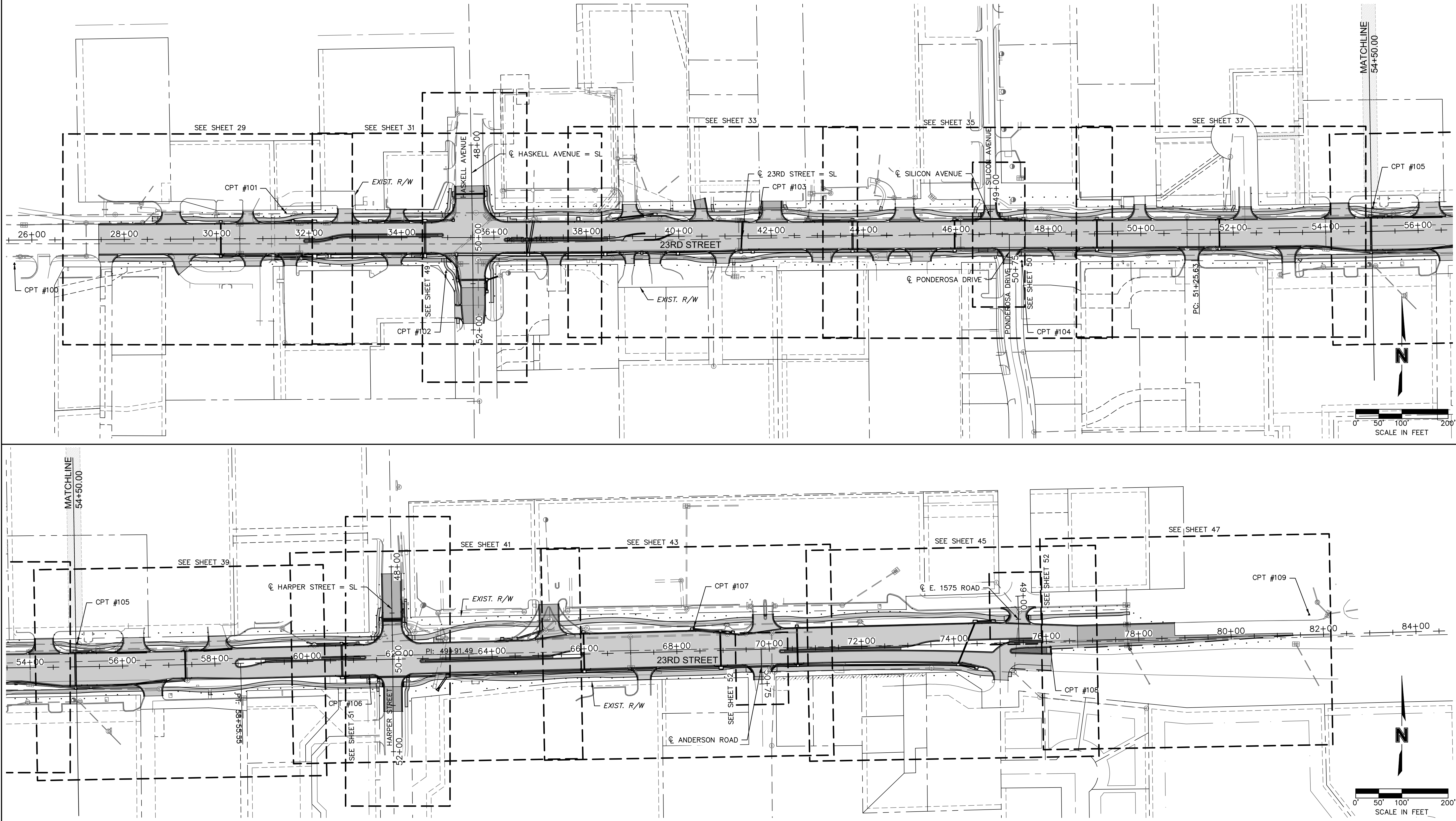


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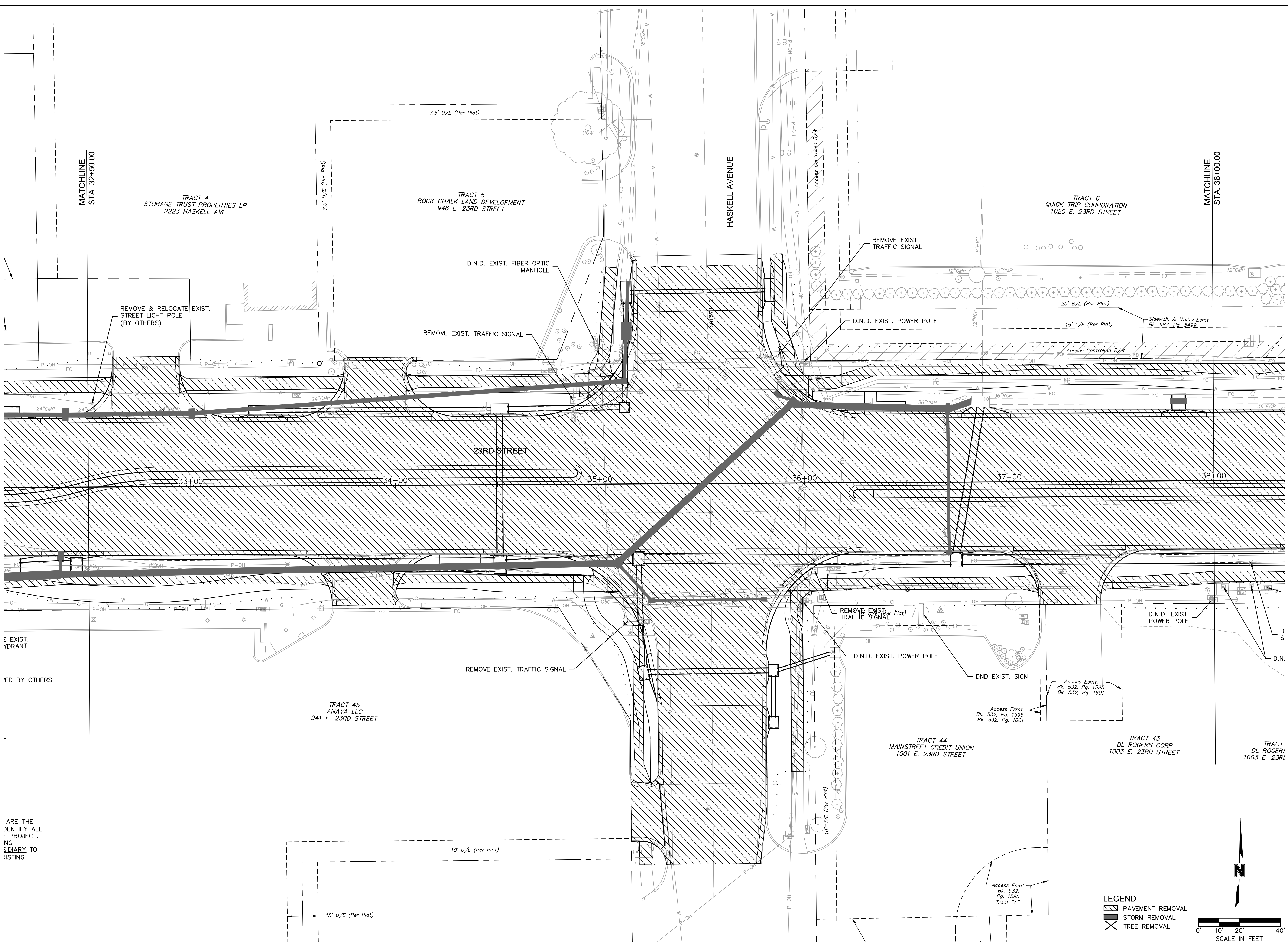
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GENERAL LAYOUT & SURVEY CONTROL
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

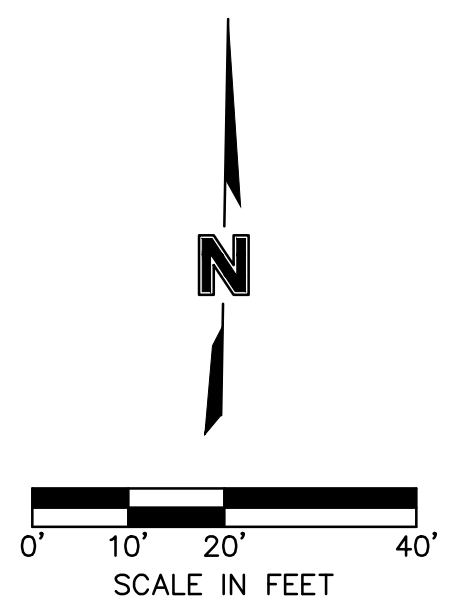
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 USER: autorenk
 T_PBLK_0202348

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LEGEND
 [Symbol] PAVEMENT REMOVAL
 [Symbol] STORM REMOVAL
 [Symbol] TREE REMOVAL



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REV. NO.	DATE	REVISIONS DESCRIPTION

DEMOLITION AND REMOVALS

**23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD**

LAWRENCE, KANSAS

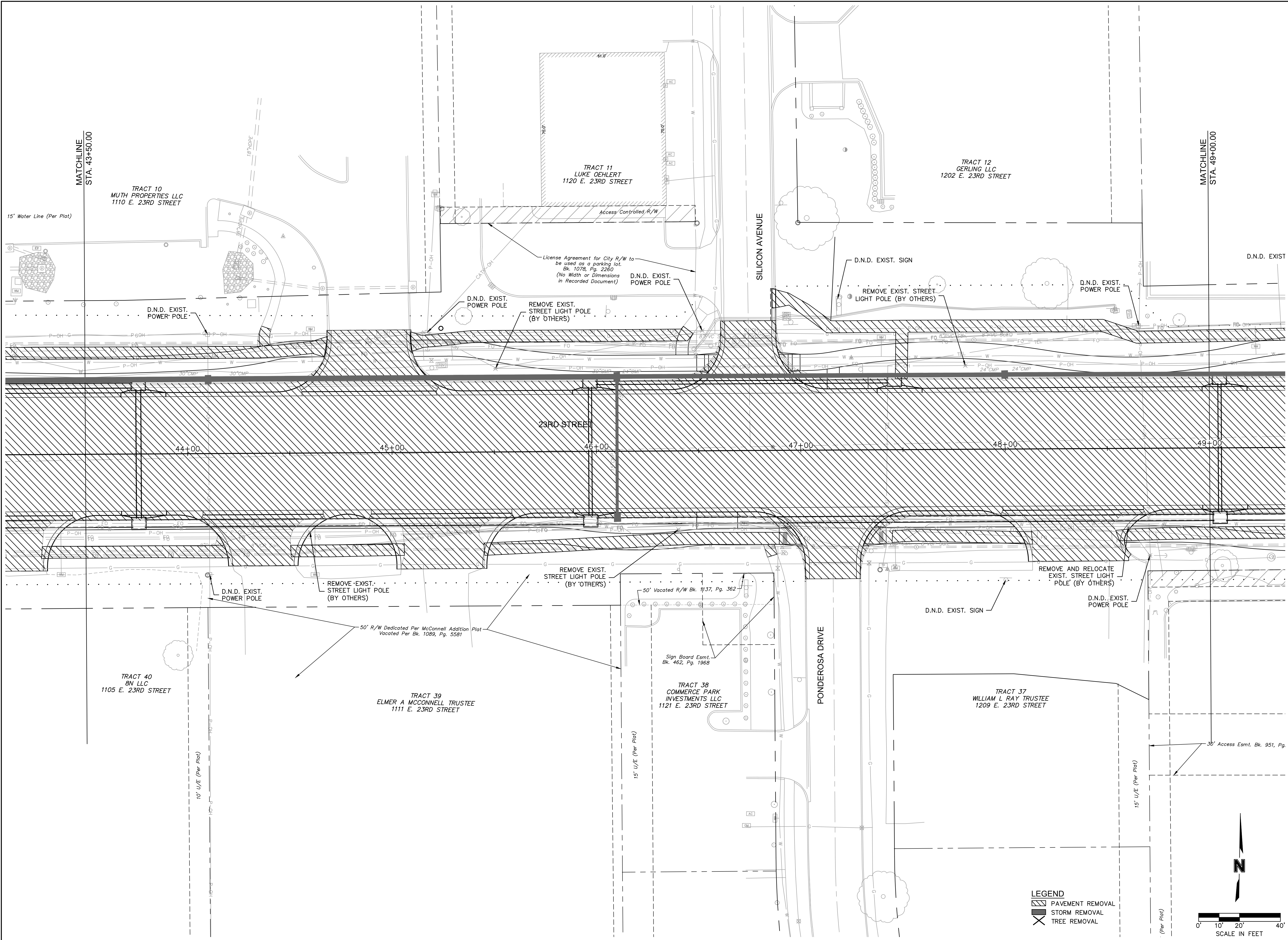
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REVISIONS

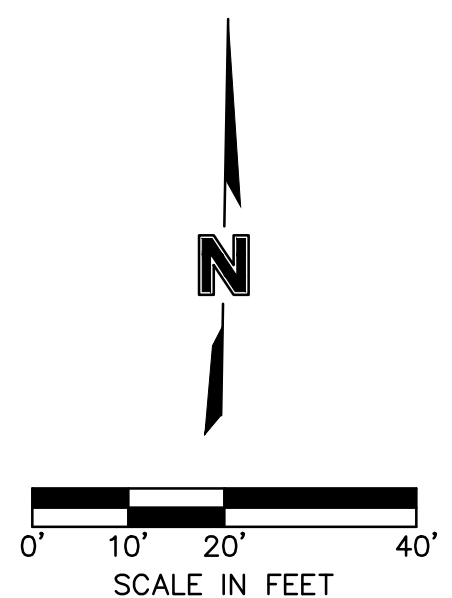
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SHEET
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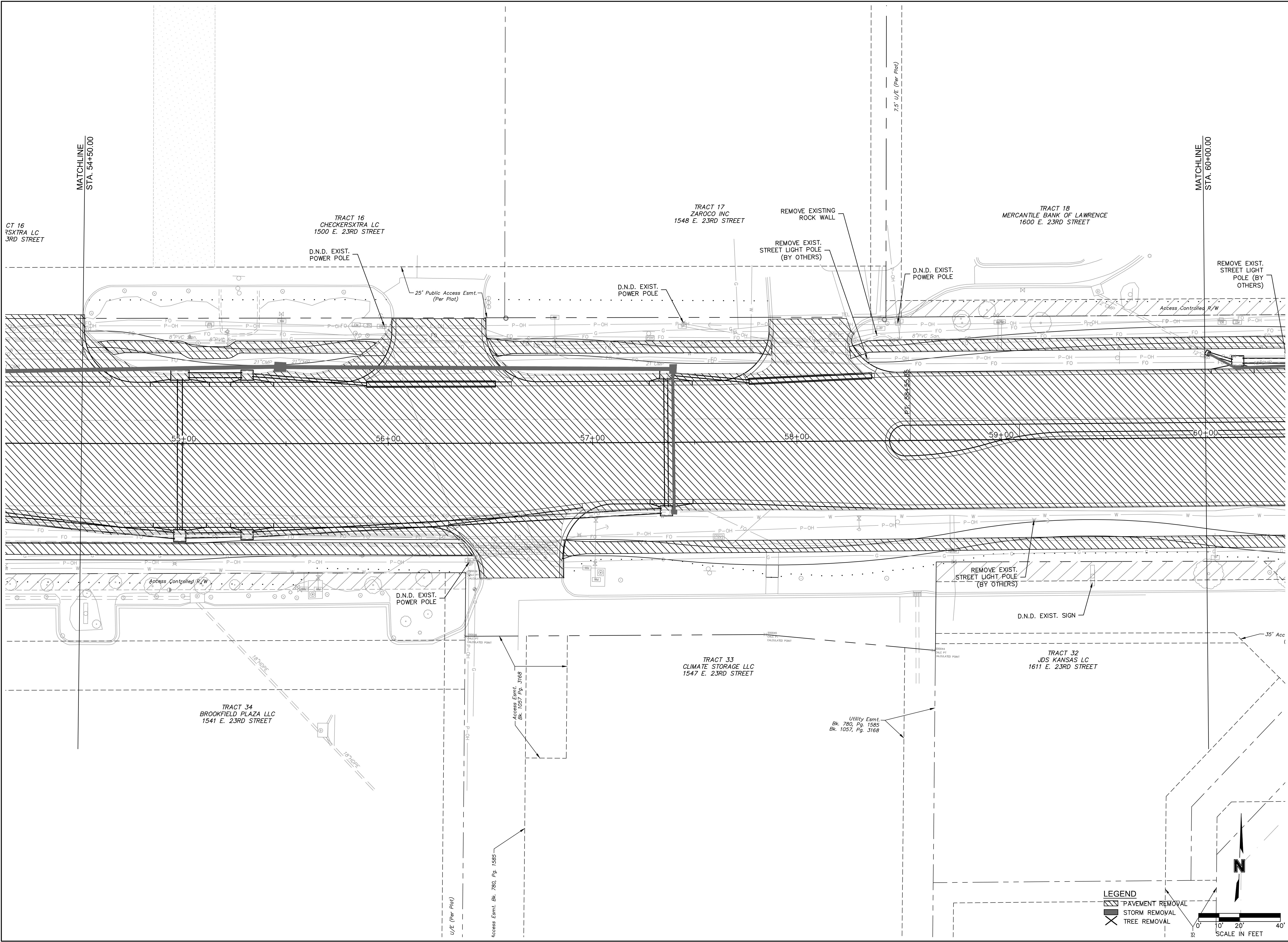


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 [Cross-hatched Box] STORM REMOVAL
 [X] TREE REMOVAL



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PRELIMINARY NOT FOR CONSTRUCTION																										
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HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD																										
LAWRENCE, KANSAS																										
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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

DEMOLITION AND REMOVALS

**23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD**

LAWRENCE, KANSAS

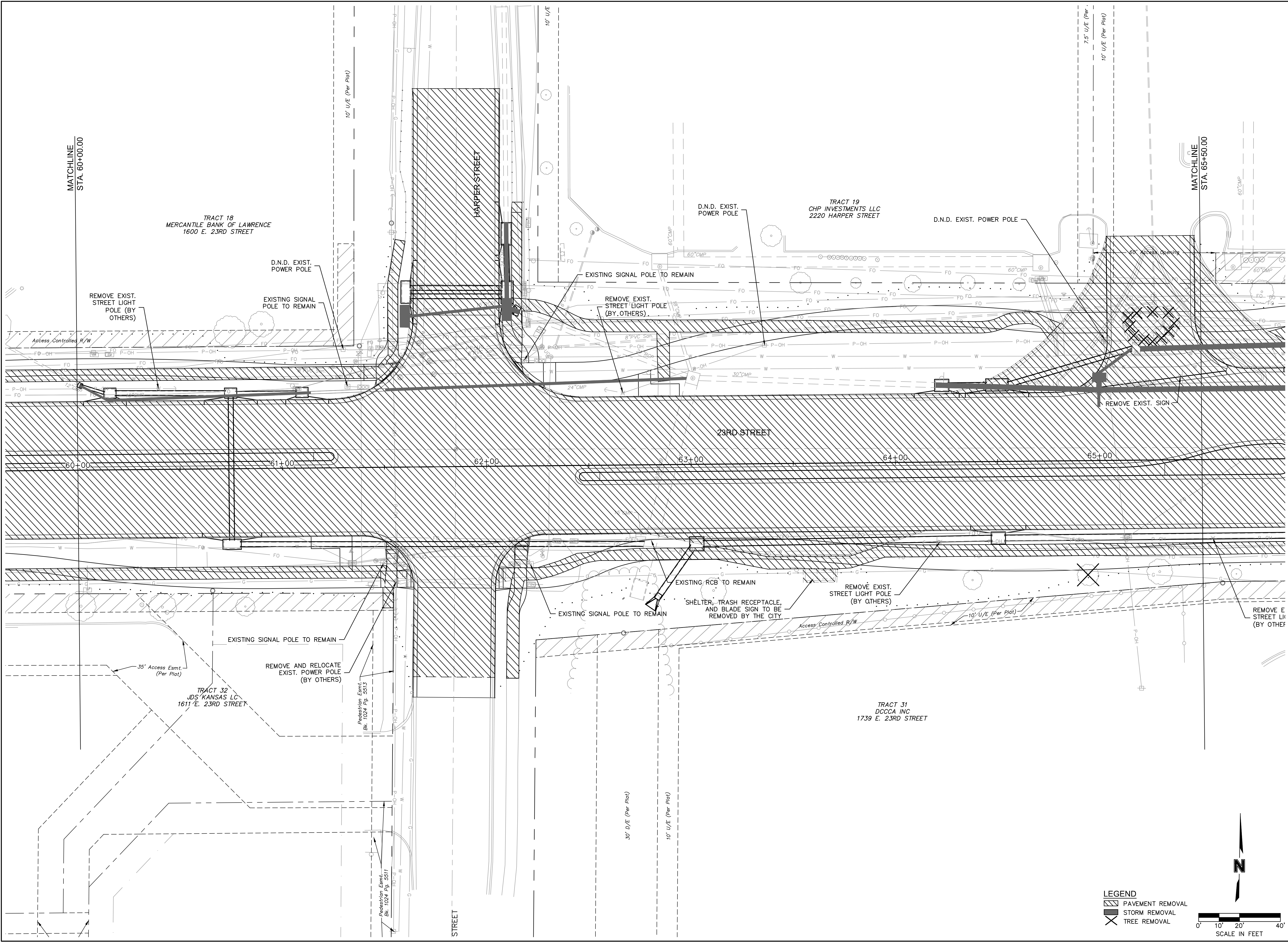
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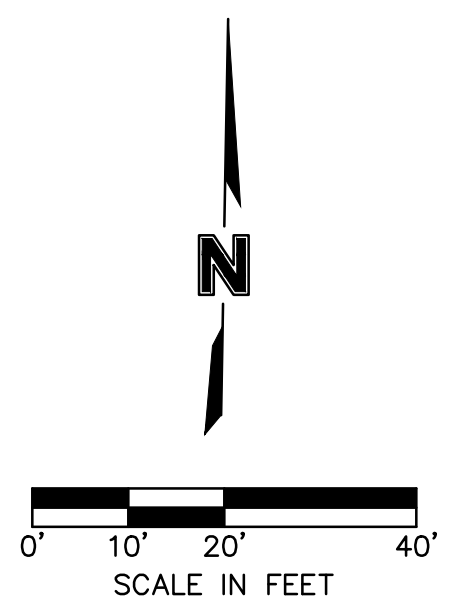
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 [Cross-hatched Box] STORM REMOVAL
 [X] TREE REMOVAL



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DEMOLITION AND REMOVALS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

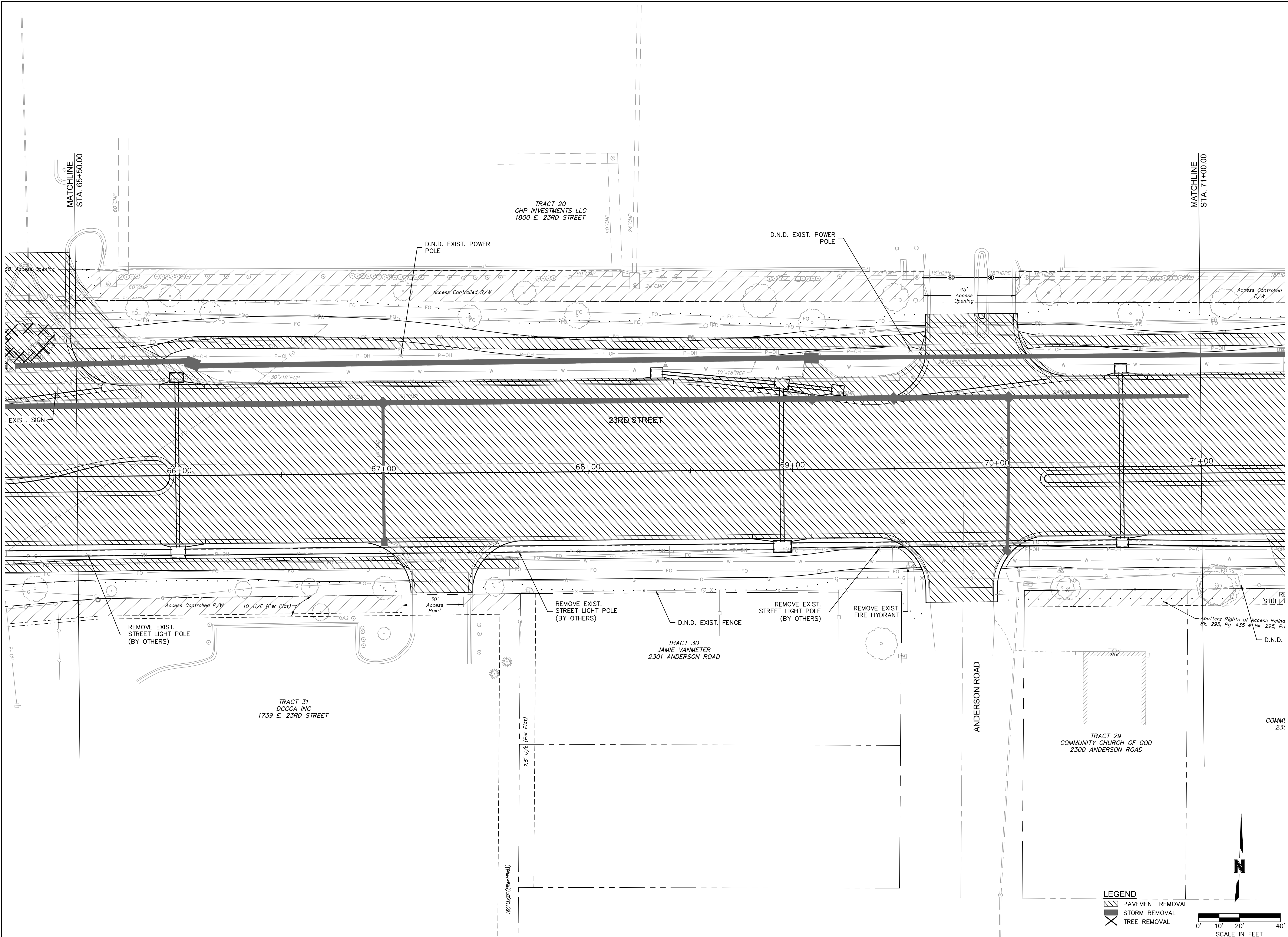
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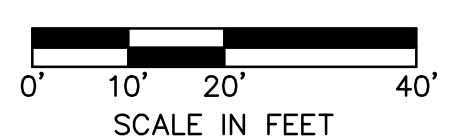
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LEGEND
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DEMOLITION AND REMOVALS

**23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD**

LAWRENCE, KANSAS

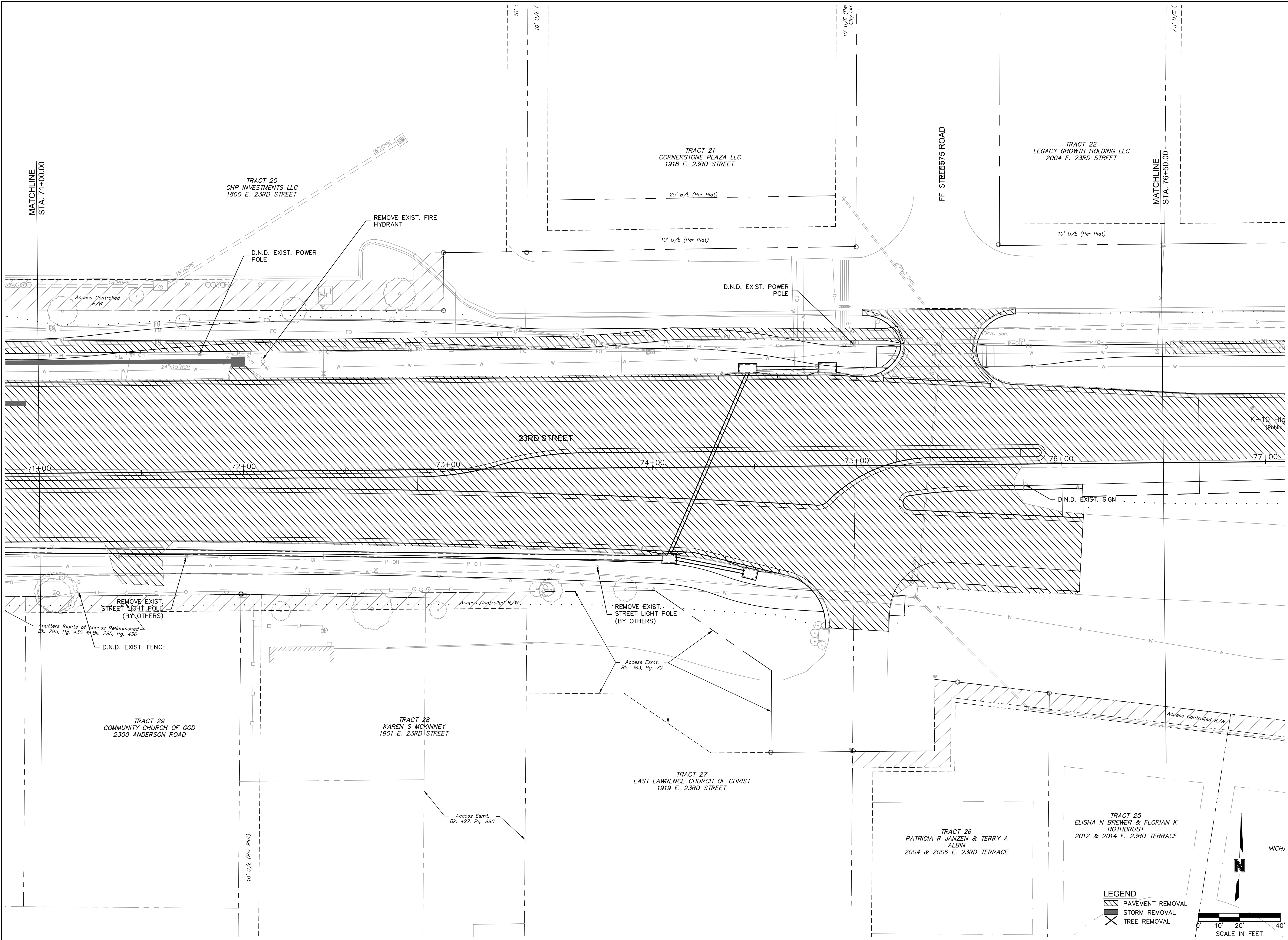
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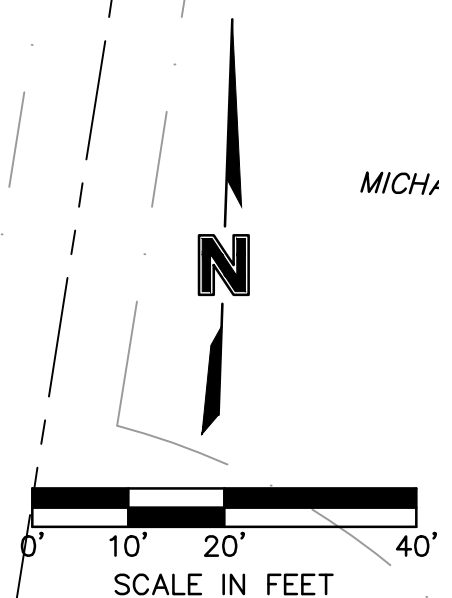
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SHEET
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LEGEND
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 [Cross-hatched Box] STORM REMOVAL
 [X Symbol] TREE REMOVAL



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DEMOLITION AND REMOVALS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

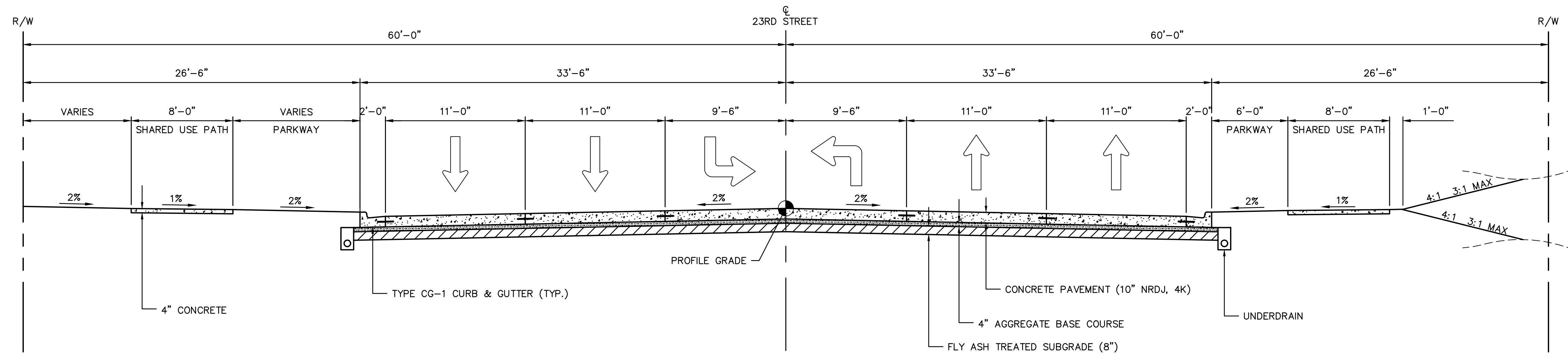
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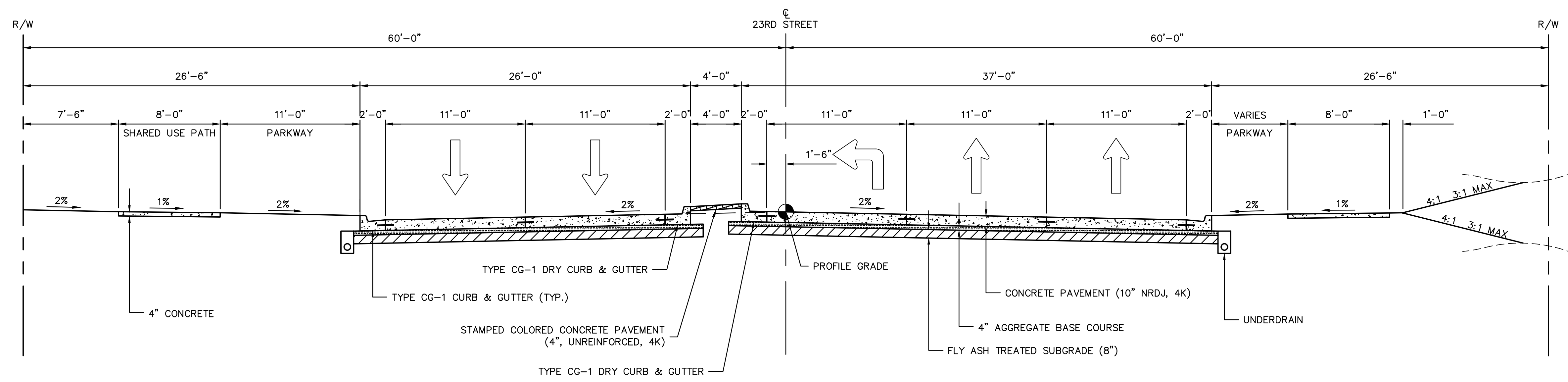
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SHEET
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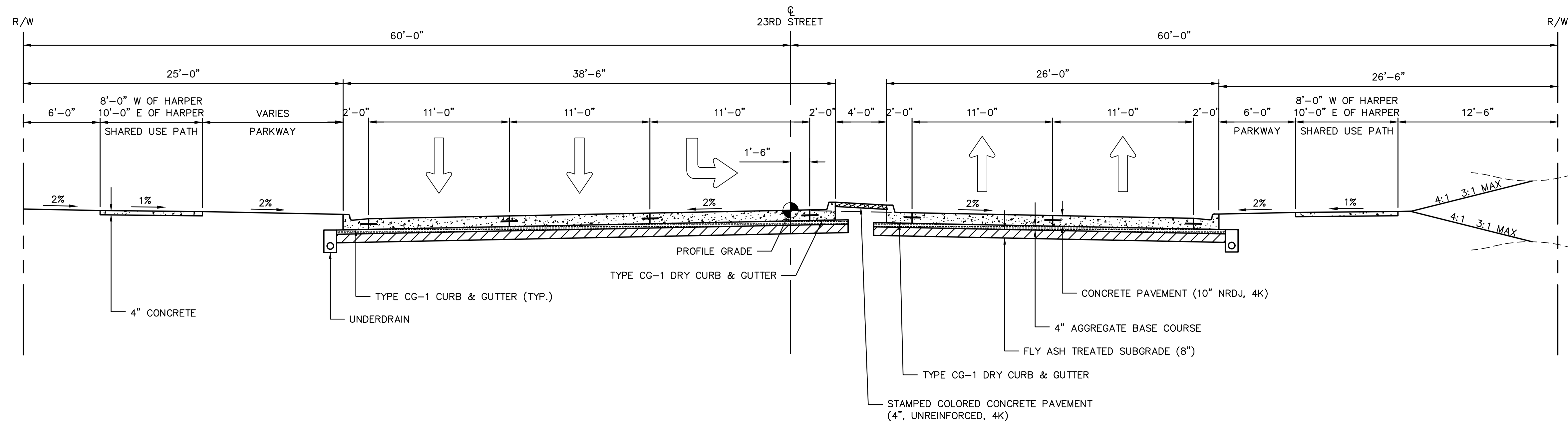
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PRELIMINARY
 NOT FOR CONSTRUCTION

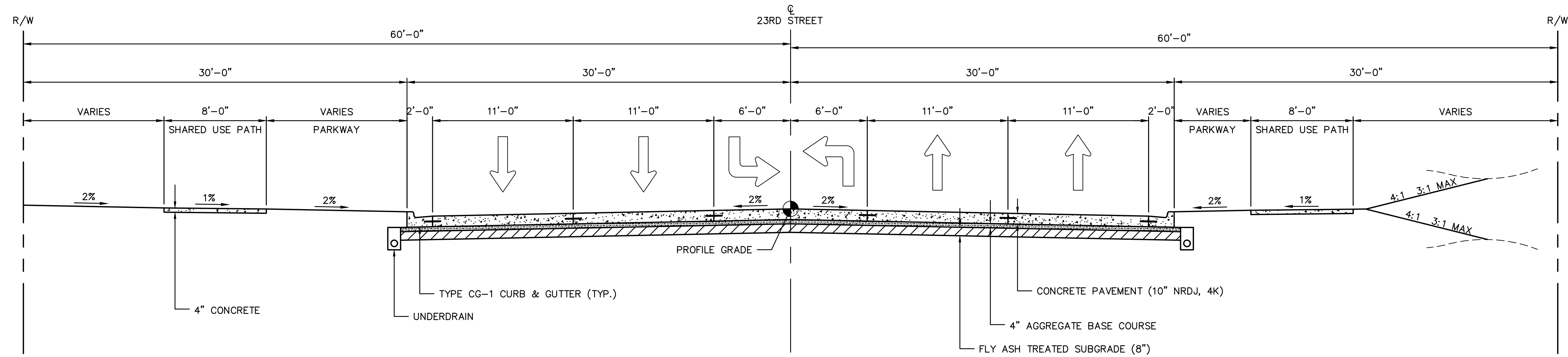
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LAWRENCE, KANSAS	

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**TYPICAL SECTION WB LEFT TURN LANE
 23RD STREET**
 NOT TO SCALE



**TYPICAL SECTION
 23RD STREET**
 NOT TO SCALE
 STA. 41+55.30 TO STA. 54+70.01
 STA. 56+19.70 TO 57+62.85

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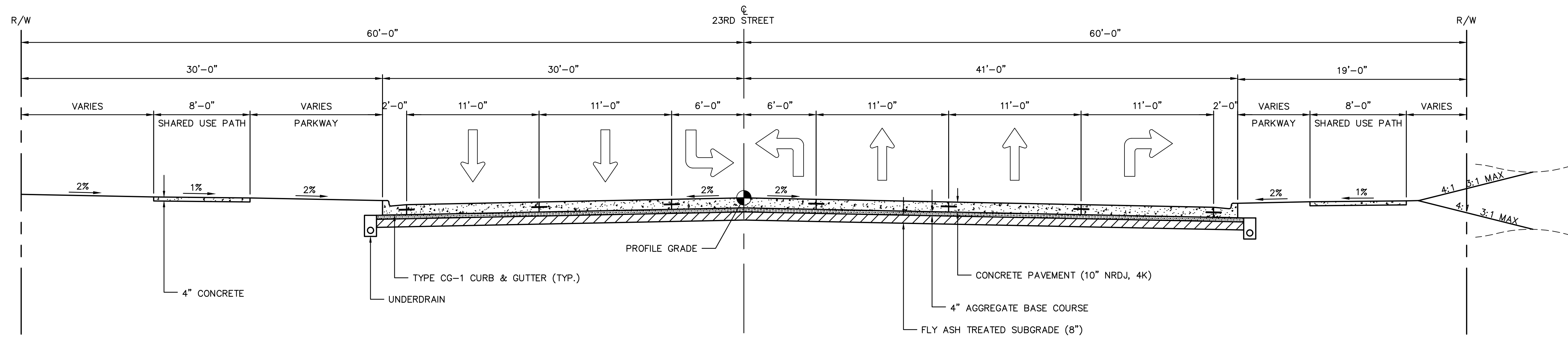
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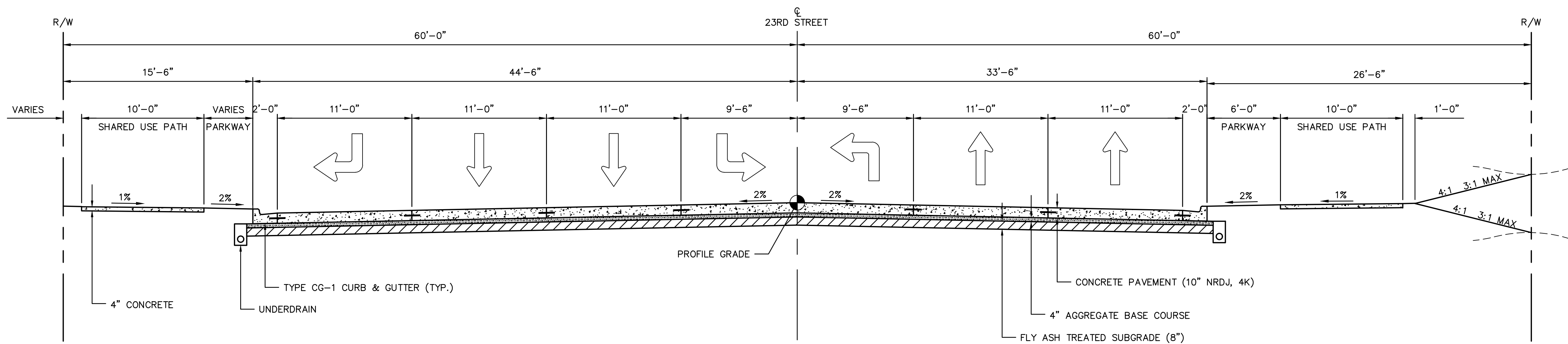
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 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: RBK
 project no.: 020-2348
 drawing no.: TYP_0202348
 date: 12-18-2020

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TYPICAL SECTION
23RD STREET
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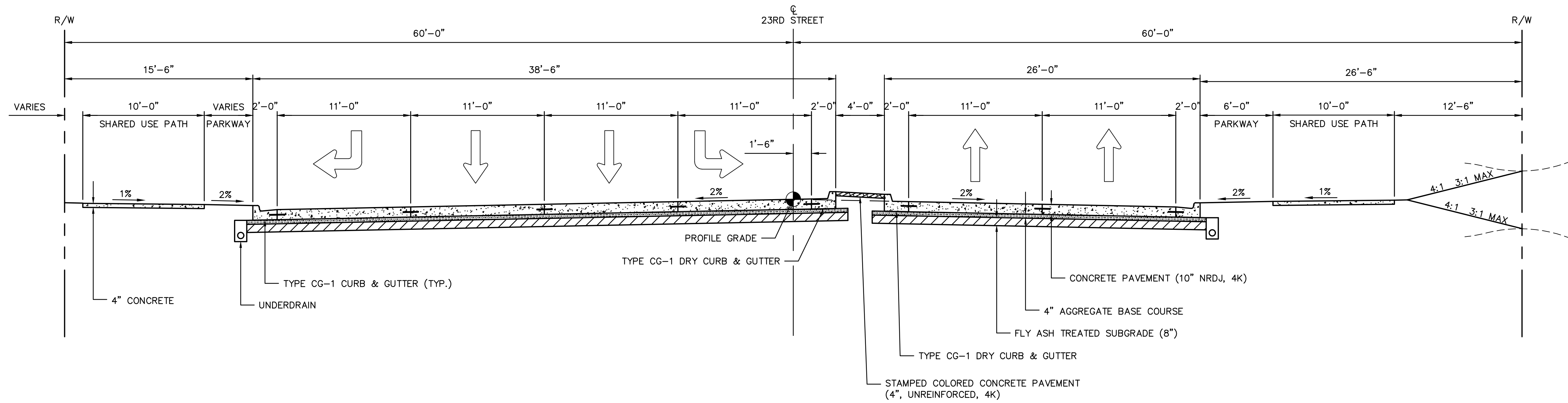
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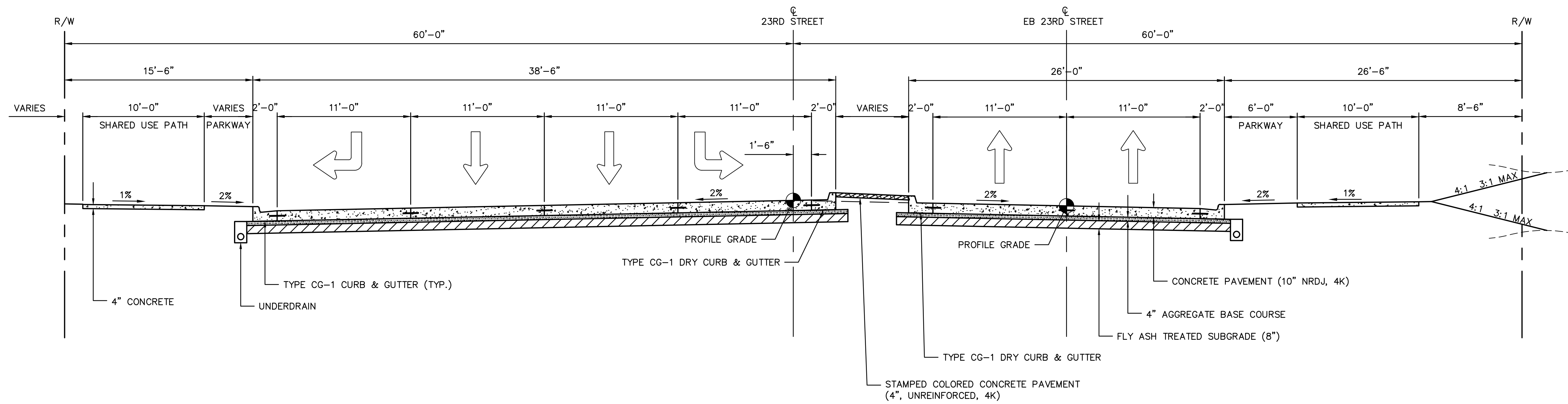
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LAWRENCE, KANSAS	

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TYPICAL SECTION
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 NOT TO SCALE
 STA. 70+21.19 TO STA. 71+14.07



TYPICAL SECTION
23RD STREET
 NOT TO SCALE
 STA. 71+14.07 TO STA. 72+85.19

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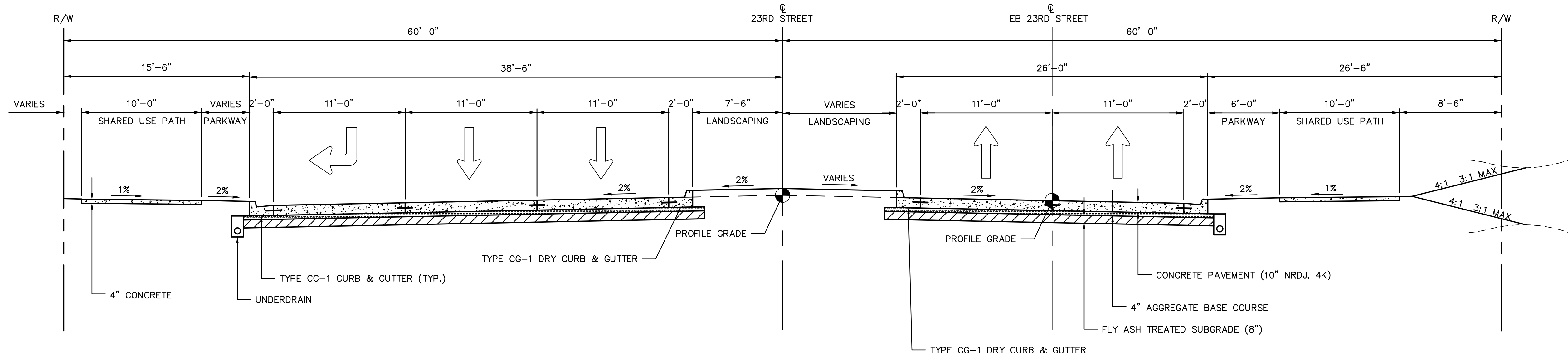
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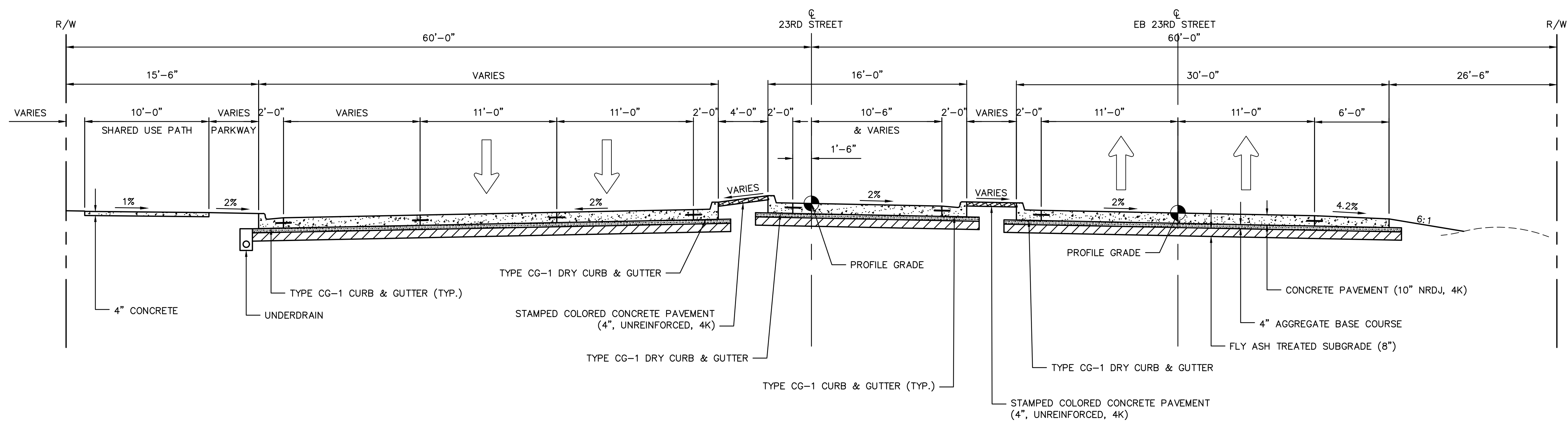
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LAWRENCE, KANSAS	

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: RBK
 project no.: 020-2348
 drawing no.: T TYP_0202348
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 DATE: Dec 18, 2020 9:25am XREFS: T_PBLK_0202348 V_BASE_0202348 T_PALGN_0202348



TYPICAL SECTION
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 NOT TO SCALE
 STA. 72+85.19 TO STA. 74+80.82



TYPICAL SECTION
23RD STREET
 NOT TO SCALE
 STA. 75+36.25 TO STA. 75+84.31

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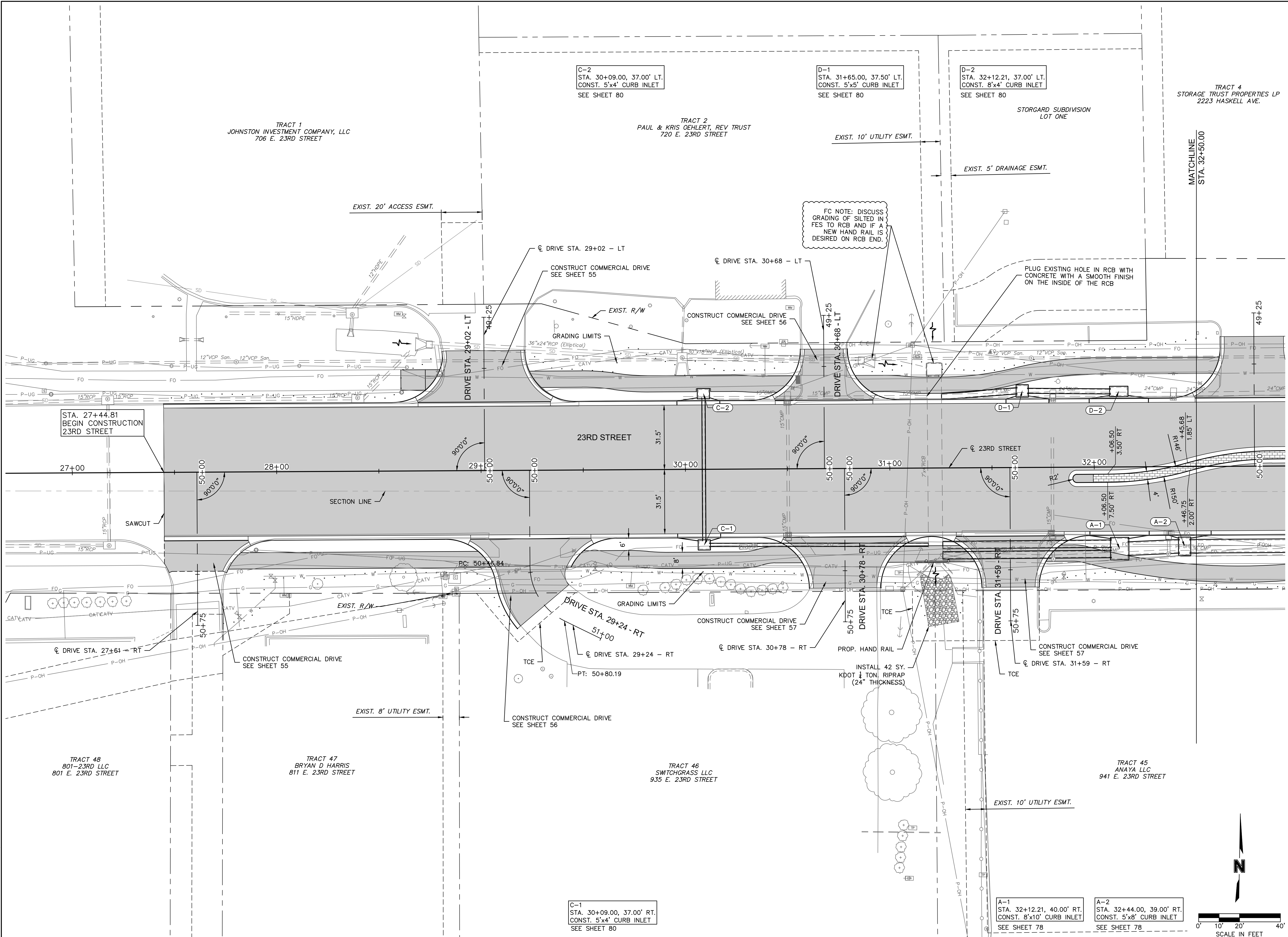
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REV. NO.	DATE	REVISIONS DESCRIPTION

TYPICAL SECTIONS	2021
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LAWRENCE, KANSAS	

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PLAN
23RD STREET

2021

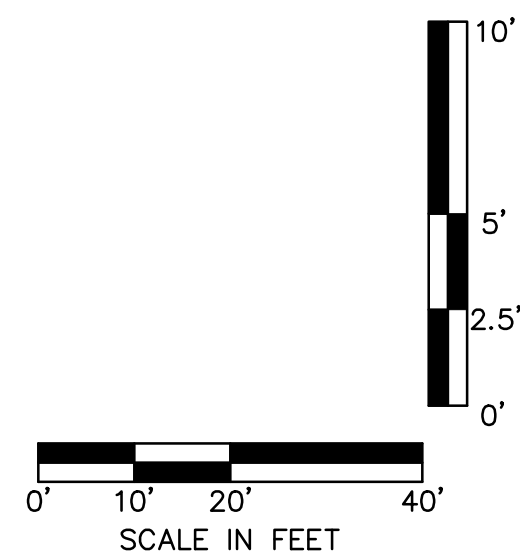
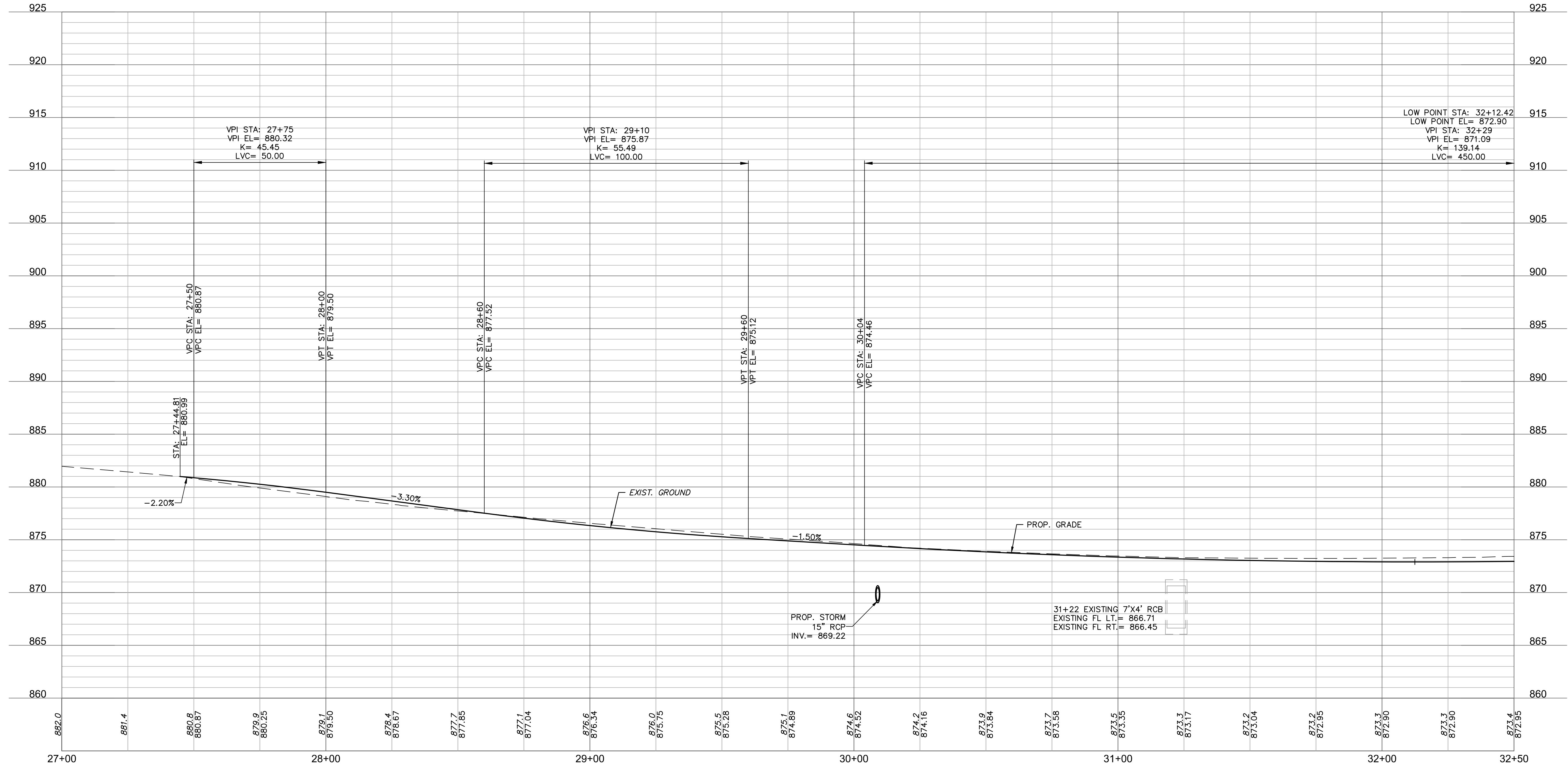
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HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

drawn by: CJC
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23RD STREET (27+00 - 32+50)



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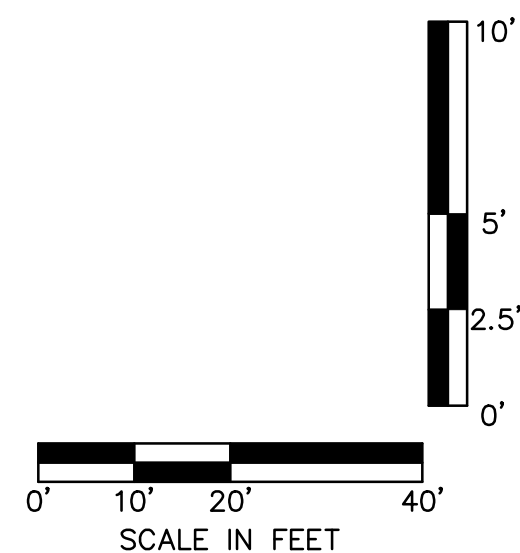
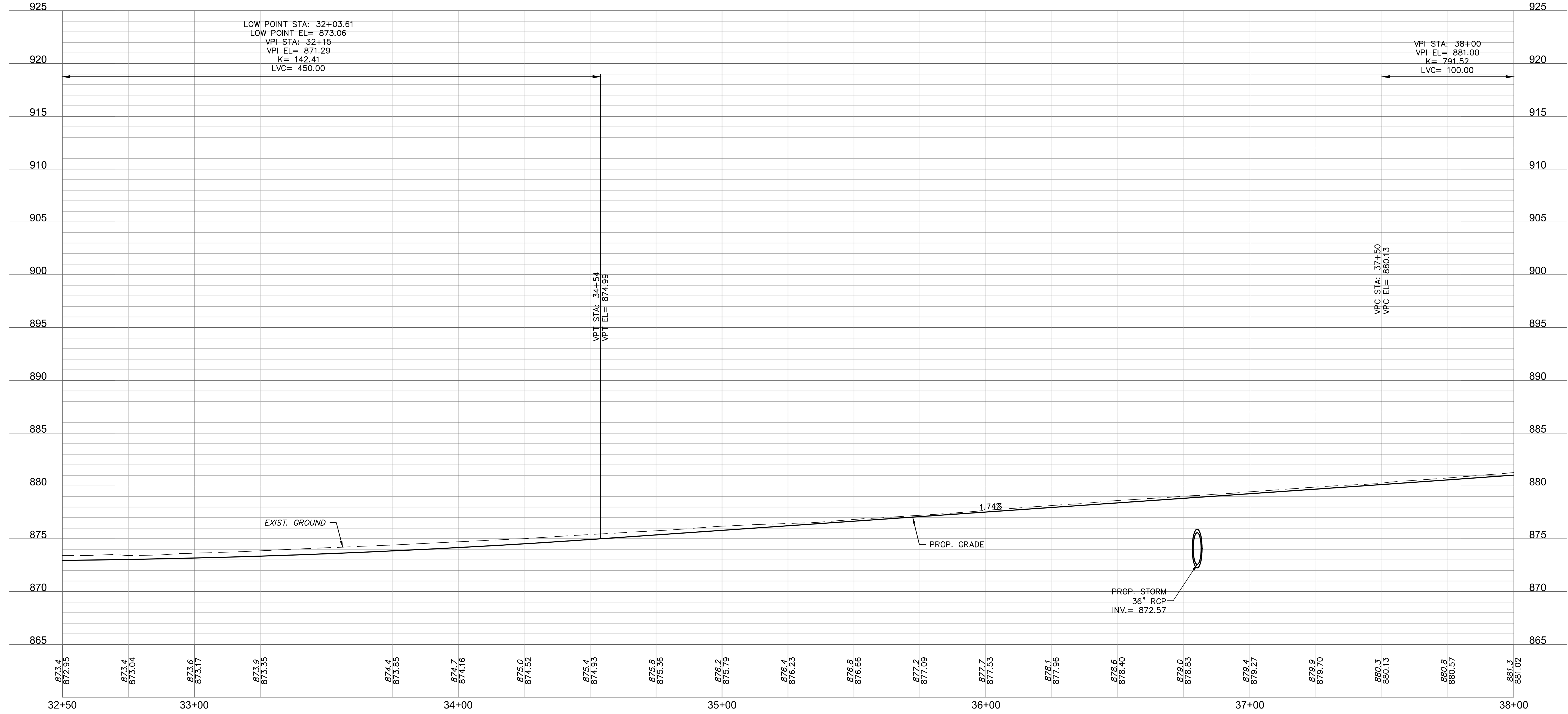
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23RD STREET
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

drawn by: CJC
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 approved by: PBM
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23RD STREET (32+50 - 38+00)



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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

PROFILE
 23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

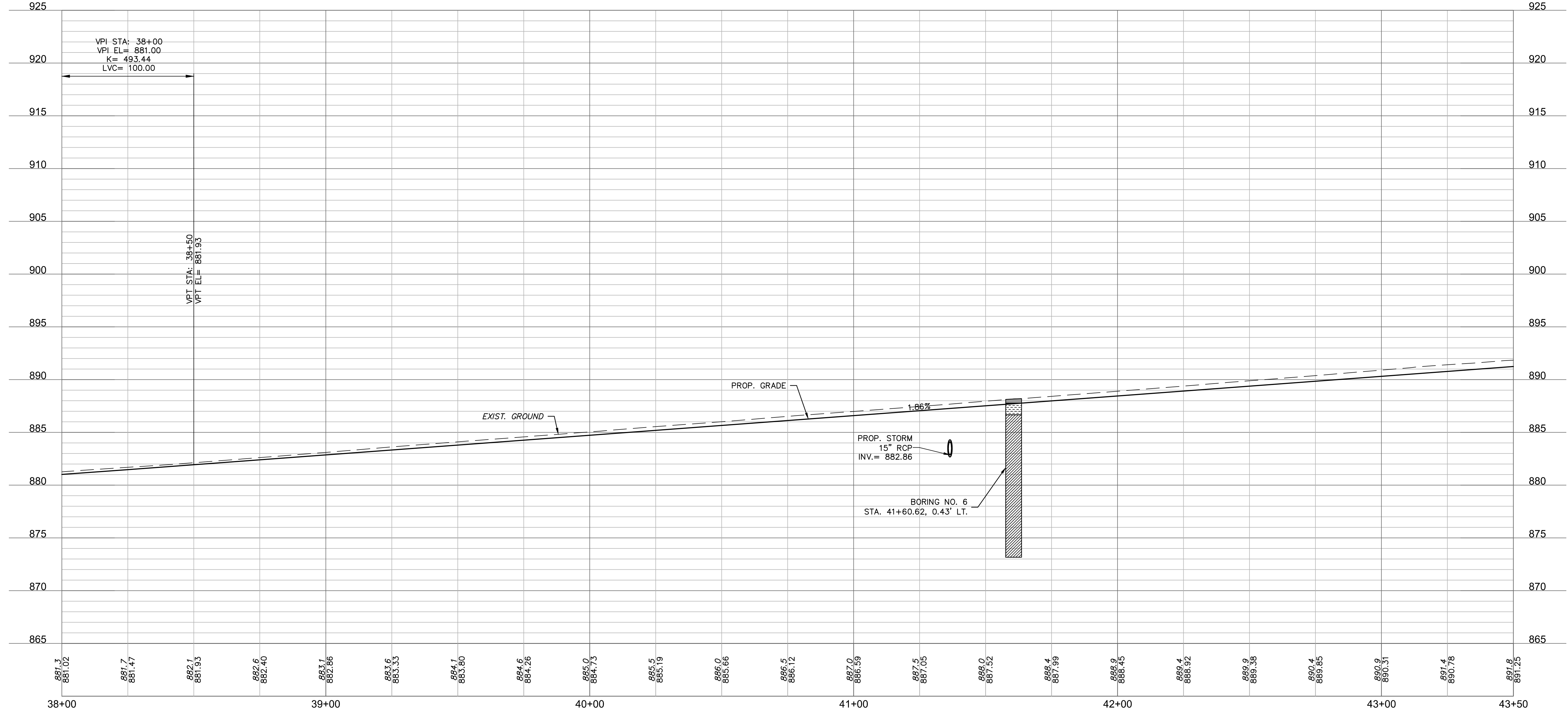
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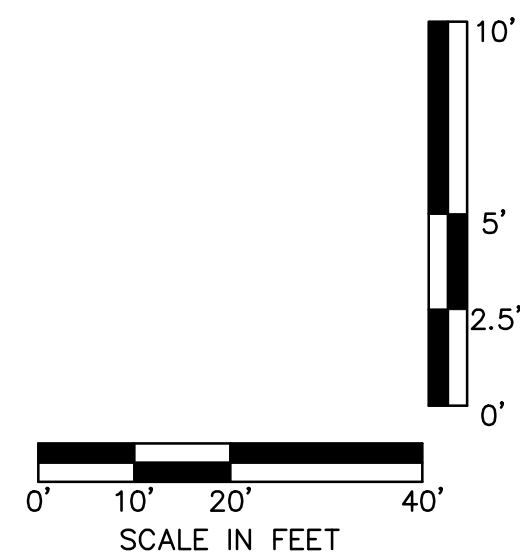
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23RD STREET (38+00 - 43+50)



	Asphaltic Concrete		Fill
	Concrete		Lean Clay
	Gravel		Lean to Fat Clay
	Sandstone		Fat Clay



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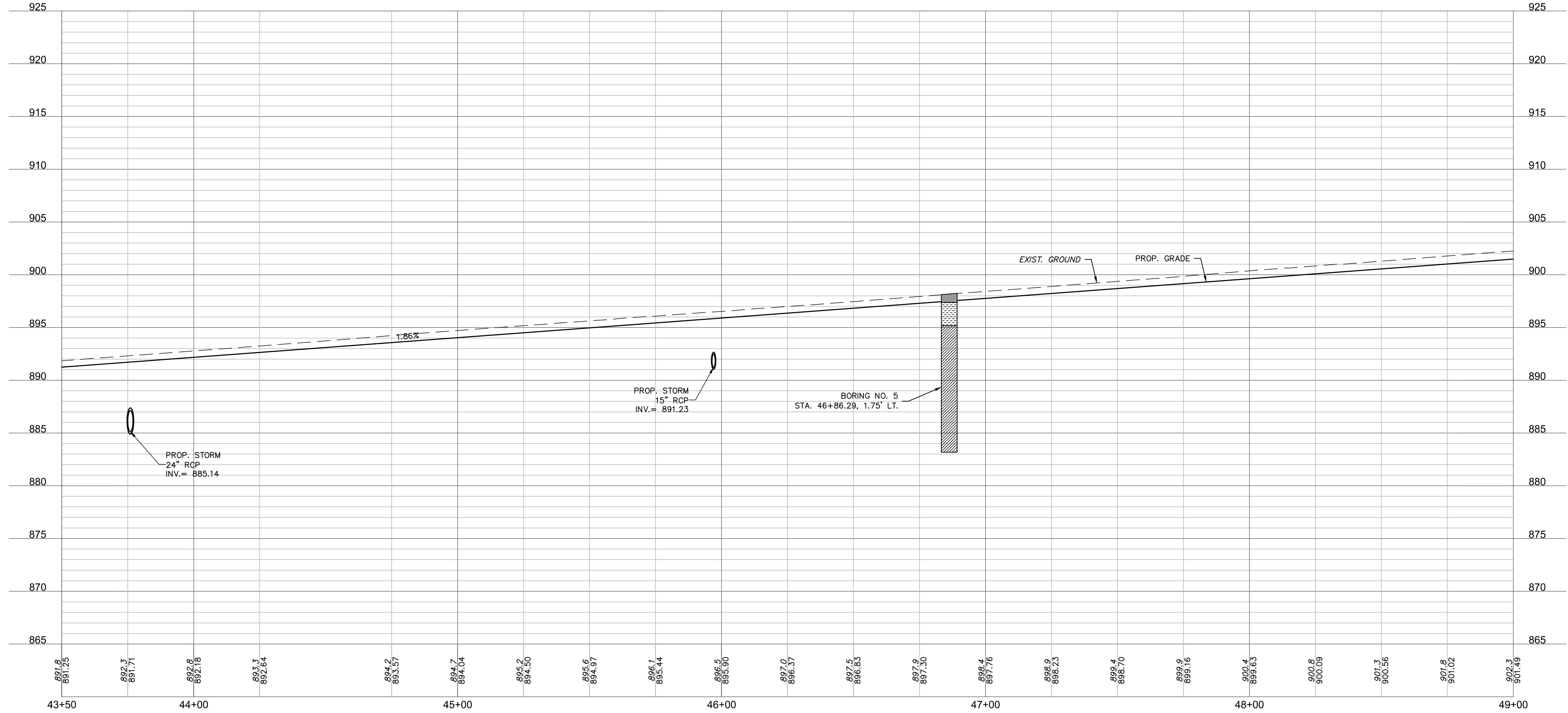
REV. NO.	DATE	REVISIONS DESCRIPTION	BY

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23RD STREET
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

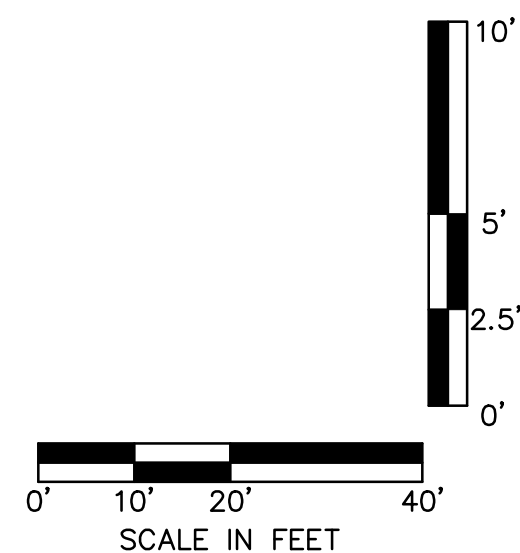
drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: PBM
 project no.: 020-2348
 drawing no.: T_RPP03_0202348
 date: 12-18-2020

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23RD STREET (43+50 - 49+00)



BORING LOG LEGEND	
	Asphaltic Concrete
	Concrete
	Gravel
	Sandstone
	Fill
	Lean Clay
	Lean to Fat Clay
	Fat Clay



PRELIMINARY
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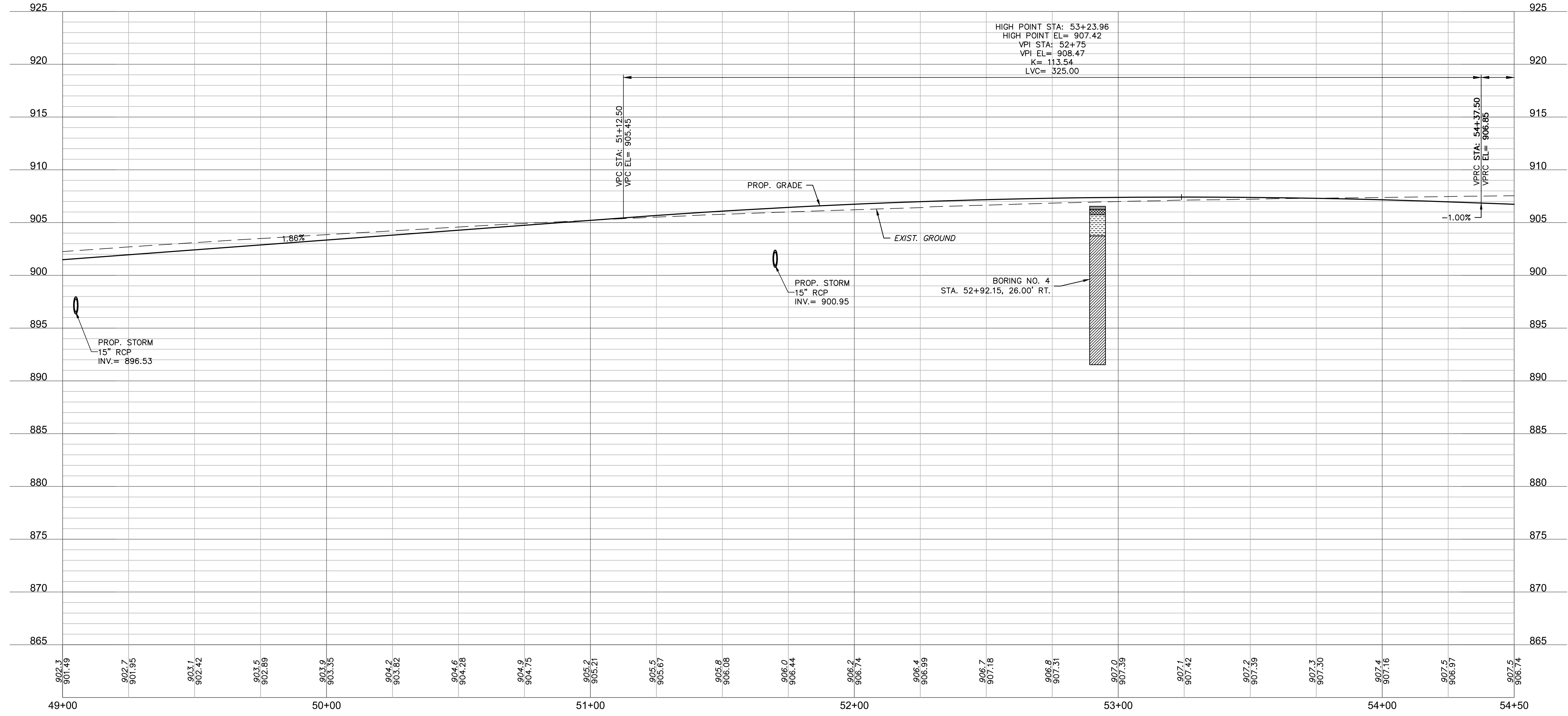
REV. NO.	DATE	REVISIONS DESCRIPTION	BY

PROFILE
 23RD STREET
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS

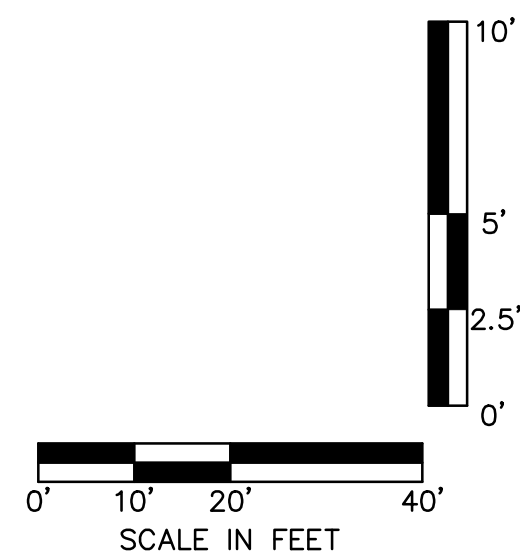
drawn by: CJC
 checked by: PBM
 approved by: PBM
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 T_PTBK_0202348 T_PESMT_0202348

23RD STREET (49+00 - 54+50)



BORING LOG LEGEND	
[Pattern] Asphaltic Concrete	[Pattern] Fill
[Pattern] Concrete	[Pattern] Lean Clay
[Pattern] Gravel	[Pattern] Lean to Fat Clay
[Pattern] Sandstone	[Pattern] Fat Clay



PRELIMINARY
 NOT FOR CONSTRUCTION

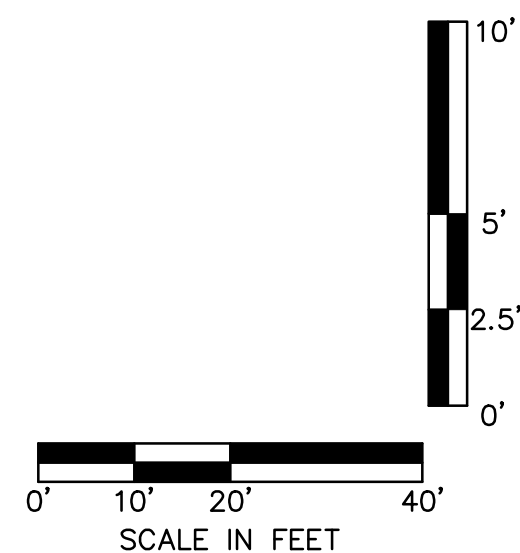
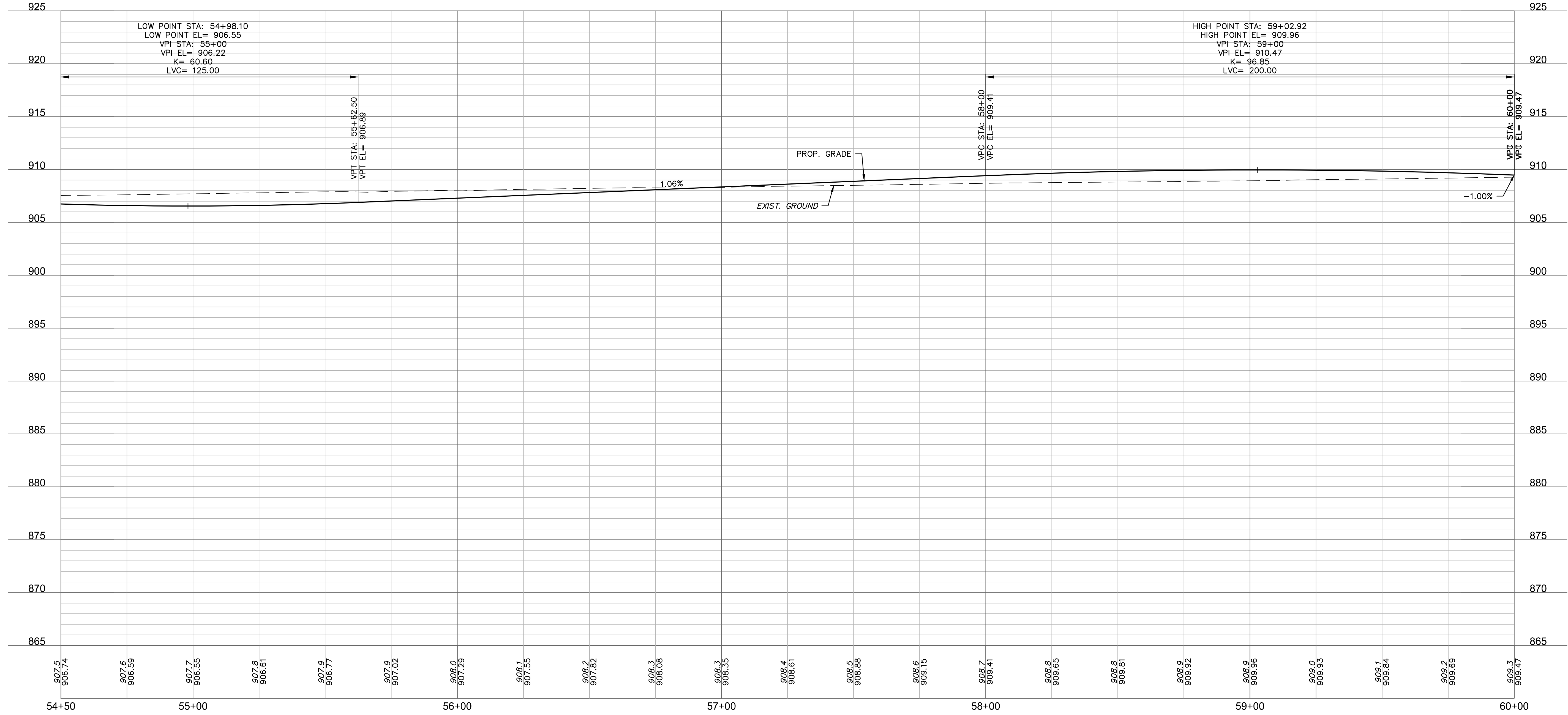
REV. NO.	DATE	REVISIONS DESCRIPTION

PROFILE
23RD STREET
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: RBK
 project no.: 020-2348
 drawing no.: T_RPP05_0202348
 date: 12-18-2020

DWG: F:\2020\2001-2500\020-2348\40-Design\AutoCAD\Final Plans\Sheets\PROFILES\PLAN & PROFILES\T_RPP06_0202348.dwg USER: ouharsak
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23RD STREET (54+50 - 60+00)



PRELIMINARY
NOT FOR CONSTRUCTION

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

PROFILE
23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

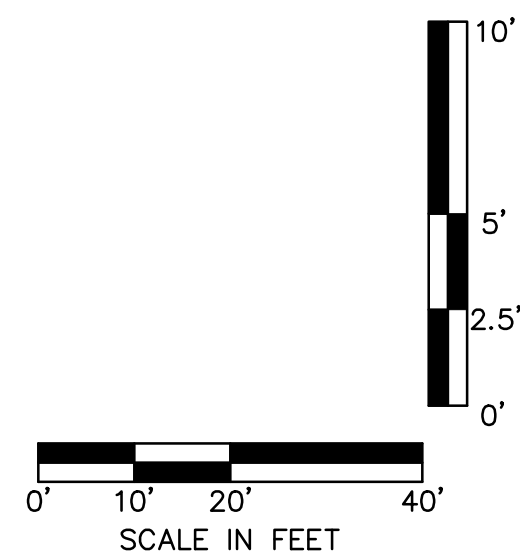
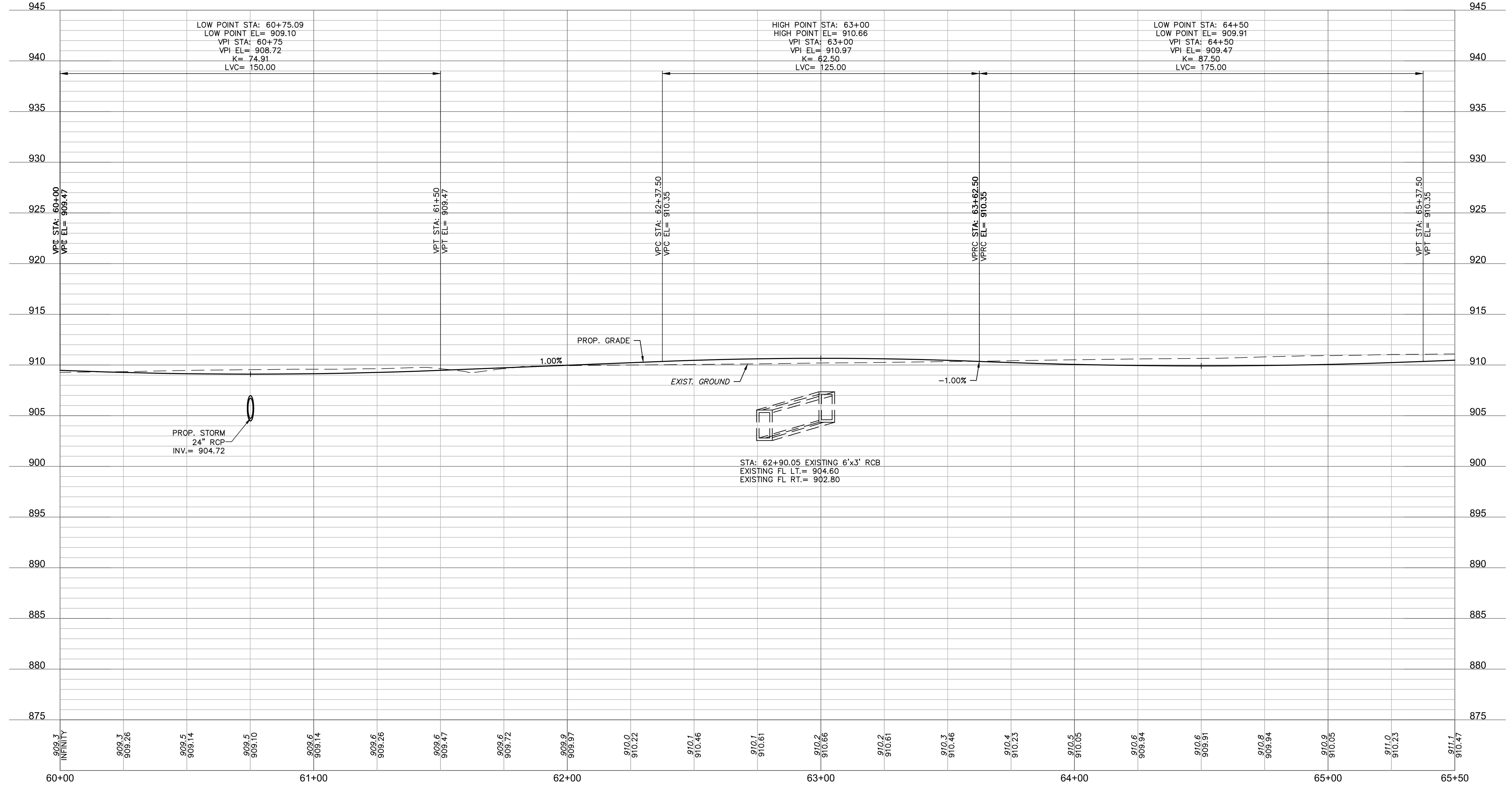
LAWRENCE, KANSAS

2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: RBG
 project no.: 020-2348
 drawing no.: T_RPP06_0202348
 date: 12-18-2020

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23RD STREET (60+00 - 65+50)



PRELIMINARY
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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

PROFILE
 23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

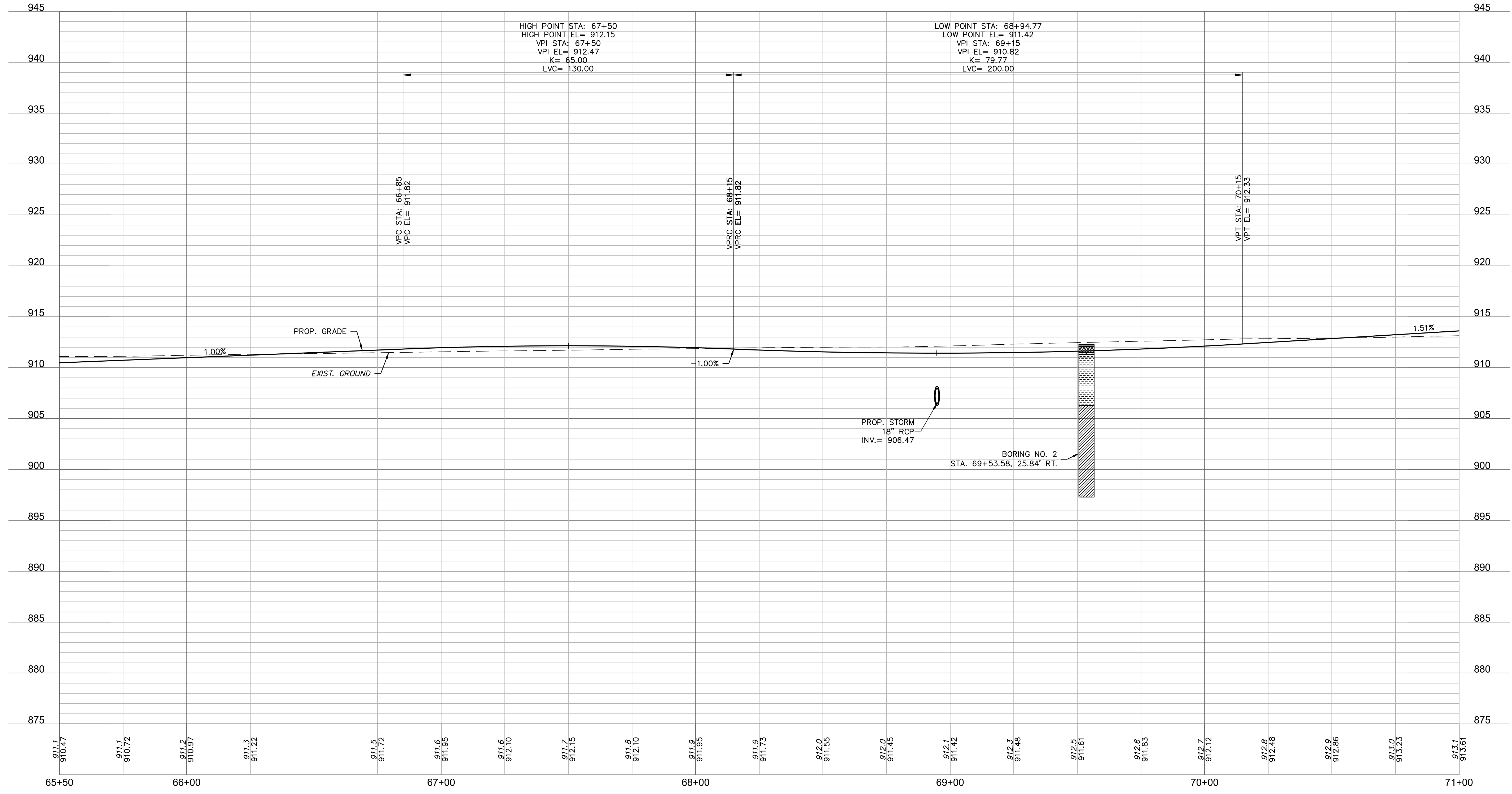
LAWRENCE, KANSAS

2021

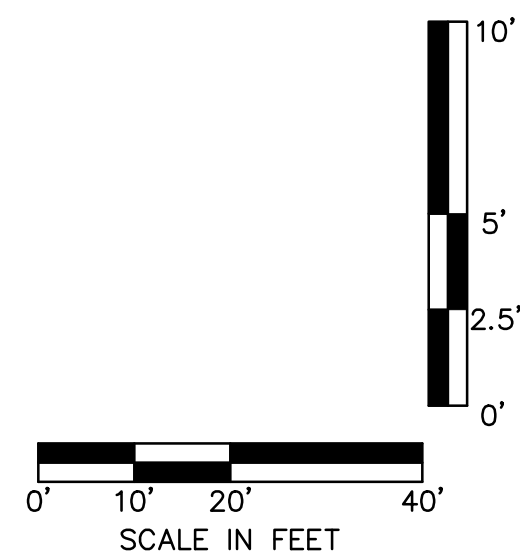
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 checked by: PBM
 approved by: PBM
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 drawing no.: T_RPP07_0202348
 date: 12-18-2020

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 I_P7BLK_0202348 I_PESMT_0202348

23RD STREET (65+50 - 71+00)



	Asphaltic Concrete		Fill
	Concrete		Lean Clay
	Gravel		Lean to Fat Clay
	Sandstone		Fat Clay



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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

PROFILE
23RD STREET

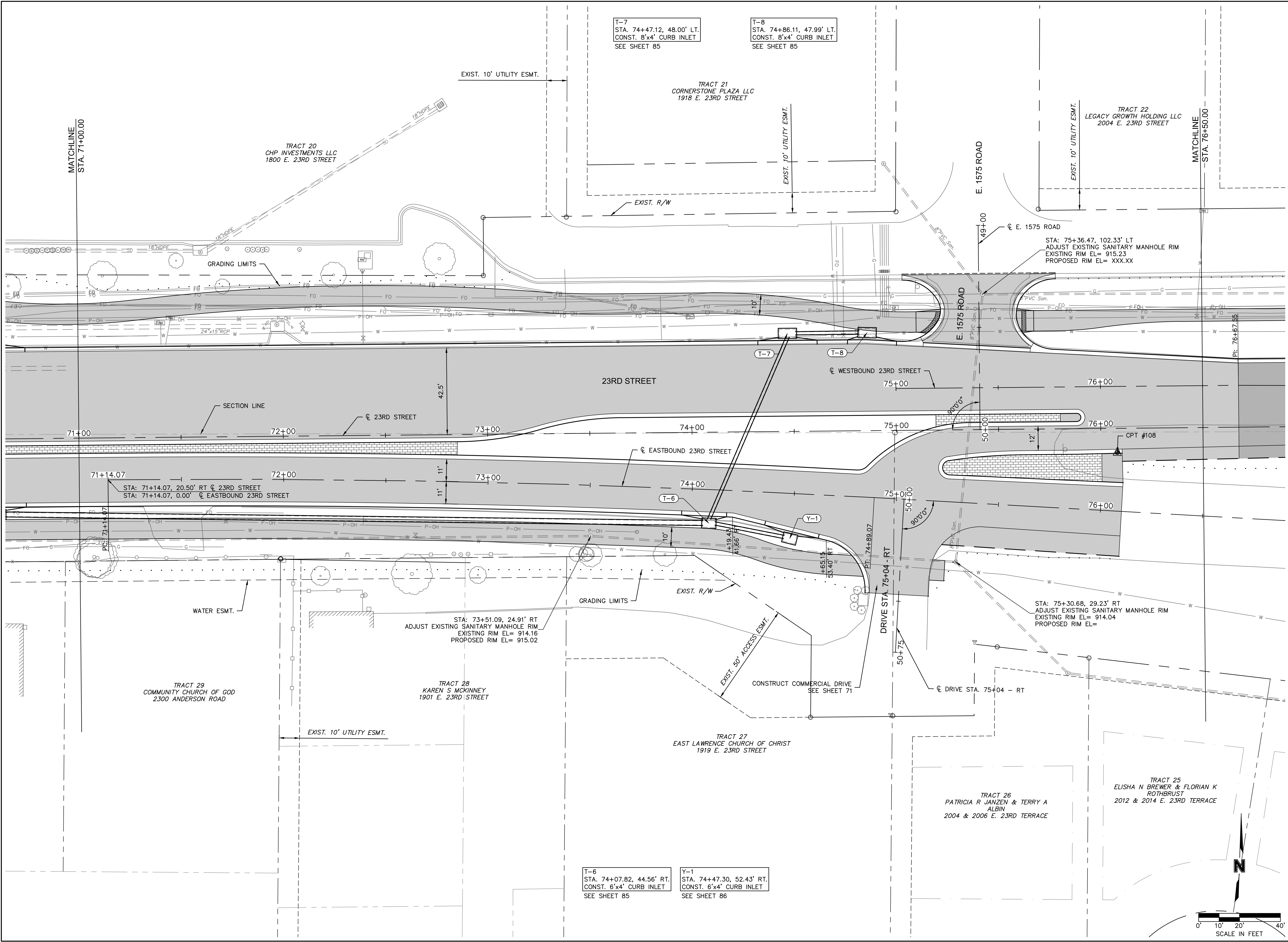
2021

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

drawn by: CJC
checked by: PBM
approved by: PBM
QA/QC by: PBM
project no.: 020-2348
drawing no.: T_RPP08_0202348
date: 12-18-2020

SHEET
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DWG: F:\2020\2021-2500\020-2348\10-Design\Autocad\Plan & Profiles\T_RPP09_0202348.dwg USER: autodesk
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REV. NO.	DATE	REVISIONS DESCRIPTION

PLAN
 23RD STREET

REVISIONS
 2021

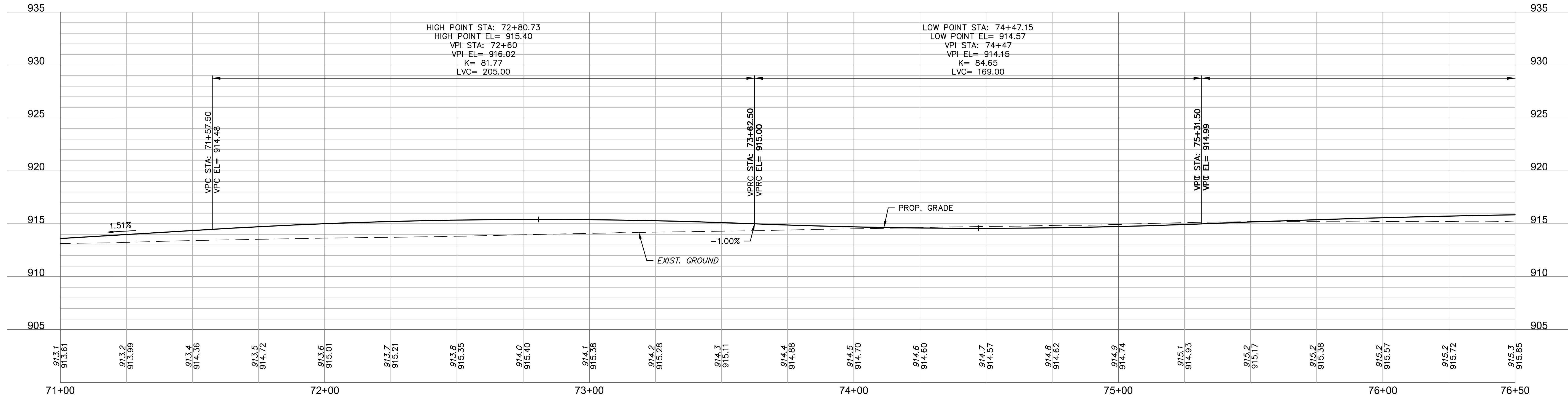
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS

SHEET
 45 of 206

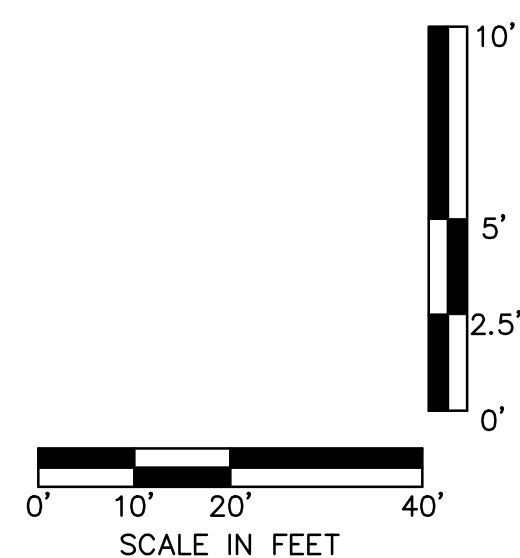
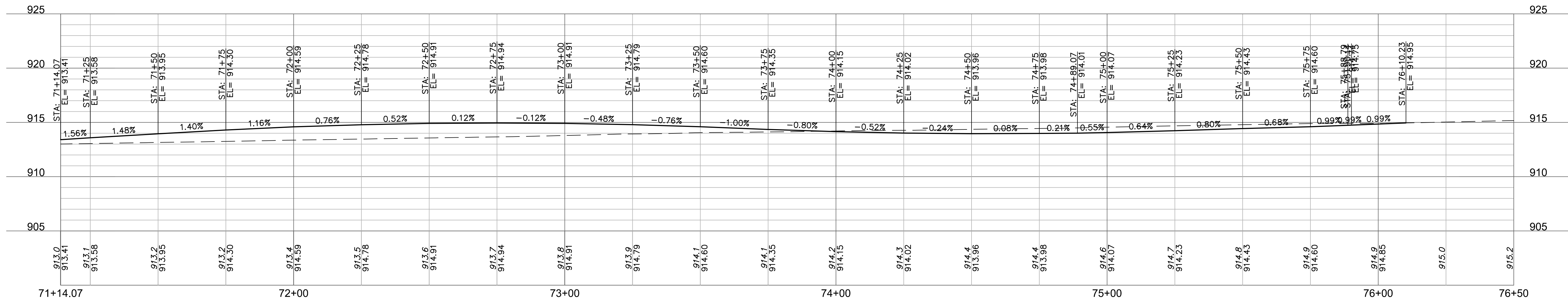
drawn by: CJC
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23RD STREET (71+00 - 76+50)



EASTBOUND 23RD STREET (71+14.07 - 76+50)



PRELIMINARY
 NOT FOR CONSTRUCTION

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

PROFILE
 23RD STREET

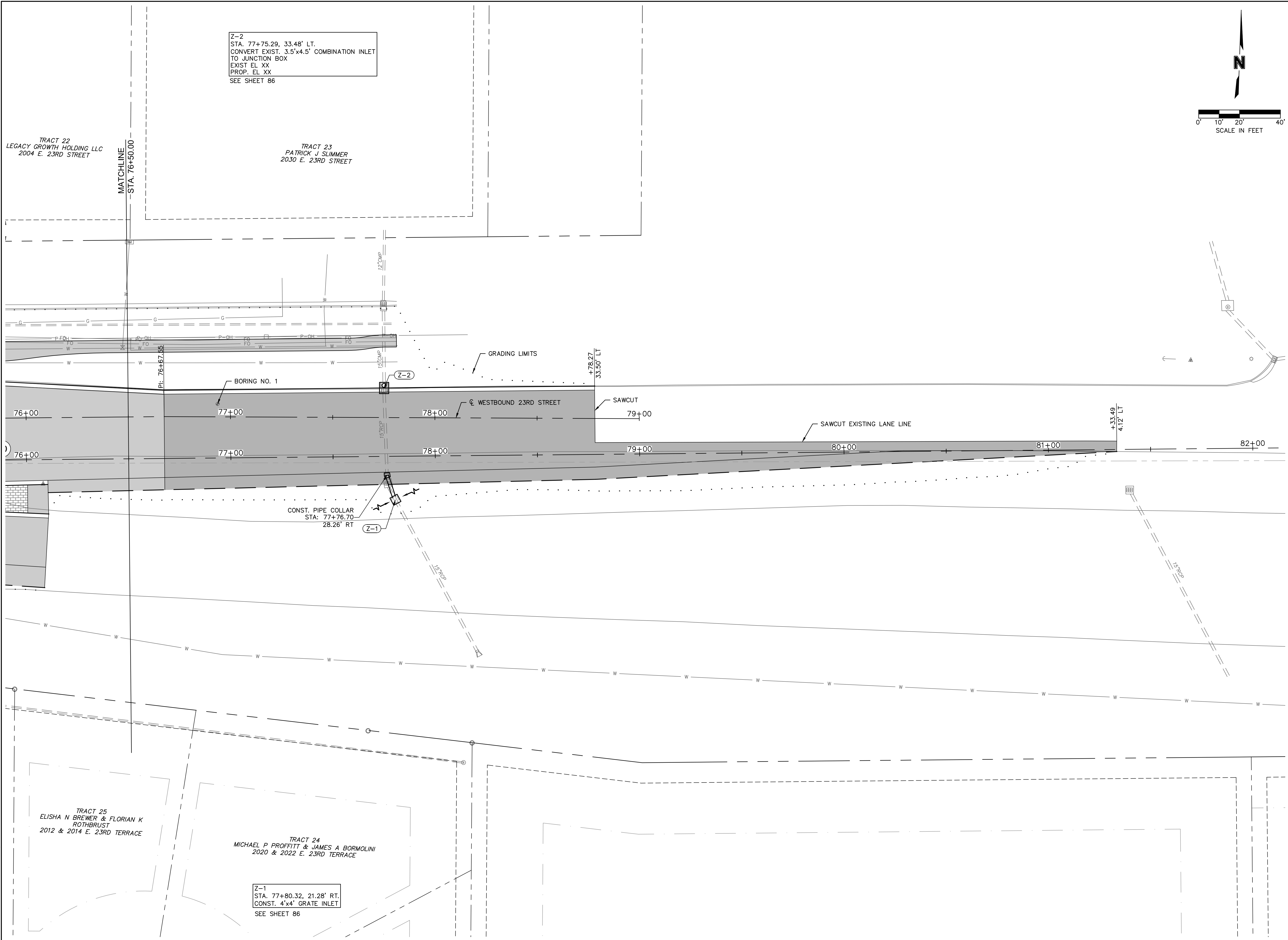
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

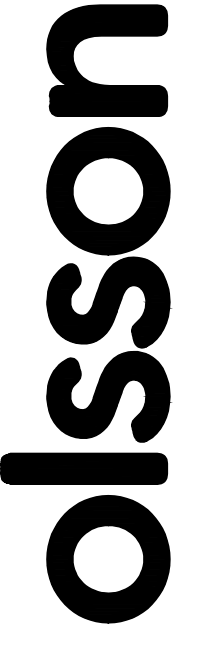
LAWRENCE, KANSAS

2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: PBM
 project no.: 020-2348
 drawing no.: T_RPP09_0202348
 date: 12-18-2020

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REV. NO.	DATE	REVISIONS DESCRIPTION

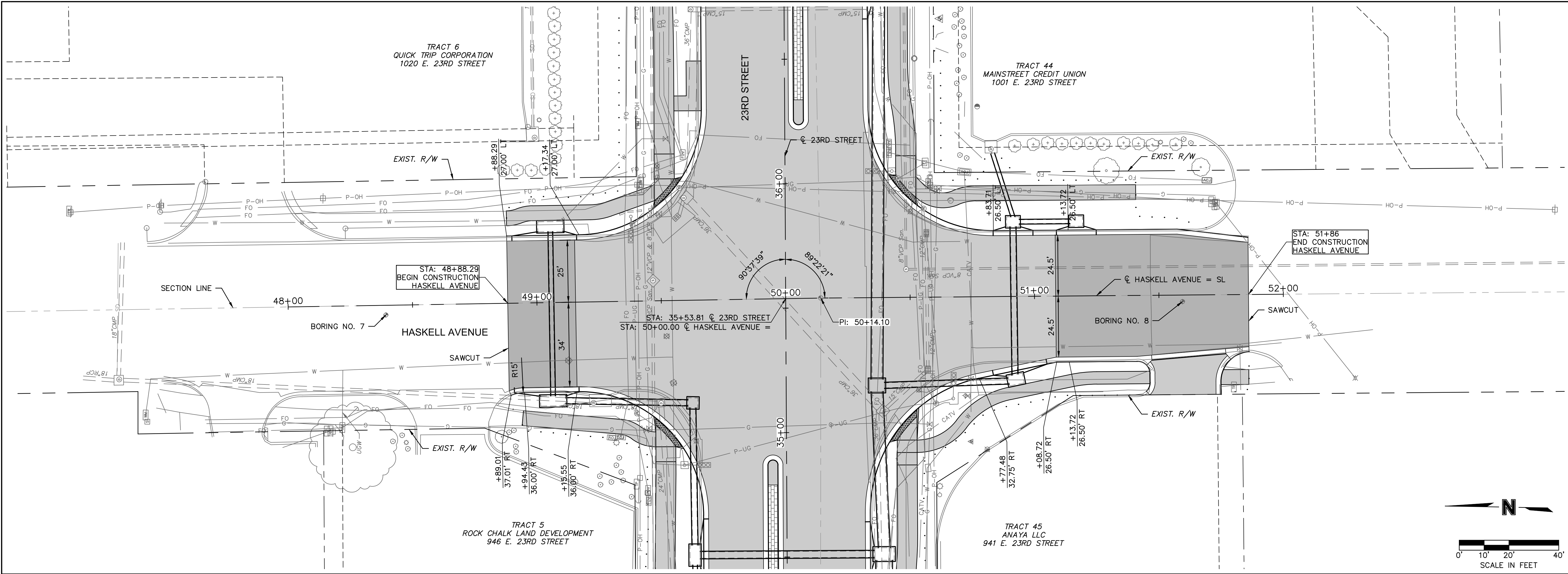
PLAN
23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

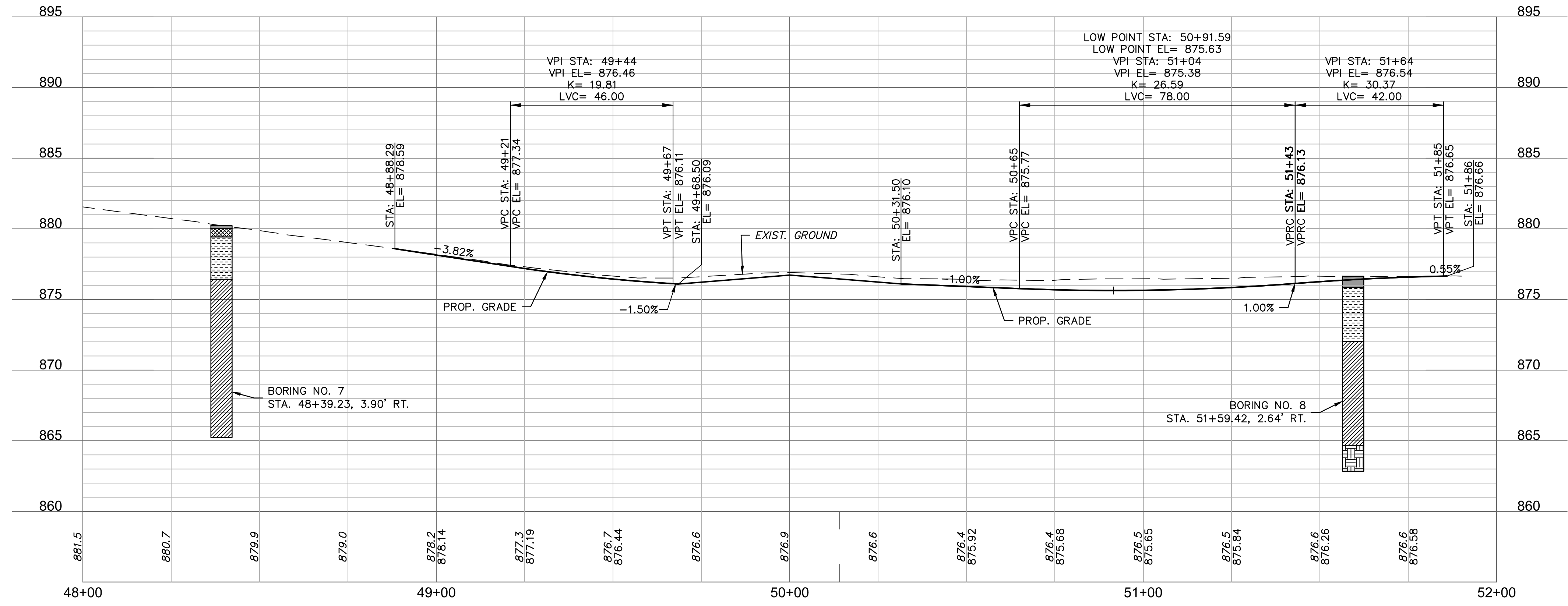
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checked by:	PBM
approved by:	PBM
QA/QC by:	REB
project no.:	020-2348
drawing no.:	T_RPP9.5_0202348
date:	12-18-2020

SHEET
47 of 206

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 USER: auburnek V_BNDY_0202348 I_PATBK_0202348 I_PESMT_0202348



HASKELL AVENUE (48+00 - 52+00)



BORING LOG LEGEND	
	Asphaltic Concrete
	Concrete
	Gravel
	Sandstone
	Fill
	Lean Clay
	Lean to Fat Clay
	Fat Clay

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BY _____

PLAN AND PROFILE
HASKELL AVENUE

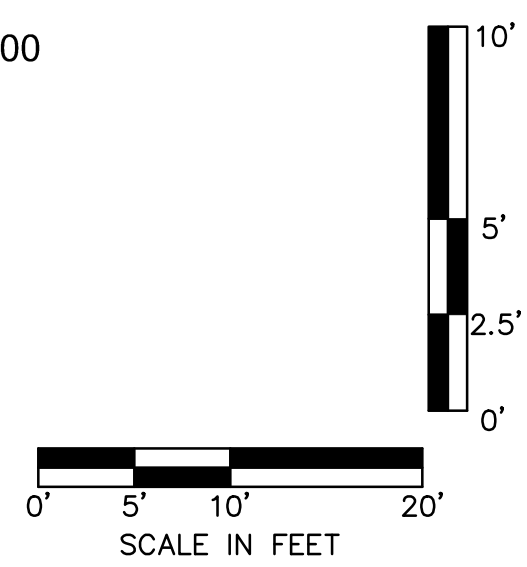
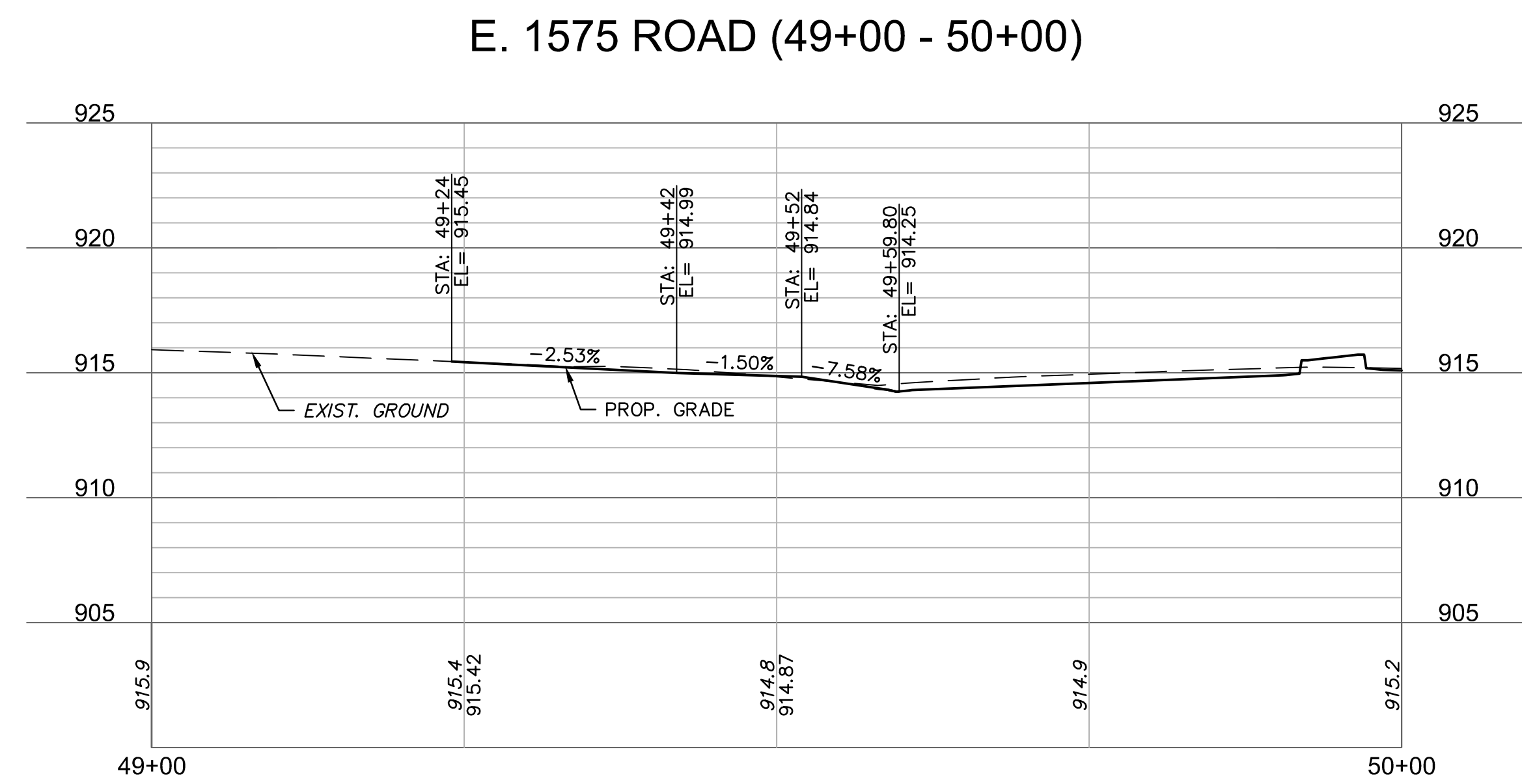
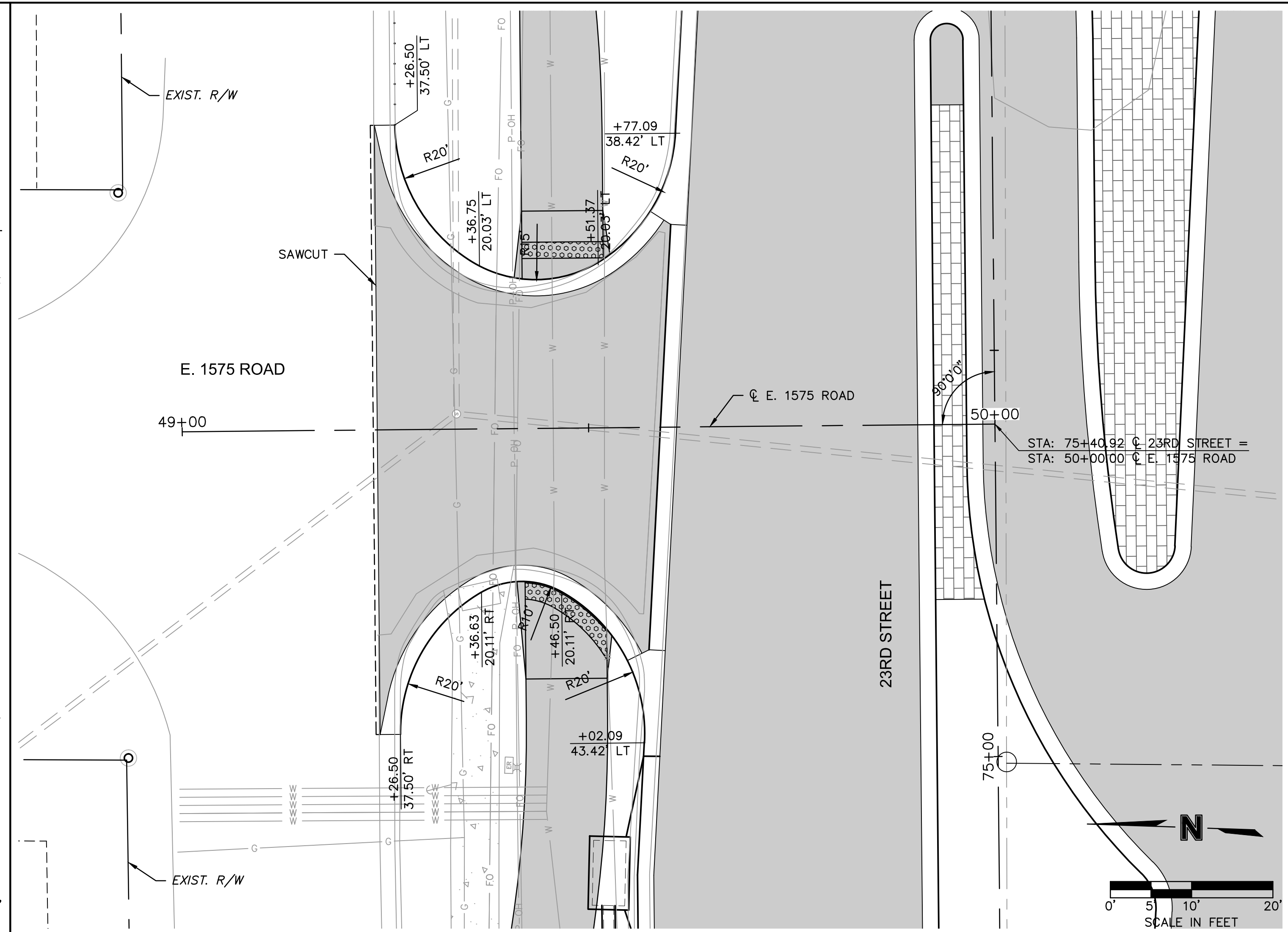
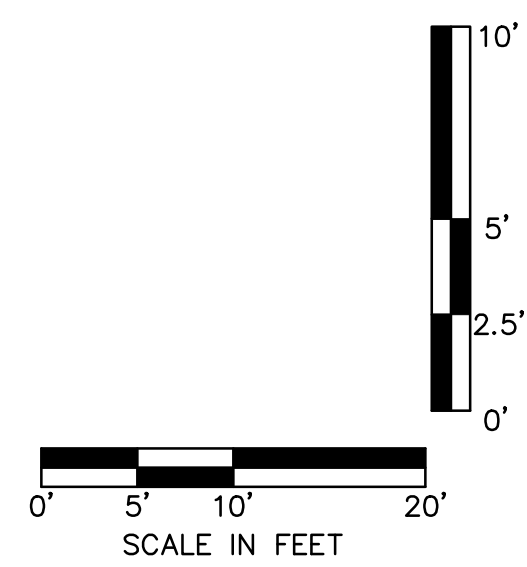
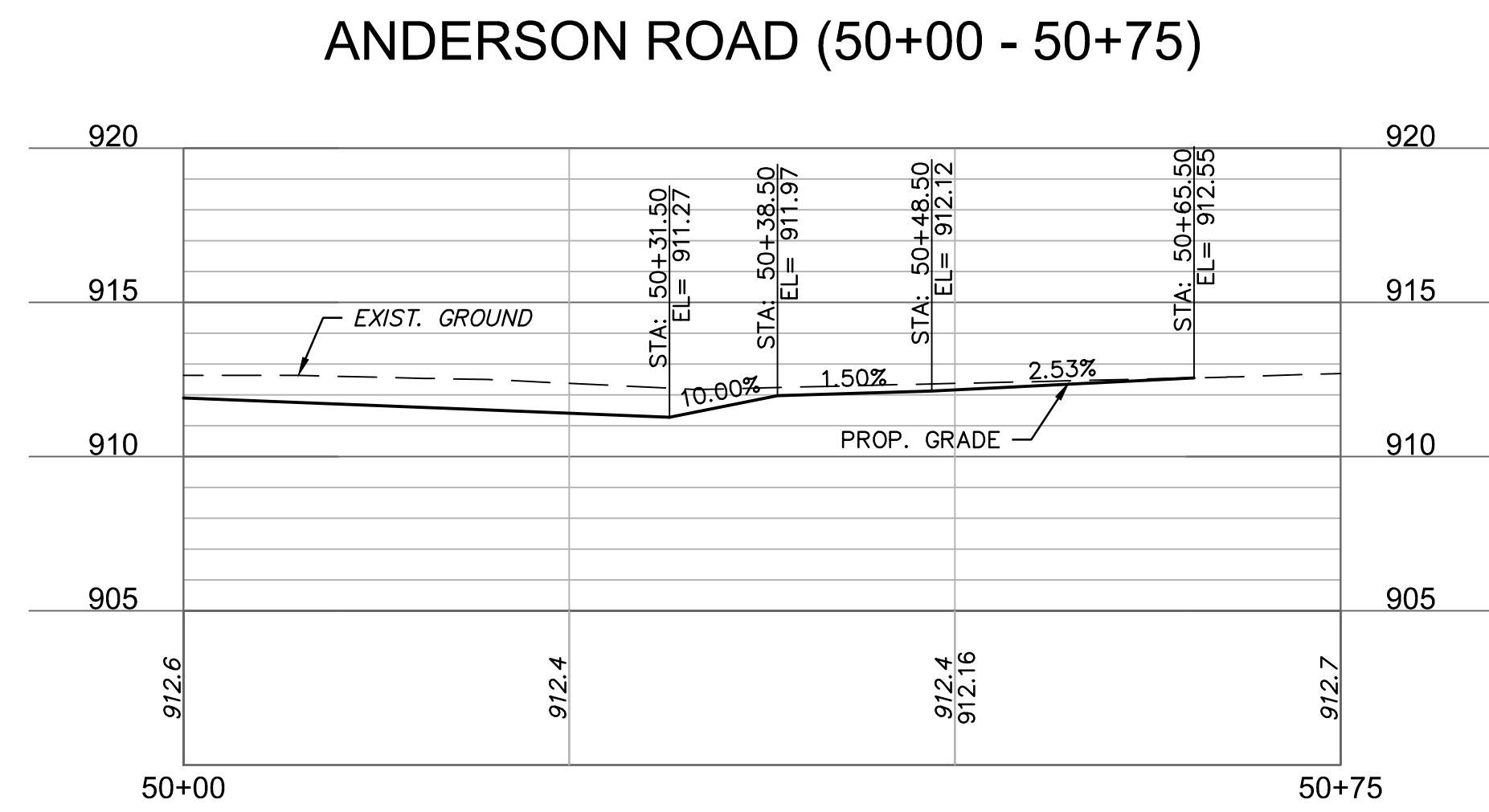
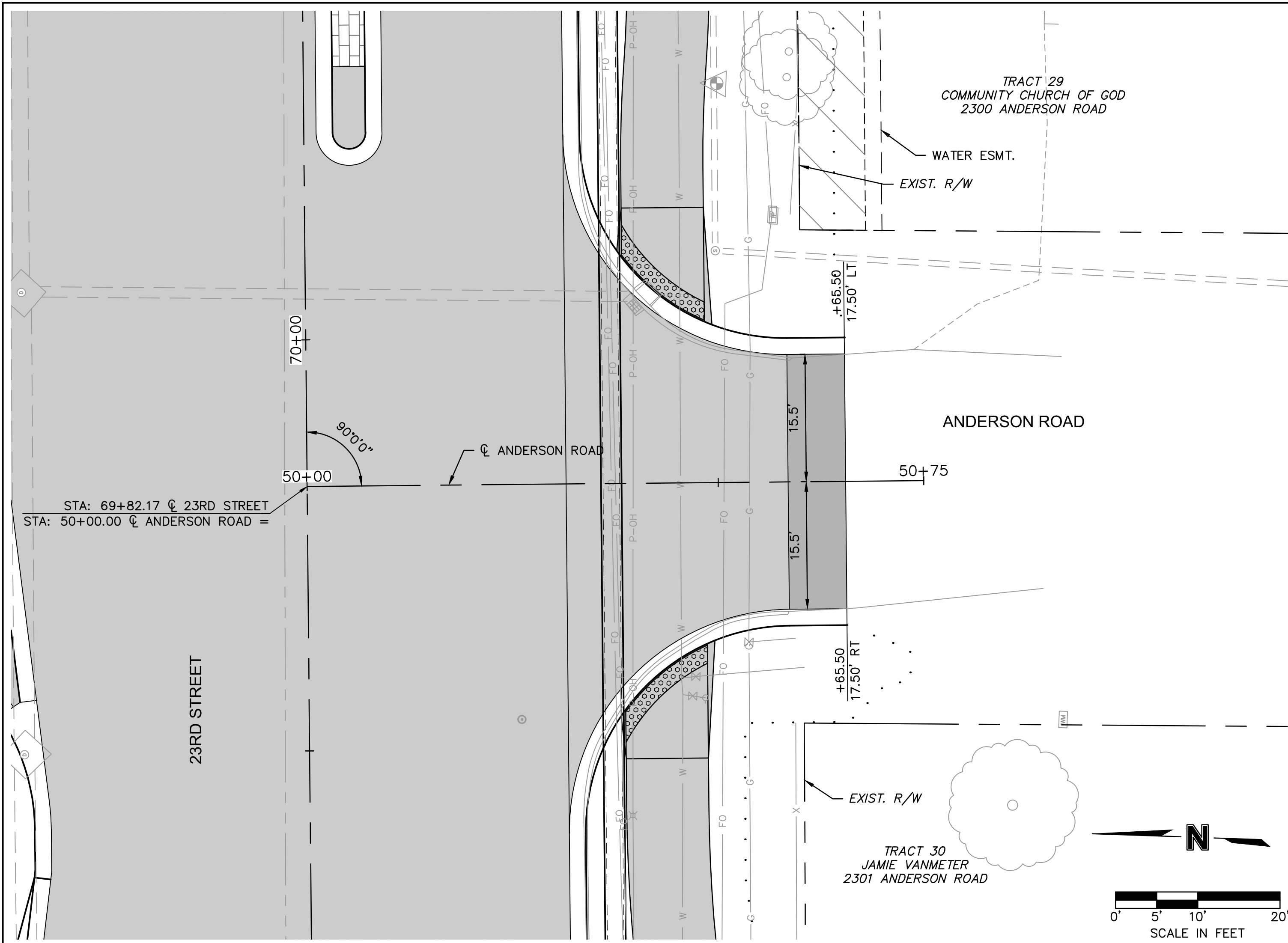
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: PBM
 project no.: 020-2348
 drawing no.: T_RPP10_0202348
 date: 12-18-2020

SHEET
49 of 206

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drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: PBM
 project no.: 020-2348
 drawing no.: T_RPP13_0202348
 date: 12-18-2020

PLAN AND PROFILE
 ANDERSON ROAD AND E. 1575 ROAD
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS

REVISIONS

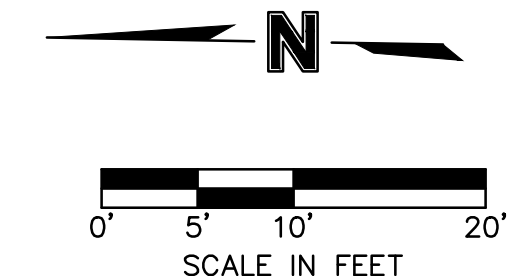
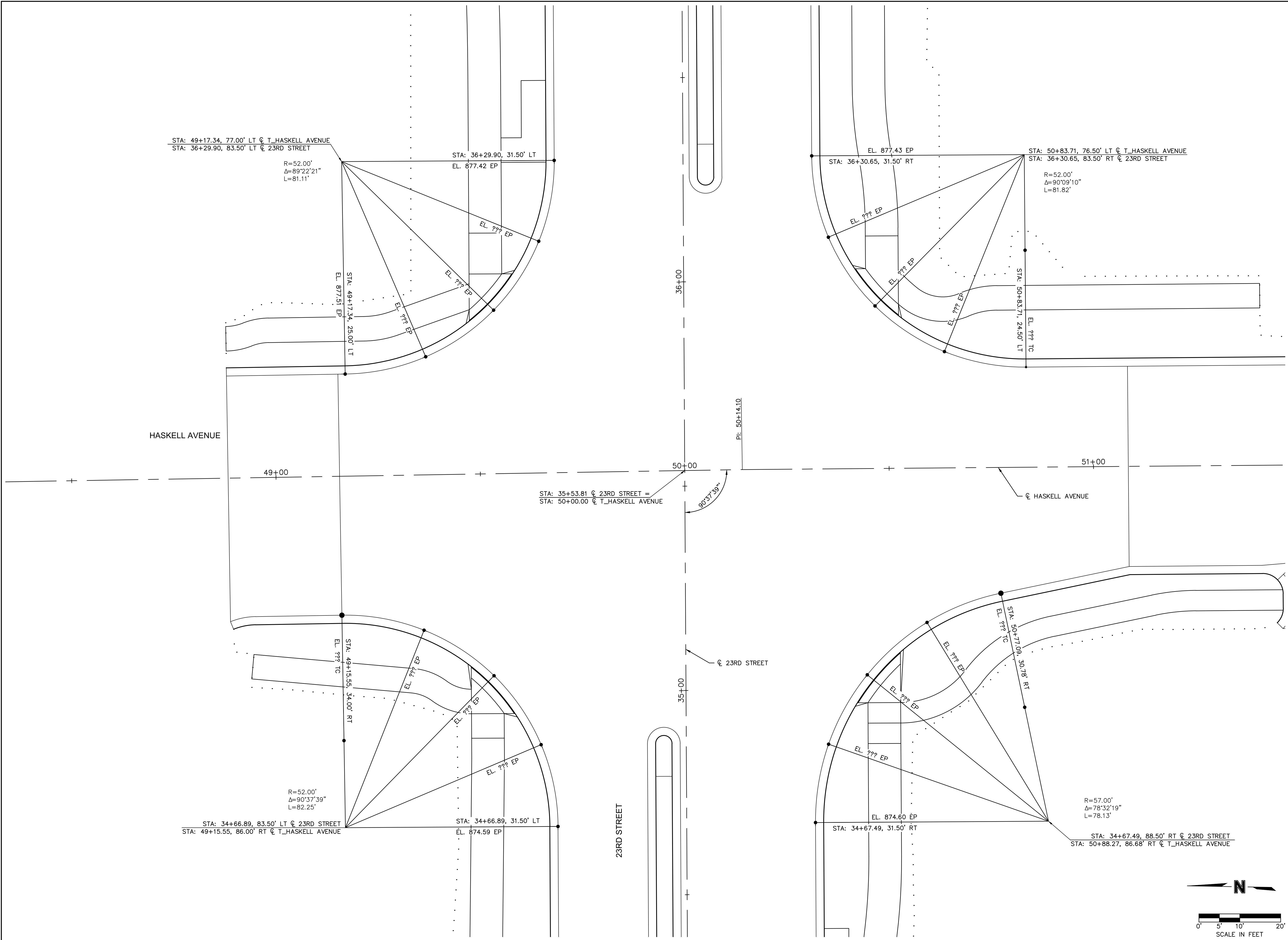
REV. NO.	DATE	REVISIONS DESCRIPTION	BY

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SHEET
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DWG: F:\2020\2001-2500\020-2348\10-Design\AutoCAD\Final Plans\Sheets\BDR\INTERSECTION_LAYOUTS\T_INT01_0202348.dwg
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 USER: aurbank
 XREFS: T_PBASE_0202348 V_TOP_0202348



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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

INTERSECTION LAYOUTS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

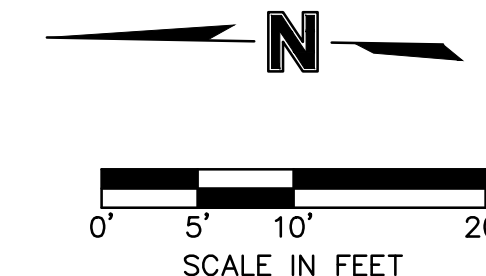
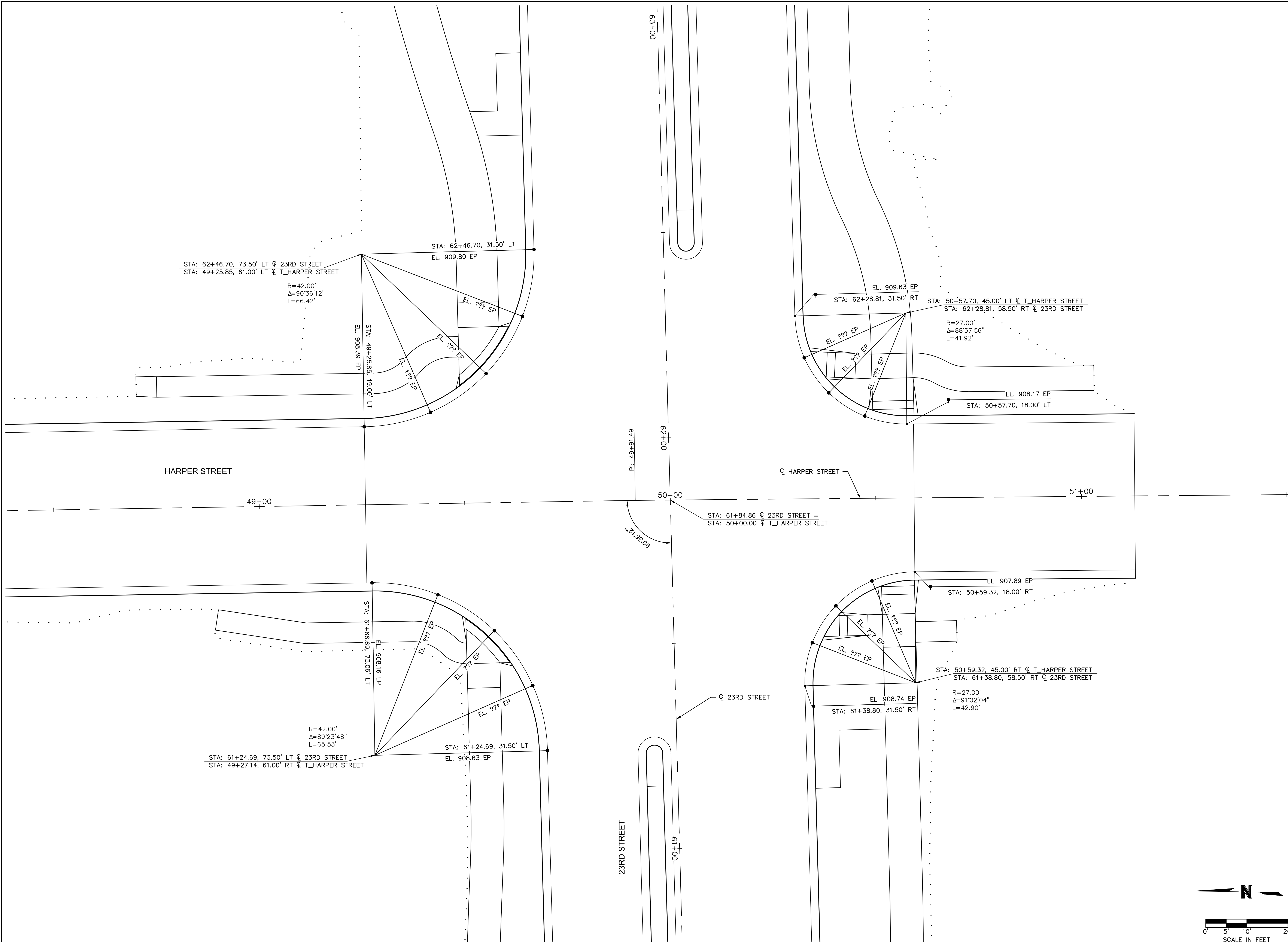
2021

REVISIONS

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: RBC
 project no.: 020-2348
 drawing no.: T_INT01_0202348
 date: 12-18-2020

SHEET
53 of 206

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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

INTERSECTION LAYOUTS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

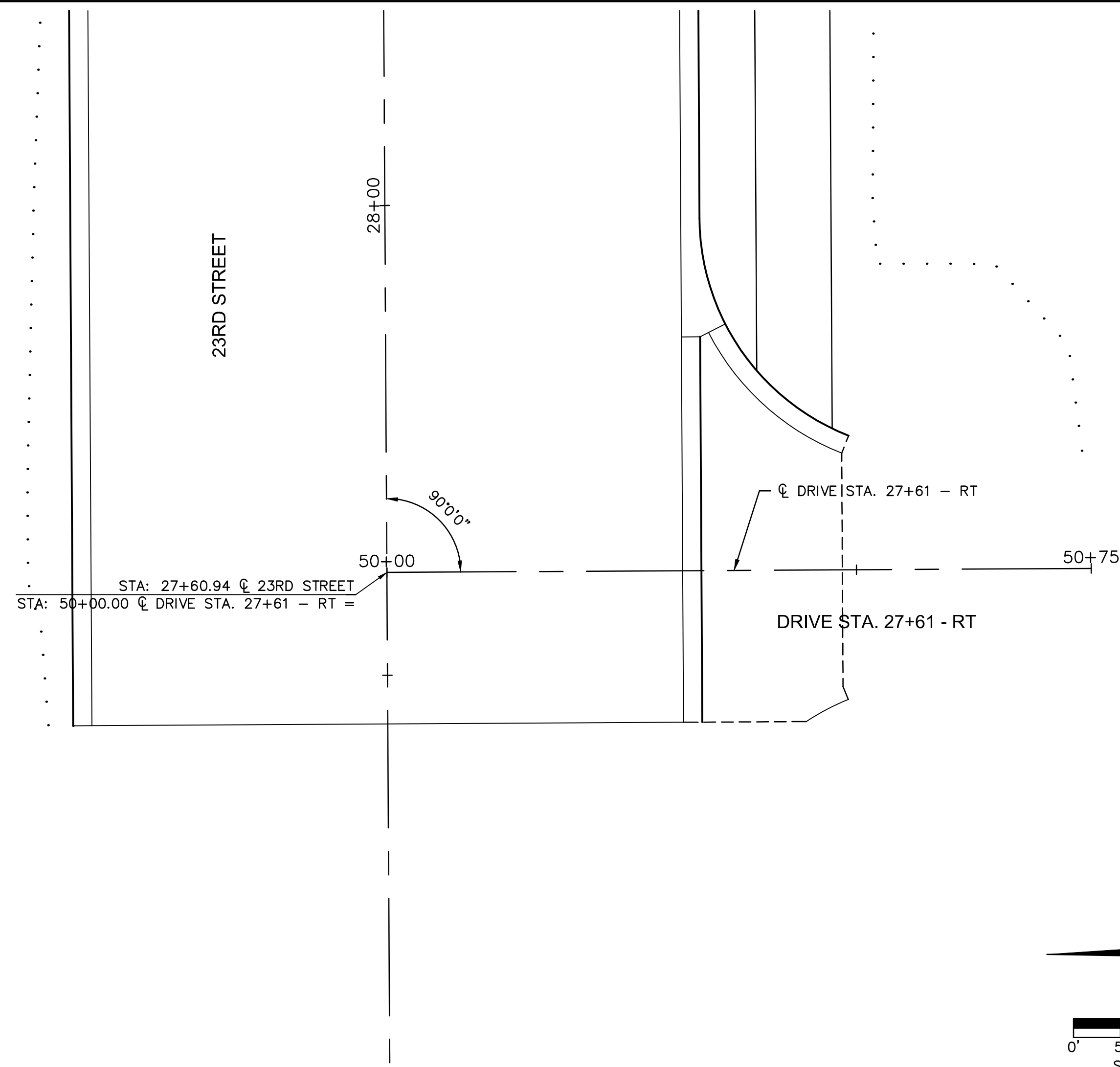
2021

REVISIONS

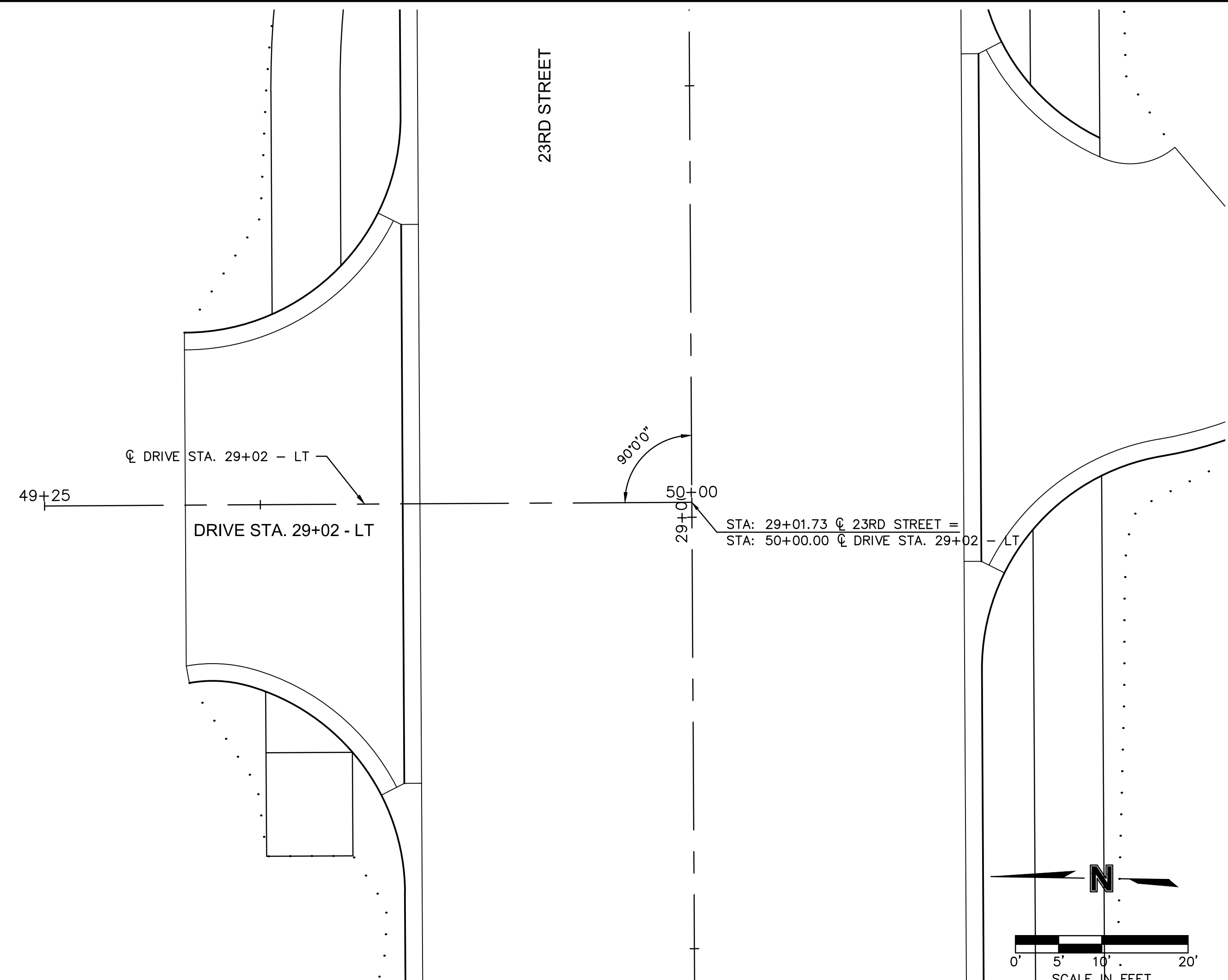
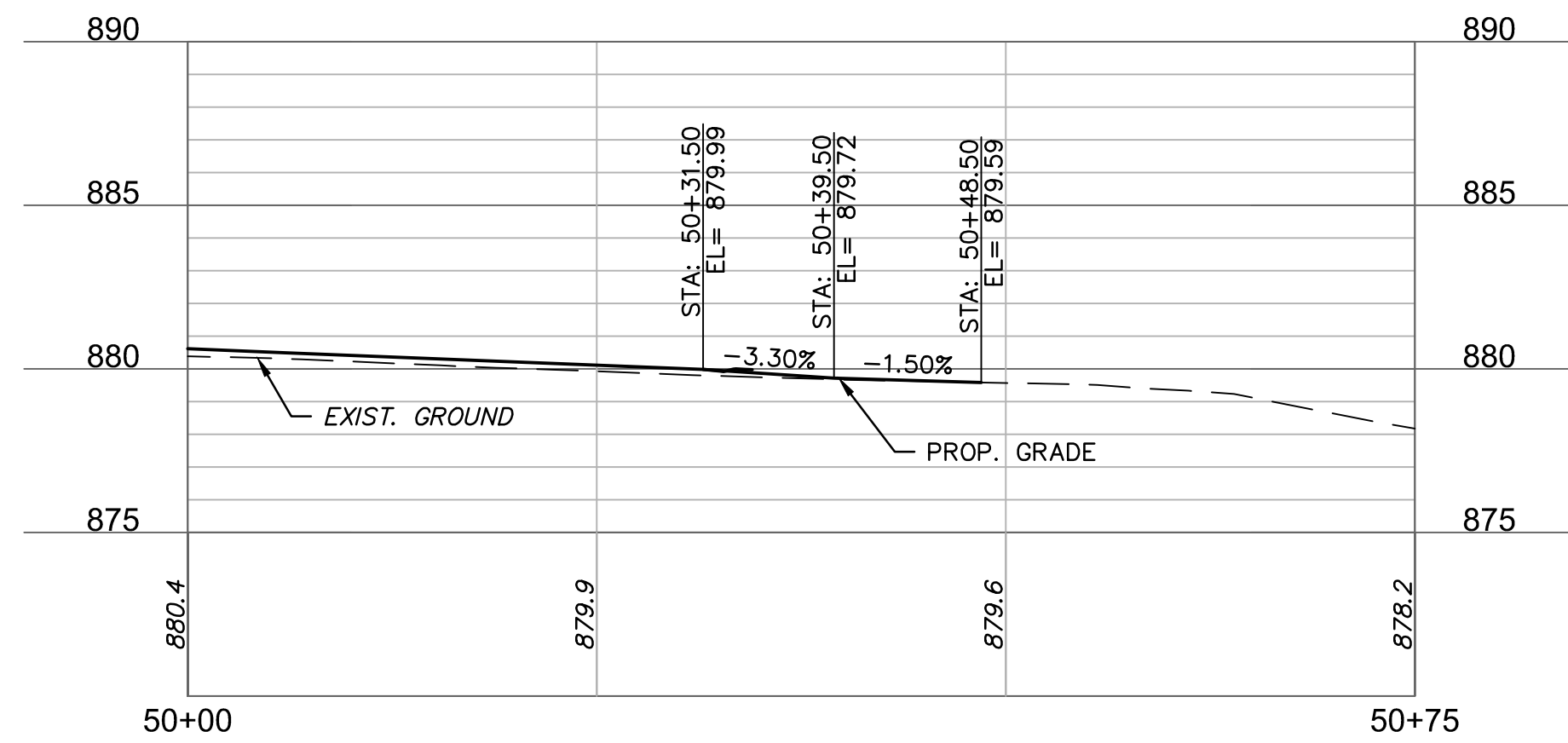
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 approved by: _____ PBM
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 date: 12-18-2020

SHEET
54 of 206

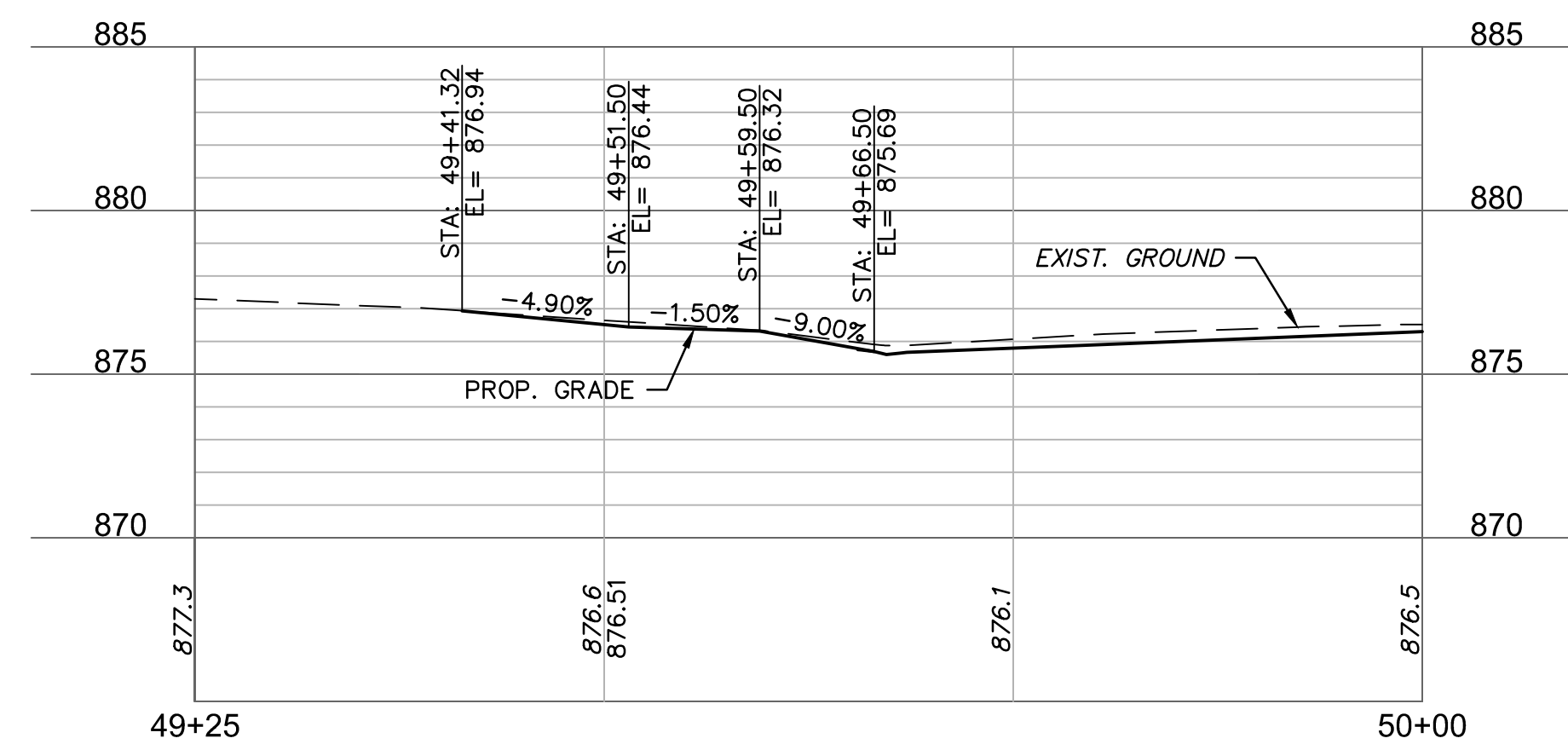
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DRIVE STA. 27+61 - RT (50+00 - 50+75)



DRIVE STA. 29+02 - LT (49+25 - 50+00)



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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

DRIVEWAY PLAN & PROFILES

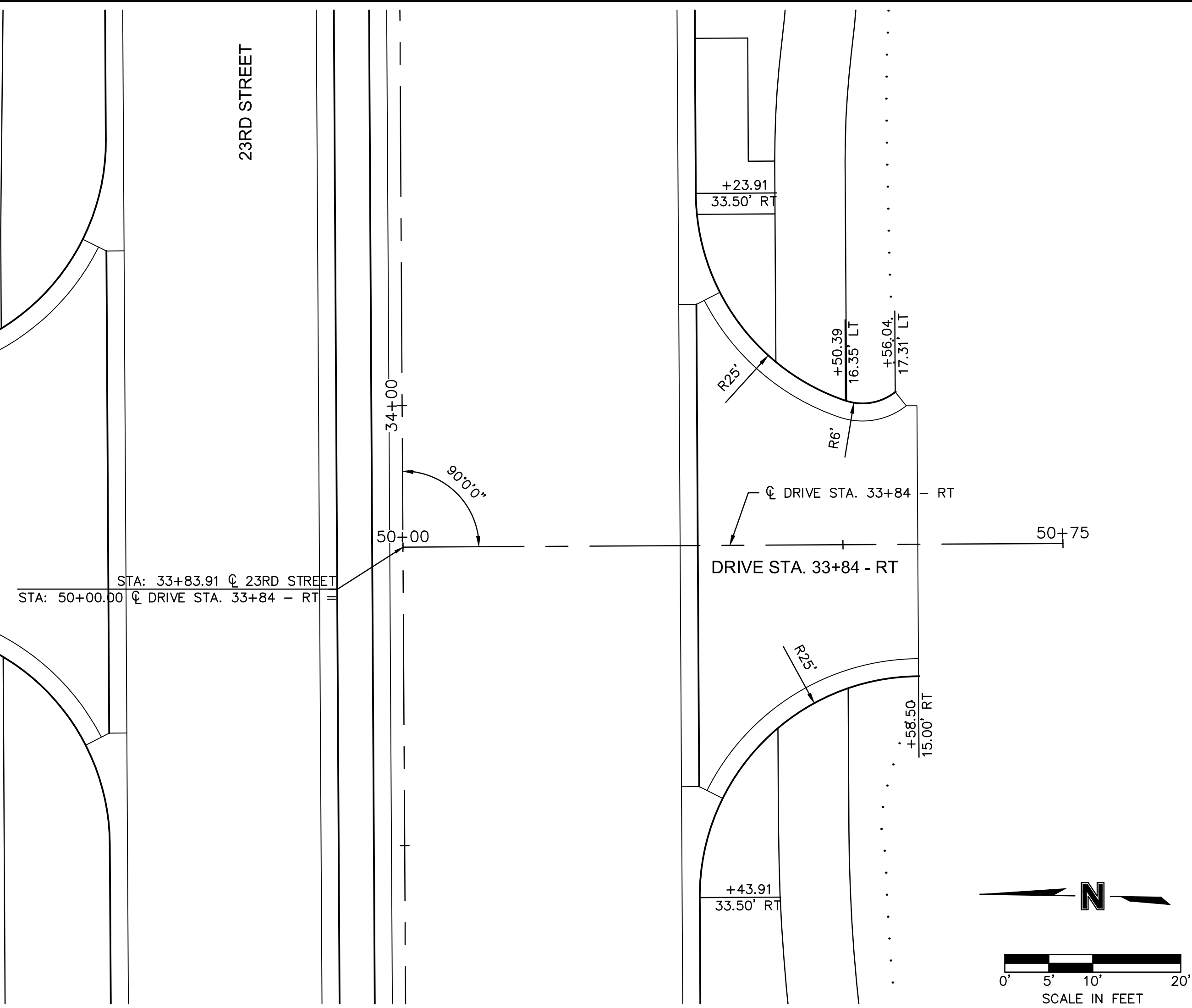
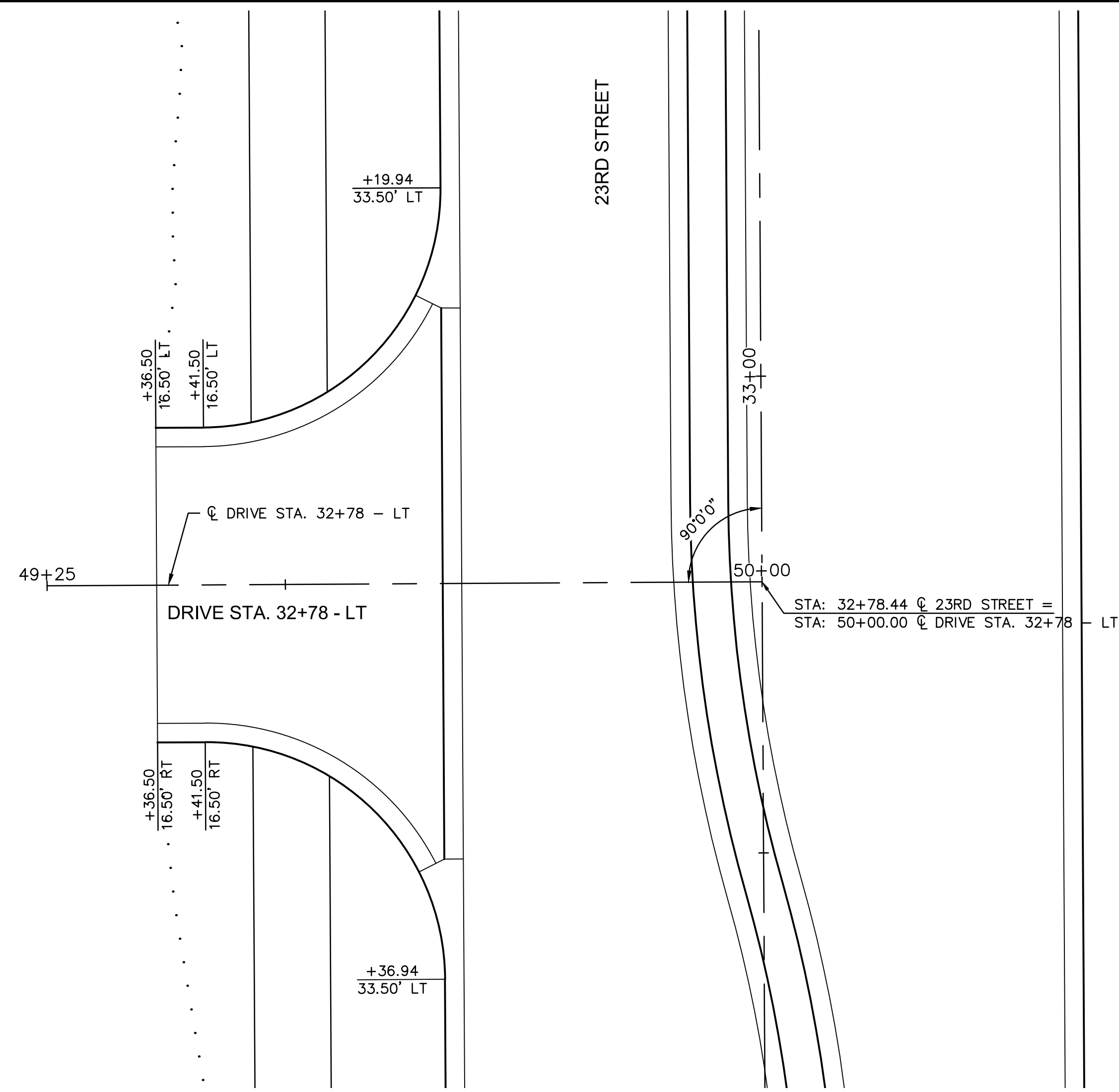
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS

2021

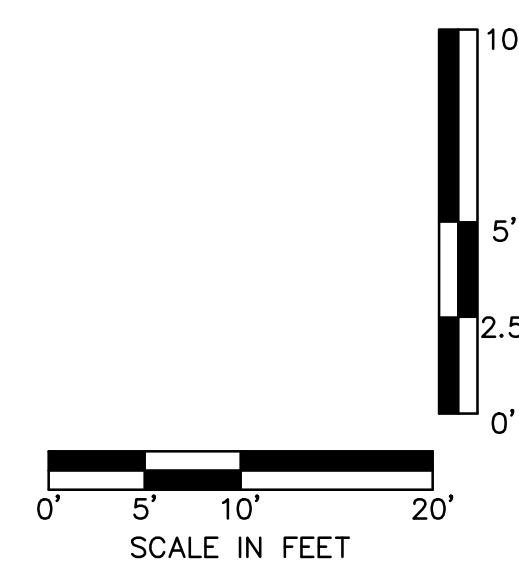
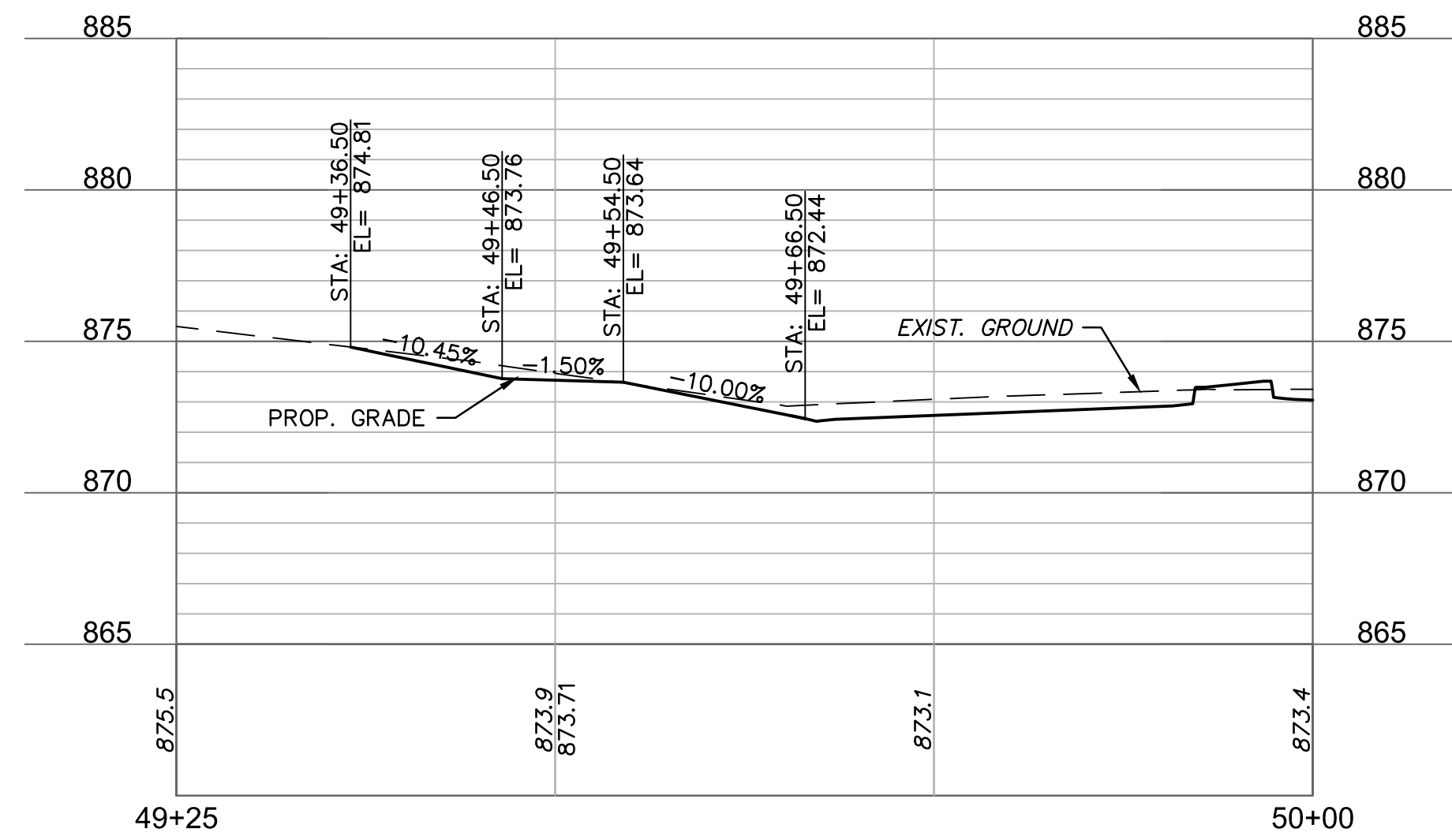
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SHEET
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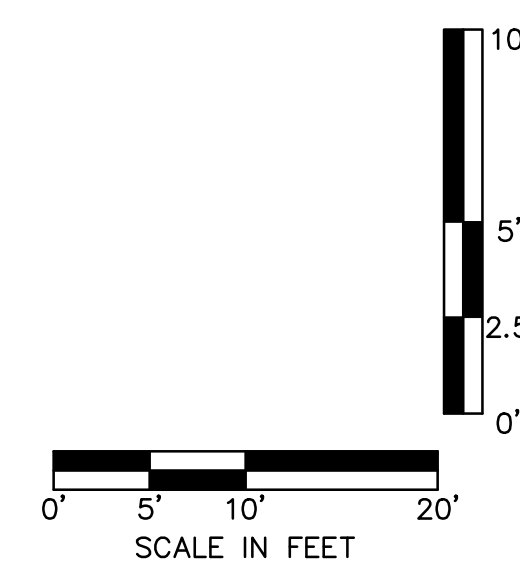
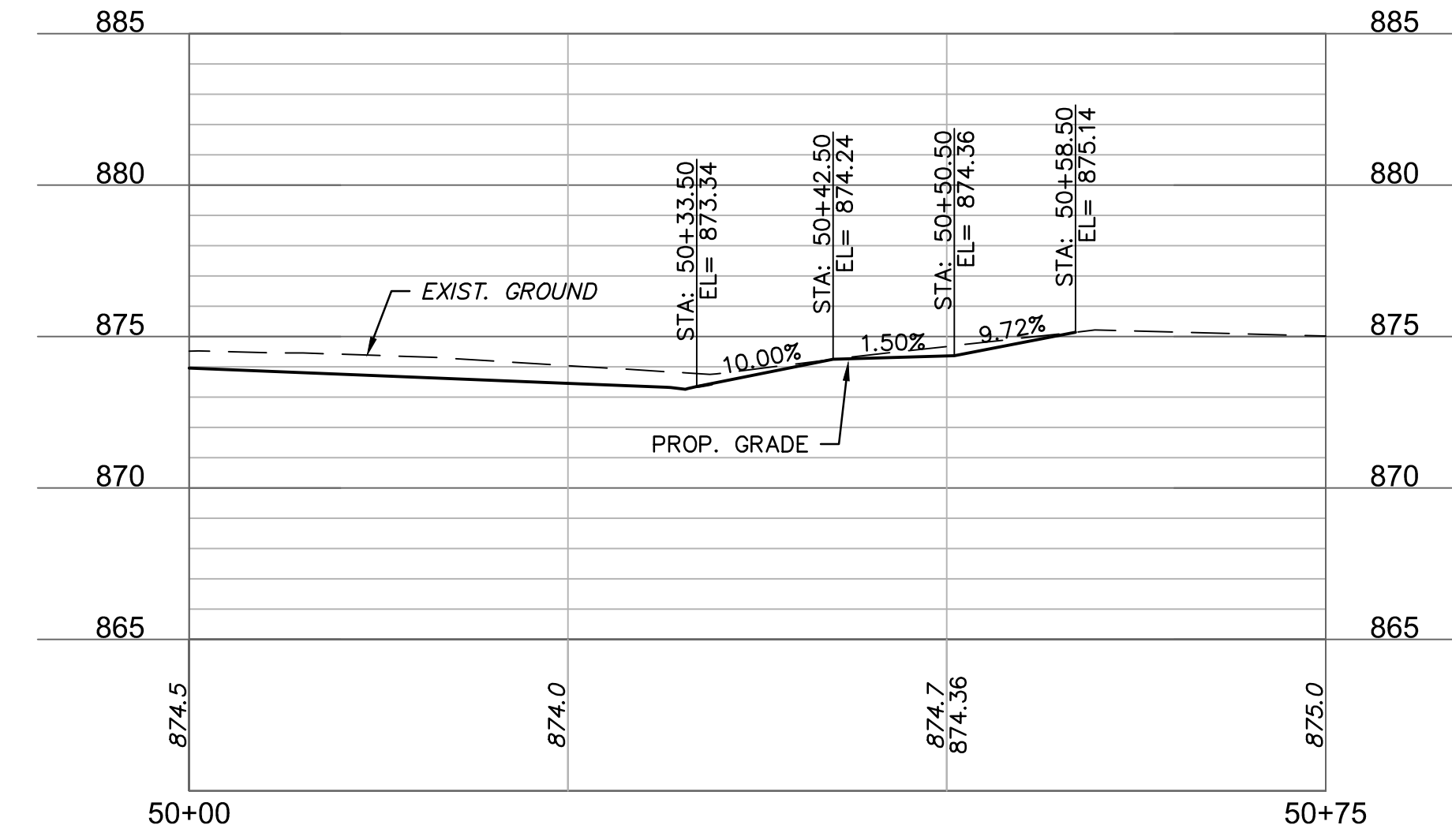
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DRIVE STA. 32+78 - LT (49+25 - 50+00)



DRIVE STA. 33+84 - RT (50+00 - 50+75)



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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

DRIVEWAY PLAN & PROFILES

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

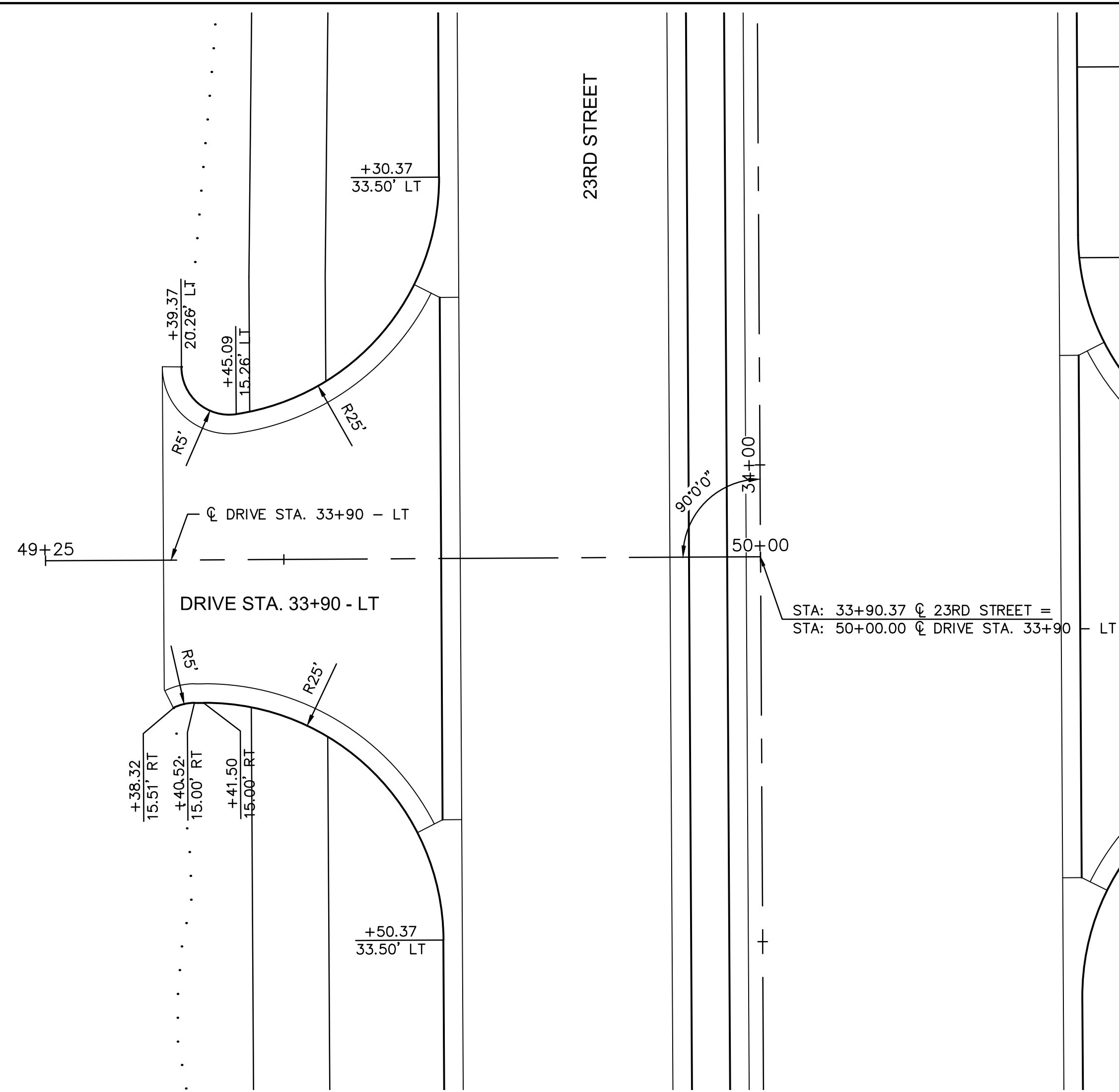
LAWRENCE, KANSAS

2021

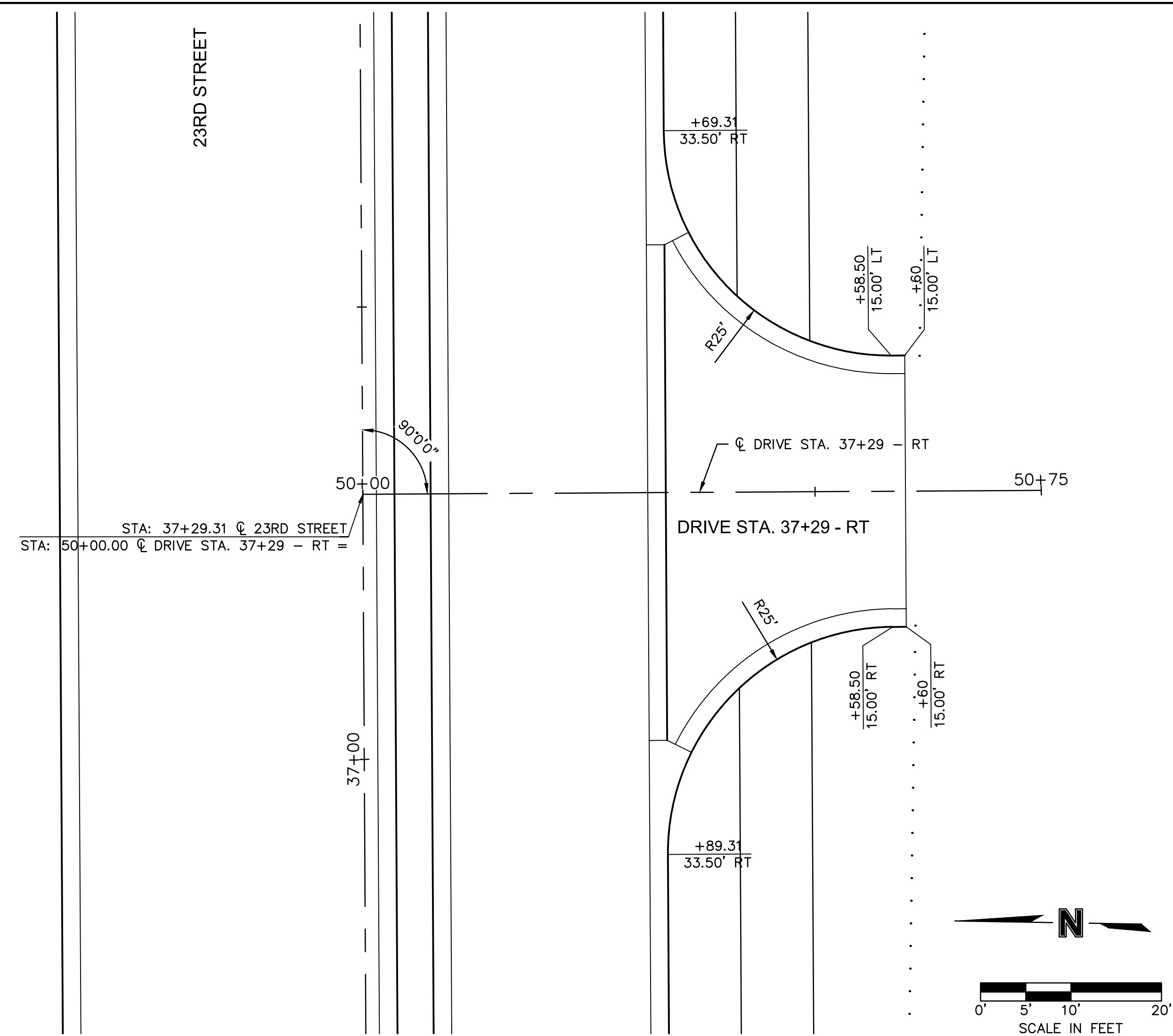
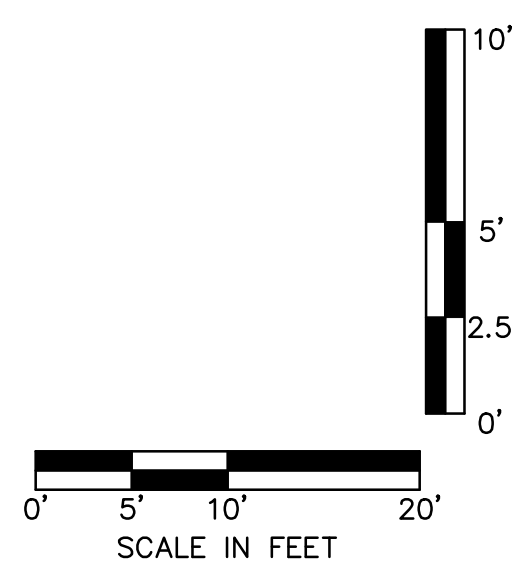
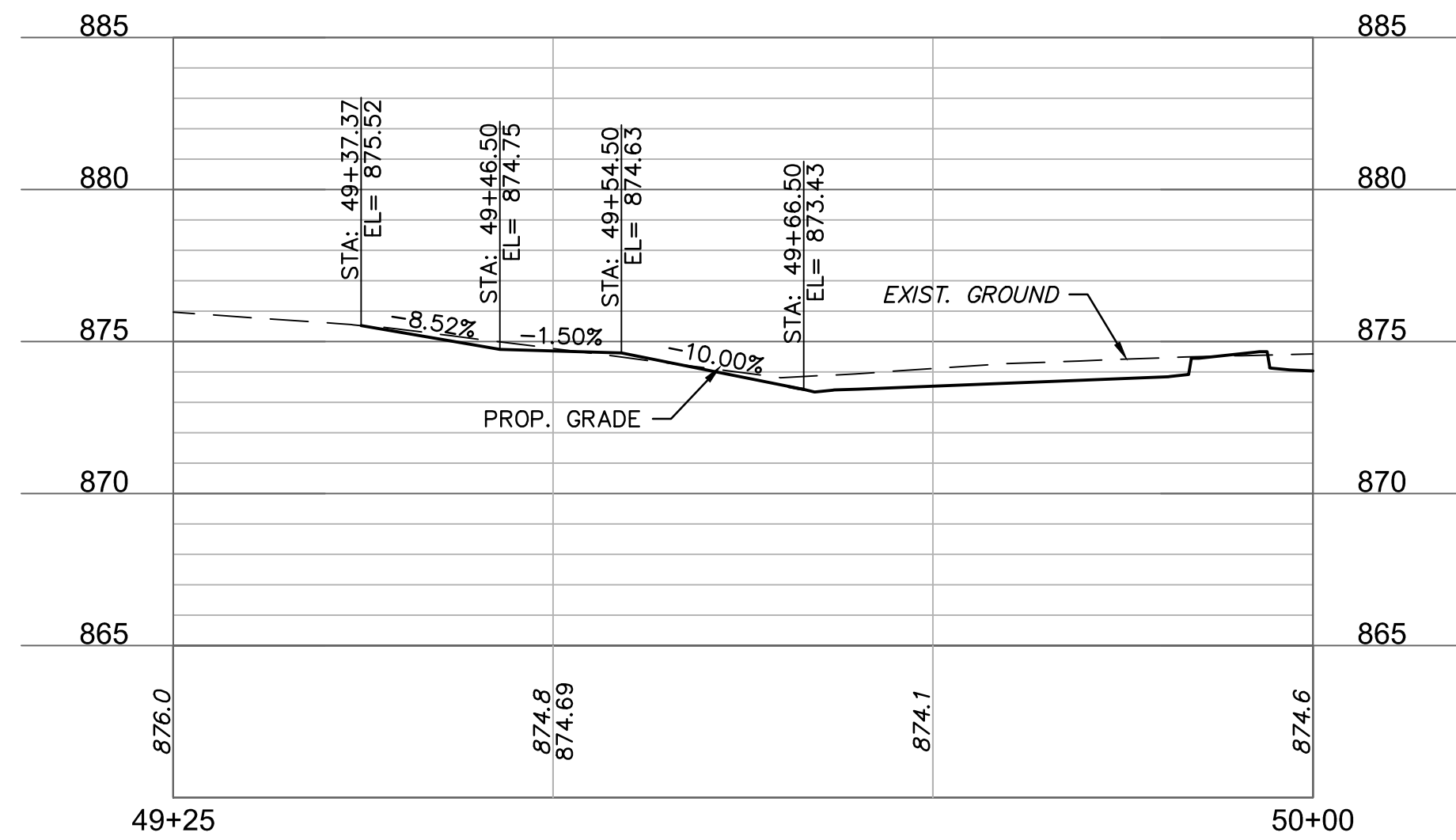
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 drawing no.: I_DRIVEWAY_LAYOUT_0202348
 date: 12-18-2020

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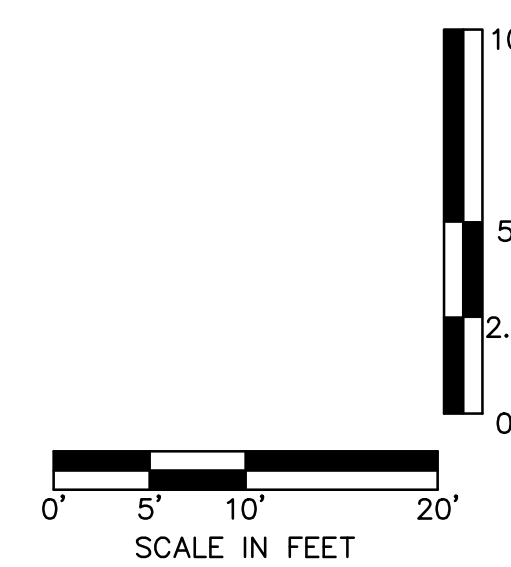
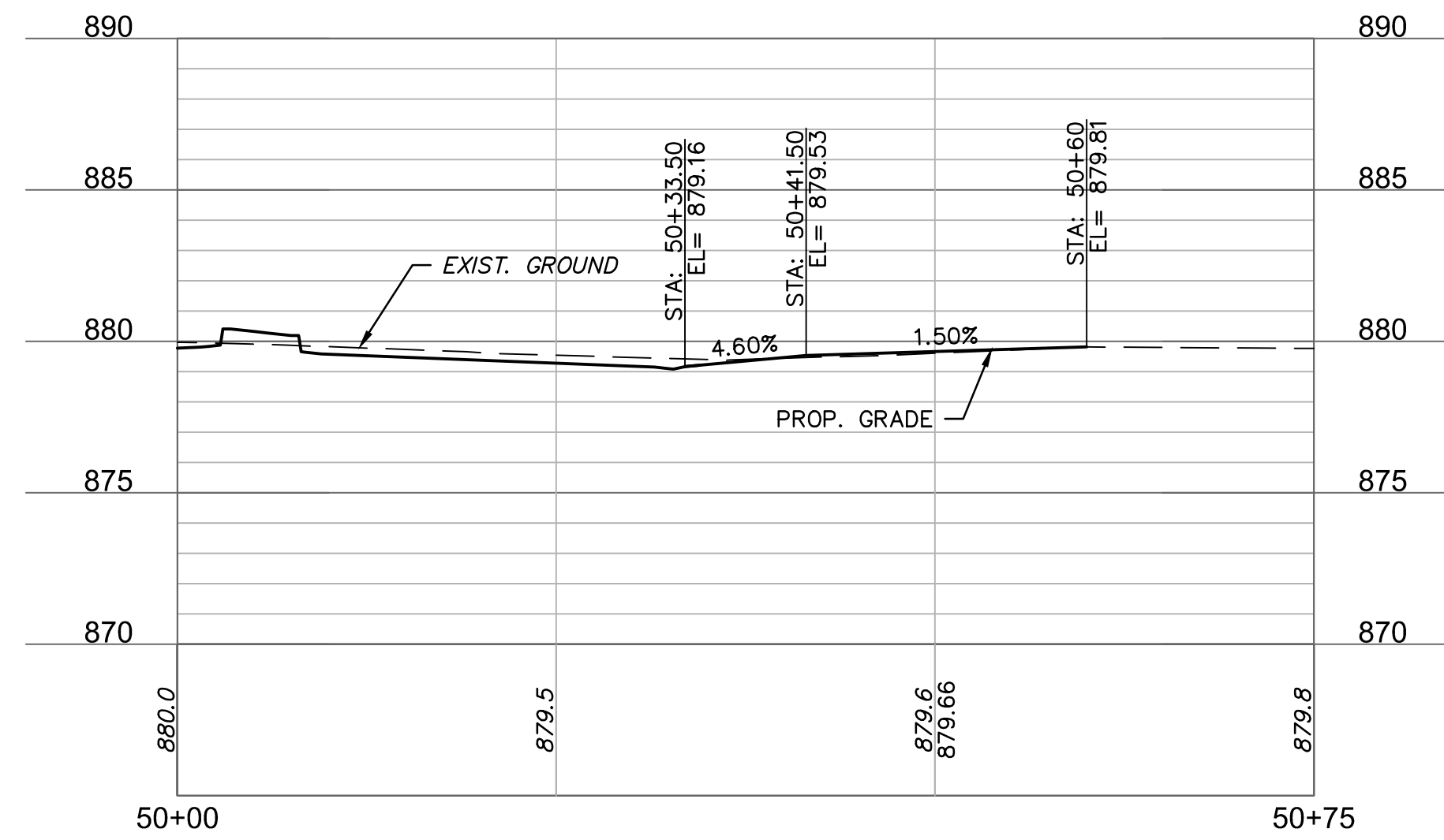
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DRIVE STA. 33+90 - LT (49+25 - 50+00)



DRIVE STA. 37+29 - RT (50+00 - 50+75)



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DRIVEWAY PLAN & PROFILES

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS

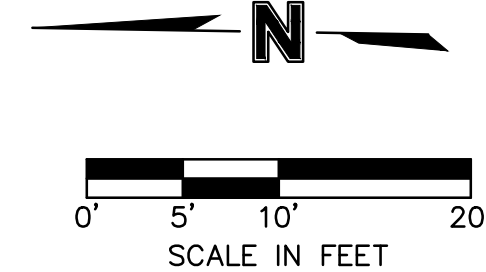
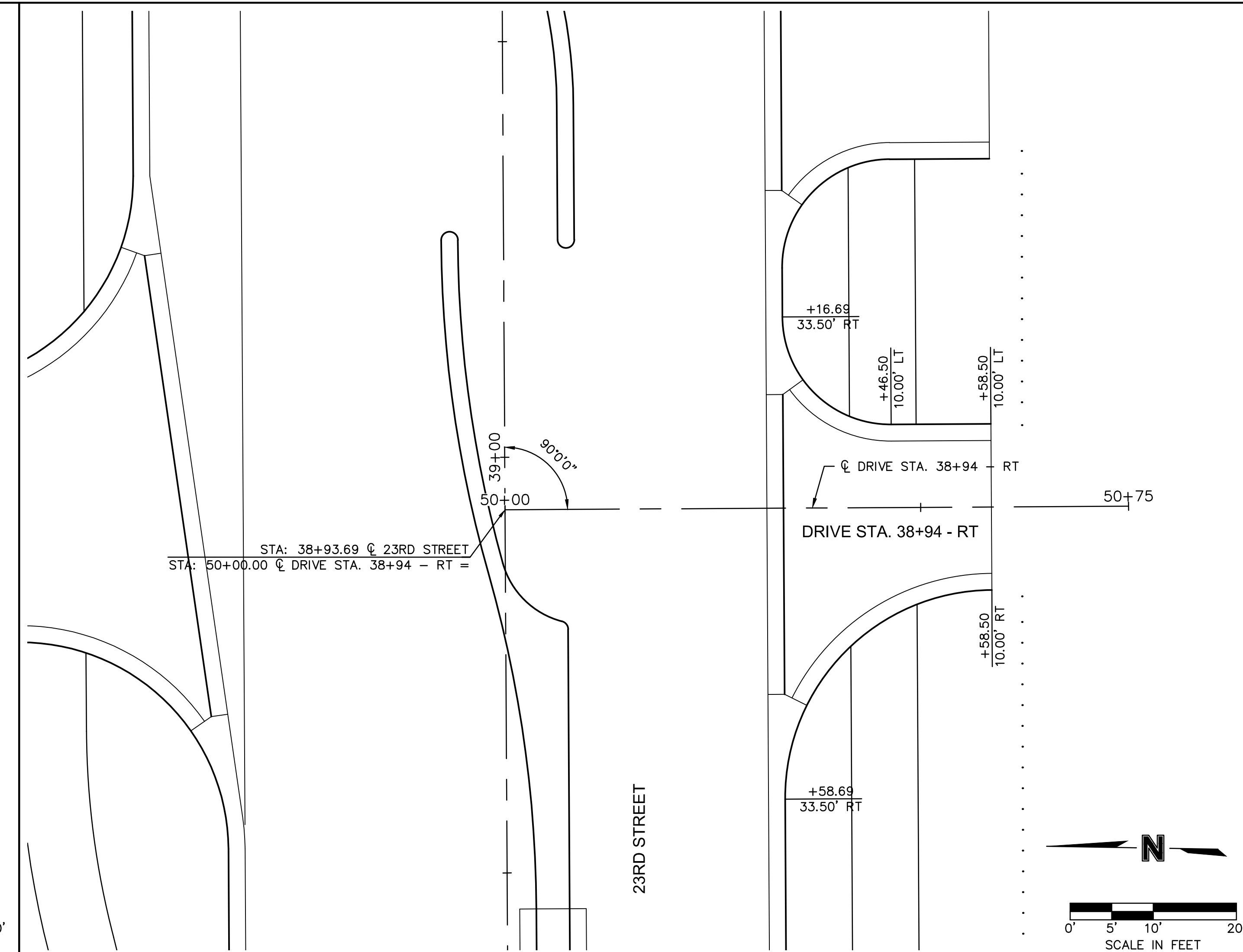
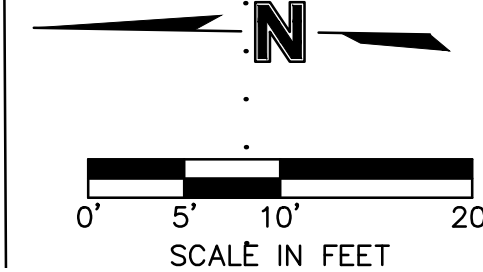
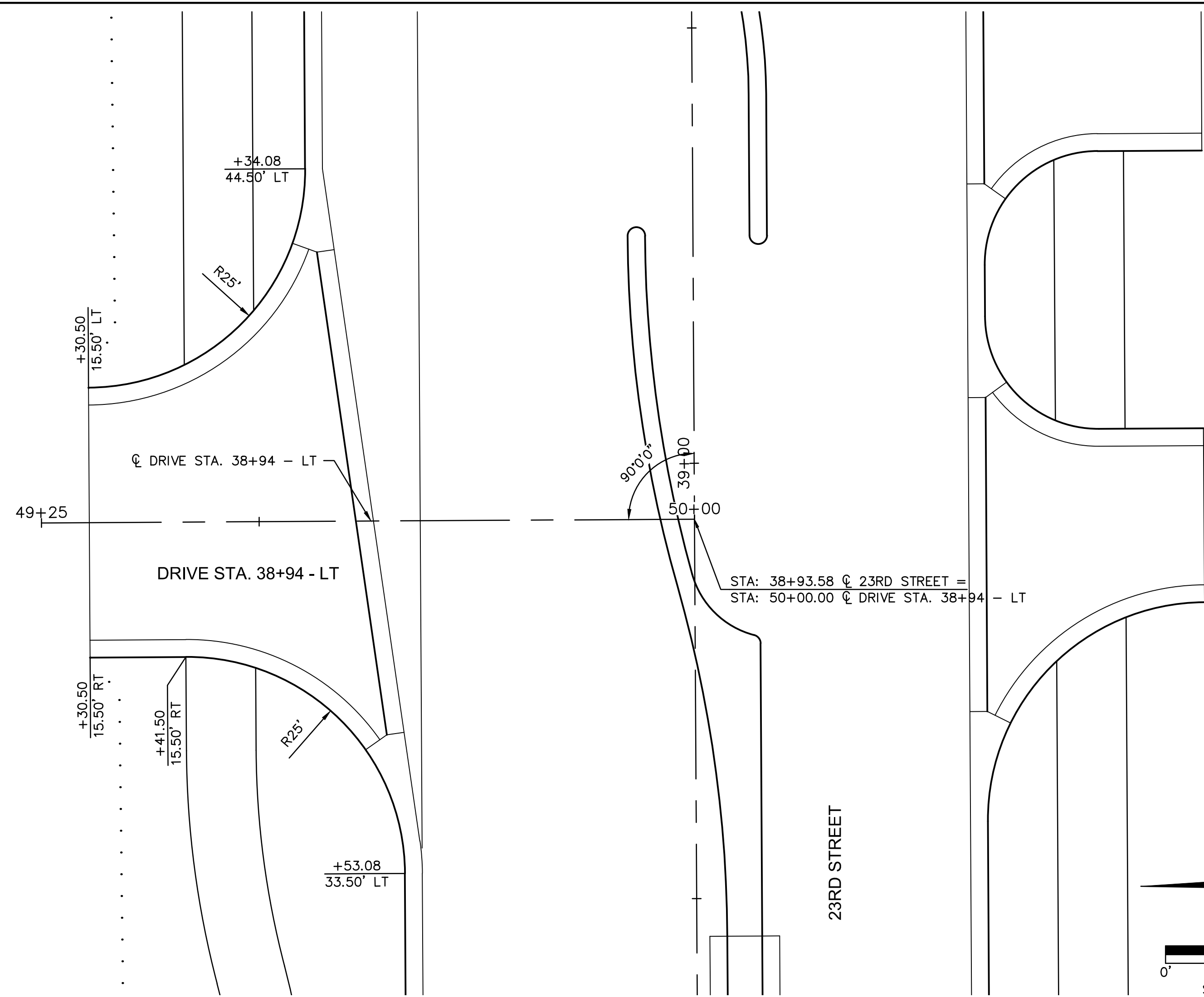
2021

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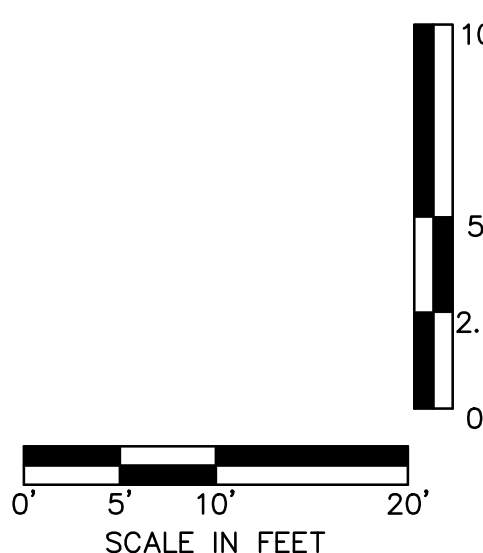
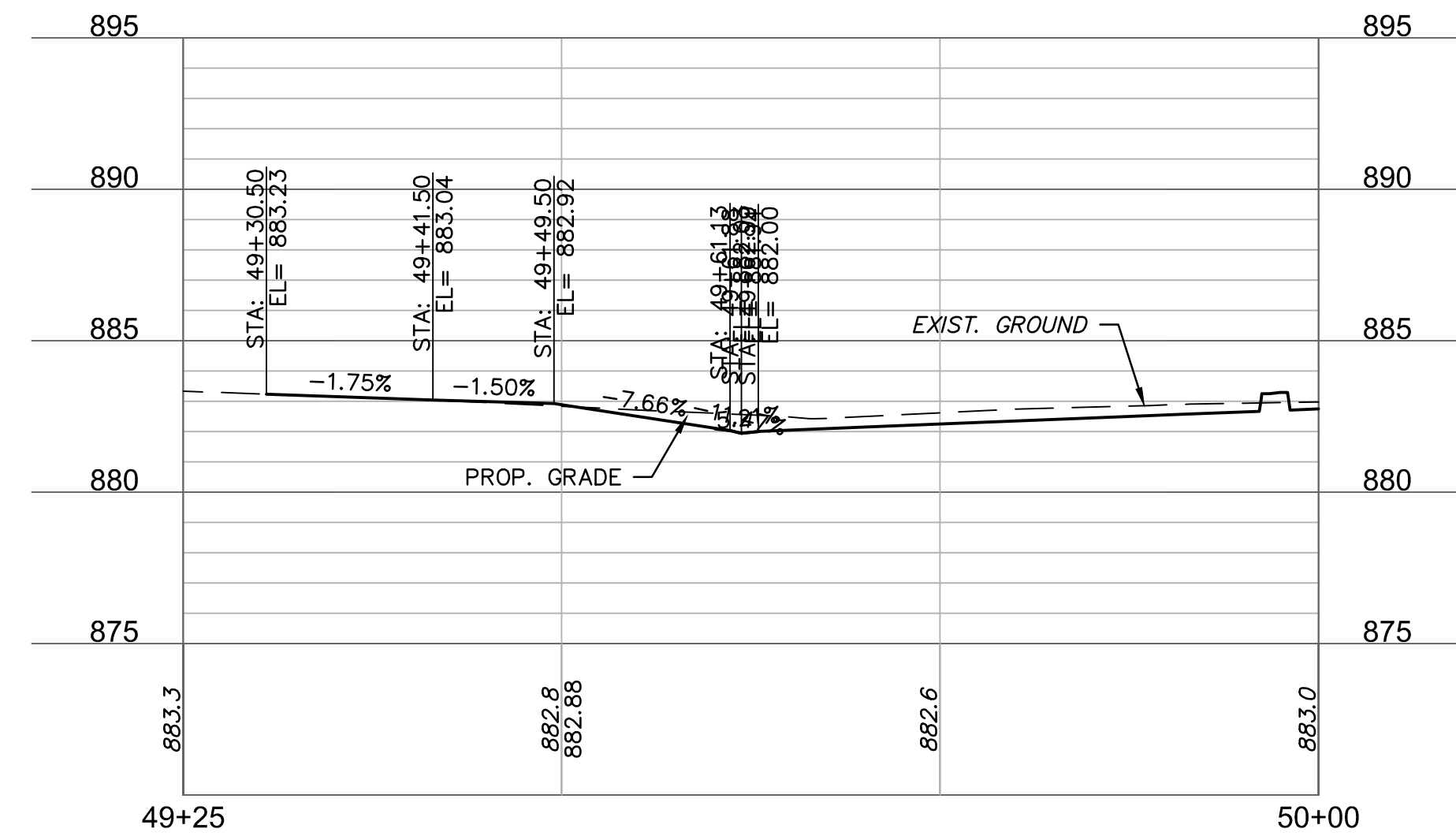
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USER: aurbonek

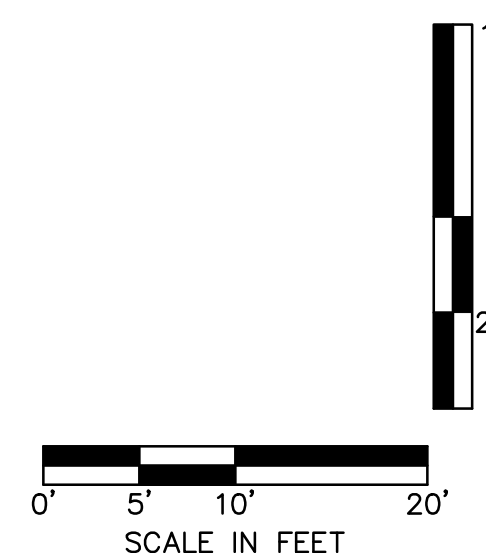
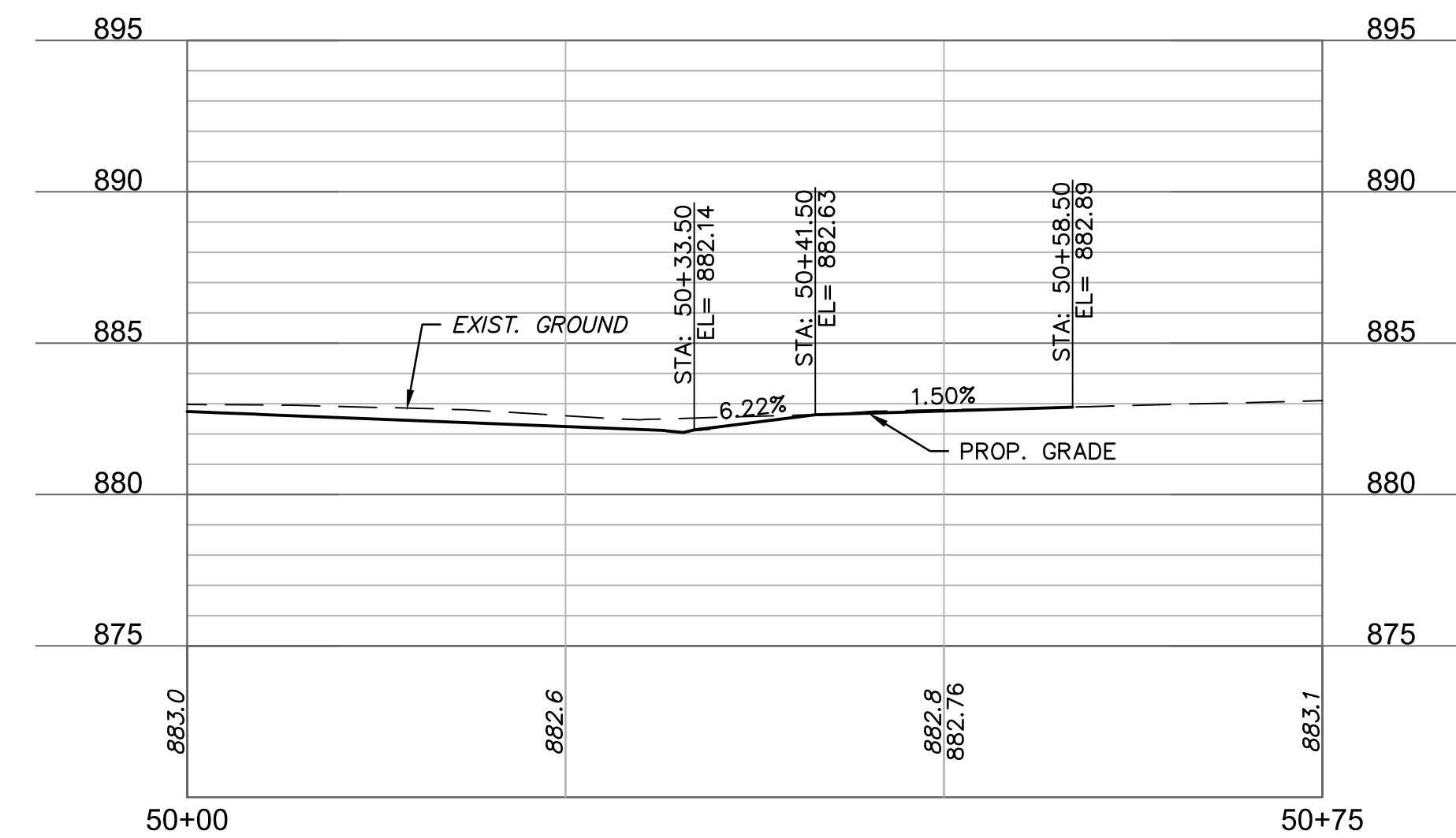
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DRIVE STA. 38+94 - LT (49+25 - 50+00)



DRIVE STA. 38+94 - RT (50+00 - 50+75)



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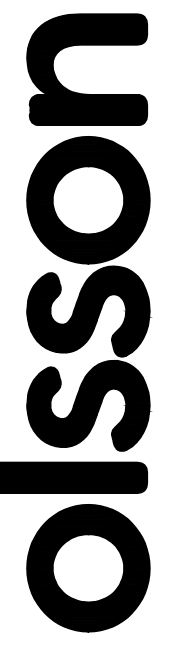
DRIVEWAY PLAN & PROFILES

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

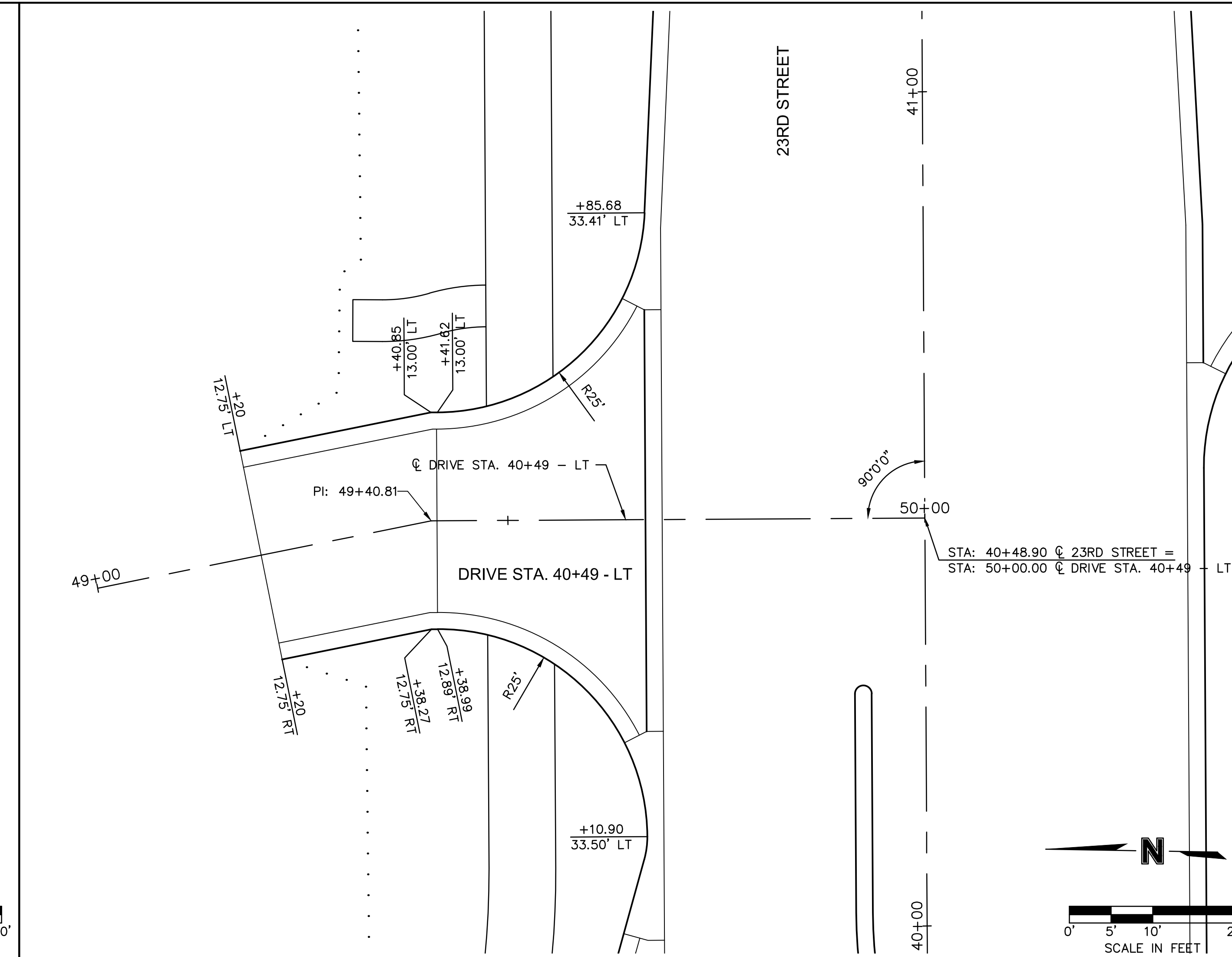
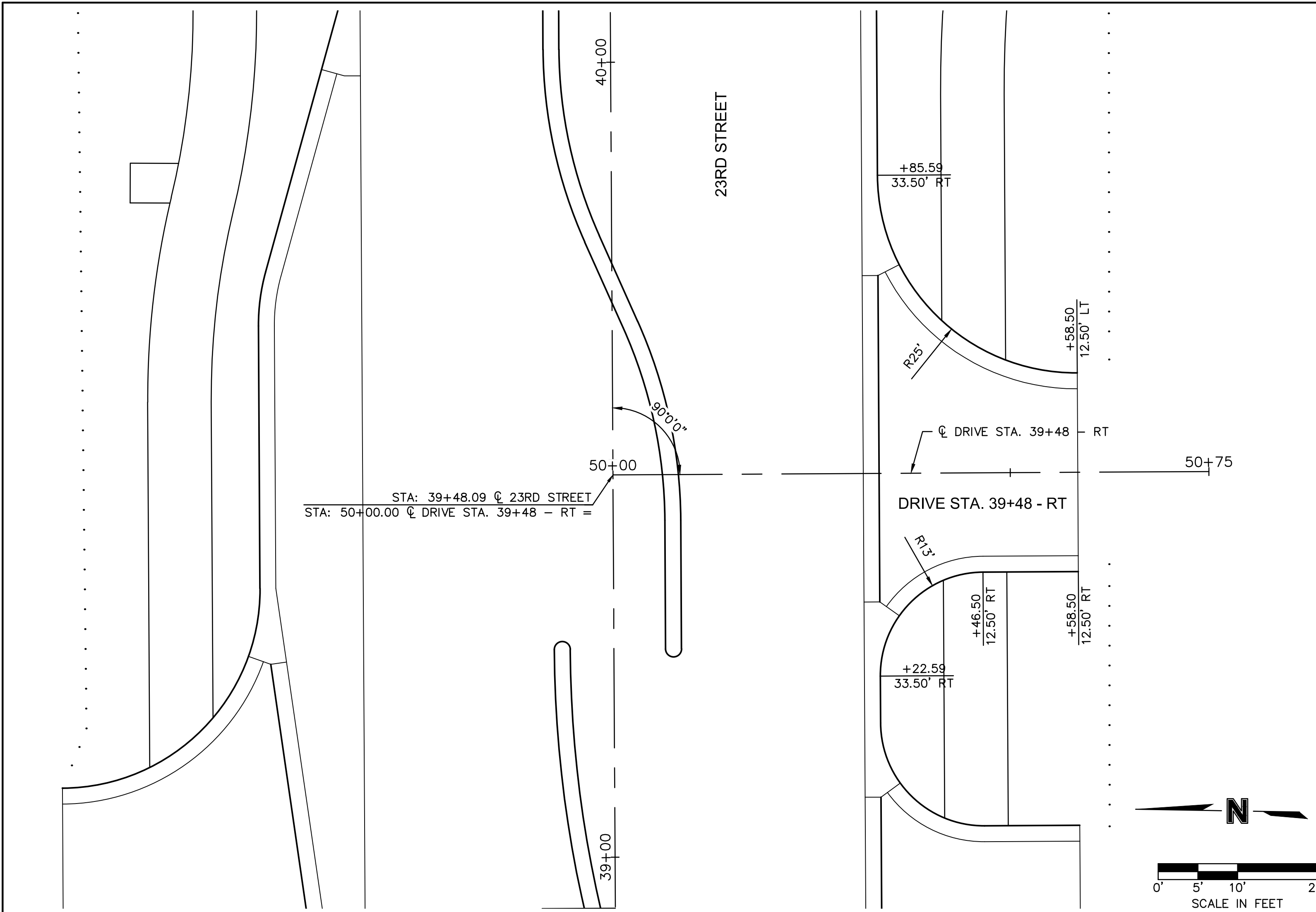
2021

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drawing no.: I_DRIVE02_0202348
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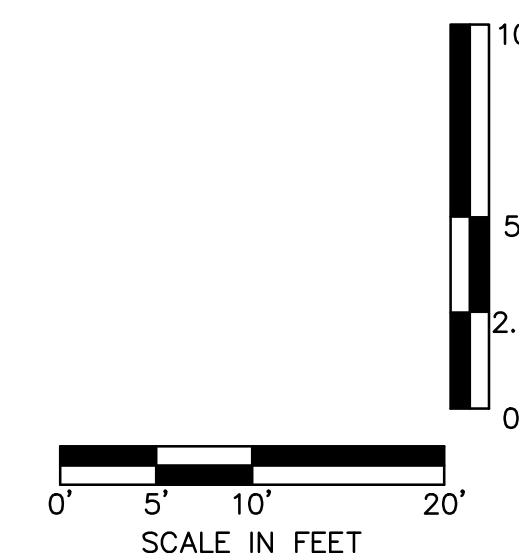
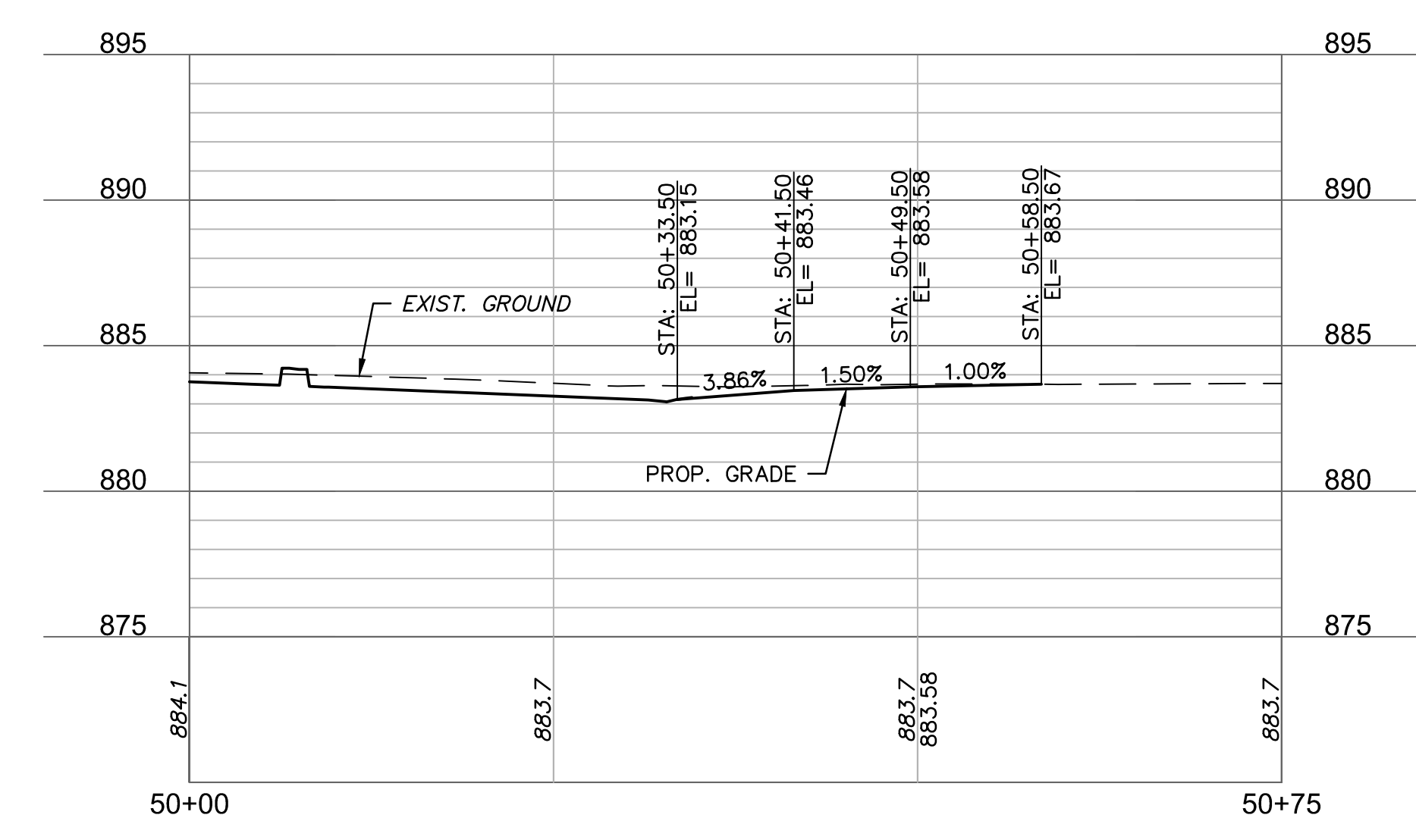


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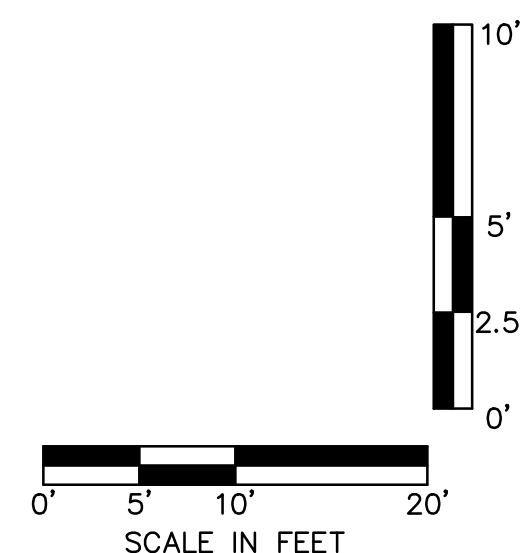
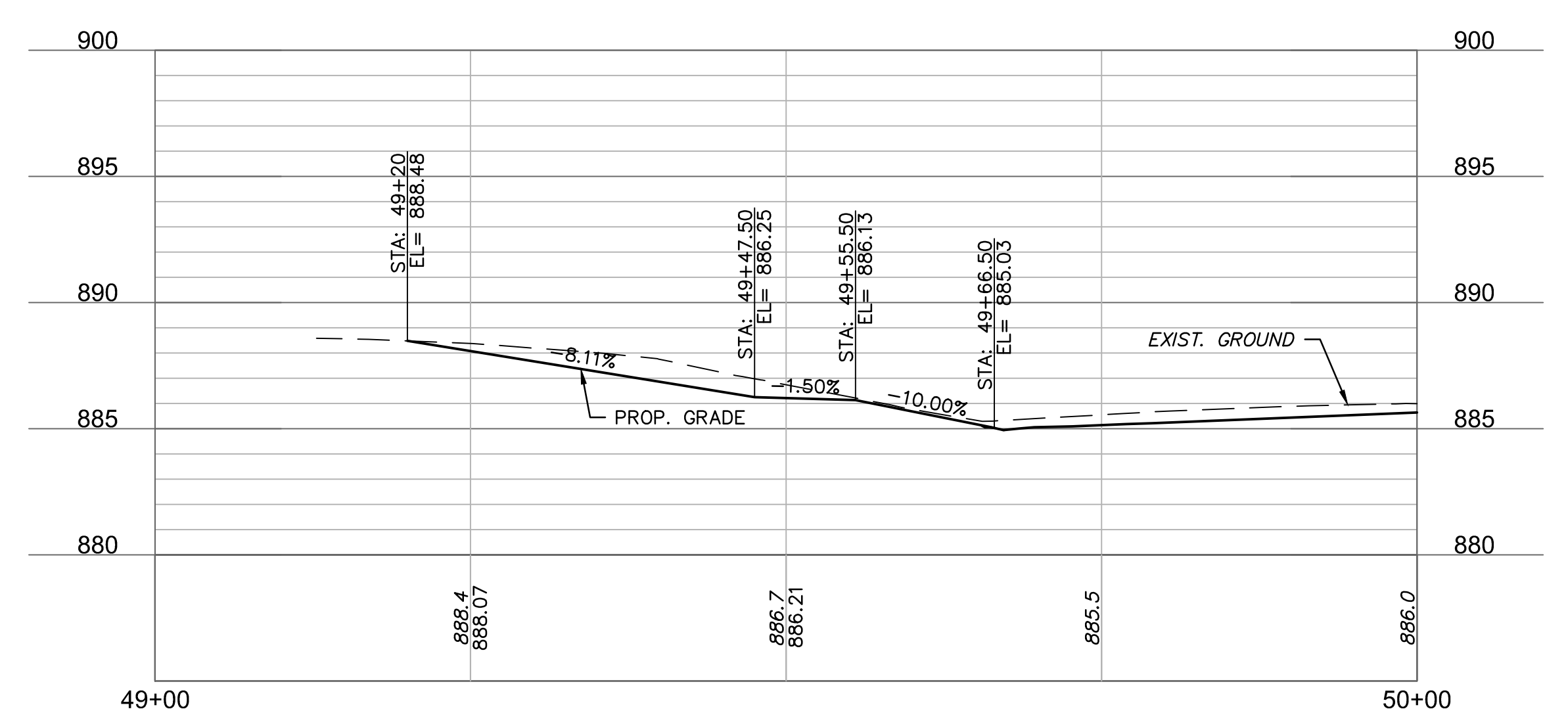
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DRIVE STA. 39+48 - RT (50+00 - 50+75)



DRIVE STA. 40+49 - LT (49+00 - 50+00)



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23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

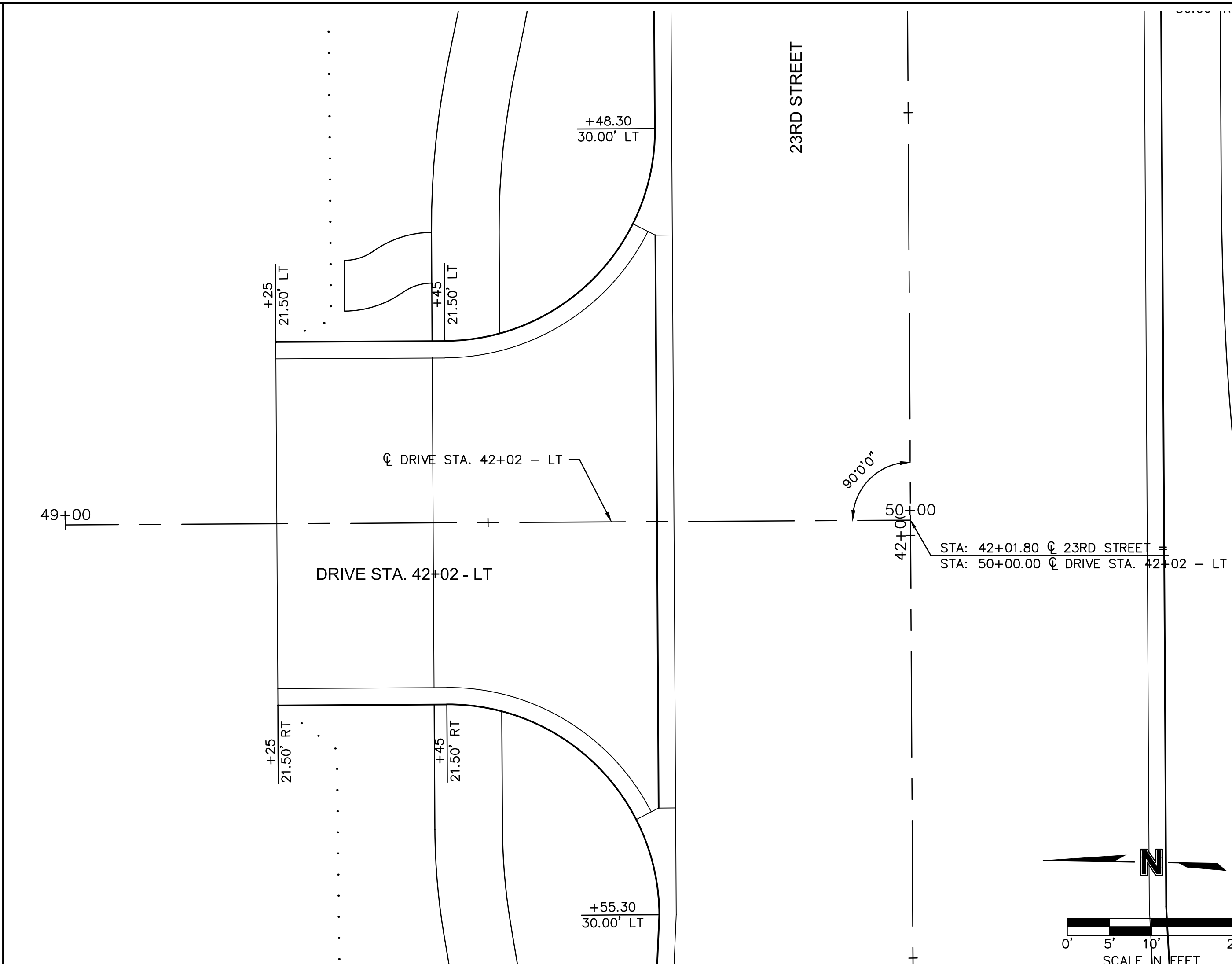
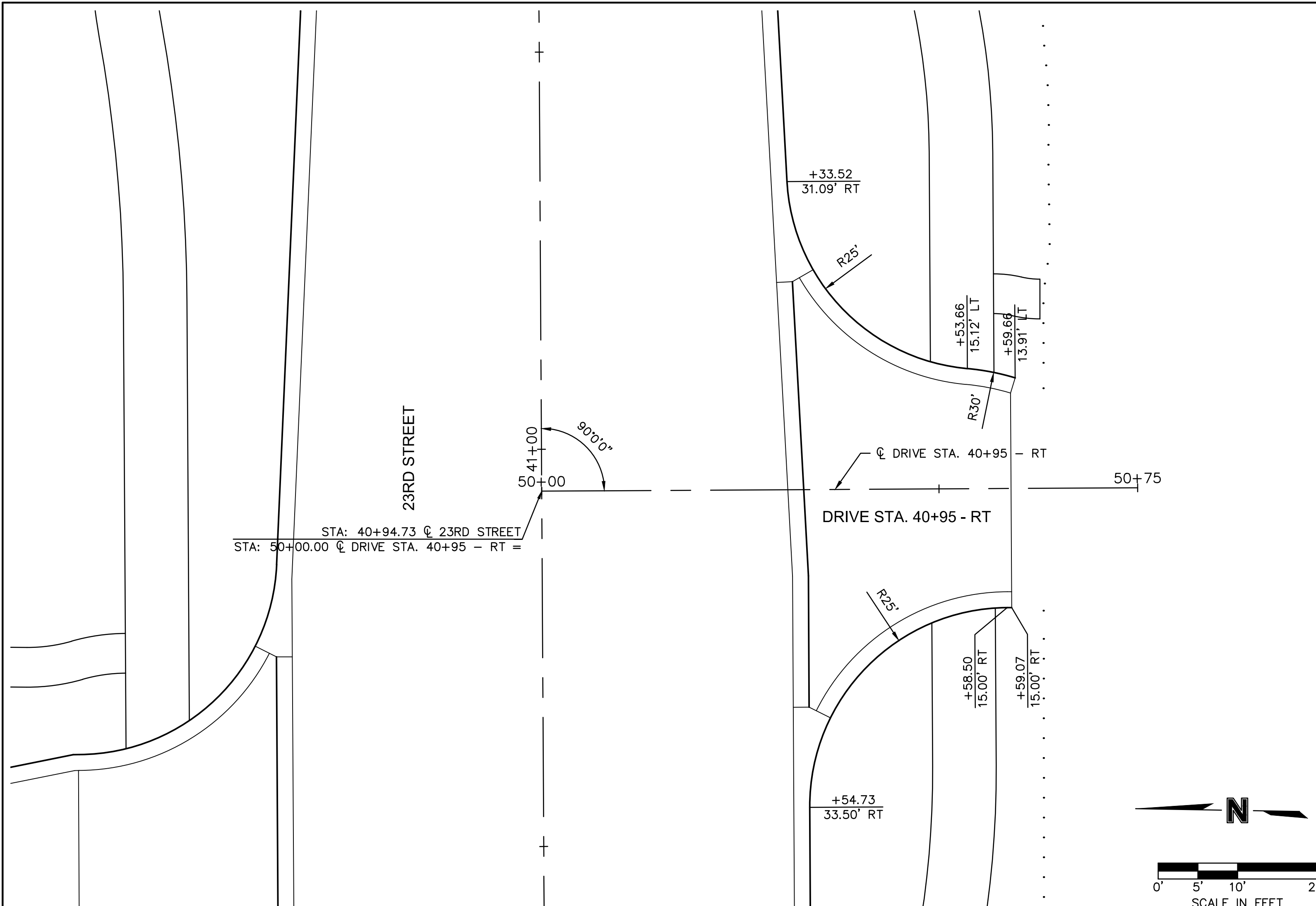
LAWRENCE, KANSAS

2021

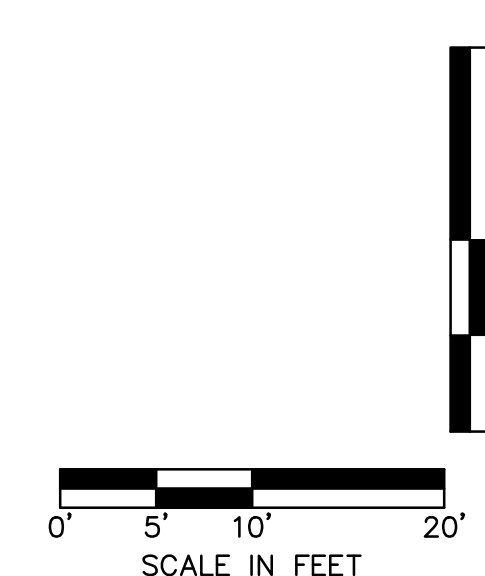
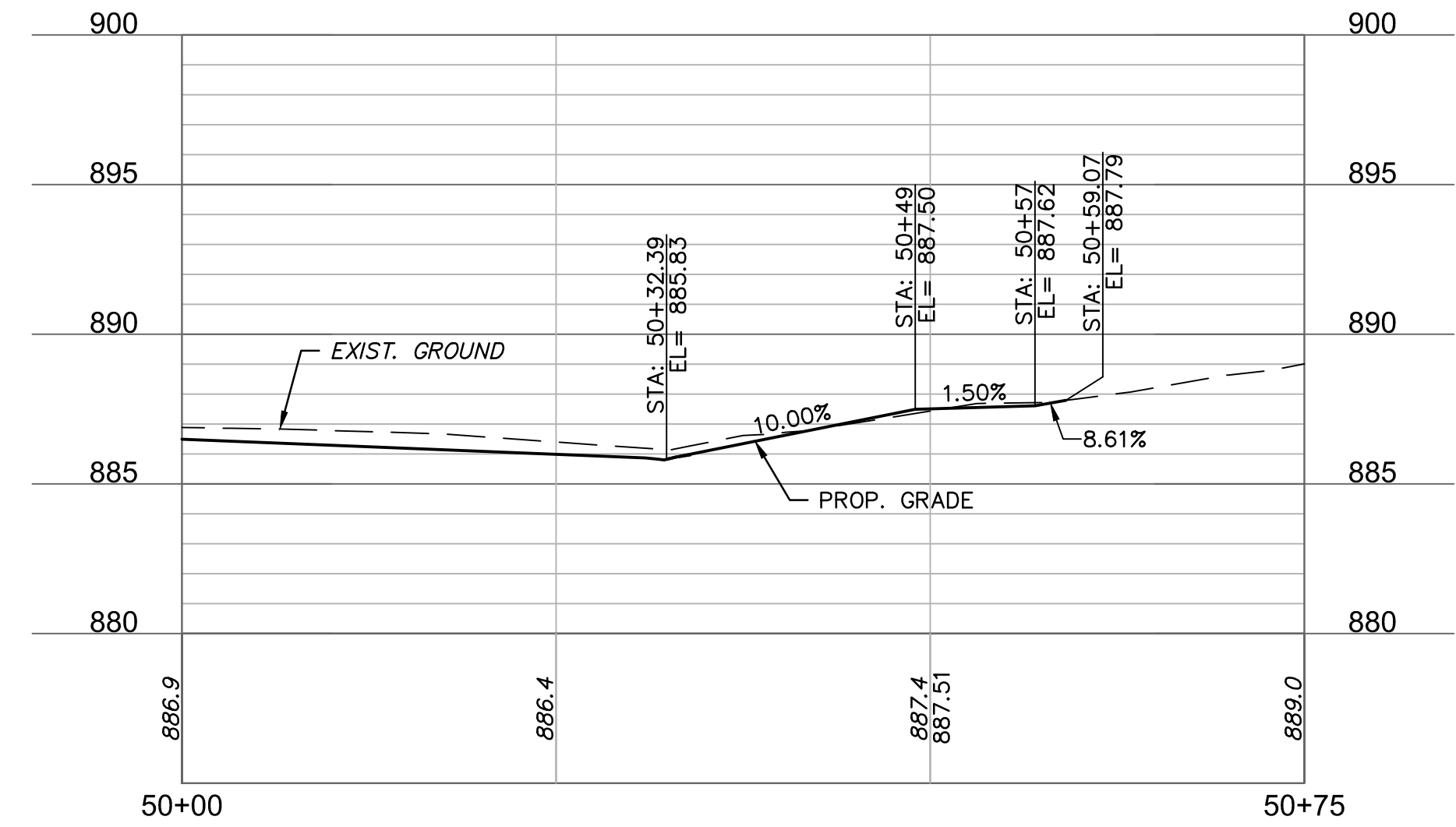
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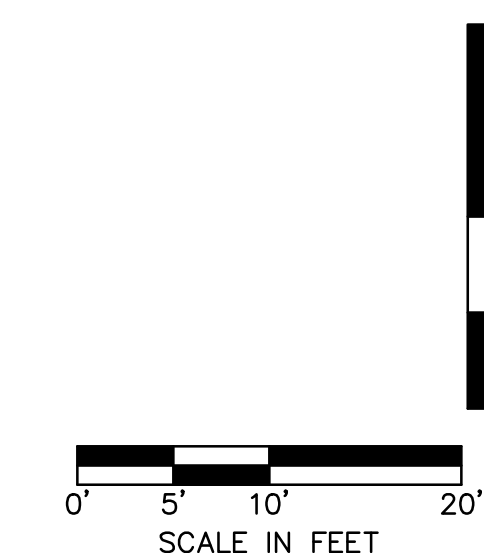
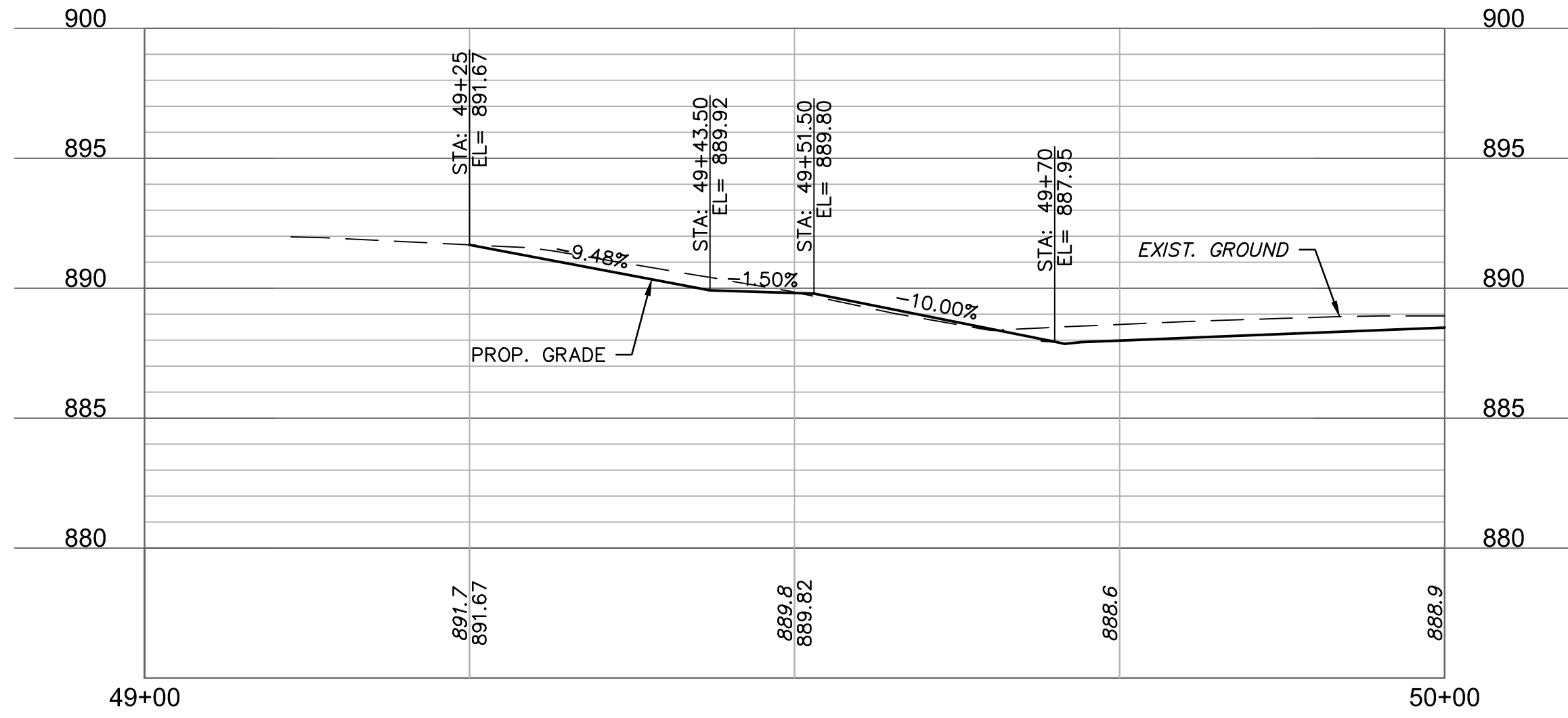
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DRIVE STA. 40+95 - RT (50+00 - 50+75)



DRIVE STA. 42+02 - LT (49+00 - 50+00)



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 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

2021

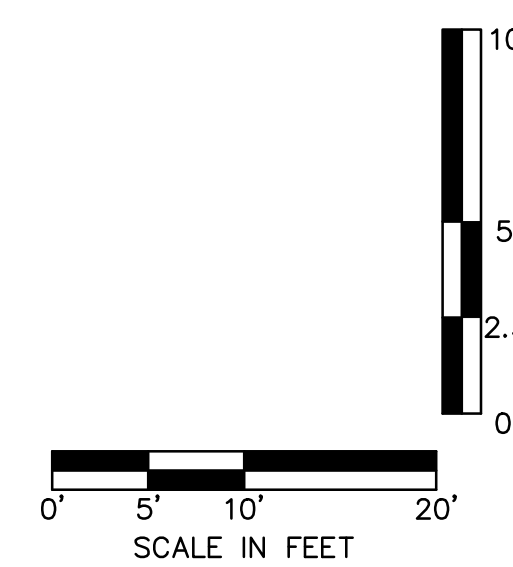
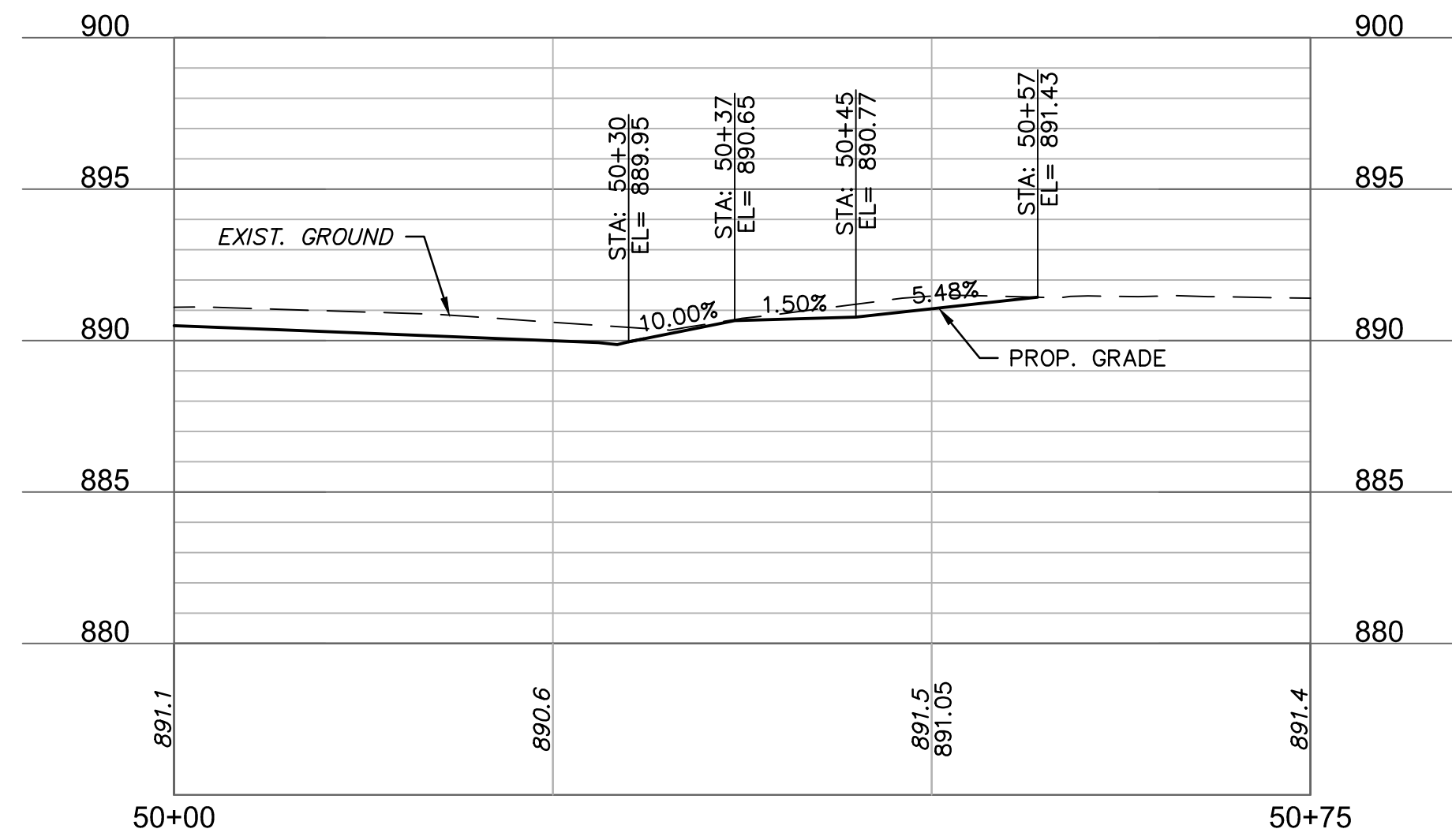
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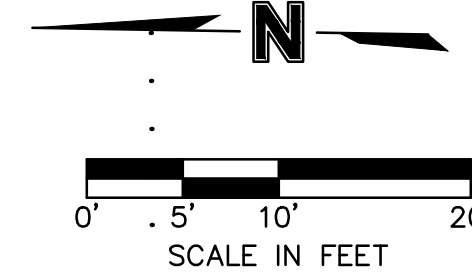
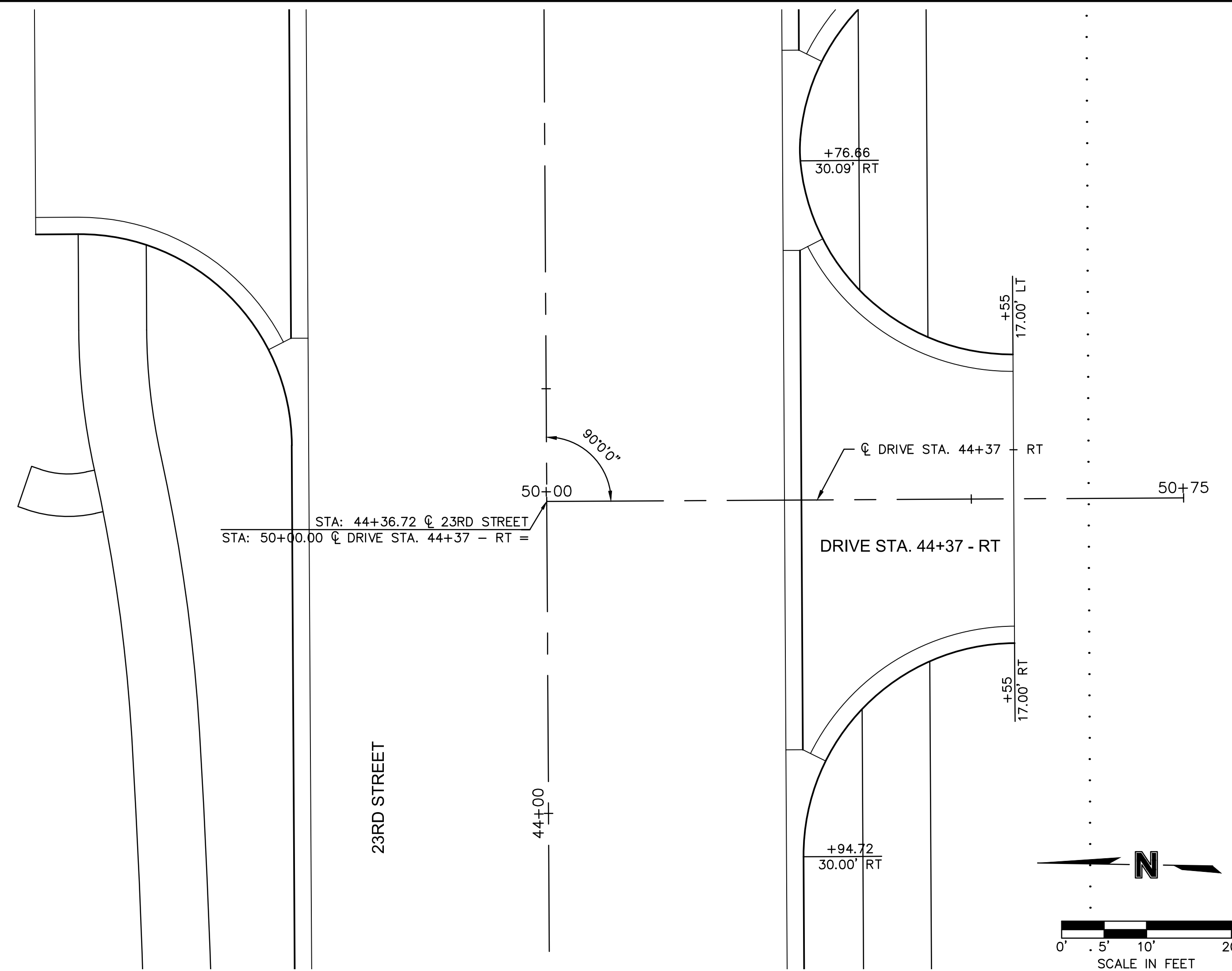
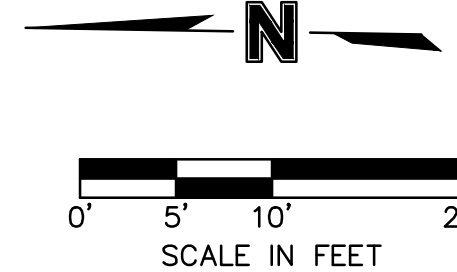
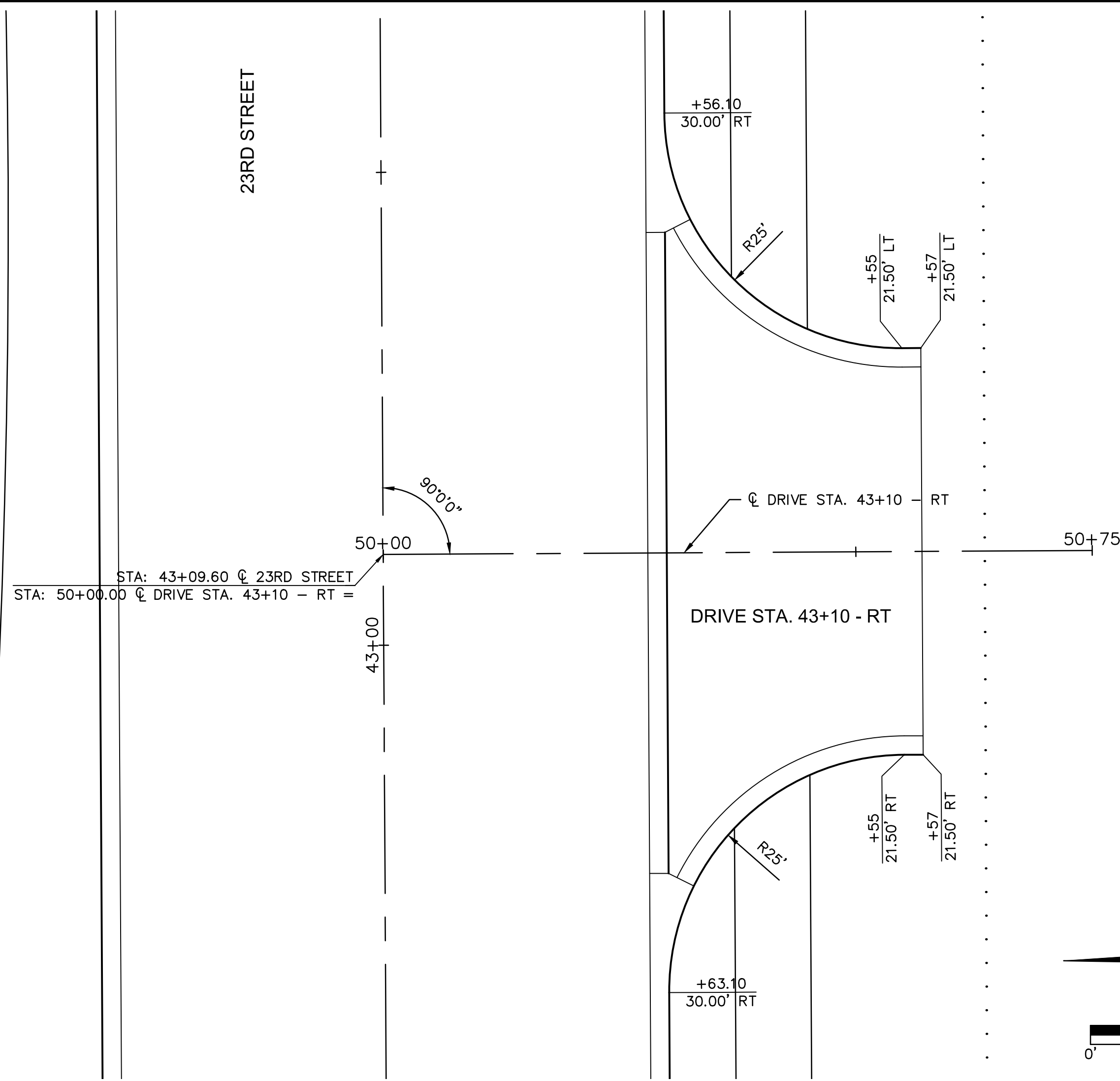
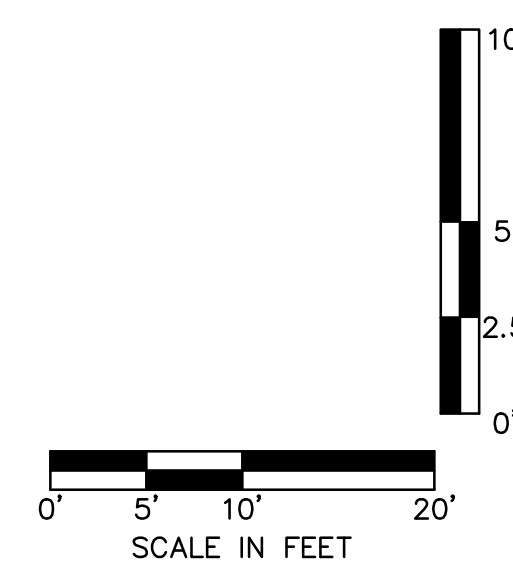
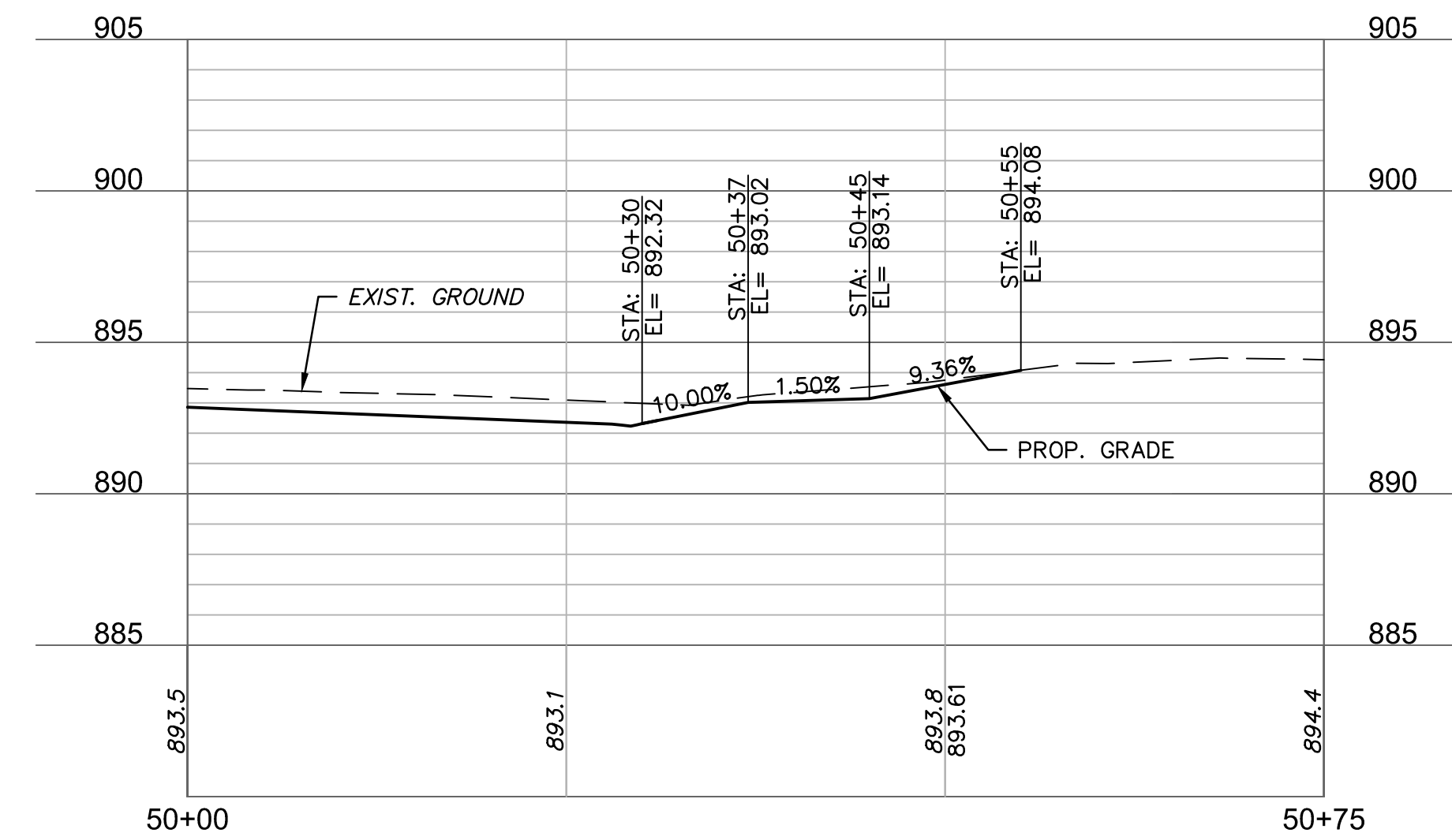
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DRIVE STA. 43+10 - RT (50+00 - 50+75)



DRIVE STA. 44+37 - RT (50+00 - 50+75)



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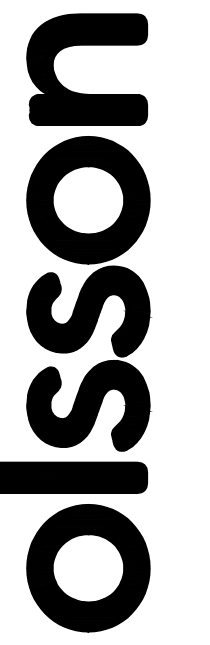
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23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

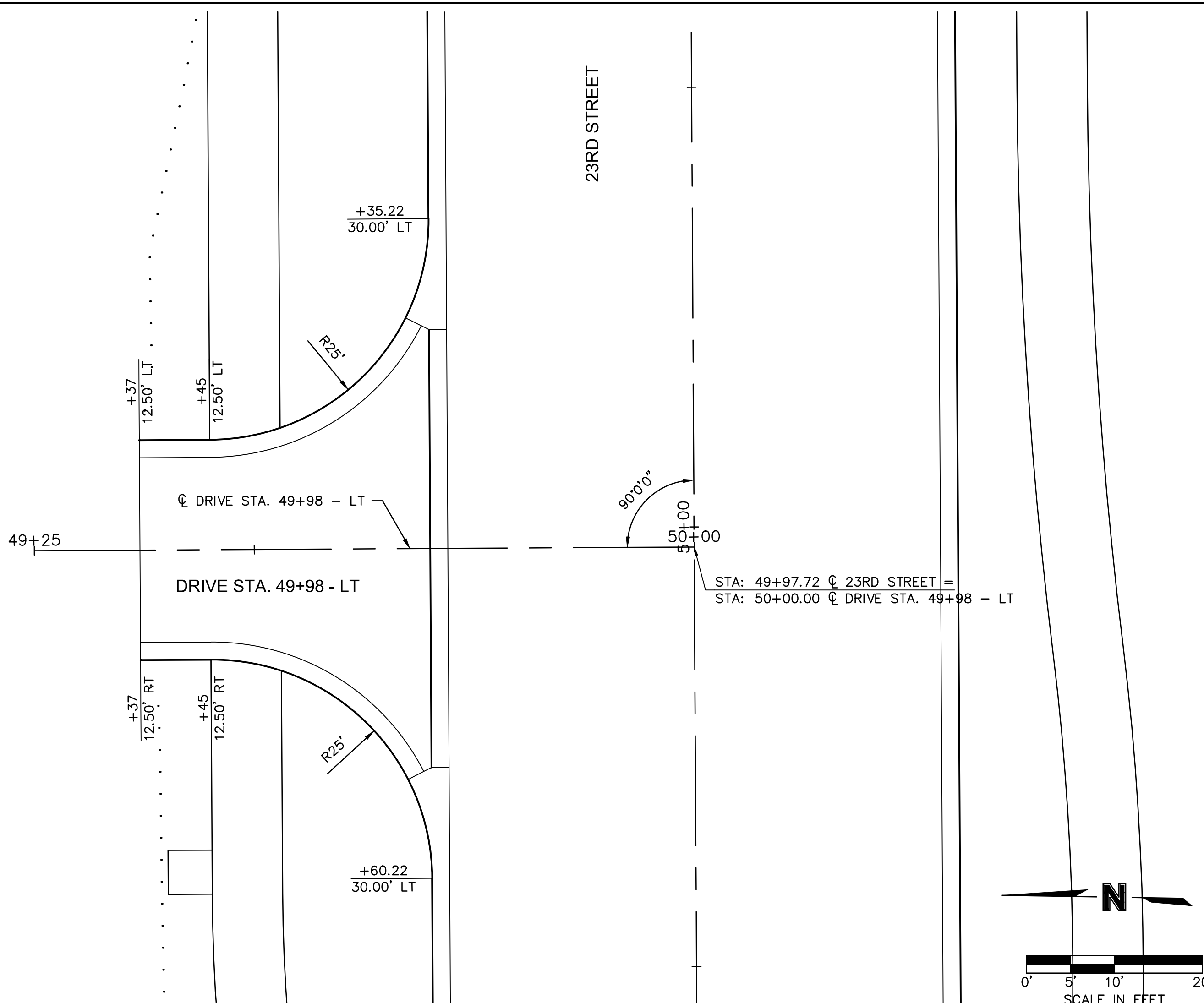
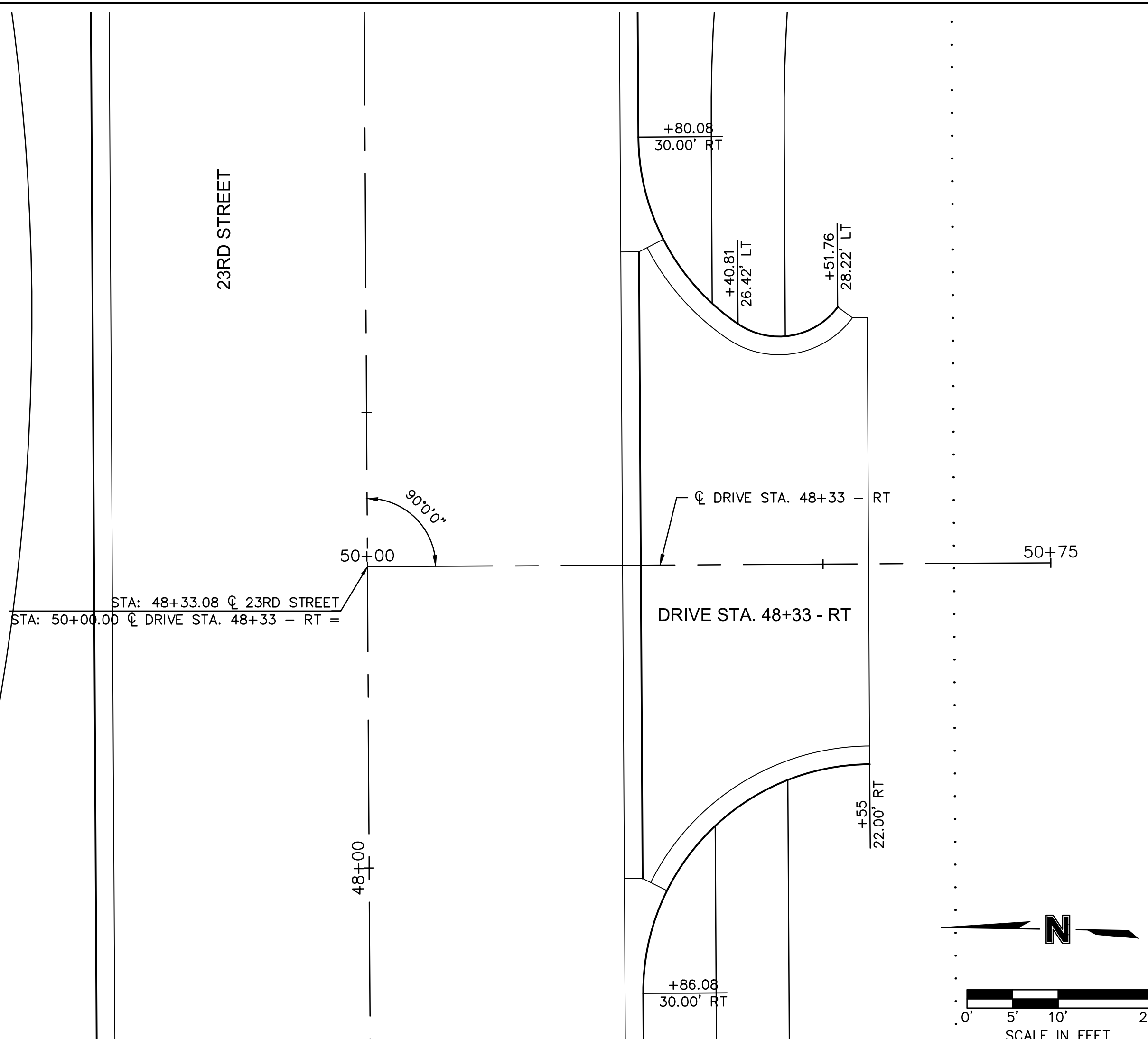
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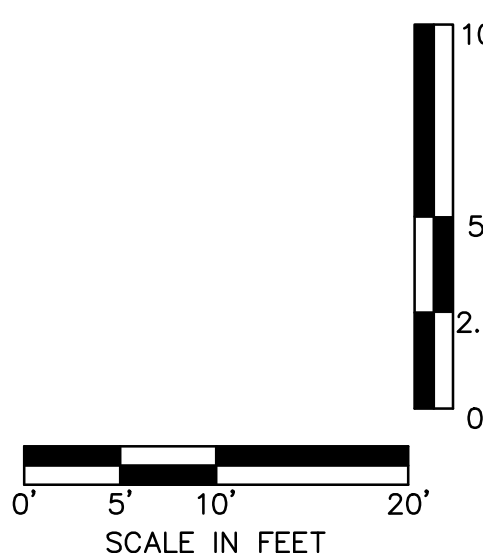
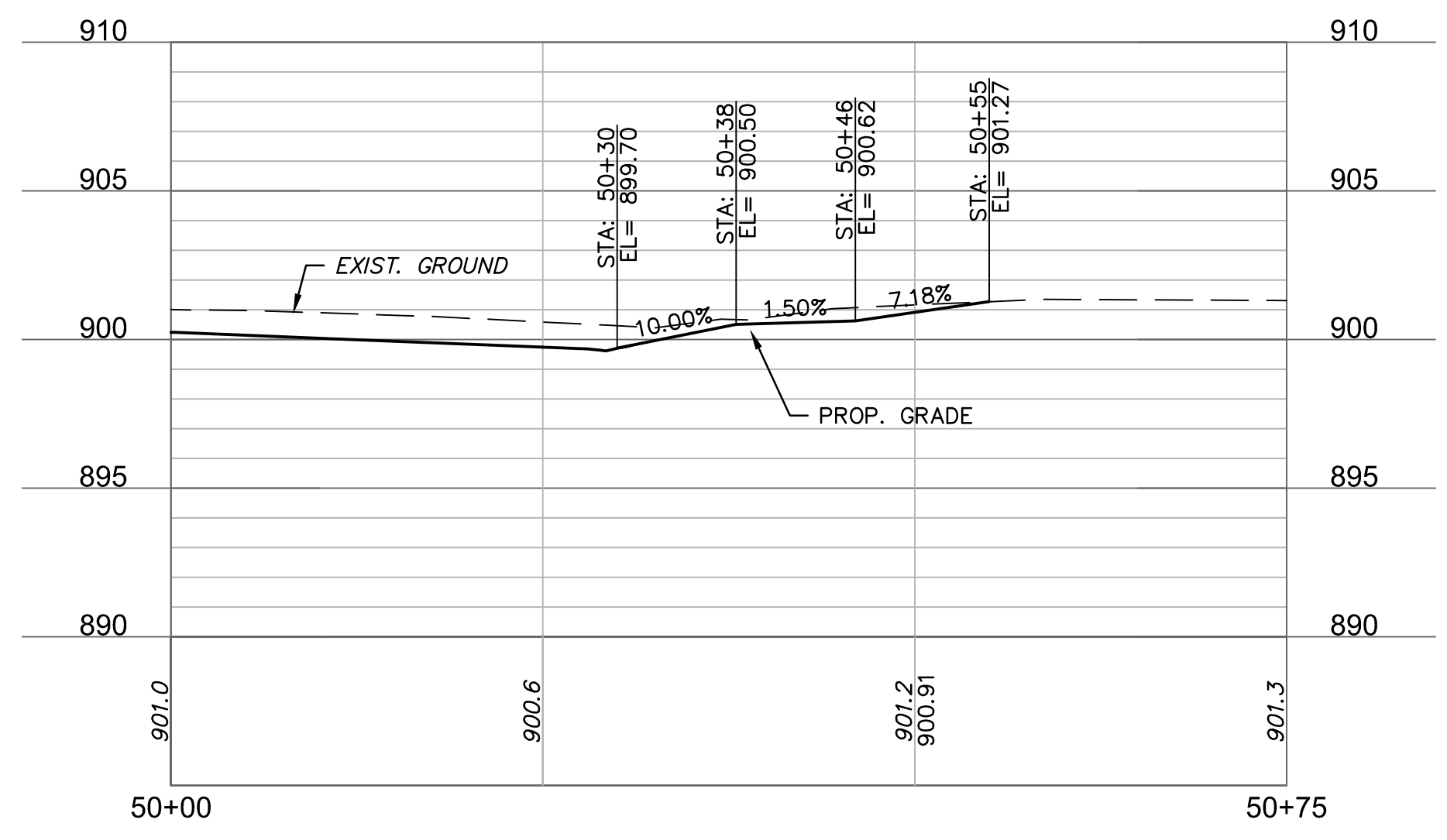


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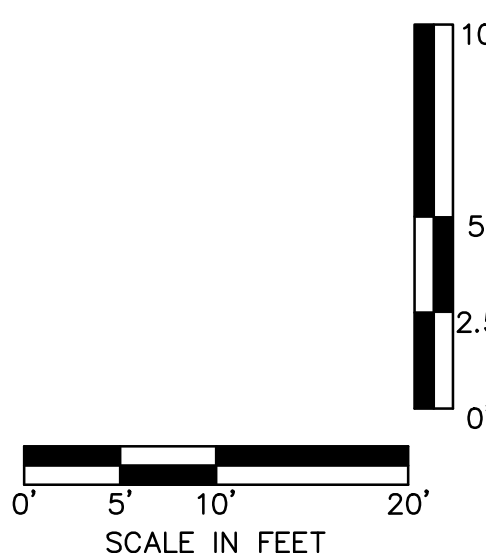
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DRIVE STA. 48+33 - RT (50+00 - 50+75)



DRIVE STA. 49+98 - LT (49+25 - 50+00)



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23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

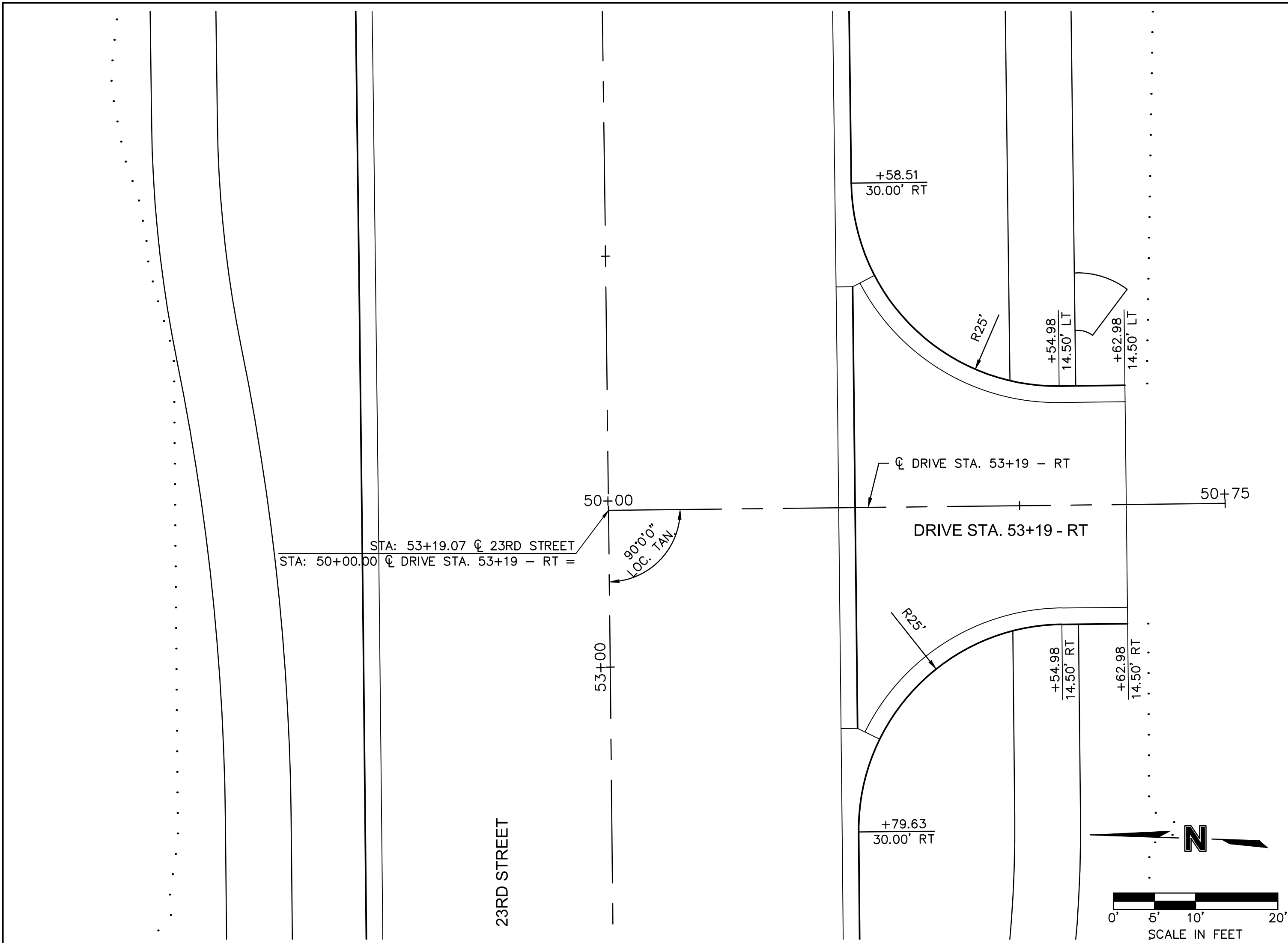
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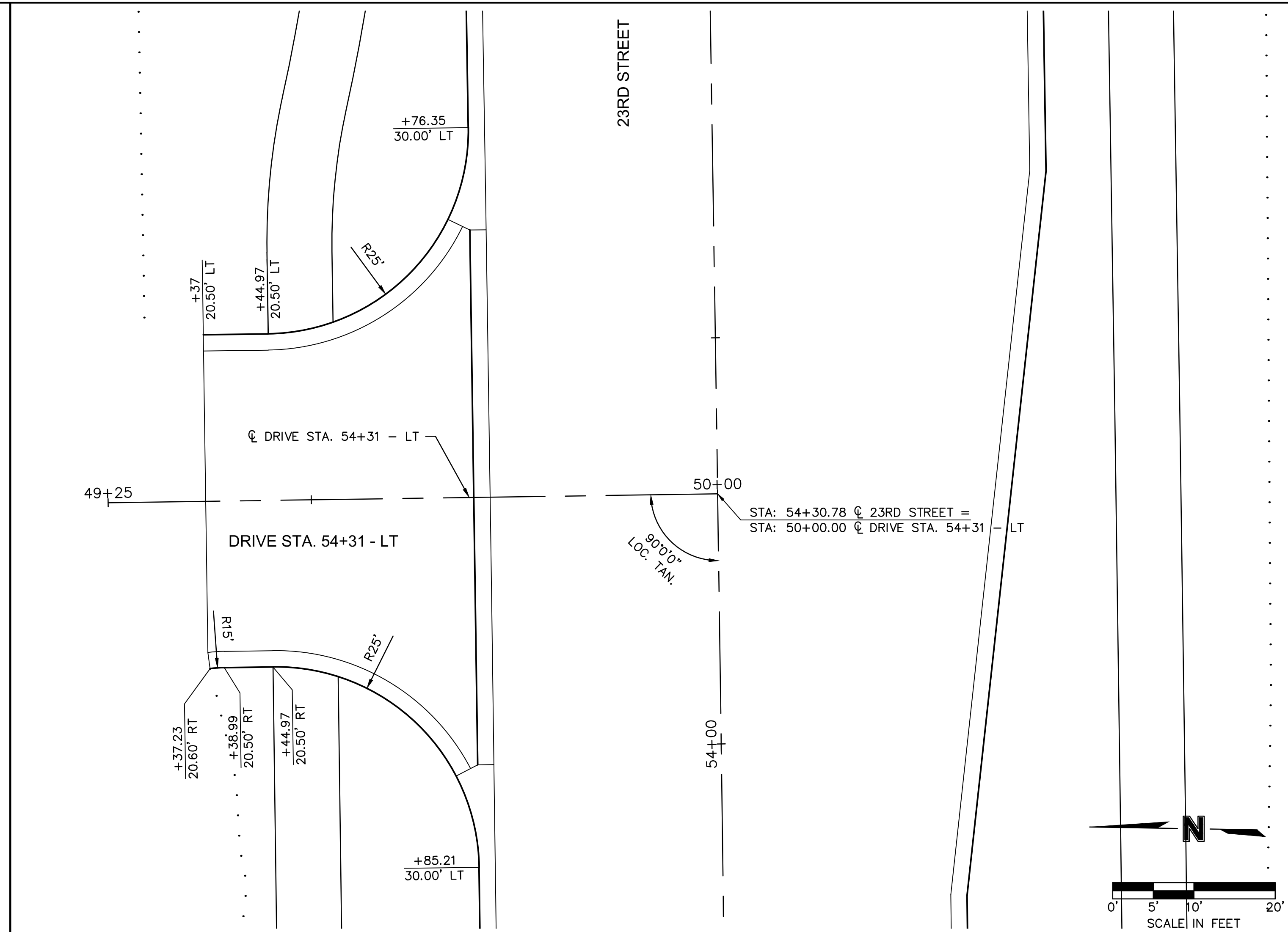
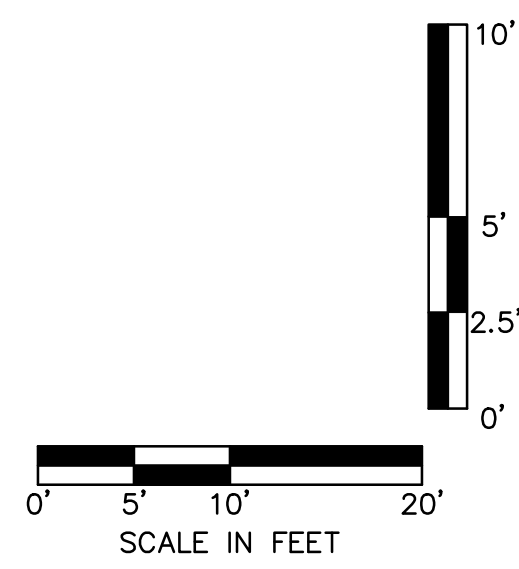
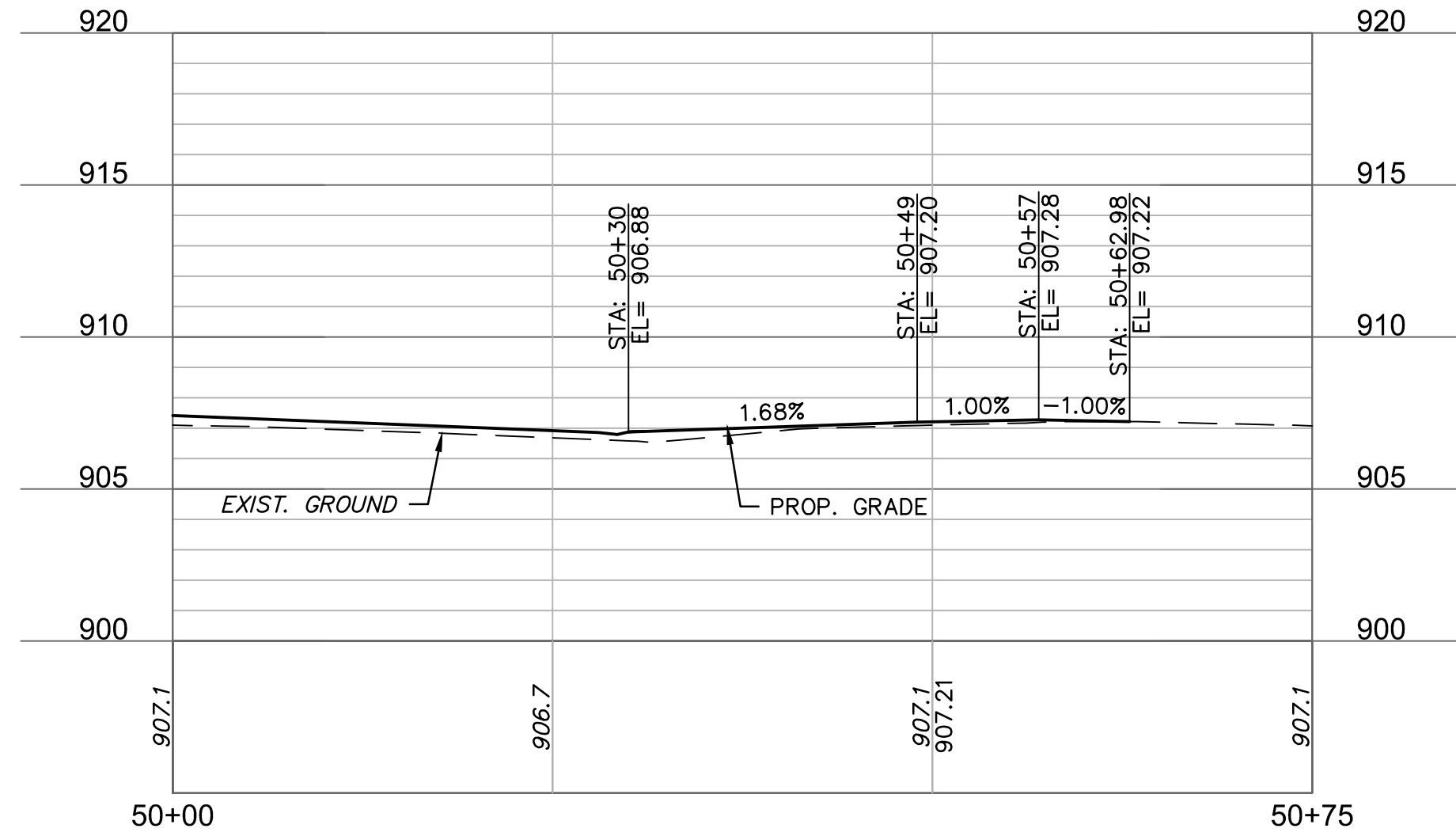
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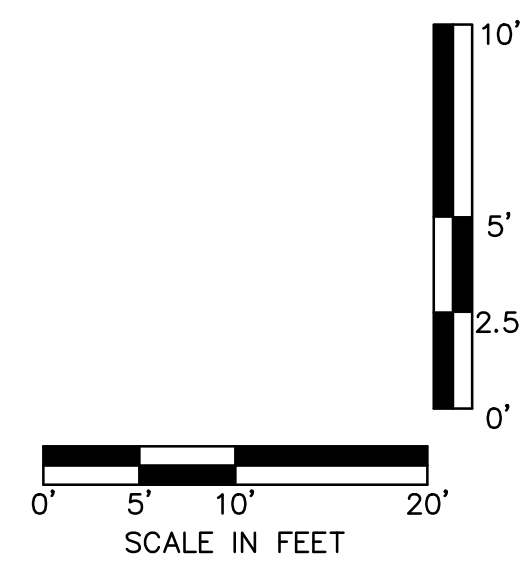
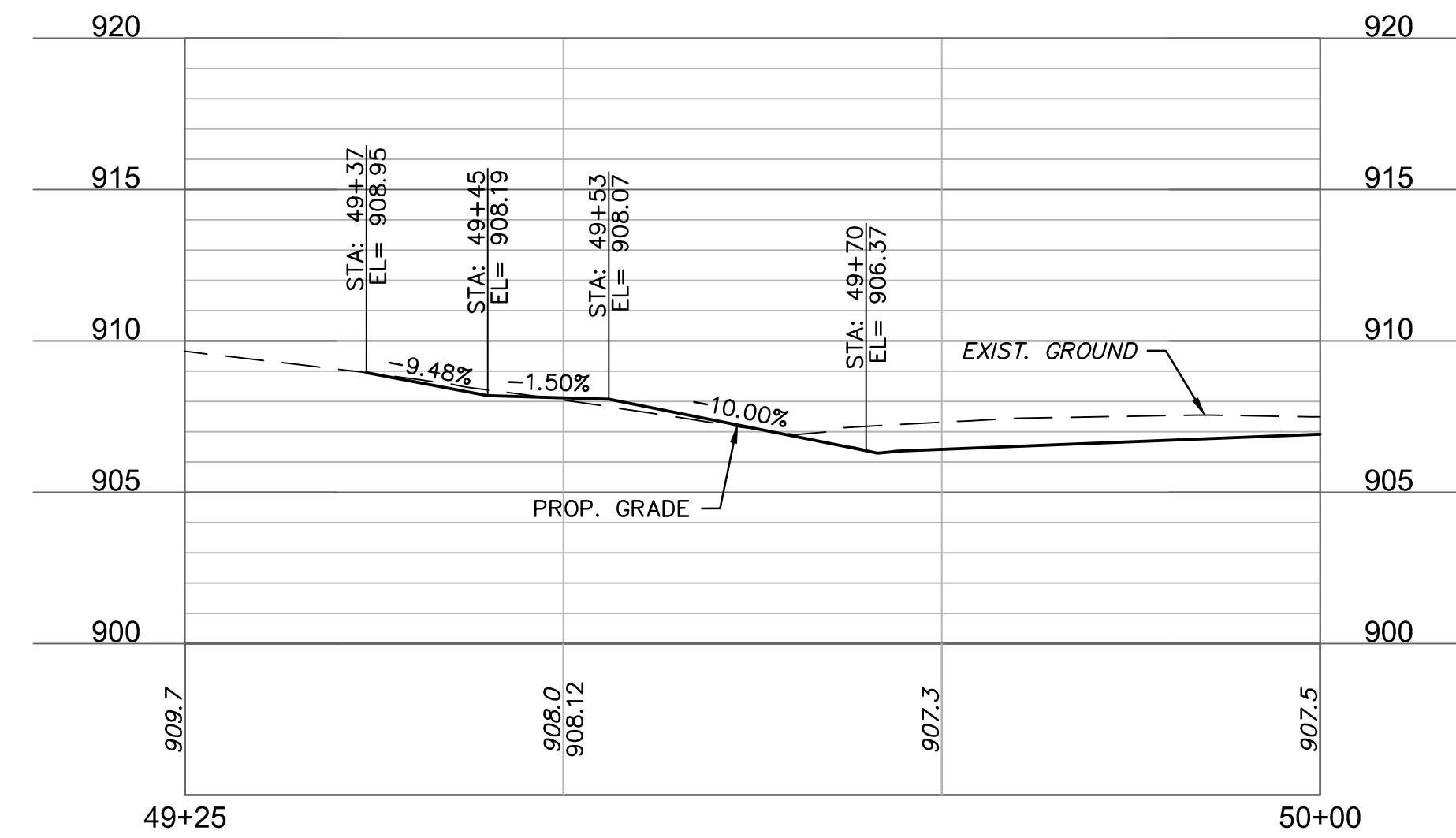
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DRIVE STA. 53+19 - RT (50+00 - 50+75)



DRIVE STA. 54+31 - LT (49+25 - 50+00)



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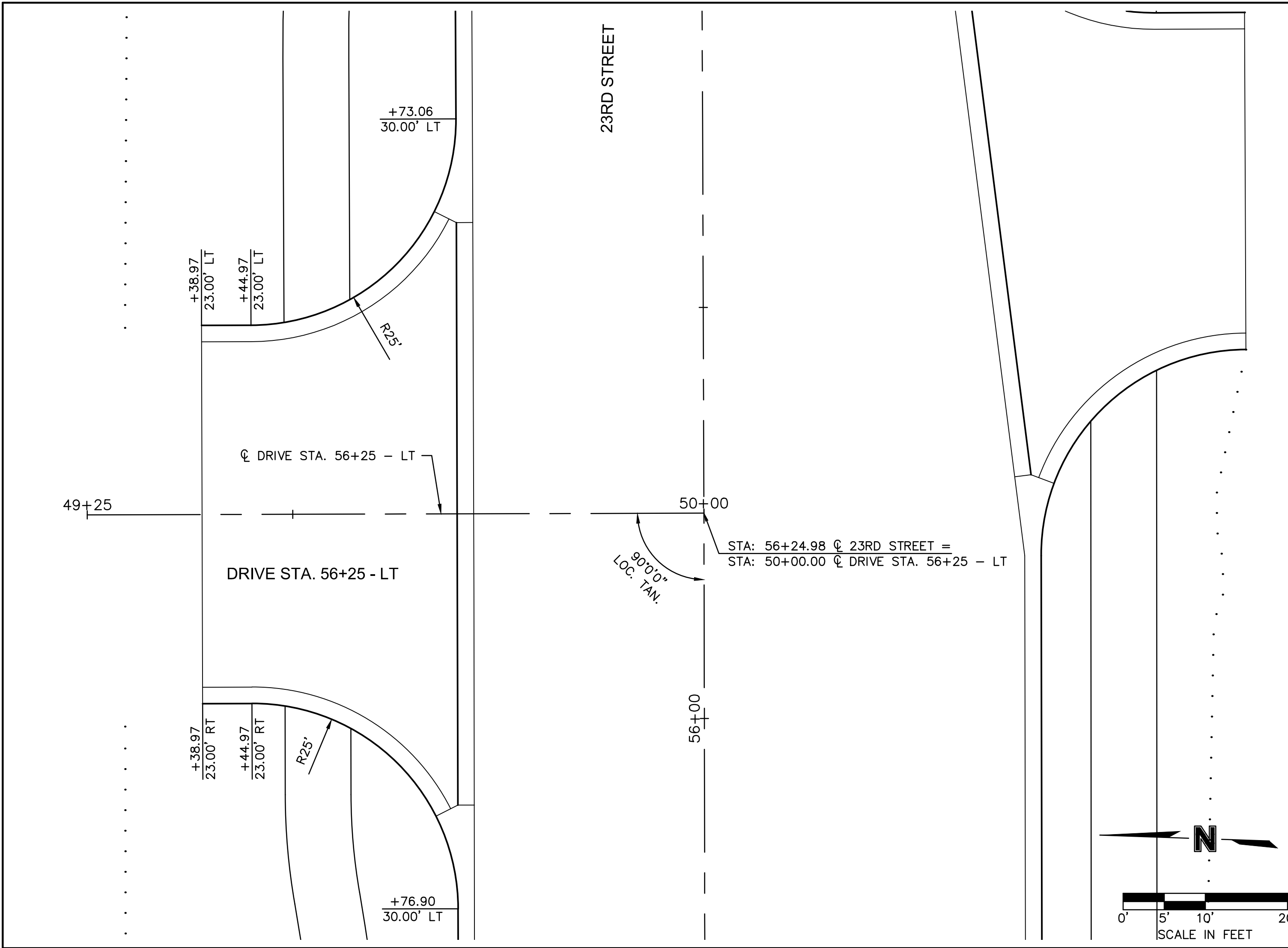
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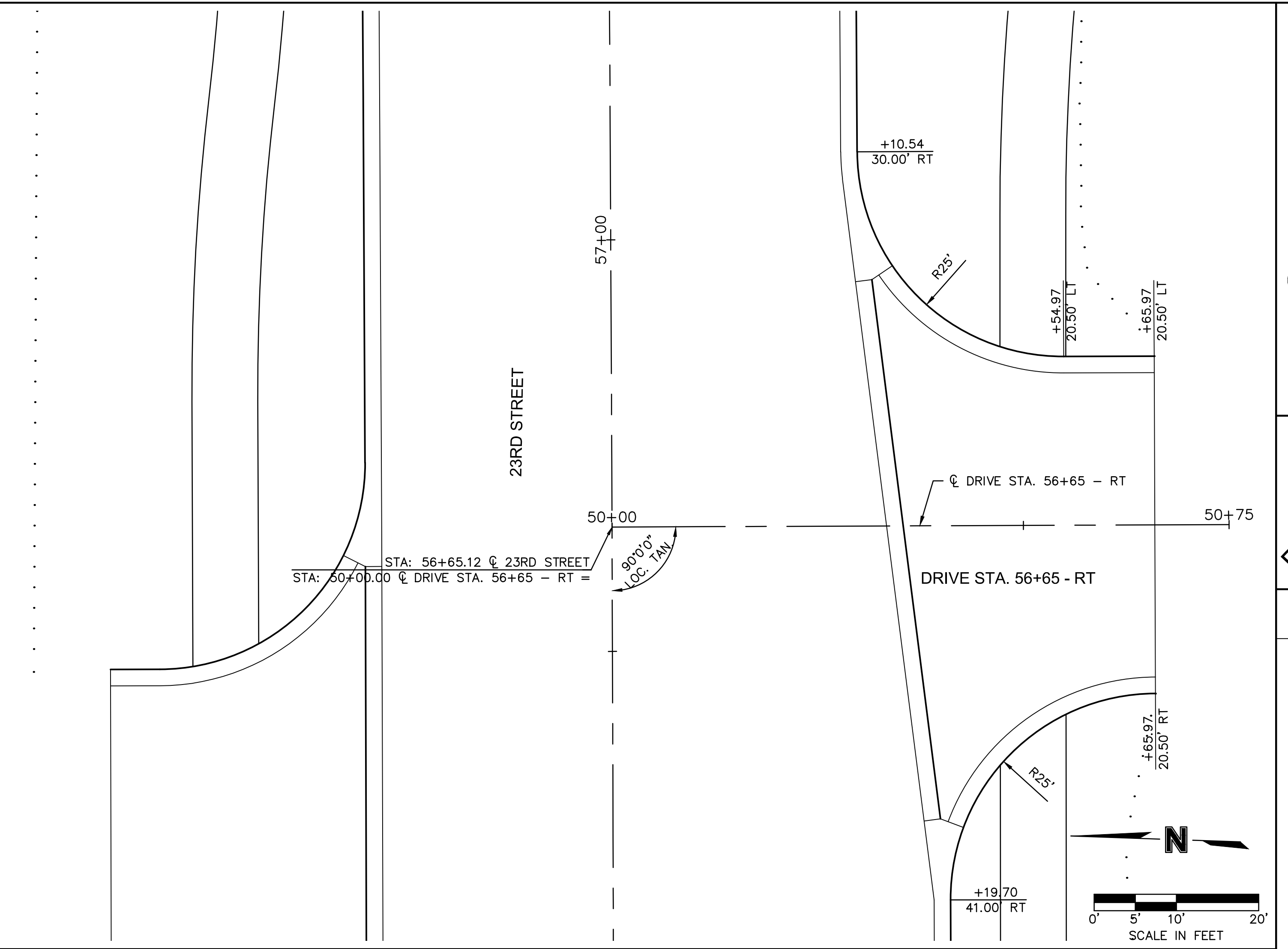
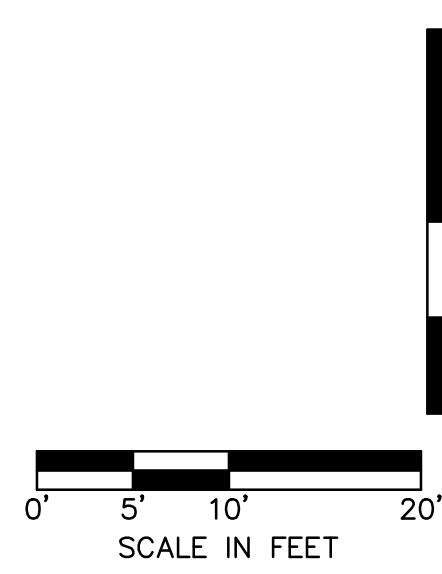
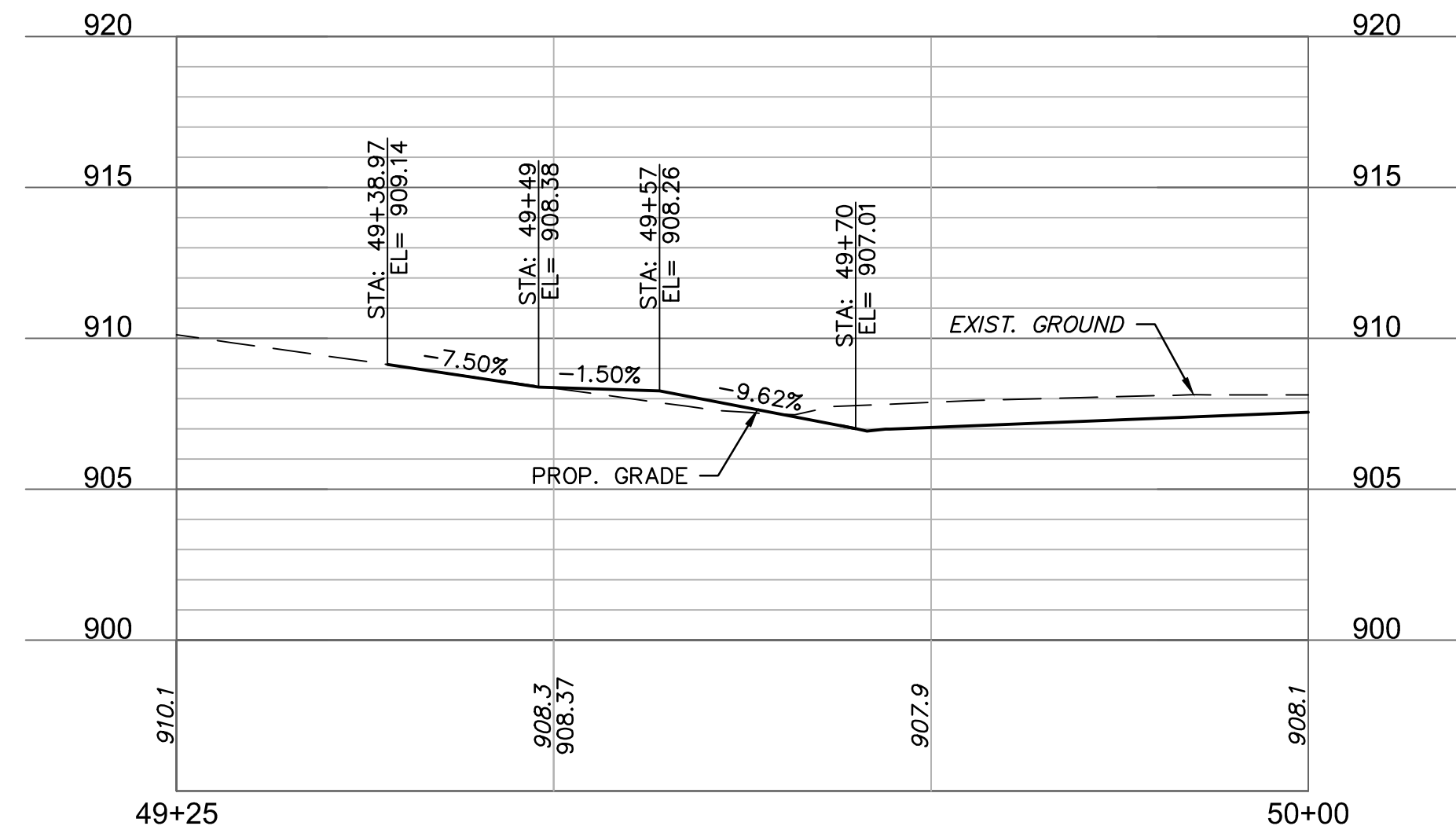
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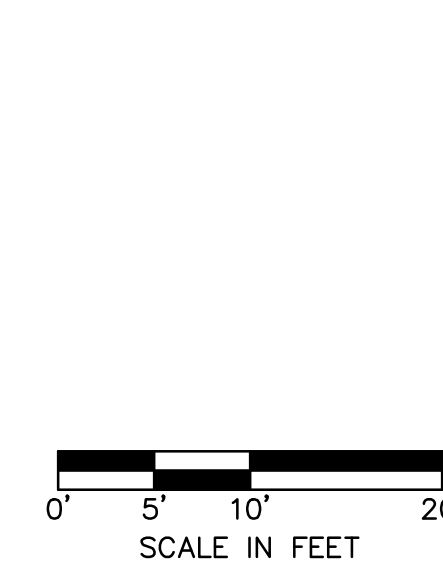
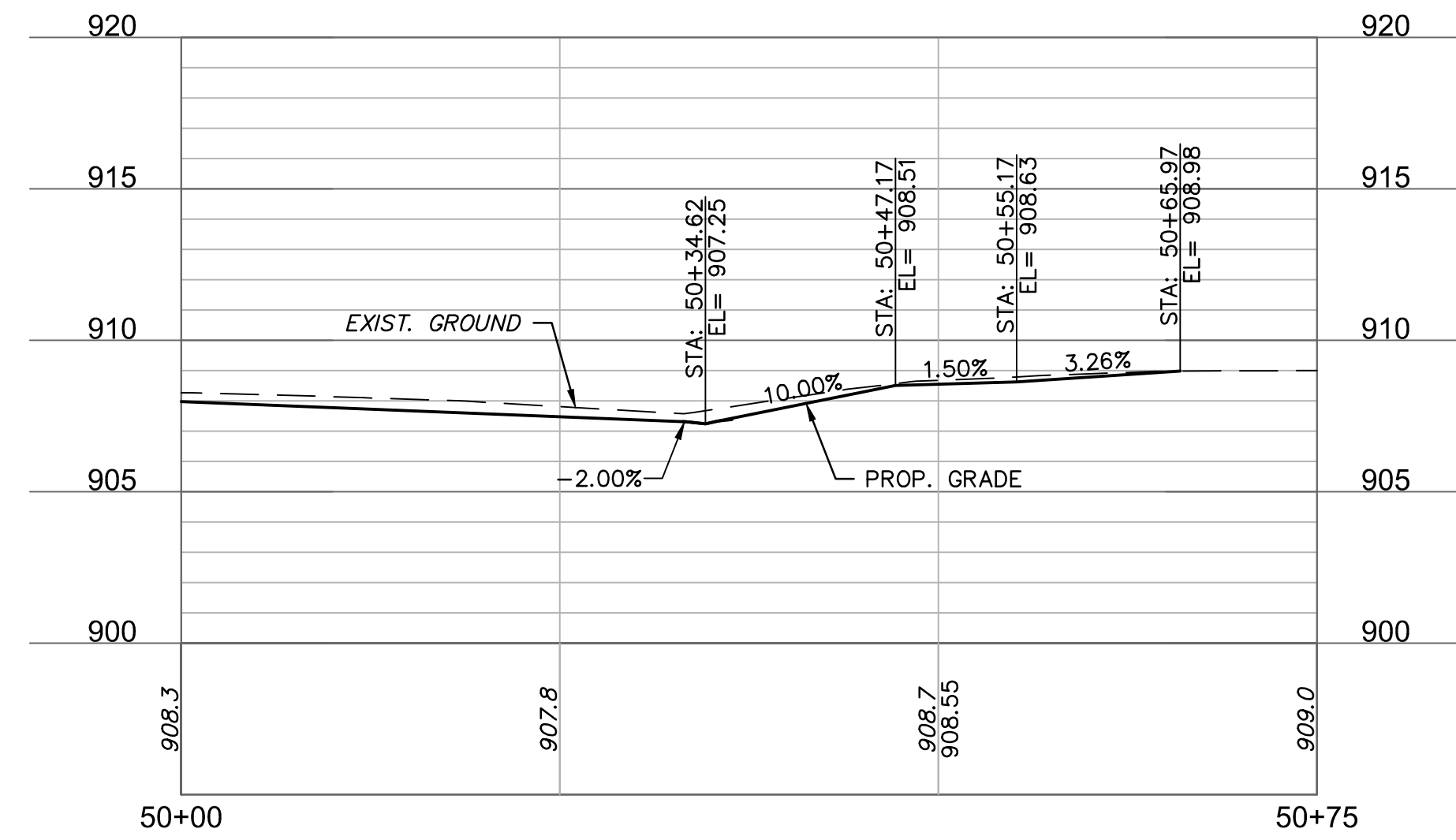
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DRIVE STA. 56+25 - LT (49+25 - 50+00)



DRIVE STA. 56+65 - RT (50+00 - 50+75)



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HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

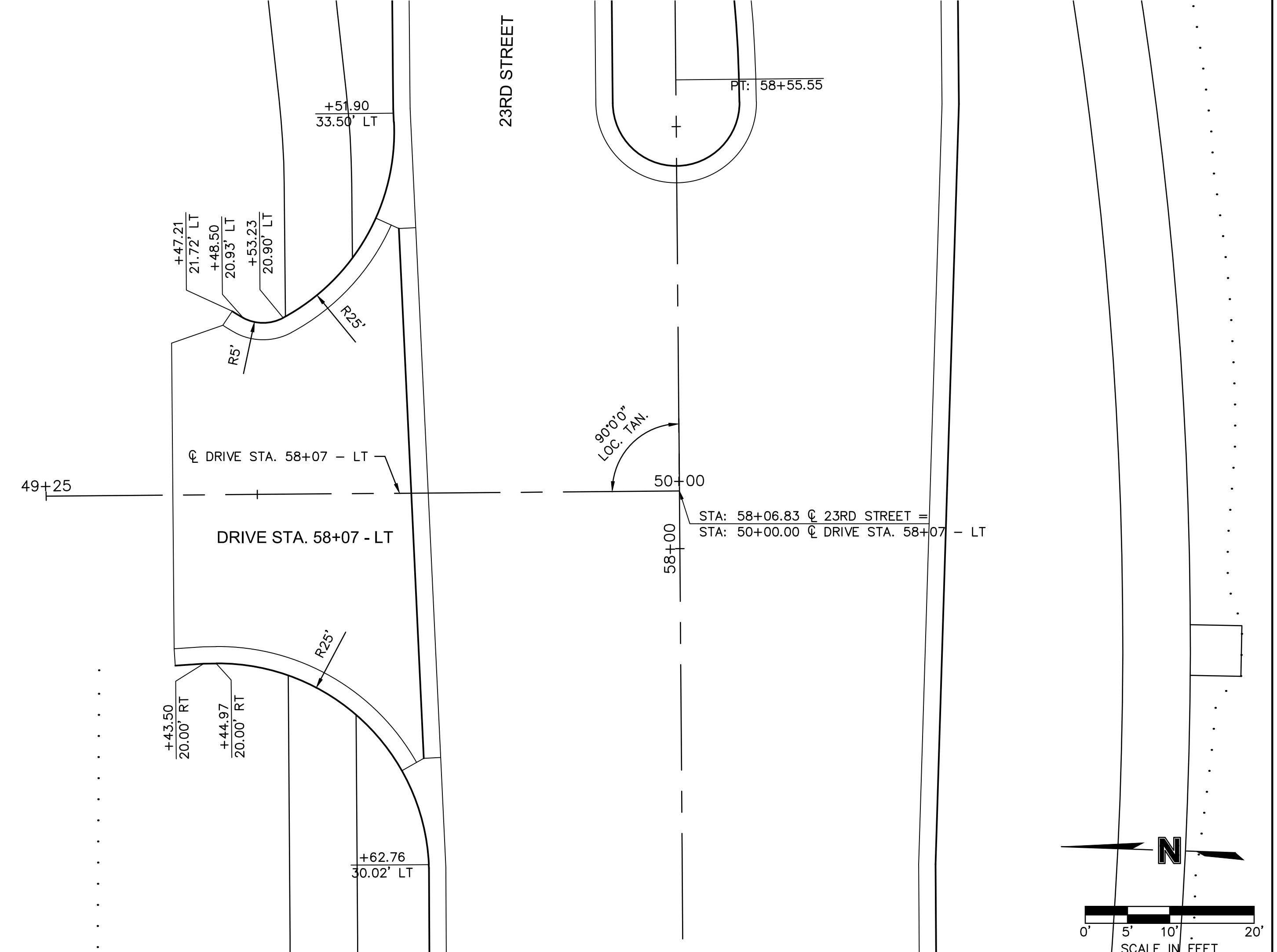
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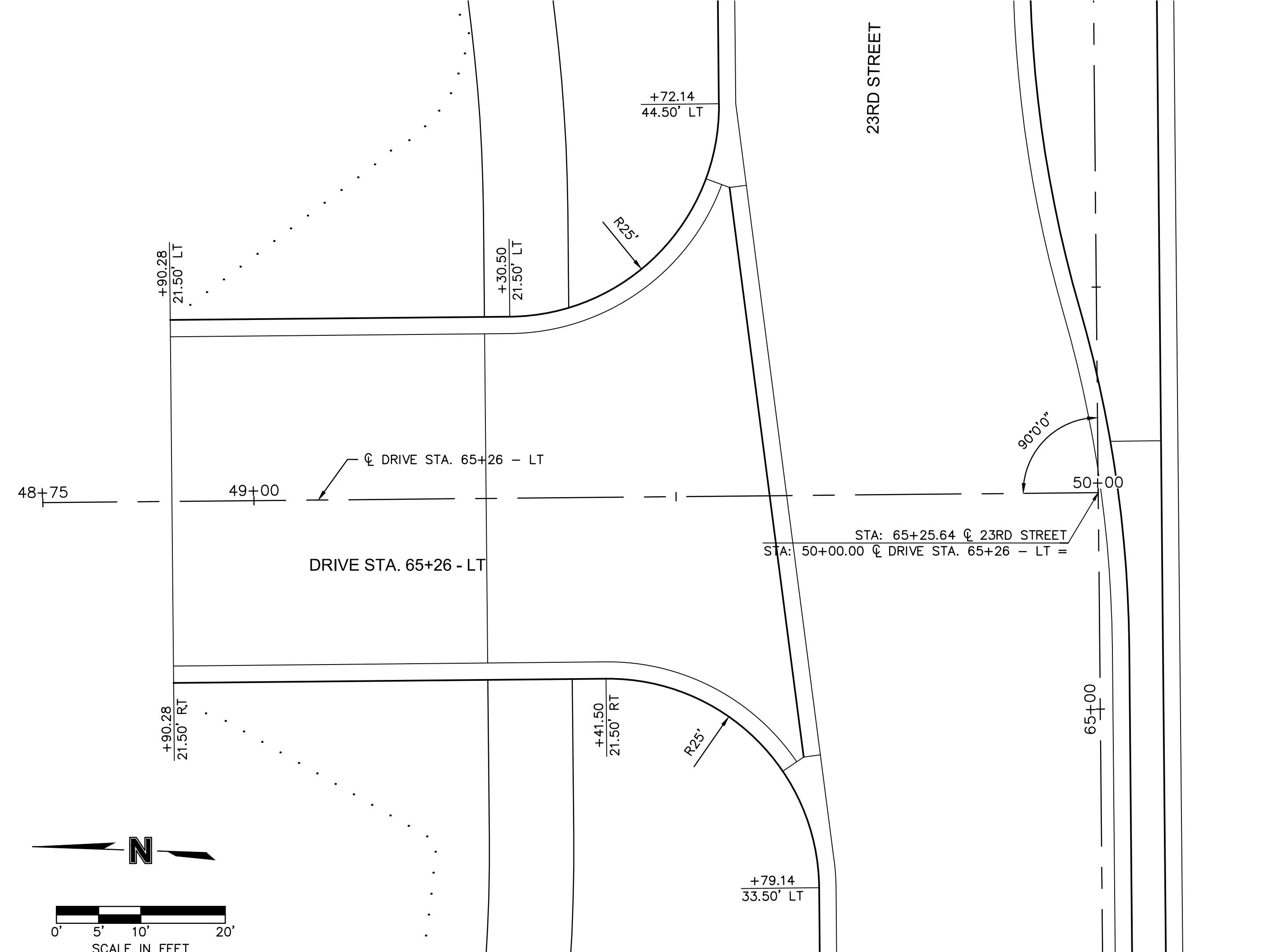
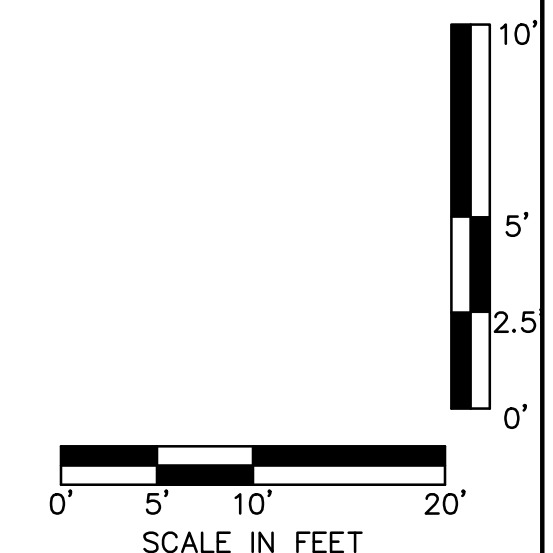
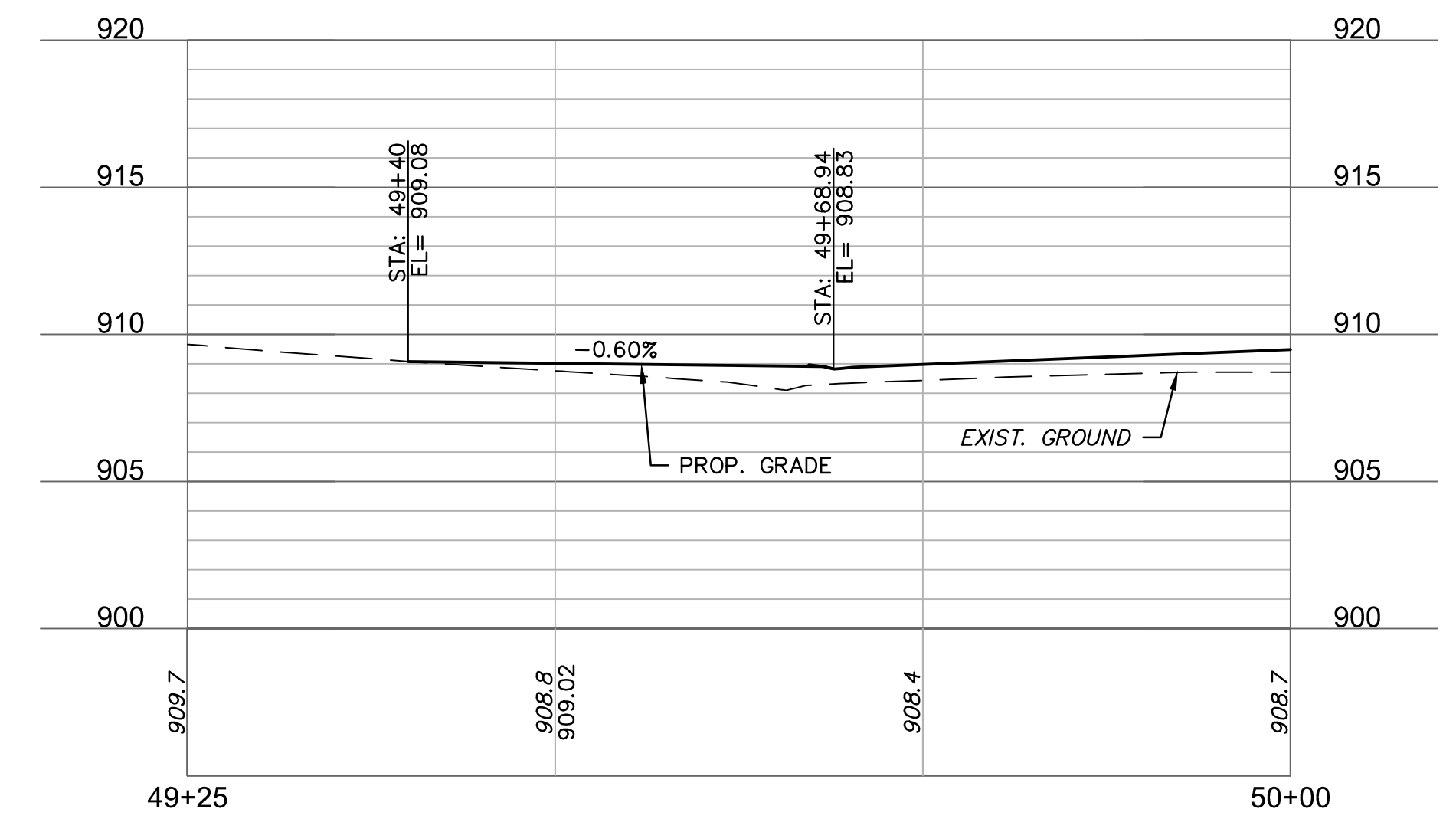
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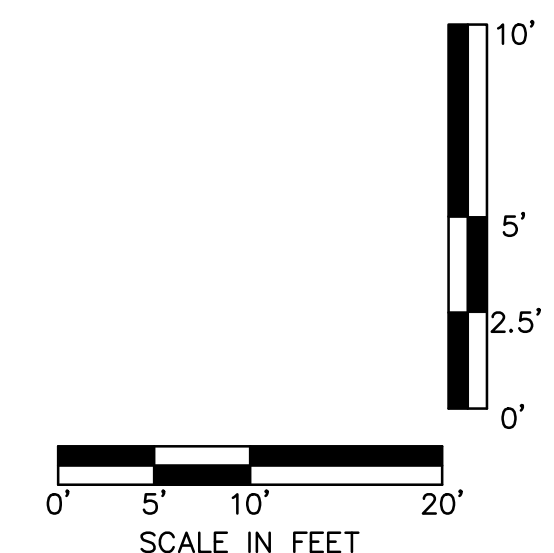
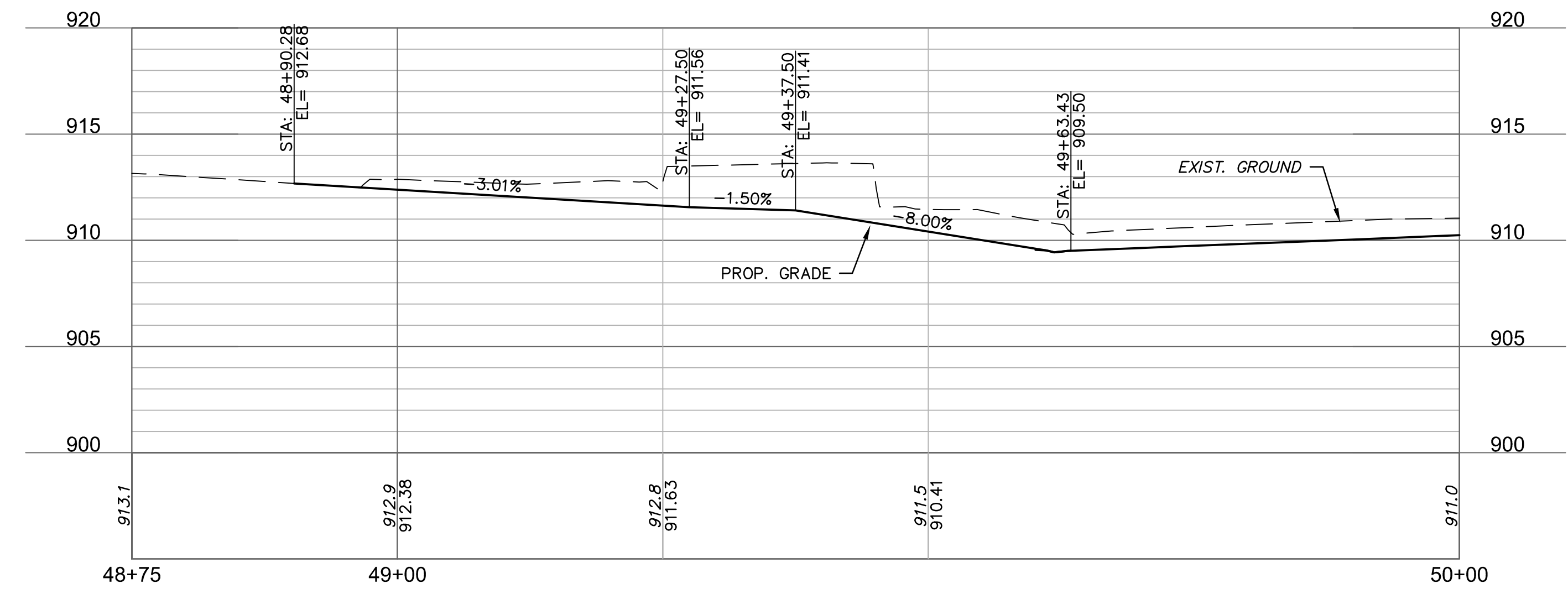
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DRIVE STA. 58+07 - LT (49+25 - 50+00)



DRIVE STA. 65+26 - LT (48+75 - 50+00)



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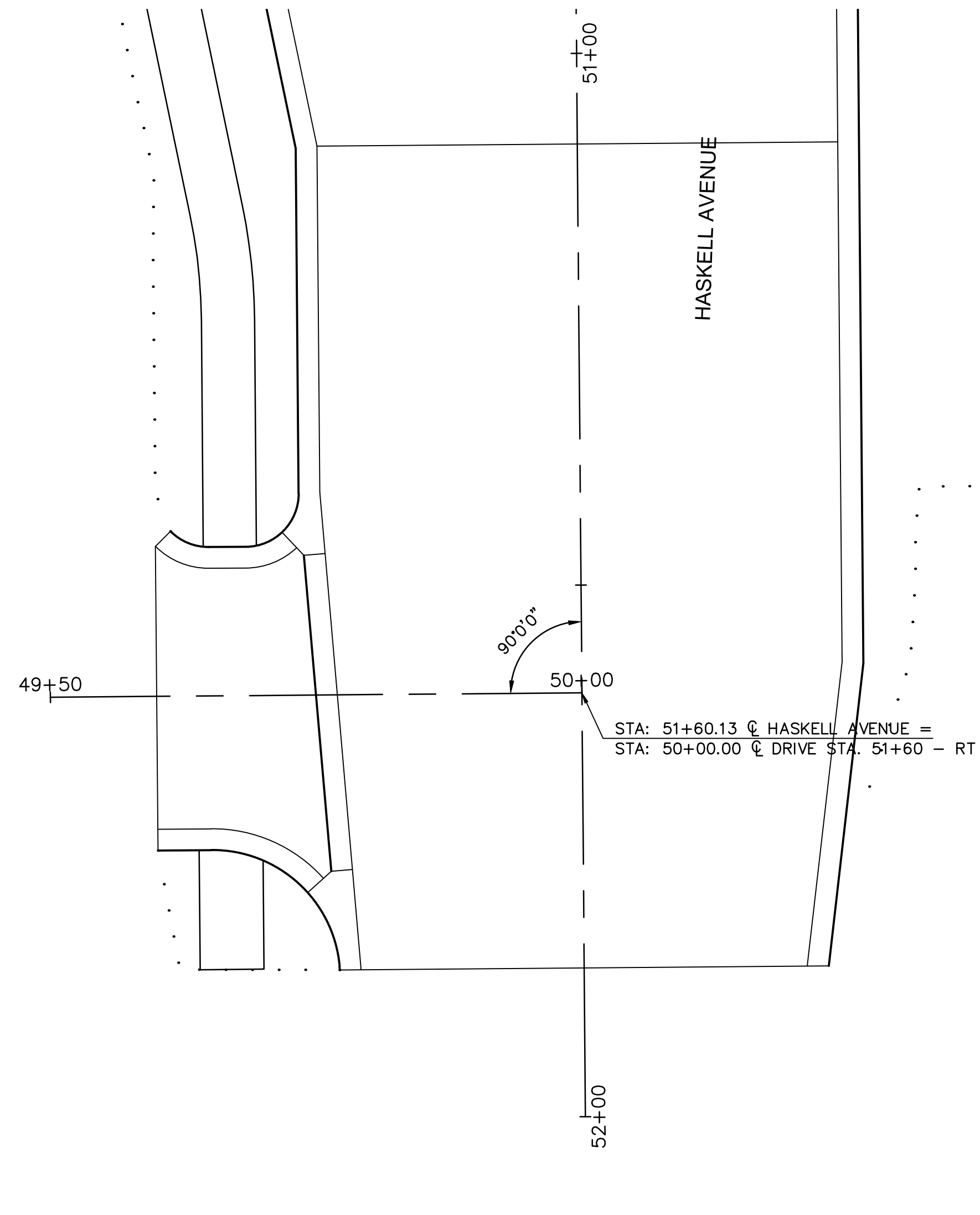
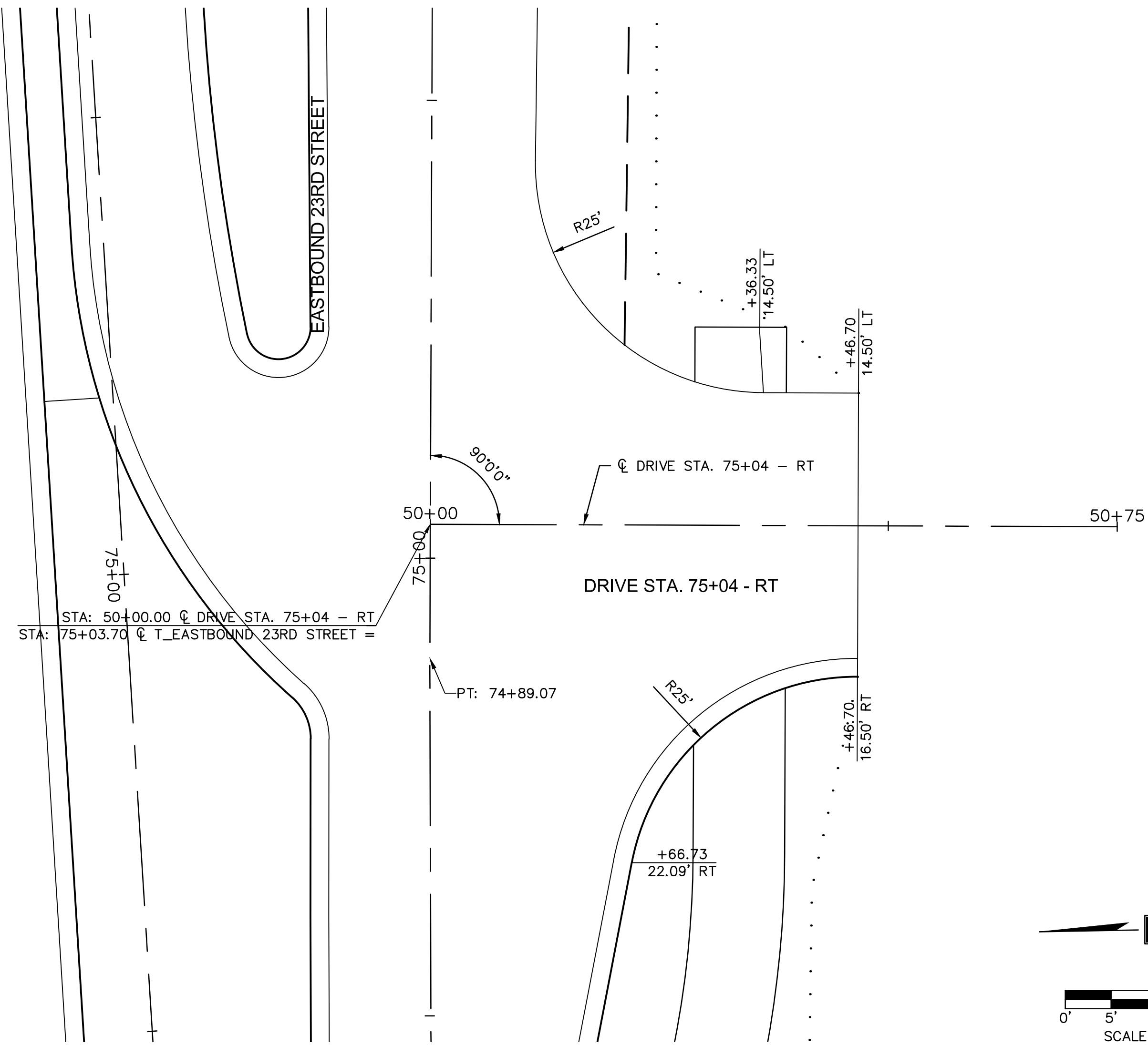
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

2021

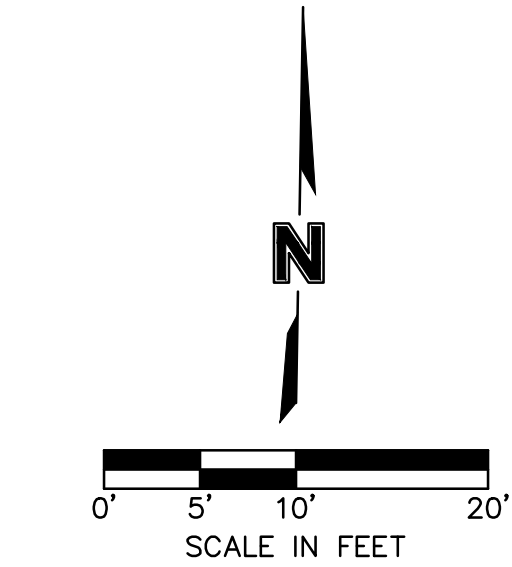
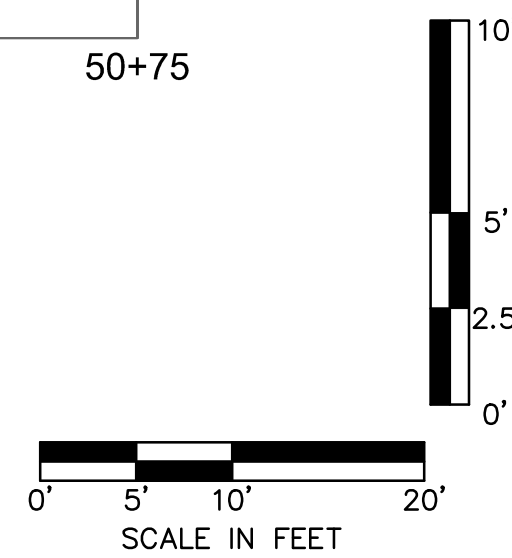
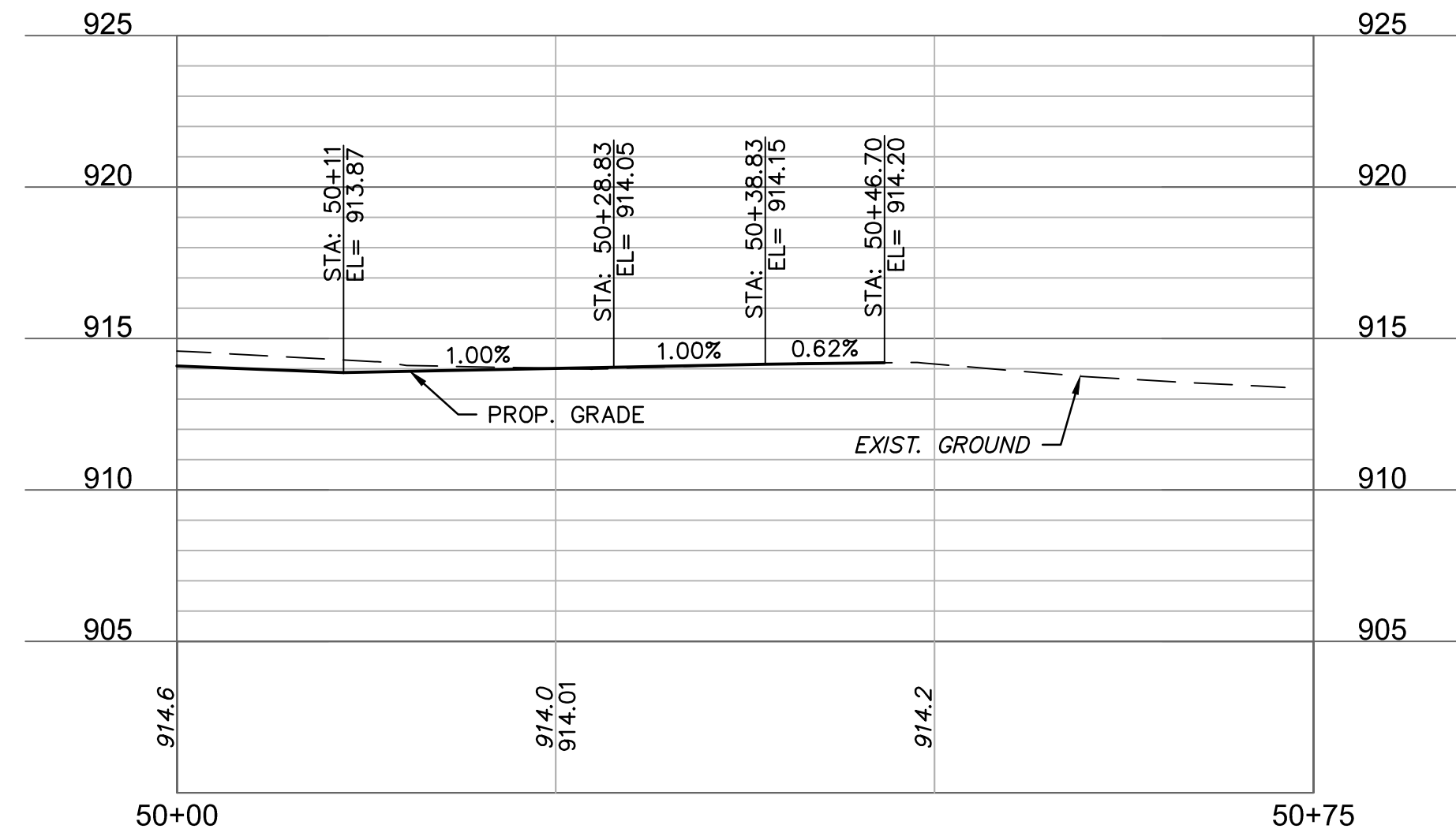
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 checked by: PBM
 approved by: PBM
 QA/QC by: PBM
 project no.: 020-2348
 drawing no.: I_DRIVE03_0202348
 date: 12-18-2020

SHEET
 69 of 206

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DRIVE STA. 75+04 - RT (50+00 - 50+75)



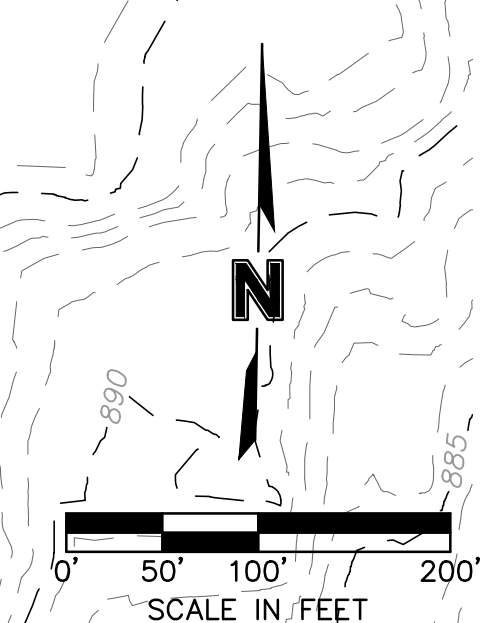
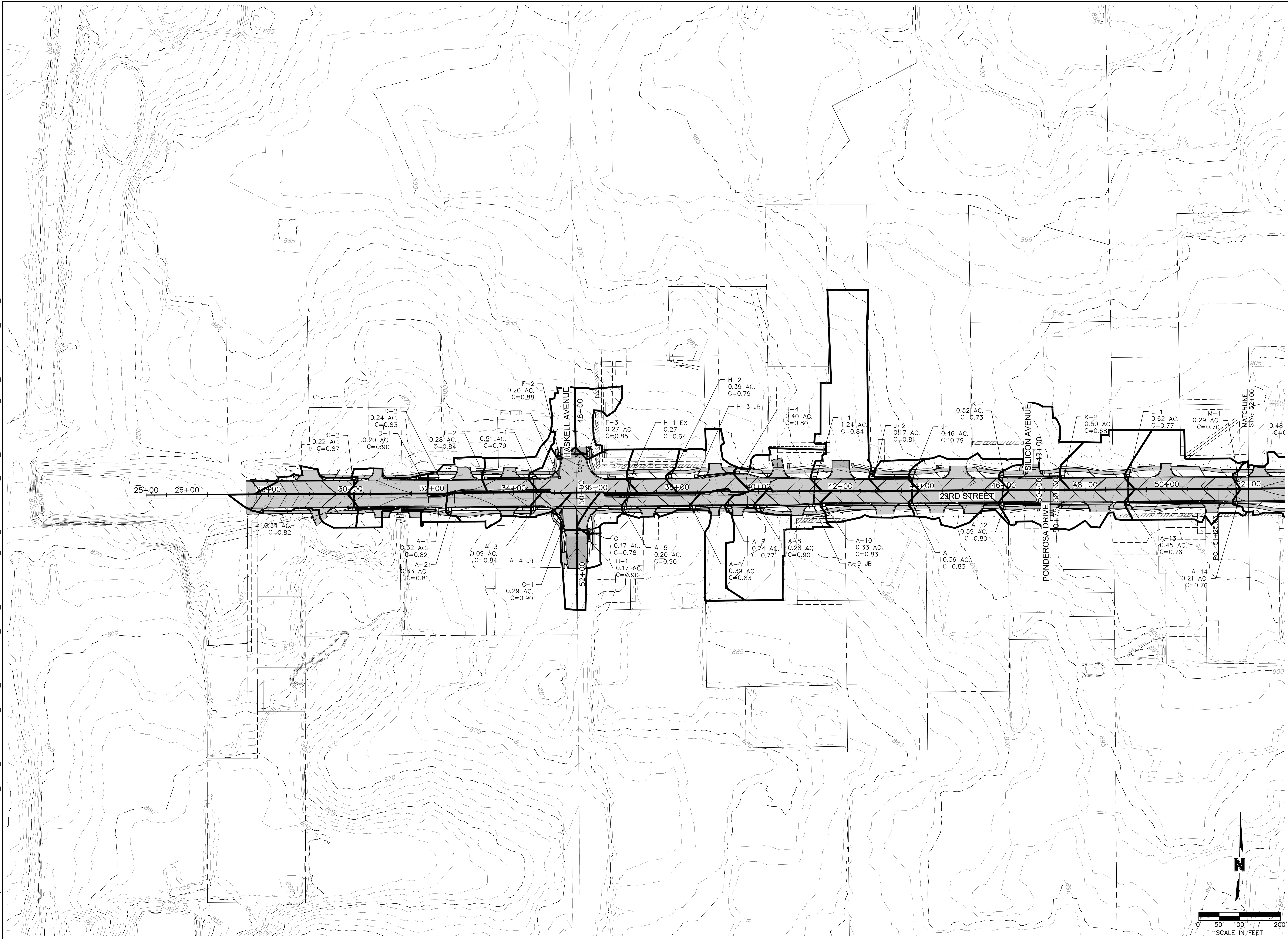
PRELIMINARY
NOT FOR CONSTRUCTION

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

DRIVEWAY PLAN & PROFILES
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: PBM
 project no.: 020-2348
 drawing no.: I_DRV03_0202348
 date: 12-18-2020

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 PROJECT: 020-2348
 DRAWING: 1.DRN01_0202348
 SHEET: 72 of 206



<p>olsson</p> <p>7201 West 133rd Street, Suite 200 Overland Park, KS 66213-4750 TEL 913.381.1170 www.olsson.com</p>	
<p>PRELIMINARY NOT FOR CONSTRUCTION</p>	
<p>STORM DRAINAGE MAP</p>	<p>BY</p>
<p>23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD</p>	<p>DATE</p>
<p>LAWRENCE, KANSAS</p>	<p>REV. NO.</p>
<p>2021</p>	<p>REVISIONS DESCRIPTION</p>
<p>drawn by: CJC checked by: PBM approved by: PBM QA/QC by: REB project no.: 020-2348 drawing no.: 1.DRN01_0202348 date: 12-18-2020</p>	<p>REVISIONS</p>
<p>SHEET 72 of 206</p>	

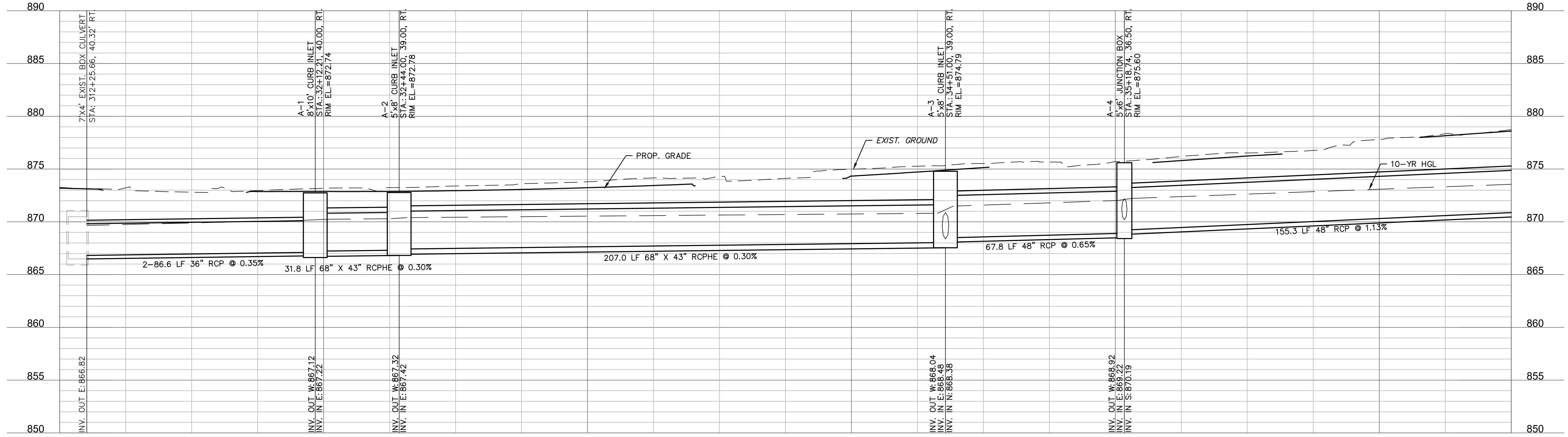
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10 YEAR STORM SEWER PIPES																						
Label	Upstream Structure	Downstream Structure	Upstream Inlet Area (acres)	Upstream Inlet C	Upstream Inlet Tc (min)	System CA (acres)	Time (Pipe Flow) (min)	System Flow Time (min)	System Rational Flow (cfs)	Invert (Start) (ft)	Invert (Stop) (ft)	Slope (Calculated) (%)	Material	Diameter (ft)	Length (Scaled) (ft)	Flow (cfs)	Velocity (ft/s)	Capacity (Full Flow) (cfs)	Flow / Capacity (Design) (%)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Notes
A-1	A-1	A-0	0.32	0.82	7.31	23.95	0.20	20.02	866.82	867.12	866.82	0.33	Concrete	2(3.00)	90.60	104.92	7.42	76.76	136.70	870.22	869.66	
A-2	A-2	A-1	0.33	0.81	7.17	23.63	0.07	19.95	103.66	867.32	867.22	0.31	Concrete	43"X68"	31.80	103.66	7.96	108.16	95.80	870.39	870.32	
A-3	A-3	A-2	0.09	0.84	5.90	23.38	0.44	19.51	103.56	868.04	867.42	0.30	Concrete	43"X68"	207.00	103.56	7.78	105.56	98.10	870.97	870.49	
A-4	A-4	A-3	(N/A)	(N/A)	0.00	19.34	0.11	19.40	85.85	868.92	868.48	0.65	Concrete	4.00	67.80	67.80	10.08	115.72	74.20	871.73	871.08	
A-5	A-5	A-4	0.20	0.90	5.00	18.23	0.21	19.19	81.28	870.97	869.22	1.13	Concrete	4.00	155.30	81.28	12.33	152.49	53.30	873.70	871.35	
A-6	A-6	A-5	0.39	0.83	12.42	10.73	0.22	18.97	48.07	874.25	871.27	1.78	Concrete	4.00	167.00	48.07	12.70	191.87	25.10	876.33	874.00	
A-7	A-7	A-6	0.74	0.77	11.98	10.24	0.11	18.87	45.99	876.63	875.25	1.75	Concrete	3.00	79.10	45.99	12.60	88.11	52.20	878.84	876.89	
A-8	A-8	A-7	0.28	0.90	5.00	9.97	0.10	18.76	44.90	878.20	876.83	1.76	Concrete	3.00	78.10	44.90	12.55	88.36	50.80	880.38	878.44	
A-9	A-9	A-8	(N/A)	(N/A)	0.00	9.70	0.18	18.58	43.88	880.80	878.40	1.75	Concrete	3.00	137.10	43.88	12.47	88.26	49.70	882.96	880.68	
A-10	A-10	A-9	0.33	0.83	6.16	8.99	0.03	18.54	40.71	881.55	881.11	1.76	Concrete	3.00	25.00	40.71	12.26	88.51	46.00	883.63	882.78	
A-11	A-11	A-10	0.36	0.83	5.83	8.69	0.31	18.23	39.62	884.99	881.75	1.50	Concrete	3.00	216.00	39.62	11.47	81.68	48.50	887.04	883.93	
A-12	A-12	A-11	0.59	0.80	7.06	5.49	0.33	17.90	25.22	889.61	885.29	1.96	Concrete	3.00	221.00	25.22	11.21	93.25	27.10	891.23	887.34	
A-13	A-13	A-12	0.45	0.76	8.57	4.08	0.51	17.39	18.97	895.50	890.11	1.75	Concrete	2.50	308.00	18.97	10.07	54.26	35.00	896.98	891.13	
A-14	A-14	A-13	0.21	0.76	7.43	3.41	0.64	16.75	16.11	897.69	895.80	0.71	Concrete	2.50	265.00	16.11	6.93	34.63	46.50	899.05	897.28	
A-15	A-15	A-14	(N/A)	(N/A)	0.00	3.06	0.50	16.26	14.65	899.38	897.99	0.70	Concrete	2.50	199.30	14.65	6.71	34.26	42.80	900.67	899.35	
A-16	A-16	A-15	0.30	0.76	9.44	3.06	0.31	15.95	14.78	900.55	899.58	0.75	Concrete	2.50	129.70	14.78	6.90	35.47	41.70	901.85	900.71	
A-17	A-17	A-16	0.33	0.76	8.65	1.76	0.09	15.86	8.53	901.31	901.05	0.79	Concrete	2.00	33.00	8.53	6.13	20.09	42.40	902.35	902.15	
A-18	A-18	A-17	0.17	0.79	7.33	1.51	0.60	15.25	7.43	902.96	901.51	0.71	Concrete	2.00	205.50	7.43	5.68	19.00	39.10	903.93	902.38	
A-19	A-19	A-18	0.10	0.68	5.00	1.38	0.17	15.08	6.82	904.15	903.41	1.10	Concrete	1.50	67.00	6.82	6.57	11.04	61.80	905.16	904.26	
A-20	A-20 TRENCH	A-19	1.62	0.81	15.00	1.31	0.08	15.00	6.51	905.31	904.90	1.00	HDPE	1.00	41.00	6.51	8.29	4.63	140.40	906.70	905.87	
B-1	B-1	G-2	0.17	0.90	5.00	0.16	0.08	5.00	1.35	872.62	871.98	2.52	Concrete	1.50	25.40	1.35	5.66	16.66	8.10	873.05	872.67	
C-1	C-1	C-0	0.34	0.82	8.78	0.42	0.31	8.78	2.71	868.50	867.00	1.32	Concrete	1.25	113.60	2.71	2.21	7.42	36.50	869.86	869.66	
C-2	C-2	C-1	0.22	0.87	5.00	0.18	0.26	5.00	1.47	869.73	868.70	1.38	Concrete	1.25	74.50	1.47	4.79	7.60	19.30	870.34	870.36	
D-1	D-1	D-0	0.20	0.90	5.00	0.50	0.18	5.22	4.11	867.51	867.32	0.44	Concrete	2.50	43.00	4.11	4.00	27.25	15.10	869.96	869.96	
D-2	D-2	D-1	0.24	0.83	5.00	0.30	0.21	5.00	2.51	868.24	868.01	0.49	Concrete	2.00	47.20	2.51	3.67	15.79	15.90	870.07	870.06	
E-1	E-1	A-3	0.51	0.79	6.27	3.97	0.19	15.66	19.35	868.87	868.38	0.65	Concrete	2.50	76.00	19.35	3.94	32.93	58.70	871.44	871.27	
E-2	E-2	E-1	0.28	0.84	5.33	0.54	0.47	5.33	4.41	869.76	869.17	0.50	Concrete	1.50	118.10	4.41	1.25	14.85	29.70	871.69	871.64	
F-1	F-1	E-1	(N/A)	(N/A)	0.00	2.73	0.12	15.54	13.33	870.79	869.93	1.41	Concrete	2.00	61.20	13.33	8.52	26.83	49.70	872.10	871.64	
F-2	F-2	F-1	0.20	0.88	5.00	2.73	0.09	15.45	13.37	872.40	870.99	2.51	Concrete	2.00	56.20	13.37	10.57	35.82	37.30	873.72	871.88	
F-3	F-3	F-2	0.27	0.85	5.00	0.85	0.16	5.00	7.08	873.65	872.60	1.50	Concrete	1.50	70.00	7.08	7.45	12.86	55.00	874.68	874.02	
G-1	G-1	A-4	0.29	0.90	5.25	1.11	0.16	8.19	7.44	870.64	870.19	0.80	Concrete	2.00	56.00	7.44	5.96	20.27	36.70	871.91	871.93	
G-2	G-2	G-1	0.17	0.78	7.99	0.85	0.20	7.99	5.74	871.35	870.84	0.79	Concrete	2.00	64.80	5.74	5.51	20.07	28.60	872.37	872.41	
G-3	G-3 EX	G-2	0.58	0.78	5.00	0.45	0.09	5.00	3.72	872.40	872.10	0.98	Concrete	1.25	30.60	3.72	5.41	6.39	58.20	873.18	872.79	
H-1	H-1 EX	A-5	0.27	0.64	7.01	7.24	0.12	16.30	34.63	873.19	871.97	1.56	Concrete	3.00	78.10	34.63	11.25	83.36	41.50	875.10	874.00	
H-3	H-3 EX	H-2	(N/A)	(N/A)	0.00	5.70	0.11	16.02	27.47	875.68	874.88	1.24	Concrete	3.00	64.60	27.47	9.71	74.21	37.00	877.37	876.72	
H-4	H-4	H-3 EX	0.40	0.80	5.52	0.50	0.22	5.52	3.97	879.81	877.43	2.34	Concrete	1.25	101.80	3.97	7.61	9.88	40.20	880.62	877.98	
I-1	I-1	A-9	1.24	0.84	9.08	0.71	0.21	9.08	4.52	883.17	882.55	0.90	Concrete	1.25	68.90	4.52	5.46	6.13	73.70	884.03	883.35	
J-1	J-1	A-11	0.46	0.79	7.12	2.87	0.24	15.51	14.04	885.28	884.99	0.43	Concrete	2.00	67.50	14.04	4.47	14.83	94.70	887.60	887.34	
J-2	J-2	J-1	0.17	0.81	5.00	2.52	0.41	15.11	12.47	885.77	885.48	0.30	Concrete	2.00	96.10	12.47	3.97	12.42	100.40	888.19	887.90	
K-1	K-1	A-12	0.52	0.73	8.42	1.04	0.17	13.40	5.47	891.70	890.75	1.41	Concrete	1.25	67.50	5.47	6.78	7.66	71.30	892.65	891.53	
K-2	K-2	K-1	0.50	0.68	9.67	0.68	0.40	13.00	3.62	894.04	891.90	1.44	Concrete	1.25	149.00	3.62	6.21	7.74	46.80	894.81	892.95	
L-1	L-1	A-13	0.62	0.77	8.90	0.37	0.20	8.90	2.40	897.00	896.05	1.41	Concrete	1.25	67.50	2.40	5.52	7.66	31.30	897.62	897.28	
M-1	M-1	A-14	0.29	0.70	8.69	0.19	0.20	8.69	1.26	901.79	900.10	2.50	Concrete	1.25	67.50	1.26	5.66	10.22	12.30	902.23	900.40	
N-1	N-1	A-16	0.48	0.74	6.14	1.07	0.20	6.14	8.17	901.47	900.75	0.92	Concrete	2.00	78.00	8.17	6.43	21.73	37.60	902.49	902.15	
N-2	N-2	N-1	0.13	0.74	5.65	0.70	0.08	5.65	5.53	902.19	901.67	1.58	Concrete	2.00	32.90	5.53	7.02	28.45	19.40	903.02	902.59	
N-3	N-3 TRENCH	N-2	0.73	0.83	5.33	0.60	0.15	5.33	4.90	903.33	902.75	0.99	HDPE	1.00	58.60	4.90	6.60	4.61	106.40	904.24	903.65	
O-1	O-1	O-0	0.32	0.90	5.43	1.57	0.68	13.16	8.31	904.40	903.50	0.45	Concrete	2.00	201.80	8.31	4.92	15.11	55.00	905.46	904.53	
O-2	O-2	O-1	0.31	0.49	11.99	1.28	0.29	12.86	6.84	904.85	904.60	0.34	Concrete	2.00	74.50	6.84	4.22	13.11	52.20	906.04	905.96	
O-3	O-3	O-2	0.20	0.65	9.10	0.72	0.17	9.73	4.48	905.81	905.15	1.12	Concrete	2.00	59.00	4.48	5.84	23.93	18.70	906.55	906.34	
P-1	P-1	O-2	0.68	0.59	12.75	0.39	0.11	12.75	2.09	905.86	905.38	1.37	Concrete	1.25	35.00	2.09	5.27	7.57	27.60	906.44	906.34	
Q-1	Q-1	Q-0	0.07	0.56	6.24	6.01	0.01	16.26	28.78	905.35	905.10	2.51	Concrete	3.00	8.90	28.78	12.73	105.72	27.20	907.09	907.32	
Q-2	Q-2	Q-1	0.38	0.61	10.88	0.24	0.20	10.88	1.42	905.60	905.35	0.50	Concrete	2(14"X22")	49.60	1.42	0.42	13.63	10.40	907.39	907.39	
R-1	R-1	Q-1	0.26	0.76	6.94	3.94	0.10	16.18	18.91	905.49	905.35	0.49	Concrete	2.00	28.60	18.91	6.02	15.82	119.50	907.59	907.39	
S-2	S-2	S-1	0.39	0.73	9.40	4.04	0.06	12.78	21.74	905.63	905.50	0.49	Concrete	2.00	26.50	21.74	6.92	15.84	137.20	907.70	907.45	
S-3	S-3 EX	S-2	(N/A)	(N/A)	0.00	3.75	0.23	12.60	20.34	906.18	905.83	0.50	Concrete	2.00	70.40	20.34	6.48	15.95	127.60	908.47	907.90	
T-1	T-1	T-0	(N/A)	(N/A)	0.00	3.06	0.10	13.88	15.74	902.69	902.49	0.55	Concrete	2.50	36.60	15.74	6.24	30.32	51.90	904.03	903.77	
T-2	T-2	T-1																				

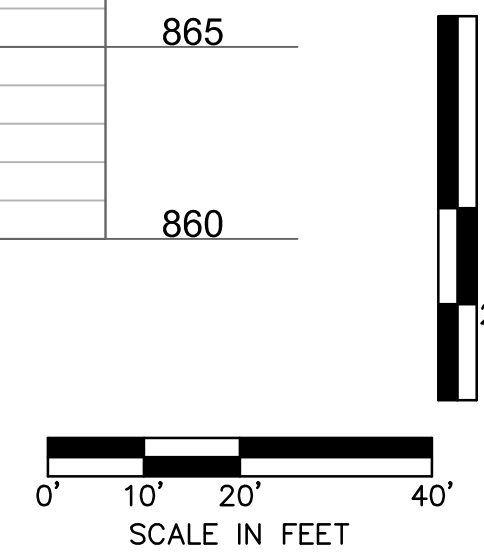
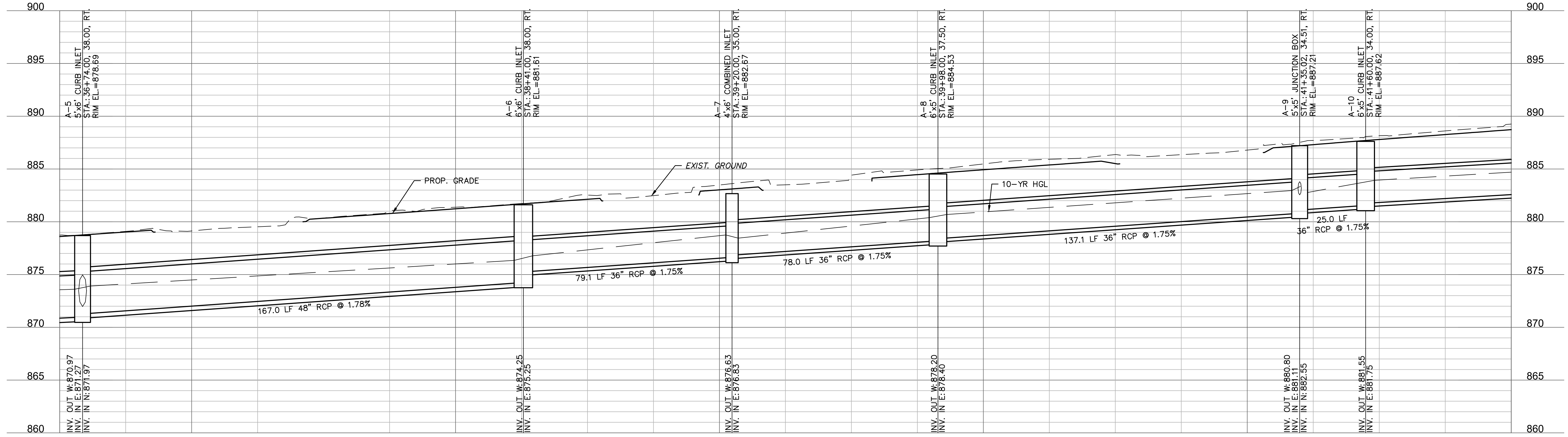
100 YEAR STORM SEWER PIPES																						
Label	Upstream Structure	Downstream Structure	Upstream Inlet Area (acres)	Upstream Inlet C	Upstream Inlet Tc (min)	System CA (acres)	Time (Pipe Flow) (min)	System Flow Time (min)	System Rational Flow (cfs)	Invert (Start) (ft)	Invert (Stop) (ft)	Slope (Calculated) (%)	Material	Diameter (ft)	Length (Scaled) (ft)	Flow (cfs)	Velocity (ft/s)	Capacity (Full Flow) (cfs)	Flow / Capacity (Design) (%)	Hydraulic Grade Line (In) (ft)	Hydraulic Grade Line (Out) (ft)	Notes
A-1	A-1	A-0	0.32	0.82	7.31	23.18	0.11	19.25	194.11	867.12	866.82	0.33	Concrete	2(3.00)	90.60	194.11	13.73	76.76	252.90	871.69	869.70	
A-2	A-2	A-1	0.33	0.81	7.17	22.75	0.08	19.20	190.74	867.32	867.22	0.31	Concrete	43"X68"	31.80	190.74	11.96	108.16	176.40	872.11	871.79	
A-3	A-3	A-2	0.09	0.84	5.90	22.56	0.52	18.91	190.34	868.04	867.42	0.30	Concrete	43"X68"	207.00	190.34	11.94	105.56	180.30	874.27	872.21	
A-4	A-4	A-3	(N/A)	(N/A)	0.00	19.04	0.12	18.83	161.00	868.92	868.48	0.65	Concrete	4.00	67.80	161.00	12.81	115.72	139.10	875.42	874.57	
A-5	A-5	A-4	0.20	0.90	5.00	17.63	0.21	18.61	149.86	870.97	869.22	1.13	Concrete	4.00	155.30	149.86	11.93	152.49	98.30	877.29	875.60	
A-6	A-6	A-5	0.39	0.83	12.42	10.08	0.19	18.42	86.00	874.25	871.27	1.78	Concrete	4.00	167.00	86.00	14.85	191.87	44.80	878.18	877.59	
A-7	A-7	A-6	0.74	0.77	11.98	9.66	0.09	18.33	82.59	876.63	875.25	1.75	Concrete	3.00	79.10	82.59	14.17	88.11	93.70	879.42	878.28	
A-8	A-8	A-7	0.28	0.90	5.00	9.39	0.09	18.24	80.48	878.20	876.83	1.76	Concrete	3.00	78.10	80.48	14.17	88.36	91.10	880.97	879.20	
A-9	A-9	A-8	(N/A)	(N/A)	0.00	9.12	0.16	18.07	78.50	880.80	878.40	1.75	Concrete	3.00	137.10	78.50	14.11	88.26	88.90	883.56	881.27	
A-10	A-10	A-9	0.33	0.83	6.16	8.56	0.03	18.04	73.68	881.55	881.11	1.76	Concrete	3.00	25.00	73.68	14.01	88.51	83.20	884.25	883.49	
A-11	A-11	A-10	0.36	0.83	5.83	8.27	0.28	17.77	71.70	884.99	881.75	1.50	Concrete	3.00	216.00	71.70	13.03	81.68	87.80	887.67	884.55	
A-12	A-12	A-11	0.59	0.80	7.06	5.13	0.28	17.49	44.72	889.61	885.29	1.96	Concrete	3.00	221.00	44.72	13.05	93.25	48.00	891.79	887.97	
A-13	A-13	A-12	0.45	0.76	8.57	3.88	0.44	17.05	34.23	895.50	890.11	1.75	Concrete	2.50	308.00	34.23	11.69	54.26	63.10	897.49	891.55	
A-14	A-14	A-13	0.21	0.76	7.43	3.35	0.56	16.49	29.99	897.69	895.80	0.71	Concrete	2.50	265.00	29.99	7.94	34.63	86.60	899.56	897.79	
A-15	A-15	A-14	(N/A)	(N/A)	0.00	3.06	0.43	16.06	27.73	899.38	897.99	0.70	Concrete	2.50	199.30	27.73	7.77	34.26	80.90	901.18	899.86	
A-16	A-16	A-15	0.30	0.76	9.44	3.06	0.27	15.79	27.94	900.55	899.58	0.75	Concrete	2.50	129.70	27.94	8.01	35.47	78.80	902.35	901.25	
A-17	A-17	A-16	0.33	0.76	8.65	1.72	0.08	15.72	15.77	901.31	901.05	0.79	Concrete	2.00	33.00	15.77	7.08	20.09	78.50	902.74	902.65	
A-18	A-18	A-17	0.17	0.79	7.33	1.51	0.52	15.20	14.00	902.96	901.51	0.71	Concrete	2.00	205.50	14.00	6.61	19.00	73.70	904.31	902.79	
A-19	A-19	A-18	0.10	0.68	5.00	1.38	0.15	15.04	12.85	904.15	903.41	1.10	Concrete	1.50	67.00	12.85	7.27	11.04	116.40	905.82	904.76	
A-20	A-20 TRENCH	A-19	1.62	0.81	15.00	1.31	0.12	15.00	12.25	905.31	904.90	1.00	HDPE	1.00	41.00	12.25	15.60	4.63	264.40	909.18	906.32	
B-1	B-1	G-2	0.17	0.90	5.00	0.40	0.05	5.00	6.30	872.62	871.98	2.52	Concrete	1.50	25.40	6.30	3.56	16.66	37.80	876.77	876.68	
C-1	C-1	C-0	0.34	0.82	8.78	0.34	0.31	8.78	4.10	868.50	867.00	1.32	Concrete	1.25	113.60	4.10	3.34	7.42	55.20	870.12	869.66	
C-2	C-2	C-1	0.22	0.87	5.00	0.15	0.23	5.00	2.30	869.73	868.70	1.38	Concrete	1.25	74.50	2.30	5.43	7.60	30.30	870.68	870.62	
D-1	D-1	D-0	0.20	0.90	5.00	1.33	0.13	5.14	20.67	867.51	867.32	0.44	Concrete	2.50	43.00	20.67	4.21	27.25	75.80	870.06	869.96	
D-2	D-2	D-1	0.24	0.83	5.00	1.14	0.16	5.00	17.83	868.24	868.01	0.49	Concrete	2.00	47.20	17.83	5.67	15.79	112.90	870.46	870.16	
E-1	E-1	A-3	0.51	0.79	6.27	3.45	0.19	15.82	31.44	868.87	868.38	0.65	Concrete	2.50	76.00	31.44	6.41	32.93	95.50	875.02	874.57	
E-2	E-2	E-1	0.28	0.84	5.33	0.65	0.47	5.33	9.96	869.76	869.17	0.50	Concrete	1.50	118.10	9.96	2.82	14.85	67.10	875.06	874.79	
F-1	F-1	E-1	(N/A)	(N/A)	0.00	2.12	0.12	15.65	19.41	870.79	869.93	1.41	Concrete	2.00	61.20	19.41	6.18	26.83	72.30	875.24	874.79	
F-2	F-2	F-1	0.20	0.88	5.00	2.12	0.08	15.50	19.49	872.40	870.99	2.51	Concrete	2.00	56.20	19.49	6.20	35.82	54.40	875.86	875.44	
F-3	F-3	F-2	0.27	0.85	5.00	0.67	0.16	5.00	10.50	873.65	872.60	1.50	Concrete	1.50	70.00	10.50	5.94	12.86	81.60	876.86	876.16	
G-1	G-1	A-4	0.29	0.90	5.25	1.41	0.15	8.22	17.74	870.64	870.19	0.80	Concrete	2.00	56.00	17.74	5.65	20.27	87.50	875.94	875.60	
G-2	G-2	G-1	0.17	0.78	7.99	1.15	0.17	7.99	14.61	871.35	870.84	0.79	Concrete	2.00	64.80	14.61	4.65	20.07	72.80	876.71	876.44	
G-3	G-3 EX	G-2	0.58	0.78	5.00	0.45	0.10	5.00	7.01	872.40	872.10	0.98	Concrete	1.25	30.60	7.01	5.71	6.39	109.70	877.04	876.68	
H-1	H-1 EX	A-5	0.27	0.64	7.01	7.30	0.11	15.97	66.34	873.19	871.97	1.56	Concrete	3.00	78.10	66.34	9.39	83.36	79.60	878.36	877.59	
H-3	H-3 EX	H-2	(N/A)	(N/A)	0.00	5.66	0.10	15.62	51.96	875.68	874.88	1.24	Concrete	3.00	64.60	51.96	7.35	74.21	70.00	879.91	879.52	
H-4	H-4	H-3 EX	0.40	0.80	5.52	0.46	0.21	5.52	6.90	879.81	877.43	2.34	Concrete	1.25	101.80	6.90	5.62	9.88	69.80	881.27	880.11	
I-1	I-1	A-9	1.24	0.84	9.08	0.57	0.21	9.08	6.82	883.17	882.55	0.90	Concrete	1.25	68.90	6.82	5.56	6.13	111.30	884.50	883.76	
J-1	J-1	A-11	0.46	0.79	7.12	2.86	0.24	15.27	26.52	885.28	884.99	0.43	Concrete	2.00	67.50	26.52	8.44	14.83	178.90	888.90	887.97	
J-2	J-2	J-1	0.17	0.81	5.00	2.55	0.41	15.06	23.73	885.77	885.48	0.30	Concrete	2.00	96.10	23.73	7.55	12.42	191.00	890.26	889.20	
K-1	K-1	A-12	0.52	0.73	8.42	0.95	0.18	12.99	9.52	891.70	890.75	1.41	Concrete	1.25	67.50	9.52	7.76	7.66	124.30	893.56	892.09	
K-2	K-2	K-1	0.50	0.68	9.67	0.63	0.39	12.52	6.44	894.04	891.90	1.44	Concrete	1.25	149.00	6.44	5.25	7.74	83.10	895.34	893.86	
L-1	L-1	A-13	0.62	0.77	8.90	0.29	0.18	8.90	3.54	897.00	896.05	1.41	Concrete	1.25	67.50	3.54	6.12	7.66	46.20	897.91	897.79	
M-1	M-1	A-14	0.29	0.70	8.69	0.16	0.18	8.69	1.93	901.79	900.10	2.50	Concrete	1.25	67.50	1.93	6.40	10.22	18.90	902.34	900.47	
N-1	N-1	A-16	0.48	0.77	6.14	1.07	0.17	6.14	15.40	901.47	900.75	0.92	Concrete	2.00	78.00	15.40	7.51	21.73	70.80	902.88	902.65	
N-2	N-2	N-1	0.13	0.74	5.65	0.70	0.07	5.65	10.43	902.19	901.67	1.58	Concrete	2.00	32.90	10.43	8.36	28.45	36.60	903.35	902.98	
N-3	N-3 TRENCH	N-2	0.73	0.83	5.33	0.60	0.08	5.33	9.23	903.33	902.75	0.99	HDPE	1.00	58.60	9.23	11.76	4.61	200.50	906.08	903.74	
O-1	O-1	O-0	0.32	0.90	5.43	1.57	0.62	13.23	15.60	904.40	903.50	0.45	Concrete	2.00	201.80	15.60	5.47	15.11	103.30	906.08	904.98	
O-2	O-2	O-1	0.31	0.49	11.99	1.28	0.26	12.97	12.83	904.85	904.60	0.34	Concrete	2.00	74.50	12.83	4.75	13.11	97.90	906.80	906.58	
O-3	O-3	O-2	0.20	0.65	9.10	0.72	0.14	9.60	8.49	905.81	905.15	1.12	Concrete	2.00	59.00	8.49	6.97	23.93	35.50	907.04	907.10	
P-1	P-1	O-2	0.68	0.59	12.75	0.32	0.10	12.75	3.23	905.86	905.38	1.37	Concrete	1.25	35.00	3.23	2.63	7.57	42.70	907.19	907.10	
Q-1	Q-1	Q-0	0.07	0.56	6.24	6.01	0.01	16.27	54.16	905.35	905.10	2.51	Concrete	3.00	8.90	54.16	15.04	105.72	51.20	908.20	908.17	
Q-2	Q-2	Q-1	0.38	0.61	10.88	0.28	0.20	10.88	3.03	905.60	905.35	0.50	Concrete	2(14"X22")	49.60	3.03	0.90	13.63	22.20	908.52	908.50	
R-1	R-1	Q-1	0.26	0.76	6.94	2.94	0.10	16.21	26.54	905.49	905.35	0.49	Concrete	2.00	28.60	26.54	8.45	15.82	167.70	908.90	908.50	
S-2	S-2	S-1	0.39	0.73	9.40	3.98	0.09	15.05	37.06	905.63	905.50	0.49	Concrete	2.00	26.50	37.06	11.80	15.84	234.00	909.23	908.51	
S-3	S-3 EX	S-2	(N/A)	(N/A)	0.00	3.68	0.23	14.94	34.46	906.18	905.83	0.50	Concrete	2.00	70.40	34.46	10.97	15.95	216.10	911.06	909.43	
T-1	T-1	T-0	(N/A)	(N/A)	0.00	3.12	0.09	13.52	30.69	902.69	902.49	0.55	Concrete	2.50	36.60	30.69	7.04					

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STORM LINE A



STORM LINE A



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PRELIMINARY
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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

STORM SEWER PROFILES
23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

2021

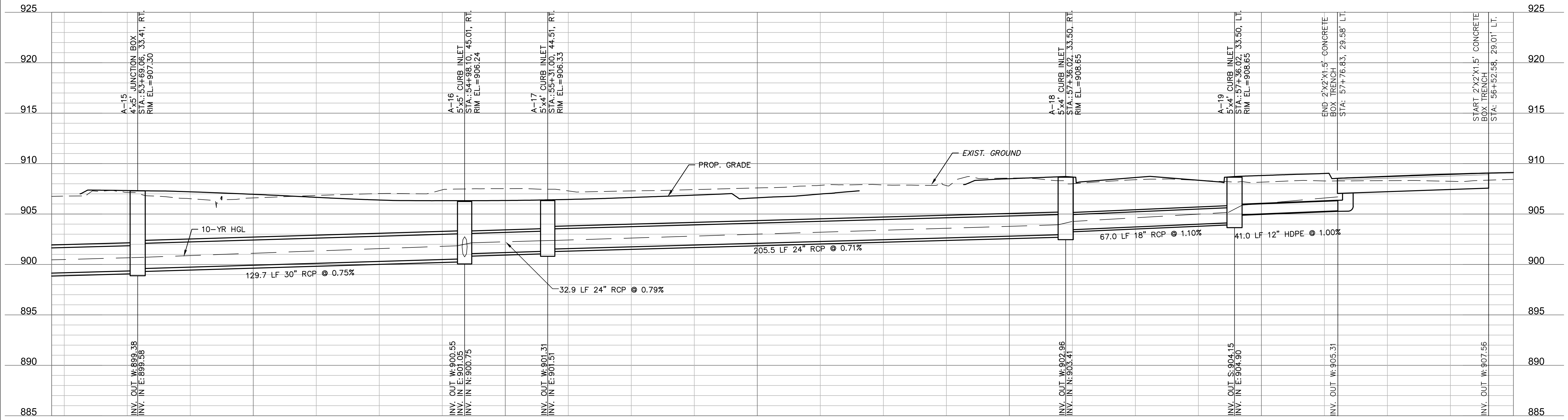
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drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: RBK
 project no.: 020-2348
 drawing no.: 1_STM01_0202348
 date: 12-18-2020

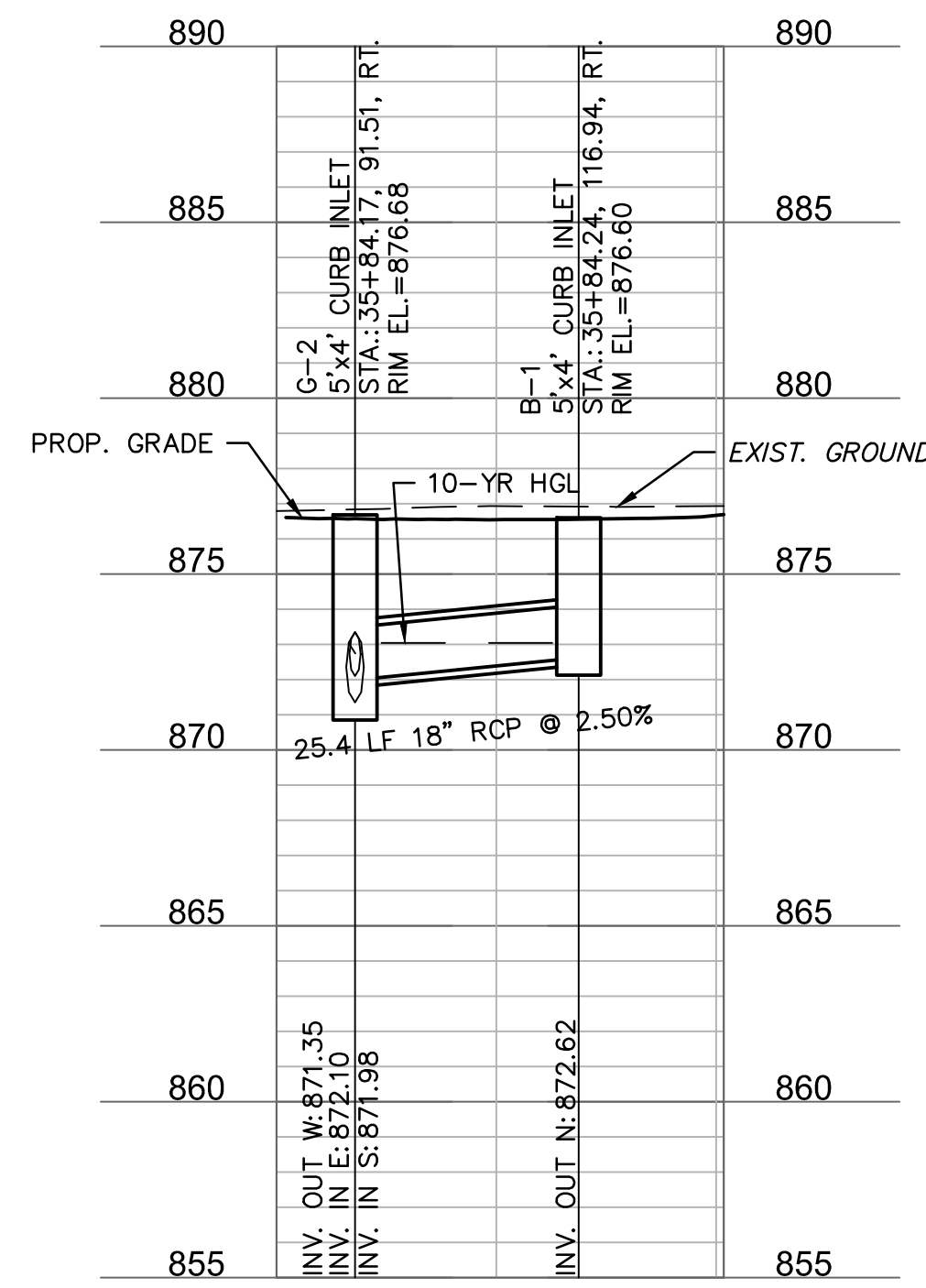
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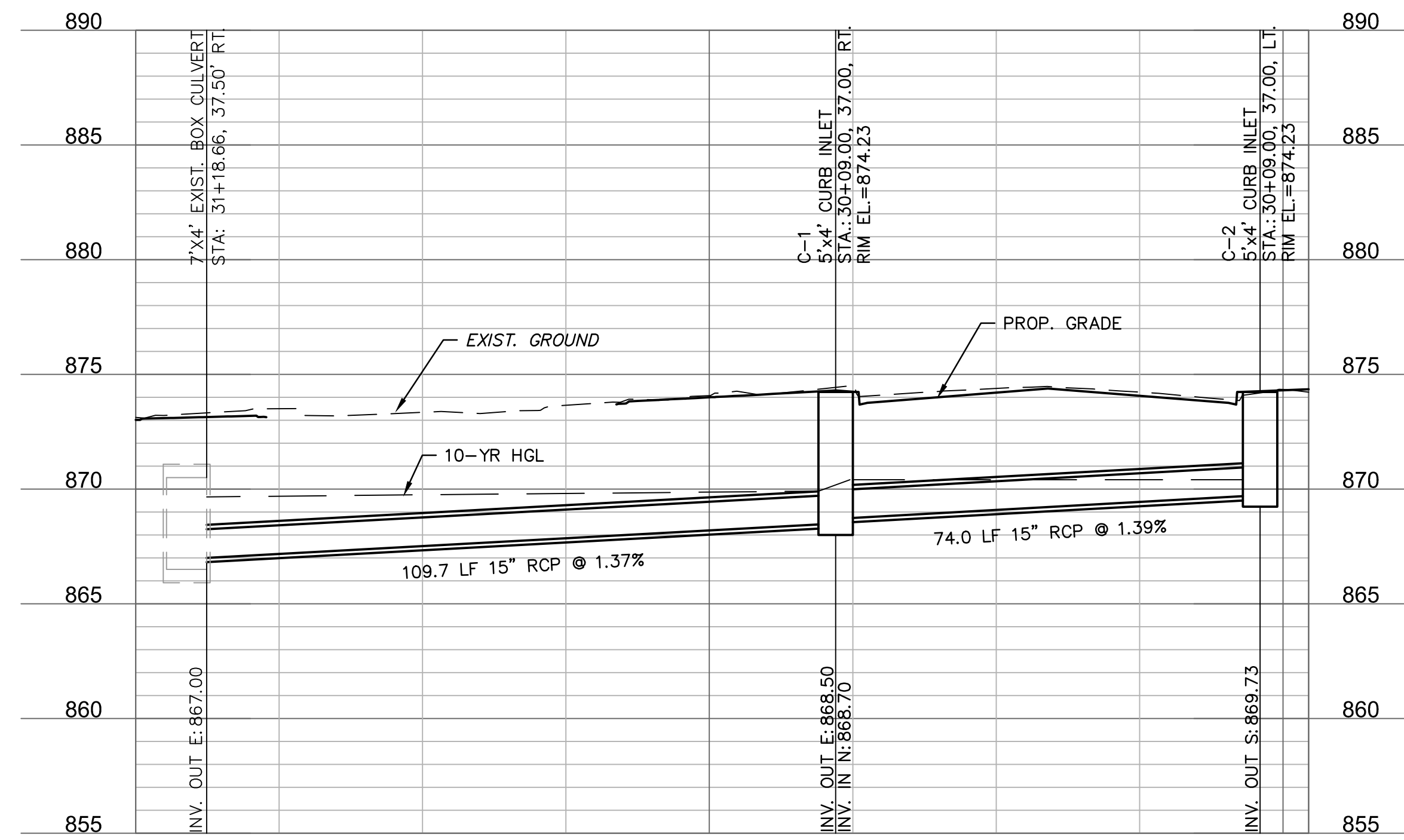
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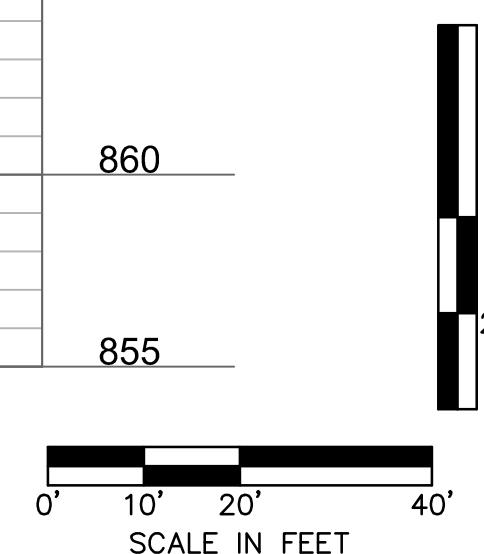
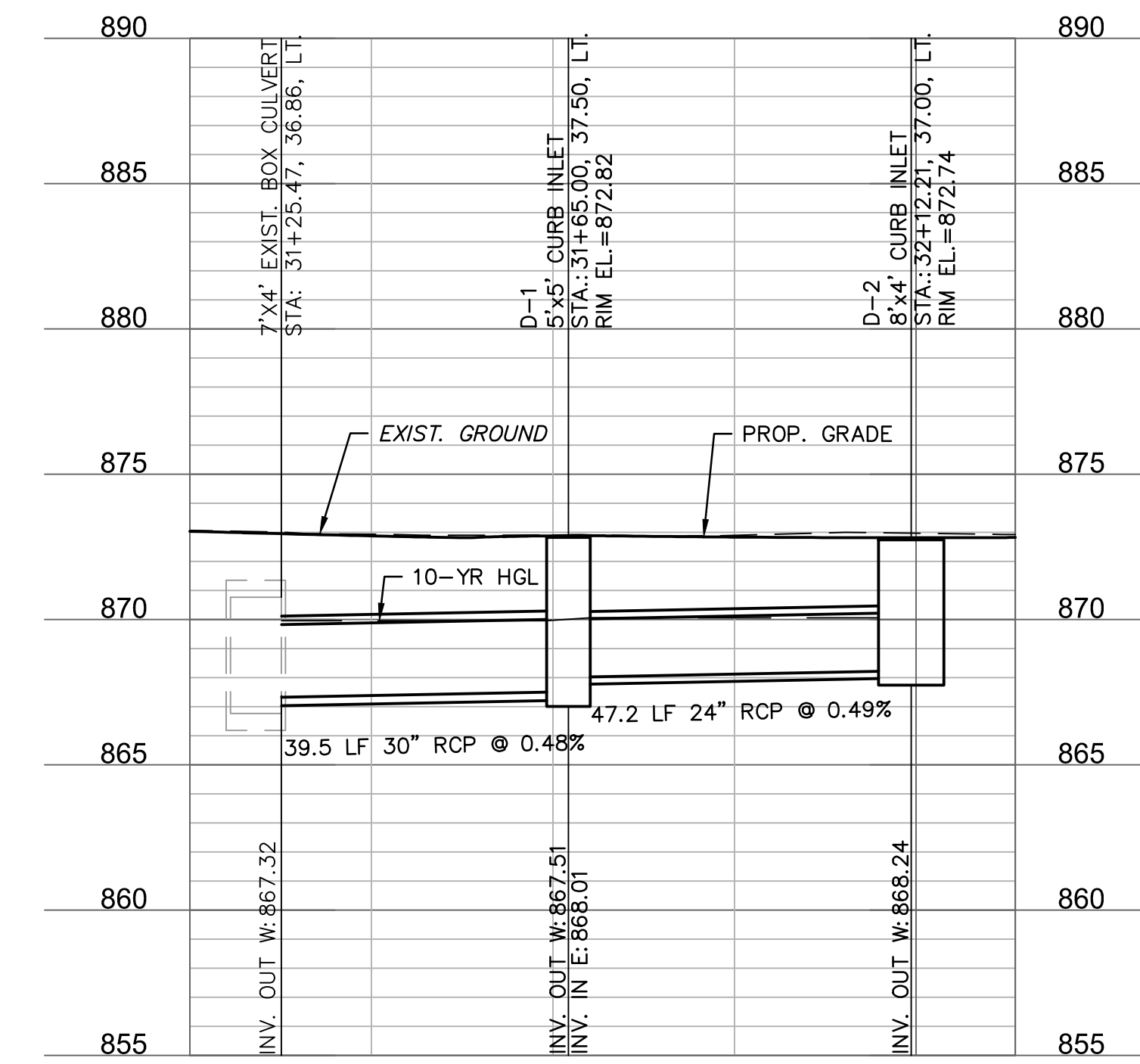
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STORM LINE C



STORM LINE D



PRELIMINARY
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REV. NO.	DATE	REVISIONS DESCRIPTION

STORM SEWER PROFILES
23RD STREET

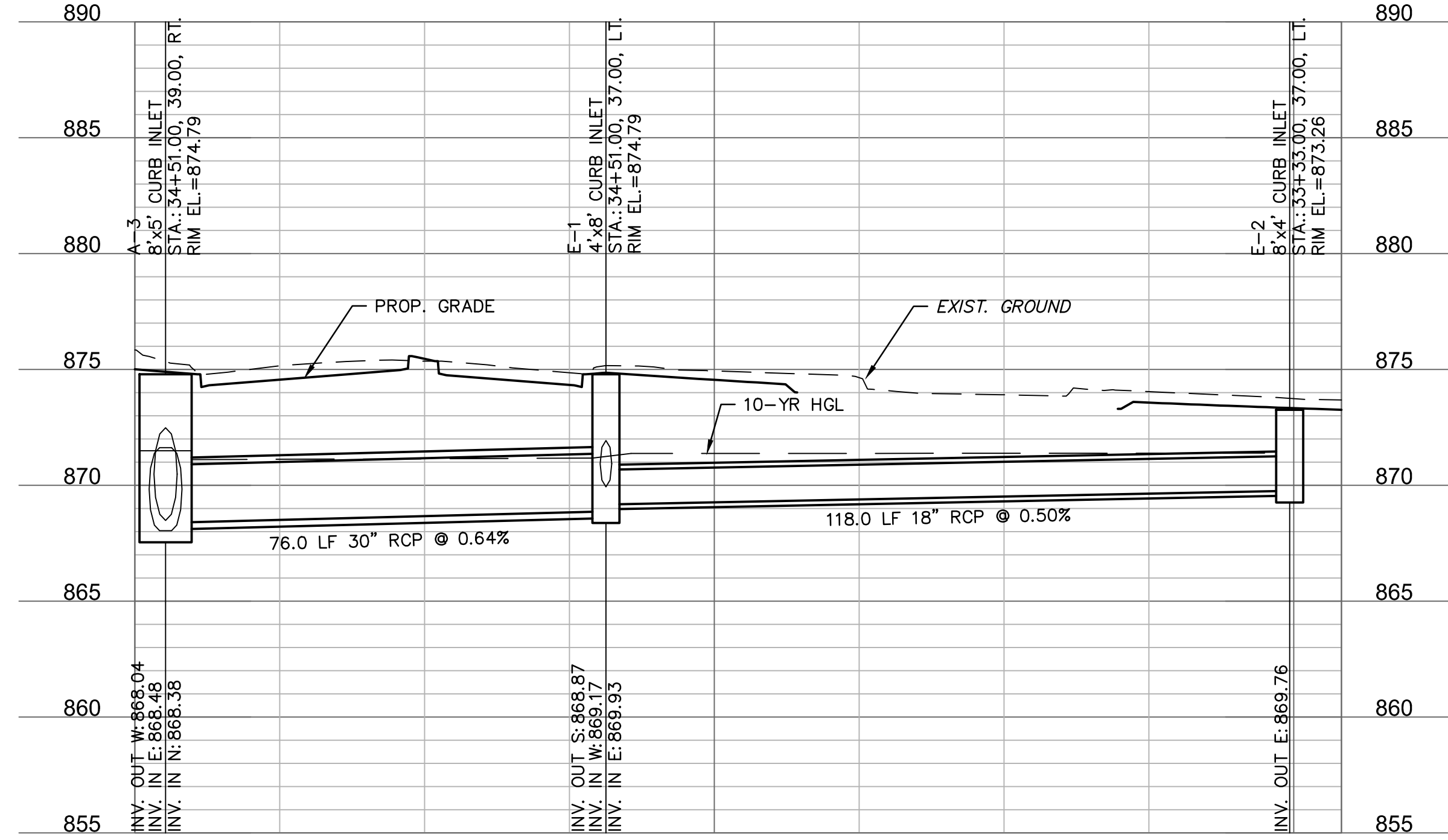
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HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

2021

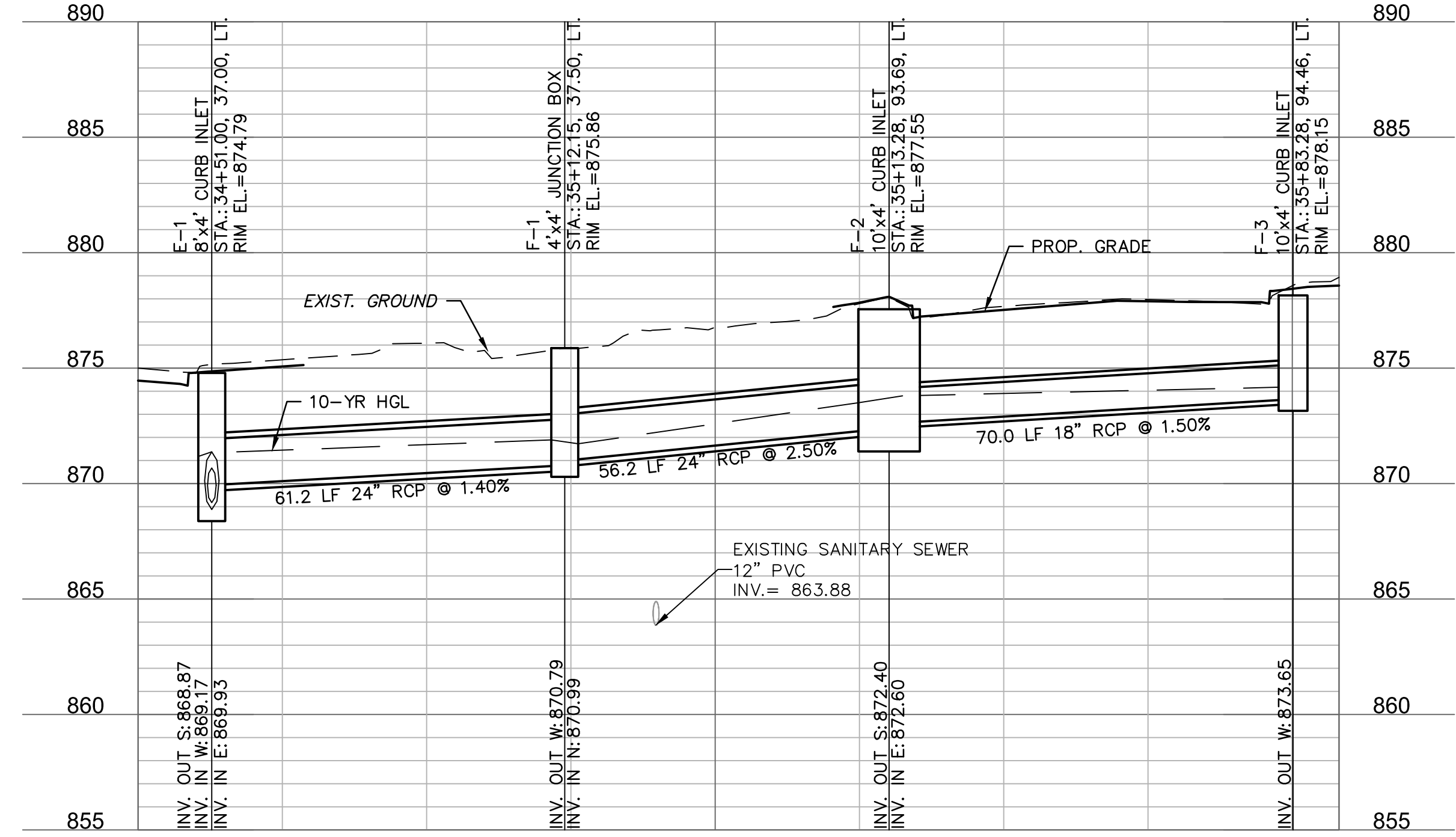
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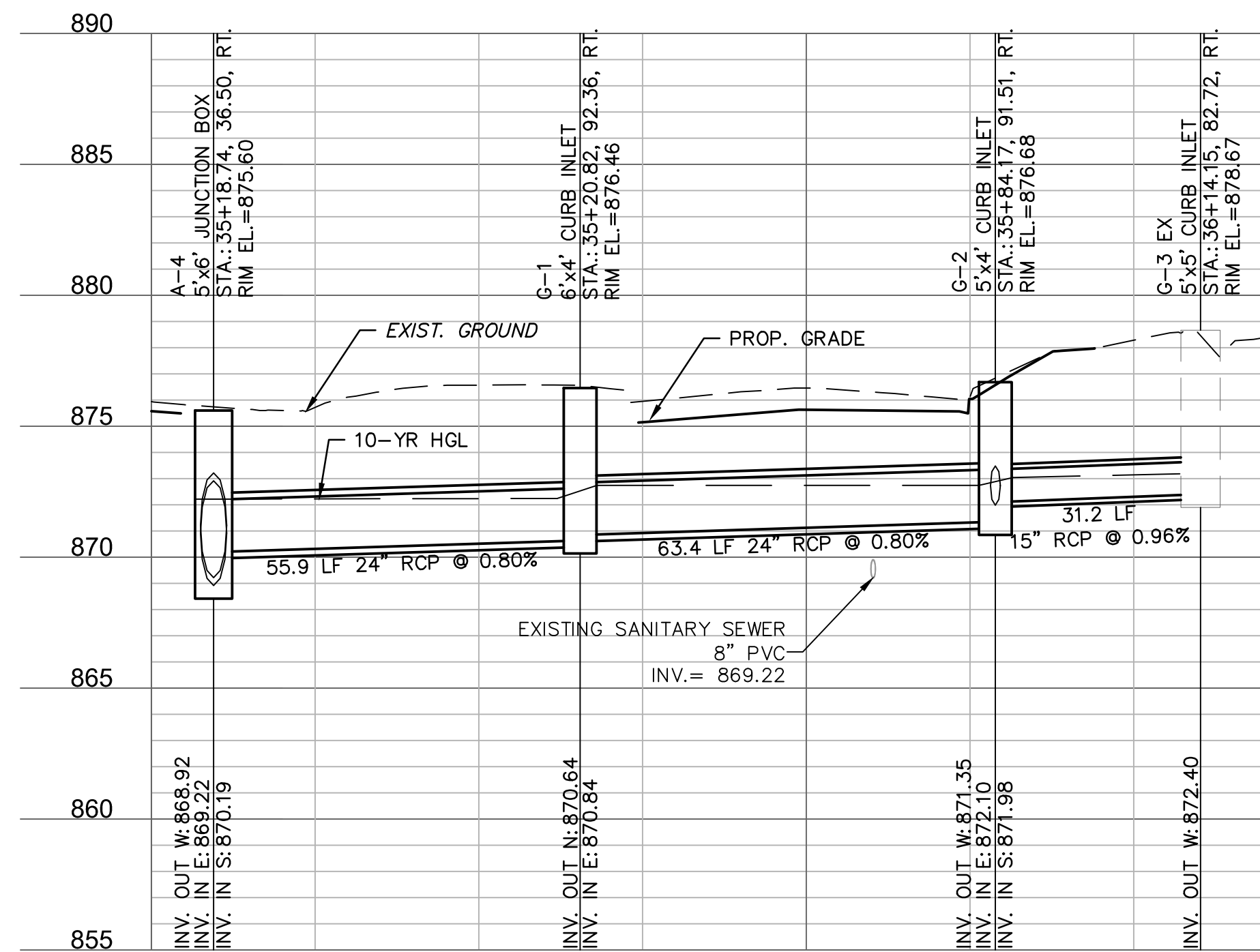
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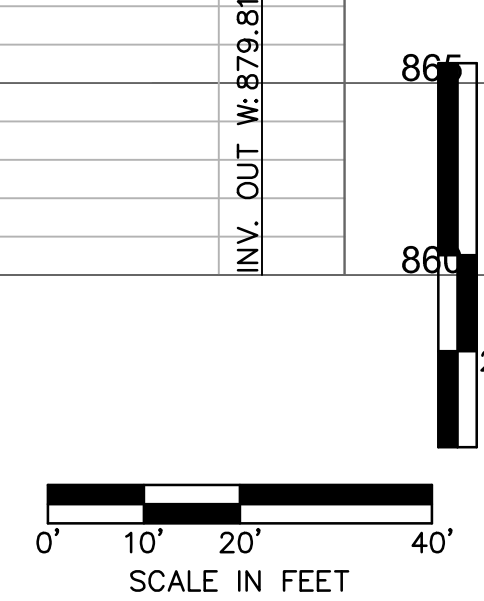
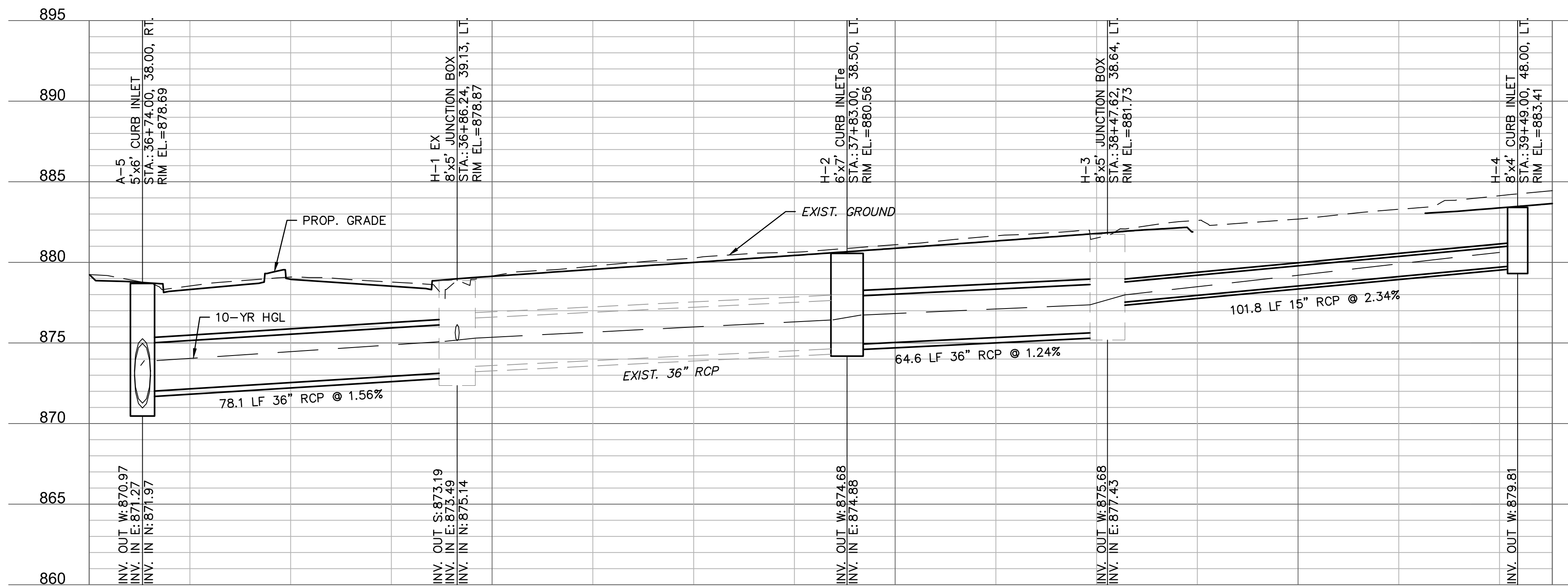
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STORM LINE G



STORM LINE H



PRELIMINARY
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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

STORM SEWER PROFILES
23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

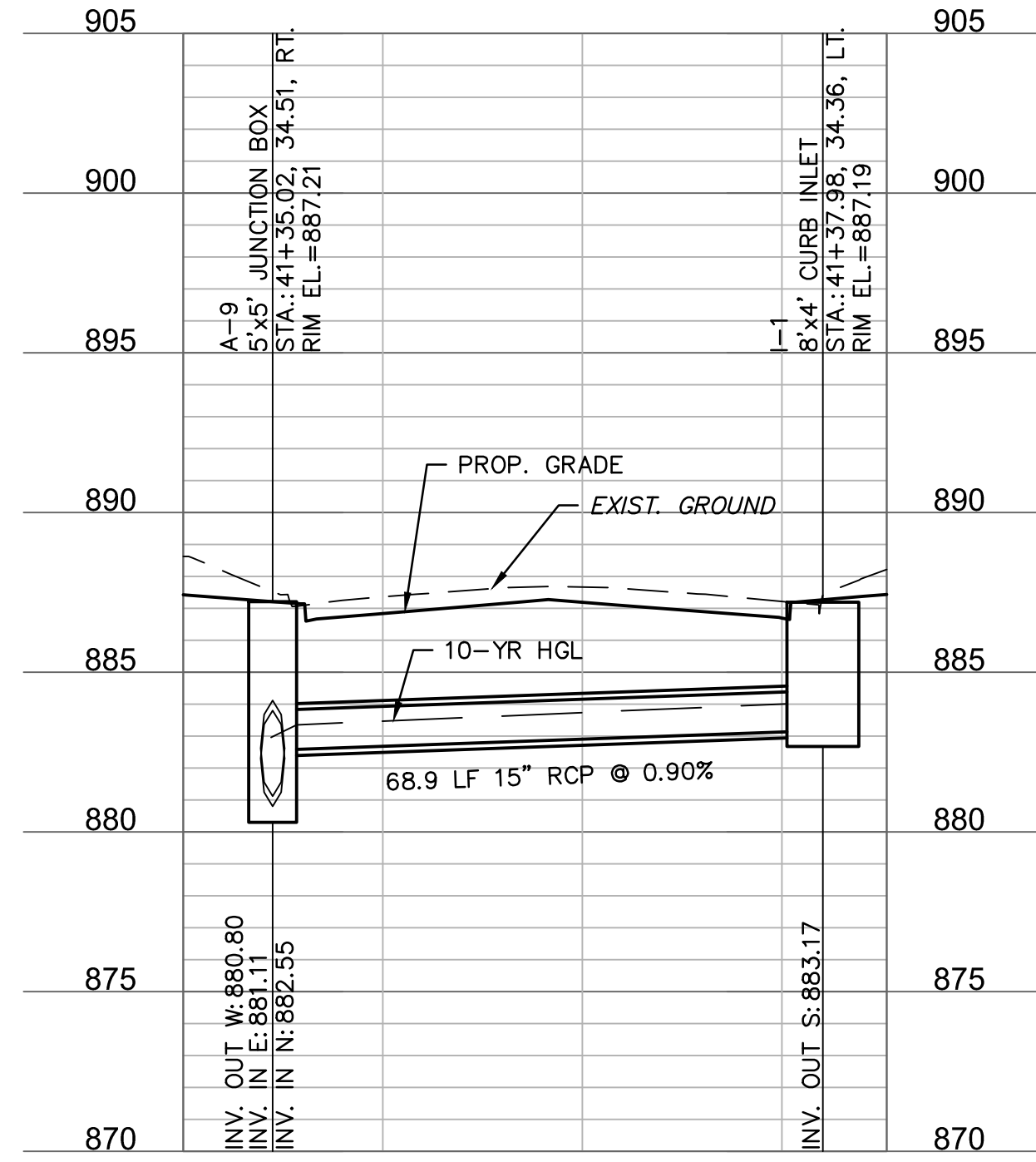
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drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: PBM
 project no.: 020-2348
 drawing no.: 1_STM01_0202348
 date: 12-18-2020

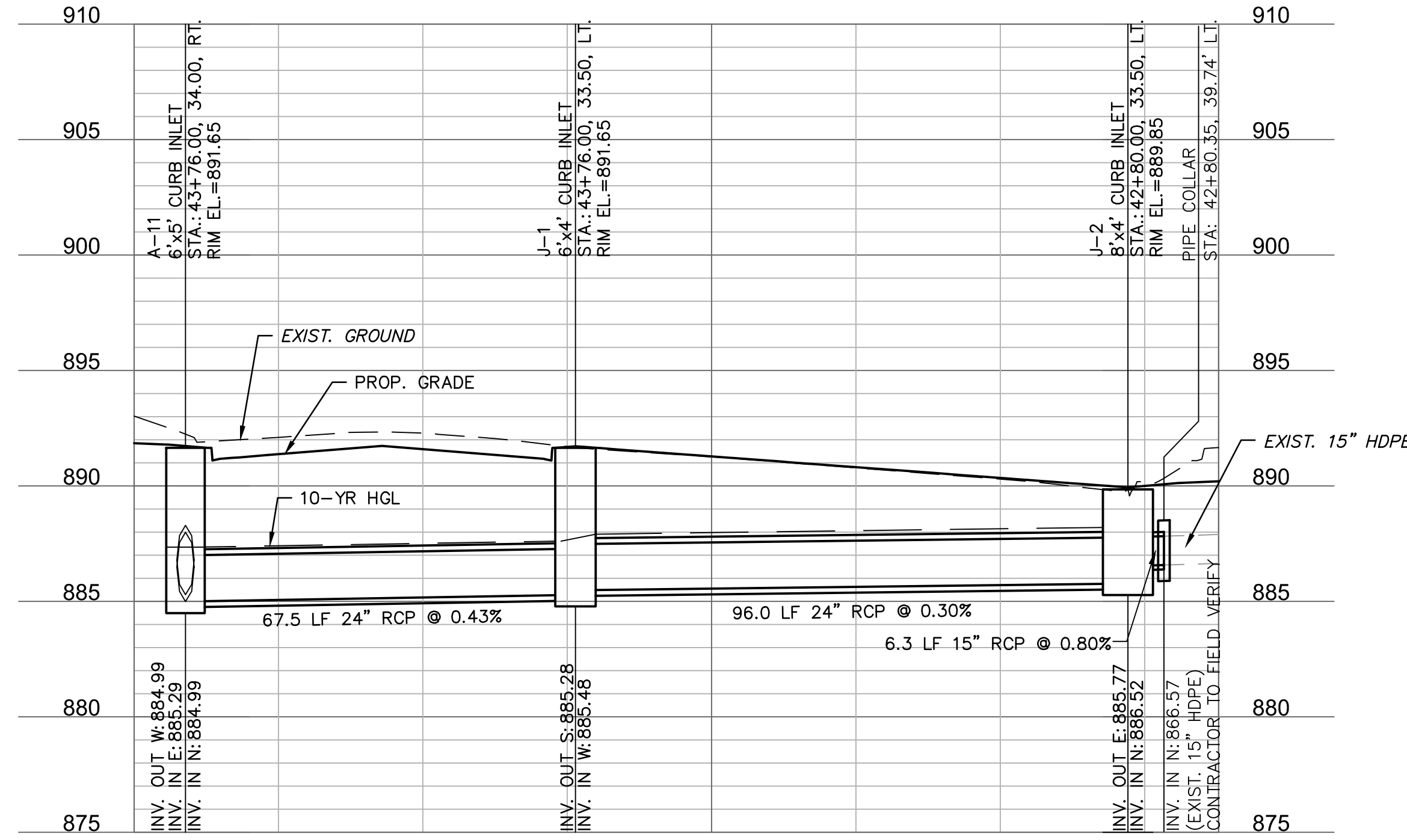
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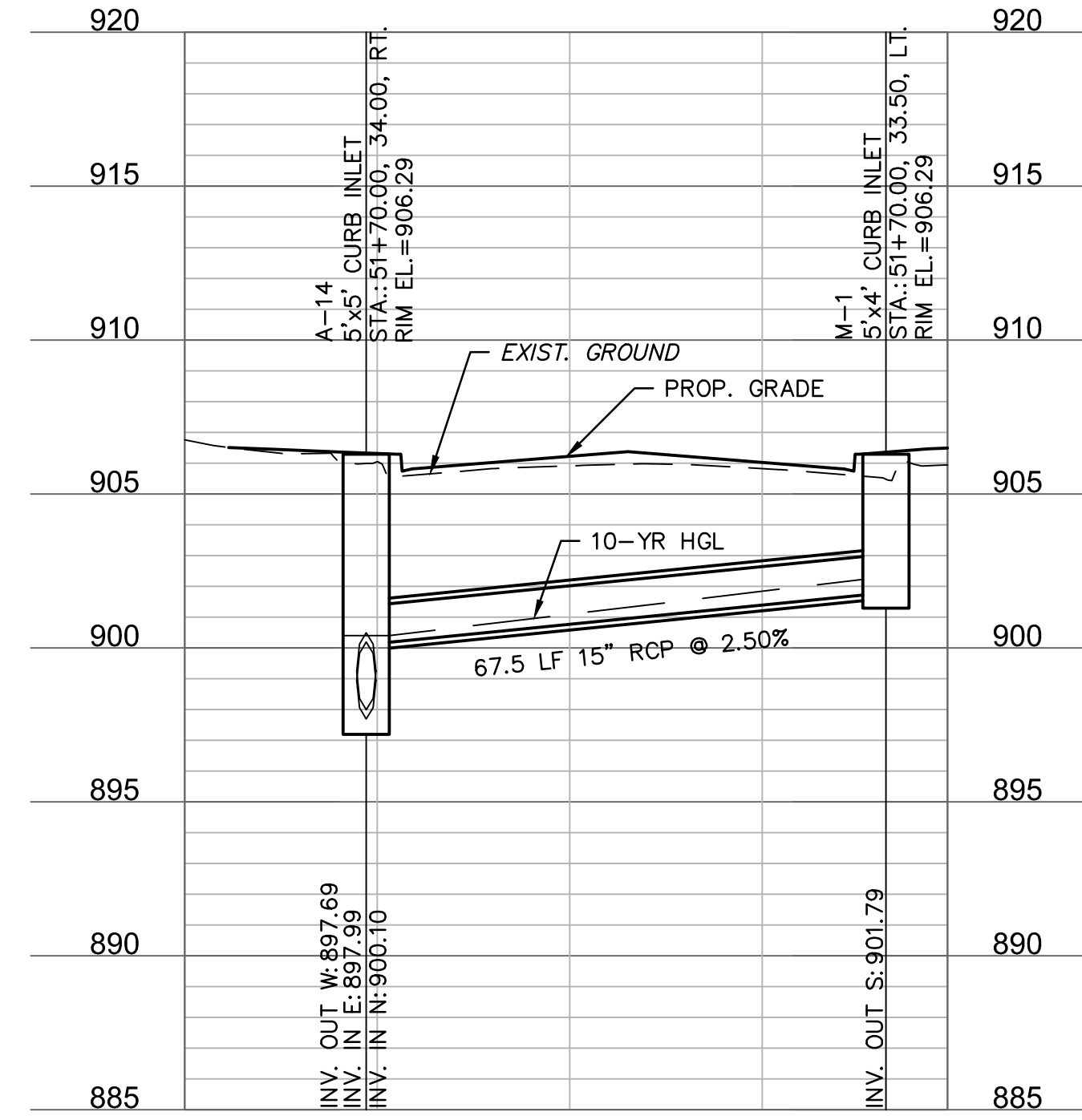
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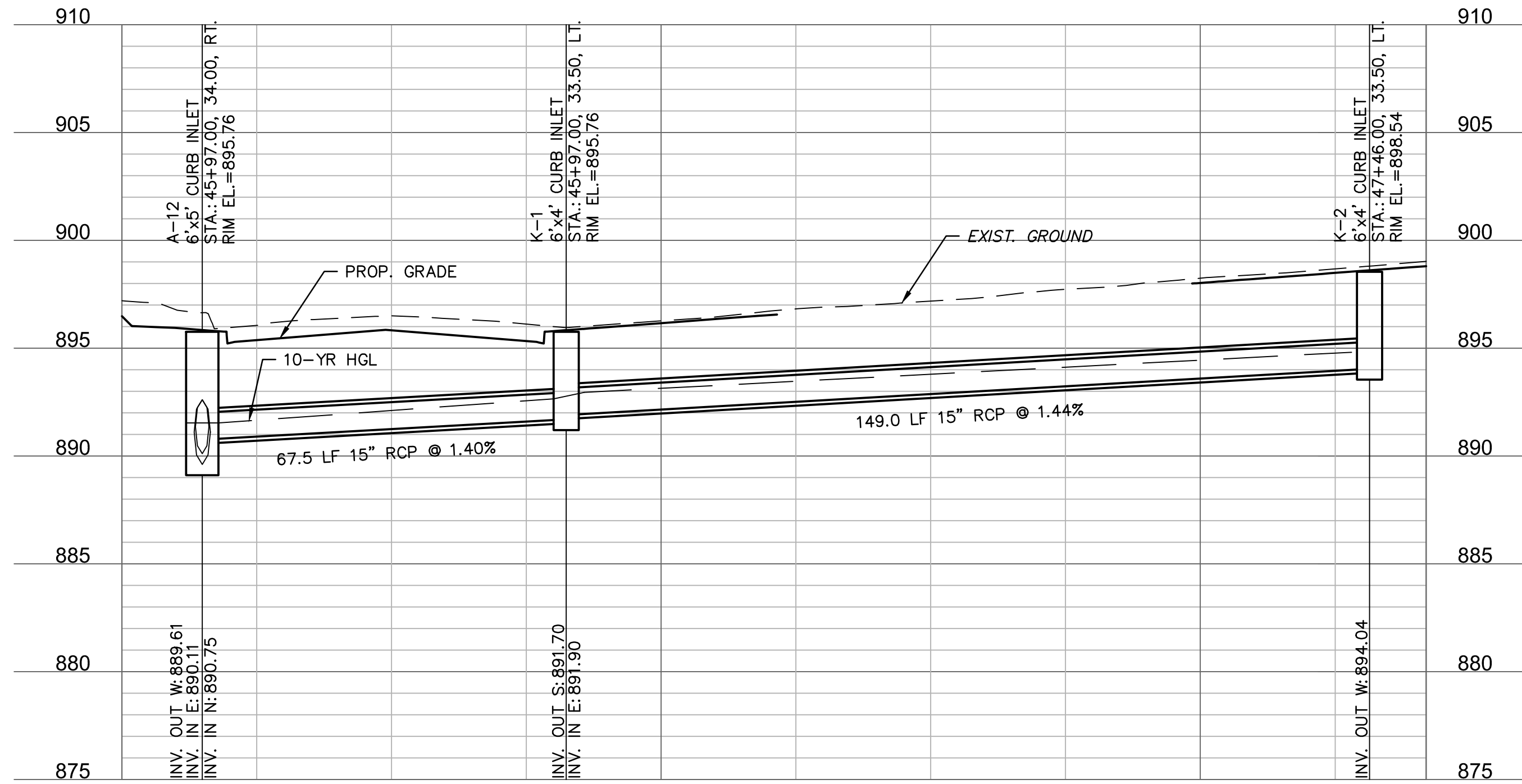
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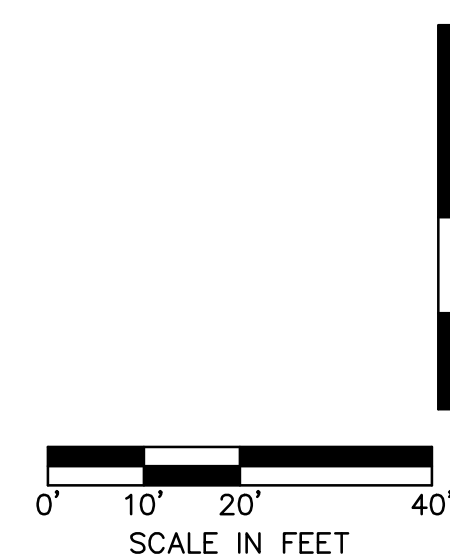
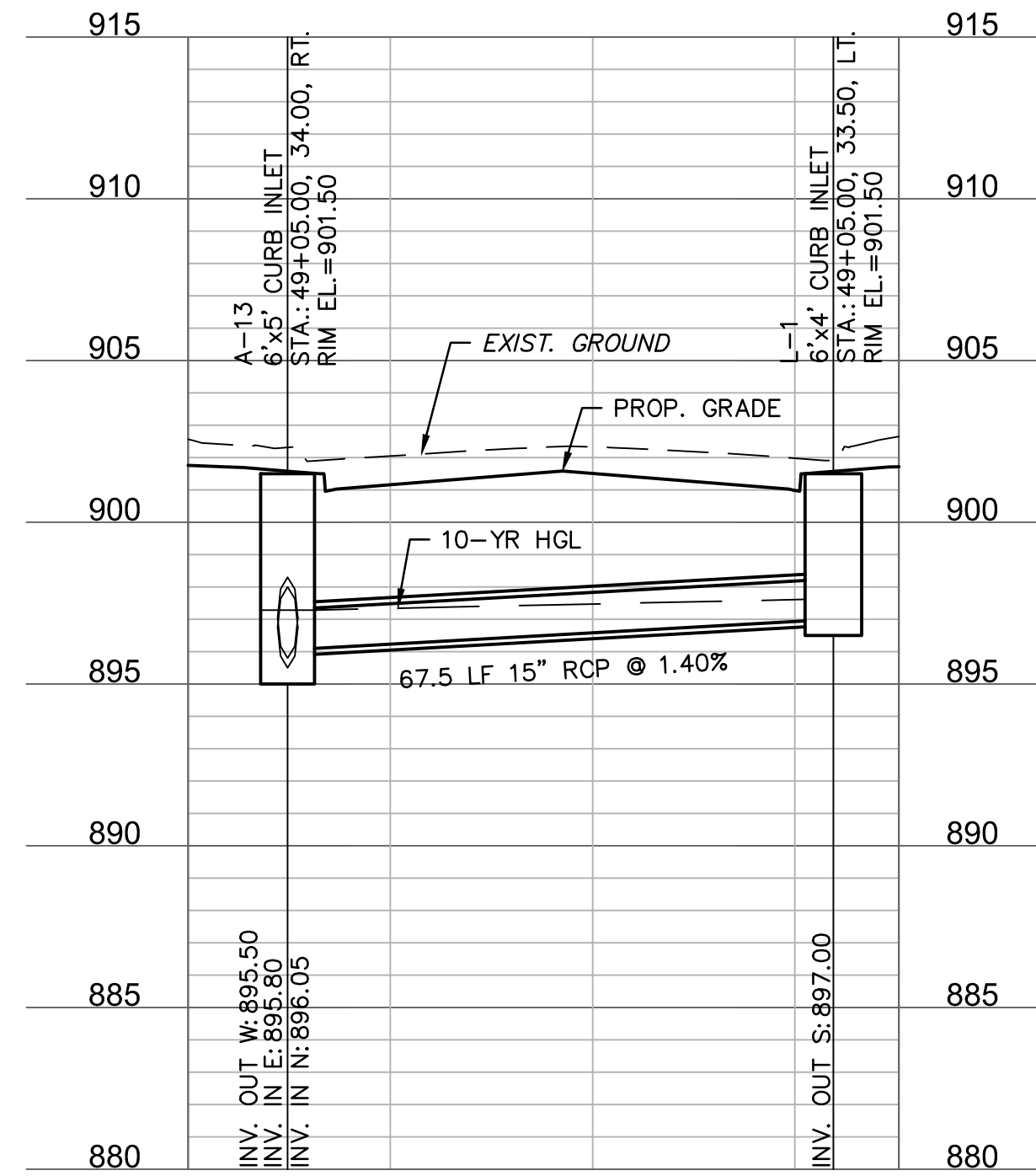
STORM LINE M



STORM LINE K



STORM LINE L



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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

STORM SEWER PROFILES
23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: PBM
 project no.: 020-2348
 drawing no.: I_STM01_0202348
 date: 12-18-2020

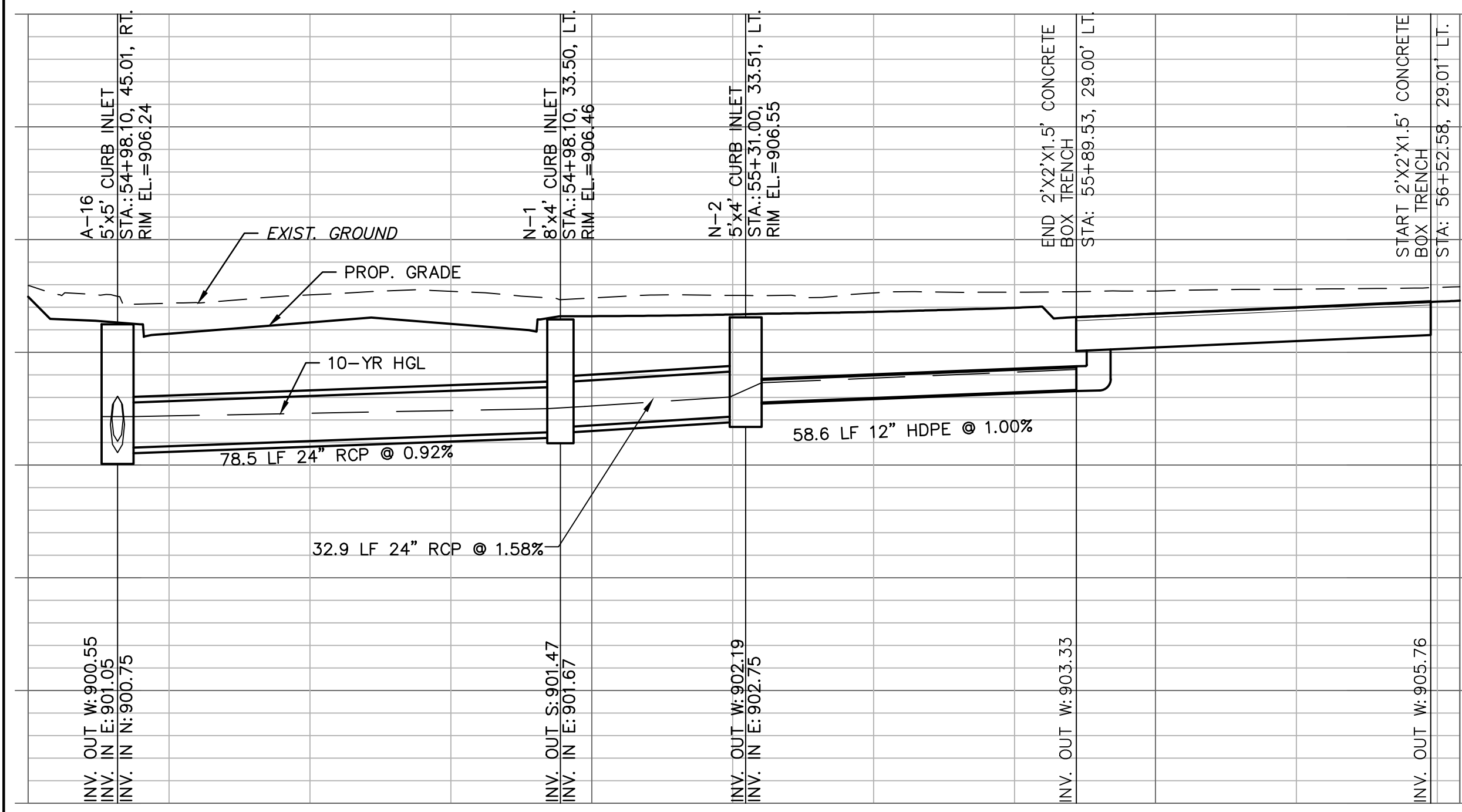
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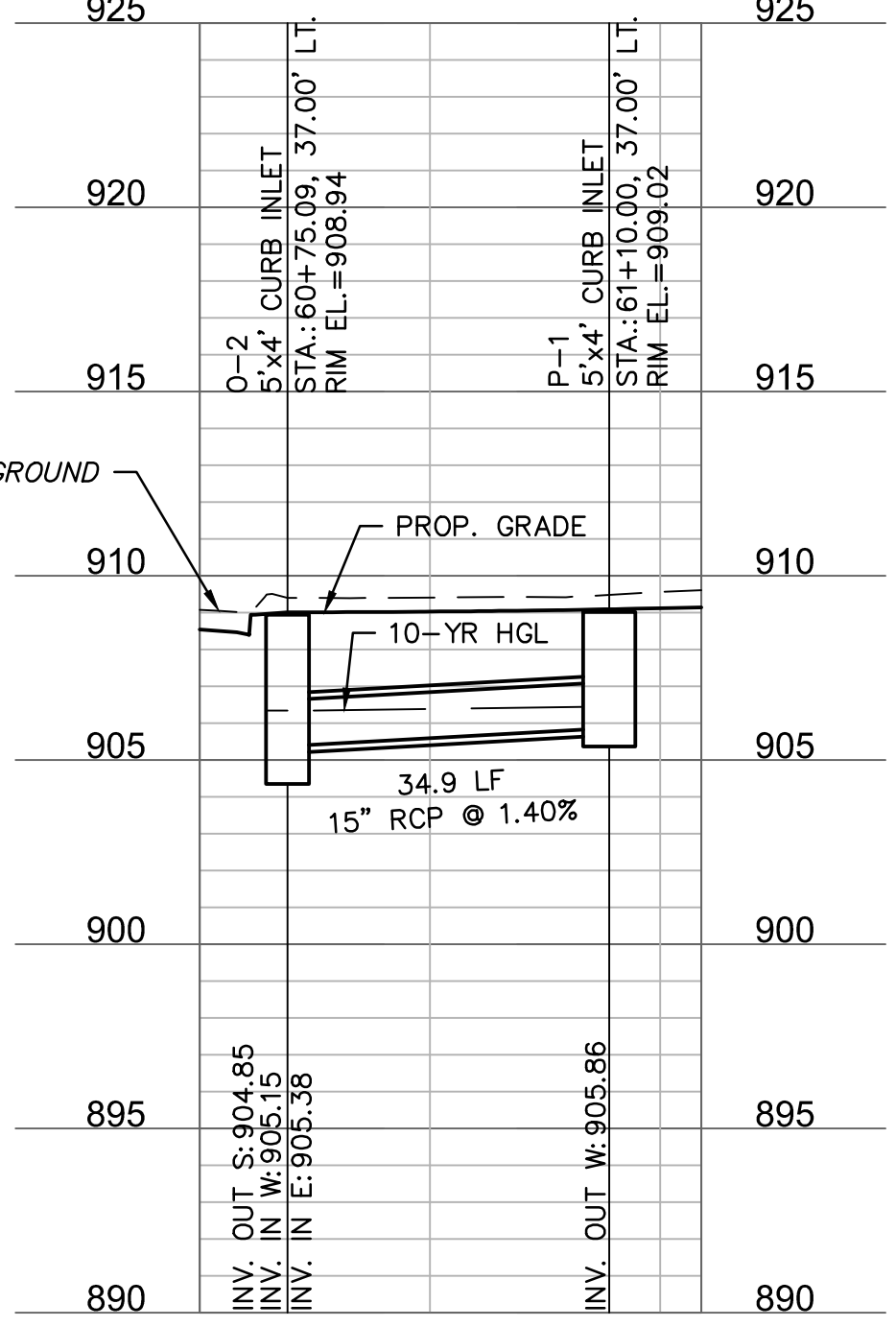
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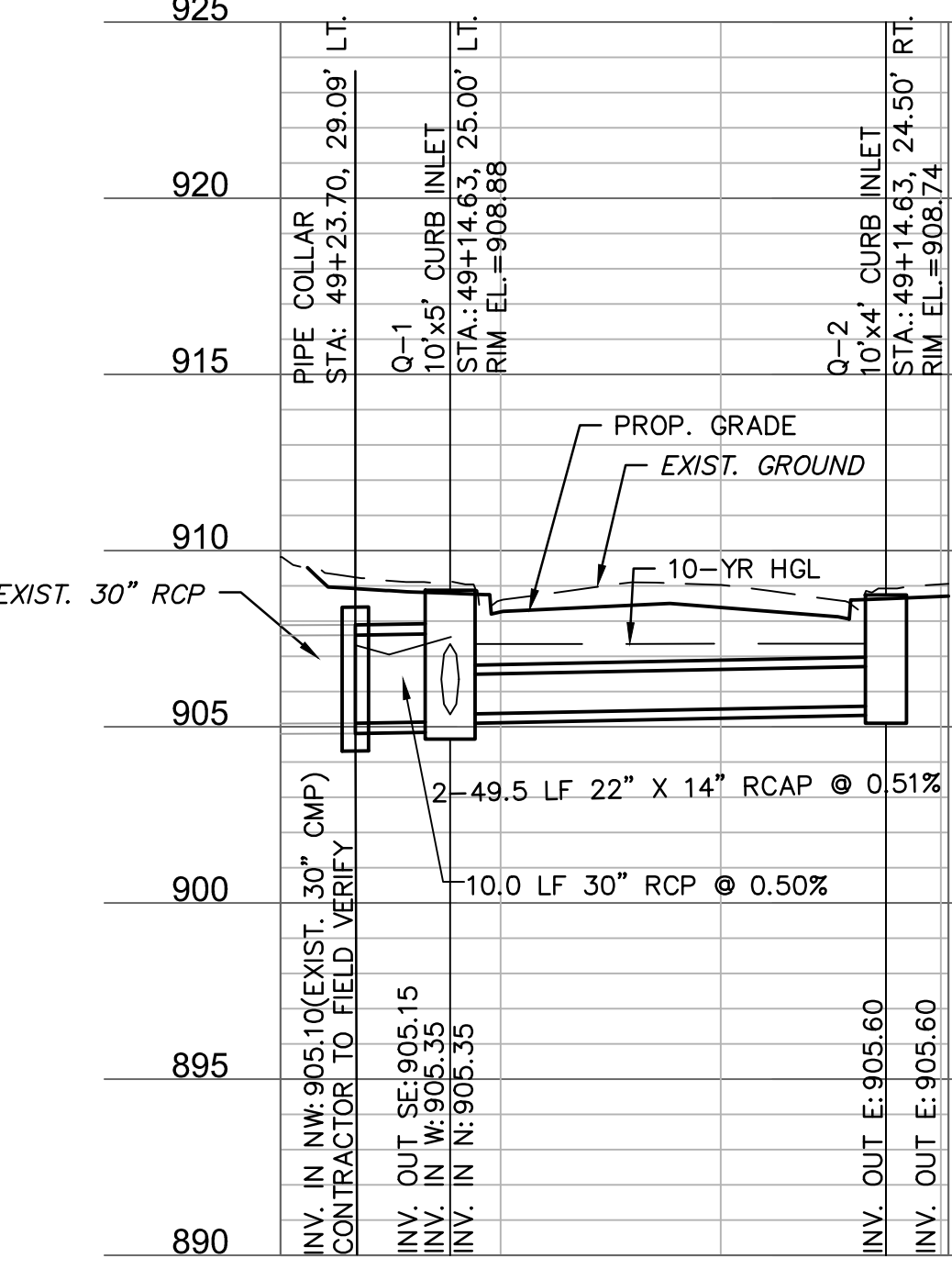
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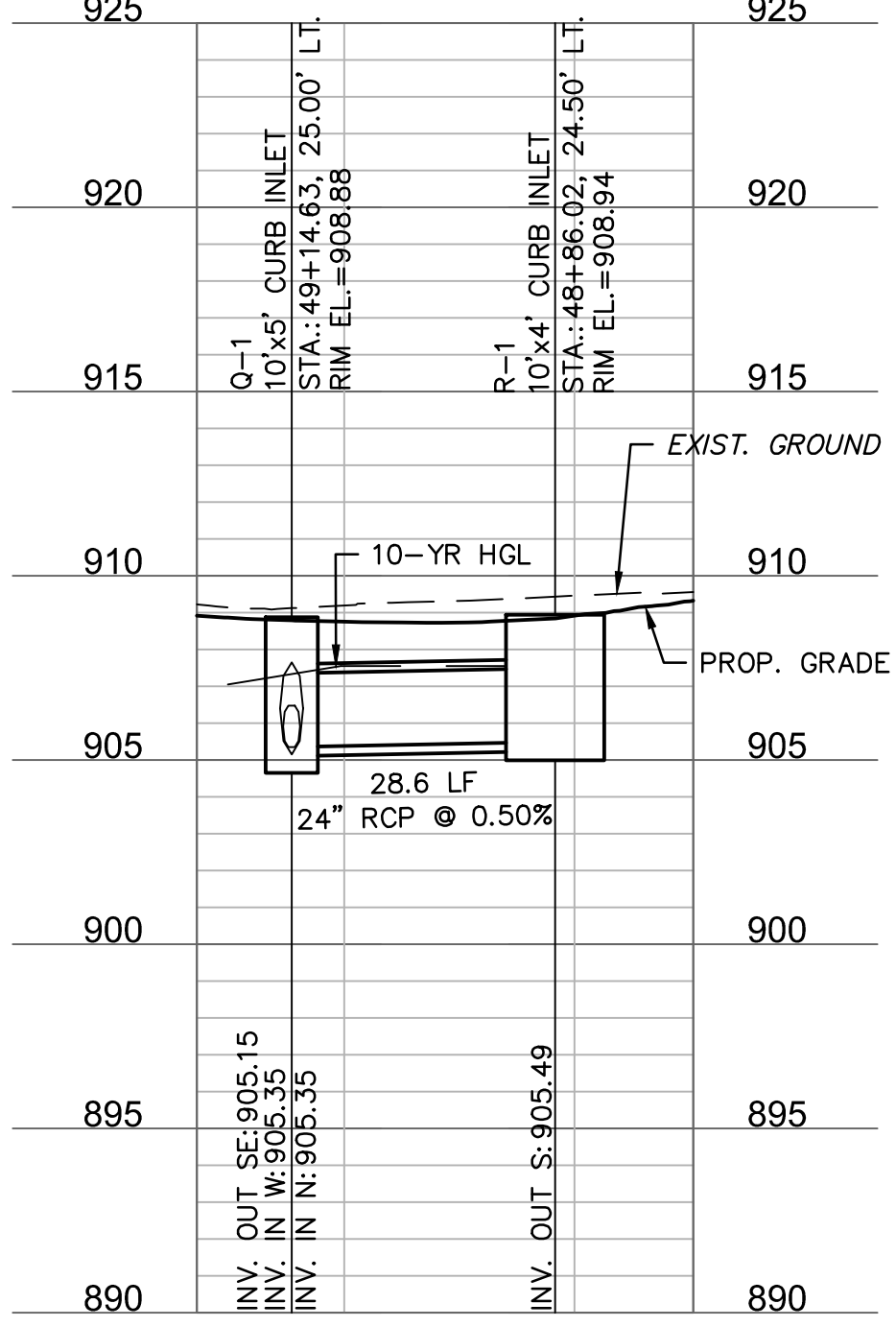
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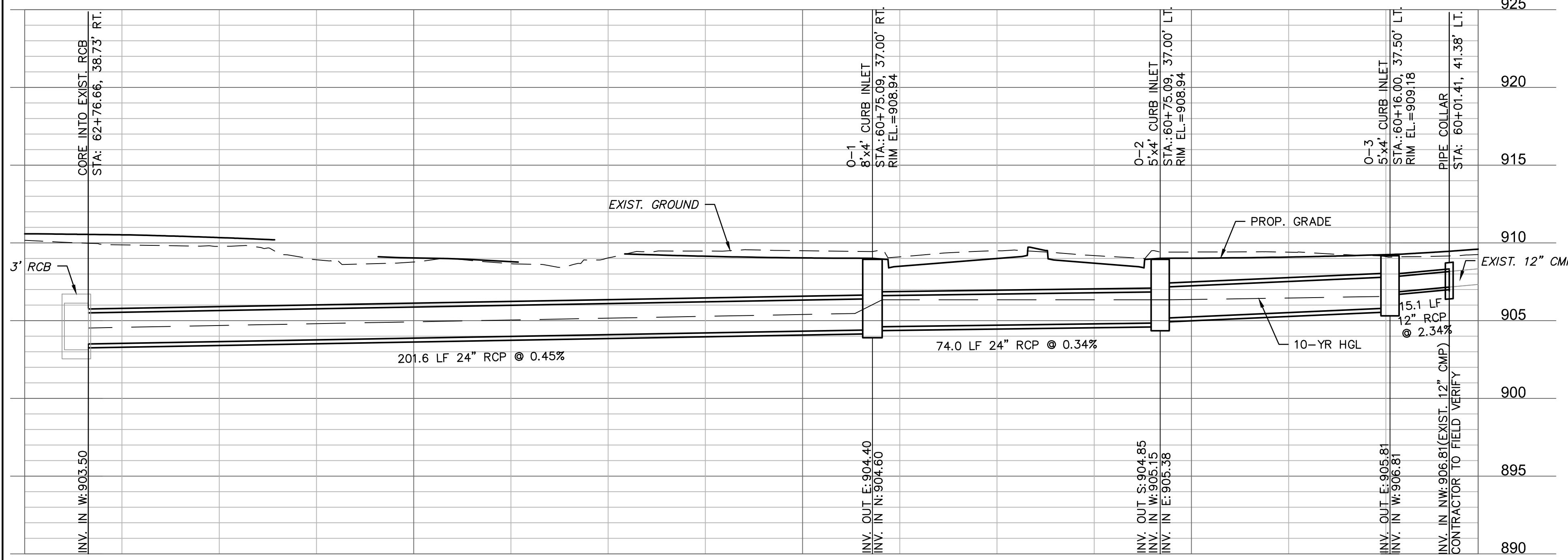
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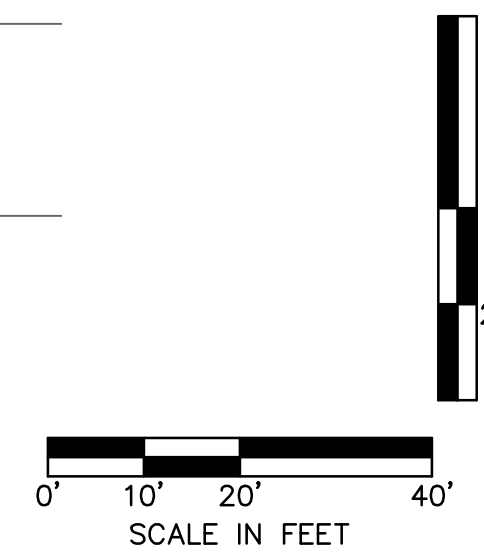
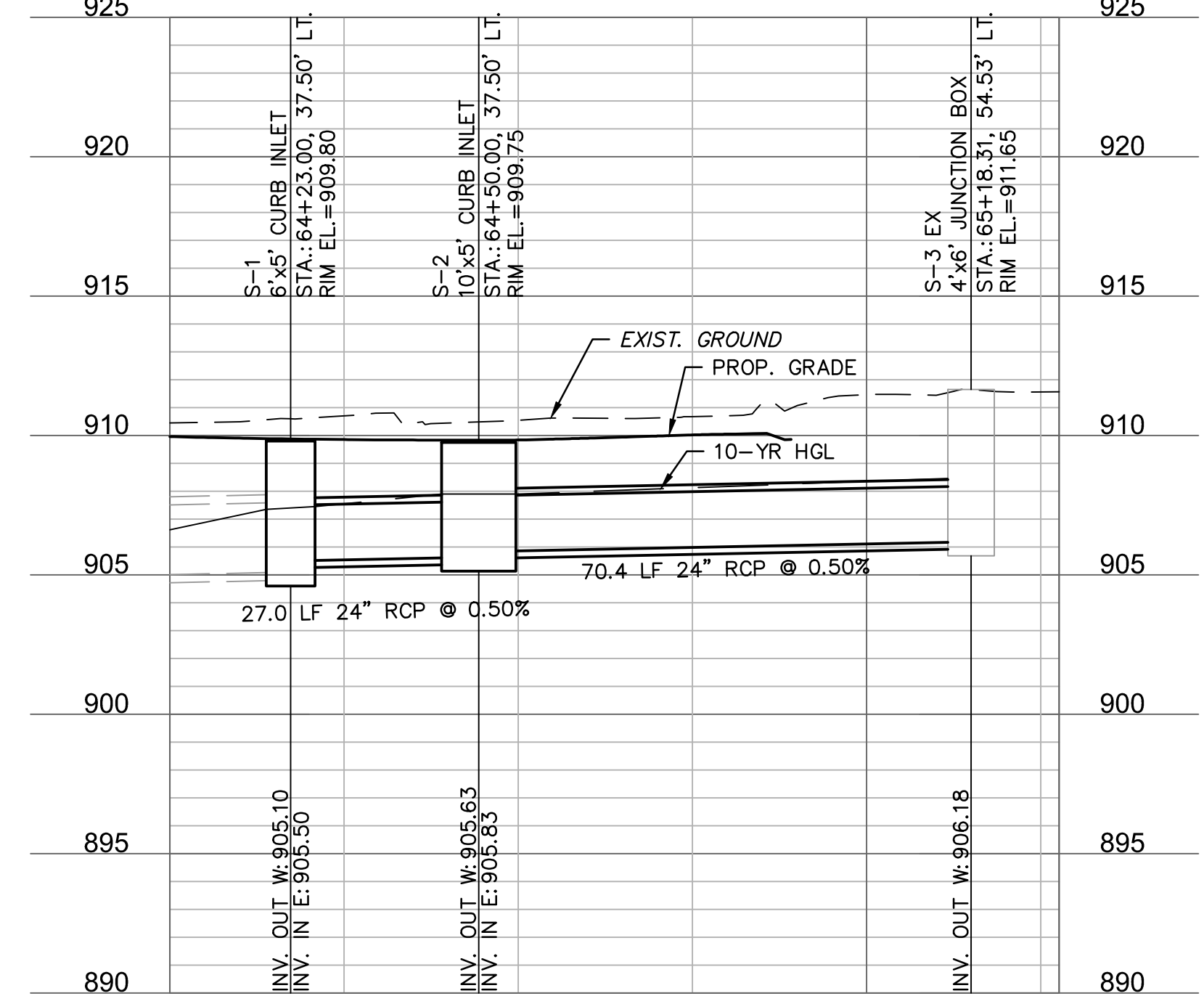
STORM LINE R



STORM LINE O



STORM LINE S



PRELIMINARY
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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

STORM SEWER PROFILES
 23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

2021

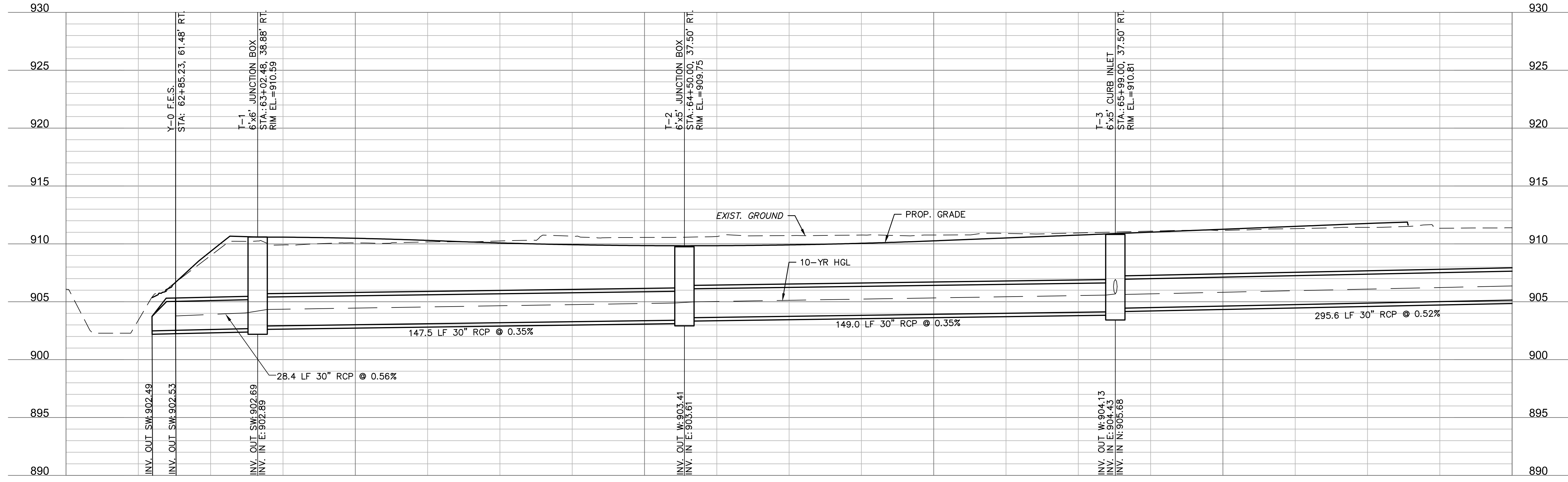
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 checked by: PBM
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 drawing no.: 1_STM01_0202348
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SHEET
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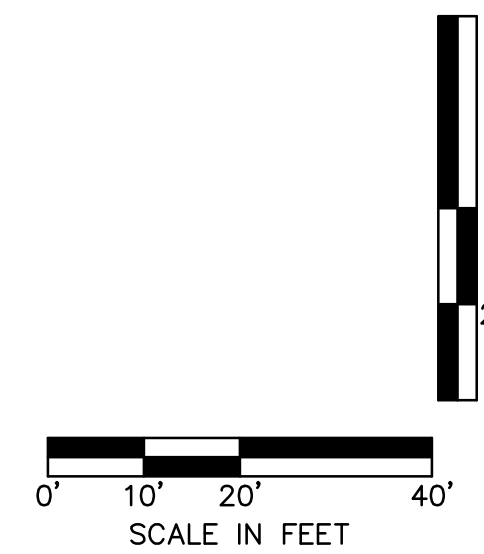
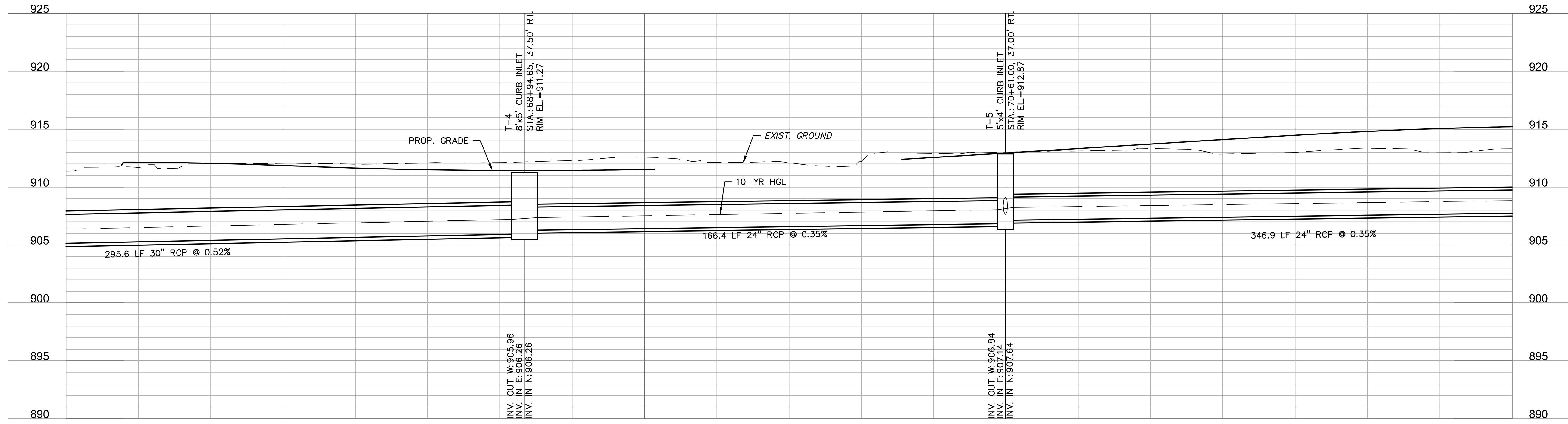
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 TEL 913.381.1170 www.olson.com

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STORM LINE T



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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

STORM SEWER PROFILES
23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

2021

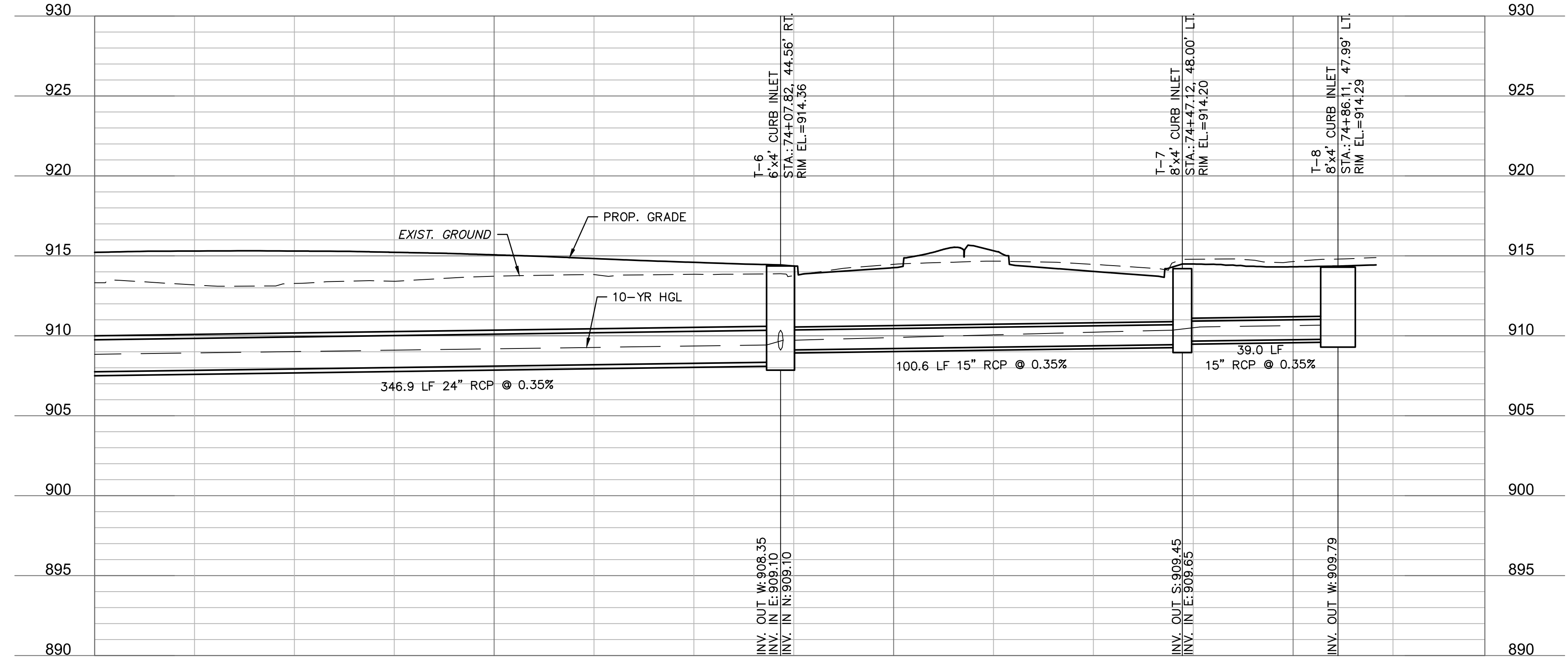
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drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: RBK
 project no.: 020-2348
 drawing no.: T_STM01_0202348
 date: 12-18-2020

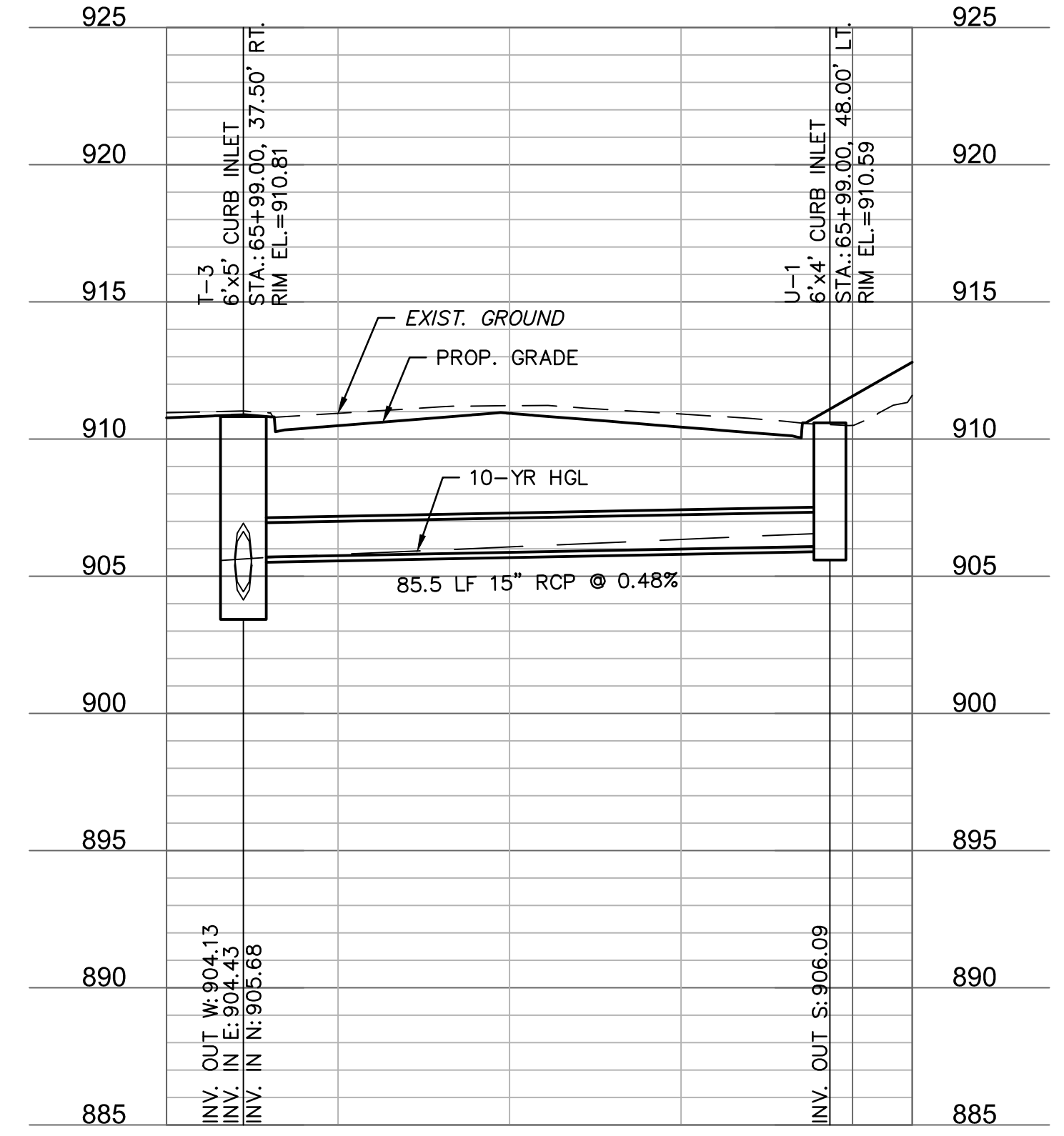
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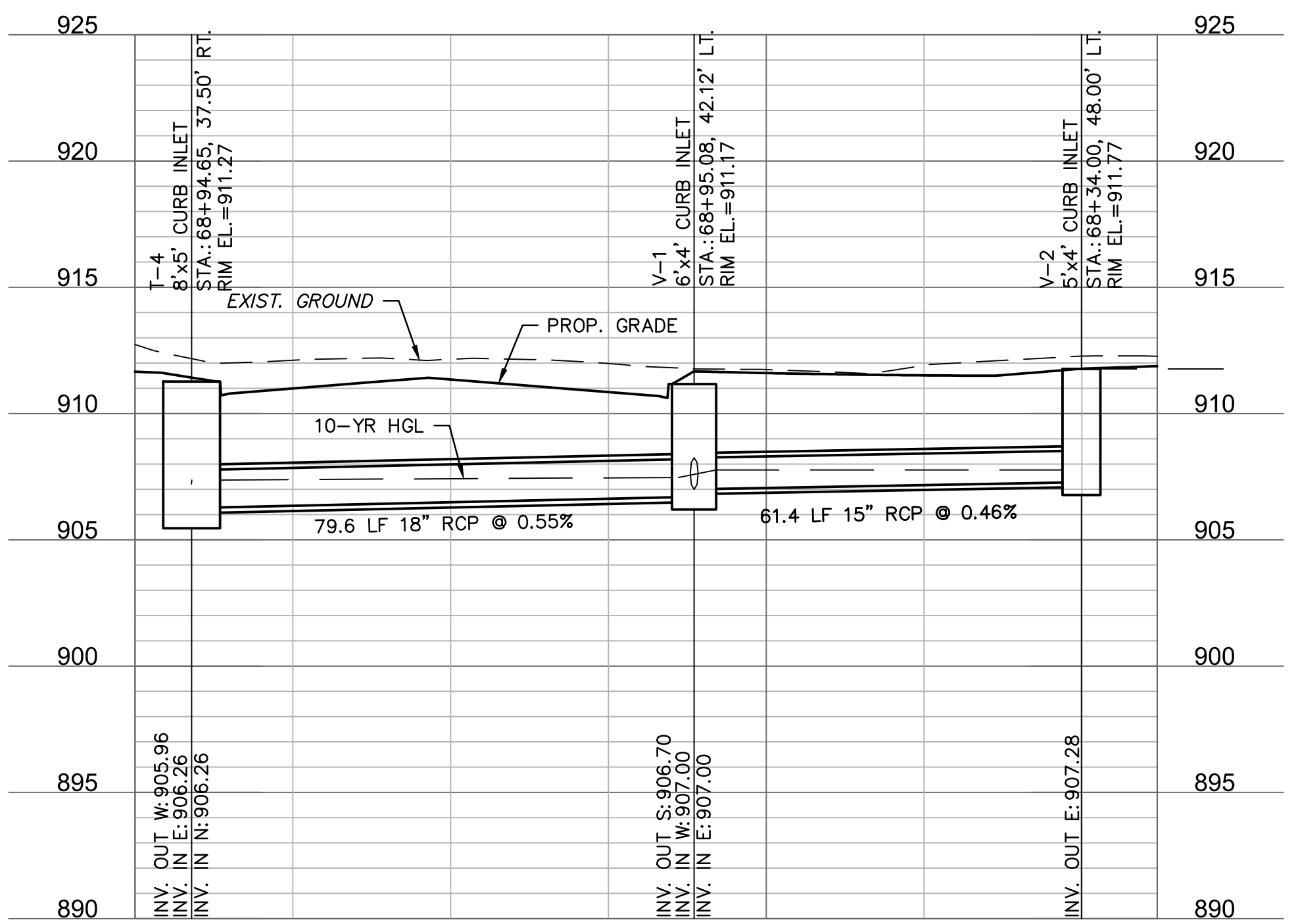
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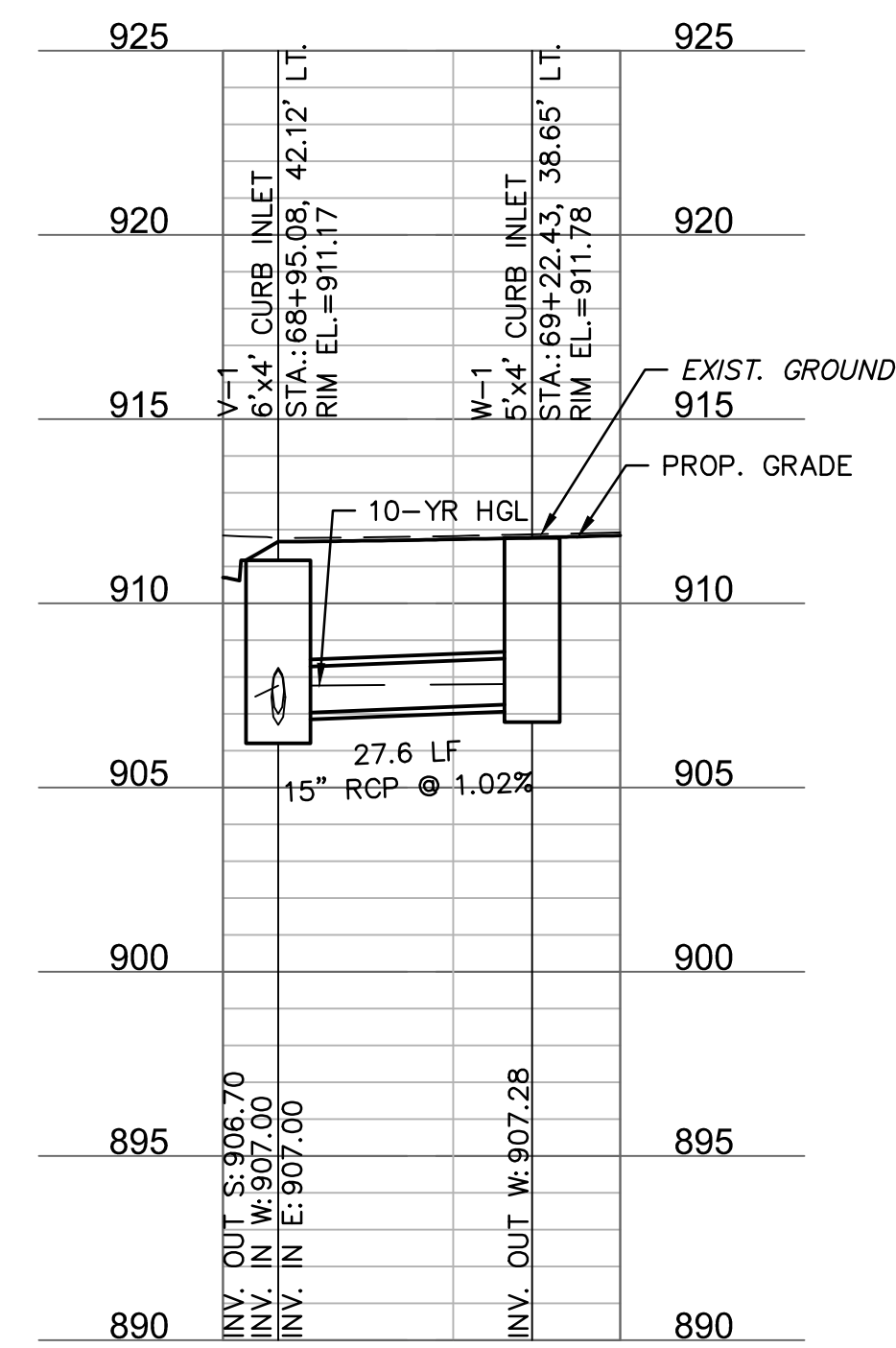
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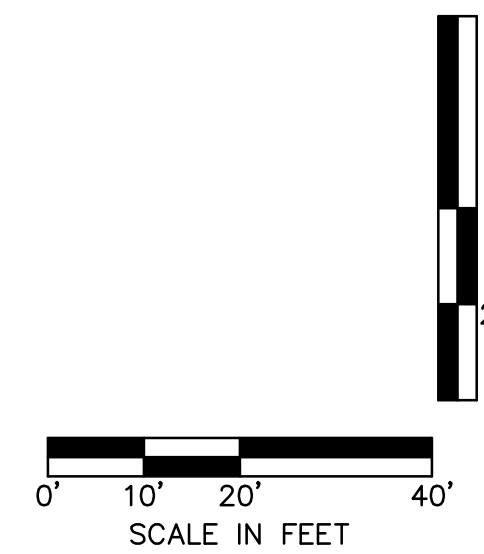
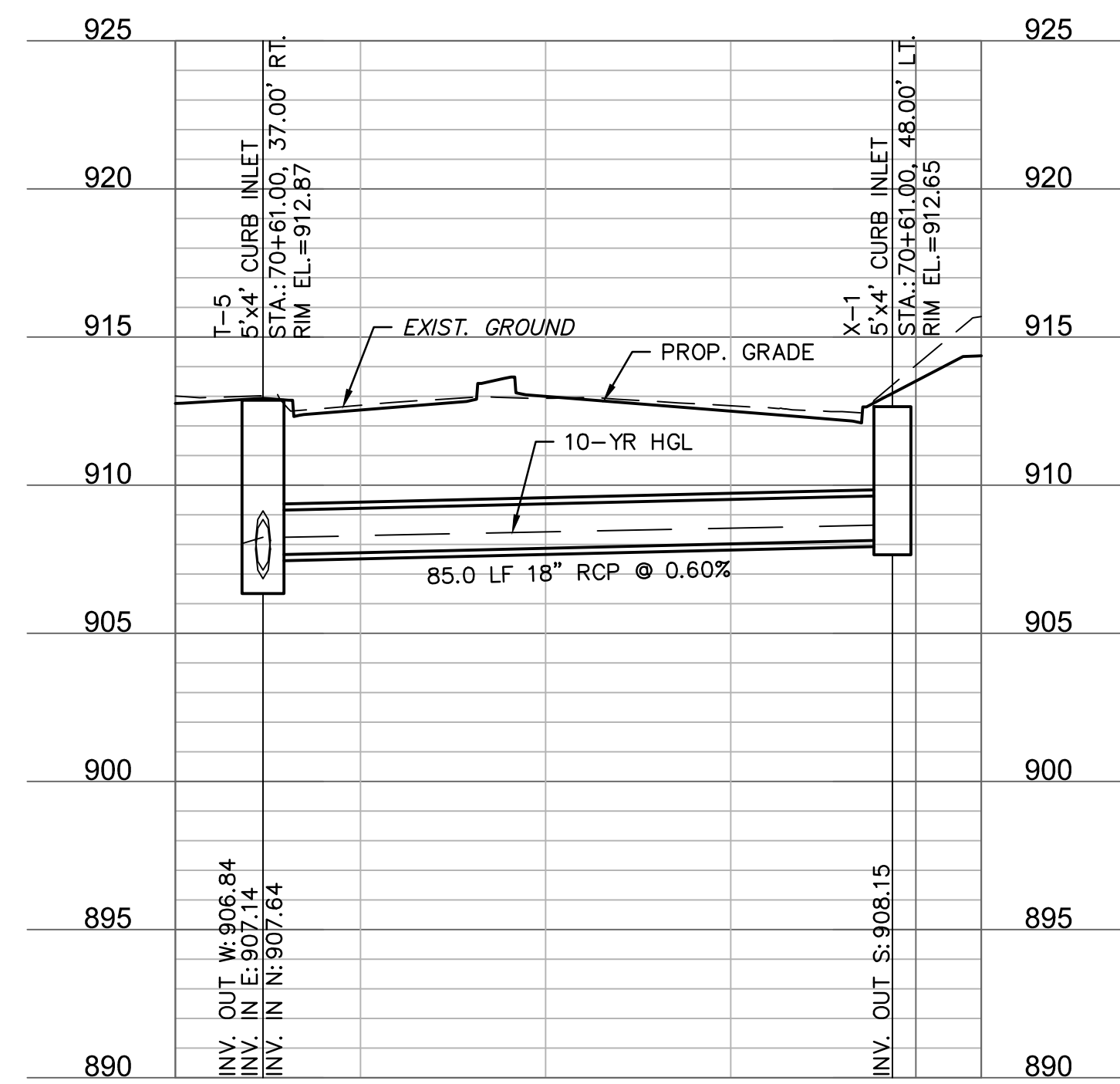
STORM LINE V



STORM LINE W



STORM LINE X



PRELIMINARY
NOT FOR CONSTRUCTION

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

STORM SEWER PROFILES
23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: PBM
 project no.: 020-2348
 drawing no.: 1_STM01_0202348
 date: 12-18-2020

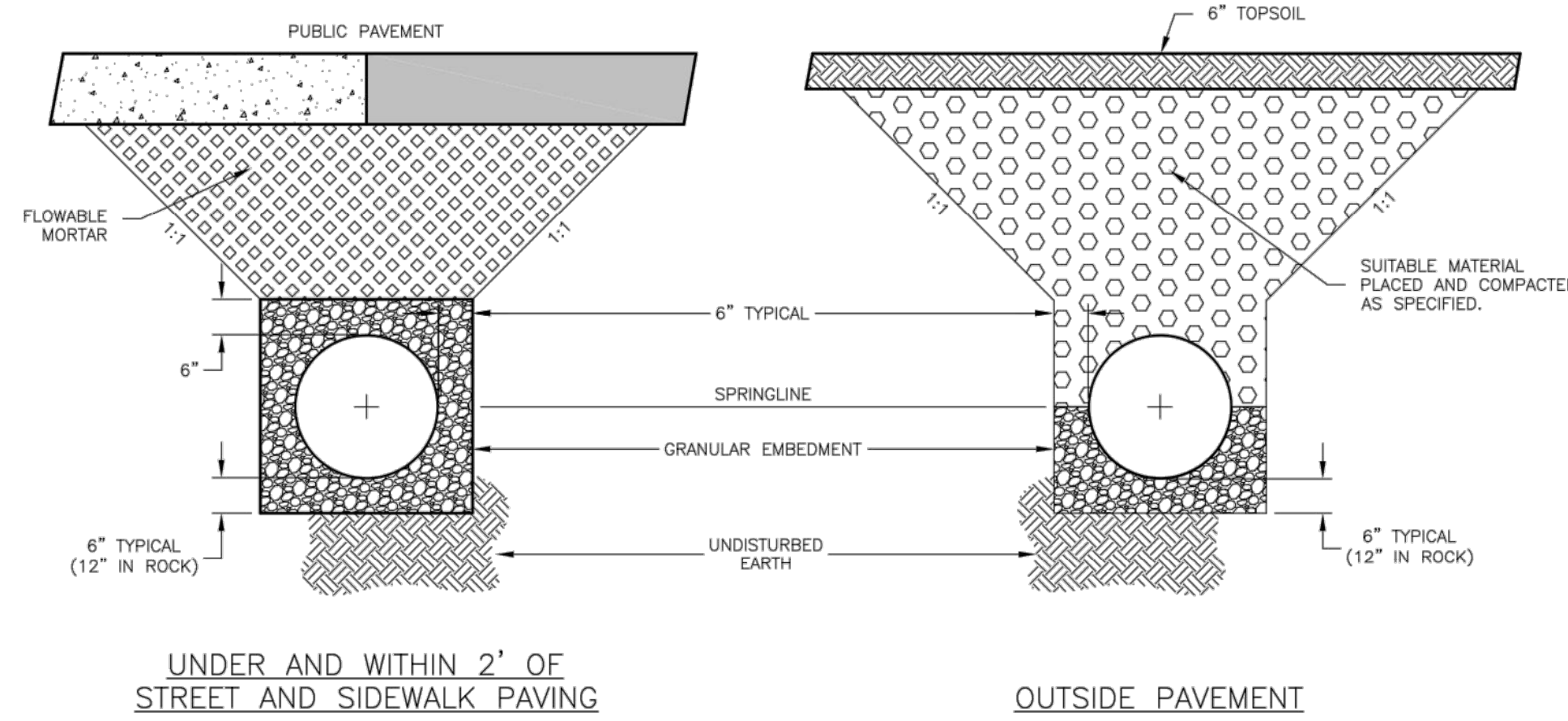
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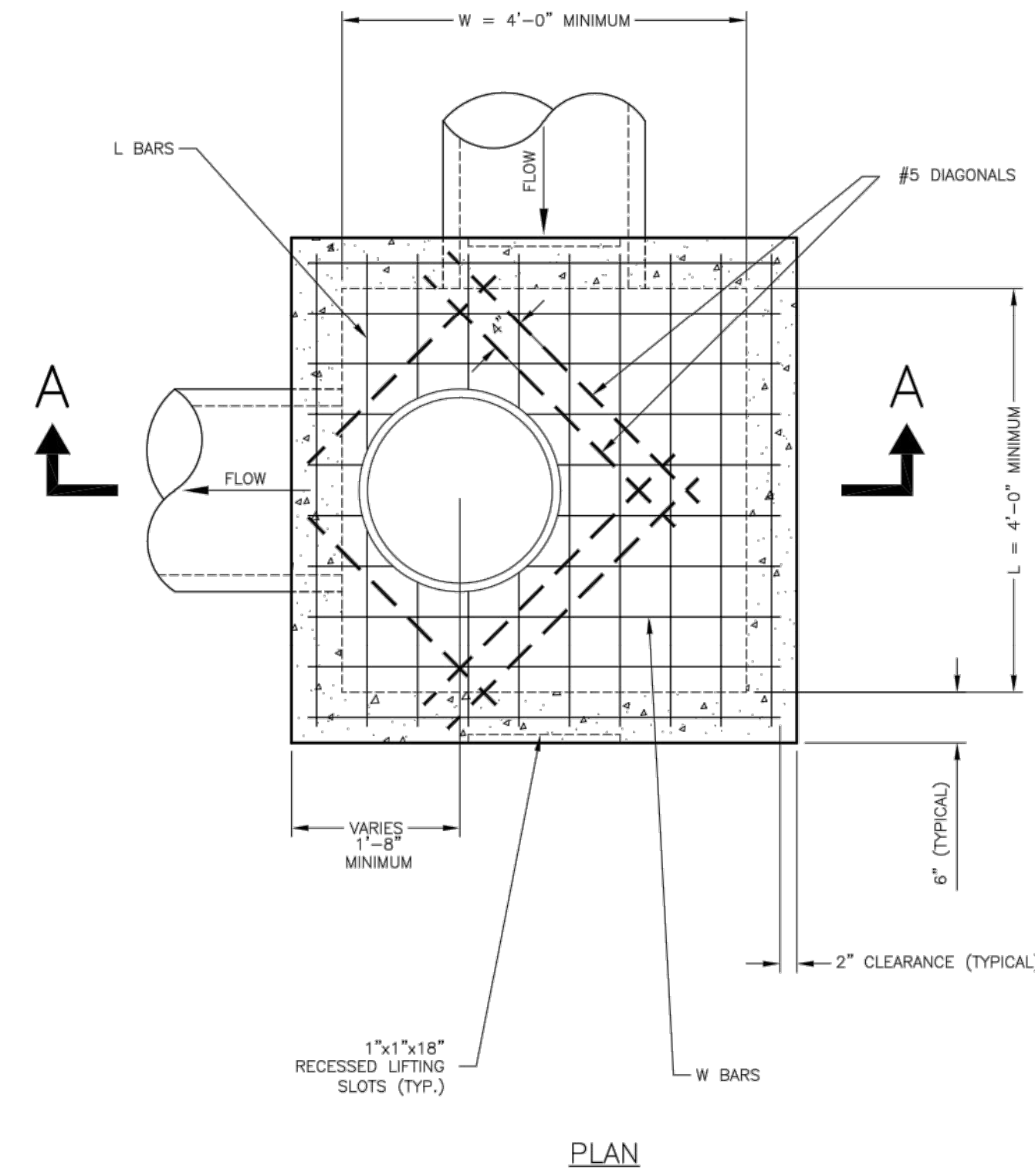
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JUNCTION BOX GENERAL NOTES

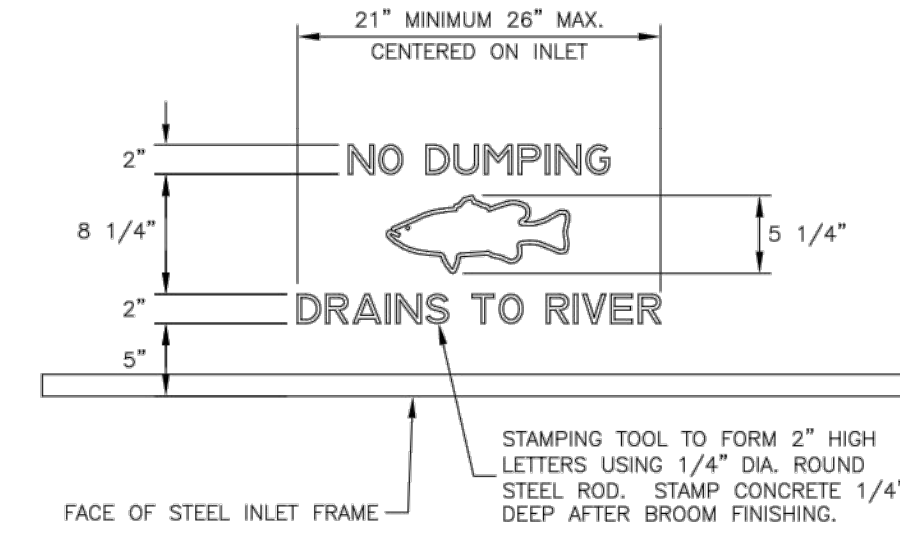
- STANDARD DRAWINGS SHALL APPLY ONLY TO STRUCTURES WITHIN THE FOLLOWING LIMITS:
A. INSIDE PLAN DIMENSIONS SHALL NOT EXCEED 40 SQUARE FEET.
B. WALL HEIGHT SHALL NOT EXCEED 10 VERTICAL FEET.
- THE MINIMUM WIDTH OF ALL STRUCTURES SHALL BE 4 FEET OR AS REQUIRED FOR PIPE CLEARANCE.
- STEPS ARE REQUIRED IN ALL STRUCTURES WITH WALL HEIGHT GREATER THAN 4 FEET.
- FRAMES, LIDS, CASTINGS, STEPS, INVERT, SUBSURFACE DRAINS, PIPE CONNECTIONS AND OTHER ITEMS SHOWN SHALL BE CONSIDERED SUBSIDIARY TO EACH STANDARD STRUCTURE.
- SUBSURFACE DRAINS ARE REQUIRED IN ALL STRUCTURES IN THE PUBLIC RIGHT-OF-WAY WITH WALL HEIGHT GREATER THAN 3 FEET. ONE DRAIN PER WALL SHALL BE INSTALLED ONLY IN WALLS WHICH ARE PERPENDICULAR TO THE STREET CENTERLINE.
- JUNCTION BOXES WITH INSIDE PLAN DIMENSIONS EXCEEDING 25 SQUARE FEET SHALL HAVE TYPE II RING AND COVER. JUNCTION BOXES IN PAVED AREAS SHALL HAVE TYPE II RING AND COVER.
- NO JUNCTION BOX TO BE LOCATED IN PAVEMENT WITHOUT APPROVAL OF THE CITY ENGINEER.
- ALL FLAT PLATE AND RODS SHALL BE M1020 MERCHANT QUALITY OR A36 HOT ROLLED STEEL.
- ALL WELDING SHALL CONFORM TO THE PROVISIONS OF THE AWS "STRUCTURAL WELDING CODE."
- STAMPING TOOLS SHALL BE APPROVED PRIOR TO USE. A FULL SIZE FABRICATION PATTERN MAY BE OBTAINED FROM THE MUNICIPAL SERVICES AND OPERATIONS DEPARTMENT. FOR CAST-IN-PLACE INLETS, A STAMPING TOOL MAY BE BORROWED FROM THE DEPARTMENT FOR AN APPROVED SCHEDULE.
- ALL DIMENSIONS AND SIDE SLOPES SHOWN WITHIN THE "TYPICAL TRENCH SECTION DETAILS" ARE TYPICAL. ANY DEVIATION FROM THESE DIMENSIONS MUST BE APPROVED BY THE PROJECT ENGINEER PRIOR TO BEGINNING THE TRENCHING WORK, OR AS SOON AS PRACTICABLE.
- FLOWABLE FILL QUANTITY IS CALCULATED BASED ON A TYPICAL TRENCH SIDE SLOPE OF 1:1. A SIDE SLOPE FLATTER THAN 1:1 (IF REQUIRED TO ENSURE STABILITY AND SAFETY OF THE TRENCHES) MUST BE APPROVED BY THE PROJECT ENGINEER IN THE FIELD PRIOR TO BEGINNING EXCAVATION FOR TRENCHES, OR AS SOON AS PRACTICABLE, THE INTENT IS TO KEEP THE FLOWABLE FILL QUANTITY TO A MINIMUM.
- FLOWABLE FILL SHALL BE PLACED TO BOTTOM OF THE PAVEMENT, STABILIZED BASE, OR GRANULAR BASE AS DIRECTED BY ENGINEER.
- CONCRETE FOR INVERTS AND COLLARS SHALL MEET CITY SPECIFICATIONS SECTION 2000 - CONCRETE



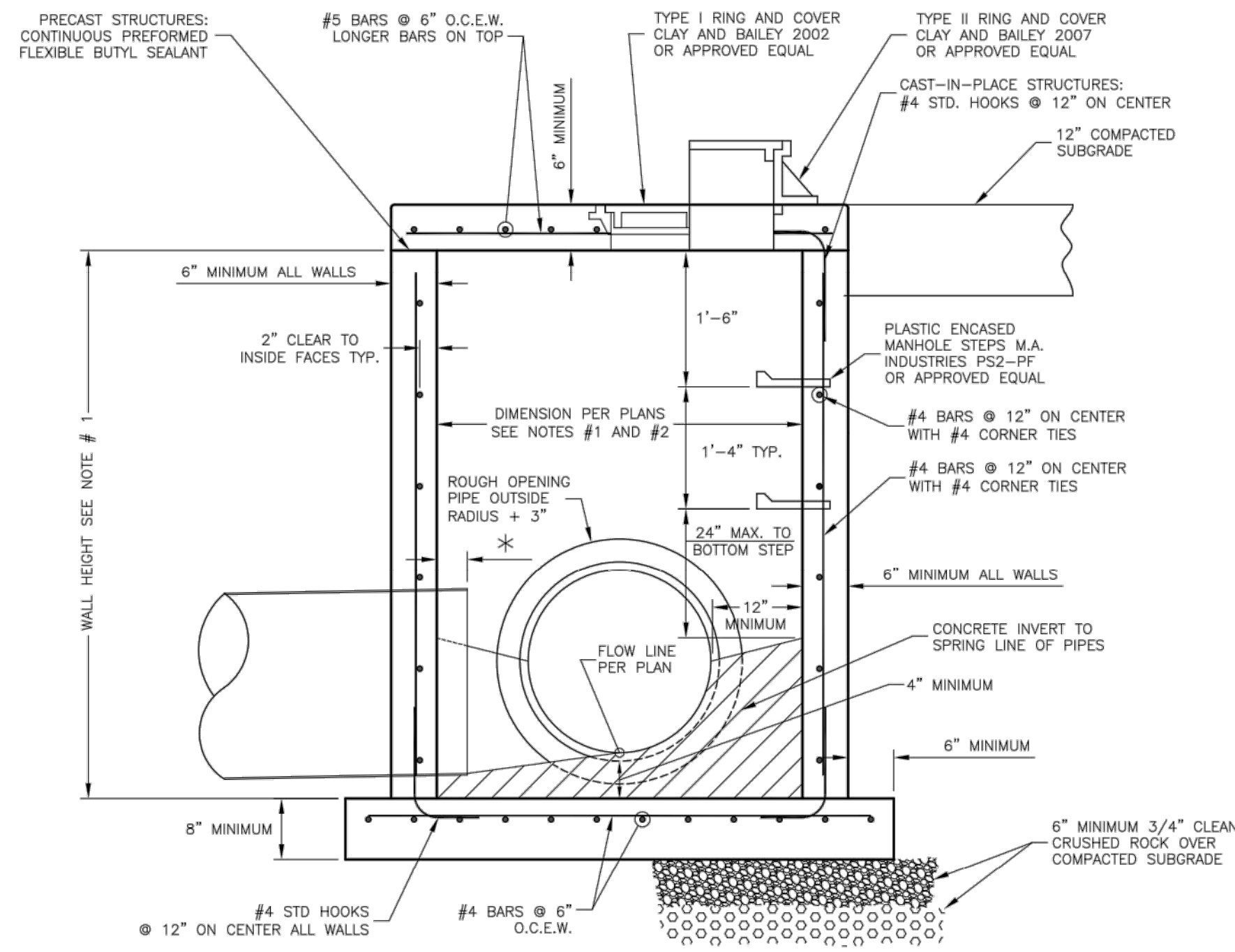
TYPICAL TRENCH SECTIONS



PLAN



JUNCTION BOX STAMP



TYPICAL SECTION A-A

STANDARD JUNCTION BOX

2020 EDITION

SHEET ____ OF ____

DATE	BY	REVISION
03-01-20	LJM	REPLACES ALL PREVIOUS VERSIONS OF STORM SEWER JUNCTION BOX DETAILS
07-01-19	LJM	UPDATED CITY MANAGER



STANDARD DETAILS FOR
STORM SEWER JUNCTION BOXES

DAVID P. CRONIN CITY ENGINEER
CRAIG S. OWENS CITY MANAGER

STORM SEWER DETAILS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

2021

REV. NO.	DATE	REVISIONS DESCRIPTION

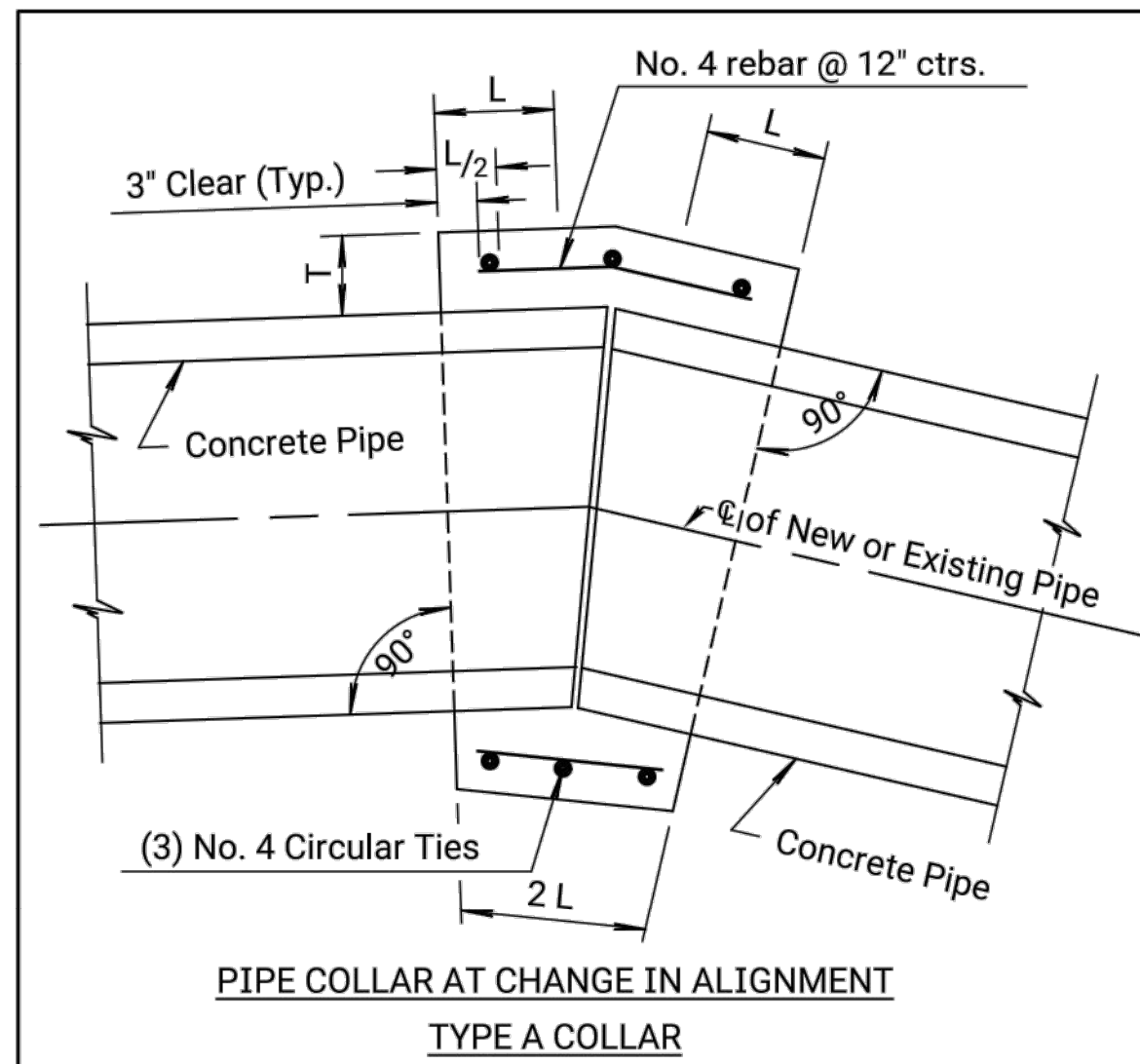
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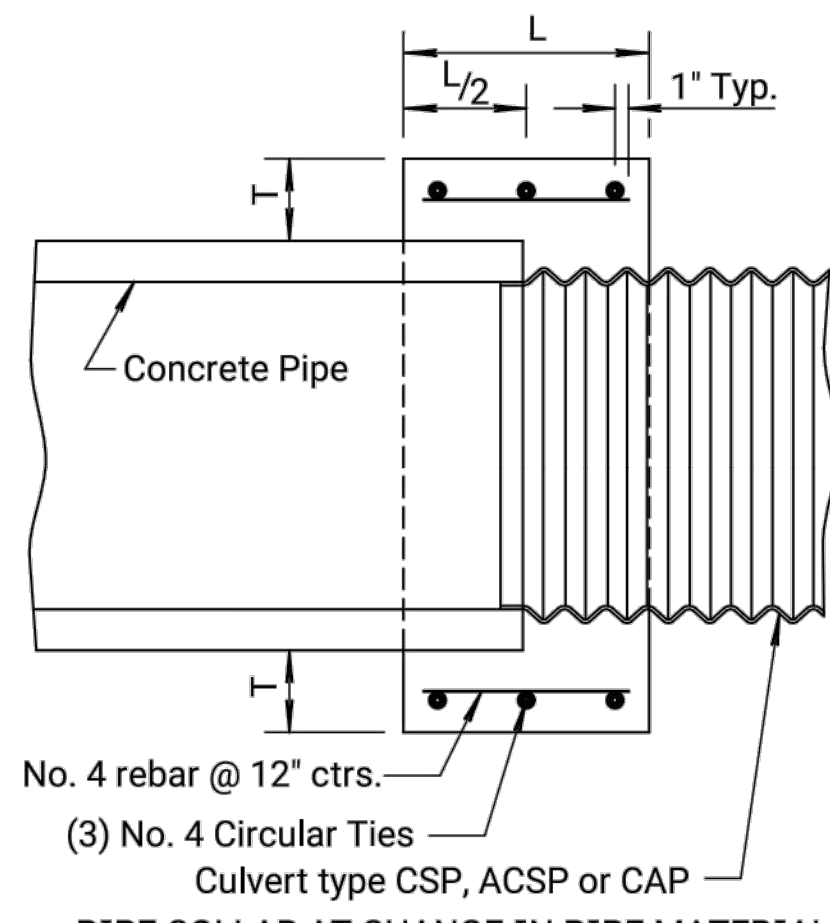
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 USER: ourbonenk

Plotted 29-MAR-2018 13:00
 Drawn By : arcockers
 File : working_rdb668.dgn



PIPE COLLAR AT CHANGE IN ALIGNMENT
 TYPE A COLLAR



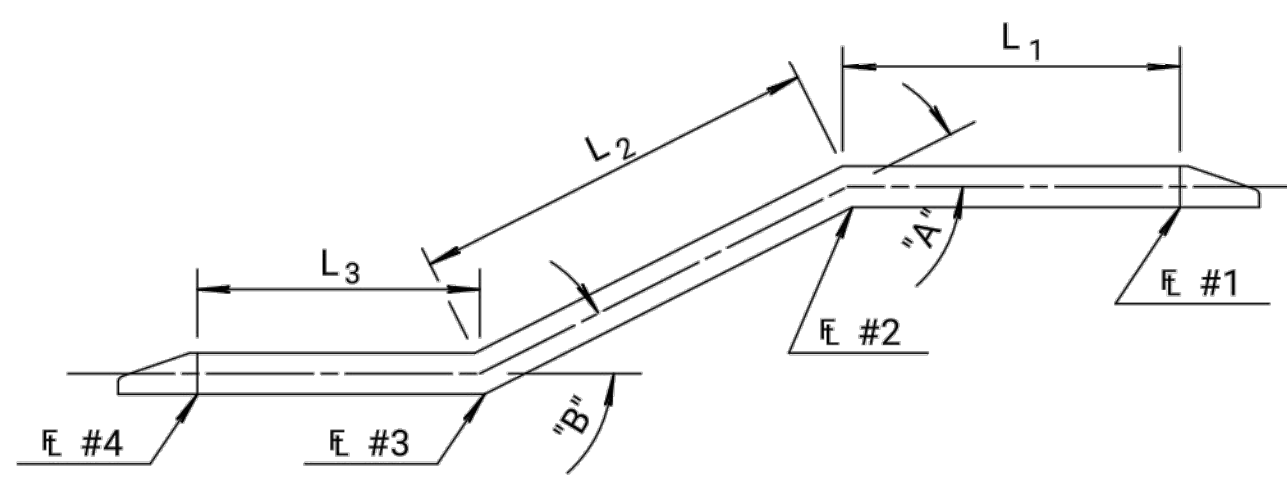
PIPE COLLAR AT CHANGE IN PIPE MATERIAL
 TYPE B COLLAR

CONCRETE PIPE COLLAR	PIPE DIA.	L	T
	18"	1'-0"	6"
	24"	1'-0"	6"
	36"	1'-6"	8"
	48"	1'-6"	10"
	60"	1'-9"	11"

General Notes:

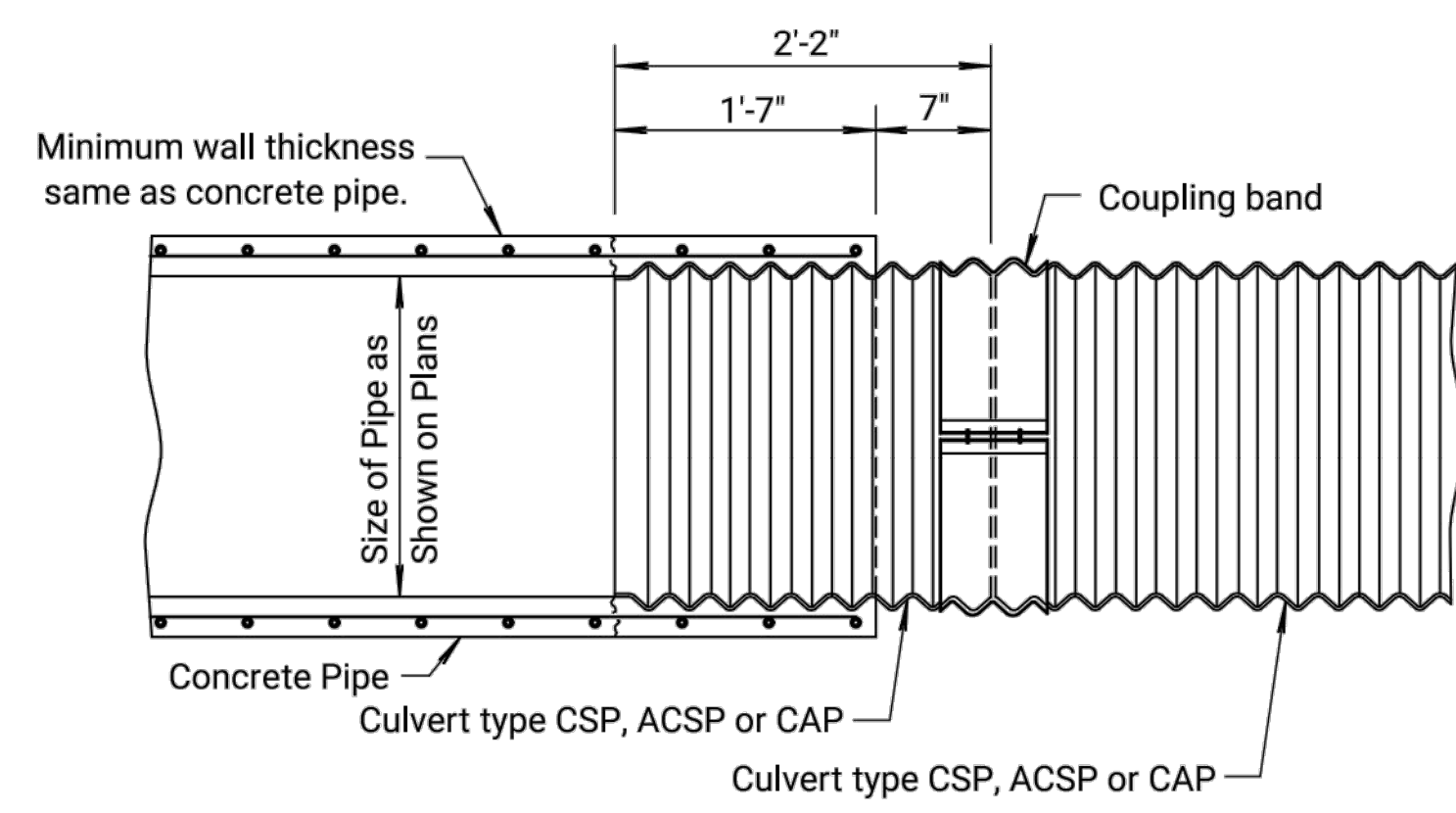
- Pipe collar shall be used to join pipes of different diameters or materials or where change in alignment or grade exceeds that allowed for ordinary joints.
- All concrete shall be Concrete Grade 3.0. All reinforcing steel shall be Grade 60 and shall have a minimum of 2" of cover.
- The diameter of the circular ties shall be the outside diameter of the larger pipe plus "T".
- The maximum allowable distance between the ends of the pipes at any point is 2".
- All labor, materials and incidentals required to construct the pipe collar Type A, B or C shall not be paid for directly but shall be subsidiary to the individual pipe bid items.
- Aluminum or aluminized pipes or end sections shall be coated with an asphaltic paint when in contact with fresh concrete in accordance with the Standard Specifications.
- Pipe ends shall be trimmed such that the maximum distance between pipes at any point is 2".

PIPE COLLARS



Sketch Along Centerline of CRP (CMP)
 Broken-Back

SUMMARY OF BROKEN BACK PIPES											
STATION	SIZE	FLOW LINES				LENGTH			ANGLES		REMARKS
		#1	#2	#3	#4	L1	L2	L3	A	B	

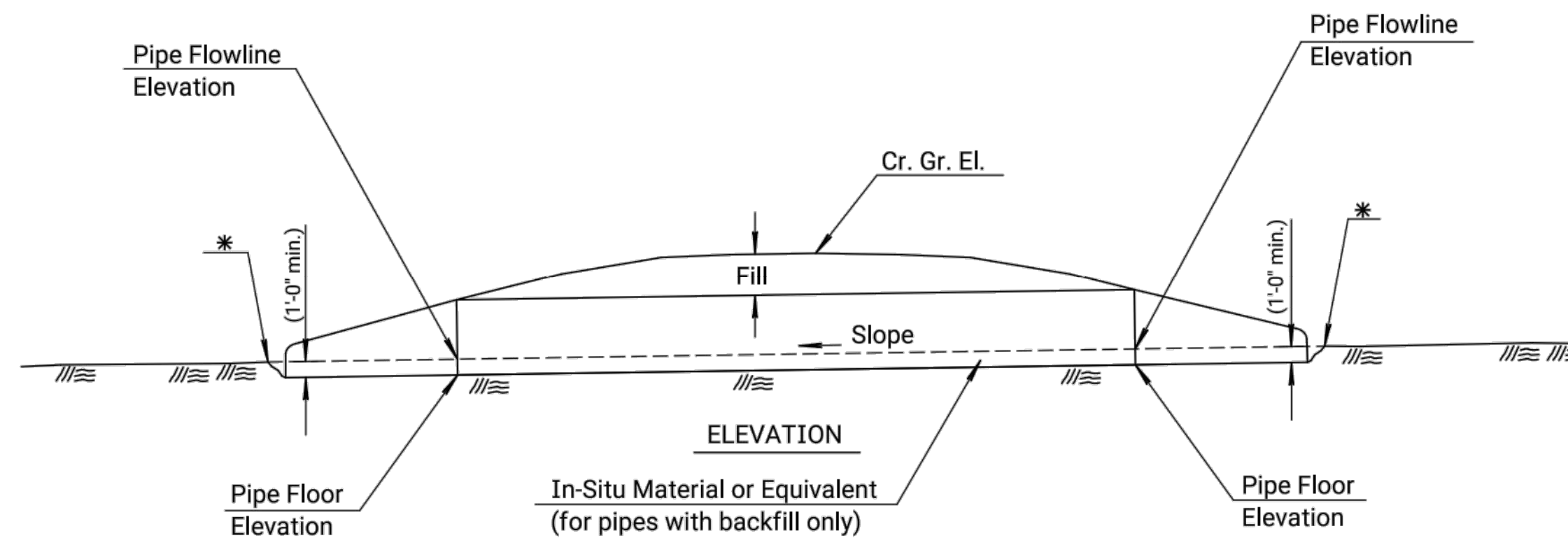


(CONCRETE PIPE CONNECTED TO CORRUGATED METAL PIPE)
 TYPE C COLLAR

A section of concrete pipe (6'-0" min.) is cast 1'-7" short with the re-steel protruding. Tack weld the re-steel to the 2'-2" section of CMP and finish casting the remaining 1'-7" of RCP around the CMP. This is an approved connection provided it is fabricated as an integral part of a section of concrete pipe.

GENERAL NOTE

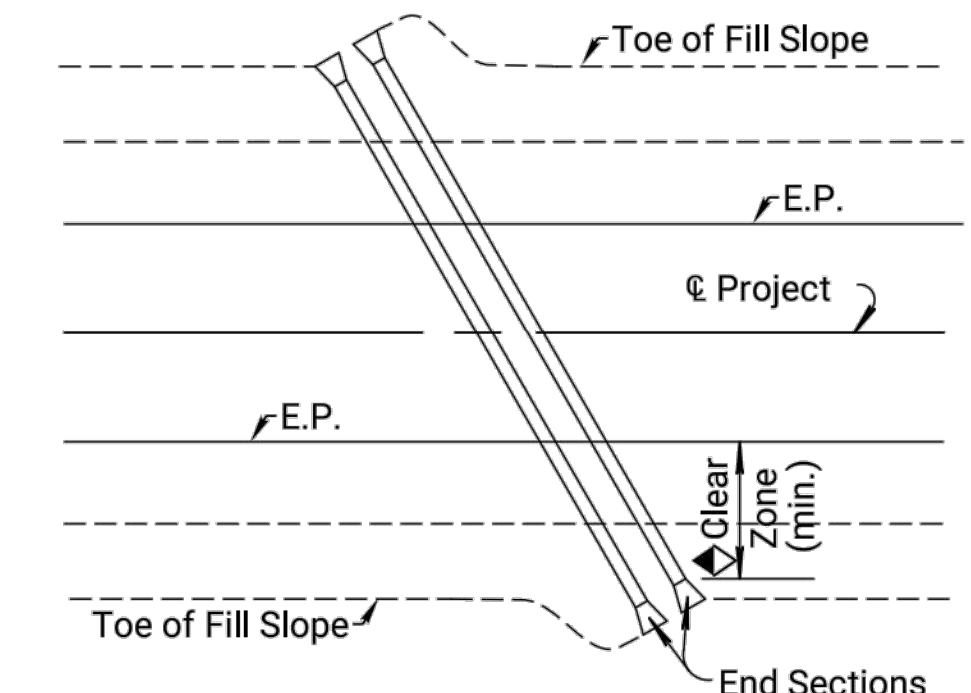
- For pipes where the height or rise is greater than 4'-0" place uncompacted backfill through the pipe, including the end sections, 1'-0" (Min.). Backfill material will be reasonably free of organic material. In-situ material may be used for backfill as approved by the Engineer.
- For pipes where the height or rise is less than or equal to 4'-0" install the pipe such that embedment will occur through natural sedimentation. See Pipe Embedment detail shown on this sheet.
- Work and material for embedding pipes will not be paid for directly, but will be subsidiary to the other pipe bid items in the contract.



PIPE EMBEDMENT

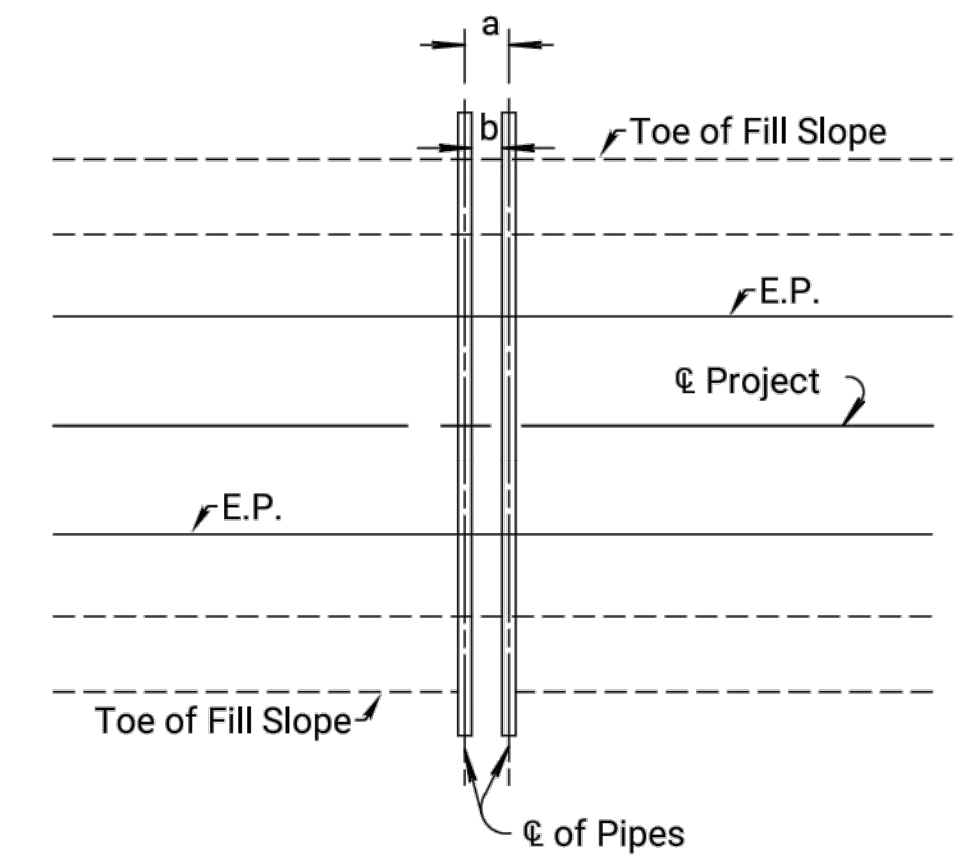
*Natural channel or ditch flowline elevation. See profile sheets and cross sections for details.

STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS				



PLACEMENT OF ROTATED PIPES
 RELATIVE TO FILL SLOPE
 AND CLEAR ZONE

Pipe culverts 2'-0" or less in height may terminate within the clear zone with Type I or Type III End Section. Any size pipe may terminate within the clear zone with a Type IV End Section.



- a = Face width of end section + 1'.
 * Face width is equal to the following dimension shown on the end section std. drawing.
 Type I Concrete = D
 Type III Concrete = I
 Type I CM = W + 2A
 Type III CM = G
 Type IV = W + 2A
- b = Pipe diameter or span (3' min.)
 Spacing shall be equal to the larger of dimensions a or b.
 Spacing for three or more pipes shall be determined using a similar method.

MULTIPLE PIPE SPACING

NO.	DATE	REVISIONS	BY	APPD
6	1-21-16	Added Details, Pipe Embedment	T.T.R.	S.W.K.
5	5-17-13	Rev. Dimension, Type B Collar	S.W.K.	J.O.B.
4	4-18-08	Added asphaltic paint note	S.W.K.	J.O.B.
3	1-28-05	Changed Class to Grade concrete	S.W.K.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS
 PIPE CULVERT DETAILS

RD668

FRWA APPROVAL: 3-16-16, APPD: SCOTT W. KING
 DESIGNED: DETAILED: KAHLER QUANTITIES: TRACED
 DESIGN CK: DETAIL CK, RHOADS/QUAN, CK, TRACE CK.

KDOT Graphics Certified 03-12-2018

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REV. NO.	DATE	REVISIONS DESCRIPTION

STORM SEWER DETAILS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

2021

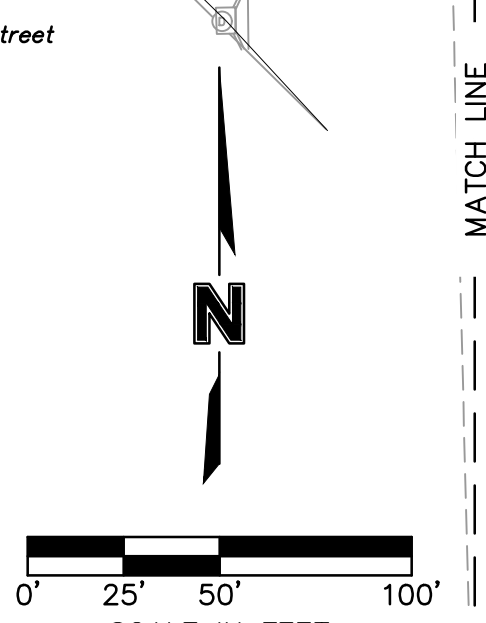
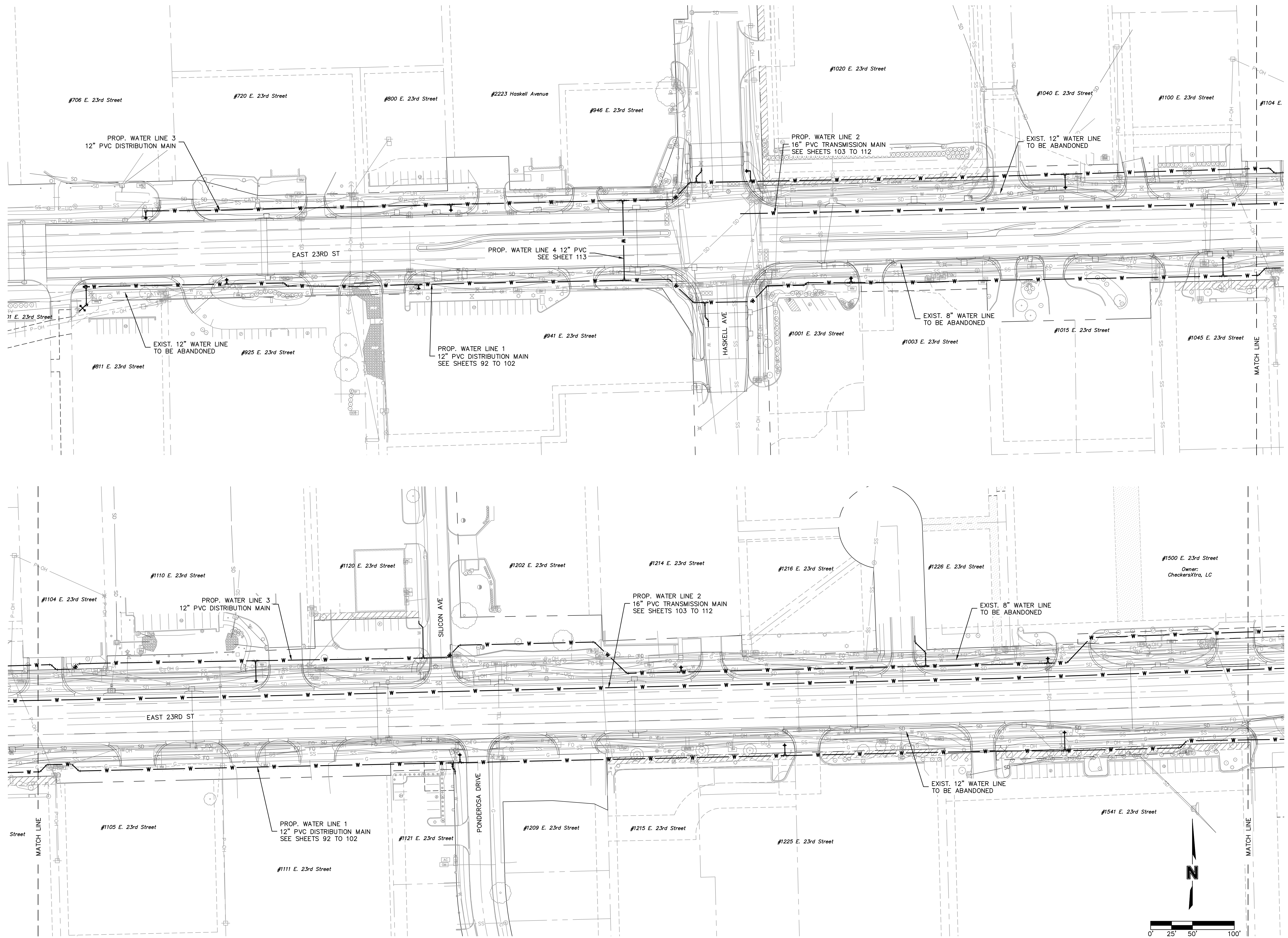
LAWRENCE, KANSAS

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 Overland Park, KS 66213-4750
 TEL 913.381.1170 www.olson.com

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: RBC
 project no.: 020-2348
 drawing no.: T_STMDTL_0202348
 date: 12-18-2020

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 P_PWATR_0202348 T_PSTRM_0202348



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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

WATERLINE GENERAL LAYOUT
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FT EAST OF ANDERSON ROAD
 LAWRENCE, KS

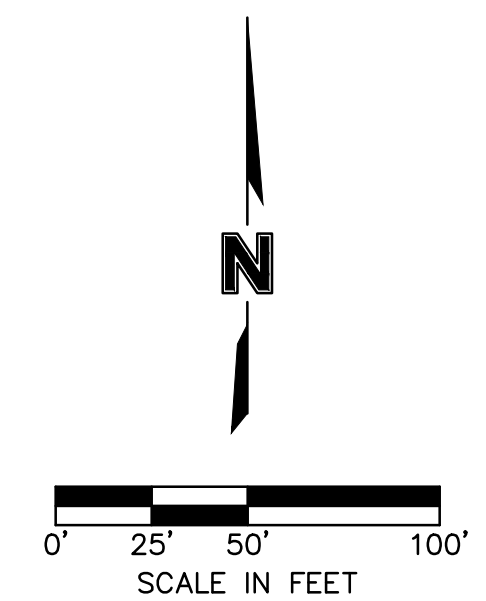
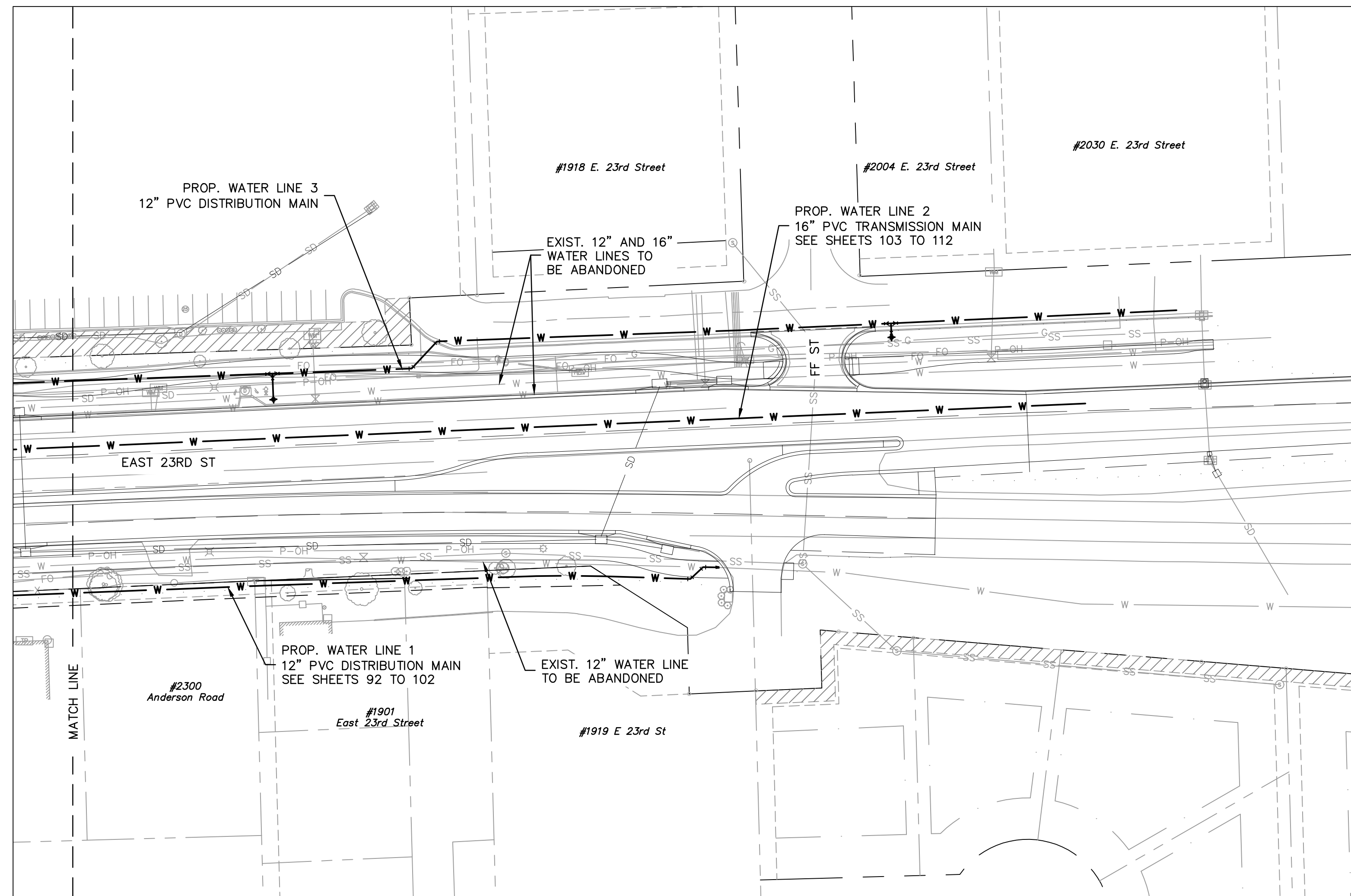
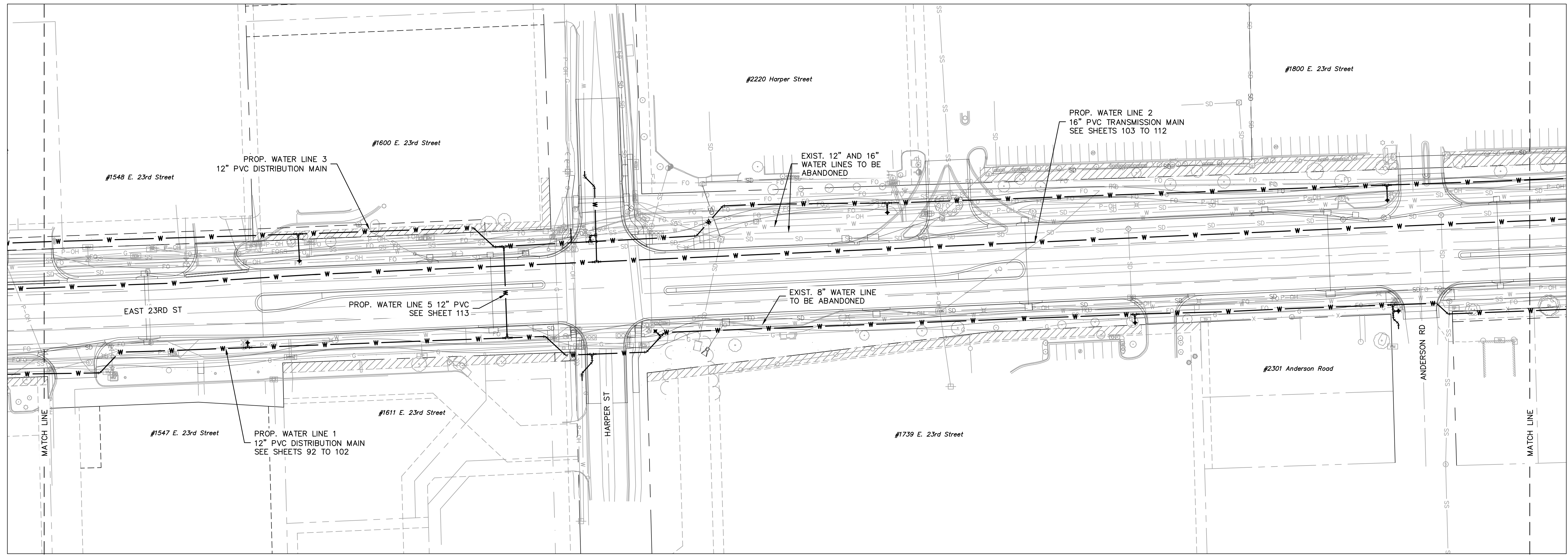
drawn by: AAS
 checked by: BH
 approved by: JH
 QA/QC by: JM
 project no.: 020-2348
 drawing no.: P_SIT01_0202348
 date: 12-18-2020

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 Missouri Certification of Authority #
 130T-Buffington-Street
 North Kansas City, MO 64116
 TEL 816.361.1177
 www.ollson.com

REVISIONS

2020

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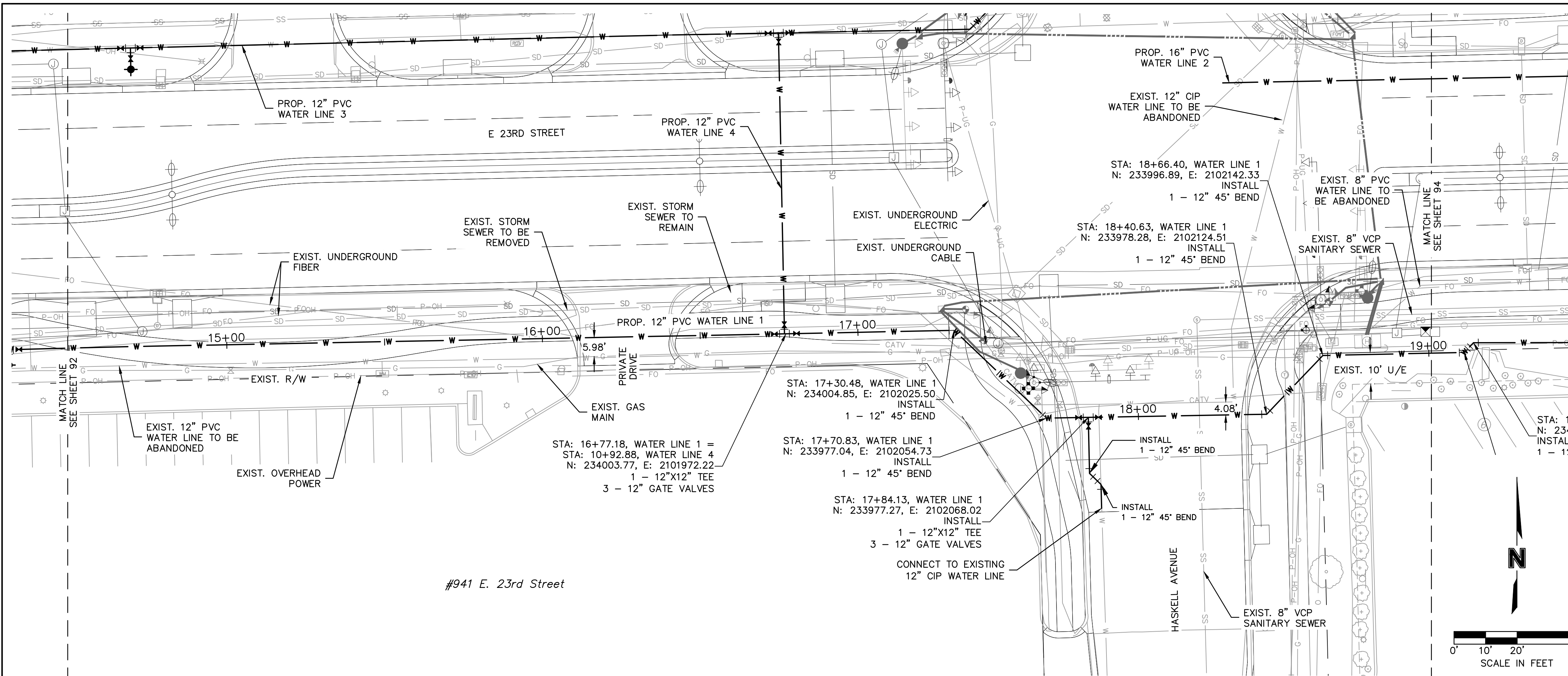
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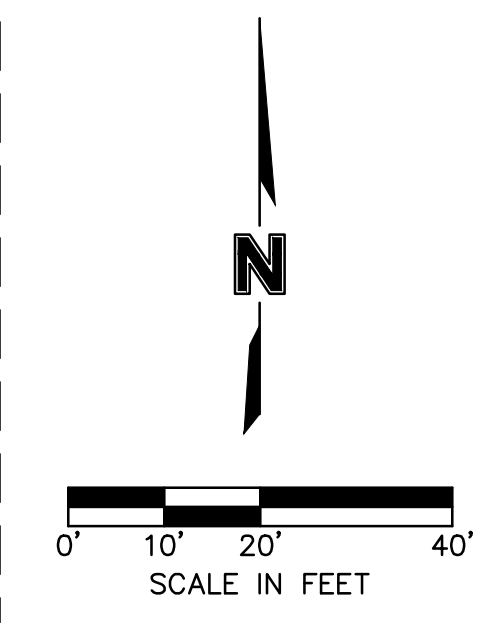
REV. NO.	DATE	REVISIONS DESCRIPTION	BY

WATERLINE GENERAL LAYOUT
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FT EAST OF ANDERSON ROAD
 LAWRENCE, KS
 2020

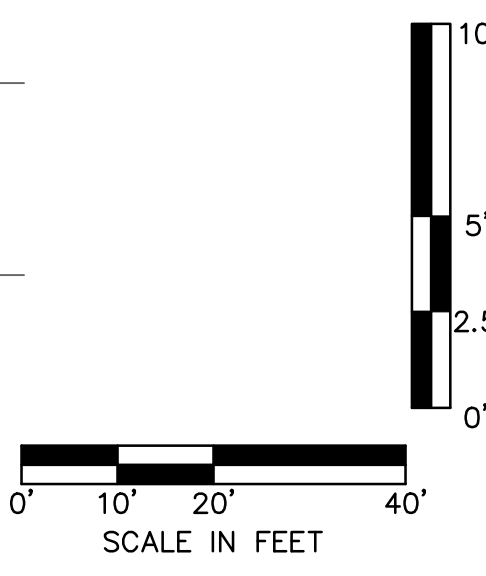
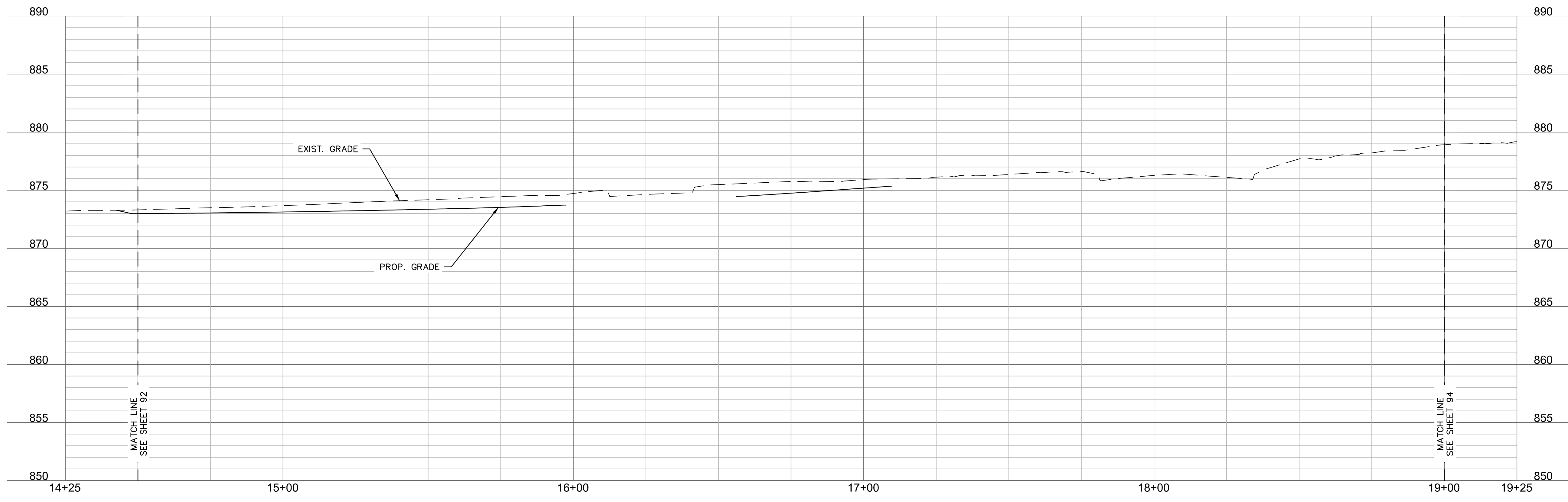
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 Y_BNDY_0202348
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ADDRESS	SIZE	TYPE	INSTALL CURB BOX	RELOCATE METER
941 E 23RD STREET	3/4"	COPPER		



WATERLINE 1



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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

WATERLINE 1 PLAN & PROFILE
23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FT EAST OF ANDERSON ROAD

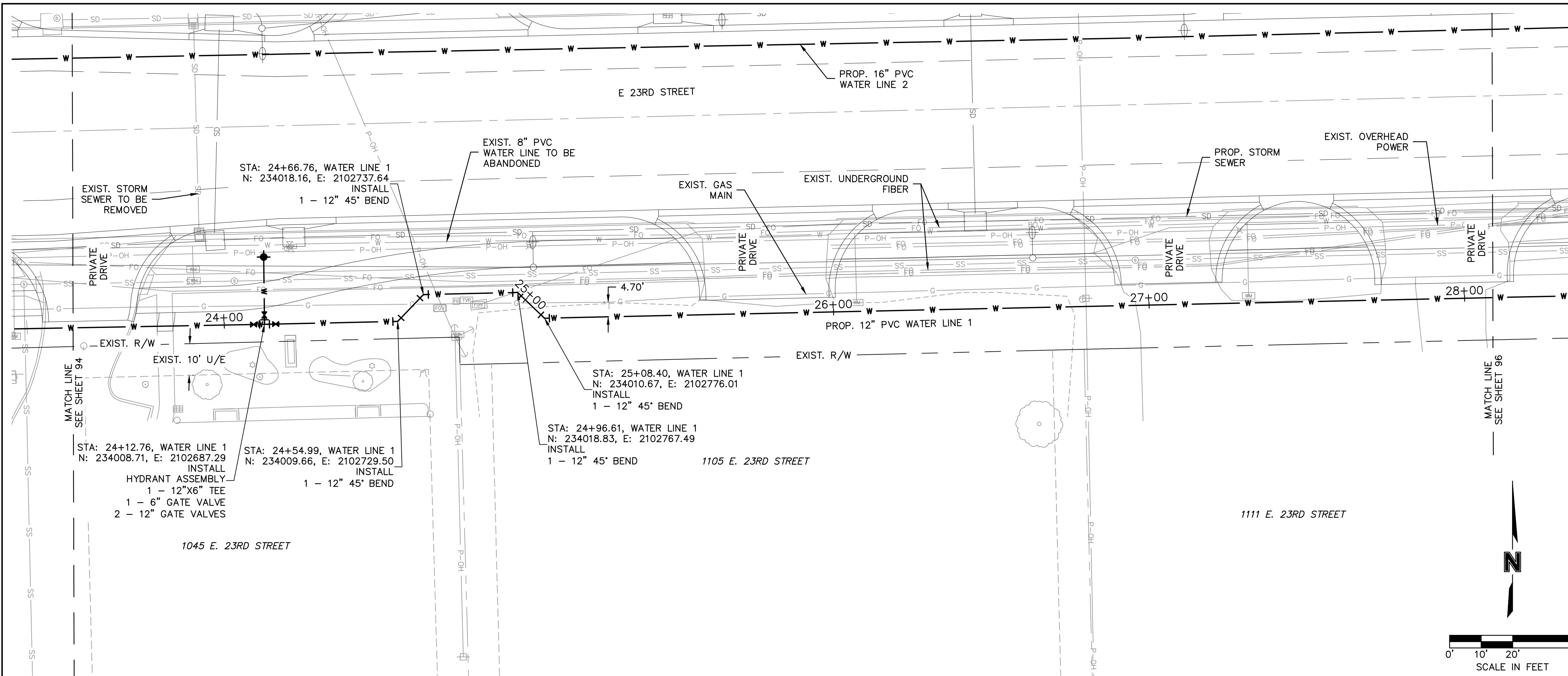
LAWRENCE, KS

drawn by: AAS
checked by: BH
approved by: JH
QA/QC by: JM
project no.: 020-2348
drawing no.: P_WAT01_0202348
date: 12-18-2020

2020

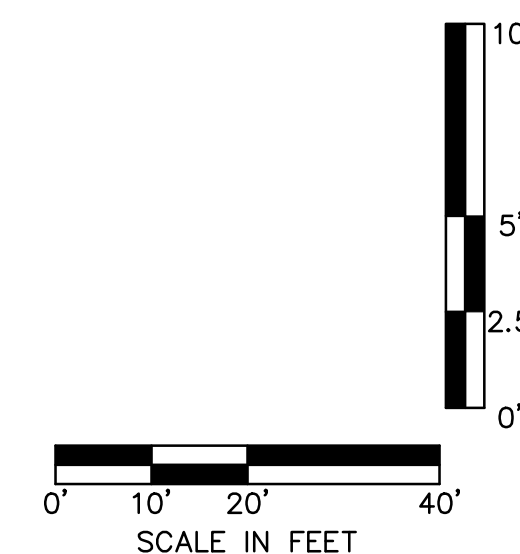
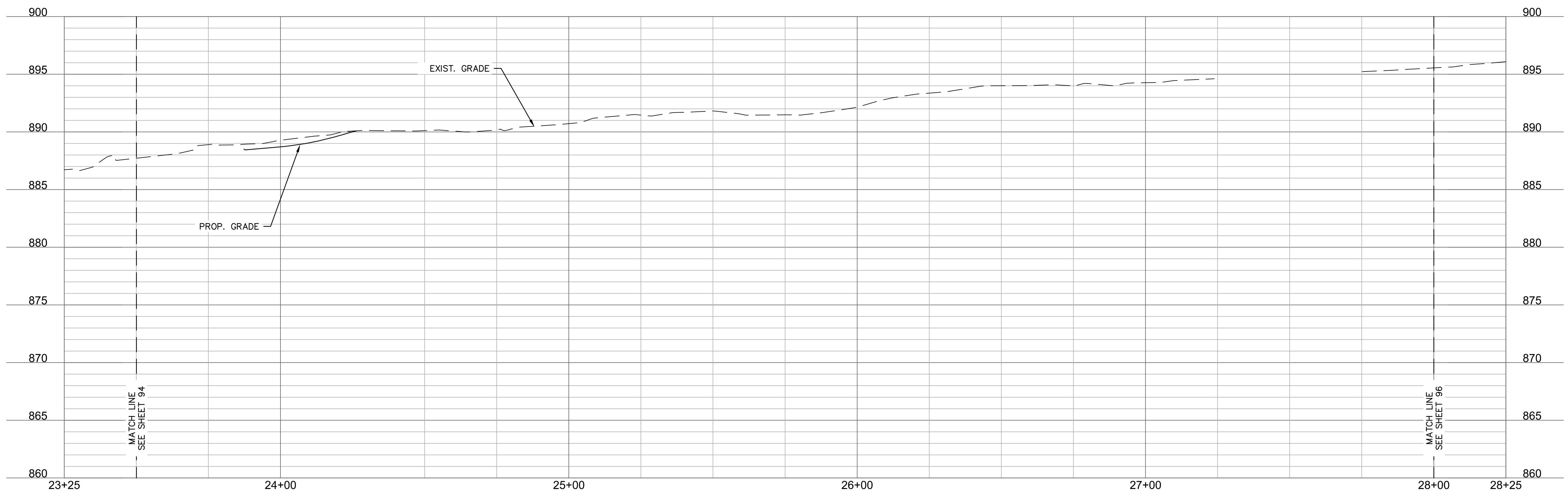
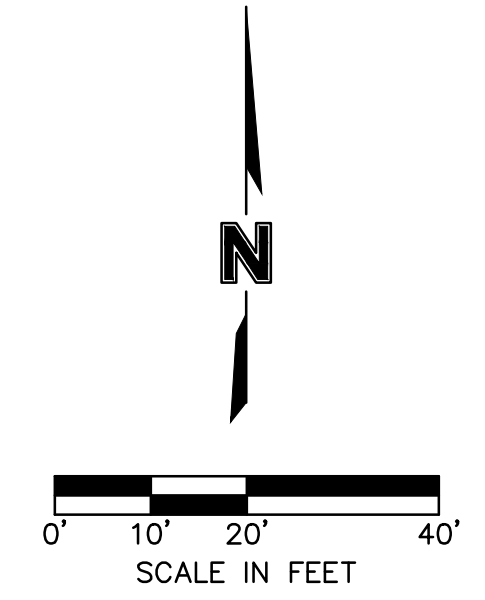
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 F_LGT-PBASE_0202348
 F_PBASE_0202348



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1035 E 23RD STREET	3/4"	COPPER		
1035 E 23RD STREET	3/4"	COPPER		
1035 E 23RD STREET	3/4"	COPPER		
1045 E 23RD STREET	2"	COPPER		
1105 E 23RD STREET	3/4"	COPPER		
1111 E 23RD STREET	3/4"	COPPER		

WATERLINE 1



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WATERLINE 1 PLAN & PROFILE
23RD STREET

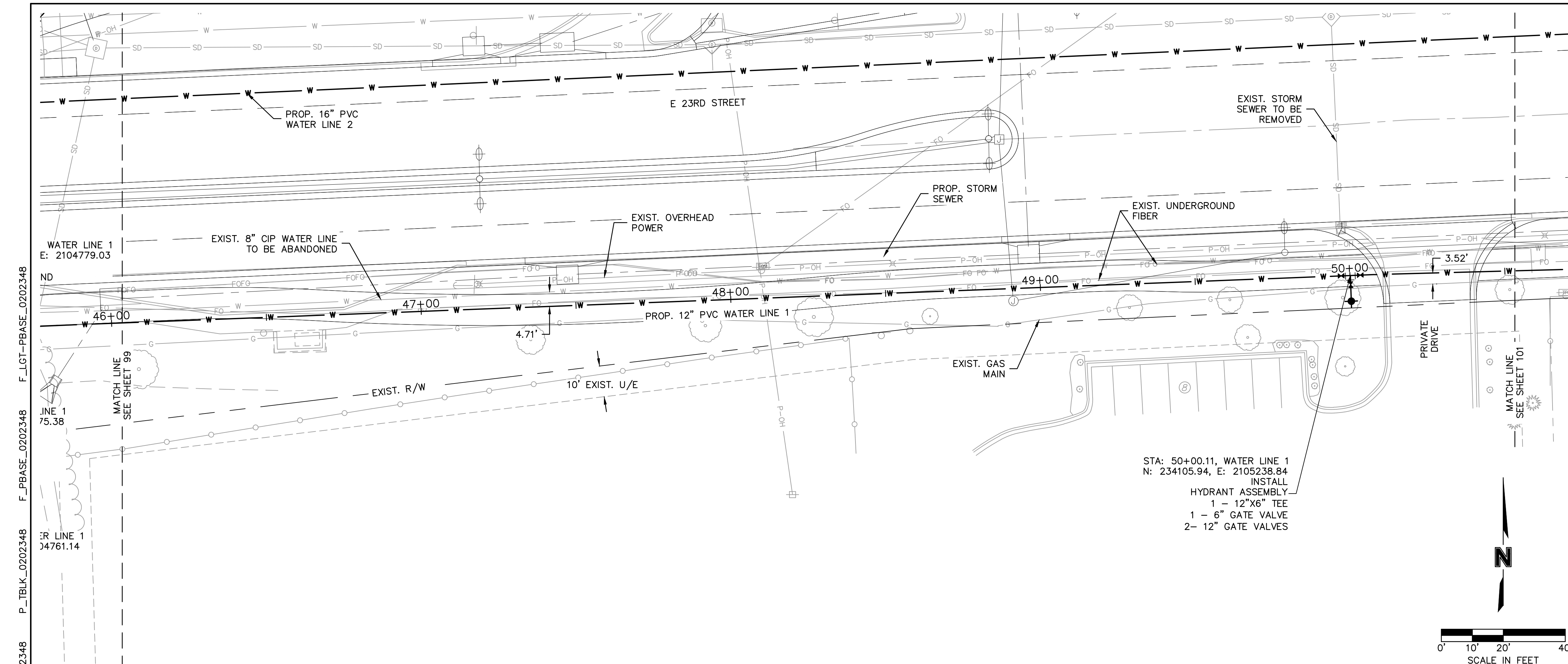
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FT EAST OF ANDERSON ROAD

LAWRENCE, KS

drawn by: AAS
 checked by: BH
 approved by: JH
 QA/QC by: JM
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 drawing no.: P_WAT02_0202348
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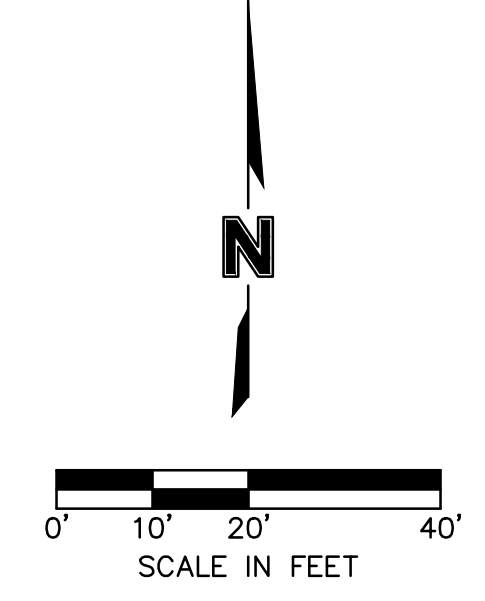
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SHEET
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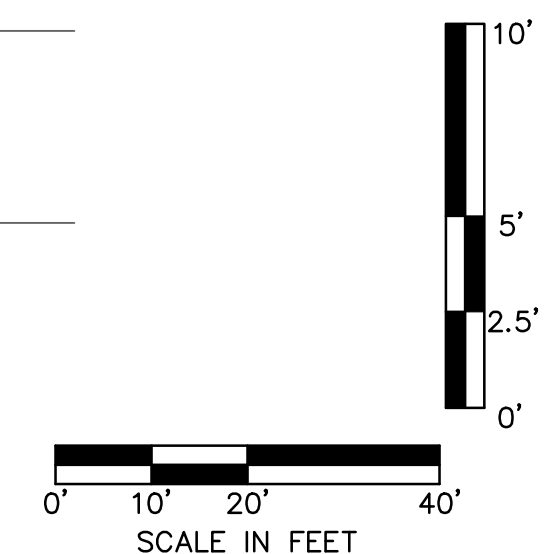
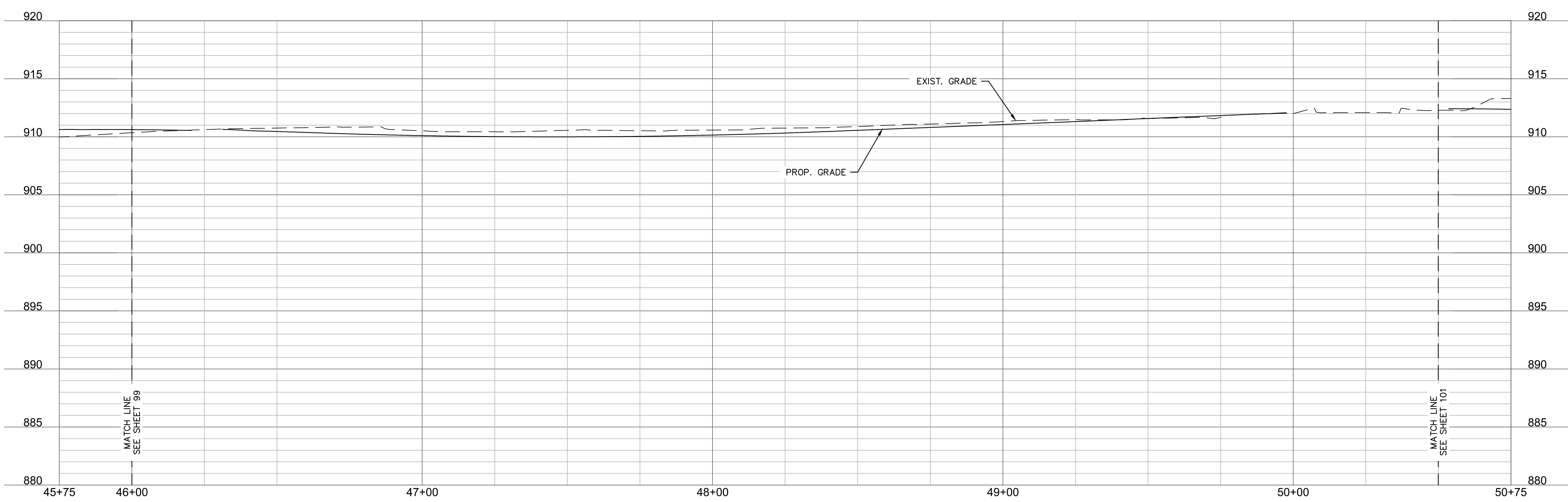


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 INSTALL
 HYDRANT ASSEMBLY
 1 - 12"x6" TEE
 1 - 6" GATE VALVE
 2 - 12" GATE VALVES



WATERLINE 1



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 F_PBASE_0202348

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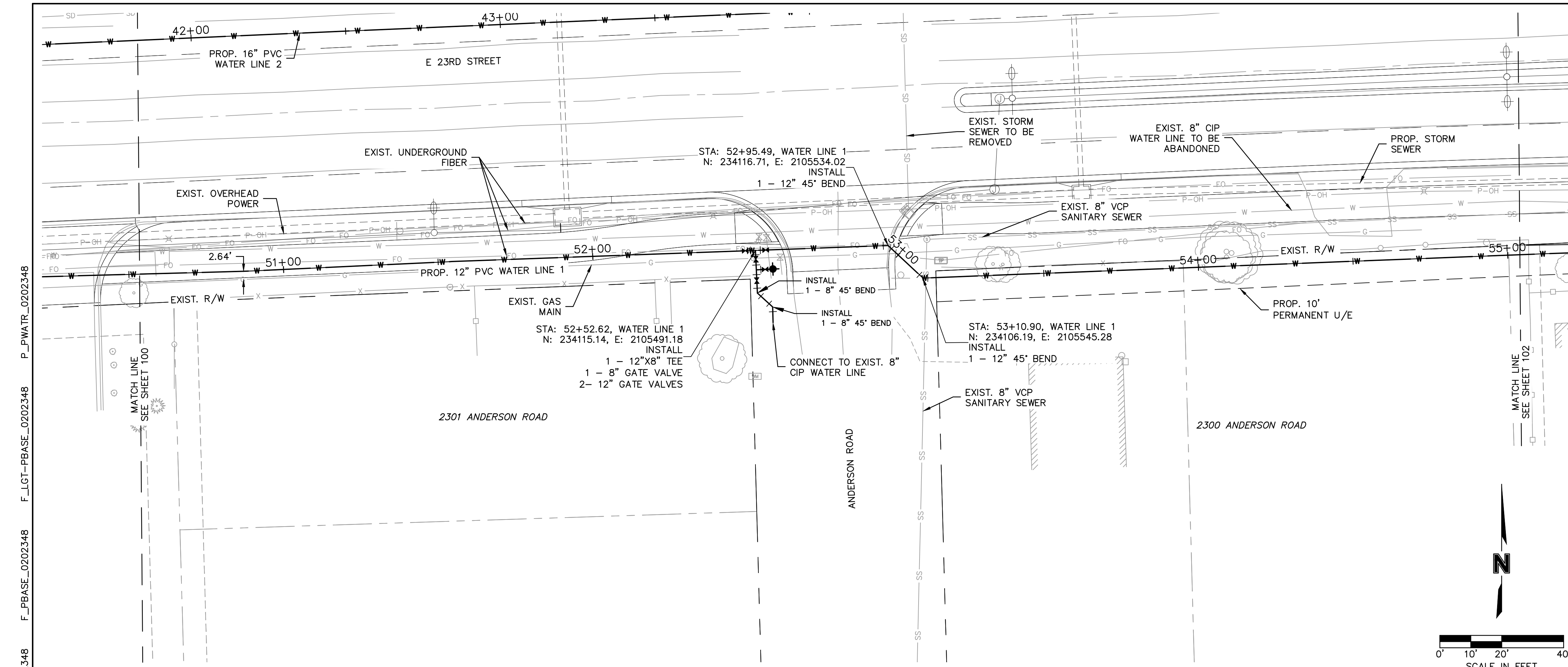
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 23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FT EAST OF ANDERSON ROAD

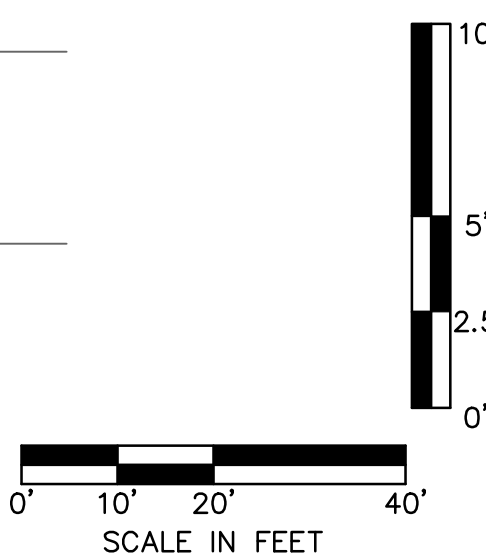
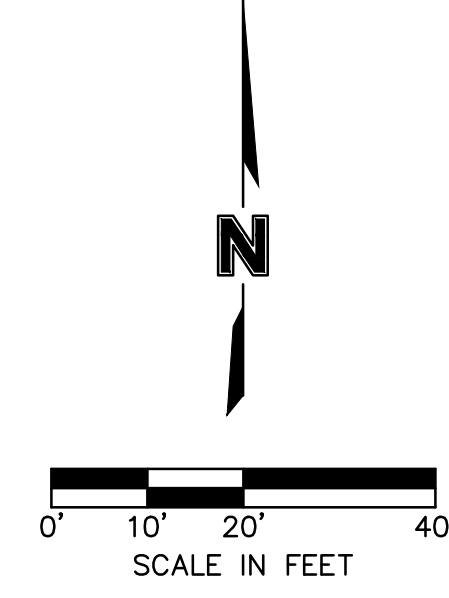
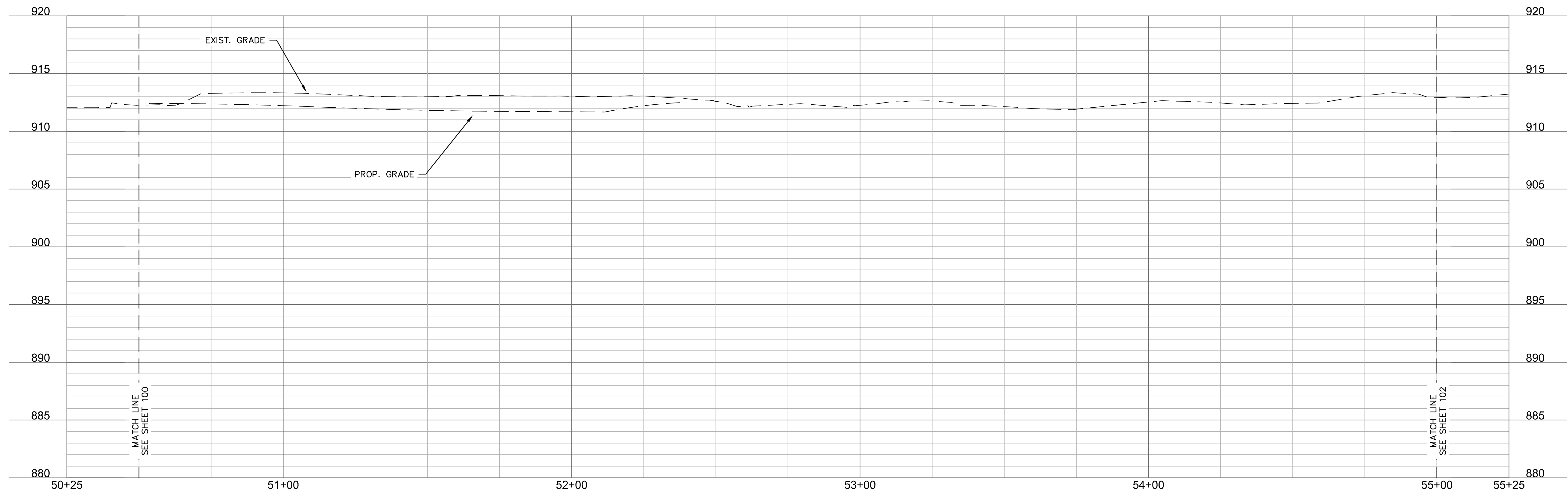
LAWRENCE, KS

2020

drawn by: AAS
 checked by: BH
 approved by: JH
 QA/QC by: JM
 project no.: 020-2348
 drawing no.: P_WAT03_0202348
 date: 12-18-2020



WATERLINE 1



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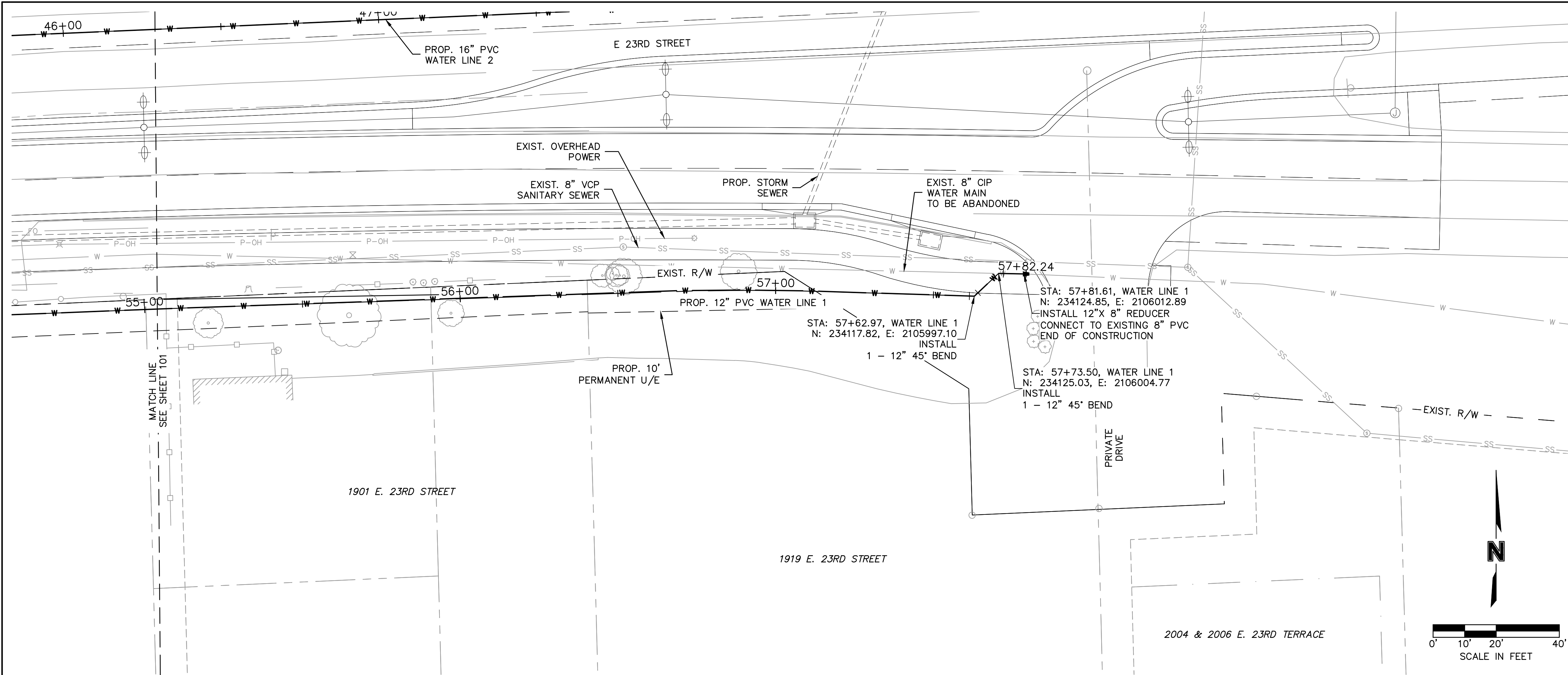
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 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FT EAST OF ANDERSON ROAD
 LAWRENCE, KS
 2020

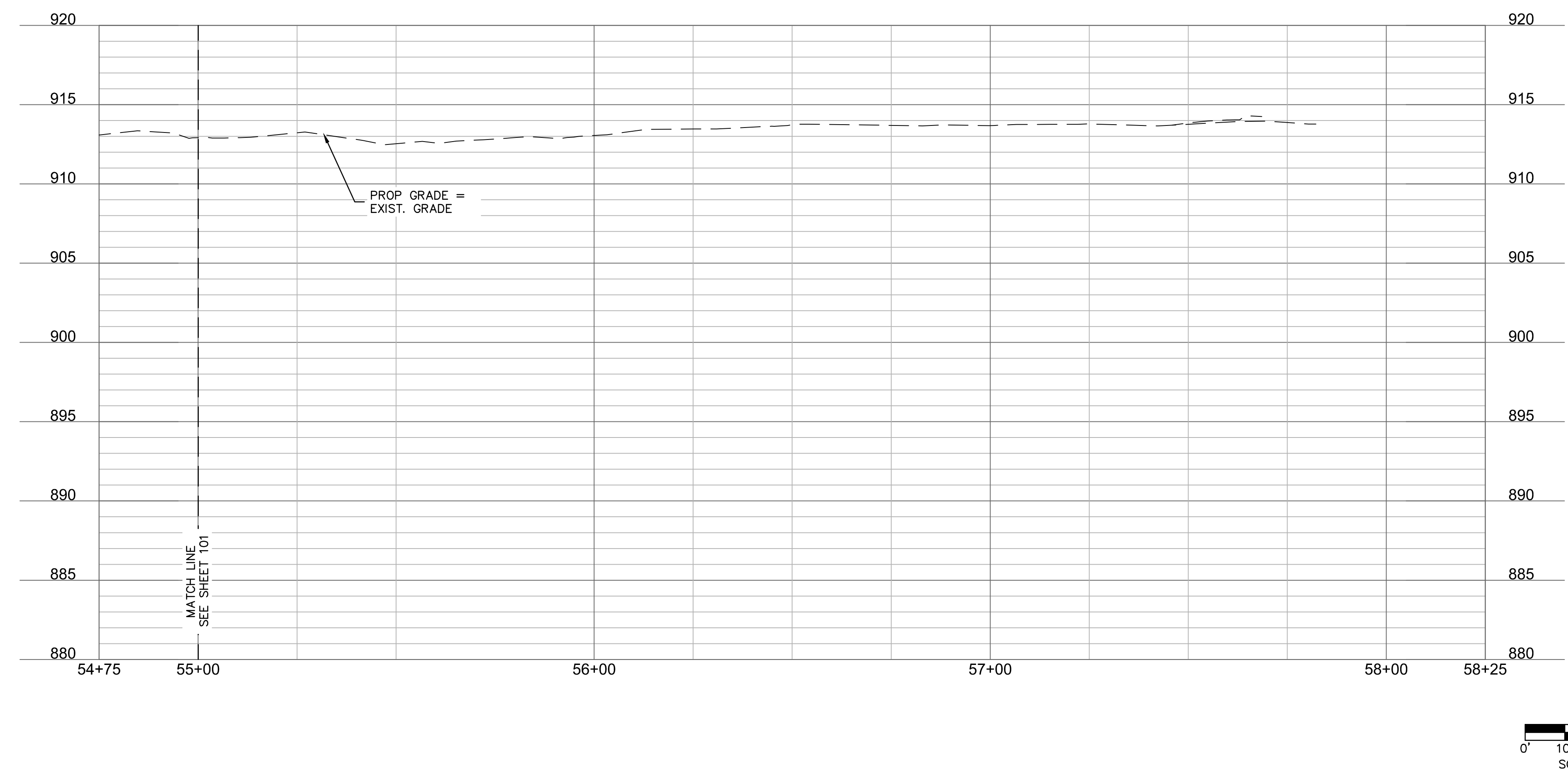
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ADDRESS	SIZE	TYPE	INSTALL CURB BOX	RELOCATE METER
1901 E 23RD STREET A	2"	PVC		
1919 E 23RD STREET	3/4"	COPPER		

WATERLINE 1



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WATERLINE 1 PLAN & PROFILE
23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FT EAST OF ANDERSON ROAD

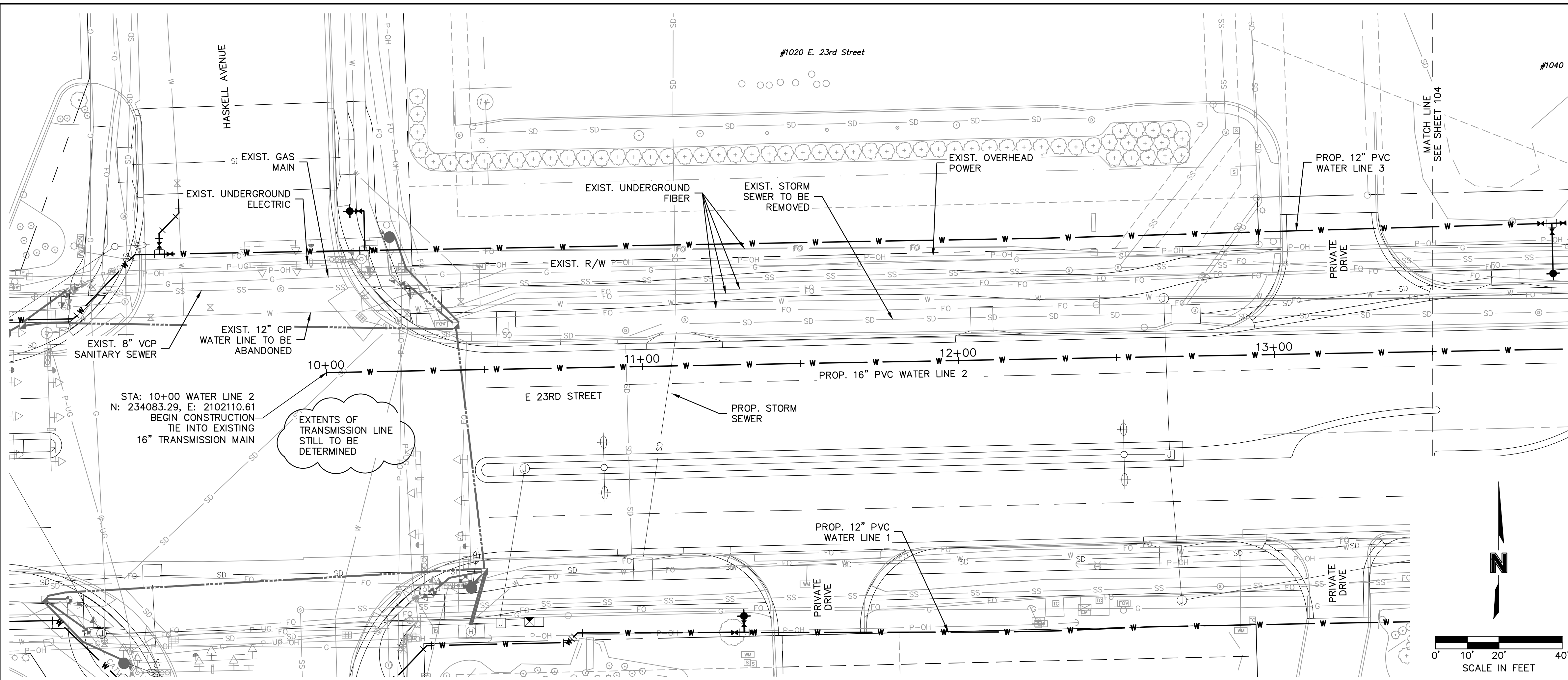
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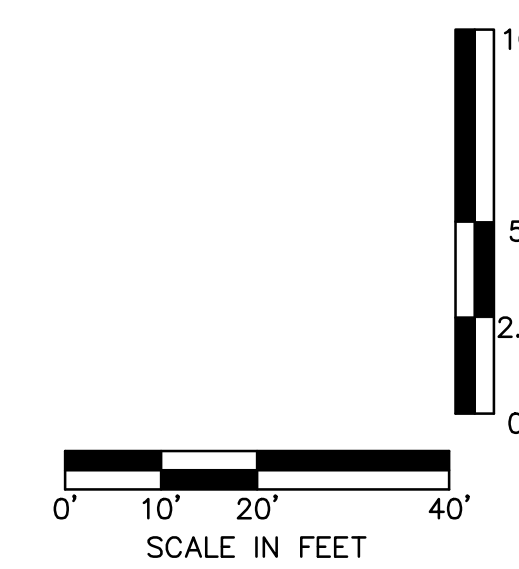
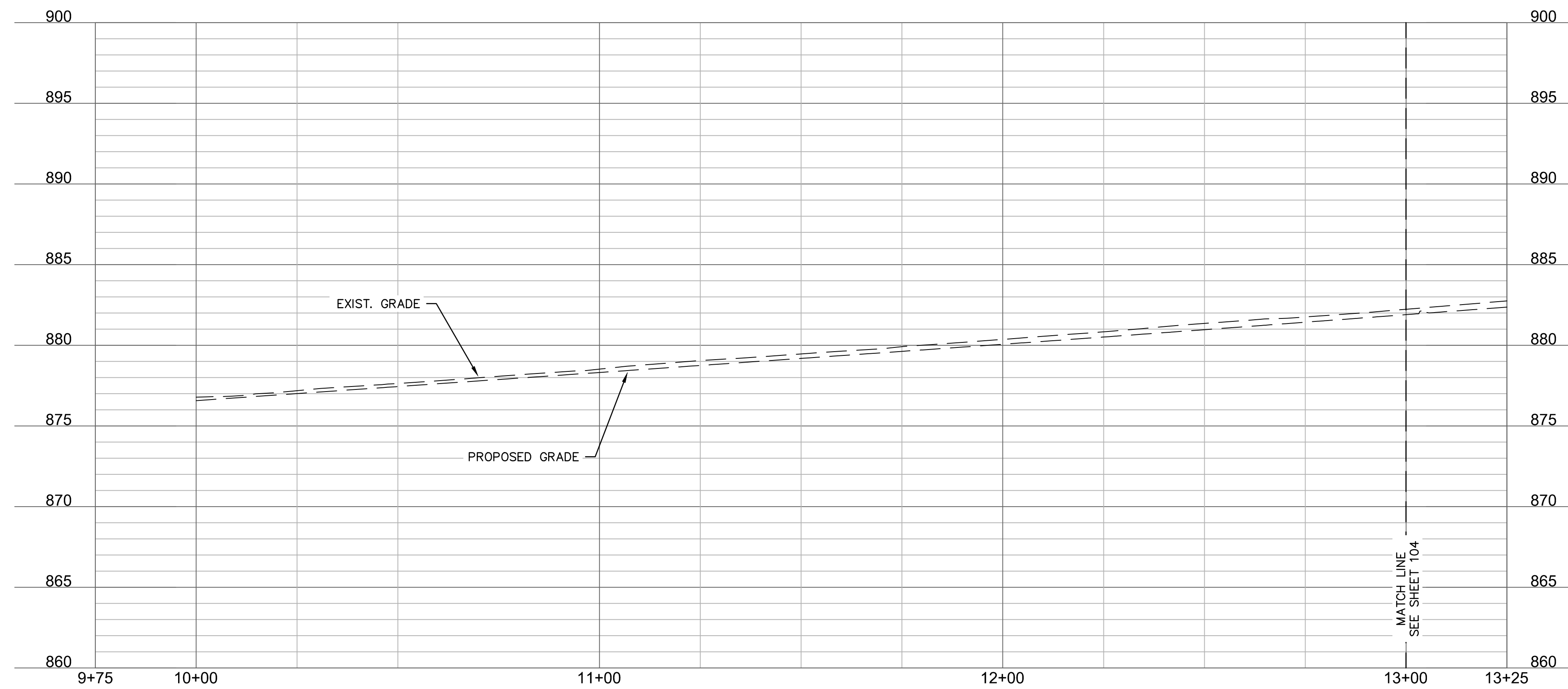
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WATERLINE 2



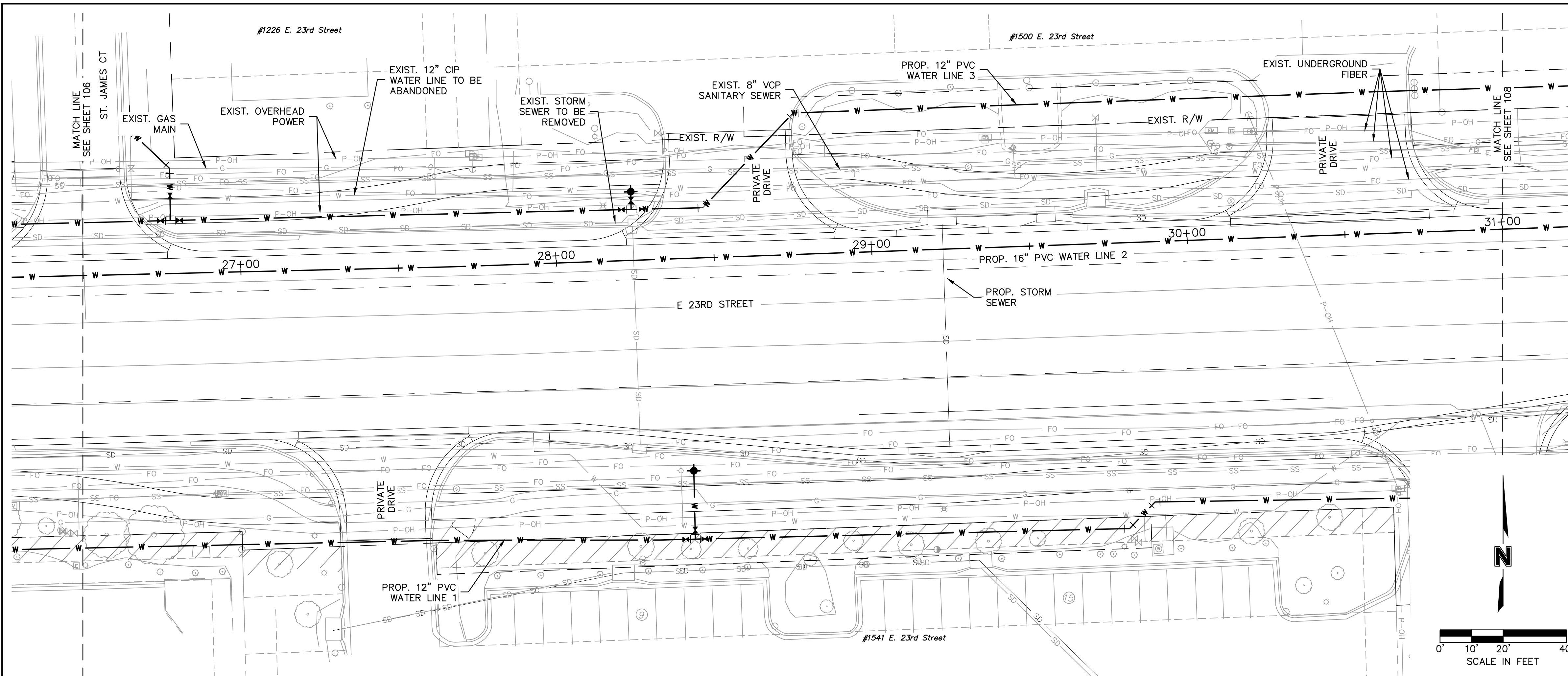
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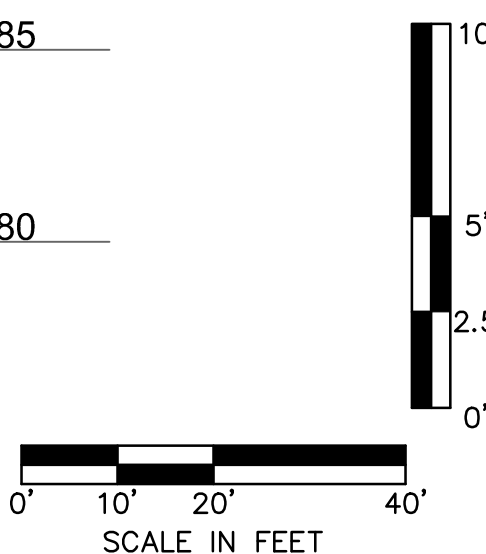
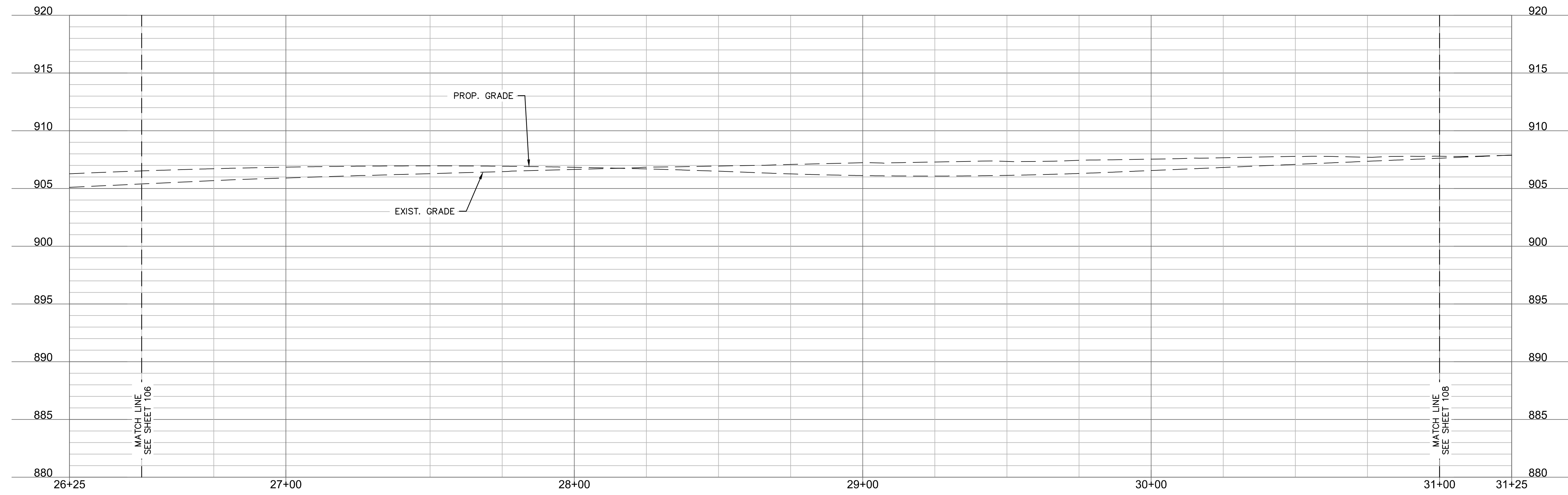
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 23RD STREET
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FT EAST OF ANDERSON ROAD
 LAWRENCE, KS
 2020

drawn by: AAS
 checked by: BH
 approved by: JH
 QA/QC by: JM
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 drawing no.: P_WAT05_0202348
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 P_TBLK_0202348
 F_LGT-PBASE_0202348
 F_PBASE_0202348



WATERLINE 2



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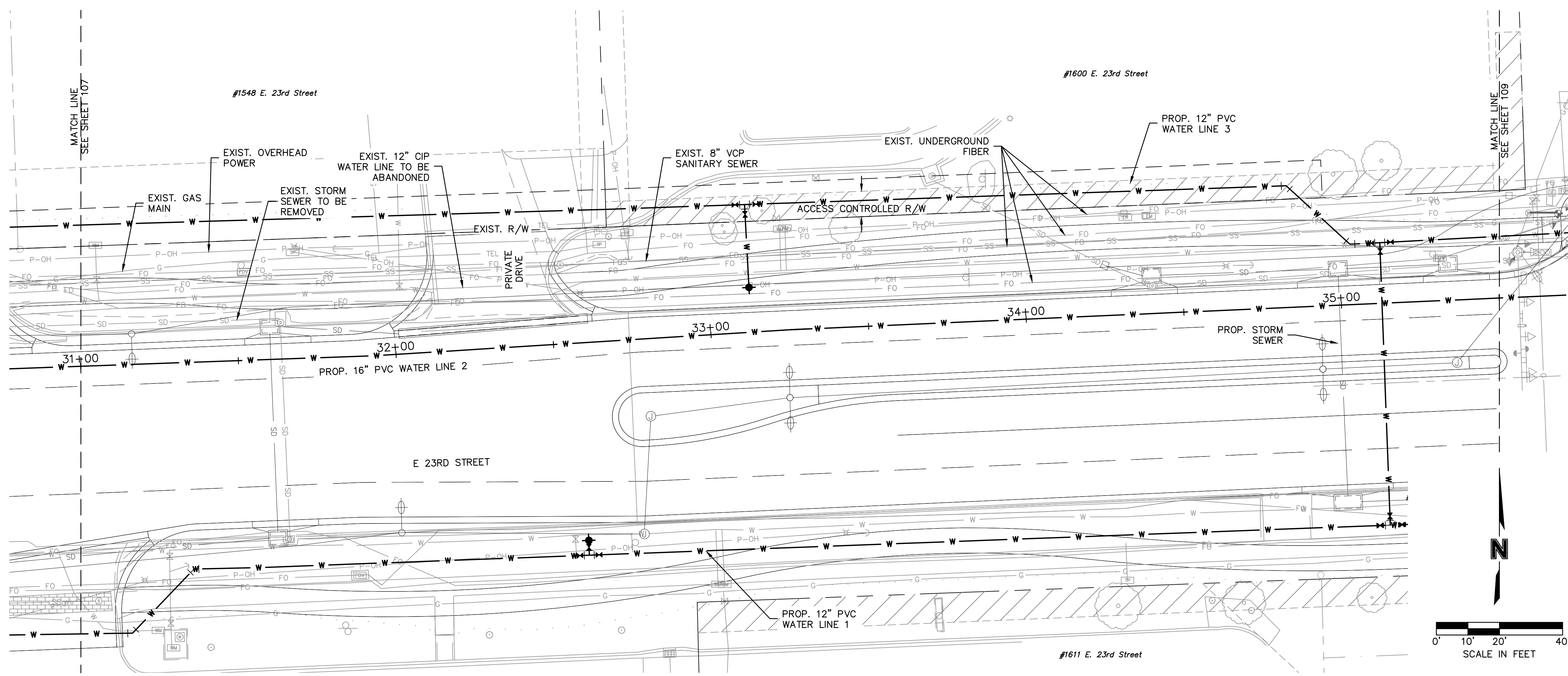
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 23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FT EAST OF ANDERSON ROAD

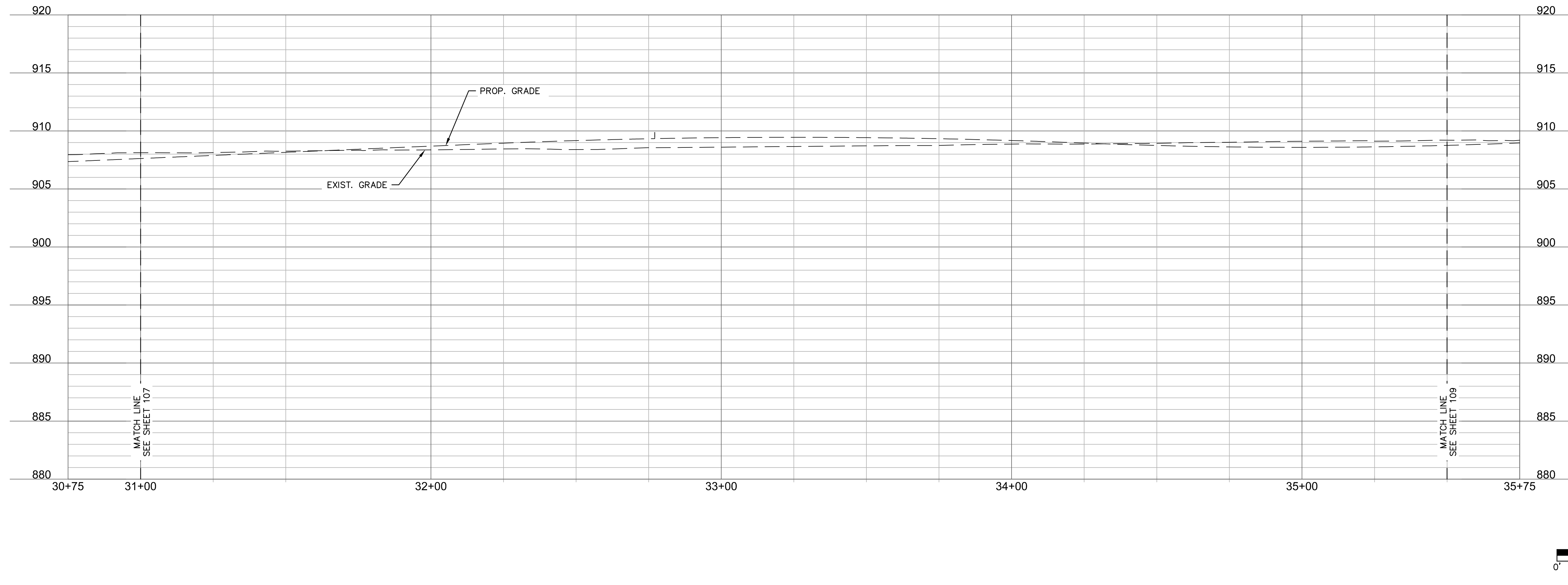
LAWRENCE, KS

2020

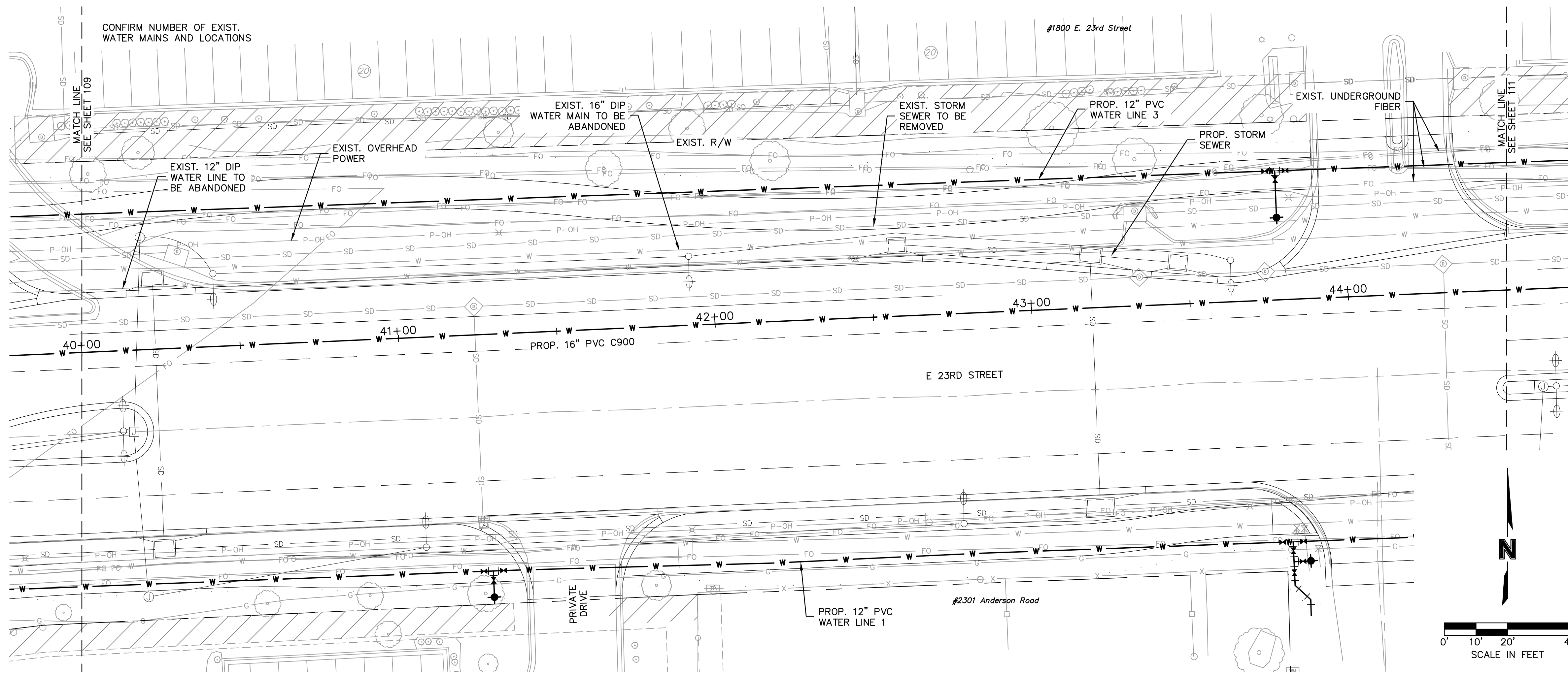
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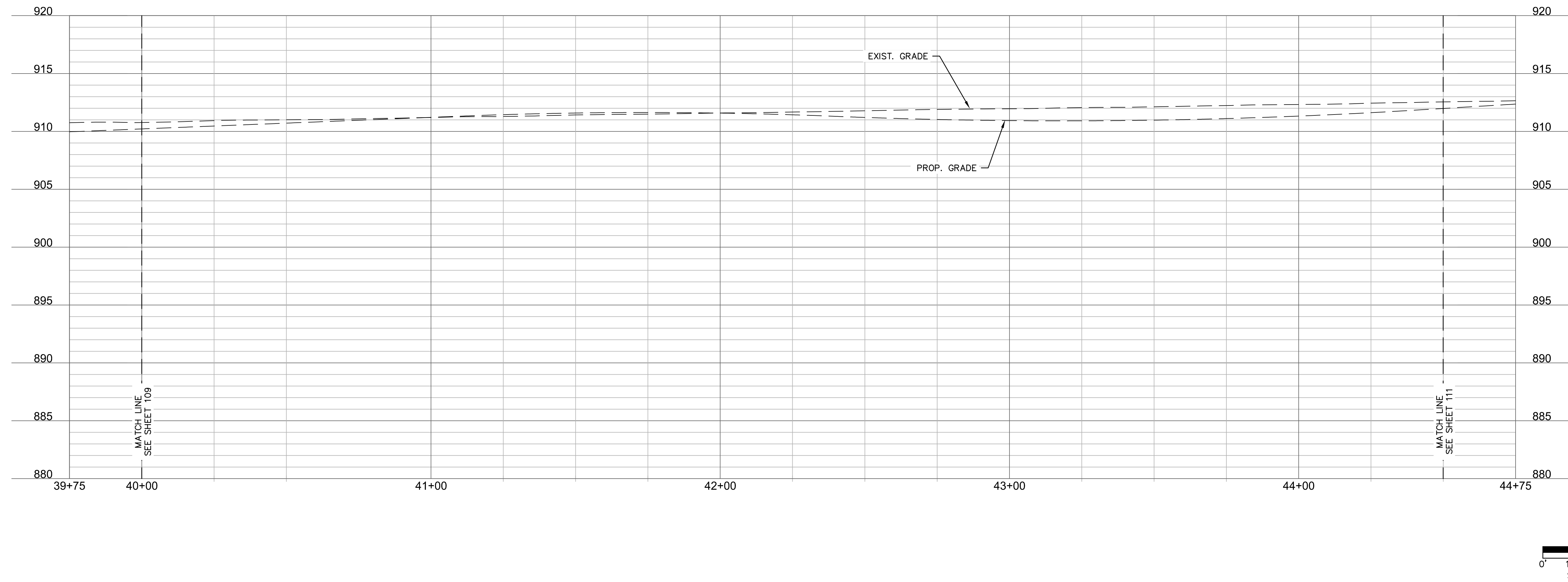
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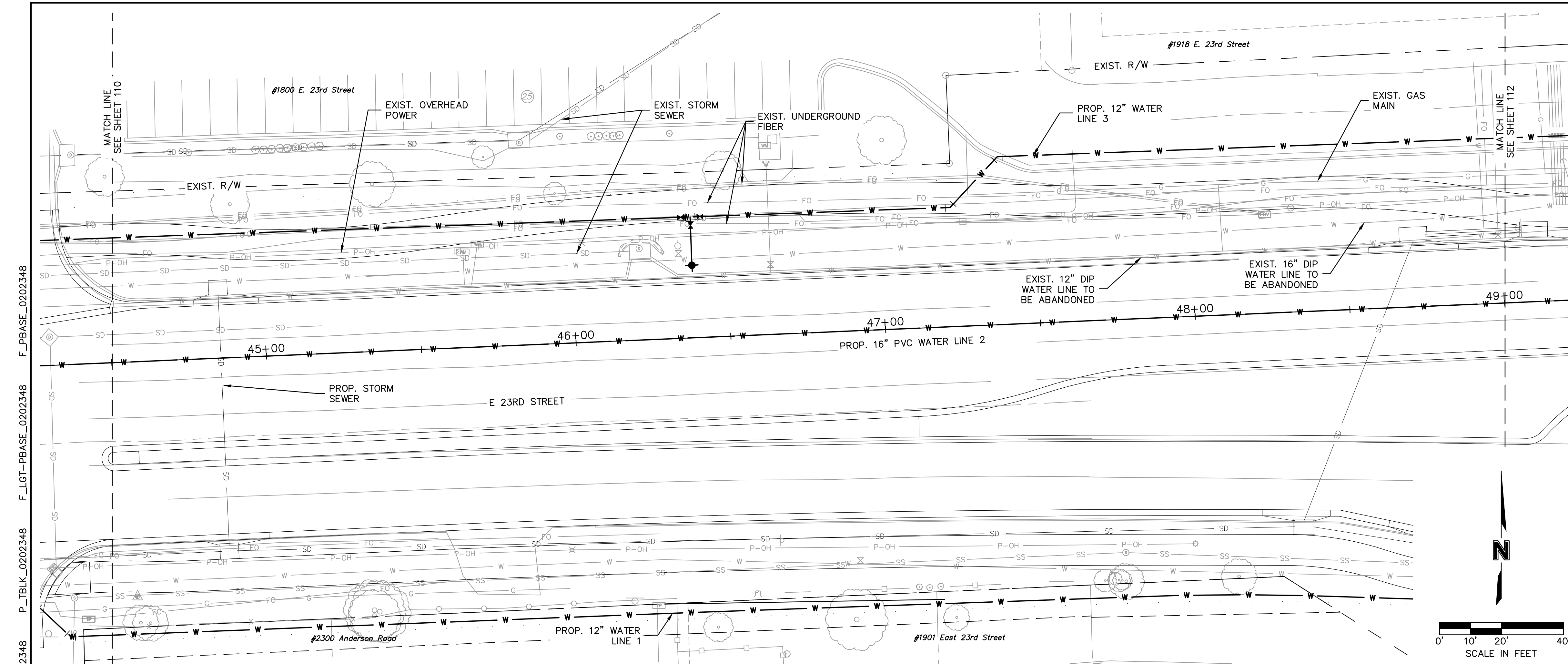
WATERLINE 2 PLAN & PROFILE
23RD STREET



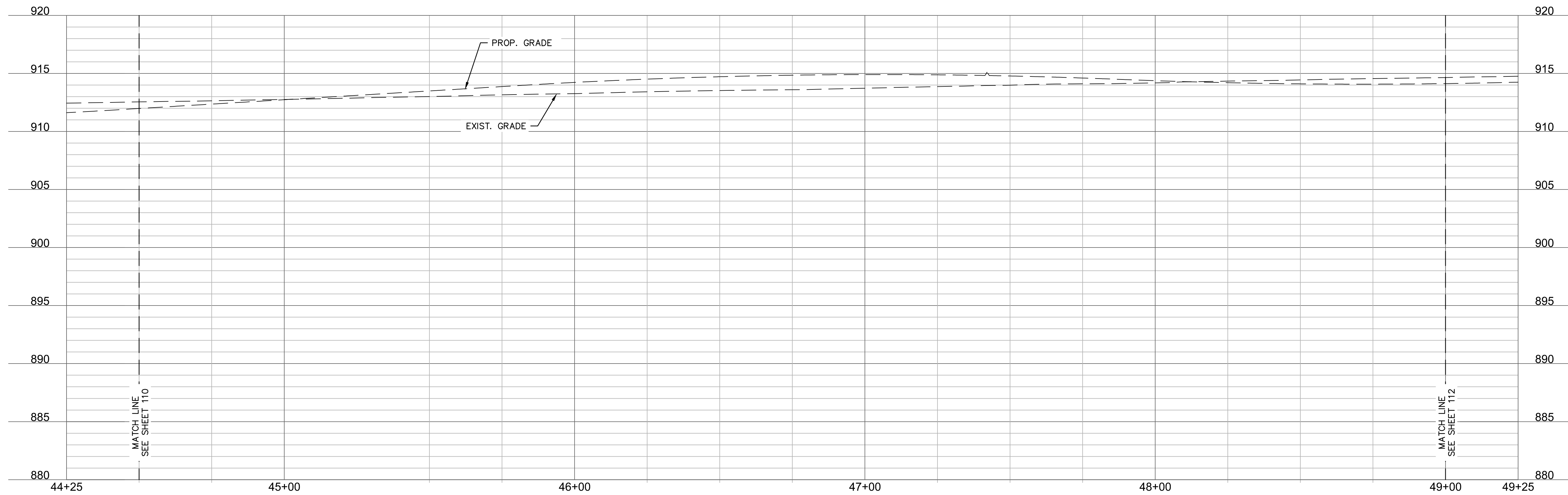
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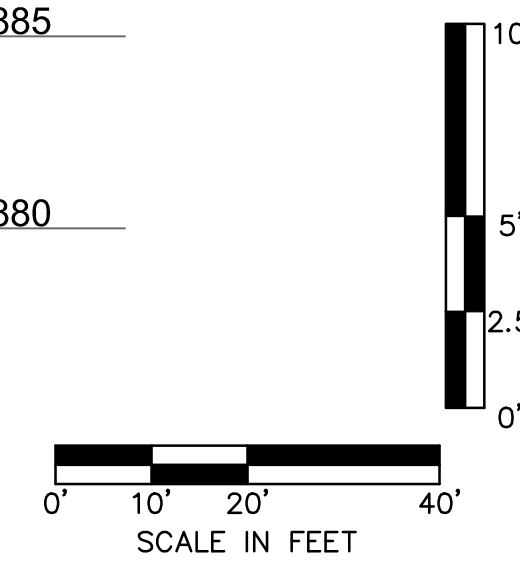
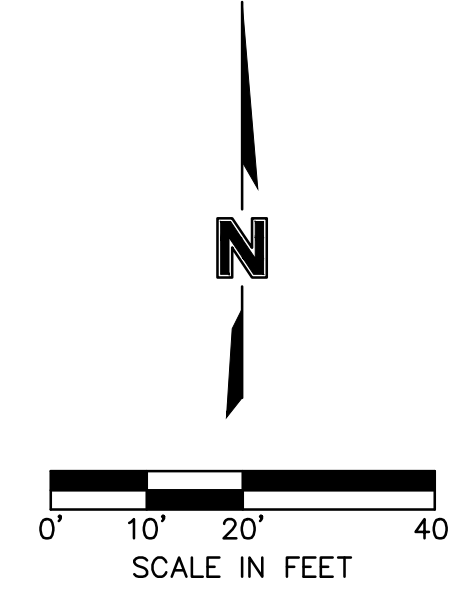
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23RD STREET



WATERLINE 2



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WATERLINE 2 PLAN & PROFILE
 23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FT EAST OF ANDERSON ROAD

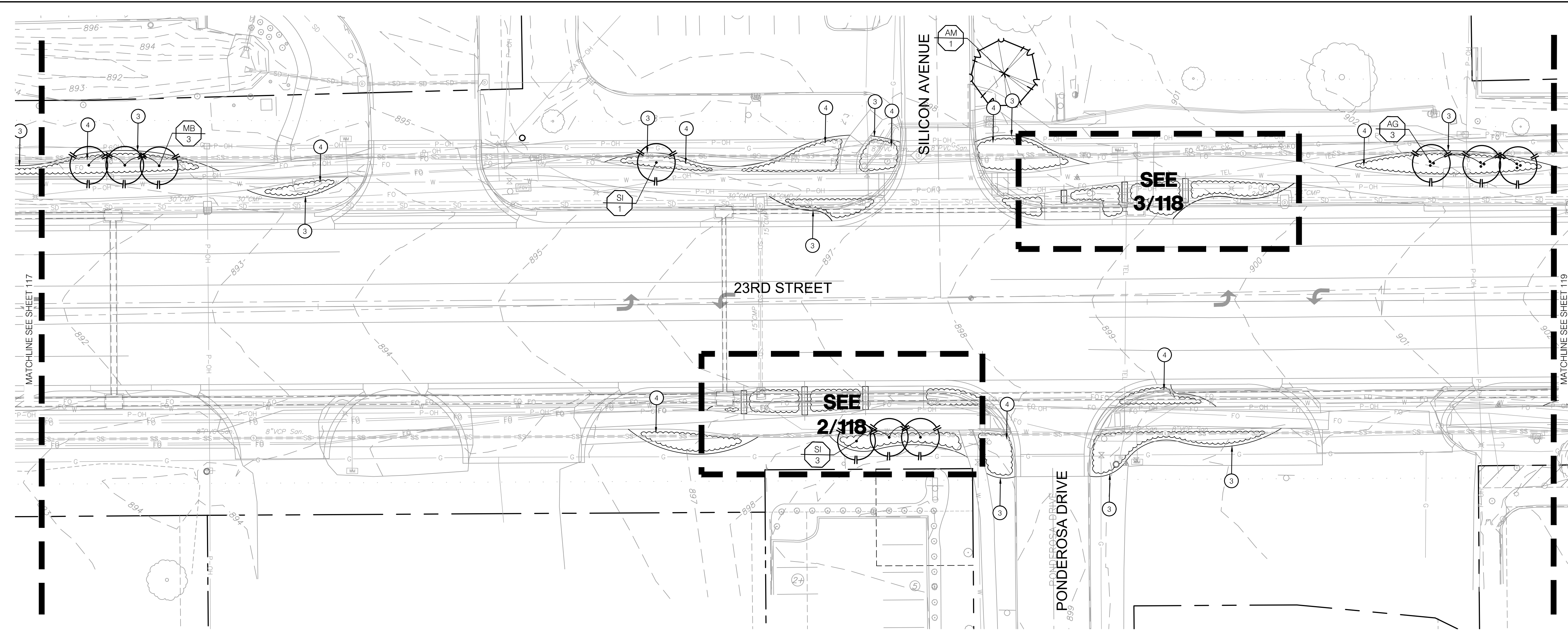
LAWRENCE, KS

2020

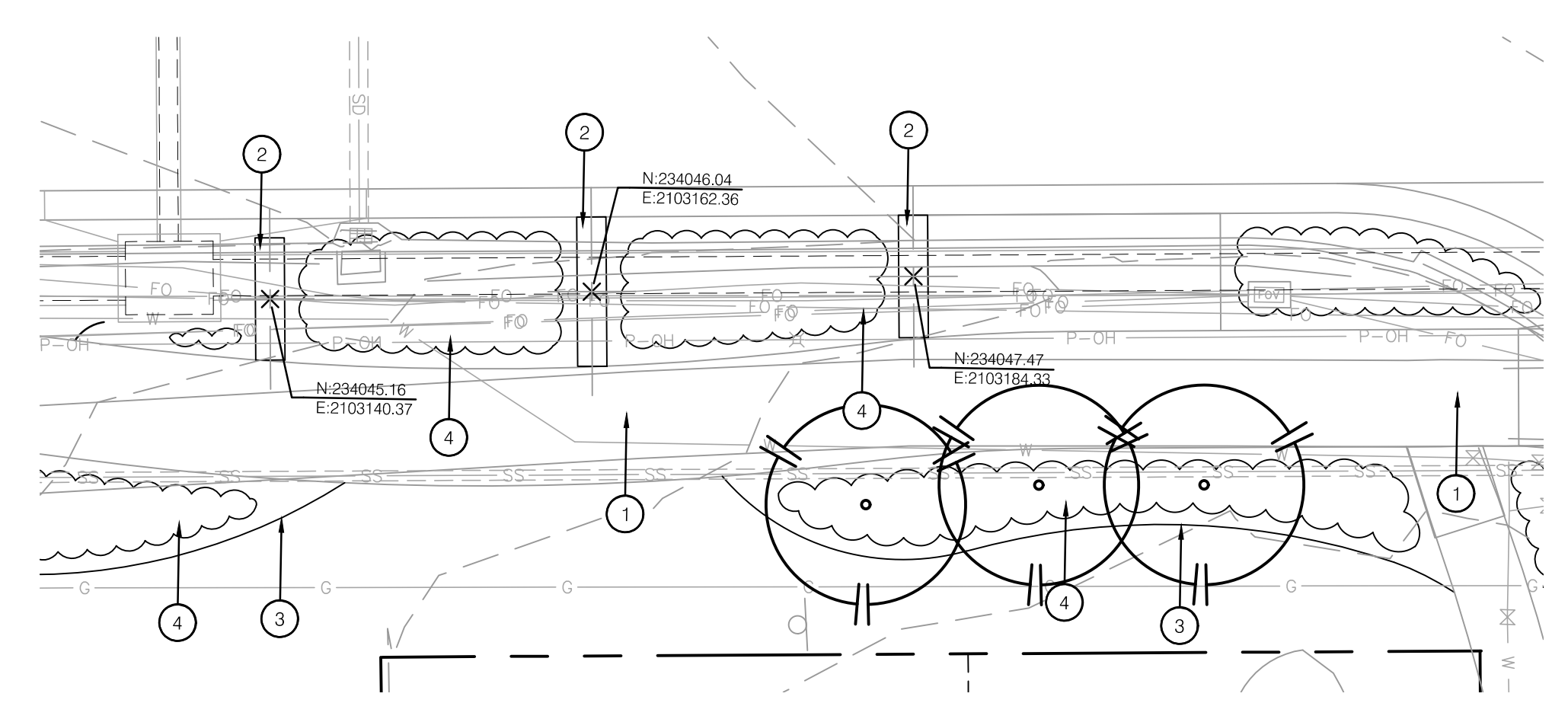
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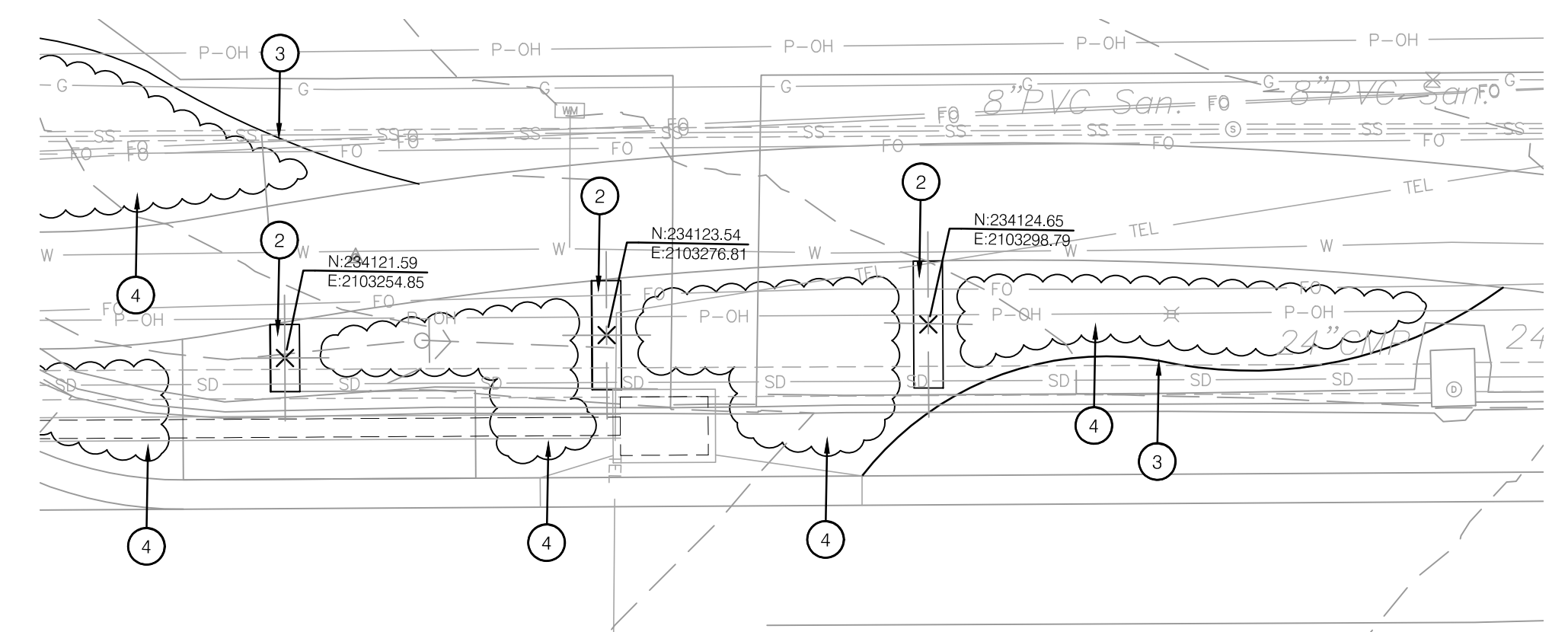
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1 LANDSCAPE OVERSTORY PLAN

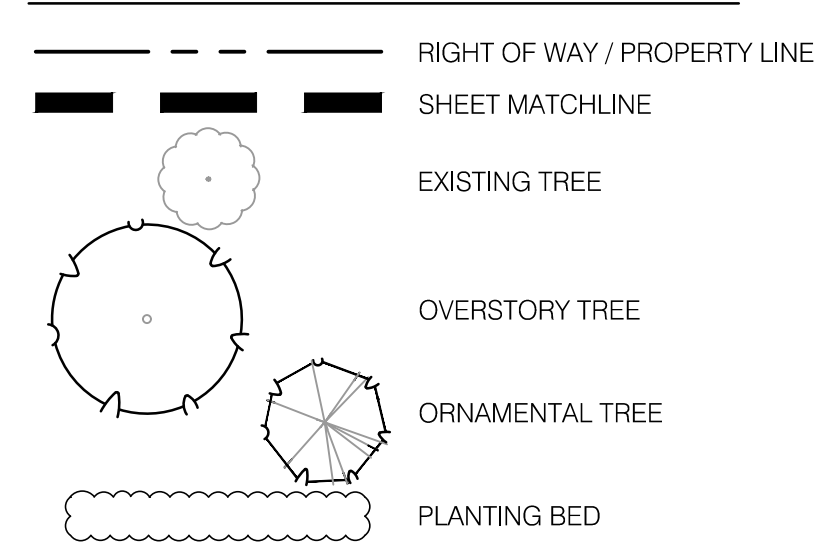


2 LANDSCAPE ENLARGEMENT PLAN



3 LANDSCAPE ENLARGEMENT PLAN

LANDSCAPE LEGEND:



OVERSTORY PLANT SCHEDULE

ORNAMENTAL TREES	BOTANICAL NAME	COMMON NAME	SIZE
AG	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE APPLE SERVICEBERRY	1.5' CAL.
CO	CERCIS CANADENSIS TEXENSIS 'OKLAHOMA'	OKLAHOMA TEXAS REDBUD	1.5' CAL.
MB	MALLUS X 'JFS KW139MX' TM	RUBY DAYZE CRABAPPLE	1.5' CAL.
MP	MALLUS X 'PRAIRIFIRE'	PRAIRIFIRE CRABAPPLE	1.5' CAL.
MV	MALLUS X ZUMI 'CALOCARPA'	REDBUD ZUMI CRABAPPLE	1.5' CAL.
SI	SYRINGA RETICULATA 'IVORY SILK'	IVORY SILK JAPANESE TREE LILAC	1.5' CAL.

SHADE TREES	BOTANICAL NAME	COMMON NAME	SIZE
AM	ACER MIYABEI 'MORTON' TM	STATE STREET MIYABEI MAPLE	2' CAL.
AX	ACER TRUNCATUM X PLATANOIDES 'WARRENED' TM	PACIFIC SUNSET MAPLE	2' CAL.
GD	GYMNOCADLUS DIOICA 'ESPRESSO'	KENTUCKY COFFEETREE	2' CAL.
MW	MACLURA POMIFERA 'MICHITA'	WICHITA OSAGE ORANGE	2' CAL.
QA	QUERCUS ACUTISSIMA	SAWTOOTH OAK	2' CAL.
QB	QUERCUS BICOLOR	SWAMP WHITE OAK	2' CAL.
UF	ULMUS CARPINIFOLIA X PARVIFOLIA 'FRONTIER'	FRONTIER ELM	2' CAL.
ZG	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE SAWLEAF ZELKOVA	2' CAL.

LANDSCAPE PLAN NOTES:

- 1 SHARED USE PATH; REF: CIVIL PLANS
- 2 LIMESTONE BLOCK; REF: 5/133
- 3 METAL BED EDGE; REF: 4/133
- 4 PLANTING BED WITH DOUBLE GROUND HARDWOOD MULCH; REF: LANDSCAPE GENERAL NOTES & LANDSCAPE DETAILS

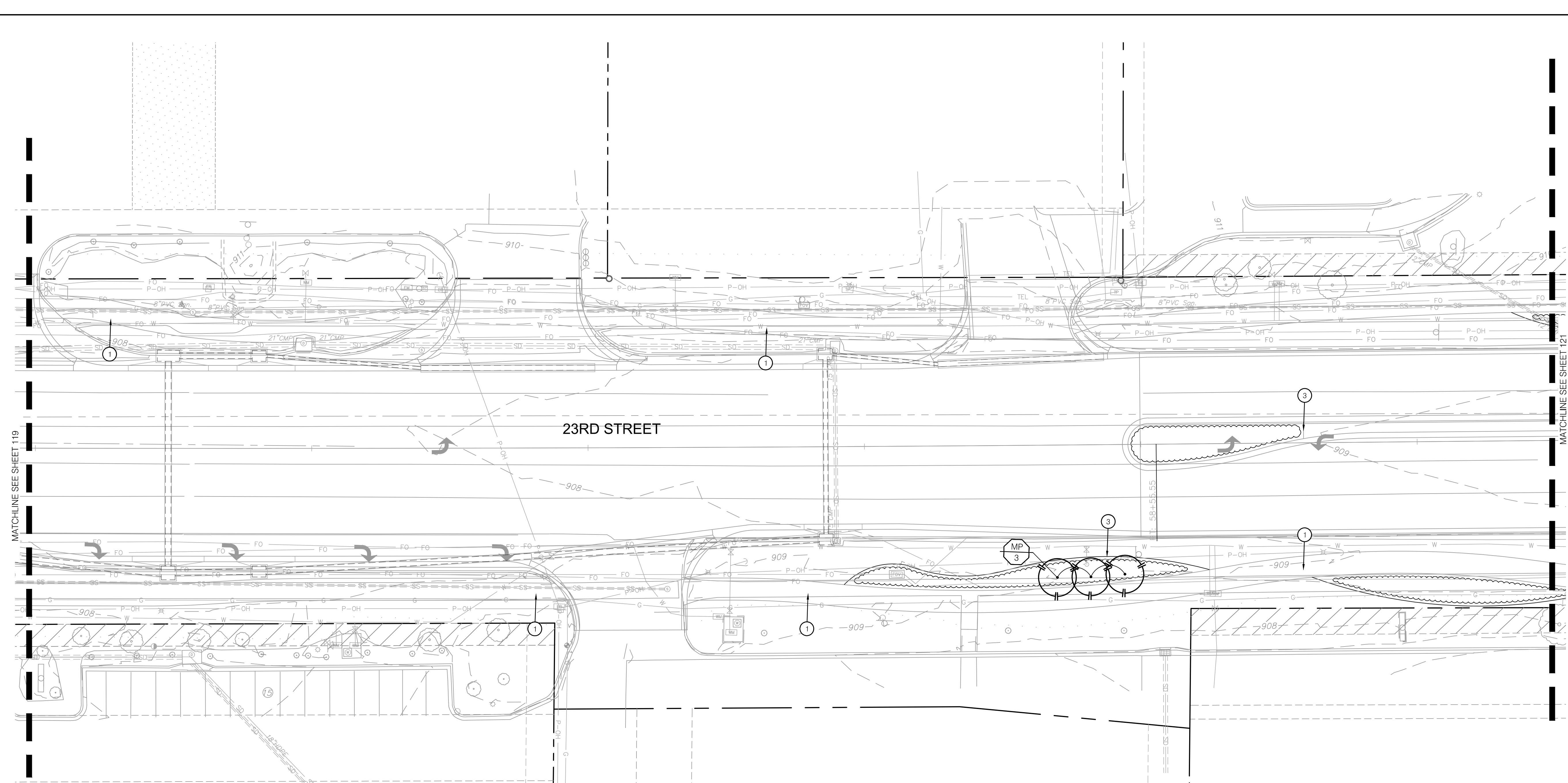
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 Kansas City, MO 64108 TEL 816.842.8844 www.olsosn.com

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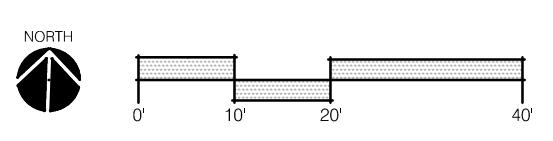
REV. NO.	DATE	REVISIONS DESCRIPTION	BY

LANDSCAPE OVERSTORY PLAN
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2020

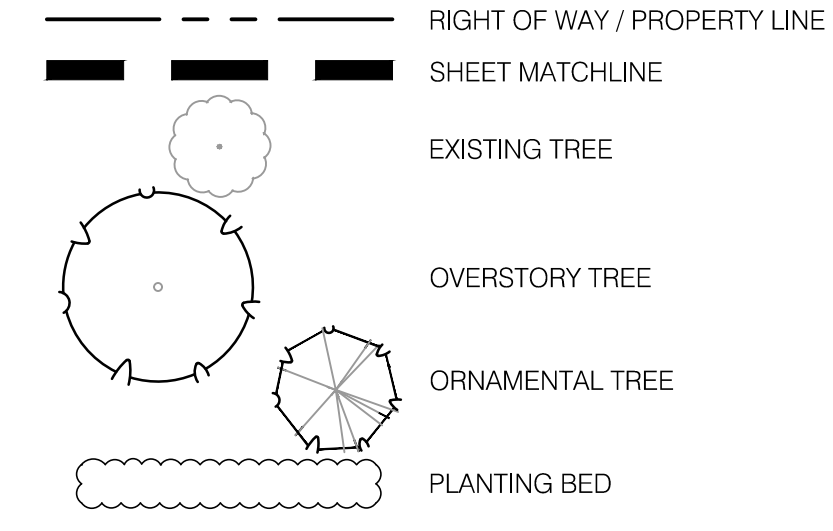
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1 LANDSCAPE OVERSTORY PLAN



LANDSCAPE LEGEND:



LANDSCAPE PLAN NOTES:

- 1 SHARED USE PATH; REF: CIVIL PLANS
- 2 LIMESTONE BLOCK; REF: 5/133
- 3 METAL BED EDGE; REF: 4/133
- 4 PLANTING BED WITH DOUBLE GROUND HARDWOOD MULCH; REF: LANDSCAPE GENERAL NOTES & LANDSCAPE DETAILS

OVERSTORY PLANT SCHEDULE

ORNAMENTAL TREES	BOTANICAL NAME	COMMON NAME	SIZE
AG	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE APPLE SERVICEBERRY	1.5' CAL.
CO	CERCIS CANADENSIS TEXENSIS 'OKLAHOMA'	OKLAHOMA TEXAS REDBUD	1.5' CAL.
MB	MALUS X 'JFS KW139M' TM	RUBY DAYZE CRABAPPLE	1.5' CAL.
MP	MALUS X 'PRAIRIFIRE'	PRAIRIFIRE CRABAPPLE	1.5' CAL.
MV	MALUS X ZUMI 'CALOCARPA'	REDBUD ZUMI CRABAPPLE	1.5' CAL.
SI	SYRINGA RETICULATA 'IVORY SILK'	IVORY SILK JAPANESE TREE LILAC	1.5' CAL.
SHADE TREES	BOTANICAL NAME	COMMON NAME	SIZE
AM	ACER MIYABEI 'MORTON' TM	STATE STREET MIYABEI MAPLE	2' CAL.
AX	ACER TRUNCATUM X PLATANOIDES 'WARRENRED' TM	PACIFIC SUNSET MAPLE	2' CAL.
GD	GYMNOCALADUS DIOICA 'ESPRESSO'	KENTUCKY COFFEETREE	2' CAL.
MW	MACLURA POMIFERA 'WICHITA'	WICHITA OSAGE ORANGE	2' CAL.
QA	QUERCUS ACUTISSIMA	SAWTOOTH OAK	2' CAL.
QB	QUERCUS BICOLOR	SWAMP WHITE OAK	2' CAL.
UF	ULMUS CARPINIFOLIA X PARVIFOLIA 'FRONTIER'	FRONTIER ELM	2' CAL.
ZG	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE SAWLEAF ZELKOVA	2' CAL.

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REVISIONS

LANDSCAPE OVERSTORY PLAN

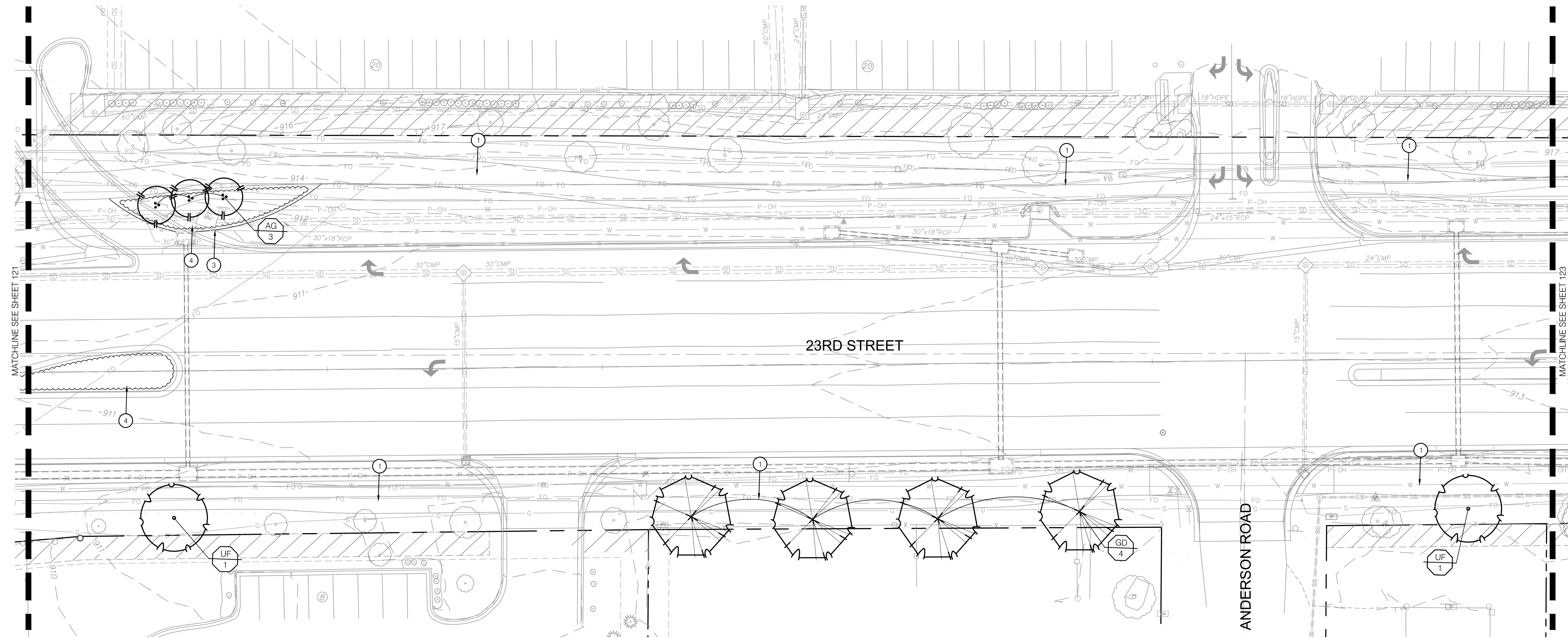
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HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

2020

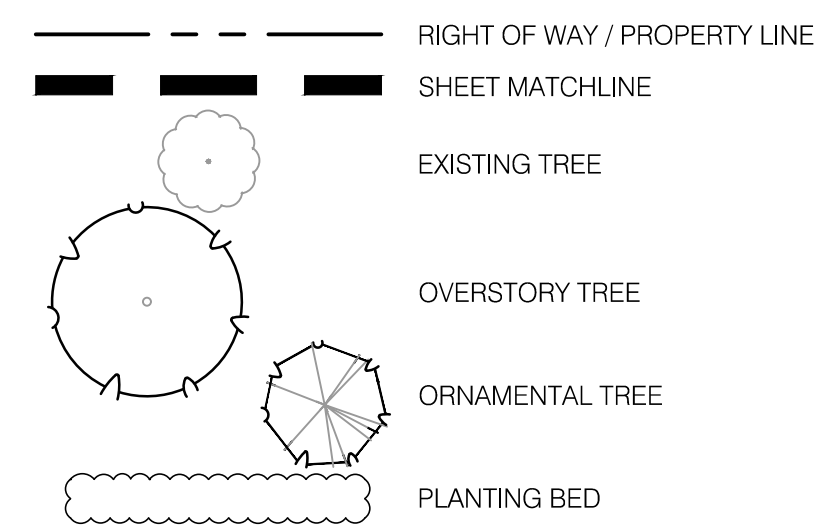
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checked by: BDM
approved by: BDM
QA/QC by: KPS
project no.: 020-2348
drawing no.: LSC_OVR02_0202348
date: 10-27-2020

SHEET
120 of 206



1 LANDSCAPE OVERSTORY PLAN

LANDSCAPE LEGEND:



LANDSCAPE PLAN NOTES:

- 1 SHARED USE PATH; REF: CIVIL PLANS
- 2 LIMESTONE BLOCK; REF: 5/133
- 3 METAL BED EDGE; REF: 4/133
- 4 PLANTING BED WITH DOUBLE GROUND HARDWOOD MULCH; REF: LANDSCAPE GENERAL NOTES & LANDSCAPE DETAILS

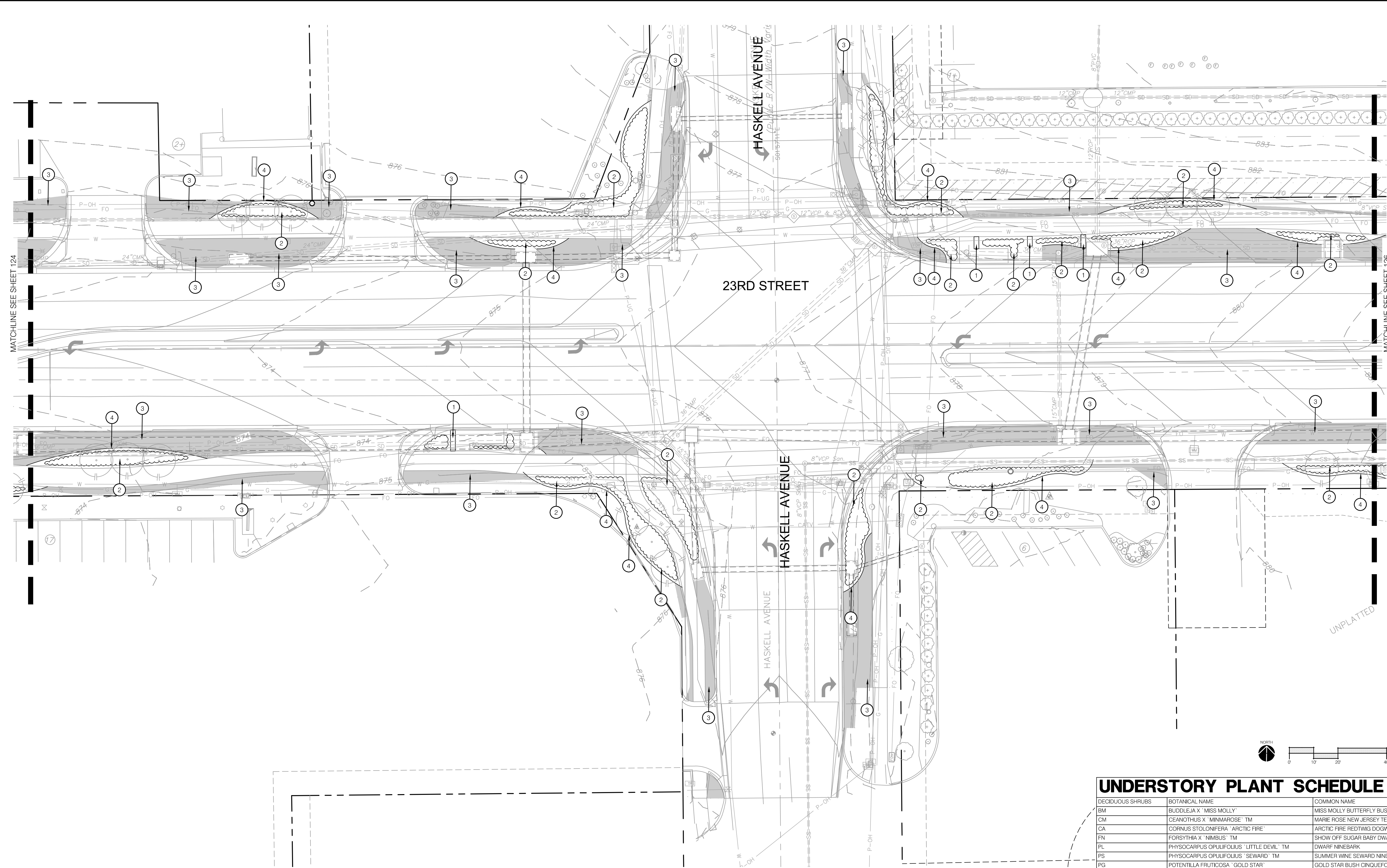
OVERSTORY PLANT SCHEDULE

ORNAMENTAL TREES	BOTANICAL NAME	COMMON NAME	SIZE
AG	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE APPLE SERVICEBERRY	1.5' CAL.
CO	CERCIS CANADENSIS TEXENSIS 'OKLAHOMA'	OKLAHOMA TEXAS REDBUD	1.5' CAL.
MB	MALLUS X 'JFS KW139MX' TM	RUBY DAYZE CRABAPPLE	1.5' CAL.
MP	MALLUS X 'PRAIRIFIRE'	PRAIRIFIRE CRABAPPLE	1.5' CAL.
MV	MALLUS X ZUMI 'CALOCARPA'	REDBUD ZUMI CRABAPPLE	1.5' CAL.
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SHADE TREES	BOTANICAL NAME	COMMON NAME	SIZE
AM	ACER MIYABEI 'MORTON' TM	STATE STREET MIYABEI MAPLE	2' CAL.
AX	ACER TRUNCATUM X PLATANOIDES 'WARRENED' TM	PACIFIC SUNSET MAPLE	2' CAL.
GD	GYMNOCLADUS DIOICA 'ESPRESSO'	KENTUCKY COFFEETREE	2' CAL.
MW	MACLURA POMIFERA 'WICHITA'	WICHITA OSAGE ORANGE	2' CAL.
QA	QUERCUS ACUTISSIMA	SAWTOOTH OAK	2' CAL.
QB	QUERCUS BICOLOR	SWAMP WHITE OAK	2' CAL.
UF	ULMUS CARPINIFOLIA X PARVIFOLIA 'FRONTIER'	FRONTIER ELM	2' CAL.
ZG	ZELKOVA SERRATA 'GREEN VASE'	GREEN VASE SAWLEAF ZELKOVA	2' CAL.

PRELIMINARY
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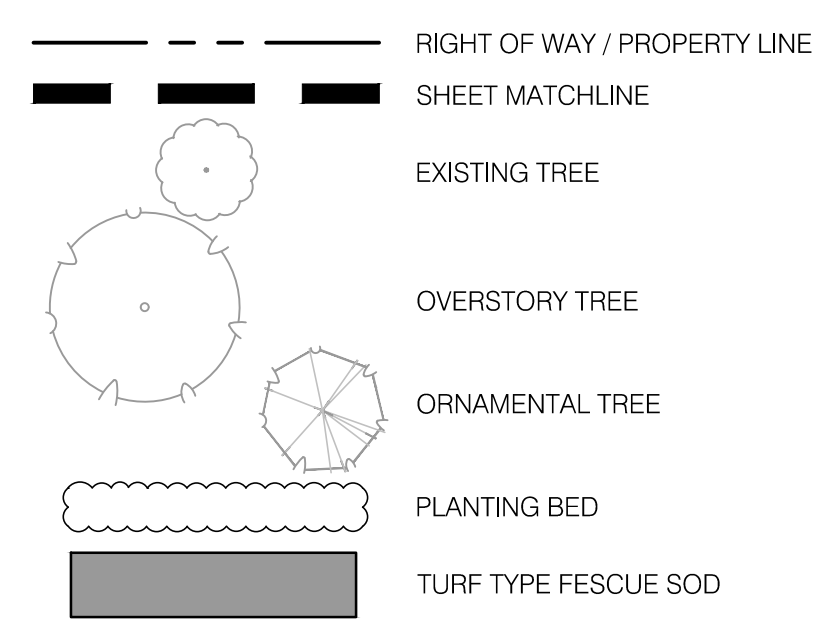
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 approved by: BDM
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 drawing no.: LSC_OVR02_0202348
 date: 10-27-2020



1 LANDSCAPE UNDERSTORY PLAN

LANDSCAPE LEGEND:

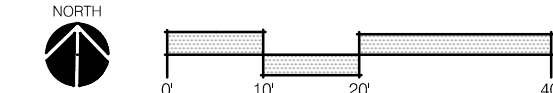


LANDSCAPE PLAN NOTES:

- 1 LIMESTONE BLOCK; REF: 5/133
- 2 PLANTING BED WITH DOUBLE GROUND HARDWOOD MULCH; REF: LANDSCAPE GENERAL NOTES & LANDSCAPE DETAILS
- 3 AREA TO BE SODDED WITH TURF-TYPE FESCUE; REF: SPECIFICATIONS
- 4 METAL BED EDGE; REF: 4/133

UNDERSTORY PLANT SCHEDULE

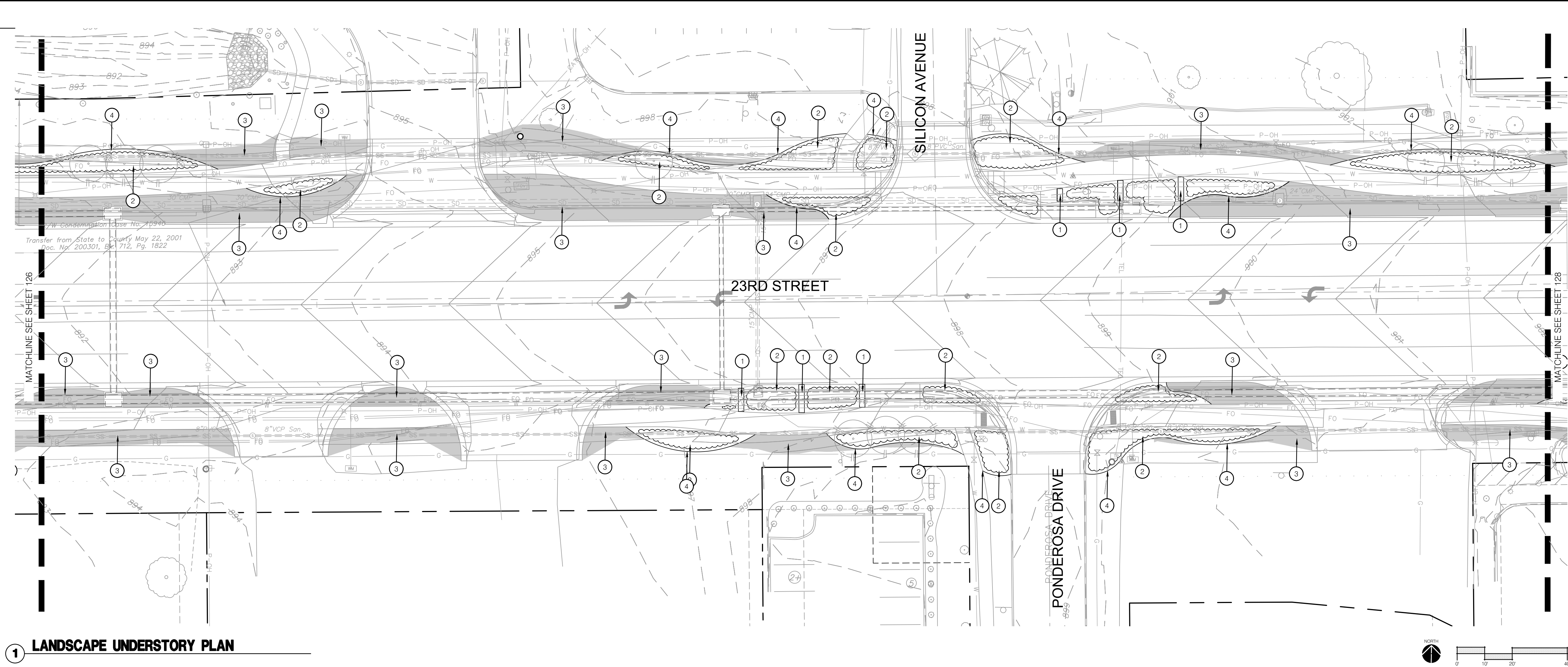
DECIDUOUS SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	
BM	BUDDLEJA X 'MISS MOLLY'	MISS MOLLY BUTTERFLY BUSH	1 GAL	
CM	CEANOTHUS X 'MINIMAROSE'™	MARIE ROSE NEW JERSEY TEA	1 GAL	
CA	CORNUS STOLONIFERA 'ARCTIC FIRE'	ARCTIC FIRE REDTWIG DOGWOOD	1 GAL	
FN	FORSYTHIA X 'NIMBUS'™	SHOW OFF SUGAR BABY DWARF FORSYTHIA	1 GAL	
PL	PHYSOCARPUS OPULIFOLIUS 'LITTLE DEVIL'™	DWARF NINEBARK	1 GAL	
PS	PHYSOCARPUS OPULIFOLIUS 'SEWARD'™	SUMMER WINE SEWARD NINEBARK	1 GAL	
PG	POTENTILLA FRUTICOSA 'GOLD STAR'	GOLD STAR BUSH CINQUEFOIL	1 GAL	
EVERGREEN SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	
JA	JUNIPERUS CHINENSIS 'AUREA'	GOLD COAST JUNIPER	1 GAL	
JB	JUNIPERUS SABINA 'BROADMOOR'	BROADMOOR JUNIPER	1 GAL	
JO	JUNIPERUS VIRGINIANA 'GREY OWL'	GREY OWL JUNIPER	1 GAL	
PL2	PICEA ABIES 'LITTLE GEM'	LITTLE GEM SPRUCE	1 GAL	
ORNAMENTAL GRASSES	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
BB	BOUTELOUA GRACILIS 'BLONDE AMBITION'	BLONDE AMBITION BLUE GRAMA	1 GAL	
CA2	CAREX ALBICANS	WHITETINGE SEDGE	1 GAL	
CB	CAREX BICKNELLII	PRAIRIE SEDGE	1 GAL	
CD	CAREX DIVULSA	EUROPEAN GREY SEDGE	1 GAL	
MS	MISCANTHUS SINENSIS 'ADAGIO'	ADAGIO EULALIA GRASS	1 GAL	
PH	PANICUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SWITCH GRASS	1 GAL	
PS2	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	1 GAL	
ST	SPOROBOLUS HETEROLEPIS 'TARA'	PRAIRIE DROPSSEED	1 GAL	
PERENNIALS	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
AP	ACHILLEA MILLEFOLIUM 'PAPRIKA'	PAPRIKA COMMON YARROW	1 GAL	
BA	BAPTISIA AUSTRALIS	BLUE WILD INDIGO	1 GAL	
EY	ERYNGIUM YUCCIFOLIUM	RATTLESNAKE MASTER	1 GAL	
LK	LIATRIS SPICATA 'KOBOLD'	KOBOLD SPIKE GAYFEATHER	1 GAL	
RS	RUIDBECKIA FULGIDA SULLIVANTII 'LITTLE GOLDSTAR'	LITTLE GOLDSTAR CONEFLOWER	1 GAL	



PRELIMINARY
 NOT FOR CONSTRUCTION

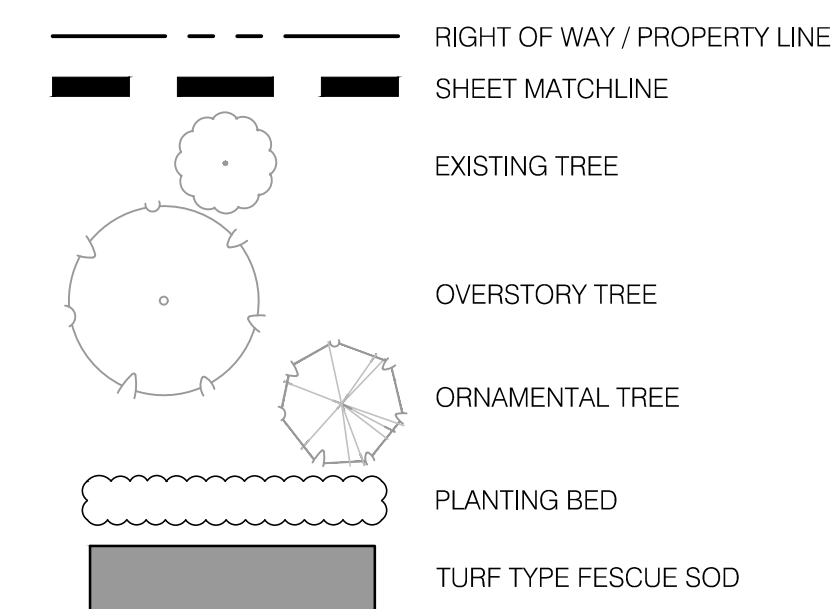
REV. NO.	DATE	REVISIONS DESCRIPTION	BY

LANDSCAPE UNDERSTORY PLAN
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2020



1 LANDSCAPE UNDERSTORY PLAN

LANDSCAPE LEGEND:



LANDSCAPE PLAN NOTES:

- 1 LIMESTONE BLOCK; REF: 5/133
- 2 PLANTING BED WITH DOUBLE GROUND HARDWOOD MULCH; REF: LANDSCAPE GENERAL NOTES & LANDSCAPE DETAILS
- 3 AREA TO BE SODDED WITH TURF-TYPE FESCUE; REF: SPECIFICATIONS
- 4 METAL BED EDGE; REF: 4/133

UNDERSTORY PLANT SCHEDULE

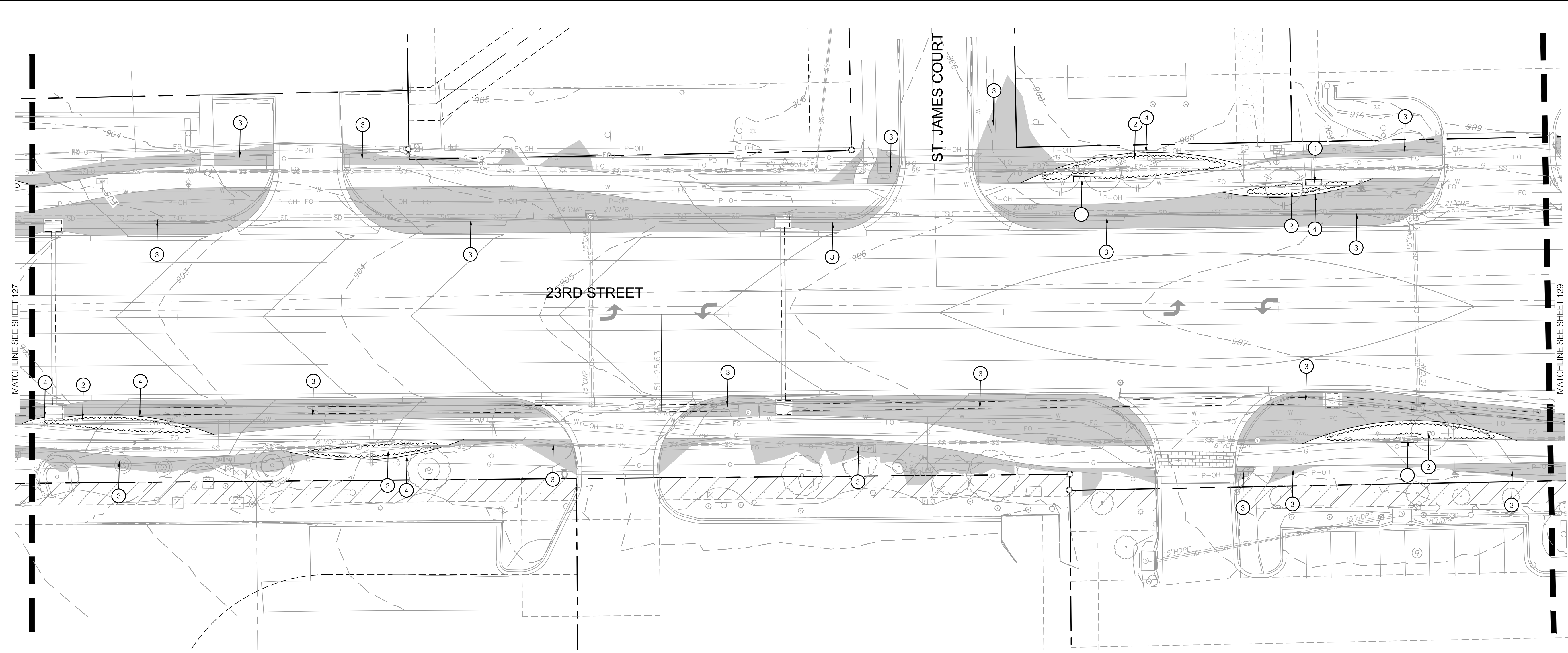
DECIDUOUS SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	
BM	BUDDLEJA X 'MISS MOLLY'	MISS MOLLY BUTTERFLY BUSH	1 GAL	
CM	CEANOTHUS X 'MINMAROSE'™	MARIE ROSE NEW JERSEY TEA	1 GAL	
CA	CORNUS STOLONIFERA 'ARCTIC FIRE'	ARCTIC FIRE REDTWIG DOGWOOD	1 GAL	
FN	FORSYTHIA X 'NIMBUS'™	SHOW OFF SUGAR BABY DWARF FORSYTHIA	1 GAL	
PL	PHYSOCARPUS OPULIFOLIUS 'LITTLE DEVIL'™	DWARF NINEBARK	1 GAL	
PS	PHYSOCARPUS OPULIFOLIUS 'SEWARD'™	SUMMER WINE SEWARD NINEBARK	1 GAL	
PG	POTENTILLA FRUTICOSA 'GOLD STAR'	GOLD STAR BUSH CINQUEFOIL	1 GAL	
EVERGREEN SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	
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JB	JUNIPERUS SABINA 'BROADMOOR'	BROADMOOR JUNIPER	1 GAL	
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EY	ERYNGIUM YUCCIFOLIUM	RATTLESNAKE MASTER	1 GAL	
LK	LIATRIS SPICATA 'KOBOLD'	KOBOLD SPIKE GAYFEATHER	1 GAL	
RS	RUDBECKIA FULGIDA SULLIVANTII 'LITTLE GOLDSTAR'	LITTLE GOLDSTAR CONEFLOWER	1 GAL	

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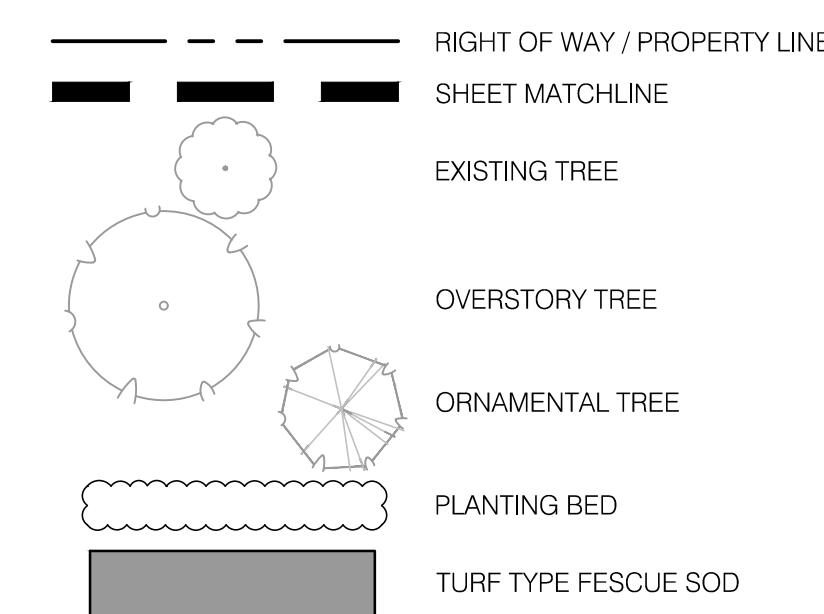
LANDSCAPE UNDERSTORY PLAN
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2020

drawn by: EMW
 checked by: BDM
 approved by: BDM
 QA/QC by: KPS
 project no.: 020-2348
 drawing no.: LSC_UND01_0202348
 date: 10-27-2020



1 LANDSCAPE UNDERSTORY PLAN

LANDSCAPE LEGEND:



LANDSCAPE PLAN NOTES:

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UNDERSTORY PLANT SCHEDULE

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PS	PHYSOCARPUS OPULIFOLIUS 'SEWARD' TM	SUMMER WINE SEWARD NINEBARK	1 GAL	
PG	POTENTILLA FRUTICOSA 'GOLD STAR'	GOLD STAR BUSH CINQUEFOIL	1 GAL	
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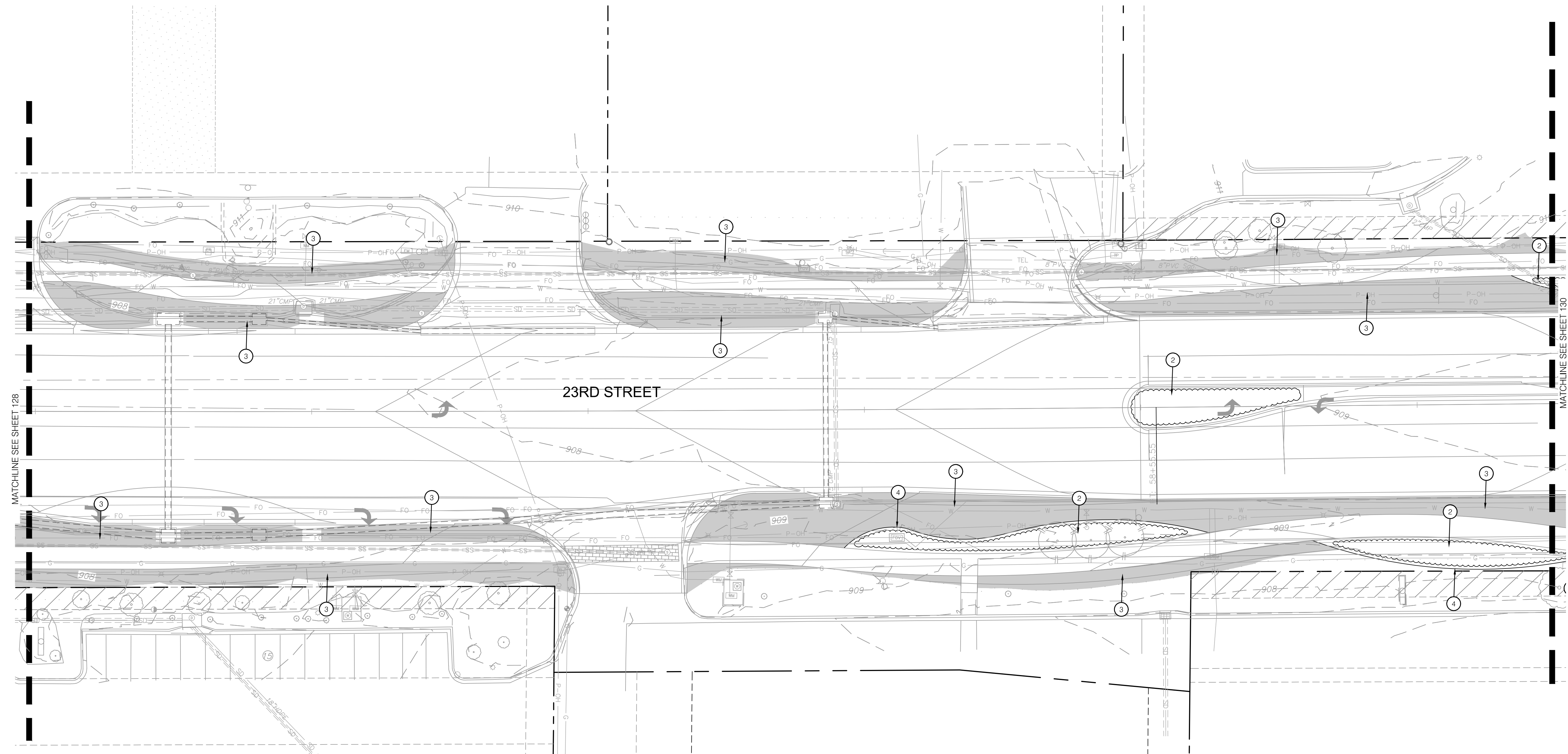
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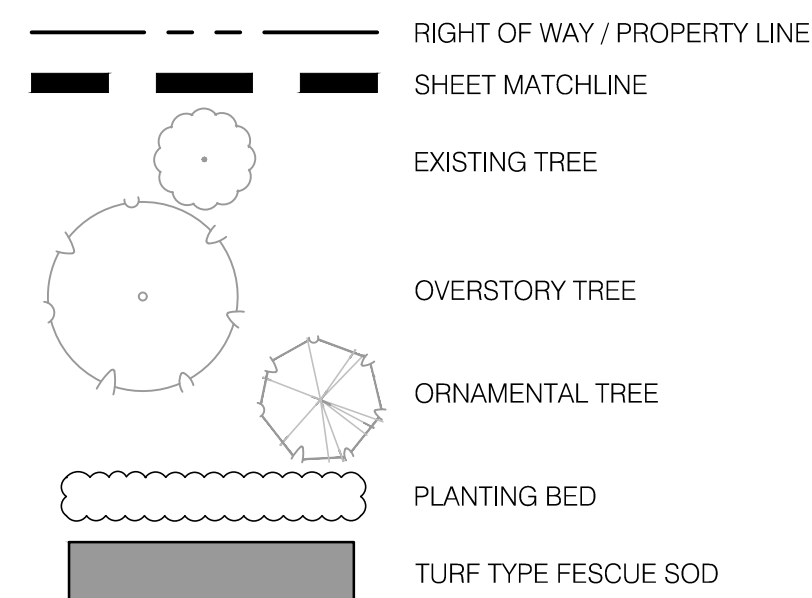
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UNDERSTORY PLANT SCHEDULE

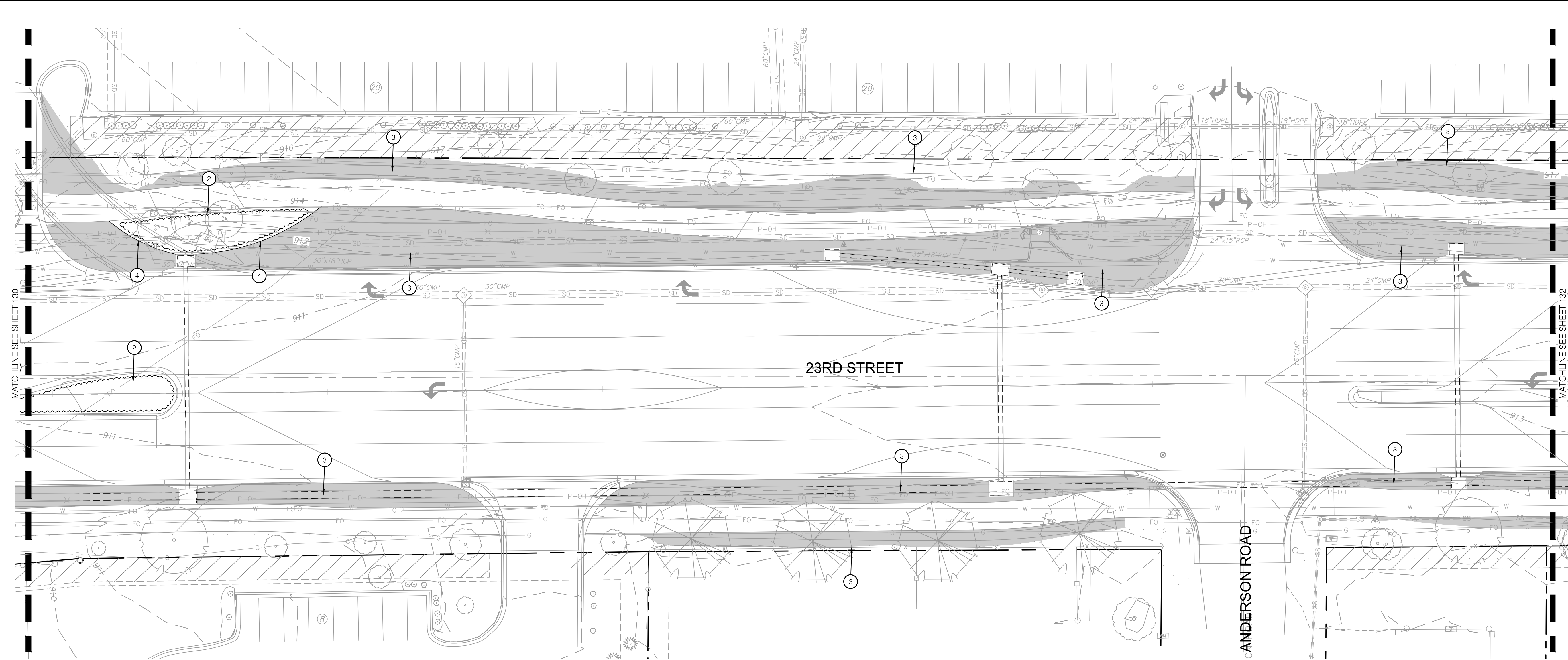
DECIDUOUS SHRUBS	BOTANICAL NAME	COMMON NAME	SIZE	
BM	BUDDLEIA X 'MISS MOLLY'	MISS MOLLY BUTTERFLY BUSH	1 GAL	
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ochsner hare + hare
 the olsson studio
 1814 Main St.
 Kansas City, MO 64108
 TEL 816.842.8844
 www.olsosn.com

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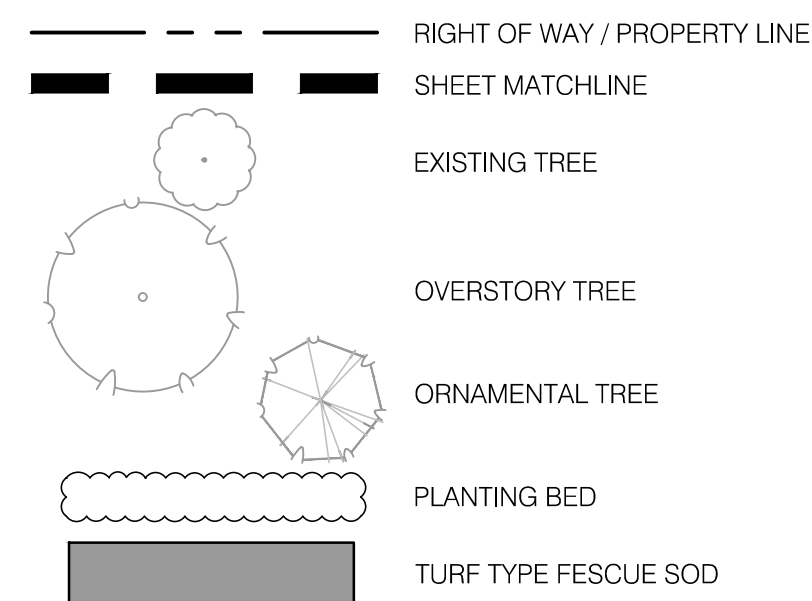
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LANDSCAPE UNDERSTORY PLAN
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
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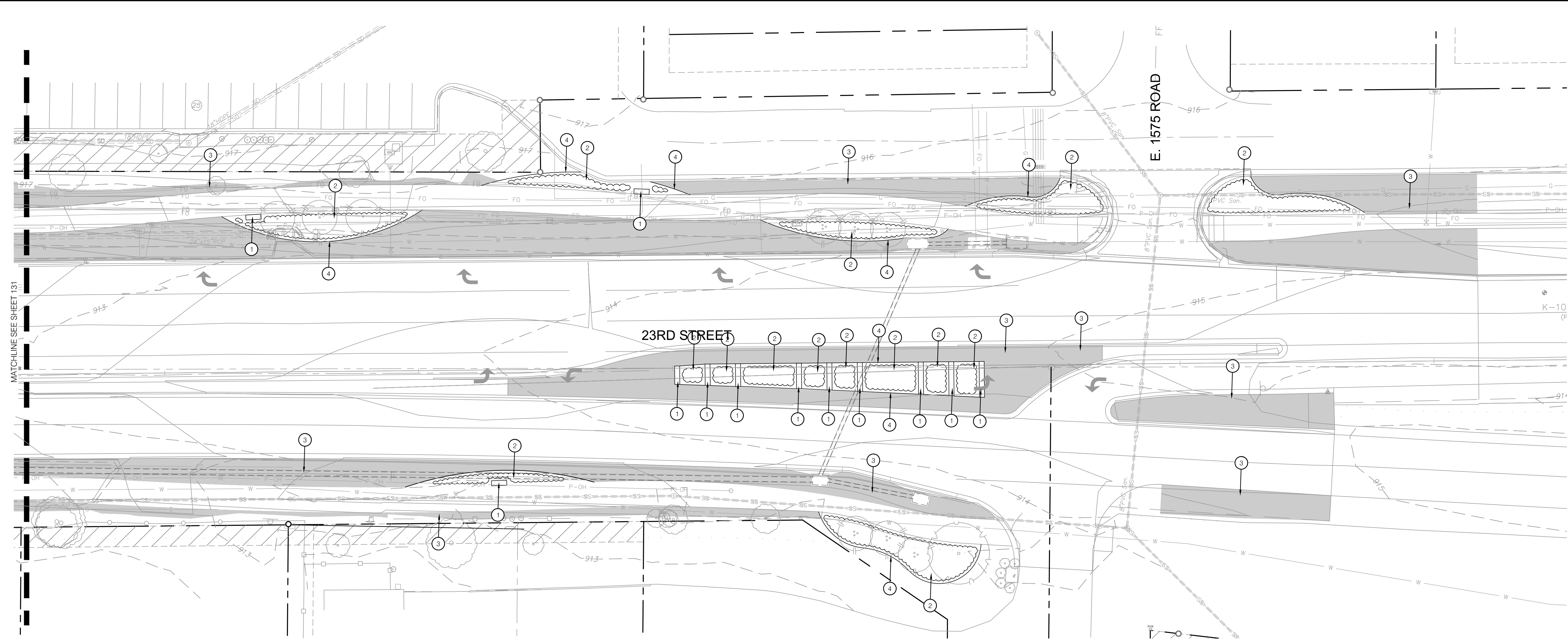
UNDERSTORY PLANT SCHEDULE

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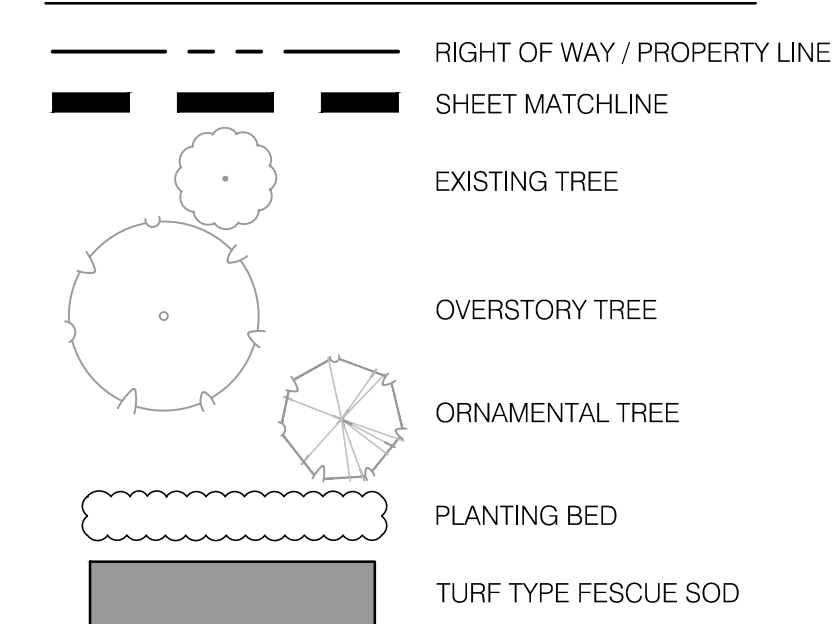
REV. NO.	DATE	REVISIONS DESCRIPTION	BY

drawn by: EMW
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 QA/QC by: KPS
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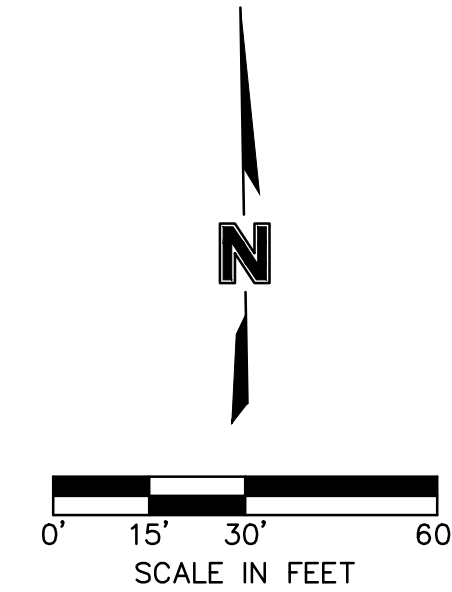
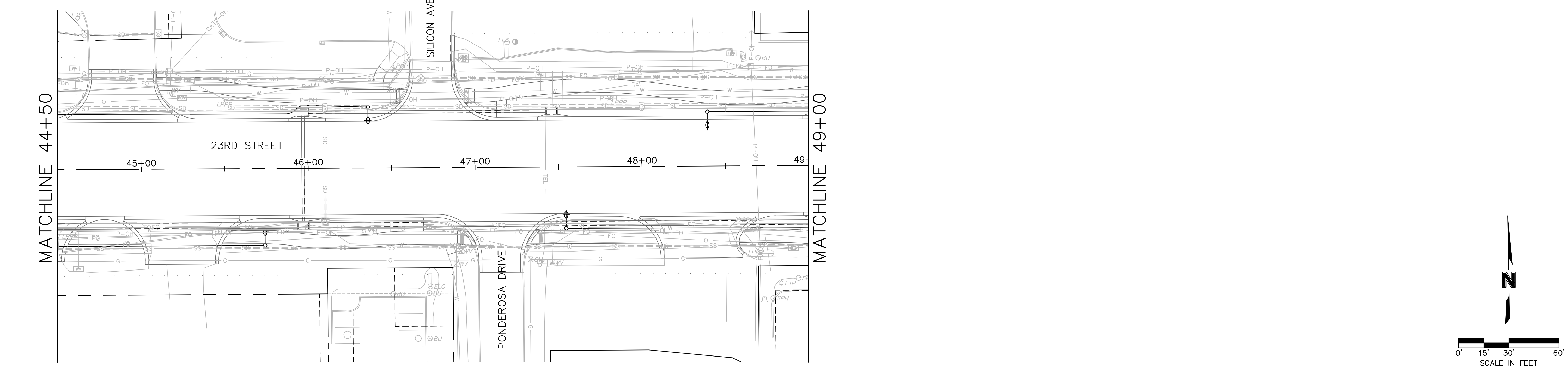
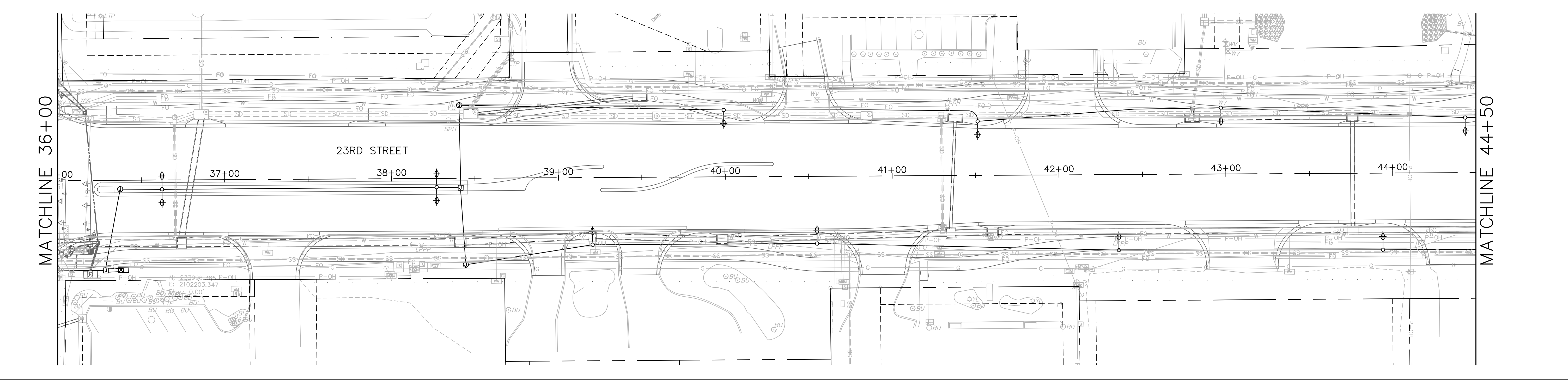
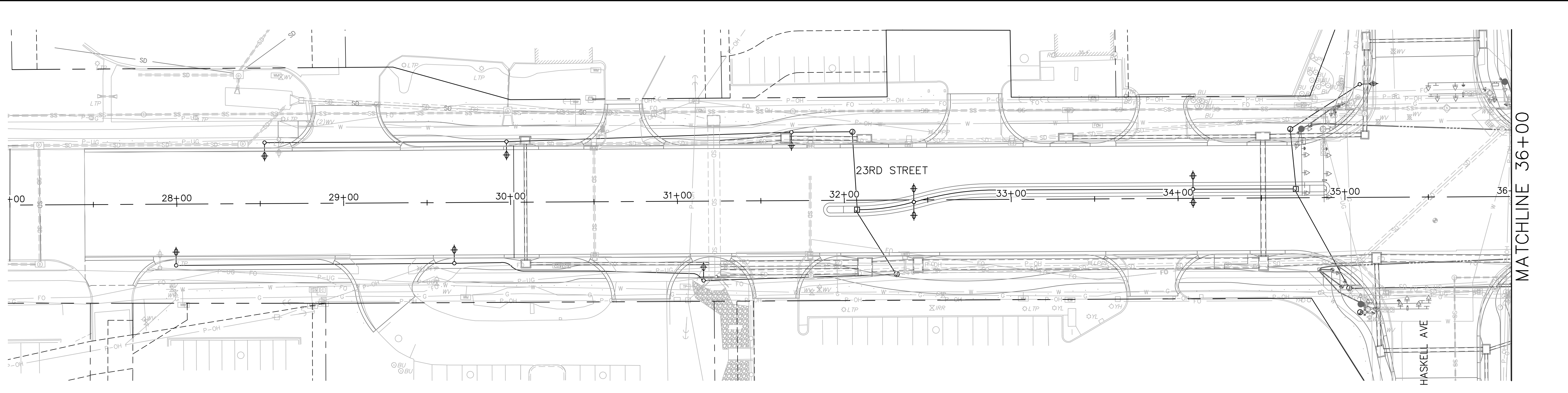
UNDERSTORY PLANT SCHEDULE

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7301 West 133rd Street, Suite 200
 Overland Park, KS 66213-4750
 TEL 913.381.1170 www.olson.com

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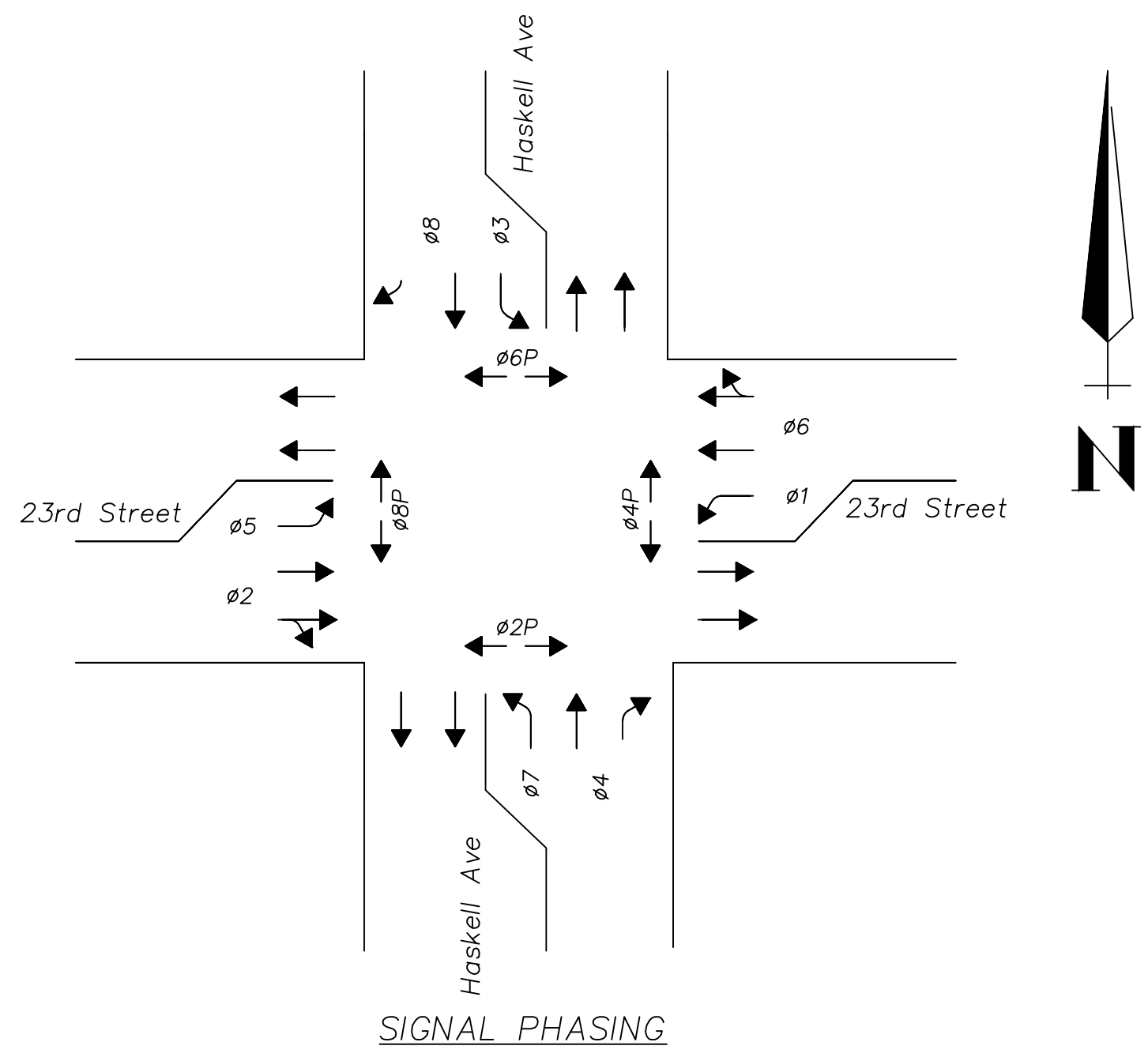
STREET LIGHTING PLAN
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23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
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 LAWRENCE, KANSAS

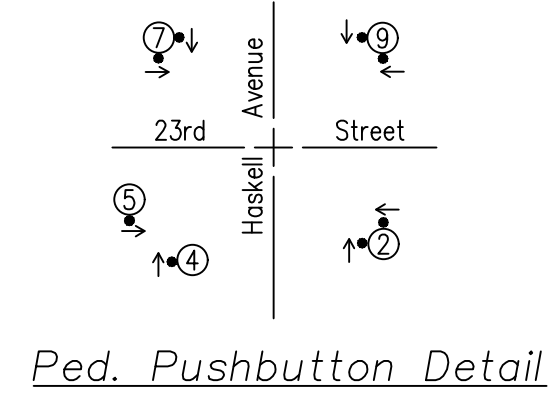
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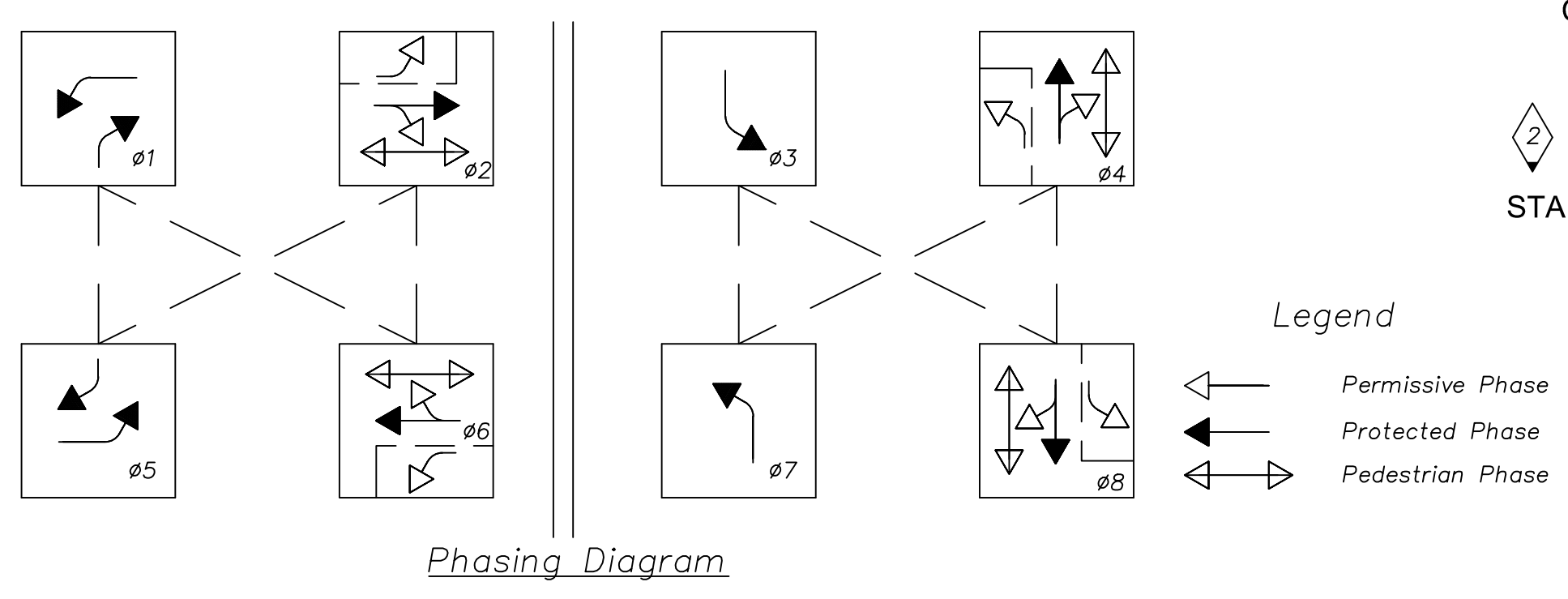
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 P_PWATR_0202348
 V_XTOPO_0202348
 F_PWMT_MKNG-BASE_0202348



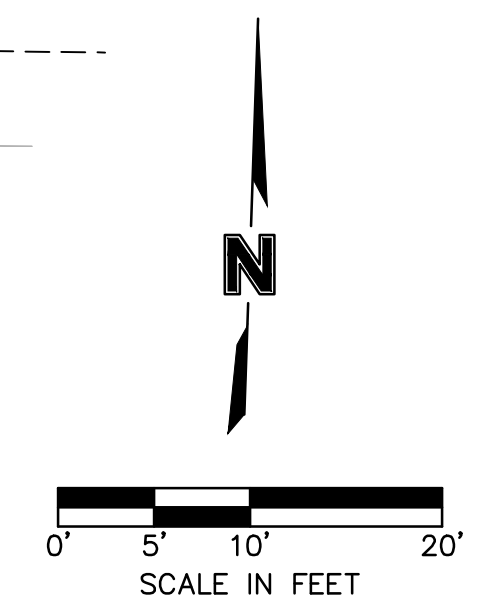
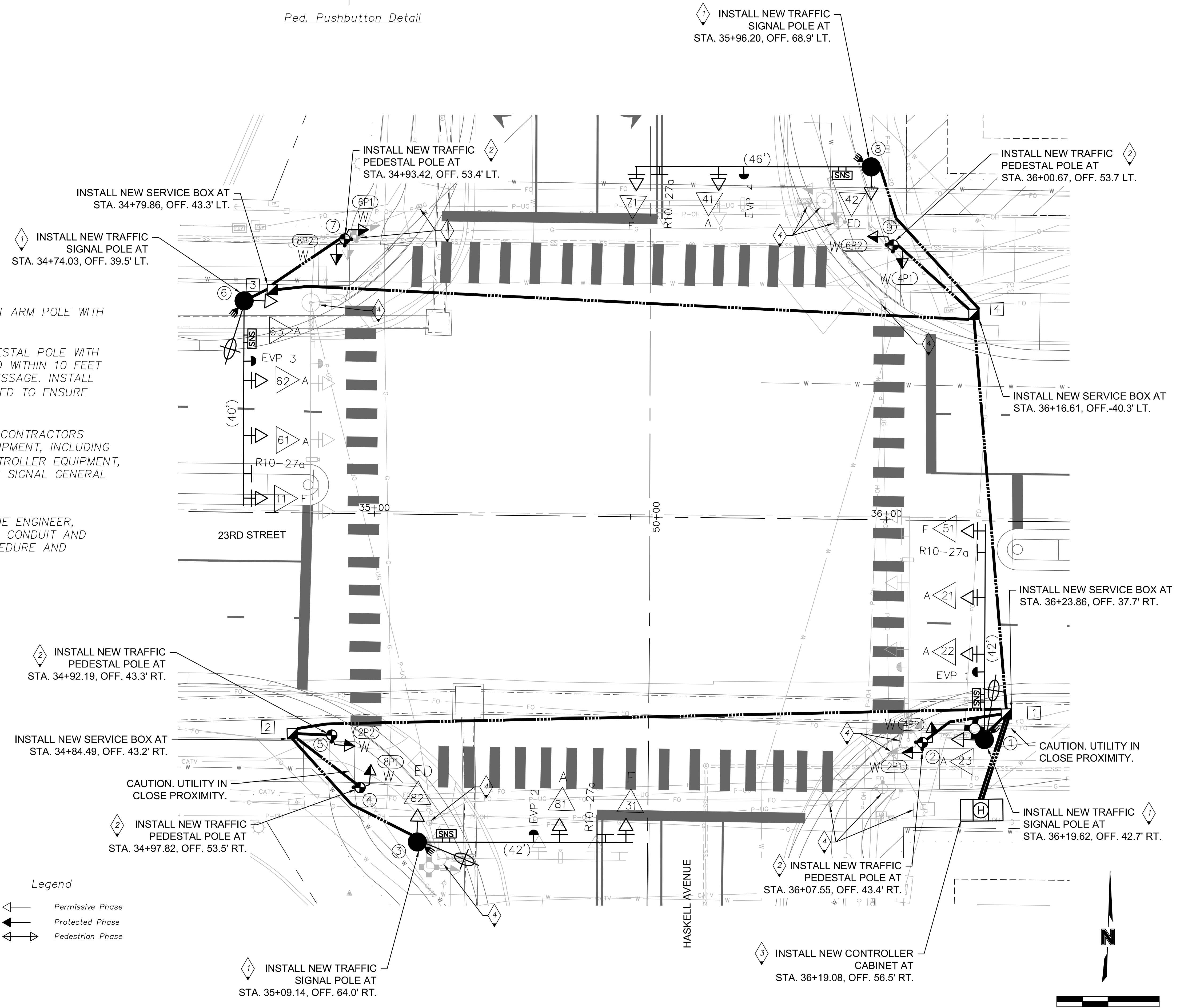
Flashing Operations	
23rd Street	FR
Haskell Ave	FR
Pedestrian Heads	Dark



- CONSTRUCTION NOTES:**
- 1 FURNISH AND INSTALL NEW FOUNDATION AND NEW MAST ARM POLE WITH SIGNAL EQUIPMENT AS SHOWN.
 - 2 FURNISH AND INSTALL NEW FOUNDATION AND NEW PEDESTAL POLE WITH SIGNAL EQUIPMENT AS SHOWN. PUSH BUTTONS LOCATED WITHIN 10 FEET OF EACH OTHER SHALL BE INSTALLED WITH AUDIBLE MESSAGE. INSTALL PUSH BUTTON EXTENSION BRACKETS OF 12" AS REQUIRED TO ENSURE <10" REACH DISTANCE TO LANDING AREA.
 - 3 FURNISH AND INSTALL NEW SIGNAL CABINET. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE ALL PROPOSED SIGNAL EQUIPMENT, INCLUDING INPUT/OUTPUT CARDS AND ALL OTHER ANCILLARY CONTROLLER EQUIPMENT, IS PROVIDED AND PROPERLY LABELED PER THE TRAFFIC SIGNAL GENERAL NOTES.
 - 4 AFTER NEW SIGNAL IS IN PLACE OR AS DIRECTED BY THE ENGINEER, REMOVE EXISTING UNUSED SIGNAL EQUIPMENT INCLUDING CONDUIT AND CABLES. REFER TO THE TRAFFIC SIGNAL TURN ON PROCEDURE AND SALVAGE NOTES PRIOR TO REMOVAL.



- Legend**
- ← Permissive Phase
 - Protected Phase
 - ↔ Pedestrian Phase



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REVISIONS

REV. NO.	DATE	REVISIONS DESCRIPTION

SIGNAL PLAN

23RD STREET AND HASKELL AVENUE

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT

HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

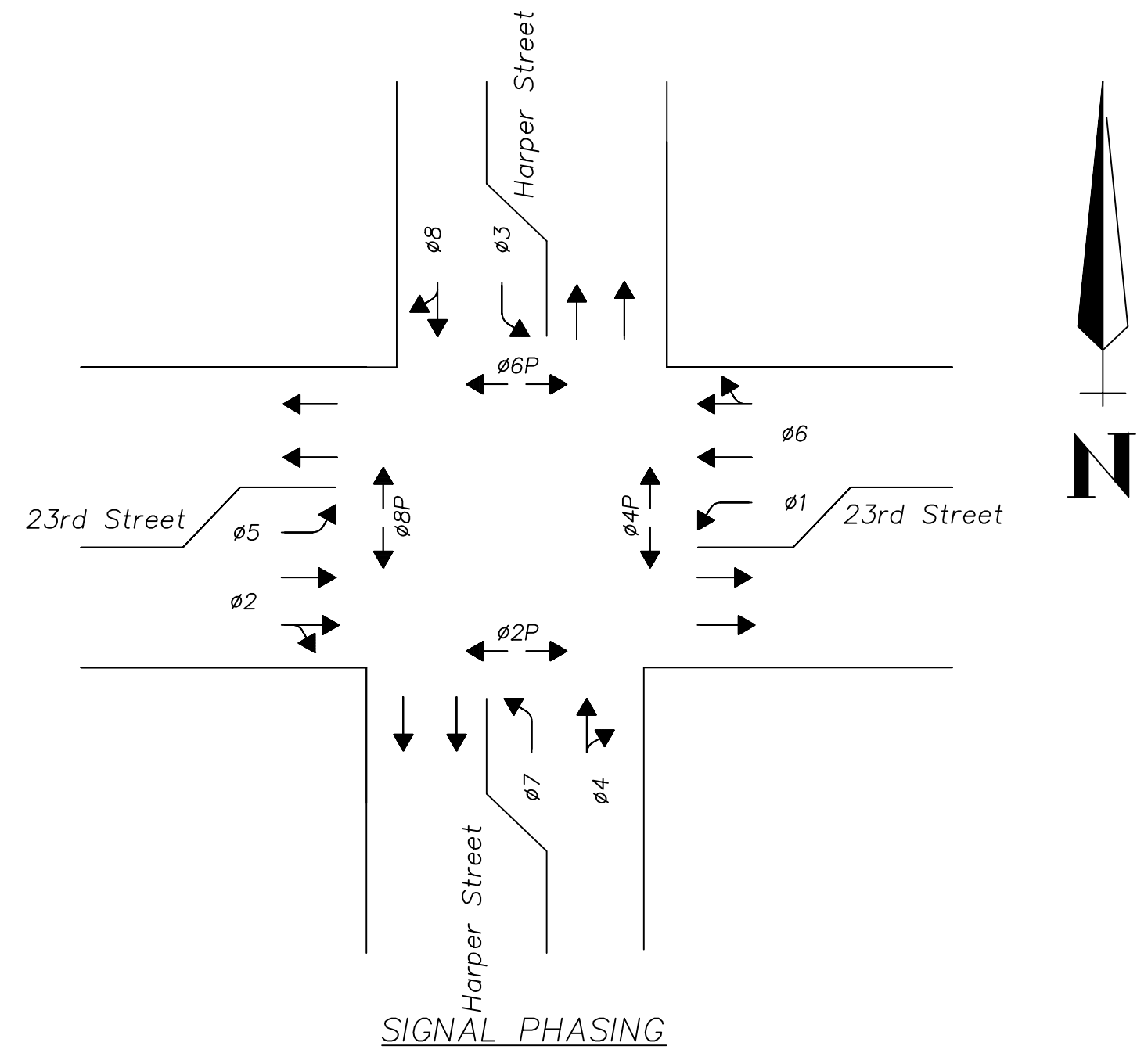
2020

drawn by: JRC
 checked by: JAB
 approved by: JSS
 QA/QC by: KR
 project no.: 020-2348
 drawing no.: 118 2348 2348 1000
 date: 10-27-2020

SHEET

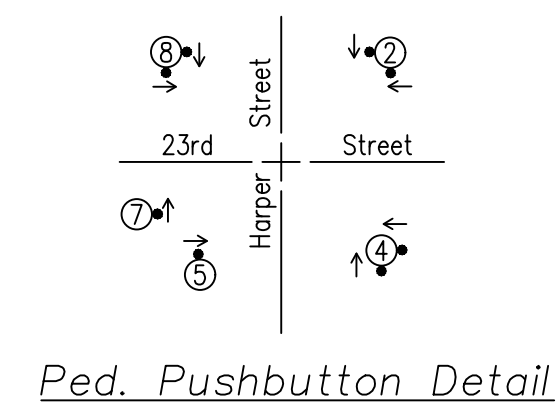
137 of 206

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 DATE: Dec 18, 2020 10:13am
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 F_PBASE_0202348
 V_XTOPO_0202348
 V_BNDY_0202348
 P_PWATR_0202348
 F_PWMT_MKING-BASE_0202348



SIGNAL PHASING

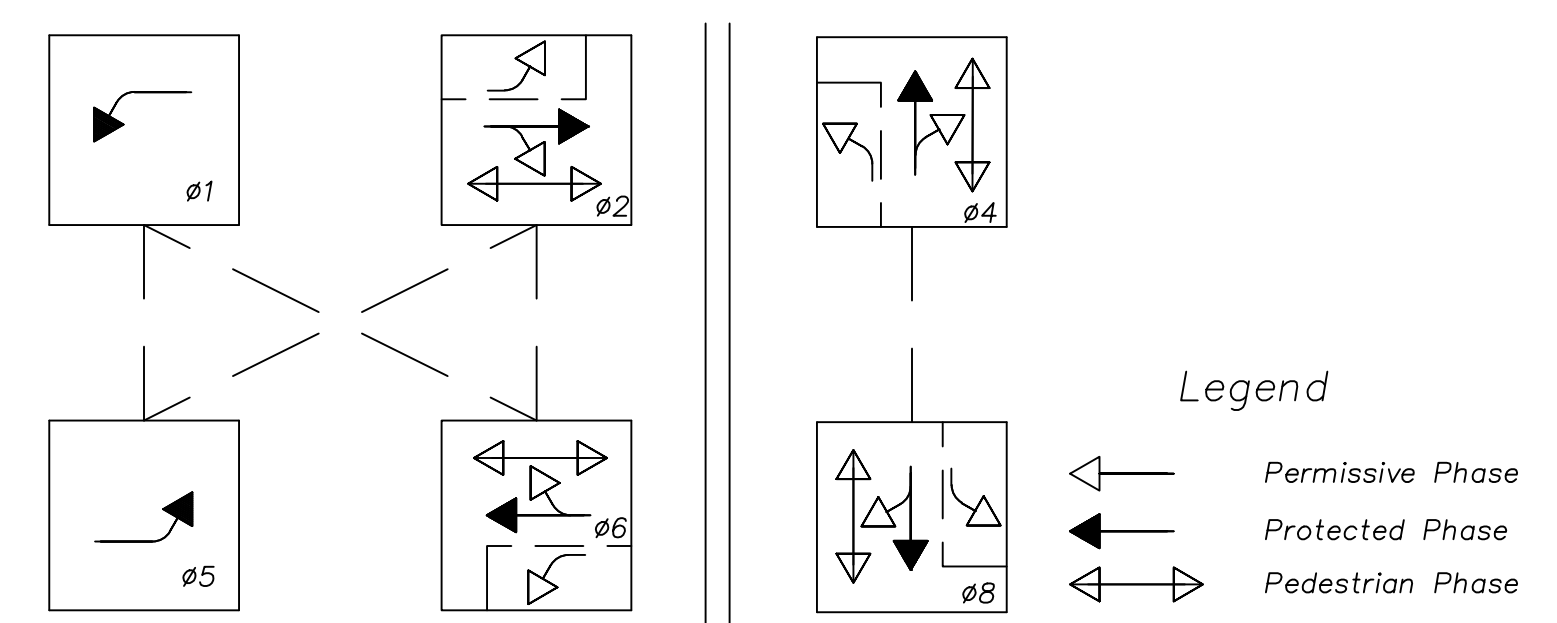
Flashing Operations	
23rd Street	FR
Harper Street	FR
Pedestrian Heads	Dark



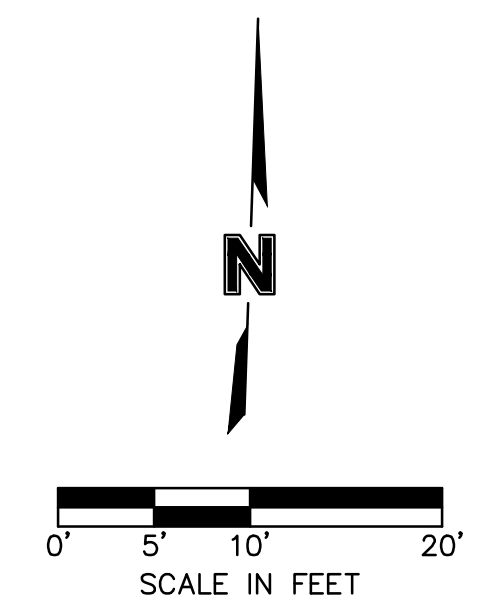
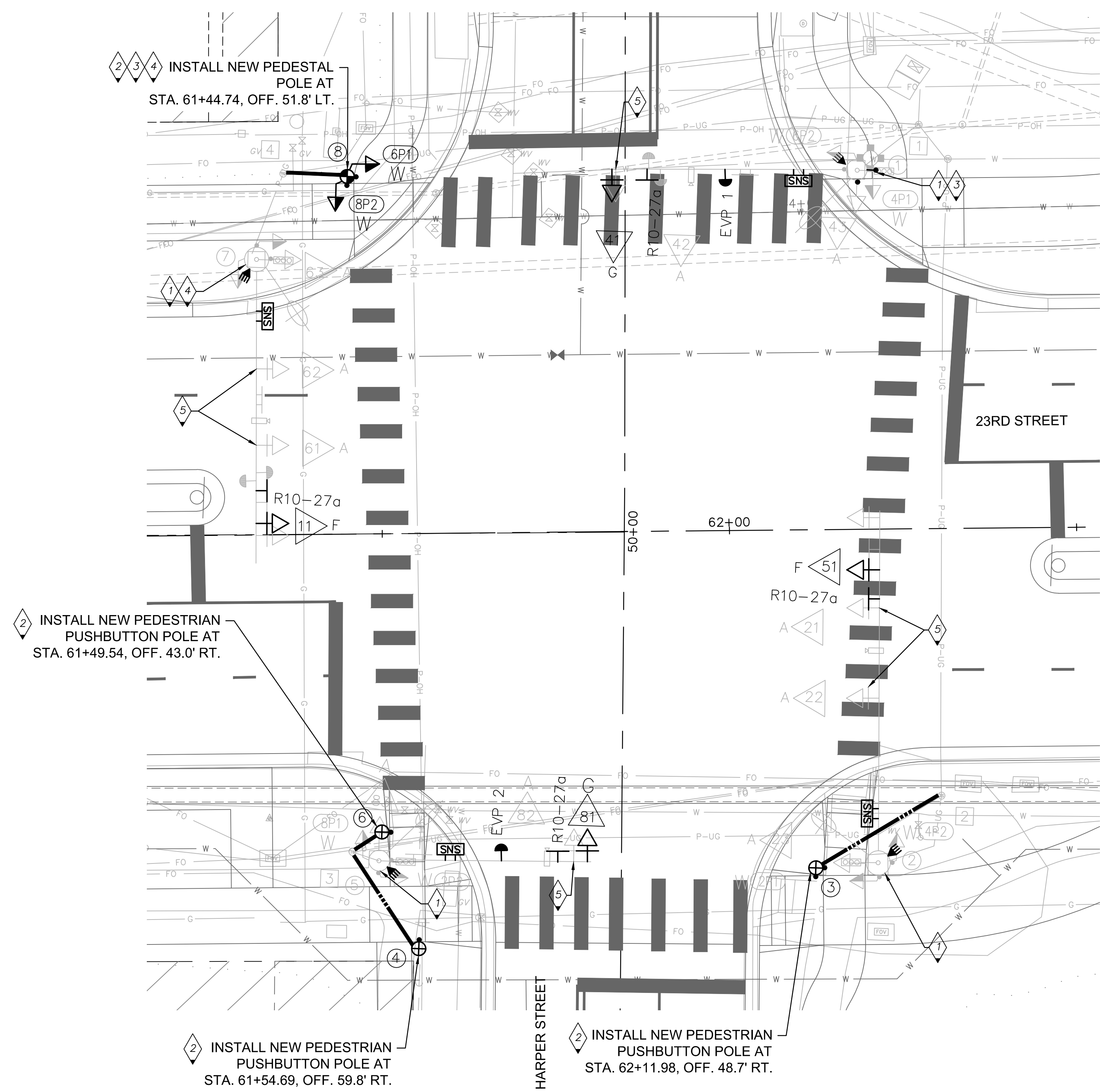
Ped. Pushbutton Detail

CONSTRUCTION NOTES:

- 1 FURNISH AND INSTALL NEW SIGNAL EQUIPMENT ON EXISTING MAST ARM POLE AS SHOWN. AFTER NEW SIGNAL IS IN PLACE OR AS DIRECTED BY THE ENGINEER, REMOVE EXISTING UNUSED SIGNAL EQUIPMENT INCLUDING CONDUIT AND CABLES. REFER TO THE TRAFFIC SIGNAL TURN ON PROCEDURE AND SALVAGE NOTES PRIOR TO REMOVAL.
- 2 FURNISH AND INSTALL NEW FOUNDATION AND NEW PEDESTAL (OR PEDESTRIAN PUSHBUTTON) POLE WITH SIGNAL EQUIPMENT AS SHOWN.
- 3 PUSH BUTTONS LOCATED WITHIN 10 FEET OF EACH OTHER SHALL BE INSTALLED WITH AUDIBLE MESSAGE. INSTALL PUSH BUTTON EXTENSION BRACKETS OF 12" AS REQUIRED TO ENSURE <10" REACH DISTANCE TO LANDING AREA.
- 4 RELOCATE EXISTING PEDESTRIAN SIGNAL HEADS FROM POLE 7 TO POLE 8.
- 5 ALIGN EXISTING TYPE "A" SIGNAL HEADS CENTERED ALONG NEW RECEIVING LANE. SIGNAL HEADS SHALL MAINTAIN 8' MINIMUM SPACING. RESIDUAL HOLES FROM PREVIOUS HEAD LOCATIONS SHALL BE PROPERLY PLUGGED.



Phasing Diagram



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SIGNAL PLAN
 23RD STREET AND HARPER STREET

REVISIONS
 2020

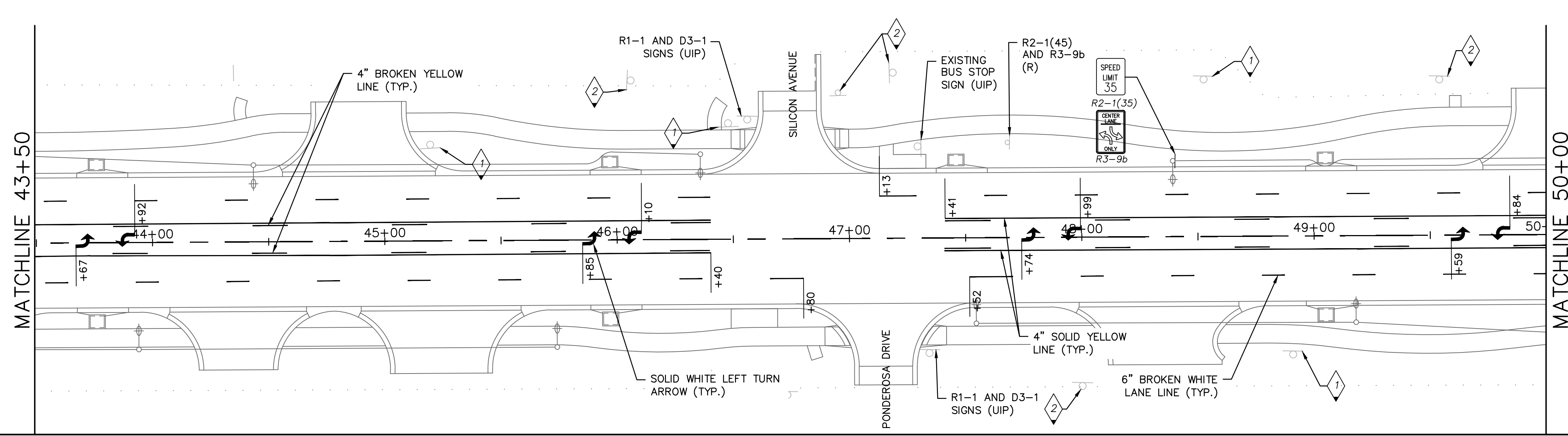
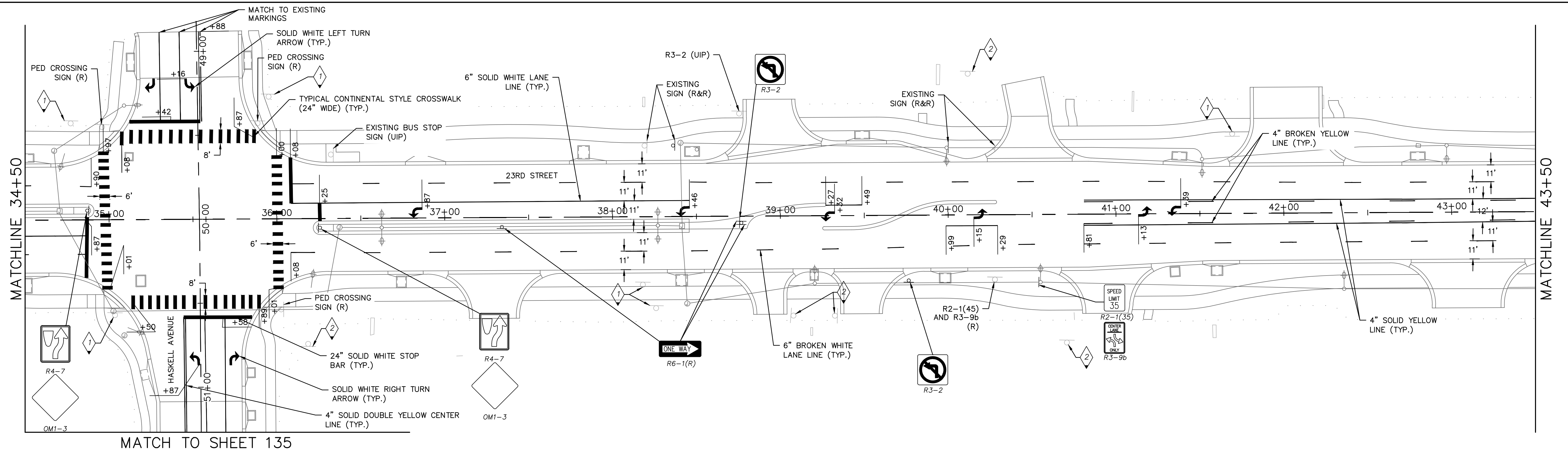
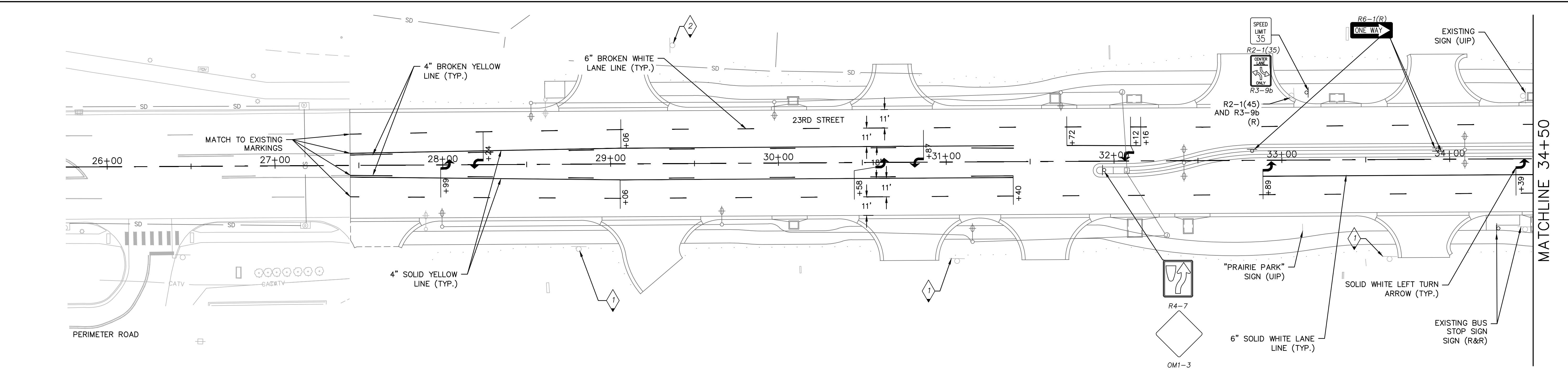
drawn by: JRC
 checked by: JAB
 approved by: JSS
 QA/QC by: KJR
 project no.: 020-2348
 drawing no.: 10-27-2020

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS

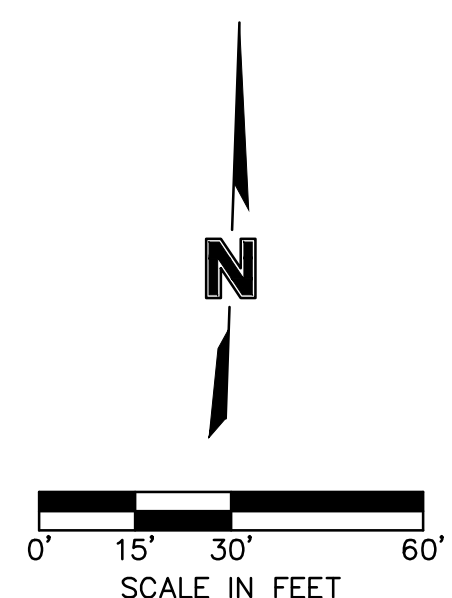
SHEET

138 of 206

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 V_XTOPO_0202348
 F_PBASE_0202348
 F_PSTRW_0202348
 F_PVT_MRKING_BASE_0202348
 F_LGT_PBASE_0202348



- CONSTRUCTION NOTES:**
- ① UTILITY MARKER TO REMAIN IN PLACE. IF UTILITY IS RELOCATED, MARKER SHALL BE RELOCATED ACCORDINGLY.
 - ② PRIVATE SIGN TO REMAIN IN PLACE.



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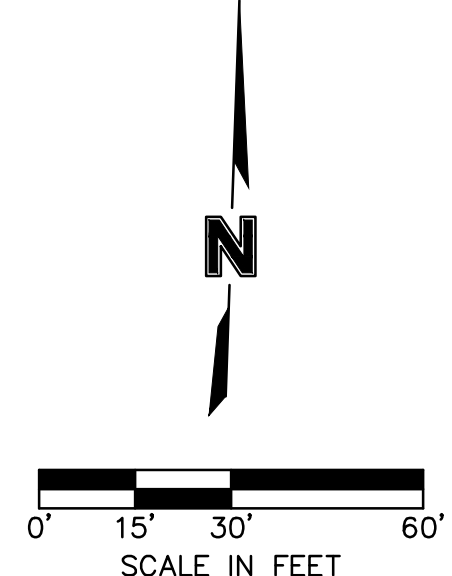
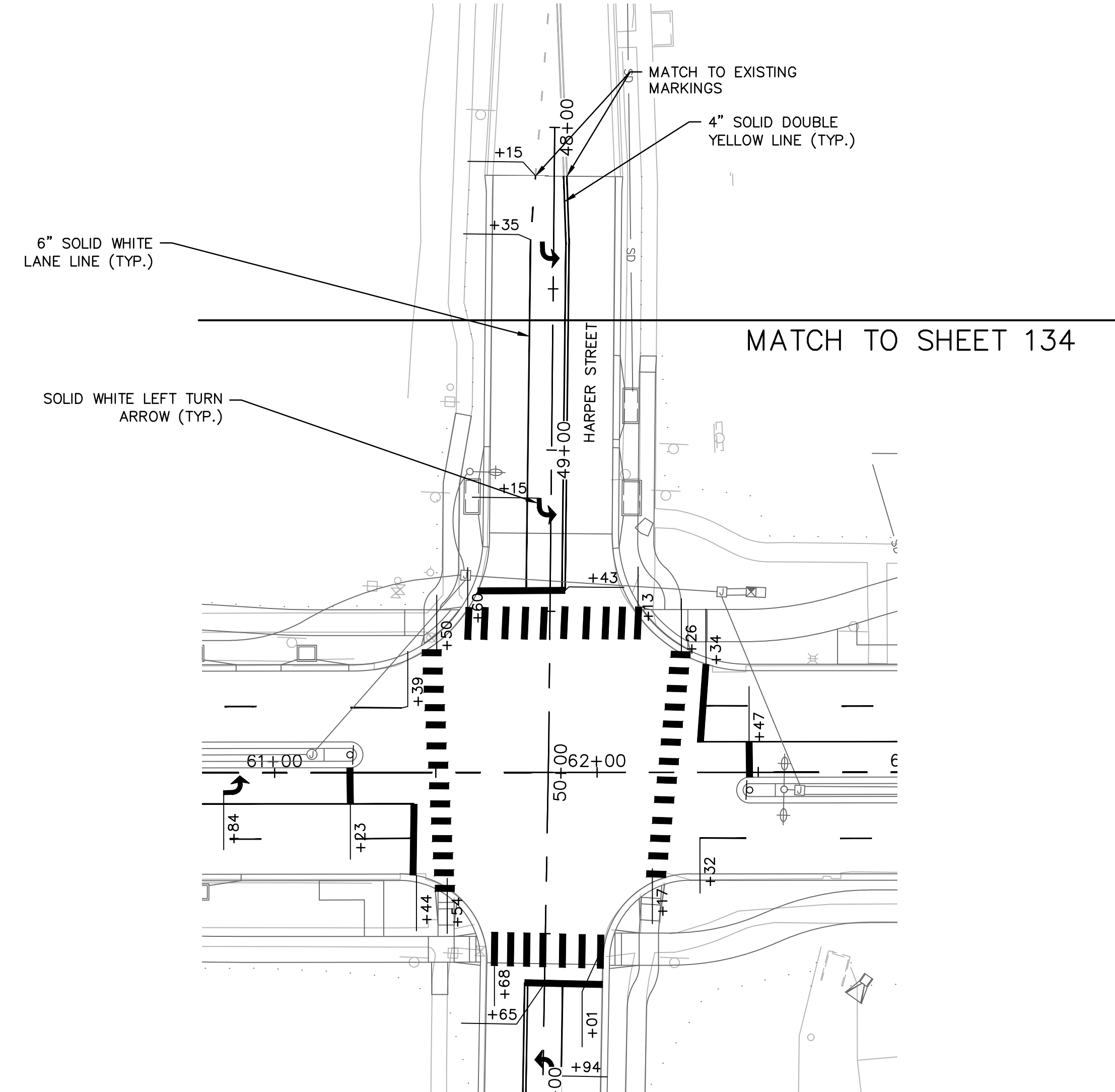
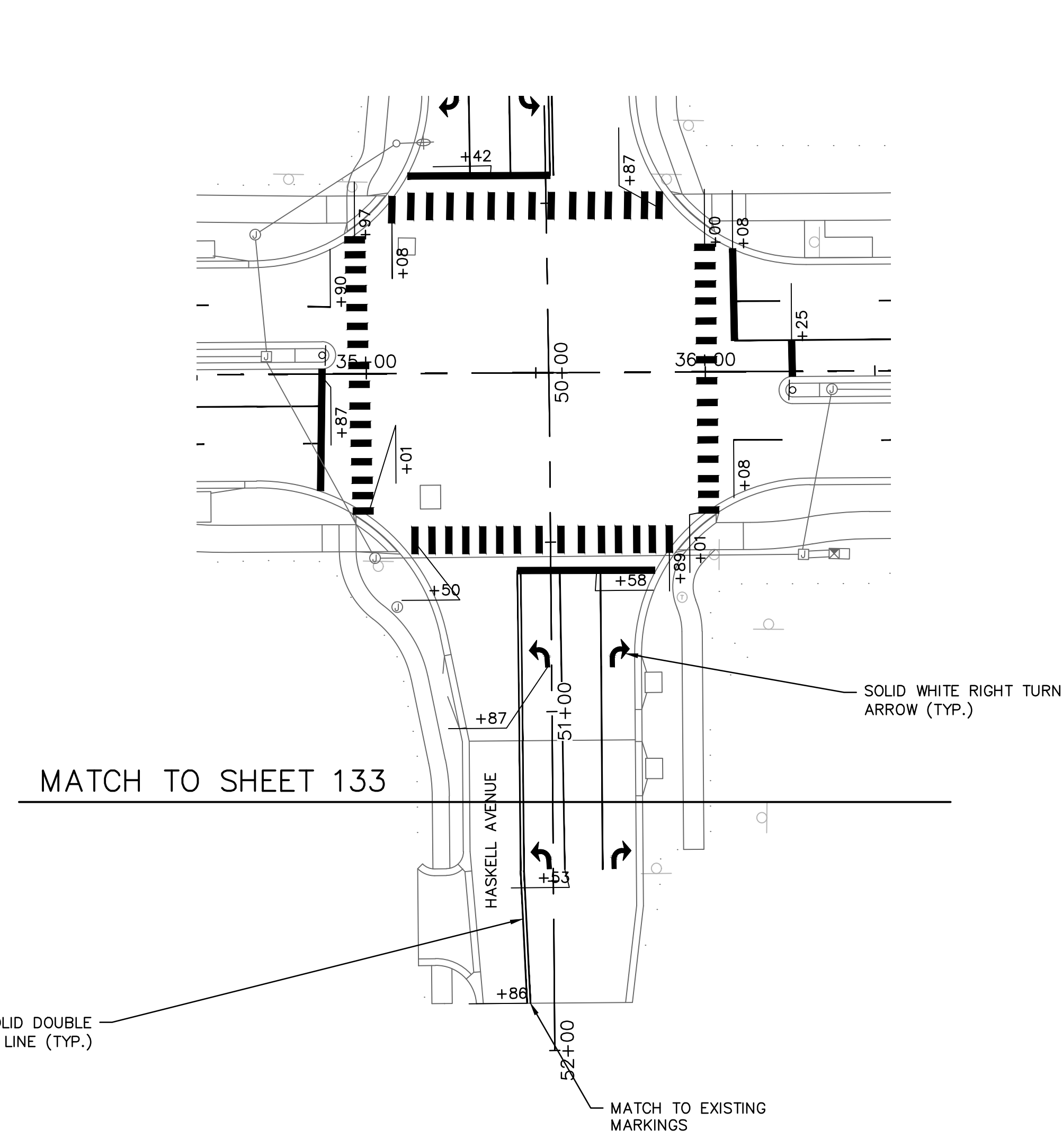
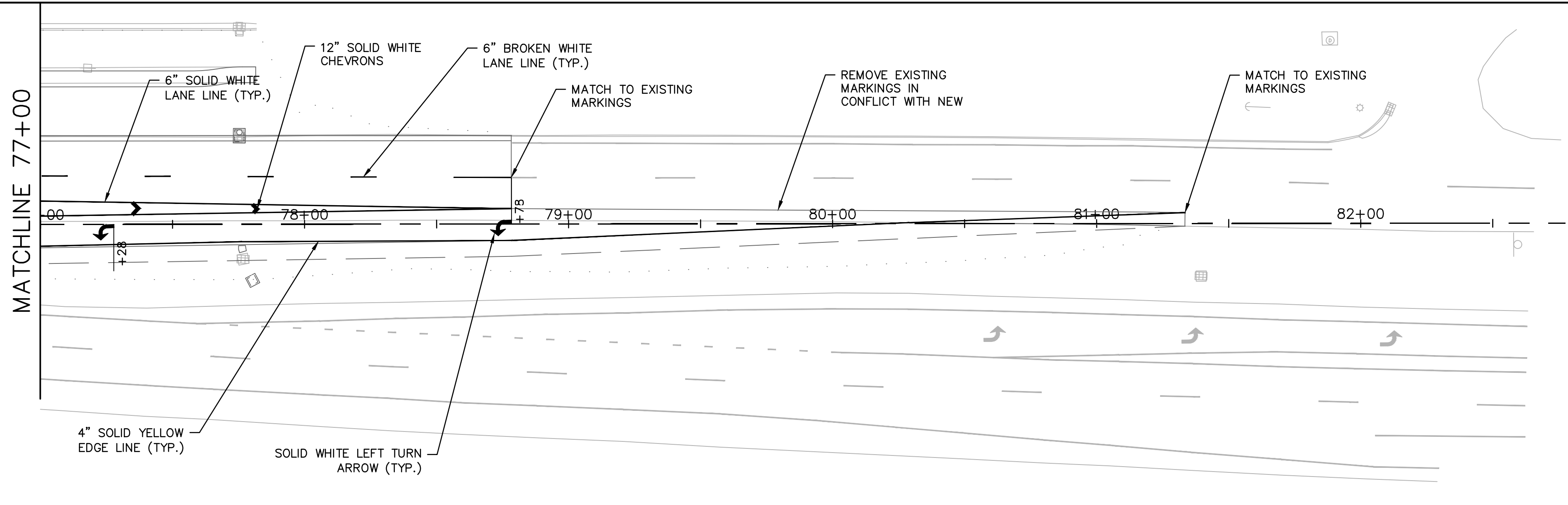
PAVEMENT MARKING AND SIGNING PLAN
23RD STREET

LAWRENCE, KANSAS

drawn by: JRC
 checked by: JAB
 approved by: JSS
 QA/QC by: KIR
 project no.: 020-2348
 drawing no.: 10-27-2020
 date: 10-27-2020

SHEET
139 of 206

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PAVEMENT MARKING AND SIGNING PLAN
23RD STREET

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

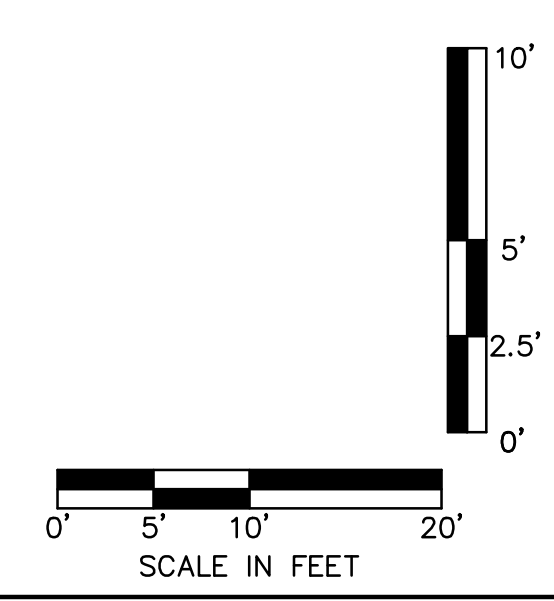
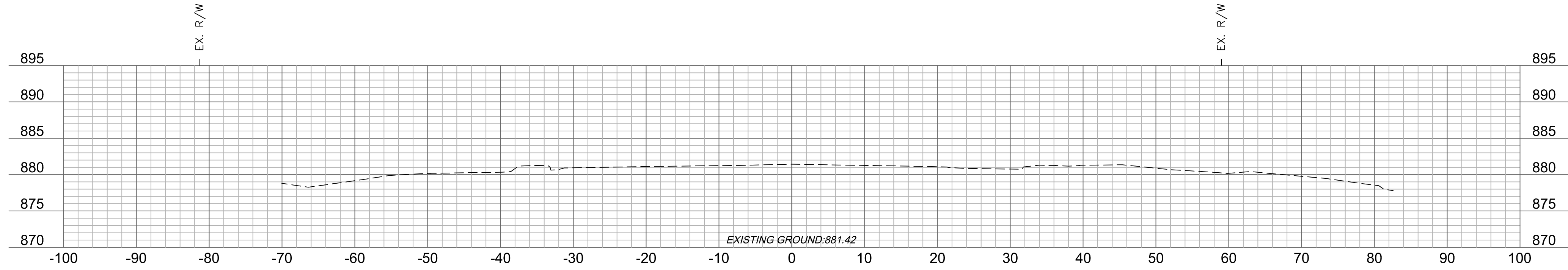
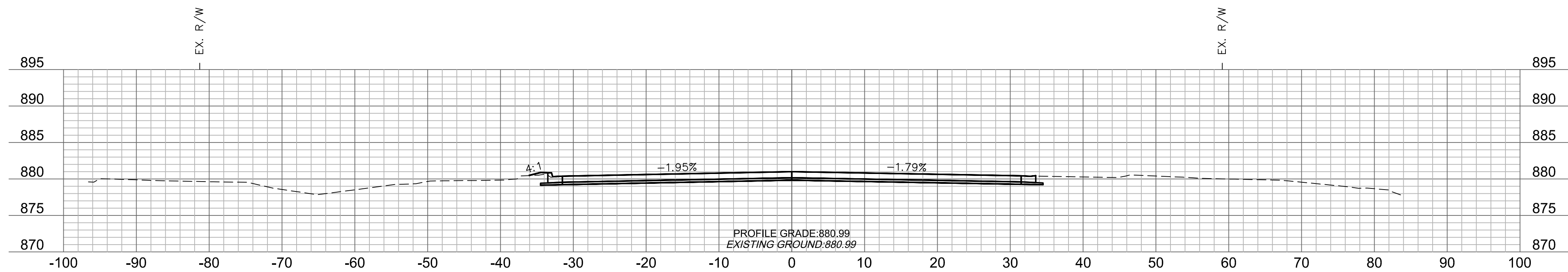
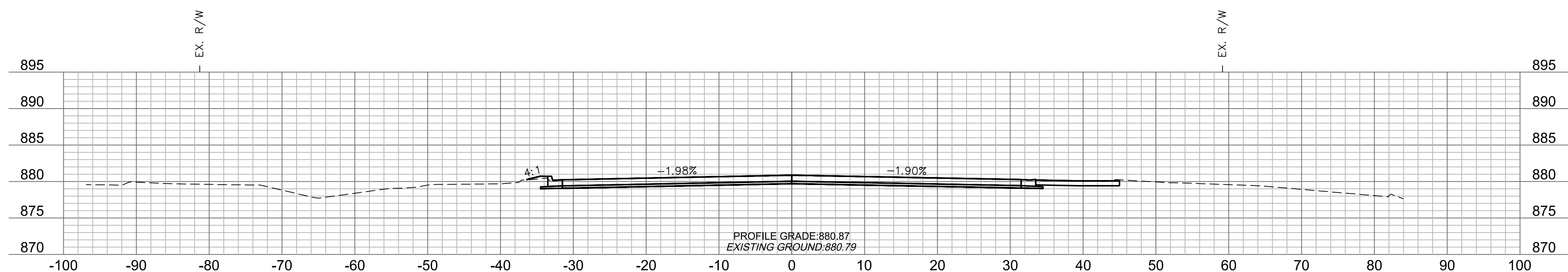
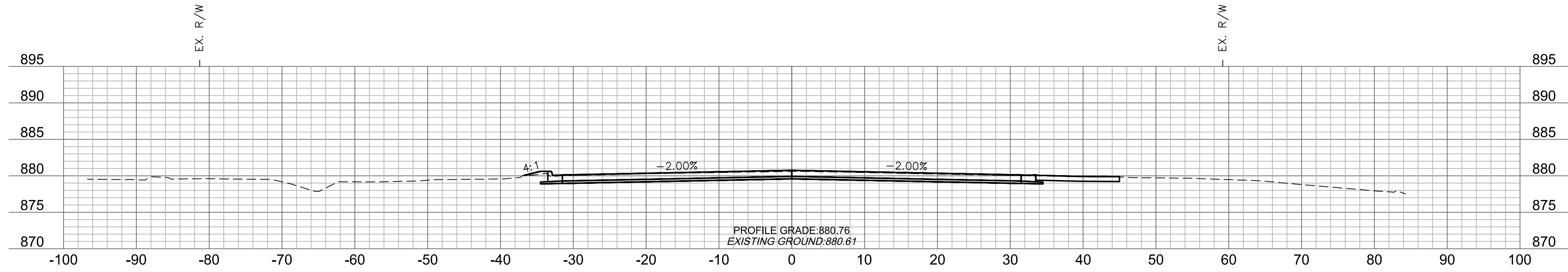
2020

REVISIONS

drawn by: JRC
 checked by: JAB
 approved by: JSS
 QA/QC by: KR
 project no.: 020-2348
 drawing no.: 10-2348
 date: 10-27-2020

SHEET
141 of 206

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 XREFS: T_BASE_0202348 T_PBLT_0202348



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23RD STREET
CROSS SECTIONS

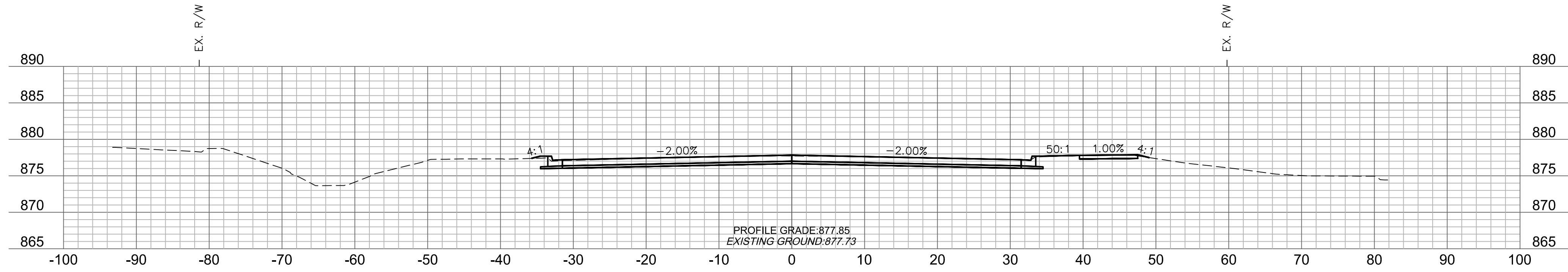
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS

2021

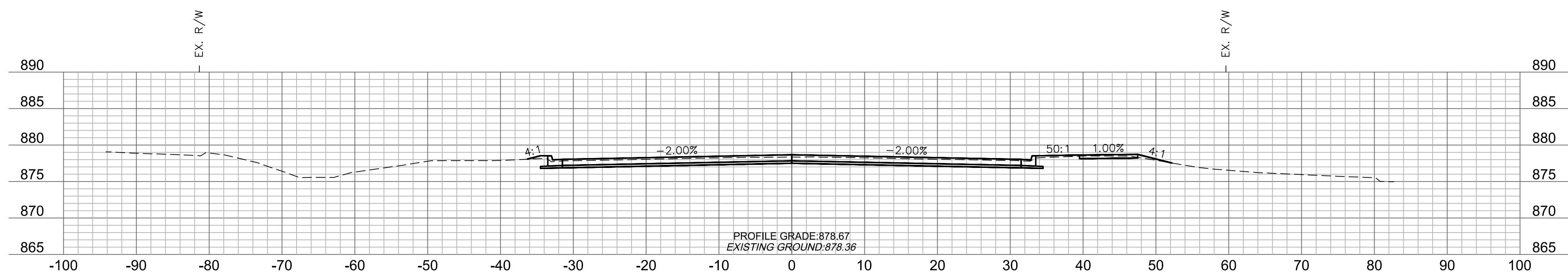
drawn by: CJC
 checked by: PBM
 approved by: PBM
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SHEET
142 of 206

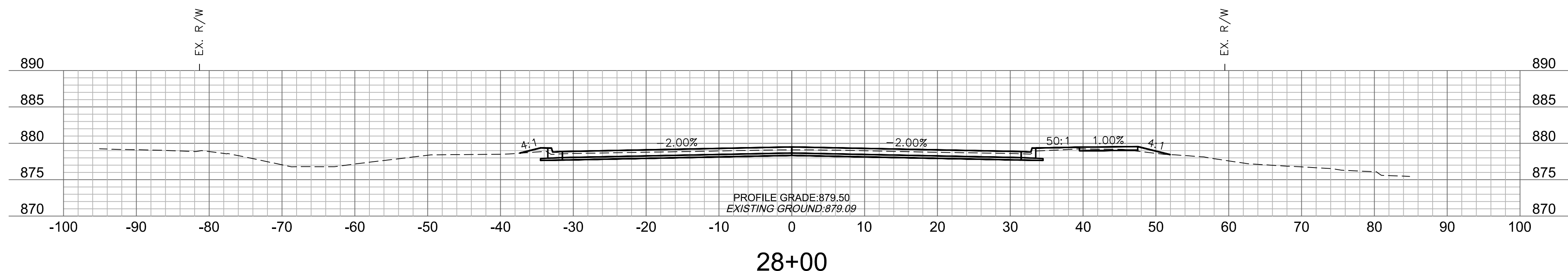
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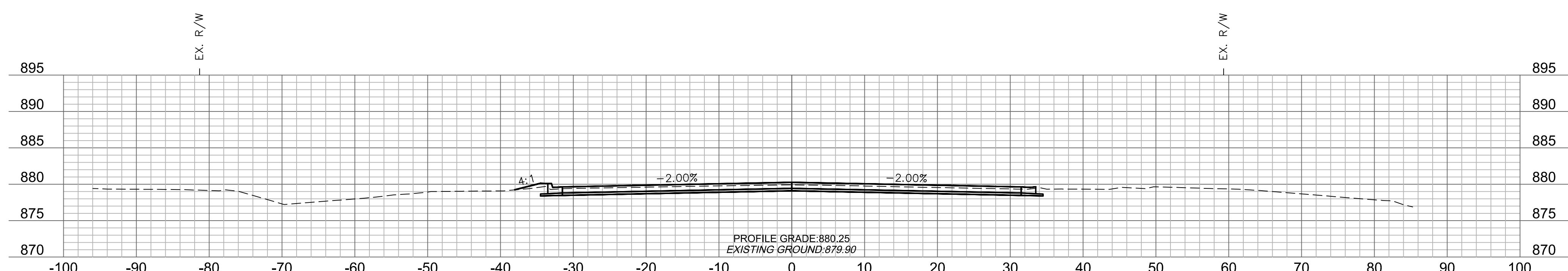
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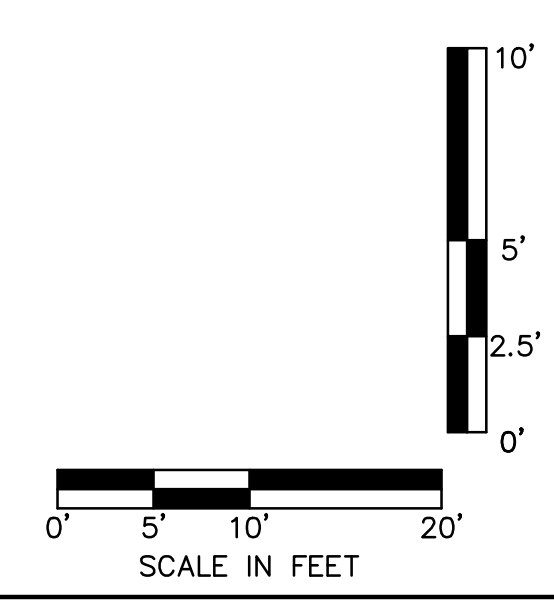
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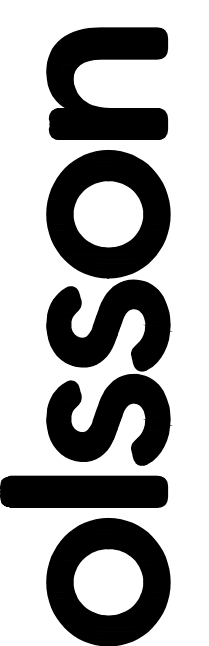


28+00



27+75





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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET CROSS SECTIONS

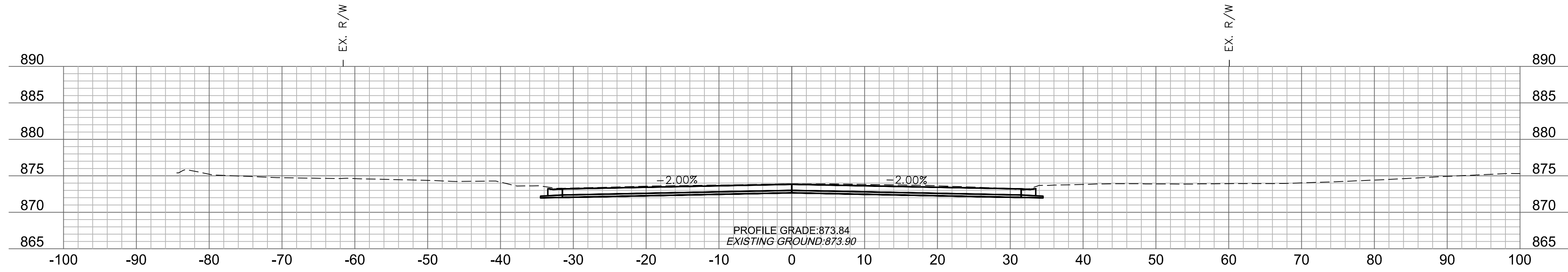
**23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS**

2021

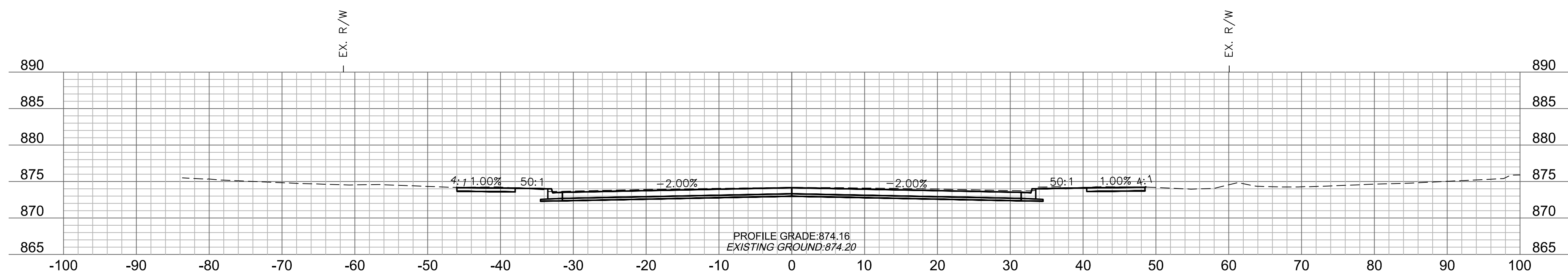
drawn by: CJC	checked by: PBM
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project no.: 020-2348	drawing no.: T_XSC01_0202348
date: 12-18-2020	

SHEET
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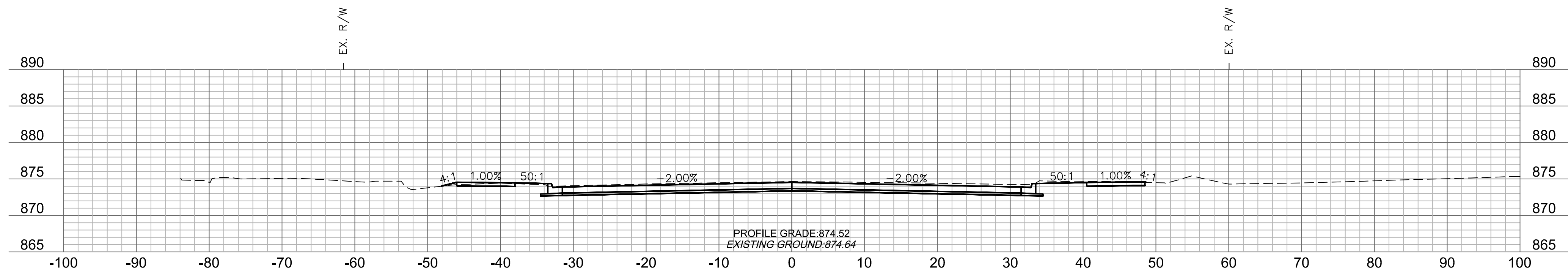
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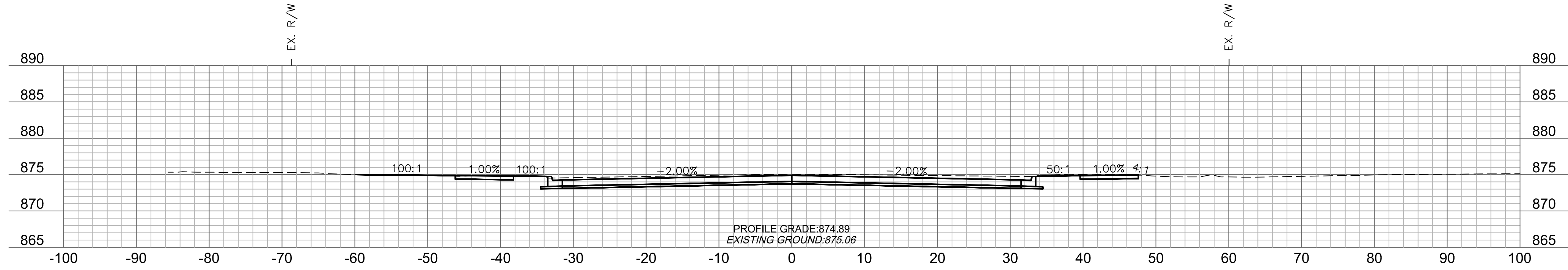
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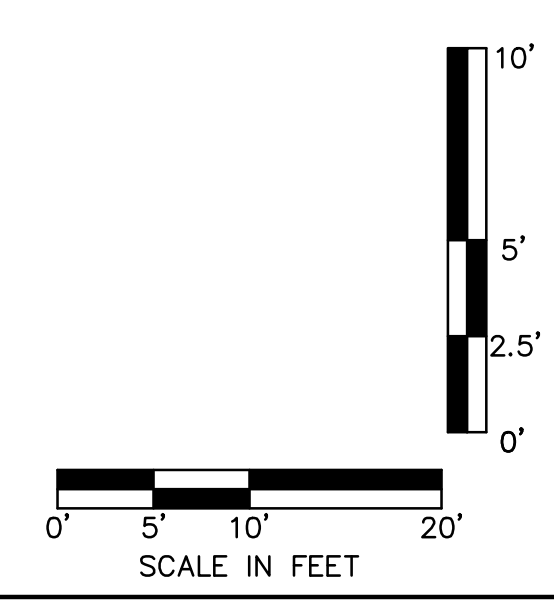
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30+00



29+75



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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

23RD STREET
 CROSS SECTIONS

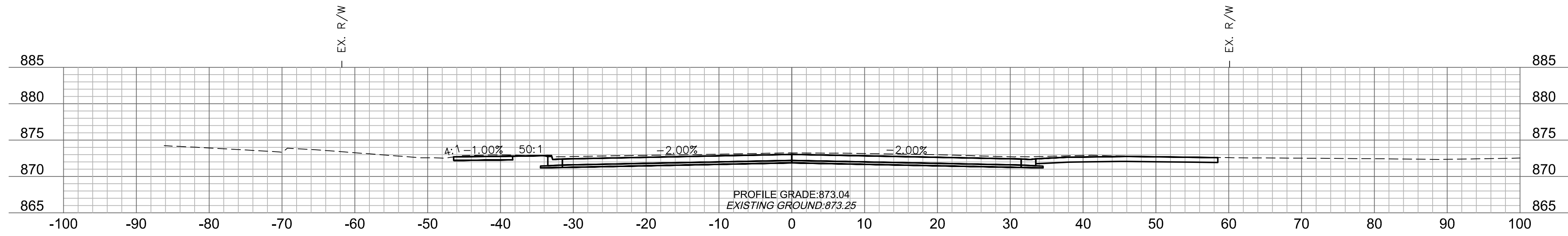
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

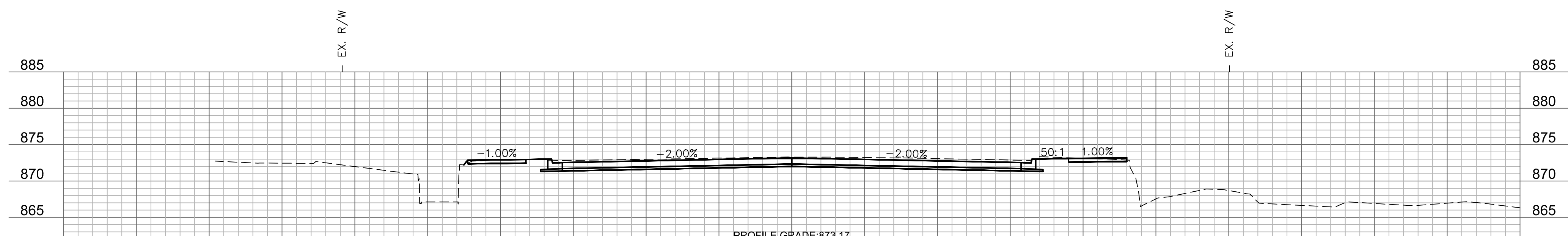
2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: RBC
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 date: 12-18-2020

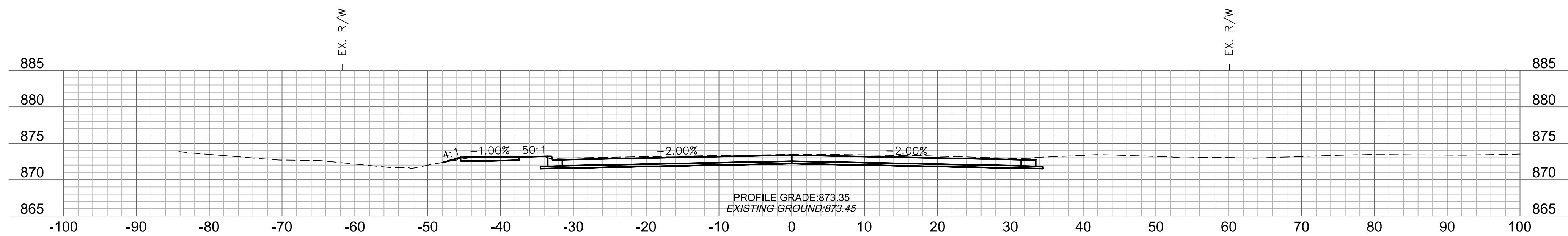
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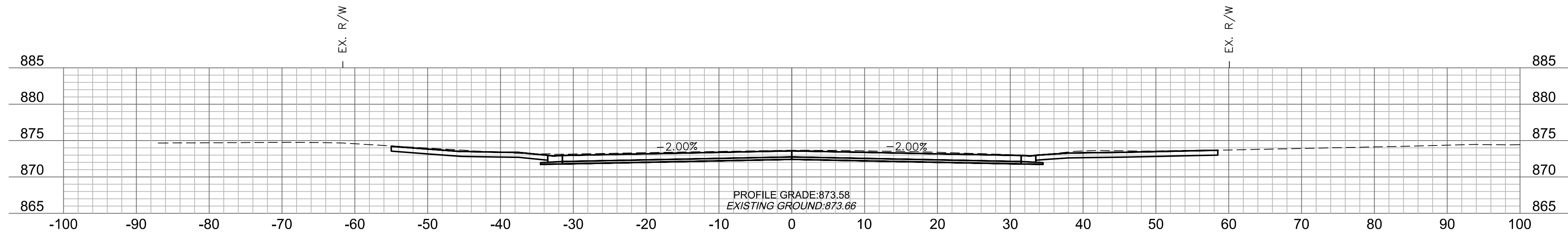
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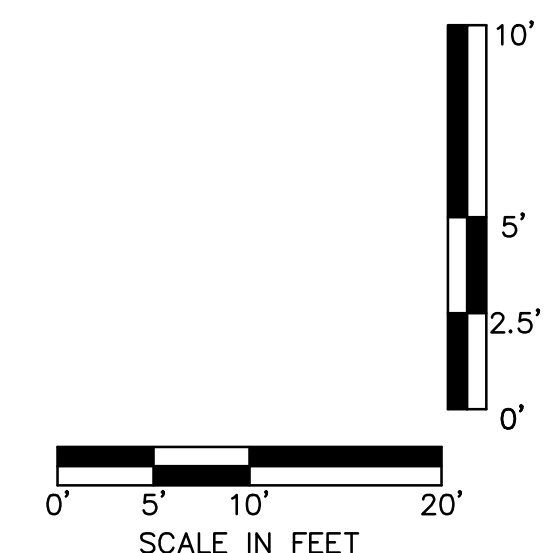
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31+00



30+75



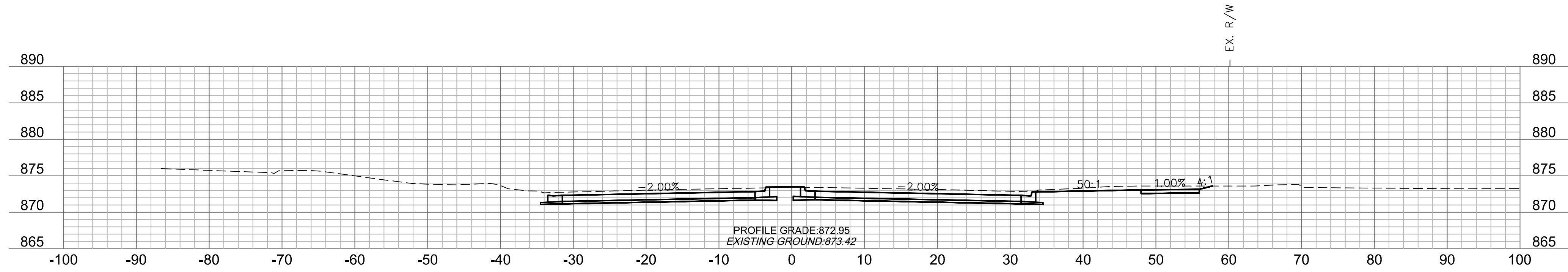
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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

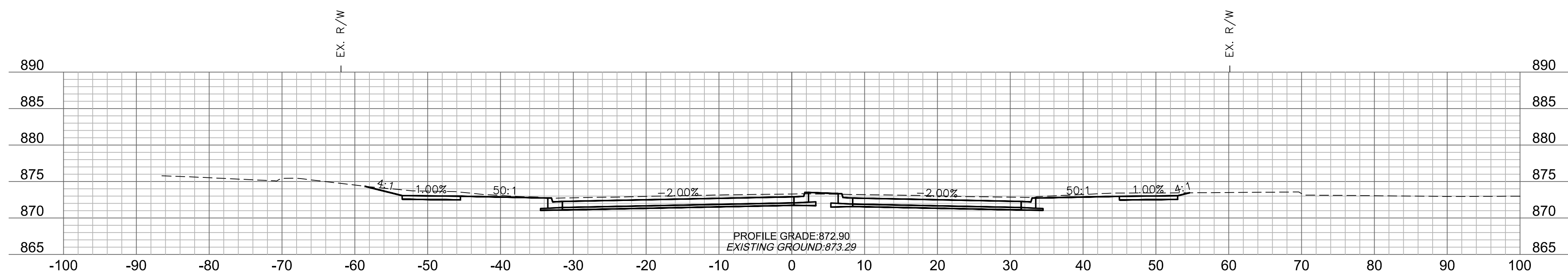
23RD STREET
 CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: RBC
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

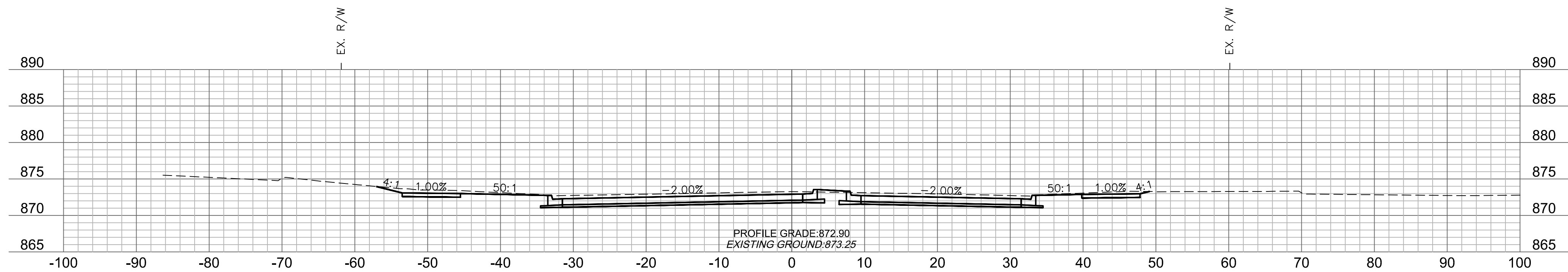
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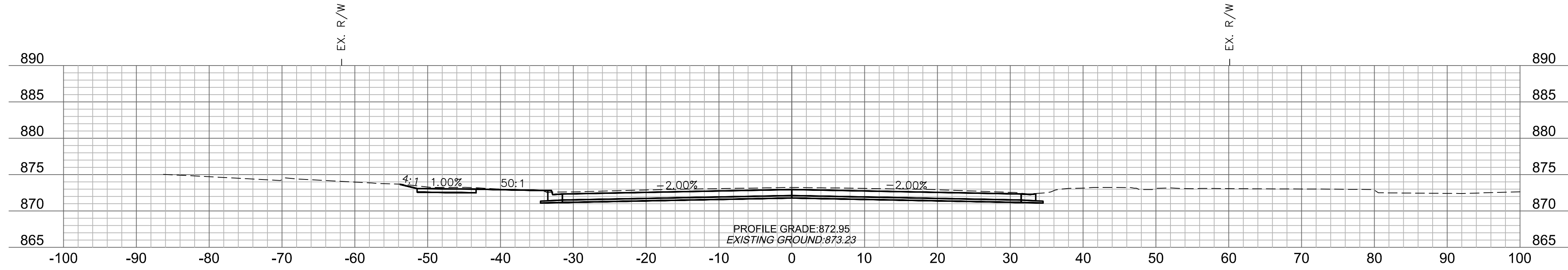
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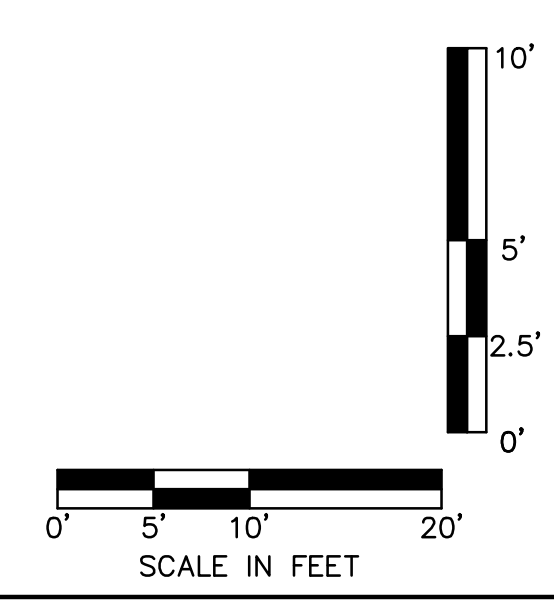
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32+00



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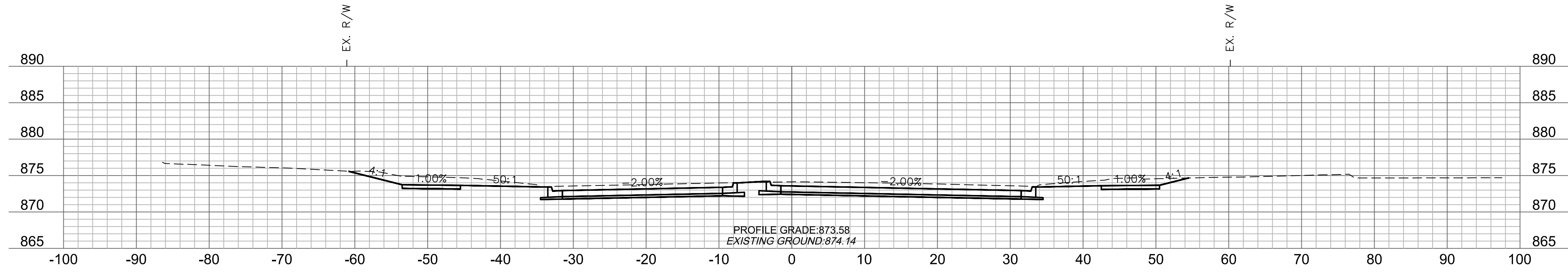
PRELIMINARY
 NOT FOR CONSTRUCTION

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

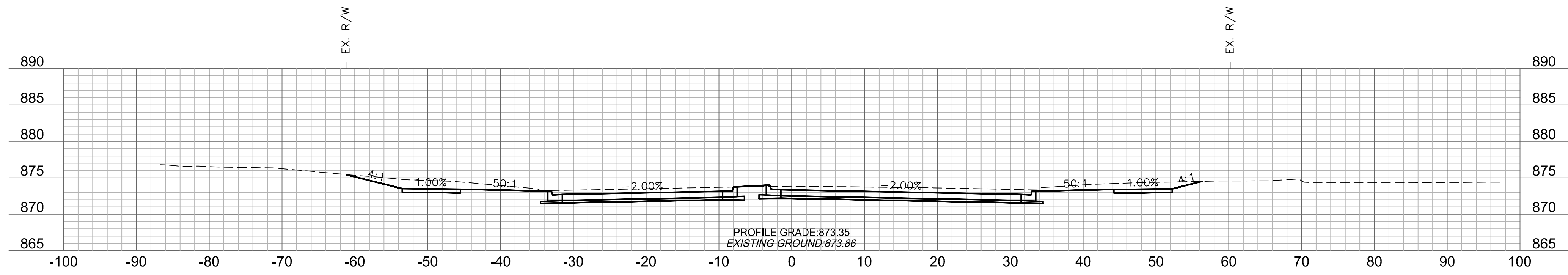
23RD STREET
 CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: 2.5' RBC
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

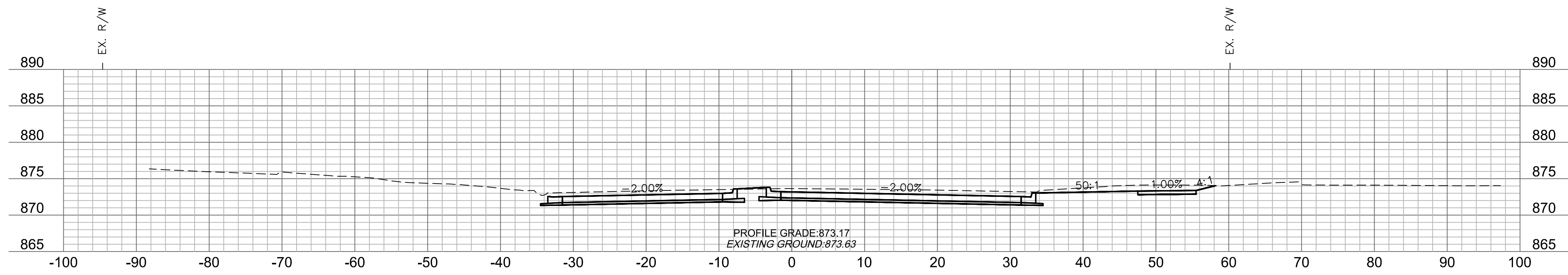
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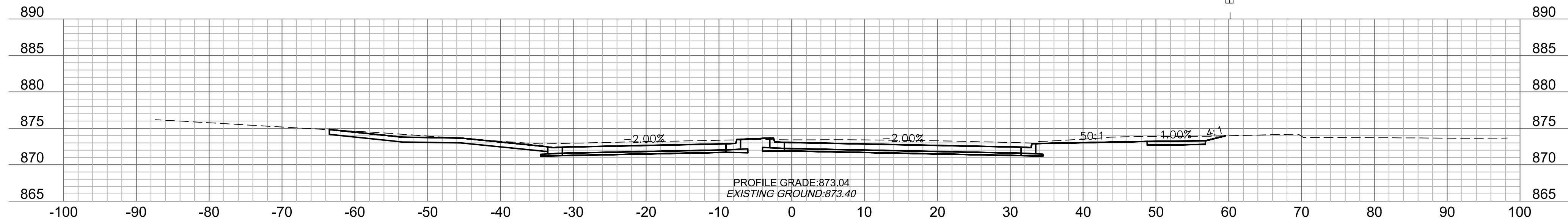
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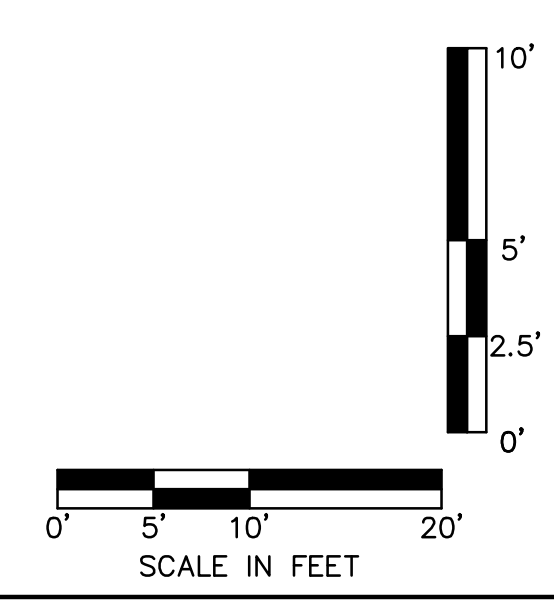
33+25



33+00



32+75



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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET CROSS SECTIONS

2021

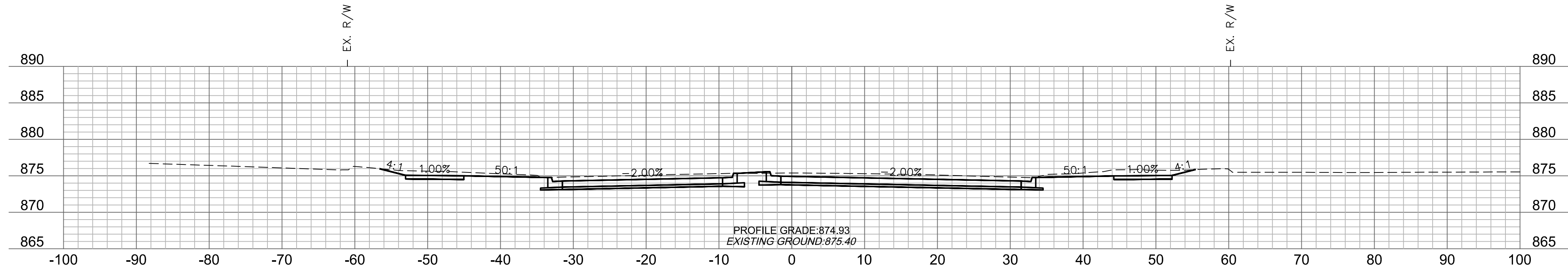
LAWRENCE, KANSAS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

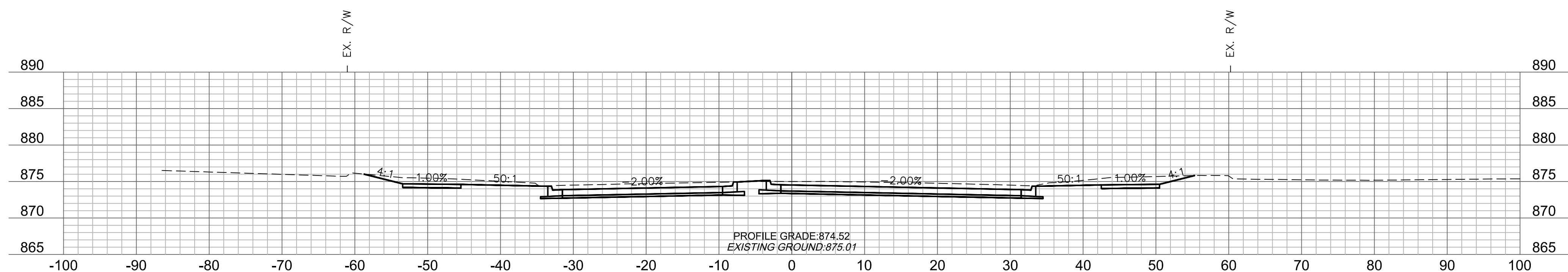
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checked by: PBM
approved by: PBM
QA/QC by: RBC
project no.: 020-2348
drawing no.: T_XSC01_0202348
date: 12-18-2020

SHEET
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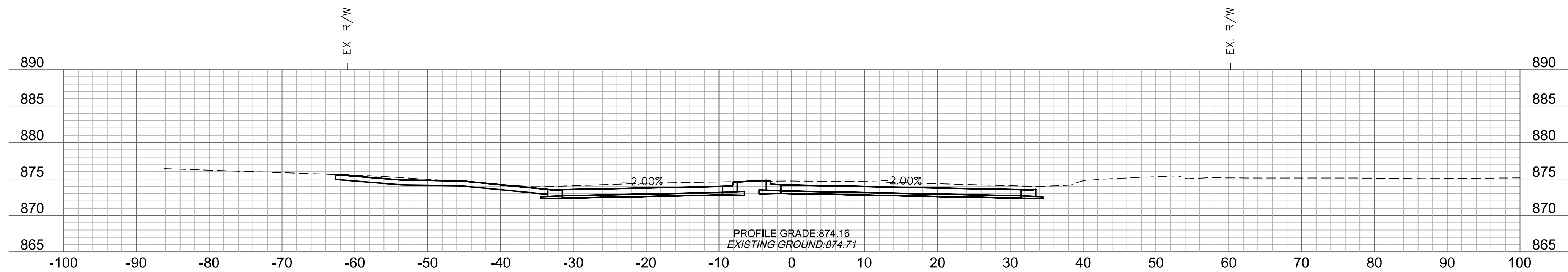
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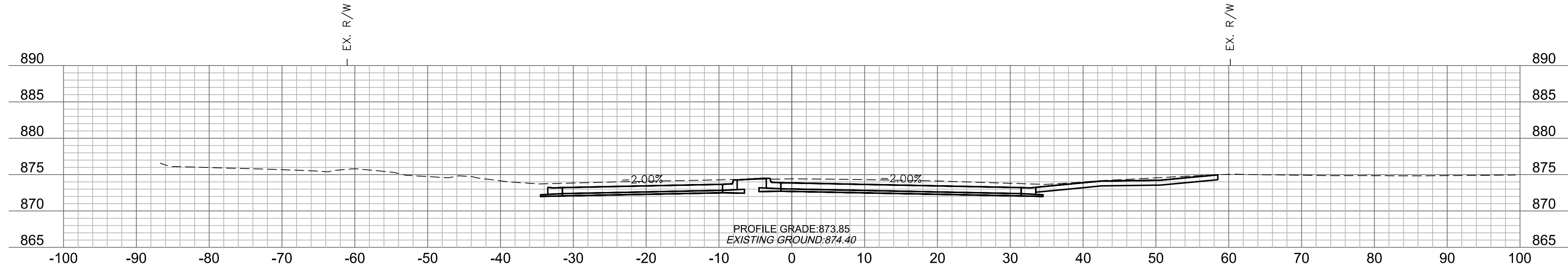
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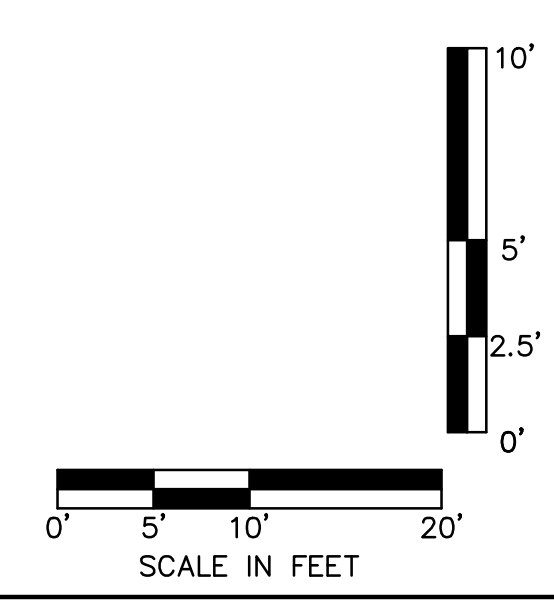
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34+00



33+75



PRELIMINARY
 NOT FOR CONSTRUCTION

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

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 CROSS SECTIONS

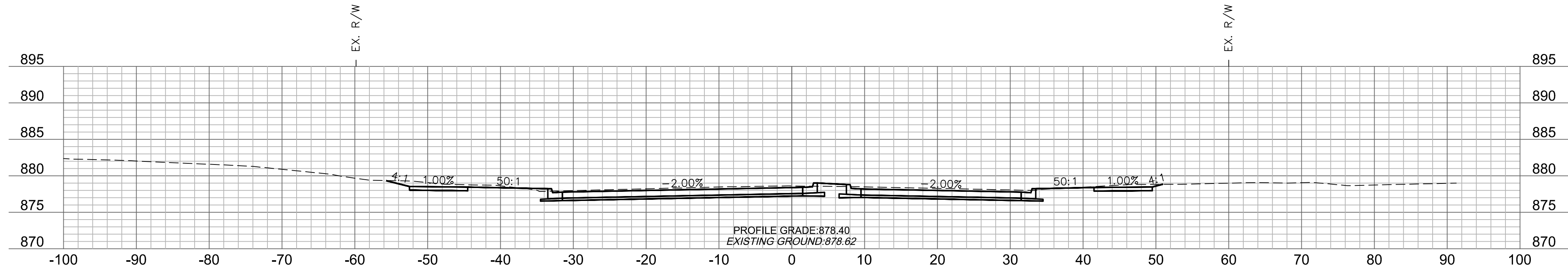
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

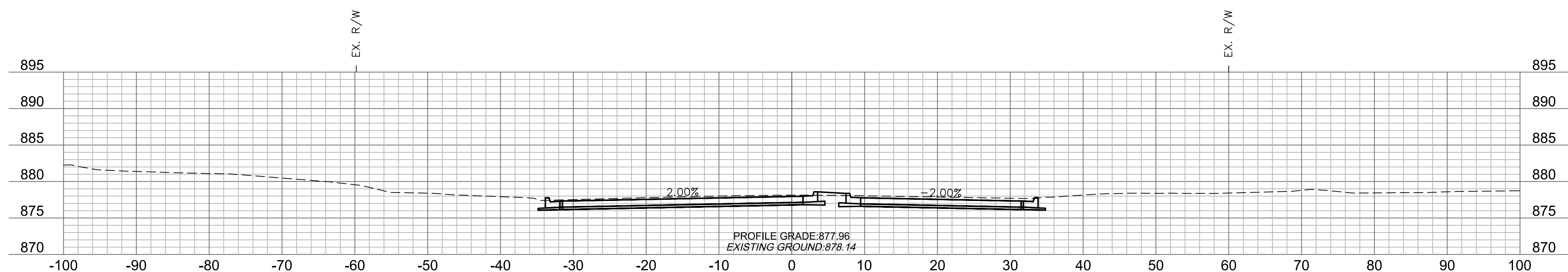
2021

drawn by: CJC
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 approved by: PBM
 QA/QC by: RBC
 project no.: 020-2348
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 date: 12-18-2020

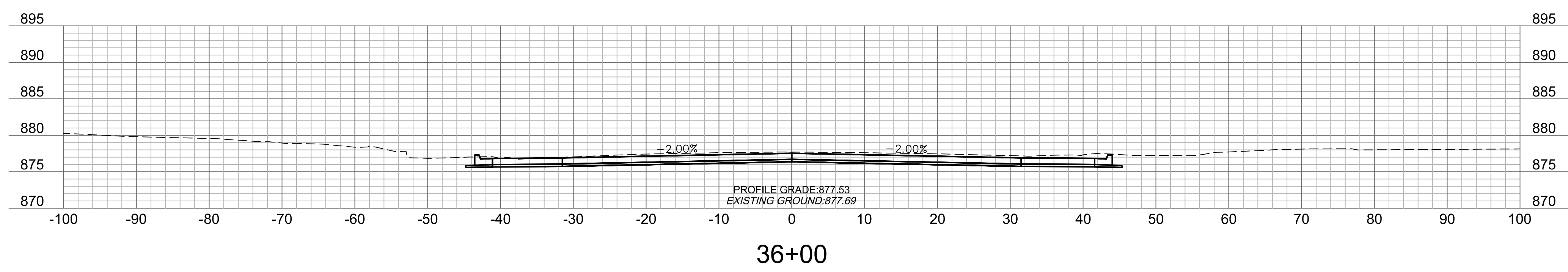
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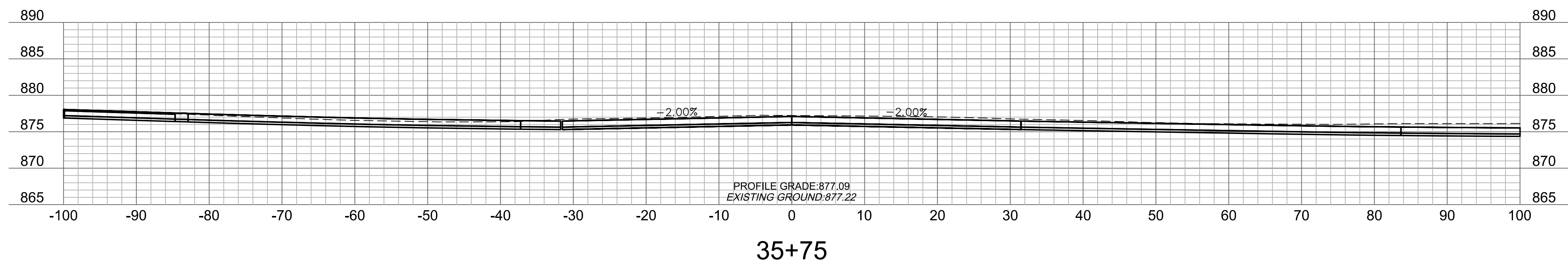
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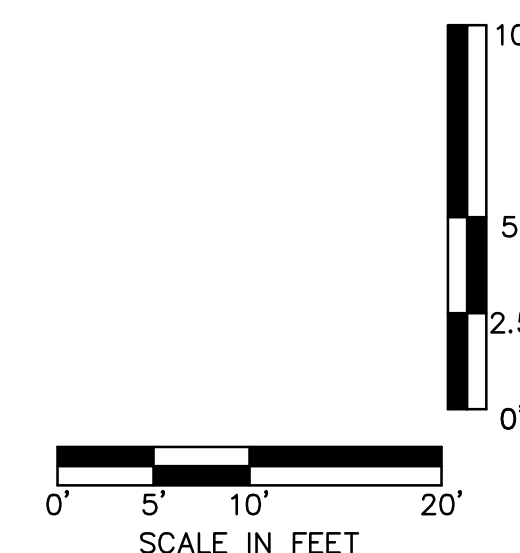
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PRELIMINARY
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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

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 CROSS SECTIONS

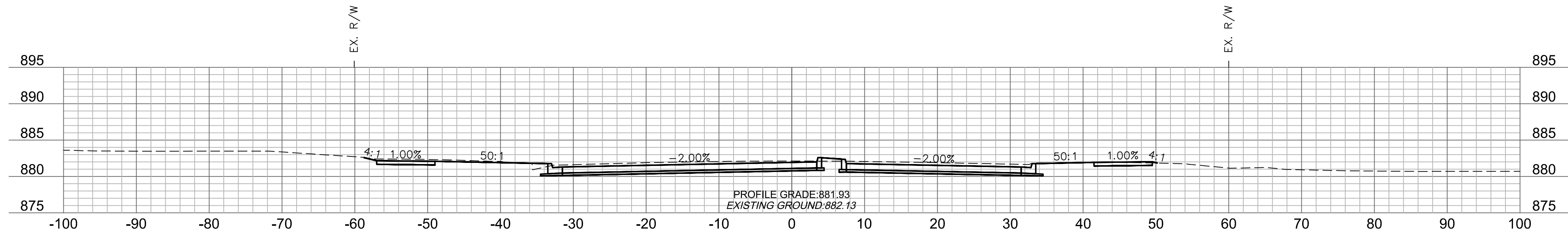
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

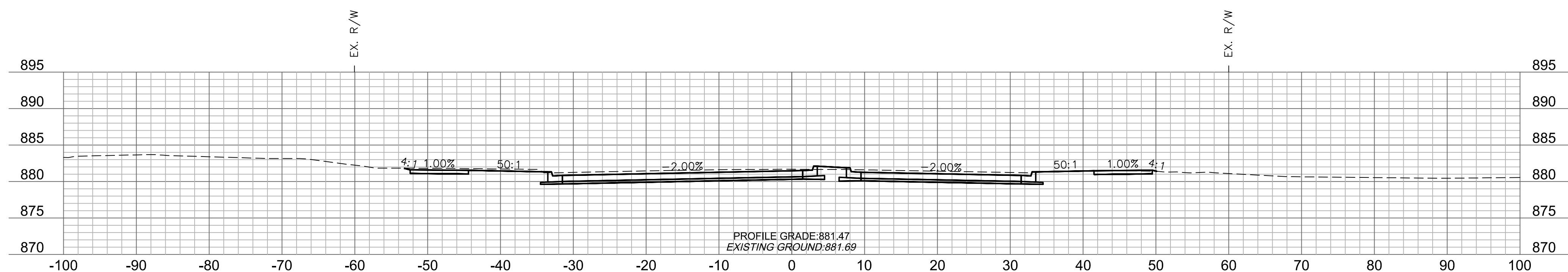
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 approved by: PBM
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 drawing no.: T_XSC01_0202348
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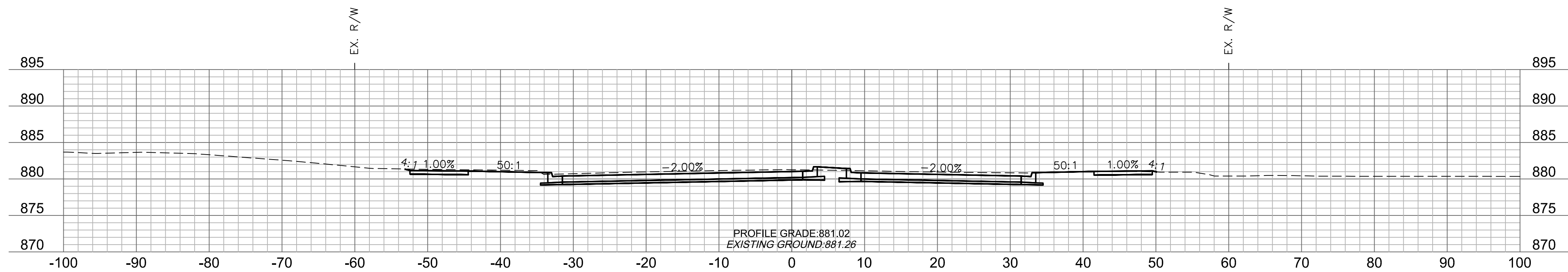
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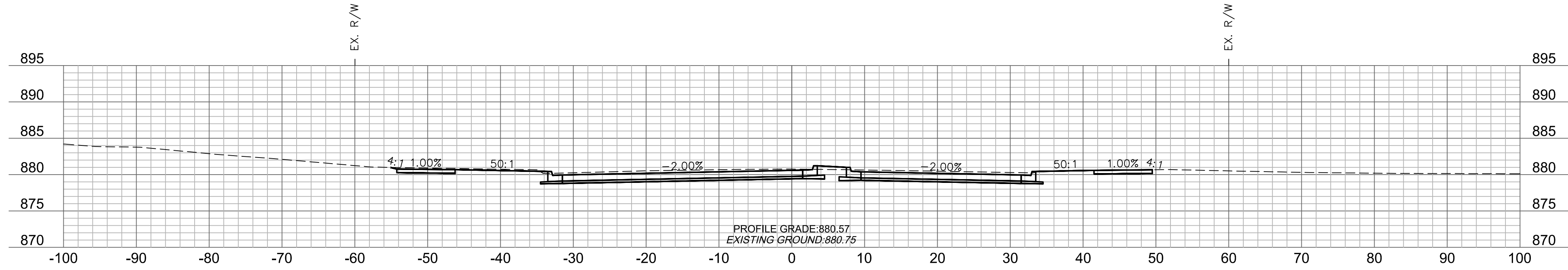
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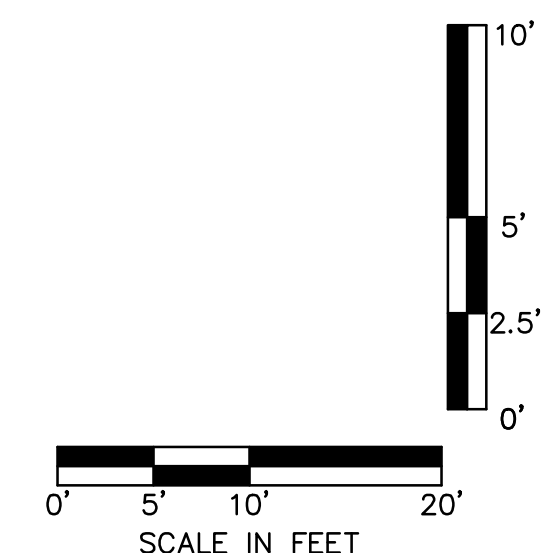
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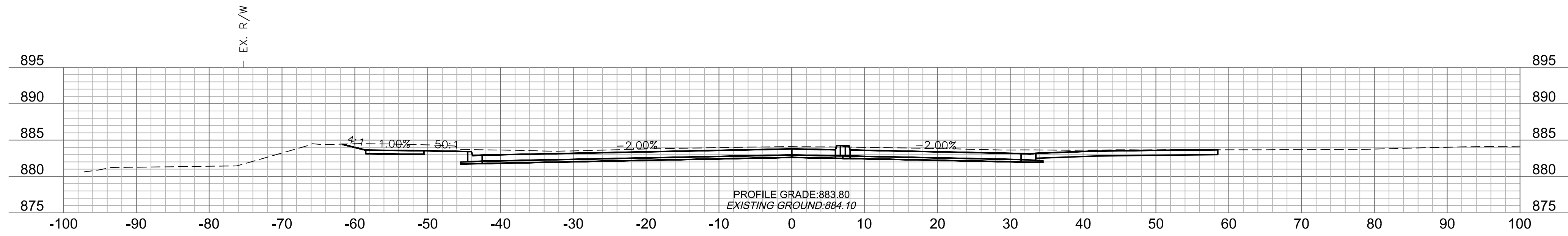
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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

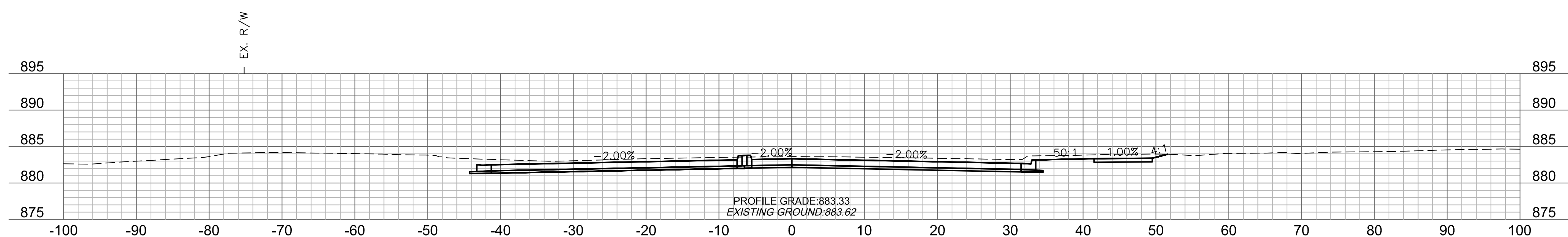
23RD STREET CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: RBC
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
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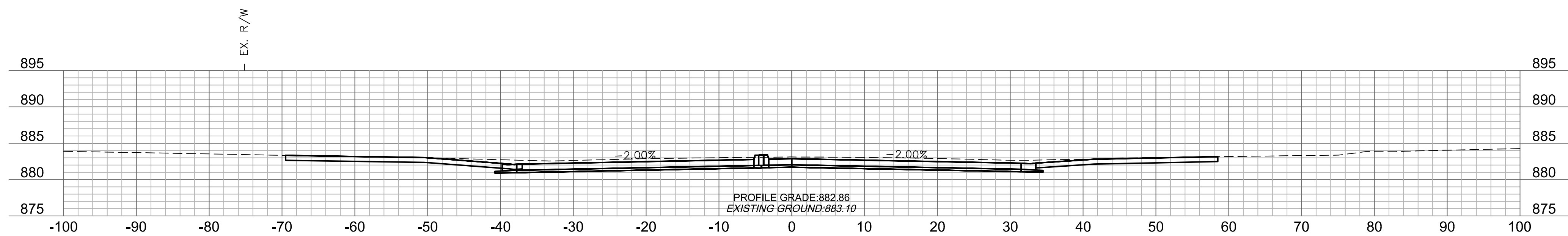
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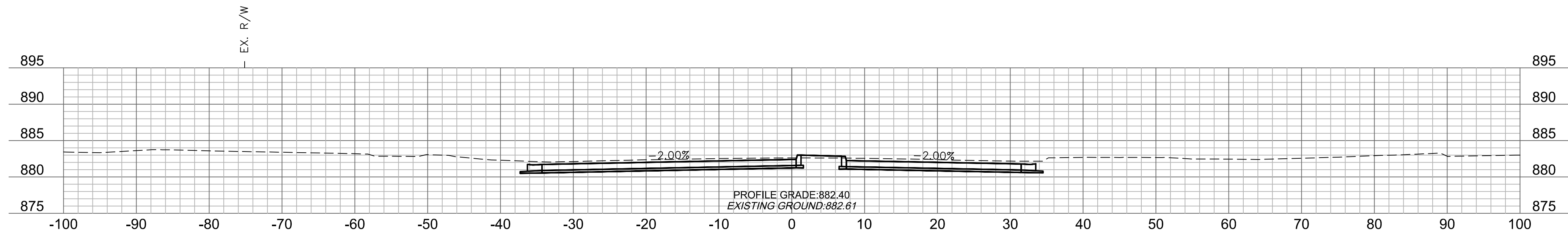
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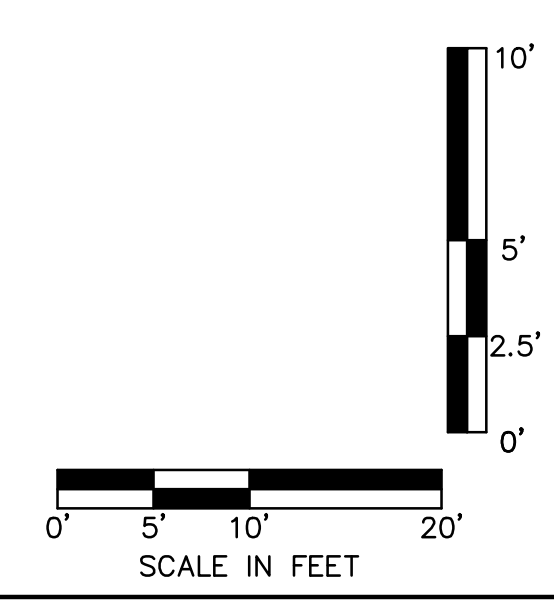
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38+75



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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

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 CROSS SECTIONS

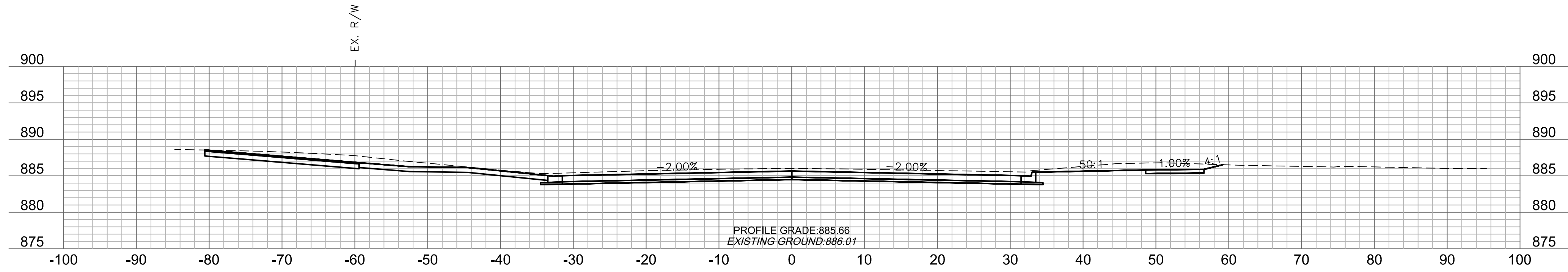
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

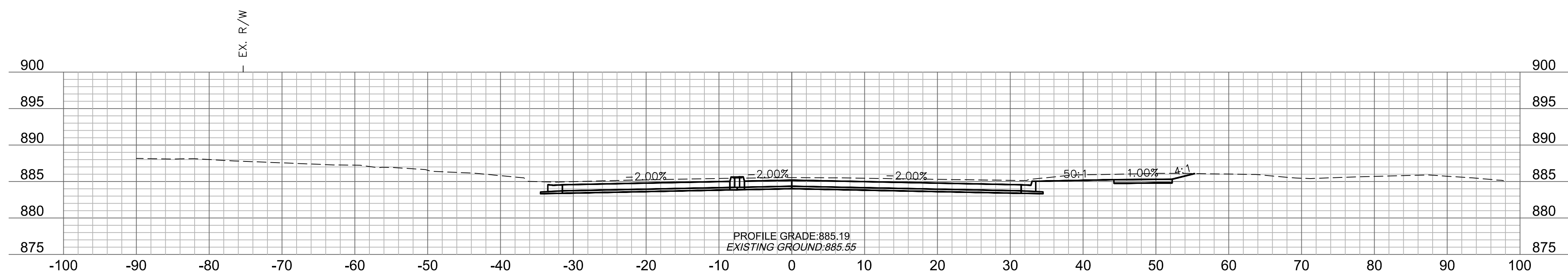
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 drawing no.: T_XSC01_0202348
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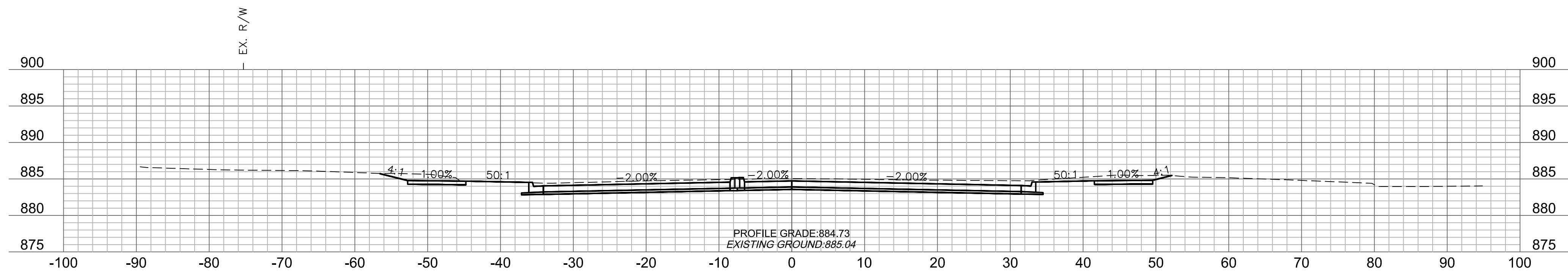
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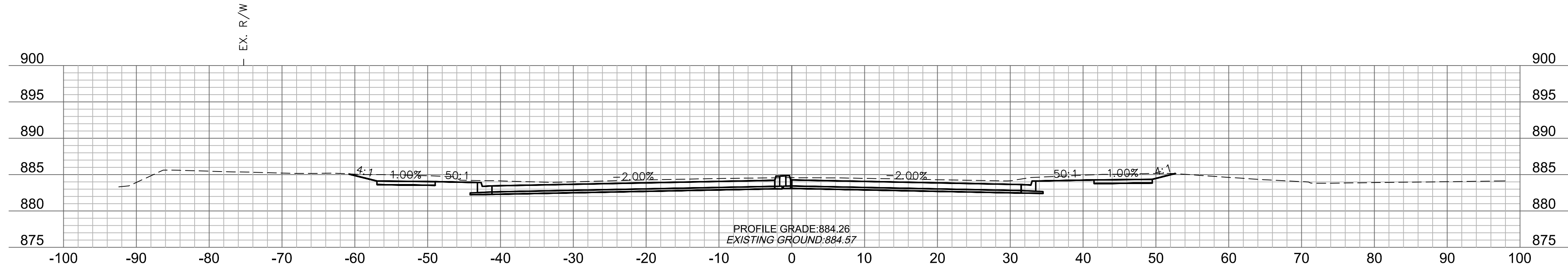
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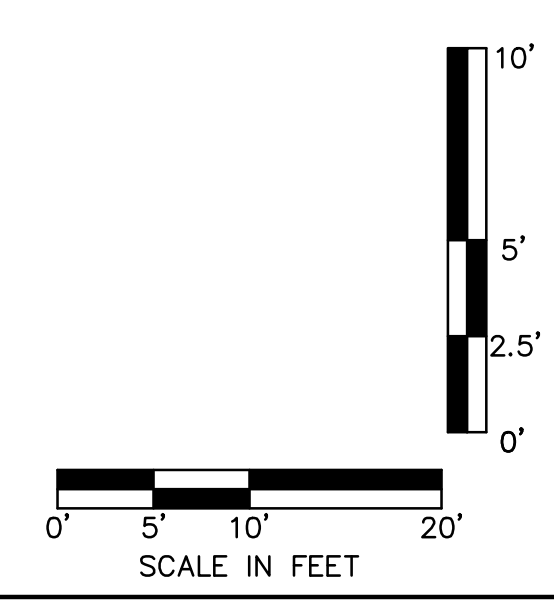
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40+00



39+75



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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET CROSS SECTIONS

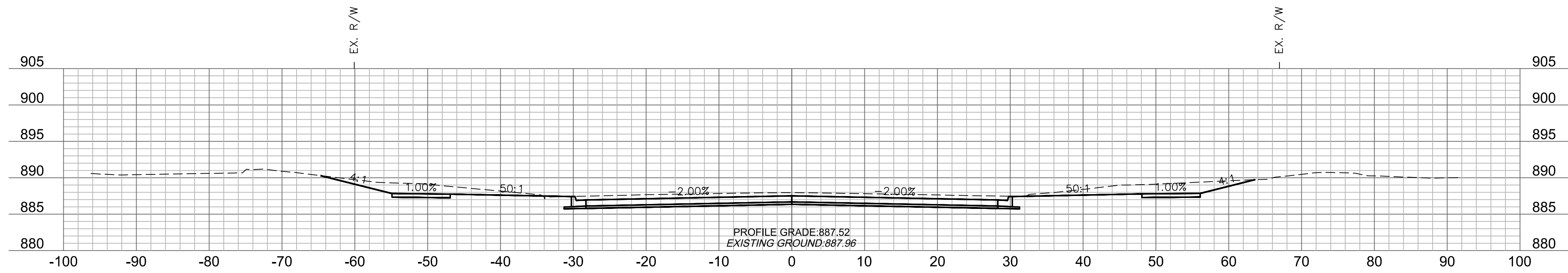
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS

REVISIONS
 2021

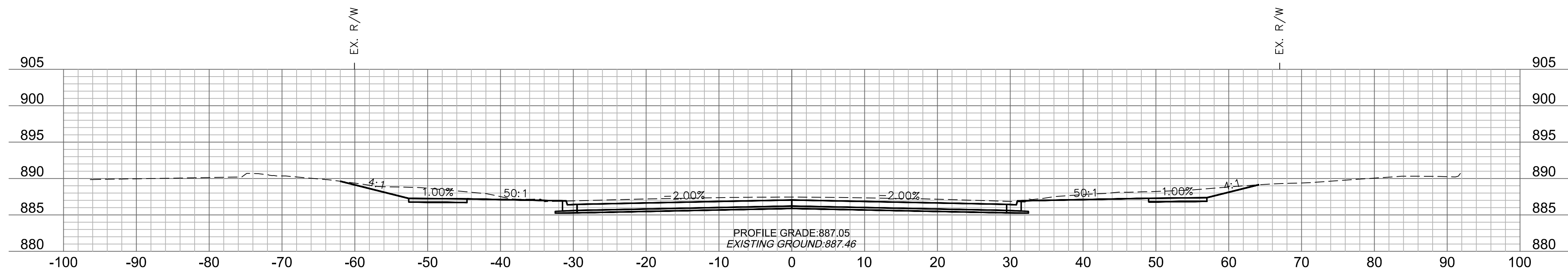
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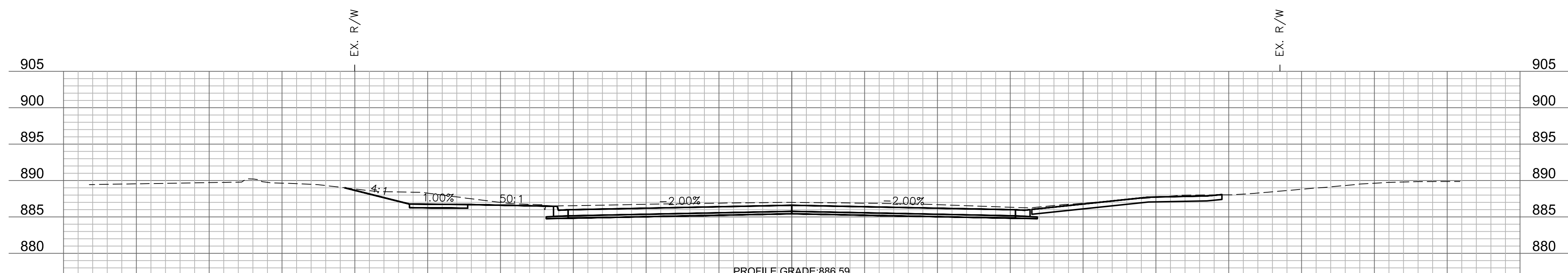
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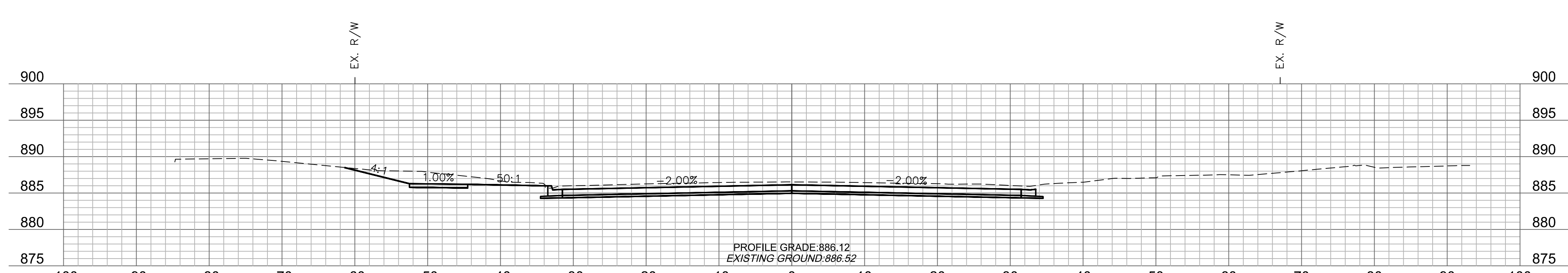
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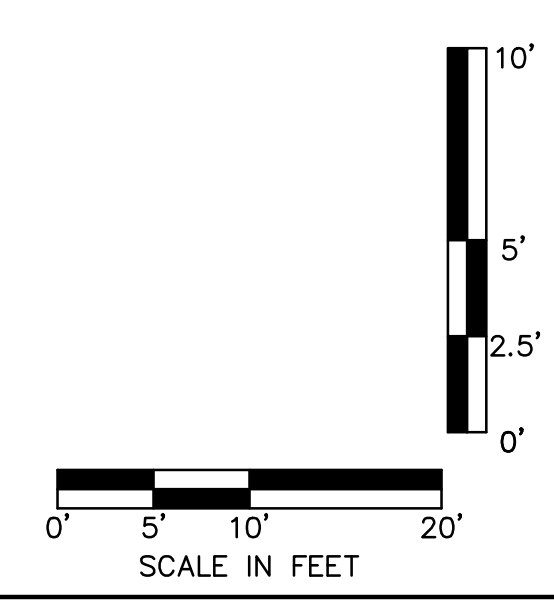
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41+00



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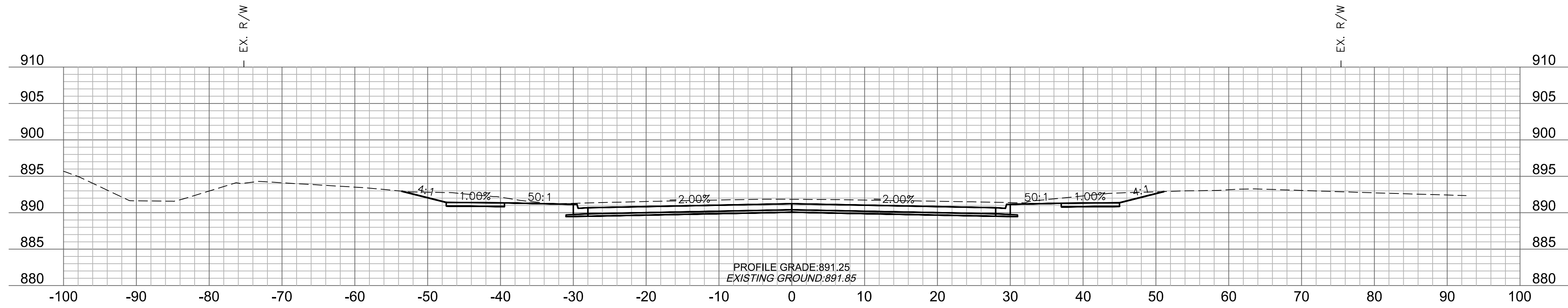
REV. NO.	DATE	REVISIONS DESCRIPTION	BY

23RD STREET CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

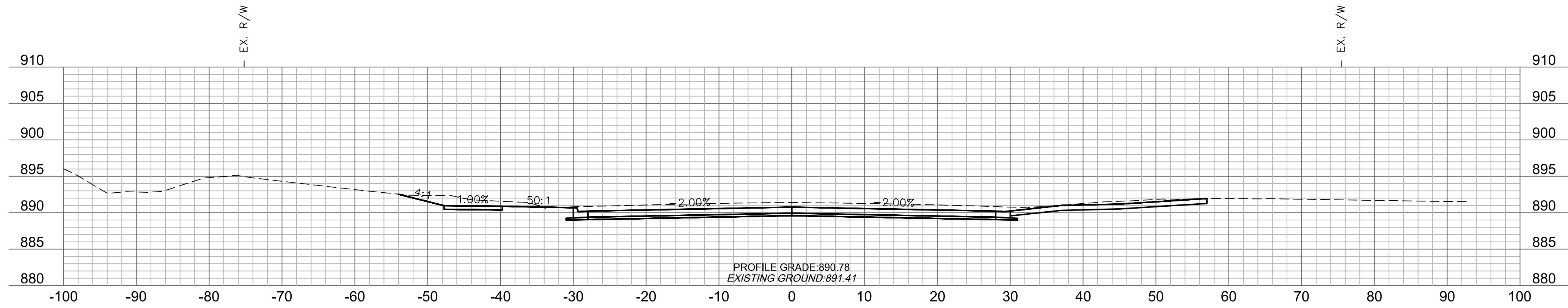
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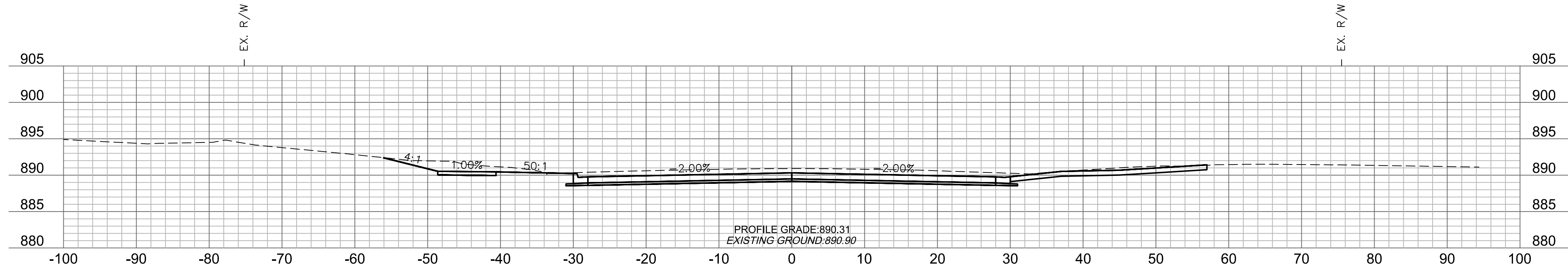
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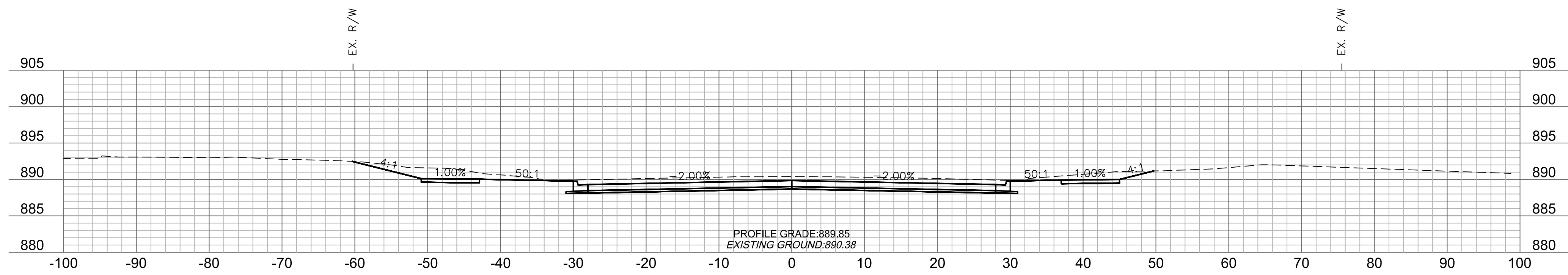
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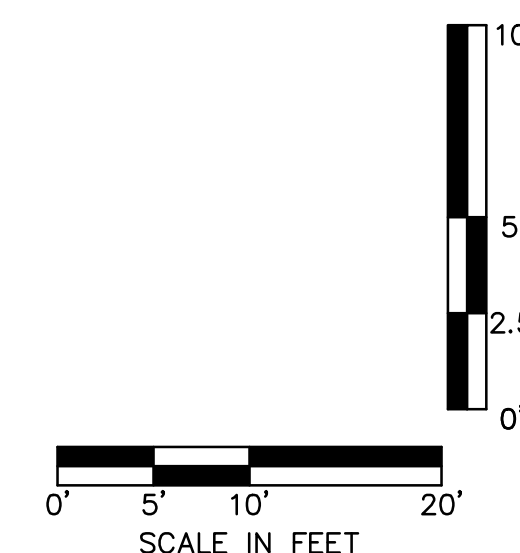
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43+00



42+75



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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET
CROSS SECTIONS

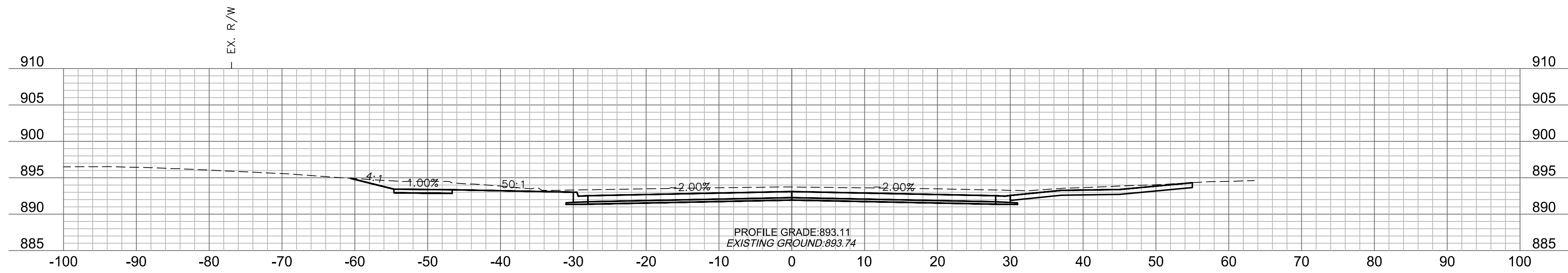
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

2021
REVISIONS

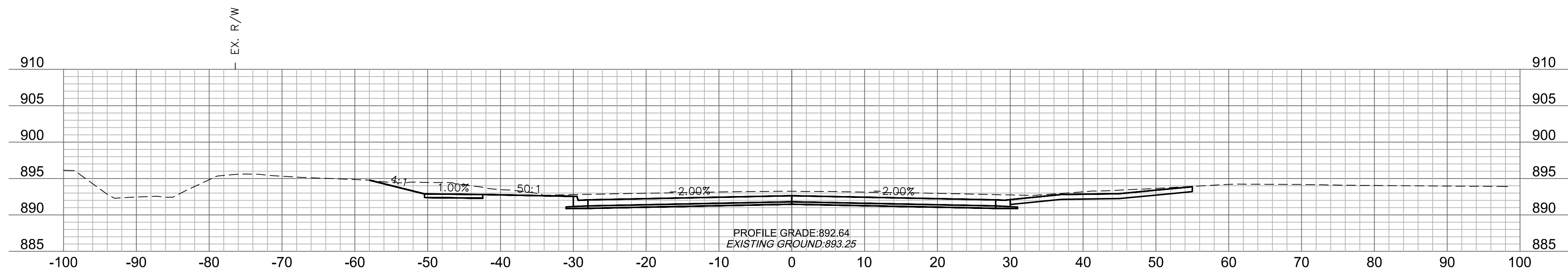
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 approved by: PBM
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 drawing no.: T_XSC01_0202348
 date: 12-18-2020

SHEET
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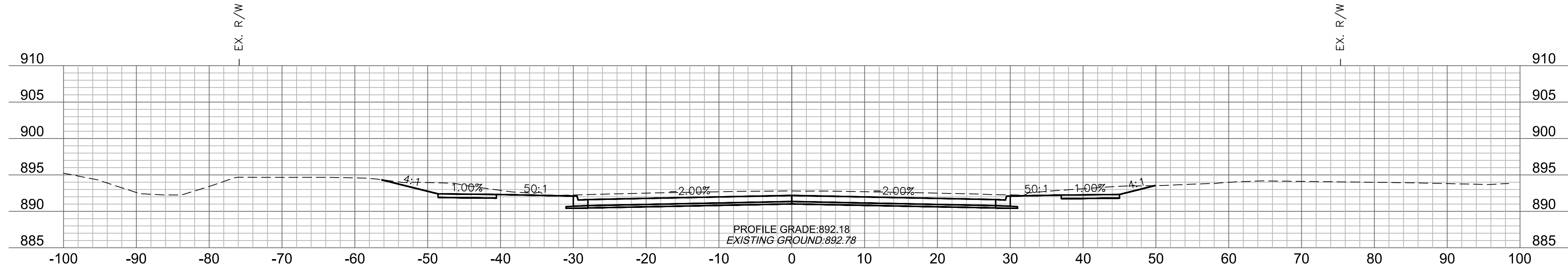
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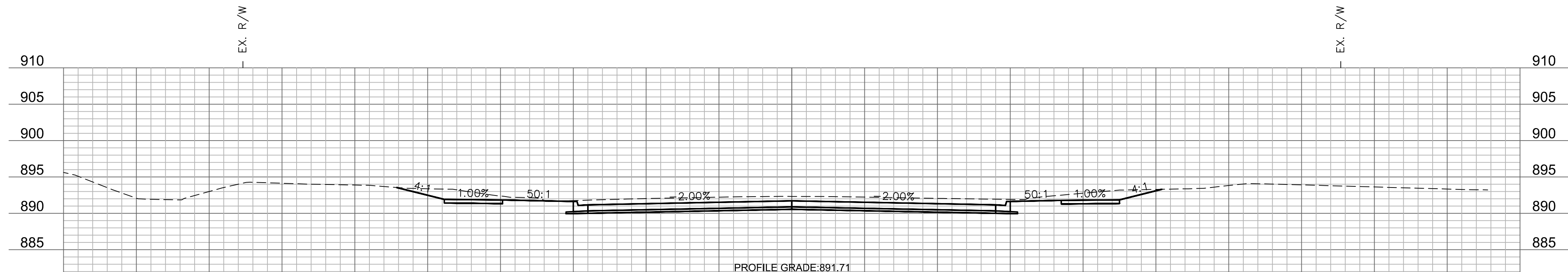
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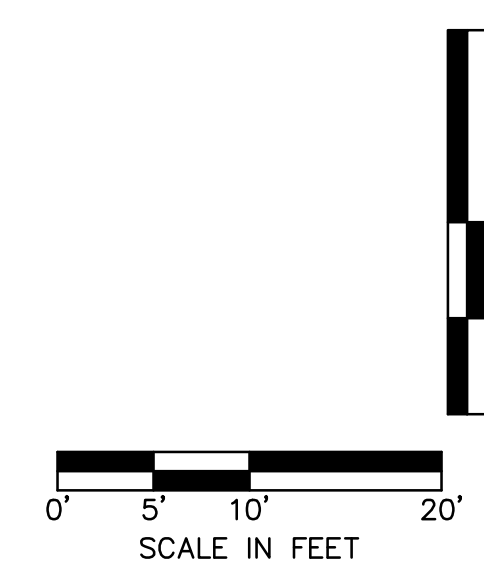
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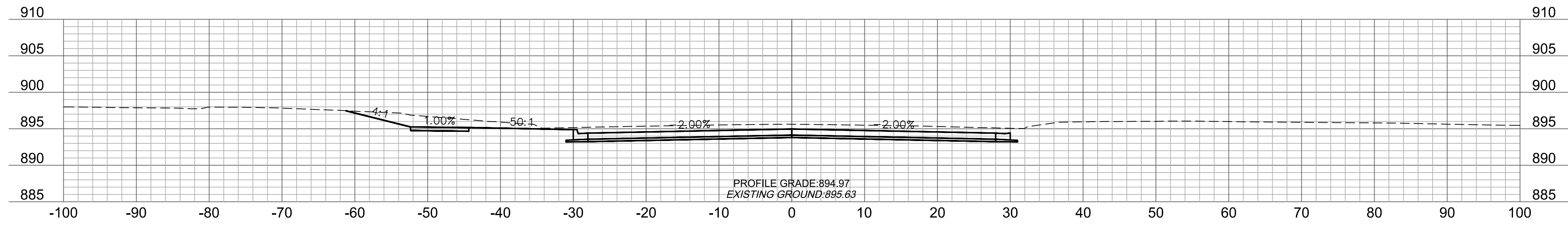
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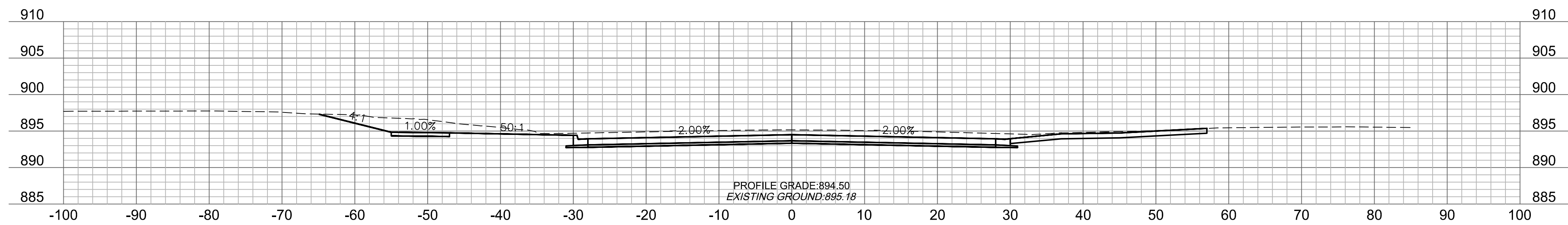
23RD STREET CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: 2.5' RBC
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

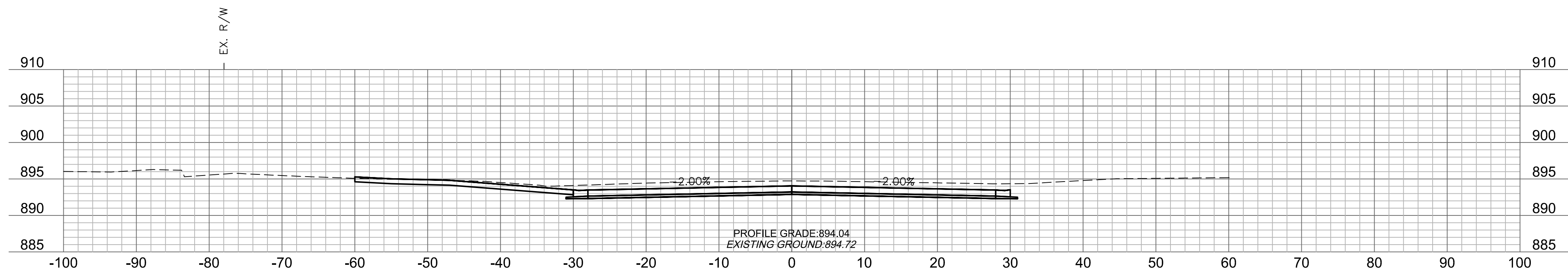
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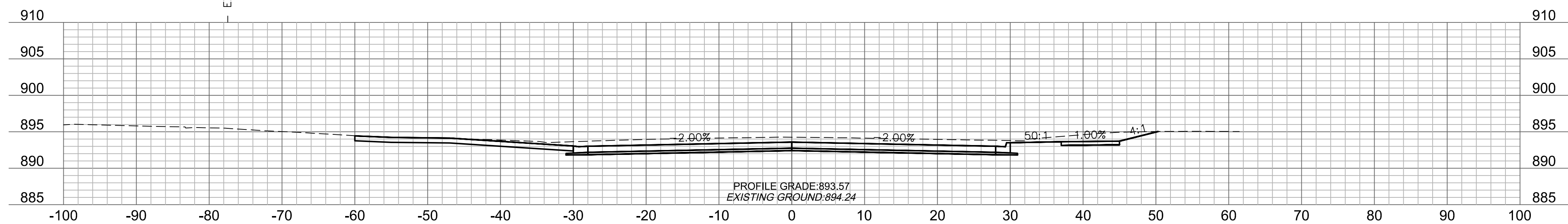
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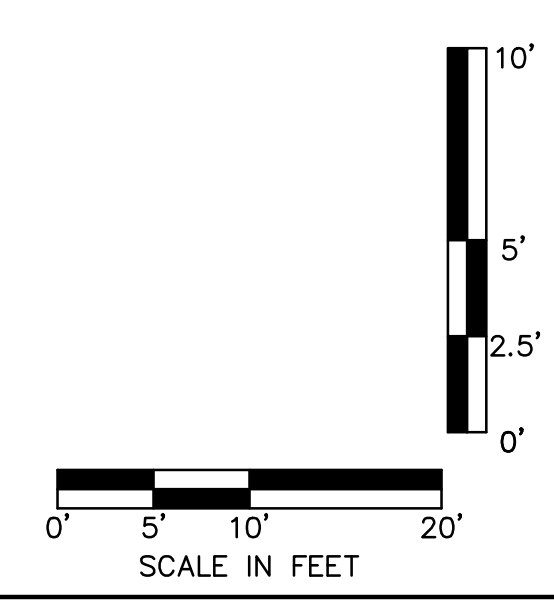
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45+00



44+75



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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET CROSS SECTIONS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

2021

drawn by: CJC

checked by: PBM

approved by: PBM

QA/QC by: 2.5' RBC

project no.: 020-2348

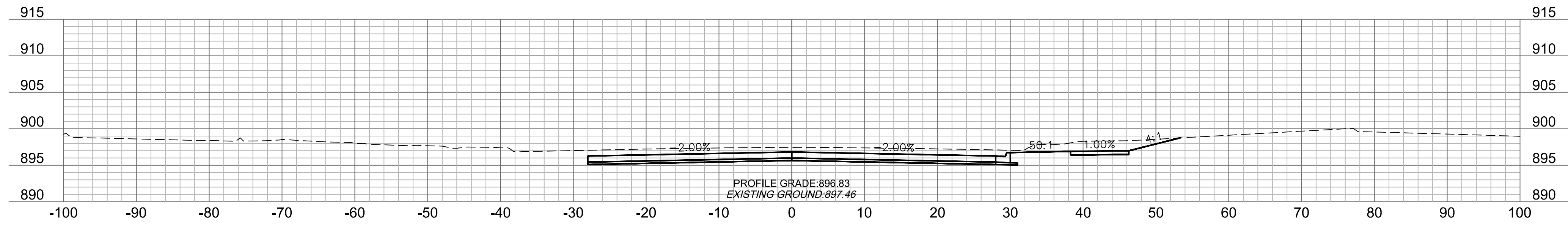
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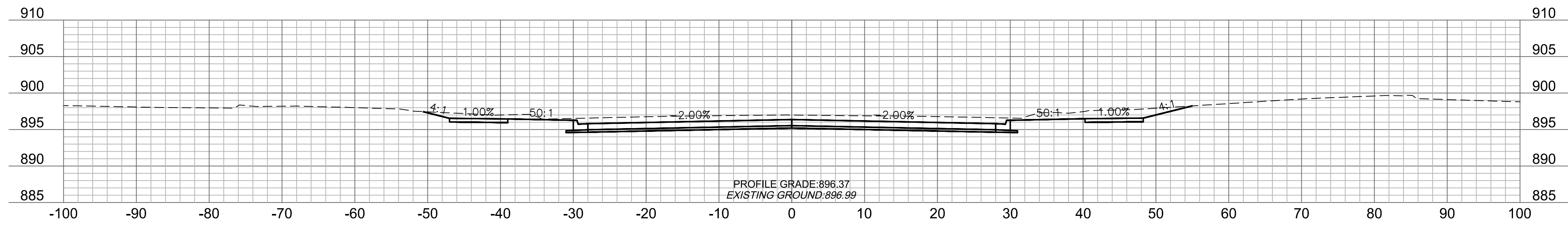
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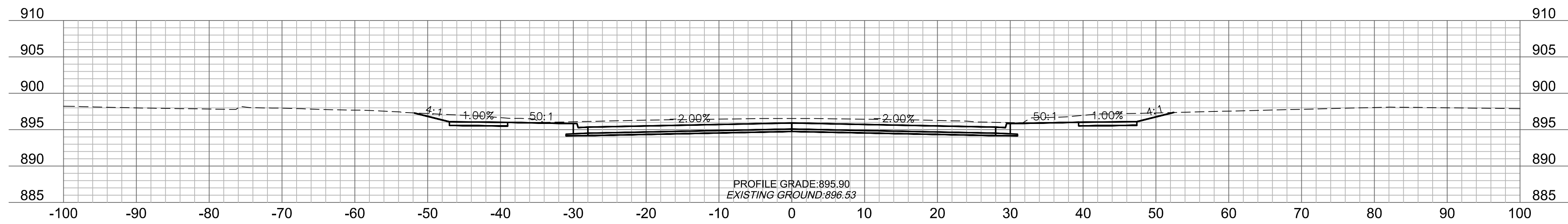
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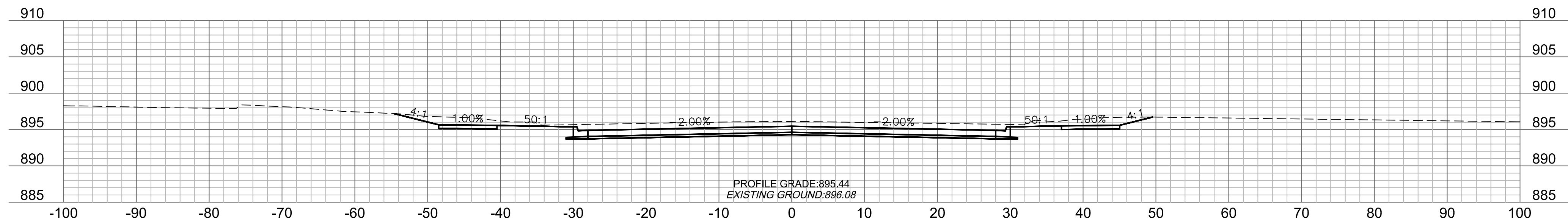
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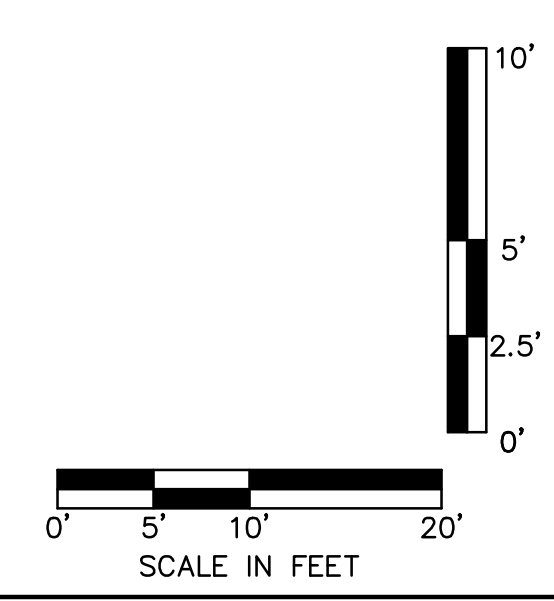
46+25



46+00



45+75



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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET
CROSS SECTIONS

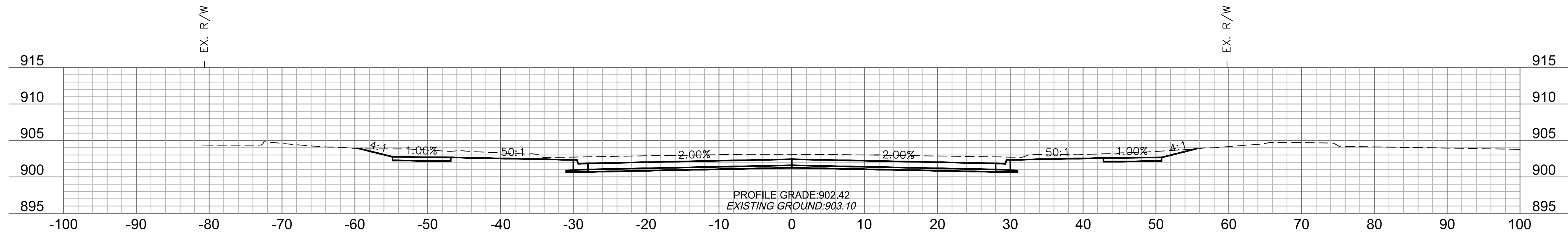
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HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

2021
REVISIONS

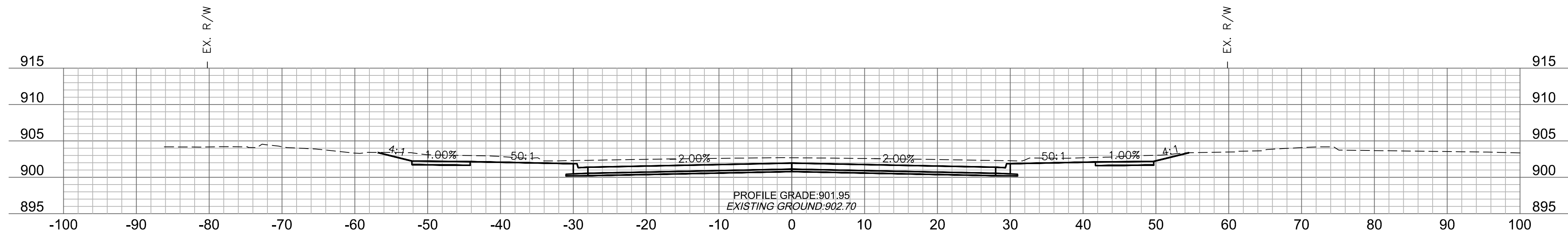
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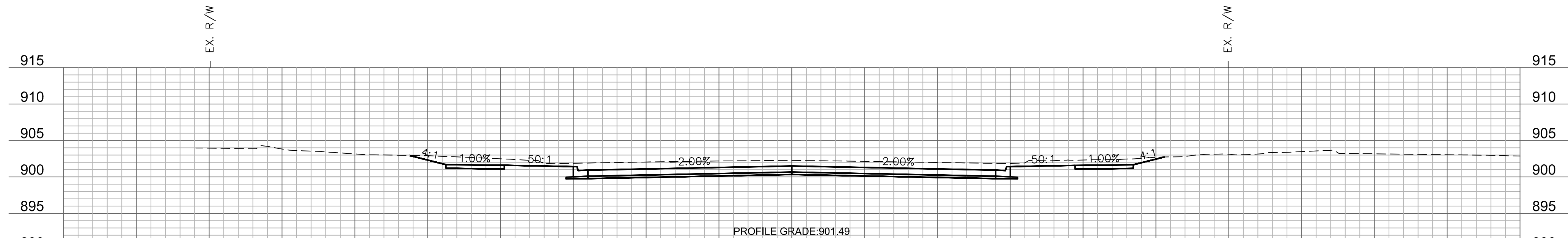
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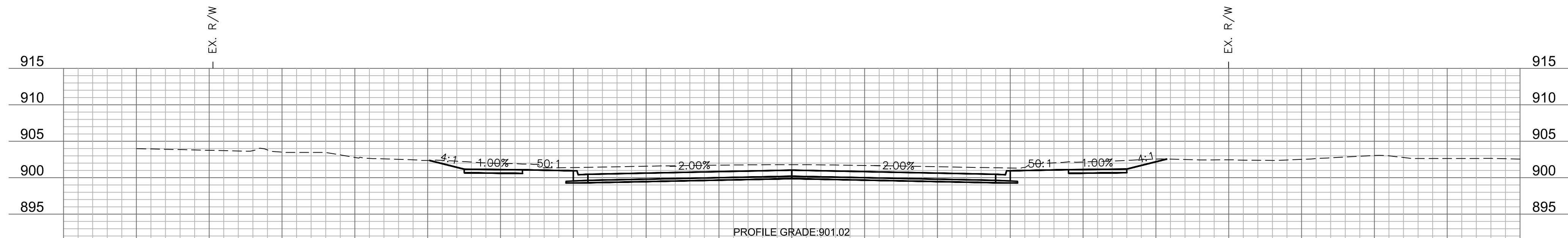
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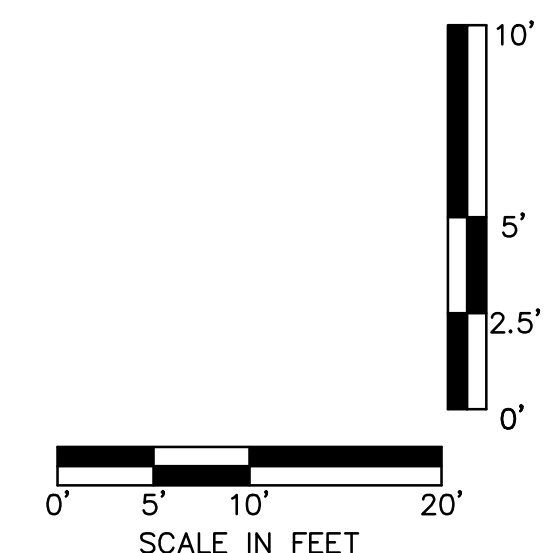
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49+00



48+75



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NOT FOR CONSTRUCTION

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

23RD STREET
CROSS SECTIONS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

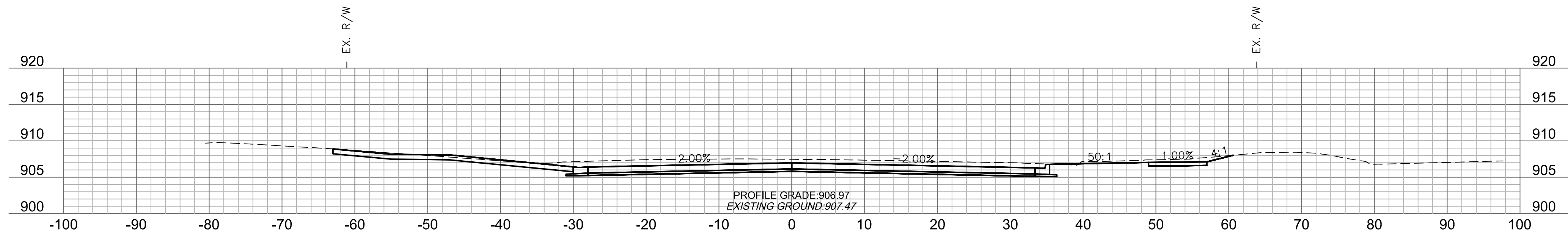
LAWRENCE, KANSAS

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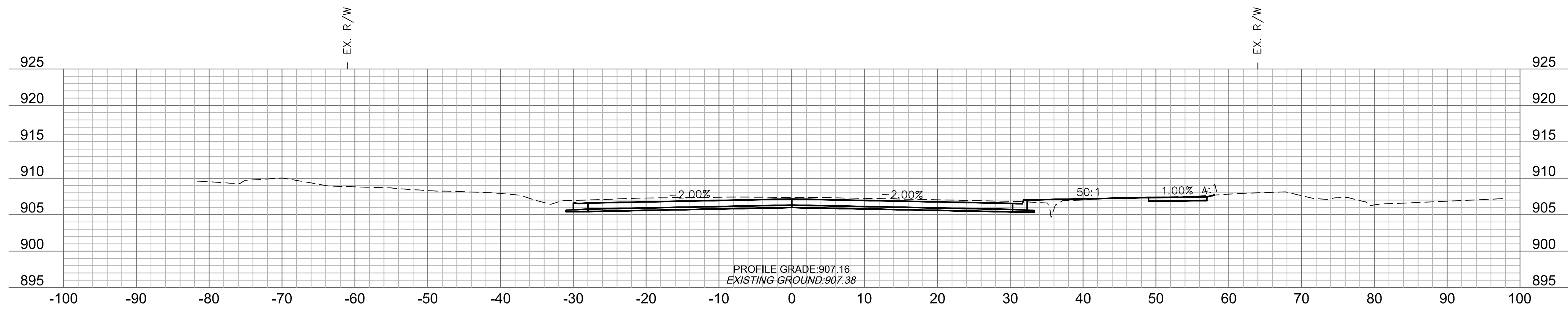
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SHEET
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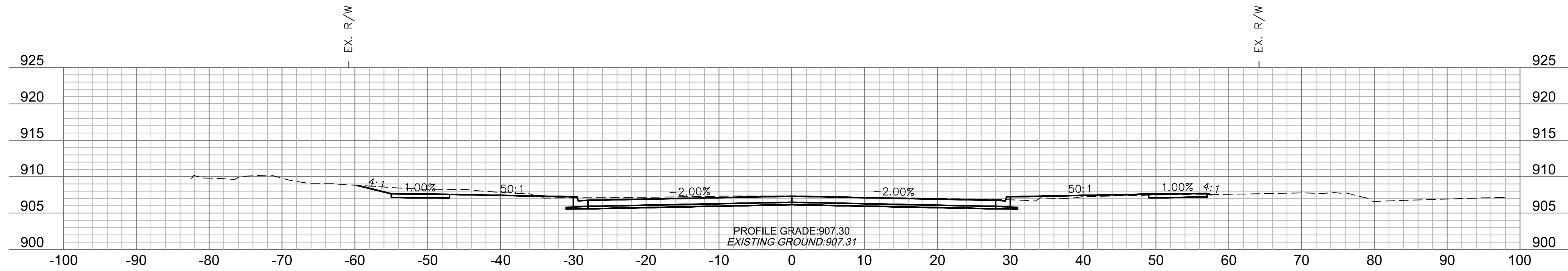
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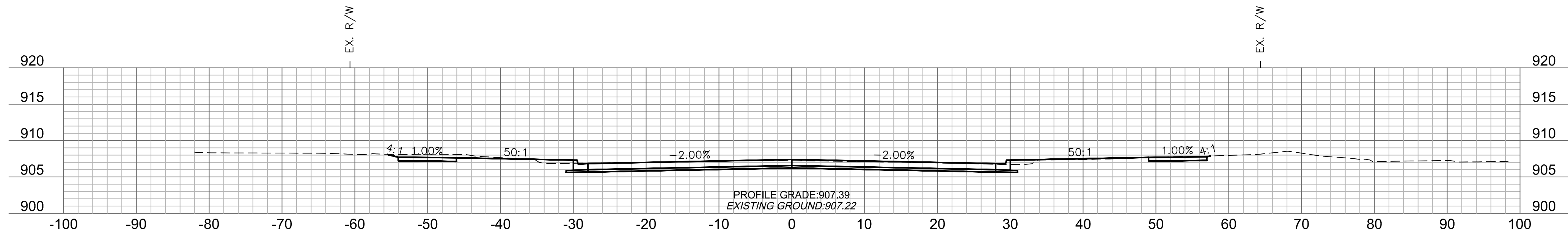
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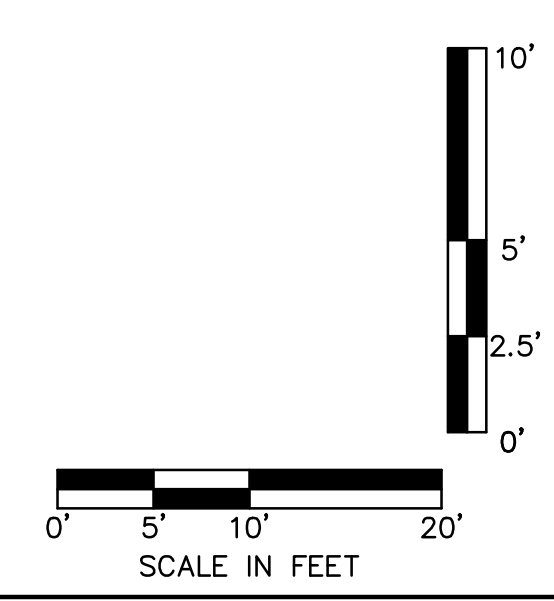
54+00



53+75



53+50



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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

23RD STREET CROSS SECTIONS

**23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD**

LAWRENCE, KANSAS

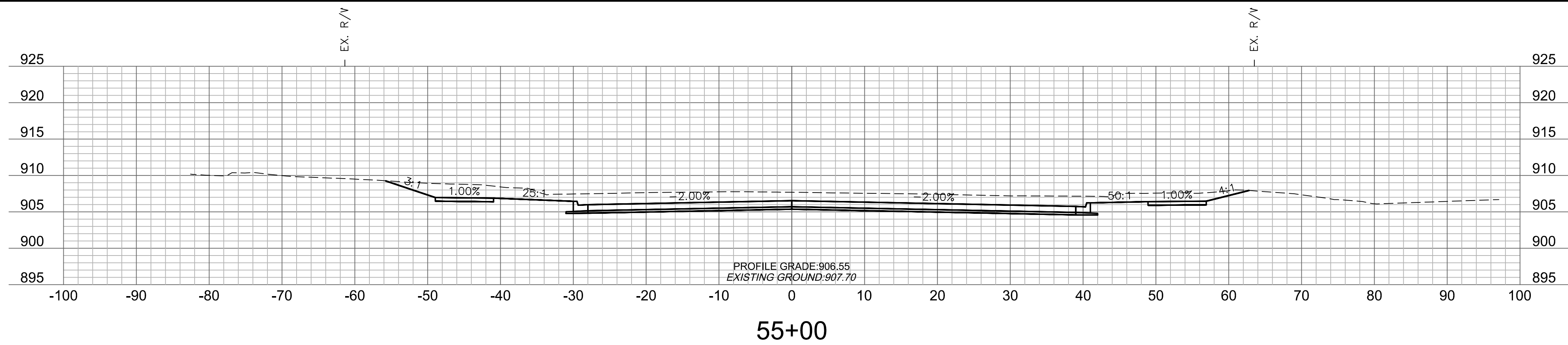
2021

REVISIONS

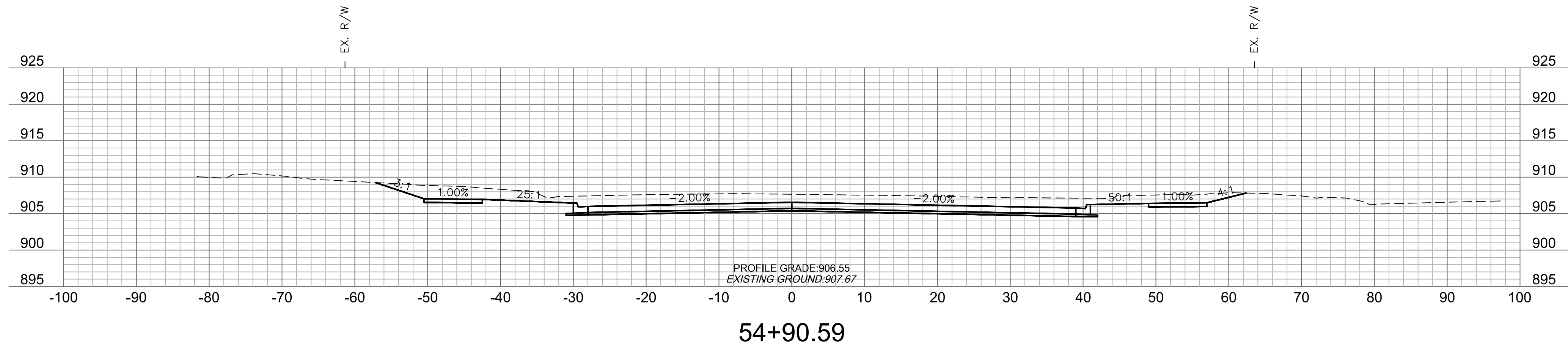
drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: 2.5' PBM
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

SHEET
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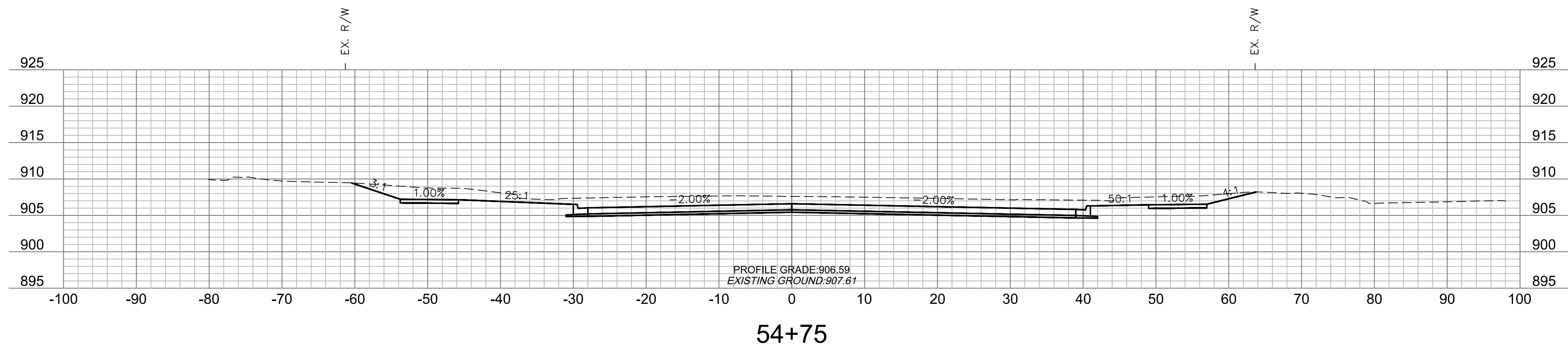
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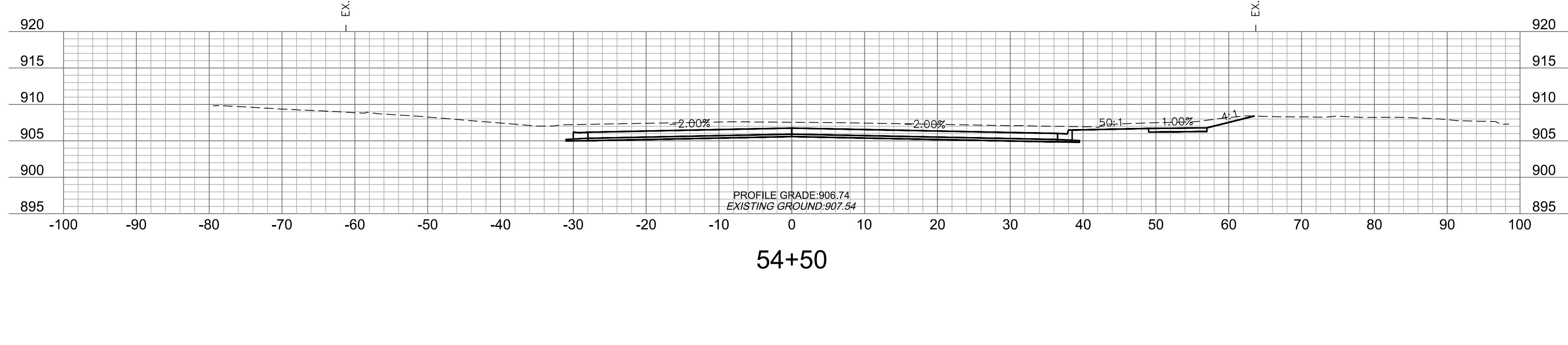
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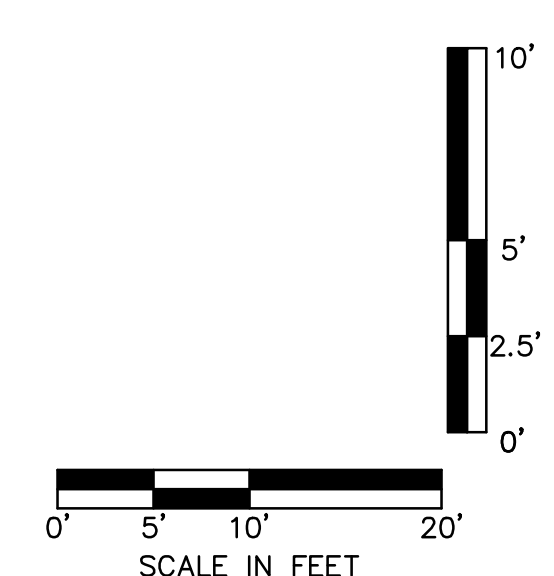
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54+75



54+50



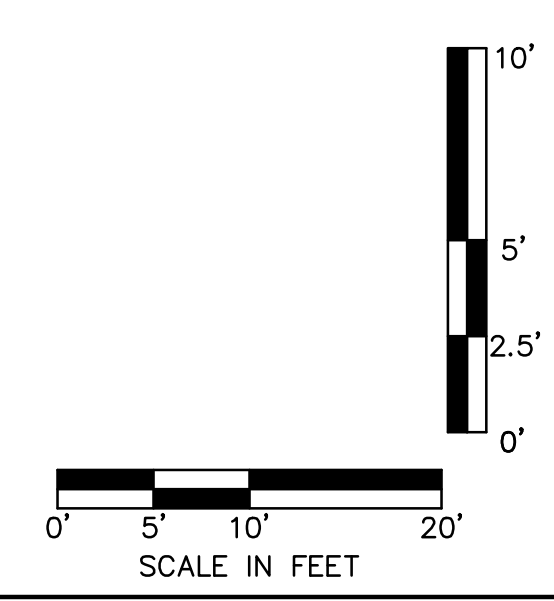
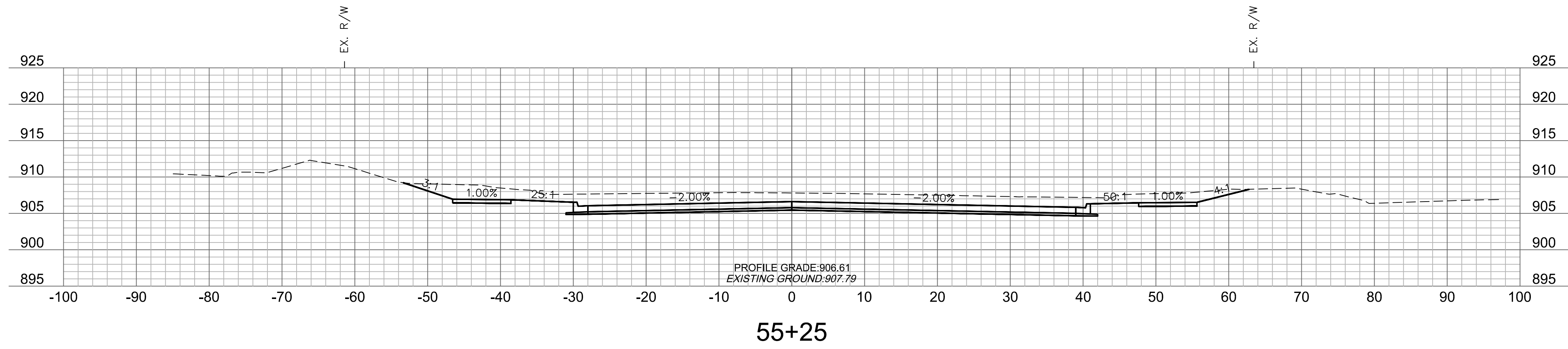
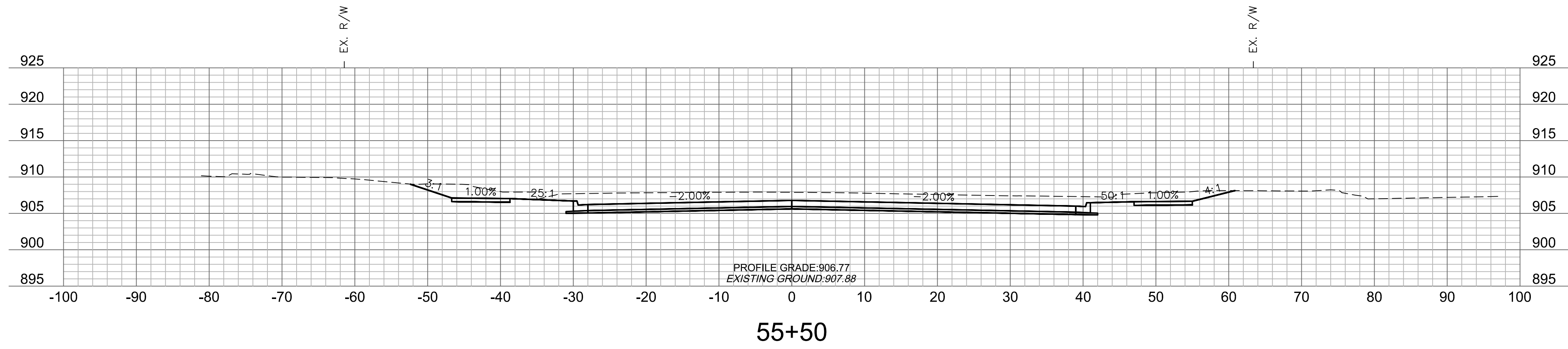
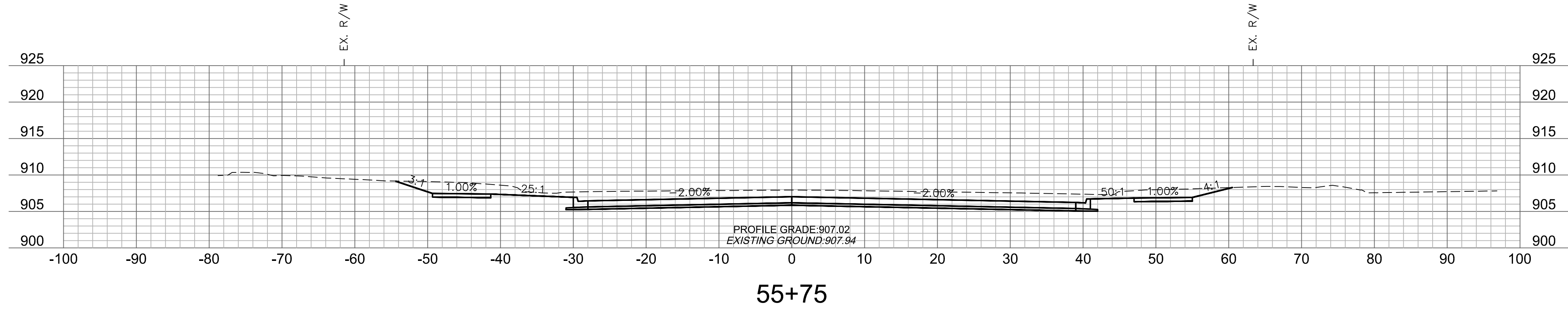
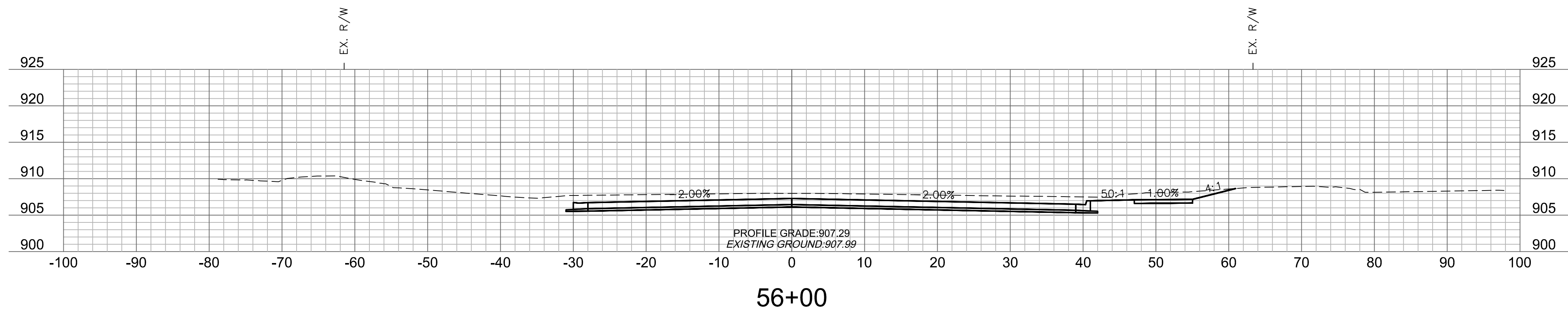
PRELIMINARY
 NOT FOR CONSTRUCTION

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

23RD STREET CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: 2.5' RBC
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

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 DATE: Dec 18, 2020 10:13am XREFS: T_BASE_0202348 T_PTBK_0202348



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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET CROSS SECTIONS

**23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD**

LAWRENCE, KANSAS

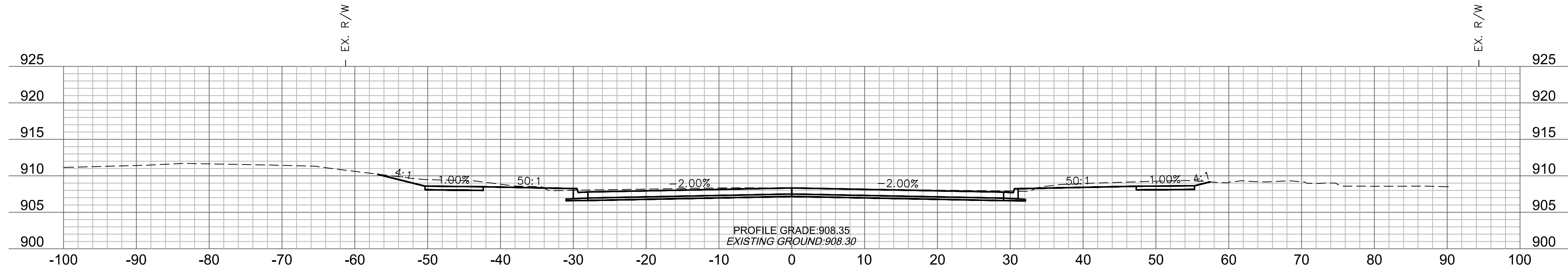
2021

REVISIONS

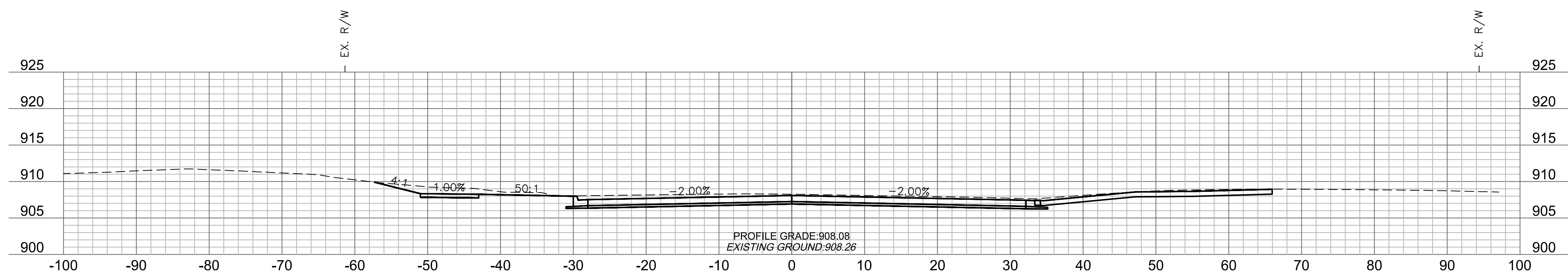
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 date: 12-18-2020

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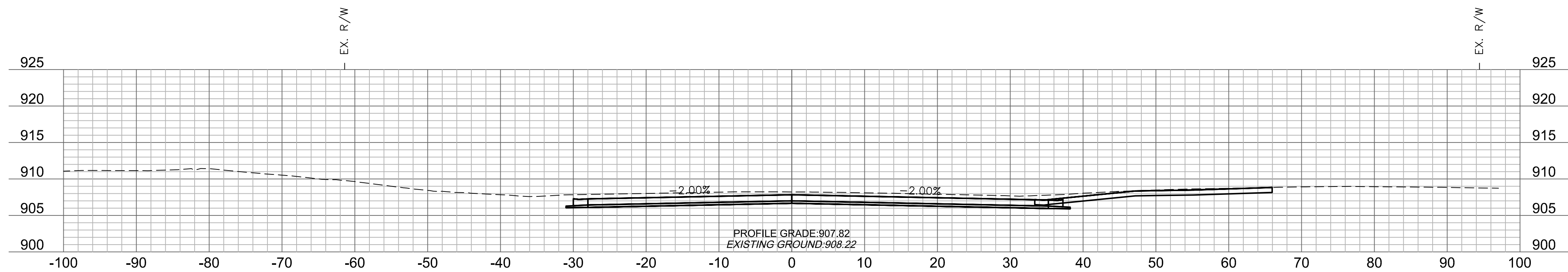
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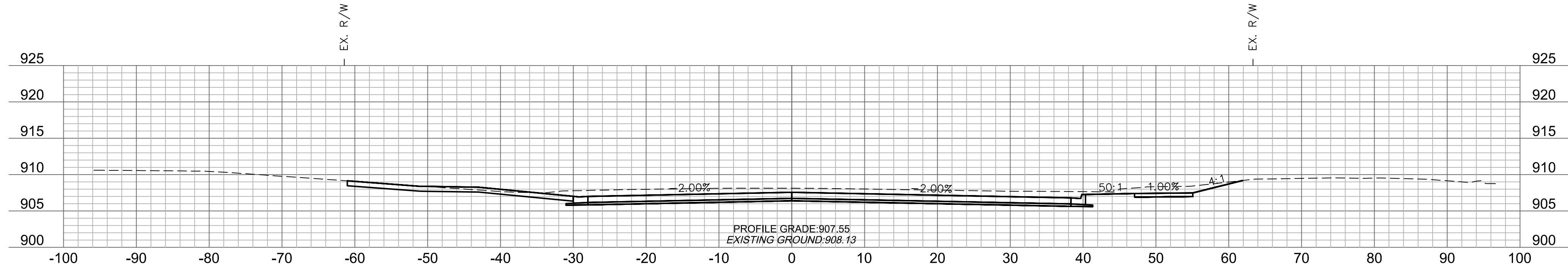
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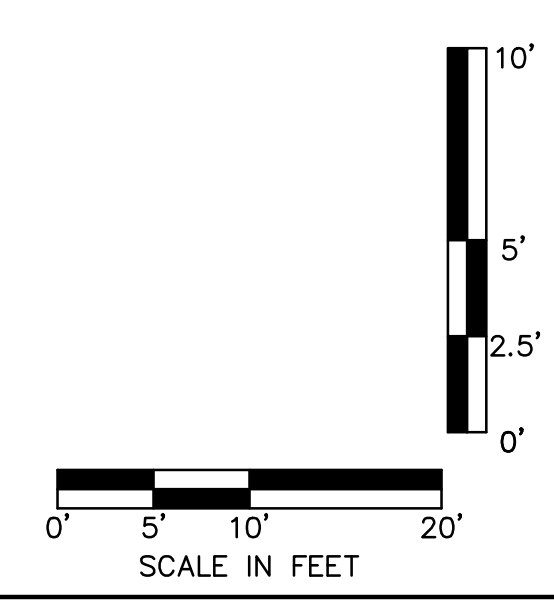
56+75



56+50



56+25



PRELIMINARY
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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

23RD STREET
 CROSS SECTIONS

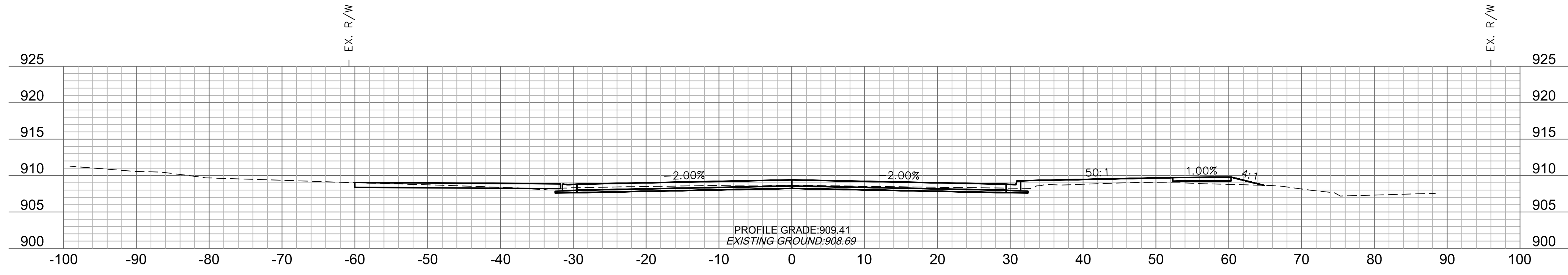
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

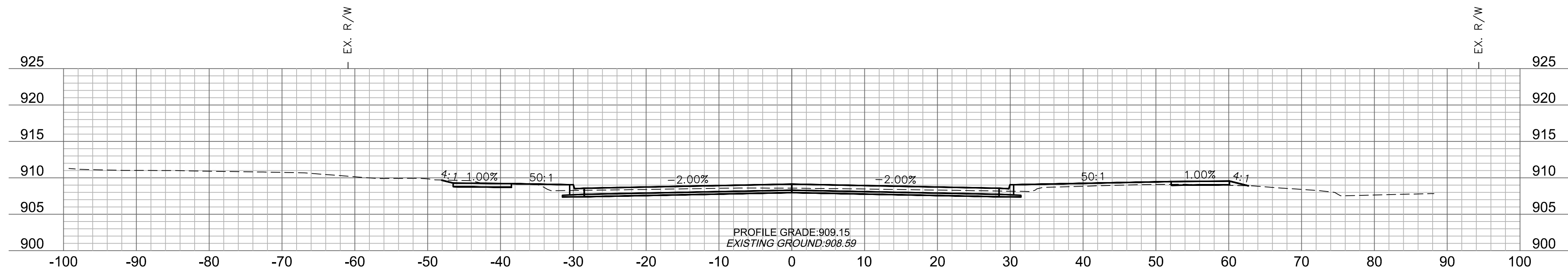
2021

drawn by: CJC
 checked by: PBM
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 QA/QC by: 2.5' RBC
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

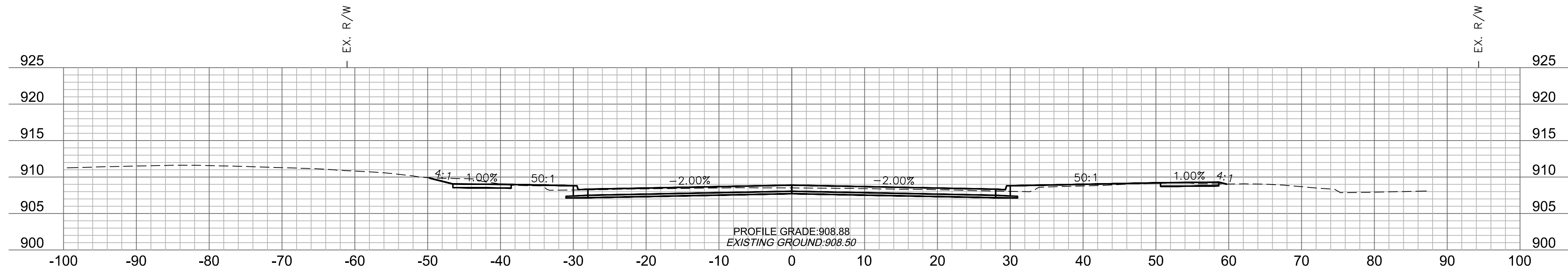
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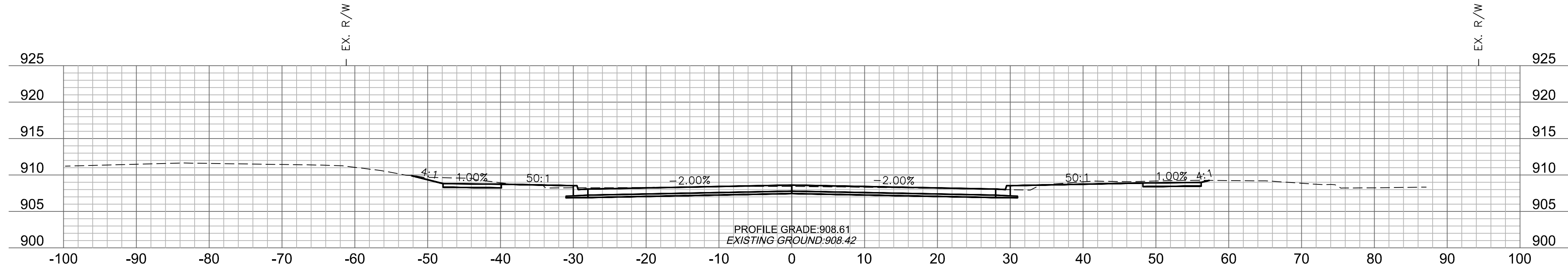
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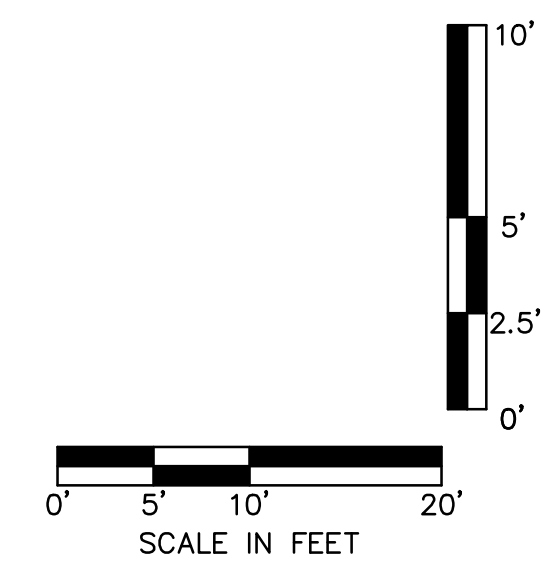
57+75



57+50



57+25



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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

23RD STREET
 CROSS SECTIONS

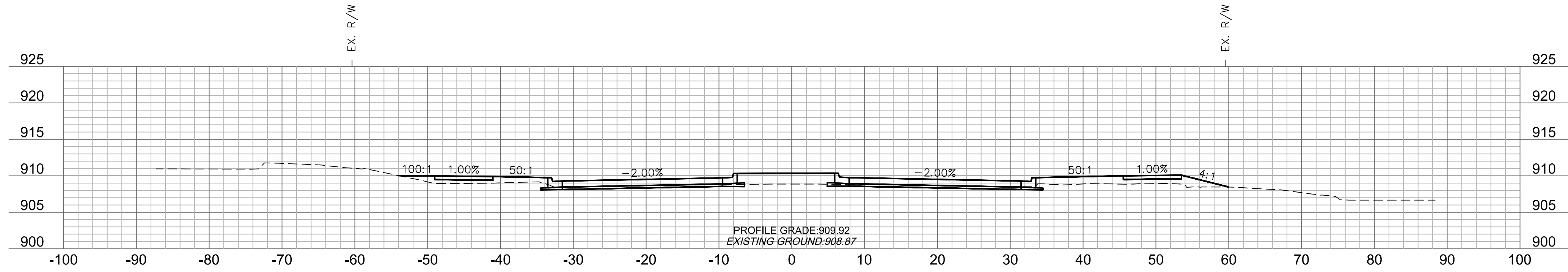
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

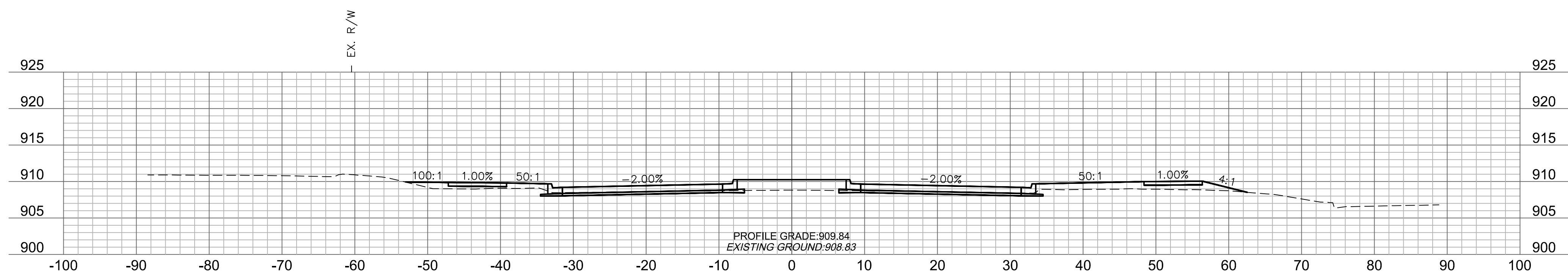
2021

drawn by: CJC
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 date: 12-18-2020

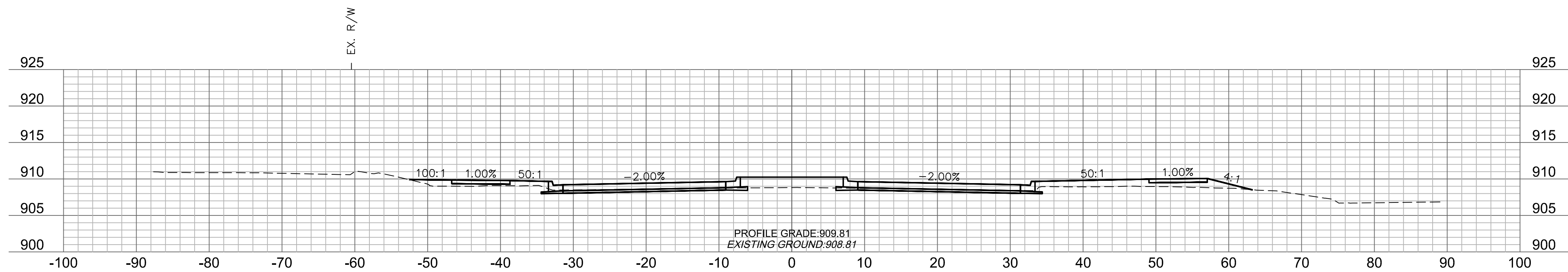
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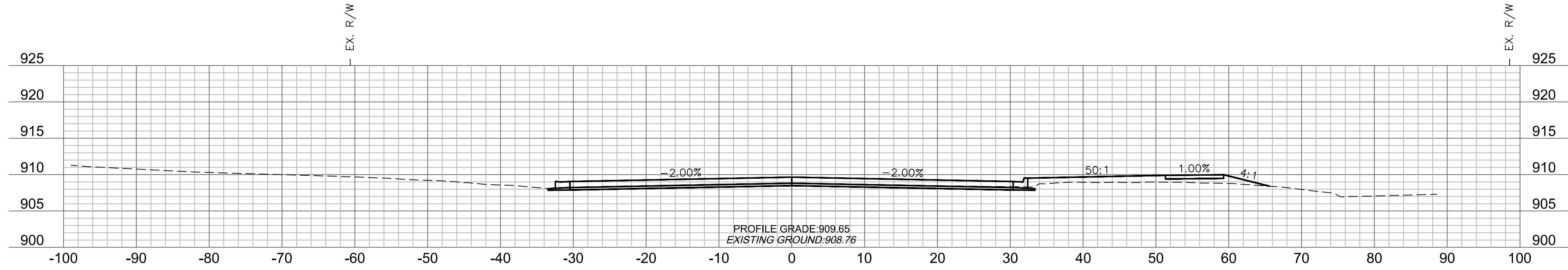
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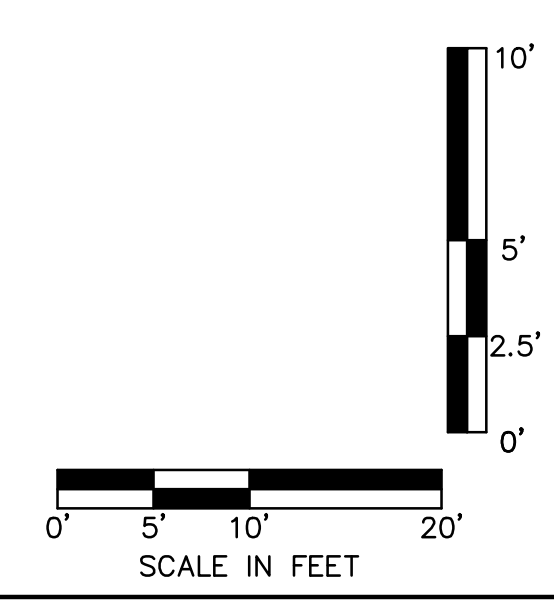
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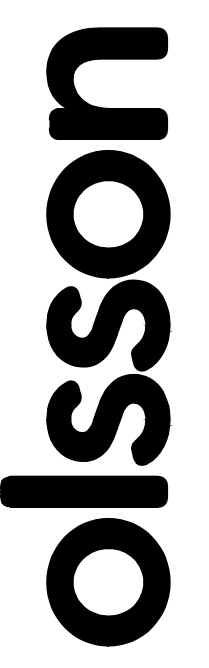


58+50



58+25





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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET CROSS SECTIONS

**23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD**

LAWRENCE, KANSAS

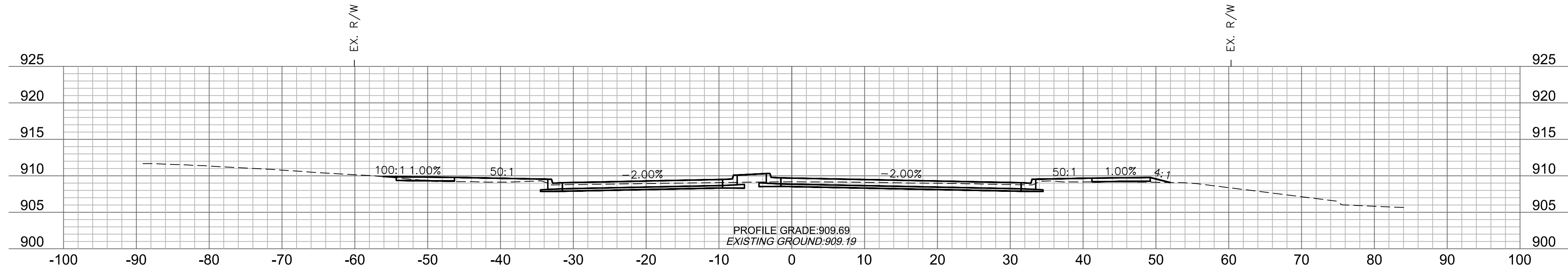
2021

REVISIONS

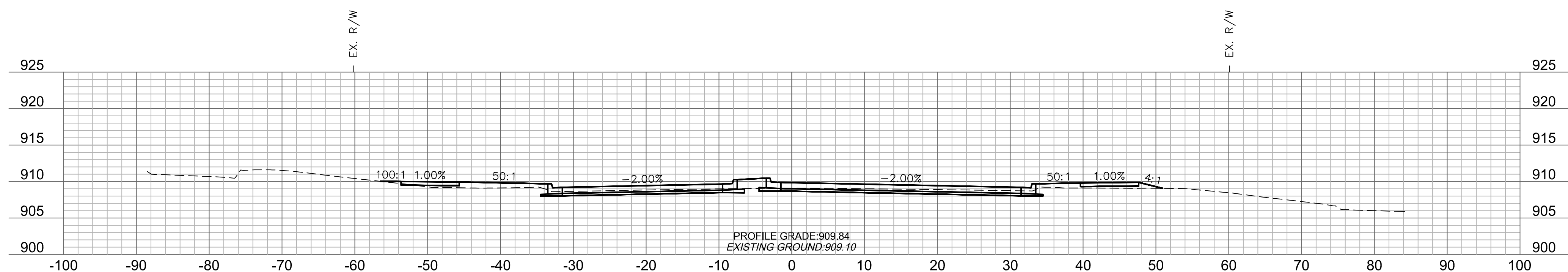
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 drawing no.: T_XSC01_0202348
 date: 12-18-2020

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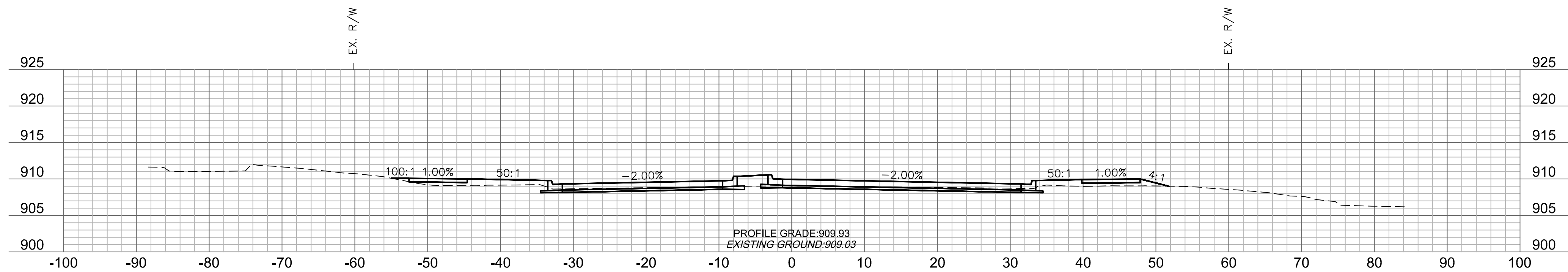
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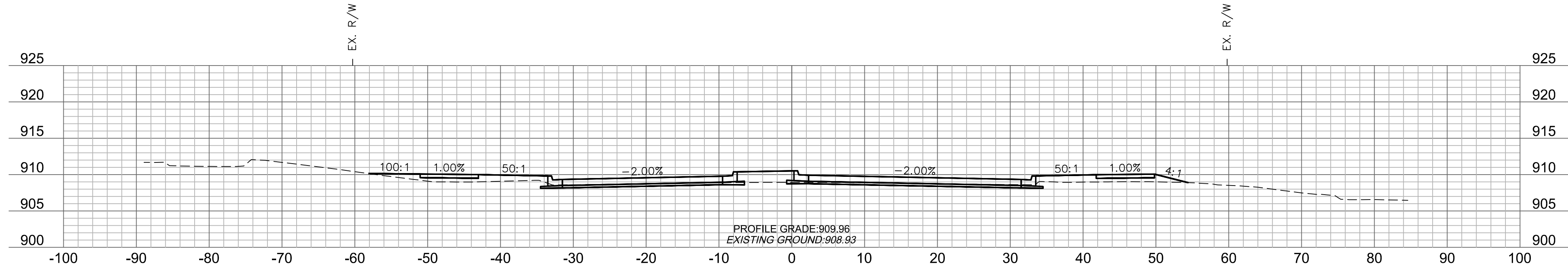
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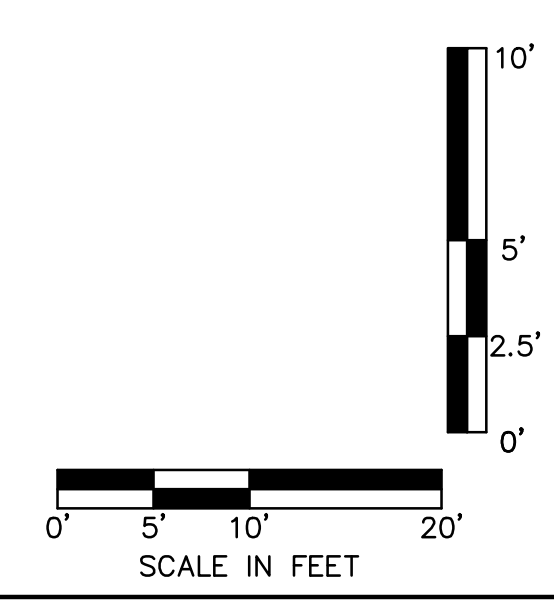
59+50



59+25



59+00



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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET CROSS SECTIONS

2021

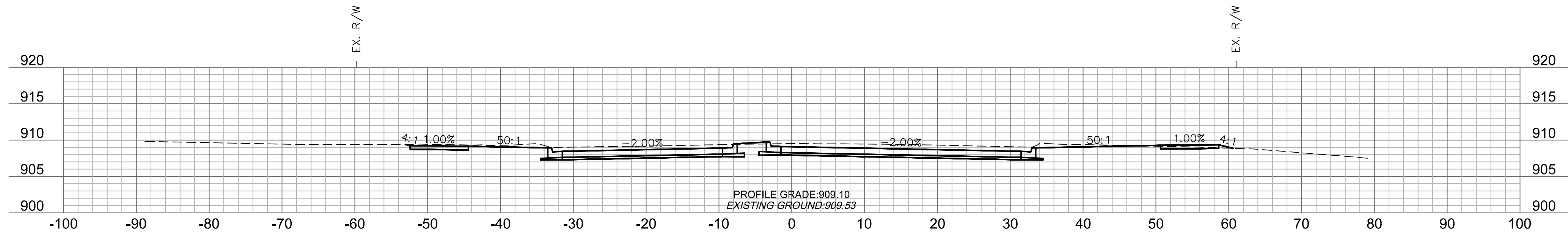
LAWRENCE, KANSAS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

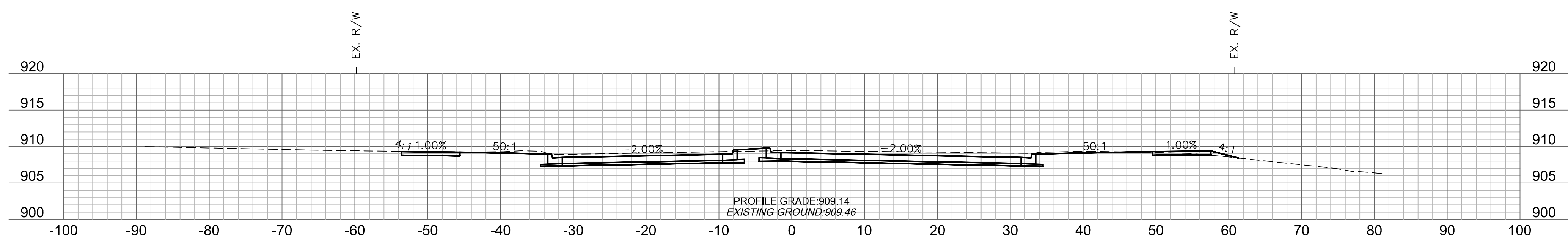
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date: 12-18-2020

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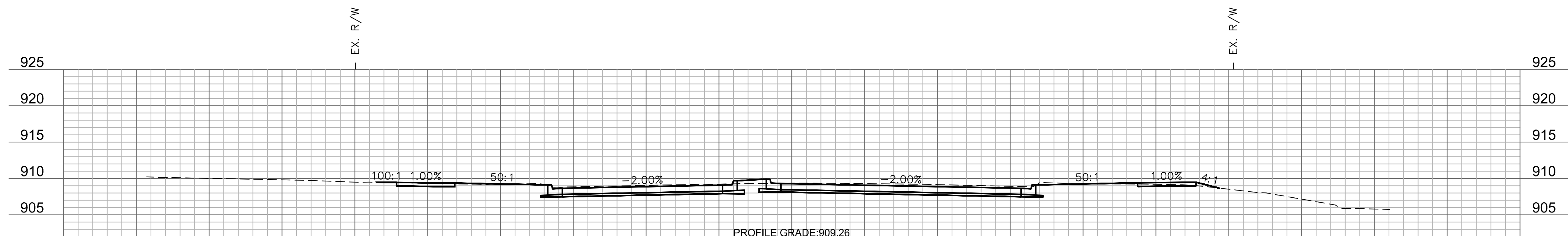
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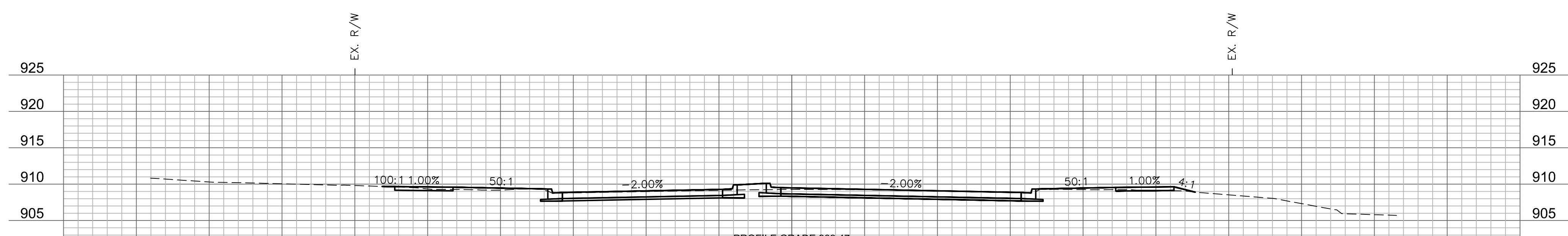
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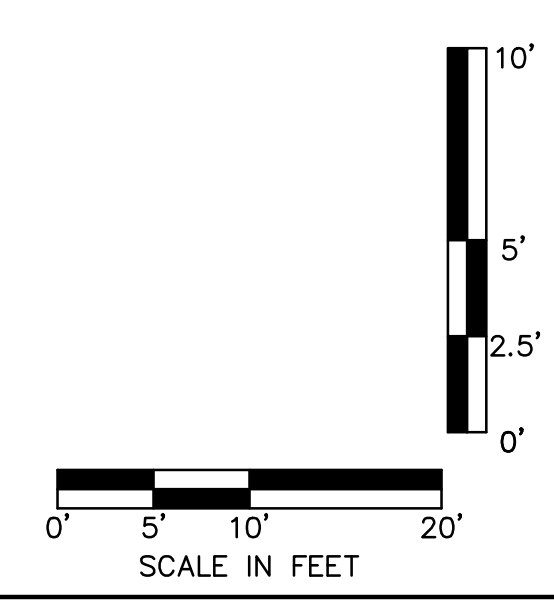
60+50



60+25



60+00



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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET CROSS SECTIONS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

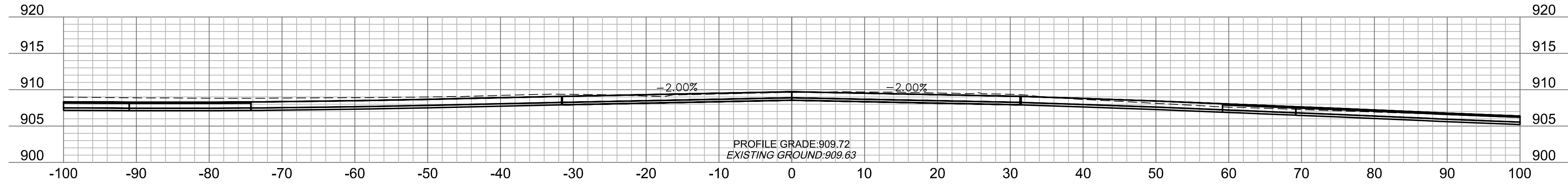
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project no.: 020-2348
drawing no.: T_XSC01_0202348
date: 12-18-2020

2021

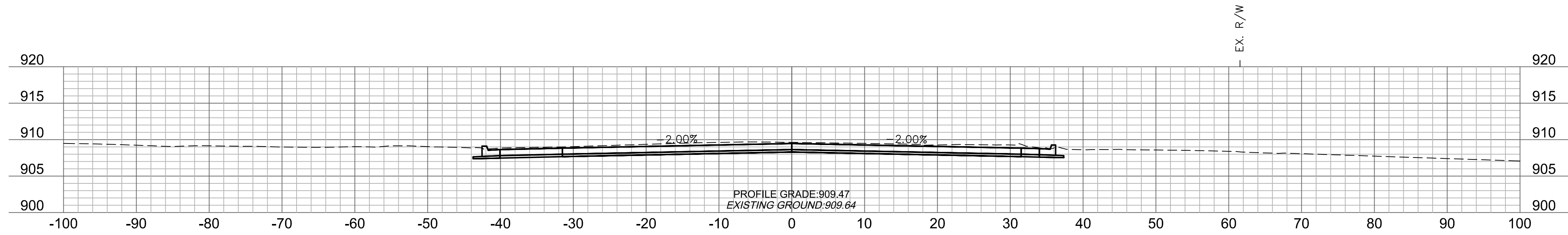
SHEET

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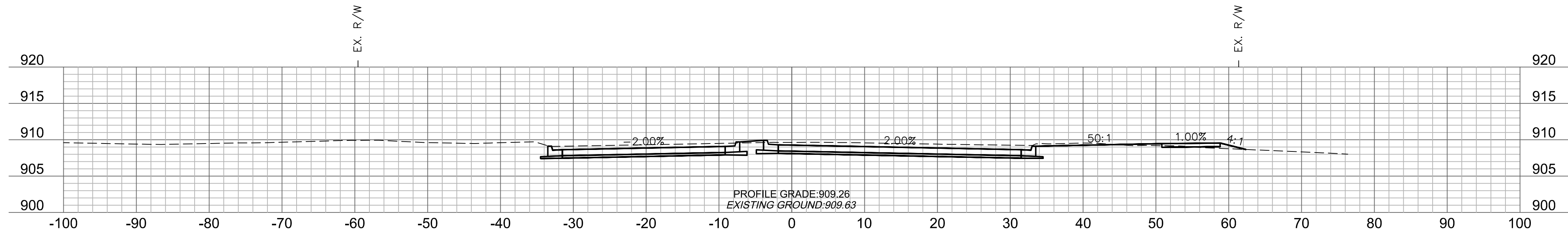
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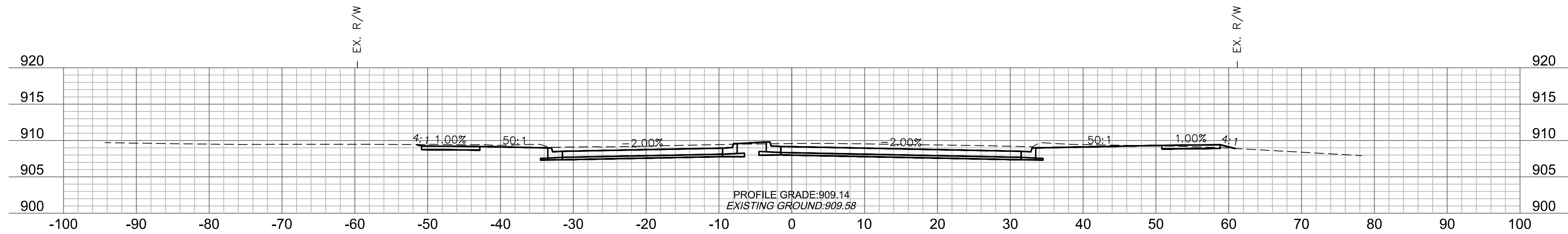
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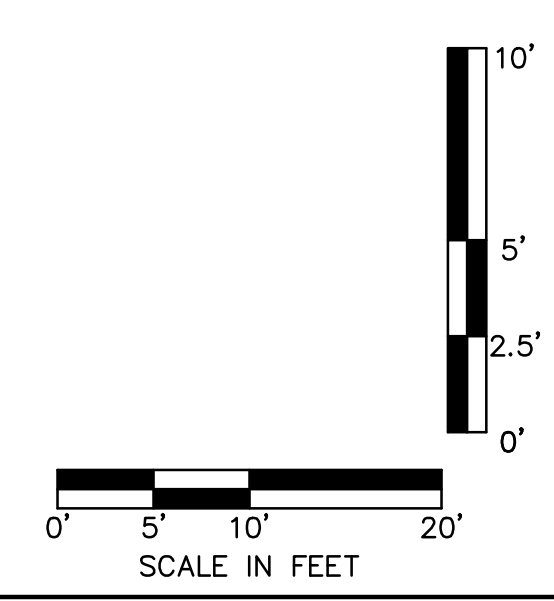
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61+25



61+00



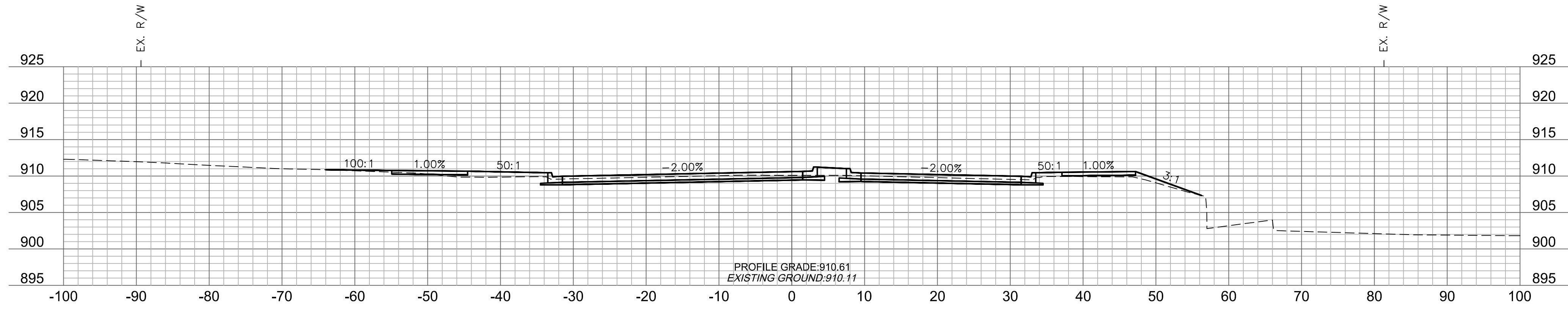
PRELIMINARY
 NOT FOR CONSTRUCTION

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

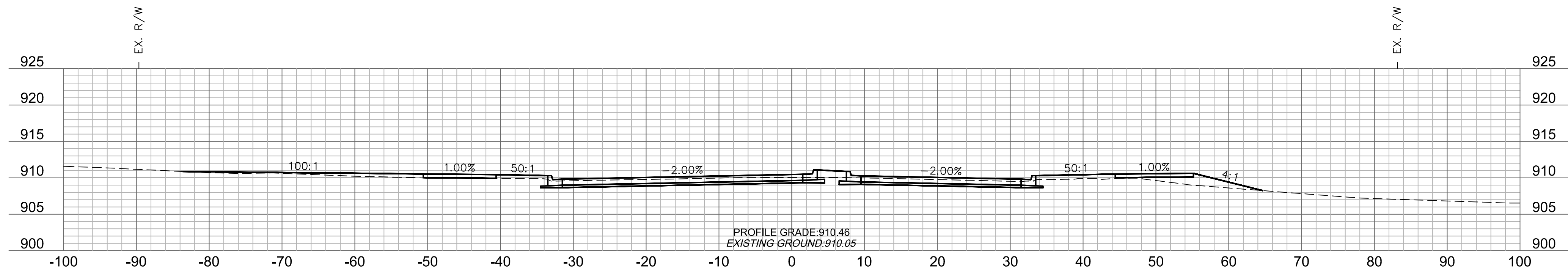
23RD STREET CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: 2.5' RBC
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

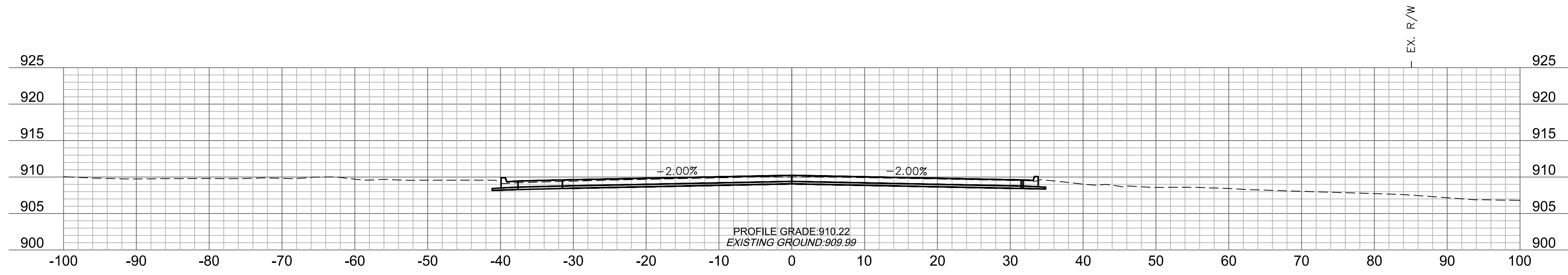
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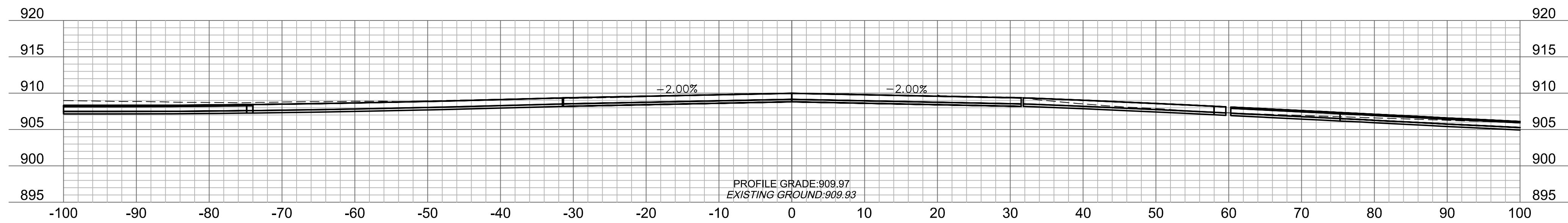
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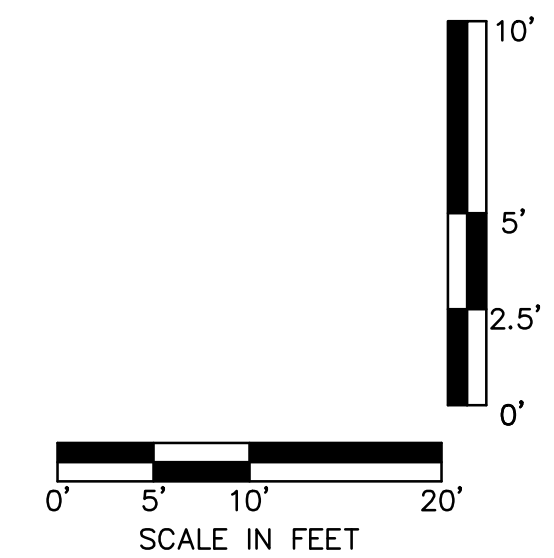
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62+25



62+00



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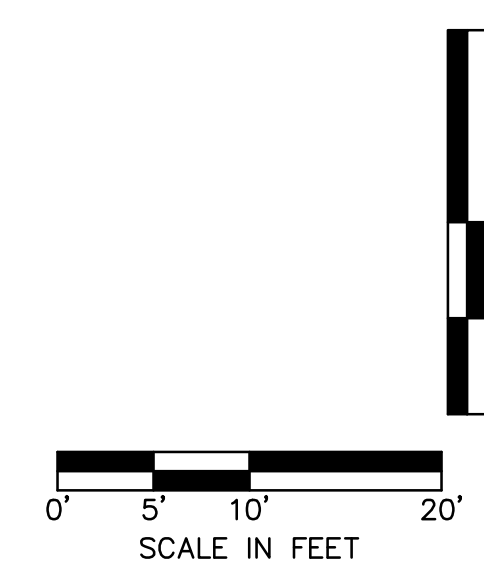
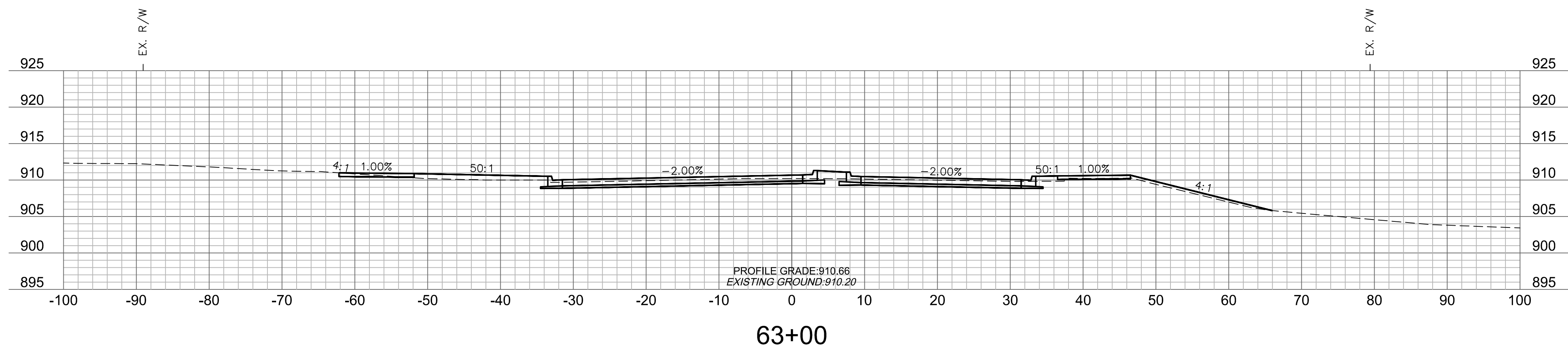
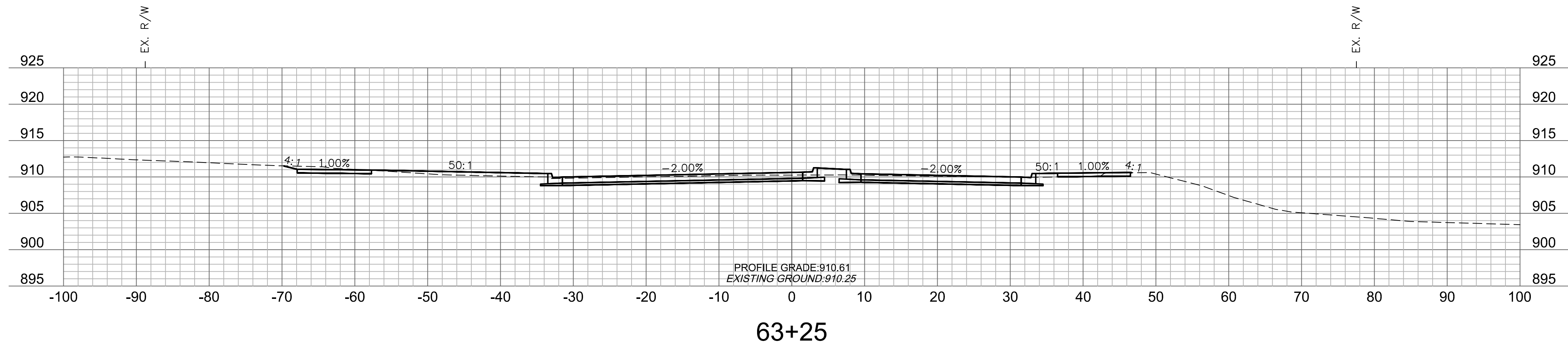
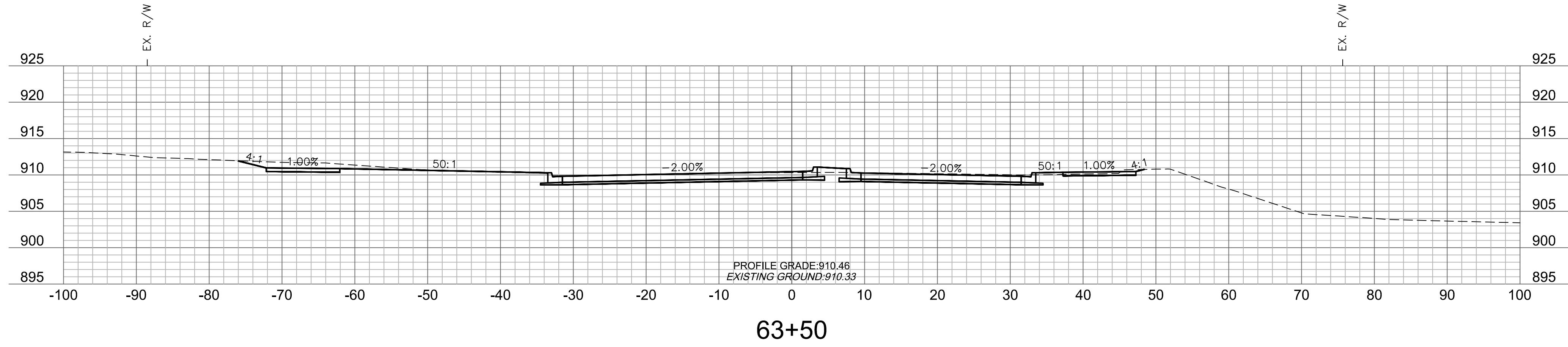
23RD STREET CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: 2.5' RBC
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

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PRELIMINARY
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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS

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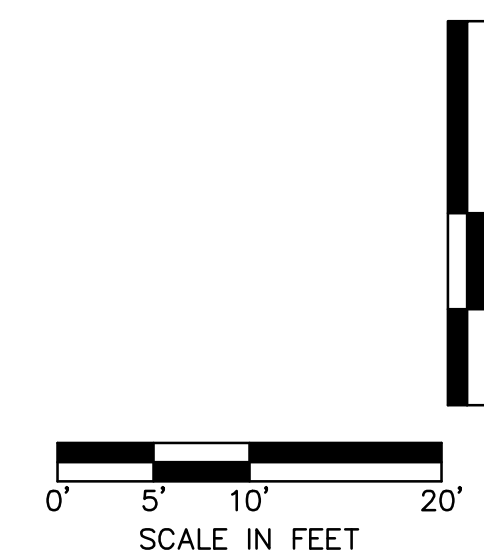
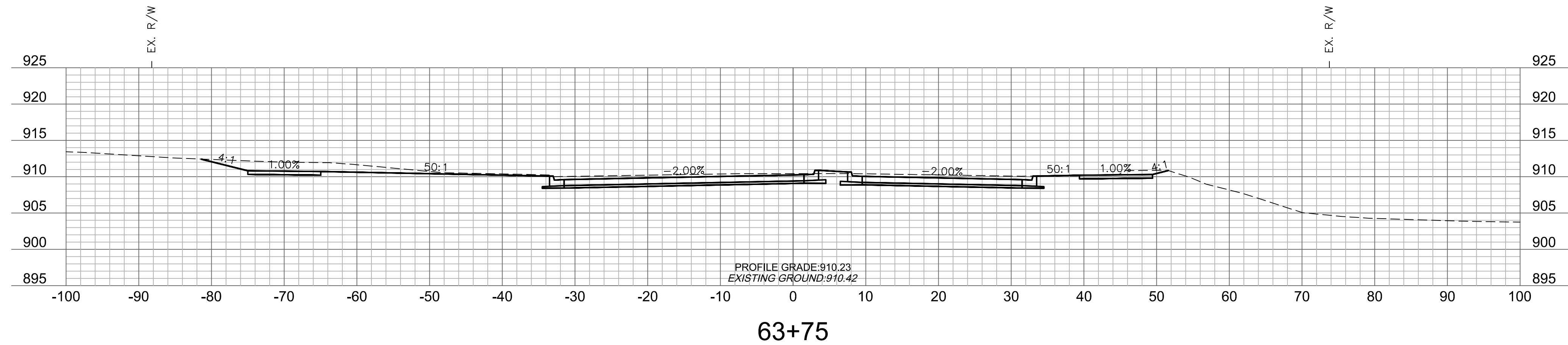
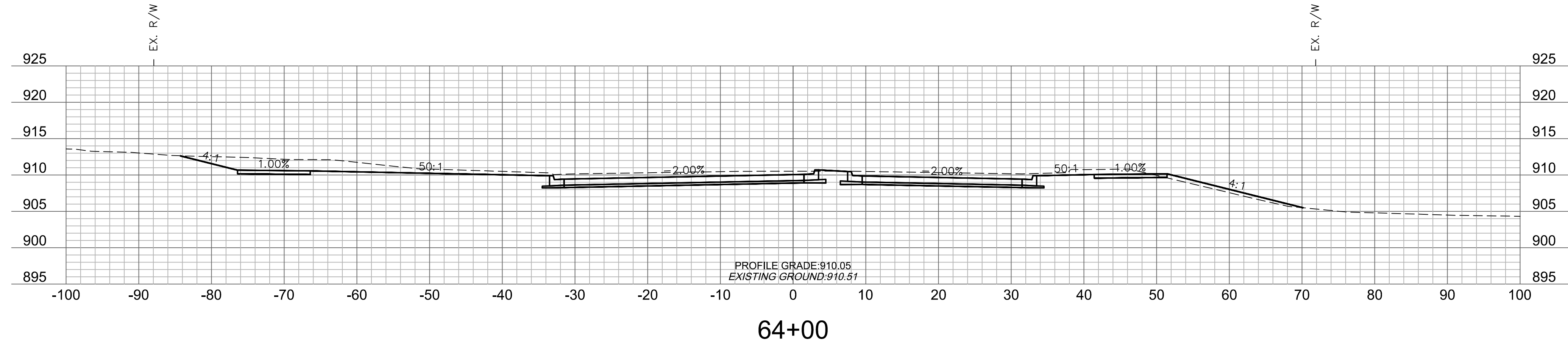
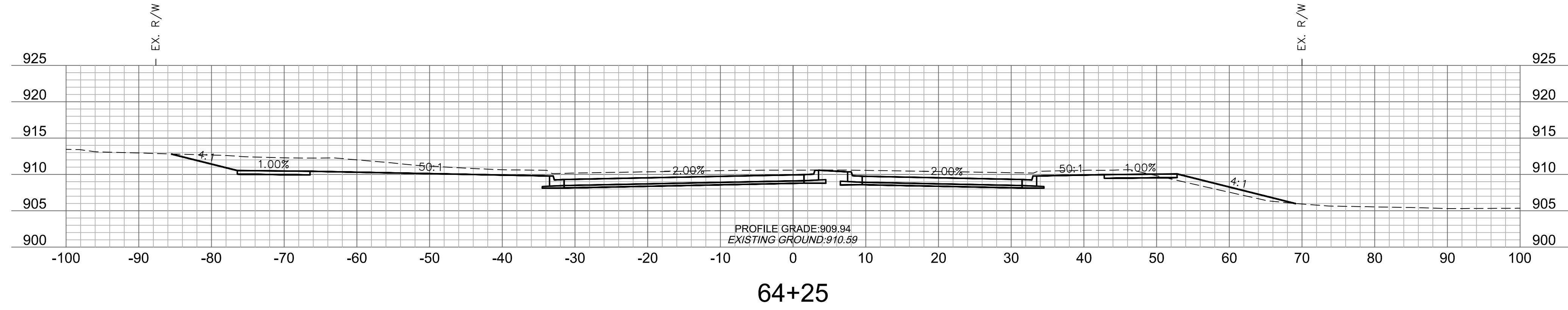
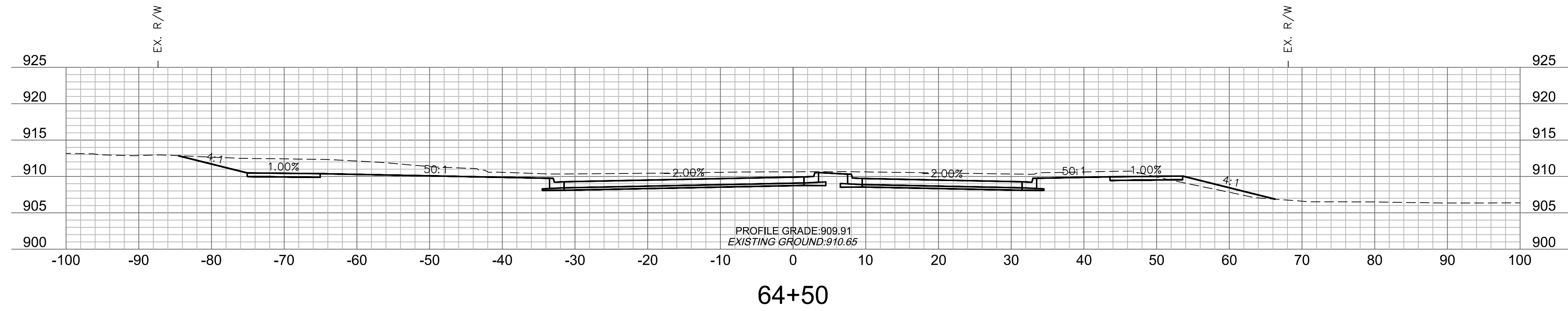
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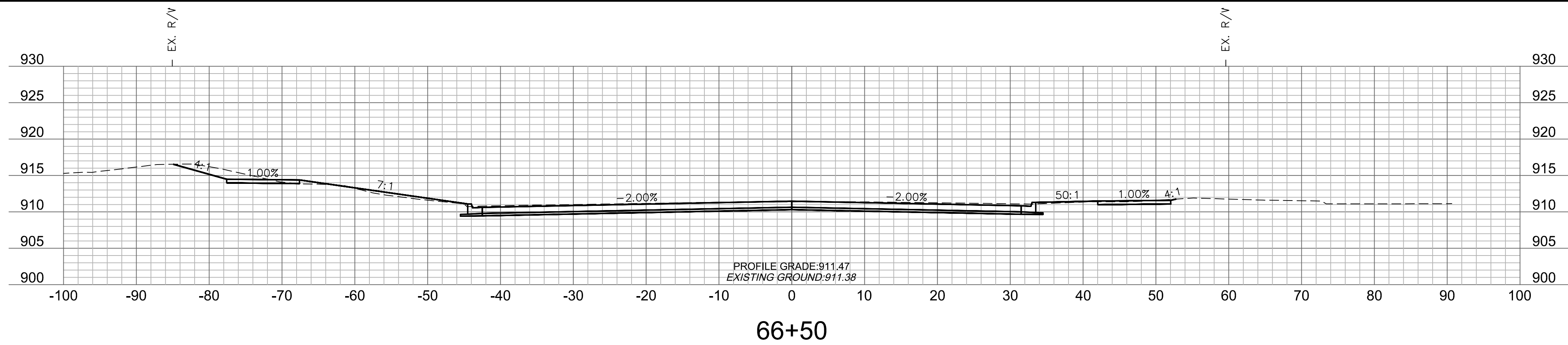
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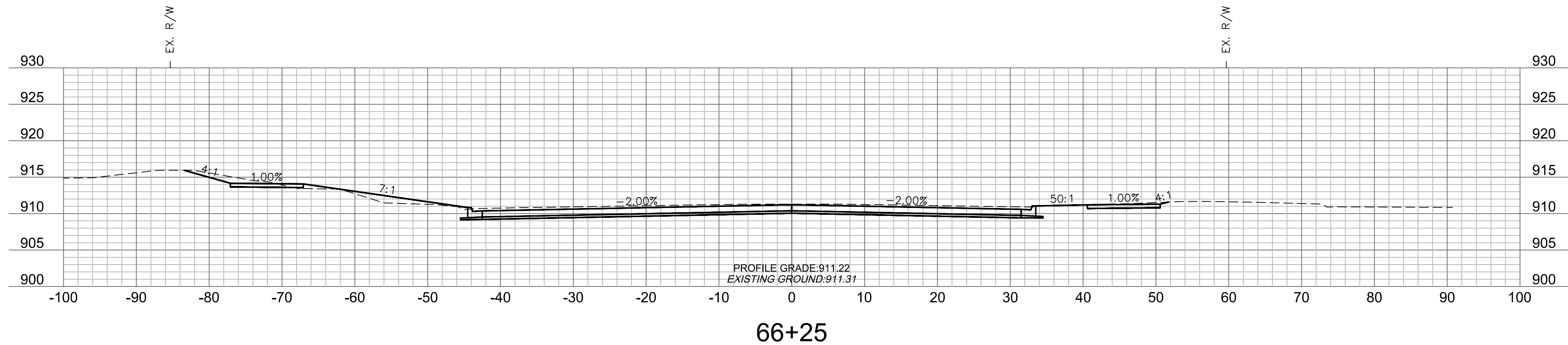
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 CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: 2.5' RBC
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

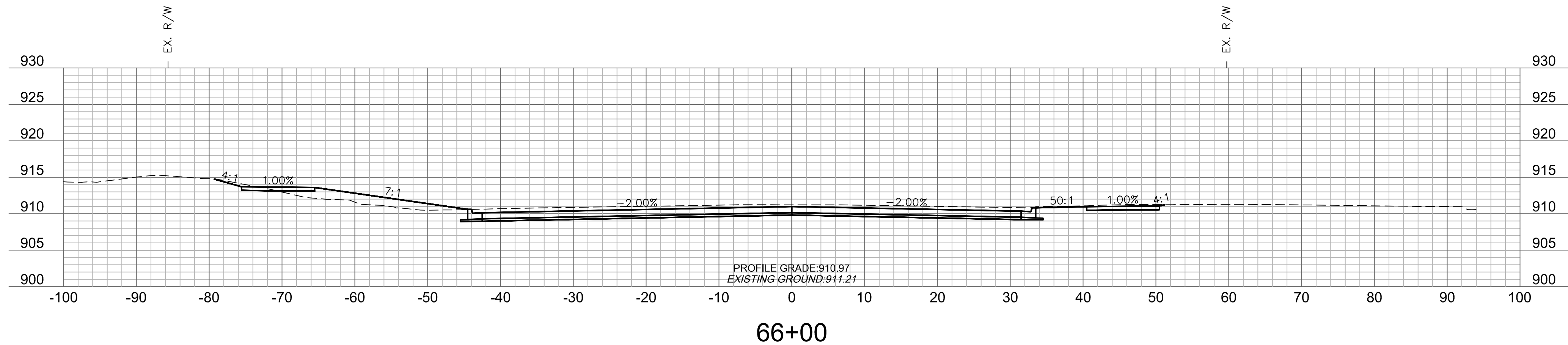
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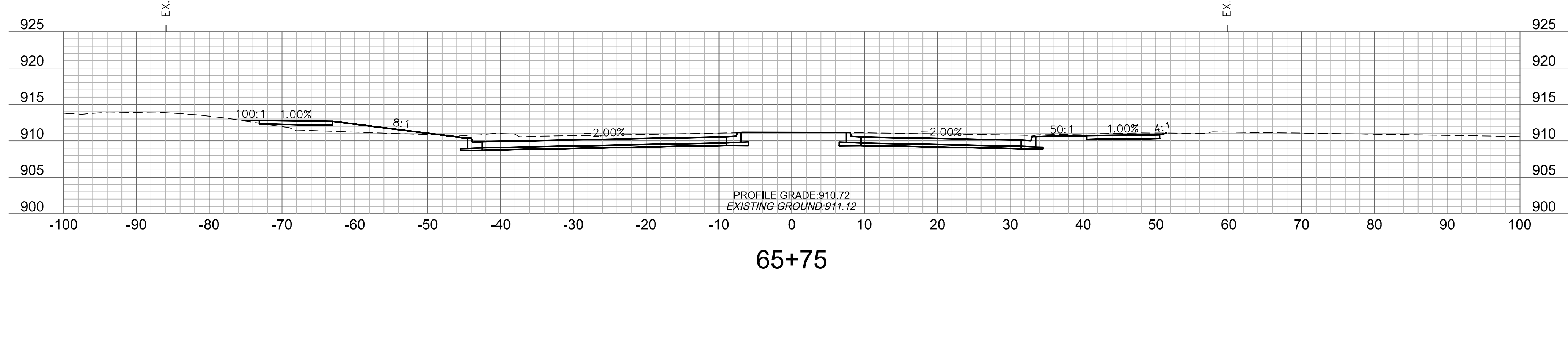
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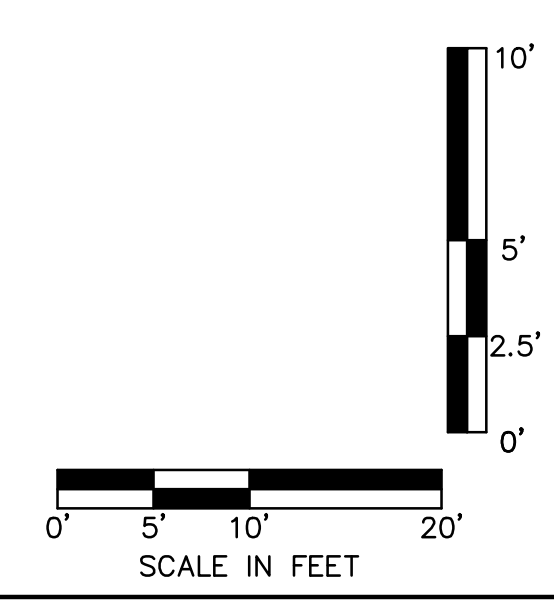
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66+00



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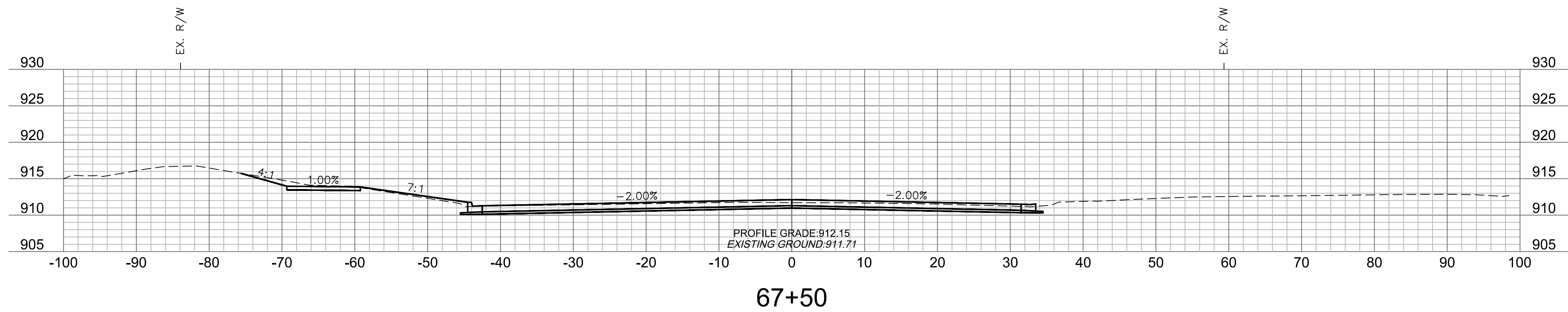
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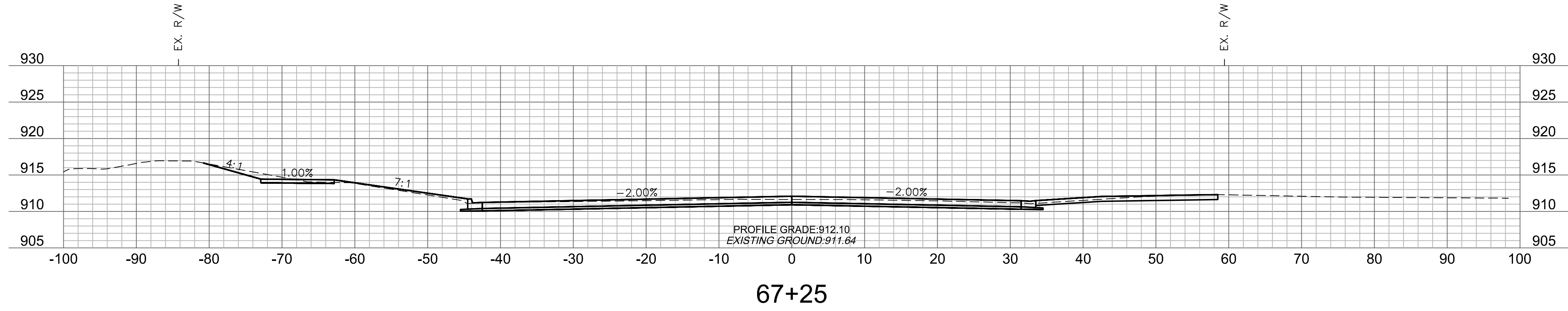
23RD STREET CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: 2.5' RBC
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

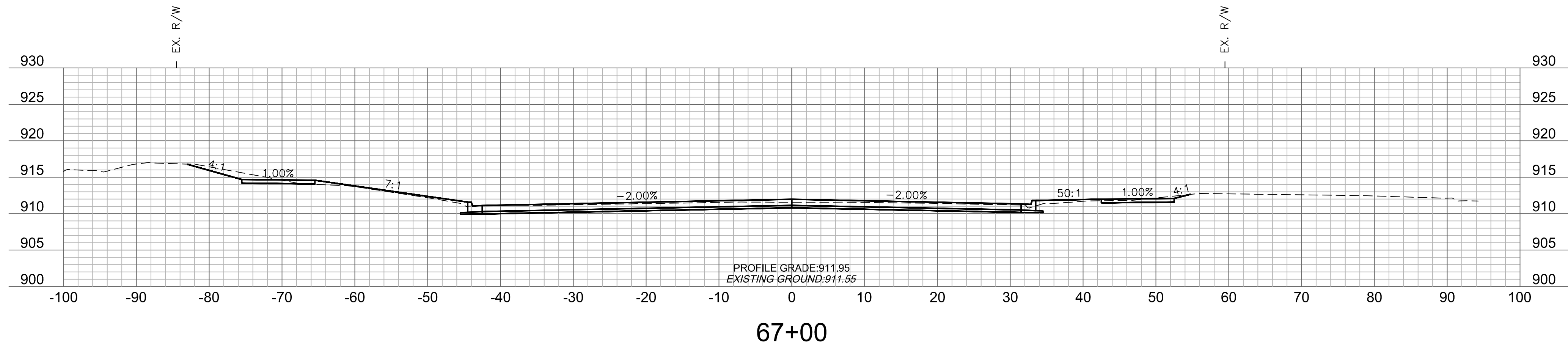
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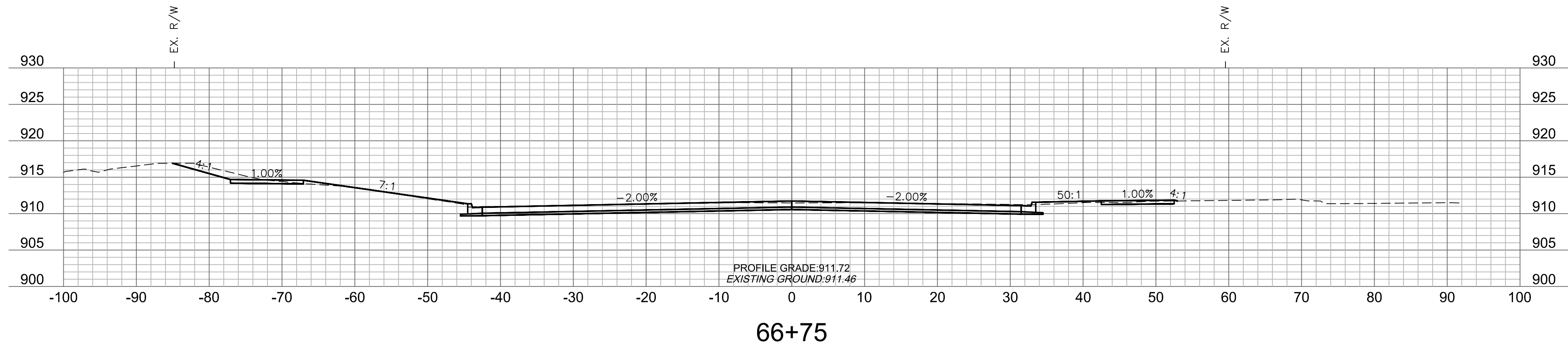
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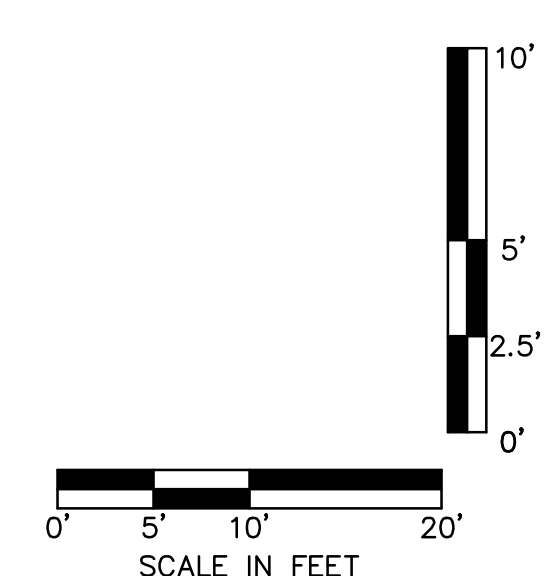
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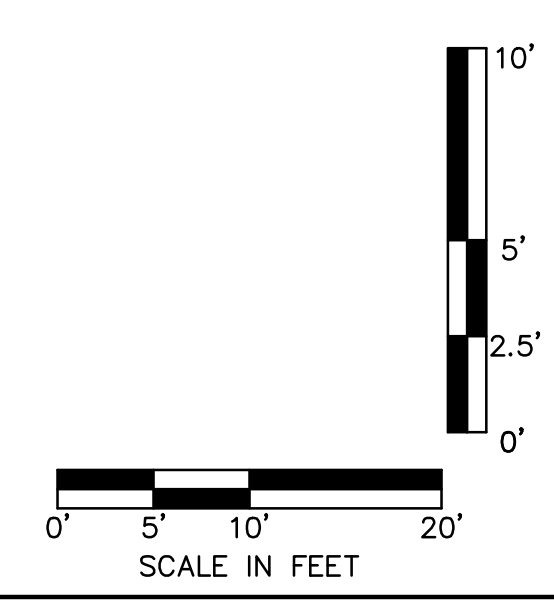
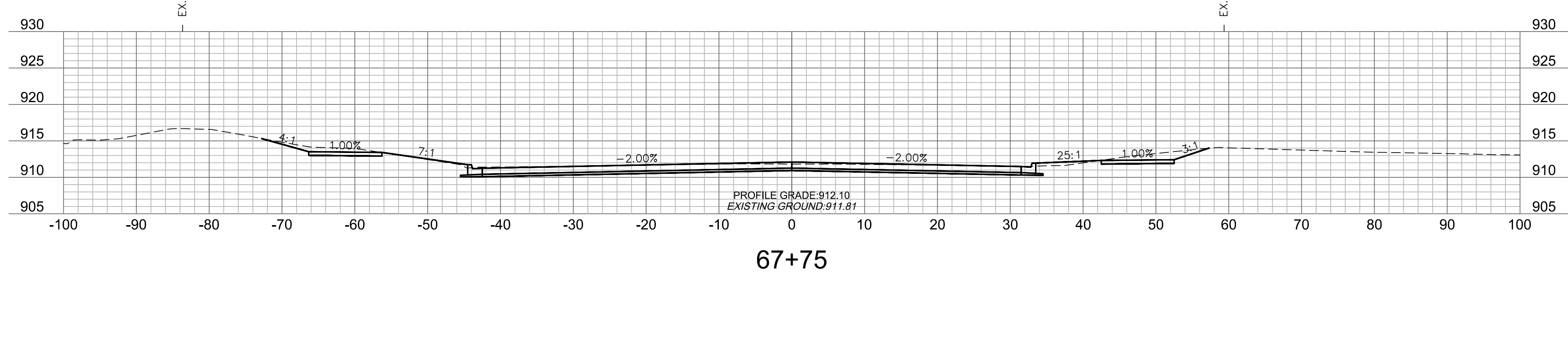
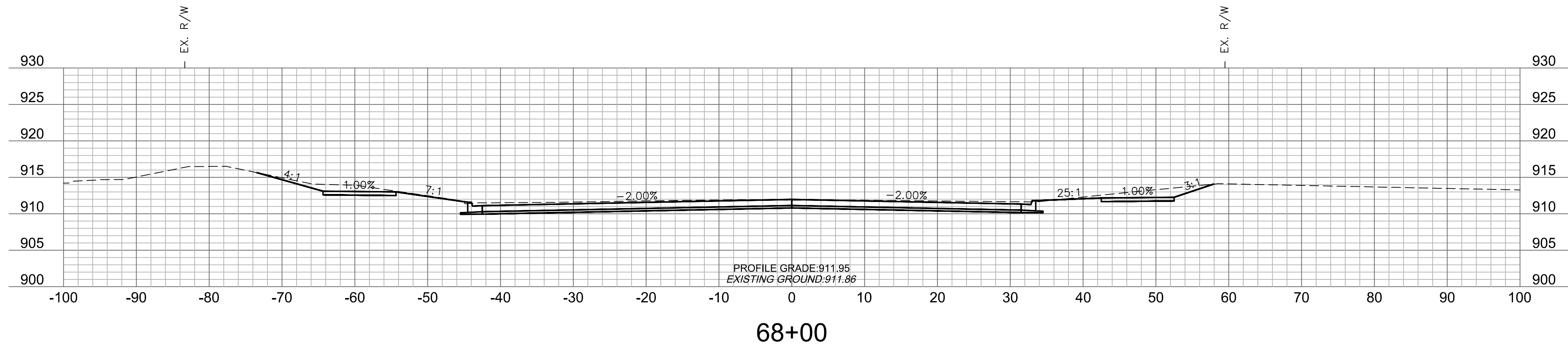
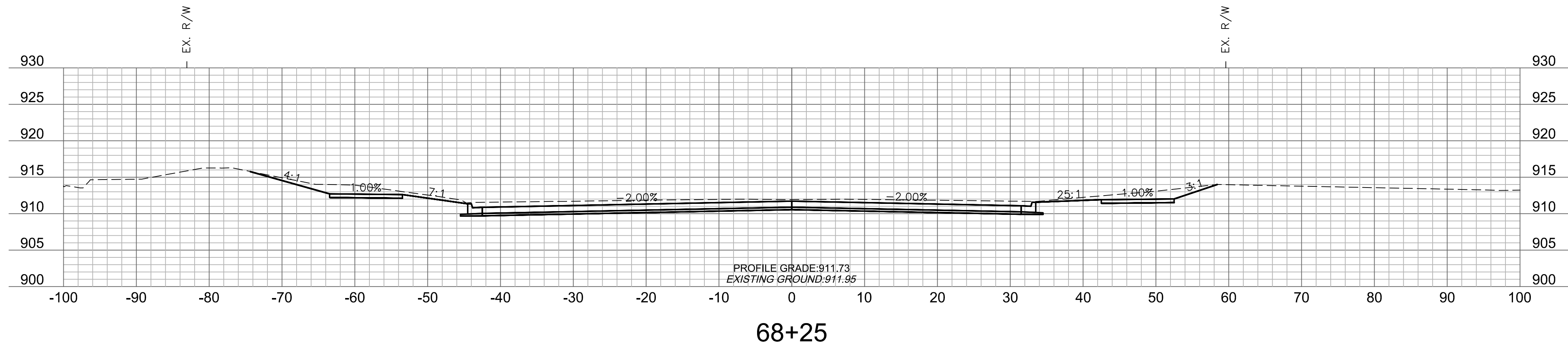
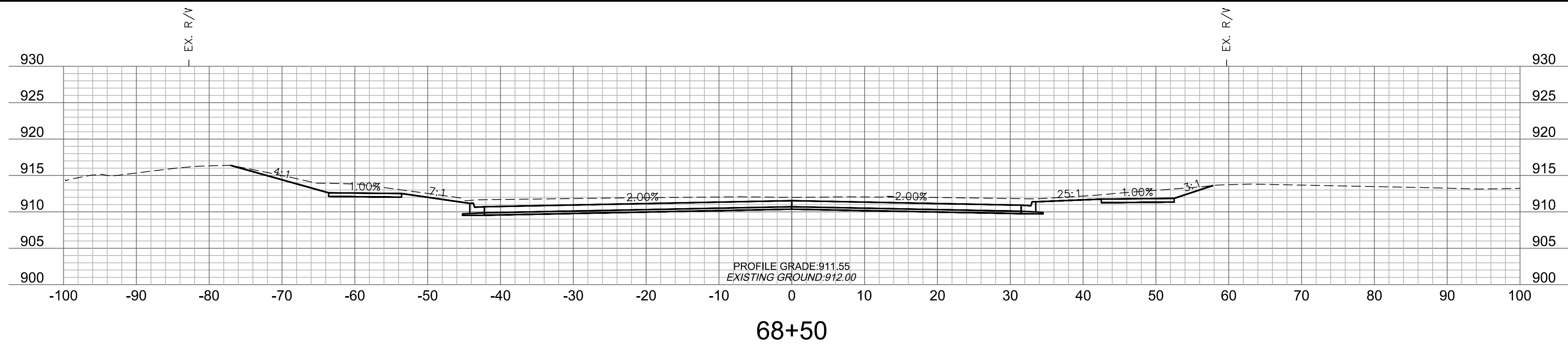
PRELIMINARY
 NOT FOR CONSTRUCTION

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

23RD STREET CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: 2.5' PBM
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

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 USER: cjarroll
 XREFS: T_PBASE_0202348 T_PBLK_0202348



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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET
CROSS SECTIONS

2021

LAWRENCE, KANSAS

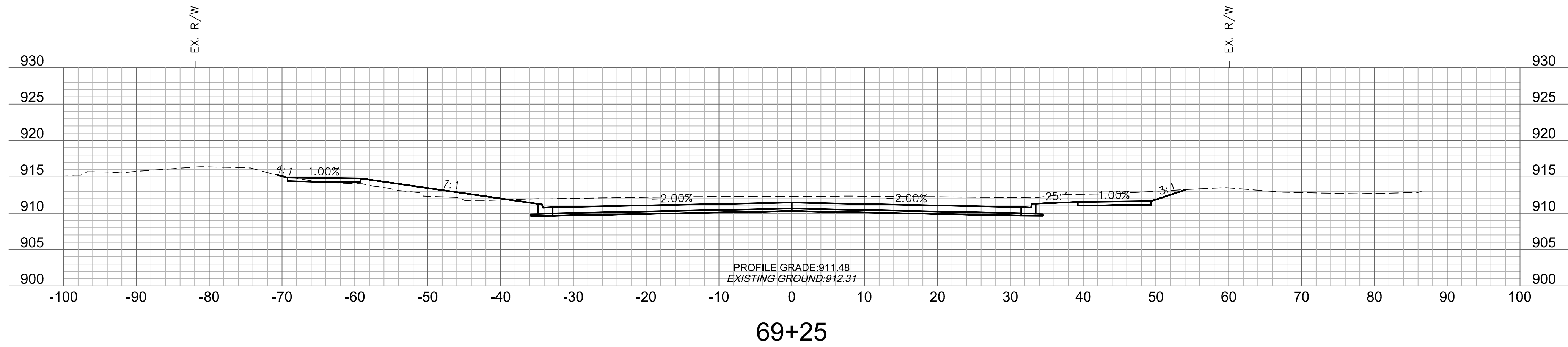
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

drawn by: CJC
checked by: PBM
approved by: PBM
QA/QC by: 2.5' RBC

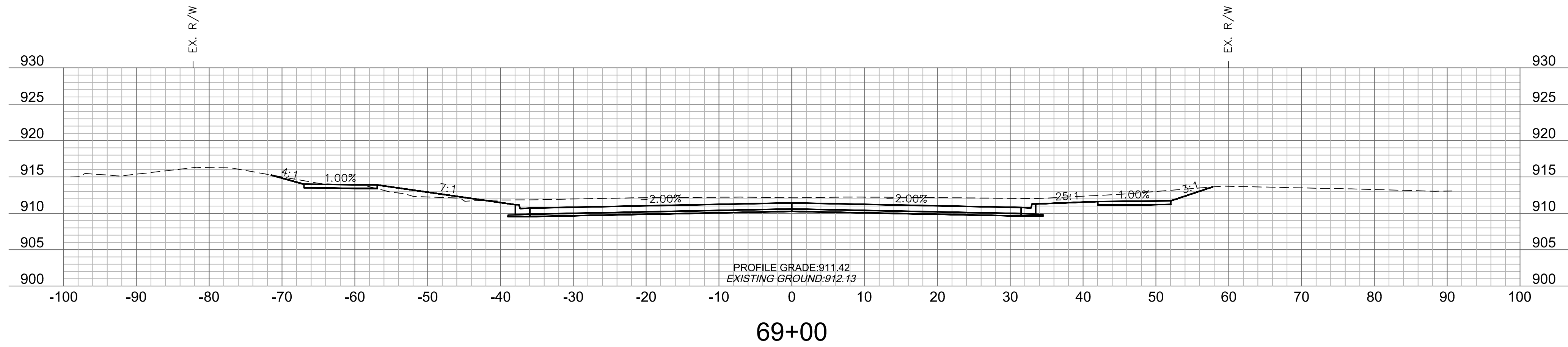
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drawing no.: T_XSC01_0202348
date: 12-18-2020

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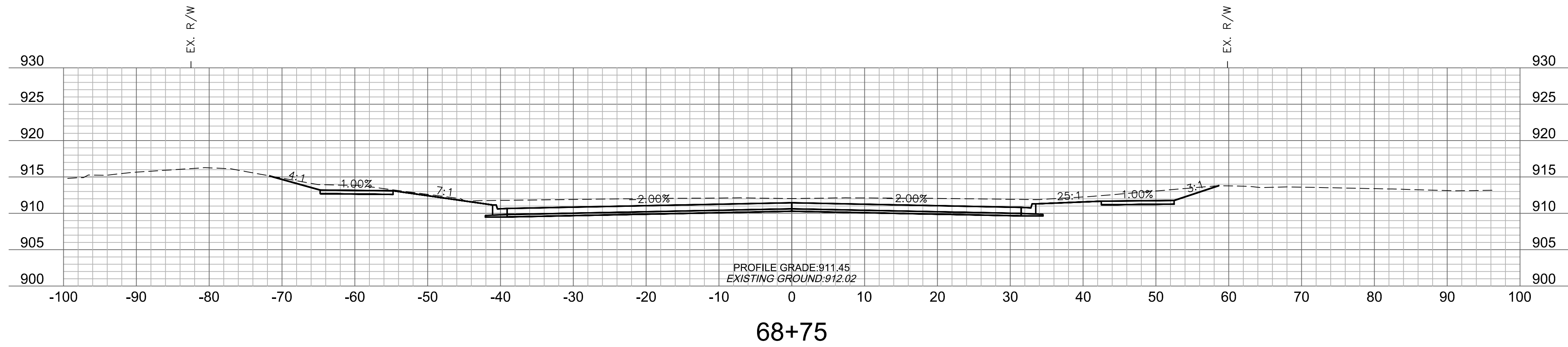
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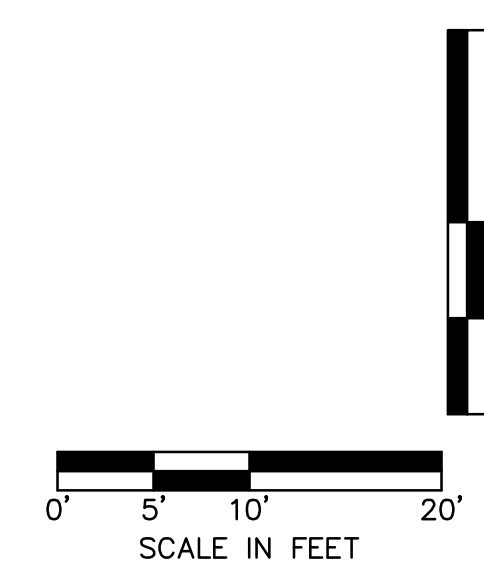
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69+00



68+75



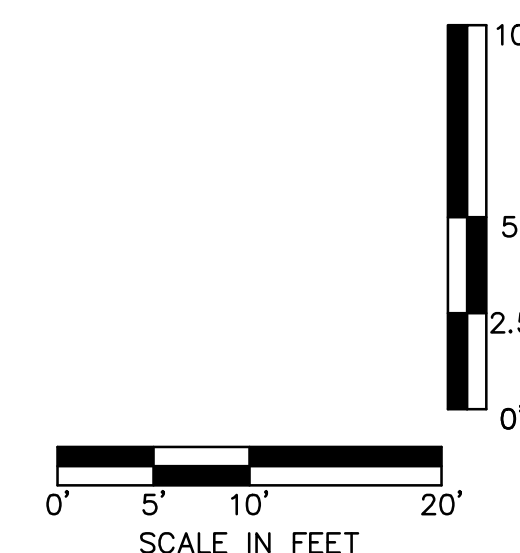
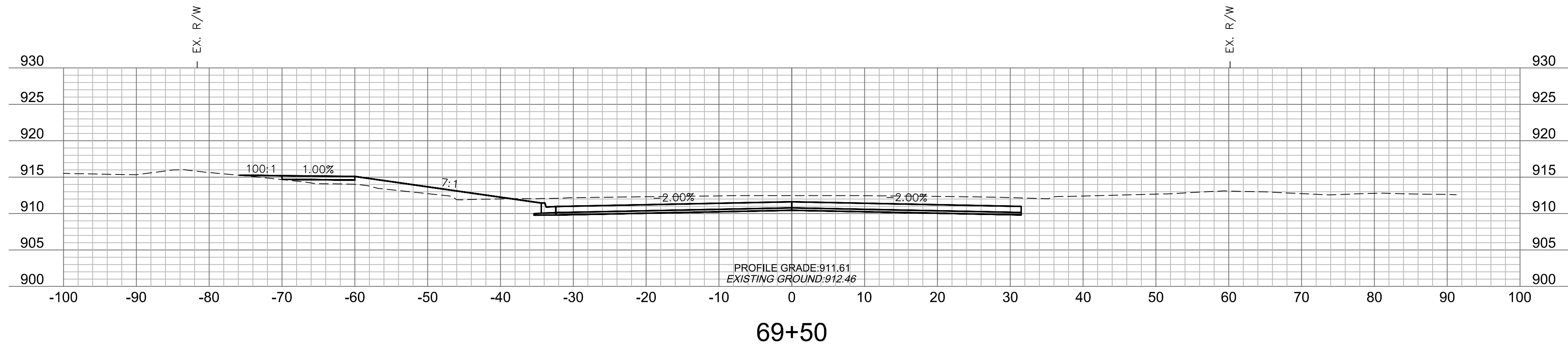
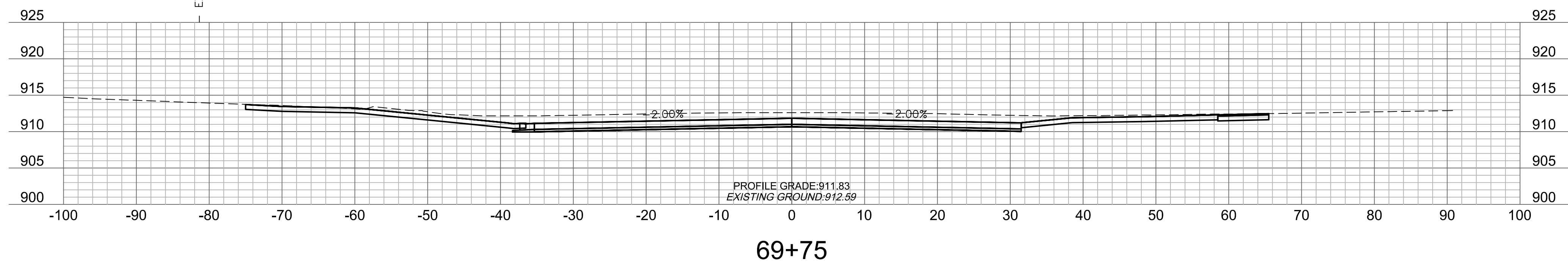
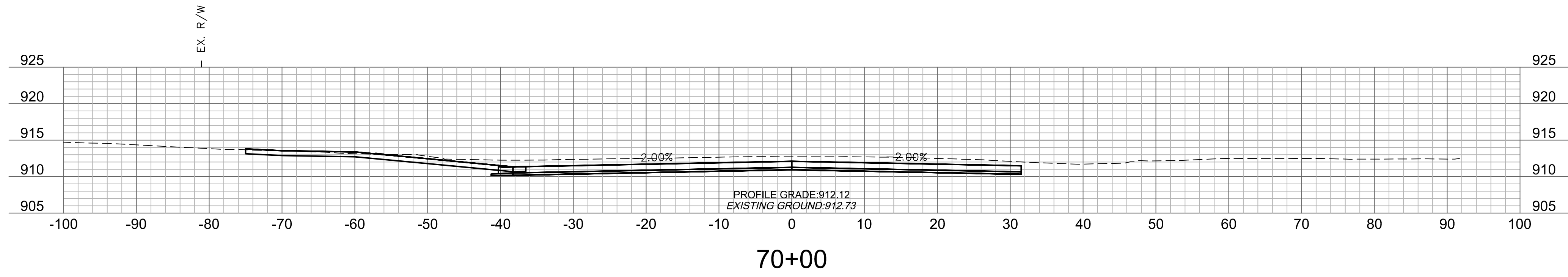
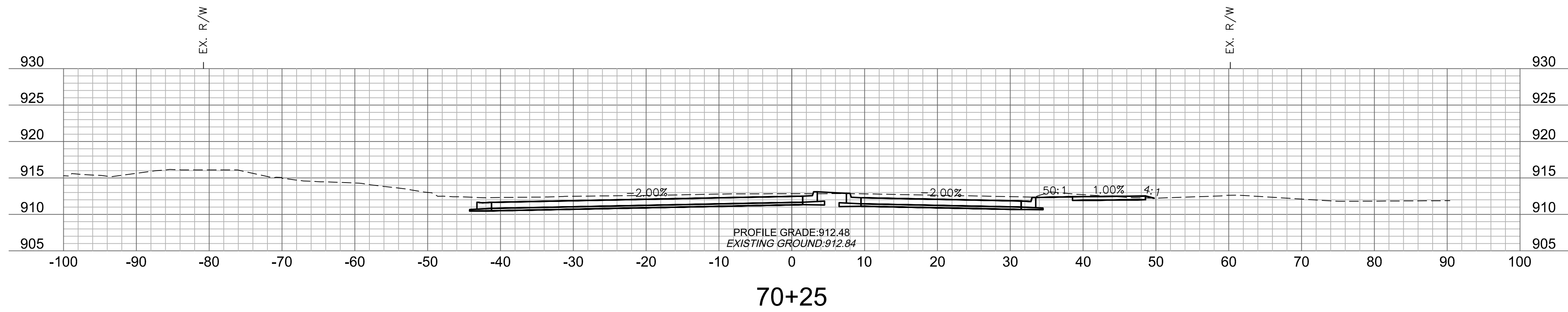
PRELIMINARY
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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

23RD STREET CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: RBC
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET CROSS SECTIONS

**23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD**

LAWRENCE, KANSAS

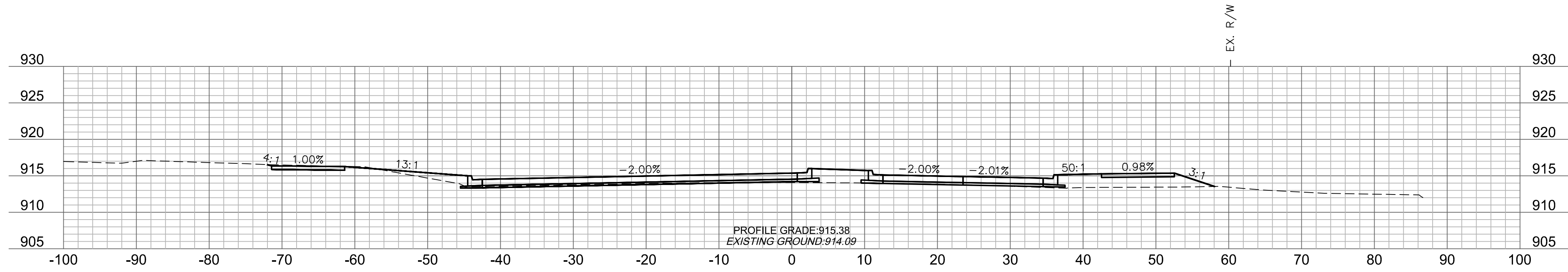
2021

REVISIONS

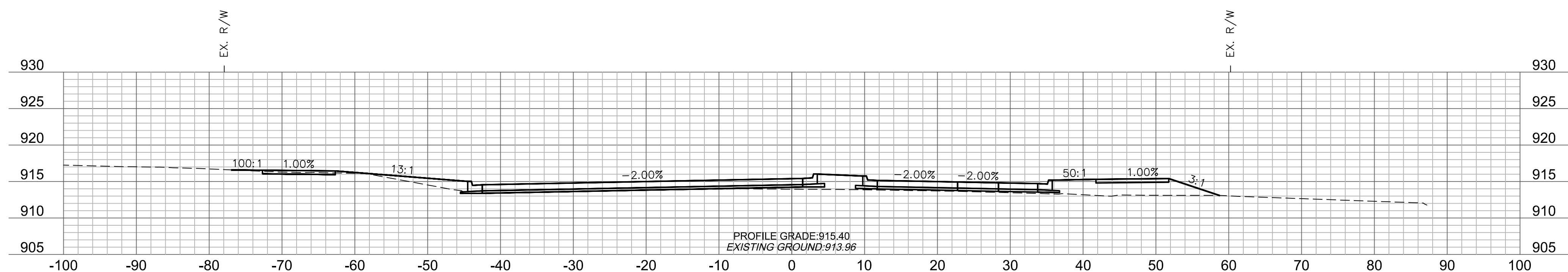
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 date: 12-18-2020

SHEET
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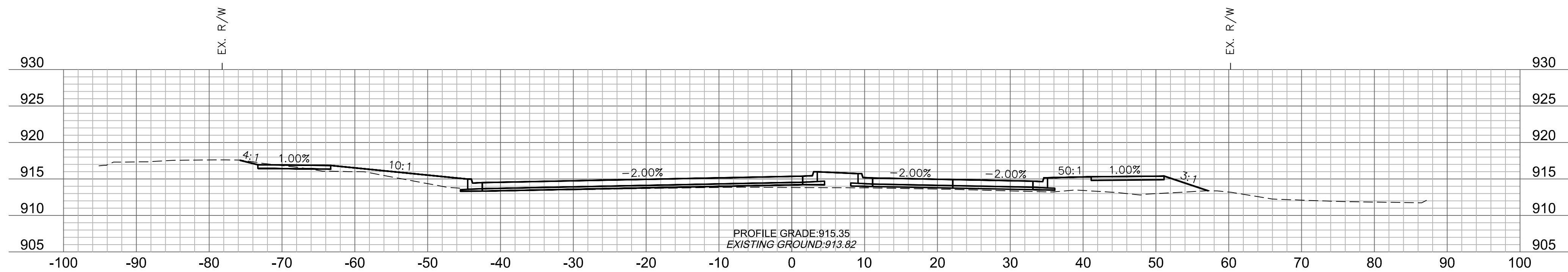
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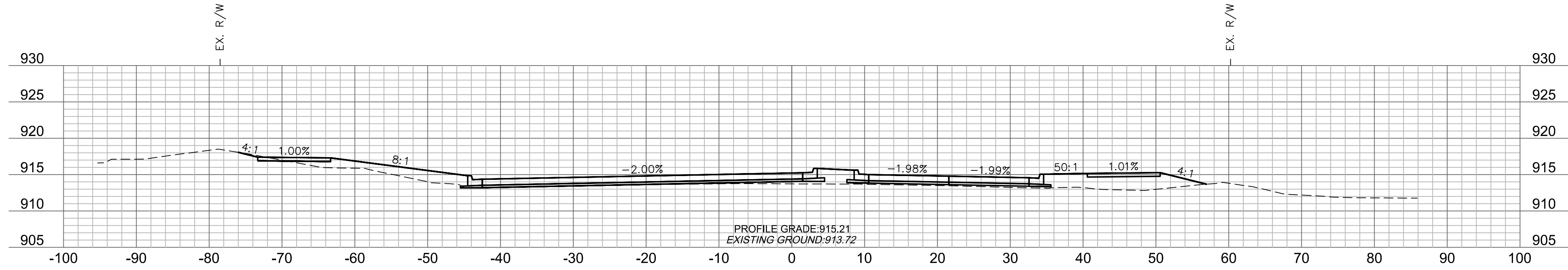
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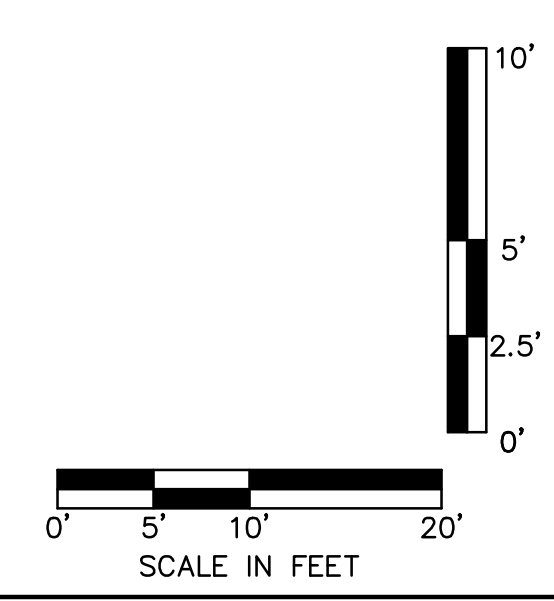
72+75



72+50



72+25



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23RD STREET CROSS SECTIONS

2021

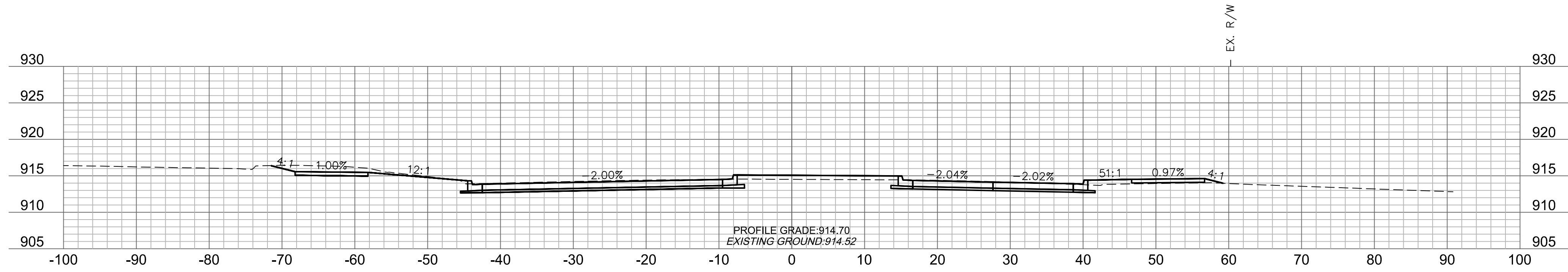
LAWRENCE, KANSAS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

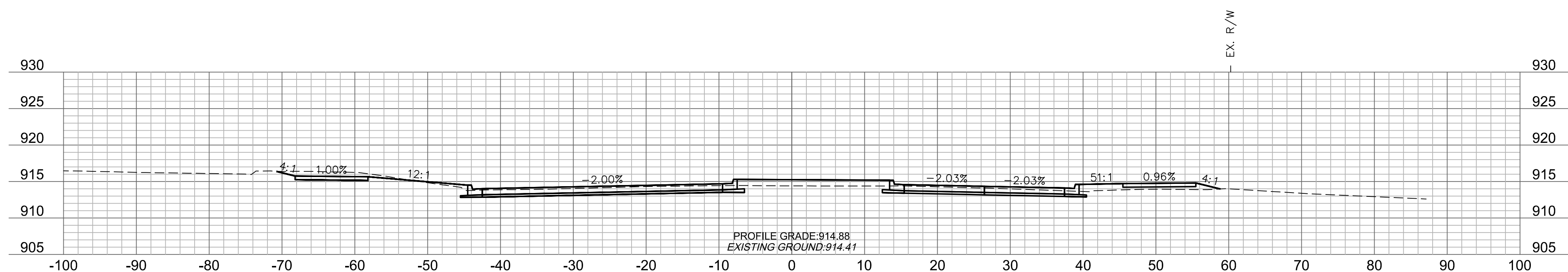
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drawing no.: T_XSC01_0202348
date: 12-18-2020

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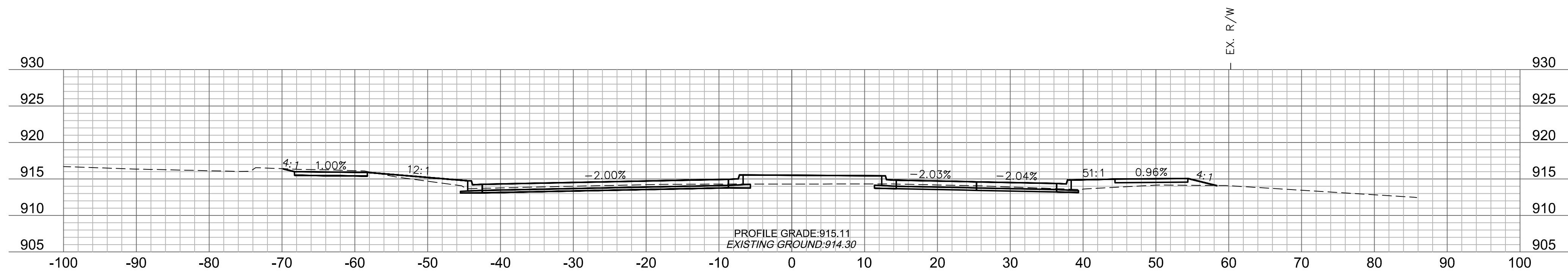
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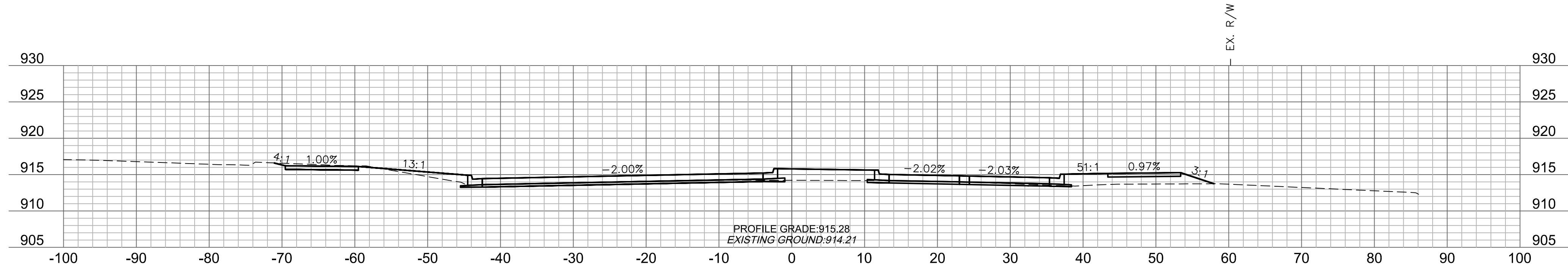
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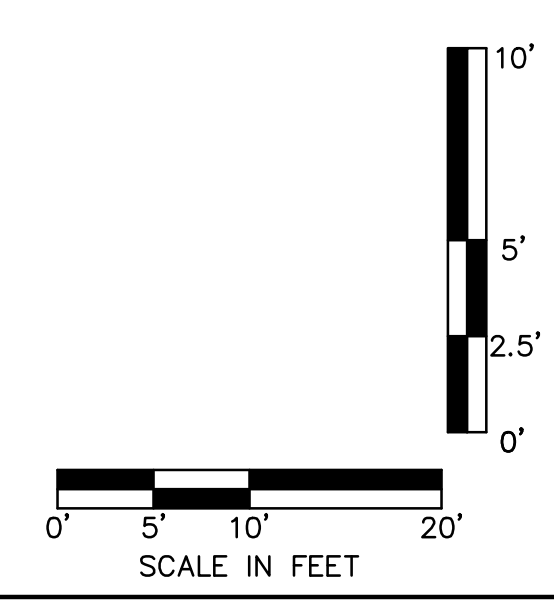
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73+50



73+25



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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET
CROSS SECTIONS

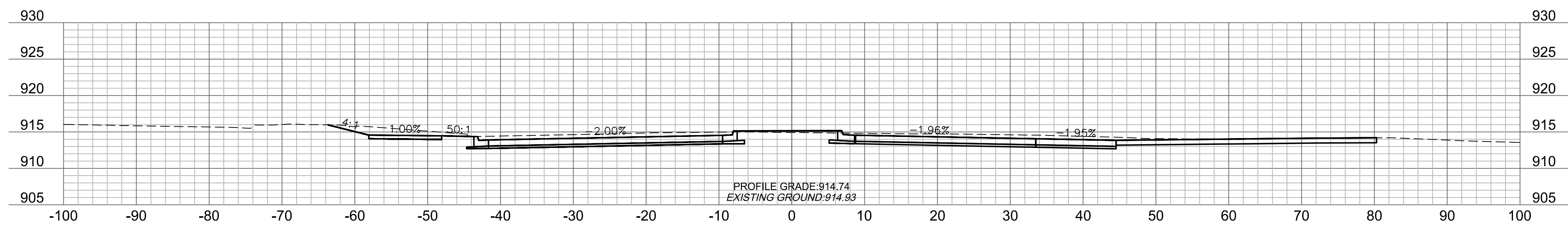
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

2021
REVISIONS

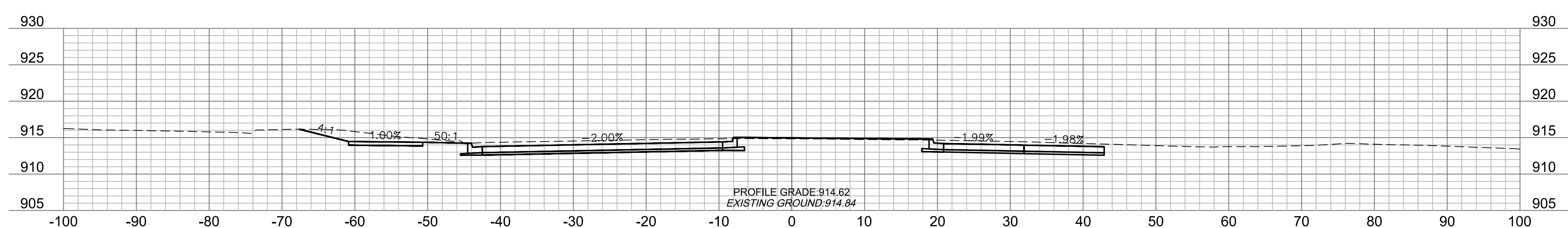
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date: 12-18-2020

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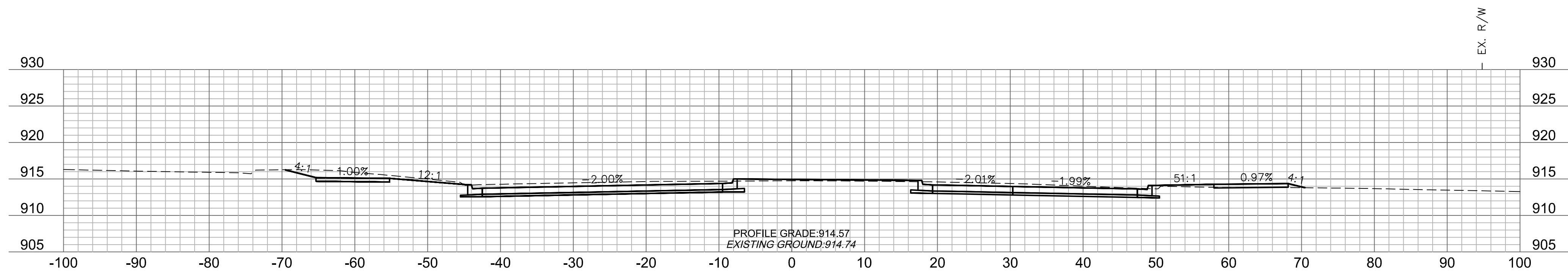
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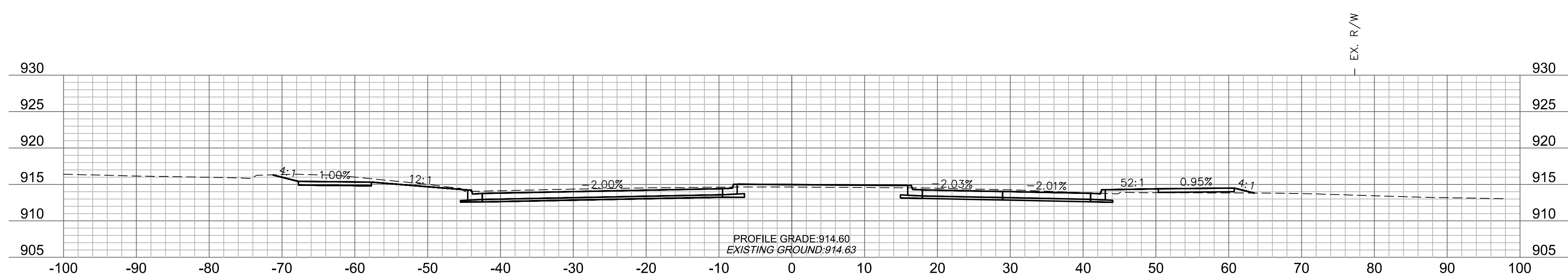
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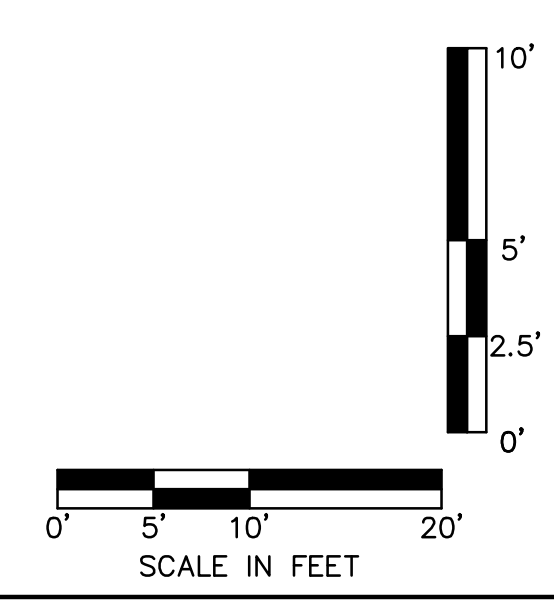
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74+50



74+25



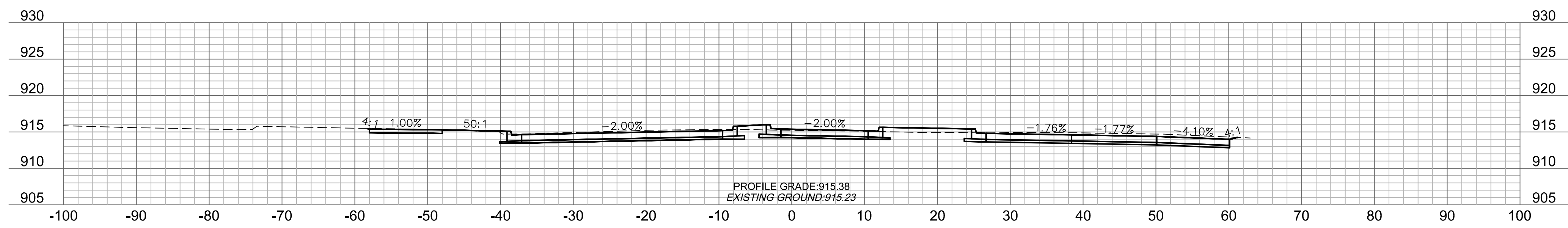
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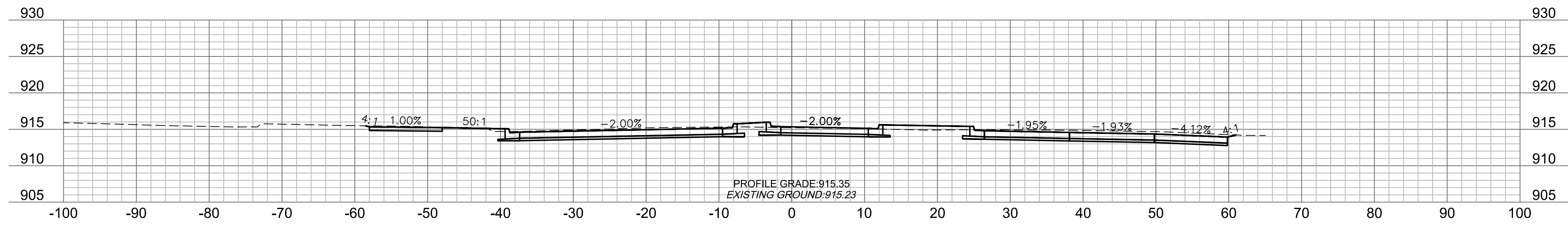
23RD STREET CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

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 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

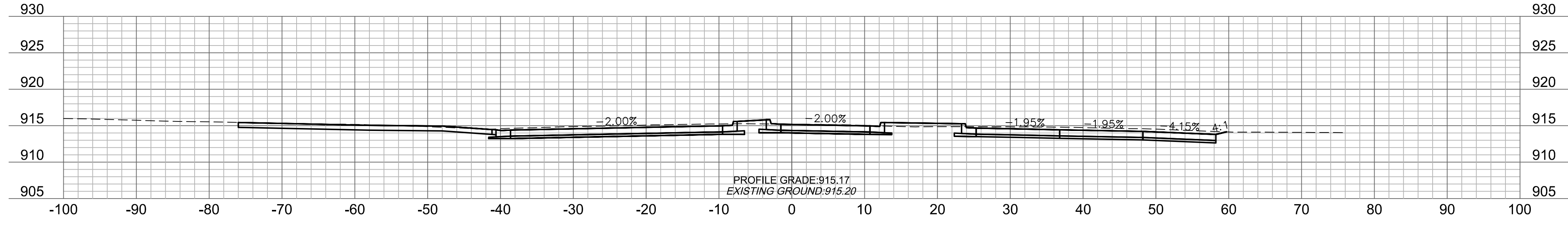
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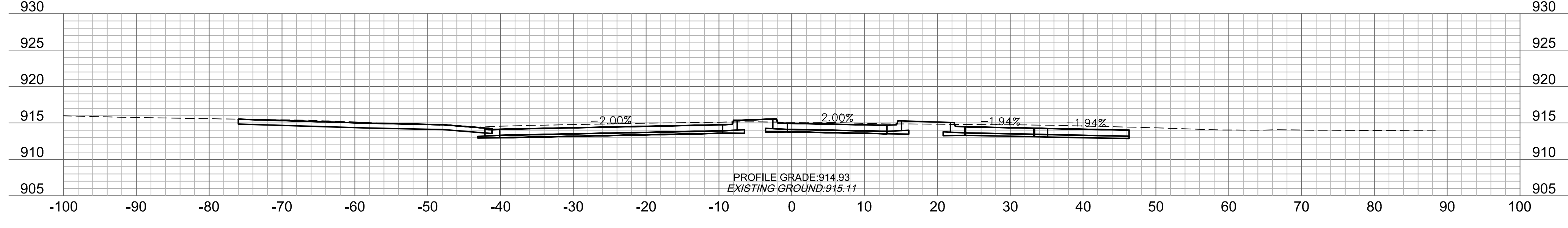
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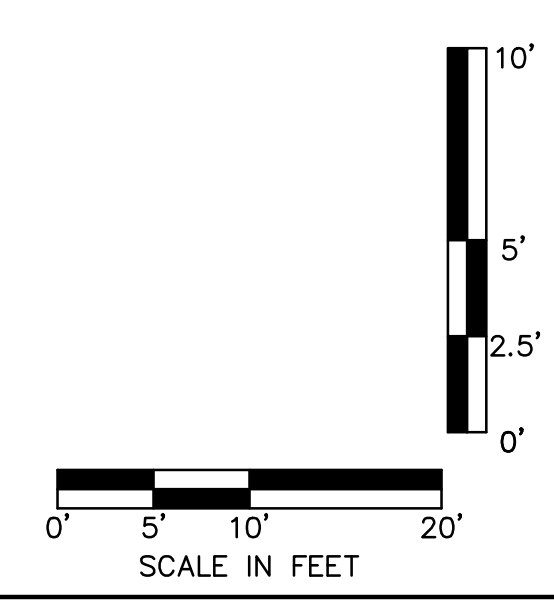
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75+50



75+25



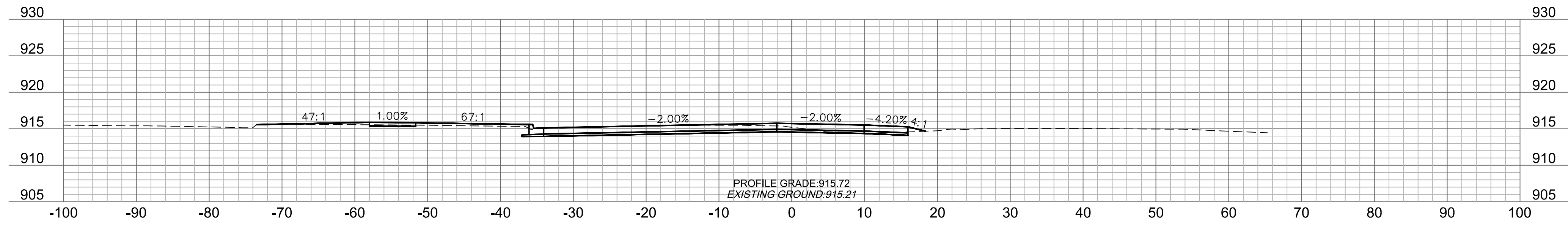
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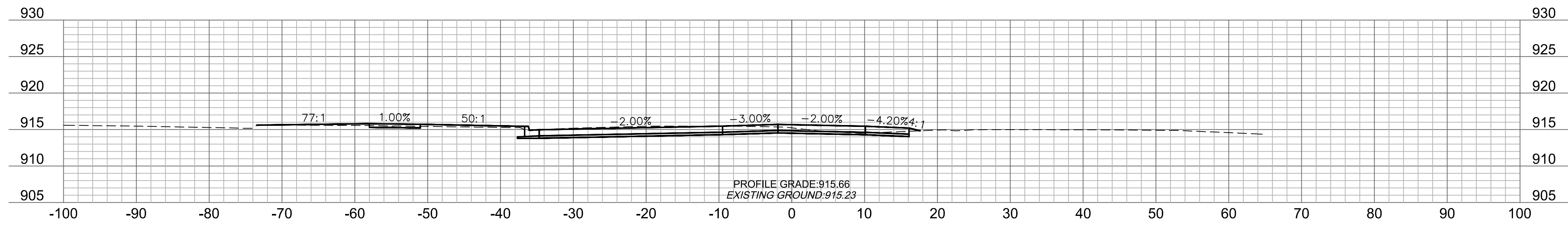
23RD STREET CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

drawn by: CJC
 checked by: PBM
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 QA/QC by: PBM
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020
SHEET
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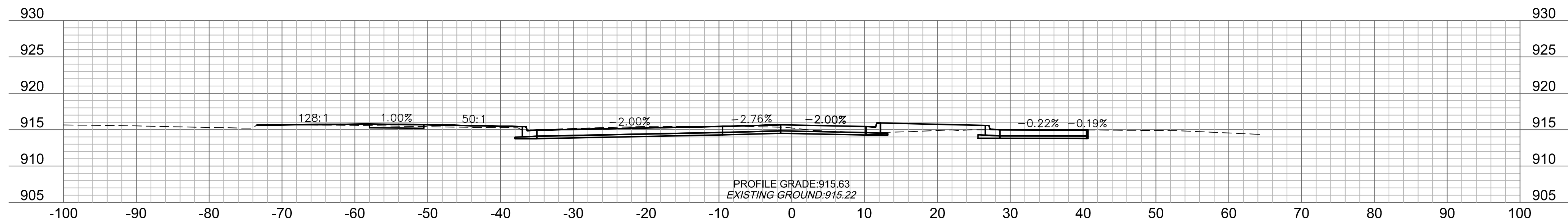
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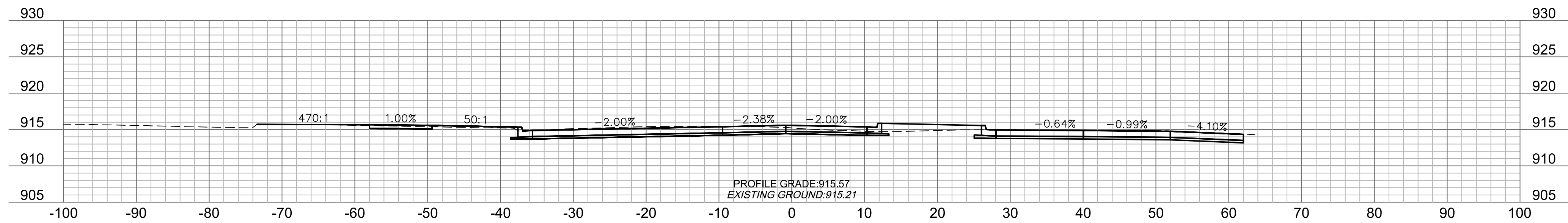
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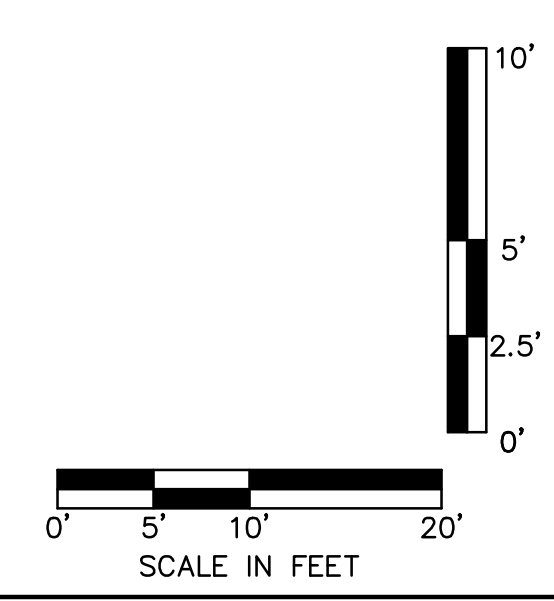
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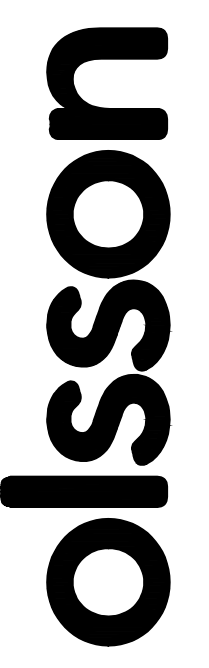


76+09.70



76+00





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23RD STREET CROSS SECTIONS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

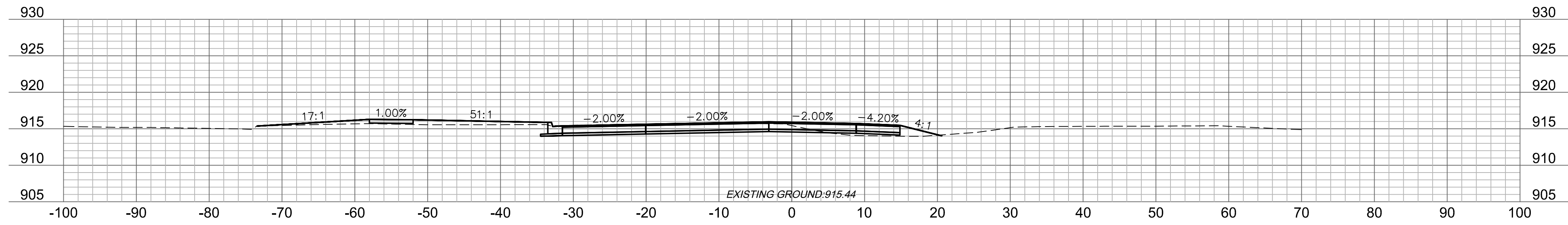
REVISIONS

drawn by: CJC
checked by: PBM
approved by: PBM
QA/QC by: 2.5 PBM
project no.: 020-2348
drawing no.: T_XSC01_0202348
date: 12-18-2020

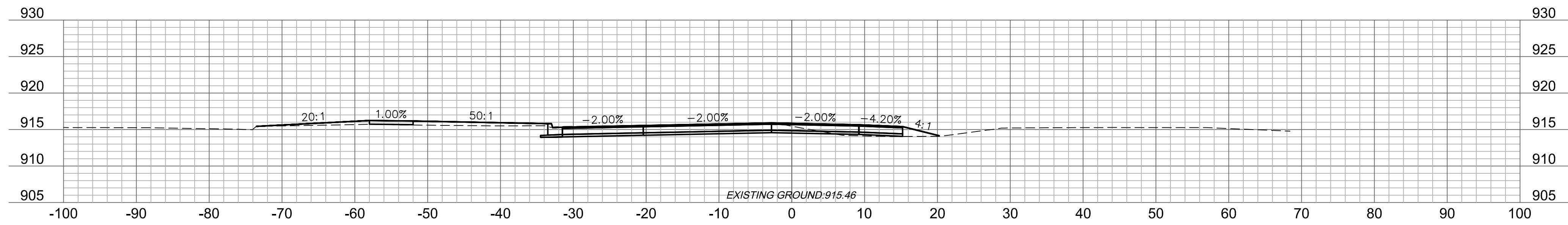
2021

SHEET
193 of 206

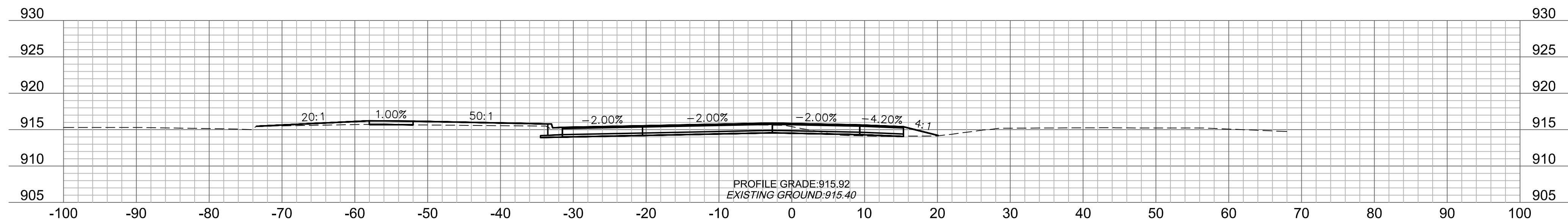
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 DATE: Dec 18, 2020 10:25am
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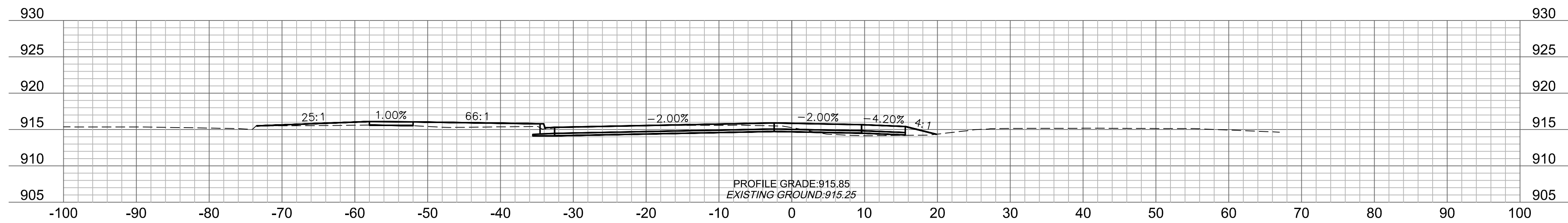
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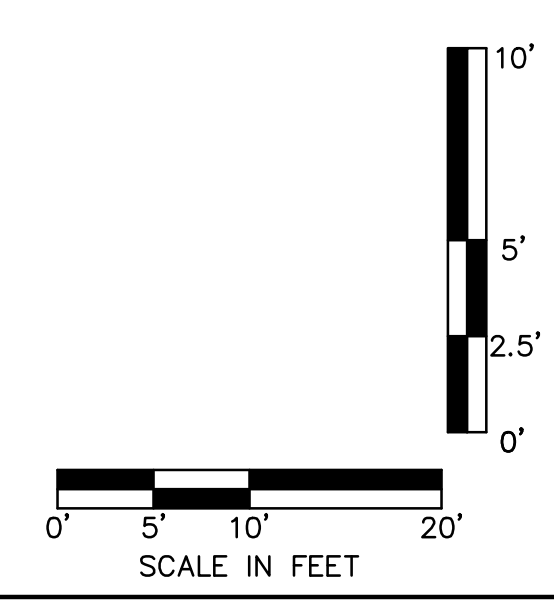
76+75



76+67.55



76+50



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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET CROSS SECTIONS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

REVISIONS

2021

drawn by: CJC

checked by: PBM

approved by: PBM

QA/QC by: 2.5' RBC

project no.: 020-2348

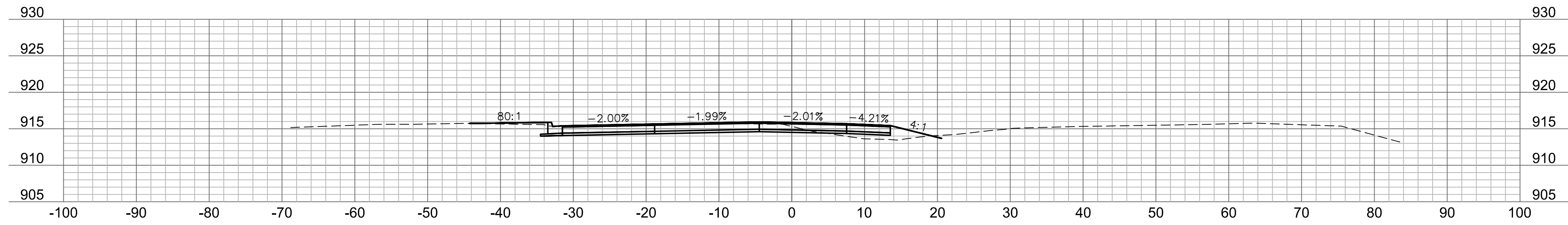
drawing no.: T_XSC01_0202348

date: 12-18-2020

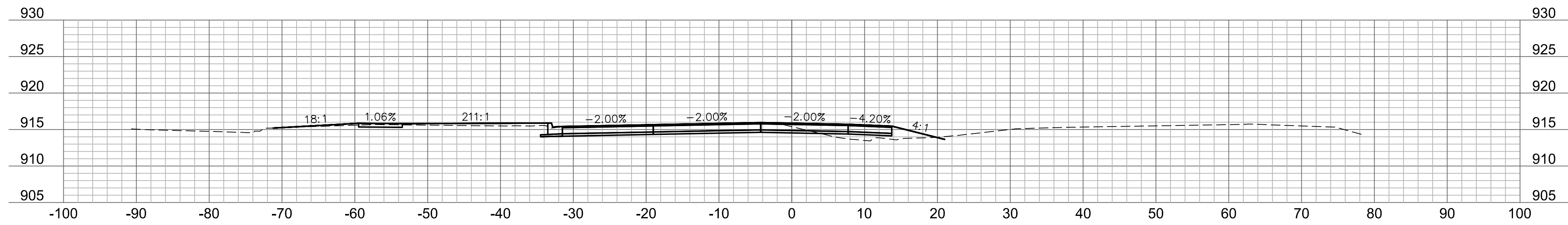
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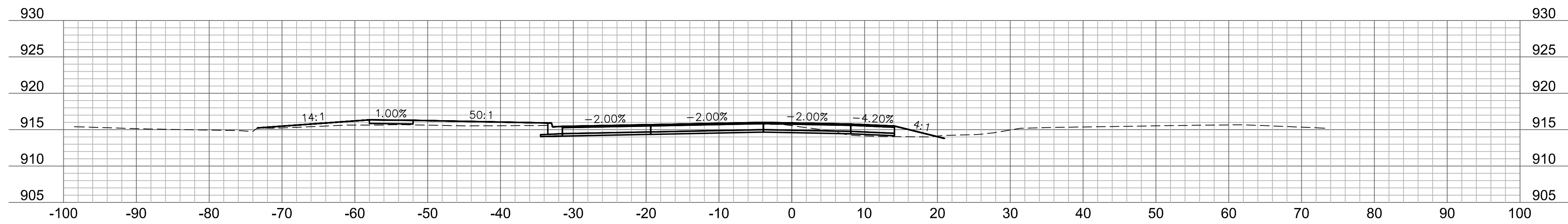
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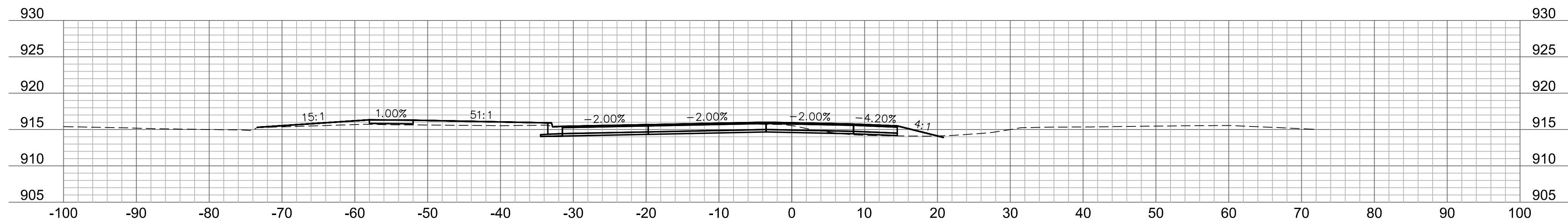
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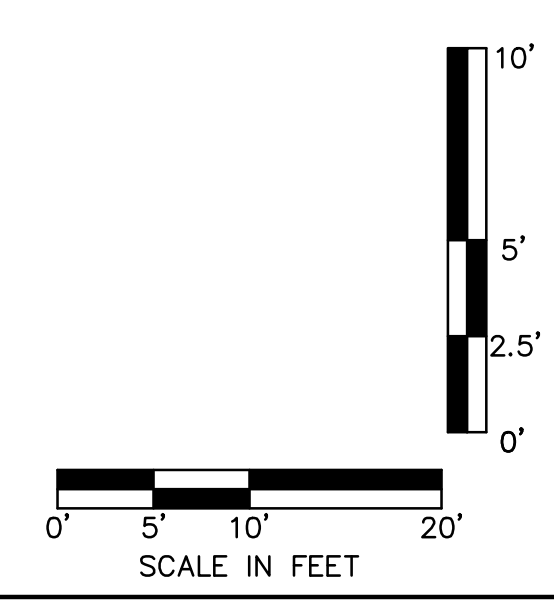
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77+50



77+25



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PRELIMINARY
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REV. NO.	DATE	REVISIONS DESCRIPTION

23RD STREET CROSS SECTIONS

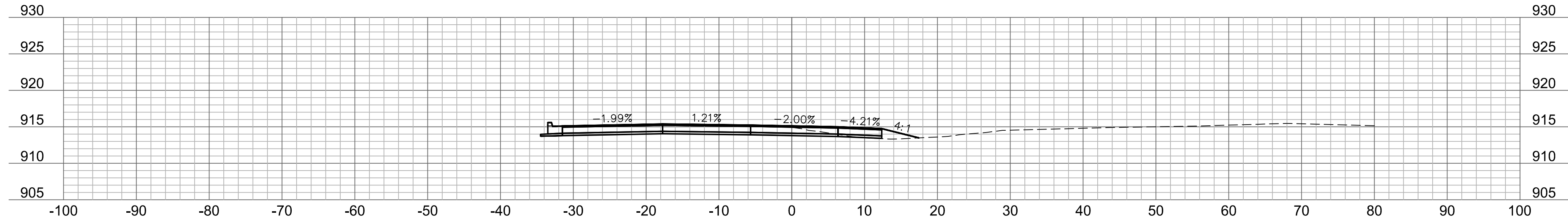
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS

REVISIONS
 2021

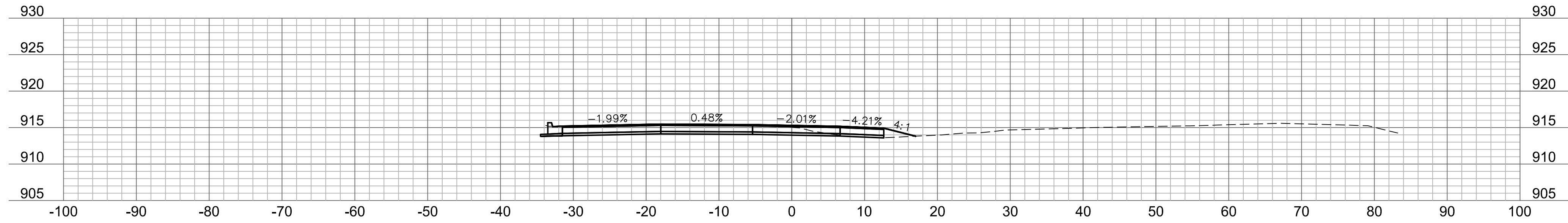
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 checked by: PBM
 approved by: PBM
 QA/QC by: PBM
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

SHEET
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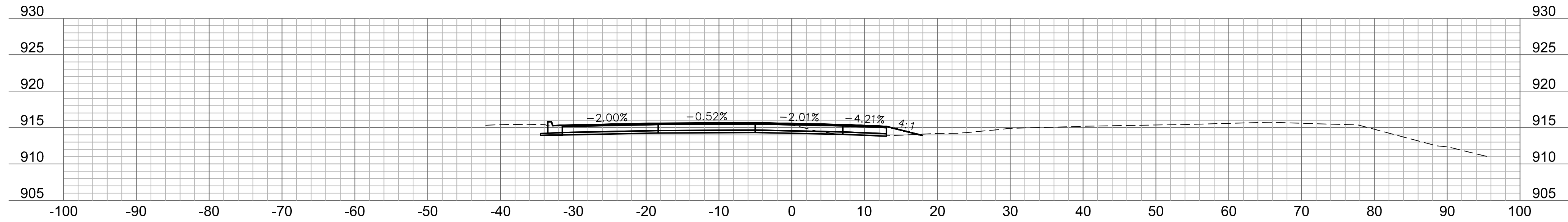
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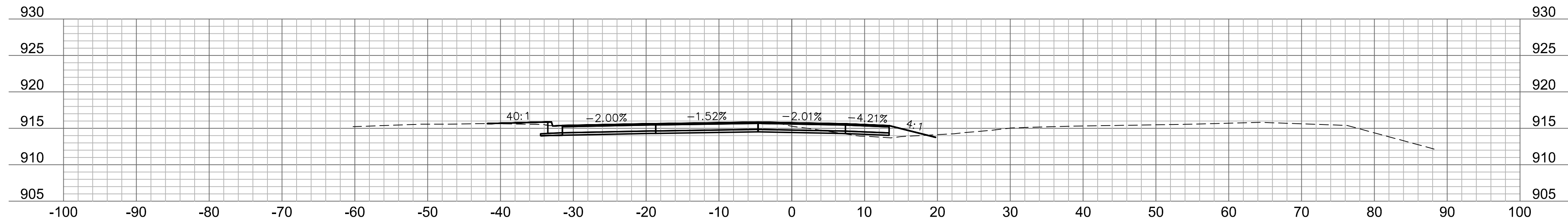
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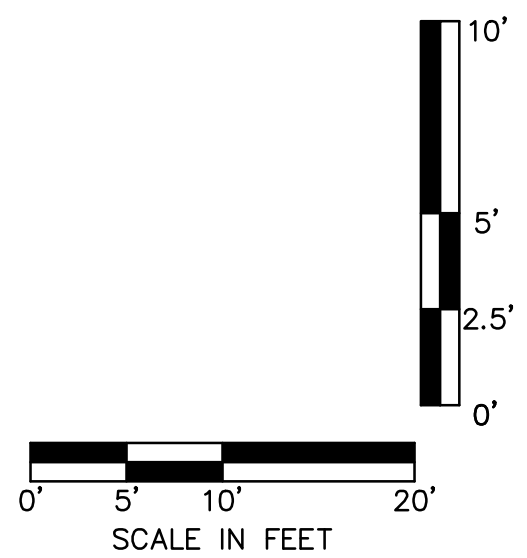
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78+25



78+00



PRELIMINARY
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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

23RD STREET
CROSS SECTIONS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

2021

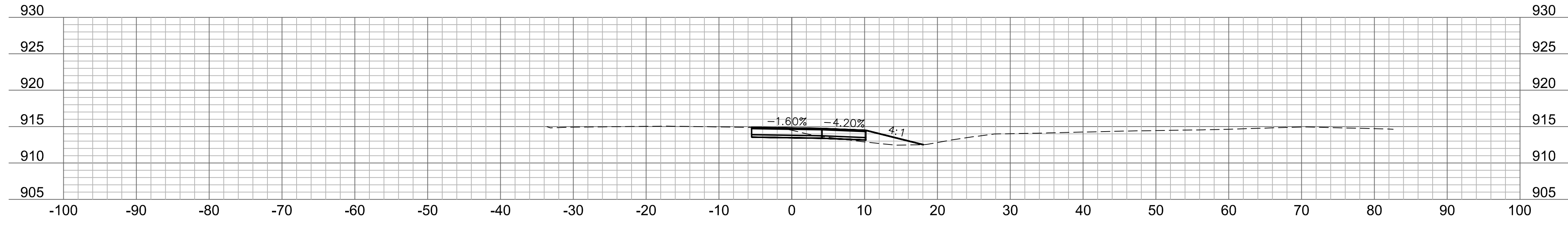
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 approved by: PBM
 QA/QC by: 2.5' PBM
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

SHEET
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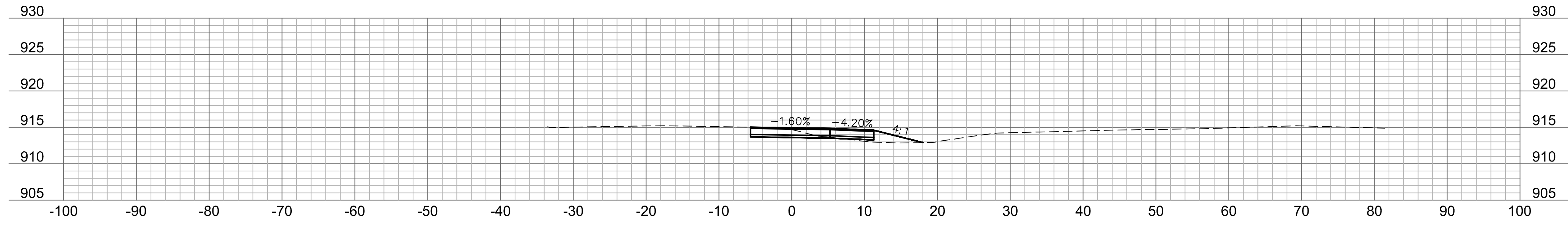
olsson

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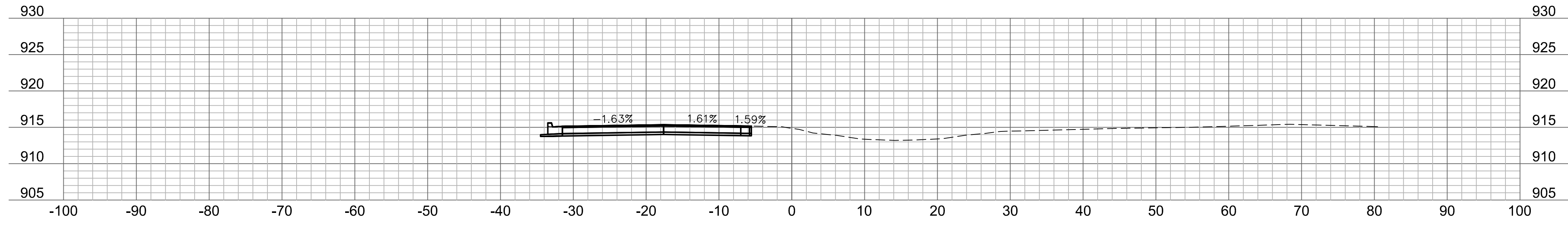
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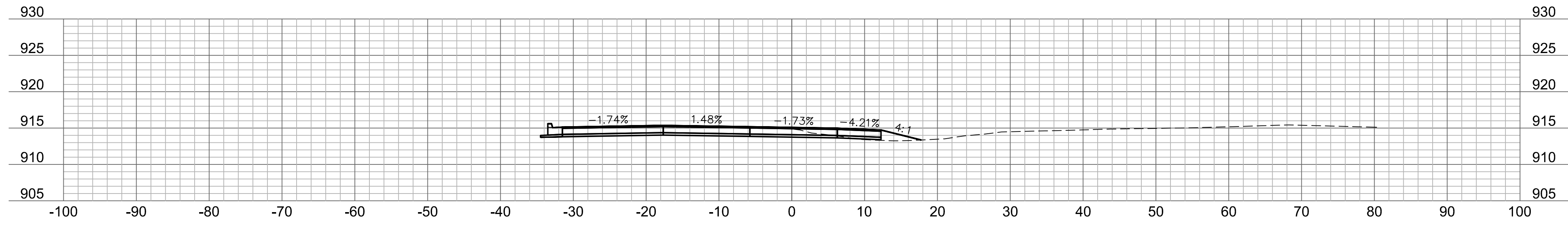
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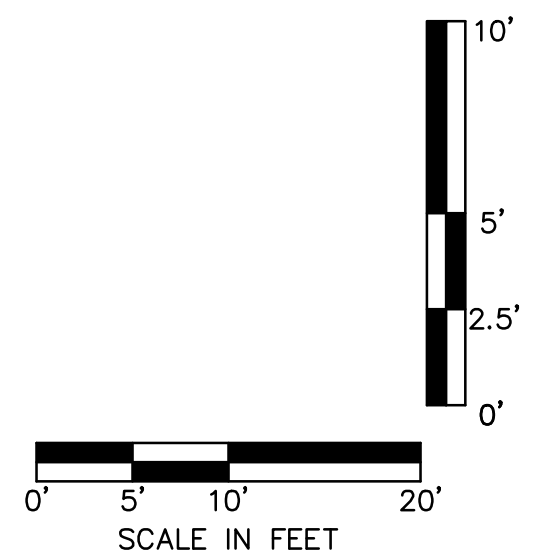
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78+75



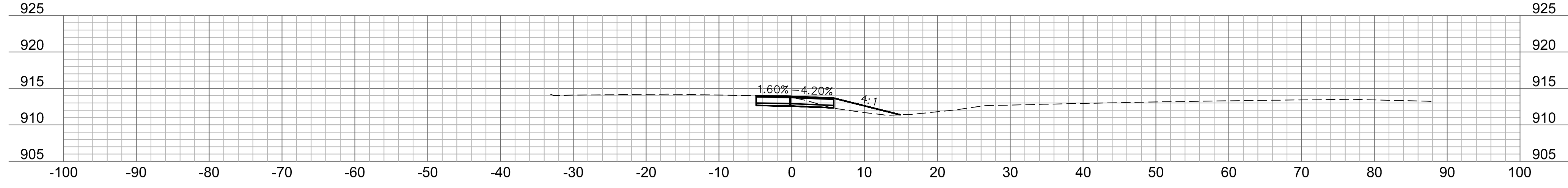
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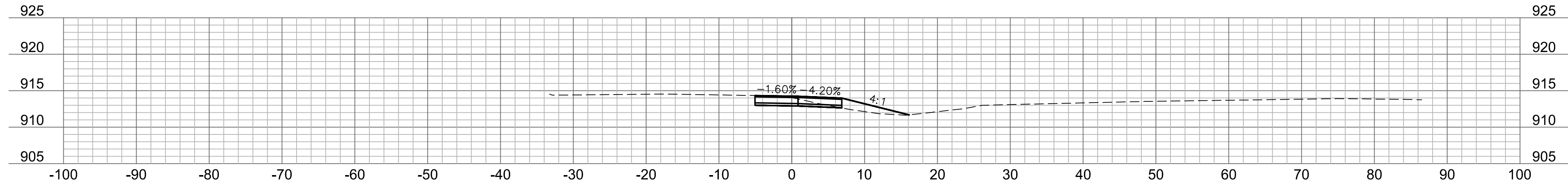
23RD STREET CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: 2.5' PBM
 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

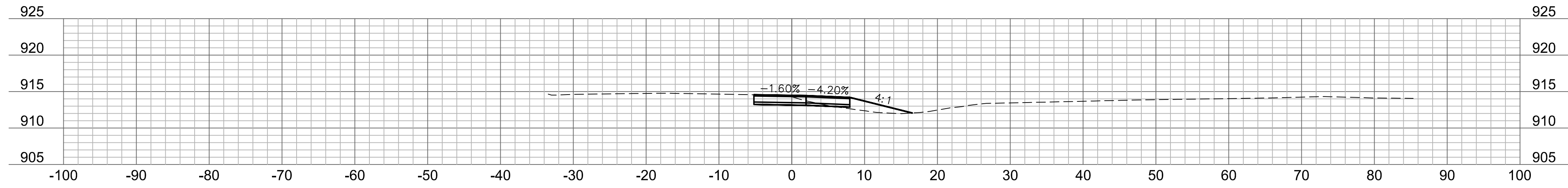
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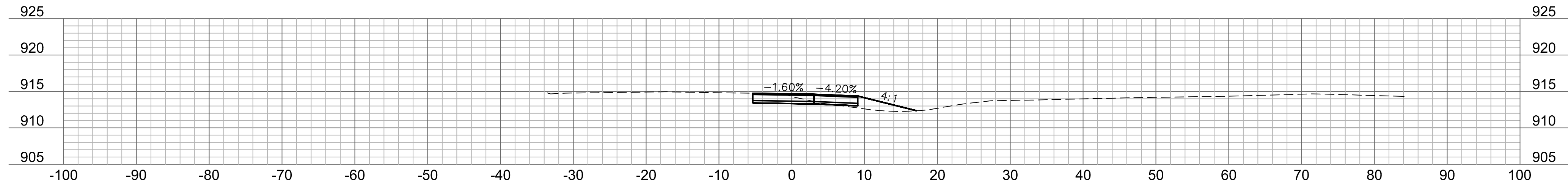
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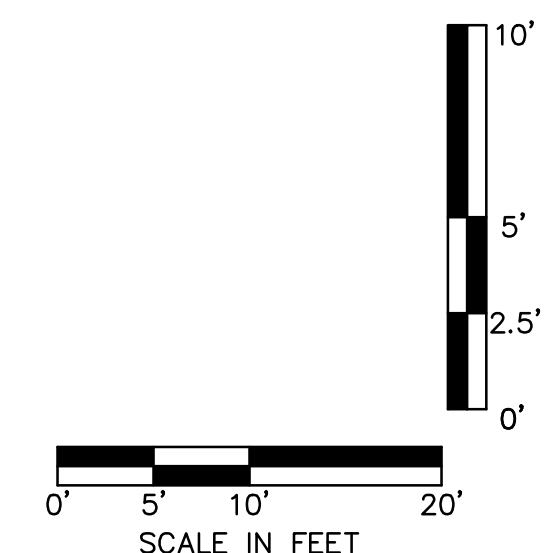
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79+75



79+50



PRELIMINARY
NOT FOR CONSTRUCTION

REV. NO.	DATE	REVISIONS DESCRIPTION	BY

23RD STREET CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS

drawn by: CJC
 checked by: PBM
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 QA/QC by: 2.5' PBM
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 drawing no.: T_XSC01_0202348
 date: 12-18-2020

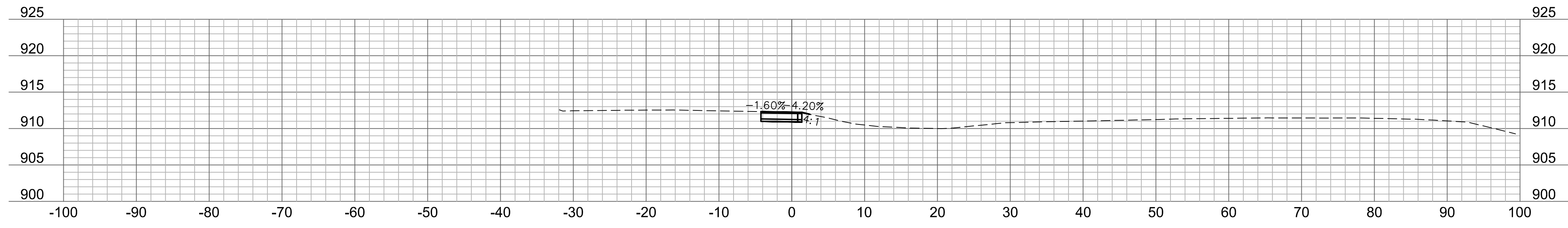
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198 of 206

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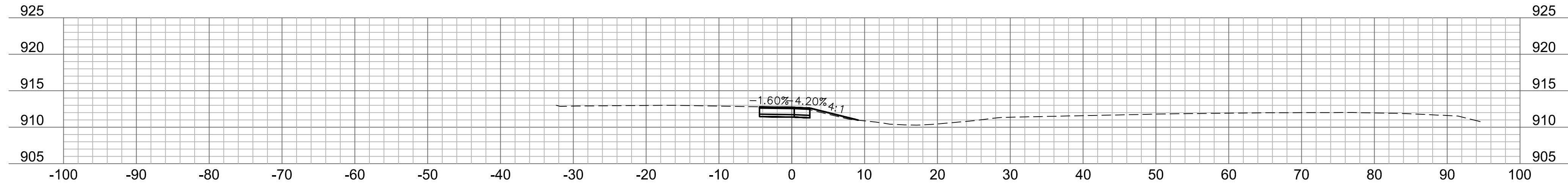
REVISIONS

2021

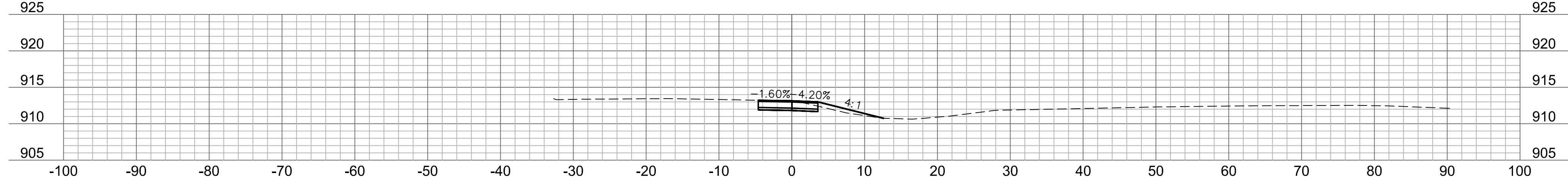
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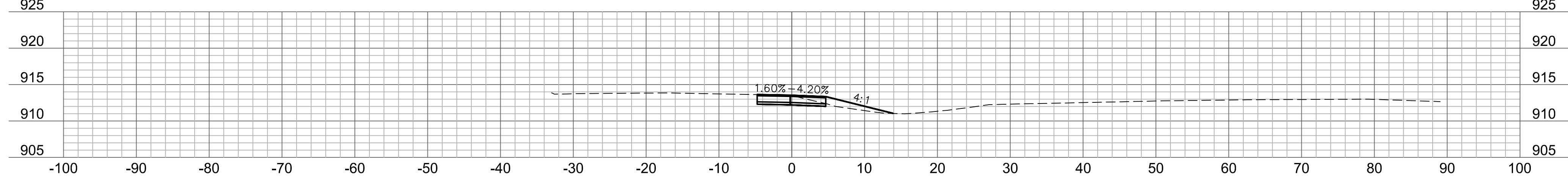
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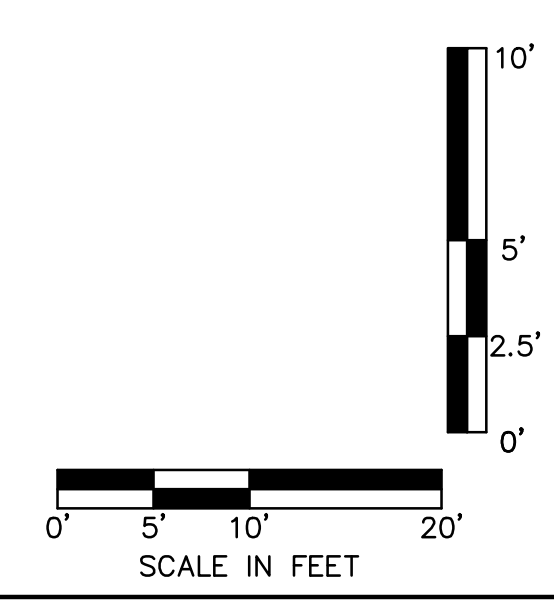
81+00



80+75



80+50



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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

23RD STREET CROSS SECTIONS

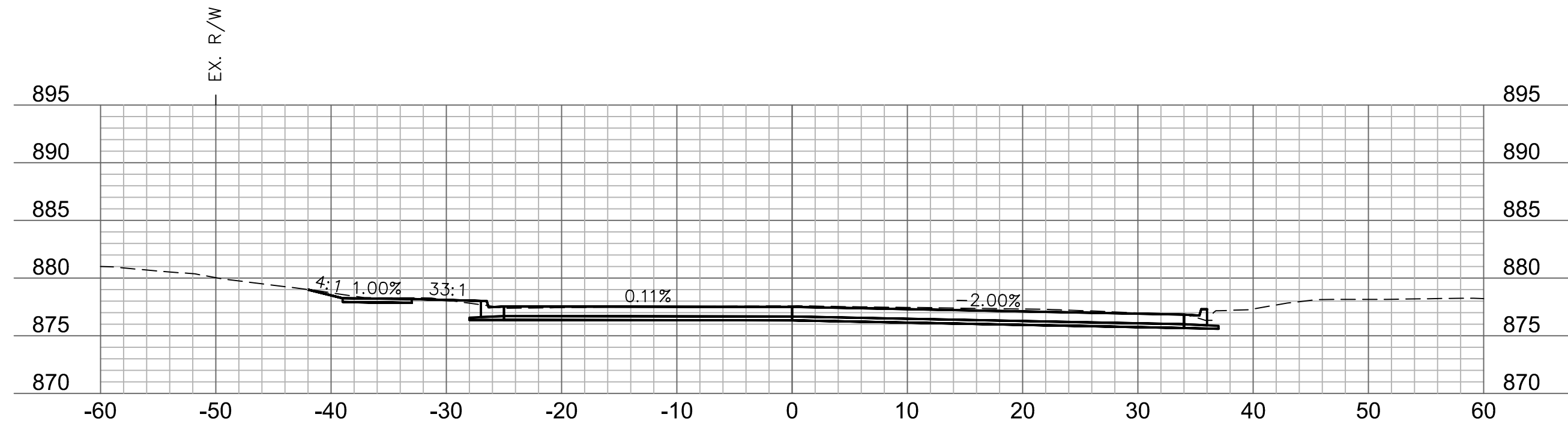
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
LAWRENCE, KANSAS

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: 2.5' PBM
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 project no.: 020-2348
 drawing no.: T_XSC01_0202348
 date: 12-18-2020

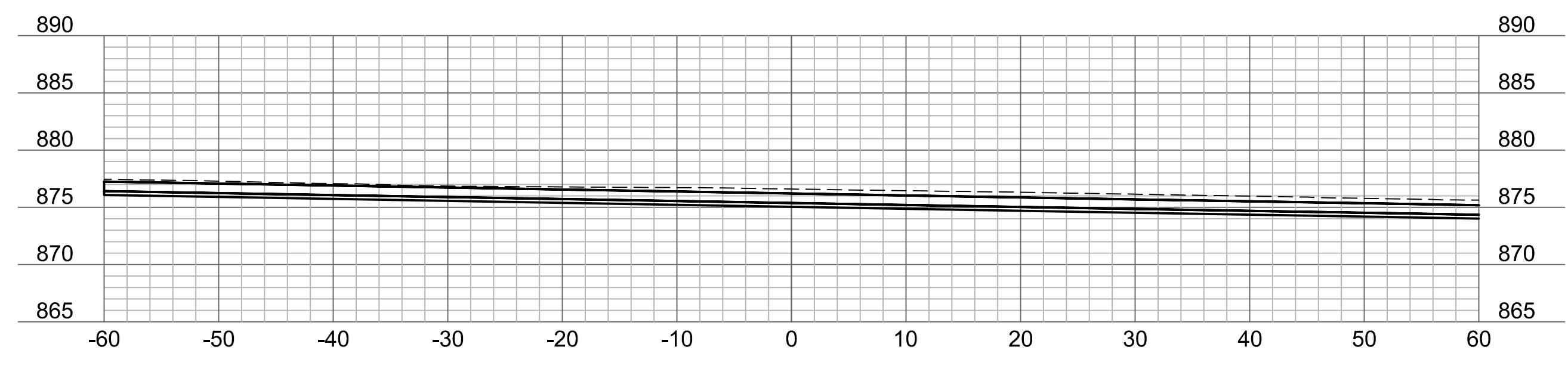
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199 of 206

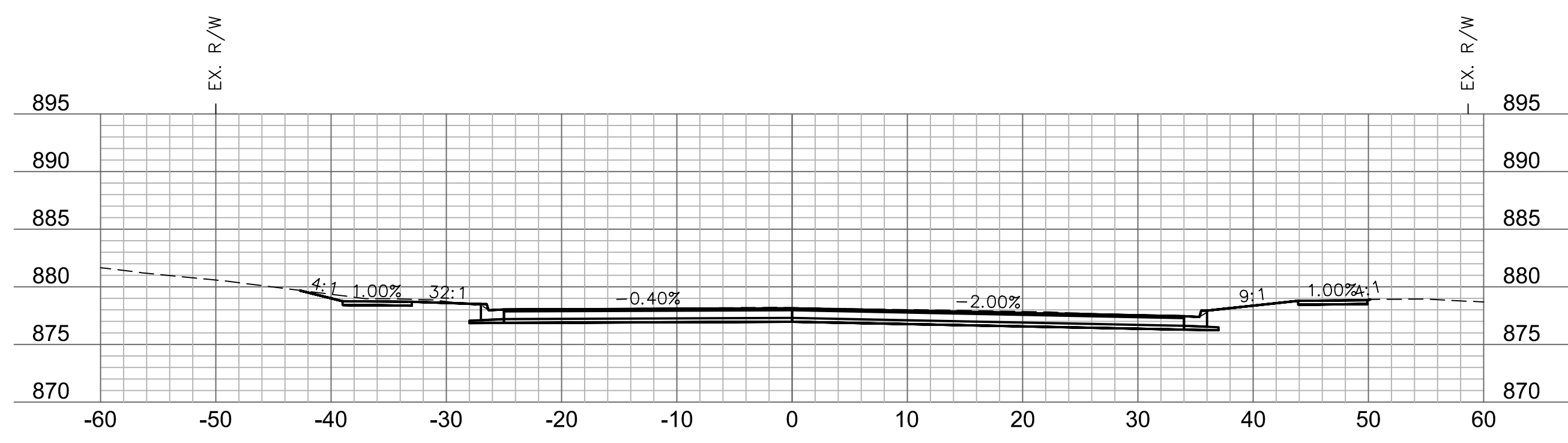
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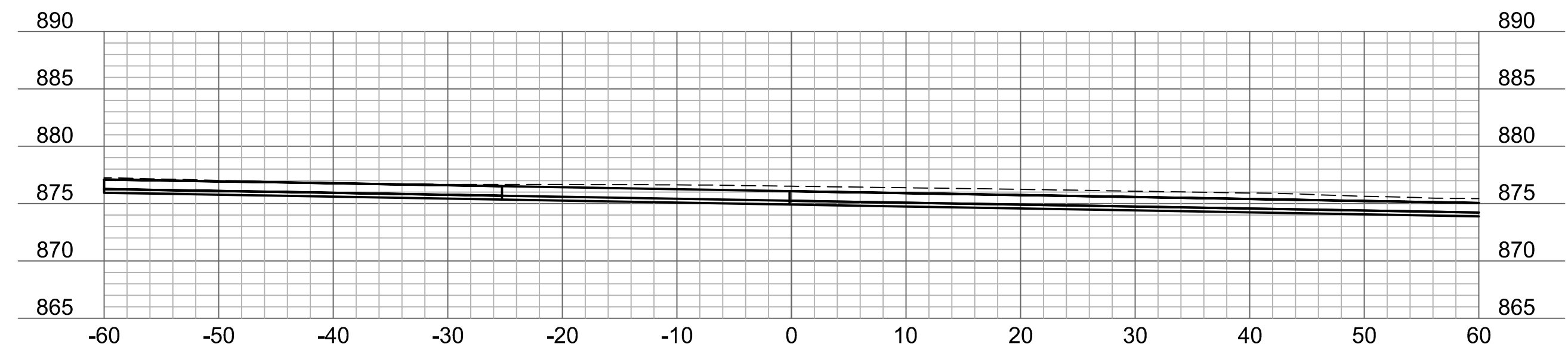
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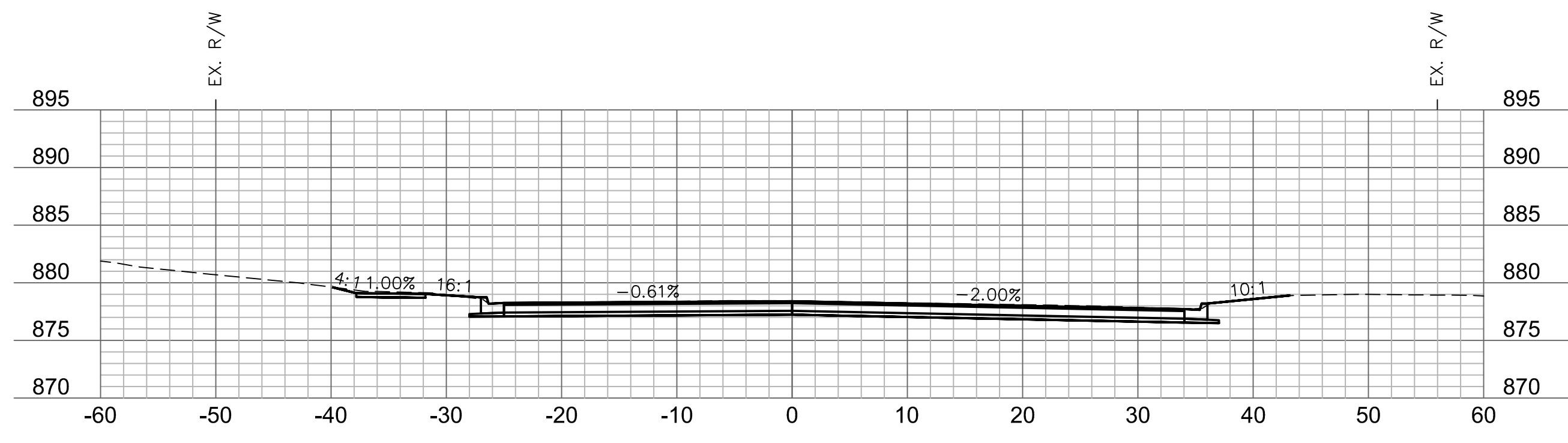
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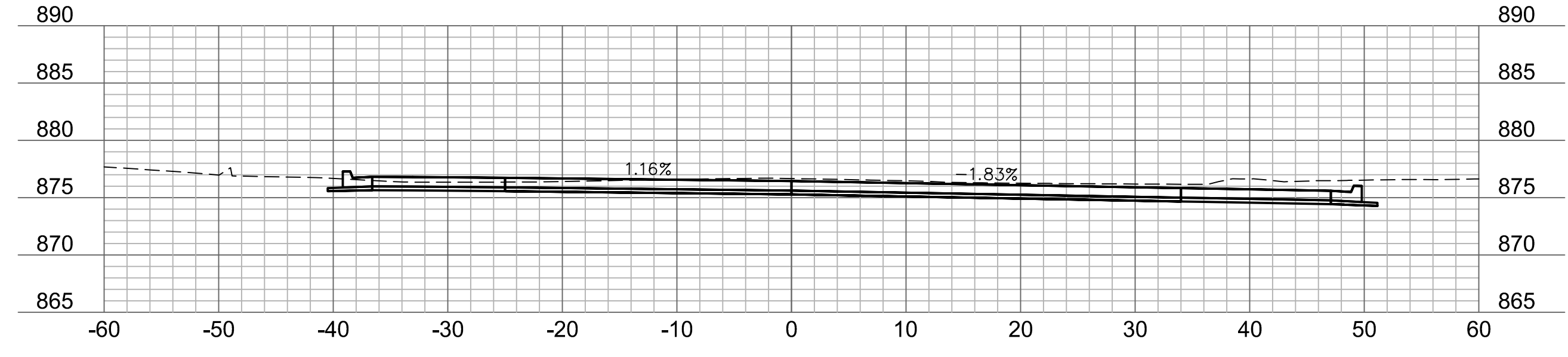
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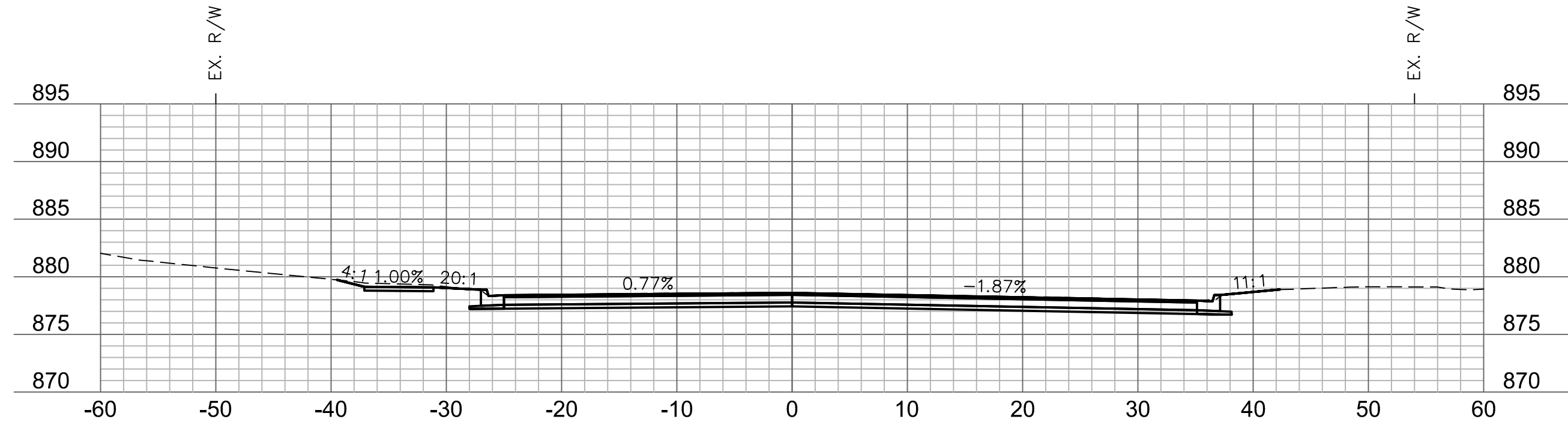
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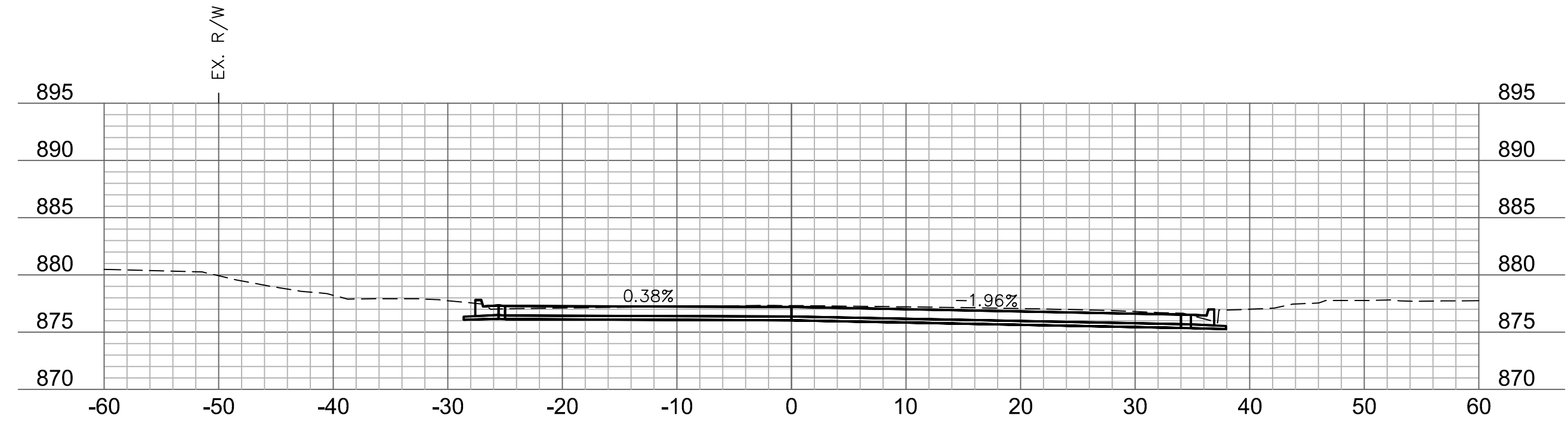
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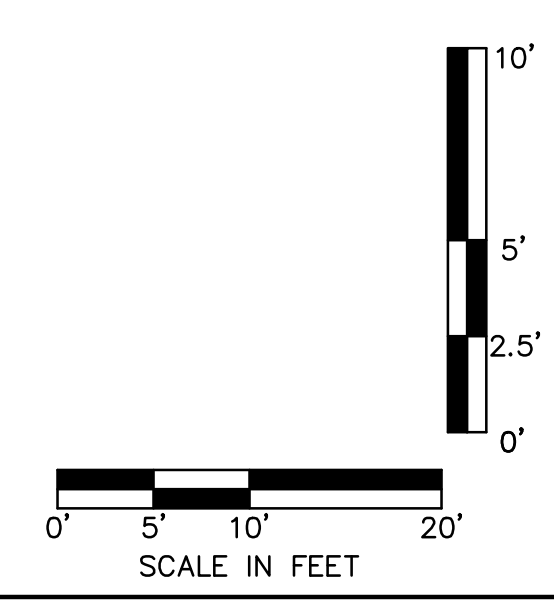
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48+88.30



49+25



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REV. NO.	DATE	REVISIONS DESCRIPTION

HASKELL AVENUE
CROSS SECTIONS

23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

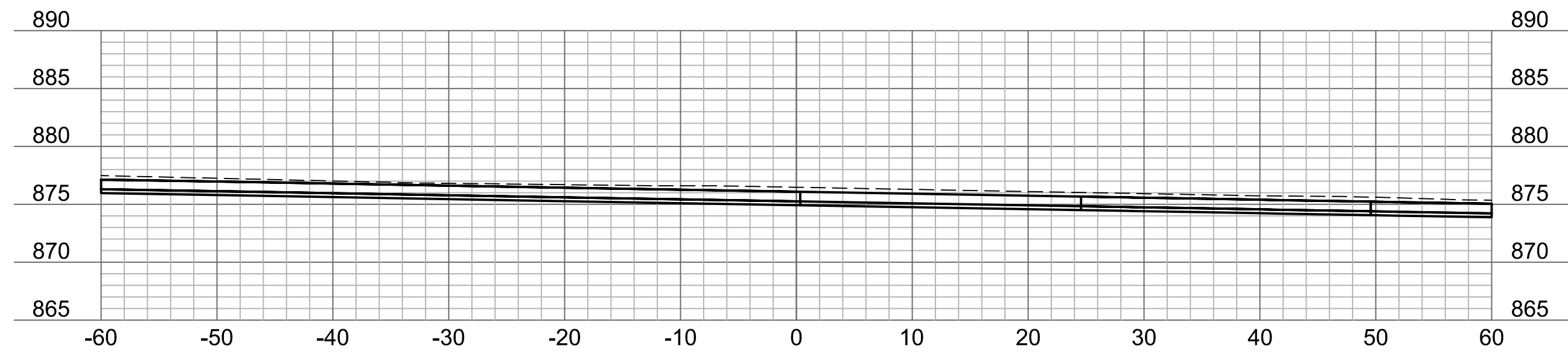
LAWRENCE, KANSAS

drawn by: CJC
checked by: PBM
approved by: PBM
QA/QC by: RBC
project no.: 020-2348
drawing no.: T_XSC02_0202348
date: 12-15-2020

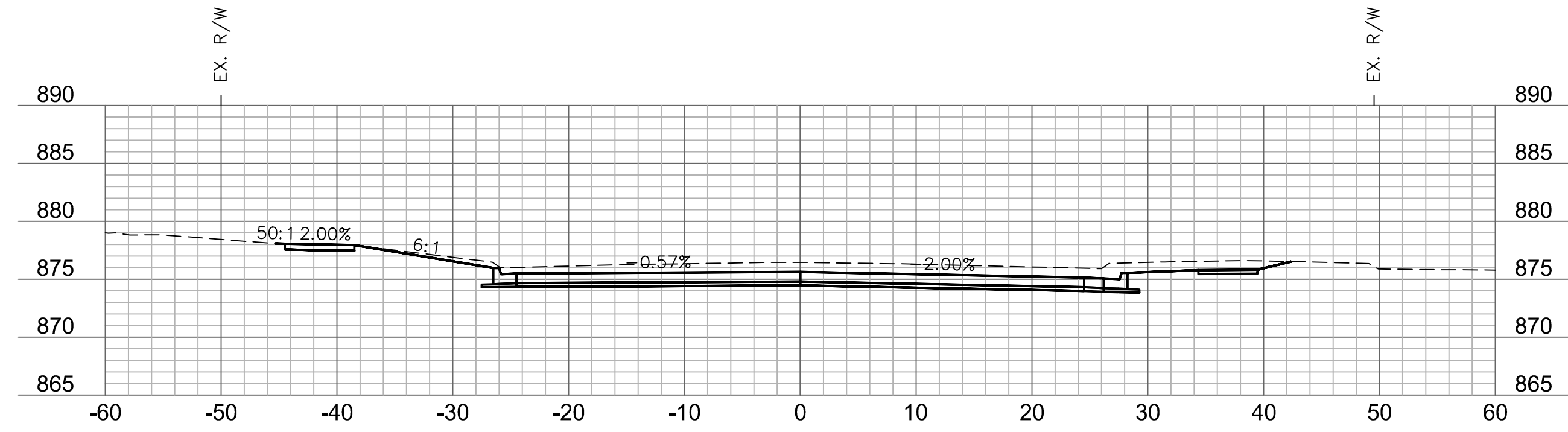
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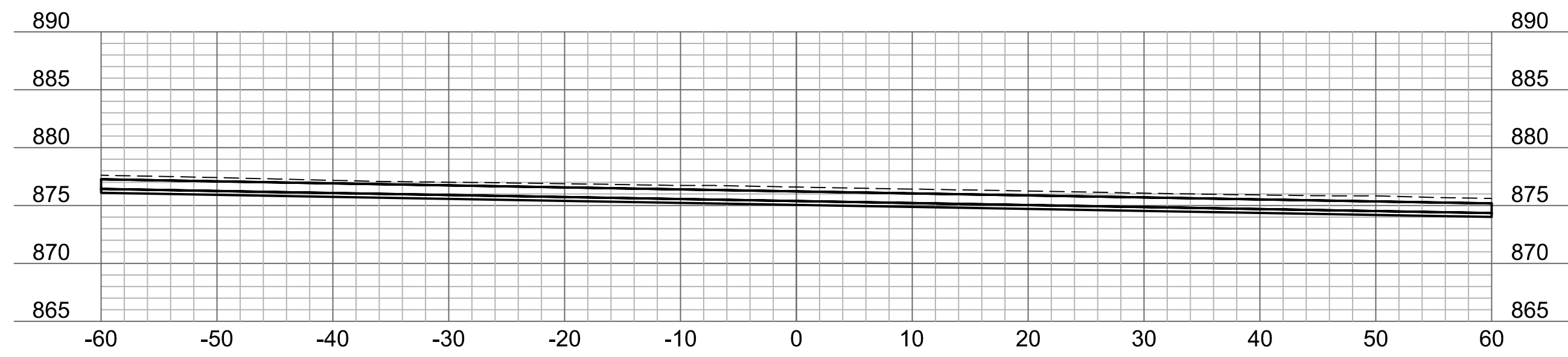
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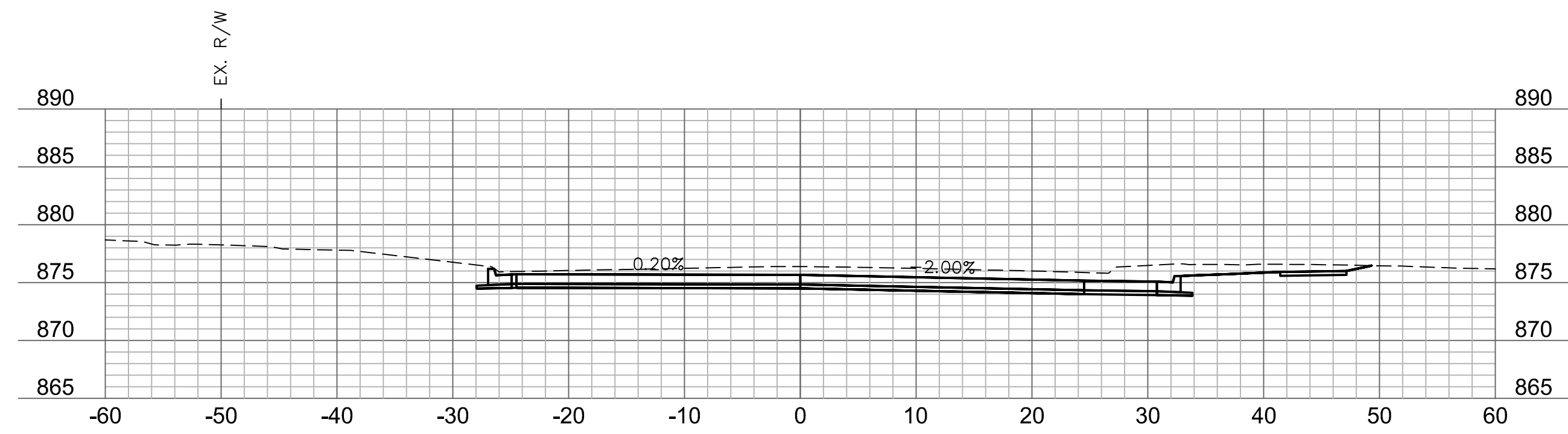
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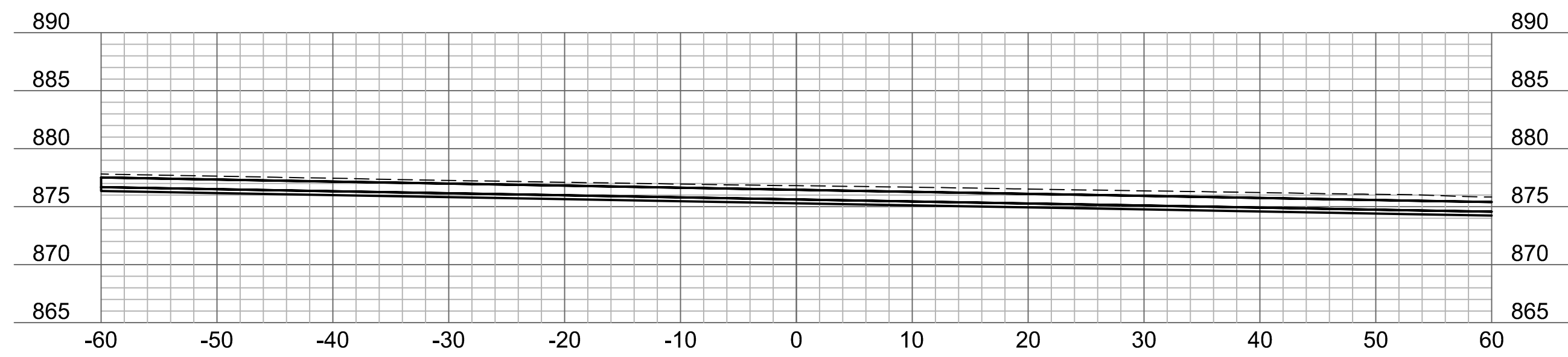
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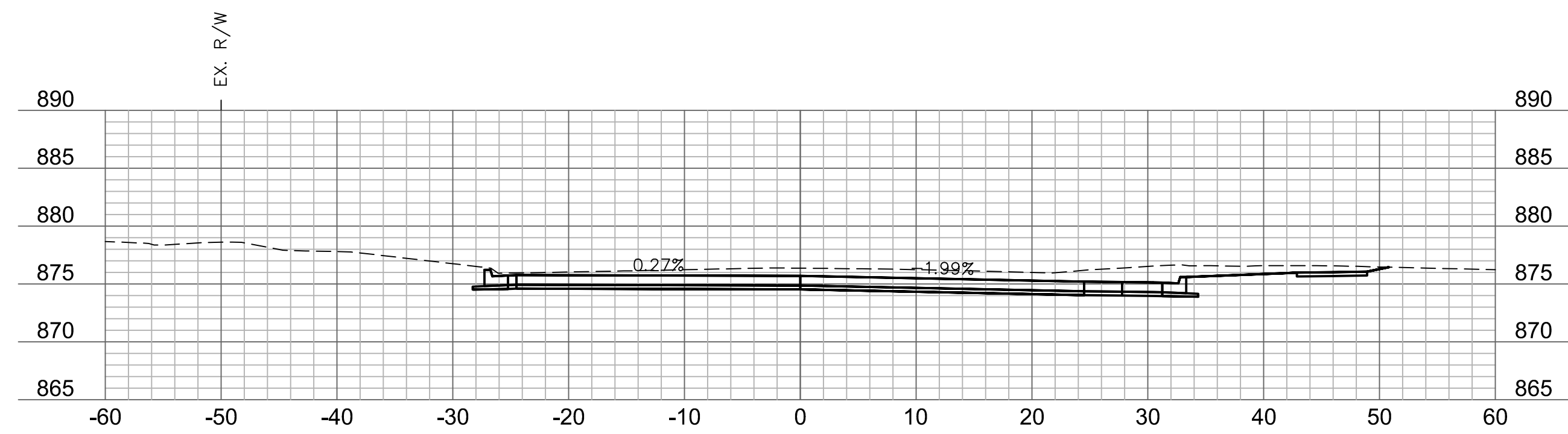
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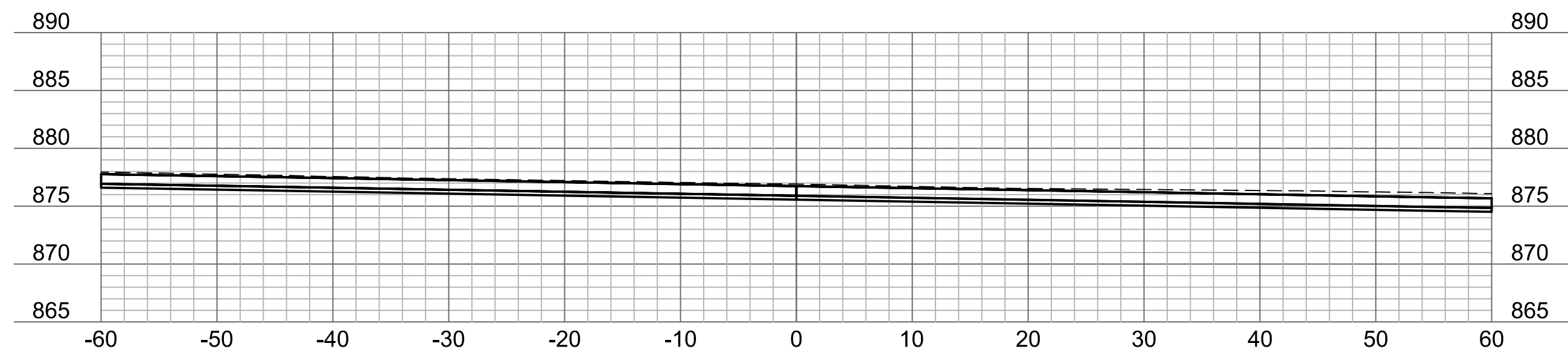
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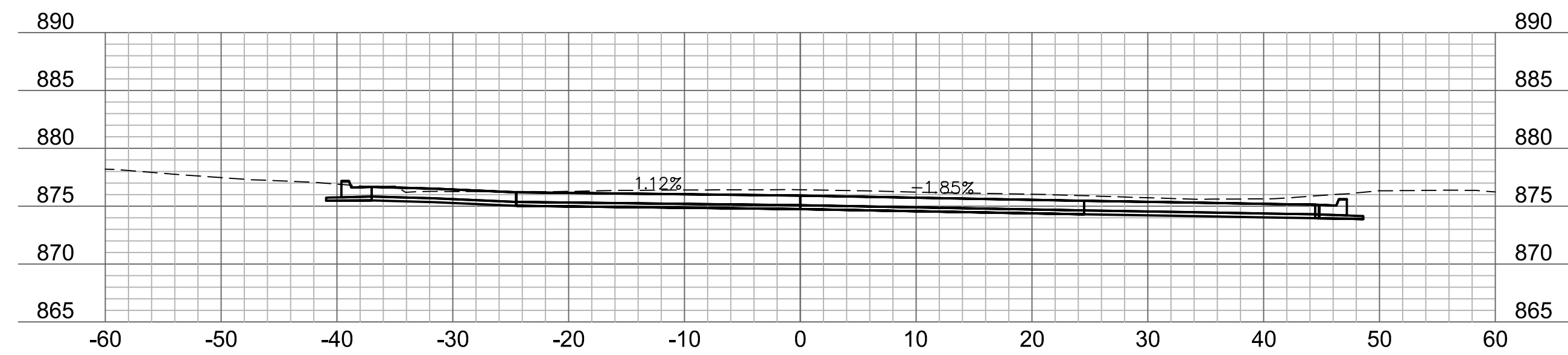
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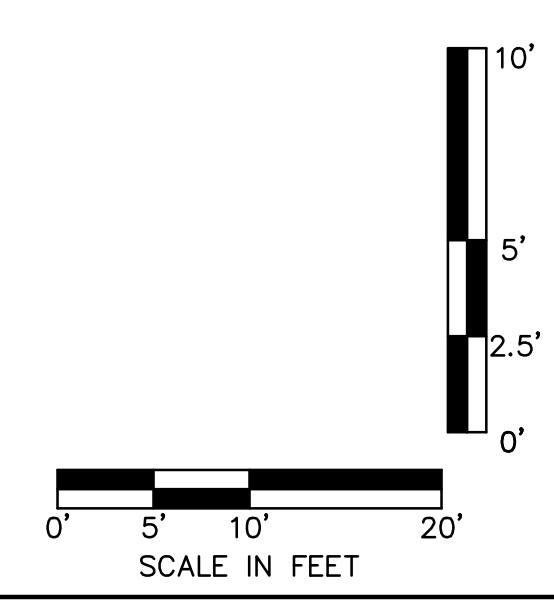
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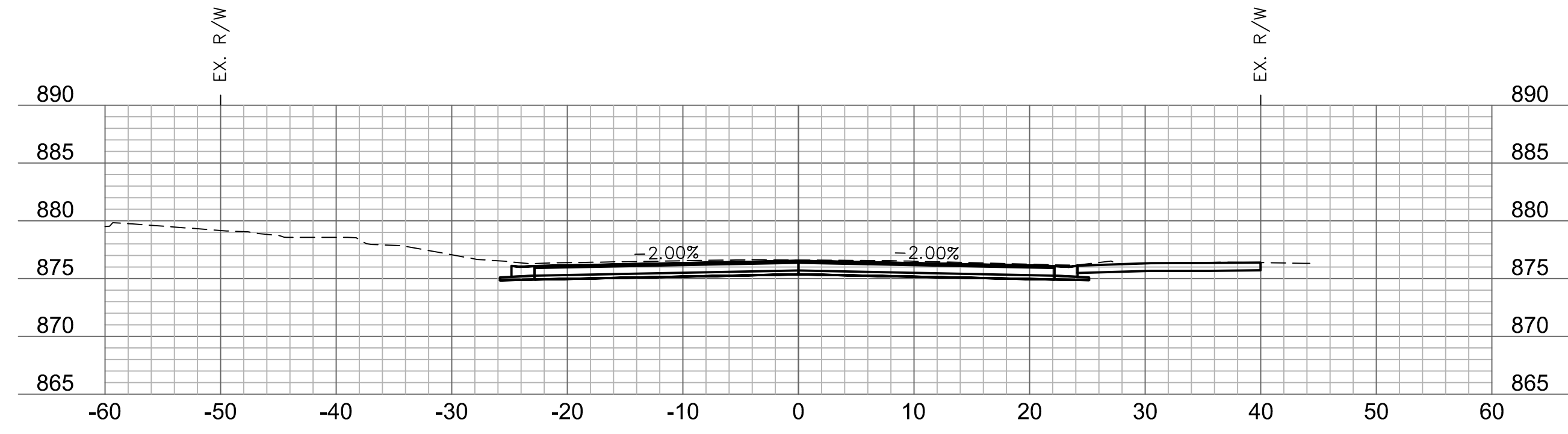


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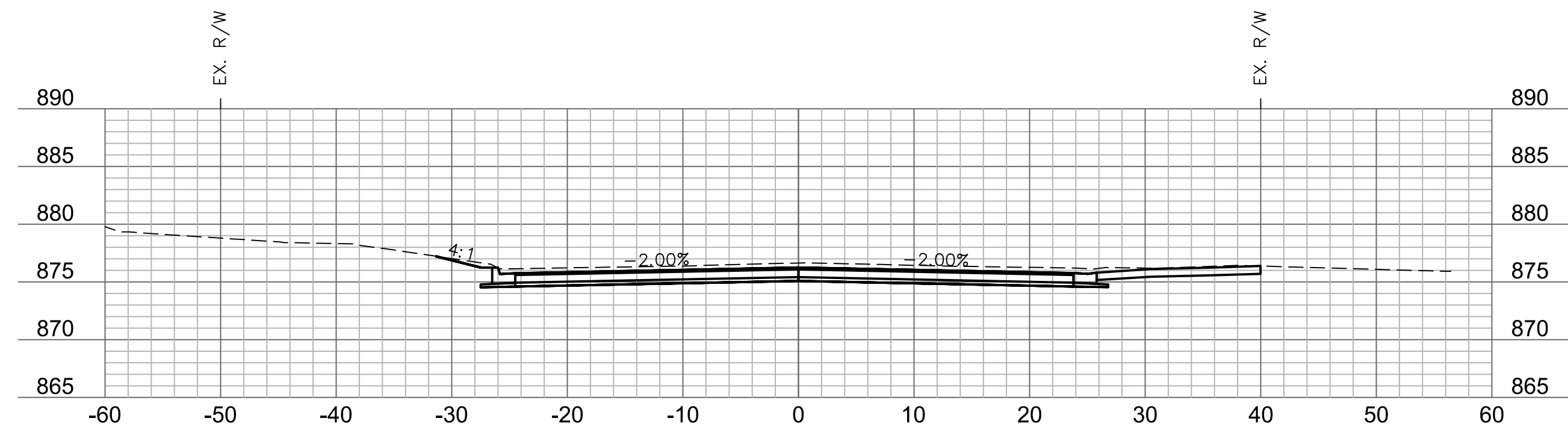
REV. NO.	DATE	REVISIONS DESCRIPTION	BY

HASKELL AVENUE
 CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021
 drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: RBC
 project no.: 020-2348
 drawing no.: T_XSC02_0202348
 date: 12-15-2020

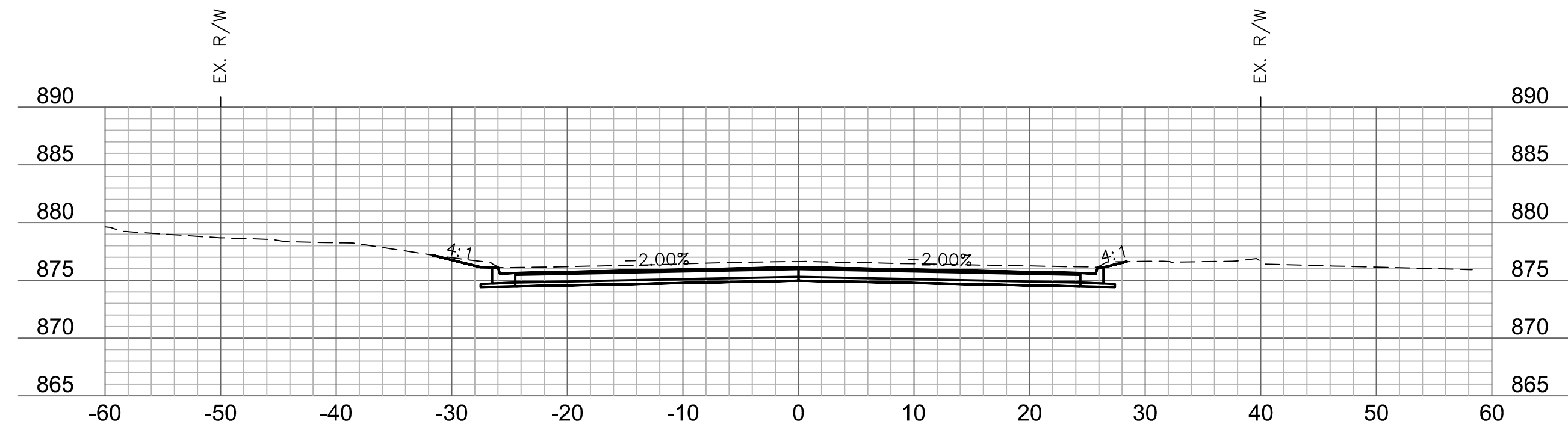
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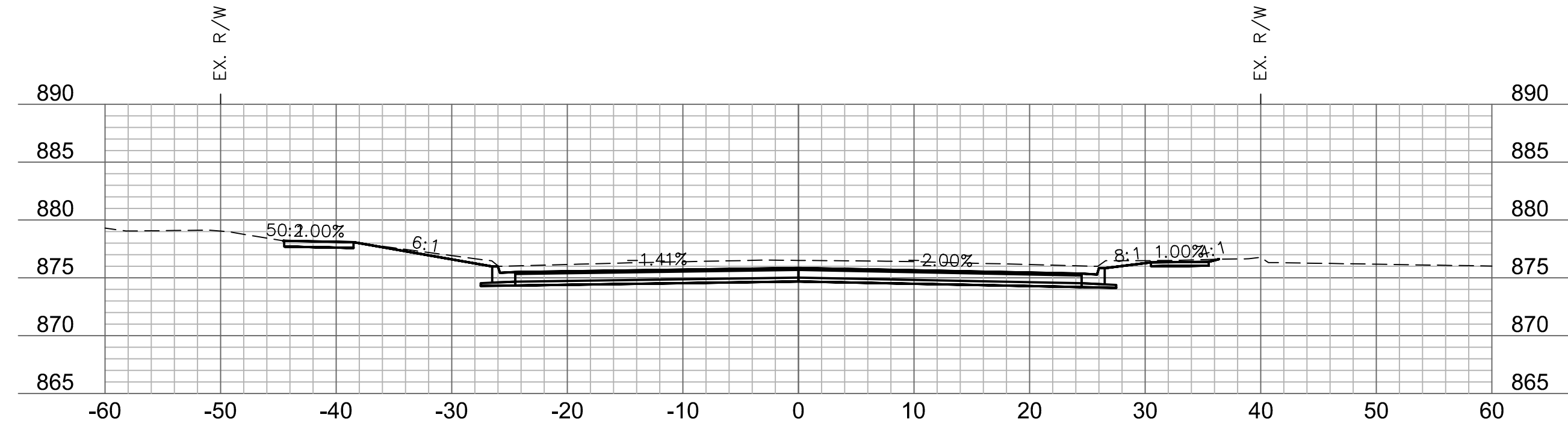
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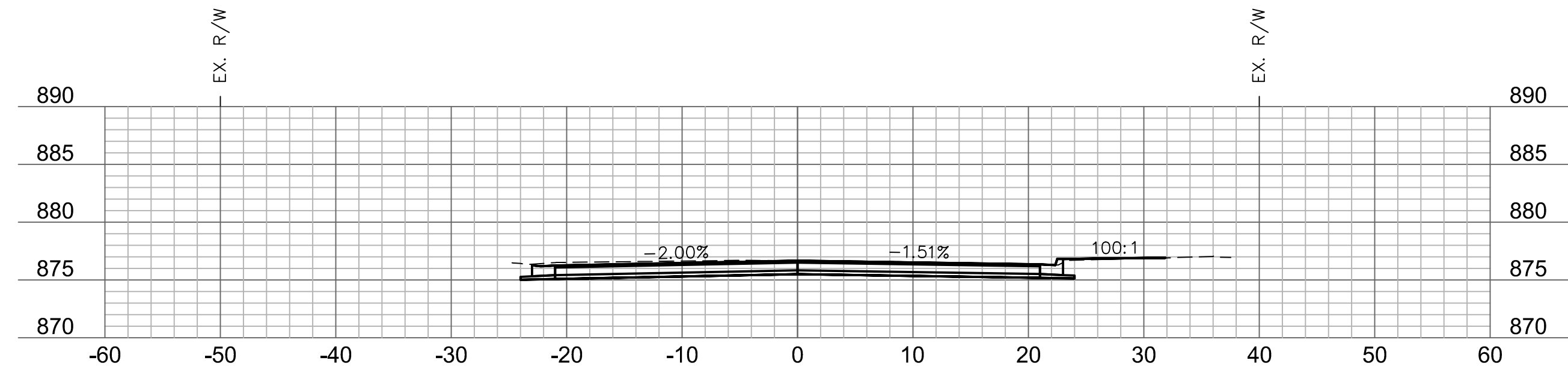
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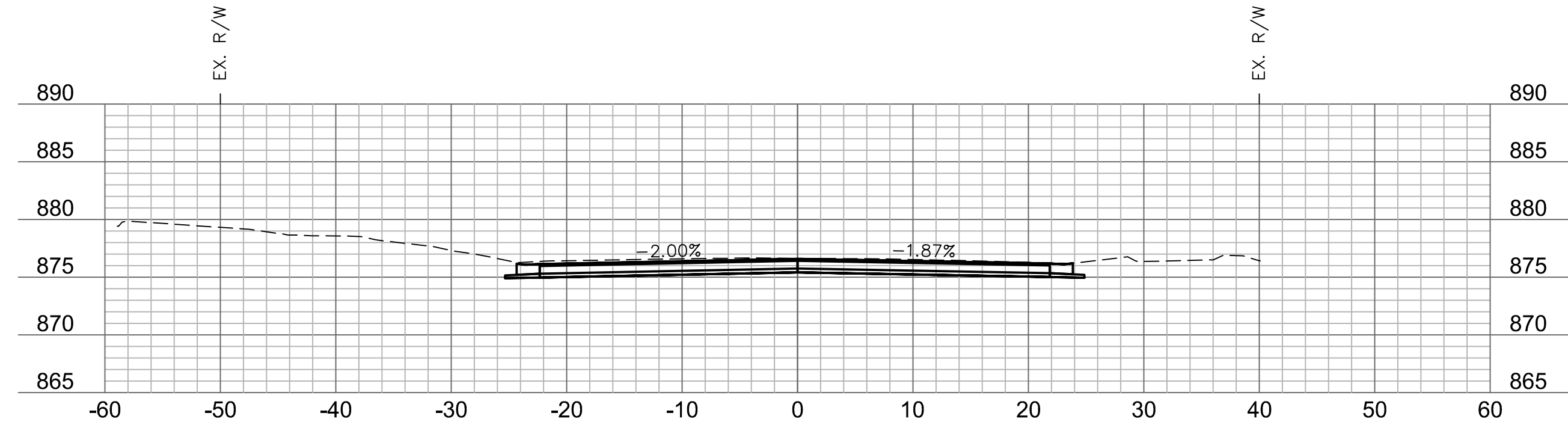
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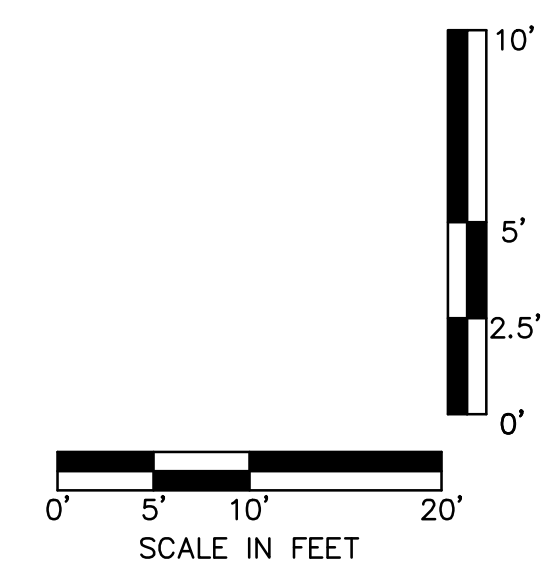
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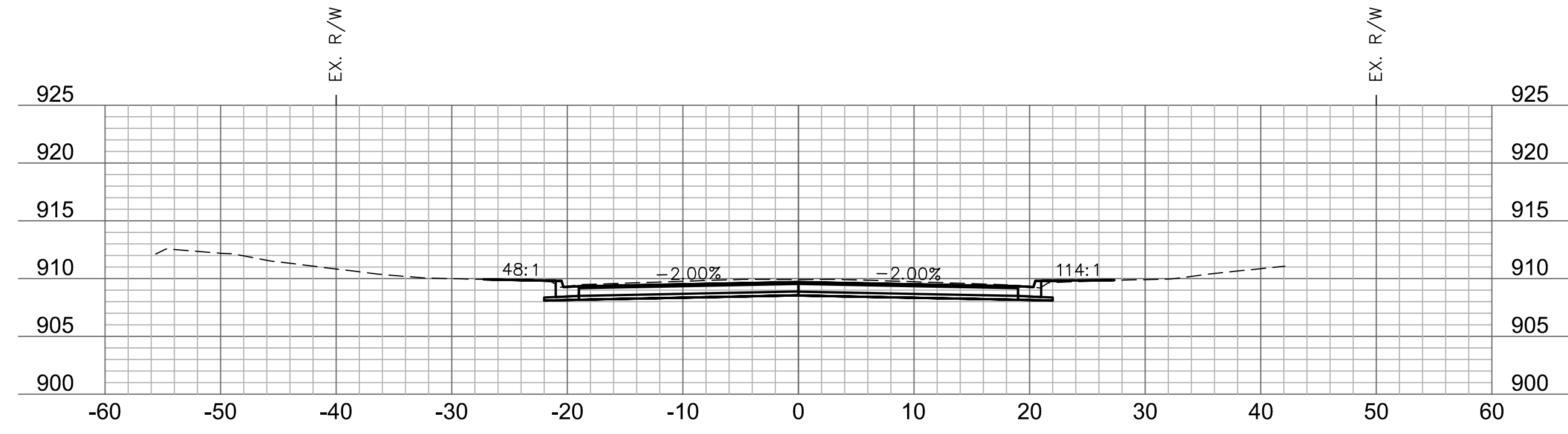


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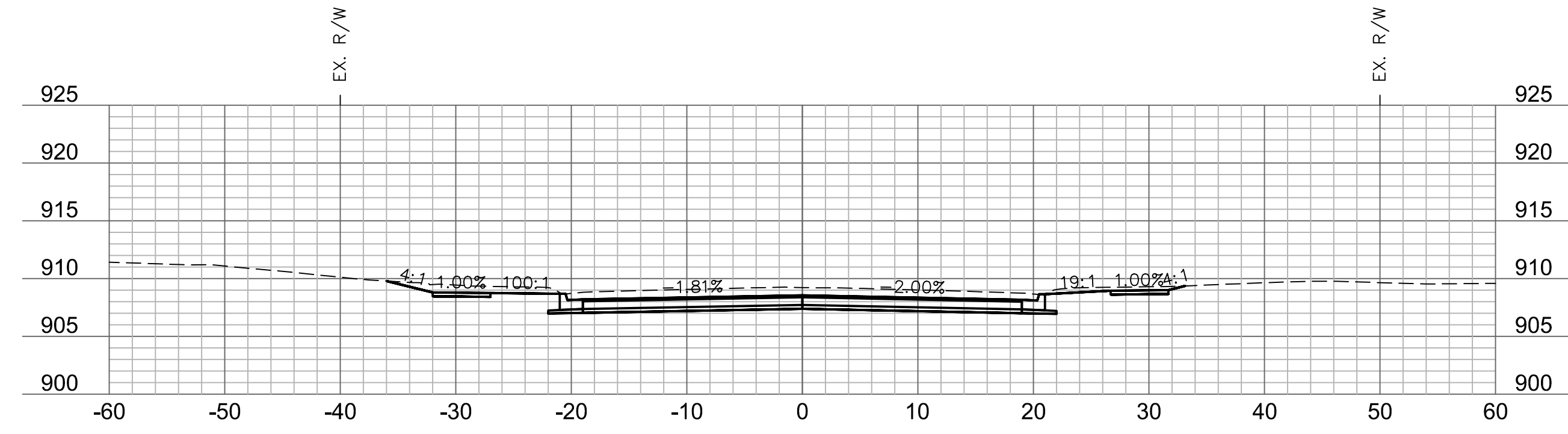
REV. NO.	DATE	REVISIONS DESCRIPTION	BY

HASKELL AVENUE
 CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

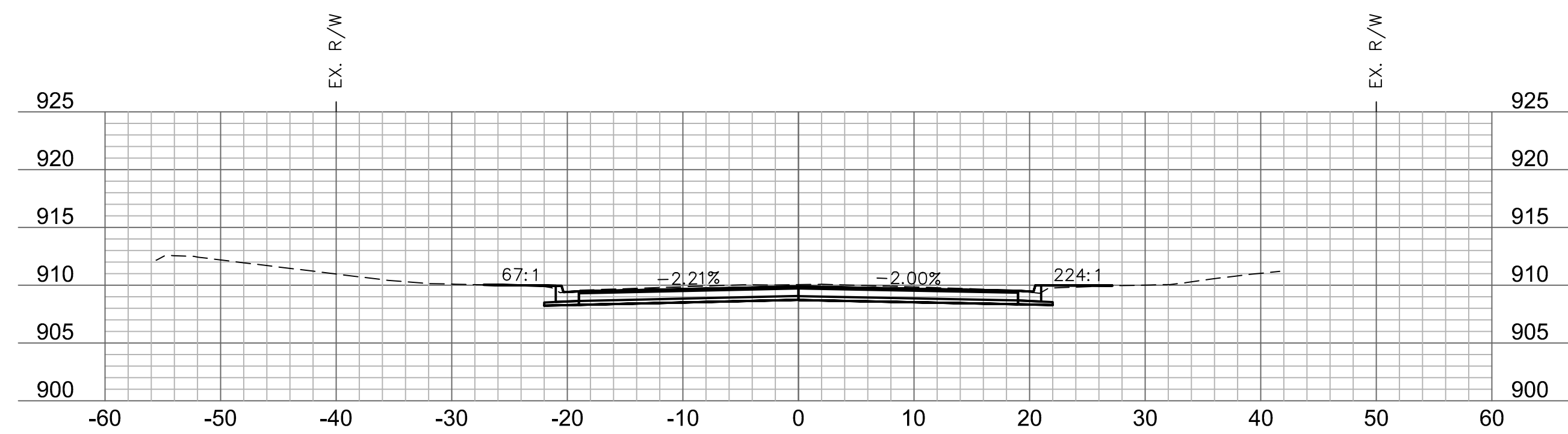
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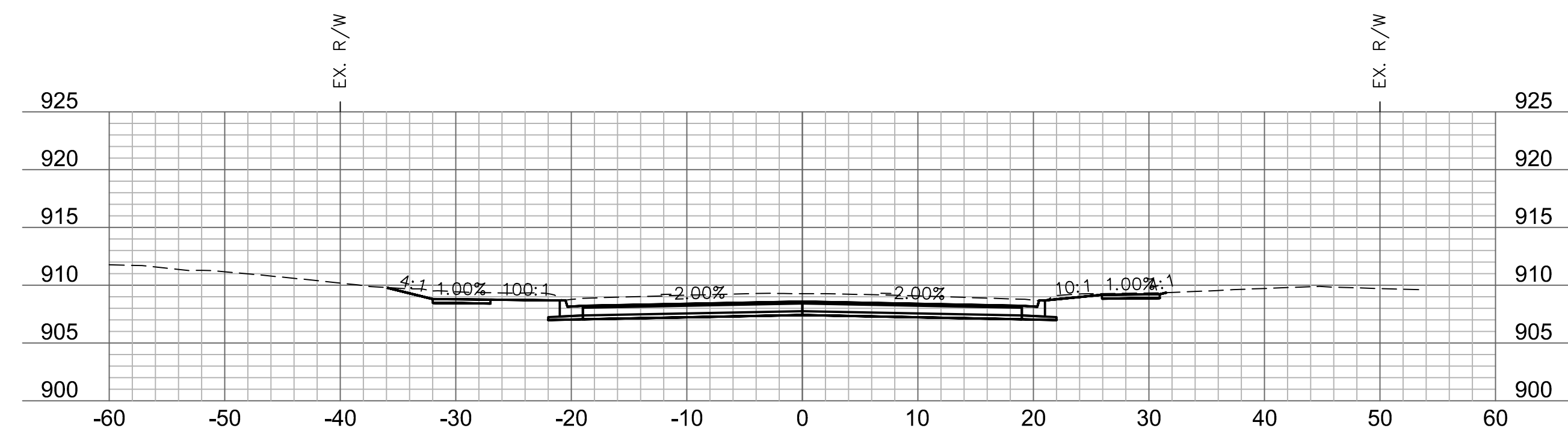
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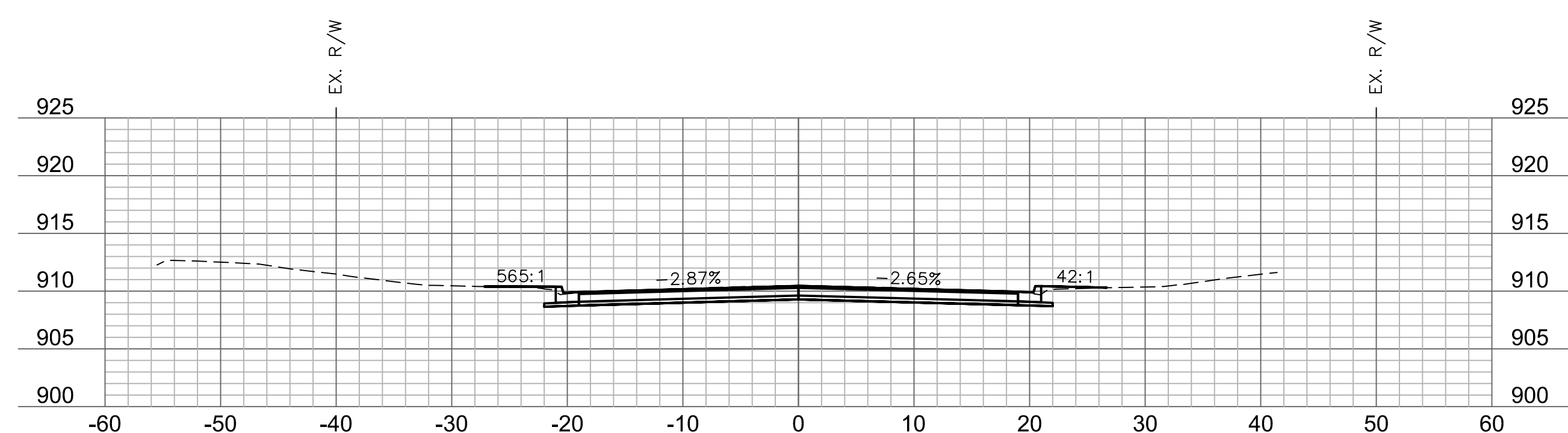
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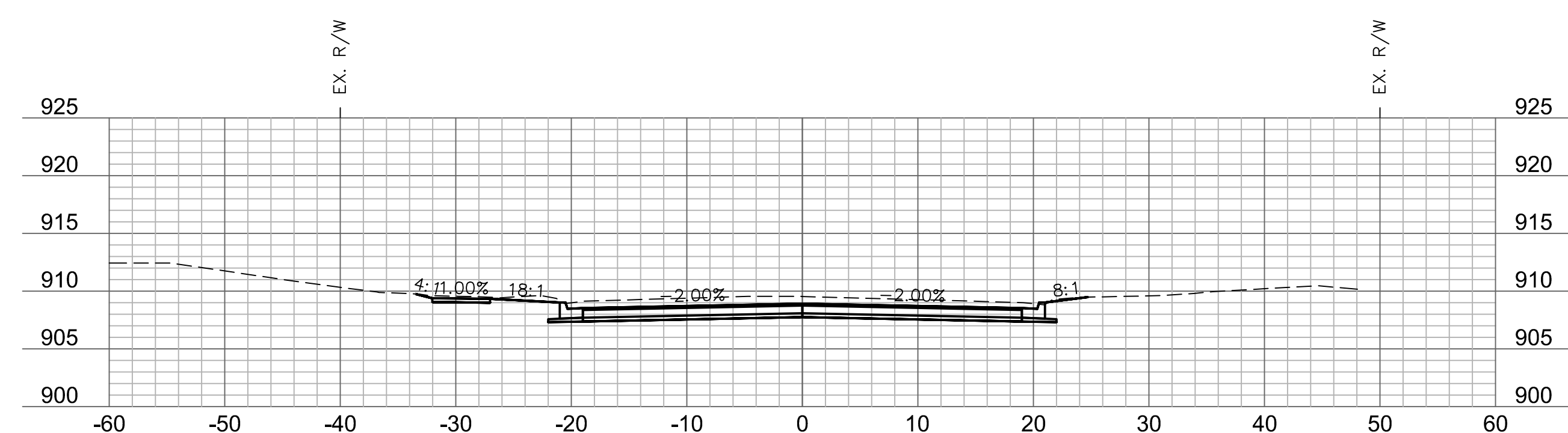
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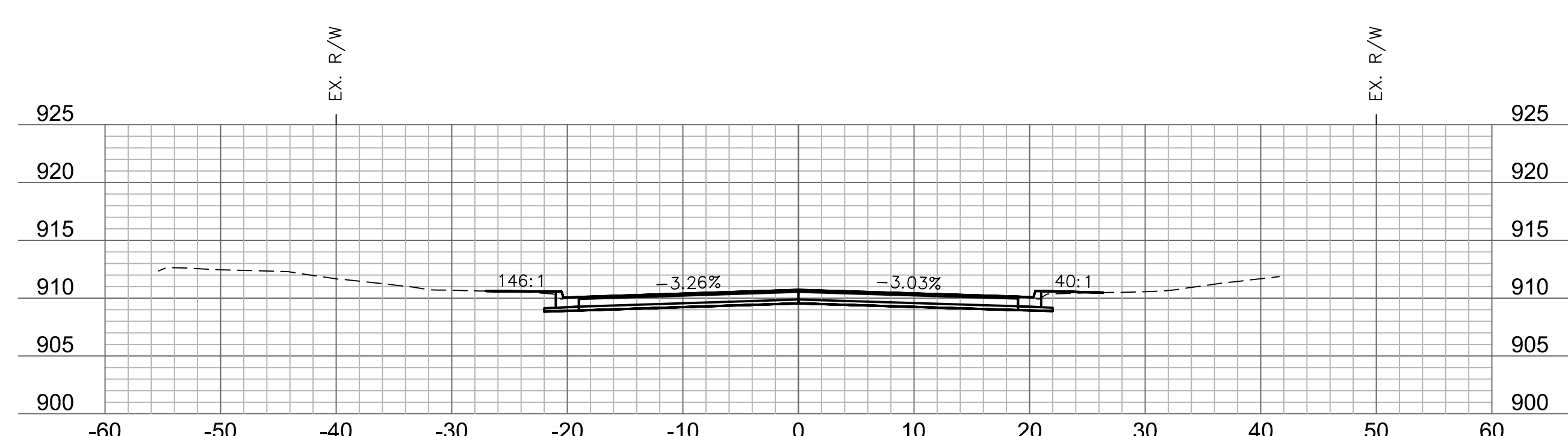
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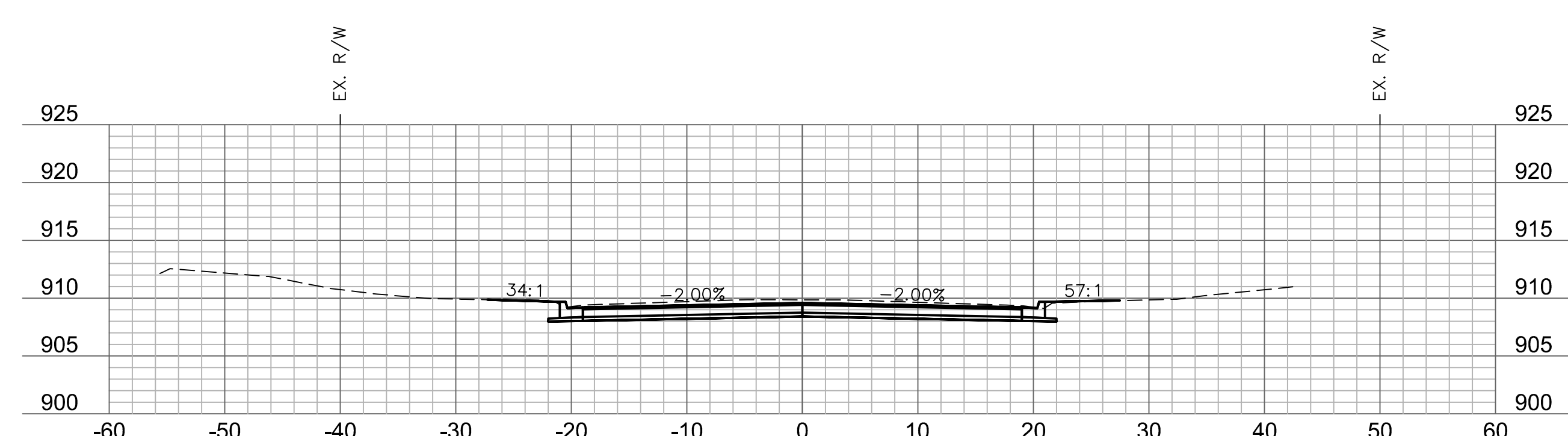
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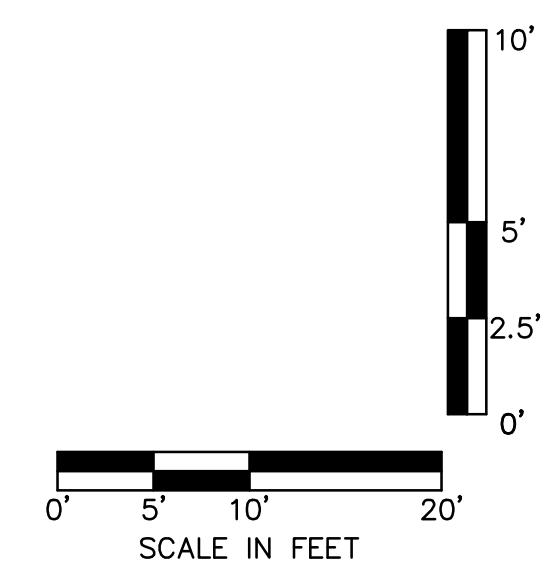
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48+15.50



48+50



PRELIMINARY
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REV. NO.	DATE	REVISIONS DESCRIPTION	BY

HARPER STREET
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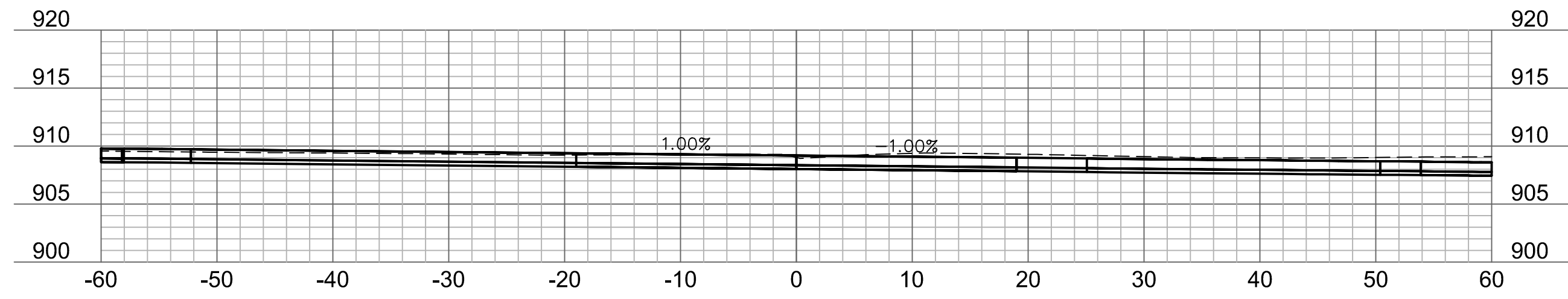
23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD

LAWRENCE, KANSAS

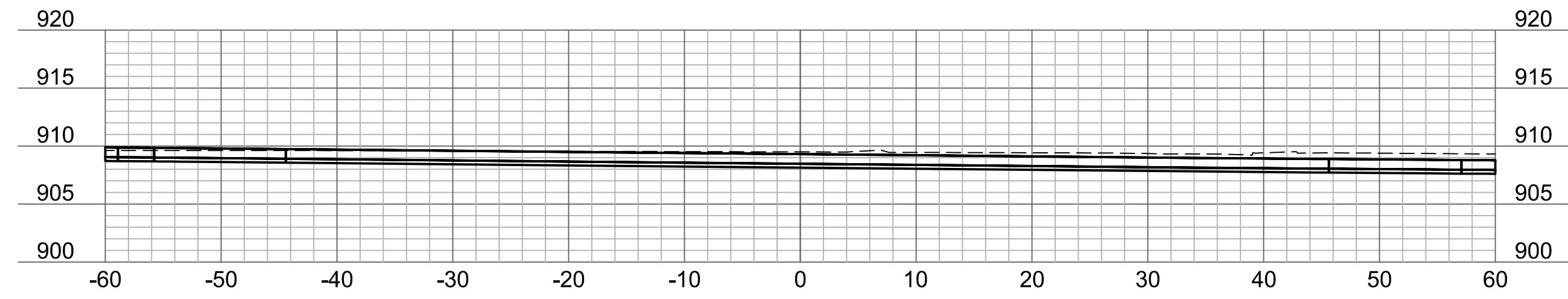
2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: PBM
 project no.: 020-2348
 drawing no.: T_XSC02_0202348
 date: 12-15-2020

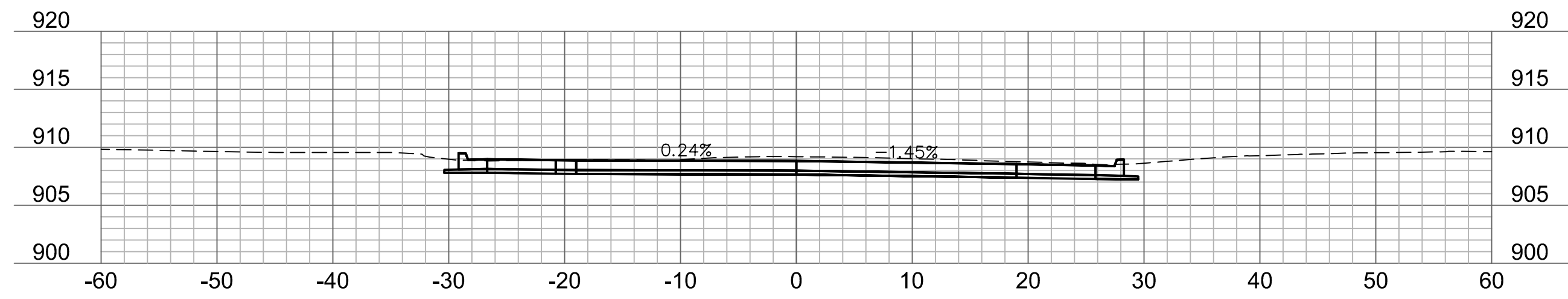
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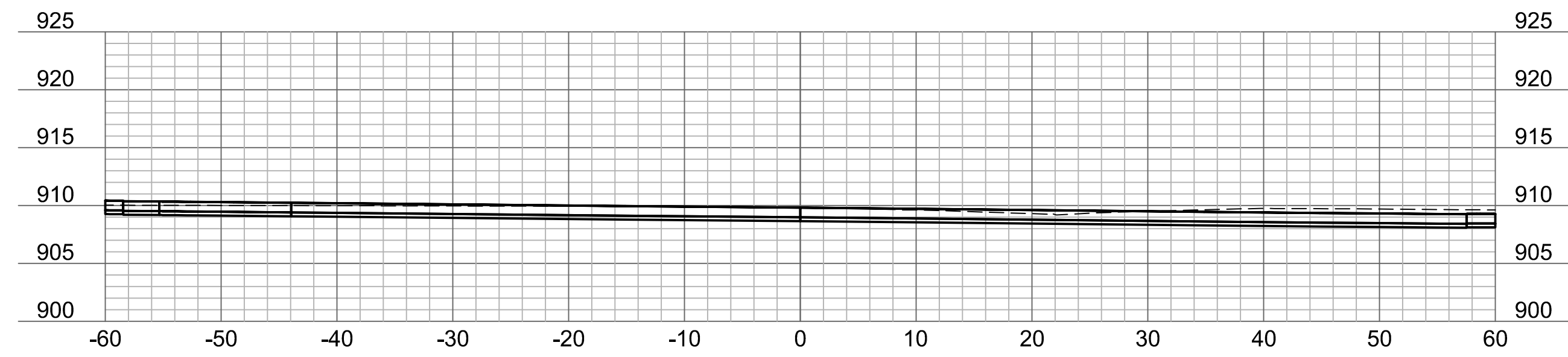
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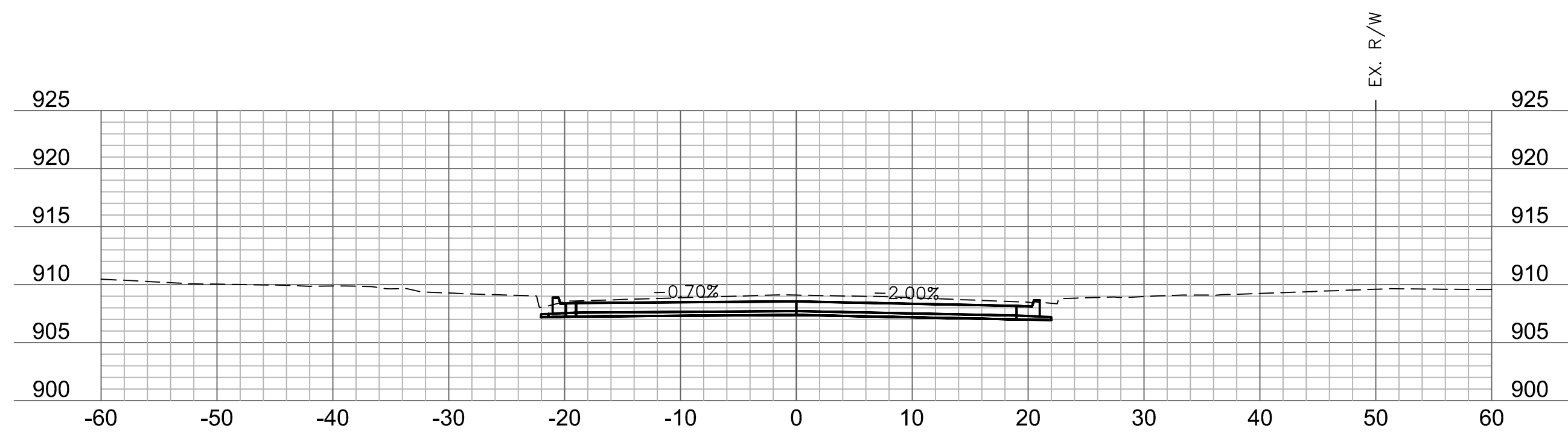
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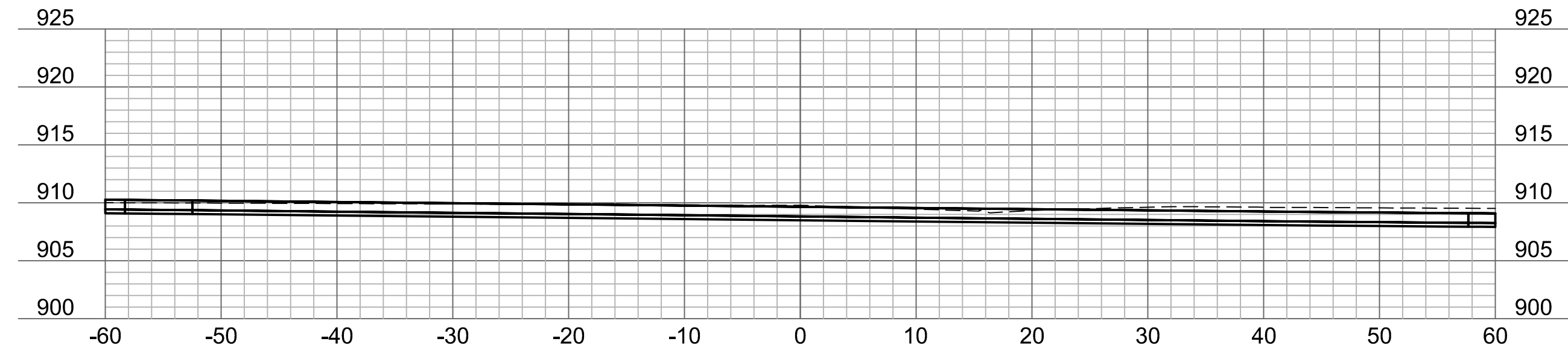
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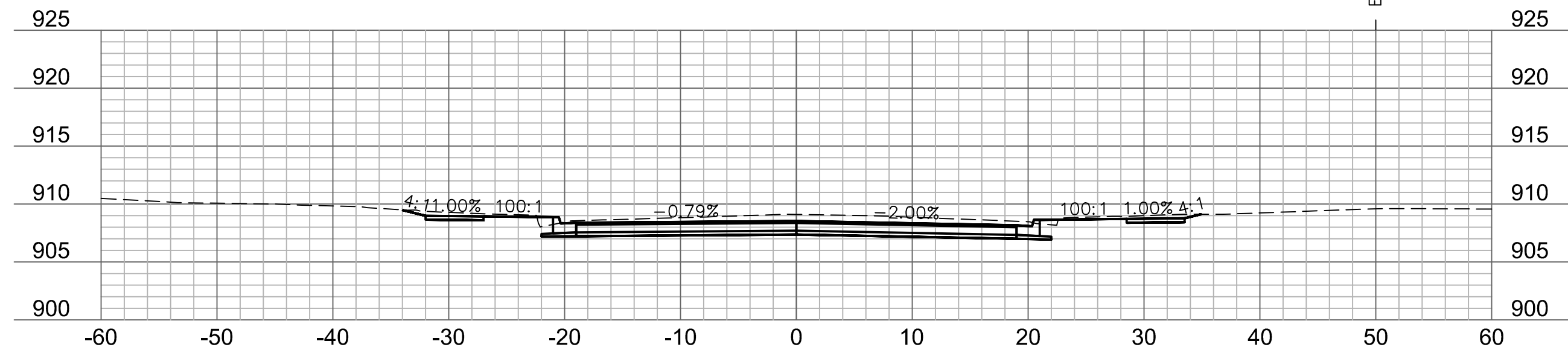
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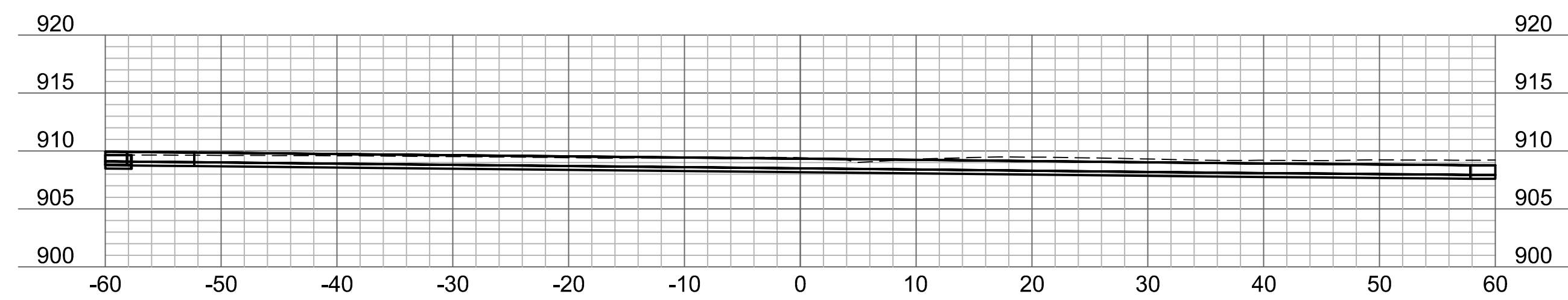
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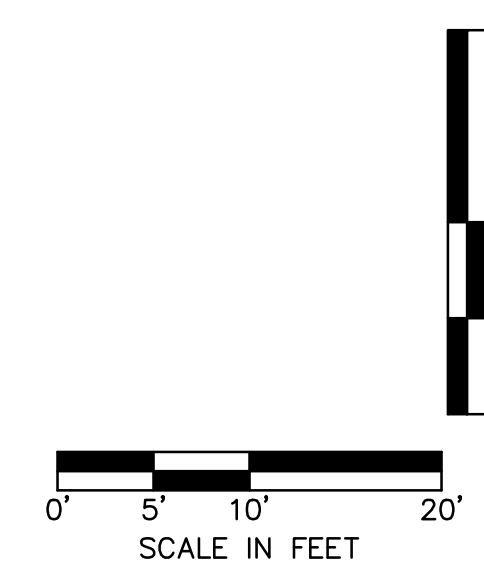
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49+75



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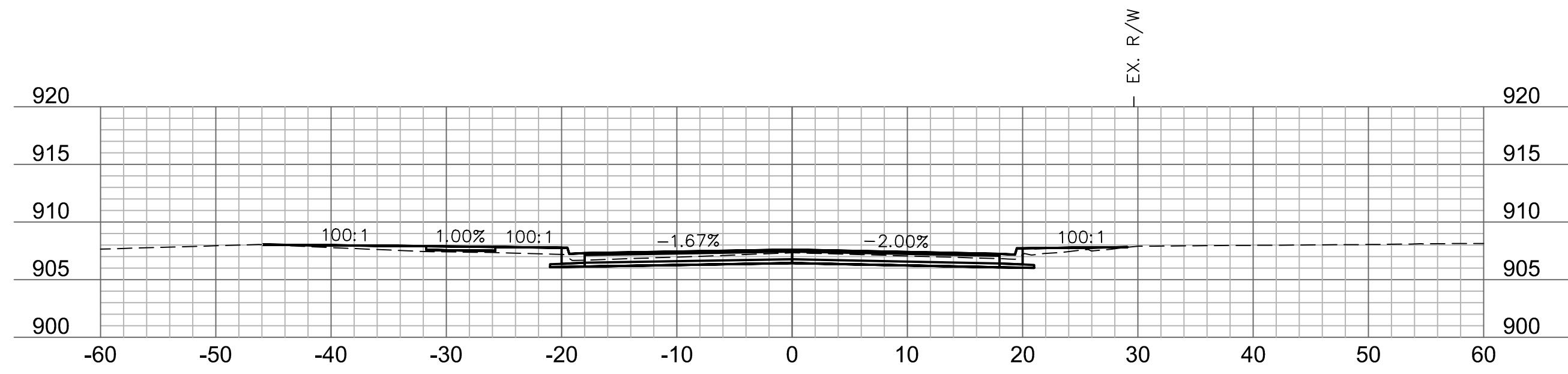
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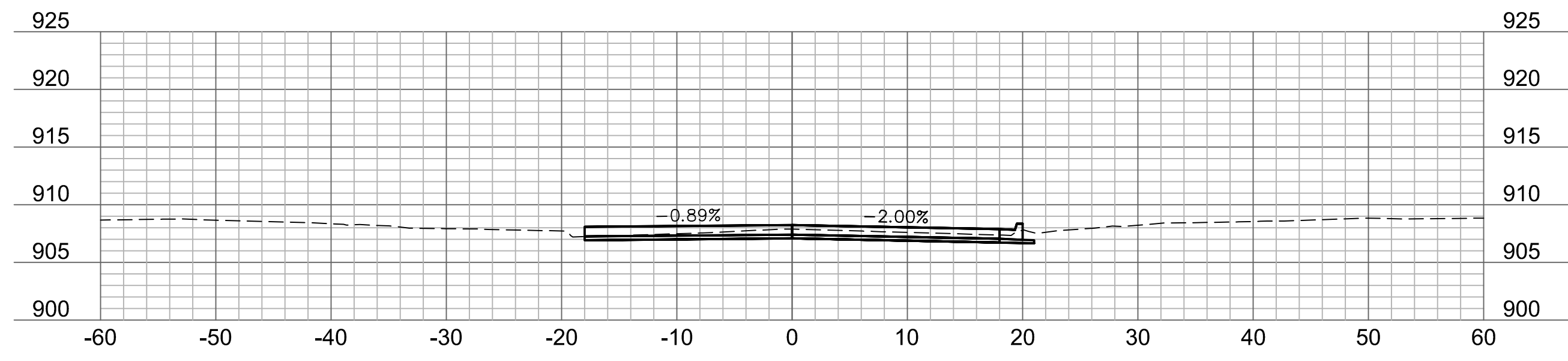
HARPER STREET
 CROSS SECTIONS
 23RD STREET RECONSTRUCTION & WATER MAIN REPLACEMENT
 HASKELL BRIDGE TO 600 FEET EAST OF ANDERSON ROAD
 LAWRENCE, KANSAS
 2021

drawn by: CJC
 checked by: PBM
 approved by: PBM
 QA/QC by: 2.5
 project no.: 020-2348
 drawing no.: T_XSC02_0202348
 date: 12-15-2020

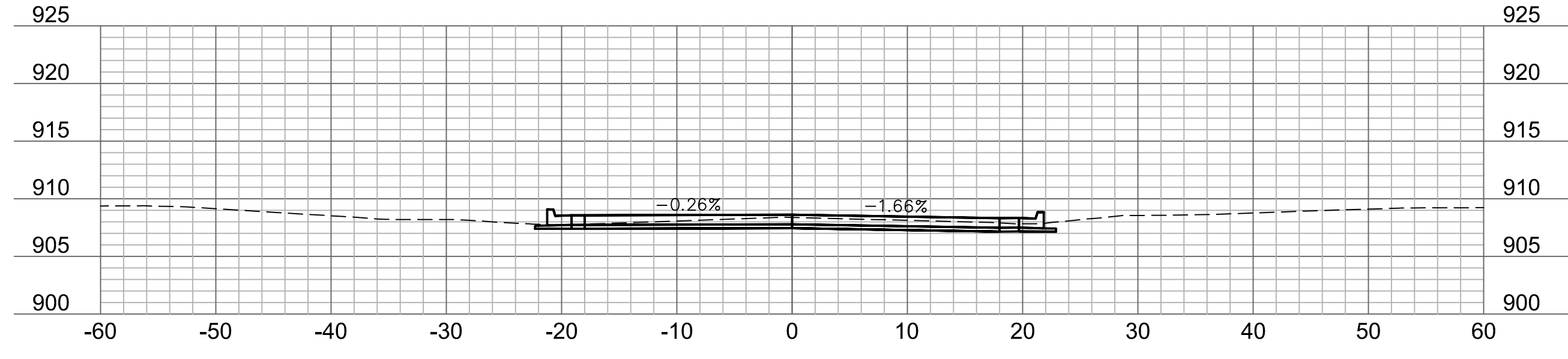
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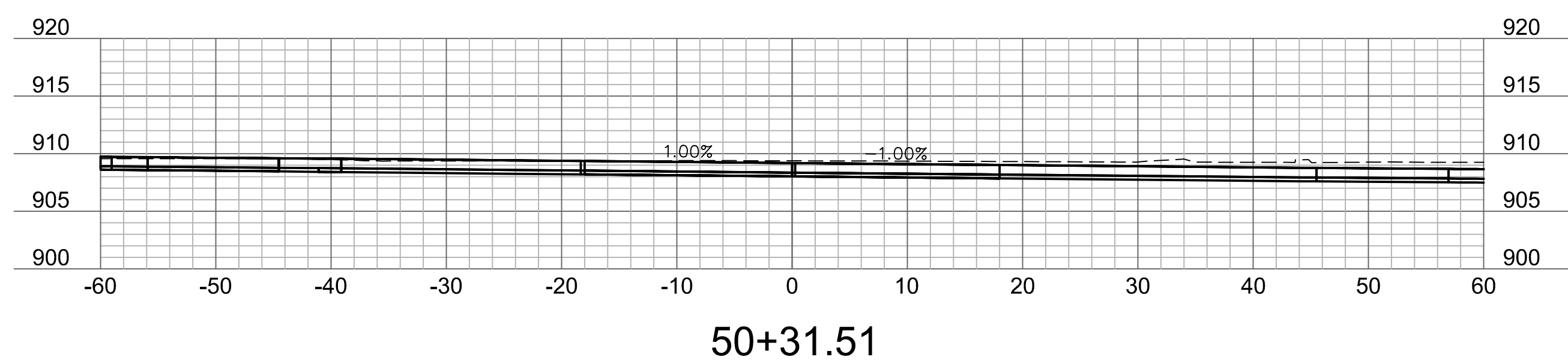
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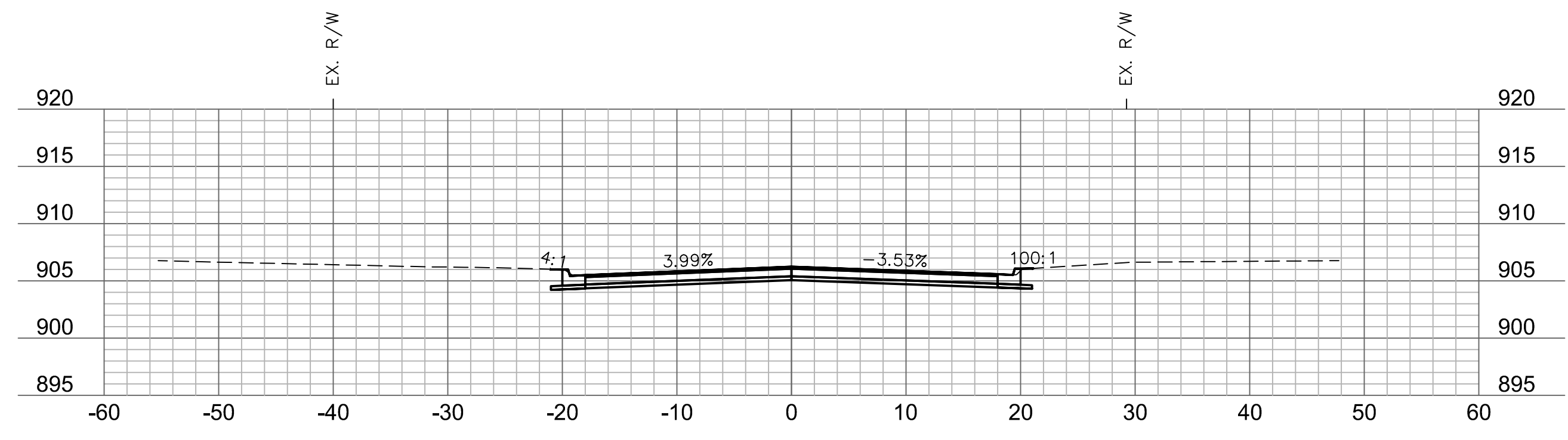
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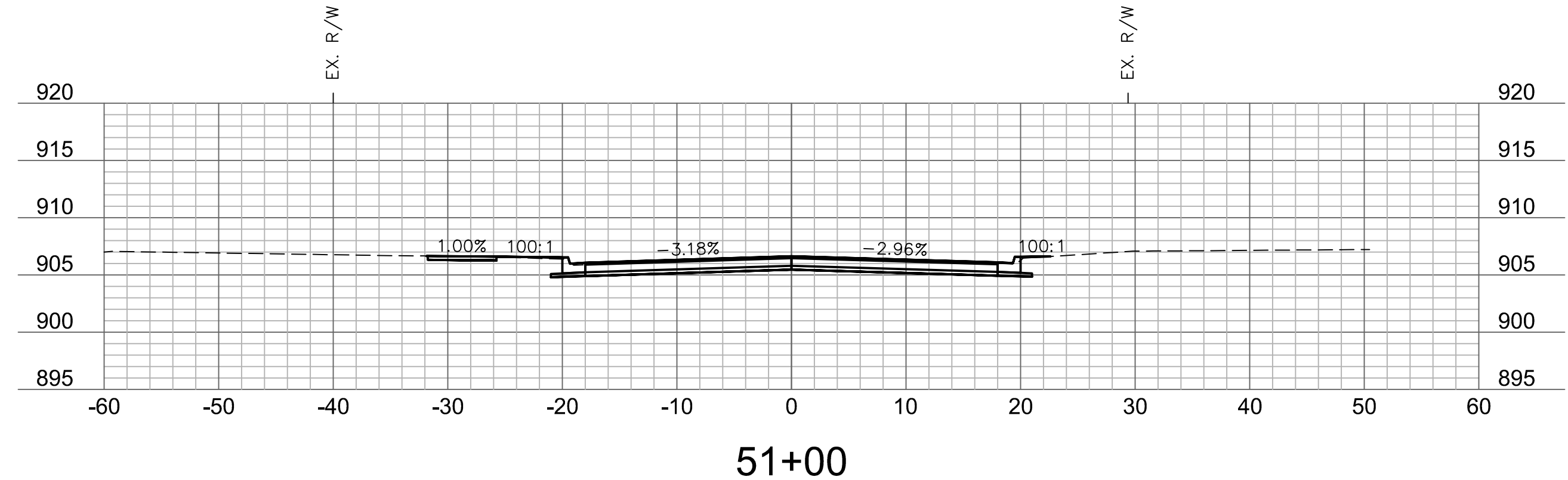
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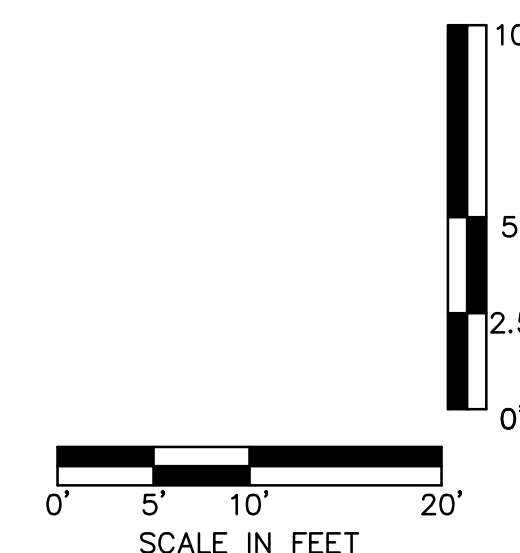
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SHEET
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