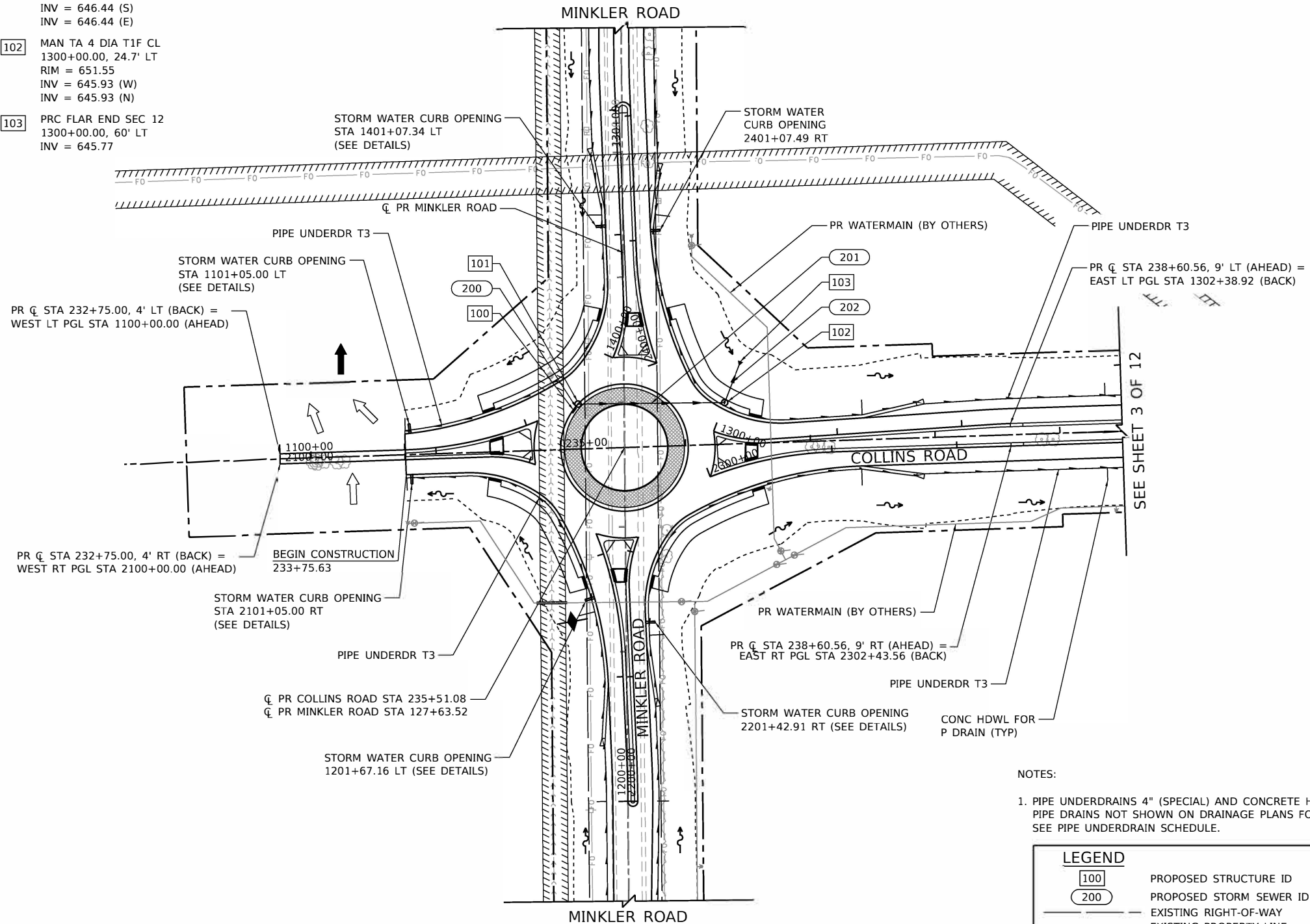


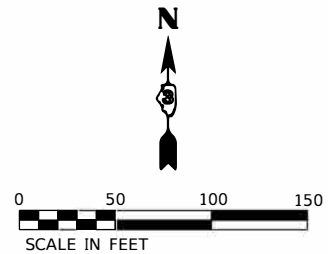
- 100 INLETS TA T24F&G
235+11.00, 31.5' LT
RIM = 650.03
INV = 646.50
- 101 MAN TA 4 DIA T24F&G
235+15.00, 36.0' LT
RIM = 650.04
INV = 646.44 (S)
INV = 646.44 (E)
- 102 MAN TA 4 DIA T1F CL
1300+00.00, 24.7' LT
RIM = 651.55
INV = 645.93 (W)
INV = 645.93 (N)
- 103 PRC FLAR END SEC 12
1300+00.00, 60' LT
INV = 645.77
- 200 STORM SEW CL A 1 12
6 LIN FT @ 1.00%
- 201 STORM SEW CL A 1 12
117 LIN FT @ 0.44%
- 202 STORM SEW CL A 1 12
35 LIN FT @ 0.46%



NOTES:

1. PIPE UNDERDRAINS 4" (SPECIAL) AND CONCRETE HEADWALLS FOR PIPE DRAINS NOT SHOWN ON DRAINAGE PLANS FOR CLARITY. SEE PIPE UNDERDRAIN SCHEDULE.

LEGEND	
100	PROPOSED STRUCTURE ID
200	PROPOSED STORM SEWER ID
---	EXISTING RIGHT-OF-WAY
---	EXISTING PROPERTY LINE
---	EXISTING EASEMENT
---	PROPOSED RIGHT-OF-WAY
---	PROPOSED TEMPORARY EASEMENT
---	PROPOSED PERMANENT EASEMENT
---	LIMITS OF CONSTRUCTION



HRG PROJECT NO. 19162
 HRG PROJ CONTACT:
 FILE NAME: 19162.dwg
 PEN TABLE: pen.tbl

HRGreen.com
Illinois Professional Design Firm
#184-001322

USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 100.0000" / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DRAINAGE PLAN AND PROFILE
COLLINS ROAD (SHEET 1 OF 12)**

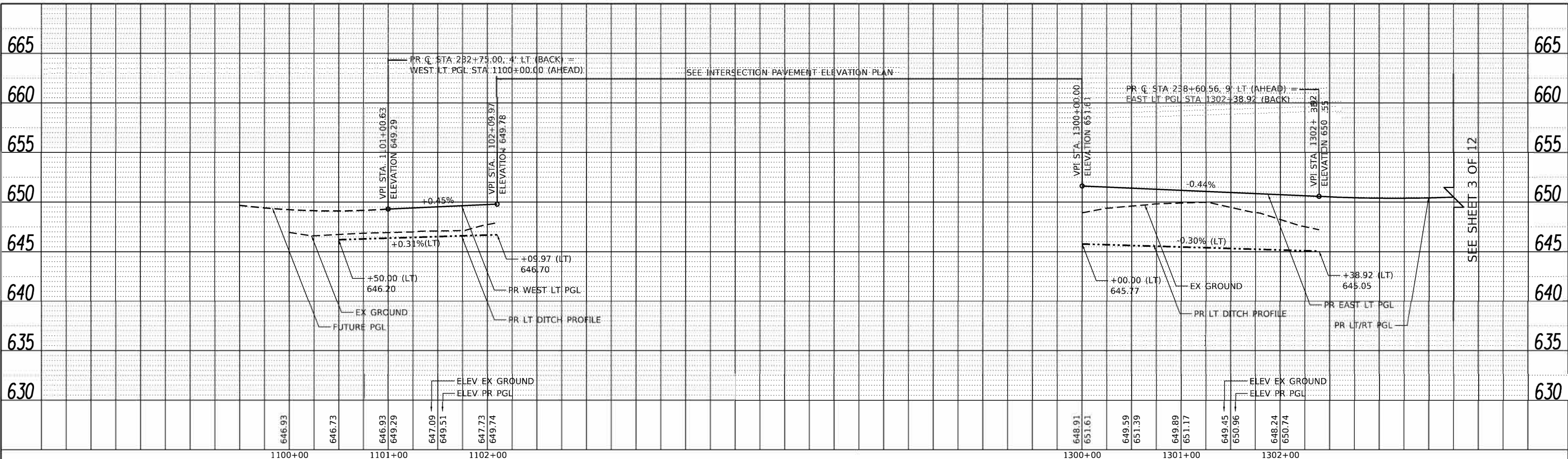
SCALE: SHEET 1 OF 23 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	102
				CONTRACT NO. 87800
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	ALIGNED		
	CHECKED		
	FILED		
	NO.		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES		
	CHECKED		
	FILED		
	NO.		

HRG PROJECT NO. 1962
 HRG PROJ. CONTACT
 FILE NAME: 19-00154-00-FP.dwg
 PEN TABLE: 19-00154-00

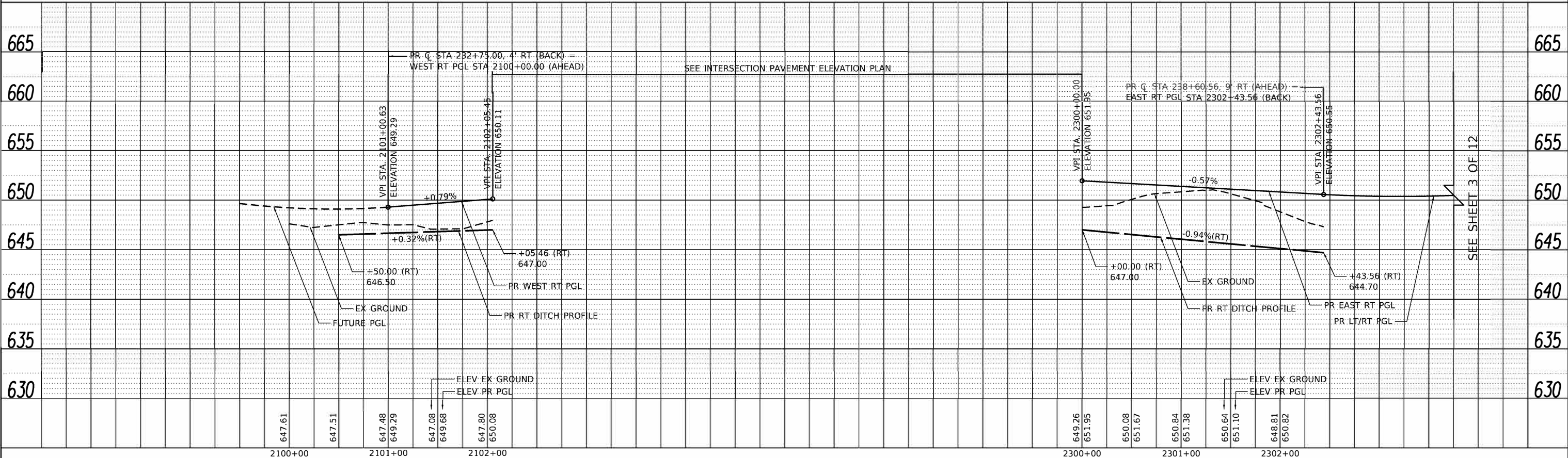


PR WEST LT PGL - COLLINS ROAD (AT MINKER ROAD)

PR EAST LT PGL - COLLINS ROAD (AT MINKER ROAD)

PR WEST RT PGL - COLLINS ROAD (AT MINKER ROAD)

PR EAST RT PGL - COLLINS ROAD (AT MINKER ROAD)



USER NAME = amiller	DESIGNED - JMR	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN - AIM	REVISED -
PLOT DATE = 10/21/2022	CHECKED - APS	REVISED -
	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DRAINAGE PLAN AND PROFILE	
COLLINS ROAD (SHEET 2 OF 12)	
SCALE:	SHEET 2 OF 23 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	103
CONTRACT NO. 87800				
ILLINOIS		FED. AID PROJECT		

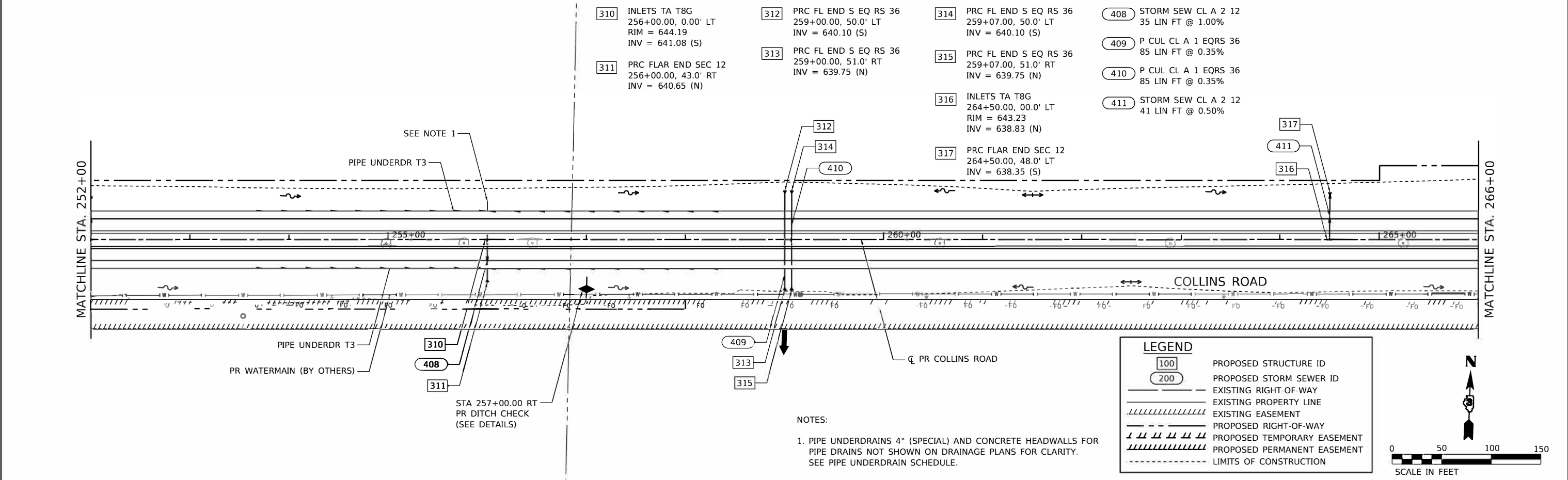
SEE SHEET 3 OF 12

SEE SHEET 3 OF 12

PLAN	REVISION	DATE
NO.	BY	DATE

PROF (E)	REVISION	DATE
NO.	BY	DATE

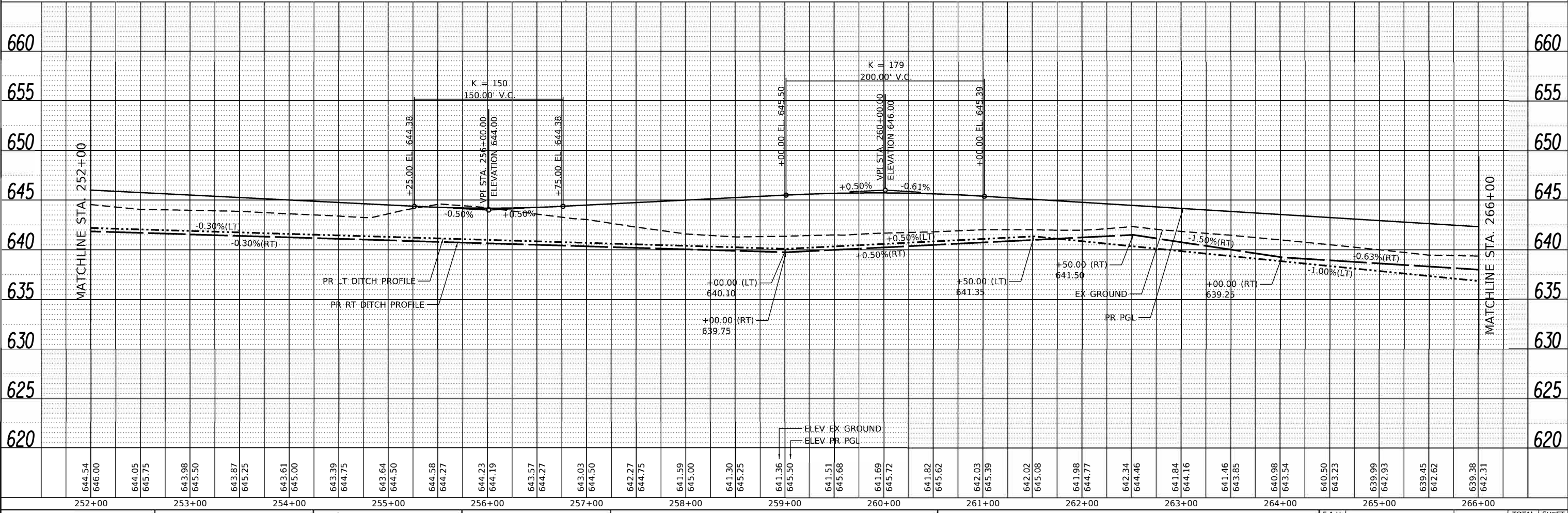
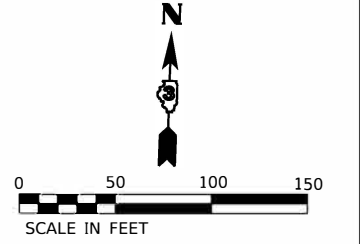
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 HRG PROJ. CONTACT: [Name]
 HRG PROJ. FILE: [Path]
 HRG PROJ. PLOT DATE: 10/21/2022



NOTES:
 1. PIPE UNDERDRAINS 4" (SPECIAL) AND CONCRETE HEADWALLS FOR PIPE DRAINS NOT SHOWN ON DRAINAGE PLANS FOR CLARITY. SEE PIPE UNDERDRAIN SCHEDULE.

LEGEND

- 100 PROPOSED STRUCTURE ID
- 200 PROPOSED STORM SEWER ID
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- //// EXISTING EASEMENT
- PROPOSED RIGHT-OF-WAY
- PROPOSED TEMPORARY EASEMENT
- //// PROPOSED PERMANENT EASEMENT
- - - - - LIMITS OF CONSTRUCTION



644.54	646.00	644.05	645.75	643.98	645.50	643.87	645.25	643.61	645.00	643.39	644.75	643.64	644.50	644.58	644.27	644.23	644.19	643.57	644.27	643.03	644.50	642.27	644.75	641.59	645.00	641.30	645.25	641.36	645.50	641.51	645.68	641.69	645.72	641.82	645.62	642.03	645.39	642.02	645.08	641.98	644.77	642.34	644.46	641.84	644.16	641.46	643.85	640.98	643.54	640.50	643.23	639.99	642.93	639.45	642.62	639.38	642.31
252+00	253+00	254+00	255+00	256+00	257+00	258+00	259+00	260+00	261+00	262+00	263+00	264+00	265+00	266+00																																											

HRGreen.com
 Illinois Professional Design Firm
 #184-001322

USER NAME = amiller	DESIGNED - JMR	REVISED -
PLOT SCALE = 100.0000" / in.	DRAWN - AJM	REVISED -
PLOT DATE = 10/21/2022	CHECKED - APS	REVISED -
	DATE = 10/21/2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DRAINAGE PLAN AND PROFILE
 COLLINS ROAD (SHEET 4 OF 12)**

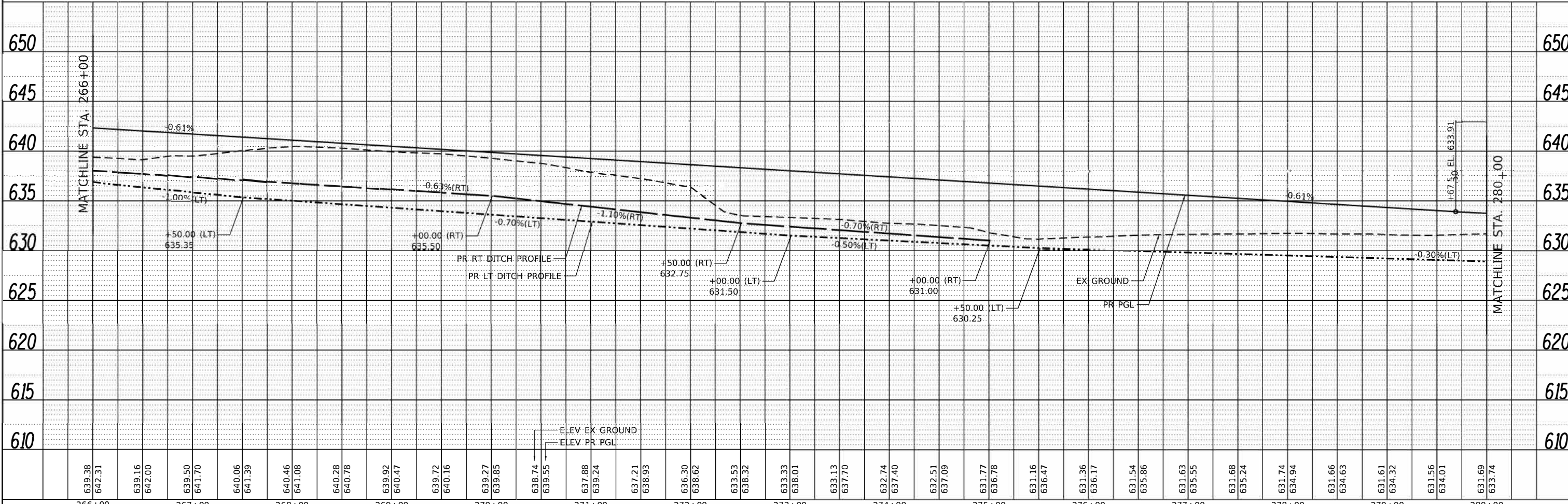
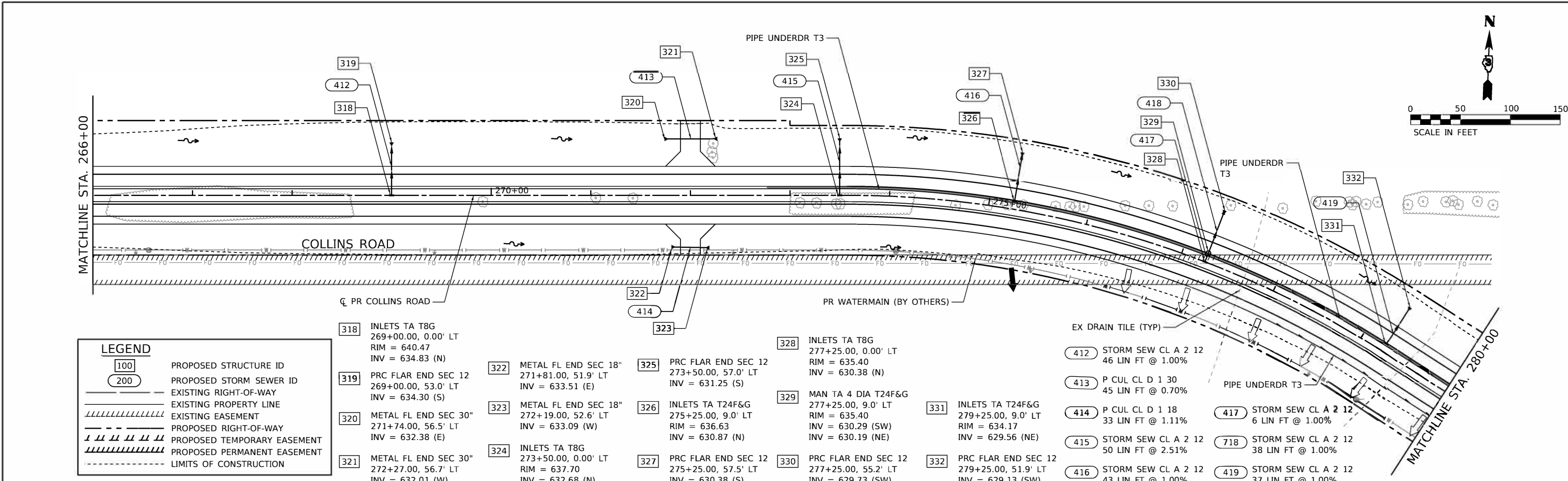
SCALE: SHEET 4 OF 23 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	105
		CONTRACT NO. 87800		
			ILLINOIS FED. AID PROJECT	

PLAN	DATE
BY	
NO.	
DATE	
BY	
NO.	
DATE	
BY	
NO.	
DATE	
BY	
NO.	
DATE	
BY	
NO.	
DATE	
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NO.	
DATE	
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NO.	
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NO.	
DATE	
BY	
NO.	
DATE	

PROFILE	DATE
BY	
NO.	
DATE	
BY	
NO.	
DATE	
BY	
NO.	
DATE	
BY	
NO.	
DATE	
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NO.	
DATE	
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NO.	
DATE	
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BY	
NO.	
DATE	

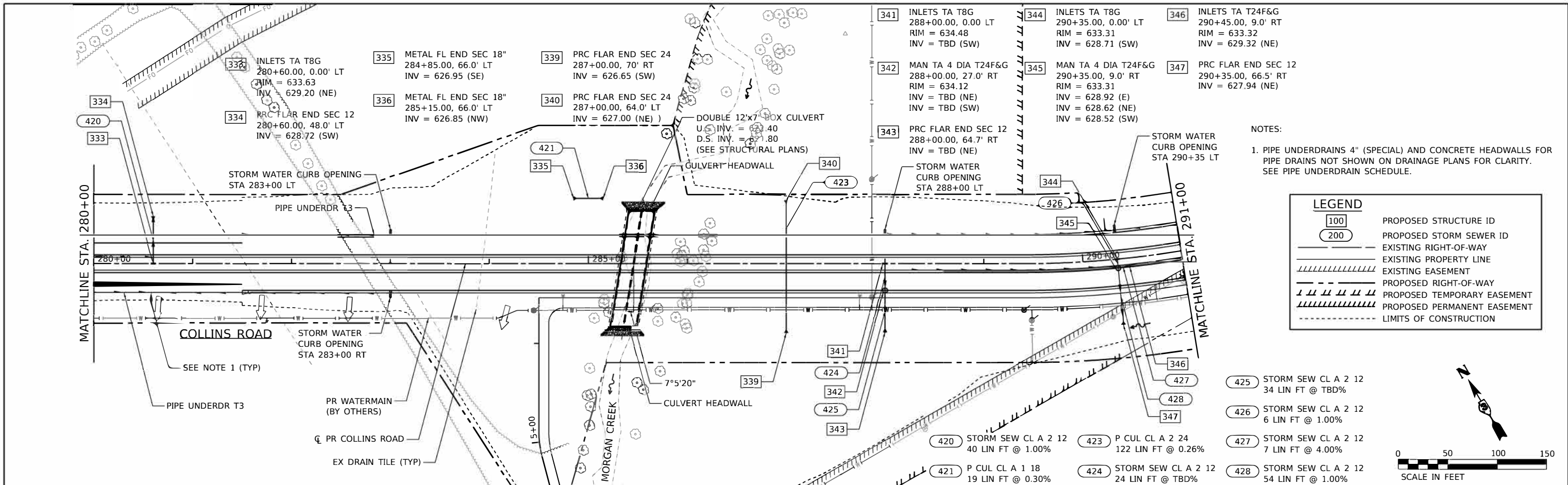
HRG PROJECT NO. 1962
 HRG PROJ. CONTACT:
 FILE NO. 19-00154-00-FP
 PEN TABLE: p19tbl01.tbl



	USER NAME = amiller PLOT SCALE = 100.0000" / in. PLOT DATE = 10/21/2022	DESIGNED - JMR DRAWN - AJM CHECKED - APS DATE - 10/21/2022	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE PLAN AND PROFILE COLLINS ROAD (SHEET 5 OF 12)	F.A.U. RTE. 2514 SECTION 19-00154-00-FP COUNTY KENDALL CONTRACT NO. 87800	TOTAL SHEETS 312 SHEET NO. 106
	SCALE: SHEET 5 OF 23 SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT				

PLAN	DATE

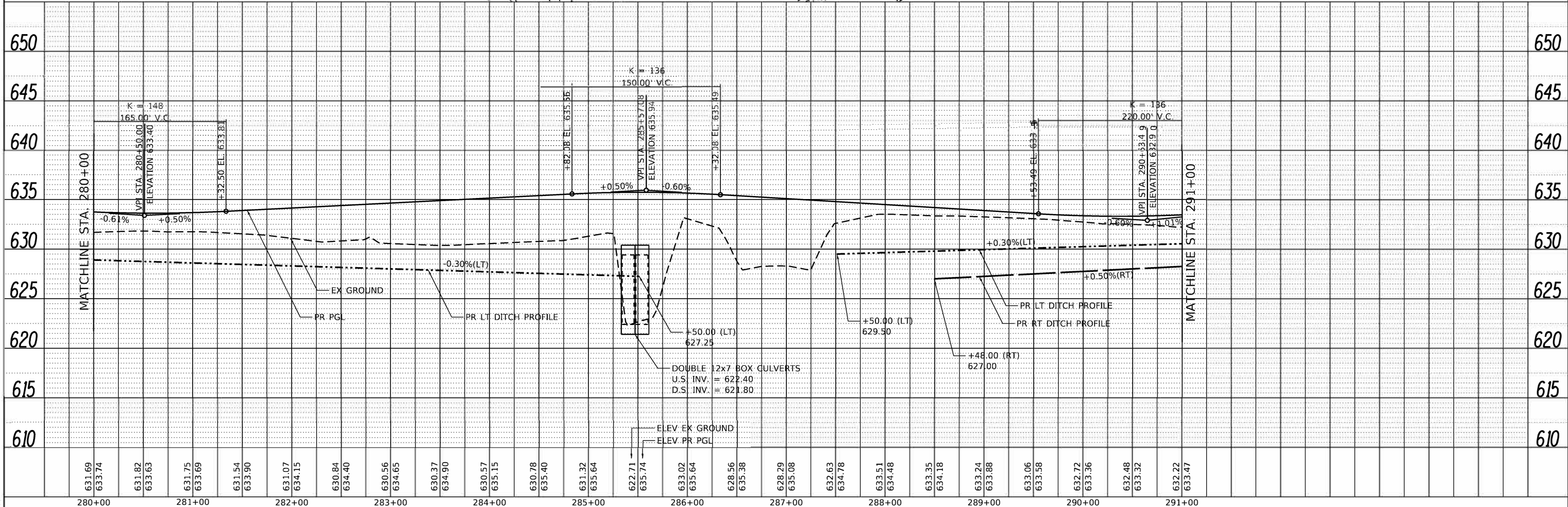
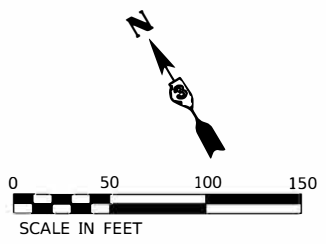
PROFILE	DATE



NOTES:
 1. PIPE UNDERDRAINS 4" (SPECIAL) AND CONCRETE HEADWALLS FOR PIPE DRAINS NOT SHOWN ON DRAINAGE PLANS FOR CLARITY. SEE PIPE UNDERDRAIN SCHEDULE.

LEGEND	
(100)	PROPOSED STRUCTURE ID
(200)	PROPOSED STORM SEWER ID
---	EXISTING RIGHT-OF-WAY
-.-.-	EXISTING PROPERTY LINE
	EXISTING EASEMENT
---	PROPOSED RIGHT-OF-WAY
--- ---	PROPOSED TEMPORARY EASEMENT
--- ---	PROPOSED PERMANENT EASEMENT
--- ---	LIMITS OF CONSTRUCTION

(425)	STORM SEW CL A 2 12 34 LIN FT @ TBD%
(426)	STORM SEW CL A 2 12 6 LIN FT @ 1.00%
(427)	STORM SEW CL A 2 12 7 LIN FT @ 4.00%
(428)	STORM SEW CL A 2 12 54 LIN FT @ 1.00%
(420)	STORM SEW CL A 2 12 40 LIN FT @ 1.00%
(421)	P CUL CL A 1 18 19 LIN FT @ 0.30%
(423)	P CUL CL A 2 24 122 LIN FT @ 0.26%
(424)	STORM SEW CL A 2 12 24 LIN FT @ TBD%



HRG PROJECT NO. 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162.drainage.dgn
 PEN: TABLE: pap/label.tbl

HRGreen
 HRGreen.com
 Illinois Professional Design Firm
 #184-001322

USER NAME	= amiller
DESIGNED	- JMR
DRAWN	- AJM
PLOT SCALE	= 100.0000" / in.
PLOT DATE	= 10/21/2022
CHECKED	- APS
DATE	= 10/21/2022
REVISED	-
REVISED	-
REVISED	-
REVISED	-

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DRAINAGE PLAN AND PROFILE
 COLLINS ROAD (SHEET 6 OF 12)**

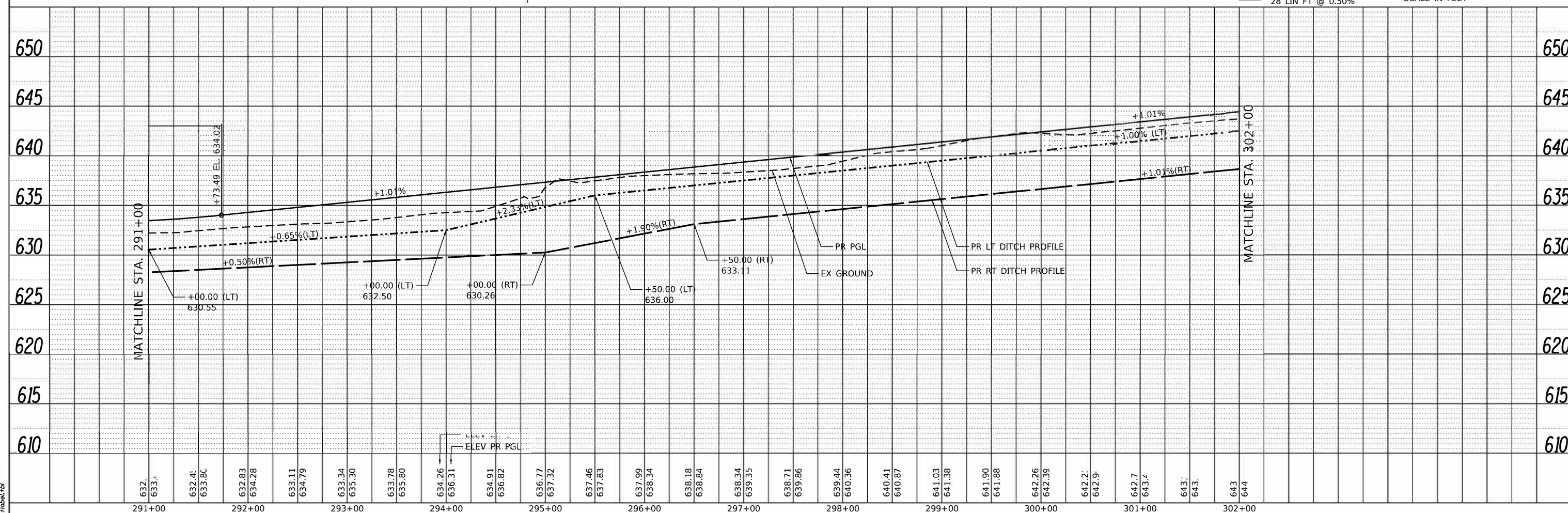
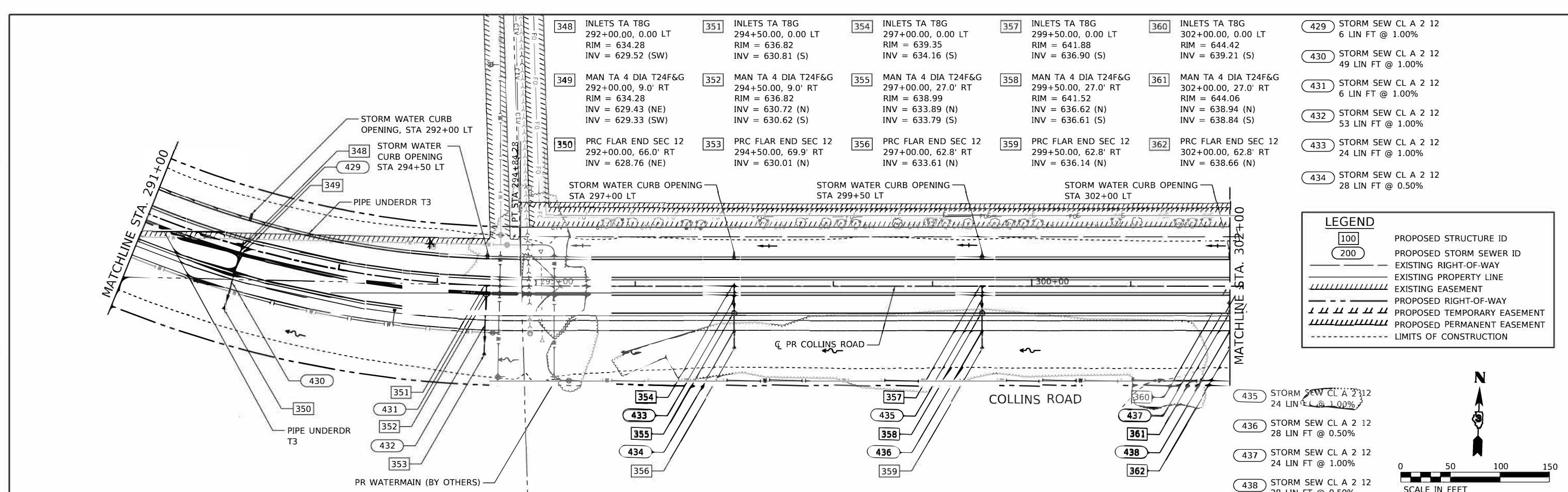
SCALE: SHEET 6 OF 23 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	107
CONTRACT NO. 87800			ILLINOIS FED. AID PROJECT	

PLAN	REVISION	DATE

PROFILE	REVISION	DATE

HRG PROJECT NO. 1962
 HRG PROJ. CONTACT
 FILE NAME: 1962_cranford.dgn
 PEN TABLE: pen.tbl



HRGreen.com Illinois Professional Design Firm #184-001322	USER NAME = amiller	DESIGNED - JMR	REVISED -
	PLOT SCALE = 100.0000' / in.	DRAWN - AJM	REVISED -
	CHECKED - APS	REVISOR -	DATE - 10/21/2022
	PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DRAINAGE PLAN AND PROFILE
 COLLINS ROAD (SHEET 7 OF 12)

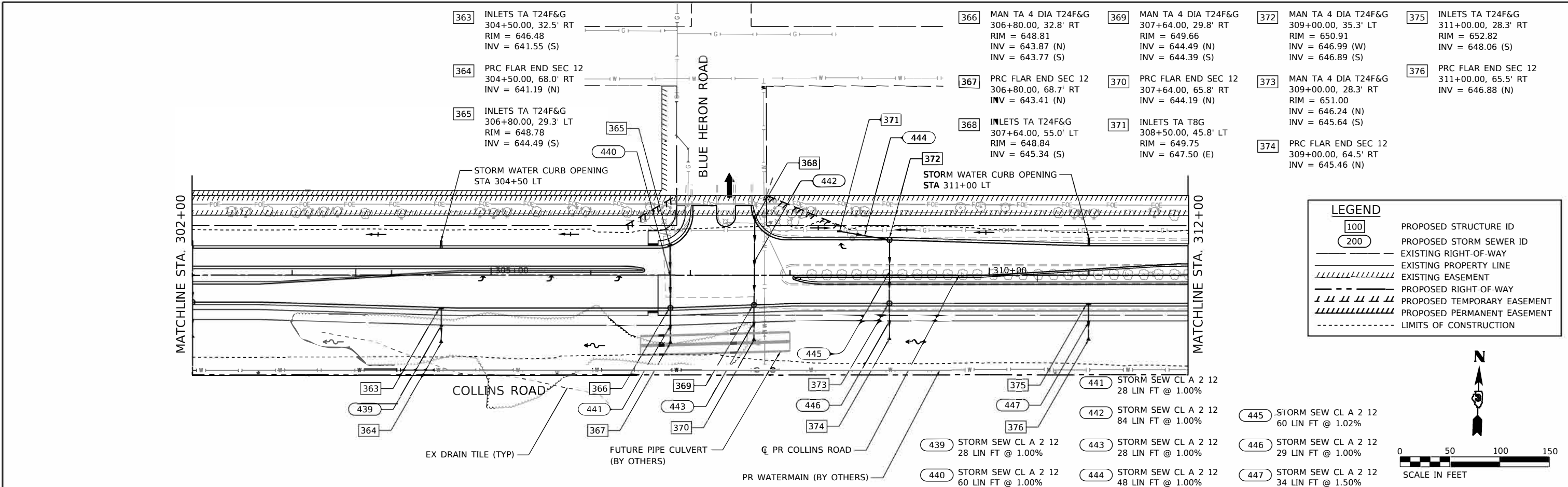
SCALE: SHEET 7 OF 23 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	108
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

PLAN	DATE
REVISED	BY
PLOTTED	
ALIGNMENT CHECKED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NOTE BOOK NO.	
FILE NAME	
FILE NUMBER	
FILE DATE	

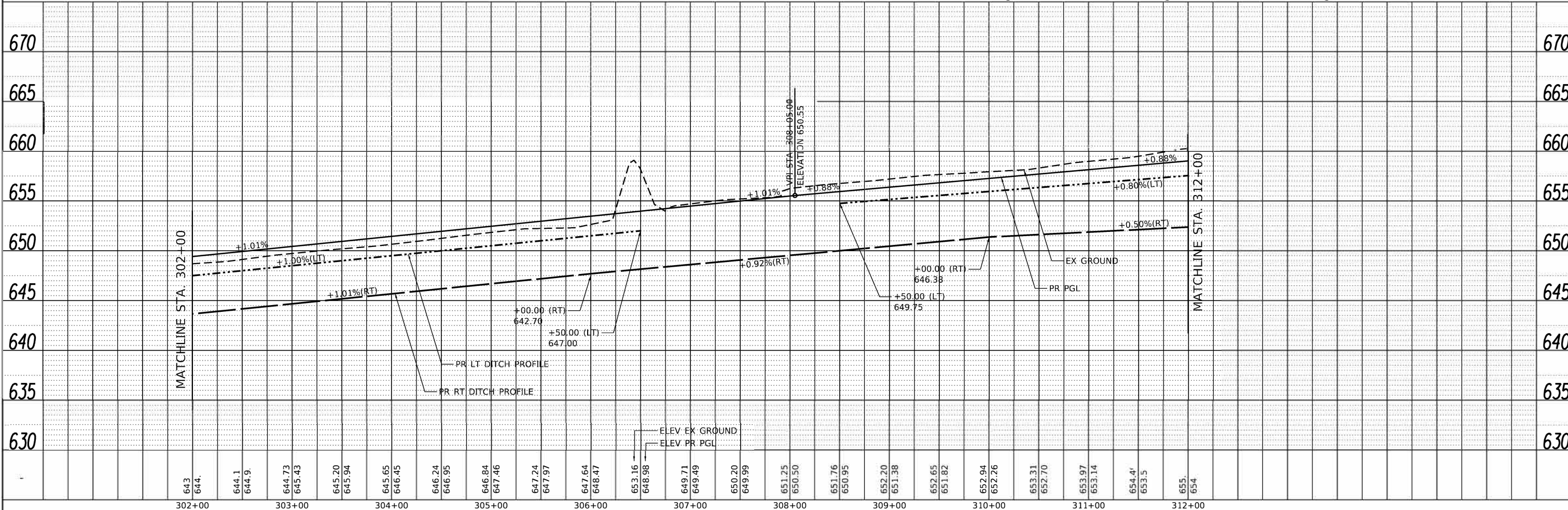
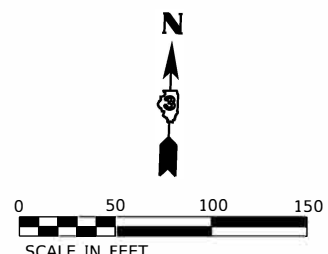
PROFILE	DATE
REVISED	BY
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NOTE BOOK NO.	
FILE NAME	
FILE NUMBER	
FILE DATE	

HRG PROJECT NO. 19162
 HRG PROJ. CONTACT: [Redacted]
 FILE NAME: 19162_001.dwg
 FILE NUMBER: [Redacted]
 FILE DATE: 10/21/2022
 PEN TABLE: [Redacted]



LEGEND

- 100 PROPOSED STRUCTURE ID
- 200 PROPOSED STORM SEWER ID
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED RIGHT-OF-WAY
- PROPOSED TEMPORARY EASEMENT
- PROPOSED PERMANENT EASEMENT
- LIMITS OF CONSTRUCTION



302+00	303+00	304+00	305+00	306+00	307+00	308+00	309+00	310+00	311+00	312+00																															
643	644	644.1	644.9	644.73	645.43	645.20	645.94	645.65	646.45	646.24	646.95	646.84	647.46	647.24	647.97	647.64	648.47	653.16	648.98	649.71	649.49	650.20	649.99	651.25	650.50	651.76	650.95	652.20	651.38	652.65	651.82	652.94	652.26	653.31	652.70	653.97	653.14	654.4	653.5	655.	654

USER NAME	= amiller
DESIGNED	- JMR
DRAWN	- AJM
CHECKED	- APS
DATE	- 10/21/2022

REVISED	-
REVISED	-
REVISED	-
REVISED	-

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DRAINAGE PLAN AND PROFILE
COLLINS ROAD (SHEET 8 OF 12)**

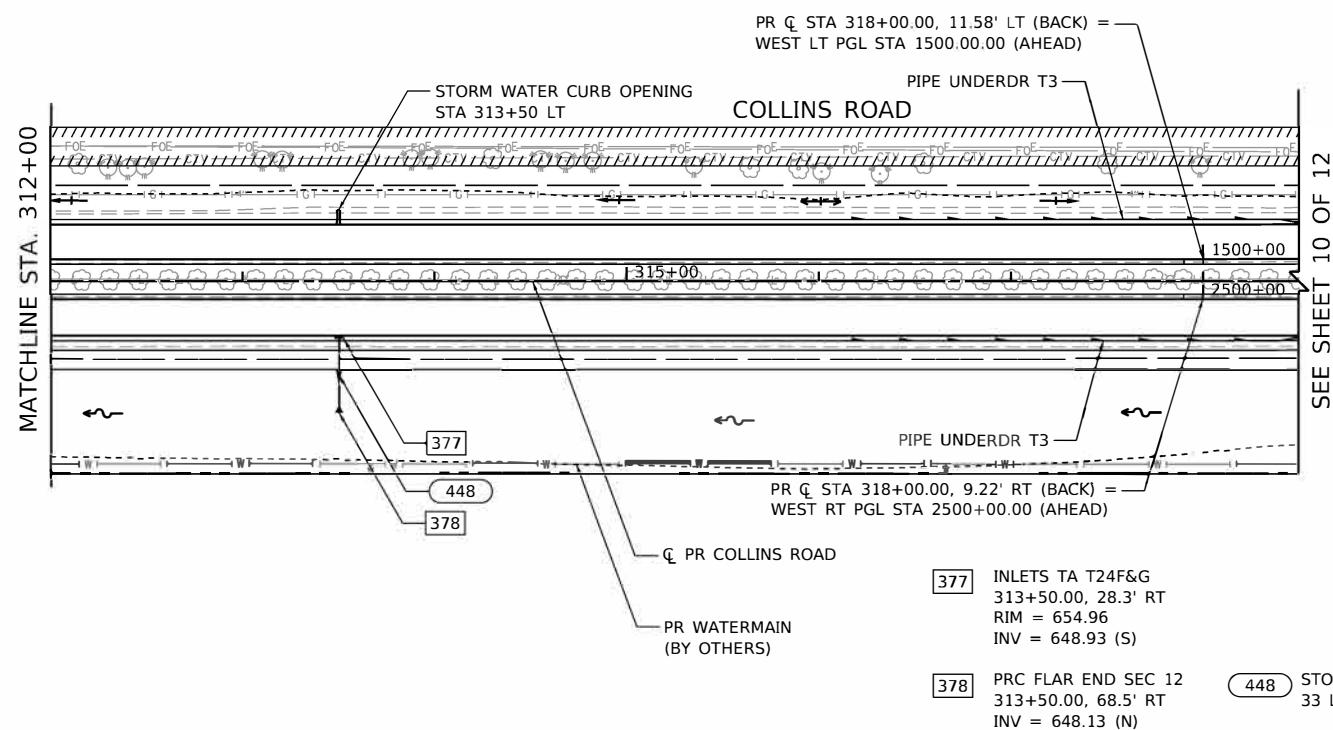
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	109
		CONTRACT NO.	87800	
		ILLINOIS	FED. AID PROJECT	

SCALE: SHEET 8 OF 23 SHEETS STA. TO STA.

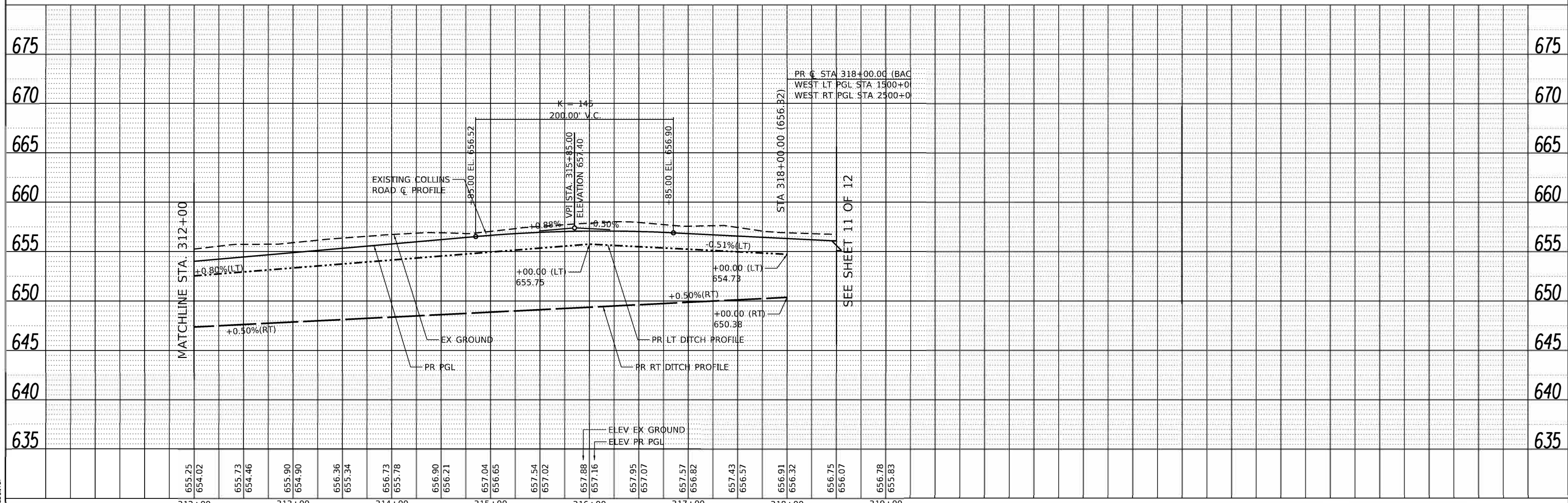
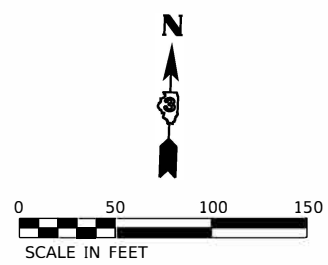
PLAN	REVISION	DATE
NO.		
BY		
DATE		
BY		
DATE		
BY		
DATE		
BY		
DATE		

PROFILE	REVISION	DATE
NO.		
BY		
DATE		
BY		
DATE		
BY		
DATE		
BY		
DATE		

HRG PROJECT NO. 19162
 HRG PROJ. CONTACT:
 FILE: 19-00154-00-FP.dwg
 PLOT DATE: 10/21/2022
 PEN TABLE: p19tbl.tbl

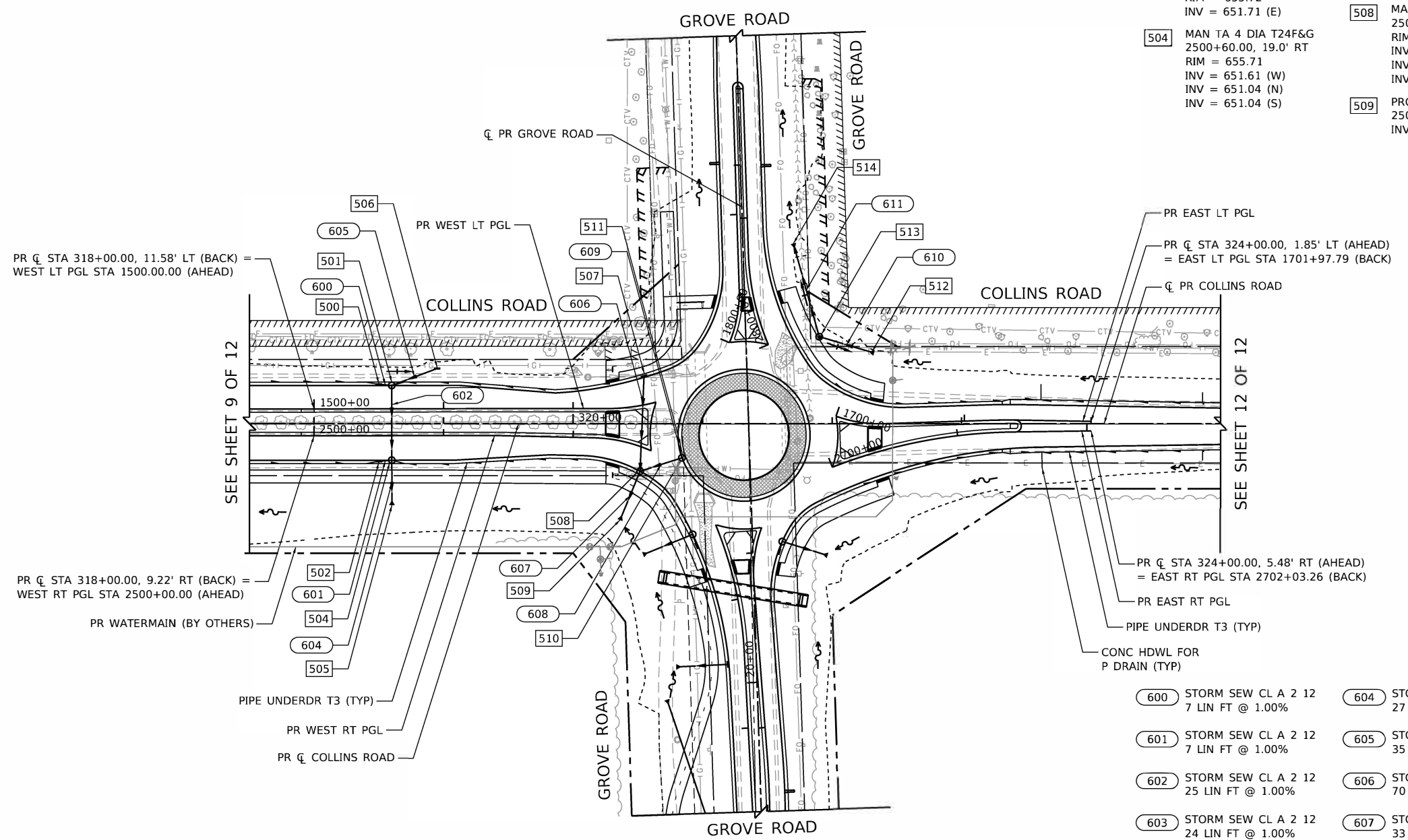


LEGEND	
100	PROPOSED STRUCTURE ID
200	PROPOSED STORM SEWER ID
---	EXISTING RIGHT-OF-WAY
---	EXISTING PROPERTY LINE
---	EXISTING EASEMENT
---	PROPOSED RIGHT-OF-WAY
---	PROPOSED TEMPORARY EASEMENT
---	PROPOSED PERMANENT EASEMENT
---	LIMITS OF CONSTRUCTION



	USER NAME = amiller DESIGNED - JMR DRAWN - AJM CHECKED - APS PLOT DATE = 10/21/2022	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE PLAN AND PROFILE COLLINS ROAD (SHEET 9 OF 12)	F.A.U. RTE. 2514 SECTION 19-00154-00-FP COUNTY KENDALL TOTAL SHEETS 312 SHEET NO. 110 CONTRACT NO. 87800
	SCALE: SHEET 9 OF 23 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT			

- 500 INLETS TA T24F&G
1500+50.00, 18.0' LT
RIM = 655.74
INV = 652.04 (E)
- 501 MAN TA 4 DIA T24F&G
1500+60.00, 18.0' LT
RIM = 655.73
INV = 651.94 (W)
INV = 651.53 (N)
INV = 651.53 (S)
- 502 INLETS TA T24F&G
2500+50.00, 19.0' RT
RIM = 655.72
INV = 651.71 (E)
- 504 MAN TA 4 DIA T24F&G
2500+60.00, 19.0' RT
RIM = 655.71
INV = 651.61 (W)
INV = 651.04 (N)
INV = 651.04 (S)
- 505 PRC FLAR END SEC 12
2500+60.00, 53.7' RT
INV = 650.69 (N)
- 506 INLETS TA T8G
1500+95.00, 31.0' LT
RIM = 654.45
INV = 651.88 (S)
- 507 INLETS TA T24F&G
1502+60.00, 20.8' LT
RIM = 658.57
INV = 654.57 (S)
- 508 MAN TA 5 DIA T24 F&G
2502+60.00, 17.9' RT
RIM = 658.52
INV = 654.24 (E)
INV = 653.84 (N)
INV = 652.32 (SW)
- 509 PRC FLAR END SEC 12
2502+61.00, 58.6' RT
INV = 651.75 (NE)
- 510 MAN TA 4 DIA T24F&G
320+84.00, 26.3' RT
RIM = 659.23
INV = 655.02 (N)
INV = 654.92 (W)
- 511 INLETS TA T24F&G
320+82.00, 19.3' RT
RIM = 659.22
INV = 655.22 (S)
- 512 PRC FLAR END SEC 12
1700+25.00 54.5' LT
INV = 654.67 (W)
- 513 MAN TA 4 DIA T1F CL
321+90.00 67.3' LT
RIM = 660.12
INV = 654.45 (E)
INV = 654.36 (NW)
- 514 PRC FLAR END SEC 12
2800+79.00 35.0' RT
INV = 653.99 (S)

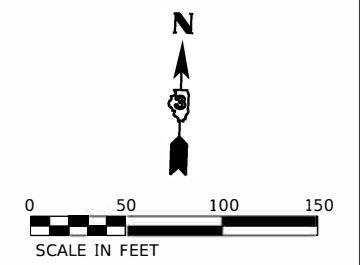


- 600 STORM SEW CL A 2 12
7 LIN FT @ 1.00%
- 601 STORM SEW CL A 2 12
7 LIN FT @ 1.00%
- 602 STORM SEW CL A 2 12
25 LIN FT @ 1.00%
- 603 STORM SEW CL A 2 12
24 LIN FT @ 1.00%
- 604 STORM SEW CL A 2 12
27 LIN FT @ 1.00%
- 605 STORM SEW CL A 2 12
35 LIN FT @ 1.00%
- 606 STORM SEW CL A 2 12
70 LIN FT @ 1.00%
- 607 STORM SEW CL A 2 12
33 LIN FT @ 1.00%
- 608 STORM SEW CL A 2 12
30 LIN FT @ 2.00%
- 609 STORM SEW CL A 2 12
7 LIN FT @ 2.00%
- 610 STORM SEW CL A 2 12
36 LIN FT @ 0.50%
- 611 STORM SEW CL A 2 12
67 LIN FT @ 0.50%

LEGEND

- 100 PROPOSED STRUCTURE ID
- 200 PROPOSED STORM SEWER ID
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED RIGHT-OF-WAY
- PROPOSED TEMPORARY EASEMENT
- PROPOSED PERMANENT EASEMENT
- LIMITS OF CONSTRUCTION

NOTES:
1. PIPE UNDERDRAINS 4" (SPECIAL) AND CONCRETE HEADWALLS FOR PIPE DRAINS NOT SHOWN ON DRAINAGE PLANS FOR CLARITY. SEE PIPE UNDERDRAIN SCHEDULE.



HRG PROJECT NO. 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162.dwg
 PEN TABLE: 19162.tbl

HRGreen
 HRGreen.com
 Illinois Professional Design Firm
 #184-001322

USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 100.0000" / in.	CHECKED - APS	REVISED +
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

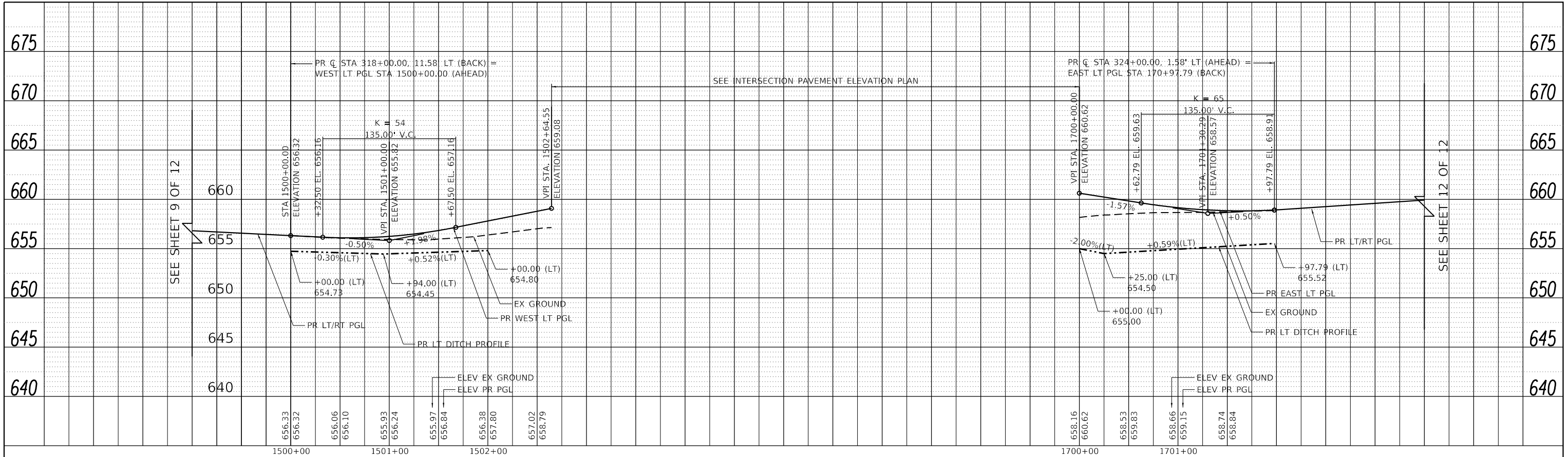
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DRAINAGE PLAN AND PROFILE
 COLLINS ROAD (SHEET 10 OF 12)**

SCALE: SHEET 10 OF 23 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	111
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	ALIGNMENT CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		
	CARD FILE NAME		



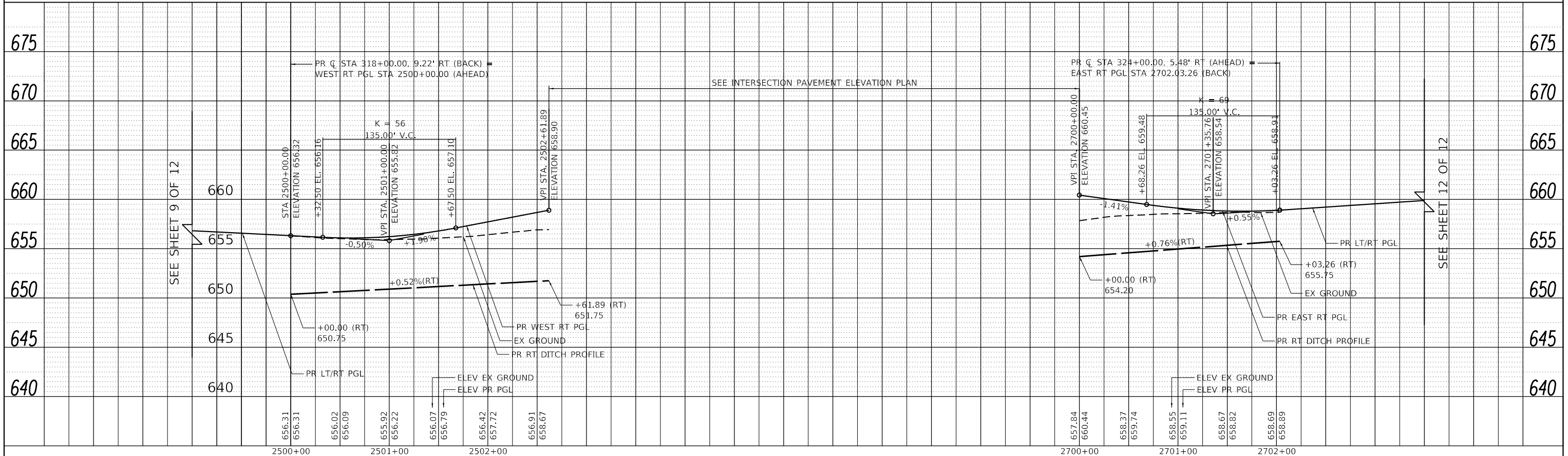
PR WEST LT PGL – COLLINS ROAD (AT GROVE ROAD)

PR EAST LT PGL – COLLINS ROAD (AT GROVE ROAD)

PR WEST RT PGL – COLLINS ROAD (AT GROVE ROAD)

PR EAST RT PGL – COLLINS ROAD (AT GROVE ROAD)

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	ALIGNMENT CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		
	CARD FILE NAME		



PR WEST RT PGL – COLLINS ROAD (AT GROVE ROAD)

PR EAST RT PGL – COLLINS ROAD (AT GROVE ROAD)

HRG PROJECT NO.: 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162.dwg
 PEN TABLE: 19162.tbl



USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

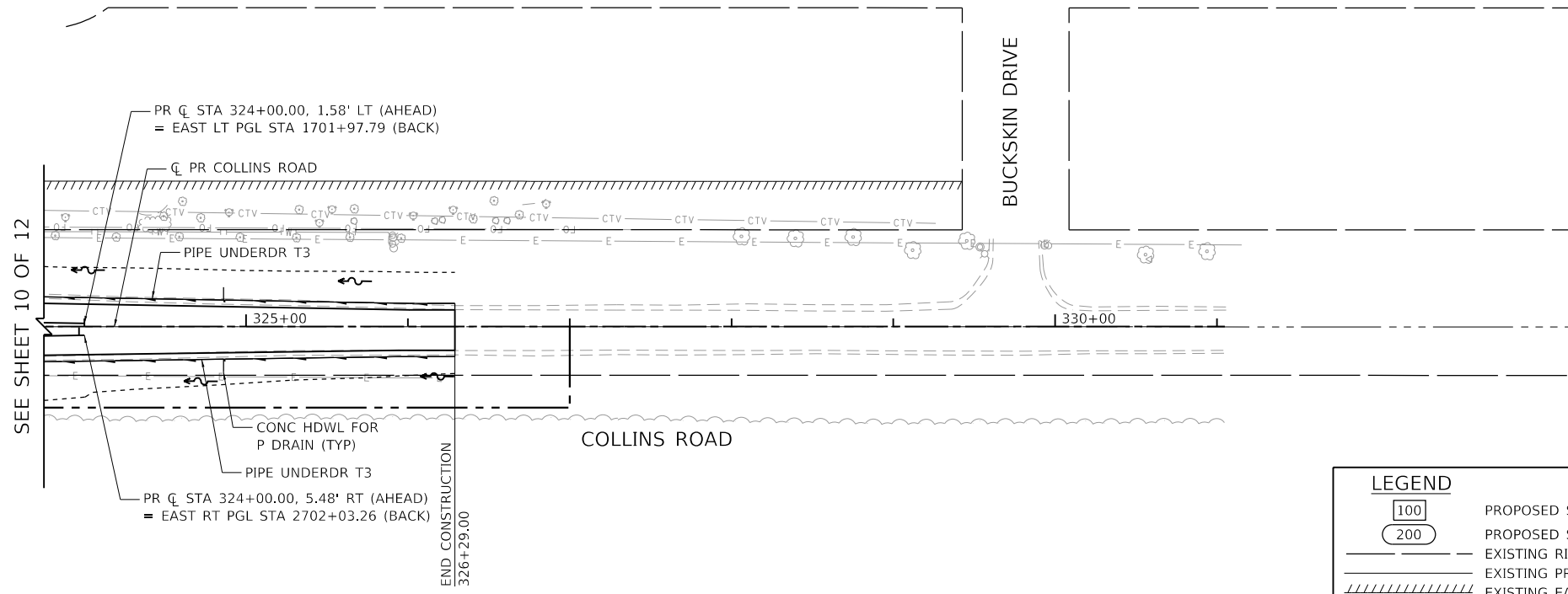
DRAINAGE PLAN AND PROFILE	
COLLINS ROAD (SHEET 11 OF 12)	
SCALE:	SHEET 11 OF 23 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	112
				CONTRACT NO. 87800
		ILLINOIS	FED. AID PROJECT	

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNED	
	CHECKED	
	FILED	
	BY	
	DATE	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	BY	
	DATE	

HRG PROJECT NO. 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162.dwg
 PEN TABLE: 19162.tbl

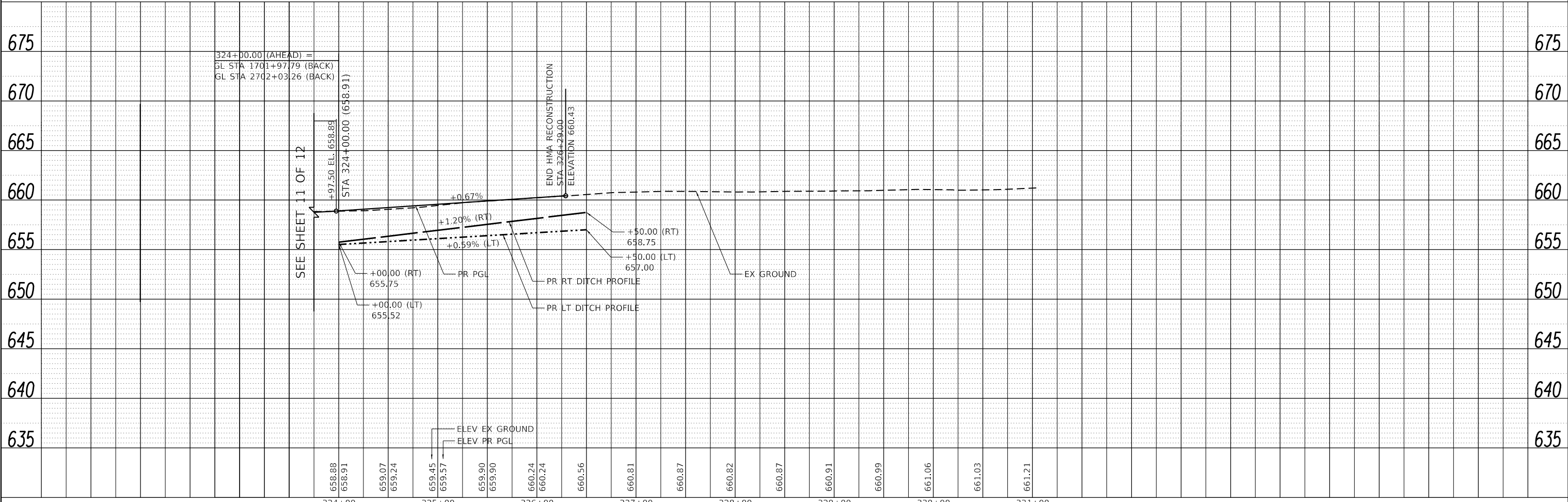
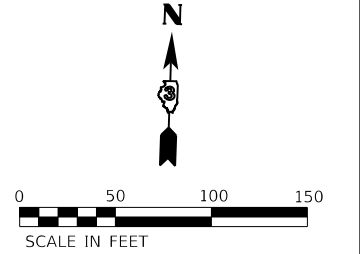


NOTES:

- PIPE UNDERDRAINS 4" (SPECIAL) AND CONCRETE HEADWALLS FOR PIPE DRAINS NOT SHOWN ON DRAINAGE PLANS FOR CLARITY. SEE PIPE UNDERDRAIN SCHEDULE.

LEGEND

- 100 PROPOSED STRUCTURE ID
- 200 PROPOSED STORM SEWER ID
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED RIGHT-OF-WAY
- PROPOSED TEMPORARY EASEMENT
- PROPOSED PERMANENT EASEMENT
- LIMITS OF CONSTRUCTION

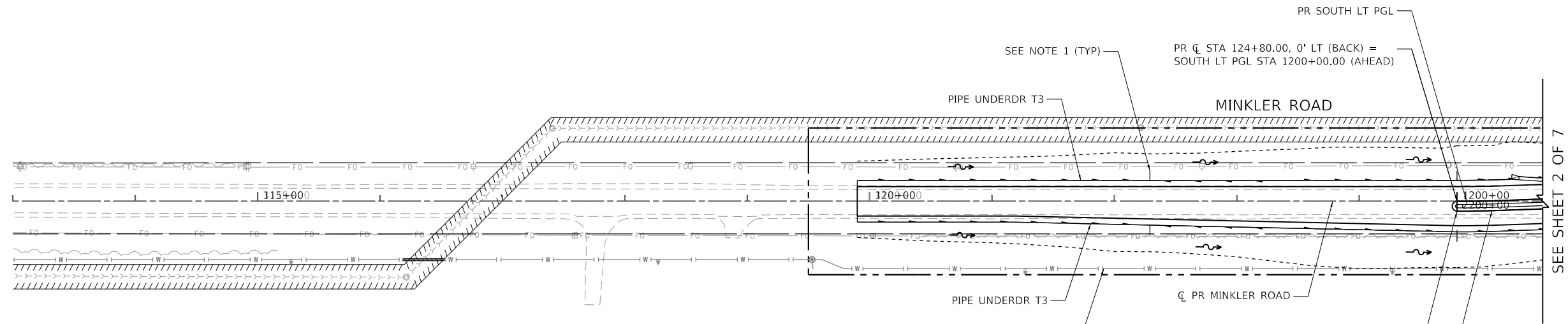


	USER NAME = amiller	DESIGNED - JMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE PLAN AND PROFILE COLLINS ROAD (SHEET 12 OF 12)	F.A.U. RTE. = 2514	SECTION = 19-00154-00-FP	COUNTY = KENDALL	TOTAL SHEETS = 312	SHEET NO. = 113
	PLOT SCALE = 100.0000' / in.	CHECKED - APS	REVISED -			SCALE: SHEET 12 OF 23 SHEETS	STA. TO STA.	CONTRACT NO. 87800		ILLINOIS FED. AID PROJECT
	PLOT DATE = 10/21/2022	DATE = 10/21/2022	REVISED -							

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNED	
	CHECKED	
	FILED	
NOTE BOOK NO.	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS OK'D	
NOTE BOOK NO.	STRUCTURE	

HRG PROJECT NO.: 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19152_drawing.dgn
 PEN TABLE: 19152.tbl

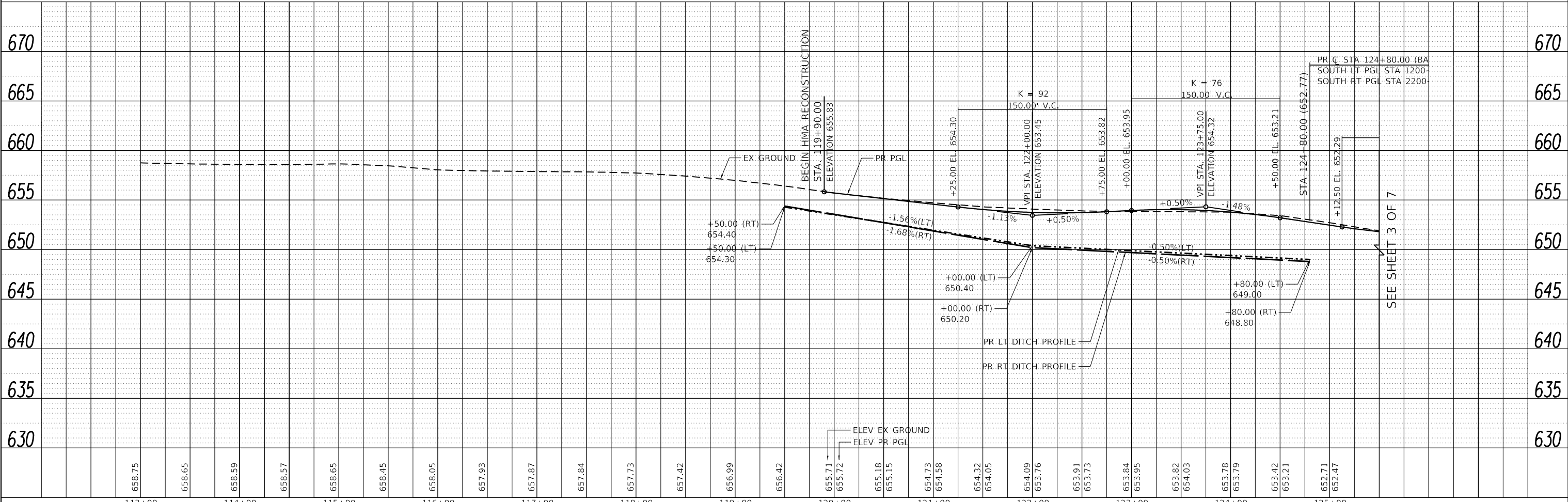
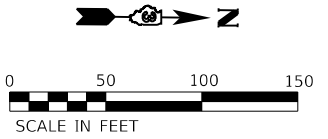


LEGEND

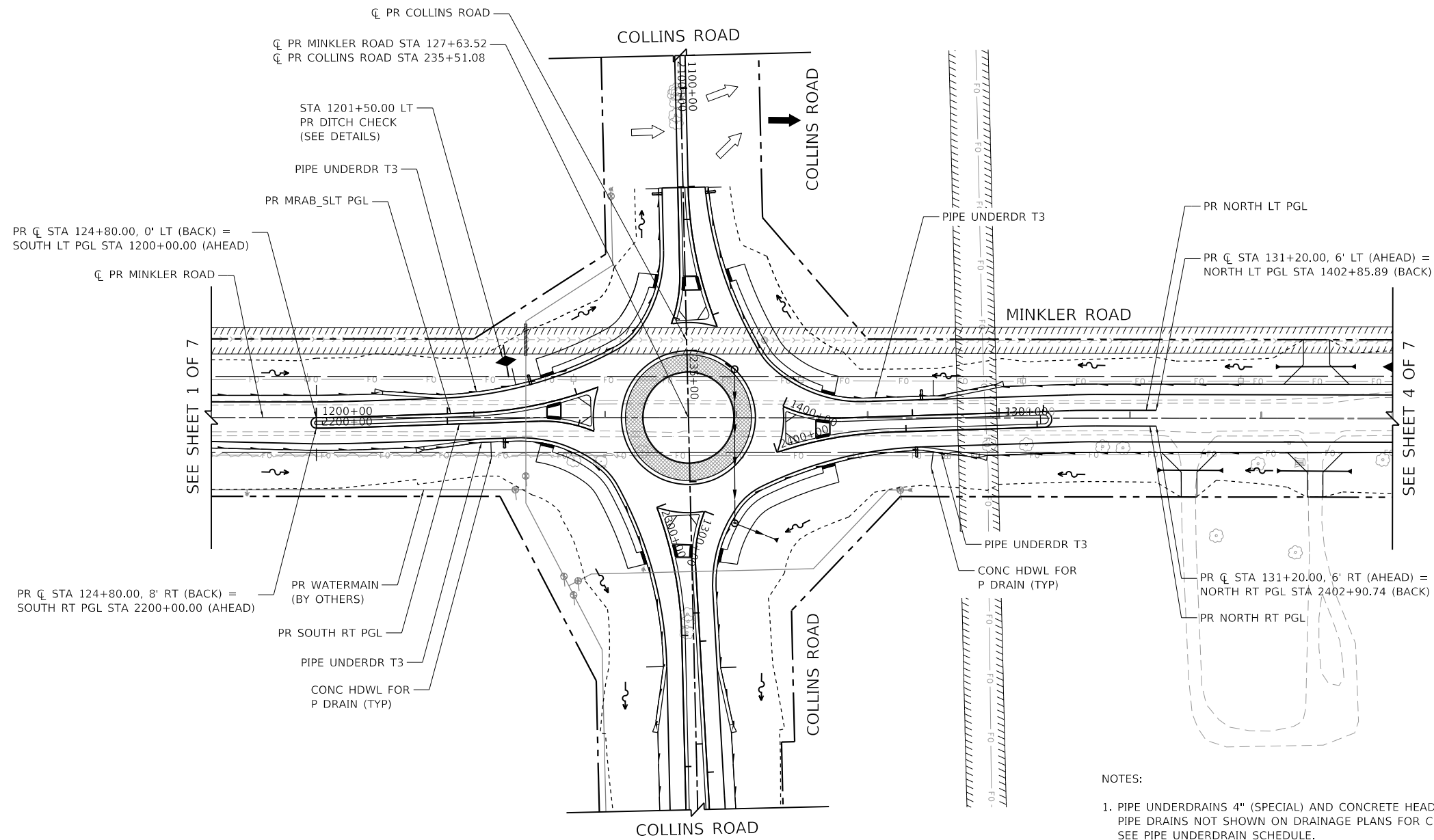
- 100 PROPOSED STRUCTURE ID
- 200 PROPOSED STORM SEWER ID
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- ////// EXISTING EASEMENT
- - - - PROPOSED RIGHT-OF-WAY
- . - . - . PROPOSED TEMPORARY EASEMENT
- ////// PROPOSED PERMANENT EASEMENT
- LIMITS OF CONSTRUCTION

NOTES:

1. PIPE UNDERDRAINS 4" (SPECIAL) AND CONCRETE HEADWALLS FOR PIPE DRAINS NOT SHOWN ON DRAINAGE PLANS FOR CLARITY. SEE PIPE UNDERDRAIN SCHEDULE.

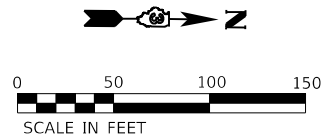


	HRGreen.com Illinois Professional Design Firm #184-001322	USER NAME = amiller DESIGNED - JMR DRAWN - AJM CHECKED - APS PLOT DATE = 10/21/2022	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE PLAN AND PROFILE MINKLER ROAD (1 OF 7)	SCALE:	SHEET 13 OF 23 SHEETS STA. TO STA.	F.A.U. RTE. 2514 SECTION 19-00154-00-FP COUNTY KENDALL ILLINOIS FED. AID PROJECT	TOTAL SHEETS 312 SHEET NO. 114 CONTRACT NO. 87800
--	---	---	--	--	---	--------	---------------------------------------	---	---



NOTES:
 1. PIPE UNDERDRAINS 4" (SPECIAL) AND CONCRETE HEADWALLS FOR PIPE DRAINS NOT SHOWN ON DRAINAGE PLANS FOR CLARITY. SEE PIPE UNDERDRAIN SCHEDULE.

LEGEND	
	PROPOSED STRUCTURE ID
	PROPOSED STORM SEWER ID
	EXISTING RIGHT-OF-WAY
	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	PROPOSED RIGHT-OF-WAY
	PROPOSED TEMPORARY EASEMENT
	PROPOSED PERMANENT EASEMENT
	LIMITS OF CONSTRUCTION



HRG PROJECT NO.: 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162.dwg
 PEN TABLE: 19162.tbl



USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

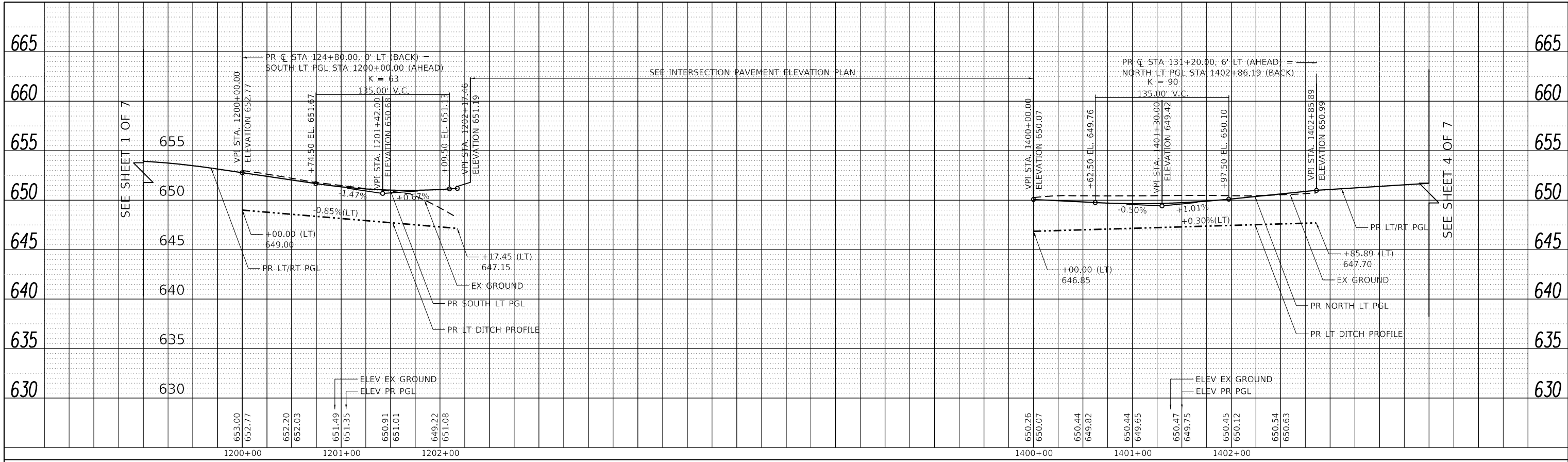
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DRAINAGE PLAN AND PROFILE
 MINKLER ROAD (2 OF 7)**

SCALE: SHEET 14 OF 23 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	115
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNED	
	CHECKED	
	FILED	
	CARD FILE NAME	
NOTE BOOK NO.		



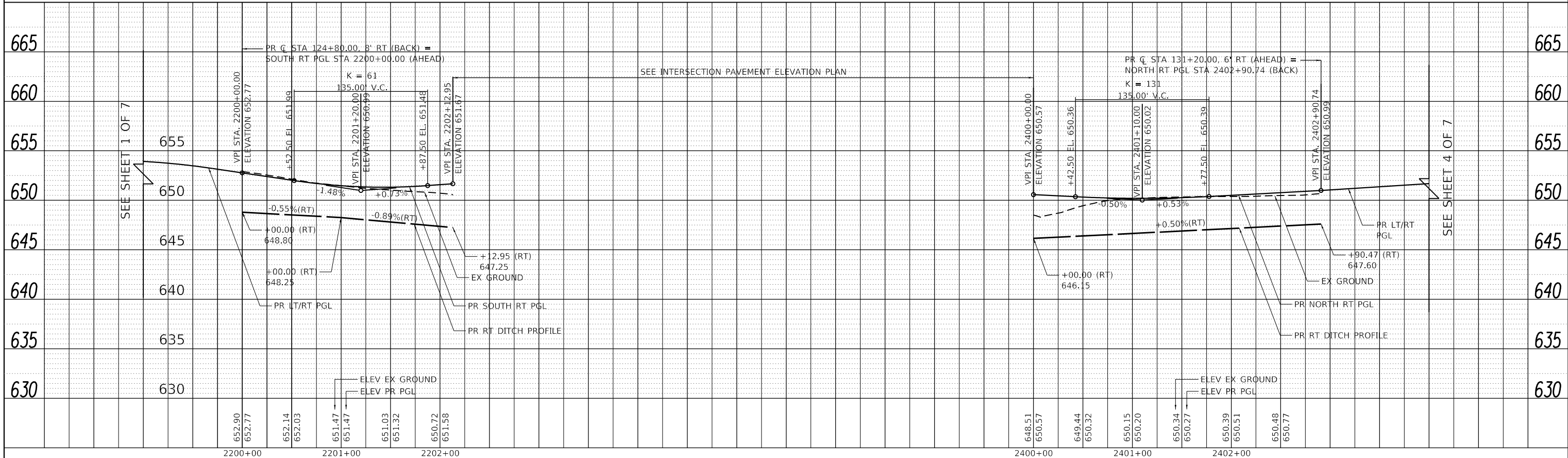
PR SOUTH LT PGL – MINKLER ROAD

PR NORTH LT PGL – MINKLER ROAD

PR SOUTH RT PGL – MINKLER ROAD

PR NORTH RT PGL – MINKLER ROAD

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE	
	NOTATIS CHFD	
NOTE BOOK NO.		



HRG PROJECT NO. 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162.dwg
 PEN TABLE: 19162.tbl



USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

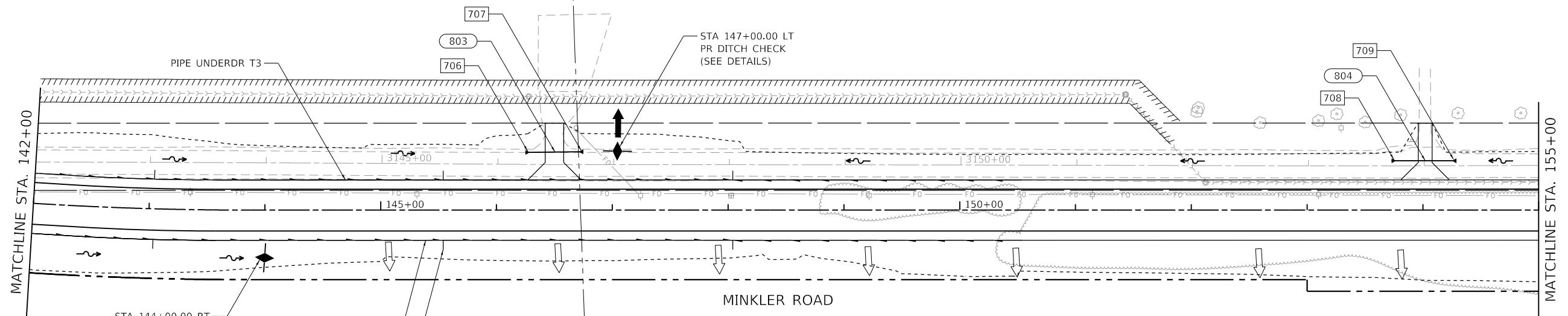
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DRAINAGE PLAN AND PROFILE	
MINKLER ROAD (3 OF 7)	
SCALE:	SHEET 15 OF 23 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	116
				CONTRACT NO. 87800
ILLINOIS		FED. AID PROJECT		

PLAN	SURVEYED	DATE
	PIOTTED	
	ALIGNED	
	CHECKED	
	FILED	
	DATE	
	BY	
	NO.	

PROFILE	SURVEYED	DATE
	PIOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	

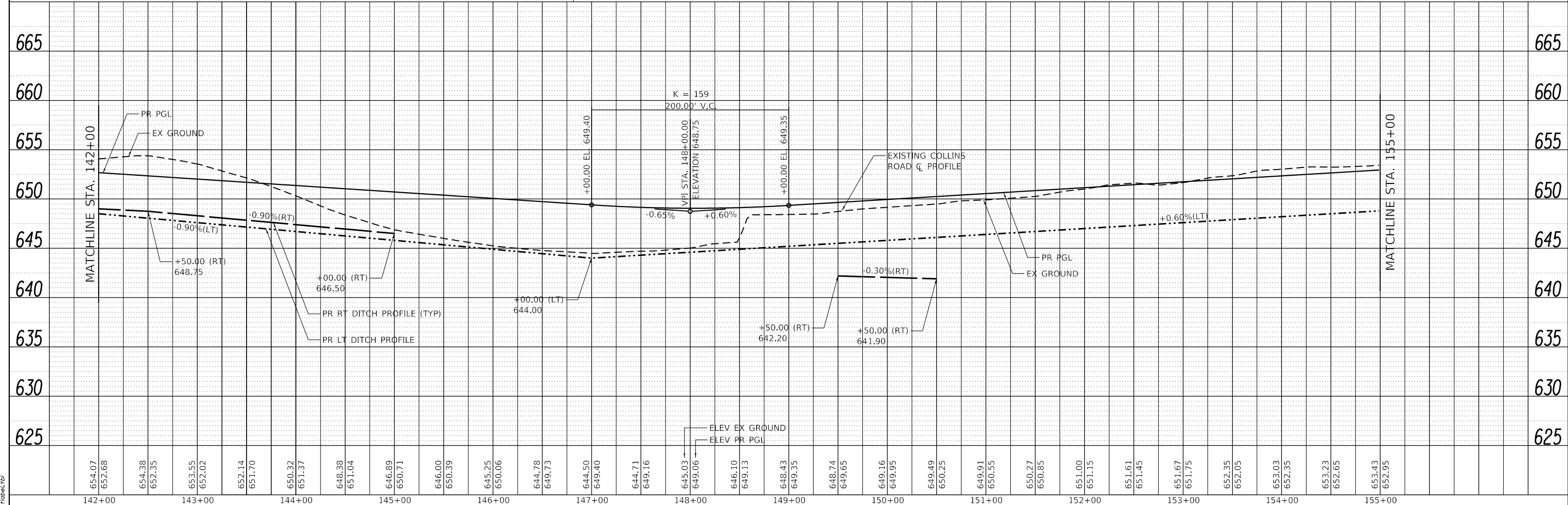
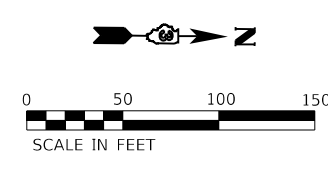


706 METAL FL END SEC 18" 146+25.00, 49.8' LT INV = 644.67 (N)	708 METAL FL END SEC 18" 153+73.00, 42.5' LT INV = 648.04 (N)	803 P CUL CL D 1 18 45 LIN FT @ 0.90%
707 METAL FL END SEC 18" 146+75.00, 50.3' LT INV = 644.23 (S)	709 METAL FL END SEC 18" 154+29.00, 42.5' LT INV = 648.37 (S)	804 P CUL CL D 1 18 51 LIN FT @ 0.60%

LEGEND

- 100 PROPOSED STRUCTURE ID
- 200 PROPOSED STORM SEWER ID
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED RIGHT-OF-WAY
- PROPOSED TEMPORARY EASEMENT
- PROPOSED PERMANENT EASEMENT
- LIMITS OF CONSTRUCTION

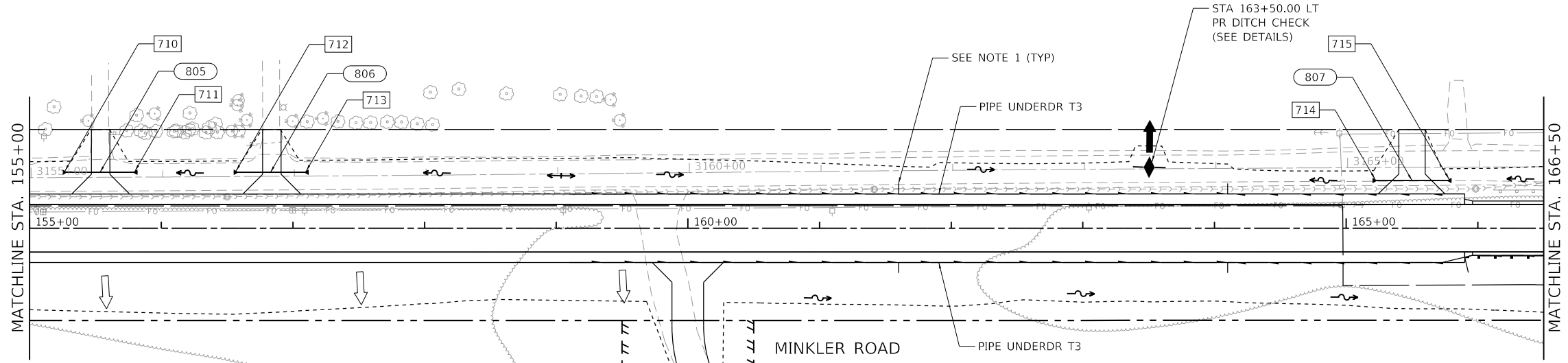
NOTES:
1. PIPE UNDERDRAINS 4" (SPECIAL) AND CONCRETE HEADWALLS FOR PIPE DRAINS NOT SHOWN ON DRAINAGE PLANS FOR CLARITY. SEE PIPE UNDERDRAIN SCHEDULE.



HRG PROJECT NO. 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162.dwg
 PEN: TABLE: 19162.dwg

HRGreen	USER NAME = amiller DESIGNED - JMR DRAWN - AJM CHECKED - APS DATE - 10/21/2022	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE PLAN AND PROFILE MINKLER ROAD (5 OF 7)	SCALE: SHEET 17 OF 23 SHEETS STA. TO STA.	F.A.U. RTE. 2514 SECTION 19-00154-00-FP COUNTY KENDALL TOTAL SHEETS 312 SHEET NO. 118 CONTRACT NO. 87800 ILLINOIS FED. AID PROJECT
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PLAN	SURVEYED	BY	DATE
	PLOTTED		
	ALIGNED		
	CHECKED		
	FILED		
	NO.		

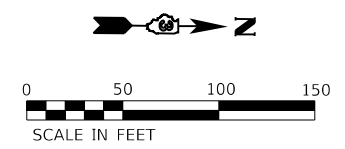


LEGEND

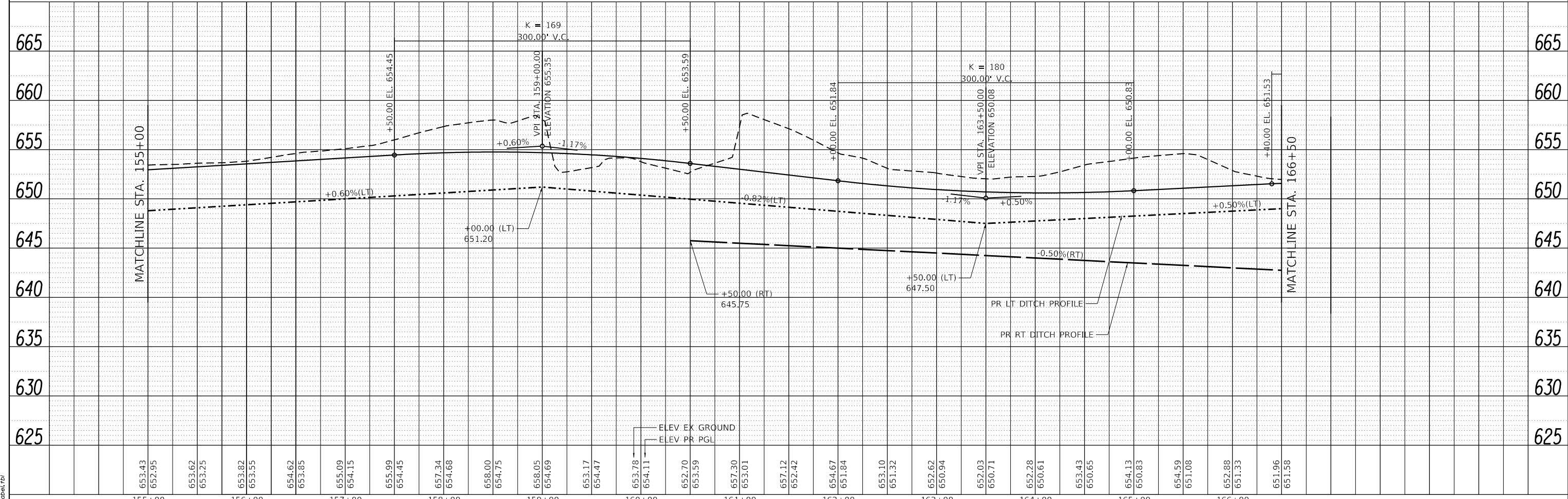
100	PROPOSED STRUCTURE ID
200	PROPOSED STORM SEWER ID
---	EXISTING RIGHT-OF-WAY
---	EXISTING PROPERTY LINE
	EXISTING EASEMENT
---	PROPOSED RIGHT-OF-WAY
	PROPOSED TEMPORARY EASEMENT
	PROPOSED PERMANENT EASEMENT
---	LIMITS OF CONSTRUCTION

710	METAL FL END SEC 18" 155+25.00, 42.5' LT INV = 648.95 (N)	713	METAL FL END SEC 18" 157+12.00, 42.5' LT INV = 650.07 (S)	805	P CUL CL D 1 18 52 LIN FT @ 0.60%
711	METAL FL END SEC 18" 155+82.00, 42.5' LT INV = 649.29 (S)	714	METAL FL END SEC 18" 165+20.00, 36.2' LT INV = 648.35 (N)	806	P CUL CL D 1 18 52 LIN FT @ 0.60%
712	METAL FL END SEC 18" 156+55.00, 42.5' LT INV = 649.73 (N)	715	METAL FL END SEC 18" 165+80.00, 36.2' LT INV = 648.65 (S)	807	P CUL CL D 1 18 55 LIN FT @ 0.50%

NOTES:
1. PIPE UNDERDRAINS 4" (SPECIAL) AND CONCRETE HEADWALLS FOR PIPE DRAINS NOT SHOWN ON DRAINAGE PLANS FOR CLARITY. SEE PIPE UNDERDRAIN SCHEDULE.



PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	NO.		
	STRUCTURE		
	NOT AT THIS OFFICE		



653.43	652.95	653.62	653.25	653.82	653.55	654.62	653.85	655.09	654.15	655.99	654.45	657.34	654.68	658.00	654.75	658.05	654.69	653.17	654.47	653.78	654.11	652.70	653.59	657.30	653.01	657.12	652.42	654.67	651.84	653.10	651.32	652.62	650.94	652.03	650.71	652.28	650.61	653.43	650.65	654.13	650.83	654.59	651.08	652.88	651.33	651.96	651.58				
155+00	156+00	157+00	158+00	159+00	160+00	161+00	162+00	163+00	164+00	165+00	166+00																																								

HRG PROJECT NO.: 19162
HRG PROJ. CONTACT:
FILE NAME: 19162.dwg
PEN TABLE: 19162.tbl



USER NAME	= amiller	DESIGNED	- JMR	REVISED	-
		DRAWN	- AJM	REVISED	-
PLOT SCALE	= 100.0000' / in.	CHECKED	- APS	REVISED	-
PLOT DATE	= 10/21/2022	DATE	- 10/21/2022	REVISED	-

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DRAINAGE PLAN AND PROFILE
MINKLER ROAD (6 OF 7)**

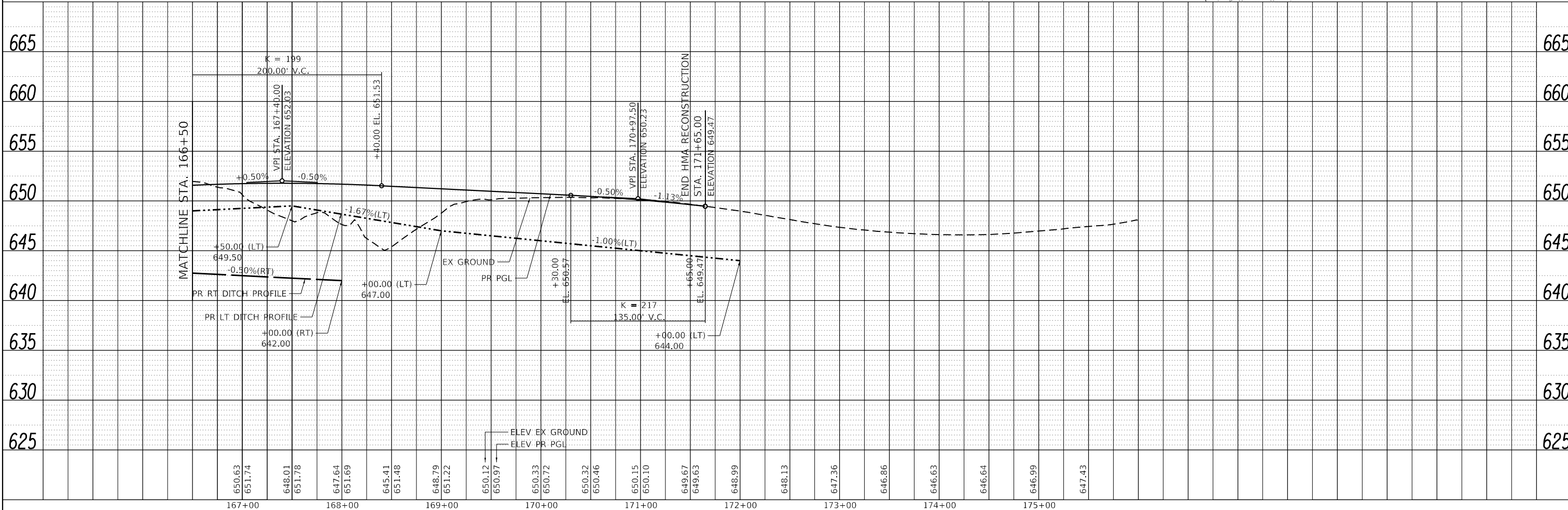
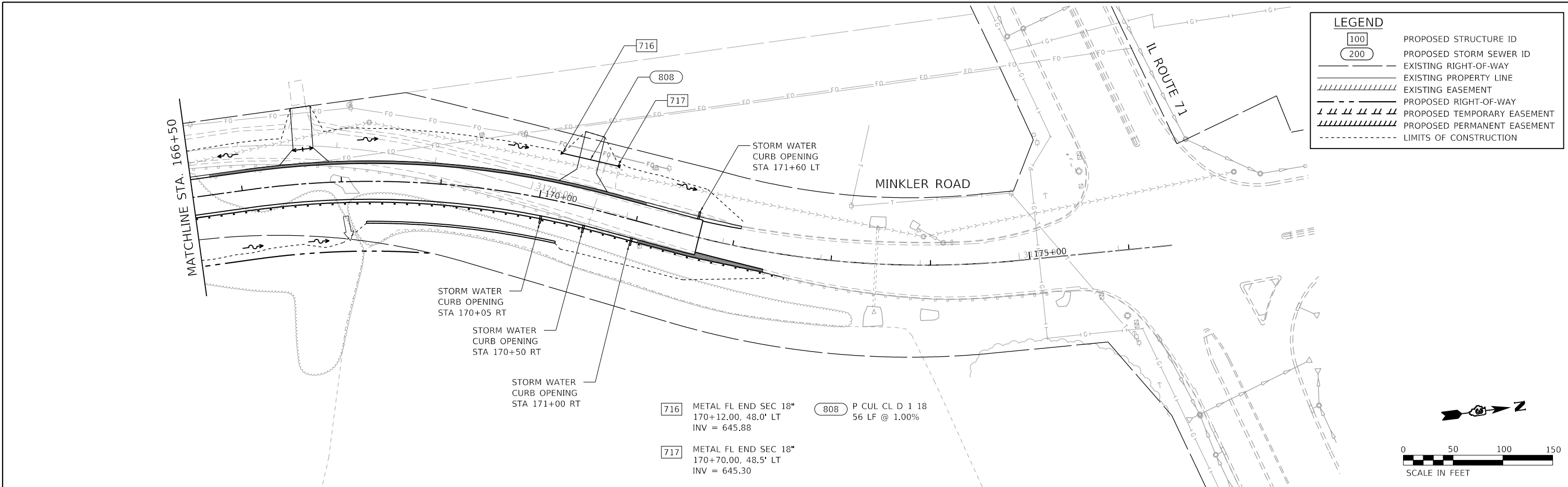
SCALE: SHEET 18 OF 23 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	119
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	
	CHECKED	
	FILED	
	CARD FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	

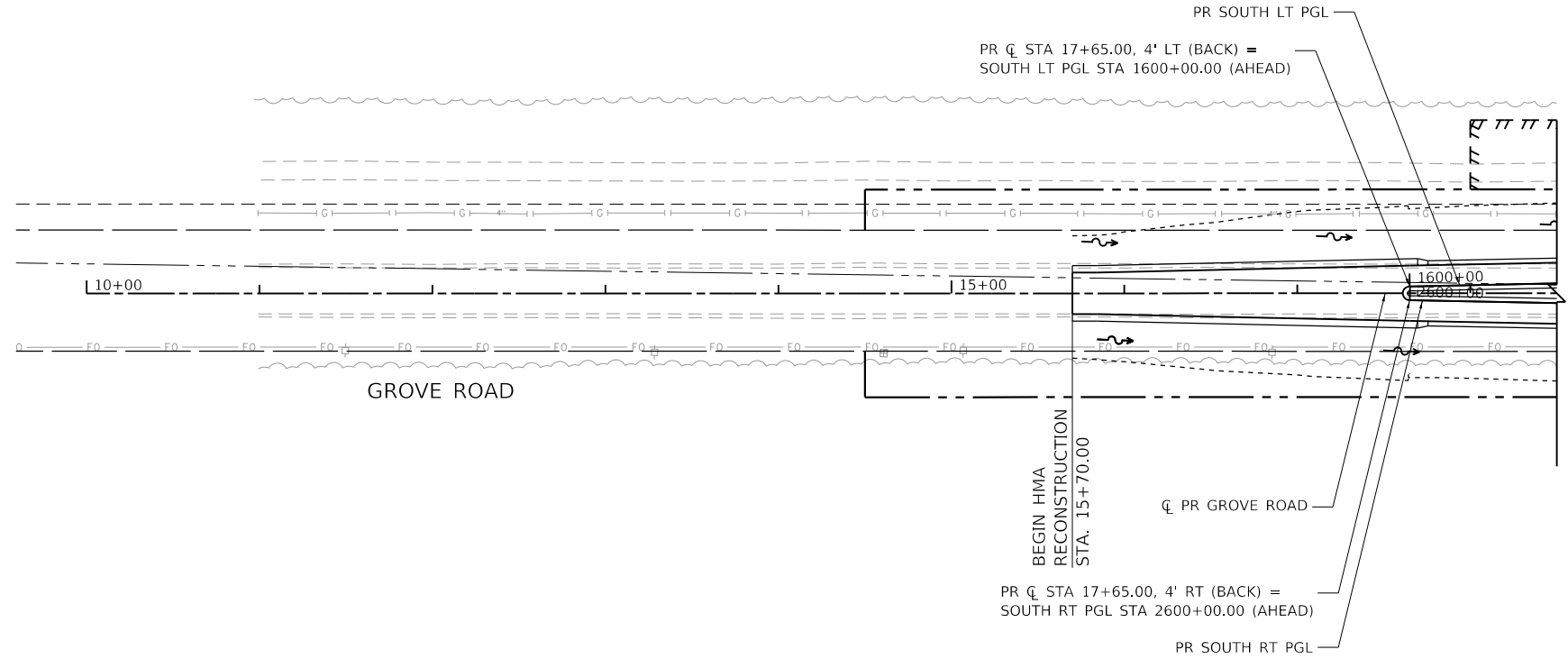
HRG PROJECT NO.: 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162.dwg
 PEN TABLE: 19162.tbl



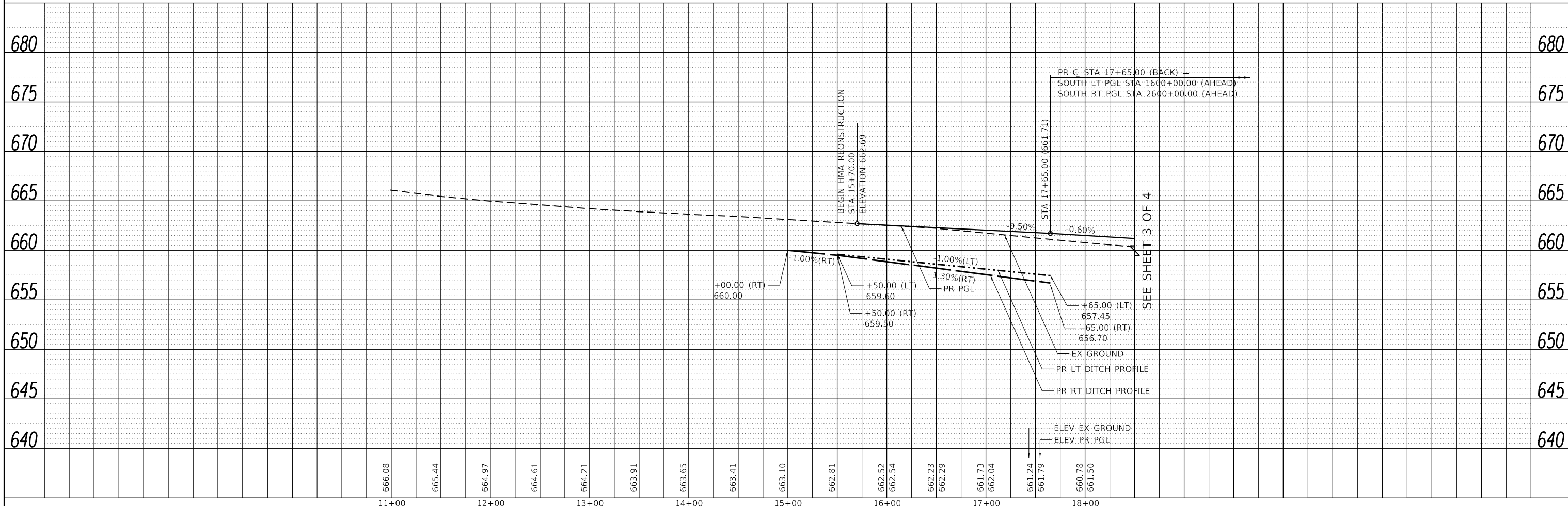
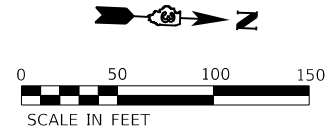
	USER NAME = amiller DESIGNED - JMR DRAWN - AJM CHECKED - APS DATE - 10/21/2022	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE PLAN AND PROFILE MINKLER ROAD (7 OF 7)	F.A.U. RTE. 2514	SECTION 19-00154-00-FP	COUNTY KENDALL	TOTAL SHEETS 312	SHEET NO. 120
	SCALE: SHEET 19 OF 23 SHEETS STA. TO STA.					CONTRACT NO. 87800 ILLINOIS FED. AID PROJECT			

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	ALIGNMENT CHECKED		
	NOTE BOOK NO.		
	FILE NAME		
	TABLE NO.		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	NOTE BOOK NO.		
	FILE NAME		
	TABLE NO.		



LEGEND	
100	PROPOSED STRUCTURE ID
200	PROPOSED STORM SEWER ID
---	EXISTING RIGHT-OF-WAY LINE
---	EXISTING PROPERTY LINE
////	EXISTING EASEMENT
---	PROPOSED RIGHT-OF-WAY
///	PROPOSED TEMPORARY EASEMENT
////	PROPOSED PERMANENT EASEMENT
---	LIMITS OF CONSTRUCTION



HRG PROJECT NO. 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162.dwg
 PEN TABLE: 19162.tbl



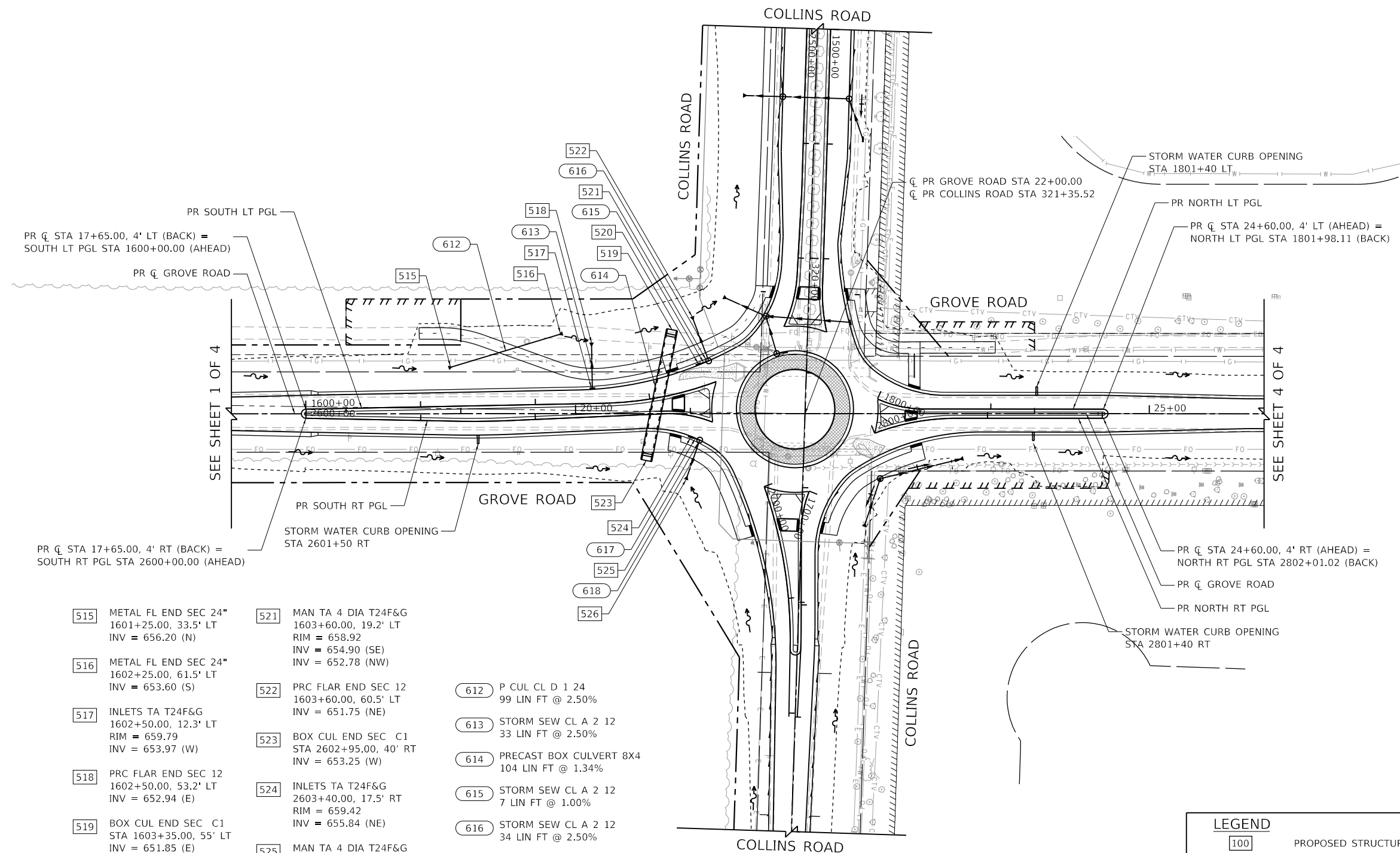
USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DRAINAGE PLAN AND PROFILE
 GROVE ROAD (1 OF 4)**

SCALE: SHEET 20 OF 23 SHEETS STA. TO STA.

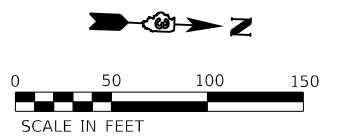
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	121
				CONTRACT NO. 87800
				ILLINOIS FED. AID PROJECT



- | | | |
|---|---|---|
| 515 METAL FL END SEC 24"
1601+25.00, 33.5' LT
INV = 656.20 (N) | 521 MAN TA 4 DIA T24F&G
1603+60.00, 19.2' LT
RIM = 658.92
INV = 654.90 (SE)
INV = 652.78 (NW) | 612 P CUL CL D 1 24
99 LIN FT @ 2.50% |
| 516 METAL FL END SEC 24"
1602+25.00, 61.5' LT
INV = 653.60 (S) | 522 PRC FLAR END SEC 12
1603+60.00, 60.5' LT
INV = 651.75 (NE) | 613 STORM SEW CL A 2 12
33 LIN FT @ 2.50% |
| 517 INLETS TA T24F&G
1602+50.00, 12.3' LT
RIM = 659.79
INV = 653.97 (W) | 523 BOX CUL END SEC C1
STA 2602+95.00, 40' RT
INV = 653.25 (W) | 614 PRECAST BOX CULVERT 8X4
104 LIN FT @ 1.34% |
| 518 PRC FLAR END SEC 12
1602+50.00, 53.2' LT
INV = 652.94 (E) | 524 INLETS TA T24F&G
2603+40.00, 17.5' RT
RIM = 659.42
INV = 655.84 (NE) | 615 STORM SEW CL A 2 12
7 LIN FT @ 1.00% |
| 519 BOX CUL END SEC C1
STA 1603+35.00, 55' LT
INV = 651.85 (E) | 525 MAN TA 4 DIA T24F&G
2603+50.00, 18.5' RT
RIM = 659.34
INV = 655.76 (SW)
INV = 654.67 (SE) | 616 STORM SEW CL A 2 12
34 LIN FT @ 2.50% |
| 520 INLETS TA T24F&G
1603+50.00, 18.7' LT
RIM = 658.99
INV = 654.99 (NW) | 526 PRC FLAR END SEC 12
1603+60.00, 60.5' LT
INV = 651.75 (NE) | 617 STORM SEW CL A 2 12
7 LIN FT @ 0.80% |
| | | 618 STORM SEW CL A 2 12
29 LIN FT @ 2.16% |

LEGEND

- 100 PROPOSED STRUCTURE ID
- 200 PROPOSED STORM SEWER ID
- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- EXISTING EASEMENT
- PROPOSED RIGHT-OF-WAY
- PROPOSED TEMPORARY EASEMENT
- PROPOSED PERMANENT EASEMENT
- LIMITS OF CONSTRUCTION



HRG PROJECT NO.: 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162_drm2.dgn
 PEN TABLE: 19162.tbl



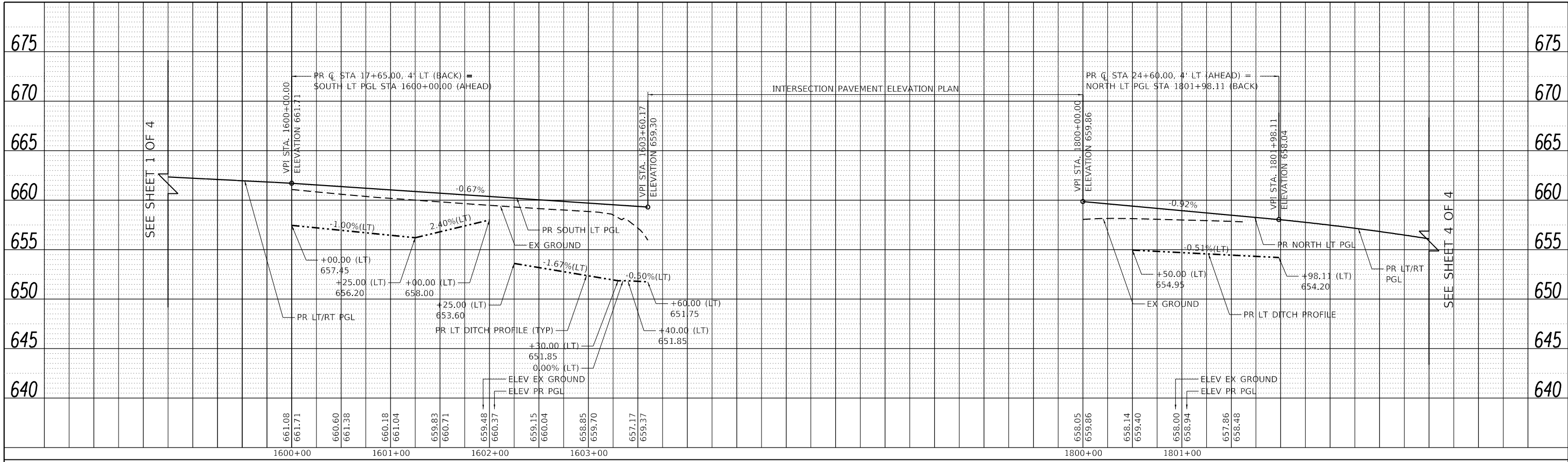
USER NAME = amiller	DESIGNED - JMR	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN - AJM	REVISED -
PLOT DATE = 10/21/2022	CHECKED - APS	REVISED -
	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DRAINAGE PLAN AND PROFILE GROVE ROAD (2 OF 4)	
SCALE:	SHEET 21 OF 23 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	122
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	ALIGNMENT CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	CARD FILE NAME	



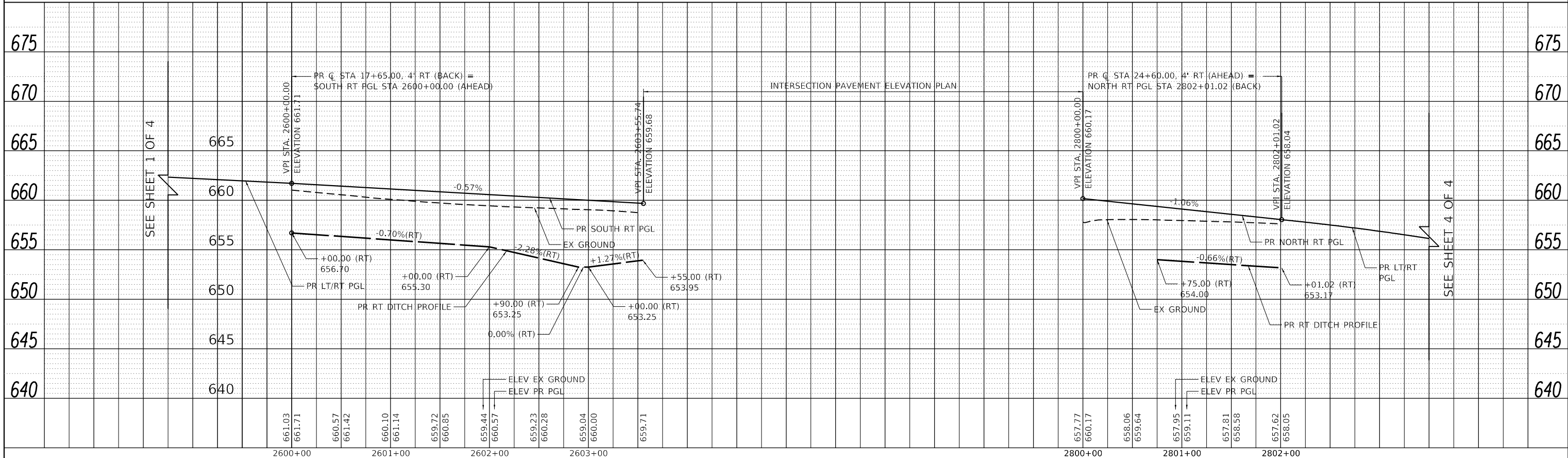
SOUTH LT PGL – GROVE ROAD

NORTH LT PGL – GROVE ROAD

SOUTH RT PGL – GROVE ROAD

NORTH RT PGL – GROVE ROAD

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	ALIGNMENT CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	CARD FILE NAME	



SOUTH RT PGL – GROVE ROAD

NORTH RT PGL – GROVE ROAD

HRG PROJECT NO. 19162
 HRG PROJ. CONTACT
 FILE NAME: 19152_drawing2.dgn
 PEN TABLE: 19152.tbl



USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

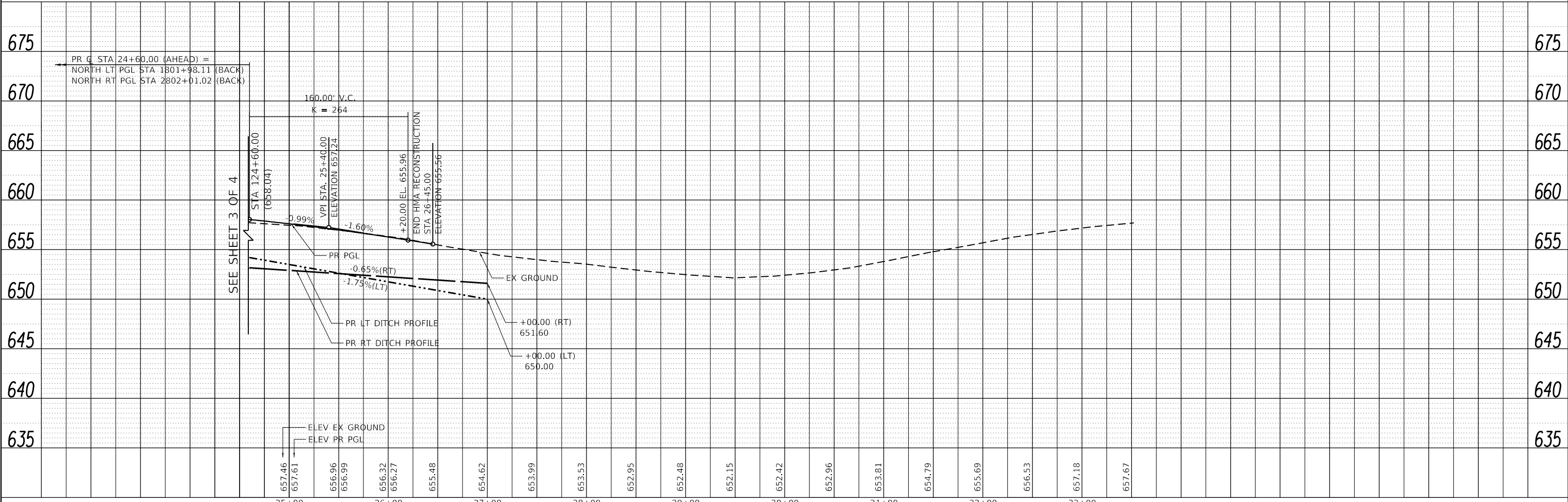
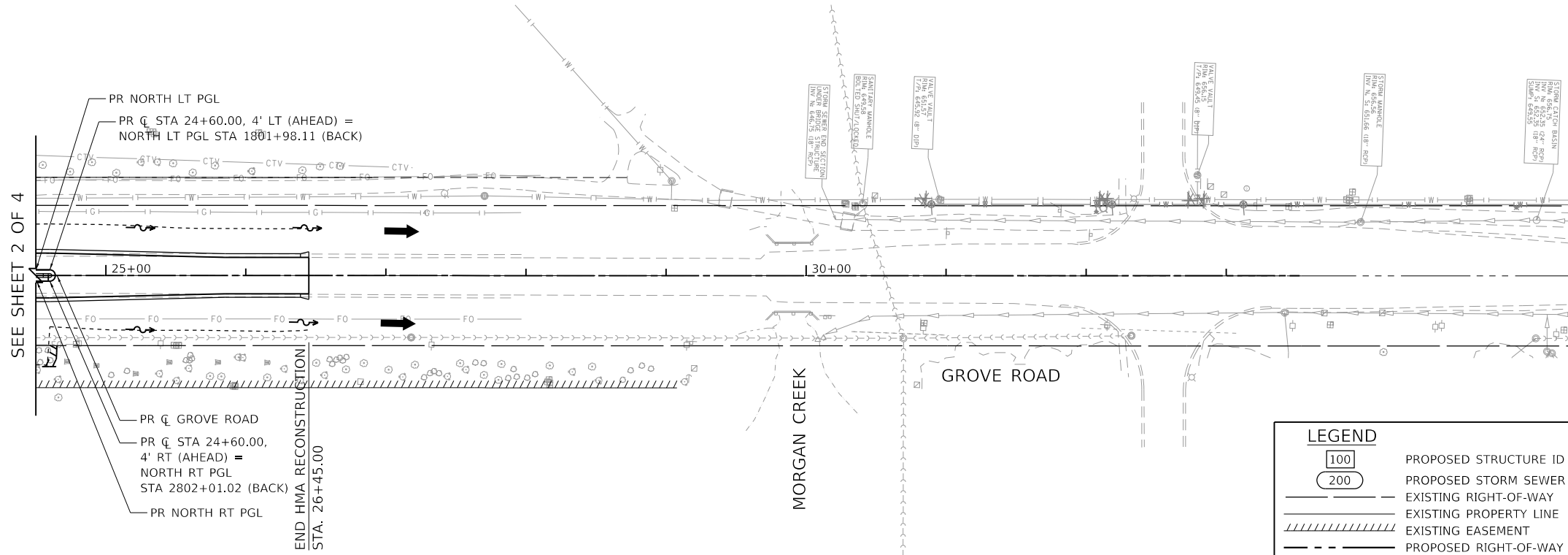
DRAINAGE PLAN AND PROFILE	
GROVE ROAD (3 OF 4)	
SCALE:	SHEET 22 OF 23 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	123
				CONTRACT NO. 87800
ILLINOIS		FED. AID PROJECT		

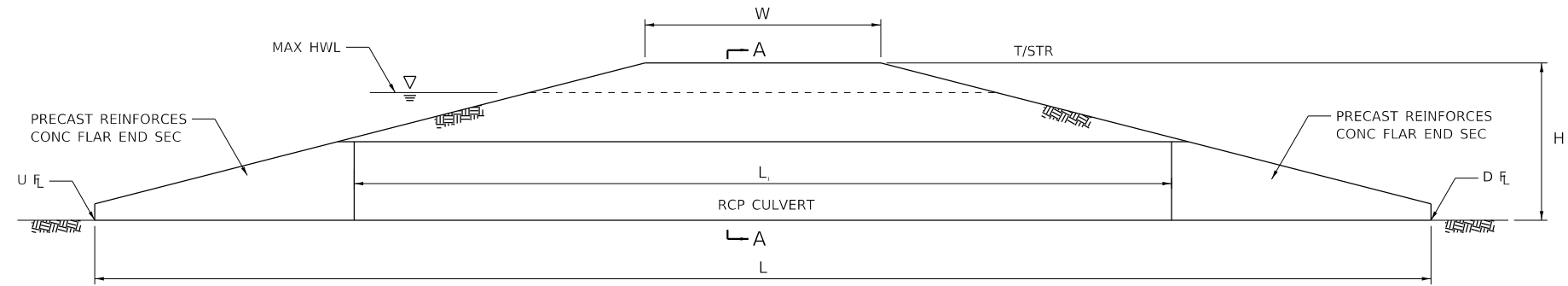
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PROFILE	SURVEYED	DATE
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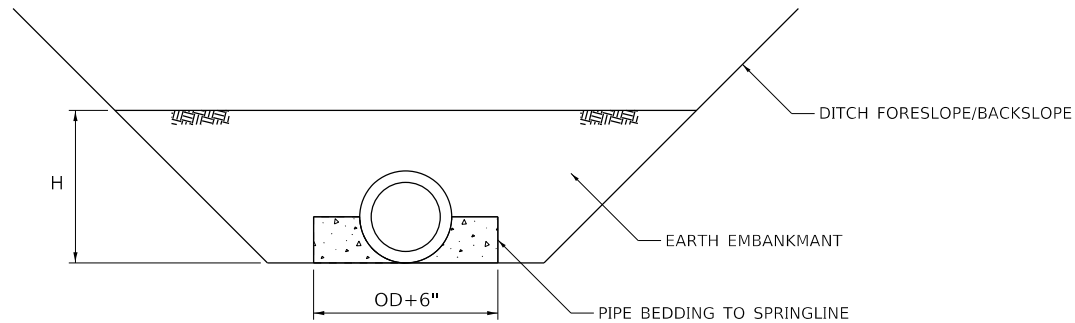
HRG PROJECT NO.: 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162_drain23.dgn
 PEN TABLE: 19162tbl.tbl



	USER NAME = amiller DESIGNED - JMR DRAWN - AJM CHECKED - APS DATE - 10/21/2022	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE PLAN AND PROFILE GROVE ROAD (4 OF 4)	F.A.U. RTE. 2514 SECTION 19-00154-00-FP COUNTY KENDALL TOTAL SHEETS 312 SHEET NO. 124 CONTRACT NO. 87800
	PLOT SCALE = 100.0000' / in. PLOT DATE = 10/21/2022	SCALE: SHEET 23 OF 23 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT



PROFILE VIEW



SECTION A-A

DESIGN ELEMENTS		VALUES
DRAINAGE AREA	X (ACRES)	SEE SCHEDULE
STORAGE VOLUME	V (CU YD)	SEE SCHEDULE
CHECK DAM TOP WIDTH	W (FEET)	SEE SCHEDULE
CHECK DAM HEIGHT	H (FEET)	SEE SCHEDULE
HORIZONTAL PIPE (P1)	P1 (DIAMETER)	SEE SCHEDULE
HORIZONTAL PIPE (P1)	L1 (LENGTH)	SEE SCHEDULE
HORIZONTAL PIPE (P1)	S1 (SLOPE)	SEE SCHEDULE
HIGH WATER ELEVATION	HWL (FEET)	SEE SCHEDULE
TOP OF STRUCTURE ELEVATION	T/STR (FEET)	SEE SCHEDULE
UPSTREAM FLOWLINE	U F/L (FEET)	SEE SCHEDULE
DOWNSTREAM FLOWLINE	D F/L (FEET)	SEE SCHEDULE
CENTERLINE FLOWLINE	C F/L (FEET)	SEE SCHEDULE

PERMANENT DITCH CHECK SCHEDULE

LOCATION	CHECK DAM TOP WIDTH W (FOOT)	CHECK DAM HEIGHT H (FOOT)	WEIR LENGTH (FOOT)	HORIZONTAL PIPE DIAMETER P1 (INCH)	HORIZONTAL PIPE LENGTH L1 (FEET)	HORIZONTAL PIPE SLOPE S1	ORIFICE DISCHARGE (CFS)	DETENTION HIGH WATER ELEVATION (FEET)	TOP OF STRUCTURE ELEVATION (T/STR)	UPSTREAM FLOWLINE U F/L (FEET)	DOWNSTREAM FLOWLINE D F/L (FEET)	CENTERLINE FLOWLINE C F/L (FEET)
1201+50 LT MINKLER RAB	4	1.5	10	12	16	0.50%	2.7	649.51	649.16	647.71	647.63	647.67
133+00 LT MINKLER RD	4	1.3	10	12	14	0.54%	2.3	650.20	649.86	648.67	648.59	648.63
147+00 LT MINKLER RD	4	1.7	20	12	17.5	0.45%	4.0	646.00	645.62	644.00	643.92	643.96
163+50 LT MINKLER RD	4	1.5	16	12	16	0.60%	4.7	650.04	648.90	647.50	647.40	647.45
144+00 RT MINKLER RD	4	1.6	12	12	16.5	0.50%	3.8	649.40	648.90	647.40	647.32	647.36
257+00 RT COLLINS RD	4	1.2	19	12	13.5	0.30%	3.1	642.78	641.51	640.35	640.31	640.33
251+50 RT COLLINS RD	4	1.9	16	12	19	0.30%	6.2	645.23	643.81	642.00	641.94	641.97
251+50 LT COLLINS RD	4	2.0	12	12	19.5	0.30%	4.5	645.10	644.25	642.35	642.29	642.32

HRG PROJECT NO: 19162
 HRG PROJ CONTACT:
 FILE NAME: 19162_drain-061.dgn
 PEN TABLE: 19162.tbl



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	DRAWN - AJM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DRAINAGE DETAILS
PERMANENT DITCH CHECK DETAIL**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	125
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES
FOR SANITARY SEWER CONSTRUCTION IN FOX METRO WATER RECLAMATION DISTRICT

- ALL SANITARY SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE "FOX METRO WATER RECLAMATION DISTRICT SEWER USE ORDINANCE NO. 885", THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", AND "77 ILLINOIS ADMINISTRATIVE CODE, PART 890, ILLINOIS PLUMBING CODE", LATEST EDITION.
- FINAL-APPROVED SET OF PLANS AND SPECIFICATIONS MUST BE KEPT ON THE JOB SITE. FAILURE TO DO THIS MAY RESULT IN A FINE AND/OR BE CONSIDERED CAUSE TO STOP THE JOB.
- CONTRACTORS FOR ALL SANITARY PUBLIC SEWER EXTENSION PROJECTS SHALL NOTIFY THE DISTRICT'S ENGINEERING DEPARTMENT TWENTY-FOUR (24) HOURS PRIOR TO THE START OF WORK. NOTIFICATION SHALL BE DONE VIA TELEPHONE AT (630) 301-6882, OR BY EMAIL AT SUBMITTALS@FOXMETRO.ORG.
- TO PREVENT ANY POSSIBLE INFILTRATION, INFLOW OR DEBRIS FROM ENTERING THE DOWNSTREAM SANITARY SYSTEM, A FACTORY-MADE PLUG SHALL BE PLACED IN THE MANHOLE BY THE CONTRACTOR, AS INDICATED ON THE FINAL-APPROVED PLANS. THE PLACEMENT OF THE PLUG(S) SHALL NOT INTERRUPT THE SERVICE OF ANY USER. THIS PLUG IS TO BE REMOVED ONLY UPON APPROVAL BY THE DISTRICT OR THE CITY/VILLAGE, AND ONLY AFTER ANY CONSTRUCTION DRAINAGE AND/OR DEBRIS HAS BEEN PROPERLY REMOVED. UNDER NO CIRCUMSTANCES IS OVERLAND SURFACE DRAINAGE ALLOWED TO DRAIN INTO THE SANITARY SYSTEM.
- ALL SANITARY SEWERS SHALL BE TESTED IN ACCORDANCE WITH SECTION 31-1.12 OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", INCLUDING ALL MANHOLES SHALL BE VACUUM TESTED (MANHOLE TESTING WILL BE IN ACCORDANCE WITH ASTM-1244-93 OR IN ACCORDANCE WITH DISTRICT REQUIREMENTS). IN CASE OF TESTING SPECIFICATION CONFLICT, WHERE DEEPER MANHOLES ARE CONSTRUCTED, THE MORE STRINGENT REQUIREMENT WILL APPLY.
- ONLY "INFI-SHIELD", "ADAPTOR-SEAL", AND "WRAPID SEAL" OR APPROVED EQUAL CHIMNEY SEALS SHALL BE INSTALLED ON ALL MANHOLES.
- ALL EXISTING SANITARY INTERCEPTOR (15" IN DIAMETER OR GREATER) MANHOLE FRAMES LOCATED WITHIN ANY PROPOSED DEVELOPMENT WILL BE REQUIRED TO BE ADJUSTED TO GRADE. UNDER NO CIRCUMSTANCES MAY THE VERTICAL HEIGHT OF THE ADJUSTING RINGS EXCEED EIGHT (8) INCHES (TWO TOTAL). IN SOME CASES, THE DISTRICT MAY REQUIRE LIDS TO BE AT THE DESIGNED FARM GRADE. EXTREME CARE SHOULD BE TAKEN WHEN WORKING NEAR ALL SANITARY MANHOLES.
- LANDSCAPING WITHIN ANY DISTRICT EASEMENT IS PROHIBITED WITHOUT REVIEW AND SUBSEQUENT PLAN APPROVAL.
- DISTRICT EASEMENTS SHALL BE GRADED SO THAT THE GROUND SURFACE DOES NOT EXCEED A SIX (6) PERCENT GRADIENT IN ALL DIRECTIONS, PARTICULARLY "SIDE-TO-SIDE WITHIN THE EASEMENT.
- ALL MANHOLE BARREL SECTIONS (INCLUDING THOSE SECTIONS OF EXISTING MANHOLES WHICH HAVE BEEN EXPOSED DURING CONSTRUCTION) SHALL BE REQUIRED TO BE EXTERNALLY SEALED WITH A *6" OR **9" WIDE (MIN.) WRAP MEETING THE REQUIREMENTS OF ASTM C-877, **TYPE II OR *TYPE III.
- ALL SAGS, LEAKS, PIPE DEFECTS, OR OTHER RELATED ISSUES WITH ANY NEWLY TELEVISED SANITARY SEWER SHALL BE REPAIRED BY THE CONTRACTOR AT THE DISCRETION OF THE DISTRICT. AFTER AN ON-SITE OR CCTV INSPECTION IS COMPLETED, THE DISTRICT SHALL PROVIDE WRITTEN VERIFICATION OF COMPLETED REPAIRS.
- THE DISTRICT SHALL TELEVIEW ALL INTERCEPTORS. IN ORDER TO ACCESS EACH MANHOLE, THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A SMOOTH, LEVEL AREA OF SUFFICIENT WIDTH ALONG THE SANITARY SEWER SYSTEM.
- DURING TELEVISIONING, IF ANY NEWLY CONSTRUCTED PUBLIC SEWER REQUIRES "HEAVY CLEANING", ADDITIONAL CHARGES MAY BE INCURRED BY THE CONTRACTOR.

FOX METRO WATER RECLAMATION DISTRICT
MANHOLE / SEWER PIPE MATERIALS AND INSTALLATION SPECIFICATIONS

PIPE & FITTINGS

PIPE AND FITTINGS USED IN SANITARY SEWER CONSTRUCTION SHALL BE POLYVINYL CHLORIDE (PVC) PIPE. PVC PIPE AND FITTINGS DATED OVER ONE-YEAR-OLD SHALL NOT BE PERMITTED FOR USE.

THE TYPES OF PVC PIPE AND FITTINGS THAT SHALL BE USED ARE: (OR MODIFY PER DESIGN)

* POLY VINYL CHLORIDE (PVC) PRESSURE RATED PIPE AND FITTINGS (AWWA DR-SERIES) CONFORMING TO AWWA C-900 AND ASTM NUMBERS D-1784 (CELL CLASSIFICATION), D-3139 (JOINT SPEC), F-477 & F-913 (GASKETS).

ALL PVC PLASTIC PIPE AND FITTINGS SHALL HAVE A CELL CLASSIFICATION OF 12454 (DREW CONFIRM THIS AND THE NEXT PARAGRAPH?) AS DEFINED IN ASTM D-1784 AND SHALL HAVE MINIMUM PIPE STIFFNESS AS SHOWN BELOW IN TABLE 1. THE REQUIRED STANDARD DIMENSION RATIO (SDR) OR DIMENSION RATIO (DR) FOR PVC PIPE FITTINGS ABOVE TWELVE (12) INCHES SHALL BE MOLDED OR FABRICATED WITH ELASTOMERIC JOINTS IN ACCORDANCE WITH ASTM STANDARDS D-1784 AND D-3139 INCORPORATING THE MANUFACTURER'S STANDARD PIPE BELLS AND GASKETS. GASKETS SHALL CONFORM TO ASTM F-477 AND ASTM F-913.

THE DISTRICT RESERVES THE RIGHT TO APPROVE/REJECT ALL PIPE AND FITTINGS ON A CASE-BY-CASE BASIS.

BEDDING, HAUNCHING, AND INITIAL BACKFILL

BEDDING MATERIAL SHALL BE CA-7 CLASS 1A, AS OUTLINED IN ASTM D-2321 AND SHALL BE CERTIFIED BY THE MANUFACTURER AND APPROVED BY THE DISTRICT PRIOR TO INSTALLATION, TO HAVE THE FOLLOWING CHARACTERISTICS:

* DESCRIPTION: SHALL BE CRUSHED STONE OR CRUSHED GRAVEL, AS PRODUCED BY MECHANICAL MEANS.

* GRADATION: SHALL MEET THE IDOT GRADATION OF CA-7, CLASS 1A.

* PLASTICITY INDEX: SHALL MEET A PLASTICITY INDEX OF 0 TO 4 PERCENT AS DETERMINED BY THE METHOD GIVEN IN AASHTO T 90.

* SPECIFIC GRAVITY: SHALL HAVE A SPECIFIC GRAVITY (DRY) OF GREATER THAN 2.45.

LABORATORY TEST

THE DISTRICT RESERVES THE RIGHT TO REQUIRE A CONTRACTOR TO SUBMIT CERTIFIED COPIES OF ALL REPORTS OF TESTS CONDUCTED BY AN INDEPENDENT LABORATORY BEFORE INSTALLATION OF PVC PLASTIC PIPE. TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH STANDARD METHOD OF TEST FOR "EXTERNAL LOADING PROPERTIES OF PLASTIC PIPE BY PARALLEL-PLATE LOADING" PER ASTM D2412.

PIPE INSTALLATION AND FIELD TESTING

1. INSTALLATION

TRENCH WIDTHS SHOULD BE STABLE OR SUPPORTED, PROVIDE A WIDTH SUFFICIENT, BUT NO GREATER THAN NECESSARY TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE HAUNCHING AND OTHER EMBEDMENT MATERIALS. THE MINIMUM TRENCH WIDTH SHALL BE 32" PLUS THE OUTSIDE DIAMETER OF THE PIPE AND THE MAXIMUM TRENCH WIDTH SHALL BE 48" PLUS THE OUTSIDE DIAMETER OF THE PIPE. PIPES SHALL BE LAID IN A MANNER WHICH PROVIDES UNIFORM SUPPORT OVER THE ENTIRE LENGTH. NO BLOCKING OF ANY KIND SHALL BE USED TO ADJUST THE PIPE TO GRADE EXCEPT WHEN EMBEDMENT CONCRETE IS USED. BEDDING SHALL BE A MINIMUM OF SIX (6) INCHES IN DEPTH. THE BEDDING MATERIAL SHALL BE PLACED AND WORKED IN AROUND PIPE BY HAND TO PROVIDE UNIFORM SUPPORT, THEN AROUND AND OVER THE CROWN OF THE PIPE BY A MINIMUM OF TWELVE (12) INCHES. THE GRANULAR EMBEDMENT MATERIAL SHALL BE PLACED AND CONSOLIDATED ALONG THE FULL WIDTH OF THE TRENCH. THE CONTRACTOR SHALL BE REQUIRED TO INSTALL THE PIPE IN SUCH A MANNER THAT THE DIAMETRIC DEFLECTION OF THE PIPE SHALL NOT EXCEED FIVE (5) PERCENT.

2. TESTING

BEFORE FINAL ACCEPTANCE, ALL PUBLIC SEWERS SHALL BE TESTED IN ACCORDANCE WITH SECTION 31-1.12 OF THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" (*SEE ITEM #2 UNDER "MANHOLE INSTALLATION AND FIELD TESTING" BELOW FOR VACUUM TESTING).

ALL PIPELINES CONSTRUCTED OF POLYVINYL CHLORIDE (PVC) SHALL BE SUBJECT TO AIR EXFILTRATION, DEFLECTION, VACUUM AND TELEVISIONING TESTS.

THE DEFLECTION TEST SHALL BE PERFORMED NO SOONER THAN THIRTY (30) DAYS AFTER THE BACKFILLING OPERATION AND SHALL CONSIST OF MEASURING THE PIPE FOR VERTICAL RING DEFLECTION. MAXIMUM RING DEFLECTION OF THE PIPELINE UNDER LOAD SHALL BE LIMITED TO FIVE (5) PERCENT OF THE INTERNAL PIPE DIAMETER. ALL PIPES EXCEEDING THIS DEFLECTION SHALL BE CONSIDERED TO HAVE REACHED THE LIMIT OF ITS SERVICEABILITY AND SHALL BE RE-LAID OR REPLACED BY THE CONTRACTOR AT THEIR SOLE EXPENSE.

THE COST OF ALL DEFLECTION TESTING SHALL BE BORNE BY THE CONTRACTOR AND SHALL BE ACCOMPLISHED BY PULLING A MANDREL, SPHERE, OR PIN-TYPE "GO / NO GO" DEVICE, WITH A DIAMETER EQUAL TO NINETY-FIVE (95) PERCENT OF THE UN-DEFLECTED INSIDE DIAMETER OF THE FLEXIBLE PIPE THROUGH THE PIPELINE. PIPE SHALL BE CONSTRUCTED SO THAT THE INTERNAL DIAMETER DOES NOT DECREASE BY MORE THAN FIVE (5) PERCENT.

ALL SANITARY SEWER INTERCEPTORS SHALL BE TELEVISED BY THE DISTRICT. SAID TELEVISIONING WORK IS SCHEDULED ONCE ALL SANITARY TESTING (AIR & VACUUM) HAS BEEN RECEIVED. ANY DEFECTS IN SAID SEWER SHALL BE EXCAVATED, THEN REPAIRED, AT THE CONTRACTOR'S OR DEVELOPER'S SOLE EXPENSE. CAUTION SHOULD BE TAKEN BEFORE CONSTRUCTING ROADS, CURBS, SIDEWALKS OR ANY OTHER INFRASTRUCTURE, WHETHER IT IS ABOVE OR BELOW THE GROUND SURFACE. IT IS THE RESPONSIBILITY OF THE UTILITY CONTRACTOR AND THE DEVELOPER TO CONTACT THE DISTRICT PRIOR TO INSTALLING ANY OF THESE UTILITIES OR INFRASTRUCTURE. REPAIRS TO DEFECTIVE SANITARY SEWERS SHALL BE PERFORMED REGARDLESS OF THE STATUS OF OTHER CONSTRUCTION OR EXTRANEIOUS EXPENSES.

MANHOLE INSTALLATION AND FIELD TESTING

1. INSTALLATION

ALL MANHOLE CASTINGS, ADJUSTING RINGS AND MANHOLE SECTIONS SHALL BE SET IN BUTYL ROPE. THE INSIDE JOINTS OF MANHOLE SECTIONS, ADJUSTING RINGS, AND FRAME SHALL NOT BE MORTARED. HOWEVER, THE AREA BETWEEN THE PIPE AND FLOW CHANNEL SHALL BE FILLED WITH CEMENT MORTAR TO PROVIDE A FLUSH SMOOTH SURFACE.

EACH MANHOLE CONE AND BARREL SECTION JOINT SHALL ALSO BE EXTERNALLY SEALED WITH A *6" OR **9" WIDE (MIN.) SEALING BAND OF RUBBER AND MASTIC. THE BAND SHALL HAVE AN OUTER LAYER OF RUBBER OR POLYETHYLENE WITH AN UNDER LAYER OF RUBBERIZED MASTIC (WITH A PROTECTIVE FILM), MEETING THE REQUIREMENTS OF ASTM C-877, **TYPE II OR *TYPE III.

A MAXIMUM OF EIGHT (8) INCHES OF ADJUSTING RINGS (2 TOTAL RINGS) IS ALLOWED. THE FRAME, CHIMNEY, AND TOP "LIP" OF THE CONE SECTION SHALL BE REQUIRED TO BE SEALED WITH A CHIMNEY SEAL.

ONLY "ADAPTOR-SEAL", "INFI-SHIELD", CANUSA (WRAPID SEAL), OR AN APPROVED EQUAL WILL BE ALLOWED. DO NOT USE UNAPPROVED SEALS.

2. TESTING

EACH NEW MANHOLE SHALL BE VACUUM TESTED AFTER MANHOLE IS AT FINISHED GRADE. THE MANHOLE FRAME, ADJUSTING RINGS AND CHIMNEY SEALS SHALL BE IN PLACE WHEN TESTING. ALL LIFT HOLES SHALL BE PLUGGED WITH A NON-SHRINKING GROUT. NO GROUT SHALL BE PLACED IN THE HORIZONTAL JOINTS BEFORE, AFTER OR DURING TESTING IN ORDER TO ACHIEVE A PASSING TEST RESULT. ALL PIPES ENTERING THE MANHOLE SHALL BE PLUGGED, TAKING CARE TO SECURELY BRACE THE PLUGS FROM BEING DRAWN INTO THE MANHOLE. A VACUUM OF TEN (10) INCHES OF MERCURY SHALL BE DRAWN AND THE VACUUM PUMP SHUT OFF. WITH THE VALVES CLOSED, THE TIME SHALL BE MEASURED FOR THE VACUUM TO DROP TO NINE (9) INCHES OF MERCURY (HG) FOR THE FOLLOWING TIME PERIODS FOR EACH SIZE MANHOLE:

*FORTY-EIGHT (48) INCHES DIAMETER - SIXTY (60) SECONDS

*SIXTY (60) INCHES DIAMETER - SEVENTY-FIVE (75) SECONDS

*SEVENTY-TWO (72) INCHES DIAMETER - NINETY (90) SECONDS

*MANHOLE TESTING WILL BE IN ACCORDANCE WITH ASTM-1244-93 OR IN ACCORDANCE WITH DISTRICT REQUIREMENTS. IN CASE OF CONFLICT, THE MORE STRINGENT REQUIREMENT WILL APPLY (E.G. WHERE DEEPER MANHOLES ARE CONSTRUCTED).

THE CONTRACTOR SHALL PROVIDE ALL MATERIAL AND EQUIPMENT NECESSARY FOR TESTING. SHOULD THE MANHOLE FAIL THE VACUUM TEST, THE STRUCTURE SHALL BE DISASSEMBLED TO A POINT THAT SAID LEAK CAN BE REPAIRED WITH BUTYL ROPE. AFTER THE REPAIR IS COMPLETE, THE MANHOLE SHALL BE RE-TESTED UNTIL A SATISFACTORY RESULT IS OBTAINED.

HRG PROJECT NO.: 19162
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 HRGreen.com
 Micro Professional Design Firm
 #184-001322



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	DRAWN - AJM	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FMWRD SANITARY SEWER INTERCEPTOR
GENERAL NOTES AND SPECIFICATIONS

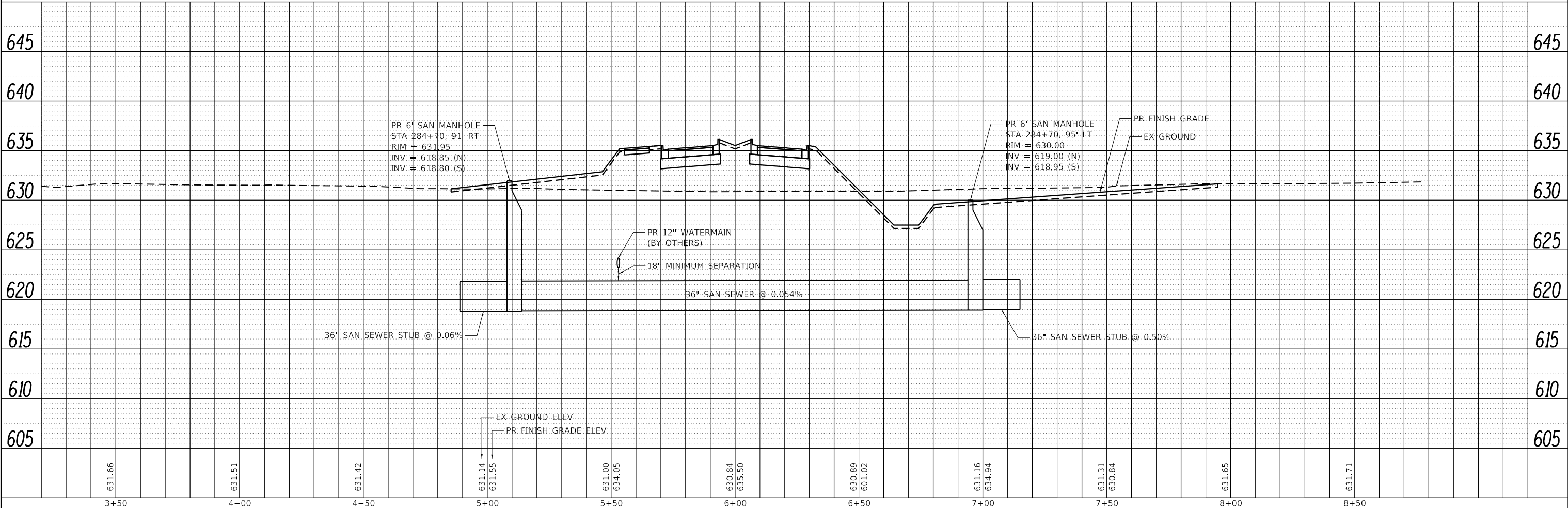
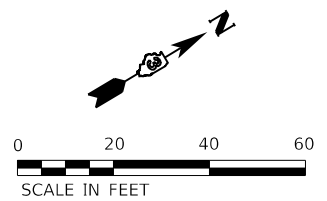
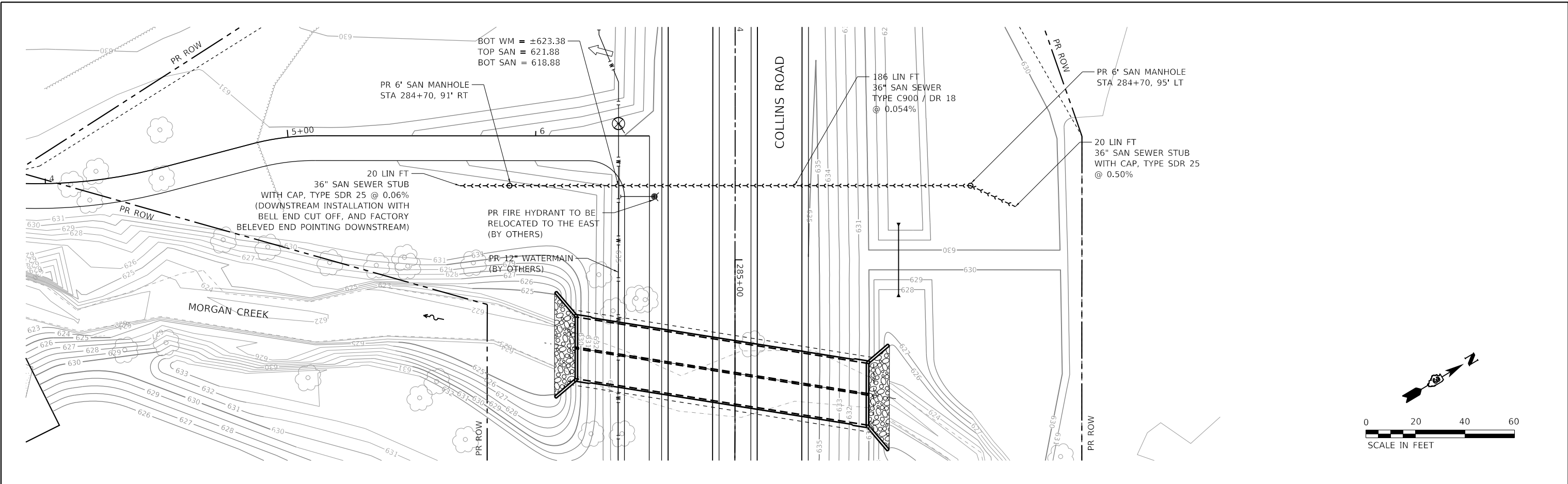
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 87800	
		ILLINOIS FED. AID PROJECT		

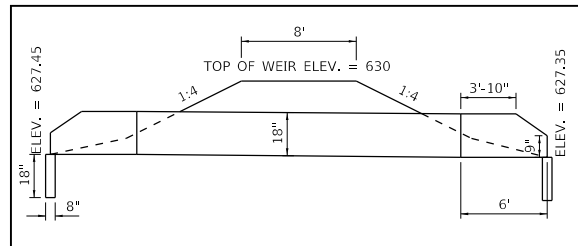
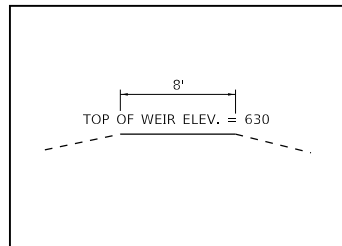
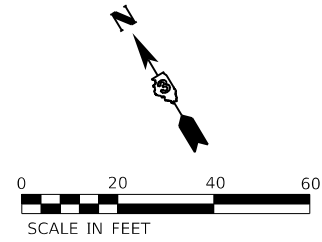
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PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
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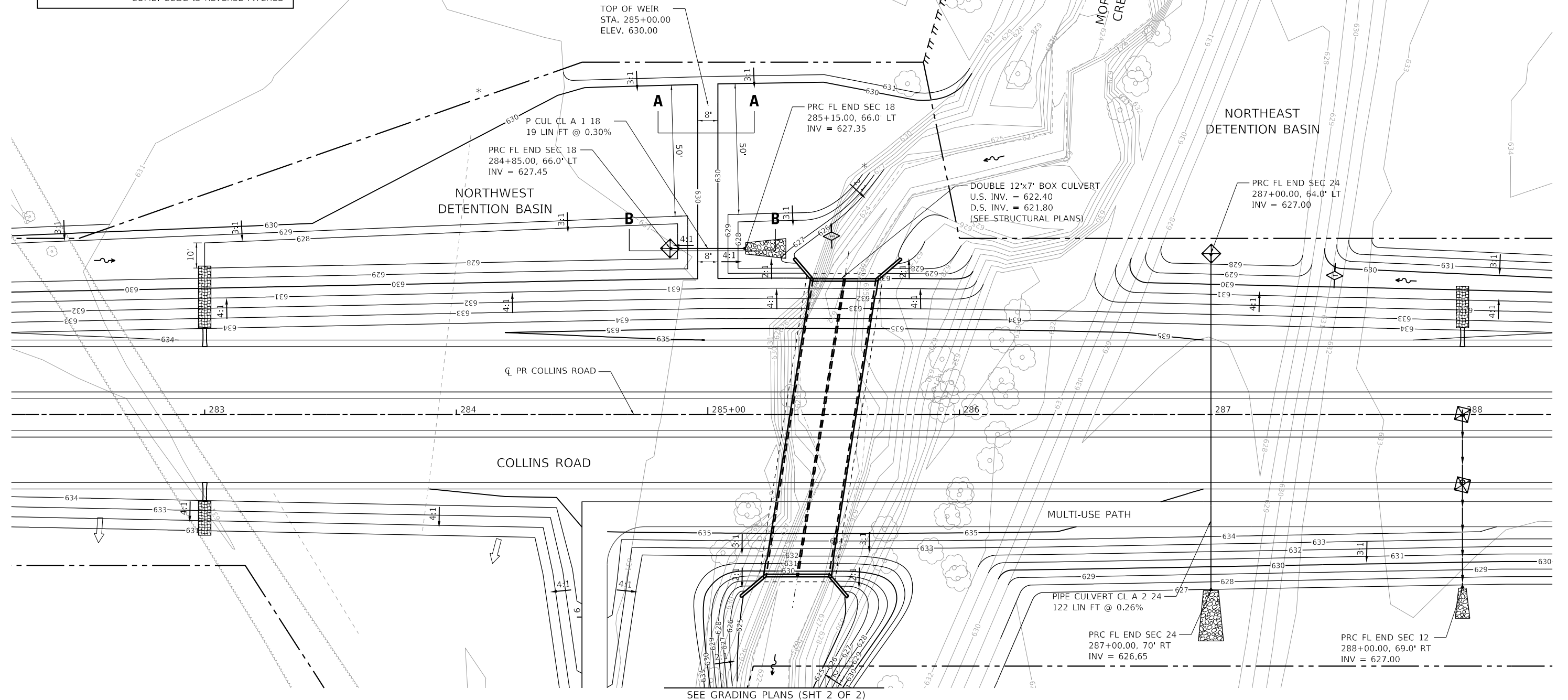


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	HRGreen.com Illinois Professional Design Firm #184-001322	SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT		



LEGEND

- EXISTING RIGHT-OF-WAY
- EXISTING PROPERTY LINE
- //// EXISTING EASEMENT
- - - - PROPOSED RIGHT-OF-WAY
- ||||| PROPOSED TEMPORARY EASEMENT
- ||||| PROPOSED PERMANENT EASEMENT
- - - - PROPOSED CONSTRUCTION LIMITS
- INDICATES AREAS WHERE MEDIAN COMB. CC&G IS REVERSE PITCHED



HRG PROJECT NO. 19162
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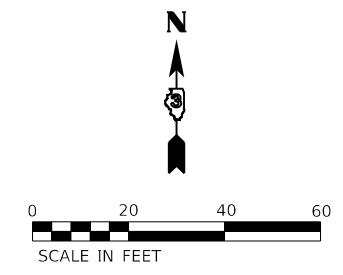
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PLOT DATE = 10/21/2022	CHECKED - APS	REVISED -
	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

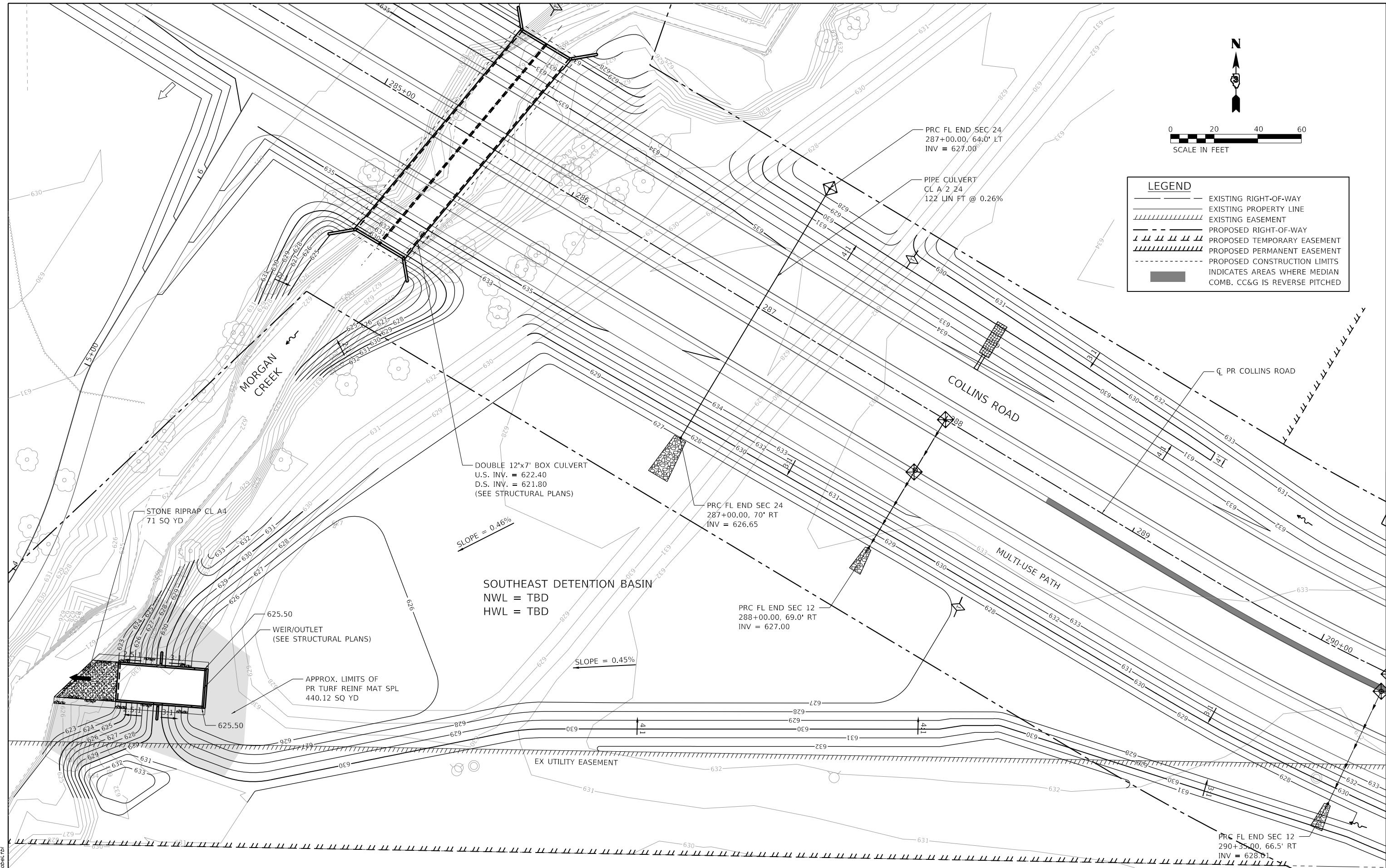
**GRADING PLAN
DETENTION BASINS (SHEET 1 OF 2)**

SCALE: SHEET 1 OF 5 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	128
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				



LEGEND	
	EXISTING RIGHT-OF-WAY
	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	PROPOSED RIGHT-OF-WAY
	PROPOSED TEMPORARY EASEMENT
	PROPOSED PERMANENT EASEMENT
	PROPOSED CONSTRUCTION LIMITS
	INDICATES AREAS WHERE MEDIAN COMB. CC&G IS REVERSE PITCHED



HRG PROJECT NO. 19162
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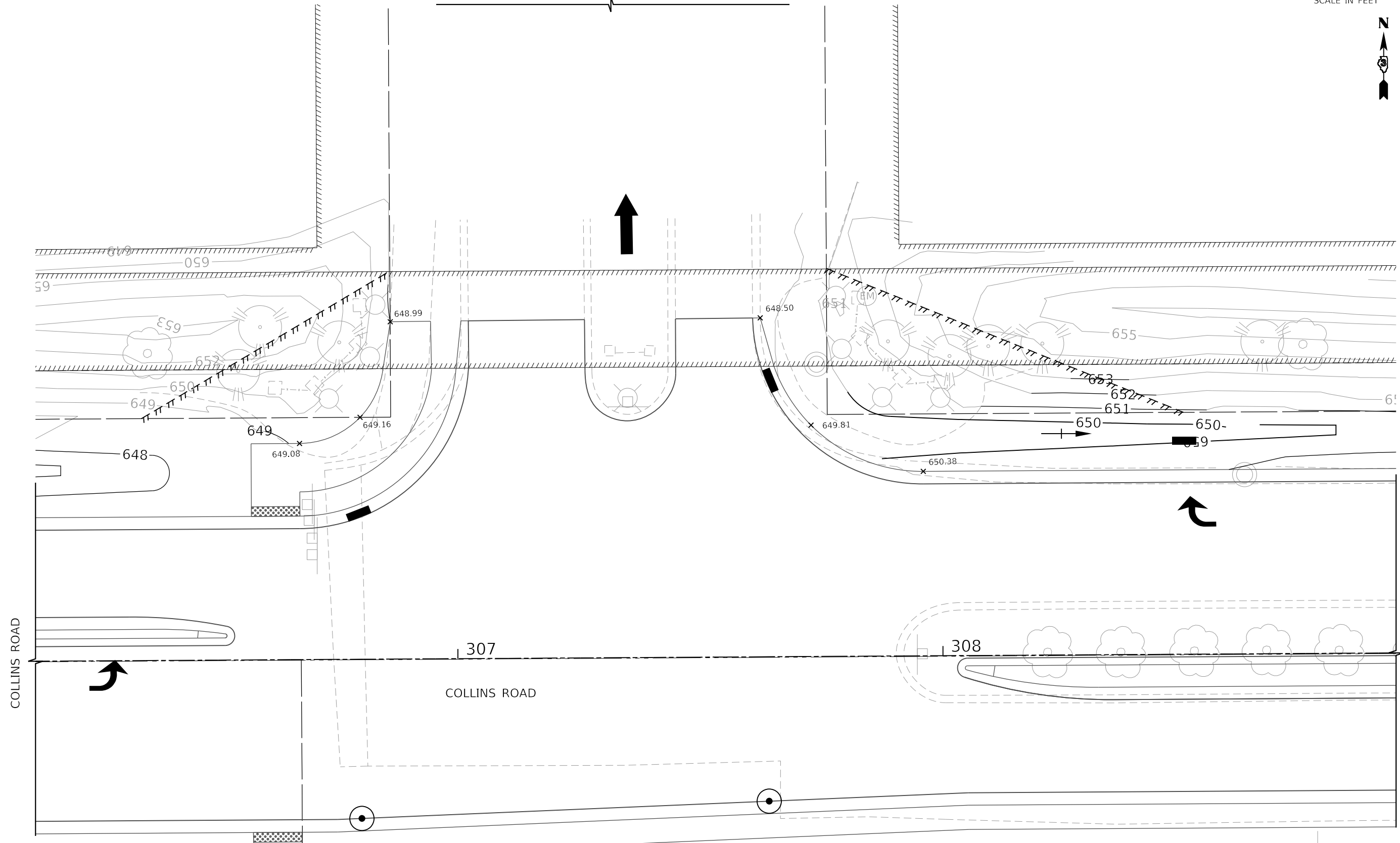
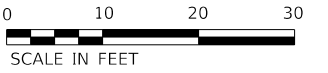
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PLOT DATE = 10/21/2022	CHECKED - APS	REVISED -
	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCALE:		GRADING PLAN	
		DETENTION BASINS (SHEET 2 OF 2)	
SHEET 2 OF 5 SHEETS	STA.	TO STA.	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	129
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

BLUE HERON DRIVE



HRG PROJECT NO.: 19162
HRG PROJ. CONTACT:
FILE NAME: 19162_19162.dwg
PEN TABLE: 19162.tbl



USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION





GRADING PLAN	
COLLINS ROAD AT BLUE HERON DRIVE	
SCALE:	SHEET 3 OF 5 SHEETS STA. TO STA.

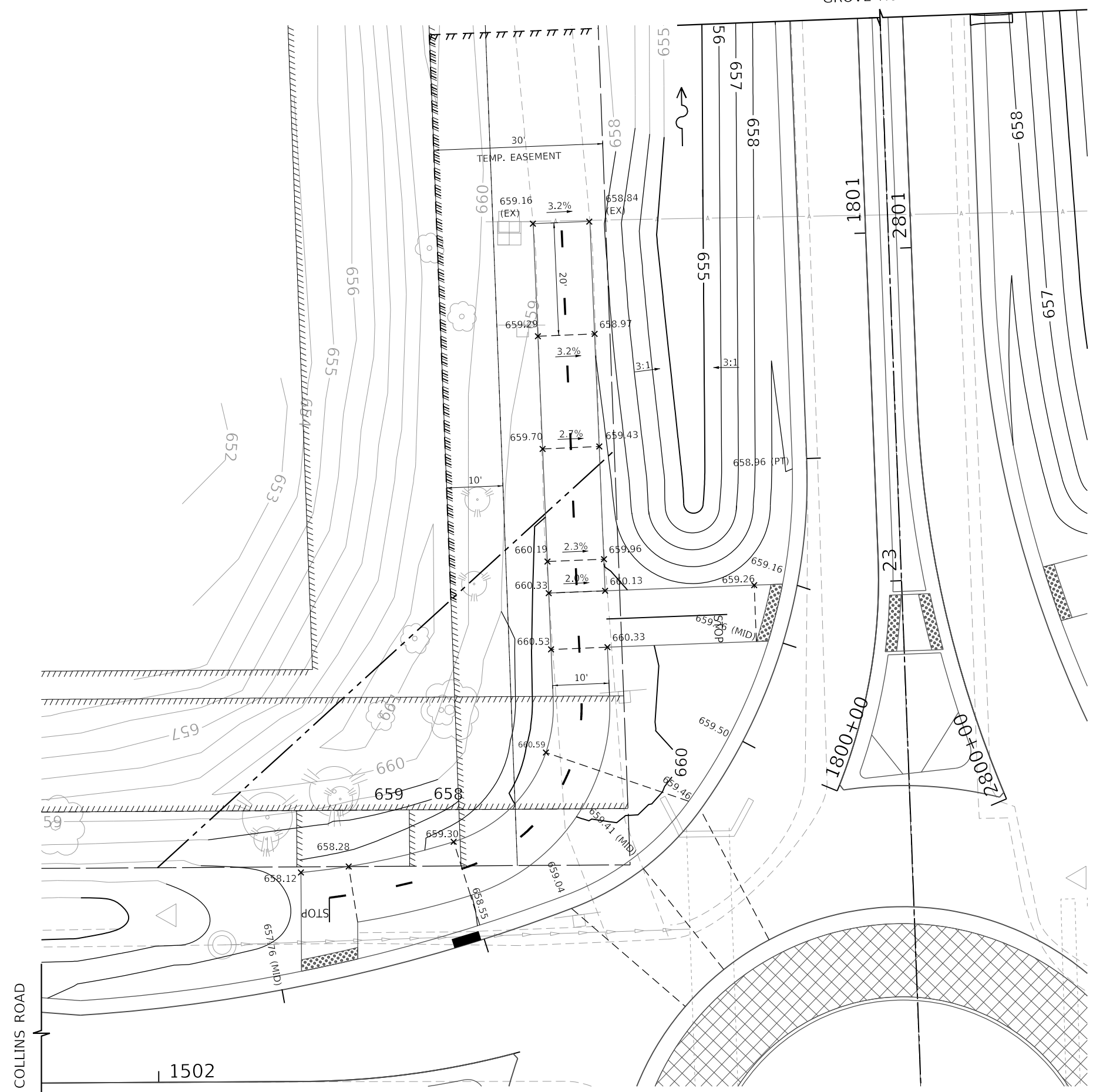
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	130
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

GROVE ROAD



LEGEND

-  INDICATES AREAS WHERE MEDIAN COMB CC&G IS REVERSE PITCHED
-  PROPOSED DEPRESSED CURB
-  PROPOSED DETECTABLE WARNINGS
-  LIMITS OF TYPE M-4 CURB AND GUTTER



HRG PROJECT NO: 19162
 HRG PROJ CONTACT:
 FILE NAME: 19162_19162.dwg
 PEN TABLE: 19162.tbl



HRGreen.com
 Illinois Professional Design Firm
 #184-001322

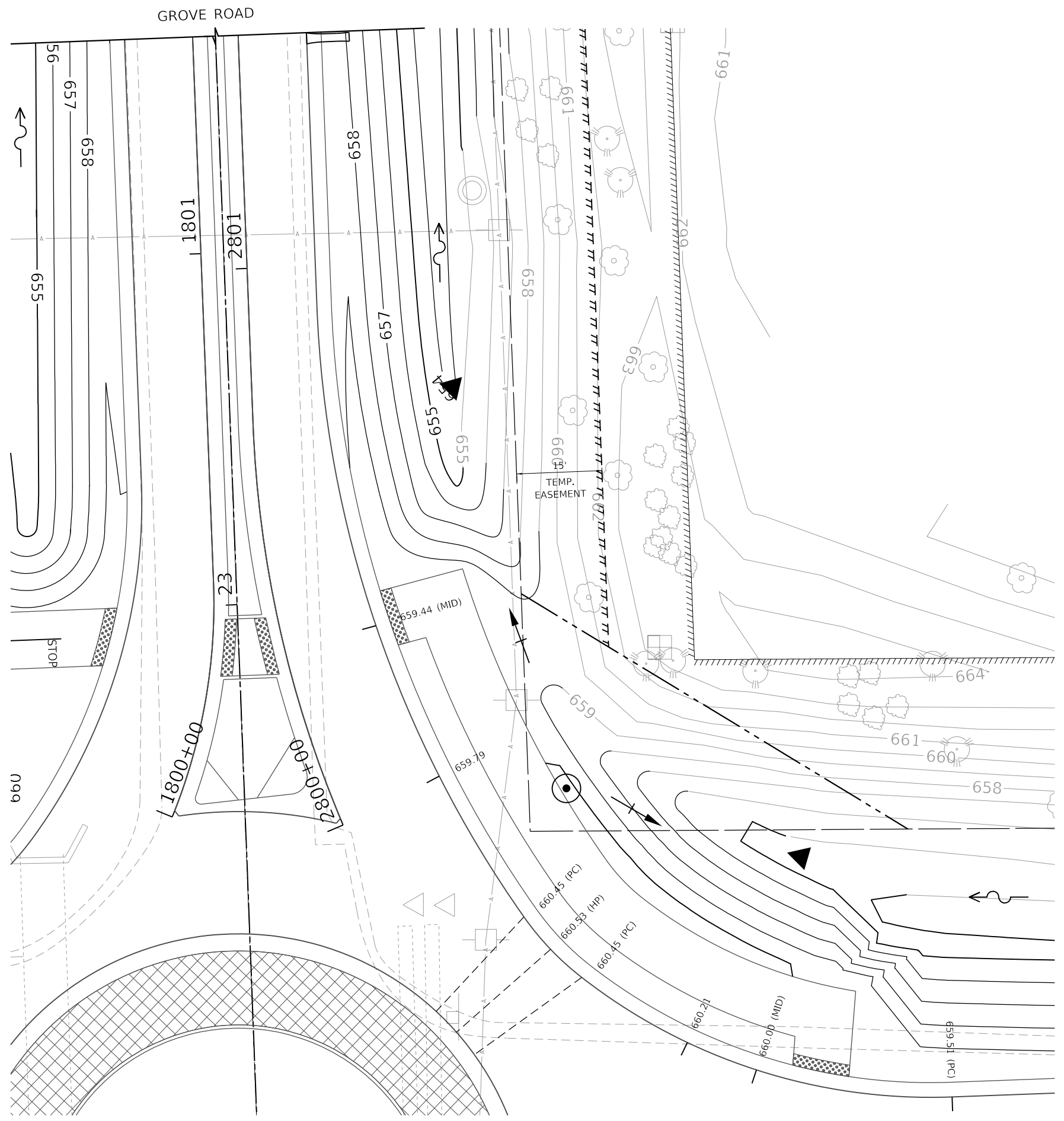
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PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**GRADING PLAN
 COLLINS ROAD AT GROVE ROAD
 (SHEET 1 OF 2)**

SCALE: SHEET 4 OF 5 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	131
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				



LEGEND

	INDICATES AREAS WHERE MEDIAN COMB CC&G IS REVERSE PITCHED
	PROPOSED DEPRESSED CURB
	PROPOSED DETECTABLE WARNINGS
	LIMITS OF TYPE M-4 CURB AND GUTTER

HRG PROJECT NO.: 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162_19-00154-00-FP
 PEN TABLE: 19-00154-00-FP



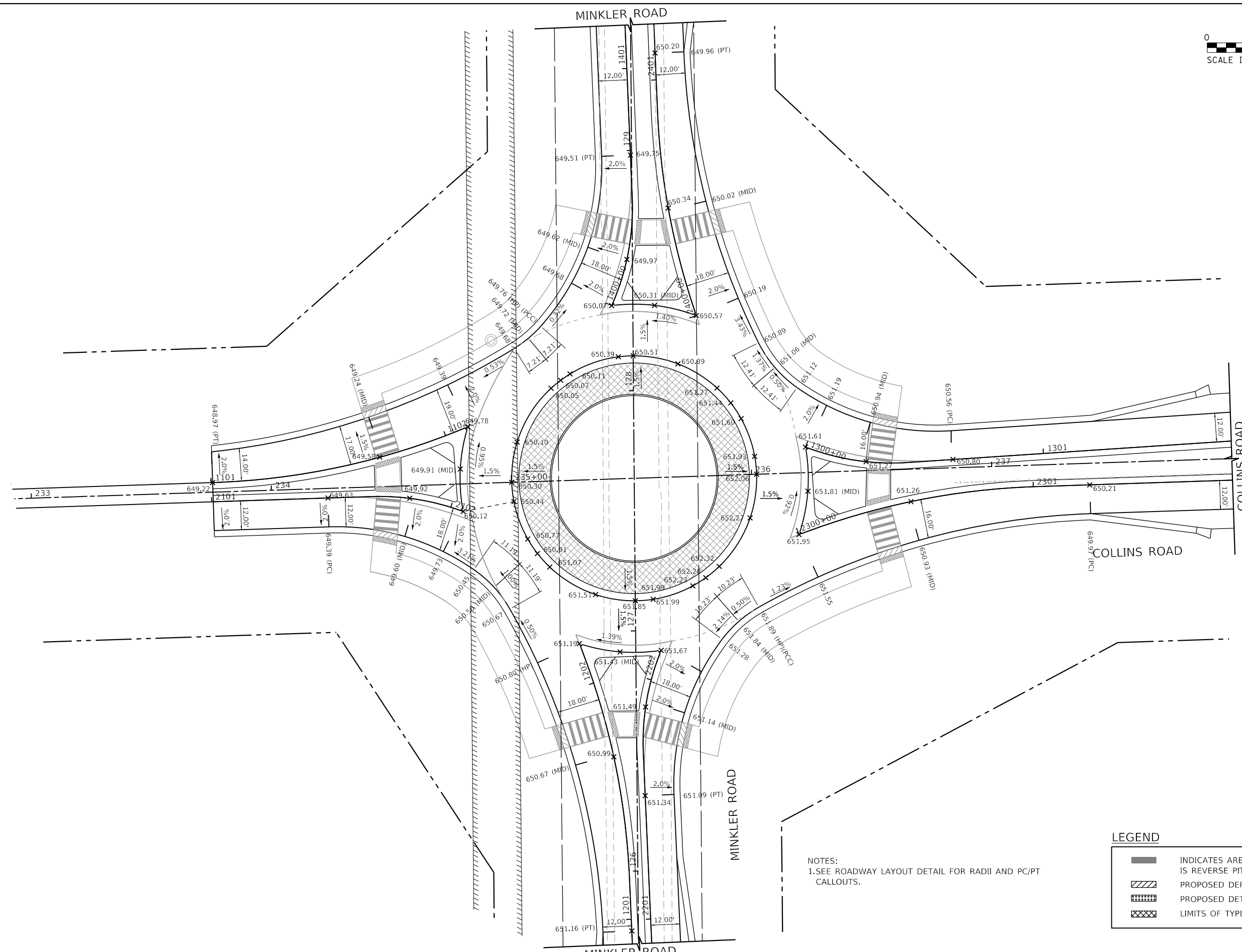
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PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GRADING PLAN
COLLINS ROAD AT GROVE ROAD
(SHEET 2 OF 2)**

SCALE: SHEET 5 OF 5 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	132
CONTRACT NO. 87800			ILLINOIS FED. AID PROJECT	



NOTES:
1. SEE ROADWAY LAYOUT DETAIL FOR RADII AND PC/PT CALLOUTS.

LEGEND

	INDICATES AREAS WHERE MEDIAN COMB CC&G IS REVERSE PITCHED
	PROPOSED DEPRESSED CURB
	PROPOSED DETECTABLE WARNINGS
	LIMITS OF TYPE M-4 CURB AND GUTTER

HRG PROJECT NO.: 19162
 HRG PROJ. CONTACT:
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 PEN TABLE: 19162.tbl

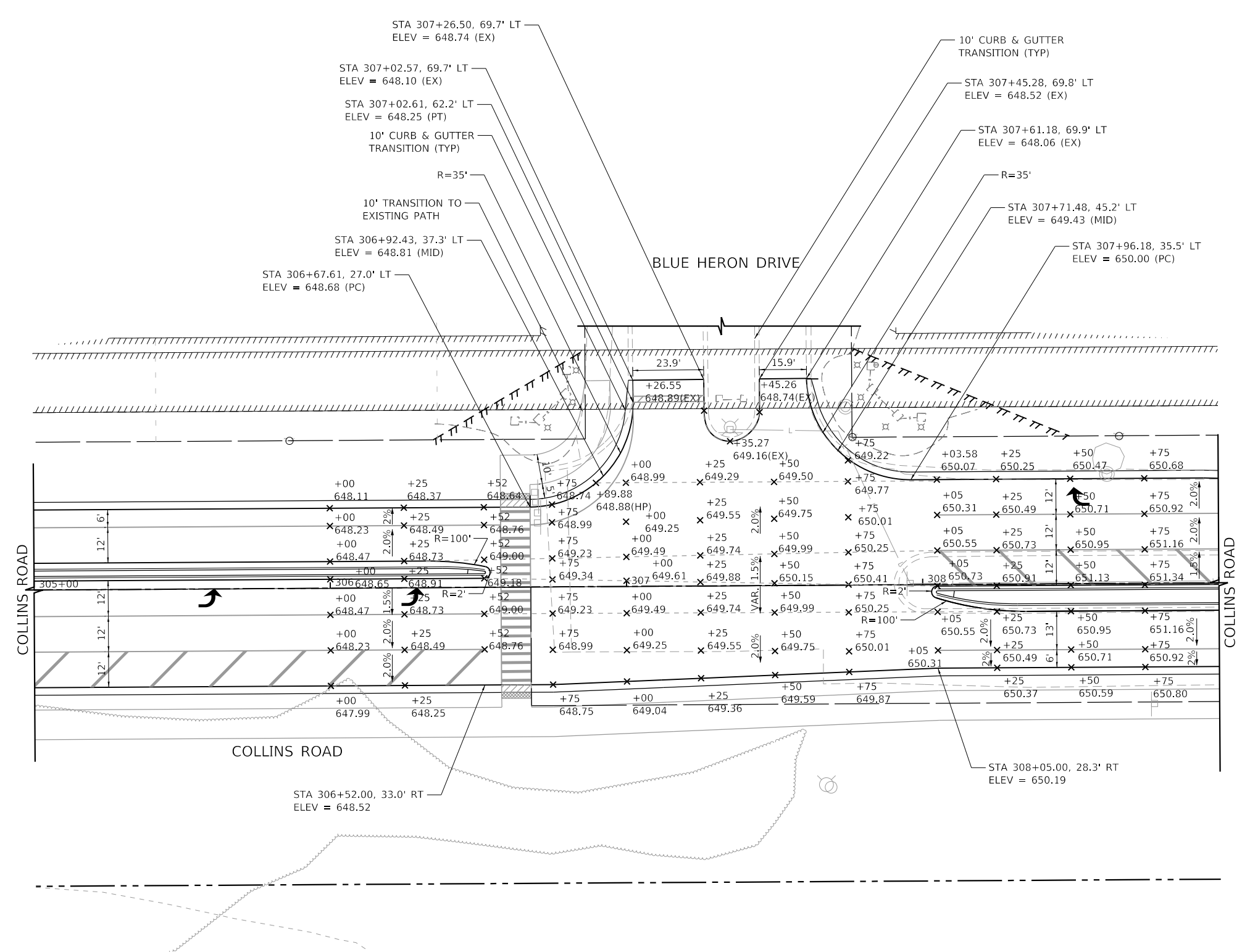


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	DRAWN - AJM	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERSECTION PAVEMENT ELEVATION PLAN			
COLLINS ROAD AT MINKLER ROAD			
SCALE:	SHEET 1 OF 3 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	133
CONTRACT NO. 87800				
ILLINOIS		FED. AID PROJECT		



LEGEND

- INDICATES AREAS WHERE MEDIAN COMB CC&G IS REVERSE PITCHED
- PROPOSED DEPRESSED CURB
- PROPOSED DETECTABLE WARNINGS
- LIMITS OF TYPE M-4 CURB AND GUTTER

HRG PROJECT NO.: 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162_19162.dgn
 PEN TABLE: 19162.tbl



USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

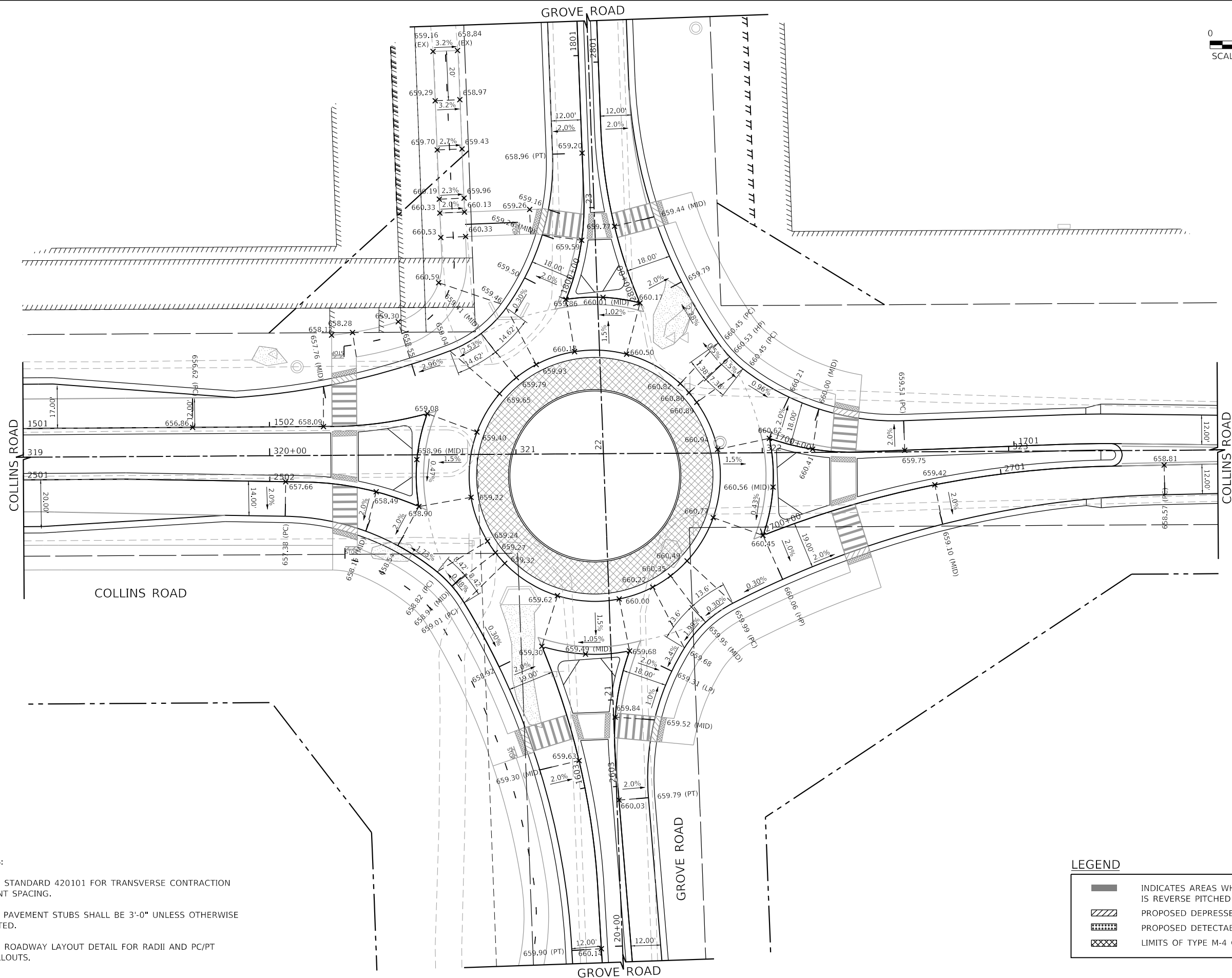
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

INTERSECTION PAVEMENT ELEVATION PLAN			
COLLINS ROAD AT BLUE HERON DRIVE			
SCALE:	SHEET 2 OF 3 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	134
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

0 20 40 60

SCALE IN FEET



NOTES:

1. SEE STANDARD 420101 FOR TRANSVERSE CONTRACTION JOINT SPACING.
2. ALL PAVEMENT STUBS SHALL BE 3'-0" UNLESS OTHERWISE NOTED.
3. SEE ROADWAY LAYOUT DETAIL FOR RADII AND PC/PT CALLOUTS.

LEGEND

	INDICATES AREAS WHERE MEDIAN COMB CC&G IS REVERSE PITCHED
	PROPOSED DEPRESSED CURB
	PROPOSED DETECTABLE WARNINGS
	LIMITS OF TYPE M-4 CURB AND GUTTER

HRG PROJECT NO: 19162
 HRG PROJ CONTACT:
 FILE NAME: 19162_19162.dgn
 PEN TABLE: 19162.tbl



USER NAME = amiller	DESIGNED - JMR	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - AJM	REVISED -
PLOT DATE = 10/21/2022	CHECKED - APS	REVISED -
	DATE - 10/21/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERSECTION PAVEMENT ELEVATION PLAN			
COLLINS ROAD AT GROVE ROAD			
SCALE:	SHEET 3 OF 3 SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	135
CONTRACT NO. 87800			ILLINOIS FED. AID PROJECT	

NOTES:

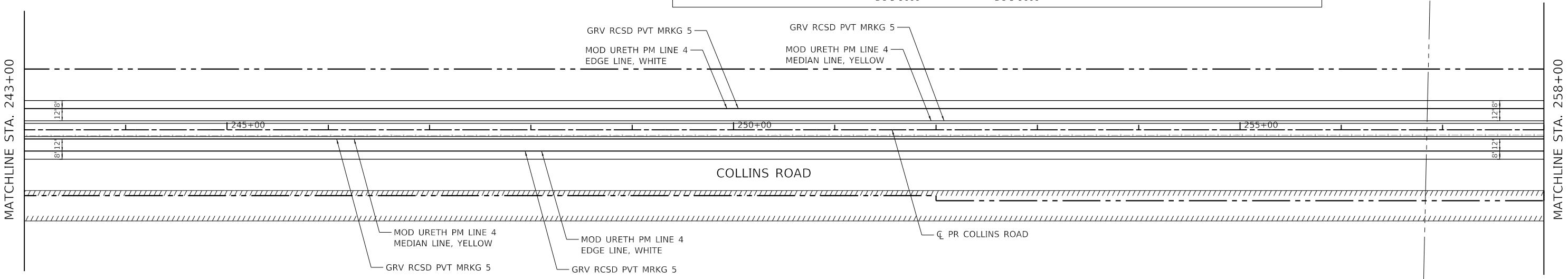
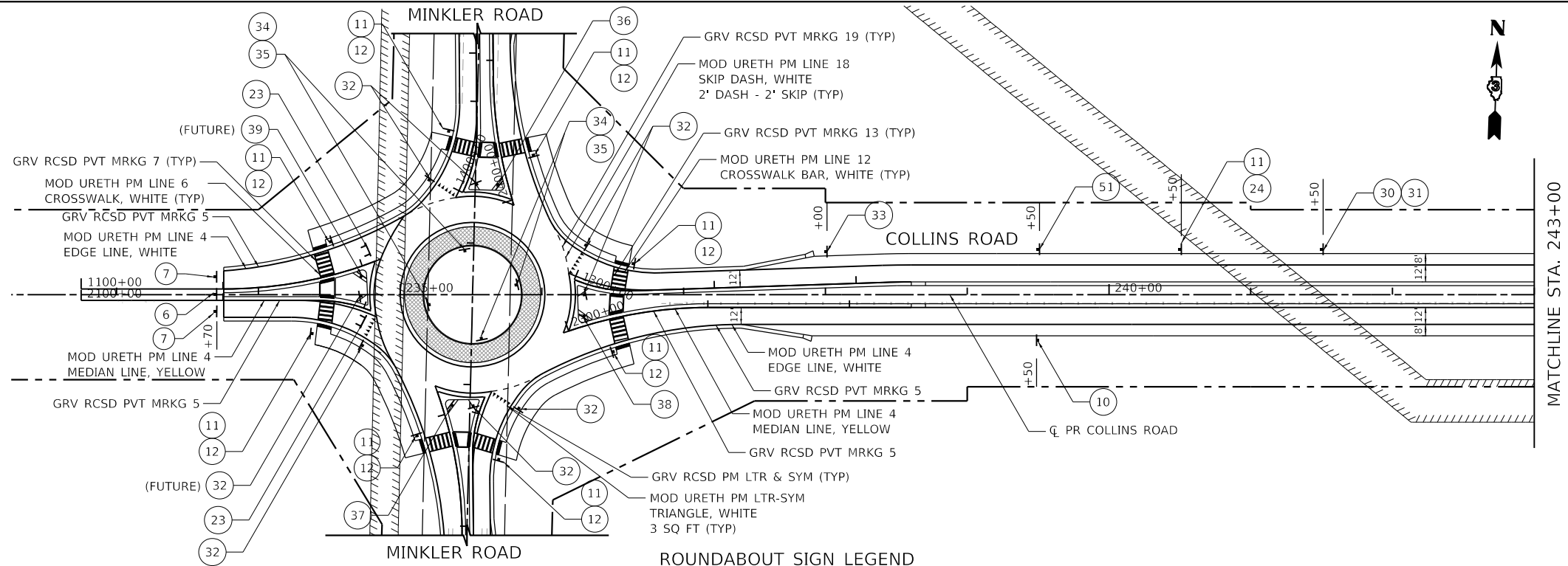
1. THE PAVEMENT MARKING ON THIS PROJECT SHALL BE MODIFIED URETHANE.
2. ALL NEW SIGNS SHALL HAVE SIGN FACE MATERIAL IN ACCORDANCE WITH THE IDOT FABRICATION OF HIGHWAY SIGN POLICY PER SECTION 1091 OF THE STANDARD SPECIFICATIONS.
3. ALL EXISTING SIGNS SHALL BE REMOVED UNLESS OTHERWISE NOTED ON THE PLANS.
4. THE CONTRACTOR SHALL MATCH THE EXISTING PAVEMENT MARKINGS AT PROJECT LIMITS AS NECESSARY.
5. 12" X 12" BLOCKOUTS SHALL BE PROVIDED FOR SIGN POSTS IN CONCRETE SURFACE. THE COST FOR THE BLOCKOUTS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

SIGN LEGEND

1	2	3	4	5	6	7	8
R1-1-3636	W4-1100-3018 (BLACK ON YELLOW)	R3-8-3030	R3-8-3030	R4-7-2430	R11-1100-4830	OM4-1-1818	W1-7-4824
9	10	11	12	13	14	15	16
R2-1-3036	R2-1-3036	W11-2-3636	W16-7PL-2412	W2-2-3636	W2-2-3636	W1-2L-3636	W1-2R-3636
17	18	19	20	21	22	23	24
W16-8P-3009	W16-8P-3009	W16-8P-3009	W16-8P-3009	W16-8P-3009	W3-3-3636	R11-2-4830	W16-9P-2412

ROUNDAABOUT SIGN LEGEND

30	31	32	33	34	52	53
W2-6-3636	W13-1P-1818	R1-2-3636	W3-2A-3636	R6-1R-3612	D1-5-9666 (FUTURE)	D1-5-9666
35	36	37	38	39	54	55
R6-4a-4824	D1-1d-2418	D1-1d-2418	D1-1d-2418	D1-1d-2418	D1-5-9666	D1-5-9666
40	41	50	51	56	57	
D1-1d-2418	D1-1d-2418	D1-5-9666	D1-5-9666	D1-5-9666	D1-5-9666	



HRG PROJECT NO. 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162_Pmk01.dgn
 PEN TABLE: 19162.tbl

HRGreen.com
 Micro Professional Design Firm
 #184-001322

USER NAME = amiller	DESIGNED - JMR	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - AJM	REVISED -
PLOT DATE = 10/21/2022	CHECKED - APS	REVISED -
	DATE - 10/21/2022	REVISED -

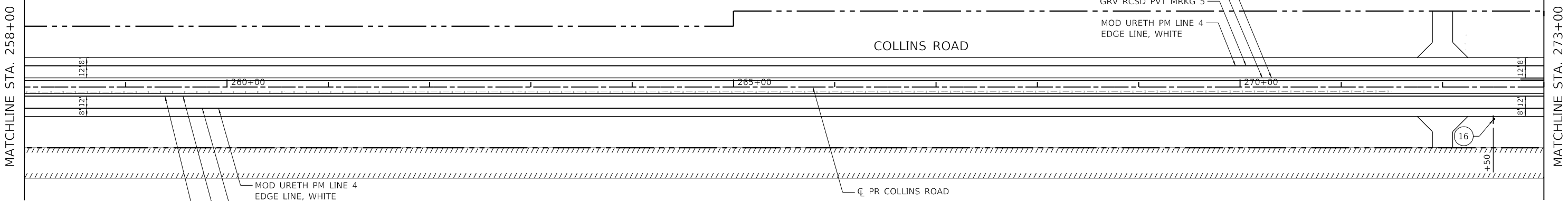
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
COLLINS ROAD

SCALE: SHEET 1 OF 7 SHEETS STA. 228+00.00 TO STA. 258+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	136
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

GRV RCSD PVT MRKG 5
 MOD URETH PM LINE 4
 MEDIAN LINE, YELLOW
 GRV RCSD PVT MRKG 5
 MOD URETH PM LINE 4
 EDGE LINE, WHITE



MOD URETH PM LINE 4
 EDGE LINE, WHITE
 GRV RCSD PVT MRKG 5
 MOD URETH PM LINE 4
 MEDIAN LINE, YELLOW
 GRV RCSD PVT MRKG 5

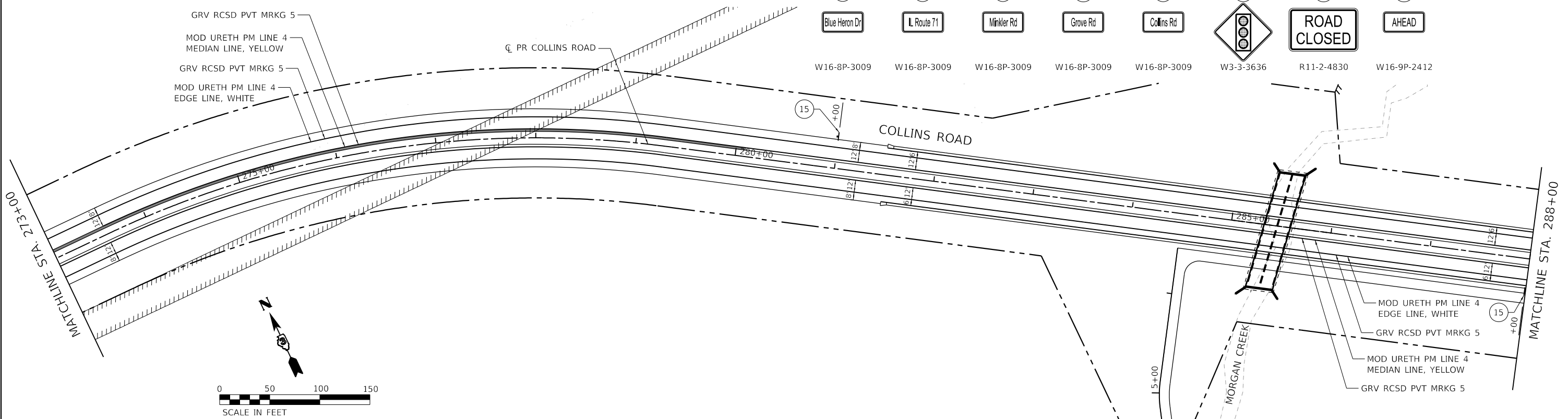
- NOTES:**
1. THE PAVEMENT MARKING ON THIS PROJECT SHALL BE MODIFIED URETHANE.
 2. ALL NEW SIGNS SHALL HAVE SIGN FACE MATERIAL IN ACCORDANCE WITH THE IDOT FABRICATION OF HIGHWAY SIGN POLICY PER SECTION 1091 OF THE STANDARD SPECIFICATIONS.
 3. ALL EXISTING SIGNS SHALL BE REMOVED UNLESS OTHERWISE NOTED ON THE PLANS.
 4. THE CONTRACTOR SHALL MATCH THE EXISTING PAVEMENT MARKINGS AT PROJECT LIMITS AS NECESSARY.
 5. 12" X 12" BLOCKOUTS SHALL BE PROVIDED FOR SIGN POSTS IN CONCRETE SURFACE. THE COST FOR THE BLOCKOUTS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

SIGN LEGEND

1	2	3	4	5	6	7	8
R1-1-3636	W4-1100-3018 (BLACK ON YELLOW)	R3-8-3030	R3-8-3030	R4-7-2430	R11-1100-4830	OM4-1-1818	W1-7-4824
9	10	11	12	13	14	15	16
R2-1-3036	R2-1-3036	W11-2-3636	W16-7PL-2412	W2-2-3636	W2-2-3636	W1-2L-3636	W1-2R-3636
17	18	19	20	21	22	23	24
W16-8P-3009	W16-8P-3009	W16-8P-3009	W16-8P-3009	W16-8P-3009	W3-3-3636	R11-2-4830	W16-9P-2412



GRV RCSD PVT MRKG 5
 MOD URETH PM LINE 4
 MEDIAN LINE, YELLOW
 GRV RCSD PVT MRKG 5
 MOD URETH PM LINE 4
 EDGE LINE, WHITE



HRG PROJECT NO.: 19162
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 FILE NAME: 19162_Pmk02.dgn
 PEN TABLE: 19162.tbl



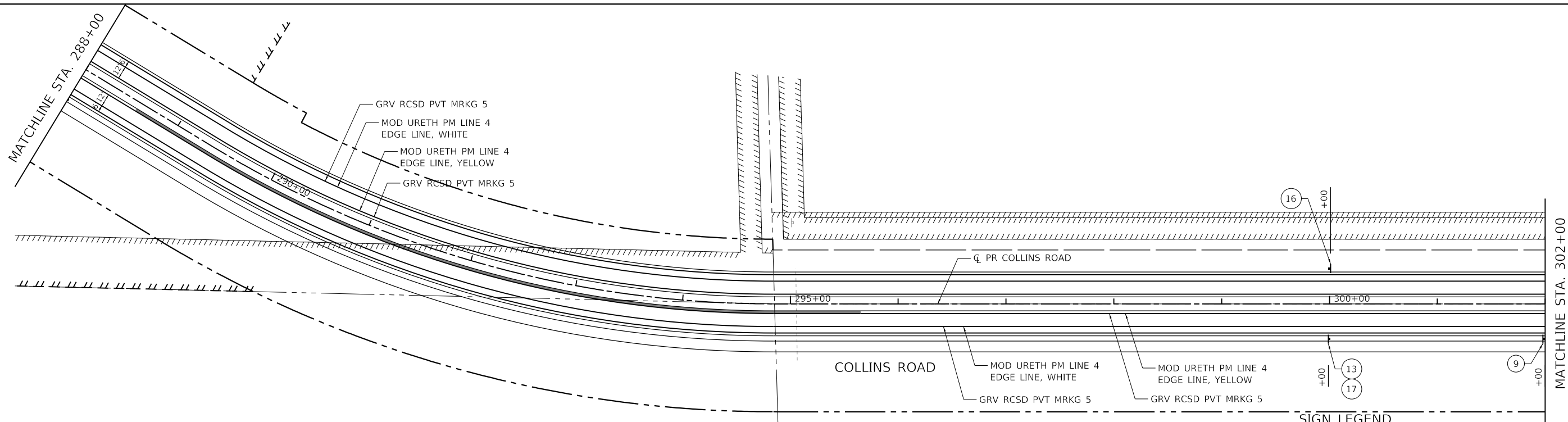
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PLOT SCALE = 100,0000' / in.	DRAWN - AJM	REVISED -
PLOT DATE = 10/21/2022	CHECKED - APS	REVISED -
	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND SIGNING PLAN
 COLLINS ROAD**

SCALE: SHEET 2 OF 7 SHEETS STA. 258+00.00 TO STA. 288+00.00

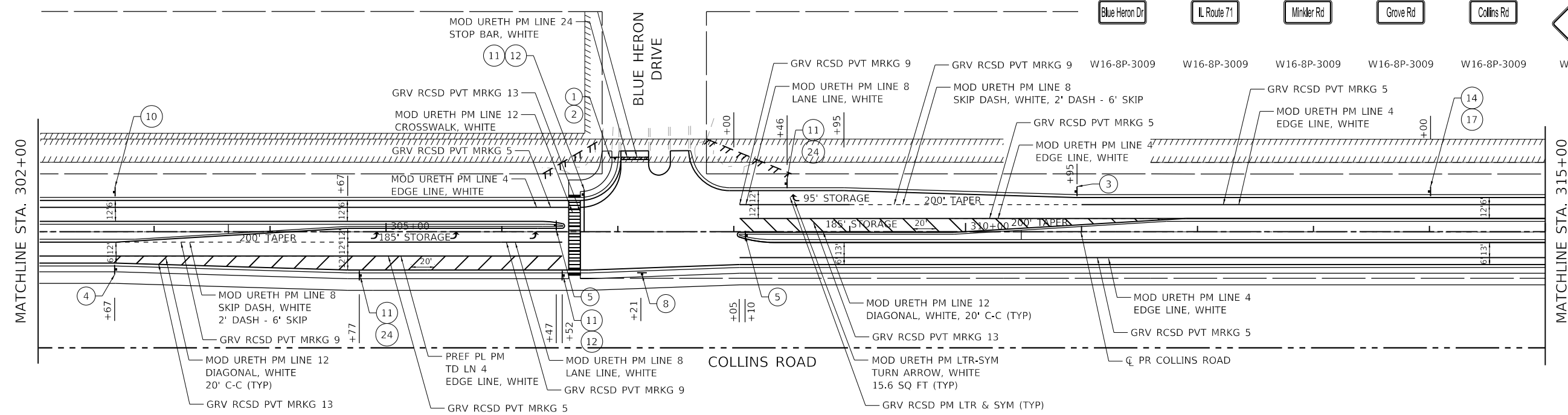
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	137
CONTRACT NO. 87800			ILLINOIS FED. AID PROJECT	



- NOTES:**
1. THE PAVEMENT MARKING ON THIS PROJECT SHALL BE MODIFIED URETHANE.
 2. ALL NEW SIGNS SHALL HAVE SIGN FACE MATERIAL IN ACCORDANCE WITH THE IDOT FABRICATION OF HIGHWAY SIGN POLICY PER SECTION 1091 OF THE STANDARD SPECIFICATIONS.
 3. ALL EXISTING SIGNS SHALL BE REMOVED UNLESS OTHERWISE NOTED ON THE PLANS.
 4. THE CONTRACTOR SHALL MATCH THE EXISTING PAVEMENT MARKINGS AT PROJECT LIMITS AS NECESSARY.
 5. 12" X 12" BLOCKOUTS SHALL BE PROVIDED FOR SIGN POSTS IN CONCRETE SURFACE. THE COST FOR THE BLOCKOUTS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

SIGN LEGEND

① R1-1-3636	② W4-1100-3018 (BLACK ON YELLOW)	③ R3-8-3030	④ R3-8-3030	⑤ R4-7-2430	⑥ R11-1100-4830	⑦ OM4-1-1818	⑧ W1-7-4824
⑨ R2-1-3036	⑩ R2-1-3036	⑪ W11-2-3636	⑫ W16-7PL-2412	⑬ W2-2-3636	⑭ W2-2-3636	⑮ W1-2L-3636	⑯ W1-2R-3636
⑰ Blue Heron Dr	⑱ IL Route 71	⑲ Minkler Rd	⑳ Grove Rd	㉑ Collins Rd	㉒ W3-3-3636	㉓ R11-2-4830	㉔ W16-9P-2412



HRG PROJECT NO. 19162
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 FILE NAME: 19162_Pmk03.dgn
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USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

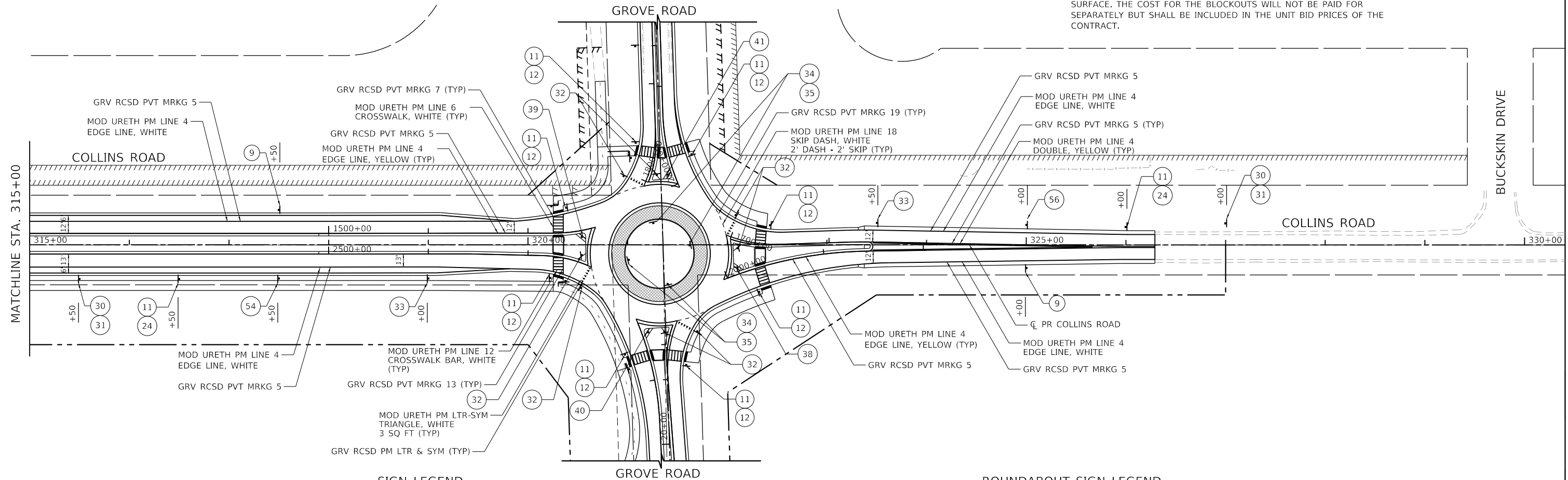
**PAVEMENT MARKING AND SIGNING PLAN
COLLINS ROAD**

SCALE: SHEET 3 OF 7 SHEETS STA. 288+00.00 TO STA. 315+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	138
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

NOTES:

1. THE PAVEMENT MARKING ON THIS PROJECT SHALL BE MODIFIED URETHANE.
2. ALL NEW SIGNS SHALL HAVE SIGN FACE MATERIAL IN ACCORDANCE WITH THE IDOT FABRICATION OF HIGHWAY SIGN POLICY PER SECTION 1091 OF THE STANDARD SPECIFICATIONS.
3. ALL EXISTING SIGNS SHALL BE REMOVED UNLESS OTHERWISE NOTED ON THE PLANS.
4. THE CONTRACTOR SHALL MATCH THE EXISTING PAVEMENT MARKINGS AT PROJECT LIMITS AS NECESSARY.
5. 12" X 12" BLOCKOUTS SHALL BE PROVIDED FOR SIGN POSTS IN CONCRETE SURFACE. THE COST FOR THE BLOCKOUTS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

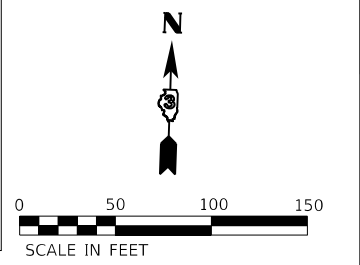


SIGN LEGEND

1 R1-1-3636	2 W4-I100-3018 (BLACK ON YELLOW)	3 R3-8-3030	4 R3-8-3030	5 R4-7-2430	6 R11-I100-4830	7 OM4-1-1818	8 W1-7-4824
9 R2-1-3036	10 R2-1-3036	11 W11-2-3636	12 W16-7PL-2412	13 W2-2-3636	14 W2-2-3636	15 W1-2L-3636	16 W1-2R-3636
17 W16-8P-3009	18 W16-8P-3009	19 W16-8P-3009	20 W16-8P-3009	21 W16-8P-3009	22 W3-3-3636	23 R11-2-4830	24 W16-9P-2412

ROUNDABOUT SIGN LEGEND

30 W2-6-3636	31 W13-1P-1818	32 R1-2-3636	33 W3-2A-3636	34 R6-1R-3612	52 D1-5-9666 (FUTURE)	53 D1-5-9666
35 R6-4a-4824	36 D1-1d-2418	37 D1-1d-2418	38 D1-1d-2418	39 D1-1d-2418	54 D1-5-9666	55 D1-5-9666
40 D1-1d-2418	41 D1-1d-2418	50 D1-5-9666	51 D1-5-9666	56 D1-5-9666	57 D1-5-9666	



HRG PROJECT NO: 19162
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 PEN TABLE: 19162.tbl



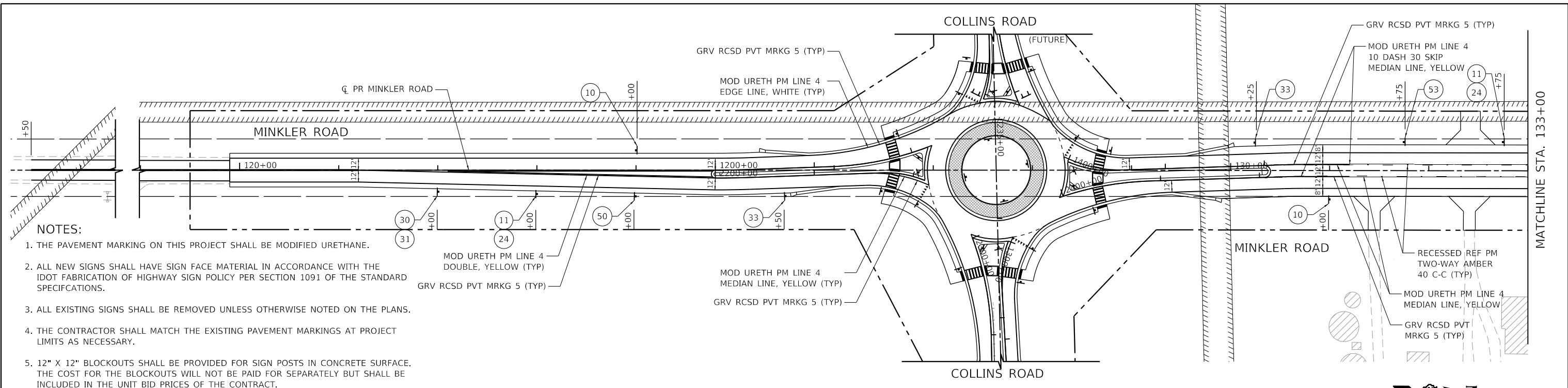
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	DRAWN - AJM	REVISED -
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PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND SIGNING PLAN
COLLINS ROAD

SCALE: SHEET 4 OF 7 SHEETS STA. 315+00.00 TO STA. 330+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	139
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				



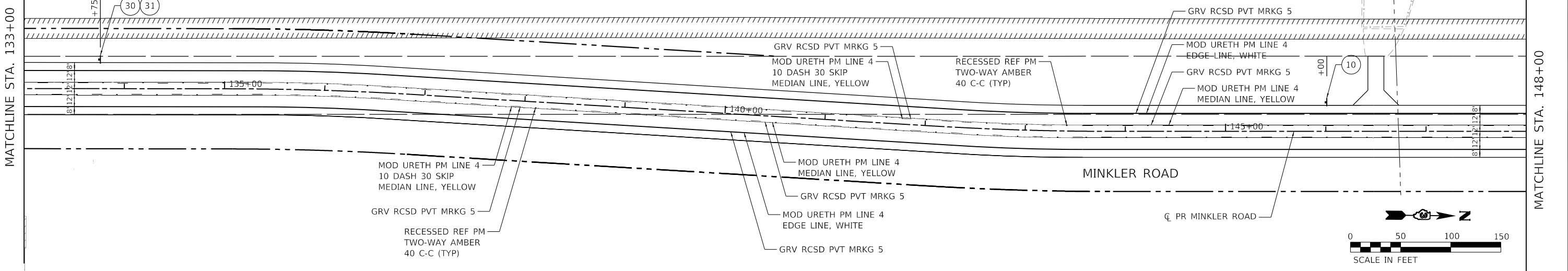
- NOTES:**
1. THE PAVEMENT MARKING ON THIS PROJECT SHALL BE MODIFIED URETHANE.
 2. ALL NEW SIGNS SHALL HAVE SIGN FACE MATERIAL IN ACCORDANCE WITH THE IDOT FABRICATION OF HIGHWAY SIGN POLICY PER SECTION 1091 OF THE STANDARD SPECIFICATIONS.
 3. ALL EXISTING SIGNS SHALL BE REMOVED UNLESS OTHERWISE NOTED ON THE PLANS.
 4. THE CONTRACTOR SHALL MATCH THE EXISTING PAVEMENT MARKINGS AT PROJECT LIMITS AS NECESSARY.
 5. 12" X 12" BLOCKOUTS SHALL BE PROVIDED FOR SIGN POSTS IN CONCRETE SURFACE. THE COST FOR THE BLOCKOUTS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

SIGN LEGEND

ROUNDAABOUT SIGN LEGEND

1 STOP R1-1-3636	2 CROSS TRAFFIC DOES NOT STOP W4-1100-3018 (BLACK ON YELLOW)	3 ONLY R3-8-3030	4 ONLY R3-8-3030	5 R4-7-2430	6 ROAD ENDS R11-1100-4830	7 OM4-1-1818	8 W1-7-4824
9 SPEED LIMIT 30 R2-1-3036	10 SPEED LIMIT 45 R2-1-3036	11 W11-2-3636	12 W16-7PL-2412	13 W2-2-3636	14 W2-2-3636	15 W1-2L-3636	16 W1-2R-3636
17 Blue Heron Dr W16-8P-3009	18 IL Route 71 W16-8P-3009	19 Minkler Rd W16-8P-3009	20 Grove Rd W16-8P-3009	21 Collins Rd W16-8P-3009	22 W3-3-3636	23 ROAD CLOSED R11-2-4830	24 AHEAD W16-9P-2412

30	31 15 MPH	32 YIELD	33	34 ONE WAY	52 EAST COLLINS RD NORTH MINKLER RD SOUTH MINKLER RD	53 SOUTH MINKLER RD EAST COLLINS RD
35	36 North Minkler Rd	37 South Minkler Rd	38 East Collins Rd	39 West Collins Rd	54 EAST COLLINS RD NORTH GROVE RD SOUTH GROVE RD	55 NORTH GROVE RD WEST COLLINS RD EAST COLLINS RD
40 South Grove Rd	41 North Grove Rd	50 NORTH MINKLER RD EAST COLLINS RD	51 SOUTH MINKLER RD NORTH MINKLER RD	56 WEST COLLINS RD SOUTH GROVE RD NORTH GROVE RD	57 SOUTH GROVE RD EAST COLLINS RD WEST COLLINS RD	



HRG PROJECT NO. 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162_Pmk05.dwg
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USER NAME = amiller	DESIGNED - JMR	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - AJM	REVISED -
PLOT DATE = 10/21/2022	CHECKED - APS	REVISED -
	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

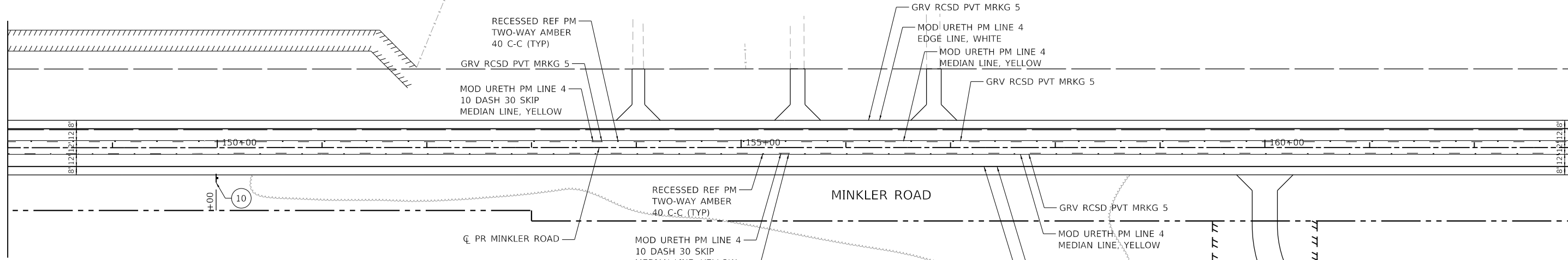
**PAVEMENT MARKING AND SIGNING PLAN
MINKLER ROAD**

SCALE: SHEET 5 OF 7 SHEETS STA. 118+00.00 TO STA. 148+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	140
CONTRACT NO. 87800			ILLINOIS FED. AID PROJECT	

MATCHLINE STA. 148+00

MATCHLINE STA. 163+00

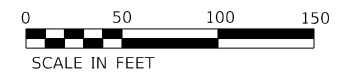
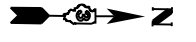


SIGN LEGEND

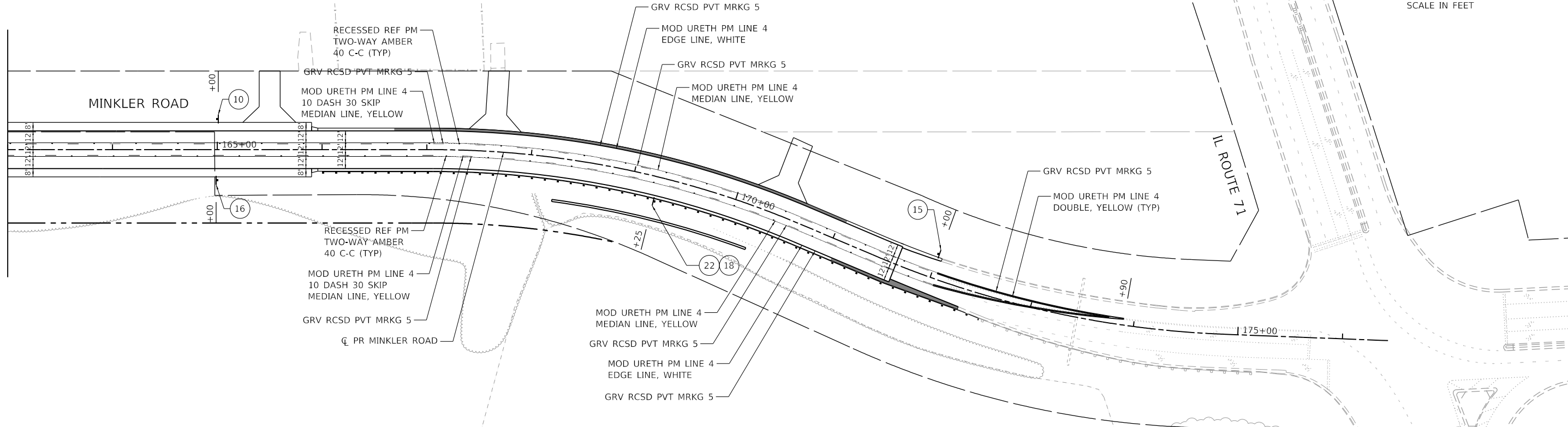
1 R1-1-3636	2 W4-1100-3018 (BLACK ON YELLOW)	3 R3-8-3030	4 R3-8-3030	5 R4-7-2430	6 R11-1100-4830	7 OM4-1-1818	8 W1-7-4824
9 R2-1-3036	10 R2-1-3036	11 W11-2-3636	12 W16-7PL-2412	13 W2-2-3636	14 W2-2-3636	15 W1-2L-3636	16 W1-2R-3636
17 W16-8P-3009	18 W16-8P-3009	19 W16-8P-3009	20 W16-8P-3009	21 W16-8P-3009	22 W3-3-3636	23 R11-2-4830	24 W16-9P-2412

NOTES:

1. THE PAVEMENT MARKING ON THIS PROJECT SHALL BE MODIFIED URETHANE.
2. ALL NEW SIGNS SHALL HAVE SIGN FACE MATERIAL IN ACCORDANCE WITH THE IDOT FABRICATION OF HIGHWAY SIGN POLICY PER SECTION 1091 OF THE STANDARD SPECIFICATIONS.
3. ALL EXISTING SIGNS SHALL BE REMOVED UNLESS OTHERWISE NOTED ON THE PLANS.
4. THE CONTRACTOR SHALL MATCH THE EXISTING PAVEMENT MARKINGS AT PROJECT LIMITS AS NECESSARY.
5. 12" X 12" BLOCKOUTS SHALL BE PROVIDED FOR SIGN POSTS IN CONCRETE SURFACE. THE COST FOR THE BLOCKOUTS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.



MATCHLINE STA. 163+00



HRG PROJECT NO.: 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162_Pmk06.dgn
 PEN TABLE: 19162.tbl



USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND SIGNING PLAN
 MINKLER ROAD**

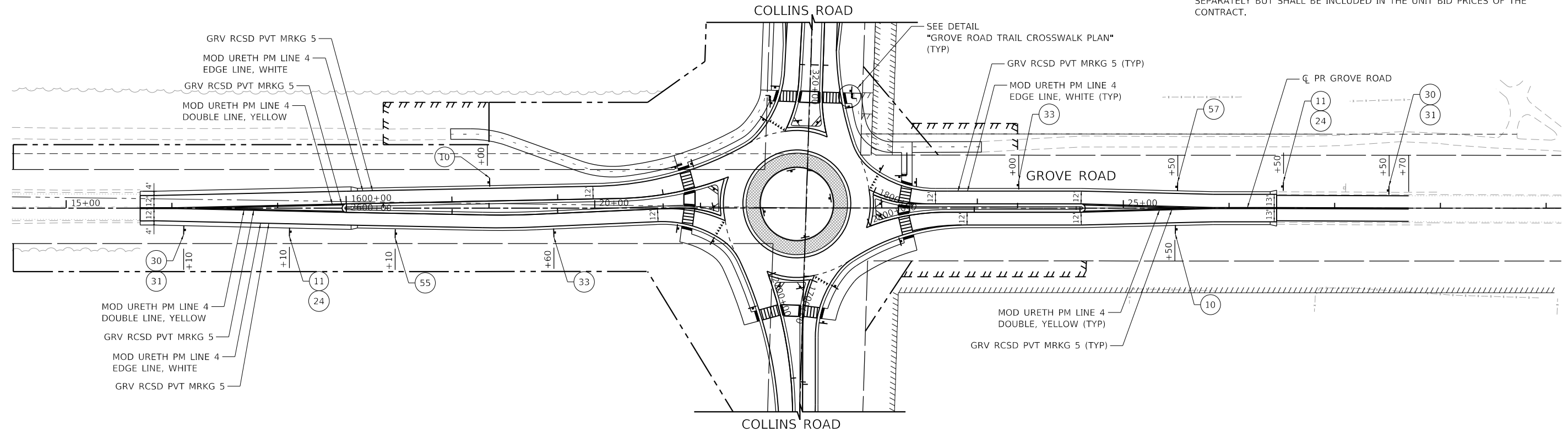
SCALE: SHEET 6 OF 7 SHEETS STA. 148+00.00 TO STA. 178+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	141
CONTRACT NO. 87800				

ILLINOIS FED. AID PROJECT

NOTES:

1. THE PAVEMENT MARKING ON THIS PROJECT SHALL BE MODIFIED URETHANE.
2. ALL NEW SIGNS SHALL HAVE SIGN FACE MATERIAL IN ACCORDANCE WITH THE IDOT FABRICATION OF HIGHWAY SIGN POLICY PER SECTION 1091 OF THE STANDARD SPECIFICATIONS.
3. ALL EXISTING SIGNS SHALL BE REMOVED UNLESS OTHERWISE NOTED ON THE PLANS.
4. THE CONTRACTOR SHALL MATCH THE EXISTING PAVEMENT MARKINGS AT PROJECT LIMITS AS NECESSARY.
5. 12" X 12" BLOCKOUTS SHALL BE PROVIDED FOR SIGN POSTS IN CONCRETE SURFACE. THE COST FOR THE BLOCKOUTS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

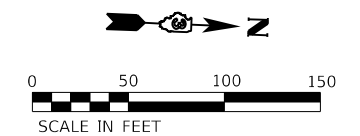


SIGN LEGEND

1	2	3	4	5	6	7	8
R1-1-3636	W4-I100-3018 (BLACK ON YELLOW)	R3-8-3030	R3-8-3030	R4-7-2430	R11-I100-4830	OM4-1-1818	W1-7-4824
9	10	11	12	13	14	15	16
R2-1-3036	R2-1-3036	W11-2-3636	W16-7PL-2412	W2-2-3636	W2-2-3636	W1-2L-3636	W1-2R-3636
17	18	19	20	21	22	23	24
W16-8P-3009	W16-8P-3009	W16-8P-3009	W16-8P-3009	W16-8P-3009	W3-3-3636	R11-2-4830	W16-9P-2412

ROUNDABOUT SIGN LEGEND

30	31	32	33	34	52	53
W2-6-3636	W13-1P-1818	R1-2-3636	W3-2A-3636	R6-1R-3612	D1-5-9666 (FUTURE)	D1-5-9666
35	36	37	38	39	54	55
R6-4a-4824	D1-1d-2418	D1-1d-2418	D1-1d-2418	D1-1d-2418	D1-5-9666	D1-5-9666
40	41	50	51	56	57	
D1-1d-2418	D1-1d-2418	D1-5-9666	D1-5-9666	D1-5-9666	D1-5-9666	



HRG PROJECT NO: 19162
 HRG PROJ CONTACT:
 FILE NAME: 19162_Pmk07.dgn
 PEN TABLE: 19162.tbl



USER NAME = amiller	DESIGNED - JMR	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - AJM	REVISED -
PLOT DATE = 10/21/2022	CHECKED - APS	REVISED -
	DATE - 10/21/2022	REVISED -




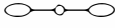
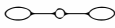





**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND SIGNING PLAN
GROVE ROAD**

SCALE: SHEET 7 OF 7 SHEETS STA. 10+00.00 TO STA. 35+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	142
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

LEGEND

	PROPOSED ELECTRIC SERVICE, 120/240V.
	PROPOSED PEDESTAL MOUNTED LIGHTING CONTROLLER, 240V, 60A.
	EXISTING LUMINAIRE AND MAST ARM ON COMED POLE TO BE REMOVED BY OTHERS.
	EXISTING LIGHTING UNIT TO REMAIN.
	EXISTING LIGHTING UNIT TO BE REMOVED.
	PROPOSED LIGHTING UNIT, LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G, 30FT MH, 15 FT M.A., ALUMINUM POLE, CONCRETE FOUNDATION, BREAKAWAY COUPLINGS WITH SS SCREEN
	EXISTING DIRECT BURY ELECTRIC CABLE TO REMAIN.
	EXISTING ELECTRIC CABLE TO BE REMOVED.
	PROPOSED UNIT DUCT, 600V, 2-1C NO. 10, 1/C NO. 10 GROUND (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE. (UNLESS STATED OTHERWISE)
	PROPOSED COILABLE NONMETALLIC CONDUIT 2" DIA. SLEEVE LENGTH AS NOTED

SCHEDULE OF QUANTITIES

DESCRIPTION	UNIT	QUANTITY
ELECTRIC SERVICE INSTALLATION	EACH	2
ELECTRIC UTILITY SERVICE CONNECTION	LSUM	1
UNDERGROUND CONDUIT, COILABLE NONMETALLIC, 2" DIA.	FOOT	309
UNIT DUCT, 600V, 2-1C NO.10, 1/C NO.10 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE	FOOT	3,898
UNIT DUCT, 600V, 2-1C NO.6, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	108
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	30
LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 60AMP	EACH	2
LIGHT POLE, ALUMINUM, 30 FT. M.H., 15 FT. MAST ARM	EACH	30
LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	150
BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	120
REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	1

GENERAL NOTES

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THIS PROJECT: SPECIFICALLY AS THEY RELATE TO LUMP SUM ITEMS AND UNIT PRICE ITEMS.
- ALL NEW CONDUITS, DUCT BANKS, MANHOLES, HANDHOLES, JUNCTION BOXES, AND APPURTENANCES ARE LOCATED DIAGRAMMATICALLY ON THE PLANS UNLESS NOTED OTHERWISE. THE ACTUAL LOCATION IN THE FIELD SHALL MEET WITH APPROVAL OF THE ENGINEER.
- THE ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST CODES, STANDARDS AND THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2022, SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS.
- PRIOR TO THE INSTALLATION OF NEW CONDUITS, JUNCTION BOXES, LIGHTING STANDARDS FOUNDATIONS AND APPURTENANCES, THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING LIGHTING CONDUITS, CABLES AND UNDERGROUND UTILITIES.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL THE LIGHT POLES FOR EXAMINATION AND CONFIRMATION WITH THE ENGINEER AT THE PRE CONSTRUCTION INSPECTION. THE EXACT LOCATION OF ALL ITEMS SHALL BE CONFIRMED WITH THE ENGINEER PRIOR TO STARTING WORK.
- GROUNDING CONNECTIONS AT THE FOUNDATION SHALL BE EXOTHERMICALLY WELDED, AS SPECIFIED, AND SHALL BE OBSERVED AND APPROVED BY THE ENGINEER PRIOR TO CONCRETE POURING OR BACKFILLING AS APPLICABLE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF THE FINISHED GRADE. THE ENGINEER MAY ASSIST THE CONTRACTOR AS APPLICABLE, BUT THE RESPONSIBILITY FOR COORDINATION OF THE FINISH GRADE WITH THE TOP OF THE FOUNDATION HEIGHTS SHALL REMAIN WITH THE CONTRACTOR.
- ALL LUMINAIRE OPTICS SHALL BE ORIENTED WITH THE LAMPS 0 DEGREES PERPENDICULAR TO THE ROADWAY UNLESS OTHERWISE INDICATED OR DIRECTED BY THE COUNTY. THE LUMINAIRES MAY REQUIRE NIGHT-TIME OPTICAL ADJUSTMENT UPON INSPECTION BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE APPLICABLE LUMINAIRE PAY ITEMS. SEPARATE PAYMENT WILL NOT BE MADE.
- CONDUITS AND UNIT DUCTS SHALL BE INSTALLED AT A MINIMUM 30 INCH DEPTH BELOW GRADE AND POSITIONED IN THE FIELD TO AVOID CONFLICT WITH ROADWAY UNDERDRAINS AND OTHER EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL INCREASE THE DEPTH OF UNIT DUCT AND CONDUIT AS REQUIRED AT NO ADDITIONAL COST TO KENDALL COUNTY. THE CONTRACTOR SHALL COORDINATE RACEWAY DEPTH WITH THE ELECTRICAL DETAILS AND THE ENGINEER.
- THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE SPECIFIED REQUIREMENTS FOR BURIED WARNING TAPE AS PART OF THE UNDERGROUND CONDUIT OR UNIT DUCT. THE INSTALLATION OF THE TAPE SHALL BE OBSERVED BY THE ENGINEER PRIOR TO BACKFILLING OR DURING PLOWING OPERATIONS AS APPLICABLE.
- WHERE THE CONTRACTOR'S EXCAVATION MEETS AN OBSTRUCTION OR EXISTING FOUNDATION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR DIRECTION PRIOR TO FURTHER EXCAVATION. THE CONTRACTOR SHALL RESTORE ANY DAMAGE TO EXISTING SYSTEMS OR UTILITIES AND REMOVE OBSTRUCTIONS AND FOUNDATIONS TO THE SATISFACTION OF THE ENGINEER. THIS WORK WILL BE INCLUDED IN COST OF THE APPROPRIATE PAY ITEM.
- THE CONTRACTOR SHALL COORDINATE INSTALLATION OF CONDUITS, FOUNDATIONS AND UNIT DUCTS WITH THE ROADWAY, DRAINAGE, CURB AND GUTTER, SIDEWALK WORK AND UNDERGROUND UTILITIES.
- NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE BEEN CURED FOR 10 DAYS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- SPLICING OF CONDUCTORS SHALL BE IN POLE BASES OR ABOVE GRADE WEATHER TIGHT JUNCTION BOXES ONLY. SPLICES BELOW GRADE WILL NOT BE PERMITTED.
- ALL MEASUREMENTS ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY MEASUREMENTS IN THE FIELD.
- COORDINATE REMOVAL OF ALL EXISTING UTILITY POLE MOUNTED LUMINAIRES AND AERIAL CABLES WITH THE VILLAGE OF OSWEGO UTILITY COORDINATOR.
- THE ASSOCIATED POLES, ARMS, AND LUMINAIRES, FROM EXISTING LIGHTING UNITS TO BE REMOVED SHALL BE SALVAGED TO THE VILLAGE OF OSWEGO DEPARTMENT OF PUBLIC WORKS. THIS WORK WILL BE PAID FOR AS "REMOVAL OF LIGHTING UNIT, SALVAGE". THE CONTRACTOR SHALL CONTACT THE VILLAGE OF OSWEGO DEPARTMENT OF PUBLIC WORKS AT 630-554-3242 TO COORDINATE DELIVERY OF SALVAGED ITEMS.
- UNIT DUCT CASINGS UNDER PAVEMENT SHALL EXTEND 2 FT BEYOND THE EDGE OF SHOULDER OR BACK OF CURB, AS APPLICABLE.

HIGHWAY STANDARDS

821101-02	LUMINAIRE WIRING IN POLE
825011-04	LIGHTING CONTROLLER PEDESTAL MOUNTED, 240V
830001-03	LIGHT POLE ALUMINUM MAST ARM
836001-04	LIGHT POLE FOUNDATION
838001-01	BREAKAWAY DEVICES

INDEX OF SHEETS

- E1 GENERAL NOTES, HIGHWAY STANDARDS, INDEX OF SHEETS, AND SCHEDULE OF QUANTITIES
- E2 LIGHTING REMOVAL PLAN COLLINS ROAD AND GROVE ROAD
- E3 PROPOSED LIGHTING PLAN COLLINS ROAD AND GROVE ROAD
- E4 PROPOSED LIGHTING PLAN COLLINS ROAD AND MINKLER ROAD
- E5 WIRING DIAGRAMS AND LUMINAIRE PERFORMANCE TABLE

HRG PROJECT NO: #PROJECT#
 HRG PROJ CONTACT: #HRGPM#
 FILE NUMBER: #P#
 PEN TABLE: #PEN TABLE#

TranSmart
 100 S. Wacker Drive Suite 400
 Chicago, Illinois 60606

USER NAME = \$USERS	DESIGNED - MKR	REVISED -
	DRAWN - MRT	REVISED -
PLOT SCALE = \$\$SCALE\$	CHECKED - WS	REVISED -
PLOT DATE = \$DATE\$	DATE -	REVISED -

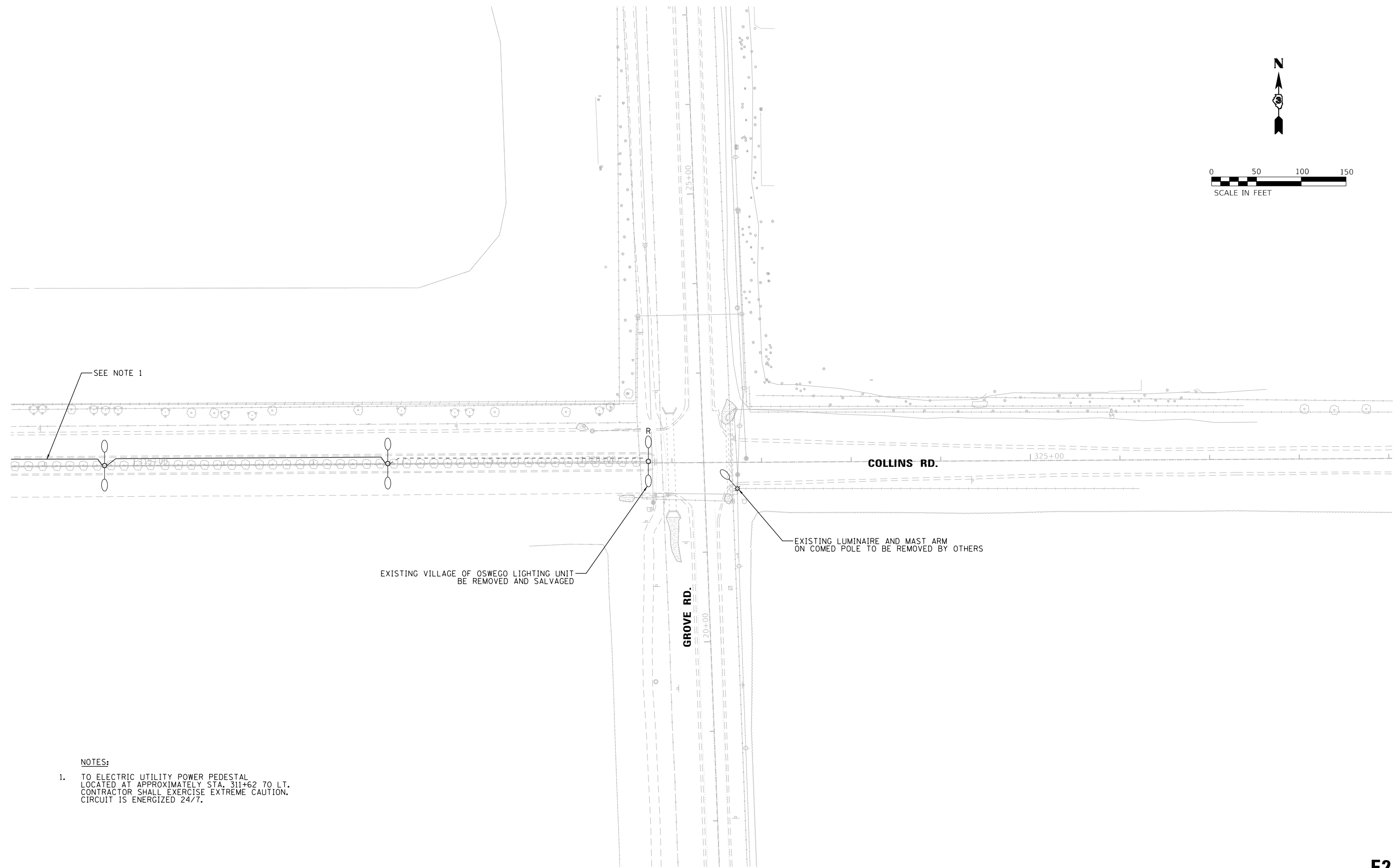
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, HIGHWAY STANDARDS,
 INDEX OF SHEETS, AND SUMMARY OF QUANTITIES

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	16-000133-EG	KENDALL	312	143
			CONTRACT NO. 87800	
ILLINOIS FED. AID PROJECT				

E1



NOTES:

1. TO ELECTRIC UTILITY POWER PEDESTAL LOCATED AT APPROXIMATELY STA. 311+62 TO LT. CONTRACTOR SHALL EXERCISE EXTREME CAUTION. CIRCUIT IS ENERGIZED 24/7.

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 HRG PROJ. CONTACT: #HRGPM\$
 FILE NUMBER: #FILES\$
 PEN TABLE: #PEN_TABLE\$



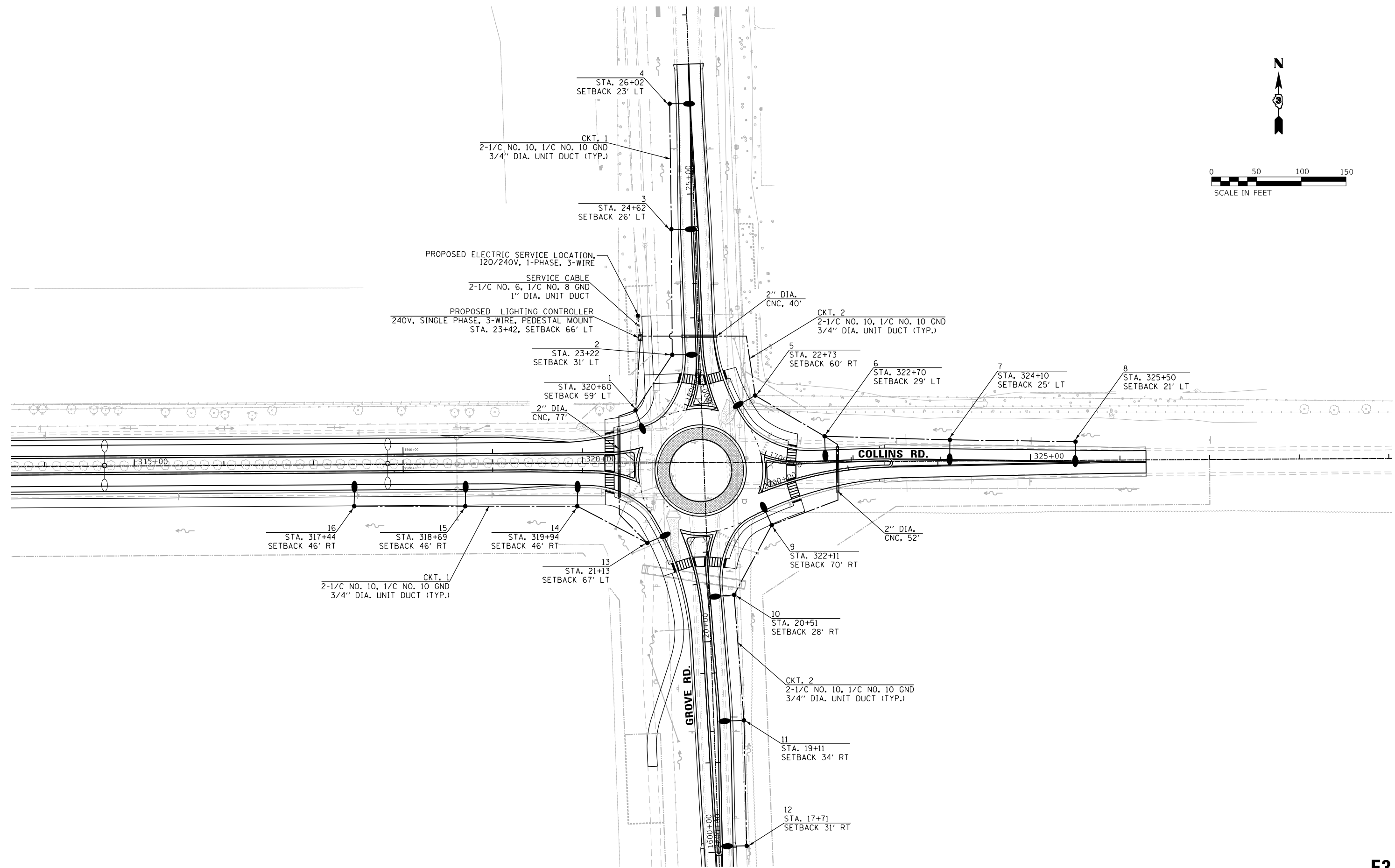
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	DRAWN - MRT	REVISED -
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PLOT DATE = \$DATE\$	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**LIGHTING REMOVAL PLAN
 COLLINS ROAD AND GROVE ROAD**

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	16-000133-EG	KENDALL	312	144
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				



HRG PROJECT NO.: #PROJECT0108
 HRG PROJ. CONTACT: #HRGPM8
 FILE NUMBER: #FILES
 PEN TABLE: #PEN TABLES



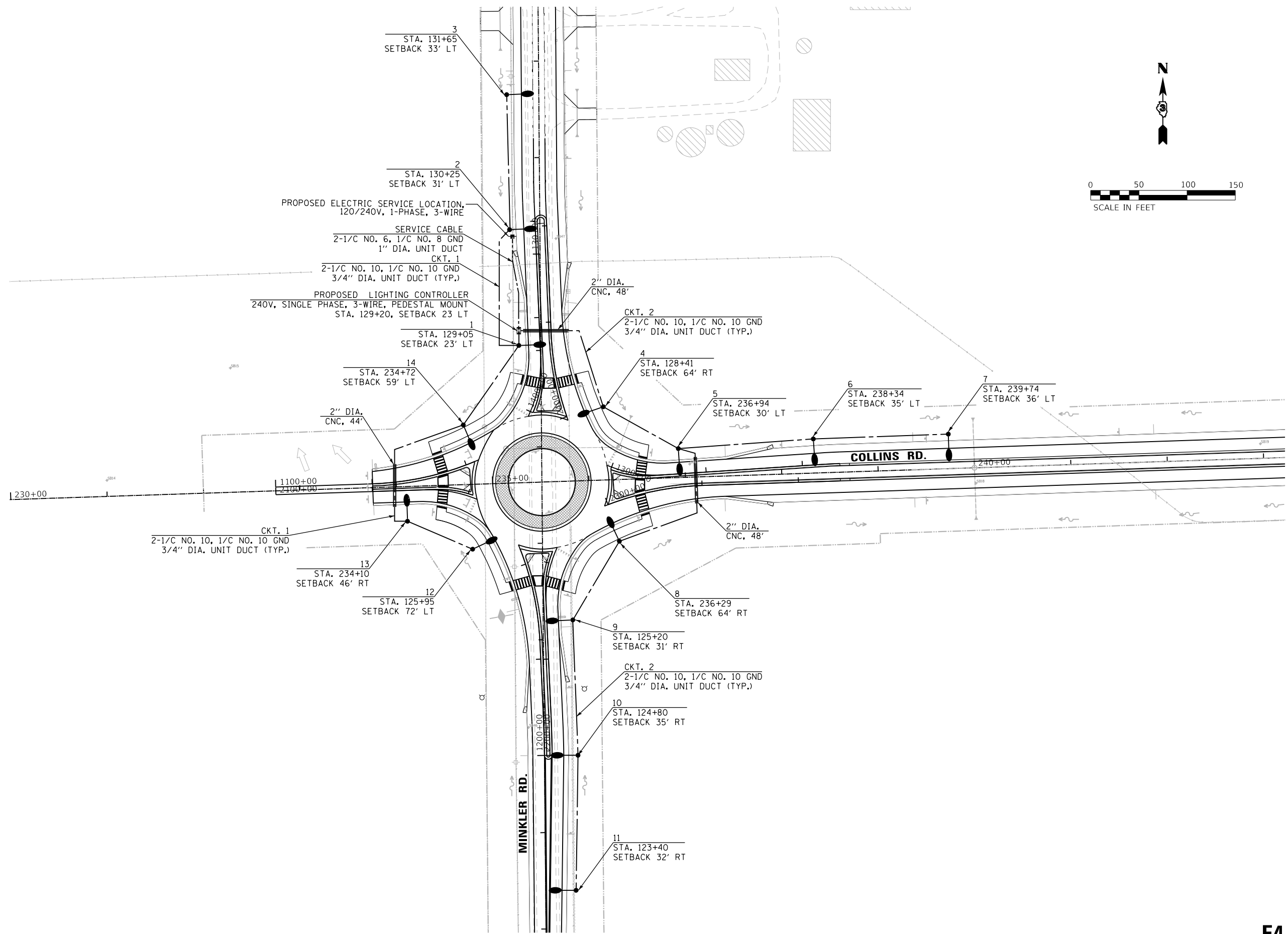
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	DRAWN - MRT	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - WS	REVISED -
PLOT DATE = \$DATE\$	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED LIGHTING PLAN
 COLLINS ROAD AND GROVE ROAD**

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	16-000133-EG	KENDALL	312	145
CONTRACT NO. 87800				
ILLINOIS		FED. AID PROJECT		



HRG PROJECT NO.: #PROJCTN08
 HRG PROJ. CONTACT: #HRGPM8
 FILE NUMBER: #FILES
 PEN TABLE: #PEN TABLES



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PLOT SCALE = \$SCALE\$	DRAWN - MRT	REVISED -
PLOT DATE = \$DATE\$	CHECKED - WS	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PROPOSED LIGHTING PLAN COLLINS ROAD AND MINKLER ROAD			
SCALE: 1" = 50'	SHEET	OF	SHEETS
	STA.	TO	STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	16-000133-EG	KENDALL	312	146
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

E4

LUMINAIRE PERFORMANCE TABLE

Project

Date	Contract Number	Section Number	County
03/08/2022		16-000133-EG	KENDALL
Marked Route Number		Municipality	
COLLINS ROAD		OSWEGO	

Roadway

Lane Width	*of Lanes	Median Width	I.E.S Surface Classification	0-Zero Value
12 FT	1	N/A	R3	0.07

Structure

Mounting Height	Arm Length	Set Back	Number of Luminaires (Highmast & Sign Lighting Only)
30 FT	15 FT	15 FT	N/A

Luminaire

Description	I.E.S. Lateral Distribution	I.E.S. Vertical Distribution	
Roadway, Output Designation G	Type III	Medium	
Total Light Loss Factor (LLF)	BUG Rating	Shields	Dimming Protocol
0.7	U = 0	N/A	0-10V

Layout

Spacing (to Nearest 5 Ft) Configuration (Opposite, Staggered, 1 Sided, or Median)
140 FT 1 SIDED

Performance

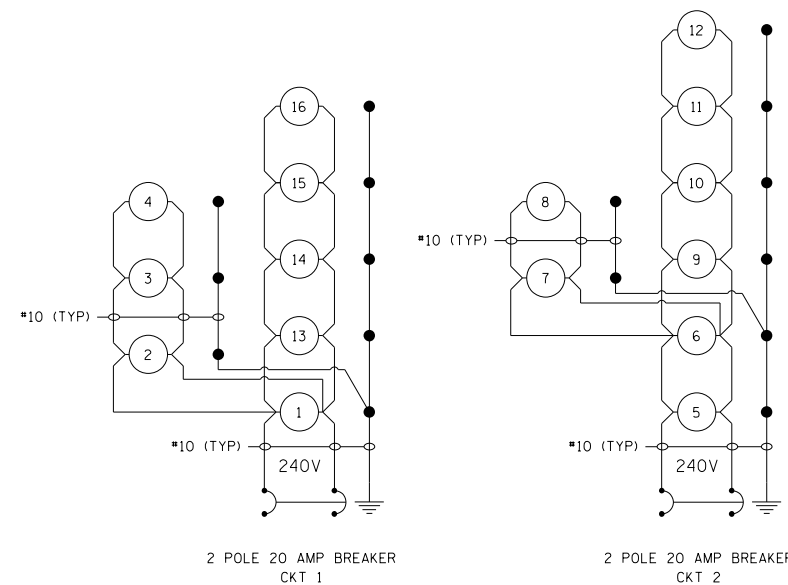
Average Illuminance, E_{AVE} (fc)	Uniformity Ratio, E_{AVE}/E_{MIN}		
1.4	3:1		
Average Luminance, L_{AVE} (cd/m ²)	Uniformity Ratio, L_{AVE}/L_{MIN}	Uniformity Ratio, L_{MAX}/L_{MIN}	Veiling Luminance Ratio, L_V/L_{MIN}
0.6	3.5	6.0	0.3

Light Trespass

Distance to ROW (behind pole)	Max. Horizontal Illuminance at ROW, E	Max. Vertical Illuminance at ROW, E
N/A	N/A	N/A

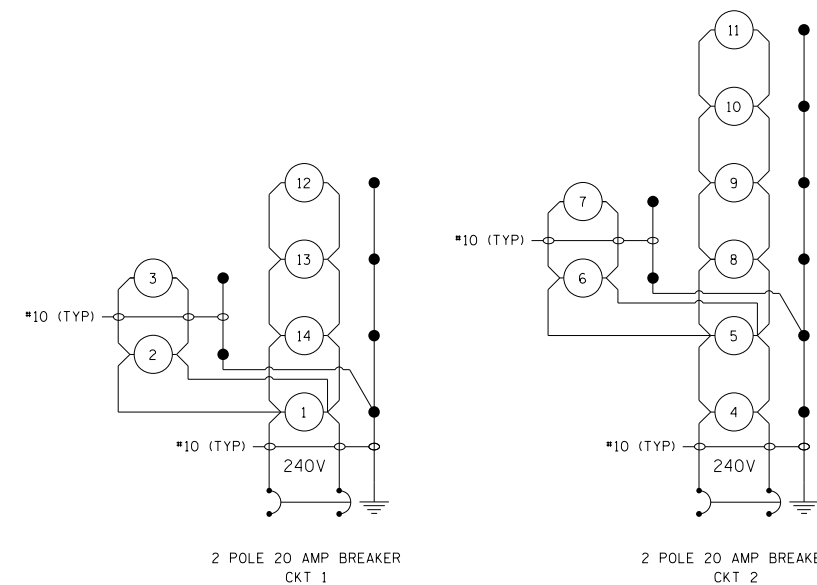
Notes

- Set Back is from Edge of Pavement (white line) except for sign luminaires when it is vertical and horizontal distance from the sign to the luminaire.
- Lighting calculations shall be performed with all luminaires oriented toward and perpendicular to roadway.
- Total Light Loss Factor (LLF) = the product of "Lumen Maintenance" (LLD) = 0.9, "Dirt Depreciation" (LDD) = 0.8, and "Equipment Factors" (EF) = 0.95.
- Performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions above.
- Calculations shall be performed with two lanes in each direction.
- Compliance with performance criteria shall be held to one significant digit.
- Initial lumens of the proposed luminaire may vary from the values specified in Article 1067.06 of the BDE Special Provision for Luminaire, LED.



COLLINS RD. AND GROVE RD.

PROPOSED LIGHTING CONTROLLER,
PEDESTAL MOUNTED, 240V, 60AMP



COLLINS RD. AND MINKLER RD.

PROPOSED LIGHTING CONTROLLER,
PEDESTAL MOUNTED, 240V, 60AMP

LEGEND:

- ① PROPOSED LIGHTING UNIT
- ⏏ GROUND ROD

NOTES:

- ALL NECESSARY REVISIONS TO THE WIRING SHOWN ON THIS SHEET SHALL BE MADE AT NO ADDITIONAL COST TO THE DEPARTMENT AND TO THE SATISFACTION OF THE ENGINEER.

HRG PROJECT NO.: #PROJECTNO#
 HRG PROJ. CONTACT: #HRGPM#
 FILE NUMBER: #FILES#
 PEN TABLE: #PEN#
 PEN TABLE: #PEN#

TranSmart
100 S. Wacker Drive Suite 400
Chicago, Illinois 60606

USER NAME = \$USERS	DESIGNED - MKR	REVISED -
	DRAWN - MRT	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - WS	REVISED -
PLOT DATE = \$DATE\$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WIRING DIAGRAMS AND
LUMINAIRE PERFORMANCE TABLE

SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	16-000133-EG	KENDALL	312	147
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

E5

Benchmarks:
 Source Benchmark:
 Oswego 0003 - Arbor Gate
 Bernstein Monumnet
 Elevation: 645.01 (NAVD88)

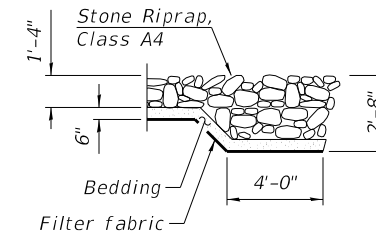
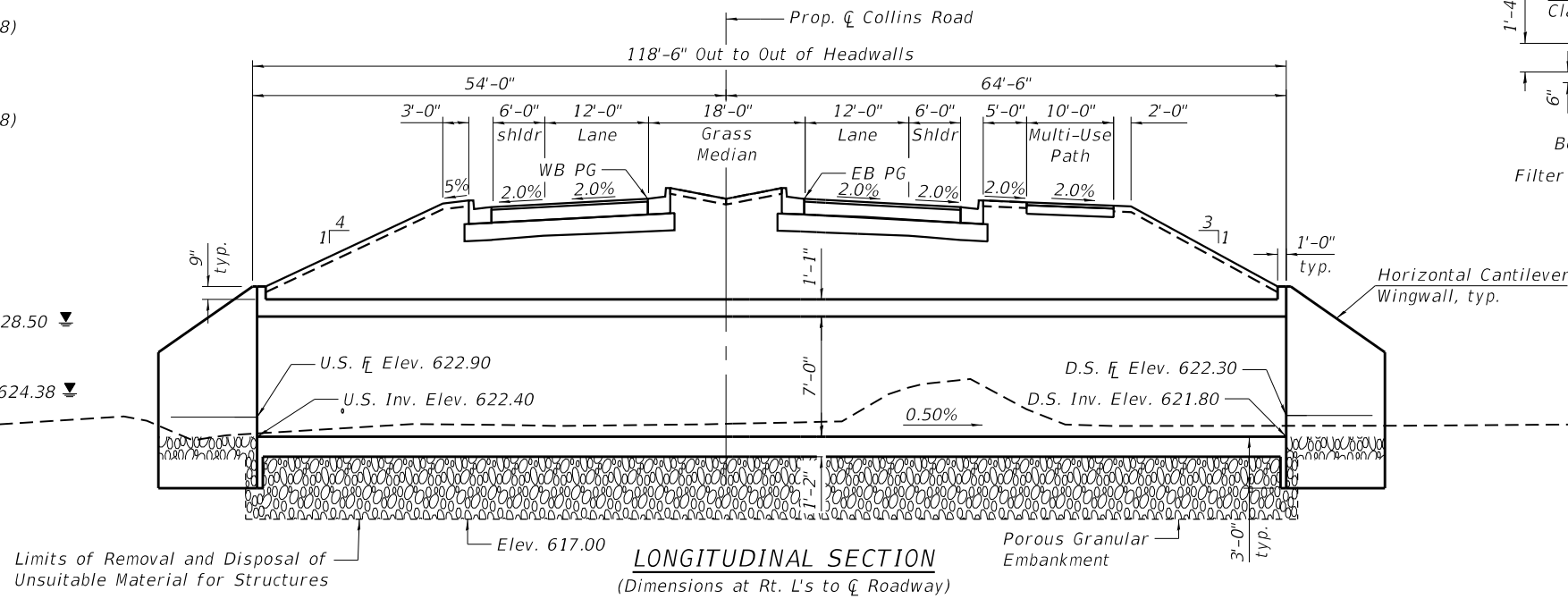
Benchmark "G":
 Chisled "x" on east side
 of water valve vault rim
 Elevation: 630.58 (NAVD88)
 N: 1817645.65
 E: 977099.37

Existing Structure:
 None

Precast alternate
 is not allowed.

D.H.E. 628.50

E.W.S.E. 624.38



DESIGN SPECIFICATIONS
 2020 AASHTO LRFD Bridge Design
 Specifications, 9th Edition

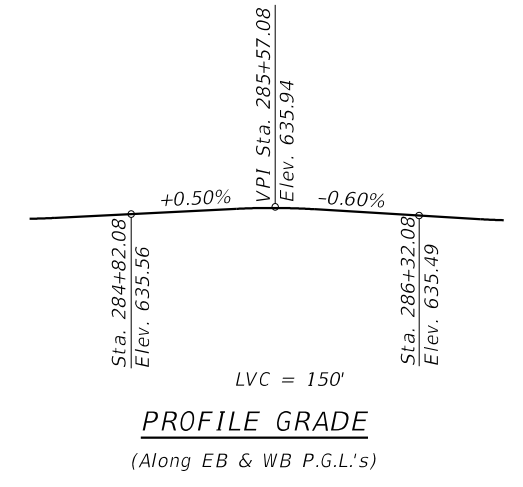
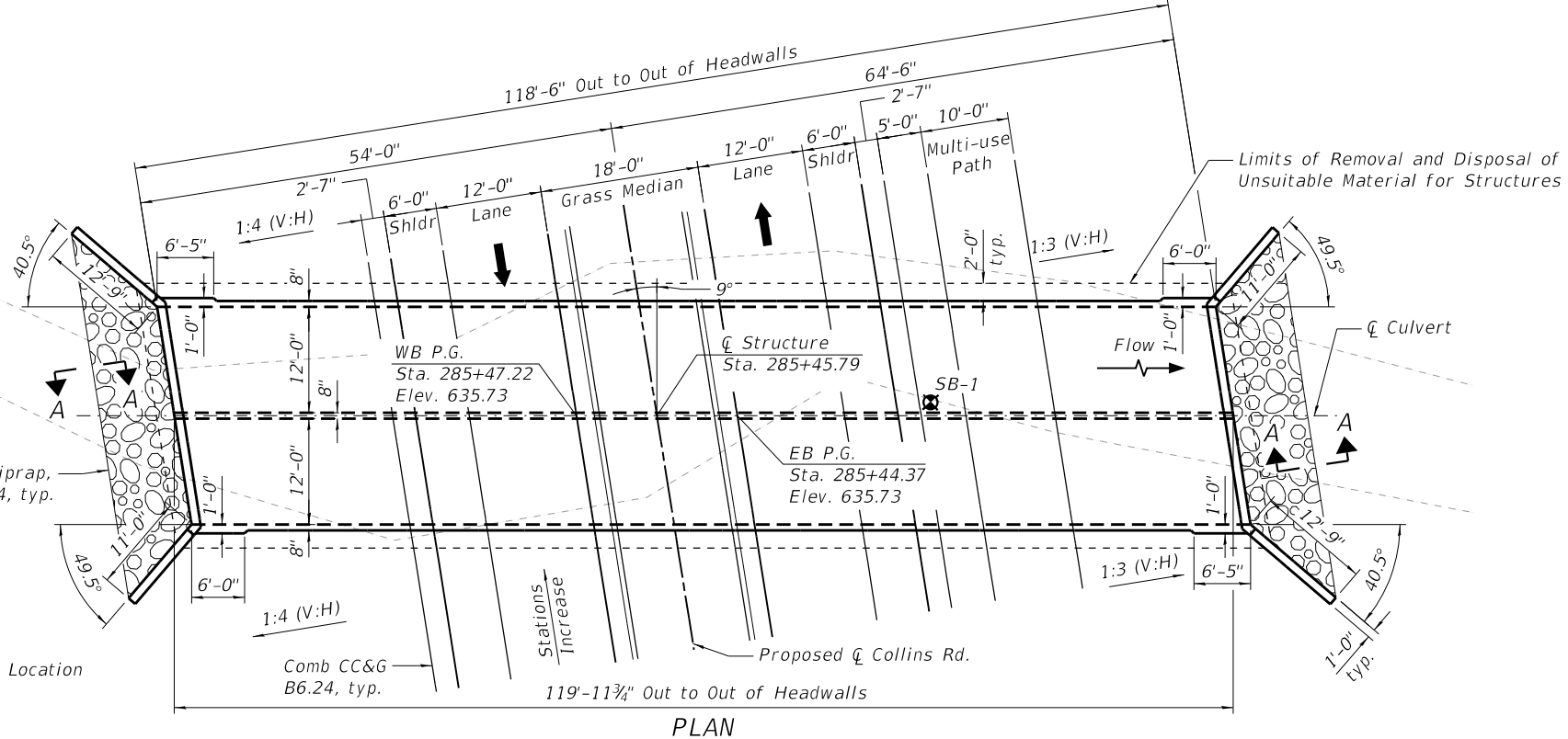
LOADING HL-93
 Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES
 FIELD UNITS

f'c = 3,500 psi
 fy = 60,000 psi (Reinforcement)

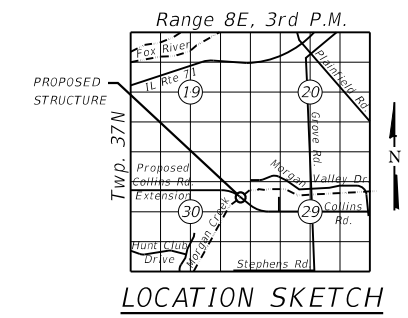
INDEX OF SHEETS

- 1 General Plan & Elevation
- 2 General Data
- 3 Culvert Details - Top Slab
- 4 Culvert Details - Bottom Slab
- 5 Culvert Details - Sections
- 6 Culvert Details - Wingwalls
- 7 Culvert Details
- 8 Soil Boring Log



STATION 285+45.79
 BUILT 202_ BY
 KENDALL COUNTY
 F.A.U. RT. 2514
 SEC. 19-00154-00-FP
 LOADING HL-93
 STRUCTURE NO. 047-3182

NAME PLATE
 See Std. 515001



WATERWAY INFORMATION

Drainage Area = 6.0 Ac. Low Grade Elev. = 633.31 @ Sta. 290+33

Flood	Freq. Yr.	Q C.F.S.	Opening Ft ²		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
	10	407	N/A	115.2	627.7	0.0	0.0	627.7	627.7
Design	30	564	N/A	135.4	628.5	0.0	0.0	628.5	628.5
Base	100	741	N/A	151.7	629.2	0.0	0.0	629.2	629.2
Overtopping	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max Calc.	500	1,020	N/A	156	629.9	0.0	0.0	629.9	629.9

To the best of my knowledge, information and belief, this culvert design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with the requirements of the current "AASHTO LRFD Bridge Design Specifications".

Andy Underwager
 Structural Engineer Expires: 11/30/2024
 HR Green, Inc.



GENERAL PLAN & ELEVATION
COLLINS ROAD OVER MORGAN CREEK
 F.A.U. 2514 - SEC. 19-00154-00-FP
 KENDALL COUNTY
 STATION 285+45.79
 STRUCTURE NO. 047-3182

HRG PROJECT NO.: 19182
 HRG PROJ. CONTACT:
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PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 10/21/2022	DRAWN - WJH	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

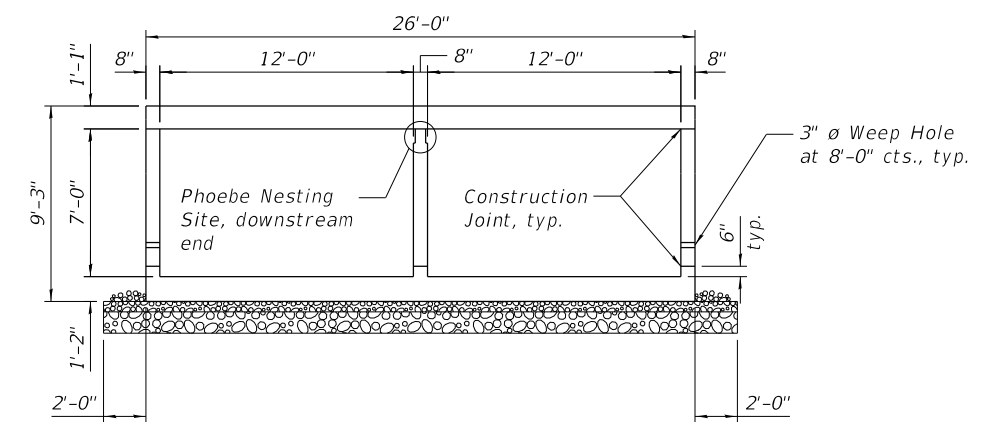
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	148
CONTRACT NO. 87800				

GENERAL NOTES

1. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
2. The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR 3704 Floodway Construction permit number allowing permanent construction as shown in the contract plans.
3. Precast Concrete alternate is not allowed.
4. Per Article 502.13 of the Standard Specifications, excavation for structures shall be considered included in the contract unit price for Concrete Box Culverts.

TOTAL BILL OF MATERIALS

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu.Yd.	542
Stone Riprap, Class A4	Sq.Yd.	62
Filter Fabric	Sq.Yd.	63
Removal and Disposal of Unsuitable Material for Structures	Cu.Yd.	542
Reinforcement Bars	Pound	68,940
Name Plates	Each	1
Concrete Box Culverts	Cu.Yd.	345.3



SECTION THRU BARREL

HRC PROJECT NO.: 19182
 HRC PROJ. CONTACT:
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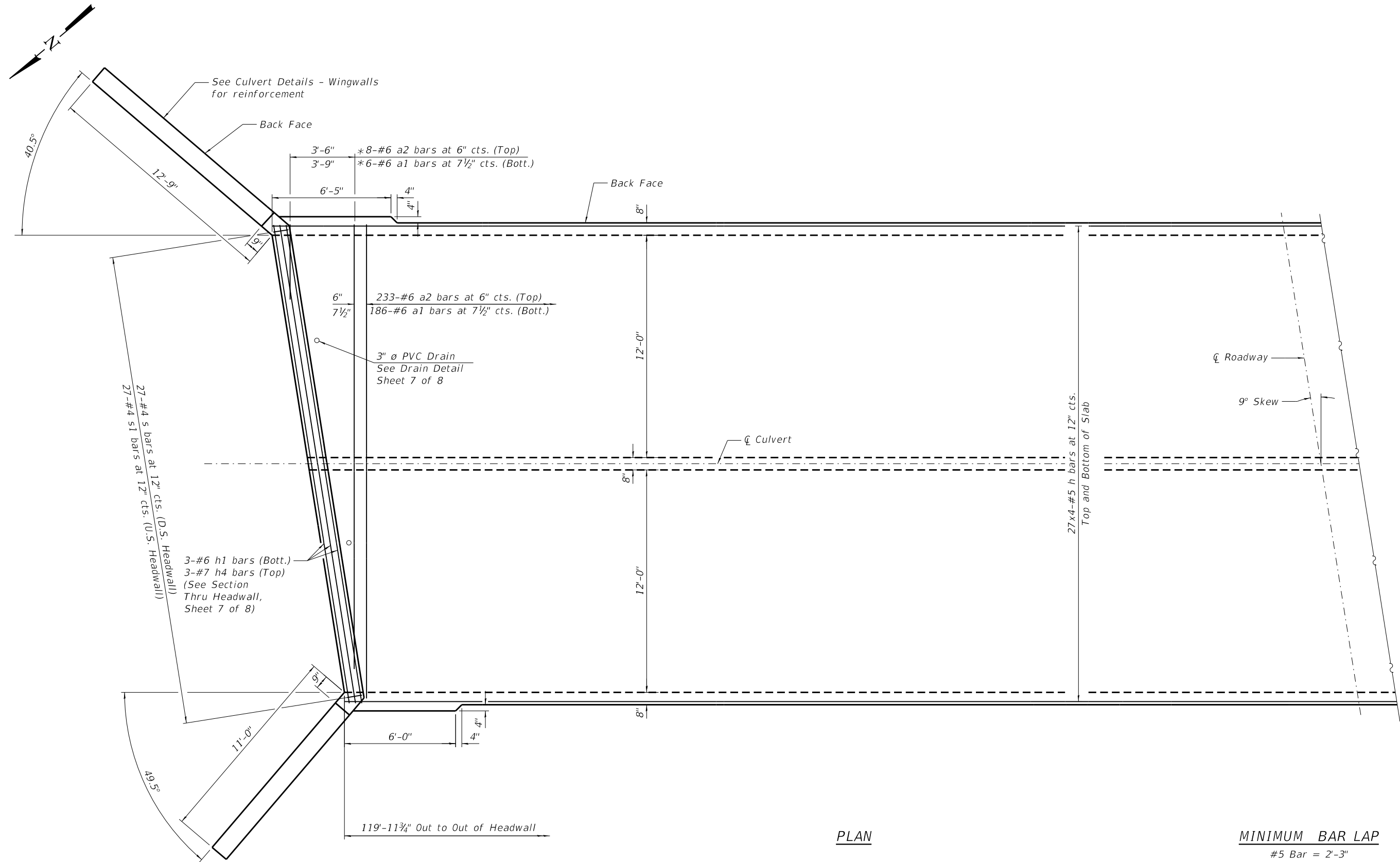
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	CHECKED - SLS	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 10/21/2022	CHECKED - AEU	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA
STRUCTURE NO. 047-3182**

SHEET NO. 2 OF 8 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	149
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				



PLAN

MINIMUM BAR LAP
#5 Bar = 2'-3"

* "a" bars in skew portion of slab shall be ordered full length and cut to fit. Balance of bar to be used in opposite end of culvert

HRC PROJECT NO.: 19182
 HRC PROJ. CONTACT:
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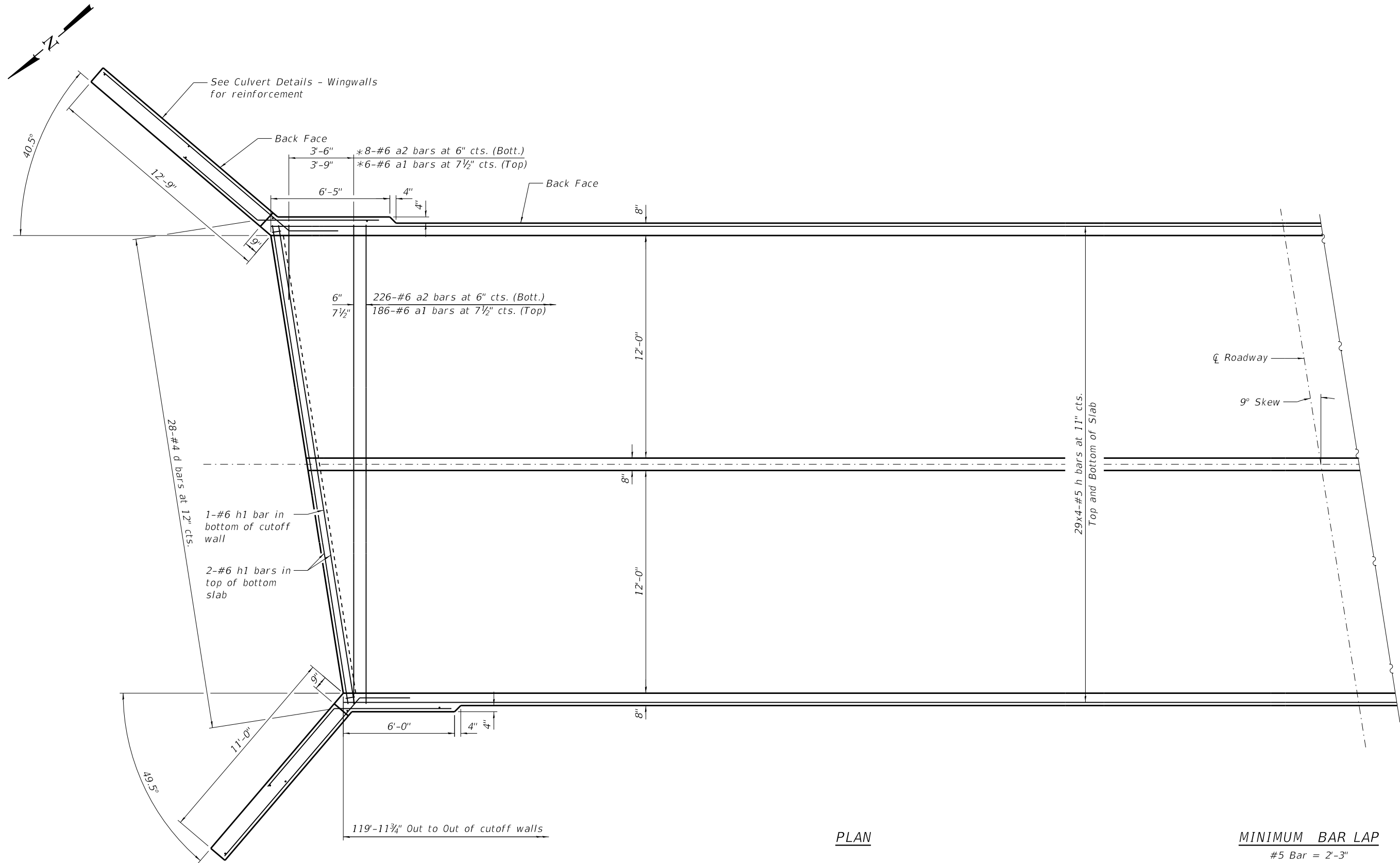
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PLOT DATE = 10/21/2022	DRAWN - WJH	REVISED -
	CHECKED - AEU	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS - TOP SLAB
STRUCTURE NO. 047-3182

SHEET NO. 3 OF 8 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	150
ILLINOIS FED. AID PROJECT			CONTRACT NO. 87800	



PLAN

MINIMUM BAR LAP
#5 Bar = 2'-3"

* "a" bars in skew portion of slab shall be ordered full length and cut to fit. Balance of bar to be used in opposite end of culvert

HRC PROJECT NO.: 19182
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 FILE NAME: 0473182-xxxx-004-Culvert Details-Bott Slab.dgn
 PLOT DRIVER: IL_Pdf.dwg, p1.ctb
 PEN TABLE: plotlabel.tbl



USER NAME = amiller
PLOT SCALE =
PLOT DATE = 10/21/2022

DESIGNED - RAT	REVISOR -
CHECKED - SLS	REVISIONS -
DRAWN - WJH	REVISIONS -
CHECKED - AEU	REVISIONS -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

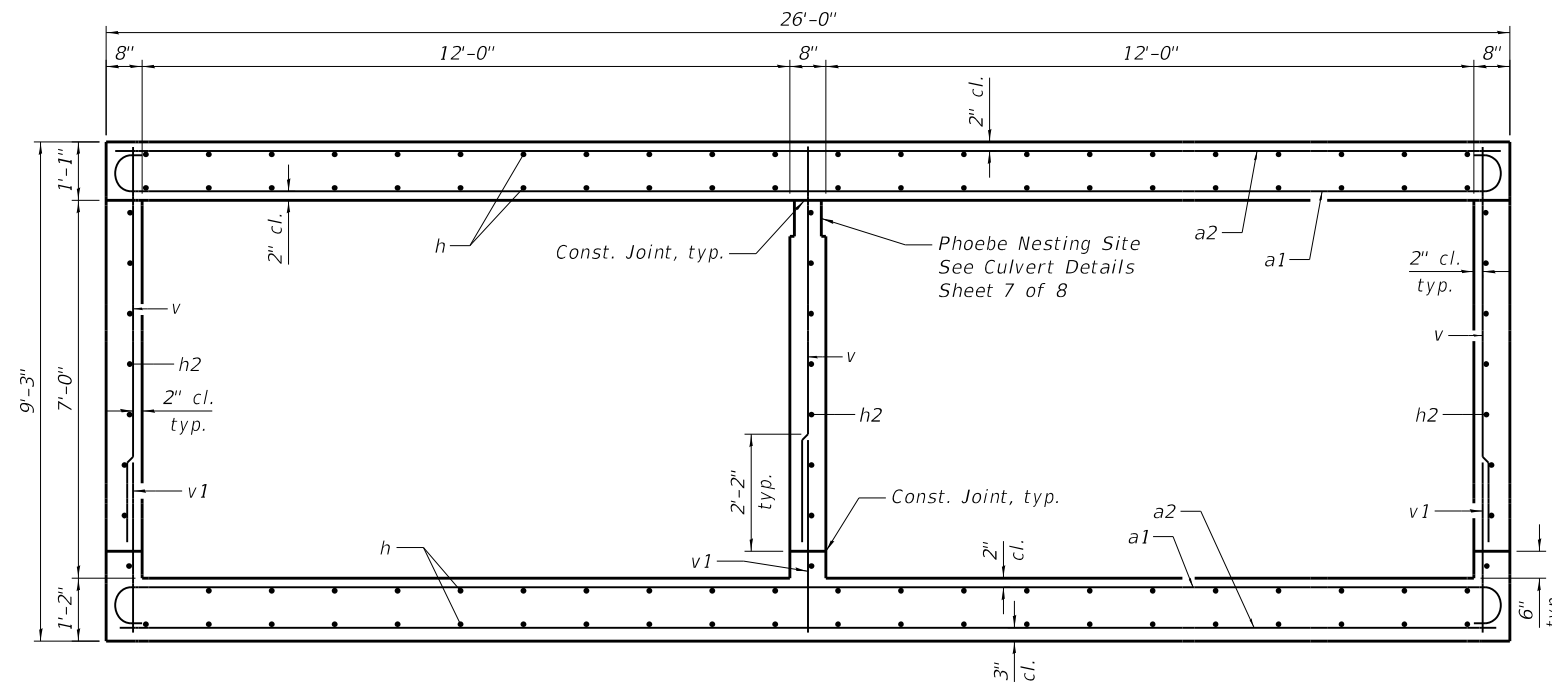
CULVERT DETAILS - BOTTOM SLAB
STRUCTURE NO. 047-3182

SHEET NO. 4 OF 8 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	151
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

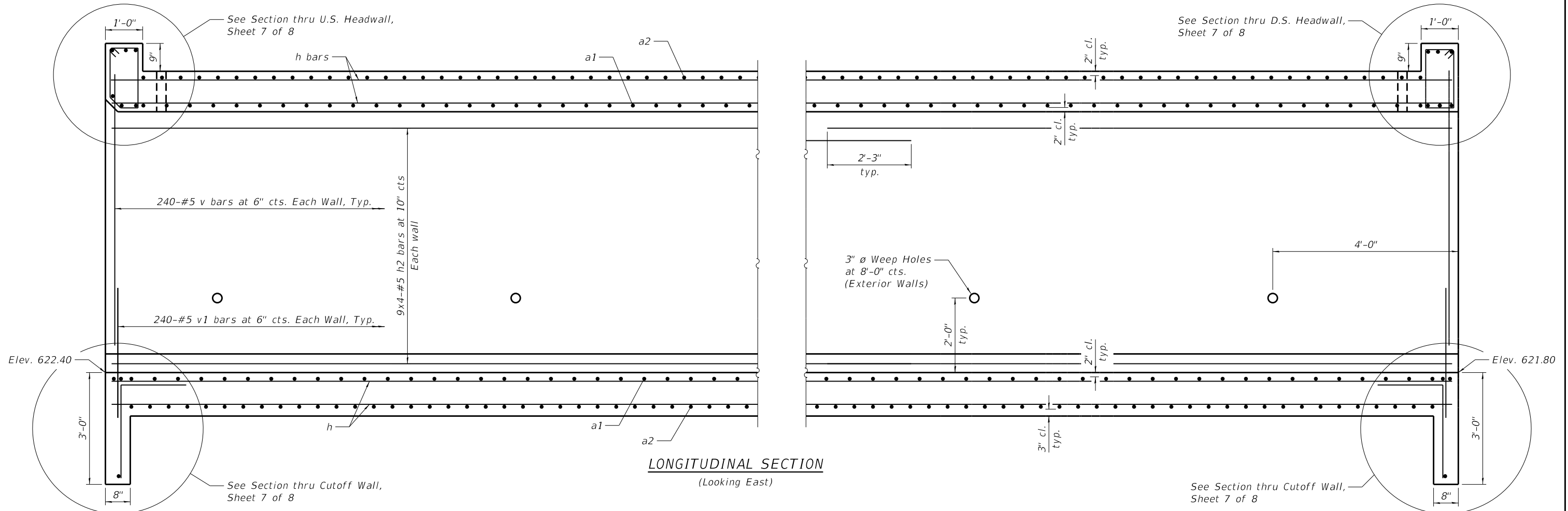
MINIMUM BAR LAP

Vert. #5 bars = 2'-2"
 Horz. #4 bars = 2'-3"



SECTION THRU BARREL

(Horizontal dimensions at Rt. L's unless otherwise noted)



LONGITUDINAL SECTION

(Looking East)

HRC PROJECT NO.: 19182
 HRC PROJ. CONTACT:
 FILE NAME: 0473182-xxxx-005-Culvert Details.dgn
 PLOT DRIVER: IL_Pdf.dwg, p1.ctb
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PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 10/21/2022	DRAWN - WJH	REVISED -
	CHECKED - AEU	REVISED -

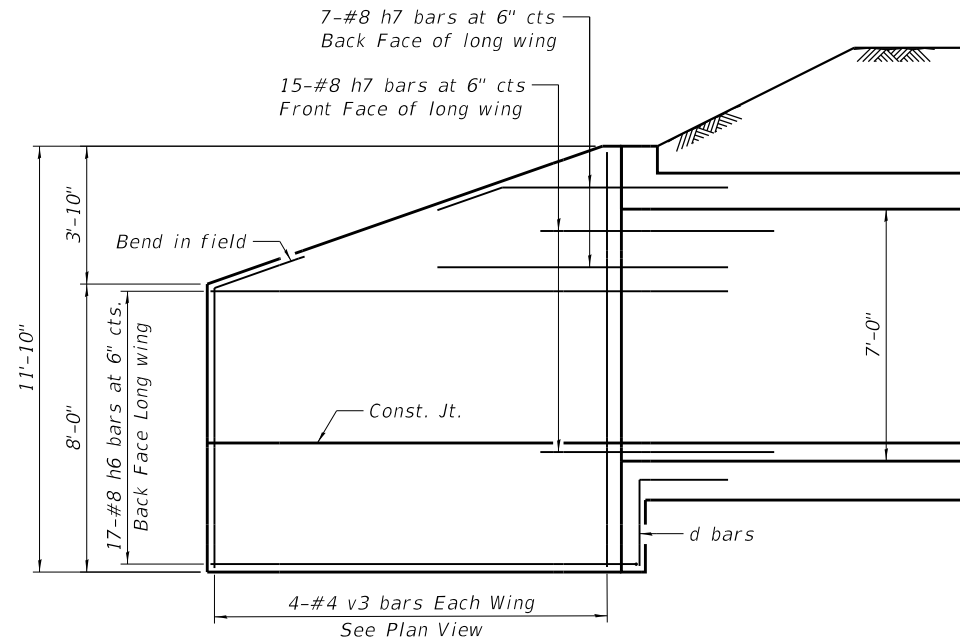
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CULVERT DETAILS - SECTIONS
 STRUCTURE NO. 047-3182**

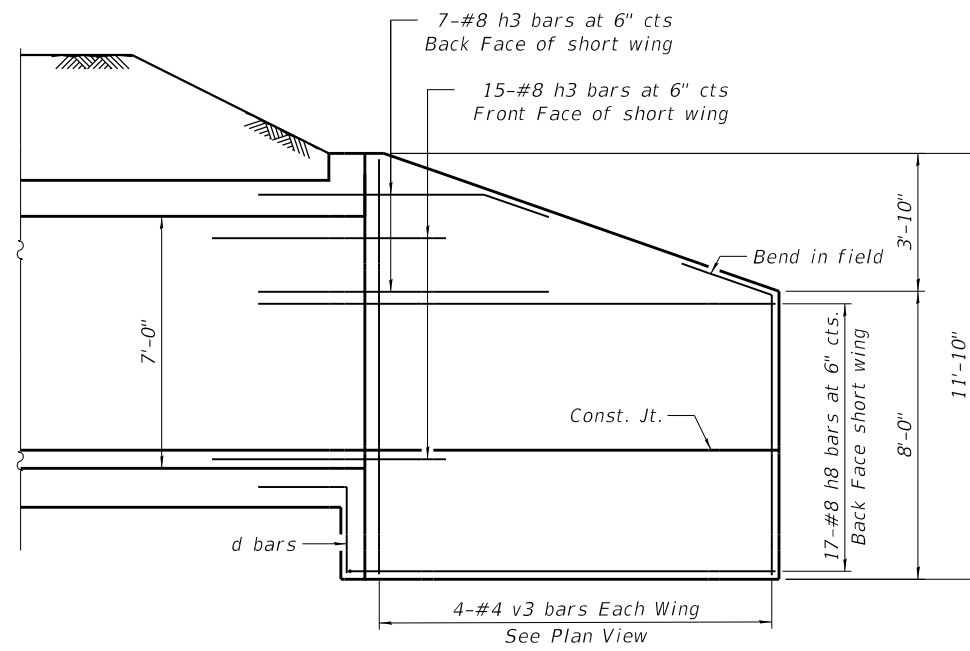
SHEET NO. 5 OF 8 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 87800				

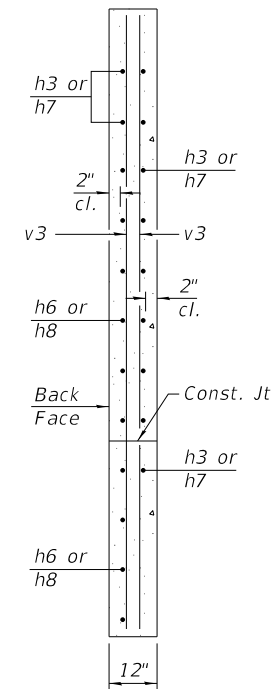
ILLINOIS FED. AID PROJECT



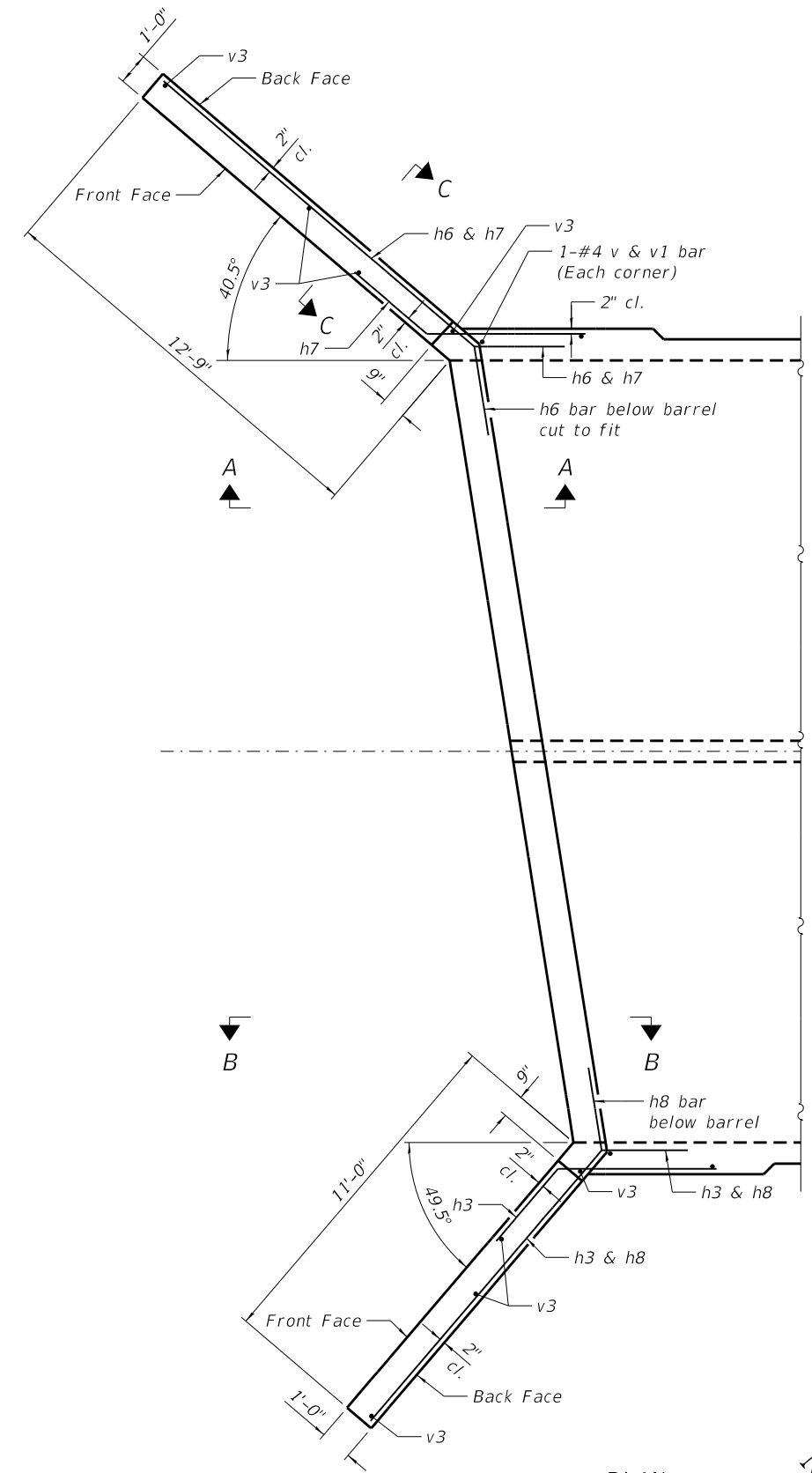
VIEW A-A



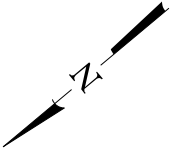
VIEW B-B



SECTION C-C



PLAN



HRG PROJECT NO.: 18182
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 PEN TABLE: plotlabel.tbl



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	CHECKED - SLS	REVISED -
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PLOT DATE = 10/21/2022	CHECKED - AEU	REVISED -

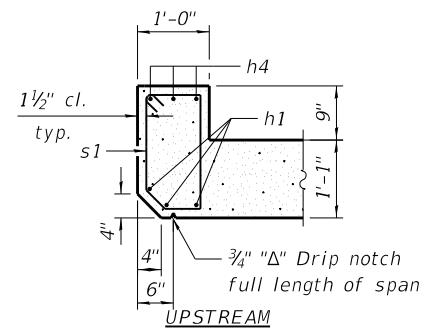
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS - WINGWALLS
 STRUCTURE NO. 047-3182

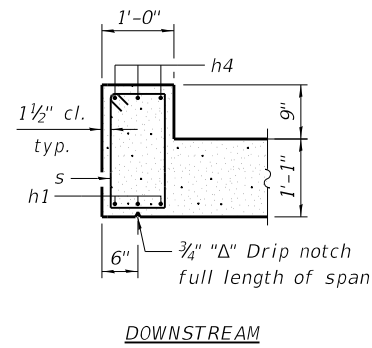
SHEET NO. 6 OF 8 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	153
CONTRACT NO. 87800				

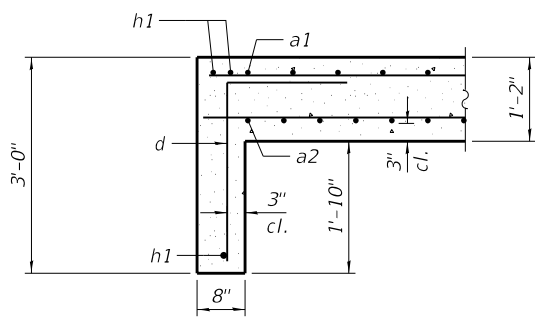
ILLINOIS FED. AID PROJECT



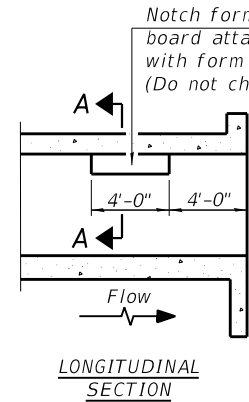
SECTION THRU HEADWALL



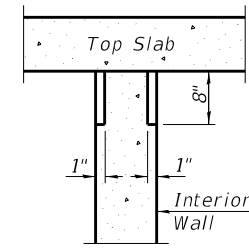
DOWNSTREAM



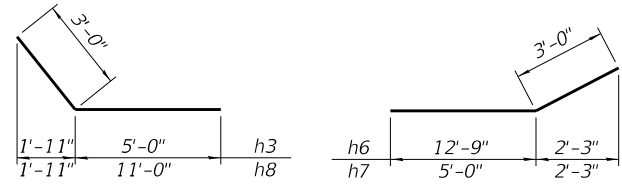
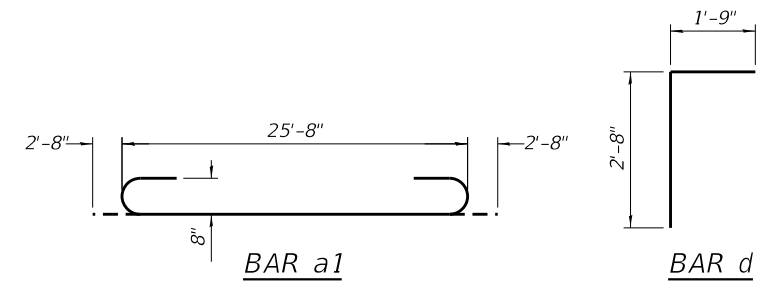
SECTION THRU CUTOFF WALLS



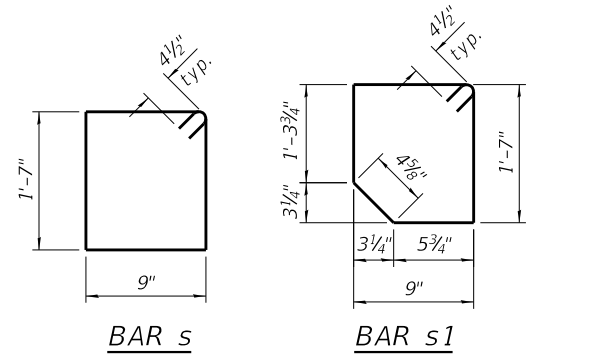
LONGITUDINAL SECTION



SECTION A-A
PHOEBE NESTING
SITE DETAILS
(Downstream End Only)

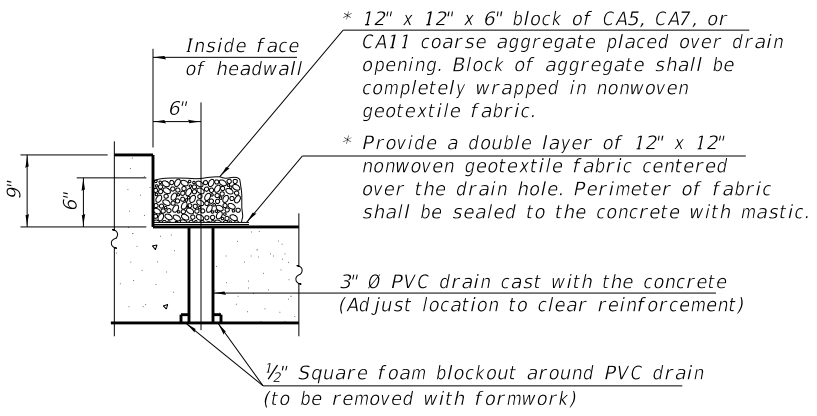


BARS h3 & h8
BARS h6 & h7



BAR s
BAR s1

* Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.



DRAIN DETAIL

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)

Notes:
A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.
At the Contractor's option, a longer v1 bar may be ordered to replace the v bar.
No reduction in quantities shall be made for this substitution.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	384	#6	31'- 0"	U
a2	482	#6	25'- 8"	—
d	56	#4	4'- 5"	L
h	448	#5	31'- 8"	—
h1	12	#6	26'- 0"	—
h2	108	#5	31'- 8"	—
h3	44	#8	8'- 0"	—
h4	6	#7	26'- 0"	—
h6	34	#8	15'- 9"	—
h7	44	#8	8'- 0"	—
h8	34	#8	14'- 0"	—
s	27	#4	5'- 5"	□
s1	27	#4	5'- 3"	□
v	720	#5	7'- 3"	—
v1	720	#5	3'- 9"	—
v3	16	#4	11'- 6"	—
Concrete Box Culverts			Cu. Yd.	345.3
Reinforcement Bars			Pound	68,940

HRG PROJECT NO.: 047312
HRG PROJ. CONTACT:
FILE NAME: 047312P-xxxx-007-Culvert_Details.dgn
PLOT DRIVER: IL_Pdf.dwg, p1.ctb
PEN TABLE: plotlabel.tbl



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PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 10/21/2022	DRAWN - WJH	REVISED -
	CHECKED - AEU	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS
STRUCTURE NO. 047-3182

SHEET NO. 7 OF 8 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	154
				CONTRACT NO. 87800
ILLINOIS FED. AID PROJECT				



3705 Progress Blvd
Peru, IL 61354
815 780-8486

SOIL BORING LOG

Solutions You Can Build On

Date 4/4/16

ROUTE Collins Rd DESCRIPTION West Abutment over Morgan Creek LOGGED BY TLM

SECTION _____ LOCATION NW 1/4, SEC. 30, TWP. 37N, RNG. 8E, 3rd PM, Latitude, Longitude

COUNTY Kendall DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO.	DEPT H	BLOW S	UCS Qu	MOIST	Surface Water Elev.	DEPT H	BLOW S	UCS Qu	MOIST
Station	(ft)	(/6")	(tsf)	(%)	ft	(ft)	(/6")	(tsf)	(%)
					Stream Bed Elev.				
BORING NO. SB-1					Groundwater Elev.:				
Station 285+20					First Encounter 619.5				
Offset 17.0 ft Lt.					Upon Completion				
Ground Surface Elev. 631.54					After Hrs.				
Topsoil (Med stiff Black Silty Clay with organics)	2				Medium Dense Gray Sand & Gravel (continued)	6			
	3	1.0	30			6			16
	4	P				6			
	2					14			
	3	1.0	26		607.04	10			14
	4	P				8			
626.04	-5				Medium Dense Gray Fine to Medium Sand with trace clay	-25			
Loose Brown Silt & Fine Sand	2					17			
624.54	3		22			10			20
	1					8			
623.54					603.54				
Loose Gray Silt & Fine Sand					Top of Weathered Rock		80/4"		11
Loose Gray Silt with trace sand	2				602.54				
	1		25		Borehole continued with rock coring.	-30			
621.04	-10								
Soft Gray Silty Clay (wet)	1								
	1	0.4	26						
	1	B							
	3								
617.04	6		20						
Medium Dense Gray Sand & Gravel	-15	7				-35			
	5								
	5		15						
	5								
	4								
	5		15						
	-20	6				-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



3705 Progress Blvd
Peru, IL 61354
815 780-8486

ROCK CORE LOG

Solutions You Can Build On

Date 4/4/16

ROUTE Collins Rd DESCRIPTION West Abutment over Morgan Creek LOGGED BY TLM

SECTION _____ LOCATION NW 1/4, SEC. 30, TWP. 37N, RNG. 8E, 3rd PM, Latitude, Longitude

COUNTY Kendall CORING METHOD Wireline

STRUCT. NO.	CORING BARREL TYPE & SIZE	DEPTH	RECOVERY	R.Q.D.	CORE TIME	STRENGTH
Station		(ft)	(%)	(%)	(min/ft)	(tsf)
BORING NO. SB-1	Core Diameter 2 in					
Station 285+20	Top of Rock Elev. 602.54					
Offset 17.0 ft Lt.	Begin Core Elev. 602.54					
Ground Surface Elev. 631.54						
Gray/green Limestone		602.54	1	99	52	1.69
		-30				
						114.2
		599.24				
Gray/green/red Limestone			2	99	52	1.3
		-35				
						297.2
		596.04				
Gray/green Limestone						
		592.54				
End of Boring		-40				
		-45				

ROCK CORE COLLINS ROAD EXTENSION.GPJ IL_DOT.GDT 8/29/16

Color pictures of the cores _____
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)
BBS, form 138 (Rev. 8-99)

HRG PROJECT NO.: 0473182
HRG PROJ. CONTACT:
FILE NAME: 0473182-xxxx-008-b04g04.dgn
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	CHECKED - SLS	REVISED -
PLOT SCALE =	DRAWN - W/JH	REVISED -
PLOT DATE = 10/21/2022	CHECKED - AEU	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG
STRUCTURE NO. 047-3182

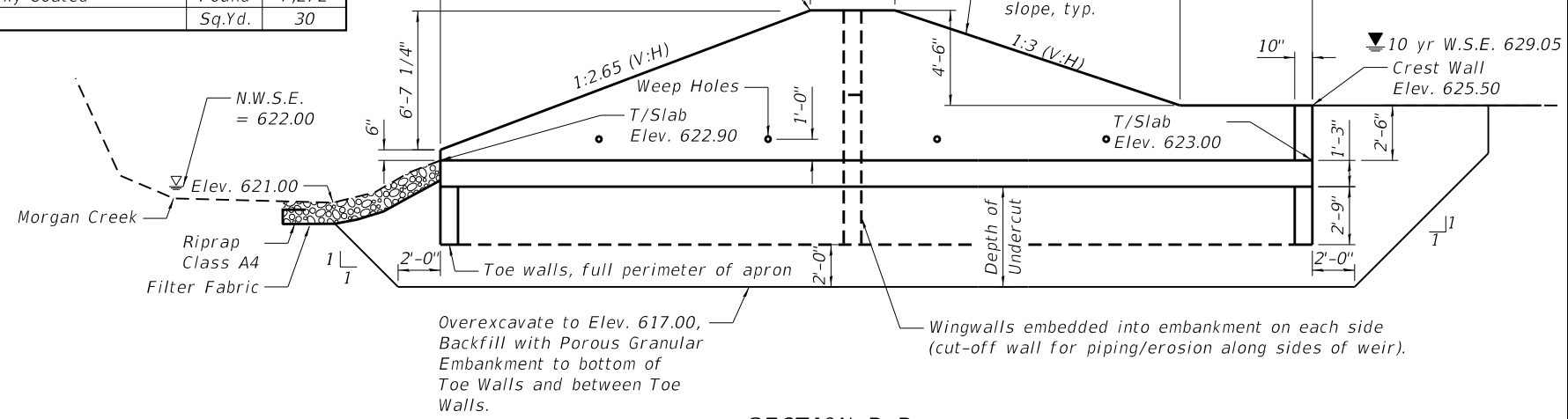
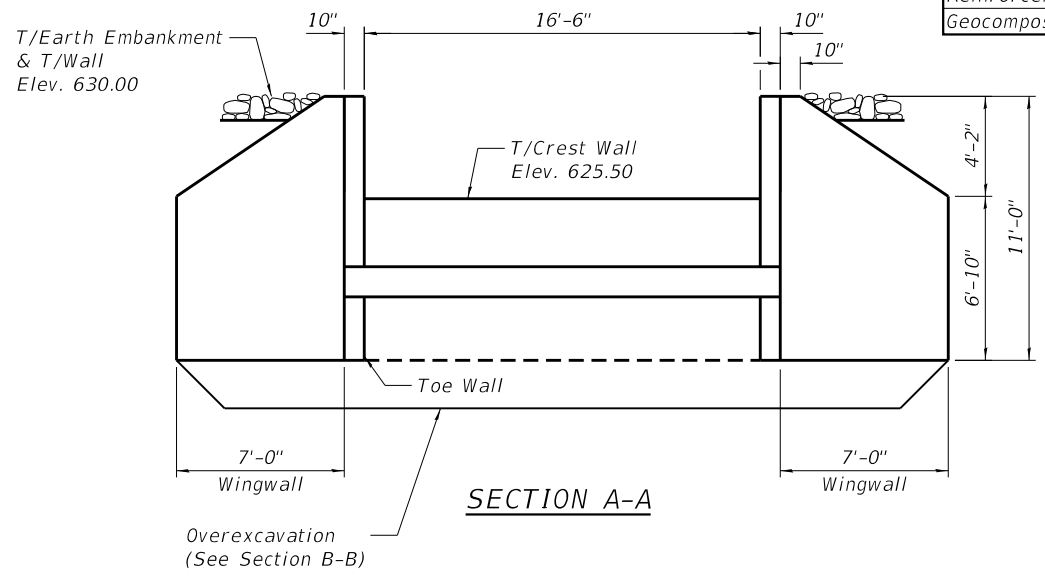
SHEET NO. 8 OF 8 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	155
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

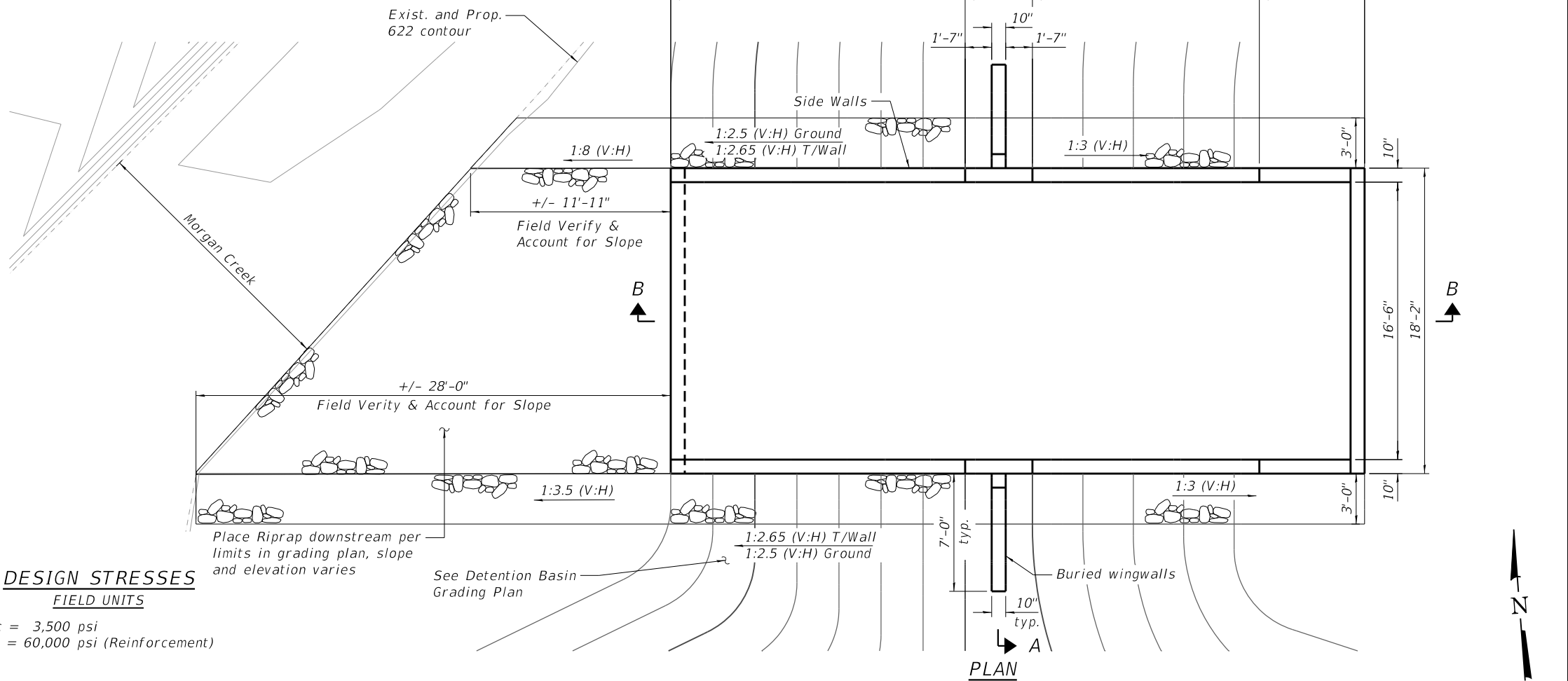
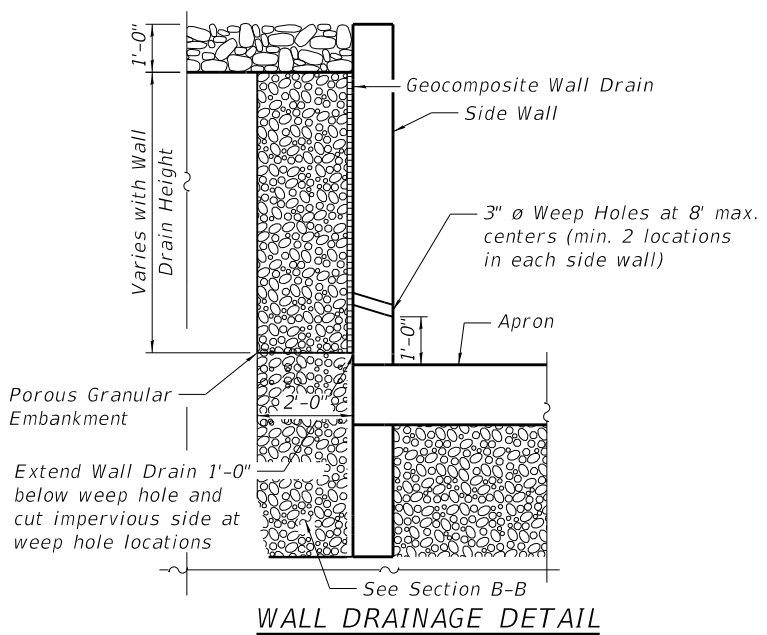
Benchmarks:
 Source Benchmark: Oswego 0003 - Arbor Gate Bernstein Monumnet
 Elevation: 645.01 (NAVD88)
 Benchmark "G": Chisled "x" on east side of water valve vault rim
 Elevation: 630.58 (NAVD88)
 N: 1817645.65
 E: 977099.37

TOTAL BILL OF MATERIALS

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu.Yd.	254
Stone Riprap, Class A4	Sq.Yd.	71
Filter Fabric	Sq.Yd.	84
Structure Excavation	Cu.Yd.	311.0
Removal and Disposal of Unsuitable Material for Structures	Cu.Yd.	533.2
Concrete Structures	Cu.Yd.	60.5
Reinforcement Bars, Epoxy Coated	Pound	7,272
Geocomposite Wall Drain	Sq.Yd.	30



Overexcavate to Elev. 617.00, Backfill with Porous Granular Embankment to bottom of Toe Walls and between Toe Walls.
 Wingwalls embedded into embankment on each side (cut-off wall for piping/erosion along sides of weir).



To the best of my knowledge, information and belief, this concrete weir design is structurally adequate. The design is an economical one for the style of structure and complies with the requirements of the current "AASHTO LFRD Bridge Design Specifications".

DESIGN STRESSES
 FIELD UNITS

f'c = 3,500 psi
 fy = 60,000 psi (Reinforcement)

Structural Engineer Expires: 11/30/2022
 HR Green, Inc.

HRC PROJECT NO.: 19182
 HRC PROJ. CONTACT:
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 PLOT DRIVER: IL_Pdf.dwg, p1.ctb
 PEN TABLE: plotlabel.tbl



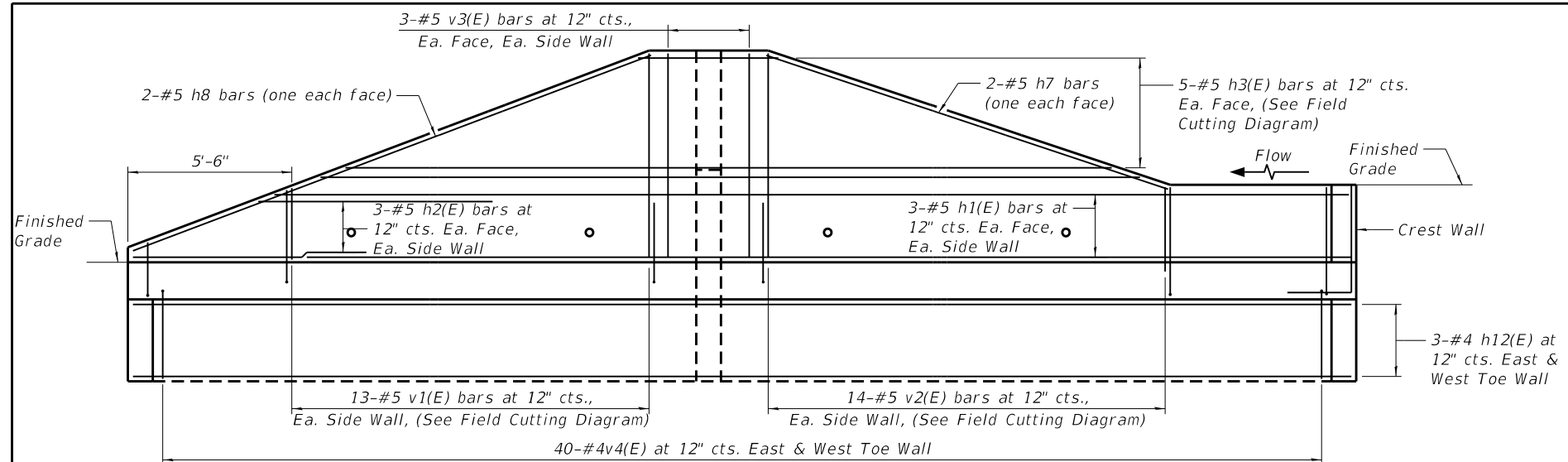
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PLOT DATE = 10/21/2022	DRAWN - WJH	REVISED -
	CHECKED - AEU	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

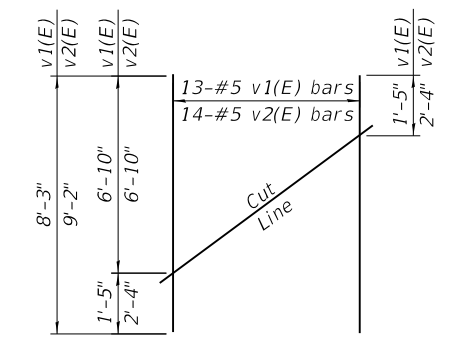
WEIR DETAILS
COLLINS ROAD

SHEET NO. 1 OF 2 SHEETS

F.A.U. RTE. 2514	SECTION 19-00154-00-FP	COUNTY KENDALL	TOTAL SHEETS 312	SHEET NO. 156
CONTRACT NO. 87800			ILLINOIS FED. AID PROJECT	



SIDE WALL ELEVATION

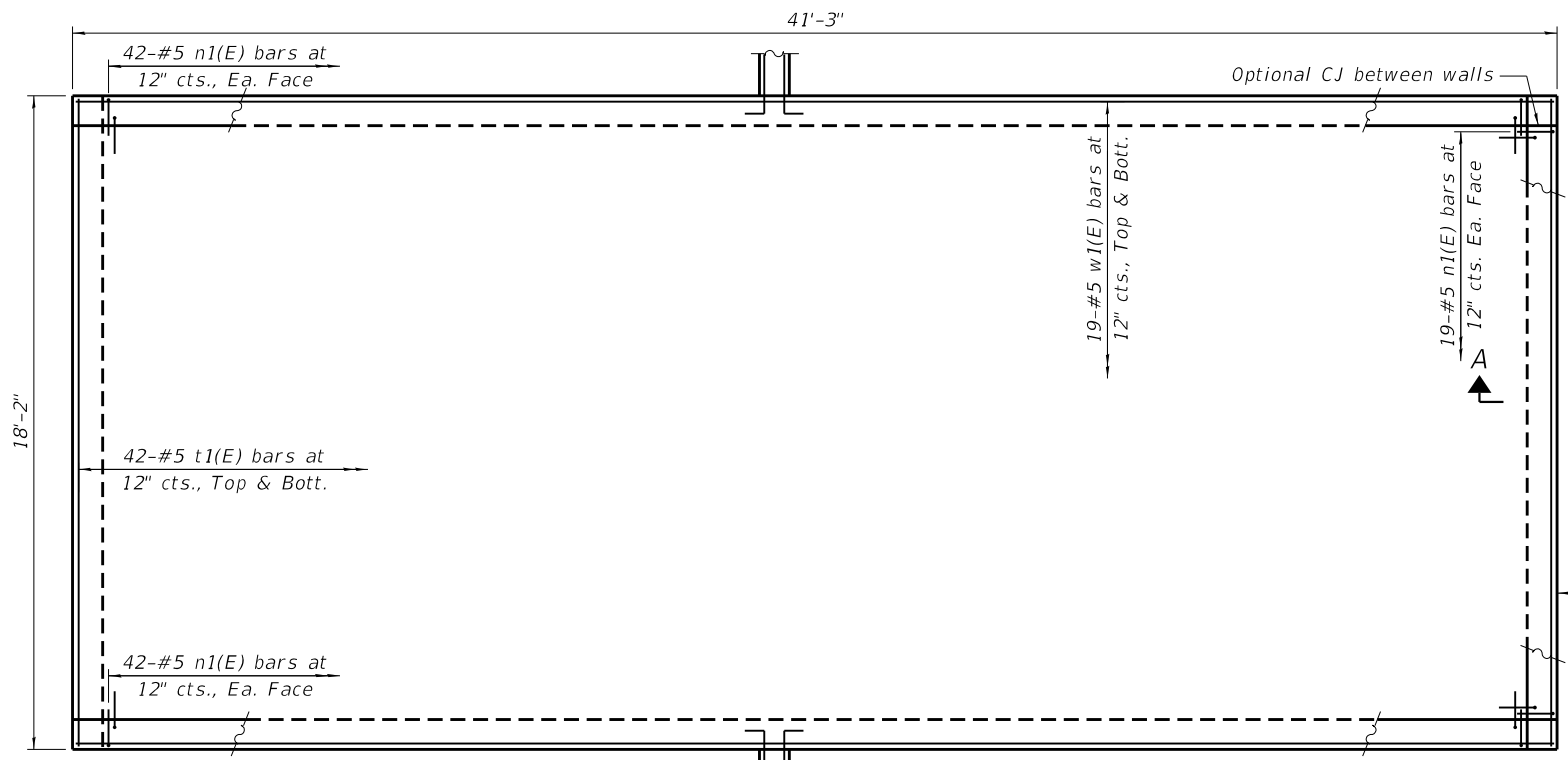


FIELD CUTTING DIAGRAM

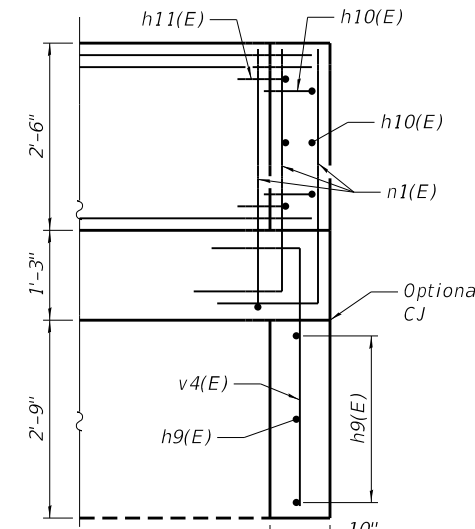
Order v1(E) and v2(E) bars full length. Cut as shown and use remainder of bars in opposite wall.

BILL OF MATERIALS

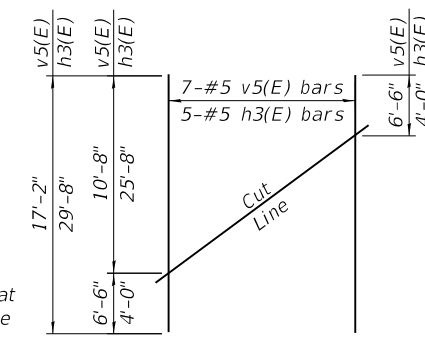
BAR	NO.	SIZE	LENGTH	SHAPE
h1(E)	12	#5	34'- 8"	—
h2(E)	12	#5	8'- 8"	—
h3(E)	10	#5	29'- 8"	—
h4(E)	16	#5	8'- 8"	┌
h5(E)	4	#5	7'- 0"	—
h6(E)	32	#5	8'- 1"	┌
h7(E)	4	#5	14'- 9"	—
h8(E)	4	#5	18'- 4"	—
h9(E)	6	#4	17'- 10"	—
h10(E)	3	#5	19'- 2"	┌
h11(E)	3	#5	18'- 2"	┌
h12(E)	6	#5	40'- 11"	—
n1(E)	206	#5	4'- 0"	┌
t1(E)	84	#5	17'- 10"	—
v1(E)	26	#5	8'- 3"	—
v2(E)	28	#5	9'- 2"	—
v3(E)	12	#5	6'- 10"	—
v4(E)	118	#5	4'- 3"	┌
v5(E)	14	#5	17'- 2"	—
w1(E)	38	#5	40'- 11"	—
Structure Excavation		Cu. Yd.	311.0	
Concrete Structures		Cu. Yd.	60.5	
Reinforcement Bars, Epoxy Coated		Pound	7,272	



APRON PLAN

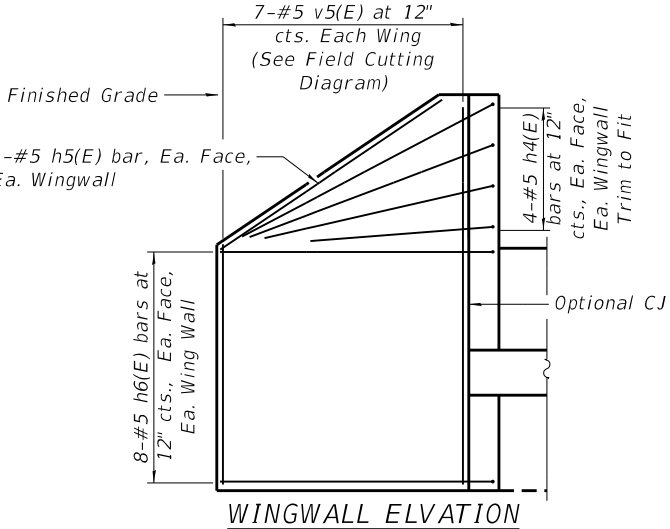


SECTION A-A (CRESTWALL & TOE WALL)



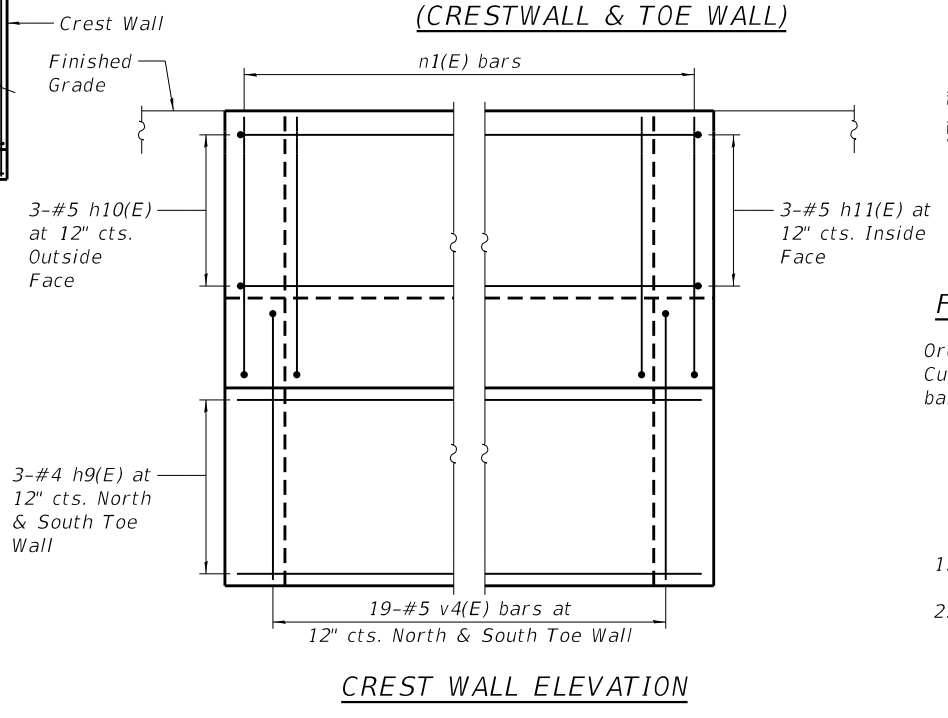
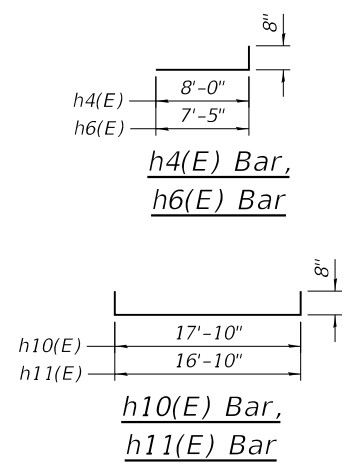
FIELD CUTTING DIAGRAM

Order v5(E) and h3(E) bars full length. Cut as shown and use remainder of bars in opposite wall.



WINGWALL ELEVATION

MINIMUM BAR LAP
#5 bar = 3'-2"



CREST WALL ELEVATION

GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Allowable net soil bearing pressure is 2,000 psf with overexcavation and backfill criteria followed. Contractor shall have a Geotechnical Engineer field verify soil conditions on site.

HRG PROJECT NO.: 19182
HRG PROJ. CONTACT:
FILE NAME: 047382P-xxxxx-01-Weir_Details02.dgn
PLOT DRIVER: IL_Pdf.dwg, p1.ctb
PEN TABLE: plotlabel.tbl



USER NAME = amiller	DESIGNED - JMW	REVISED -
PLOT SCALE =	CHECKED - JMW	REVISED -
PLOT DATE = 10/21/2022	DRAWN - W/JH	REVISED -
	CHECKED - AEU	REVISED -

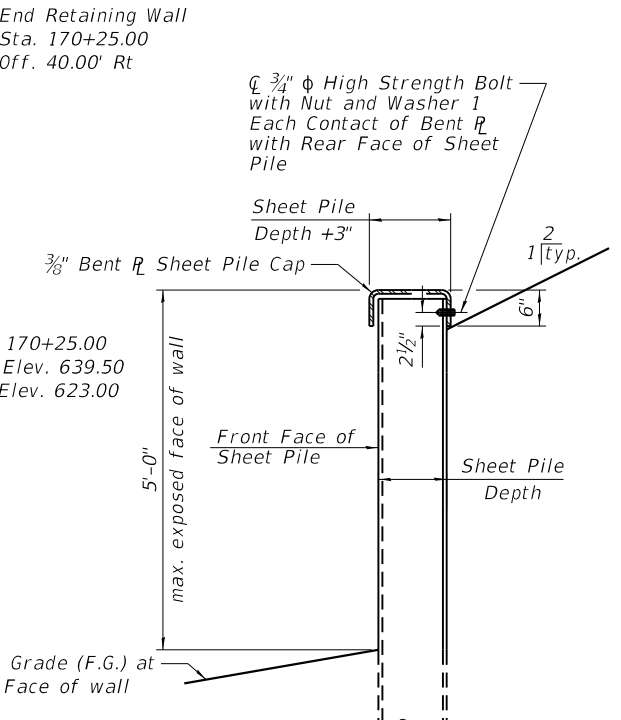
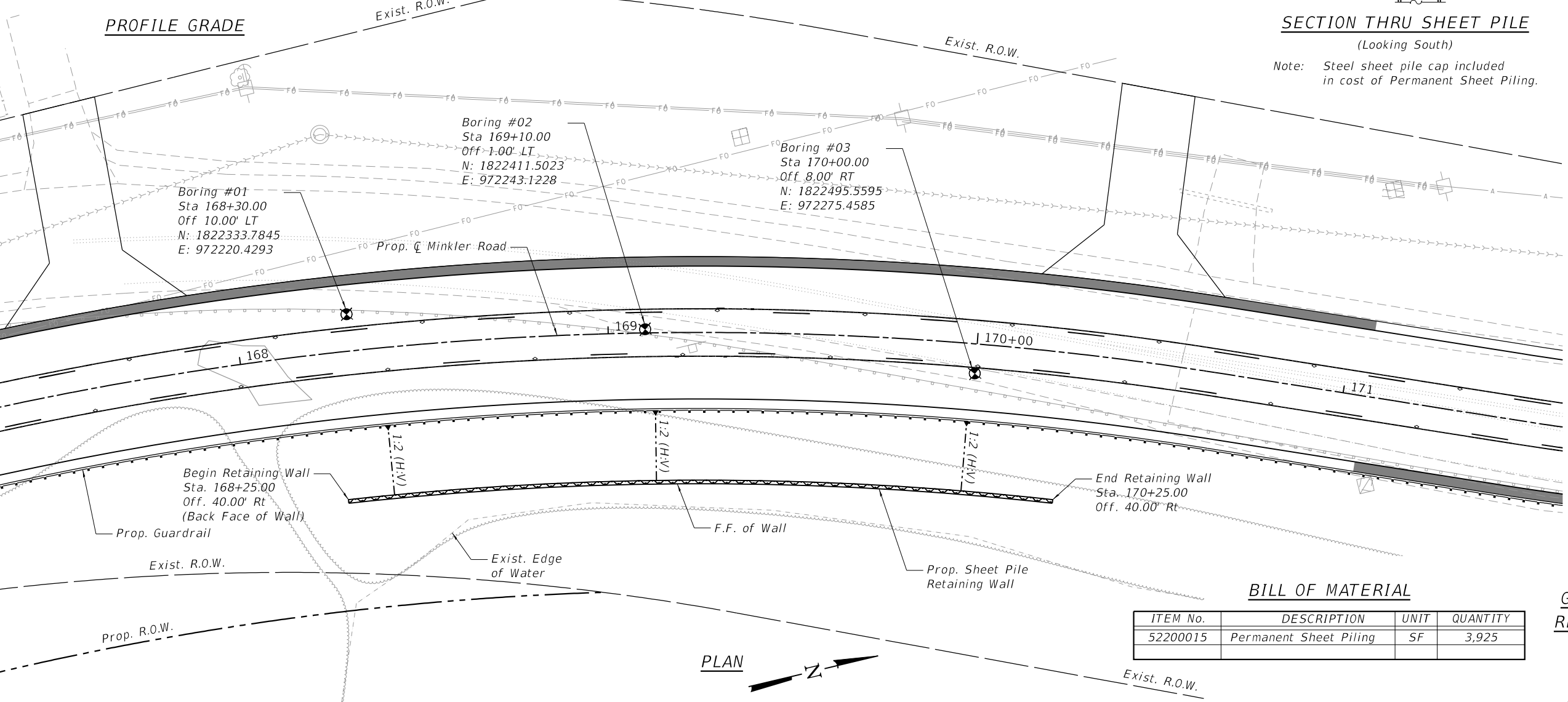
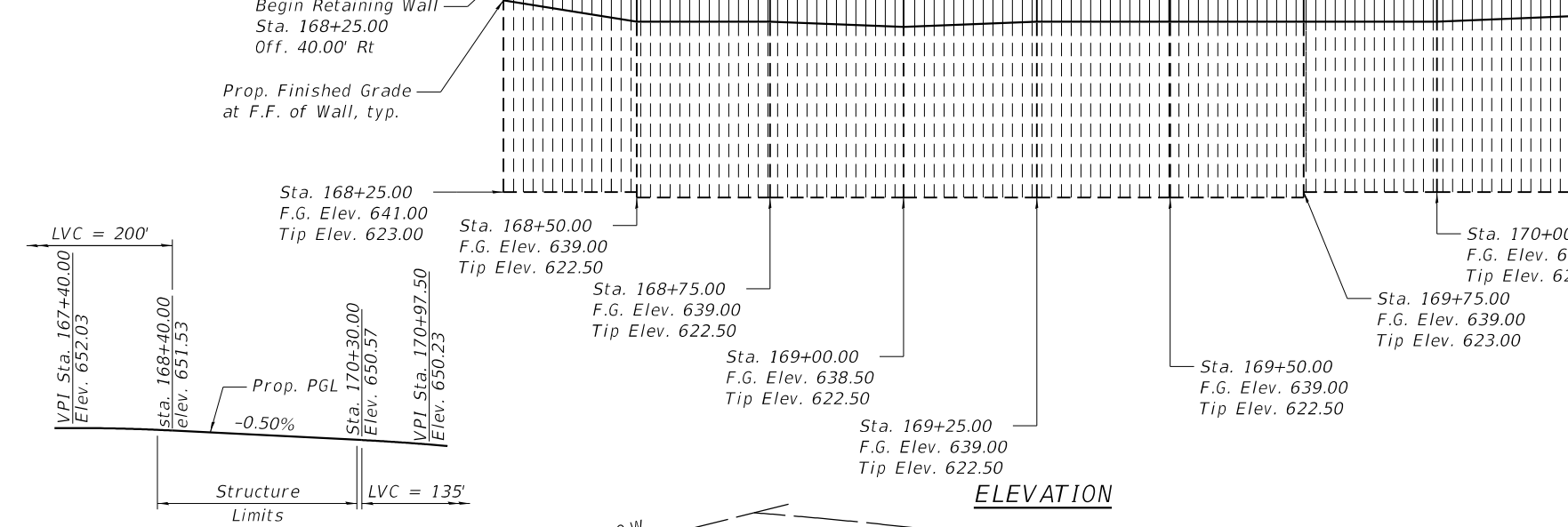
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEIR REINFORCEMENT DETAILS
COLLINS ROAD**

SHEET NO. 2 OF 2 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	157
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

Benchmark:
Cut "x" in southwest corner of concrete foundation of traffic signal control box at the southeast corner of the intersection of IL Route 71 and Minkler (Orchard) Road.
Elevation: 648.88 (NAVD 88)

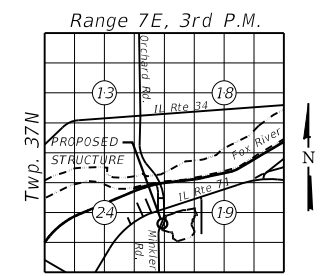


HIGHWAY CLASSIFICATION
F.A.U. RTE. 3792 / Minkler Road
Functional Class: Major Collector
ADT: 4,800 (2016); 13,000 (2040)
ADTT: 3% 144 (2016); 3% 390 (2040)
DHW: 1,300
Design Speed: 50 m.p.h.
Posted Speed: 45 m.p.h.
2-Way Traffic
Directional Distribution: 50/50

DESIGN SPECIFICATIONS
2020 AASHTO LRFD Bridge Design Specifications, 9th Edition
Minimum required $S_x = 8.0 \text{ in}^3$
Maximum deflection = 1" (At top of wall)
Minimum flange thickness = 3/8"

DESIGN STRESSES
FIELD UNITS
 $f_y = 50,000 \text{ psi (M270 Grade 50W)}$

CURVE DATA
Prop. Curve PRMINKLER 14
PI Sta. = 168+88.49
 $\Delta = 22^\circ 55' 30'' \text{ (rt)}$
 $D = 6^\circ 21' 58''$
 $R = 900.00'$
 $T = 182.49'$
 $L = 360.11'$
 $E = 18.32'$
 $e =$
 $T.R. =$
 $S.E. \text{ Run} =$
P.C. Sta. = 167+06.00
P.T. Sta. = 170+66.10



BILL OF MATERIAL

ITEM No.	DESCRIPTION	UNIT	QUANTITY
52200015	Permanent Sheet Piling	SF	3,925

GENERAL PLAN AND ELEVATION
RETAINING WALL, MINKLER ROAD
F.A.U. ROUTE 3792
KENDALL COUNTY
STA. 168+25.00 TO 170+25.00

HRG PROJECT NO.: 19182
HRG PROJ. CONTACT:
FILE NAME: 19182 Str. Retaining
PLOT DRIVER: IL_Pdf.dwg, p1c1c1g
PEN TABLE: plotlabel.tbl

HRGreen.com
Professional Design Firm
#184-001322

USER NAME = amiller	DESIGNED - SLS	REVISED -
PLOT SCALE =	CHECKED - SLS	REVISED -
PLOT DATE = 10/21/2022	DRAWN - WJH	REVISED -
	CHECKED - AEU	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 3 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	158

CONTRACT NO. 87800
ILLINOIS FED. AID PROJECT

SOIL BORING LOG

ROUTE Minkler Road DESCRIPTION Minkler Road Retaining Wall LOGGED BY DB
SECTION 16-00133-01-EG LOCATION NE 1/4, SEC. 24, TWP. 37N, RNG. 7E
COUNTY Kendall DRILLING METHOD Hollow Stem Auger HAMMER TYPE Auto

STRUCT. NO.	Station	BORING NO.	Station	Offset	Ground Surface Elev.	D	B	U	M	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After	H	B	U	M
						(ft)	(/6")	(tsf)	(%)	ft	ft	ft	ft	ft	ft	(ft)	(/6")	(tsf)	(%)
	N/A	B-1	168+30	10.00ft LT	650.00					N/A	N/A	N/A	631.0	None	N/A				
						649.83													
						649.00													
							2										3		
							3	2.3	17.2							4			32.2
							6	B								5			
							2										2		
							3	2.1	14.8							3	0.3		22.5
							-5	4	B							-25	11	P	
							2										4		
						643.00	2		26.8							5			15.8
							4										10		
							6										11		
							12		8.5							24	6.3		9.1
							-10	9								48	B		
							4												
							4		5.7										
							5												
						636.50													
							4												
							6		5.6										
							-15	6								-35			
							5												
							7		11.7										
							8												
							4		23.8										
							-20	7								-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

SOIL BORING LOG

ROUTE Minkler Road DESCRIPTION Minkler Road Retaining Wall LOGGED BY DB
SECTION 16-00133-01-EG LOCATION NE 1/4, SEC. 24, TWP. 37N, RNG. 7E
COUNTY Kendall DRILLING METHOD Hollow Stem Auger HAMMER TYPE Auto

STRUCT. NO.	Station	BORING NO.	Station	Offset	Ground Surface Elev.	D	B	U	M	Surface Water Elev.	Stream Bed Elev.	Groundwater Elev.:	First Encounter	Upon Completion	After	H	B	U	M
						(ft)	(/6")	(tsf)	(%)	ft	ft	ft	ft	ft	ft	(ft)	(/6")	(tsf)	(%)
	N/A	B-2	169+10	1.00ft LT	650.00					N/A	N/A	N/A	634.0	None	N/A				
						649.00													
							1												
							5	1.3	10.4							6			
							8	S								7			21.8
							2												
							4	0.8	15.5							2			28.4
							-5	5	B							-25	3		
							3										2		
							4		22.3							4	0.3		23.2
							5									5	P		
							7												
							8		10.3							2			
							-10	6								12			14.5
																25			
							9												
							11												
							12												
							2												
							4		14.7										
							-15	6								-35			
							5												
							6		16.8										
							7												
							5												
							6		15.8										
							7												
							-20	6								-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

HRC PROJECT NO.: 19152
 HRC PROJ CONTACT:
 FILE NAME: 19152 Str_RetWall.blog.dgn
 PLOT DRIVER: IL_Pdf_wpdrtc.fg
 PEN TABLE: PlotTable.tbl



HRGreen.com
Professional Design Firm
#184-001322

USER NAME = amiller	DESIGNED - RAT	REVISED -
CHECKED - AEU	CHECKED - AEU	REVISED -
PLOT SCALE =	DRAWN - W/JH	REVISED -
PLOT DATE = 10/21/2022	CHECKED - AEU	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOG
RETAINING WALL**

SHEET NO. 2 OF 3 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	159
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				



Illinois Department of Transportation
Division of Highways
Chicago Testing Laboratory, Inc.

SOIL BORING LOG

Page 1 of 1

Date 9/1/21

ROUTE Minkler Road DESCRIPTION Minkler Road Retaining Wall LOGGED BY DB
SECTION 16-00133-01-EG LOCATION NE 1/4, SEC. 24, TWP. 37N, RNG. 7E
COUNTY Kendall DRILLING METHOD Hollow Stem Auger HAMMER TYPE Auto

STRUCT. NO.	D E L U M				Surface Water Elev.	D E L U M			
Station	P	B	C	O	ft	P	B	C	O
BORING NO.	T	L	S	I	Stream Bed Elev.	H	L	S	I
Station	H	W	Qu	S	Groundwater Elev.:				
Offset	(ft)	(/6")	(tsf)	(%)	First Encounter	(ft)	(/6")	(tsf)	(%)
Ground Surface Elev.					Upon Completion				
					After N/A Hrs.				
24 inches of Aggregate Shoulder					N/A				
		6			N/A		6		
648.00		6		4.6			8		11.0
Brown and Gray, Moist FILL: CLAY trace gravel		6					7		
		3					5		
		4	1.3	11.7			5		20.1
		6	B				13		
		2					0		
		4	1.5	11.3			0	0.3	27.2
		6	B				0	P	
		14							
		9		15.2			3		
		6					9		25.8
639.50		10					4		
Dense Gray, Moist GRAVEL with sand (GPS)		14							
		16		5.4					
		22							
		28							
		22		6.7					
635.50		12							
Loose to Medium Dense Gray, Moist SAND with gravel (SPG)		10							
		8		17.1					
		6							
		4							
		4		17.4					
		3							

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

HRC PROJECT NO.: 19152
 HRC PROJ CONTACT:
 FILE NAME: 19152 Str. Ret Wall.blog02.dgn
 PLOT DRIVER: IL_Pdf.dwg.plt.ctb
 PEN TABLE: plotlabel.tbl

HRGreen
HRGreen.com
Professional Design Firm
#184-001322

USER NAME = amiller	DESIGNED - RAT	REVISED -
	CHECKED - AEU	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 10/21/2022	CHECKED - AEU	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

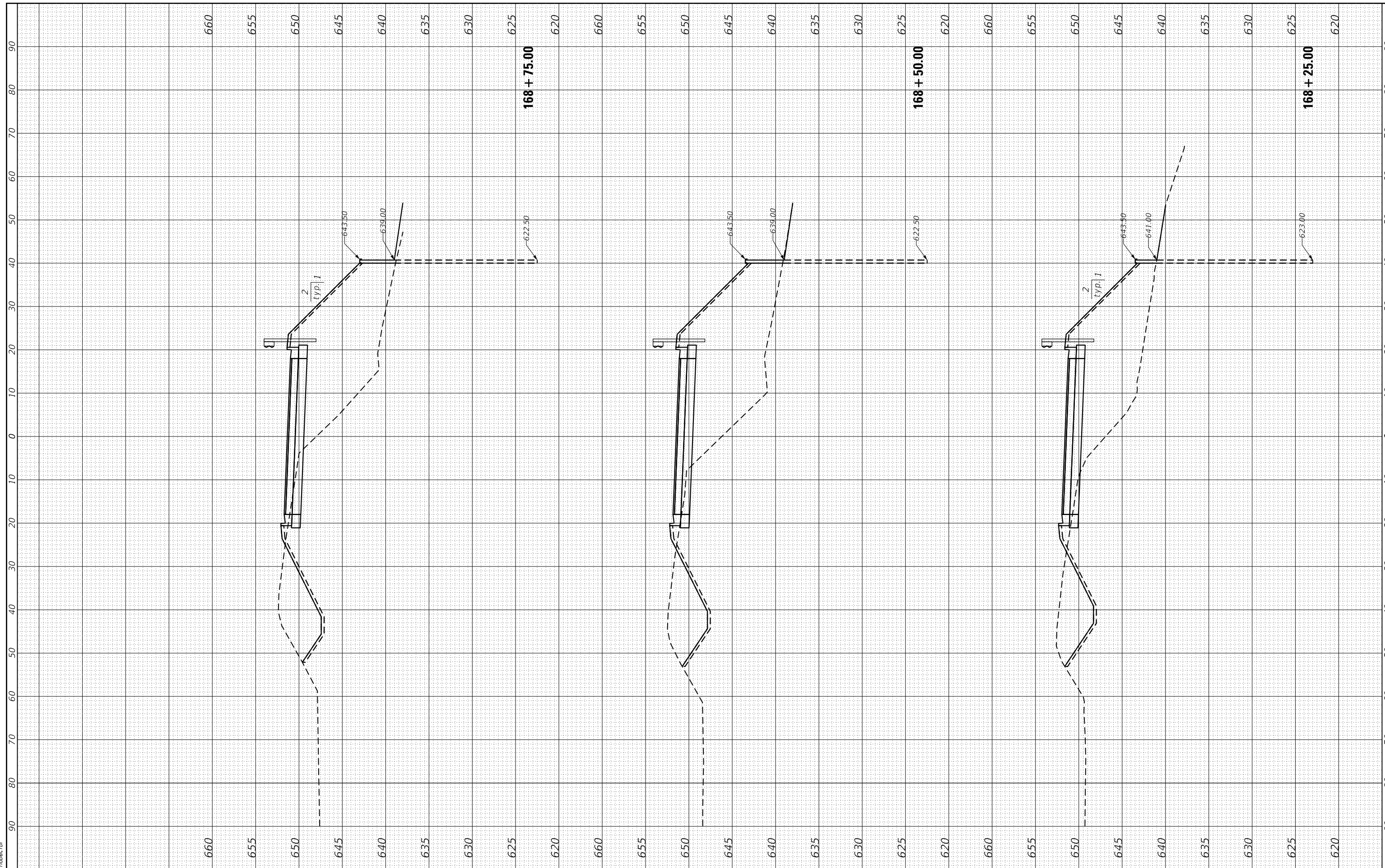
**SOIL BORING LOG
RETAINING WALL**
SHEET NO. 3 OF 3 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	160
CONTRACT NO. 87800			ILLINOIS FED. AID PROJECT	

FINAL SURVEY NO.	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	

ORIGINAL SURVEY NO.	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	

HRG PROJECT No: 19162
 FILE NAME: 19162_S1 - Ret Wall_Ksec.dgn
 PLOT DRIVER: L:\off\dwg\pc6g
 PEN TABLE: p10\table.tbl



HRGreen
 Illinois Professional Design Firm
 #184-001322

USER NAME	= amiller
DESIGNED	- SLS
DRAWN	- WJH
CHECKED	- AEU
DATE	- AEU
PLOT SCALE	= 20.0000' / in.
PLOT DATE	= 10/21/2022

REVISED	-
REVISED	-
REVISED	-
REVISED	-

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**RETAINING WALL CROSS SECTIONS
 (SHEET 1 OF 3)**

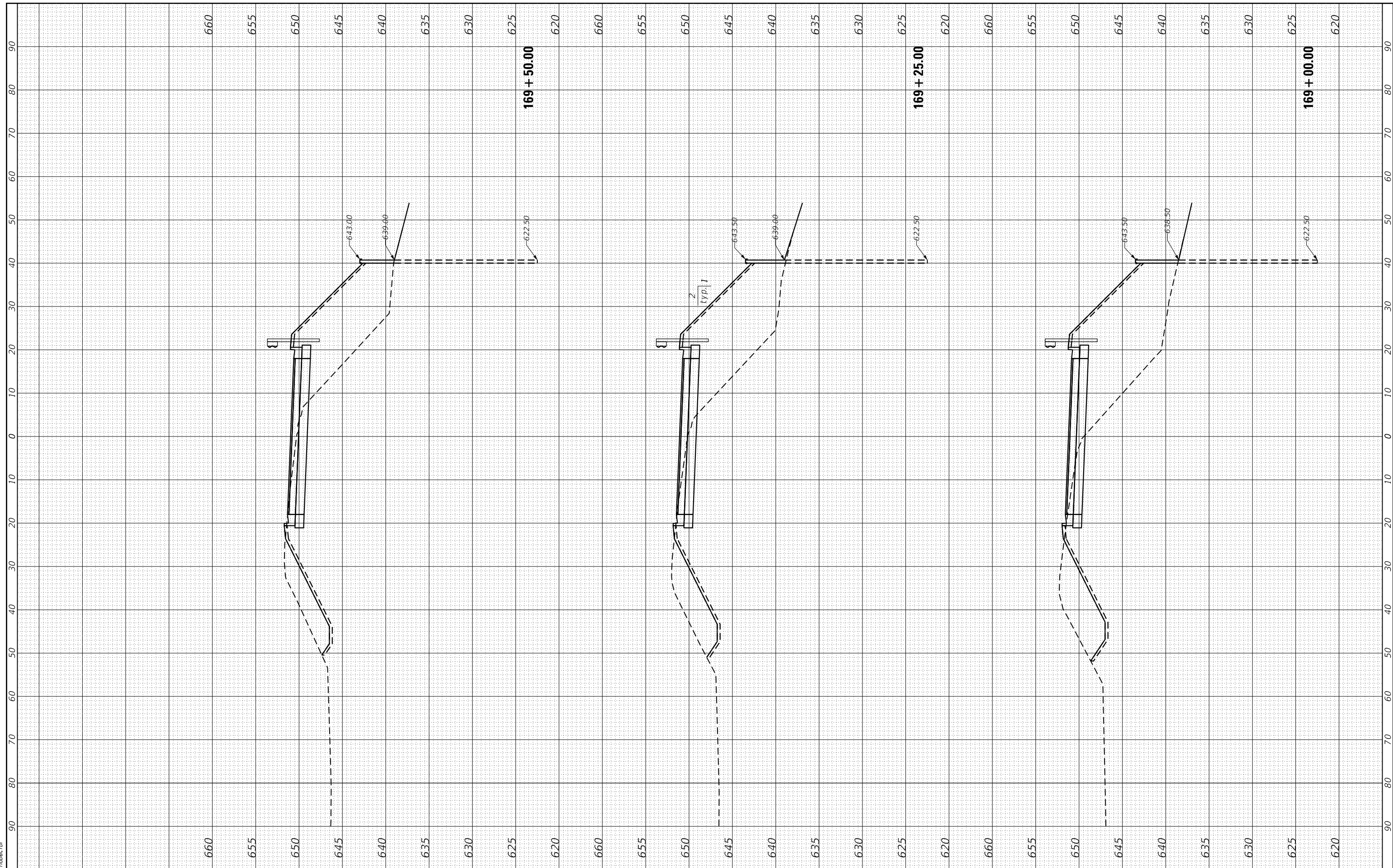
SCALE: SHEET 1 OF 3 SHEETS STA. 168+25.00 TO STA. 168+75.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	161
			CONTRACT NO. 87800	
		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY NO.	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	

ORIGINAL SURVEY NO.	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	

HRC PROJECT No: 19162
 FILE NAME: 19162_S1 - Ret Wall_Ksec.dgn
 PLOT DRIVER: lprf_dpvcrcfg
 PEN TABLE: plottabtbl




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 Illinois Professional Design Firm
 #184-001322

USER NAME = amiller	DESIGNED - SLS	REVISED -
	DRAWN - WJH	REVISED -
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PLOT DATE = 10/21/2022	DATE - AEU	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

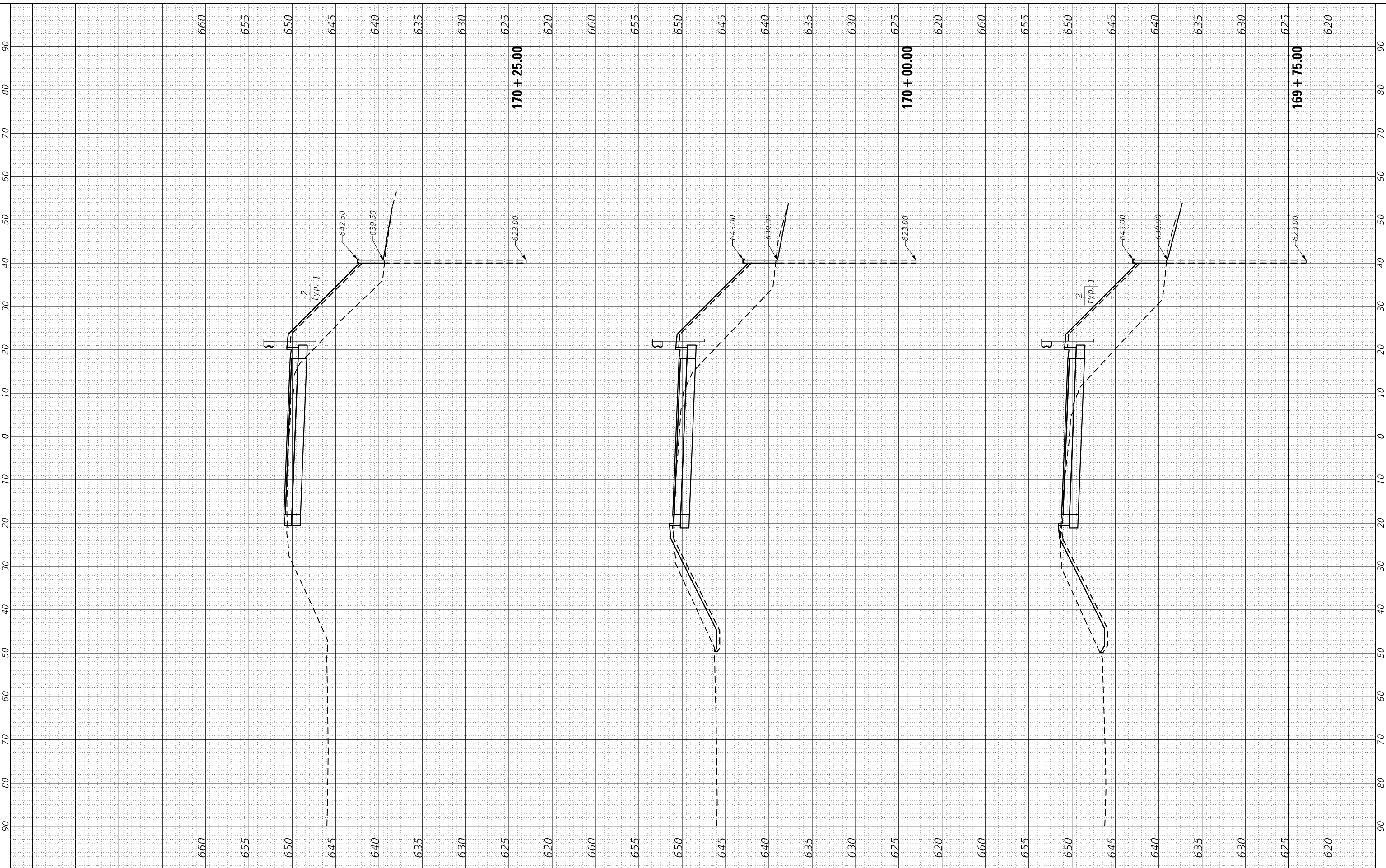
RETAINING WALL CROSS SECTIONS	
(SHEET 2 OF 3)	
SCALE:	SHEET 2 OF 3 SHEETS
	STA. 169+00.00 TO STA. 169+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	162
			CONTRACT NO. 87800	
ILLINOIS FED. AID PROJECT				

FINAL SURVEY NO.	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
AREAS CHECKED	TEMPLATE		
AREAS CHECKED	AREAS		
AREAS CHECKED	AREAS		

ORIGINAL SURVEY NO.	SURVEYED	BY	DATE
NOTE BOOK NO.	PLOTTED		
AREAS CHECKED	TEMPLATE		
AREAS CHECKED	AREAS		
AREAS CHECKED	AREAS		

HRG PROJECT No: 19162
 FILE NAME: 19162_311 - Ret Wall_Kenc.dgn
 PLOT DRIVER: il_caf_fdwprtcfg
 PEN TABLE: plot.tbl



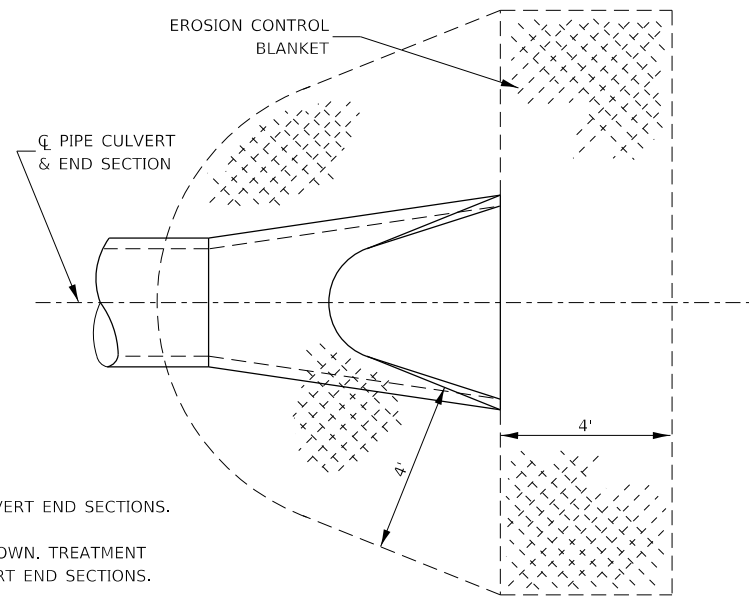
HRGreen
 HRGreen.com
 Illinois Professional Design Firm
 #184-001322

USER NAME = amiller	DESIGNED - SLS	REVISED -
	DRAWN - WJH	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - AEU	REVISED -
PLOT DATE = 10/21/2022	DATE - AEU	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

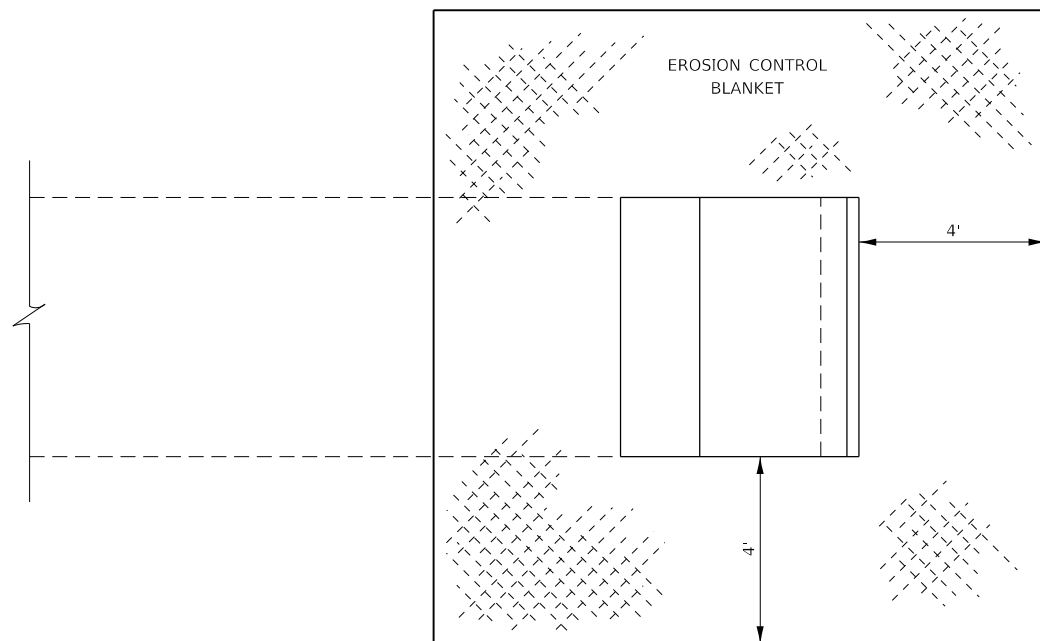
RETAINING WALL CROSS SECTIONS (SHEET 3 OF 3)	
SCALE:	SHEET 3 OF 3 SHEETS STA. 169+75.00 TO STA. 170+25.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	163
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

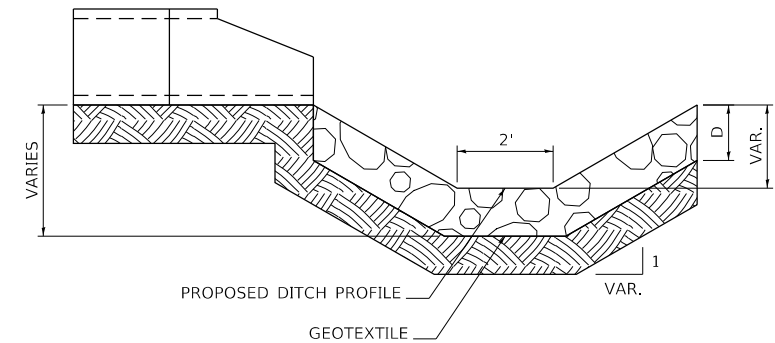
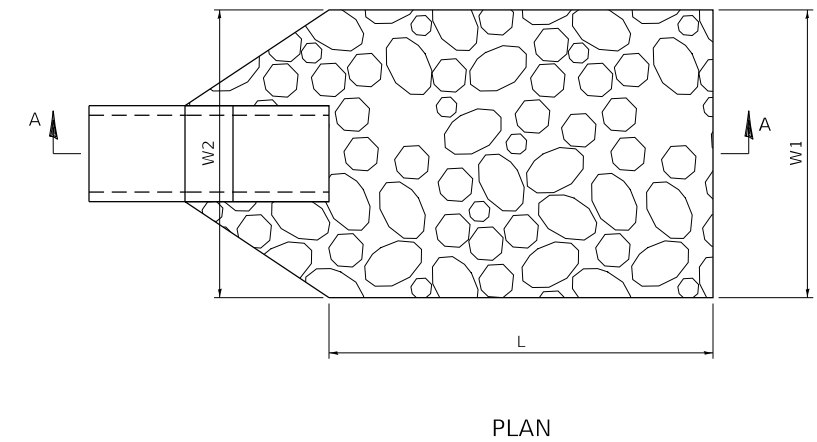


- NOTES:
1. TO BE USED AT ALL PIPE CULVERT END SECTIONS.
 2. PRC FLARED END SECTION SHOWN. TREATMENT SAME FOR OTHER PIPE CULVERT END SECTIONS.
 3. SEE DETAIL BELOW FOR TREATMENT AT BOX CULVERT END SECTIONS.

DETAIL OF EROSION CONTROL BLANKET LINING AROUND END SECTION



EROSION CONTROL BLANKET AT PRECAST BOX CULVERT END SECTIONS



NOTES:

1. THE FILTER FABRIC SHALL MEET THE REQUIREMENTS IN MATERIAL SPECIFICATIONS 592 GEOTEXTILE TABLE 1 OR 2, CLASS I, II OR III.
2. THE ROCK RIPRAP SHALL MEET THE IDOT REQUIREMENTS FOR THE GRADATION SPECIFIED ON THE EROSION CONTROL PLANS.
3. THE RIPRAP SHALL BE PLACED ACCORDING TO CONSTRUCTION SPECIFICATION 61 LOOSE ROCK RIPRAP. THE ROCK MAY BE EQUIPMENT PLACED. DIMENSIONS SHOWN IN PLAN VIEW SHALL BE AS SPECIFIED ON THE EROSION CONTROL PLANS OR AS DIRECTED BY THE ENGINEER.

RIPRAP OUTLET

HRG PROJECT NO.: 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162_081100.dgn
 PEN TABLE: 19162.tbl

HRGreen
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 Illinois Professional Design Firm
 #184-001322

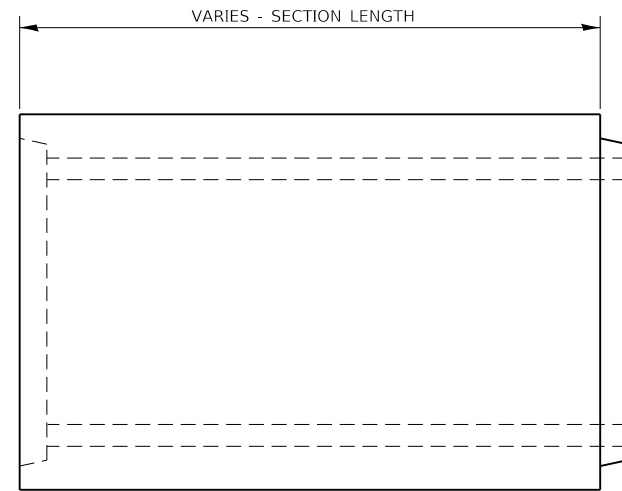
USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

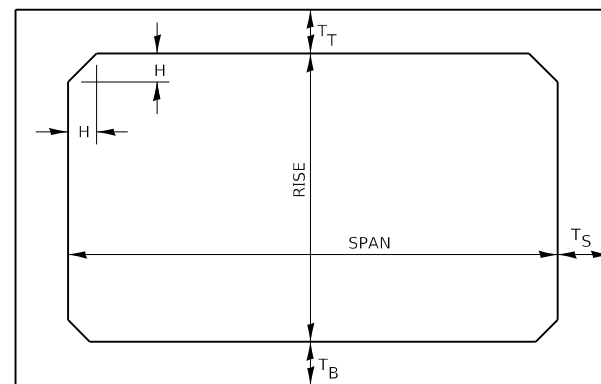
**MISCELLANEOUS DETAILS
 (SHEET 1 OF 9)**

SCALE: SHEET 1 OF 9 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	164
CONTRACT NO. 87800			ILLINOIS FED. AID PROJECT	



ELEVATION



NOTE: THE HAUNCH DIMENSION H, IS EQUAL TO THE WALL THICKNESS T_S.

TYPICAL BOX SECTION

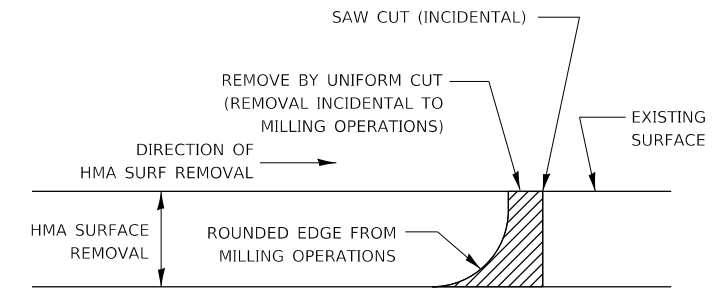
SPAN, FEET	T _T INCHES		T _B INCHES		T _S INCHES	
	M 259	M 273	M 259	M 273	M 259	M 273
3	4	7	4	6	4	4
4	5	7½	5	6	5	5
5	6	8	6	7	6	6
6	7	8	7	7	7	7
7	8	8	8	8	8	8
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12

TYPICAL THICKNESSES

PRECAST CONCRETE BOX SECTION

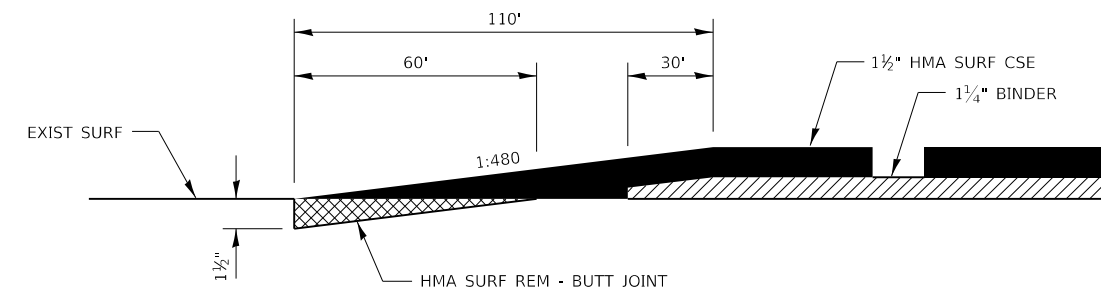
GENERAL NOTES:

MINIMUM COVER FOR BOX CULVERTS SHALL BE 6".

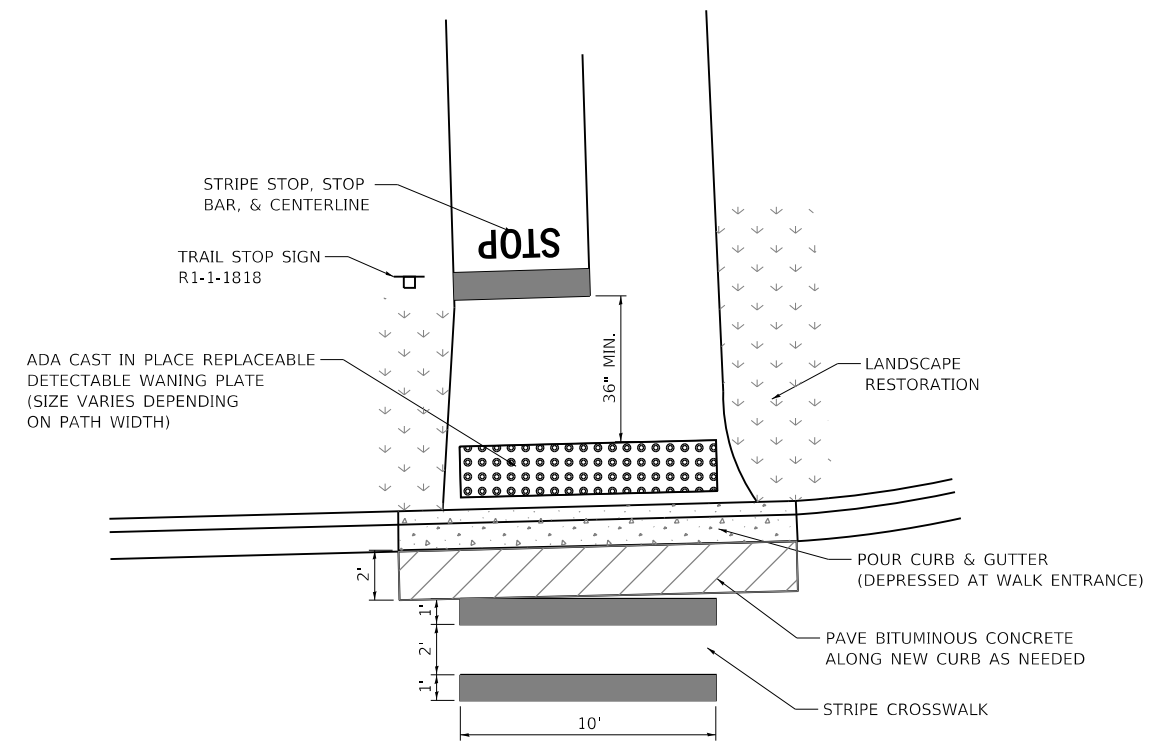


NOTE:

WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL.



HMA DETAIL AT BUTT JOINTS



GROVE ROAD TRAIL CROSSWALK PLAN

NOT TO SCALE

HRG PROJECT NO: 19162
 HRG PROJ CONTACT:
 FILE NAME: 19162_0810.dgn
 PEN TABLE: 19162.tbl



USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

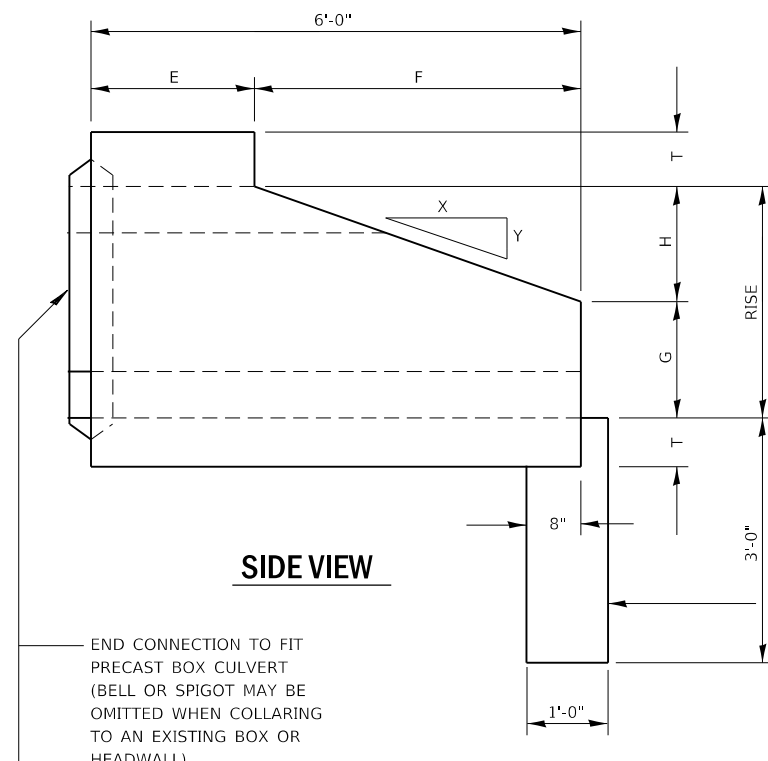
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MISCELLANEOUS DETAILS
(SHEET 2 OF 9)**

SCALE: SHEET 2 OF 9 SHEETS STA. TO STA.

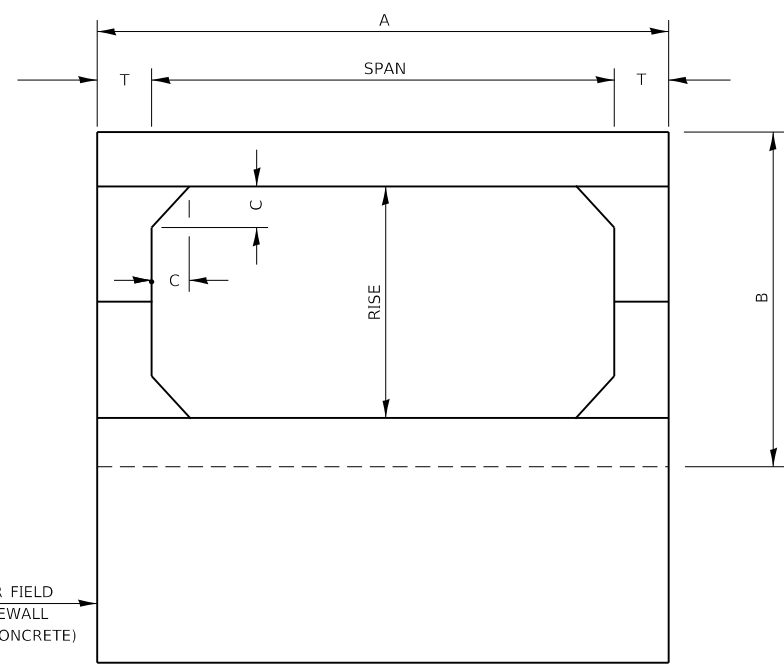
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	165
CONTRACT NO. 87800				

ILLINOIS FED. AID PROJECT



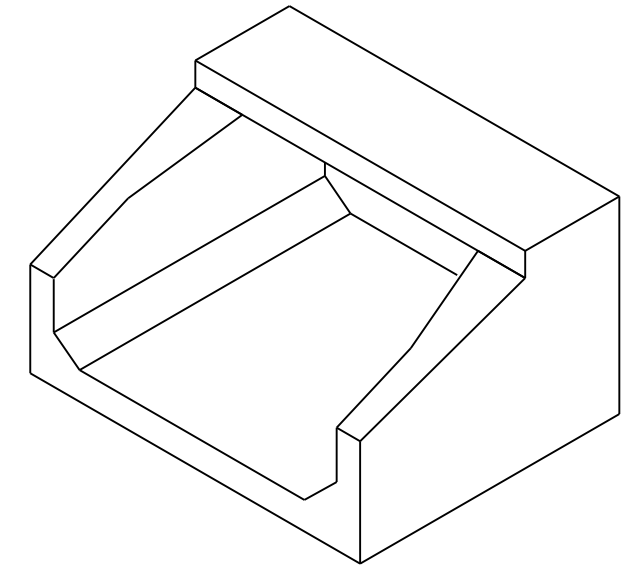
SIDE VIEW

END CONNECTION TO FIT PRECAST BOX CULVERT (BELL OR SPIGOT MAY BE OMITTED WHEN COLLARING TO AN EXISTING BOX OR HEADWALL)

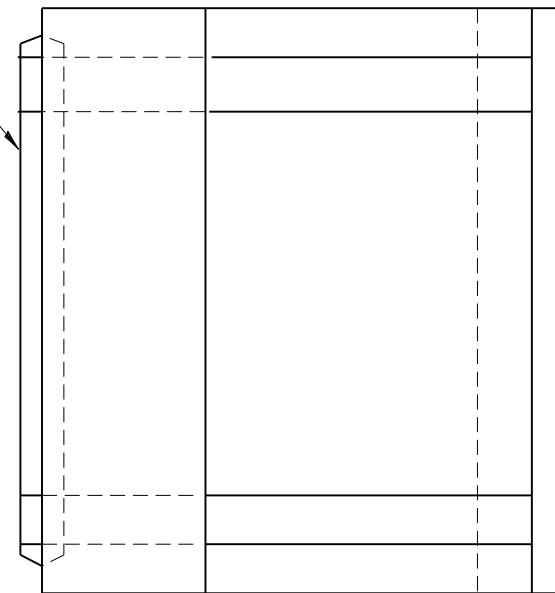


END VIEW

PRECAST OR FIELD Poured TOEWALL (CLASS SI CONCRETE)



ISOMETRIC VIEW



PLAN

SPAN X RISE	T (INCHES)	A (FT-IN)	B (FT-IN)	C (INCHES)	E (FT-IN)	F (FT-IN)	G (FT-IN)	H (FT-IN)	SLOPE
2' X 2'	4	2 - 8	2 - 8	4	3 - 0	3 - 0	1 - 0	1 - 0	3 : 1
3' X 2'	4	3 - 8	2 - 8	4	3 - 0	3 - 0	1 - 0	1 - 0	3 : 1
3' X 3'	4	3 - 8	3 - 8	4	2 - 0	4 - 0	1 - 8	1 - 4	3 : 1
4' X 2'	5	4 - 10	2 - 10	5	3 - 0	3 - 0	1 - 0	1 - 0	3 : 1
4' X 3'	5	4 - 10	3 - 10	5	2 - 0	4 - 0	1 - 8	1 - 4	3 : 1
4' X 4'	5	4 - 10	4 - 10	5	2 - 0	4 - 0	2 - 0	2 - 0	2 : 1
5' X 2'	6	6 - 0	3 - 0	6	3 - 0	3 - 0	1 - 0	1 - 0	3 : 1
5' X 3'	6	6 - 0	4 - 0	6	2 - 0	4 - 0	1 - 8	1 - 4	3 : 1
5' X 4'	6	6 - 0	5 - 0	6	2 - 0	4 - 0	2 - 0	2 - 0	2 : 1
5' X 5'	6	6 - 0	6 - 0	6	4 - 0	4 - 0	3 - 0	2 - 0	2 : 1
6' X 2'	7	7 - 2	3 - 2	7	3 - 0	3 - 0	1 - 0	1 - 0	3 : 1
6' X 3'	7	7 - 2	4 - 2	7	2 - 0	4 - 0	1 - 8	1 - 4	3 : 1
6' X 4'	7	7 - 2	5 - 2	7	2 - 0	4 - 0	2 - 0	2 - 0	2 : 1
6' X 5'	7	7 - 2	6 - 2	7	4 - 0	4 - 0	3 - 0	2 - 0	2 : 1
7' X 3'	8	8 - 4	4 - 4	8	4 - 0	4 - 0	1 - 8	1 - 4	3 : 1
7' X 4'	8	8 - 4	5 - 4	8	4 - 0	4 - 0	2 - 0	2 - 0	2 : 1
7' X 5'	8	8 - 4	6 - 4	8	4 - 0	4 - 0	3 - 0	2 - 0	2 : 1
8' X 3'	8	9 - 4	4 - 4	8	4 - 0	4 - 0	1 - 8	1 - 4	3 : 1
8' X 4'	8	9 - 4	5 - 4	8	4 - 0	4 - 0	2 - 0	2 - 0	2 : 1
8' X 5'	8	9 - 4	6 - 4	8	4 - 0	4 - 0	3 - 0	2 - 0	2 : 1
9' X 3'	9	10 - 6	4 - 6	9	4 - 0	4 - 0	1 - 8	1 - 4	3 : 1
9' X 4'	9	10 - 6	5 - 6	9	4 - 0	4 - 0	2 - 0	2 - 0	2 : 1
9' X 5'	9	10 - 6	6 - 6	9	4 - 0	4 - 0	3 - 0	2 - 0	2 : 1
10' X 4'	10	11 - 8	5 - 9	10	4 - 0	4 - 0	2 - 0	2 - 0	2 : 1
10' X 5'	10	11 - 8	6 - 8	10	4 - 0	4 - 0	3 - 0	2 - 0	2 : 1

PRECAST CONCRETE BOX CULVERT END SECTION

HRG PROJECT NO.: 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162_endsec.dgn
 PEN TABLE: 19162.tbl



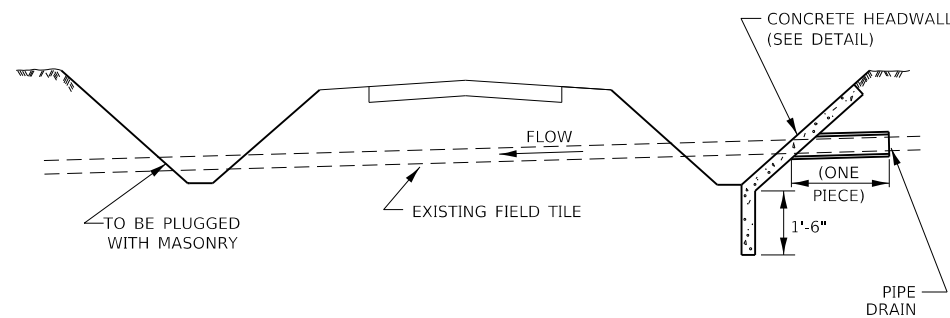
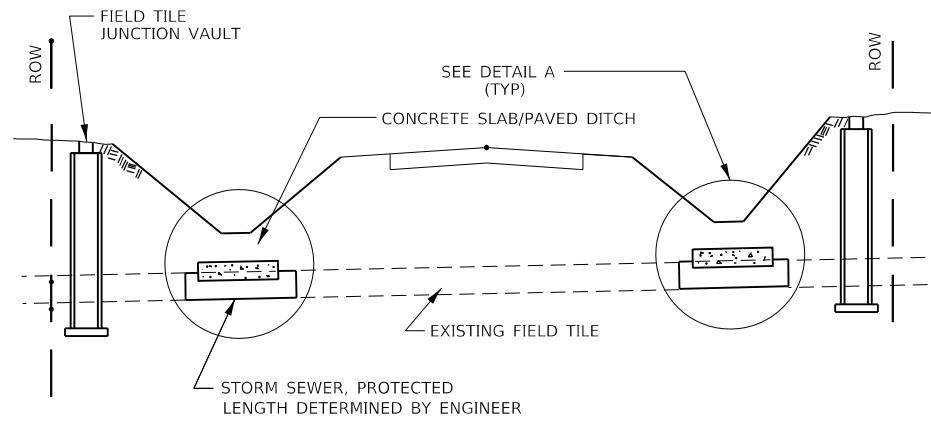
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DRAWN - AJM	REVISED -	
PLOT SCALE = 100.0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

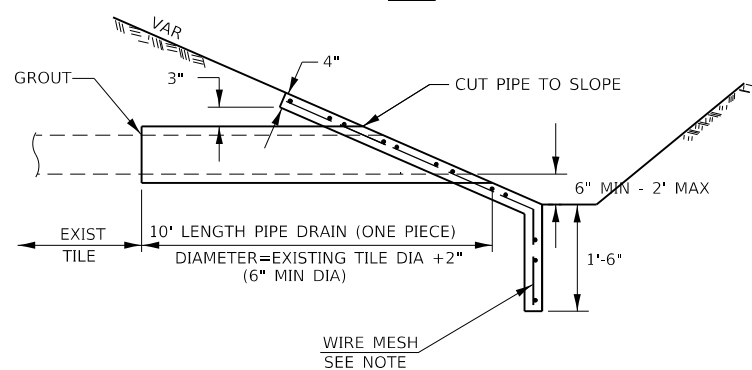
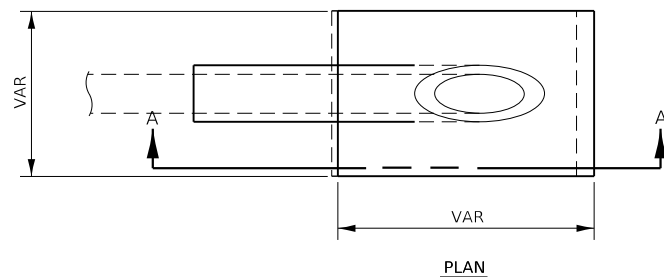
**MISCELLANEOUS DETAILS
 (SHEET 3 OF 9)**

SCALE: SHEET 3 OF 9 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	166
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

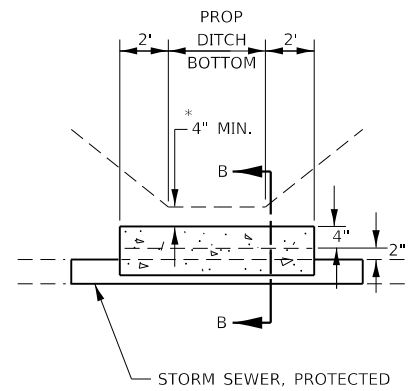


FIELD TILE REPLACEMENT



SECTION A-A

CLASS SI CONCRETE HEADWALLS



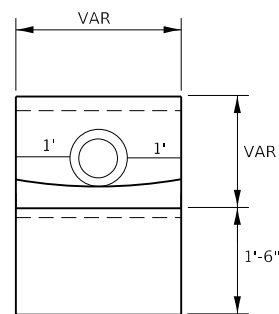
DETAIL A

NO SCALE

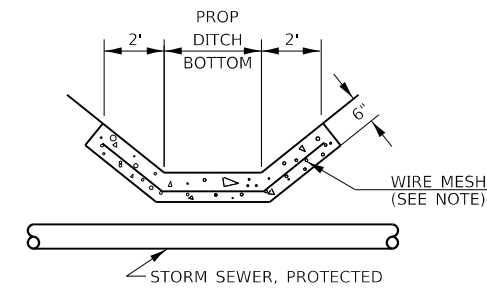
- * IF A 4" COVER CAN NOT BE PROVIDED A PAVED DITCH SHALL BE CONSTRUCTED AS SHOWN IN DETAIL C.
- NOTES**
1. WIDTH OF CONCRETE SLAB SHALL BE THE SAME AS THE TRENCH WIDTH IN ACCORDANCE WITH SECTION 550 OF THE STD. SPECIFICATIONS, OR 3' MIN.
 2. CONCRETE FOR SLAB, HEADWALL AND PAVED DITCH SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR "MISCELLANEOUS CONCRETE."
 3. COST OF FURNISHING AND INSTALLING WIRE MESH SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR MISCELLANEOUS CONCRETE. WIRE MESH TO WEIGH NOT LESS THAN 58# PER 100 SQ FT

NOTES

1. ANY STORM SEWER OR FIELD TILE OUTLET INTO A DITCH SHALL HAVE A HEADWALL BUILT IN ACCORDANCE WITH THIS DETAIL.
2. COST OF FURNISHING AND INSTALLING WIRE MESH SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR MISCELLANEOUS CONCRETE. WIRE MESH TO WEIGH NOT LESS THAN 58# PER 100 SQ FT

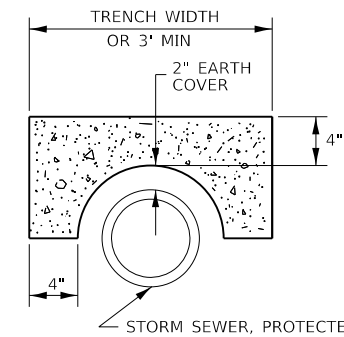


END VIEW

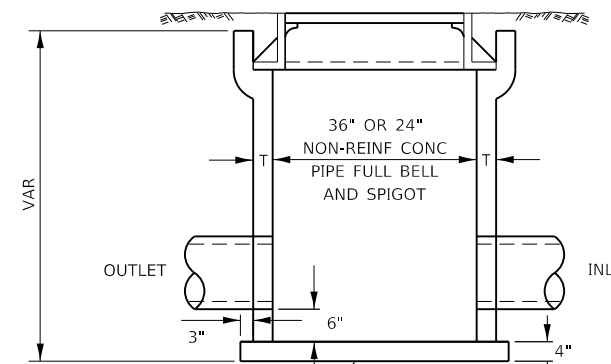


DETAIL C

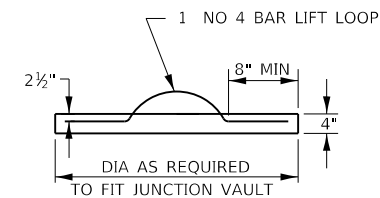
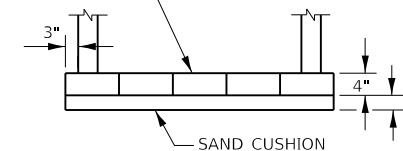
NO SCALE



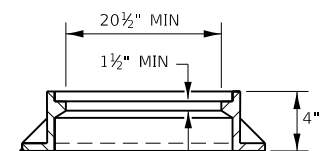
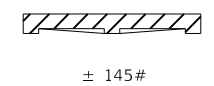
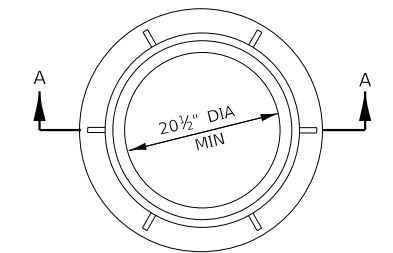
SECTION B-B



CLASS SI CONCRETE OR PRECAST REINFORCED CONCRETE SLABS NOT LESS THAN 12" WIDE



FIELD TILE JUNCTION VAULT



SECTION A-A

ALTERNATE MATERIALS FOR WALLS	T
PRECAST REINFORCED CONCRETE RISERS	4"
CONCRETE MASONRY UNIT	5"
MONOLITHIC CONCRETE	6"
BUILDING BRICK, GRADE SW FROM CLAY OR SHALE	8"
CONCRETE BUILDING BRICK, GRADE A	8"

NOTES

1. THE CONTRACT UNIT PRICE FOR FIELD TILE JUNCTION VAULT SHALL INCLUDE THE COST OF FURNISHING AND PLACING THE FRAME AND GRATE OR PRECAST CONCRETE LID AND WHEN REQUIRED, THE SAND CUSHION.
2. ALL FIELD TILE JUNCTION VAULTS SHALL BE 2'-0" IN DIAMETER UNLESS OTHERWISE NOTED ON THE PLANS.

HRG PROJECT NO. 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162_081702.dgn
 PEN TABLE: 19162.tbl



USER NAME = amiller	DESIGNED - JMR	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - AJM	REVISED -
PLOT DATE = 10/21/2022	CHECKED - APS	REVISED -
	DATE - 10/21/2022	REVISED -

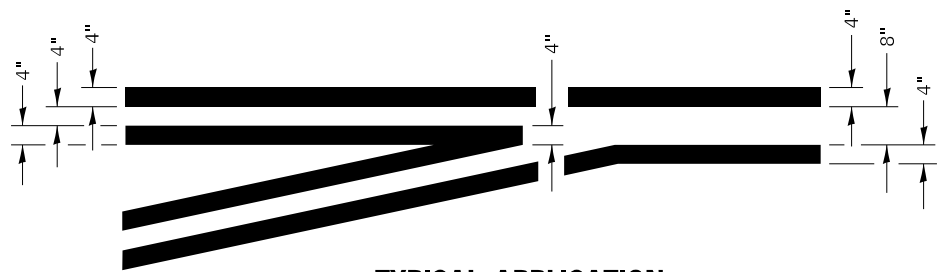
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**MISCELLANEOUS DETAILS
 (SHEET 4 OF 9)**

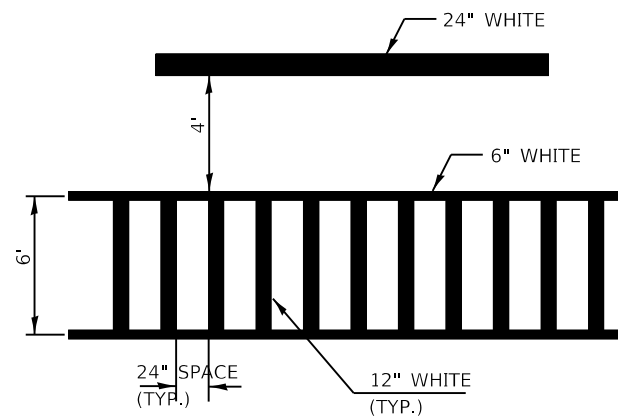
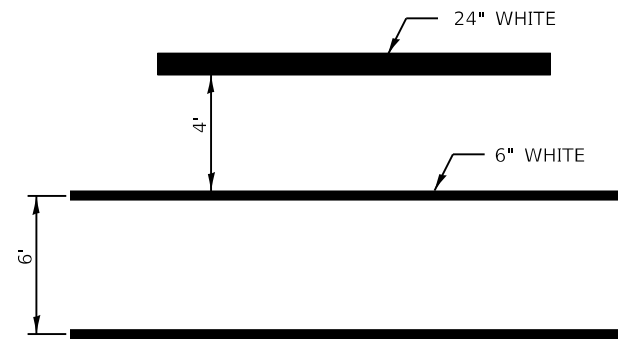
SCALE: SHEET 4 OF 9 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	167
CONTRACT NO. 87800				

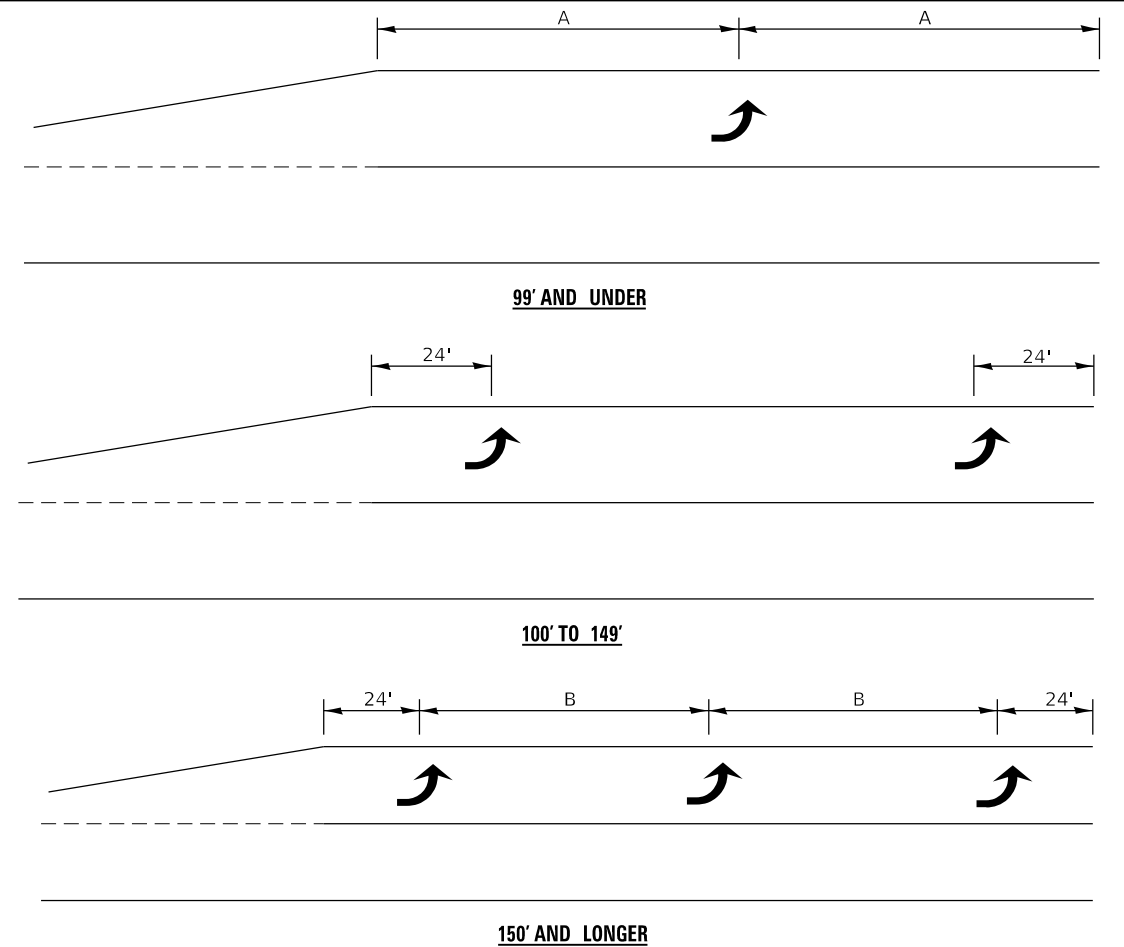
ILLINOIS FED. AID PROJECT



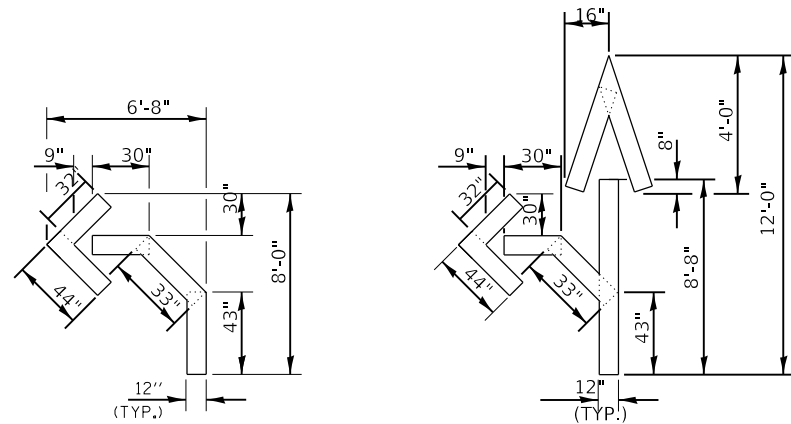
**TYPICAL APPLICATION
AT LEFT TURN LANES**



**TYPICAL SPACING DETAIL FOR
CROSSWALKS AND STOP BARS**

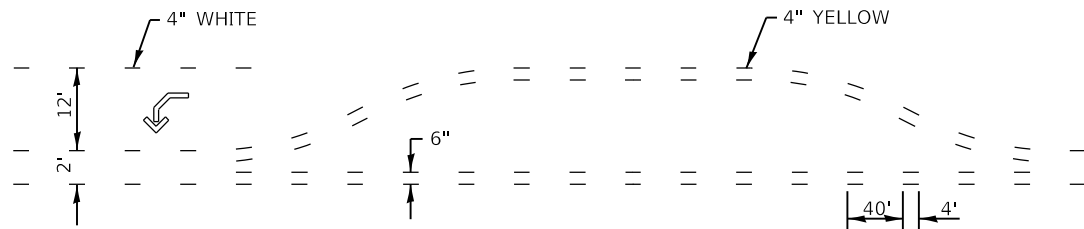


**TYPICAL PLACEMENT OF ARROWS
IN TURN LANES**

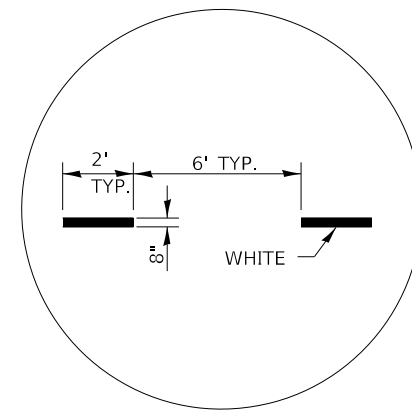


QUANTITY
12" LINE = 16 LIN. FT.
OR 4" LINE = 48 LIN. FT.

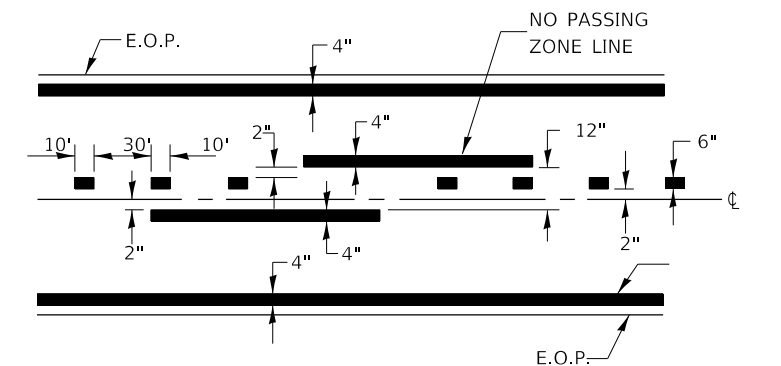
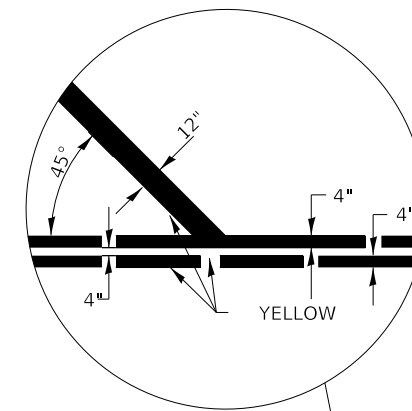
QUANTITY
12" LINE = 29 LIN. FT.
OR 4" LINE = 87 LIN. FT.



**SHORT-TERM PAVEMENT MARKING
FOR MEDIANS AND ARROWS**

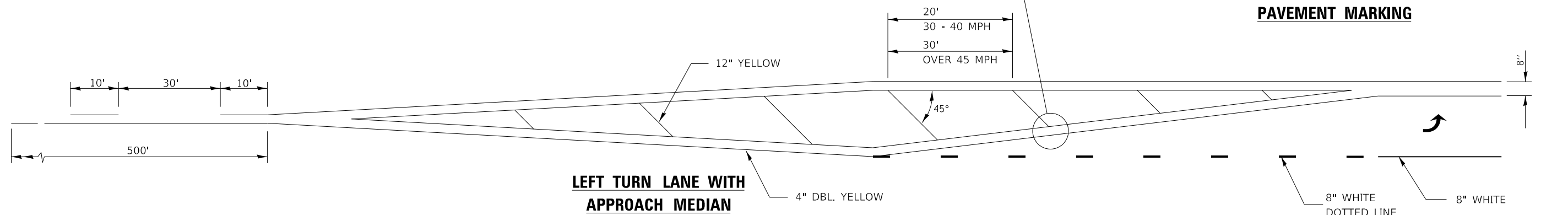


**ADVANCE AND INTERSECTION
LANE DIVIDER LINES**



CENTERLINE & NO PASSING
ZONE LINES - YELLOW

PAVEMENT MARKING



**LEFT TURN LANE WITH
APPROACH MEDIAN**

HRG PROJECT NO.: 19162
HRG PROJ. CONTACT:
FILE NAME: 19152_drf100.dgn
PEN TABLE: 19162.tbl

HRGreen.com
Illinois Professional Design Firm
#184-001322

USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

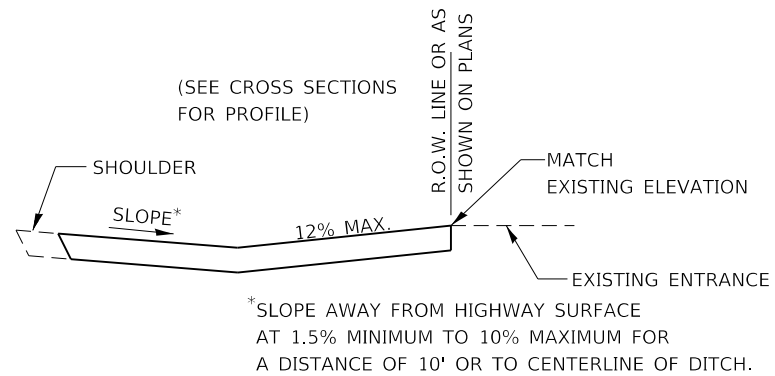
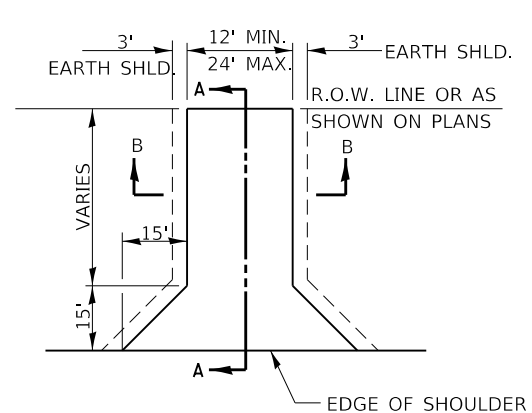
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MISCELLANEOUS DETAILS
(SHEET 5 OF 9)**

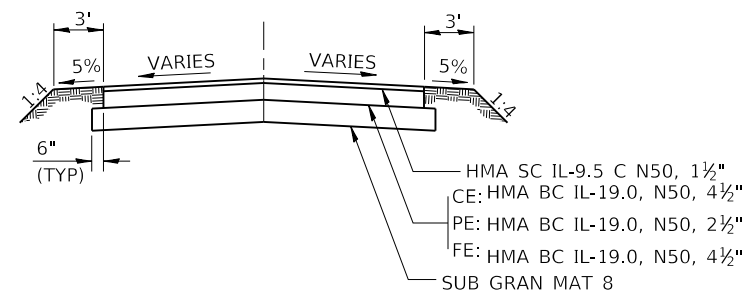
SCALE: SHEET 5 OF 9 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	168
CONTRACT NO. 87800				

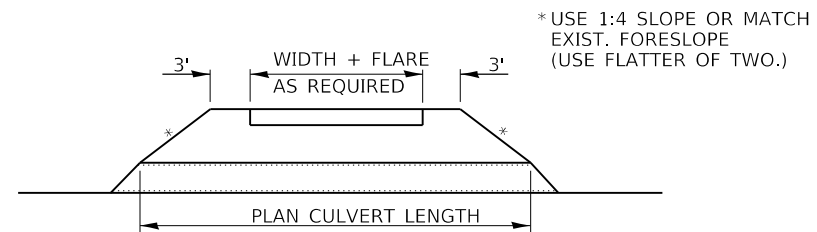
ILLINOIS FED. AID PROJECT



SECTION A-A

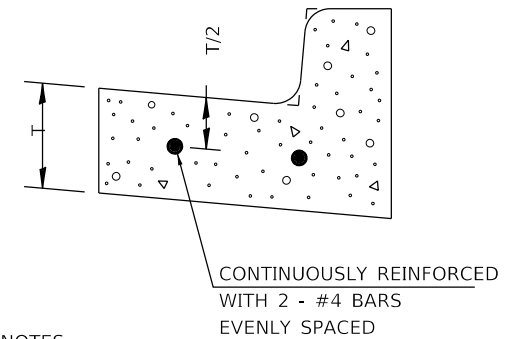


SECTION B-B



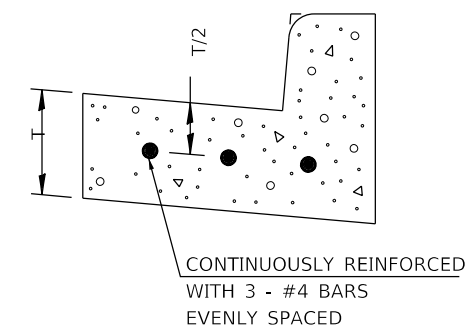
NOTE:
FIELD ENTRANCES SHALL BE SURFACED FROM THE EDGE OF PAVEMENT TO THE END OF THE APRON. ALL OTHER DRIVEWAYS SHALL BE SURFACED FROM THE EDGE OF PAVEMENT TO THE RIGHT OF WAY LINE.

FIELD ENTRANCE DETAIL



NOTES:
1. REINFORCEMENT SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR CC&G.

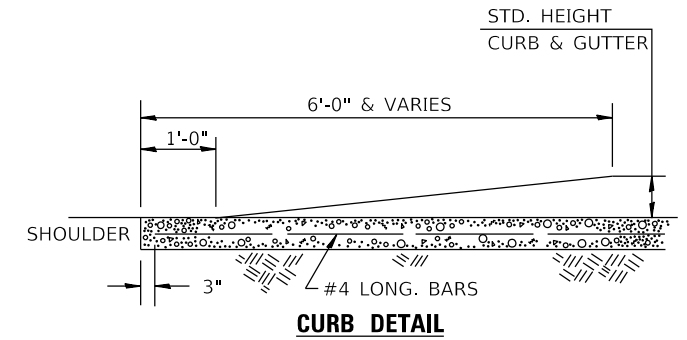
REINFORCEMENT DETAIL FOR COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.12



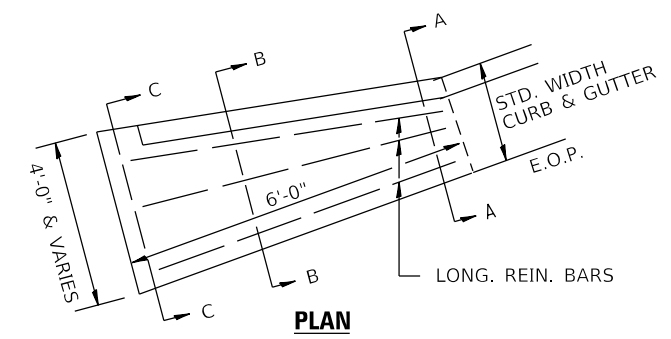
NOTES:
1. REINFORCEMENT SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR CC&G.

2. ABOVE CC&G DETAIL ALSO APPLIES TO TYPE M (MODIFIED) CURB AND GUTTER.

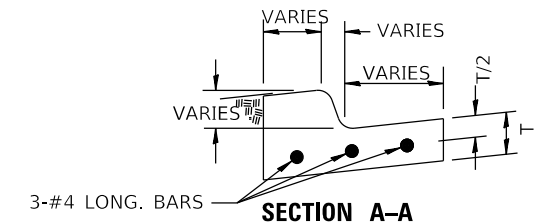
REINFORCEMENT DETAIL FOR COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.24



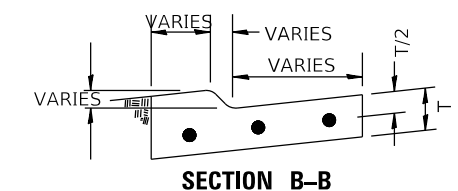
CURB DETAIL



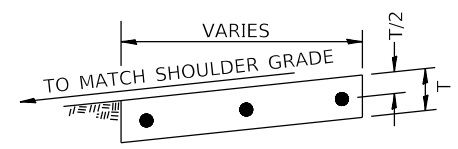
PLAN



SECTION A-A



SECTION B-B



SECTION C-C

NOTES:
1. CONCRETE CURB AND GUTTER OUTLET, SPECIAL WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE MEASURED AND PAID FOR AS COMBINATION CONCRETE CURB AND GUTTER, OF THE ADJACENT TYPE SPECIFIED IN THE PLANS.
2. WHEN ADJACENT TO COMBINATION CONCRETE CURB AND GUTTER, TYPE M4.12, TWO EVENLY SPACED LONGITUDINAL REINFORCEMENT BARS SHALL BE REQUIRED INSTEAD OF THREE. SEE PLAN AND PROFILES FOR LOCATIONS OF SPECIFIC CURB TYPES.

CONCRETE CURB AND GUTTER OUTLET, SPECIAL

HRG PROJECT NO.: 19162
HRG PROJ. CONTACT:
FILE NAME: 19162_dbr100.dgn
PEN TABLE: 19162.tbl



USER NAME = amiller	DESIGNED - JMR	REVISED -
PLOT SCALE = 100.0000' / in.	DRAWN - AJM	REVISED -
PLOT DATE = 10/21/2022	CHECKED - APS	REVISED -
	DATE - 10/21/2022	REVISED -

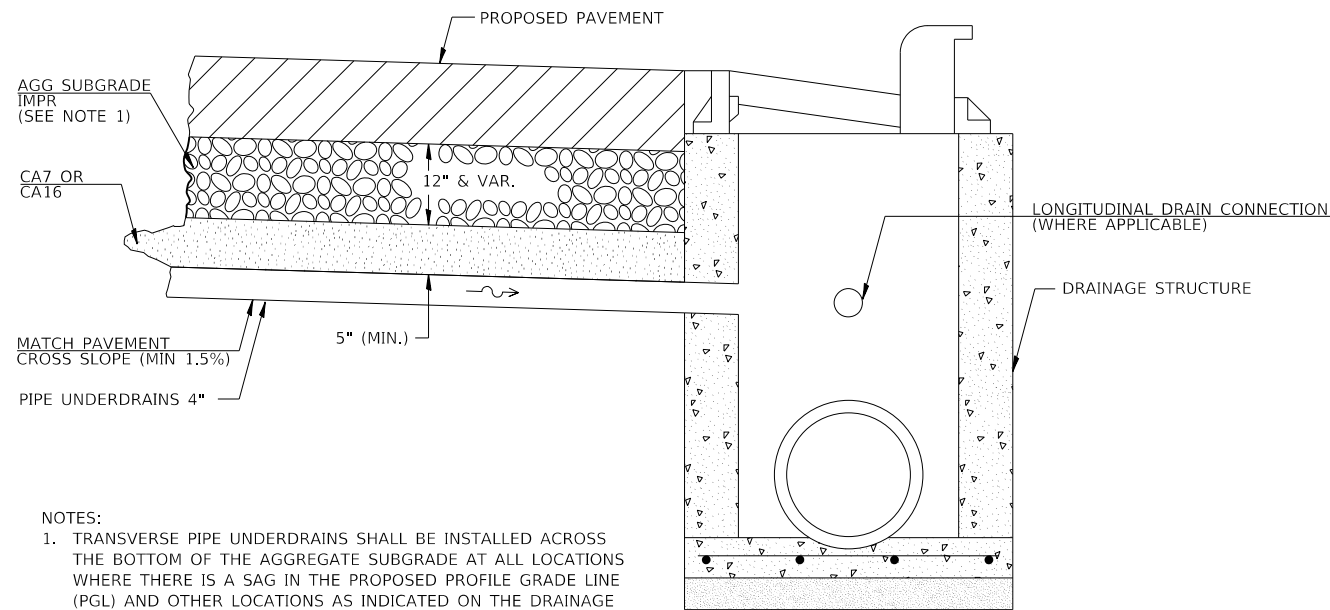
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS
(SHEET 6 OF 9)

SCALE: SHEET 6 OF 9 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	169
CONTRACT NO. 87800				

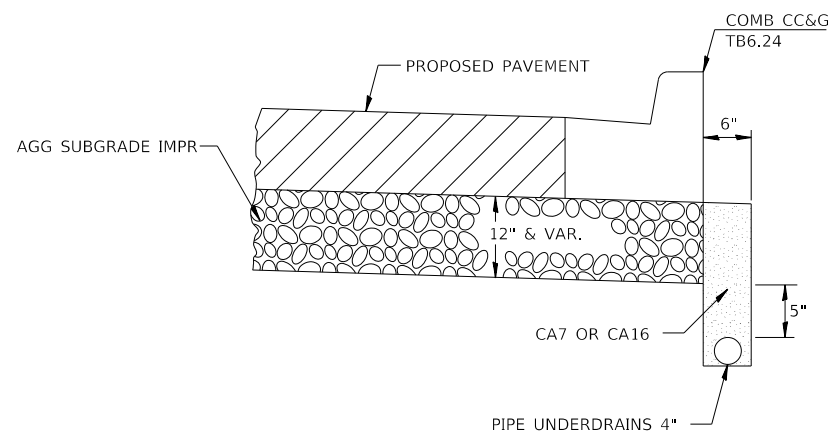
ILLINOIS FED. AID PROJECT



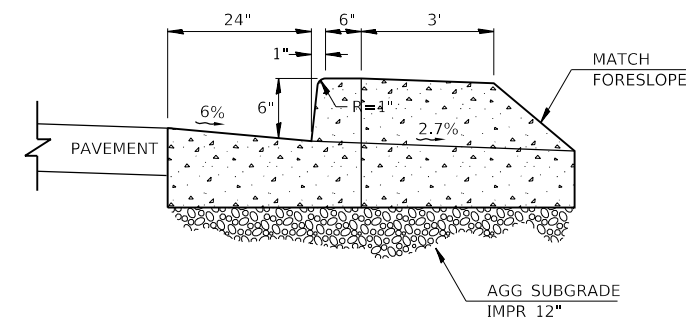
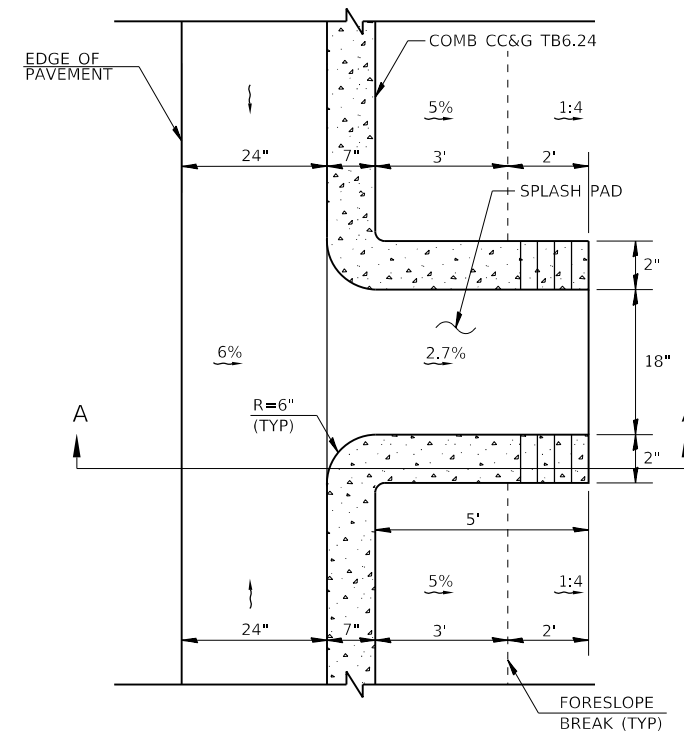
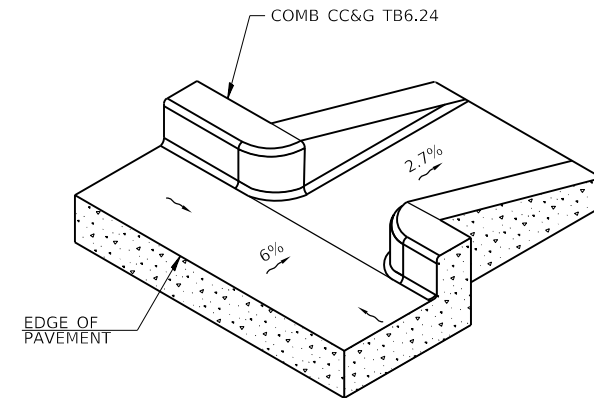
NOTES:

1. TRANSVERSE PIPE UNDERDRAINS SHALL BE INSTALLED ACROSS THE BOTTOM OF THE AGGREGATE SUBGRADE AT ALL LOCATIONS WHERE THERE IS A SAG IN THE PROPOSED PROFILE GRADE LINE (PGL) AND OTHER LOCATIONS AS INDICATED ON THE DRAINAGE PLAN. THIS WORK SHALL BE COMPLETED ACCORDING TO SECTION 601 OF THE STANDARD SPECIFICATIONS.
2. PIPE UNDERDRAIN INSTALLATION SHALL OCCUR AFTER PLACEMENT OF THE AGGREGATE SUBGRADE IMPROVEMENT.
3. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR PIPE UNDERDRAINS OF THE DIAMETER SPECIFIED, WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE DRAINAGE STRUCTURE.

PIPE UNDERDRAINS WITH OUTLET TO DRAINAGE STRUCTURE IN CURB



LONGITUDINAL PIPE UNDERDRAINS ADJACENT TO CURB AND GUTTER



**SECTION A-A
STORM WATER CURB OPENING**

NOTE:

1. THIS WORK SHALL CONSIST OF CONSTRUCTING STORM WATER CURB OPENINGS AT THE LOCATIONS INDICATED IN THE PLANS OR BY THE ENGINEER. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR STORM WATER CURB OPENING. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND APPURTENANCES NECESSARY TO COMPLETE THE WORK AS DETAILED IN THE PLANS.

HRG PROJECT NO.: 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162.dwg
 PEN TABLE: 19162.tbl



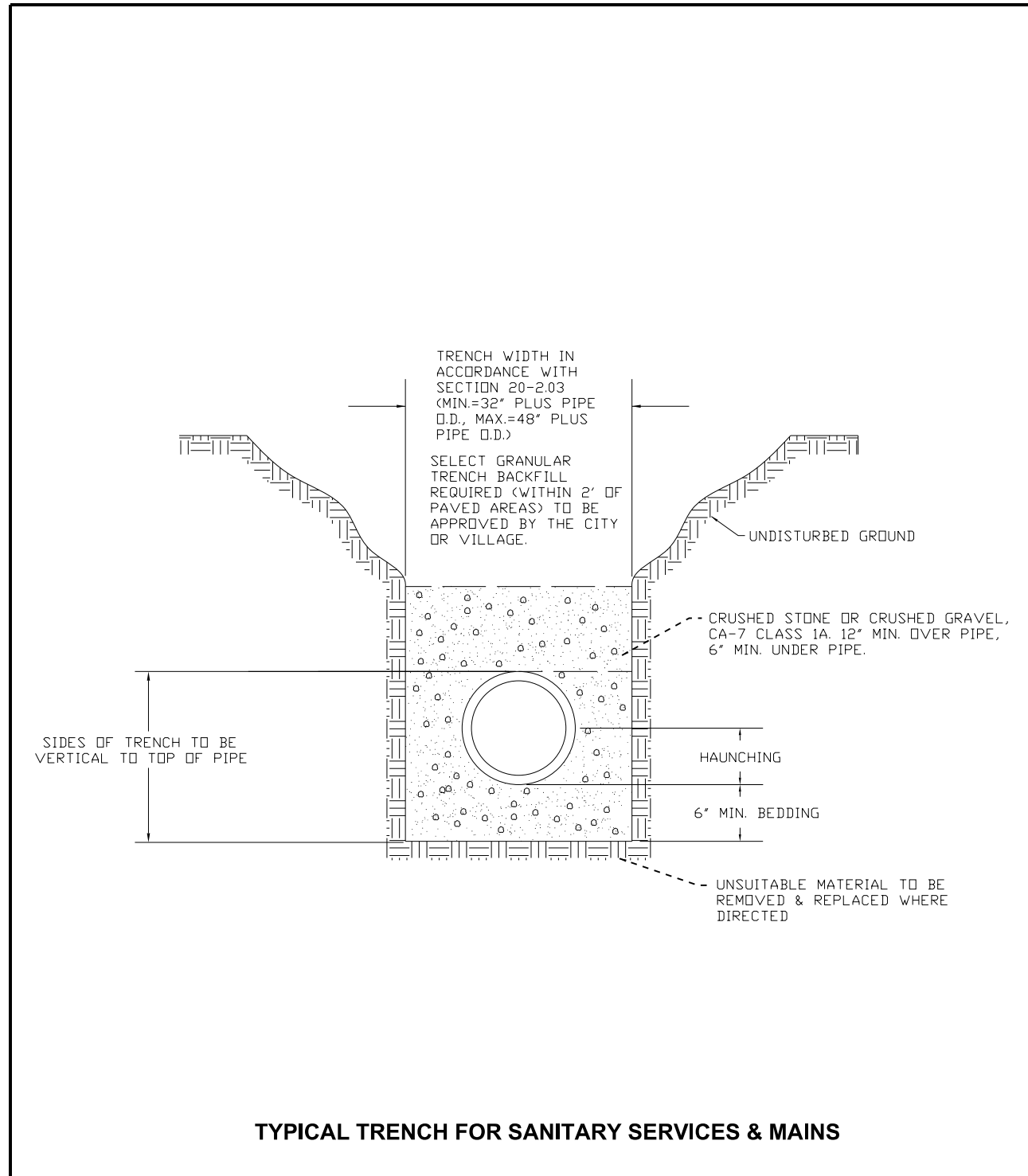
USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MISCELLANEOUS DETAILS
(SHEET 7 OF 9)**

SCALE: SHEET 7 OF 9 SHEETS STA. TO STA.

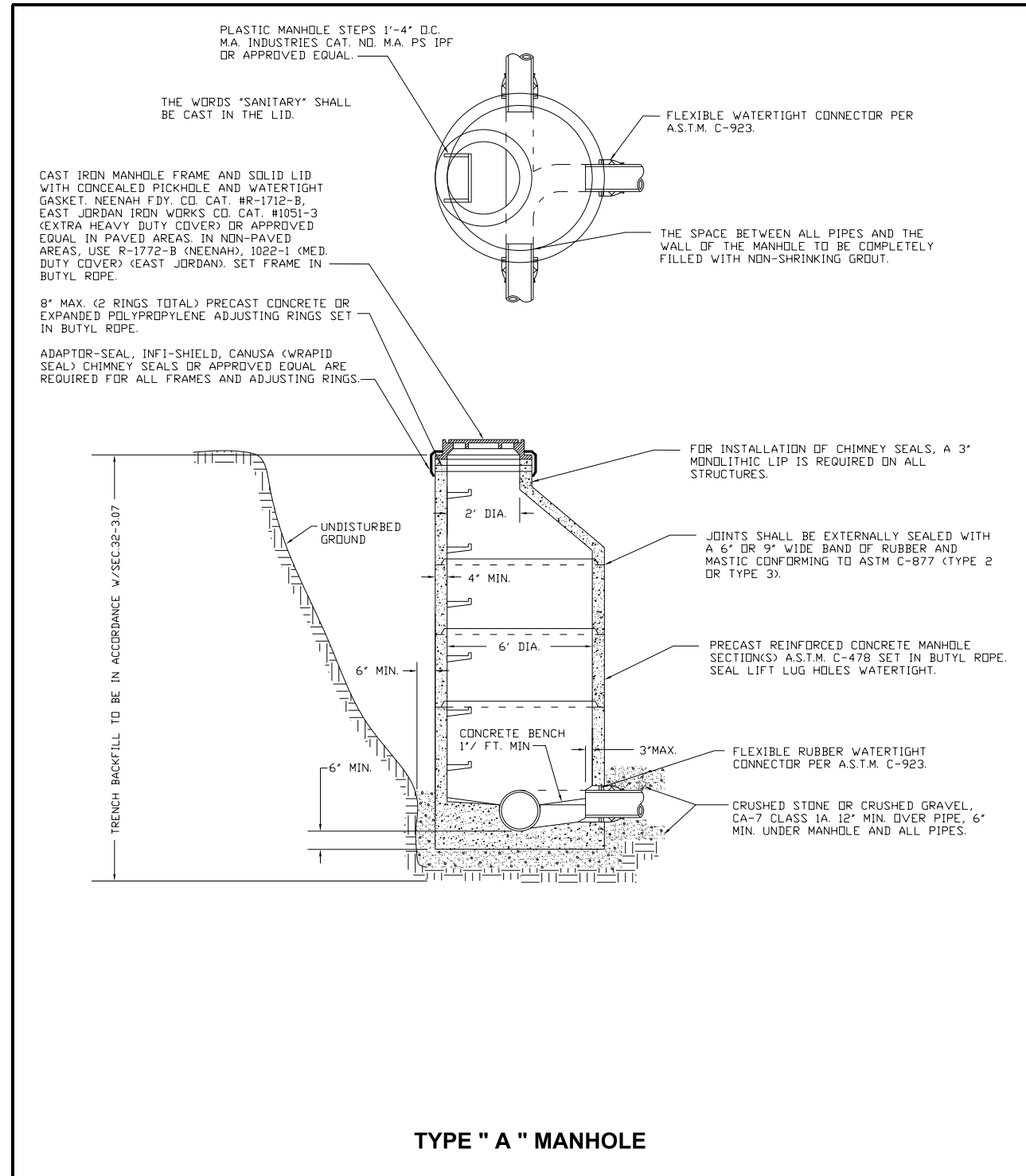
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	170
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				



TYPICAL TRENCH FOR SANITARY SERVICES & MAINS

Fox Metro
Water Reclamation District

DESIGNED	FMWRD	REVISION	2022
DRAWN	KZ	D Stone Note	01/30/06
APPROVED	KZ, MF	E 07 Revisions	03/19/07
DATE	05-12-00	F Overdig Compaction Note	03/08/17
SCALE	NTS	G Full-Sized C.O. Req'd Note	07/23/2020
SHEET	1	CAD DWG.	REVISION
OF	1	JOB NO.	G



TYPE "A" MANHOLE

Fox Metro
Water Reclamation District

DESIGNED	FMWRD	REVISION	2022
DRAWN	KZ	G "NOTE" Revision-Invert Elev's	05/10/12
APPROVED	KZ, MF	H Misc. Note Revisions	03/09/17
DATE	05-12-00	I "NOTE" Revision-determine inv.	01/26/2021
SCALE	NTS	J Expanded Polypropylene adj. rings	06/27/22
SHEET	1	CAD DWG.	REVISION
OF	1	JOB NO.	

HRG PROJECT NO.: 19162
 HRG PROJ. CONTACT:
 FILE NAME: 19162.dwg
 PEN TABLE: 19162.tbl



USER NAME	DESIGNED	REVISION
amiller	JMR	-
	AJM	-
	APS	-
		-

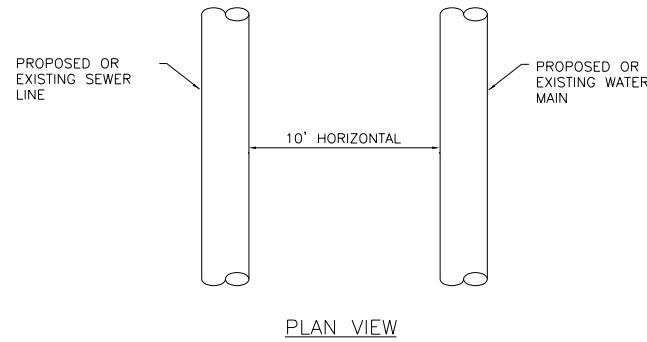
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS
(SHEET 8 OF 9)

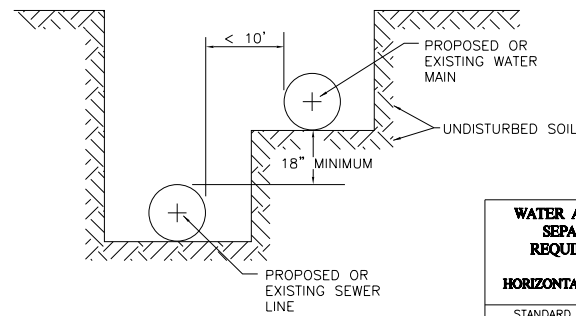
SCALE: SHEET 8 OF 9 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	171
CONTRACT NO. 87800				
ILLINOIS FED. AID PROJECT				

WHEN PROPOSED SEWER (OR WATER) IS LOCATED 10 FEET OR MORE FROM EXISTING WATER (OR SEWER), NO SPECIAL CONSTRUCTION REQUIRED. SEE ARTICLE 41-2.01A (1)



WHEN PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN 10 FEET FROM EXISTING WATER (OR SEWER), DETAILS BELOW SHALL APPLY. SEE ARTICLE 41-2.01B (2)



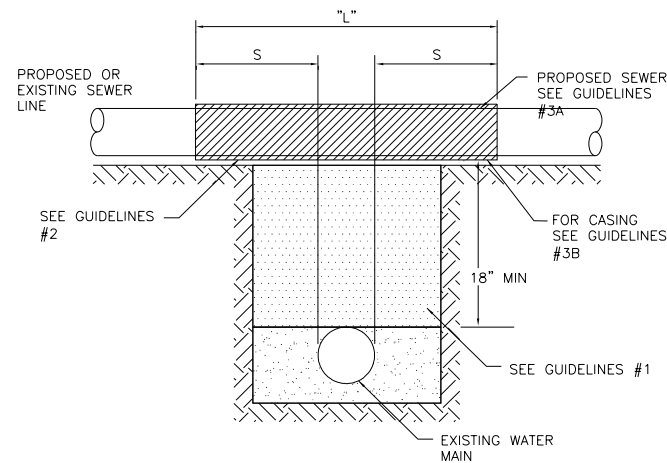
WATER AND SEWER SEPARATION REQUIREMENTS

HORIZONTAL SEPARATION

STANDARD DRAWING NO.18

PROPOSED SEWER LINE WITH 18" MINIMUM VERTICAL SEPARATION ABOVE EXISTING WATER MAIN

NOTE: COMPACTION REQUIREMENTS REFER TO ARTICLE 20-4



GUIDELINES

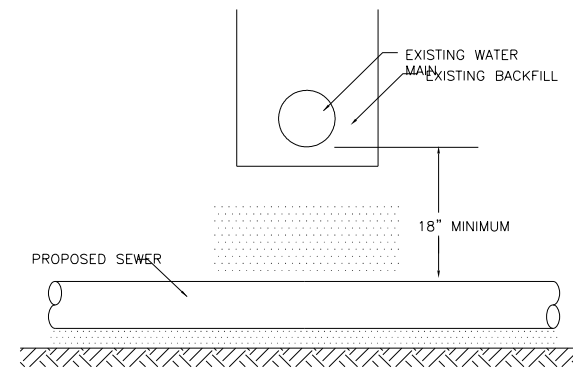
- IF SELECT GRANULAR BACKFILL EXISTS: REMOVE WITHIN WIDTH OF PROPOSED SEWER TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT
- OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF SEWER AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L" FEET.
- A) CONSTRUCT "L" FEET OF PROPOSED SEWER OF WATER MAIN MATERIAL AND PRESSURE TEST, OR;
B) USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED SEWER AND SEAL ENDS OF CASING.

WATER AND SEWER SEPARATION REQUIREMENTS

VERTICAL SEPARATION

STANDARD DRAWING NO.19

PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH 18" MINIMUM VERTICAL SEPARATION.



GUIDELINES

- PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.

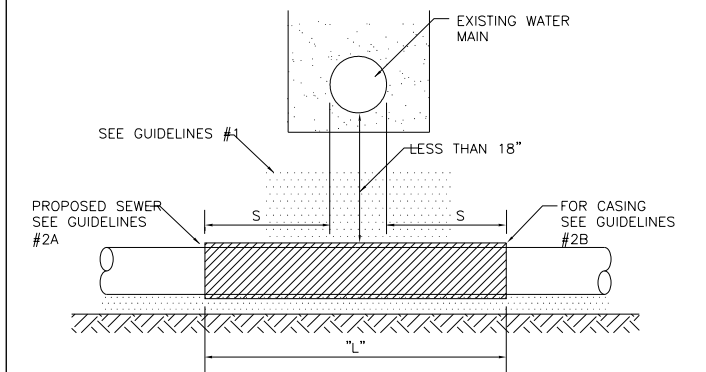
WATER AND SEWER SEPARATION REQUIREMENTS

VERTICAL SEPARATION

STANDARD DRAWING NO.20

PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH LESS THAN 18" MINIMUM VERTICAL SEPARATION.

NOTE: COMPACTION REQUIREMENTS REFER TO ARTICLE 20-4



GUIDELINES

- OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF SEWER AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT FOR "S" FEET ON EACH SIDE OF WATER MAIN.
- A) CONSTRUCT "L" FEET OF PROPOSED SEWER OF WATER MAIN MATERIAL AND PRESSURE TEST, OR;
B) USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED SEWER AND SEAL ENDS OF CASING.
- PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH

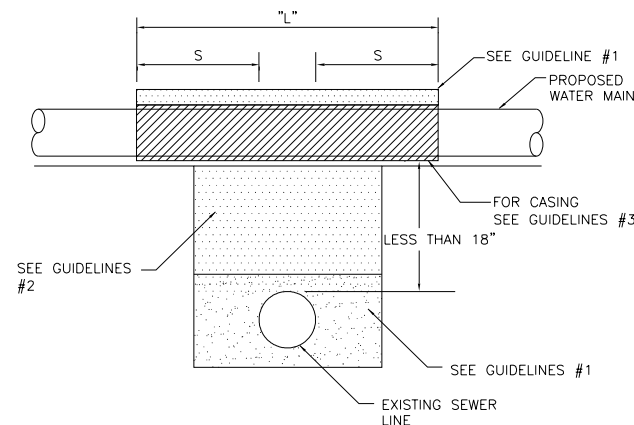
WATER AND SEWER SEPARATION REQUIREMENTS

VERTICAL SEPARATION

STANDARD DRAWING NO.21

PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE WITH LESS THAN 18" VERTICAL SEPARATION

NOTE: COMPACTION REQUIREMENTS REFER TO ARTICLE 20-4



GUIDELINES

- OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATER MAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
 - IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
 - USE "L" FEET OF WATER MAIN MATERIAL FOR CASING.
 - OF PROPOSED WATER MAIN AND SEAL ENDS OF CASING.
- POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATER MAIN CASING AND SEWER

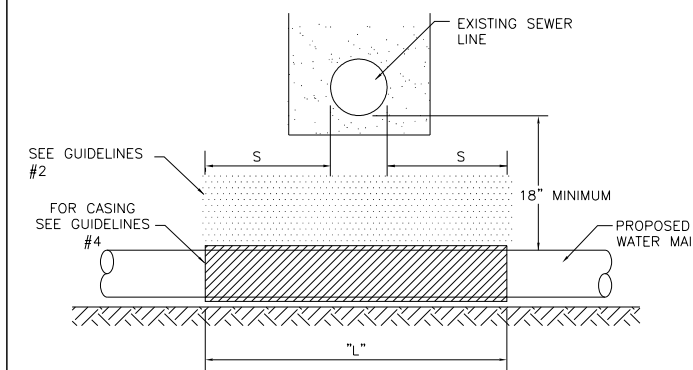
WATER AND SEWER SEPARATION REQUIREMENTS

VERTICAL SEPARATION

STANDARD DRAWING NO.22

PROPOSED WATER MAIN BELOW EXISTING SEWER LINE WITH 18" MINIMUM VERTICAL SEPARATION.

NOTE: COMPACTION REQUIREMENTS REFER TO ARTICLE 20-4



GUIDELINES

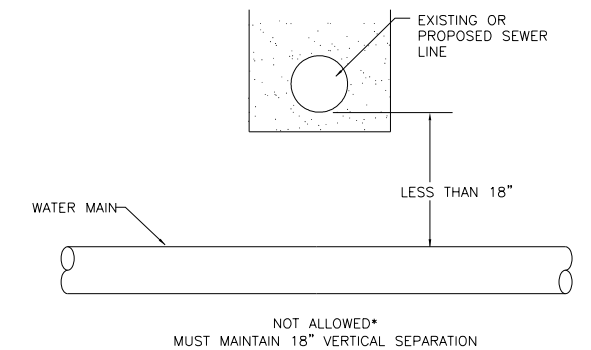
- OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATER MAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
- IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
- PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE
- TO PREVENT DAMAGE DUE TO SETTLEMENT.
- USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED WATER MAIN AND SEAL ENDS OF CASING.

WATER AND SEWER SEPARATION REQUIREMENTS

VERTICAL SEPARATION

STANDARD DRAWING NO.23

PLACEMENT OF WATER MAIN BELOW EXISTING OR PROPOSED SEWER LINE WITH LESS THAN 18" MINIMUM VERTICAL SEPARATION. NOT ALLOWED.



WATER AND SEWER SEPARATION REQUIREMENTS

VERTICAL SEPARATION

STANDARD DRAWING NO.24

HRG PROJECT NO.: 19162
HRG PROJ. CONTACT:
FILE NAME: 19162_dwr10.dgn
PEN TABLE: 19162.tbl



USER NAME = amiller	DESIGNED - JMR	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN - AJM	REVISED -
PLOT DATE = 10/21/2022	CHECKED - APS	REVISED -
	DATE - 10/21/2022	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS
(SHEET 9 OF 9)

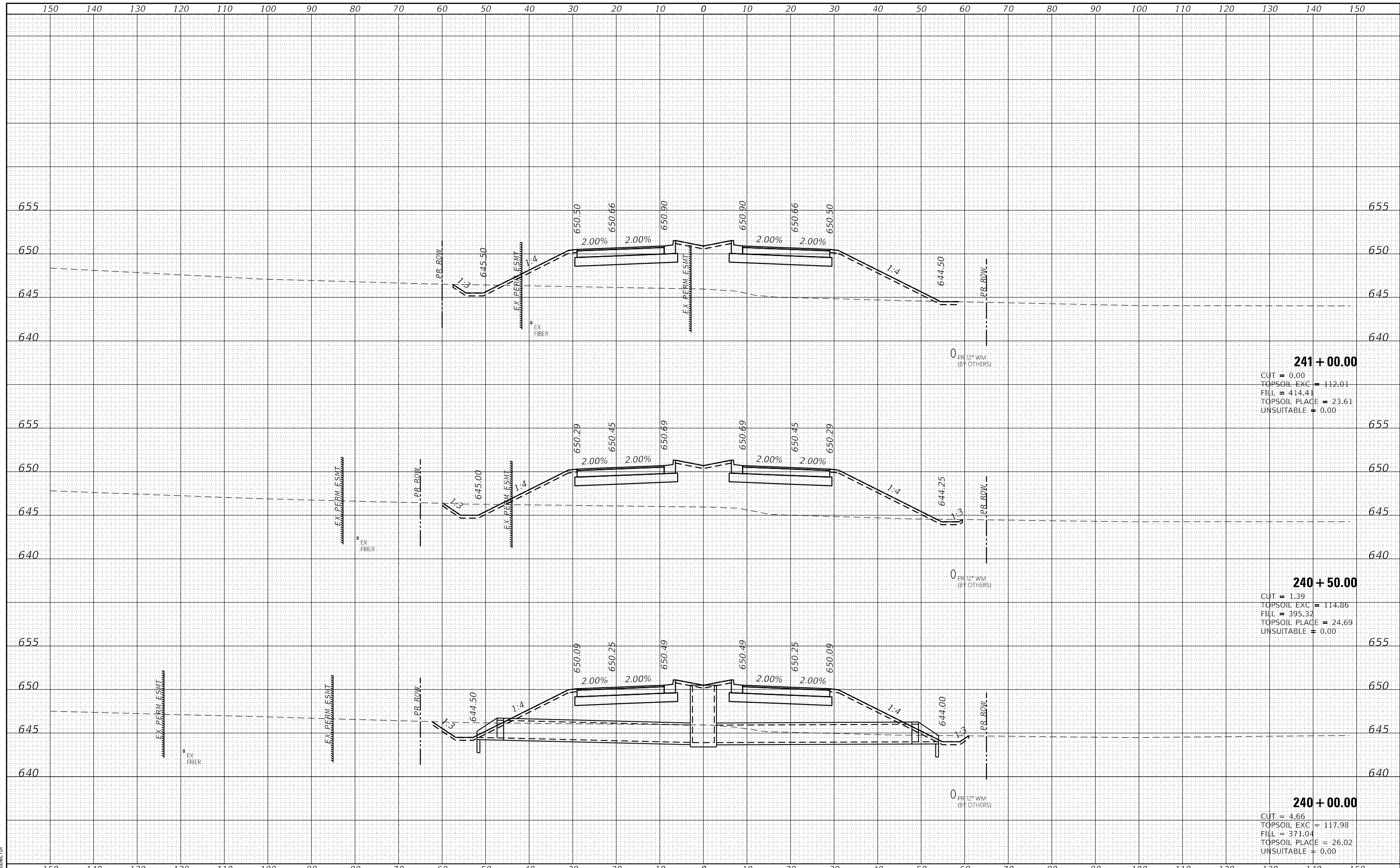
SCALE: SHEET 9 OF 9 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	172
				CONTRACT NO. 87800
ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINISHED SURVEY	
PLOTTED TEMPLATE	
NOTE BOOK AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED TEMPLATE	
NOTE BOOK AREAS CHECKED	
NO.	

HRG PROJECT No: 19182
 ACT: 19182
 FILE NAME: 19182_19182.dgn
 PLOT DRIVER: il_caf_bep1rctg
 PEN TABLE: p101tblpen.tbl



241 + 00.00

CUT	= 0.00
TOPSOIL EXC	= 112.01
FILL	= 414.41
TOPSOIL PLACE	= 23.61
UNSUITABLE	= 0.00

240 + 50.00

CUT	= 1.39
TOPSOIL EXC	= 114.86
FILL	= 395.32
TOPSOIL PLACE	= 24.69
UNSUITABLE	= 0.00

240 + 00.00

CUT	= 4.66
TOPSOIL EXC	= 117.98
FILL	= 371.04
TOPSOIL PLACE	= 26.02
UNSUITABLE	= 0.00



USER NAME	= amiller
DESIGNED	- JMR
DRAWN	- AJM
CHECKED	- APS
DATE	- 10/21/2022
REVISIONS	
REVISED	-
REVISED	-
REVISED	-
REVISED	-

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
 COLLINS ROAD**

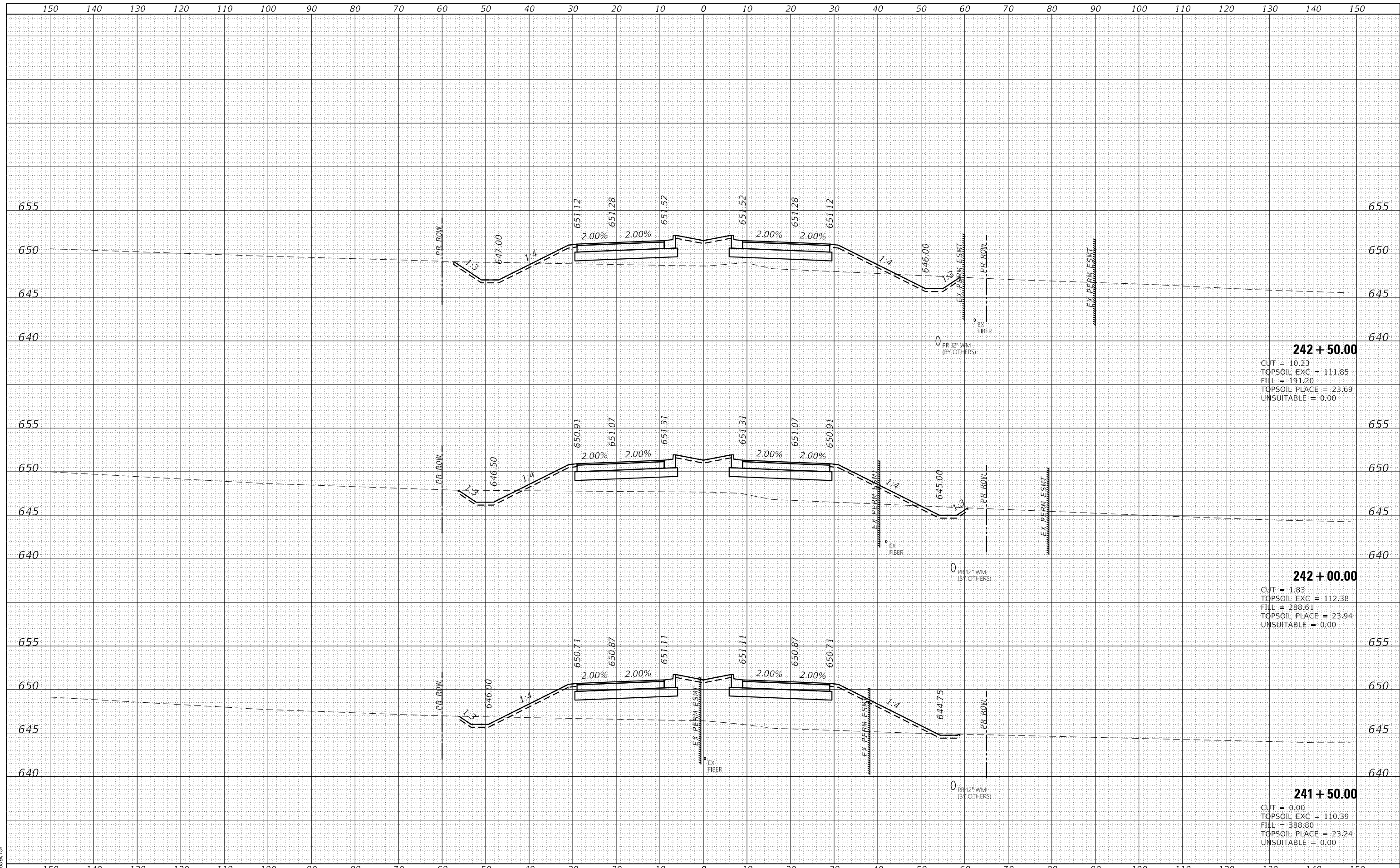
SCALE: SHEET 2 OF 55 SHEETS STA. 240+00.00 TO STA. 241+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	174
				CONTRACT NO. 87800
ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINISHED SURVEY	
PLOTTED TEMPLATE	
NOTE BOOK AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED TEMPLATE	
NOTE BOOK AREAS CHECKED	

HRG PROJECT No: 19182
 FILE NAME: 19182_19182.dgn
 PLOT DRIVER: il_caf_bep1r1c1g
 PEN TABLE: p101aep1.td



242 + 50.00
 CUT = 10.23
 TOPSOIL EXC = 111.85
 FILL = 191.20
 TOPSOIL PLACE = 23.69
 UNSUITABLE = 0.00

242 + 00.00
 CUT = 1.83
 TOPSOIL EXC = 112.38
 FILL = 288.61
 TOPSOIL PLACE = 23.94
 UNSUITABLE = 0.00

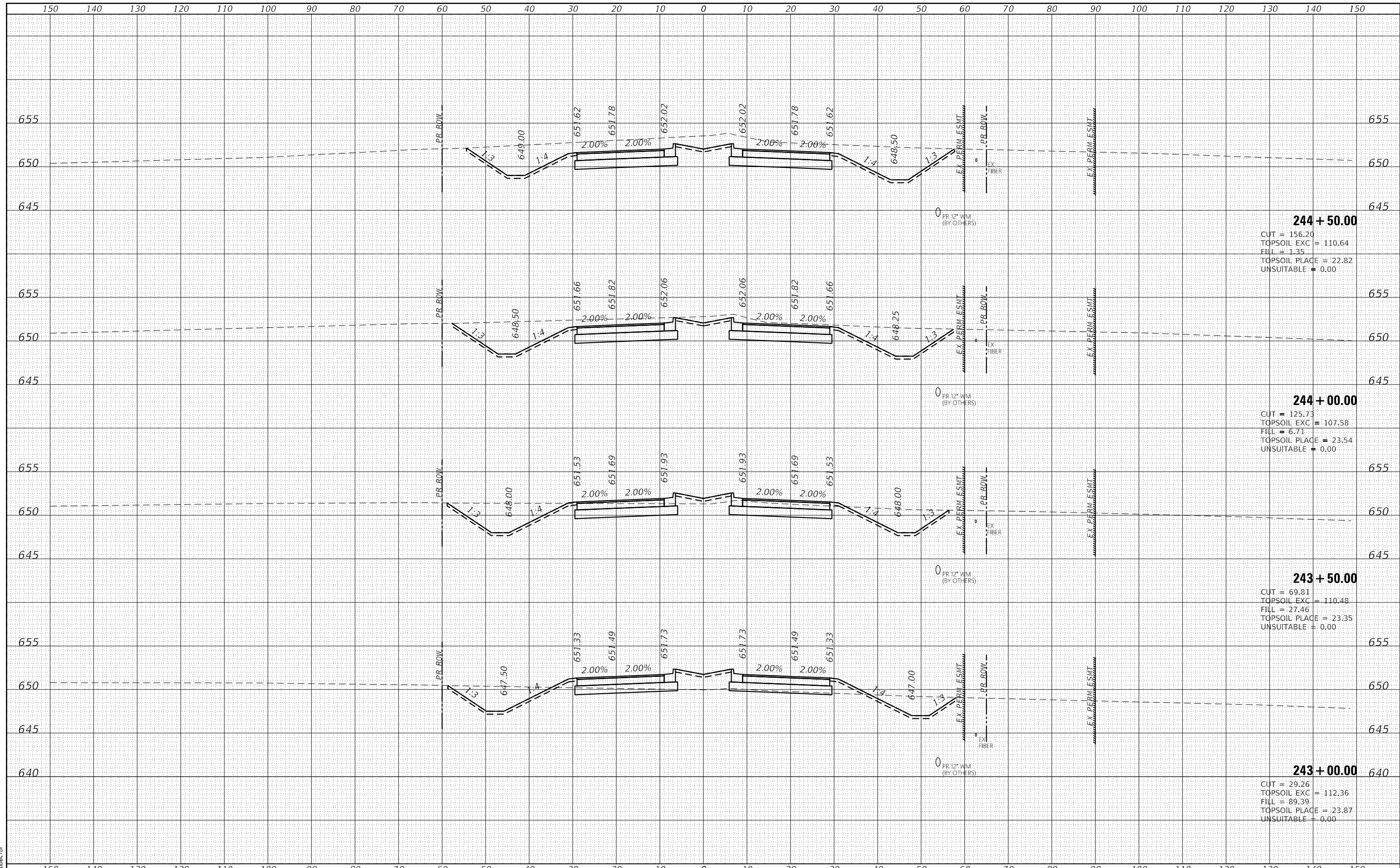
241 + 50.00
 CUT = 0.00
 TOPSOIL EXC = 110.39
 FILL = 388.80
 TOPSOIL PLACE = 23.24
 UNSUITABLE = 0.00

	USER NAME = amiller DESIGNED - JMR DRAWN - AJM CHECKED - APS DATE - 10/21/2022	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS COLLINS ROAD	F.A. RTE. 2514 SECTION 19-00154-00-FP COUNTY KENDALL CONTRACT NO. 87800	TOTAL SHEETS 312 SHEET NO. 175
	PLOT SCALE = 20.0000' / in. PLOT DATE = 10/21/2022	SCALE: SHEET 3 OF 55 SHEETS STA. 241+50.00 TO STA. 242+50.00			ILLINOIS FED. AID PROJECT	

DATE	
BY	
FINISHED SURVEY	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	
NO.	

HRG PROJECT No: 19182
 FILE NAME: 19182_19182_19182.dgn
 PLOT DRIVER: il_caf_batrcfg
 PEN TABLE: plottbl.tbl



USER NAME	= amiller
DESIGNED	- JMR
DRAWN	- AJM
CHECKED	- APS
DATE	- 10/21/2022
REVISIONS	
REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
COLLINS ROAD

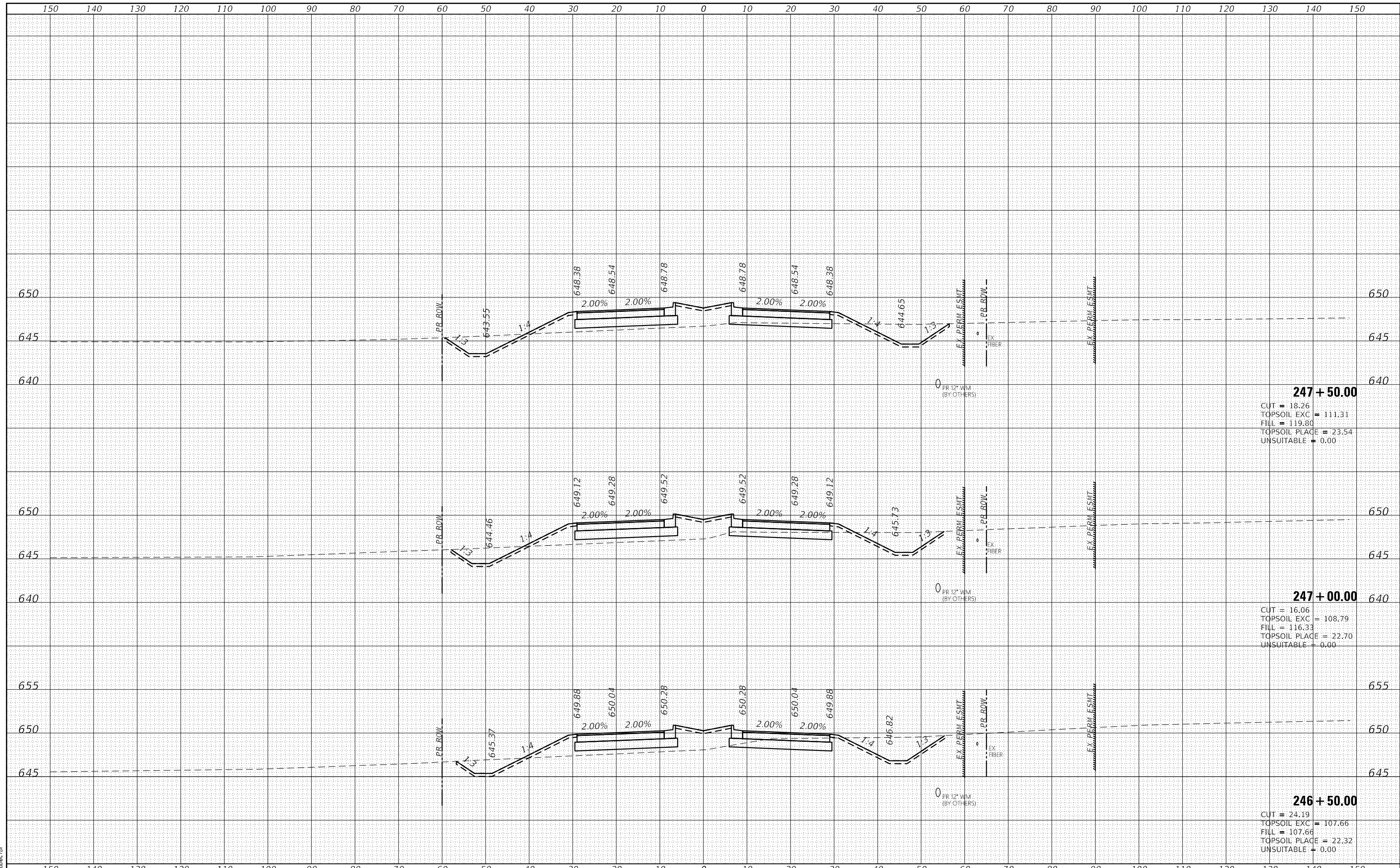
SCALE: SHEET 4 OF 55 SHEETS STA. 243+00.00 TO STA. 244+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	176
CONTRACT NO. 87800			ILLINOIS FED. AID PROJECT	

DATE	
BY	
FINISHED SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	

HRG PROJECT No: 19182
 ACT: 19182
 FILE NAME: 19182_19182.dgn
 PLOT DRIVER: il_caf_bap1r1c1g
 PEN TABLE: p101aep1.td



247 + 50.00
 CUT = 18.26
 TOPSOIL EXC = 111.31
 FILL = 119.80
 TOPSOIL PLACE = 23.54
 UNSUITABLE = 0.00

247 + 00.00
 CUT = 16.06
 TOPSOIL EXC = 108.79
 FILL = 116.33
 TOPSOIL PLACE = 22.70
 UNSUITABLE = 0.00

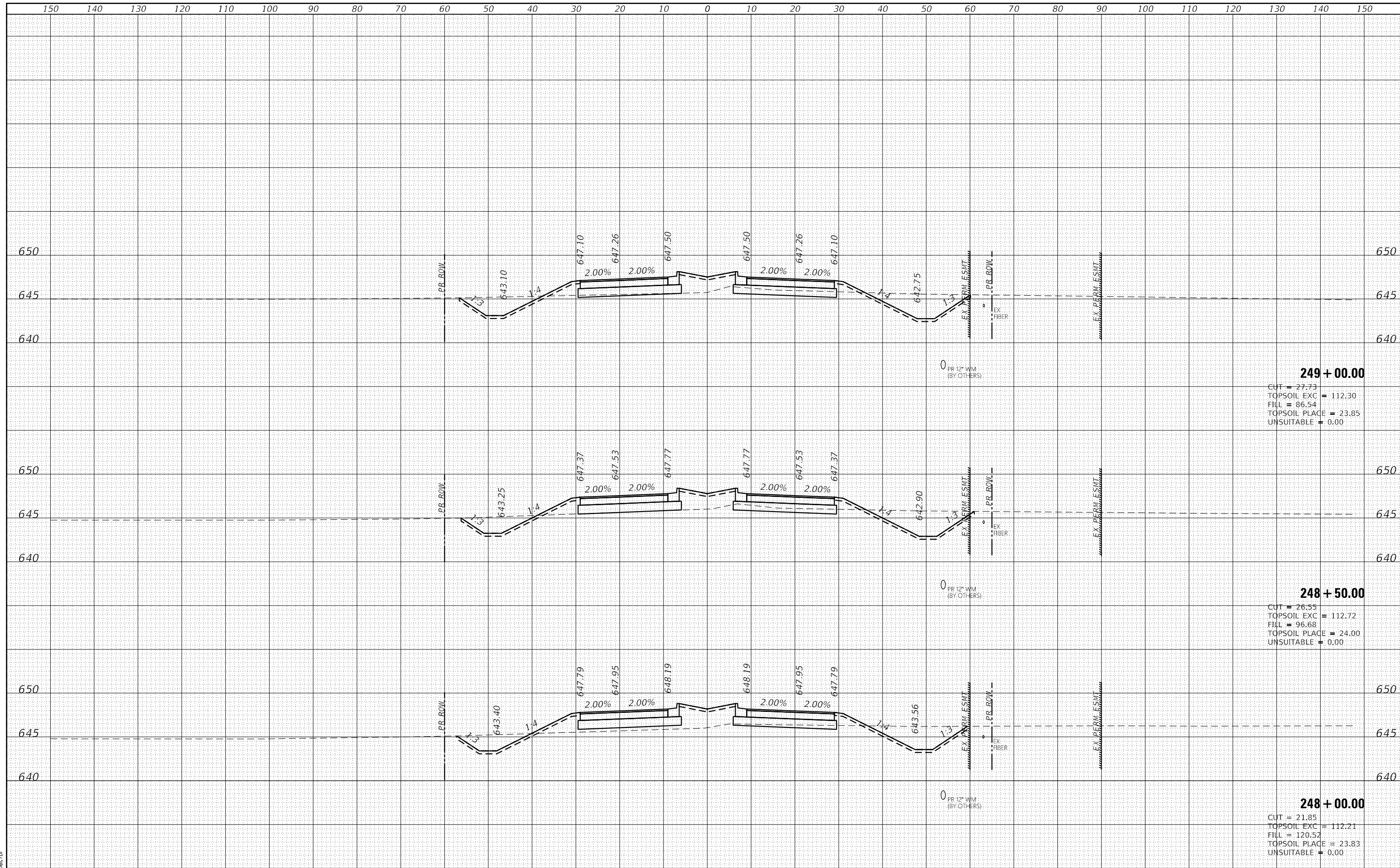
246 + 50.00
 CUT = 24.19
 TOPSOIL EXC = 107.66
 FILL = 107.66
 TOPSOIL PLACE = 22.32
 UNSUITABLE = 0.00

	USER NAME = amiller DESIGNED - JMR DRAWN - AJM CHECKED - APS DATE - 10/21/2022	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS COLLINS ROAD	F.A. RTE. 2514 SECTION 19-00154-00-FP COUNTY KENDALL CONTRACT NO. 87800	TOTAL SHEETS 312 SHEET NO. 178
	PLOT SCALE = 20.0000' / in. PLOT DATE = 10/21/2022	SCALE: SHEET 6 OF 55 SHEETS STA. 246+50.00 TO STA. 247+50.00			ILLINOIS FED. AID PROJECT	

DATE	
BY	
FINISHED SURVEY	
PLOTTED TEMPLATE	
NOTE BOOK AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED TEMPLATE	
NOTE BOOK AREAS CHECKED	
NO.	

HRC PROJECT No: 19182
 FILE NAME: 19182_19182_19182.dgn
 PLOT DRIVER: il_caf_bap1rcfg
 PEN TABLE: p101tbl.tbl

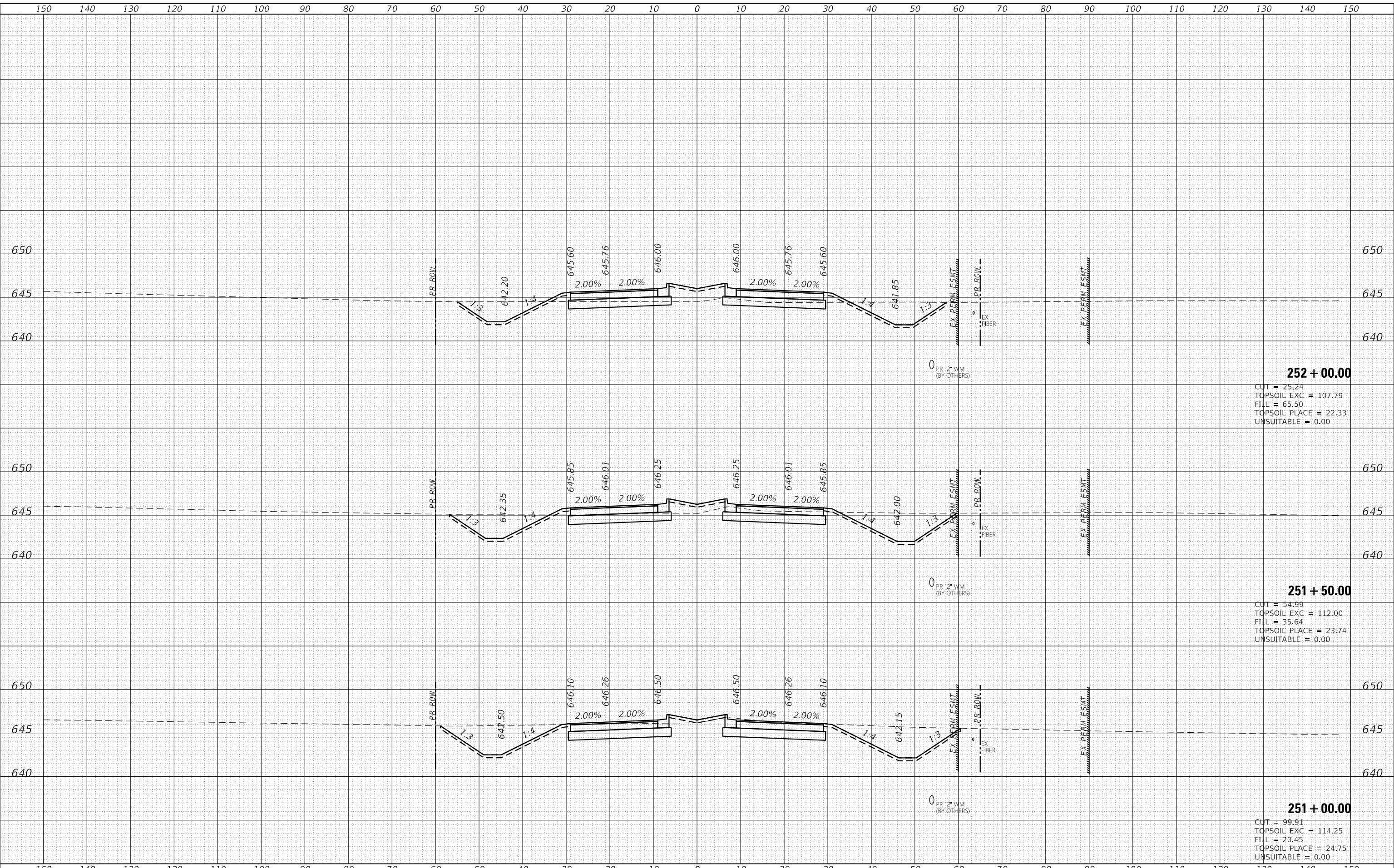


HRGreen.com Illinois Professional Design Firm #184-001322	USER NAME = amiller DESIGNED - JMR DRAWN - AJM CHECKED - APS DATE - 10/21/2022	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS COLLINS ROAD	F.A. RTE. 2514 SECTION 19-00154-00-FP COUNTY KENDALL CONTRACT NO. 87800	TOTAL SHEETS 312 SHEET NO. 179
	PLOT SCALE = 20.0000' / in. PLOT DATE = 10/21/2022	SCALE: SHEET 7 OF 55 SHEETS STA. 248+00.00 TO STA. 249+00.00			ILLINOIS FED. AID PROJECT	

DATE	
BY	
FINISHED SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

HRG PROJECT No: 19182
 ACT: 19182
 FILE NAME: 19182.dwg
 PLOT DRIVER: lwp2000.plt
 PEN TABLE: p10.tbl



252 + 00.00
 CUT = 25.24
 TOPSOIL EXC = 107.79
 FILL = 65.50
 TOPSOIL PLACE = 22.33
 UNSUITABLE = 0.00

251 + 50.00
 CUT = 54.99
 TOPSOIL EXC = 112.00
 FILL = 35.64
 TOPSOIL PLACE = 23.74
 UNSUITABLE = 0.00

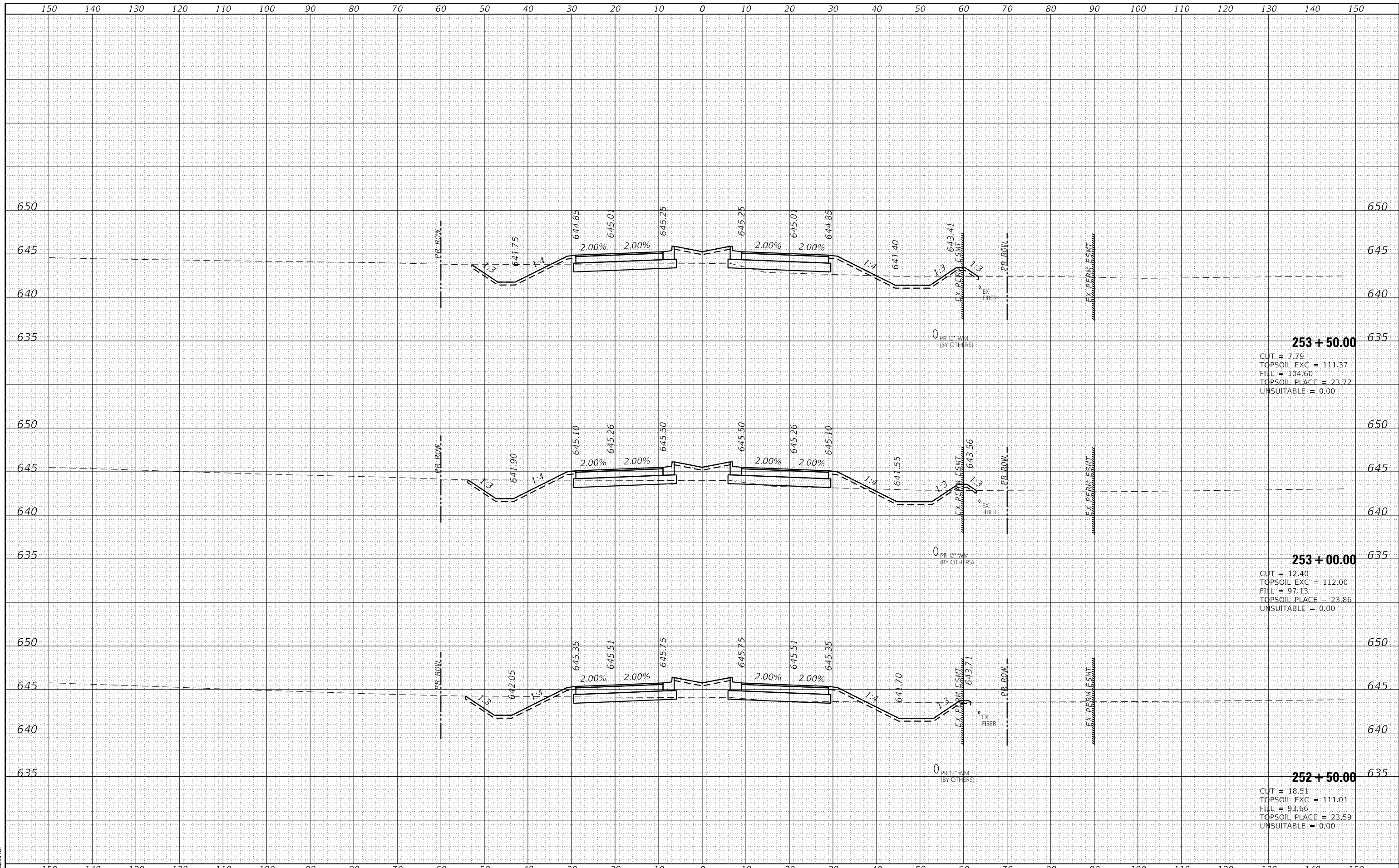
251 + 00.00
 CUT = 99.91
 TOPSOIL EXC = 114.25
 FILL = 20.45
 TOPSOIL PLACE = 24.75
 UNSUITABLE = 0.00

	USER NAME = amiller DESIGNED - JMR DRAWN - AJM CHECKED - APS DATE - 10/21/2022	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS COLLINS ROAD	F.A. RTE. 2514 SECTION 19-00154-00-FP COUNTY KENDALL CONTRACT NO. 87800	TOTAL SHEETS 312 SHEET NO. 181
	PLOT SCALE = 20.0000' / in. PLOT DATE = 10/21/2022	SCALE: SHEET 9 OF 55 SHEETS STA. 251+00.00 TO STA. 252+00.00			ILLINOIS FED. AID PROJECT	

DATE	
BY	
FINISHED SURVEY	
PLOTTED TEMPLATE	
NOTE BOOK AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED TEMPLATE	
NOTE BOOK AREAS CHECKED	
NO.	

HRG PROJECT No: 19182
 ACT: 19182
 FILE NAME: 19182.dwg
 PLOT DRIVER: l:\cpl\p10\p10.ctb
 PEN TABLE: p10\p10.tbl



253 + 50.00
 CUT = 7.79
 TOPSOIL EXC = 111.37
 FILL = 104.60
 TOPSOIL PLAC = 23.72
 UNSUITABLE = 0.00

253 + 00.00
 CUT = 12.40
 TOPSOIL EXC = 112.00
 FILL = 97.13
 TOPSOIL PLAC = 23.86
 UNSUITABLE = 0.00

252 + 50.00
 CUT = 18.51
 TOPSOIL EXC = 111.01
 FILL = 93.66
 TOPSOIL PLAC = 23.59
 UNSUITABLE = 0.00



USER NAME = amiller	DESIGNED - JMR	REVISED -
	DRAWN - AJM	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - APS	REVISED -
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
 COLLINS ROAD**

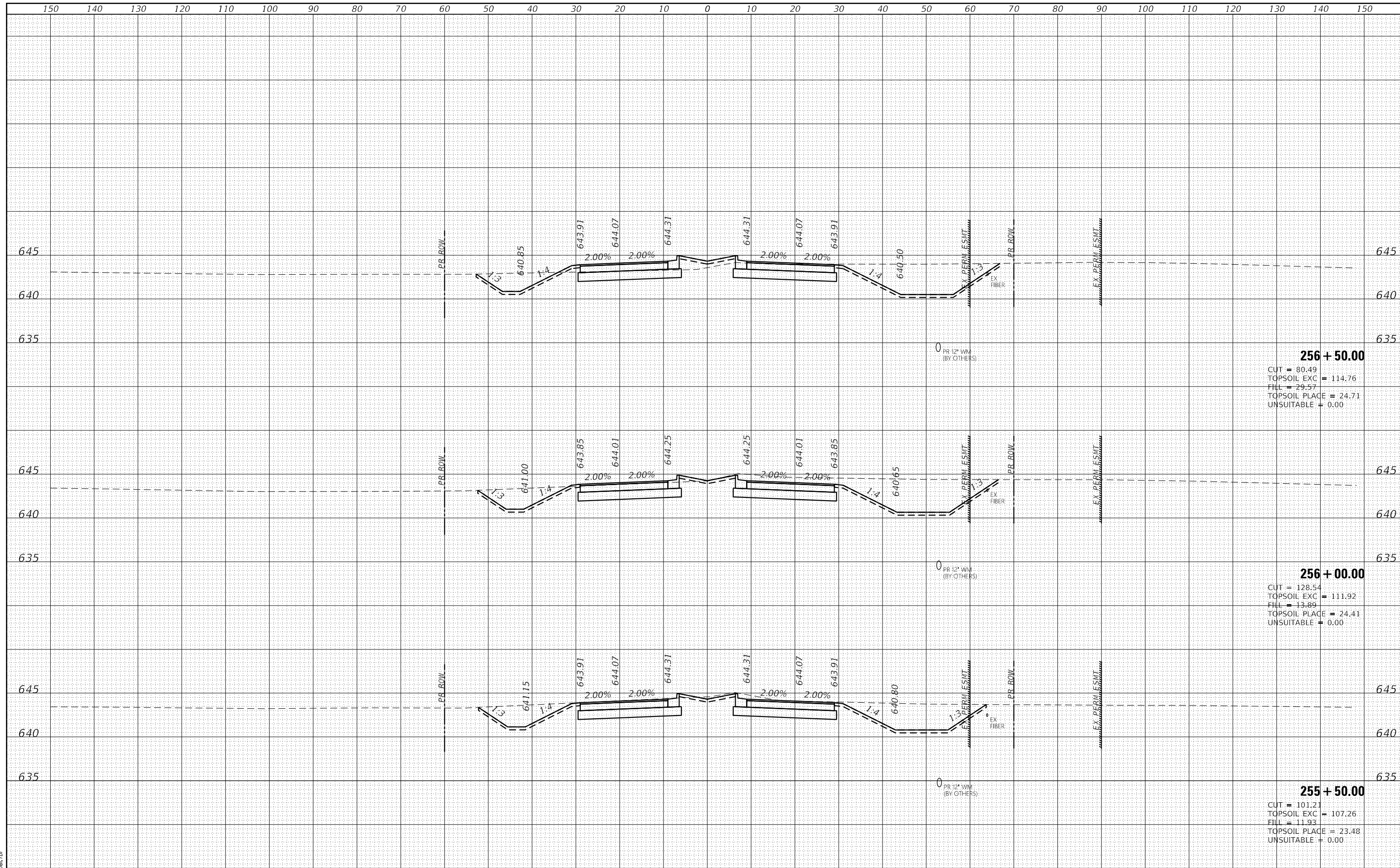
SCALE: SHEET 10 OF 55 SHEETS STA. 252+50.00 TO STA. 253+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	182
			CONTRACT NO. 87800	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINISHED SURVEY	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	
NO.	

HRC PROJECT No: 19182
 FILE NAME: 19182_19182.dgn
 PLOT DRIVER: ilcpldpcfg
 PEN TABLE: plottable.tbl



256 + 50.00
 CUT = 80.49
 TOPSOIL EXC = 114.76
 FILL = 29.57
 TOPSOIL PLACE = 24.71
 UNSUITABLE = 0.00

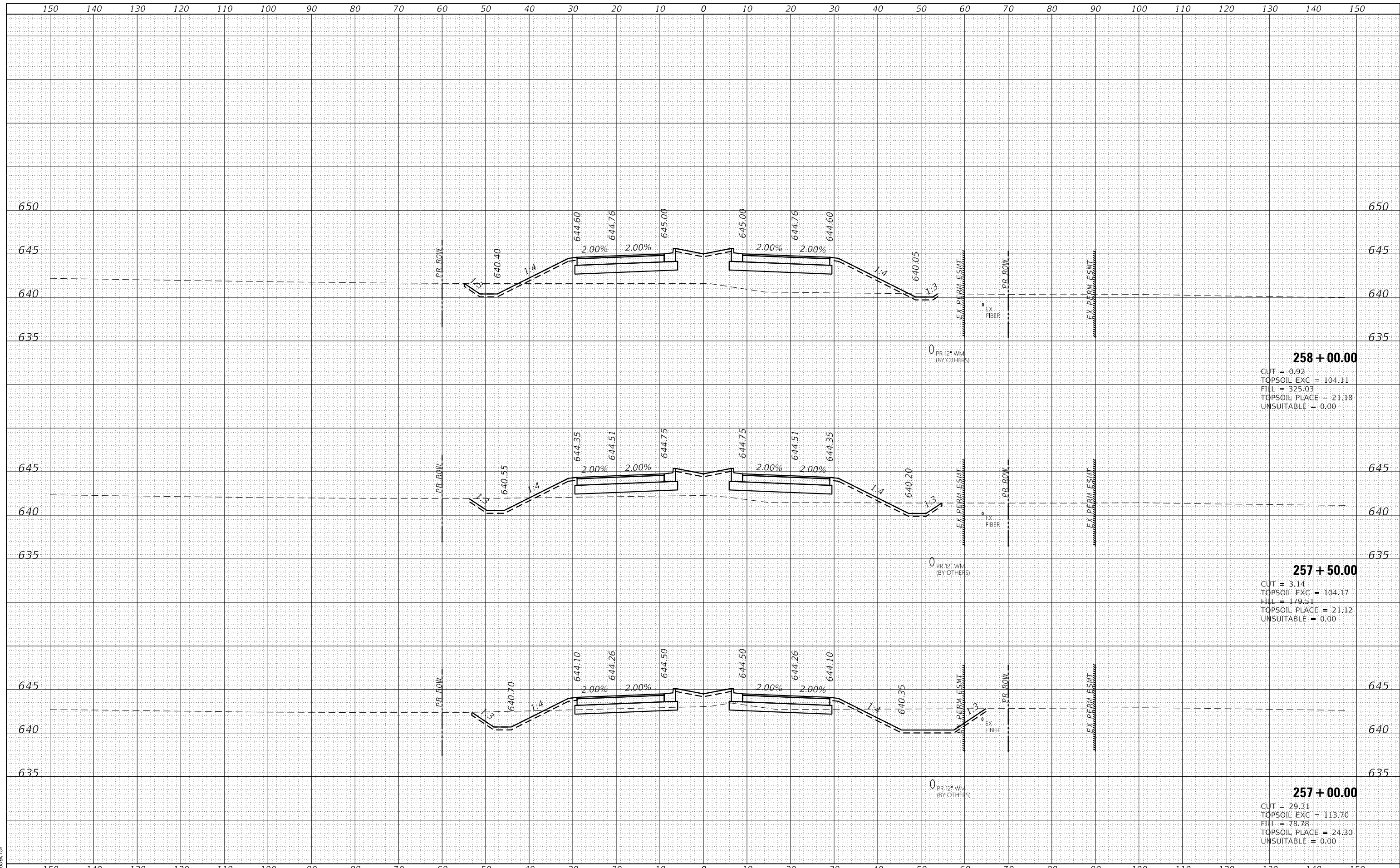
256 + 00.00
 CUT = 128.54
 TOPSOIL EXC = 111.92
 FILL = 13.89
 TOPSOIL PLACE = 24.41
 UNSUITABLE = 0.00

255 + 50.00
 CUT = 101.21
 TOPSOIL EXC = 107.26
 FILL = 11.93
 TOPSOIL PLACE = 23.48
 UNSUITABLE = 0.00

DATE	
BY	
FINISHED SURVEY	
PLOTTED TEMPLATE	
NOTE BOOK AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED TEMPLATE	
NOTE BOOK AREAS CHECKED	
NO.	

HRG PROJECT No: 19182
 ACT: 19182
 FILE NAME: 19182.dwg
 PLOT DRIVER: il_caf_batrcfg
 PEN TABLE: plottbl.tbl



258 + 00.00
 CUT = 0.92
 TOPSOIL EXC = 104.11
 FILL = 325.03
 TOPSOIL PLACE = 21.18
 UNSUITABLE = 0.00

257 + 50.00
 CUT = 3.14
 TOPSOIL EXC = 104.17
 FILL = 179.51
 TOPSOIL PLACE = 21.12
 UNSUITABLE = 0.00

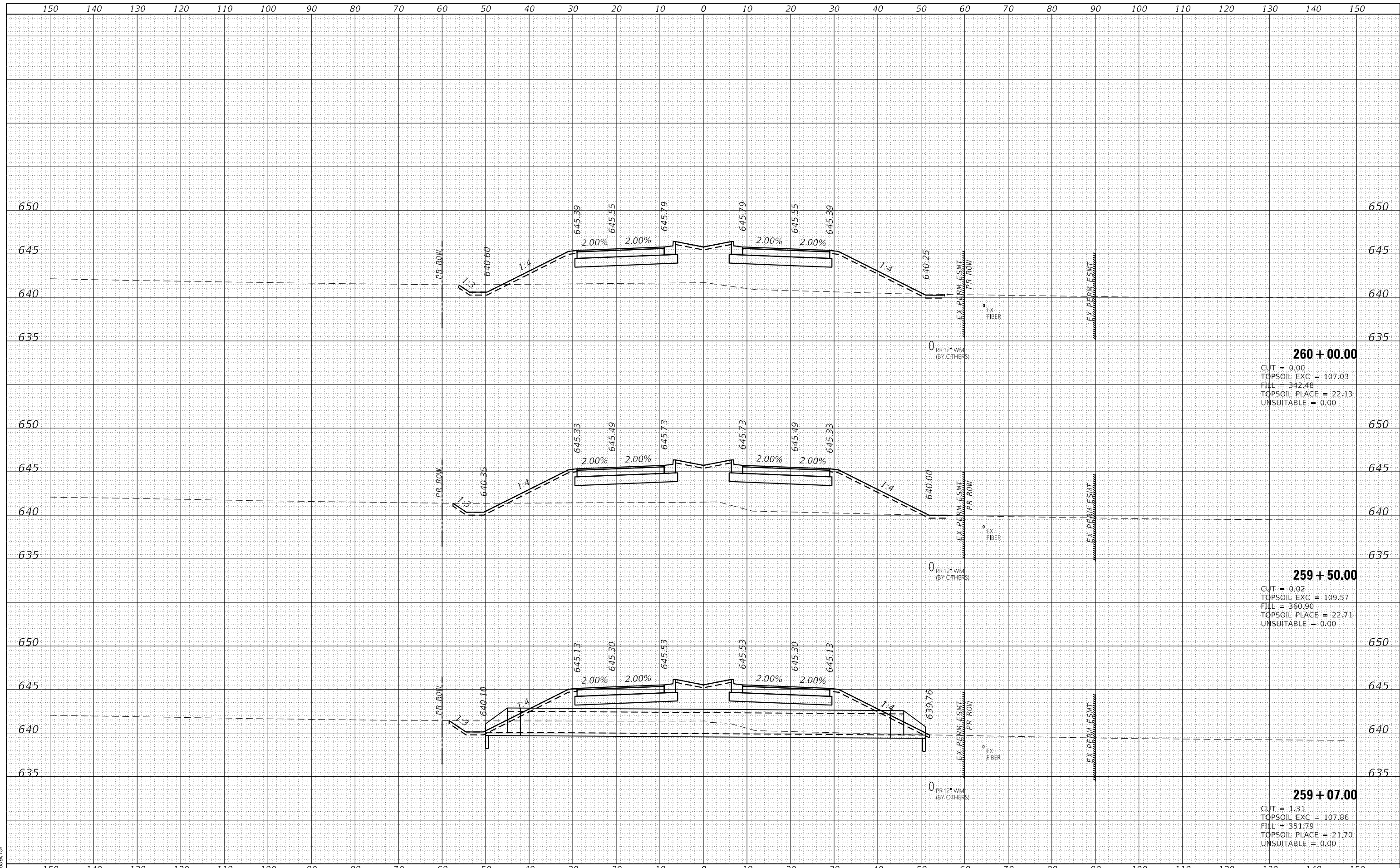
257 + 00.00
 CUT = 29.31
 TOPSOIL EXC = 113.70
 FILL = 78.78
 TOPSOIL PLACE = 24.30
 UNSUITABLE = 0.00

HRG PROJECT No: 19182	USER NAME = amiller	DESIGNED - JMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS COLLINS ROAD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ACT: 19182	DRAWN - AJM	REVISED -	2514			19-00154-00-FP	KENDALL	312	185	
FILE NAME: 19182.dwg	CHECKED - APS	REVISED -	CONTRACT NO. 87800							
PLOT DRIVER: il_caf_batrcfg	DATE - 10/21/2022	REVISED -	ILLINOIS FED. AID PROJECT							
PEN TABLE: plottbl.tbl	PLOT SCALE = 20.0000' / in.			SCALE:	SHEET 13 OF 55 SHEETS	STA. 257+00.00 TO STA. 258+00.00				

DATE	
BY	
FINISHED SURVEY	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	

HRG PROJECT No: 19182
 ACT: 19182
 FILE NAME: 19182_19182.dgn
 PLOT DRIVER: il_caf_bap1r1c1g
 PEN TABLE: p101aep1.td



260 + 00.00
 CUT = 0.00
 TOPSOIL EXC = 107.03
 FILL = 342.48
 TOPSOIL PLACE = 22.13
 UNSUITABLE = 0.00

259 + 50.00
 CUT = 0.02
 TOPSOIL EXC = 109.57
 FILL = 360.90
 TOPSOIL PLACE = 22.71
 UNSUITABLE = 0.00

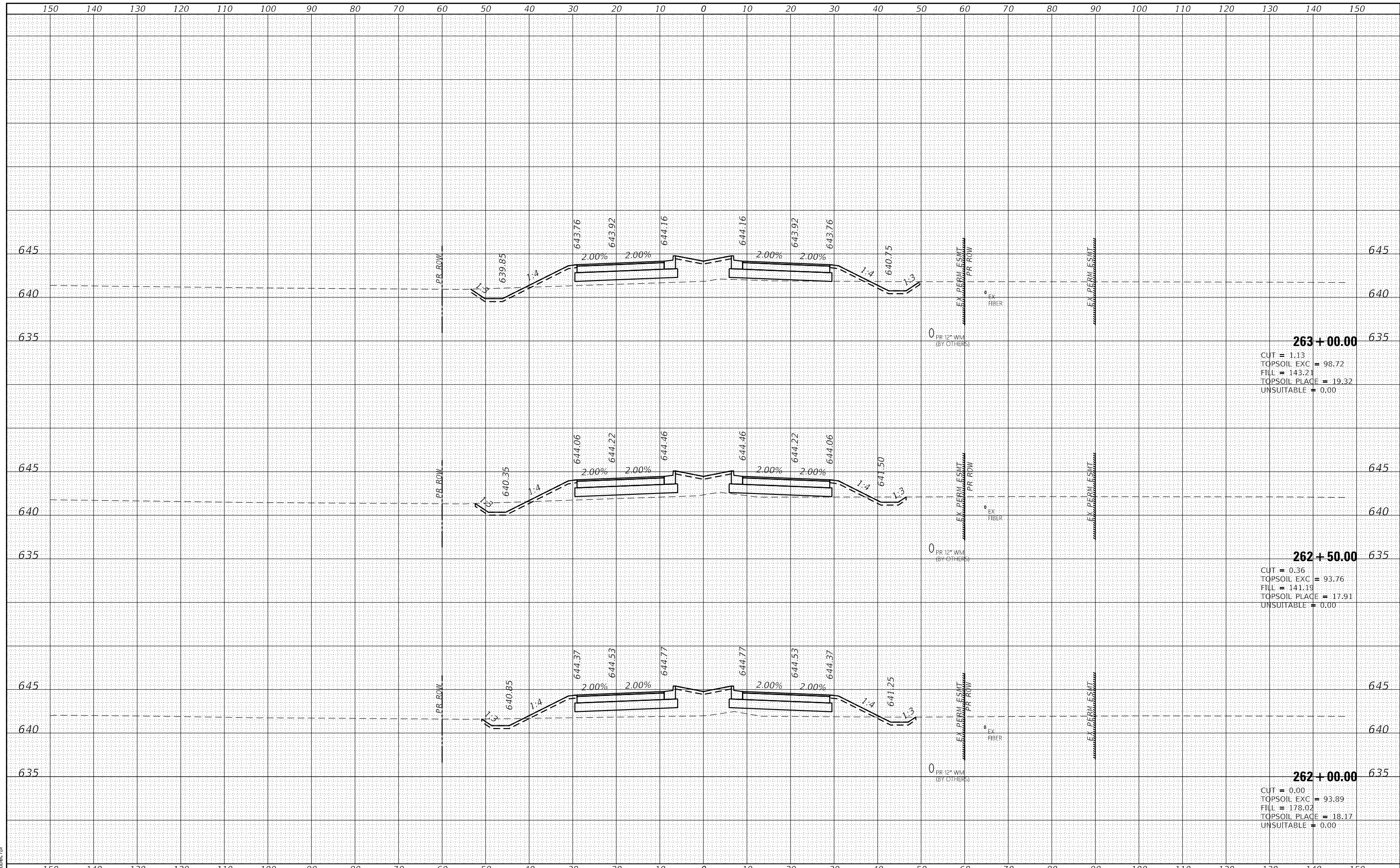
259 + 07.00
 CUT = 1.31
 TOPSOIL EXC = 107.86
 FILL = 351.79
 TOPSOIL PLACE = 21.70
 UNSUITABLE = 0.00

	USER NAME = amiller DESIGNED - JMR DRAWN - AJM CHECKED - APS DATE - 10/21/2022	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS COLLINS ROAD	F.A. RTE. 2514 SECTION 19-00154-00-FP COUNTY KENDALL CONTRACT NO. 87800	TOTAL SHEETS 312 SHEET NO. 187
	PLOT SCALE = 20.0000' / in. PLOT DATE = 10/21/2022	SCALE: SHEET 15 OF 55 SHEETS STA. 259+07.00 TO STA. 260+00.00			ILLINOIS FED. AID PROJECT	

DATE	
BY	
FINISHED SURVEY	
PLOTTED TEMPLATE	
NOTE BOOK NO.	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED TEMPLATE	
NOTE BOOK NO.	
AREAS CHECKED	

HRG PROJECT No: 19182
 FILE NAME: 19182_19182_19182.dgn
 PLOT DRIVER: il_caf_batrcfg
 PEN TABLE: p101tbl.tbl

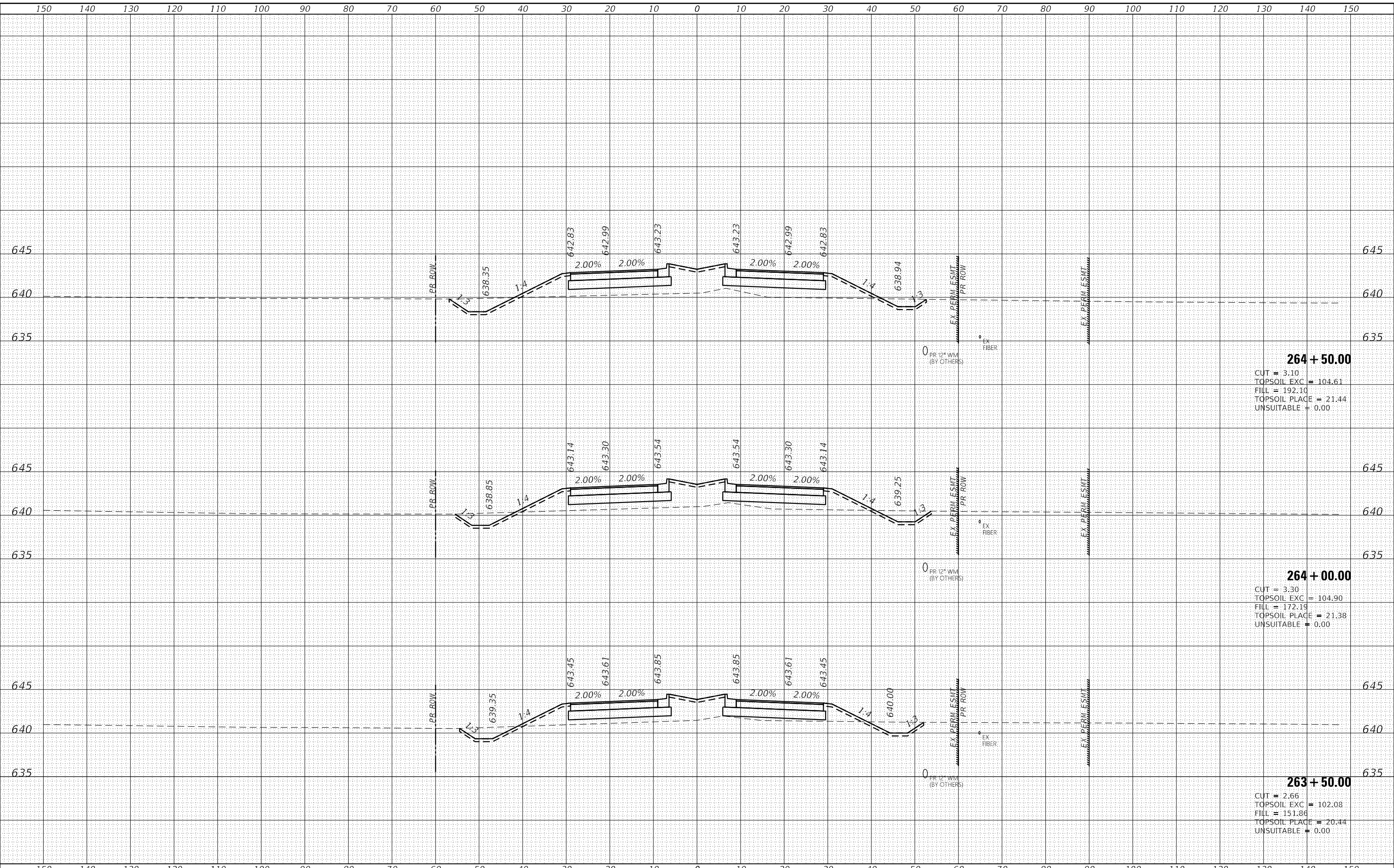


HRG PROJECT No: 19182	USER NAME = amiller	DESIGNED - JMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS COLLINS ROAD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
FILE NAME: 19182_19182_19182.dgn	PLOT SCALE = 20.0000' / in.	DRAWN - AJM	REVISED -			2514	19-00154-00-FP	KENDALL	312	189	
PLOT DRIVER: il_caf_batrcfg	PLOT DATE = 10/21/2022	CHECKED - APS	REVISED -			CONTRACT NO. 87800					
PEN TABLE: p101tbl.tbl		DATE - 10/21/2022	REVISED -			ILLINOIS FED. AID PROJECT					

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	
NO.	

HRG PROJECT No: 19182
 ACT: 19182
 FILE NAME: 19182_19182.dgn
 PLOT DRIVER: il_caf_batrcfg
 PEN TABLE: p101tbl.tbl



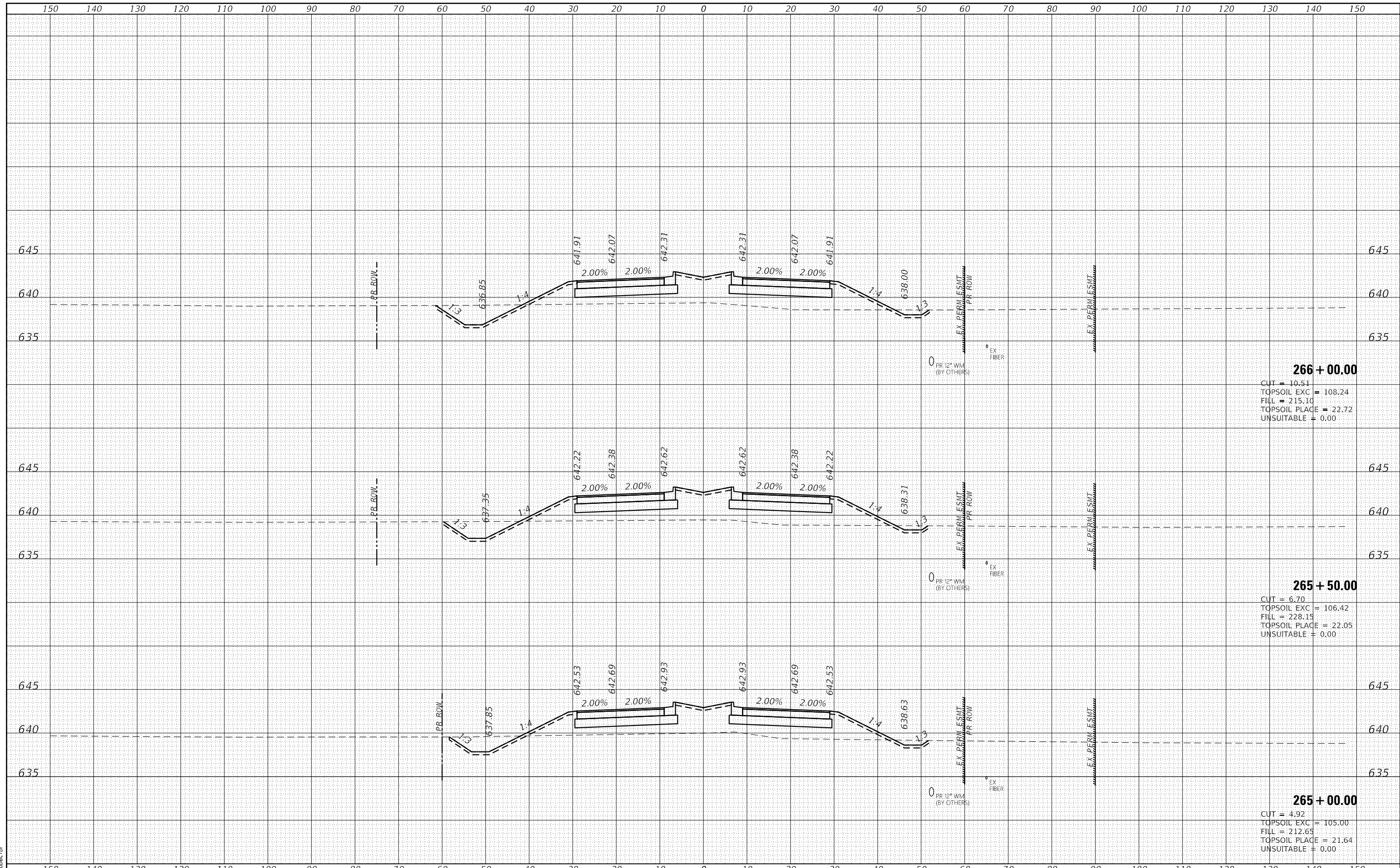
HRG PROJECT No: 19182	DESIGNED - JMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS COLLINS ROAD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HRGreen.com Illinois Professional Design Firm #184-001322	DRAWN - AJM	REVISED -			2514	19-00154-00-FP	KENDALL	312	190	
PLOT SCALE = 20.0000' / in.	CHECKED - APS	REVISED -			CONTRACT NO. 87800					
PLOT DATE = 10/21/2022	DATE - 10/21/2022	REVISED -			ILLINOIS FED. AID PROJECT					

SCALE: SHEET 18 OF 55 SHEETS STA. 263+50.00 TO STA. 264+50.00

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	TEMPLATE
	AREAS
	CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	TEMPLATE
	AREAS
	CHECKED

HRC PROJECT No: 19182
 FILE NAME: 19182_19182_19182.dgn
 PLOT DRIVER: il_caf_bap1r1c1g
 PEN TABLE: p1010a1.td1



266 + 00.00
 CUT = 10.51
 TOPSOIL EXC = 108.24
 FILL = 215.10
 TOPSOIL PLACE = 22.72
 UNSUITABLE = 0.00

265 + 50.00
 CUT = 6.70
 TOPSOIL EXC = 106.42
 FILL = 228.15
 TOPSOIL PLACE = 22.05
 UNSUITABLE = 0.00

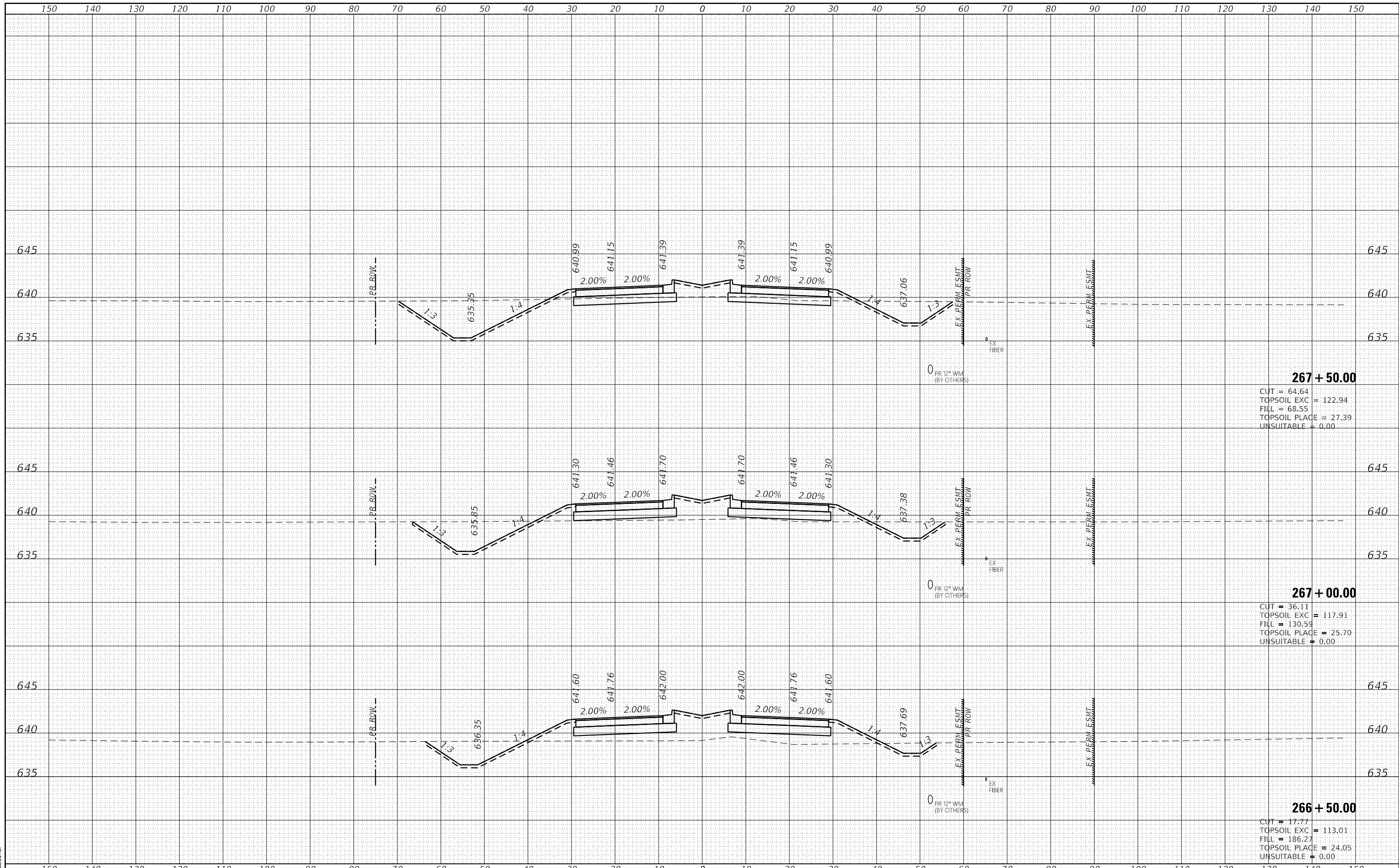
265 + 00.00
 CUT = 4.92
 TOPSOIL EXC = 105.00
 FILL = 212.65
 TOPSOIL PLACE = 21.64
 UNSUITABLE = 0.00

HRCGreen.com Illinois Professional Design Firm #184-001322	USER NAME = amiller DESIGNED - JMR DRAWN - AJM CHECKED - APS DATE - 10/21/2022	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		CROSS SECTIONS COLLINS ROAD		F.A. RTE. 2514 SECTION 19-00154-00-FP COUNTY KENDALL CONTRACT NO. 87800	TOTAL SHEETS 312 SHEET NO. 191
PLOT SCALE = 20.0000' / in. PLOT DATE = 10/21/2022	DATE - 10/21/2022		SCALE:		SHEET 19 OF 55 SHEETS		STA. 265+00.00 TO STA. 266+00.00	
							ILLINOIS FED. AID PROJECT	

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS
	CHECKED

HRC PROJECT No: 19182
 ACT: 19182
 FILE NAME: 19182_HRC_19182.dgn
 PLOT DRIVER: il_caf_bep1r1c1g
 PEN TABLE: p101aep1.td

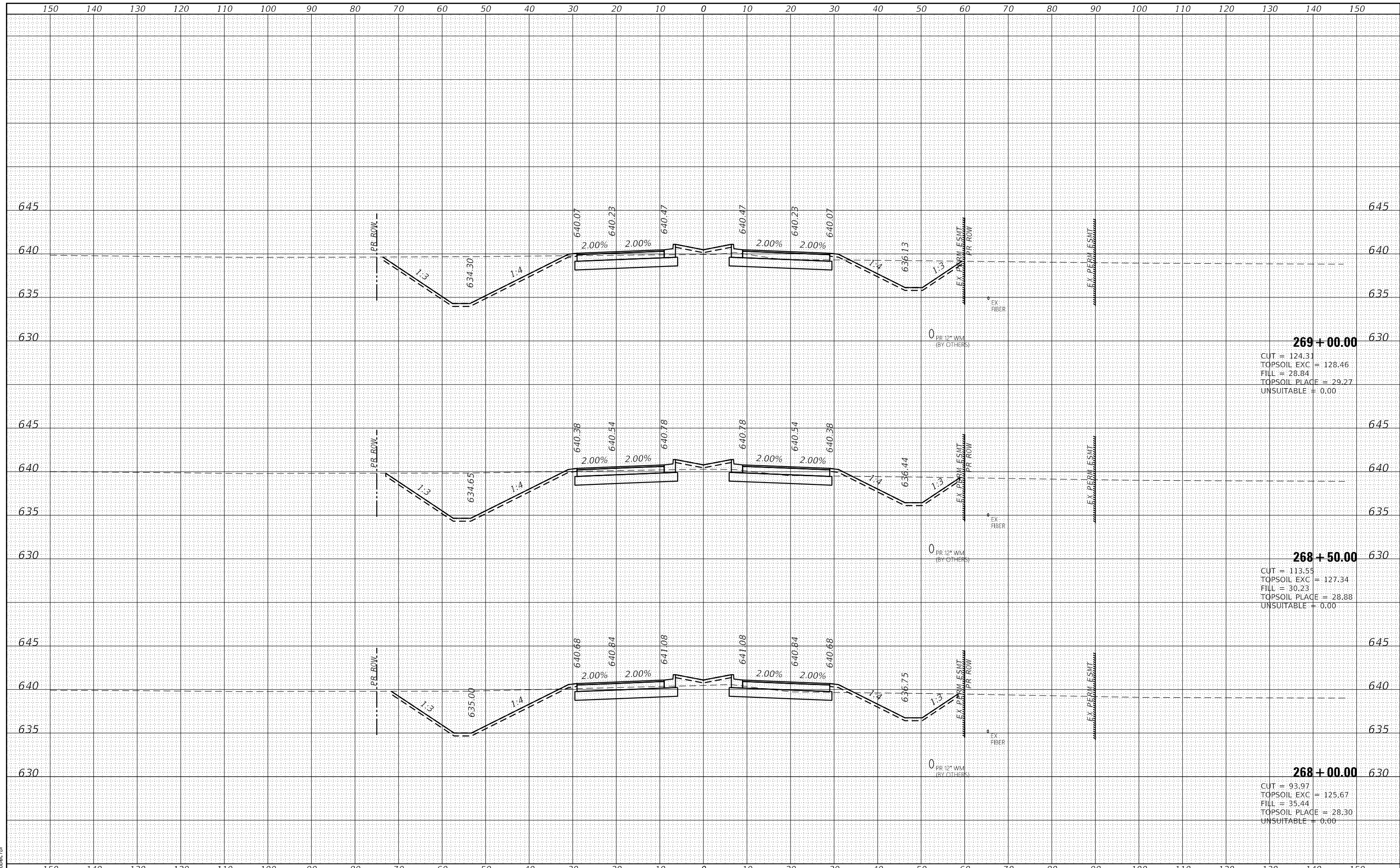


HRGreen.com Illinois Professional Design Firm #184-001322	USER NAME = amiller DESIGNED - JMR DRAWN - AJM CHECKED - APS DATE - 10/21/2022	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS COLLINS ROAD	F.A. RTE. 2514 SECTION 19-00154-00-FP COUNTY KENDALL CONTRACT NO. 87800	SHEET NO. 192 TOTAL SHEETS 312
	PLOT SCALE = 20.0000' / in. PLOT DATE = 10/21/2022	SCALE: SHEET 20 OF 55 SHEETS STA. 266+50.00 TO STA. 267+50.00			ILLINOIS FED. AID PROJECT	

DATE	
BY	
FINAL SURVEY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	
NO.	

HRG PROJECT No: 19182
 ACT: 19182
 FILE NAME: 19182_19182.dgn
 PLOT DRIVER: il_def_batrcfg
 PEN TABLE: plottbl.tbl

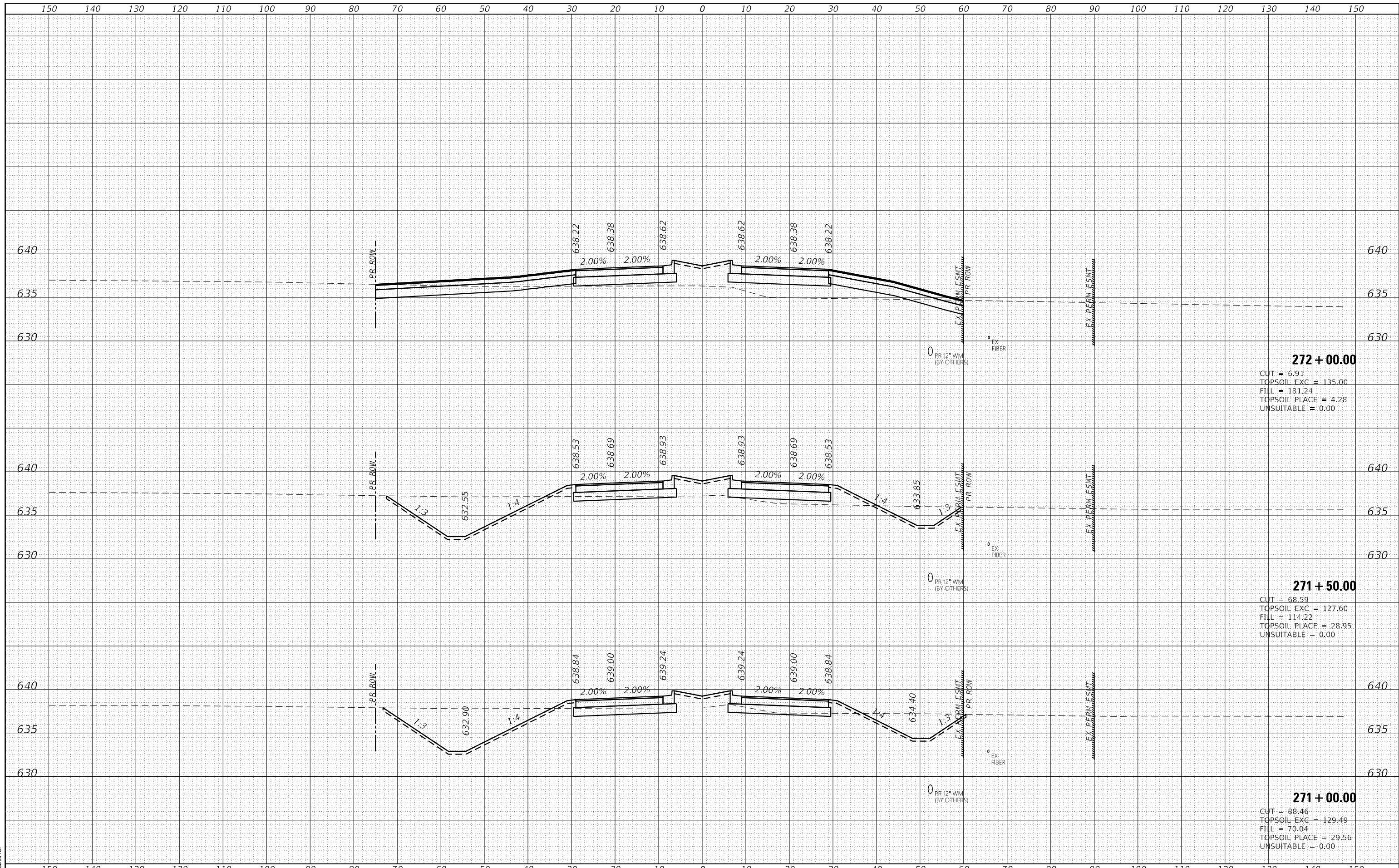


	USER NAME = amiller DESIGNED - JMR DRAWN - AJM CHECKED - APS DATE - 10/21/2022	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS COLLINS ROAD	SCALE: SHEET 21 OF 55 SHEETS STA. 268+00.00 TO STA. 269+00.00	F.A. RTE. 2514 SECTION 19-00154-00-FP COUNTY KENDALL CONTRACT NO. 87800	TOTAL SHEETS 312 SHEET NO. 193
	ILLINOIS FED. AID PROJECT						

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	TEMPLATE
	AREAS
	CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	TEMPLATE
	AREAS
	CHECKED

HRC PROJECT No: 19182
 FILE NAME: 19182_19182.dgn
 PLOT DRIVER: il_def_bsp1r1c1g
 PEN TABLE: p101tblpen.tbl



272 + 00.00
 CUT = 6.91
 TOPSOIL EXC = 135.00
 FILL = 181.24
 TOPSOIL PLACE = 4.28
 UNSUITABLE = 0.00

271 + 50.00
 CUT = 68.59
 TOPSOIL EXC = 127.60
 FILL = 114.22
 TOPSOIL PLACE = 28.95
 UNSUITABLE = 0.00

271 + 00.00
 CUT = 88.46
 TOPSOIL EXC = 129.49
 FILL = 70.04
 TOPSOIL PLACE = 29.56
 UNSUITABLE = 0.00



USER NAME =	amiller	DESIGNED -	JMR	REVISED -	
		DRAWN -	AJM	REVISED -	
PLOT SCALE =	20.0000' / in.	CHECKED -	APS	REVISED -	
PLOT DATE =	10/21/2022	DATE -	10/21/2022	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
COLLINS ROAD

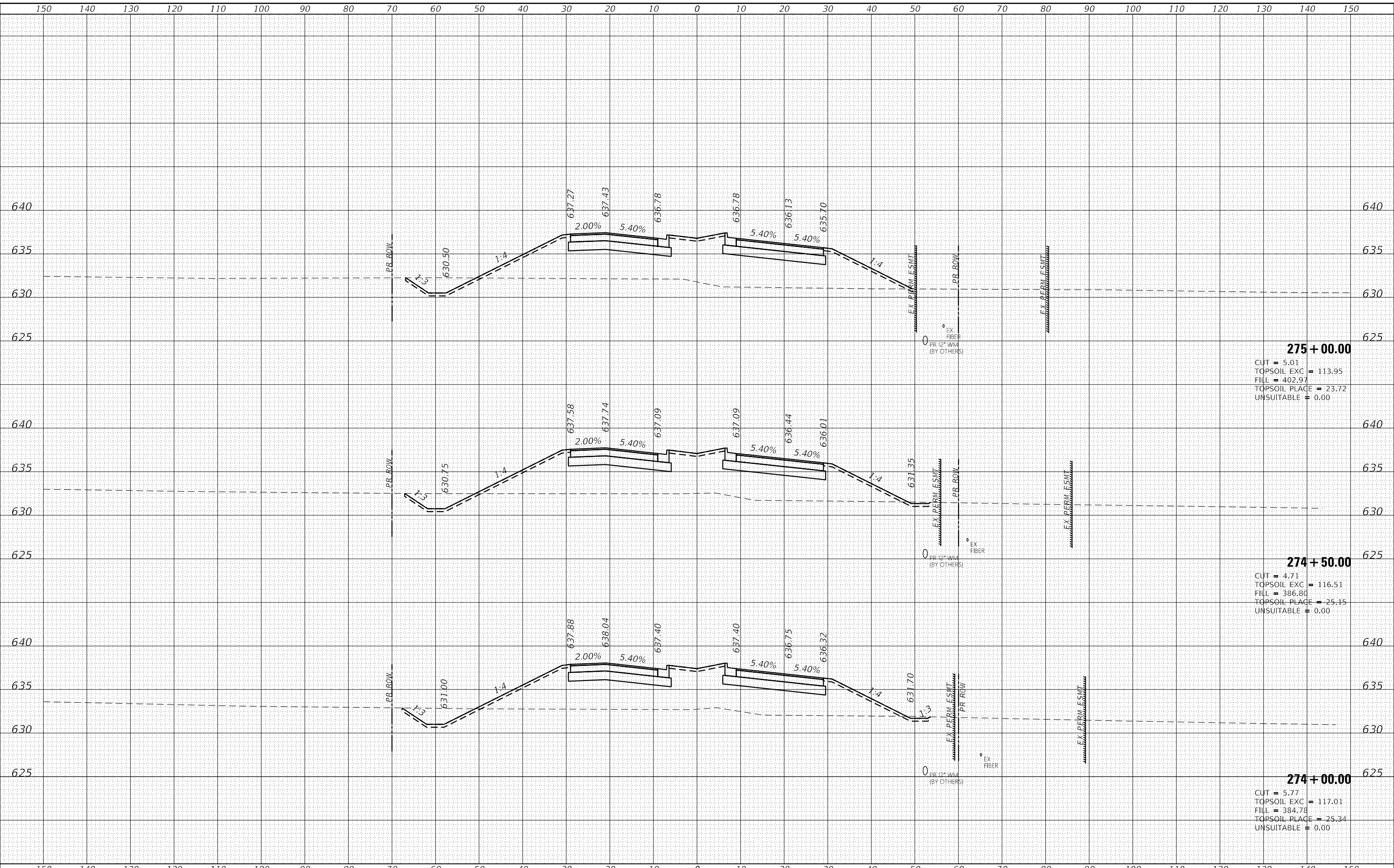
SCALE: SHEET 23 OF 55 SHEETS STA. 271+00.00 TO STA. 272+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2514	19-00154-00-FP	KENDALL	312	195
			CONTRACT NO. 87800	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	TEMPLATE
	AREAS
	CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	TEMPLATE
	AREAS
	CHECKED

HRG PROJECT No: 19182
 ACT: 19-00154-00-FP
 FILE NAME: 19182_19-00154-00-FP.dgn
 PLOT DRIVER: il_caf_bap1r1c1g
 PEN TABLE: p101aep1.td



HRG PROJECT No: 19182	USER NAME = amiller	DESIGNED - JMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS COLLINS ROAD	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
FILE NAME: 19182_19-00154-00-FP.dgn	PLOT SCALE = 20.0000' / in.	DRAWN - AJM	REVISED -			2514	19-00154-00-FP	KENDALL	312	197	
PLOT DRIVER: il_caf_bap1r1c1g	PLOT DATE = 10/21/2022	CHECKED - APS	REVISED -			CONTRACT NO. 87800					
PEN TABLE: p101aep1.td		DATE - 10/21/2022	REVISED -			ILLINOIS FED. AID PROJECT					

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	TEMPLATE
	AREAS
	CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	TEMPLATE
	AREAS
	CHECKED

HRG PROJECT No: 19182
 ACT: 19-00154-00-FP
 FILE NAME: 19182_19-00154-00-FP.dgn
 PLOT DRIVER: L:\app\lpc\lpcfcg
 PEN TABLE: p10\table.tbl

