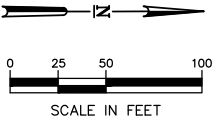
HORIZONTAL DATUM
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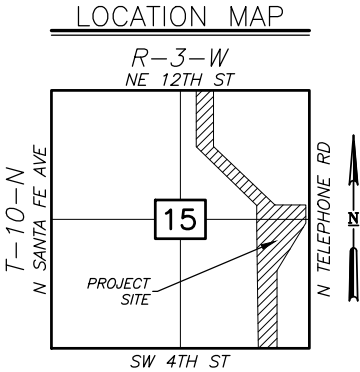
C.R.L. LINE DATA		
Line #	Length	Bearing
L1	37.07	N4° 13' 33.84"E
L2	39.76	N38° 30' 00.14"E
L3	13.95	N16° 15' 52.32"E
L4	51.04	N9° 27' 32.42"E
L5	97.38	N0° 02' 53.93"E
L6	88.98	N17° 54' 40.06"E
L7	1440.21	N0° 20' 03.85"W
L8	227.44	N54° 26' 38.72"E
L9	315.89	N25° 31' 44.80"W
L10	280.89	N33° 58' 09.76"W
L11	240.20	N1° 04' 23.22"E
L12	387.73	N47° 49' 39.83"W
L13	46.45	N47° 01' 11.50"W
L14	396.65	N47° 55' 20.38"W
L15	53.67	N46° 16' 06.34"W
L16	107.64	N49° 02' 04.59"W
L17	123.68	N49° 35' 12.92"W
L18	328.84	N48° 23' 32.03"W
L19	90.19	N49° 24' 18.13"W
L20	97.71	N47° 01' 21.37"W

C.R.L. LINE DATA		
Line #	Length	Bearing
L21	71.26	N48° 09' 58.17"W
L22	97.19	N0° 19' 28.81"E
L23	25.46	N4° 49' 33.02"W
L24	23.13	N0° 16' 25.74"E
L25	14.90	N9° 44' 17.98"E
L26	175.24	N0° 19' 26.55"E
L27	116.51	N1° 01' 14.13"W
L28	370.03	N0° 13' 10.51"W
L29	18.92	N32° 55' 09.75"E
L30	151.75	N0° 13' 27.46"W
L31	151.16	N89° 46' 56.61"E
L32	28.20	N49° 18' 59.72"E

C.R.L. CURVE DATA					
Curve #	Arc Length	Radius	Delta Angle	Chord Length	Chord Bearing
C1	15.59	50.00	17°51'46"	15.53	N8° 58' 47.00"E
C2	15.92	50.00	18°14'44"	15.86	N8° 47' 18.11"E
C3	286.82	300.00	54°46'43"	276.02	N27° 03' 17.44"E
C4	34.89	25.00	79°58'24"	32.13	N14° 27' 26.96"E
C5	137.61	225.00	35°02'33"	135.48	N16° 26' 53.27"W
C6	42.67	50.00	48°54'03"	41.39	N23° 22' 38.31"W
C7	67.71	80.00	48°29'27"	65.70	N23° 55' 14.68"W
C8	13.48	150.00	5°09'02"	13.48	N2° 15' 02.11"W
C9	13.35	150.00	5°05'59"	13.35	N2° 16' 33.64"W
C10	120.63	170.80	40°27'57"	118.14	N69° 32' 58.17"E
C11	16.43	100.00	9°24'51"	16.41	N5° 01' 52.27"E
C12	211.11	365.00	33°08'20"	208.18	N16° 20' 59.62"E
C13	43.38	75.00	33°08'37"	42.78	N16° 20' 51.15"E



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SURVEY DATA					
KELLY CREEK DRAINAGE REPLACEMENT					
CITY OF MOORE					
PLANS AND ESTIMATES PREPARED BY: MESHEK & ASSOCIATES, L.L.C. 1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620					
REVISION	BY	DATE	DRAWN	AD	08/19
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C.A. 1487 EXPIRES 6/30/21					
SHEET: 20 OF 76					

PRINT DATE: 03/02/2021 M:\City_of_Moore\18MCR03_NW_5th_Channel_Improvements\Design\Drawings\18MCR03_R004_SWMP.dwg

STORM WATER MANAGEMENT PLAN

SITE DESCRIPTION

PROJECT LIMITS: Between NW 12th Street and SW 4th Street/SH-37, less than 1 mile West of I-35
in Moore, OK.

PROJECT DESCRIPTION: Channel improvements. Approximately 1/2 mile of channel re-lining in
Kelly Creek. Reconstruction of NW 8th Street due to installation of new culvert. Turf reinforcement
mat installation.

SUGGESTED SEQUENCE OF EROSION CONTROL ACTIVITIES:

1. TEMPORARY EROSION CONTROL.
2. ROADWAY AND CHANNEL REMOVAL.
3. NEW CHANNEL INSTALLATION.
4. NEW ROADWAY RECONSTRUCTION.
5. TURF REINFORCEMENT MAT INSTALLATION.
6. PERMANENT EROSION CONTROL.

SOIL TYPE: Port silt loam, Port-Urban land complex

TOTAL AREA OF THE
CONSTRUCTION SITE: 6.96 ACRES

ESTIMATED AREA TO BE DISTURBED: 2.92 ACRES

OFFSITE AREA TO BE DISTURBED:
(FOR CONTRACTOR USE)

TOTAL IMPERVIOUS AREA
PRE-CONSTRUCTION: 1.89 ACRES

TOTAL IMPERVIOUS AREA
POST-CONSTRUCTION: 2.07 ACRES

POST-CONSTRUCTION RUNOFF
COEFFICIENT OF THE SITE: 0.57

LATITUDE & LONGITUDE
OF CENTER OF PROJECT: N36° 16' 31.5", W96° 46' 16.5"

PROJECT WILL DISCHARGE TO:

NAME OF RECEIVING WATERS: LITTLE RIVER

SENSITIVE WATERS OR WATERSHEDS: YES ☐ NO ☒

303 IMPAIRED WATERS: YES ☒ NO ☐

IF YES, LIST IMPAIRMENT: ENTEROCOCCUS, E. COLI, DO, TDS

LOCATED IN A TMDL: YES ☐ NO ☒

LAKE THUNDERBIRD TMDL: YES ☐ NO ☒

MS4 ENTITY YES ☒ NO ☐

IF YES, LOCATION: CITY OF MOORE

NOTE:

THIS SHEET SHOULD BE USED IN CONJUNCTION WITH A DRAINAGE MAP THAT ILLUSTRATES THE DRAINAGE PATTERNS/PATHWAYS AND RECEIVING WATERS FOR THIS PROJECT. THIS SHEET SHOULD ALSO BE USED WITH THE EROSION CONTROL SUMMARIES, PAY ITEMS, & NOTES.

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

- ☐ TEMPORARY SEEDING
- ☒ PERMANENT SODDING, SPRIGGING OR SEEDING
- ☐ VEGETATIVE MULCHING
- ☐ SOIL RETENTION BLANKET
- ☒ PRESERVATION OF EXISTING VEGETATION

NOTE: TEMPORARY EROSION CONTROL METHODS MUST BE USED ON ALL DISTURBED AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED FOR OVER 14 DAYS. METHODS USED WILL BE AS SHOWN ON PLANS, OR AS DIRECTED BY THE ENGINEER.

STRUCTURAL PRACTICES:

- ☐ STABILIZED CONSTRUCTION EXIT
- ☒ TEMPORARY SILT FENCE
- ☒ TEMPORARY SILT DIKES
- ☐ TEMPORARY FIBER LOG
- ☐ DIVERSION, INTERCEPTOR OR PERIMETER DIKES
- ☐ DIVERSION, INTERCEPTOR OR PERIMETER SWALES
- ☐ ROCK FILTER DAMS
- ☐ TEMPORARY SLOPE DRAIN
- ☒ PAVED DITCH W/ DITCH LINER PROTECTION
- ☐ TEMPORARY DIVERSION CHANNELS
- ☐ TEMPORARY SEDIMENT BASINS
- ☐ TEMPORARY SEDIMENT TRAPS
- ☐ TEMPORARY SEDIMENT FILTERS
- ☒ TEMPORARY SEDIMENT REMOVAL
- ☐ RIP RAP
- ☐ INLET SEDIMENT FILTER
- ☐ TEMPORARY BRUSH SEDIMENT BARRIERS
- ☐ SANDBAG BERMS
- ☐ TEMPORARY STREAM CROSSINGS

OFFSITE VEHICLE TRACKING:

- ☒ HAUL ROADS DAMPENED FOR DUST CONTROL
- ☒ LOADED HAUL TRUCKS TO BE COVERED WITH TARPULIN
- ☒ EXCESS DIRT ON ROAD REMOVED DAILY

NOTES:

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE FOLLOWING:

MAINTENANCE AND INSPECTION:

ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER FROM THE BEGINNING OF CONSTRUCTION UNTIL AN ACCEPTABLE VEGETATIVE COVER IS ESTABLISHED. INSPECTION BY THE CONTRACTOR AND ANY NECESSARY REPAIRS SHALL BE PERFORMED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCH AS RECORDED BY A NON-FREEZING RAIN GAUGE TO BE LOCATED ON SITE. POTENTIALLY ERODIBLE AREAS, DRAINAGEWAYS, MATERIAL STORAGE, STRUCTURAL DEVICES, CONSTRUCTION ENTRANCES AND EXITS ALONG WITH EROSION AND SEDIMENT CONTROL LOCATIONS ARE EXAMPLES OF SITES THAT NEED TO BE INSPECTED.

WASTE MATERIALS:

PROPER MANAGEMENT AND DISPOSAL OF CONSTRUCTION WASTE MATERIAL IS REQUIRED BY THE CONTRACTOR. MATERIALS INCLUDE STOCKPILES, SURPLUS, DEBRIS AND ALL OTHER BY-PRODUCTS FROM THE CONSTRUCTION PROCESS. PRACTICES INCLUDE DISPOSAL, PROPER MATERIALS HANDLING, SPILL PREVENTION AND CLEANUP MEASURES. CONTROLS AND PRACTICES SHALL MEET THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL AGENCIES.

HAZARDOUS MATERIALS:

PROPER MANAGEMENT AND DISPOSAL OF HAZARDOUS WASTE MATERIALS IS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING MANUFACTURER'S RECOMMENDATIONS, STATE AND FEDERAL REGULATIONS TO ENSURE CORRECT HANDLING, DISPOSAL, SPILL PREVENTION AND CLEANUP MEASURES. EXAMPLES INCLUDE BUT ARE NOT LIMITED TO: PAINTS, ACIDS, CLEANING SOLVENTS, CHEMICAL ADDITIVES, CONCRETE CURING COMPOUNDS AND CONTAMINATED SOILS.

GENERAL NOTES:

A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED TO COMPLY WITH THE OKLAHOMA POLLUTION DISCHARGE ELIMINATION SYSTEM (OPDES) REGULATIONS. THIS PLAN IS INITIATED DURING THE DESIGN PHASE, CONFIRMED IN THE PRE-WORK MEETINGS AND AVAILABLE ON THE JOB SITE ALONG WITH COPIES OF THE NOTICE OF INTENT (NOI) FORM AND PERMIT CERTIFICATE THAT HAVE BEEN FILED WITH THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ). THE PLAN MUST BE KEPT CURRENT WITH UP-TO-DATE AMENDMENTS DURING THE PROGRESSION OF THE PROJECT. ALL CONTRACTOR OFF-SITE OPERATIONS ASSOCIATED WITH THE PROJECT MUST BE DOCUMENTED IN THE SWPPP, I.E., BORROW PITS, WORK ROADS, DISPOSAL SITES, ASPHALT/CONCRETE PLANTS, ETC. THE BASIC GOAL OF STORM WATER MANAGEMENT IS TO IMPROVE WATER QUALITY BY REDUCING POLLUTANTS IN STORM WATER DISCHARGES. RUNOFF FROM CONSTRUCTION SITES HAS A POTENTIAL FOR POLLUTION DUE TO EXPOSED SOILS AND THE PRESENCE OF HAZARDOUS MATERIALS USED IN THE CONSTRUCTION PROCESS. THE PREVENTION OF SOIL EROSION, CONTAINMENT OF HAZARDOUS MATERIALS AND/OR THE INTERCEPTION OF THESE POLLUTANTS BEFORE LEAVING THE CONSTRUCTION SITE ARE THE BEST PRACTICES FOR CONTROLLING STORM WATER POLLUTION.

THE FOLLOWING SECTIONS OF THE 2009 ODOT STANDARD SPECIFICATIONS SHOULD BE NOTED:

- 103.05 BONDING REQUIREMENTS
- 104.10 FINAL CLEANING UP
- 104.12 CONTRACTOR'S RESPONSIBILITY FOR WORK
- 104.13 ENVIRONMENTAL PROTECTION
- 106.08 STORAGE AND HANDLING OF MATERIAL
- 107.01 LAWS, RULES AND REGULATIONS TO BE OBSERVED
- 107.20 STORM WATER MANAGEMENT
- 220 MANAGEMENT OF EROSION, SEDIMENTATION AND STORM WATER POLLUTION PREVENTION AND CONTROL
- 221 TEMPORARY SEDIMENT CONTROL

IN ADDITION:

"ODEQ GENERAL PERMIT (OKR10) FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES WITHIN THE STATE OF OKLAHOMA." ODEQ, WATER QUALITY DIVISION, SEPTEMBER 13, 2017.

STORM WATER MANAGEMENT PLAN

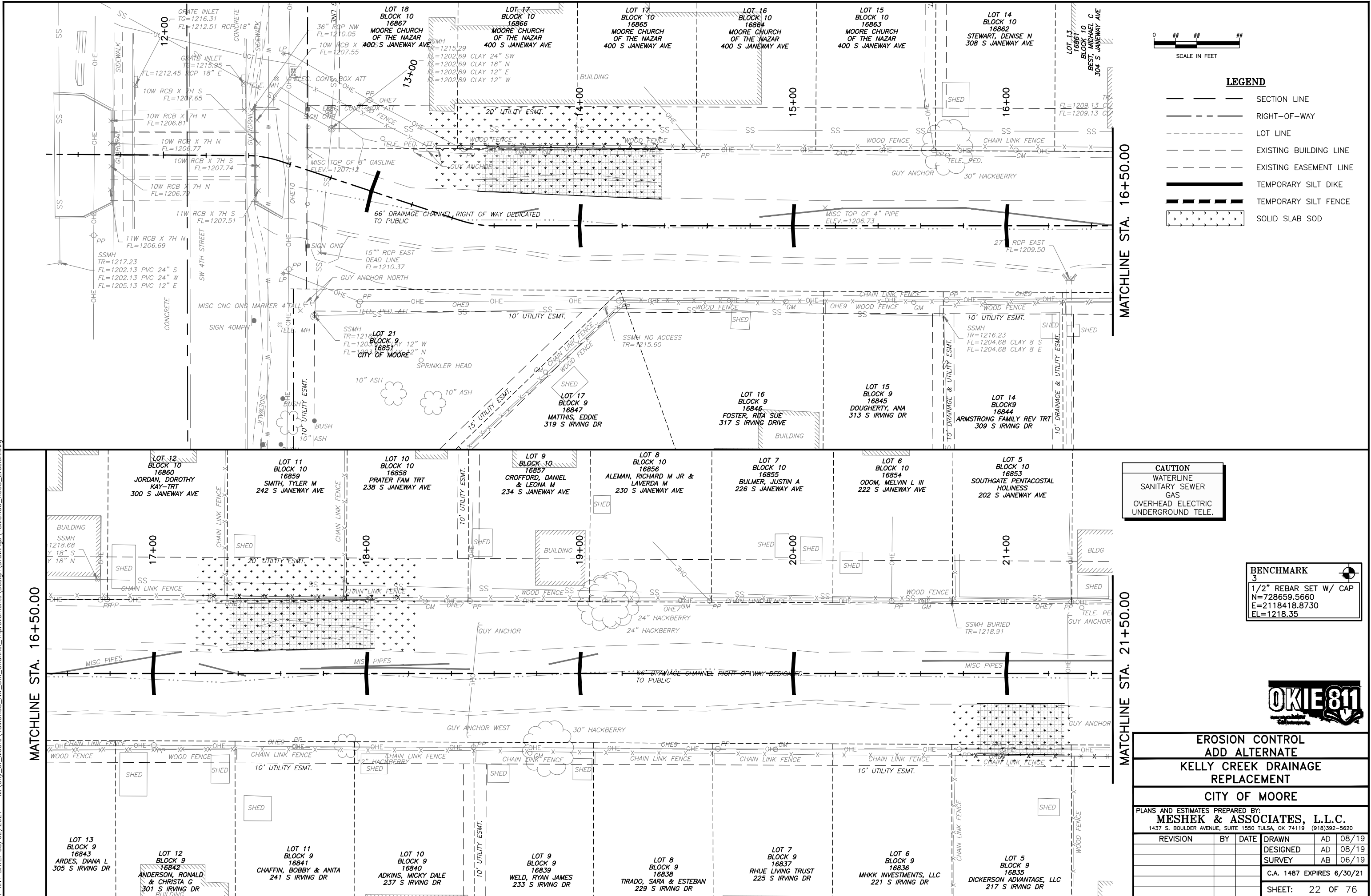
KELLY CREEK DRAINAGE REPLACEMENT

CITY OF MOORE

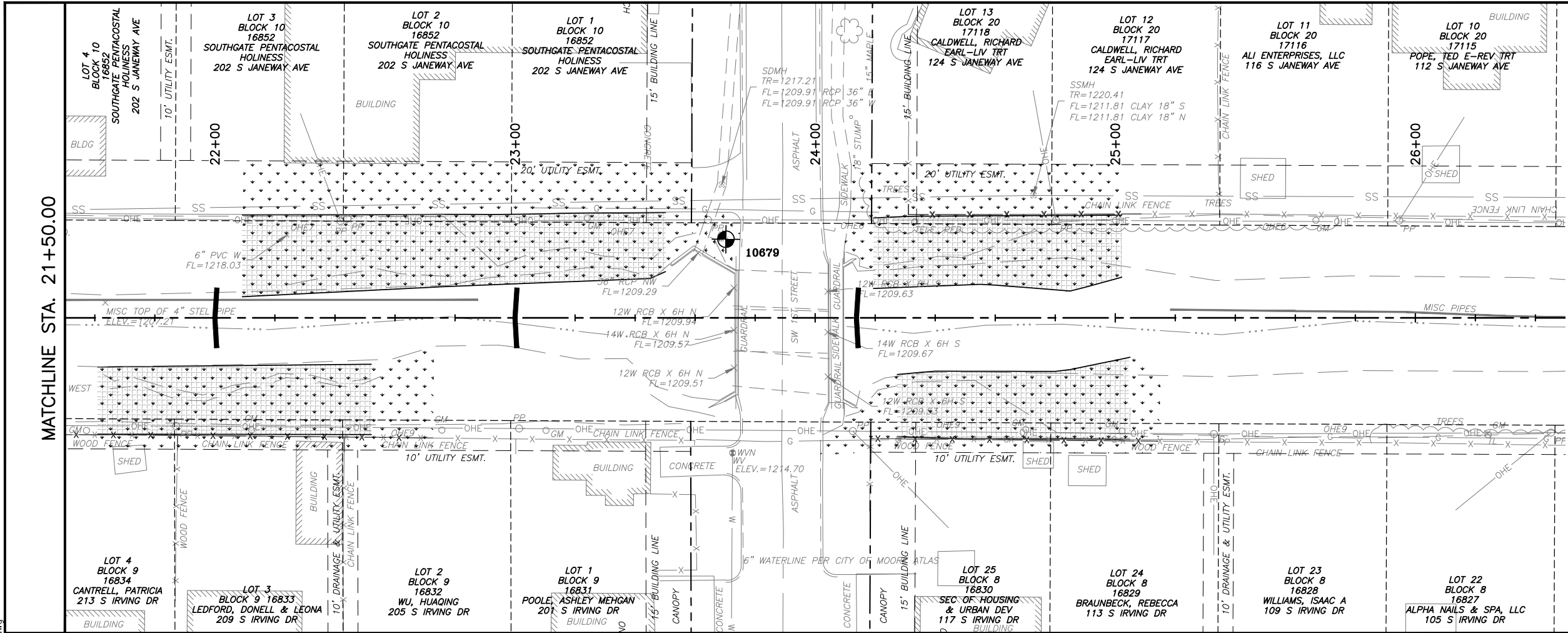
PLANS AND ESTIMATES PREPARED BY:
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1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620

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			C.A. 1487 EXPIRES 6/30/21		
			SHEET: 21 OF 76		

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LEGEND

- SECTION LINE
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- EXISTING BUILDING LINE
- EXISTING EASEMENT LINE
- TEMPORARY SILT DIKE
- TEMPORARY SILT FENCE
- SOLID SLAB SOD

CAUTION
WATERLINE
SANITARY SEWER
GAS
OVERHEAD ELECTRIC
UNDERGROUND TELE.

BENCHMARK
10679
1/2" REBAR SET W/ CAP
N=729746.8273
E=2118256.2933
EL=1217.43

BENCHMARK
10240
1/2" REBAR SET W/ CAP
N=731560.1803
E=2118250.8002
EL=1228.49



EROSION CONTROL ADD ALTERNATE					
KELLY CREEK DRAINAGE REPLACEMENT					
CITY OF MOORE					
PLANS AND ESTIMATES PREPARED BY: MESHEK & ASSOCIATES, L.L.C. 1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620					
REVISION	BY	DATE	DRAWN	AD	08/19
			DESIGNED	AD	08/19
			SURVEY	AB	06/19
			C.A. 1487 EXPIRES 6/30/21		
			SHEET: 22A OF 76		

PRINT DATE: 03/02/2021 M:\City of Moore\18MOR03_NW_5th_Channel_Improvements\Drawings\18MOR03_R005_Erosion.dwg



LEGEND

- SECTION LINE
- RIGHT-OF-WAY
- LOT LINE
- EXISTING BUILDING LINE
- EXISTING EASEMENT LINE
- TEMPORARY SILT DIKE
- TEMPORARY SILT FENCE
- SOLID SLAB SOD

CAUTION
WATERLINE
SANITARY SEWER
GAS
OVERHEAD ELECTRIC
UNDERGROUND TELE.

BENCHMARK
10679
1/2" REBAR SET W/ CAP
N=729746.8273
E=2118256.2933
EL=1217.43

BENCHMARK
10240
1/2" REBAR SET W/ CAP
N=731560.1803
E=2118250.8002
EL=1228.49



EROSION CONTROL

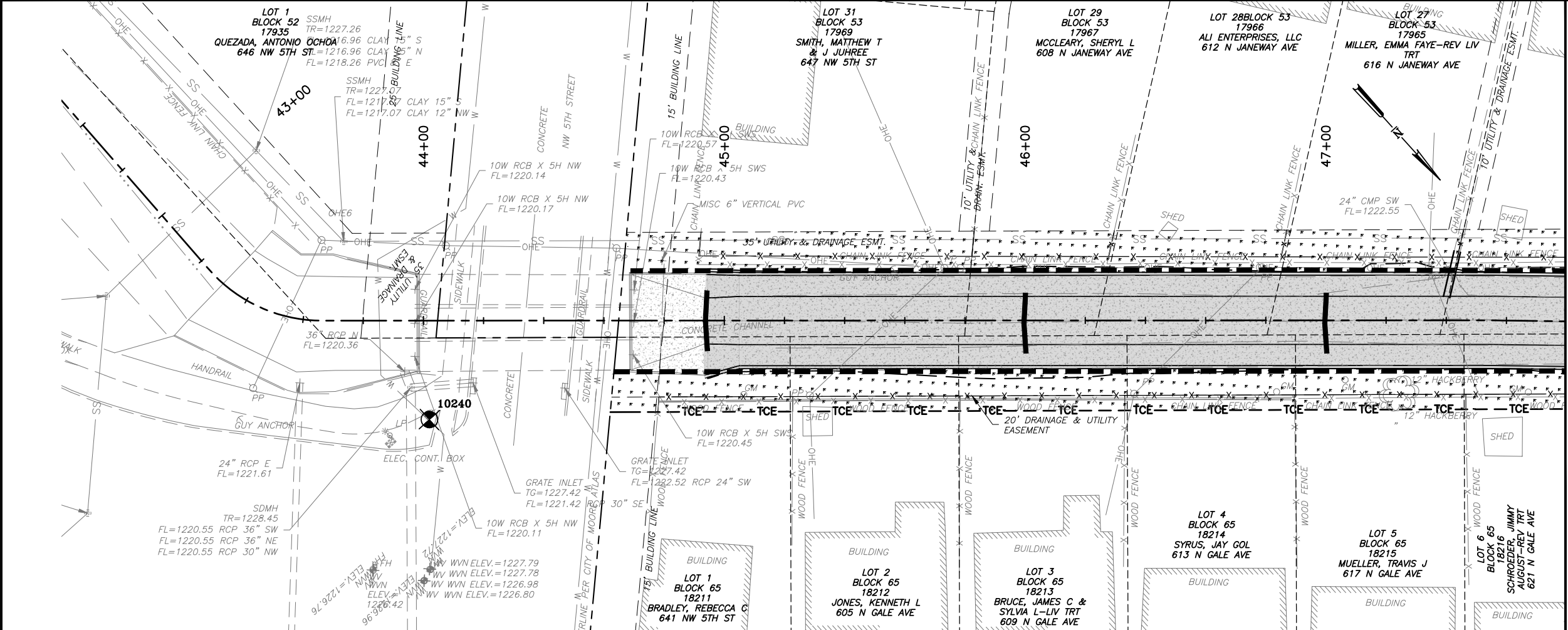
KELLY CREEK DRAINAGE
REPLACEMENT

CITY OF MOORE

PLANS AND ESTIMATES PREPARED BY:
MESHEK & ASSOCIATES, L.L.C.
1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620

REVISION	BY	DATE	DRAWN	AD	08/19
			DESIGNED	AD	08/19
			SURVEY	AB	06/19
C.A. 1487 EXPIRES 6/30/21					
SHEET: 23 OF 76					

MATCHLINE STA. 47+80.00



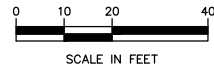
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MATCHLINE STA. 47+80.00

MATCHLINE STA. 52+80.00

MATCHLINE STA. 52+80.00

MATCHLINE STA. 57+80.00



LEGEND

- SECTION LINE
- RIGHT-OF-WAY
- LOT LINE
- EXISTING BUILDING LINE
- EXISTING EASEMENT LINE
- TEMPORARY SILT DIKE
- TEMPORARY SILT FENCE
- SOLID SLAB SOD

BENCHMARK

1/2" REBAR SET W/ CAP
N=728659.5660
E=2118418.8730
EL=1218.35



EROSION CONTROL

KELLY CREEK DRAINAGE REPLACEMENT

CITY OF MOORE

PLANS AND ESTIMATES PREPARED BY:
MESHEK & ASSOCIATES, L.L.C.
1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620

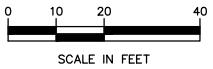
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			DESIGNED	AD	08/19
			SURVEY	AB	06/19
C.A. 1487 EXPIRES 6/30/21					
SHEET: 24 OF 76					

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MATCHLINE STA. 57+80.00

MATCHLINE STA. 61+40.00

MATCHLINE STA. 66+40.00



LEGEND

- SECTION LINE
- RIGHT-OF-WAY
- LOT LINE
- EXISTING BUILDING LINE
- EXISTING EASEMENT LINE
- TEMPORARY SILT DIKE
- TEMPORARY SILT FENCE
- SOLID SLAB SOD



EROSION CONTROL

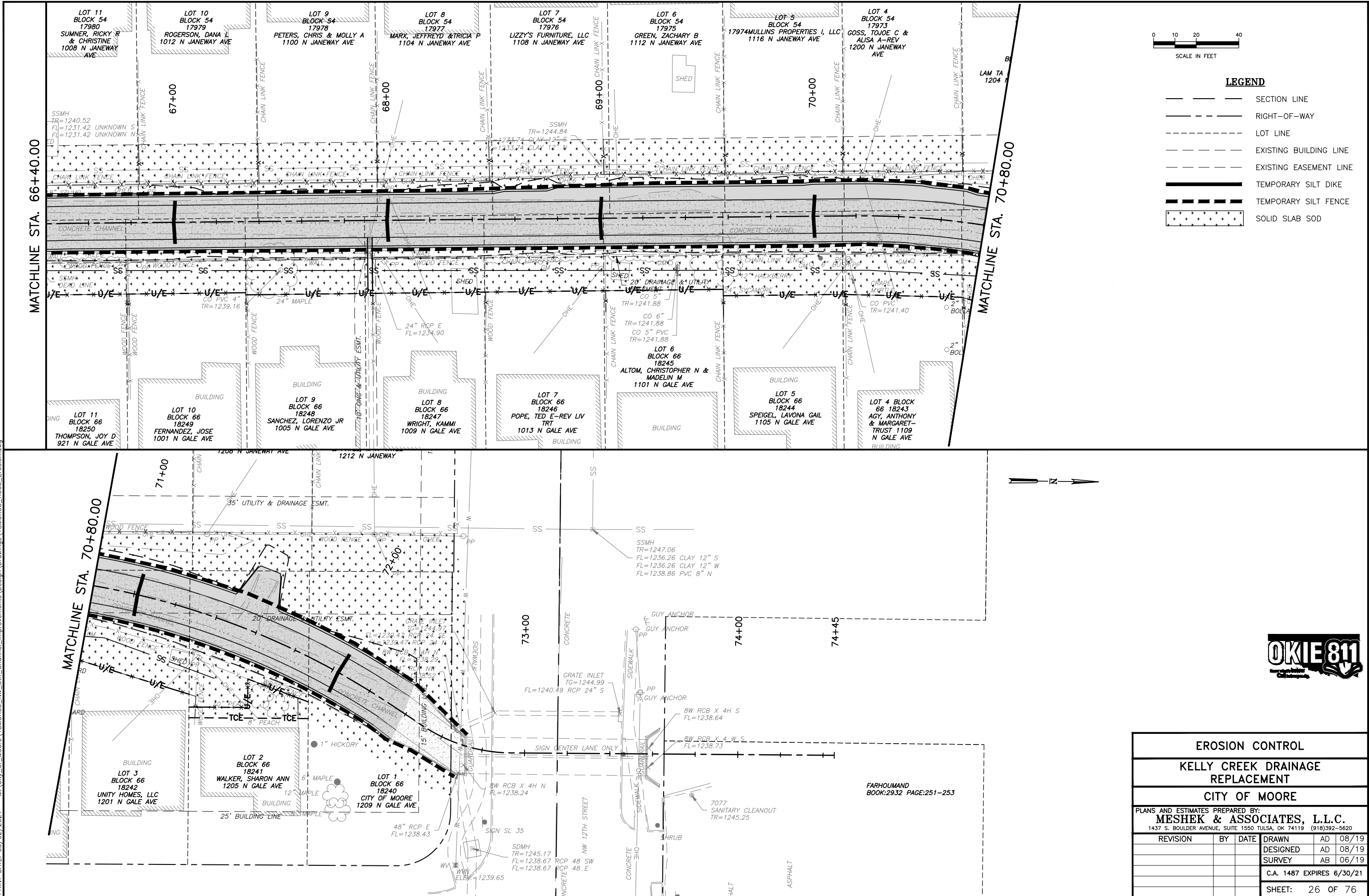
KELLY CREEK DRAINAGE REPLACEMENT

CITY OF MOORE

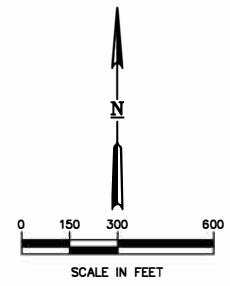
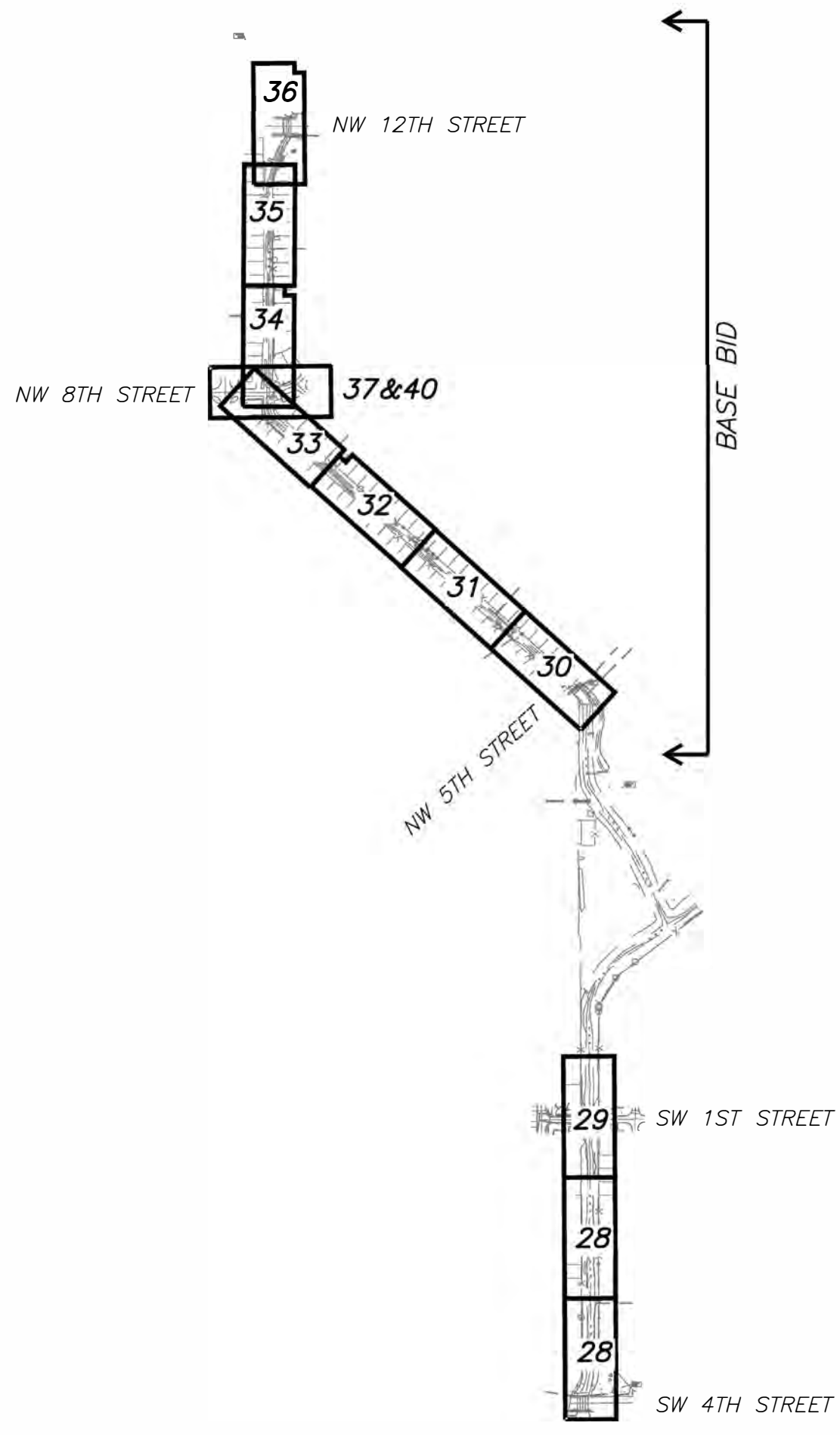
PLANS AND ESTIMATES PREPARED BY:
MESHEK & ASSOCIATES, L.L.C.
1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620

REVISION	BY	DATE	DRAWN	AD	08/19
			DESIGNED	AD	08/19
			SURVEY	AB	06/19
C.A. 1487 EXPIRES 6/30/21					
SHEET: 25 OF 76					

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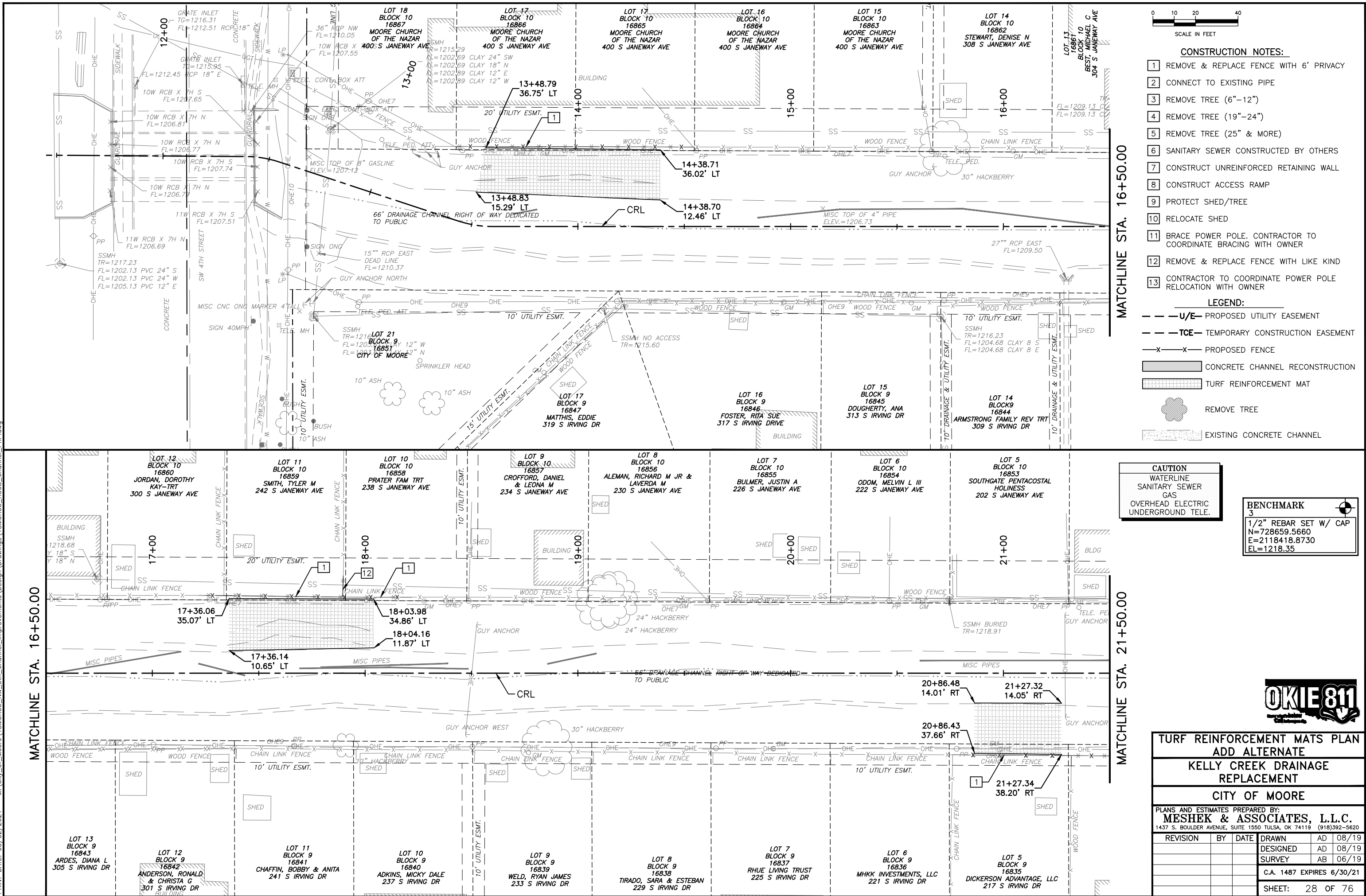
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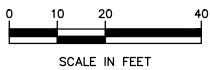
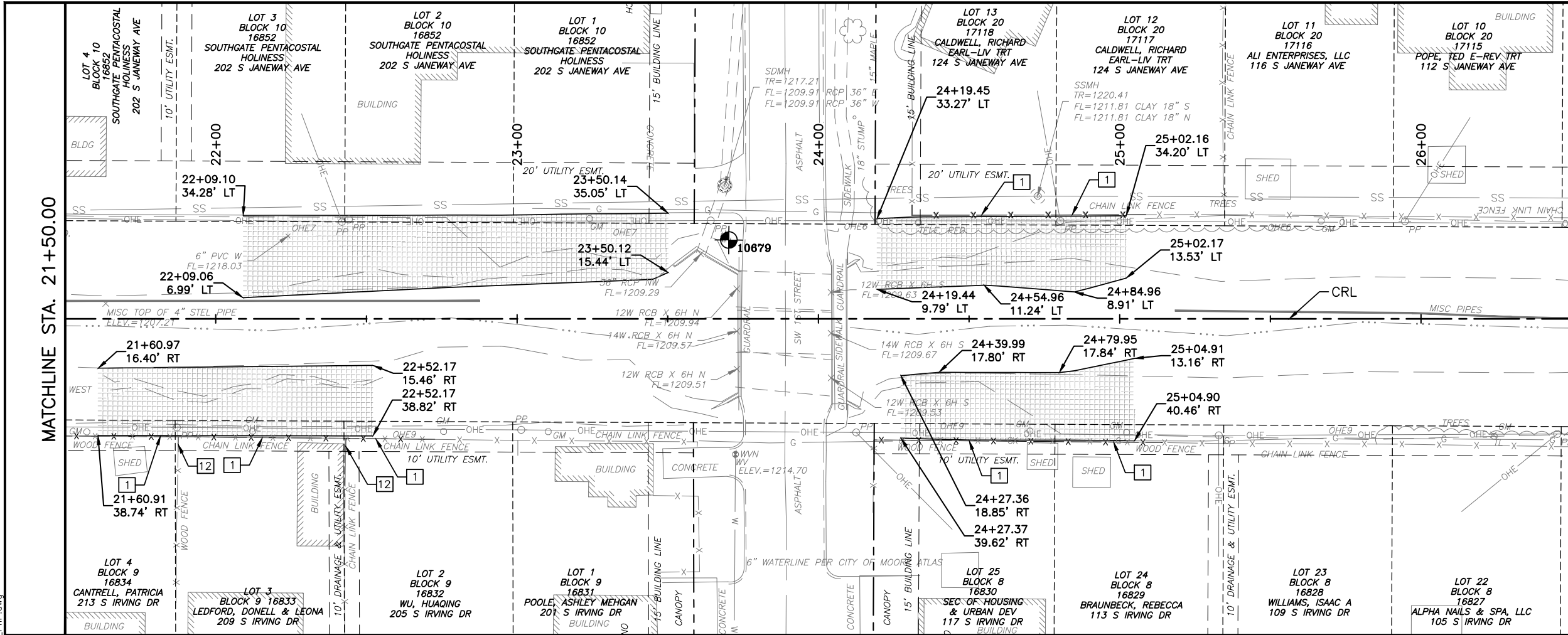


XX = PLAN & PROFILE
SHEET NUMBER



KEY PLAN					
KELLY CREEK DRAINAGE REPLACEMENT					
CITY OF MOORE					
PLANS AND ESTIMATES PREPARED BY:					
MESHEK & ASSOCIATES, L.L.C.					
1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620					
REVISION	BY	DATE	DRAWN	AD	08/19
			DESIGNED	AD	08/19
			SURVEY	AB	06/19
			C.A. 1487 EXPIRES 8/30/21		
			SHEET: 27 OF 76		





CONSTRUCTION NOTES:

- 1 REMOVE & REPLACE FENCE WITH 6' PRIVACY
- 2 CONNECT TO EXISTING PIPE
- 3 REMOVE TREE (6"-12")
- 4 REMOVE TREE (19"-24")
- 5 REMOVE TREE (25" & MORE)
- 6 SANITARY SEWER CONSTRUCTED BY OTHERS
- 7 CONSTRUCT UNREINFORCED RETAINING WALL
- 8 CONSTRUCT ACCESS RAMP
- 9 PROTECT SHED/TREE
- 10 RELOCATE SHED
- 11 BRACE POWER POLE. CONTRACTOR TO COORDINATE BRACING WITH OWNER
- 12 REMOVE & REPLACE FENCE WITH LIKE KIND
- 13 CONTRACTOR TO COORDINATE POWER POLE RELOCATION WITH OWNER

LEGEND:

- U/E --- PROPOSED UTILITY EASEMENT
- TCE --- TEMPORARY CONSTRUCTION EASEMENT
- x-x- PROPOSED FENCE
- [Solid Gray Box] CONCRETE CHANNEL RECONSTRUCTION
- [Hatched Box] TURF REINFORCEMENT MAT
- [Tree Symbol] REMOVE TREE
- [Dashed Box] EXISTING CONCRETE CHANNEL

CAUTION
WATERLINE
SANITARY SEWER
GAS
OVERHEAD ELECTRIC
UNDERGROUND TELE.

BENCHMARK
10679
1/2" REBAR SET W/ CAP
N=729746.8273
E=2118256.2933
EL=1217.43



**TURF REINFORCEMENT MATS PLAN
ADD ALTERNATE**

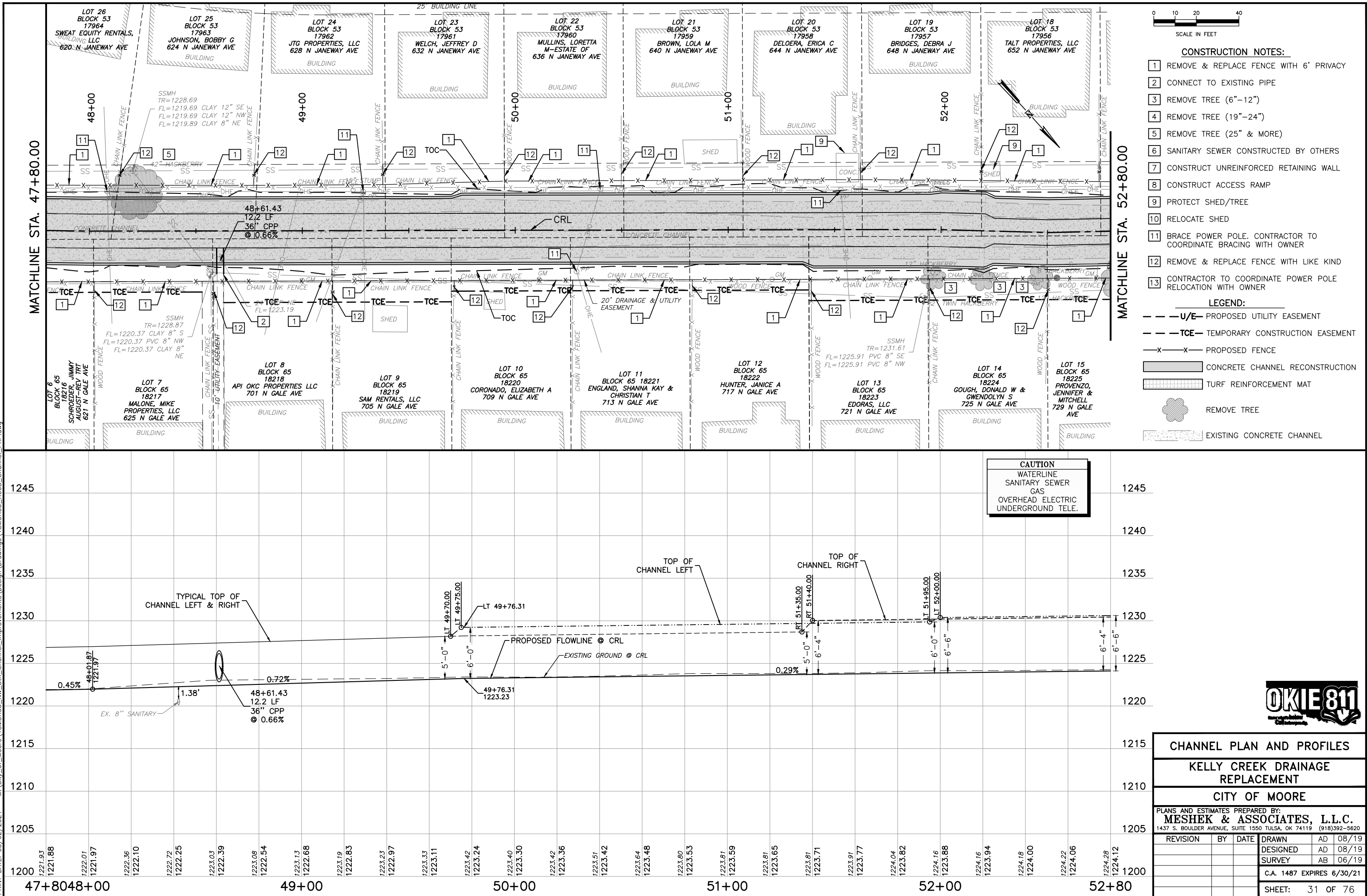
**KELLY CREEK DRAINAGE
REPLACEMENT**

CITY OF MOORE

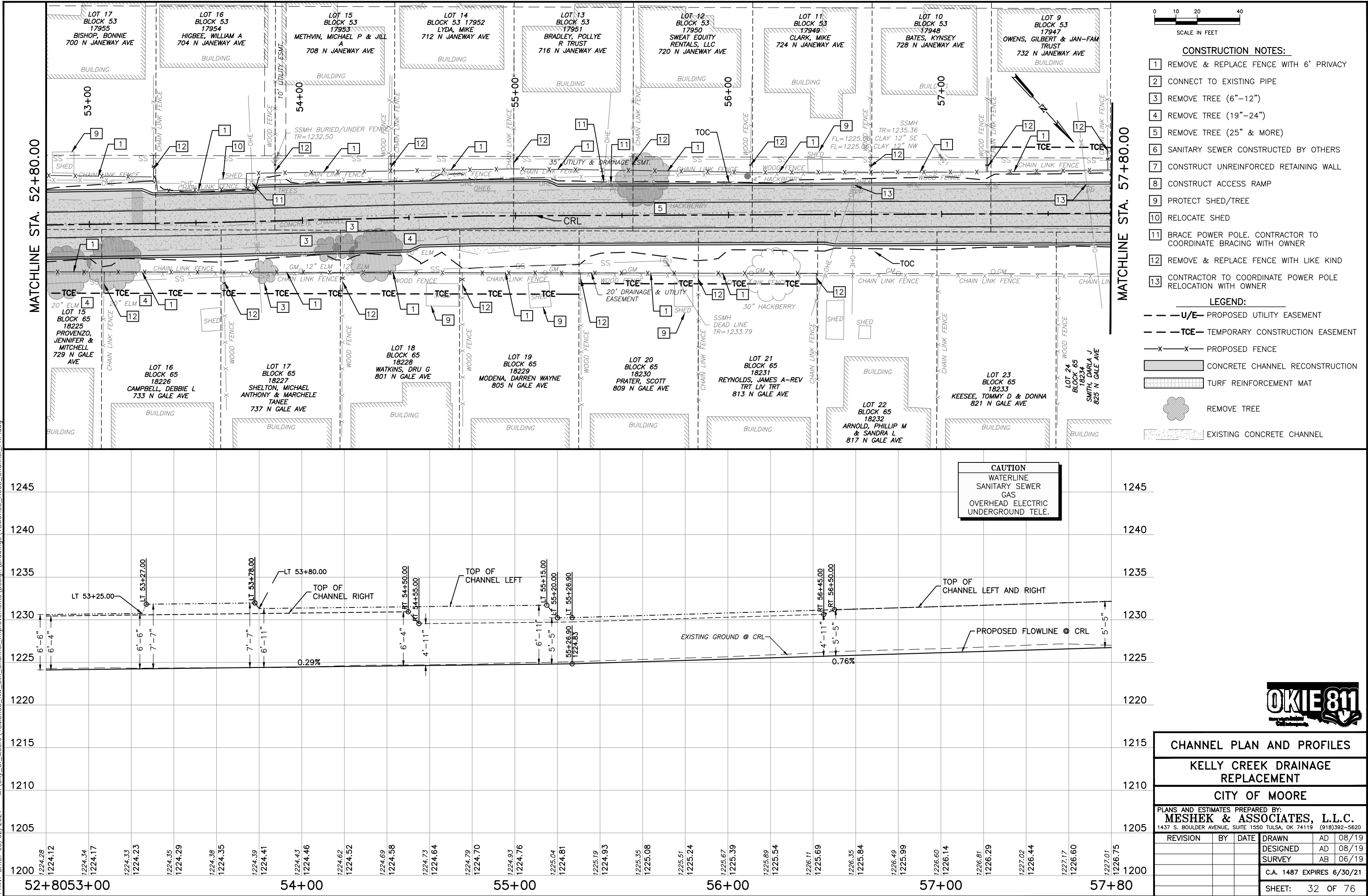
PLANS AND ESTIMATES PREPARED BY:
MESHEK & ASSOCIATES, L.L.C.
1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620

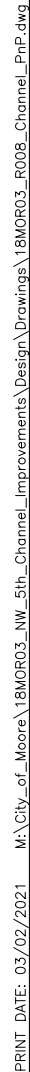
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			DESIGNED	AD	08/19
			SURVEY	AB	06/19
			C.A. 1487 EXPIRES 6/30/21		
			SHEET: 29 OF 76		

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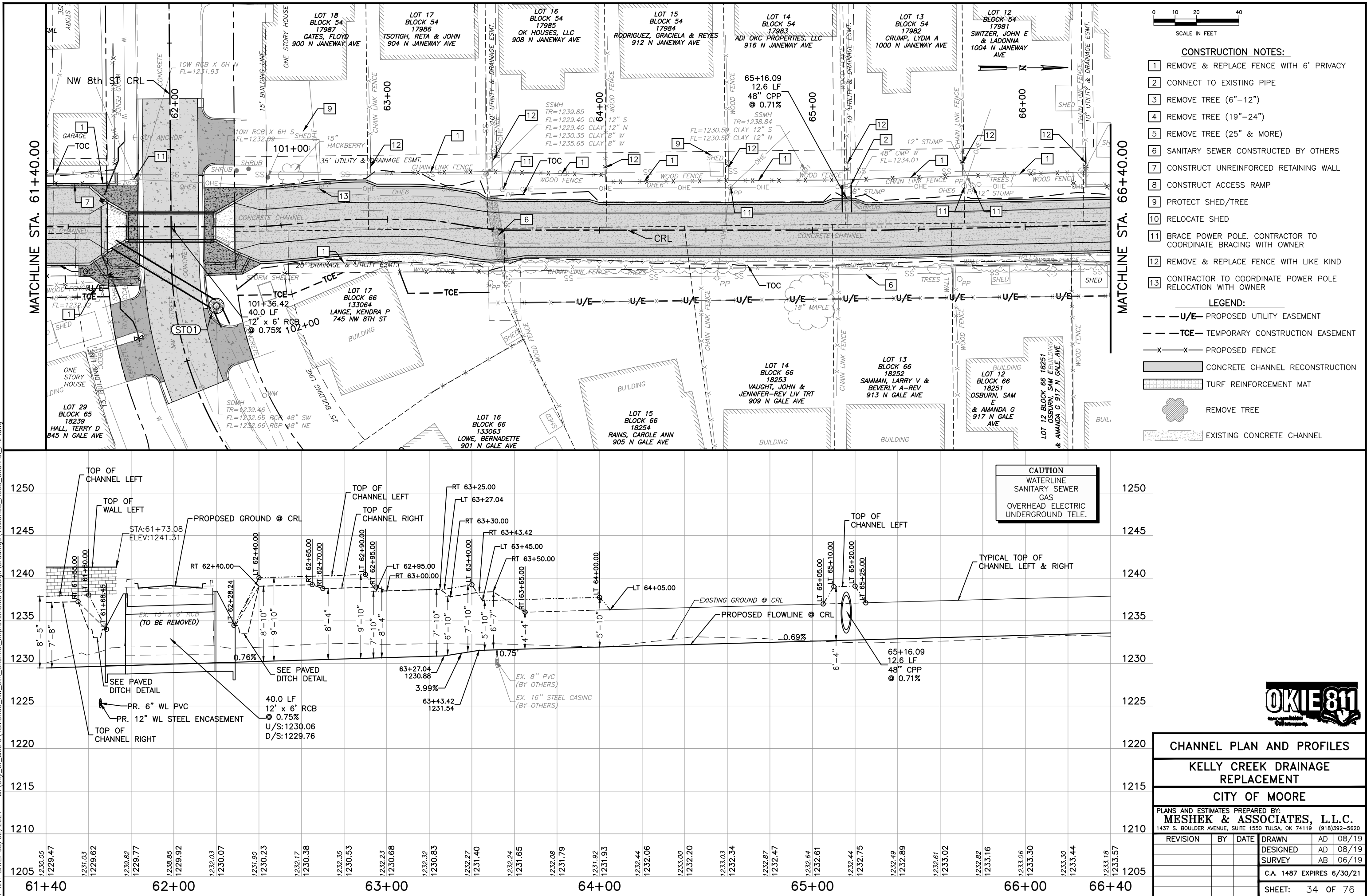


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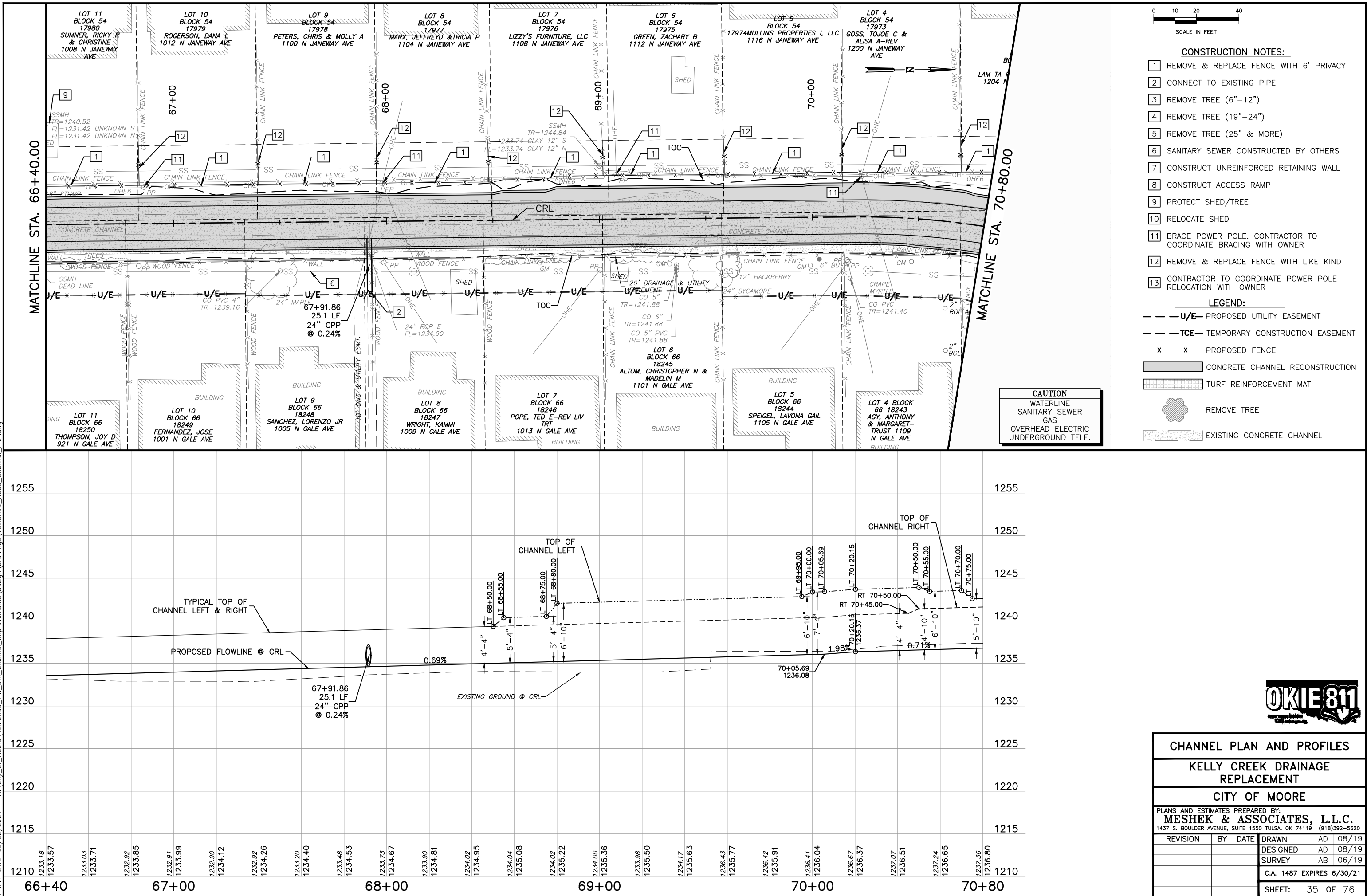




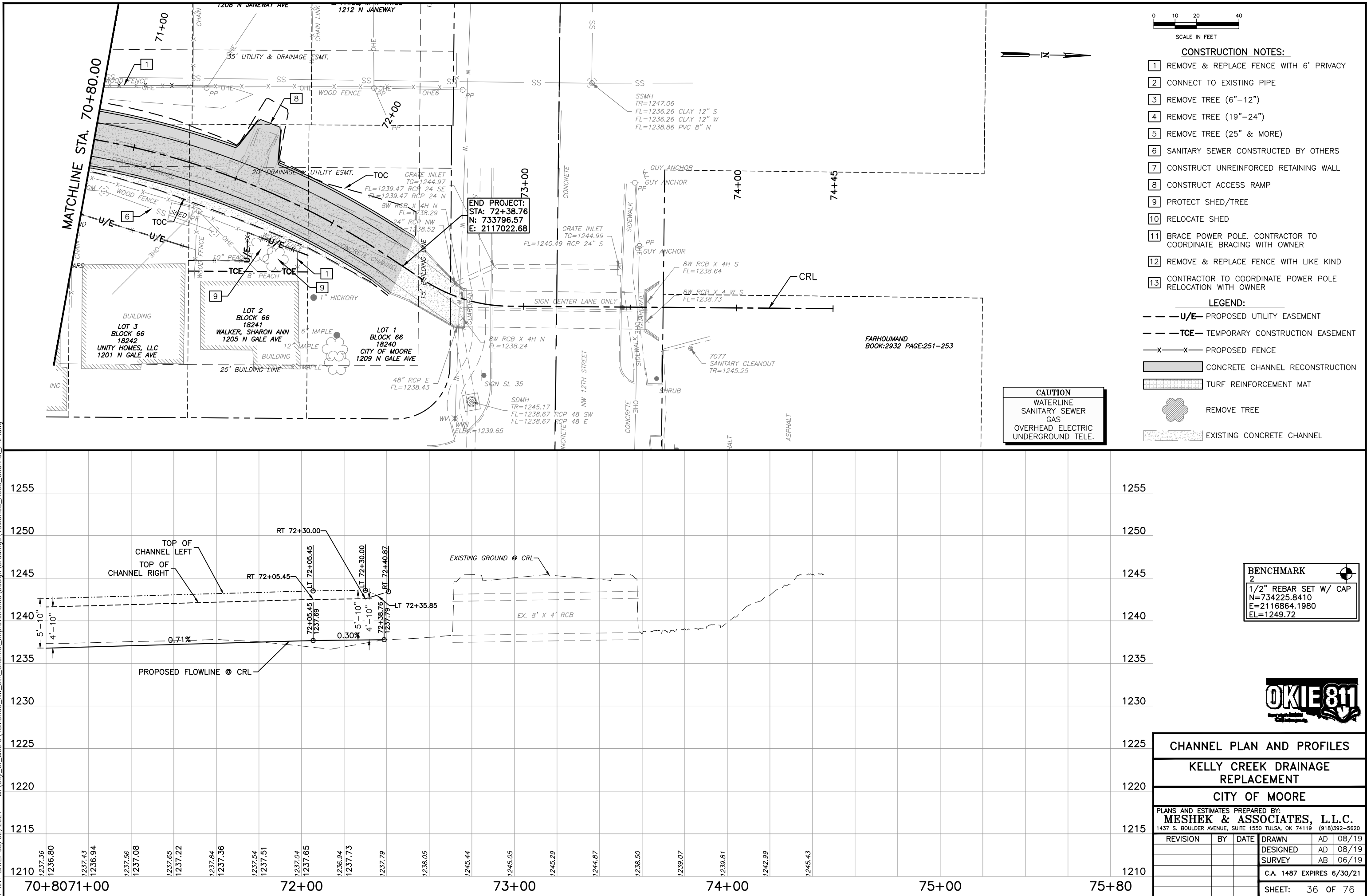
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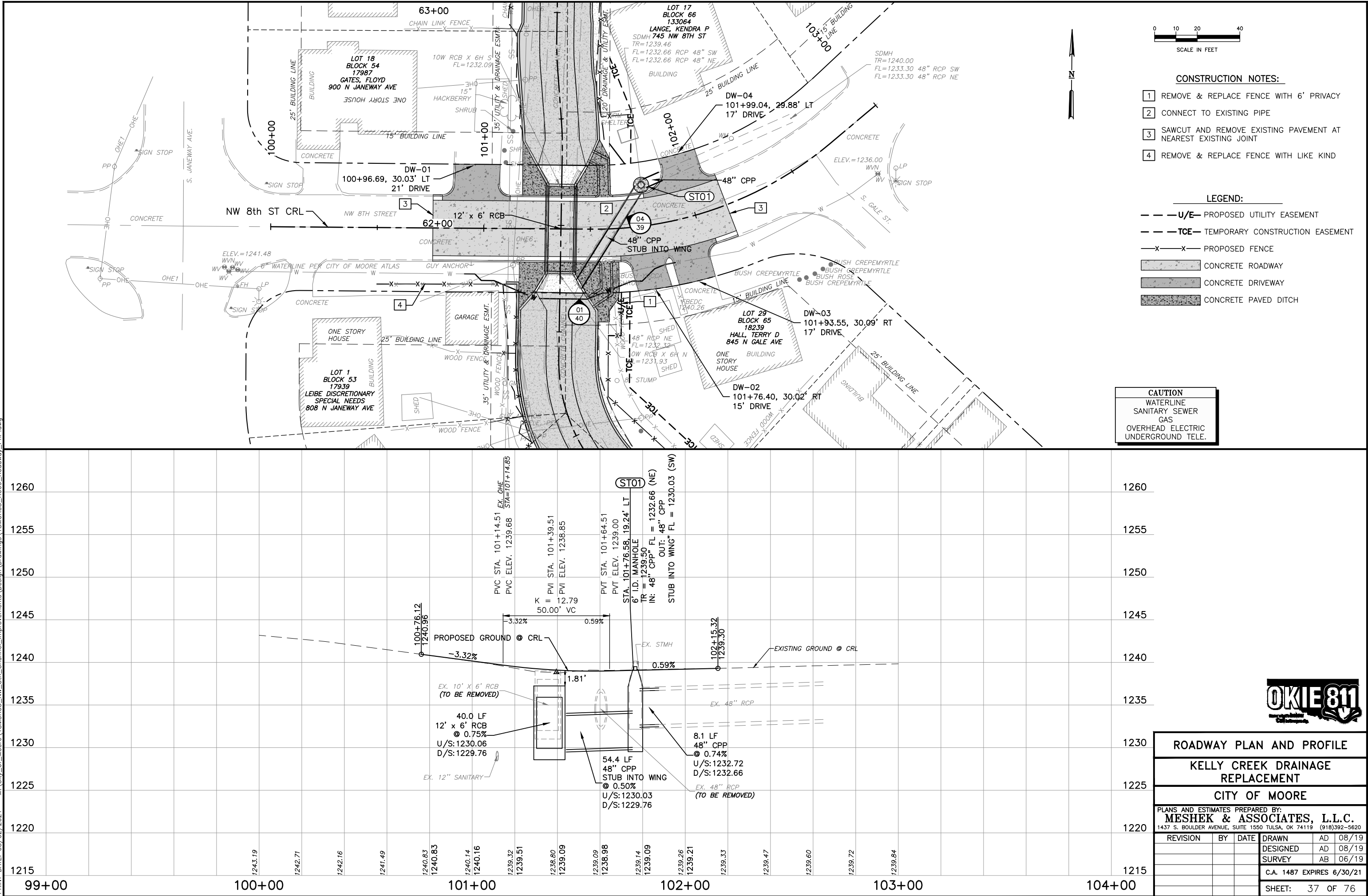
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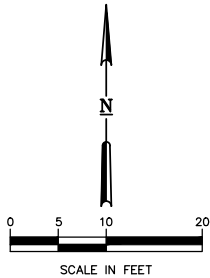
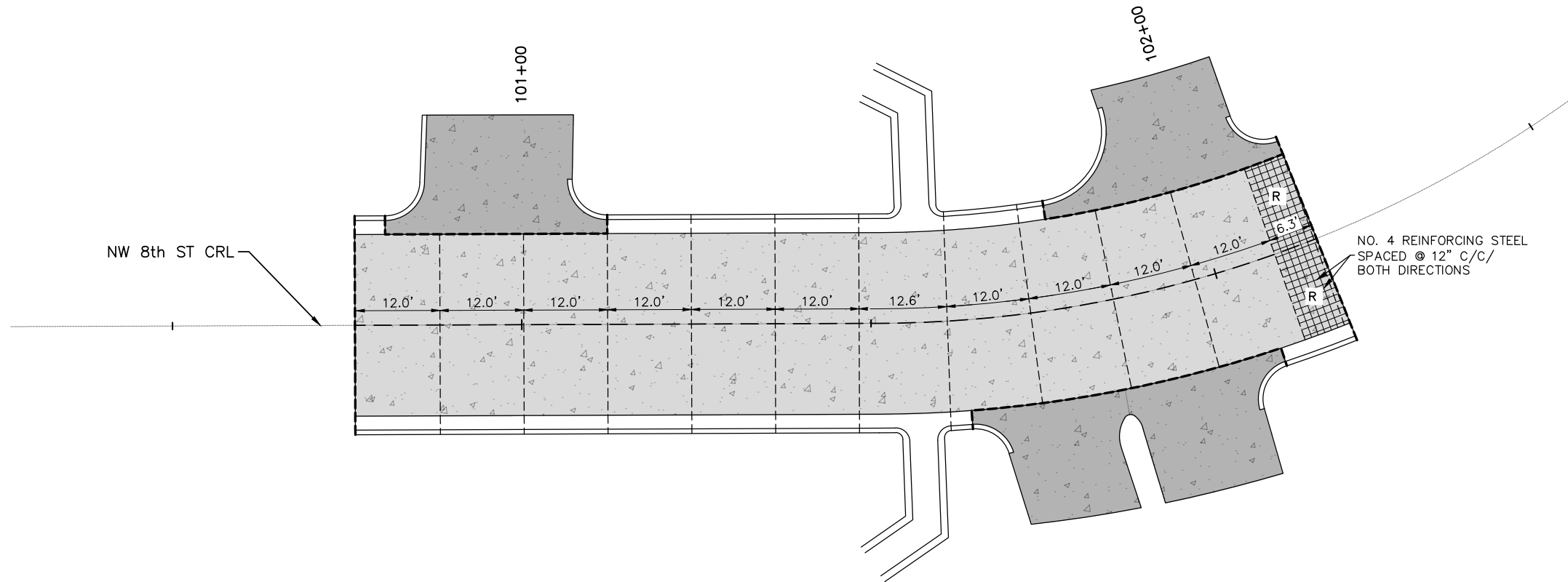
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LEGEND

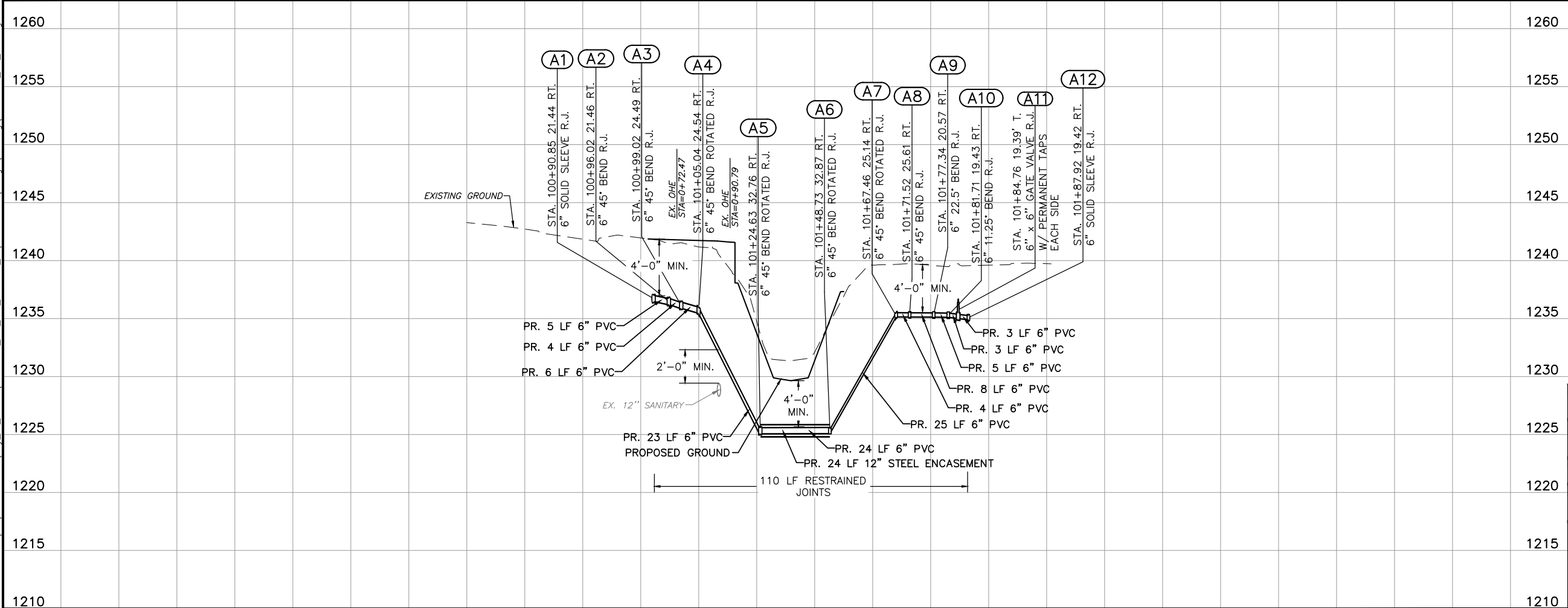
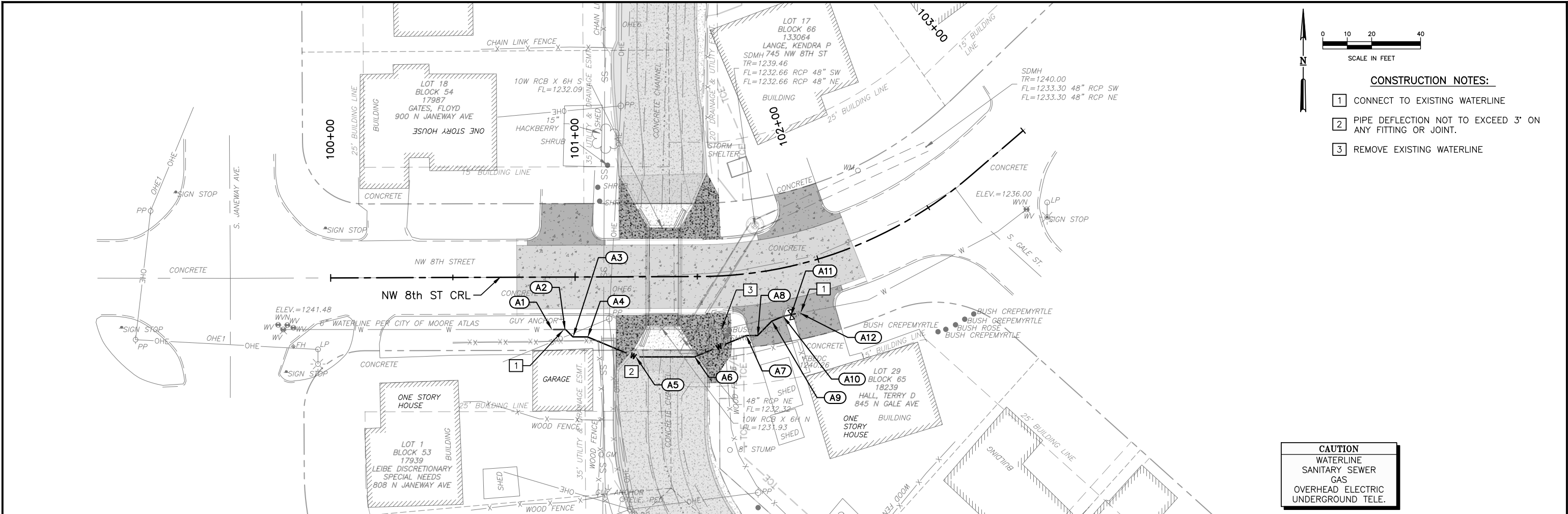
- LONGITUDINAL CONSTRUCTION JOINT
- DOWELED CONTRACTION JOINT
- ISOLATION JOINT
- [R] REINFORCED PANEL

- NOTES:
1. DEAD END JOINTS SHALL BE PERPENDICULAR TO PAVEMENT EDGE OR INTERSECTING JOINT.
 2. TRANSVERSE JOINTS LOCATED IN A RADIUS SHALL BE RADIAL LINES INTERSECTING THE CENTER POINT OF THE CURVE RADIUS.
 3. JOINTS AT TWELVE FEET SPACING UNLESS OTHERWISE NOTED.
 4. SEE ODOT STD. LECS-4 AND LTU-3 (LATEST REVISIONS) FOR JOINT DETAILS.
 5. COST OF REINFORCEMENT IN INDICATED PANELS SUBSIDIARY TO OTHER ITEMS.



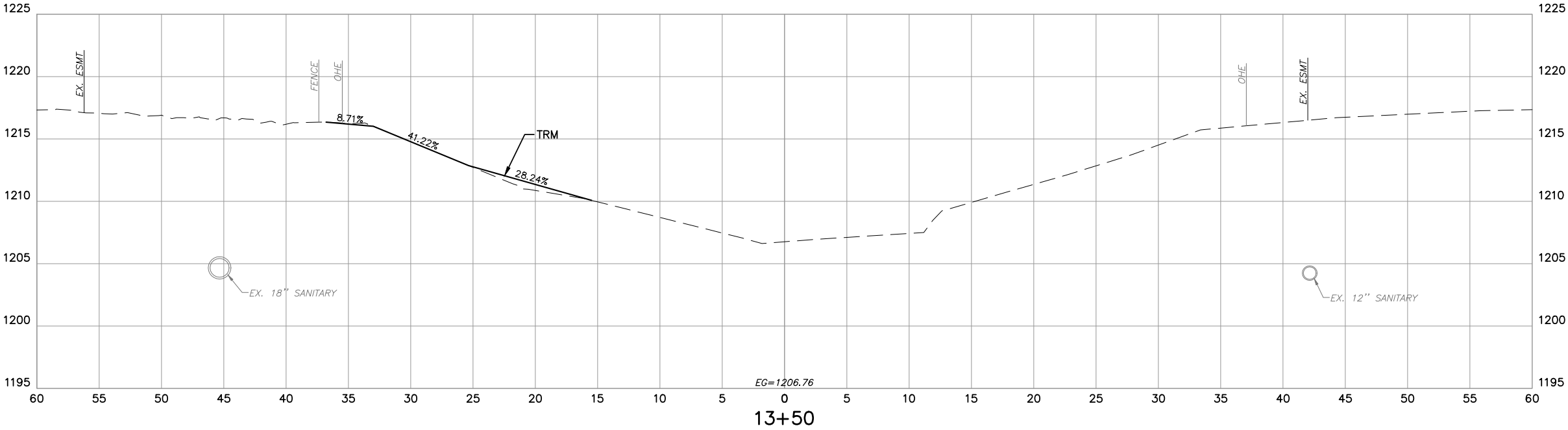
JOINT LAYOUT PLAN					
KELLY CREEK DRAINAGE REPLACEMENT					
CITY OF MOORE					
PLANS AND ESTIMATES PREPARED BY:					
MESHEK & ASSOCIATES, L.L.C.					
1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620					
REVISION	BY	DATE	DRAWN	AD	08/19
			DESIGNED	AD	08/19
			SURVEY	AB	06/19
			C.A. 1487 EXPIRES 6/30/21		
			SHEET: 38 OF 76		

PRINT DATE: 03/02/2021 M:\City of Moore\18MCR03_NW_5th_Channel_Improvements\Design\Working\18MCR03_PR_WL.dwg

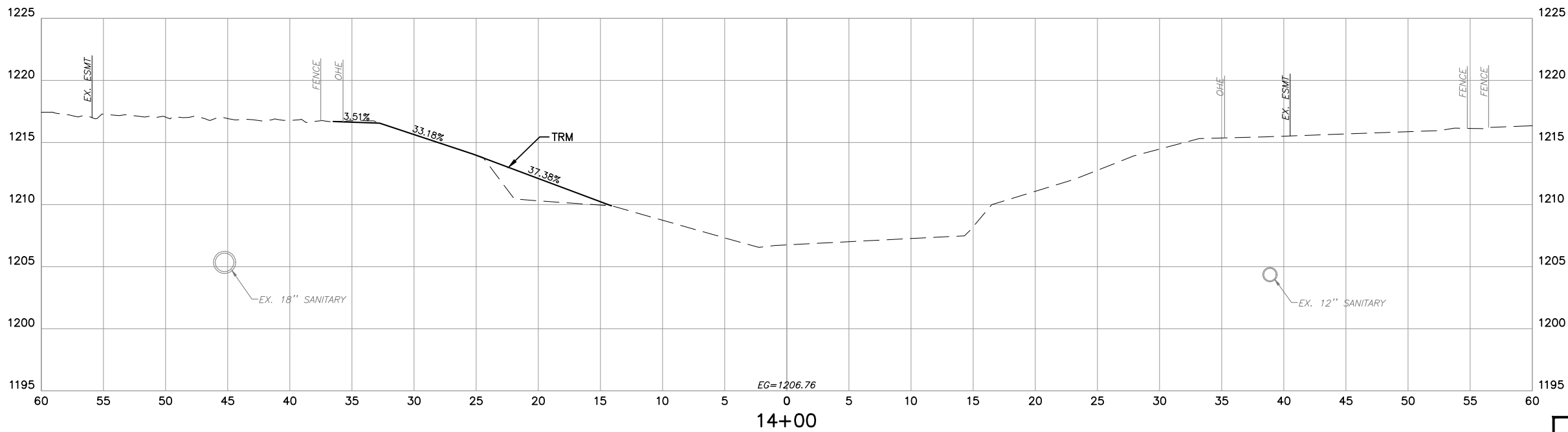
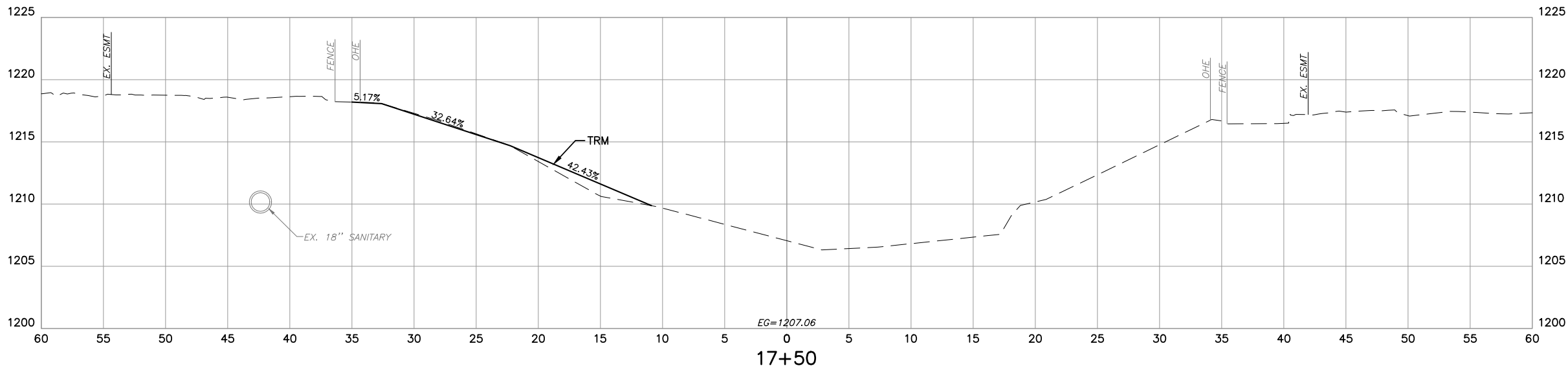
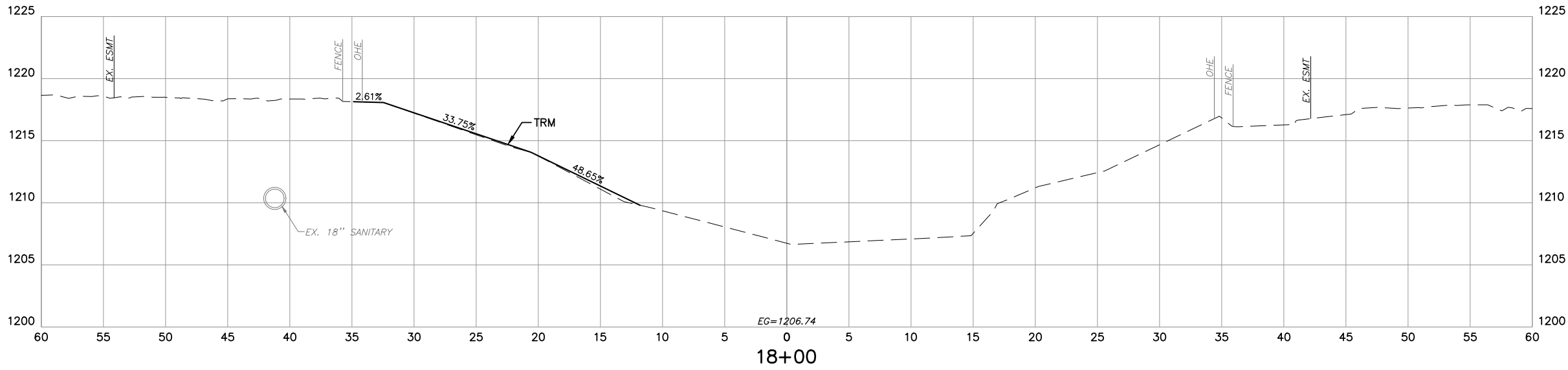


WATERLINE PLAN & PROFILE					
KELLY CREEK DRAINAGE REPLACEMENT					
CITY OF MOORE					
PLANS AND ESTIMATES PREPARED BY:					
MESHEK & ASSOCIATES, L.L.C.					
1437 S. BOULDER AVENUE, SUITE 1550 TULSA, OK 74119 (918)392-5620					
REVISION	BY	DATE	DRAWN	AD	08/19
			DESIGNED	AD	08/19
			SURVEY	AB	06/19
C.A. 1487 EXPIRES 6/30/21					
SHEET: 40 OF 76					

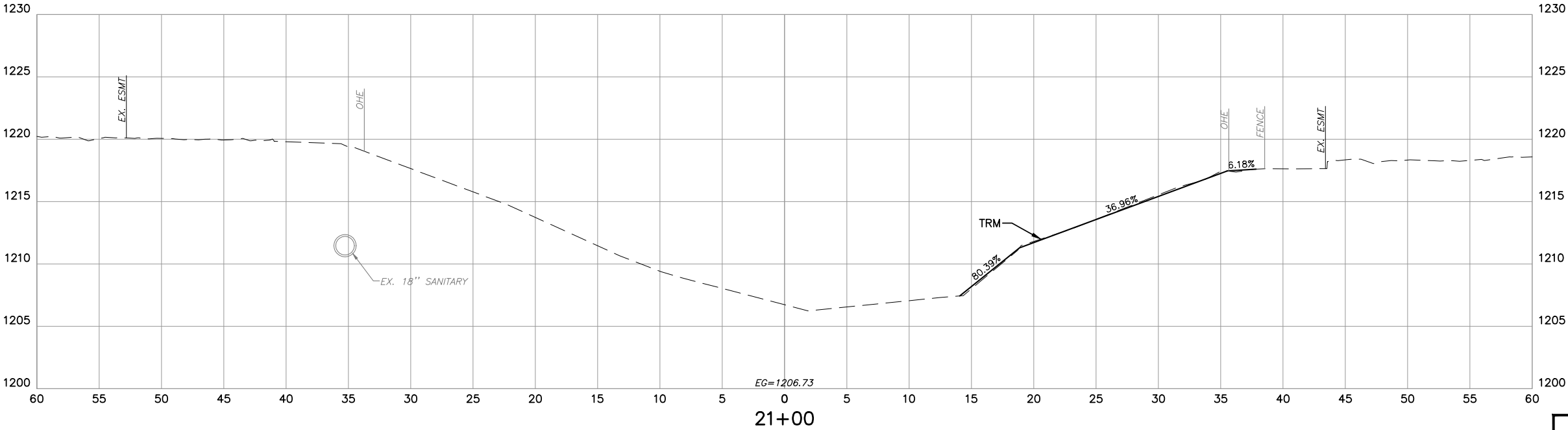
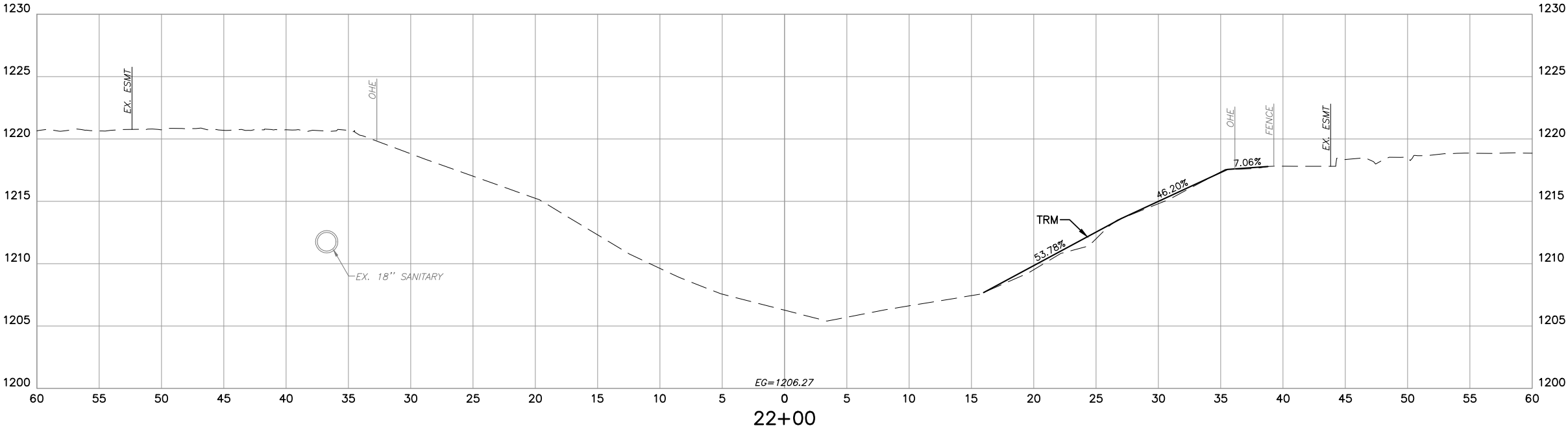
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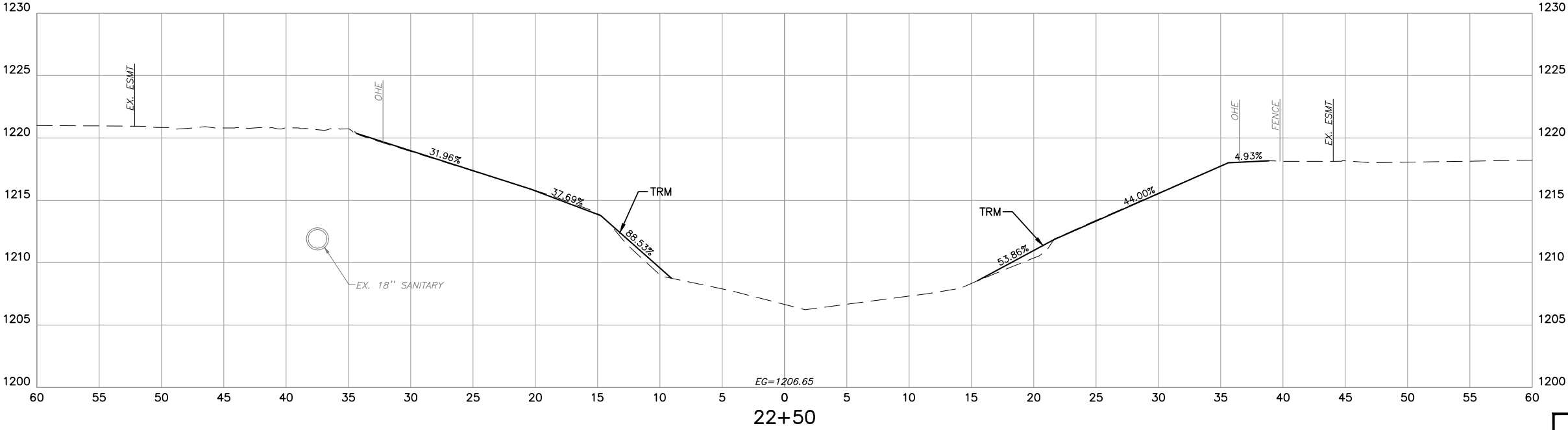
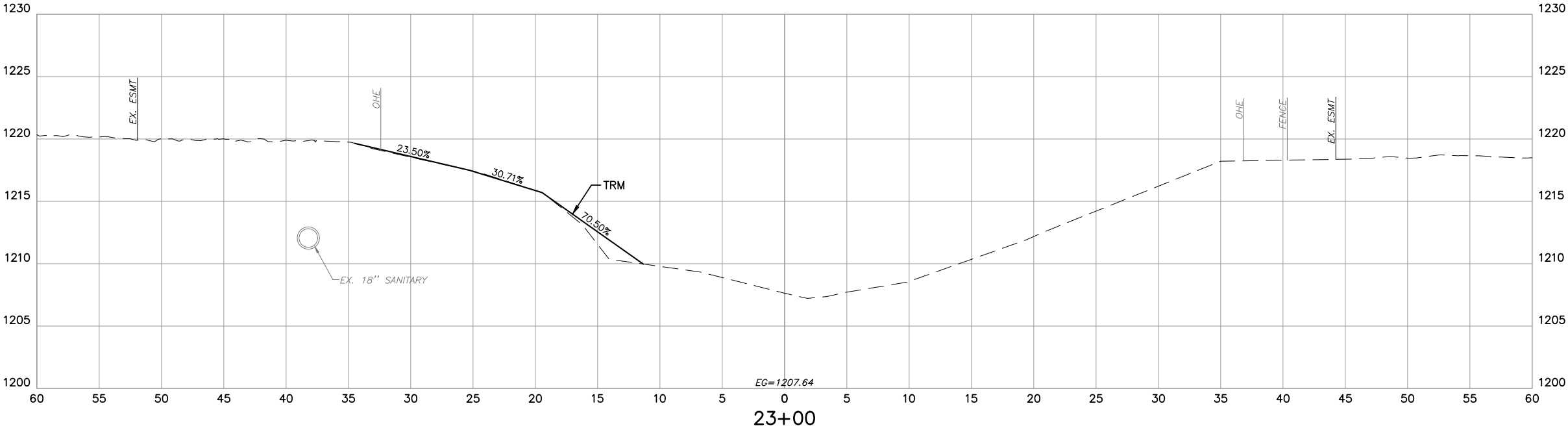
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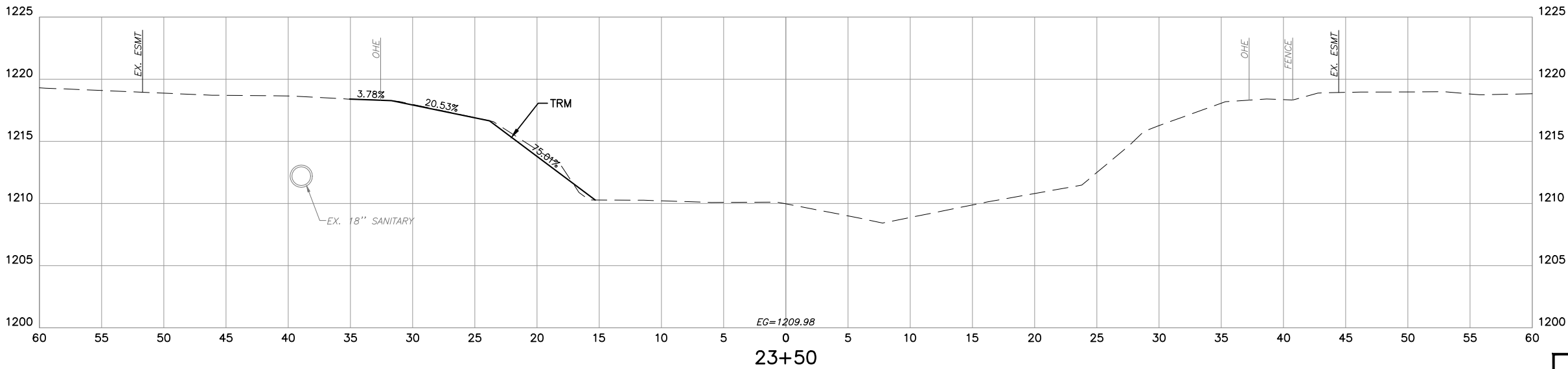
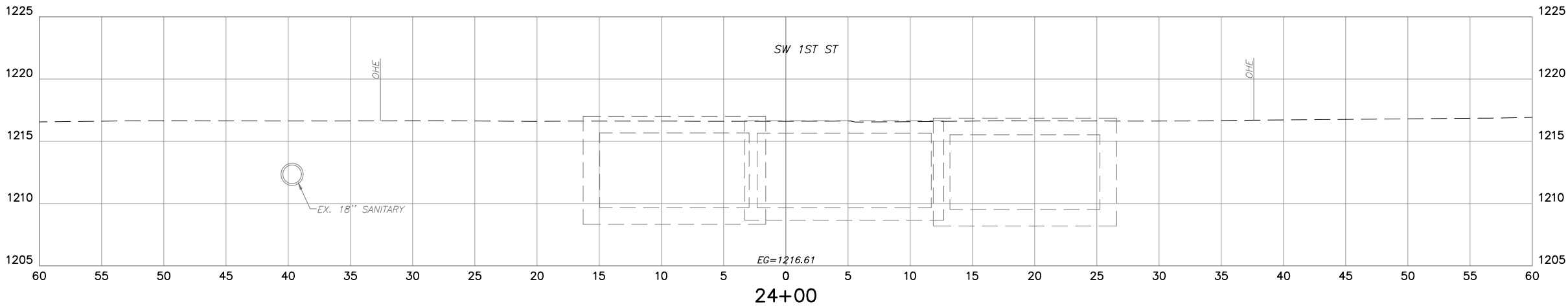
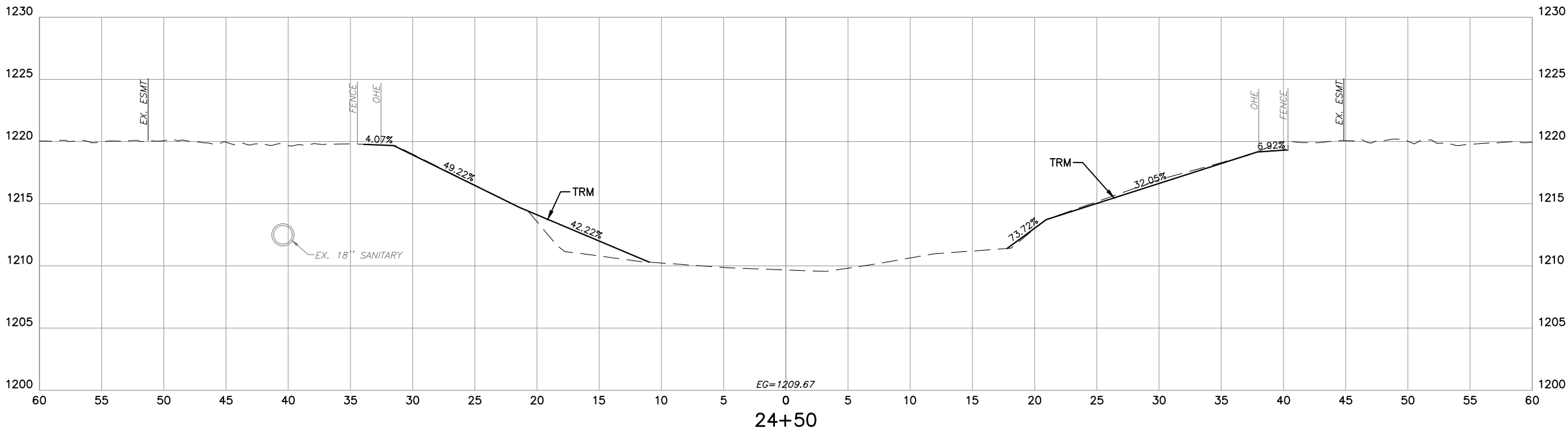
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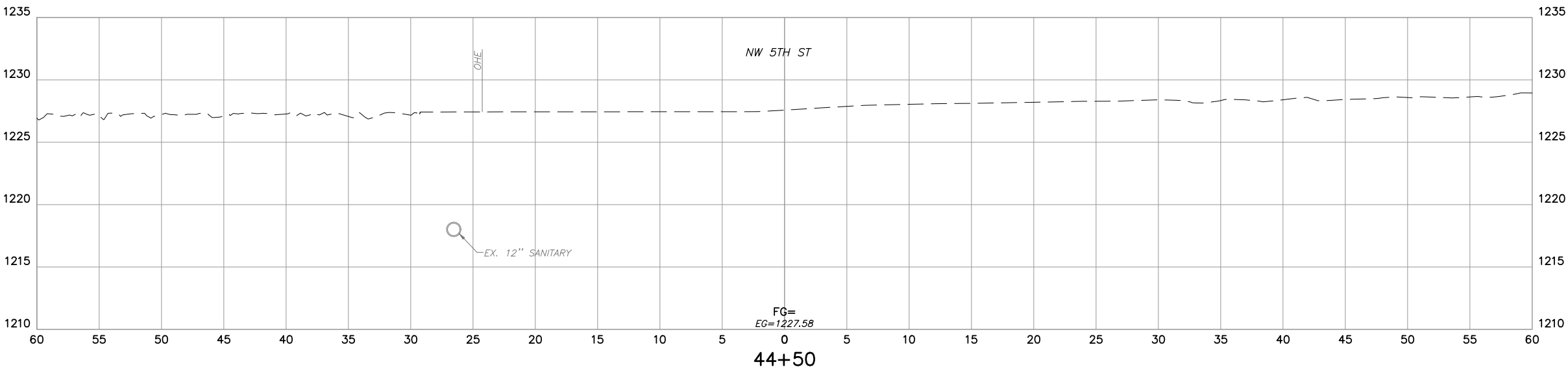
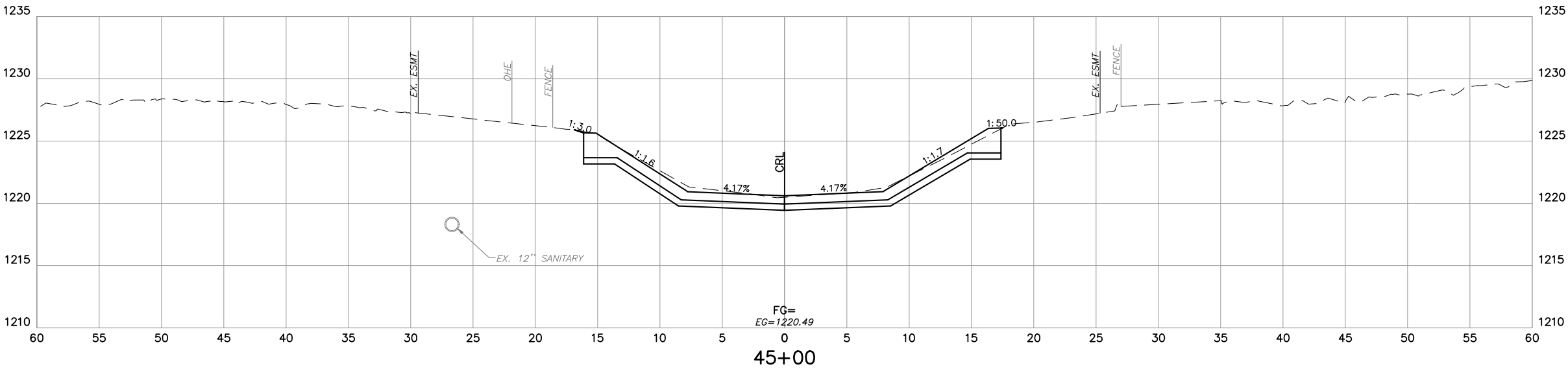


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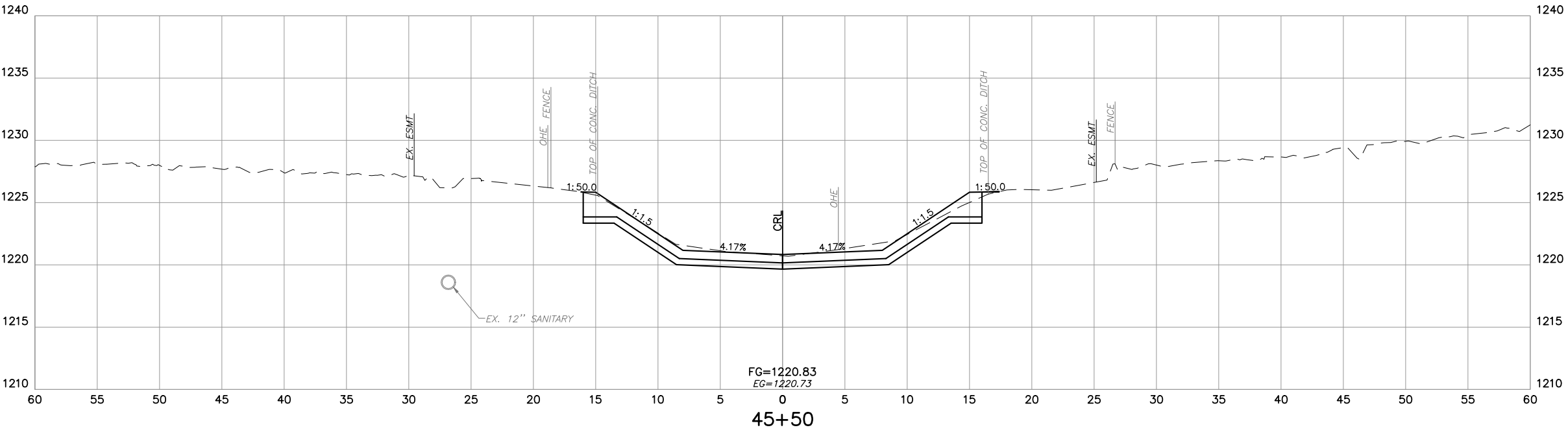
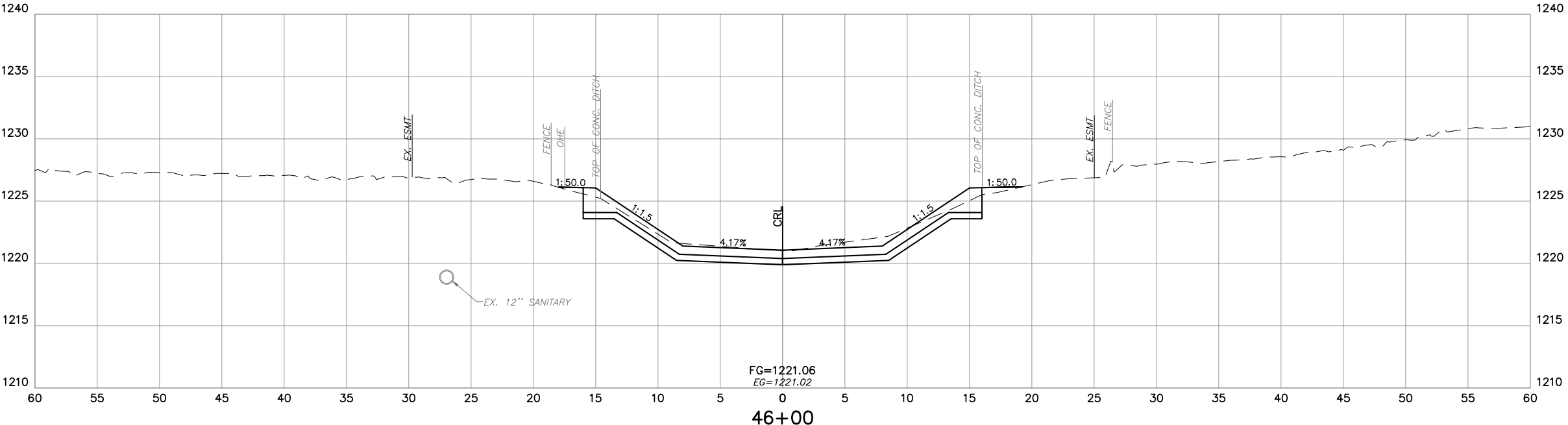




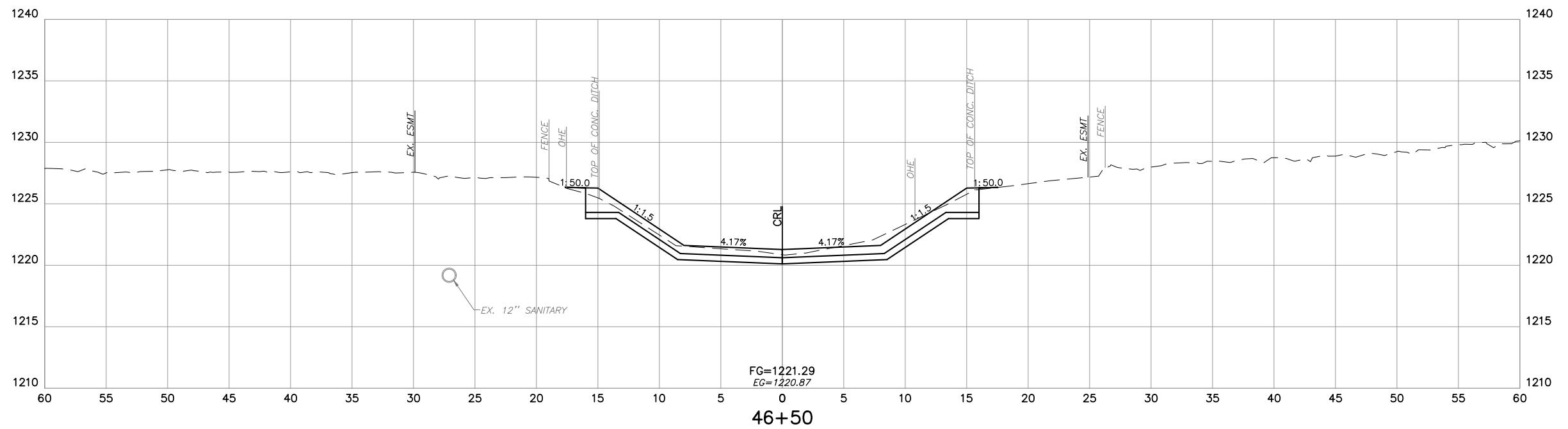
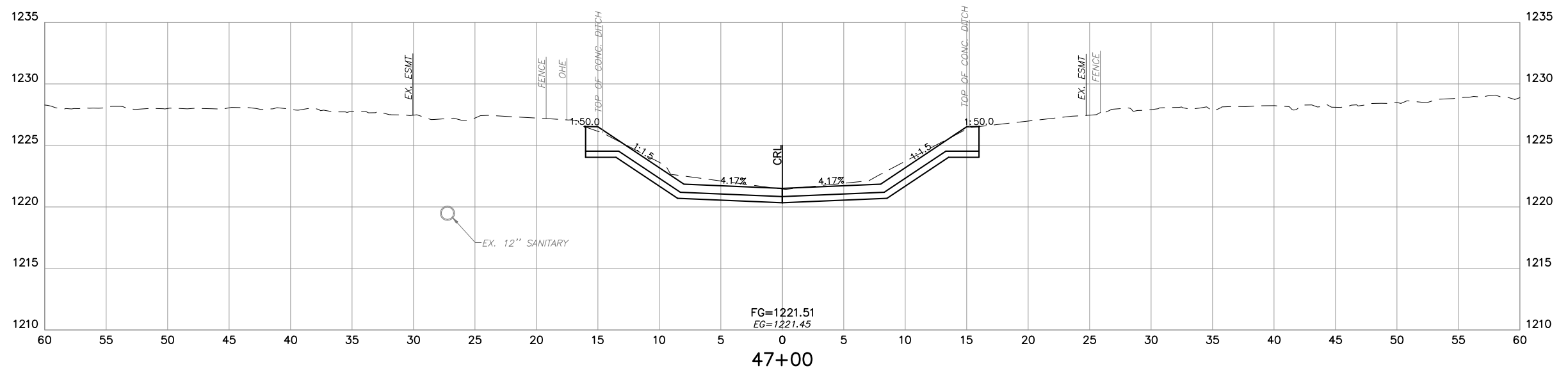
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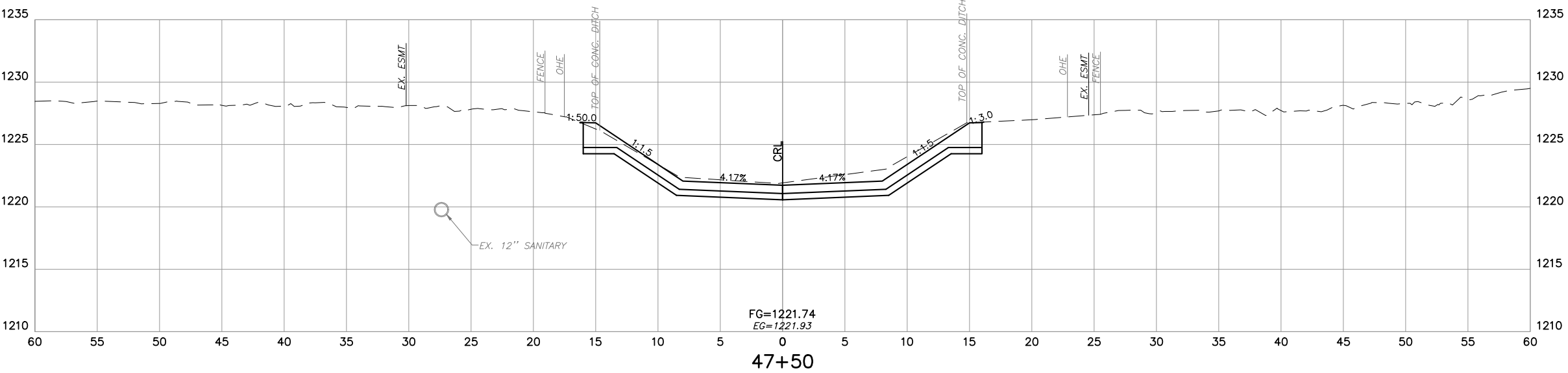
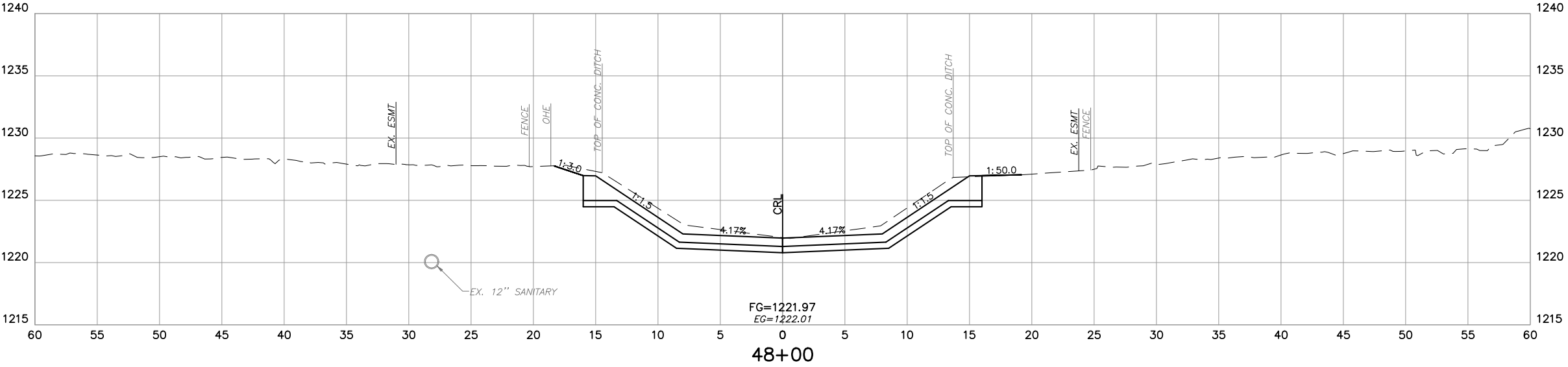
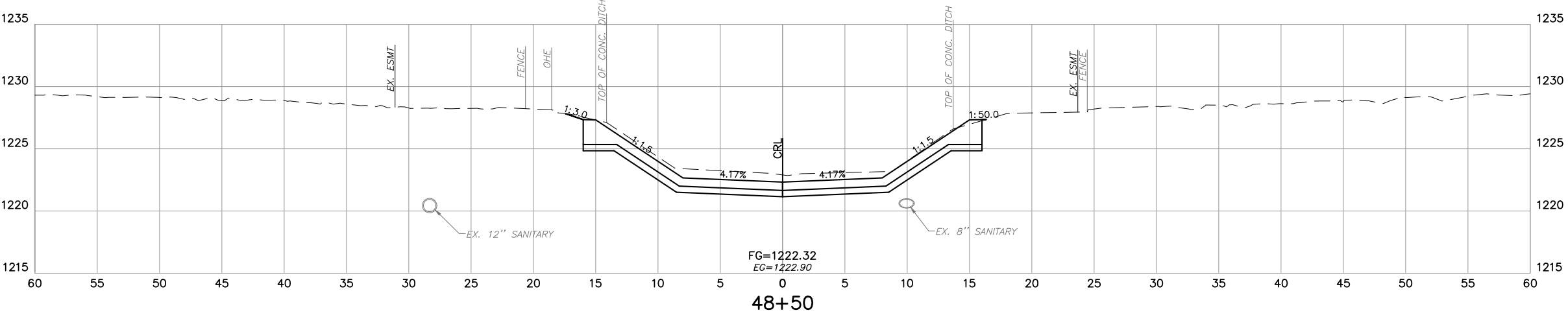
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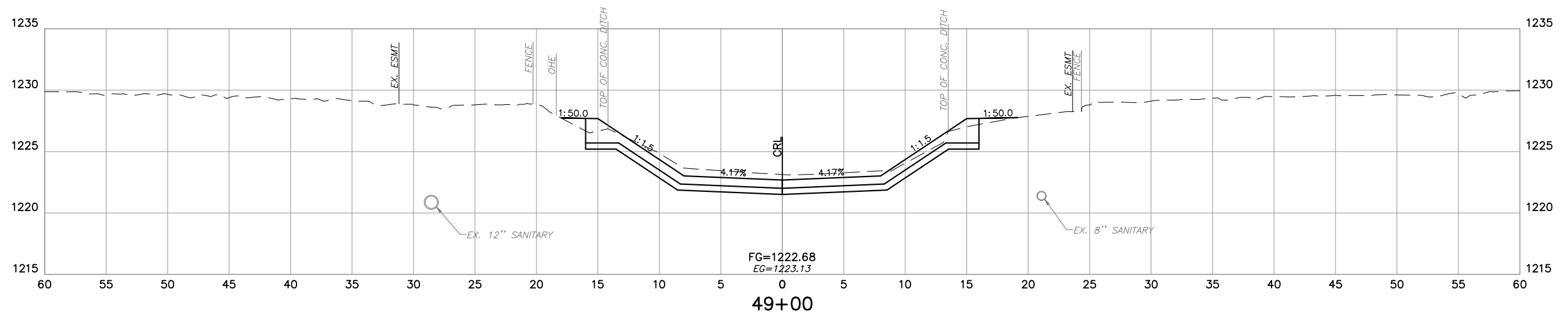
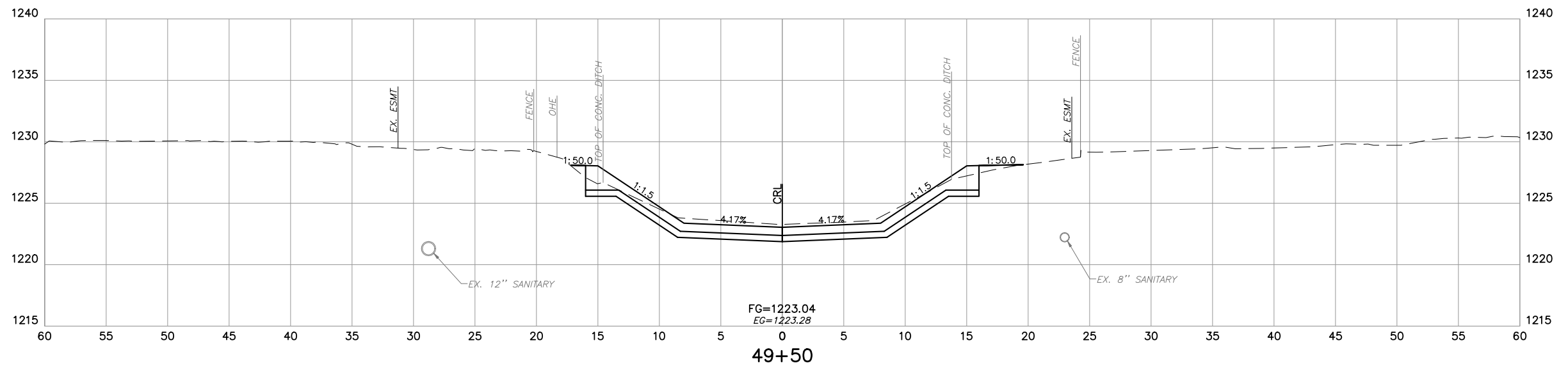
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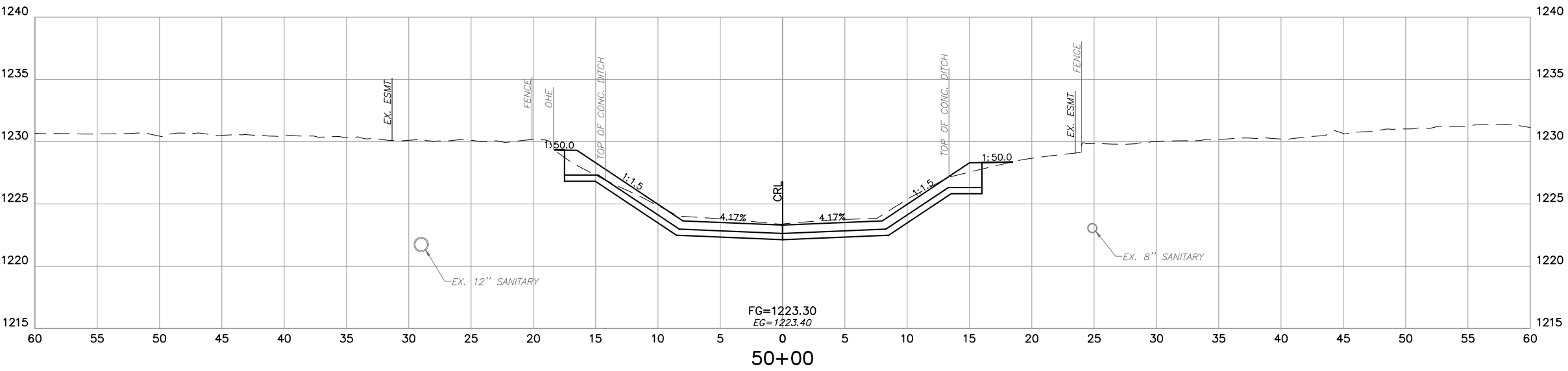
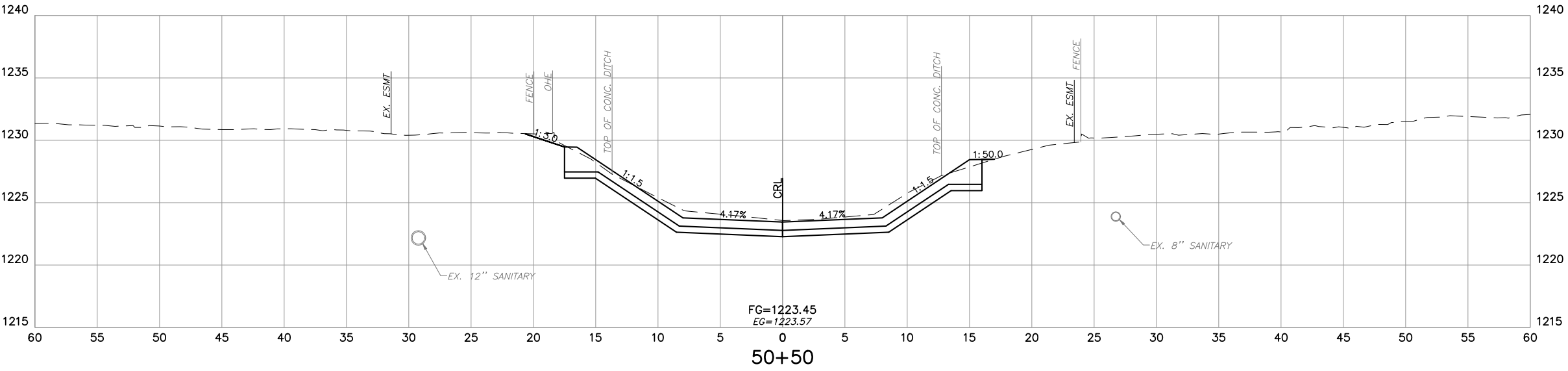
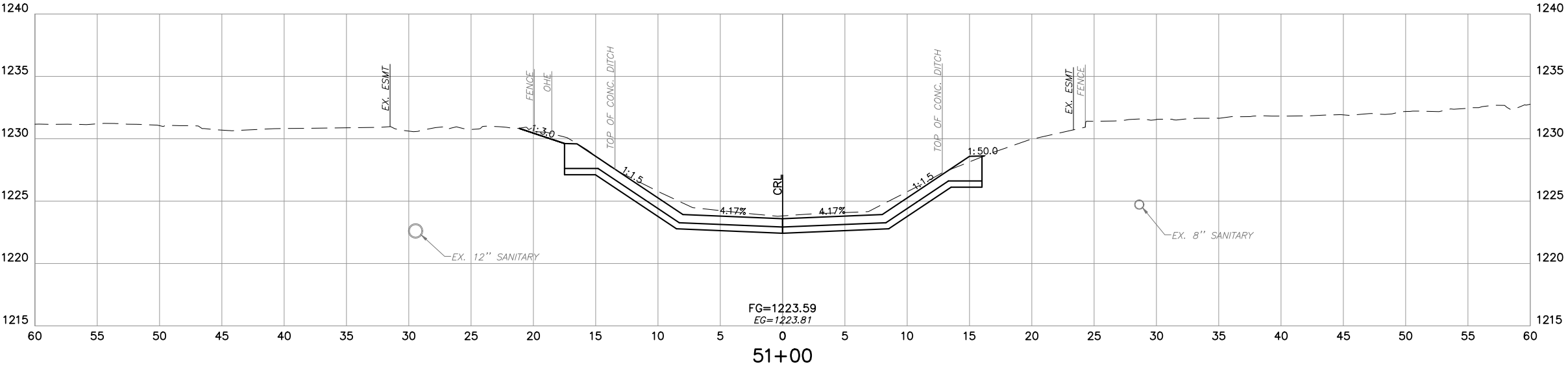
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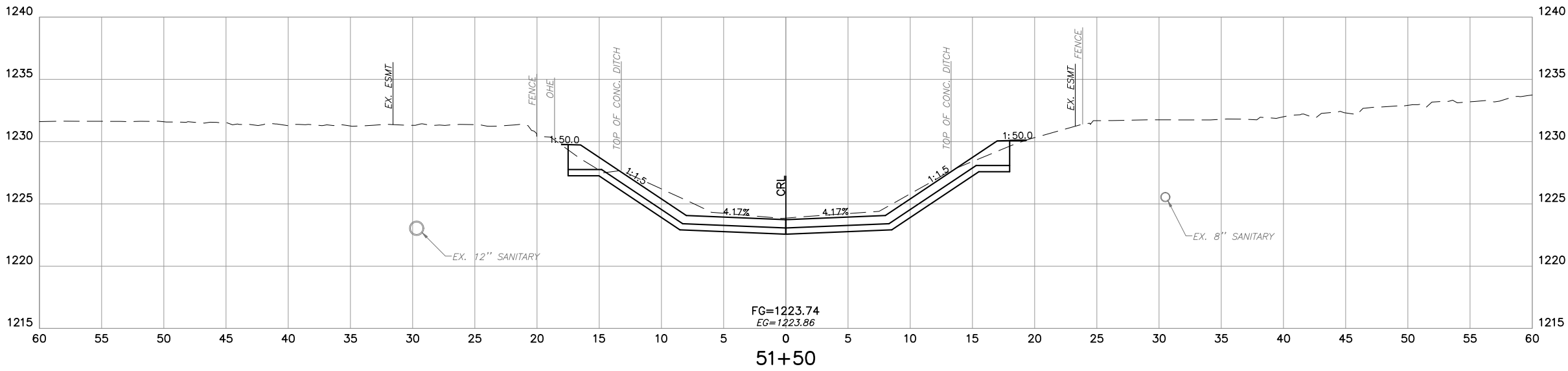
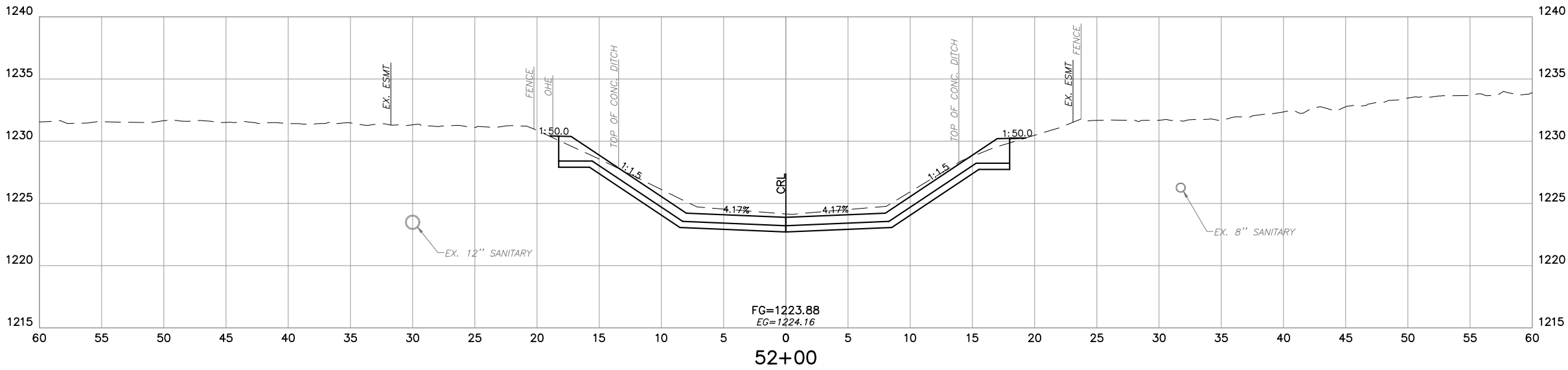
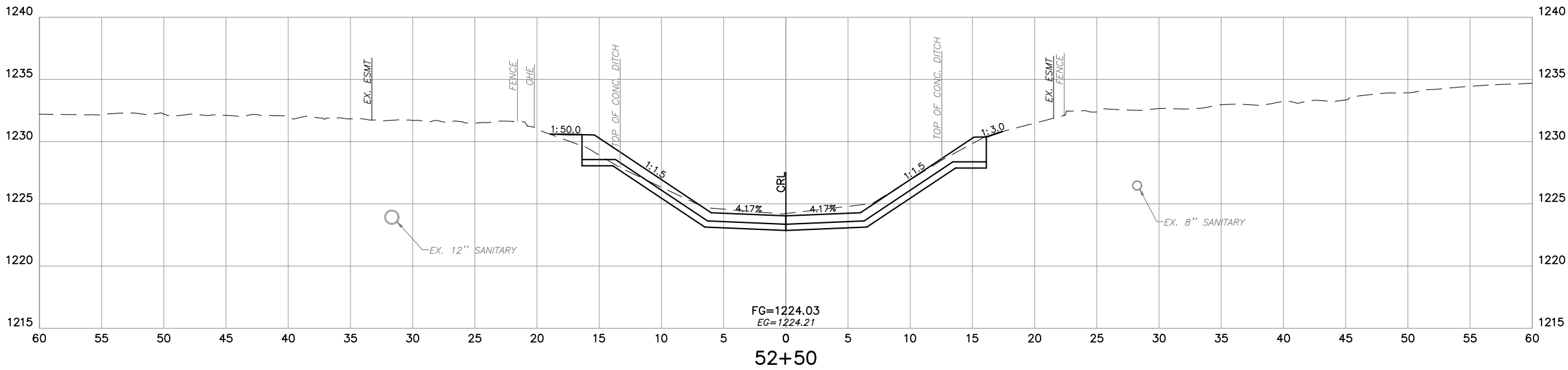
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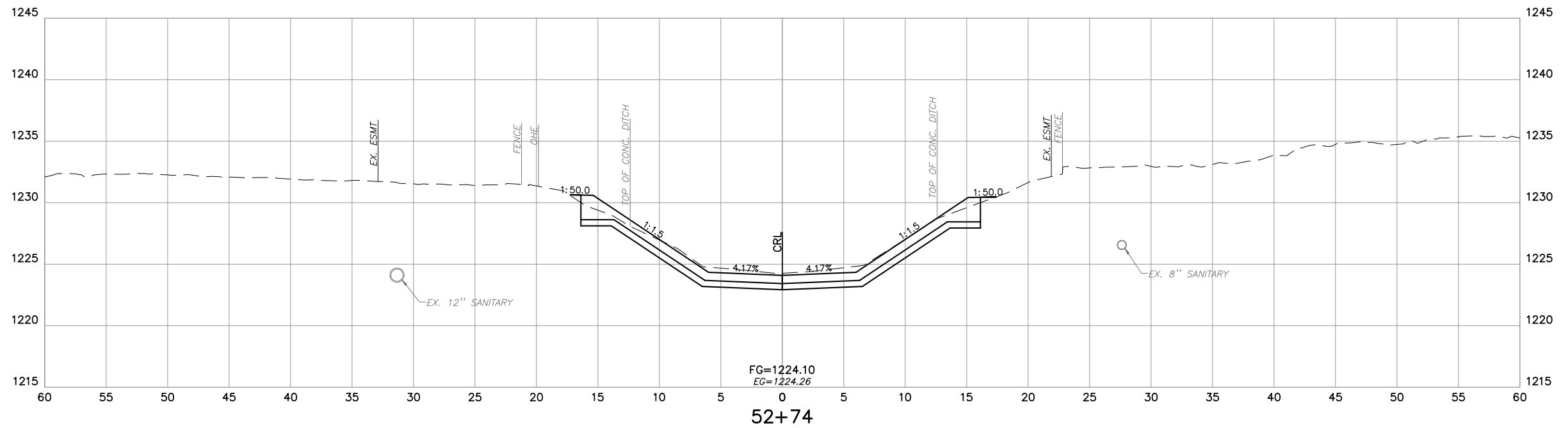
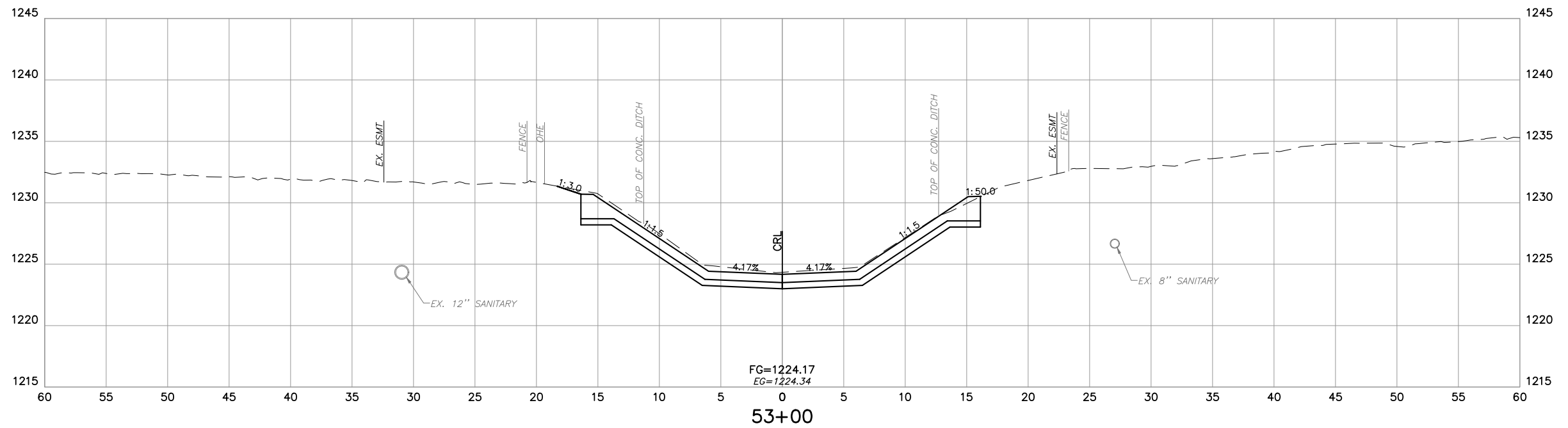
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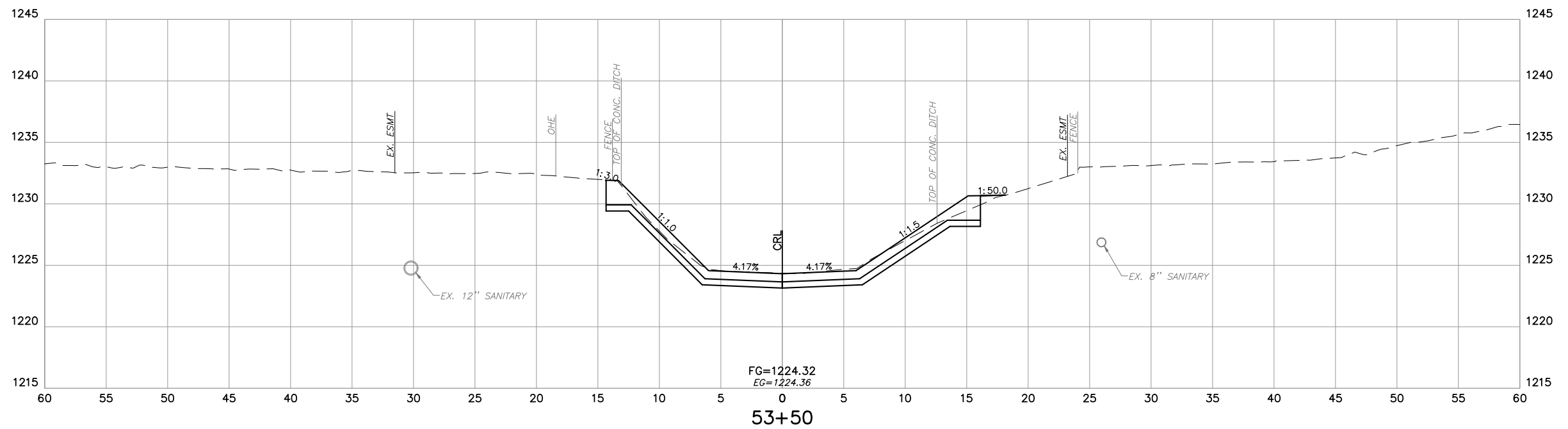
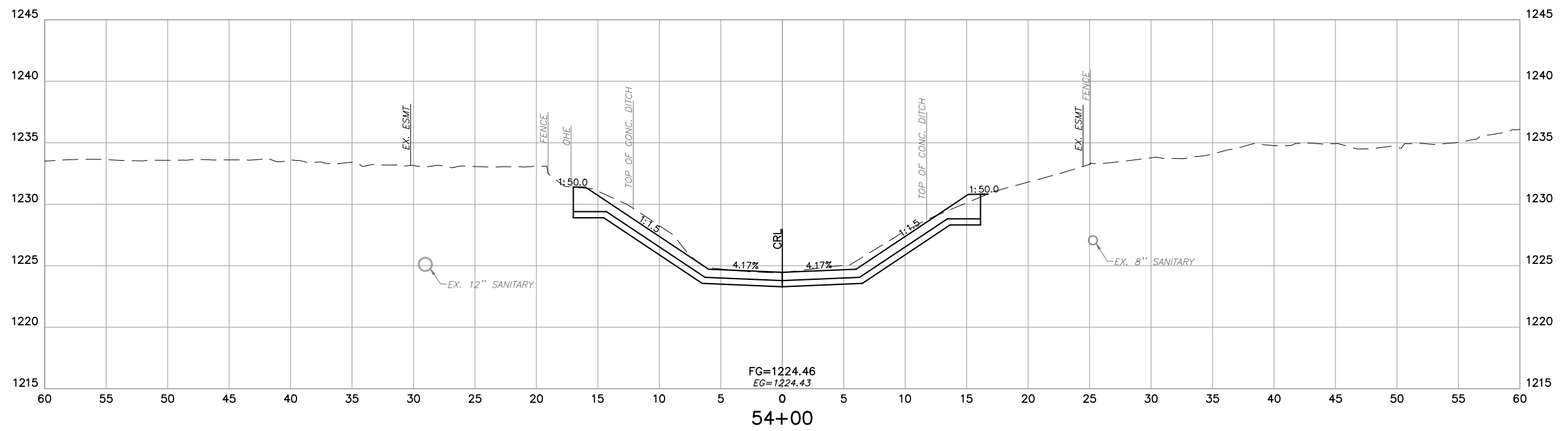
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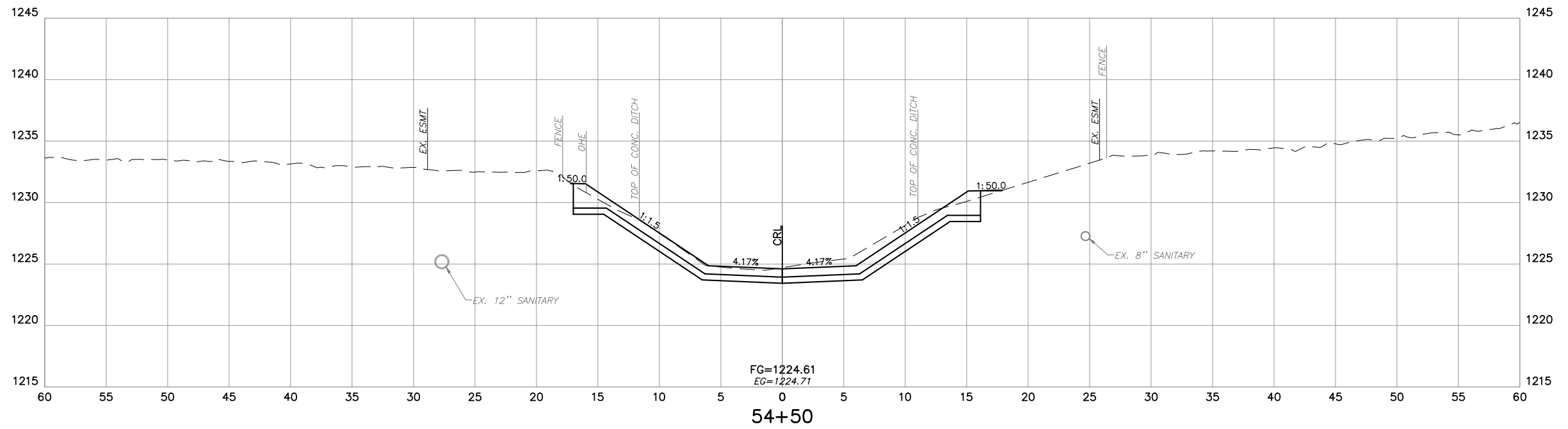
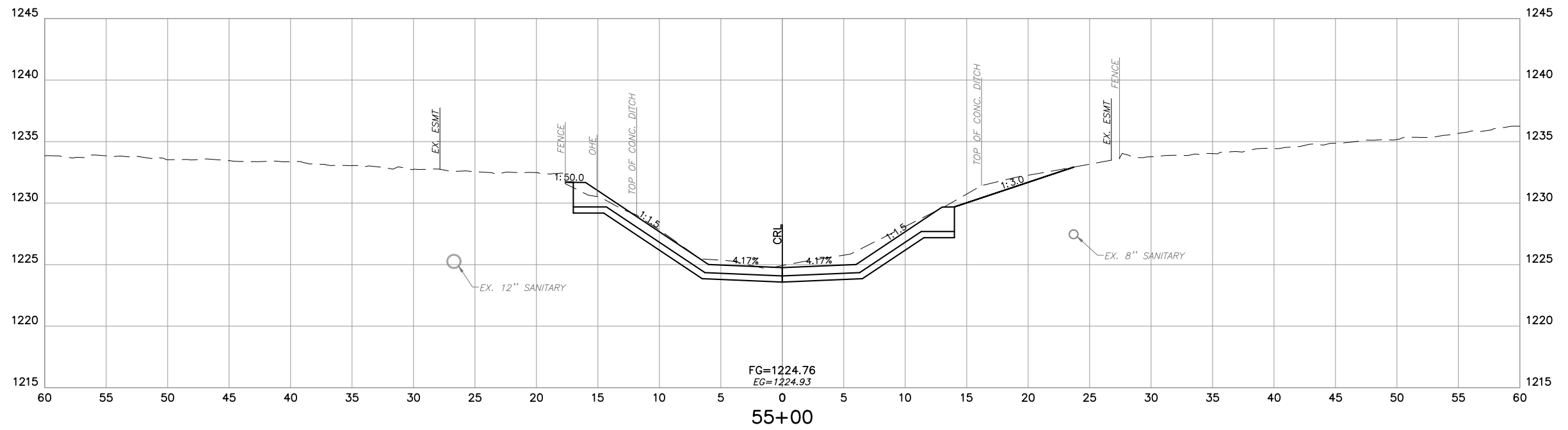
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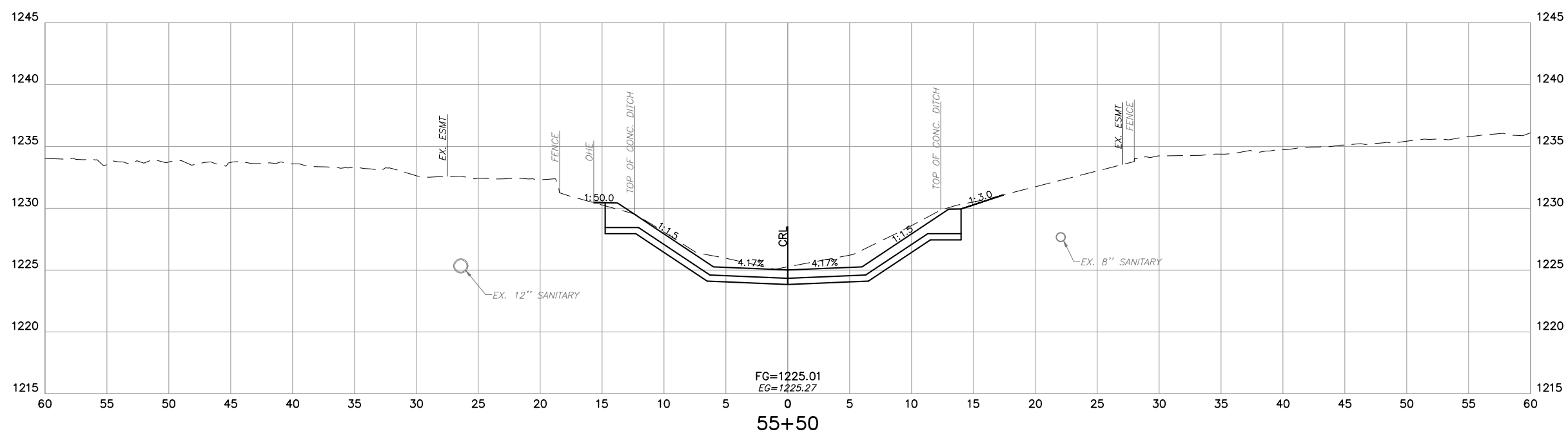
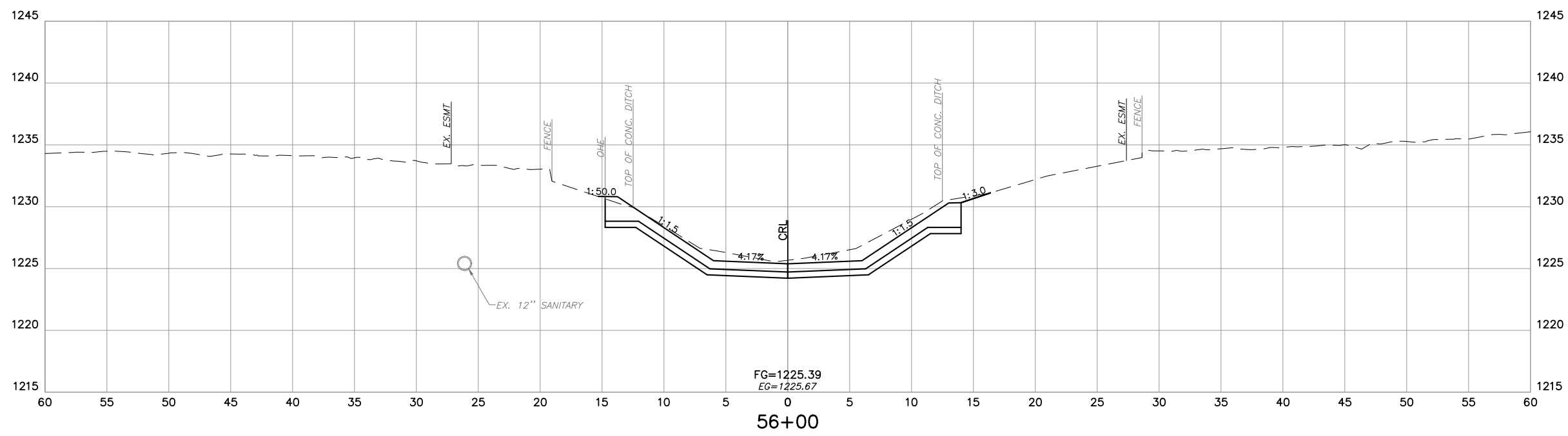
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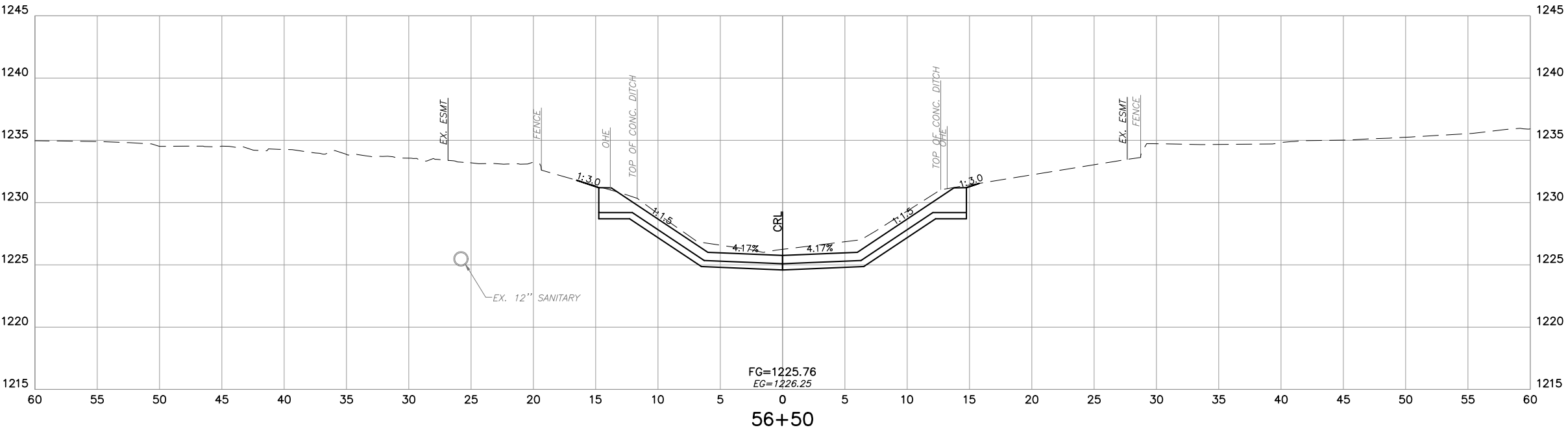
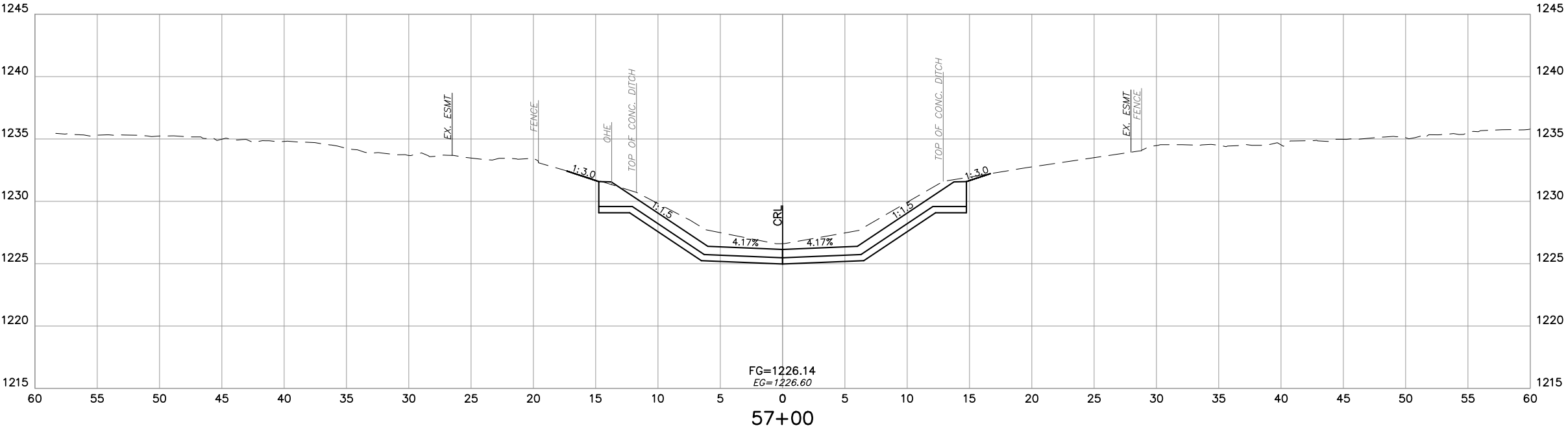
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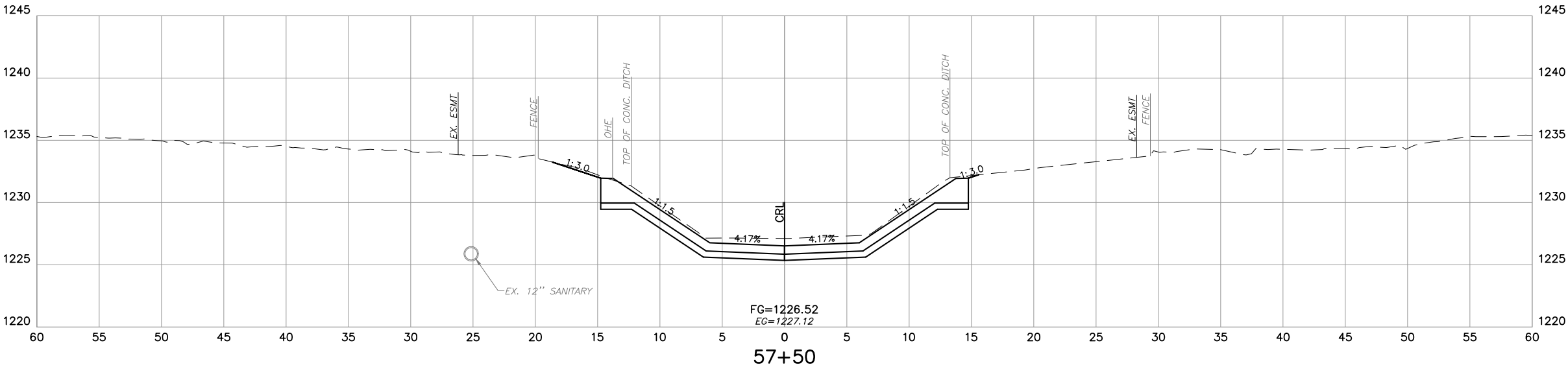
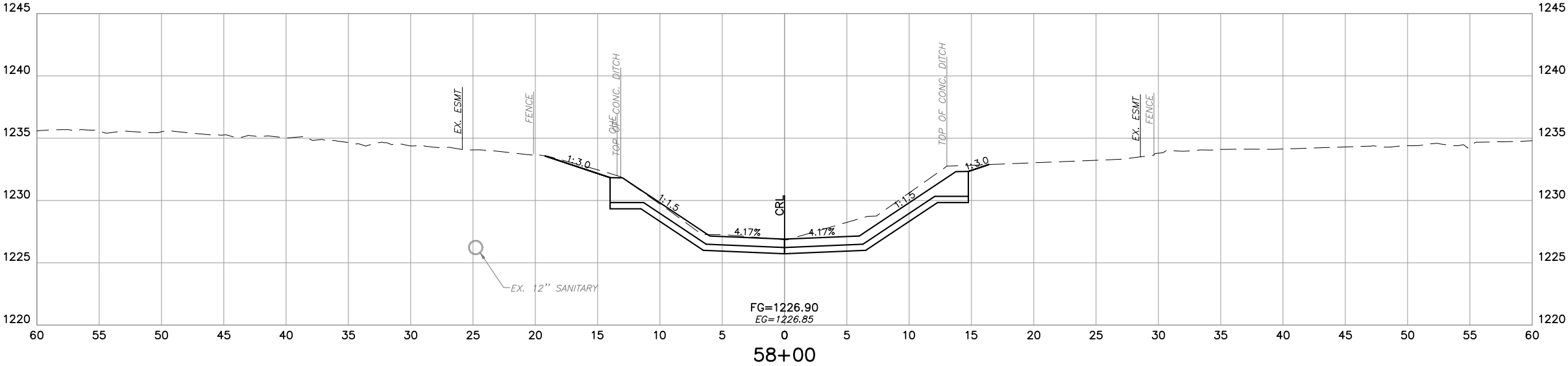
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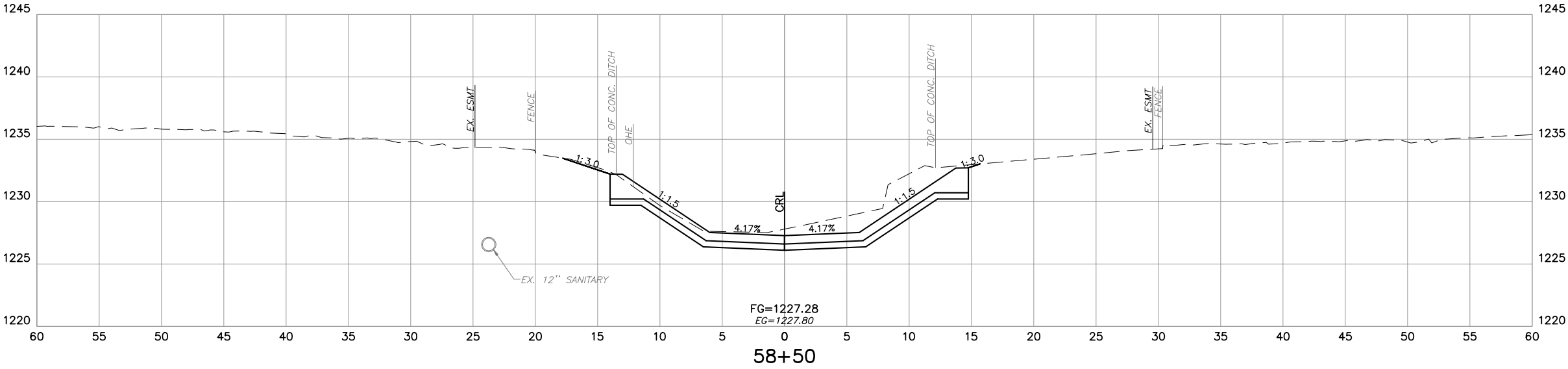
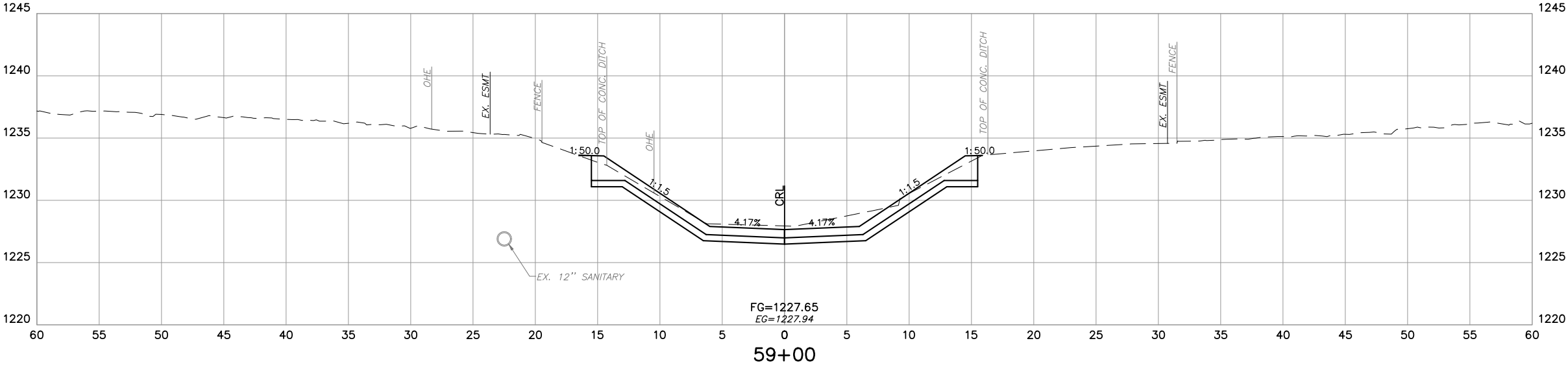
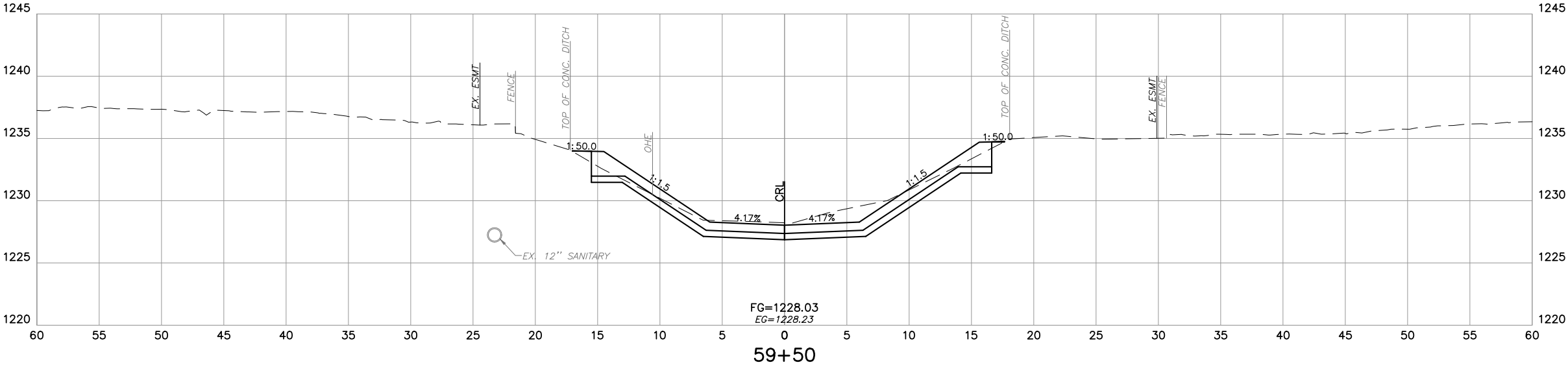
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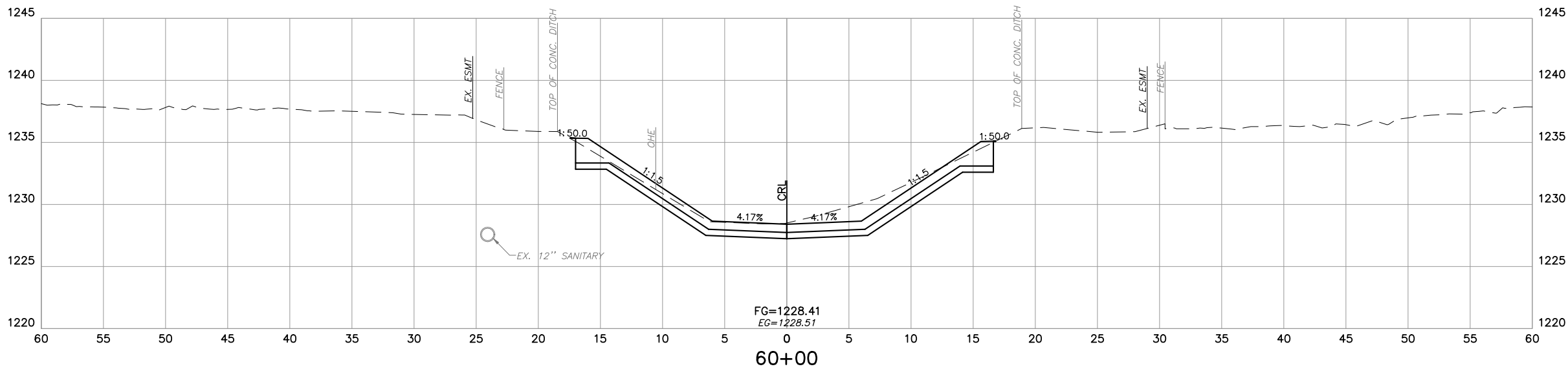
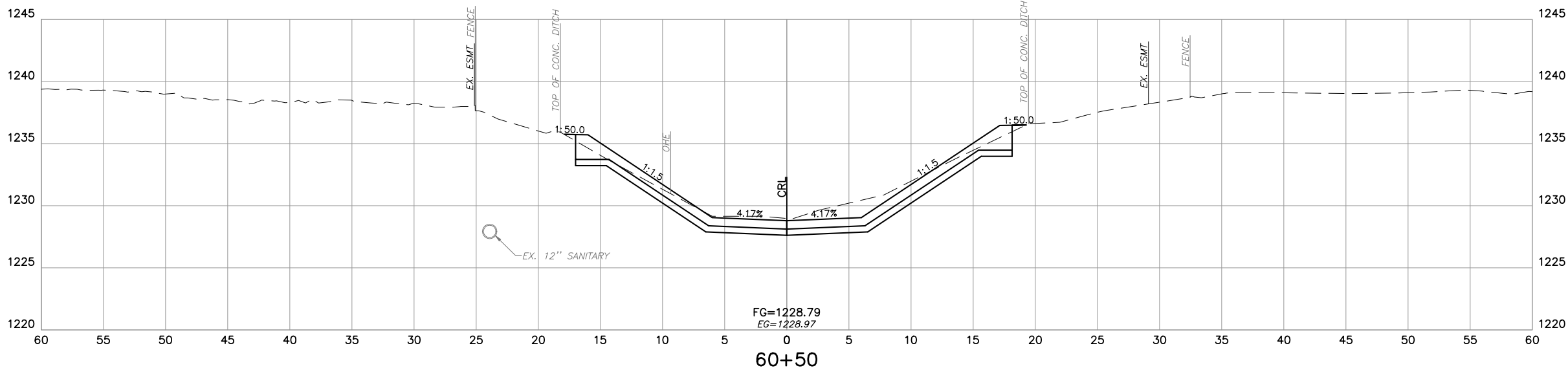
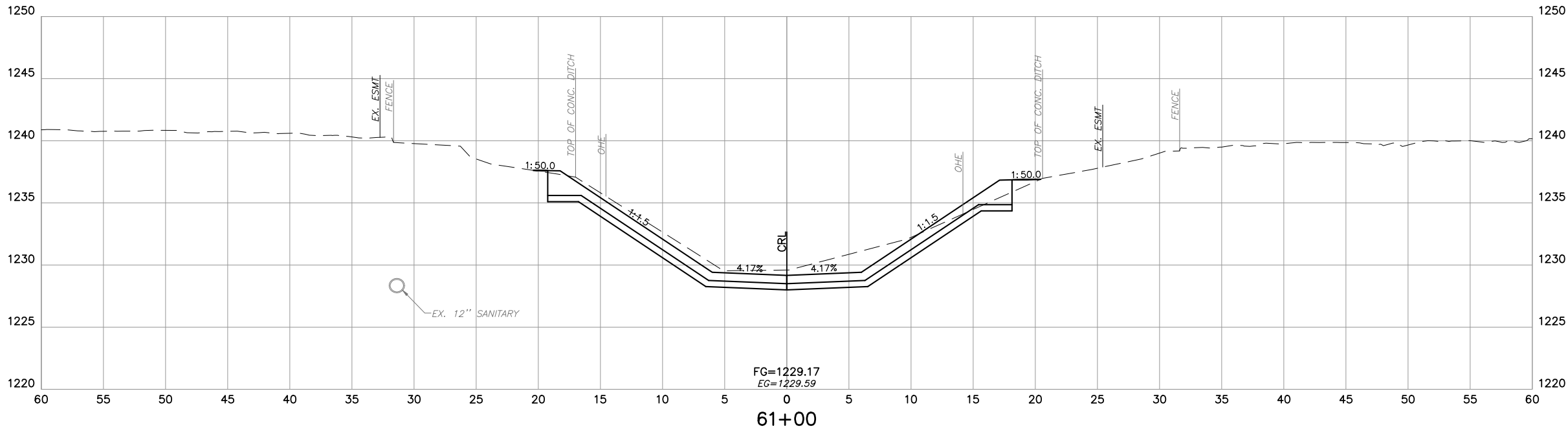
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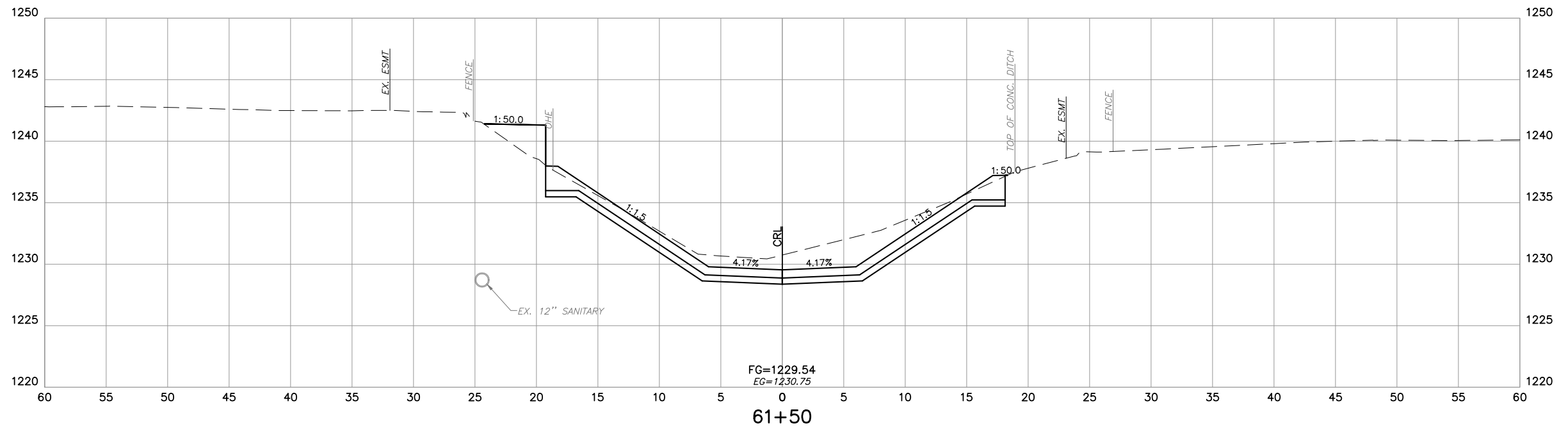
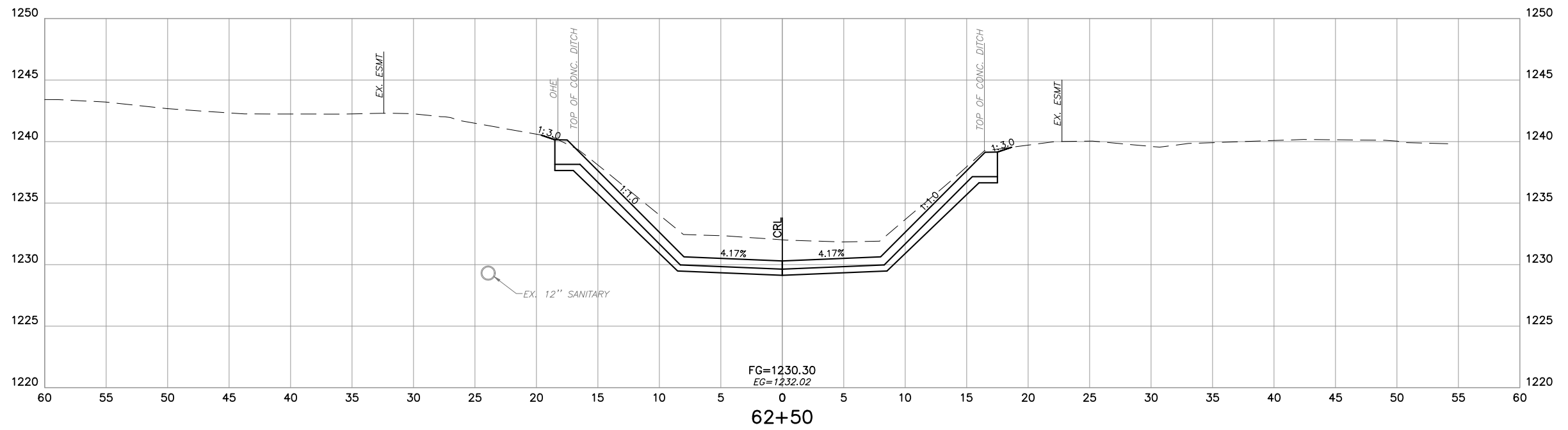
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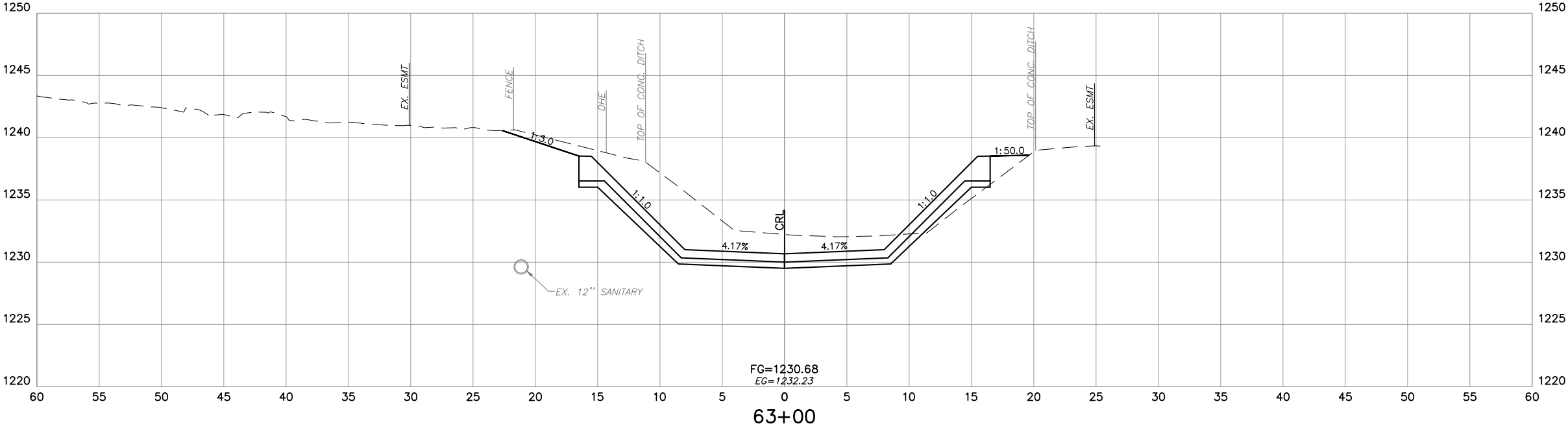
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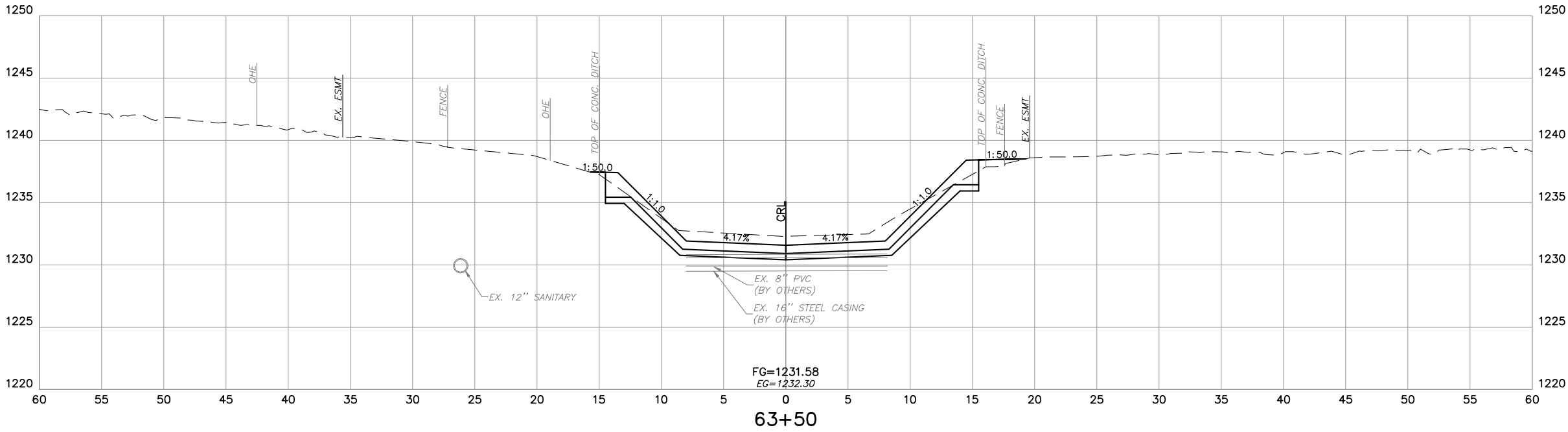
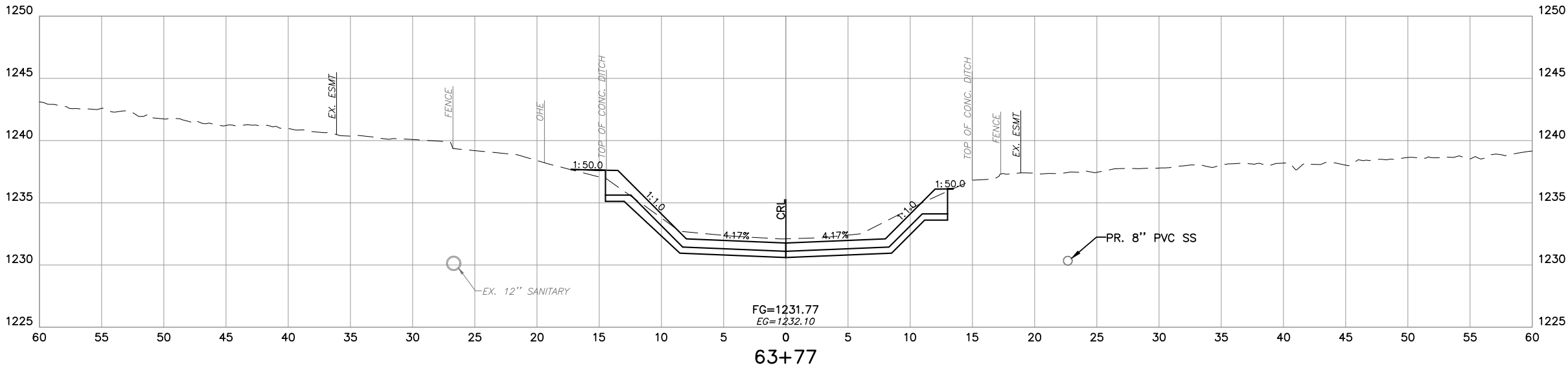
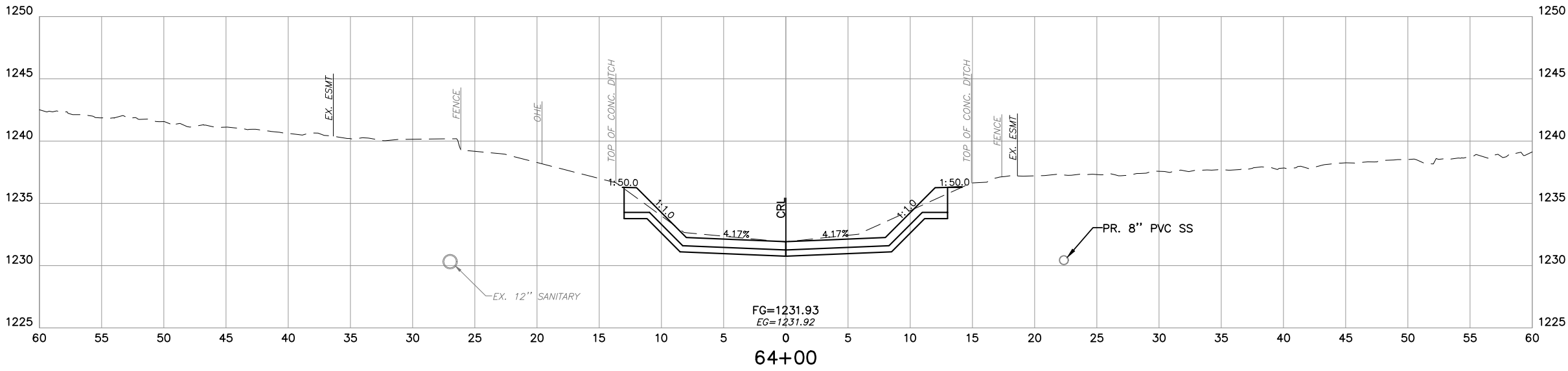


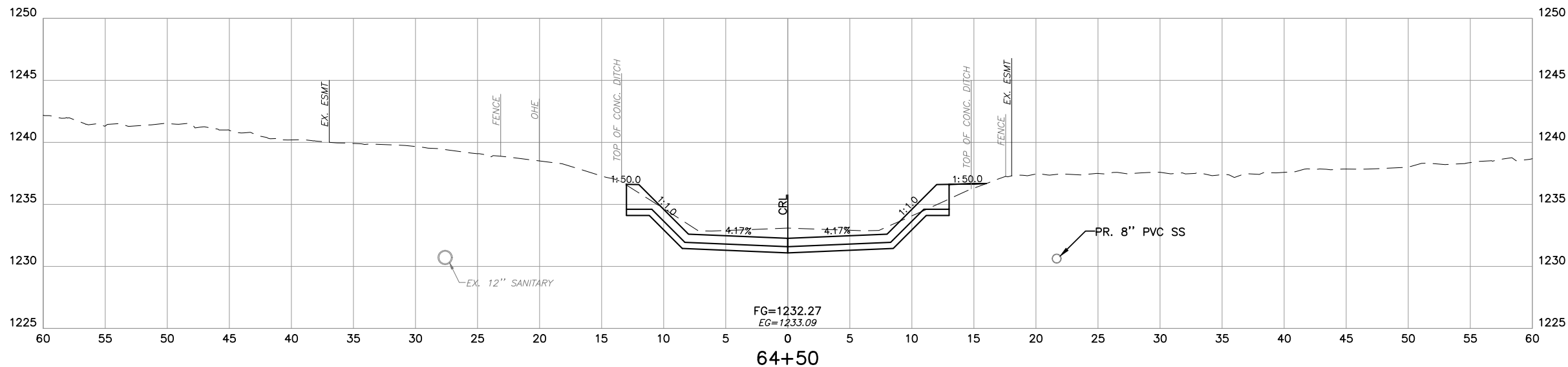
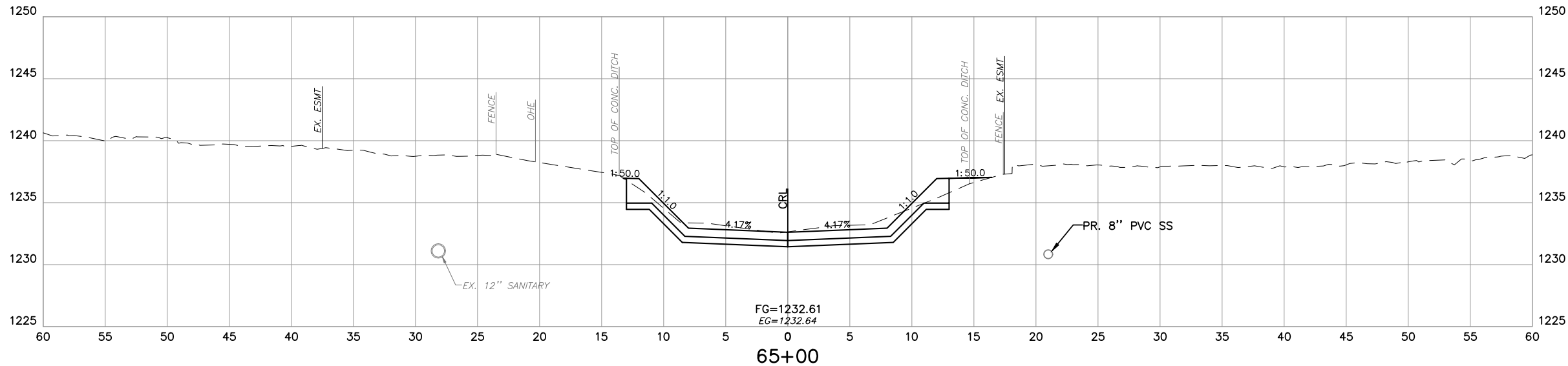
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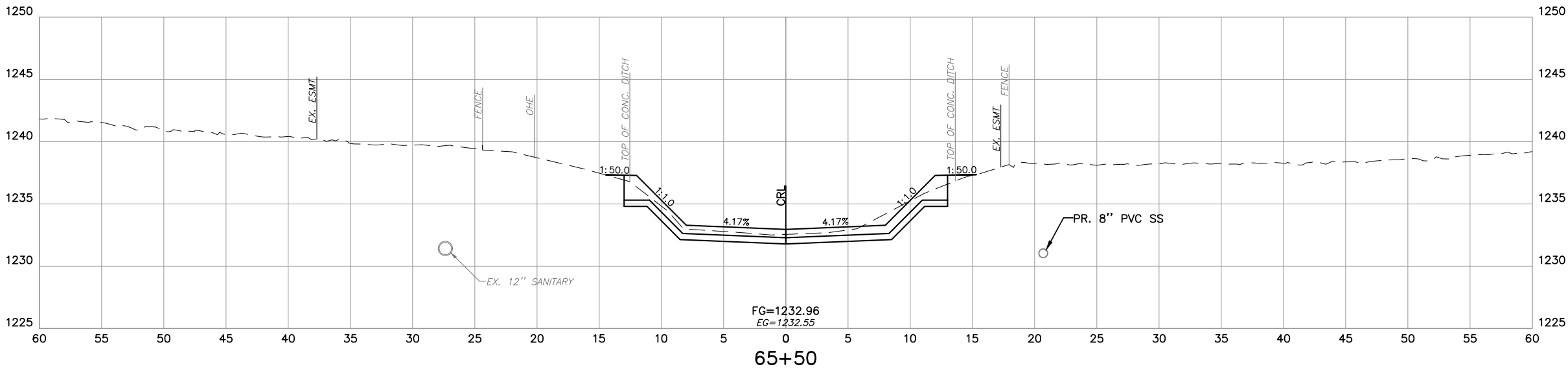
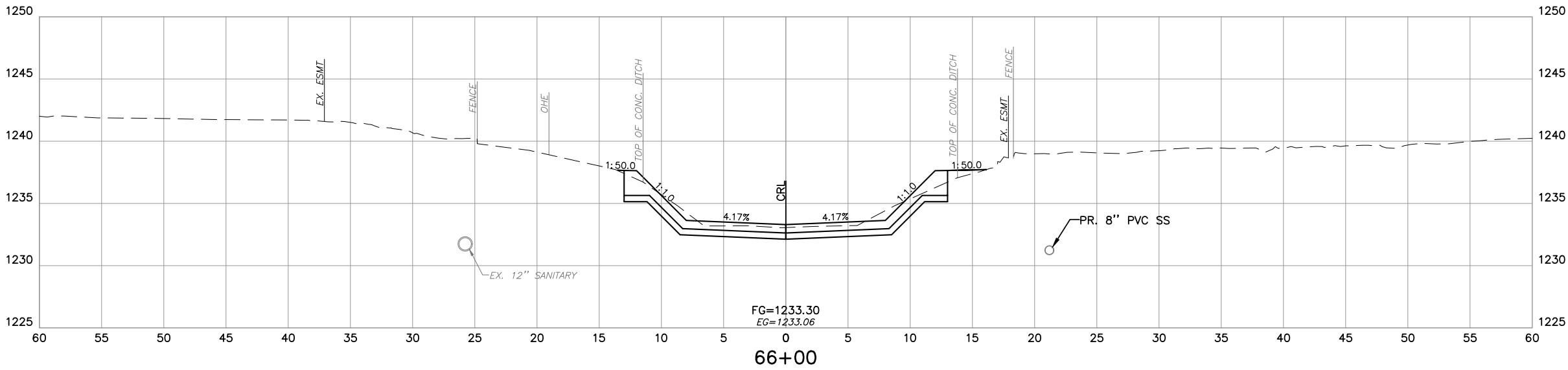
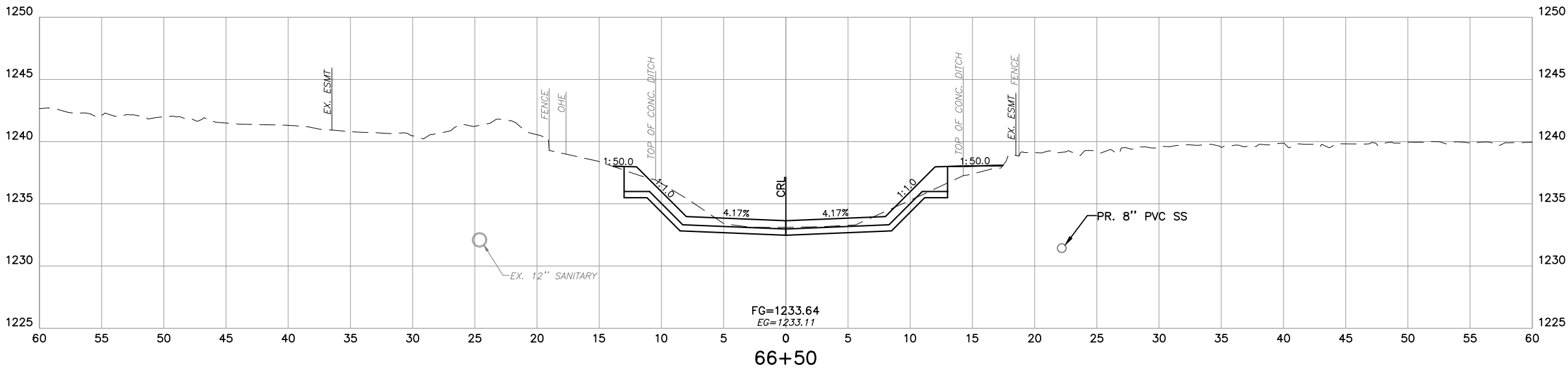
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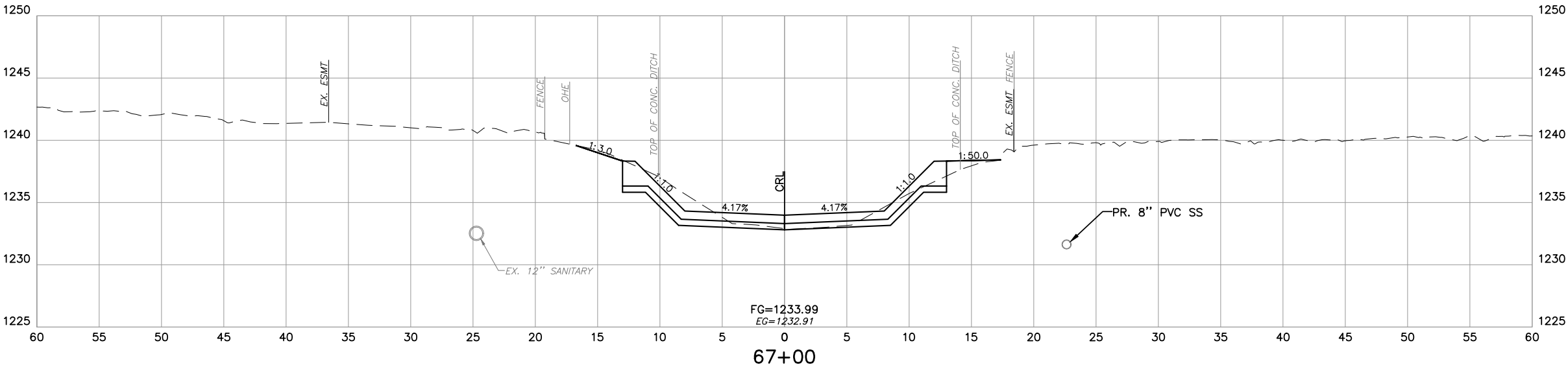
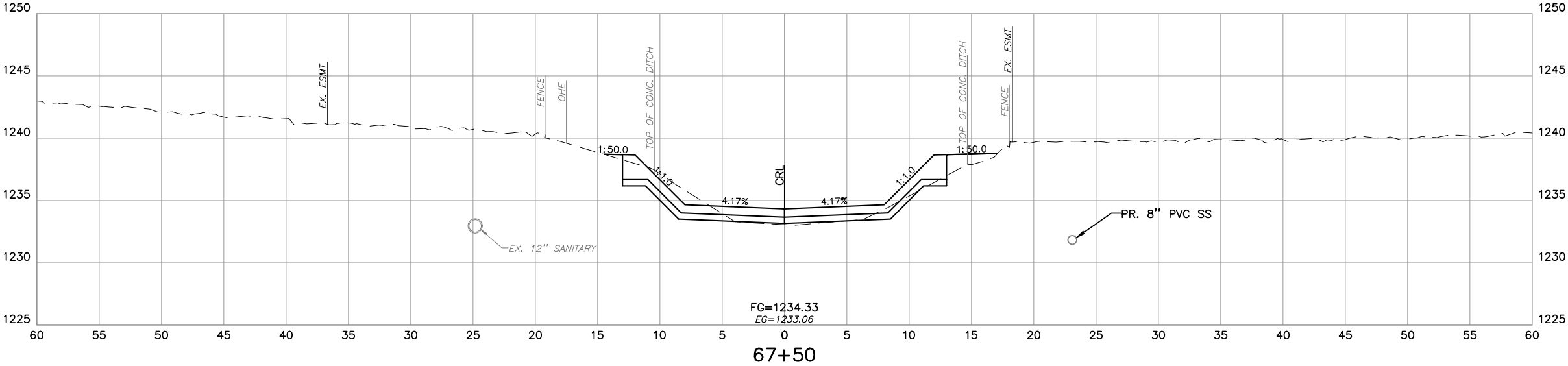


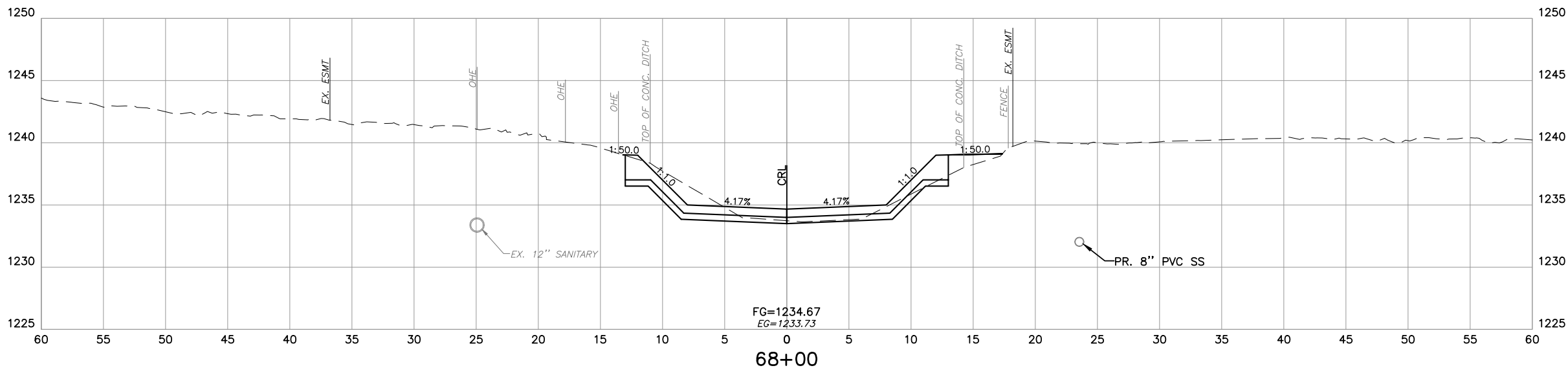
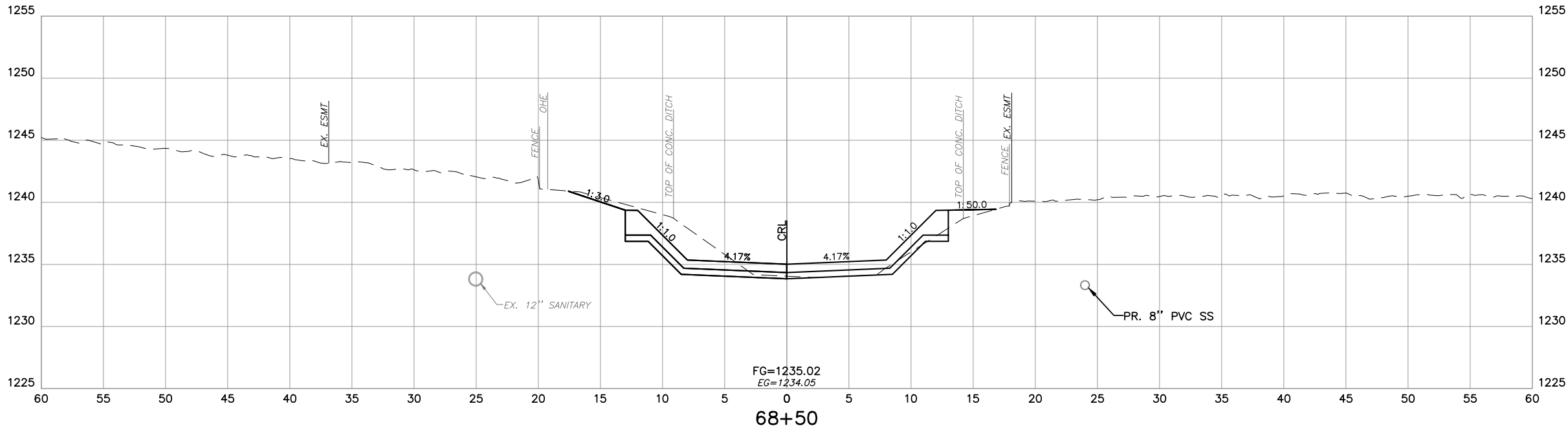


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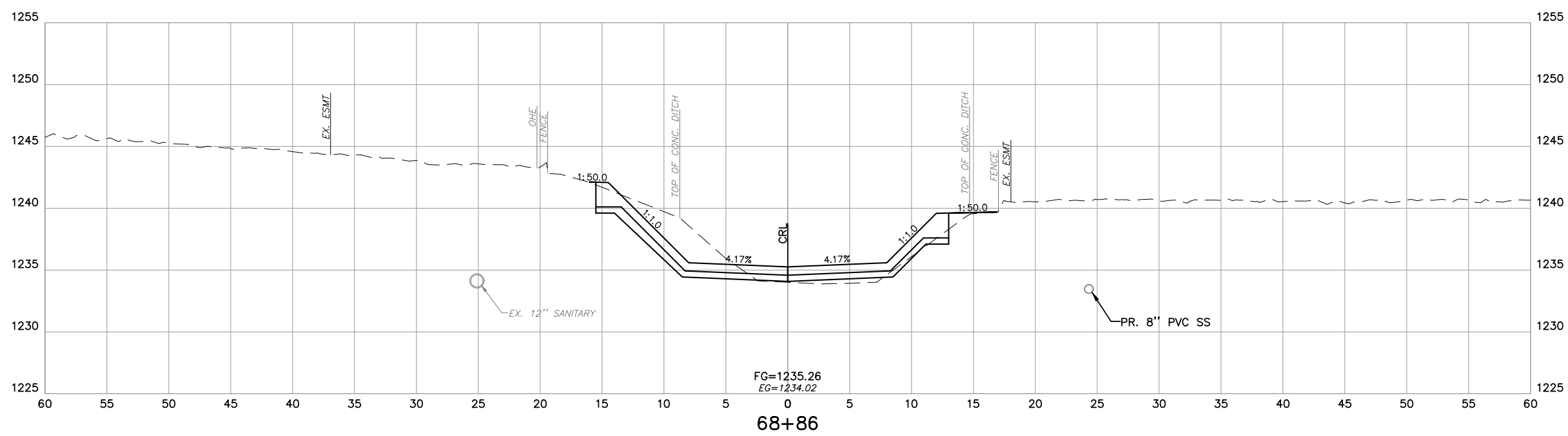
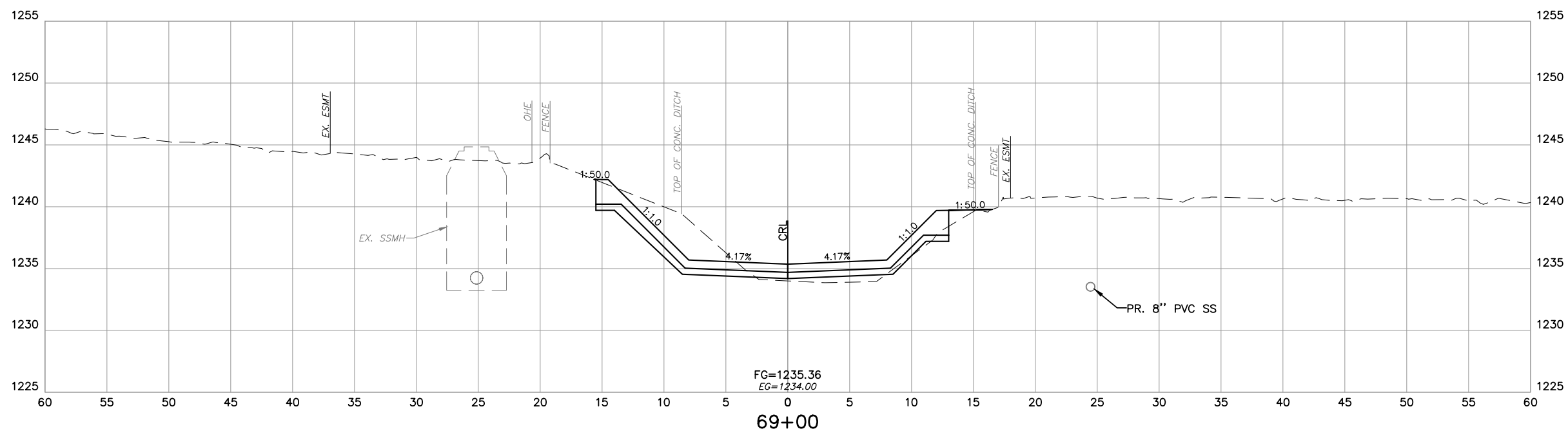


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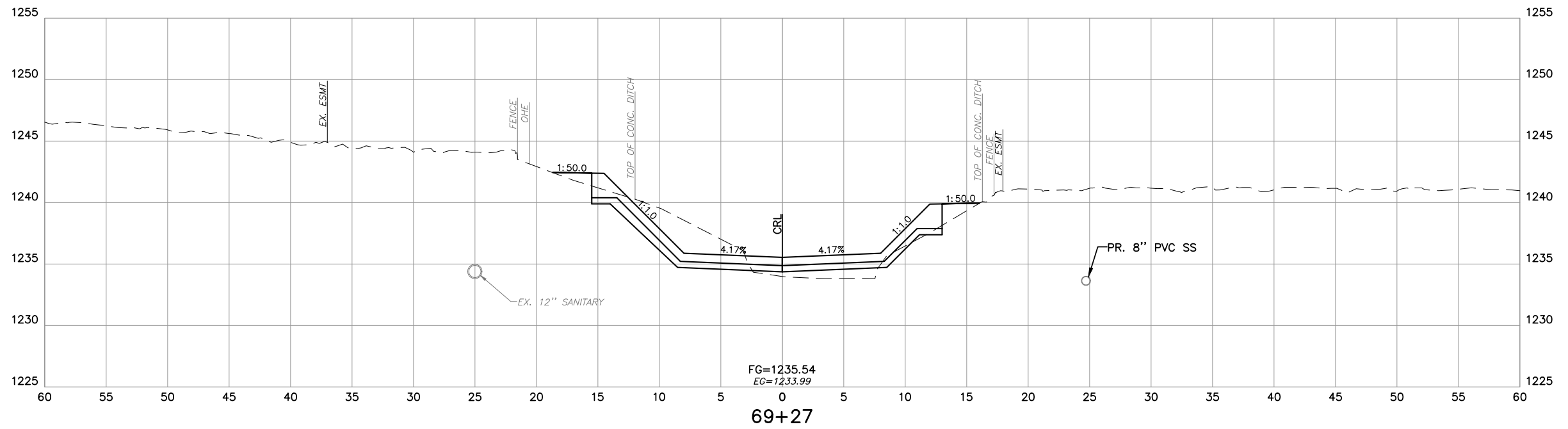
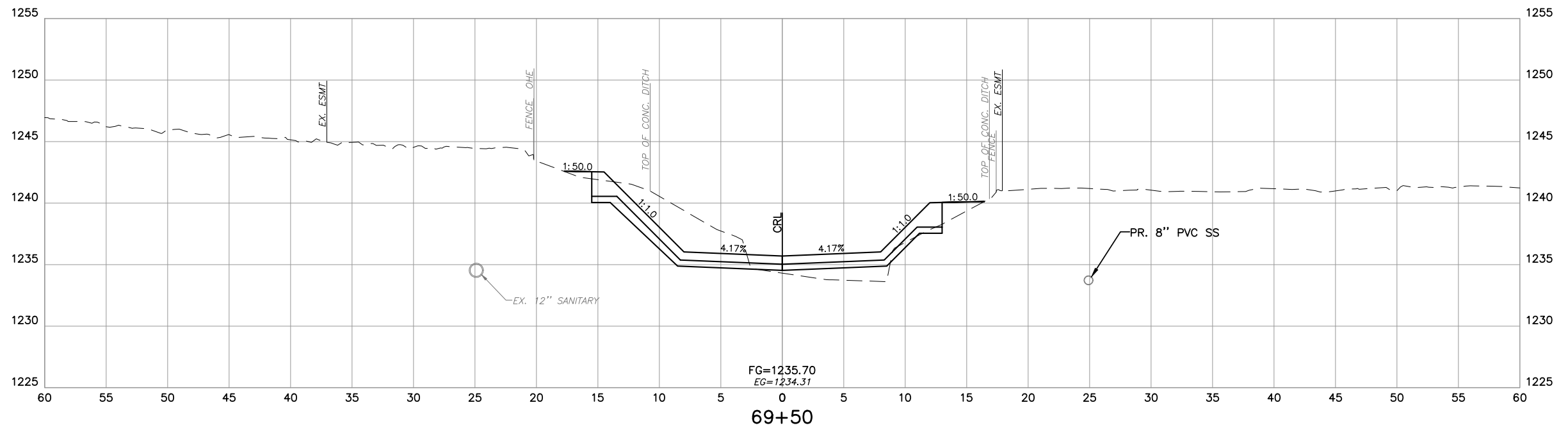




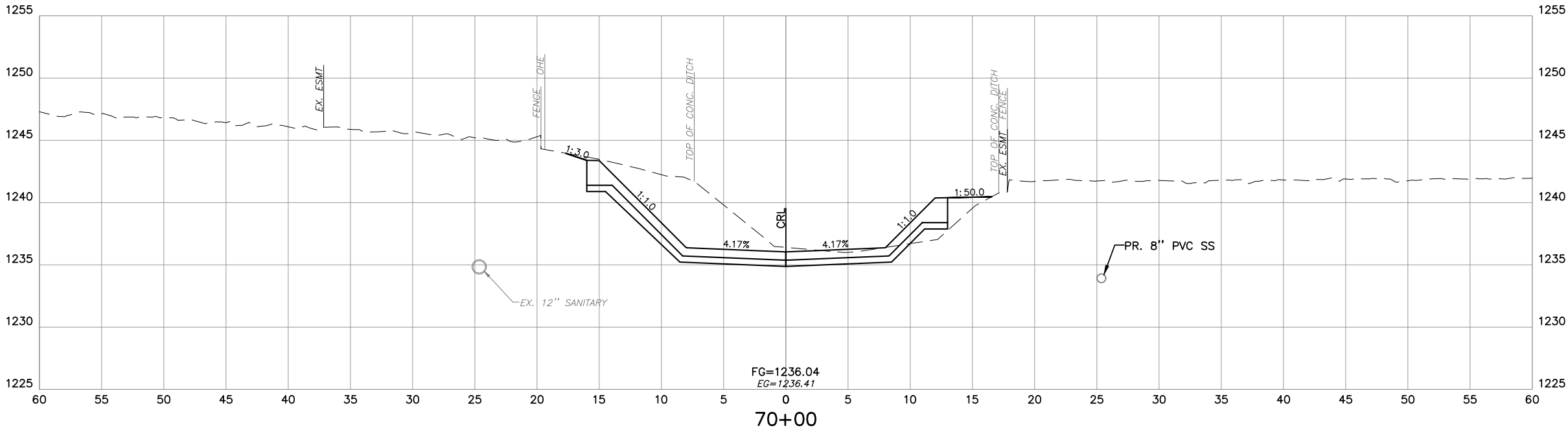
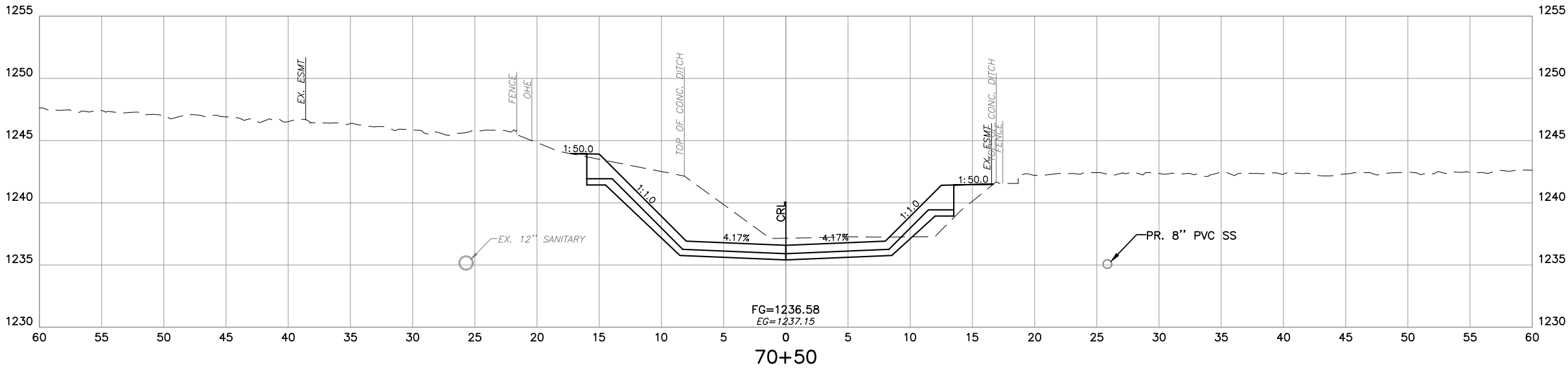
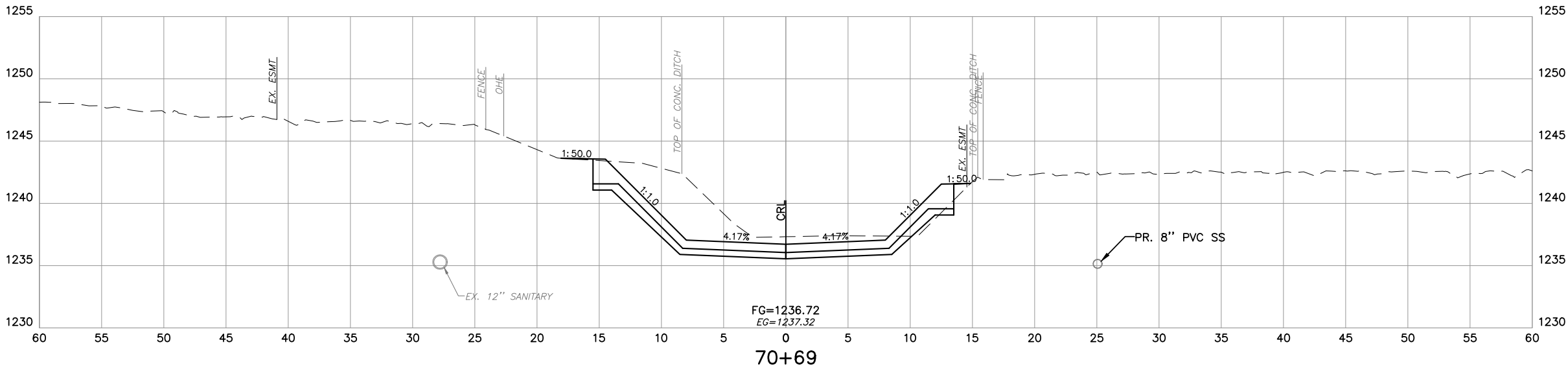
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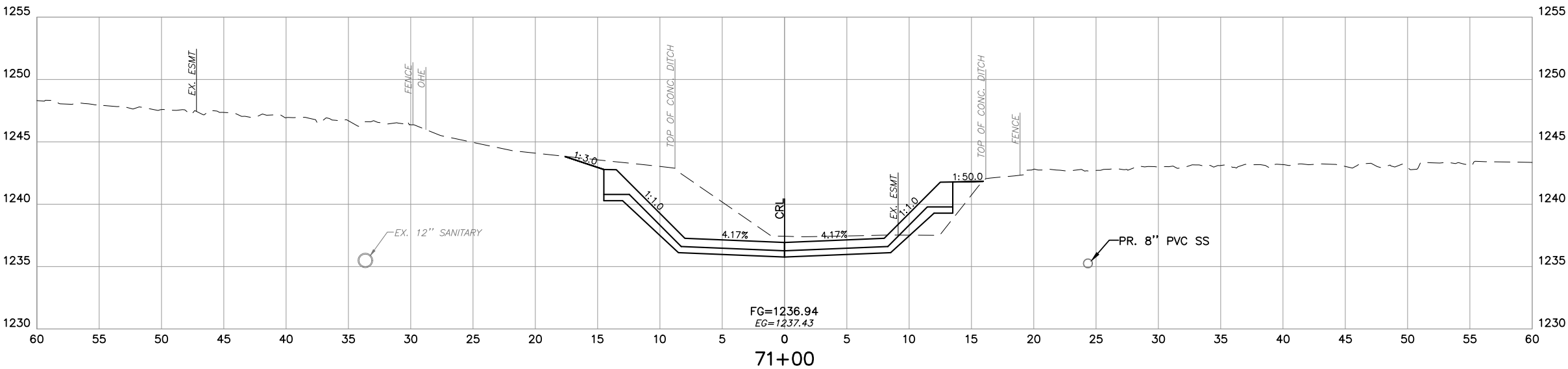
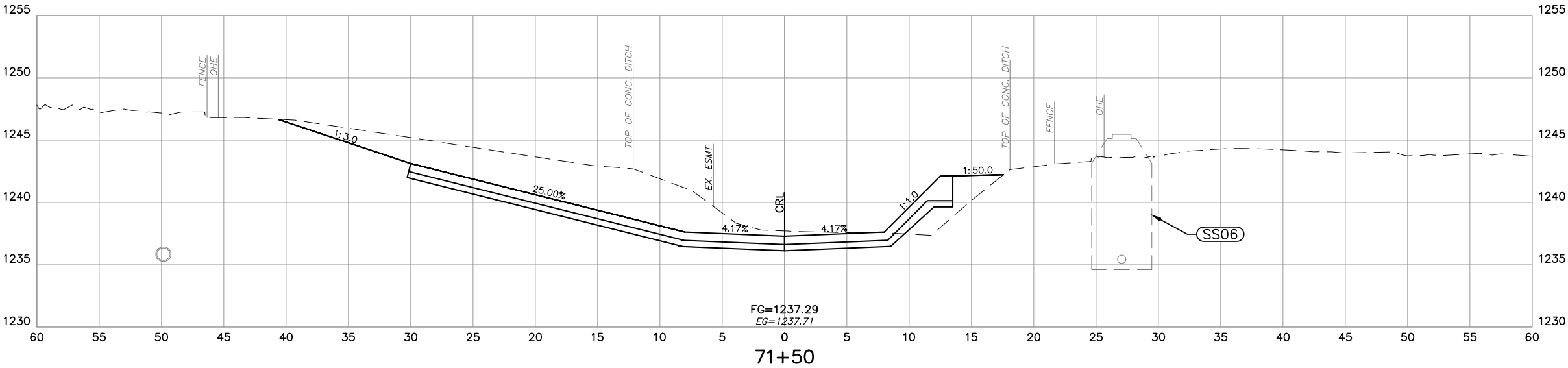
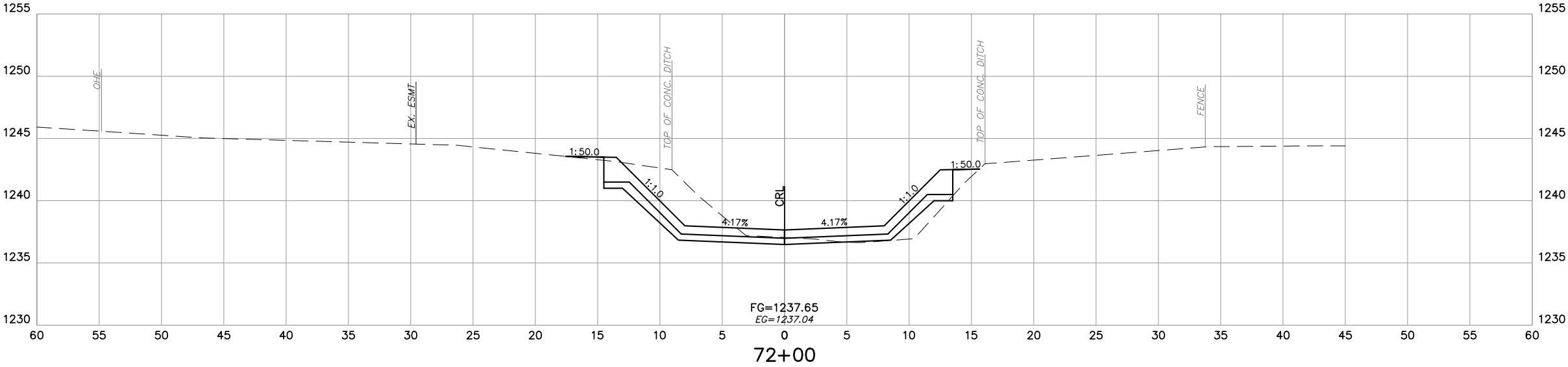
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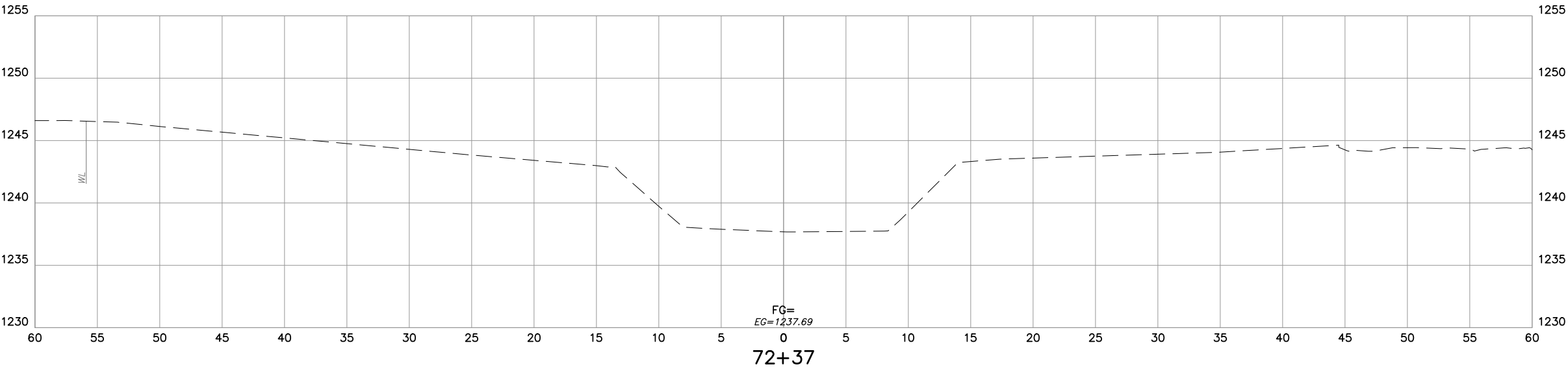
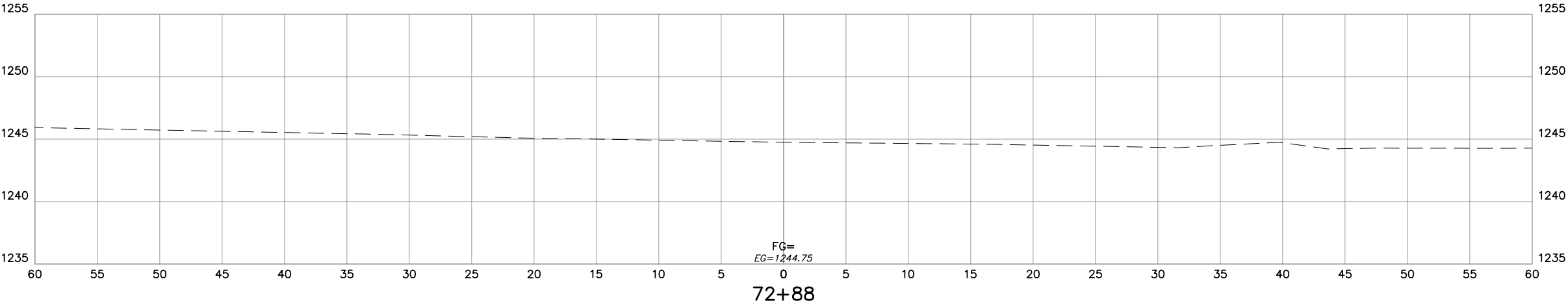
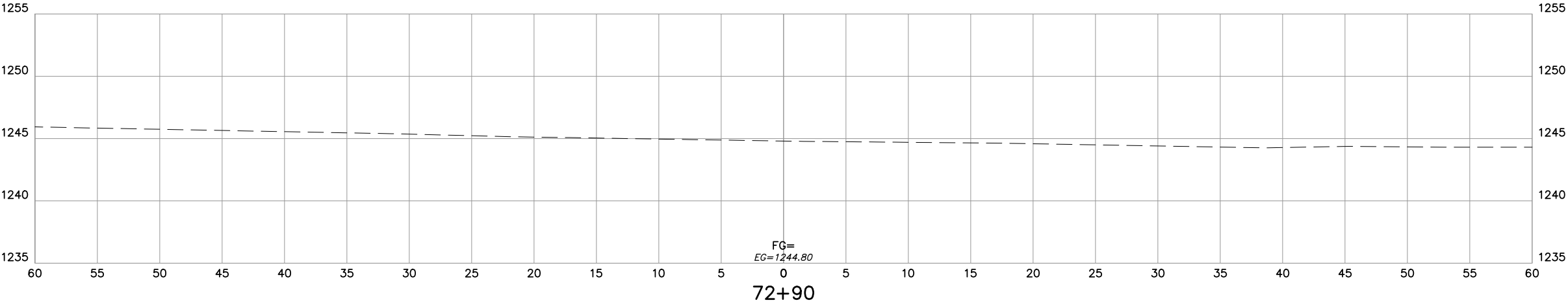
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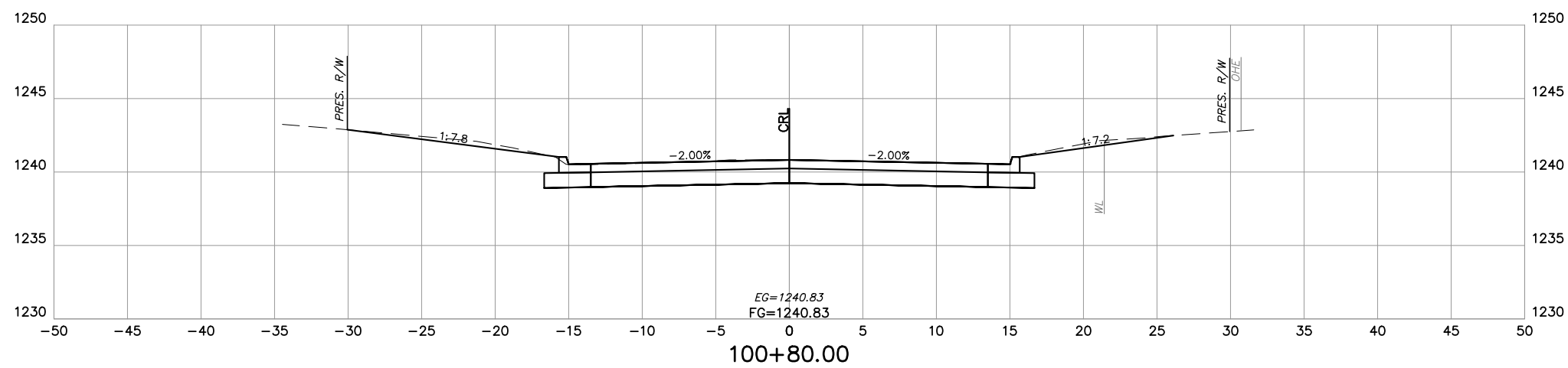
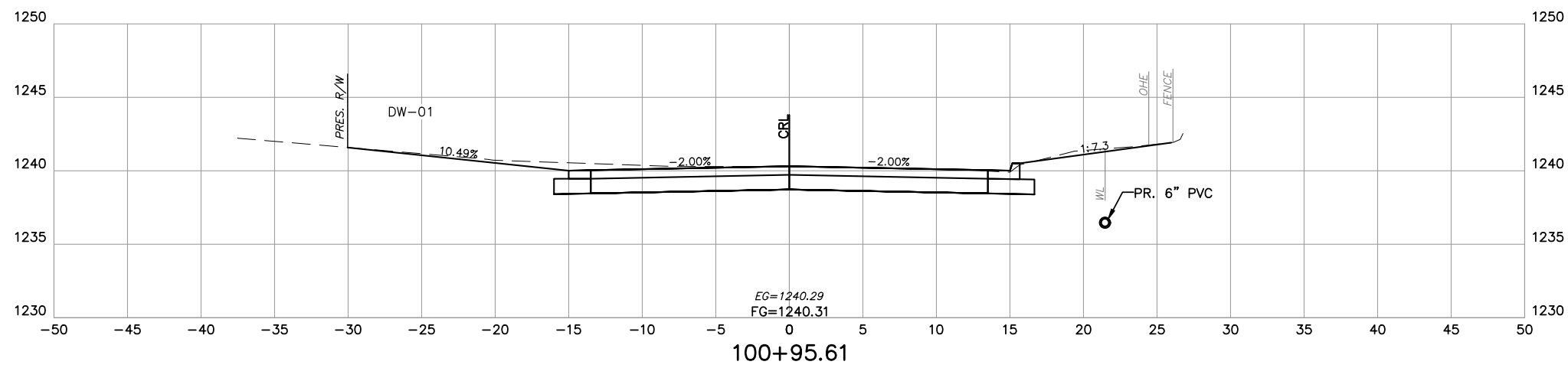
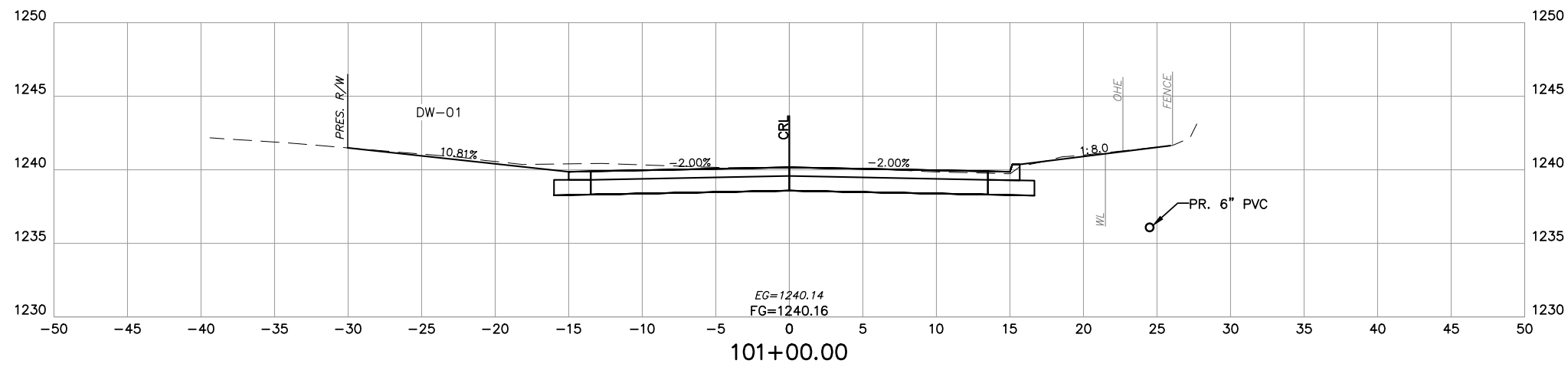
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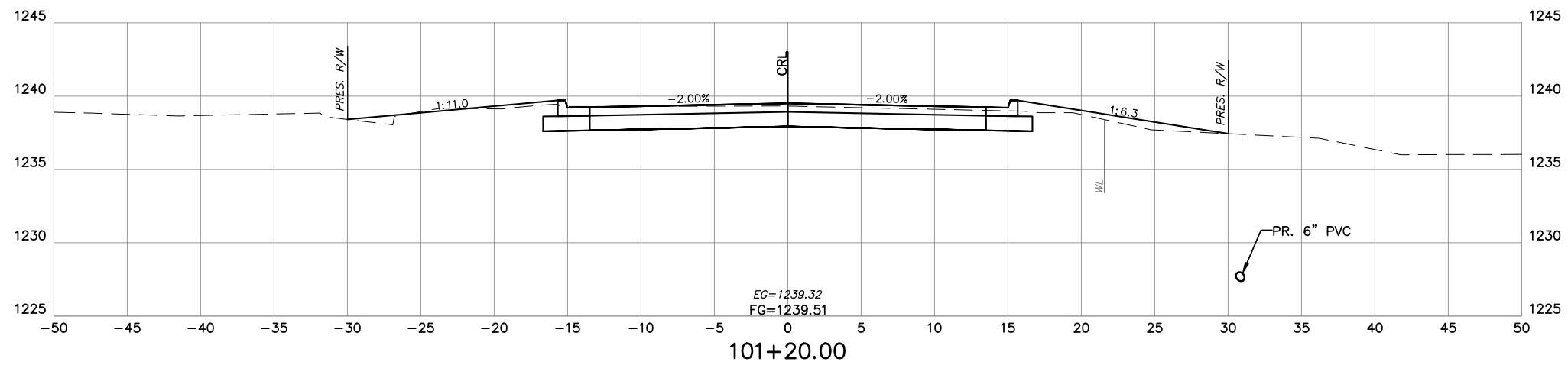
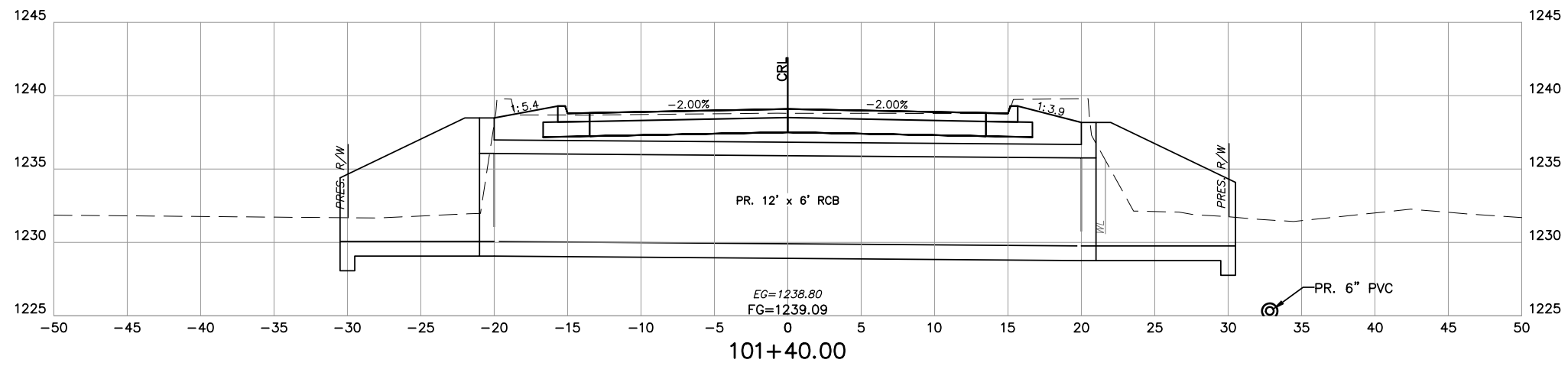
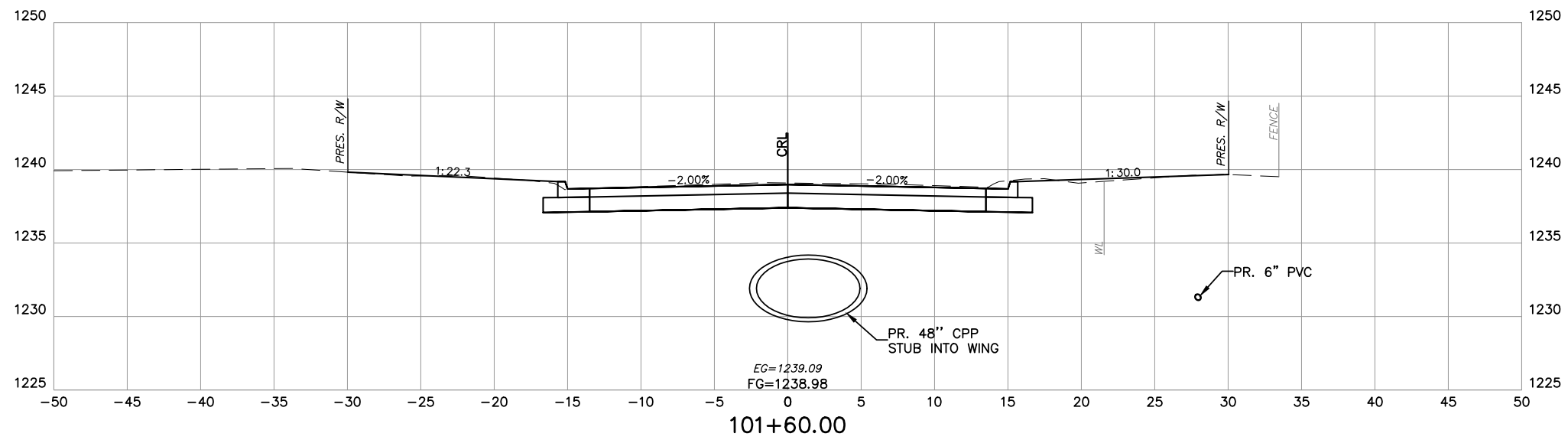
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