

SECTIONS 25, 26, 35, & 36, TOWNSHIP 47N, RANGE 32W
IN LEE'S SUMMIT, JACKSON COUNTY, MO

	SURVEY CONTROL POINT		TRAFFIC SIGNAL BOX
	SURVEY BENCHMARK		TRAFFIC SIGNAL MANHOLE
	SURVEY TEMPORARY BENCHMARK		TRAFFIC SIGNAL POLE W/ ARM
	GAS METER		TRAFFIC SIGNAL POLE
	GAS RISER		TRAFFIC SIGNAL CONTROL BOX
	GAS MANHOLE		TRAFFIC SIGNAL PEDESTAL
	GAS REGULATOR		ELECTRIC MANHOLE
	TELEVISION PEDESTAL		ELECTRIC METER
	FIBER BOX		ELECTRIC RISER
	FIBER PEDESTAL		ELECTRIC BOX
	CABLE BOX		ELECTRIC CABINET
	CABLE VAULT		ELECTRIC JUNCTION BOX
	TELEPHONE PEDESTAL		SPRINKLER HEAD
	STORM MANHOLE		SPRINKLER CONTROL VALVE
	STORM GRATE		WATER METER PIT
	SANITARY MANHOLE		FIRE HYDRANT
	YARD LIGHT		WATER METER
	LIGHT POLE		WATER VALVE
	POWER POLE		FLAG POLE
	POWER POLE W/ LIGHT		SIGN
	GUY WIRE		BOLLARD
	STUMP		WOOD POST
	BUSH		STEEL POST
	EVERGREEN TREE		COLUMN
	DECIDUOUS TREE		BORE HOLE



LOCATION MAP

DESIGN/POSTED SPEED:
MO-HWY 150
OTHER PRINCIPAL ARTERIAL = 45 MPH

PRYOR ROAD
COMMERCIAL COLLECTOR = 35 MPH

REVIEWED BY:

CITY OF LEE'S SUMMIT

DATE _____

OLSSON HAS BEEN RETAINED TO PROVIDE AS-BUILT DRAWINGS FOR THIS PROJECT. *A. M. M.*

JAMES P. GALLAGHER, P.E.
CIVIL ENGINEER
MO# 2018010499

DATE 3/31/2020

M	MATCH GRADE
W.G	WATERWAY
B/C	BACK OF CURB
EOP	EDGE OF PAVEMENT
R/W	RIGHT-OF-WAY
D/E	DRAINAGE EASEMENT
S/E	SANITARY EASEMENT
S/W	SEWELINK
T.C.E.	TEMPORARY CONSTRUCTION EASEMENT
U.O.H.E.	UTILITY OVERHEAD EASEMENT
P.D.E.	PERMANENT DRAINAGE EASEMENT
P.P.E.	PERMANENT SIDEWALK EASEMENT
P.U.E.	PERMANENT UTILITY EASEMENT
PROP.	PROPOSED
EXIST.	EXISTING
TY.P.	TYPICAL
CONST.	CONSTRUCT
TEMP.	TEMPORARY BENCHMARK
C.P.	CONTROL POINT
D.N.D.	DO NOT DISTURB
U.I.P.	USE IN PLACE
ADJ.	ADJUST
EL.	ELEVATION
ESMT.	EASEMENT
BK.CB.	BACK OF CURB
BK.SWK.	BACK OF SIDEWALK



1-800-DIG-RITE or 811
www.mo1call.com

THE EXISTING UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MAY NOT INCLUDE ALL LINES PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE TO CALL "1-800-DIG-RITE", AND COORDINATE FIELD LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING GRADING ACTIVITIES. !!STOP!! CALL BEFORE YOU DIG!!

AT&T
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CONSOLIDATED COMMUNICATIONS
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LEE'S SUMMIT R-7 SCHOOL DISTRICT
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LEE'S SUMMIT WATER UTILITIES
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LEE'S SUMMIT, MO 64081
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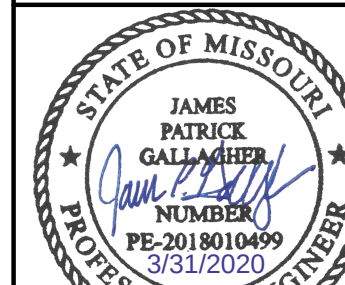
SPIRE GAS
CHRIS GUNDERSON
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CHARTER/SPECTRUM CABLE
TROY PREWITT
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OVERLAND PARK, KS 66213
PHONE: (816) 401-3573
EMAIL: TROY.PREWITT@CHARTER.COM

<u>SHEET NO.</u>	<u>TITLE</u>
1	TITLE SHEET
2	GENERAL LAYOUT
3	ALIGNMENT DATA & SURVEY CONTROL
4	GENERAL NOTES & SUMMARY OF QUANTITIES
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49-53	PRIYOR ROAD CROSS SECTIONS

Lesson

Olsson - Civil Engineering
Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City, MO 64116



JAMES PATRICK GALLAGHER
PF-2018010499

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DEVISIONS

2020

TITLE SHEET

HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS

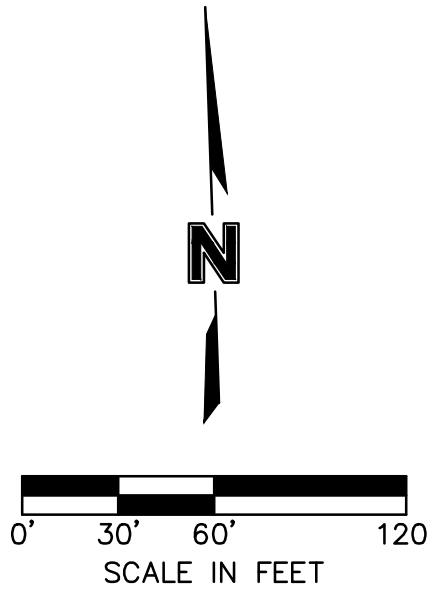
LEE'S SUMMIT, MO

drawn by: _____ AK
checked by: _____ JF
approved by: _____ JF
QA/QC by: _____ RE
project no.: _____ A19-23
drawing no.: _____ T TTL A1923
date: _____ 2020.03.

SHEET
1 of 53

☒ NOT FOR CONSTRUCTION

☐ REVIEWED FOR CONSTRUCTION



SHEET
3 of 53

GENERAL NOTES:

1. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE PLANS (APPROVED BY THE CITY OF LEES SUMMIT, MO.) AND (1) COPY OF THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES.

2. APWA "TECHNICAL SPECIFICATIONS" LATEST EDITION ALONG WITH APWA "SPECIFICATIONS AND CRITERIA" SHALL GOVERN CONSTRUCTION OF THE PROJECT. THE ONLY EXCEPTION IS AREAS OF THE PROJECT THAT ARE WITHIN MODOT RIGHT OF WAY.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, OTHERWISE COMPLYING WITH ALL APPLICABLE REGULATIONS GOVERNING THE WORK.

4. CONSTRUCTION OF THE IMPROVEMENTS SHOWN OR IMPLIED BY THIS SET OF DRAWINGS SHALL NOT BE INITIATED OR ANY PART THEREOF UNDERTAKEN UNTIL THE DIRECTOR OF PUBLIC WORKS OR HIS AGENT IS NOTIFIED OF SUCH INTENT AND ALL REQUIRED PERMITS, PROPERTY ACQUISITIONS, SECURITY AND OTHER CONTRACT BONDS, AND CONTRACT AGREEMENTS ARE RECEIVED AND APPROVED BY THE CITY.

5. CONTRACTOR SHALL NOT BE ALLOWED TO WORK WEEKENDS OR HOLIDAYS WITHOUT REQUESTING PRIOR APPROVAL FROM THE CITY THREE WORKING DAYS IN ADVANCE.

6. PRIOR TO ORDERING PRECAST STRUCTURES, SHOP DRAWINGS ARE TO BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL.



1-800-DIG-RITE or 811
www.mo1call.com

7. ALL EXISTING UTILITIES INDICATED ON THE DRAWINGS ARE ACCORDING TO THE BEST INFORMATION AVAILABLE TO THE ENGINEER; HOWEVER ALL UTILITIES ACTUALLY EXISTING MAY NOT BE SHOWN. UTILITIES DAMAGED THROUGH THE NEGLIGENCE OF THE CONTRACTOR TO OBTAIN THE EXACT LOCATION OF SAME SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THEIR EXPENSE. ONE-CALL/DIG RITE (1-800-344-7483 AND 1-800-DIG-RITE).

8. ALL PRIVATELY OWNED UTILITIES IN CONFLICT WITH THESE IMPROVEMENTS SHALL BE RELOCATED BY THE APPROPRIATE UTILITY COMPANIES. UTILITY RELOCATIONS WILL BE COMPLETED PRIOR TO THE START OF CONSTRUCTION, WHEN PRACTICABLE.

9. CONSTRUCTION STAKING IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SET THOSE STAKES NECESSARY TO CONSTRUCT THIS PROJECT IN ACCORDANCE WITH THE PLANS.

10. CONTRACTOR SHALL REMOVE THOSE TREES NECESSARY TO ACCOMPLISH THE GRADING WORK SHOWN HEREON. ALL TREES AND BRUSH FROM THE WORK SHALL BE COMPLETELY REMOVED FROM THE SITE BY THE CONTRACTOR. BURNING WILL NOT BE ALLOWED ON THE PROJECT.

11. ALL BACKFILL SHALL BE PLACED AND COMPACTED TO THE REQUIRED DENSITY AS INDICATED IN THE SPECIFICATIONS.

12. ALL ROADWAY EXCAVATION IN ROCK (SHALE, SANDSTONE OR LIMESTONE) WILL BE UNDERCUT NO LESS THAN 6" INCHES FOR THE FULL WIDTH OF THE ROADWAY AND BACKFILLED WITH SUITABLE SOIL OR GRANULAR MATERIAL. THERE WILL BE NO DIRECT PAYMENT FOR ROCK EXCAVATION. PAYMENT FOR ALL MATERIAL WILL BE MADE AT THE CONTRACT BID PRICE FOR UNCLASSIFIED EXCAVATION.

13. THE CONTRACTOR SHALL USE ADEQUATE DUST CONTROL MEASURES DURING ALL PHASES OF THE CONSTRUCTION TO MINIMIZE DUST ON SURROUNDING PROPERTIES AT THE CONTRACTOR'S EXPENSE.

14. WATER CAN BE OBTAINED BY RENTING A FIRE HYDRANT METER FROM THE CITY OF LEES SUMMIT, MO WATER UTILITIES DEPARTMENT.

15. DRIVEWAYS, SIDEWALKS, FENCES, SPRINKLER SYSTEMS AND OTHER AREAS DAMAGED BY THE CONTRACTOR SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT EXISTING BEFORE DAMAGE OCCURRED. THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT IS CONSIDERED SUBSIDIARY TO OTHER BID ITEMS.

16. WHERE THE NEW STREET IS TO CONNECT TO AN EXISTING STREET ALL DETERIORATED OR CRACKED ASPHALT WITHIN TWO (2) FEET OF THE CONNECTION POINT SHALL BE REMOVED TO A DEPTH WHERE SOUND MATERIAL IS FOUND. IF FULL-DEPTH PAVEMENT REMOVAL IS REQUIRED, THE SUB-GRADE SHALL BE RE-COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY (ASTM D-698).

17. ALL EXISTING FENCING, DRIVEWAYS, SIDEWALKS AND OTHER ITEMS WITHIN THE CONSTRUCTION LIMITS DAMAGED OR REMOVED BY THE CONTRACTOR, SHALL BE REPLACED WITH NEW MATERIALS. ALL FENCE REPLACEMENT SHOULD BE RELOCATED TO THE PROPERTY LINES UNLESS THE EXISTING FENCE WAS LOCATED INSIDE THE PROPERTY LINES, THEN THE FENCE SHOULD BE REPLACED IN ITS ORIGINAL LOCATION. FENCE CORNERS OF FENCES TO BE RELOCATED AT THE ORIGINAL LOCATIONS SHALL BE REFERENCE OUT BY THE CONTRACTOR BEFORE REMOVAL. REMOVALS SHALL BE AS SHOWN ON THESE PLANS, OR APPROVED BY THE CITY PRIOR TO REMOVAL. REMOVALS NOT PRE-APPROVED WILL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

18. REMOVAL OF EXISTING STORM DRAINAGE STRUCTURES AND OTHER EXISTING PHYSICAL FEATURES OF THE EXISTING ROADWAY SHALL BE CONSIDERED INCIDENTAL AND REMOVED AS A SUBSIDIARY ITEM TO REMOVAL OF EXISTING STRUCTURES. ALL WASTE SHALL BE TRANSPORTED TO A CITY APPROVED DUMP SITE FOR DISPOSAL.

19. ALL EXISTING WATER VALVES, METERS, FIRE HYDRANTS AND BLOW-OFF ASSEMBLIES WITHIN THE LIMITS OF THE PROPOSED PAVEMENT SHALL BE RELOCATED OR ADJUSTED TO GRADE BY THE CONTRACTOR. WATER METERS SHALL BE RELOCATED SO THAT THEY ARE WITHIN THE PUBLIC RIGHT-OF -WAY, APPROXIMATELY ONE FOOT FROM RIGHT-OF WAY LINE. WATER SERVICE LINES AFFECTED BY METER RELOCATION AND/OR THE WATER MAIN RELOCATIONS SHOWN IN THESE PLANS SHALL BE RECONNECTED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY RESIDENTS OF ANY WATER SERVICE INTERRUPTIONS 48 HOURS PRIOR TO INTERRUPTING THE SERVICE. ANY SERVICE INTERRUPTIONS MUST BE RESTORED THE SAME DAY.

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS AND SURVEY MONUMENTS WHICH HAVE BEEN DAMAGED OR DESTROYED BY THIS CONSTRUCTION OPERATION INCLUDING THOSE BURIED WITH EMBANKMENT OR REMOVED DURING EXCAVATION. SUCH IRONS AND MONUMENTS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR. REPLACEMENT OF PROPERTY IRONS AND MONUMENTS SHALL BE SUBSIDIARY TO OTHER BID ITEMS.

21. THE TOP 6" OF ALL DISTURBED AREAS THAT ARE TO BE SEEDED OR SODDED SHALL BE OF MATERIAL SUITABLE FOR SUSTAINING GRASS. THE GRADED SURFACE SHALL BE MADE FREE OF ROCK, CONCRETE, BRICK, OR FRAGMENTS THEREOF, OR RUBBISH AND SHALL BE FINISHED TO THE LINES, GRADES, AND CROSS-SECTION INDICATED ON THE PLANS.

22. ALL EXISTING TRAFFIC CONTROL SIGNS REMOVED SHALL BE SALVAGED AND DELIVERED TO THE CITY OF LEES SUMMIT, MISSOURI MAINTENANCE YARD.

23. ALL WATERLINE MAINS, SANITARY SEWER MAINS AND STORM WATER DRAINAGE CROSSINGS UNDER PROPOSED STREET PAVEMENTS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF THE ASPHALT SURFACE OR BASE COURSES.

24. APPROPRIATE TRAFFIC CONTROL DEVICES, SIGNAGE, AND PAVEMENT MARKINGS SHALL BE ESTABLISHED AND MAINTAINED THROUGHOUT THE PROJECT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND MUTCD.

25. HANDICAP RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ADA REQUIREMENTS AT ALL LOCATIONS WHERE POSSIBLE.

26. THE CONTRACTOR MUST REMOVE AT THEIR COST ANY BAD SUBSURFACE SOIL WHICH WOULD NOT BE ABLE TO SUPPORT ANY PROPOSED PUBLIC IMPROVEMENT. BACKFILL SHOULD BE ACCOMPLISHED IN ACCORDANCE WITH SECTIONS 2100 AND 2201 ENTITLED "GRADING AND SITE PREPARATION" AND "SUBGRADE PREPARATION."

27. ALL SIGNS INSTALLED, INCLUDING STOP SIGNS, KEEP RIGHT SIGNS AND OBJECT MARKERS ALONG WITH THE SIGN POSTS SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND APWA GUIDELINES.

28. SAWCUTS SHALL BE FULL DEPTH. THIS SHALL BE SUBSIDIARY TO PAVING ITEMS.

29. ALL EXISTING STRUCTURES WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED, UNLESS OTHERWISE NOTED ON THE PLANS. THIS WORK SHALL BE PAID FOR UNDER THE BID ITEM "REMOVAL OF EXISTING STRUCTURES".

30. THE CONTRACTOR SHALL AT NO TIME LEAVE EQUIPMENT, MATERIALS OR DEBRIS WITHIN 4' OF TRAVELED WAY OR LOCATIONS THAT COULD OBSTRUCT INTERSECTION SIGHT DISTANCE, OBSTRUCT ANY EXISTING CAPACITY OF STORM SEWER SYSTEM, OR CAUSE FLOODING OR EROSION TO RESIDENCES.

31. THE CONTRACTOR SHALL POTHOLE AND SURVEY ALL UTILITY CROSSINGS PRIOR TO CONSTRUCTION OF ANY PORTION OF STORM SEWER, UNDERDRAINS, CONDUIT, AND ANY OTHER SUBSURFACE ELEMENTS OF THE PROJECT. THIS SURVEY INFORMATION SHALL BE FORWARDED TO THE ENGINEER FOR REVIEW. THE CONTRACTOR SHALL NOT BEGIN CONSTRUCTION ON ANY SUBSURFACE ELEMENT ON THE PROJECT WITHOUT THE APPROVAL OF THE ENGINEER. THIS ITEM SHALL BE SUBSIDIARY TO OTHER BID ITEMS.

32. THE CONTRACTOR SHALL SUPPORT AND PROTECT ALL EXPOSED UTILITIES IN TRENCHES AND BRACE ALL POLES AS REQUIRED BY THE ENGINEER.

33. ALL REINFORCED CONCRETE PIPE SHALL BE CLASS III, UNLESS OTHERWISE NOTED ON THE PLANS.

34. KCMMB CONCRETE SHALL BE USED THROUGHOUT THE PROJECT.

35. CONTACT STEVE HOLLOWAY WITH THE MISSOURI DEPARTMENT OF TRANSPORTATION PERMITS AT 816-607-2186 AT LEAST 24 HOURS PRIOR TO BEGINNING WORK AND FOR REQUIRED INSPECTIONS ON PORTIONS IN THE MODOT RIGHT OF WAY.

36. ANY WORK PERFORMED WITHIN MODOT RIGHT OF WAY SHALL CONFORM TO MODOT STANDARDS AND SPECIFICATIONS. IN ADDITION, THE CONTRACTOR SHALL PROVIDE MATERIALS CERTIFICATION AND COMPACTION TESTING THAT COMPLIES WITH MODOT SPECIFICATIONS.

37. MISSOURI DEPARTMENT OF TRANSPORTATION WILL HAVE FIRST RIGHT OF REFUSAL TO SALVAGED MATERIALS SUCH AS LIGHT POLES AND TRAFFIC SIGNAL EQUIPMENT, ETC. THE CONTRACTOR SHALL COORDINATE WITH MODOT FOR A TIME AND LOCATION TO DELIVER THOSE ITEMS.

BEST MANAGEMENT PRACTICES:

1. PRIOR TO LAND DISTURBANCE ACTIVITIES, THE CONTRACTOR SHALL:

A. PRIOR TO BEGINNING EXCAVATION, THE CONTRACTOR SHALL INSTALL SILT FENCE ALONG THE CONSTRUCTION LIMITS TO DIVERT CLEAN WATER AWAY FROM THE DISTURBED SITE. THE CONTRACTOR AND THE ENGINEERS REPRESENTATIVE SHALL USE DISCRETION IN THE PLACEMENT OF THE SILT FENCE AS TO PREVENT FLOODING IN UNDESIRABLE LOCATIONS.

B. CONSTRUCT A STABILIZED ENTRANCE/PARKING/DELIVERY AREA AND INSTALL ALL PERIMETER SEDIMENT CONTROLS ON THE SITE.

C. INSTALL AND REQUEST THE INSPECTION OF THE PRE-CONSTRUCTION EROSION AND SEDIMENT CONTROL MEASURES DESIGNATED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN. LAND DISTURBANCE WORK SHALL NOT PROCEED UNTIL THERE IS A SATISFACTORY INSPECTION.

D. TEMPORARY FENCING SHALL BE INSTALLED ALONG ALL TEMPORARY EASEMENTS AND MAINTAINED FOR THE DURATION OF THE PROJECT.

2. THE CONTRACTOR SHALL MINIMIZE THE AREA DISTURBED DURING EXCAVATION AND CONSTRUCTION OF THE STORM SEWER PIPES AND STRUCTURES. FOLLOWING THE CONSTRUCTION OF THE STORM SEWER LINE, THE CONTRACTOR SHALL INSTALL THE TEMPORARY DITCH CHECKS AT 100' INTERVALS WITHIN TWO WORKING DAYS AFTER CONSTRUCTION ACTIVITY HAS CEASED IN THAT AREA. THE TEMPORARY DITCH CHECKS SHALL REMAIN IN PLACE UNTIL SOD HAS BEEN PLACED ON THE DISTURBED AREAS. INLETS SHALL BE PROTECTED WITH SEDIMENT BARRIERS AS SHOWN ON THE DETAIL.

3. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF KC APWA CHAPTER 5100, SUCH AS:

THE CONTRACTOR SHALL SEED, MULCH, OR OTHERWISE STABILIZE ANY DISTURBED AREA WHERE THE LAND DISTURBANCE ACTIVITY HAS CEASED OR IS PLANNED TO CEASE FOR MORE THAN 21 DAYS.

THE CONTRACTOR SHALL PERFORM INSPECTIONS OF EROSION AND SEDIMENT CONTROL MEASURES AT LEAST ONCE PER WEEK AND WITHIN 24 HOURS FOLLOWING EACH RAINFALL EVENT OF 1/2" OR MORE WITHIN ANY 24-HOUR PERIOD.

THE CONTRACTOR SHALL MAINTAIN AN INSPECTION LOG INCLUDING THE INSPECTOR'S NAME, DATE OF INSPECTION, OBSERVATIONS AS TO THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL MEASURES, ACTIONS NECESSARY TO CORRECT DEFICIENCIES, WHEN THE DEFICIENCIES WERE CORRECTED, AND THE SIGNATURE OF THE PERSON PERFORMING THE INSPECTION. THE LOG SHALL BE AVAILABLE FOR REVIEW BY THE CITY OF LEES SUMMIT AND THE STATE OF MISSOURI.

4. THE CONTRACTOR SHALL MAINTAIN INSTALLED EROSION AND SEDIMENT CONTROL DEVICES IN A MANNER THAT PRESERVES THEIR EFFECTIVENESS FOR PREVENTING SEDIMENT FROM LEAVING THE SITE OR ENTERING A SENSITIVE AREA SUCH AS A NATURAL STREAM CORRIDOR, AREAS OF THE SITE INTENDED TO BE LEFT UNDISTURBED, A STORM SEWER, OR AN ON-SITE DRAINAGE CHANNEL.

5. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING EROSION AND SEDIMENT CONTROL FOR THE DURATION OF A PROJECT. IF THE CITY DETERMINES THAT THE BMP'S IN PLACE DO NOT PROVIDE ADEQUATE EROSION AND SEDIMENT CONTROL AT ANY TIME DURING THE PROJECT, THE CONTRACTOR SHALL INSTALL ADDITIONAL OR ALTERNATE MEASURES THAT PROVIDE EFFECTIVE CONTROL.

6. THE CONTRACTOR MAY UTILIZE PUBLIC RIGHT-OF-WAY, PERMANENT DRAINAGE EASEMENTS AND TEMPORARY EASEMENTS FOR STAGING EQUIPMENT AND MATERIALS SO LONG AS TWO-WAY TRAFFIC AND ACCESS TO DRIVEWAYS IS MAINTAINED AT ALL TIMES.

7. EXCAVATED MATERIAL AND TOPSOIL STAGING SHALL NOT BE PERMITTED IN STREET RIGHT-OF-WAY AND SHALL BE CONFINED TO DRAINAGE EASEMENTS AND THOSE AREAS IDENTIFIED ON THIS PLAN. STOCKPILE AREAS SHALL BE PROTECTED WITH SILT FENCING TO PREVENT SOIL LOSS TO NEARBY STORM DRAINAGE SYSTEMS AND PROPERTY.

8. PROJECT SHALL BE CONSTRUCTED DOWNSTREAM TO UPSTREAM. THE AMOUNT OF DISTURBED AREA LEFT EXPOSED SHALL BE MINIMIZED.

9. ALL AREA INLETS AND CURB INLETS SHALL BE PROTECTED WITH TEMPORARY INLET SEDIMENT BARRIERS PRIOR TO TOP SLAB INSTALLATION AS WELL AS AFTER TOP SLAB INSTALLATION UNTIL SODDING AND PAVING IS COMPLETE.

10. SODDING SHALL OCCUR IN PHASES AS DEPICTED ON THIS PLAN. SOD SHALL NOT BE INSTALLED AFTER NOV. 15.

RECAPITULATION OF QUANTITIES			
ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
1	Clearing and Grubbing	Lump Sum	1
2	Contractor Construction Staking	Lump Sum	1
3	Unclassified Excavation	Cu. Yd.	3598
4	Compaction of Earthwork (All Types)	Cu. Yd.	923
5	Asphaltic Concrete (Surface Course type 3) (2")	Ton	560
6	Asphaltic Concrete (Intermediate Course) (7 1/2")	Ton	657
7	Concrete Pavement (9")	Sq. Yd.	565
8	Type 5 Aggregate (4")	Sq. Yd.	586
9	Type 5 Aggregate (12")	Sq. Yd.	3194
10	Type CG-1 Curb and Gutter	Lin. Ft.	131
11	MoDOT Type A Curb and Gutter	Lin. Ft.	434
12	Curb and Cutter Replacement	Lin. Ft.	48
13	Field Inlet (4'x4')	Each	1
14	Curb Inlet (5'x3')	Each	2
15	Convert Existing Structure	Each	2
16	RCP (15")	Lin. Ft.	97.5
17	RCP (18")	Lin. Ft.	26.8
18	RCP (24")	Lin. Ft.	145.6
19	Flared End Section (15")	Each	2
20	Concrete Sidewalk (4")	Sq. Ft.	5120
21	Concrete Sidewalk Ramp	Sq. Ft.	155
22	Detectable Warning Surface	Sq. Ft.	61
23	Edge Drain (4")	Lin. Ft.	297
24	Erosion Control	Lump Sum	1
25	Sodding	Lump Sum	1
26	Seeding	Lump Sum	1
27	Pavement Marking	Lump Sum	1
28	Permanent Signing	Lump Sum	1
29	Temporary Traffic Control	Lump Sum	1
30	Street Lighting	Lump Sum	1

GENERAL NOTES & SUMMARY OF QUANTITIES

HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS

LEE'S SUMMIT, MO

drawn by: AKU
checked by: JPG
approved by: JPC
QA/QC by: RBC
project no.: A19-2339
drawing no.: T_GENW_A192339
date: 2020.03.27

SHEET

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BY

REVISIONS DESCRIPTION

DATE

REV. NO.

2020

GENERAL NOTES & SUMMARY OF QUANTITIES

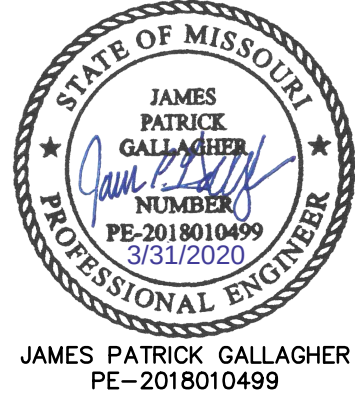
HIGHWAY 150 & PRYOR ROAD
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SHEET

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JAMES PATRICK GALLAGHER
PE-2018010499

REVISIONS

2020

GENERAL NOTES & SUMMARY OF QUANTITIES

HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS

LEE'S SUMMIT, MO

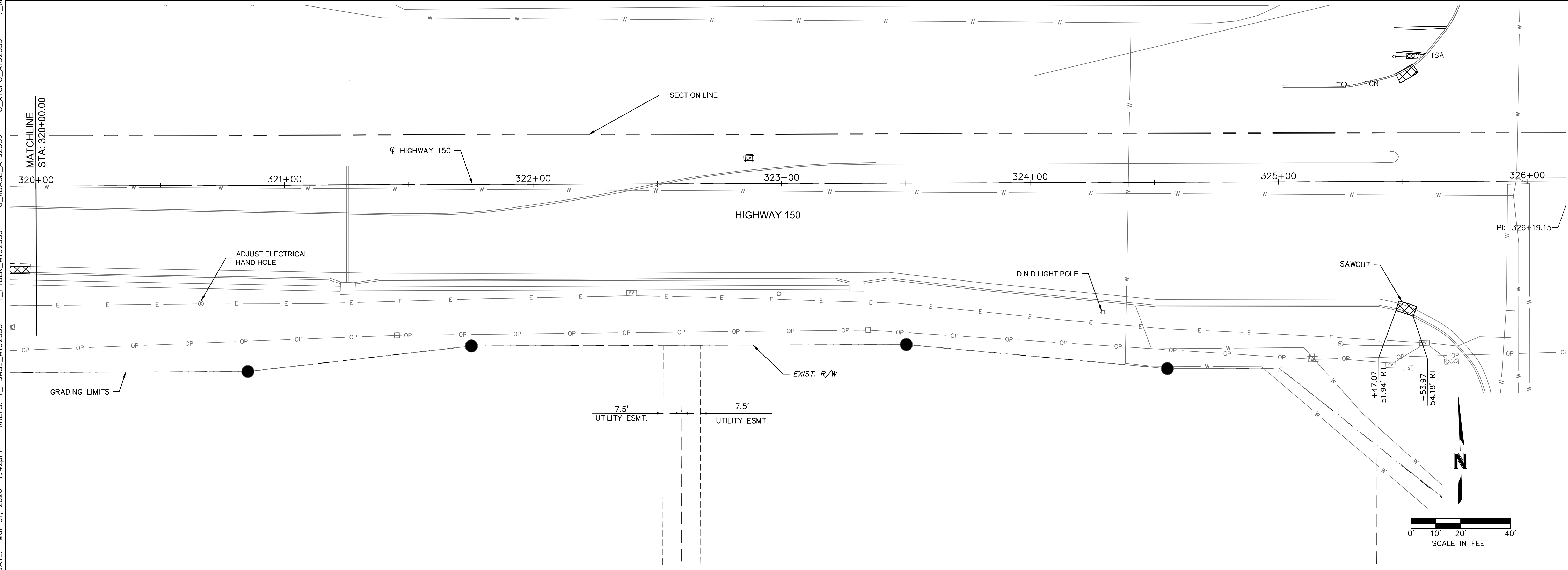
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SHEET

4 of 53

olsson

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V_XBASE_A192339

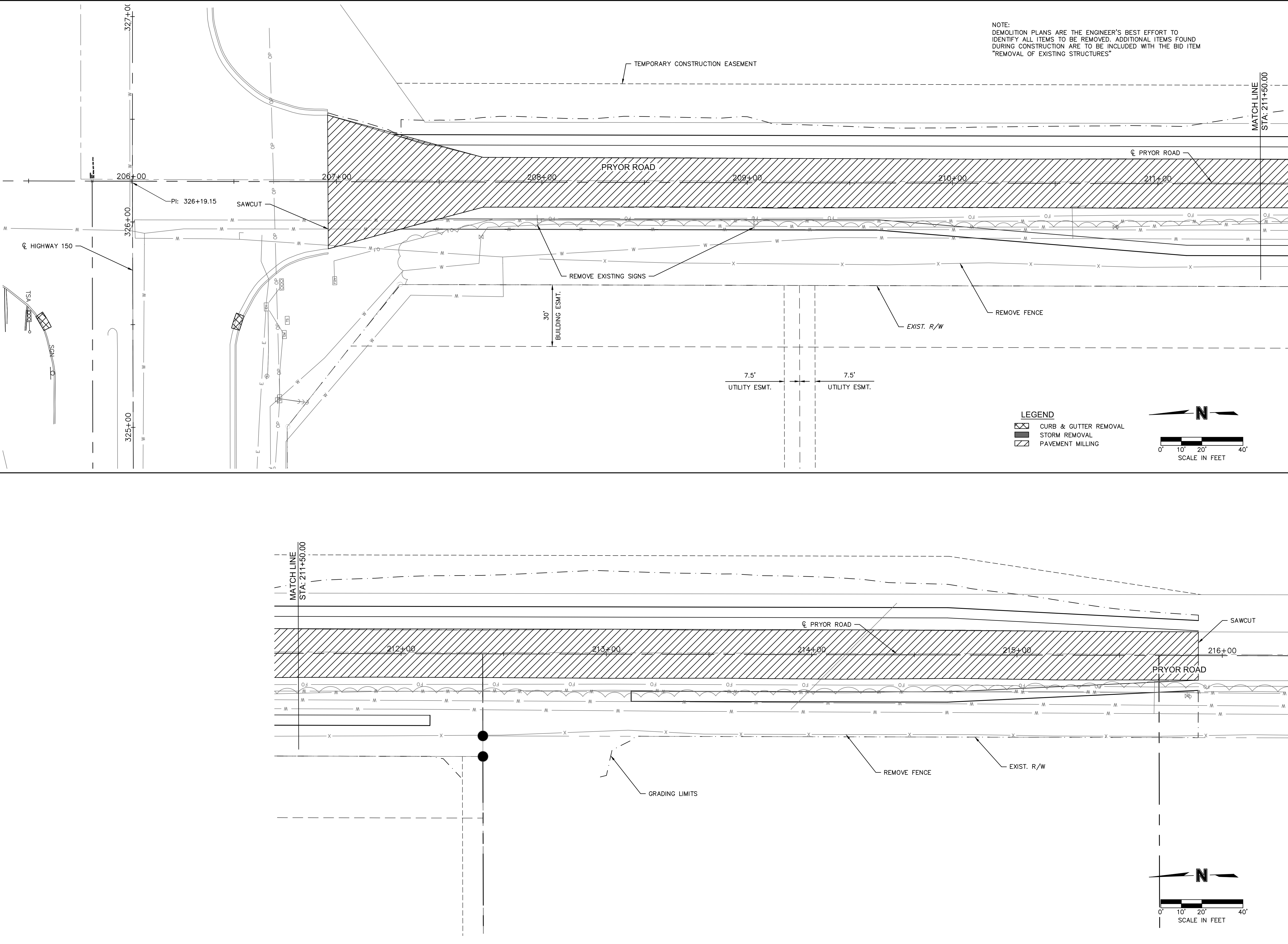
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COLLIMATION & REMOVAL\T
C_XBASE_A192339

9-A\40-Design\AutoCAD\REFS: T_PBASE_A192339

Mar 31 2019

DWG:
DATE:



NOTE:
DEMOLITION PLANS ARE THE ENGINEER'S BEST EFFORT TO
IDENTIFY ALL ITEMS TO BE REMOVED. ADDITIONAL ITEMS FOUND
DURING CONSTRUCTION ARE TO BE INCLUDED WITH THE BID ITEM
"REMOVAL OF EXISTING STRUCTURES"

DEMOLITION & REMOVALS

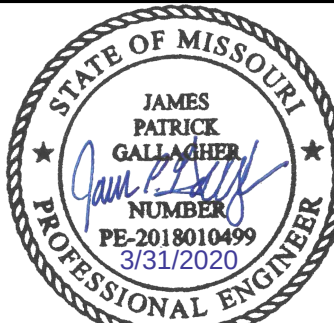
HIGHWAY 150 & PRYOR ROAD ROADWAY IMPROVEMENTS

LEE'S SUMMIT. MO.

2020

drawn by: _____ AKL
checked by: _____ JPC
approved by: _____ JPC
QA/QC by: _____ RBC
project no.: _____ A19-2339
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date: _____ 2020.03.27

SHEET
of



JAMES PATRICK GALLAGHER
PE-2018010499

BY

REVISIONS DESCRIPTION

DATE _____

RE

DEMOLITION & REMOVALS

HIGHWAY 150 & PRYOR ROAD ROADWAY IMPROVEMENTS

LEE'S SUMMIT. MO.

2020

drawn by: _____ AKL
checked by: _____ JPC
approved by: _____ JPC
QA/QC by: _____ RBC
project no.: _____ A19-2339
drawing no.: _____ T DEM A192339
date: _____ 2020.03.27

SHEET
of

BY

REVISIONS DESCRIPTION

DATE _____

RE

DEMOLITION & REMOVALS

HIGHWAY 150 & PRYOR ROAD ROADWAY IMPROVEMENTS

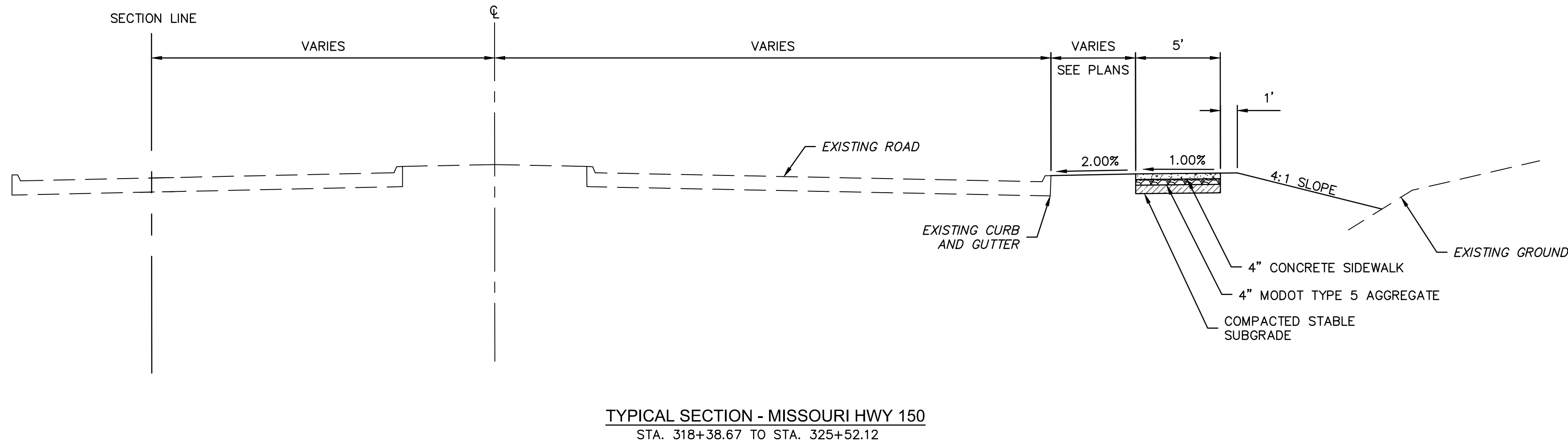
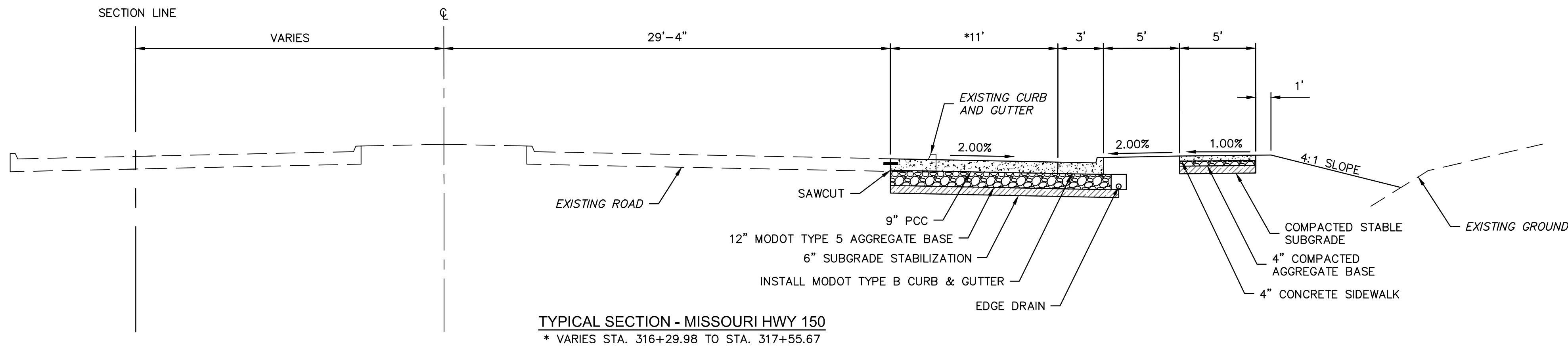
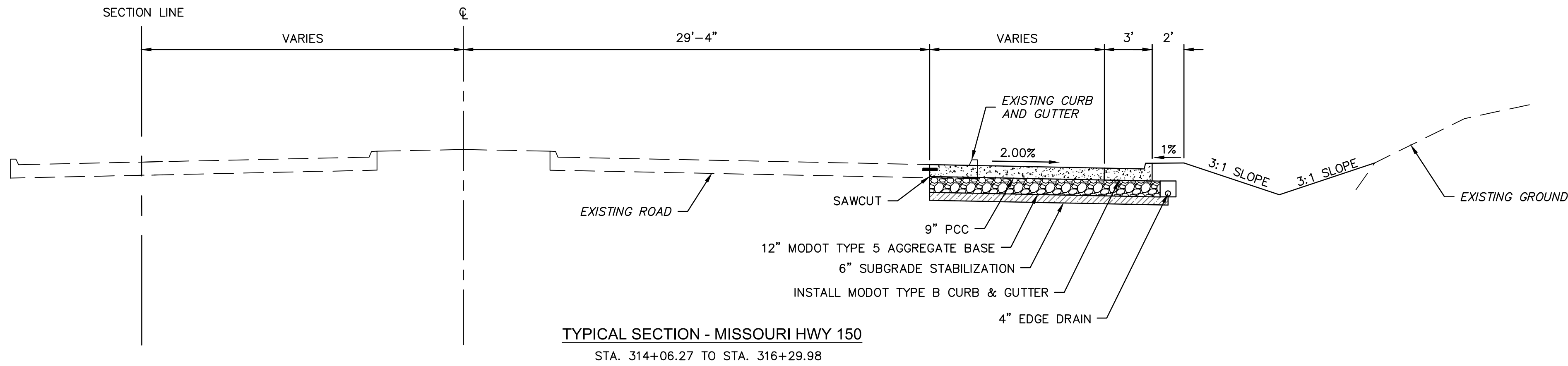
LEE'S SUMMIT. MO.

2020

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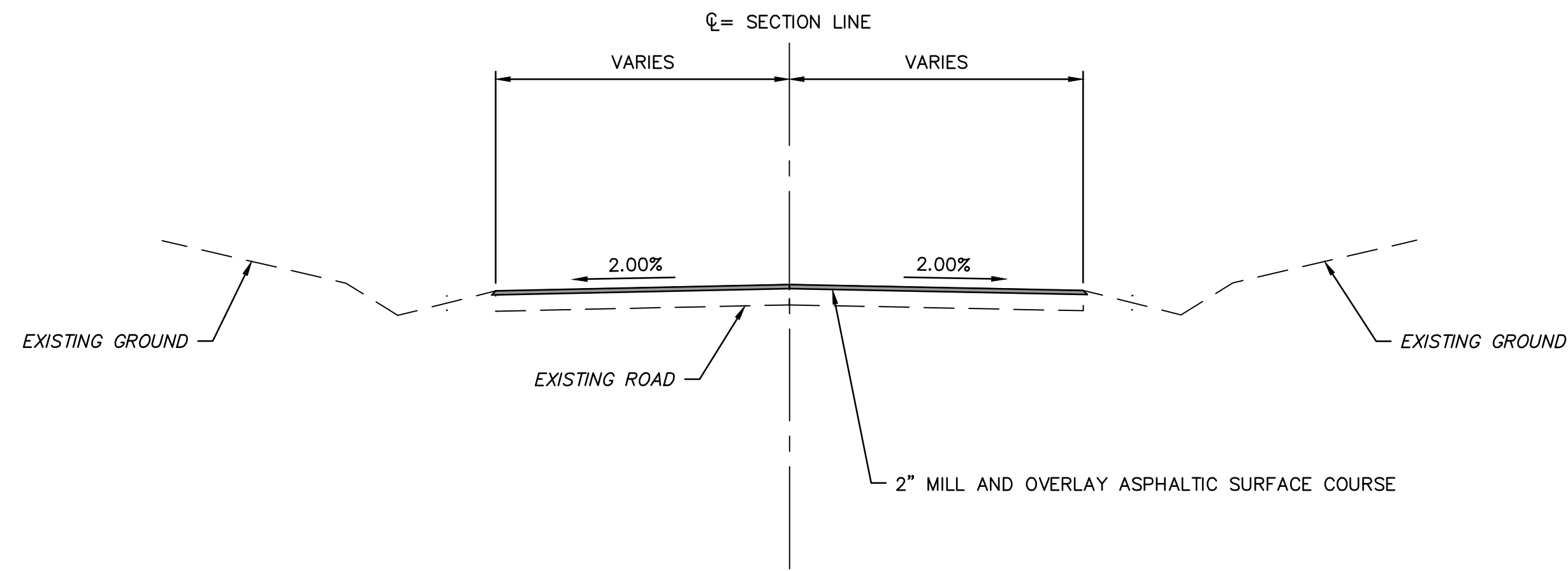
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of

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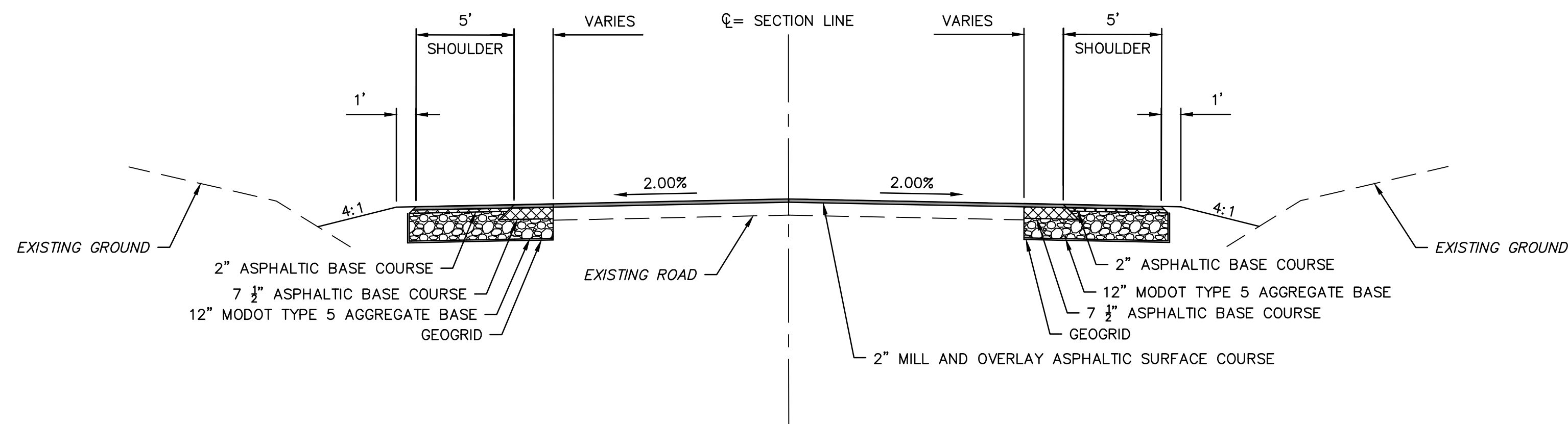


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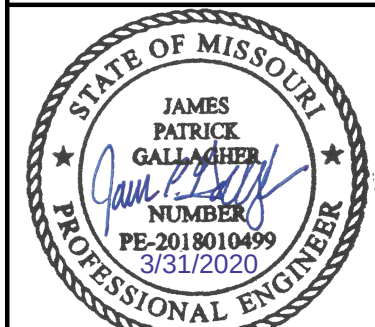
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STA. 206+95.79 TO STA. 207+27.32



TYPICAL SECTION - PRYOR ROAD
STA. 207+27.32 TO STA. 215+88.36

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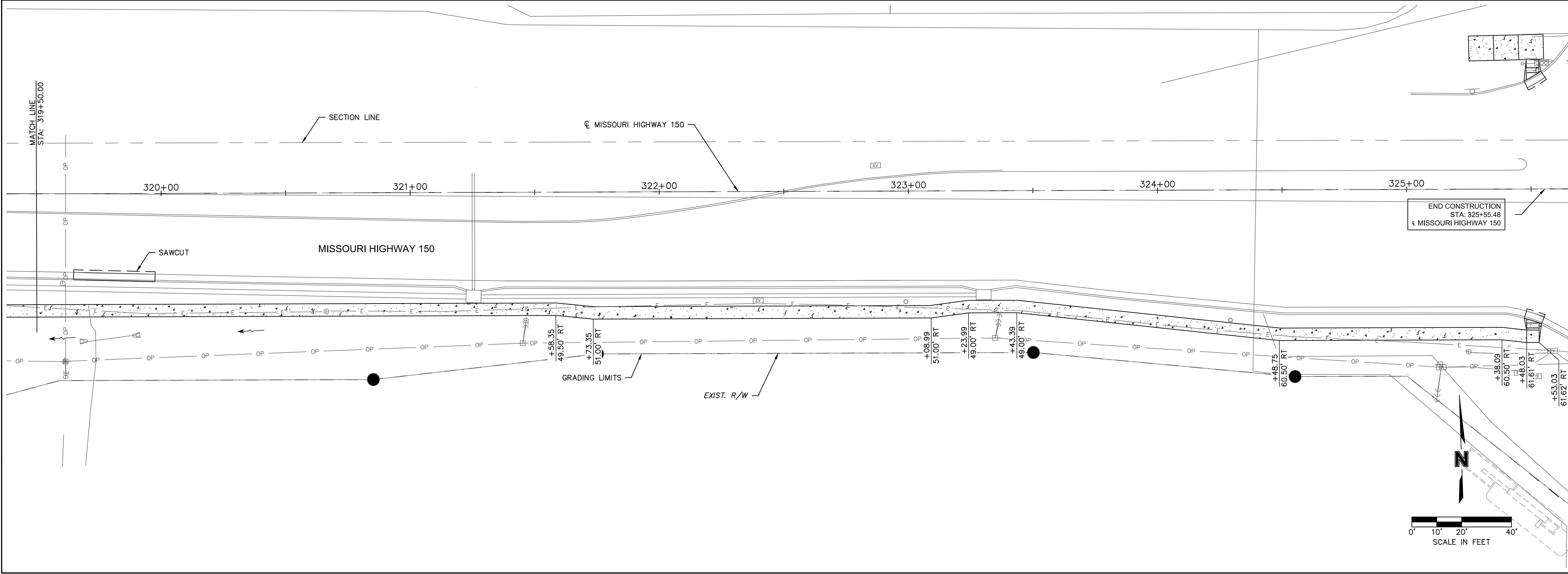
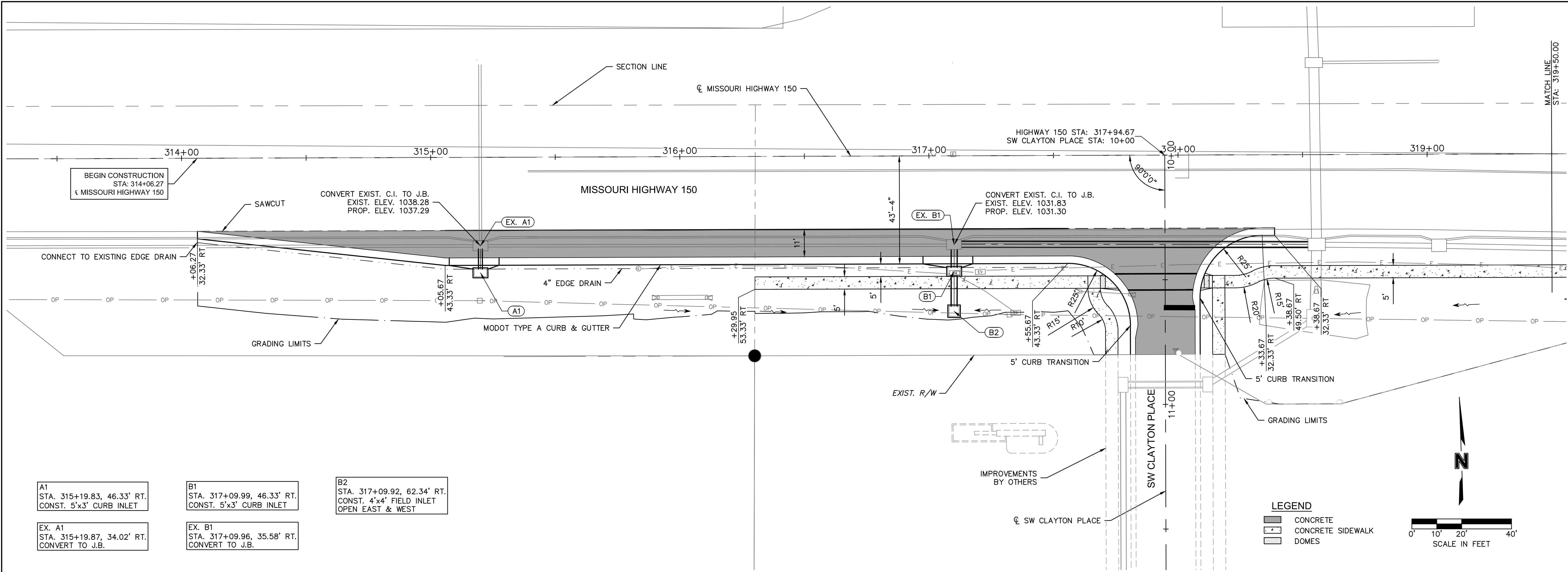
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Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City, MO 64116
TE



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PE-2018010499

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STATE OF MISSOURI
JAMES PATRICK GALLAGHER
PE-2018010499
3/31/2020
PROFESSIONAL ENGINEER

JAMES PATRICK GALLAGHER
PE-2018010499

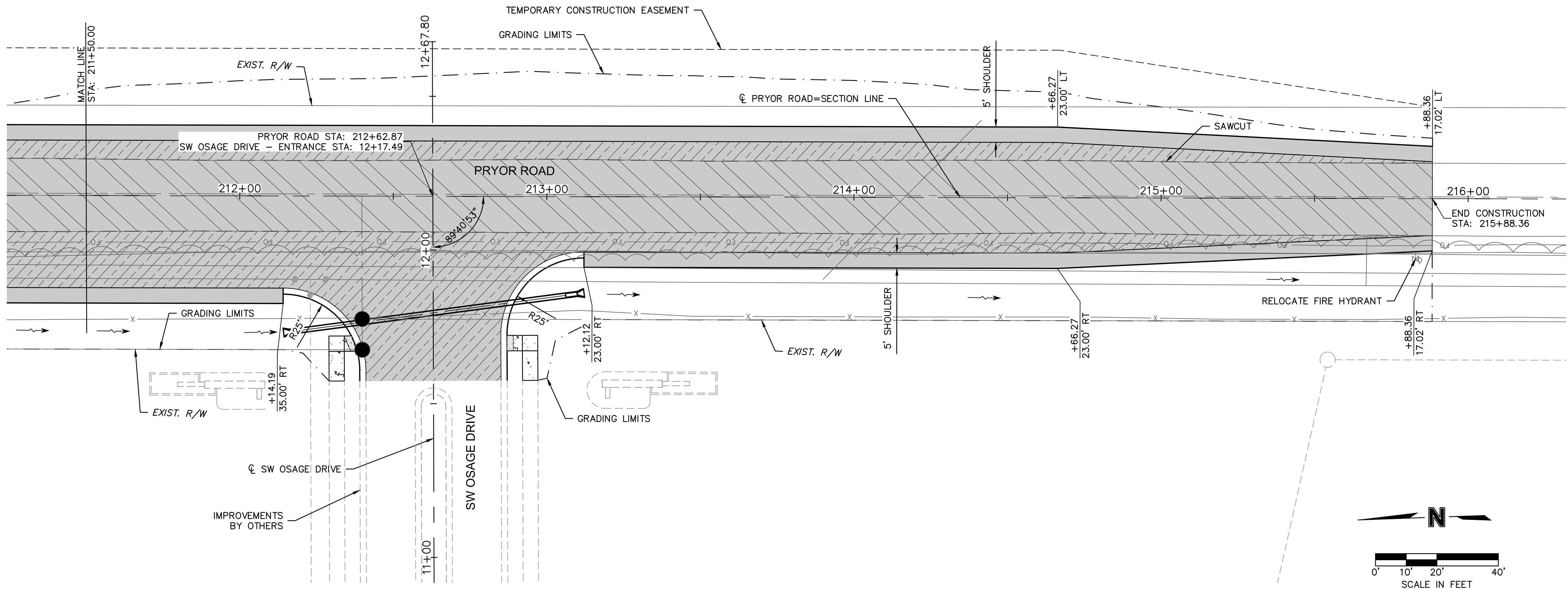
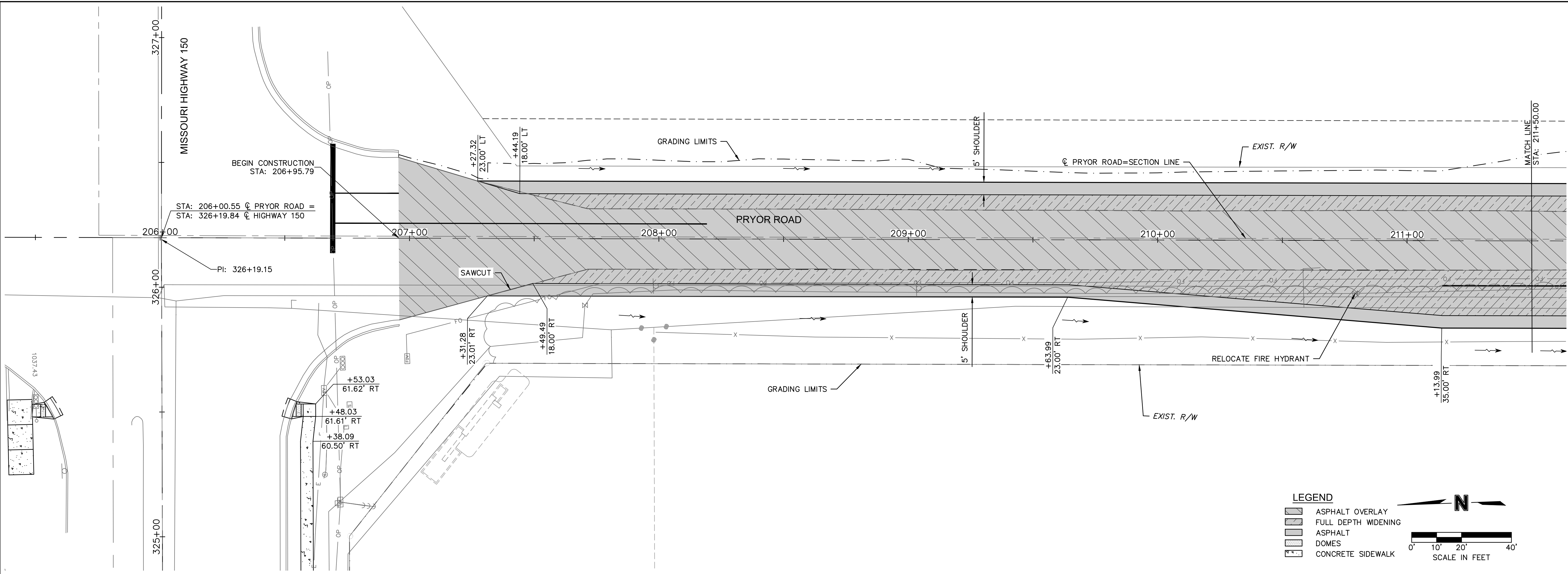
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HIGHWAY 150 & PRYOR ROAD ROADWAY IMPROVEMENTS	LEE'S SUMMIT, MO

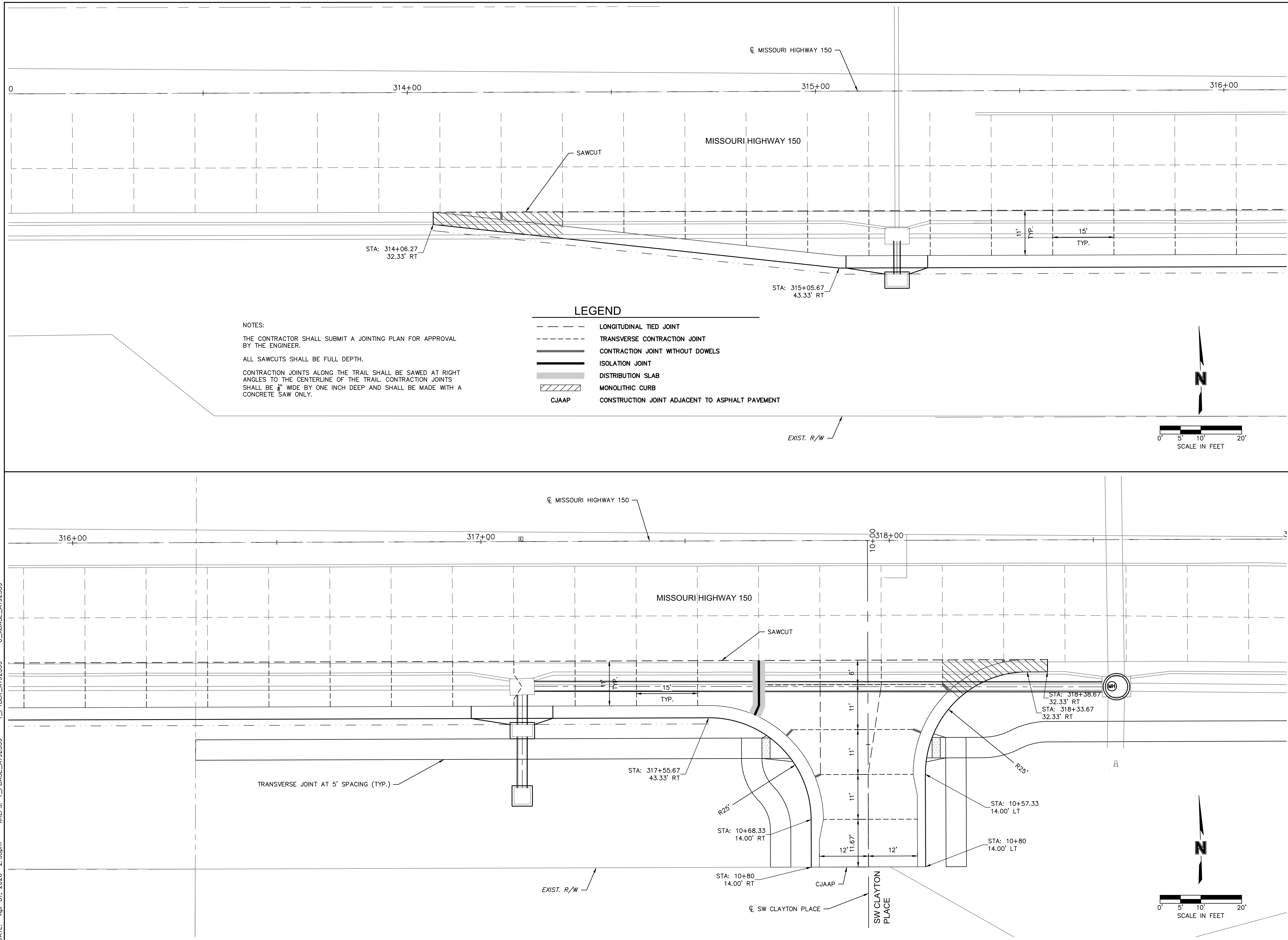
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checked by: JFG
approved by: JFG
QA/QC by: RBC
project no.: T_RPP01_A192339
drawing no.: 2020.03.27
date:

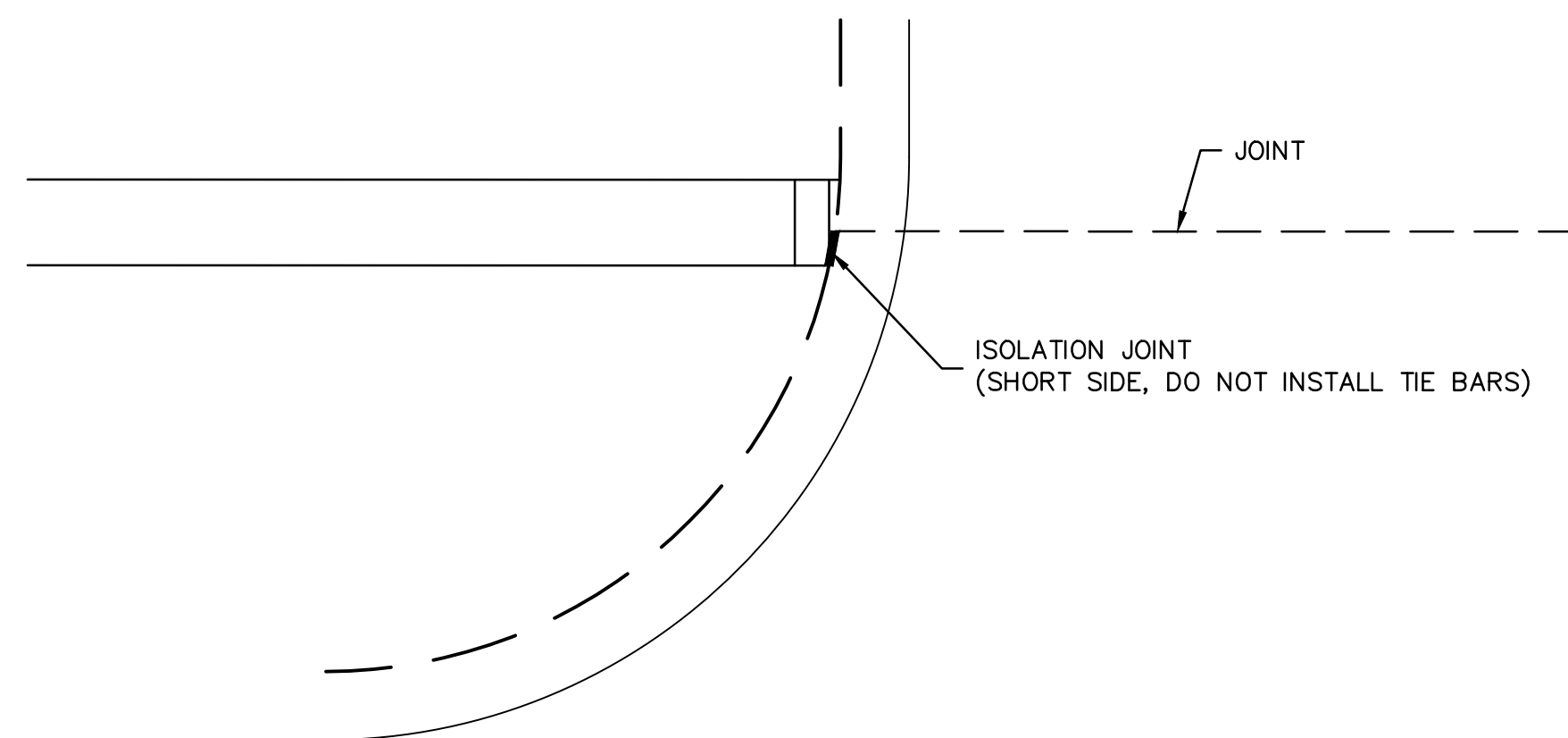
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9 of 53

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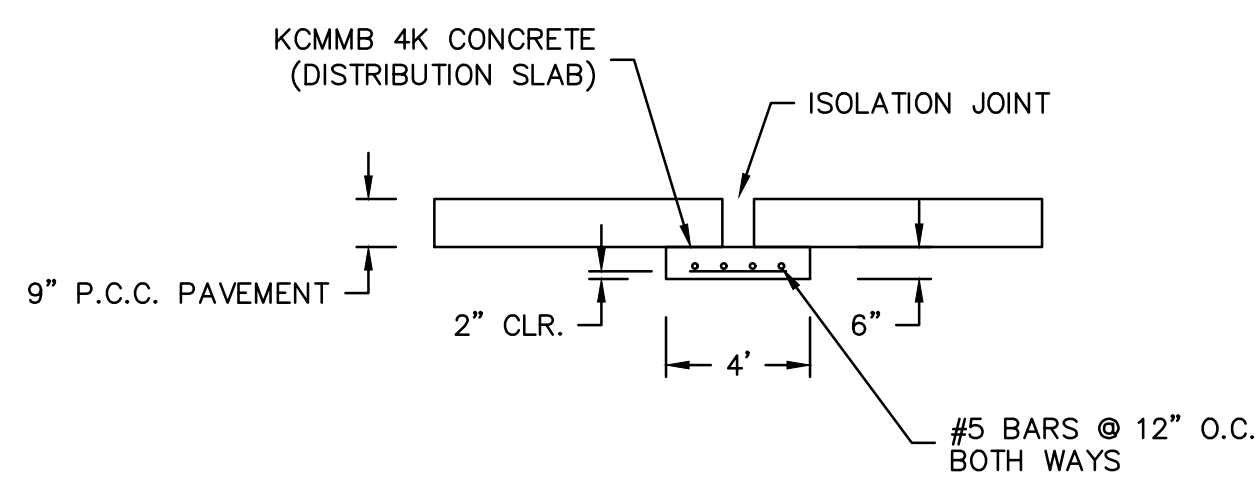


olsson Olsson - Civil Engineering 1301 Burlington Street North Kansas City, MO 64116 TEL 816.361.1177 www.olson.com		STATE OF MISSOURI JAMES PATRICK GALLAGHER PE-2018010499 3/31/2020 PROFESSIONAL ENGINEER	
		JAMES PATRICK GALLAGHER PE-2018010499	
BY		REVISIONS DESCRIPTION	
REV. NO.	DATE		
PLANS		2020	
HIGHWAY 150 & PRYOR ROAD ROADWAY IMPROVEMENTS		LEE'S SUMMIT, MO	
drawn by: AKU checked by: JPC approved by: JPC QA/QC by: RBC project no.: T_RPP01_A19-2339 drawing no.: T_RPP01_A192339 date: 2020.03.27		SHEET 10 of 53	

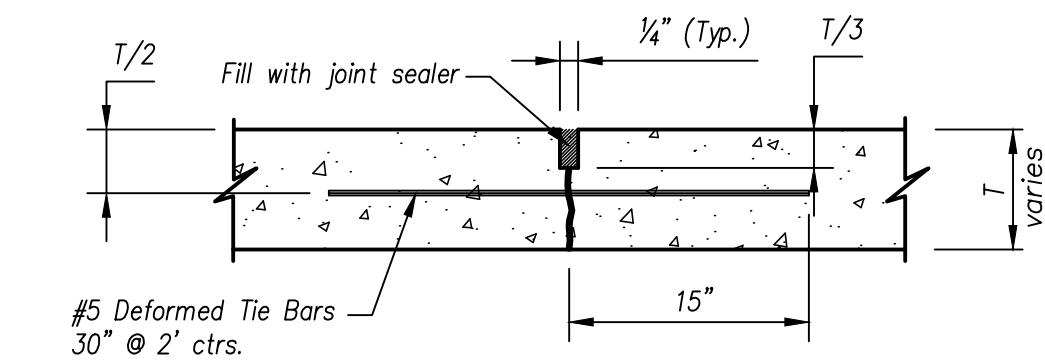




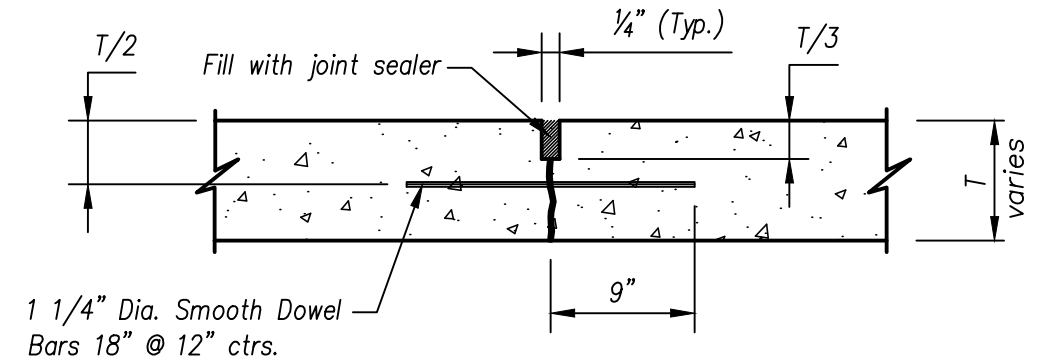
CONCRETE JOINT ADJACENT
TO SIDEWALK RAMP
*APPLIES TO ALL LOCATIONS THAT A
JOINT INTERSECTS WITH A SIDEWALK RAMP



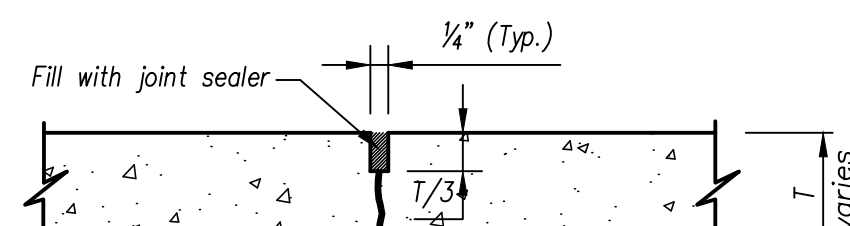
DISTRIBUTION SLAB DETAIL



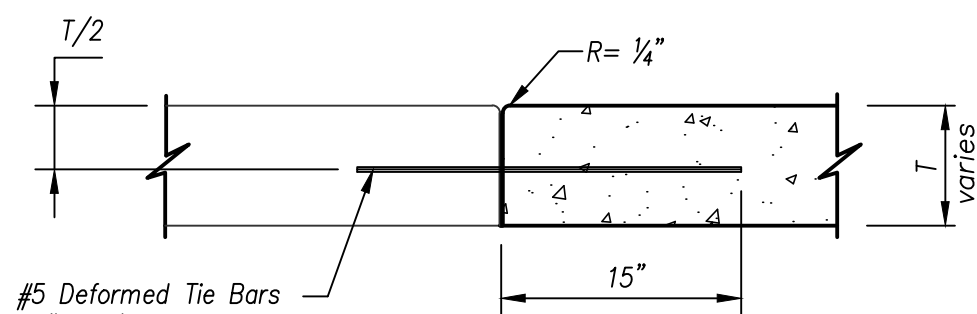
Logitudinal Tied Joint



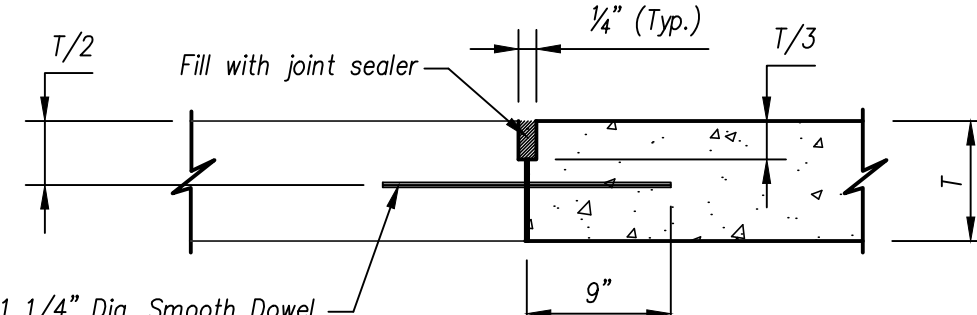
Transverse Contraction Joint



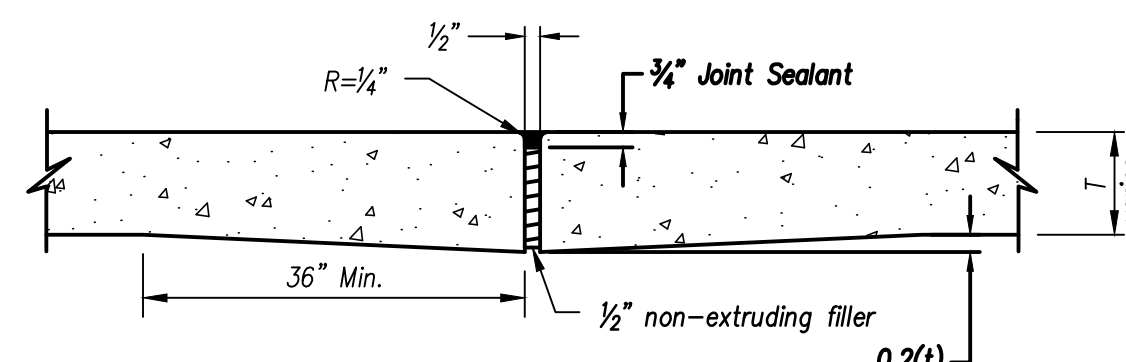
Contraction Joint Without Dowels



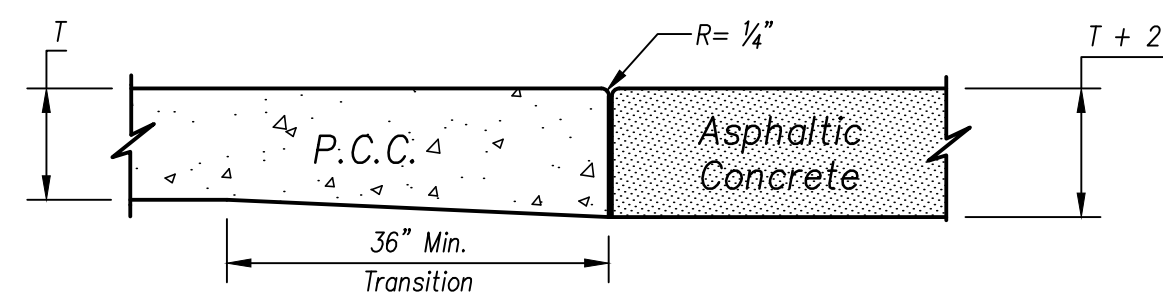
Longitudinal Construction Joint



Transverse Construction Joint



Isolation Joint



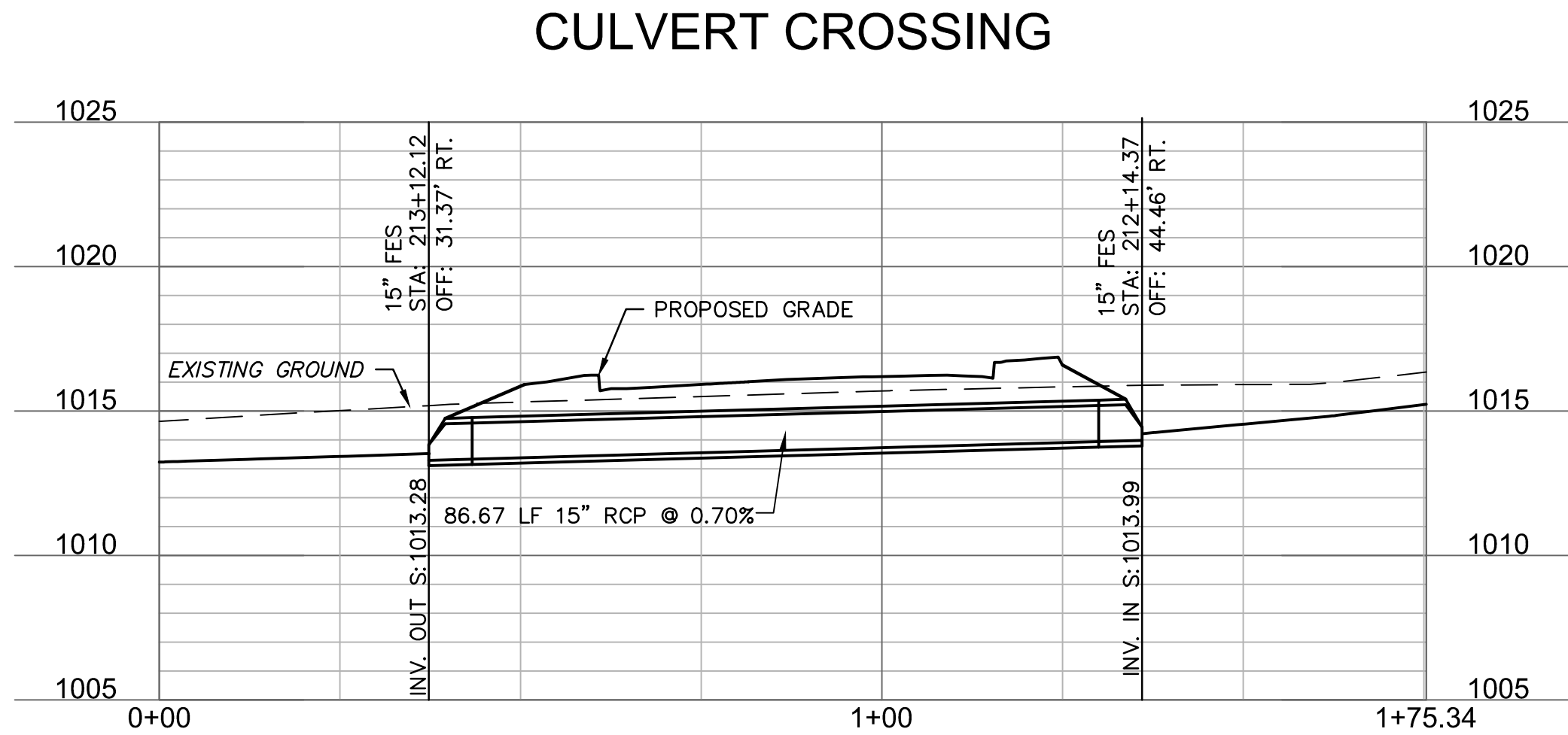
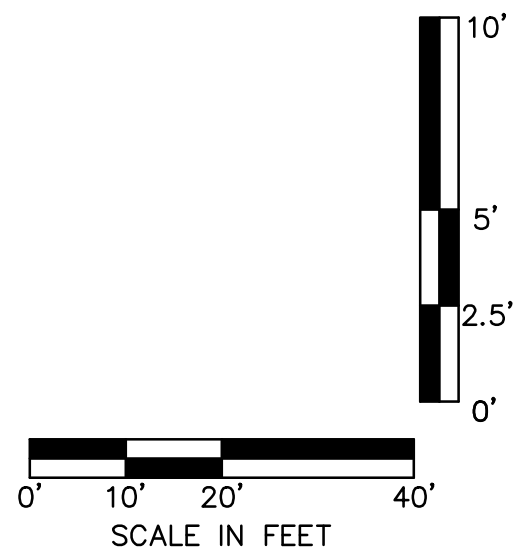
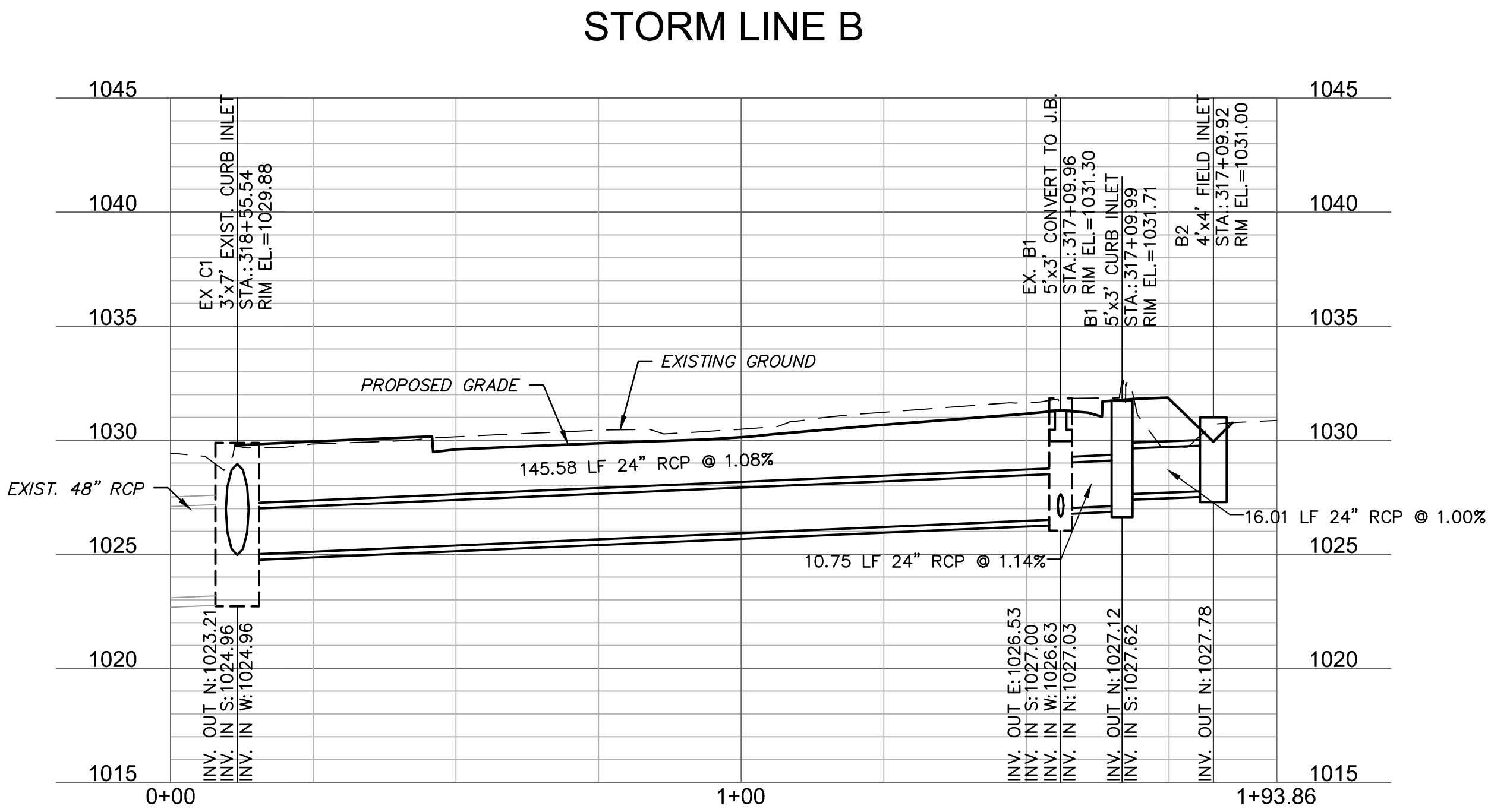
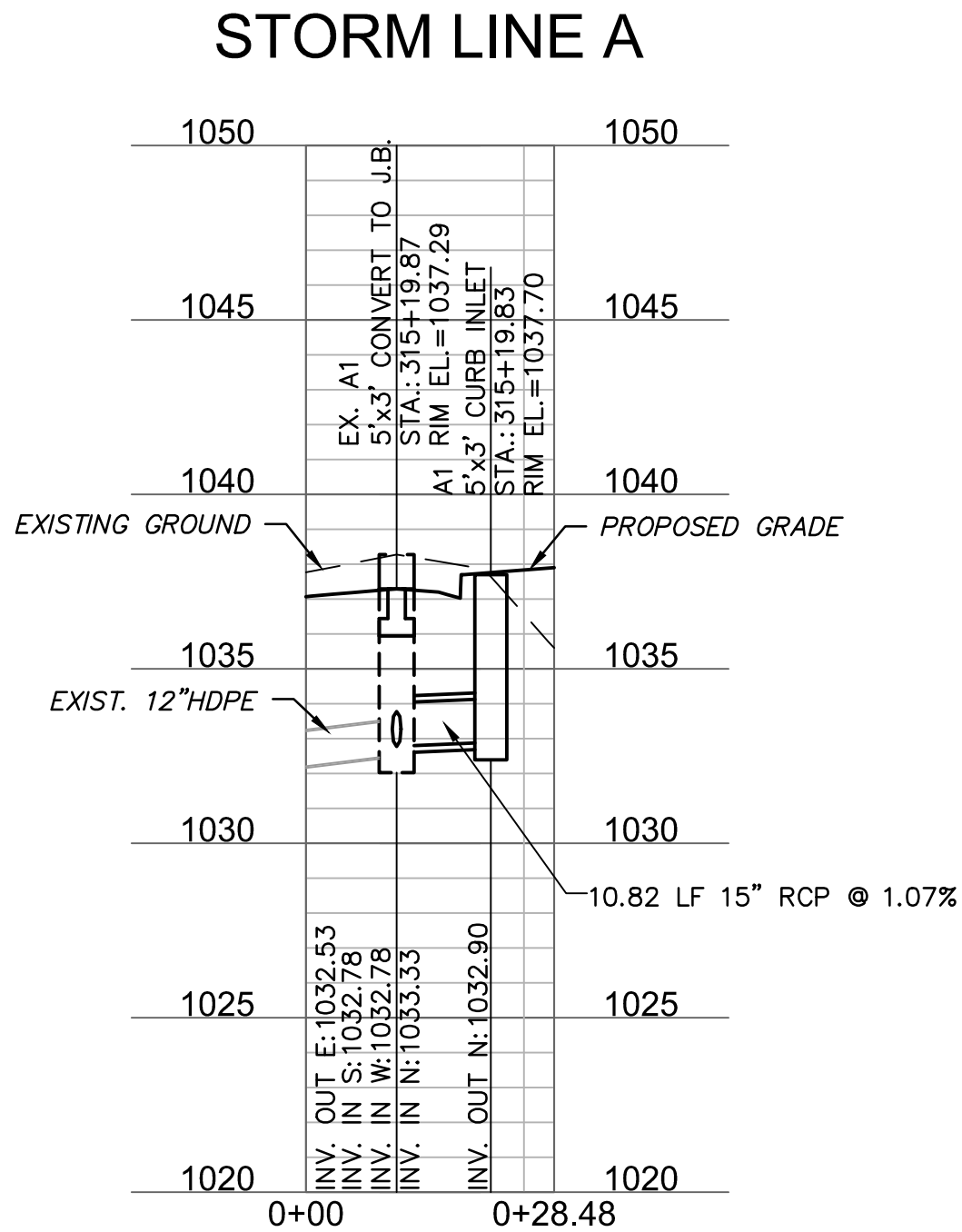
Construction Joint Adjacent to Asphalt Pavement

Joint Details

Note: Tie bars shall not be less than 12" from end of Dowel Bars.

[illegible]

drawn by: _____ AKU checked by: _____ JPG approved by: _____ JPG QA/QC by: _____ RBC project no.: _____ A19-2339 drawing no.: _____ T_JNT_A192339 date: _____ 2020.03.27	CONCRETE JOINTING DETAILS	
	HIGHWAY 150 & PRYOR ROAD ROADWAY IMPROVEMENTS	
	LEE'S SUMMIT, MO	2020



STORM SEWER PROFILES

HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS

LEE'S SUMMIT, MO

drawn by: AKU
checked by: JPG
approved by: RBC
QA/QC by: RBC
project no.: A19-2339
drawing no.: T_STM_A192339
date: 2020.03.27

SHEET
15 of 53

BY

REV. NO.

DATE

REVISIONS DESCRIPTION

REVISIONS

2020

JAMES PATRICK GALLAGHER
PE-2018010499
3/31/2020
PROFESSIONAL ENGINEER

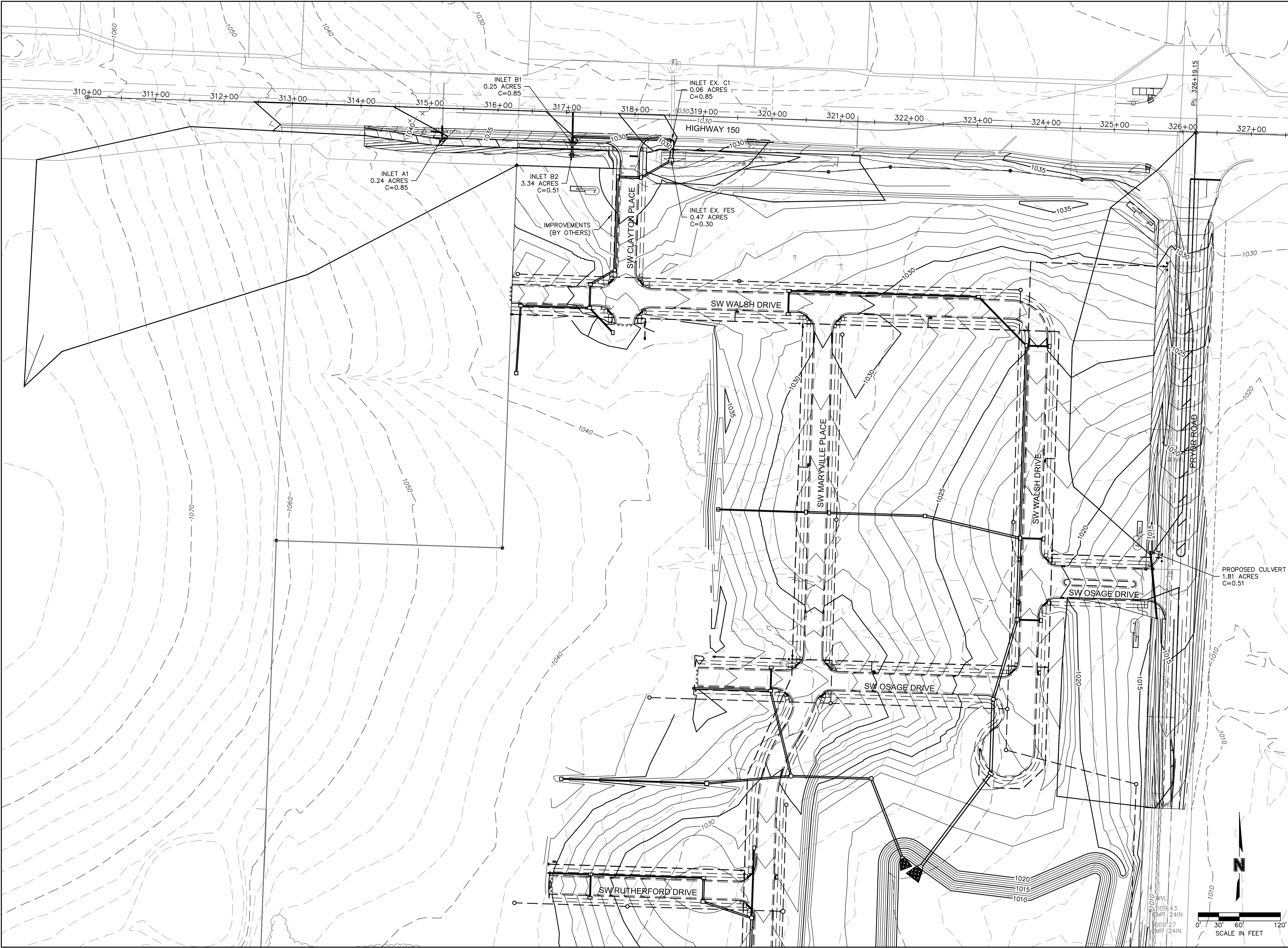
JAMES PATRICK GALLAGHER
PE-2018010499

STATE OF MISSOURI
JAMES PATRICK GALLAGHER
NUMBER
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USER: jgallagher



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PE-2018010499

BY

REV. NO.

DATE

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DRAINAGE MAP

HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS

LEE'S SUMMIT, MO

drawn by: AKU
checked by: JFG
approved by: JFG
QA/QC by: RBC
project no.: T_PDRN_A192339
drawing no.: 2020.03.27

date: 2020.03.27

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2020

REVISIONS

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10 Year Storm Calculations																										
Label	Inlet Area (acres)	System Drainage Area (acres)	Upstream Inlet C	System CA (acres)	Inlet Tc (min)	Spread / Top Width (ft)	Depth (In) (ft)	System Intensity (in/h)	Capacity (Design) (cfs)	Flow (cfs)	Diameter (in)	Length (User Defined) (ft)	Material	Manning's n	Invert (Start) (ft)	Invert (Stop) (ft)	Slope (Calculated) (%)	Flow / Capacity (Design) (%)	Velocity (ft/s)	Headloss Coefficient	Headloss (ft)	Elevation (Rim) (ft)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Rim Elevation-H GL (In) (ft)	Notes
A1	0.240	0.20	0.85	0.22	5.00	7.40	1.70	7.35	6.80	1.60	15.00	10.80	Concrete	0.013	1032.90	1032.78	1.11	23.50	1.31	1.000	0.010	1037.70	1034.58	1034.57	3.12	C.I.
B1	0.250	3.60	0.85	1.92	5.00	7.30	1.31	6.07	23.87	11.72	24.00	10.80	Concrete	0.013	1027.12	1027.00	1.11	49.10	7.56	0.150	-0.100	1031.71	1028.35	1028.45	3.36	C.I.
B2	3.340	3.30	0.51	1.70	10.00	(N/A)	1.63	6.08	22.61	10.44	24.00	16.00	Concrete	0.013	1027.78	1027.62	1.00	46.20	7.06	1.000	0.310	1031.00	1028.94	1028.63	2.06	FIELD INLET
EX A1	(N/A)	1.3	(N/A)	1.083	(N/A)	(N/A)	(N/A)	7.209	8.15	7.87	12	(N/A)	HDPE	0.010	1,032.53	1,026.63	3.096	96.5	10.02	0.4	5.5	1037.29	1,033.95	1,028.45	3.34	CONVERT TO J.B.
PROP. B1	(N/A)	5.1	(N/A)	3.185	(N/A)	(N/A)	(N/A)	6.067	23.49	19.48	24	145.6	Concrete	0.013	1,026.53	1,024.96	1.078	82.9	8.36	0.4	1.77	1031.30	1,028.12	1,026.35	3.18	CONVERT TO J.B.

100 Year Storm Calculations																										
Label	Inlet Area (acres)	System Drainage Area (acres)	Upstream Inlet C	System CA (acres)	Inlet Tc (min)	Spread / Top Width (ft)	Depth (In) (ft)	System Intensity (in/h)	Capacity (Design) (cfs)	Flow (cfs)	Diameter (in)	Length (User Defined) (ft)	Material	Manning's n	Invert (Start) (ft)	Invert (Stop) (ft)	Slope (Calculated) (%)	Flow / Capacity (Design) (%)	Velocity (ft/s)	Headloss Coefficient	Headloss (ft)	Elevation (Rim) (ft)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Rim Elevation-HG L (In) (ft)	Notes
A1	0.240	0.20	0.85	0.19	5.00	9.90	4.47	12.90	6.80	2.46	15.00	10.80	Concrete	0.013	1032.90	1032.78	1.11	36.20	2.00	1.00	0.02	1037.70	1037.31	1037.29	0.39	C.I.
B1	0.25	3.60	0.85	1.90	5.00	10.00	3.84	10.73	23.87	20.51	24.00	10.80	Concrete	0.013	1027.12	1027.00	1.11	85.90	6.53	0.15	0.09	1031.71	1030.86	1030.77	0.85	C.I.
B2	3.34	3.30	0.51	1.70	10.00	(N/A)	4.91	10.74	22.61	18.44	24.00	16.00	Concrete	0.013	1027.78	1027.62	1.00	81.50	10.44	1.00	0.49	1031.00	1031.45	1030.96	-0.45	FIELD INLET
EX A1	(N/A)	1.3	(N/A)	0.996	(N/A)	(N/A)	(N/A)	12.678	8.15	12.73	12	(N/A)	HDPE	0.010	1,032.53	1,026.63	3.096	156.2	16.21	0.4	14.4	1037.29	1,045.17	1,030.77	-7.88	CONVERT TO J.B.
EX B1	(N/A)	5.1	(N/A)	3.079	(N/A)	(N/A)	(N/A)	10.721	23.49	33.28	24	145.6	Concrete	0.013	1,026.53	1,024.96	1.078	141.7	10.59	0.4	3.21	1031.30	1,030.07	1,026.86	1.23	CONVERT TO J.B.

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James P. Gallagher

NUMBER
PE-2018010499
3/31/2020

PROFESSIONAL ENGINEER

JAMES PATRICK GALLAGHER
PE-2018010499

BY

REV. NO.

DATE

REVISIONS DESCRIPTION

STORM SEWER CALCULATIONS

HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS

LEE'S SUMMIT, MO

2020

REVISIONS

drawn by: AKU

checked by: JPG

approved by: RBC

QA/QC by: RBC

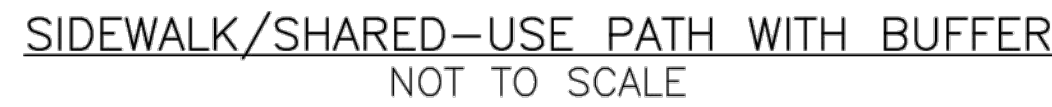
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drawing no.: T_PDRN_A192339

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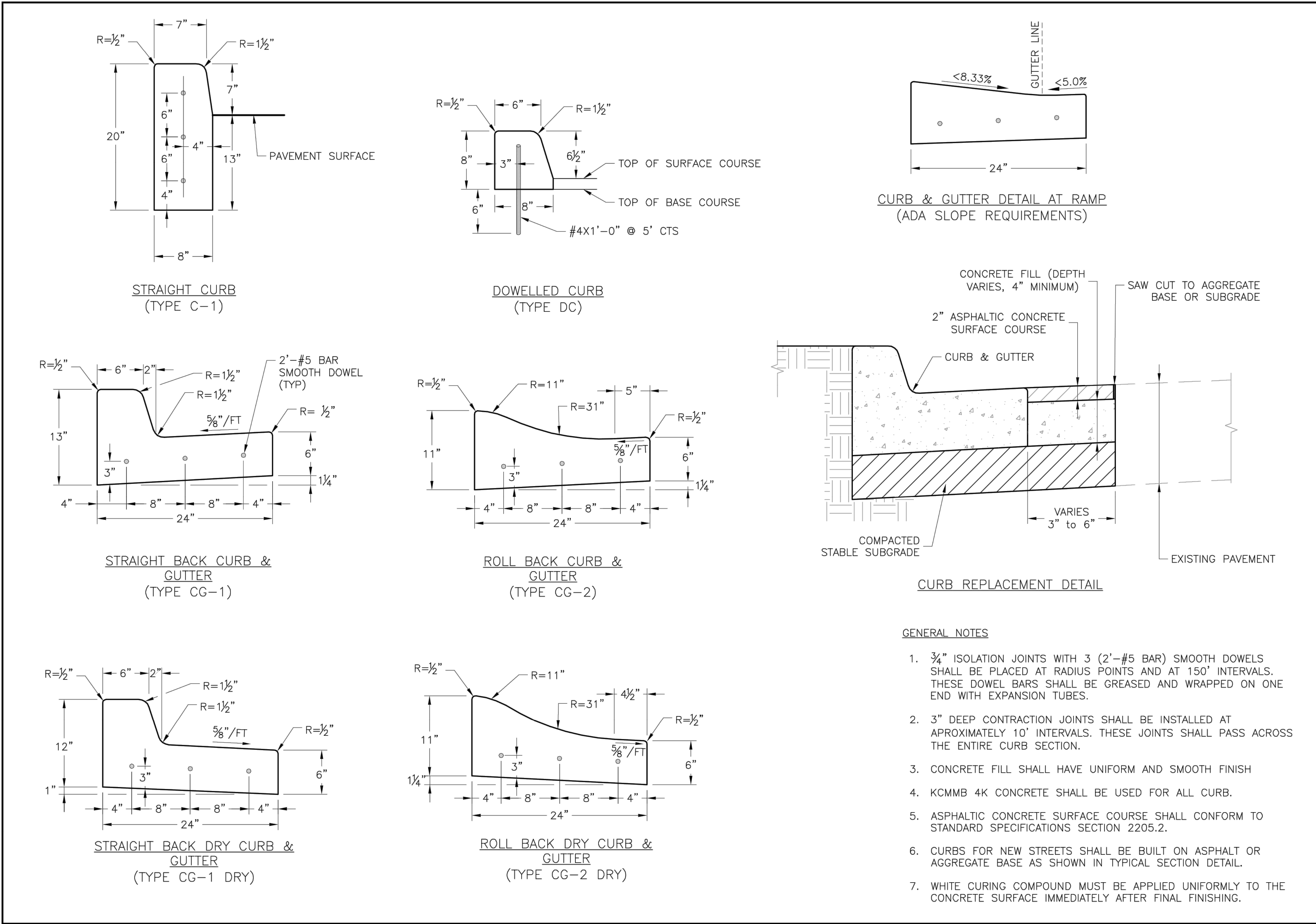


1. SUBGRADE MUST BE OF STABLE, COMPACTED EARTH AND SHALL BE OVERLAYED WITH 4" COMPACTED DENSE GRADED AGGREGATE BASE.
2. 1.5% CROSS SLOPE MUST BE MAINTAINED THROUGH DRIVEWAYS.
3. KCMMB 4K CONCRETE MIX SHALL BE REQUIRED FOR ALL SIDEWALKS/SHARED-USE PATHS OR AS APPROVED BY THE CITY INSPECTOR.
4. ALL SIDEWALK/SHARED-USE PATHS SHALL MEET CURRENT PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).
5. AN ISOLATION JOINT SHALL BE PLACED AT A MAXIMUM OF 150 FT. CONSTRUCTION JOINTS SHALL BE PLACED THE SAME WIDTH OF SIDEWALK/SHARED-USE PATHS, BUT NO GREATER THAN 10 FT.
6. AN ISOLATION JOINT SHALL BE PLACED WHERE THE SIDEWALK/SHARED-USE PATHS MEETS A RESIDENTIAL DRIVEWAY.
7. SHARED-USE PATHS WIDTH SHALL BE 10 FT. WIDE.
8. SIDEWALK/SHARED-USE PATHS FINISHING SHALL BE FULL BROOM FINISH OR AS DIRECTED BY CITY INSPECTOR.
9. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.



SIDEWALK/SHARED-USE PATH DETAIL

GEN-2



LEE'S SUMMIT MISSOURI

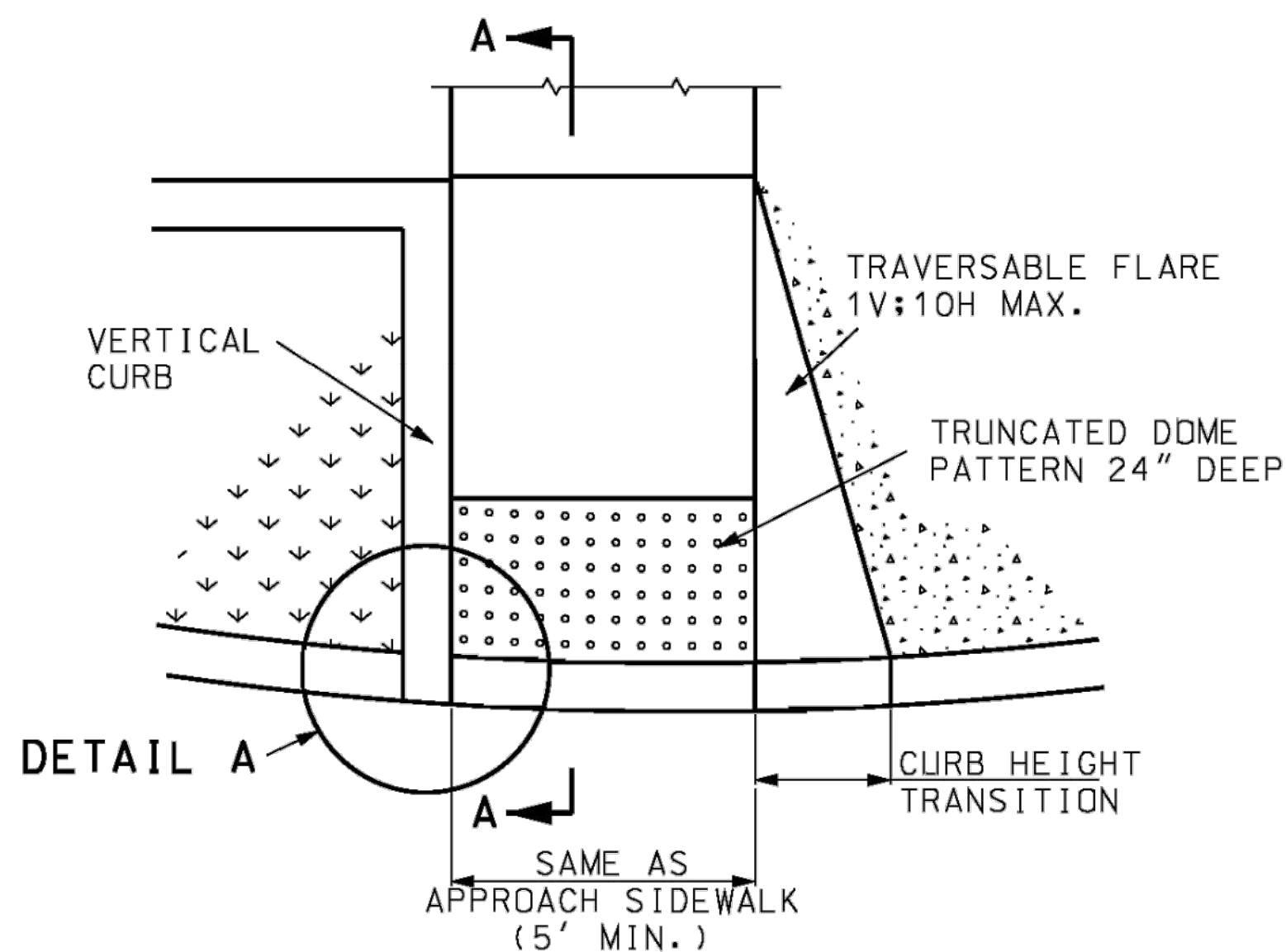
PUBLIC WORKS ENGINEERING DIVISION | 220 SE GREEN STREET | LEE'S SUMMIT, MO 64063

Project: STANDARD DETAILS
City: CITY OF LEE'S SUMMIT, MO
County: JACKSON COUNTY, MO
Sheet Name: CURB & GUTTER DETAIL

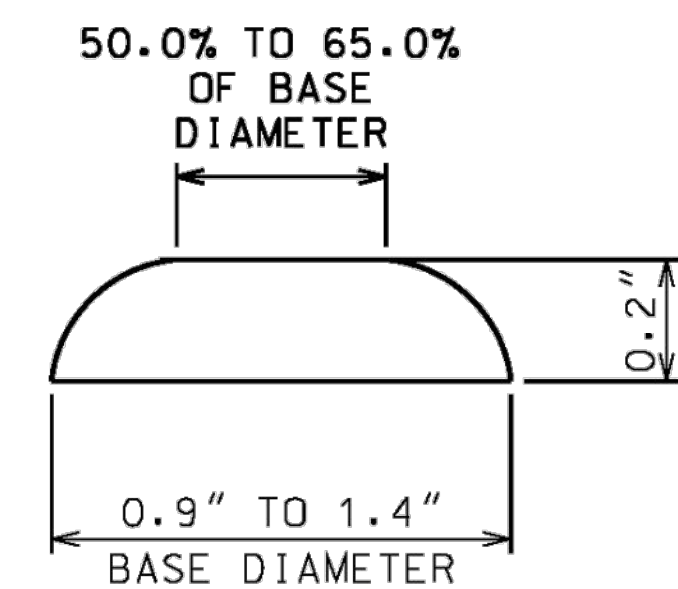
Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

GEN-4

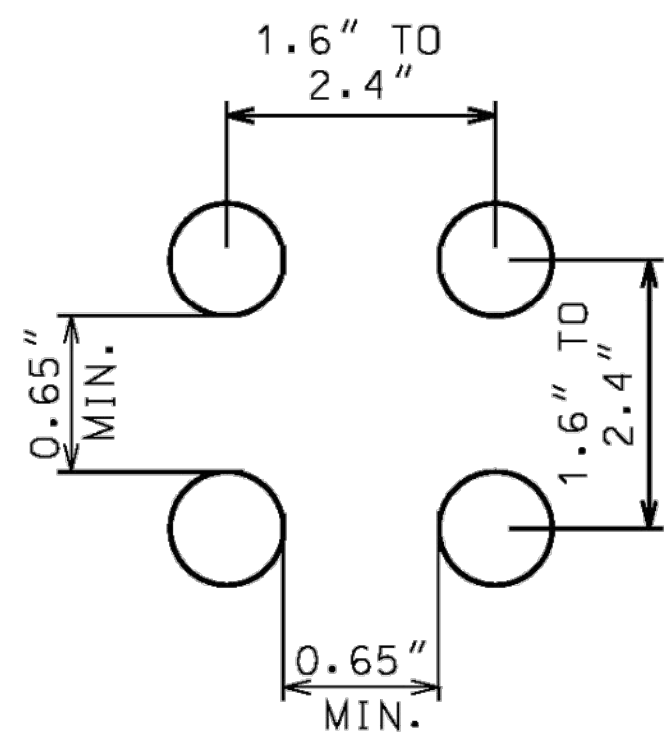
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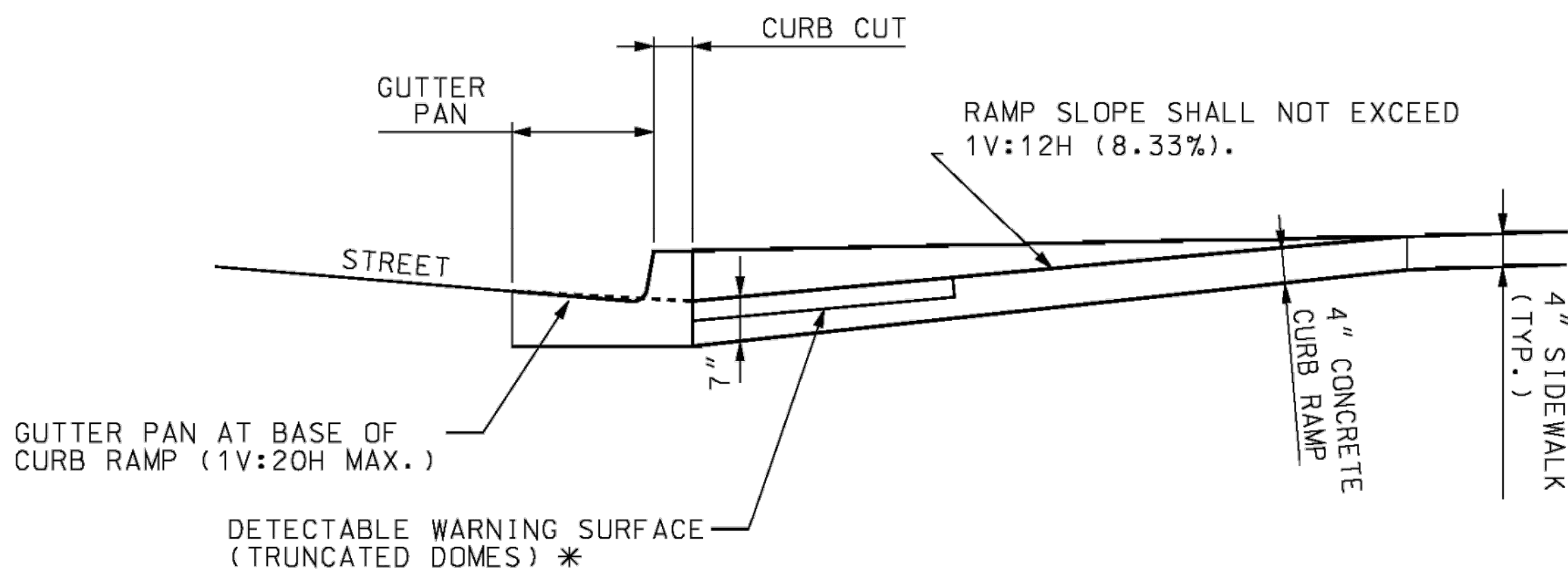
CURB RAMP DETAIL



TRUNCATED DOMES CROSS SECTION



TRUNCATED DOMES SPACING



SECTION A-A

* SOME DETECTABLE WARNING PRODUCTS REQUIRE A CONCRETE BORDER FOR PROPER INSTALLATION. THE CONCRETE BORDER SHALL NOT EXCEED 2 INCH PER SIDE.

GENERAL NOTES:

ALL AREAS OF THE PEDESTRIAN ACCESS ROUTE MUST BE COMPLIANT WITH THE AMERICANS WITH DISABILITIES ACT - GUIDELINES FOR ACCESSIBLE PUBLIC RIGHTS OF WAY". EXCEPTIONS MUST BE APPROVED BY THE ENGINEER. ALL OTHER AREAS OF NON-COMPLIANCE SHALL BE REMOVED AND CORRECTED AT THE CONTRACTOR'S EXPENSE.

THE SURFACES OF PEDESTRIAN ACCESS ROUTES AND ELEMENTS, AND SPACES REQUIRED TO CONNECT TO PEDESTRIAN ACCESS ROUTES, SHALL BE FIRM, STABLE, SLIP RESISTANT, AND SHALL NOT POND WATER.

SIDEWALK, RAMP AND LANDING CROSS SLOPES SHALL BE 1.00% TO FACILITATE DRAINAGE (2.00% MAX.).

THE CROSS SLOPE OF THE CONTINUOUS PEDESTRIAN ACCESS ROUTE THROUGH ENTRANCES, ALLEYS, AND SIDEROAD CONNECTIONS WITH STOP OR YIELD CONTROL SHALL BE 1.00% TO FACILITATE DRAINAGE (2.00% MAX.).

WHERE PEDESTRIAN ACCESS ROUTES ARE CONTAINED WITHIN PEDESTRIAN STREET CROSSINGS WITHOUT YIELD OR STOP CONTROL, THE CROSS SLOPE OF THE PEDESTRIAN ACCESS ROUTE SHALL BE 5.00% MAXIMUM.

WHERE PEDESTRIAN ACCESS ROUTES ARE CONTAINED WITHIN MIDBLOCK PEDESTRIAN STREET CROSSINGS, THE CROSS SLOPE OF THE PEDESTRIAN ACCESS ROUTE SHALL BE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.

30"x 48" CLEAR SPACE SHALL BE PROVIDED CENTERED ON THE PEDESTRIAN PUSH BUTTON.

BEYOND THE BOTTOM GRADE BREAK OF A CURB RAMP, A CLEAR SPACE 4' MINIMUM BY 4' MINIMUM SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.

SIDE FLARES OF CURB RAMP, IN THE PATH OF PEDESTRIAN TRAVEL (TRAVERSABLE), SHALL NOT EXCEED A SLOPE OF 1V:10H. SIDE FLARES OUTSIDE THE PEDESTRIAN PATH (NONTRAVERSABLE) MAY BE VERTICAL.

TRANSITION FROM SIDEWALK OR CURB RAMP TO GUTTER TO ROADWAY SHALL BE FLUSH.

DETECTABLE WARNING SURFACES (TRUNCATED DOMES) SHALL BE PREFORMED AND INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS. STAMPED CONCRETE WILL NOT BE ACCEPTED.

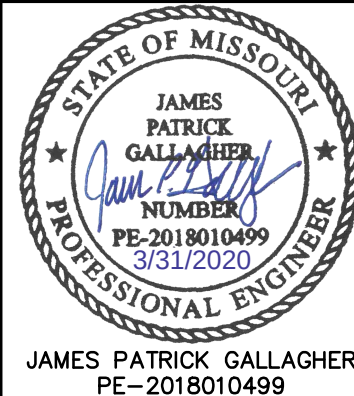
THE DETECTABLE WARNING SURFACE SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. TRUNCATED DOMES SHALL SPAN THE FULL WIDTH OF THE RAMP OR LANDING 24" DEEP.

DETECTABLE WARNING SURFACES SHALL BE ALIGNED PERPENDICULAR OR RADIAL TO THE BREAK BETWEEN THE RAMP, LANDING OR BLENDED TRANSITION, AND THE STREET.

WHERE THE BOTTOM GRADE BREAK OF A CURB RAMP IS LESS THAN 5' FROM THE BACK OF CURB, DETECTABLE WARNINGS SHALL BE LOCATED ON THE RAMP SURFACE AT THE BACK OF THE CURB. WHERE THE GRADE BREAK IS GREATER THAN 5' FROM THE BACK OF CURB, THE DETECTABLE WARNING SHALL BE LOCATED ON THE LOWER LANDING.

 MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)			
		CURB RAMPS	
DATE EFFECTIVE: 04/01/2015		SHEET NO. 1 of 4	
DATE PREPARED: 5/29/2015		608.50	

drawn by: AKU
checked by: JPG
approved by: RBC
QA/QC by: RBC
project no.: A19-2339
drawing no.: T_DTL_A192339
date: 2020.03.27



JAMES PATRICK GALLAGHER
PE-2018010499

REV. NO.	DATE	REVISIONS DESCRIPTION

STANDARD DETAILS
HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS
LEE'S SUMMIT, MO
2020



- | | | | |
|---|--|--|--|
|  | <p>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION</p> <p>105 WEST CAPITAL
JEFFERSON CITY, MO 65102</p> <p>1-888-ASK-MODOT (1-888-275-6636)</p> | | |
|  | <h1 style="margin: 0;">CURB RAMPS</h1> | | |
| <p>THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY.</p> | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;"> DATE EFFECTIVE: <u>04/01/2015</u>
 DATE PREPARED: <u>2/20/2015</u> </td> <td style="width: 50%; padding: 5px; text-align: center;"> <div style="font-size: 2em; font-weight: bold; margin: 0;">608.50</div> <div style="margin-top: 10px;"> SHEET NO.
 3 of 4 </div> </td> </tr> </table> | DATE EFFECTIVE: <u>04/01/2015</u>
DATE PREPARED: <u>2/20/2015</u> | <div style="font-size: 2em; font-weight: bold; margin: 0;">608.50</div> <div style="margin-top: 10px;"> SHEET NO.
 3 of 4 </div> |
| DATE EFFECTIVE: <u>04/01/2015</u>
DATE PREPARED: <u>2/20/2015</u> | <div style="font-size: 2em; font-weight: bold; margin: 0;">608.50</div> <div style="margin-top: 10px;"> SHEET NO.
 3 of 4 </div> | | |

TYPICAL SIDEWALK WITH PARKWAY 2' OR MORE

HALF PLAN AT BRIDGE ENDS

CONCRETE SIDEWALK JOINTS

- (1) SEE PLANS FOR WIDTH
- (2) SEE STANDARD 608.00
- (3) CURB TO BE MONOLITHIC WITH PCC MAINLINE PAVEMENT. CURB TO BE TYPE S WITH ASPHALT CONCRETE MAINLINE PAVEMENT. SEE STANDARD PLAN 609.00.
- (4) MIN. $\frac{1}{2}$ " DEPTH JOINT.
- (5) SEE TYPICAL PAVEMENT SECTION
- (6) SLOPE 1.0% (2.0% MAX.)
- (7) SPACING EQUAL TO WIDTH OF WALK

CURB CURB AND GUTTER

TYPICAL SIDEWALK WITH NO PARKWAY

GENERAL NOTES:

ALL AREAS OF THE PEDESTRIAN ACCESS ROUTE MUST BE COMPLIANT WITH THE AMERICANS WITH DISABILITIES ACT - GUIDELINES FOR ACCESSIBLE PUBLIC RIGHTS OF WAY. EXCEPTIONS MUST BE APPROVED BY THE ENGINEER. ALL OTHER AREAS OF NON-COMPLIANCE SHALL BE REMOVED AND CORRECTED AT THE CONTRACTOR'S EXPENSE.

THE SURFACES OF PEDESTRIAN ACCESS ROUTES AND ELEMENTS, AND SPACES REQUIRED TO CONNECT TO PEDESTRIAN ACCESS ROUTES, SHALL BE FIRM, STABLE, SLIP RESISTANT, AND SHALL NOT POND WATER.

WHERE SIDEWALKS ARE LESS THAN 5 FT., 5 FT. X 5 FT. PASSING SPACES EVERY 200 FT. SHALL BE PROVIDED AND ARE PERMITTED TO OVERLAP PEDESTRIAN ACCESS ROUTES.

THE CROSS SLOPE OF THE CONTINUOUS PEDESTRIAN ACCESS ROUTE THROUGH ENTRANCES, ALLEYS, AND SIDEROAD CONNECTIONS WITH STOP OR YIELD CONTROL SHALL BE 1.00% TO FACILITATE DRAINAGE (2.00% MAX.).

WHERE PEDESTRIAN ACCESS ROUTES ARE CONTAINED WITHIN PEDESTRIAN STREET CROSSINGS WITHOUT YIELD OR STOP CONTROL, THE CROSS SLOPE OF THE PEDESTRIAN ACCESS ROUTE SHALL BE 5.00% MAXIMUM.

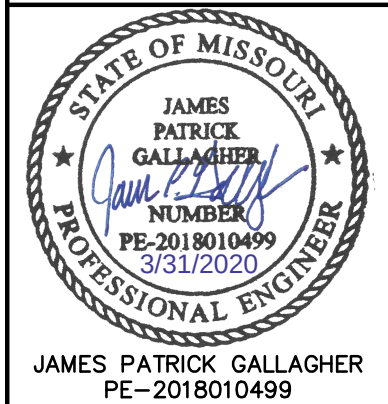
WHERE PEDESTRIAN ACCESS ROUTES ARE CONTAINED WITHIN MIDBLOCK PEDESTRIAN STREET CROSSINGS, THE CROSS SLOPE OF THE PEDESTRIAN ACCESS ROUTE SHALL BE PERMITTED TO EQUAL THE STREET OR HIGHWAY GRADE.

STORMWATER INLETS, SIGNS, POSTS, MANHOLE COVERS, PULL BOXES AND OTHER ACCESS LIDS SHOULD BE AVOIDED WITHIN THE SIDEWALK. IF SUCH A LOCATION IS NECESSARY, THE FEATURE MUST MEET ADA STANDARDS.

THE RUNNING GRADE OF A SIDEWALK SHALL NOT EXCEED 5.0%
UNLESS IT IS MATCHING THE GRADE OF THE ADJACENT ROADWAY.

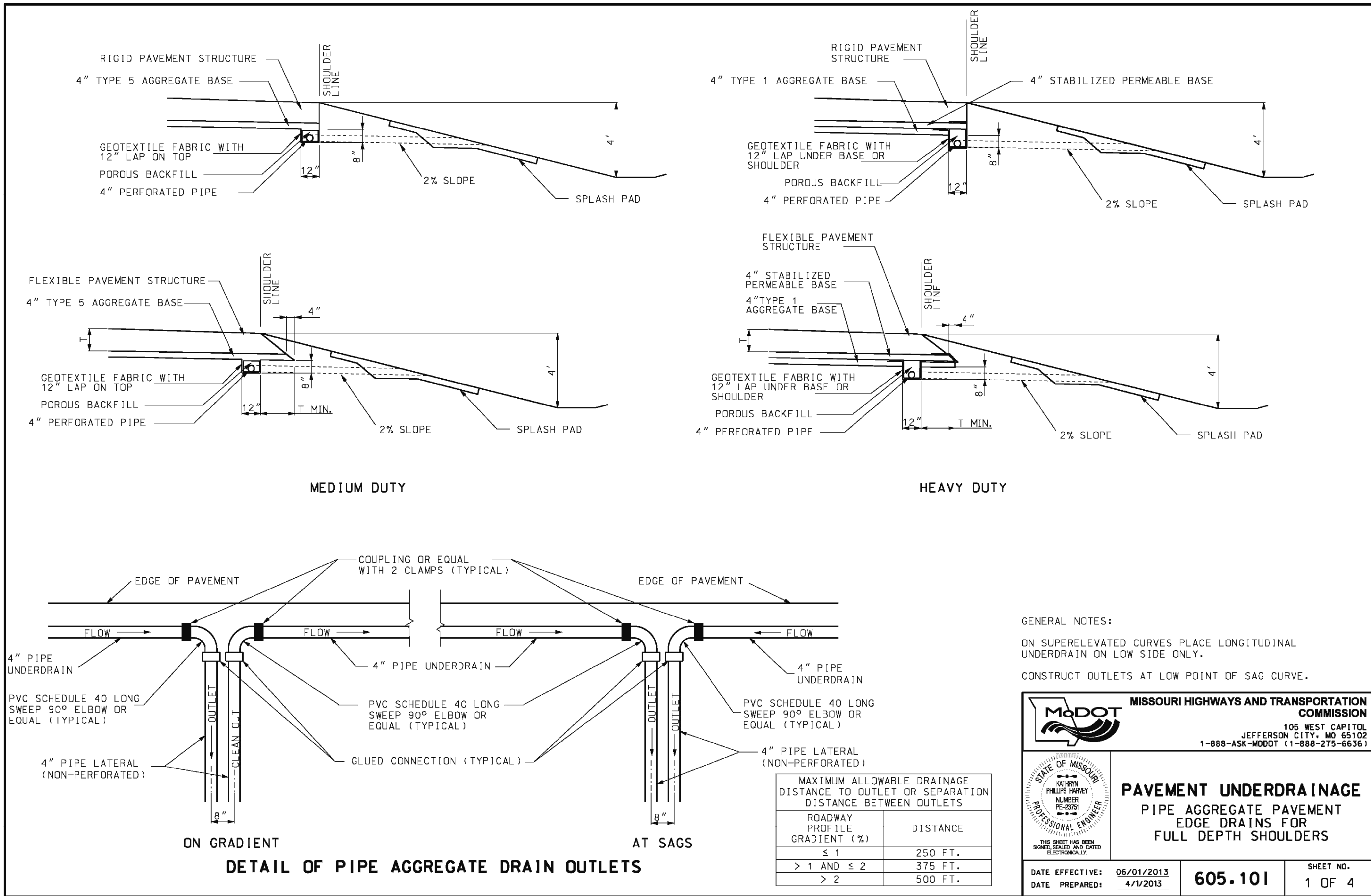
PEDESTRIAN ACCESS ROUTE SHALL CONTINUE ACROSS RESIDENTIAL AND COMMERCIAL ENTRANCES, ALLEYS, AND SIDEROAD CONNECTIONS.

		MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
	CONCRETE SIDEWALK		
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.		DATE EFFECTIVE: <u>04/01/2015</u>	DATE PREPARED: <u>2/20/2015</u>
		608.10P	SHEET NO. 1 OF 1



STANDARD DETAILS		REV. NO.	DATE	REVISIONS DESCRIPTION	BY
HIGHWAY 150 & PRYOR ROAD ROADWAY IMPROVEMENTS					
LEE'S SUMMIT, MO		2020	REVISIONS		

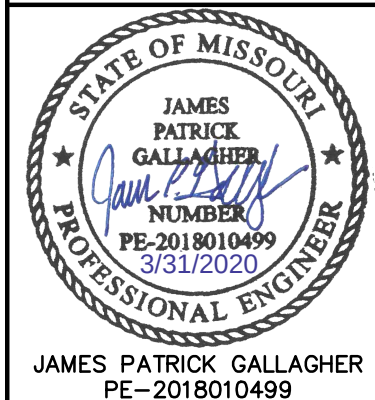
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DATE: Mar 31, 2020 7:49pm
USER: jgallagher
XREFS: T_PBL_A192339



IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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JAMES PATRICK GALLAGHER
PE-2018010499

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

2020

STANDARD DETAILS
HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS
LEE'S SUMMIT, MO

drawn by: AKU
checked by: JPG
approved by: RBC
QA/QC by: RBC
project no.: A19-2339
drawing no.: T_DTL_A192339
date: 2020.03.27

SHEET
24 of 53

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

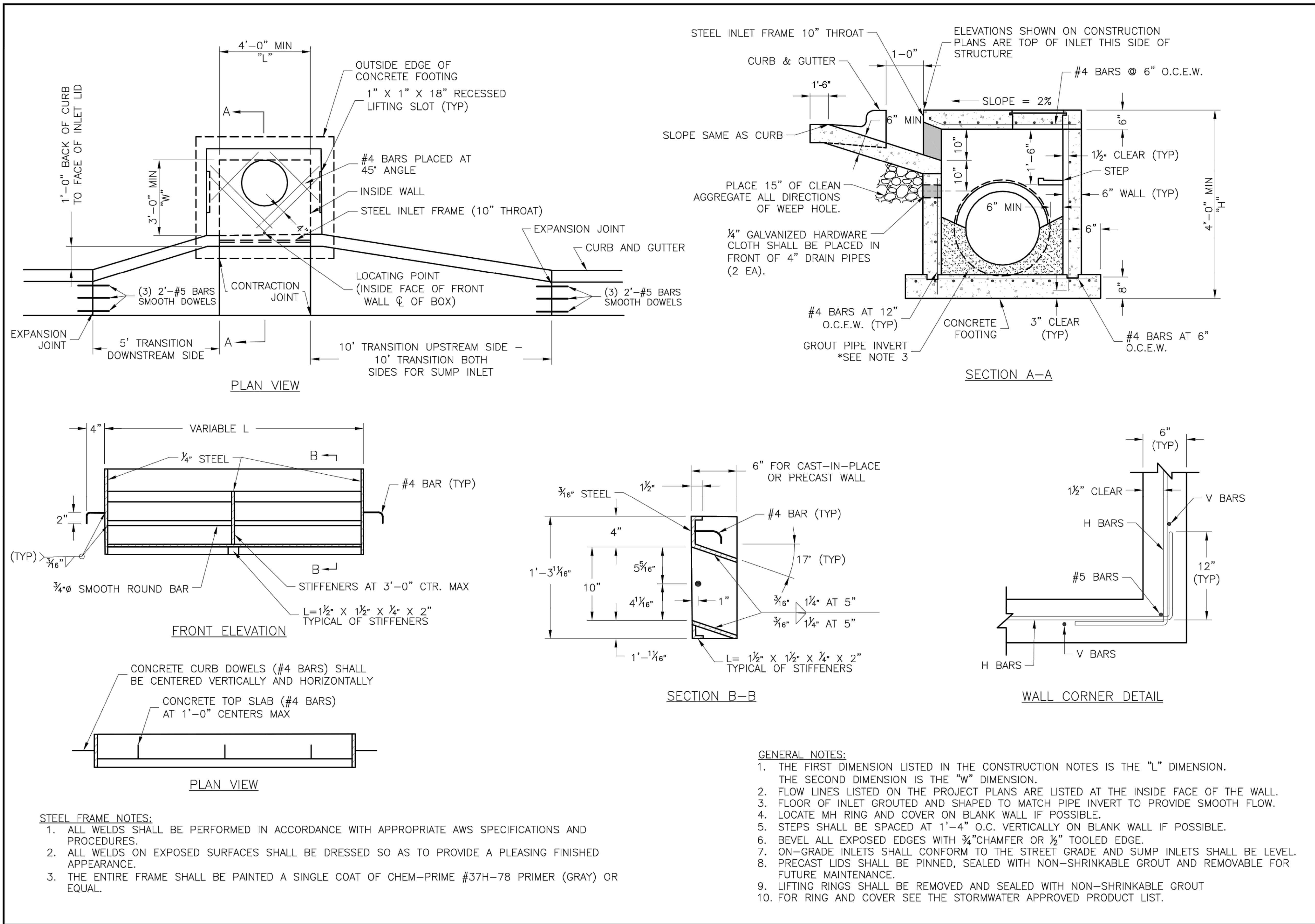
PAVEMENT UNDERDRAINAGE
PIPE AGGREGATE PAVEMENT
EDGE DRAINS FOR
FULL DEPTH SHOULDERS

DATE EFFECTIVE: 06/01/2013
DATE PREPARED: 4/1/2013

605.101

SHEET NO.
1 OF 4

DWG: F:\2019\2001-2500\019-2339-A19-Design\AutoCAD\Final Plans\Sheets\STANDARD DETAILS\T_DTL_A192339.dwg
DATE: Mar 31, 2020 7:49pm
USER: jgallagher
XREFS: T_PTBLC_A192339



- STEEL FRAME NOTES:**
1. ALL WELDS SHALL BE PERFORMED IN ACCORDANCE WITH APPROPRIATE AWS SPECIFICATIONS AND PROCEDURES.
 2. ALL WELDS ON EXPOSED SURFACES SHALL BE DRESSED SO AS TO PROVIDE A PLEASING FINISHED APPEARANCE.
 3. THE ENTIRE FRAME SHALL BE PAINTED A SINGLE COAT OF CHEM-PRIME #37H-78 PRIMER (GRAY) OR EQUAL.

- GENERAL NOTES:**
1. THE FIRST DIMENSION LISTED IN THE CONSTRUCTION NOTES IS THE "L" DIMENSION. THE SECOND DIMENSION IS THE "W" DIMENSION.
 2. FLOW LINES LISTED ON THE PROJECT PLANS ARE LISTED AT THE INSIDE FACE OF THE WALL.
 3. FLOOR OF INLET GROUTED AND SHAPED TO MATCH PIPE INVERT TO PROVIDE SMOOTH FLOW.
 4. LOCATE MH RING AND COVER ON BLANK WALL IF POSSIBLE.
 5. STEPS SHALL BE SPACED AT 1'-4" O.C. VERTICALLY ON BLANK WALL IF POSSIBLE.
 6. BEVEL ALL EXPOSED EDGES WITH 3/4" CHAMFER OR 1/2" TOOLED EDGE.
 7. ON-GRADE INLETS SHALL CONFORM TO THE STREET GRADE AND SUMP INLETS SHALL BE LEVEL.
 8. PRECAST LIDS SHALL BE PINNED, SEALED WITH NON-SHRINKABLE GROUT AND REMOVABLE FOR FUTURE MAINTENANCE.
 9. LIFTING RINGS SHALL BE REMOVED AND SEALED WITH NON-SHRINKABLE GROUT
 10. FOR RING AND COVER SEE THE STORMWATER APPROVED PRODUCT LIST.

LEE'S SUMMIT
MISSOURI

STANDARD DETAILS
CITY OF LEE'S SUMMIT, MO
LEE'S SUMMIT, JACKSON COUNTY, MO

Project:
Sheet Name:

Public Works Engineering Division | 220 SE Green Street | Lee's Summit, MO 64063

Drawn By: MJF
Checked By: DL
Date: 04/17
Proj. #:

STM-1

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STATE OF MISSOURI
JAMES PATRICK GALLAGHER
Professional Engineer
PE-2018010499
3/31/2020

BY
REVISIONS DESCRIPTION
DATE
REV. NO.

REVISIONS
2020

STORM SEWER DETAILS

HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS

LEE'S SUMMIT, MO



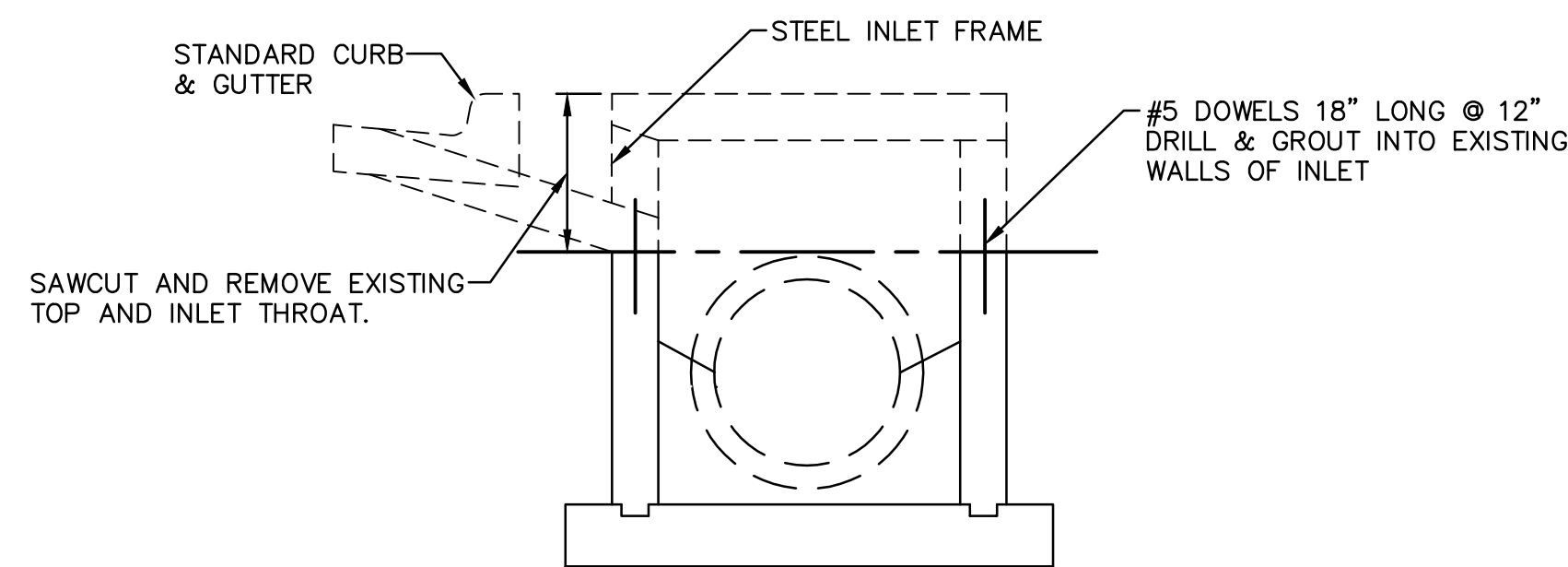
*COVER AND FRAME MODEL INFORMATION REFER TO THE STORMWATER APPROVED PRODUCT LIST.

STM-6

[illegible]

		(c)
		(c)

date: 2020.03.2



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- The seal is circular with a double-line border. The outer ring contains the text "STATE OF MISSOURI" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The center of the seal contains the name "JAMES PATRICK GALLAGHER" in a serif font. Below the name is a handwritten signature in blue ink. Underneath the signature is the word "NUMBER" in a sans-serif font, followed by the license number "PE-2018010499" and the expiration date "3/31/2020" in a blue sans-serif font.

[illegible]

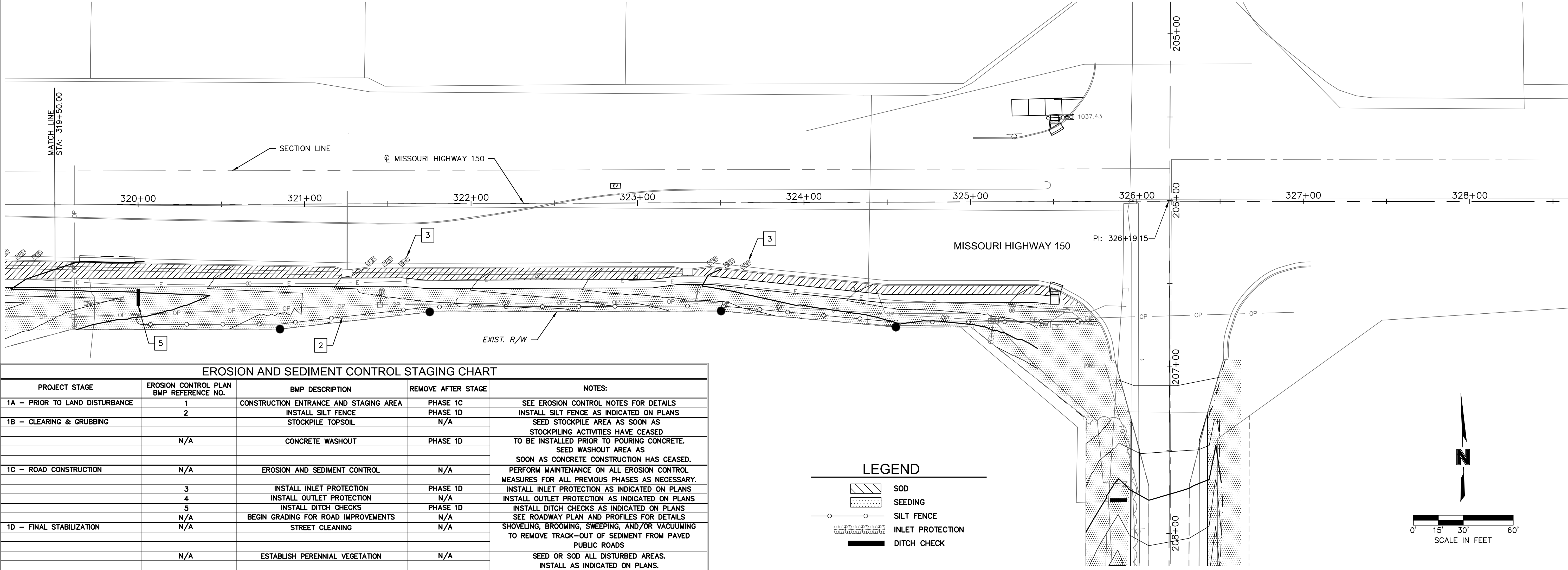
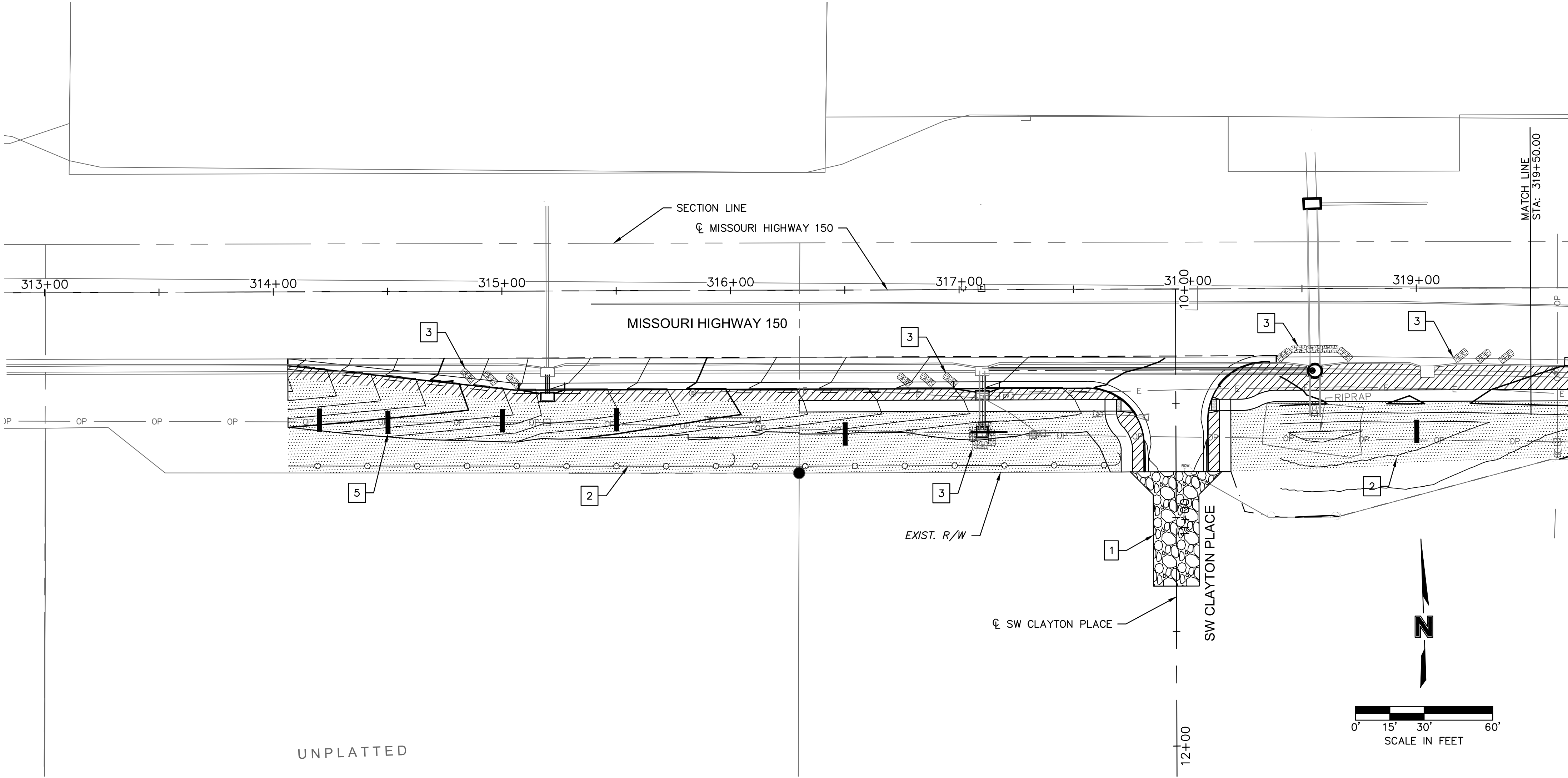
STORM SEWER DETAILS	
HIGHWAY 150 & PRYOR ROAD ROADWAY IMPROVEMENTS	
LEE'S SUMMIT, MO	2020

drawn by: _____ AKU
checked by: _____ JPG
approved by: _____ JPG
QA/QC by: _____ RBC
project no.: _____ A19-2339
drawing no.: _____ T DTL A192339
date: _____ 2020.03.27

DWG: F:\2019\2001-2500\019-2339-A\40-Design\AutoCAD\Final\Plans\Sheets\BDR\EROSION_CONTROL\T_ERC_A192339.dwg
DATE: May 31, 2020 7:49pm XREFS: T_PBASE_A192339 T_PBASE_A192339 C_XBASE_A192339 USER: jgallagher

EROSION CONTROL NOTES

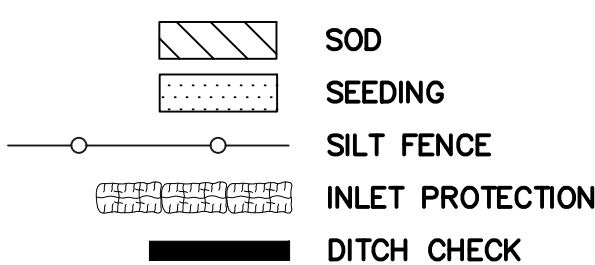
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION & SEDIMENT CONTROL MEASURES AND PRACTICES THROUGHOUT THE PROJECT INCLUDING ANY AND ALL FINES ASSOCIATED WITH EROSION CONTROL VIOLATIONS.
2. EROSION CONTROL IS THE CONTRACTOR'S RESPONSIBILITY. THIS PLAN SHOULD BE USED AS A GUIDE AND REPRESENTS THE MINIMUM EROSION CONTROL DEVICES REQUIRED.
3. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
4. CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND REPAIRING ALL EROSION AND SEDIMENT CONTROL DEVICES AFTER EACH RAINFALL EVENT.
5. THE CONTRACTOR SHALL PROVIDE ANY FURTHER EROSION CONTROL MEASURES IN ADDITION TO THOSE LISTED TO ENSURE THAT SILT WILL NOT LEAVE THE PROJECT CONFINES.
6. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED WITH A HEALTHY STAND OF PERMANENT VEGETATION.
7. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AT COMPLETION OF CONSTRUCTION.
8. THE CONTRACTOR SHALL ENSURE THAT ALL DRAINAGE STRUCTURES, FLUMES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
9. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY STABILIZATION AS REQUIRED.
10. THE CONTRACTOR SHALL PROVIDE A TEMPORARY CONSTRUCTION ENTRANCE/EXIT FOR VEHICULAR TRAFFIC AT LOCATION SHOWN.
11. ALL EROSION CONTROL DEVICES SHALL CONFORM TO THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND DESIGN CRITERIA OF THE ENGINEERING DIVISION, DEPARTMENT OF PUBLIC WORKS, CITY OF SPRINGFIELD, MISSOURI.
12. REFERENCE DETAILS THIS SHEET FOR TYPICAL EROSION CONTROL DEVICE INSTALLATION.
13. THE CONTRACTOR WILL BE REQUIRED TO CLEAN THE STREETS OF DEPOSITED MUD AS FREQUENTLY AS NEEDED AS DETERMINED BY THE ENGINEER TO KEEP THEM USABLE AND TO CONTROL DUST.
14. PRIOR TO GRADING ACTIVITIES, CONTRACTOR MUST HAVE TEMPORARY BMP'S INSPECTED BY THE CITY.
15. AREAS STRIPPED OF VEGETATION THAT ARE LEFT EXPOSED FOR MORE THAN 14 DAYS SHALL BE TEMPORARILY SEEDED OR MULCHED TO PREVENT EROSION. IF MULCHED, CONTRACTOR SHALL CRIMP THE MULCH INTO THE EXPOSED GROUND.
16. THE CONTRACTOR SHALL PROTECT ALL STORM SEWER STRUCTURES WITH COMPOST FILTER SOCK IN LIEU OF GRAVEL FILTER BAGS UNTIL GRASS IS ESTABLISHED.
17. ALL DISTURBED AREAS NOT RECEIVING OTHER PERMANENT STABILIZATION SUCH AS PAVEMENT, ROOFS, SOD, ETC., SHALL BE SODDED OR SEEDED AND MULCHED, ACCORDING TO THE STANDARD SPECIFICATIONS AND DESIGN CRITERIA OF THE ENGINEERING DIVISION, DEPARTMENT OF PUBLIC WORKS, CITY OF LEE'S SUMMIT, MISSOURI.
18. CONTRACTOR IS RESPONSIBLE FOR PHASED INSTALLATION OF EROSION CONTROL BMP'S IN ORDER TO PREVENT SEDIMENT FROM BREACHING THE LIMITS OF DISTURBANCE.



EROSION AND SEDIMENT CONTROL STAGING CHART

PROJECT STAGE	EROSION CONTROL PLAN BMP REFERENCE NO.	BMP DESCRIPTION	REMOVE AFTER STAGE	NOTES:
1A - PRIOR TO LAND DISTURBANCE	1	CONSTRUCTION ENTRANCE AND STAGING AREA	PHASE 1C	SEE EROSION CONTROL NOTES FOR DETAILS
1B - CLEARING & GRUBBING	2	INSTALL SILT FENCE	PHASE 1D	INSTALL SILT FENCE AS INDICATED ON PLANS
		STOCKPILE TOPSOIL	N/A	SEED STOCKPILE AREA AS SOON AS STOCKPILING ACTIVITIES HAVE CEASED
	N/A	CONCRETE WASHOUT	PHASE 1D	TO BE INSTALLED PRIOR TO POURING CONCRETE. SEED WASHOUT AREA AS SOON AS CONCRETE CONSTRUCTION HAS CEASED.
1C - ROAD CONSTRUCTION	N/A	EROSION AND SEDIMENT CONTROL	N/A	PERFORM MAINTENANCE ON ALL EROSION CONTROL MEASURES FOR ALL PREVIOUS PHASES AS NECESSARY.
	3	INSTALL INLET PROTECTION	PHASE 1D	INSTALL INLET PROTECTION AS INDICATED ON PLANS
	4	INSTALL OUTLET PROTECTION	N/A	INSTALL OUTLET PROTECTION AS INDICATED ON PLANS
	5	INSTALL DITCH CHECKS	PHASE 1D	INSTALL DITCH CHECKS AS INDICATED ON PLANS
	N/A	BEGIN GRADING FOR ROAD IMPROVEMENTS	N/A	SEE ROADWAY PLAN AND PROFILES FOR DETAILS
1D - FINAL STABILIZATION	N/A	STREET CLEANING	N/A	SHOVELING, BROOMING, SWEEPING, AND/OR VACUUMING TO REMOVE TRACK-OUT OF SEDIMENT FROM PAVED PUBLIC ROADS
	N/A	ESTABLISH PERENNIAL VEGETATION	N/A	SEED OR SOD ALL DISTURBED AREAS. INSTALL AS INDICATED ON PLANS.

LEGEND



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STATE OF MISSOURI
JAMES PATRICK GALLAGHER
PE-2018010499
3/31/2020
PROFESSIONAL ENGINEER

JAMES PATRICK GALLAGHER
PE-2018010499

BY

REVISIONS DESCRIPTION

DATE

REV. NO.

EROSION CONTROL PLAN

HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS

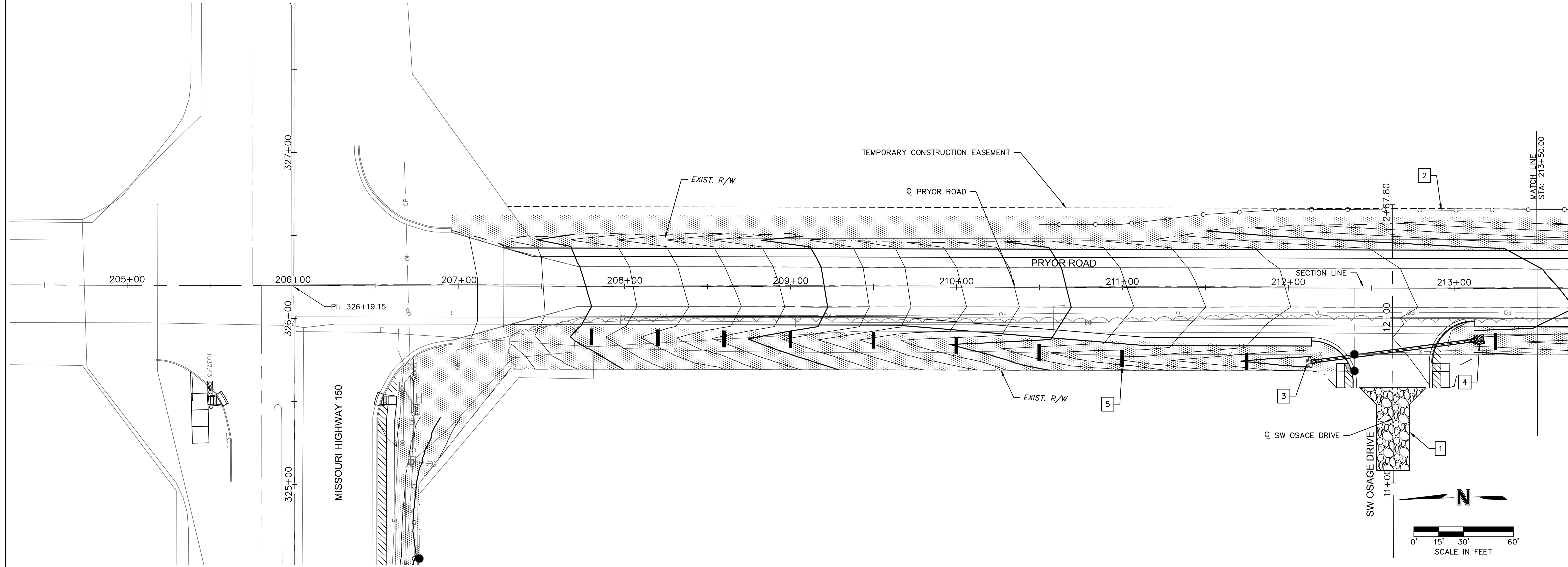
LEE'S SUMMIT, MO

2020

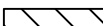
drawn by: AKU
checked by: JFG
approved by: JFG
QA/QC by: RBC
project no.: A19-2339
drawing no.: T_ERC_A192339
date: 2020.03.27

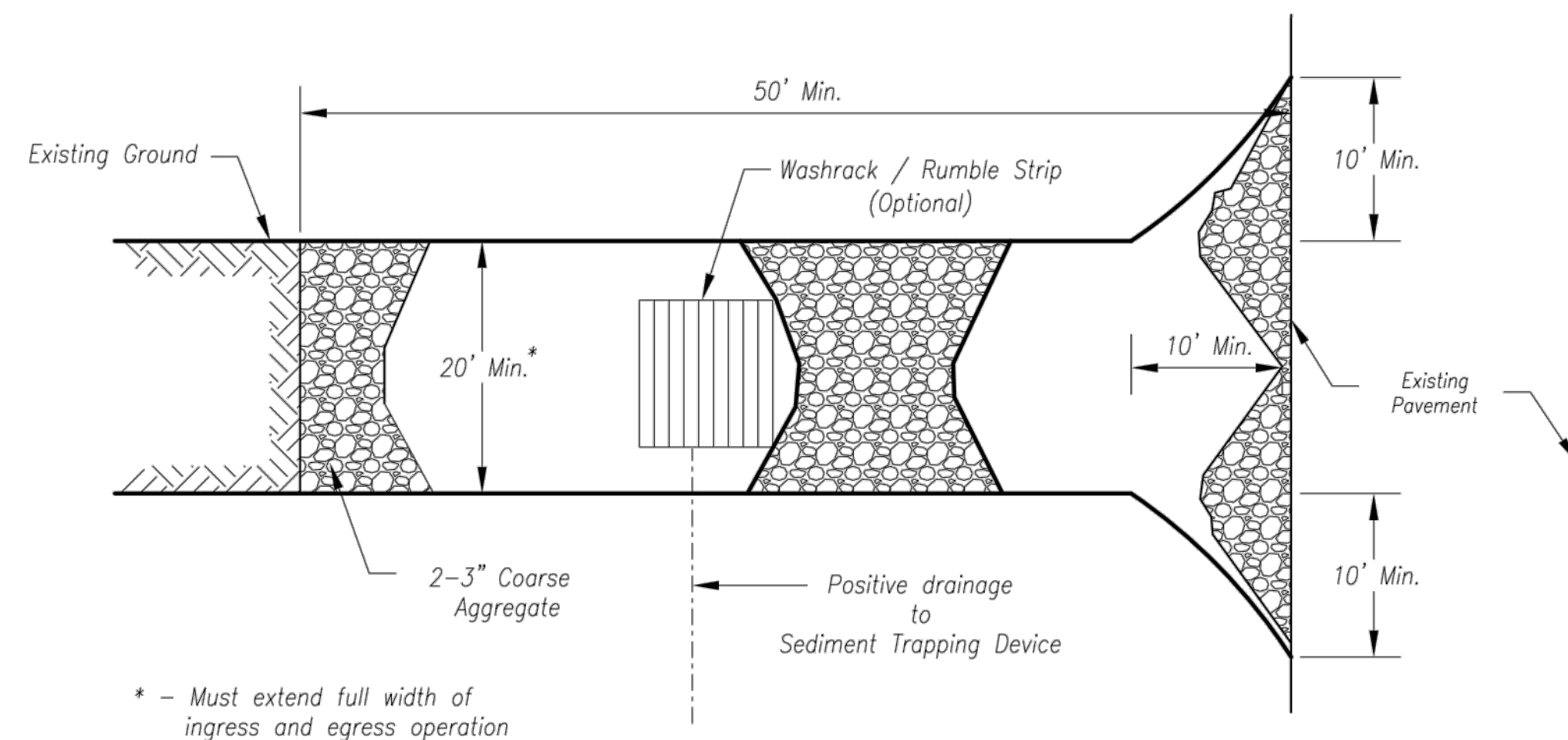
SHEET

28 of 53

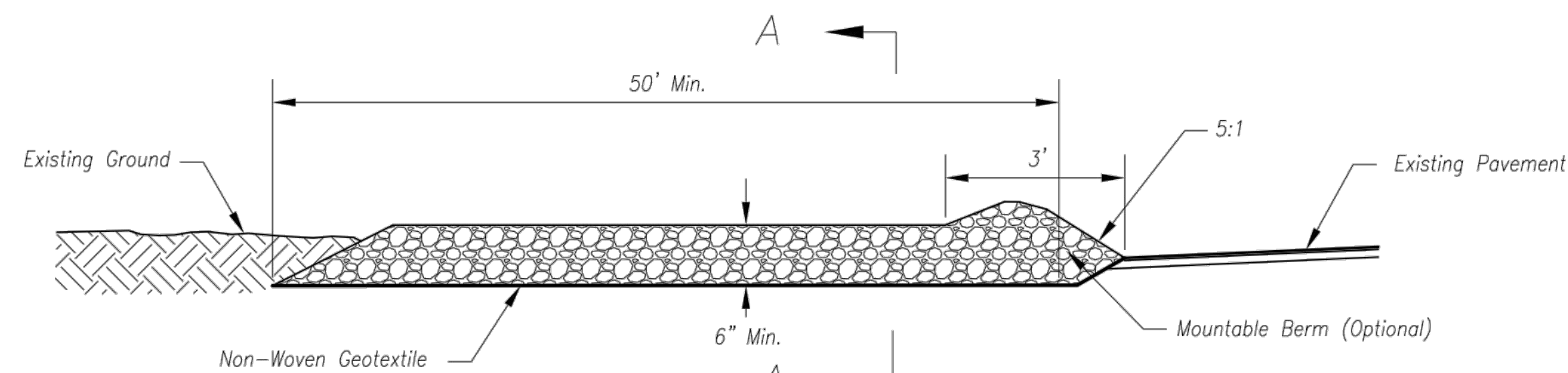


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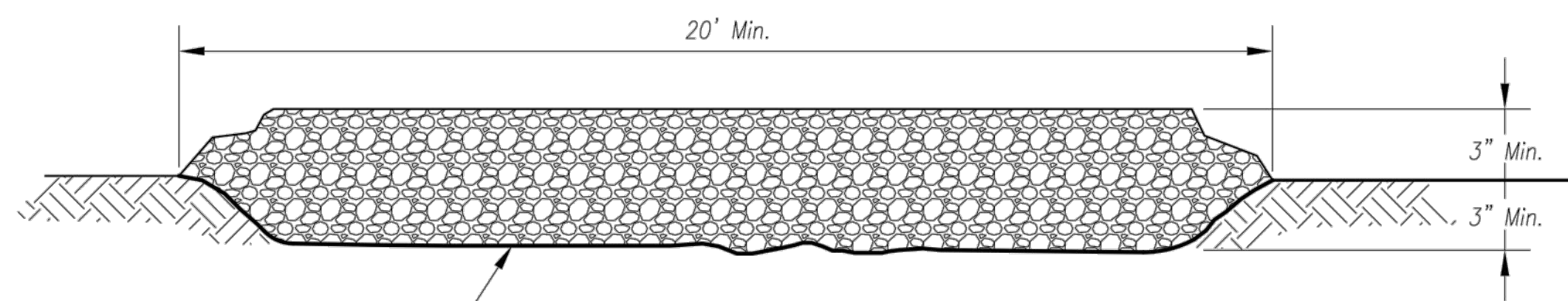
	SOD
	SEEDING
	SILT FENCE
	INLET PROTECTION
	DITCH CHECK



Plan View
Not to Scale



Side Elevation
Not to Scale



Section A-A
Not to Scale

Notes for Construction Entrance:

1. Avoid locating on steep slopes, at curves on public roads, or downhill of disturbed area.
2. Remove all vegetation and other unsuitable material from the foundation area, grade, and crown for positive drainage.
3. If slope towards the public road exceeds 2%, construct a 6- to 8-inch high ridge with 3H:1V side slopes across the foundation approximately 15 feet from the edge of the public road to divert runoff from it.
4. Install pipe under the entrance if needed to maintain drainage ditches along public roads.
5. Place stone to dimensions and grade as shown on plans. Leave surface sloped for drainage.
6. Divert all surface runoff and drainage from the entrance to a sediment control device.
7. If conditions warrant, place geotextile fabric on the graded foundation to improve stability.

Maintenance for Construction Entrance:

1. Reshape entrance as needed to maintain function and integrity of Installation. Top dress with clean aggregate as needed.

CONSTRUCTION ENTRANCE

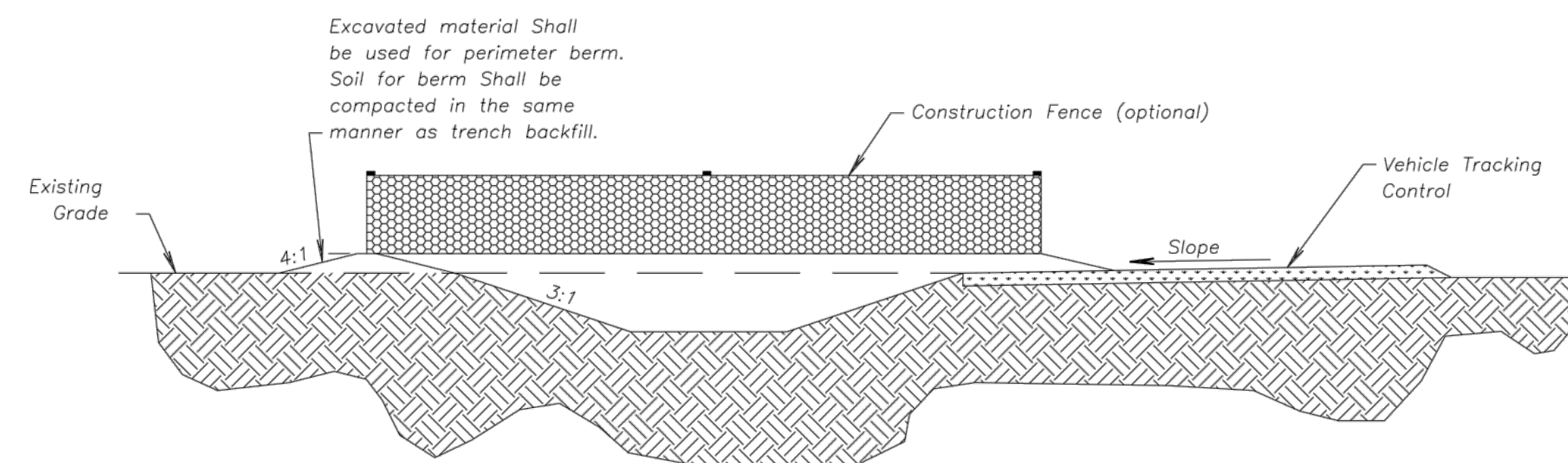
Construction Entrance modified from 2015 Overland Park Standard Details for Erosion and Sediment Control; Concrete Washout modified from 2009 City of Great Bend Standard Drawings.

Notes for Concrete Washout:

1. Concrete washout areas shall be installed prior to any concrete placement on site.
2. Concrete washout area shall include a flat subsurface pit sized relative to the amount of concrete to be placed on site. The slopes leading out of the subsurface pit shall be 3:1. The vehicle tracking pad shall be sloped towards the concrete washout area.
3. Vehicle tracking control is required at the access point to all concrete washout areas.
4. Signs shall be placed at the construction site entrance, washout area and elsewhere as necessary to clearly indicate the location(s) of the concrete washout area(s) to operators of concrete truck and pump rigs.
5. A one-piece impervious liner may be required along the bottom and sides of the subsurface pit in sandy or gravelly soils.

Maintenance for Concrete Washout:

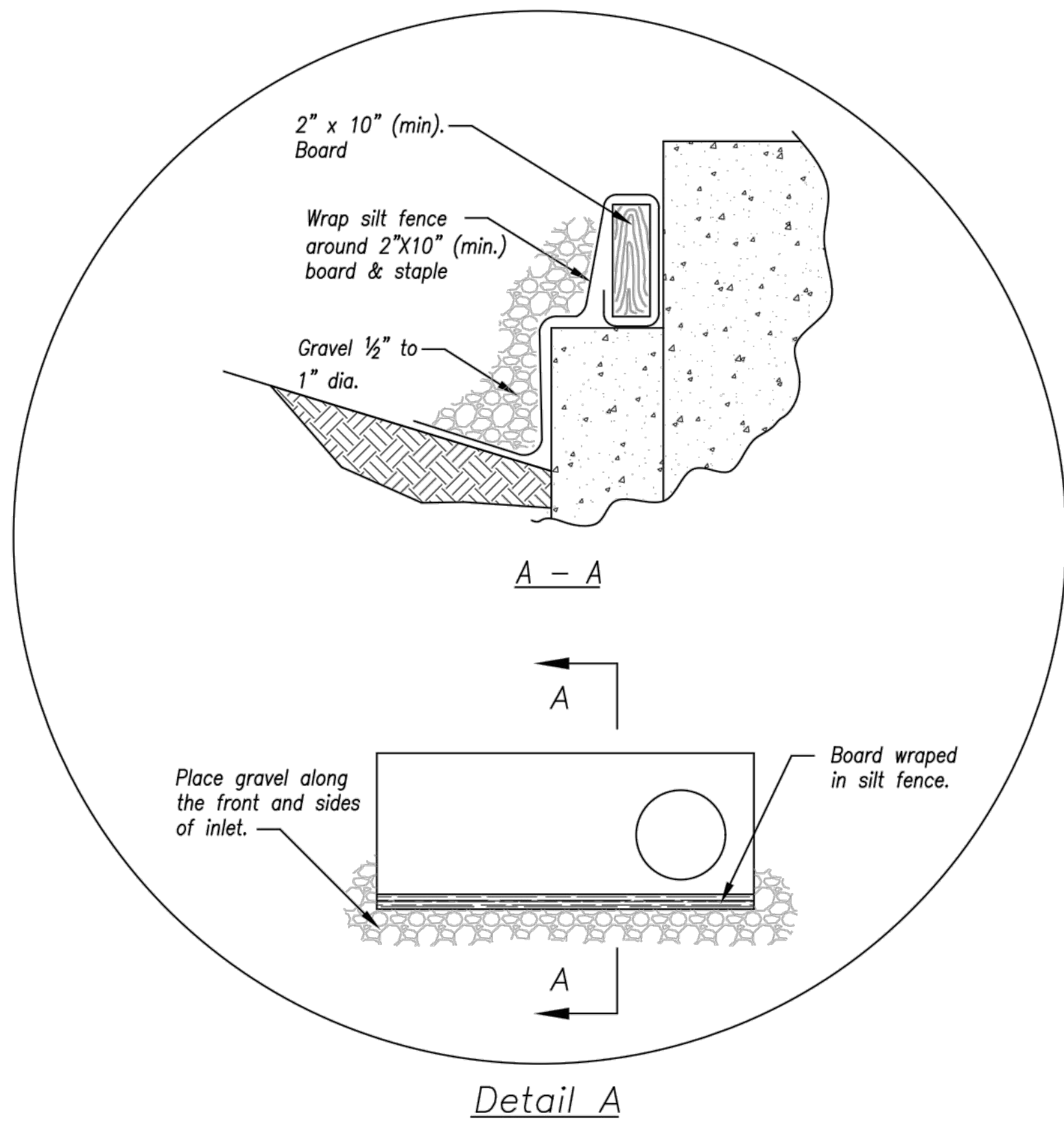
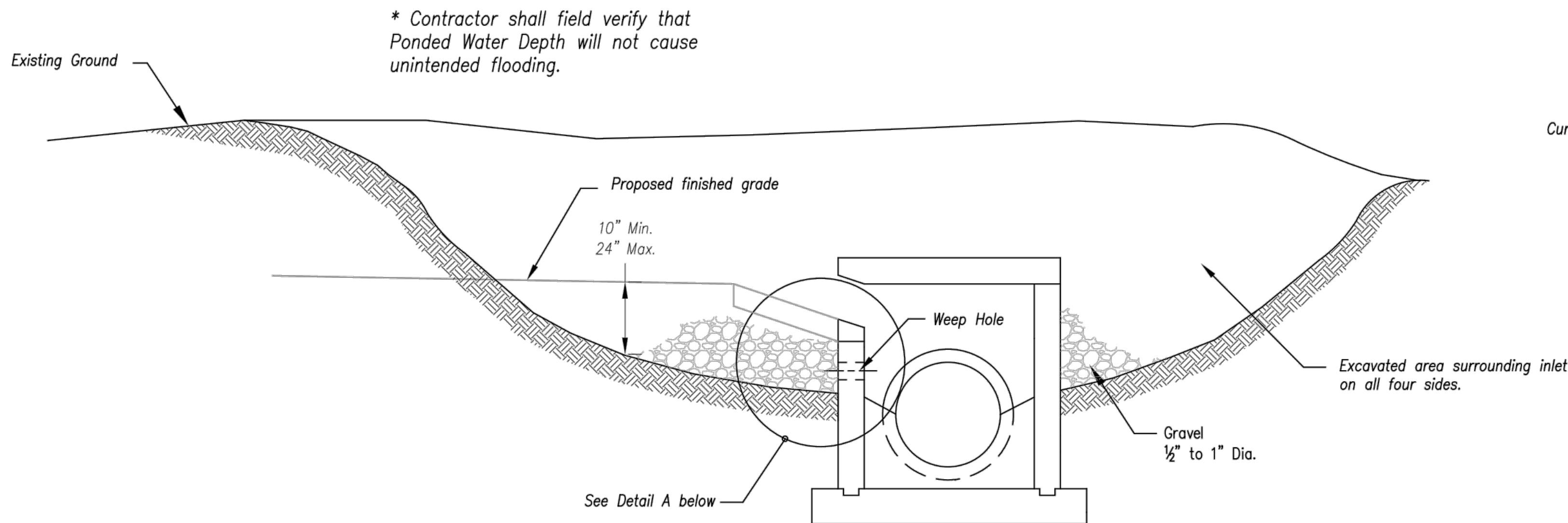
1. Concrete washout materials shall be removed once the materials have filled the washout to approximately 75% full.
2. Concrete washout areas shall be enlarged as necessary to maintain capacity for wasted concrete.
3. Concrete washout water, washed pieces of concrete and all other debris in the subsurface pit shall be transported from the job site in a water-tight container and disposed of properly.
4. Concrete washout areas shall remain in place until all concrete for the project is placed.
5. When concrete washout areas are removed, excavations shall be filled with suitable compacted backfill and topsoil, any disturbed areas associated with the installation, maintenance, and/or removal of the concrete washout areas shall be stabilized.



CONCRETE WASHOUT

AMERICAN PUBLIC WORKS ASSOCIATION	
	KANSAS CITY METRO CHAPTER
CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT	STANDARD DRAWING NUMBER ESC-01 ADOPTED: 10/24/2016

DWG: F:\2019\2001-2500\019-2339-A19-Design\AutoCAD\Final Plans\Sheets\BDR\EROSION_CONTROL\T_ERC_A192339.dwg
DATE: Mar 31, 2020 7:49pm
USER: jgallagher
T_PBLK_A192339
C_XBASE_A192339
XREFS: T_PBASE_A192339



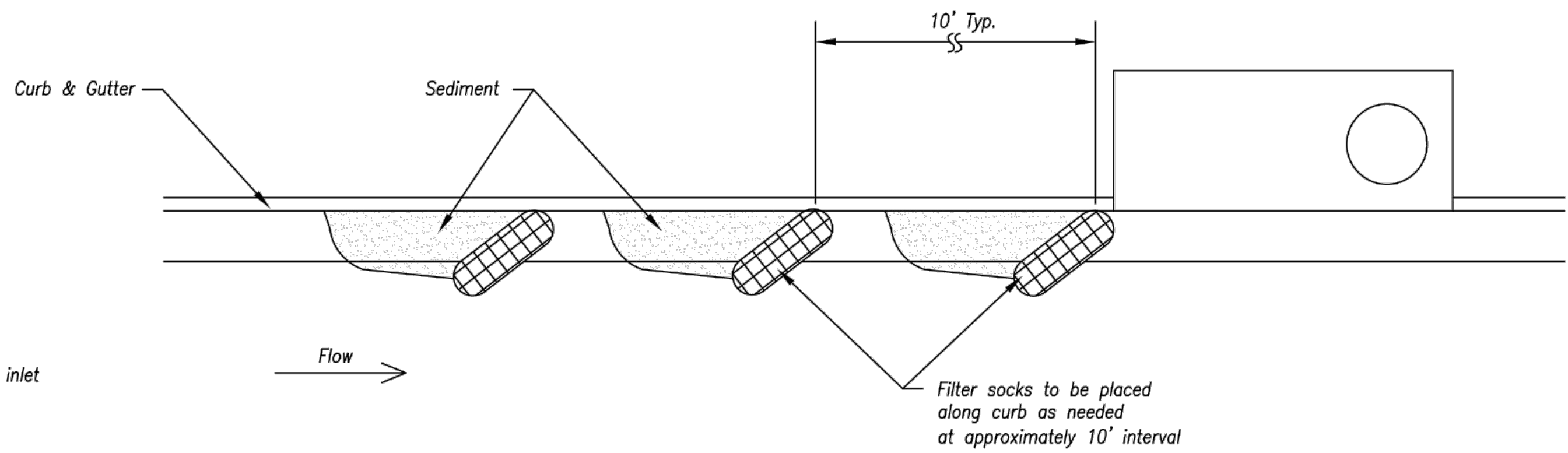
EARLY STAGE CURB INLET
(Open Box and Prior to Pouring Curb and Inlet Throat)

Notes:

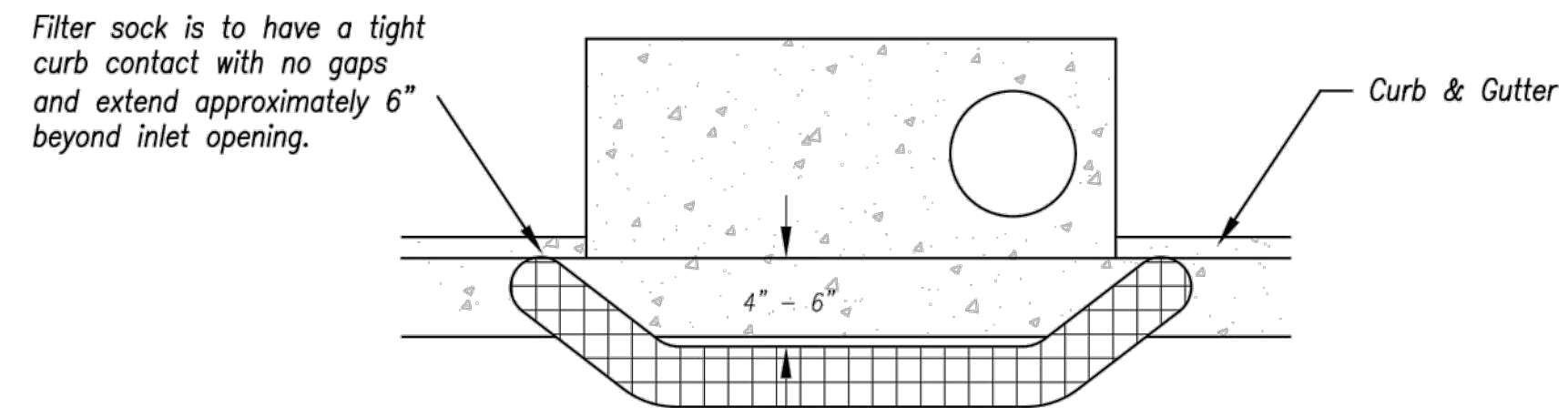
1. Immediately following inlet construction and prior to construction of curb and inlet throat, protect inlet opening by installing 2" X 10" (min.) board wrapped in silt fence. Structures shall have excavated storage area on all four sides to allow settling of sediment (Early Stage Curb Inlet).
2. When inlet is completed and curb poured, filter socks or approved equal should be used (Late Stage Curb Inlet). Straw wattles are not approved for curb inlet use.
3. Contractor to field verify ponding water shall not create a traffic hazard.

Maintenance:

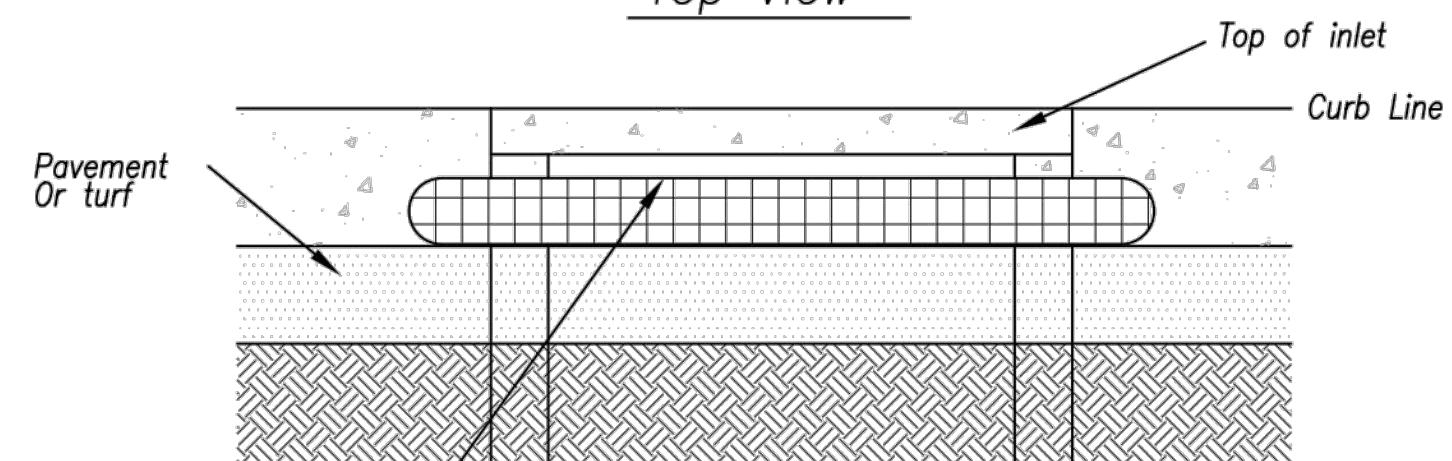
1. Remove deposited sediment from excavated storage areas when available storage has been reduced by 20%.
2. Remove deposited sediment from filter socks or similar when any accumulation of sediment is visible.
3. Repair or replace as necessary to maintain function and integrity of installation.



On Grade Curb Inlet Protection



Top View



Front View

Sump Inlet Sediment Filter

LATE STAGE CURB INLET
(After Pouring Curb and Inlet Throat)

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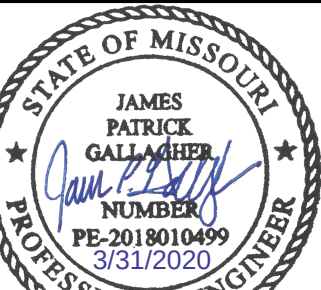


KANSAS CITY
METRO CHAPTER

CURB INLET PROTECTION

STANDARD DRAWING
NUMBER ESC-06
ADOPTED:
10/24/2016

Modified from 2015 Overland Park Standard Details
for Erosion and Sediment Control.



JAMES PATRICK GALLAGHER
PE-2018010499

BY

REVISIONS DESCRIPTION

DATE

REV. NO.

2020

EROSION CONTROL DETAILS

HIGHWAY 150 & PRYOR ROAD

ROADWAY IMPROVEMENTS

LEE'S SUMMIT, MO

2020

REVISIONS

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Plan
Not to Scale



1. Stakes shall be 4' (min.) long and one of the following materials:
 - a. Hardwood - 1 $\frac{3}{8}$ " x 1 $\frac{3}{8}$ ";
 - b. Southern Pine (No. 2) - 2 $\frac{3}{8}$ " x 2 $\frac{3}{8}$ ";
 - c. Steel U, T, L, or C Section - .95 lbs. per 1'-0";
 - d. Synthetic - same strength as wood stakes.
2. Cross pieces shall be of same material as stakes.
3. Attach fence fabric securely on 6" centers (max.).
4. Use of high flow material is acceptable.
5. Refer to plan sheets to estimate the length of silt fence required.
6. Use support fencing when tributary area is greater than 2.4 acres or when ditch gradient is greater than 2 percent.
7. Silt fence sliced in to a 6" minimum depth.
8. Elevation at tie in points shall be a minimum of 4" higher than the center.



Alternative Type
Ditch Check Spacing



NO SCALE



1. Use as many biodegradable log sections as necessary to ensure water does not flow around end of ditch check.
2. Overlap sections a minimum of 18"
3. Stakes shall be per manufacturer's instructions. Length of stakes shall be a minimum of 2 times the diameter of the log or 24" minimum.
4. Use Erosion Control (Class 1) (Type C) as the downstream apron when directed by the Engineer.
5. Use 9" diameter logs when used with Erosion Control (Class 2) (Any Type) channel lining. Smaller diameter logs may be used with Erosion Control (Class 2) (Any Type) channel lining as directed by the Engineer.



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APWA
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KANSAS CITY
METRO CHAPTER

SILT FENCE AND WATTLE/
BIODEGRADABLE LOG
DITCH CHECKS

STANDARD DRAWING NUMBER ESC-09
ADOPTED: 10/24/2016

Drawn by: AKU
Checked by: JPG
Approved by: JPG
A/QC by: RBC
Project no.: A19-2339
Drawing no.: T ERC A192339
Date: 2020.03.27

SHEET
4 of 53

USER: jgallagher

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DATE: Mar 31, 2020 7:49pm XREFS: T_PBASE_A192339 T_PTBLK_A192339 C_XBASE_A192339

STATE OF MISSOURI
JAMES
PATRICK
GALLAGHER
NUMBER
PE-2018010499
3/31/2020
PROFESSIONAL ENGINEER

JAMES PATRICK GALLAGHER
PE-2018010499

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EROSION CONTROL DETAILS

HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS

LEE'S SUMMIT, MO

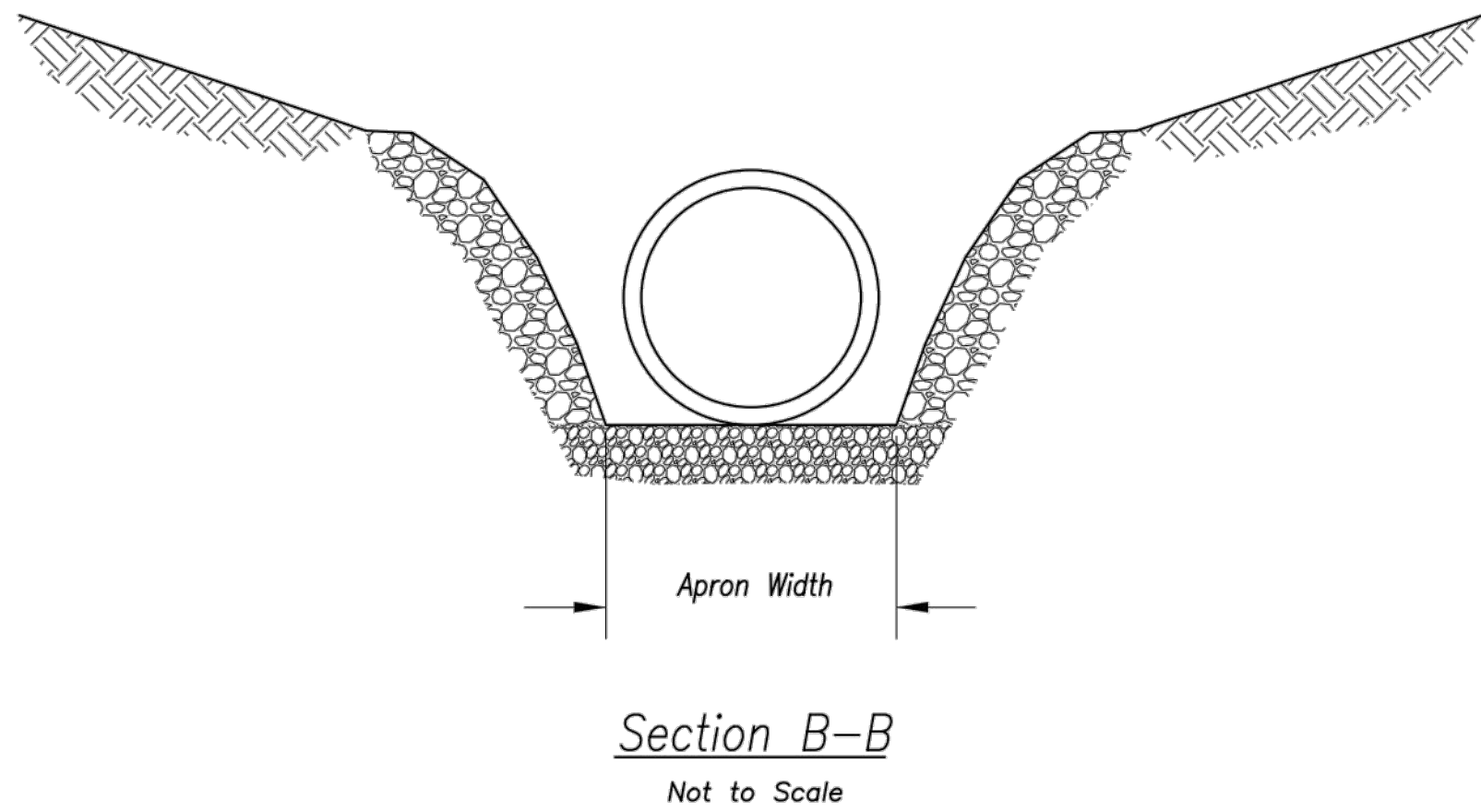
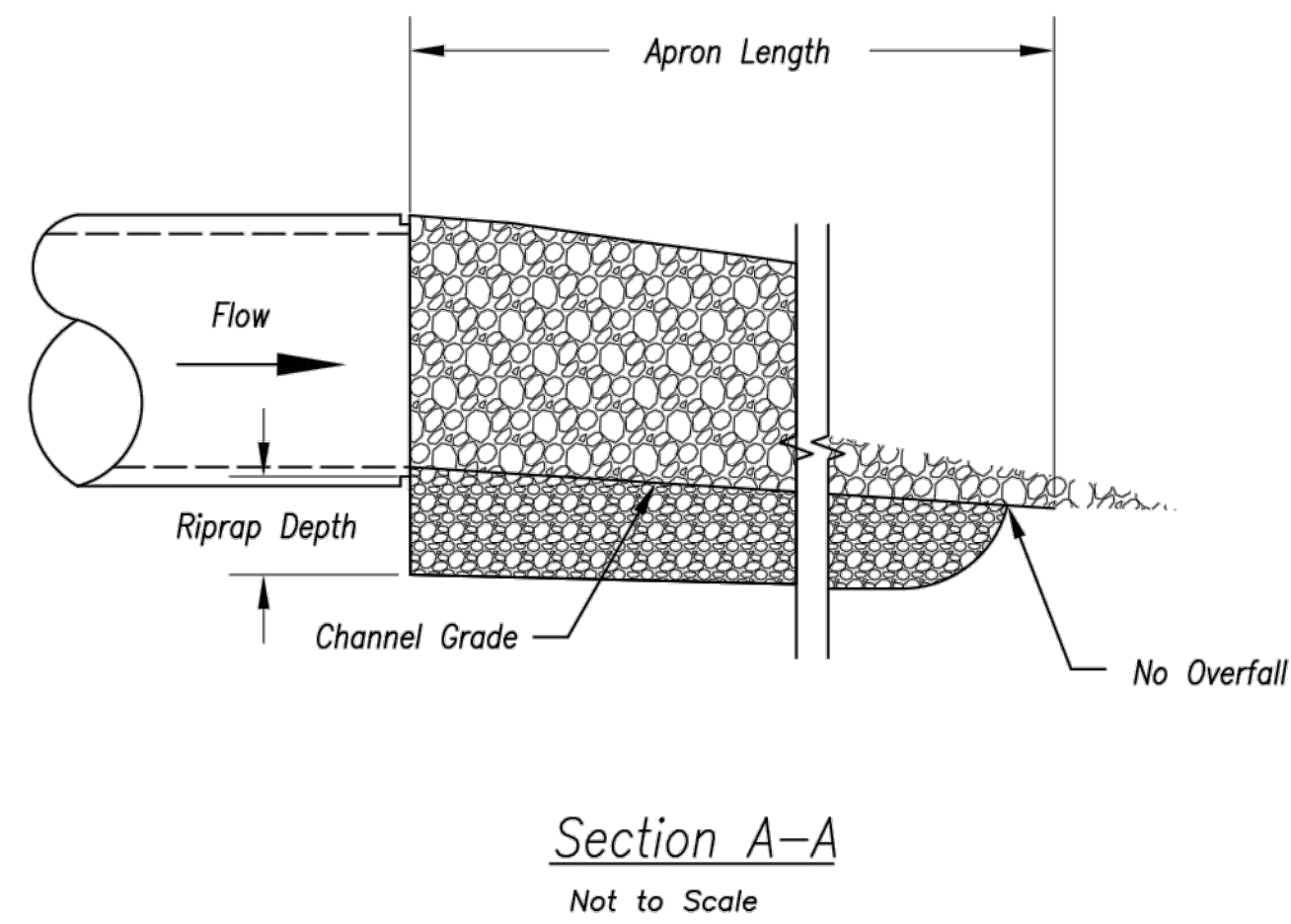
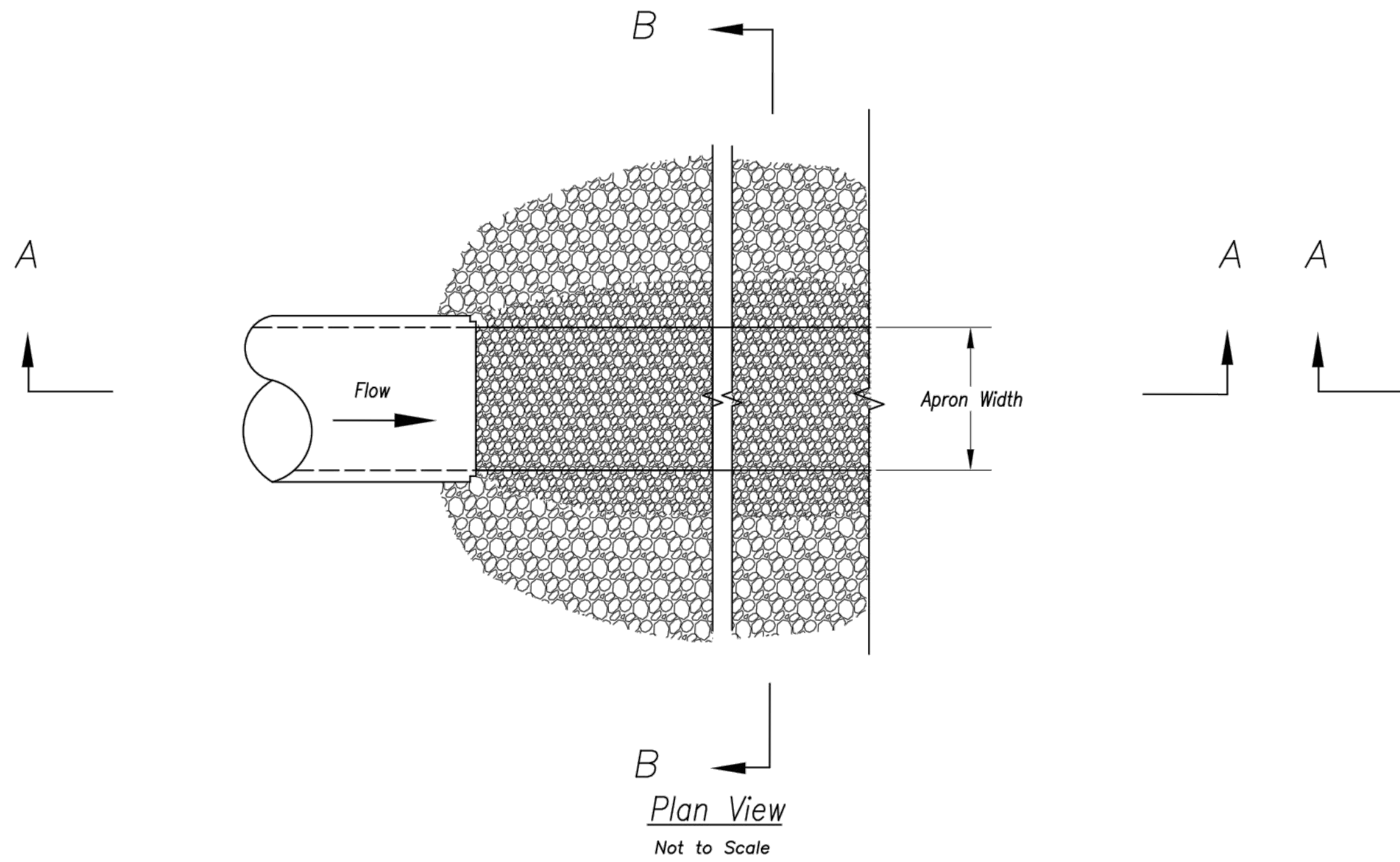
Drawn by: AKU
 Checked by: JPG
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 Project no.: A19-2339
 Drawing no.: T ERC A192339
 Date: 2020.03.27

SHEET
4 of 53

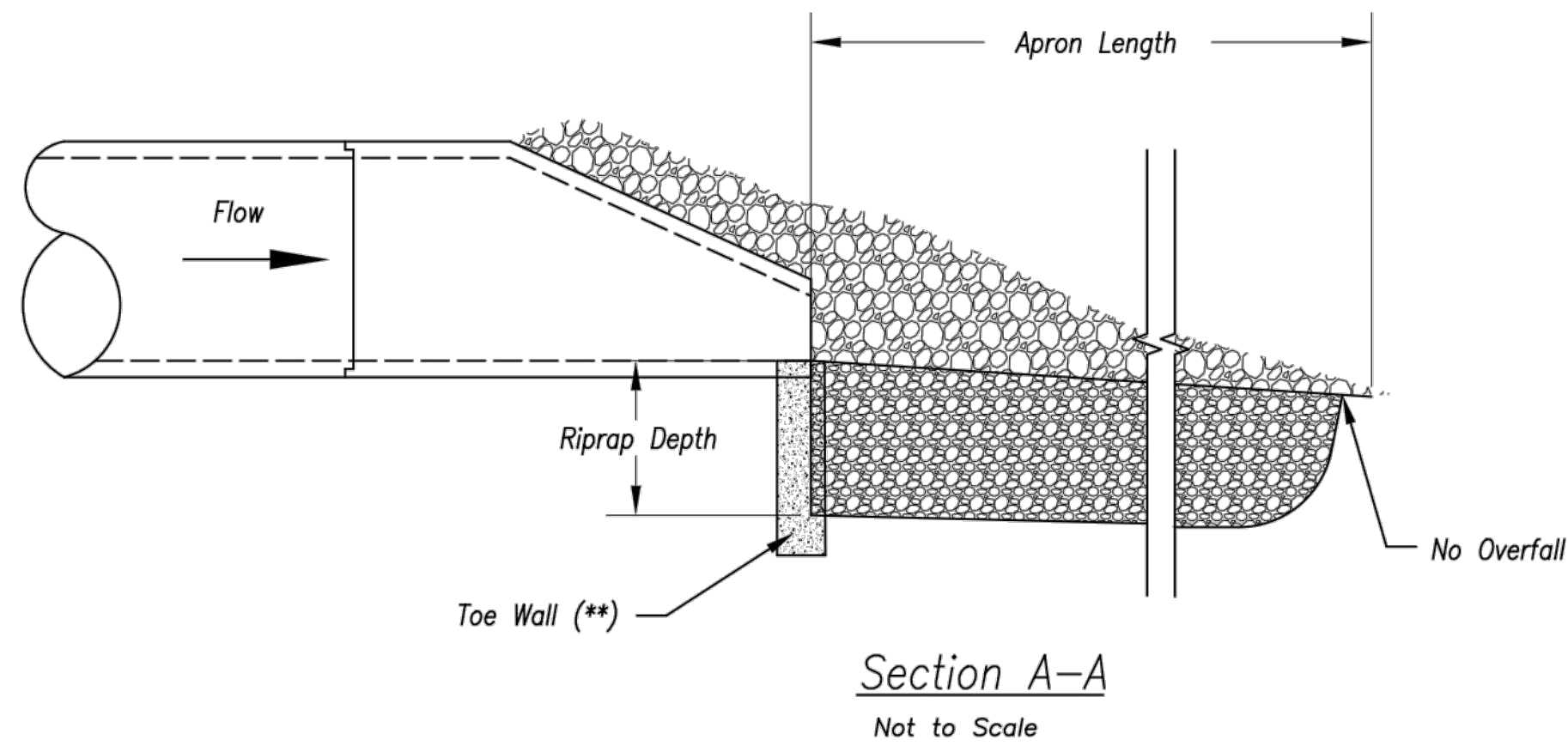
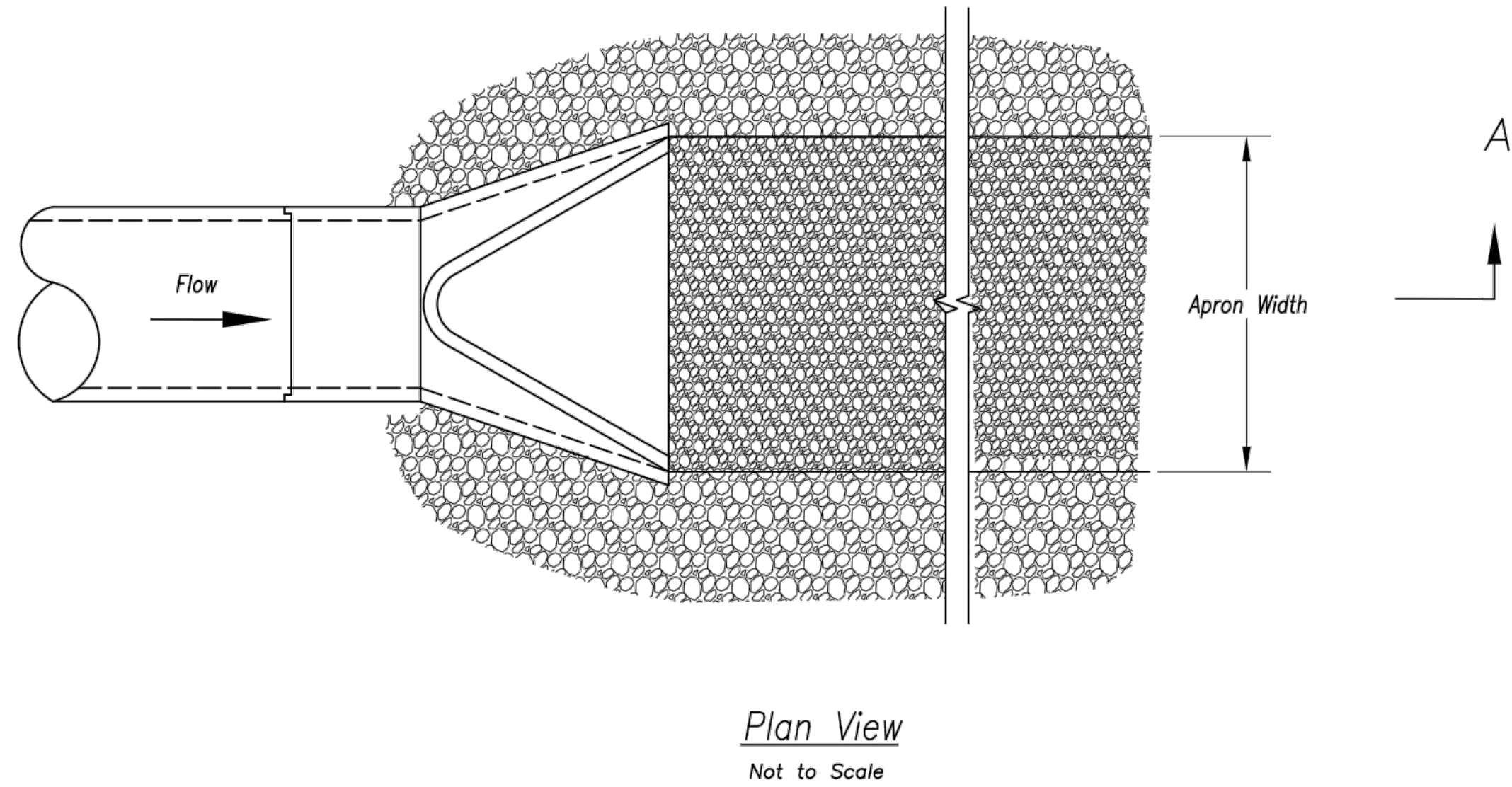
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Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City, MO 64116
TEL 816.361.1177 www.olsson-engineers.com

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OUTLET PROTECTION W/O END SECTION



OUTLET PROTECTION WITH END SECTION

- Notes:
1. Rock all sides steeper than 3:1.
 2. Stabilize all disturbed areas downstream of outlet to the limits of disturbance.
 3. Alternative outlet protection and slope stabilization measures may be used with approval by the Engineer.
 4. Install riprap apron so that it is no higher than flowline of pipe.
 5. Reference APWA Specification 2650 for rock type, size, and placement.

Modified from 2015 Overland Park Standard Details
for Erosion and Sediment Control.

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Kansas City Metro Chapter

APWA

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KANSAS CITY
METRO CHAPTER

STANDARD DRAWING
NUMBER ESC-14
ADOPTED:
10/24/2016

OUTLET PROTECTION

drawn by: AKU
checked by: JPG
approved by: RBC
QA/QC by: RBC
project no.: A19-2339
drawing no.: T_ERC_A192339
date: 2020.03.27

SHEET
35 of 53

EROSION CONTROL DETAILS
HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS
LEE'S SUMMIT, MO

2020

REVISIONS

BY

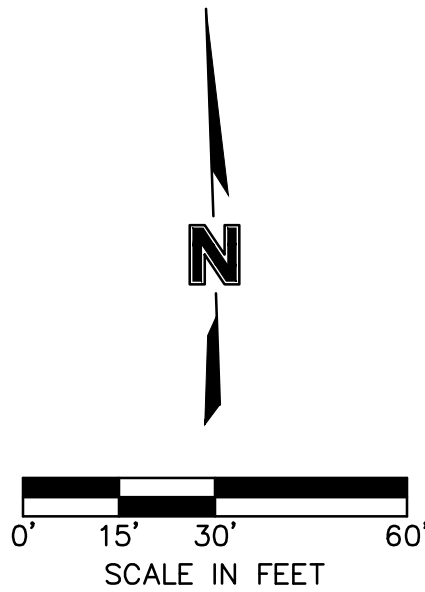
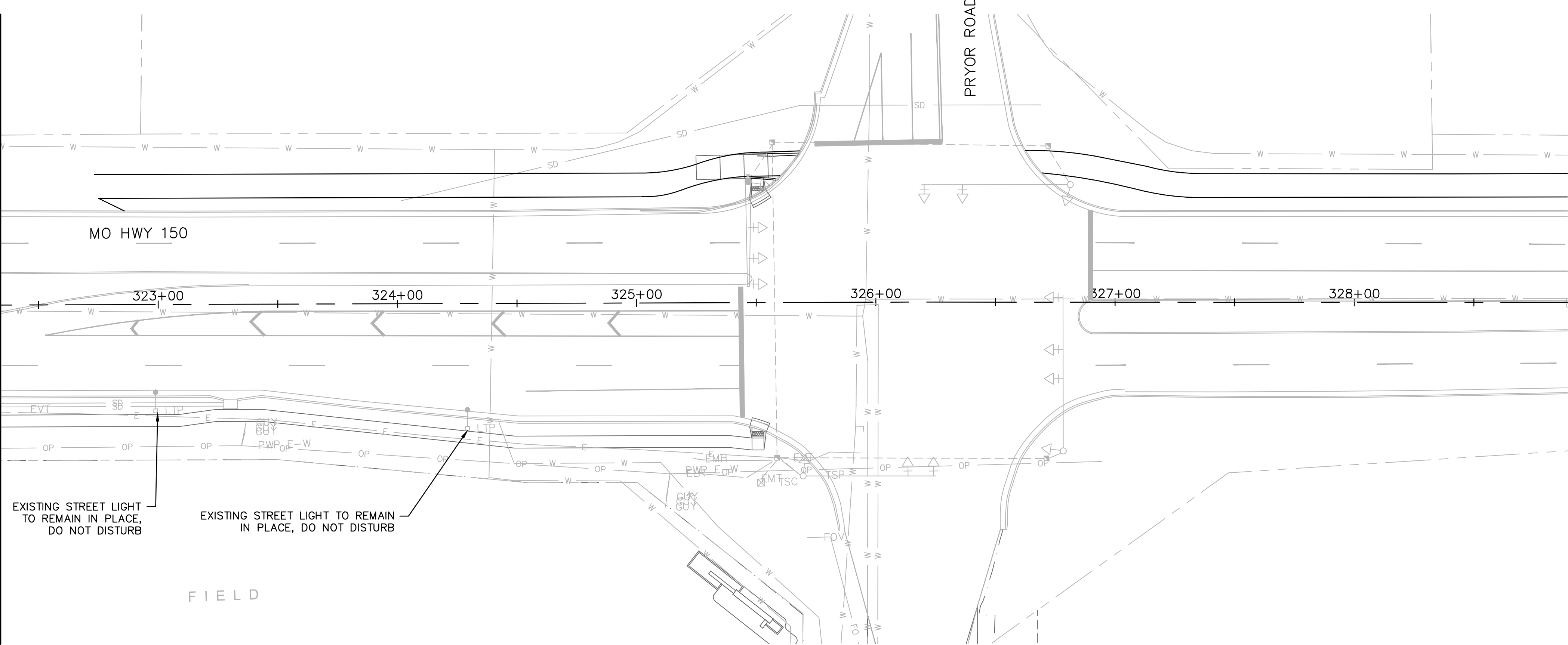
JAMES PATRICK GALLAGHER
PE-2018010499



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MATCHLINE 322+34.08



drawn by: JRC
checked by: JSS
approved by: JSS
QA/QC by: JSS
project no.: A19-2339
drawing no.:
date: 2.12.2020

SHEET
36 of 53

LIGHTING PLAN
150 HIGHWAY

HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS

LEE'S SUMMIT, MO

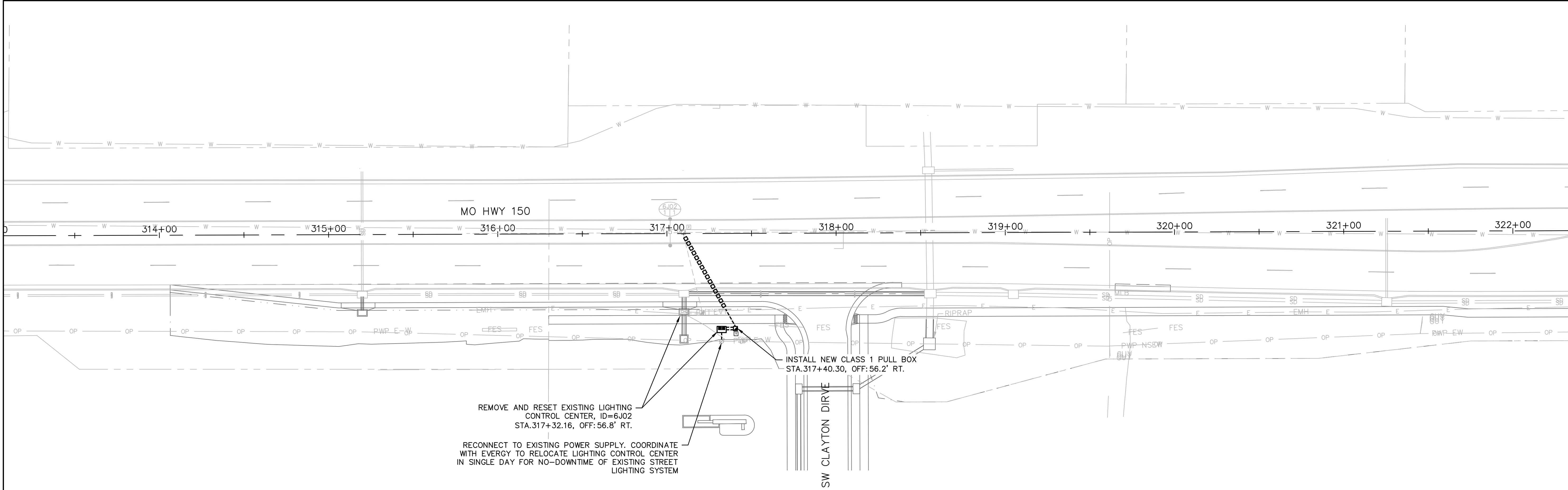
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REV. NO. DATE REVISIONS DESCRIPTION

REVISIONS

BY

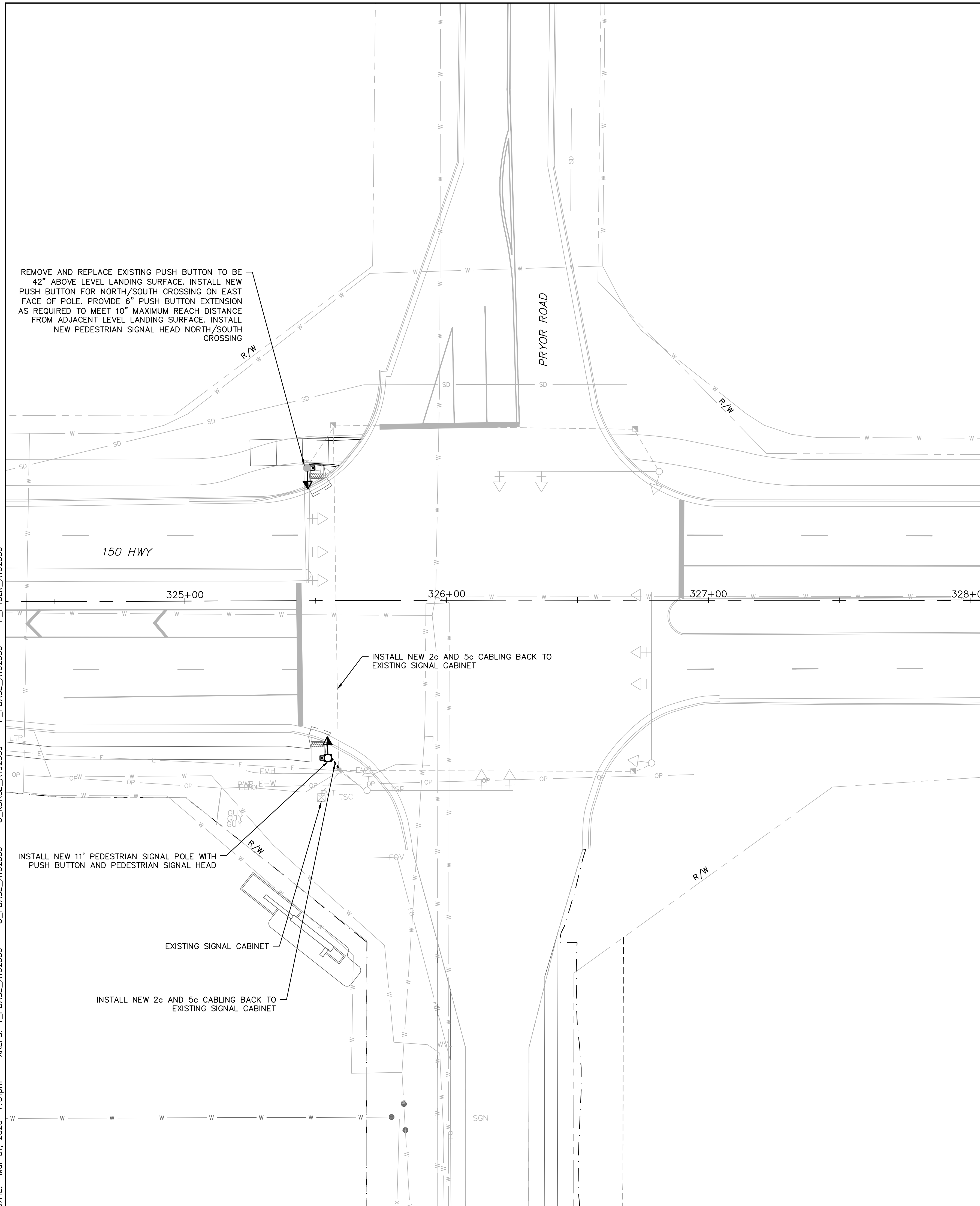
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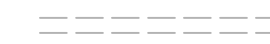
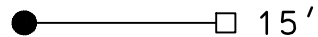
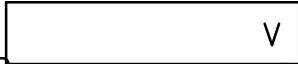
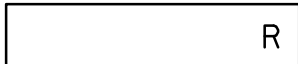
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TRAFFIC SIGNALS LEGEND

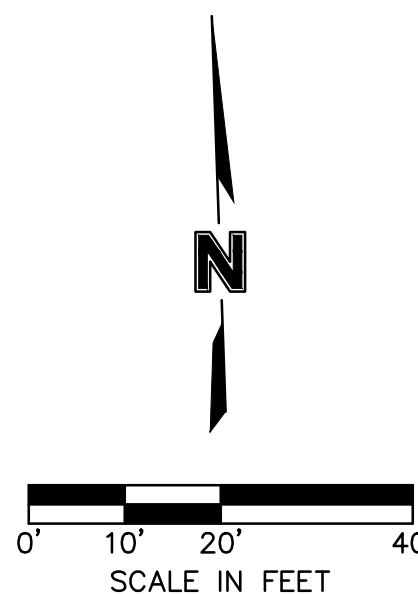
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JCT 	JUNCTION BOX		PREFORMED PULL BOX TYPE 2		CONDUIT BRIDGE
	POWER SOURCE		PULL BOX TYPE 1		CONDUIT EXISTING
P.S. 	POWER SUPPLY		PULL BOX TYPE 2		CONDUIT TRENCHED
	WOOD POST	ITS 	ITS PULL BOX TYPE 2		TYPE C BASE
	SIGNAL HEAD (OPT LIM CONV)	ITS 	ITS PULL BOX TYPE 5		EXISTING TYPE C BASE
	SIGNAL HEAD (OPT LIM)		VIDEO DETECTOR		EXISTING TYPE C MAST ARM A BASE
	SIGNAL HEAD (PEDESTRIAN)		EXISTING DETECTOR		EXISTING TYPE C MAST ARM A BASE
	SIGNAL HEAD (STANDARD)		15' ARM 400W H.P.S.L		EXISTING SIGNAL HEAD (STANDARD)
	BIKE SIGNAL HEAD (STANDARD)		VIDEO DETECTION ZONE		EXISTING SIGNAL HEAD (PEDESTRIAN)
			RADAR DETECTION ZONE		EXISTING PULL BOX TYPE 1
			CCTV CAMERA		WIRELESS DEVICE
			EXISTING CCTV CAMERA		EXISTING WIRELESS DEVICE
			RADAR DETECTOR		
			EXISTING RADAR DETECTOR		

R	RED BALL
Y	YELLOW BALL
G	GREEN BALL
RL	RED LEFT ARROW
YL	YELLOW LEFT ARROW
GL	GREEN LEFT ARROW
YR†	YELLOW RIGHT ARROW
GR†	GREEN RIGHT ARROW
S	STRAIGHT GREEN ARROW
S*45	STRAIGHT GREEN ARROW MOUNTED AT 45° ANGLE

W	PEDESTRIAN INDICATIONS SHALL BE LED
DW	COUNTDOWN TYPE.

ALL 12" LENS WITH
TUNNEL VISOR

150 HIGHWAY & PRYOR ROAD



TRAFFIC SIGNAL PLAN
150 HWY & PRYOR ROAD

HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS

LEE'S SUMMIT, MO

drawn by:	JRC
checked by:	JSS
approved by:	JSS
QA/QC by:	JSS
project no.:	A19-2339
drawing no.:	
date:	2.12.2020

SHEET
37 of 53

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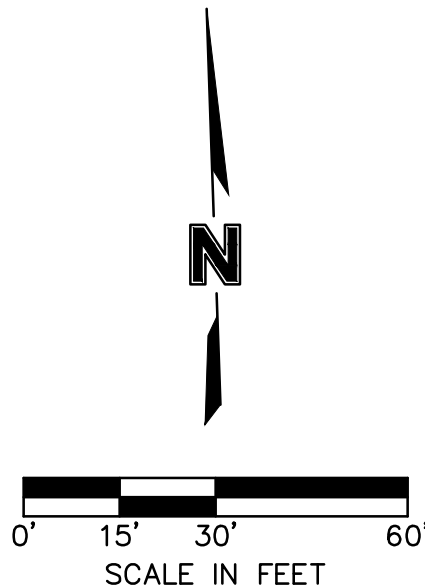
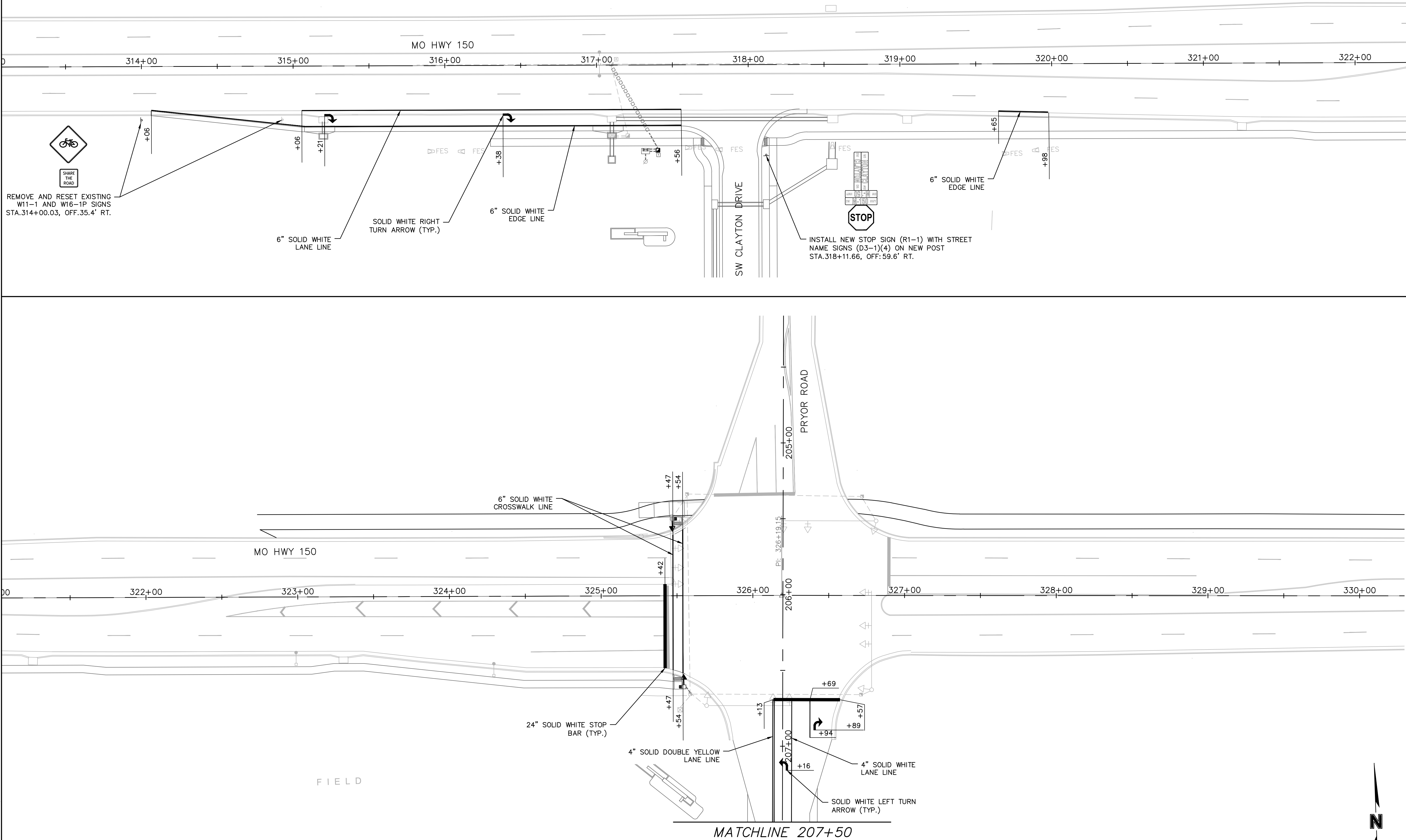
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Professional Authority #001592
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North Kansas City, MO 64116
TEL 816.381.1177 www.olson.com

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GENERAL NOTES:
1.) ALL PAVEMENT MARKING ON MODOT RIGHT OF WAY SHALL CONFORM TO MODOT STANDARDS AND SPECIFICATIONS. ALL PAVEMENT MARKING IN CITY OF LEE'S SUMMIT RIGHT OF WAY SHALL CONFORM TO CITY STANDARDS AND SPECIFICATIONS.



PAVEMENT MARKING AND SIGNING PLAN

HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS

LEE'S SUMMIT, MO

drawn by: JRC
checked by: JSS
approved by: JSS
QA/QC by: JSS
project no.: A19-2339
drawing no.: 2,12,2020

SHEET
38 of 53

REV. NO.

DATE

REVISIONS DESCRIPTION

BY

2020

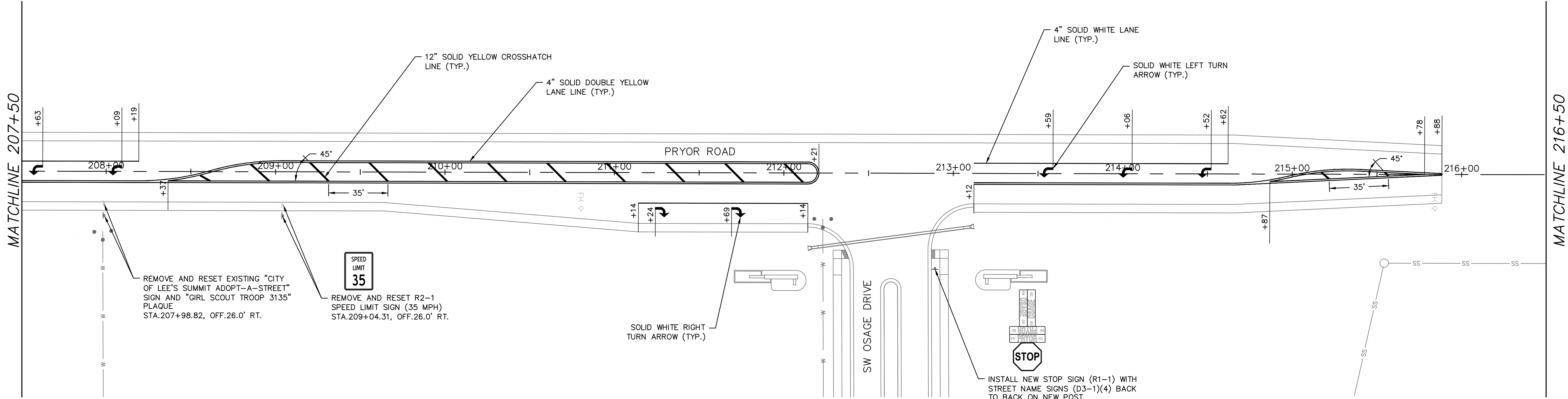
REVISIONS

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TEL 816.361.1177
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Professional Engineer
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GENERAL NOTES:
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PAVEMENT MARKING AND SIGNING PLAN

HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS

LEE'S SUMMIT, MO

drawn by: JRC
checked by: JSS
approved by: JSS
QA/QC by: JSS
project no.: A19-2339
drawing no.:
date: 2.12.2020

2020

REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION

BY

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North Kansas City, MO 64116

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SHEET

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LEGEND

 WORK AREA

 SIGN

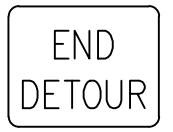
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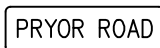
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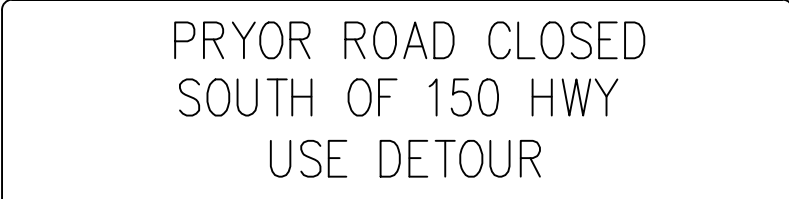
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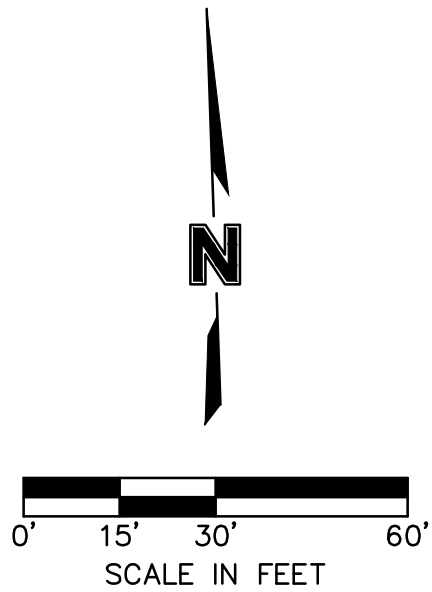
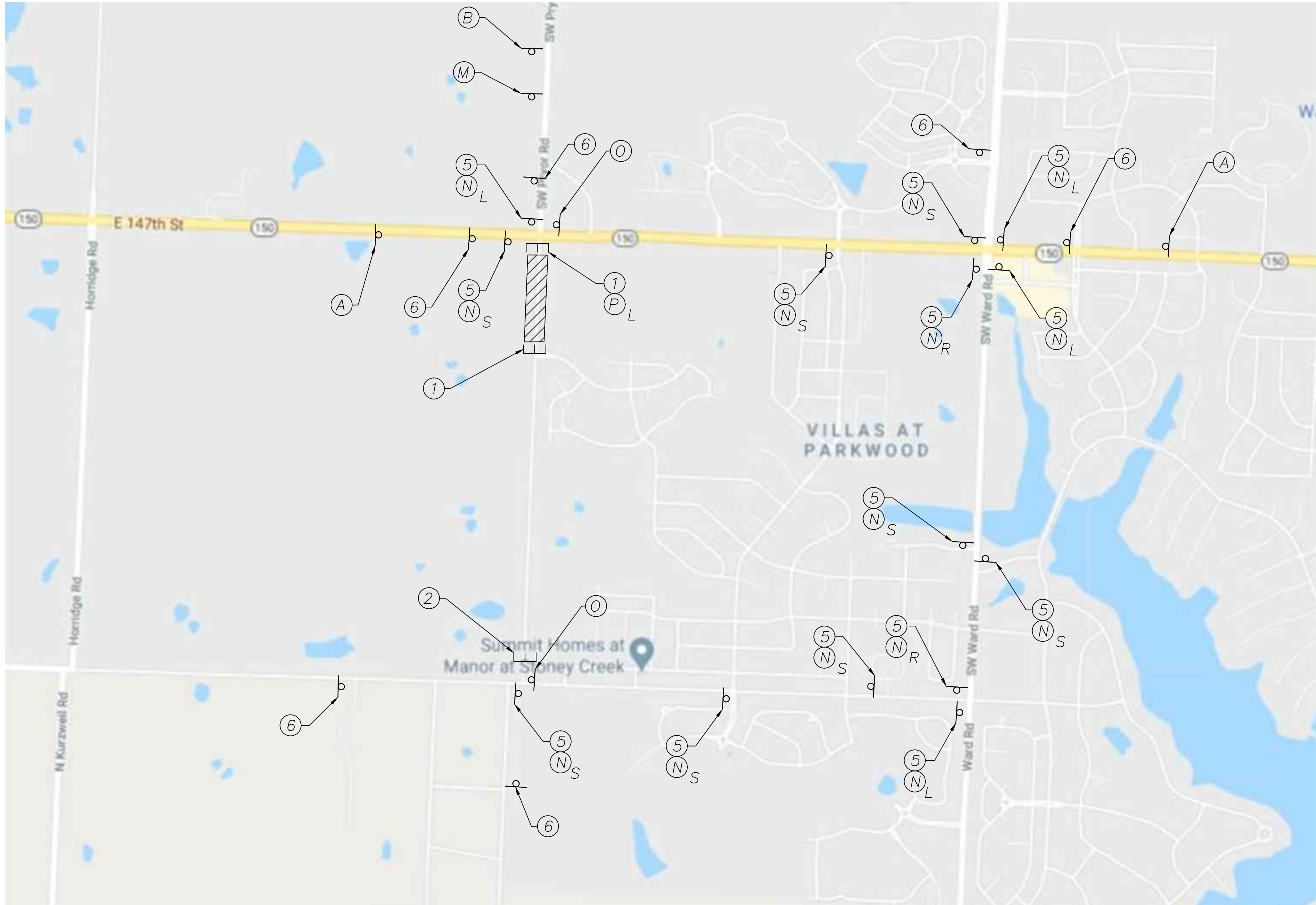
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 (5) D3-1 (SPECIAL)

 (6) SP-1 (SPECIAL)



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TRAFFIC CONTROL PLAN		2020	
HIGHWAY 150 & PRYOR ROAD ROADWAY IMPROVEMENTS		LEE'S SUMMIT, MO	
drawn by: JRC checked by: JSS approved by: JSS QA/QC by: JSS project no.: A19-2339 drawing no.: 2,12,2020		REVISIONS	
SHEET 41 of 53			

316+75

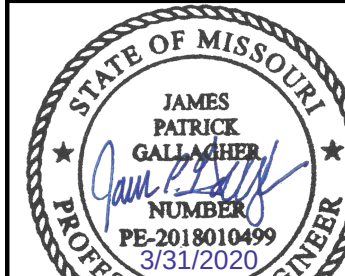
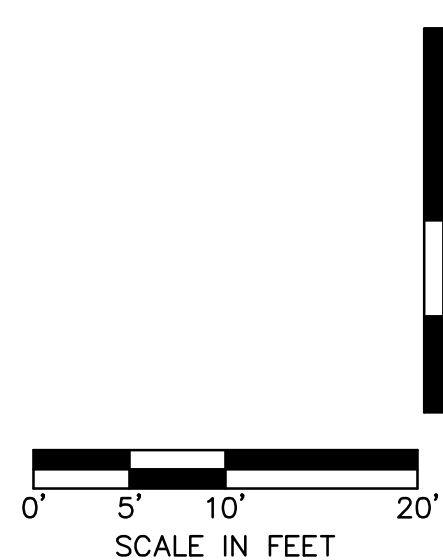
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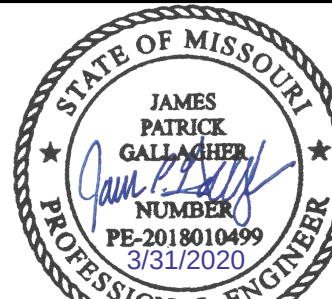
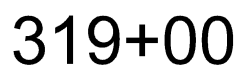
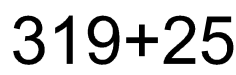
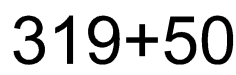
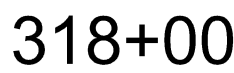
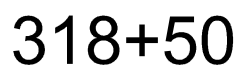
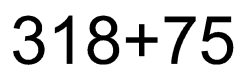
JAMES PATRICK GALLAGHER
PE-2018010499

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drawn by: _____ AK
checked by: _____ JP
approved by: _____ JP
QA/QC by: _____ RB
project no.: _____ A19-2333
drawing no.: _____ T_XSC A192333
date: _____ 2020.03.2

SHEET
44 of 53



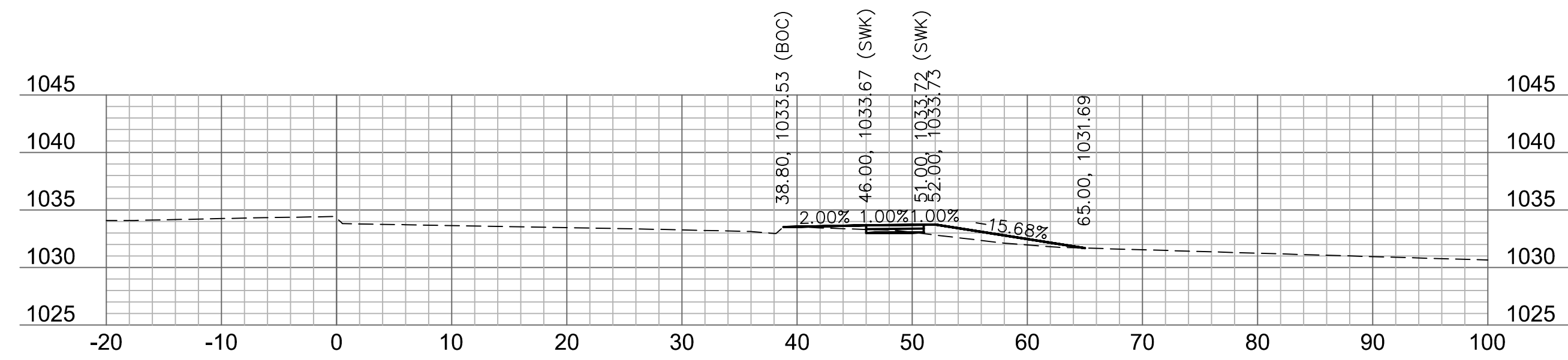
JAMES PATRICK GALLAGHER
PE-2018010499

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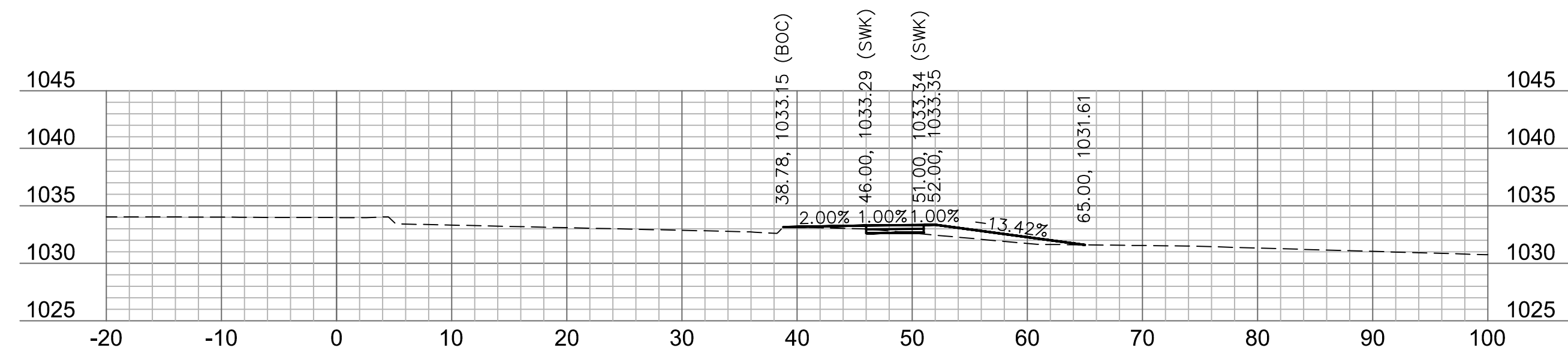
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approved by: _____ JP
QA/QC by: _____ RB
project no.: _____ A19-233
drawing no.: _____ T_XSC_A19233
date: _____ 2020.03.2

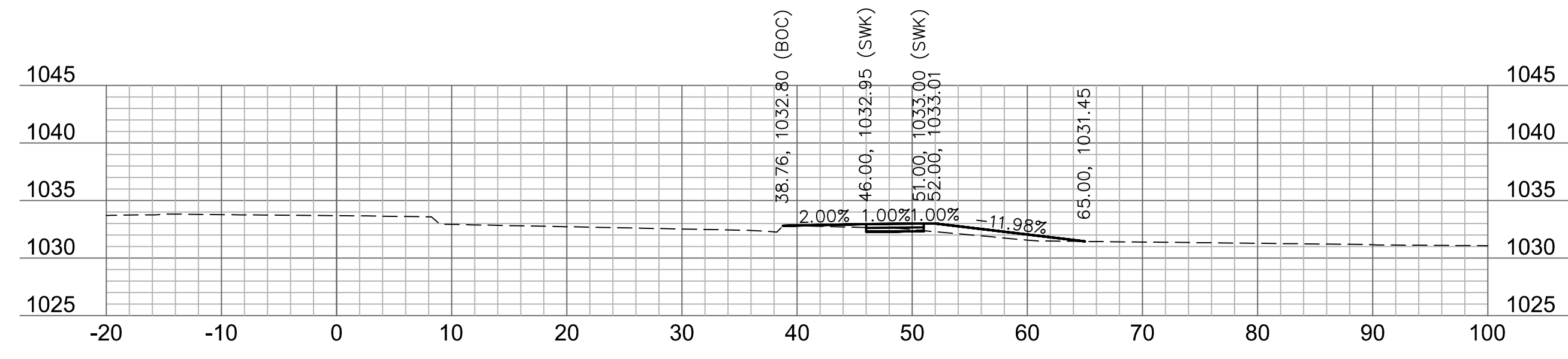
SHEET
45 of 53



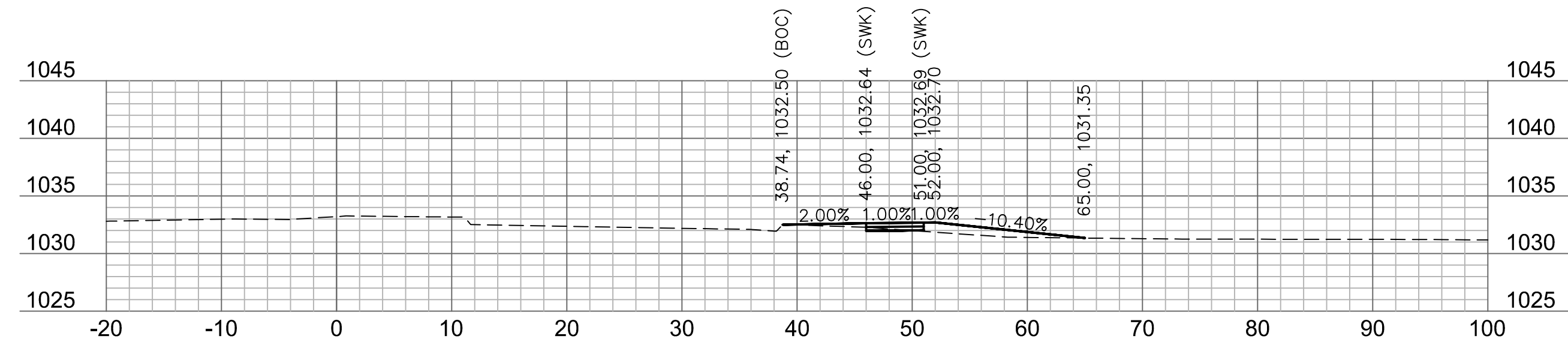
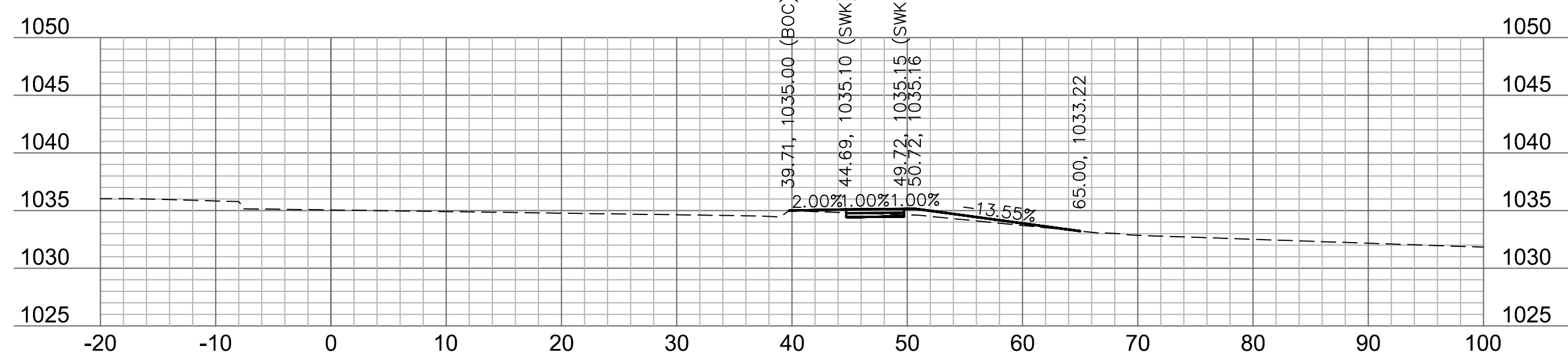
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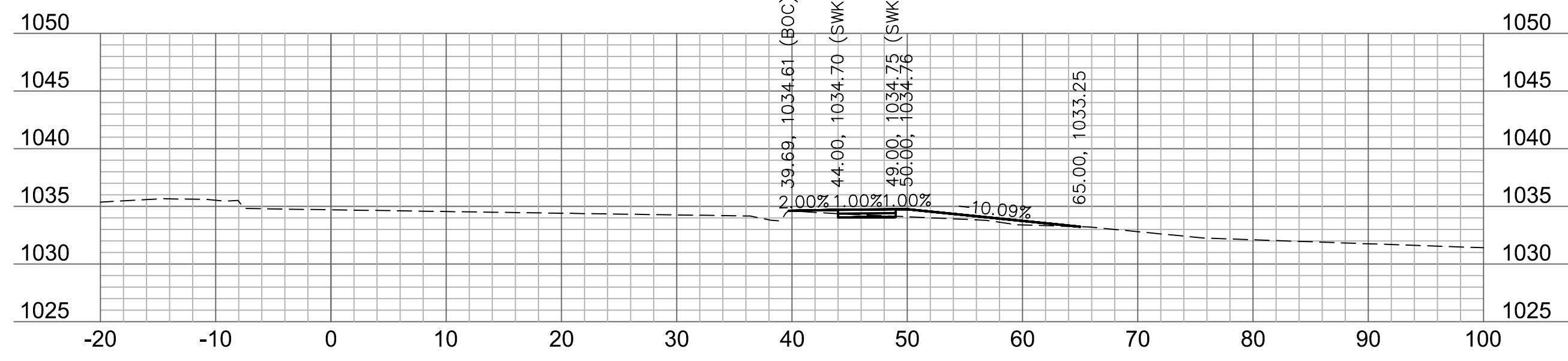
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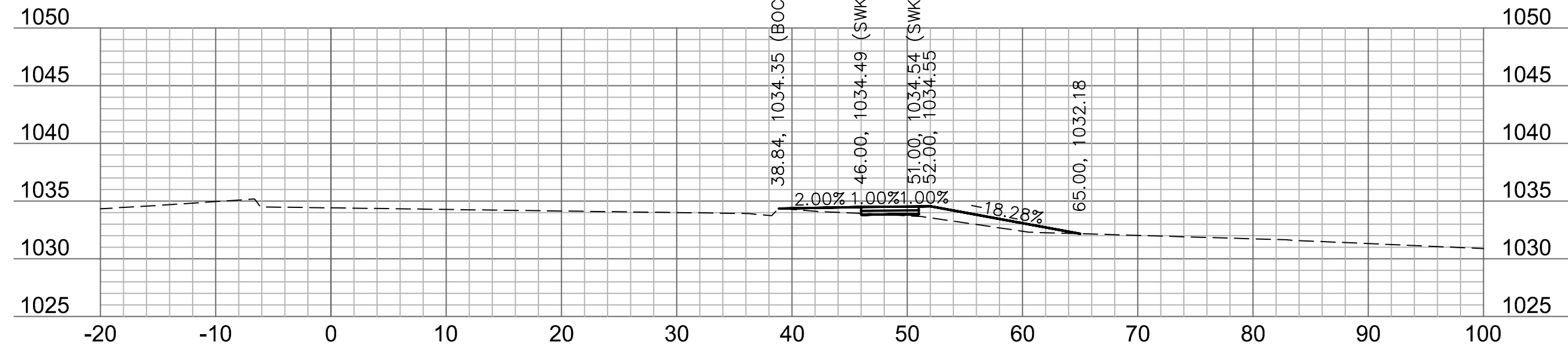
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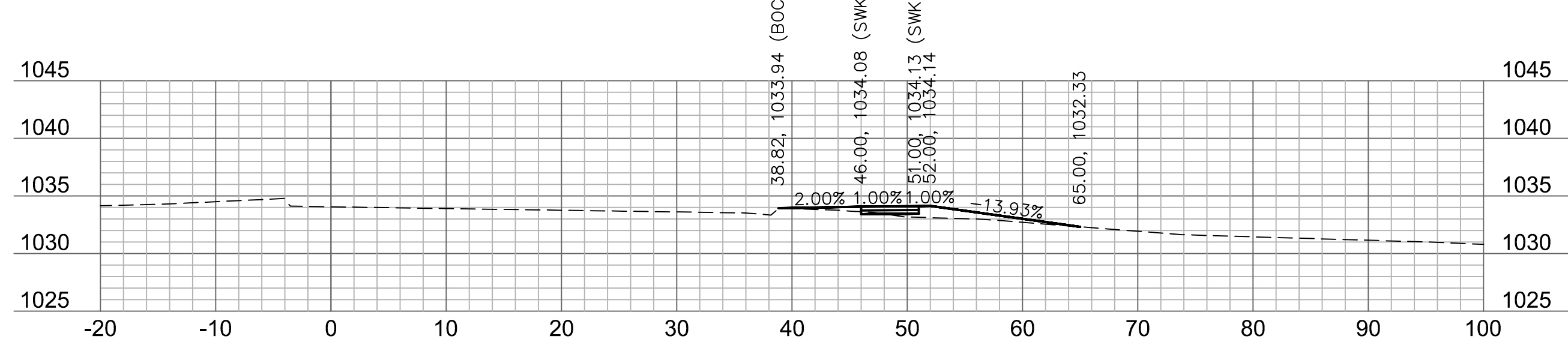
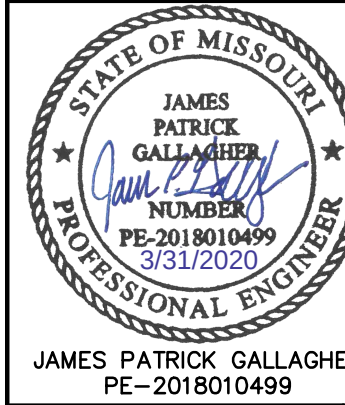
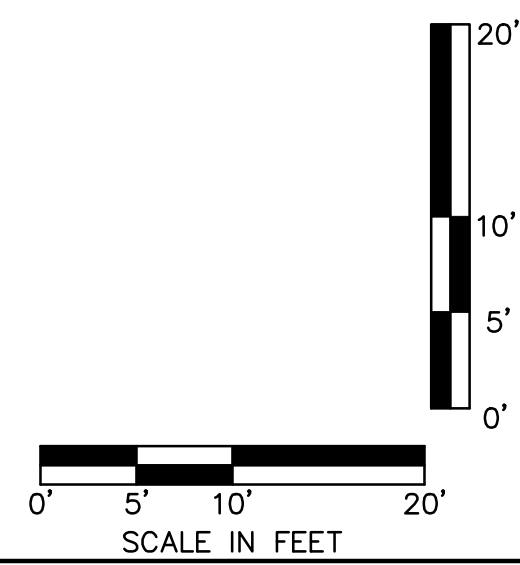
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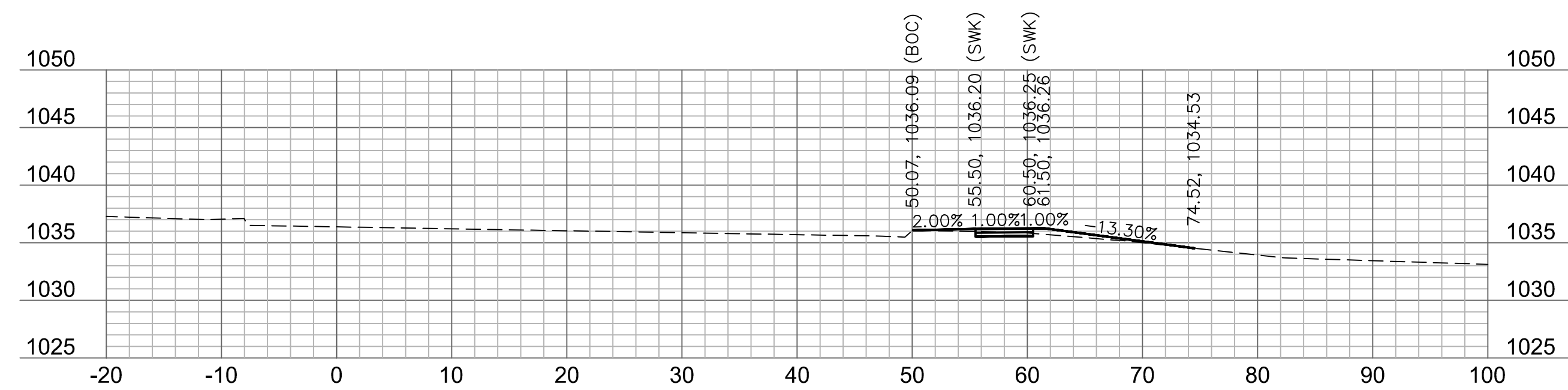
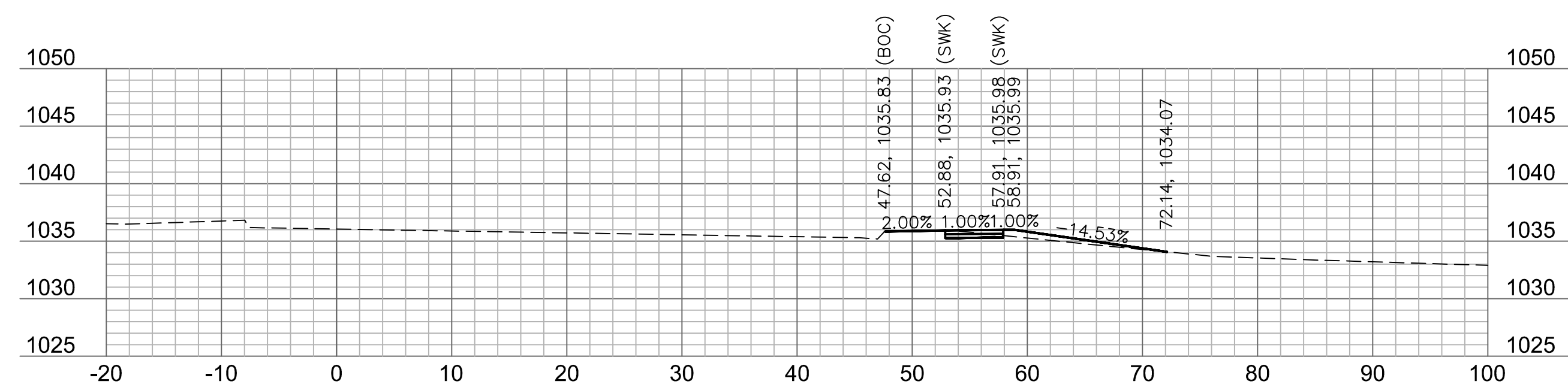
323+00

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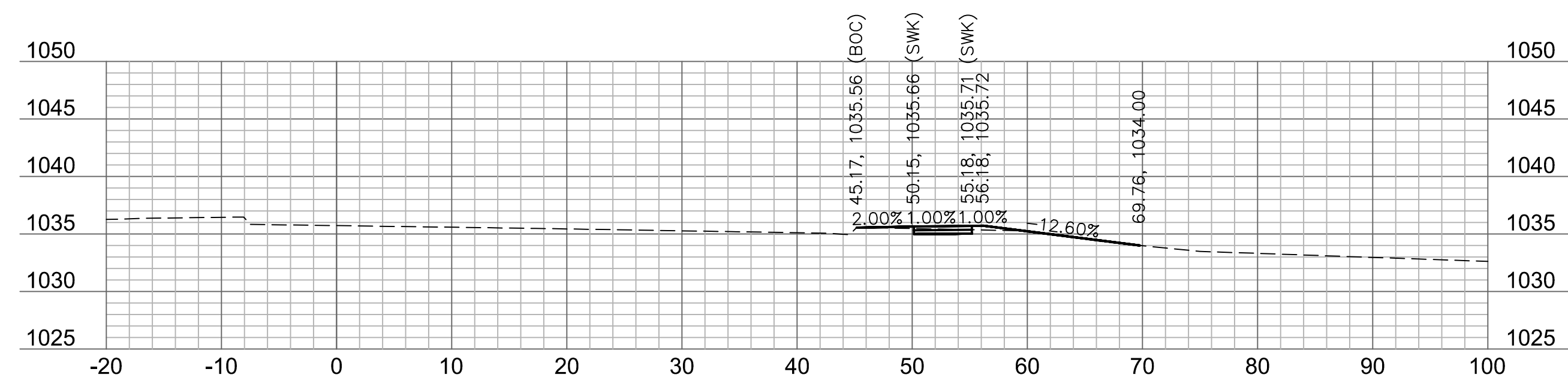
HIGHWAY 150 CROSS SECTION	
HIGHWAY 150 & PRYOR ROAD ROADWAY IMPROVEMENTS	

drawn by: _____ AK
checked by: _____ JP
approved by: _____ JP
QA/QC by: _____ RB
project no.: _____ A19-2333
drawing no.: _____ T XSC A19233
date: _____ 2020.03.2

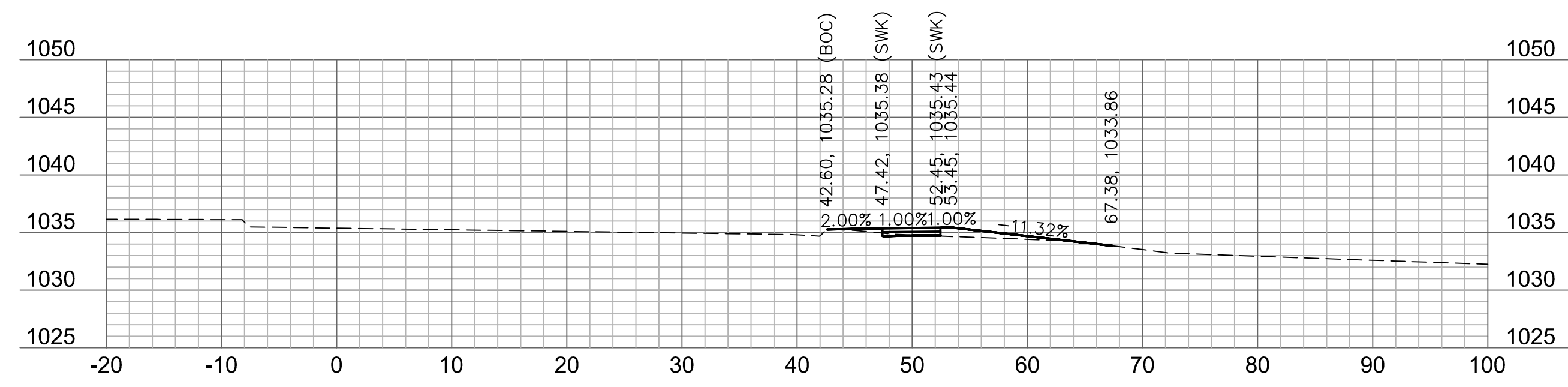
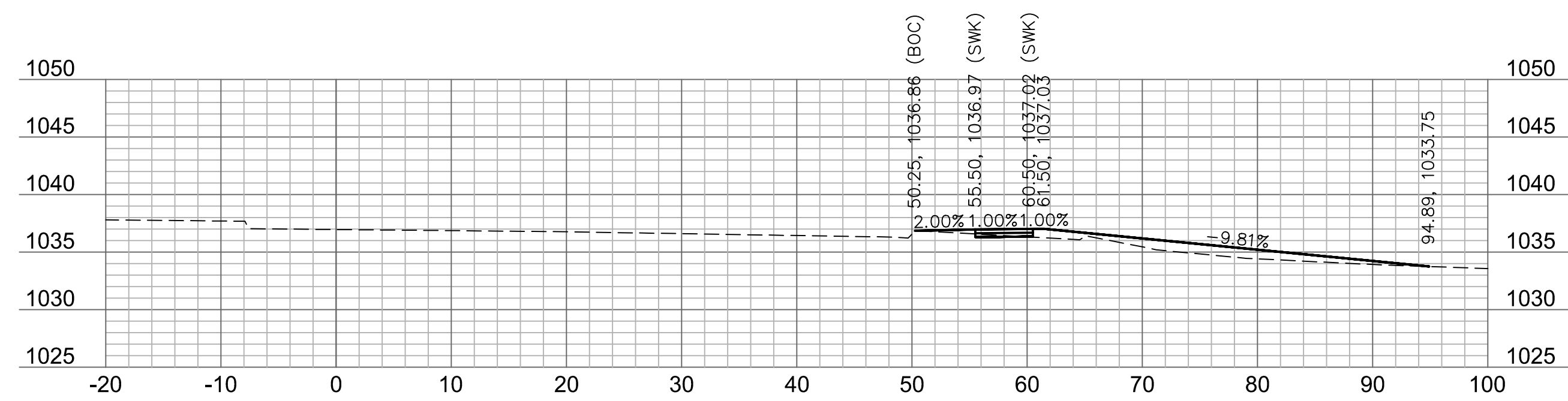
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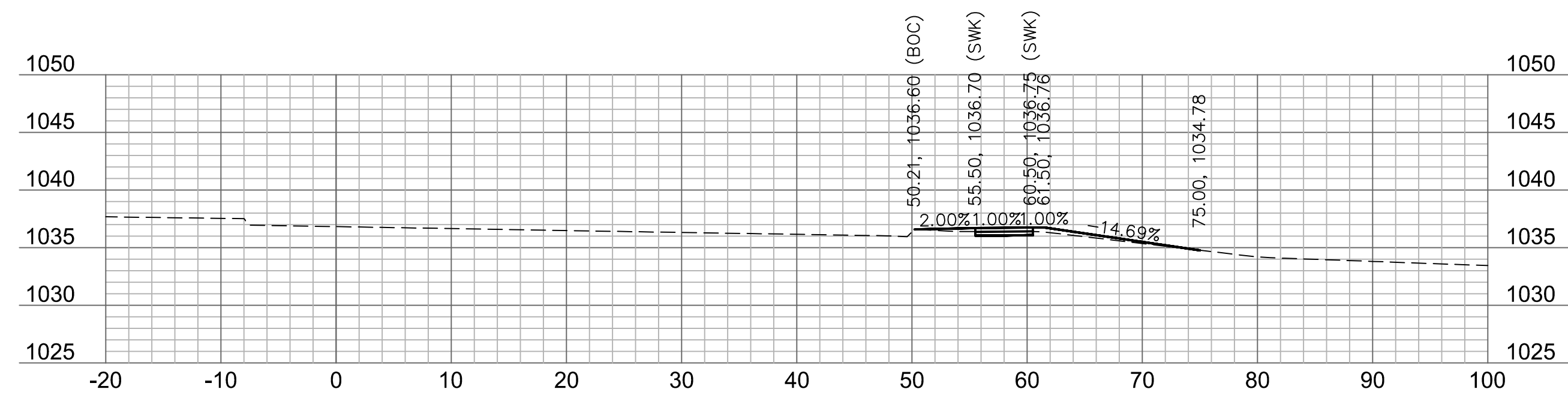
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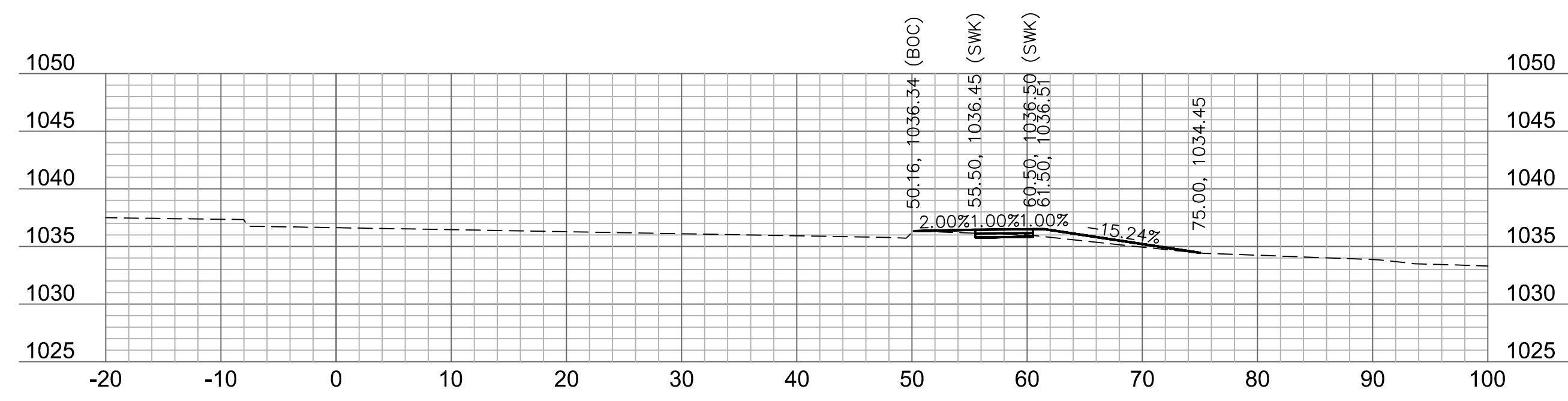
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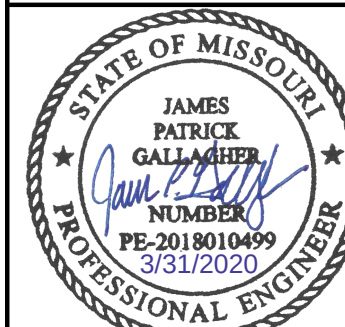
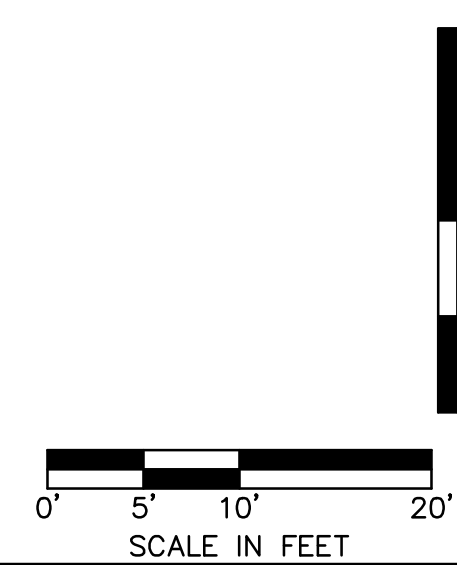
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325+00



324+75



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PE-2018010499

[illegible]

REVISIONS

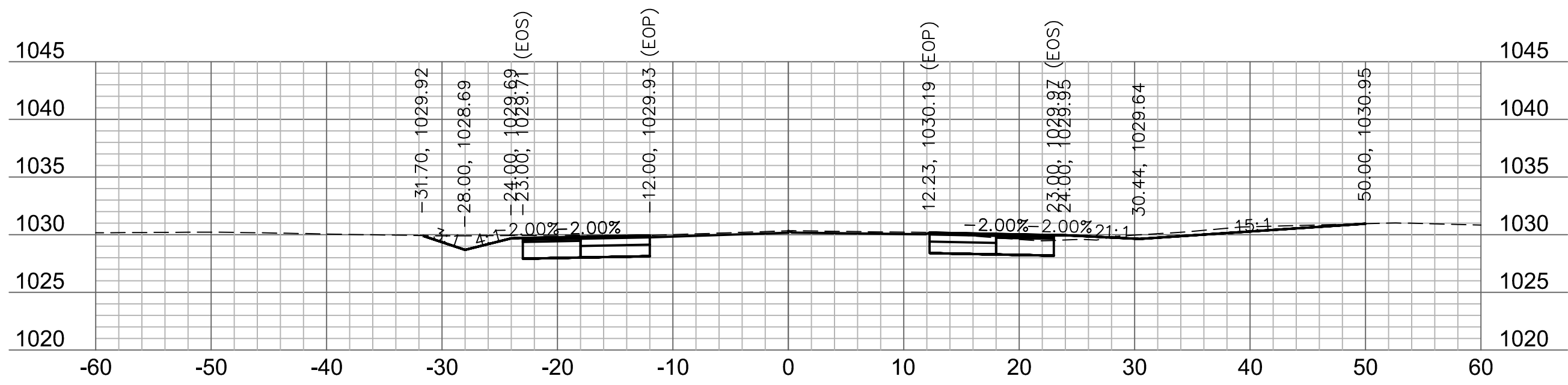
2020

HIGHWAY 150 CROSS SECTION	HIGHWAY 150 & PRYOR ROAD ROADWAY IMPROVEMENTS
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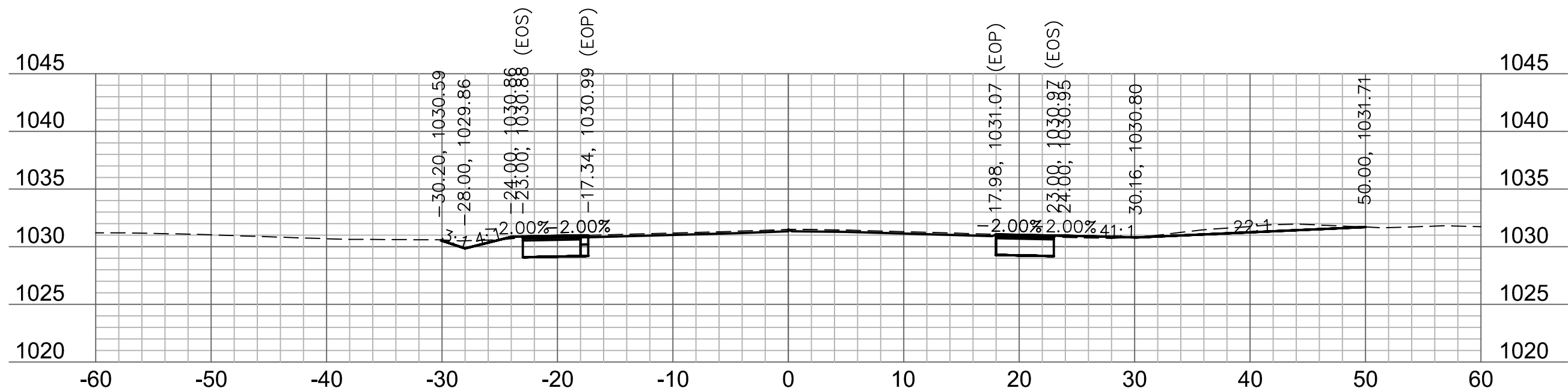
drawn by: AK
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project no.: A19-233
drawing no.: T XSC A19233
date: 2020.03.2

SHEET
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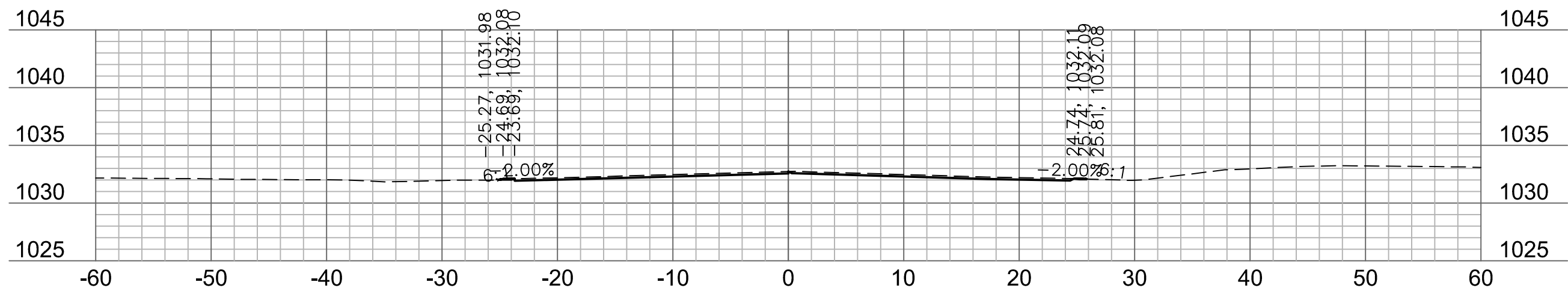
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Missouri Certificate of Authority #001592
1301 Burlington Street
North Kansas City, MO 64116
TEL 816.361.1177 www.olsson.com



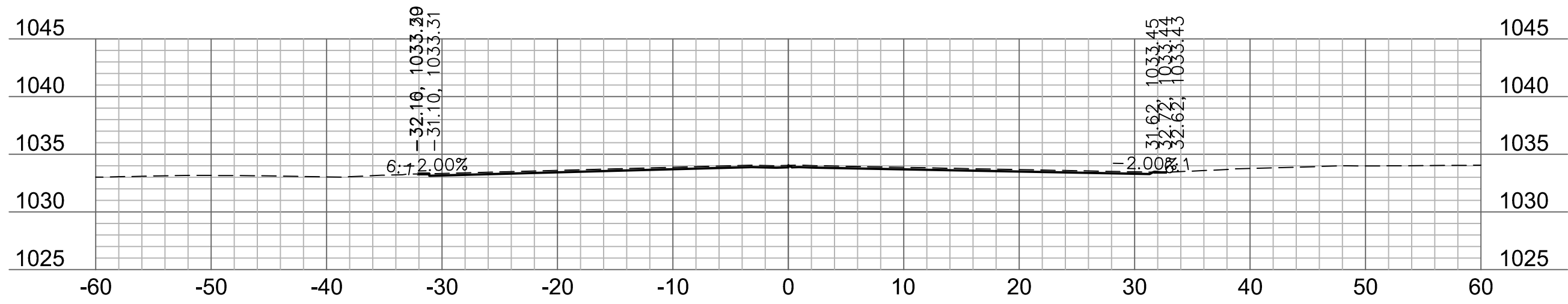
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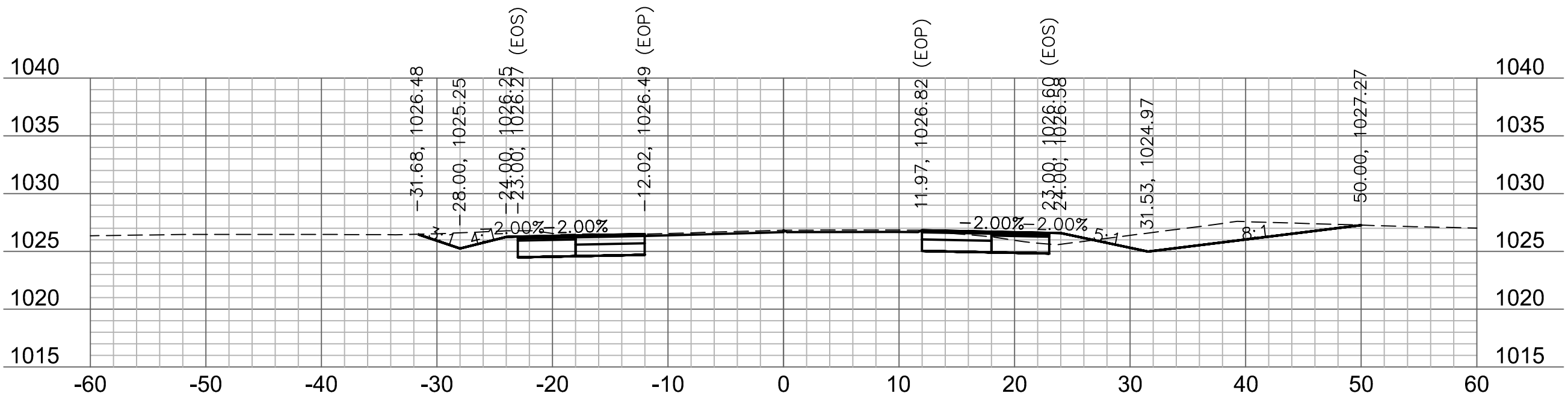
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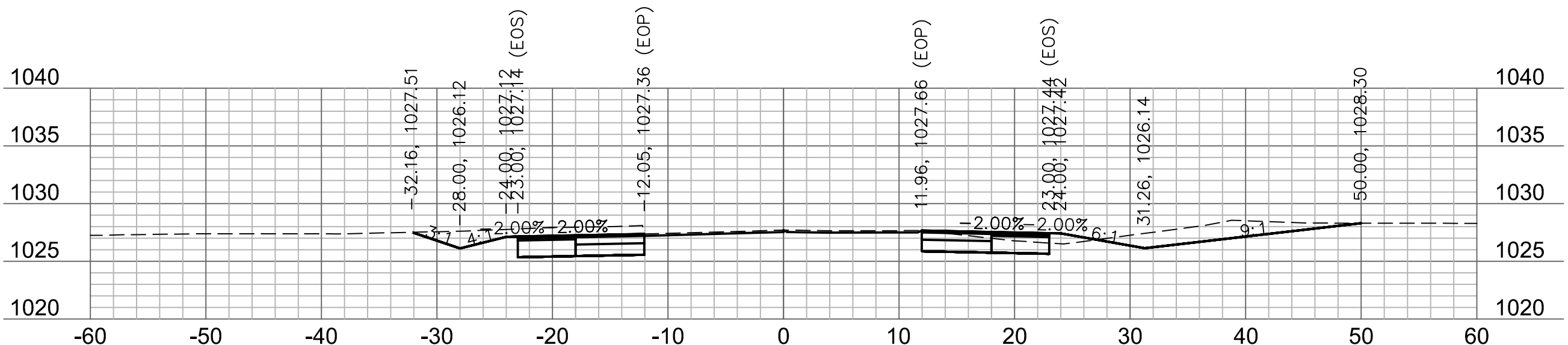
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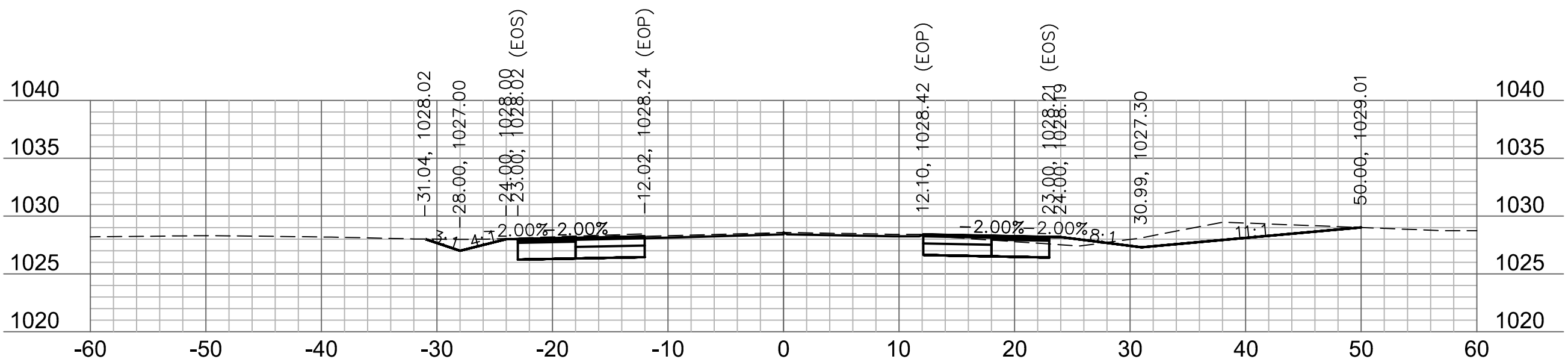
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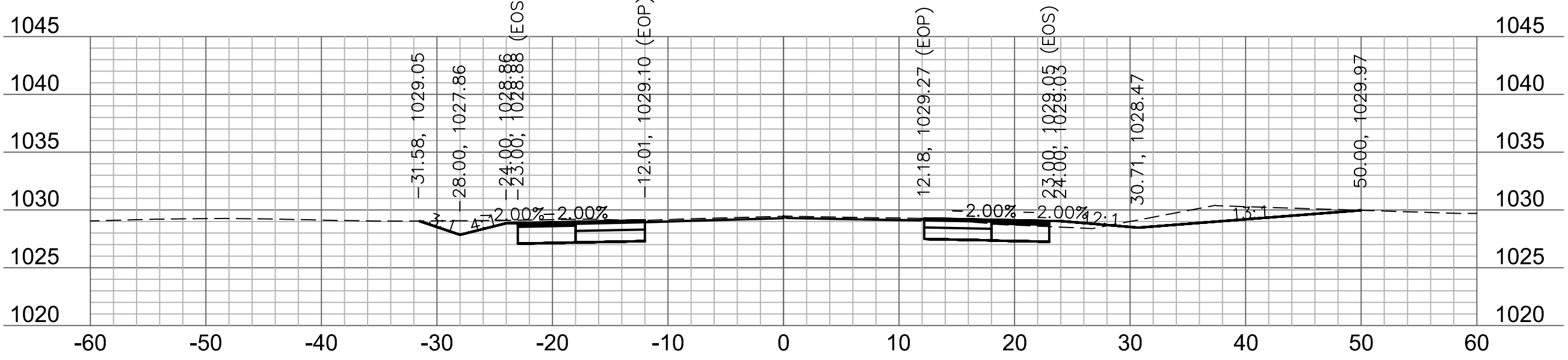
208+75



208+50



208+25



208+00



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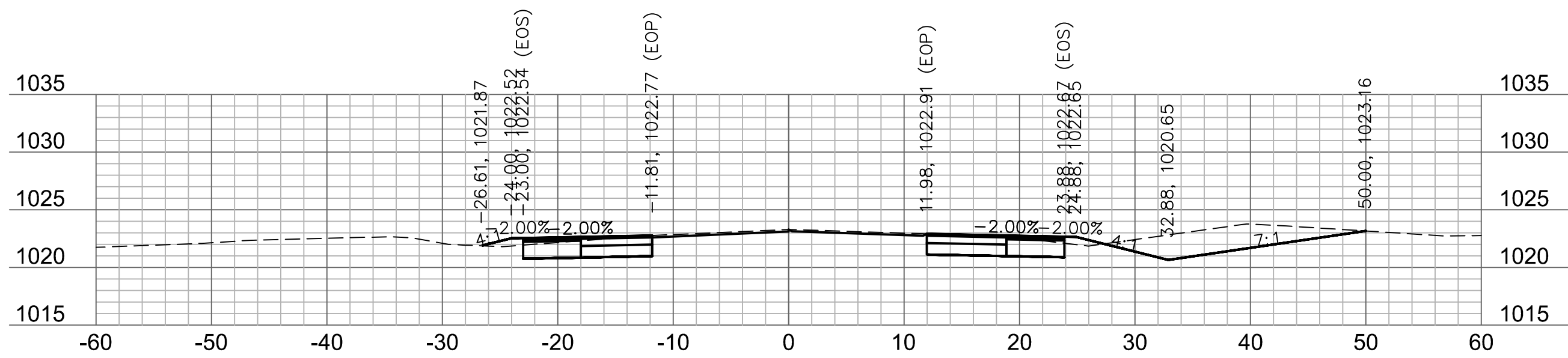
JAMES PATRICK GALLAGHER
PE-2018010499

REV.	NO.	DATE	REVISIONS DESCRIPTION	BY

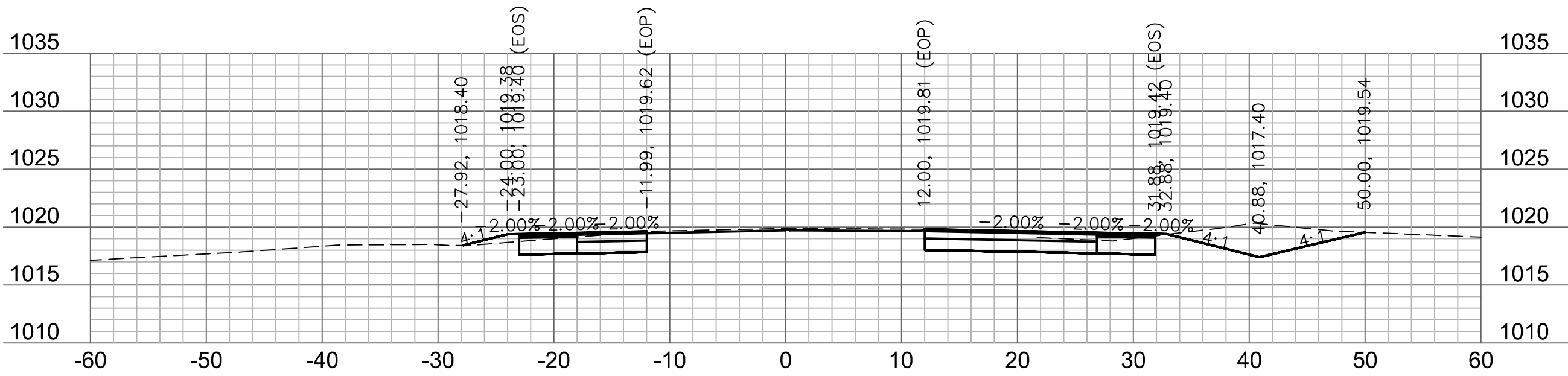
PRYOR ROAD CROSS SECTION	2020
HIGHWAY 150 & PRYOR ROAD ROADWAY IMPROVEMENTS	
LEE'S SUMMIT, MO	

drawn by: AKU
checked by: JFG
approved by: JFG
QA/QC by: RBC
project no.: A19-2339
drawing no.: T_XSC_A192339
date: 2020.03.27

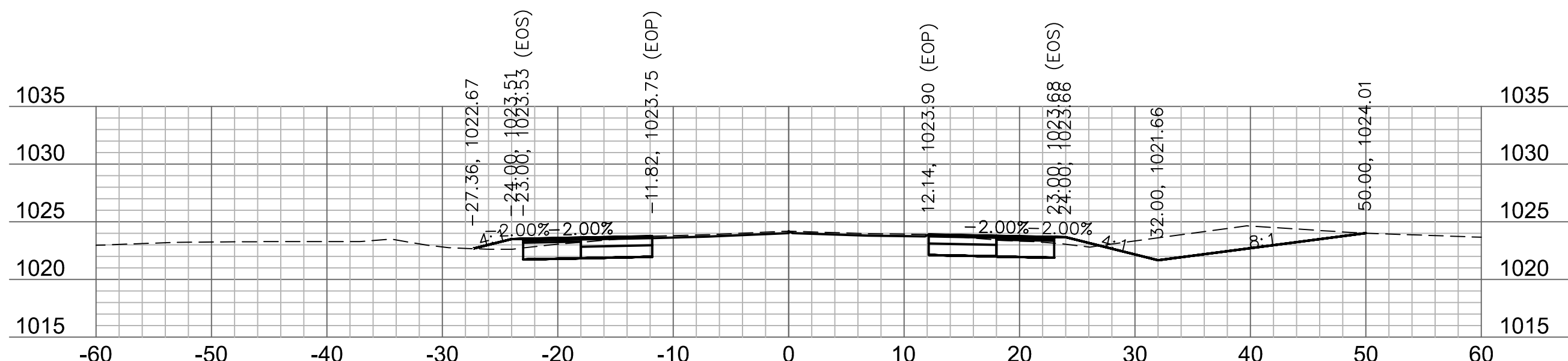
SHEET
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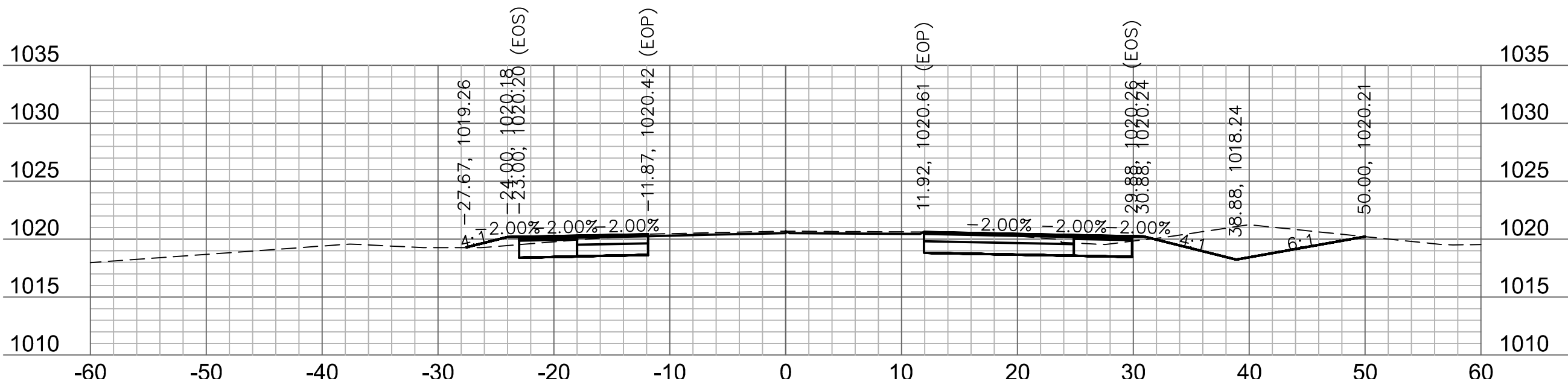
209+75



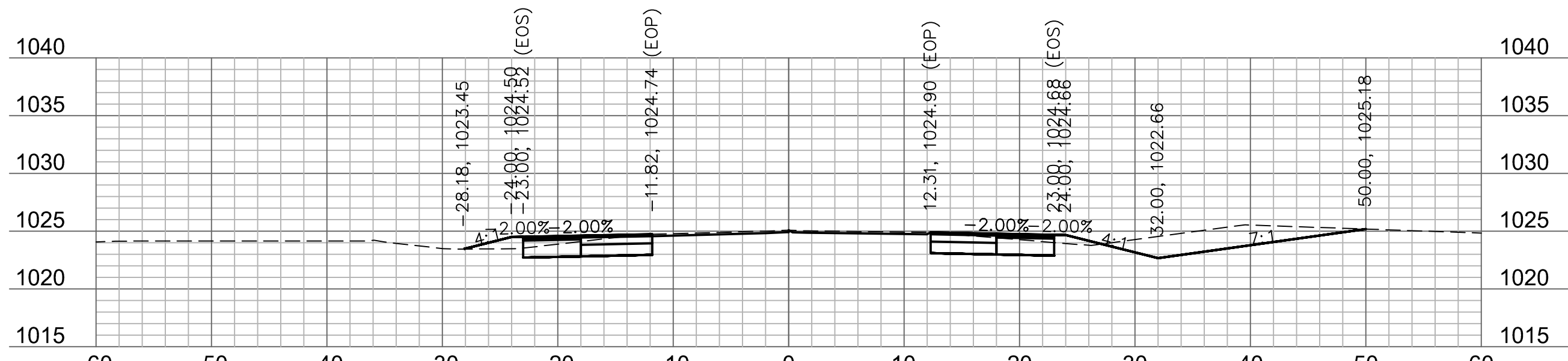
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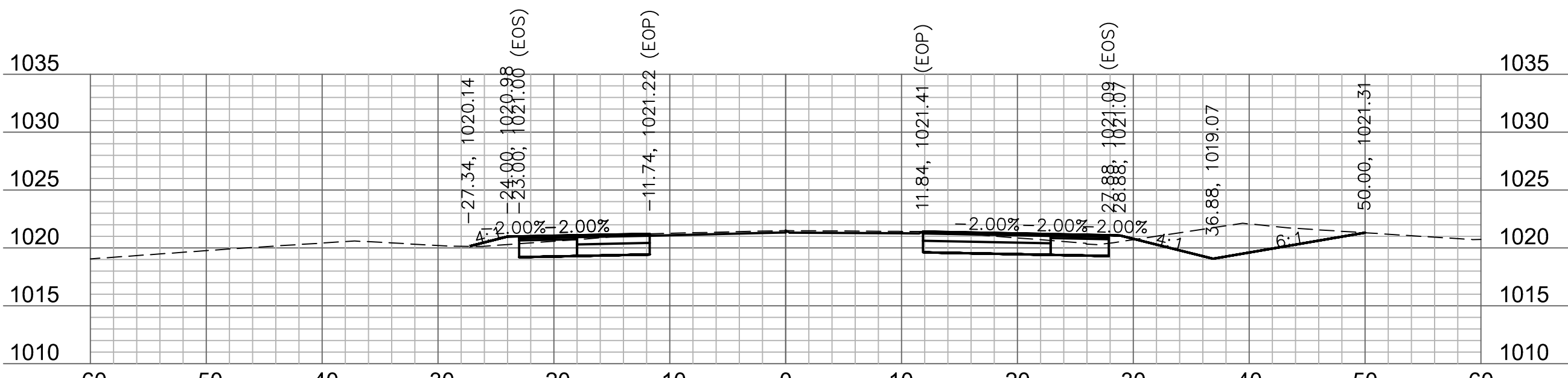
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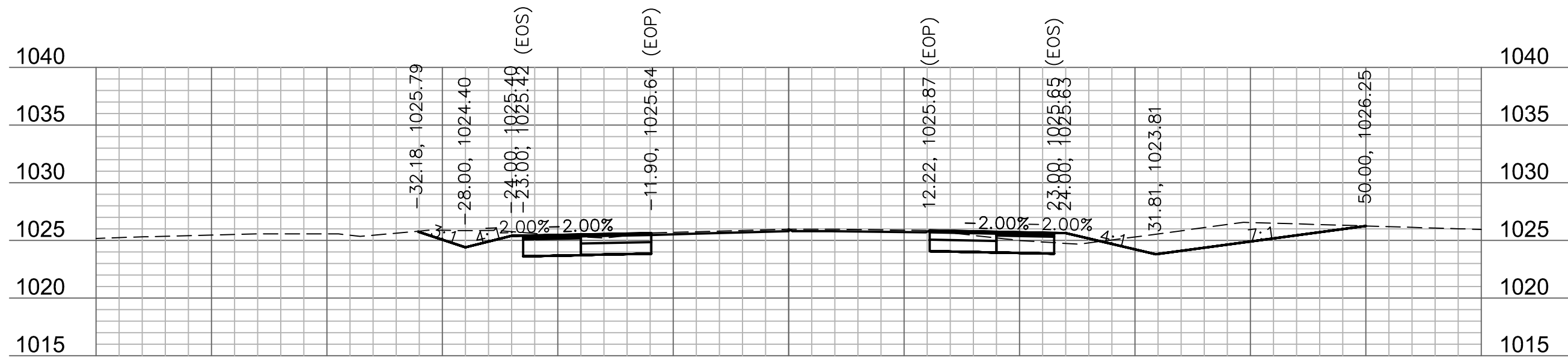
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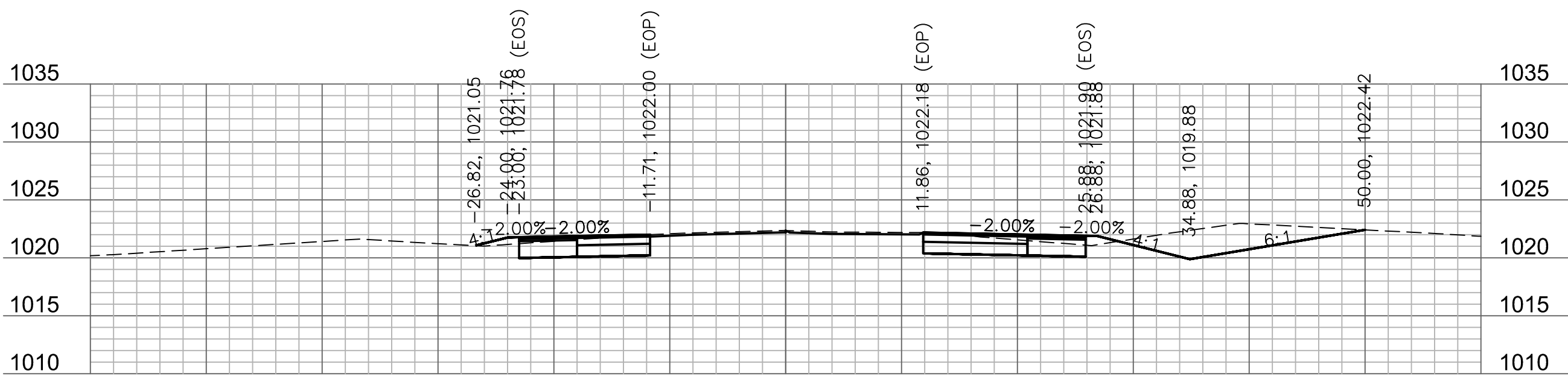
209+25



210+25



209+00



210+00



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JAMES PATRICK GALLAGHER
PE-2018010499
3/31/2020
PROFESSIONAL ENGINEER

JAMES PATRICK GALLAGHER
PE-2018010499

BY

REVISIONS DESCRIPTION

DATE

REV. NO.

2020

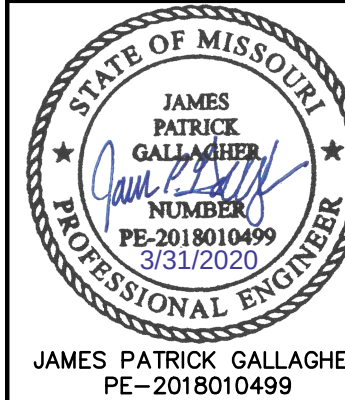
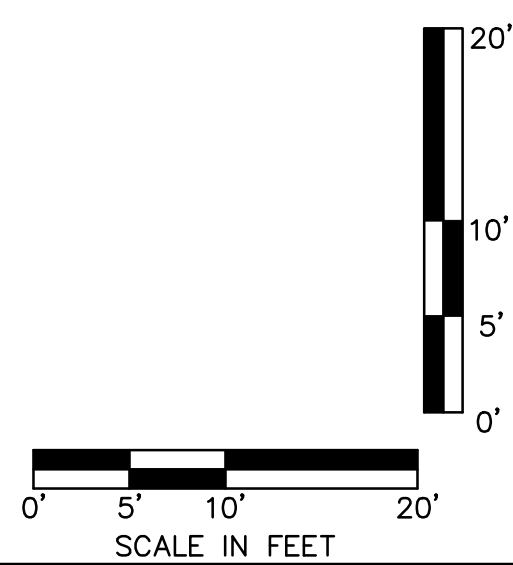
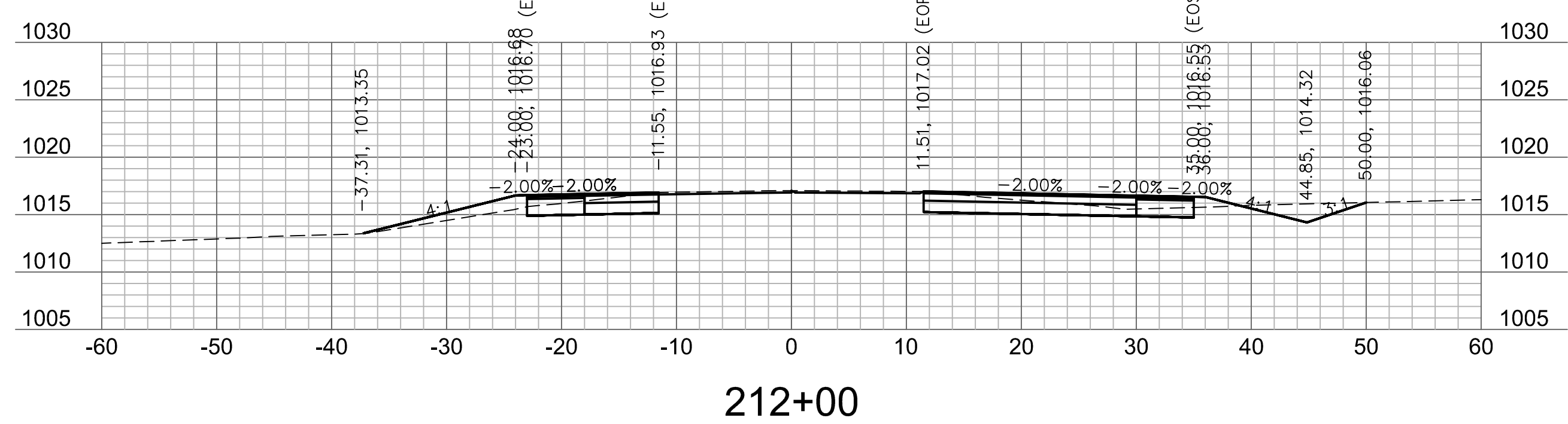
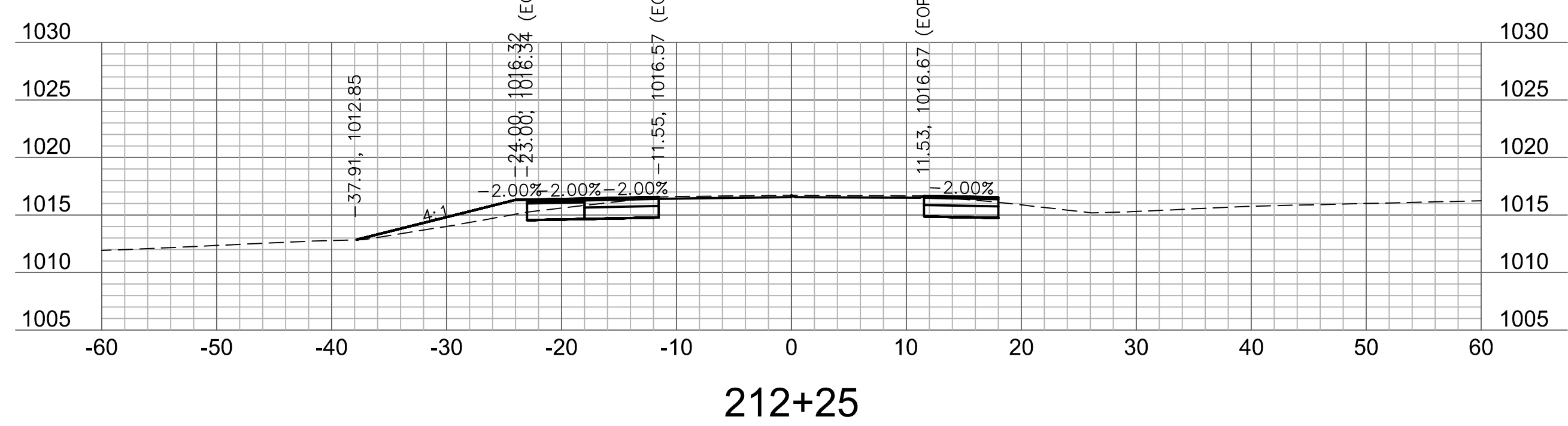
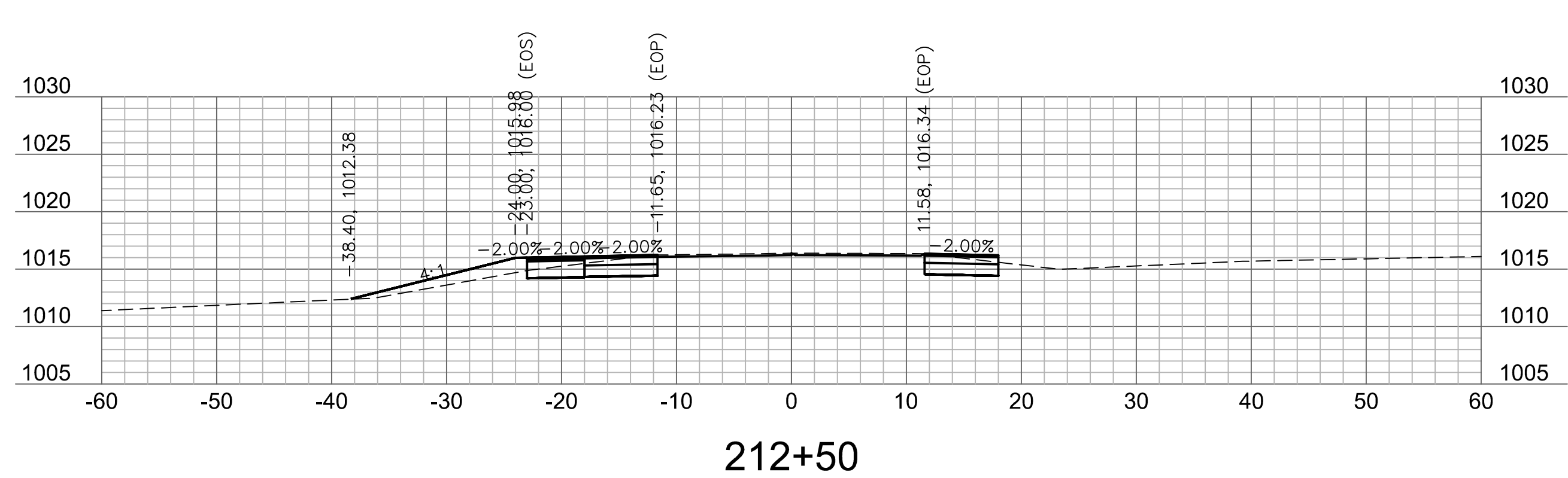
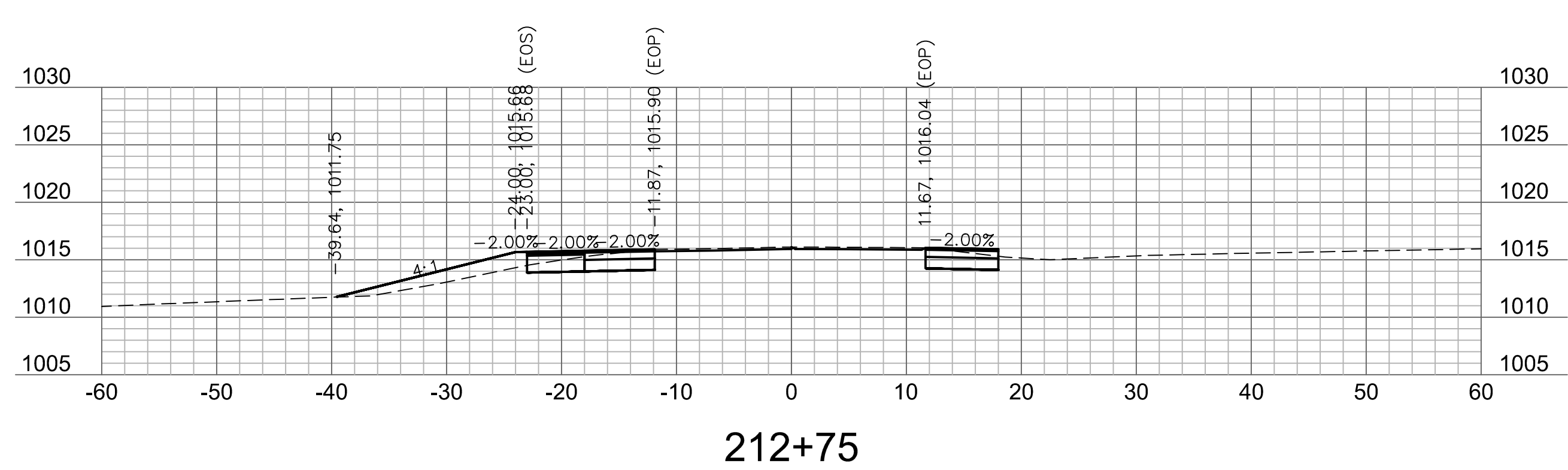
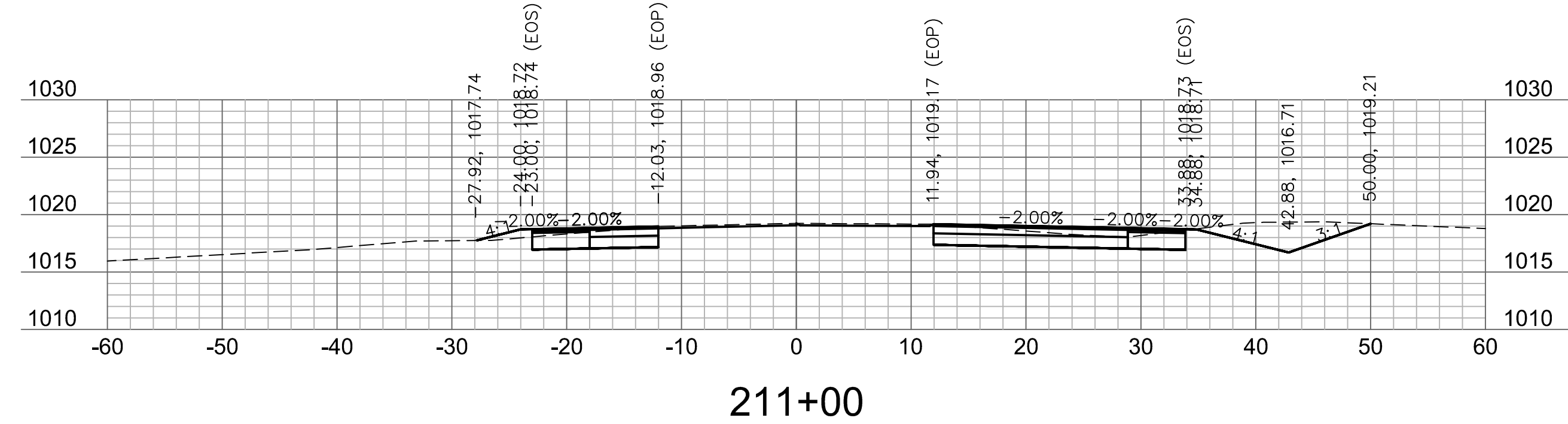
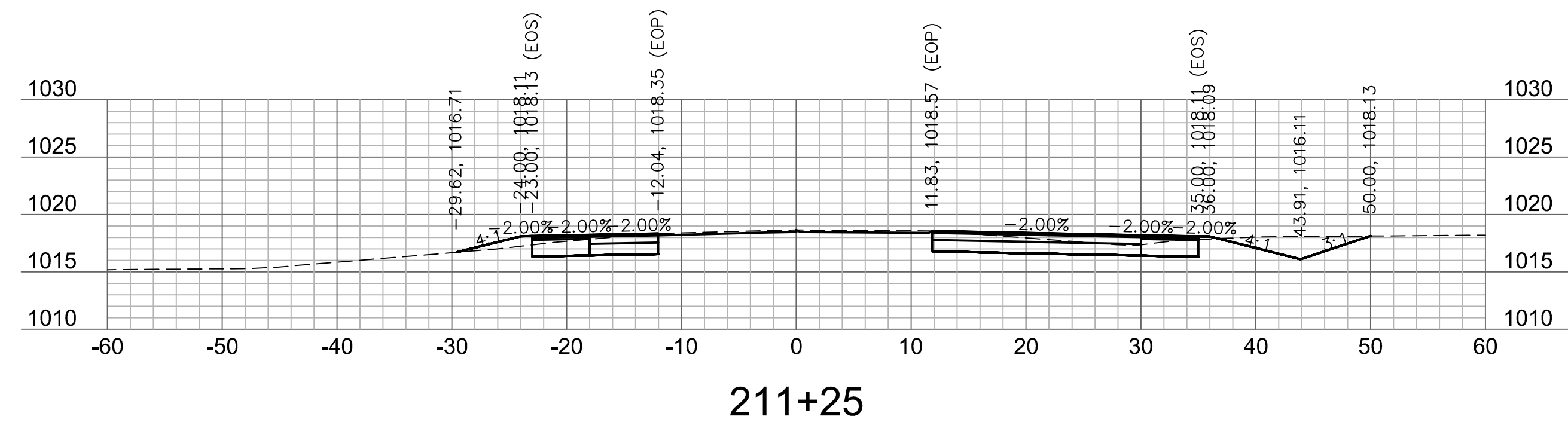
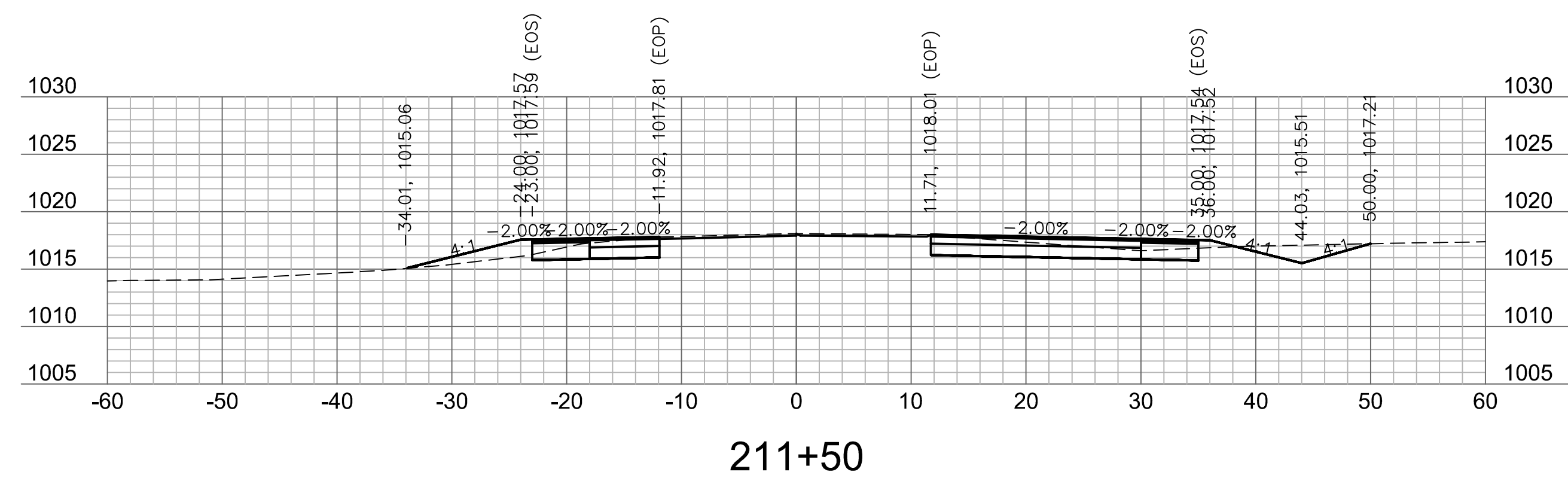
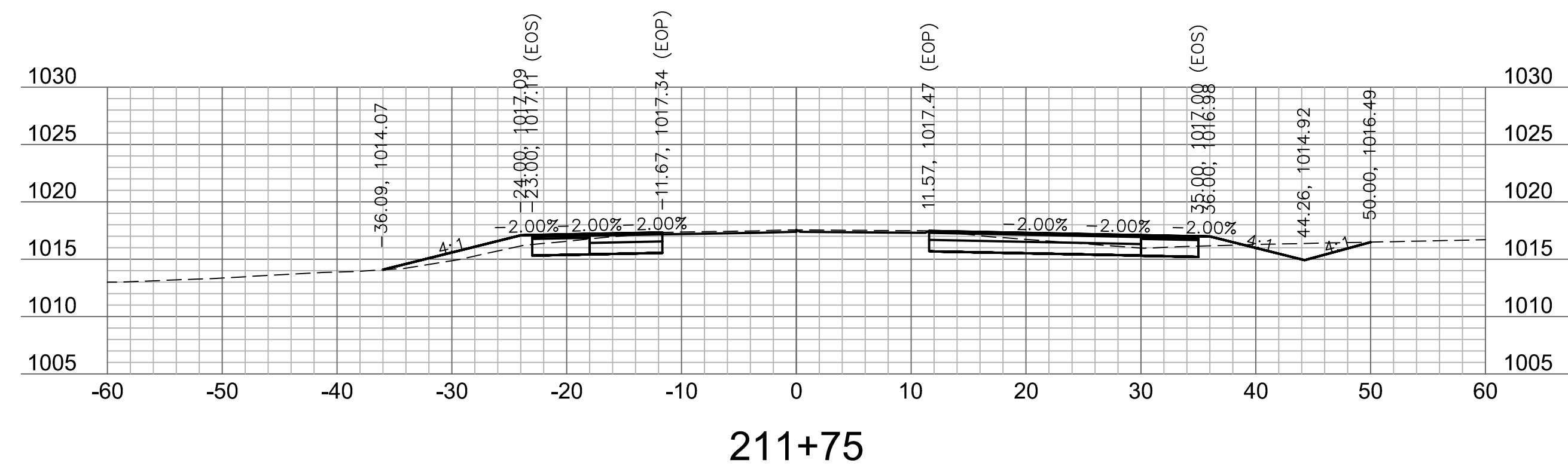
PRYOR ROAD
CROSS SECTION

HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS

LEE'S SUMMIT, MO

drawn by: AKU
checked by: JPC
approved by: JPC
QA/QC by: RBC
project no.: A19-2339
drawing no.: T_XSC_A192339
date: 2020.03.27

SHEET
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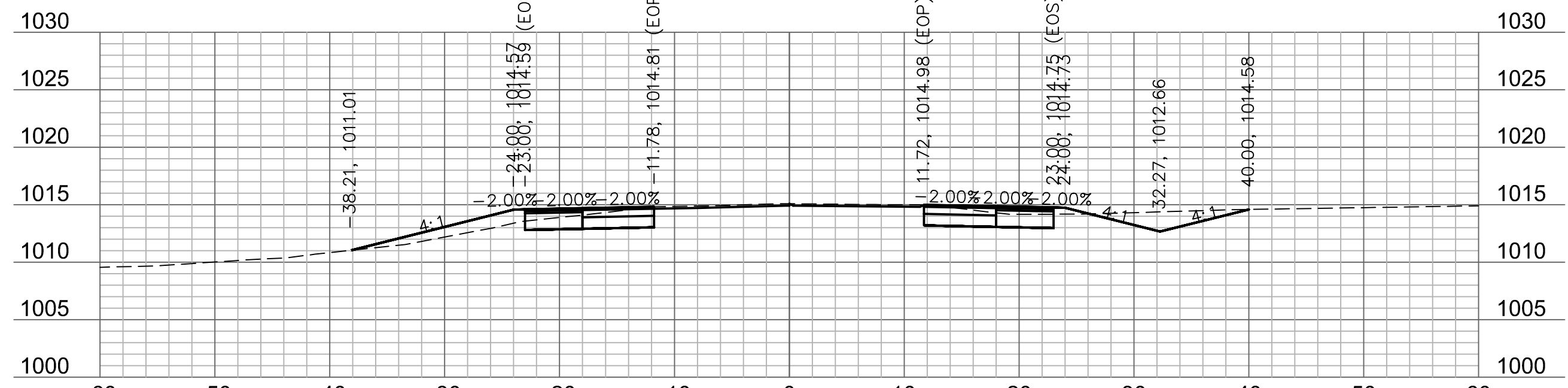
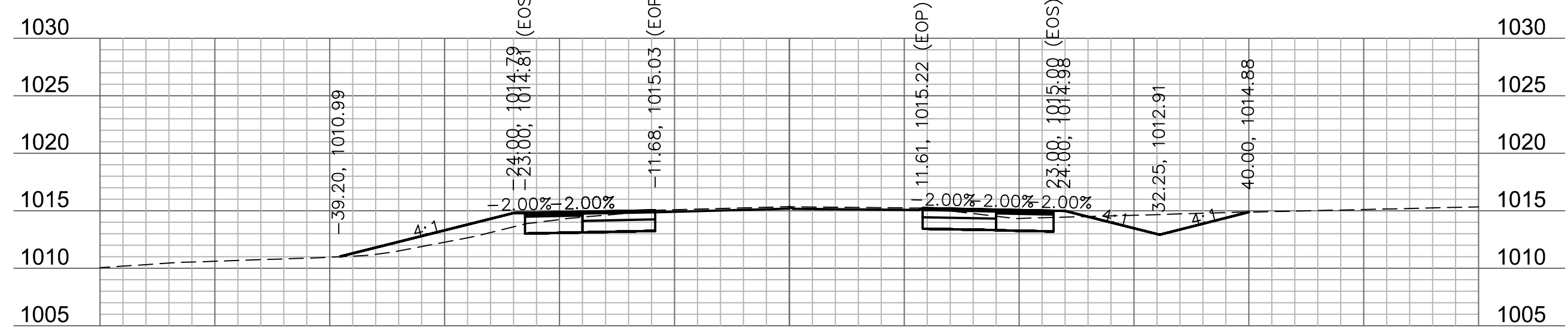


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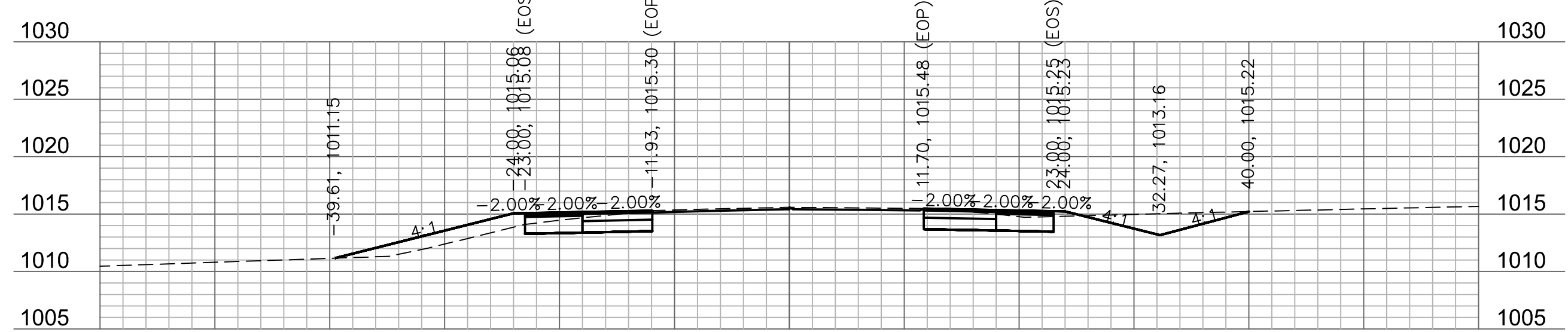
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HIGHWAY 150 CROSS SECTION	
HIGHWAY 150 & PRYOR ROAD ROADWAY IMPROVEMENTS	

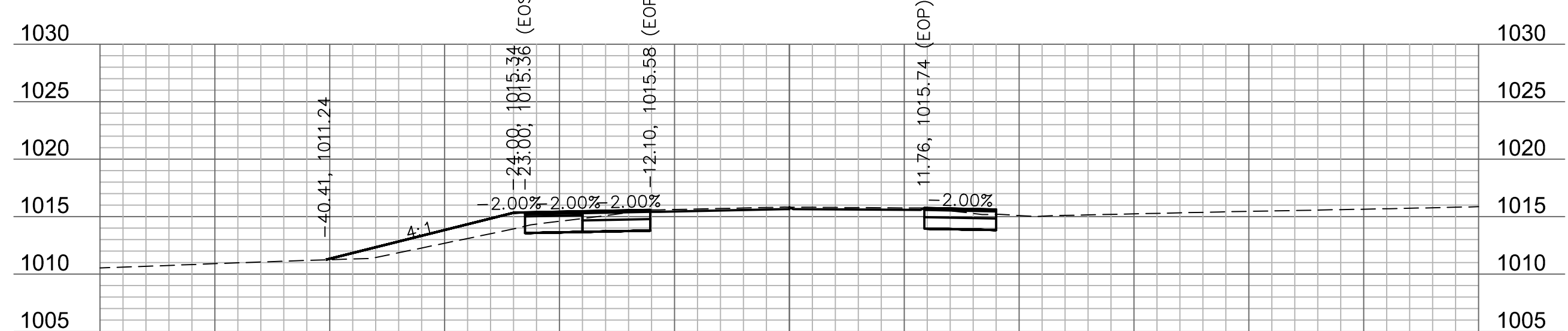
SHEET
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 $213+75$ 

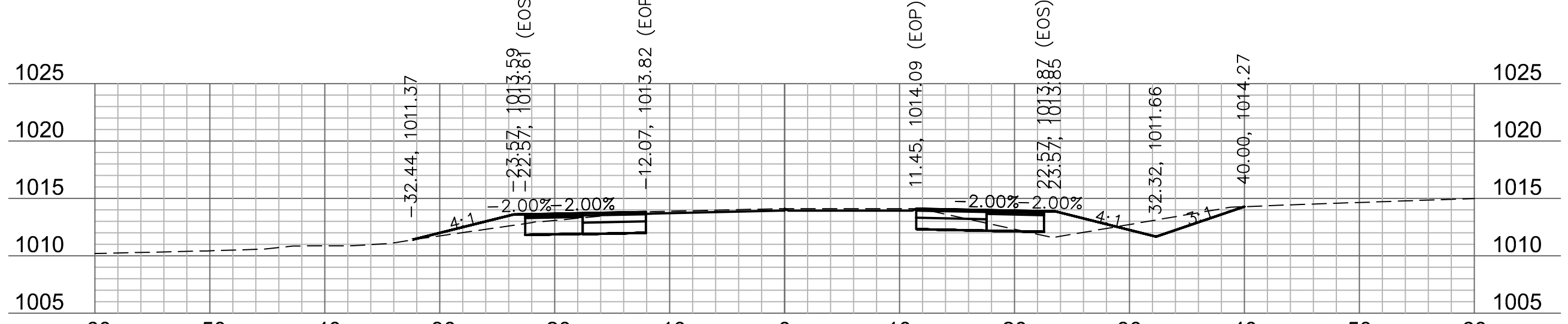
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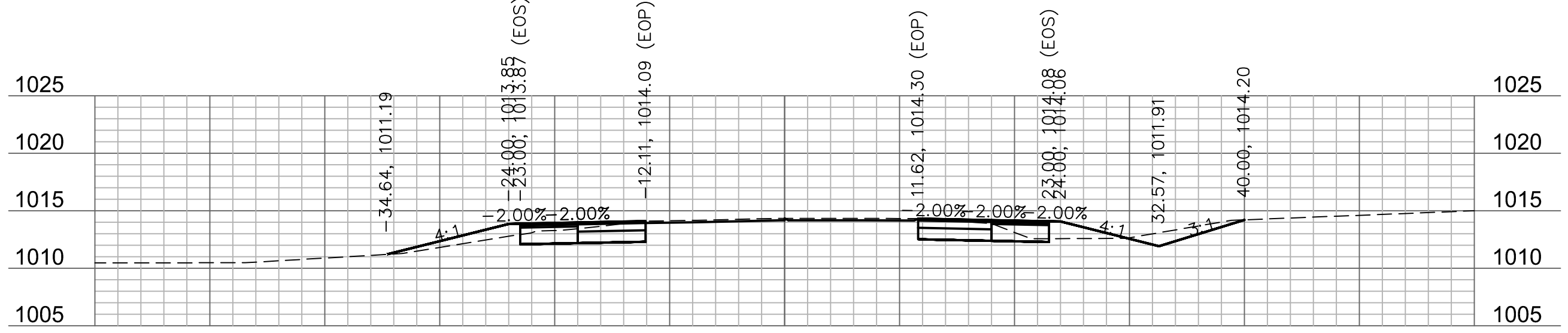
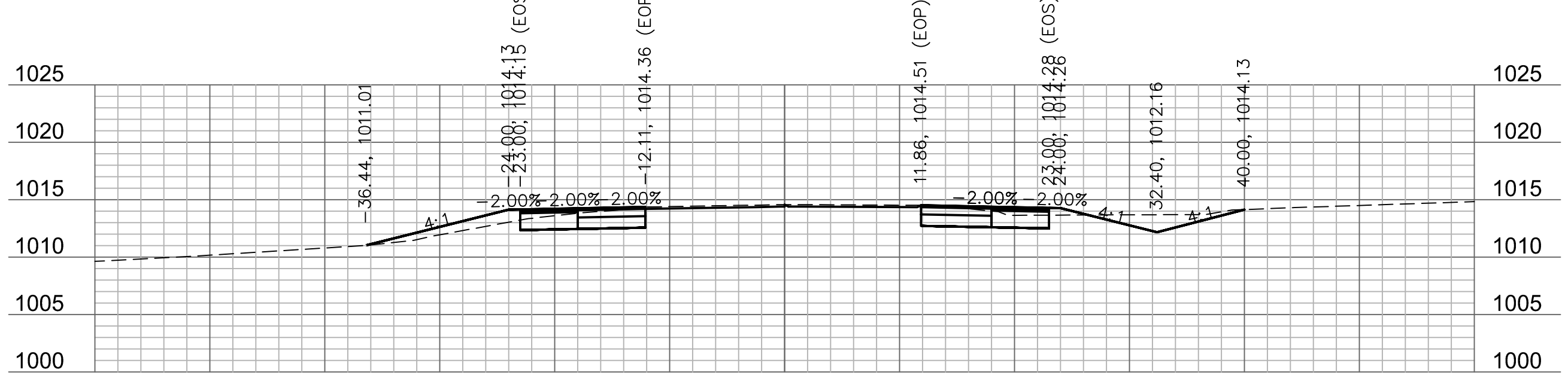
213+25



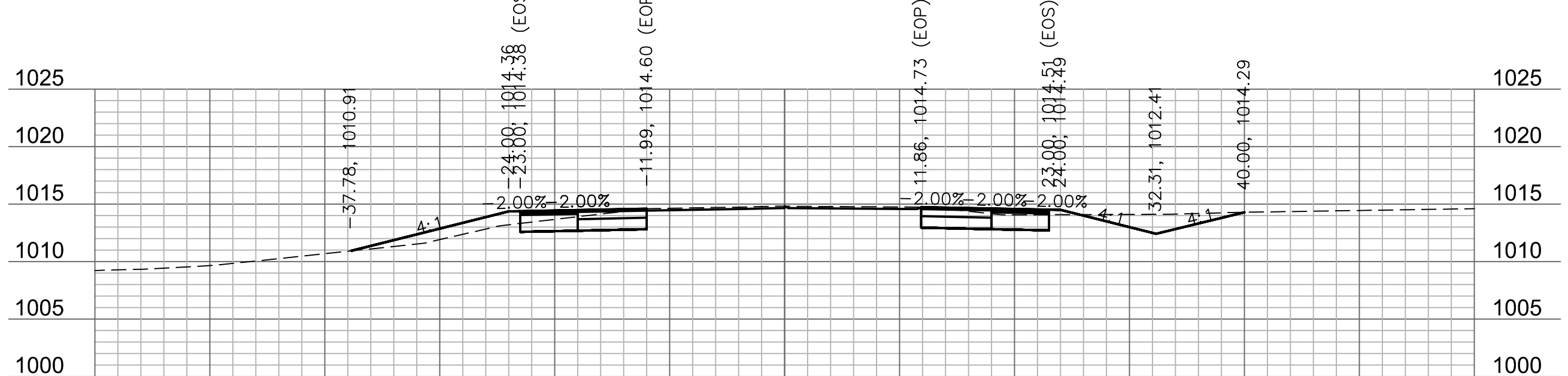
213+00



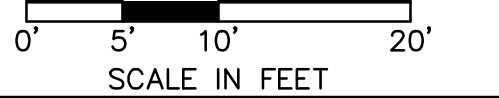
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 $214+50$ 

214+25



214+00



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PE-2018010499

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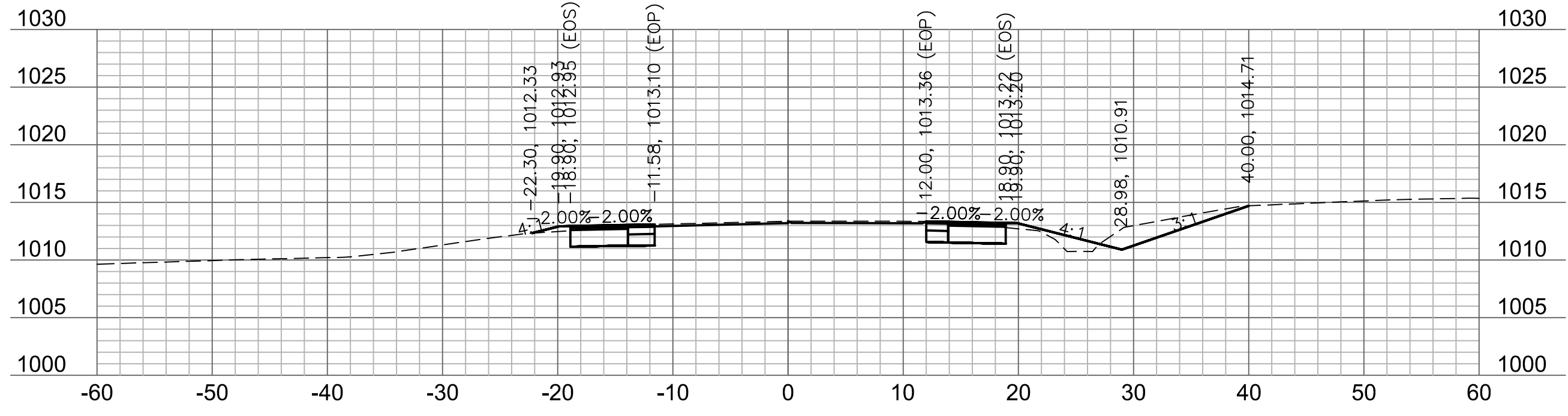
2020

PRYOR ROAD CROSS SECTION	HIGHWAY 150 & PRYOR ROAD ROADWAY IMPROVEMENTS	Q
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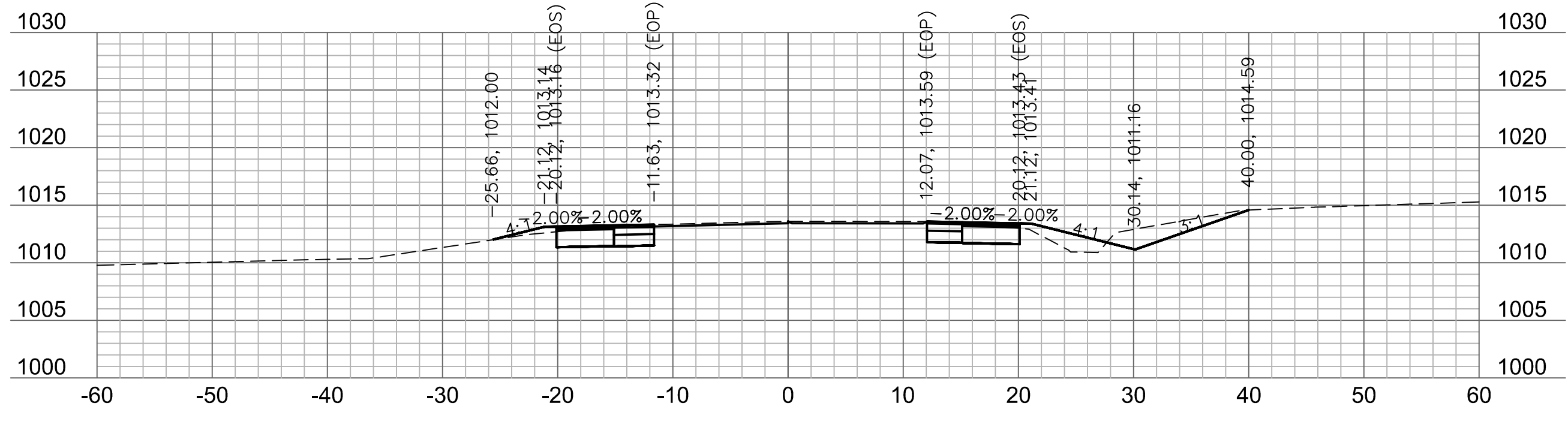
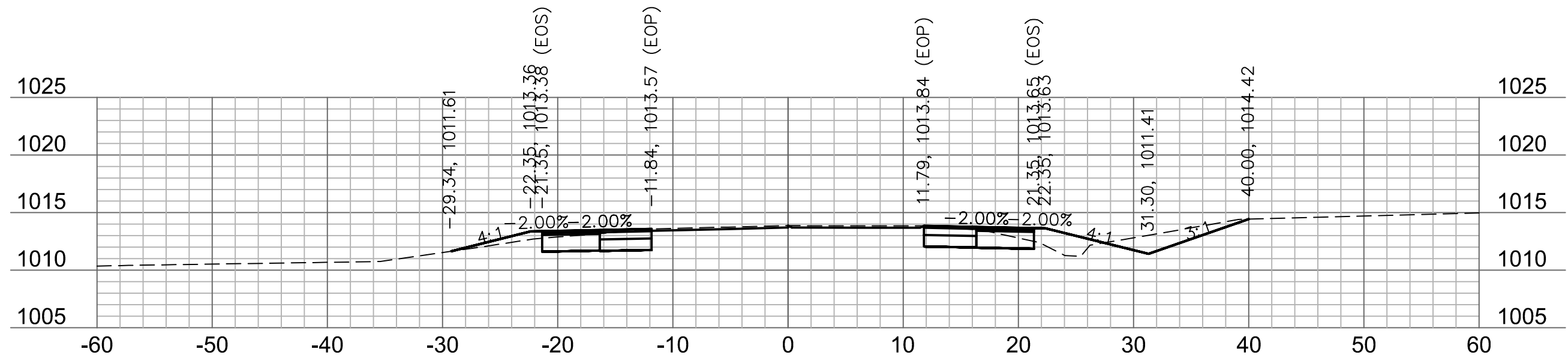
drawn by: AKU
checked by: JPG
approved by: JPG
QA/QC by: RBC
project no.: A19-2339
drawing no.: T XSC A192339
date: 2020.03.27

SHEET
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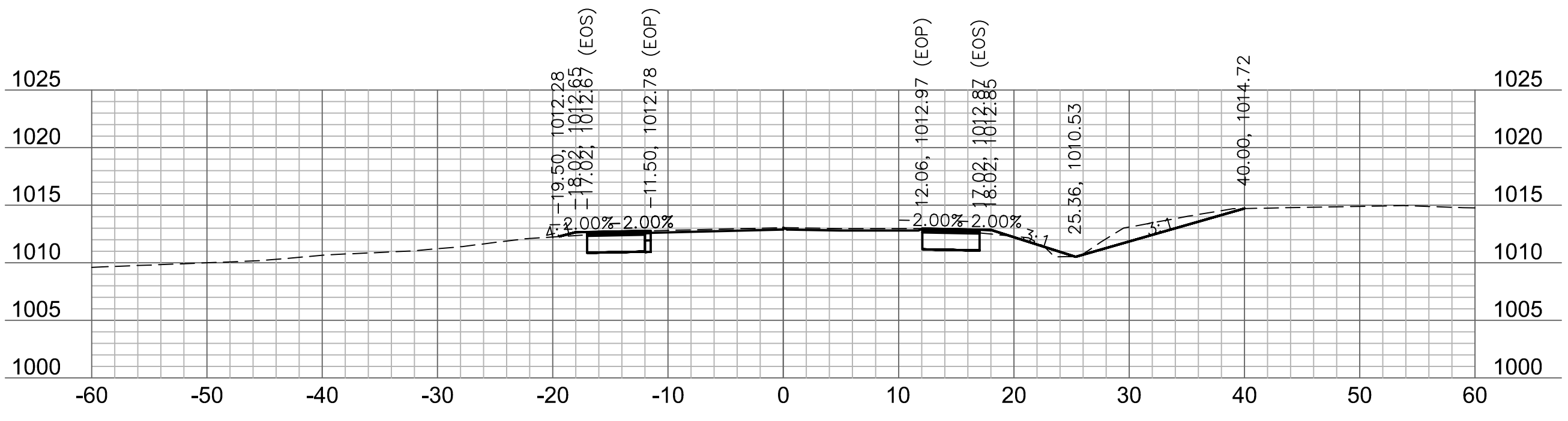
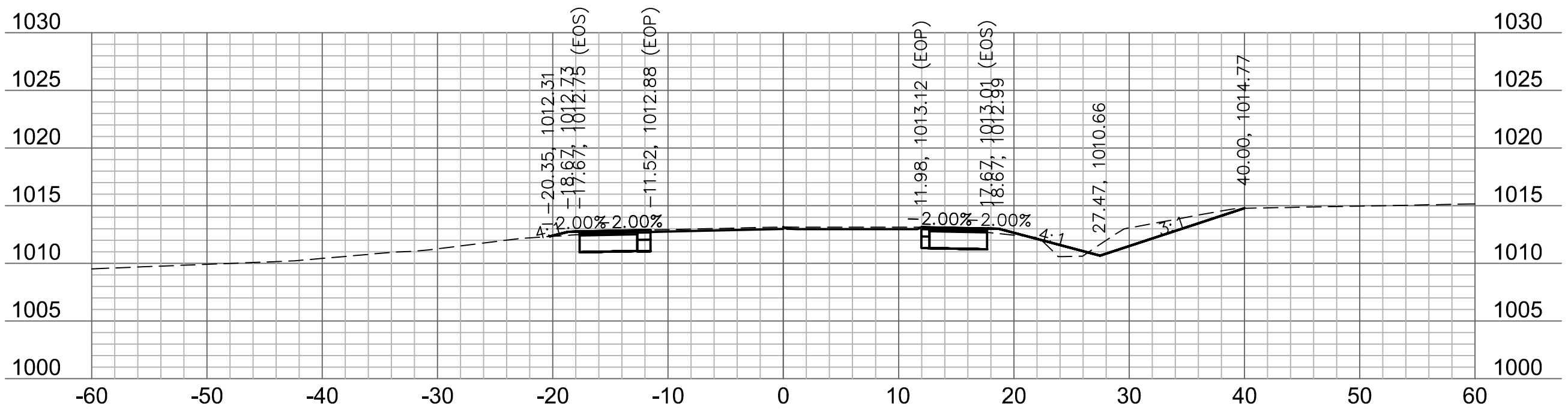
T_XSC_A192339.dwg



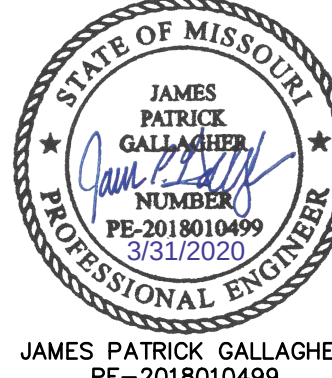
215+50

 $215+25$ 

215+00


$$215 + 88.36$$


215+75



JAMES PATRICK GALLAGHER
RE-2018010400

BY

REVISIONS DESCRIPTION

REV. _____
DATE _____

020

PRYOR ROAD
CROSS SECTION

HIGHWAY 150 & PRYOR ROAD
ROADWAY IMPROVEMENTS

drawn by:	AKU
checked by:	JPG
approved by:	JPG
QA/QC by:	RBC
project no.:	A19-2339
drawing no.:	T XSC A192339
date:	2020.03.27

SHEET
53 of 53

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