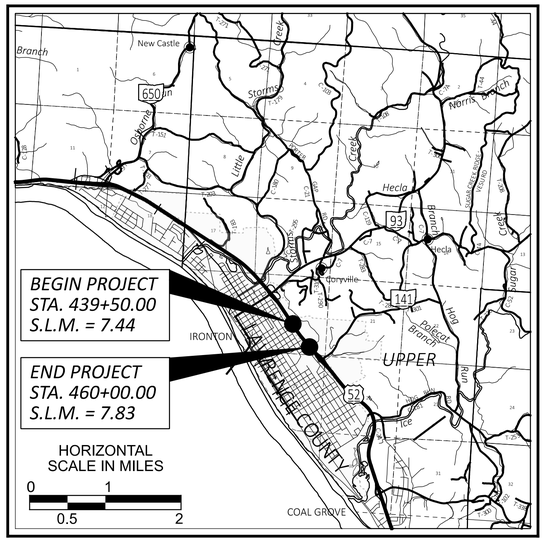
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

LAW-52-7.44

CITY OF IRONTON

LAWRENCE COUNTY



LOCATION MAP

LATITUDE: 38°31'59" LONGITUDE: -82°40'20"

PORTION TO BE IMPROVED
INTERSTATE HIGHWAY
FEDERAL ROUTES
STATE ROUTES
COUNTY & TOWNSHIP ROADS
OTHER ROADS

DESIGN DESIGNATION

CURRENT ADT (2025)	*16,000*
DESIGN YEAR ADT (2045)	*18,500*
DESIGN HOURLY VOLUME (2045)	*2,000*
DIRECTIONAL DISTRIBUTION	*57%*
TRUCKS (24 HOUR B&C)	*16%*
DESIGN SPEED	*65 MPH*
LEGAL SPEED	*60 MPH*

DESIGN FUNCTIONAL CLASSIFICATION:
02 PRINCIPAL ARTERIAL FREEWAY (URBAN)
NHS PROJECT — *YES*

DESIGN EXCEPTIONS

NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:
ARCADIS

INDEX OF SHEETS:

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FEDERAL PROJECT NUMBER

E230 (413)

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

ROCKFALL HAZARD REMEDIATION CONSISTING OF 1,000 LINEAR FEET OF ROCK CUT SLOPE BY BLASTING AND EXCAVATION AS WELL AS THE INSTALLATION OF CONCRETE BARRIER ALONG US 52 IN LAWRENCE COUNTY STARTING AT SLM 7.44. THE PROJECT ALSO INCLUDES GRADING OF ROCK CATCHMENT AND SHOULDER REPAIR.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	*6.6 ACRES*
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	*1.0 ACRES*
NOTICE OF INTENT EARTH DISTURBED AREA:	*7.6 ACRES(NOI REQUIRED)**

** POST-CONSTRUCTION BMP'S NOT REQUIRED.*

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEETS P.7 - P.15 AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

Michael G. Dombrowski
District 09 Deputy Director

Pamela Boratyn
Director, Department of Transportation

STANDARD CONSTRUCTION DRAWINGS

BP-3.1	*1/19/24*	*RM-4.6*	*7/18/25*	*MT-104.10*	*1/19/24*			*800-2023*	*1/16/26*
BP-3.2	*1/18/19*			*MT-105.10*	*1/17/20*			*808*	*7/19/24*
BP-9.1	*1/18/19*	*MT-95.30*	*7/18/25*					*821*	*4/20/12*
		MT-95.40	*7/18/25*	*TC-21.11*	*1/16/26*			*832*	*7/18/25*
F-2.1	*7/20/18*	*MT-95.45*	*7/21/23*	*TC-21.21*	*7/18/25*			*862*	*1/16/25*
F-3.3	*7/19/13*	*MT-95.50*	*7/21/17*	*TC-22.20*	*7/18/25*				
F-3.4	*7/19/13*	*MT-98.10*	*1/17/20*	*TC-41.10*	*1/16/26*			*908*	*1/17/25*
F-3.5	*1/16/26*	*MT-98.11*	*1/17/20*	*TC-41.30*	*4/21/23*			*921*	*7/19/24*
		MT-98.20	*4/19/19*	*TC-41.40*	*1/16/26*				
MGS-2.1	*1/16/26*	*MT-98.22*	*1/17/20*	*TC-41.41*	*7/19/19*				
MGS-3.1	*1/16/26*	*MT-98.28*	*1/17/20*	*TC-41.50*	*10/18/13*				
MGS-4.3	*7/18/25*	*MT-99.60*	*7/19/24*	*TC-42.10*	*10/18/13*				
				TC-42.20	*10/18/13*				
RM-4.1	*1/17/20*	*MT-101.60*	*1/17/25*	*TC-64.10*	*1/16/26*				
RM-4.4	*1/17/25*	*MT-101.70*	*7/19/24*	*TC-72.20*	*1/16/26*				
RM-4.5	*1/16/26*	*MT-103.10*	*7/18/25*	*TC-73.20*	*1/16/26*				

SUPPLEMENTAL SPECIFICATIONS

SPECIAL PROVISIONS

ENGINEER'S SEAL

STATE OF OHIO
KEVIN DANIEL KEHRES
E-55520
REGISTERED
PROFESSIONAL ENGINEER

Kevin D. Kehres
Digitally signed by Kevin D. Kehres
Date: 2026.07.15 13:55:42 -04'00'

10/23/26

DESIGN AGENCY
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222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
(330) 434-9555
www.arcadis.com

DESIGNER
MJB

REVIEWER
KDK 6/12/26

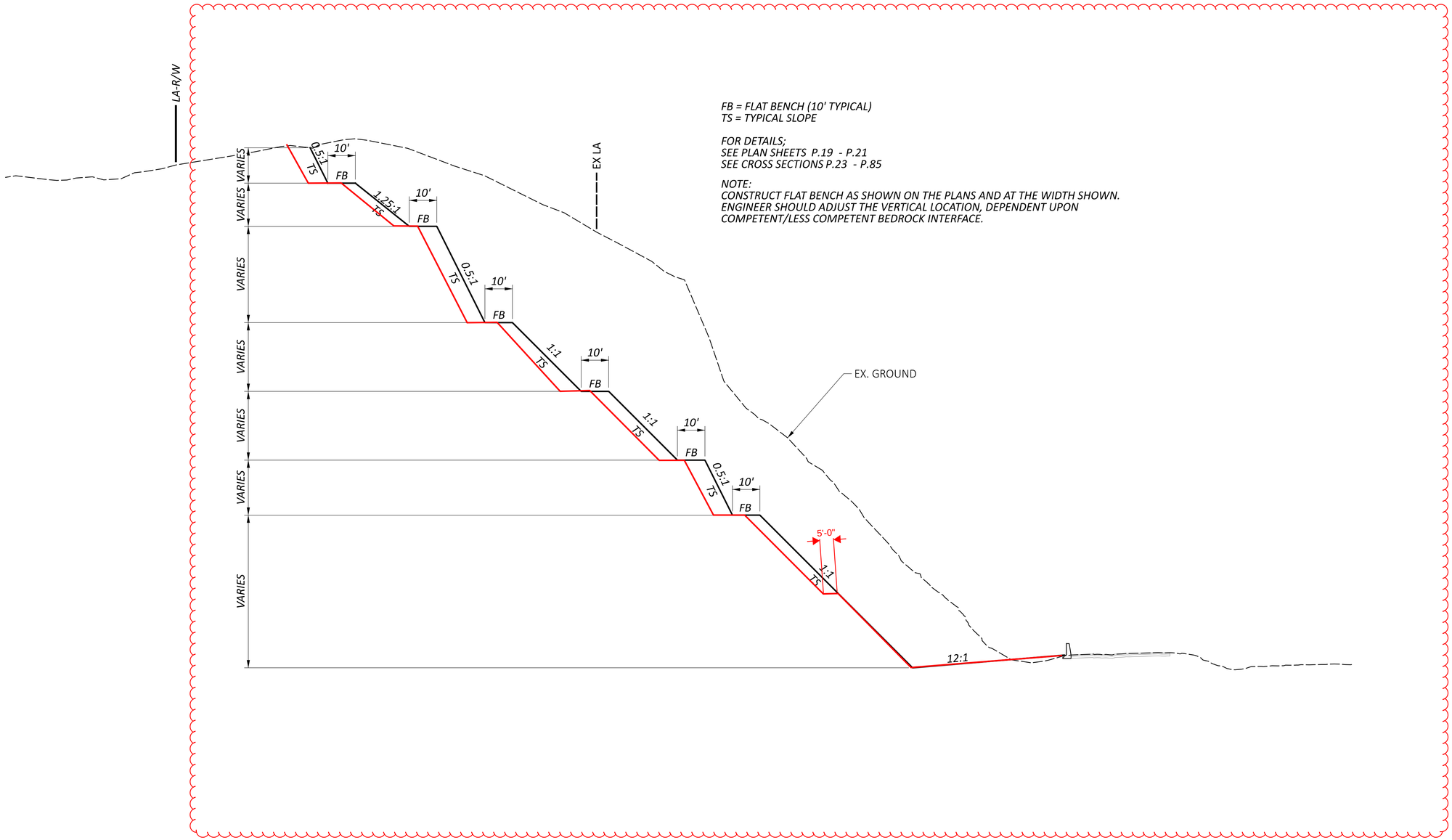
PROJECT ID
118776

SHEET P.1 TOTAL 114

TITLE SHEET

LAW-52-7.44

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FB = FLAT BENCH (10' TYPICAL)
TS = TYPICAL SLOPE

FOR DETAILS;
SEE PLAN SHEETS P.19 - P.21
SEE CROSS SECTIONS P.23 - P.85

NOTE:
CONSTRUCT FLAT BENCH AS SHOWN ON THE PLANS AND AT THE WIDTH SHOWN. ENGINEER SHOULD ADJUST THE VERTICAL LOCATION, DEPENDENT UPON COMPETENT/LESS COMPETENT BEDROCK INTERFACE.

TYPICAL SECTIONS - ROCK CUT

LAW-52-7.44

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DESIGNER
MJB

REVIEWER
KDK ~~5/12/26~~ 10/23/26

PROJECT ID
118776

SHEET P.4 | TOTAL 114

UTILITIES

THERE ARE NO EXISTING UTILITY FACILTIES SHOWN ON THIS PLAN, NOR WILL ANY EXISTING UTILITY FACILITIES BE RELOCATED AHEAD OF THIS PROJECT. HOWEVER, THE NATURE OF THE WORK REQUIRED BY THIS PROJECT MAY HAVE THE POTENTIAL TO AFFECT UTILITIES THAT MAY EXIST WITHIN OR ADJACENT TO THE WORK AREA. IT IS THE RESPONSIBILITY OF THE PROJECT CONTRACTOR TO IDENTIFY POTENTIAL UTILITY CONFLICTS, BY BOTH VISUAL INSPECTION AND BY CONTACTING THE OHIO UTILITIES PROTECTION SERVICE (OHIO 811) FOR FIELD MARKINGS OF THE UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT AND COORDINATE WITH THE UTILITY OWNERS TO RESOLVE ALL UTILITY CONFLICTS PRIOR TO CONSTRUCTION OR, WITH THE APPROVAL OF THE PROJECT ENGINEER, THE CONTRACTOR SHALL ADJUST THE PROJECT CONSTRUCTION ACCORDINGLY, SO AS TO AVOID DAMAGE TO THE EXISTING UTILITY FACILITIES.

EXISTING PLANS

EXISTING PLANS ENTITLED "LAW-52-11.75" MAY BE INSPECTED IN THE ODOT DISTRICT 9 OFFICE IN CHILLICOTHE, OHIO.

WORK LIMITS

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

CLEARING AND GRUBBING

THE DEPARTMENT HAS NOT MARKED INDIVIDUAL TREES AND STUMPS FOR REMOVAL. UNLESS SPECIFICALLY DESIGNATED AS" DO NOT DISTURB" IN THE PLANS, REMOVE ALL TREES AND STUMPS WITHIN THE CONSTRUCTION LIMITS UNDER THE LUMP SUM BID FOR ITEM 201 CLEARING AND GRUBBING.

ROUNDING

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLIES TO ALL CROSSSECTIONS, EVEN THOUGH OTHERWISE SHOWN.

FENCE LENGTHS

FENCE LENGTHS THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH ITEM 607.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A W-BEAM, BEAM SPLICE AS SHOWN IN AASHTO M 180, EXCEPT THE BEAM WASHERS ARE NOT TO BE USED. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

ENDANGERED BAT HABITAT REMOVAL

ENSURE IMPACTS TO THE FEDERALLY LISTED AND PROTECTED INDIANA BAT AND NORTHERN LONG-EARED BAT AND THE STATE LISTED AND PROTECTED LITTLE BROWN BAT AND TRICOLORED BAT ARE AVOIDED AND MINIMIZED.

DO NOT PERFORM WORK THAT WOULD IMPACT CLIFF FACE, CRACKS, GROVES AND SMALL OPENING FROM OCTOBER 1 THROUGH MARCH 31. PERFORM ALL NECESSARY WORK THAT WOULD IMPACT CLIFF FACE, CRACKS, GROVES AND SMALL OPENING FROM APRIL 1 THROUGH SEPTEMBER 30.

DO NOT REMOVE TREES FROM APRIL 1 THROUGH SEPTEMBER 30. PERFORM ALL NECESSARY TREE REMOVAL FROM OCTOBER 1 THROUGH MARCH 31. DEMARCATE CLEARING LIMITS IN THE FIELD TO AVOID ANY UNAUTHORIZED TREE CLEARING. FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK THREE INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

SURVEYING PARAMETERS

THE FOLLOWING VERTICAL POSITIONING AND HORIZONTAL POSITIONING PARAMETERS WERE USED FOR ALL SURVEYING ON THIS PROJECT:

POSITIONING METHOD: ODOT REAL TIME NETWORK (2011)
MONUMENT TYPE: TYPE B

VERTICAL POSITIONING
- ORTHOMETRIC HEIGHT DATUM: NAVD 88
- GEOID: 18

HORIZONTAL POSITIONING
- REFERENCE FRAME: NAD83 (2011 ADJ)
- ELLIPSOID: GRS 80
- COORDINATE SYSTEM: CUSTOM O.D.O.T. LAWRENCE LDP*
  - LAWRENCE LDP PROJECTION PARAMETERS:
    - PROJECTION: LCC 1 PARALLEL
    - ORIGIN LATITUDE: N 38°21'00"
    - ORIGIN LONGITUDE: E 277°27'00"
    - FALSE NORTHING 100000
    - FALSE EASTING 50000 FEET METERS
    - PROJECT SCALE FACTOR 1.000019

*THE LOW DISTORTION PROJECTION (LDP) IS A LOCAL COUNTY PROJECTION DEVELOPED BY O.D.O.T. THE DISTORTION BETWEEN GROUND AND GRID IS SO MINIMAL THAT THERE IS NO NEED FOR A SCALE FACTOR TO ADJUST BETWEEN GRID AND GROUND COORDINATES. CONTACT THE DISTRICT SURVEY DEPARTMENT FOR FURTHER INFORMATION OR QUESTIONS.

UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

SEEDING AND MULCHING

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

ITEM 659 - SEEDING AND MULCHING	6410 SY
ITEM 659 - REPAIR SEEDING AND MULCHING	321 SY
ITEM 659 - INTER-SEEDING	321 SY
ITEM 659 - COMMERCIAL FERTILIZER	1.45 TON
ITEM 659 - LIME	1.33 ACRES
ITEM 659 - WATER	36 MGAL

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

ITEM 202 - CONCRETE BARRIER REMOVED, AS PER PLAN

THIS ITEM SHALL BE USED TO REMOVE THE EXISTING PORTABLE CONCRETE BARRIER SHOWN IN THE PLANS ACCORDING TO ODOT CMS 202.02.

THE PORTABLE CONCRETE BARRIER SHALL BE REMOVED IN A MANNER SUCH THAT IT REMAINS INTACT FOR FUTURE REUSE. THE BARRIER AND ANY EXISTING BARRIER HARDWARE SHALL BE DELIVERED TO:

ODOT LAWRENCE COUNTY GARAGE
450 COMMERCE DRIVE
IRONTON, OHIO 45638
740-532-1636

PAYMENT FOR THE ABOVE WORK SHALL BE AT THE UNIT PRICE BID PER FOOT FOR THE ABOVE ITEM, WHICH INCLUDES ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE ABOVE WORK.

ITEM 203 EXCAVATION, AS PER PLAN

EXCAVATION INCLUDES REMOVAL OF ALL WASTE MATERIAL INCLUDING ROCK AND TALUS DEBRIS (ROCK AND SOIL) LOCATED BETWEEN BASE OF CUT SLOPE AND ROADWAY TO ESTABLISH CROSS SECTIONS AS IDENTIFIED IN THE PLANS VIA MECHANICAL AND PRODUCTION BLASTING METHODS. THIS ALSO INCLUDES EXISTING BOULDERS AS IDENTIFIED IN THE PLANS AND OTHER TALUS AND DEBRIS THAT HAVE ACCUMULATED IN THE ROAD DRAINAGE DITCHES PRIOR TO BEGINNING WORK. LIMITS ARE DETERMINED FOR ESTIMATING PURPOSES AND WILL BE ADJUSTED BASED ON FIELD CONDITIONS. THIS ALSO INCLUDES INCIDENTAL GRADING ASSOCIATED WITH GRADING THE CATCHMENT AND SHOULDER REPAIR.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED FROM THE CROSS SECTIONS:

EXCAVATION, AS PER PLAN	241,838 ~~212,436~~ CY
EMBANKMENT	688 CY

ITEM 203 - EXCAVATION - EXISTING BOULDERS REMOVED			
STATION	OFFSET	SIZE (CY)	NO. OF BOULDERS
440+45	160' LT	0.52	1
442+00	75' LT	0.52	7
442+85	415' LT	0.52	2
443+25	350' LT	0.52	6
443+50	260' LT	0.52	7
445+40	65' LT	0.52	4
451+25	60' LT	0.52	8
TOTAL			35

ITEM 862 - SCALING

THE DISTRICT HAS ANTICIPATED MECHANICAL SCALING FOR THE TIE-IN CUT SECTION TO NATURAL ROCK FACE FROM STA. 448+00 THROUGH STA. 448+50.00 WHERE OVERBURDEN THICKNESS AND BENCHING WIDTH MAY NOT BE FEASIBLE FOR PRE-SPLITTING ACTIVITIES. SCALING IS ALSO INCLUDED AS INCIDENTAL AS MAY BE REQUIRED ON OTHER PARTS OF THE ROCK CUT SLOPE. CONTRACTOR TO DETERMINE SUITABILITY OF MECHANICAL SCALING OR IF HAND SCALING IS NECESSARY.

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR ITEM 862 SCALING: 240 HOURS

AN ESTIMATED QUANTITY OF 240 HOURS SHALL BE CARRIED TO THE GENERAL SUMMARY.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACT, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 7:00 PM AND 7:00 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

EARTHWORK AND SEEDING SUMMARY

SHEET NO.	STATION	SEEDING SY	EXCAVATION CY	EMBANKMENT CY
P.27	438+00.00	67	599	0
P.28	438+50.00	158	2103	5
P.29	439+00.00	192	3650	12
P.30	439+50.00	214	~~4386~~	24
P.31	440+00.00	244	~~5824~~ 6,128	28
P.32	440+50.00	272	~~9262~~ 10,094	35
P.33	441+00.00	300	~~11224~~ 12,338	43
P.34	441+50.00	63	~~2203~~ 2,499	7
P.35	441+60.00	242	~~8944~~ 10,145	28
P.36	442+00.00	286	~~11517~~ 13,095	38
P.37	442+50.00	283	~~12880~~ 14,399	35
P.38	443+00.00	283	~~13236~~ 15,104	31
P.39	443+50.00	283	~~11908~~ 13,961	34
P.40	444+00.00	283	~~12645~~ 14,501	44
P.41	444+50.00	283	~~14369~~ 16,030	56
P.42	445+00.00	286	~~15458~~ 16,960	58
P.43	445+50.00	286	~~16248~~ 17,631	49
P.44	446+00.00	283	~~15050~~ 16,555	41
P.45	446+50.00	283	~~12727~~ 15,005	40
P.46	447+00.00	283	~~12071~~ 14,926	35
P.47	447+50.00	283	~~11844~~ 14,525	26
P.48	448+00.00	63	~~2277~~ 4,636	5
P.49	448+12.50	45	~~1252~~ 1,661	5
P.51	448+25.00	28	~~468~~ 618	6
P.53	448+37.50	16	81	3
P.55	448+50.00	27	39	0
P.57	448+80.00	18	3	0

EARTHWORK AND SEEDING SUMMARY

SHEET NO.	STATION	SEEDING SY	EXCAVATION CY	EMBANKMENT CY
P.58	449+00.00	44	7	0
P.59	449+50.00	44	7	0
P.60	450+00.00	44	7	0
P.61	450+50.00	44	7	0
P.62	451+00.00	44	7	0
P.63	451+50.00	44	7	0
P.64	452+00.00	44	7	0
P.65	452+50.00	44	7	0
P.66	453+00.00	44	7	0
P.67	453+50.00	44	7	0
P.68	454+00.00	44	7	0
P.69	454+50.00	44	7	0
P.70	455+00.00	44	7	0
P.71	455+50.00	44	7	0
P.72	456+00.00	44	7	0
P.73	456+50.00	44	7	0
P.74	457+00.00	44	7	0
P.75	457+50.00	44	7	0
P.76	458+00.00	44	7	0
P.77	458+50.00	44	7	0
P.78	459+00.00	44	7	0
P.79	459+50.00	44	7	0
P.80	460+00.00	44	7	0
P.81	460+50.00	44	7	0
P.82	461+00.00	44	7	0
TOTALS CARRIED TO GENSUM		6410	~~212436~~ 241,838	688

DESIGN AGENCY
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DESIGNER MJB

REVIEWER KDK 6/12/26

10/23/26

PROJECT ID 118776

SHEET P.5 TOTAL 114

LAW-52-7.44

MODEL: GN001 PAPERSIZE: 34x22 (in.) DATE: 2026-07-08 TIME: 7:59:34 PM USER: MBoyer
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ITEM 208, ROCK BLASTING, AS PER PLAN
THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR ROCK BLASTING PURPOSES:

ITEM 208, PRE-BLAST CONDITION SURVEY	LS
ITEM 208, BLASTING CONSULTANT	LS
ITEM 208, AIR BLAST AND NOISE CONTROL	LS
ITEM 208, VIBRATION CONTROL AND MONITORING	LS
ITEM 208, PRESPLITTING* ~~20,575~~ 20,968	SY
*SEE TABLE FOR CALCULATIONS	
ITEM 208, HYDROLOGIST	LS

ROCK BLASTING OPERATIONS
BLASTING SHALL CONFORM TO ITEM C&MS 208 ROCK BLASTING. THE CONTRACTOR SHALL ENSURE THAT BLASTING DOES NOT RESULT IN OVER-EXCAVATION, OVERBREAK, OR LANDSLIDES. THE CONTRACTOR SHALL DESCRIBE IN THE BLASTING PLAN THEIR UNDERSTANDING OF THE GEOLOGY AND MEASURES THEY PLAN TO TAKE TO AVOID CAUSING OVERBREAK OR LANDSLIDES. CONTRARY TO C&MS 208.05, THE BLASTING PLAN SHALL BE SUBMITTED AT LEAST FOUR (4) WEEKS PRIOR TO THE START OF ANY DRILLING OR BLASTING OPERATIONS.

IN ADDITION TO THE REQUIREMENTS FOR COMMUNICATION WITH THE PUBLIC IN C&MS 107.09 AND 208.19, THE CONTRACTOR SHALL RECEIVE, RECORD AND LOG ALL BLASTING COMPLAINTS FROM THE PUBLIC AND PERFORM ALL SUBSEQUENT INVESTGATION FOLLOW-UP AND RESPONSE TO A COMPLAINT IN A TIMELY MANNER. THE BLASTING COMPLAINT LOG SHALL BE MADE AVAILALBE TO THE ENGINEER UPON REQUEST AND REVIEWED WITH THE ENGINEER MONTHLY.

IN ADDITION TO VIDEO RECORDING OF BLASTS IN C&MS 208.20.D, THE CONTRACTOR SHALL ALSO PERFORM A VIDEO RECORDING OF EACH BLAST BY AERIAL DRONE PRODUCING AT LEAT 4K ULTRA-HIGH RESOLUTION VIDEO AT 60 FRAMES PER SECOND. THE DRONE SHALL BE PREPOSITIONED SO ITS FIELD OF VIEW COVERS THE BLAST AND SURROUNDING AREA ADJACENT TO THE BLAST SITE. PROVIDE A COPY OF THE UNEDITED RAW VIDEO RECORDING IN MP4 FORMAT TO THE ENGINEER WITHIN 48 HOURS OF A BLAST EVENT.

THE CONTRACTOR SHALL FOLLOW THE REQUIREMENTS OF OAC 4123:1-5-29. THIS INCLUDES THE PROVISION THAT SIGNS MUST BE POSTED WARNING AGAINST THE USE OF MOBILE RADIO TRANSMITTERS ON ALL ROADS WITHIN 1,000 FEET OF BLASTING OPERATIONS WHEN ELECTRIC BLASTING CAPS ARE USED.

IN CONFORMANCE WITH US DRONE REGULATIONS, UNDER FAR 52.240-1, EFFECTIVE DECEMBER 22,2025, THE CONTRACTOR IS PROHIBITED FROM USING, PURCHASING, OR DELIVERING UNMANNED AIRCRAFT SYSTEMS (UAS) MANUFACTURED OR ASSEMBLED BY "COVERED FOREIGN ENTITIES" (E.G., DJI, AUTEL, ETC.) WHEN PERFORMING THIS WORK.

IN AREAS THE CONTRACTOR ELECTS TO USE BLASTING OPERATIONS TO FACILITATE EARTHWORK, THE FOLLOWING SHALL APPLY. DURING BLASTING OPERATIONS, THE CONTRACTOR SHALL ELECT TO USE A ROLLING ROADBLOCK PER MT-99-60, AND THE ROLLING ROADBLOCK SHALL APPLY TO BOTH WB AND EB LANES.

THE FOLLOWING EXCEPTIONS TO MT-99-60 APPLY:

THE CONTRACTOR SHALL ATTEMPT TO MINIMIZE INTERRUPTION TO TRAFFIC TO THE EXTENT POSSIBLE. BLASTING WORK SHOULD NOT OCCUR AT NIGHT BETWEEN 12 AM - 5 AM, WITHOUT EXPRESS APPROVAL BY ENGINEER. THE ROLLING ROADBLOCK MAY BE USED BETWEEN THE HOURS OF 9 AM AND 1 PM.

NO OTHER EXCEPTIONS TO MT-99-60 ARE PERMITTED UNLESS EXPLICITLY APPROVED BY ENGINEER.

LAW ENFORCEMENT OFFICERS (LEOS) REQUIRED BY THIS STANDARD DRAWING SHALL BE PAID HOURLY FROM THE LEO HOURS INCLUDED IN THE PLANS. BLASTING AREAS SHALL HAVE TRAFFIC CONTROL IN PLACE PER OMUTCD TYPICAL APPLICATION 2 (TA-2).

ALL REQUIRED TRAFFIC CONTROL FROM THE STANDARD DRAWING, OMUTCD TA-2 AND ANY TRAFFIC CONTROL NEEDED FOR ADVANCE PREPARATION OF BLASTING, DURING AND AFTER BLASTING, AND RELATED OPERATIONS, SHALL BE INCLUDED IN THE LUMP SUM FOR ITEM - 614 MAINTAINING TRAFFIC.

PRIOR TO STARTING BLASTING OPERATIONS, THE CONTRACTOR SHALL SUBMIT A PLAN FOR APPROVAL TO THE ENGINEER WHICH DETAILS THE SCHEDULE OF OPERATIONS AND REQUIRED TRAFFIC CONTROL, WHICH WILL ALSO INCLUDE THE DETAILS OF BLASTING OPERATION PLAN AS REQUIRED IN ITEM 208. BLASTING WORK WILL NOT COMMENCE UNTIL APPROVAL FROM THE ENGINEER IS RECEIVED AND PROPER NOTIFICATION IS GIVEN TO ALL SURROUNDING PROPERTIES AND STAKEHOLDERS.

ONCE ALL WORK IS COMPLETE, ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED AND RETURNED TO THE EXISTING CONDITIONS.

ITEM 208 - PRESPLITTING CALCULATIONS

SHEET	STATION	SIDE	CUT FACE LENGTH (FT)	AVG AREA (SF)
P.28	438+50	LT	0.00	0
P.29	439+00	LT	0.00	0
P.30	439+50	LT	0.00	0
P.31	440+00	LT	~~126.38~~ 128.67	~~3,159~~ 3,217
P.32	440+50	LT	~~164.60~~ 174.04	~~7,274~~ 7,568
P.33	441+00	LT	~~207.30~~ 208.65	~~9,298~~ 9,567
P.34	441+50	LT	~~220.70~~ 219.33	~~10,700~~ 10,699
P.36	442+00	LT	~~217.01~~ 218.48	~~10,943~~ 10,945
P.37	442+50	LT	~~218.60~~ 221.21	~~10,890~~ 11,017
P.38	443+00	LT	~~228.38~~ 233.52	~~11,175~~ 11,393
P.39	443+50	LT	~~231.83~~ 233.29	~~11,505~~ 11,670
P.40	444+00	LT	~~233.25~~ 233.69	~~11,627~~ 11,674
P.41	444+50	LT	~~234.00~~ 234.90	~~11,681~~ 11,715
P.42	445+00	LT	~~226.35~~ 227.25	~~11,509~~ 11,554
P.43	445+50	LT	~~224.80~~ 226.96	~~11,279~~ 11,355
P.44	446+00	LT	~~229.48~~ 229.88	~~11,357~~ 11,421
P.45	446+50	LT	~~230.62~~ 234.67	~~11,503~~ 11,614
P.46	447+00	LT	~~228.21~~ 232.06	~~11,471~~ 11,688
P.47	447+50	LT	~~221.64~~ 226.73	~~11,246~~ 11,470
P.48	448+00	LT	~~220.11~~ 215.46	~~11,044~~ 11,055
P.49	448+12.5	LT	~~242.97~~ 243.50	~~2,894~~ 2,868
P.51	448+25	LT	~~252.41~~ 252.31	~~2,288~~ 3,099
P.53	448+37.5	LT	75.99	~~1,244~~ 2,052
P.55	448+50	LT	19.68	598
P.58	449+00	LT	0.00	492
P.59	449+50	LT	0.00	0
			TOTAL (SF) =	~~185,177~~ 188,711
			TOTAL (SY) =	**~~20,575~~ 20,968**

ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN
& ITEM 622 - BARRIER TRANSITION, AS PER PLAN
THESE ITEMS SHALL CONFORM TO THE STANDARD CONSTRUCTION DRAWINGS AND SPECIFICATIONS EXEPT THE HEIGHT DIMENSIONS WHICH ARE SHOWN IN STANDARD DRAWINGS RM-4.4, AND RM-4.5 AS 42" SHALL BE REVISED TO 50".

CONSTRUCT THE BARRIER WITH REINFORCEMENT AS DETAILED ON CONCRETE BARRIER DETAIL SHEETS P.86- P.87.

MATERIALS: PROVIDE MATERIALS CONFORMING TO THE FOLLOWING REQUIREMENTS:

PORTLAND CEMENT CONCRETE
499.03, CLASS QC 3, W/ MACRO-FIBERS*

QC3: COMPRESSIVE STRENGTH: 4000 PSI IN 28 DAYS

PERMEABILITY: 2000 COULOMBS OR LESS

MACROFIBERS: MINIMUM 7.50 LB/CY

COARSE AGGREGATE (NO. 57 & NO. 8)	703.02
FINE AGGREGATE (NATURAL SAND)	703.02
PORTLAND CEMENT, TYPE I	701.04
FLY ASH OR NATURAL POZZOLAN	701.13
SLAG CEMENT	709.09
WATER	499.02
CHEMICAL ADMIXTURE	705.12, ASTM C 494,
AIR-ENTRAINING ADMIXTURE	705.10
HIGH RANGE WATER REDUCING ADMIXTURE (SUPERPLASTICIZING ADMIXTURE)	705.12 ASTM C 494, TYPE F OR G
MACRO-FIBERS FOR CONCRETE	ASTM C 1116, TYPE III

*PROVIDE MACRO-FIBERS THAT ARE MONOFILAMENT, NON-FIBRILLATED FIBERS MADE FROM VIRGIN POLYPROPYLENE, POLYETHYLENE, OR CO-POLYMERS THAT ARE INERT TO ALKALI ATTACK. ENSURE THE FIBERS HAVE A MINIMUM TENSILE STRENGTH OF 70 KSI, A MINIMUM MODULUS OF ELASTICITY OF 800 KSI, A MINIMUM FILAMENT DIAMETER OF 0.012 INCHES, AN ASPECT RATIO BETWEEN 70 AND 150, AND ARE BETWEEN 1.0 AND 2.5 INCHES IN LENGTH. STORE THE FIBERS ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AND KEEP THE MATERIAL FREE FROM DUST, DIRT, AND MOISTURE.

USE A MINIMUM DOSAGE RATE OF FIBERS OF 7.5 LB/CU YD OF CONCRETE. ENSURE THE FINAL PROPOSED MIX IS WORKABLE AND ABLE TO BE PRODUCED SUCH THAT BALLING OR CLUMPING OF THE FIBERS IS NOT A PROBLEM AS DETERMINED BY THE ENGINEER. UTILIZE AN AASHTO ACCREDITED LABORATORY TO PERFORM THE TESTING. BEFORE USE, SUBMIT DOCUMENTATION TO THE PROJECT ENGINEER CERTIFYING BOTH THE FIBERS AND MIX MEET OR EXCEED THE REQUIRED PROPERTIES. SAMPLING WILL BE ALLOWED FOR TESTING PURPOSES. A DEMONSTRATION OF THE MIX PRODUCTION, OR TRIAL MIX, MAY BE REQUIRED BY THE ENGINEER PRIOR TO PLACING ANY OF THE MIX ON THE PROJECT.

THE CONTRACTOR WILL CONSTRUCT DRAINAGE SLOTS AT THE BASE OF THE BARRIER AT INTERVALS NOT EXCEEDING 100 FEET. THE SLOTS WILL BE LOCATED FLUSH WITH THE BASE OF THE BARRIER AND THE 4" HIGH AND 5' LENGTH FOR THE FULL WIDTH OF THE BARRIER.

BARRIER EXPANSION JOINTS SHALL BE INSTALLED AT A MAXIMUM SPACING OF 90'-0". SEE BARRIER DETAIL SHEET FOR ADDITIONAL INFORMATION.

ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN
& ITEM 622 - BARRIER TRANSITION, AS PER PLAN (CONTINUED)
APPROXIMATE LOCATIONS FOR DRAINAGE SLOTS AND EXPANSION JOINTS FOR REFERENCE ARE SHOWN BELOW. MINOR ADJUSTMENTS CAN BE MADE TO AVOID REINFORCING STEEL CONFLICTS.

DRAINAGE SLOT LOCATIONS ESTIMATED BASED UPON 90-FOOT BARRIER SECTIONS ARE AS FOLLOWS:

439+50	450+30
440+40	451+20
441+30	452+10
442+20	453+00
443+10	453+90
444+00	454+80
444+90	455+70
445+80	456+60
446+70	457+50
447+60	458+40
448+50	459+30
449+40	

ON EACH SIDE OF EXPANSION JOINT AND AT DRAINAGE SLOT, PLACE THE REINFORCEMENT AS DETAILED ON BARRIER DETAIL SHEETS.

UNLESS ITEMIZED SEPARATELY ALL ACTIVITIES INCLUDING EXCAVATION, PAVEMENT REMOVAL, SUBGRADE COMPACTION, AGGREGATE BASE, REINFORCING STEEL, EXPANSION JOINTS, CONCRETE PAVEMENT, FULL DEPTH PAVEMENT SAWING AND BACKFILL NECESSARY TO CONSTRUCT THESE ITEMS SHALL BE AT THE CONTRACT UNIT PRICE BID PER FOOT FOR ITEM 622, CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN, PER EACH FOR ITEM 622, BARRIER TRANSITION, AS PER PLAN AND PER EACH FOR ITEM 622, CONCRETE BARRIER END SECTION, TYPE D, AS PER PLAN.

THESE ITEMS SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, AND INCIDENTALS NECESSARY TO PERFORM THE WORK.

GENERAL NOTES

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ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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DESIGNER MJB
REVIEWER KDK ~~6/12/26~~ 10/23/26
PROJECT ID 118776
SHEET P.6 TOTAL 114

LAW-52-7.44

MODEL: GN002 PAPERSIZE: 34x22 (in.) DATE: 2026-07-08 TIME: 7:59:36 PM USER: MBoyer
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SHEET NUMBER														PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.5	P.6	P.7	P.8	P.9	P.10	P.17	P.18	P.88						01/LAW						
																			ROADWAY	
LS														LS	201	11000	LS		CLEARING AND GRUBBING	
						1,935								1,935	202	30701	1,935	FT	CONCRETE BARRIER REMOVED, AS PER PLAN	P.5
						113								113	202	38000	113	FT	GUARDRAIL REMOVED	
241,838						1								1	202	47000	1	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
~~212,436~~													241,838	~~212,436~~	203	10001	~~212,436~~ 241,838	CY	EXCAVATION, AS PER PLAN	P.5
688														688	203	20000	688	CY	EMBANKMENT	
	LS													LS	208	10000	LS		PRE-BLAST CONDITION SURVEY	
	LS													LS	208	12000	LS		BLASTING CONSULTANT	
	LS													LS	208	13000	LS		AIR BLAST AND NOISE CONTROL	
	LS													LS	208	14000	LS		VIBRATION CONTROL AND MONITORING	
	20,968																20,968			
	~~20,575~~												20,968	~~20,575~~	208	15001	~~20,575~~	SY	PRESPLITTING, AS PER PLAN	P.6
	LS													LS	208	16000	LS		HYDROLOGIST	
						112.5								112.5	606	15050	112.5	FT	GUARDRAIL, TYPE MGS	
						1								1	606	35002	1	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
						1,661								1,661	607	15000	1,661	FT	FENCE, TYPE 47	
						2,008								2,008	622	10161	2,008	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D, AS PER PLAN	P.6
						1								1	622	10201	1	EACH	BARRIER TRANSITION, AS PER PLAN	P.6
						1								1	622	25000	1	EACH	CONCRETE BARRIER END SECTION, TYPE D	
240														240	862	00500	240	HOUR	SCALING	P.5
																			EROSION CONTROL	
6,410														6,410	659	10000	6,410	SY	SEEDING AND MULCHING	
321														321	659	14000	321	SY	REPAIR SEEDING AND MULCHING	
321														321	659	15000	321	SY	INTER-SEEDING	
1.45														1.45	659	20000	1.45	TON	COMMERCIAL FERTILIZER	
1.33														1.33	659	31000	1.33	ACRE	LIME	
36														36	659	35000	36	MGAL	WATER	
							LS							LS	832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
							LS							LS	832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
							LS							LS	832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
							100,000							100,000	832	30000	100,000	EACH	EROSION CONTROL	
																			PAVEMENT	
						1,823								1,823	254	01000	1,823	SY	PAVEMENT PLANING, ASPHALT CONCRETE (1-1/2")	
						114								114	304	20000	114	CY	AGGREGATE BASE	
						155								155	407	10000	155	GAL	TACK COAT	
						76								76	442	22100	76	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449)	
						2,050								2,050	618	40100	2,050	FT	RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	
																			TRAFFIC CONTROL	
						21								21	626	00102	21	EACH	BARRIER REFLECTOR, TYPE 1, ONE-WAY	
						3								3	626	00110	3	EACH	BARRIER REFLECTOR, TYPE 2, ONE-WAY	
						6								6	630	80100	6	SF	SIGN, FLAT SHEET	
						1								1	630	84900	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
								1						1	630	85101	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION, AS PER PLAN	P.88
						0.93								0.93	642	00104	0.93	MILE	EDGE LINE, 6", TYPE 1	
						0.93								0.93	642	00204	0.93	MILE	LANE LINE, 6", TYPE 1	
						1,000								1,000	642	01510	1,000	FT	DOTTED LINE, 6", TYPE 1	
																			MAINTENANCE OF TRAFFIC	
			400											400	614	11110	400	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	P.8
					55									55	614	11630	55	FT	INCREASED BARRIER DELINEATION	
					3									3	614	12380	3	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	P.8
					37									37	614	13310	37	EACH	BARRIER REFLECTOR, TYPE 1, ONE-WAY	
					35									35	614	13350	35	EACH	OBJECT MARKER, ONE WAY	
		LS												LS	614	12420	LS		DETOUR SIGNING	
			3											3	614	12484	3	EACH	WORK ZONE INCREASED PENALTIES SIGN	
					1.08									1.08	614	22210	1.08	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 740.06, TYPE I	
					976									976	614	23410	976	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 740.06, TYPE I	
					1,788									1,788	614	24402	1,788	FT	WORK ZONE DOTTED LINE, CLASS I, 6", 740.06, TYPE I	
				12										12	614	18601	12	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	P.9
		847												847	616	10000	847	MGAL	WATER	
					1,710									1,710	622	41100	1,710	FT	PORTABLE BARRIER, UNANCHORED	
			10											10	808	18700	10	SNMT	DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY	10/23/26
																			INCIDENTALS	
		LS												LS	614	11001	LS		MAINTAINING TRAFFIC, AS PER PLAN	P.7
														LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
														LS	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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DESIGNER MJB

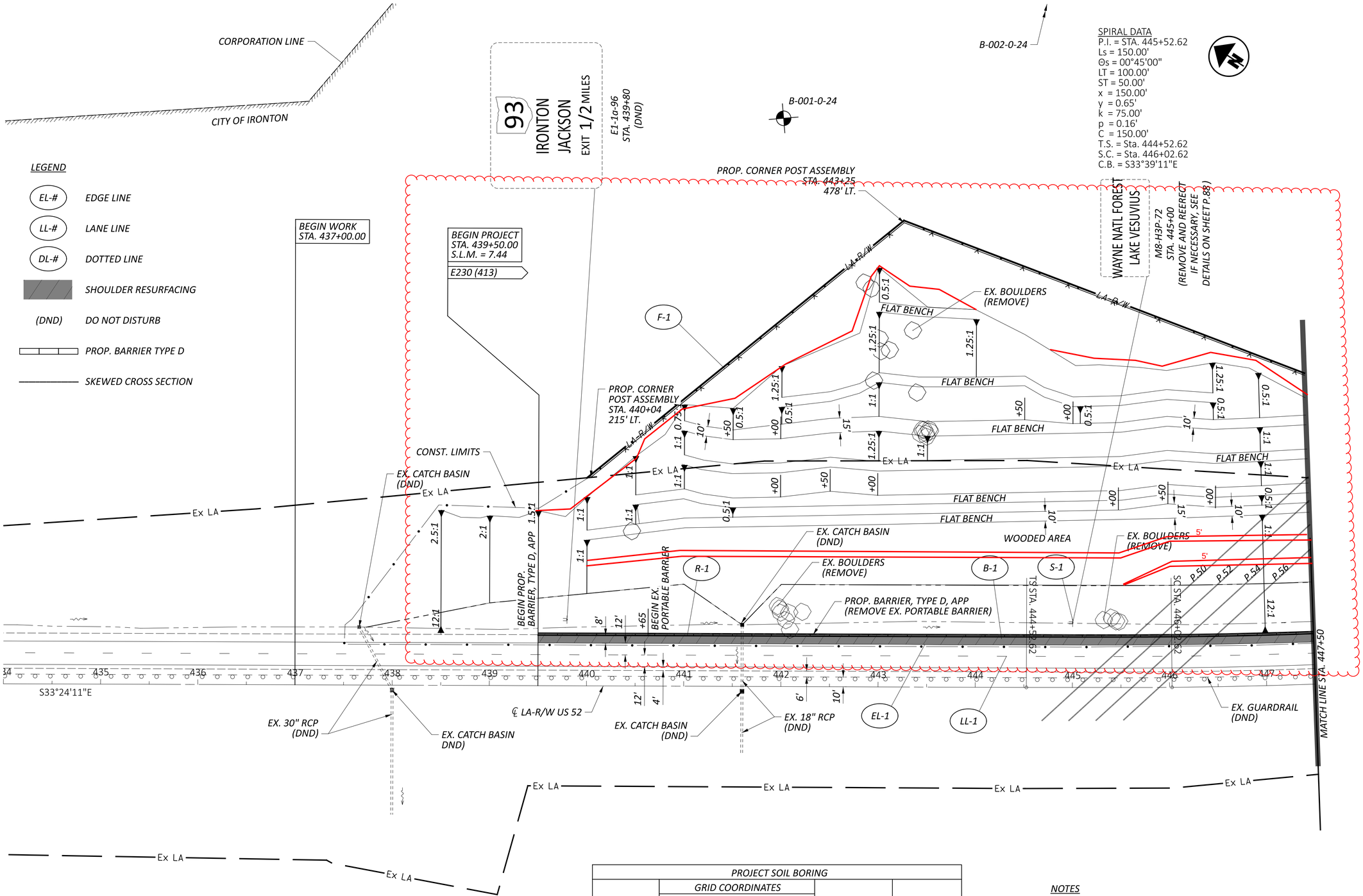
REVIEWER KDK ~~6/12/26~~ 10/23/26

PROJECT ID 118776

SHEET P.16 TOTAL 114

LAW-52-7.44

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PROJECT SOIL BORING				
PT. NAME	GRID COORDINATES US SURVEY FEET NORTHING	GRID COORDINATES US SURVEY FEET EASTING	ELEVATION	DESCRIPTION
B-001-0-24	394872.39	129806.19	893.67	SOILINST
B-002-0-24	394873.52	130353.52	792.06	SOILINST

NOTES

1. FOR BARRIER DETAILS SEE SHEETS P.86 - P.87
2. EXISTING DRAINAGE AT STA. 438+00 & STA. 441+50 SHOWN AS PER ORIGINAL 1960 PLANS

HORIZONTAL SCALE IN FEET
0 25 50 100

PLAN - US 52
STA. 434+00 TO STA. 437+50

DESIGN AGENCY
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222 SOUTH MAIN STREET SUITE 200
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DESIGNER MJB
REVIEWER KDK 6/12/26
10/23/26
PROJECT ID 118776
SHEET P.19 TOTAL 114

LAW-52-7.44

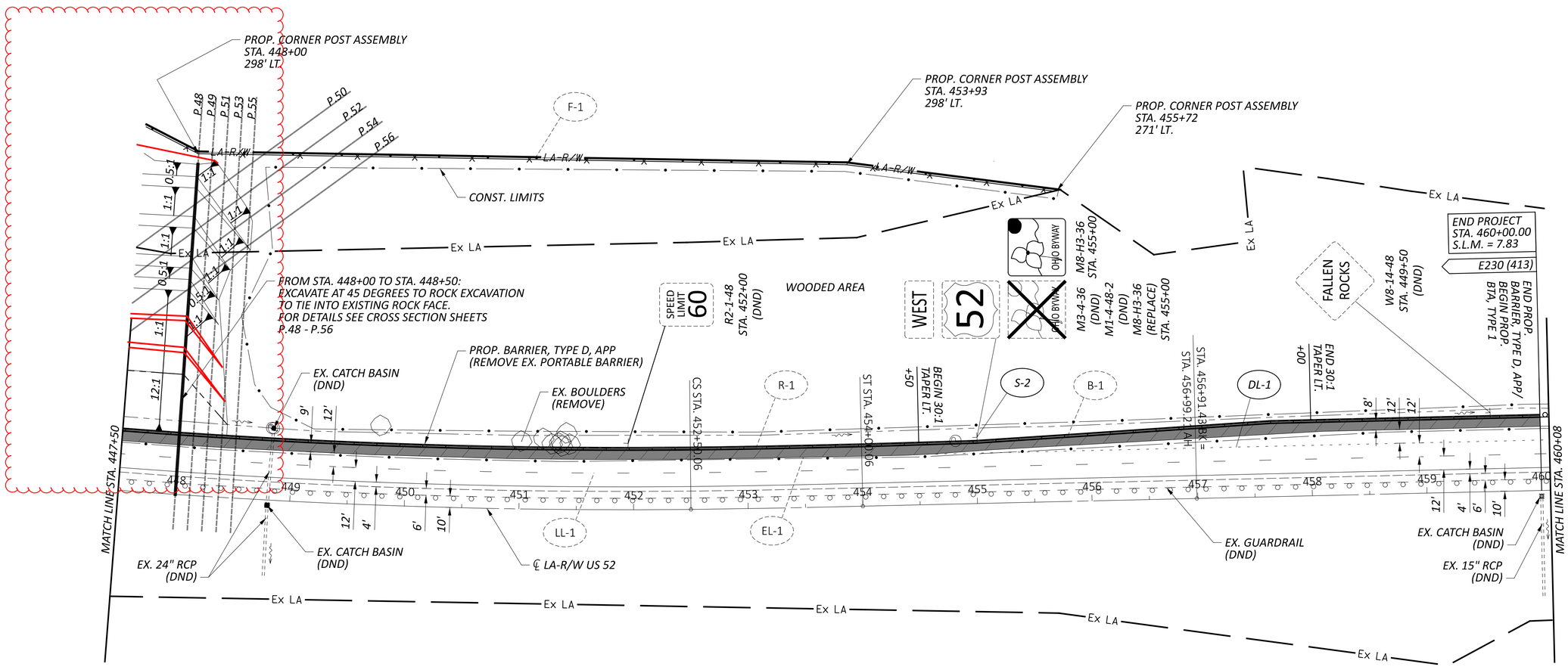
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LEGEND

- *EL-#* — *EDGE LINE*
- *LL-#* — *LANE LINE*
- *DL-#* — *DOTTED LINE*
- *SHOULDER RESURFACING*
- *(DND)* — *DO NOT DISTURB*
- *PROP. BARRIER TYPE D*
- *SKEWED CROSS SECTION*
- *PERPENDICULAR CROSS SECTION*

CURVE DATA
P.I. = STA. 449+26.68
Δ = 06°28'28" LT
Dc = 01°00'00"
R = 5,729.58'
T = 324.06'
L = 647.44'
E = 9.16'
eMAX = 0.06

SPIRAL DATA
P.I. = STA. 453+00.06
Ls = 150.00'
Θs = 00°45'00"
LT = 100.00'
ST = 50.00'
x = 149.99'
y = 1.31'
k = 75.00'
p = 0.16'
C = 150.00'
T.S. = Sta. 452+50.06
S.T. = Sta. 454+00.06
C.B. = S41°07'38"E



NOTES

1. *FOR BARRIER DETAILS SEE SHEETS P.86 - P.87*
2. *EXISTING DRAINAGE AT STA. 460+00 SHOWN AS PER ORIGINAL 1960 PLANS*

HORIZONTAL SCALE IN FEET
0 25 50 100

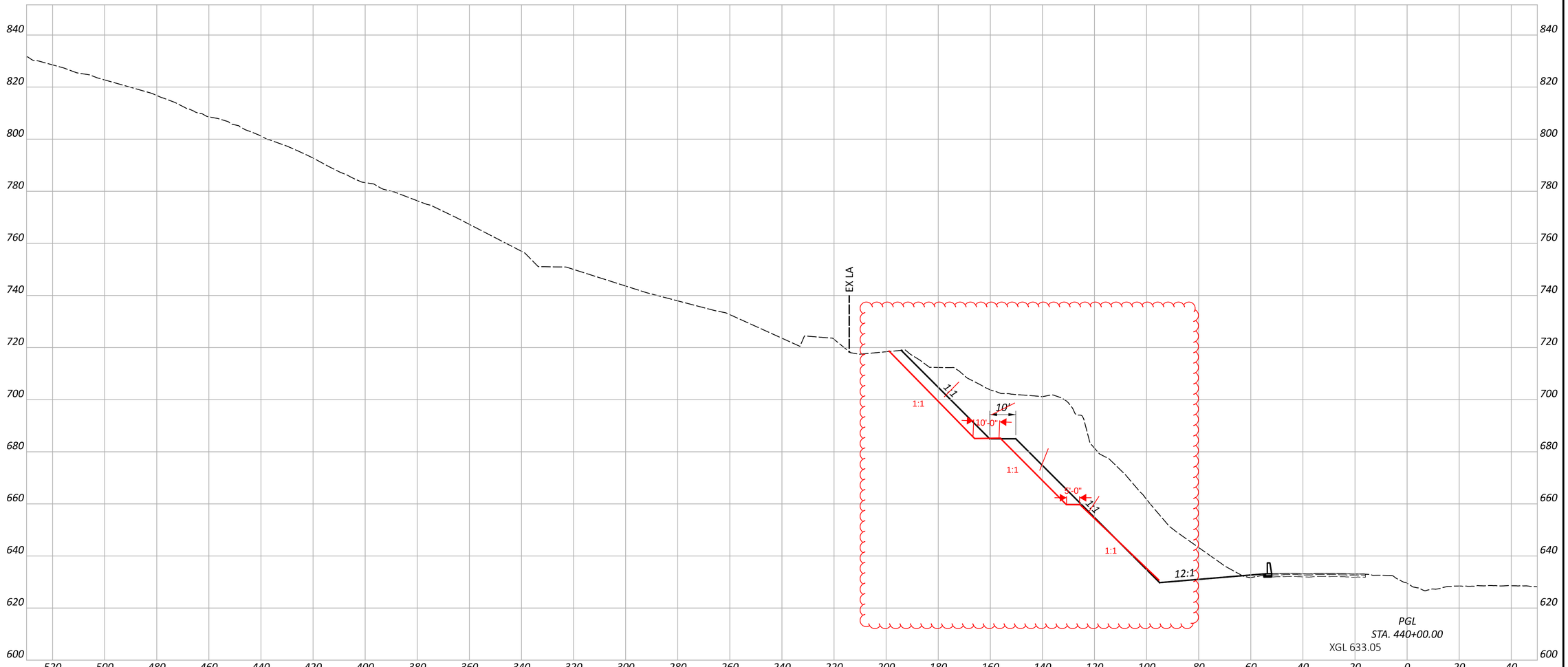
PLAN - US 52
STA. 447+50.00 TO STA. 460+08

DESIGN AGENCY
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222 SOUTH MAIN STREET SUITE 200
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DESIGNER MJB
REVIEWER KDK 6/12/26 10/23/26
PROJECT ID 118776
SHEET P.20 TOTAL 114

LAW-52-7.44

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CROSS SECTIONS - US 52
STA. 440+00.00

LAW-52-7.44

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DESIGN AGENCY
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DESIGNER
MJB

REVIEWER
KDK 6/12/26

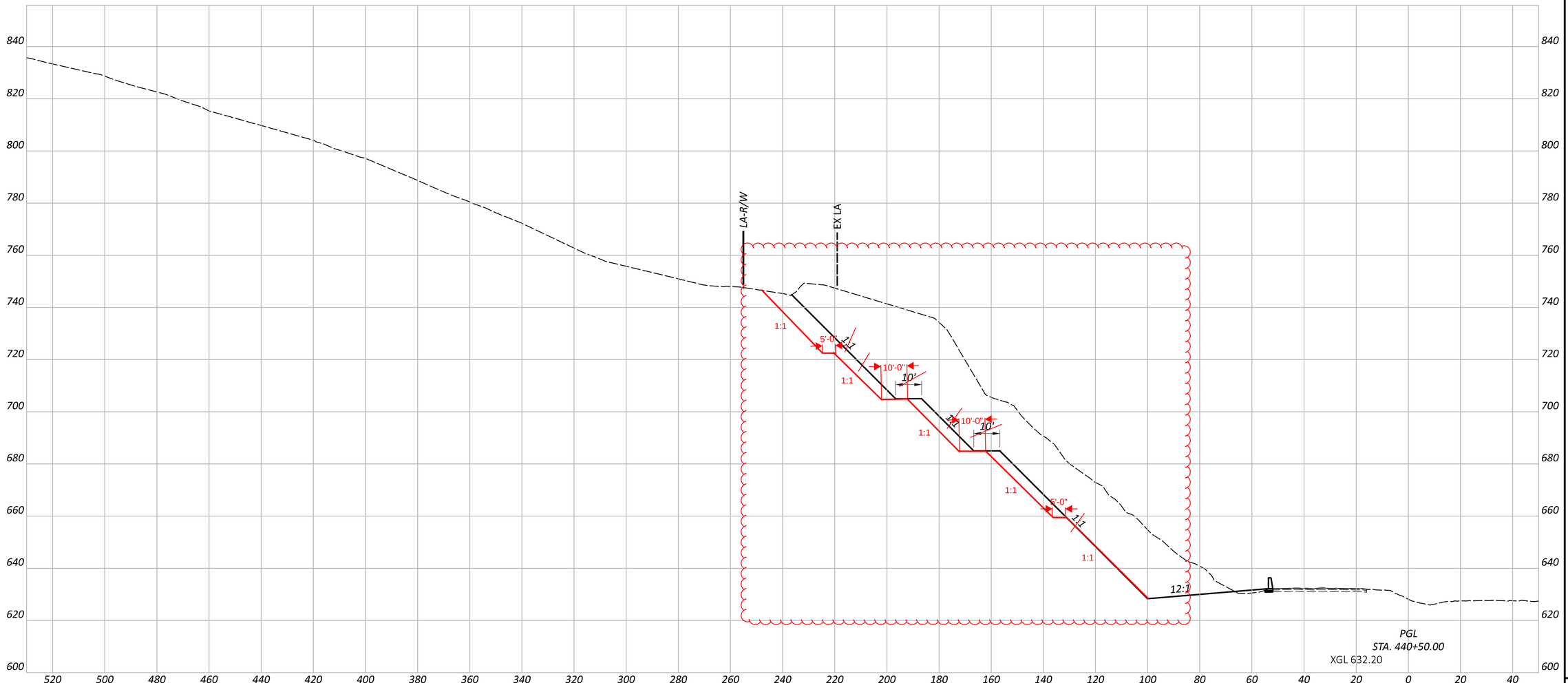
10/23/26

PROJECT ID
118776

Sheet Totals		
Seeding	Cut	Fill
244	5824	28

6,128

SHEET P.31 TOTAL 114



CROSS SECTIONS - US 52
STA. 440+50.00

LAW-52-7.44

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DESIGNER
MJB

REVIEWER
KDK 6/12/26

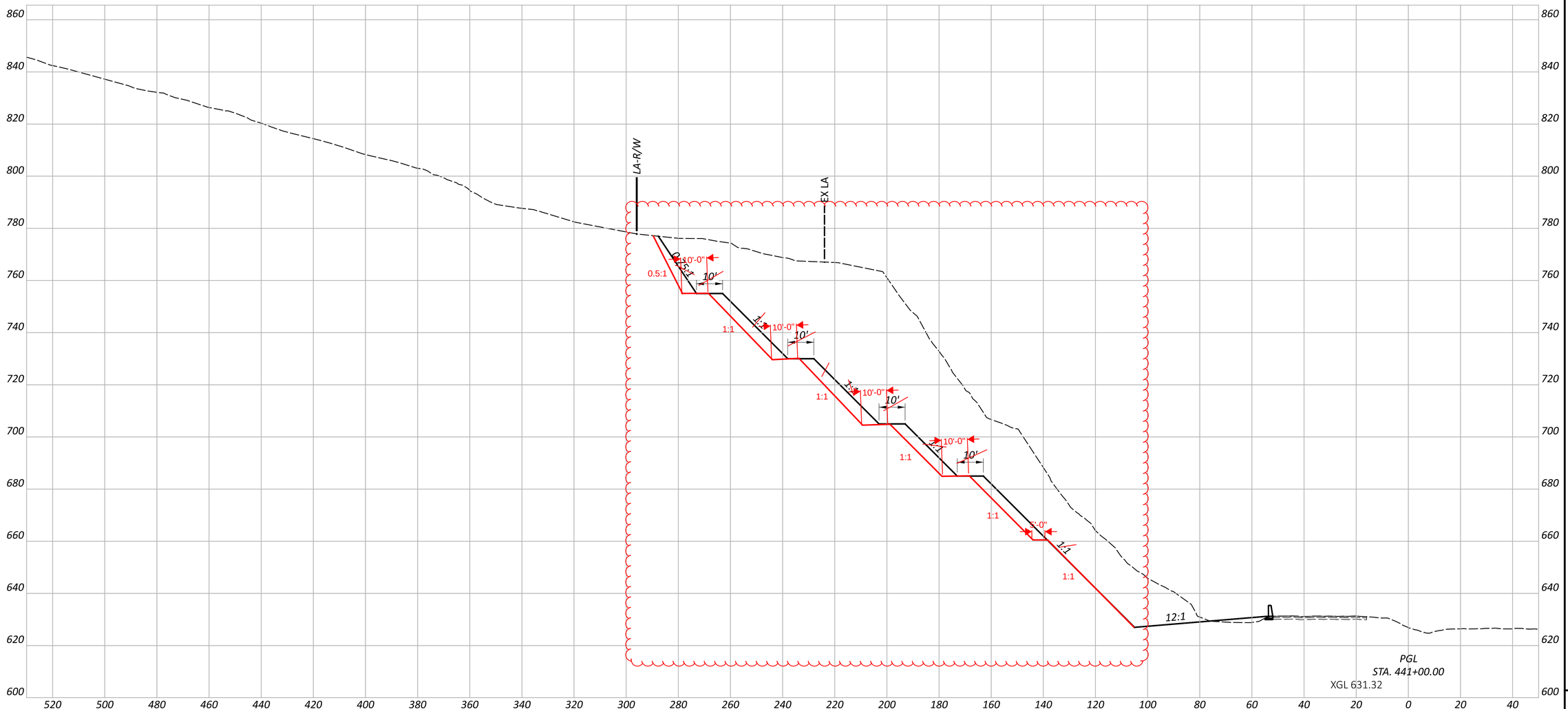
10/23/26

PROJECT ID
118776

SHEET P.32 TOTAL 114

Sheet Totals		
Seeding	Cut	Fill
272	9262	35

10,094



CROSS SECTIONS - US 52
STA. 441+00.00

LAW-52-7.44

MODEL: 441+00.00 [Sheet] PAPERSIZE: 34x22 (in.) DATE: 2026-07-08 TIME: 8:05:02 PM USER: MBoyer
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ARCADIS
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DESIGN AGENCY

DESIGNER
MJB

REVIEWER
KDK 6/12/26

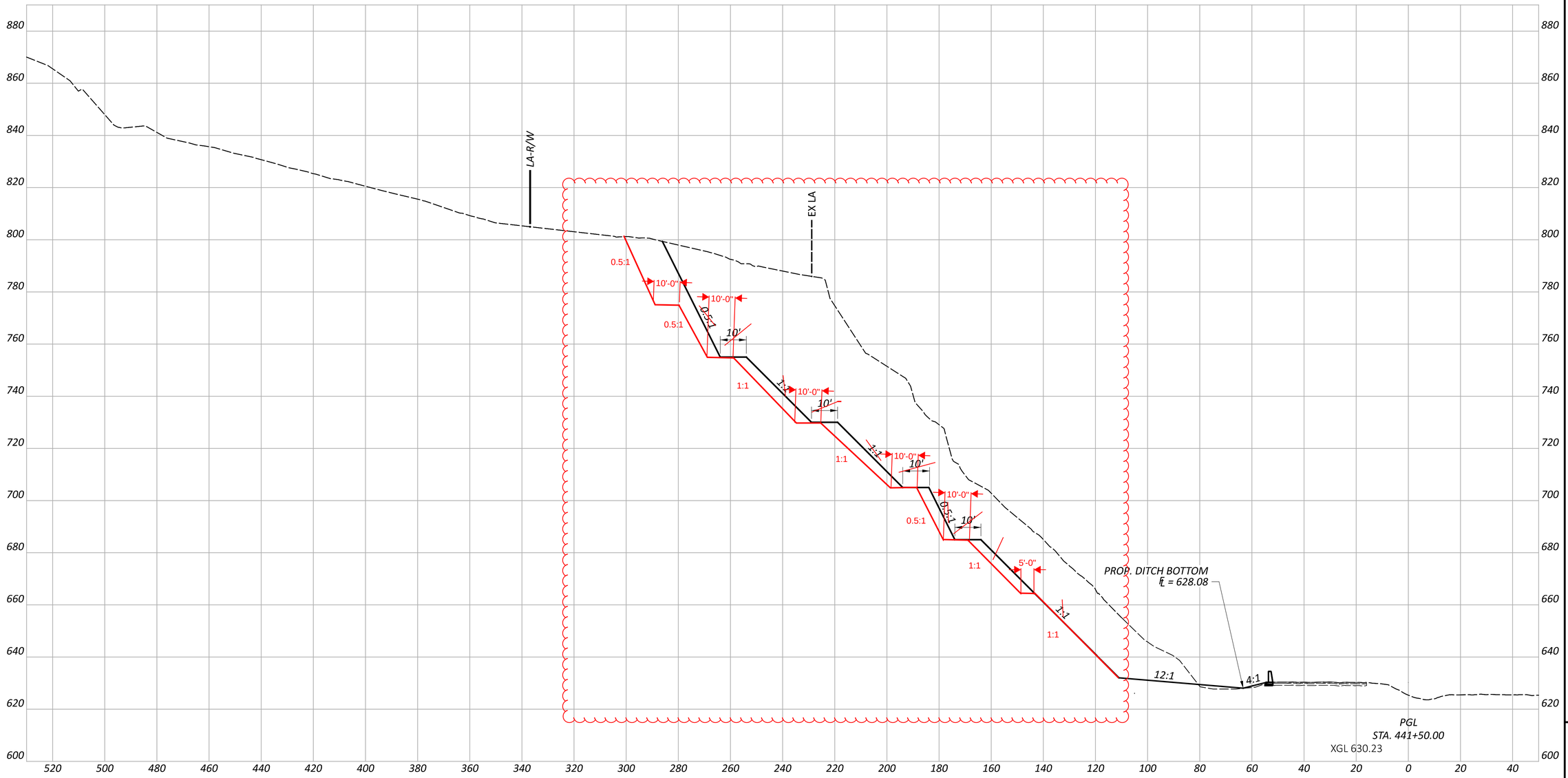
10/23/26

PROJECT ID
118776

Sheet Totals		
Seeding	Cut	Fill
300	11224	43

12,338

SHEET	TOTAL
P.33	114



CROSS SECTIONS - US 52
STA. 441+50.00

DESIGN AGENCY
ARCADIS
222 SOUTH MAIN STREET, SUITE 200
AKRON, OHIO 44308
(330) 434-4355
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DESIGNER
MJB

REVIEWER
KDK 6/12/26
10/23/26

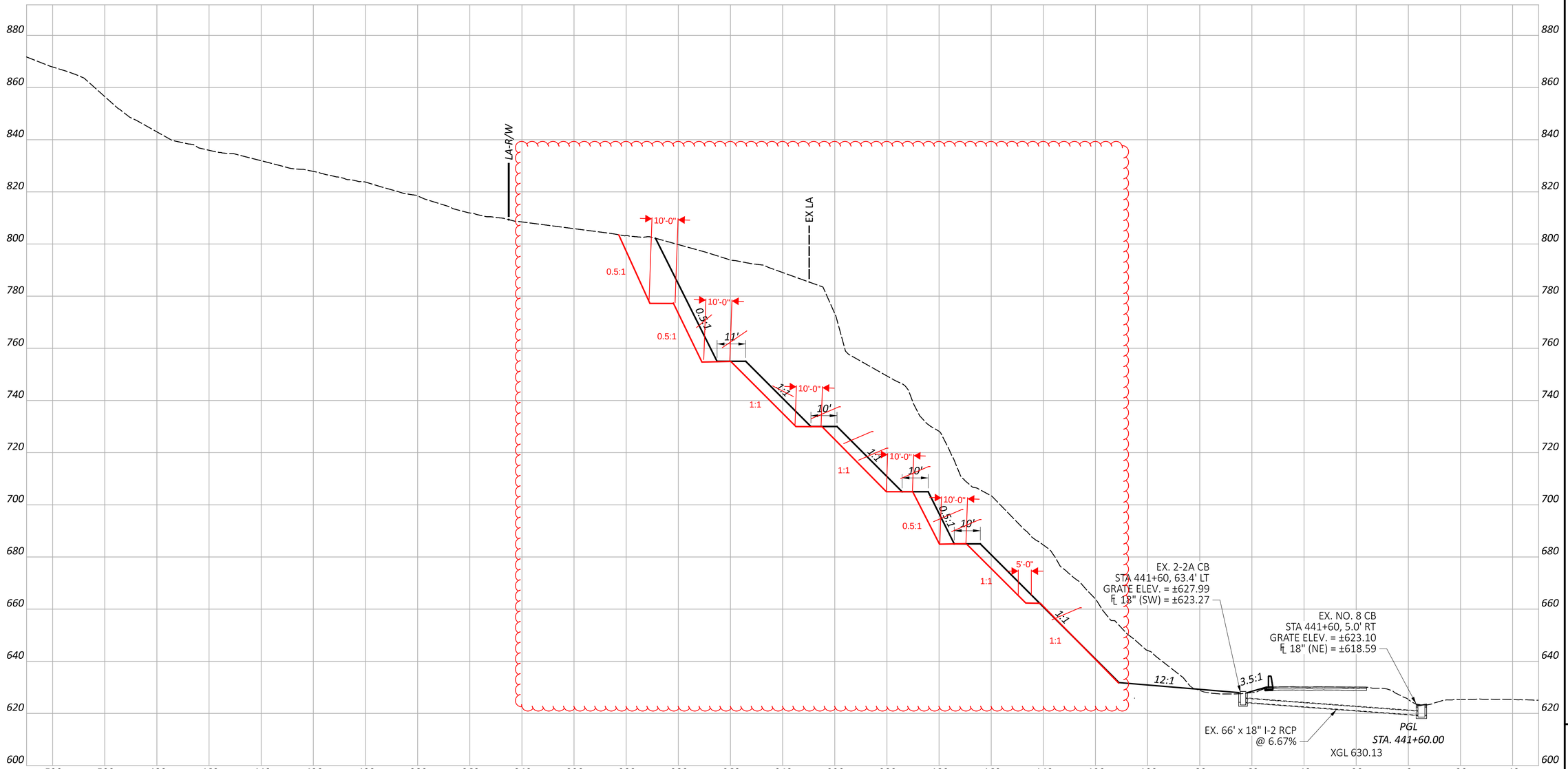
PROJECT ID
118776

SHEET P.34 | TOTAL 114

Sheet Totals		
Seeding	Cut	Fill
63	2203	7
	2,499	

LAW-52-7.44

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STA. 441+60.00

LAW-52-7.44

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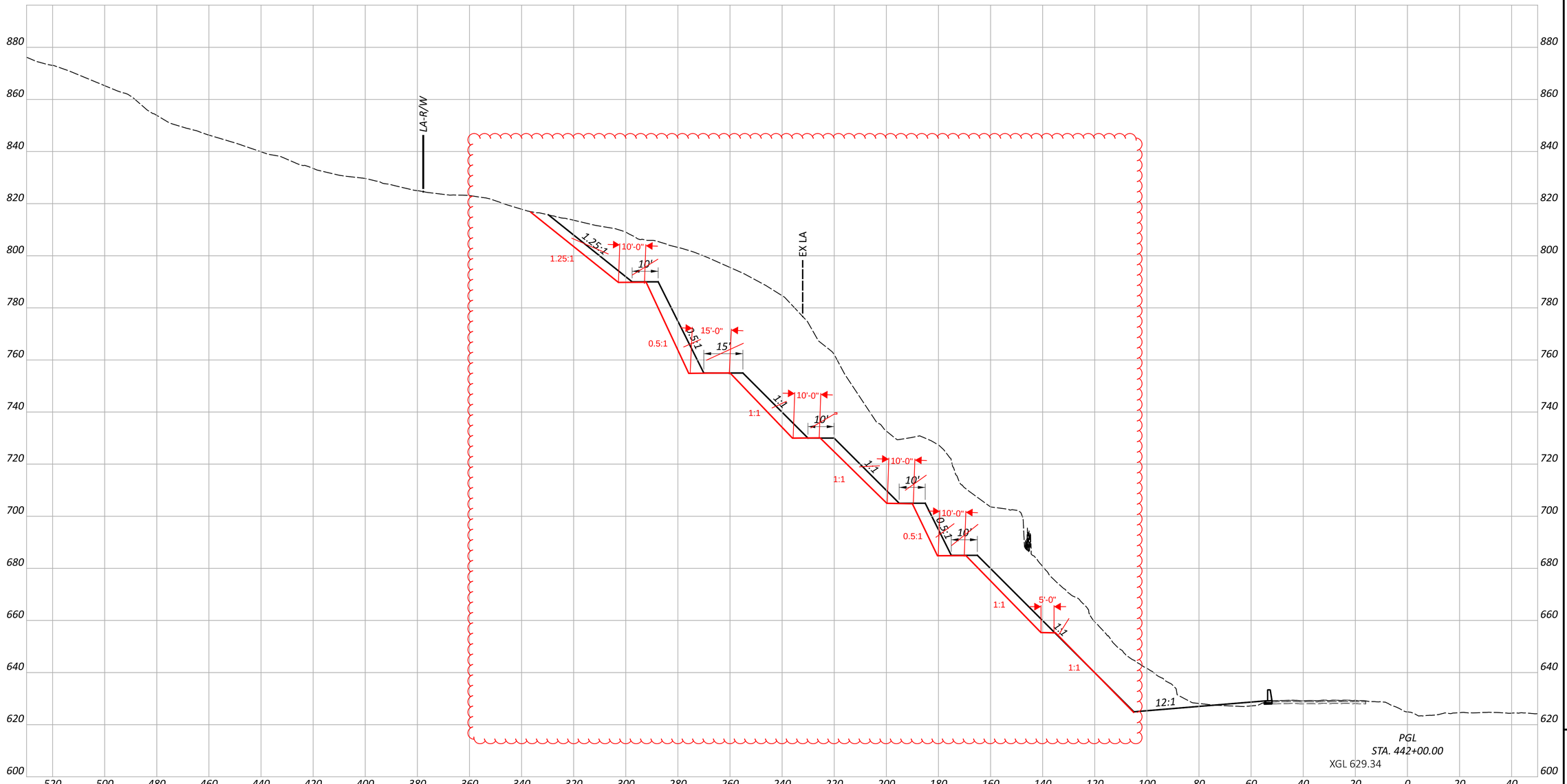
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MJB

REVIEWER
KDK ~~6/12/26~~ 10/23/26

PROJECT ID
118776

SHEET P.35 TOTAL 114

Sheet Totals		
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CROSS SECTIONS - US 52
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LAW-52-7.44

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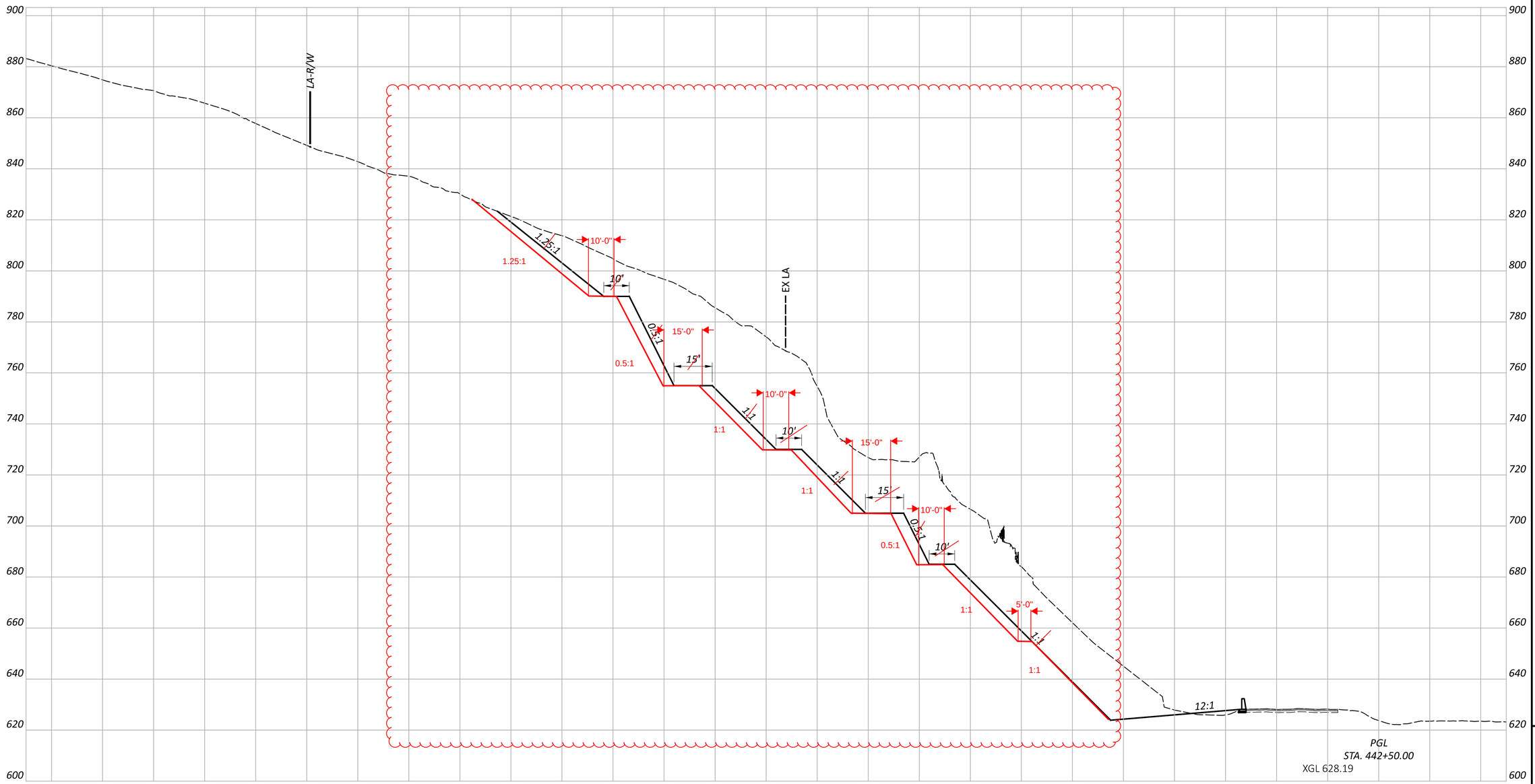
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10/23/26

PROJECT ID
118776

Sheet Totals		
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	13,095	

SHEET	TOTAL
P.36	114



CROSS SECTIONS - US 52
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LAW-52-7.44

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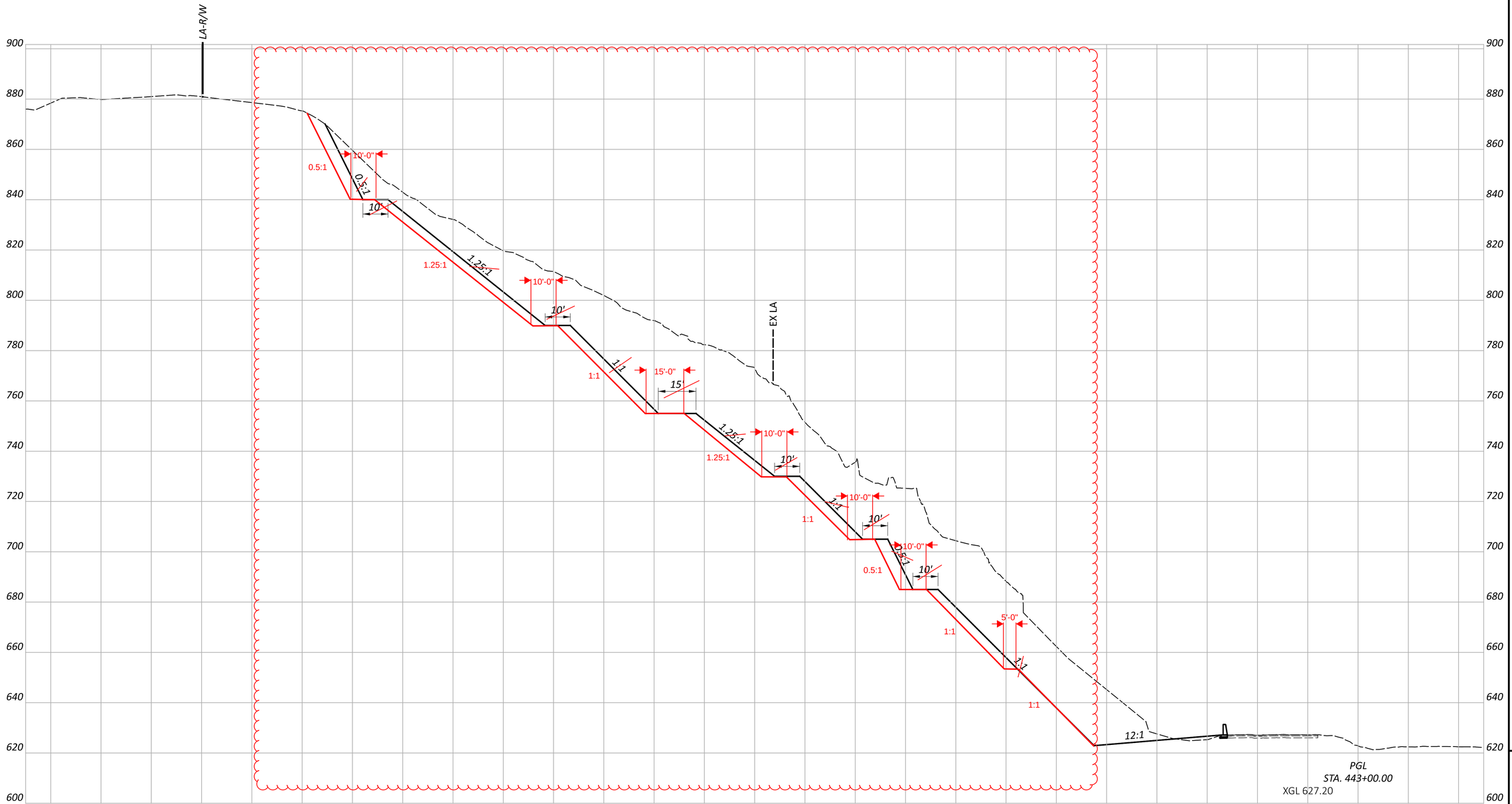
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PROJECT ID
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SHEET P.37 TOTAL 114

Sheet Totals		
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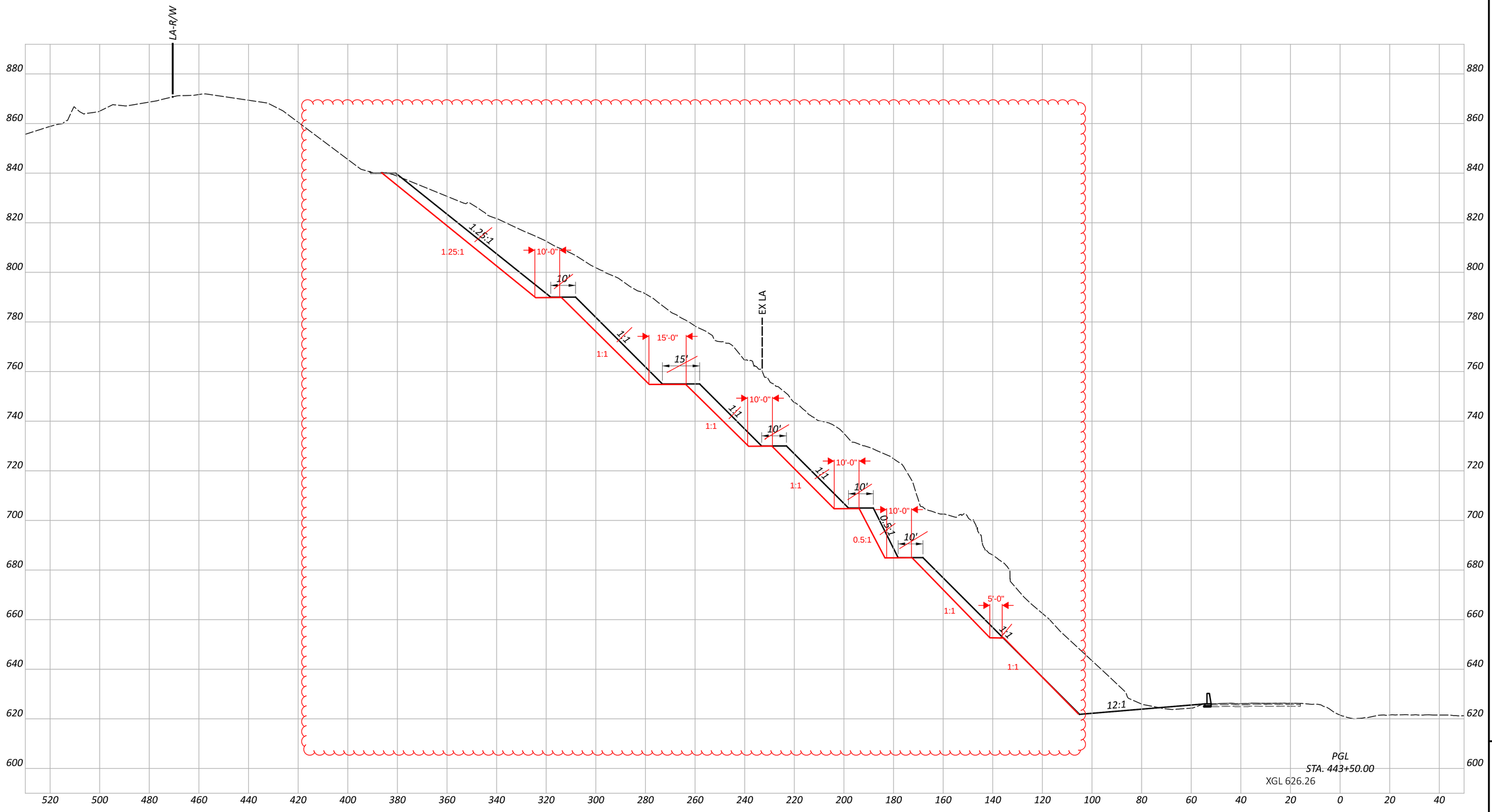
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PROJECT ID
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SHEET P.38 TOTAL 114

Sheet Totals		
Seeding	Cut	Fill
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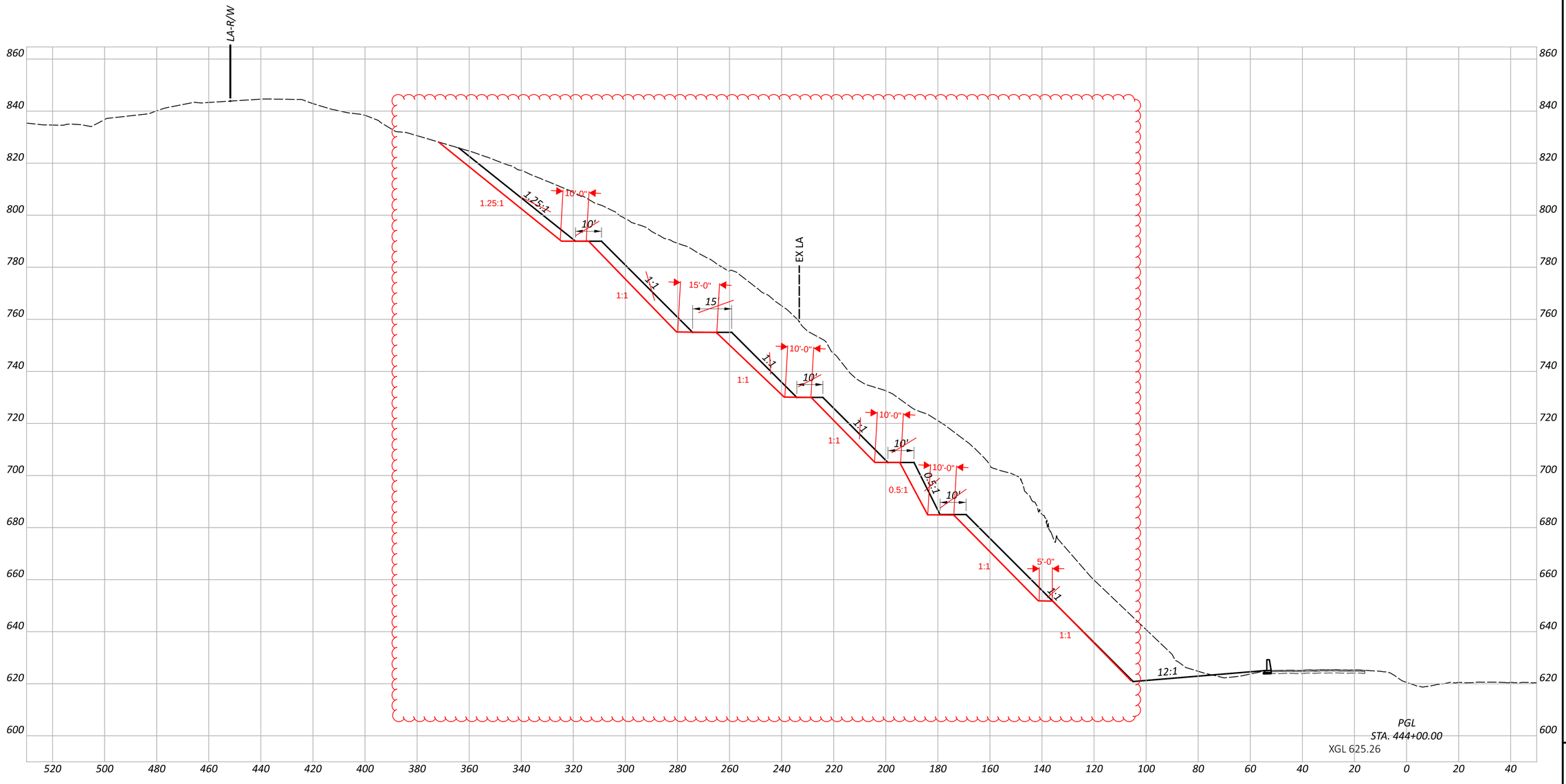
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PROJECT ID
118776

SHEET P.39 TOTAL 114

Sheet Totals		
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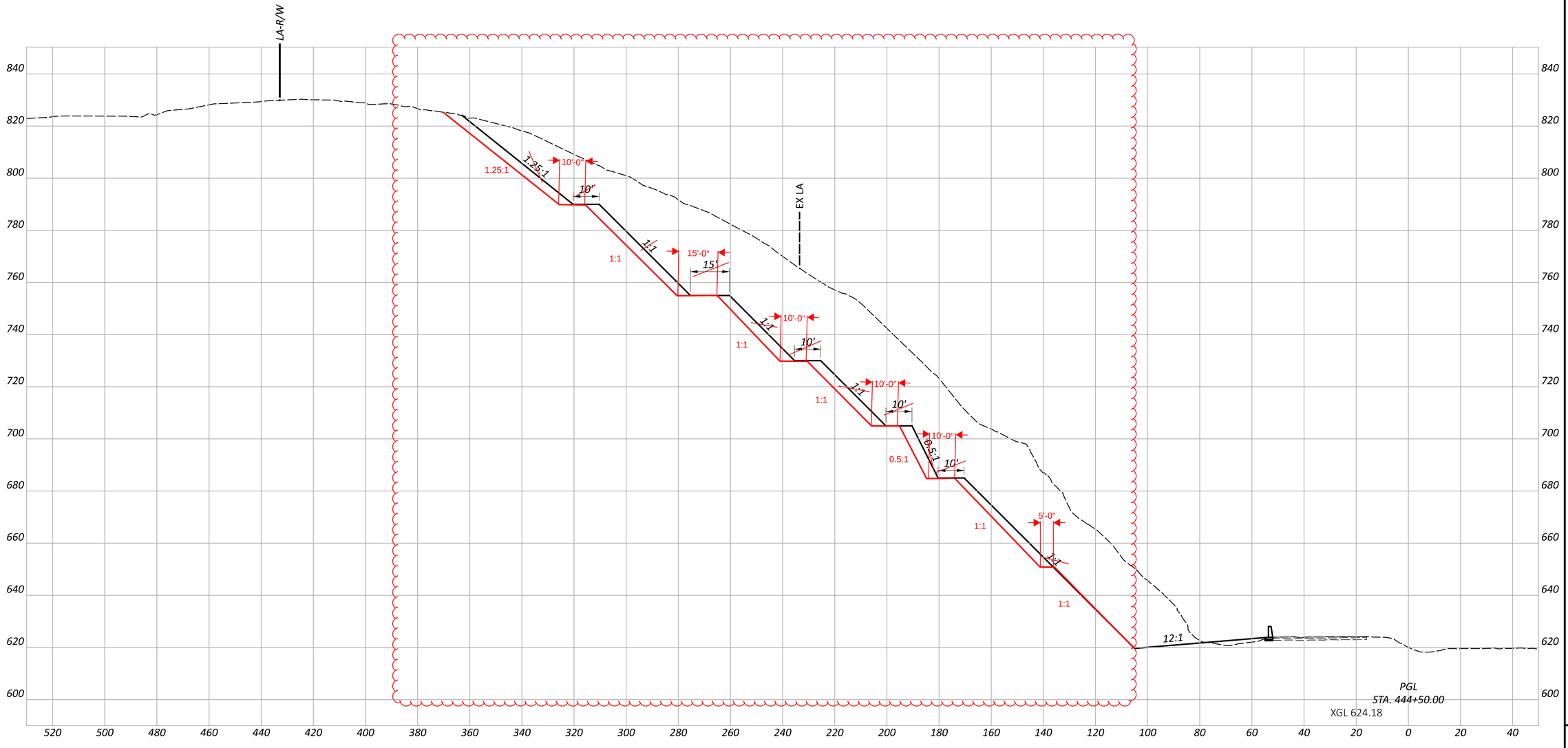
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PROJECT ID
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SHEET P.40 TOTAL 114

Sheet Totals		
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14,501



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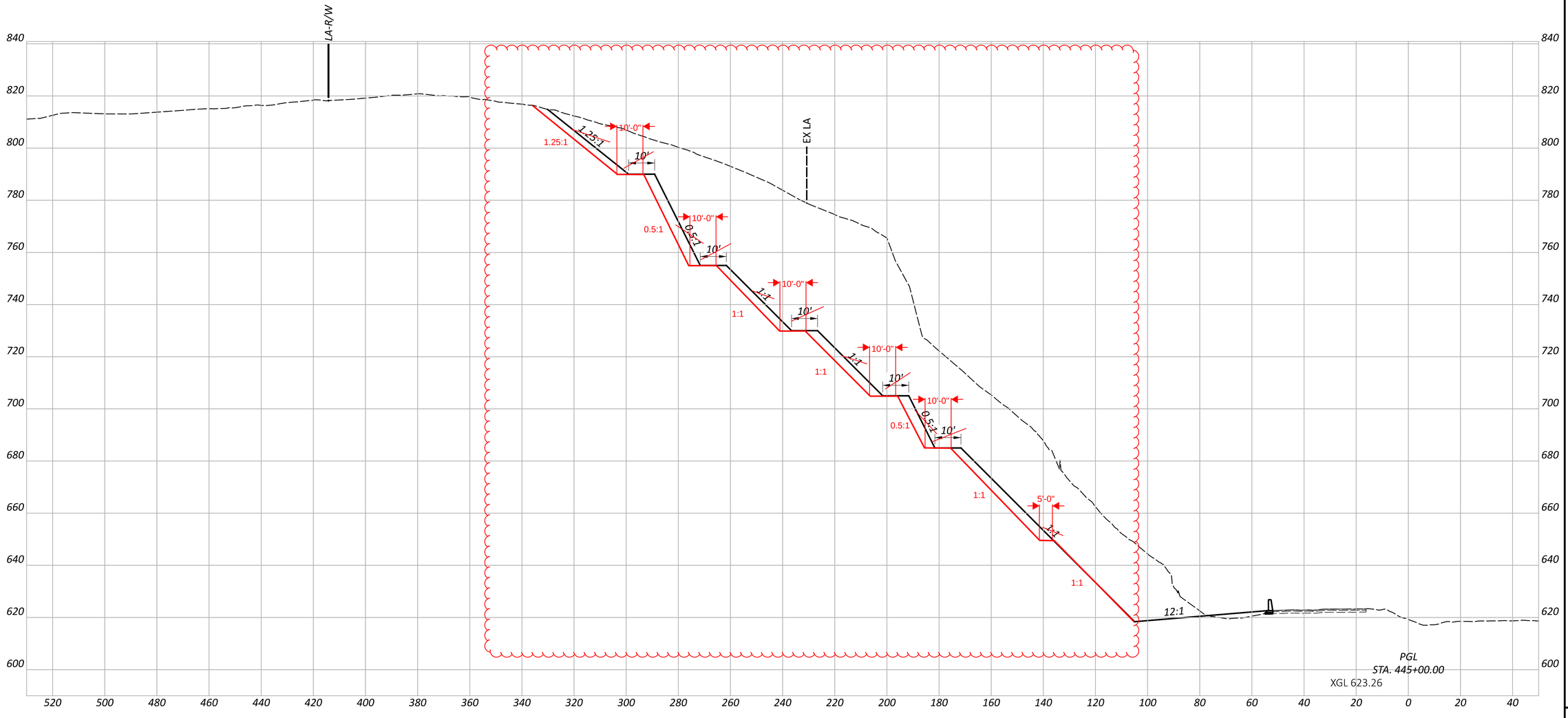
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SHEET P.41 TOTAL 114

Sheet Totals

Seeding	Cut	Fill
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16,030



LAW-52-7.44

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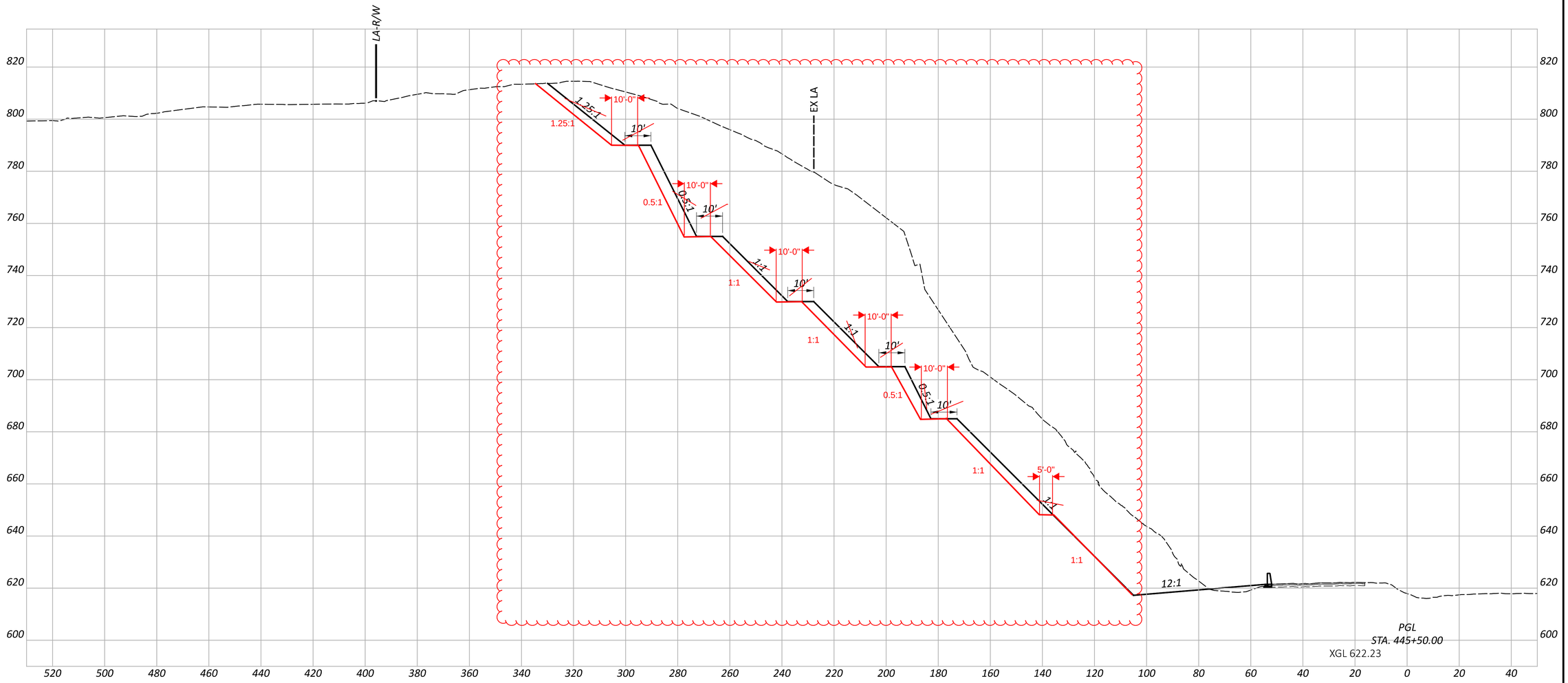
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10/23/26

PROJECT ID
118776

Sheet Totals		
Seeding	Cut	Fill
286	15458	58
	16,960	

SHEET	TOTAL
P.42	114



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STA. 445+50.00

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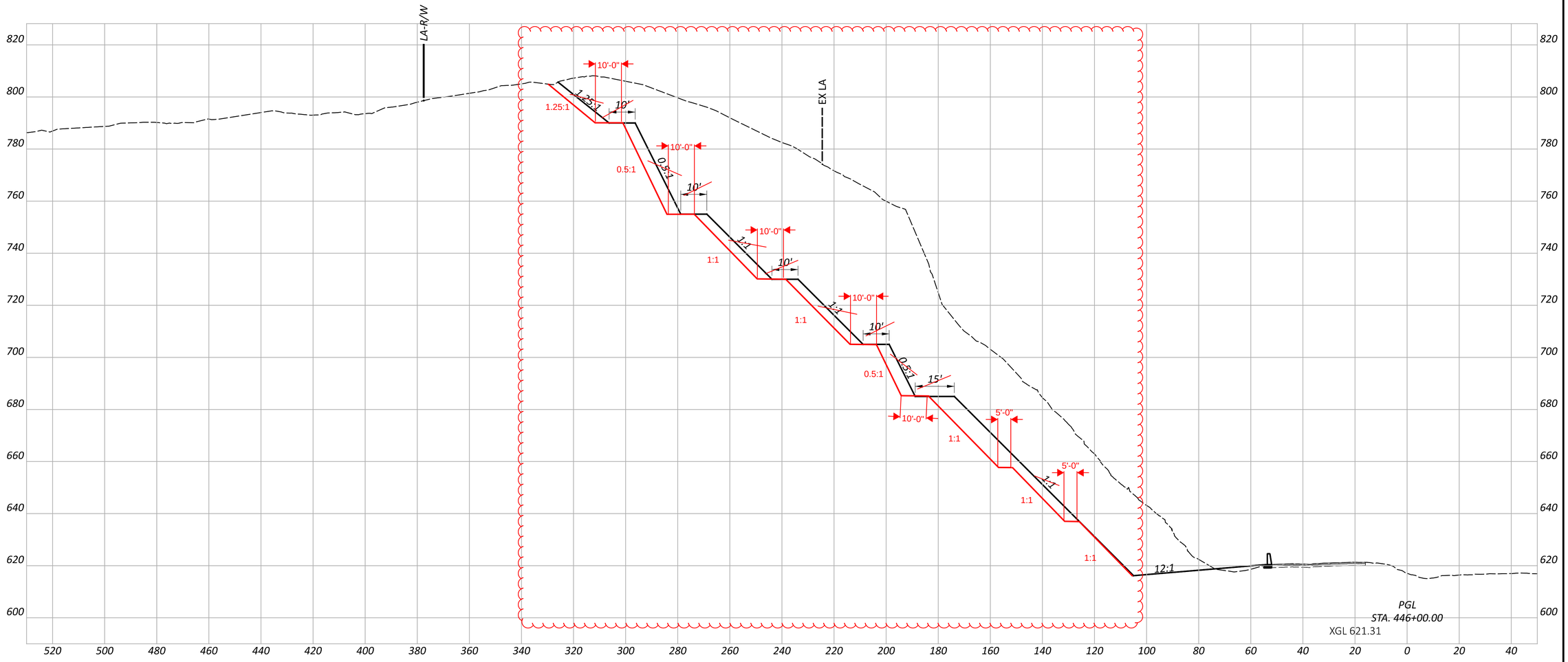
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PROJECT ID
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SHEET P.43 TOTAL 114

Sheet Totals		
Seeding	Cut	Fill
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17,631



CROSS SECTIONS - US 52
STA. 446+00.00

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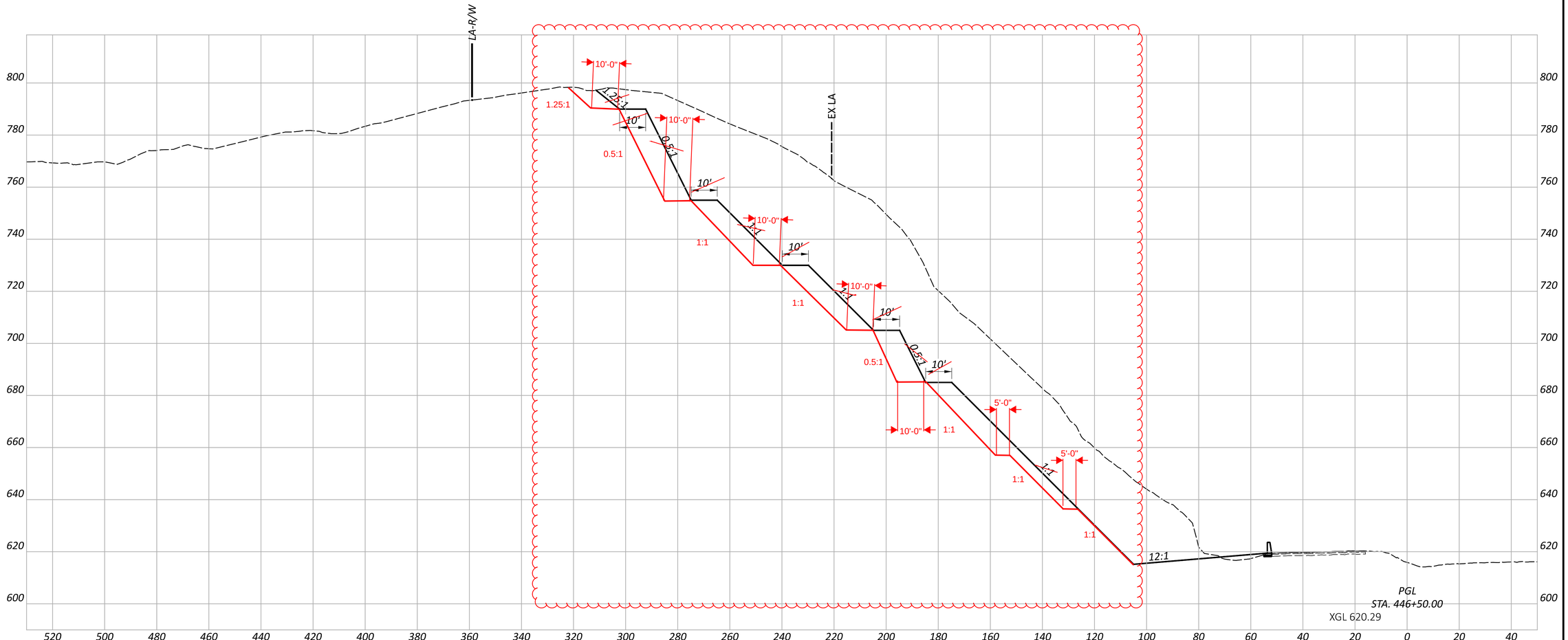
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10/23/26

PROJECT ID
118776

Sheet Totals		
Seeding	Cut	Fill
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	16,555	

SHEET	TOTAL
P.44	114



CROSS SECTIONS - US 52
STA. 446+50.00

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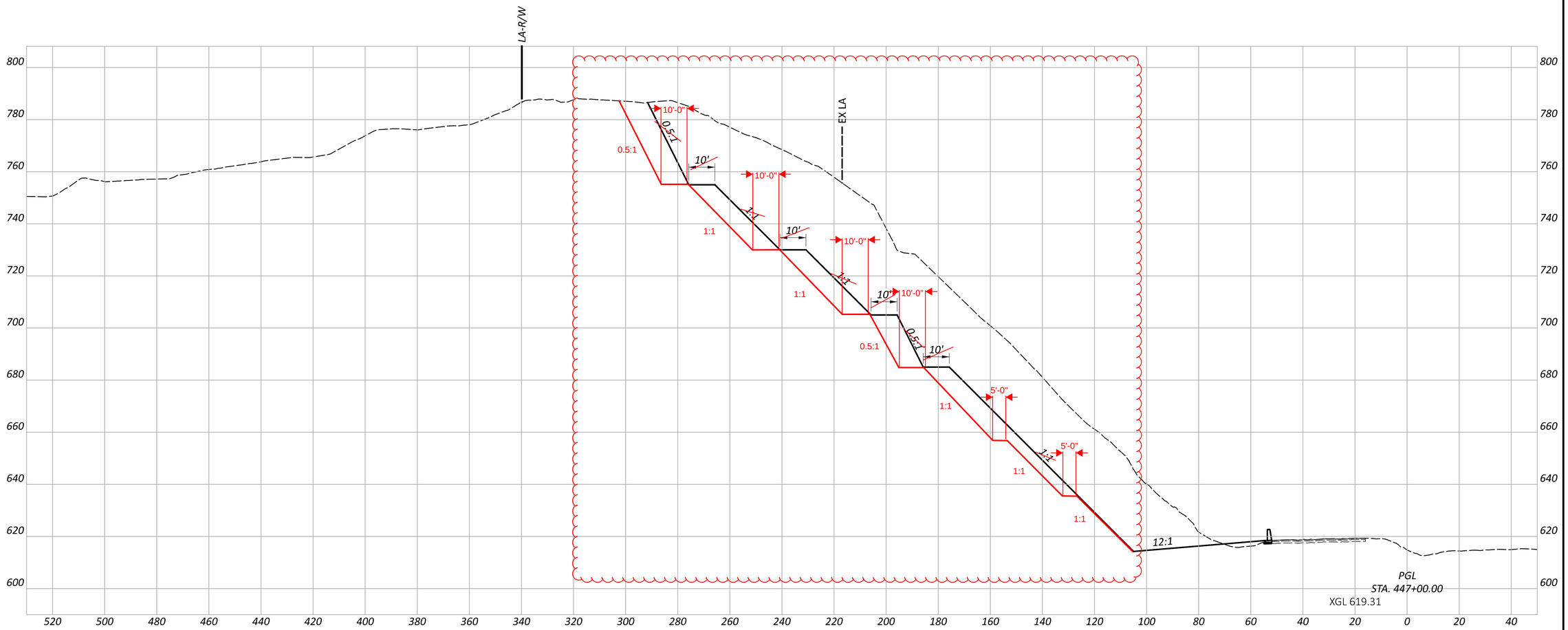
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PROJECT ID
118776

SHEET P.45 TOTAL 114

Sheet Totals		
Seeding	Cut	Fill
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15,005



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CROSS SECTIONS - US 52
STA. 447+00.00

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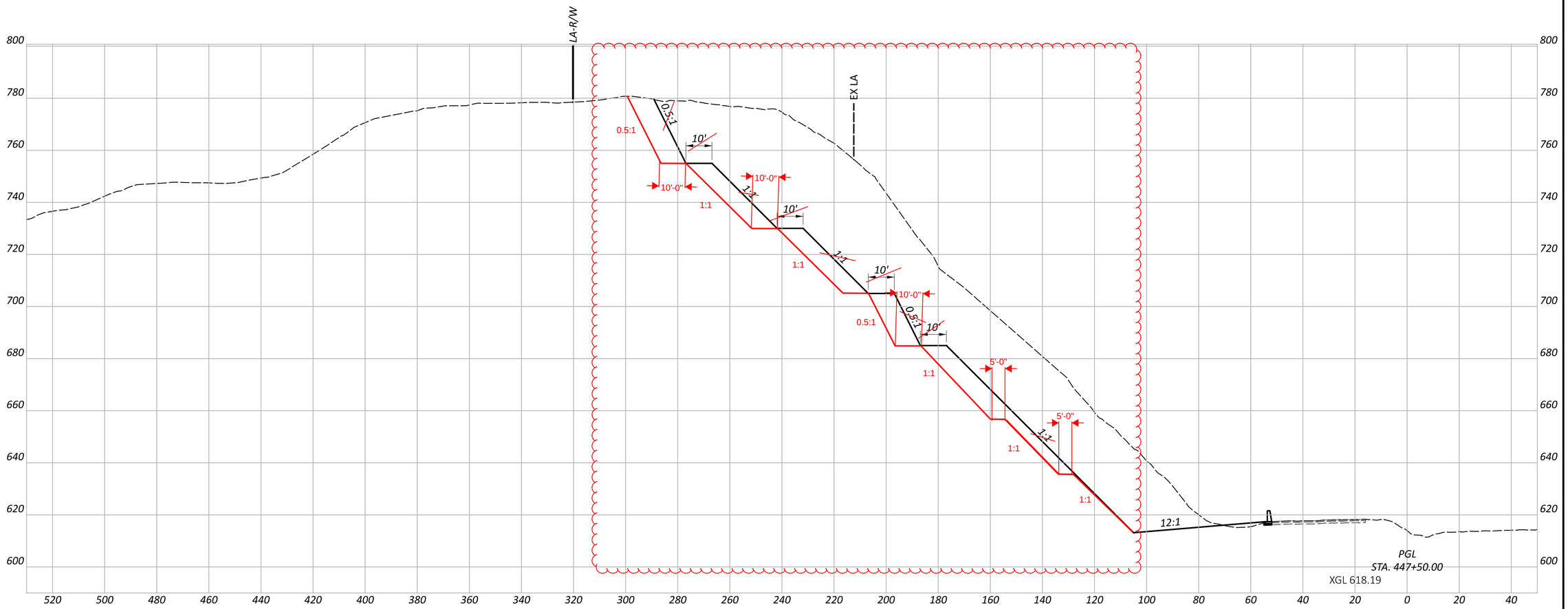
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PROJECT ID: 118776

SHEET: P.46 TOTAL: 114

Sheet Totals		
Seeding	Cut	Fill
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14,926



LAW-52-7.44

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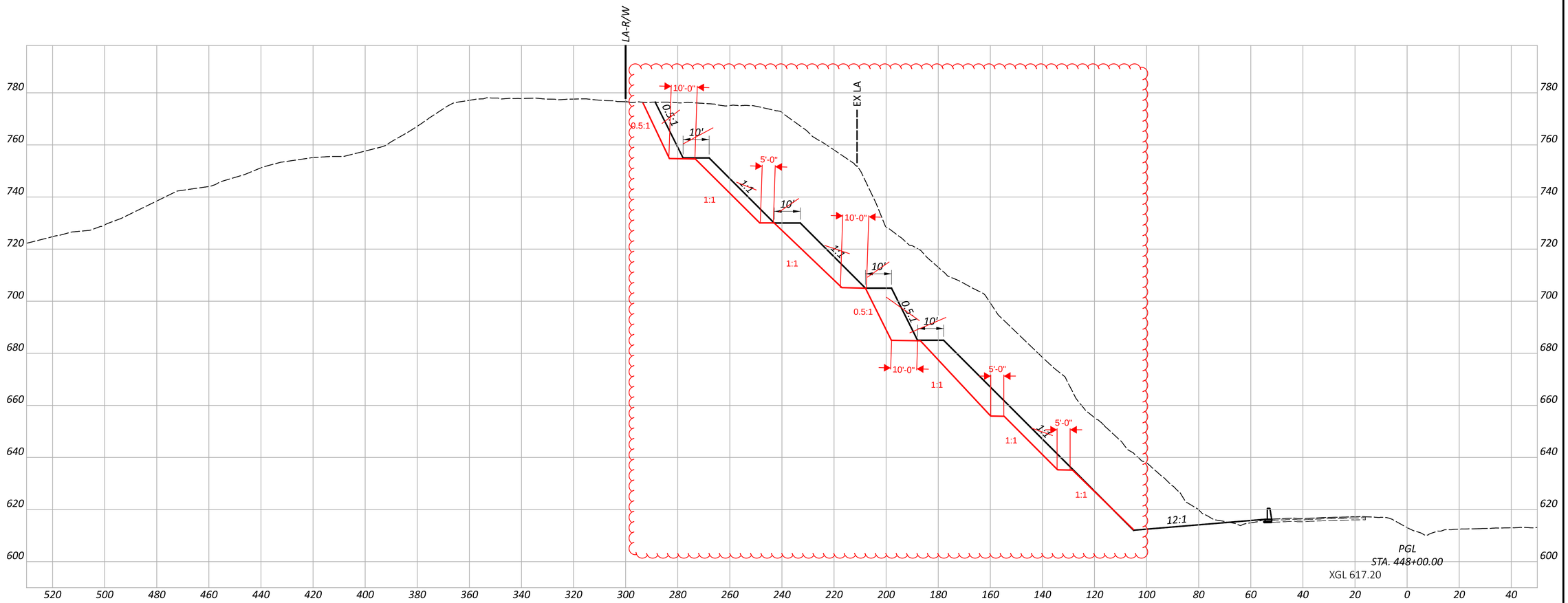
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PROJECT ID
118776

SHEET P.47 TOTAL 114

Sheet Totals		
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14,525



LAW-52-7.44

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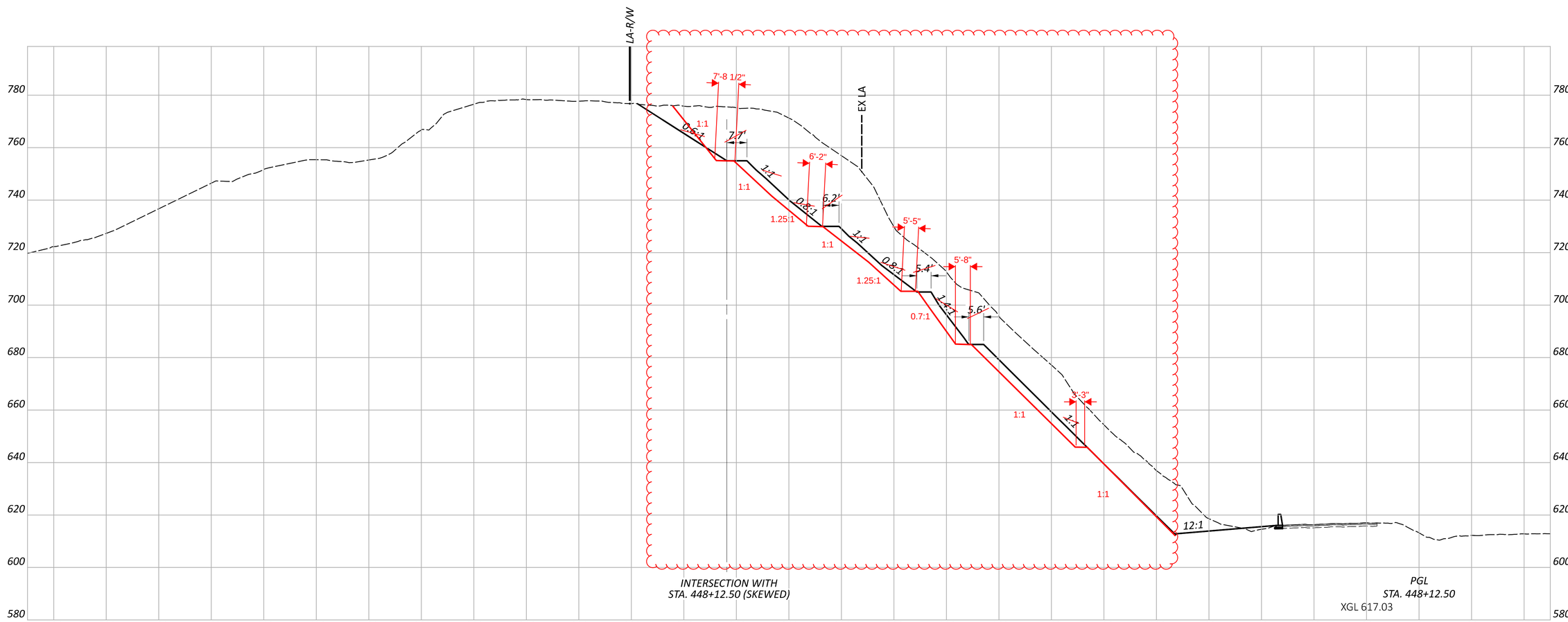
10/23/26

PROJECT ID
118776

Sheet Totals		
Seeding	Cut	Fill
63	2277	5
	4,636	

SHEET P.48 TOTAL 114

NOTES:
1. FOR SKEWED CROSS SECTION PERPENDICULAR TO 45° ROCK CUT SEE SHEET P.50
2. FOR SLOPES AND BENCH WIDTHS SEE SHEETS P.19 - P.20



CROSS SECTIONS - US 52
STA. 448+12.50

LAW-52-7.44

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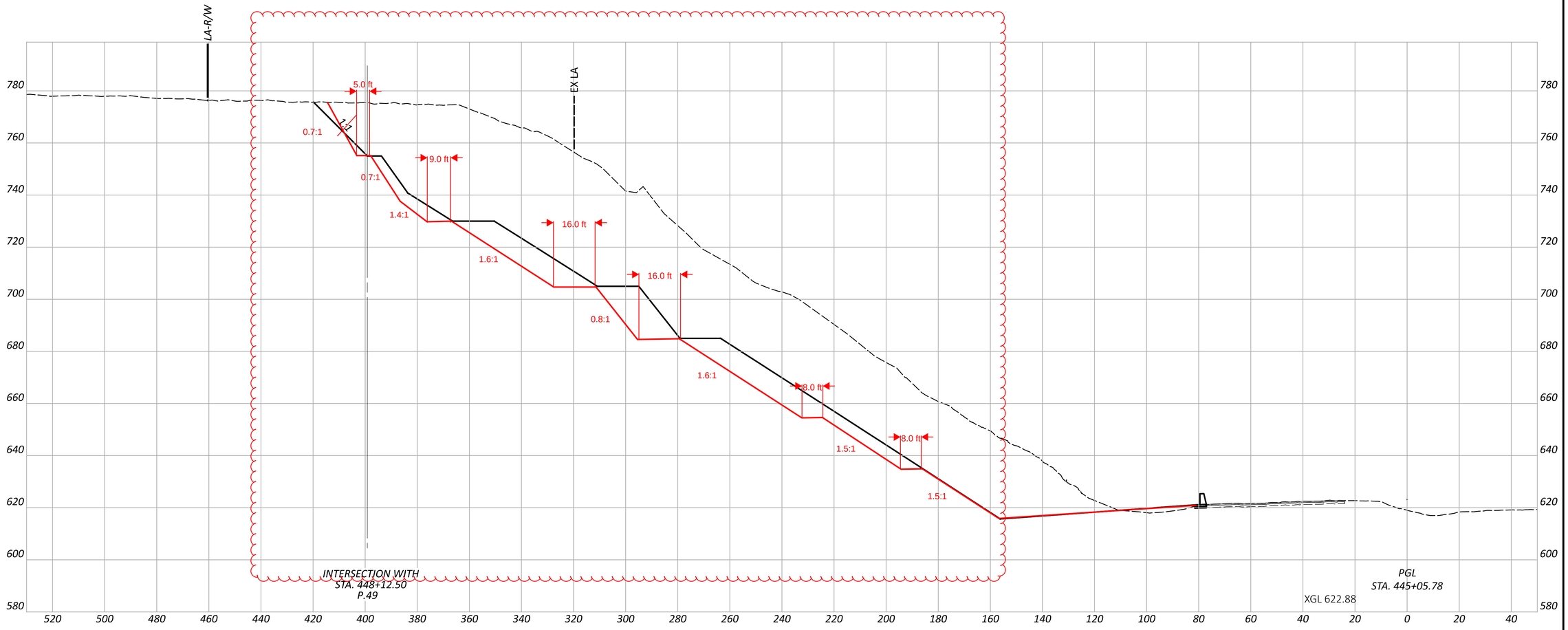
SHEET	TOTAL
P.49	114

Sheet Totals

Seeding	Cut	Fill
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1,661

NOTES:
1. FOR NORMAL CROSS SECTION PERPENDICULAR TO ROADWAY SEE SHEET $XS0027
2. FOR SLOPES AND BENCH WIDTHS SEE SHEETS P.19 - P.20



CROSS SECTIONS - US 52
STA. 448+12.50 (SKEWED)

LAW-52-7.44

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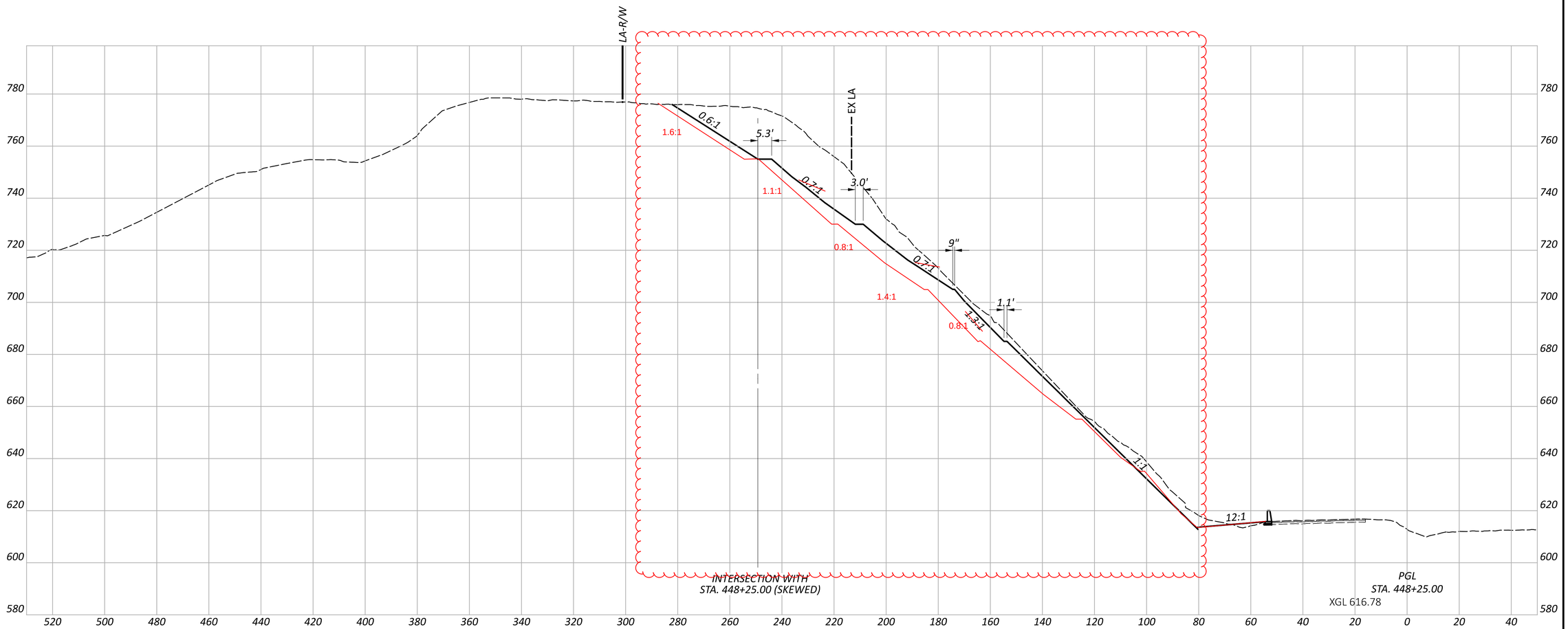
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PROJECT ID
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SHEET P.50 | TOTAL 114

NOTES:
1. FOR SKEWED CROSS SECTION PERPENDICULAR TO 45° ROCK CUT SEE SHEET P.52
2. FOR SLOPES AND BENCH WIDTHS SEE SHEETS P.19 - P.20



CROSS SECTIONS - US 52
STA. 448+25.00

LAW-52-7.44

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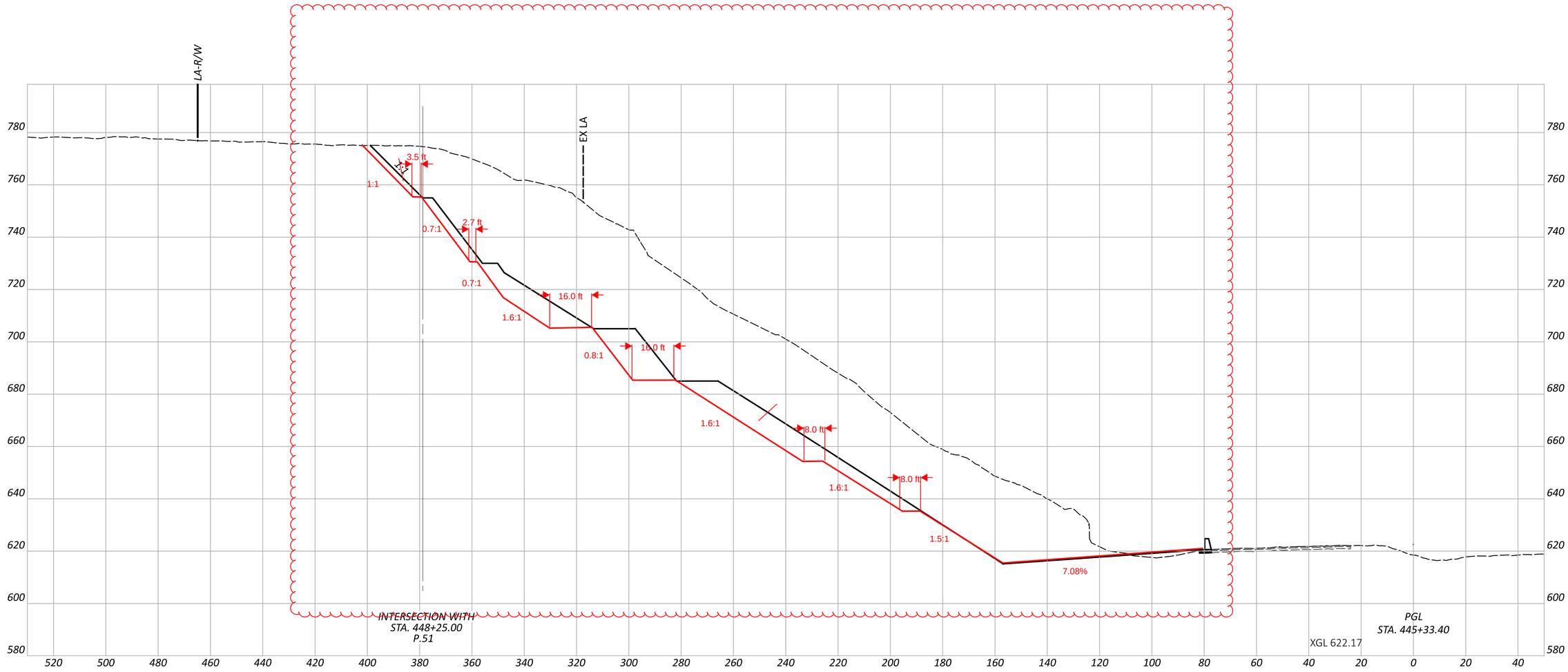
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10/23/26
PROJECT ID: 118776
SHEET: P.51 TOTAL: 114

Sheet Totals		
Seeding	Cut	Fill
28	468	6

618

NOTES:
1. FOR NORMAL CROSS SECTION PERPENDICULAR TO ROADWAY SEE SHEET $XS0029
2. FOR SLOPES AND BENCH WIDTHS SEE SHEETS P.19 - P.20



CROSS SECTIONS - US 52
STA. 448+25.00 (SKEWED)

LAW-52-7.44

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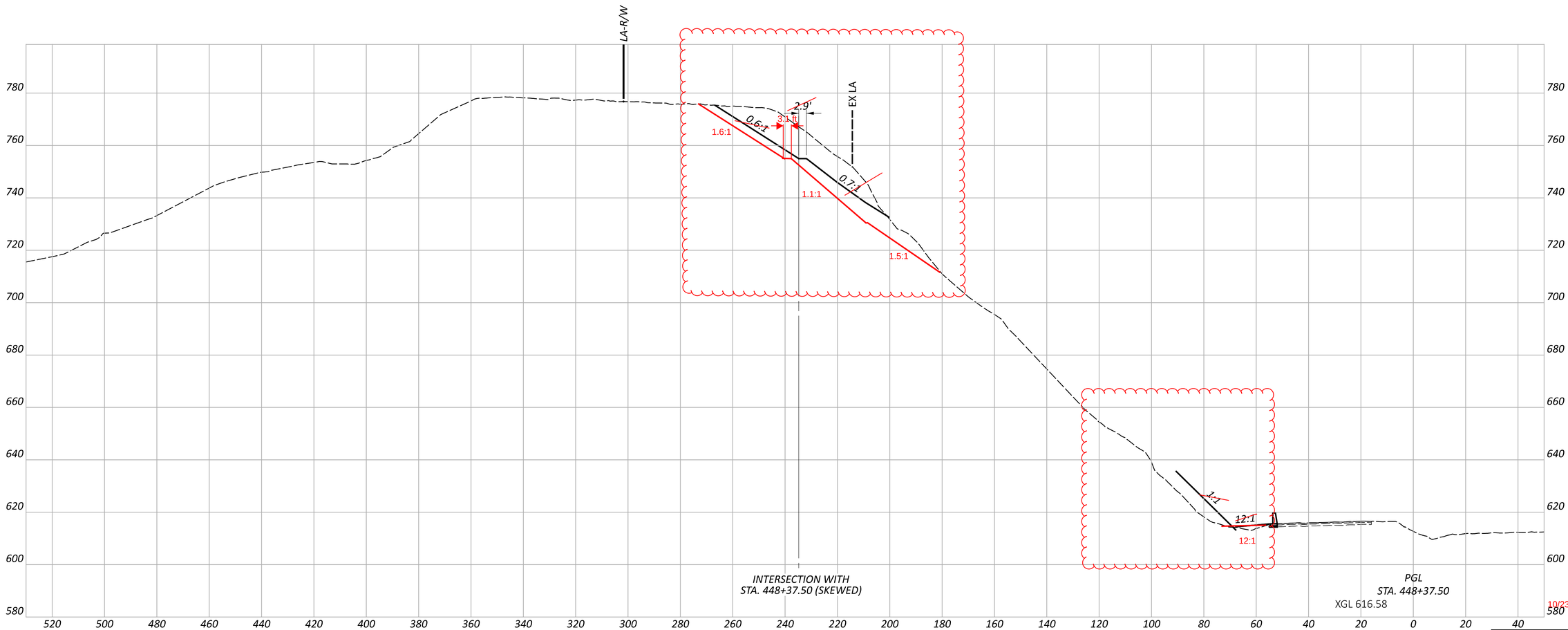
REVIEWER
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PROJECT ID
118776

SHEET P.52 TOTAL 114

NOTES:
1. FOR SKEWED CROSS SECTION PERPENDICULAR TO 45° ROCK CUT SEE SHEET P.54
2. FOR SLOPES AND BENCH WIDTHS SEE SHEETS P.19 - P.20



CROSS SECTIONS - US 52
STA. 448+37.50

LAW-52-7.44

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Sheet Totals		
Seeding	Cut	Fill
16	81	3

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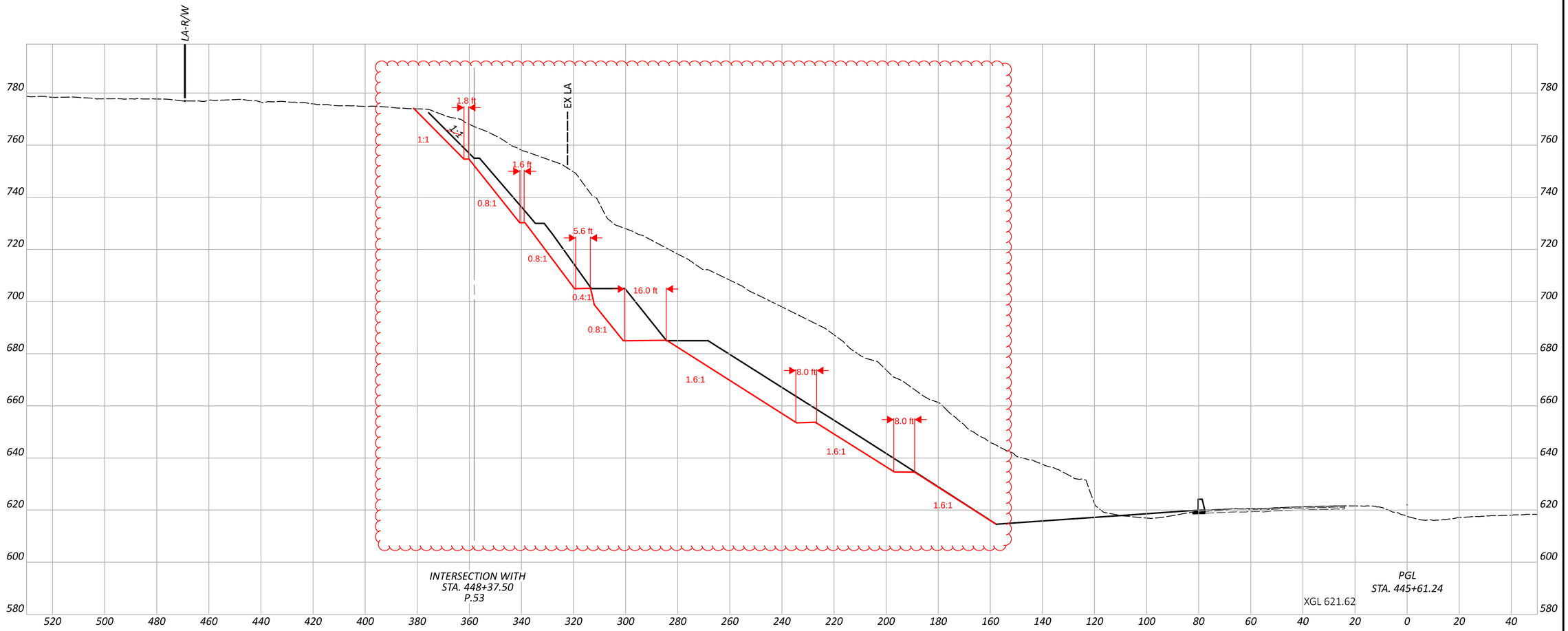
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PROJECT ID
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SHEET P.53 TOTAL 114

NOTES:
1. FOR NORMAL CROSS SECTION PERPENDICULAR TO ROADWAY SEE SHEET P.53
2. FOR SLOPES AND BENCH WIDTHS SEE SHEETS P.19 - P.20



CROSS SECTIONS - US 52
STA. 448+37.50 (SKEWED)

LAW-52-7.44

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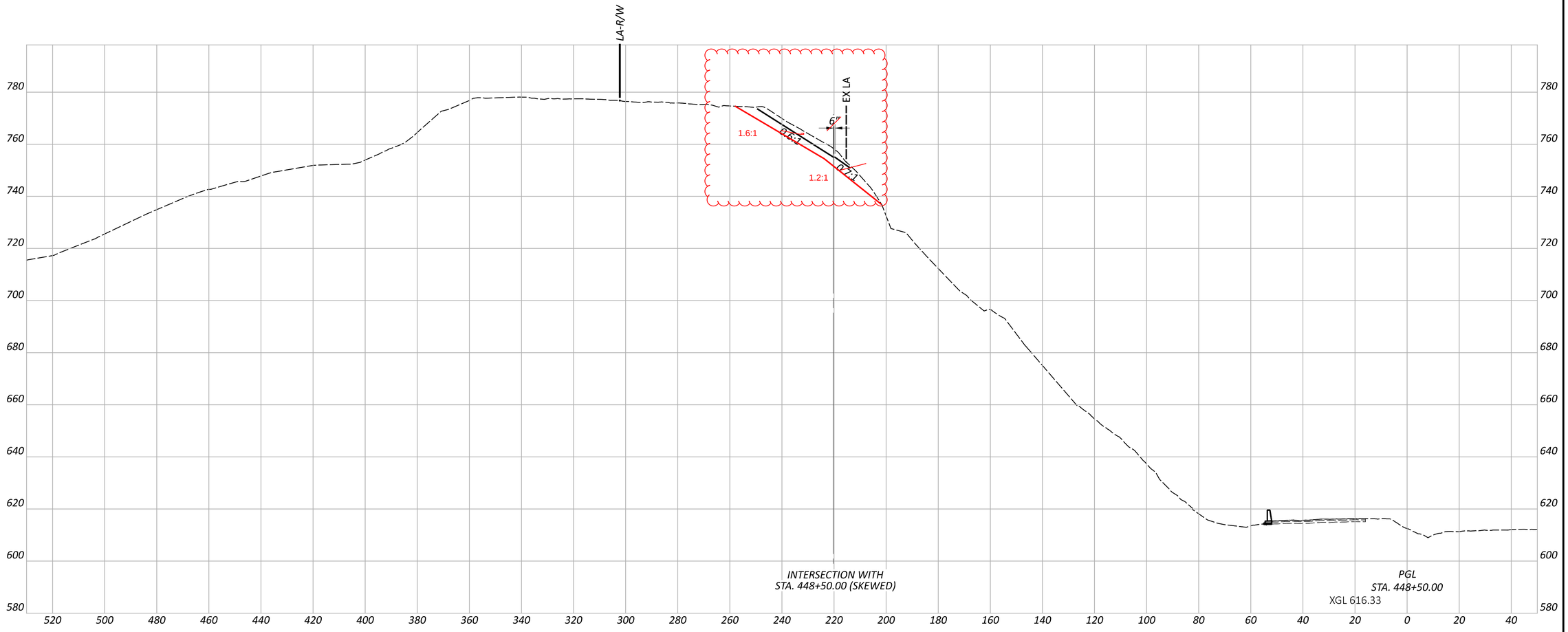
DESIGNER
MJB

REVIEWER
KDK ~~6/12/26~~ 10/23/26

PROJECT ID
118776

SHEET P.54 TOTAL 114

NOTES:
1. FOR SKEWED CROSS SECTION PERPENDICULAR TO 45° ROCK CUT SEE SHEET P.56
2. FOR SLOPES AND BENCH WIDTHS SEE SHEETS P.19 - P.20



CROSS SECTIONS - US 52
STA. 448+50.00

DESIGN AGENCY
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222 SOUTH MAIN STREET SUITE 200
AKRON, OHIO 44308
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DESIGNER
MJB

REVIEWER
KDK 6/12/26

10/23/26

PROJECT ID
118776

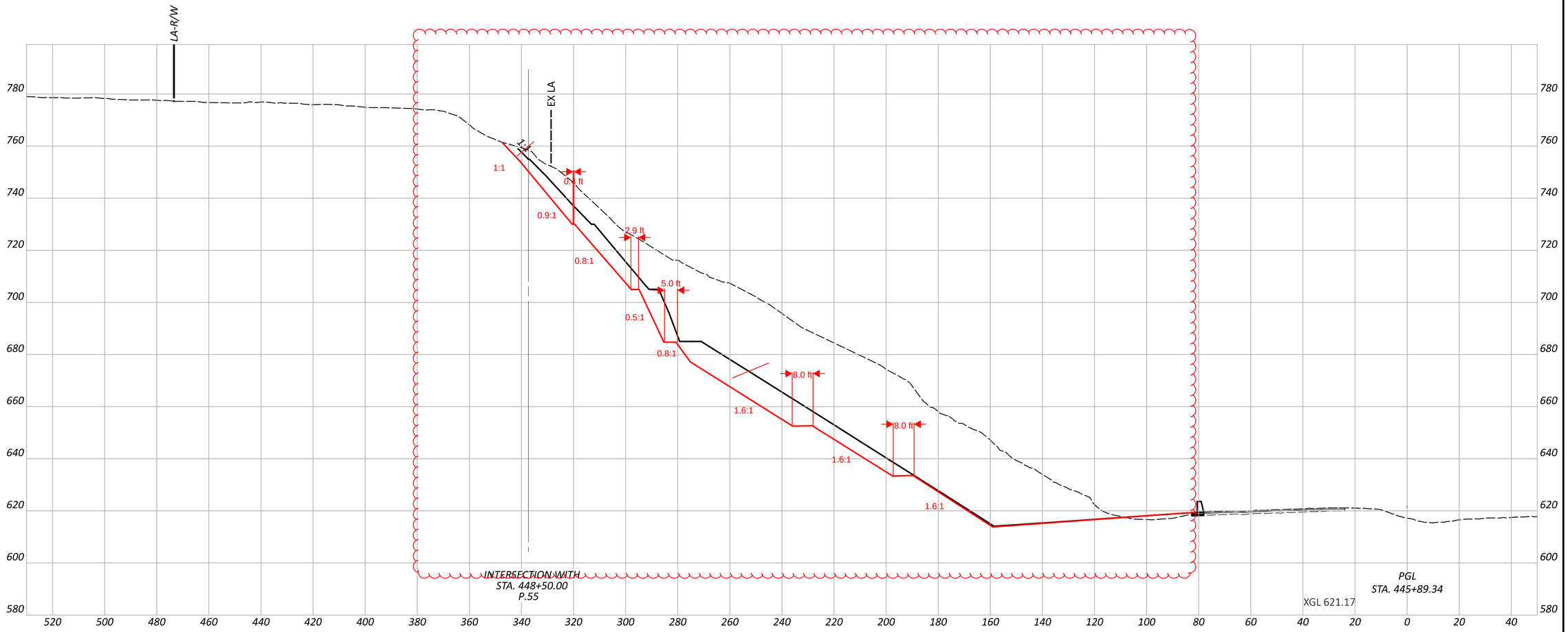
Sheet Totals		
Seeding	Cut	Fill
27	39	

SHEET	TOTAL
P.55	114

LAW-52-7.44

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NOTES:
1. FOR NORMAL CROSS SECTION PERPENDICULAR TO ROADWAY SEE SHEET P.55
2. FOR SLOPES AND BENCH WIDTHS SEE SHEETS P.19 - P.20



CROSS SECTIONS - US 52
STA. 448+50.00 (SKEWED)

LAW-52-7.44

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DESIGN AGENCY
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DESIGNER: MJB

REVIEWER: KDK 6/12/26

10/23/26

PROJECT ID: 118776

SHEET: P.56 TOTAL: 114