PRELIMINARY

LETTING DATE

IMN-035-4(194)87--0E-77

POLK Co.

INDEX OF SHEETS

No.	DESCRIPTION
A Sheets	**Title Sheets**
A.1	Title Sheet
A.2	Location Map Sheet
A.3 - 9	Project Key Map Sheets
B Sheets	**Typical Cross Sections and Details**
B.1 - 18	Roadway Typical Sections and Details
D Sheets	**Mainline Plan and Profile Sheets**
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2 - 5	I-80 Survey
* D.6 - 10	I-80 Eastbound
* D.11 - 15	I-80 Westbound
* D.16 - 19	I-80 Mainline
* D.20 - 28	I-35 Northbound
* D.29 - 30	I-35 Southbound
* D.31 - 36	I-235
E Sheets	**Side Road Plan and Profile Sheets**
* E.1	NE Broadway Avenue
* E.2	Chichaqua Valley Trail
G Sheets	**Survey Sheets**
G.1 - 2	Survey Control Points Reference Ties and Bench Marks
G.3 - 6	Horizontal Control Alignment Geometry
J Sheets	**Traffic Control and Staging Sheets**
* J.1 - 2	Traffic Control & Staging Notes
K Sheets	**Interchange Sheets**
* K.1 - 2	RAMP A Plan & Profile Sheets
* K.3 - 4	RAMP B Plan & Profile Sheets
* K.5 - 6	RAMP D Plan & Profile Sheets
* K.7 - 14	RAMP F Plan & Profile Sheets
* K.15 - 23	RAMP G Plan & Profile Sheets
* K.24 - 25	RAMP H Plan & Profile Sheets
K.26 - 32	Interchange Drainage & Site Grading
N Sheets	**Traffic Signing Sheets**
N.1 - 38	Signing Locations and Detail Sheets
U Sheets	**500 Series, Mod.Stds. and Detail Sheets**
U.1	Survey 80 Pavement Transition Detail
U.2	NB I-235 to WB I-80 - Ramp H Pavement Transition Detail
V Sheets	**Bridge and Culvert Situation Plans**
V.1	I-35 SB Retaining Wall Plan & Profile
V.2	Ramp B Retaining Wall Plan & Profile
* V.3 - 15	Bridge Situation Sketches
W Sheets	**Mainline Cross Sections**
W.1	Cross Sections Legend & Symbol Information Sheet
W.2 - 321	Mainline Cross Sections
X Sheets	**Side Road Cross Sections**
X.1 - 9	Side Road Cross Sections
Y Sheets	**Ramp Cross Sections**
Y.1 - 106	Ramp Cross Sections

* Color Plan Sheets

IOWA DOT

Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

INTERSTATE ROAD SYSTEM

POLK COUNTY

PRELIMINARY

I-80/35/235

Junction of I-80/35/235 Northeast Mixmaster System Interchange

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

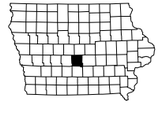
Value Engineering Saves. Refer to Article 1105.14 of the Specifications.

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811 Know what's below. Call before you dig.

REVISIONS

TOTAL
PROJECT IDENTIFICATION NUMBER
10-77-035-010-03
PROJECT NUMBER
IMN-035-4(194)87--0E-77
R.O.W. PROJECT NUMBER

For Project Location Map
Refer to Sheet A.2



INTERSTATE 235 DESIGN DATA URBAN		
2012 AADT	63,000	V.P.D.
2050 AADT	105,600	V.P.D.
2050 DHV	11,000	V.P.H.
TRUCKS	9	%
Total Design ESALs	--	

INTERSTATE 35 DESIGN DATA URBAN		
2012 AADT	75,200	V.P.D.
2050 AADT	125,800	V.P.D.
2050 DHV	13,000	V.P.H.
TRUCKS	14	%
Total Design ESALs	--	

INTERSTATE 80 DESIGN DATA URBAN		
2012 AADT	84,100	V.P.D.
2050 AADT	133,900	V.P.D.
2050 DHV	13,900	V.P.H.
TRUCKS	19	%
Total Design ESALs	--	

PRELIMINARY PLANS

Subject to change by final design.

FIELD EXAM SUBMITTAL
Date: April 26, 2016

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER A.1

SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC

IOWA DOT

Sta. 9484+48.83
End Southbound I-35 Construction

Sta. 2114+60.00
End Mainline I-235 Construction

Sta. 8532+36.33
End Northbound I-35 Construction

Sta. 9456+91.63
Begin Southbound I-35 Construction

Sta. 8464+19.42
Begin Northbound I-35 Construction

Sta. 1038+25.00
Begin Mainline I-80 Construction

Sta. 5155+00.00
End Mainline I-80 Construction

Sta. 2018+40.00
Begin Mainline I-235 Construction

R-24W

R-23W

T-80N

T-79N

ISU EXPERIMENTAL FARM

DES MOINES AREA COMM. COLLEGE

CARNEY

SAYLORVILLE

MARGO FRANKEL WOODS STATE PARK

DES MOINES MORNINGSTAR FIELD

ANKENY REGIONAL AIRPORT

MID AMERICAN ENERGY

DELAWARE

Corporate Woods Drive

BERWICK

NORWOOD-VILLE

CAPITOL HEIGHTS

CASE-BEER

FHWA # 609865 EB 609815 WB

FHWA # 41740

FHWA # 41690

FHWA # 43051 EB 43061 WB

FHWA # 43071 EB 43081 WB

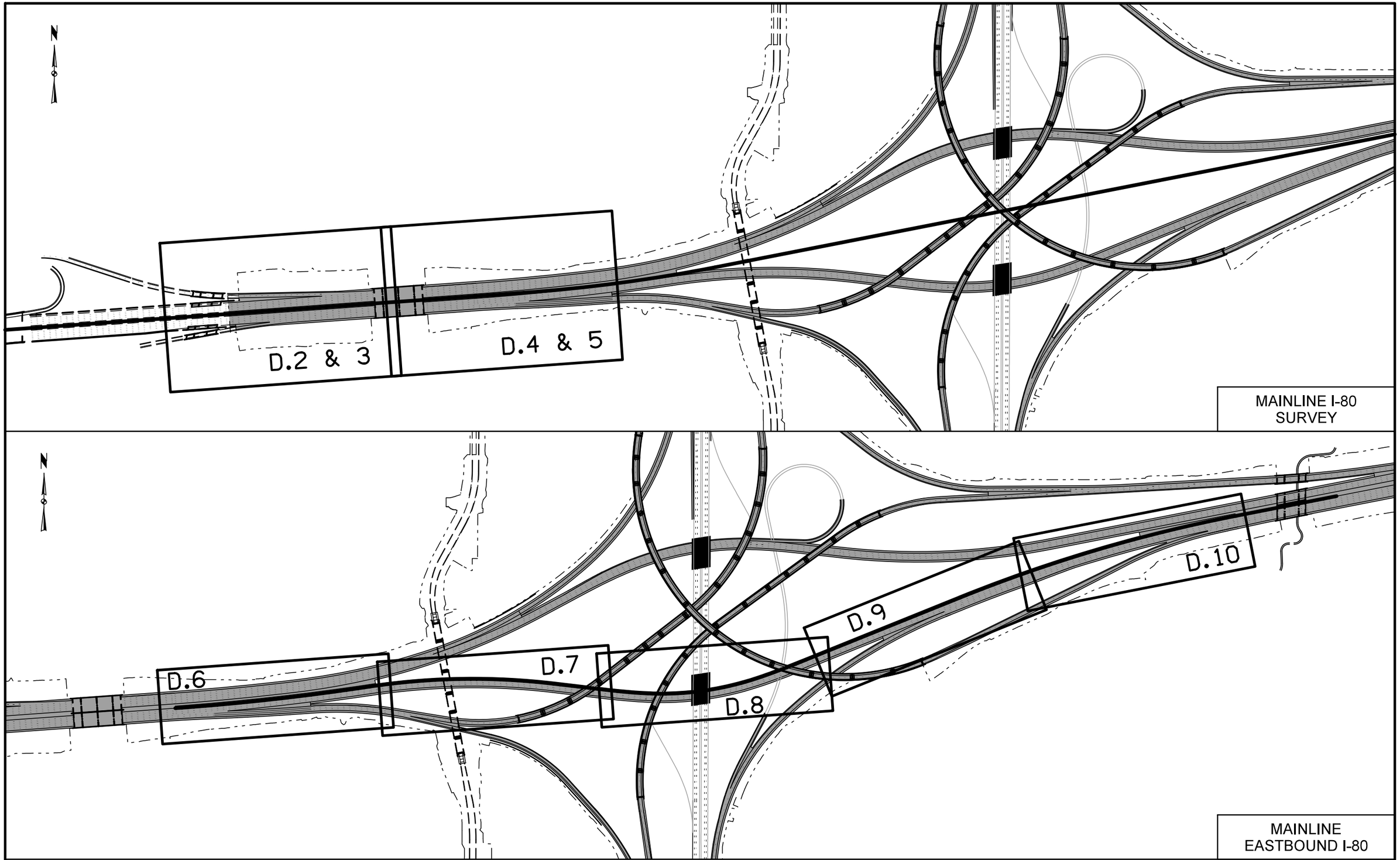
FHWA # 41950 EB 41960 WB

FHWA # 609860 EB 609810 WB

LOCATION MAP SCALE
0 0.5 1 1.5
Miles

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER A.2

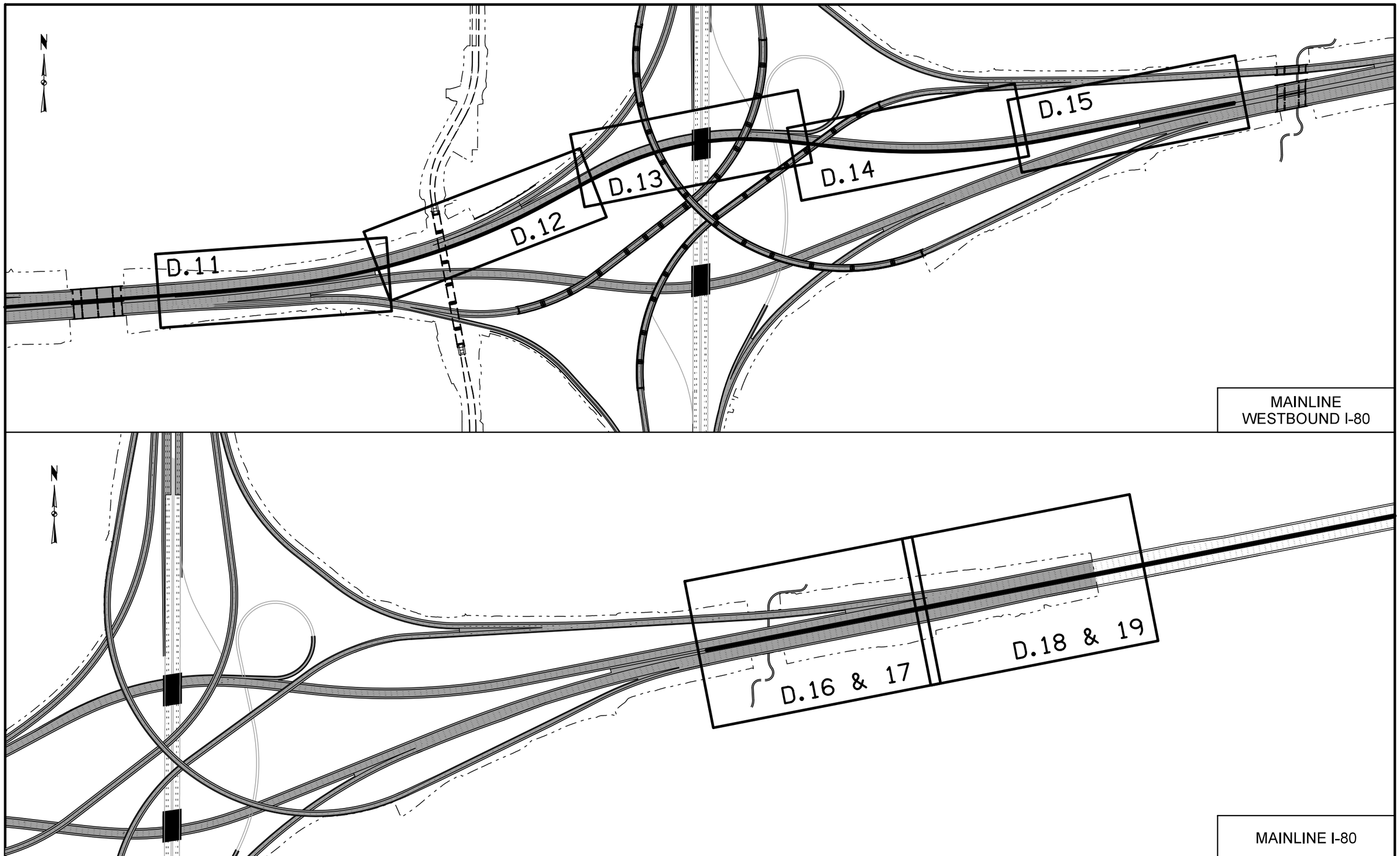
SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC



Project Key Maps

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER A.3

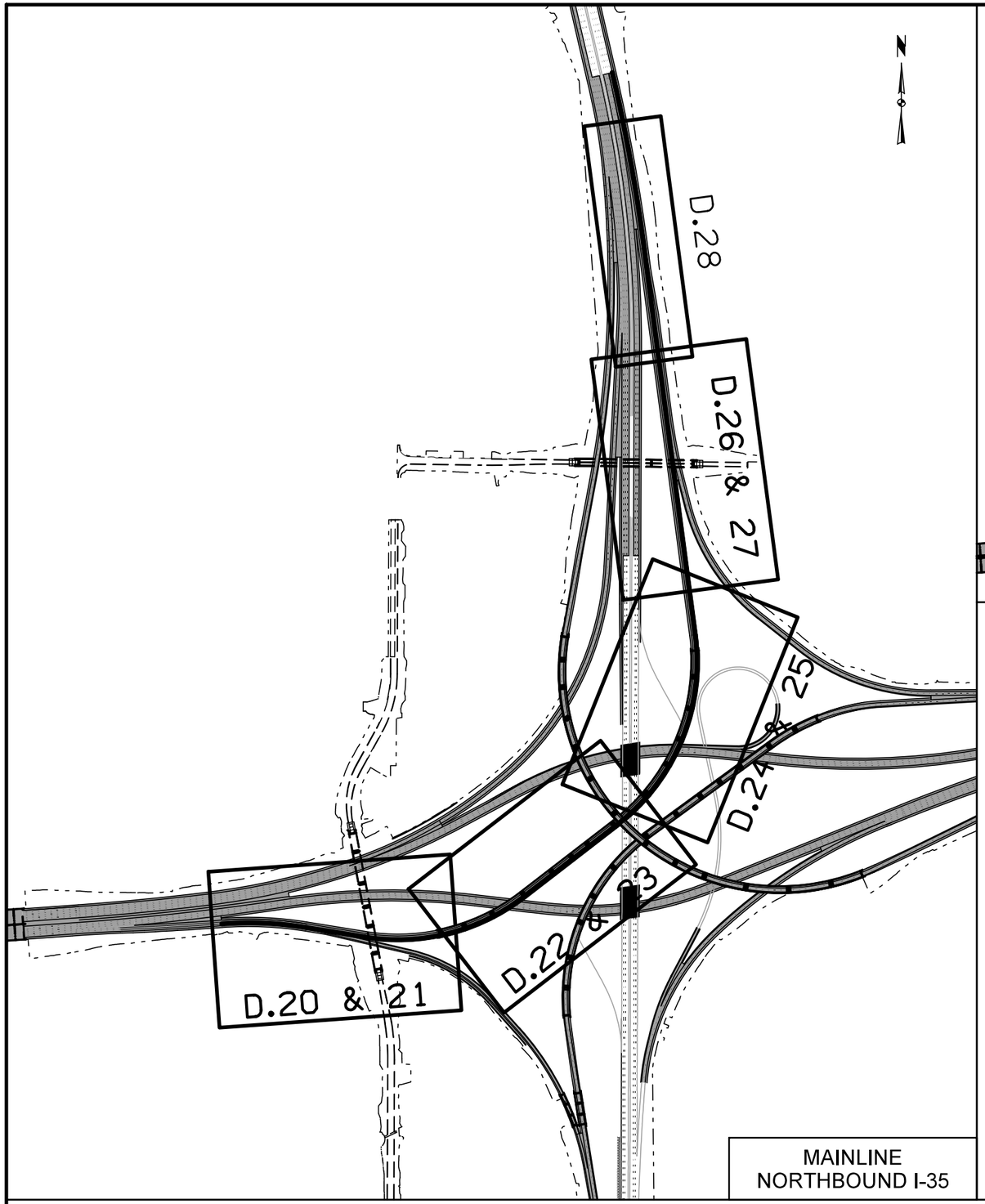
2:38:21 PM 4/17/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194A01.sht

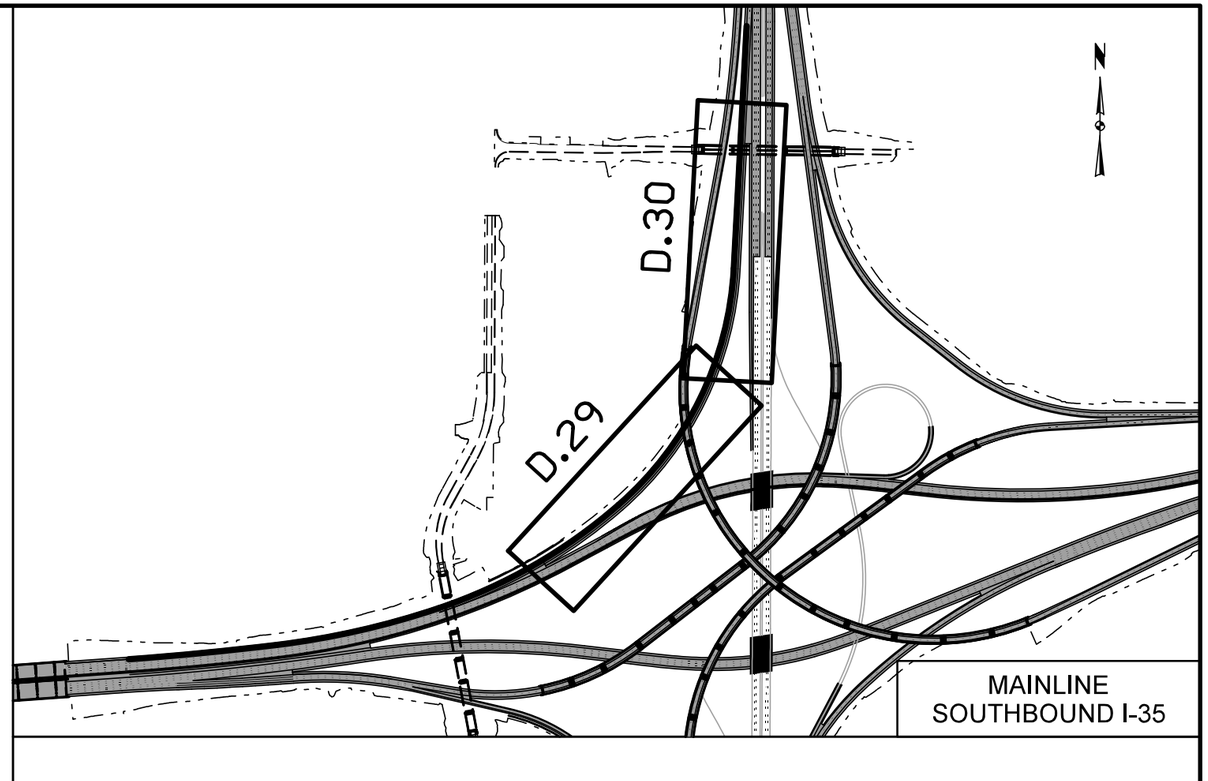


Project Key Maps

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER A.4

2:38:23 PM 4/17/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194A01.sht

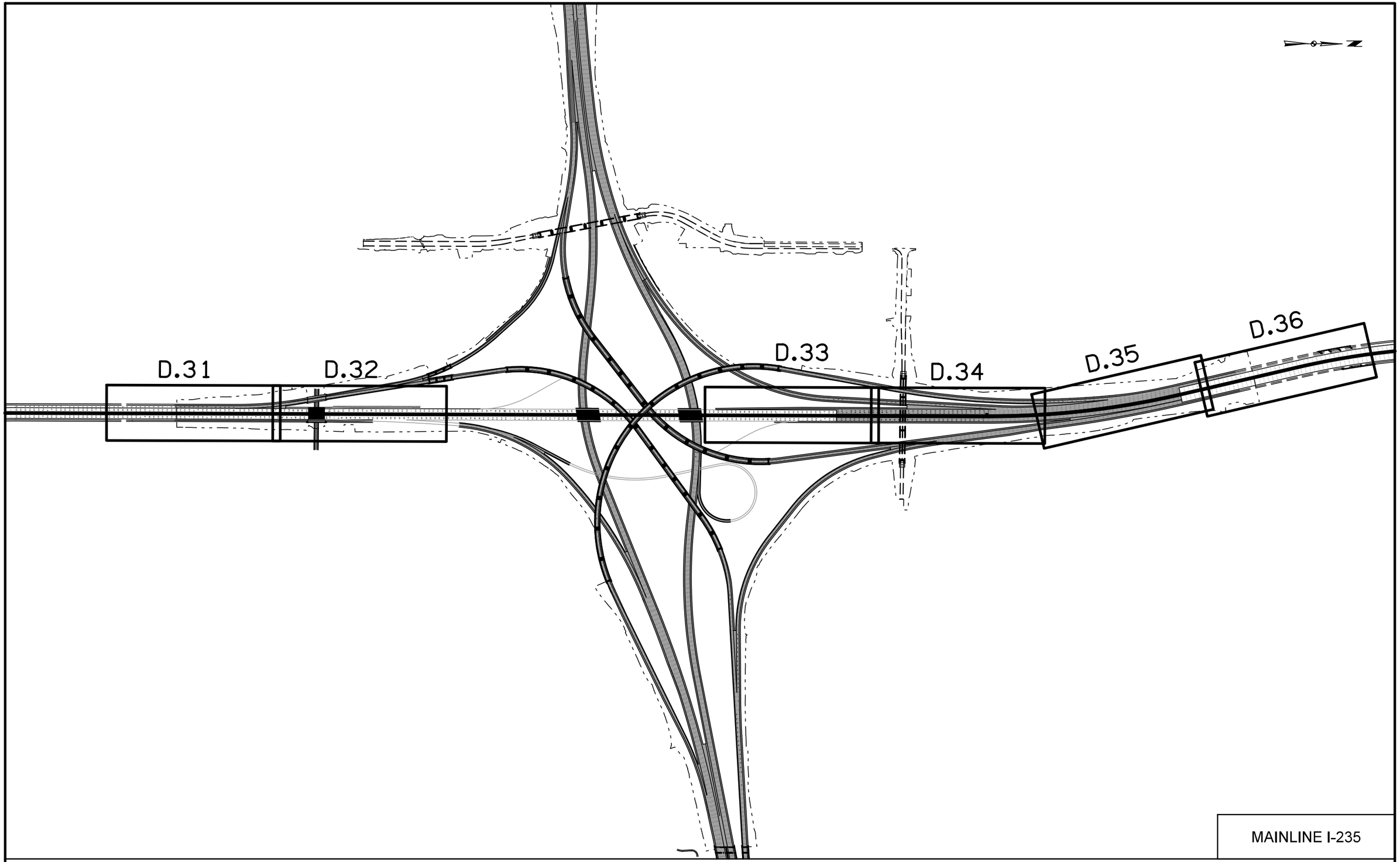




Project Key Maps

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER A.5

2:38:25 PM 4/17/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194A01.sht

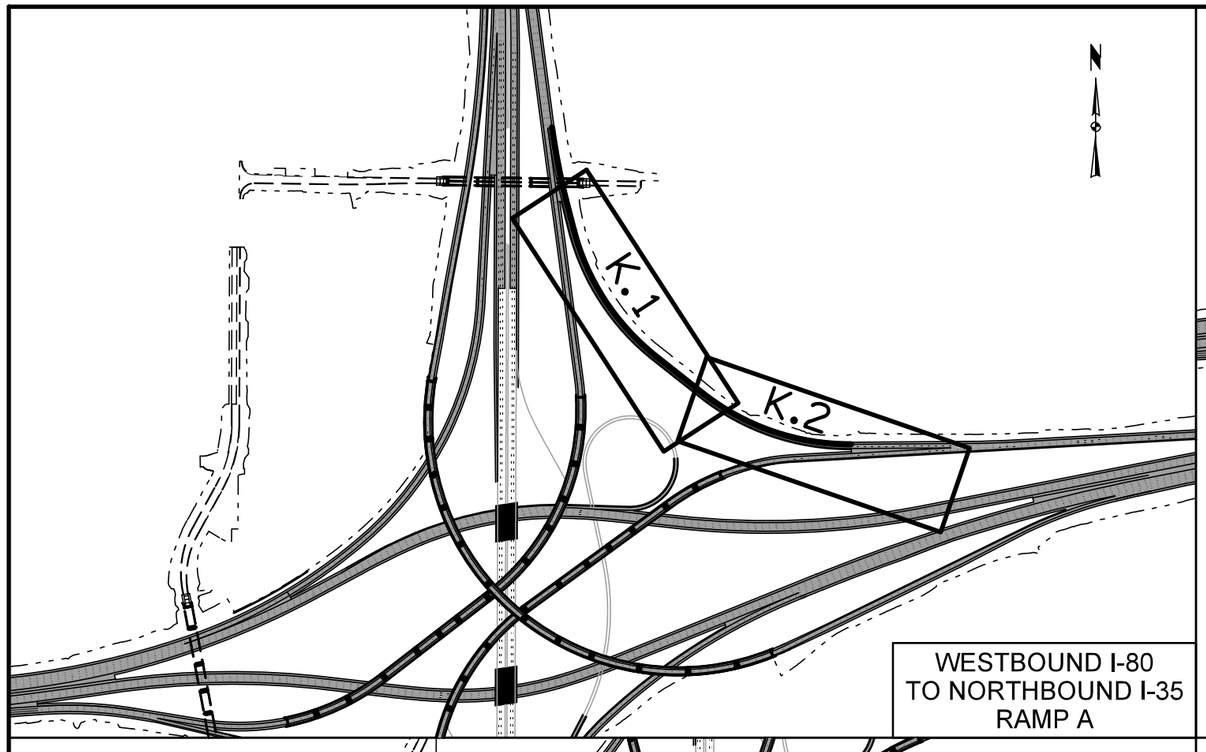


MAINLINE I-235

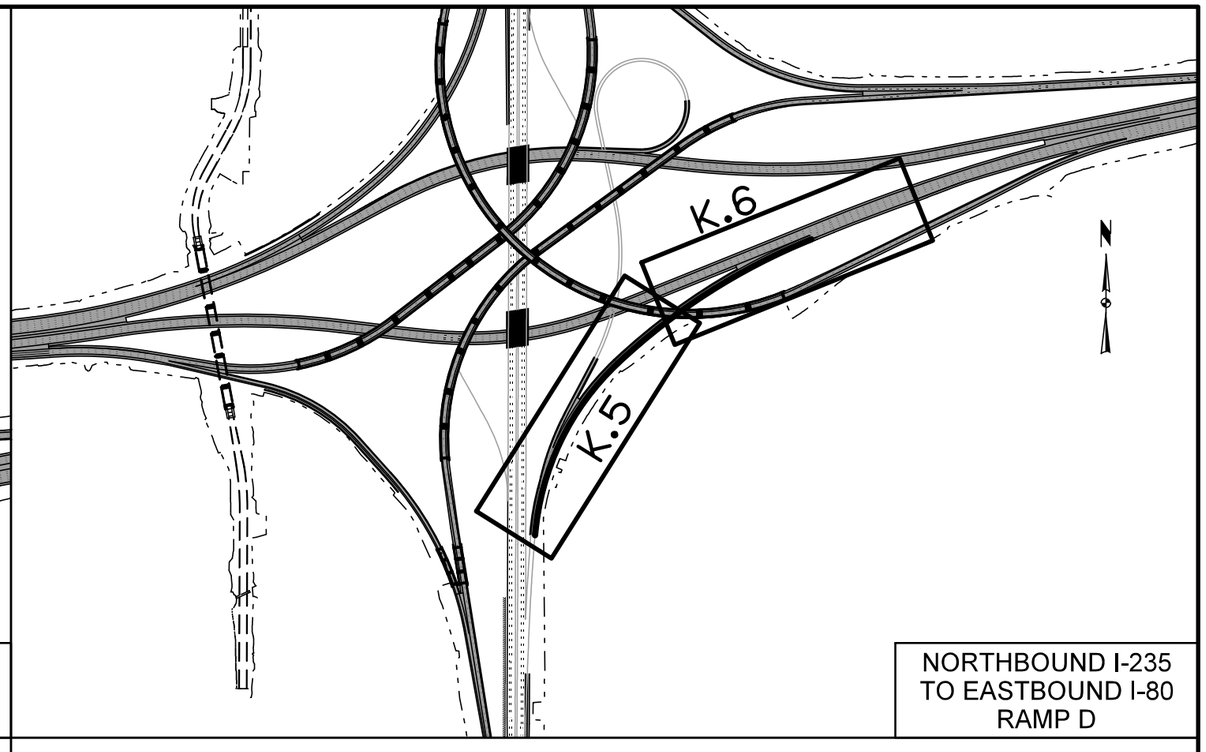
Project Key Maps

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER A.6

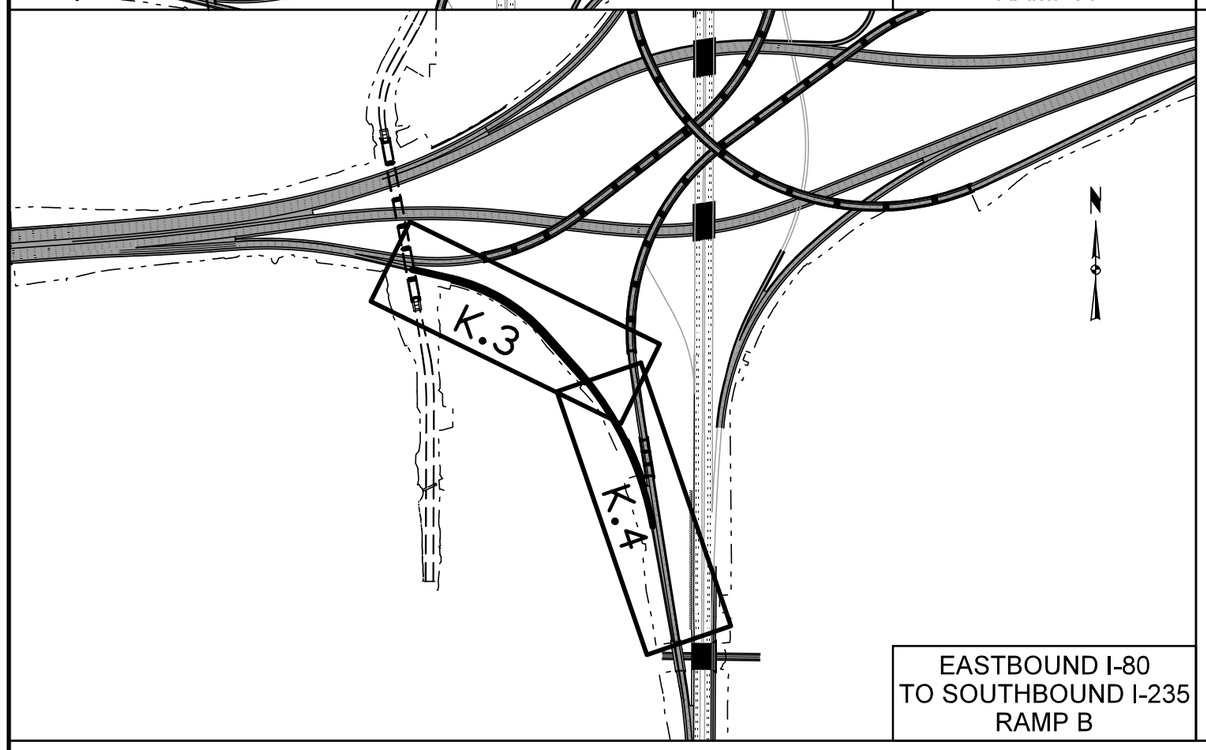
2:38:27 PM 4/17/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194A01.sht



WESTBOUND I-80
TO NORTHBOUND I-35
RAMP A



NORTHBOUND I-235
TO EASTBOUND I-80
RAMP D

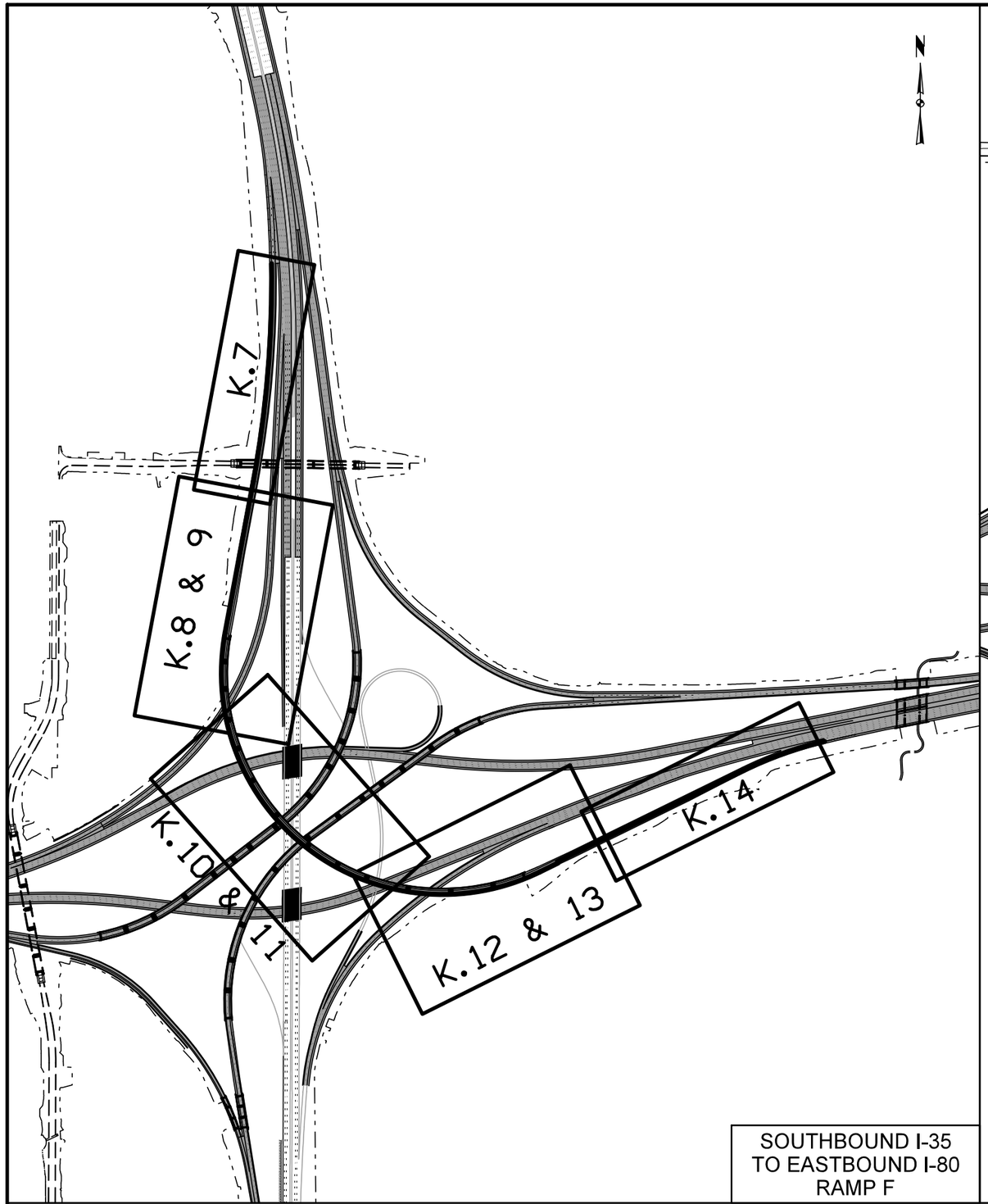


EASTBOUND I-80
TO SOUTHBOUND I-235
RAMP B

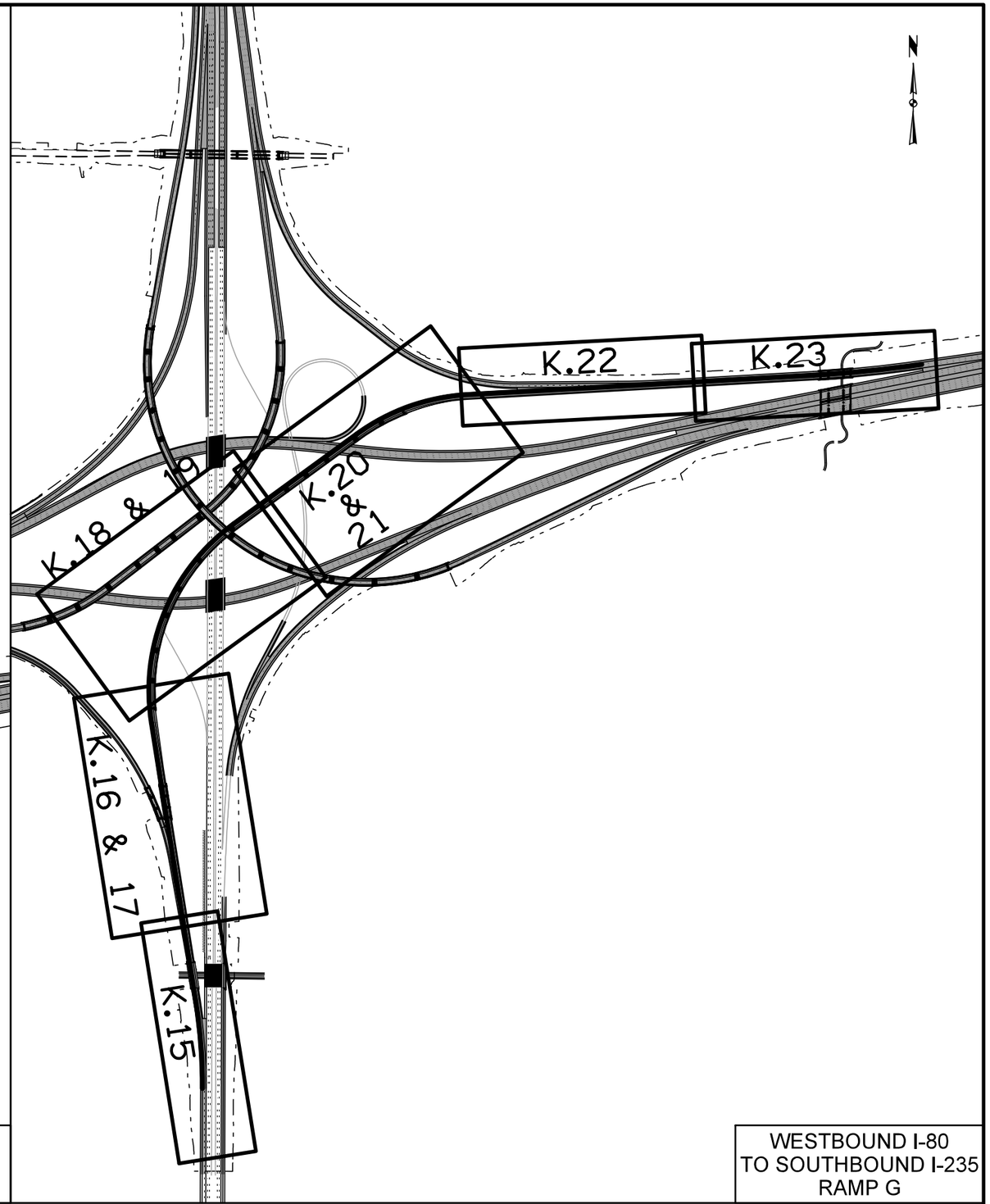
Project Key Maps

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER A.7

2:38:29 PM 4/17/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194A01.sht



SOUTHBOUND I-35
TO EASTBOUND I-80
RAMP F

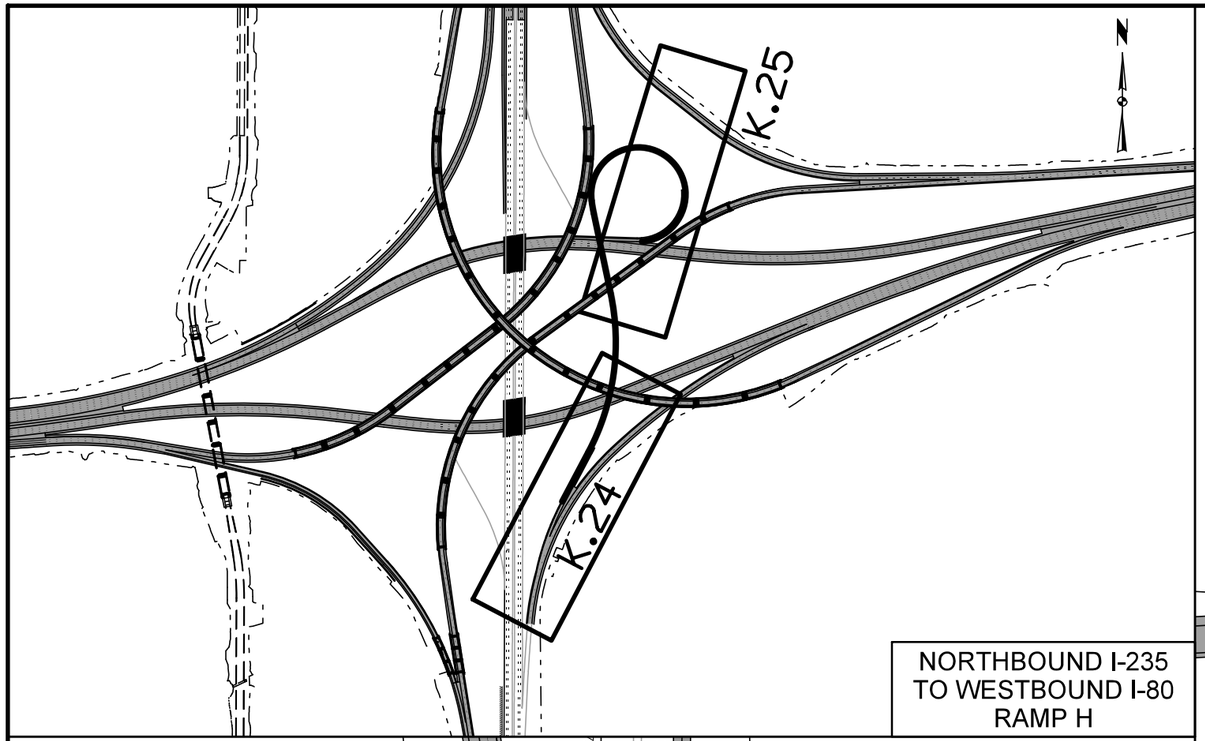


WESTBOUND I-80
TO SOUTHBOUND I-235
RAMP G

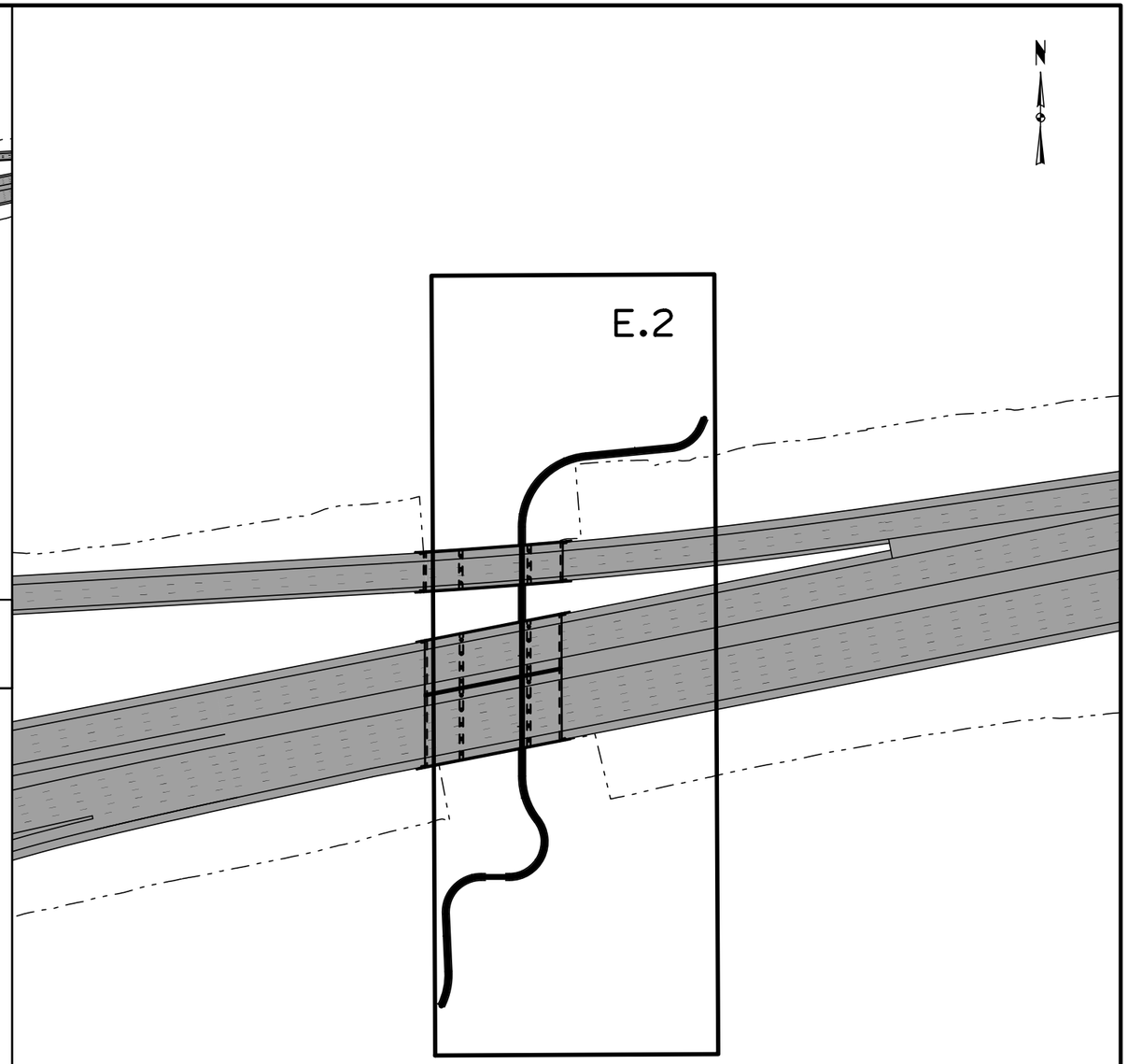
Project Key Maps

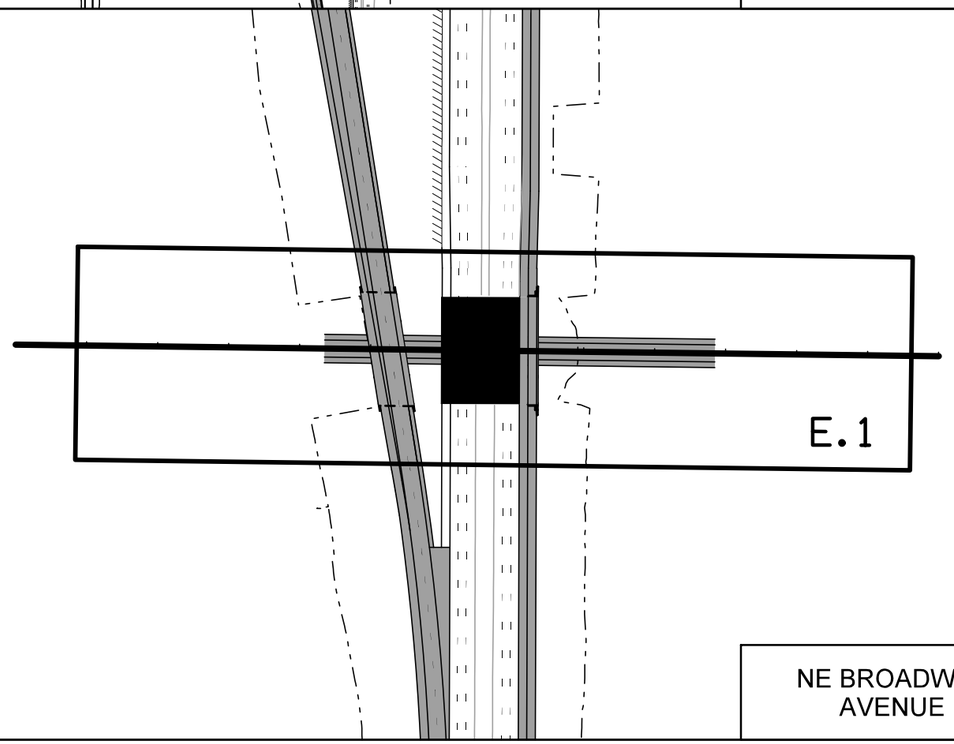
FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER A.8

2:38:30 PM 4/17/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194A01.sht



NORTHBOUND I-235
TO WESTBOUND I-80
RAMP H





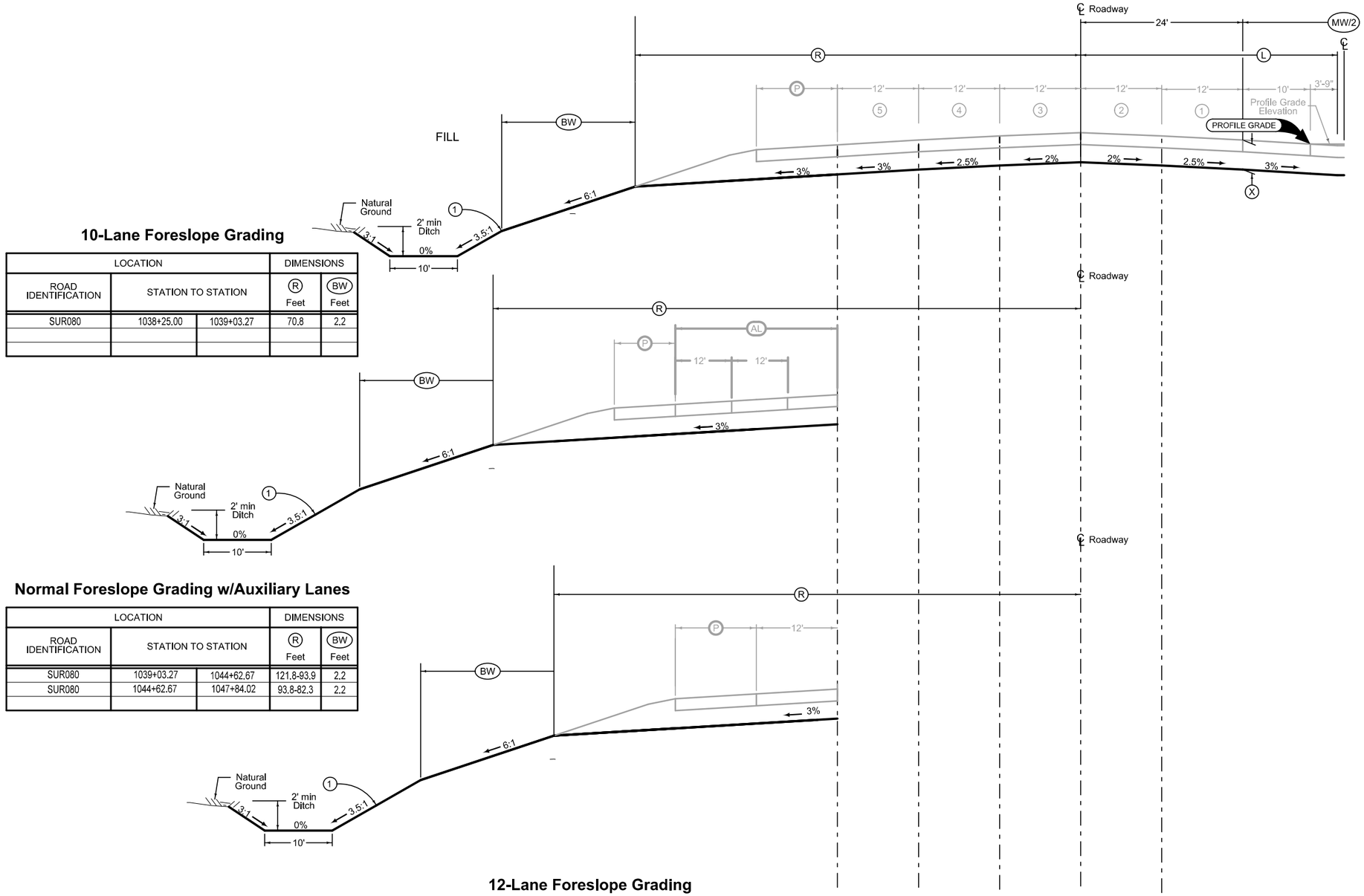
NE BROADWAY
AVENUE

CHICHAQUA VALLEY
TRAIL

Project Key Maps

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER A.9

2:38:32 PM 4/17/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194A01.sht



10 LANE GRADING

LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		(L) Feet	(X) Inches	(MW) Feet
SUR080	1038+25.00	1055+07.15	37.75	30	30

10-Lane Foreslope Grading

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
SUR080	1038+25.00	1039+03.27	70.8	2.2

Normal Foreslope Grading w/Auxiliary Lanes

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
SUR080	1039+03.27	1044+62.67	121.8-93.9	2.2
SUR080	1044+62.67	1047+84.02	93.8-82.3	2.2

12-Lane Foreslope Grading

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
SUR080	1048+53.17	1055+07.15	81.8-84.0	2.2

Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

See Plan & Profile sheets and cross sections for additional details of ditches and backslopes.

See Typical EW-301 for grading at guardrail.

(1) Refer to project plan and cross sections for specific location of foreslope change.

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

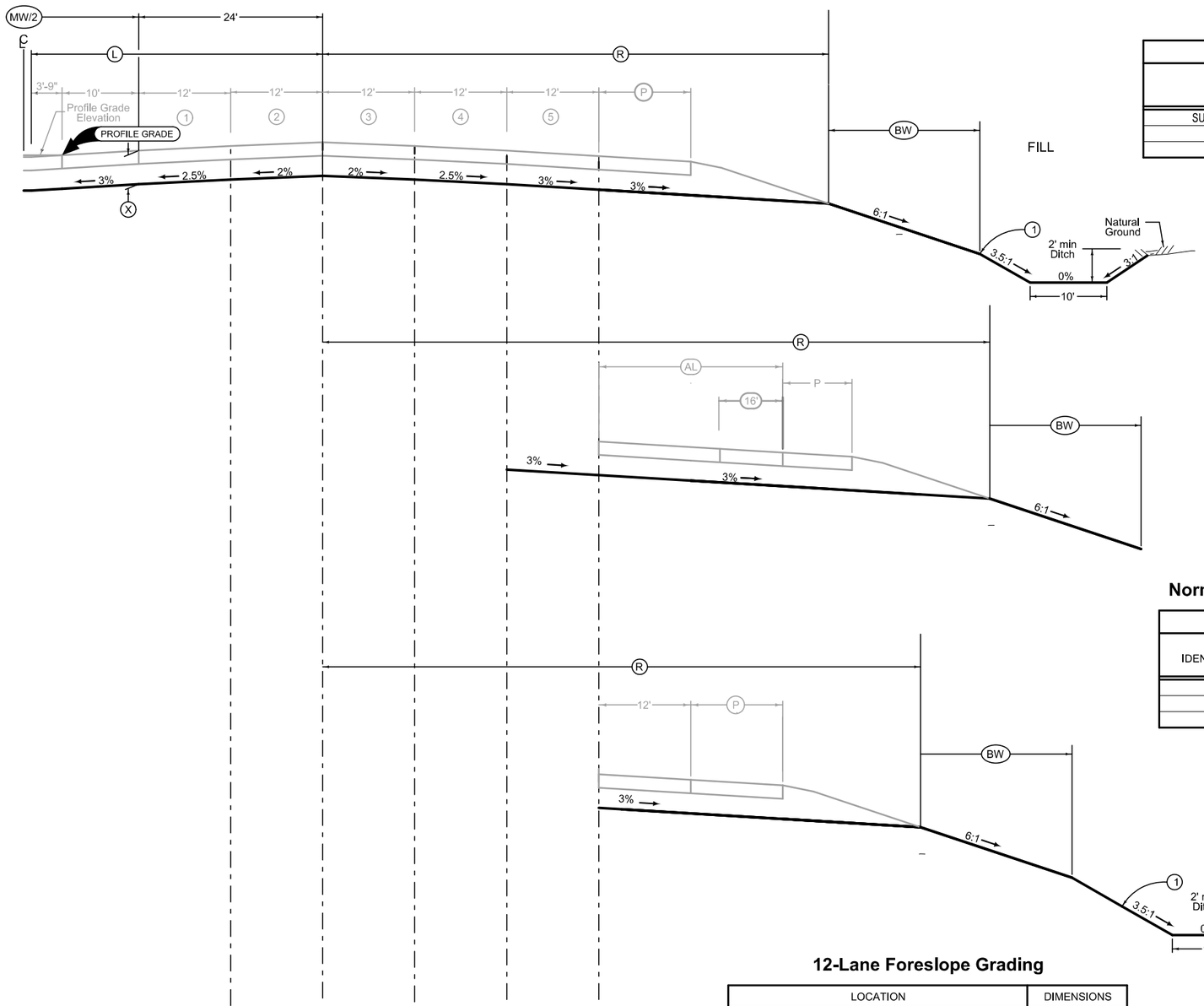
I-80 SURVEY WESTBOUND

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER B.1

10:27:18 AM 4/19/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194B01.sht

12 LANE GRADING

LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		(L) Feet	(X) Inches	(MW) Feet
SUR080	1038+25.00	1055+07.15	37.75	30	30



Normal Foreslope Grading

LOCATION			DIMENSIONS	
	STATION TO STATION		(R) Feet	(BW) Feet
SUR080	1038+25.00	1038+66.68	69.8	2.2

Normal Foreslope Grading w/Auxiliary Lanes

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
SUR080	1038+66.68	1043+41.95	105-82	2.2

12-Lane Foreslope Grading

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
SUR080	1043+41.95	1047+84.02	81.8	2.2
SUR080	1051+70.00	1055+07.15	81.8	2.2

Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

See Plan & Profile sheets and cross sections for additional details of ditches and backslopes.

See Typical EW-301 for grading at guardrail.

(1) Refer to project plan and cross sections for specific location of foreslope change.

See Tab 100-24 or 100-25 for pavement quantities.

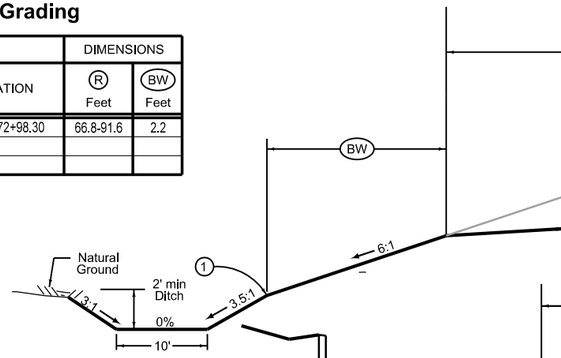
See Tab 112-9 for shoulder quantities.

I-80 SURVEY EASTBOUND

8 LANE GRADING

Normal Foreslope Grading

LOCATION			DIMENSIONS	
	STATION TO STATION		(R) Feet	(BW) Feet
ML080W	4055+07.15	4072+98.30	66.8-91.6	2.2

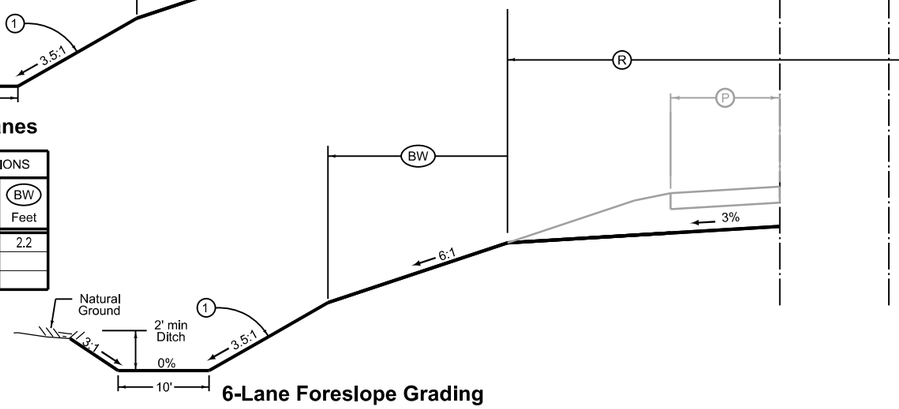


Normal Foreslope Grading w/Auxiliary Lanes

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
ML080W	4076+25.00	4079+58.30	66.8-107	-

Normal Foreslope Grading w/Auxiliary Lanes

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
ML080W	4082+75.00	4099+66.50	54.5-57.8	2.2



Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

See Plan & Profile sheets and cross sections for additional details of ditches and backslopes.

See Typical EW-301 for grading at guardrail.

(1) Refer to project plan and cross sections for specific location of foreslope change.

6-Lane Foreslope Grading

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
ML080W	4079+58.30	4082+75.00	44.2-54.5	2.2
ML080W	4099+66.50	4128+95.91	44.2-45	2.2

Median Barrier Grading

LOCATION			(R) Feet	(X) Inches	(MW) Feet
ROAD IDENTIFICATION	STATION TO STATION				
ML080W	4055+07.15	4063+47.95	37.75	30	30

Median Barrier Grading

LOCATION			(R) Feet	(V) Feet
ROAD IDENTIFICATION	STATION TO STATION			
ML080W	4122+37.00	4128+95.91	42.00	36.3-15

Median Barrier Grading

LOCATION			(R) Feet	(V) Feet
ROAD IDENTIFICATION	STATION TO STATION			
ML080W	4063+47.95	4068+68.76	39-60	15-36.4

Median Foreslope Grading

LOCATION			(R) Feet
ROAD IDENTIFICATION	STATION TO STATION		
ML080W	4068+68.76	4122+37.00	40-33.8

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

I-80 WESTBOUND

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER B.3

SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC

10 LANE GRADING

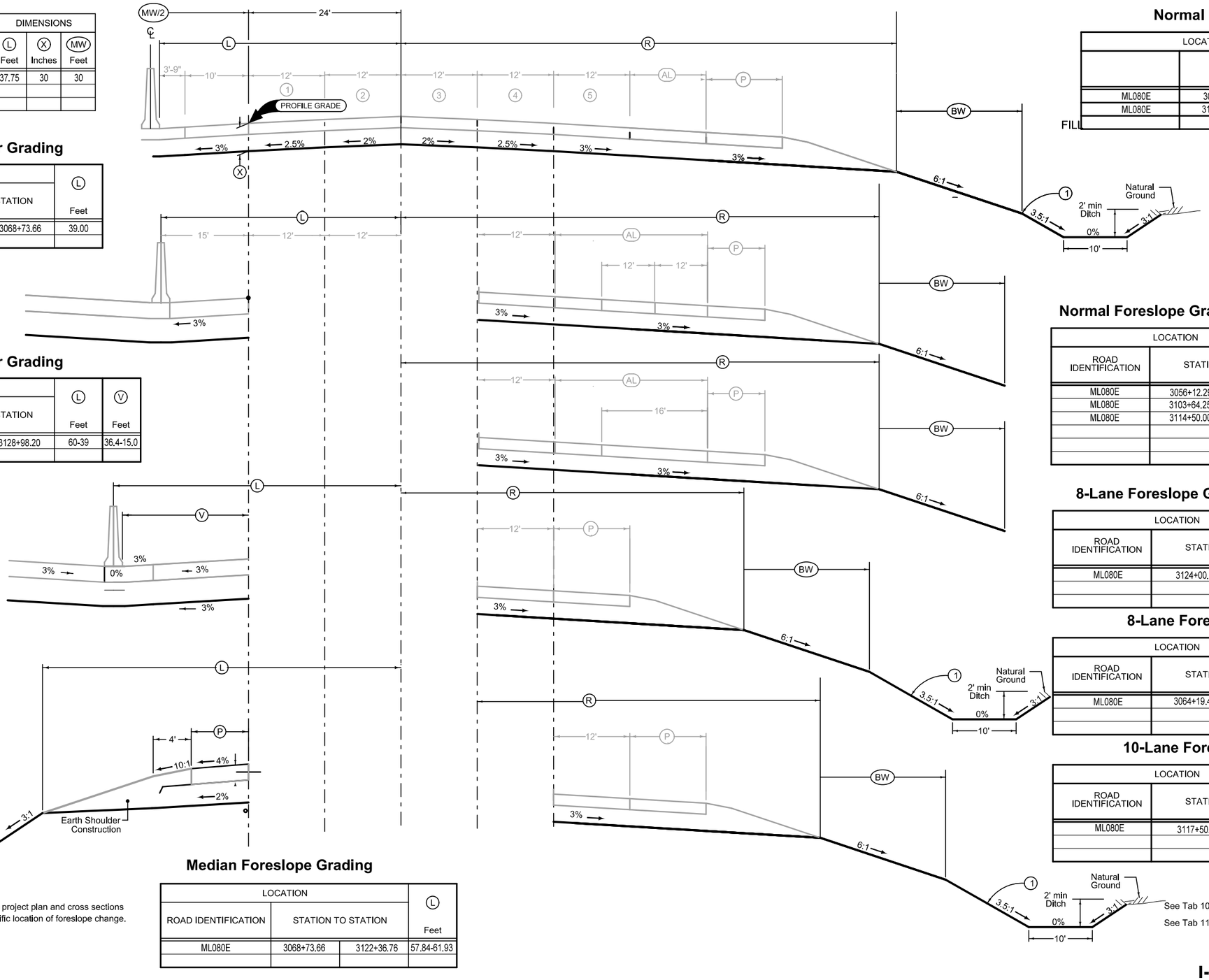
LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		(L) Feet	(X) Inches	(MW) Feet
I-80	3055+07.15	3063+49.34	37.75	30	30

Median Barrier Grading

LOCATION			(L)
ROAD IDENTIFICATION	STATION TO STATION		Feet
ML080E	3063+49.34	3068+73.66	39.00

Median Barrier Grading

LOCATION			(L)	(V)
ROAD IDENTIFICATION	STATION TO STATION		Feet	Feet
ML080E	3122+36.76	3128+98.20	60-39	36.4-15.0



Normal Foreslope Grading

LOCATION			DIMENSIONS	
	STATION TO STATION		(R) Feet	(BW) Feet
ML080E	3055+07.15	3056+12.29	91.6	2.2
ML080E	3108+14.25	3114+50.00	81.8-69.8	2.2

Normal Foreslope Grading w/Auxiliary Lanes

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
ML080E	3056+12.29	3064+19.42	118.3-121.8	2.2
ML080E	3103+64.25	3108+14.25	110.7-81.8	2.2
ML080E	3114+50.00	3117+50.00	81.8-69.8	2.2

8-Lane Foreslope Grading w/ AUX Lanes

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
ML080E	3124+00.00	3128+98.82	98.1-85.8	2.2

8-Lane Foreslope Grading

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
ML080E	3064+19.47	3103+64.25	54.8-57.8	2.2

10-Lane Foreslope Grading

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
ML080E	3117+50.00	3124+00.00	69.84	2.2

Median Foreslope Grading

LOCATION			(L)
ROAD IDENTIFICATION	STATION TO STATION		Feet
ML080E	3068+73.66	3122+36.76	57.84-61.93

Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

See Plan & Profile sheets and cross sections for additional details of ditches and backslopes.

See Typical EW-301 for grading at guardrail.

(1) Refer to project plan and cross sections for specific location of foreslope change.

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

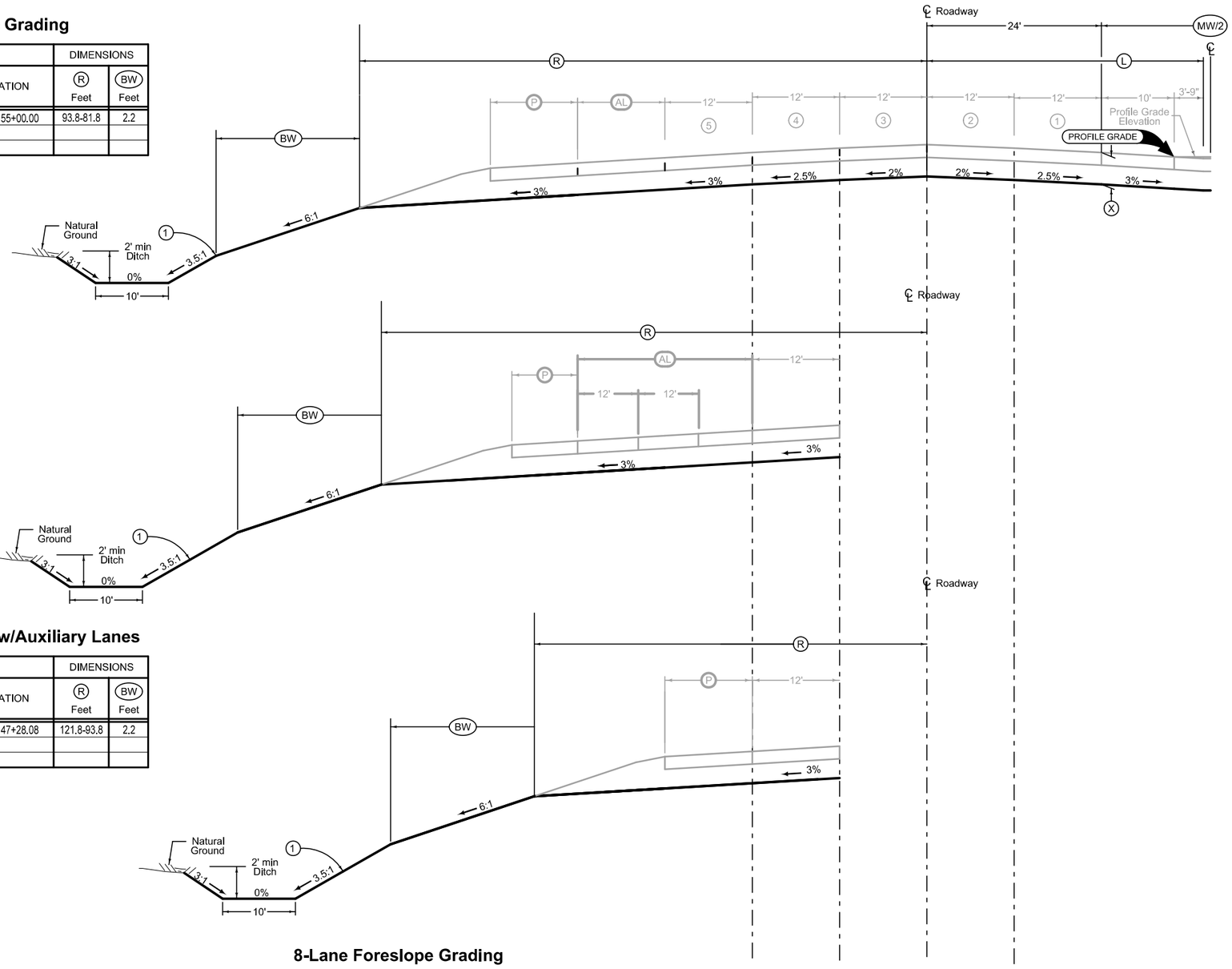
I-80 EASTBOUND

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER B.4

10:27:21 AM 4/19/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194B01.sht

10-Lane Foreslope Grading

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
ML080	5147+28.08	5155+00.00	93.8-81.8	2.2



10 LANE GRADING

LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		(L) Feet	(X) Inches	(MW) Feet
ML080	5128+03.54	5155+00.00	37.75	30	30

Normal Foreslope Grading w/Auxiliary Lanes

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
ML080	5137+77.88	5147+28.08	121.8-93.8	2.2

8-Lane Foreslope Grading

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
ML080	5128+03.54	5137+77.88	57.8	2.2

Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

See Plan & Profile sheets and cross sections for additional details of ditches and backslopes.

See Typical EW-301 for grading at guardrail.

(1) Refer to project plan and cross sections for specific location of foreslope change.

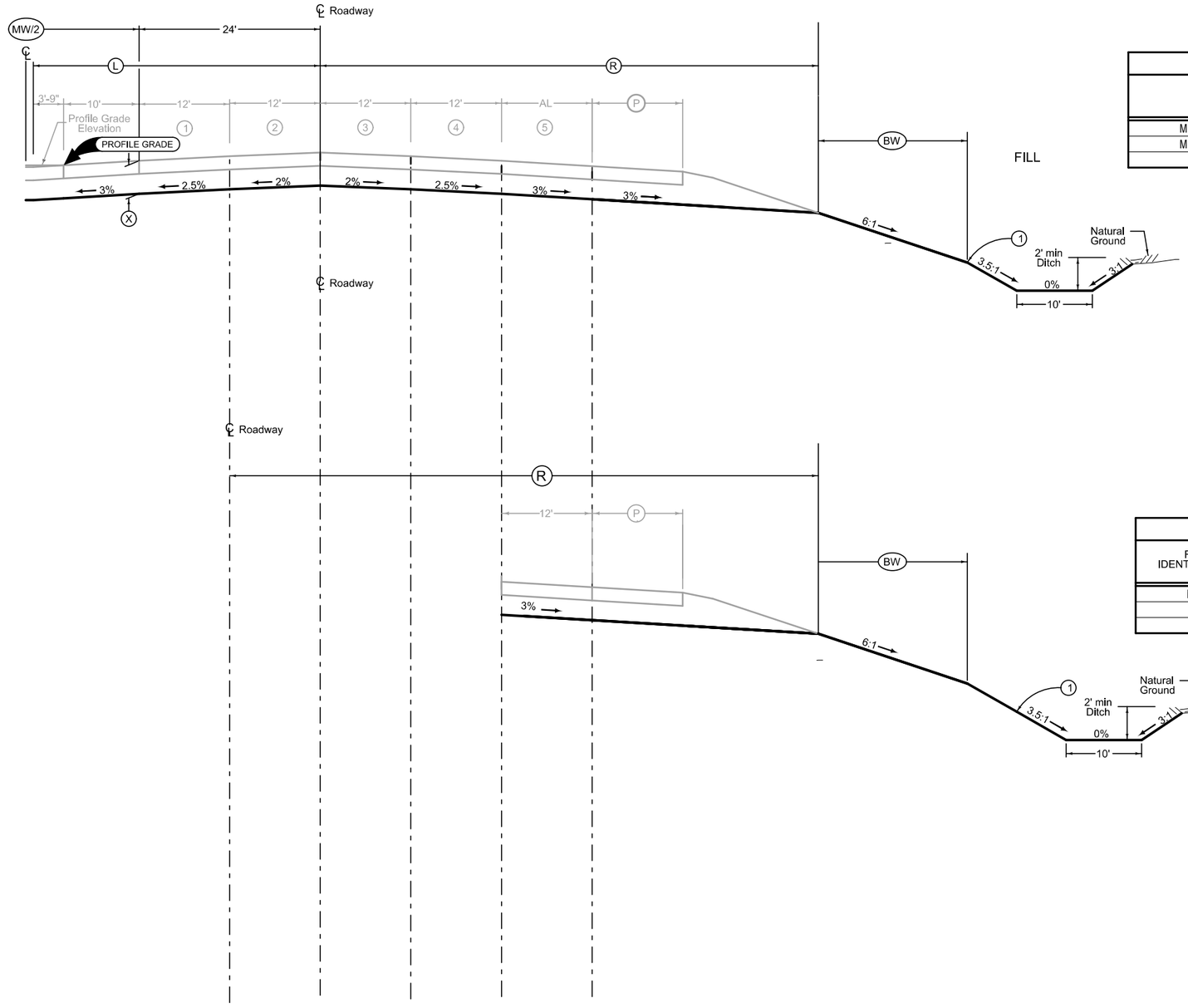
See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

MAINLINE I-80 (WESTBOUND)

12 LANE GRADING

LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		(L) Feet	(X) Inches	(MW) Feet
ML080	5128+03.54	5155+00.00	37.75	30	30



Normal Foreslope Grading

LOCATION			DIMENSIONS	
	STATION TO STATION		(R) Feet	(BW) Feet
ML080	5128+03.54	5145+00.00	81.8	2.2
ML080	5145+00+00	5151+00.00	81.8-69.8	2.2

10-Lane Foreslope Grading

LOCATION			DIMENSIONS	
ROAD IDENTIFICATION	STATION TO STATION		(R) Feet	(BW) Feet
ML080	5151+00.00	5155+00.00	69.8	2.2

Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

See Plan & Profile sheets and cross sections for additional details of ditches and backslopes.

See Typical EW-301 for grading at guardrail.

(1) Refer to project plan and cross sections for specific location of foreslope change.

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

MAINLINE I-80 (EASTBOUND)

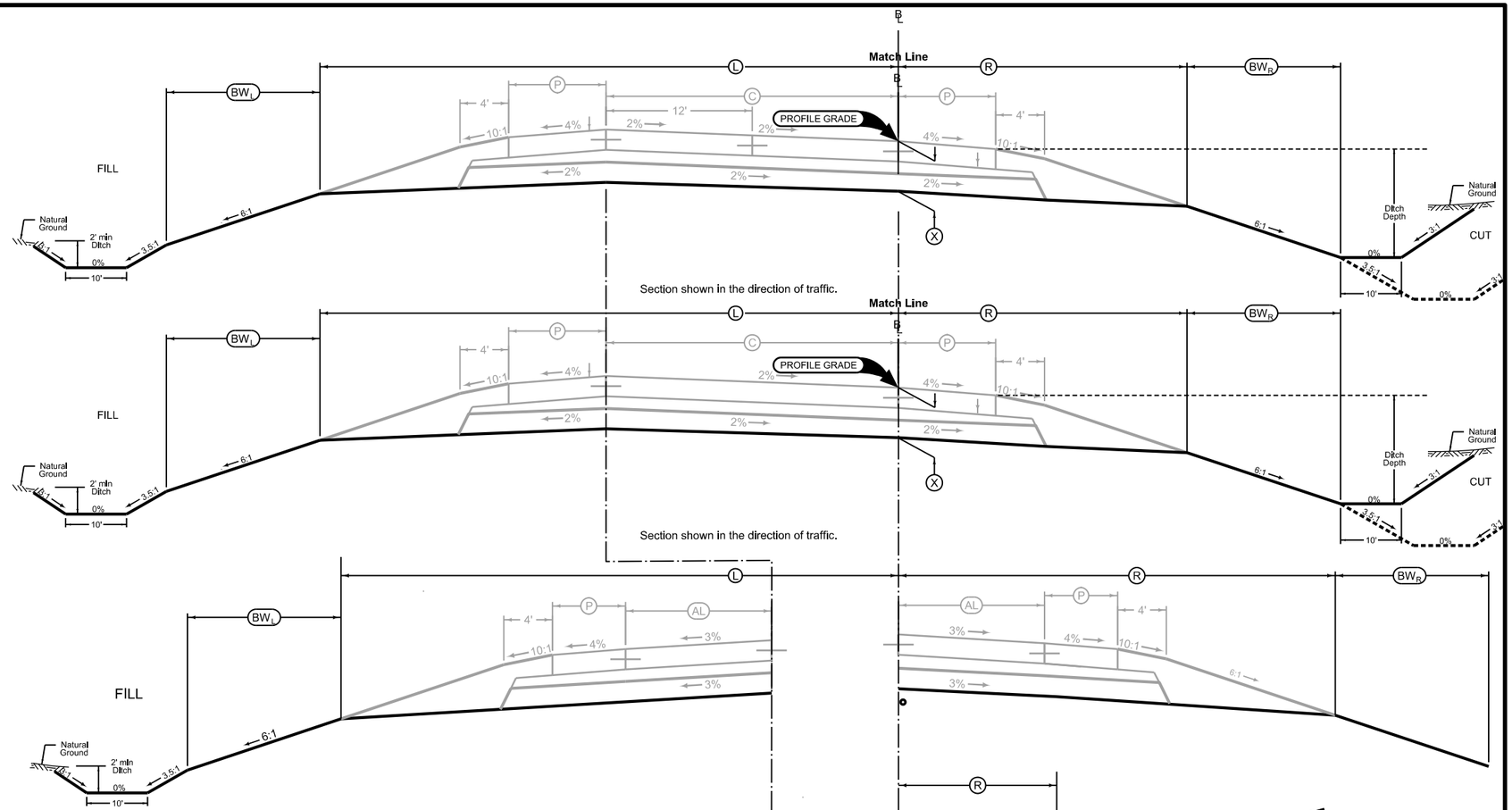
LOCATION				DIMENSIONS					
INTERCHANGE	RAMP	STATION TO STATION		(L) Feet	(R) Feet	(C) Feet	(X) Inches	(BW_L) Feet	(BW_R) Feet
NEMM	235A	38488+93.31	38511+66.22	51.8	21.8	24	30	0.0	0.0
NEMM	235D	33544+07.26	33546+69.42	49.9-64.3	22.9-36.1	24	30	0.0	0.0
NEMM	235D	33552+15.79	33563+58.33	49.9-51.8	22.9-33.8	24	30	0.0	0.0
NEMM	235F	36597+11.89	36616+00.00	34.0-51.8	33.8	24	30	0.0	0.0
NEMM	235F	36616+00.00	36619+00.00	51.8-56.0	31.9-33.8	24	30	0.0	0.0
NEMM	235F	36619+00.00	36652+00.00	56.0-60	25.9-33.8	24	30	0.0	0.0
NEMM	235F	36652+00.00	36653+94.84	51.8-56.0	33.8-40.0	24	30	0.0	0.0
NEMM	235G	38557+03.00	38557+30.04	51.8	33.0	24	30	0.0	0.0
NEMM	235G	38569+60.04	38573+32.36	33.0	51.8	24	30	0.0	0.0
NEMM	235G	38573+32.36	38576+32.36	33.0	51.8-54.8	24	30	0.0	0.0
NEMM	235G	38576+32.36	38604+32.36	31.7-33.8	51.8	24	30	0.0	0.0
NEMM	235G	38604+32.36	38607+32.36	31.6-33.0	51.8-54.5	24	30	0.0	0.0
NEMM	235G	38607+32.36	38611+66.22	31.6-33.0	51.8-54.5	24	30	0.0	0.0
NEMM	ML035N	8474+22.46	8515+96.11	57.8-61.9	33.8-44.7	24	30	0.0	0.0
NEMM	ML035N	8515+96.11	8477+30.33	57.8	57.8	24	30	0.0	0.0
NEMM	ML035S	9458+09.42	9484+48.83	33.8-37.0	55.4-57.8	24	30	0.0	0.0

LOCATION				DIMENSIONS					
INTERCHANGE	RAMP	STATION TO STATION		(L) Feet	(R) Feet	(C) Feet	(X) Inches	(BW_L) Feet	(BW_R) Feet
NEMM	235B	32574+22.46	32576+53.97	40.8-43.8	14.0-33.8	16	30	0.0	0.0
NEMM	235B	32586+32.95	32593+05.82	40.8-43.8	14.0-33.8	16	30	0.0	0.0
NEMM	235H	38652+13.74	38654+58.44	51.8	33.8	16	30	0.0	0.0
NEMM	235H	38677+18.48	38681+45.29	51.8	33.8	16	30	0.0	0.0
NEMM	235F	36667+30.34	36669+99.60	35.8-43.8	33.8	16	30	0.0	0.0

LOCATION				DIMENSIONS					
INTERCHANGE	RAMP	STATION TO STATION		(L) Feet	(R) Feet	(C) Feet	(X) Inches	(BW_L) Feet	(BW_R) Feet
NEMM	235G	38557+30.04	38569+60.04	51.8	33.0-49.0	24	30	0.0	0.0
NEMM	235G	38611+66.22	38637+77.87	51.8	33.0-84.9	24	30	0.0	0.0
NEMM	ML035N	8515+96.11	8574+22.46	57.8-69.8	33.8-44.7	24	30	0.0	0.0
NEMM	235D	33546+69.42	33552+15.79	49.9-64.2	34.0-36.1	24	30	0.0	0.0
NEMM	235F	36653+94.84	36655+00.00	45.9-43.8	40.0-41.0	16	30	0.0	0.0
NEMM	235F	36655+00.00	36663+30.34	43.8-51.8	41.0-33.8	16	30	0.0	0.0
NEMM	235F	36663+30.34	36667+30.34	43.8	33.8-41.0	16	30	0.0	0.0

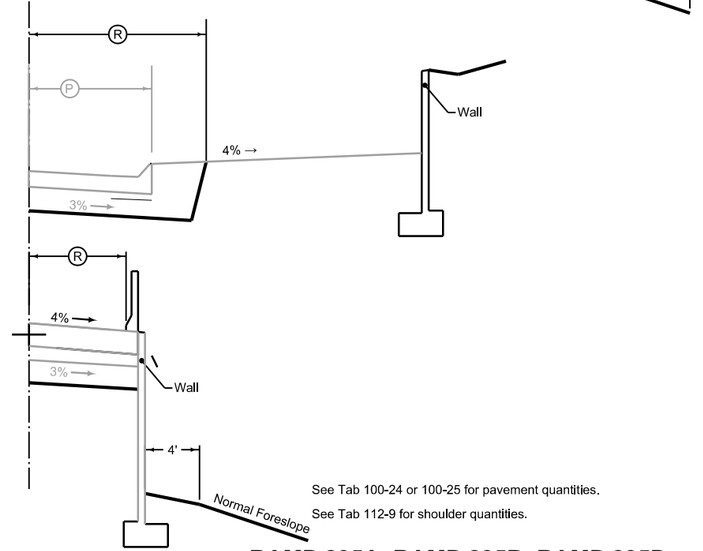
LOCATION				DIMENSIONS					
INTERCHANGE	RAMP	STATION TO STATION		(L) Feet	(R) Feet	(C) Feet	(X) Inches	(BW_L) Feet	(BW_R) Feet
NEMM	ML035S	9456+91.63	9458+09.42	33.8-37.0	14	24	30	0.0	-

LOCATION				DIMENSIONS					
INTERCHANGE	RAMP	STATION TO STATION		(L) Feet	(R) Feet	(C) Feet	(X) Inches	(BW_L) Feet	(BW_R) Feet
NEMM	235B	32576+53.97	32586+32.95	40.8	20	16	30	0.0	-



Section view is in direction of traffic.

Normal sections shown may be appropriately modified for areas specifically designated by the Engineer such as intersections or superelevated curves.



See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

RAMP 235A, RAMP 235B, RAMP 235D
RAMP 235F, RAMP 235G, RAMP 235H
ML035N, AND ML035S

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER B.7

SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC

Auxiliary Lane Grading

LOCATION			Ⓡ
ROAD IDENTIFICATION	STATION TO STATION		Feet
ML235	2018+40.00	2023+92.95	69.8
ML235	2023+92.95	2028+42.95	69.8

Auxiliary Lane Grading

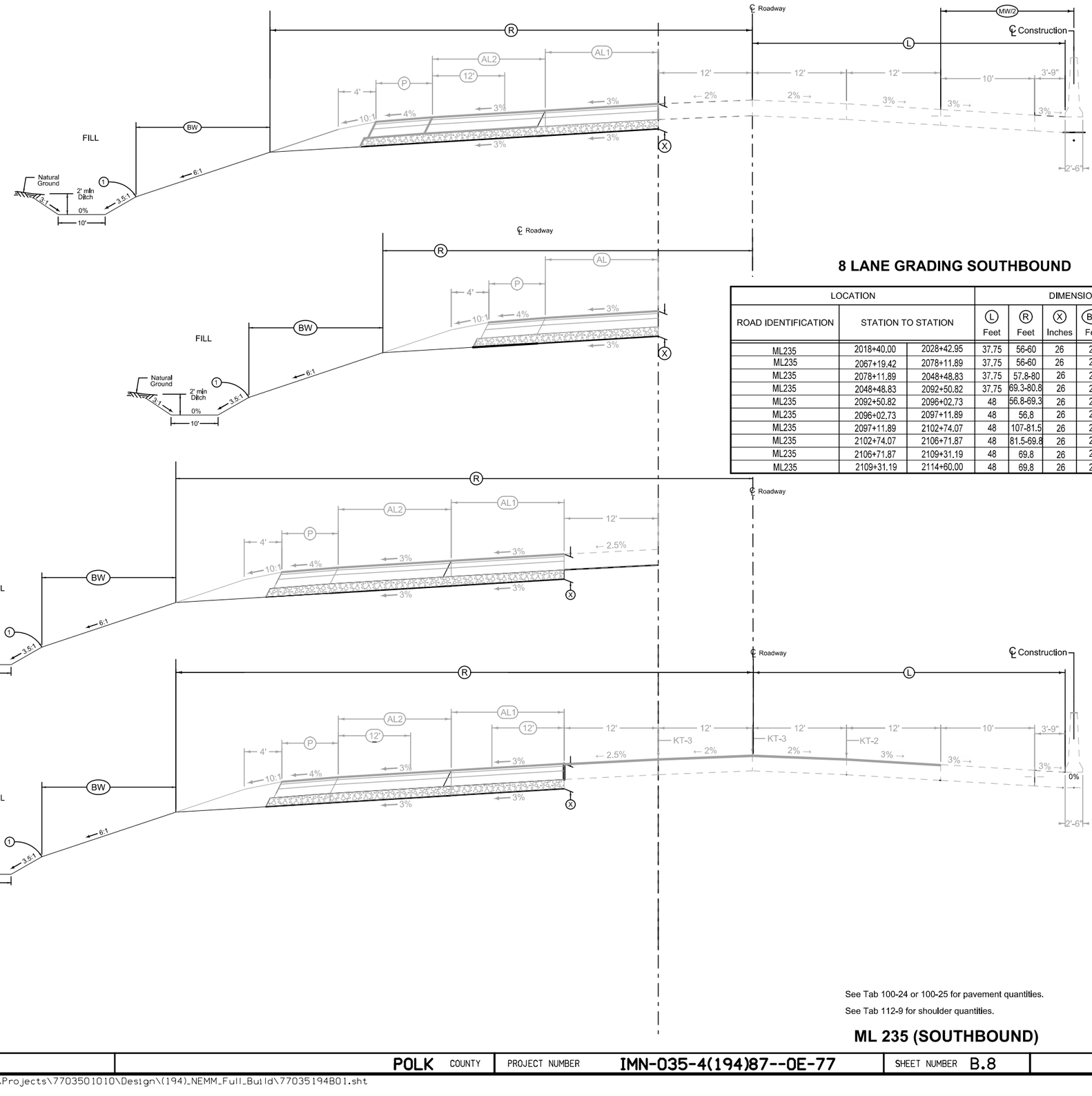
LOCATION			Ⓡ
ROAD IDENTIFICATION	STATION TO STATION		Feet
ML235	2067+19.42	2074+99.42	56-60
ML235	2074+99.42	2078+11.89	56-60

Auxiliary Lane Grading

LOCATION			Ⓡ
ROAD IDENTIFICATION	STATION TO STATION		Feet
ML235	2109+31.19	2114+60.00	69.8

Auxiliary Lane Grading

LOCATION			Ⓡ
ROAD IDENTIFICATION	STATION TO STATION		Feet
ML235	2078+11.89	2048+48.83	57.8-80
ML235	2048+48.83	2092+50.82	69.3-80.8
ML235	2092+50.82	2096+02.73	56.8-69.3
ML235	2096+02.73	2097+11.89	56.8
ML235	2097+11.89	2102+74.07	107-81.5
ML235	2102+74.07	2106+71.87	81.5-69.8
ML235	2106+71.87	2109+31.19	69.8



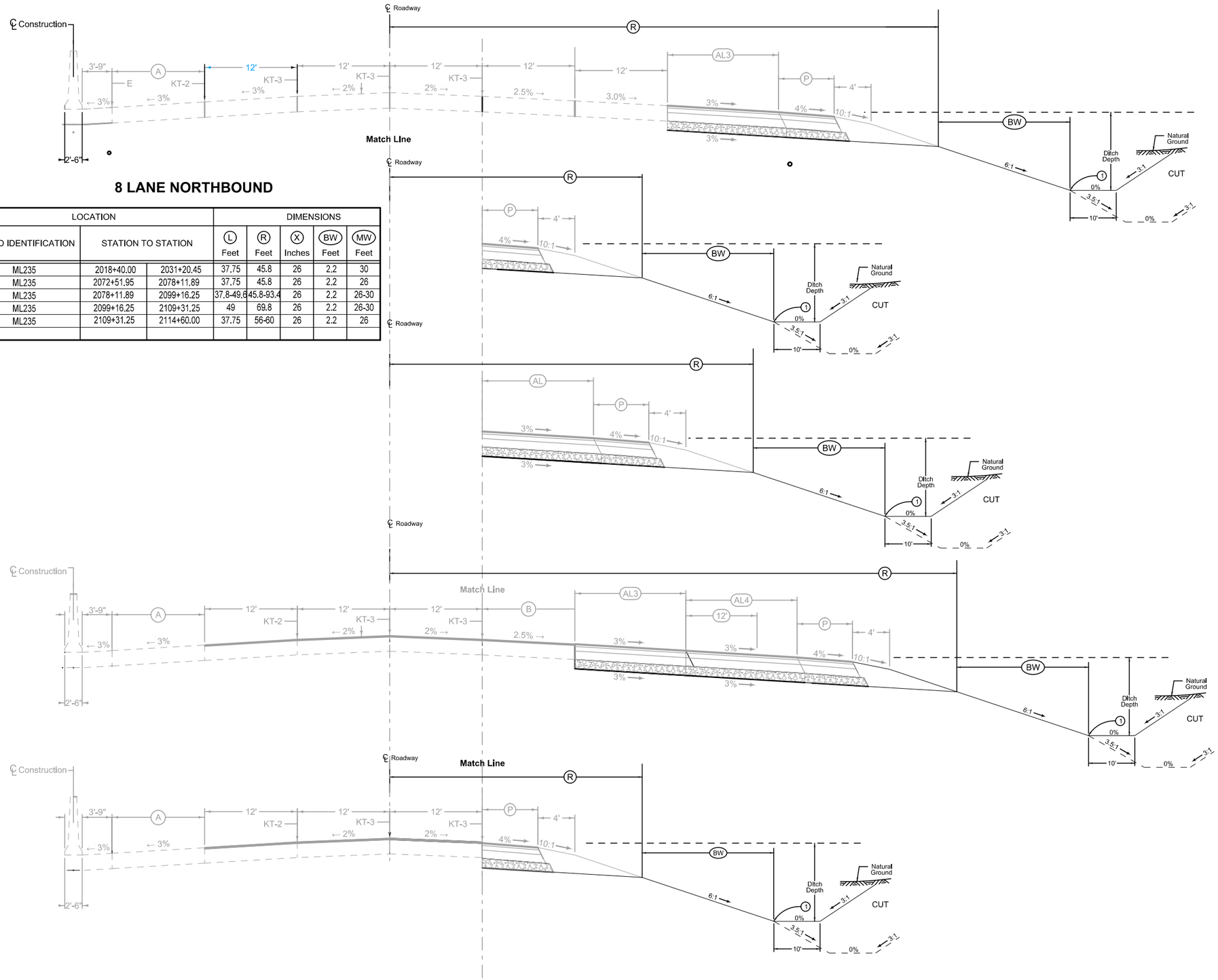
8 LANE GRADING SOUTHBOUND

LOCATION			DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION		Ⓛ Feet	Ⓡ Feet	Ⓧ Inches	Ⓑ Feet	Ⓜ Feet
ML235	2018+40.00	2028+42.95	37.75	56-60	26	2.2	30
ML235	2067+19.42	2078+11.89	37.75	56-60	26	2.2	30
ML235	2078+11.89	2048+48.83	37.75	57.8-80	26	2.2	30
ML235	2048+48.83	2092+50.82	37.75	69.3-80.8	26	2.2	30
ML235	2092+50.82	2096+02.73	48	56.8-69.3	26	2.2	26-30
ML235	2096+02.73	2097+11.89	48	56.8	26	2.2	26-30
ML235	2097+11.89	2102+74.07	48	107-81.5	26	2.2	26
ML235	2102+74.07	2106+71.87	48	81.5-69.8	26	2.2	26
ML235	2106+71.87	2109+31.19	48	69.8	26	2.2	26
ML235	2109+31.19	2114+60.00	48	69.8	26	2.2	26

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

ML 235 (SOUTHBOUND)



8 LANE NORTHBOUND

LOCATION			DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION		(L) Feet	(R) Feet	(X) Inches	(BW) Feet	(MW) Feet
ML235	2018+40.00	2031+20.45	37.75	45.8	26	2.2	30
ML235	2072+51.95	2078+11.89	37.75	45.8	26	2.2	26
ML235	2078+11.89	2099+16.25	37.8-49.6	45.8-93.4	26	2.2	26-30
ML235	2099+16.25	2109+31.25	49	69.8	26	2.2	26-30
ML235	2109+31.25	2114+60.00	37.75	56-60	26	2.2	26

Auxiliary Lane Grading

LOCATION			(R) Feet
ROAD IDENTIFICATION	STATION TO STATION		
ML235	2109+31.25	2114+60.00	

Auxiliary Lane Grading

LOCATION			(R) Feet
ROAD IDENTIFICATION	STATION TO STATION		
ML235	2072+51.95	2078+11.89	

Auxiliary Lane Grading

LOCATION			(R) Feet
ROAD IDENTIFICATION	STATION TO STATION		
ML235	2018+40.00	2031+20.45	

Auxiliary Lane Grading

LOCATION			(R) Feet
ROAD IDENTIFICATION	STATION TO STATION		
ML235	2099+16.25	2109+31.25	

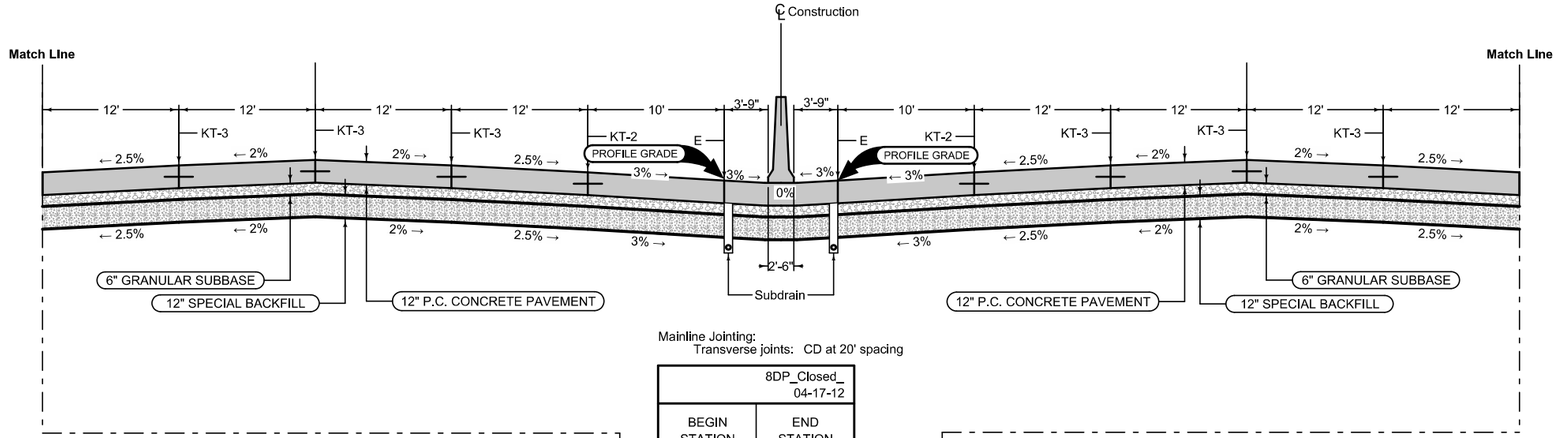
Auxiliary Lane Grading

LOCATION			(R) Feet
ROAD IDENTIFICATION	STATION TO STATION		
ML235	2078+11.89	2099+16.25	

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

ML 235 (NORTHBOUND)



Mainline Jointing:
Transverse joints: CD at 20' spacing

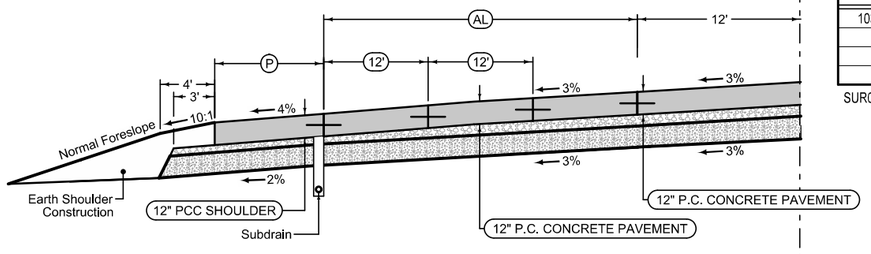
8DP_Closed_ 04-17-12	
BEGIN STATION	END STATION
1038+28.25	1055+07.15

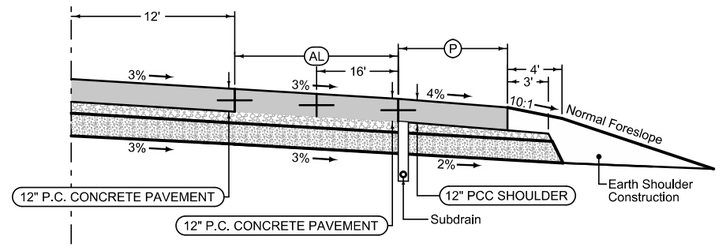
SUR080

Auxiliary Lane with Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

2_P_FullPCC_ 10-19-10			
STATION TO STATION		(AL) Feet	(P) Feet
1039+03.27	1044+62.67	52-24	6





Auxiliary Lane with Full Depth PCC Shoulder

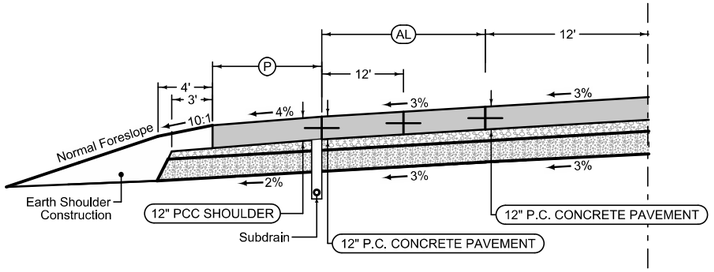
Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

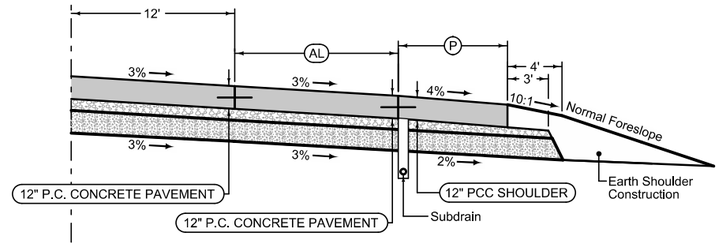
2_P_FullPCC_ 10-19-10			
STATION TO STATION		(AL) Feet	(P) Feet
1038+66.68	1040+96.68	34.5-18	6

Auxiliary Lane with Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

2_P_FullPCC_ 10-19-10			
STATION TO STATION		(AL) Feet	(P) Feet
1044+62.67	1045+85.22	24-18	6
1045+85.22	1048+53.17	18-12	6-12
1048+53.17	1055+07.15	12	12





Auxiliary Lane with Full Depth PCC Shoulder

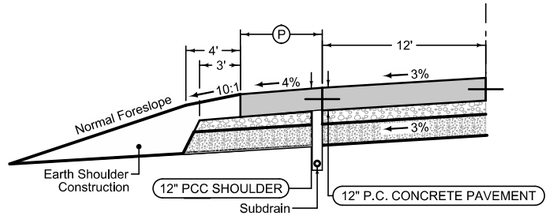
Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

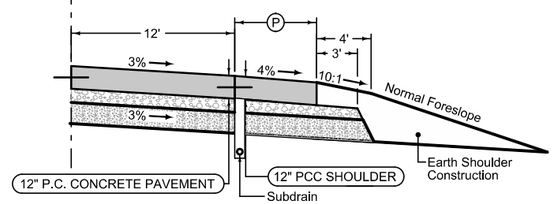
2_P_FullPCC_ 10-19-10			
STATION TO STATION		(AL) Feet	(P) Feet
1040+96.68	1043+41.95	18-12	6-12
1043+41.95	1055+07.15	12	12

Full Depth PCC Shoulder

Longitudinal joint: L or KT
Transverse joint: Match Mainline

4_AuxLane_PCC_ 10-19-10			
Direction of Travel	BEGIN STATION	END STATION	(P) Feet
WB	1038+28.38	1039+03.27	12





Full Depth PCC Shoulder

Longitudinal joint: L or KT
Transverse joint: Match Mainline

4_AuxLane_PCC_ 10-19-10			
Direction of Travel	BEGIN STATION	END STATION	(P) Feet
EB	1038+28.25	1038+66.68	12

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

I-80 SURVEY

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER B.10

10:27:30 AM 4/19/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194B01.sht

Auxiliary Lane

Longitudinal joint: L or KT
Transverse joint: Match Mainline

Direction of Travel	BEGIN STATION	END STATION	(AL) Feet	(P) Feet
			4_AuxLane_PCC_ 10-19-10	
WB	4055+07.15	4072+98.26	12	12

Auxiliary Lane with Full Depth PCC Shoulder

Longitudinal joint: L or KT
Transverse joint: Match Mainline

Direction of Travel	BEGIN STATION	END STATION	(AL) Feet	(P) Feet
			4_AuxLane_PCC_ 10-19-10	
WB	4072+98.26	4076+25.00	24-48	12

Curbed Shoulder

Shoulder Jointing:
Longitudinal joint not required when distance from back of curb to nearest joint is less than 15':

Single pour: L-2
Staged : KT-2
Transverse:C at 20' spacing

STATION TO STATION		(P) Feet	Curb Type See PV-102
			2_Curb_ 04-19-11
4076+25.00	4079+58.30	12	4" sloped

Auxiliary Lane with Full Depth PCC Shoulder

Longitudinal joint: L or KT
Transverse joint: Match Mainline

Direction of Travel	BEGIN STATION	END STATION	(AL) Feet	(P) Feet
			4_AuxLane_PCC_ 10-19-10	
WB	4097+56.00	4099+66.50	16-34.2	6

Auxiliary Lane with Full Depth PCC Shoulder

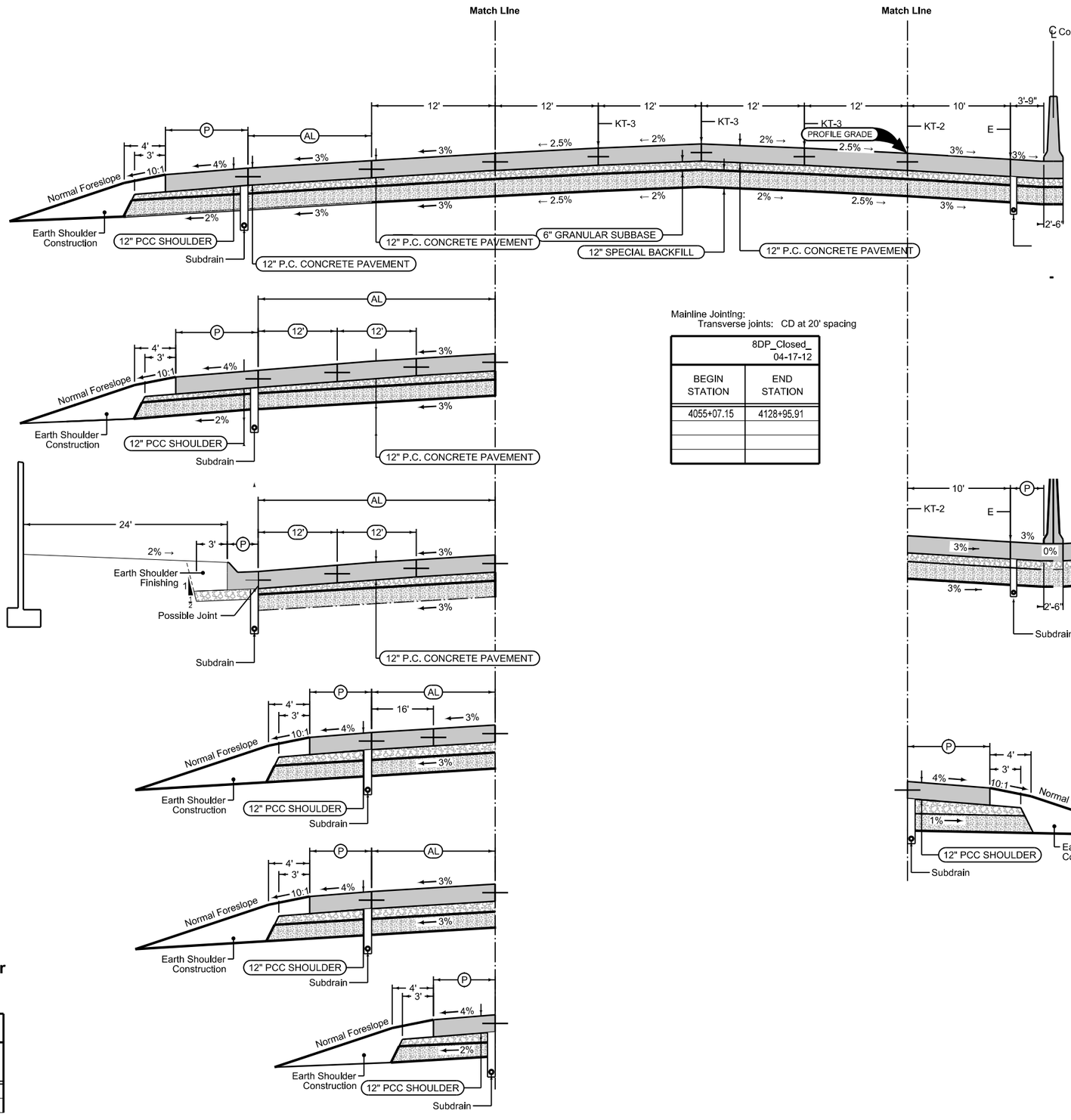
Longitudinal joint: L or KT
Transverse joint: Match Mainline

Direction of Travel	BEGIN STATION	END STATION	(AL) Feet	(P) Feet
			4_AuxLane_PCC_ 10-19-10	
WB	4082+75.00	4085+75.00	0-12	12-6
WB	4085+75.00	4095+43.35	12	6
WB	4095+43.35	4097+57.00	12-16	6

Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

STATION TO STATION		(P) Feet
		2_P_FullPCC_ 10-19-10
4079+58.30	4082+75.00	12
4099+66.50	4128+95.91	12



Mainline Jointing:
Transverse joints: CD at 20' spacing

BEGIN STATION	END STATION
8DP_Closed_ 04-17-12	
4055+07.15	4128+95.91

Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

Direction of Travel	BEGIN STATION	END STATION	(P) Feet
			4_P_FullPCC_ 10-19-10
WB	4055+07.15	4063+47.95	-

Full Depth PCC Shoulder w/ Barrier

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

Direction of Travel	BEGIN STATION	END STATION	(P) Feet
			4_P_FullPCC_ 10-19-10
WB	4063+47.95	4068+68.84	3.8-26.4
WB	4122+37.00	4128+95.91	3.8

Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

Direction of Travel	BEGIN STATION	END STATION	(P) Feet
			4_P_FullPCC_ 10-19-10
WB	4068+68.84	4122+37.00	12

See Tab 100-24 or 100-25 for pavement quantities.

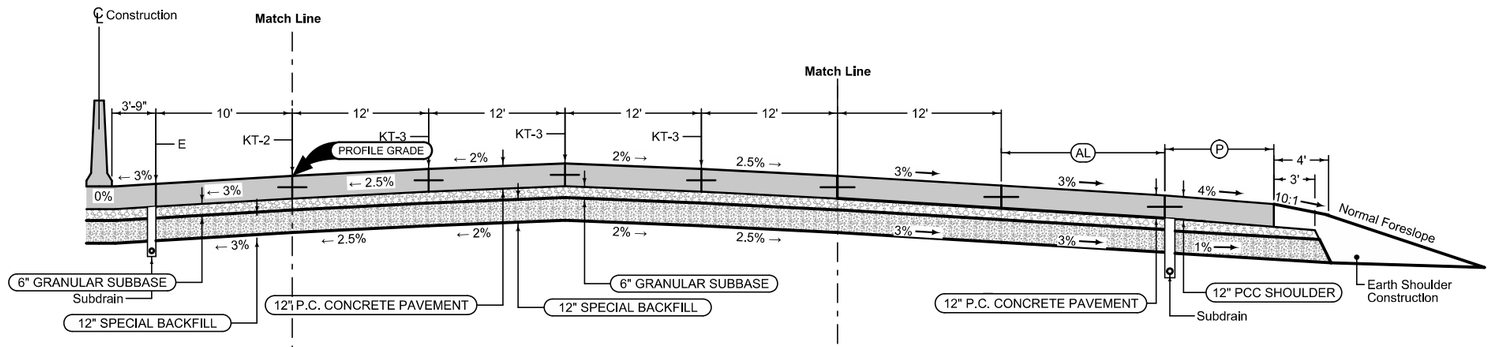
See Tab 112-9 for shoulder quantities.

I-80 WESTBOUND

Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

			4_P_FullPCC_ 10-19-10
Direction of Travel	BEGIN STATION	END STATION	(P) Feet
EB	3055+07.15	3063+49.34	



Auxiliary Lane with Full Depth PCC Shoulder

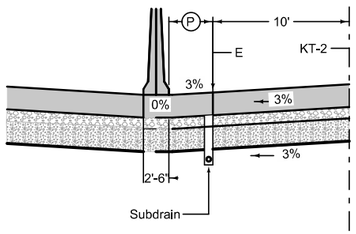
Longitudinal joint: L or KT
Transverse joint: Match Mainline

					4_AuxLane_PCC_ 10-19-10
Direction of Travel	BEGIN STATION	END STATION	(AL) Feet	(P) Feet	
EB	3055+07.15	3058+60.28	12	12	
EB	3108+14.26	3114+50.00	12	12	
EB	3114+50.00	3117+50.00	12-0	12	
EB	3126+91.26	3128+98.20	16-12	12	

Full Depth PCC Shoulder w/Half Section Barrier

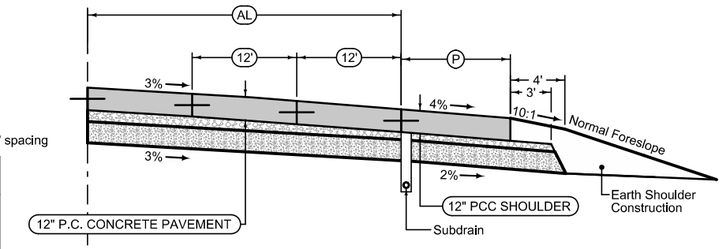
Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

			4_P_FullPCC_ 10-19-10
Direction of Travel	BEGIN STATION	END STATION	(P) Feet
EB	3063+49.34	3068+73.66	3.8-25.4
EB	3122+37.63	3128+98.20	25.4-3.8



Mainline Jointing:
Transverse joints: CD at 20' spacing

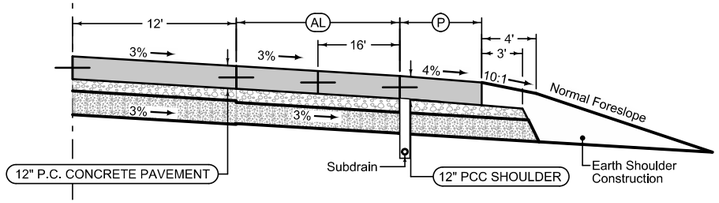
8DP_Closed_ 04-17-12	
BEGIN STATION	END STATION
3055+07.15	3128+98.20



Auxiliary Lane with Full Depth PCC Shoulder

Longitudinal joint: L or KT
Transverse joint: Match Mainline

					4_AuxLane_PCC_ 10-19-10
Direction of Travel	BEGIN STATION	END STATION	(AL) Feet	(P) Feet	
EB	3058+60.28	3064+19.42	36-63	12	
EB	3103+64.26	3108+14.26	52-24	12	



Auxiliary Lane with Full Depth PCC Shoulder

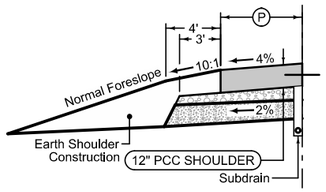
Longitudinal joint: L or KT
Transverse joint: Match Mainline

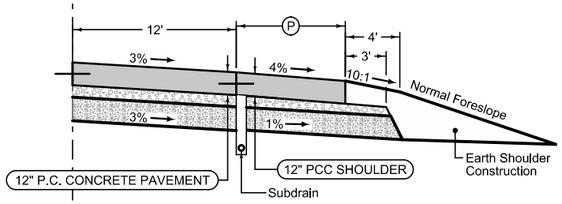
					4_AuxLane_PCC_ 10-19-10
Direction of Travel	BEGIN STATION	END STATION	(AL) Feet	(P) Feet	
EB	3124+01.26	3126+91.26	28.2-16	12	

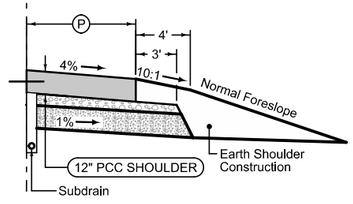
Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

			4_P_FullPCC_ 10-19-10
Direction of Travel	BEGIN STATION	END STATION	(P) Feet
EB	3068+73.67	3122+37.63	12







Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

			4_P_FullPCC_ 10-19-10
Direction of Travel	BEGIN STATION	END STATION	(P) Feet
EB	3117+50.00	3124+01.26	12

Full Depth PCC Shoulder

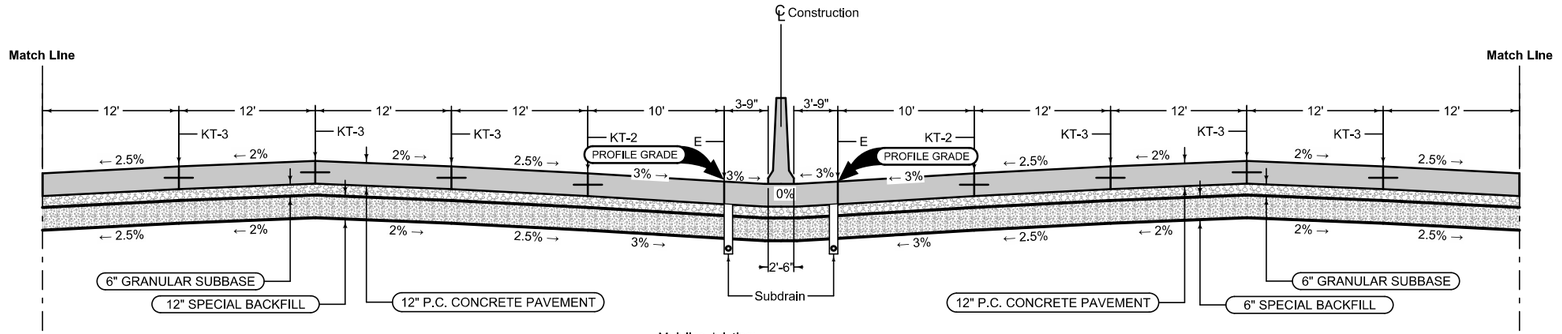
Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

			4_P_FullPCC_ 10-19-10
Direction of Travel	BEGIN STATION	END STATION	(P) Feet
EB	3064+19.42	3103+64.26	12

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

I-80 EASTBOUND



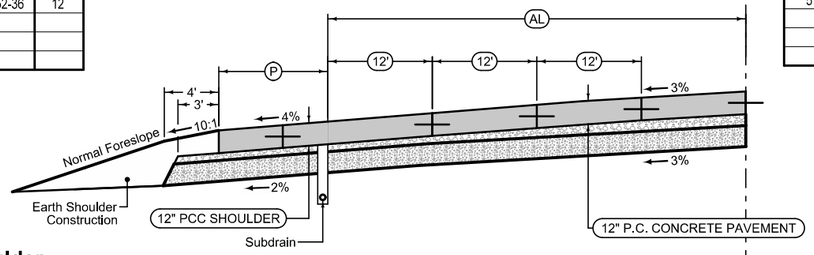
Auxiliary Lane with Full Depth PCC Shoulder

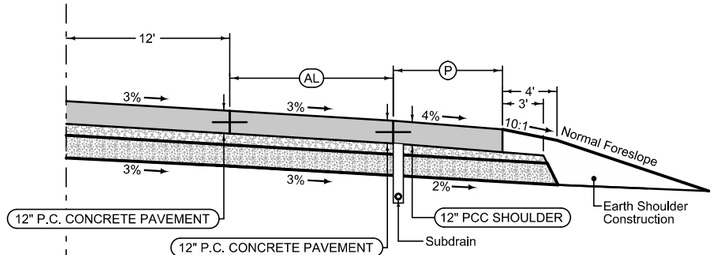
Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

			2_P_FullPCC_ 10-19-10	
Direction of Travel	STATION TO STATION		(AL) Feet	(P) Feet
WB	5137+77.87	5143+37.27	52-36	12

Mainline Jointing:
Transverse joints: CD at 20' spacing

8DP_Closed_ 04-17-12	
BEGIN STATION	END STATION
5128+03.54	5155+00.00

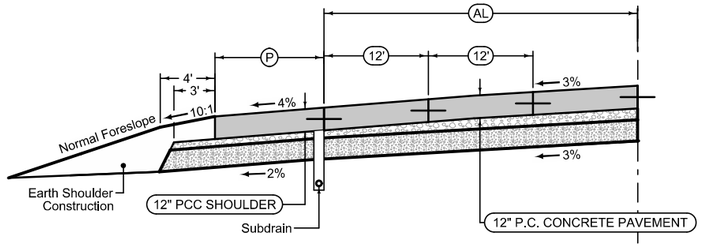


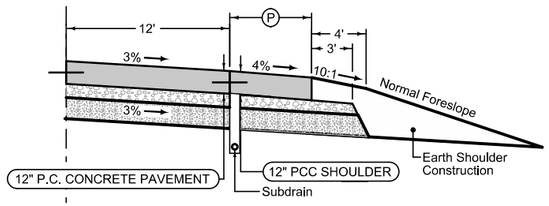


Auxiliary Lane with Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

			2_P_FullPCC_ 10-19-10	
Direction of Travel	STATION TO STATION		(AL) Feet	(P) Feet
EB	5128+03.54	5129+96.72	16-12	12
EB	5129+96.72	5145+00.00	12	12
EB	5145+00.00	5151+00.00	12-0	12

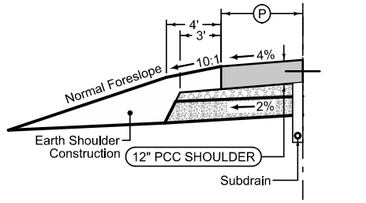




Full Depth PCC Shoulder

Longitudinal joint: L or KT
Transverse joint: Match Mainline

			4_AuxLane_PCC_ 10-19-10	
Direction of Travel	BEGIN STATION	END STATION	(P) Feet	
WB	5128+03.54	5137+77.87	12	



Full Depth PCC Shoulder

Longitudinal joint: L or KT
Transverse joint: Match Mainline

			4_AuxLane_PCC_ 10-19-10	
Direction of Travel	BEGIN STATION	END STATION	(P) Feet	
EB	5151+00.00	5155+00.00	12	

Auxiliary Lane with Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

			2_P_FullPCC_ 10-19-10	
Direction of Travel	STATION TO STATION		(AL) Feet	(P) Feet
EB	5128+03.54	5129+96.72	16-12	12
EB	5129+96.72	5145+00.00	12	12
EB	5145+00.00	5151+00.00	12-0	12

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

I-80 MAINLINE

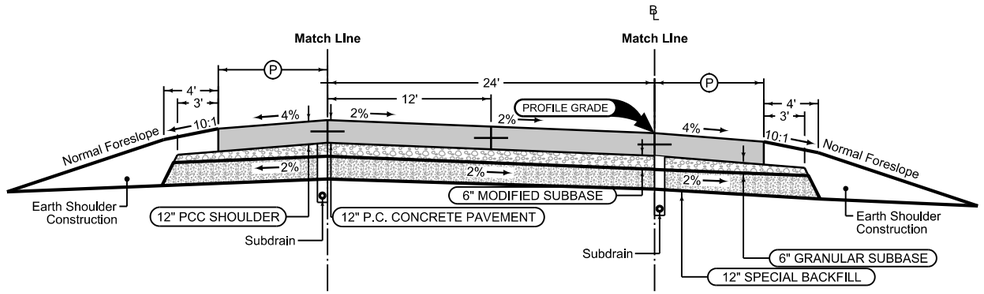
FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER B.13

10:27:35 AM 4/19/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194B01.sht

Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

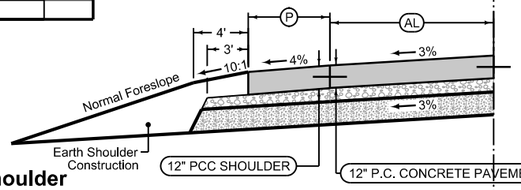
ROAD IDENTIFICATION	2_P_FullPCC_ 10-19-10		
	STATION TO STATION		(P) Feet
ML035N	8464+19.42	8532+36.33	12
ML035S	9458+09.42	9477+03.79	12
RAMP 235A	38488+93.31	38511+66.22	6
RAMP 235D	33544+07.26	33546+69.42	6
RAMP 235D	33552+15.79	33563+58.33	6
RAMP 235F	36597+11.89	36616+00.00	6
RAMP 235F	36616+00.00	36619+00.00	6-12
RAMP 235F	36619+00.00	36619+00.00	12
RAMP 235F	36619+00.00	36653+94.84	12-6
RAMP 235G	38557+03.00	38573+32.36	6
RAMP 235G	38573+32.36	38576+32.36	6-12
RAMP 235G	38576+32.36	38604+32.36	12
RAMP 235G	38604+32.36	38607+32.36	12-6
RAMP 235G	38607+32.36	38637+77.87	6

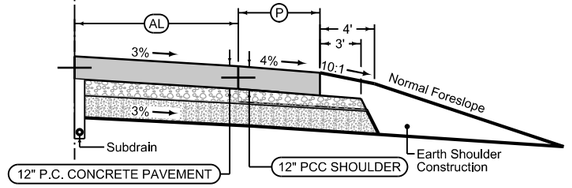


Section shown in the direction of traffic.

Ramp Jointing:
Transverse joints: CD at 20' spacing.
Longitudinal joint: L-2

ROAD IDENTIFICATION	2RP_ 04-16-13	
	BEGIN STATION	END STATION
ML035N	8464+19.42	8532+36.33
ML035S	9456+91.63	9477+03.79
RAMP 235A	38488+93.31	38511+66.22
RAMP 235D	33544+07.26	33563+58.33
RAMP 235F	36597+11.89	36653+94.84
RAMP 235G	38527+15.88	38607+90.72





Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

ROAD IDENTIFICATION	2_P_FullPCC_ 10-19-10		
	STATION TO STATION		(P) Feet
ML035N	8474+22.46	8515+96.11	12
ML035S	9456+91.63	9477+03.79	12
RAMP 235A	38488+93.31	38511+66.22	12
RAMP 235D	33544+07.26	33563+58.33	12
RAMP 235F	36597+11.89	36616+00.00	12
RAMP 235F	36616+00.00	36619+00.00	12
RAMP 235F	36619+00.00	36652+00.00	6
RAMP 235F	36652+00.00	36653+94.84	12-9.9
RAMP 235G	38607+32.36	38611+66.22	12
RAMP 235G	38604+32.36	38607+32.36	12-6
RAMP 235G	38576+32.36	38604+32.36	6
RAMP 235G	38604+32.36	38607+32.36	6-12
RAMP 235G	38607+32.36	38611+66.22	12

Auxiliary Lane Full Depth Shoulder

Longitudinal joint: L or KT
Transverse joint: Match Mainline

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

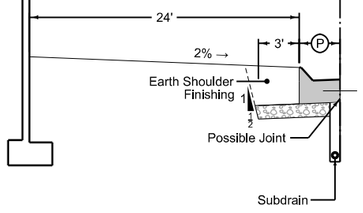
ROAD IDENTIFICATION	4_AuxLane_PCC_ 10-19-10			4_AL_Shldr_FullPCC_ 10-19-10	
	Direction of Travel	BEGIN STATION	END STATION	(AL) Feet	(P) Feet
RAMP 235D	EB	33546+69.42	33546+99.26	0-2	6-4
RAMP 235D	EB	33546+99.26	33552+15.79	2-40	4

Curbed Shoulder

Shoulder Jointing:
Longitudinal joint not required when distance from back of curb to nearest joint is less than 15':

Single pour: L-2
Staged : KT-2
Transverse:C at 20' spacing

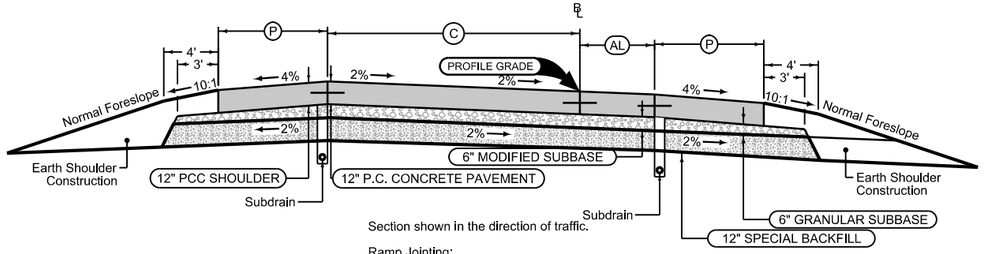
2_Curb_ 04-19-11			
STATION TO STATION		(P) Feet	Curb Type See PV-102
9456+91.63	9458+09.42	12	4" sloped



Full Depth PCC Shoulder

Longitudinal joint: L or KT
Transverse joint: Match Mainline

ROAD IDENTIFICATION	4_AuxLane_PCC_ 10-19-10			
	Direction of Travel	BEGIN STATION	END STATION	(P) Feet
RAMP 235F	EB	36653+94.84	36655+00.00	8.1-6
RAMP 235F	EB	36655+00.00	36663+30.34	8.1-6



Section shown in the direction of traffic.

Ramp Jointing:
Transverse joints: CD at 20' spacing.
Longitudinal joint: L-2

ROAD IDENTIFICATION	2RP_ 04-16-13		
	BEGIN STATION	END STATION	(C) Feet
RAMP 235F	36653+94.84	36663+30.34	16

Auxiliary Lane Full Depth Shoulder

Longitudinal joint: L or KT
Transverse joint: Match Mainline

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

ROAD IDENTIFICATION	4_AuxLane_PCC_ 10-19-10			2_AL_Shldr_FullPCC_ 10-19-10	
	Direction of Travel	BEGIN STATION	END STATION	(AL) Feet	(P) Feet
ML035N	NB	8464+19.42	8470+36.10	12	12
ML035N	NB	8470+36.10	8470+95.63	12-16	12-6
ML035N	NB	8470+95.63	8474+22.46	16-40	12
ML035N	NB	8515+96.11	8520+16.11	49.1-24	12
ML035N	NB	8520+16.11	8526+75.00	24	12
ML035N	NB	8526+75.00	8529+75.00	24-12	12
ML035N	NB	8529+75.00	8532+36.33	12	12
RAMP 235G	WB	38621+16.13	38637+77.87	12	12
RAMP 235G	WB	38611+66.22	38621+16.13	12-52	12
RAMP 235G	SB	38559+79.88	38570+09.93	37.7-4	8
RAMP 235G	SB	38557+80.04	38559+79.88	4-0	8-12

Auxiliary Lane Full Depth Shoulder

Longitudinal joint: L or KT
Transverse joint: Match Mainline

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

ROAD IDENTIFICATION	4_AuxLane_PCC_ 10-19-10			4_AL_Shldr_FullPCC_ 10-19-10	
	Direction of Travel	BEGIN STATION	END STATION	(AL) Feet	(P) Feet
RAMP 235F	EB	36653+94.84	36655+00.00	8	9.9-12
RAMP 235F	EB	36655+00.00	36663+30.34	8	12

See Tab 100-24 or 100-25 for pavement quantities.

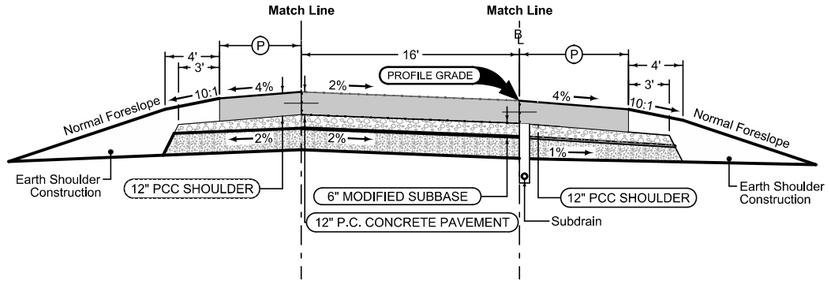
See Tab 112-9 for shoulder quantities.

ML 35 NORTH, ML 35 SOUTH
RAMPS 235A, 235D, 235F, 235G

Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

ROAD IDENTIFICATION	4_P_FullPCC_ 10-19-10			
	Direction of Travel	BEGIN STATION	END STATION	(P) Feet
RAMP 235B	SB	32574+22.46	32592+60.63	4
RAMP 235F	EB	36663+30.34	36669+99.60	4
RAMP 235H	NB	38652+13.74	38654+58.44	4
RAMP 235H	NB	38677+18.48	38681+45.29	4



Section shown in the direction of traffic.

Ramp Jointing:
Transverse joints: CD at 20' spacing.

ROAD IDENTIFICATION	1RP_ 10-19-10	
	BEGIN STATION	END STATION
RAMP 235B	32574+22.46	32592+60.63
RAMP 235F	36663+30.34	36669+99.60
RAMP 235H	38652+13.74	38654+58.44
RAMP 235H	38677+18.48	38681+45.29

Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

ROAD IDENTIFICATION	4_P_FullPCC_ 10-19-10			
	Direction of Travel	BEGIN STATION	END STATION	(P) Feet
RAMP 235B	SB	32574+22.46	32592+60.63	8
RAMP 235H	NB	38652+13.74	38654+58.44	6
RAMP 235H	NB	38677+18.48	38681+45.29	6

Auxiliary Lane Full Depth Shoulder

Longitudinal joint: L or KT
Transverse joint: Match Mainline

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

ROAD IDENTIFICATION	4_AuxLane_PCC_ 10-19-10			4_AL_Shldr_FullPCC_ 10-19-10	
	Direction of Travel	BEGIN STATION	END STATION	(AL) Feet	(P) Feet
RAMP 235F	EB	36663+30.34	36667+30.34	8-0	12
RAMP 235F	EB	36667+30.34	36669+99.60	0	12

Full Depth PCC Shoulder w/Retaining Wall

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

ROAD IDENTIFICATION	4_P_FullPCC_ 10-19-10			
	Direction of Travel	BEGIN STATION	END STATION	(P) Feet
RAMP 235B	SB	32576+53.97	32586+32.95	20

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

RAMPS 235B, 235F, 235H

Auxiliary Lanes w/Full Depth HMA Shoulder

Longitudinal joint: B

Shoulder Jointing:
Longitudinal joint: B

	4_AuxLane_PCC_ 10-19-10		2_AL_Shldr_FullPCC_ 10-19-10		
Direction of Travel	BEGIN STATION	END STATION	(AL1) Feet	(AL2) Feet	(P) Feet
SB	2018+40.00	2023+92.95	12	12	12
SB	2023+92.95	2028+42.95	12-40.8	12	12

Auxiliary Lane w/Full Depth HMA Shoulder

Longitudinal joint: B

Shoulder Jointing:
Longitudinal joint: B

	4_AuxLane_PCC_ 10-19-10		2_AL_Shldr_FullPCC_ 10-19-10	
Direction of Travel	BEGIN STATION	END STATION	(AL) Feet	(P) Feet
SB	2067+19.42	2074+99.42	0-12	12
SB	2074+99.42	2078+11.89	12	12

Auxiliary Lanes w/Full Depth HMA Shoulder

Longitudinal joint: B

Shoulder Jointing:
Longitudinal joint: B

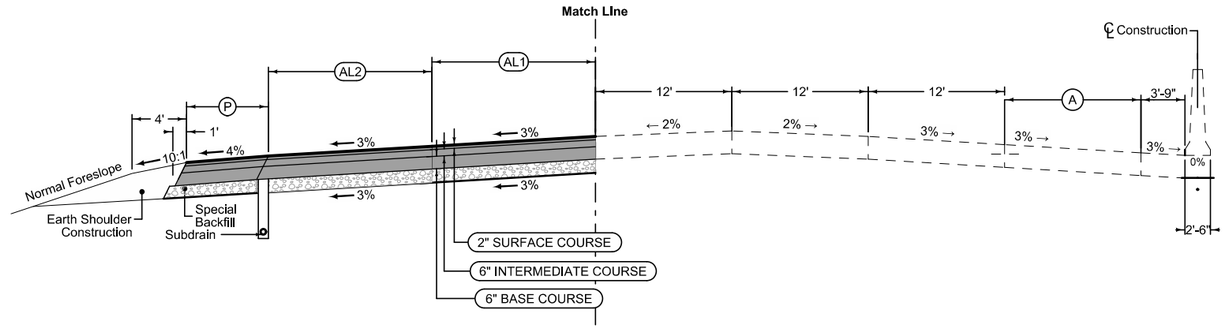
	4_AuxLane_PCC_ 10-19-10		2_AL_Shldr_FullPCC_ 10-19-10		
Direction of Travel	BEGIN STATION	END STATION	(AL1) Feet	(AL2) Feet	(P) Feet
SB	2109+31.19	2114+60.00	12	12	12

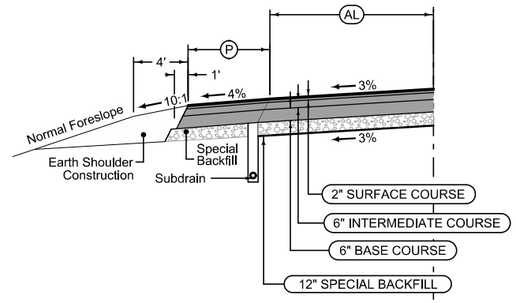
Auxiliary Lanes w/Full Depth HMA Shoulder

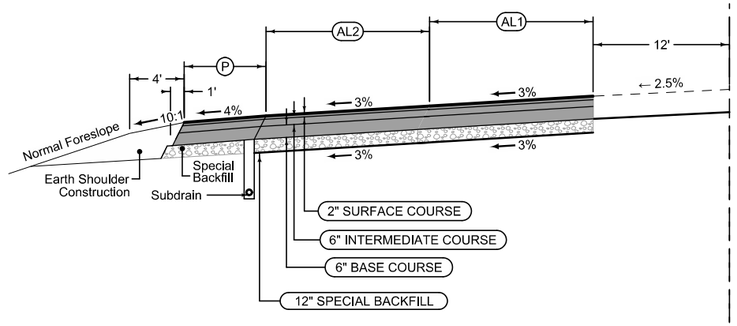
Longitudinal joint: L or KT
Transverse joint: Match Mainline

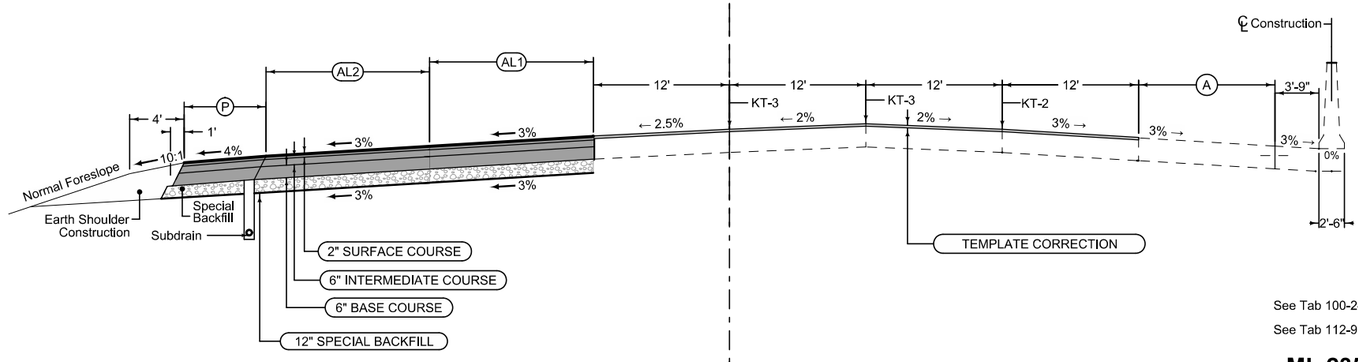
Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

	4_AuxLane_PCC_ 10-19-10		4_AL_Shldr_FullPCC_ 10-19-10		
Direction of Travel	BEGIN STATION	END STATION	(AL1) Feet	(AL2) Feet	(P) Feet
SB	2078+11.89	2084+48.83	0	0	12
SB	2084+48.83	2092+50.82	40-0	24	12
SB	2092+50.82	2096+02.73	12-0	12	12
SB	2096+02.73	2097+11.98	0	12	12
SB	2097+11.98	2102+74.07	40-12	24	12
SB	2102+74.07	2106+71.87	12	24-12	12
SB	2106+71.87	2109+31.19	12	12	12





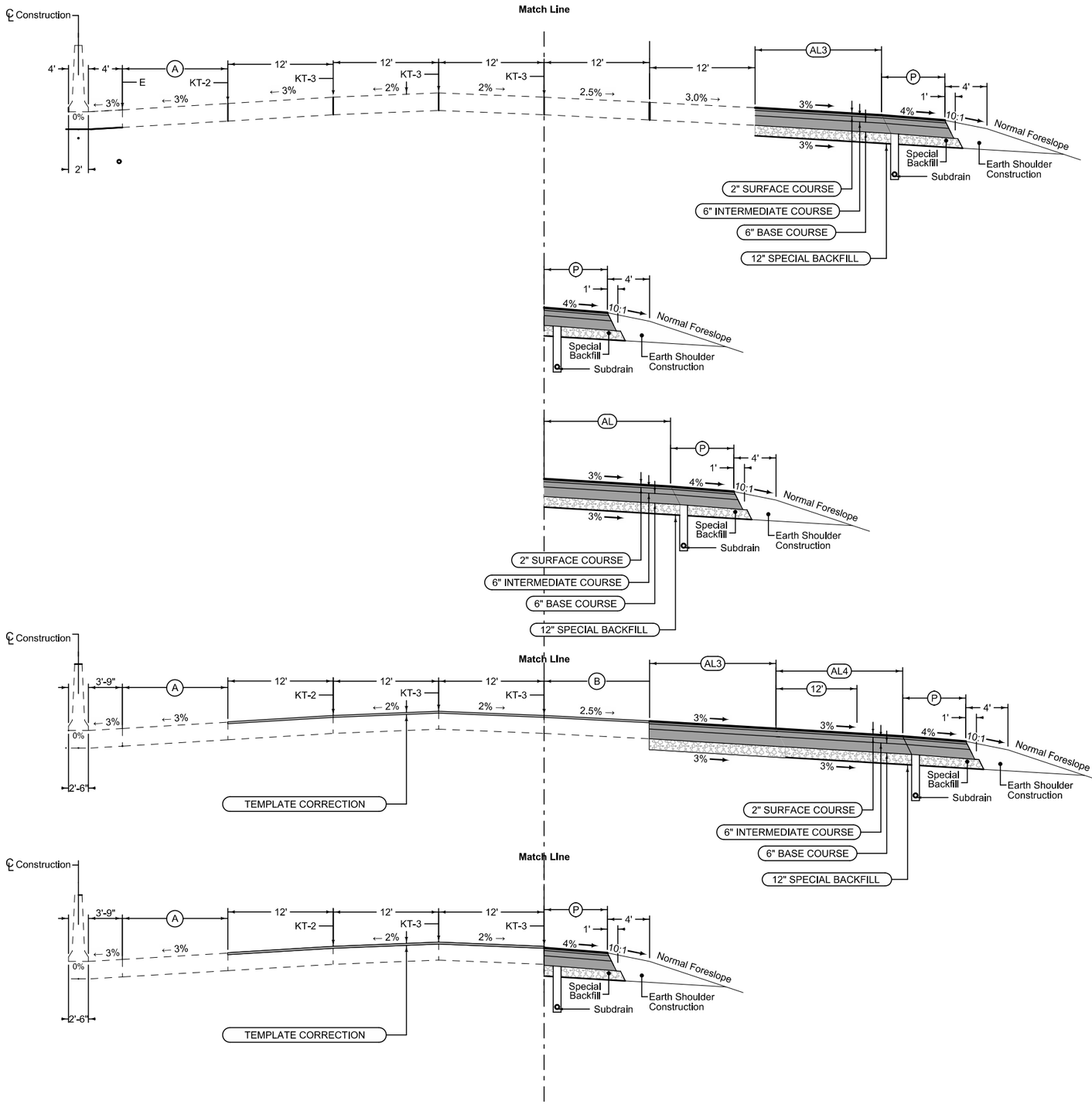




See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

ML 235 (SOUTHBOUND)



Auxiliary Lane w/ Full Depth HMA Shoulder

Longitudinal joint: B

Shoulder Jointing: Longitudinal joint: B

Direction of Travel	BEGIN STATION (4_AuxLane_PCC_ 10-19-10)	END STATION (4_AuxLane_PCC_ 10-19-10)	AL3 Feet (4_AL_Shldr_FullPCC_ 10-19-10)	P Feet (4_AL_Shldr_FullPCC_ 10-19-10)
NB	2109+31.25	2114+60.00	12	12

Full Depth Shoulder HMA Shoulder

Shoulder Jointing: Longitudinal joint: B

Direction of Travel	BEGIN STATION	END STATION	P Feet (4_P_FullPCC_ 10-19-10)
NB	2072+51.95	2078+11.89	12

Auxiliary Lane w/ Full Depth HMA Shoulder

Longitudinal joint: B

Shoulder Jointing: Longitudinal joint: B

Direction of Travel	BEGIN STATION (4_AuxLane_PCC_ 10-19-10)	END STATION (4_AuxLane_PCC_ 10-19-10)	AL3 Feet (4_AL_Shldr_FullPCC_ 10-19-10)	P Feet (4_AL_Shldr_FullPCC_ 10-19-10)
NB	2018+40.00	2036+27.46	12	12

Auxiliary Lanes w/ Full Depth HMA Shoulder

Longitudinal joint: B

Shoulder Jointing: Longitudinal joint: B

Direction of Travel	BEGIN STATION (4_AuxLane_PCC_ 10-19-10)	END STATION (4_AuxLane_PCC_ 10-19-10)	B Feet (4_AL_Shldr_FullPCC_ 10-19-10)	AL3 Feet (4_AL_Shldr_FullPCC_ 10-19-10)	AL4 Feet (4_AL_Shldr_FullPCC_ 10-19-10)	P Feet (4_AL_Shldr_FullPCC_ 10-19-10)
NB	2099+16.25	2109+31.25	24.2-0	12	24	12

Full Depth Shoulder HMA Shoulder

Shoulder Jointing: Longitudinal joint: B

Direction of Travel	BEGIN STATION	END STATION	P Feet (4_P_FullPCC_ 10-19-10)
NB	2078+11.89	2099+16.25	12

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

ML 235 (NORTHBOUND)

Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

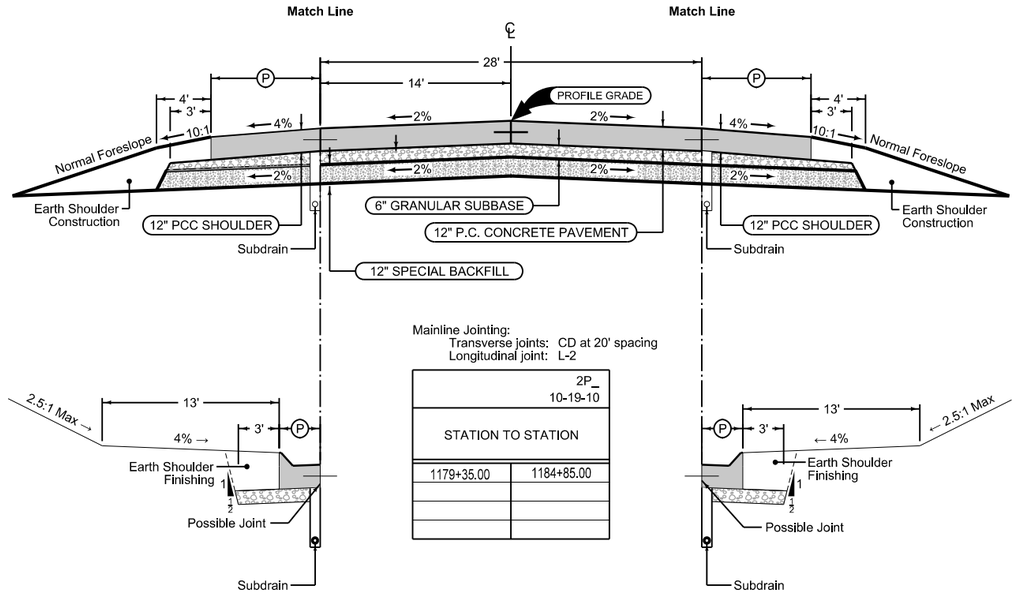
2_P_FullPCC_ 10-19-10		
STATION TO STATION		(P) Feet
1179+35.00	1181+00.00	8
1182+36.94	1184+85.00	8

Curbed Shoulder

Shoulder Jointing:
Longitudinal joint not required when distance from back of curb to nearest joint is less than 15':

Single pour: L-2
Staged : KT-2
Transverse:C at 20' spacing

2_Curb_ 04-19-11			
STATION TO STATION		(P) Feet	Curb Type See PV-102
1181+00.00	1182+36.94	3.5	6"

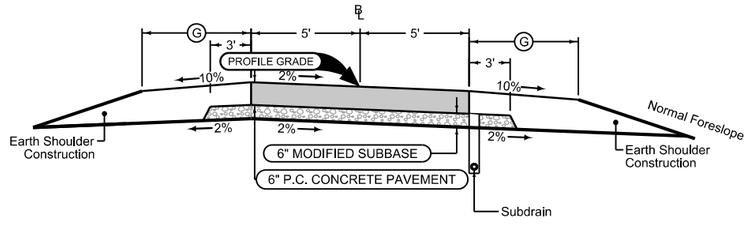


Mainline Jointing:
Transverse joints: CD at 20' spacing
Longitudinal joint: L-2

2P_ 10-19-10	
STATION TO STATION	
1179+35.00	1184+85.00

Granular Shoulder

1R_G_ 10-19-10		
BEGIN STATION	END STATION	(G) Feet
10+00.00	20+98.08	5



Section shown in the direction of traffic.

Ramp Jointing:
Transverse joints: CD at 20' spacing.

1RP_ 10-19-10	
BEGIN STATION	END STATION
10+00.00	20+98.08

Full Depth PCC Shoulder

Shoulder Jointing:
Longitudinal joint: L-2 or KT-2
Transverse joints: C at 20' spacing

2_P_FullPCC_ 10-19-10		
STATION TO STATION		(P) Feet
1179+35.00	1181+00.00	8
1182+36.94	1184+85.00	

Curbed Shoulder

Shoulder Jointing:
Longitudinal joint not required when distance from back of curb to nearest joint is less than 15':

Single pour: L-2
Staged : KT-2
Transverse:C at 20' spacing

2_Curb_ 04-19-11			
STATION TO STATION		(P) Feet	Curb Type See PV-102
1181+00.00	1182+36.94	3.5	6"

Granular Shoulder

1R_G_ 10-19-10		
BEGIN STATION	END STATION	(G) Feet
10+00.00	20+98.08	5

See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

BROADWAY STREET
CHICHAQUA VALLEY TRAIL

SURVEY SYMBOLS

- PPA Power Pole Co. 1
- PRA Power Riser Co. 1
- UB Utility Box
- TSG Traffic Signal
- TSL Traffic Signal and Luminare
- TCB Traffic Signal Box
- LUM Luminaire
- TP TPD Telephone Pedestal
- MH Utility Access (Manhole)
- IN Storm Sewer Intake
- INB Storm Sewer Beehive Intake
- WV Water Valve
- FHYD Fire Hydrant
- SIGN SI Sign
- SIGN SL Speed Limit Sign
- BB Billboard
- MM MM Mile Marker Post
- ROW Right of Way Rail
- TEV Evergeen Tree
- SHR Shrub
- TDC Tree Deciduous
- SWAMP
- Flg FLG Flagpole
- BCL Bridge Centerline
- BD Bridge Deck
- BLS Bridge Low Steel
- UE Utility Elevation
- PRO Profile Shot
- BRG Bridge
- PLG Location of General Photo
- PIP Pipe Culvert
- SOP Size of Pipe or Culvert
- DU Centerline Draw or Stream (Up)
- D Centerline Draw or Stream (Down)
- DIK Centerline of Dike or Dam
- GDL Guard Rail Steel
- GPR Guard Post (4 or More Posts)
- GDC Guard Rail Cable
- RIP Rip-Rap
- TLN Tree Line
- Tile TIL Tile Line
- FCL Chain Link and Security Fence
- FW Wire Fence
- RET Retaining Walls

- EP Edge of Paved Roads (ML or SR)
- SNP Unpaved Shoulder
- CU Back of Curb
- GU Gutter In Front of Curb
- ENT Centerline BL of Entrance
- ENP Edge Paved Entrance & Park Lot
- ENU Edge Unpaved Entrance & Parking
- SWK Sidewalk
- CON Concrete or A/C Slab
- E1 ELA Underground Electric Line Co. 1
- E2 ELA Underground Electric Line Co. 2
- E3 ELA Underground Electric Line Co. 3
- T1 ELA Underground Telephone Line Co. 1
- FO FOA Underground Fiber Optic Co. 1
- FO2 FOB Underground Fiber Optic Co. 2
- FO3 FOB Underground Fiber Optic Co. 3
- FO4 FOB Underground Fiber Optic Co. 4
- G GLA Underground Gas Line Co. 1
- W WLA Underground Water Line Co. 1
- St.S. STA Storm Sewer Line Co. 1
- St.S.2 STA Storm Sewer Line Co. 2

UTILITY LEGEND

This is a POINT 25 Project and is subject to the provisions of IAC 761-115.25.

Mid American Energy - Power and Gas
Michael Younts
E1 / G — 10510 Douglas Avenue
Urbandale, Iowa 50322
515-252-6565 - myounts@midamerican.com

Iowa D. O. T. - Lighting and Fiber Optic
E2 — Tony Taylor
800 Lincoln Way
FO3 — Ames, Iowa 50010
515-239-1902 - Tony.Taylor@dot.iowa.gov
Olsson Associates - Gregory T. Seib
601 P Street
Lincoln, Nebraska 68508
402-458-5037
gseib@olssonassociates.com

Polk County - Lighting and Traffic Signals
Kurt Bailey
E3 — 5885 NE 14th Street
Des Moines, Iowa 50313
515-286-3705
Kurt.Bailey@polkcountyiowa.gov

Century Link - Telephone and Fiber Optics
Dustin Withers
T1 — 2103 East University Avenue
Des Moines, Iowa 50317
FO — 515-263-7202
Dustin.Withers@centurylink.com

Windstream - Fiber Optics
Jim Wiand
FO2 — 115 South 2nd Avenue West
Newton, Iowa 50208
641-787-2270
jim.wiand@windstream.com

Iowa Communications Network (ICN) - Fiber Optics
Larry Klawitter
FO3 — Grimes State Office Building
400 East 14th Street
Des Moines, Iowa 50319
515-229-2046
larry.klawitter@iowa.gov

Iowa Network Services (INS) - Fiber Optics
Jeff Klocko
FO4 — 7760 Office Plaza Drive South
West Des Moines, Iowa 50266
515-830-0445
Jeff@netins.com

Des Moines Water Works - Water
Matt Smith
W — 2201 George Flagg Parkway
Des Moines, Iowa 50321
515-283-8781
msmith@dmww.com

St.S. — IDOT or Private

Polk County - Storm Sewer
Kurt Bailey
St.S.2 — 5885 NE 14th Street
Des Moines, Iowa 50313
515-286-3705
Kurt.Bailey@polkcountyiowa.gov

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)	Existing Utilities
SHADING	**Design Color No.**	
Yellow	(4)	Highlight for Critical Notes or Features
Red	(3)	Delineates Restricted Areas
Lavender	(9)	Temporary Pavement Shading
Gray, Light	(48)	Proposed Pavement Shading
Gray, Med	(80)	Proposed Granular Shading
Gray, Dark	(112)	Proposed Grade and Pave Shading "In conjunction with a paving project"
Brown, Light	(236)	Grading Shading
Tan	(8)	Proposed Sidewalk Shading
Blue, Light	(230)	Proposed Sidewalk Landing Shading
Pink	(11)	Proposed Sidewalk Ramp Shading

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Ground Line Profile
Blue	(1)	Proposed Profile and Annotation
Magenta	(5)	Existing Utilities
Blue, Light	(230)	Proposed Ditch Grades, Left
Black	(0)	Proposed Ditch Grades, Median
Rust	(14)	Proposed Ditch Grades, Right

- Reference Point / Station — Survey Line
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Trench Drain
- HighTension Cable Guardrail
- Sheet Pile
- Pavement Removal
- Clearing & Grubbing Area

RIGHT-OF-WAY LEGEND

- Proposed Right-of-Way
- Existing Right of Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Easement (Temporary)
- Easement
- C/A Access Control
- Property Line

PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES D, E, F, & K)

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.1

SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC

SAYLOR TWP.
T-79-N R-24W
SEC. 13

Sta. 1038+46
24" X 142' Conc Pipe

Sta. 1038+46.00
Barrier Intake SW-547
w/24" x 288' DR-601

Sta. 1040+78.00
Barrier Intake SW-547 to
Sta. 1042+41.00
Barrier Intake SW-547
w/24" x 156' DR-601

Sta. 1044+04.00
Barrier Intake SW-547 to
Sta. 1045+67.00
Barrier Intake SW-547
w/24" x 156' DR-601

Sta. 1045+67.00
Barrier Intake SW-547 to
Sta. 1047+38.00
Barrier Intake SW-547
w/24" x 164' DR-601

By Others
(Typ.)

Sta. 1038+25.00 (I-80/35 SURVEY)
Begin Construction

1035

1040

1045

F03

F03

F03

UPRR

I-80/35 (SUR080)

FUTURE HIGH TRESTLE TRAIL EXTENSION

36" X 104' Conc Pipe
(U.A.C)

Sta. 1040+78.00
Barrier Intake SW-547
w/24" x 262' DR-601

Sta. 1040+78
24" X 206' Conc Pipe
(Remove)

Sta. 1044+04.00
Barrier Intake SW-547
w/24" x 268' DR-601

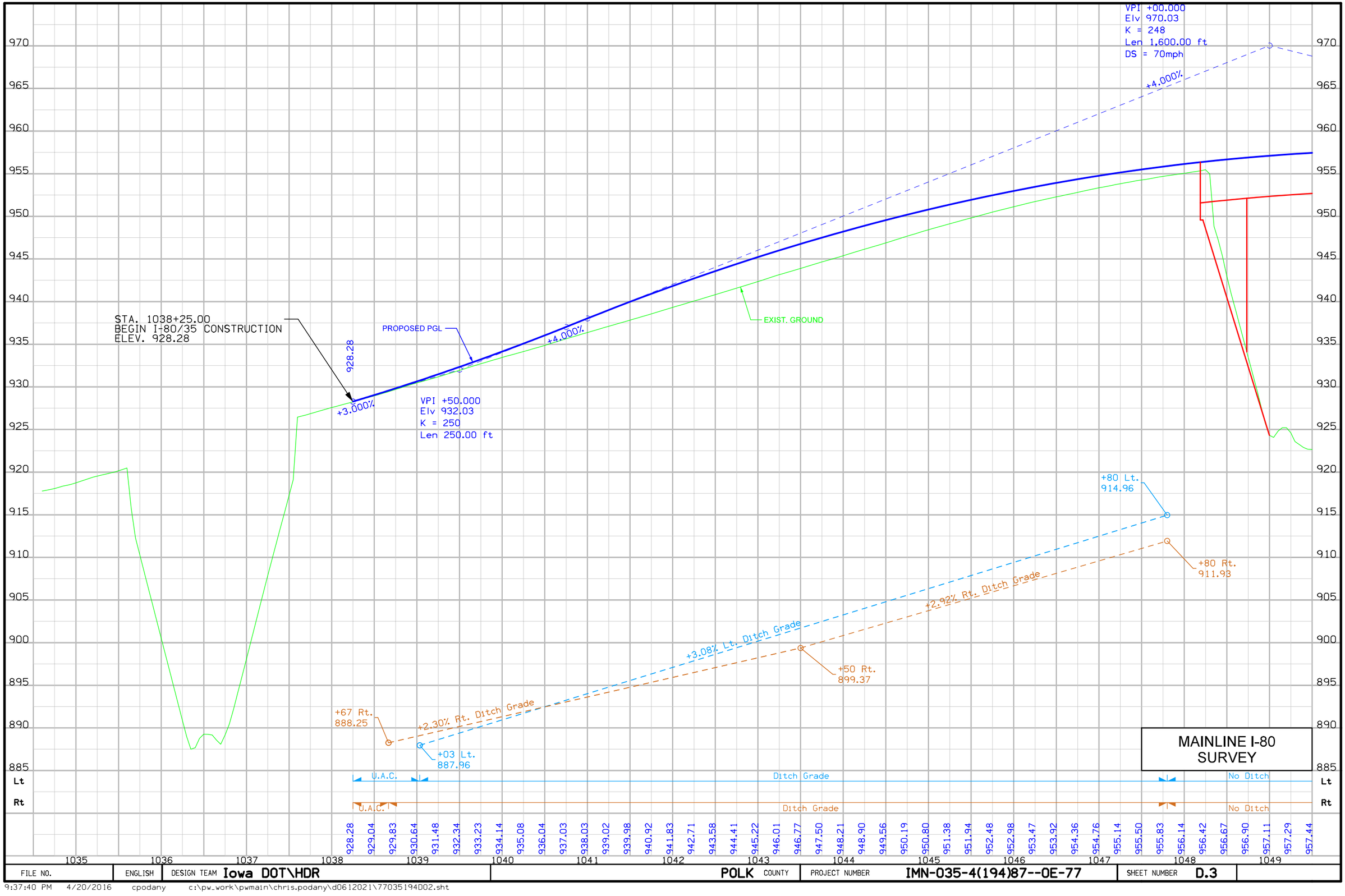
0 50
FEET

SAYLOR TWP.
T-79-N R-24W
SEC. 13

MAINLINE I-80
SURVEY

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.2

9:37:39 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.3

9:37:40 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

Sta. 1050+70
36" X 229' Conc Pipe
D.A. = 43 Ac - R

SAYLOR TWP.
T-79-N R-24W
SEC. 13

N

Sta. 1055+07.15 (I-80/35 SURVEY) =
Sta. 3055+07.15 (EB I-80, 15.00' LT)
Sta. 4055+07.15 (WB I-80, 15.00' RT)
Stop I-80 Construction I-80/35 SURVEY

UPRR

1050

1055

1060

WB I-80 (ML080W)

I-80/35 (SUR080)

EB I-80 (ML080E)

NB I-35 (ML035N)

F03

Sta. 1053+54.00
Barrier Intake SW-547
w/24" x 192' DR-601

0 50
FEET

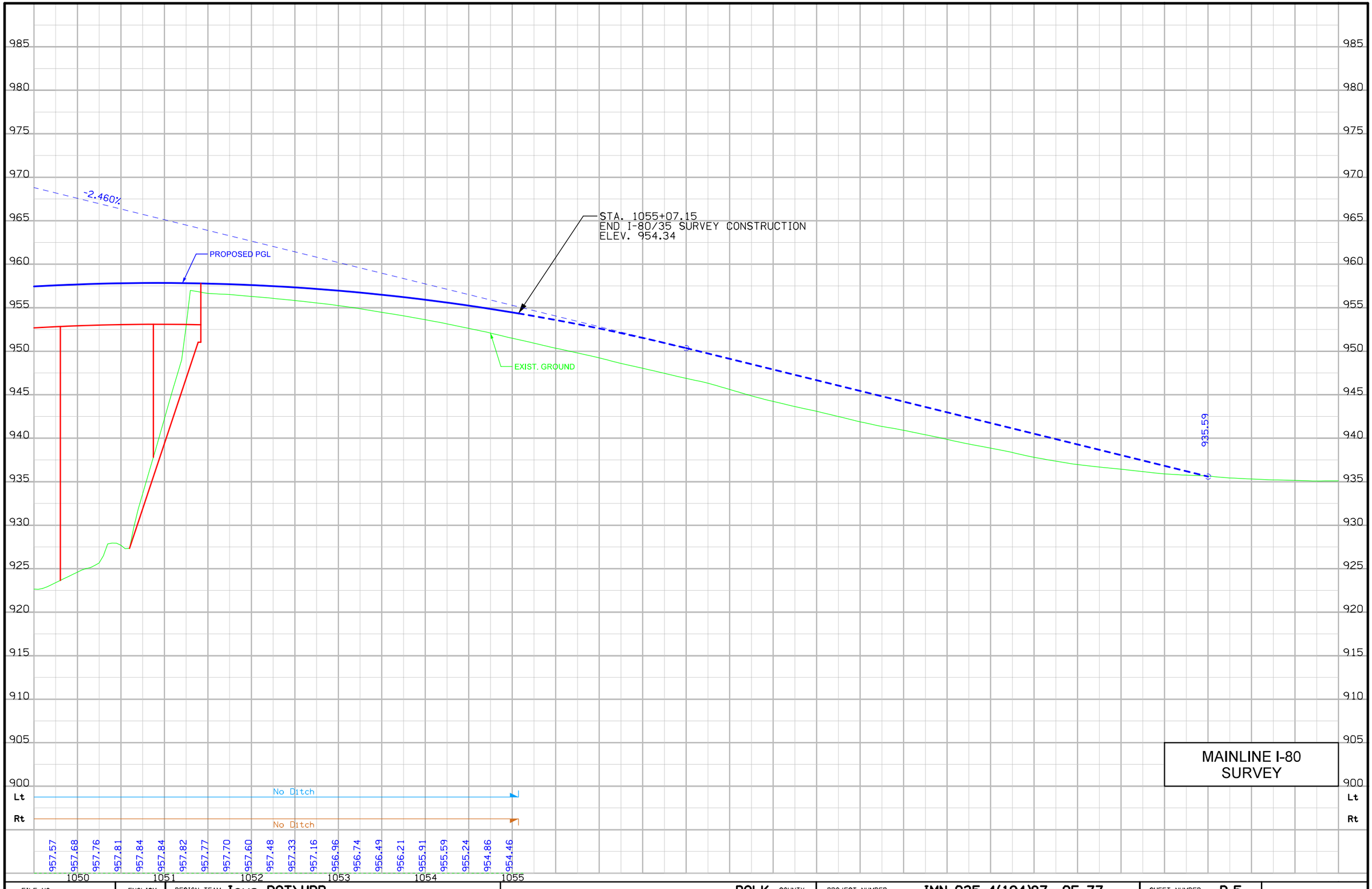
Sta. 1057+00
24" X 95' Conc Pipe
(Remove)

SAYLOR TWP.
T-79-N R-24W
SEC. 13

MAINLINE I-80
SURVEY

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.4

9:37:42 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.5

9:37:44 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

SAYLOR TWP.
T-79-N R-24W
SEC. 13

Sta. 3057+00.00, 13.90' Lt.
Barrier Intake SW-547 to
Sta. 3061+41.00, 15.00' Lt.
Barrier Intake SW-547
w/24" x 434' DR-601

Sta. 3065+28.00, 14.30' Lt.
Barrier Intake SW-547 to
Sta. 3064+75.00, 14.30' Lt.
Barrier Intake SW-547
w/24" x 48' DR-601

Sta. 3066+17.50
Install SW-547 ,Amd.
Lt. 921.98
Rt. 913.56

Sta. 3065+75.00, 14.30' Lt.
Barrier Intake SW-547 to
Sta. 3065+28.00, 14.30' Lt.
Barrier Intake SW-547
w/24" x 44' DR-601

CONCRETE BARRIER

PC Sta 3055+07.15

WB I-80 (ML080W)

I-80/35
(SUR080)

EB I-80 (ML080E)

3060

PI Sta 3061+69.34

3065

PRC Sta 3068+30.86

NB I-35 (ML035N)

Sta. 3068+73.66, 15.00' LT
End Concrete Barrier

Sta. 3055+07.1515 (EB I-80)
Sta. 1055+07.15, 15.00' Rt (I-80/35 SURVEY)
Begin EB I-80 Construction

Curve Data
Δ = 4° 27' 40.90" (LT)
T = 662.19
L = 1,323.71
R = 17,000.00
E = 12.89
e = NC
DS = 70mph

Sta. 1057+00
24" X 95' Conc Pipe

Sta. 3061+41.00, 15.00' Lt.
Barrier Intake SW-547
w/24" x 162' DR-601

0 50 FEET

Sta. 3064+75.00, 14.30' Lt.
Barrier Intake SW-547
w/24" x 196' DR-601

Sta. 1064+74
24" X 93' Conc Pipe

SAYLOR TWP.
T-79-N R-24W
SEC. 13

MAINLINE
EASTBOUND I-80

VPI +03.579
Elv 953.02
K = 248
Len 192.84 ft
DS = 70mph

-1.681%

-2.460%

STA. 3055+07.15
BEGIN EB I-80 CONSTRUCTION
ELEV. 954.64

PROPOSED PGL

EXIST. GROUND

+50 Rt.
938.44

-1.70% Rt. Ditch Grade

+35 Rt.
933.60

-4.00% Rt. Ditch Grade

VPI +50.000
Elv 934.66
K = 184
Len 550.00 ft
DS = 70mph

+19 Rt.
922.28

-2.460%

+0.522%

VPI +25.000
Elv 937.14
K = 254
Len 300.00 ft
DS = 70mph

+0.522%

-0.661%

+50 Rt.
931.48

-0.50% Rt.
Ditch
Grade

+10 Rt.
931.18

-3.90%
Rt. Ditch Grade

955 950 945 940 935 930 925 920

Lt: See Mainline Westbound I-80 | See Westbound I-80 Left Ditch | Vari.- See Cross Section

Rt: Ditch Grade | Ditch Grade | Vari. - See Cross Sections | Ditch Grade | Ditch Grade

3055 3056 3057 3058 3059 3060 3061 3062 3063 3064 3065 3066 3067 3068 3069

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.6

9:37:47 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

SAYLOR TWP.
T-79-N R-24W
SEC. 13

Sta. 1075+95.35
54" X 413' Conc Pipe
W/ 54" x 138'
Conc Pipe Extension
D.A. = 89 Ac - R-H

Sta. 1077+28, 182' Rt
36" X 66' Conc Pipe
D.A. = 19 Ac - Median

DELAWARE TWP.
T-79-N R-23W
SEC. 18

WB I-80 (ML080W)

PI Sta 3074+58.87

3070

3075

EB I-80 (ML080E)

3080

Equation:
Sta. 3083+49.50 EB I-80
=Sta. 8483+86.64 NB I-35

PT Sta 3083+49.26

Equation:
Sta. 3073+54.58 EB I-80
=Sta. 2043+10.29 NE 22ND ST.

NE 22ND STREET
(By Others)

Curve Data
Δ = 15° 17' 08.95" (RT)
T = 628.01
L = 1,248.57
R = 4,680.00
E = 41.95
e = 4.0%
L = 300
x = 188
DS = 70mph

PT Sta 3080+79.43

NB I-35 (ML035N)

Sta. 3075+25.00
Install Twin 59" x 36" x 126' Arch DR-601
Skew = 0° Ahd.
F.L. = Lt. 924.03
Rt. 923.90

0 50
FEET

SAYLOR TWP.
T-79-N R-24W
SEC. 13

Sta. 1072+61, 123' Rt
48" X 320' Conc Pipe
D.A. = 15 Ac - R-H

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 1082+33, 421' Rt
42" X 92' Conc Pipe
D.A. = 14 Ac - Median

MAINLINE EASTBOUND I-80

VPI +25.000
Elv 942.14
K = 249
Len 650.00 ft
DS = 70mph

VPI +75.000
Elv 932.18
K = 182
Len 450.00 ft
DS = 70mph

EXIST. GROUND

PROPOSED PGL

-0.661%

+1.811%

-0.800%

+00 Rt.
933.17

+0.50% Rt. Ditch Grade

+1.00% Rt. Ditch Grade

+25 Rt.
923.90

+2.21% Rt. Ditch Grade

+15 Rt.
930.32

+0.50% Lt. Ditch Grade

+50 Rt.
923.55

+0.20% Rt. Ditch Grade

+20 Lt.
924.00

+45 Rt.
922.00

-3.90% Rt. Ditch Grade

+0.51% Rt. Ditch Grade

Vari. - See Cross Section

Ditch Grade

Lt

Rt

3070	3071	3072	3073	3074	3075	3076	3077	3078	3079	3080	3081	3082	3083	3084
936.15	935.98	935.82	935.65	935.49	935.32	935.16	934.99	934.83	934.66	934.50	934.33	934.17	934.00	933.83
933.67	933.52	933.41	933.33	933.28	933.27	933.30	933.35	933.45	933.57	933.73	933.93	934.16	934.42	934.72
935.05	935.42	935.82	936.26	936.70	937.11	937.50	937.87	938.21	938.52	938.81	939.08	939.31	939.53	939.72
939.88	940.02	940.13	940.22	940.29	940.33	940.34	940.33	940.29	940.23	940.14	940.03	939.89	939.73	939.54

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.7

9:37:48 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\T7035194D02.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

NB I-35 (ML035N)

Equation:
Sta. 3087+86.76 EB I-80
=Sta. 38554+66.79 RAMP G

(Remove)

(Remove)

3085

PI Sta 3086+49.45

SC Sta 3087+99.26 E2

WB I-80 to SB I-235
RAMP G (235G)

ML I-235 (ML235)

(U.A.C.)

3090

EB I-80 (ML080E)

PI Sta 3090+08.88

Equation:
Sta. 3090+80.04 EB I-80
=Sta. 2055+58.36 ML 235

SCS PI Sta 3090+96.91
Δ = 28° 41' 21.15" (LT)
& = 6° 19' 09.79"
Ls = 450.00
Ts = 747.65
Es = 69.91
P = 4.13
K = 224.91
Xc = 449.45
Yc = 16.53
LT = 300.19
ST = 150.17
LC = 449.76

(Remove)

CS Sta 3093+70.73

Sta. 3092+50.00
Install 24" x 128' DR-601
Skew = 0° Ahd.
F.L. = Lt. 932.56
Rt. 935.90

Equation:
Sta. 3096+45.51 EB I-80
=Sta. 36641+80.81 RAMP F

SB I-35 to EB I-80
RAMP F (235F)

EXISTING
NB I-235 to WB I-80

ST Sta 3098+20.73

Equation:
Sta. 3096+39.61 EB I-80
=Sta. 38657+70.90 RAMP H

3095

PI Sta 3095+20.91

(U.A.C.)

(Remove)

NB I-235 to EB I-80
RAMP D (235D)

Curve Data
Δ = 16° 03' 01.56" (LT)
T = 287.62
L = 571.47
R = 2,040.00
E = 20.18
e = 6.0%
L = 450
x = 188
DS= 70mph

DELAWARE TWP.
T-79-N R-23W
SEC. 18

0 50 FEET

MAINLINE
EASTBOUND I-80

960 955 950 945 940 935 930 925

VPI +75.000
Elv 937.74
K = 184
Len 300.00 ft
DS = 70mph

-0.800%

+0.50% Rt. Ditch Grade

+00 Rt.
936.67

+0.827%

+1.76% Rt. Ditch Grade

+80 Rt.
939.84

+0.50% Lt. Ditch Grade

VPI +75.000
Elv 941.05
K = 301
Len 400.00 ft
DS = 70mph

+40 Rt.
940.08

-0.500%

-3.80% Rt. Ditch Grade

+50 Rt.
935.90

-0.500%

VPI +25.000
Elv 939.30
K = 261
Len 300.00 ft
DS = 70mph

EXIST. GROUND

PROPOSED PGL

+0.60% Rt. Ditch Grade

+00 Lt.
933.90

+3.20% Lt. Ditch Grade

+00 Rt.
938.00

+0.650%

+00 Lt.
937.10

+00 Lt.
937.44

-0.25% Rt. Ditch Grade

-0.49% Lt. Ditch Grade

Lt Ditch Grade Ditch Grade Cross Sections Ditch Grade Lt

Rt Ditch Grade Ditch Grade Vari. - See Cross Sections Ditch Grade Ditch Grade Ditch Grade Rt

939.34 939.14 938.94 938.76 938.61 938.50 938.41 938.37 938.35 938.37 938.43 938.52 938.64 938.79 938.98 939.19 939.40 939.59 939.77 939.92 940.06 940.17 940.26 940.34 940.39 940.42 940.43 940.42 940.38 940.33 940.26 940.17 940.05 939.94 939.85 939.78 939.74 939.73 939.73 939.76 939.82 939.90 940.00 940.13 940.28 940.44 940.60 940.76 940.93 941.09 941.25 941.41 941.58 941.74 941.90 942.06 942.23 942.39 942.55 942.71

3085 3086 3087 3088 3089 3090 3091 3092 3093 3094 3095 3096 3097 3098 3099

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.8

9:37:50 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

Sta. 3100+00.00
Install 24" x 122' DR-601
Skew = 0° ,Ahd.
F.L. = Lt. 936.21
Rt. 937.00

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 1104+54, 53' Rt
48" X 109' Conc Pipe
D.A. = 10 Ac - Median

(Remove)

(Remove)

3100

3105

3110

EB I-80 (ML080E)

PC Sta 3109+47.48

NB I-235 to EB I-80
RAMP D (235D)

SB I-35 to EB I-80
RAMP F (235F)

Sta. 3105+80.00
Install 42" x 172' DR-601
Skew = 0° ,Ahd.
F.L. = Lt. 935.05
Rt. 934.41

0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 18

MAINLINE EASTBOUND I-80

VPI +25.000
Elv 947.10
K = 286
Len 400.00 ft
DS = 70mph

VPI +25.000
Elv 941.85
K = 194
Len 350.00 ft
DS = 70mph

EXIST. GROUND

PROPOSED PGL

+0.650%

-0.750%

-0.750%

+1.055%

+00 Rt.
937.00

+50 Rt.
938.53

+1.02% Rt. Ditch Grade

+00 Lt.
936.21

-0.20% Lt. Ditch Grade

+64 Rt.
937.17

-0.50% Rt.
Ditch Grade

+00 Rt.
936.49

+80 Lt.
935.05

+00 Rt.
934.41

-0.85% Rt. Ditch Grade

+0.50% Lt. Ditch Grade

955 950 945 940 935 930 925 920

| | | |

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 1117+76
Skew 45
4' X 4' X 46.0' RCB
D.A. = 98 AC. - R

PI Sta 3119+25.78

CONCRETE BARRIER

Sta. 1125+49
24" X 123' Conc Pipe

Sta. 1128+24
18" X 127'
Conc Pipe

WB I-80 (ML080W)

ML I-80
(ML080)

(Remove)

EB I-80 (ML080E)

3115

3120

3125

PI Sta 3128+98.17

Sta. 3128+98.20 (EB I-80)
Sta. 5128+03.54, 15.00' RT (ML I-80)
End EB I-80 Construction

25:1 Taper

Curve Data
Δ = 10° 54' 14.49" (RT)
T = 978.30
L = 1,950.69
R = 10,250.00
E = 46.58
e = 2.2%
L = 198
x = 180
DS= 70mph

SB I-35 to EB I-80
RAMP F (235F)

Sta. 3117+50.00, 60.00' RT
End Taper

Sta. 3114+50.00, 72.00' RT
Begin Taper

Sta. 3119+12.81
Extend Rt. 4' X 4' x 144' RCB
Skew = 45° Rt. Ahd.
F.L. = Exist. Rt. 909.40
Proposed Outlet Rt. 904.29

0 FEET 50

DELAWARE TWP.
T-79-N R-23W
SEC. 18

MAINLINE
EASTBOUND I-80

STA. 3128+98.20
END EB I-80 CONSTRUCTION
ELEV. 941.37

PROPOSED PGL

+1.055%

+1.055%

-0.700%

+75 Lt.
942.52

EXIST. GROUND

VPI +25.000
Elv 948.18
K = 256
Len 450.00 ft
DS = 70mph

+00 Rt.
928.69

+50 Rt.
926.19

+1.00% Rt. Ditch Grade

+70 Rt.
920.63

-0.80% Rt. Ditch Grade

+98 Rt.
918.00

941.37

955 950 945 940 935 930 925 920

Lt Ditch Grade — Vari. - See Cross Sections

Rt Ditch Grade — Ditch Grade — No Ditch — Ditch Grade

943.45 943.70 943.96 944.23 944.49 944.75 945.02 945.28 945.54 945.81 946.06 946.29 946.49 946.67 946.82 946.95 947.06 947.14 947.20 947.23 947.24 947.22 947.18 947.11 947.02 946.91 946.77 946.61 946.43 946.26 946.08 945.91 945.73 945.56 945.38 945.21 945.03 944.86 944.68 944.51 944.33 944.16 943.98 943.81 943.63 943.46 943.28 943.11 942.93 942.76 942.58 942.41 942.23 942.06 941.88 941.71 941.53

3115 3116 3117 3118 3119 3120 3121 3122 3123 3124 3125 3126 3127 3128 3129

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.10

9:37:53 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

SAYLOR TWP.
T-79-N R-24W
SEC. 13

Sta. 1066+75
42" X 226 Conc Pipe
D.A. = 52 Ac - R
(Remove)

Sta. 4055+07.1515 (WB I-80)
Sta. 1055+07.15, 15.00' LT (I-80/35 SURVEY)
Begin WB I-80 Construction

SEE SHEET D.6 FOR
CULVERT INFORMATION

CONCRETE BARRIER

PC Sta 4055+07.15

PCC Sta 4063+47.95

4060

4065

WB I-80 (ML080W)

I-80/35 (SUR080)

EB I-80 (ML080E)

PT Sta 4057+27.63

NB I-35 (ML035N)

Curve Data
Δ = 2° 50' 19.67" (LT)
T = 420.49
L = 840.80
R = 16,970.00
E = 5.21
e = NC
DS = 70mph

0 50
FEET

Sta. 1057+00
24" X 95' Conc Pipe
(U.A.C)

Sta. 1064+74
24" X 93' Conc Pipe
(U.A.C.)

SAYLOR TWP.
T-79-N R-24W
SEC. 13

MAINLINE
WESTBOUND I-80

-1.681%

-2.460%

VPI +03.580
Elv 953.02
K = 248
Len 192.84 ft
DS = 70mph

+40 Lt.
940.95

-0.70% Lt. Ditch Grade

+50 Lt.
938.78

STA. 4055+07.15
BEGIN WB I-80 CONSTRUCTION
ELEV. 954.64

PROPOSED PGL

EXIST. GROUND

-2.460%

VPI +50.000
Elv 934.66
K = 184
Len 550.00 ft
DS = 70mph

+0.522%

+80 Lt.
929.12

-3.04% Lt. Ditch Grade

+15 Lt.
921.98

+3.40% Lt. Ditch Grade

+00 Lt.
928.27

+0.68%
Lt. Ditch Grade

955 950 945 940 935 930 925

| | | |

SAYLOR TWP.
T-79-N R-24W
SEC. 13

Curve Data
Δ = 21° 15′ 25.45″ (LT)
T = 878.25
L = 1,736.31
R = 4,680.00
E = 81.69
e = 4.0%
L = 300
x = 188
DS = 70mph

Equation:
Sta. 4073+50.73 WB I-80
=Sta. 2044+55.27 NE 22ND ST.

Sta. 4076+53.00, 88.60′ Lt.
Area Intake SW-507
w/24″ x 84′ DR-601

Sta. 4076+53.00, 88.60′ Lt.
Area Intake SW-507 to
Sta. 4077+86.00, 94.90′ Lt.
Area Intake SW-507
w/24″ x 128′ DR-601

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 4077+86.00, 94.90′ Lt.
Area Intake SW-507 to
Sta. 4079+20.00, 103.80′ Lt.
Area Intake SW-507
w/24″ x 128′ DR-601

Sta. 4080+54.00, 114.10′ Lt.
Area Intake SW-507
w/24″ x 50′ DR-601

NE 22ND STREET (By Others)

PROPOSED RETAINING WALL

SB I-35 (ML035S)

PT Sta 4080+84.26

25:1 Taper

TS Sta 4083+14.92

WB I-80 (ML080W)

4070

4075

4080

PI Sta 4072+26.20

EB I-80 (ML080E)

(Remove)

(Remove By Others)

(Remove)

Sta. 4079+20.00, 103.80′Lt.
Area Intake SW-507 to
Sta. 4080+54.00, 114.10′ Lt.
Area Intake SW-507
w/24″ x 128′ DR-601

Sta. 4082+75.00, 48.00′ LT
Begin Taper

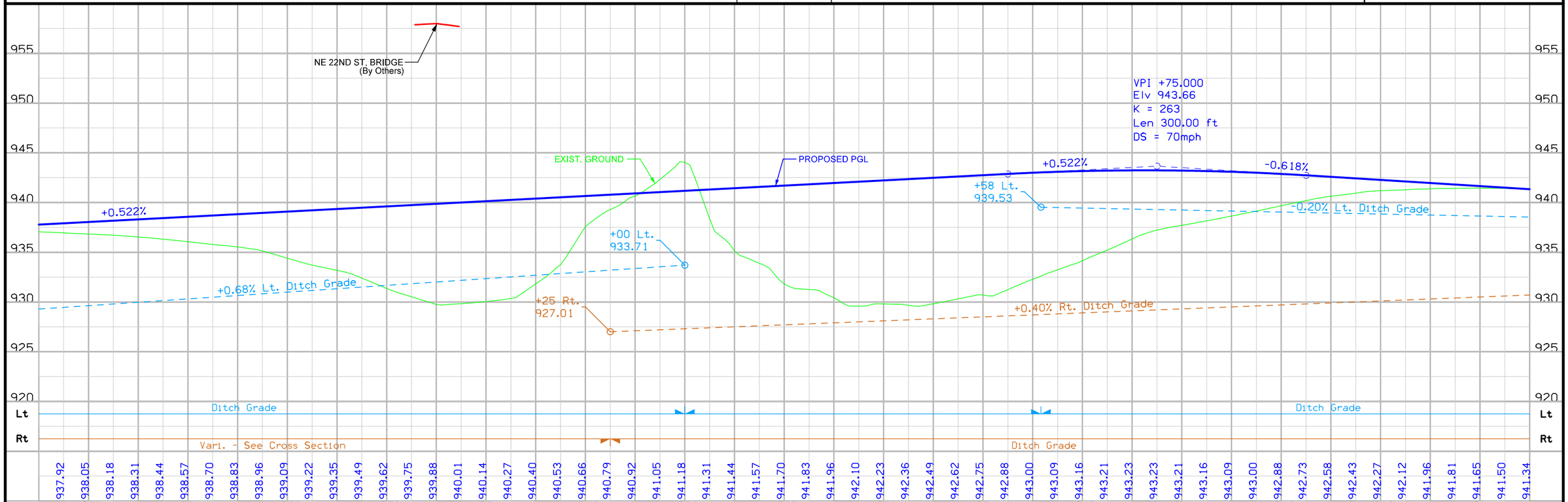
Sta. 1077+48, 144′ Lt
30″ X 121′ Conc Pipe
D.A. = 36 Ac - R
(Remove)

0 FEET 50

SAYLOR TWP.
T-79-N R-24W
SEC. 13

DELAWARE TWP.
T-79-N R-23W
SEC. 18

MAINLINE
WESTBOUND I-80



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.12

9:37:57 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

Sta. 1085+67, 481' Lt
30" X 205' Steel Pipe
D.A. = 1 Ac - Median
(Remove)

DELAWARE TWP.
T-79-N R-23W
SEC. 18

SCS PI Sta 4091+74.54
Δ = 34° 29' 58.92" (RT)
θs = 6° 19' 09.79"
Ls = 450.00
Ts = 859.62
Es = 100.41
P = 4.13
K = 224.91
Xc = 449.45
Yc = 16.53
LT = 300.19
ST = 150.17
LC = 449.76

Curve Data
Δ = 21° 51' 39.33" (RT)
T = 393.97
L = 778.35
R = 2,040.00
E = 37.69
e = 6.0%
L = 450
E = 37.69
x = 188
DS = 70mph

Sta. 2065+90
42" X 212' Conc Pipe
D.A. = 3 Ac - Median
(U.A.C.)

Equation:
Sta. 4089+34.80 WB I-80
=Sta. 36580+64.75 RAMP F

Equation:
Sta. 4095+44.10 WB I-80
=Sta. 8439+66.57 NB I-35

PI Sta 4091+58.88

PI Sta 4086+15.11

25:1 Taper

4085

4090

4095

WB I-80 (ML080W)

SB I-35 (ML035S)

SC Sta 4087+64.92

Equation:
Sta. 4092+54.48 WB I-80
=Sta. 2065+08.03 ML I-235

(Remove)

SB I-35 to EB I-80
RAMP F (235E)

(U.A.C.)

ML I-235 (ML235)

NB I-35 (ML035N)

CS Sta 4095+43.27

PI Sta 4096+93.44

F03

E2

(Remove)

(U.A.C.)

WB I-80 to SB I-235
RAMP G (235GT)

Sta. 4086+00.00
Install Twin 44" x 27" x 180' Arch DR-601
Skew = 50° Rt. Ahd.
F.L. = Lt. 934.90
Rt. 931.50

Sta. 4085+75.00, 60.00' LT
End Taper

Sta. 1086+88, 387' Lt
42" X 228' Conc Pipe
D.A. = Part of 14 Ac - Median
(Remove)

Sta. 2065+20, 294' Lt
36" X 75' Conc Pipe
D.A. = 9 Ac - Median
(Remove)

Sta. 2063+99, 212' Lt
24" X 104' STEEL PIPE
D.A. = Part of 14 Ac - Median
(Remove)

0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 18

MAINLINE WESTBOUND I-80

VPI +25.000
Elv 938.41
K = 212
Len 300.00 ft
DS = 70mph

VPI +75.000
Elv 941.19
K = 270
Len 350.00 ft
DS = 70mph

VPI +75.000
Elv 939.19
K = 190
Len 400.00 ft
DS = 70mph

PROPOSED PGL

EXIST. GROUND

-0.20% Lt. Ditch Grade
+00 Lt.
938.25

-4.00% Lt.
Ditch Grade
+75 Lt.
935.25

-0.618%

+0.796%

+0.38% Lt. Ditch Grade

-0.500%

+1.601%

+20 Lt.
939.22

-0.20% Lt. Ditch Grade

+1.30% Rt. Ditch Grade

-0.30% Rt.
Ditch Grade

+25 Rt.
937.78

+50 Rt.
935.51

+0.40% Rt. Ditch Grade

955 950 945 940 935 930 925 920

Lt: Ditch Grade | Ditch Grade | Ditch Grade | Ditch Grade

Rt: Ditch Grade | Ditch Grade | Ditch Grade

941.19 941.03 940.88 940.73 940.57 940.42 940.26 940.11 939.95 939.80 939.64 939.49 939.34 939.20 939.09 939.00 938.95 938.93 938.94 938.98 939.04 939.14 939.26 939.42 939.60 939.80 939.99 940.15 940.29 940.41 940.51 940.58 940.63 940.65 940.65 940.63 940.59 940.52 940.43 940.32 940.19 940.09 940.01 939.97 939.96 939.98 940.04 940.12 940.24 940.40 940.59 940.81 941.06 941.34 941.66 942.01 942.40 942.78 943.15 943.49

4085 4086 4087 4088 4089 4090 4091 4092 4093 4094 4095 4096 4097 4098 4099

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.13

9:37:59 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

Sta. 1100+10, 424' Lt
30" X 70' Conc Pipe
D.A. = 5 Ac - Median
(Remove)

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 1107+22, 142' Lt
42" X 75' Conc Pipe
D.A. = 12 Ac - Median
(Remove)

WB I-80 to SB I-235
RAMP G (235G)

PC Sta 4102+10.95

ST Sta 4

Equation:
Sta. 4100+06.91 WB I-80
=Sta. 38598+80.53 RAMP G

WB I-80 (ML080W)

(Remove)

(Remove)

Curve Data
Δ = 17° 22' 12.85" (LT)
T = 714.90
L = 1,418.83
R = 4,680.00
E = 54.29
e = 4.0%
L = 300
x = 188
DS = 70mph

PI Sta 4109+25.85

0 50 FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 18

MAINLINE
WESTBOUND I-80

VPI +75.000
Elv 947.20
K = 250
Len 600.00 ft
DS = 70mph

VPI +25.000
Elv 942.00
K = 183
Len 300.00 ft
DS = 70mph

PROPOSED PGL

+1.601%

-0.800%

+0.841%

EXIST. GROUND

+66 Lt.
938.72

+40 Lt.
940.44

-3.80%

+70 Lt.
939.30

Ditch Grade

-0.30% Rt. Ditch Grade

+35 Rt.
935.65

+0.50% Rt. Ditch Grade

-1.28% Lt. Ditch Grade

Vari. - See Cross Section

D.G.

Ditch Grade

Ditch Grade

Ditch Grade

Ditch Grade

Lt

Rt

960 955 950 945 940 935 930 925

4100 4101 4102 4103 4104 4105 4106 4107 4108 4109 4110 4111 4112 4113 4114

943.80 944.09 944.35 944.59 944.80 944.99 945.15 945.29 945.40 945.49 945.55 945.59 945.60 945.59 945.55 945.49 945.40 945.29 945.15 944.99 944.80 944.60 944.40 944.20 944.00 943.80 943.60 943.40 943.20 943.02 942.87 942.75 942.67 942.63 942.62 942.64 942.69 942.78 942.91 943.07 943.26 943.47 943.68 943.89 944.10 944.31 944.52 944.73 944.94 945.15 945.36 945.57 945.78 945.99 946.20 946.41 946.62 946.83 947.04 947.25

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.14

9:38:01 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 1117+76
Skew 45
4' X 4' X 400' RCB
D.A. = 98 Ac - R
(U.A.C.)

Sta. 1125+49
24" X 123' Conc Pipe
(U.A.C)

Sta. 1128+24
18" X 127'
Conc Pipe
(U.A.C)

WB I-80 to SB I-235
RAMP G (235G)

Sta. 4128+95.91 (WB I-80)
Sta. 5128+03.54, 15.00' LT (ML I-80)
End WB I-80 Construction

F03

Sta. 4126+45.00
Barrier Intake SW-547
w/24" x 154' DR-601

PT Sta 4116+29.78

Sta. 4122+37.00, 15.00' RT
Begin Barrier

4115 4120 4125

WB I-80 (ML080W)

POT Sta 4128+95.91

I-80
(ML080)

(Remove)

EB I-80 (ML080E)

Sta. 4118+38.39
Extend Lt. w/5' X 4' x 64' RCB
Skew = 45° Lt. Bk.
F.L. = Exist. Lt. 919.50
Proposed Inlet Lt. 920.70

SB I-35 to EB I-80
RAMP F (235F)

0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 18

MAINLINE WESTBOUND I-80

PROPOSED PGL

+0.841%

-0.700%

EXIST. GROUND

+80 Rt.
941.38

+0.50% Rt. Ditch Grade

VPI +25.000
Elv 949.57
K = 260
Len 400.00 ft
DS = 70mph

STA. 4128+95.91
END WB I-80 CONSTRUCTION
ELEV. 941.37

950 945 940 935 930 925 920 915

+00 Lt.
922.75

+75 Lt.
921.80

+96 Lt.
923.57

-1.28% Lt. Ditch Grade

+0.50% Lt. Ditch Grade

-0.20% Lt. Ditch Grade

+0.80% Lt. Ditch Grade

+70 Lt.
920.10

Lt Ditch Grade Ditch Grade Ditch Grade Ditch Grade

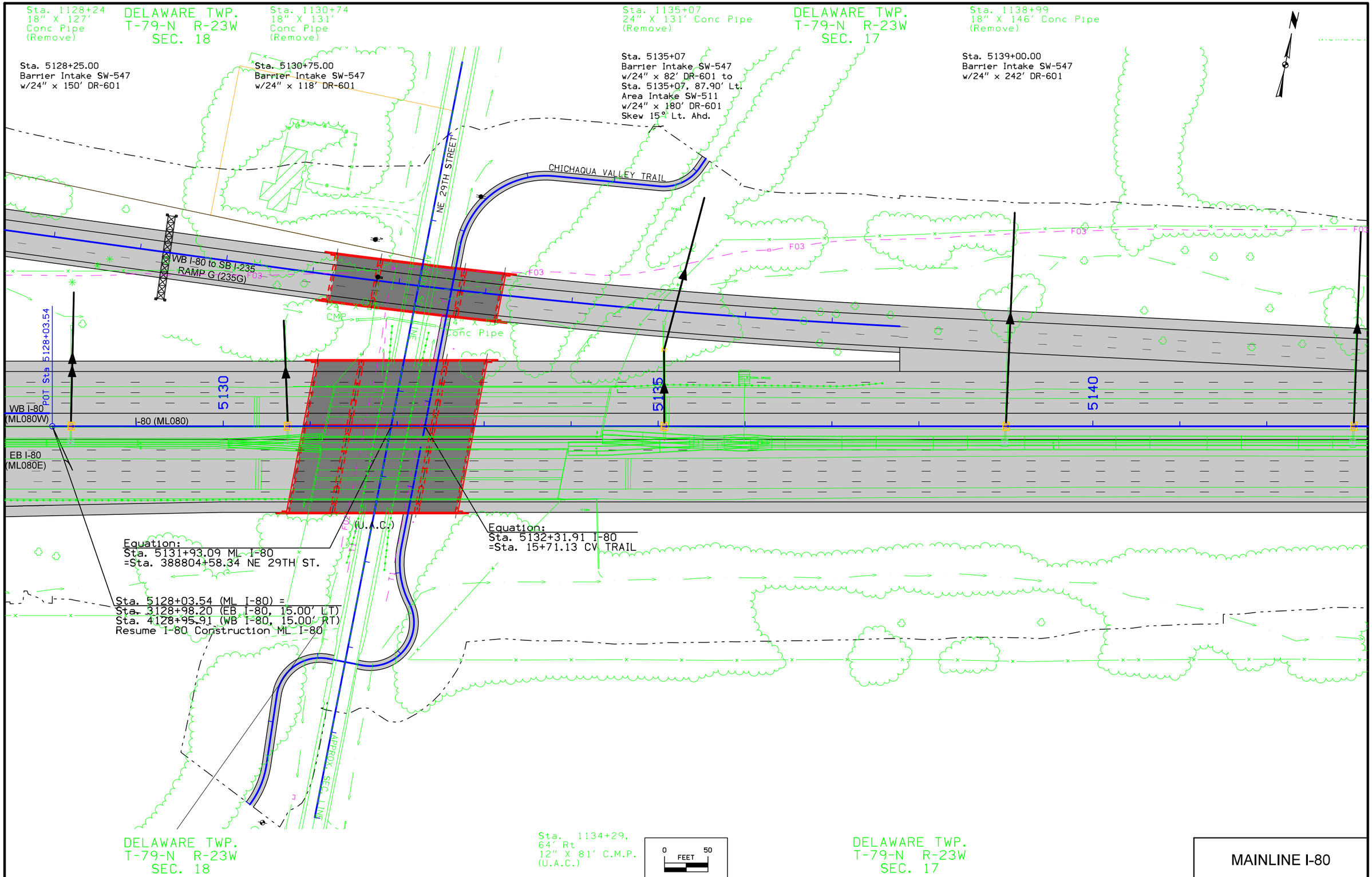
Rt Ditch Grade Vari. - See Cross Section

947.46 947.67 947.89 948.08 948.26 948.41 948.53 948.63 948.71 948.77 948.80 948.80 948.78 948.74 948.67 948.58 948.47 948.33 948.17 947.99 947.82 947.64 947.47 947.29 947.12 946.94 946.77 946.59 946.42 946.24 946.07 945.89 945.72 945.54 945.37 945.19 945.02 944.84 944.67 944.49 944.32 944.14 943.97 943.79 943.62 943.44 943.27 943.09 942.92 942.74 942.57 942.39 942.22 942.04 941.87 941.69 941.52

4115 4116 4117 4118 4119 4120 4121 4122 4123 4124 4125 4126 4127 4128 4129

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.15

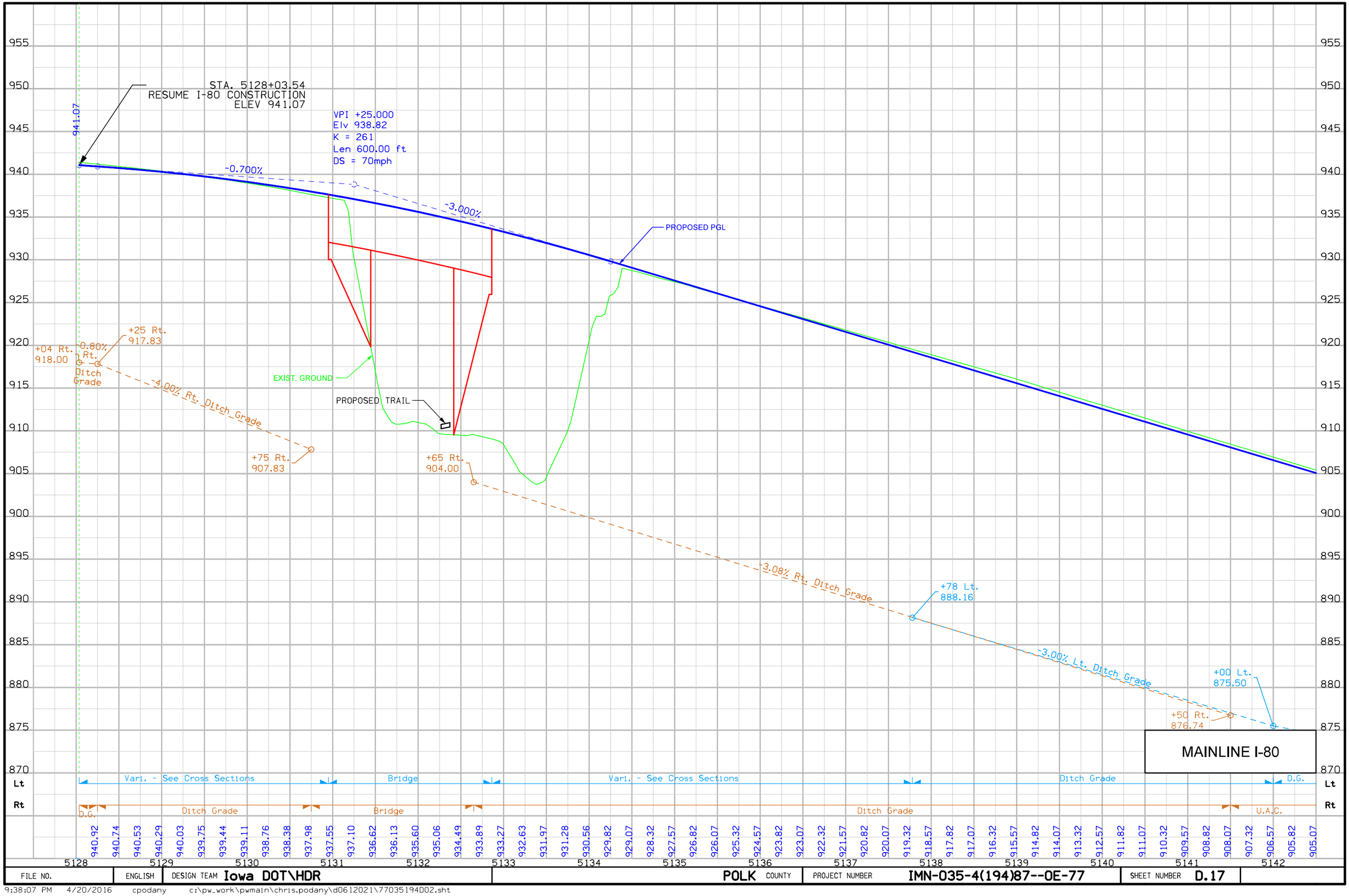
9:38:03 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht



MAINLINE I-80

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.16

9:38:05 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.17

9:38:07 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

Sta. 1142+98
18" X 150'
Conc Pipe
(Remove)

DELAWARE TWP.
T-79-N R-23W
SEC. 17

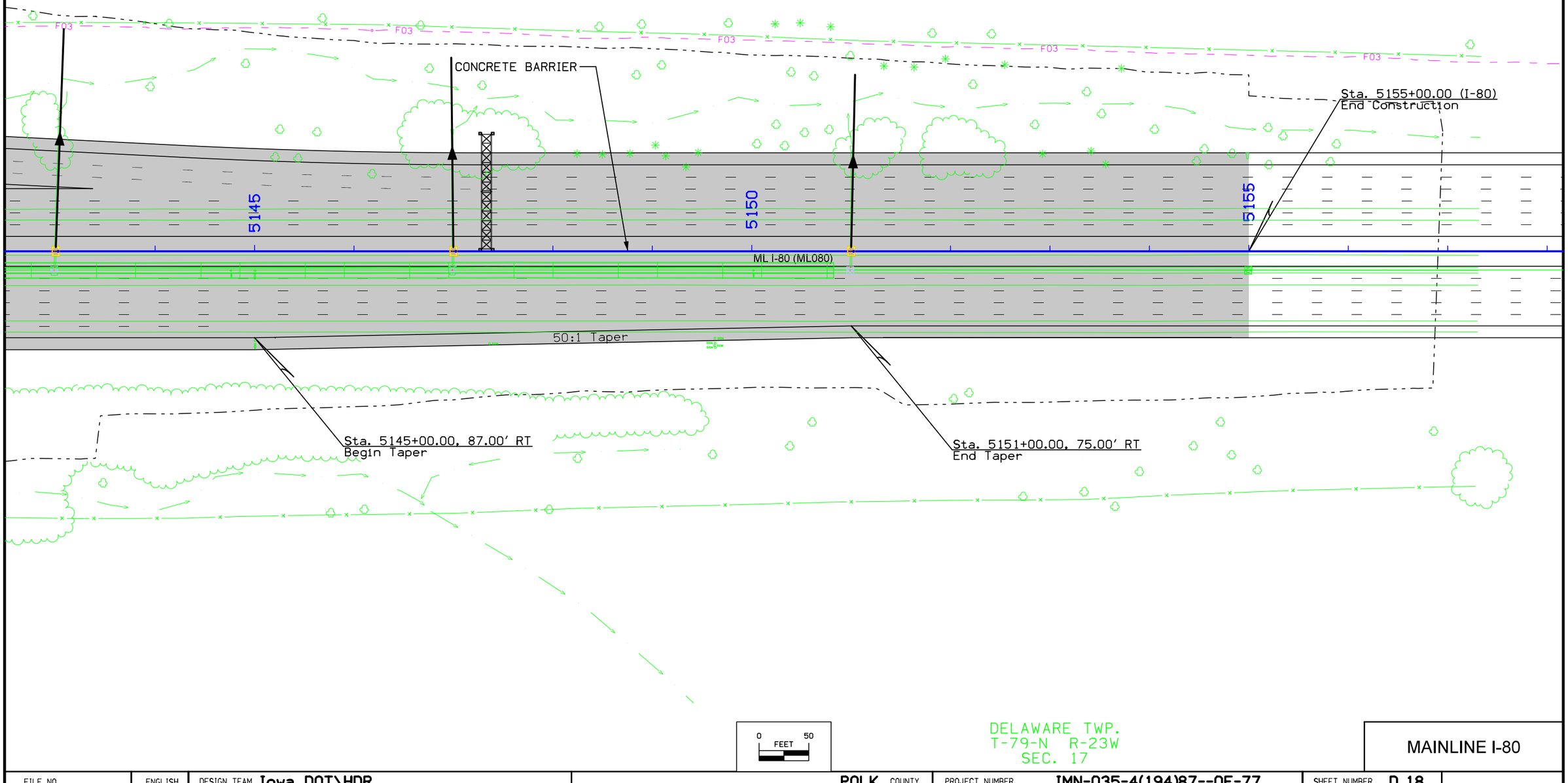
Sta. 1146+99
18" X 132' Conc Pipe
(Remove)

Sta. 1150+99
18" X 116' Conc Pipe
(Remove)

Sta. 5143+00.00
Barrier Intake SW-547
w/24" x 220' DR-601

Sta. 5147+00.00
Barrier Intake SW-547
w/24" x 190' DR-601

Sta. 5151+00.00
Barrier Intake SW-547
w/24" x 174' DR-601



0 FEET 50

DELAWARE TWP.
T-79-N R-23W
SEC. 17

MAINLINE I-80

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.18

9:38:08 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

935 930 925 920 915 910 905 900 895 890 885 880 875 870 865 860 855 850

-3.000%

STA. 5155+00.00
END CONSTRUCTION
ELEV 867.57

867.57

-1.80% Lt. Ditch Grade

+00 Lt.
852.10

MAINLINE I-80

Ditch Grade

Lt

Rt

U.A.C.

904.32 903.57 902.82 902.07 901.32 900.57 899.82 899.07 898.32 897.57 896.82 896.07 895.32 894.57 893.82 893.07 892.32 891.57 890.82 890.07 889.32 888.57 887.82 887.07 886.32 885.57 884.82 884.07 883.32 882.57 881.82 881.07 880.32 879.57 878.82 878.07 877.32 876.57 875.82 875.07 874.32 873.57 872.82 872.07 871.32 870.57 869.82 869.07 868.32 867.57

5143 5144 5145

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.19

9:38:10 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

Sta. 1064+74
24" X 93' Conc Pipe

Sta. 1066+75
42" X 226 Conc Pipe
D.A. = 52 Ac - R

SAYLOR TWP.
T-79-N R-24W
SEC. 13

Sta. 8470+00.00
Install 66" x 140' DR-601
Skew = 15° Lt. Ahd.
F.L. = Lt. 922.00
Rt. 920.50

Sta. 1075+95.35
54" X 45" Conc Pipe
W/ 54" Conc Pipe Extension
D.A. = 89 Ac - R-H

DELAWARE TWP.
T-79-N R-23W
SEC. 18

WB I-80 (ML080W)

EB I-80 (ML080E)

PI Sta 8466+93.06

NB I-35 (ML035N)

8465

8470

8475

PC Sta 8464+19.42

PT Sta 8469+64.19

PC Sta 8473+48.85

NE 22ND STREET (By Others)

(Remove)

(Remove)

(Remove)

(Remove By Others)

Curve Data
Δ = 46° 54' 31.73" (LT)
T = 577.04
L = 1,088.89
R = 1,330.00
E = 119.79
e = 6.0%
L = 240
x = 80
DS = 60mph

Sta. 8464+19.42 (NB I-35)
Sta. 3064+19.42, 100.00' RT (EB I-80)
Begin Construction

Curve Data
Δ = 13° 34' 14.76" (RT)
T = 273.66
L = 544.77
R = 2,300.00
E = 16.22
e = 5.2%
L = 208
x = 80
DS = 60mph

Equation:
Sta. 8473+98.99 NB I-35
=Sta. 2040+08.19 NE 22ND ST.

PI Sta 8479+25.90

EB I-80 to SB I-235 RAMP B (235B)

PROPOSED RETAINING WALL

Sta. 1077+28
36" X 66 Conc Pipe
D.A. = 19 Ac - Median

Sta. 1072+61, 123' Rt
48" X 320' Conc Pipe
D.A. = 15 Ac - R-H

SAYLOR TWP.
T-79-N R-24W
SEC. 13

0 FEET 50

DELAWARE TWP.
T-79-N R-23W
SEC. 18

MAINLINE
NORTHBOUND I-35

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.20

9:38:12 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

985 980 975 970 965 960 955 950 945 940 935 930 925 920 915 910 905 900

934.61

STA. 8464+19.42
BEGIN CONSTRUCTION
ELEV. 934.61

VPI +75.000
Elv 930.50
K = 148
Len 700.00 ft
DS = 60mph

NE 22ND ST. BRIDGE
(By Others)

PROPOSED PGL

EXIST. GROUND

-0.740%

+4.000%

+22 Rt.
935.03

+19 Rt.
922.28

-4.90% Rt. Ditch Grade

+50 Rt.
913.06

+2.27% Rt. Ditch Grade

+00 Rt.
921.00

+3.32% Rt. Ditch Grade

MAINLINE
NORTHBOUND I-35

Lt See Eastbound I-80 Right Ditch

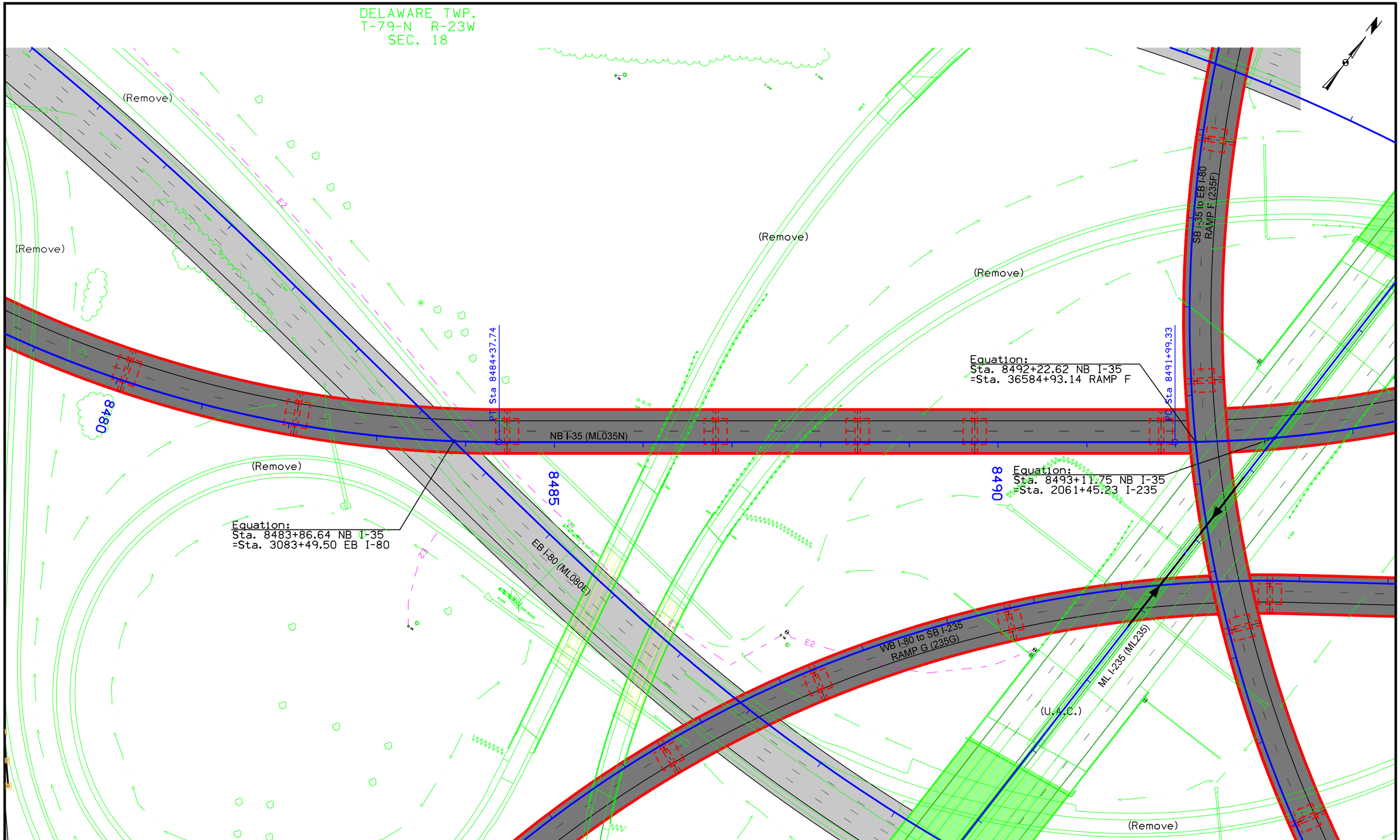
Rt Ditch Grade Vari. - See Cross Section

934.57	934.38	934.20	934.01	933.83	933.64	933.46	933.27	933.09	932.92	932.80	932.72	932.69	932.69	932.74	932.83	932.96	933.14	933.35	933.61	933.91	934.26	934.64	935.07	935.54	936.06	936.61	937.21	937.85	938.53	939.26	940.03	940.84	941.69	942.58	943.52	944.50	945.50	946.50	947.50	948.50	949.50	950.50	951.50	952.50	953.50	954.50	955.50	956.50	957.50	958.50	959.50	960.50	961.50	962.50	963.50	964.50	965.50

8464 8465 8466 8467 8468 8469 8470 8471 8472 8473 8474 8475 8476 8477 8478

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.21

9:38:13 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht



MAINLINE
NORTHBOUND I-35

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.22

9:38:15 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

PROPOSED RAMP F BRIDGE

VPI +25,000
Elv 1,024.50
K = 262
Len 2,100.00 ft
DS = 60mph

+4.000%

PROPOSED PGL

EXIST. GROUND

PROPOSED EB I-80

Bridge

Bridge

Bridge

Lt

Rt

MAINLINE
NORTHBOUND I-35

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.23

9:38:17 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

SB I-35 to EB I-80
RAMP F (235F)

WB I-80 (ML080W)

ML I-235 (ML235)

(Remove)

(U.A.C.)

(Remove)

PT Sta 8505+89.13

NB I-35 (ML035N)

8495

8500

8505

(Remove)

(U.A.C.)

Equation:
Sta. 8497+94.95 NB I-35
=Sta. 4095+44.10 WB I-80

WB I-80 to SB I-235
RAMP G (235G)

PT Sta 8499+65.23

WB I-80 to NB I-35
RAMP A (235A)

Curve Data
Δ = 59° 52′ 18.89″ (LT)
T = 765.89
L = 1,389.80
R = 1,330.00
E = 204.76
e = 6.0%
L = 240
x = 80
DS = 60mph

0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 18

MAINLINE
NORTHBOUND I-35

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.24

9:38:19 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

PROPOSED PGL

-4.000%

EXIST. GROUND

PROPOSED WB I-80

+85 Rt.
952.54

+85 Lt.
952.23

-0.50% Lt. Ditch Grade

-1.36% Rt. Ditch Grade

MAINLINE
NORTHBOUND I-35

Bridge

Ditch Grade

Lt

Rt

| 1,003.49 | 1,003.45 | 1,003.39 | 1,003.31 | 1,003.20 | 1,003.07 | 1,002.91 | 1,002.74 | 1,002.53 | 1,002.31 | 1,002.06 | 1,001.78 | 1,001.49 | 1,001.16 | 1,000.82 | 1,000.45 | 1,000.06 | 999.64 | 999.20 | 998.74 | 998.25 | 997.74 | 997.20 | 996.64 | 996.06 | 995.45 | 994.82 | 994.16 | 993.49 | 992.78 | 992.06 | 991.31 | 990.53 | 989.74 | 988.91 | 988.07 | 987.20 | 986.31 | 985.39 | 984.45 | 983.49 | 982.50 | 981.50 | 980.50 | 979.50 | 978.50 | 977.50 | 976.50 | 975.50 | 974.50 | 973.50 | 972.50 | 971.50 | 970.50 | 969.50 | 968.50 | 967.50 | 966.50 | 965.52 | 964.58 |
|---|---|---

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 2083+12.47
24" X 165'
Conc Pipe
D.A. = 0.6 Ac - R

Sta. 2084+98.30
24" X 159'
Conc Pipe
D.A. = 24 Ac - R

DELAWARE TWP.
T-79-N R-23W
SEC. 17

(U.A.C.)

(Remove)

ML I-235 (ML235)

SB I-35 (ML035S)

SB I-35 to EB I-80
RAMP F (235F)

F03

NE 54TH AVENUE
(By Others)

APPROX. SEC. LINE

NB I-35 (ML035N)

8510

8515

8520

WB I-80 to NB I-35
RAMP A (235A)

Equation:
Sta. 8417+05.64 NB I-35
=Sta. 2237+18.96 NE 54TH AVE.

Rt

Sta. 8512+64.00
Install 24" x 270' DR-601
Skew = 22° Lt. Ahd.
F.L. = Lt. 943.40
Rt. 939.00

DELAWARE TWP.
T-79-N R-23W
SEC. 18

0 50
FEET

Sta. 8518+50.00
Install 42" x 140' DR-601
Skew = 0° Lt. Ahd.
F.L. = Lt. 951.32
Rt. 949.96

DELAWARE TWP.
T-79-N R-23W
SEC. 17

MAINLINE
NORTHBOUND I-35

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.26

9:38:22 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

EXIST. GROUND

PROPOSED PGL

VPI +00.000
Elv 953.50
K = 144
Len 650.00 ft
DS = 60mph

-4.000%

+0.512%

+0.512%

+00 Lt.
950.16

-2.60% Lt. Ditch Grade

-1.36% Rt.
Ditch Grade

+70 Rt.
945.94

+00 Lt.
944.96

-0.80% Lt. Ditch Grade

+00 Lt.
943.36

+1.87% Lt.
Ditch Grade

+00 Lt.
945.23

+3.10% Lt. Ditch Grade

+10 Lt.
954.84

+1.50% Rt.
Ditch Grade

+96 Rt.
949.90

-1.77% Lt.
Ditch Grade

-1.00% Rt. Ditch Grade

+00 Rt.
951.46

+50 Rt.
949.96

+50 Lt.
952.32

+1.50%
Lt. DG

+00 Lt.
953.07

+0.68% Rt. Ditch Grade

MAINLINE
NORTHBOUND I-35

	D.G.	Ditch Grade	Ditch Grade	Ditch Grade	Ditch Grade	D.G.	5.0 Ft Ditch
Lt							
Rt	Ditch Grade	Vari. - See Cross Section		Ditch Grade	Ditch Grade	Ditch Grade	

962.84	962.04	961.28	960.56	959.89	959.25	958.67	958.12	957.62	957.16	956.75	956.38	956.05	955.77	955.53	955.33	955.17	955.06	955.00	954.97	954.99	955.06	955.16	955.29	955.42	955.55	955.67	955.80	955.93	956.06	956.19	956.31	956.44	956.57	956.70	956.83	956.95	957.08	957.21	957.34	957.47	957.59	957.72	957.85	957.98	958.11	958.23	958.36	958.49	958.62	958.75	958.87	959.00	959.13	959.26	959.39	959.51	959.64	959.77	959.89
8509				8510					8511						8512					8513						8514						8515						8516						8517						8518						8519						8520						8521						8522						8523					

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.27

9:38:23 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 17

Sta. 2102+34
24" X 84' Conc. Pipe

ML I-235 (ML235)

ML I-235 (ML235)

NB I-35 (ML035N)

F03

F03

25:1 Taper

8525

SEE SHEET D.35 FOR
STORM SEWER INFORMATION

8530

PC Sta 8531+09.25

8535

PI Sta 8536+86.32

F03

F03

F03

Sta. 8526+75.00, 24.00' RT
Begin Taper

Sta. 8529+75.00, 12.00' RT
End Taper

Sta. 8532+36.33 (NB I-35)
Sta. 2099+16.25, 97.33' RT (I-235)
End Construction

Curve Data
Δ = 5° 30' 22.71" (LT)
T = 577.06
L = 1,153.24
R = 12,000.00
E = 13.87

DELAWARE TWP.
T-79-N R-23W
SEC. 17

0 FEET 50

MAINLINE
NORTHBOUND I-35

975
970
965
960
955
950
945
940

VPI +25.000
Elv 961.82
K = 299
Len 800.00 ft
DS = 60mph

+0.512%

-2.160%

950.75

STA. 8532+37.46
END CONSTRUCTION
ELEV. 950.75

+0.68% Rt. Ditch Grade

+40 Rt.
954.62

PROPOSED PGL

+55 Rt.
952.45

-2.00% Rt. Ditch Grade

+37 Rt.
944.80

EXIST. GROUND

Lt 5.0 Ft Ditch — Vari. - See Cross Sections

Rt Ditch Grade — 5.0 Ft Ditch — Ditch Grade

959.98 960.06 960.12 960.15 960.16 960.16 960.13 960.08 960.01 959.92 959.80 959.67 959.52 959.34 959.15 958.93 958.69 958.44 958.16 957.86 957.54 957.19 956.83 956.45 956.04 955.62 955.17 954.71 954.22 953.71 953.18 952.64 952.10 951.56 951.02

8524 8525 8526 8527 8528 8529 8530 8531 8532 8533

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.28

9:38:25 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 2067+29, 520' Lt
24" X 37' CMP

Sta. 9456+91.63 (SB I-35)
Sta. 4079+56.46, 96.36' LT (WB I-80)
Begin Construction

PROPOSED RETAINING WALL

Equation:
Sta. 9467+91.73 SB I-35
=Sta. 36576+35.62 RAMP F

PI Sta 9456+40.62

PT Sta 9462+21.89

SB I-35 to EB I-80
RAMP F (235F)

(Remove)

WB I-80 (ML080W)

SB I-35 (ML035S)

Curve Data
Δ = 22° 29' 33.05" (LT)
T = 596.53
L = 1,177.71
R = 3,000.00
E = 58.73
e = 4.4%
L = 176
x = 80
DS = 60mph

Curve Data
Δ = 45° 52' 45.39" (LT)
T = 804.14
L = 1,521.41
R = 1,900.00
E = 163.16
e = 5.6%
L = 224
x = 80
DS = 60mph

PI Sta 9470+25.98

Sta. 1085+67, 481' Lt
30" X 205'
Steel Pipe
D.A. = 1 Ac - Median

0 FEET 50

DELAWARE TWP.
T-79-N R-23W
SEC. 18

MAINLINE
SOUTHBOUND I-35

EXIST. GROUND

STA. 9456+91.63
BEGIN CONSTRUCTION
ELEV. 939.08

939.08

+0.100%

+2.800%

+2.800%

-1.588%

PROPOSED PGL

VPI +25.000
Elv 939.31
K = 148
Len 400.00 ft
DS = 60mph

VPI +00.000
Elv 966.61
K = 160
Len 700.00 ft
DS = 60mph

+65 Lt.
958.03

-0.50% Lt. Ditch Grade

+10 Rt.
935.31

+2.13% Rt. Ditch Grade

+00 Rt.
947.88

+0.50% Rt. Ditch Grade

Lt Wall 5.0 Ft Ditch Ditch Grade

Rt Vari. - See Cross Section Ditch Grade Ditch Grade

939.09 939.11 939.16 939.24 939.38 939.55 939.76 940.02 940.32 940.66 941.04 941.47 941.94 942.45 943.00 943.59 944.23 944.91 945.61 946.31 947.01 947.71 948.41 949.11 949.81 950.51 951.21 951.91 952.61 953.31 954.01 954.71 955.41 956.11 956.81 957.49 958.13 958.73 959.30 959.82 960.30 960.75 961.16 961.52 961.85 962.14 962.39 962.60 962.77 962.90 963.00 963.05 963.06 963.04 962.97 962.87 962.73 962.55 962.33

9457 9458 9459 9460 9461 9462 9463 9464 9465 9466 9467 9468 9469 9470 9471

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.29

9:38:26 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 9473+96.66
Install 52" x 32" x 128' Arch DR-601
Skew = 25° Ahd.
F.L. = Lt. 950.24
Rt. 949.67

SB I-35 to EB I-80
RAMP F (235F)

PT Sta 9477+43.25

9475

9480

9485

Equation:
Sta. 9484+12.14 SB I-35
=Sta. 2233+23.68 NE 54TH AVE.

Sta. 9484+48.83 SB I-35
Sta. 2084+48.83 I-235
End Construction

Sta. 2084+98.30
24" X 159'
Conc Pipe
D.A. = 24 Ac - R

NE 54TH AVE
(By Others)

DELAWARE TWP.
T-79-N R-23W
SEC. 17

SB I-35 (ML035S)

(Remove)

(U.A.C.)

ML I-235 (ML235)

Sta. 2077+05
24" X 111' Conc Pipe

0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 2083+12.47
24" X 165'
Conc Pipe
D.A. = 0.6 Ac - R

MAINLINE
SOUTHBOUND I-35

VPI +50.000
Elv 956.29
K = 137
Len 300.00 ft
DS = 60mph

VPI +50.000
Elv 959.29
K = 200
Len 250.00 ft
DS = 60mph

VPI +00.000
Elv 957.66
K = 184
Len 250.00 ft
DS = 60mph

EXIST. GROUND

PROPOSED PGL

NE 54TH ST. BRIDGE
(By Others)

STA. 9484+48.83
END CONSTRUCTION
ELEV. 958.72

958.72

-1.588%

+0.600%

-0.650%

+0.710%

-0.50% Lt.
Ditch Grade

+50 Lt.
956.61

-3.64% Lt.
Ditch Grade

+40 Rt.
953.46

+4.73% Rt.
Ditch Grade

+0.50% Rt. Ditch Grade

+35 Rt.
955.43

+0.30% Lt. Ditch Grade

+0.50% Rt. Ditch Grade

+60 Rt.
949.68

+25 Lt.
950.23

+55 Lt.
951.22

+50 Lt.
953.00

+4.50% Lt.
Ditch Grade

-0.20% Lt. Ditch Grade

+15 Lt.
955.93

+49 Lt.
955.86

| | | |

DELAWARE TWP.
T-79-N R-23W
SEC. 19

Sta. 2020+27
24" X 89' Conc. Pipe
(U.A.C)
Extend Existing 24" RCP
w/24" x 34' DR-621

Sta. 2024+29
30" X 215' Conc Pipe
D.A. = 10 Ac - R
(U.A.C)
Extend Existing 30" RCP
~~w/30" x 48' Lt.~~
& 30" x 46' Rt. DR-621

Sta. 2018+40.00 (I-235)
Begin Widening

WB I-80 to SB I-235
RAMP G (235G)

(U.A.C.)

ML I-235 (ML235)

(U.A.C.)

2015 2020 2025

0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 19

MAINLINE I-235

960 955 950 945 940 935 930 925 Lt Rt

EXIST. GROUND

0 Lt.
8.20

+40 Rt.
927.03

+1.40% Lt. Ditch Grade

+50 Lt.
931.70

+1.83% Rt. Ditch Grade

-0.20% Lt. Ditch Grade

+30 Rt.
937.80

+1.40% Rt. Ditch Grade

+50 Lt.
930.90

+1.30% Lt. Ditch Grade

+00 Lt.
932.85

-0.20% Lt. Ditch Grade

Ditch Grade
Ditch Grade
Ditch Grade
Ditch Grade
Ditch Grade
Ditch Grade

2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.31

9:38:34 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 19

Sta. 2030+76
24" X 236'
Conc Pipe
D.A. = 1/4 Ac - Ditch
(U.A.C)

Sta. 2030+13,
58' Lt.
12" X 70'
C.M.P.

Sta. 2032+31,
59' Lt
12" X 74'
C.M.P.
(U.A.C)

Extend Existing 12" CMP
w/12" x 152' Lt. DR-621

Sta. 2035+56
36" X 294' Conc Pipe
D.A. = 16 Ac - R
(U.A.C)

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 2040+87, 86' Lt.
12" X 42' C.M.P.
(Remove)

WB I-80 to SB I-235
RAMP G (235G)

Sawcut

(Remove)

(U.A.C.)

ML I-235 (ML235)

2030

2035

2040

(U.A.C.)

Equation:
Sta. 2031+20.45 I-235
=Sta. 1181+61.24 NE BROADWAY AVE.

Sta. 2036+27.46, 51.00' RT
Stop Shoulder Widening

NE BROADWAY AVE

Extend Existing 12" CMP
w/12" x 32' Rt. DR-621

Extend Existing 12" CMP
w/12" x 28' Rt. DR-621

DELAWARE TWP.
T-79-N R-23W
SEC. 19

Sta. 2030+12,
58' Rt.
12" x56'
C.M.P. (U.A.C.)

Sta. 2031+62
24" X 262'
Conc Pipe
(U.A.C.)

Sta. 2031+28,
58' Rt
12"X 72'
C.M.P. (U.A.C.)

0 FEET 50

Sta. 2037+17
18" X 127'
Conc. Pipe
(U.A.C)

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 2040+84,
94' Rt.
12" X 35'
C.M.P. (U.A.C)

MAINLINE I-235

EXIST. GROUND

+20 Rt.
946.06

+1.40% Rt. Ditch Grade

PROPOSED NE BROADWAY AVENUE

+00 Rt.
943.12

-1.12% Rt. Ditch Grade

+10 Rt.
939.65

+25 Rt.
939.87

+1.48% Rt. Ditch Grade

-0.20% Lt. Ditch Grade

+00 Lt.
932.45

+43 Lt.
932.54

+0.20% Lt. Ditch Grade

D.G. D.G. Vari. - See Cross Sections

Lt

Rt

Ditch Grade Bridge Ditch Grade D.G.

970 965 960 955 950 945 940 935

2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.32

9:38:35 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

Sta. 2065+90
42" X 212' Conc. Pipe
D.A. = 3 Ac - Median
(U.A.C)

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 2077+05
24" X 111' Conc Pipe
(U.A.C)
Extend Existing 24" RCP
w/24" x 84" DR-621

Sta. 2067+05,
63' Lt
12" X 83' C.M.P.
(U.A.C)

Sta. 2067+19.42, 51.00' LT (I-235)
Resume Widening/Taper

Sta. 2074+99.42, 12.00' LT (I-235)
End Taper

SB I-35 (ML035S)

(Remove)

65:1 Taper

(U.A.C.)

ML I-235 (ML235)

2070

2075

2080

(U.A.C.)

Sta. 2067+05,
63' Rt
12" X 84' C.M.P.
(U.A.C)

(Remove)

Sta. 2072+51.95, 51.00' RT (I-235)
Resume Widening

Sta. 2078+11.89 (I-235)
Begin Template Correction

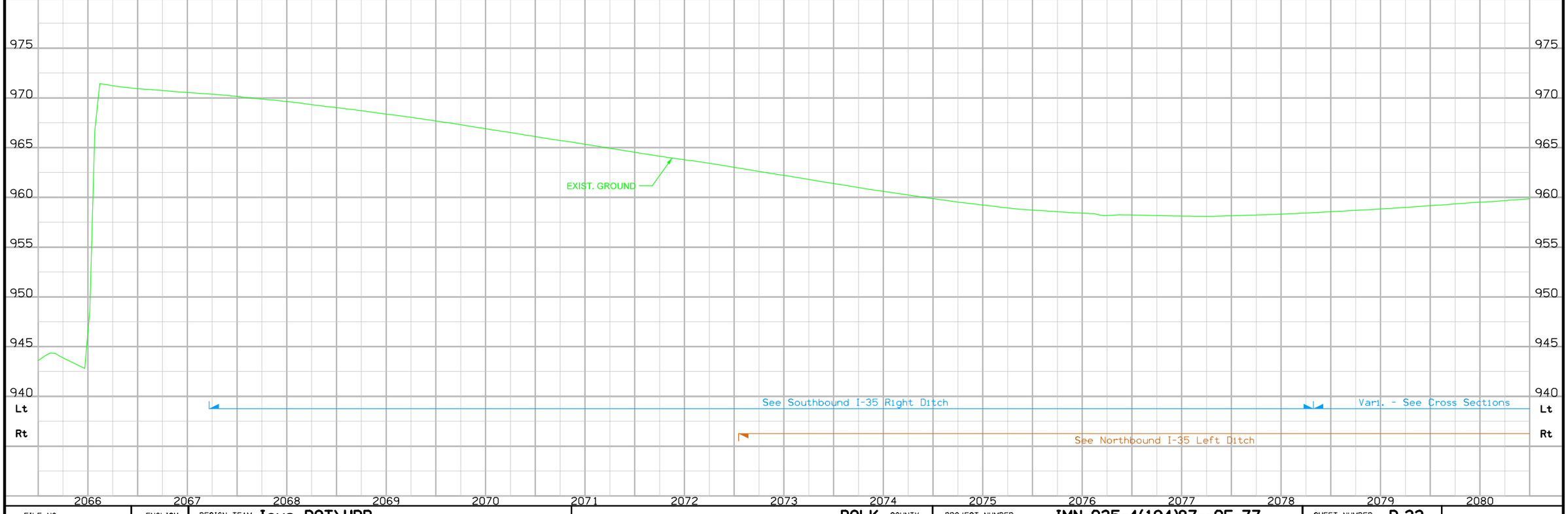
(Remove)

Sta. 2065+90.00
Extend 42" DR-622
Both Ends - 36' Lt. & 55' Rt.
F.L. = Left Side: Ex. Pipe 937.27
Proposed Outlet 936.60
Right Side: Ex. Pipe 937.78
Proposed Inlet 938.20

0 FEET 50

DELAWARE TWP.
T-79-N R-23W
SEC. 18

MAINLINE I-235



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.33

9:38:35 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 2083+13
24" X 165'
Conc Pipe
D.A. = 0.6 Ac - R
(Remove)

Sta. 2084+98
24" X 159'
Conc Pipe
D.A. = 24 Ac - R
(Remove)

DELAWARE TWP.
T-79-N R-23W
SEC. 7

Baseline I-235 SB
(For Horizontal Control Only)

SB I-35 to EB I-80
RAMP F (235F)

Sta. 2090+59.42 (SB I-235)
Sta. 2090+59.42, 15.00' LT (I-235)

SB I-35 (ML035S)

PC Sta 2091+68.42

ML I-235 (ML235)

2085

2090

2095

Sta. 2090+59.42 (NB I-235)
Sta. 2090+59.42, 15.00' RT (I-235)

Equation:
Sta. 2084+10.77 I-235
=Sta. 2234+52.53 NE 54TH AVE.

NE 54TH AVE (By Others)

Sta. 2085+26.56
Install 42" x 436' DR-601
w/Area Intake SW-511
Skew = 5° Ahd.
F.L. = Lt. 952.32
Rt. 951.32

NB I-35 (ML035N)

Baseline I-235 NB
(For Horizontal Control Only)

DELAWARE TWP.
T-79-N R-23W
SEC. 18

DELAWARE TWP.
T-79-N R-23W
SEC. 7

0 50
FEET

MAINLINE I-235

PROPOSED 54TH STREET BRIDGE
(BY OTHERS)

EXIST. GROUND

+49 Lt.
955.86

-0.20% Lt.
Ditch
Grade

+05 Lt.
955.75

+2.23% Lt.
Ditch Grade

+40 Lt.
958.76

+0.20% Lt. Ditch Grade

+15 Lt.
959.51

Vari. - See Cross Sections

D.G.

Ditch Grade

Ditch Grade

Vari. - See Cross Section

Lt

Rt

See Northbound I-35 Left Ditch

Vari. - See Cross Section

985 980 975 970 965 960 955 950

2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.34

9:38:35 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

Sta. 2096+61.00, 89.90' Rt.
Area Intake SW-512
w/24" x 78' DR-601

DELAWARE TWP.
T-79-N R-23W
SEC. 7

Sta. 2102+34
24" X 84' Conc. Pipe
(U.A.C)

SB I-35 to EB I-80
RAMP F (235F)

Baseline I-235 SB
(For Horizontal Control Only)

Sta. 2109+27.97 (SB I-235)
Sta. 2109+31.19, 13.00' LT (I-235)

PT Sta 2109+31.19

Sta. 2109+31.19 (I-235)
End Template Correction
Begin Widening

ML I-235 (ML235)

NB I-35 (ML035N)

2100

PT Sta 2100+53.74

2105

2110

(U.A.C.)

(U.A.C.)

Curve Data
Δ = 13° 13' 11.22" (LT)
D = 885.31
L = 1,762.76
R = 7,639.98
E = 51.12
e = U.A.C.
DS= 70mph

Baseline I-235 NB
(For Horizontal Control Only)

F03

Sta. 2096+31.00, 69.50' Rt.
Area Intake SW-512
w/24" x 94' DR-601

0 FEET 50

DELAWARE TWP.
T-79-N R-23W
SEC. 7

Sta. 2107+00
24" X 121' Conc. Pipe
(Remove)

Sta. 2109+31.40 (NB I-235)
Sta. 2109+31.19, 13.00' RT (I-235)

Extend Existing 24" RCP
w/24" x 24' DR-621

MAINLINE I-235

960
955
950
945
940
935
930
925

+12 Lt.
944.82

+16 Rt.
946.06

-1.95% Lt. Ditch Grade

-1.96% Rt. Ditch Grade

EXIST. GROUND

+00 Lt.
933.37

+31 Rt.
926.21

Var1.-
See
Cross
Section

Ditch Grade

5.0 Ft Ditch

U.A.C.

Lt

Rt

Var1. - See Cross Section

Ditch Grade

2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.35

9:38:36 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht

Sta. 2112+52
24" x 90' Conc. Pipe
(U.A.C)
Extend Existing 24" RCP
w/24" x 98' DR-621

Sta. 165+43
24" X 109' Conc. Pipe
(U.A.C)

DELAWARE TWP.
T-79-N R-23W
SEC. 7

Sta. 2114+60.00 (I-235)
End Widening

By Others

(U.A.C.)

(U.A.C.)

ML I-235 (ML235)

2115

2120

PC Sta 2120+36.80

2125

By Others

F03 F03 F03 F03

Sta. 2114+91
64" X 586' Steel Pipe
W/6' X 6' RCB Exts
D.A. = 111 Ac - R
(U.A.C)

0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 7

MAINLINE I-235

970 965 960 955 950 945 940 935

EXIST. GROUND

U.A.C.

Lt

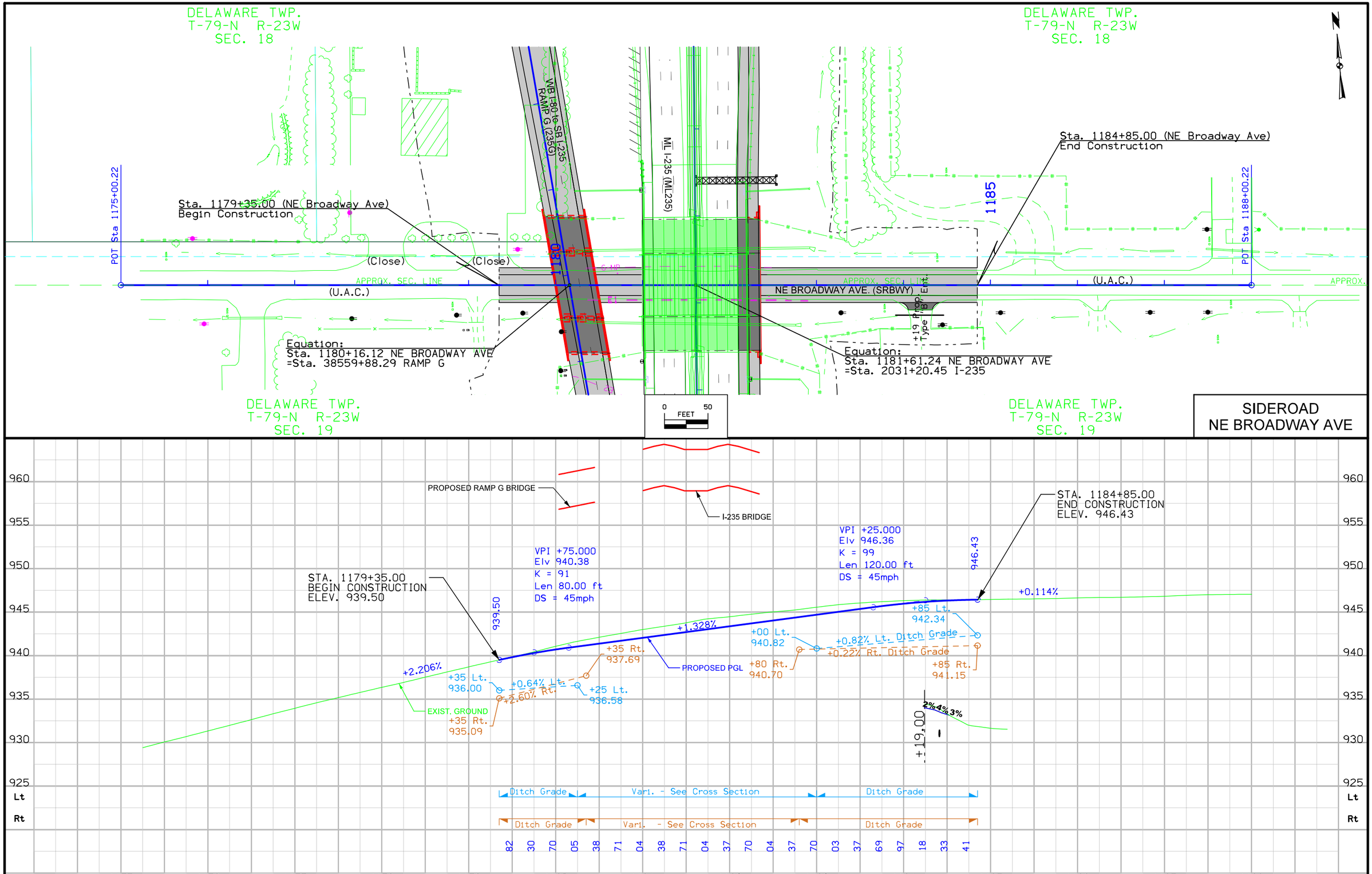
Rt

U.A.C.

2112 2113 2114 2115 2116 2117

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER D.36

9:38:38 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194D02.sht



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER E.1

10:16:27 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194E01.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

DELAWARE TWP.
T-79-N R-23W
SEC. 18

DELAWARE TWP.
T-79-N R-23W
SEC. 17

DELAWARE TWP.
T-79-N R-23W
SEC. 17

PC Sta 10+00.00
PC Sta 11+31.18
PI Sta 11+83.25
PT Sta 10+50.03
PT Sta 12+11.75
PC Sta 12+51.75
PI Sta 13+98.00
PRC Sta 13+63.51
PT Sta 14+29.94
PI Sta 13+54.41
PI Sta 10+25.55

Sta. 10+00.00 CV TRAIL
Begin Construction

Equation:
Sta. 12+31.75 CV TRAIL
=Sta. 38801+82.11 29TH ST.

Equation:
Sta. 15+71.13 CV TRAIL
=Sta. 5132+31.91 I-80

Equation:
Sta. 17+31.38 CV TRAIL
=Sta. 38632+60.79 RAMP G

PC Sta 17+82.47
PI Sta 18+73.24
PT Sta 19+29.88
PC Sta 20+52.14
PT Sta 21+05.08
PI Sta 20+81.40

Sta. 21+18.01 CV TRAIL
End Construction

(U.A.C.)
NE 29TH STREET
APPROX. SEC. LINE

ML I-80 (ML080)
WB I-80 to SB I-235
RAMP G (235G)

Curve Data

C1
Δ = 28° 39′ 57.65″ (LT)
T = 25.55
L = 50.03
R = 100.00
E = 3.21
DS = 20mph

C2
Δ = 92° 19′ 53.61″ (RT)
T = 52.08
L = 80.57
R = 50.00
E = 22.19
DS = 16mph

C3
Δ = 128° 03′ 43.35″ (LT)
T = 102.66
L = 111.76
R = 50.00
E = 64.19
DS = 16mph

C4
Δ = 38° 03′ 43.35″ (RT)
T = 34.49
L = 66.43
R = 100.00
E = 5.78
DS = 20mph

Curve Data

C5
Δ = 84° 27′ 36.42″ (RT)
T = 90.77
L = 147.41
R = 100.00
E = 35.05
DS = 20mph

C6
Δ = 60° 39′ 51.21″ (LT)
T = 29.26
L = 52.94
R = 50.00
E = 7.93
DS = 16mph

0 FEET 50

CHICHAQUA
VALLEY TRAIL

PROPOSED I-80 BRIDGE
PROPOSED RAMP G BRIDGE

STA. 10+00.00
BEGIN CONSTRUCTION
ELEV 909.53

STA. 12+18.18
STOP CONSTRUCTION
MATCH EXISTING
ELEV 908.92

STA. 12+46.51
RESUME CONSTRUCTION
MATCH EXISTING
ELEV 908.69

STA. 21+18.01
END CONSTRUCTION
MATCH EXISTING
ELEV 898.68

-0.634%
+0.500%
-0.736%
+2.940%
+0.500%
-4.844%
-1.168%

VPI +50.00
Elv 908.58
K = 88
Len 100.00 ft

VPI +00.000
Elv 907.56
K = 27
Len 100.00 ft

VPI +00.000
Elv 910.50
K = 41
Len 100.00 ft

VPI +75.000
Elv 911.88
K = 19
Len 100.00 ft

930 925 920 915 910 905 900 895
Lt
Rt

909.53 909.37 909.21 909.05 908.90 908.77 908.72 908.74 908.83 908.86 908.66 908.48 908.30 908.11 907.93 907.86 908.02 908.41 909.03 909.69 910.19 910.55 910.75 910.88 911.00 911.13 911.25 911.38 911.50 911.63 911.58 911.21 910.50 909.45 908.24 907.03 905.82 904.61 903.40 902.19 901.09 900.22 899.59 899.18 898.89

10 11 12 13 14 15 16 17 18 19 20 21

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER E.2

10:16:28 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194E01.sht

Survey Information

County: Polk
PIN: 10-77-035-010-03
Project Number: IM-035-3(194)87--13-77
Location: I-35/80/235 Interchange NE Of Des Moines(Stage 3A)
Type of Work: Grading
Project Directory: 7703501010
This Index covers SAP's 0742.2, 0742.3 and 0742.4

General Information

Measurement units for this survey are US survey feet. This survey is for phase 3 of the NE Mixmaster ramp reconstruction. This survey uses the same coordinate system as the Delaware Ave. IM-035-4(161)87--13-77 and 54th. Ave. IM-035-4(160)87--13-77 Surveys. Phase 3 surveying was accomplished by an IDOT design survey crew and 2 consulting firms. IDOT surveyed project control, mainline alignments, culvert surveys, utility survey, photo control survey and selected ground features. R.E.Y. Consultants surveyed mainline pavement and interchange ramps using mobile LiDAR. Snyder and Associates surveyed railroads. Aerial survey will also be used to create a project surface and to add other topographic features.

IDOT Design Party Personnel

John Dewey- Party Chief
Robert Mingus- Party Chief
Myron Fox- Assistant Party Chief

IDOT Date(s) of Survey

Begin Date 04/2014
End Date 09/2014

R.E.Y Engineers, Inc.
Contract No. 801AH; WO7

Date(s) of R.E.Y. Survey
June-July 2014

Snyder and Associates
Contract No. 433AF; WO 5

Date(s) of R.E.Y. Survey
Oct. 2014

Project Control Information

GPS Control from previous surveys were used as follows:
GPS PROJECT : Sap 323 & 324 STP-69-4(65)--2c-77 (2000 Survey)
STATE PLANE COORDINATE ZONE 1402 (IOWA SOUTH LAMBERT)
STATE PLANE COORDINATES HELD AT POINT G030
AVERAGE PROJECT LATITUDE = 41 40 12.05576
RESULTING RADIUS = 6363663.482 (METERS)
MEAN PROJECT ELEVATION = 285.000 (METERS)
SEA LEVEL FACTOR = 0.999955216
AVERAGE PROJECT SCALE FACTOR = 0.999982250
COMBINED FACTOR (GRID) = 0.999937467
1 / GRID = 1.000062537
VERTICAL DATUM = NAVD 88 <> HORIZONTAL DATUM = NAD 83 (1996)

GPS Control point G024 coordinates from previous surveys were used and the following points were re-observed and adjusted: G013, G025, G026 and G027. G010, G011, G029 and G030 were searched for but not found. It is presumed reconstruction has obliterated those points. Point G128 from an I-235 survey was re- observed and adjusted. Points G128 and G026 are FENO monuments. All other points are 5/8" Rebar. Two FENO monuments were added. These are points 100 and 101.
It is intended that the control included in the re-observation will be the primary control used for future survey work. The FENO monuments designated as 26,100,101 and 128 to the north, south, east and west of the interchange are constructed to hold horizontal and vertical position reasonably well. The other rebar can be used but should be verified first relative to the FENO monuments. It is anticipated additional temporary marks in the interchange will be needed at various stages as the project progresses. Those temporary marks will be established as needed relative to this control.

Alignment Information

Mainline Alignment (I-80)

The I 80 alignment is relative to the control in the metric as-built plans IM-35-3(116)85--13-77 computed from a 1994 metric I 80 survey alignment. Metric alignment points were scaled and translated to this survey coordinate system. No rotation was required. Sta 2000+00.00 was assigned to the PC of the metric I 80 curve west of the Delaware Ave. Bridge. Stationing was run ahead without station equation to the end of the alignment at the mixmaster interchange central intersection point.

This Mainline survey relates to the mainline plan stationing as follows:

CP Sta. 1024+84.88, 97.35' Lt this survey (English)
=CP Sta. 312+34.97, 29.67m Lt Project # IM-35-3(116)85—13-77 (Metric)

POT Sta. 1075+46.01, 0.04' Lt this survey (English)
=POT Sta. 327+77.59, 0.010m Lt Project # IM-35-3(116)85—13-77 (Metric)

POT Sta. 1181+51.81 this survey (English)
=POT Sta. 1181+53.0 Project # IM-80-5(145)137--13-77 (English)

Mainline Alignment (I-35)

From 2001/2002 I-35 Realignment, Project # IM-35-4(101)—13-77
The mainline alignment for this survey is a retrace of Project # IM-35-4(101)—13-77. The mainline alignment was created in centerline of median. Stationing was obtained at PI Sta. 2001+60.36 and carried ahead to PI Sta. 3100+53.44 without equation. The following PI points were used to create this CL alignment.

PI 2001+60.36 Project # IM-35-4(101)88—13-77 (not found or set)
PI 3100+53.44 Project # IM-35-4(101)88—13-77 (not found or set)

This Mainline survey relates to the mainline plan stationing as follows:

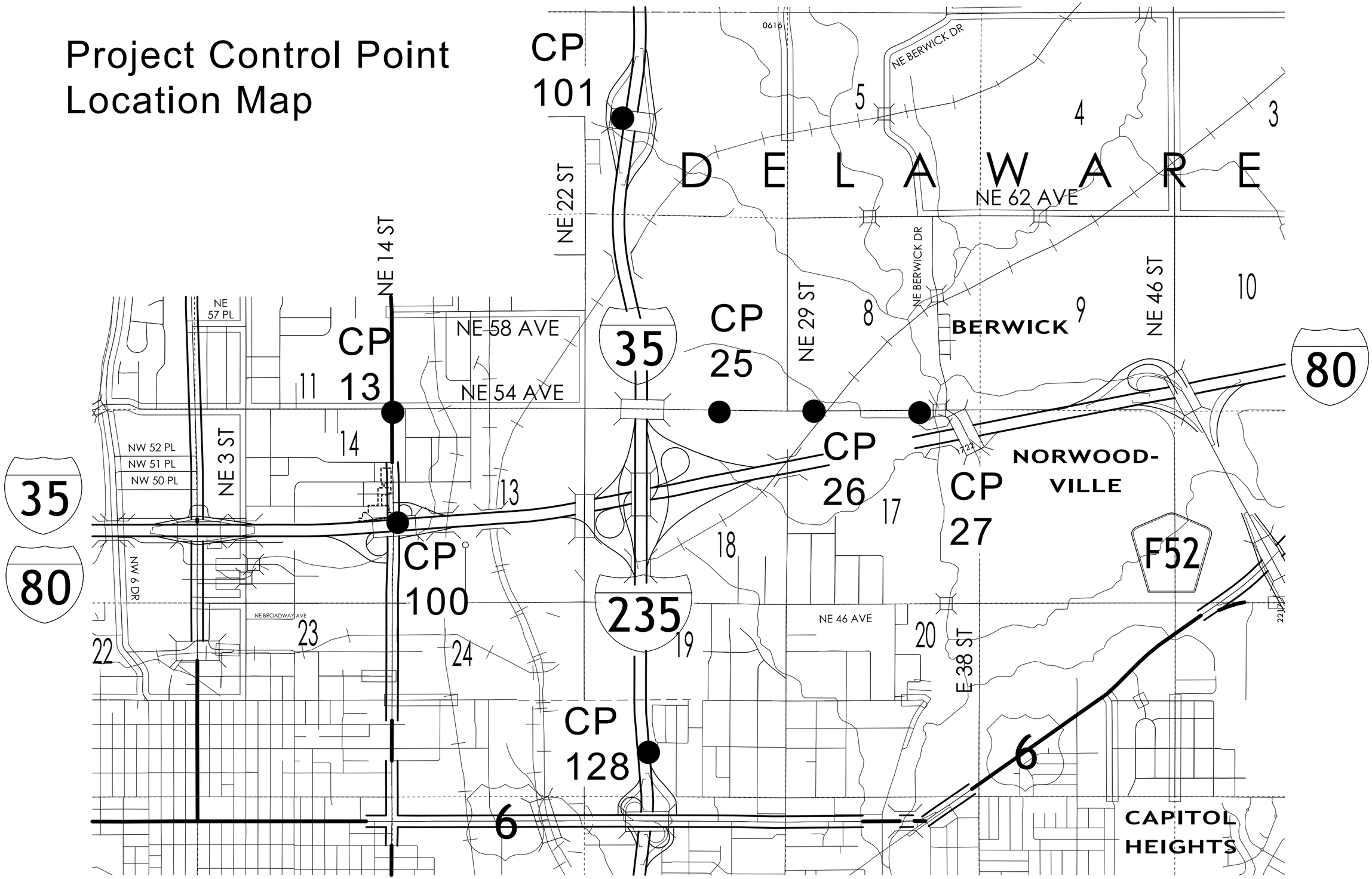
PI Sta. 2001+60.36 this survey
=PI Sta. 2001+60.36 Project # IM-35-4(101)88—13-77

PI Sta. 2100+53.74 this survey
=PI Sta. 3100+53.44 Project # IM-35-4(101)88—13-77

Project Control -FENO monuments are also Bench Marks

Name	Ground Northing (USft)	Ground Easting (USft)		
13	604251.756	1612997.613		
25	604260.796	1621907.741	939.609	
26	604283.735	1624489.54	886.7	
27	604243.29	1627372.639	838.959	
100	601242.316	1613129.094	904.541	Feno. Monument
101	612281.879	1619265.525	932.935	Feno. Monument
128	594971.978	1619970.2	933.868	Feno. Monument between top backslope and ROW fence in east ROW

Project Control Point Location Map



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER G.2

9:04:21 AM 4/18/2016 mkadlec c:\pw_work\pwmain\mark.kadlec\d0612021\77035194G01.sht

ALIGNMENT COORDINATES

101-16
10-20-09

Name	Location	Point on Tangent			Begin Spiral			Begin Curve			Simple Curve PI or Master PI of SCS			End Curve			End Spiral		
		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates	
			Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)
8011	I-80	975+28.38	600,997.23	1,608,212.44															
SUR080-1	(WEST OF CORE)							998+08.83	600,998.02	1,610,492.89	1004+20.94	600,998.23	1,611,105.00	1010+32.54	601,041.98	1,611,715.55			
8012		1024+84.88	601,145.79	1,613,164.17															
8013		1055+07.15	601,361.80	1,616,178.71															
SUR080-2								1058+28.34	601,384.75	1,616,499.08	1064+81.98	601,431.47	1,617,151.06	1071+34.02	601,556.86	1,617,792.56			
8014		1240+69.40	604,805.49	1,634,413.44															
199	I-80 EASTBOUND	3041+00.00	601,246.26	1,614,776.24															
ML080E-1								3055+07.15	601,346.84	1,616,179.78	3061+69.34	601,394.16	1,616,840.28	3068+30.86	601,492.73	1,617,495.10			
ML080E-2								3068+30.86	601,492.73	1,617,495.10	3074+58.87	601,586.20	1,618,116.11	3080+79.43	601,512.65	1,618,739.80			
ML080E-3B					3083+49.26	601,481.05	1,619,007.78				3086+49.45	601,445.89	1,619,305.91				3087+99.26	601,444.83	1,619,456.08
ML080E-3								3087+99.26	601,444.83	1,619,456.08	3090+86.88	601,442.79	1,619,743.69	3093+70.73	601,520.34	1,620,020.65			
ML080E-3A					3093+70.73	601,520.34	1,620,020.65				3095+20.91	601,560.84	1,620,165.26				3098+20.73	601,673.12	1,620,443.67
ML080E-4								3109+47.48	602,094.53	1,621,488.64	3119+25.78	602,460.43	1,622,395.94	3128+98.17	602,648.09	1,623,356.07			
205		3135+94.63	602,781.69	1,624,039.60															
109	I-80 WESTBOUND	4041+00.00	601,276.19	1,614,774.09															
ML080W-1								4055+07.15	601,376.76	1,616,177.64	4059+27.63	601,406.81	1,616,597.05	4063+47.95	601,457.60	1,617,014.46			
ML080W-2								4063+47.95	601,457.60	1,617,014.46	4072+26.20	601,563.68	1,617,886.28	4080+84.26	601,978.62	1,618,660.33			
ML080W-3B					4083+14.92	602,087.60	1,618,863.62				4086+15.11	602,229.43	1,619,128.19				4087+64.92	602,285.39	1,619,267.55
ML080W-3								4087+64.92	602,285.39	1,619,267.55	4091+58.88	602,432.17	1,619,633.15	4095+43.27	602,432.27	1,620,027.12			
ML080W-3A					4095+43.27	602,432.27	1,620,027.12				4096+93.44	602,432.31	1,620,177.30				4099+93.27	602,399.34	1,620,475.67
ML080W-4								4102+10.95	602,375.43	1,620,692.04	4109+25.85	602,296.85	1,621,402.60	4116+29.78	602,433.98	1,622,104.22			
108		4128+95.91	602,676.86	1,623,346.84															
90	I-80	5128+03.54	602,662.82	1,623,353.19															
91	(EAST OF CORE)	5188+97.59	603,831.81	1,629,334.07															
92		5208+07.61	604,179.78	1,631,212.12															
93		5240+69.50	604,805.49	1,634,413.44															
ML035N-1	I-35 NORTHBOUND							8464+19.42	601,337.20	1,617,100.02	8466+93.08	601,357.77	1,617,372.91	8469+64.19	601,313.73	1,617,643.01			
ML035N-2								8473+48.85	601,251.83	1,618,022.66	8479+25.90	601,158.98	1,618,592.19	8484+37.74	601,511.45	1,619,049.07			
ML035N-3								8491+99.33	601,976.65	1,619,652.07	8499+65.23	602,444.47	1,620,258.48	8505+89.13	603,203.78	1,620,158.24			
ML035N-4								8531+09.25	605,702.22	1,619,828.39	8536+86.32	606,274.32	1,619,752.86	8542+62.49	606,836.53	1,619,622.78			
ML035S-1	I-35 SOUTHBOUND							9432+71.16	601,448.57	1,616,172.49	9436+89.86	601,478.50	1,616,590.13	9441+08.39	601,529.07	1,617,005.76			
ML035S-2								9441+08.39	601,529.07	1,617,005.76	9445+77.86	601,585.78	1,617,471.79	9450+44.09	601,735.30	1,617,916.80			
ML035S-3								9450+44.09	601,735.30	1,617,916.80	9456+40.62	601,925.29	1,618,482.27	9462+21.79	602,317.16	1,618,932.04			
ML035S-4								9462+21.83	602,317.18	1,618,932.07	9470+25.98	602,845.44	1,619,538.36	9477+43.25	603,648.44	1,619,581.22			
101125		9491+11.93	605,015.17	1,619,654.17															
23510	I-235	1949+59.42	590,888.03	1,619,611.10															
ML235-1								1973+48.82	593,260.91	1,619,891.57	1976+35.85	593,545.95	1,619,925.27	1979+20.97	593,832.02	1,619,901.74			
ML235-2								1999+18.25	595,822.57	1,619,738.02	2001+63.13	596,066.63	1,619,717.95	2004+07.71	596,311.51	1,619,718.77			
ML235-3								2091+68.42	605,072.17	1,619,748.25	2100+53.74	605,957.48	1,619,751.23	2109+31.19	606,820.01	1,619,551.67			
ML235-4								2120+36.80	607,897.17	1,619,302.45	2133+30.72	609,157.79	1,619,010.79	2145+94.73	610,438.20	1,619,197.30			
ML235-5								2175+76.86	613,389.19	1,619,627.15	2181+89.48	613,995.41	1,619,715.45	2187+99.48	614,607.95	1,619,706.02			
23511		2221+71.45	617,979.53	1,619,654.15															
309100	I-235 NORTHBOUND	2090+59.42	604,963.12	1,619,762.88															
ML235NB-1	(NORTHERLY END							2091+68.09	605,071.79	1,619,763.13	2096+10.48	605,514.19	1,619,764.17	2100+51.90	605,953.75	1,619,714.23			
ML235NB-2	I-235)							2100+51.90	605,953.75	1,619,714.23	2104+93.64	606,392.67	1,619,664.37	2109+34.40	606,822.94	1,619,564.34			
309200	I-235 SOUTHBOUND	2090+59.42	604,963.22	1,619,732.88															
ML235SB-1	(NORTHERLY END							2091+68.07	605,071.88	1,619,733.37	2096+08.60	605,512.40	1,619,735.34	2100+48.16	605,950.22	1,619,686.57			
ML235SB-2	I-235)							2100+48.16	605,950.22	1,619,686.57	2104+88.55	606,387.91	1,619,637.82	2109+27.97	606,817.08	1,619,539.01			

SPIRAL OR CIRCULAR CURVE DATA

101-17
04-19-11

Name	Location	Δ_{scs}	Horizontal Alignment Data												Remarks
			Spiral Data							Curve Data					
			θs	Ls	Ts	Es	Xc	Yc	L.T.	S.T.	Δ_c	T	L	R	E	
SUR080-1	I-80										4° 04′ 43.41″ LT	612.11′	1,223.71′	17,190.00′	10.89′	
SUR080-2	(WEST OF CORE)										6° 57′ 38.61″ LT	653.65′	1,305.68′	10,747.47′	19.86′	
ML080E-1	I-80 EASTBOUND										4° 27′ 40.90″ LT	662.19′	1,323.71′	17,000.00′	12.89′	
ML080E-2											15° 17′ 08.95″ RT	628.01′	1,248.57′	4,680.00′	41.95′	
ML080E-3		28° 41′ 21.15″ LT	6° 19′ 09.79″	450.00′	TS	150.17′	449.45′	16.53′	300.19′	150.17′	16° 03′ 01.56″ LT	287.62′	571.47′	2,040.00′	20.18′	
ML080E-4											10° 54′ 14.49″ RT	978.30′	1,950.69′	10,250.00′	46.58′	
ML080W-1	I-80 WESTBOUND										2° 50′ 19.67″ LT	420.49′	840.80′	16,970.00′	5.21′	
ML080W-2											21° 15′ 25.45″ LT	878.25′	1,736.31′	4,680.00′	81.69′	
ML080W-3		34° 29′ 58.92″ RT	6° 19′ 09.79″	450.00′	TS	150.17′	449.45′	16.53′	300.19′	150.17′	21° 51′ 39.33″ RT	393.97′	778.35′	2,040.00′	37.69′	
ML080W-4											17° 22′ 12.85″ LT	714.90′	1,418.83′	4,680.00′	54.29′	
ML035N-1	I-35 NORTHBOUND										13° 34′ 14.76″ RT	273.66′	544.77′	2,300.00′	16.22′	
ML035N-2											46° 54′ 31.73″ LT	577.04′	1,088.89′	1,330.00′	119.79′	
ML035N-3											59° 52′ 18.89″ LT	765.89′	1,389.80′	1,330.00′	204.76′	
ML035N-4											5° 30′ 22.71″ LT	577.06′	1,153.24′	12,000.00′	13.87′	
ML035S-1	I-35 SOUTHBOUND										2° 50′ 19.67″ LT	418.70′	837.23′	16,898.00′	5.19′	
ML035S-2											11° 38′ 03.84″ LT	469.46′	935.69′	4,608.00′	23.85′	
ML035S-3											22° 29′ 33.05″ LT	596.53′	1,177.71′	3,000.00′	58.73′	
ML035S-4											45° 52′ 45.39″ LT	804.14′	1,521.41′	1,900.00′	163.16′	
ML235-1	I-235										11° 26′ 34.74″ LT	287.03′	572.15′	2,864.79′	14.34′	
ML235-2											4° 53′ 40.67″ RT	244.88′	489.46′	5,729.58′	5.23′	
ML235-3											13° 13′ 11.22″ LT	885.31′	1,762.76′	7,639.98′	51.12′	
ML235-4											21° 18′ 52.28″ RT	1,293.92′	2,557.93′	6,875.99′	120.69′	
ML235-5											9° 10′ 08.25″ LT	612.62′	1,222.62′	7,639.98′	24.52′	
ML235NB-1	I-235 NORTHBOUND										6° 36′ 56.13″ LT	442.39′	883.81′	7,654.39′	12.77′	
ML235NB-2	(NORTHERLY END I-235)										6° 36′ 24.10″ LT	441.74′	882.51′	7,653.45′	12.74′	
ML235SB-1	I-235 SOUTHBOUND										6° 36′ 45.46″ LT	440.53′	880.08′	7,625.57′	12.71′	
ML235SB-2	(NORTHERLY END I-235)										6° 36′ 35.18″ LT	440.39′	879.81′	7,626.51′	12.70′	

ALIGNMENT COORDINATES

101-16
10-20-09

Name	Location	Point on Tangent			Begin Spiral			Begin Curve			Simple Curve PI or Master PI of SCS			End Curve			End Spiral		
		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates		Station	Coordinates	
			Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)		Y (Northing)	X (Easting)
235A-1	RAMP A							38484+75.18	604,621.62	1,619,995.26	38486+84.50	604,414.10	1,620,022.66	38488+93.31	604,211.33	1,620,074.59			
235A-2								38490+63.31	604,046.65	1,620,116.77	38495+12.65	603,611.36	1,620,228.26	38499+29.96	603,332.87	1,620,580.89			
235A-3								38502+68.51	603,123.05	1,620,846.58	38507+35.22	602,833.80	1,621,212.84	38511+66.22	602,836.84	1,621,679.54			
303220	RAMP B	32574+22.46	601,202.23	1,618,091.36															
235B-1								32576+53.97	601,149.86	1,618,316.87	32579+68.33	601,078.75	1,618,623.08	32582+63.12	600,845.23	1,618,833.52			
235B-2								32585+22.66	600,652.43	1,619,007.27	32590+41.99	600,266.64	1,619,354.94	32595+34.44	599,755.47	1,619,446.66			
235B-1												34° 54′ 05.36″	RT 314.35′	609.15′	1,000.00′	48.25′			
235B-2												31° 51′ 07.08″	RT 519.33′	1,011.78	1,820.00′	72.65′			
235D-1	RAMP D							33544+07.26	600,310.69	1,619,835.15	33549+83.73	600,885.23	1,619,882.23	33555+07.99	601,280.37	1,620,301.97			
235D-2								33555+07.99	601,280.37	1,620,301.97	33561+66.39	601,731.67	1,620,781.37	33568+09.58	601,977.92	1,621,391.98			
235F-1	RAMP F							36597+11.89	605,606.74	1,619,605.60	36604+18.62	604,900.11	1,619,617.83	36611+20.59	604,205.30	1,619,488.57			
235F-2								36621+14.03	603,228.61	1,619,306.86	36649+50.08	600,440.40	1,618,788.15	36652+63.80	601,688.36	1,621,334.87			
303611		36653+94.84	601,746.02	1,621,452.54															
303612		36653+94.84	601,753.20	1,621,449.02															
235F-3								36667+30.34	602,340.86	1,622,648.27	36670+09.37	602,463.64	1,622,898.84	36672+86.11	602,528.16	1,623,170.31			
235G-1	RAMP G							38552+54.84	598,296.98	1,619,652.83	38555+37.05	598,579.19	1,619,653.78	38558+18.03	598,857.90	1,619,609.50			
235G-2								38576+34.09	600,651.46	1,619,324.57	38584+47.75	601,455.05	1,619,196.91	38590+94.52	601,934.59	1,619,854.24			
235G-3								38600+76.01	602,513.05	1,620,647.15	38604+68.41	602,744.31	1,620,964.16	38608+39.16	602,766.46	1,621,355.93			
235G-4								38630+76.49	602,892.74	1,623,589.70	38634+27.39	602,912.55	1,623,940.05	38637+77.87	602,962.58	1,624,287.37			
220101	RAMP H	38651+06.43	601,001.32	1,620,006.52															
235H-1								38654+23.24	601,281.36	1,620,154.67	38659+02.89	601,705.33	1,620,378.96	38663+43.59	602,174.59	1,620,279.66			
235H-2								38668+04.85	602,625.86	1,620,184.17	38668+40.81	602,661.03	1,620,176.73	38668+76.73	602,696.69	1,620,172.06			
235H-3								38668+76.73	602,696.69	1,620,172.06	38671+28.07	602,447.46	1,620,204.66	38681+45.29	602,465.90	1,620,455.33			
223000	NE BROADWAY AVE	1175+00.22	599,032.49	1,619,066.93															
223001		1188+00.22	599,016.24	1,620,366.83															
TRAIL-1								10+00.00	602,279.48	1,623,659.52	10+25.55	602,302.44	1,623,670.74	10+50.03	602,327.96	1,623,669.57			
TRAIL-2								11+31.18	602,409.02	1,623,665.87	11+83.25	602,461.05	1,623,663.50	12+11.75	602,461.30	1,623,715.58			
TRAIL-3								12+51.75	602,461.31	1,623,755.58	13+54.41	602,461.34	1,623,858.23	13+63.51	602,542.15	1,623,794.92			
TRAIL-4								13+63.51	602,542.15	1,623,794.92	13+98.00	602,569.30	1,623,773.65	14+29.94	602,603.79	1,623,773.64			
TRAIL-5								17+82.47	602,956.33	1,623,773.56	18+73.24	603,047.10	1,623,773.54	19+29.88	603,055.88	1,623,863.88			
TRAIL-6								20+52.14	603,067.72	1,623,985.56	20+81.40	603,070.55	1,624,014.68	21+05.08	603,097.32	1,624,026.48			
1001		21+18.01	603,109.15	1,624,031.69															
RAMPB_SHLDR-1												35° 39′ 18.54″	RT 319.03′	617.33′	992.01′	50.04′			
308100	NE 29TH ST	38800+00.00	602,279.20	1,623,735.62															
308101		38808+85.14	603,164.34	1,623,735.41															

SPIRAL OR CIRCULAR CURVE DATA

101-17
04-19-11

Name	Location	Δ_{scs}	Horizontal Alignment Data												Remarks
			Spiral Data								Curve Data				
			θs	Ls	Ts	Es	Xc	Yc	L.T.	S.T.	Δ_c	T	L	R	E	
235A-1	RAMP A										6° 50′ 41.78″ LT	209.32′	418.13′	3,500.00′	6.25′	
235A-2											37° 20′ 05.39″ LT	449.34′	866.65′	1,330.00′	73.85′	
235A-3											38° 40′ 21.70″ LT	466.71′	897.70′	1,330.00′	79.51′	
235B-1											34° 54′ 05.36″ RT	314.35′	609.15′	1,000.00′	48.25′	
235B-2											31° 51′ 07.08″ RT	519.33′	1,011.78′	1,820.00′	72.65′	
235D-1	RAMP D										42° 02′ 41.75″ RT	576.47′	1,100.73′	1,500.00′	106.96′	
235D-2											21° 18′ 26.17″ RT	658.40′	1,301.59′	3,500.00′	61.39′	
235F-1	RAMP F										11° 31′ 49.19″ RT	706.73′	1,408.70′	7,000.00′	35.59′	
235F-2											126° 38′ 40.81″ LT	2,836.05′	3,149.77′	1,425.00′	1,748.93′	
235F-3											12° 44′ 14.17″ RT	279.03′	555.77′	2,500.00′	15.52′	
235G-1	RAMP G										9° 13′ 10.55″ LT	282.21′	563.19′	3,500.00′	11.36′	
235G-2											62° 54′ 53.64″ RT	813.67′	1,460.44′	1,330.00′	229.15′	
235G-3											32° 52′ 34.42″ RT	392.40′	763.15′	1,330.00′	56.68′	
235G-4											4° 57′ 40.47″ LT	350.91′	701.38′	8,100.00′	7.60′	
235H-1	RAMP H										39° 49′ 39.83″ LT	479.64′	920.35′	1,324.00′	84.20′	
235H-2											4° 29′ 45.02″ RT	35.96′	71.88′	916.00′	0.71′	
235H-3											273° 14′ 43.18″ RT	251.34′	1,268.56′	266.00′	631.97′	
TRAIL-1											28° 39′ 57.65″ LT	25.55′	50.03′	100.00′	3.21′	
TRAIL-2											92° 19′ 53.61″ RT	52.08′	80.57′	50.00′	22.19′	
TRAIL-3											128° 03′ 43.35″ LT	102.66′	111.76′	50.00′	64.19′	
TRAIL-4											38° 03′ 43.35″ RT	34.49′	66.43′	100.00′	5.78′	
TRAIL-5											84° 27′ 36.42″ RT	90.77′	147.41′	100.00′	35.05′	
TRAIL-6											60° 39′ 51.21″ LT	29.26′	52.94′	50.00′	7.93′	
235A-1						38484+75.18	604,621.62	1,619,995.26	38486+84.50		604,414.10	1,620,022.66	38488+93.31	604,211.33	1,620,074.59	
235A-2						38490+63.31	604,046.65	1,620,116.77	38495+12.65		603,611.36	1,620,228.26	38499+29.96	603,332.87	1,620,580.89	
235A-3						38502+68.51	603,123.05	1,620,846.58	38507+35.22		602,833.80	1,621,212.84	38511+66.22	602,336.84	1,621,679.54	

STAGING NOTES

Stage 1

-Replace NE 54th Ave Bridge over I-35-Construction in 2016-2017

Stage 2

-Replace NE 22nd St Bridge over I-80/35-Construction in 2016- 2017

Stage 3A

Traffic:
-Maintain Traffic on existing roadways.
-Maintain traffic with lane closures during off-peak hours for shoulder strengthening and milling/filling rumble strip activities
-Maintain traffic via detour widening and lane shifts
-Reduce I-35 NB to 3 lanes just north of NE 54th Ave.
-I-80/35 EB, I-80 WB, I-235 SB, and I-35NB traffic in chute design at tie-ins
-Temporary short term closures of I-80 EB and WB, I-35 NB, SB to EB ramp, EB to NB ramp and WB to SB ramp for setting beams
-Temporary closures of NE 29th St. for setting beams
-Temporary closures of Chichaqua Valley Trail for tying in trail pavement and setting beams
-Temporary closures of NE Broadway Ave. for setting beams

Construction:
-Construct I-80/35 EB shoulder strengthening/widening in median west of NE 22nd St
-Construct I-35 NB ramp and flyover bridge with gaps at EB to SB ramp and WB to NB ramp
-Construct I-35 NB interim exit Taper
-Grade and pave relocated temporary, interim and portions of ultimate Chichaqua Valley Trail
-Construct Ramp G Bridge over NE 29th St and relocated Chichaqua Valley Trail
-Construct retaining wall along Ramp B
-Construct Ramp B bridge over UPRR
-Construct Ramp G bridge over Broadway Ave
-Grade and pave Ramp G partial, Ramp A and Ramp B
-Construct Ramp G interim exit Taper
-Construct temporary pavement adjacent to Ramp A and I-35 NB outside shoulder north of 54th St

Stage 3B

Traffic:
-Maintain traffic on existing and new roadway
-No chute design
-Open Ramp G partial, Ramp A and Ramp B to traffic
-Permanently close existing EB to SB ramp and WB to NB ramp to traffic

Construction:
-Complete Gaps on I-35 NB bridge

Stage 3C-Complete

Traffic:
-Open I-35 NB to traffic
-Permanently close existing I-35 NB left exit ramp to traffic
-Temporary short term closures of I-80 WB for ramp bridge demo

Construction:
-Remove existing I-35 NB left exit ramp pavement and bridge

Stage 4A

Traffic:
-Maintain traffic on existing and new roadway
-Maintain traffic with lane closure during off-peak hours for shoulder strengthening and milling/filling rumble strip activities
-Maintain 3 lanes I-235 SB traffic in chute design north of Euclid exit ramp to just south of NE Broadway Ave
-Maintain 3 lanes I-235 NB traffic in chute design north of Euclid entrance loop to just north of NE Broadway Ave
-Close Euclid Ave. NB entrance ramp (Utilize substages and accelerated construction to minimize closure period)
-Close NE Broadway Ave.

Construction:
-Construct Aux lane for I-235 NB from just north of Euclid Ave to north of NE Broadway Ave.
-Construct Aux lane for I-235 SB from just north of Euclid exit ramp to south of NE Broadway Ave.
-Construct Euclid Ave NB entrance ramp
-Construct NE Broadway Ave bridge widening
-Reconstruct NE Broadway Ave.

Stage 4B Complete

Traffic:
-Open Euclid Ave. NB entrance ramp
-Open NE Broadway Ave.
-Open NB Aux lane and NB entrance ramp to provide 3+1 lanes from Euclid Ave to NB to EB ramp exit
-Open SB Aux lane to provide 3+1 lanes from Euclid Ave exit ramp to Ramp B entrance

Stage 5A.1

Traffic:
-Maintain traffic on existing and new roadway
-Maintain traffic with lane closure during off-peak hours for shoulder strengthening and milling/filling rumble strip activities
-Maintain 3 lanes I-35/80 EB traffic in Chute design from just east of High Trestle Trail Bridge to west of NE 22nd St
-Shift I-35 NB/Ramp B traffic to new temporary exit ramp connection
-Close NE 14th St EB Entrance Ramp

Construction:
-Construct Detour pavement for I-35 NB temporary exit ramp connection
-Construct I-80/35 EB partial from just west of High Trestle Trail Bridge to I-35 NB Ramp gore
-Construct I-80/35 partial EB bridge over UPRR
-Construct I-80/35 EB bridge widening over High Trestle Trail
-Construct NE 14th Entrance ramp bridge over High Trestle Trail
-Construct shoulder strengthening/widening for I-80/35 WB from east of UPRR to NE 22nd St

Stage 5A.2

Traffic:
-Maintain 2 lanes I-80 EB traffic in Chute design from just east of High Trestle Trail Bridge to west of NE 22nd St
-Shift 2 lanes I-35 NB/Ramp B traffic to new outside lanes and exit ramp connection
-Maintain closure of NE 14th St EB Entrance Ramp

Construction:
-Remove I-35 NB temporary exit ramp connection
-Construct temporary pavement for I-80 EB just east of I-35 NB exit gore
-Construct temporary pavement for I-80/35 WB just west of NE 22nd St bridge

Stage 5B

Traffic:
-Maintain traffic on existing and new roadway
-Open NE 14th St EB Entrance Ramp
-Shift I-80/35 EB traffic to outside 3+1 lanes from east of High Trestle Trail to NE 22nd St

Construction:
-Construct I-80/35 EB remainder from High Trestle Trail Bridge to west of NE 22nd St
-Construct I-80/35 EB remainder bridge over UPRR

Stage 5C

Traffic:
-Maintain traffic on existing and new roadway
-Maintain traffic with lane closure during off-peak hours for shoulder strengthening and milling/filling rumble strip activities
-Maintain 3 lanes I-80/35 WB traffic in chute design from just west of High Trestle Trail Bridge to NE 22nd St
-Maintain 3 lanes I-35/235 SB traffic in chute design north of NE 54th Ave
-Close NE 14th St WB Exit Ramp

Construction:
-Construct shoulder strengthening/detour widening for tie-in detour to SB to EB ramp
-Construct I-80/35 WB from just west of High Trestle Trail Bridge to NE 22nd St
-Construct retaining wall along I-35 SB
-Construct I-35 SB from NE 22nd St to north of NE 54th Ave
-Construct NE 14th St Exit ramp
-Construct I- 80/35 WB bridge over UPRR
-Construct I-80/35 WB bridge widening over High Trestle Trail
-Construct NE 14th Exit ramp bridge over High Trestle Trail

Stage 5D.1

Traffic:
-Maintain traffic on existing and new roadway
-Shift I-35 SB traffic to new I-35 SB and new I-80/35 WB
-Maintain 2 lanes I-80 WB traffic in chute design in EB lanes from High Trestle Trail bridge to NE 22nd St
-Maintain 2 lanes of I-35 SB and NB in chute design from north of NE 54th Ave to just north of I-80 WB
-Shift SB to EB traffic to detour ramp
-Open NE 14th St WB exit ramp to I-235 SB only

Construction:
-Construct detour pavement for I-80 WB just west of NE 22nd St

Stage 5D.2

Traffic:
-Maintain traffic on existing and new roadway
-Shift I-80 WB traffic to new I-80/35 EB
-Maintain 2 lanes I-235 SB and NB traffic in chute design from bridge over I-80 WB north to north of NE 54th Ave

Construction:
-Construct outside lane widening on I-235 NB and SB

Stage 5E

Traffic:
-Maintain traffic on existing and new roadway
-Shift I-80 WB traffic to new I-80/35 WB
-Maintain 2 lanes of I-80 WB during off-peak shoulder reconstruction/widening activities

Construction:
-Construct detour pavement for I-80 EB just west of NE 22nd St
-Construct shoulder strengthening/detour widening for I-80 WB, Loop H and WB to SB ramp

STAGING NOTES

Stage 5F.1

Traffic:
-Maintain traffic on existing and new roadway
-Shift I-80 WB onto widened areas through interchange
-Maintain I-80 EB traffic in chute design from west of NE 22nd St to NE 22nd ST
-Shift NB to WB loop traffic onto detour
-Shift WB to SB ramp traffic onto widened area
-Maintain 3 lanes I-80 WB traffic in chute design from west of NE 29th St to east of NE 29th St of NE 29th St
-Maintain 1 lanes of I-80 EB during off-peak shoulder reconstruction/widening activities from just west of I-235 to just west of NE 29th
-Temporary closures of Chichaqua Valley Trail for tying in trail pavement and setting beams

Construction:
-Construct I-80 WB partial from just east of NE 22nd St to east of NE 29th St with staged gap for Ramp H detour
-Construct I-80 WB partial bridge over NE 29th St
-Construct Ramp H
-Construct I-80 EB partial just west of NE 22nd St
-Construct shoulder strengthening/detour widening for I-80 EB from just west of I-235 to just west of I-235 to just west of NE 29th St
-Construct shoulder strengthening/detour widening for I-80 EB median cross over west of NE 29th St

Stage 5F.2

Traffic:
-Close Ramp H

Construction:
-Remove Loop detour pavement
-Construct final tie section of Ramp H
-Construct staged gap on I-80 WB

Stage 5G

Traffic:
-Maintain traffic on existing and new roadway
-Open Ramp H
-Shift I-80 WB to new pavement
-Shift WB to SB ramp traffic on independent detour alignment
-Maintain 2 lane I-80 EB traffic in chute design from west of NE 22nd St to NE 22nd St
-Shift I-80 EB onto widened areas through interchange
-Maintain 3 lane I-80 EB traffic on WB side via median crossovers and chute design from east to west of NE 29th St
-Maintain SB to EB ramp traffic with Chute design
-Temporary closures of Chichaqua Valley Trail for tying in trail pavement and setting beams

Construction:
-Construct I-80 WB remainder from just west of NE 22nd St to west of NE 29th St
-Construct I-80 EB from just west of NE 22nd St to just west of NE 29th St, gapping SB to EB ramp and NB to EB ramp
-Construct I80 EB partial bridge over NE 29th St
-Construct Ramp D partial

Stage 5H

Traffic:
-Maintain traffic on existing and new roadway
-Maintain I-80 WB on new pavement
-Maintain WB to SB ramp traffic on independent detour alignment
-Maintain 2 lane I-80 EB traffic in chute design from west of NE 22nd St to NE 22nd St
-Maintain I-80 EB on existing and widened areas through interchange
-Maintain 3 lane I-80 EB traffic on WB side via median crossovers and chute design from east to west of 29th St
-Shift SB to EB ramp traffic for staged construction
-Shift Ramp D to new ramp and new I-80 EB
-Close Ramp H during Ramp D construction

Construction:
-Construct gapped portion of I-80 EB just west of I-235, and just east of I-235
-Construct Ramp D remainder and Ramp H remainder

Stage 5I

Traffic:
-Maintain traffic on existing and new roadway
-Close WB to SB detour Ramp
-Shift I-80 WB onto new pavement remainder west of NE 29th St
-Shift I-80 EB onto new pavement partial from east of NE 22nd St to east of NE 29th St
-Close Ramp H
-Temporary closures of Chichaqua Valley Trail for tying in trail pavement and setting beams

Construction:
-Construct WB to SB interim ramp
-Construct inside median portions of I-80 EB and WB from west of NE 29th St to east of NE 29th St
-Construct I-80 EB and I-80 WB remainder bridges over NE 29th St
-Construct Ramp D remainder and Ramp H
-Construct final Chichaqua Valley Trail construction

108-26A
08-01-08

STAGING NOTES

Stage 5J Complete

Traffic:
-Traffic on new pavement

Stage 6A
Traffic:
-Maintain traffic on existing and new roadway
-Temporary short term closures of I-80 EB and WB, I-235 NB and SB, Ramp H, and WB to SB ramp for setting beams

Construction:
-G&P Ramp G remainder
-Construct Ramp G flyover bridge
-Construct Ramp G bridge over UPRR

Stage 6B Complete

Traffic:
-Traffic on new pavement
-Shift traffic onto new Ramp G
-Permanently close existing WB to SB ramp to traffic
-Temporary short term closures of I-80 EB for ramp bridge demo

Construction:
Remove existing WB to SB ramp pavement and bridge

Stage 7A
Traffic:
-Maintain traffic on existing and new roadway
-Maintain 3 lanes I-35 SB from north of NE 54th Ave to Corporate Woods Drive
-Maintain 3+1 lanes I-235 SB traffic in chute design north of Euclid exit ramp to just south of NE Broadway Ave
-Additional traffic control will be required by others working on Euclid Ave interchange and I-235 NB
-Additional traffic control will be required by others working on Corporate Woods Drive interchange and I-35 NB

Construction:
-Construct Interchange modifications at Euclid (Work By Others)
-Construct Interchange modifications at Corporate Woods Drive (Work By Others)
-Construct new I-35 lanes north of Corporate Woods Drive (Work By Others)
-Construct I-35 SB auxiliary lanes from Euclid Ave to just south of NE Broadway Ave.
-Construct I-35 SB auxiliary lanes from just north of NE 54th Ave to just south of Corporate Woods Drive
-Construct I-35 SB bridge widening over UPRR
-Construct I-35 NB bridge widening over UPRR

Stage 7B Complete

Traffic:
-Traffic on modified interchanges and new pavement
-Open I-235 through core of interchange to 3 lanes

Stage 8A

Traffic:
-Maintain traffic on existing and new roadway
-Temporary short term closures of I-35 SB and NB, I-80 EB and WB, I-235 NB and SB, Ramp G, Ramp H, and Ramp D for setting beams

Construction:
-Grade and pave Ramp F
-Construct Ramp F flyover bridge

Stage 8B

Traffic:
-Traffic on new pavement
-Shift traffic onto new Ramp F
-Permanently close existing SB to EB ramp to traffic
-Temporary short term closures of I-80 EB and WB for SB to EB ramp demo

Construction:
-Remove existing SB to EB ramp pavement and bridges

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 38501+85.00
Install 30" x 112' DR-601
Skew = 0° ,Ahd.
F.L. = Lt. 935.00
Rt. 938.10

Sta. 38488+93.31 (RAMP A)
Sta. 8515+98.97, 48.95' RT (NB I-35)
Begin Ramp Construction

NE 54TH AVENUE
(By Others)

PT Sta 38488+93.31

38490

PC Sta 38490+63.31

38495

PT Sta 38499+29.96

38500

WB I-80 to NB I-35
RAMP A (235A)

NB I-35 (ML035N)

Curve Data
Δ = 37° 20' 05.39" (LT)
T = 449.34
L = 866.65
R = 1,330.00
E = 73.85
e = 5.4%
L = 194
x = 72
DS = 50mph

PI Sta 38495+12.65

F03

(Remove)

DELAWARE TWP.
T-79-N R-23W
SEC. 18

0 50
FEET

WESTBOUND I-80 to NORTHBOUND I-35 RAMP A

STA. 38488+93.31
BEGIN CONSTRUCTION
ELEV 954.04

954.04

VPI +75.000
Elv 953.39
K = 95
Len 250.00 ft
DS = 50mph

EXIST. GROUND

-0.360%

-3.000%

+93 Lt.
949.90

-2.66% Lt. Ditch Grade

+30 Rt.
942.28

+00 Lt.
939.10

VPI +75.000
Elv 944.39
K = 100
Len 350.00 ft
DS = 50mph

+0.500%

VPI +75.000
Elv 945.89
K = 200
Len 200.00 ft
DS = 50mph

-0.50% Rt. Ditch Grade

-0.50% Lt. Ditch Grade

-0.500%

PROPOSED PGL

VPI +75.000
Elv 943.39
K = 143
Len 250.00 ft
DS = 50mph

+1.250%

+70 Rt.
938.08

+4.00% Rt.
Ditch Grade

+0.50% Rt.
Ditch Grade

+50 Rt.
941.28

965 960 955 950 945 940 935 930

Lt: Ditch Grade | Ditch Grade

Rt: Var1. - See Cross Section | Ditch Grade | Ditch Grade | Ditch Grade

954.02 953.93 953.84 953.71 953.52 953.27 952.95 952.56 952.11 951.59 951.00 950.35 949.64 948.92 948.26 947.67 947.14 946.67 946.26 945.92 945.64 945.42 945.26 945.17 945.14 945.17 945.26 945.39 945.50 945.57 945.62 945.64 945.62 945.57 945.50 945.39 945.26 945.14 945.01 944.89 944.76 944.64 944.51 944.39 944.26 944.14 944.01 943.91 943.85 943.83 943.86 943.93 944.05 944.21 944.41 944.66 944.95 945.26 945.57

38489 38490 38491 38492 38493 38494 38495 38496 38497 38498 38499 38500 38501 38502 38503

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.1

9:30:55 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 38511+66.22 (RAMP A)
Sta. 38611+66.22, 52.00' LT (RAMP G)
End Ramp Construction

PT Sta 38511+66.22

38505

38510

WB I-80 to NB I-35
RAMP A (235A)

WB I-80 to SB I-35
RAMP G (235G)

PI Sta 38507+35.22

Curve Data
Δ = 38° 40' 21.70" (LT)
T = 466.71
L = 897.70
R = 1,330.00
E = 79.51
e = 5.4%
L = 194
x = 72
DS = 50mph

FO3

WB I-80 (ML060W)

0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 18

WESTBOUND I-80
to NORTHBOUND I-35
RAMP A

VPI +75.000
Elv 950.88
K = 156
Len 700.00 ft
DS = 50mph

PROPOSED PGL

+1.250%

-3.250%

EXIST. GROUND

+0.50% Rt. Ditch Grade

+50 Rt.
944.28

938.17

STA. 38511+66.22
END CONSTRUCTION
ELEV 938.17

-0.50% Lt. Ditch Grade

+20 Lt.
930.50

-4.00% Lt. Ditch Grade

+66 Lt.
924.65

Ditch Grade

Ditch Grade

Ditch Grade

Vari. - See Cross Section

960 955 950 945 940 935 930 925

Lt

Rt

945.89 946.20 946.51 946.80 947.05 947.27 947.44 947.57 947.66 947.71 947.72 947.70 947.63 947.52 947.37 947.18 946.95 946.68 946.37 946.02 945.63 945.19 944.72 944.21 943.66 943.07 942.44 941.77 941.05 940.30 939.51 938.70

38504 38505 38506 38507 38508 38509 38510 38511

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.2

9:30:57 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 32576+60.00, 17.40' Rt.
Area Intake SW-549
w/24" x 113' DR-601

Sta. 32581+97.00, 27.00' Lt.
Area Intake SW-562
w/24" x 177' DR-601

Sta. 32581+97.00, 17.00' Rt.
Area Intake SW-549 to
Sta. 32581+97.00, 27.00' Lt.
Area Intake SW-562
w/24" x 48' DR-601

Sta. 32582+27.00, 17.00' Rt.
Area Intake SW-549 to
Sta. 32582+27.00, 27.00' Lt.
Area Intake SW-562
w/24" x 48' DR-601

Sta. 32582+57.00, 17.00' Rt.
Area Intake SW-549 to
Sta. 32582+57.00, 27.00' Lt.
Area Intake SW-562
w/24" x 48' DR-601

PI Sta 32579+68.33

32580

(Remove)

EB I-80 to SB I-235 RAMP B (235B)

(Remove
By Others)

NB I-35 (ML035N)

32585

POT Sta 32574+22.46

32575

PROPOSED RETAINING WALL

PT Sta 32582+63.12

PC Sta 32585+22.66

PCI Sta 32576+53.97

Curve Data
Δ = 34° 54' 05.36" (RT)
T = 314.35
L = 609.15
R = 1,000.00
E = 48.25
e = 6.0%
L = 216
x = 72
DS = 50mph

Sta. 32574+22.46 (RAMP B)
Sta. 8474+22.46, 40.00' RT (NB I-35)
Begin Construction

NE 22ND ST.
(By Others)

Sta. 32582+27.00, 27.00' Lt.
Area Intake SW-562 to
Sta. 32581+97.00, 27.00' Lt.
Area Intake SW-562
w/24" x 30' DR-601

Sta. 32582+57.00, 27.00' Lt.
Area Intake SW-562 to
Sta. 32582+27.00, 27.00' Lt.
Area Intake SW-562
w/24" x 30' DR-601

SAYLOR TWP.
T-79-N R-24W
SEC. 13

0 FEET 50

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 3256+58, 145' Lt
30" X 110 Conc Pipe
D.A. = 8 Ac - Median
(Remove)

EASTBOUND I-80 to SOUTHBOUND I-235 RAMP B

VPI +75.000
Elv 961.88
K = 144
Len 700.00 ft
DS = 50mph

VPI +50.000
Elv 960.49
K = 303
Len 450.00 ft
DS = 50mph

VPI +25.000
Elv 957.29
K = 100
Len 200.00 ft
DS = 50mph

STA. 32574+22.46
BEGIN CONSTRUCTION
ELEV 947.20

948.31

+3.850%

-1.021%

-1.021%

+0.985%

-0.500%

-0.500%

+50 Lt.
949.30

-3.32% Lt. Ditch Grade

EXIST. GROUND

+50 Rt.
944.70

+22 Rt.
935.03

+4.25% Rt. Ditch Grade

+00 Lt.
941.00

+00 Lt.
955.47

-1.92% Lt. Ditch Grade

+25 Rt.
950.00

-2.55% Rt. Ditch Grade

970 965 960 955 950 945 940 935

Lt: Vari. - See Cross Sections | Ditch Grade | Vari. - See Cross Sections | Ditch Grade

Rt: Ditch Grade | Wall | Ditch Grade

948.41 949.35 950.25 951.10 951.91 952.68 953.40 954.08 954.72 955.31 955.86 956.36 956.83 957.25 957.62 957.95 958.24 958.49 958.69 958.85 958.96 959.03 959.06 959.04 958.98 958.88 958.73 958.54 958.31 958.09 957.92 957.83 957.79 957.82 957.91 958.06 958.27 958.51 958.72 958.92 959.09 959.25 959.38 959.49 959.58 959.65 959.70 959.73 959.74 959.73 959.70 959.65 959.57 959.48 959.36 959.24

32575 32576 32577 32578 32579 32580 32581 32582 32583 32584 32585 32586 32587 32588

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.3

9:30:58 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

Sta. 32589+00.00
Install 24" x 120' DR-601
Skew = 0° Ahd.
F.L. = Lt. 949.7
Rt. 943.0

DELAWARE TWP.
T-79-N R-23W
SEC. 18

UPRR

WB I-80 to SB I-235
RAMP G (235G)

EB I-80 to SB I-235 RAMP B (235B)

PI Sta 32590+41.99

32590

32595

PI Sta 32595+34.44

ML I-235 (ML235)

NE BROADWAY AVENUE

Curve Data
Δ = 31° 51' 07.08" (RT)
T = 519.33
L = 1,011.78
R = 1,820.00
E = 72.65
x = 4.6%
L = 166
x = 72
DS = 50mph

Sta. 32593+05.82 (RAMP B)
Sta. 38569+57.72, 38.90' LT (RAMP G)
End Construction

0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 18

EASTBOUND I-80
to SOUTHBOUND I-235
RAMP B

VPI +75.000
Elv 958.86
K = 112
Len 150.00 ft
DS = 50mph

VPI +75.000
Elv 961.39
K = 164
Len 150.00 ft
DS = 50mph

961.30

+0.843%

-0.070%

STA. 32593+05.82
END CONSTRUCTION
ELEV 961.30

+00 Lt.
949.70

-1.92% Lt. Ditch Grade

EXIST. GROUND

-2.55% Rt. Ditch Grade

-1.00% Rt. Ditch Grade

+00 Rt.
943.00

+50 Rt.
941.50

970 965 960 955 950 945 940 935

Lt Ditch Grade Bridge

Rt Ditch Grade Ditch Grade Bridge

959.14 959.10 959.12 959.19 959.31 959.50 959.71 959.92 960.13 960.34 960.55 960.76 960.95 961.10 961.22 961.30 961.34 961.34 961.32 961.30

32588 32589 32590 32591 32592

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.4

9:31:01 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

PI Sta 33549+83.73

ML I-235 (ML235)

(U.A.C.)

NB I-235 to WB I-80 RAMP H (235H)

NB I-235 to EB I-80
RAMP D (235D)

(Remove)

EB I-80 (ML080E)

SB I-35 to EB I-80
RAMP F (235E)

33545

33550

33555

E2

Curve Data
Δ = 42° 02' 41.75" (RT)
T = 576.47
L = 1,100.73
R = 1,500.00
E = 106.96
e = 5.0%
L = 180
x = 72
DS = 50mph

PC Sta 33544+07.26

PCC Sta 33555+07.99

Sta. 33544+07.26 (RAMP D)
Sta. 2044+07.26, 102.92' RT (I-235)
Begin Construction

0 FEET 50

DELAWARE TWP.
T-79-N R-23W
SEC. 18

NORTHBOUND I-235 to EASTBOUND I-80 RAMP D

STA. 33544+07.26
BEGIN CONSTRUCTION
ELEV. 965.22

965.22

VPI +00.000
Elv 960.07
K = 237
Len 300.00 ft
DS = 50mph

-0.650%

-1.914%

PROPOSED PGL

EXIST. GROUND

970 965 960 955 950 945 940 935

Lt: Vari. - See Cross Section | 5.0 Ft Ditch | Vari. - See Cross Section

Rt: No Ditch | 5.0 Ft Ditch

965.10 964.94 964.78 964.62 964.45 964.29 964.13 963.97 963.80 963.64 963.48 963.32 963.15 962.99 962.83 962.67 962.50 962.34 962.18 962.02 961.85 961.69 961.53 961.37 961.20 961.04 960.87 960.66 960.44 960.18 959.90 959.59 959.26 958.90 958.51 958.10 957.66 957.20 956.72 956.24 955.76 955.28 954.80 954.33 953.85 953.37 952.89 952.41 951.93 951.45 950.98 950.50 950.02 949.54 949.06 948.58 948.10 947.63 947.15 946.67

33544 33545 33546 33547 33548 33549 33550 33551 33552 33553 33554 33555 33556 33557 33558 33559

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.5

9:31:03 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

(Remove)

EB I-80 (ML080E)

PI Sta 33561+66.39

NB I-235 to EB I-80
RAMP D (235D)

33565

PT Sta 33568+09.58

Curve Data
Δ = 21° 18′ 26.17″ (RT)
T = 658.40
L = 1,301.59
R = 3,500.00
E = 61.39
e = 3.0
L = 108
x = 72
DS = 50mph

Sta. 33563+58.33 (RAMP D)
Sta. 3103+64.26, 101.05′ RT (EB I-80)
End Ramp Construction

Equation:
Sta. 33559+22.06 RAMP D
=Sta. 36645+26.17 RAMP F

SB I-35 to EB I-80
RAMP F (235F)

0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 18

NORTHBOUND I-235 to EASTBOUND I-80 RAMP D

EXIST. GROUND

943.53

PROPOSED PGL

STA. 33563+58.33
END CONSTRUCTION
ELEV. 943.53

-1.914%

+1.160%

-0.89% Rt. Ditch Grade

-0.50% Rt. Ditch Grade

+00 Rt.
939.75

+00 Rt.
937.96

+58 Rt.
937.17

VPI +75.000
Elv 941.41
K = 114
Len 350.00 ft
DS = 50mph

955 950 945 940 935 930 925 920

Vari. - See Cross Section

Lt

Rt

Ditch Grade | Ditch Grade | Ditch Grade

946.19 945.71 945.23 944.75 944.30 943.91 943.57 943.28 943.05 942.87 942.75 942.68 942.67 942.71 942.81 942.96 943.17 943.44

33559 33560 33561 33562 33563 33564 33565 33566 33567 33568

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.6

9:31:05 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 7

DELAWARE TWP.
T-79-N R-23W
SEC. 18

ML I-235 (ML235)

SB I-35 (ML035S)

PI Sta 36604+18.62

SB I-35 to EB I-80
RAMP F (235F)

36600

36605

36610

PC Sta 36597+11.89

Sta. 36597+11.89 (RAMP F)
Sta. 2097+11.89, 125.45' LT (I-235)
Begin Ramp Construction

Curve Data
Δ = 11° 31' 49.19" (RT)
T = 706.73
L = 1,408.70
R = 7,000.00
E = 35.59
e = NC
DS = 50mph

Equation:
Sta. 36610+06.19 RAMP F
=Sta. 2232+15.37 NE 54TH AVE.

PT Sta 36611+20.59

APPROX. SECTION LINE

NE 54TH AVE.
(By Others)

0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 7

SOUTHBOUND I-35
to EASTBOUND I-80
RAMP F

VPI +00.000
Elv 962.52
K = 163
Len 450.00 ft
DS = 50mph

STA. 36597+11.89
BEGIN CONSTRUCTION
ELEV. 949.82

949.82

EXIST. GROUND

PROPOSED PGL

+2.160%

-0.602%

+90 Rt.
956.42

+0.70% Rt.
Ditch Grade

+00 Rt.
957.19

-1.16% Rt. Ditch Grade

+20 Rt.
952.32

+0.47% Rt. Ditch Grade

+25 Rt.
953.27

-0.20% Rt.
Ditch Grade

975 970 965 960 955 950 945 940

| | | |

DELAWARE TWP.
T-79-N R-23W
SEC. 18

(Remove)

(U.A.C.)

(Remove)

ML I-235 (ML235)

SB I-35 (ML035S)

Sta. 36616+00.00, 30.00' LT
Begin Shoulder Taper

Sta. 36619+00.00, 36.00' LT
End Shoulder Taper

50:1 Taper

50:1 Taper

PC Sta 36621+14.03

SB I-35 to EB I-80
RAMP F (235F)

36615

36620

36625

Equation:
Sta. 36625+95.05 RAMP F
=Sta. 9467+91.73 SB I-35

Sta. 36616+00.00, 12.00' RT
Begin Shoulder Taper

Sta. 36619+00.00, 6.00' RT
End Shoulder Taper

Sta. 36616+45.00
Install 36" x 142' DR-601
Skew = 0° ,Ahd.
F.L. = Lt. 952.40
Rt. 953.30

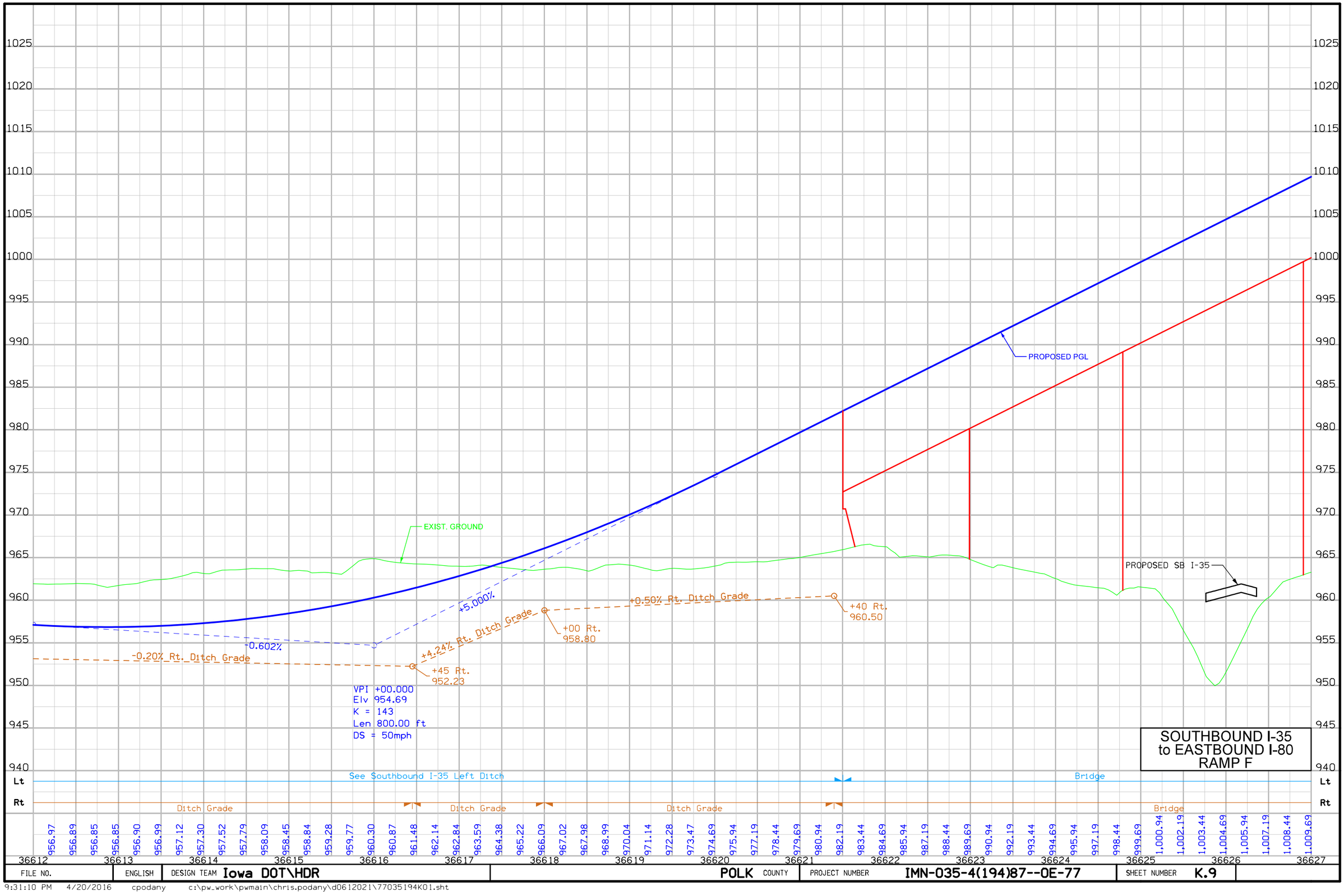
0 FEET 50

DELAWARE TWP.
T-79-N R-23W
SEC. 18

SOUTHBOUND I-35 to EASTBOUND I-80 RAMP F

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.8

9:31:08 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.9

9:31:10 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

WB I-80 (ML080W)

NB I-35 (ML035N)

(U.A.C.)

ML I-235 (ML235)

Curve Data
Δ = 126° 38' 40.81" (LT)
T = 2,836.05
L = 3,149.77
R = 1,425.00
E = 1,748.93
e = 5.2%
L = 187
x = 72
DS = 50mph

WB I-80 to SB I-235
RAMP G (235G)

NB I-235 to WB I-80
RAMP H (235H)

(U.A.C.)

(Remove)

Equation:
Sta. 36641+80.81 RAMP F
=Sta. 3096+45.51 EB I-80

Equation:
Sta. 36635+47.37 RAMP F
=Sta. 2060+20.47 I-235

36640

Equation:
Sta. 36641+75.88 RAMP F
=Sta. 38608+15.01 RAMP H

SB I-35 to EB I-80
RAMP F (235F)

36630

36635

(Remove)

Equation:
Sta. 36630+24.18 RAMP F
=Sta. 131+06.42 WB I-80

Equation:
Sta. 36634+52.56 RAMP F
=Sta. 8492+22.62 NB I-35

(Remove)

Equation:
Sta. 36636+12.02 RAMP F
=Sta. 38590+07.92 RAMP G

SB I-35 (ML035S)

(Remove)

EB I-80 (ML080E)

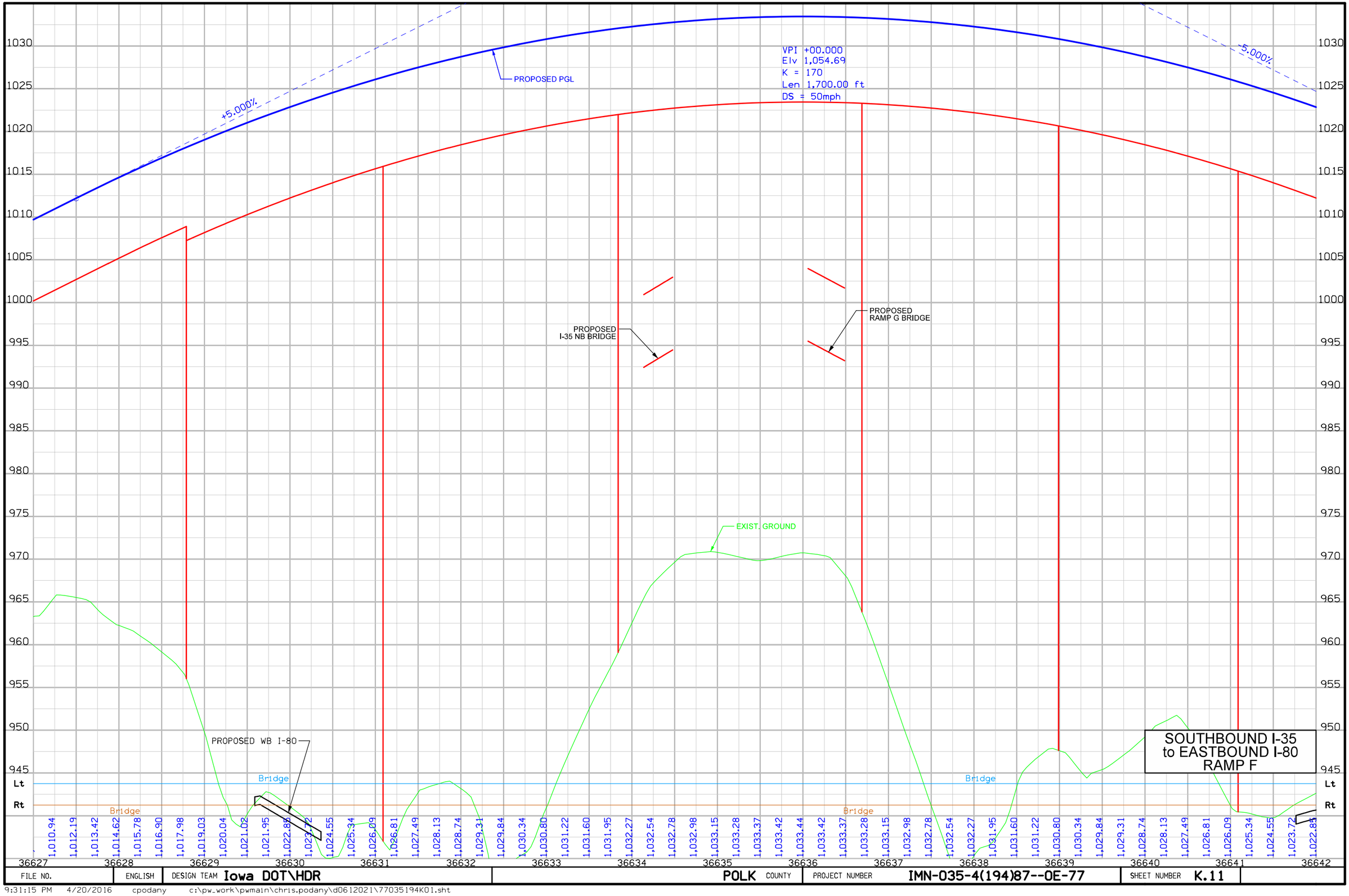
0 FEET 50

DELAWARE TWP.
T-79-N R-23W
SEC. 18

SOUTHBOUND I-35 to EASTBOUND I-80 RAMP F

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.10

9:31:12 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.11

9:31:15 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Equation:
Sta. 36641+75.88 RAMP F
=Sta. 38657+74.58 RAMP H

Equation:
Sta. 36641+80.81 RAMP F
=Sta. 3096+45.51 EB I-80

NB I-235 to WB I-80
RAMP H (235H)

(Remove)

EB I-80 (ML080E)

(Remove)

NB I-235 to EB I-80
RAMP D (235D)

36645

Equation:
Sta. 36645+26.17 RAMP F
=Sta. 33559+22.06 RAMP D

SB I-35 to EB I-80
RAMP F (235F)

Sta. 36652+00.00, 36.00' LT
Begin Shoulder Taper

PT Sta 36652+63.80

Sta. 36655+00.00, 22.00' LT
End Shoulder Taper

POT Sta 36653+94.84

50:1 Taper

50:1 Taper

36650

36655

Sta. 36652+00.00, 6.00' RT
Begin Shoulder Taper

POT Sta 36653+94.84

Sta. 36655+00.00, 20.00' RT
End Shoulder Taper

Equation:
Sta. 36653+94.84 (AHD)
=Sta. 36653+94.84, 8.00' RT (BK)

0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 18

SOUTHBOUND I-35
to EASTBOUND I-80
RAMP F

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.12

9:31:16 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

PROPOSED PGL

-5.000%

PROPOSED RAMP D

EXIST. GROUND

PROPOSED EB I-80

+65 Rt.
942.25

-1.74% Rt. Ditch Grade

SOUTHBOUND I-35
to EASTBOUND I-80
RAMP F

Lt Bridge — See Eastbound I-80 Right Ditch Lt

Rt Bridge — Ditch Grade Rt

36642	36643	36644	36645	36646	36647	36648	36649	36650	36651	36652	36653	36654	36655	36656	36657
1,021.95	1,021.02	1,020.04	1,019.03	1,017.98	1,016.90	1,015.78	1,014.62	1,013.42	1,012.19	1,010.94	1,009.69	1,008.44	1,007.19	1,005.94	1,004.69	1,003.44	1,002.19	1,000.94	999.69	998.44	997.19	995.94	994.69	993.44	992.19	990.94	989.69	988.44	987.19	985.94	984.69	983.44	982.19	980.94	979.69	978.44	977.19	975.94	974.69	973.44	972.19	970.94	969.69	968.44	967.19	965.94	964.69	963.44	962.19	960.94	959.69	958.44	957.19	955.94	954.69	953.44	952.19	950.94	949.69

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.13

9:31:18 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

WB I-80 (ML080W)

EB I-80 (ML080E)

PI Sta 36670+09.37

SB I-35 to EB I-80
RAMP F (235F)

50:1 Taper

36660

36665

36670

PC Sta 36667+30.34

Curve Data
Δ = 12° 44′ 14.17″ (RT)
T = 279.03
L = 555.77
R = 2,500.00
E = 15.52
DS = 50mph

Sta. 36663+30.34, 8.00′ RT
Begin Lane Taper

Sta. 36667+30.34, 0.00′ RT
End Lane Taper

Sta. 36669+99.60 (RAMP F)
Sta. 3124+02.98, 98.13′ RT (EB I-80)
End Ramp Construction

Sta. 36661+60.00
Install 36″ x 90′ DR-601
Skew = 0° Ahd.
F.L. = Lt. 920.60
Rt. 919.45

0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 18

SOUTHBOUND I-35 to EASTBOUND I-80 RAMP F

VPI +50.000
Elv 942.32
K = 92
Len 250.00 ft
DS = 50mph

941.90

-0.280%

-5.000%

+2.426%

PROPOSED PGL

EXIST. GROUND

-1.74% Rt. Ditch Grade

-4.50% Rt. Ditch Grade

+25 Rt.
922.07

+55 Rt.
902.72

VPI +75.000
Elv 925.94
K = 101
Len 750.00 ft
DS = 50mph

STA. 36669+99.60
END CONSTRUCTION
ELEV. 941.90

945 940 935 930 925 920 915 910

Lt See Eastbound I-80 Right Ditch — Vari. - See Cross Section

Rt Ditch Grade — Ditch Grade — No Ditch

948.44 947.19 945.94 944.69 943.47 942.32 941.22 940.19 939.22 938.31 937.46 936.67 935.95 935.29 934.69 934.15 933.67 933.26 932.91 932.61 932.39 932.22 932.11 932.07 932.09 932.17 932.31 932.52 932.78 933.11 933.50 933.95 934.47 935.04 935.65 936.25 936.86 937.47 938.07 938.68 939.29 939.86 940.36 940.80 941.17 941.47 941.71 941.88 941.97 942.01 941.97

36657 36658 36659 36660 36661 36662 36663 36664 36665 36666 36667 36668 36669 36670

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.14

9:31:20 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 19

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 38557+03.00 (RAMP G)
Sta. 2028+39.88, 101.28' LT (I-235)
Begin Ramp Construction

PC Sta 38552+54.84

38555

Curve Data
Δ = 9° 13' 10.55" (LT)
T = 282.21
L = 563.19
R = 3,500.00
E = 11.36
e = 3.0%
L = 108
x = 72
DS = 50mph

PT Sta 38558+18.03

38560

SR NE BROADWAY AVE (SRBWY)

Equation:
Sta. 38559+88.29 RAMP G
=Sta. 1180+16.12 SR BROADWAY

WB I-80 to SB I-235
RAMP G (235G)

PI Sta 38555+37.05

(U.A.C.)

ML I-235 (ML235)

DELAWARE TWP.
T-79-N R-23W
SEC. 19

0 FEET 50

DELAWARE TWP.
T-79-N R-23W
SEC. 18

WESTBOUND I-80 to SOUTHBOUND I-235 RAMP G

STA. 38557+03.00
BEGIN CONSTRUCTION
ELEV 959.07

959.07

VPI +00.000
Elv 962.04
K = 175
Len 350.00 ft
DS = 50mph

VPI +25.000
Elv 958.79
K = 151
Len 250.00 ft
DS = 50mph

+1.000%

-1.000%

PROPOSED PGL

-2.05% Rt. Ditch Grade

+00 Rt.
956.00

EXIST. GROUND

+03 Lt.
932.54

+00 Lt.
933.00

+70 Lt.
932.46

+40 Lt.
933.00

+0.23% Lt. Ditch Grade

+0.20% Lt. Ditch Grade

Ditch Grade | Bridge | Ditch Grade

Vari. - See Cross Section | Bridge

38552	38553	38554	38555	38556	38557	38558	38559	38560	38561	38562	38563
959.29	959.54	959.79	960.04	960.29	960.52	960.72	960.88	961.00	961.09	961.15	961.16
961.15	961.09	961.00	960.88	960.72	960.52	960.29	960.04	959.81	959.62	959.48	959.37	959.31	959.29

965 960 955 950 945 940 935 930 Lt Rt

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.15

9:31:22 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

Sta. 38563+53.00
Install 36" x 172' DR-626
Skew = 70° Lt. Bk.
F.L. = Ex. Pipe 933.70
Proposed Outlet 933.00

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 38566+00.00
Install 24" x 215' DR-601
Skew = 0° Ahd.
F.L. = Lt. 936.90'
Rt. 944.70'

Sta. 38574+00.00
Install 24" x 170' DR-601
Skew = 0° Ahd.
F.L. = Lt. 950.70'
Rt. 951.50'

UPRR

PROPOSED RETAINING WALL

EB I-80 to SB I-235 RAMP B (235B)

38565

38570

38575

Sta. 38573+32.36, 12.00' LT
Begin Shoulder Taper

Sta. 38576+32.36, 6.00' LT
Begin Shoulder Taper

50:1 Taper

WB I-80 to SB I-235
RAMP G (235G)

50:1 Taper

PC Sta 38576+34.09

Sta. 38573+32.36, 30.00' RT
Begin Shoulder Taper

Sta. 38576+32.36, 36.00' RT
End Shoulder Taper

(Remove)

(U.A.C.)

ML I-235 (ML235)

(Remove)

NB I-235 to EB I-80
RAMP D (235D)

0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 18

WESTBOUND I-80 to SOUTHBOUND I-235 RAMP G

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.16

9:31:24 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

PROPOSED PGL

+0.656%

+0.656%

+4.000%

VPI +50.000
Elv 966.17
K = 150
Len 500.00 ft
DS = 50mph

+00 Rt.
955.50

+00 Rt.
952.50

+00 Rt.
961.00

-2.05% Rt. Ditch Grade

+50 Rt.
944.70

+0.25% Rt. Ditch Grade

+00 Rt.
945.32

+10.17% Rt.
Ditch Grade

-0.50% Rt. Ditch Grade

+6.60% Rt.
Ditch Grade

+2.90% Rt.
Ditch Grade

+00 Rt.
954.40

+00 Rt.
951.50

EXIST. GROUND

+1.50% Lt. Ditch Grade

-0.50% Lt. Ditch Grade

+15 Lt.
937.12

+50 Lt.
935.45

WESTBOUND I-80
to SOUTHBOUND I-235
RAMP G

| | | |

DELAWARE TWP.
T-79-N R-23W
SEC. 18

NB I-35 (ML035N)

PI Sta 38584+47.75

(Remove)

Equation:
Sta. 38589+43.26 RAMP G
=Sta. 2059+34.93 ML I-235

Equation:
Sta. 38590+07.92 RAMP G
=Sta. 36636+12.02 RAMP F

EB I-80 (ML080E)

38585

E2

WB I-80 to SB I-235
RAMP G (235G)

Equation:
Sta. 38584+49.15 RAMP G
=Sta. 3087+86.76 EB I-80

ML I-235 (ML235)

(U.A.C.)

SB I-35 to EB I-80
RAMP F (235F)

Sta 38590+94.52

(Remove)

(Remove)

Curve Data
Δ = 62° 54′ 53.64″ (RT)
T = 813.67
L = 1,460.44
R = 1,330.00
E = 229.15
e = 5.4%
L = 194
x = 72
DS = 50mph

38580

(U.A.C.)

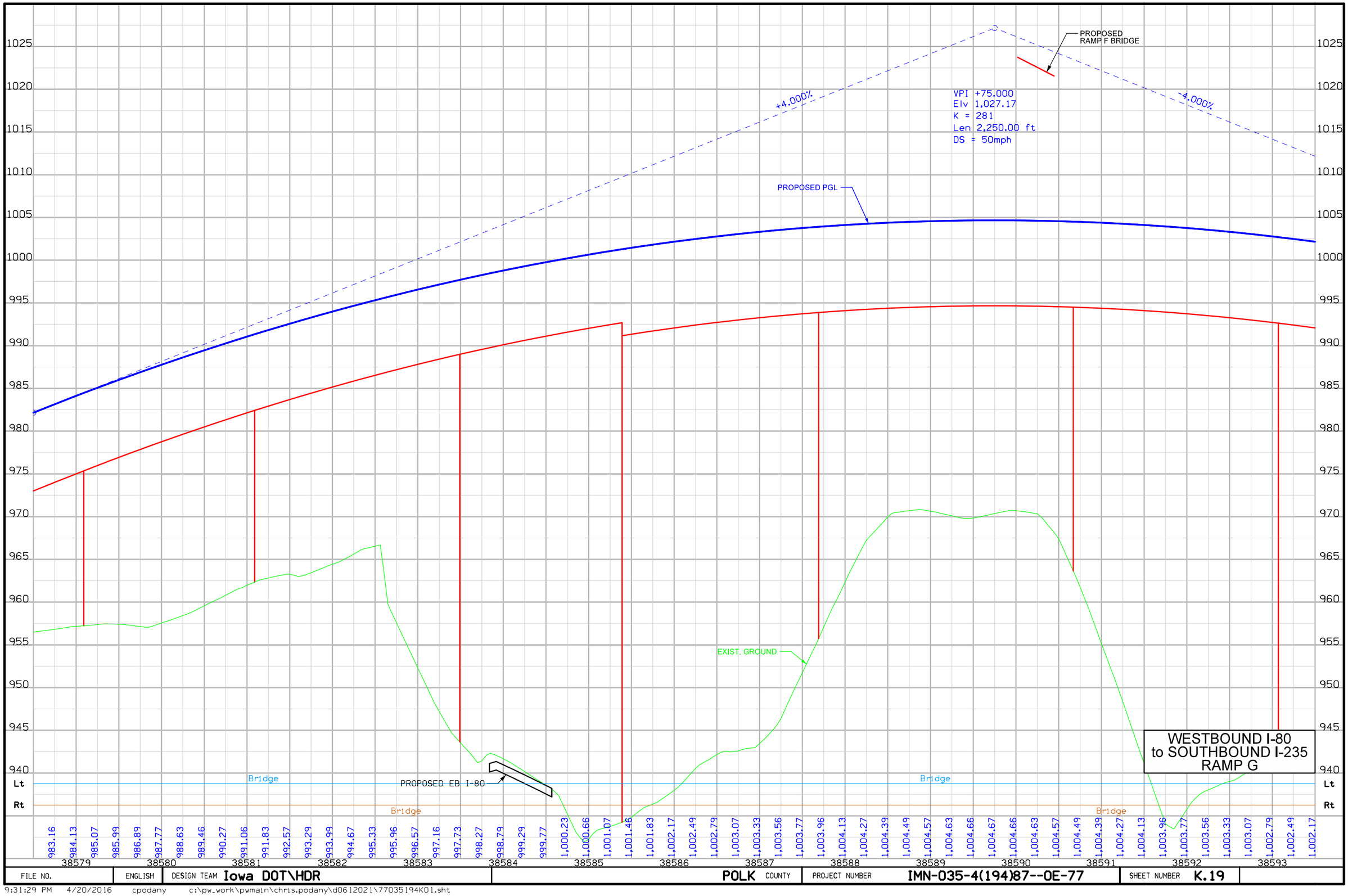
0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 18

WESTBOUND I-80
to SOUTHBOUND I-235
RAMP G

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.18

9:31:27 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.19

9:31:29 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Equation:
Sta. 38596+05.16 RAMP G
=Sta. 38664+05.90 RAMP H

Equation:
Sta. 38598+80.53 RAMP G
=Sta. 4100+06.91 WB I-80

38595

38600

38605

NB I-235 to WB I-80 RAMP H (235H)

WB I-80 to SB I-235
RAMP G (235G)

WB I-80 to NB I-35
RAMP A (235A)

(U.A.C.)

(Remove)

(U.A.C.)

Sta 38600+76.01

WB I-80 (ML080W)

(Remove)

EB I-80 (ML080E)

(Remove)

Sta. 38604+32.36, 6.00' LT
Begin Shoulder Taper

PI Sta 38604+68.41

Sta. 38607+32.36, 12.00' LT
End Shoulder Taper

50:1 Taper

50:1 Taper

Sta. 38604+32.36, 36.00' RT
Begin Shoulder Taper

Curve Data
Δ = 32° 52' 34.42" (RT)
T = 392.40
L = 763.15
R = 1,330.00
E = 56.68
e = 5.4%
L = 194
x = 72
DS = 50mph

(Remove)

Sta. 38607+32.36, 30.00' RT
End Shoulder Taper

PT Sta 38608+39.16

DELAWARE TWP.
T-79-N R-23W
SEC. 18

0 FEET 50

WESTBOUND I-80
to SOUTHBOUND I-235
RAMP G

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.20

9:31:31 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

-4.000%

PROPOSED PGL

PROPOSED WB I-80

EXIST. GROUND

+05 Lt.
942.72

+00 Lt.
943.31

+0.20% Lt. Ditch Grade

+1.28% Lt. Ditch Grade

+40 Lt.
945.10

+00 Rt.
938.00

-1.52% Rt. Ditch Grade

WESTBOUND I-80
to SOUTHBOUND I-235
RAMP G

Bridge

Ditch Grade

Ditch Grade

Bridge

Ditch Grade

1,001.83	1,001.46	1,001.07	1,000.66	1,000.23	999.77	999.29	998.79	998.27	997.73	997.16	996.57	995.96	995.33	994.67	993.99	993.29	992.57	991.83	991.06	990.27	989.46	988.63	987.77	986.89	985.99	985.07	984.13	983.16	982.17	981.17	980.17	979.17	978.17	977.17	976.17	975.17	974.17	973.17	972.17	971.17	970.17	969.17	968.17	967.17	966.17	965.17	964.17	963.17	962.17	961.17	960.17	959.17	958.17	957.17	956.17	955.17	954.17	953.17	952.17
38594				38595				38596				38597				38598				38599				38600				38601				38602				38603				38604				38605				38606				38607				38608			

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.21

9:31:33 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 38613+57.50
Install 4' x 4' x 254' RCB DR-601
Skew = 47° Rt. Ahd.
F.L. = Lt. 922.40
Rt. 921.40

N

WB I-80 to NB I-35
RAMP A (235A)

38610

38615

38620

WB I-80 to SB I-235
RAMP G (235G)

PT Sta 38608+39.16

F03

0 FEET 50

DELAWARE TWP.
T-79-N R-23W
SEC. 18

WESTBOUND I-80
to SOUTHBOUND I-235
RAMP G

EXIST. GROUND

VPI +75.000
Elv 927.17
K = 176
Len 800.00 ft
DS = 50mph

-4.000%

+0.553%

PROPOSED PGL

-1.52% Rt. Ditch Grade

+4.00% Lt. Ditch Grade

+66 Lt.
924.65

+20 Lt.
922.50

+0.20% Lt. Ditch Grade

+40 Rt.
922.20

+0.60% Rt. Ditch Grade

+75 Lt.
923.41

+15 Rt.
924.45

+50 Lt.
924.12

-0.50% Lt. Ditch Grade

950 945 940 935 930 925 920 915

| | | |

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 38625+80.00
Install 24" x 136' DR-601
Skew = 0° Ahd.
F.L. = Lt. 921.00
Rt. 921.90

Equation:
Sta. 38632+22.58 RAMP G
=Sta. 38806+23.10 NE 29TH ST.

DELAWARE TWP.
T-79-N R-23W
SEC. 17

Sta. 38637+77.87 (RAMP G)
Sta. 5137+77.87, 115.00' LT (I-80)
End Construction

CHICHAQUA VALLEY TRAIL

Equation:
Sta. 38632+60.79 RAMP G
=Sta. 17+31.38 CV TRAIL

Curve Data
Δ = 4° 57' 40.47" (LT)
T = 350.91
L = 701.38
R = 8,100.00
E = 7.60
e = NC
DS = 50mph

38625
38630
38635
PC Sta 38630+76.49
PT Sta 38634+27.39
PT Sta 38637+77.87
NE 29TH STREET
WB I-80 to SB I-235
RAMP G (235G)
F03
I-80 (Mi 080)

DELAWARE TWP.
T-79-N R-23W
SEC. 18

0 50 FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 17

WESTBOUND I-80
to SOUTHBOUND I-235
RAMP G

VPI +25.000
Elv 936.29
K = 162
Len 550.00 ft
DS = 50mph

+0.553%
-2.850%
-3.00% Lt. Ditch Grade
-0.50% Lt. Ditch Grade
-4.12% Lt. Ditch Grade

+50 Lt.
901.00

+78 Lt.
888.16

+50 Lt.
919.12

+90 Lt.
909.23

EXIST. GROUND
PROPOSED PGL

STA. 38637+77.87
END CONSTRUCTION
ELEV 917.68

Lt
Rt

Ditch Grade | Ditch Grade | Bridge | Ditch Grade

See Westbound I-80 Left Ditch | Vari. - See Cross Section | Bridge | Vari. - See Cross Section

932.14 932.28 932.42 932.56 932.70 932.83 932.97 933.11 933.25 933.39 933.52 933.66 933.80 933.94 934.08 934.21 934.35 934.49 934.63 934.77 934.89 934.97 935.01 935.01 934.97 934.90 934.79 934.63 934.44 934.22 933.95 933.64 933.30 932.91 932.49 932.03 931.53 930.99 930.41 929.80 929.14 928.45 927.74 927.02 926.31 925.60 924.89 924.17 923.46 922.75 922.04 921.32 920.61 919.90 919.19 918.47 917.76

38624 38625 38626 38627 38628 38629 38630 38631 38632 38633 38634 38635 38636 38637 38638

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.23

9:31:37 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 38652+13.74 (RAMP H)
Sta. 33552+13.74, 64.00' LT (RAMP D)
Begin Construction

Curve Data
Δ = 39° 49' 39.83" (LT)
T = 479.64
L = 920.35
R = 1,324.00
E = 84.20
e = 5.2%
DS = 50mph

POT Sta 38651+06.43

PC Sta 38654+23.24

38655

PI Sta 38659+02

ML I-235 (MI235)

(U.A.C.)

NB I-235 to WB I-80 RAMP H (235H)

NB I-235 to EB I-80
RAMP D (235D)

Sta. 38654+58.44 (RAMP H)
End Ramp Construction

EB I-80 (ML080E)

(Remove)

E2

E3

0 FEET 50

DELAWARE TWP.
T-79-N R-23W
SEC. 18

NORTHBOUND I-235 to WESTBOUND I-80 RAMP H

STA. 38652+13.74
BEGIN CONSTRUCTION
ELEV 962.11

STA. 38654+58.44
END CONSTRUCTION
ELEV 961.16

962.11

961.16

PROPOSED PGL

-1.151%

+0.570%

VPI +50.000
Elv 960.54
K = 116
Len 200.00 ft
DS= 50mph

EXIST. GROUND

970 965 960 955 950 945 940 935

Lt

Rt

961.98 961.69 961.43 961.22 961.07 960.97 960.92 960.93 960.99 961.11

38652 38653 38654 38655

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.24

9:31:38 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

DELAWARE TWP.
T-79-N R-23W
SEC. 18

Sta. 38677+18.48 (RAMP H)
Begin Ramp Construction

NB I-235 to WB I-80 RAMP H (235H)

Sta. 38679+60.00
Install 24" x 120' DR-601
Skew = 0° ,Ahd.
F.L. = Lt. 935.00
Rt. 938.00

Curve Data
Δ = 273° 14' 43.18" (RT)
T = 251.34
L = 1,268.56
R = 266.00
E = 631.97
DS = 30mph

Sta. 38681+45.29 (RAMP H)
Sta. 4099+65.77, 63.93' RT (WB I-80)
End Ramp Construction

WB I-80 to NB I-35
RAMP A (235A)

WB I-80 (MILO80W)

WB I-80 to SB I-235
RAMP G (235G)

PT Sta 38681+45.29

PT Sta 38663+43.59

38675

38680

38665

0 50
FEET

DELAWARE TWP.
T-79-N R-23W
SEC. 18

NORTHBOUND I-235
to WESTBOUND I-80
RAMP H

970
965
960
955
950
945
940
935
Lt
Rt

EXIST. GROUND

VPI +75.000
Elv 953.64
K = 118
Len 100.00 ft
DS= 50mph

955.06

-2.500%

PROPOSED PGL

VPI +25.000
Elv 945.28
K = 89
Len 200.00 ft
DS= 50mph

943.95

-3.347%

-1.104%

STA. 38677+18.48
BEGIN CONSTRUCTION
ELEV 955.06

STA. 38681+45.29
END CONSTRUCTION
ELEV 943.95

+18 Rt.
948.22

-3.92% Rt. Ditch Grade

+45 Rt.
938.72

+0.20% Rt. Ditch Grade

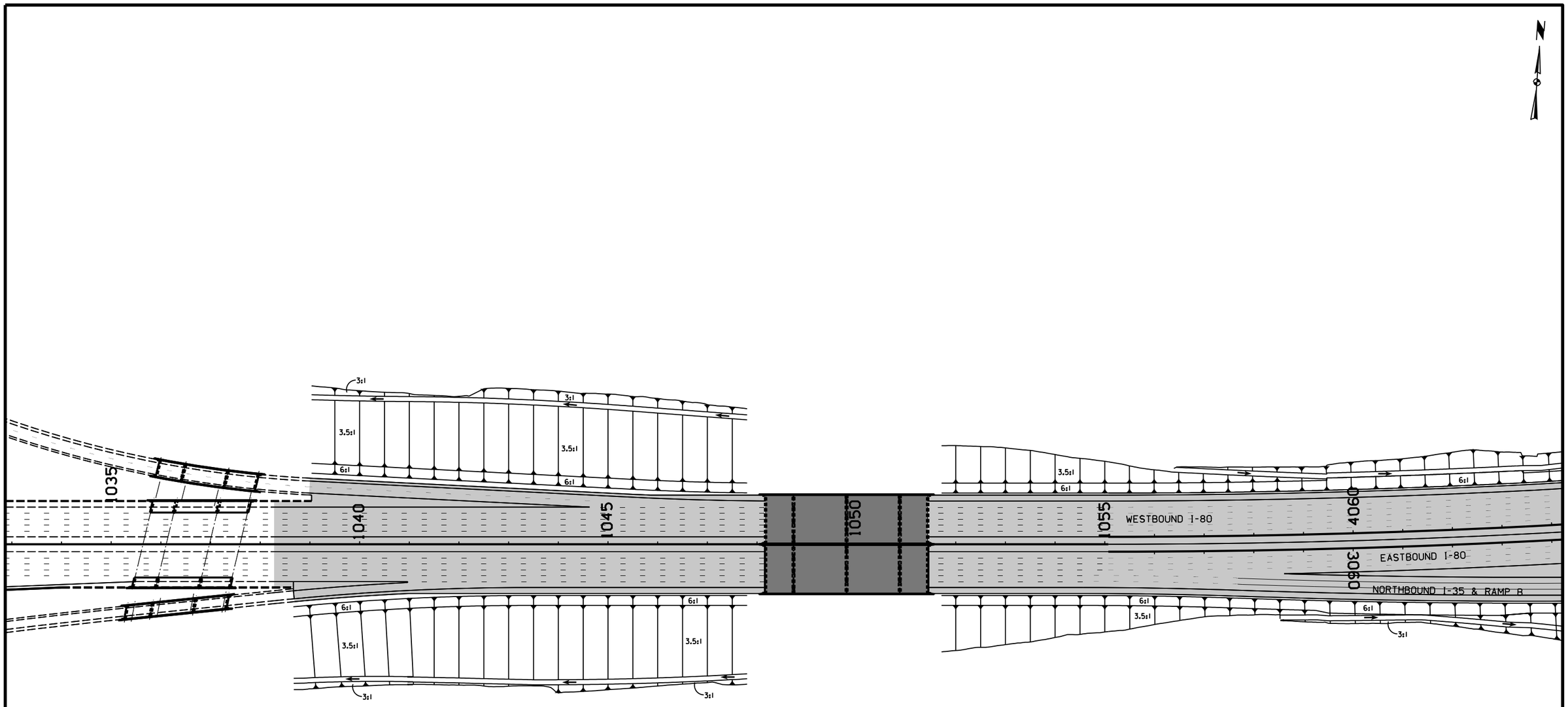
+70 Rt.
938.37

954.89 954.24 953.54 952.78 951.97 951.13 950.30 949.46 948.62 947.82 947.09 946.43 945.84 945.32 944.86 944.48 944.17

38677 38678 38679 38680 38681 38682

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.25

9:31:40 PM 4/20/2016 cpodany c:\pw_work\pwmain\chris.podany\d0612021\77035194K01.sht

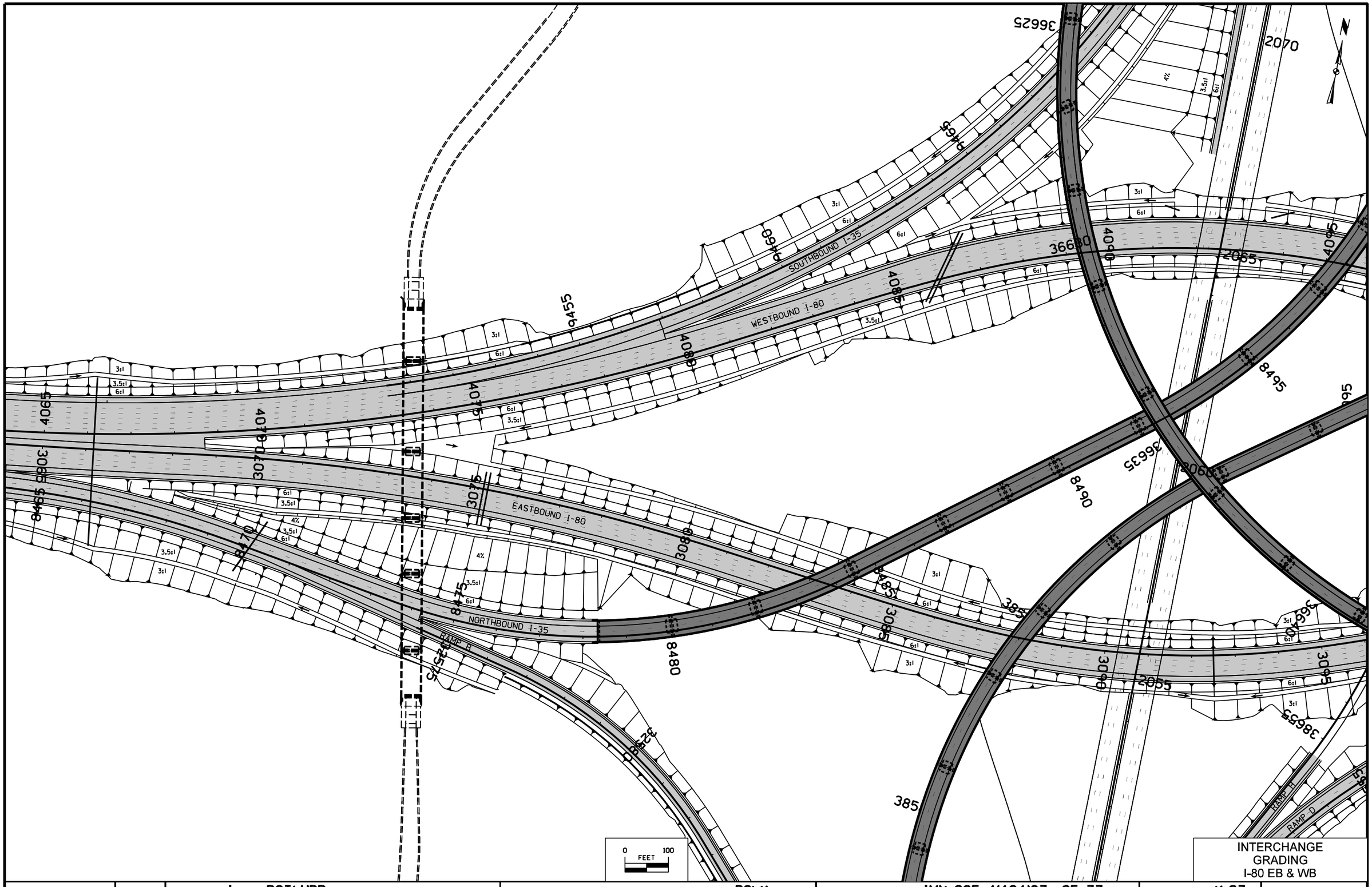


0 FEET 100

INTERCHANGE
GRADING
I-80 WEST OF CORE

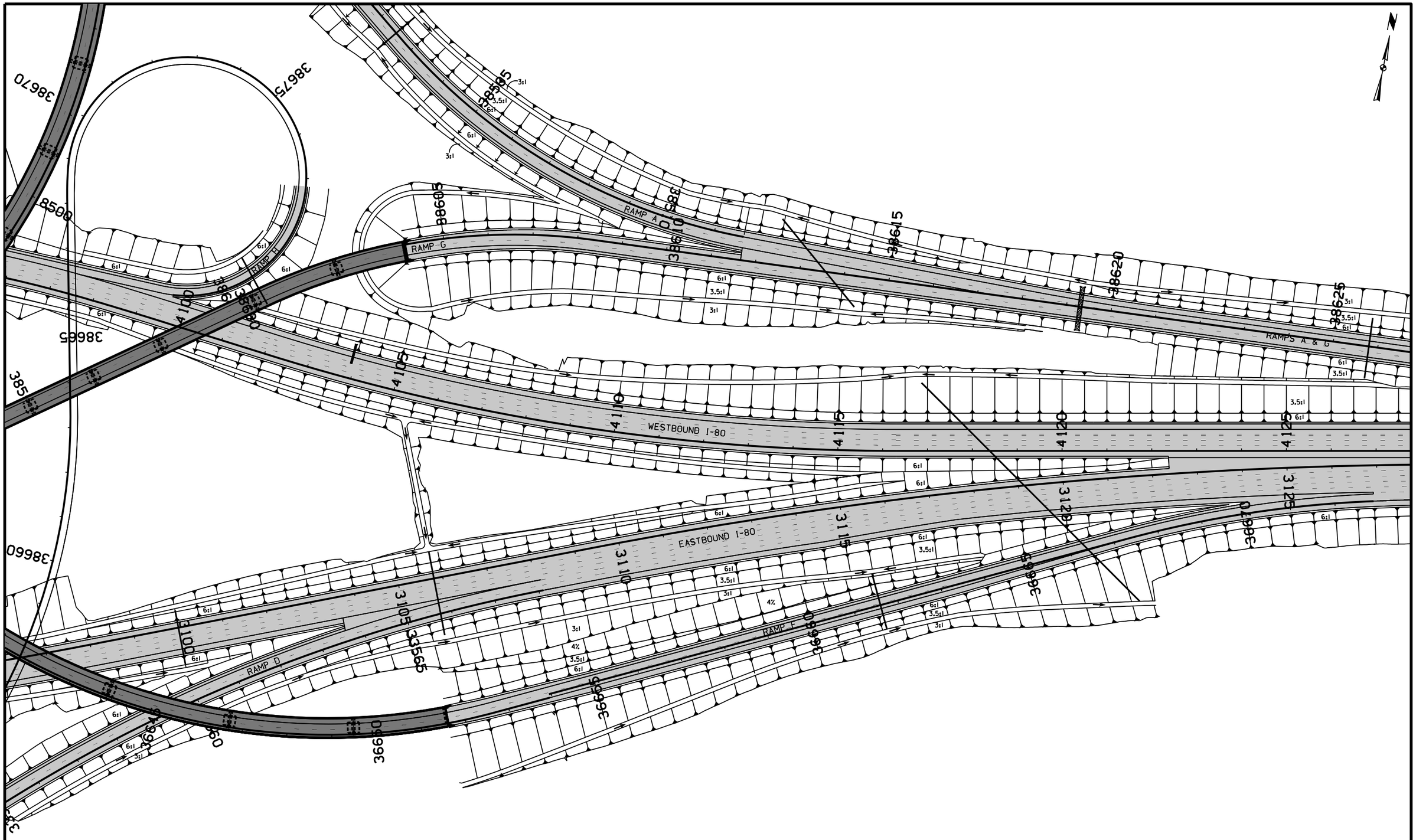
FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.26

SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.27

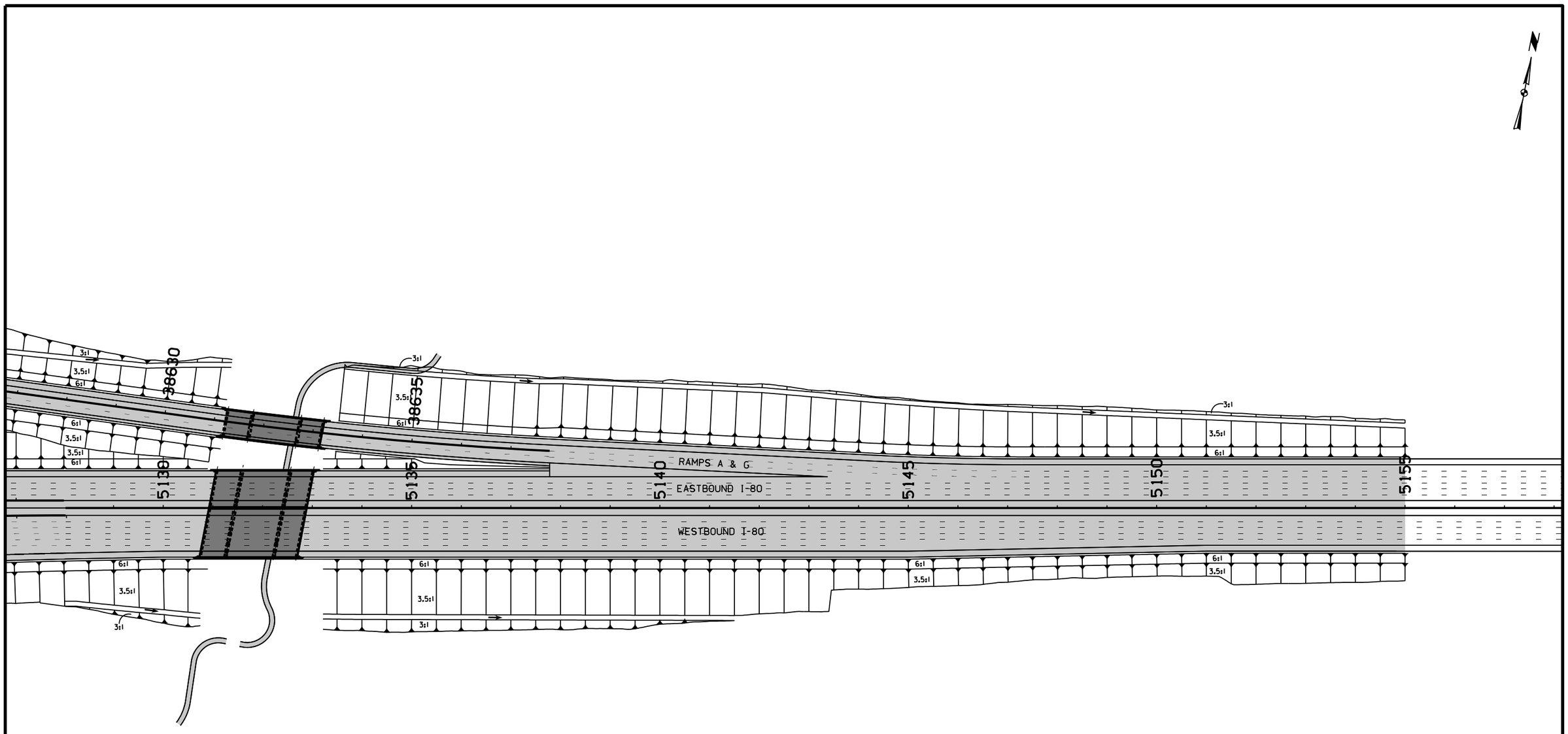
SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC



INTERCHANGE GRADING
I-80 EB & WB

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.28

SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC

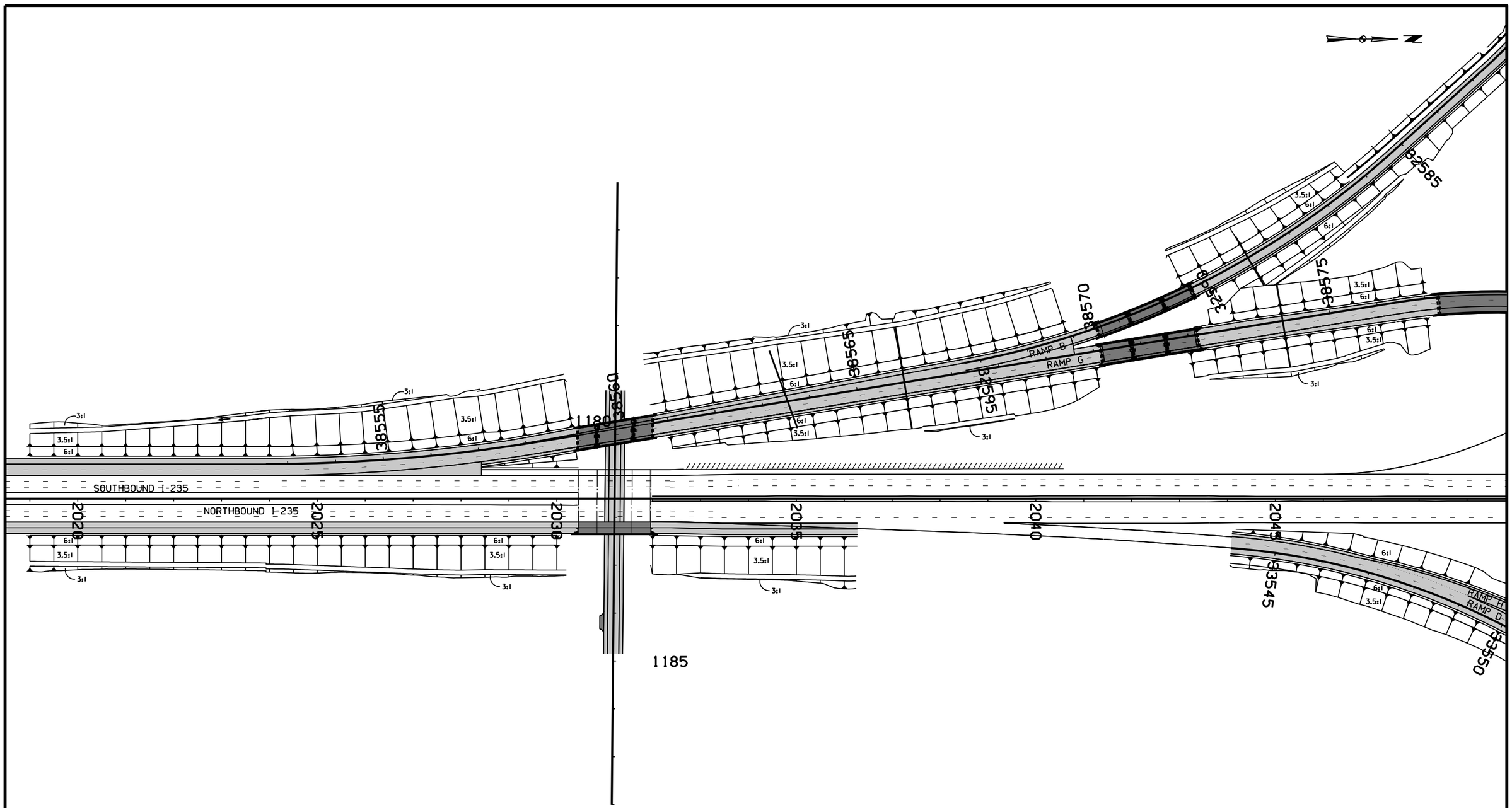


0 100 FEET

INTERCHANGE GRADING I-80 EAST OF CORE

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.29

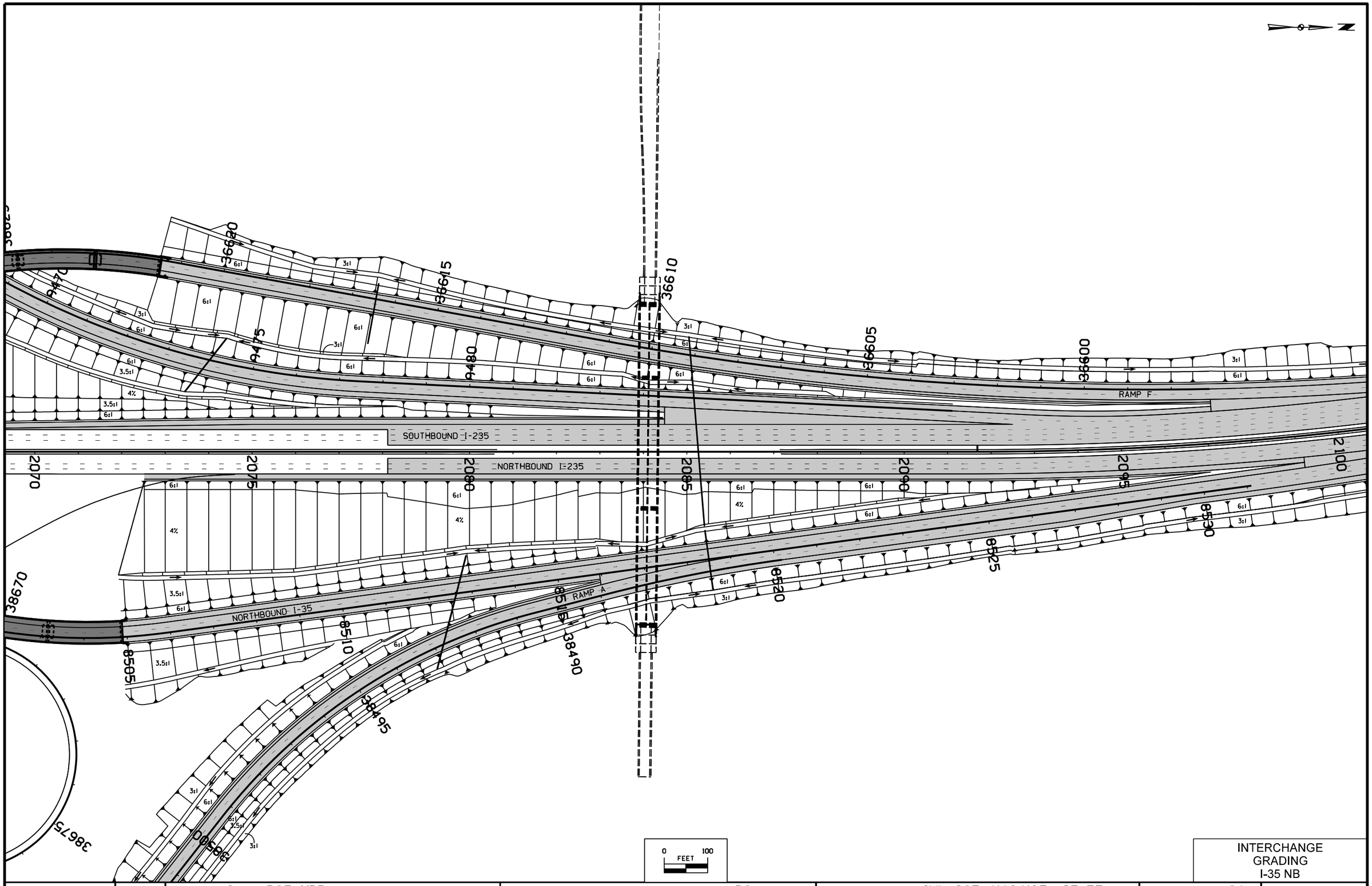
SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC



INTERCHANGE
GRADING
I-235 SOUTH OF CORE

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.30

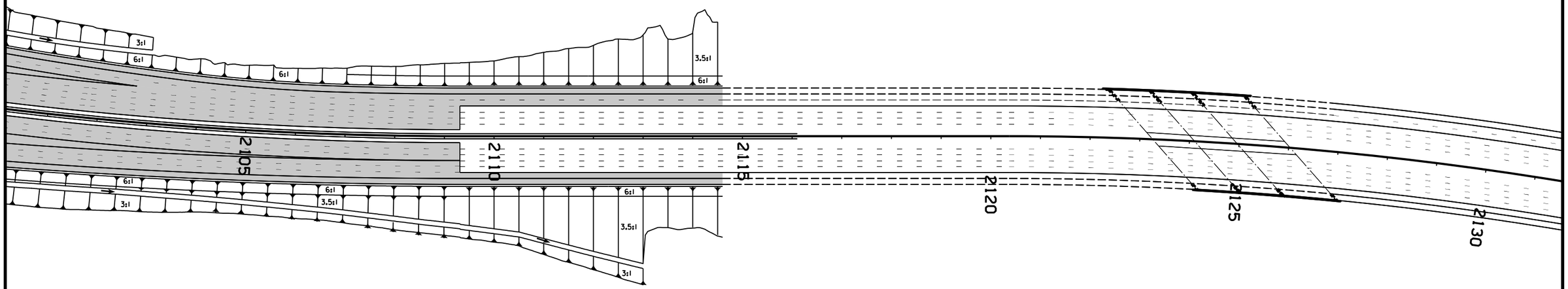
SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC



INTERCHANGE GRADING I-35 NB

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.31

SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC



INTERCHANGE
GRADING
I-35 NORTH OF CORE

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER K.32

SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC

KEY MAP



NO SCALE

SHEET LAYOUT OVERVIEW

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.1

1:55:53 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\7703519 4N01.sht

995
1000
1005
1010
1015
1020

80/35-77-X M300



STA. 991+91.36
EXIT DIRECTION ON
45 FT CANTILEVER

80/35-77-X M301



STA. 1002+00.00
EXIT DIRECTION ON
55 FT CANTILEVER

80/35-77-X M302

80/35-77-X M303



STA. 1012+00.00
PULL THRU & ADVANCE ON
105 FT OVERHEAD TRUSS

0 100
FEET

NOTE: STRUCTURE LENGTHS
SHOWN ARE APPROXIMATE AND ARE
ROUNDED TO THE NEAREST 5 FEET

PERMANENT SIGN
LOCATION DETAILS
ALONG I-80/I-35

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.2

1:56:41 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N01.sht

80/35-77-X M409

69
E 14th St
Ankeny
EXIT ONLY

STA. 1045+38.90
EXIT DIRECTION ON
50 FT CANTILEVER

1025 1030 1035 1040 1045 1050

80/35-77-X M305

80/35-77-X
M304

EAST
80
Davenport
LEFT LANES

NORTH WEST
35 235
Minneapolis
Des Moines
1/2 MILE

STA. 1030+87.01
PULL THRU & ADVANCE ON
120 FT OVERHEAD TRUSS

80/35-77-X M306

EAST
80
Davenport

NORTH
35
Minneapolis

WEST
235
Des Moines

1/4 MILE

EXIT ONLY

STA. 1043+80.57
ARROW-PER-LANE ADVANCE ON
120 FT OVERHEAD TRUSS

0 100
FEET

NOTE: STRUCTURE LENGTHS
SHOWN ARE APPROXIMATE AND ARE
ROUNDED TO THE NEAREST 5 FEET

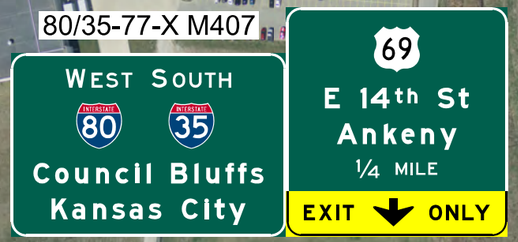
PERMANENT SIGN
LOCATION DETAILS
ALONG I-80/I-35

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.3

1:58:44 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N01.sht

80/35-77-X M408

80/35-77-X M407



STA. 1064+07.21
PULL THRU & EXIT DIRECTION ON
120 FT OVERHEAD TRUSS

1055 1060 1065 1070 1075 1080

8465 8470 8475 8480

80/35-77-X M307



STA. 1055+05.29
ARROW-PER-LANE EXIT DIRECTION ON
120 FT OVERHEAD TRUSS

80/35-77-X M308



80/35-77-X M309



STA. 1063+06.46
PULL THRU & EXIT DIRECTION ON
145 FT OVERHEAD TRUSS

35-77-X R310



35-77-X R311



STA. 8471+08.83
PULL THRU & EXIT DIRECTION ON
105 FT OVERHEAD TRUSS

0 100 FEET

NOTE: STRUCTURE LENGTHS
SHOWN ARE APPROXIMATE AND ARE
ROUNDED TO THE NEAREST 5 FEET

PERMANENT SIGN
LOCATION DETAILS
ALONG I-80/I-35

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.4

2:00:37 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N01.sht

35-77-X R405



STA. 38619+30.36
ARROW-PER-LANE EXIT DIRECTION ON
100 FT OVERHEAD TRUSS

35-77-X R404



STA. 38629+30.52
ARROW-PER-LANE ADVANCE ON
100 FT OVERHEAD TRUSS

38610
38615
38620
38625
38630
38635
1110
1115
1120
1125
1130
1135

0 100
FEET

NOTE: STRUCTURE LENGTHS SHOWN ARE APPROXIMATE AND ARE ROUNDED TO THE NEAREST 5 FEET

PERMANENT SIGN LOCATION DETAILS ALONG I-80

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.5

2:02:30 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N01.sht

80-77-X M403

WEST SOUTH
Council Bluffs
Kansas City

WEST NORTH
Des Moines Minneapolis

EXIT ONLY EXIT ONLY

STA. 5147+33.26
ARROW-PER-LANE EXIT DIRECTION ON
120 FT OVERHEAD TRUSS

80-77-X M402

NORTH
Minneapolis
RIGHT 2 LANES

STA. 5160+03.41
PULL THRU ON
50 FT CANTILEVER

5140 5145 5150 5155 5160 5165

80-77-X M313

SOUTH
Altoona
Des Moines
1 MILE
EXIT ONLY

80-77-X M312

EAST
Davenport

STA. 5167+56.51
PULL THRU & EXIT DIRECTION ON
105 FT OVERHEAD TRUSS

0 100
FEET

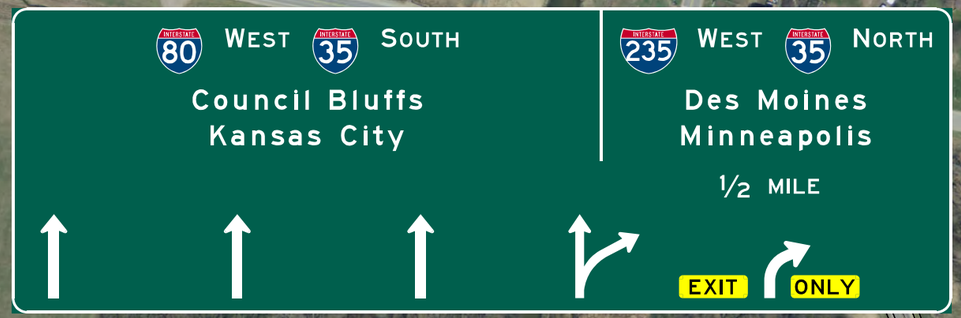
NOTE: STRUCTURE LENGTHS SHOWN ARE APPROXIMATE AND ARE ROUNDED TO THE NEAREST 5 FEET

PERMANENT SIGN LOCATION DETAILS ALONG I-80

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.6

2:04:25 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N01.sht

80-77-X M401



STA. 5172+88.39
ARROW-PER-LANE ADVANCE ON
105 FT OVERHEAD TRUSS

DMS

STA. 5182+03.99
RELOCATED DYNAMIC MESSAGE SIGN
105 FT OVERHEAD TRUSS

5170 5175 5180 5185 5190 5195

SEE SHEET N.6

80-77-X M314



STA. 5193+50.00
EXIT DIRECTION ON
45 FT CANTILEVER

N

0 FEET 100

NOTE: STRUCTURE LENGTHS SHOWN ARE APPROXIMATE AND ARE ROUNDED TO THE NEAREST 5 FEET

PERMANENT SIGN LOCATION DETAILS ALONG I-80

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.7

2:06:09 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N01.sht

80-77-X M400

WEST SOUTH
Council Bluffs
Kansas City

WEST NORTH
Des Moines
Minneapolis

1 MILE

EXIT ONLY

STA. 5199+63.13
ARROW-PER-LANE ADVANCE ON
105 FT OVERHEAD TRUSS

5200 5205 5210 5215 5220 5225

80-77-X M316

80-77-X M315

LANE ENDS
¼ MILE

65 SOUTH
Altoona
Des Moines

EXIT ONLY

STA. 5219+87.02
LANE ENDS & EXIT DIRECTION ON
70 FT CANTILEVER

0 100
FEET

NOTE: STRUCTURE LENGTHS SHOWN ARE APPROXIMATE AND ARE ROUNDED TO THE NEAREST 5 FEET

PERMANENT SIGN LOCATION DETAILS ALONG I-80

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.8

2:07:56 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N01.sht

1955
1960
1965
1970
1975
1980
1985

235-77-X M100

6
Euclid Ave
Grand View Univ

STA. 1955+57.56
EXIT DIRECTION ON
55 FT CANTILEVER

235-77-X M101

NORTH
35
Minneapolis

SOUTH
35 80
1 MILE

STA. 1970+80.53
ARROW-PER-LANE ADVANCE ON
95 FT OVERHEAD TRUSS

0 100
FEET

NOTE: STRUCTURE LENGTHS SHOWN ARE APPROXIMATE AND ARE ROUNDED TO THE NEAREST 5 FEET

PERMANENT SIGN LOCATION DETAILS ALONG I-235

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.9

2:09:35 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\7703519 4N01.sht

235-77-X M207

235-77-X M208

235-77-X M205

235-77-X M206

LANE ENDS
1/2 MILE

6
Euclid Ave
Grand View Univ
EXIT ONLY

INTERSTATE 235 WEST
Des Moines

6
Euclid Ave
Grand View Univ
1/4 MILE
EXIT ONLY

STA. 1993+97.65
LANE ENDS & EXIT DIRECTION ON
65 FT CANTILEVER

STA. 2009+77.11
PULL THRU & EXIT DIRECTION ON
105 FT OVERHEAD TRUSS

1985 1990 1995 2000 2005 2010 2015

DMS

STA. 1998+70.61
RELOCATED DYNAMIC MESSAGE SIGN
95 FT OVERHEAD TRUSS

235-77-X M102

Davenport
FOLLOW INTERSTATE 80

STA. 1988+81.29
PULL THRU ON
65 FT CANTILEVER

235-77-X M103

NORTH
INTERSTATE 35
Minneapolis

SOUTH
INTERSTATE 35 INTERSTATE 80
1/2 MILE

STA. 2010+57.26
ARROW-PER-LANE ADVANCE ON
95 FT OVERHEAD TRUSS

0 FEET 100

NOTE: STRUCTURE LENGTHS SHOWN ARE APPROXIMATE AND ARE ROUNDED TO THE NEAREST 5 FEET

PERMANENT SIGN LOCATION DETAILS ALONG I-235

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.10

2:11:37 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N01.sht

DMS

STA. 2019+58.21
RELOCATED DYNAMIC MESSAGE SIGN
105 FT OVERHEAD TRUSS

2015 2025 2030 2035 2040 2045

235-77-X M104

SOUTH
35 80
Kansas City
Council Bluffs
¼ MILE

235-77-X M105

80
Davenport
¼ MILE

STA. 2022+40.41
ADVANCE & ADVANCE ON
95 FT OVERHEAD TRUSS

235-77-X M106

NORTH
35
Minneapolis

SOUTH
35 80

STA. 2032+40.41
ARROW-PER-LANE EXIT DIRECTION ON
95 FT OVERHEAD TRUSS

35/80-77-X R107

LEFT

SOUTH WEST
35 80
Kansas City
Council Bluffs

35/80-77-X R108

80 EAST
Davenport

STA. 2040+40.69
EXIT DIRECTION & PULL THRU ON
60 FT CANTILEVER

0 100
FEET

NOTE: STRUCTURE LENGTHS
SHOWN ARE APPROXIMATE AND ARE
ROUNDED TO THE NEAREST 5 FEET

PERMANENT SIGN
LOCATION DETAILS
ALONG I-235

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.11

2:13:28 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N01.sht

235-77-X M204

6
Euclid Ave
Grand View Univ
1 MILE

STA. 2047+00.00
ADVANCE ON
55 FT CANTILEVER

2045
33545
2055
2065
2070
2075
33550
33555
1095
33560
1100

35/80-77-X R109

LEFT

SOUTH WEST
35 80
Kansas City
Council Bluffs

35/80-77-X R110

80 EAST
Davenport

STA. 33548+98.37
EXIT DIRECTION & EXIT DIRECTION ON
100 FT OVERHEAD TRUSS

80-77-X M406

69
E 14th St
Ankeny
1 MILE

STA. 1103+25.11
ADVANCE ON
45 FT CANTILEVER

0 100
FEET

NOTE: STRUCTURE LENGTHS SHOWN ARE APPROXIMATE AND ARE ROUNDED TO THE NEAREST 5 FEET

PERMANENT SIGN LOCATION DETAILS ALONG I-235

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.12

2:15:14 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N01.sht

35-77-X M203



STA. 2096+02.73
ARROW-PER-LANE EXIT DIRECTION ON
165 FT OVERHEAD TRUSS

35-77-X M202



STA. 2104+90.27
ARROW-PER-LANE EXIT DIRECTION ON
120 FT OVERHEAD TRUSS

2075 2080 2085 2090 2095 2100 2105

35-77-X M111



STA. 2087+50.00
ADVANCE ON
55 FT CANTILEVER

0 100 FEET

NOTE: STRUCTURE LENGTHS SHOWN ARE APPROXIMATE AND ARE ROUNDED TO THE NEAREST 5 FEET

PERMANENT SIGN LOCATION DETAILS ALONG I-35

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.13

2:16:57 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N01.sht

35-77-X M201



DMS

STA. 2126+40.45
RELOCATED DYNAMIC MESSAGE SIGN
115 FT OVERHEAD TRUSS

STA. 2135+02.16
ARROW-PER-LANE ADVANCE ON
120 FT OVERHEAD TRUSS

2110 2115 2120 2125 2130 2135

35-77-X M112



35-77-X M113



STA. 2114+97.87
PULL THRU & EXIT DIRECTION ON
115 FT OVERHEAD TRUSS

0 FEET 100

NOTE: STRUCTURE LENGTHS SHOWN ARE APPROXIMATE AND ARE ROUNDED TO THE NEAREST 5 FEET

PERMANENT SIGN LOCATION DETAILS ALONG I-35

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.14

2:18:48 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N01.sht

35-77-X M200



STA. 2164+84.51
ARROW-PER-LANE ADVANCE ON
125 FT OVERHEAD TRUSS

2140
2145
2150
2155
2160
2165

35-77-X M114



STA. 2140+39.78
EXIT DIRECTION ON
55 FT CANTILEVER

0 100 FEET

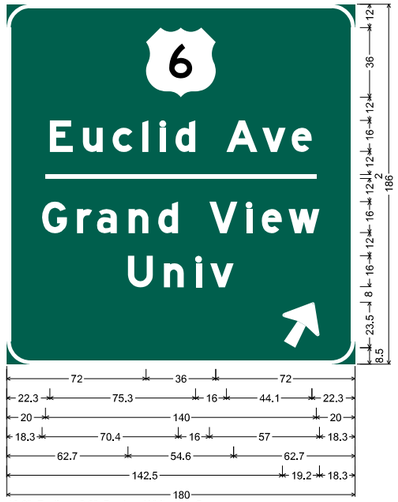
NOTE: STRUCTURE LENGTHS SHOWN ARE APPROXIMATE AND ARE ROUNDED TO THE NEAREST 5 FEET

PERMANENT SIGN LOCATION DETAILS ALONG I-35

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.15

2:20:33 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N01.sht

235-77-X M100



12.0" Radius, 2.0" Border, White on Green;
[Euclid Ave] E Mod; [Grand View] E Mod; [Univ] E Mod;
Arrow 8 - 25.0" 60°;
Table of letter and object lefts.

6 72.0								
E 22.3	u 39.4	c 54.7	l 70.0	l 79.2	d 87.2	A 113.6	v 132.1	e 147.3
— 20.0								
G 18.3	r 36.3	a 46.6	n 63.0	d 78.3	V 104.7	l 123.8	e 131.8	w 145.7
U 62.7	n 81.2	l 97.7	v 105.2					
↗ 142.5								

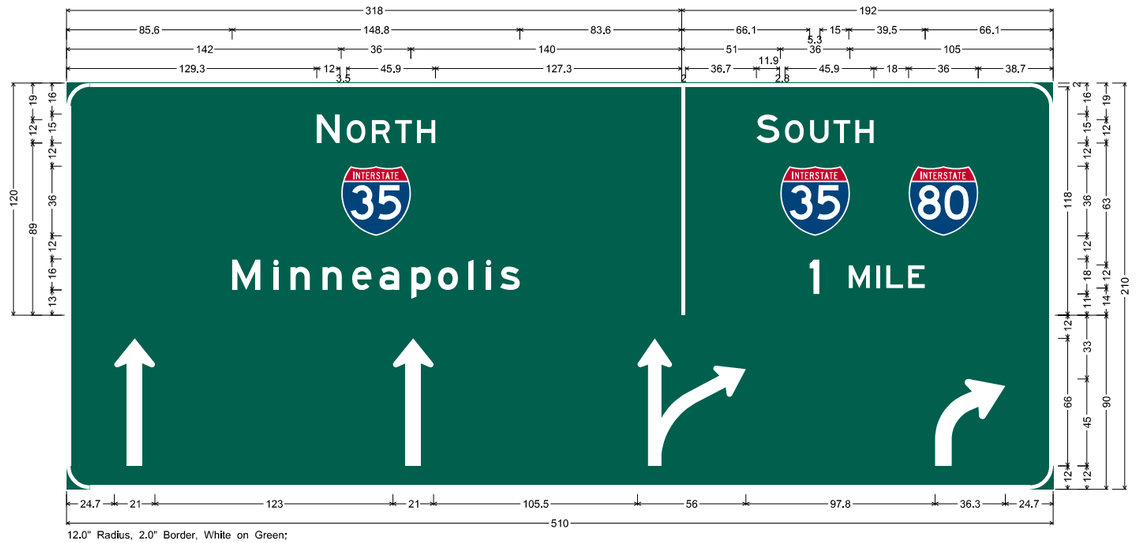
NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.16

2:31:22 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N16.sht

235-77-X M101



12.0" Radius, 2.0" Border, White on Green;
[NORTH] E: [Minneapolis] E;
12.0" Radius, 2.0" Border, White on Green;
[SOUTH] E: [1 MILE] E;
12.0" Radius, 2.0" Border, White on Green;
Arrow Custom - 66.0" 90°; Arrow Custom - 66.0" 90°; 30D; 48A;
Table of letter and object lefts.

N 129.3	O 144.8	R 157.8	T 169.8	H 181.1
142.0				
M 85.6	I 106.9	n 115.8	n 132.3	e 147.6	a 161.7	p 178.2	o 192.0	I 207.6	I 216.8	s 224.1
I 318.0	S 356.7	O 371.4	U 384.4	T 396.5	H 407.7	435.3
369.0				
I 384.1	M 404.4	I 418.6	L 423.8	E 435.0
I 24.7	I 168.7	295.2	449.0	

235-77-X M102



12.0" Radius, 2.0" Border, White on Green;
[Davenport] E Mod; [FOLLOW] E;
Table of letter and object lefts.

D 17.8	a 34.7	v 49.5	e 64.7	n 80.1	p 96.7	o 110.5	r 126.1	t 136.1
F 24.1	O 33.5	L 44.3	L 53.7	O 63.1	W 73.5	101.9

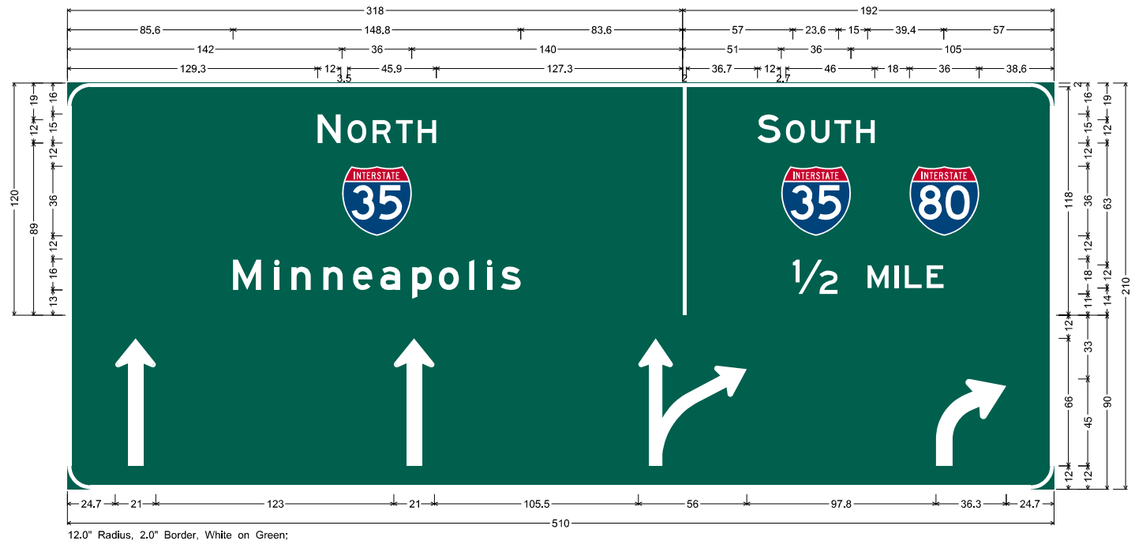
NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.17

2:31:32 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N16.sht

235-77-X M103



12.0" Radius, 2.0" Border, White on Green;
[NORTH] E; [Minneapolis] E;
12.0" Radius, 2.0" Border, White on Green;
[SOUTH] E; [½ MILE] E;
12.0" Radius, 2.0" Border, White on Green;
Arrow Custom - 66.0" 90°; Arrow Custom - 66.0" 90°; 30D; 48A;
Table of letter and object lefts.

N 129.3	O 144.8	R 157.8	T 169.8	H 181.1
142.0				
M 85.6	I 106.9	n 115.8	n 132.3	e 147.6
a 161.7	p 178.2	o 192.0	I 207.6	I 216.8
s 224.1	I 318.0	S 356.7	O 371.4	U 384.5
T 396.5	H 407.8	435.4	369.0	
½ 375.0	M 413.6	I 427.8	L 433.0	E 444.2
I 24.7	I 168.7	295.2	449.0	

NOTE: SIGN DIMENSIONS ARE IN INCHES

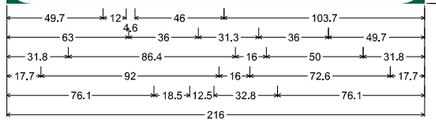
SIGN DETAILS

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.18

2:31:41 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N16.sht

235-77-X M104

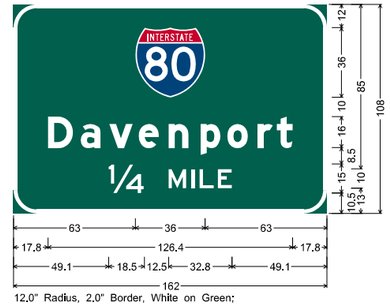




12.0" Radius, 2.0" Border, White on Green:
[S OUTH] E; [Kansas City] E Mod; [Council Bluffs] E Mod; [¼ MILE] E;
Table of letter and object lefts.

S 49.7	O 66.3	U 79.4	T 91.4	H 102.7
63.0	130.3			
K 31.8	a 48.0	n 64.5	s 79.3	a 93.1
s 107.9	C 134.2	l 152.2	t 159.7	y 171.1
C 17.7	o 34.7	u 50.3	n 66.8	c 82.1
l 97.5	l 106.6	B 125.7	l 144.1	u 153.3
f 168.4	f 178.3	s 188.0		
¼ 76.1	M 107.1	l 118.9	L 123.2	E 132.6

235-77-X M105



12.0" Radius, 2.0" Border, White on Green:
[Davenport] E Mod; [¼ MILE] E;
Table of letter and object lefts.

63.0									
D 17.8	a 34.7	v 49.5	e 64.7	n 80.1	p 96.7	o 110.5	r 126.1	t 136.1	
¼ 49.1	M 80.1	l 91.9	L 96.2	E 105.6					

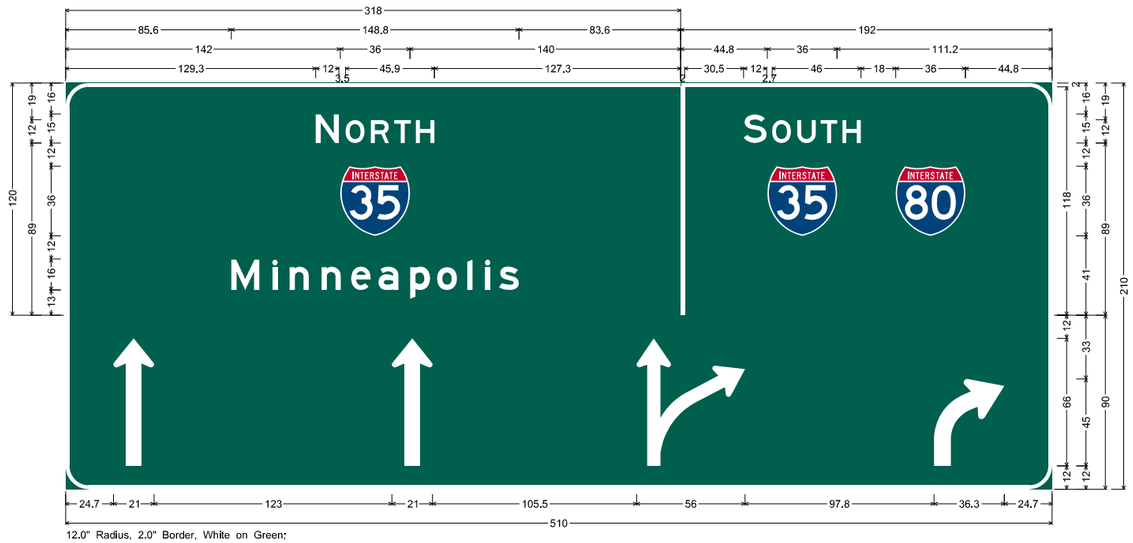
NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.19

2:31:52 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N16.sht

235-77-X M106



12.0" Radius, 2.0" Border, White on Green;
[NORTH] E; [Minneapolis] E:
12.0" Radius, 2.0" Border, White on Green;
[SOUTH] E:
12.0" Radius, 2.0" Border, White on Green;
Arrow Custom - 66.0" 90°; Arrow Custom - 66.0" 90°; 30D; 48A;
Table of letter and object lefts.

N 129.3	O 144.8	R 157.8	T 169.8	H 181.1
142.0				
M 85.6	I 106.9	n 115.8	n 132.3	e 147.6	a 161.7	p 178.2	o 192.0	l 207.6	l 216.8	s 224.1
I 318.0	S 350.5	O 365.2	U 378.3	T 390.3	H 401.6	429.2
362.8				
I 24.7	I 168.7	295.2	449.0	

NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

35/80-77-X R107



3.0" Radius, 1.3" Border, 0.8" Indent, Black on Yellow;
[LEFT] E specified length;
12.0" Radius, 2.0" Border, White on Green;
[S OUTH] E; [W EST] E: [Kansas City] E Mod; [Council Bluffs] E Mod;
Down Arrow 22.0" 270°;
Table of letter and object lefts.

L 14.6	E 26.3	F 37.9	T 48.6

S 41.0	O 57.6	U 70.6	T 82.7	H 94.0	W 122.5	E 142.9	S 154.1	T 166.2	
54.3	130.8								

K 31.8	a 48.0	n 64.5	s 79.3	a 93.1	s 107.9	C 134.2	l 152.2	t 159.7	y 171.1		
C 17.7	o 34.7	u 50.3	n 66.8	c 82.1	l 97.5	l 106.6	B 125.7	l 144.1	u 153.3	f 168.4	f 178.3	s 188.0
92.0											

35/80-77-X R108

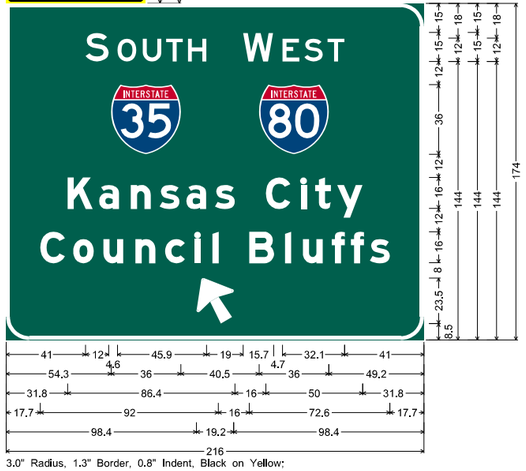


12.0" Radius, 2.0" Border, White on Green;
[E AST] E; [Davenport] E Mod;
Table of letter and object lefts.

28.5	E 82.5	A 98.2	S 112.6	T 124.7	

D 17.8	a 34.7	v 49.5	e 64.7	n 80.1	p 96.7	o 110.5	r 126.1	t 136.1	

35/80-77-X R109



3.0" Radius, 1.3" Border, 0.8" Indent, Black on Yellow;
[LEFT] E specified length;
12.0" Radius, 2.0" Border, White on Green;
[S OUTH] E; [W EST] E: [Kansas City] E Mod; [Council Bluffs] E Mod;
Arrow 8 - 25.0" 120°;
Table of letter and object lefts.

L 14.6	E 26.3	F 37.9	T 48.6

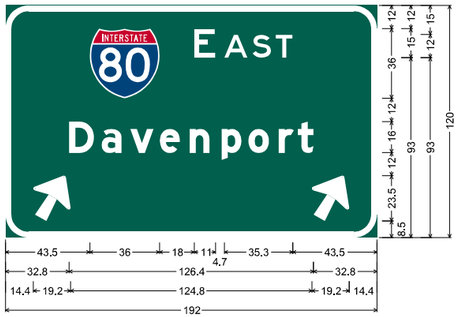
S 41.0	O 57.6	U 70.6	T 82.7	H 94.0	W 122.5	E 142.9	S 154.1	T 166.2	
54.3	130.8								

K 31.8	a 48.0	n 64.5	s 79.3	a 93.1	s 107.9	C 134.2	l 152.2	t 159.7	y 171.1		
C 17.7	o 34.7	u 50.3	n 66.8	c 82.1	l 97.5	l 106.6	B 125.7	l 144.1	u 153.3	f 168.4	f 178.3	s 188.0
98.4											

NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

35/80-77-X R110



12.0" Radius, 3.0" Border, White on Green;
[E AST] E; [Davenport] E Mod; Arrow 8 - 25.0" 60°;
Arrow 8 - 25.0" 60°;
Table of letter and object lefts.

43.5	E 97.5	A 113.2	S 127.6	T 139.7

D 32.8	a 49.7	v 64.5	e 79.7	n 95.1	p 111.7	o 125.5	r 141.1	t 151.1	
14.4	158.4								

35-77-X M111



9.0" Radius, 2.0" Border, White on Green;
[Corporate Woods Dr] E Mod; [1 MILE] E;
Table of letter and object lefts.

C 17.5	o 34.5	r 50.1	p 61.7	o 75.6	r 91.2	a 101.4	t 116.2	e 128.0	W 154.4	o 175.0	o 189.1	d 203.3	s 218.2	D 244.5	r 262.6

1 120.4	M 134.8	I 146.6	L 150.9	E 160.3

35-77-X M112

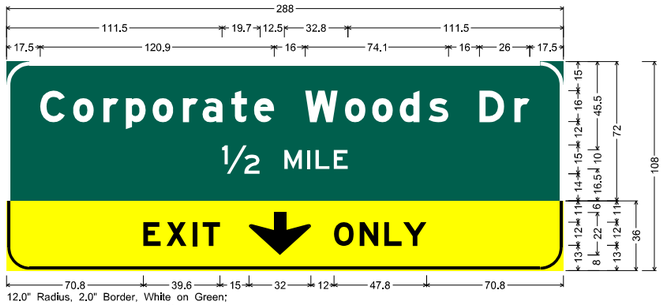


12.0" Radius, 2.0" Border, White on Green;
[N ORTH] E; [Minneapolis] E Mod;
Table of letter and object lefts.

34.7	N 88.7	O 105.3	R 118.4	T 130.4	H 141.7

M 18.4	I 39.6	n 48.8	n 65.3	e 80.6	a 94.7	p 111.2	o 125.0	l 140.6	l 149.8	s 157.3

35-77-X M113



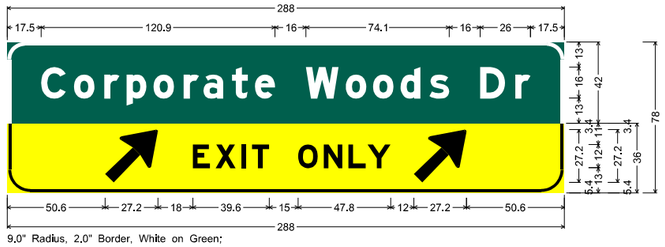
12.0" Radius, 2.0" Border, White on Green;
[Corporate Woods Dr] E Mod; [½ MILE] E;
12.0" Radius, 1.5" Border, 0.5" Indent, Black on Yellow;
[EXIT] E Mod specified length; Down Arrow II-A - 22.0" 270°; [ONLY] E Mod specified length;
Table of letter and object lefts.

C 17.5	o 34.5	r 50.1	p 61.7	o 75.6	r 91.2	a 101.4	t 116.2	e 128.0	W 154.4	o 175.0	o 189.1	d 203.3	s 218.2	D 244.5	r 262.6

½ 111.5	M 143.7	I 155.5	L 159.8	E 169.2

E 70.8	X 82.7	I 96.1	T 101.5	↓ 125.4	O 169.4	N 182.6	L 195.4	Y 205.2	

35-77-X M114



9.0" Radius, 2.0" Border, White on Green;
[Corporate Woods Dr] E Mod;
12.0" Radius, 1.5" Border, 0.5" Indent, Black on Yellow;
Arrow I-F - 35.0" 45°; [EXIT] E Mod specified length; [ONLY] E Mod specified length;
Arrow I-F - 35.0" 45°;
Table of letter and object lefts.

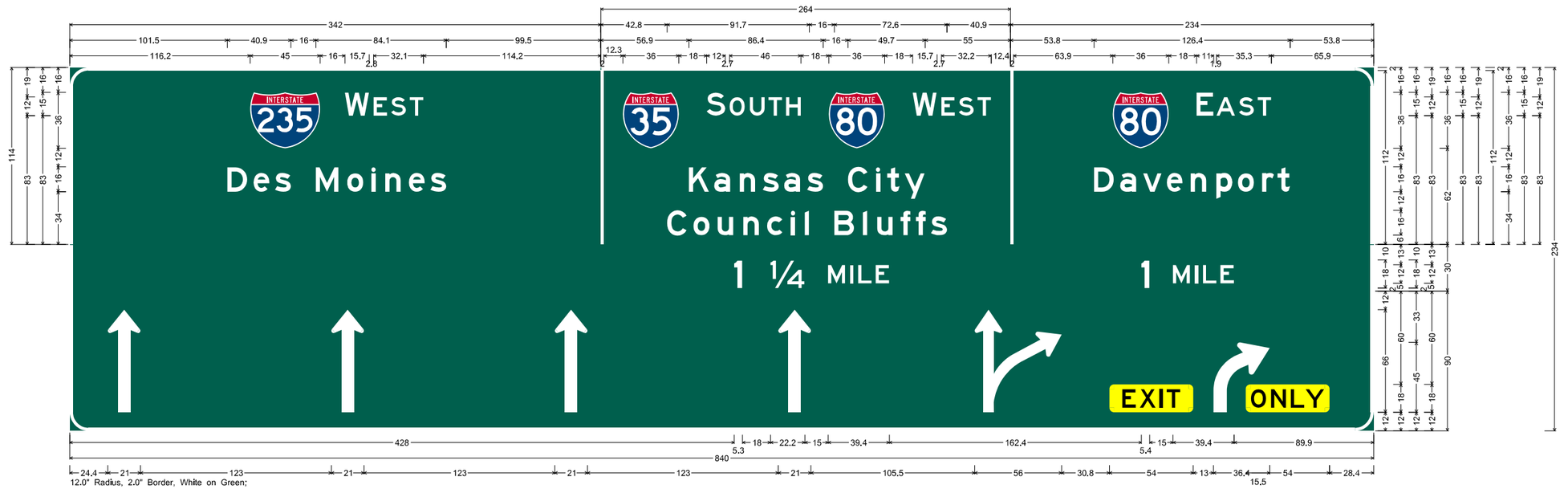
C 17.5	o 34.5	r 50.1	p 61.7	o 75.6	r 91.2	a 101.4	t 116.2	e 128.0	W 154.4	o 175.0	o 189.1	d 203.3	s 218.2	D 244.5	r 262.6

↗ 50.6	E 95.8	X 107.7	I 121.1	T 126.5	O 150.4	N 163.6	L 176.4	Y 186.2	↗ 210.2	

NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

35-77-X M200



12.0" Radius, 2.0" Border, White on Green;
[WEST] E; [Des Moines] E;
12.0" Radius, 2.0" Border, White on Green;
[SOUTH] E; [WEST] E; [Kansas City] E; [Council Bluffs] E;
12.0" Radius, 2.0" Border, White on Green;
[EAST] E; [Davenport] E;
12.0" Radius, 2.0" Border, White on Green;
[1 ¼ MILE] E; [1 MILE] E;
12.0" Radius, 2.0" Border, White on Green;
Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; 30D; Rounded Rectangle 3.0" Radius Yellow;
48A; Rounded Rectangle 3.0" Radius Yellow;
Table of letter and object lefts.

116.2	W 177.2	E 195.7	S 207.0	T 219.0

D 101.5	e 118.4	s 132.1	M 158.4	o 178.7	i 194.3	n 203.2	e 218.5	s 232.2

I 342.0	356.3	S 410.3	O 425.0	U 438.1	T 450.1	H 461.4	489.0	W 543.0	E 561.4	S 572.7	T 584.8	

K 398.9	a 415.1	n 431.5	s 446.4	a 460.2	s 475.0	C 501.3	i 519.3	t 526.5	y 537.9		

C 384.8	o 401.8	u 417.4	n 433.9	c 449.2	l 464.5	l 473.4	B 492.5	l 510.9	u 520.1	f 535.2	f 545.0	s 554.8

I 606.0	671.9	E 725.9	A 738.8	S 753.2	T 765.3

D 659.8	a 676.7	v 691.5	e 706.7	n 722.1	p 738.7	o 752.5	r 768.1	t 778.0	

1 428.0	¼ 451.3	M 488.5	I 502.7	L 507.8	E 519.1	1 690.3	M 710.7	I 724.8	L 730.0	E 741.3	

I 24.4	I 168.4	I 312.4	I 456.4	582.9	669.7	736.7	757.6

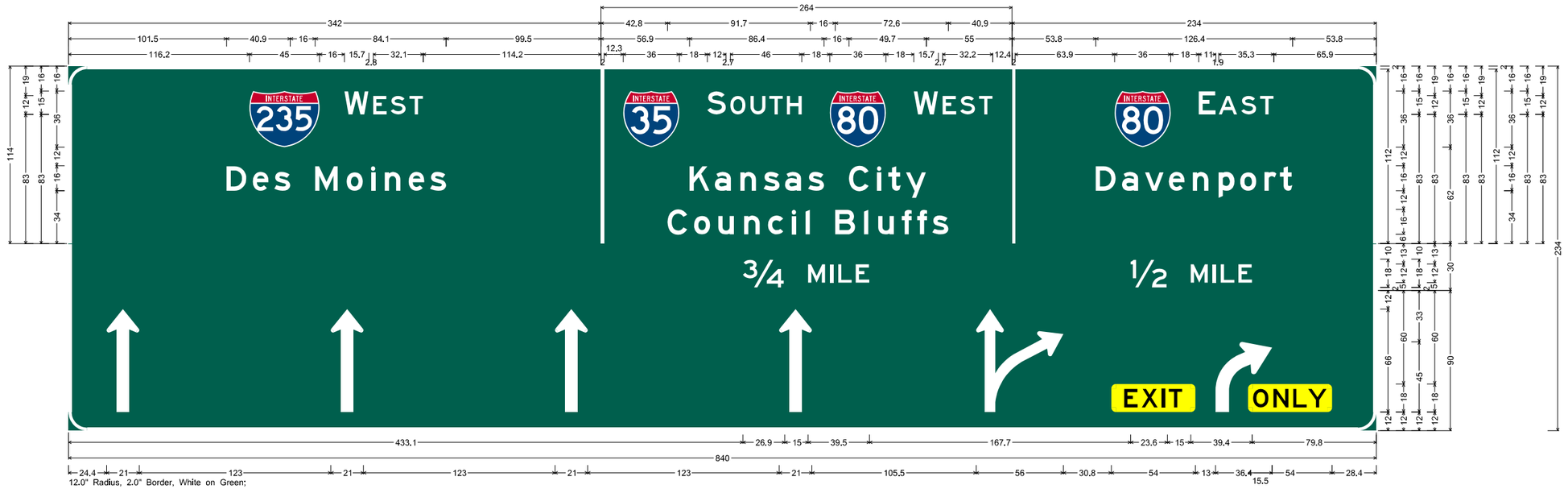
NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.23

2:32:37 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N16.sht

35-77-X M201



12.0" Radius, 2.0" Border, White on Green;
[WEST] E; [Des Moines] E;
12.0" Radius, 2.0" Border, White on Green;
[SOUTH] E; [WEST] E; [Kansas City] E; [Council Bluffs] E;
12.0" Radius, 2.0" Border, White on Green;
[EAST] E; [Davenport] E;
12.0" Radius, 2.0" Border, White on Green;
[¾ MILE] E; [½ MILE] E;
12.0" Radius, 2.0" Border, White on Green;
Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; 30D; Rounded Rectangle 3.0" Radius Yellow;
48A; Rounded Rectangle 3.0" Radius Yellow;
Table of letter and object lefts.

116.2	W 177.2	E 195.7	S 207.0	T 219.0
D 101.5	e 118.4	s 132.1	M 158.4	o 178.7	i 194.3	n 203.2	e 218.5	s 232.2
342.0	356.3	S 410.3	O 425.0	U 438.1	T 450.1	H 461.4	489.0	W 543.0	E 561.4	S 572.7	T 584.8
K 398.9	a 415.1	n 431.5	s 446.4	a 460.2	s 475.0	C 501.3	i 519.3	t 526.5	y 537.9
C 384.8	o 401.8	u 417.4	n 433.9	c 449.2	l 464.5	l 473.4	B 492.5	l 510.9	u 520.1	f 535.2	f 545.0	s 554.8
606.0	671.9	E 725.9	A 738.8	S 753.2	T 765.3
D 659.8	a 676.7	v 691.5	e 706.7	n 722.1	p 738.7	o 752.5	r 768.1	t 778.0
¾ 433.1	M 475.0	l 489.2	L 494.4	E 505.6	½ 682.2	M 720.8	l 734.9	L 740.1	E 751.4
l 24.4	l 168.4	l 312.4	f 456.4	582.9	669.7	736.7	757.6

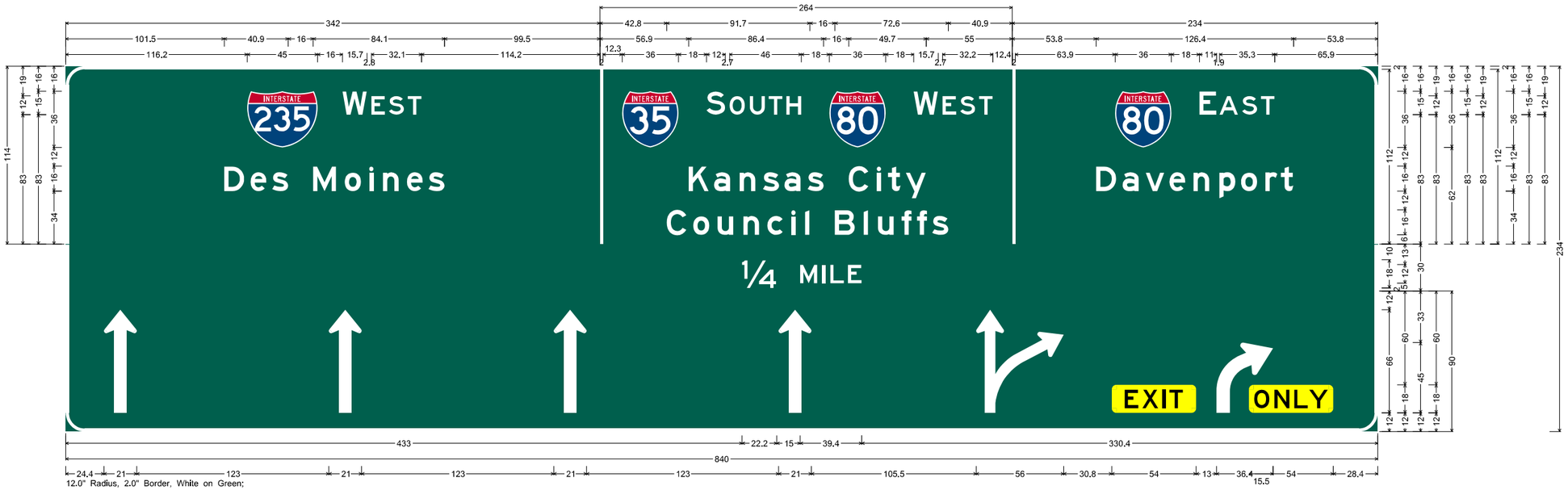
NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.24

2:32:46 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N16.sht

35-77-X M202



12.0" Radius, 2.0" Border, White on Green;
[WEST] E; [Des Moines] E;
12.0" Radius, 2.0" Border, White on Green;
[SOUTH] E; [WEST] E; [Kansas City] E; [Council Bluffs] E;
12.0" Radius, 2.0" Border, White on Green;
[EAST] E; [Davenport] E;
12.0" Radius, 2.0" Border, White on Green;
[1/4 MILE] E;
12.0" Radius, 2.0" Border, White on Green;
Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; 30D; Rounded Rectangle 3.0" Radius Yellow;
48A; Rounded Rectangle 3.0" Radius Yellow;
Table of letter and object lefts.

116.2	W 177.2	E 195.7	S 207.0	T 219.0

D 101.5	e 118.4	s 132.1	M 158.4	o 178.7	i 194.3	n 203.2	e 218.5	s 232.2	

I 342.0	356.3	S 410.3	O 425.0	U 438.1	T 450.1	H 461.4	489.0	W 543.0	E 561.4	S 572.7	T 584.8	

K 398.9	a 415.1	n 431.5	s 446.4	a 460.2	s 475.0	C 501.3	i 519.3	t 526.5	y 537.9	

C 384.8	o 401.8	u 417.4	n 433.9	c 449.2	l 464.5	l 473.4	B 492.5	l 510.9	u 520.1	f 535.2	f 545.0	s 554.8

I 606.0	671.9	E 725.9	A 738.8	S 753.2	T 765.3

D 659.8	a 676.7	v 691.5	e 706.7	n 722.1	p 738.7	o 752.5	r 768.1	t 778.0

1/4 433.0	M 470.2	I 484.4	L 489.6	E 500.8

I 24.4	I 168.4	I 312.4	I 456.4	582.9	669.7	736.7	757.6

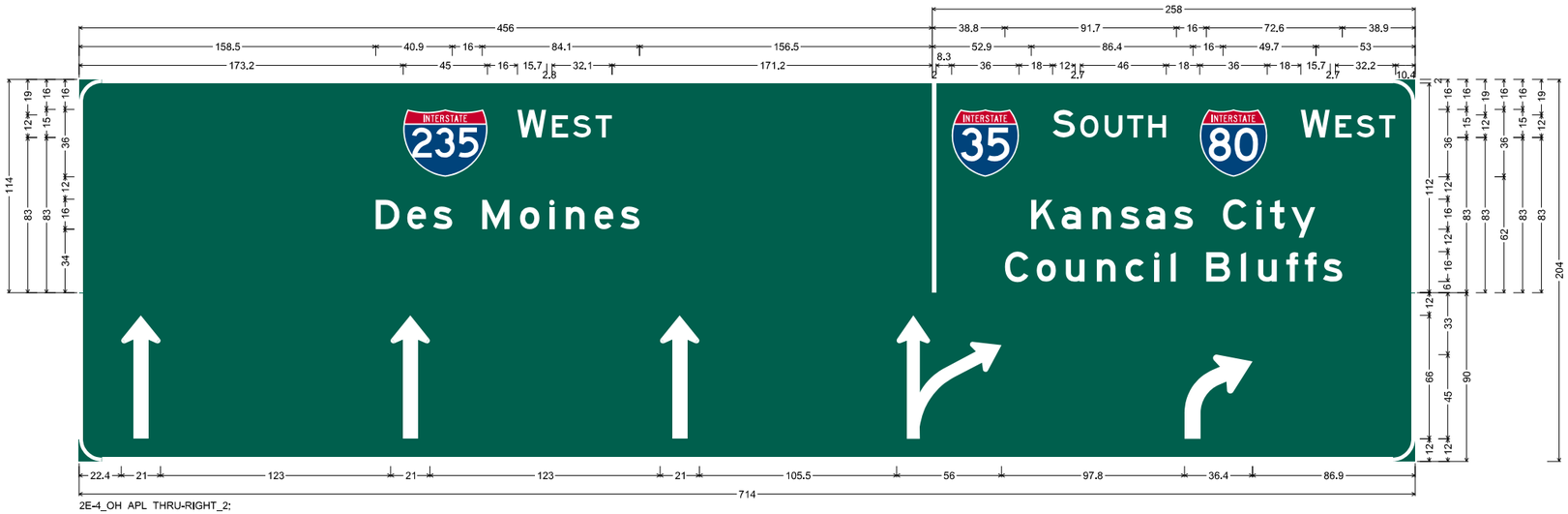
NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.25

2:32:55 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N16.sht

35-77-X M203



2E-4_OH APL THRU-RIGHT_2:
12.0" Radius, 2.0" Border, White on Green;
[WEST] E; [Des Moines] E;
12.0" Radius, 2.0" Border, White on Green;
[SOUTH] E; [WEST] E; [Kansas City] E; [Council Bluffs] E;
12.0" Radius, 2.0" Border, White on Green;
Arrow Custom - 66.0" 90°; Arrow Custom - 66.0" 90°; Arrow Custom - 66.0" 90°; 30D; 48A;
Table of letter and object lefts.

173.2	W 234.2	E 252.7	S 264.0	T 276.0
D 158.5	e 175.4	s 189.1	M 215.4	o 235.7	l 251.3	n 260.2	e 275.5	s 289.2
l 456.0	466.3	S 520.3	O 535.0	U 548.1	T 560.1	H 571.4	599.0	W 653.0	E 671.4	S 682.7	T 694.8
K 508.9	a 525.1	n 541.5	s 556.4	a 570.2	s 585.0	C 611.3	i 629.3	t 636.5	y 647.9
C 494.8	o 511.8	u 527.4	n 543.9	c 559.2	i 574.5	l 583.4	B 602.5	l 620.9	u 630.1	f 645.2	f 655.0	s 664.8
l 22.4	l 166.4	l 310.4	436.9	590.7

235-77-X M204



12.0" Radius, 2.0" Border, White on Green;
[Euclid Ave] E Mod; [Grand View Univ] E Mod; [1 MILE] E;
Table of letter and object lefts.

105.0									
E 55.3	u 72.4	c 87.7	l 103.0	l 112.2	d 120.2	A 146.6	v 165.1	e 180.3	
20.0									
G 16.0	r 34.0	a 44.3	n 60.7	d 76.0	V 102.4	l 121.5	e 129.5	w 143.4	U 175.4	n 193.8	l 210.4	v 217.9
l 98.1	M 115.1	l 126.9	L 131.1	E 140.6					

NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

235-77-X M205

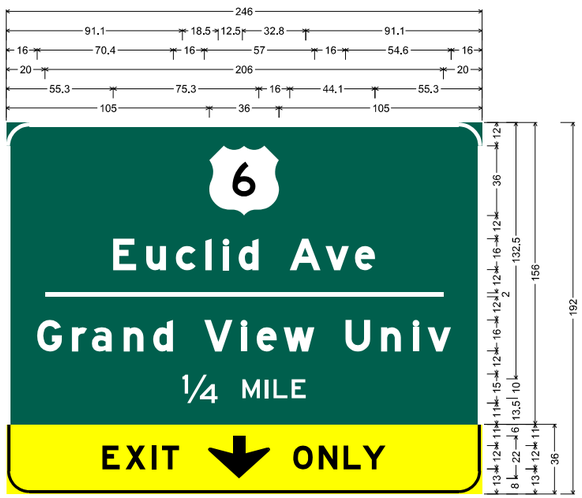


12.0" Radius, 2.0" Border, White on Green;
[W EST] E; [Des Moines] E Mod;
Table of letter and object lefts.

30.3	W 91.3	E 111.6	S 122.9	T 134.9

D 16.3	e 33.2	s 47.0	M 73.3	o 93.5	l 109.1	n 118.3	e 133.6	s 147.4	

235-77-X M206



12.0" Radius, 2.0" Border, White on Green;
[Euclid Ave] E Mod; [Grand View Univ] E Mod; [¼ MILE] E;
12.0" Radius, 1.5" Border, 0.5" Indent, Black on Yellow;
[EXIT] E Mod specified length; Down Arrow II-A - 22.0" 270°;
[ONLY] E Mod specified length;
Table of letter and object lefts.

6 105.0

E 55.3	u 72.4	c 87.7	l 103.0	i 112.2	d 120.2	A 146.6	v 165.1	e 180.3	

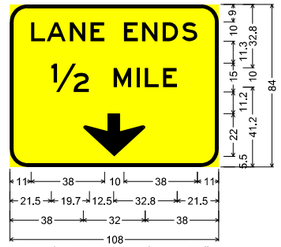
— 20.0

G 16.0	r 34.0	a 44.3	n 60.7	d 76.0	V 102.4	l 121.5	e 129.5	w 143.4	U 175.4	n 193.8	l 210.4	v 217.9		

¼ 91.1	M 122.1	I 133.9	L 138.2	E 147.6

E 49.8	X 61.7	I 75.1	T 80.5	↓ 104.4	O 148.4	N 161.6	L 174.4	Y 184.2	

235-77-X M207



9.0" Radius, 2.0" Border, Black on Yellow;
[LANE ENDS] E; [½ MILE] E;
Down Arrow 22.0" 270°;
Table of letter and object lefts.

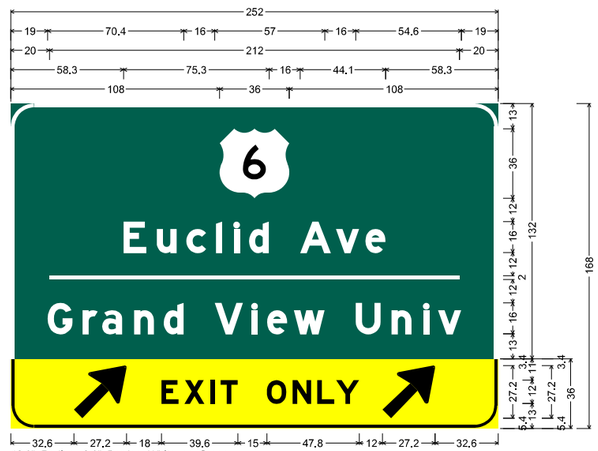
L 11.0	A 19.1	N 31.1	E 41.7

	E 59.0	N 68.4	D 79.0	S 89.0

½ 21.5	M 53.7	I 65.5	L 69.8	E 79.2

↓ 38.0

235-77-X M208



12.0" Radius, 2.0" Border, White on Green;
[Euclid Ave] E Mod; [Grand View Univ] E Mod;
12.0" Radius, 1.5" Border, 0.5" Indent, Black on Yellow;
Arrow I-F - 35.0" 45°; [EXIT] E Mod specified length; [ONLY] E Mod specified length;
Arrow I-F - 35.0" 45°;
Table of letter and object lefts.

6 108.0

E 58.3	u 75.4	c 90.7	l 106.0	i 115.2	d 123.2	A 149.6	v 168.1	e 183.3	

— 20.0

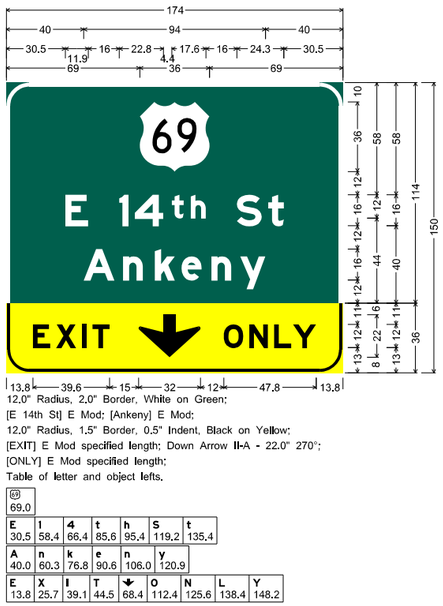
G 19.0	r 37.0	a 47.3	n 63.7	d 79.0	V 105.4	l 124.5	e 132.5	w 146.4	U 178.4	n 196.8	l 213.4	v 220.9		

↗ 32.6	E 77.8	X 89.7	I 103.1	T 108.5	O 132.4	N 145.6	L 158.4	Y 168.2	↗ 192.2

NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

80/35-77-X M300



12,0" Radius, 2,0" Border, White on Green;
[E 14th St] E Mod; [Ankeny] E Mod;
12,0" Radius, 1,5" Border, 0,5" Indent, Black on Yellow;
[EXIT] E Mod specified length; Down Arrow **II-A - 22.0" 270°**;
[ONLY] E Mod specified length;
Table of letter and object lefts.

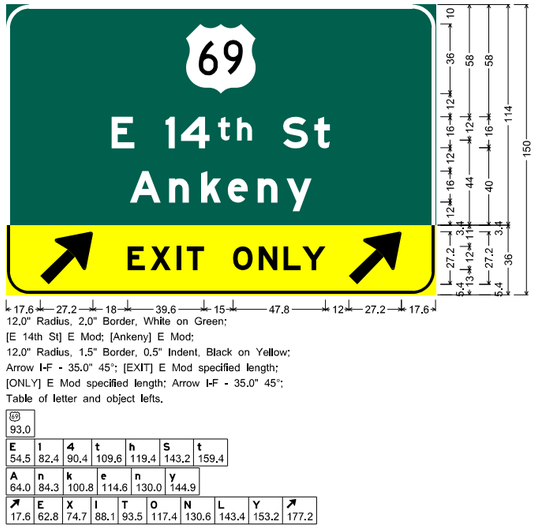
69
69,0

E	l	4	t	h	S	t
30,5	58,4	66,4	85,6	95,4	119,2	135,4

A	n	k	e	n	y
40.0	60.3	76.8	90.6	106.0	120.9

E	X	I	T	↓	O	N	L	Y
13.8	25.7	39.1	44.5	68.4	112.4	125.6	138.4	148.2

80/35-77-X M301



12,0" Radius, 2,0" Border, White on Green;
[E 14th St] E Mod; [Ankeny] E Mod;
12,0" Radius, 1,5" Border, 0,5" Indent, Black on Yellow;
Arrow **I-F - 35.0" 45°**; [EXIT] E Mod specified length;
[ONLY] E Mod specified length; Arrow **I-F - 35.0" 45°**;
Table of letter and object lefts.

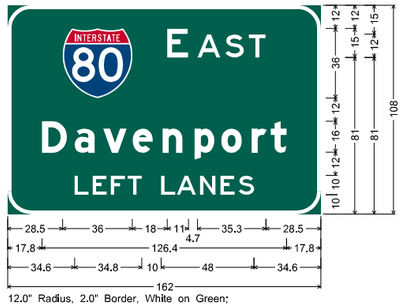
69
93,0

E	l	4	t	h	S	t
54,5	82,4	90,4	109,6	119,4	143,2	159,4

A	n	k	e	n	y
64.0	84.3	100.8	114.6	130.0	144.9

↗	E	X	I	T	O	N	L	Y	↗
17.6	62.8	74.7	88.1	93.5	117.4	130.6	143.4	153.2	177.2

80/35-77-X M302



12.0" Radius, 2.0" Border, White on Green;
[E AST] E; [Davenport] E Mod; [LEFT LANES] E;
Table of letter and object lefts.

	E	A	S	T
28.5	82.5	98.2	112.6	124.7

D	a	v	e	n	p	o	r	t
17.8	34.7	49.5	64.7	80.1	96.7	110.5	126.1	136.1

L	E	F	T	L	A	N	E	S
34.6	44.0	53.4	62.1	79.4	87.5	99.5	110.1	119.5

80/35-77-X M303



12.0" Radius, 2.0" Border, White on Green;
[N ORTH] E; [W EST] E; [Minneapolis] E Mod;
[Des Moines] E Mod; [1 MILE] E;
Table of letter and object lefts.

N	O	R	T	H	W	E	S	T
28.0	44.6	57.6	69.7	81.0	105.5	125.9	137.1	149.2

41.3	109.3

M	I	n	n	e	a	p	o	l	I	s
18.4	39.6	48.8	65.3	80.6	94.7	111.2	125.0	140.6	149.8	157.3

D	e	s	M	o	I	n	e	s
22.3	39.2	53.0	79.3	99.5	115.1	124.3	139.6	153.4

I	M	I	L	E
68.1	85.1	96.9	101.1	110.6

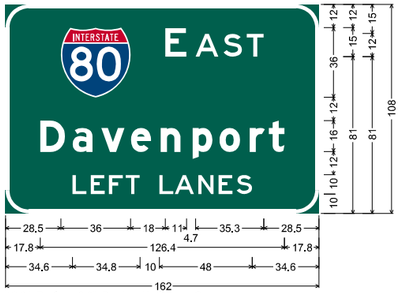
NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.28

2:33:32 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N16.sht

80/35-77-X M304



12.0" Radius, 2.0" Border, White on Green;
[E AST] E; [Davenport] E Mod; [LEFT LANES] E;
Table of letter and object lefts.

28.5	E 82.5	A 98.2	S 112.6	T 124.7

D 17.8	a 34.7	v 49.5	e 64.7	n 80.1	p 96.7	o 110.5	r 126.1	t 136.1	
L 34.6	E 44.0	F 53.4	T 62.1	L 79.4	A 87.5	N 99.5	E 110.1	S 119.5	

80/35-77-X M305



12.0" Radius, 2.0" Border, White on Green;
[N ORTH] E; [W EST] E; [Minneapolis] E Mod;
[Des Moines] E Mod; [½ MILE] E;
Table of letter and object lefts.

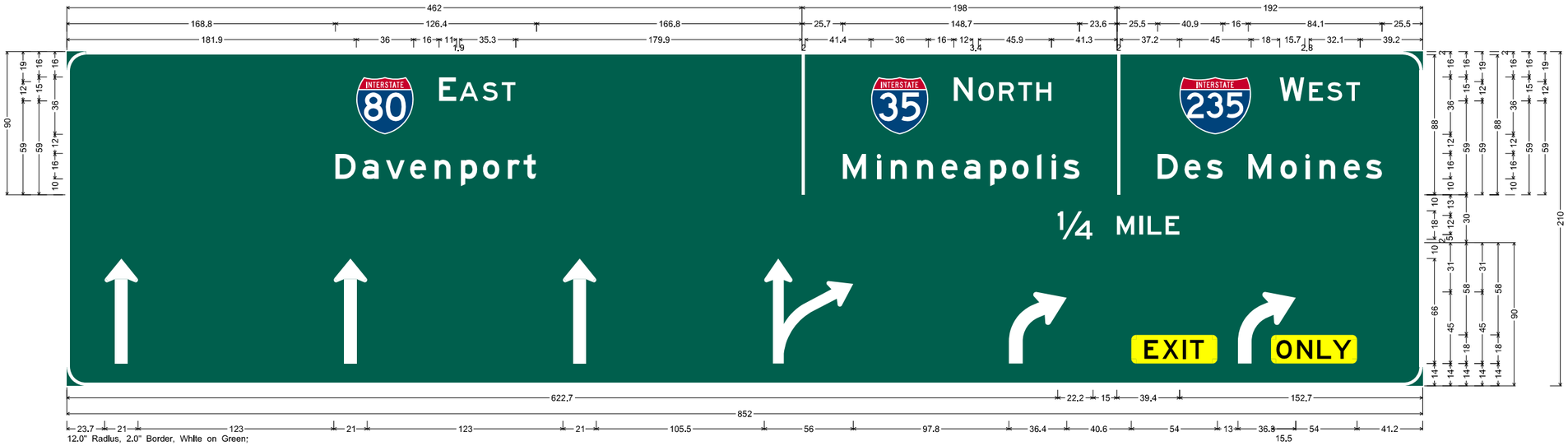
N 28.0	O 44.6	R 57.6	T 69.7	H 81.0	W 105.5	E 125.9	S 137.1	T 149.2	
41.3	109.3								

M 18.4	i 39.6	n 48.8	n 65.3	e 80.6	a 94.7	p 111.2	o 125.0	l 140.6	l 149.8	s 157.3	
D 22.3	e 39.2	s 53.0	M 79.3	o 99.5	i 115.1	n 124.3	e 139.6	s 153.4			
½ 60.5	M 92.7	I 104.5	L 108.8	E 118.2							

NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

80/35-77-X M306



12.0" Radius, 2.0" Border, White on Green;
[EAST] E; [Davenport] E;
12.0" Radius, 2.0" Border, White on Green;
[NORTH] E; [Minneapolis] E;
12.0" Radius, 2.0" Border, White on Green;
[WEST] E; [Des Moines] E;
12.0" Radius, 2.0" Border, White on Green;
[1/4 MILE] E;
12.0" Radius, 2.0" Border, White on Green;
Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; 30D; 48A; Rounded Rectangle 3.0" Radius Yellow;
48A; Rounded Rectangle 3.0" Radius Yellow;
Table of letter and object lefts.

181.9	E 233.9	A 246.8	S 261.2	T 273.3
D 168.8	a 185.7	v 200.5	e 215.7	n 231.1	p 247.7	o 261.5	r 277.1	t 287.1
462.0	505.4	N 557.4	O 572.8	R 585.9	T 597.9	H 609.2		
M 487.7	i 509.0	n 517.8	n 534.4	e 549.7	a 563.8	p 580.2	o 594.1	l 609.7	i 618.9	s 626.1
660.0	699.2	W 762.2	E 780.7	S 792.0	T 804.0					
D 685.5	e 702.4	s 716.1	M 742.4	o 762.7	l 778.3	n 787.2	e 802.5	s 816.2		
¼ 622.7	M 659.9	I 674.0	L 679.2	E 690.5						
I 23.7	I 167.7	I 311.7	438.2	592.0	669.0	736.0	756.8			

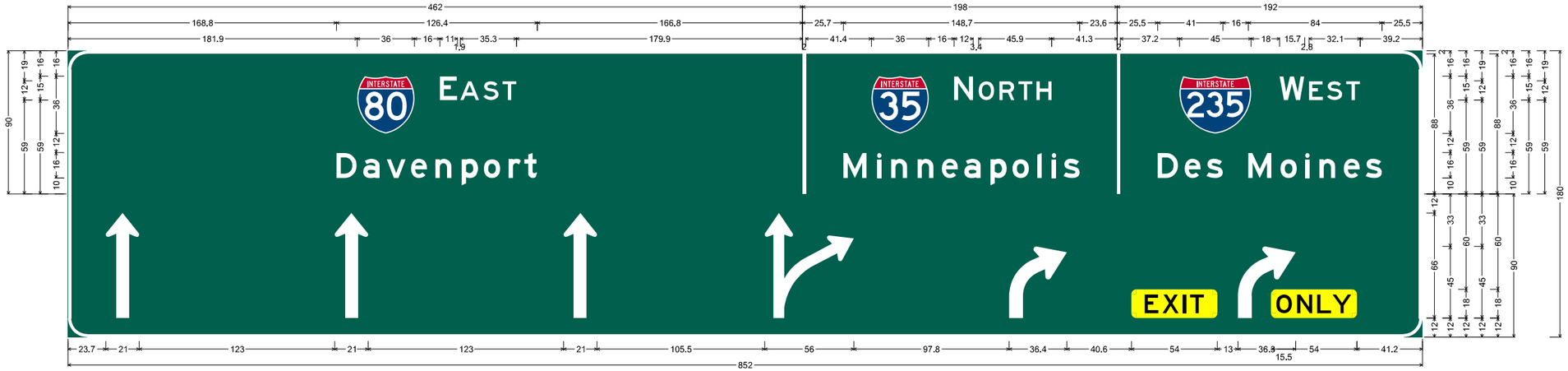
NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.30

2:33:50 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N16.sht

80/35-77-X M307



2E-4_OH APL THRU-RIGHT_2;
12.0" Radius, 2.0" Border, White on Green;
[EAST] E; [Davenport] E;
12.0" Radius, 2.0" Border, White on Green;
[NORTH] E; [Minneapolis] E;
12.0" Radius, 2.0" Border, White on Green;
[WEST] E; [Des Moines] E;
12.0" Radius, 2.0" Border, White on Green;
Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; 30D; 48A; Rounded Rectangle 3.0" Radius Yellow;
48A; Rounded Rectangle 3.0" Radius Yellow;
Table of letter and object lefts.

181,9	E 233,9	A 246,8	S 261,2	T 273,3

D 168,8	a 185,7	v 200,5	e 215,7	n 231,1	p 247,7	o 261,5	r 277,1	t 287,1

I 462,0	505,4	N 557,4	O 572,8	R 585,9	T 597,9	H 609,2

M 487,7	I 509,0	n 517,8	n 534,4	e 549,7	a 563,8	p 580,2	o 594,1	I 609,7	I 618,9	s 626,1

I 660,0	699,2	W 762,2	E 780,7	S 792,0	T 804,0

D 685,5	e 702,4	s 716,2	M 742,5	o 762,7	I 778,3	n 787,2	e 802,5	s 816,2

I 23,7	I 167,7	I 311,7	438,2	592,0	669,0	736,0	756,8

NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.31

2:33:59 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N16.sht

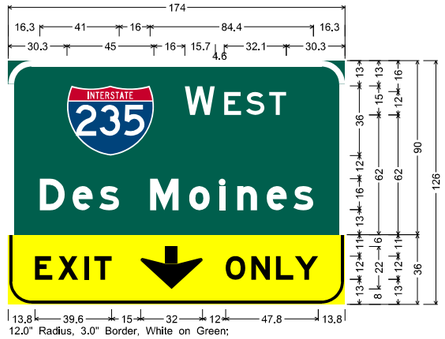
80/35-77-X M308



12.0" Radius, 2.0" Border, White on Green;
[N ORTH] E; [Minneapolis] E Mod; Down Arrow 22.0" 270°;
Down Arrow 22.0" 270°;
Table of letter and object lefts.

37.7	N 91.7	O 108.3	R 121.4	T 133.4	H 144.7	
M 21.4	I 42.6	n 51.8	n 68.3	e 83.6	a 97.7	p 114.2	o 128.0	l 143.6	l 152.8	s 160.3
8.0	152.0					

80/35-77-X M309



12.0" Radius, 3.0" Border, White on Green;
[W EST] E; [Des Moines] E Mod;
12.0" Radius, 1.5" Border, 0.5" Indent, Black on Yellow;
[EXIT] E Mod specified length; Down Arrow II-A - 22.0" 270°;
[ONLY] E Mod specified length;
Table of letter and object lefts.

30.3	W 91.3	E 111.6	S 122.9	T 134.9	
D 16.3	e 33.2	s 47.0	M 73.3	o 93.5	i 109.1	n 118.3	e 133.6	s 147.4
E 13.8	X 25.7	I 39.1	T 44.5	68.4	O 112.4	N 125.6	L 138.4	Y 148.2

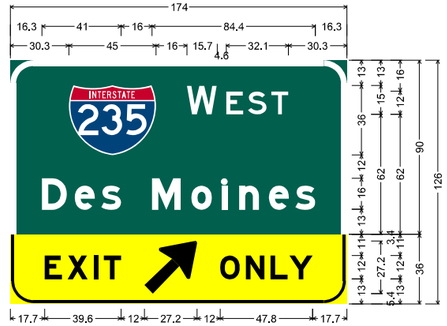
35-77-X R310



12.0" Radius, 2.0" Border, White on Green;
[N ORTH] E; [Minneapolis] E Mod; Arrow 8 - 25.0" 120°;
Arrow 8 - 25.0" 120°;
Table of letter and object lefts.

37.7	N 91.7	O 108.3	R 121.4	T 133.4	H 144.7	
M 21.4	I 42.6	n 51.8	n 68.3	e 83.6	a 97.7	p 114.2	o 128.0	l 143.6	l 152.8	s 160.3
14.4	158.4					

35-77-X R311



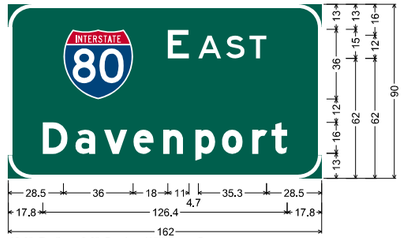
12.0" Radius, 3.0" Border, White on Green;
[W EST] E; [Des Moines] E Mod;
12.0" Radius, 1.5" Border, 0.5" Indent, Black on Yellow;
[EXIT] E Mod specified length; Arrow I-F - 35.0" 45°;
[ONLY] E Mod specified length;
Table of letter and object lefts.

30.3	W 91.3	E 111.6	S 122.9	T 134.9				
D 16.3	e 33.2	s 47.0	M 73.3	o 93.5	i 109.1	n 118.3	e 133.6	s 147.4
E 17.7	X 29.6	I 43.0	T 48.3	69.3	O 108.5	N 121.7	L 134.5	Y 144.3

NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

80-77-X M312



12.0" Radius, 2.0" Border, White on Green;
[E AST] E; [Davenport] E Mod;
Table of letter and object lefts.

80 28.5	E 82.5	A 98.2	S 112.6	T 124.7
D 17.8	a 34.7	v 49.5	e 64.7	n 80.1	p 96.7	o 110.5	r 126.1	t 136.1

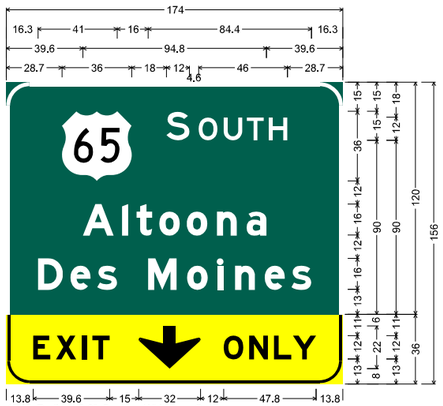
80-77-X M313



12.0" Radius, 2.0" Border, White on Green;
[S OUTH] E; [Altoona] E Mod; [Des Moines] E Mod;
[1 MILE] E;
12.0" Radius, 1.5" Border, 0.5" Indent, Black on Yellow;
[EXIT] E Mod specified length; Down Arrow II-A - 22.0" 270°;
[ONLY] E Mod specified length;
Table of letter and object lefts.

65 28.7	S 82.7	O 99.3	U 112.4	T 124.4	H 135.7	
A 39.6	l 59.8	t 67.3	o 79.1	o 93.2	n 108.8	a 124.1
D 16.3	e 33.2	s 47.0	M 73.3	o 93.5	l 109.1	n 118.3	e 133.6	s 147.4
l 62.1	M 79.1	l 90.9	L 95.1	E 104.6		
E 13.8	X 25.7	I 39.1	T 44.5	↓ 68.4	O 112.4	N 125.6	L 138.4	Y 148.2

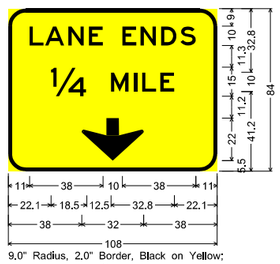
80-77-X M314



12.0" Radius, 2.0" Border, White on Green;
[S OUTH] E; [Altoona] E Mod; [Des Moines] E Mod;
12.0" Radius, 1.5" Border, 0.5" Indent, Black on Yellow;
[EXIT] E Mod specified length; Down Arrow II-A - 22.0" 270°;
[ONLY] E Mod specified length;
Table of letter and object lefts.

65 28.7	S 82.7	O 99.3	U 112.4	T 124.4	H 135.7	
A 39.6	l 59.8	t 67.3	o 79.1	o 93.2	n 108.8	a 124.1
D 16.3	e 33.2	s 47.0	M 73.3	o 93.5	l 109.1	n 118.3	e 133.6	s 147.4
E 13.8	X 25.7	I 39.1	T 44.5	↓ 68.4	O 112.4	N 125.6	L 138.4	Y 148.2

80-77-X M315

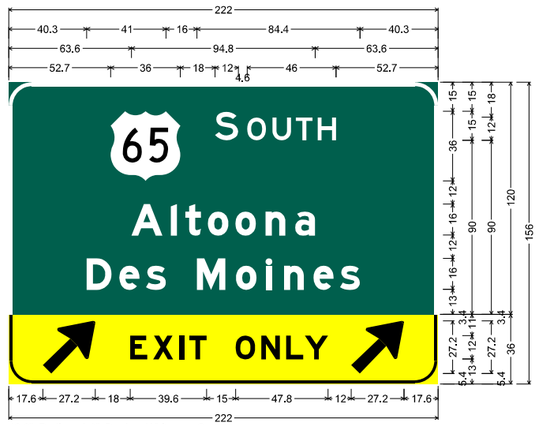


9.0" Radius, 2.0" Border, Black on Yellow;
[LANE ENDS] E; [¼ MILE] E;
Down Arrow 22.0" 270°;
Table of letter and object lefts.

L 11.0	A 19.1	N 31.1	E 41.7
	E 59.0	N 68.4	D 79.0	S 89.0
¼ 22.1	M 53.1	I 64.9	L 69.2	E 78.6
↓ 38.0				

NOTE: SIGN DIMENSIONS ARE IN INCHES

80-77-X M316

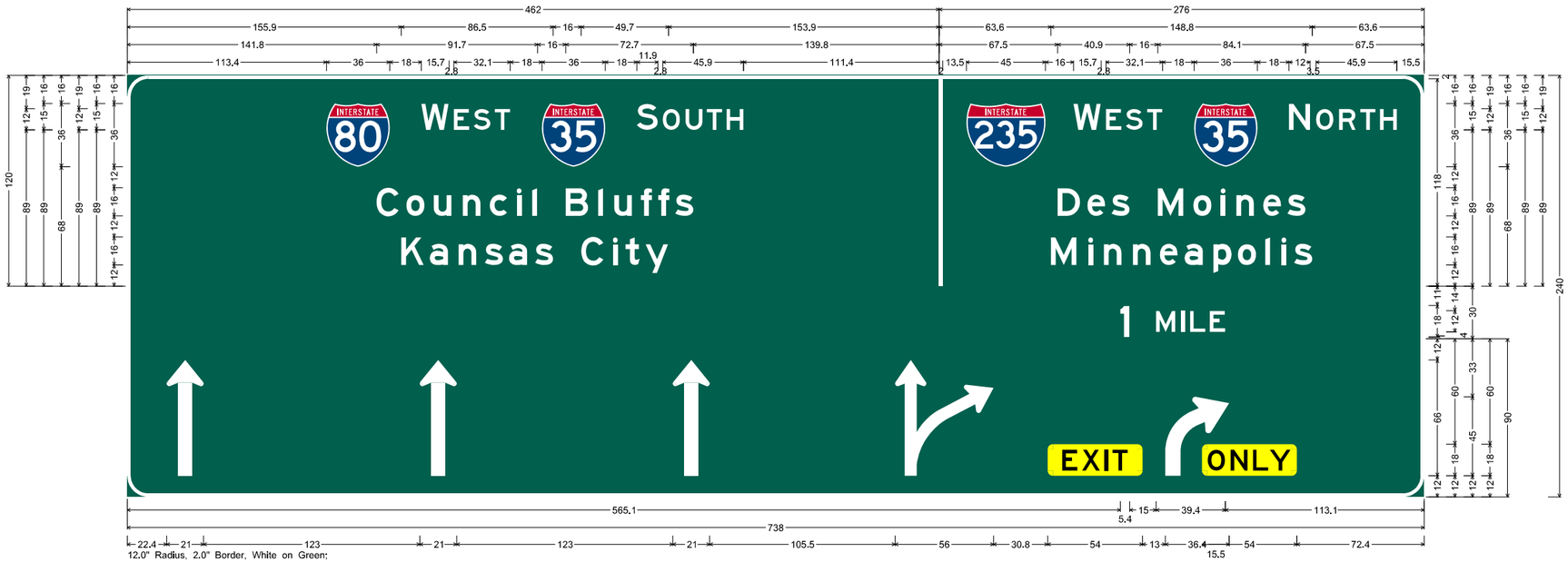


12.0" Radius, 2.0" Border, White on Green;
[S OUTH] E; [Altoona] E Mod; [Des Moines] E Mod;
12.0" Radius, 1.5" Border, 0.5" Indent, Black on Yellow;
Arrow I-F - 35.0" 45°; [EXIT] E Mod specified length;
[ONLY] E Mod specified length; Arrow I-F - 35.0" 45°;
Table of letter and object lefts.

65 52.7	S 106.7	O 123.3	U 136.4	T 148.4	H 159.7	
A 63.6	l 83.8	t 91.3	o 103.1	o 117.2	n 132.8	a 148.1
D 40.3	e 57.2	s 71.0	M 97.3	o 117.5	i 133.1	n 142.3	e 157.6	s 171.4
↗ 17.6	E 62.8	X 74.7	I 88.1	T 93.5	O 117.4	N 130.6	L 143.4	Y 153.2	↗ 177.2

SIGN DETAILS

80-77-X M400



12.0" Radius, 2.0" Border, White on Green;
[WEST] E; [SOUTH] E; [Council Bluffs] E; [Kansas City] E;
12.0" Radius, 2.0" Border, White on Green;
[WEST] E; [NORTH] E; [Des Moines] E; [Minneapolis] E;
12.0" Radius, 2.0" Border, White on Green;
[1 MILE] E;
12.0" Radius, 2.0" Border, White on Green;
Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; 30D; Rounded Rectangle 3.0" Radius Yellow;
48A; Rounded Rectangle 3.0" Radius Yellow;
Table of letter and object lefts.

113.4	W 167.4	E 185.9	S 197.1	T 209.2	236.0	S 290.0	O 304.7	U 317.8	T 329.8	H 341.1	
C 141.8	o 158.8	u 174.4	n 191.0	c 206.3	i 221.6	l 230.5	B 249.5	l 268.0	u 277.2	f 292.2	f 302.1	s 311.9
K 155.9	a 172.2	n 188.6	s 203.5	a 217.3	s 232.1	C 258.4	i 276.4	t 283.6	y 295.0			
I 462.0	477.5	W 538.5	E 557.0	S 568.3	T 580.3	607.1	N 661.1	O 676.6	R 689.6	T 701.6	H 712.9	
D 529.5	e 546.4	s 560.1	M 586.4	o 606.7	l 622.3	n 631.2	e 646.5	s 660.2				
M 525.6	i 546.9	n 555.8	n 572.3	e 587.6	a 601.7	p 618.2	o 632.0	l 647.6	i 656.8	s 664.1		
1 565.1	M 585.5	i 599.6	L 604.8	E 616.1								
I 22.4	1 166.4	1 310.4	436.9	523.7	590.7	611.6						

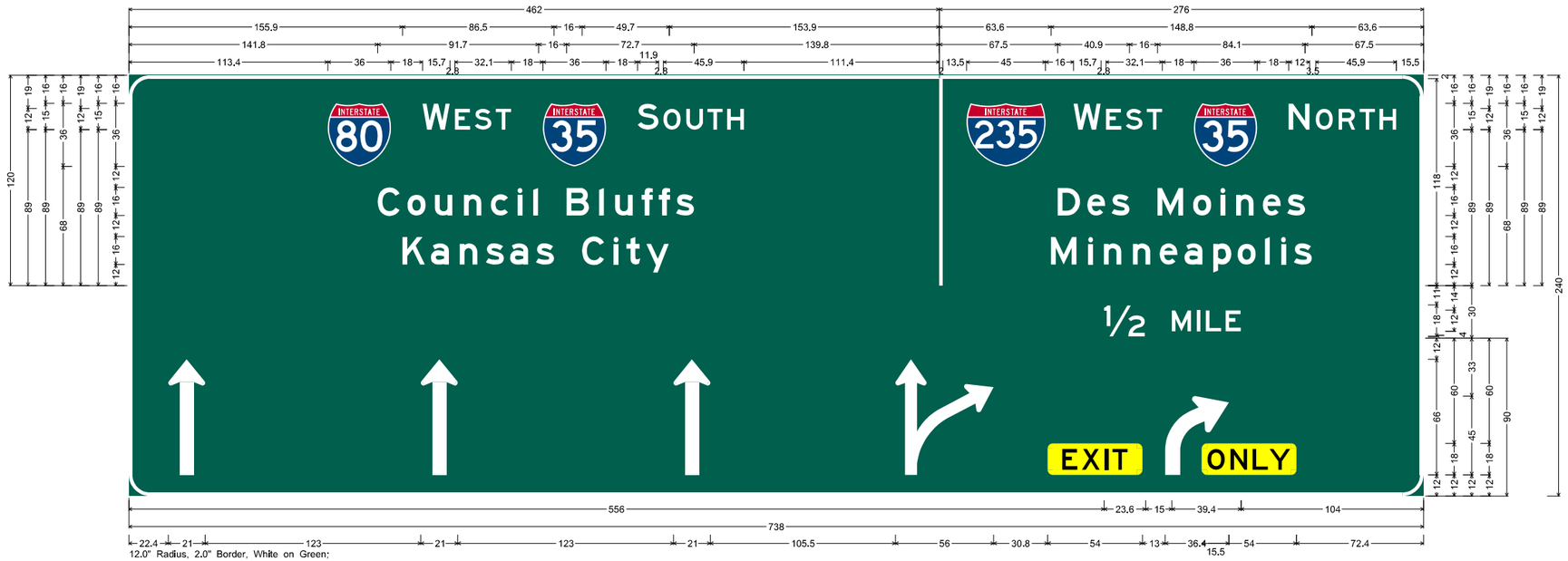
NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.34

2:34:32 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N16.sht

80-77-X M401



12.0" Radius, 2.0" Border, White on Green;
[WEST] E; [SOUTH] E; [Council Bluffs] E; [Kansas City] E;
12.0" Radius, 2.0" Border, White on Green;
[WEST] E; [NORTH] E; [Des Moines] E; [Minneapolis] E;
12.0" Radius, 2.0" Border, White on Green;
[½ MILE] E;
12.0" Radius, 2.0" Border, White on Green;
Arrow Custom - 66.0" 90°; Arrow Custom - 66.0" 90°; Arrow Custom - 66.0" 90°; 30D; Rounded Rectangle 3.0" Radius Yellow;
48A; Rounded Rectangle 3.0" Radius Yellow;
Table of letter and object lefts.

113.4	W 167.4	E 185.9	S 197.1	T 209.2	236.0	S 290.0	O 304.7	U 317.8	T 329.8	H 341.1	
C 141.8	o 158.8	u 174.4	n 191.0	c 206.3	l 221.6	l 230.5	B 249.5	l 268.0	u 277.2	f 292.2	f 302.1	s 311.9
K 155.9	a 172.2	n 188.6	s 203.5	a 217.3	s 232.1	C 258.4	i 276.4	t 283.6	y 295.0			
l 462.0	477.5	W 538.5	E 557.0	S 568.3	T 580.3	607.1	N 661.1	O 676.6	R 689.6	T 701.6	H 712.9	
D 529.5	e 546.4	s 560.1	M 586.4	o 606.7	l 622.3	n 631.2	e 646.5	s 660.2				
M 525.6	l 546.9	n 555.8	n 572.3	e 587.6	a 601.7	p 618.2	o 632.0	l 647.6	l 656.8	s 664.1		
½ 556.0	M 594.6	l 608.7	L 613.9	E 625.2								
l 22.4	l 166.4	l 310.4	436.9	523.7	590.7	611.6						

NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.35

2:34:42 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N16.sht

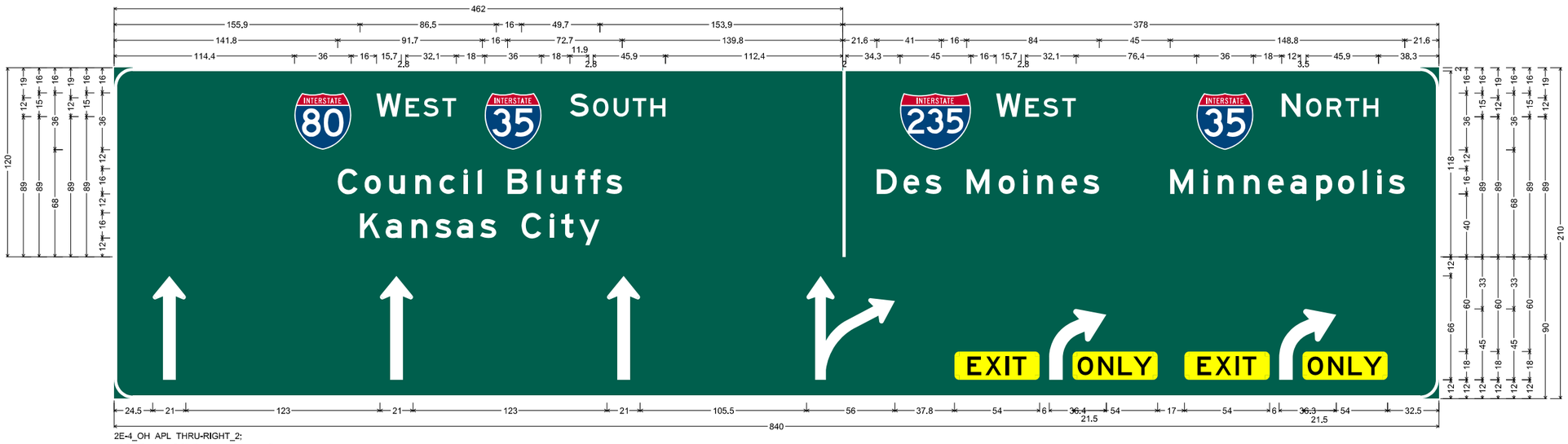
80-77-X M402



12.0" Radius, 2.0" Border, White on Green;
[N ORTH] E; [Minneapolis] E Mod; [RIGHT 2 LANES] E;
Table of letter and object lefts.

34.7	N 88.7	O 105.3	R 118.4	T 130.4	H 141.7						
M 18.4	I 39.6	n 48.8	n 65.3	e 80.6	a 94.7	p 111.2	o 125.0	l 140.6	l 149.8	s 157.3	
R 31.6	I 42.2	G 46.5	H 57.0	T 67.1	2 84.4	L 106.4	A 114.4	N 126.4	E 137.0	S 146.4	

80-77-X M403



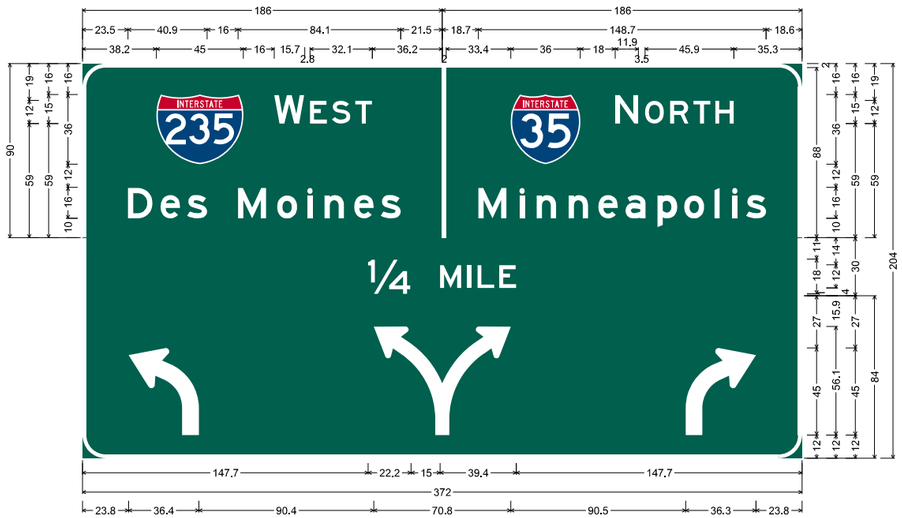
2E-4_OH APL THRU-RIGHT_2;
12.0" Radius, 2.0" Border, White on Green;
[WEST] E; [SOUTH] E; [Council Bluffs] E; [Kansas City] E;
12.0" Radius, 2.0" Border, White on Green;
[WEST] E; [Des Moines] E; [NORTH] E; [Minneapolis] E;
12.0" Radius, 2.0" Border, White on Green;
Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; Arrow Custom - 66.0° 90°; 30D; Rounded Rectangle 3.0" Radius Yellow;
48A; Rounded Rectangle 3.0" Radius Yellow;
Rounded Rectangle 3.0" Radius Yellow;
48A; Rounded Rectangle 3.0" Radius Yellow;
Table of letter and object lefts.

114.4	W 166.4	E 184.9	S 196.1	T 208.2	235.0	S 289.0	O 303.7	U 316.8	T 328.8	H 340.1	
C 141.8	o 158.8	u 174.4	n 191.0	c 206.3	l 221.6	l 230.5	B 249.5	l 268.0	u 277.2	f 292.2	f 302.1	s 311.9
K 155.9	a 172.2	n 188.6	s 203.5	a 217.3	s 232.1	C 258.4	l 276.4	t 283.6	y 295.0			
I 462.0	498.3	W 559.3	E 577.8	S 589.1	T 601.1	686.3	N 740.3	O 755.8	R 768.8	T 780.8	H 792.1	
D 483.6	e 500.5	s 514.3	M 540.6	o 560.8	l 576.4	n 585.3	e 600.6	s 614.3	M 669.6	l 690.9	n 699.8	n 716.3	e 731.6	a 745.7	p 762.2	o 776.0	l 791.7	l 800.8	s 808.1
I 24.5	I 168.5	I 312.5	439.0	532.8	592.8	607.7	678.7	738.7	753.5										

NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

35-77-X R404

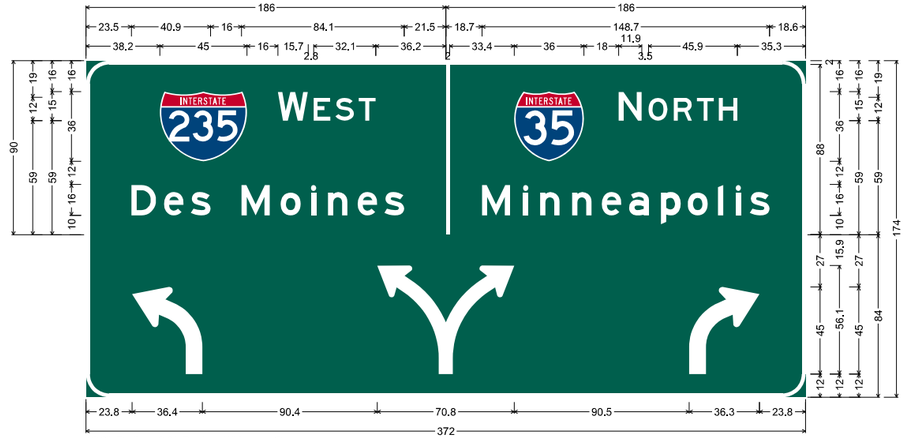


12.0" Radius, 2.0" Border, White on Green;
[WEST] E; [Des Moines] E;
12.0" Radius, 2.0" Border, White on Green;
[NORTH] E; [Minneapolis] E;
12.0" Radius, 2.0" Border, White on Green;
[1/4 MILE] E;
12.0" Radius, 2.0" Border, White on Green;
48A; AHA; 48A;
Table of letter and object lefts.

38.2	W 99.2	E 117.7	S 129.0	T 141.0

D 23.5	e 40.4	s 54.1	M 80.4	o 100.7	l 116.3	n 125.2	e 140.5	s 154.2	
I 186.0	221.4	N 275.4	O 290.8	R 303.8	T 315.9	H 327.2			
M 204.7	i 225.9	n 234.8	n 251.4	e 266.7	a 280.8	p 297.2	o 311.1	l 326.7	i 335.9	s 343.1
1/4 147.7	M 184.9	I 199.1	L 204.2	E 215.5					
23.8	150.6	311.9							

35-77-X R405



12.0" Radius, 2.0" Border, White on Green;
[WEST] E; [Des Moines] E;
12.0" Radius, 2.0" Border, White on Green;
[NORTH] E; [Minneapolis] E;
12.0" Radius, 2.0" Border, White on Green;
48A; AHA; 48A;
Table of letter and object lefts.

38.2	W 99.2	E 117.7	S 129.0	T 141.0

D 23.5	e 40.4	s 54.1	M 80.4	o 100.7	l 116.3	n 125.2	e 140.5	s 154.2	
I 186.0	221.4	N 275.4	O 290.8	R 303.8	T 315.9	H 327.2			
M 204.7	i 225.9	n 234.8	n 251.4	e 266.7	a 280.8	p 297.2	o 311.1	l 326.7	i 335.9	s 343.1
23.8	150.6	311.9							

80-77-X M406



12.0" Radius, 2.0" Border, White on Green;
[E 14th St] E Mod; [Ankeny] E Mod; [1 MILE] E;
Table of letter and object lefts.

69.0							
E 30.5	l 58.4	4 66.4	t 85.6	h 95.4	S 119.2	t 135.4	
A 40.0	n 60.3	k 76.8	e 90.6	n 106.0	y 120.9		
I 62.1	M 79.1	I 90.9	L 95.1	E 104.6			

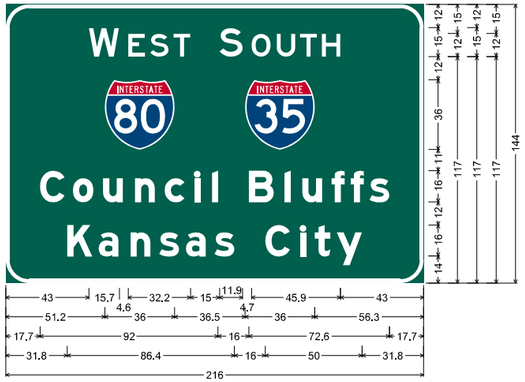
NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER N.37

2:35:03 PM 4/18/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194N16.sht

80/35-77-X M407



12.0" Radius, 2.0" Border, White on Green;
[W EST] E; [S OUTH] E; [Council Bluffs] E Mod; [Kansas City] E Mod;
Table of letter and object lefts.

W 43.0	E 63.3	S 74.6	T 86.7	S 110.5	O 127.1	U 140.1	T 152.1	H 163.4	
51.2	123.7								
C 17.7	o 34.7	u 50.3	n 66.8	c 82.1	l 97.5	l 106.6	B 125.7	l 144.1	u 153.3	f 168.4	f 178.3	s 188.0
K 31.8	a 48.0	n 64.5	s 79.3	a 93.1	s 107.9	C 134.2	l 152.2	t 159.7	y 171.1			

80/35-77-X M408



12.0" Radius, 2.0" Border, White on Green;
[E 14th St] E Mod; [Ankeny] E Mod; [1/4 MILE] E;
12.0" Radius, 1.5" Border, 0.5" Indent, Black on Yellow;
[EXIT] E Mod specified length; Down Arrow II-A - 22.0" 270°;
[ONLY] E Mod specified length;
Table of letter and object lefts.

69.0							
E 30.5	l 58.4	4 66.4	t 85.6	h 95.4	S 119.2	t 135.3	
A 40.0	n 60.3	k 76.8	e 90.6	n 106.0	y 120.9		
1/4 55.1	M 86.1	I 97.9	L 102.2	E 111.6			
E 13.8	X 25.7	I 39.1	T 44.5	↓ 68.4	O 112.4	N 125.6	L 138.4	Y 148.2

80/35-77-X M409

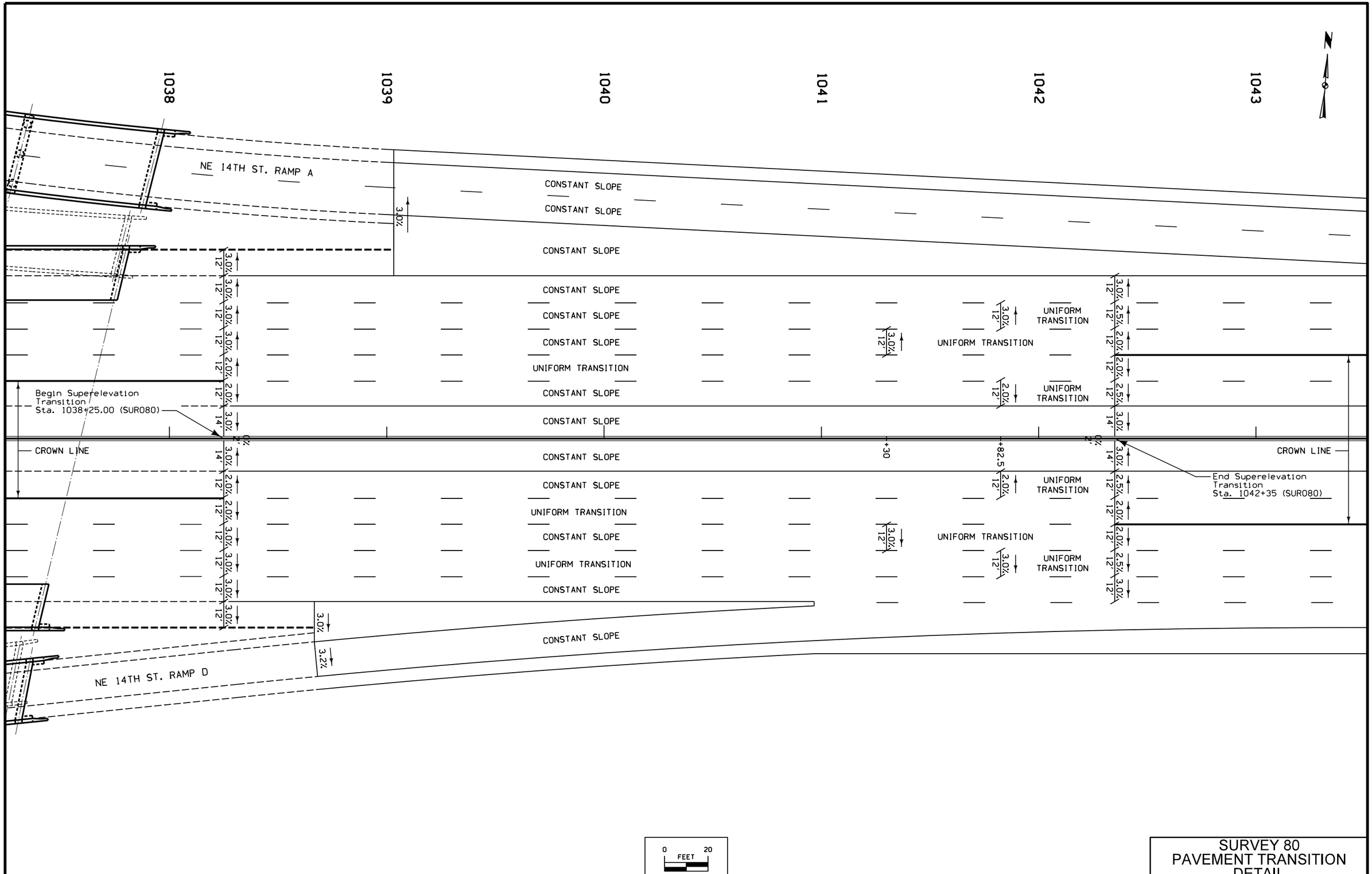


12.0" Radius, 2.0" Border, White on Green;
[E 14th St] E Mod; [Ankeny] E Mod;
12.0" Radius, 1.5" Border, 0.5" Indent, Black on Yellow;
Arrow I-F - 35.0" 45°; [EXIT] E Mod specified length;
[ONLY] E Mod specified length; Arrow I-F - 35.0" 45°;
Table of letter and object lefts.

93.0							
E 54.5	l 82.4	4 90.4	t 109.6	h 119.4	S 143.2	t 159.3	
A 64.0	n 84.3	k 100.8	e 114.6	n 130.0	y 144.9		
↗ 17.6	E 62.8	X 74.7	I 88.1	T 93.5	O 117.4	N 130.6	L 143.4	Y 153.2	↗ 177.2

NOTE: SIGN DIMENSIONS ARE IN INCHES

SIGN DETAILS



SURVEY 80
PAVEMENT TRANSITION
DETAIL

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER U.1

SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC

38653

38653

38653

POT Sta 38651+06.43

38652+13.74

38652+52.03

38653+08.03

PC Sta 38654+23.24

38654+22.04

38654+58.44

NB I-235 to WB I-80 RAMP H

CONSTANT SLOPE

5.2%
16'

UNIFORM TRANSITION

1.37%
16'

UNIFORM TRANSITION
0.0%
16'

UNIFORM TRANSITION
2.0%
16'

CONSTANT SLOPE

2.0%
16'

UNIFORM TRANSITION
3.3%
16'

5.2%
16'

CONSTANT SLOPE

5.2%

NB I-235 to EB I-80 RAMP D

5.2%
12'

5.2%
12'

CONSTANT SLOPE

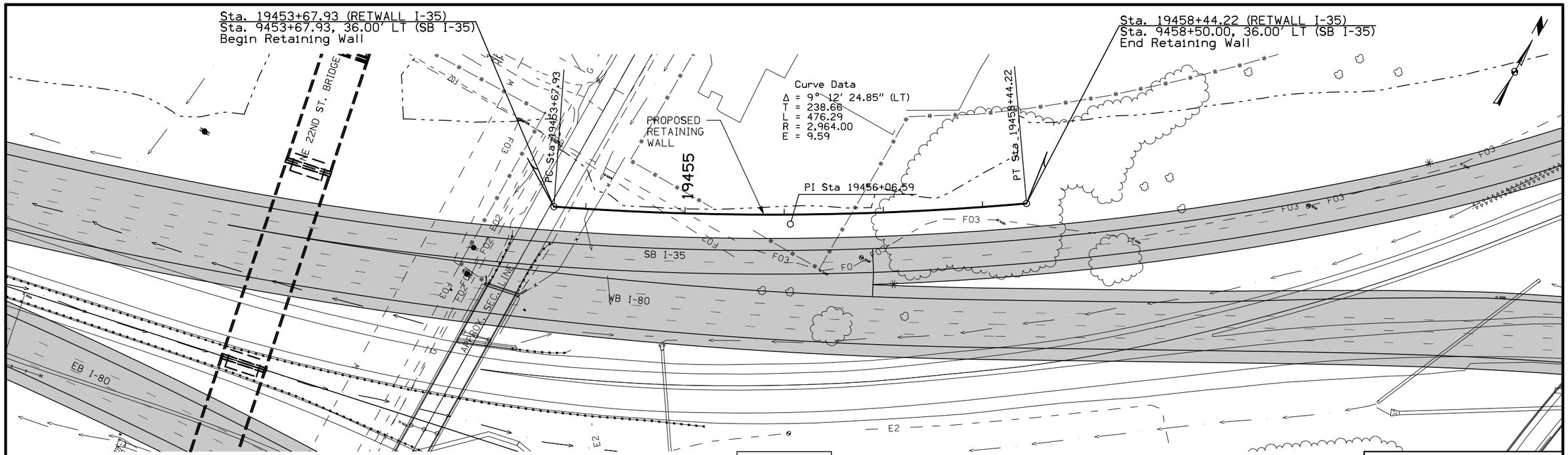
CONSTANT SLOPE

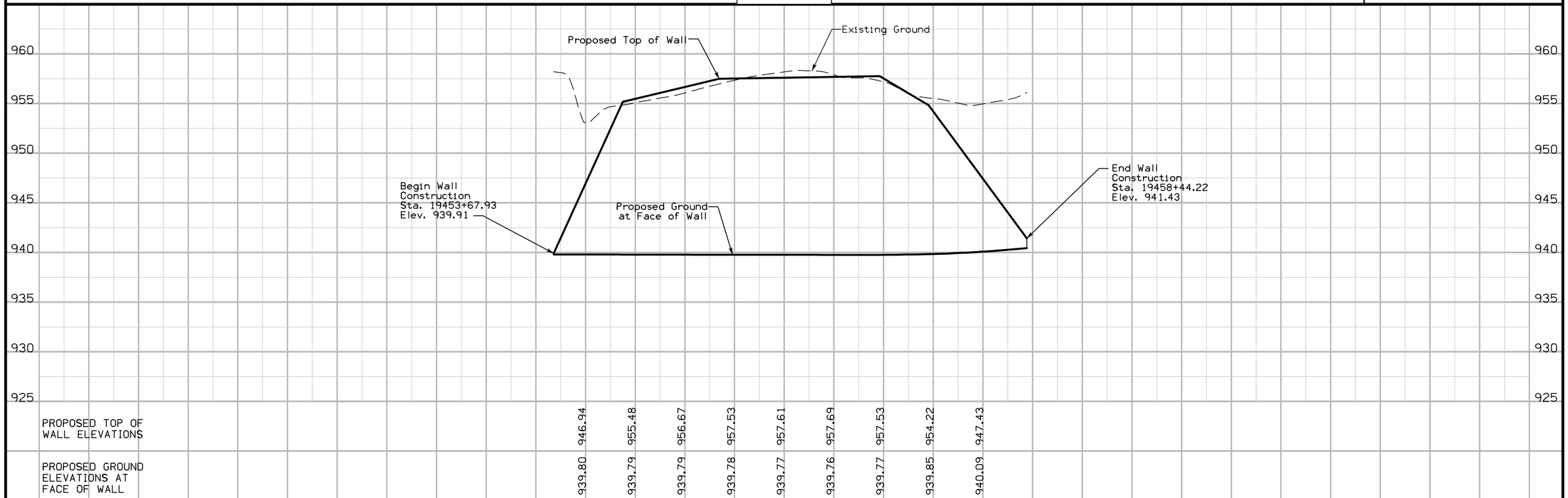
0 20
FEET

NB I-235 to WB I-80 - RAMP H
PAVEMENT TRANSITION
DETAIL

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER U.2	

SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC

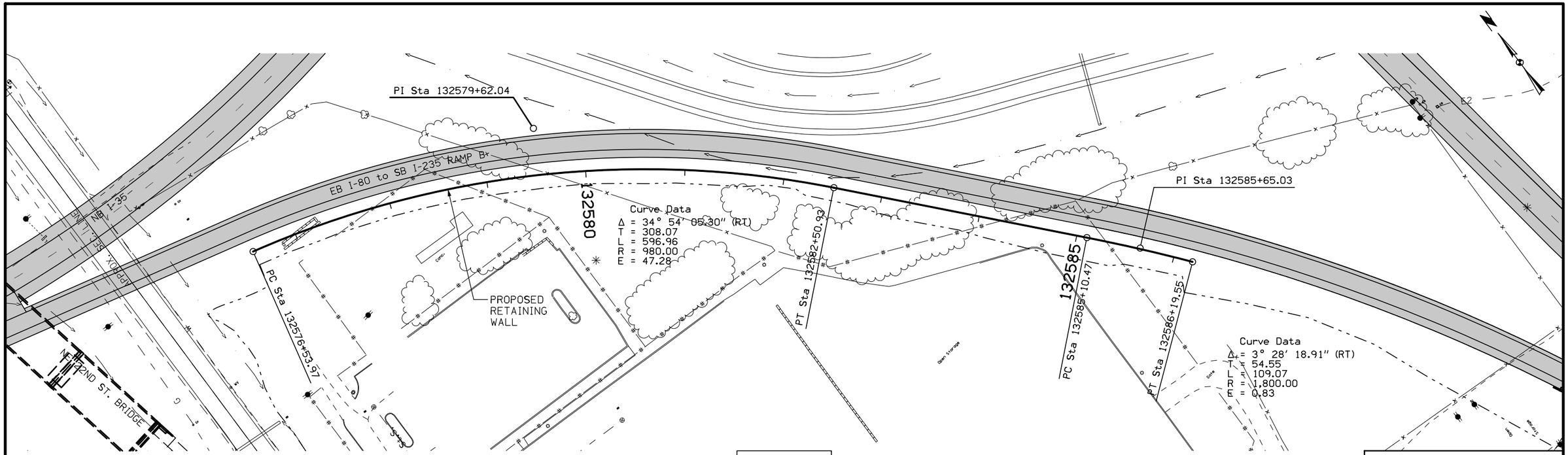


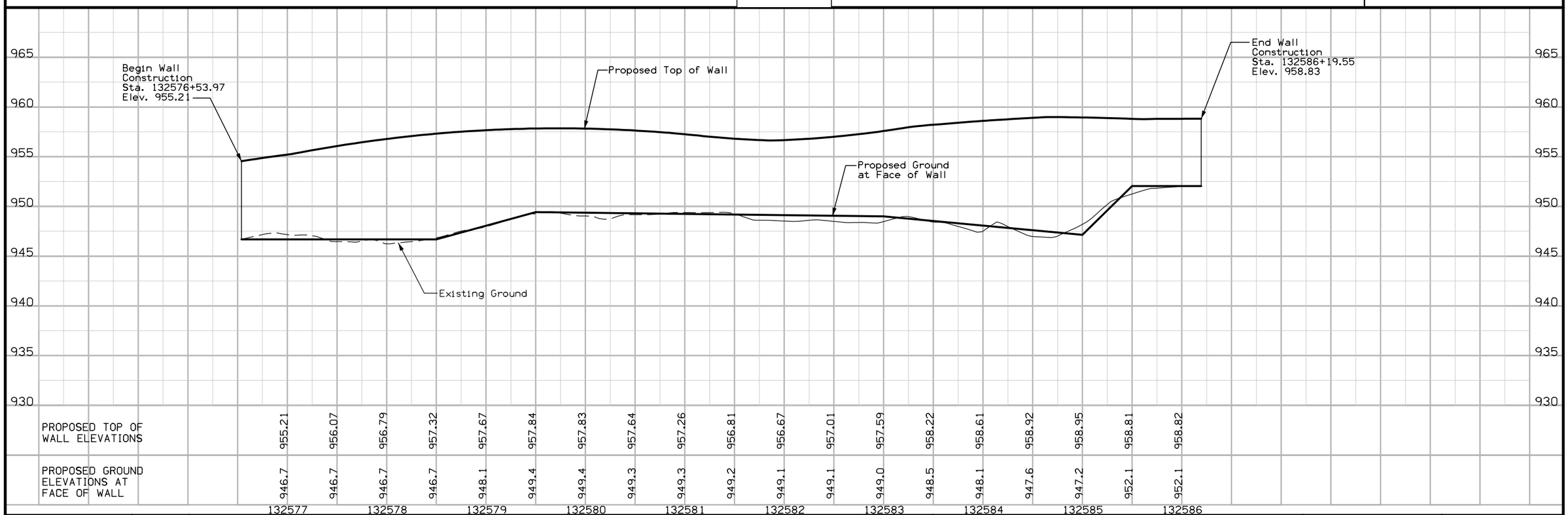


	19453	19454	19455	19456	19457	19458	19459
PROPOSED TOP OF WALL ELEVATIONS		946.94	955.48	956.67	957.53	957.61	957.69	957.53	954.22	947.43
PROPOSED GROUND ELEVATIONS AT FACE OF WALL		939.80	939.79	939.79	939.78	939.77	939.76	939.77	939.85	940.09

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER V.1

SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC

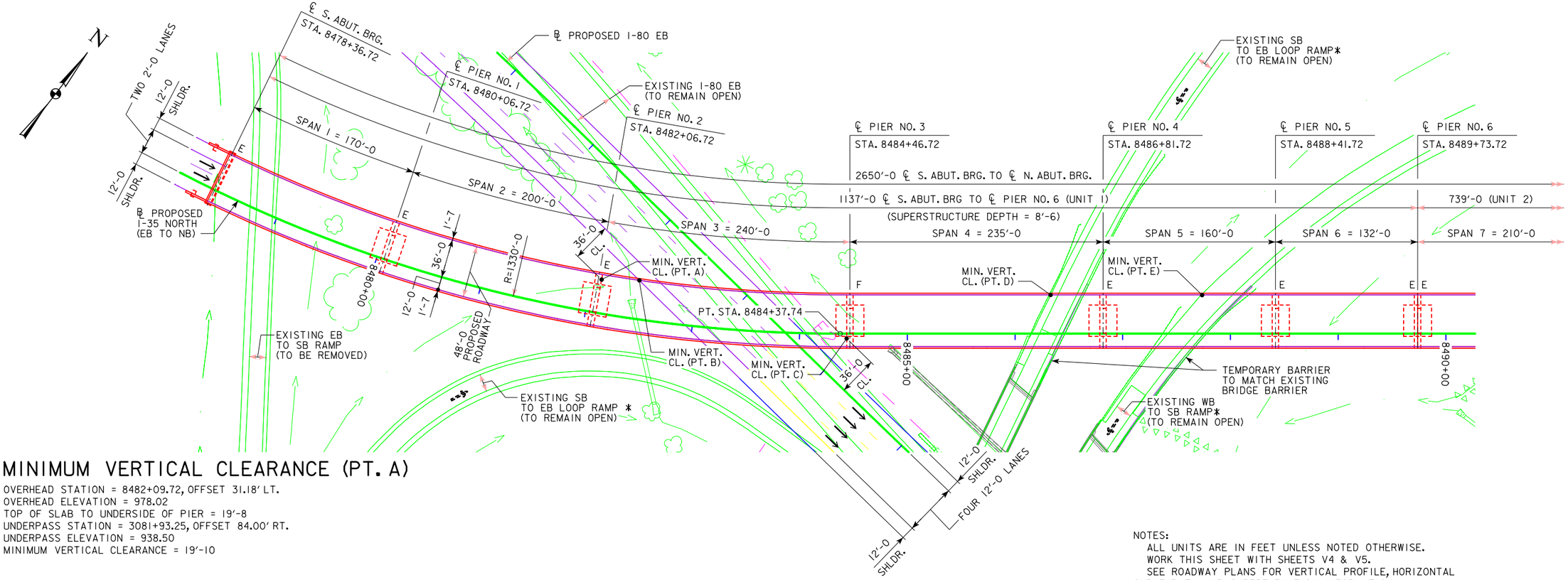




	132577	132578	132579	132580	132581	132582	132583	132584	132585	132586
PROPOSED TOP OF WALL ELEVATIONS	955.21	956.07	956.79	957.32	957.67	957.84	957.83	957.64	957.26	956.81	956.67	957.01	957.59	958.22	958.61	958.92	958.95	958.81	958.82
PROPOSED GROUND ELEVATIONS AT FACE OF WALL	946.7	946.7	946.7	946.7	948.1	949.4	949.4	949.3	949.3	949.2	949.1	949.1	949.0	948.5	948.1	947.6	947.2	952.1	952.1

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER V.2

2:04:53 PM 3/29/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194V01.sht



MINIMUM VERTICAL CLEARANCE (PT. A)

OVERHEAD STATION = 8482+09.72, OFFSET 31.18' LT.
OVERHEAD ELEVATION = 978.02
TOP OF SLAB TO UNDERSIDE OF PIER = 19'-8
UNDERPASS STATION = 3081+93.25, OFFSET 84.00' RT.
UNDERPASS ELEVATION = 938.50
MINIMUM VERTICAL CLEARANCE = 19'-10

MINIMUM VERTICAL CLEARANCE (PT. B)

OVERHEAD STATION = 8482+45.40, OFFSET 36.00' LT.
OVERHEAD ELEVATION = 979.16
DEPTH OF SUPERSTRUCTURE = 8'-6
UNDERPASS STATION = 3082+18.79, OFFSET 60.00' RT.
UNDERPASS ELEVATION = 939.27
MINIMUM VERTICAL CLEARANCE = 31'-4

MINIMUM VERTICAL CLEARANCE (PT. C)

OVERHEAD STATION = 8484+43.71, OFFSET 4.46' RT.
OVERHEAD ELEVATION = 988.89
TOP OF SLAB TO UNDERSIDE OF PIER = 26'-6
UNDERPASS STATION = 3083+94.14, OFFSET 36.00' LT.
UNDERPASS ELEVATION = 940.64
MINIMUM VERTICAL CLEARANCE = 21'-9

MINIMUM VERTICAL CLEARANCE (PT. D)

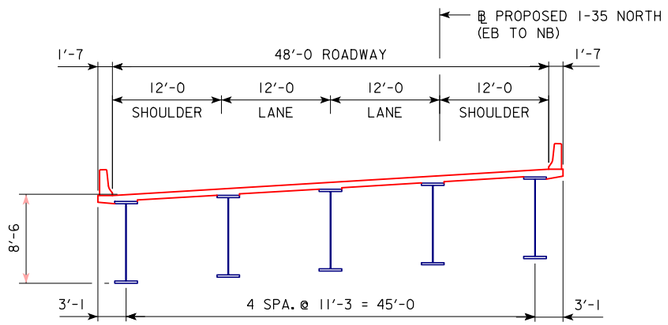
OVERHEAD STATION = 8486+33.18, OFFSET 36.00' LT.
OVERHEAD ELEVATION = 993.66
DEPTH OF SUPERSTRUCTURE = 8'-6
EXISTING UNDERPASS ELEVATION = 968.18
MINIMUM VERTICAL CLEARANCE = 16'-11

MINIMUM VERTICAL CLEARANCE (PT. E)

OVERHEAD STATION = 8487+72.95, OFFSET 36.00' LT.
OVERHEAD ELEVATION = 996.97
DEPTH OF SUPERSTRUCTURE = 8'-6
EXISTING UNDERPASS ELEVATION = 961.49
MINIMUM VERTICAL CLEARANCE = 26'-11

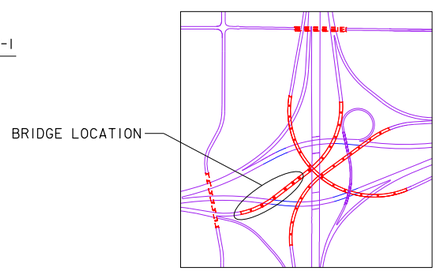
BRIDGE SKETCH - I-35 NORTH (EB TO NB) UNIT 1

*EXISTING RAMP MOVEMENT TO BE REMOVED AFTER PROPOSED RAMP MOVEMENT CONSTRUCTED



TYPICAL SECTION - UNIT 1

PRELIMINARY PLAN
NOT FINAL-SUBJECT TO CHANGE



INTERCHANGE KEY PLAN

NOTES:
ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.
WORK THIS SHEET WITH SHEETS V4 & V5.
SEE ROADWAY PLANS FOR VERTICAL PROFILE, HORIZONTAL CURVE DATA AND SUPERELEVATION INFORMATION.
DISPOSITION OF UTILITIES TO BE DETERMINED IN FUTURE DESIGN PHASES UNLESS NOTED OTHERWISE.

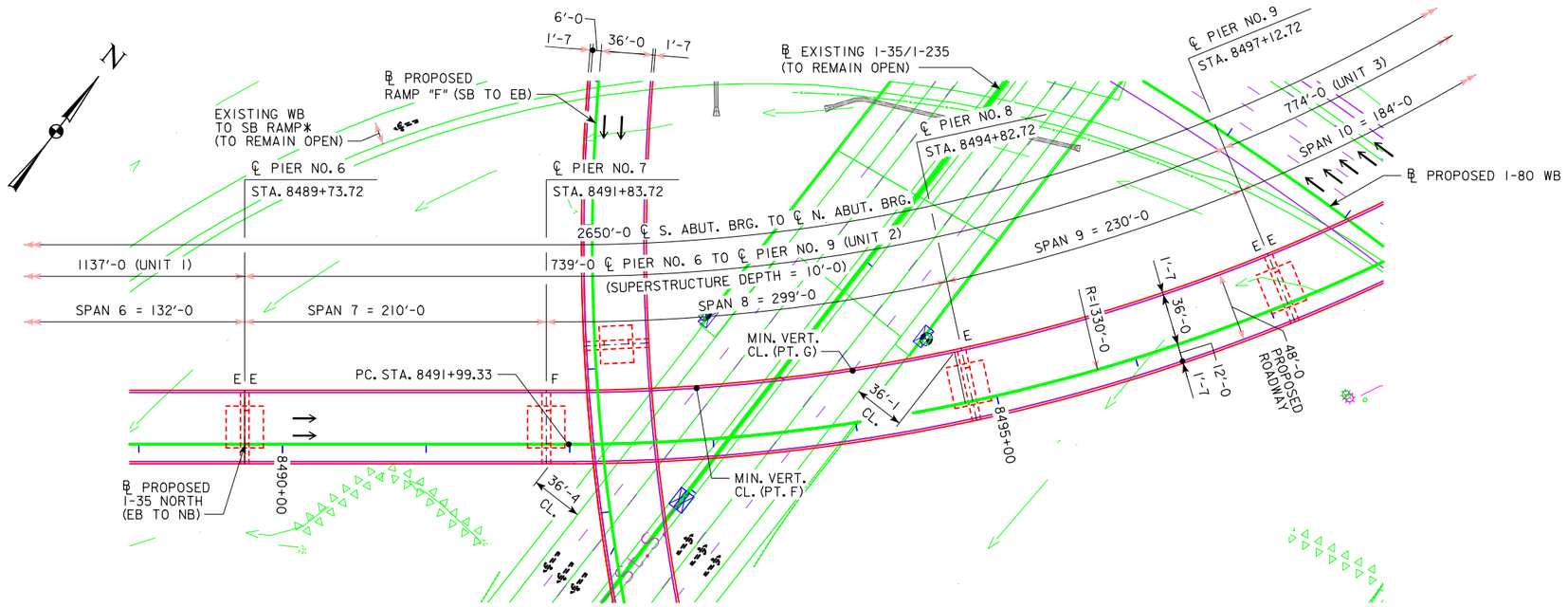
NOTES TO DESIGNERS:
MINIMUM HORIZONTAL CLEARANCE AND CLEAR ZONE FOR FUTURE EXPANSION:
I-80, I-35, I-235, I-35 NORTH (EB TO NB) & I-35 SOUTH (SB TO WB) = 36' FROM LANE LINE
RAMP "G" (WB TO SB), RAMP "A" (WB TO NB), RAMP "F" (SB TO EB),
RAMP "D" (NB TO EB) & RAMP "B" (EB TO SB) = 32' FROM LANE LINE
RAMP "E" (NB TO WB) (OUTSIDE OF LOOP) = 22' FROM LANE LINE
(AT LOOP) = 16' FROM LANE LINE
EXISTING ROADS LABELED "TO REMAIN OPEN" MAY BE BARRIER PROTECTED WITH THE FACE OF BARRIER AT THE BACK OF EXISTING SHOULDER.
MINIMUM VERTICAL CLEARANCE = 16'-6 REQUIRED ABOVE EXISTING, PROPOSED AND FUTURE EXPANSION PAVEMENT.
SUBSTRUCTURE TO BE STUB TYPE ABUTMENTS AND I-235 DELTA PIERS. PIER RENDERINGS PROVIDED BY KIMBALL OLSON, AUGUST 2012.
EXPANSION JOINTS AT SOUTH ABUTMENT, PIER NO. 9 AND NORTH ABUTMENT TO BE MODULAR JOINTS. EXPANSION JOINT AT PIER NO. 6 TO BE EITHER MODULAR OR FINGER JOINT.

0 ENGLISH 100
SCALE IN FEET

2650'-0 X 48'-0 CONTINUOUS WELDED GIRDER BRIDGE

BRIDGE SKETCH - I-35 NORTH OVER I-80/I-235 - UNIT 1

POLK COUNTY
APRIL 2016
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION



BRIDGE SKETCH - I-35 NORTH (EB TO NB) UNIT 2

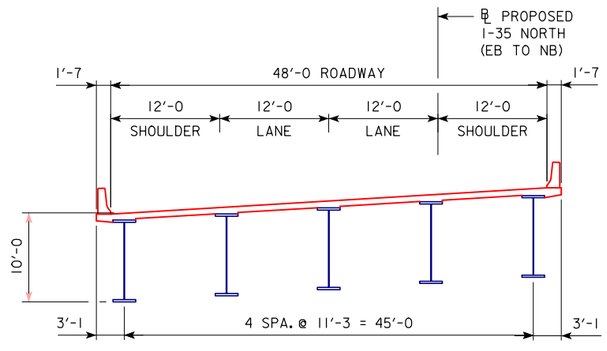
*EXISTING RAMP MOVEMENT TO BE REMOVED
AFTER PROPOSED RAMP MOVEMENT CONSTRUCTED

MINIMUM VERTICAL CLEARANCE (PT. F)

OVERHEAD STATION = 8492+91.49, OFFSET 36.00' LT.
OVERHEAD ELEVATION = 1001.32
DEPTH OF SUPERSTRUCTURE = 10'-0
UNDERPASS STATION = 2061+58.43, OFFSET 39.00' LT.
UNDERPASS ELEVATION = 971.48
MINIMUM VERTICAL CLEARANCE = 19'-10

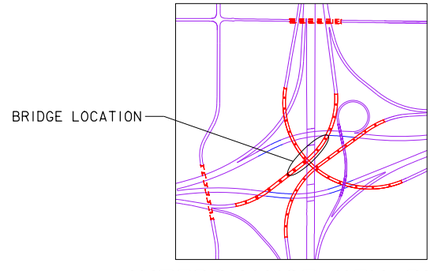
MINIMUM VERTICAL CLEARANCE (PT. G)

OVERHEAD STATION = 8494+03.40, OFFSET 36.00' LT.
OVERHEAD ELEVATION = 1001.22
DEPTH OF SUPERSTRUCTURE = 10'-0
UNDERPASS STATION = 2062+34.35, OFFSET 39.00' RT.
UNDERPASS ELEVATION = 971.93
MINIMUM VERTICAL CLEARANCE = 19'-3



TYPICAL SECTION - UNIT 2

PRELIMINARY PLAN
NOT FINAL-SUBJECT TO CHANGE



INTERCHANGE KEY PLAN

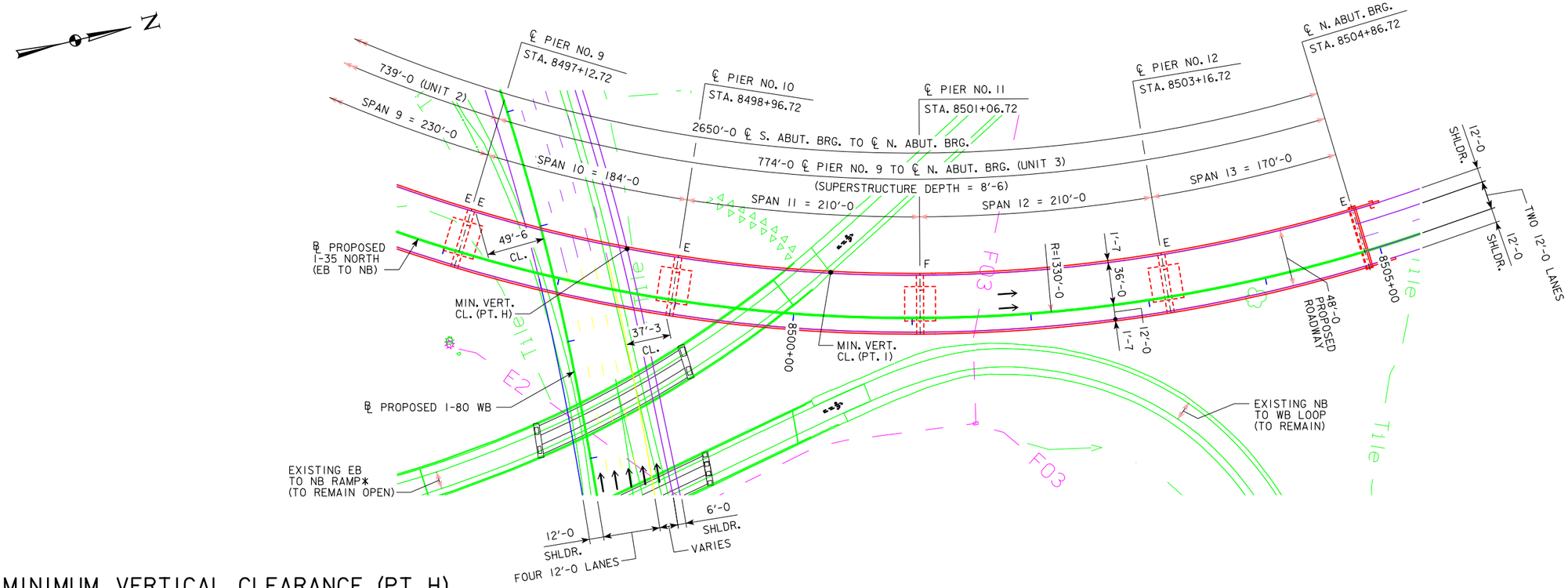
NOTES:
WORK THIS SHEET WITH SHEETS V.3 & V.5.
SEE SHEET V.3 FOR ADDITIONAL NOTES.

0 ENGLISH 100
SCALE IN FEET

2650'-0 X 48'-0 CONTINUOUS WELDED GIRDER BRIDGE

BRIDGE SKETCH - I-35 NORTH OVER I-80/I-235 - UNIT 2

POLK COUNTY
APRIL 2016
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION



BRIDGE SKETCH - I-35 NORTH (EB TO NB) UNIT 3

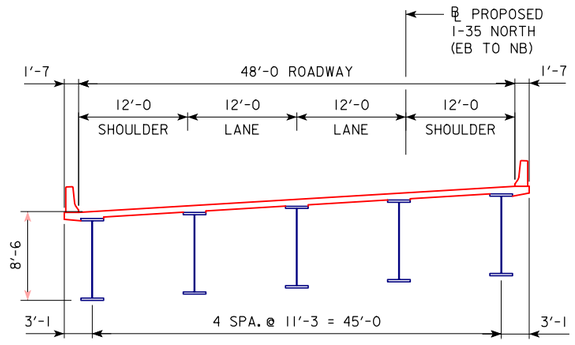
*EXISTING RAMP MOVEMENT TO BE REMOVED
AFTER PROPOSED RAMP MOVEMENT CONSTRUCTED

MINIMUM VERTICAL CLEARANCE (PT. H)

OVERHEAD STATION = 8498+51.67, OFFSET 36.00' LT.
OVERHEAD ELEVATION = 996.06
DEPTH OF SUPERSTRUCTURE = 8'-6
UNDERPASS STATION = 4095+35.92, OFFSET 66.00' LT.
UNDERPASS ELEVATION = 943.95
MINIMUM VERTICAL CLEARANCE = 43'-7

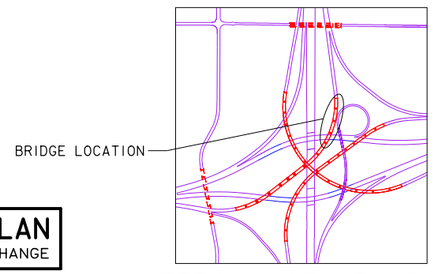
MINIMUM VERTICAL CLEARANCE (PT. I)

OVERHEAD STATION = 8500+28.90, OFFSET 36.00' LT.
OVERHEAD ELEVATION = 991.90
DEPTH OF SUPERSTRUCTURE = 8'-6
EXISTING UNDERPASS ELEVATION = 966.55
MINIMUM VERTICAL CLEARANCE = 16'-10



TYPICAL SECTION - UNIT 3

PRELIMINARY PLAN
NOT FINAL-SUBJECT TO CHANGE



INTERCHANGE KEY PLAN

NOTES:
WORK THIS SHEET WITH SHEETS V.3 & V.4.
SEE SHEET V.3 FOR ADDITIONAL NOTES

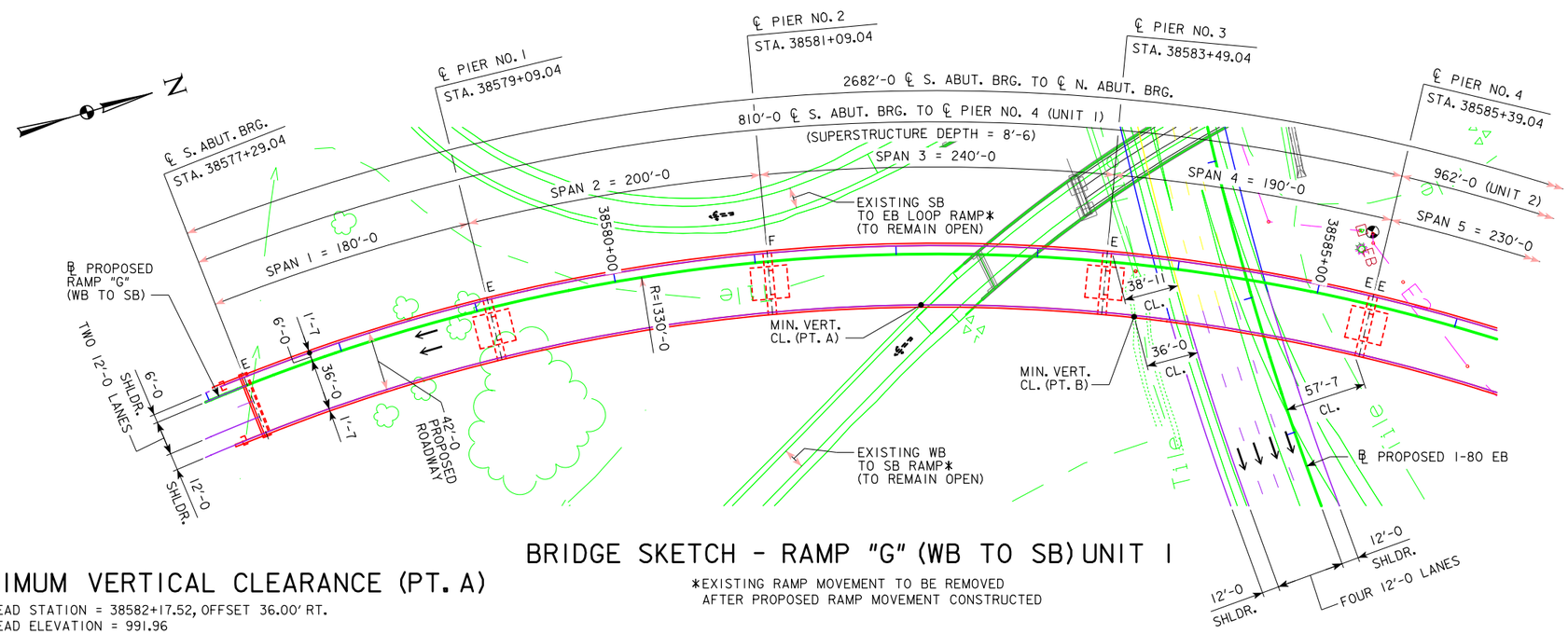
0 ENGLISH 100
SCALE IN FEET

2650'-0 X 48'-0 CONTINUOUS WELDED GIRDER BRIDGE

BRIDGE SKETCH - I-35 NORTH OVER I-80/I-235 - UNIT 3

POLK COUNTY
APRIL 2016
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN TEAM HDR | POLK COUNTY | SHEET NUMBER V.5



BRIDGE SKETCH - RAMP "G" (WB TO SB) UNIT 1

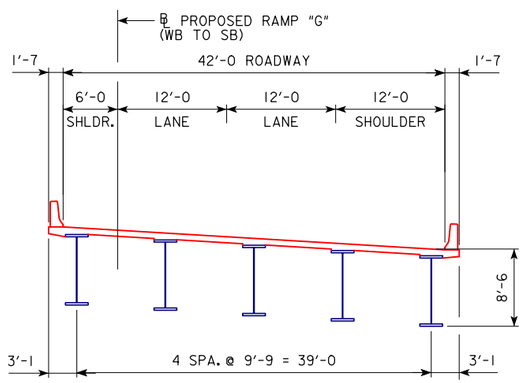
*EXISTING RAMP MOVEMENT TO BE REMOVED
AFTER PROPOSED RAMP MOVEMENT CONSTRUCTED

MINIMUM VERTICAL CLEARANCE (PT. A)

OVERHEAD STATION = 38582+17.52, OFFSET 36.00' RT.
OVERHEAD ELEVATION = 991.96
DEPTH OF SUPERSTRUCTURE = 8'-6
EXISTING UNDERPASS ELEVATION = 966.79
MINIMUM VERTICAL CLEARANCE = 16'-8

MINIMUM VERTICAL CLEARANCE (PT. B)

OVERHEAD STATION = 38583+72.16, OFFSET 36.00' RT.
OVERHEAD ELEVATION = 995.54
DEPTH OF SUPERSTRUCTURE = 8'-6
UNDERPASS STATION = 3087+89.10, OFFSET 84.00' RT.
UNDERPASS ELEVATION = 943.64
MINIMUM VERTICAL CLEARANCE = 43'-4

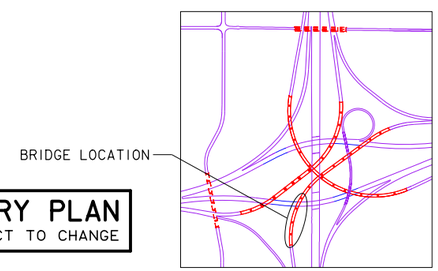


TYPICAL SECTION - UNIT 1

NOTES:
ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.
WORK THIS SHEET WITH SHEETS V.7 & V.8.
SEE ROADWAY PLANS FOR VERTICAL PROFILE, HORIZONTAL CURVE DATA AND SUPERELEVATION INFORMATION.
DISPOSITION OF UTILITIES TO BE DETERMINED IN FUTURE DESIGN PHASES UNLESS NOTED OTHERWISE.

NOTES TO DESIGNERS:
BRIDGE SUPERSTRUCTURE DEPTH CHANGE LOCATIONS TO OCCUR AT DOUBLE EXPANSION PIERS.
MINIMUM HORIZONTAL CLEARANCE AND CLEAR ZONE FOR FUTURE EXPANSION:
I-80, I-35, I-235, I-35 NORTH (EB TO NB) & I-35 SOUTH (SB TO WB) = 36' FROM LANE LINE
RAMP "G" (WB TO SB), RAMP "A" (WB TO NB), RAMP "F" (SB TO EB),
RAMP "D" (NB TO EB) & RAMP "B" (EB TO SB) = 32' FROM LANE LINE
RAMP "E" (NB TO WB) (OUTSIDE OF LOOP) = 22' FROM LANE LINE
(AT LOOP) = 16' FROM LANE LINE
EXISTING ROADS LABELED "TO REMAIN OPEN" MAY BE BARRIER PROTECTED WITH THE FACE OF BARRIER AT THE BACK OF EXISTING SHOULDER.
MINIMUM VERTICAL CLEARANCE = 16'-6 REQUIRED ABOVE EXISTING, PROPOSED AND FUTURE EXPANSION PAVEMENT.
SUBSTRUCTURE TO BE STUB TYPE ABUTMENTS AND I-235 DELTA PIERS. PIER RENDERINGS PROVIDED BY KIMBALL OLSON, AUGUST 2012.
EXPANSION JOINTS AT SOUTH ABUTMENT, PIER NO. 4 AND NORTH ABUTMENT TO BE MODULAR JOINTS. EXPANSION JOINT AT PIER NO. 8 TO BE EITHER MODULAR OR FINGER JOINT.

PRELIMINARY PLAN
NOT FINAL-SUBJECT TO CHANGE



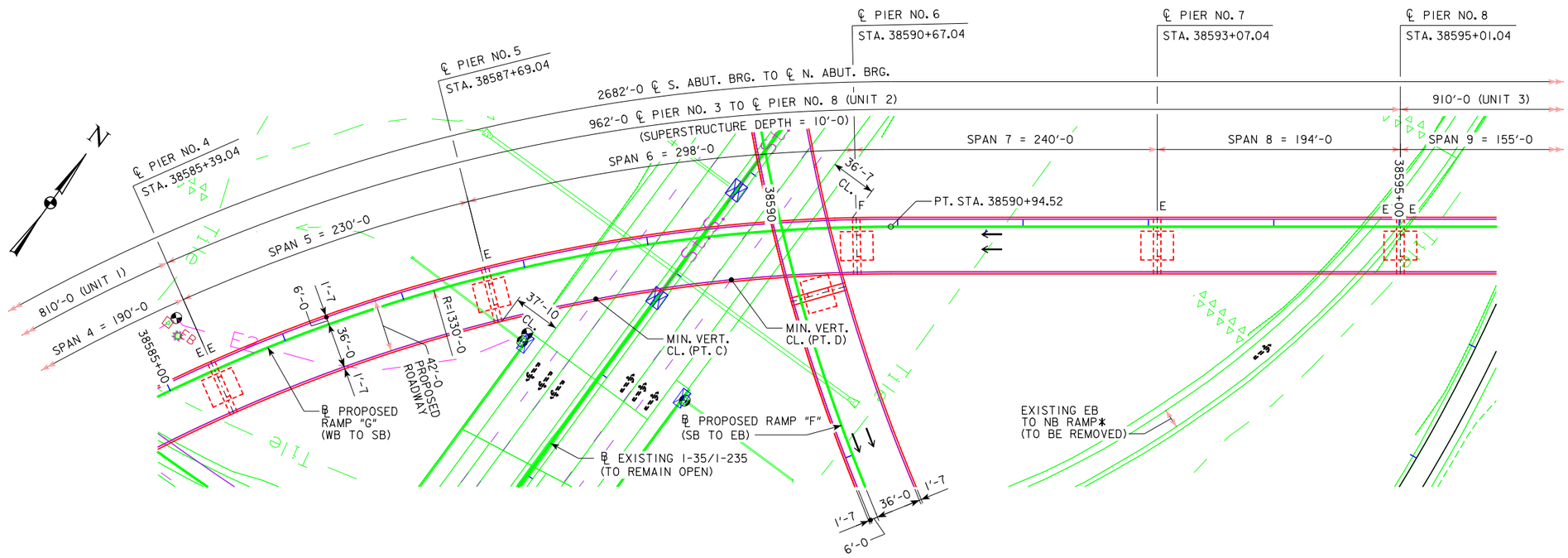
INTERCHANGE KEY PLAN

0 ENGLISH 100
SCALE IN FEET

2682'-0 X 42'-0 CONTINUOUS WELDED GIRDER BRIDGE

BRIDGE SKETCH - RAMP "G" OVER I-80/I-235 - UNIT 1

POLK COUNTY
APRIL 2016
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION



BRIDGE SKETCH - RAMP "G" (WB TO SB) UNIT 2

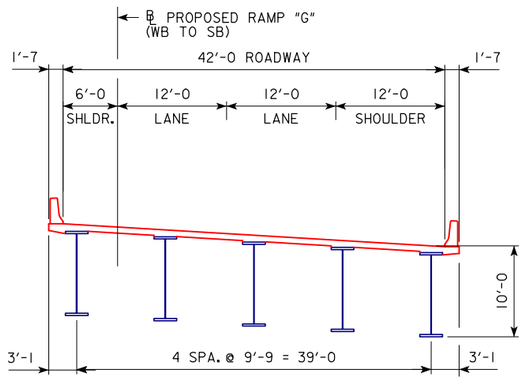
*EXISTING RAMP MOVEMENT TO BE REMOVED
AFTER PROPOSED RAMP MOVEMENT CONSTRUCTED

MINIMUM VERTICAL CLEARANCE (PT. C)

OVERHEAD STATION = 38588+51.30, OFFSET 36.00' RT.
OVERHEAD ELEVATION = 1001.47
DEPTH OF SUPERSTRUCTURE = 10'-0
UNDERPASS STATION = 2058+45.49, OFFSET 39.00' LT.
UNDERPASS ELEVATION = 971.00
MINIMUM VERTICAL CLEARANCE = 20'-5

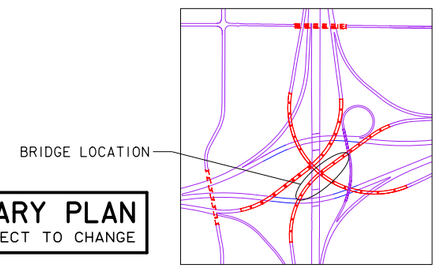
MINIMUM VERTICAL CLEARANCE (PT. D)

OVERHEAD STATION = 38589+63.48, OFFSET 36.00' RT.
OVERHEAD ELEVATION = 1001.72
DEPTH OF SUPERSTRUCTURE = 10'-0
UNDERPASS STATION = 2059+21.79, OFFSET 39.00' RT.
UNDERPASS ELEVATION = 970.81
MINIMUM VERTICAL CLEARANCE = 20'-11



TYPICAL SECTION - UNIT 2

NOTES:
WORK THIS SHEET WITH SHEETS V.6 & V.8.
SEE SHEET V.6 FOR ADDITIONAL NOTES.



INTERCHANGE KEY PLAN

0 ENGLISH 100
SCALE IN FEET

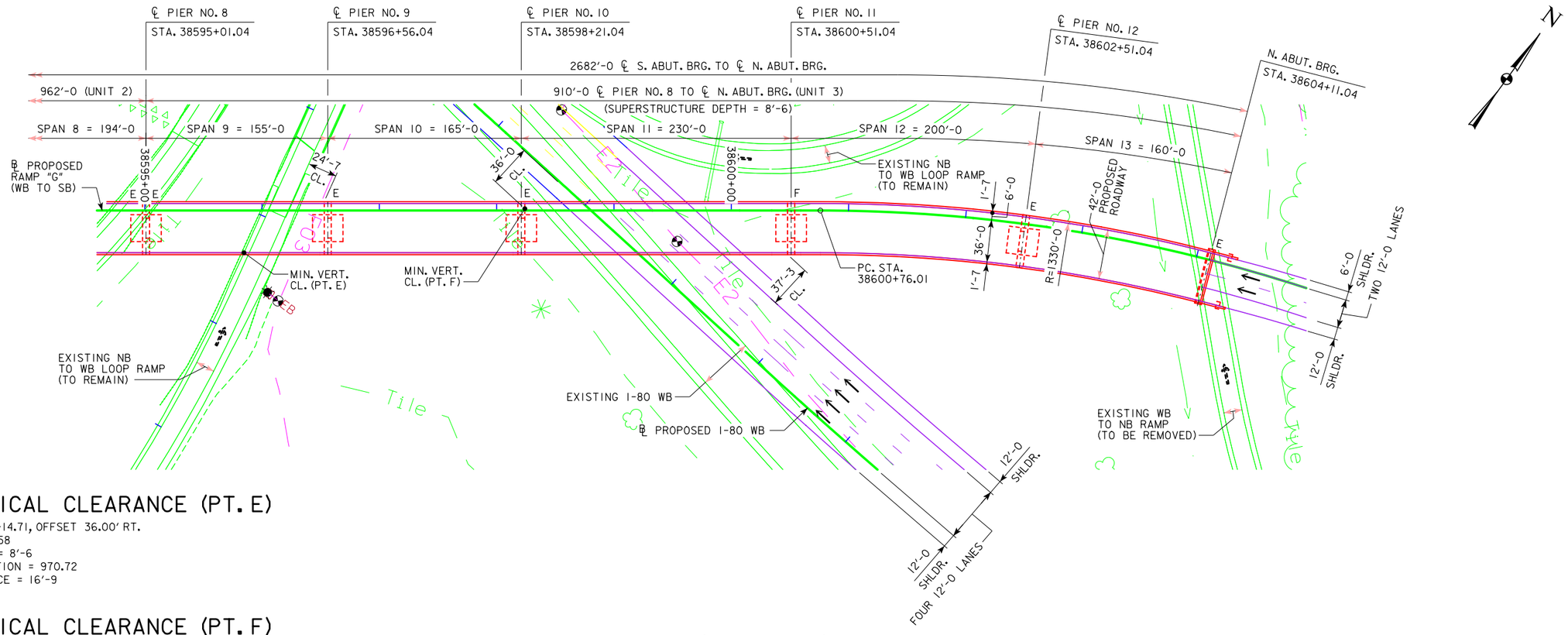
PRELIMINARY PLAN
NOT FINAL-SUBJECT TO CHANGE

2682'-0 X 42'-0 CONTINUOUS WELDED GIRDER BRIDGE

BRIDGE SKETCH - RAMP "G" OVER I-80/I-235 - UNIT 2

POLK COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
APRIL 2016

DESIGN TEAM HDR | POLK COUNTY | SHEET NUMBER V.7



MINIMUM VERTICAL CLEARANCE (PT. E)

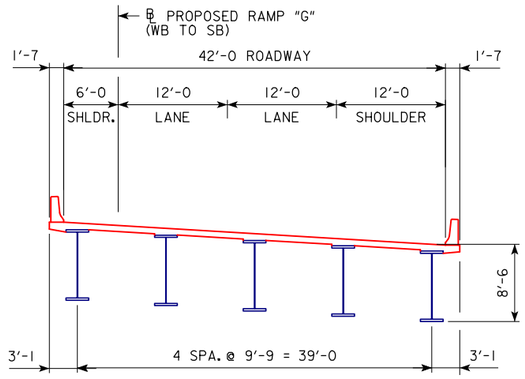
OVERHEAD STATION = 38596+14.71, OFFSET 36.00' RT.
OVERHEAD ELEVATION = 995.58
DEPTH OF SUPERSTRUCTURE = 8'-6
EXISTING UNDERPASS ELEVATION = 970.72
MINIMUM VERTICAL CLEARANCE = 16'-9

MINIMUM VERTICAL CLEARANCE (PT. F)

OVERHEAD STATION = 38598+24.04, OFFSET 2.84' LT.
OVERHEAD ELEVATION = 991.52
GUTTER LINE TO UNDERSIDE OF PIER = 17'-9
UNDERPASS STATION = 4099+63.28, OFFSET 36.00' RT.
UNDERPASS ELEVATION = 943.51
MINIMUM VERTICAL CLEARANCE = 30'-3

BRIDGE PLAN - RAMP "G" (WB TO SB) UNIT 3

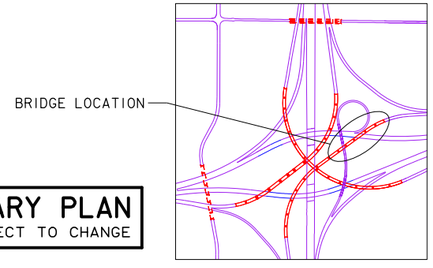
*EXISTING RAMP MOVEMENT TO BE REMOVED
AFTER PROPOSED RAMP MOVEMENT CONSTRUCTED



TYPICAL SECTION - UNIT 3

PRELIMINARY PLAN
NOT FINAL-SUBJECT TO CHANGE

NOTES:
WORK THIS SHEETS V.6 AND V.7.
SEE SHEET V.6 FOR ADDITIONAL NOTES.



INTERCHANGE KEY PLAN

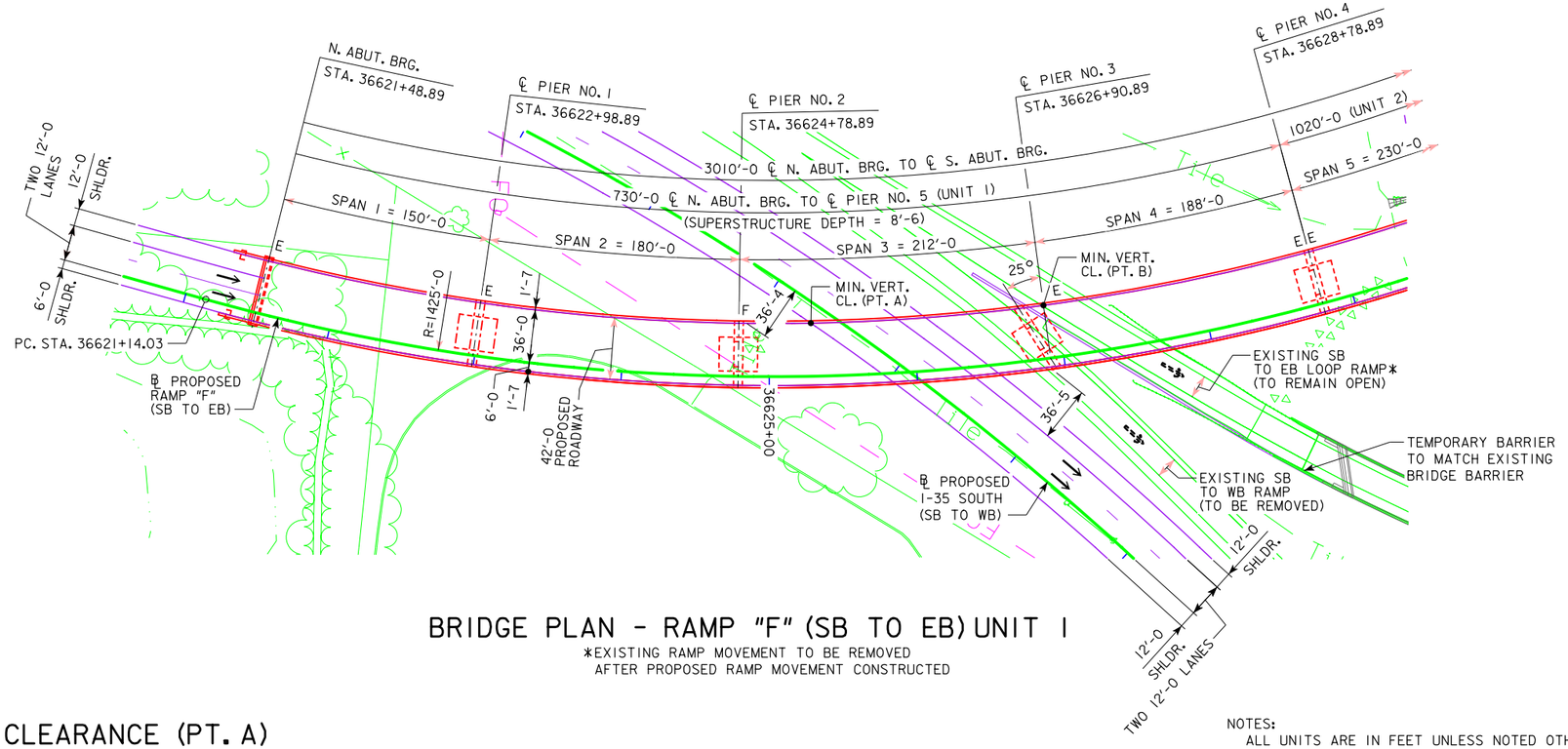
0 ENGLISH 100
SCALE IN FEET

2682'-0 X 42'-0 CONTINUOUS WELDED GIRDER BRIDGE

BRIDGE SKETCH - RAMP "G" OVER I-80/I-235 - UNIT 3

POLK COUNTY APRIL 2016
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN TEAM HDR | POLK COUNTY | SHEET NUMBER V.8



BRIDGE PLAN - RAMP "F" (SB TO EB) UNIT 1

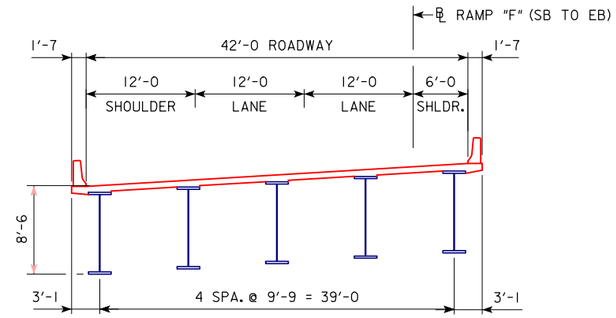
*EXISTING RAMP MOVEMENT TO BE REMOVED
AFTER PROPOSED RAMP MOVEMENT CONSTRUCTED

MINIMUM VERTICAL CLEARANCE (PT. A)

OVERHEAD STATION = 36625+28.88, OFFSET 36.00' LT.
OVERHEAD ELEVATION = 999.27
DEPTH OF SUPERSTRUCTURE = 8'-6
UNDERPASS STATION = 9468+65.58, OFFSET 12.00' LT.
UNDERPASS ELEVATION = 961.85
MINIMUM VERTICAL CLEARANCE = 28'-11

MINIMUM VERTICAL CLEARANCE (PT. B)

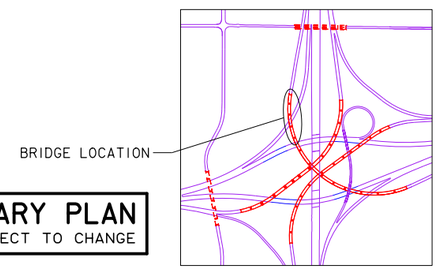
OVERHEAD STATION = 36626+89.86, OFFSET 36.00' LT.
OVERHEAD ELEVATION = 1019.59
DEPTH OF SUPERSTRUCTURE = 8'-6
EXISTING UNDERPASS ELEVATION = 965.60
MINIMUM VERTICAL CLEARANCE = 33'-2



TYPICAL SECTION - UNIT 1

NOTES:
ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.
WORK THIS SHEET WITH SHEETS V.10 & V.11.
SEE ROADWAY PLANS FOR VERTICAL PROFILE, HORIZONTAL CURVE DATA AND SUPERELEVATION INFORMATION.
DISPOSITION OF UTILITIES TO BE DETERMINED IN FUTURE DESIGN PHASES UNLESS NOTED OTHERWISE.

NOTES TO DESIGNERS:
BRIDGE SUPERSTRUCTURE DEPTH CHANGE LOCATIONS TO OCCUR AT DOUBLE EXPANSION PIERS.
MINIMUM HORIZONTAL CLEARANCE AND CLEAR ZONE FOR FUTURE EXPANSION:
I-80, I-35, I-235, I-35 NORTH (EB TO NB) & I-35 SOUTH (SB TO WB) = 36' FROM LANE LINE
RAMP "G" (WB TO SB), RAMP "A" (WB TO NB), RAMP "F" (SB TO EB),
RAMP "D" (NB TO EB) & RAMP "B" (EB TO SB) = 32' FROM LANE LINE
RAMP "E" (NB TO WB) (OUTSIDE OF LOOP) = 22' FROM LANE LINE
(AT LOOP) = 16' FROM LANE LINE
EXISTING ROADS LABELED "TO REMAIN OPEN" MAY BE BARRIER PROTECTED WITH THE FACE OF BARRIER AT THE BACK OF EXISTING SHOULDER.
MINIMUM VERTICAL CLEARANCE = 16'-6 REQUIRED ABOVE EXISTING, PROPOSED AND FUTURE EXPANSION PAVEMENT.
SUBSTRUCTURE TO BE STUB TYPE ABUTMENTS AND I-235 DELTA PIERS. PIER RENDERINGS PROVIDED BY KIMBALL OLSON, AUGUST 2012.
EXPANSION JOINTS AT NORTH ABUTMENT, PIER NOS. 4 & 8 AND SOUTH ABUTMENT TO BE MODULAR JOINTS.



INTERCHANGE KEY PLAN

0 ENGLISH 100
SCALE IN FEET

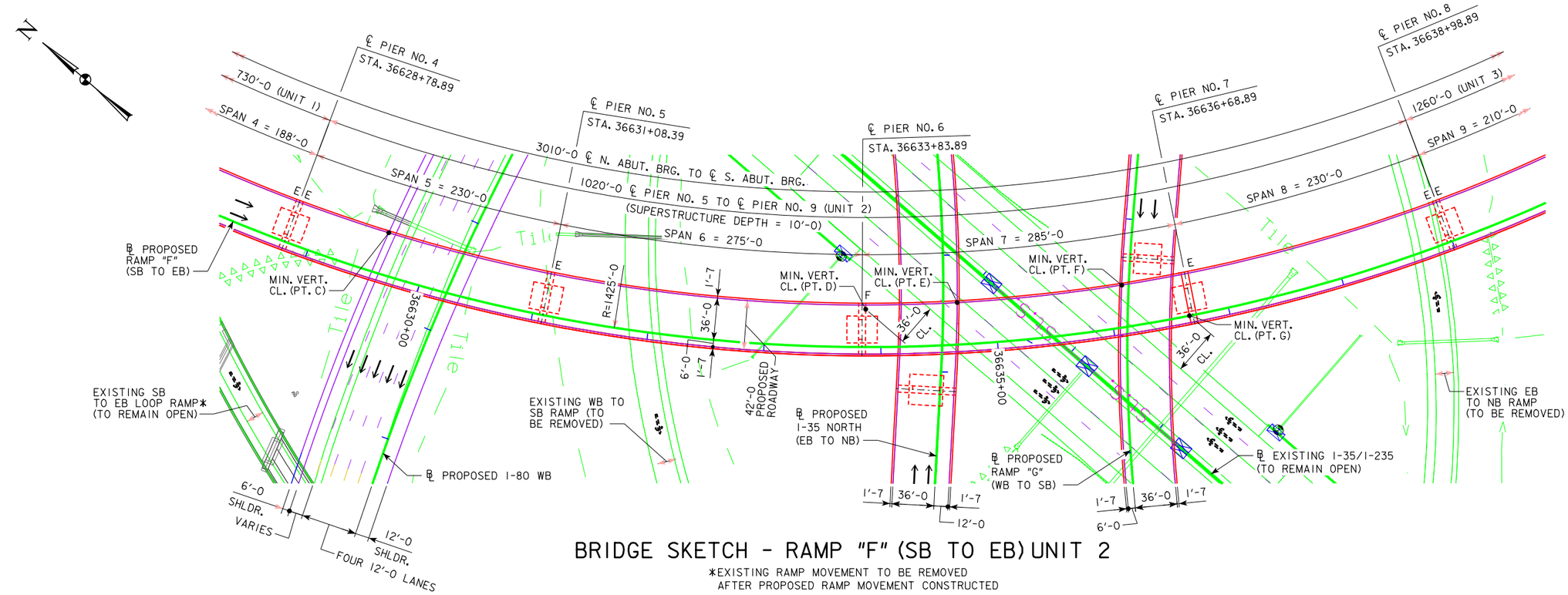
PRELIMINARY PLAN
NOT FINAL-SUBJECT TO CHANGE

3010'-0 X 42'-0 CONTINUOUS WELDED GIRDER BRIDGE

BRIDGE SKETCH - RAMP "F" OVER I-80/I-235 - UNIT 1

POLK COUNTY
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION
APRIL 2016

DESIGN TEAM HDR | POLK COUNTY | SHEET NUMBER V.9



BRIDGE SKETCH - RAMP "F" (SB TO EB) UNIT 2

*EXISTING RAMP MOVEMENT TO BE REMOVED AFTER PROPOSED RAMP MOVEMENT CONSTRUCTED

MINIMUM VERTICAL CLEARANCE (PT. C)

OVERHEAD STATION = 36629+61.83, OFFSET 36.00' LT.
OVERHEAD ELEVATION = 1019.59
DEPTH OF SUPERSTRUCTURE = 10'-0
UNDERPASS STATION = 4089+61.36, OFFSET 66.00' LT.
UNDERPASS ELEVATION = 942.48
MINIMUM VERTICAL CLEARANCE = 67'-1

MINIMUM VERTICAL CLEARANCE (PT. D)

OVERHEAD STATION = 36633+86.89, OFFSET 32.37' LT.
OVERHEAD ELEVATION = 1030.24
GUTTERLINE TO UNDERSIDE OF PIER = 19'-2
UNDERPASS ELEVATION = 970.55
MINIMUM VERTICAL CLEARANCE = 40'-6

MINIMUM VERTICAL CLEARANCE (PT. E)

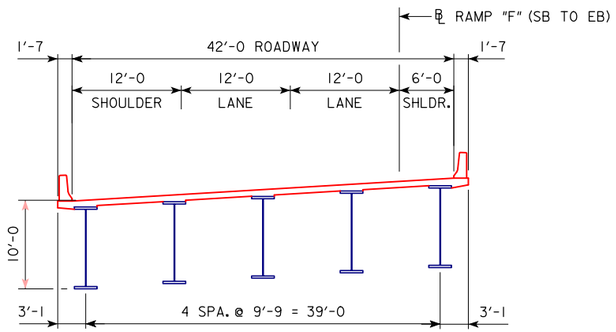
OVERHEAD STATION = 36634+67.37, OFFSET 36.00' LT.
OVERHEAD ELEVATION = 1031.05
DEPTH OF SUPERSTRUCTURE = 10'-0
UNDERPASS STATION = 8492+59.45, OFFSET 12.00' RT.
UNDERPASS ELEVATION = 1004.10
MINIMUM VERTICAL CLEARANCE = 16'-11

MINIMUM VERTICAL CLEARANCE (PT. F)

OVERHEAD STATION = 36636+12.67, OFFSET 36.00' LT.
OVERHEAD ELEVATION = 1031.57
DEPTH OF SUPERSTRUCTURE = 10'-0
UNDERPASS STATION = 38590+43.35, OFFSET 6.00' LT.
UNDERPASS ELEVATION = 1003.90
MINIMUM VERTICAL CLEARANCE = 17'-8

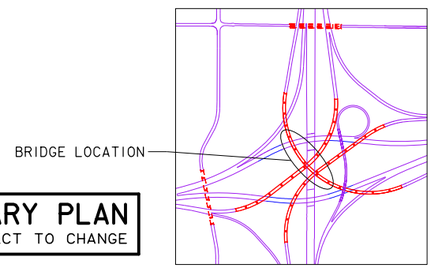
MINIMUM VERTICAL CLEARANCE (PT. G)

OVERHEAD STATION = 36636+65.89, OFFSET 5.42' RT.
OVERHEAD ELEVATION = 1033.63
GUTTERLINE TO UNDERSIDE OF PIER = 17'-3
UNDERPASS ELEVATION = 969.80
MINIMUM VERTICAL CLEARANCE = 46'-7



TYPICAL SECTION - UNIT 2

PRELIMINARY PLAN
NOT FINAL-SUBJECT TO CHANGE



INTERCHANGE KEY PLAN

NOTES:
WORK THIS SHEET WITH SHEETS V.9 & V.11.
SEE SHEET V.9 FOR ADDITIONAL NOTES.

0 ENGLISH 100
SCALE IN FEET

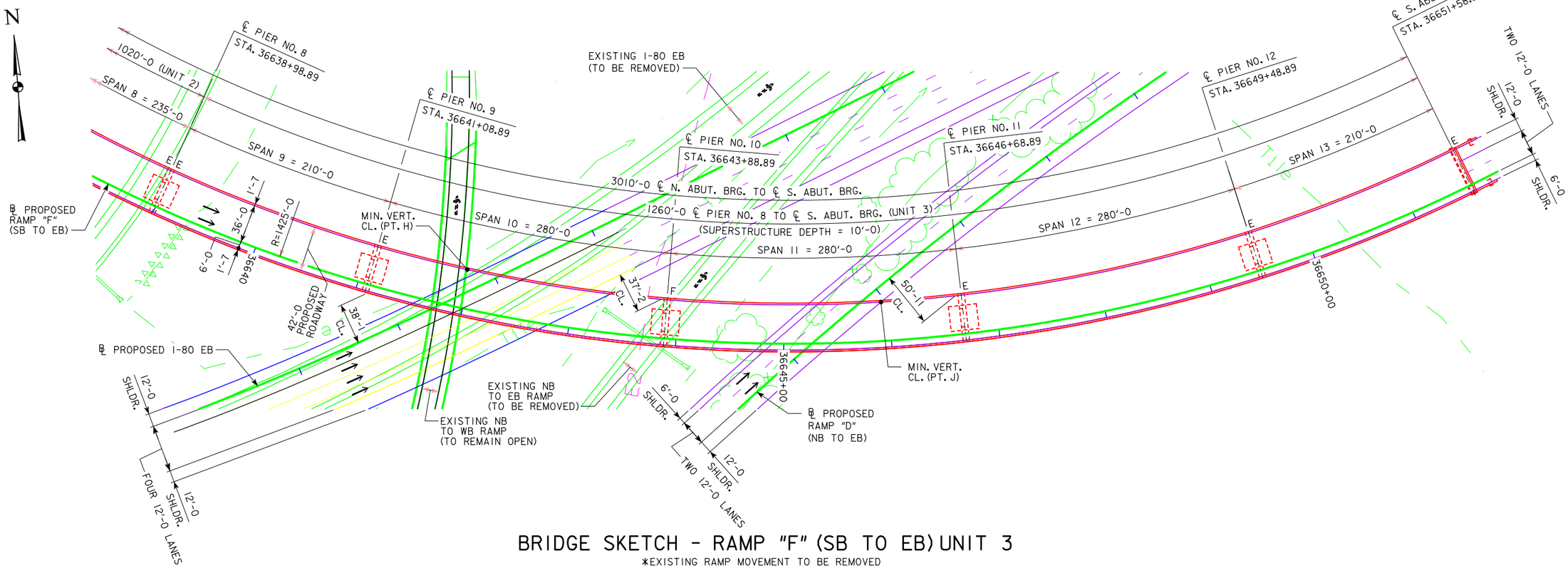
3010'-0 X 42'-0 CONTINUOUS WELDED GIRDER BRIDGE

BRIDGE SKETCH - RAMP "F" OVER I-80/I-235 - UNIT 2

POLK COUNTY
APRIL 2016
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

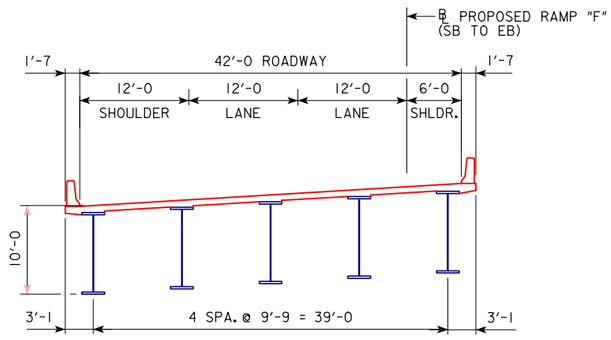
DESIGN TEAM HDR | POLK COUNTY | SHEET NUMBER V.10

4/19/2016 10:11:11 AM esorens pw:\\PWAPPOMA001:NorthCentral_Omaha\Documents\008180\00.00_Client_Standards\00.04_Work_In_Progress\Working_Folders\Sorens_Eric\IDOT\Mix Master\NEMM_Preliminary_Drafting.dgn V10 11x17c_pdf.pltcfg



BRIDGE SKETCH - RAMP "F" (SB TO EB) UNIT 3

*EXISTING RAMP MOVEMENT TO BE REMOVED
AFTER PROPOSED RAMP MOVEMENT CONSTRUCTED



TYPICAL SECTION - UNIT 3

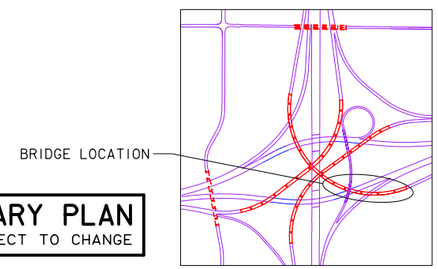
MINIMUM VERTICAL CLEARANCE (PT. H)

OVERHEAD STATION = 36641+94.84, OFFSET 36.00' LT.
OVERHEAD ELEVATION = 1021.16
DEPTH OF SUPERSTRUCTURE = 10'-0
UNDERPASS ELEVATION = 969.28
MINIMUM VERTICAL CLEARANCE = 41'-10

MINIMUM VERTICAL CLEARANCE (PT. J)

OVERHEAD STATION = 36645+92.34, OFFSET 36'-0 LT.
OVERHEAD ELEVATION = 1003.20
DEPTH OF SUPERSTRUCTURE = 10'-0
UNDERPASS STATION = 33559+95.80, OFFSET 12'.00 RT.
UNDERPASS ELEVATION = 944.35
MINIMUM VERTICAL CLEARANCE = 48'-10

PRELIMINARY PLAN
NOT FINAL-SUBJECT TO CHANGE



INTERCHANGE KEY PLAN

NOTES:
WORK THIS SHEET WITH SHEETS V.9 & V.10.
SEE SHEET V.9 FOR ADDITIONAL NOTES.

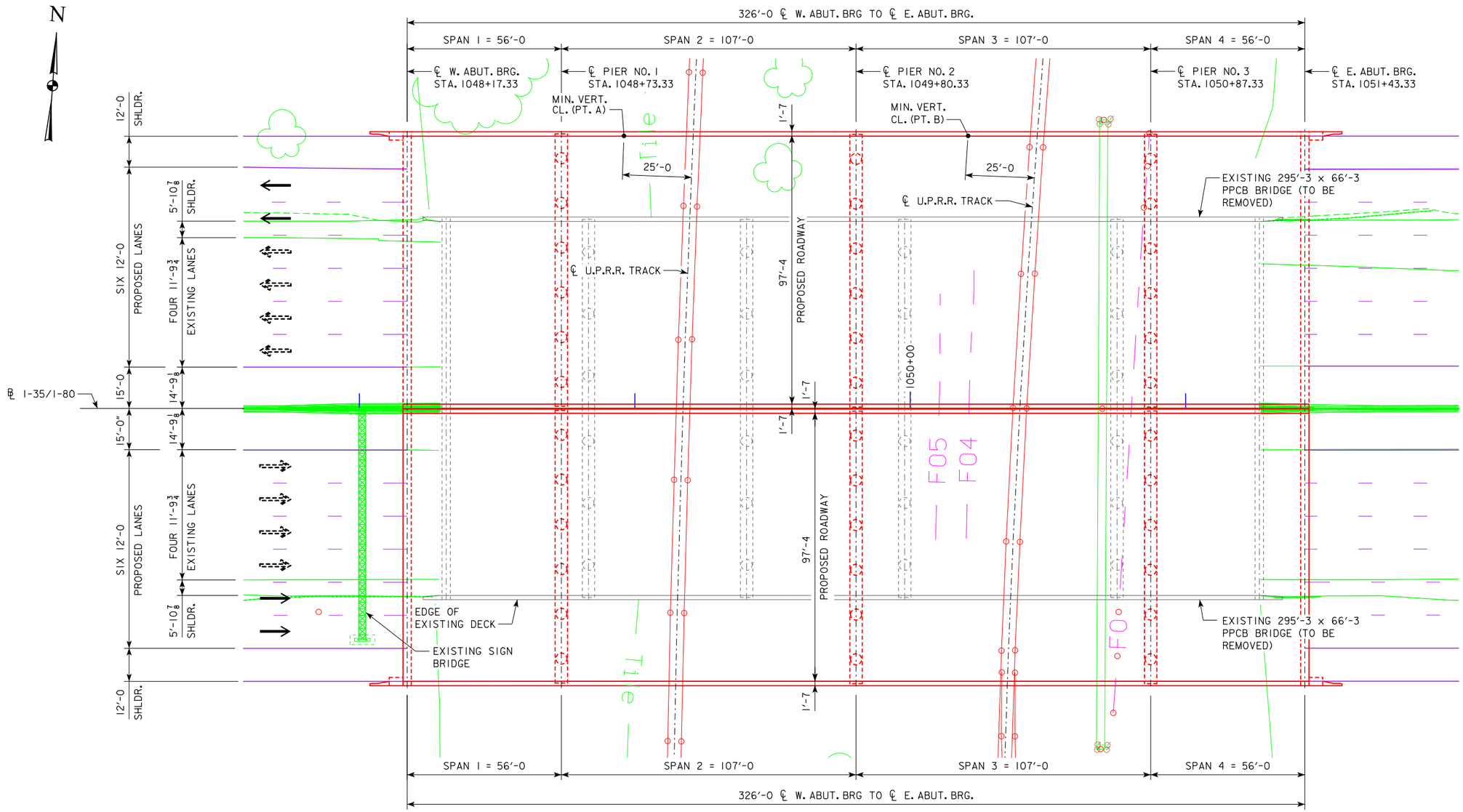
0 ENGLISH 100
SCALE IN FEET

3010'-0 X 42'-0 CONTINUOUS WELDED GIRDER BRIDGE

BRIDGE SKETCH - RAMP "F" OVER I-80/I-235 - UNIT 3

POLK COUNTY APRIL 2016
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN TEAM HDR | POLK COUNTY | SHEET NUMBER V.11



NOTES:
ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.
SEE ROADWAY PLANS FOR VERTICAL PROFILE, HORIZONTAL CURVE DATA AND SUPERELEVATION INFORMATION.
DISPOSITION OF UTILITIES TO BE DETERMINED IN FUTURE DESIGN PHASES UNLESS NOTED OTHERWISE.

NOTES TO DESIGNERS:
BRIDGE SUPERSTRUCTURES TO BE PPC "BTC" BEAMS. SUBSTRUCTURE IS INTEGRAL ABUTMENTS AND MULTI-COLUMN PIERS.

BRIDGE SKETCH - I-80/I-35 OVER U.P.R.R.

MINIMUM VERTICAL CLEARANCE (PT. A)

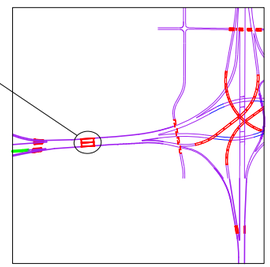
OVERHEAD STATION = 1048+96.16, OFFSET 99.00' LT.
OVERHEAD ELEVATION = 956.43
DEPTH OF SUPERSTRUCTURE = 4'-9
EXISTING UNDERPASS ELEVATION = 926.66
MINIMUM VERTICAL CLEARANCE = 25'-0

MINIMUM VERTICAL CLEARANCE (PT. B)

OVERHEAD STATION = 1050+21.08, OFFSET 99'-0 LT.
OVERHEAD ELEVATION = 957.10
DEPTH OF SUPERSTRUCTURE = 4'-9
EXISTING UNDERPASS ELEVATION = 928.82
MINIMUM VERTICAL CLEARANCE = 23'-6

PRELIMINARY PLAN
NOT FINAL-SUBJECT TO CHANGE

BRIDGE LOCATION



KEY PLAN

0 ENGLISH 40
SCALE IN FEET

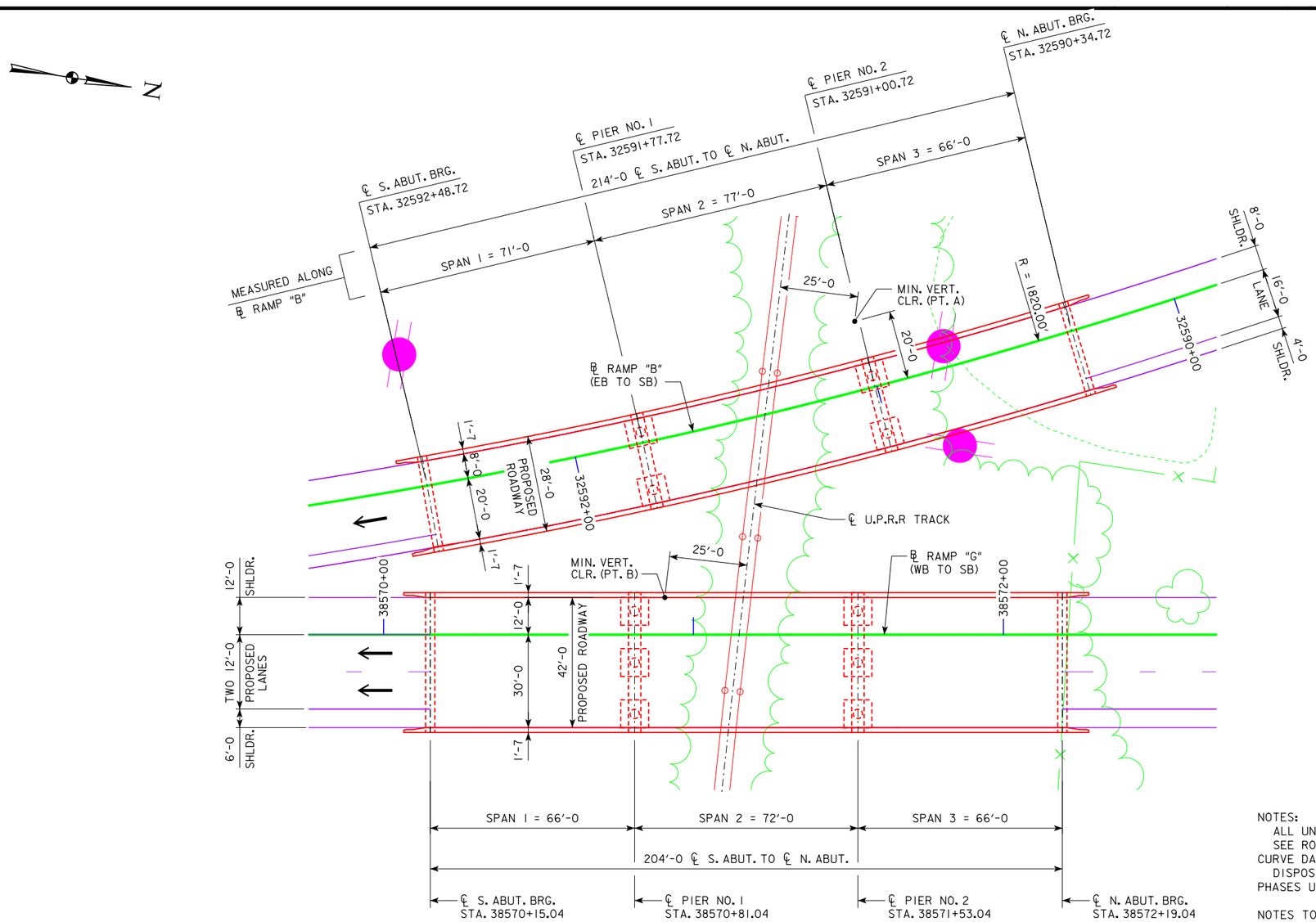
DUAL 326'-0 x 97'-4 PPCB BRIDGES

BRIDGE SKETCH - I-80/I-235 OVER U.P.R.R.

POLK COUNTY APRIL 2016
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN TEAM HDR	POLK COUNTY	SHEET NUMBER V.12

4/19/2016 10:11:13 AM esorens pw:\\PWAPPOMA001:NorthCentral_Omaha\Documents\008180\00.00_Client_Standards\00.04_Work_In_Progress\Working_Folders\Sorens_Eric\IDOT\Mix Master\NEMM_Preliminary_Drafting.dgn V12 11x17c_pdf.pltcfg



BRIDGE SKETCH
RAMP "G" (WB TO SB) AND RAMP "B" (EB TO SB) OVER U.P.R.R.

MINIMUM VERTICAL CLEARANCE (PT. A)

OVERHEAD STATION = 32591+02.76, OFFSET 20.00' RT.
OVERHEAD ELEVATION = 959.86
DEPTH OF SUPERSTRUCTURE = 4'-0
UNDERPASS ELEVATION = 932.45
MINIMUM VERTICAL CLEARANCE = 23'-5

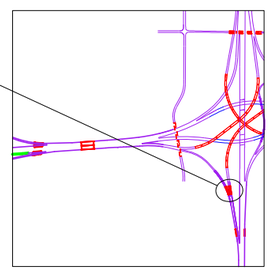
MINIMUM VERTICAL CLEARANCE (PT. B)

OVERHEAD STATION = 38570+90.87, OFFSET 12.00' LT.
OVERHEAD ELEVATION = 963.57
DEPTH OF SUPERSTRUCTURE = 4'-0
UNDERPASS ELEVATION = 933.38
MINIMUM VERTICAL CLEARANCE = 26'-2

NOTES:
ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.
SEE ROADWAY PLANS FOR VERTICAL PROFILE, HORIZONTAL CURVE DATA AND SUPERELEVATION INFORMATION.
DISPOSITION OF UTILITIES TO BE DETERMINED IN FUTURE DESIGN PHASES UNLESS NOTED OTHERWISE.

NOTES TO DESIGNERS:
RAMP "G" BRIDGE AND RAMP "B" BRIDGE SUPERSTRUCTURES TO BE PPC "BTB" BEAMS. SUBSTRUCTURE TO BE INTEGRAL ABUTMENTS & MULTI-COLUMN PIERS.

BRIDGE LOCATION



KEY PLAN

PRELIMINARY PLAN
NOT FINAL-SUBJECT TO CHANGE

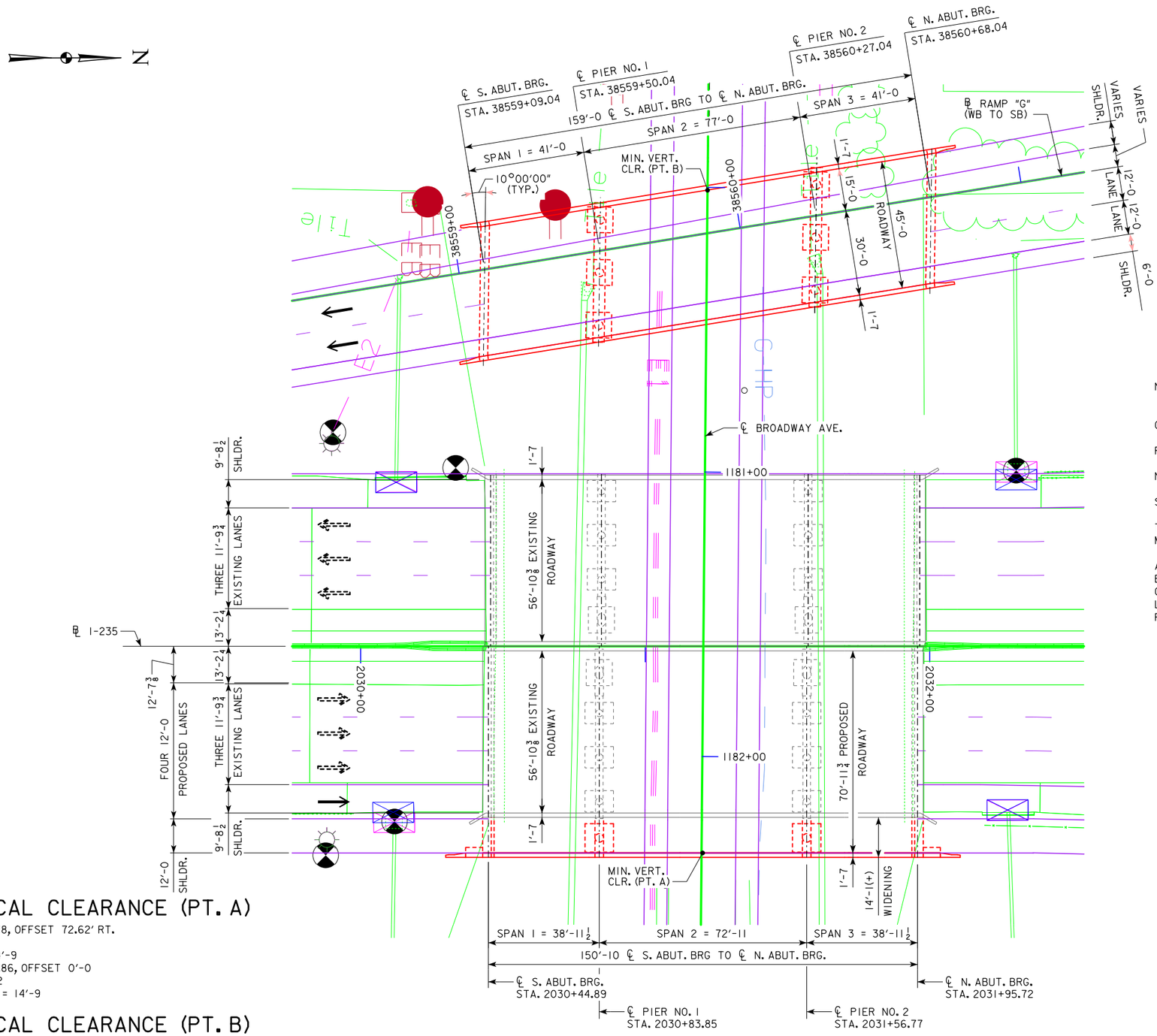
0 ENGLISH 40
SCALE IN FEET

204'-0 x 42'-0 PPCB BRIDGE (RAMP "G")
214'-0 x 28'-0 PPCB BRIDGE (RAMP "B")

BRIDGE SKETCH - RAMP "G" & RAMP "B" OVER U.P.R.R.

POLK COUNTY
APRIL 2016
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

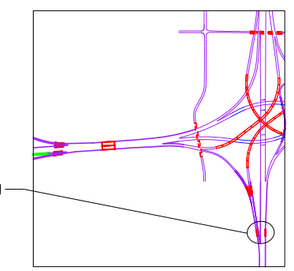
DESIGN TEAM HDR | POLK COUNTY | SHEET NUMBER V.13



BRIDGE SKETCH - I-235 AND RAMP "G" (WB TO SB) OVER BROADWAY AVE.

NOTES:
ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.
SEE ROADWAY PLANS FOR VERTICAL PROFILE, HORIZONTAL CURVE DATA AND SUPERELEVATION INFORMATION.
DISPOSITION OF UTILITIES TO BE DETERMINED IN FUTURE DESIGN PHASES UNLESS NOTED OTHERWISE.

NOTES TO DESIGNERS:
RAMP "G" BRIDGE SUPERSTRUCTURE TO BE PPC "BTB" BEAMS. SUBSTRUCTURE TO BE INTEGRAL ABUTMENTS & MULTI-COLUMN PIERS.
I-235 NB BRIDGE SUPERSTRUCTURE WIDENING TO BE PPC "C" BEAMS TO MATCH EXISTING. SUBSTRUCTURE IS INTEGRAL ABUTMENTS AND MULTI-COLUMN PIERS.
MINIMUM VERTICAL CLEARANCE BELOW EXISTING BRIDGES IS 14'-6" AT THE EAST SIDE EXTERIOR BEAM LINE OF THE EXISTING I-235 SB BRIDGE AS NOTED IN BRIDGE INSPECTION REPORT. MINIMUM VERTICAL CLEARANCE POINT "A" IS LOCATED AT THE EAST SIDE EXTERIOR BEAM LINE OF THE PROPOSED WIDENING OF THE I-235 NB BRIDGE TO THE RECONSTRUCTED BROADWAY AVE.



KEY PLAN

0 ENGLISH 40
SCALE IN FEET

MINIMUM VERTICAL CLEARANCE (PT. A)

OVERHEAD STATION = 2031+19.78, OFFSET 72.62' RT.
OVERHEAD ELEVATION = 963.34
DEPTH OF SUPERSTRUCTURE = 4'-9
UNDERPASS STATION = 1182+33.86, OFFSET 0'-0
UNDERPASS ELEVATION = 943.82
MINIMUM VERTICAL CLEARANCE = 14'-9

MINIMUM VERTICAL CLEARANCE (PT. B)

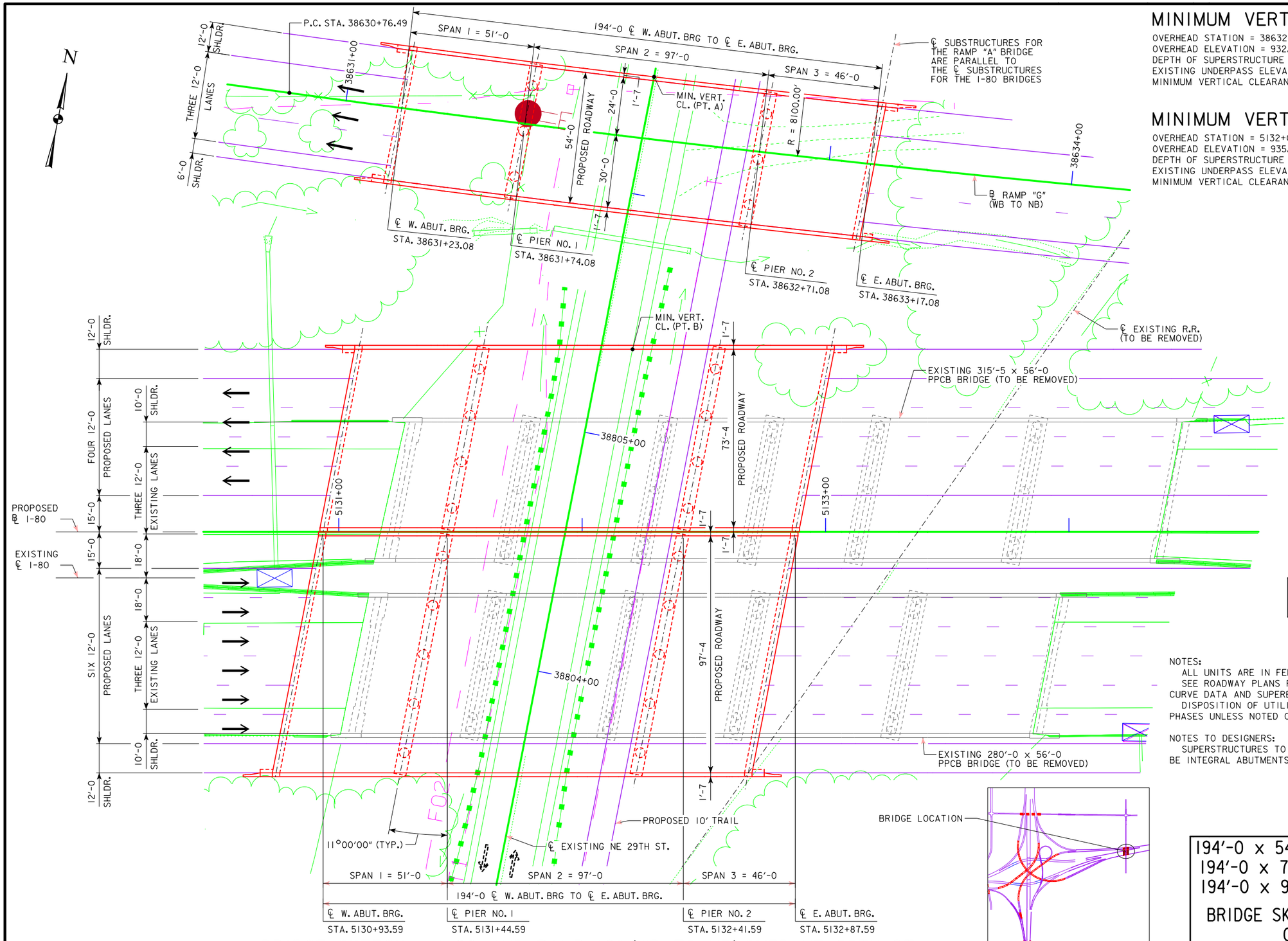
OVERHEAD STATION = 38559+90.86, OFFSET 12.00' LT.
OVERHEAD ELEVATION = 960.92
DEPTH OF SUPERSTRUCTURE = 4'-0
UNDERPASS STATION = 1180+00.90, OFFSET 0'-0
UNDERPASS ELEVATION = 940.71
MINIMUM VERTICAL CLEARANCE = 16'-2

PRELIMINARY PLAN
NOT FINAL-SUBJECT TO CHANGE

159'-0 x 45'-0 PPCB BRIDGE (RAMP "G")
150'-10 x 70'-11¾ PPC BRIDGE WIDENING (I-235)

BRIDGE SKETCH - I-235 & RAMP "G" OVER BROADWAY AVENUE

POLK COUNTY
APRIL 2016
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION



MINIMUM VERTICAL CLEARANCE (PT. A)

OVERHEAD STATION = 38632+37.31 OFFSET 24.00' LT.
OVERHEAD ELEVATION = 932.61
DEPTH OF SUPERSTRUCTURE = 4'-9
EXISTING UNDERPASS ELEVATION = 911.18
MINIMUM VERTICAL CLEARANCE = 16'-8

MINIMUM VERTICAL CLEARANCE (PT. B)

OVERHEAD STATION = 5132+08.49, OFFSET 75.00' LT.
OVERHEAD ELEVATION = 935.37
DEPTH OF SUPERSTRUCTURE = 4'-9
EXISTING UNDERPASS ELEVATION = 911.49
MINIMUM VERTICAL CLEARANCE = 19'-1

PRELIMINARY PLAN
NOT FINAL-SUBJECT TO CHANGE

NOTES:
ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.
SEE ROADWAY PLANS FOR VERTICAL PROFILE, HORIZONTAL CURVE DATA AND SUPERELEVATION INFORMATION.
DISPOSITION OF UTILITIES TO BE DETERMINED IN FUTURE DESIGN PHASES UNLESS NOTED OTHERWISE.

NOTES TO DESIGNERS:
SUPERSTRUCTURES TO BE PPCB "BTC" BEAMS. SUBSTRUCTURE TO BE INTEGRAL ABUTMENTS AND MULTI-COLUMN PIERS.

0 ENGLISH 40
SCALE IN FEET

BRIDGE LOCATION

KEY PLAN

BRIDGE SKETCH - I-80 AND RAMP "G" (WB TO NB) OVER NE 29TH ST.

194'-0 x 54'-0 PPCB BRIDGE (RAMP "G")
194'-0 x 73'-4 PPCB BRIDGE (I-80 WB)
194'-0 x 97'-4 PPCB BRIDGE (I-80 EB)

BRIDGE SKETCH - I-80 AND RAMP "G" OVER NE 29TH ST.

POLK COUNTY APRIL 2016
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN TEAM HDR | POLK COUNTY | SHEET NUMBER V.15

LINE STYLE LEGEND OF CROSS SECTION SHEETS (ROAD)

- Existing Ground Line
- Proposed Template
- Proposed Topsoil Placement
- Additional Topsoil Removal
- Subgrade Treatment
- Granular Shoulder
- Pavement
- Existing Pipe\RCB
- Proposed Pipe\RCB
- Proposed Dike
- All Elements Associated with Proposed Entrances

LINE STYLE LEGEND OF CROSS SECTION SHEETS (SOILS)

- TS — Topsoil (Class 10)
- SLOPE DRESSING — Slope Dressing Only
- CL 10 — Class 10 Materials
- SEL LO — Select Loams And Clay-Loams
- SEL SA — Select Sand
- UNS A — Unsuitable Type A Disposal
- UNS B — Unsuitable Type B Disposal
- UNS C — Unsuitable Type C Disposal
- SHALE — Shale
- WASTE — Waste
- B&W LS — Broken and Weathered Rock
- ROCK — Solid Rock
- BLDRS — Boulders

Note: All layer lines and descriptions identify layers above the line.

Note: Vertical or near vertical lines connecting soil layers at edges of cross sections are only for the purpose of calculating template quantities and do not depict soil stratification.

SYMBOL LEGEND OF CROSS SECTION SHEETS



Existing Right-of-Way Limit

Proposed Right-of-Way Limit

Temporary Right-of-Way Limit

CROSS SECTION LEGEND AND SYMBOL INFORMATION SHEET

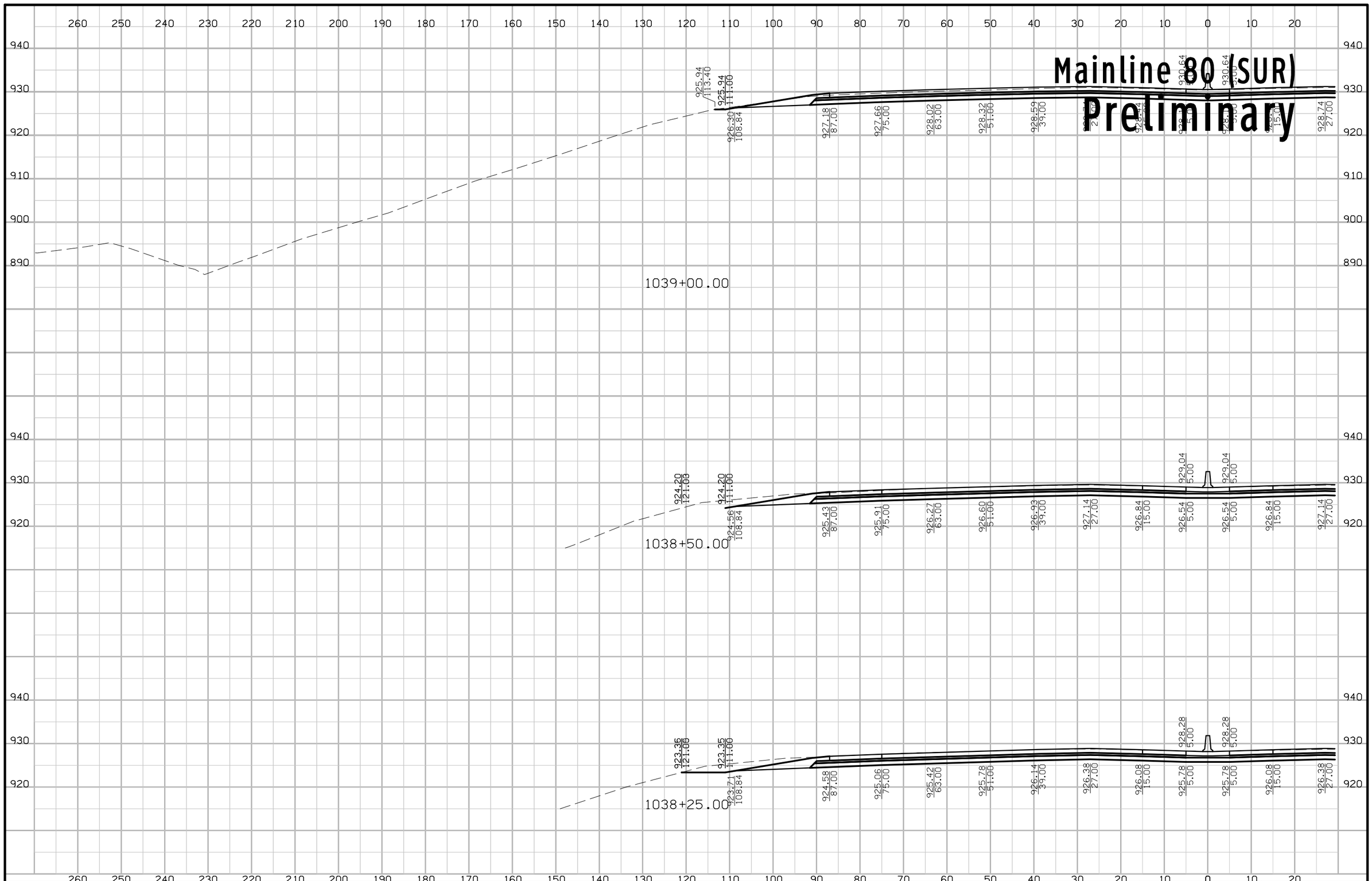
(COVERS SHEET SERIES W, X, Y, & Z)

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.1

SYSTEMTIME SYSTEMDATE USERNAME DGNSPEC

Mainline 80 (SUR)

Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.2

5:07:43 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)

Preliminary

1039+00.00

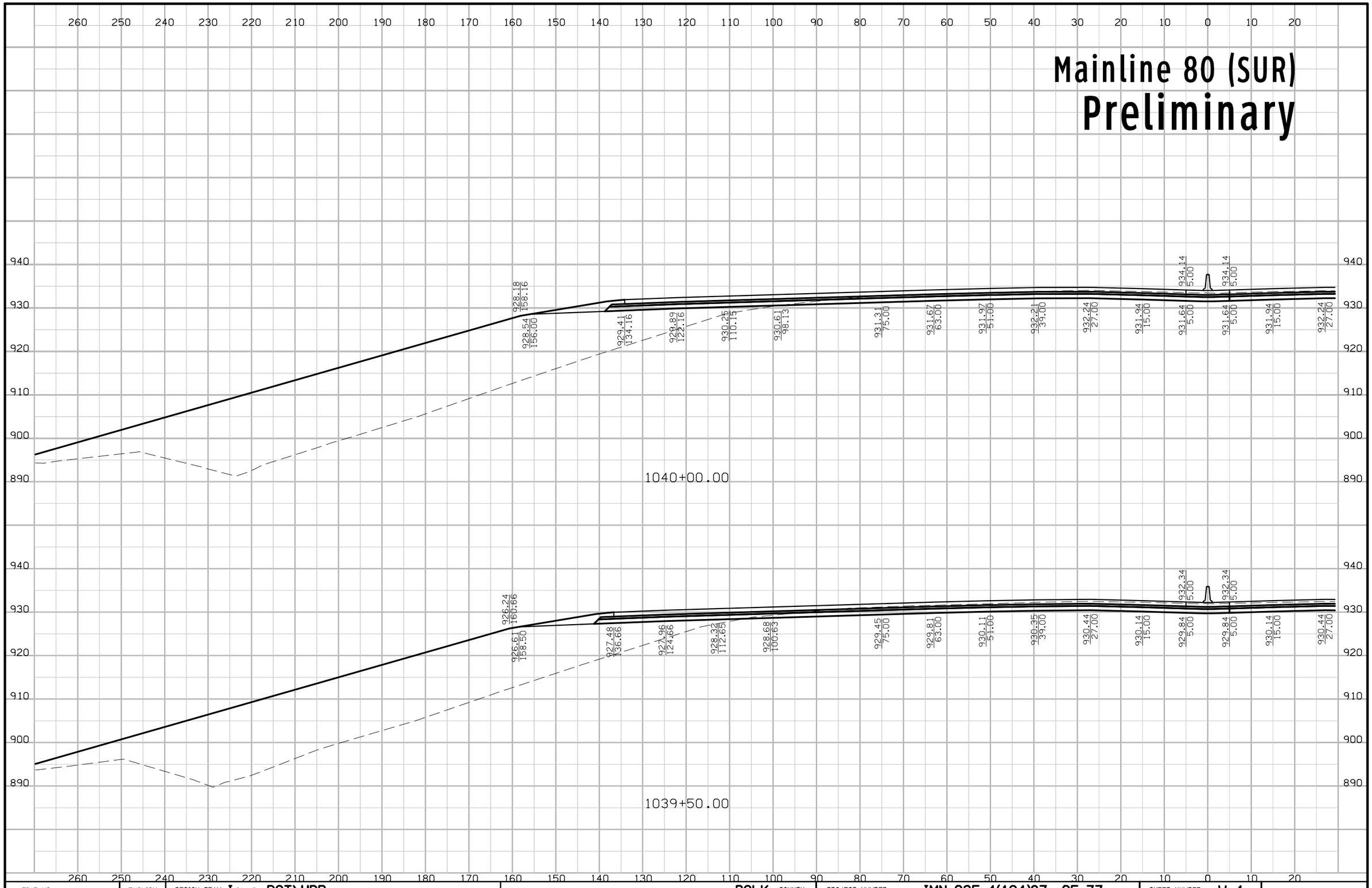
1038+50.00

1038+25.00

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.3

5:07:45 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)
Preliminary

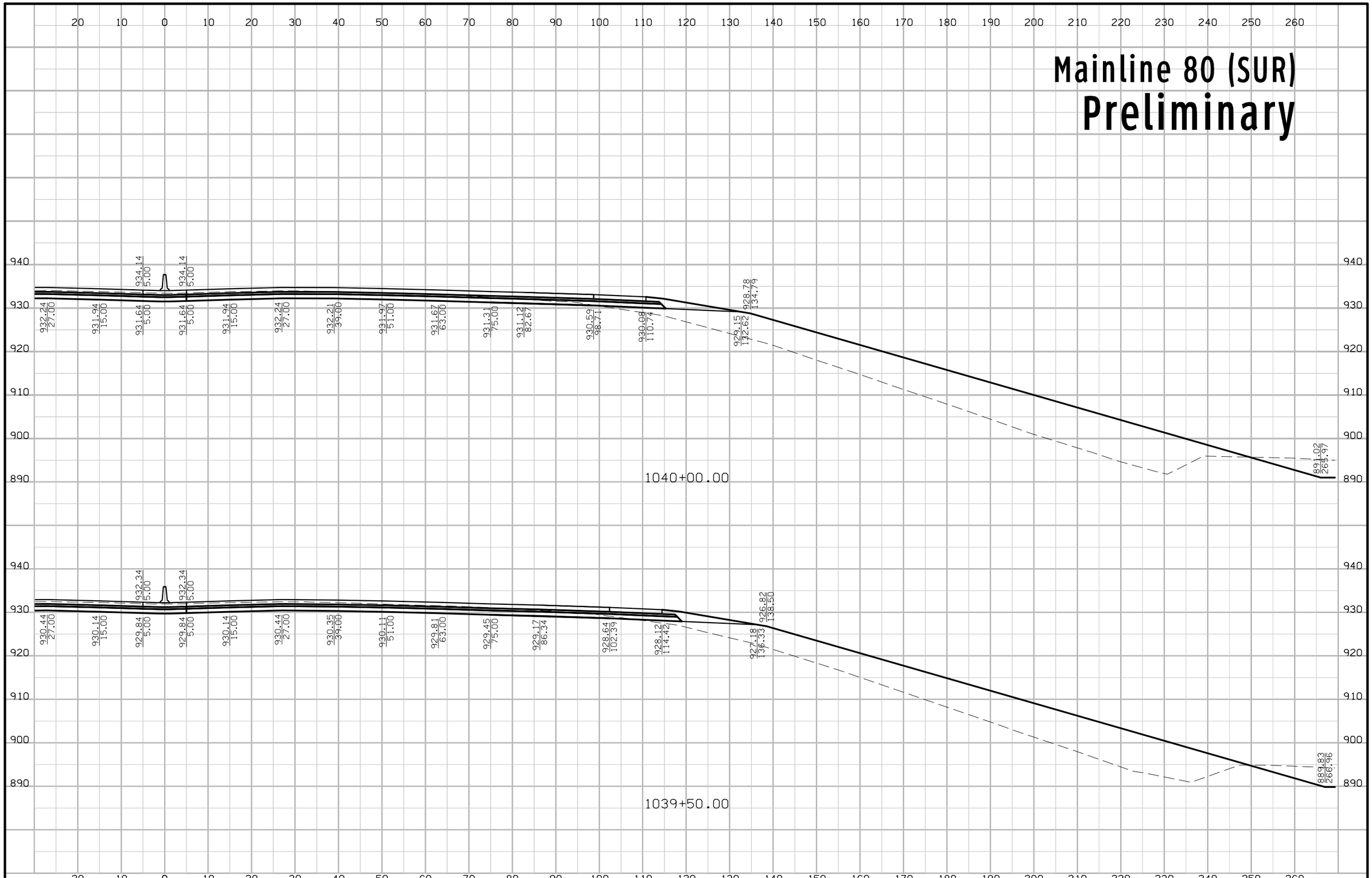


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.4

5:07:47 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)

Preliminary

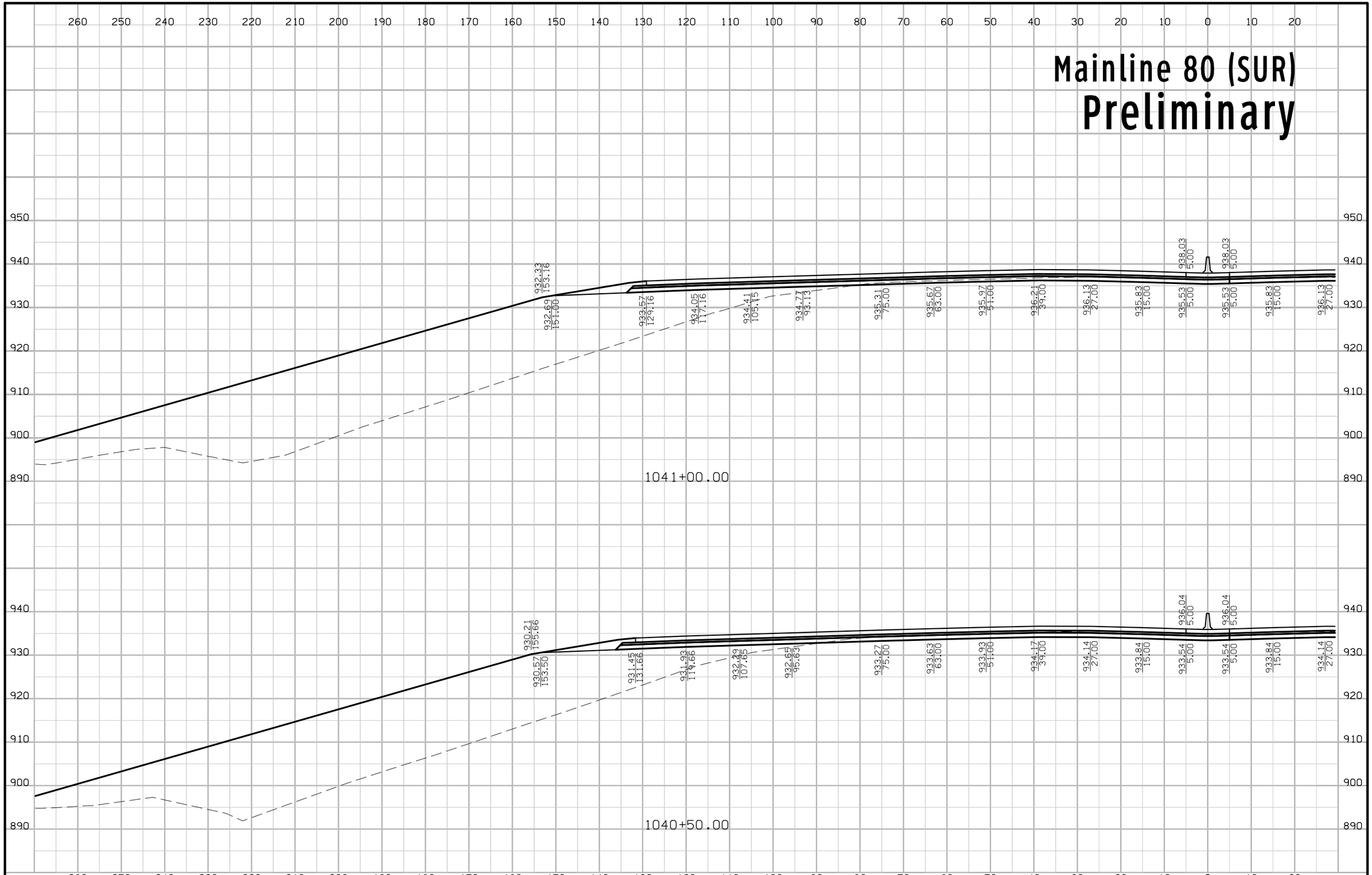


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.5

5:07:49 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)

Preliminary

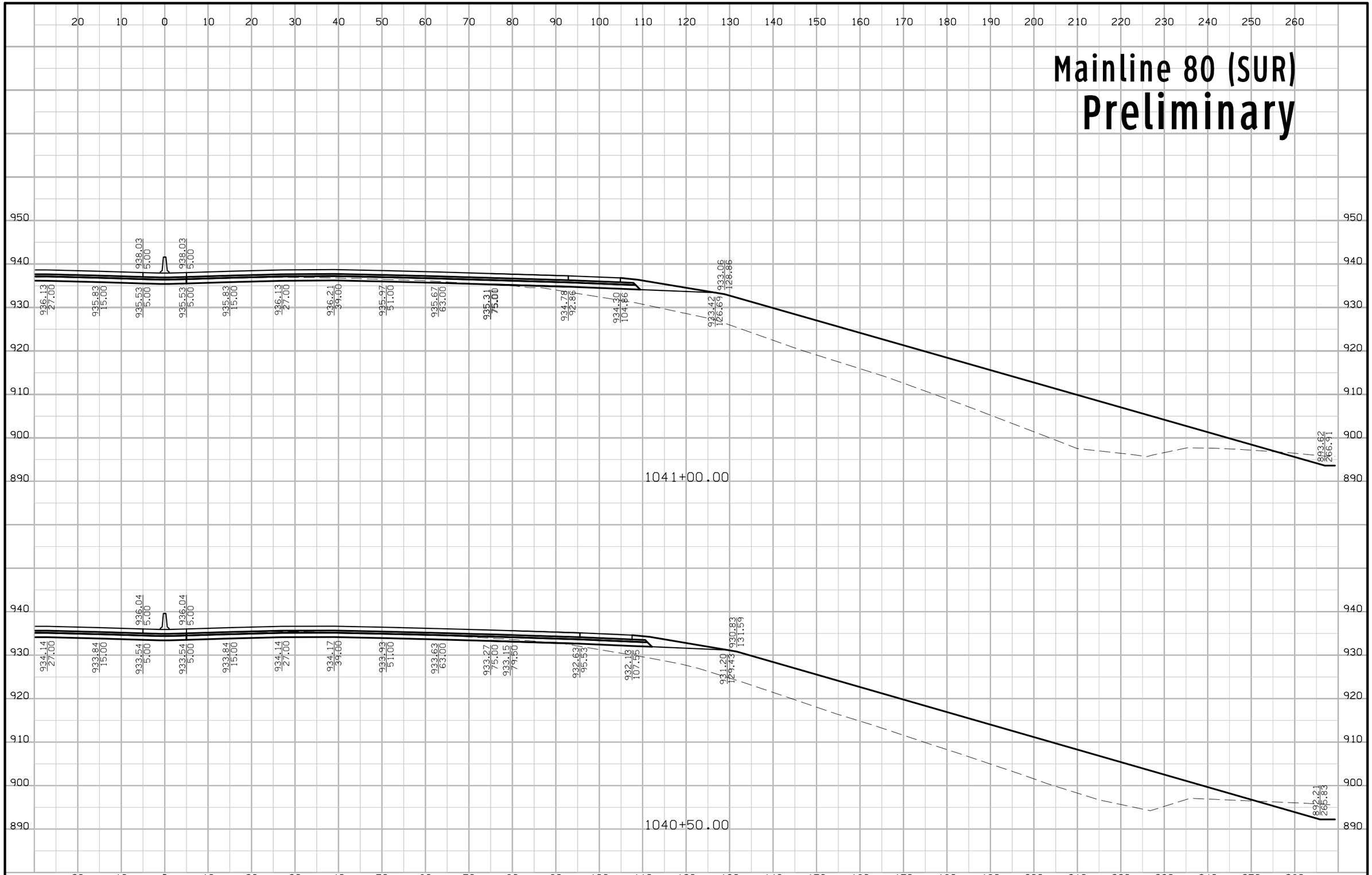


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.6

5:07:51 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)

Preliminary

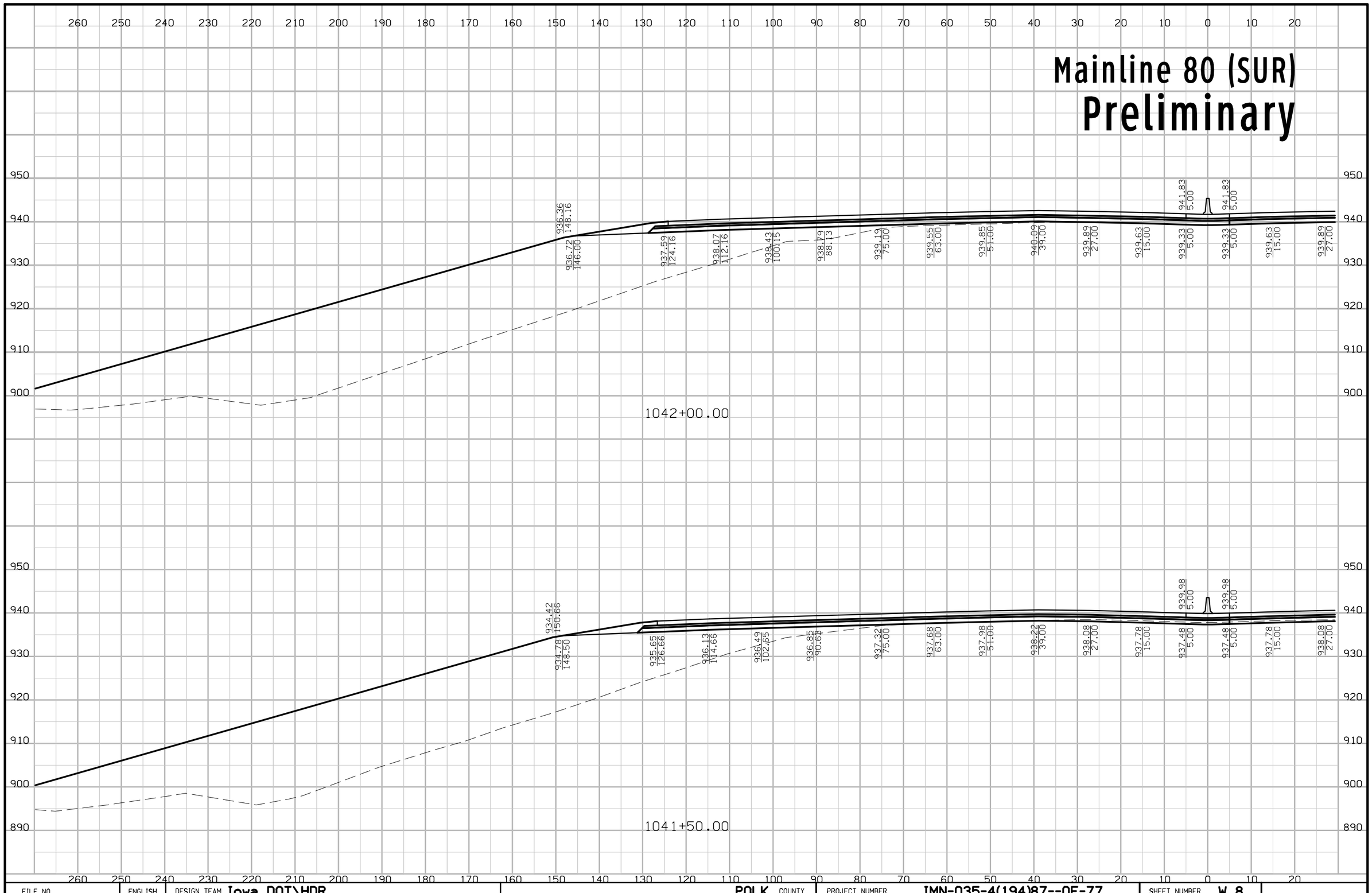


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.7

5:07:53 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)

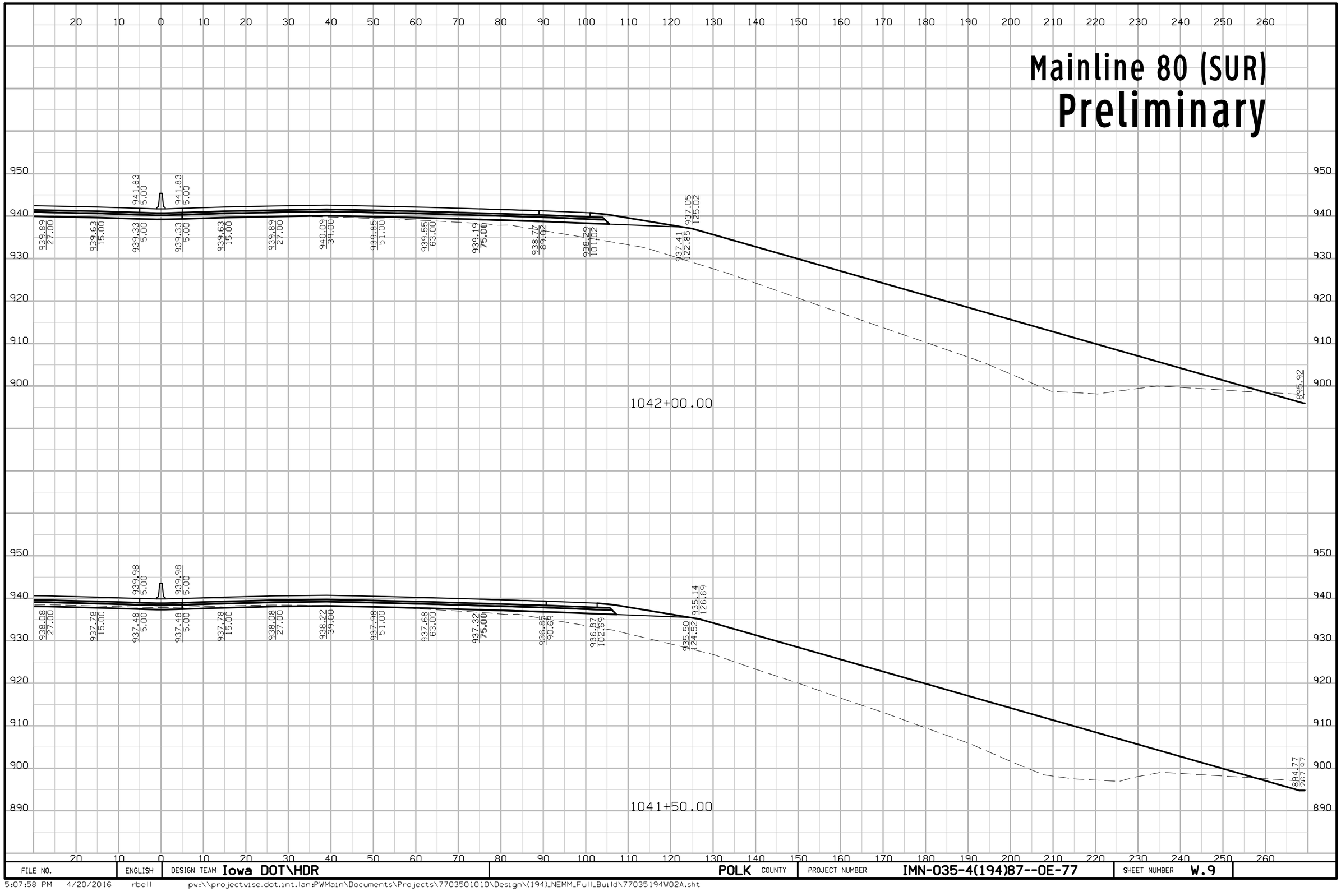
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.8

5:07:56 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

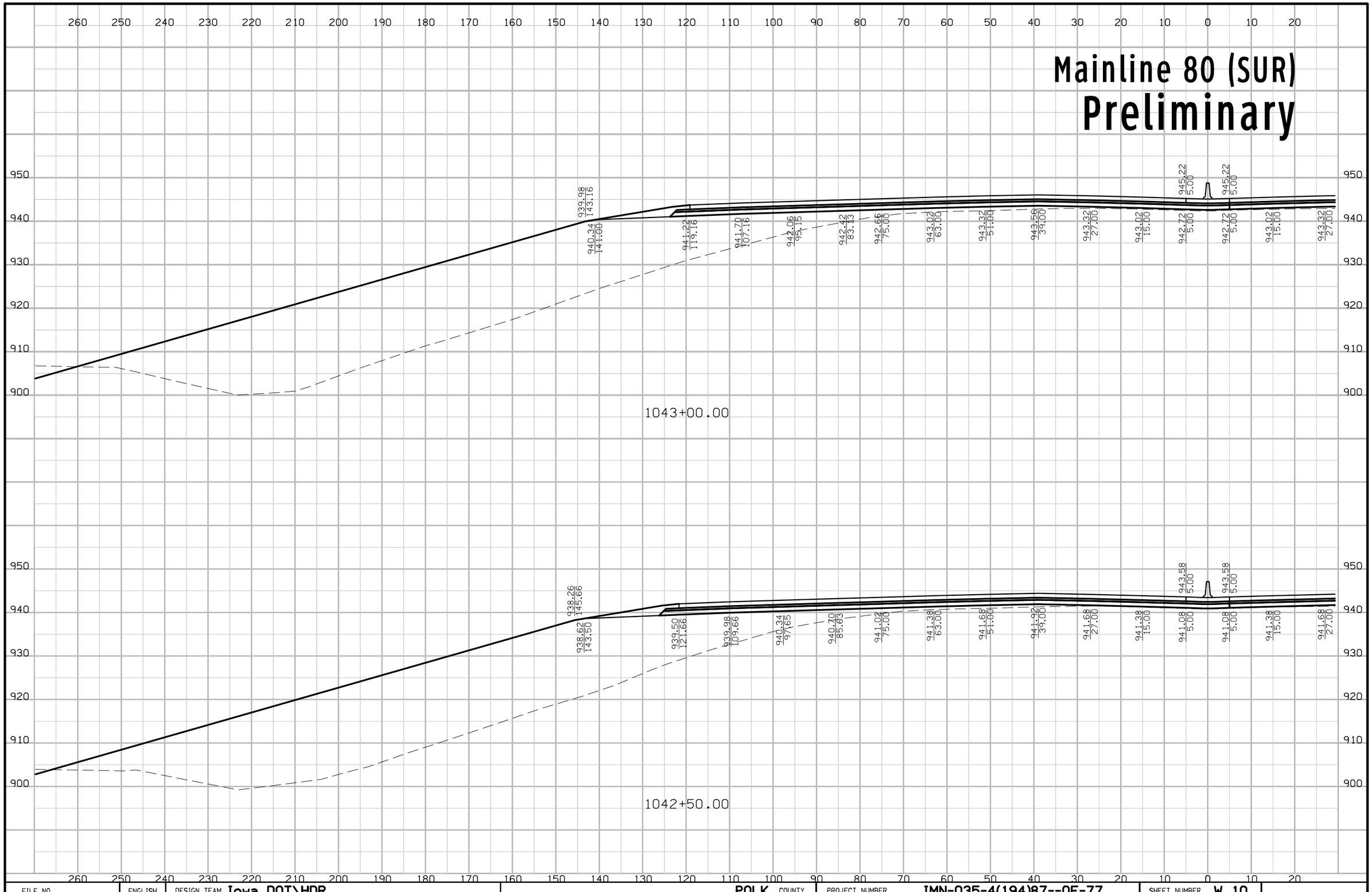
Mainline 80 (SUR)
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.9

5:07:58 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

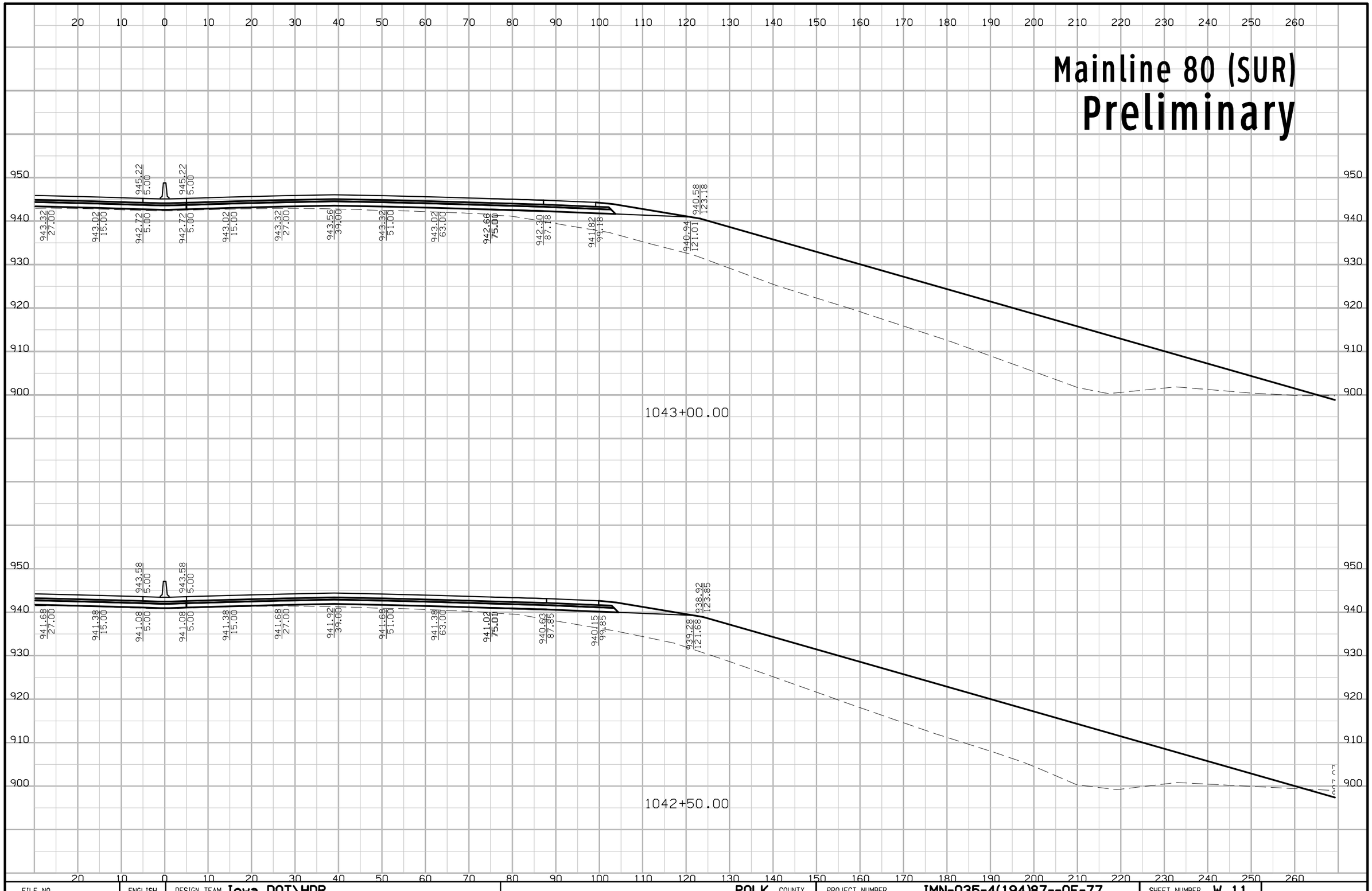
Mainline 80 (SUR)
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.10

5:08:00 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

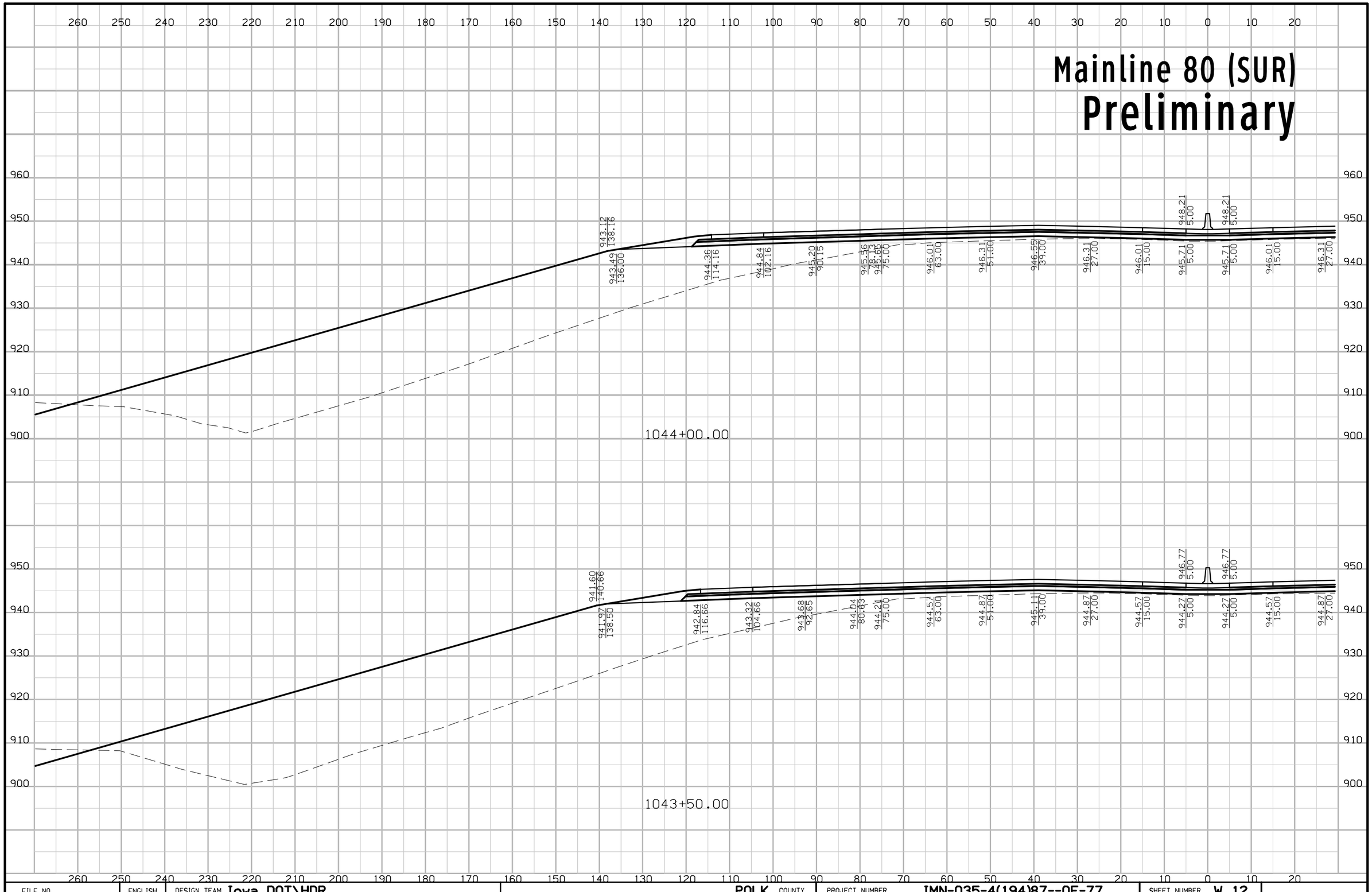
Mainline 80 (SUR)
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.11

5:08:02 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

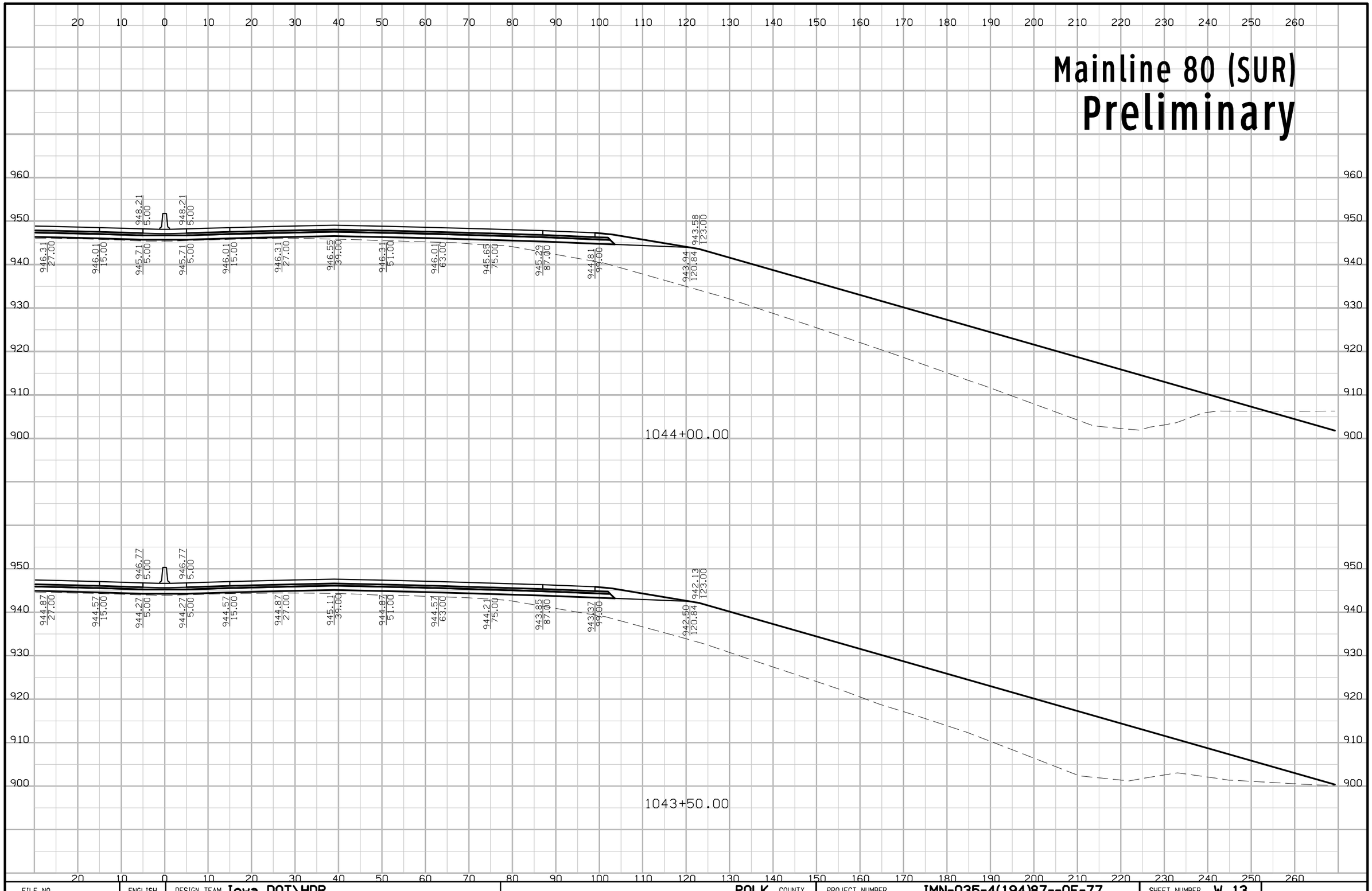
Mainline 80 (SUR)
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.12

5:08:05 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)
Preliminary

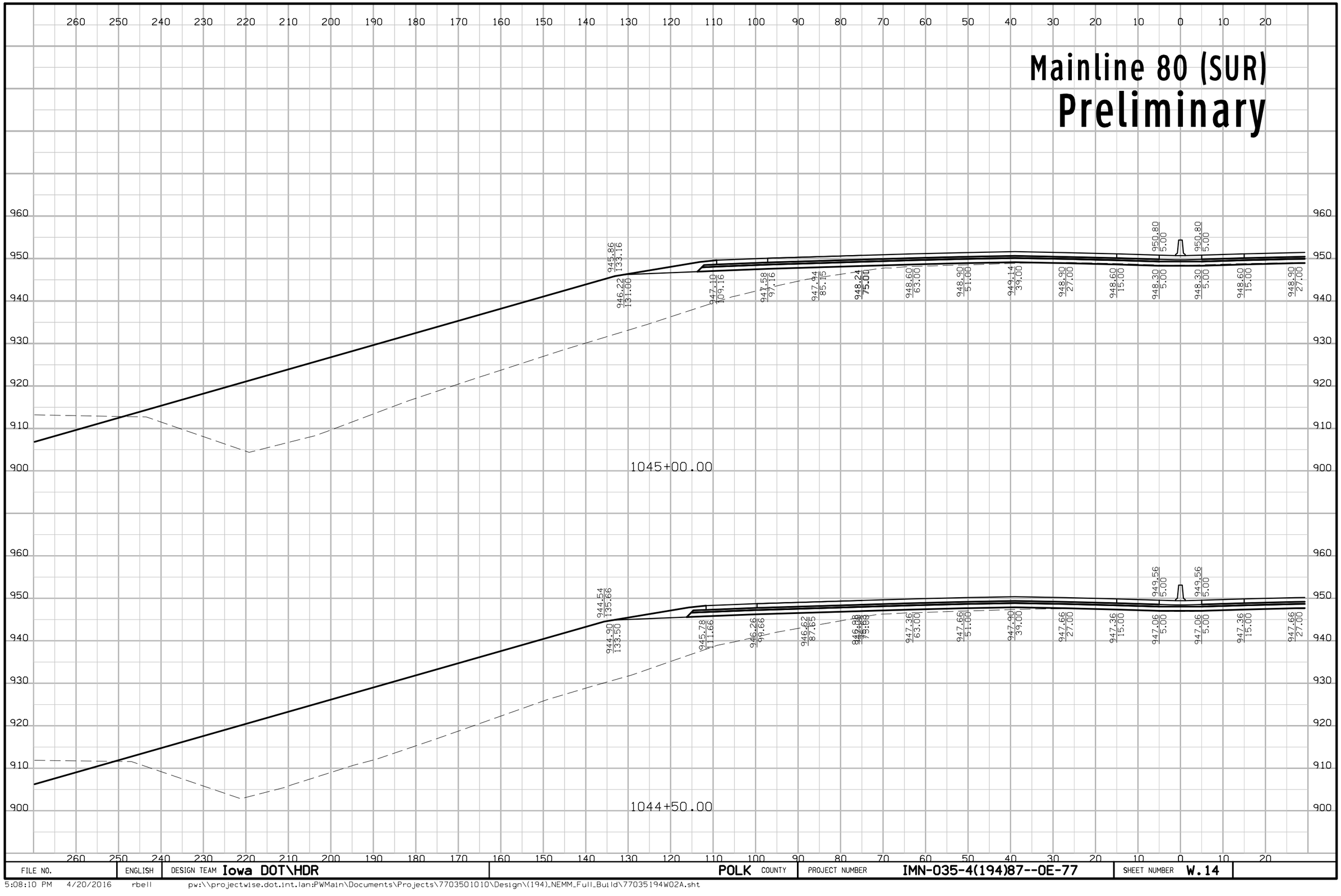


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.13

5:08:08 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)

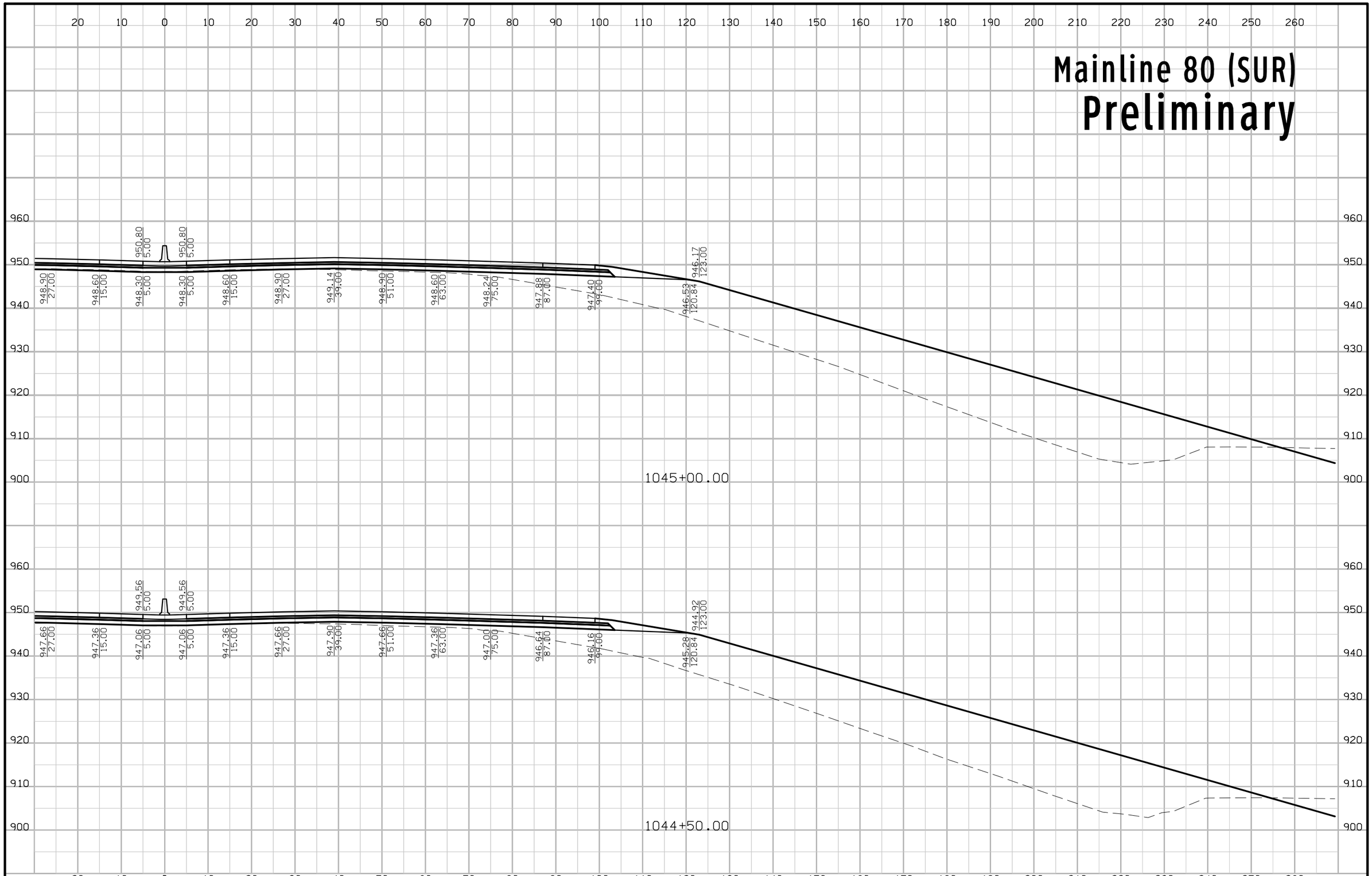
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.14

5:08:10 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)
Preliminary

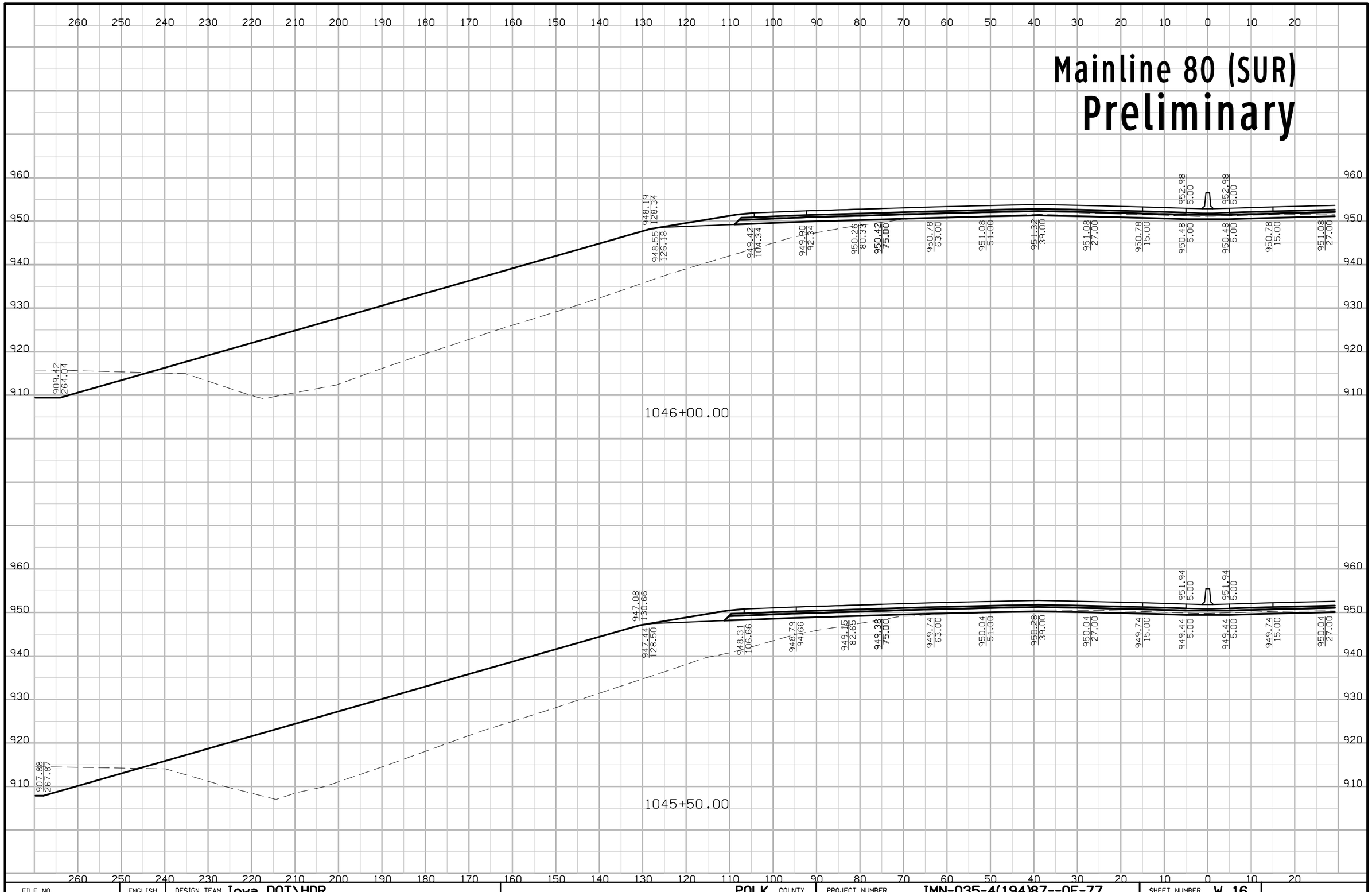


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.15

5:08:12 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)

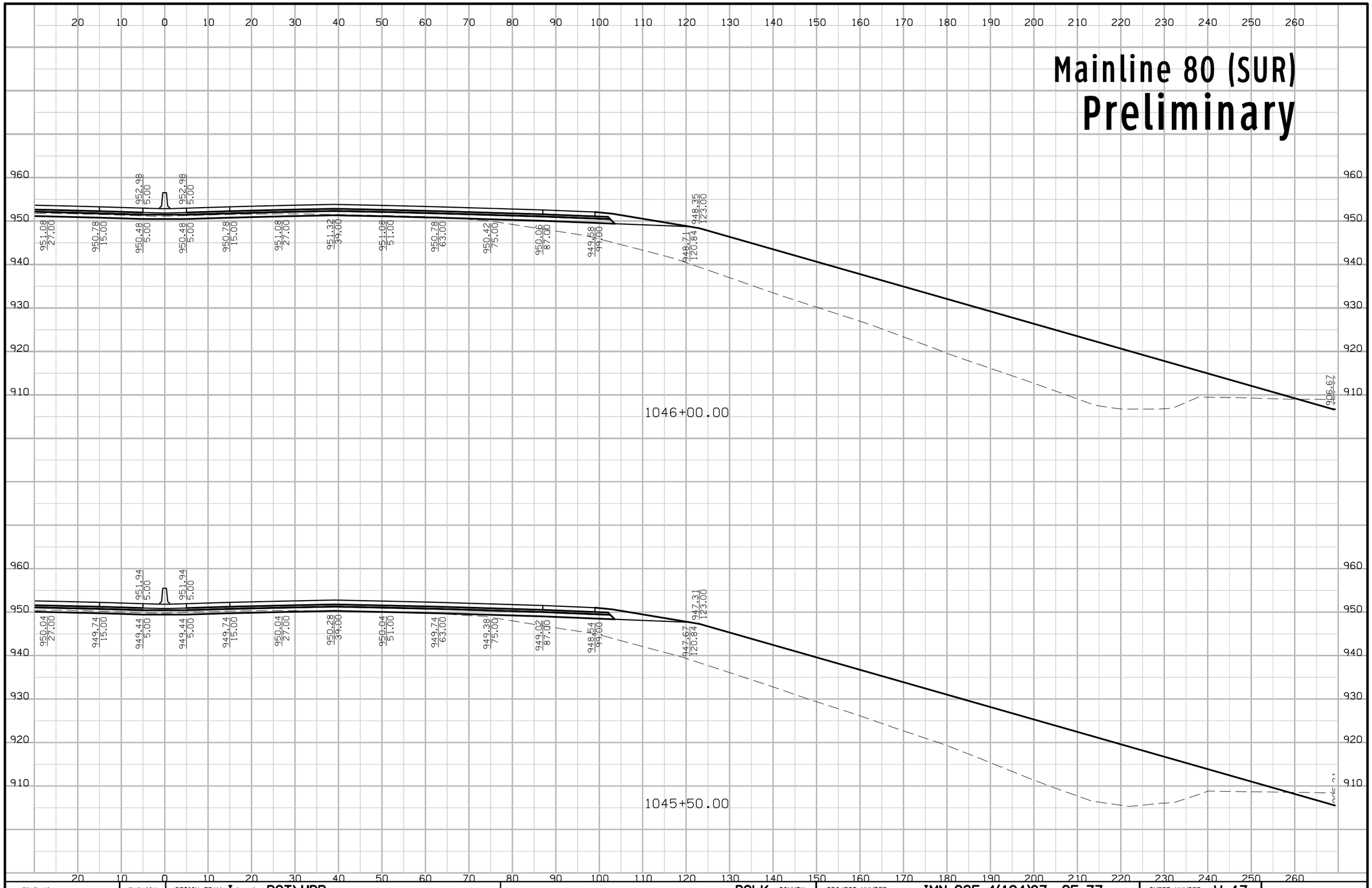
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.16

5:08:14 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)
Preliminary

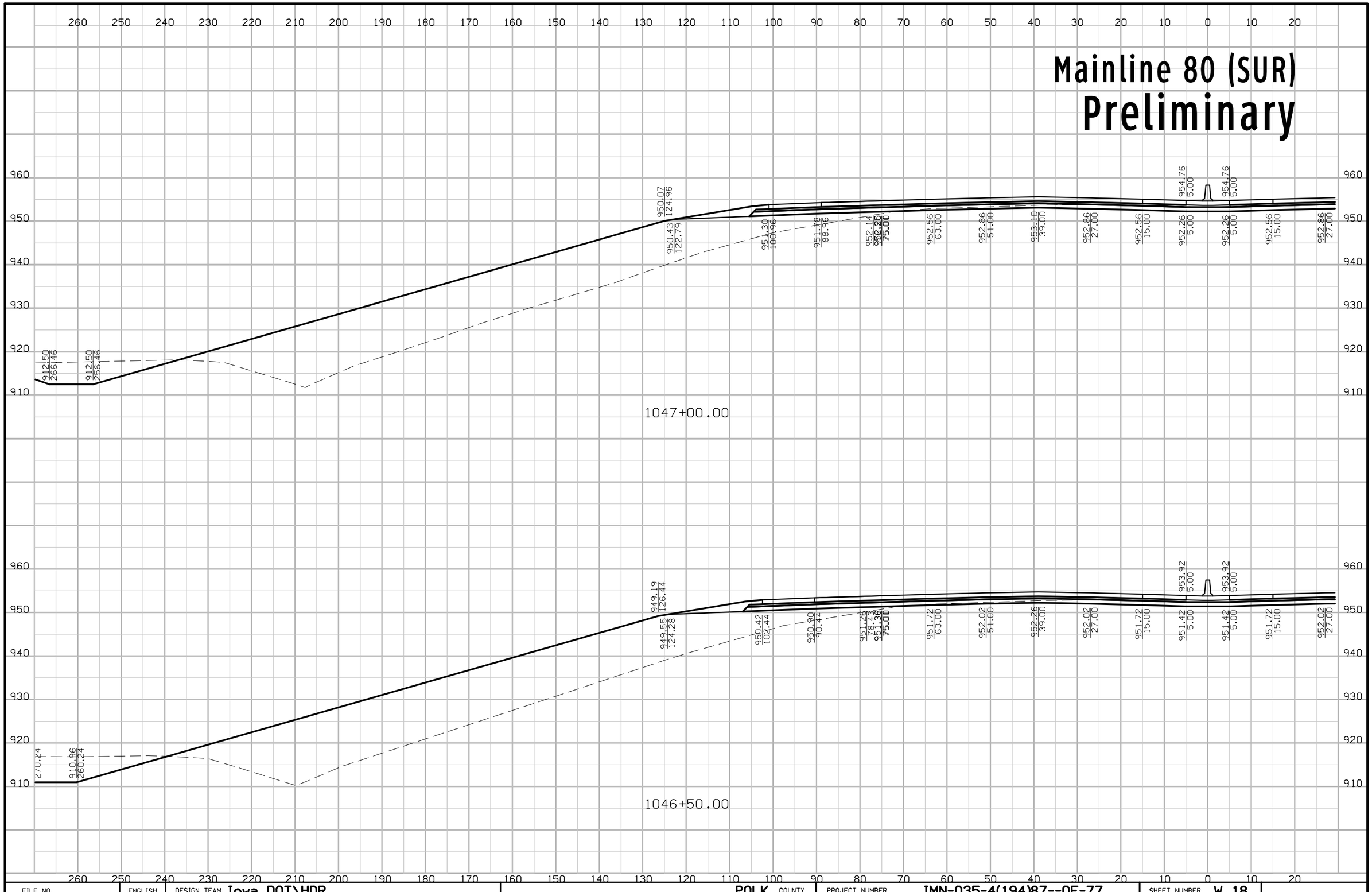


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.17

5:08:17 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)

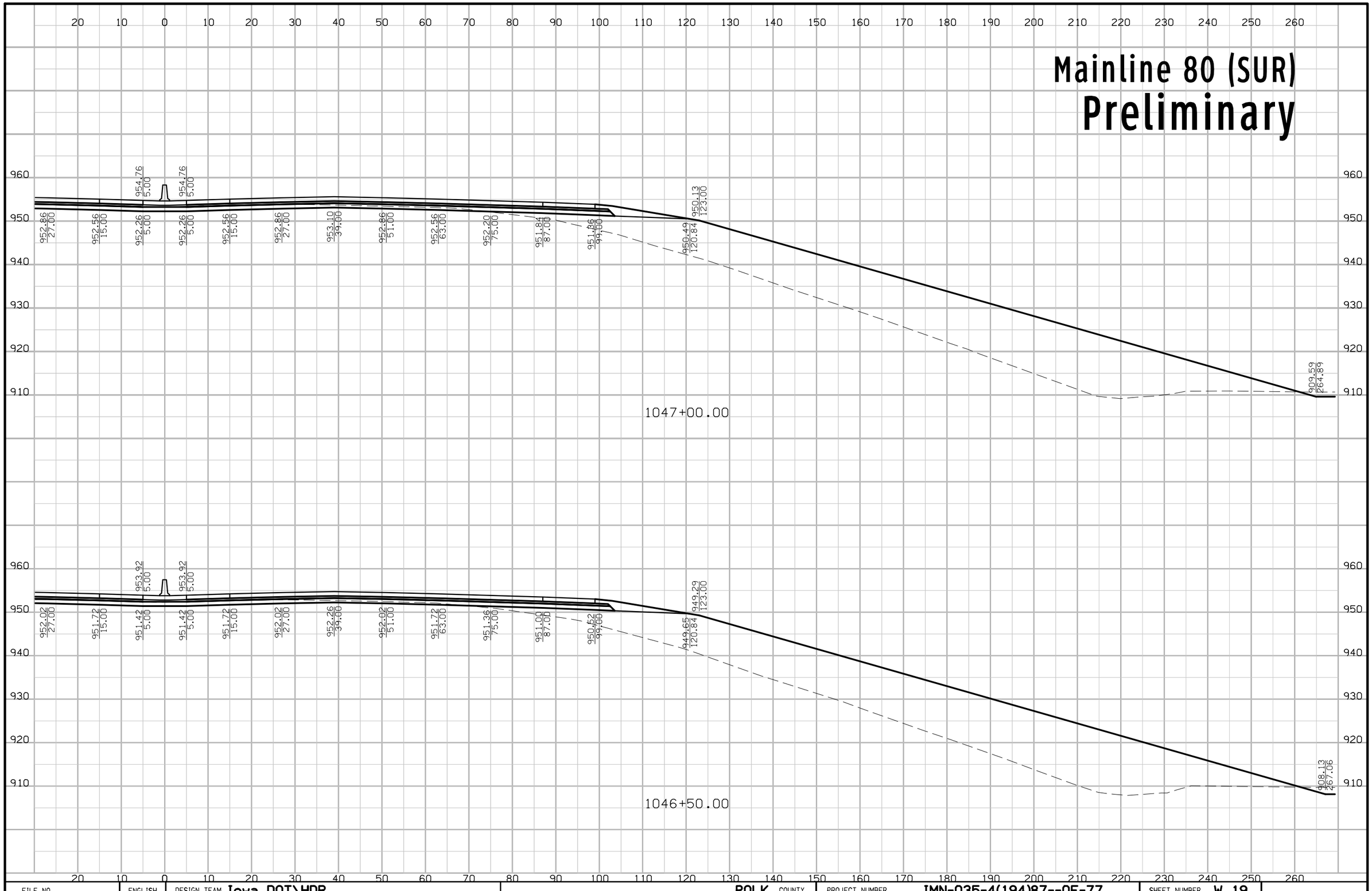
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.18

5:08:19 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)
Preliminary

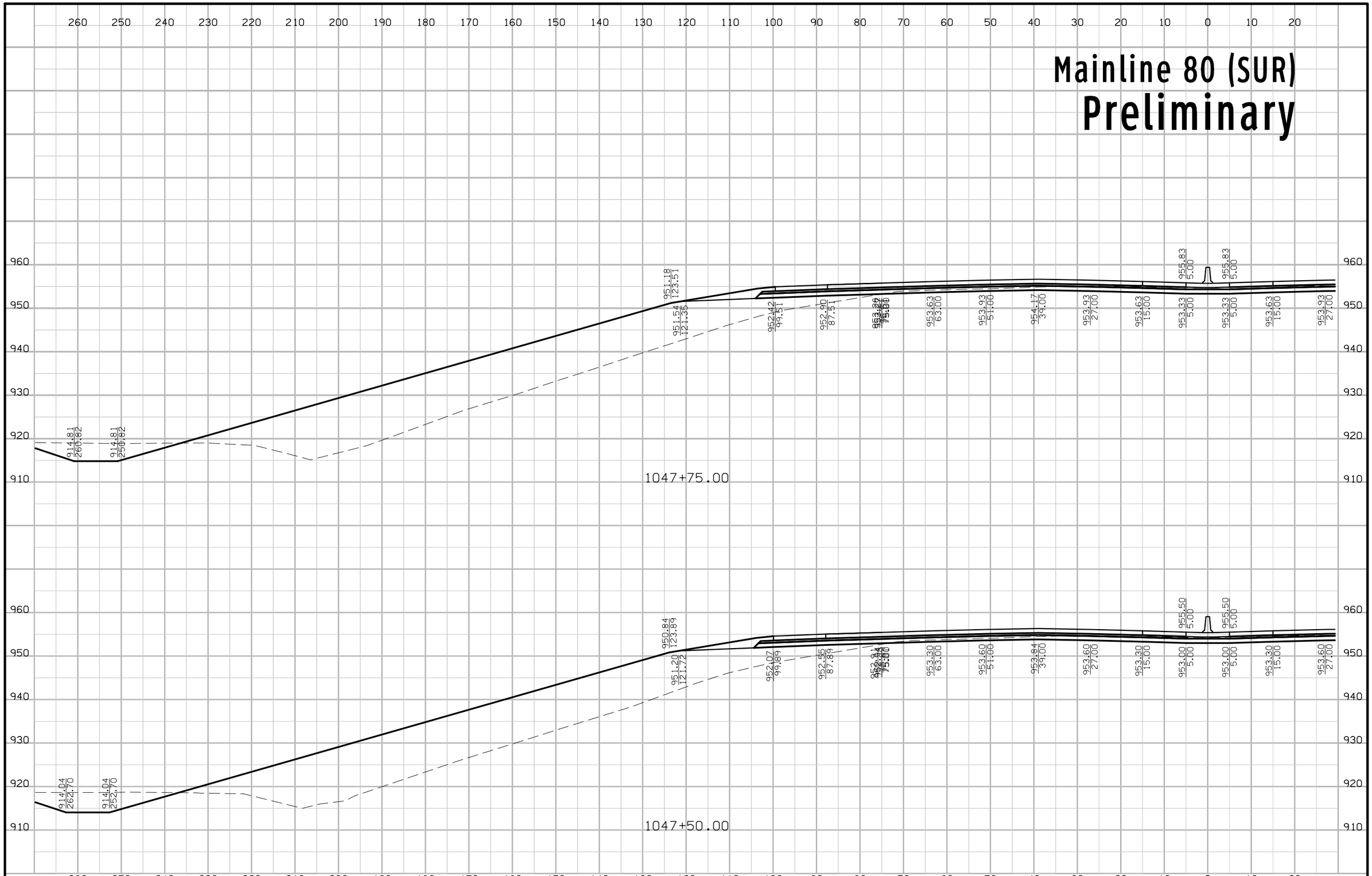


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.19

5:08:21 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)

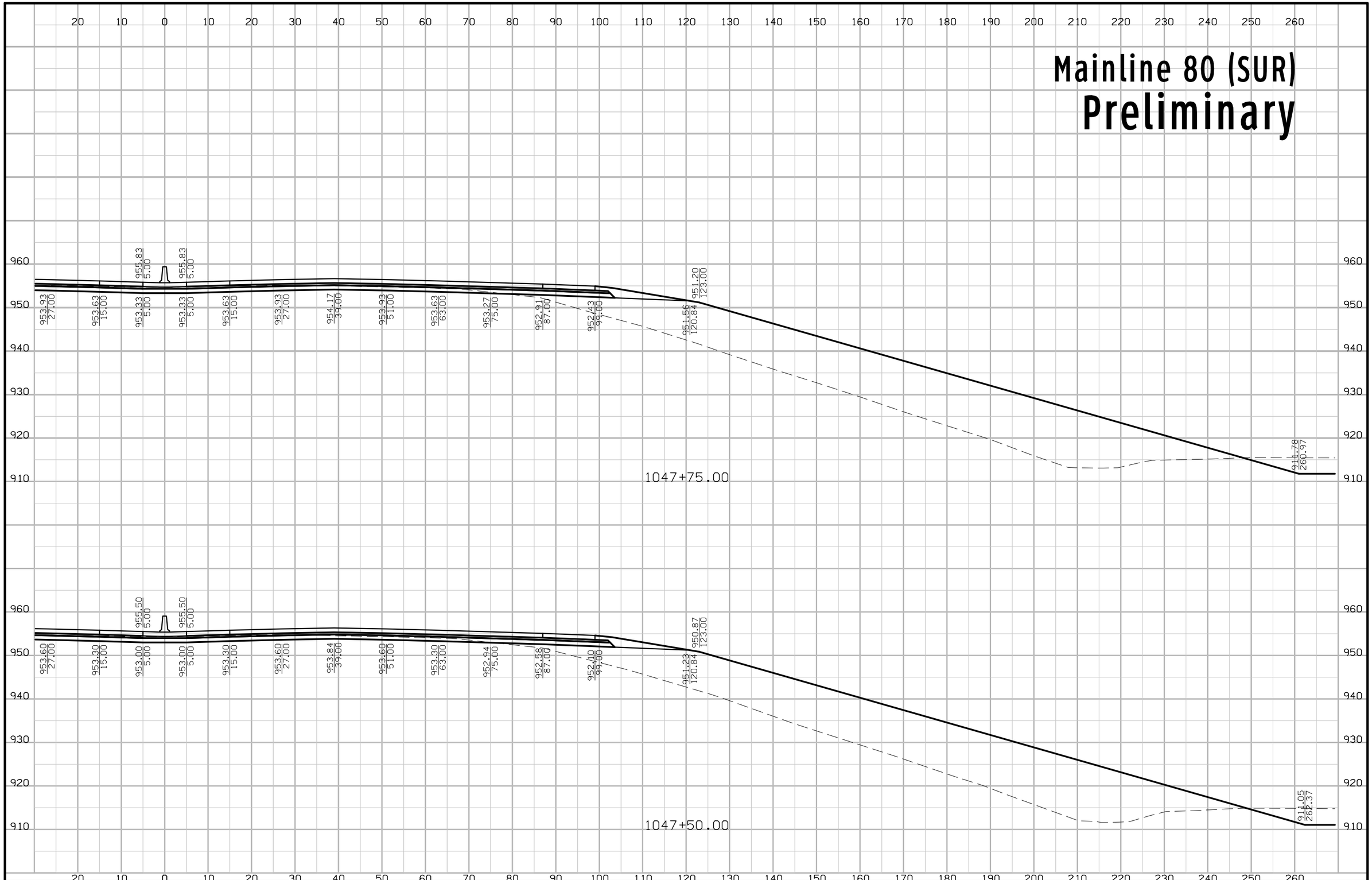
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.20

5:08:23 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)
Preliminary

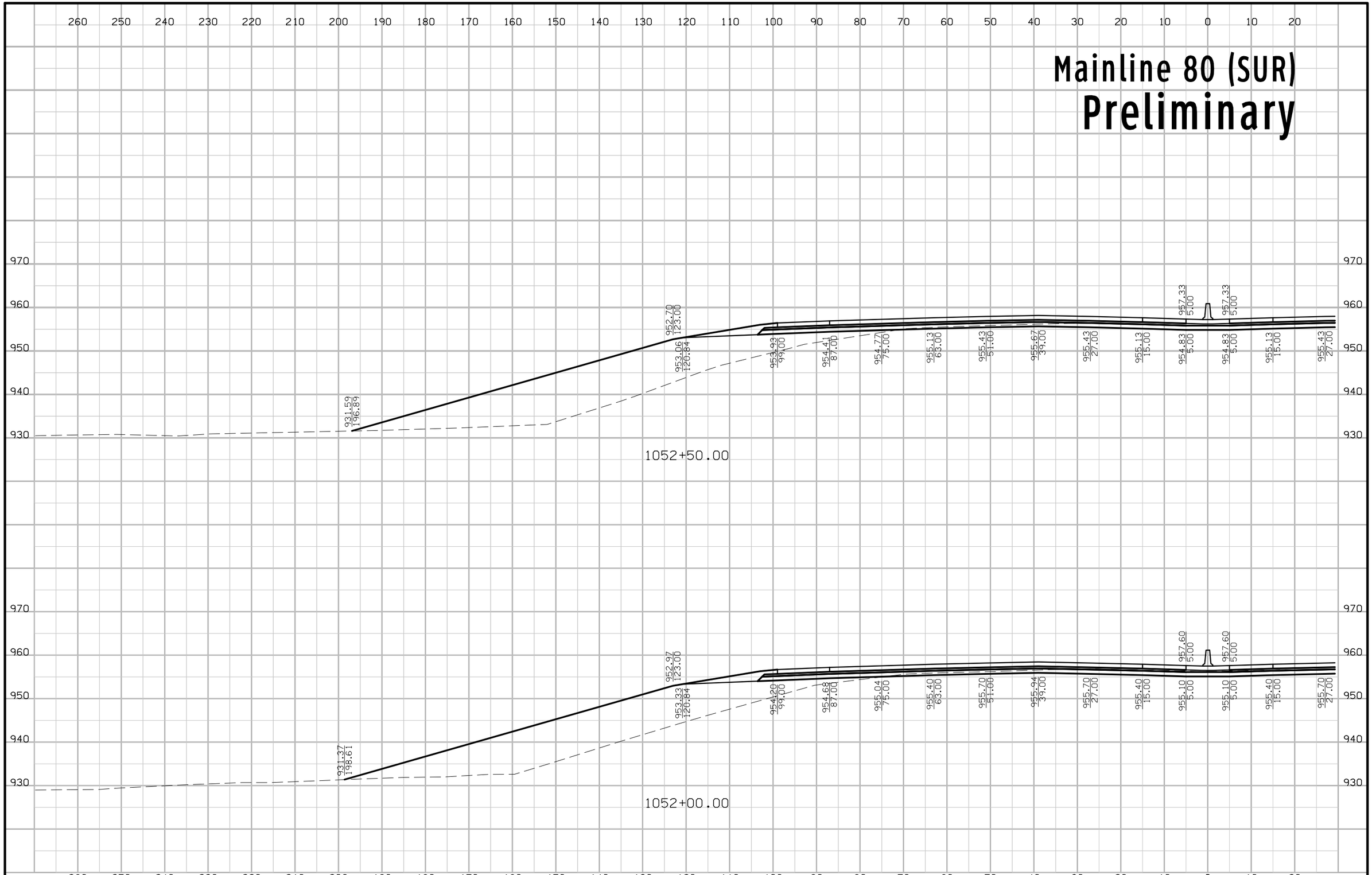


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.21

5:08:25 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)

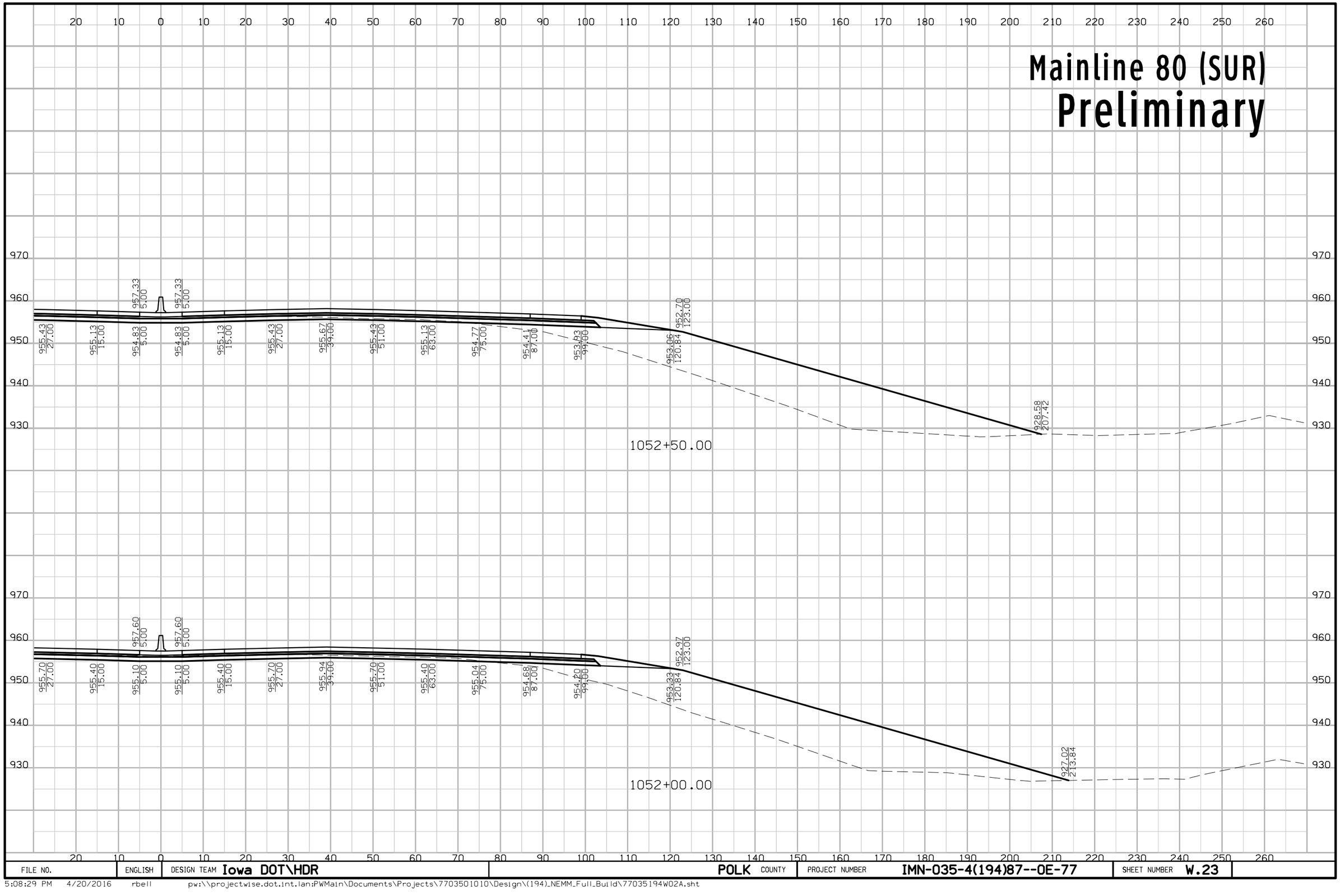
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.22

5:08:27 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)
Preliminary

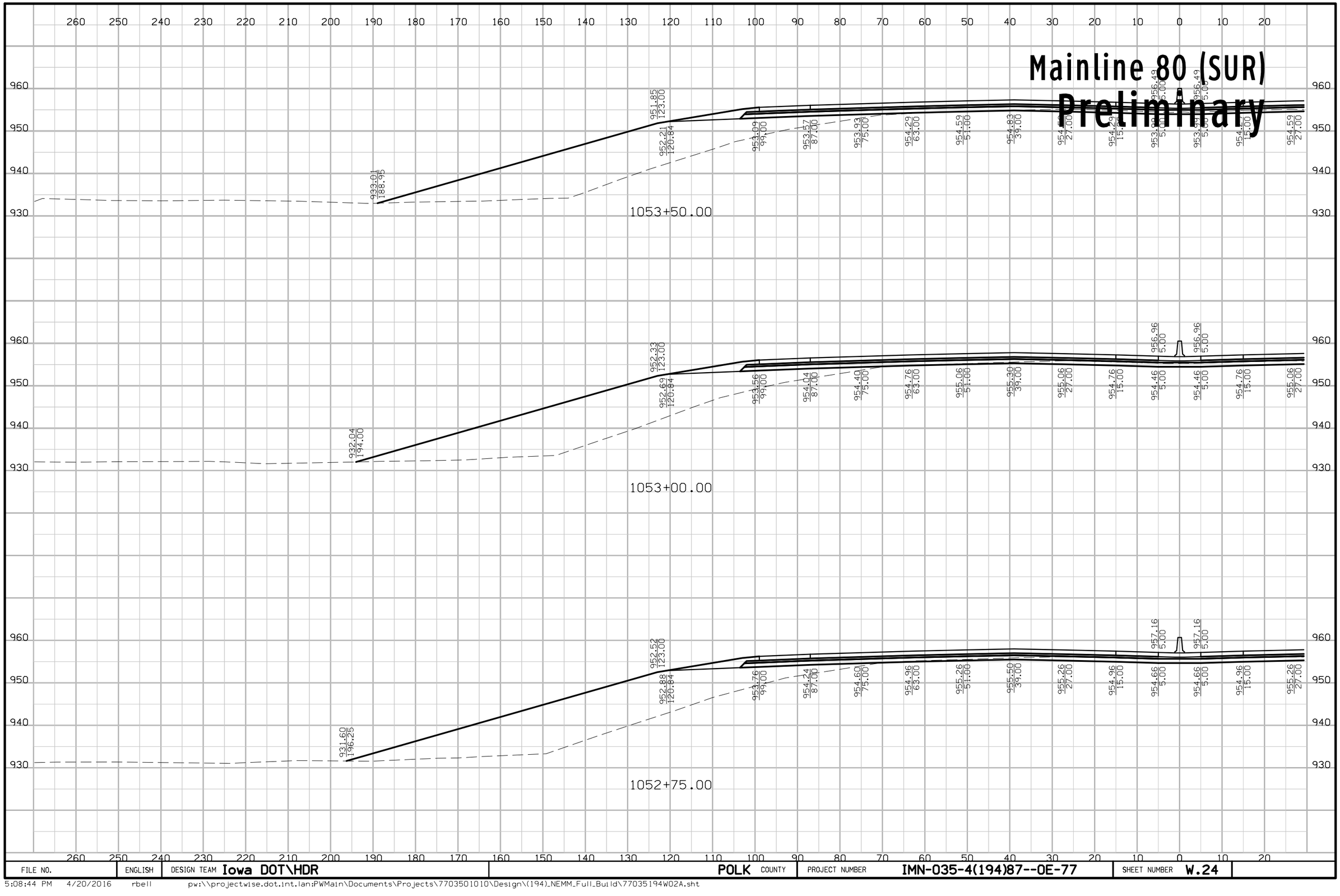


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.23

5:08:29 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)

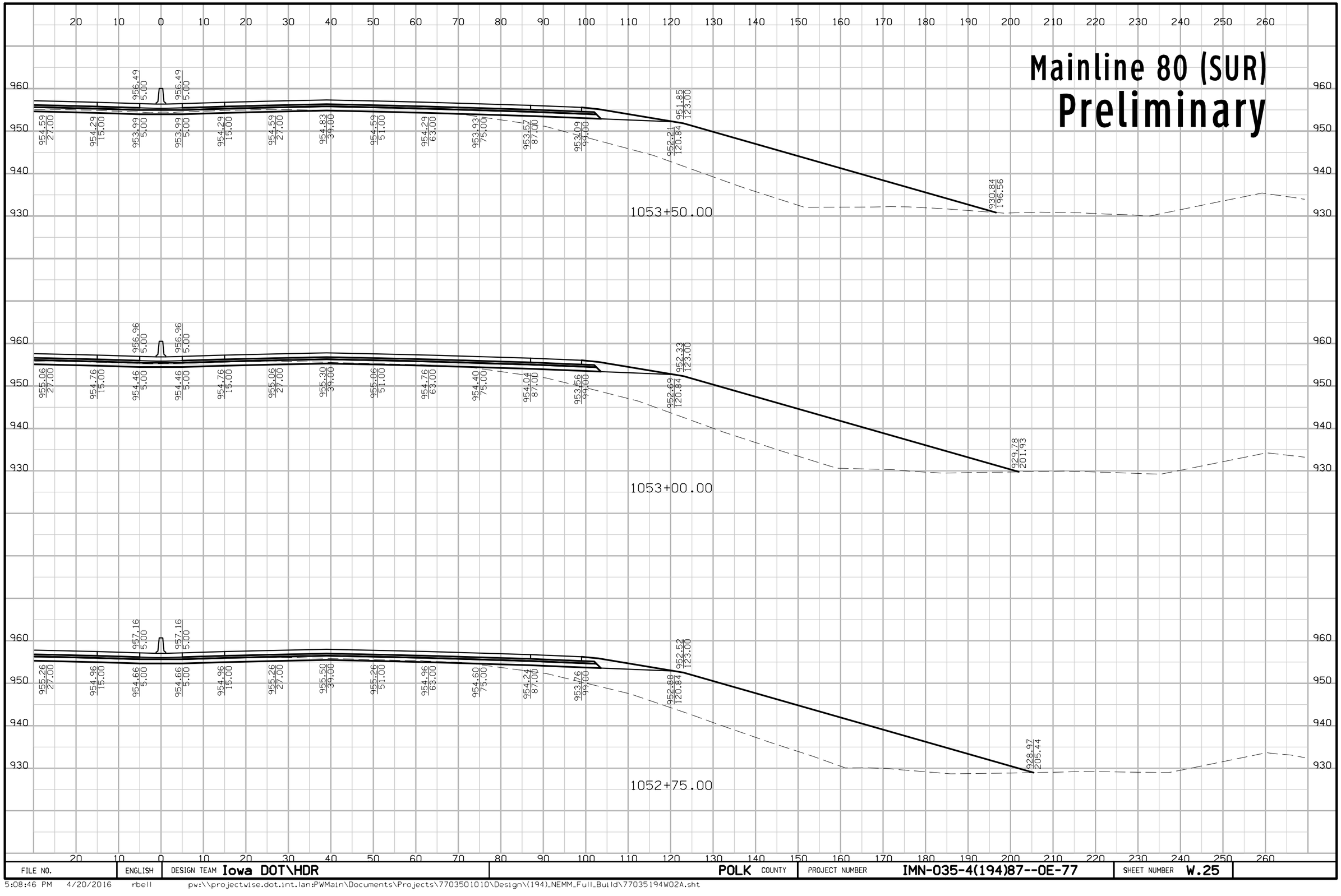
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.24

5:08:44 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)
Preliminary

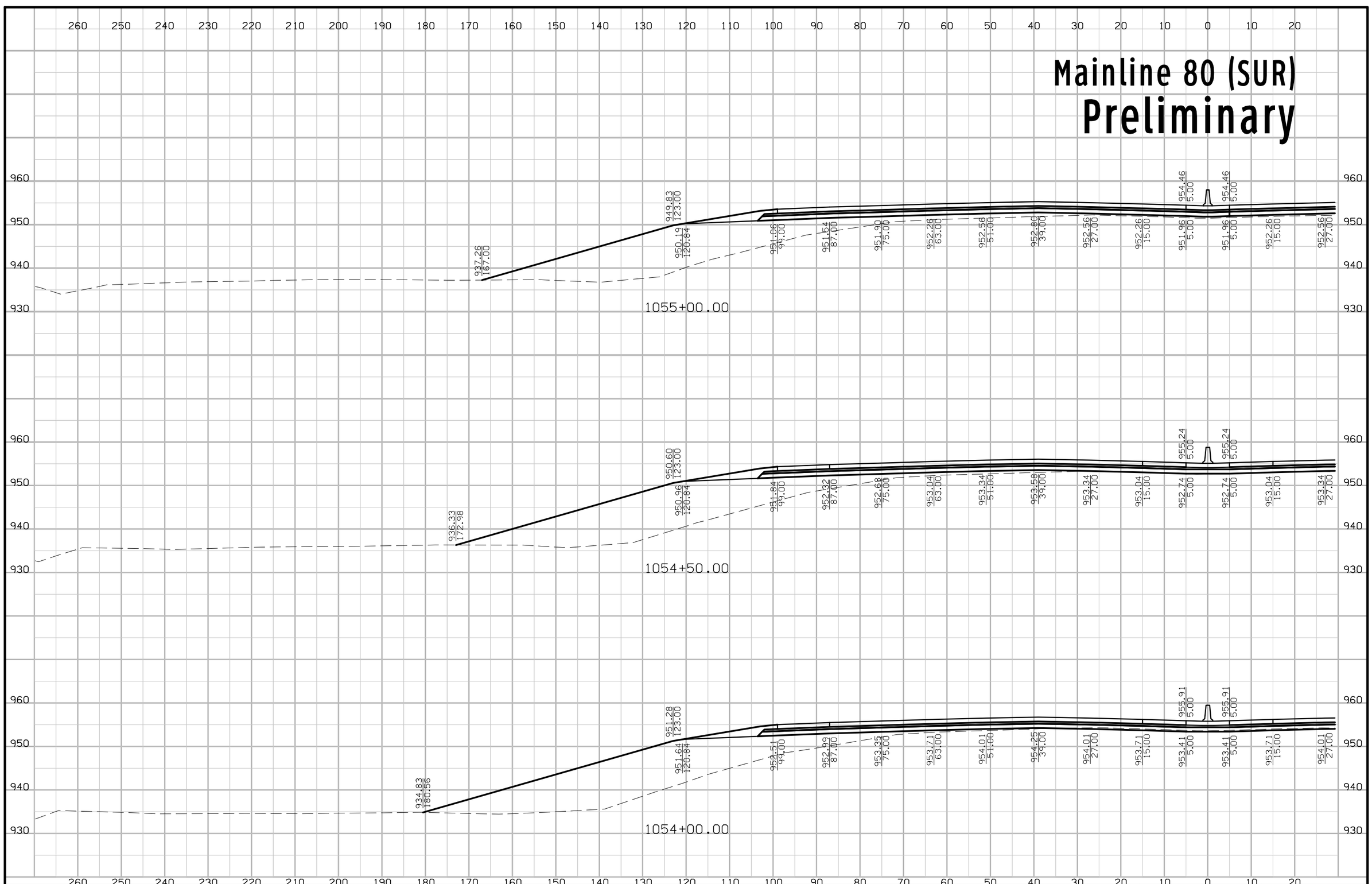


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.25

5:08:46 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80 (SUR)

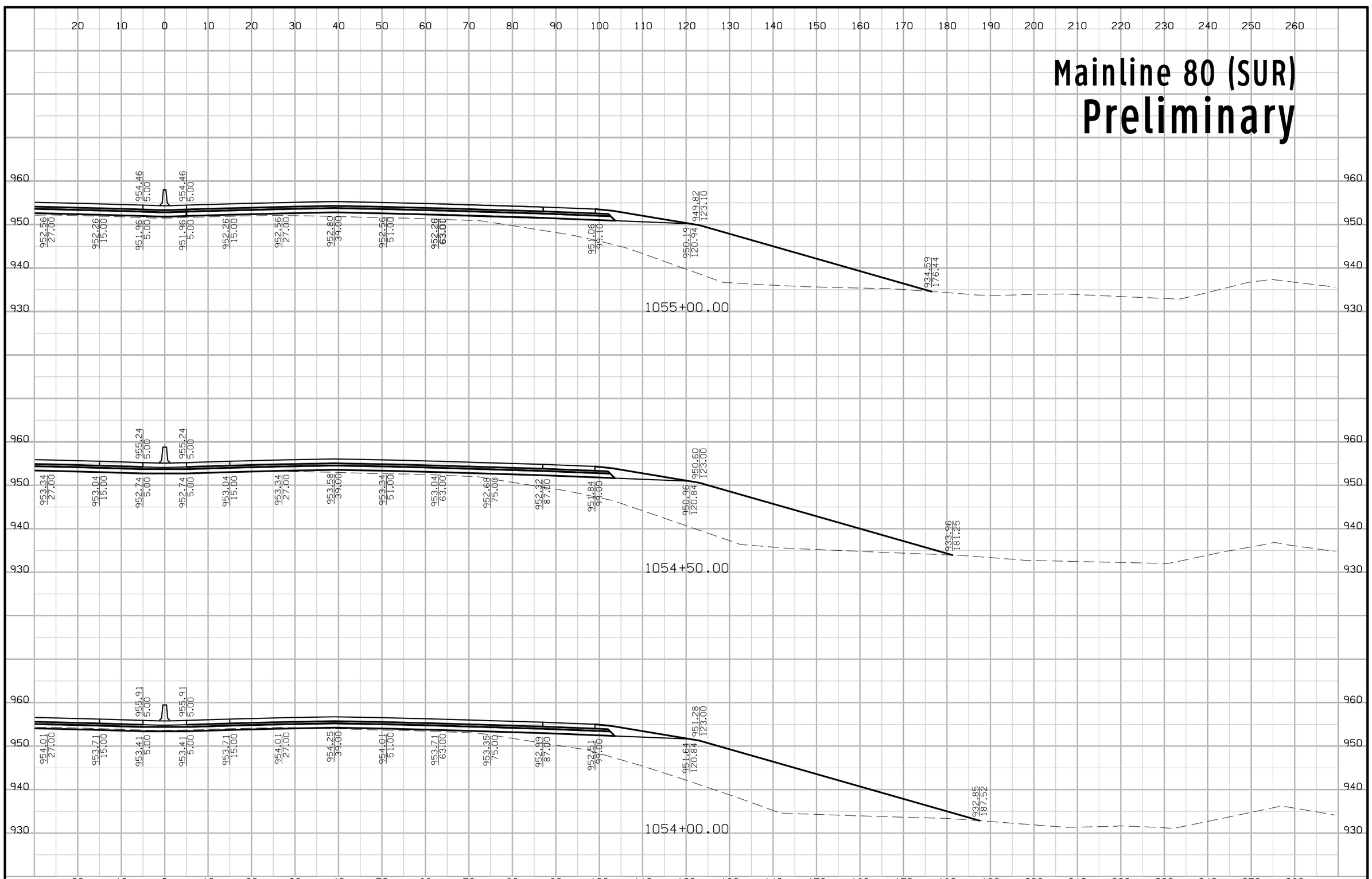
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.26

5:08:48 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

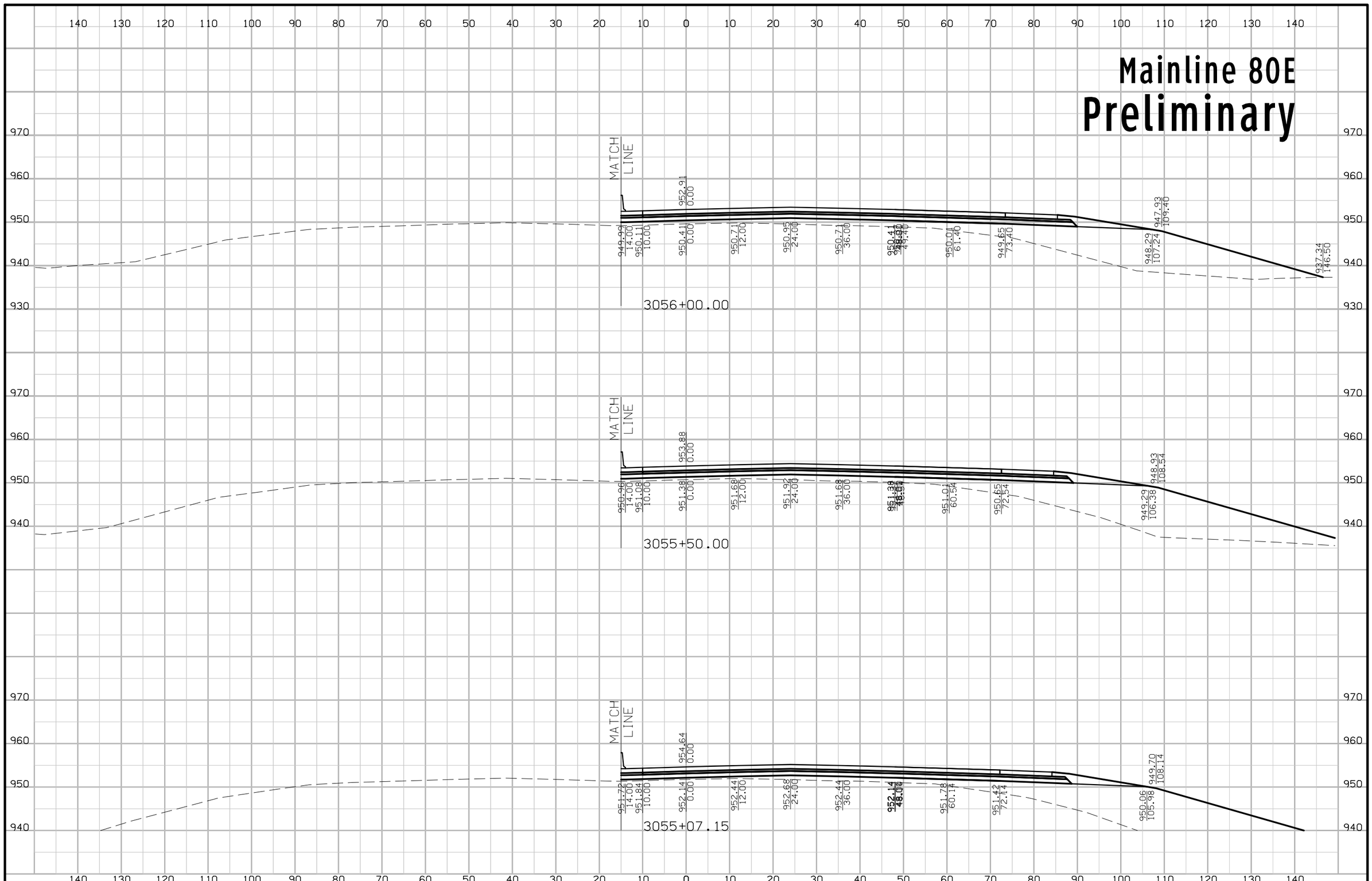
Mainline 80 (SUR)
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.27

5:08:51 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E
Preliminary

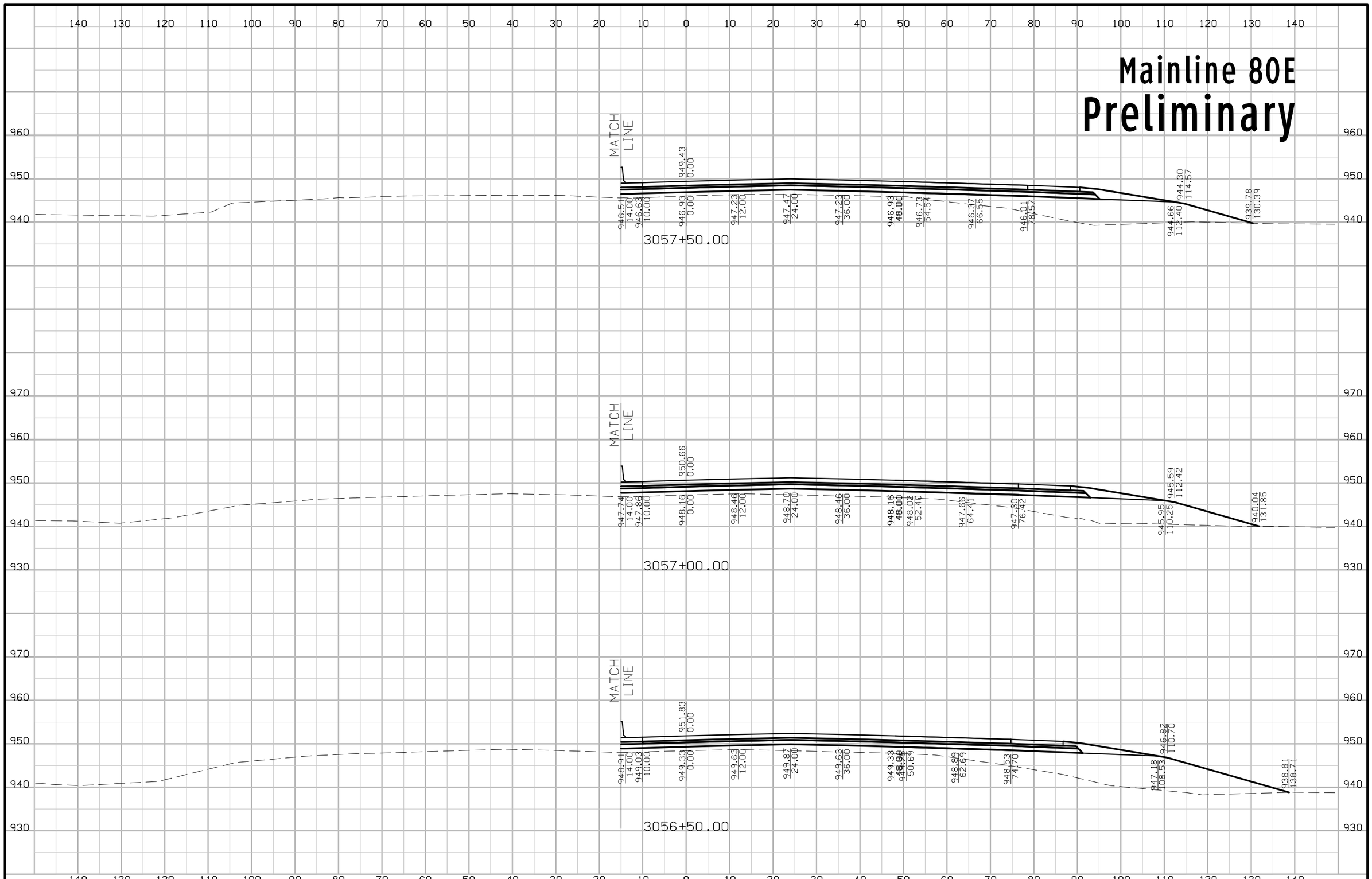


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.28

5:08:52 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

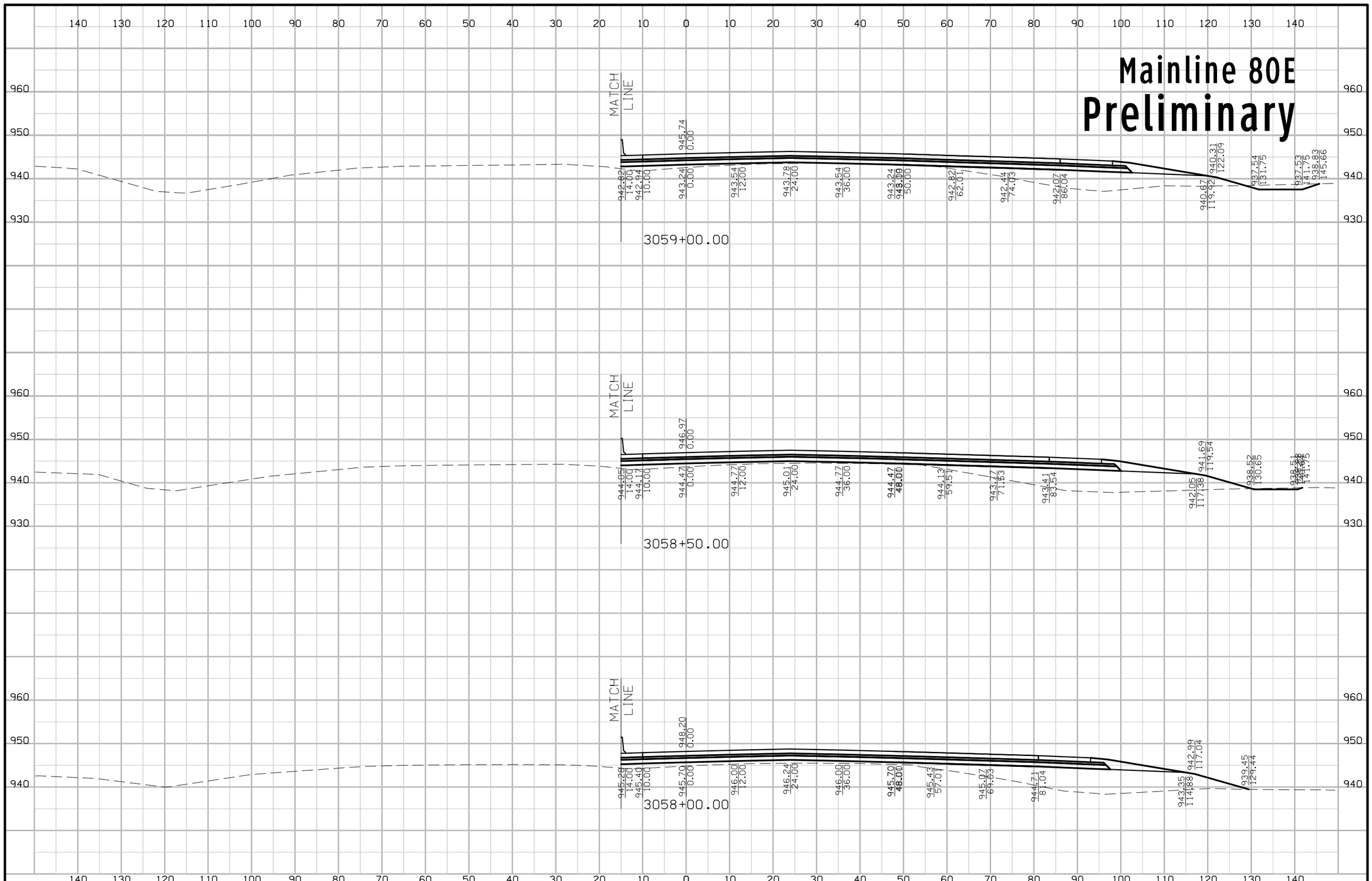
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.29

5:08:54 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E
Preliminary

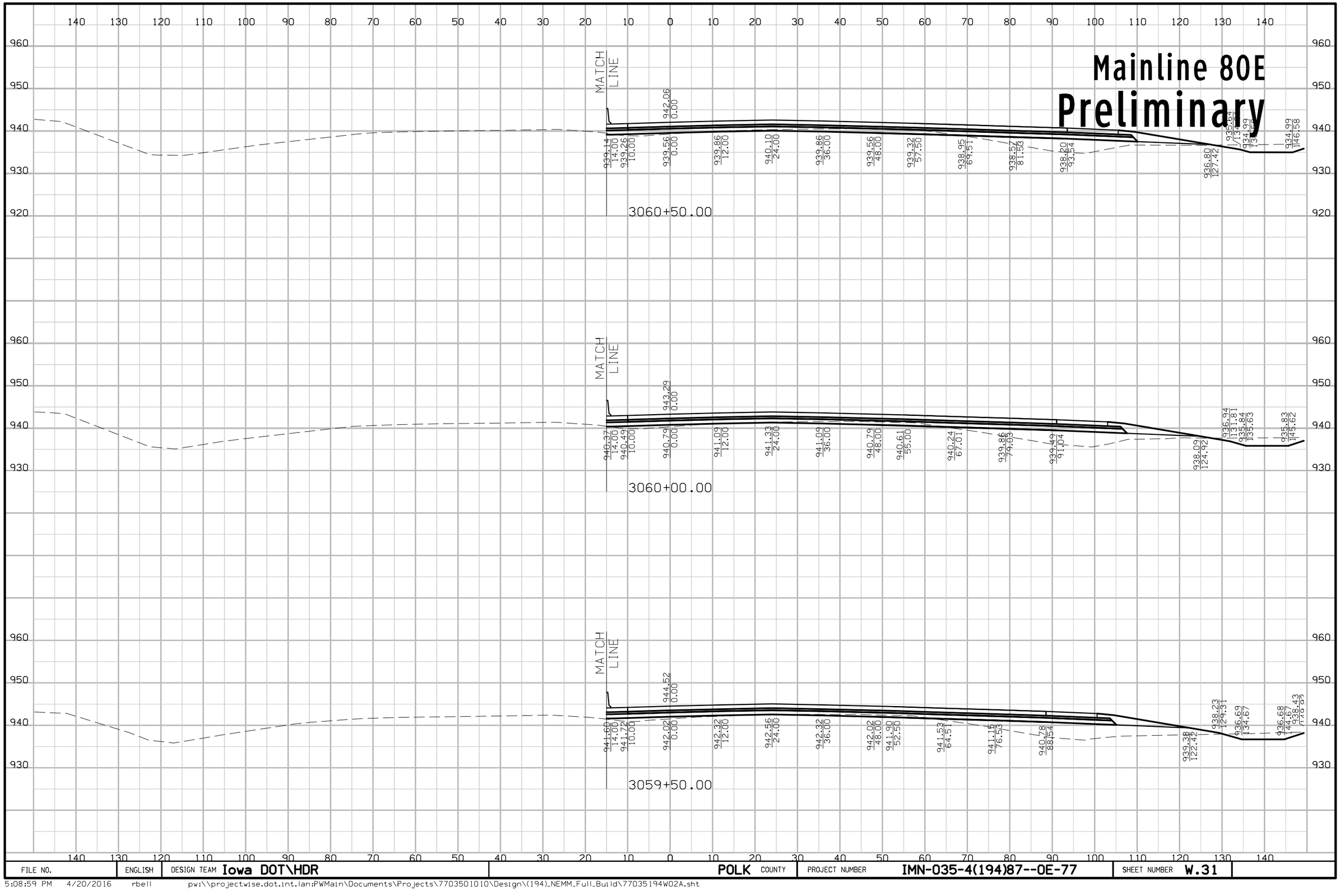


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.30

5:08:56 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194WO2A.sht

Mainline 80E

Preliminary

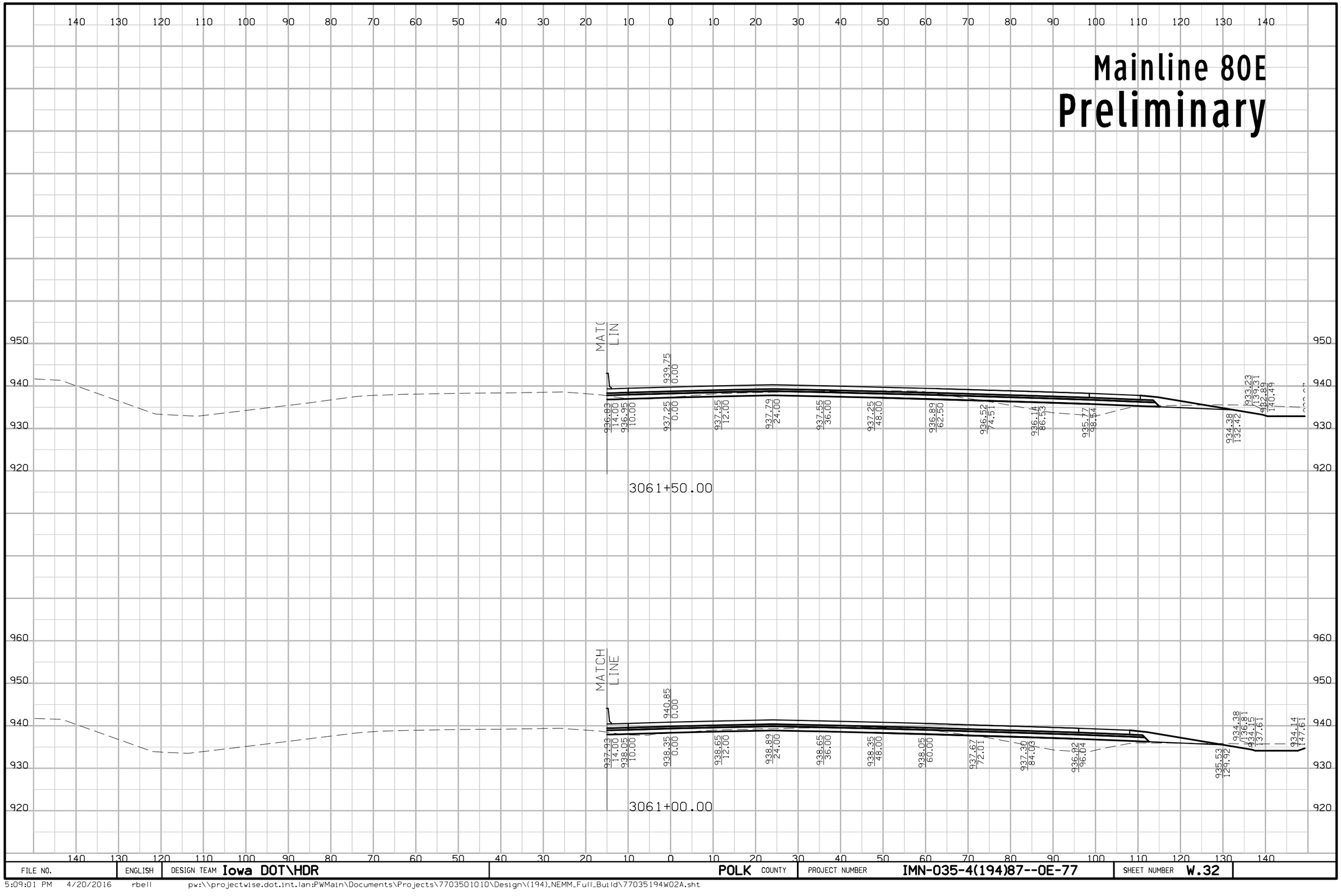


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.31

5:08:59 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

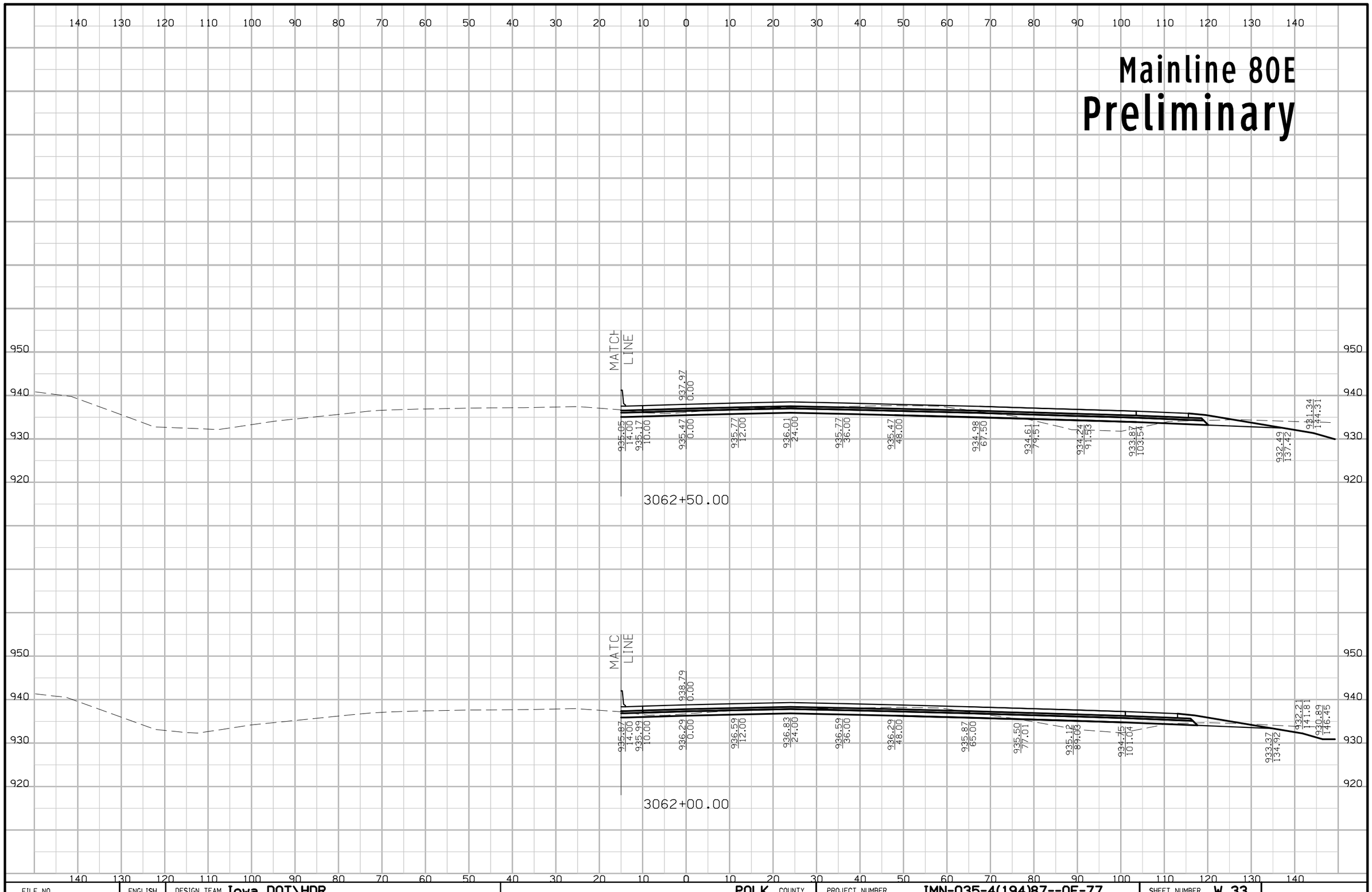


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.32

5:09:01 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

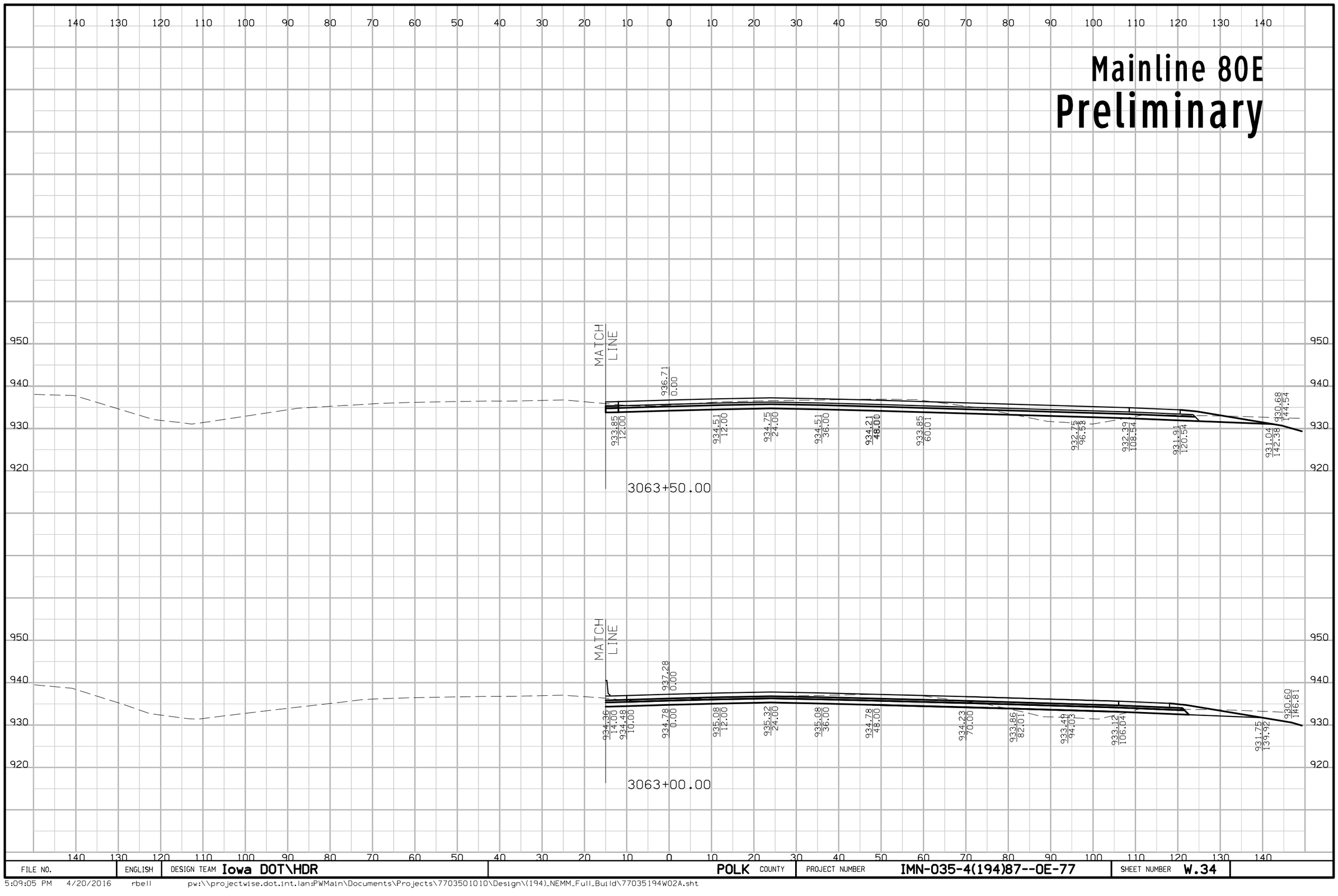


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.33

5:09:03 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

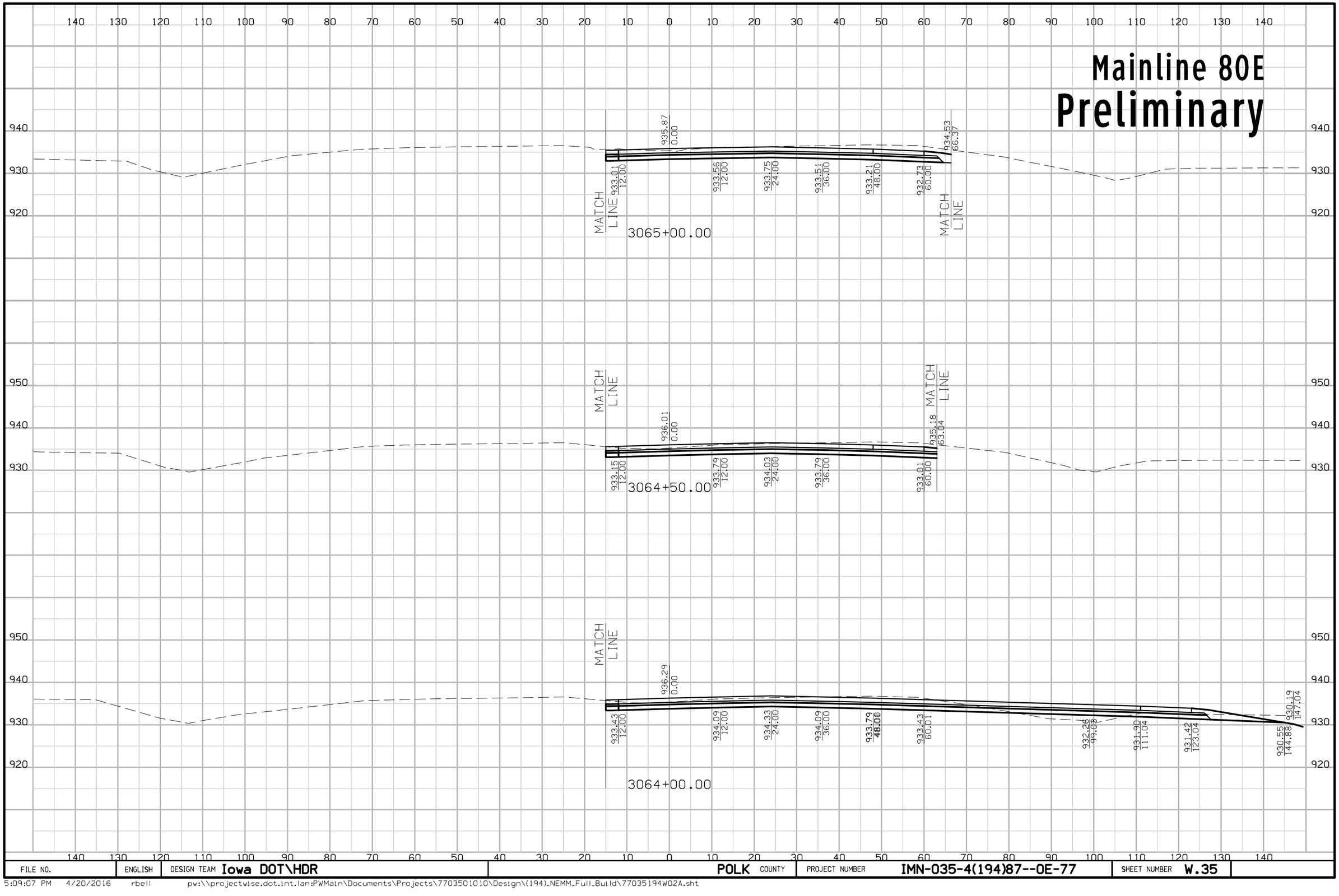
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.34

5:09:05 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

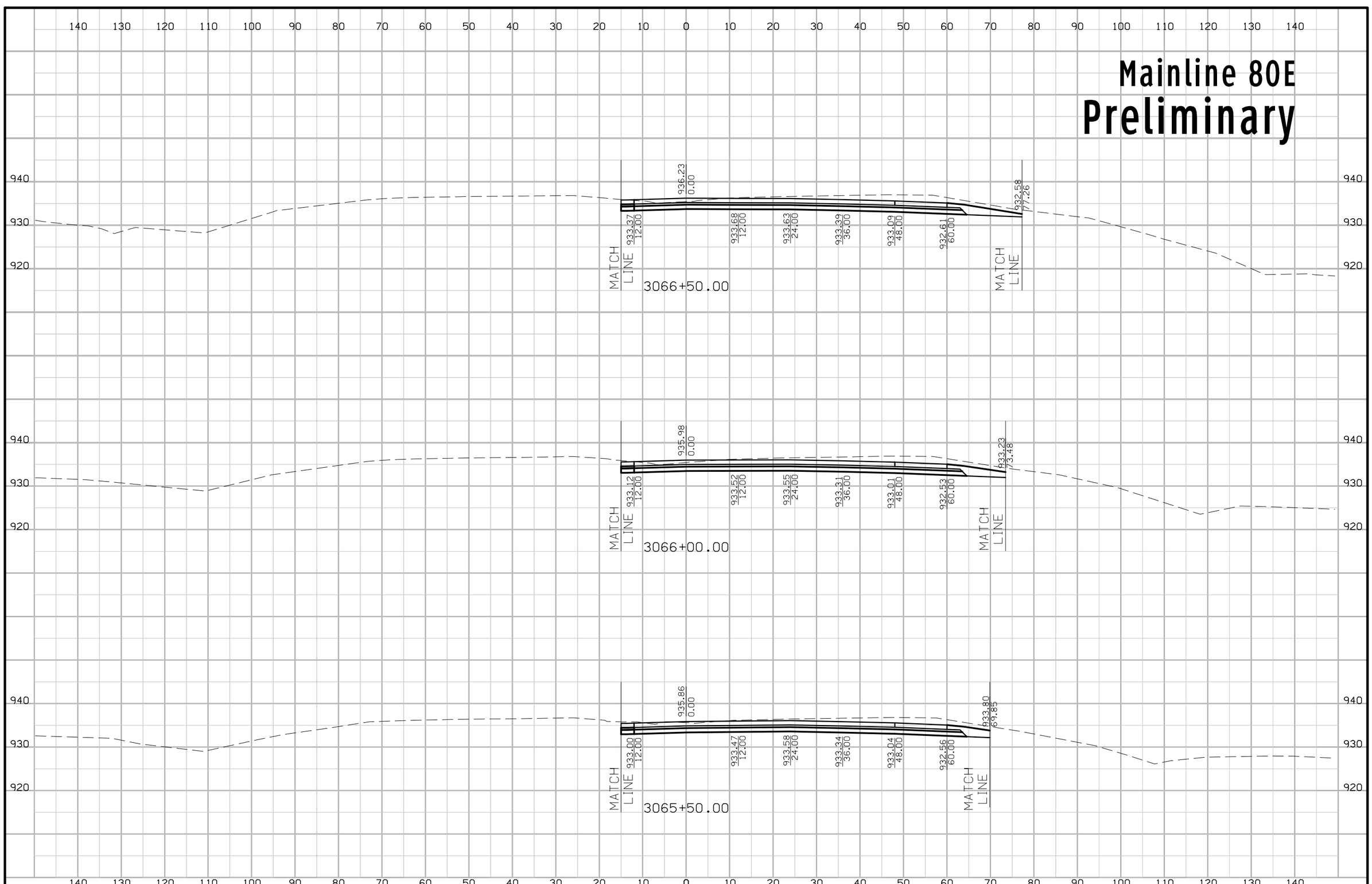
Mainline 80E
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.35

5:09:07 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

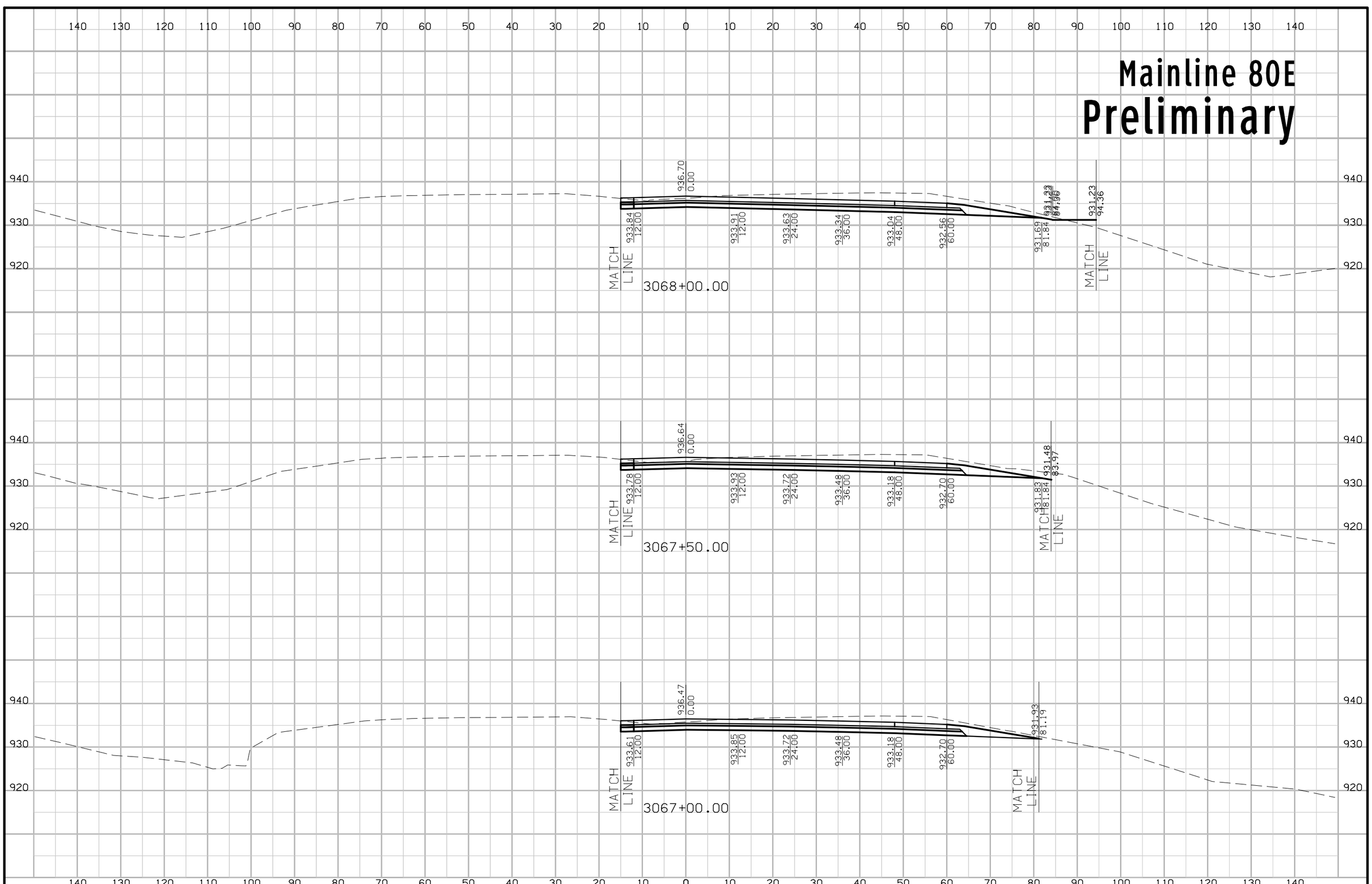
Mainline 80E
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.36

5:09:09 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

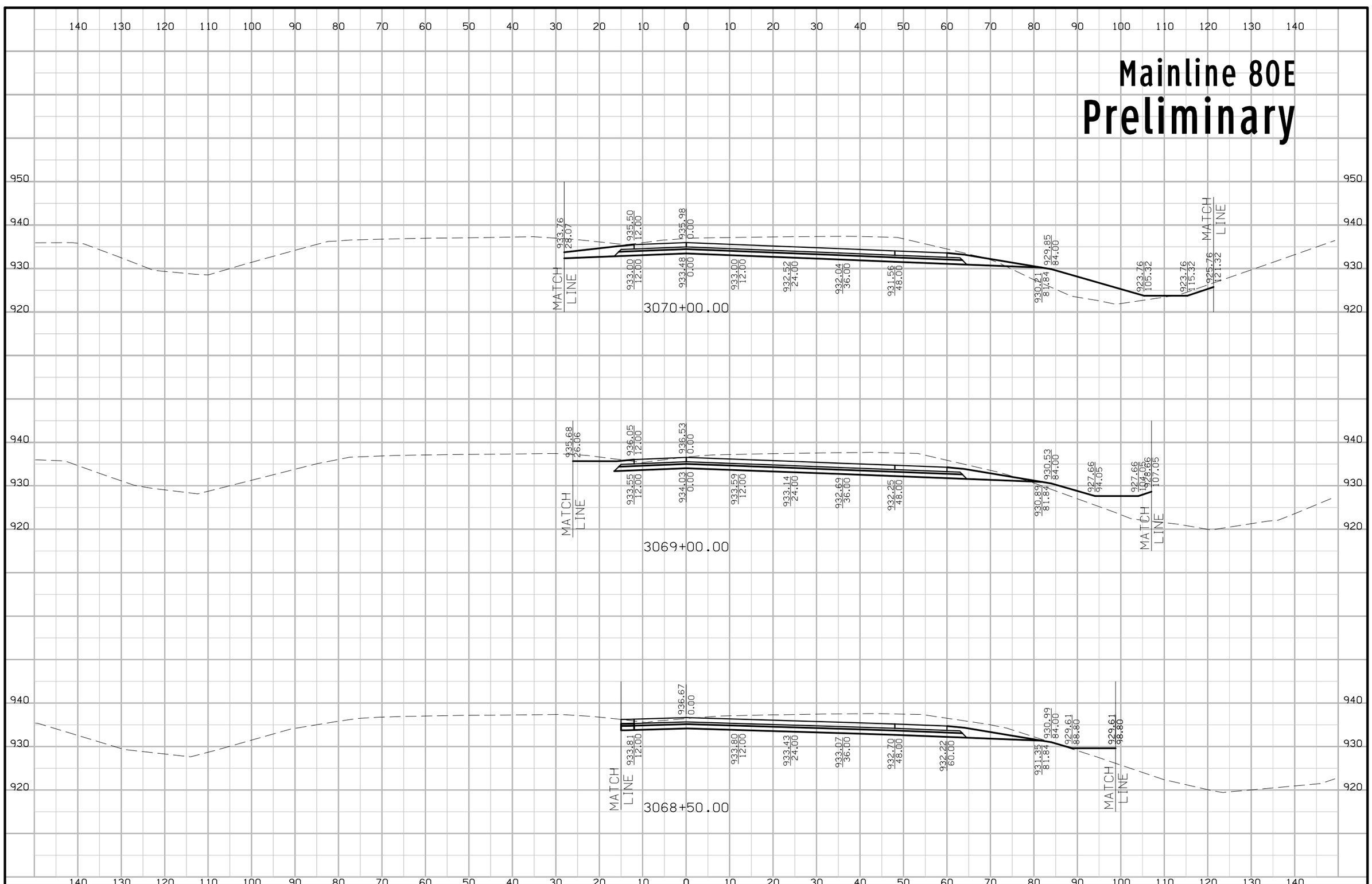
Mainline 80E
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.37

5:09:12 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

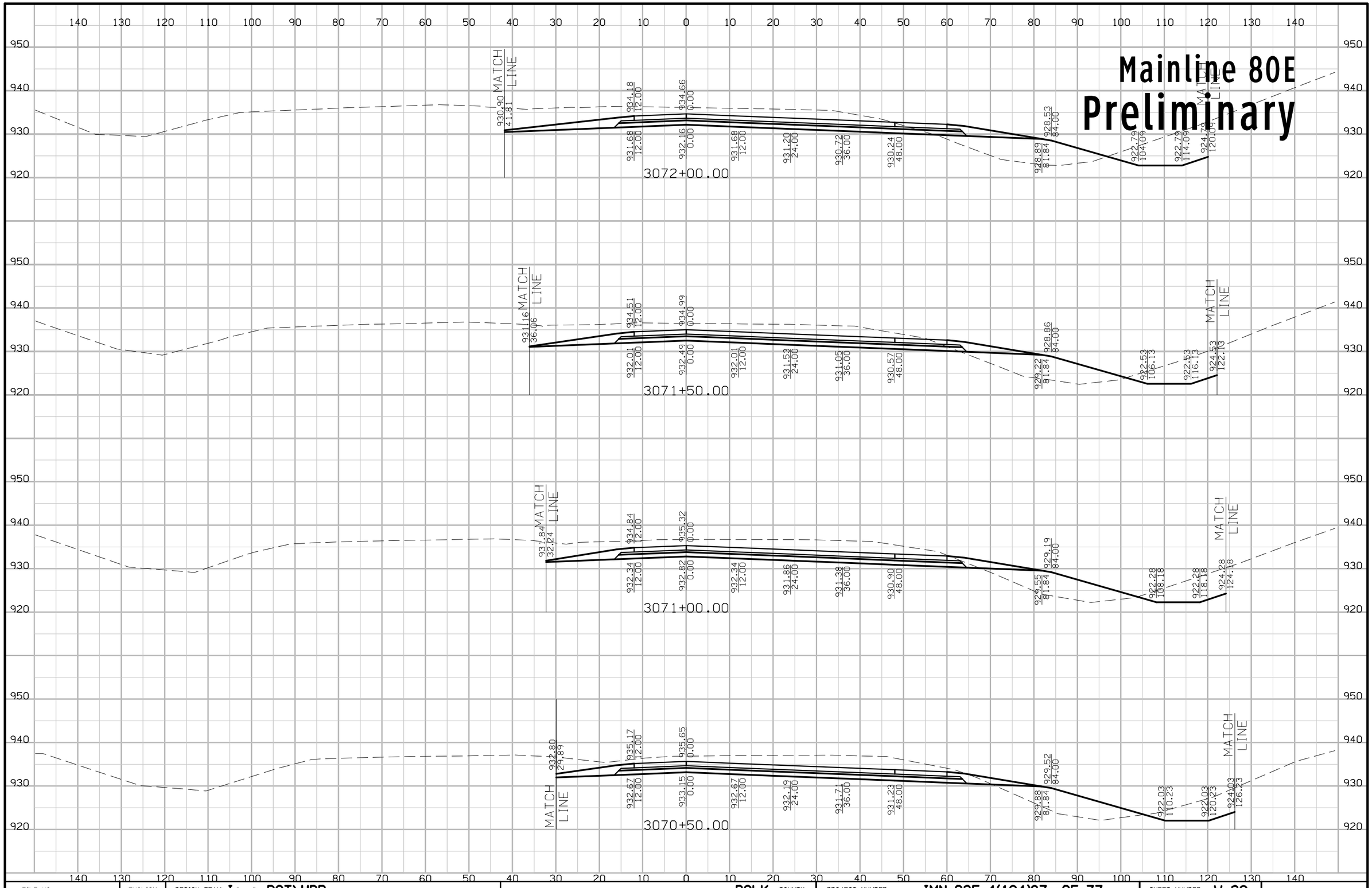
Mainline 80E
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.38

5:09:14 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E
Preliminary

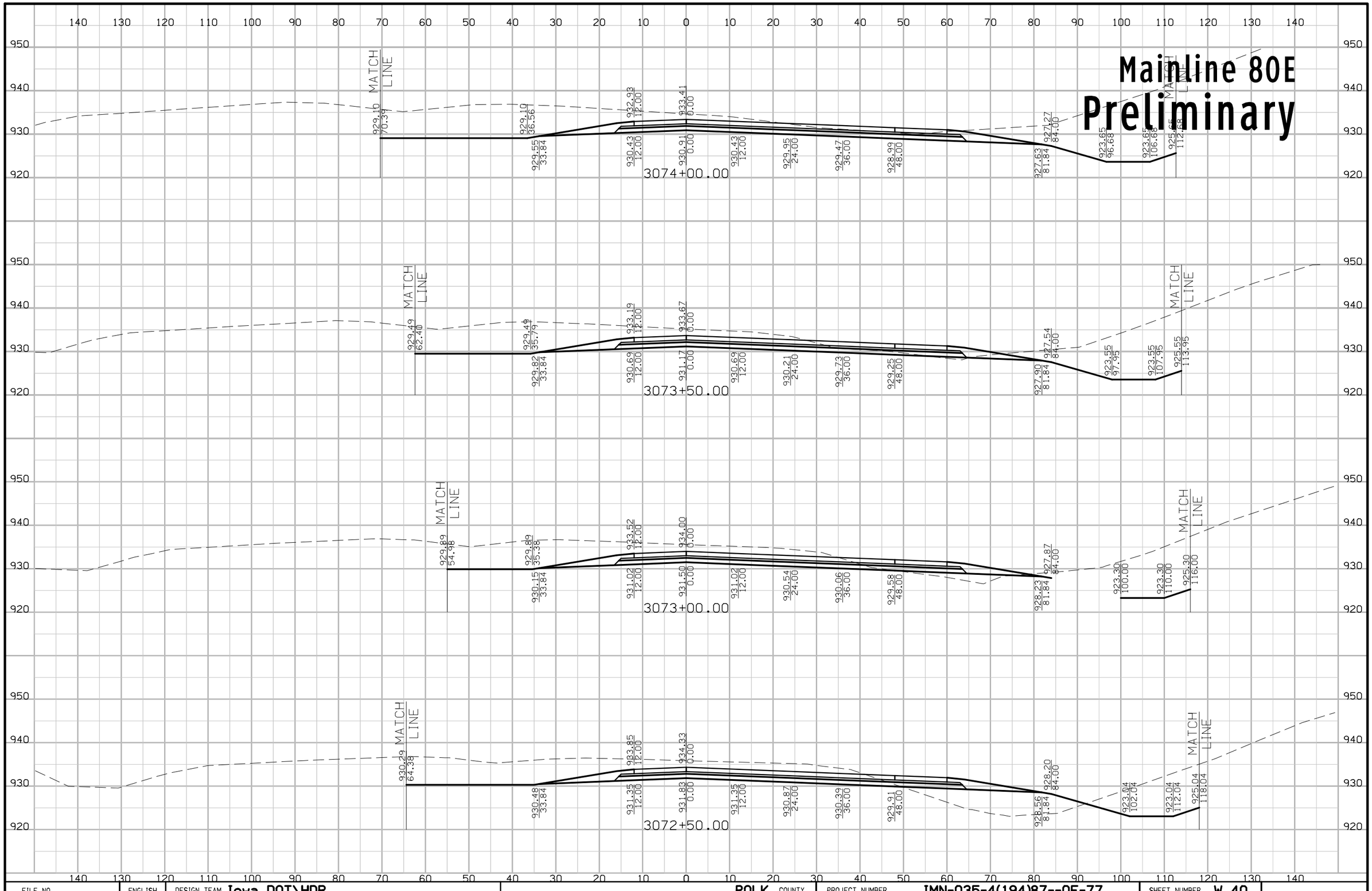


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.39

5:09:16 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

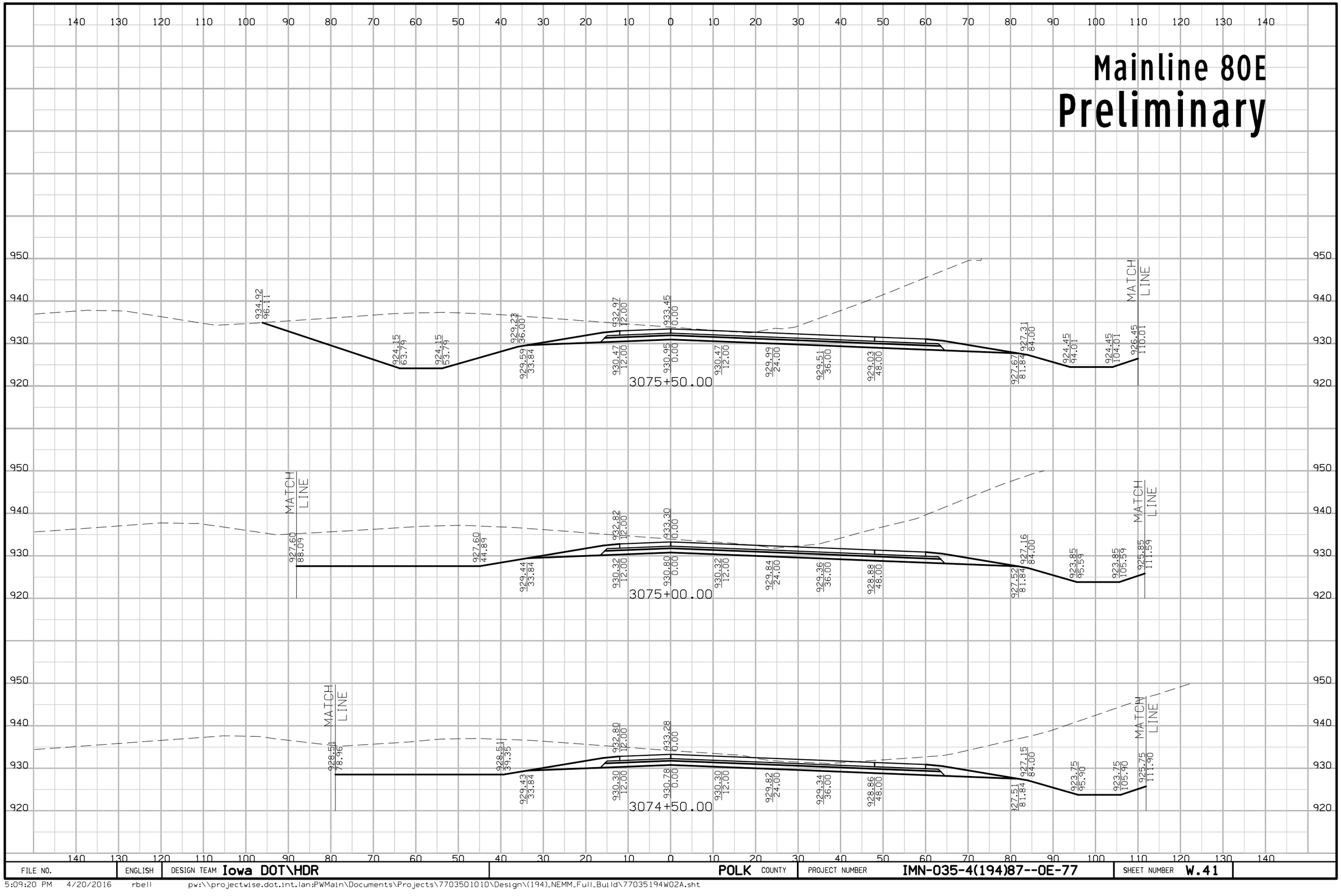


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.40

5:09:18 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

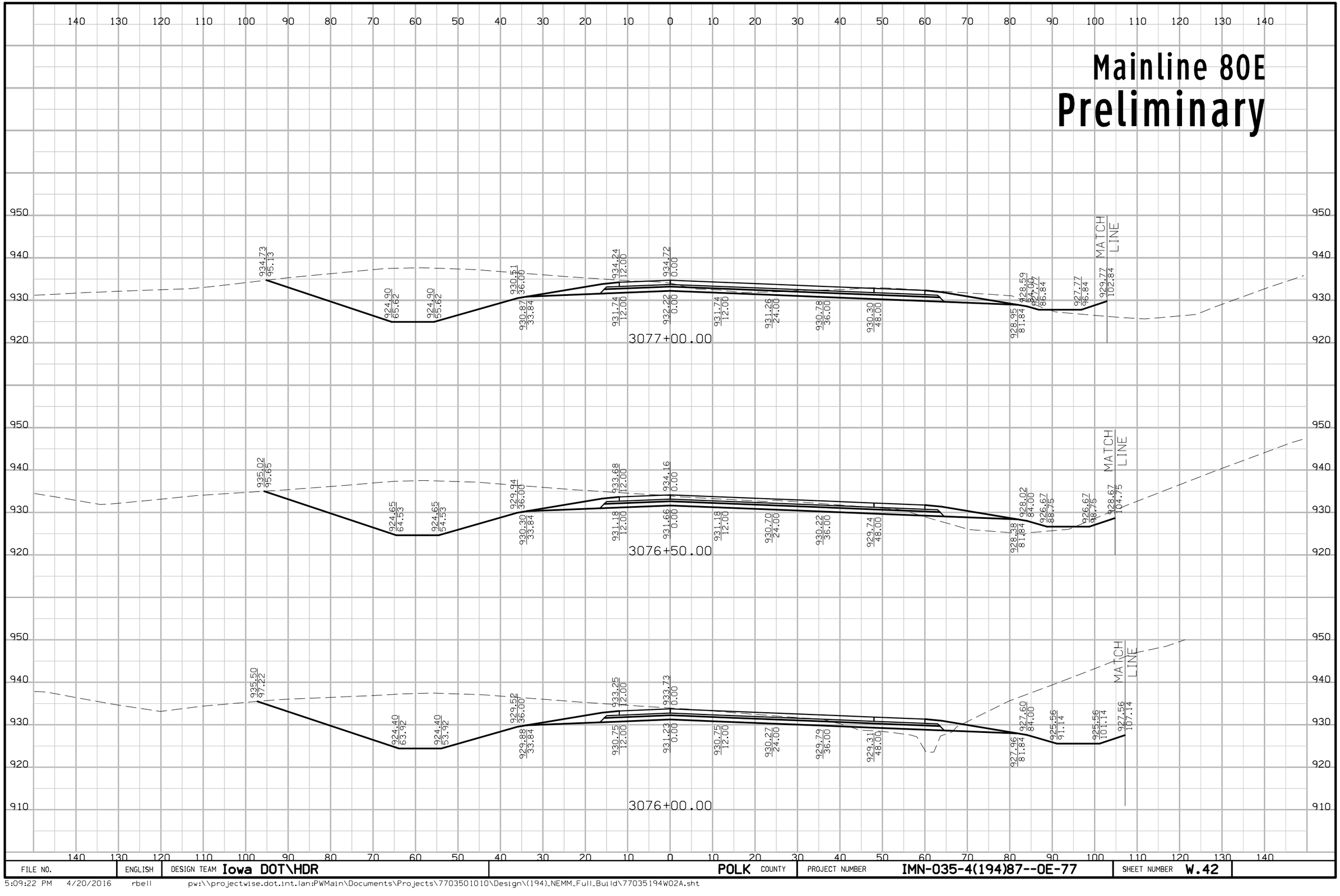


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.41

5:09:20 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

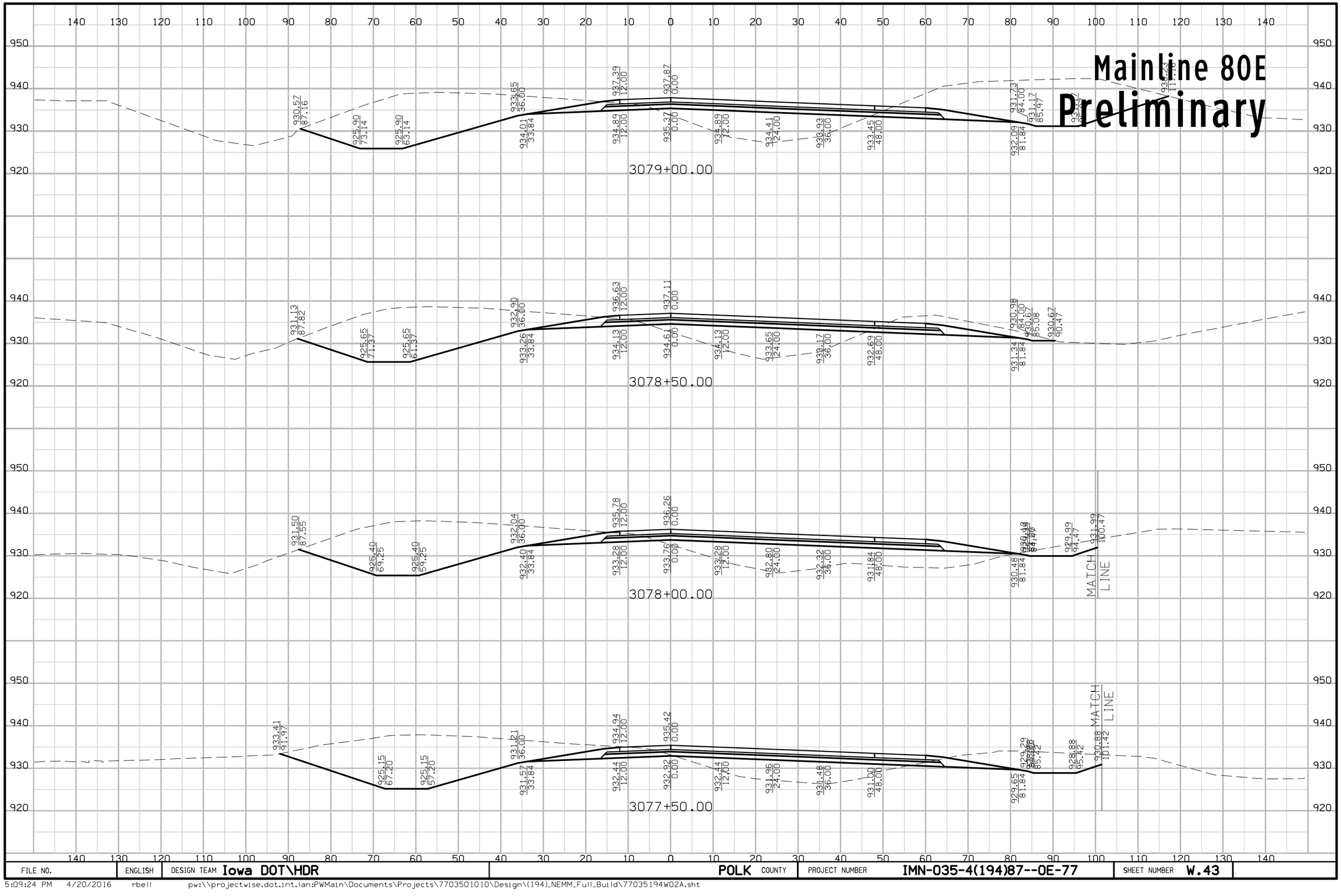


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.42

5:09:22 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

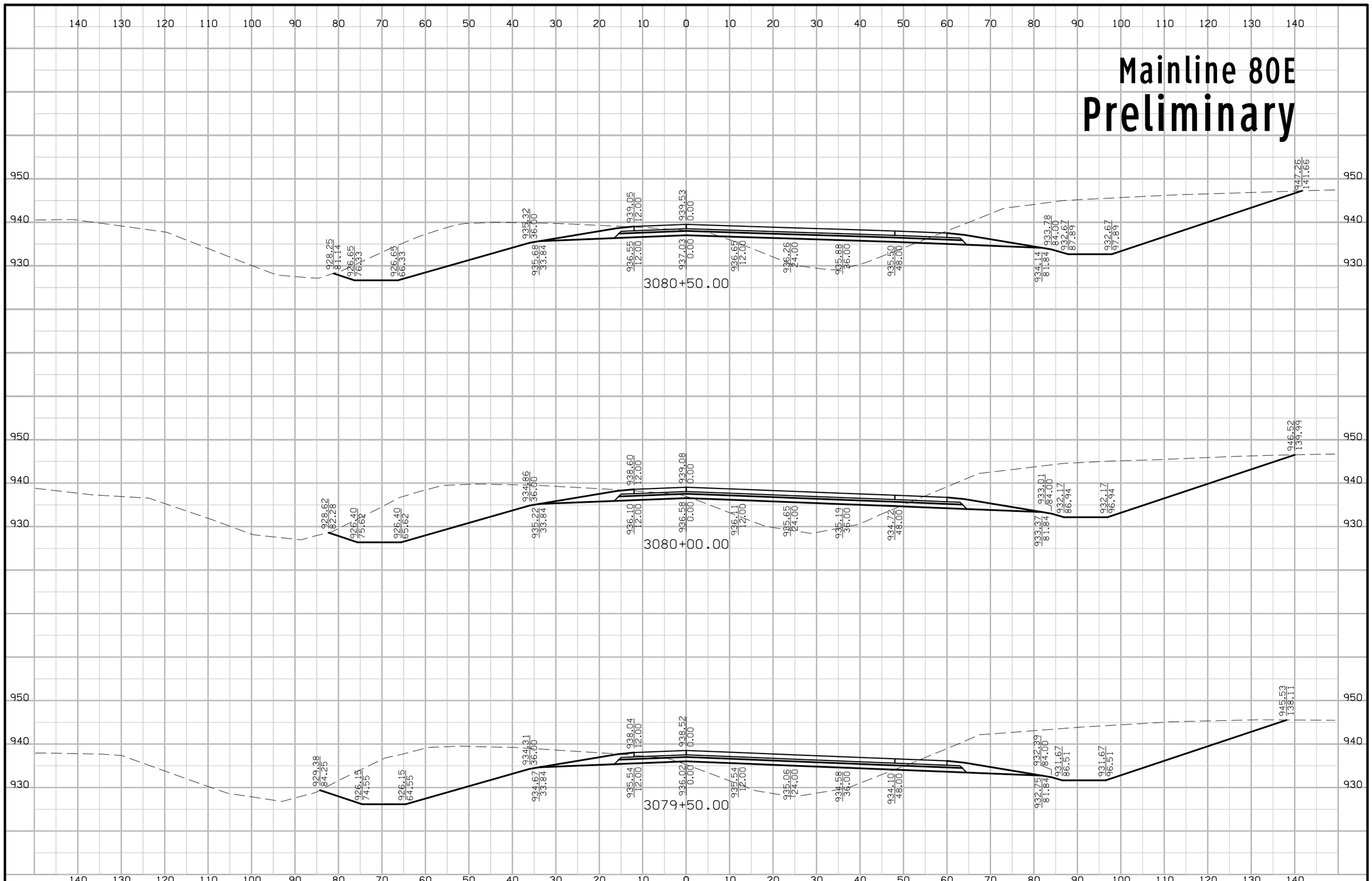


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.43

5:09:24 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

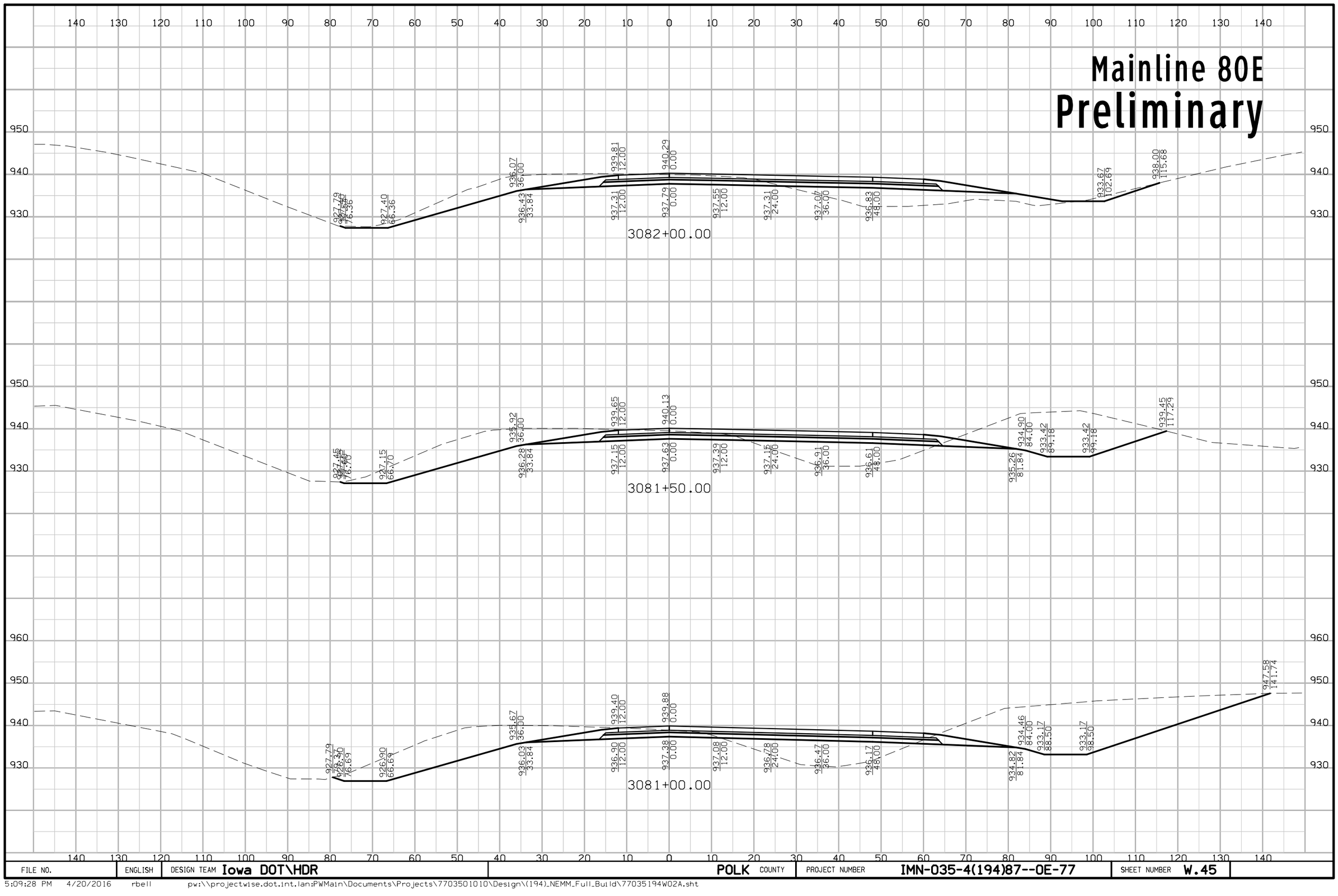


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.44

5:09:26 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

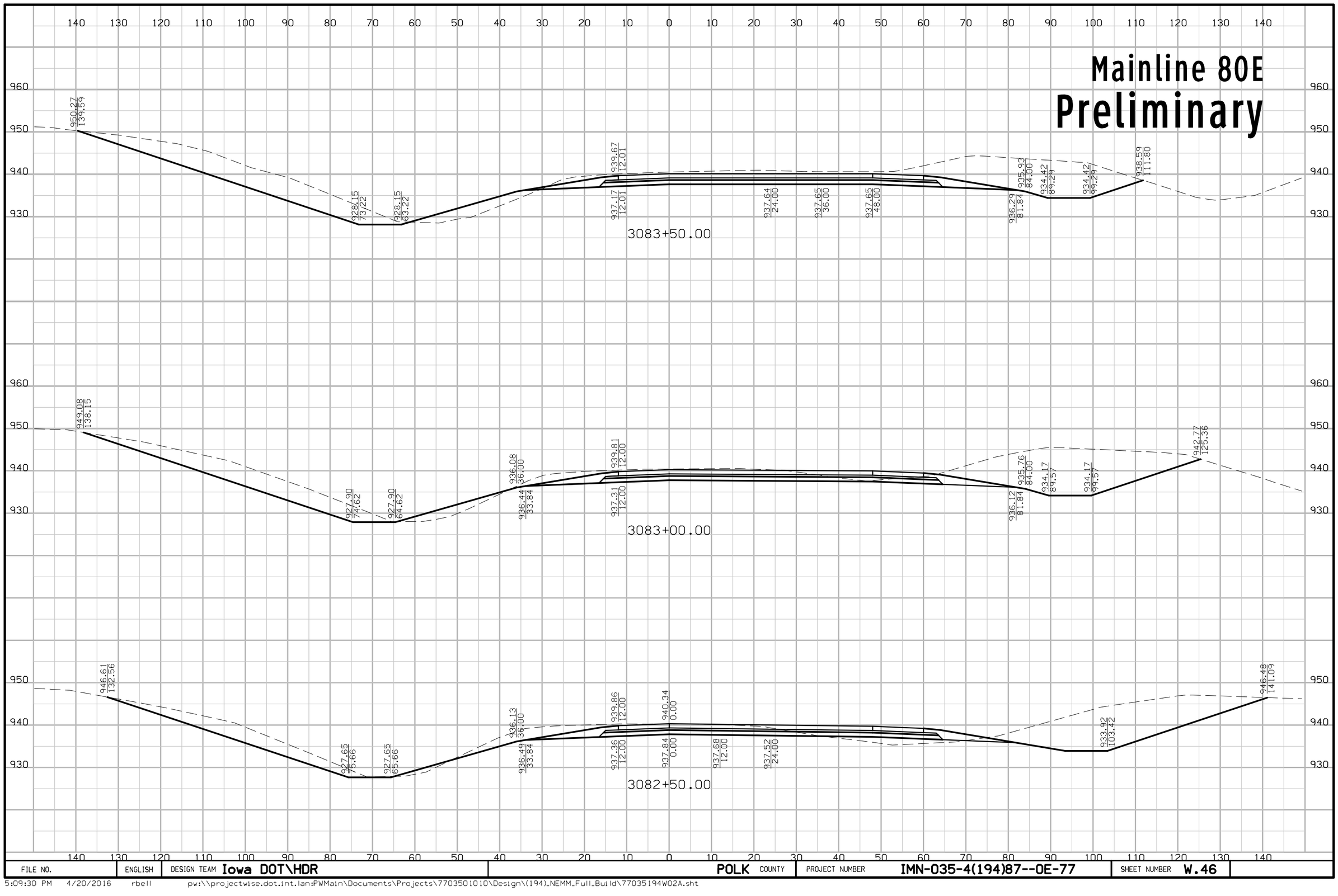


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.45

5:09:28 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

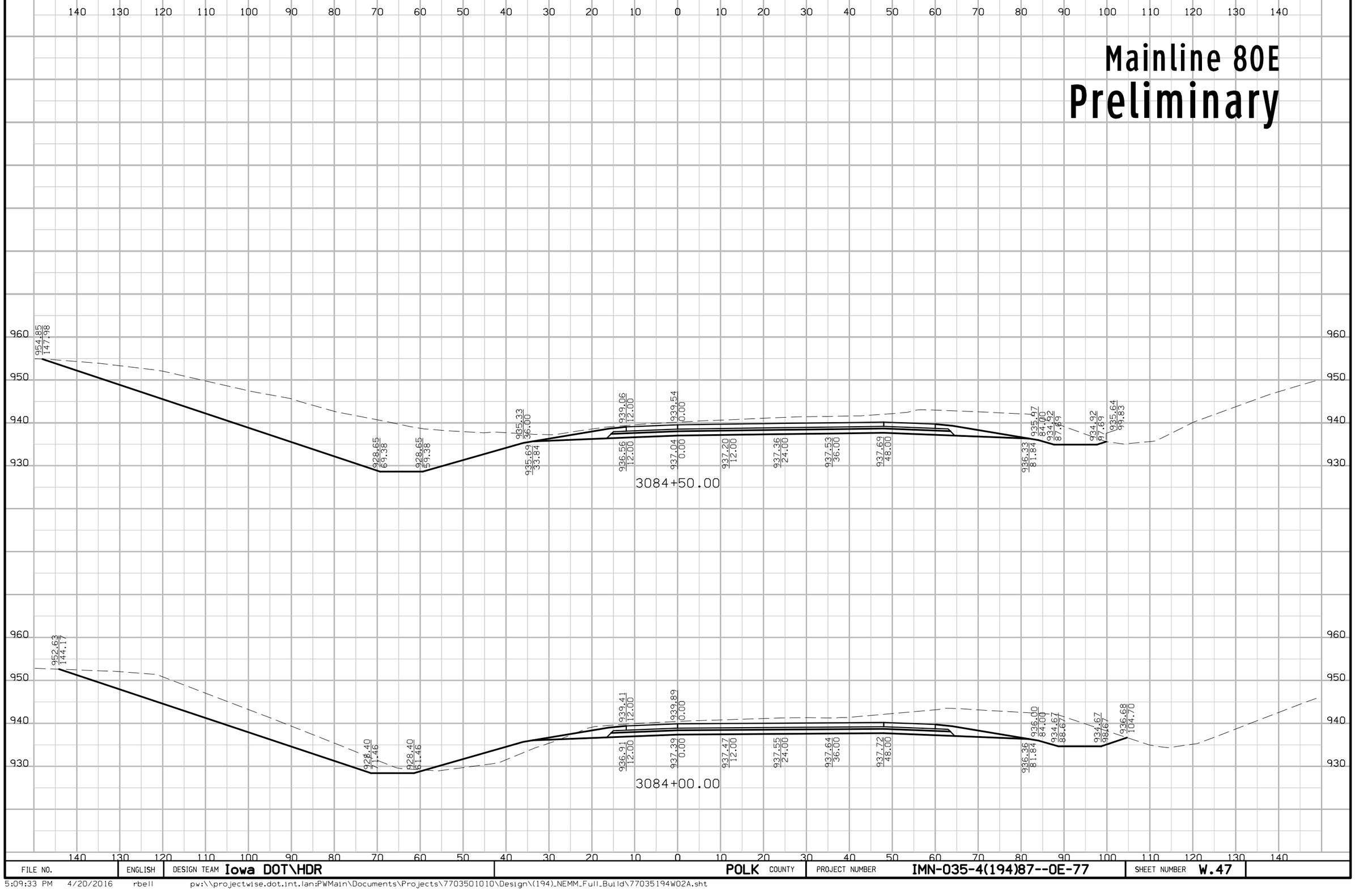


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.46

5:09:30 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

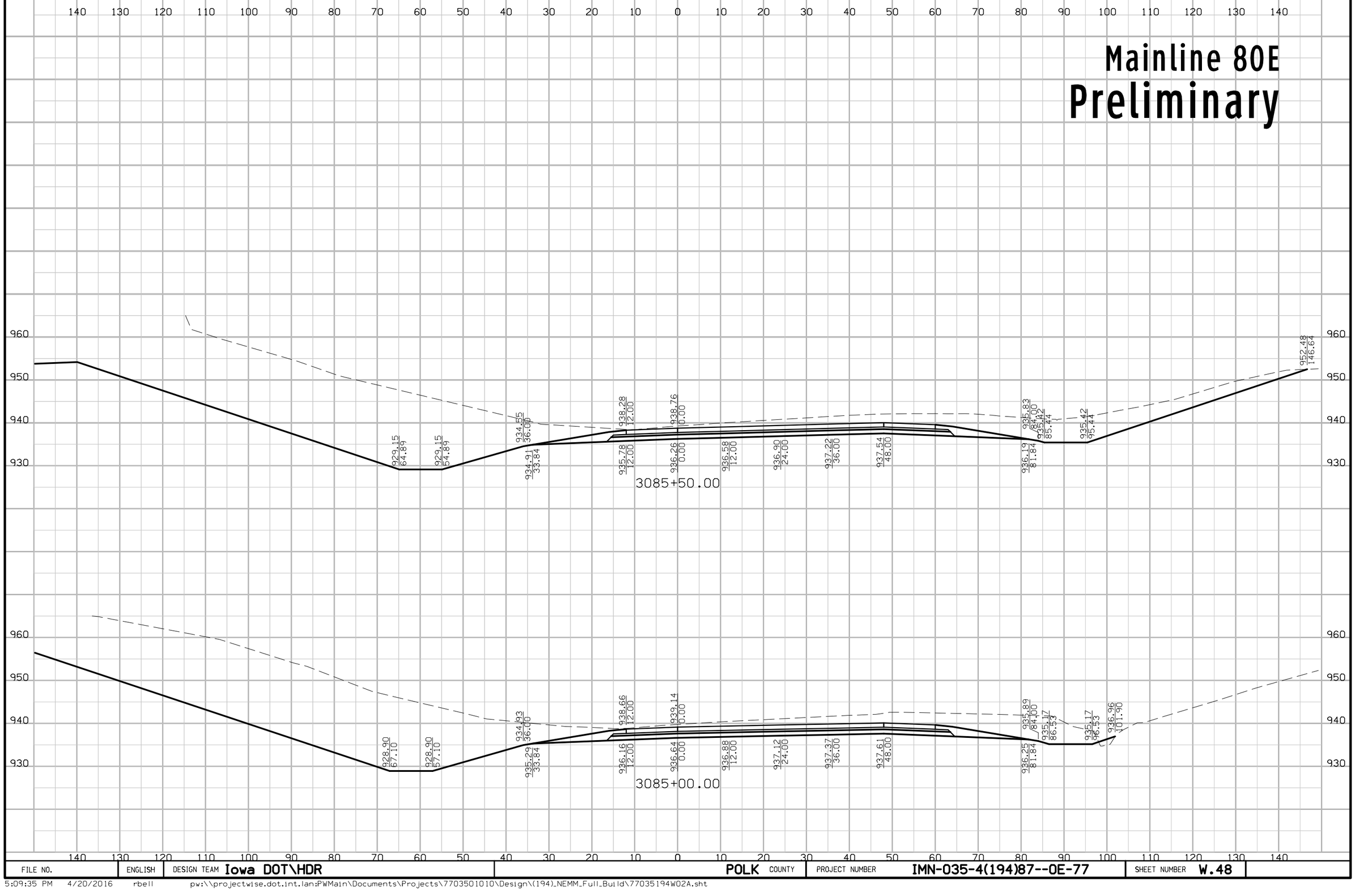


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.47

5:09:33 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

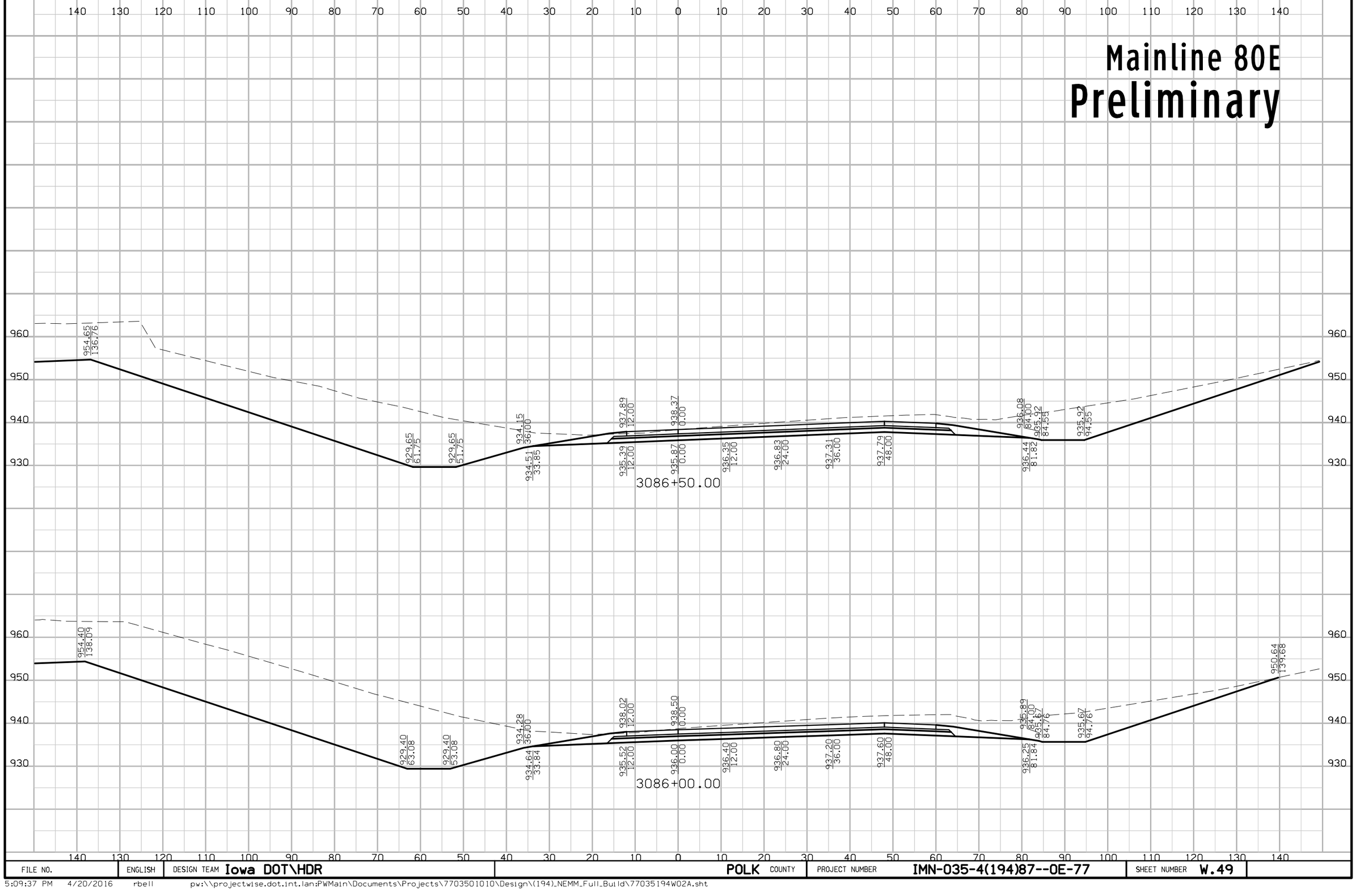


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.48

5:09:35 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

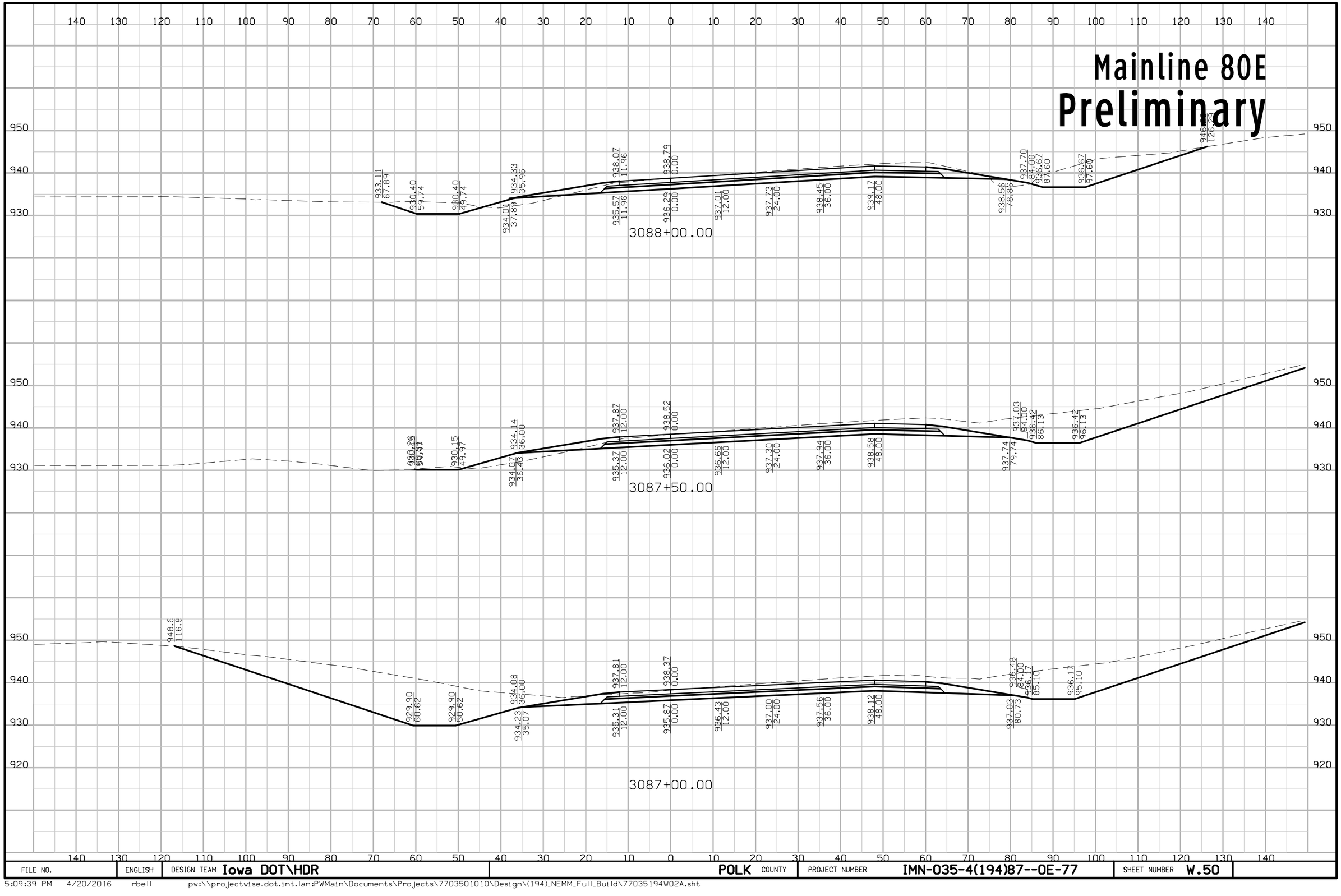


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.49

5:09:37 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

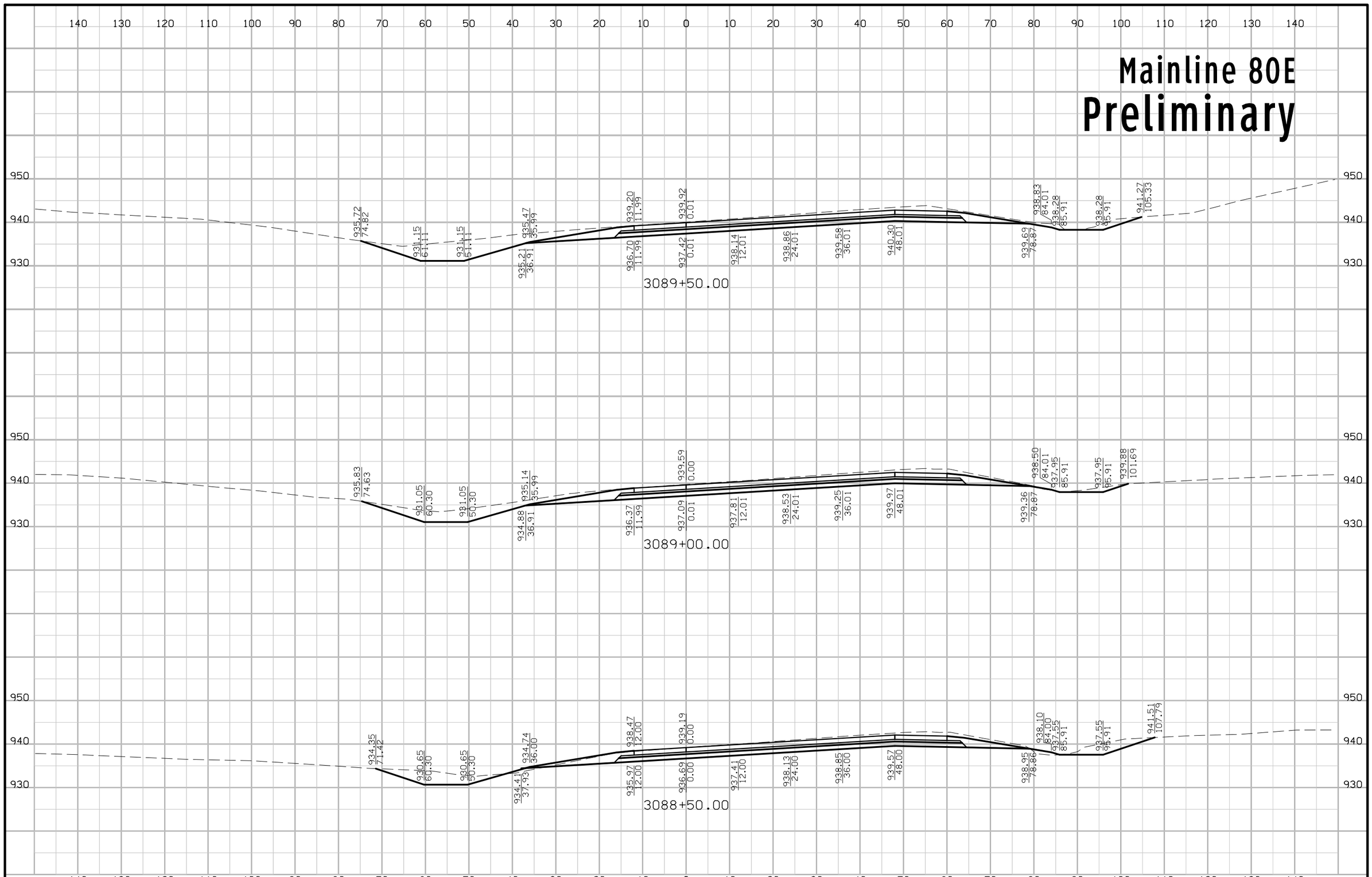
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.50

5:09:39 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E
Preliminary

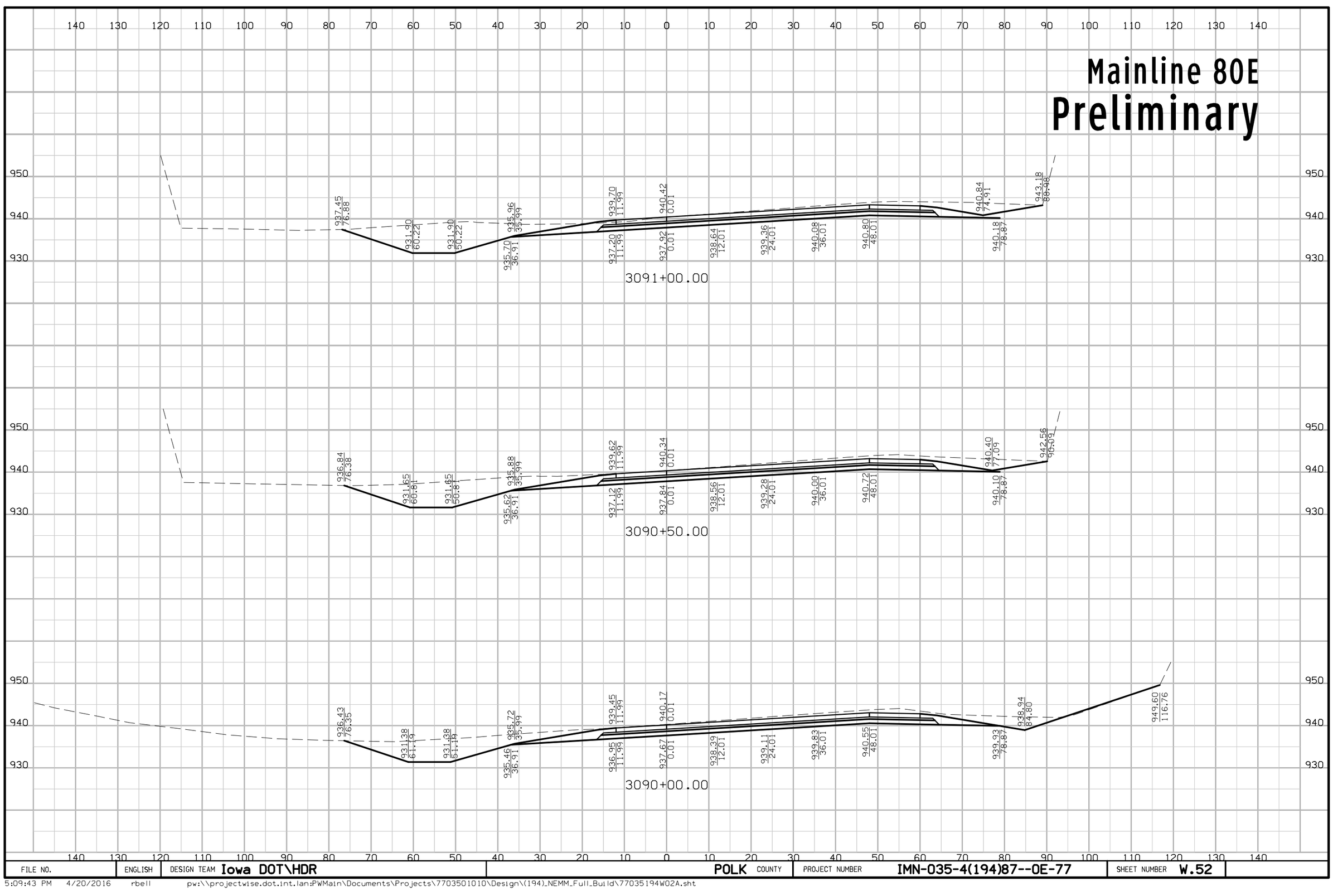


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.51

5:09:41 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194WO2A.sht

Mainline 80E

Preliminary

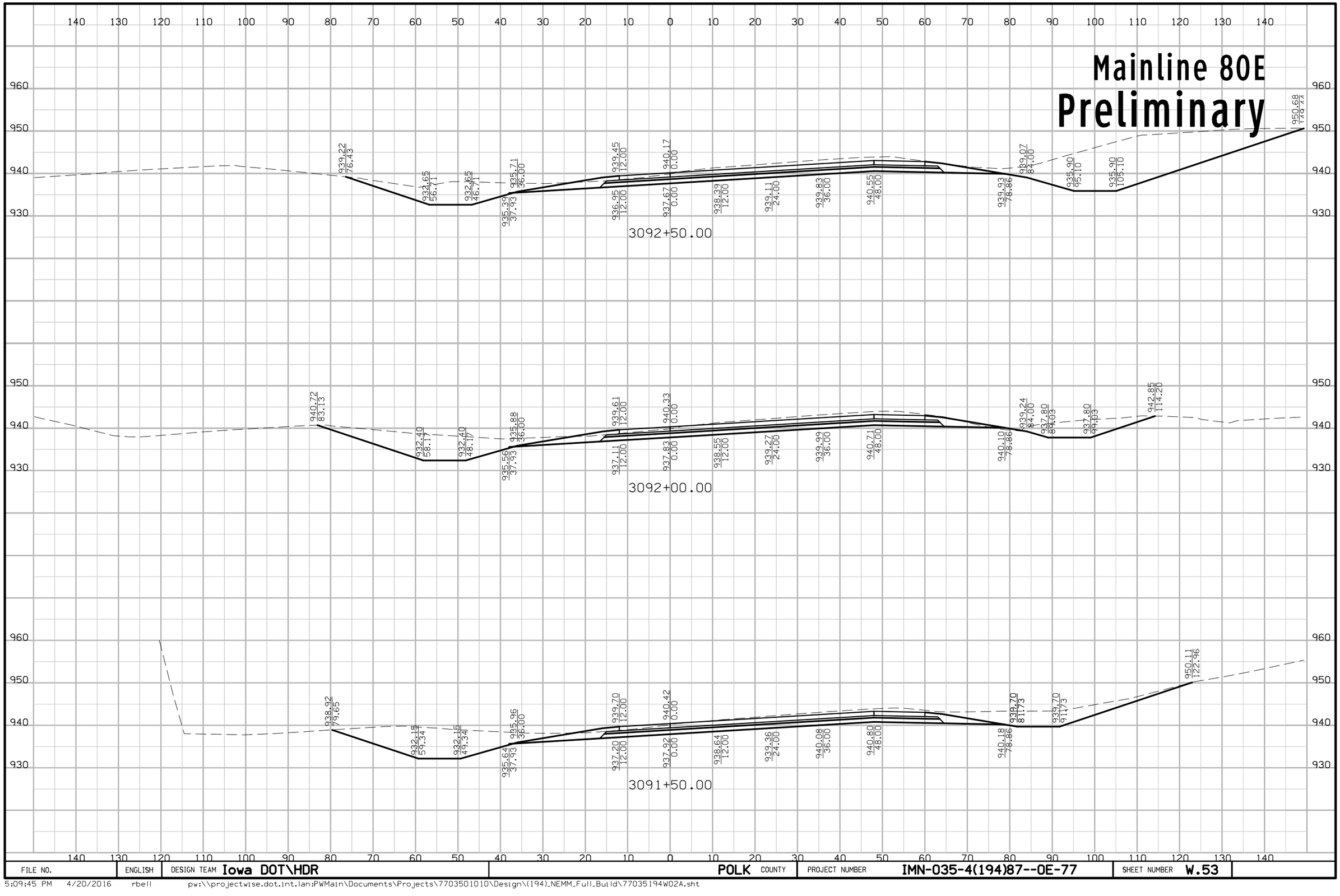


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.52

5:09:43 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

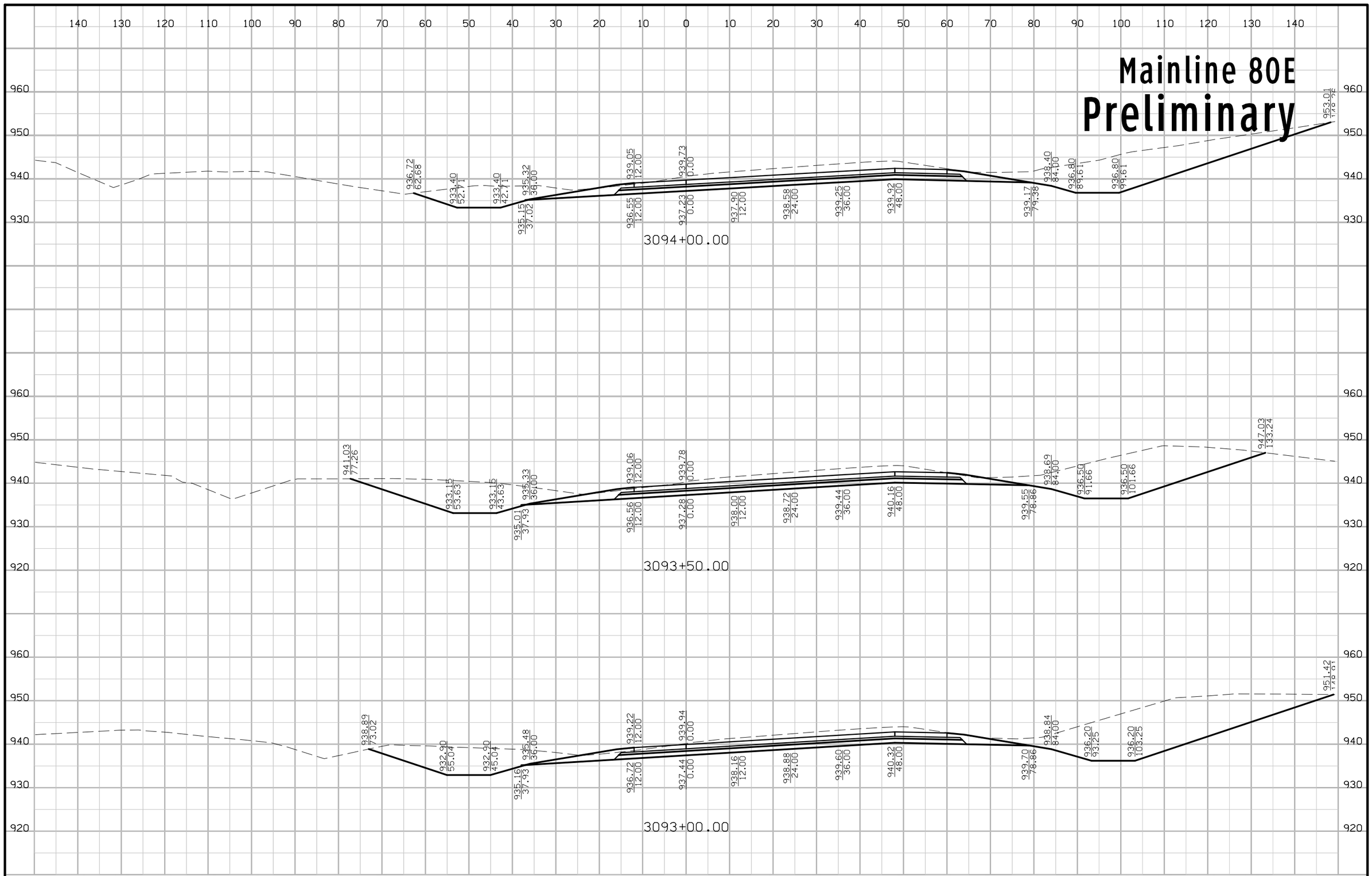


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.53

5:09:45 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

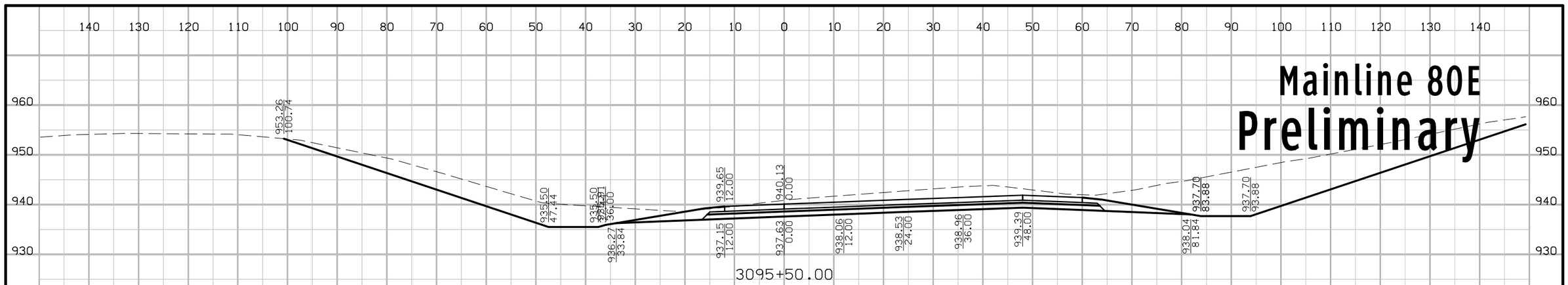


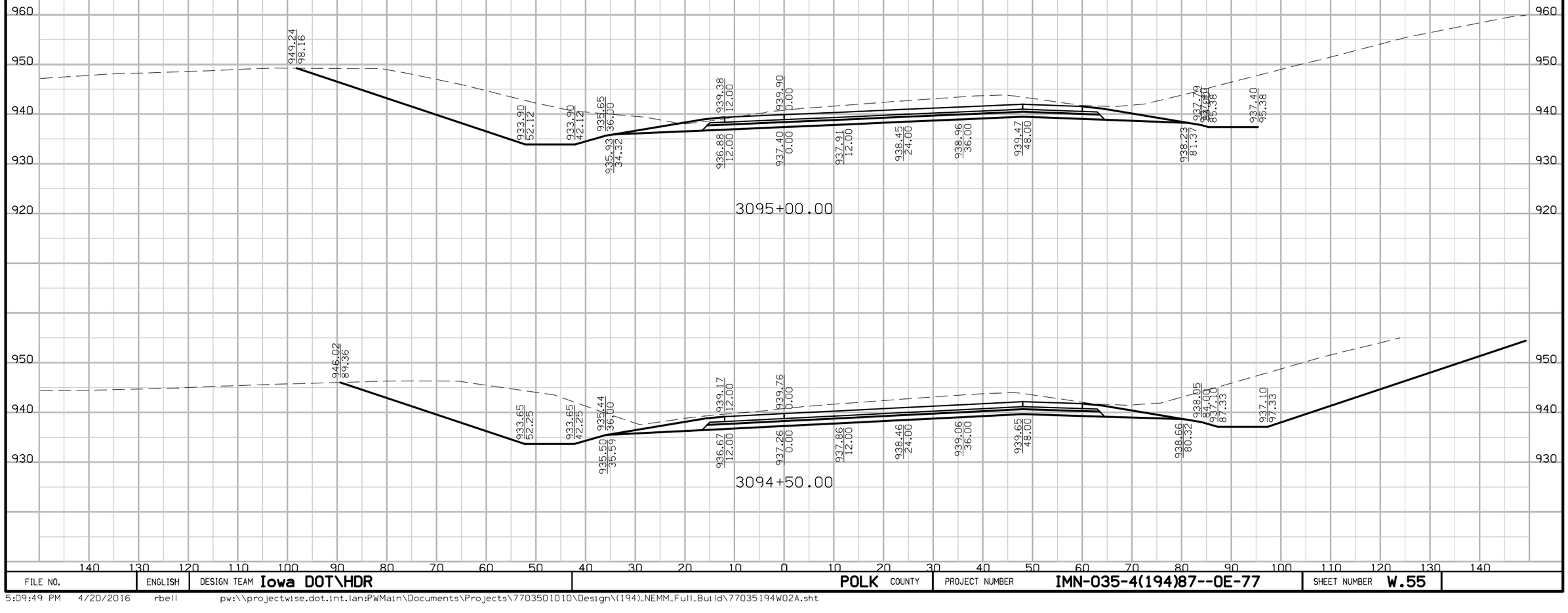
FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.54

5:09:47 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

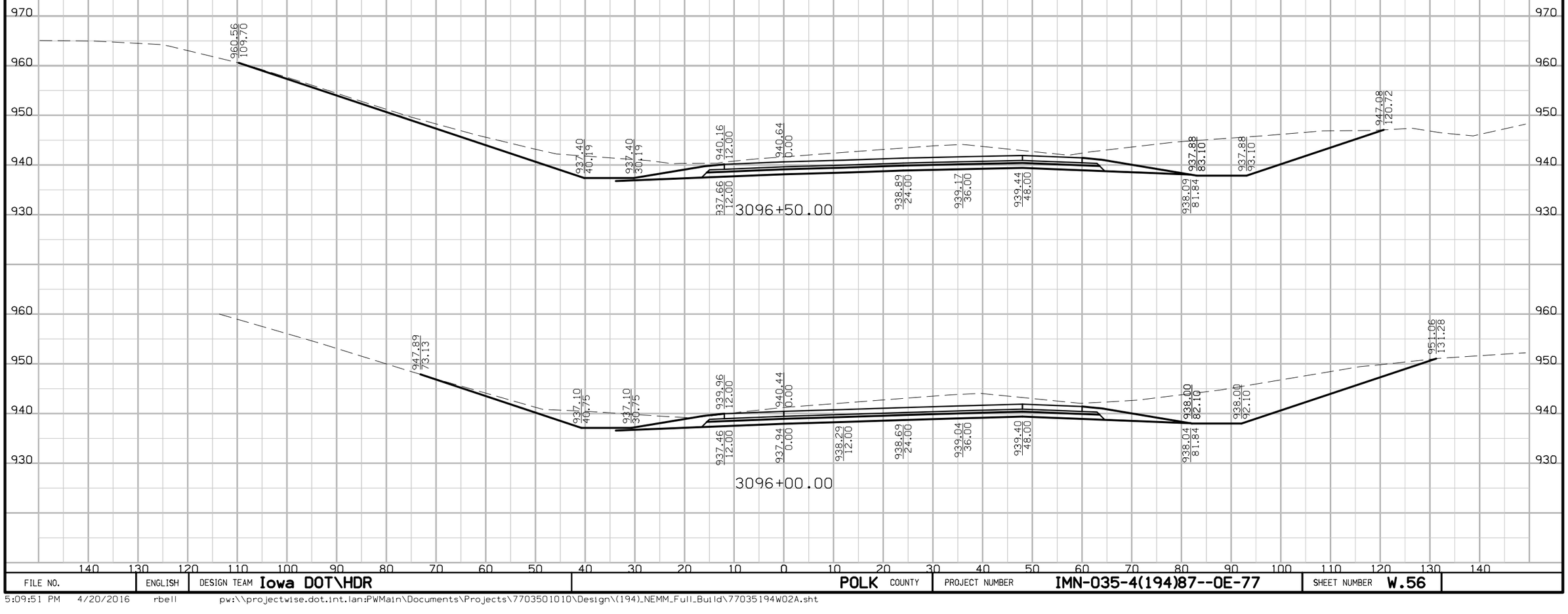




FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.55

5:09:49 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E
Preliminary

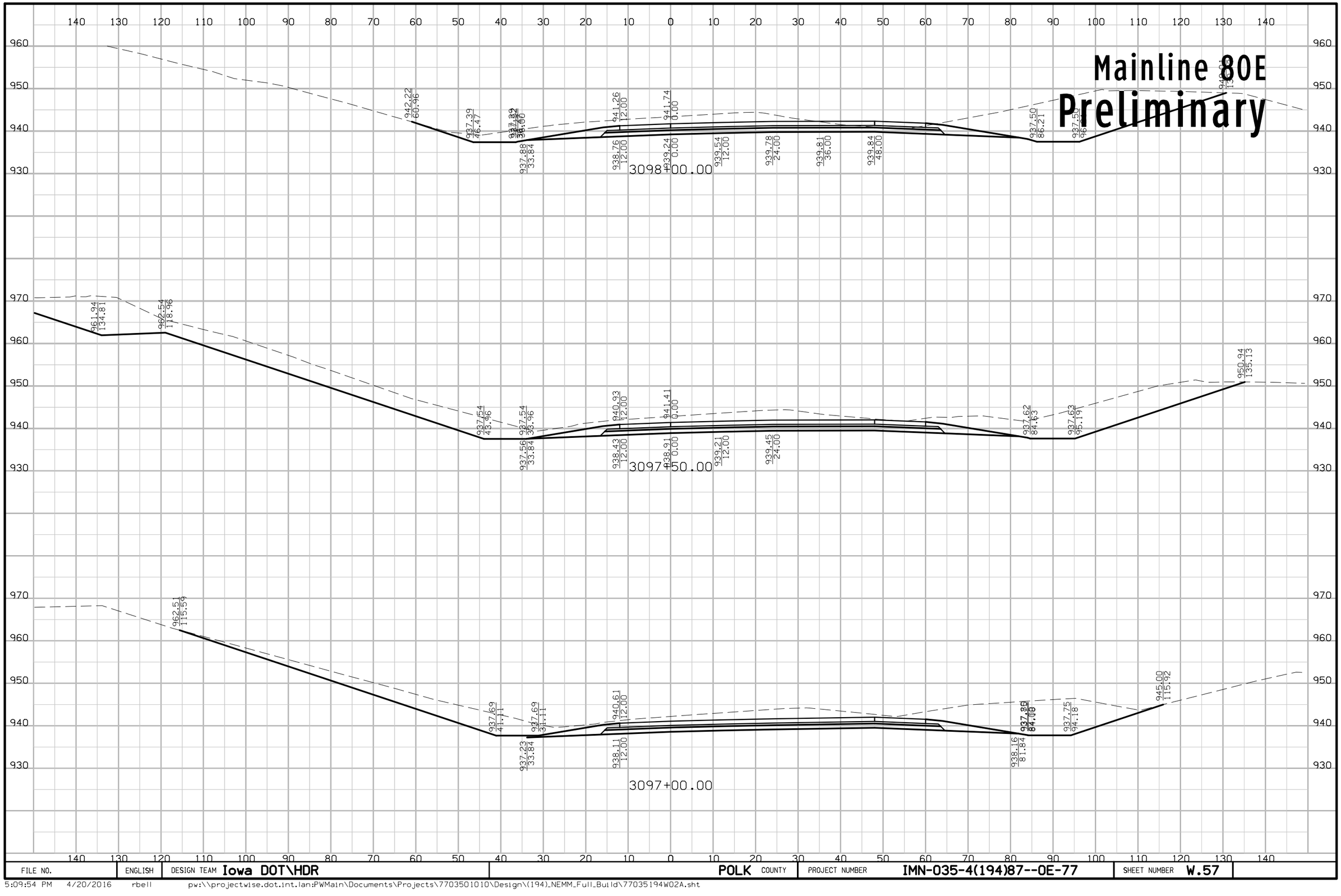


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.56

5:09:51 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194WO2A.sht

Mainline 80E

Preliminary

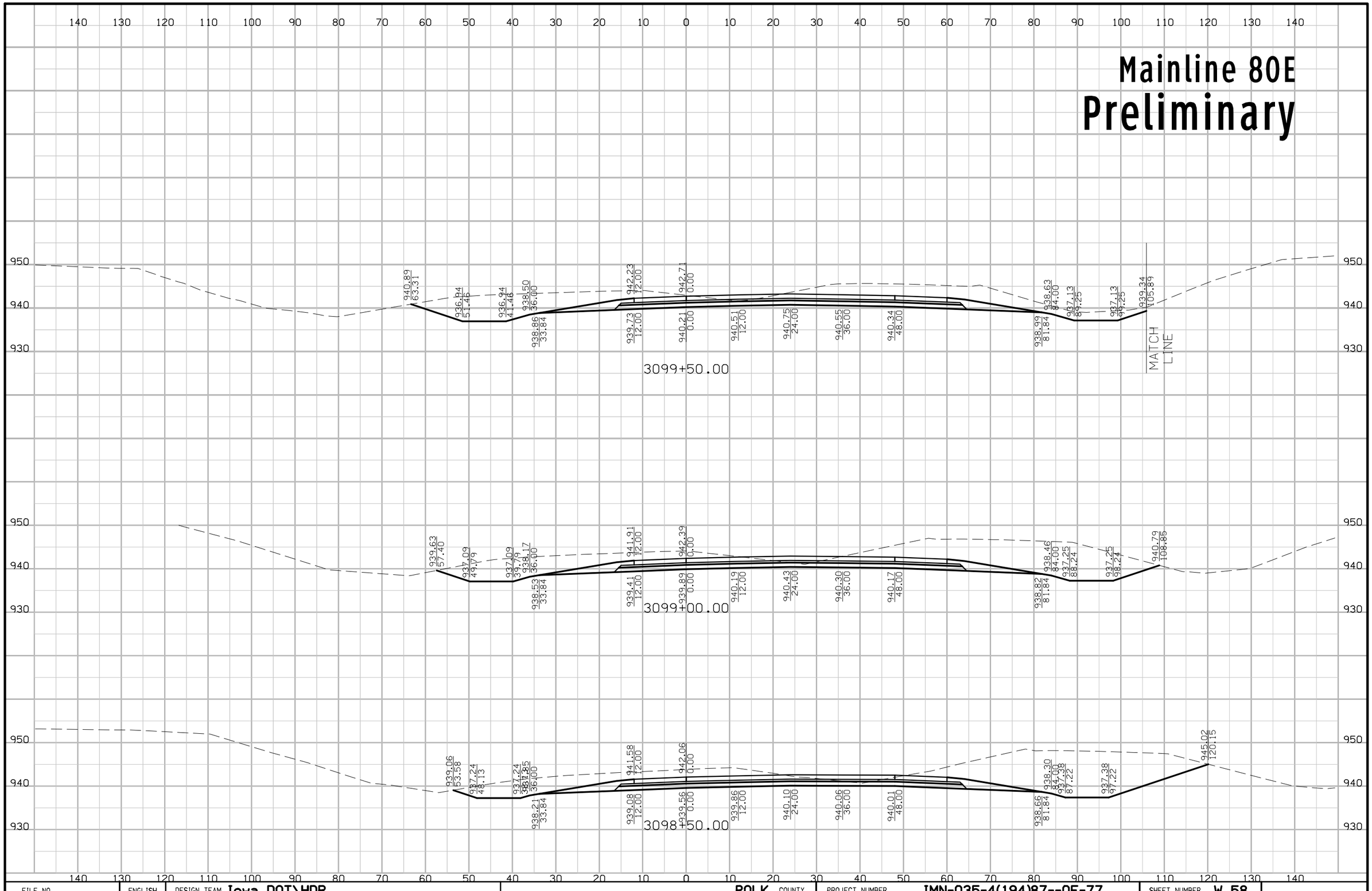


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.57

5:09:54 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

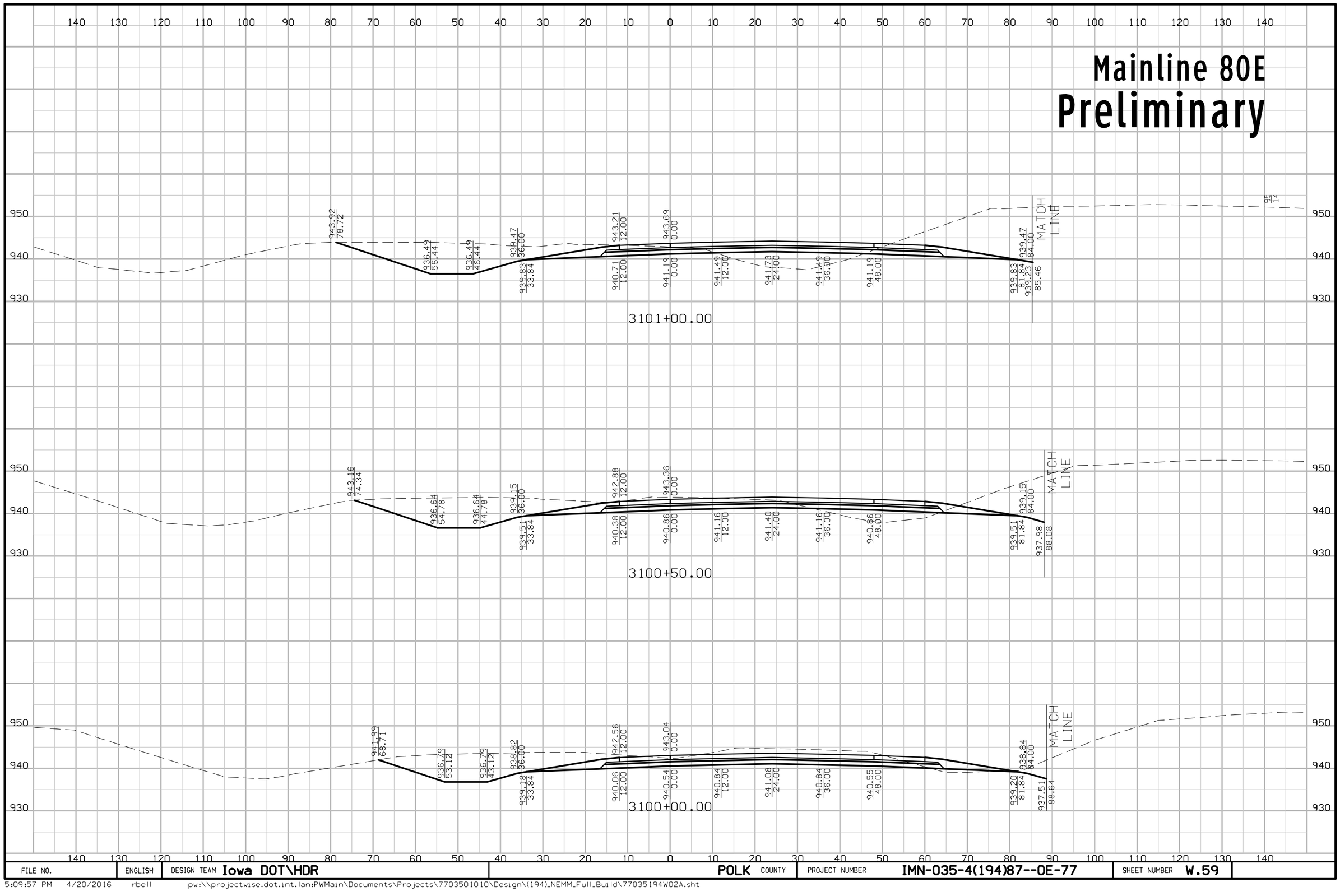


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.58

5:09:55 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

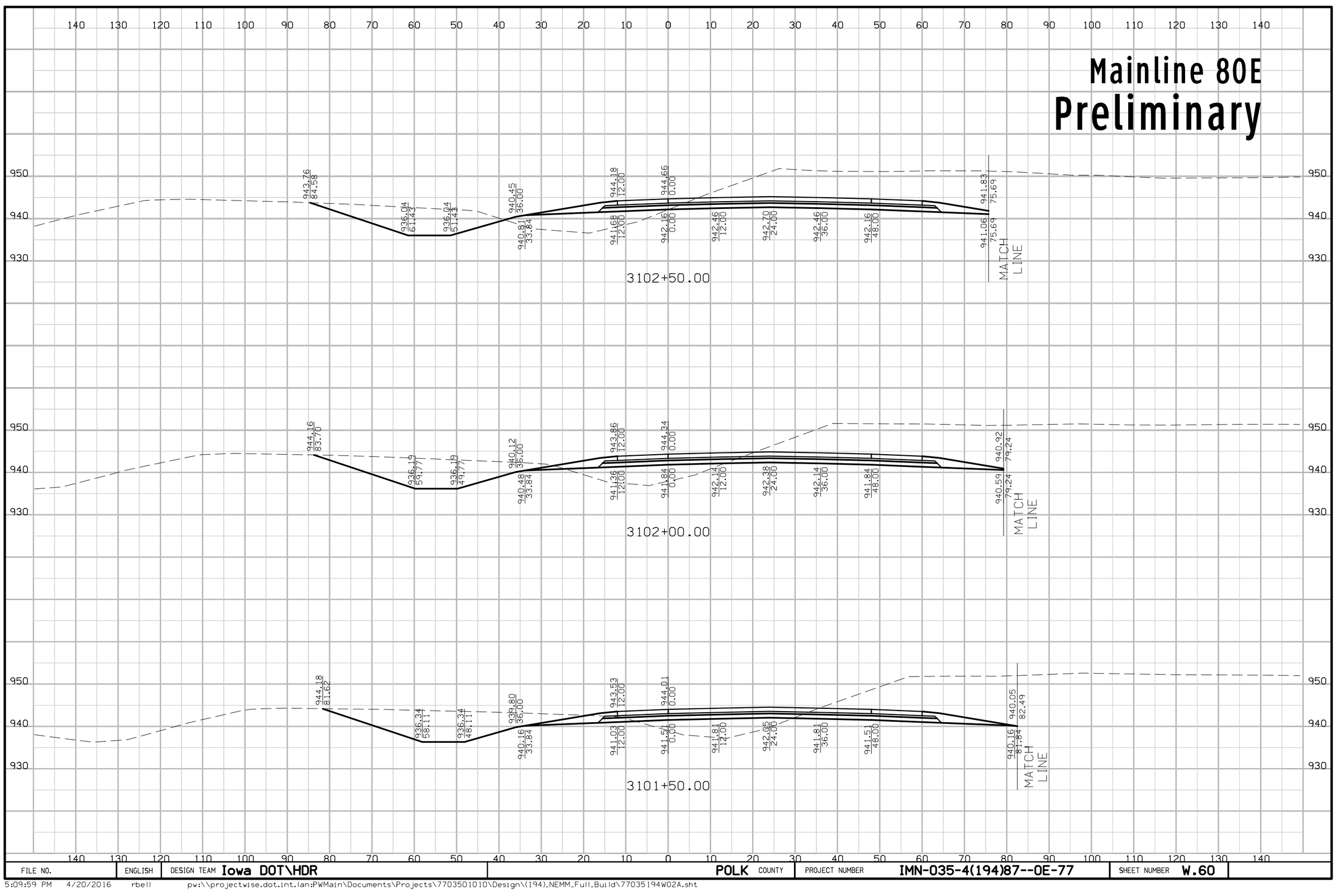
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.59

5:09:57 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E
Preliminary

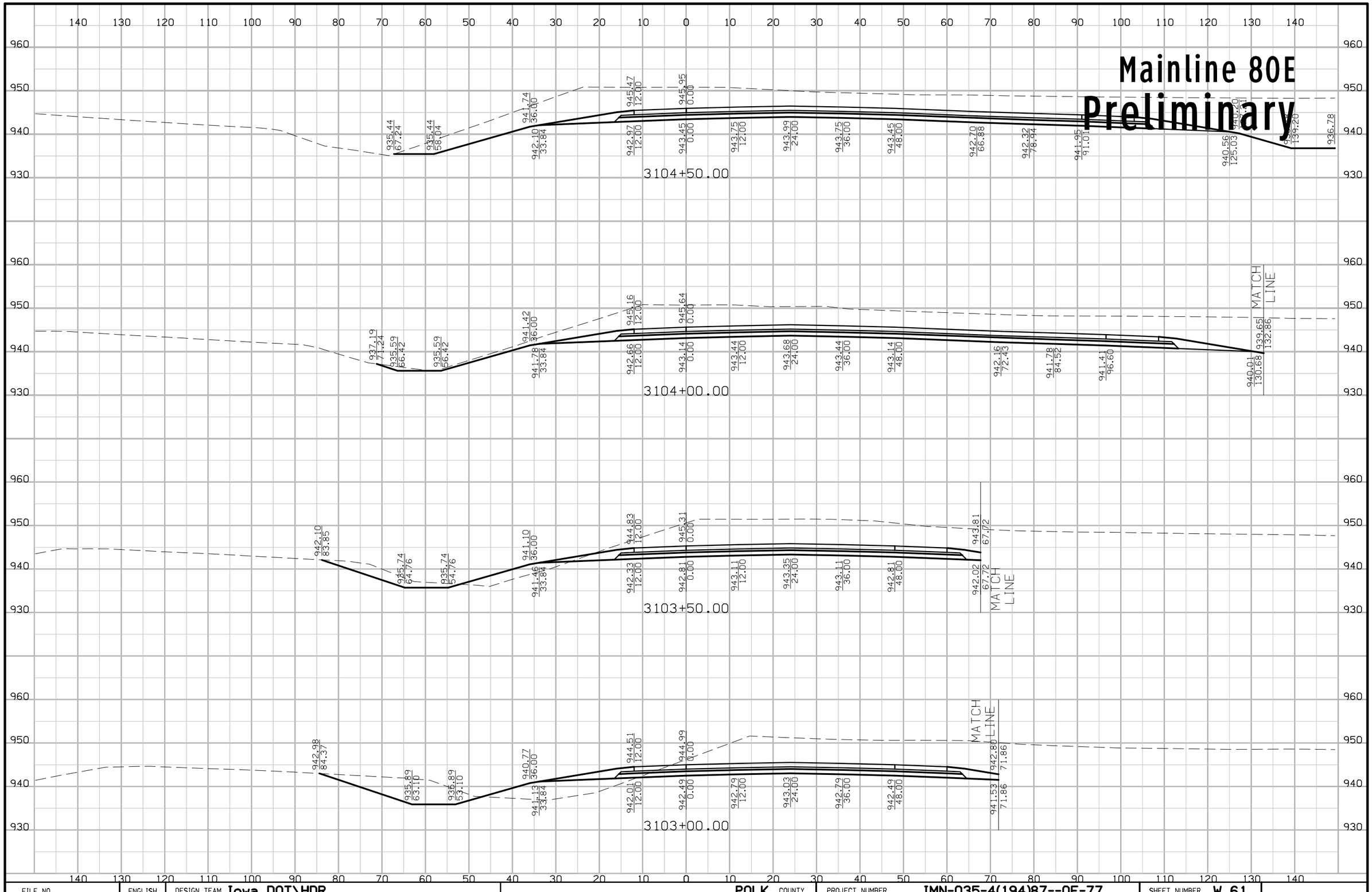


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.60

5:09:59 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

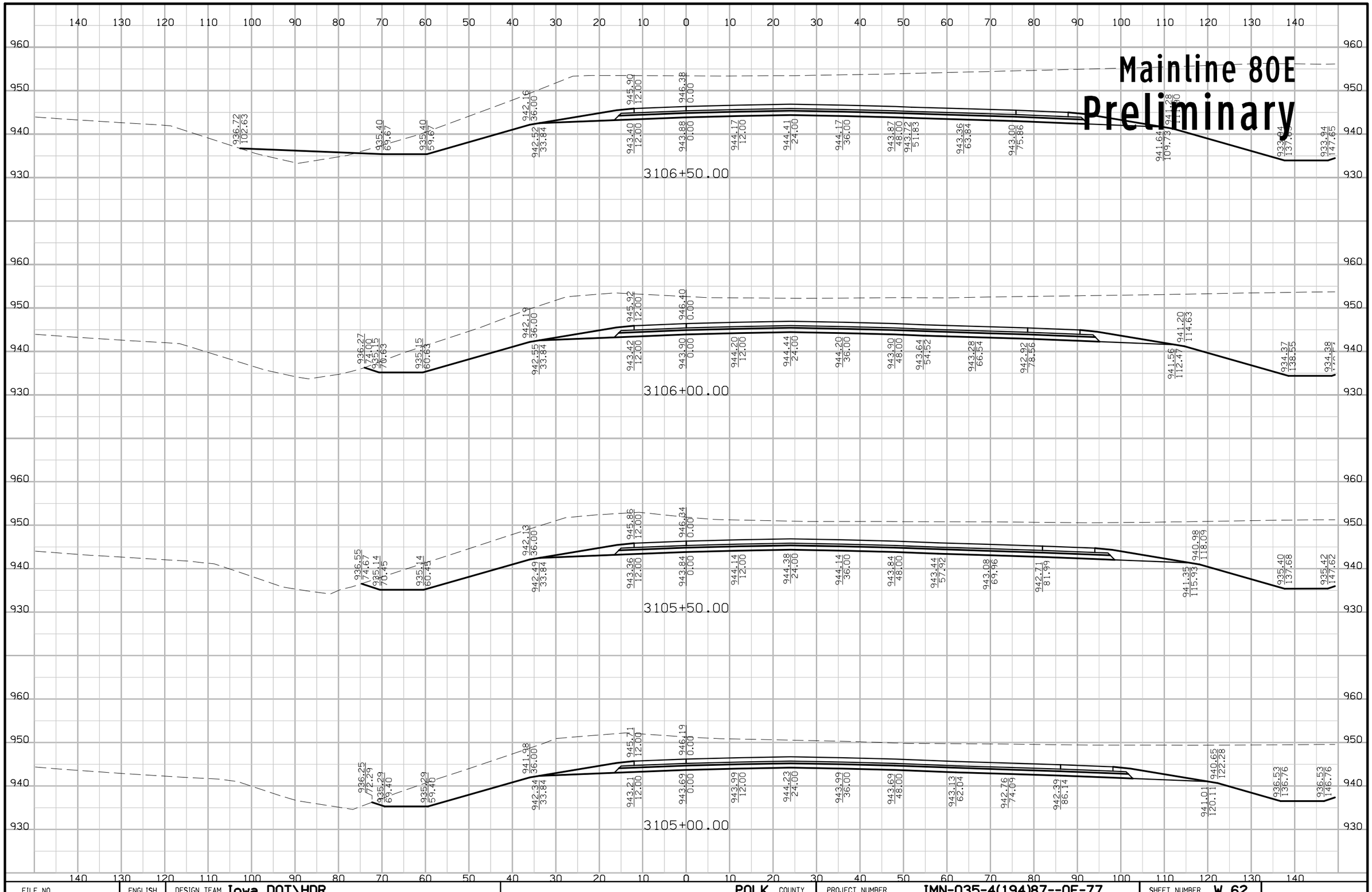


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.61

5:10:01 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

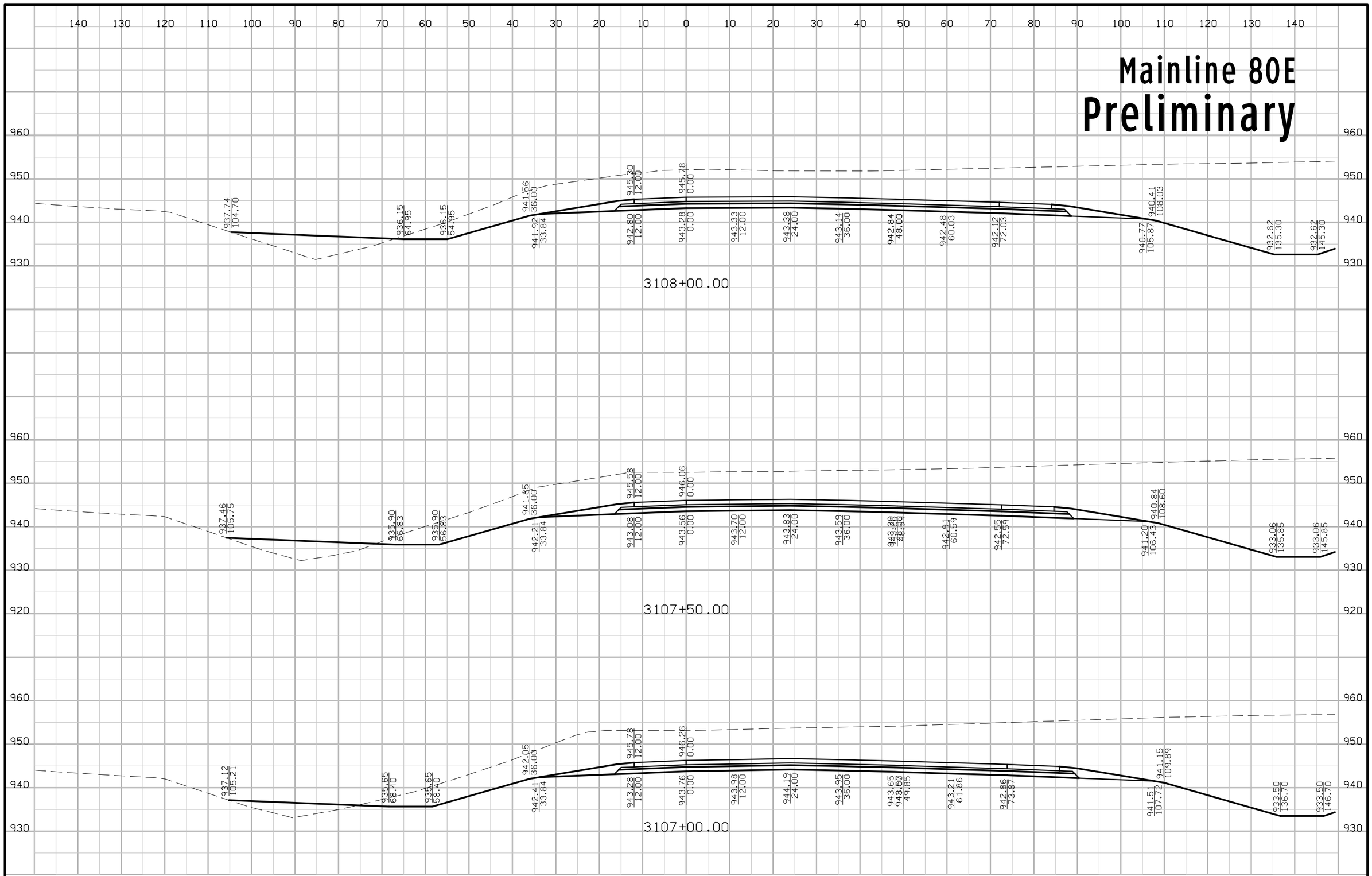


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.62

5:10:04 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

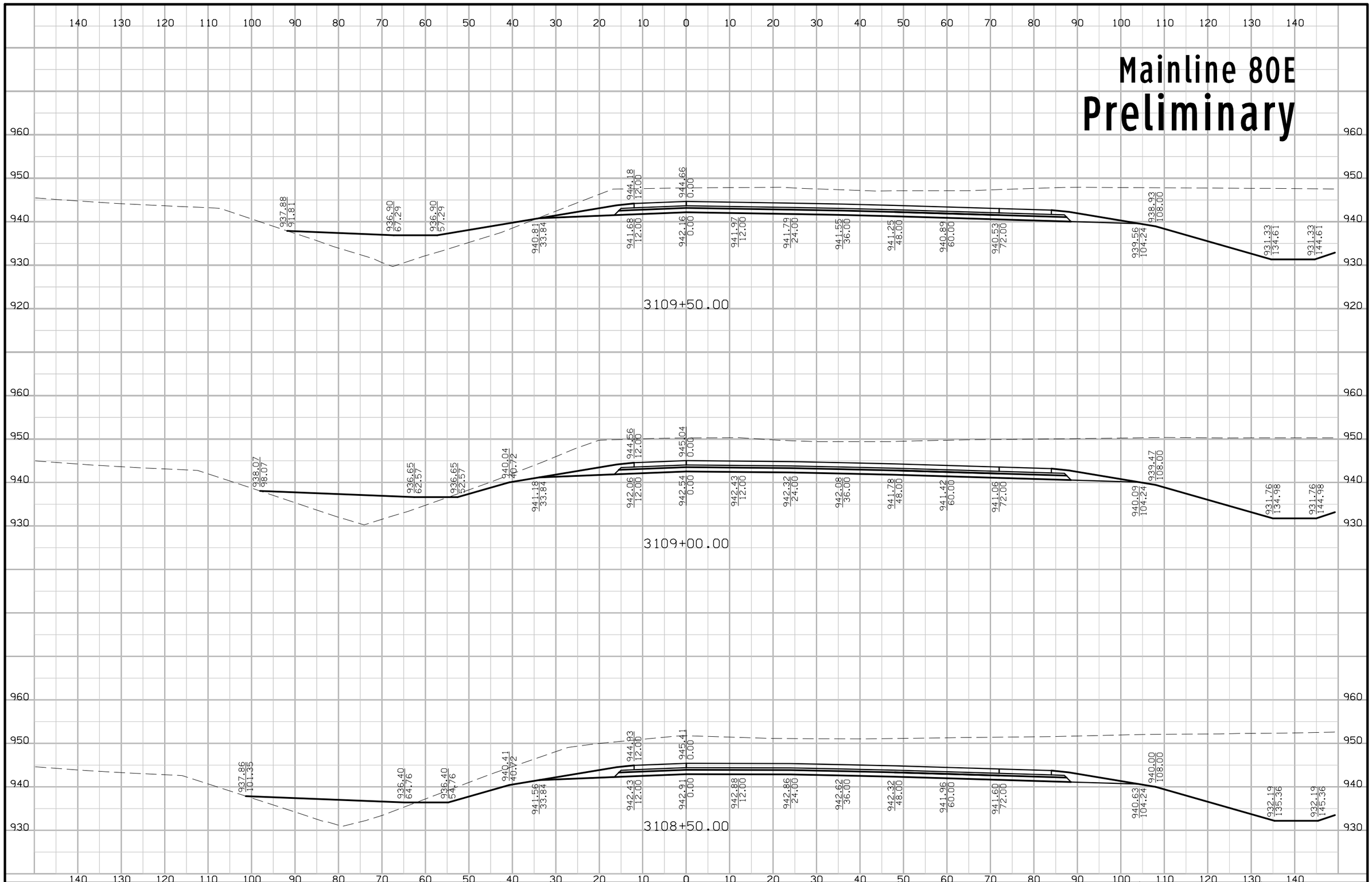


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.63

5:10:06 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

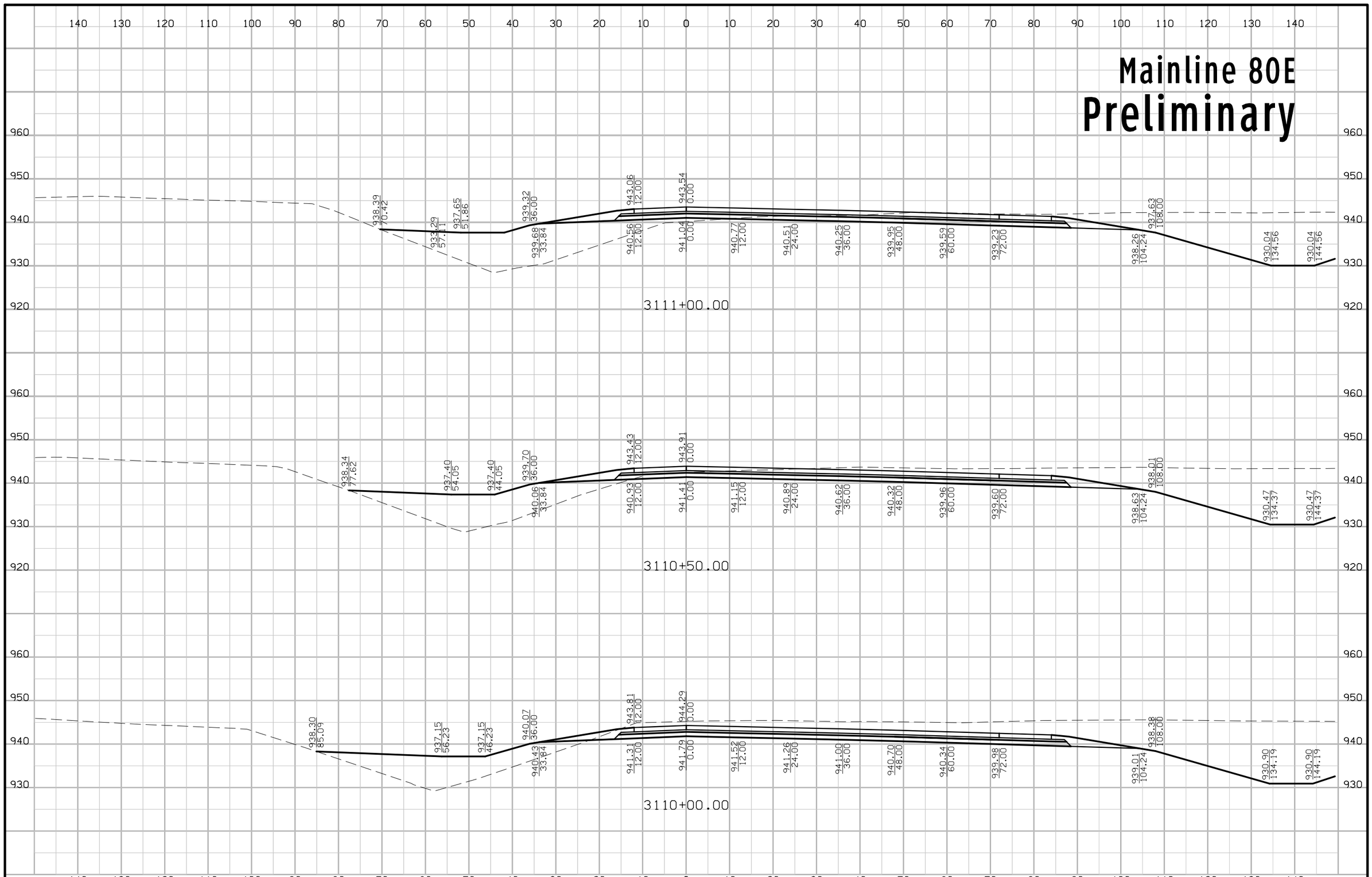


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.64

5:10:08 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

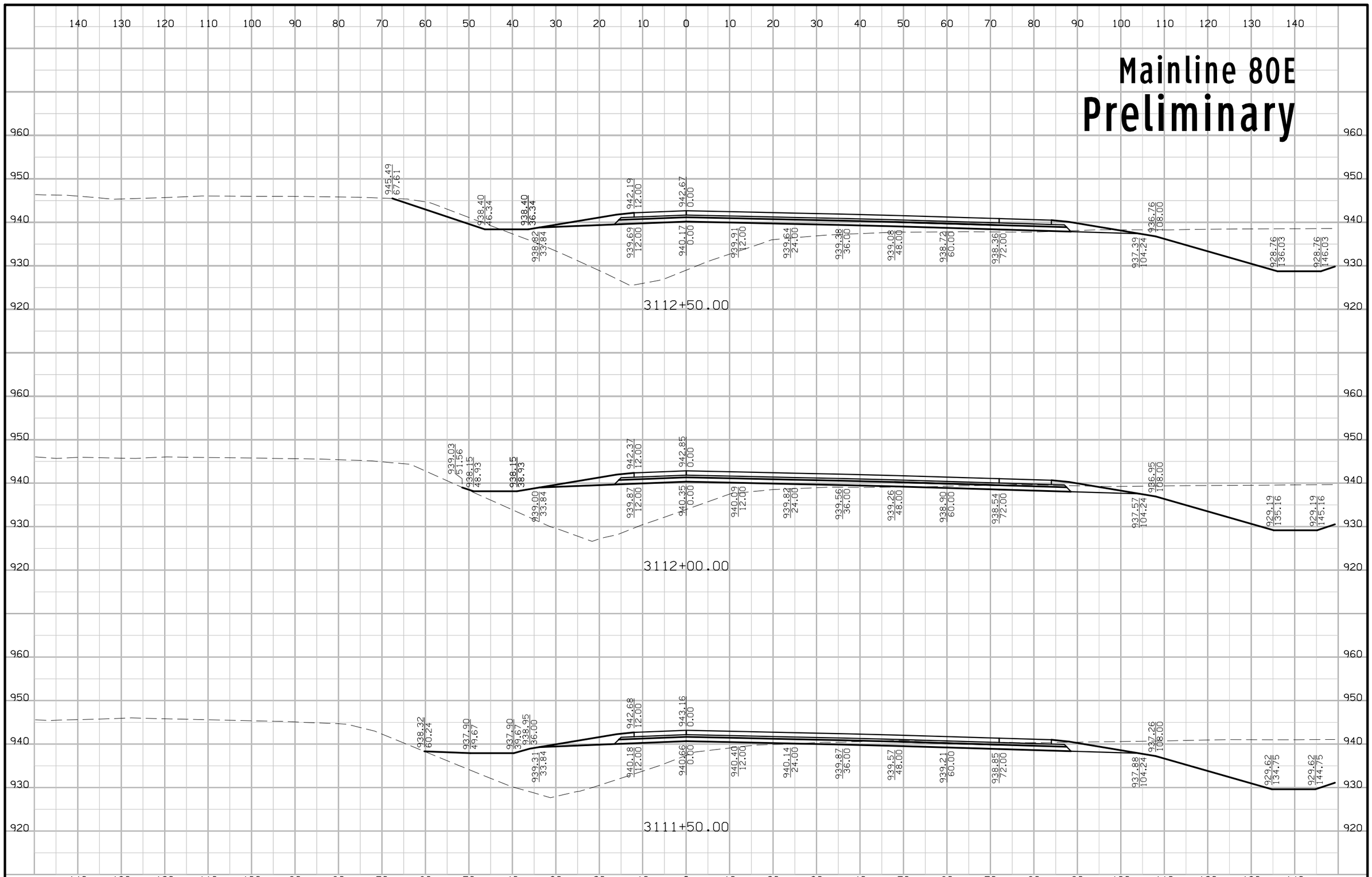
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.65

5:10:09 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E
Preliminary

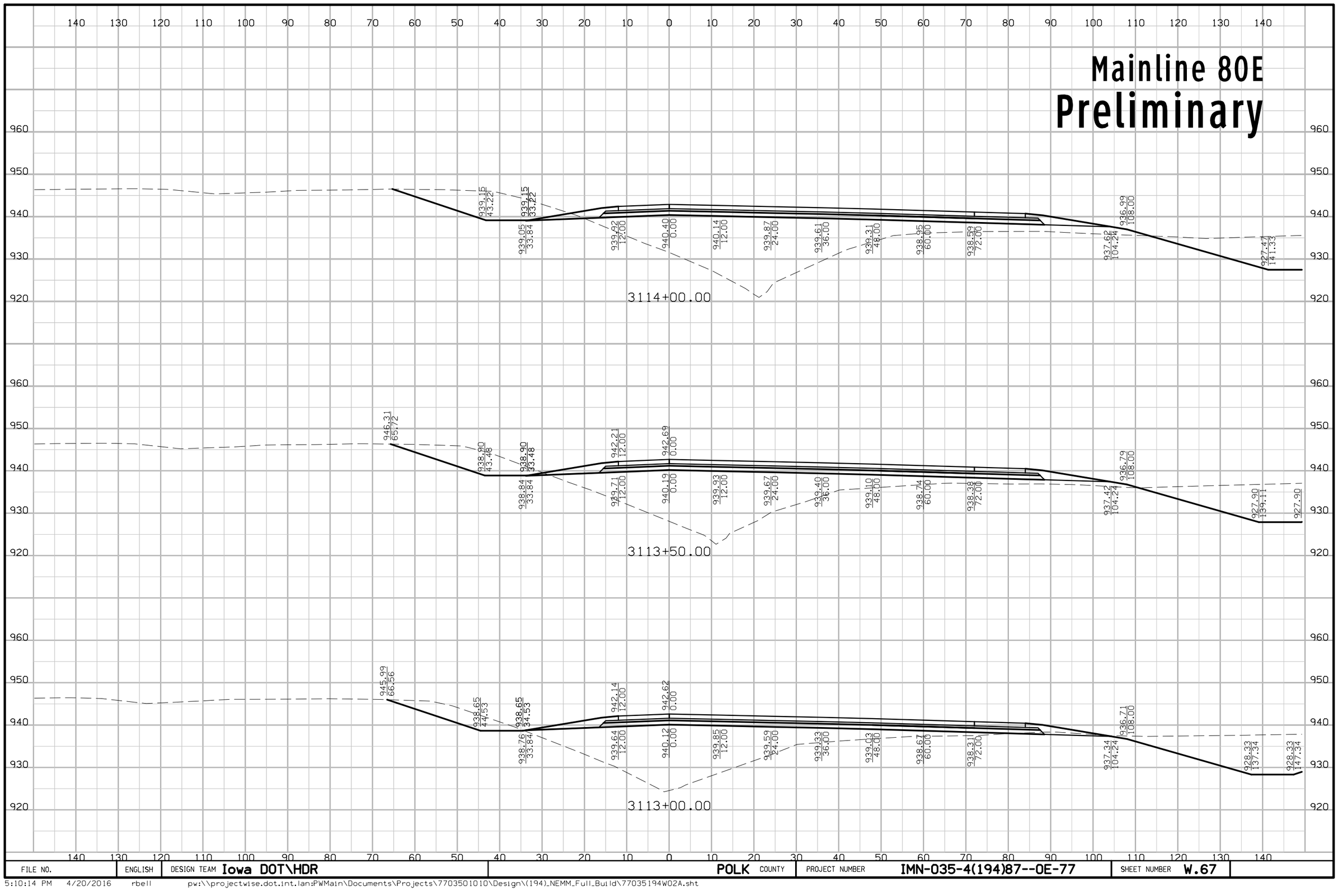


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.66

5:10:12 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

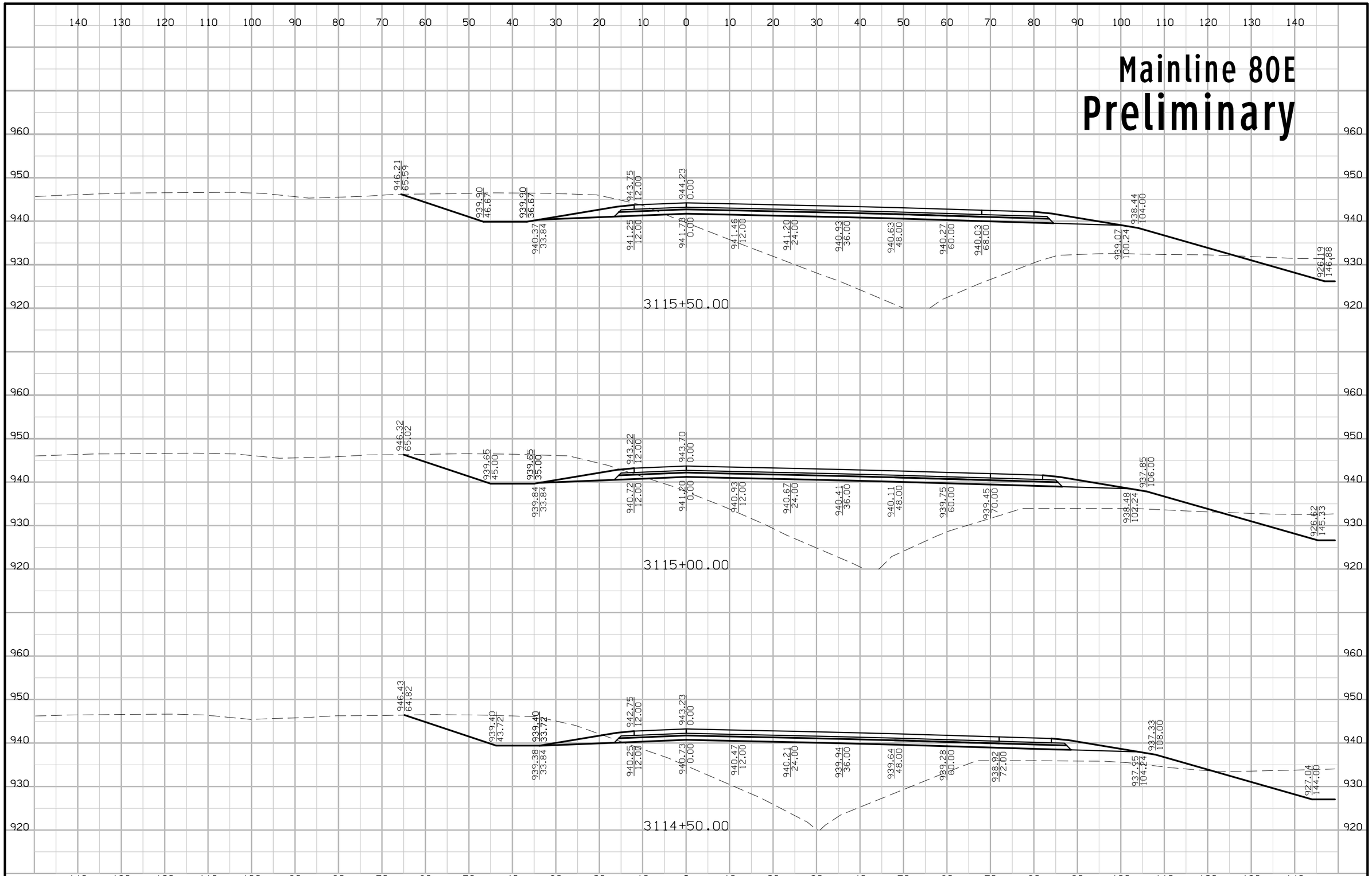
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.67

5:10:14 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E
Preliminary

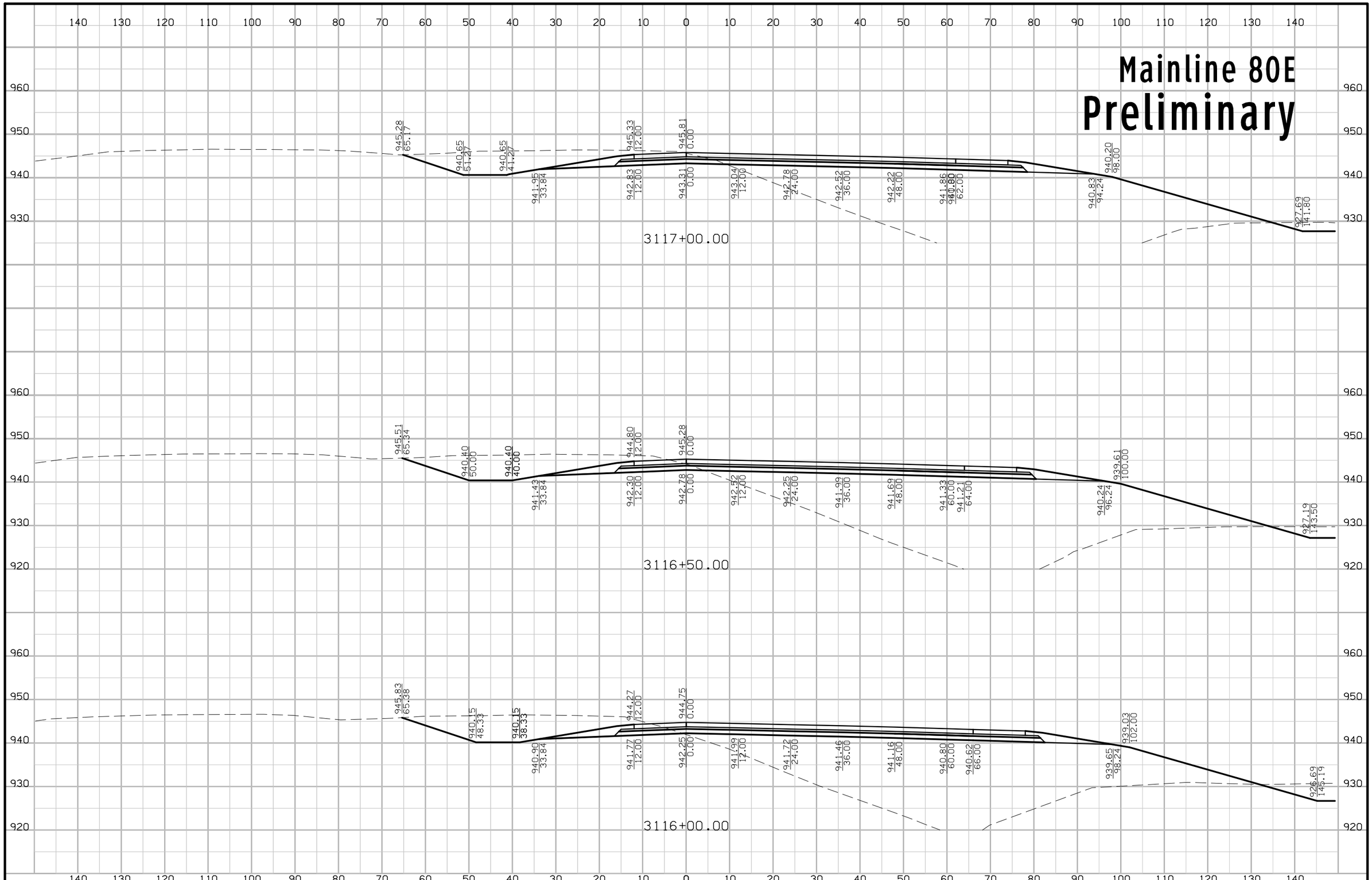


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.68

5:10:16 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

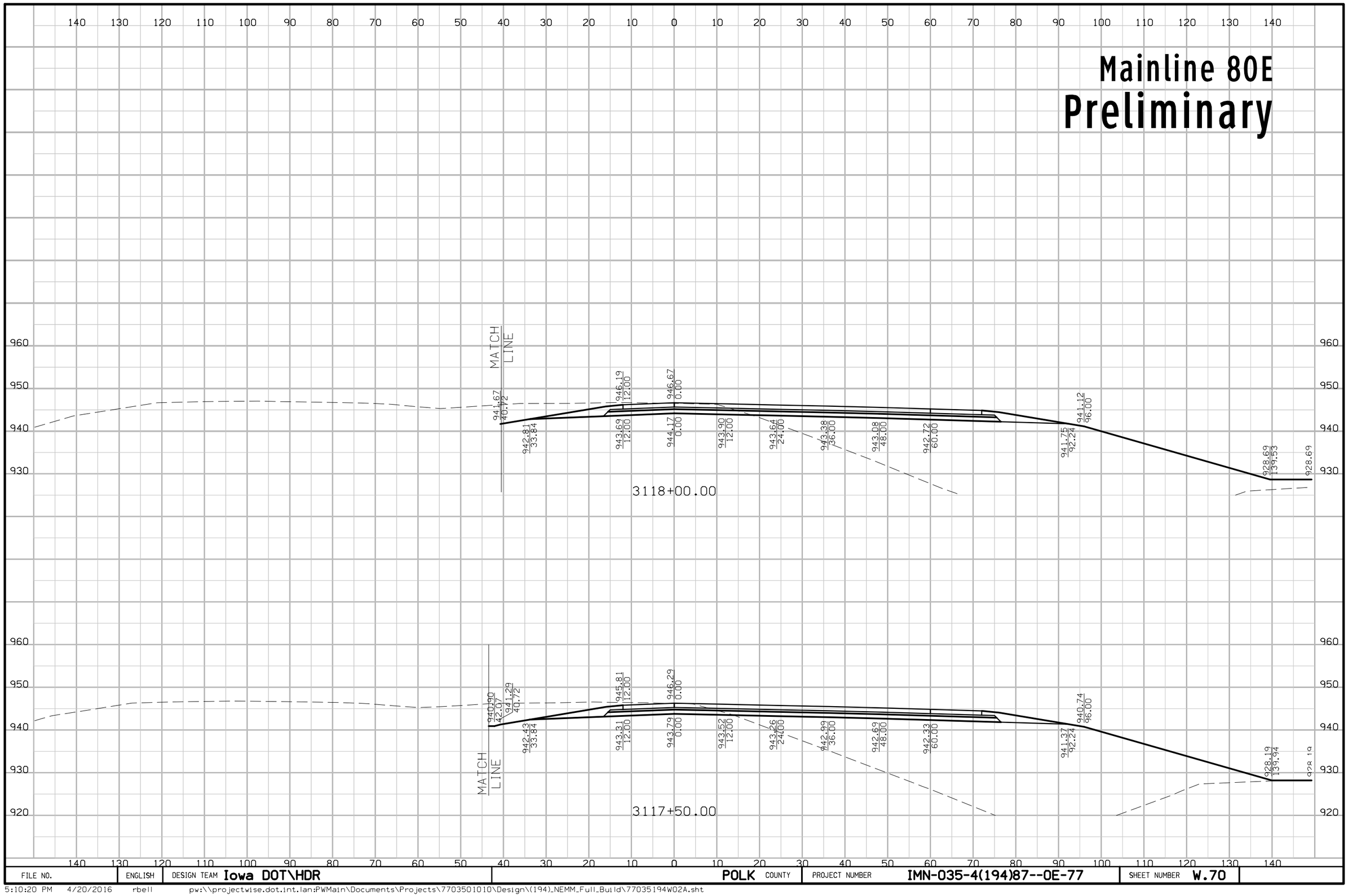


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.69

5:10:18 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

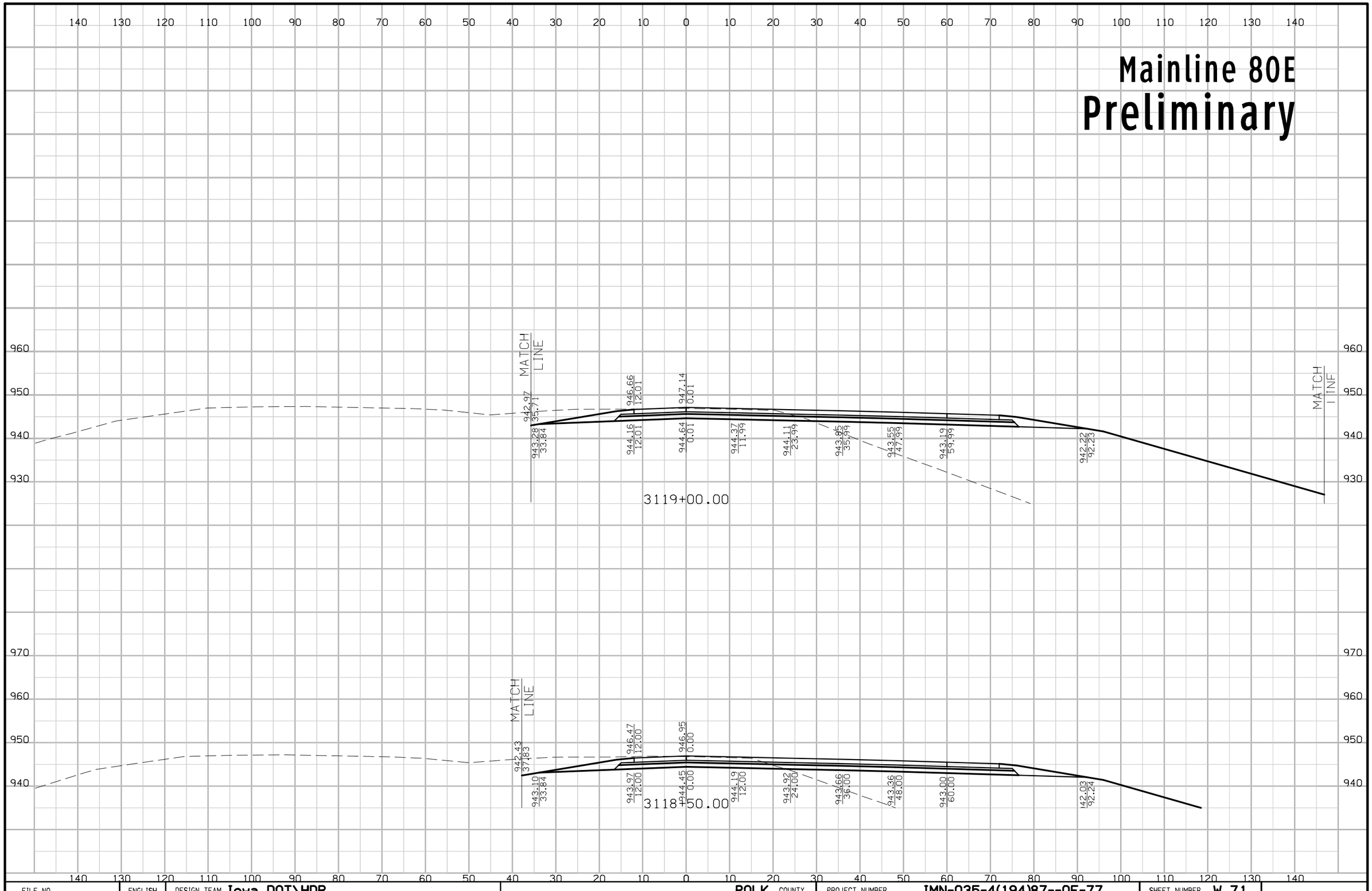


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.70

5:10:20 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

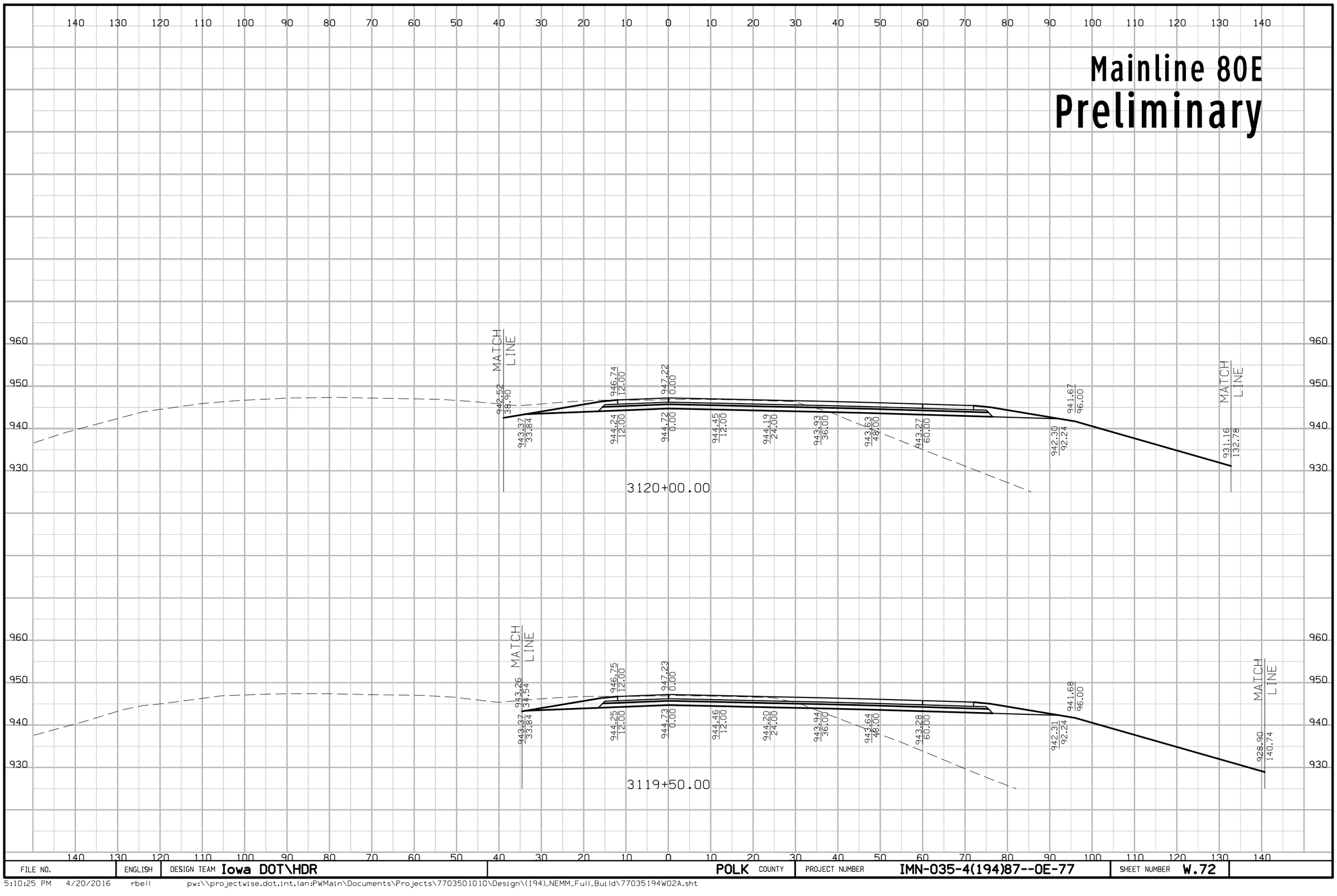
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.71

5:10:22 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E
Preliminary

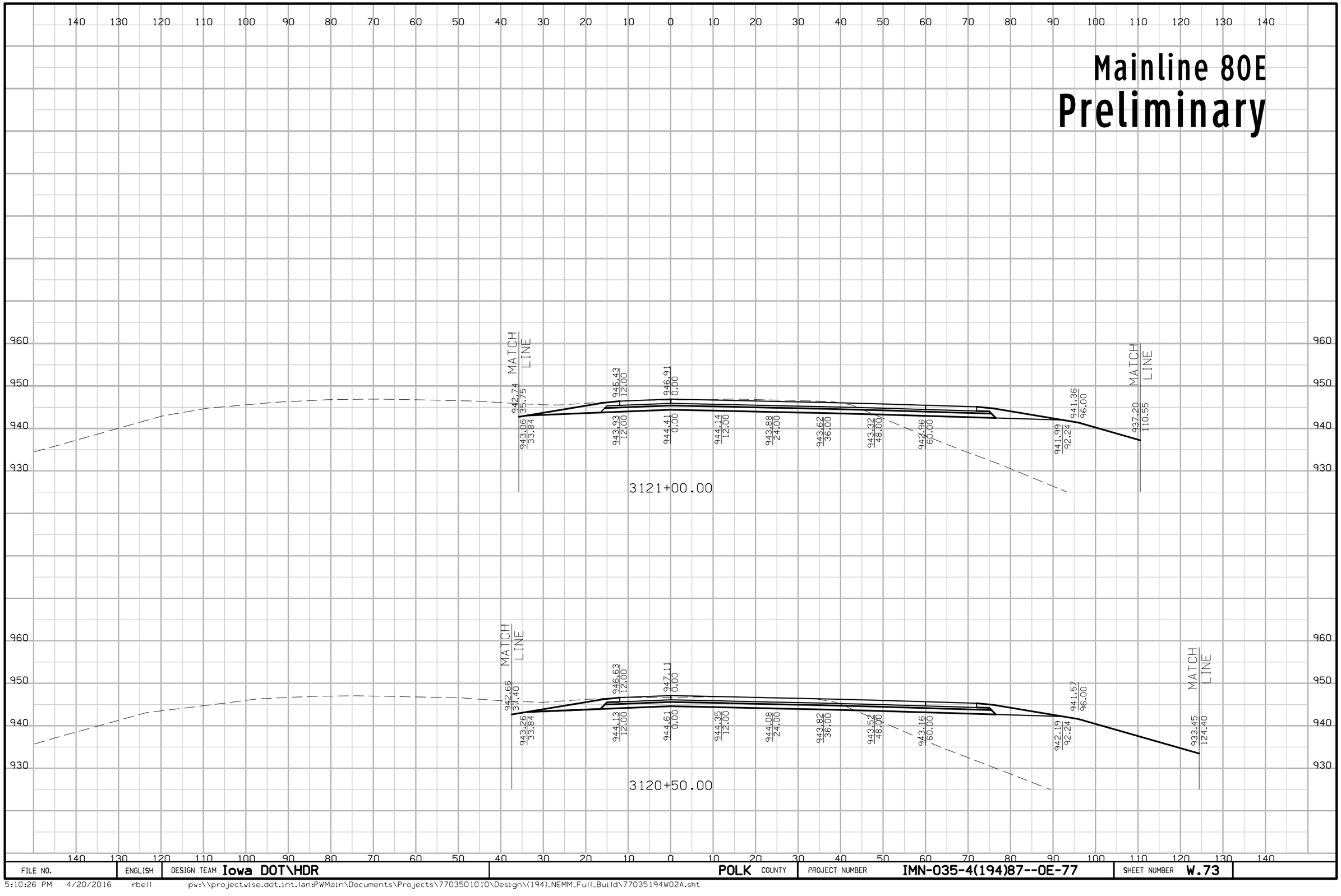


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.72

5:10:25 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

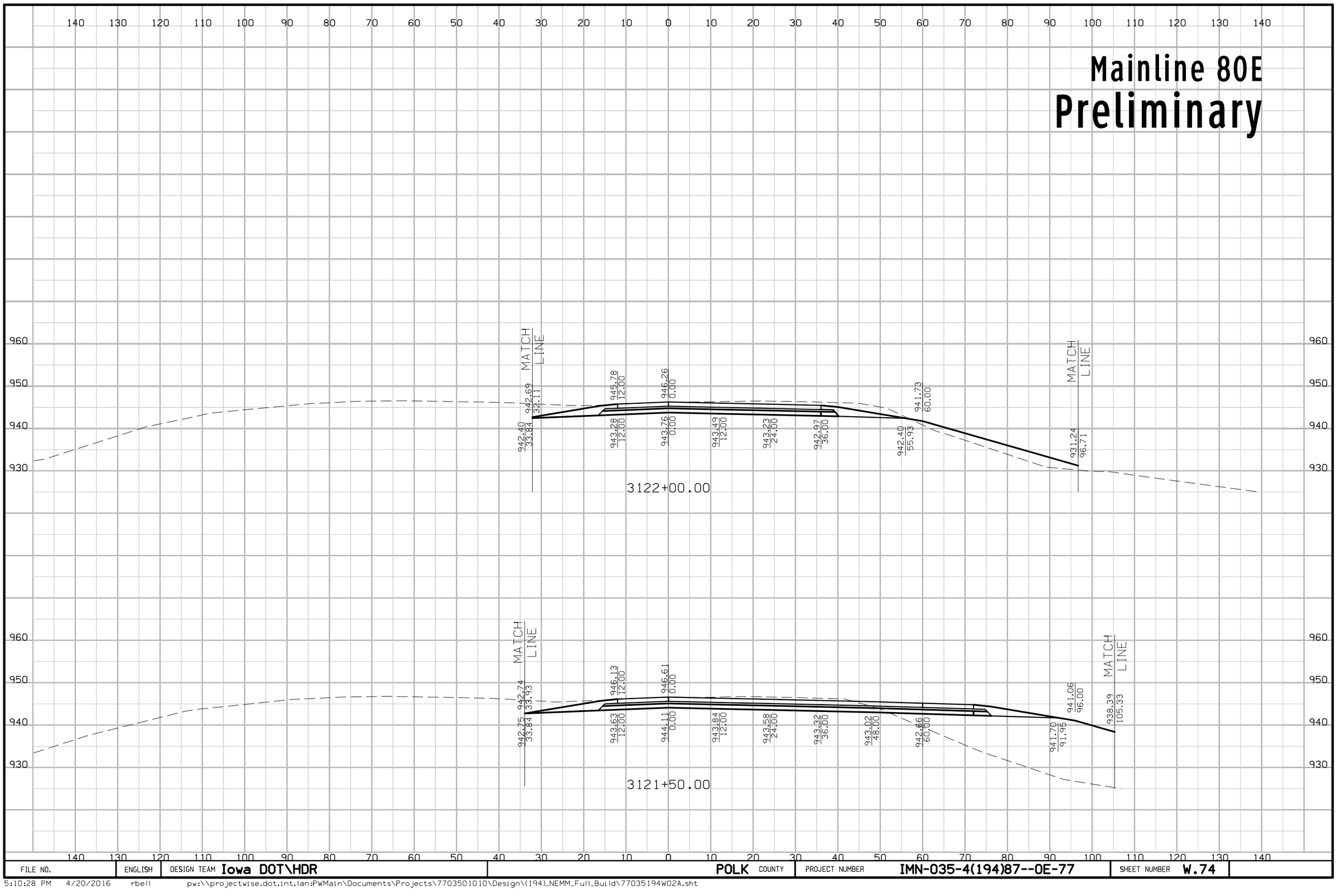
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.73

5:10:26 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E
Preliminary

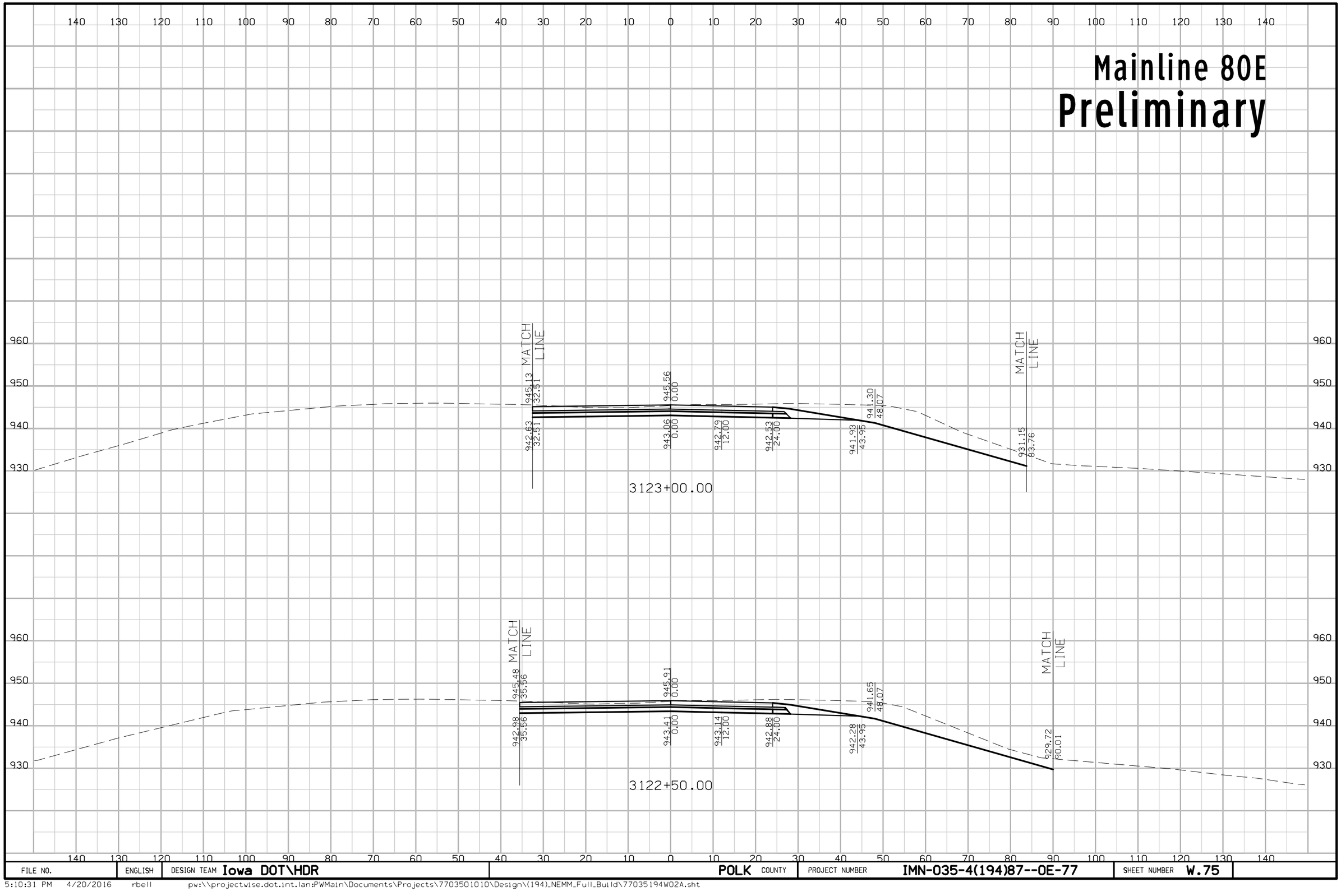


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.74

5:10:28 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

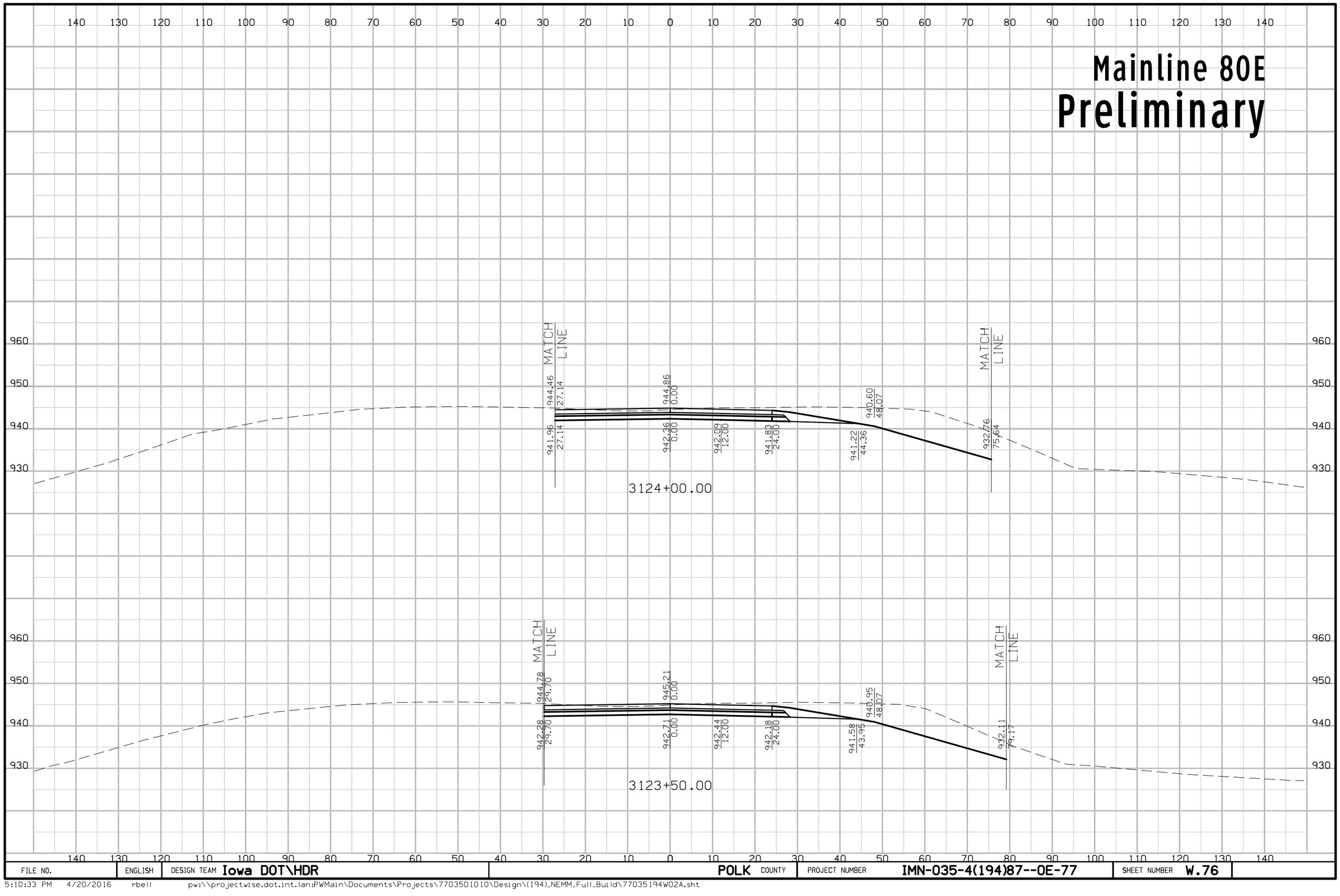


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.75

5:10:31 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

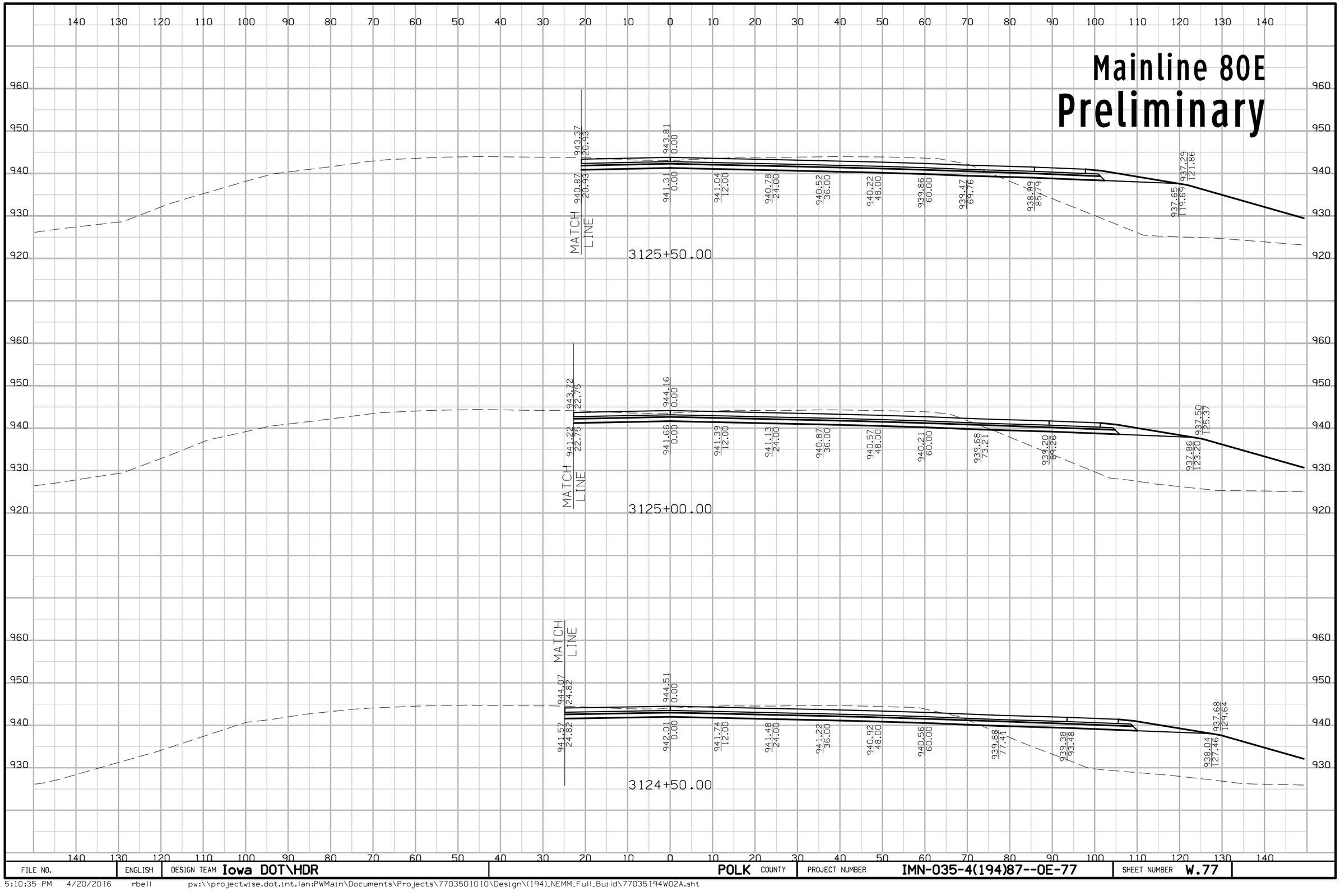
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.76

5:10:33 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E
Preliminary

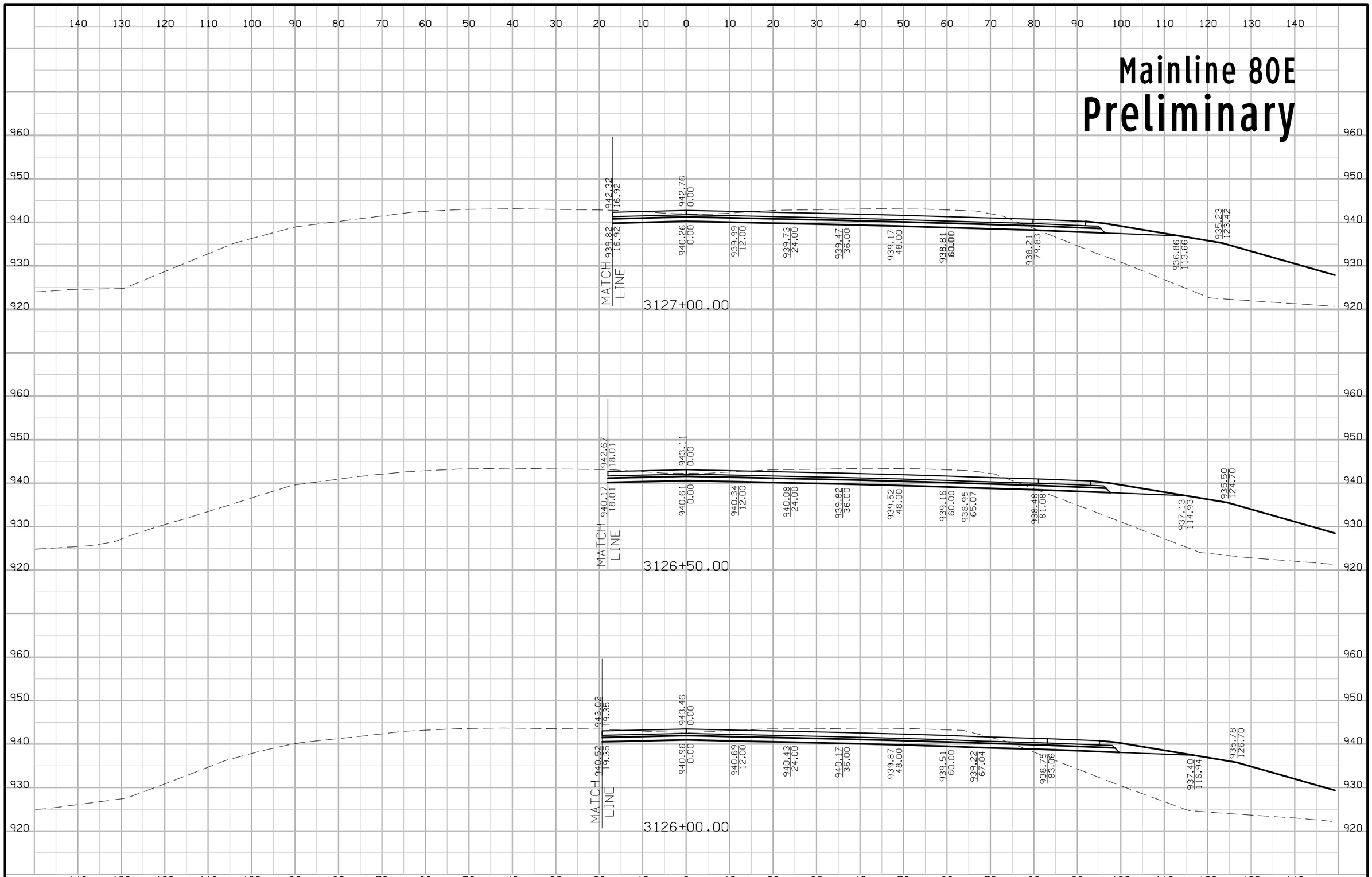


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.77

5:10:35 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

Preliminary

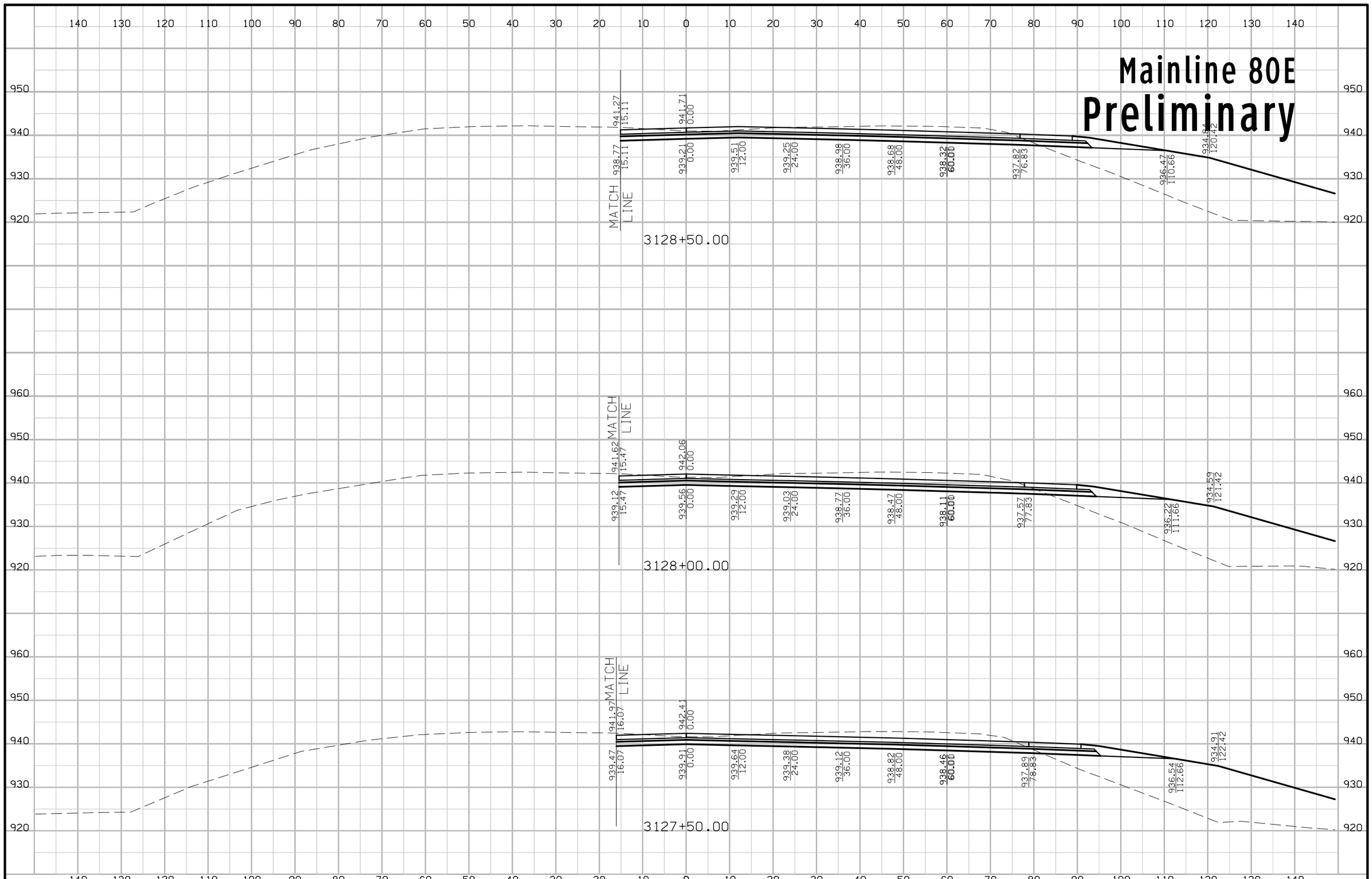


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.78

5:10:37 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80E

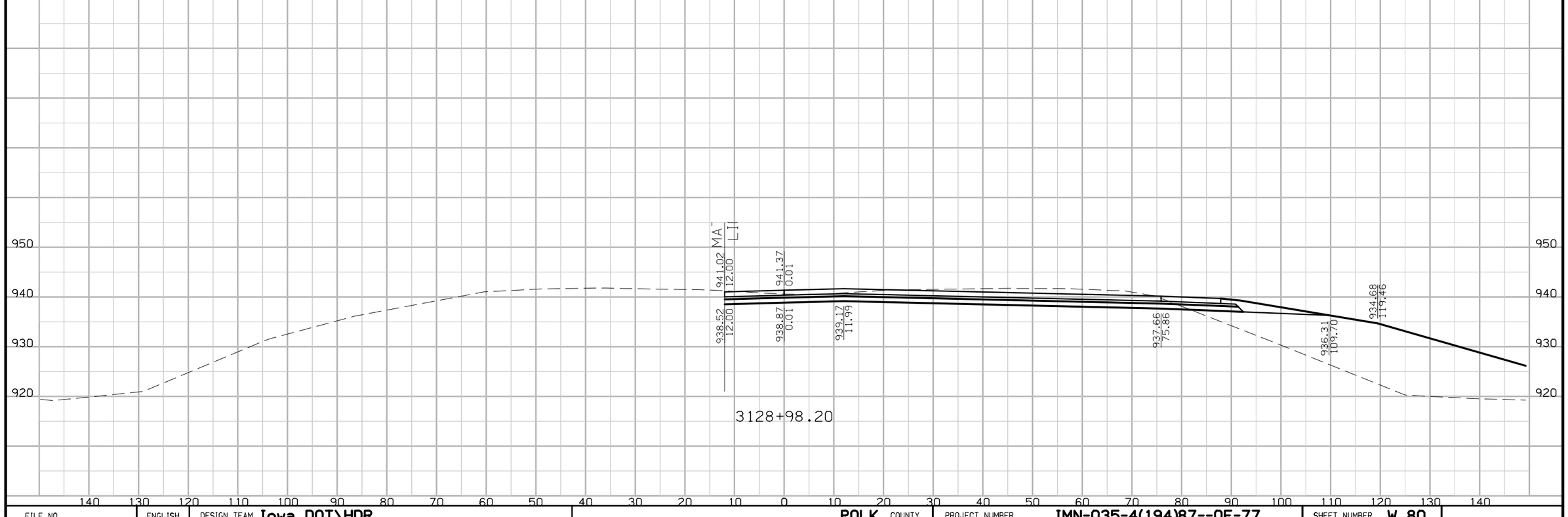
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.79

5:10:39 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

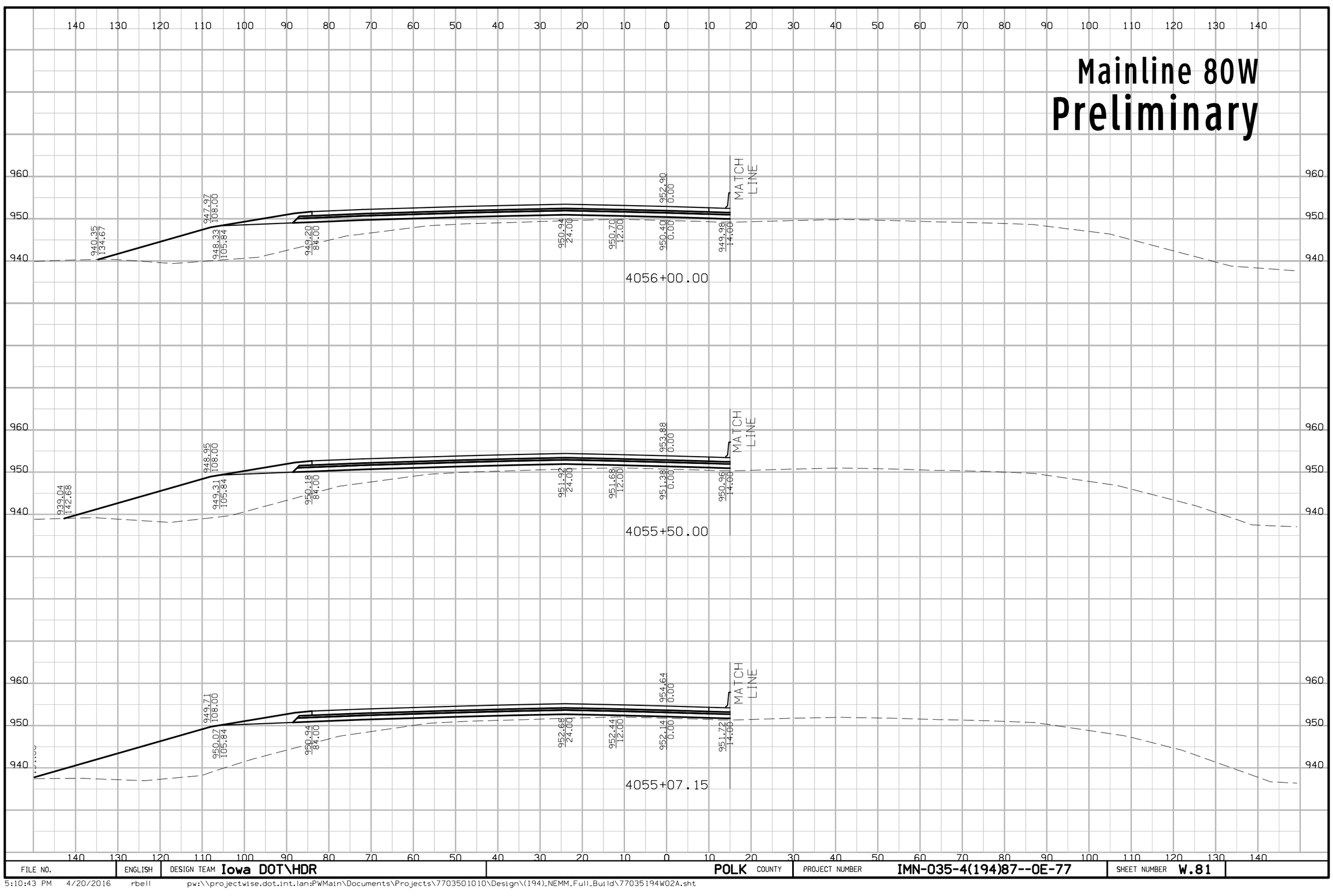
Mainline 80E
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.80

5:10:41 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

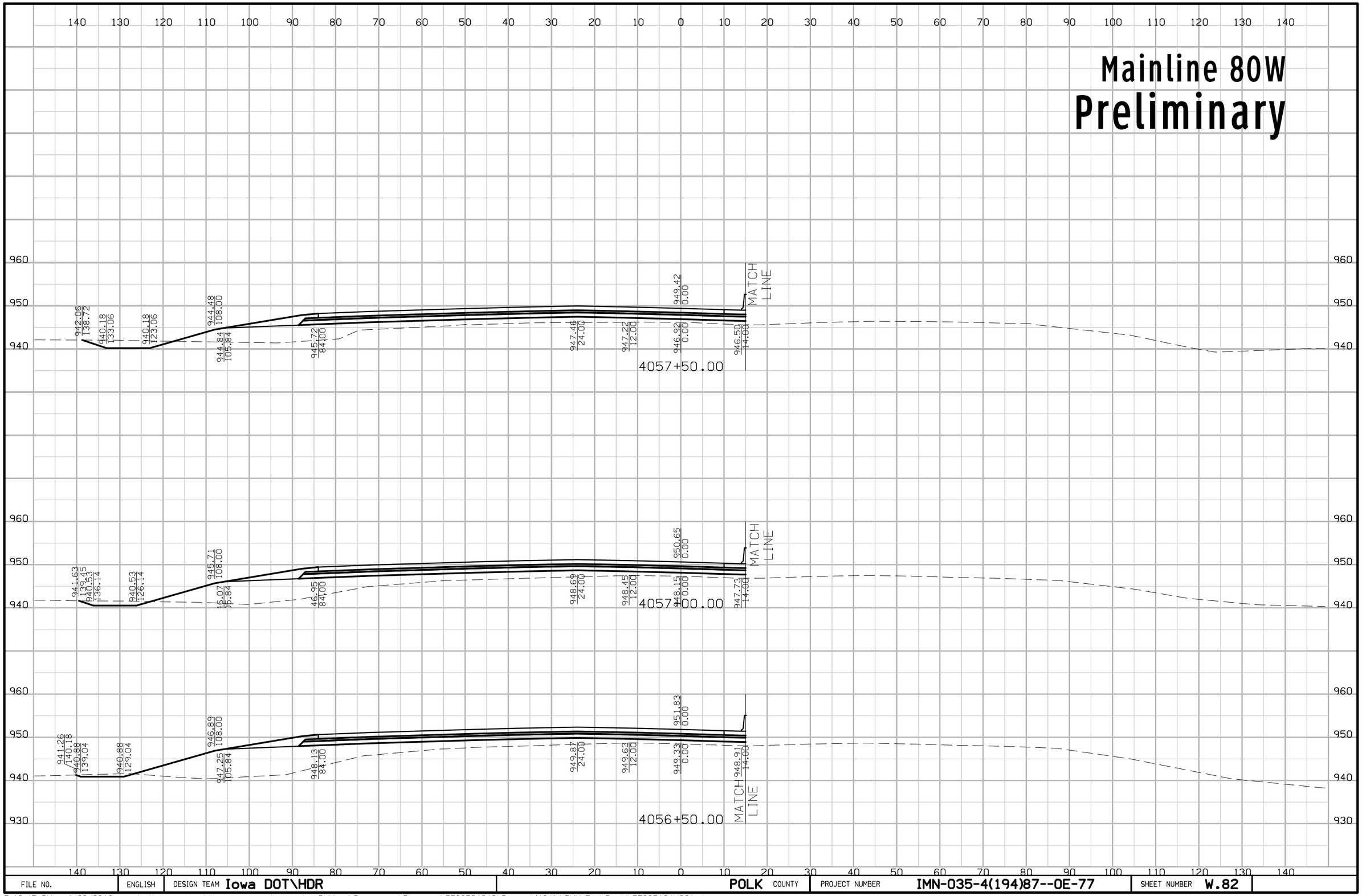
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.81

5:10:43 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80W
Preliminary

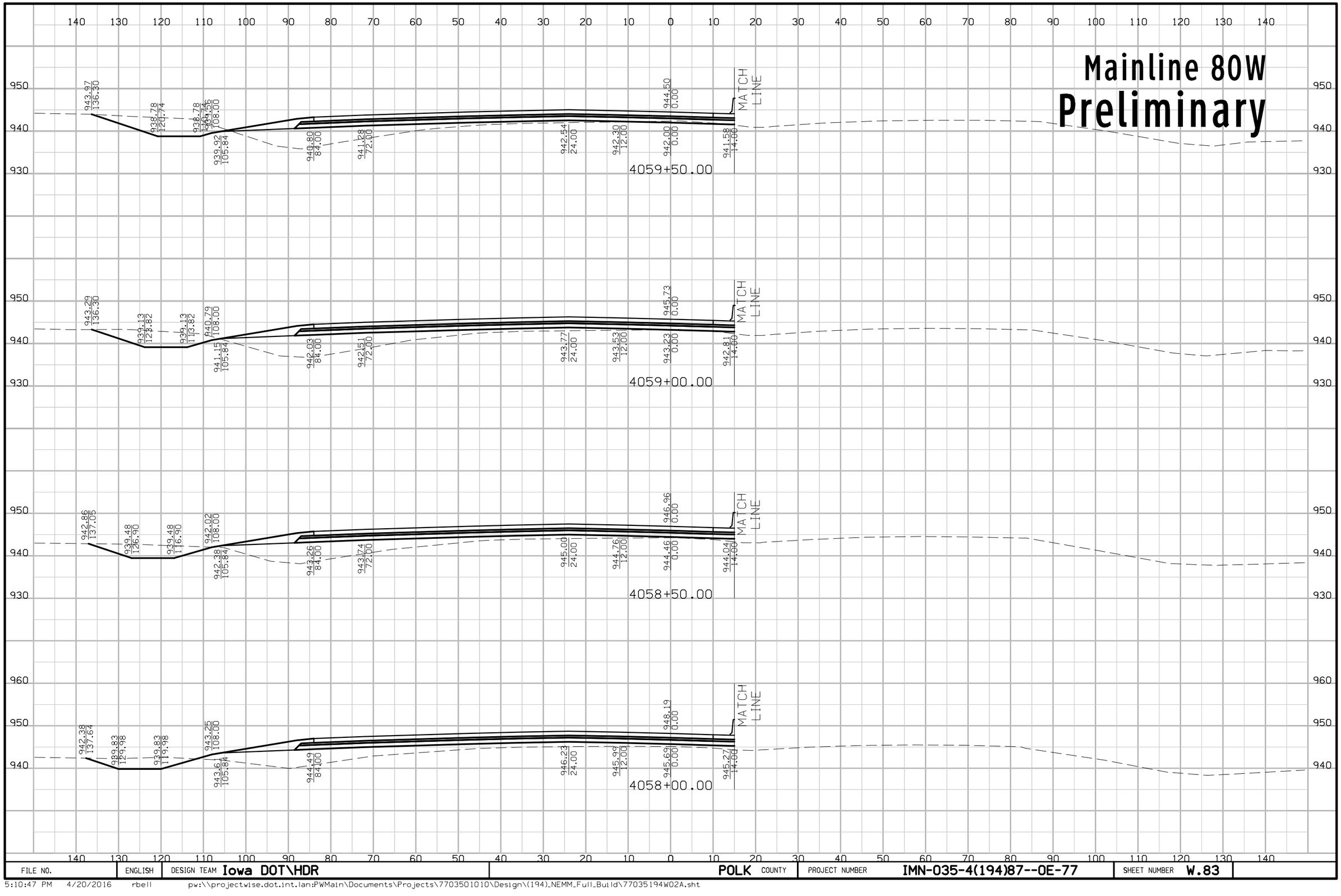


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.82

5:10:45 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80W

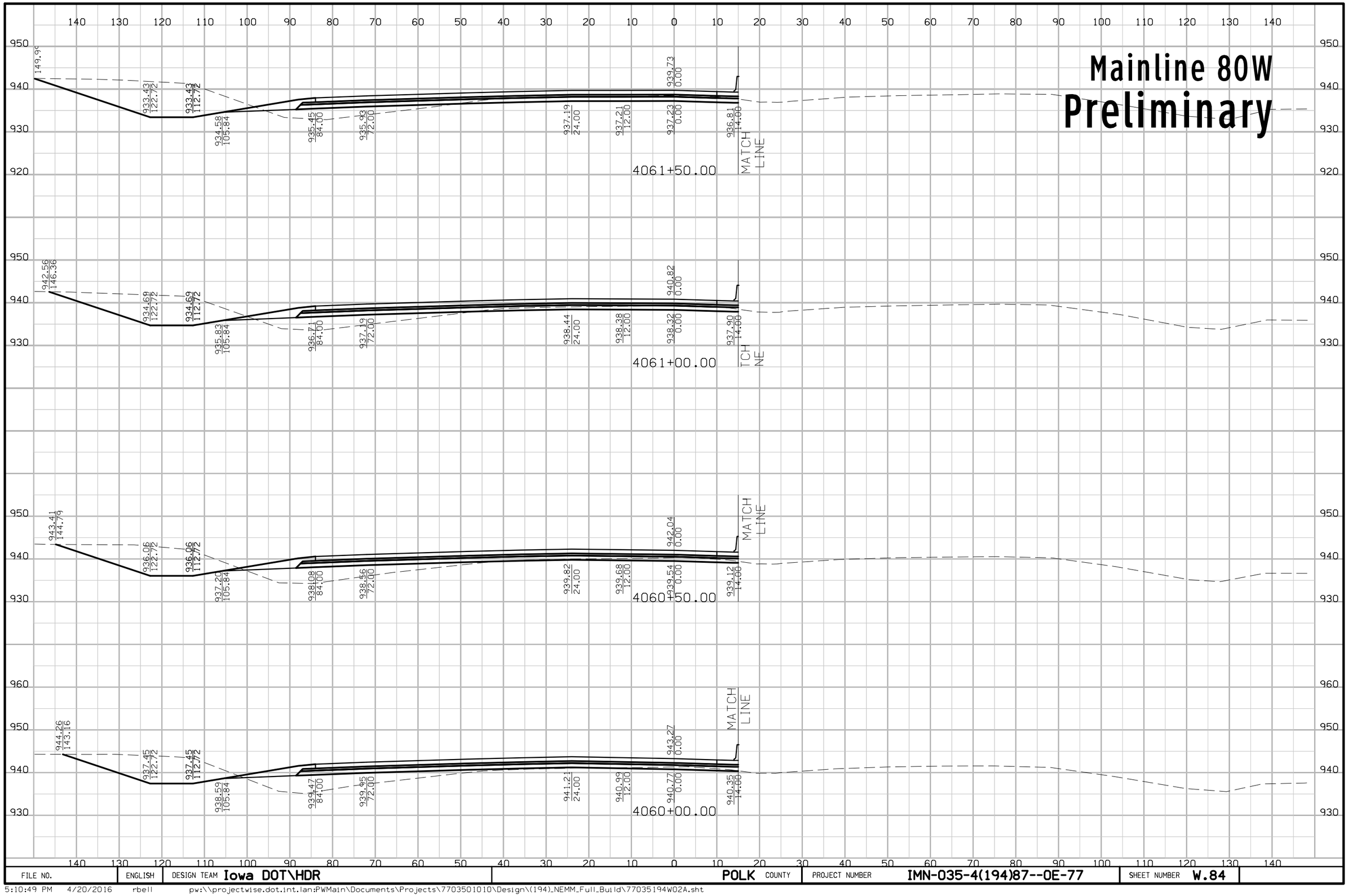
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.83

5:10:47 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

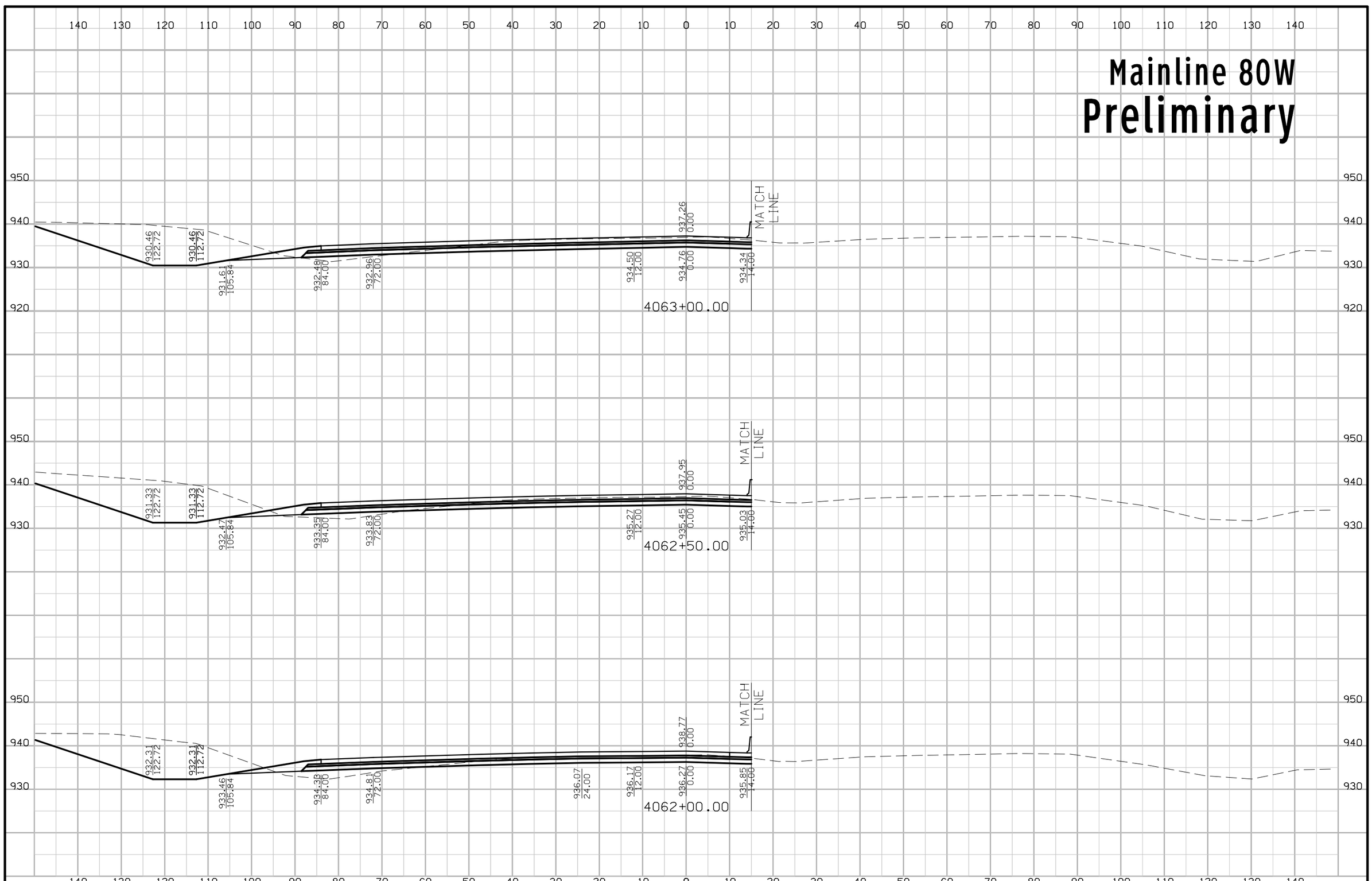
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.84

5:10:49 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

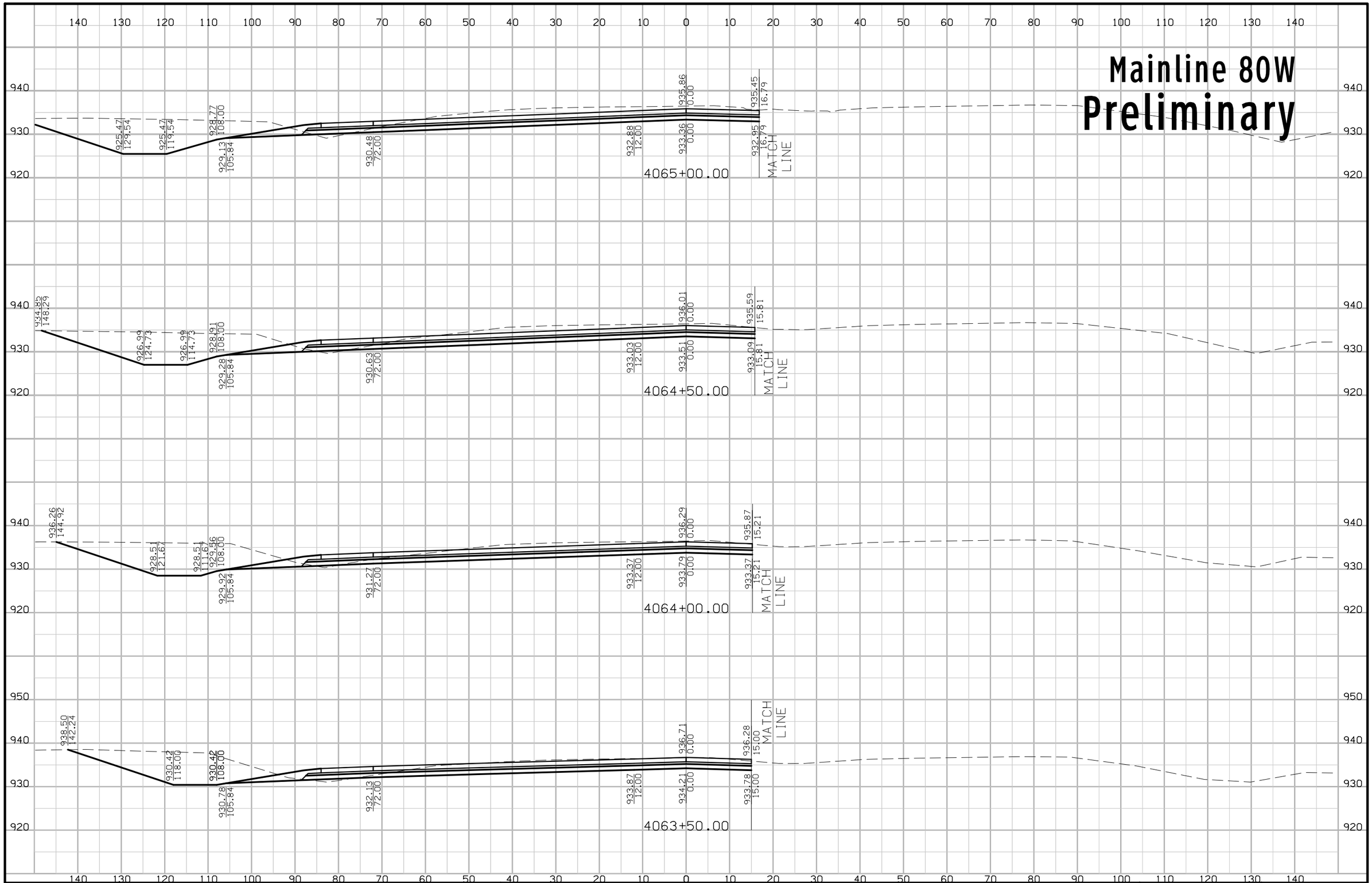
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.85

5:10:51 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

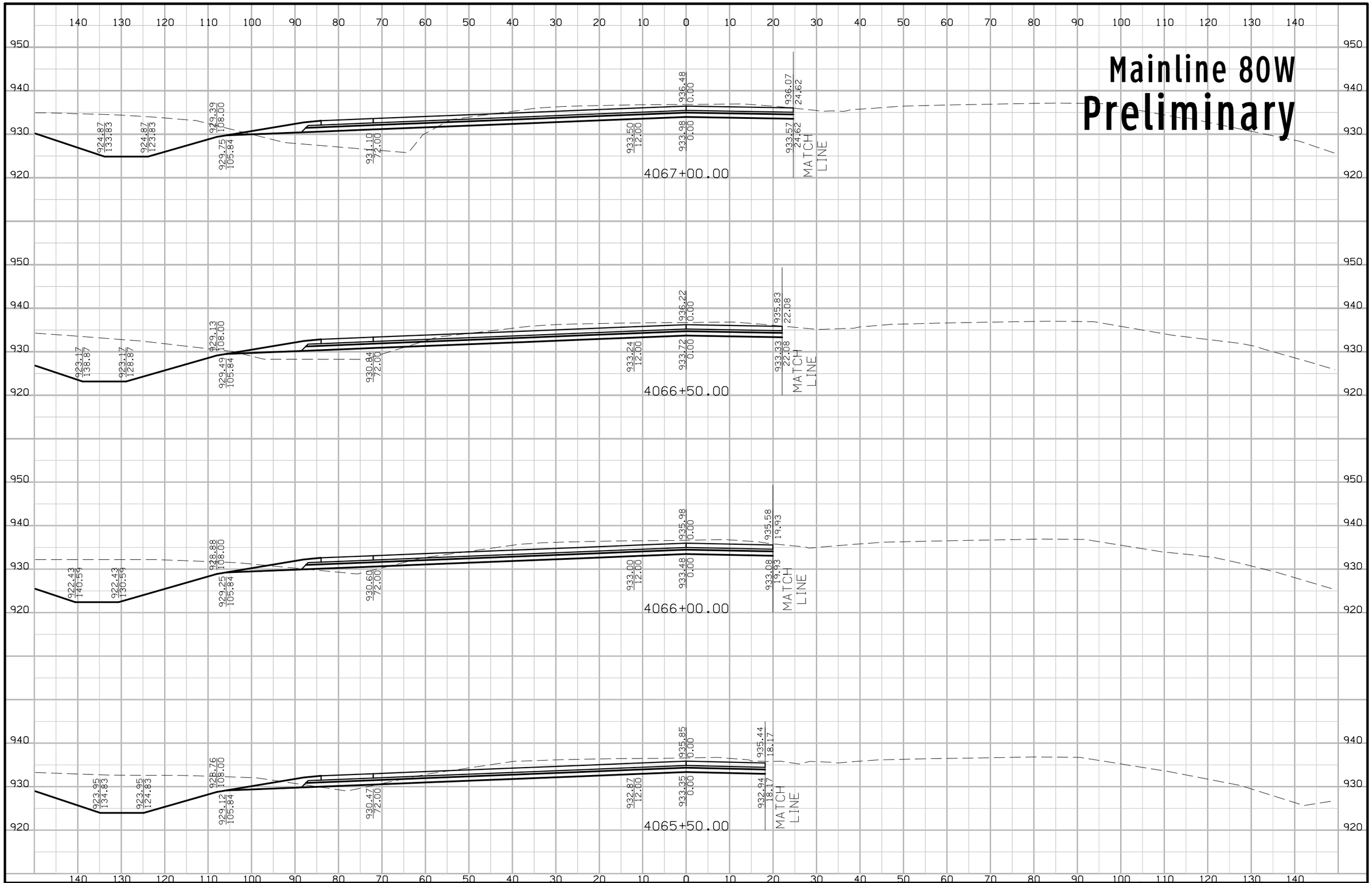
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.86

5:10:53 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

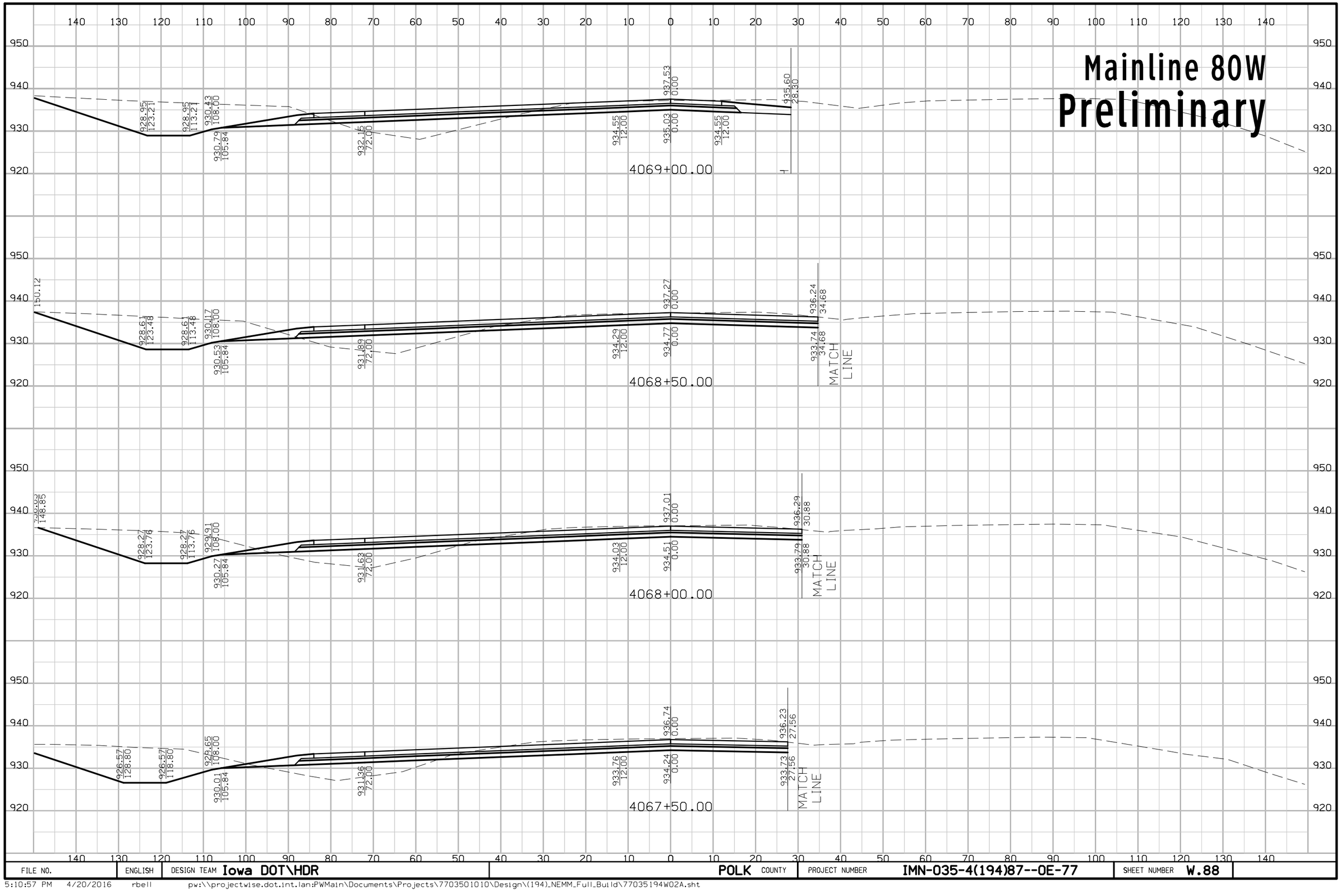
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.87

5:10:55 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80W
Preliminary

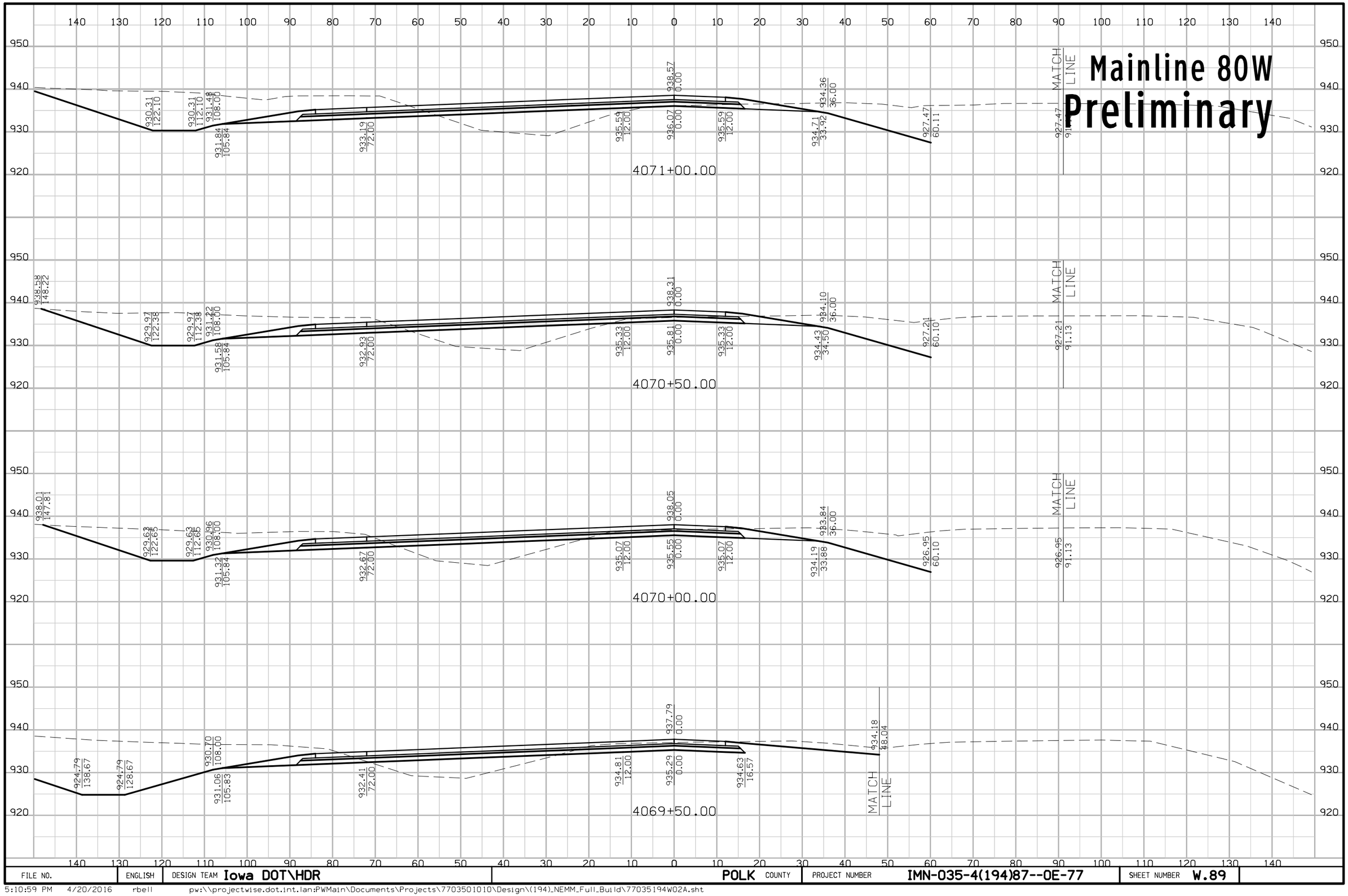


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.88

5:10:57 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80W

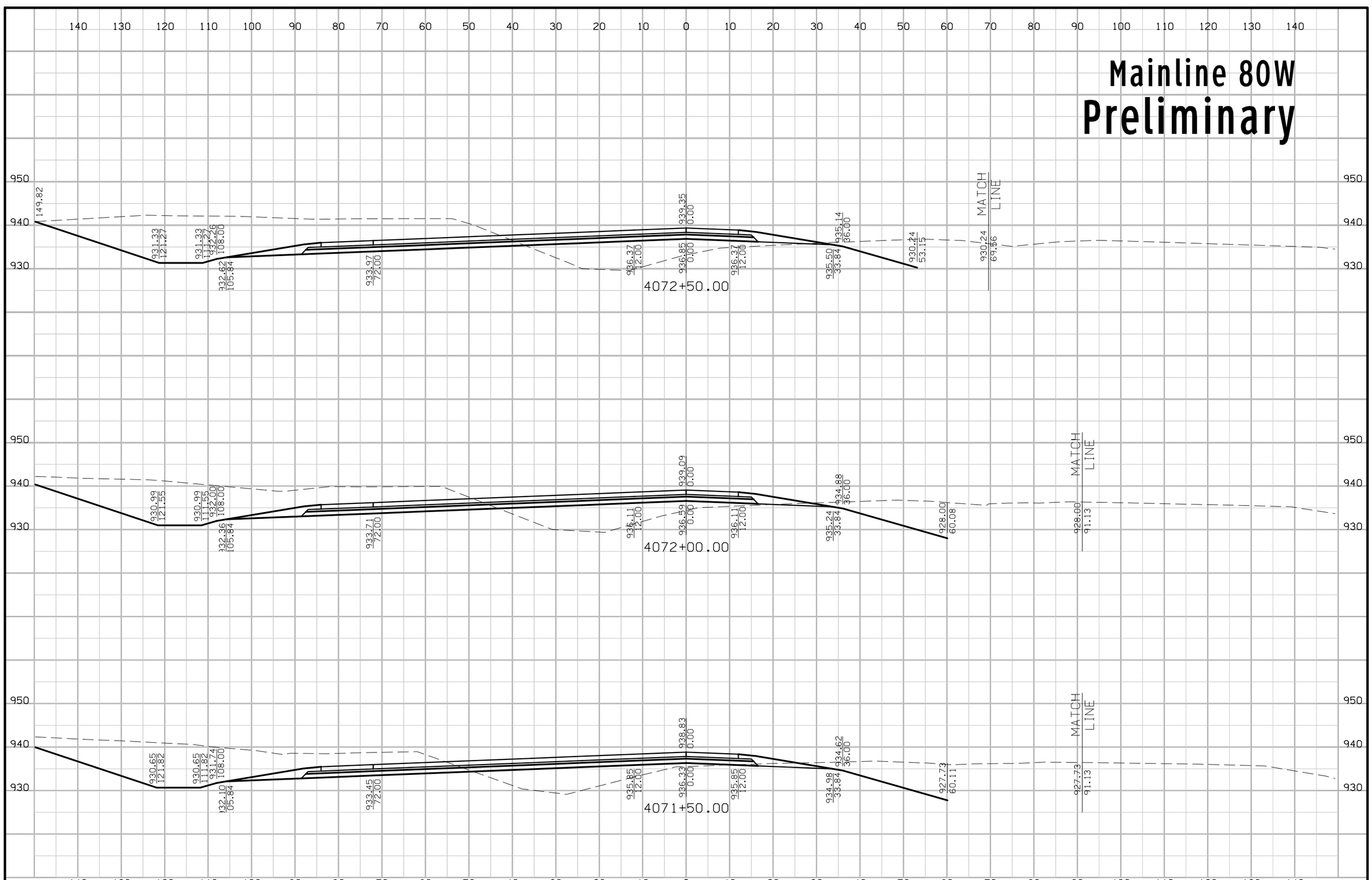
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.89

5:10:59 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

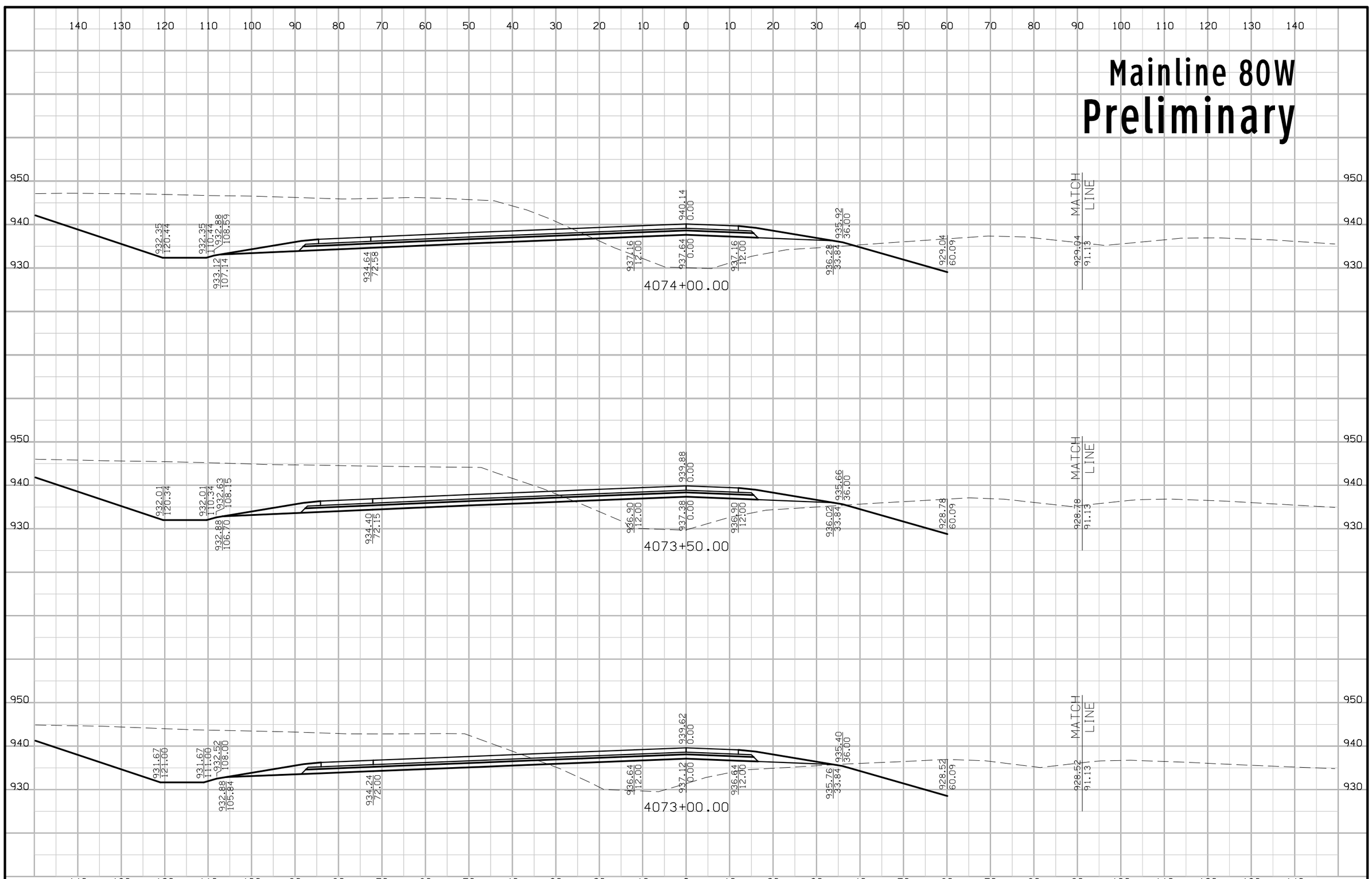
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.90

5:11:01 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

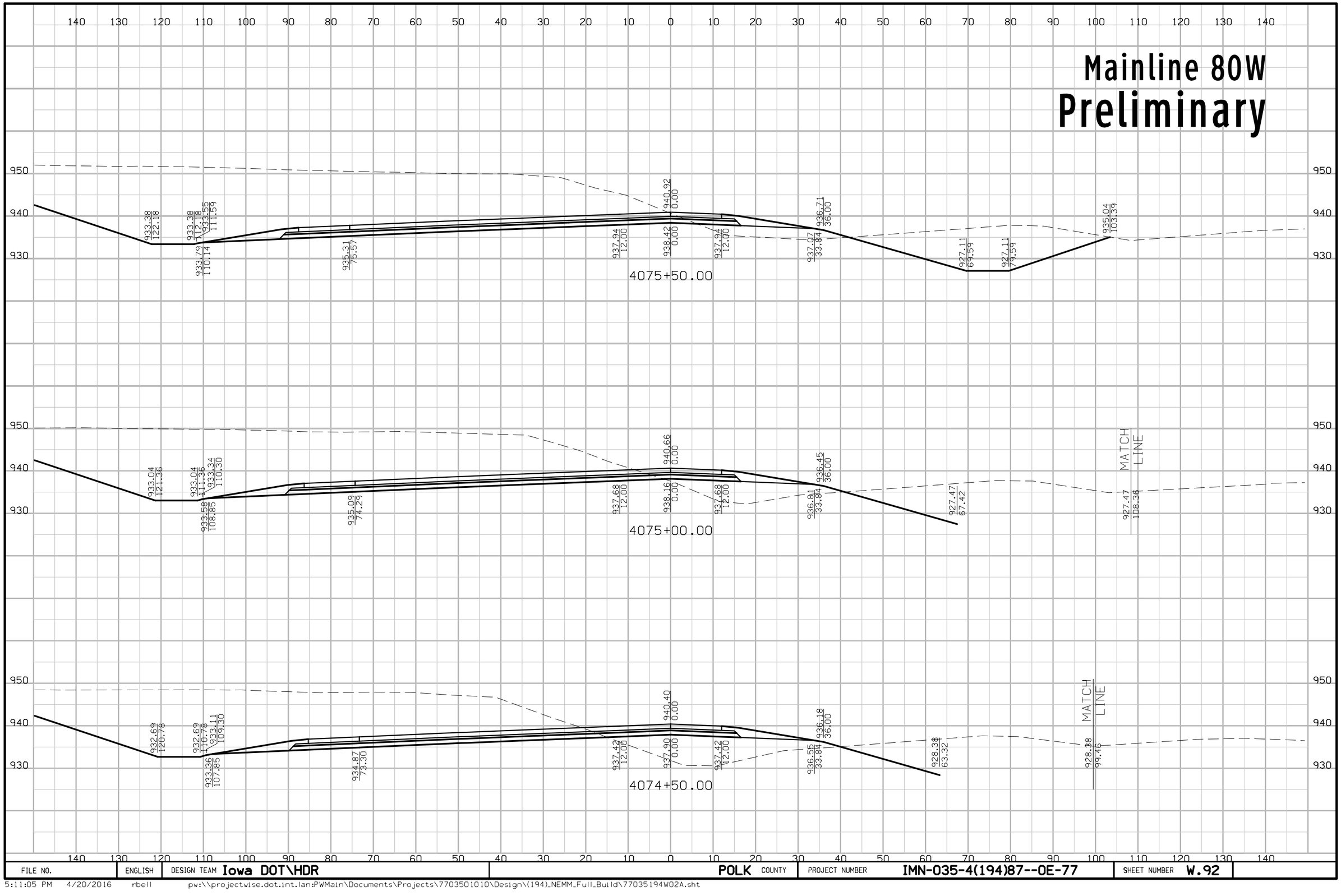
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.91

5:11:03 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

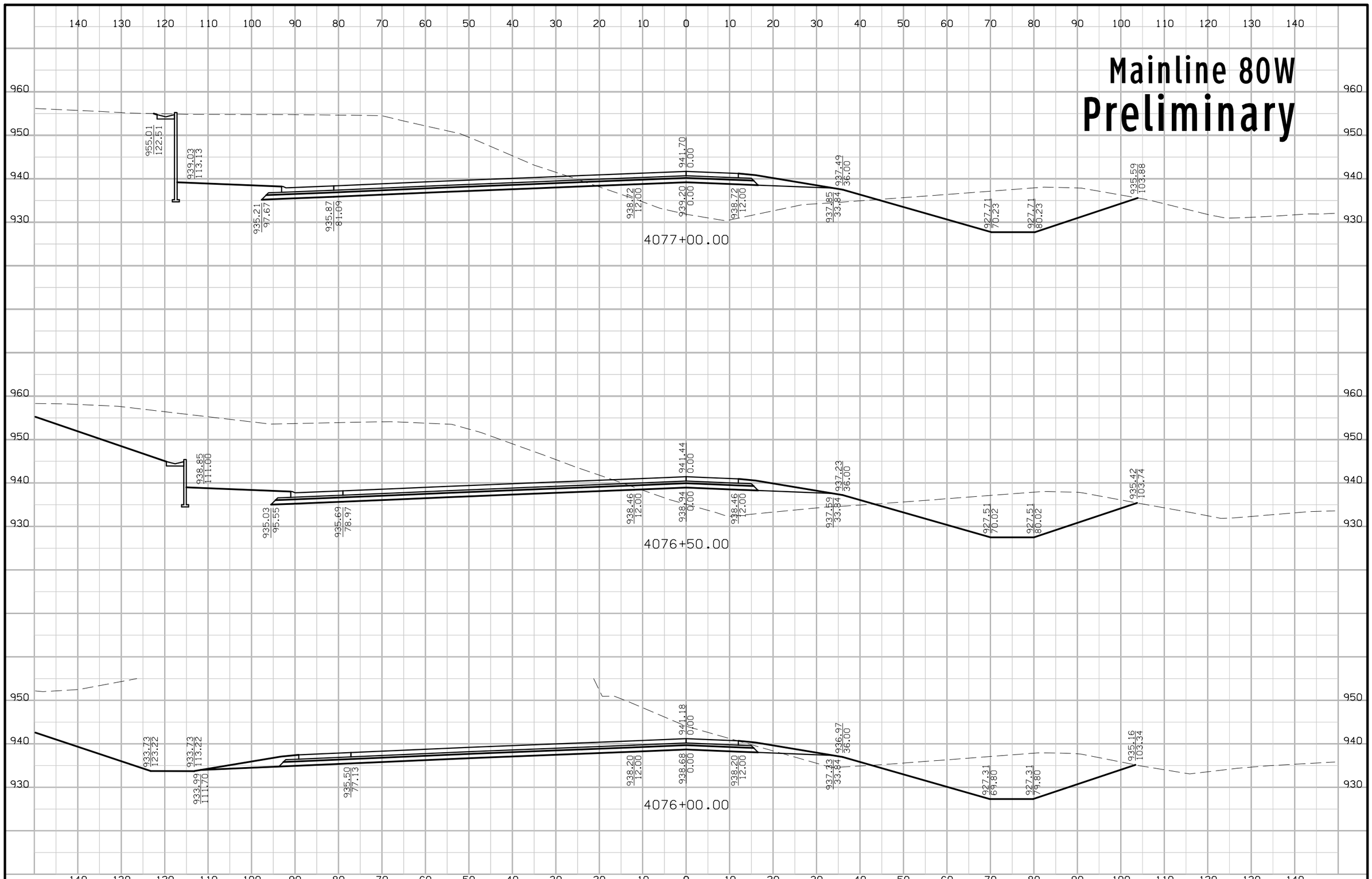
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.92

5:11:05 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

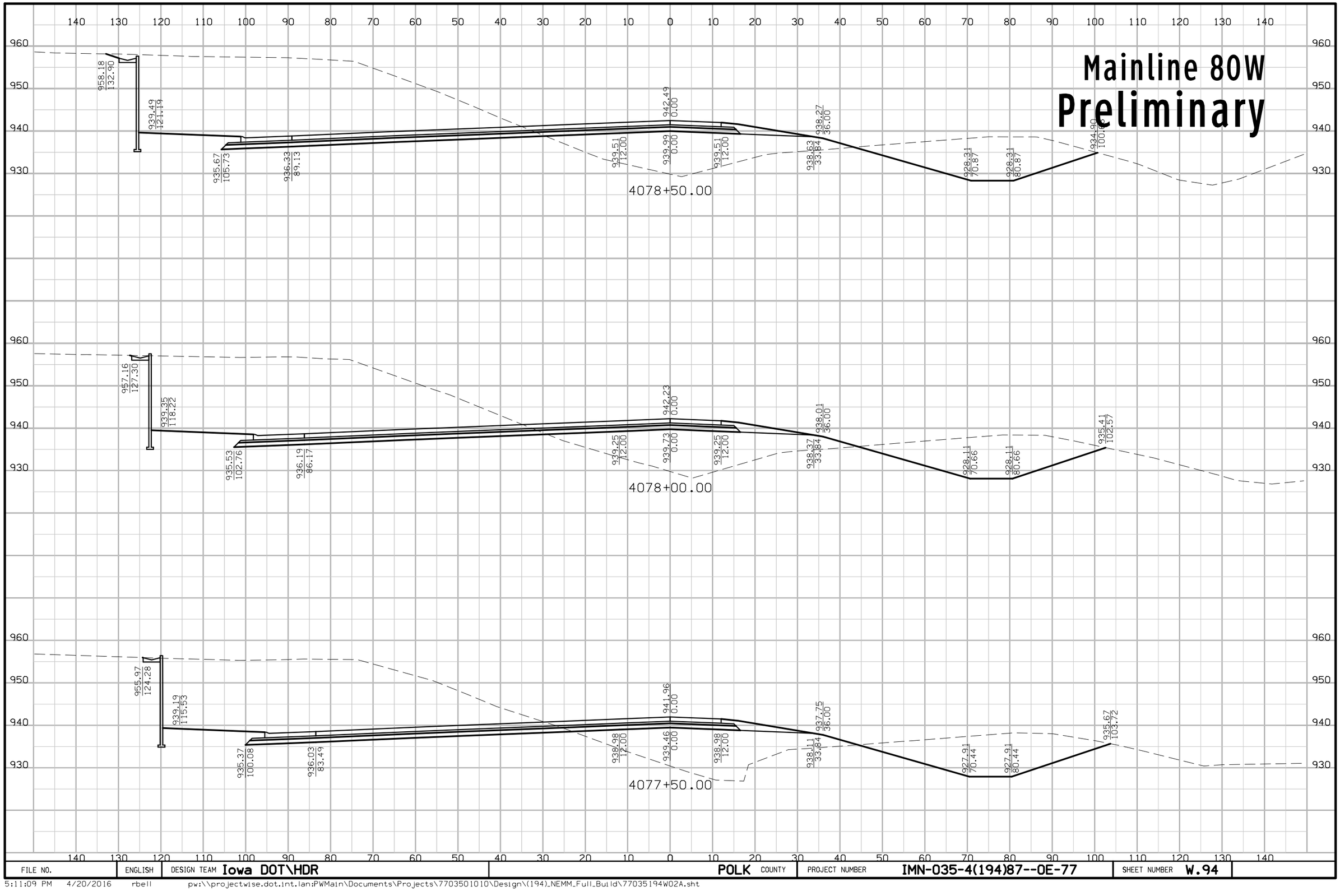
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.93

5:11:07 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194WO2A.sht

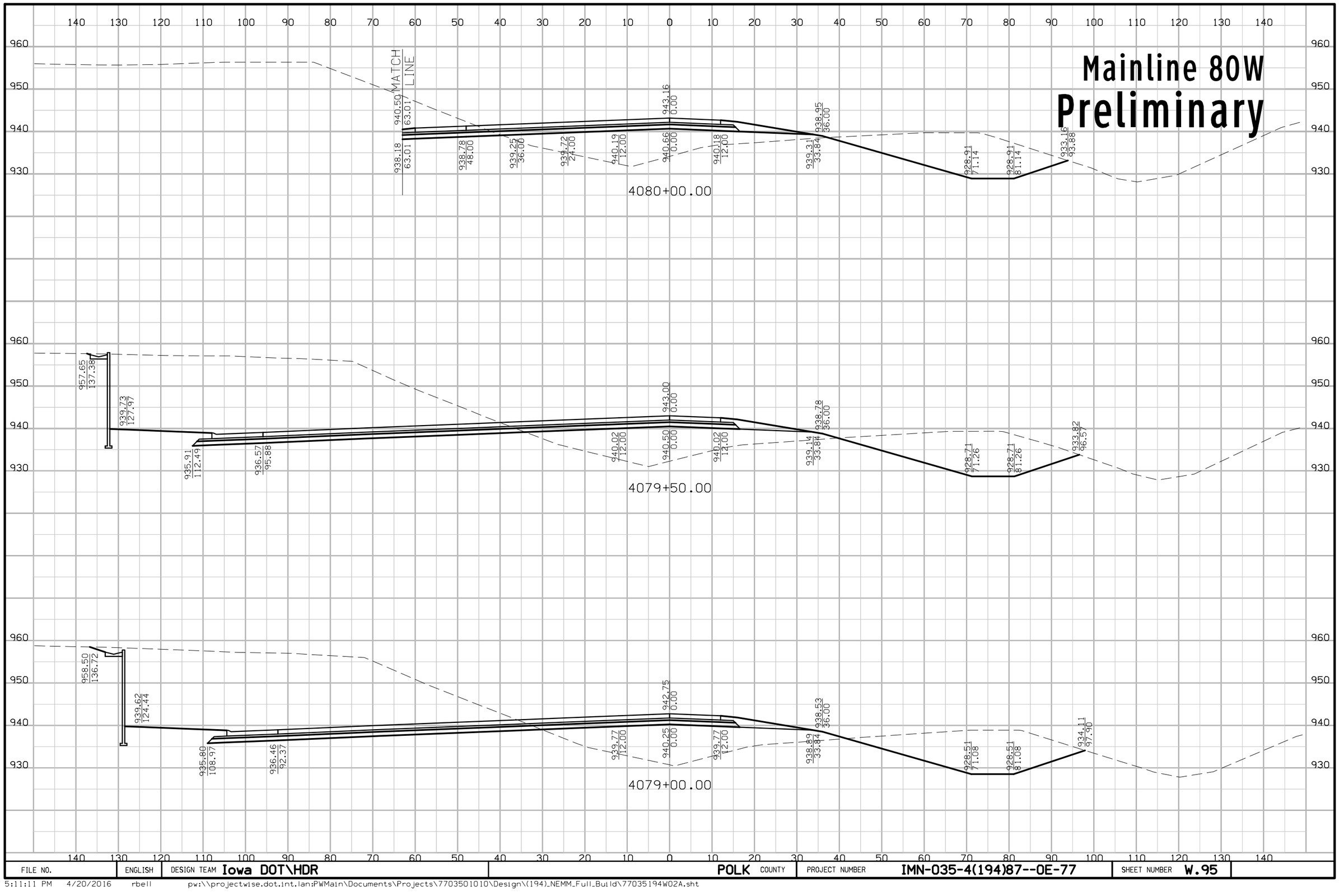
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.94

5:11:09 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

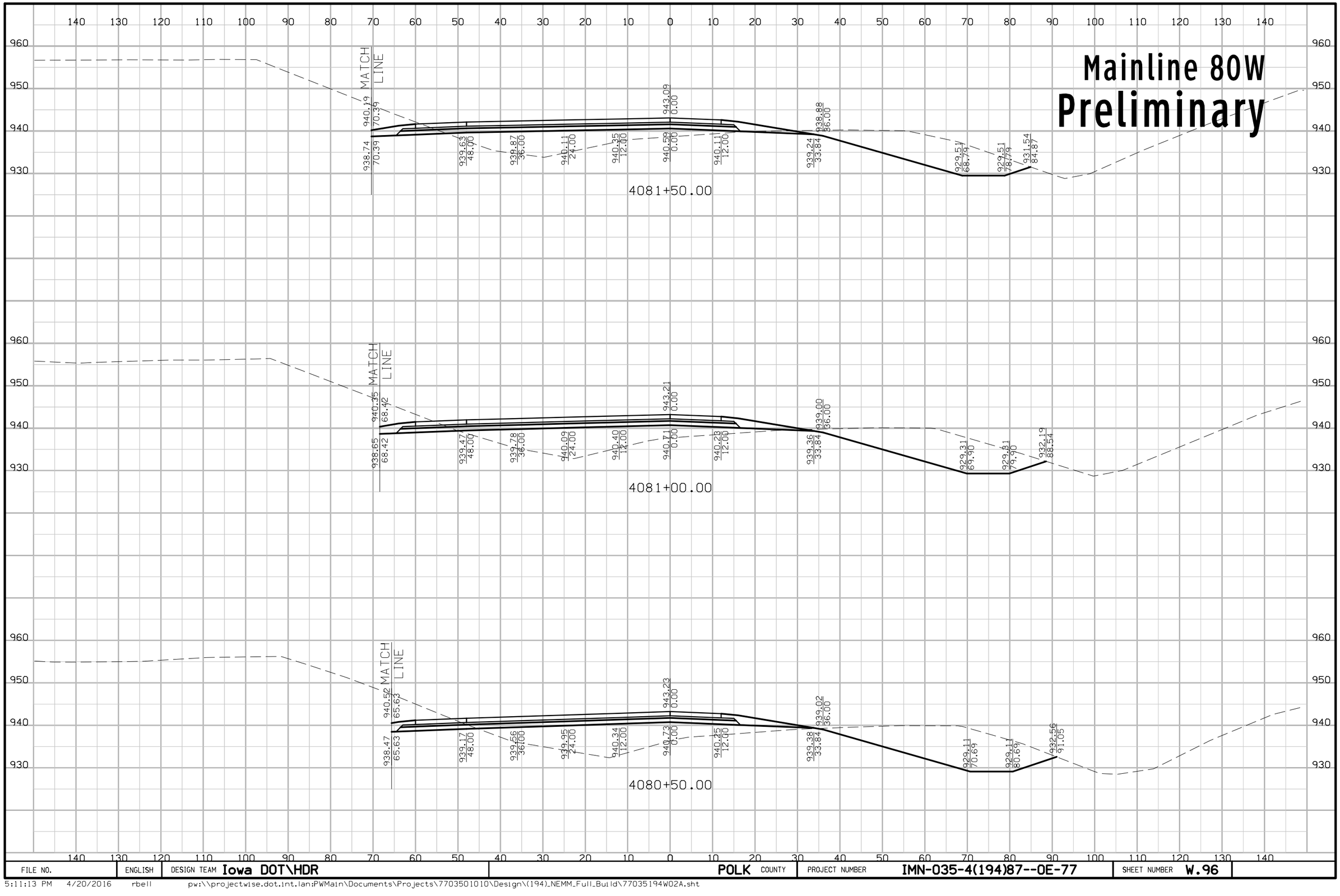
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.95

5:11:11 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

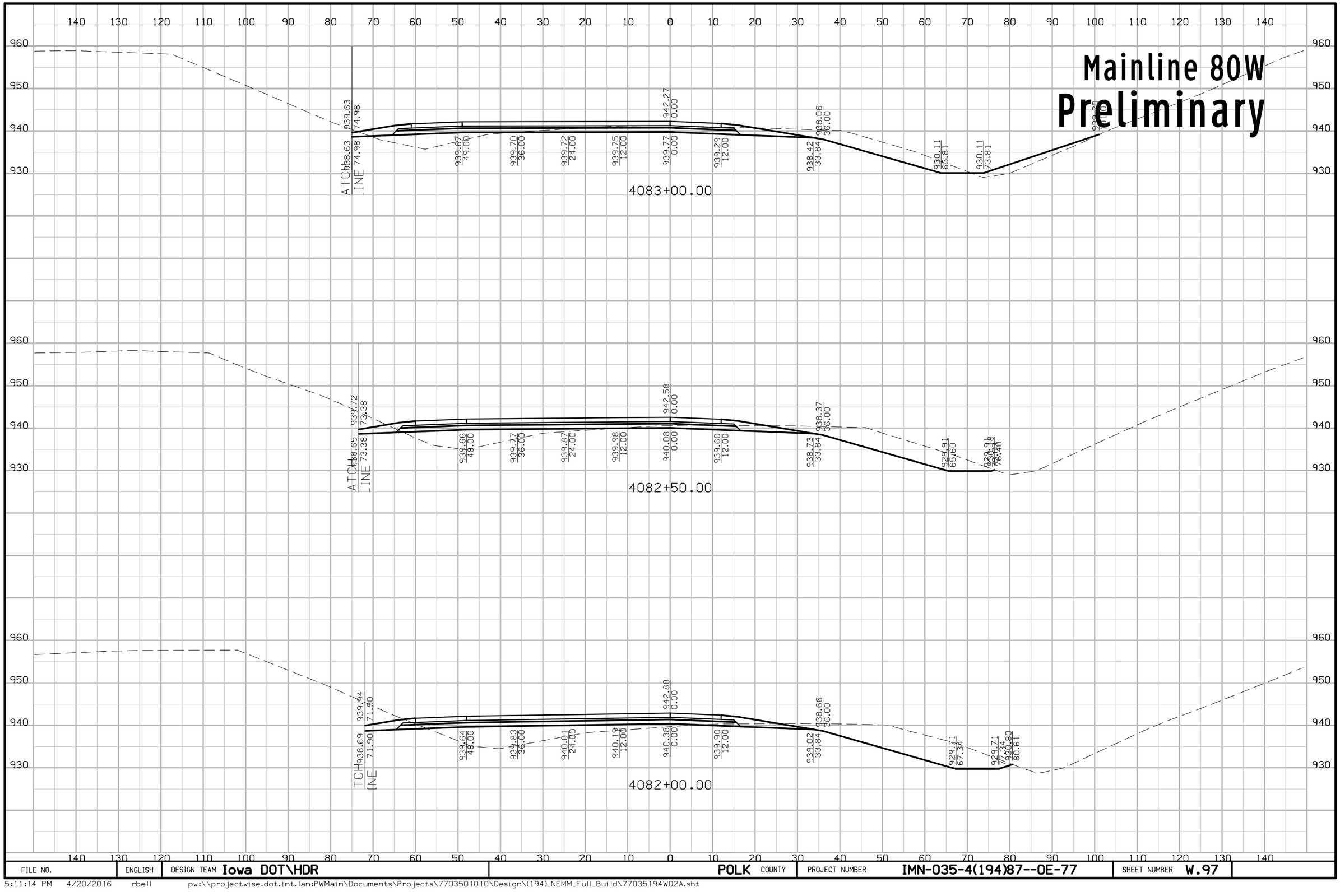
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.96

5:11:13 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80W
Preliminary

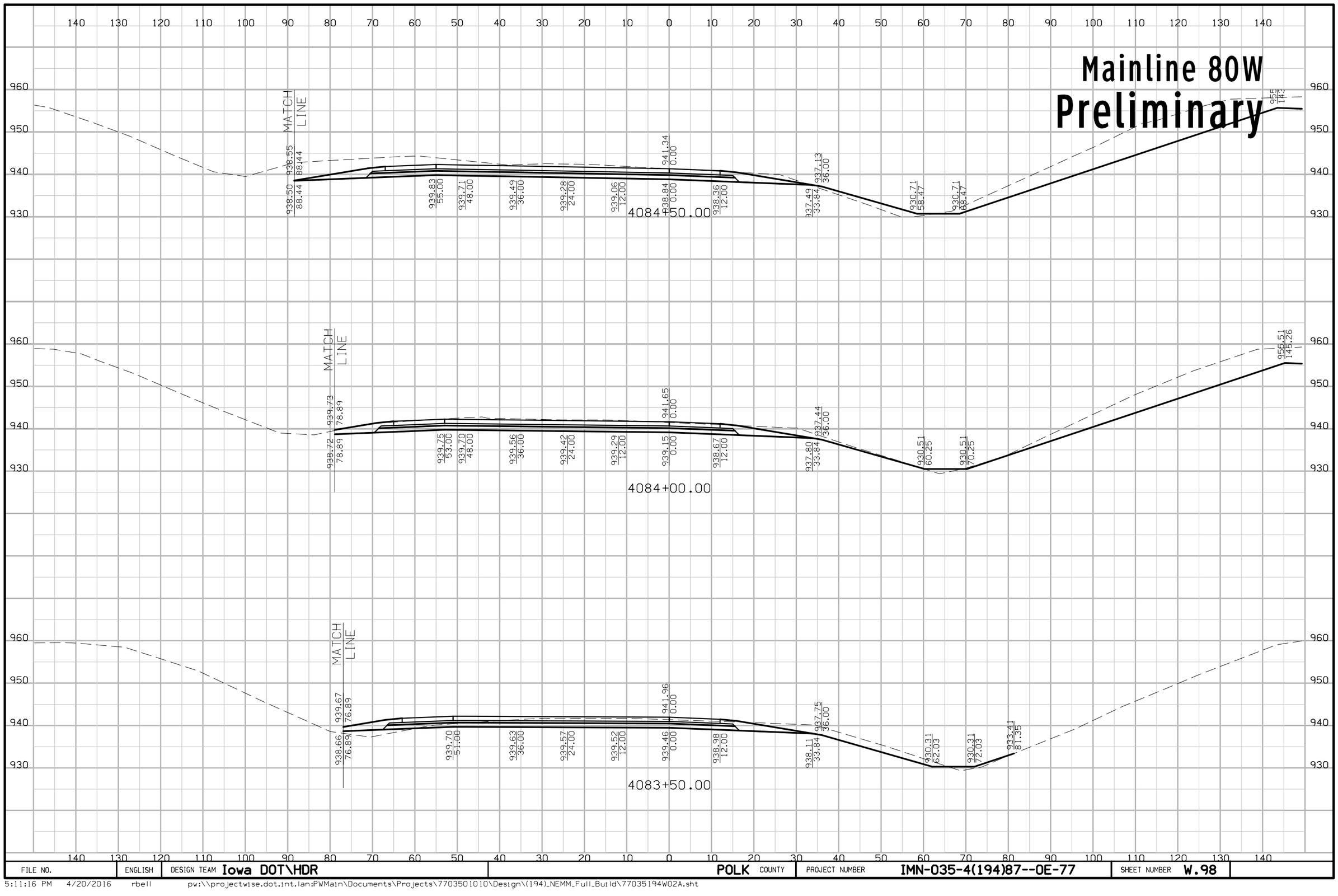


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.97

5:11:14 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80W

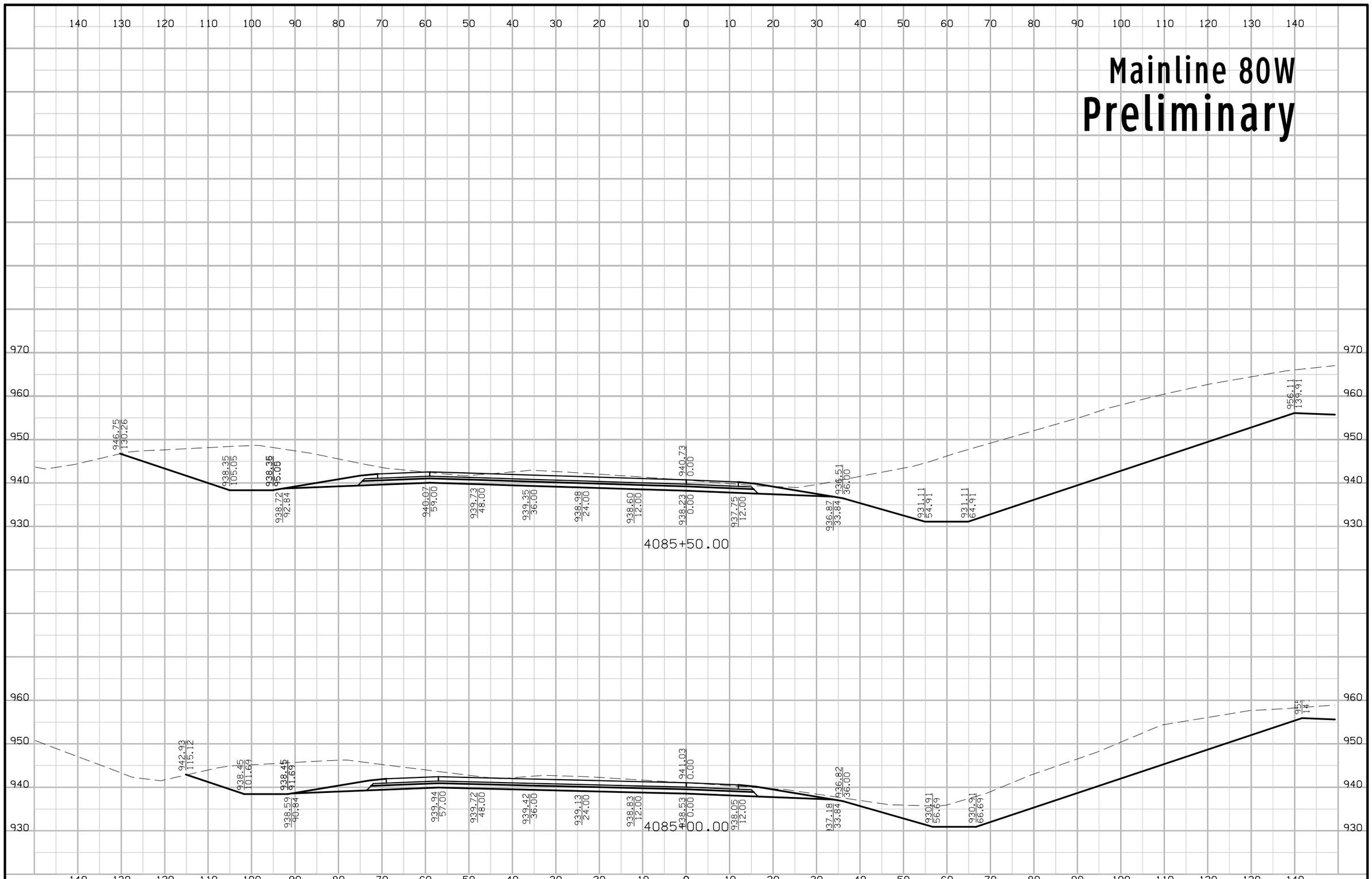
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.98

5:11:16 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

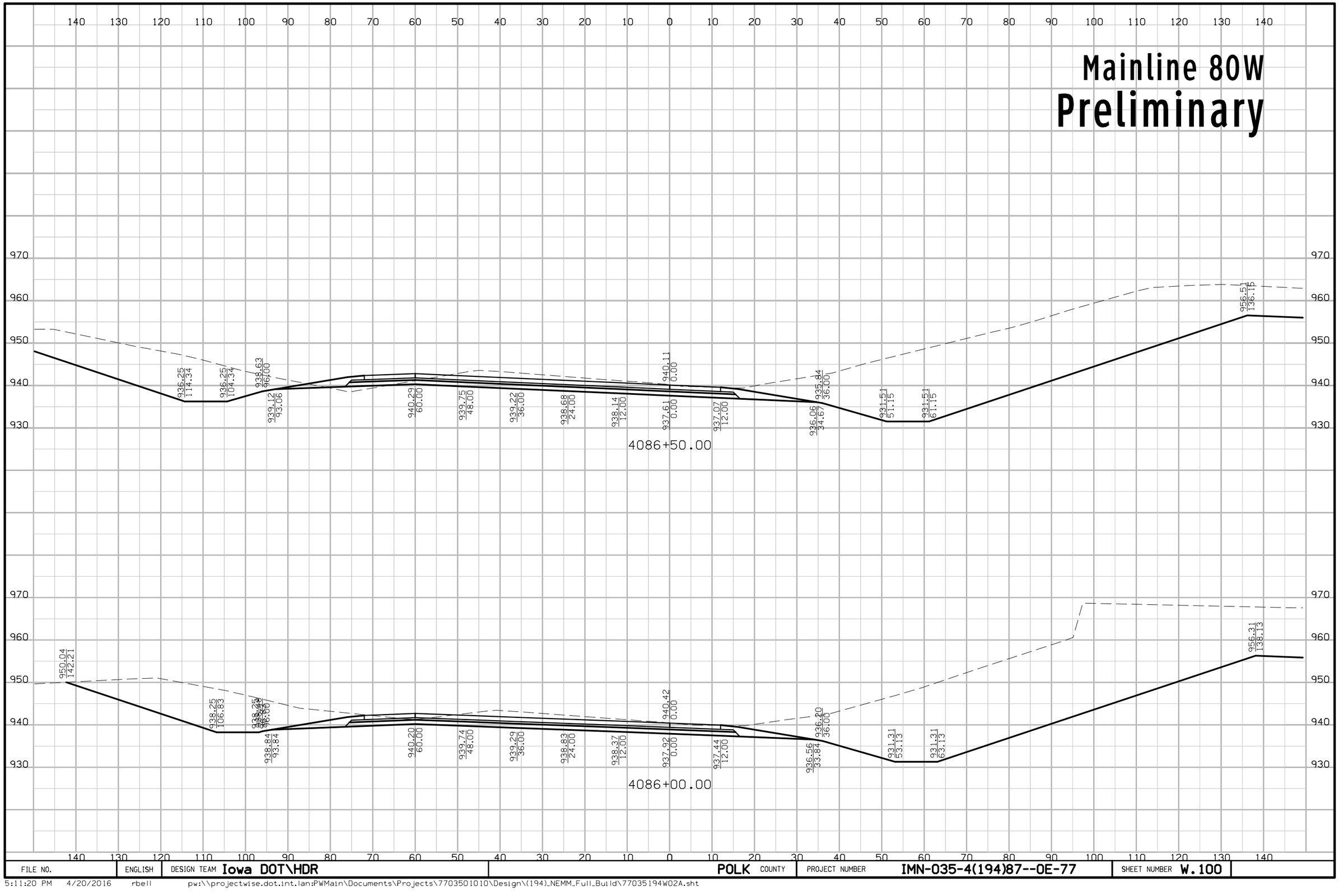
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.99

5:11:18 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

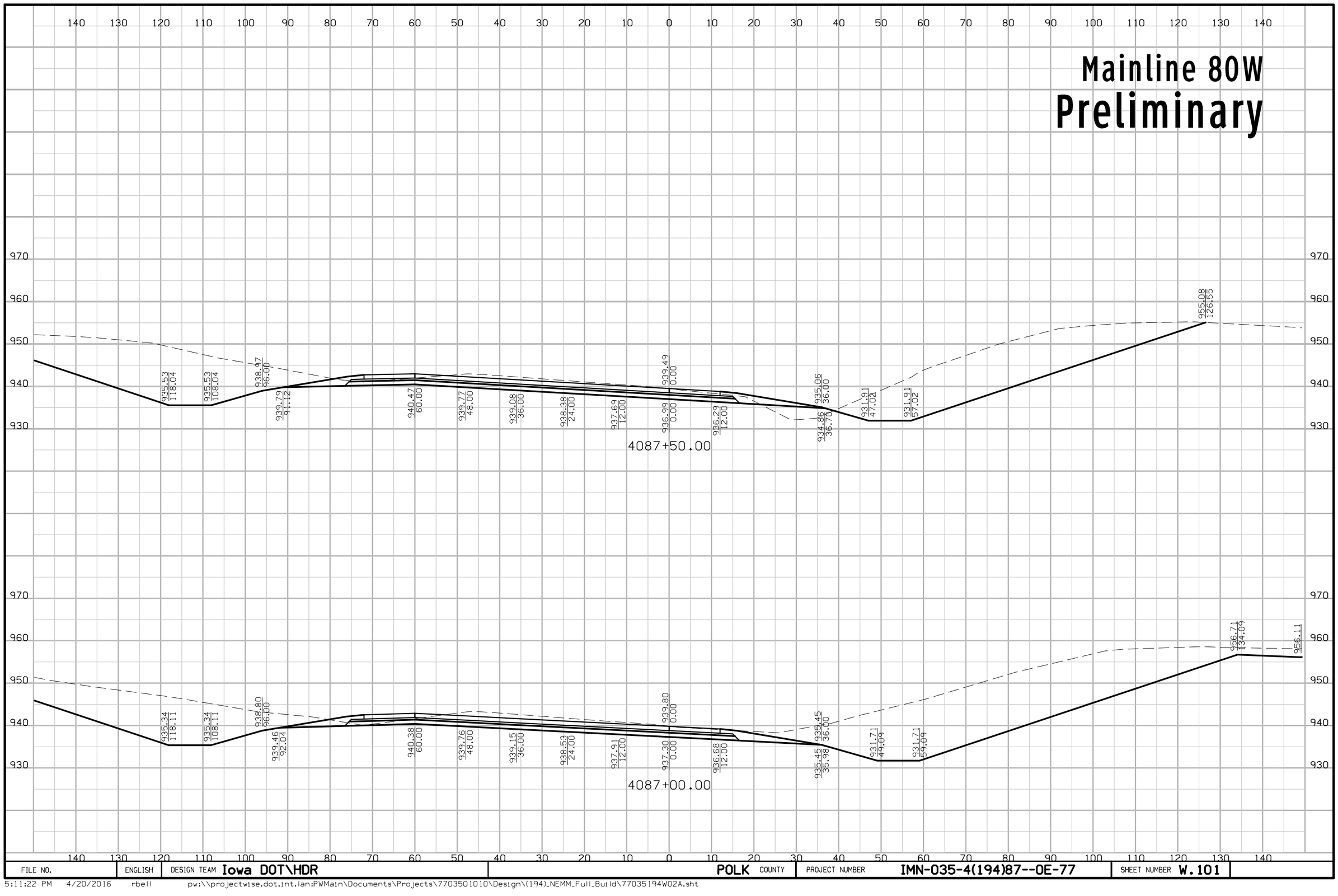
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.100

5:11:20 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

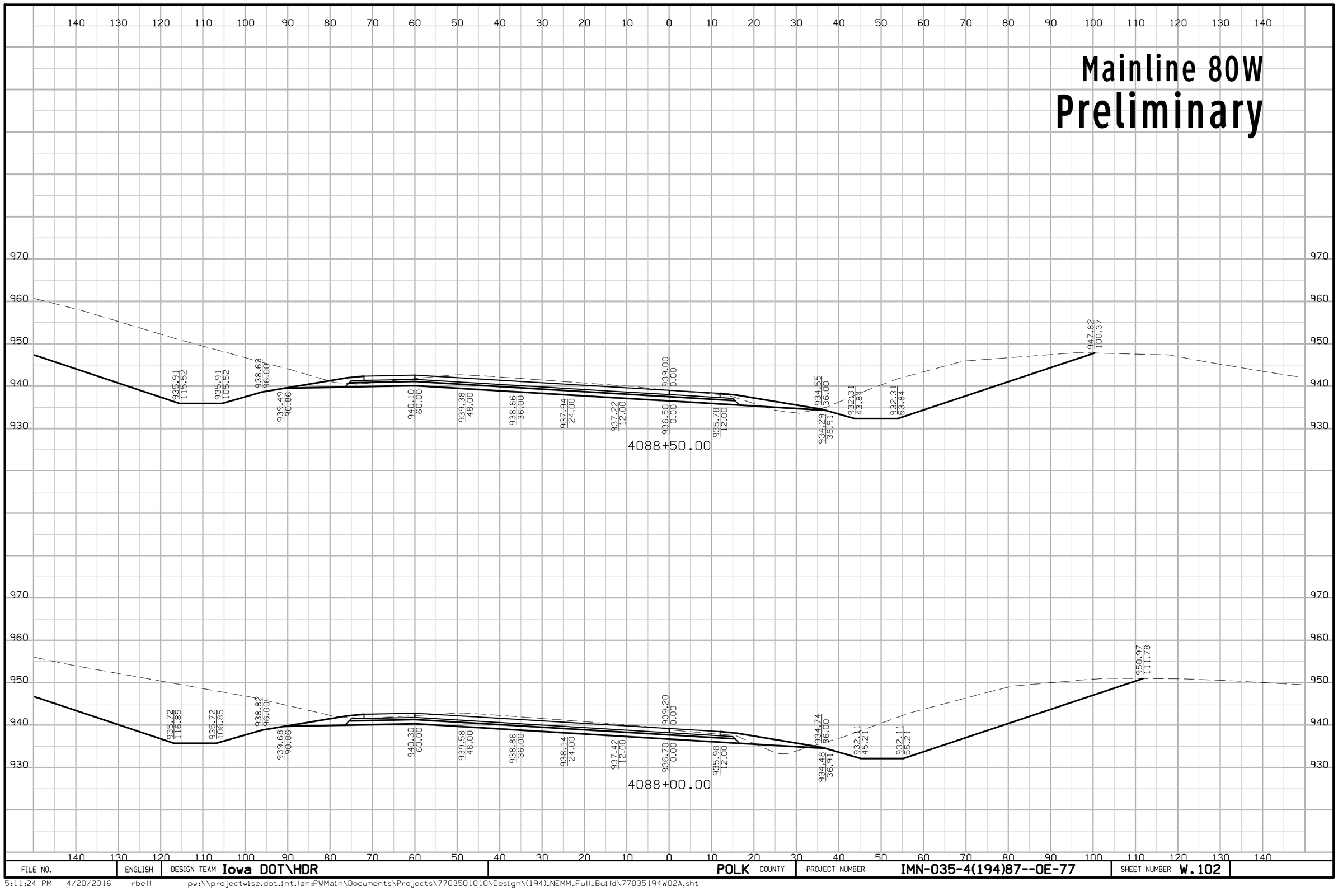
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.101

5:11:22 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80W
Preliminary

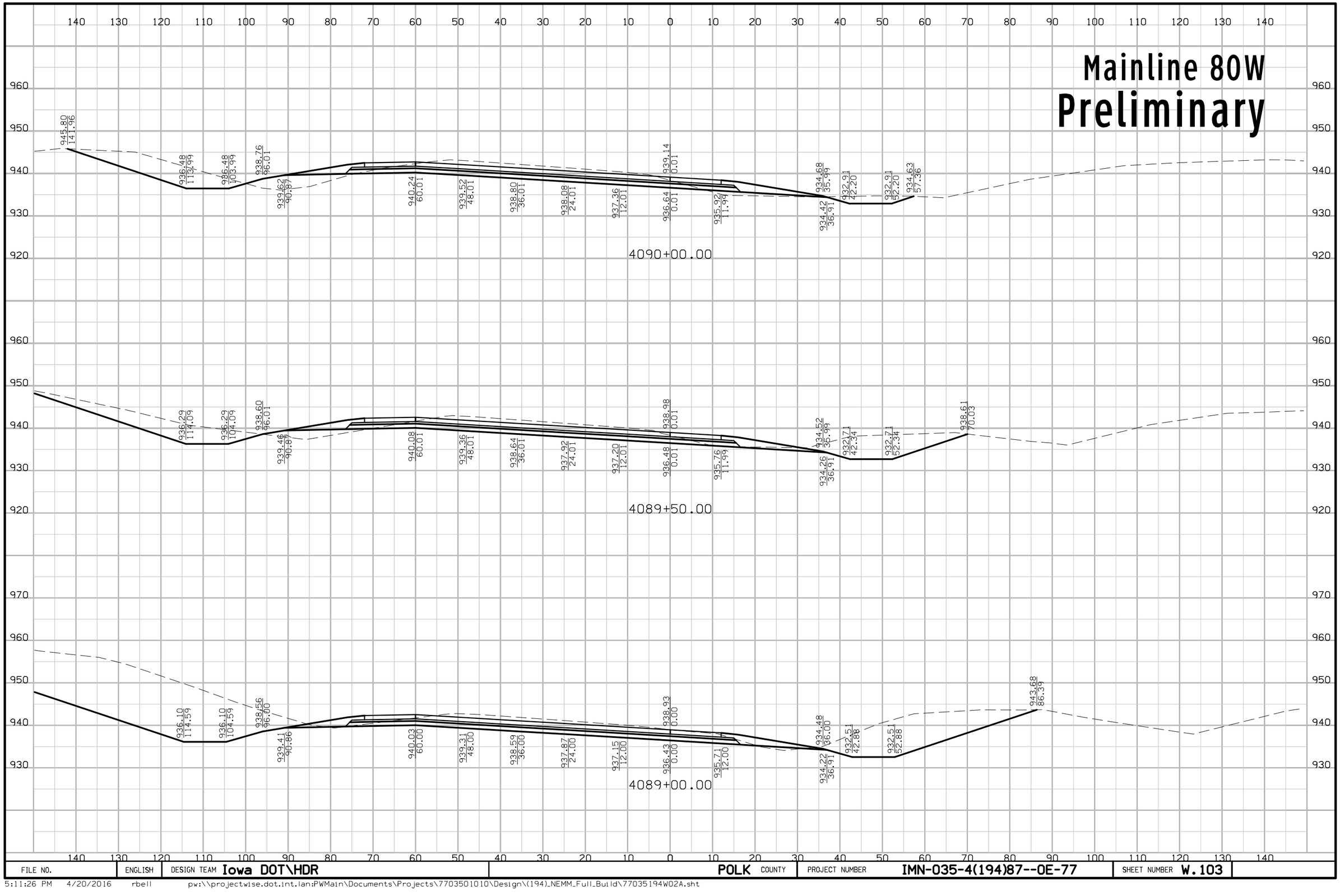


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.102

5:11:24 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80W

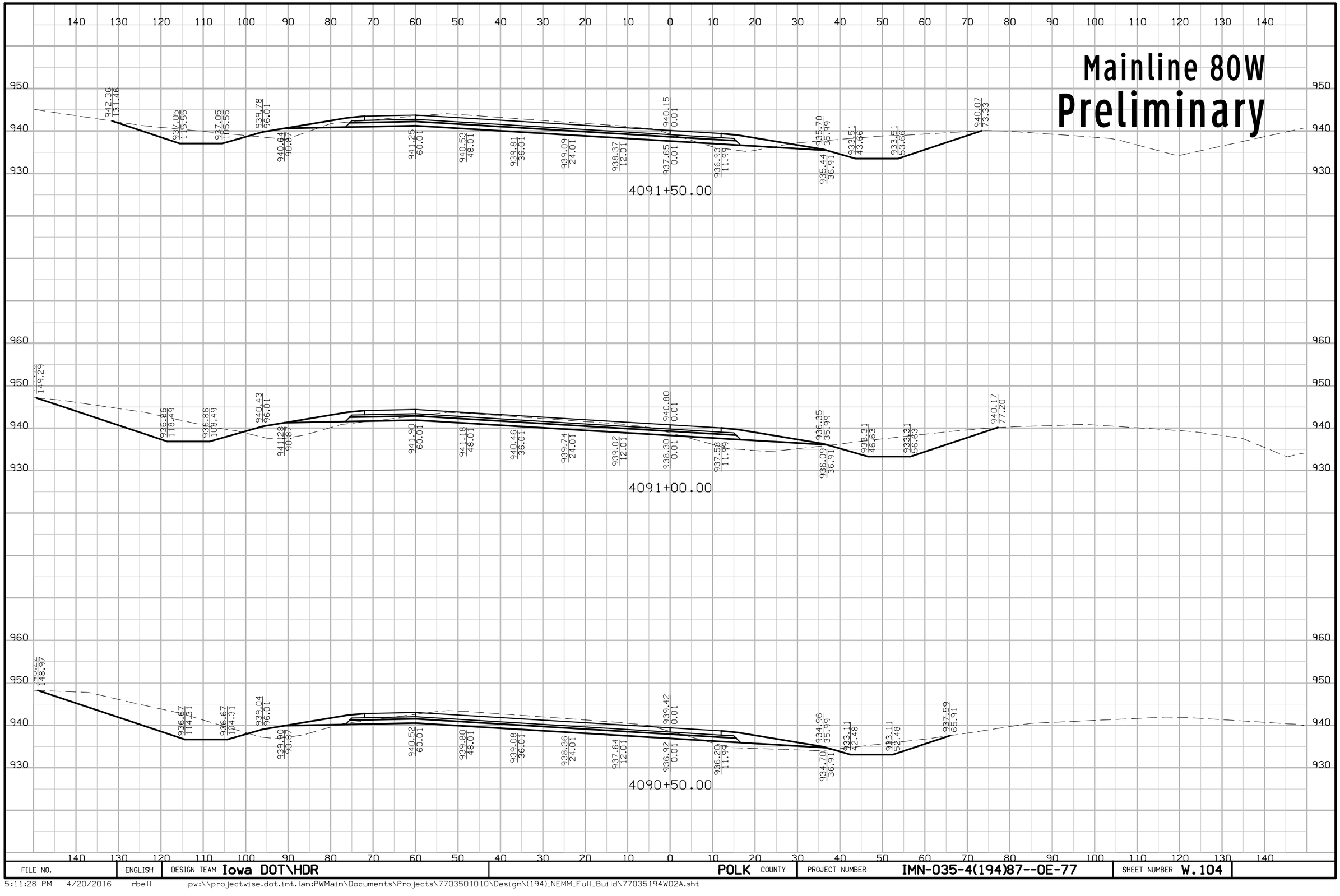
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.103

5:11:26 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

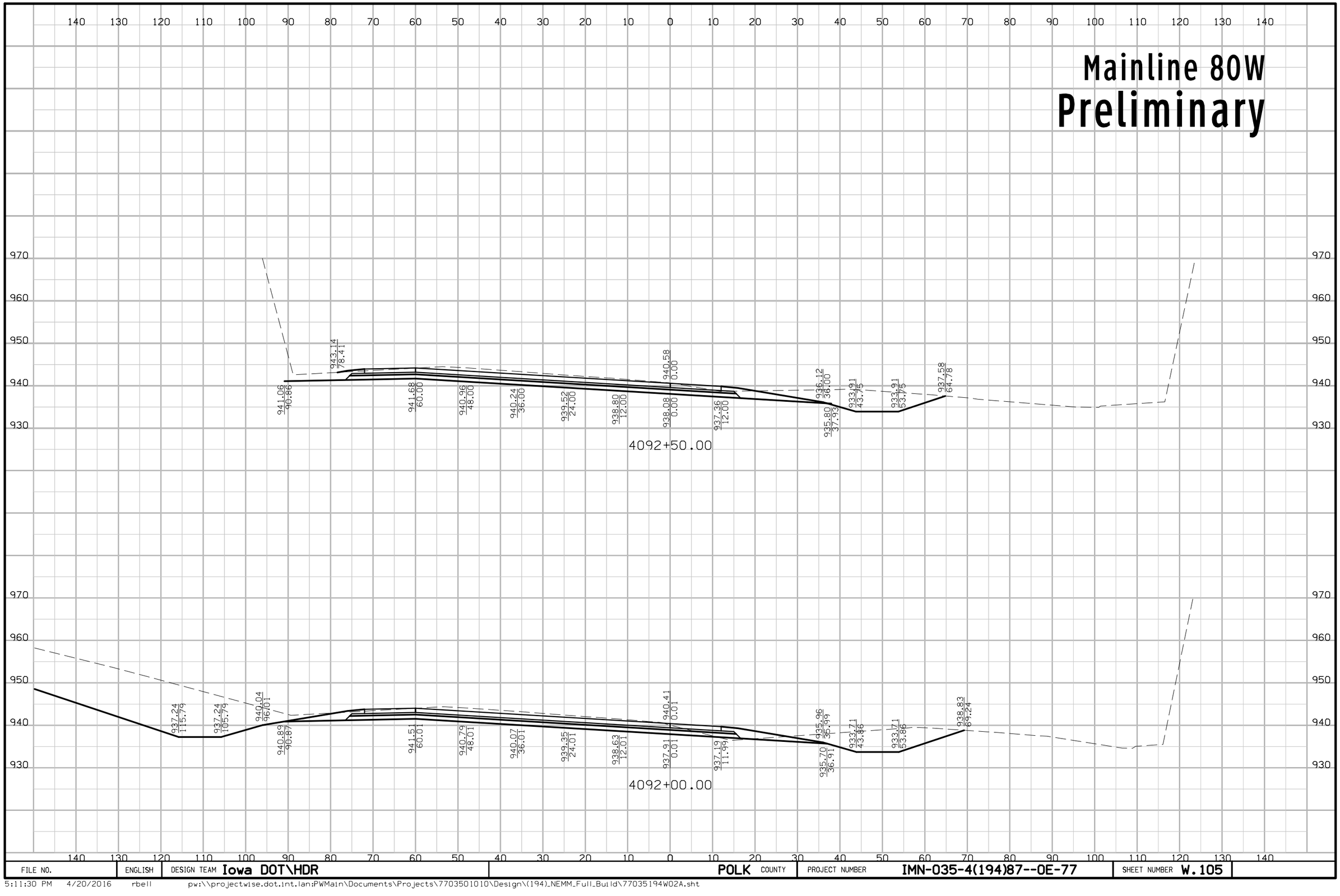
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.104

5:11:28 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

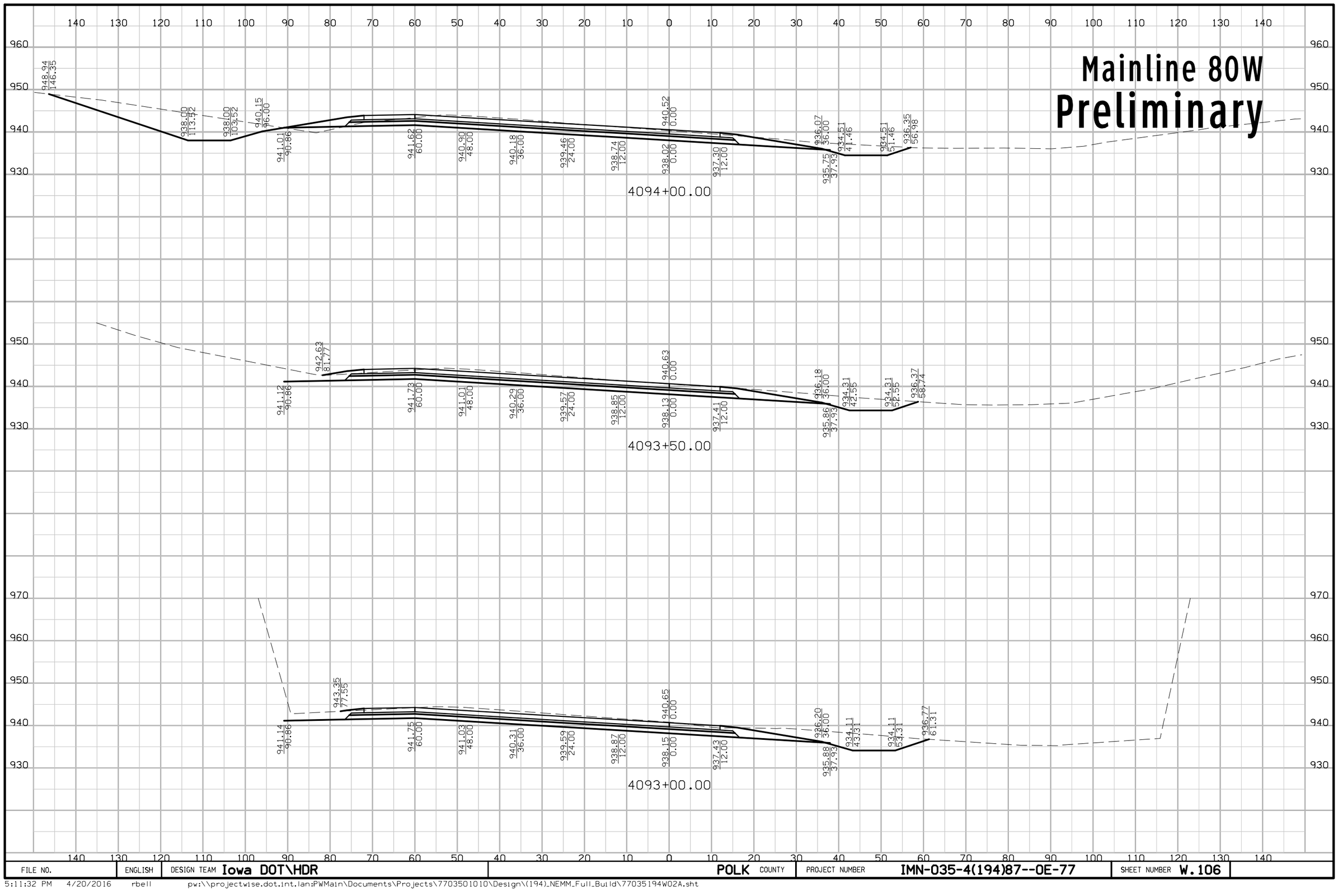
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.105

5:11:30 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

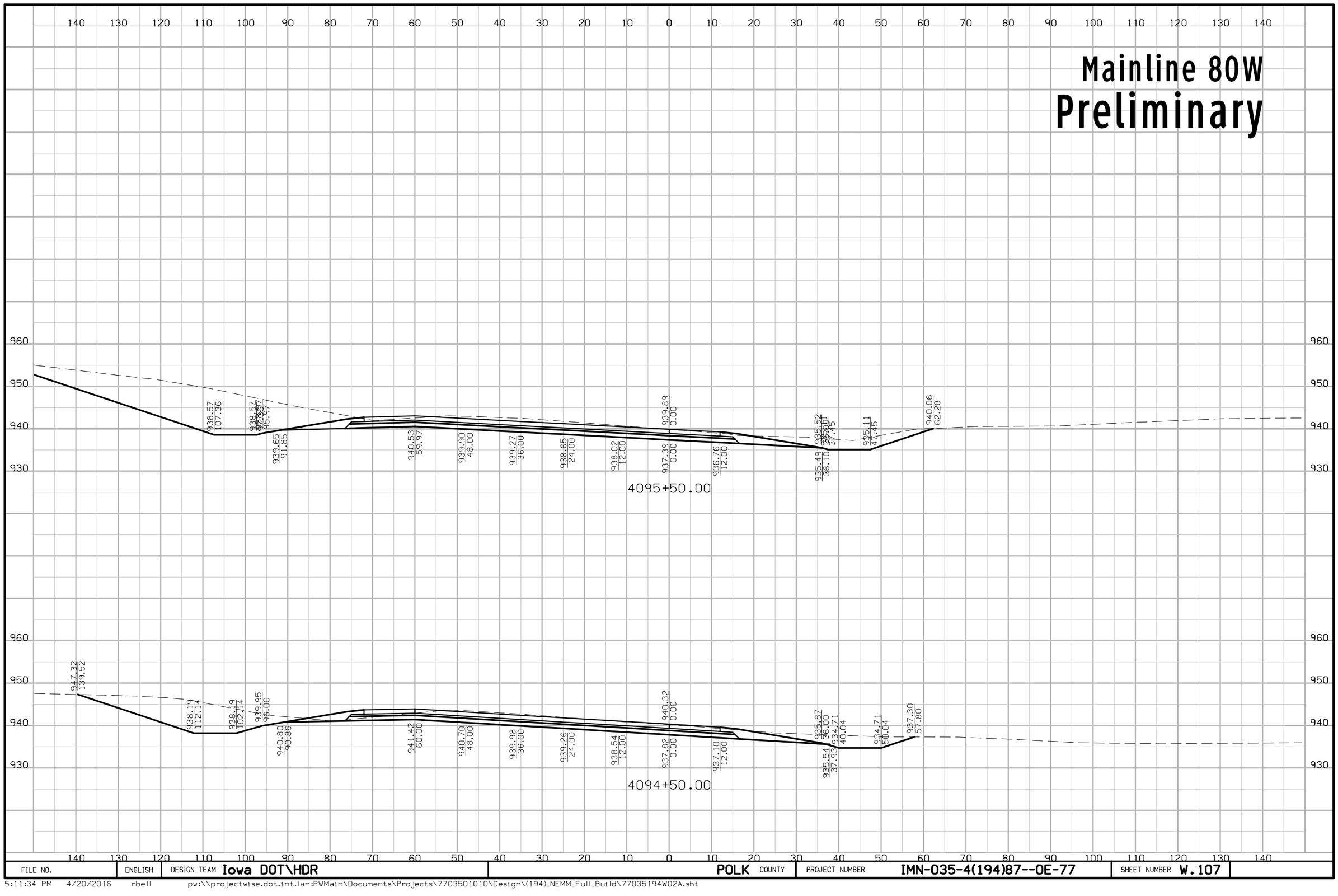
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.106

5:11:32 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

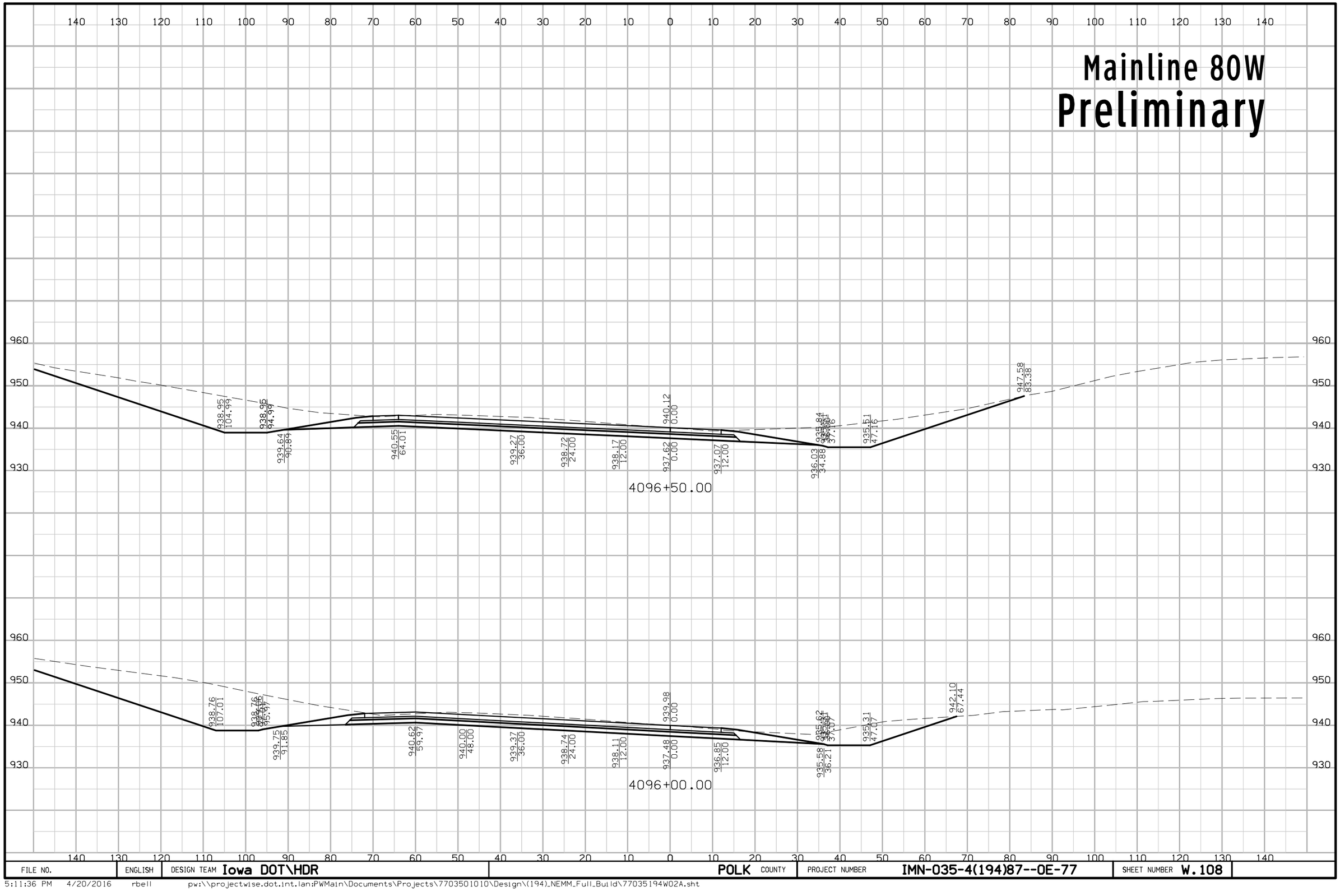
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.107

5:11:34 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

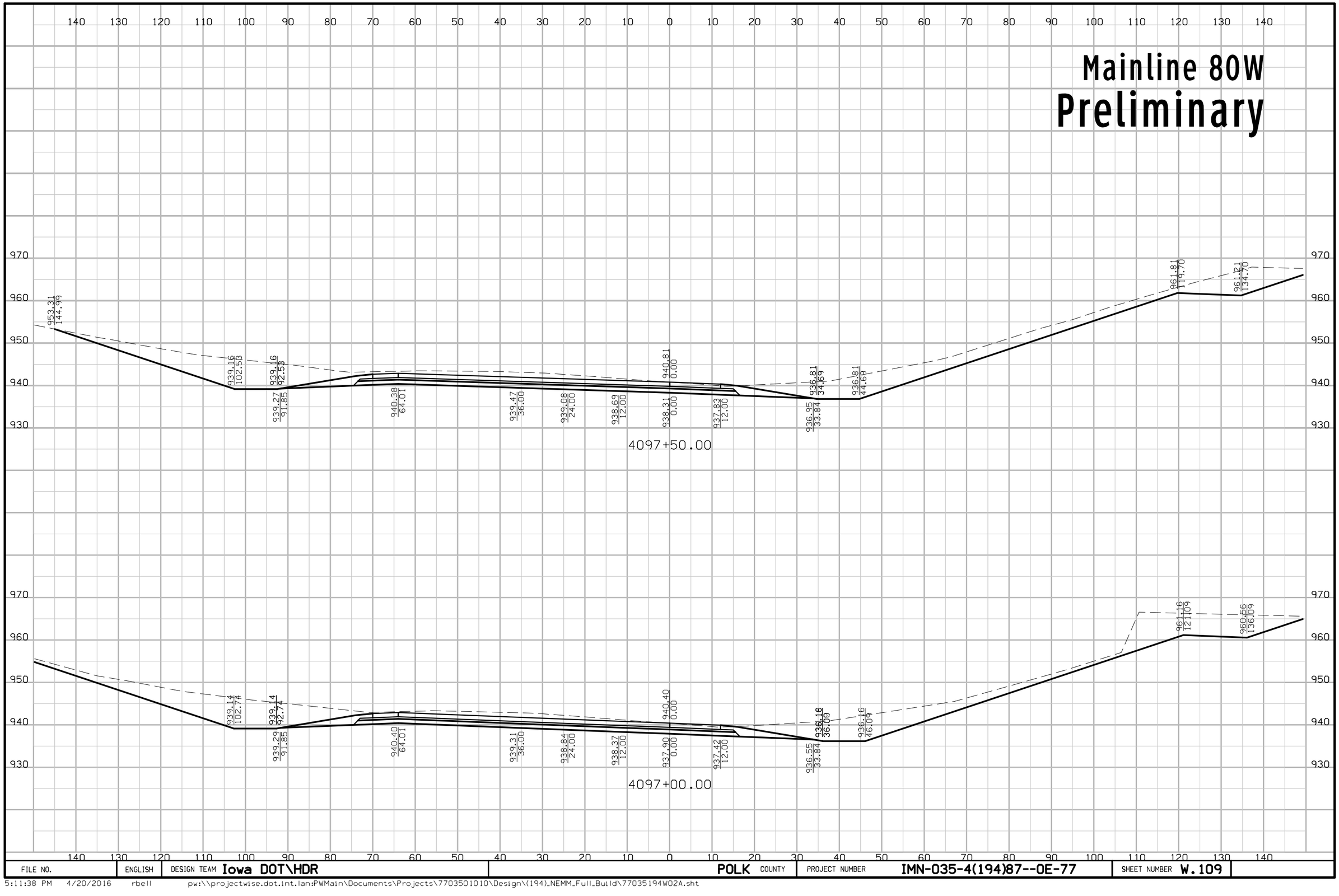
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.108

5:11:36 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80W
Preliminary

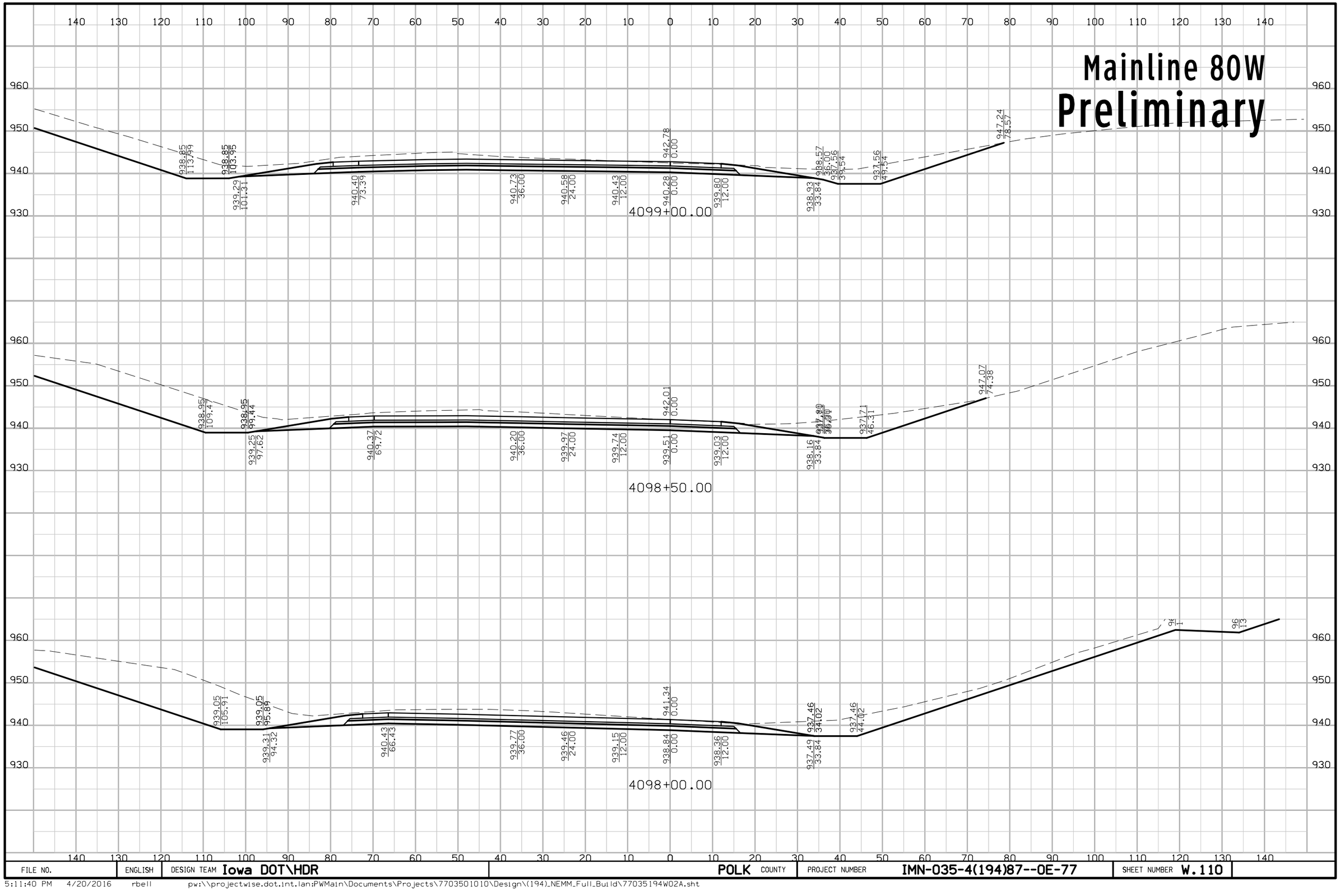


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.109

5:11:38 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80W

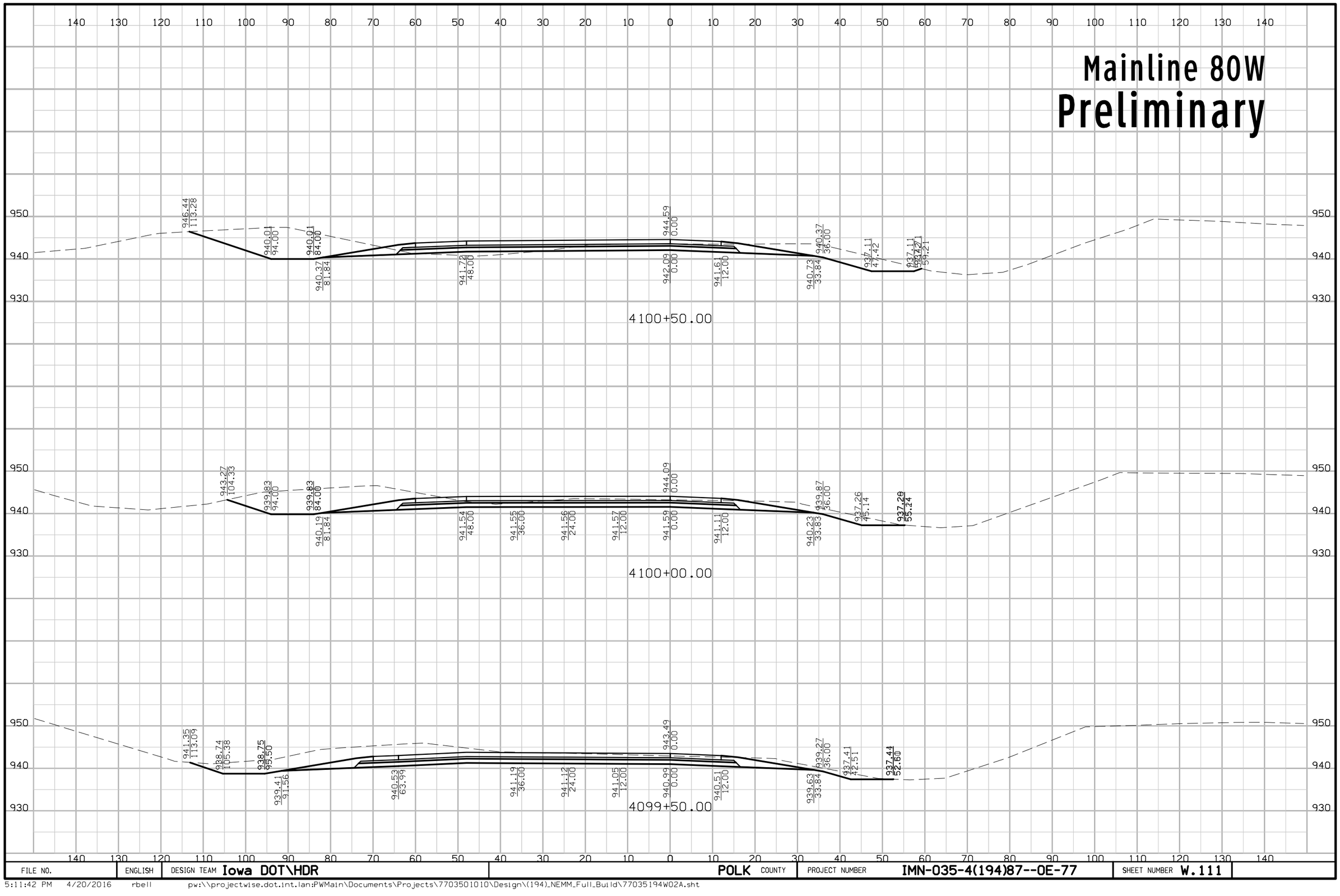
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.110

5:11:40 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

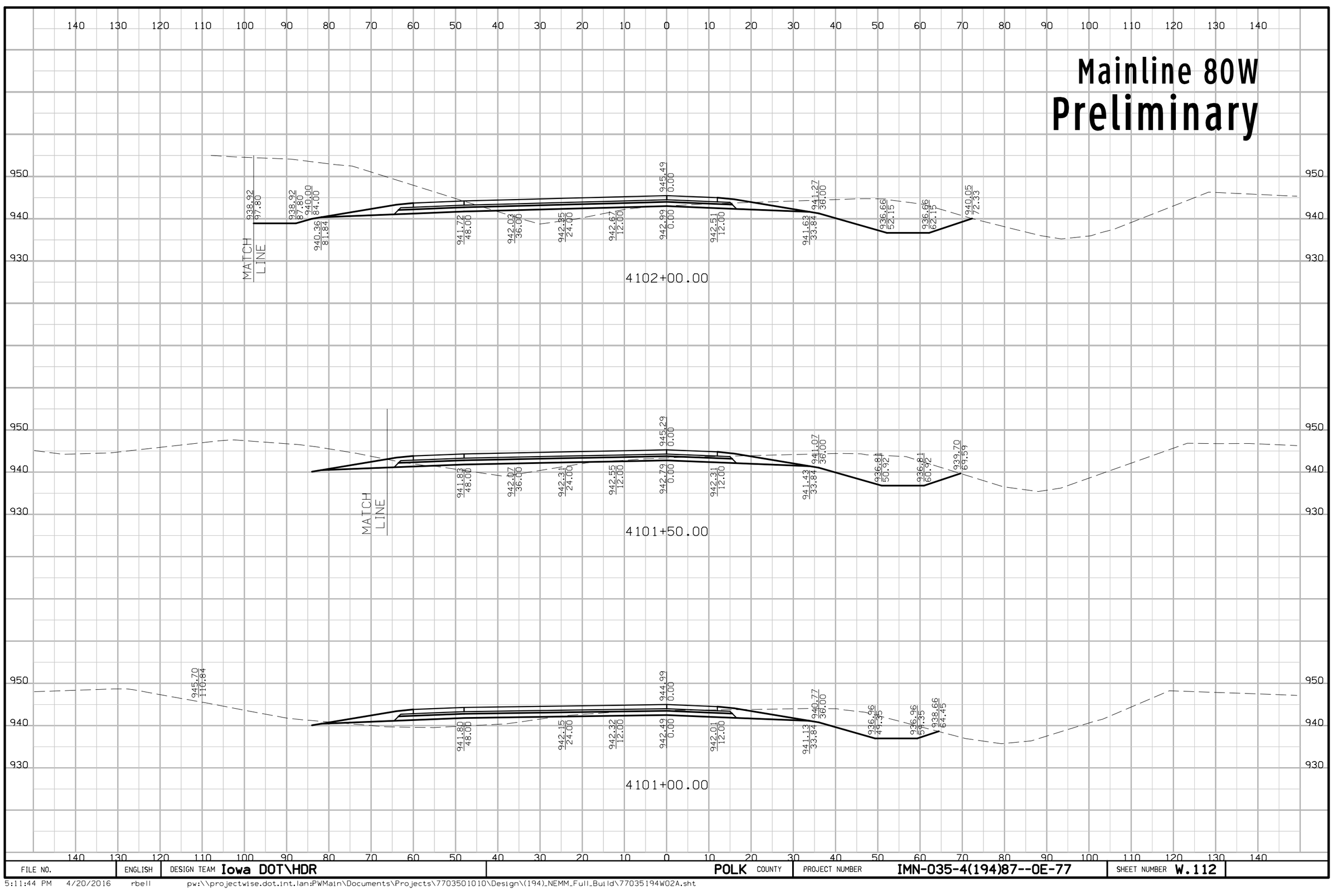
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.111

5:11:42 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

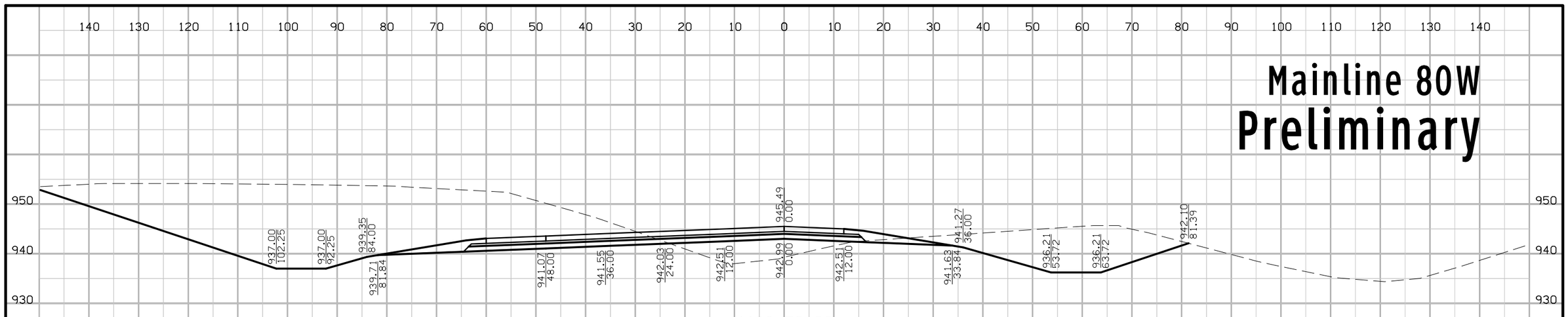
Mainline 80W
Preliminary

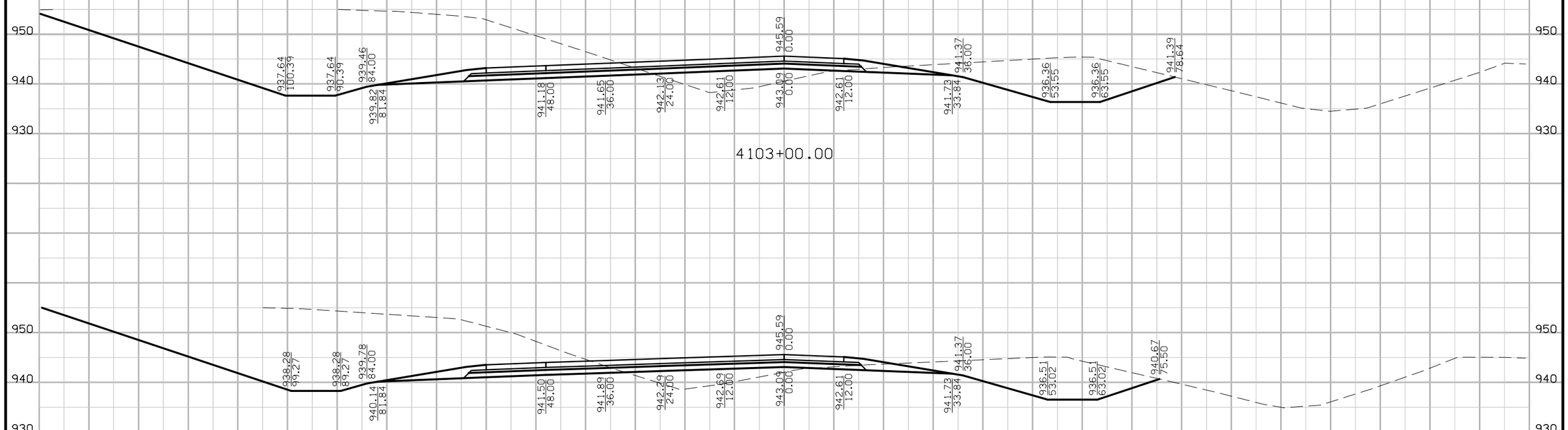


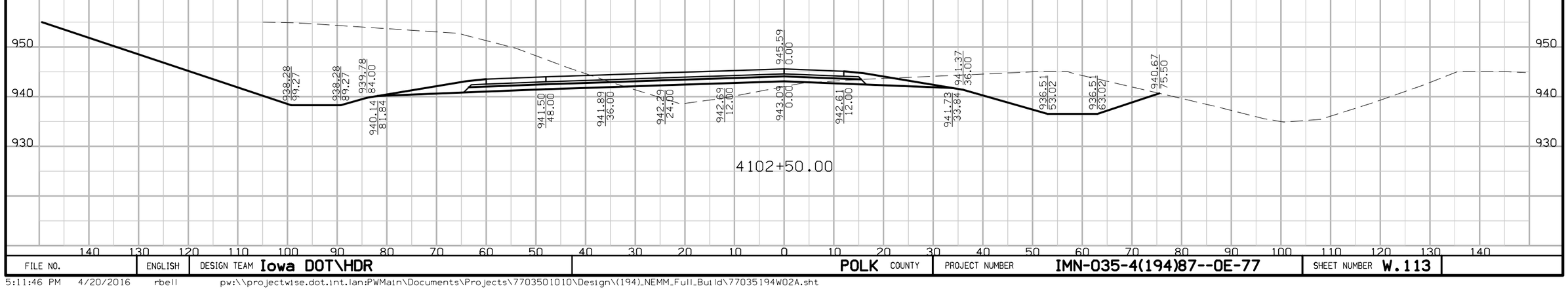
FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.112

5:11:44 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80W
Preliminary



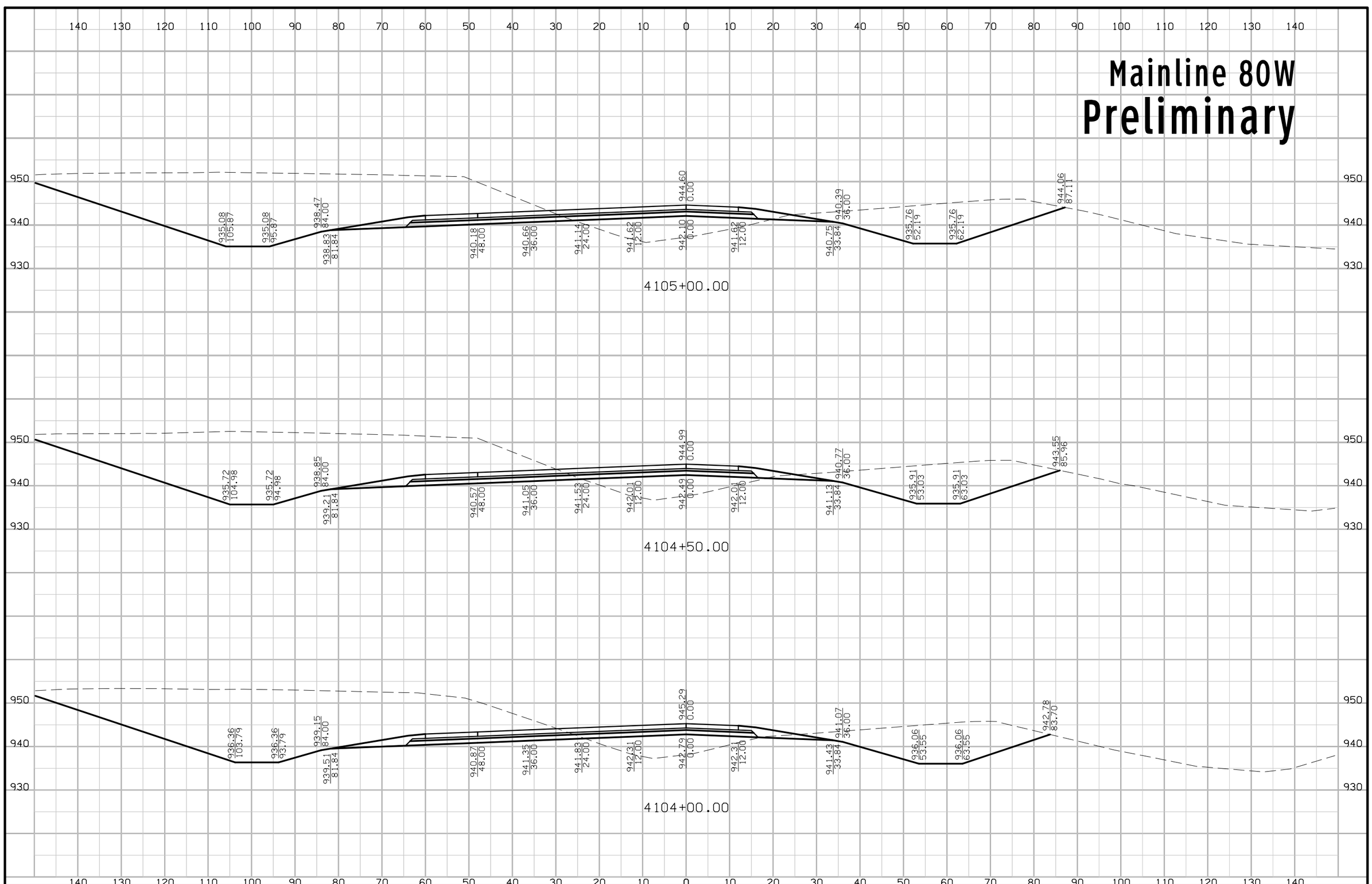




FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.113

5:11:46 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

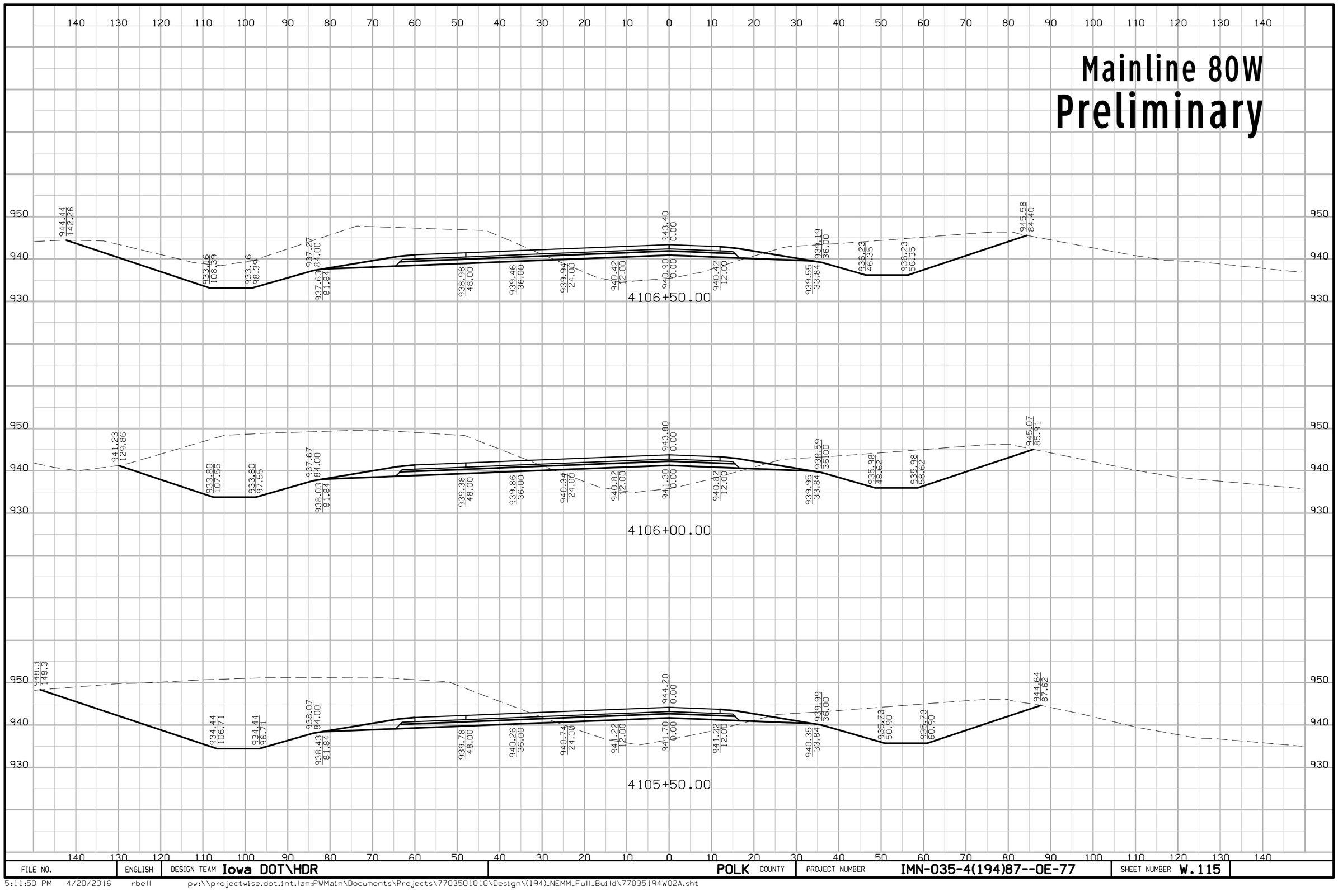
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.114

5:11:48 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

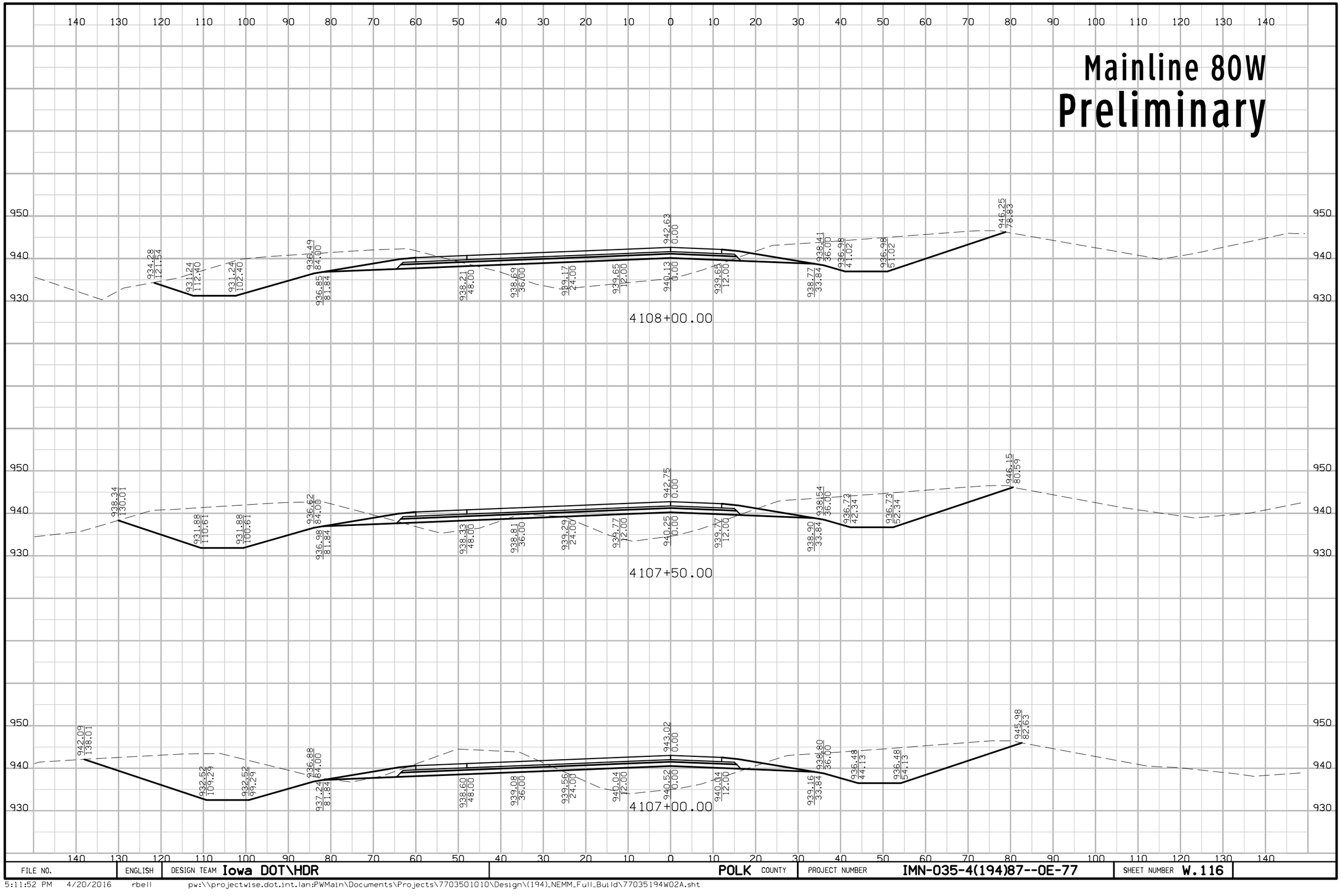
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.115

5:11:50 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

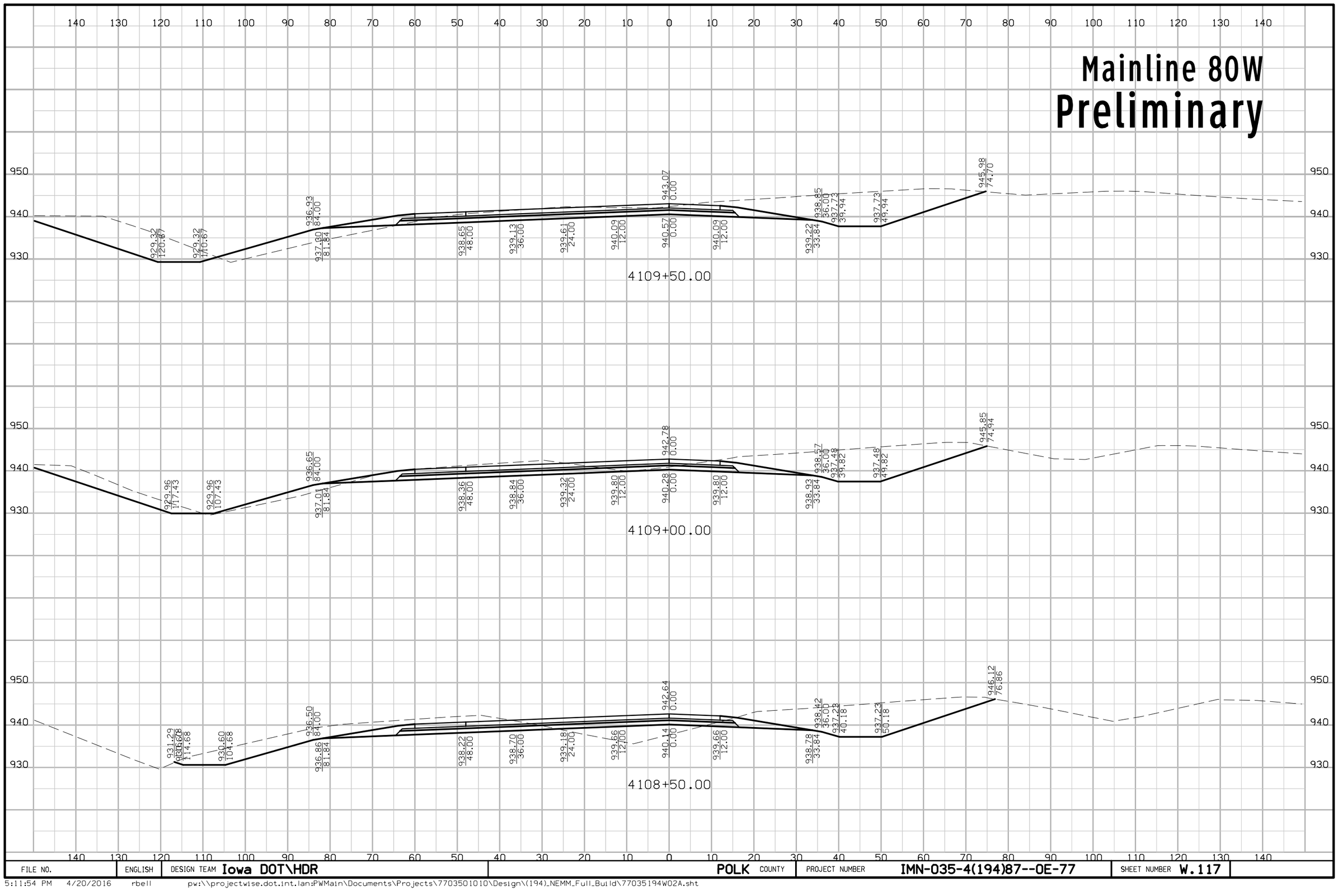
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.116

5:11:52 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

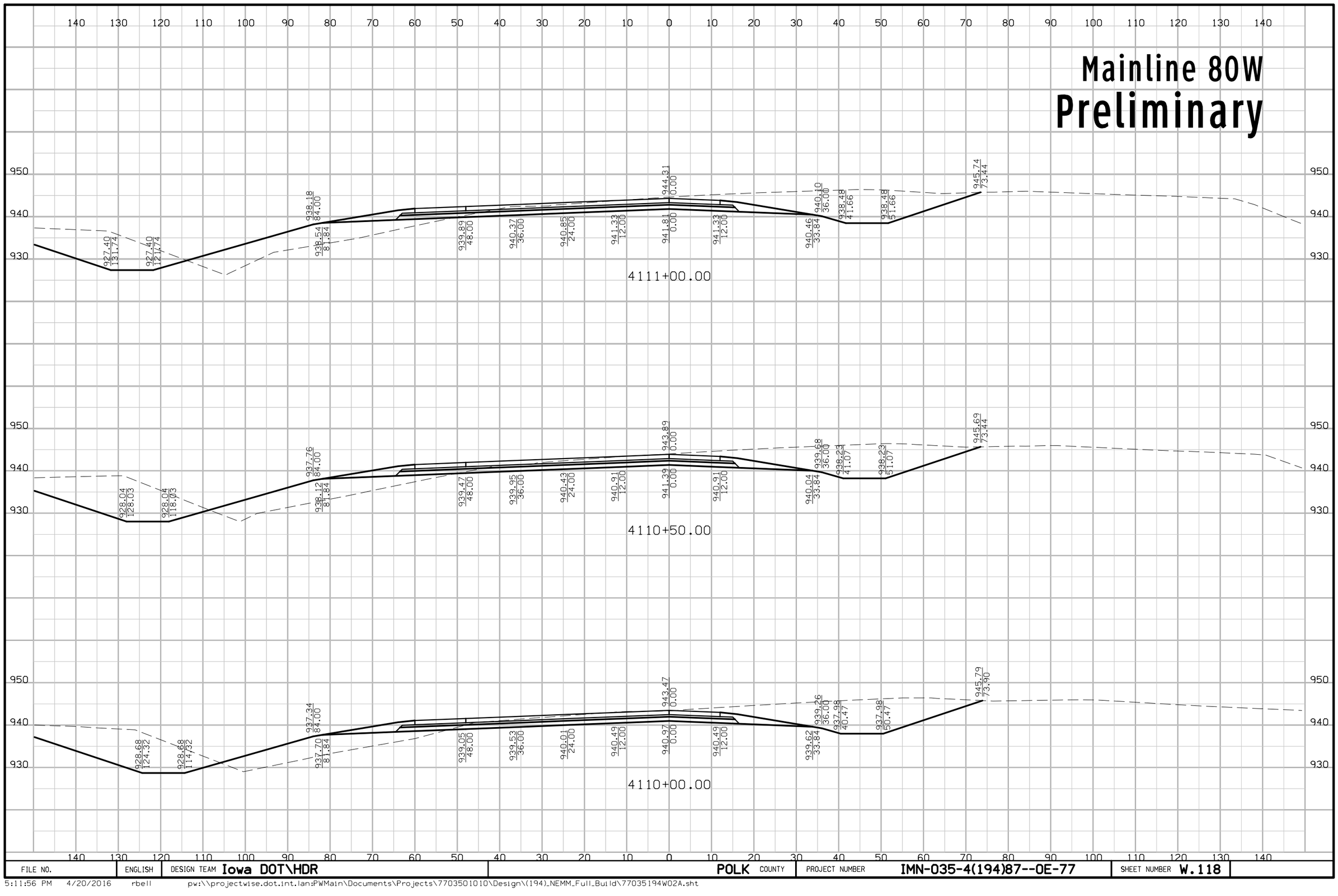
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.117

5:11:54 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80W
Preliminary

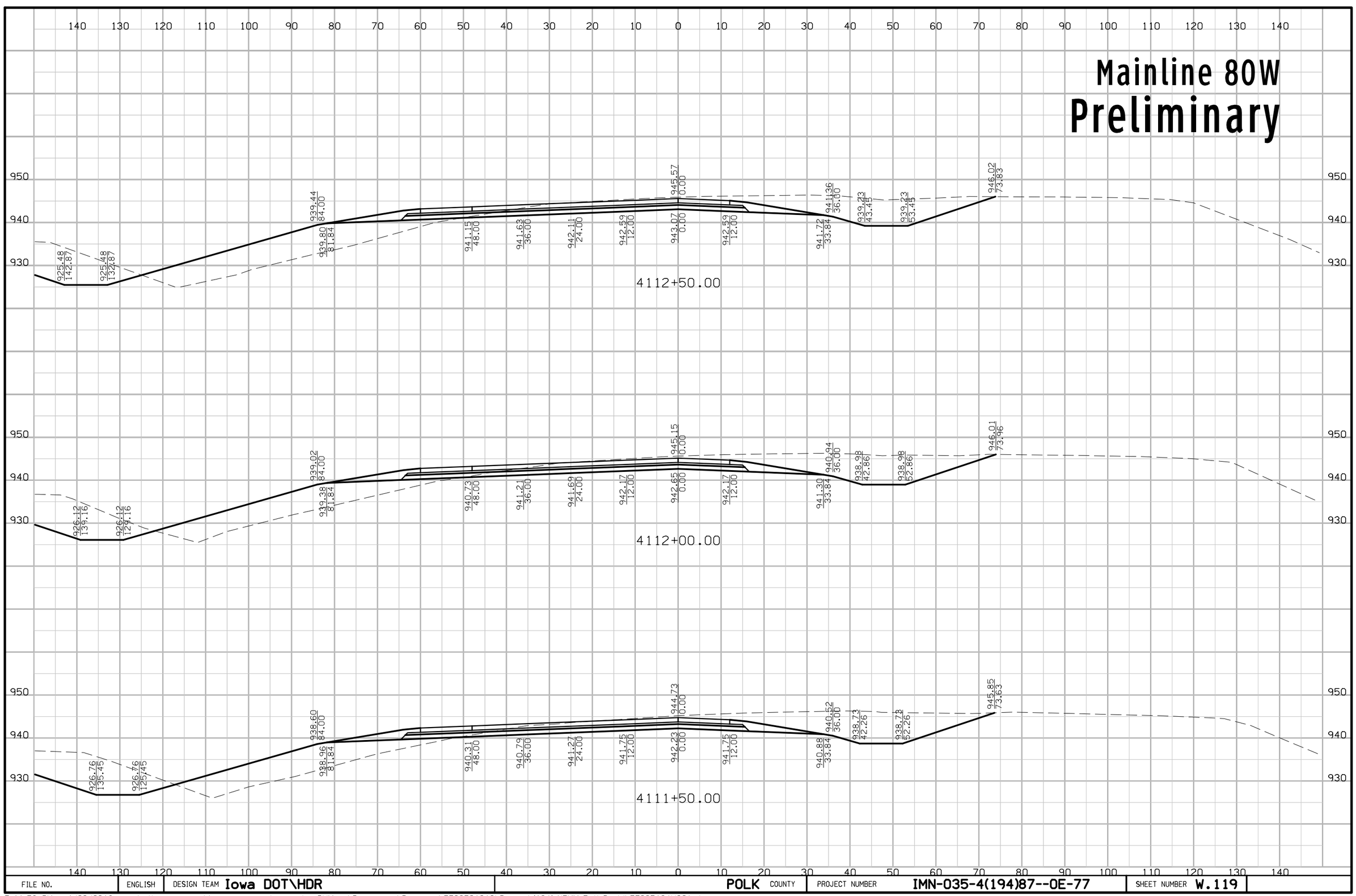


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.118

5:11:56 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

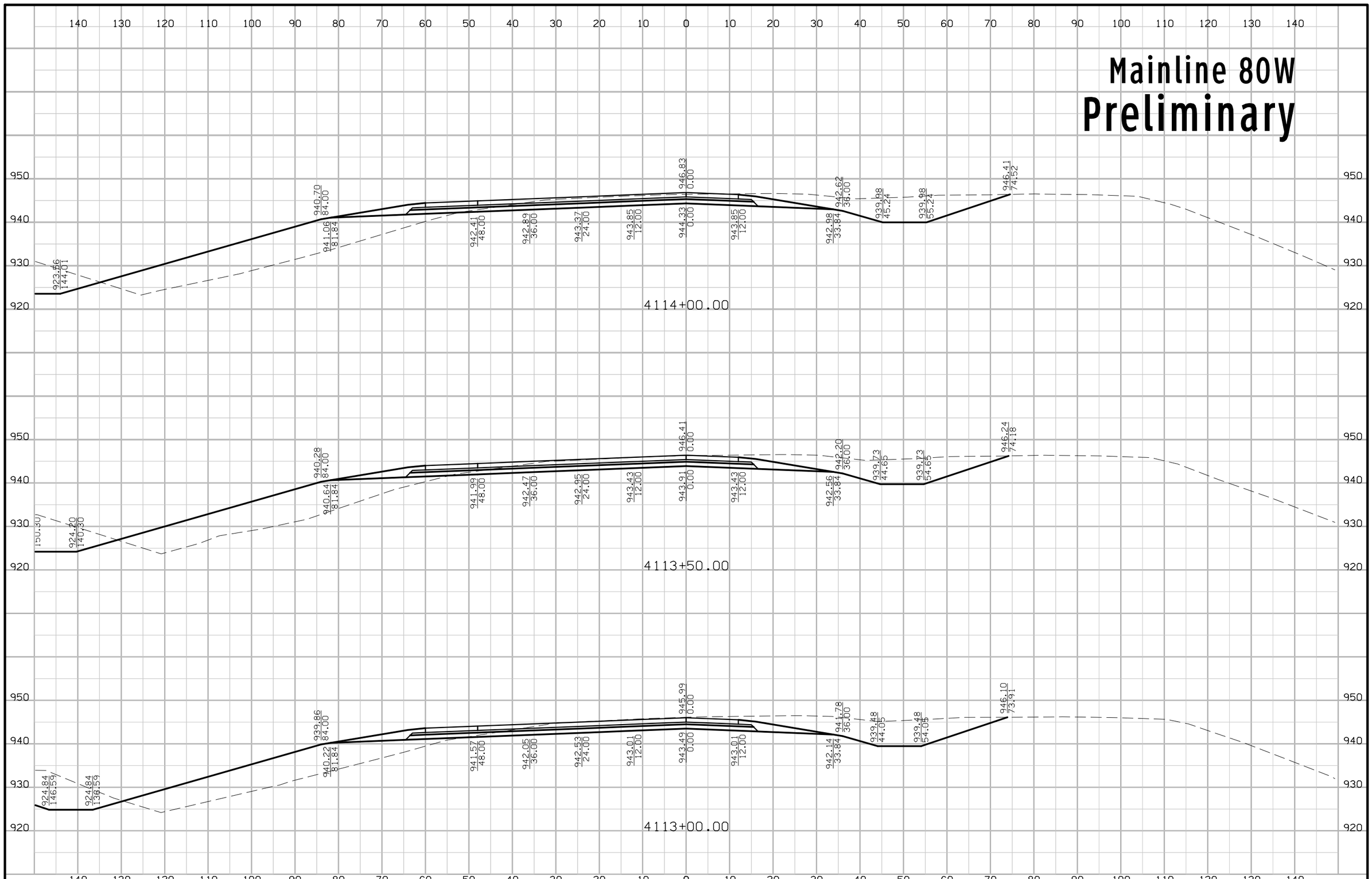
Mainline 80W

Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.119

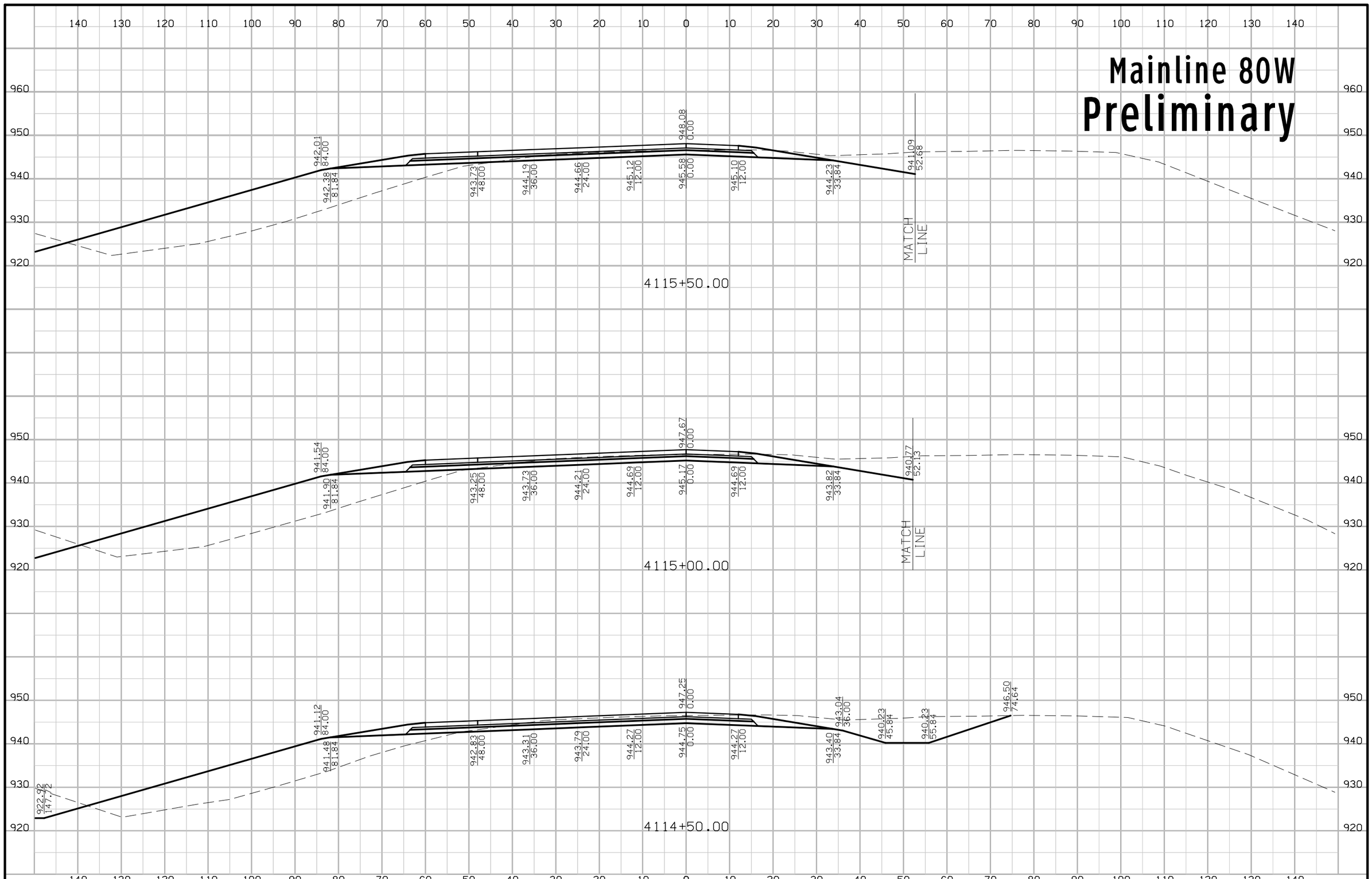
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.120

5:12:00 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

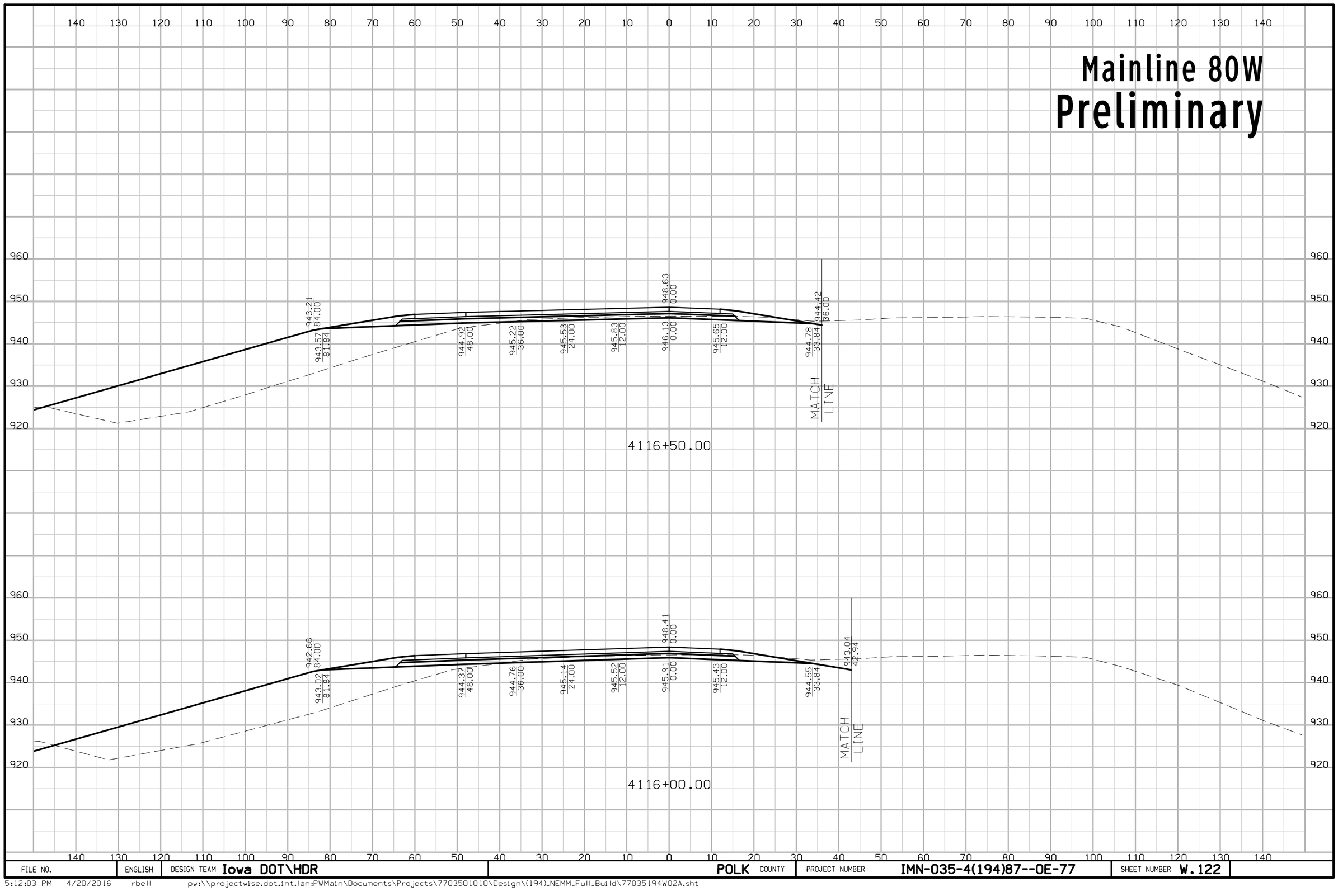
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.121

5:12:01 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

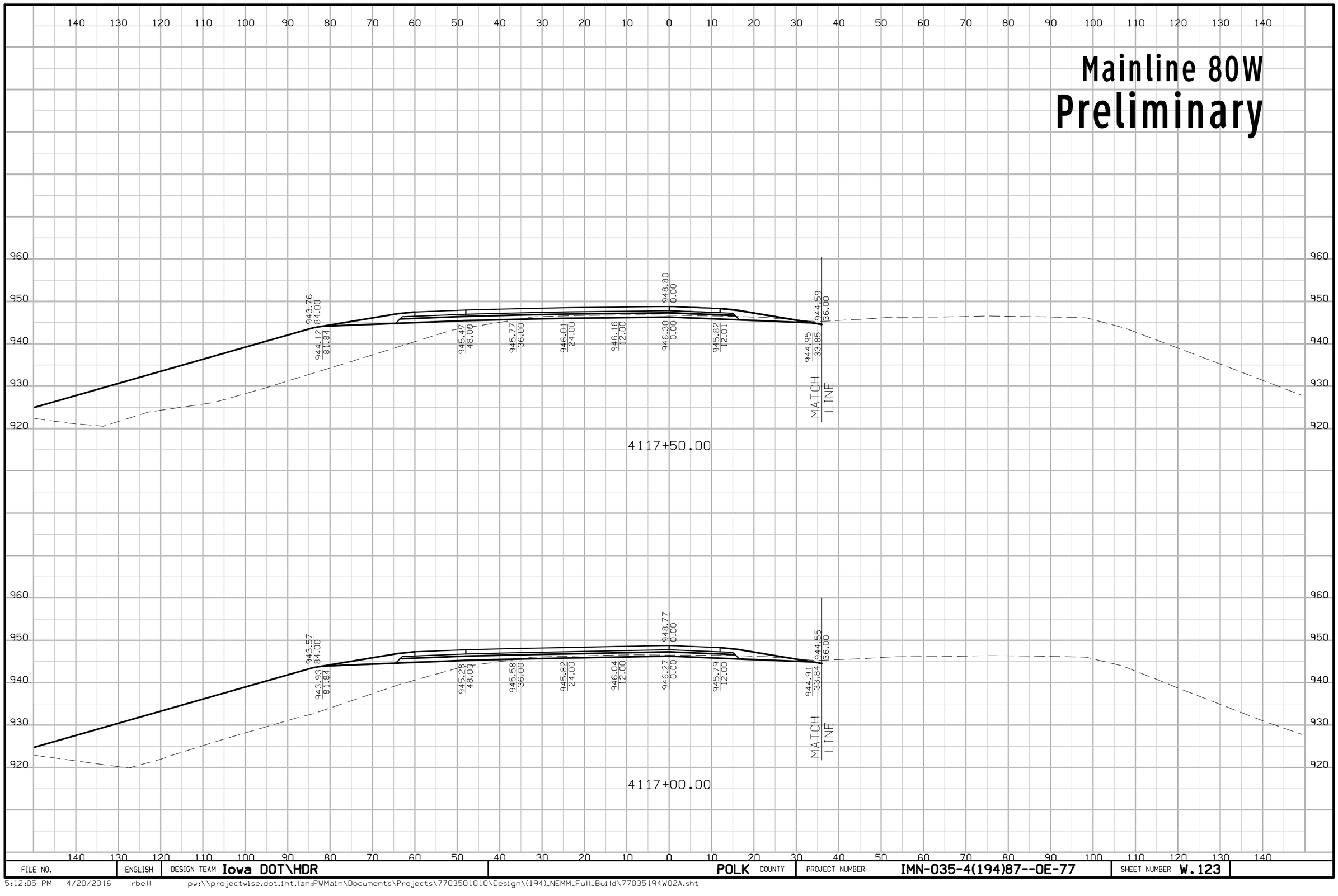
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.122

5:12:03 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

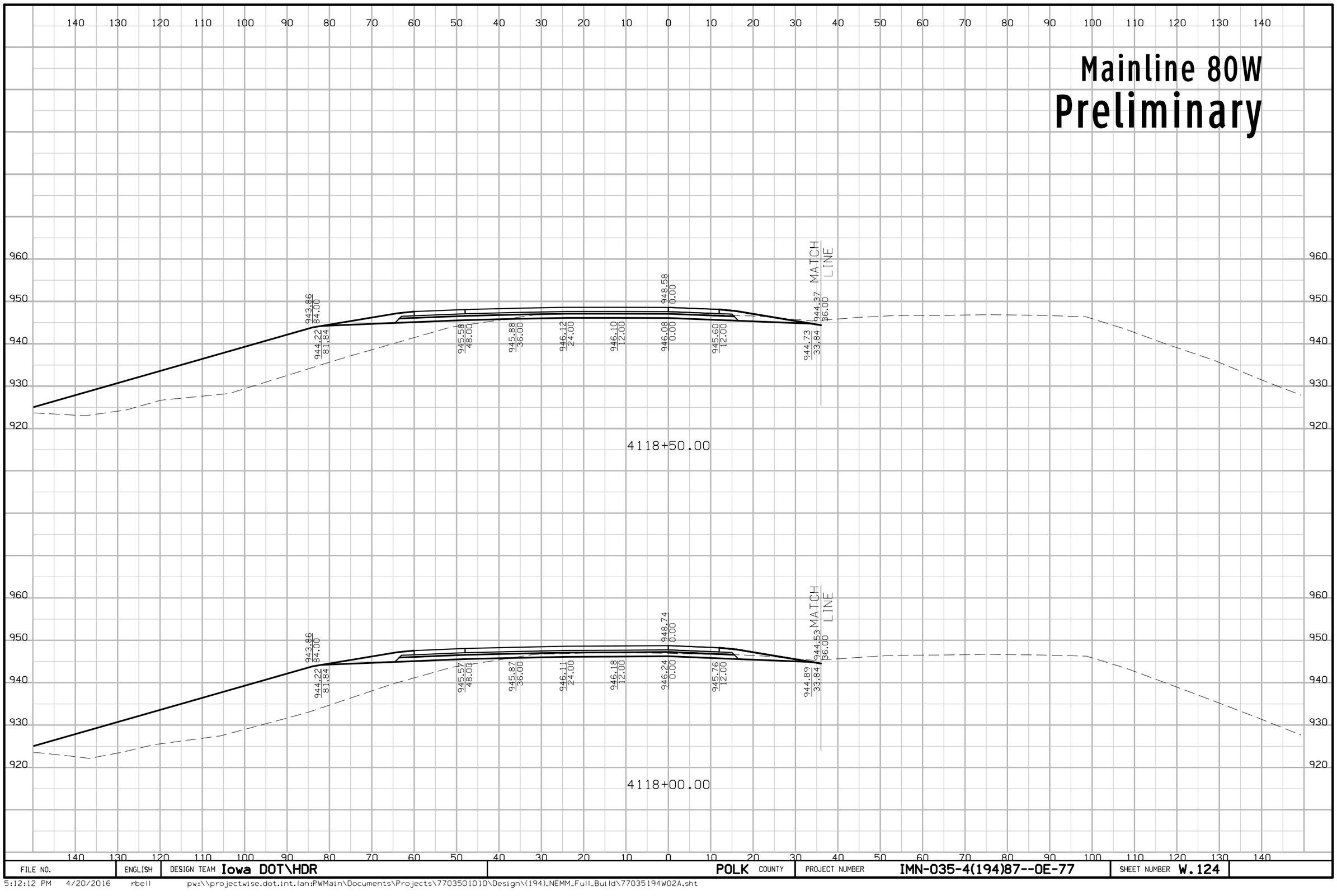
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.123

5:12:05 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

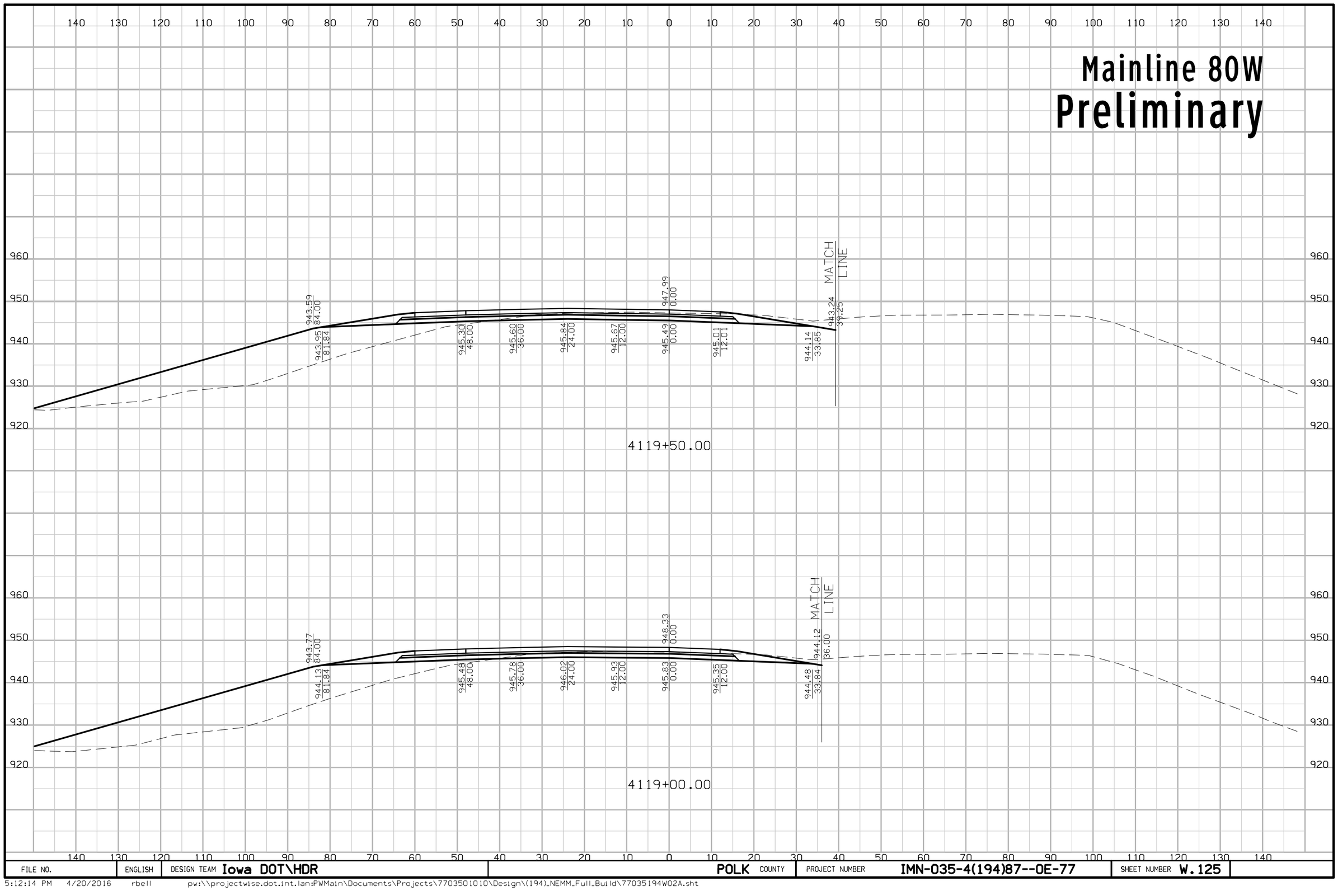
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.124

5:12:12 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

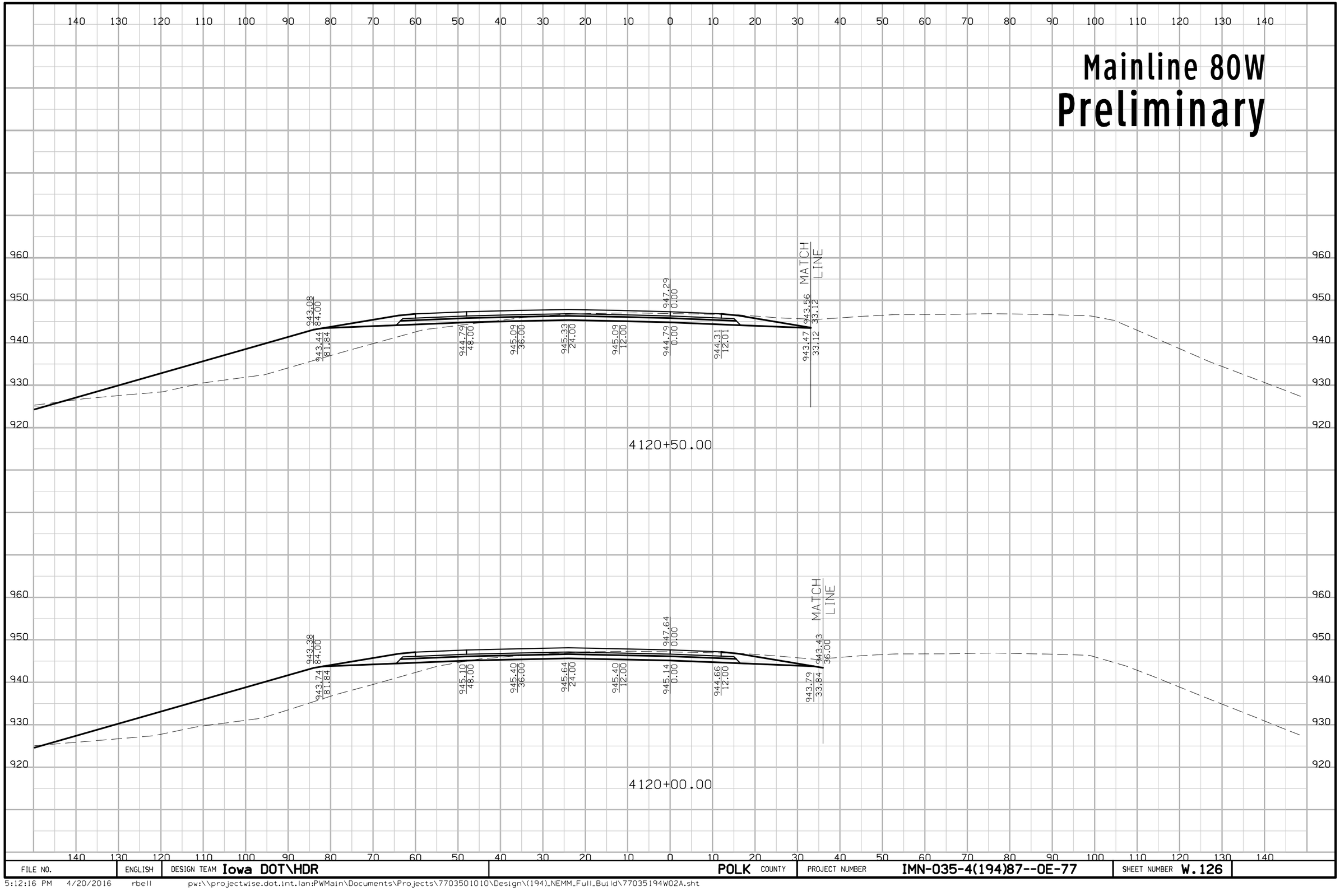
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.125

5:12:14 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

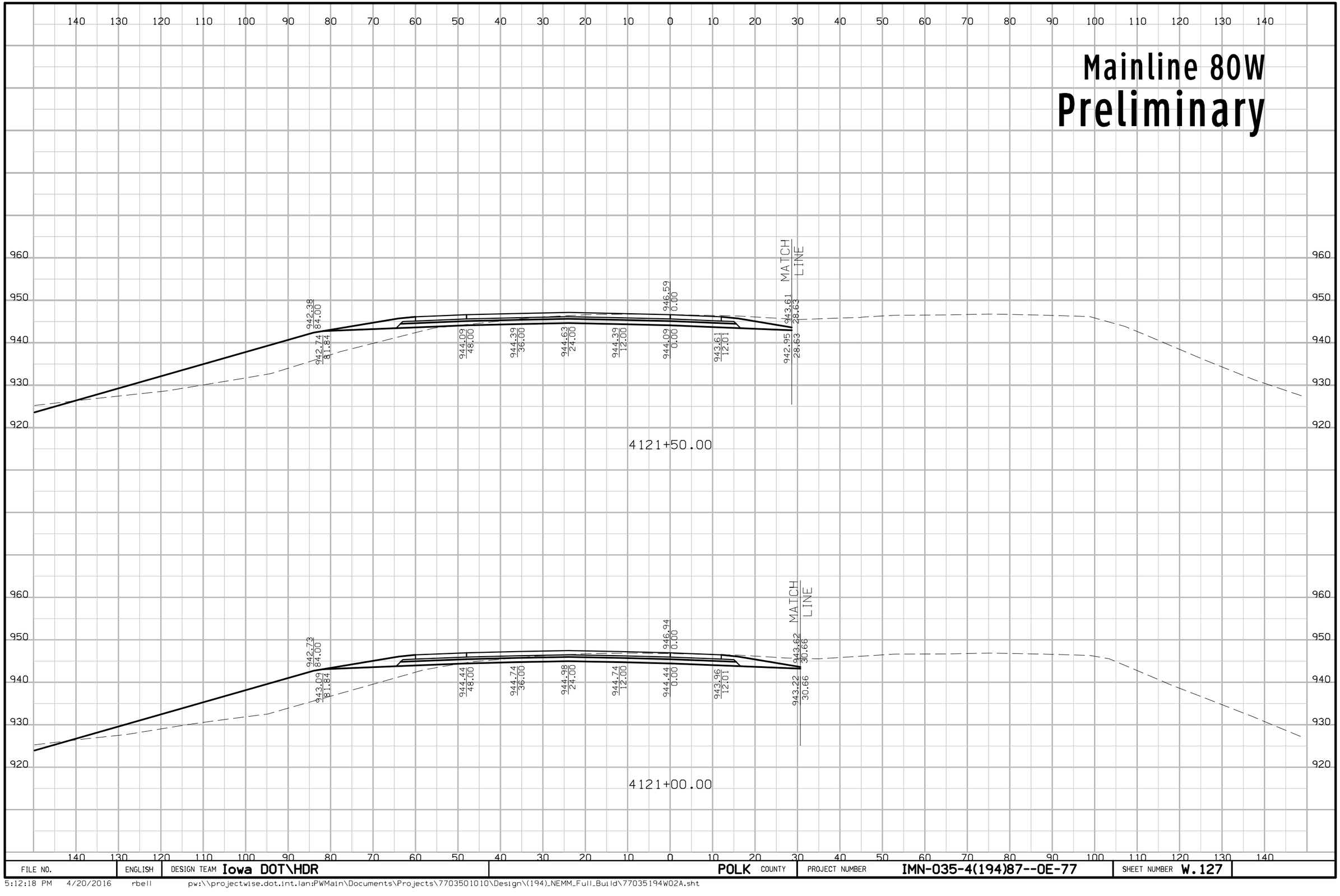
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.126

5:12:16 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

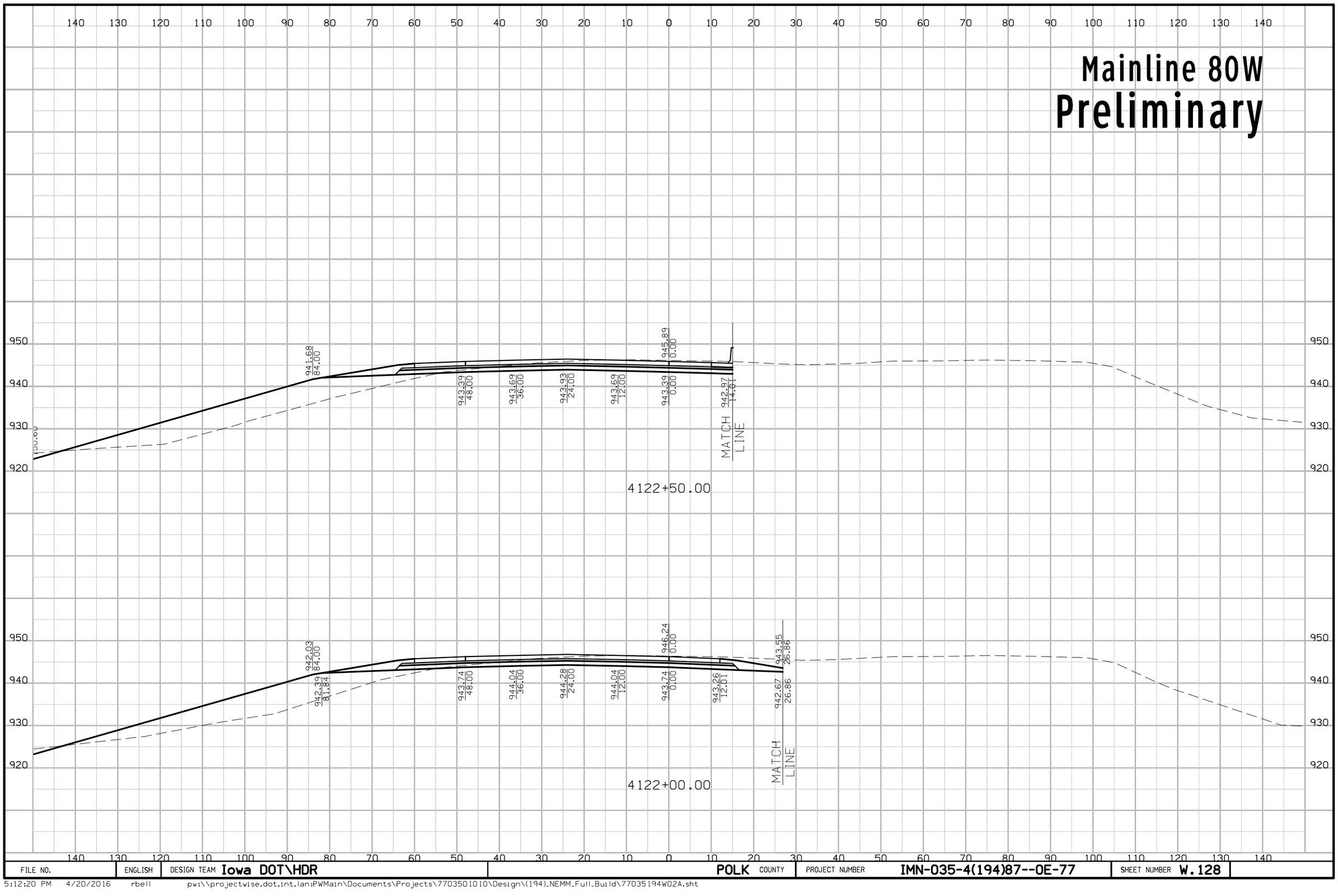
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.127

5:12:18 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

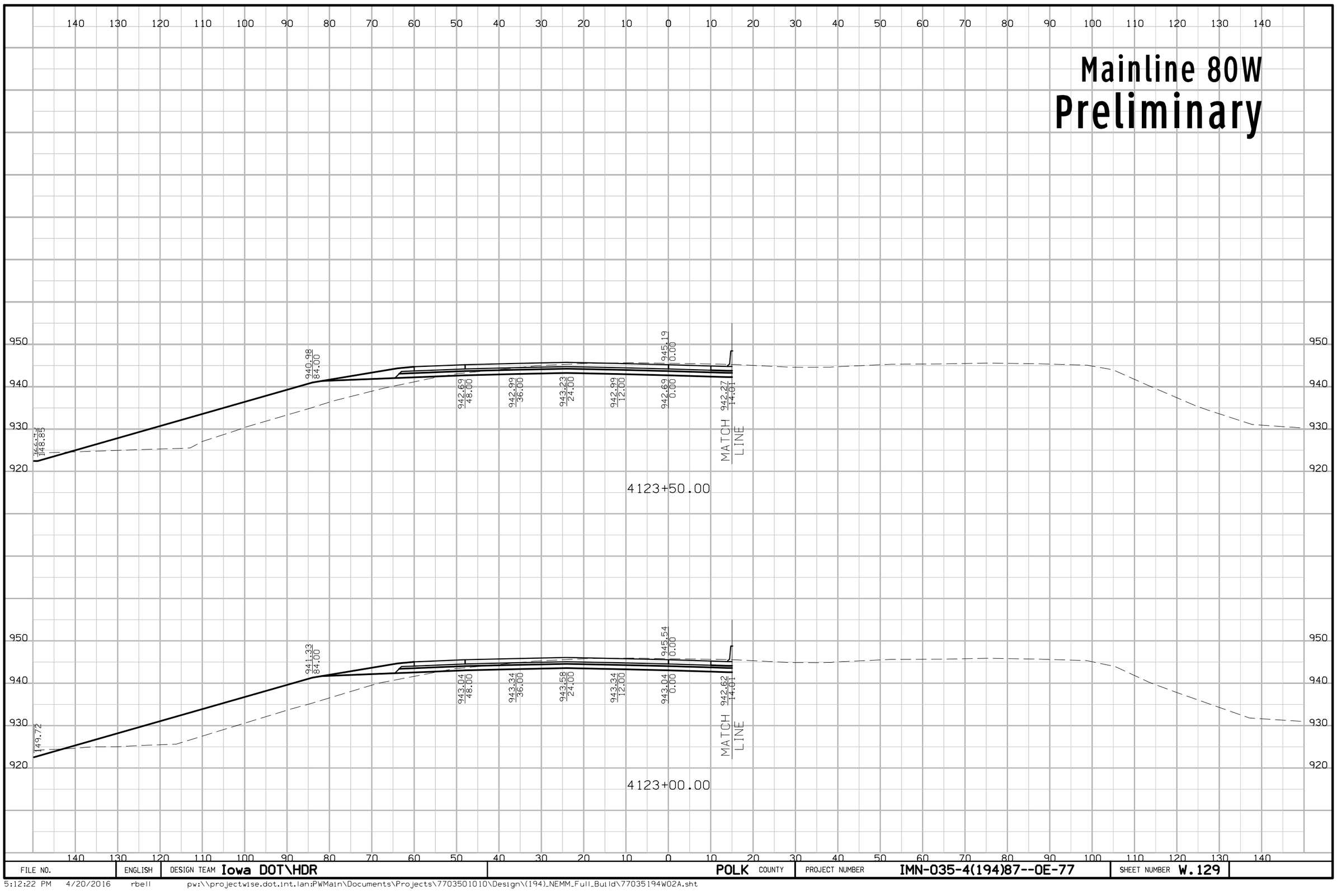
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.128

5:12:20 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

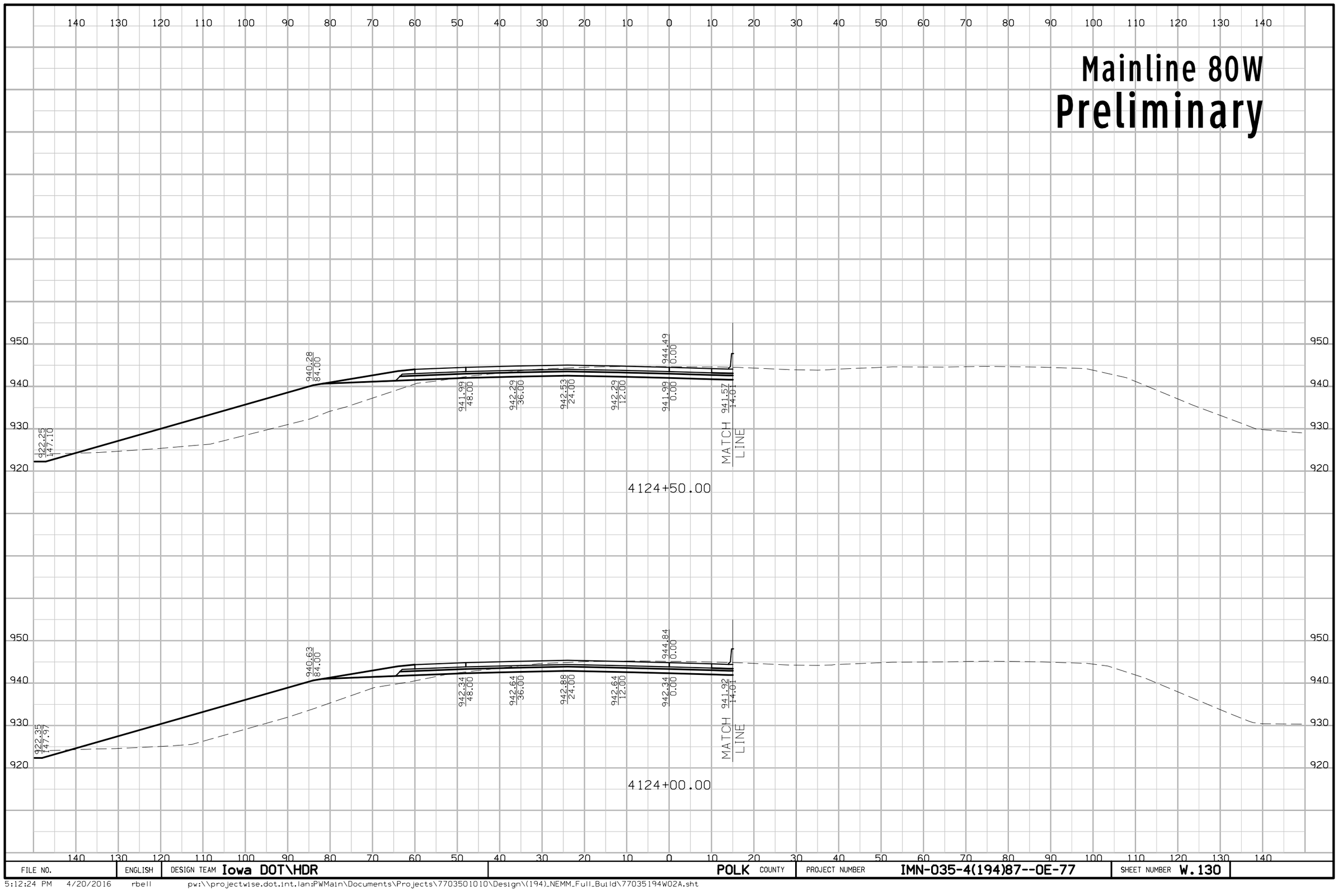
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.129

5:12:22 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

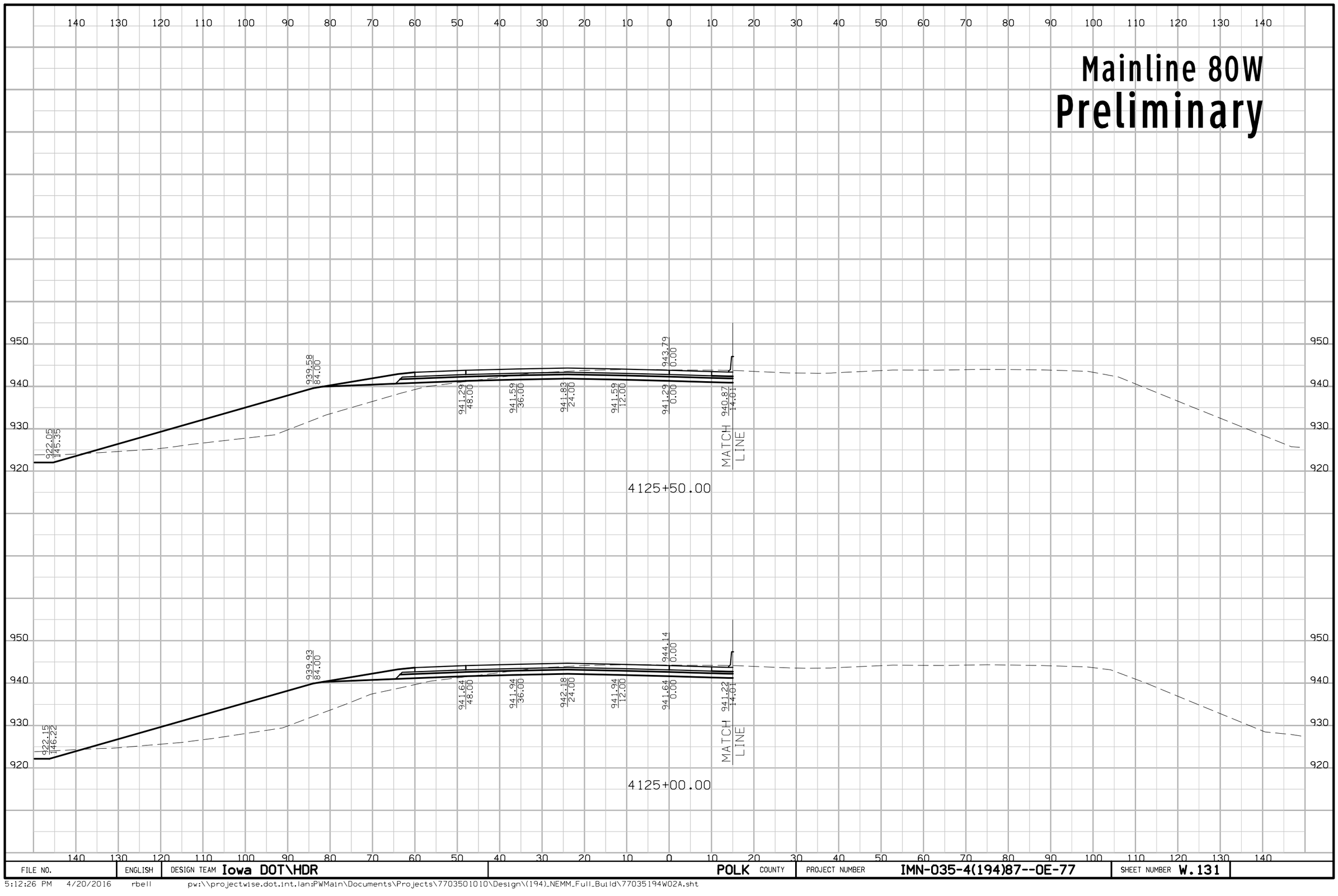
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.130

5:12:24 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

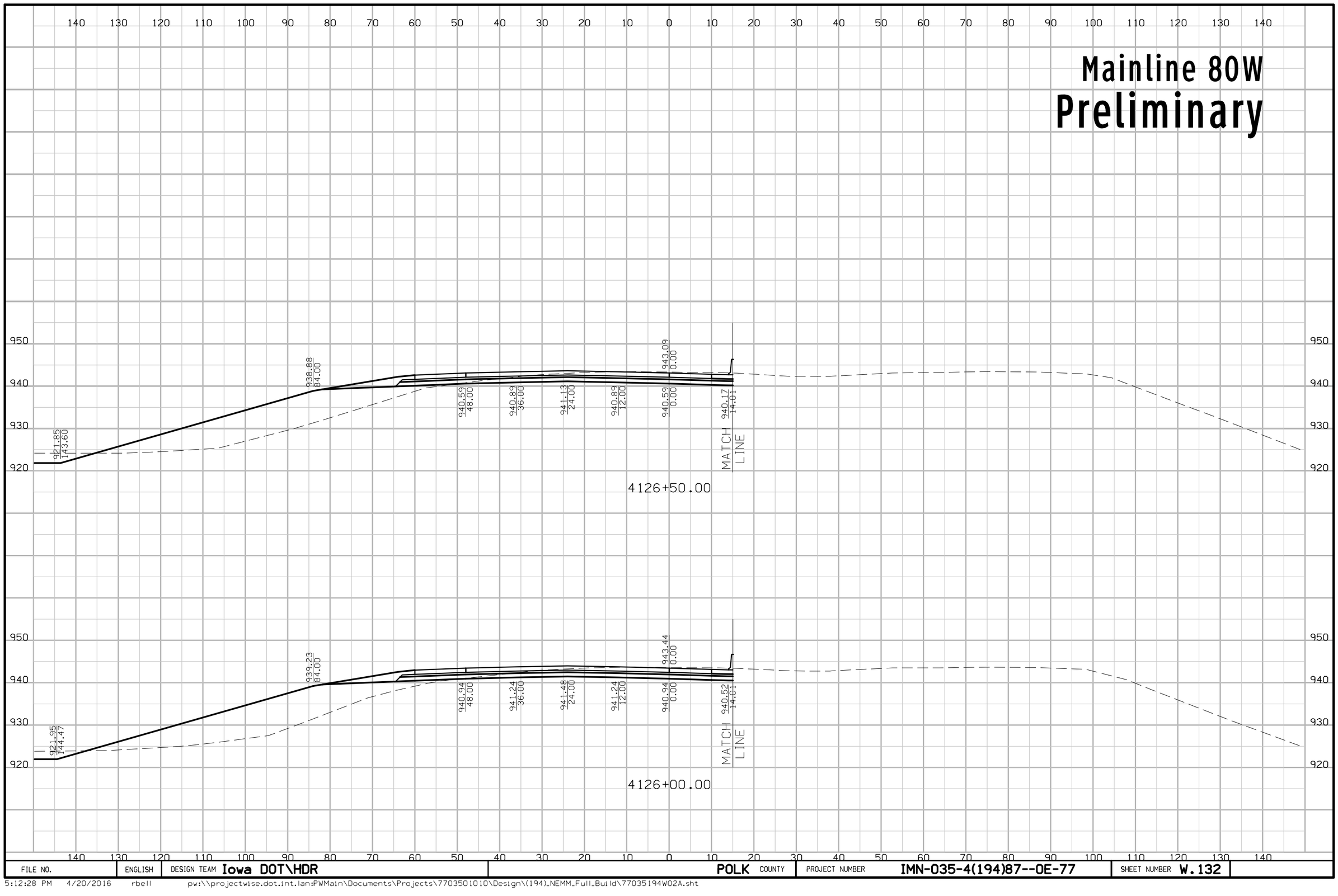
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.131

5:12:26 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

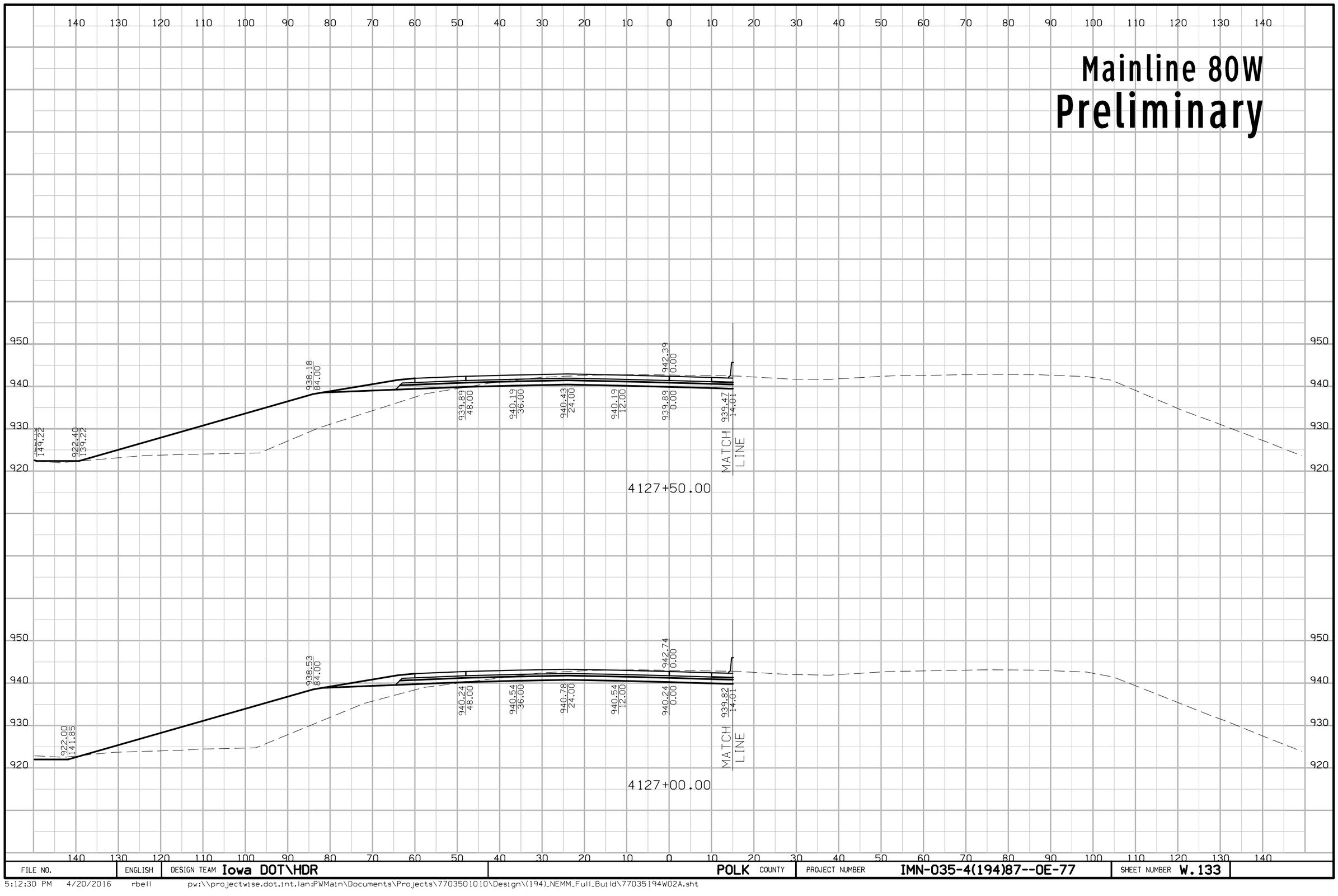
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.132

5:12:28 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

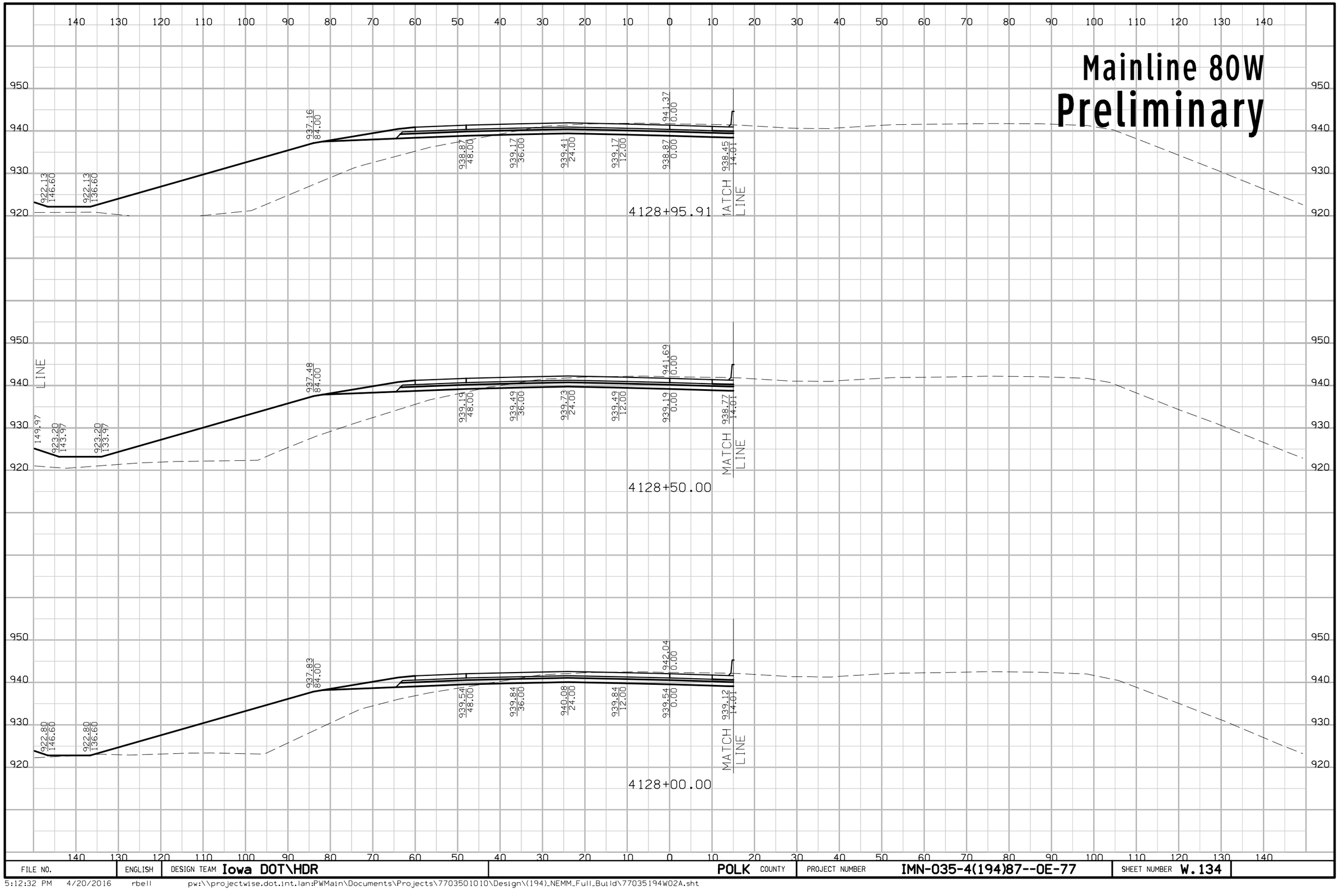
Mainline 80W
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.133

5:12:30 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80W
Preliminary

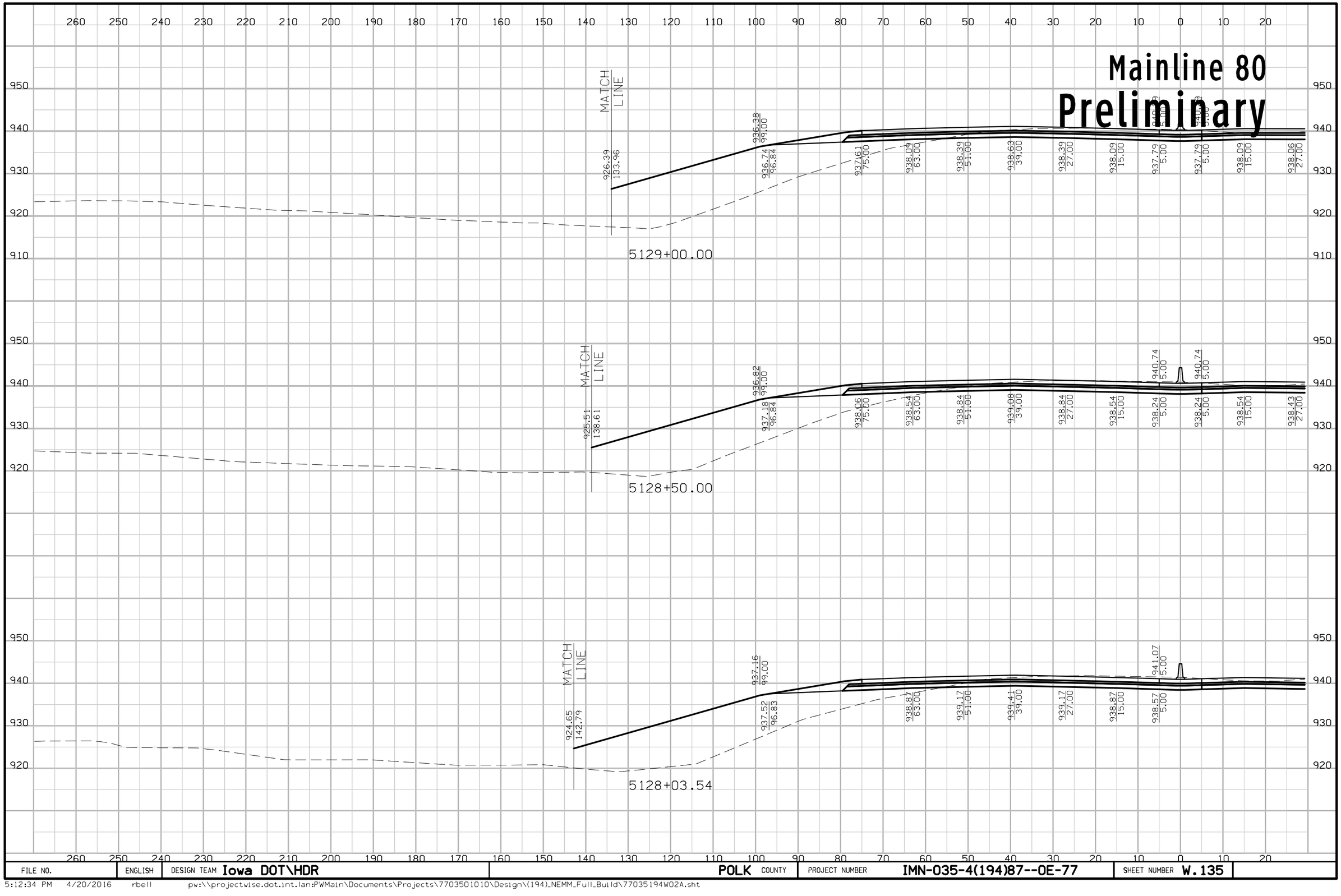


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.134

5:12:32 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

Preliminary

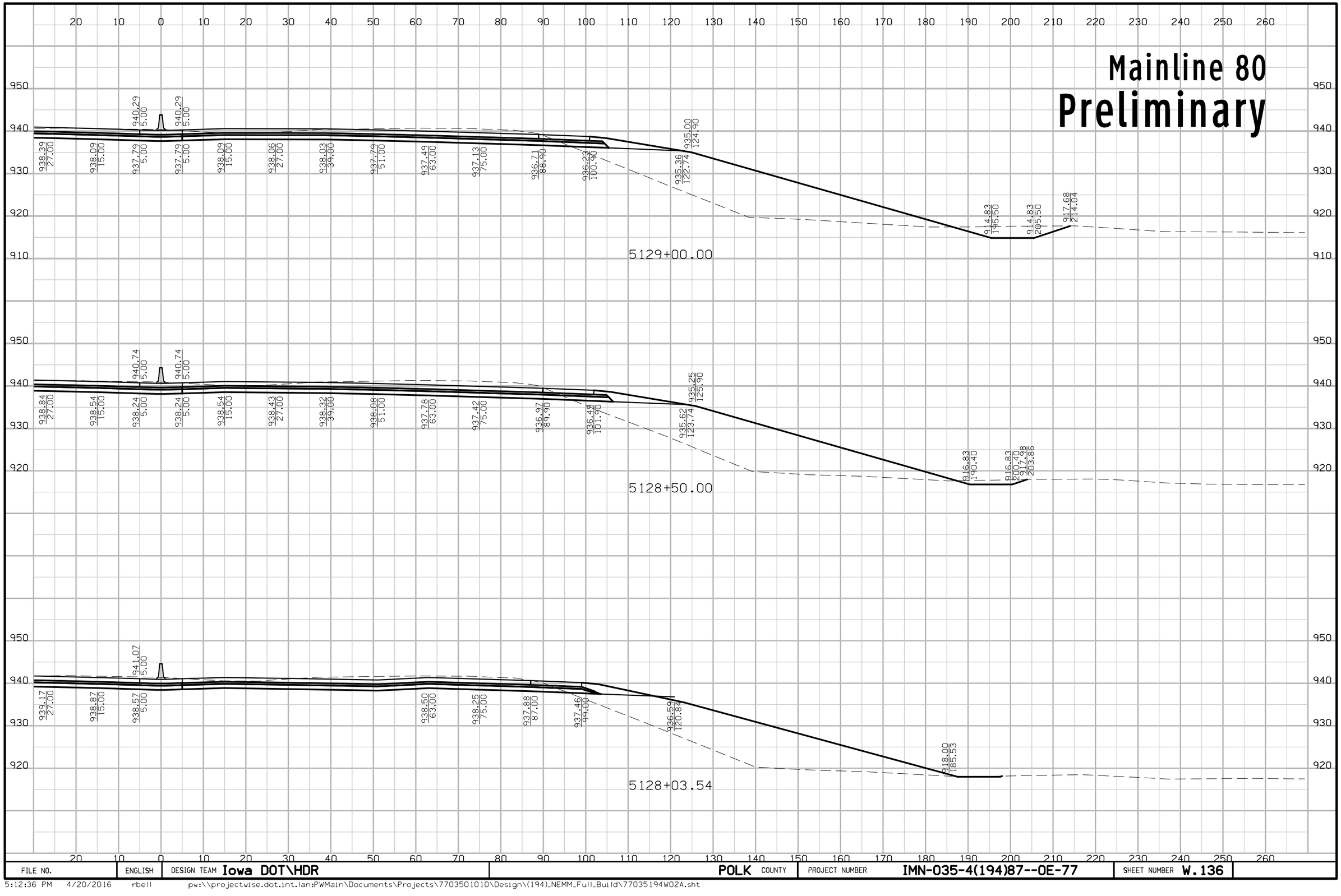


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.135

5:12:34 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

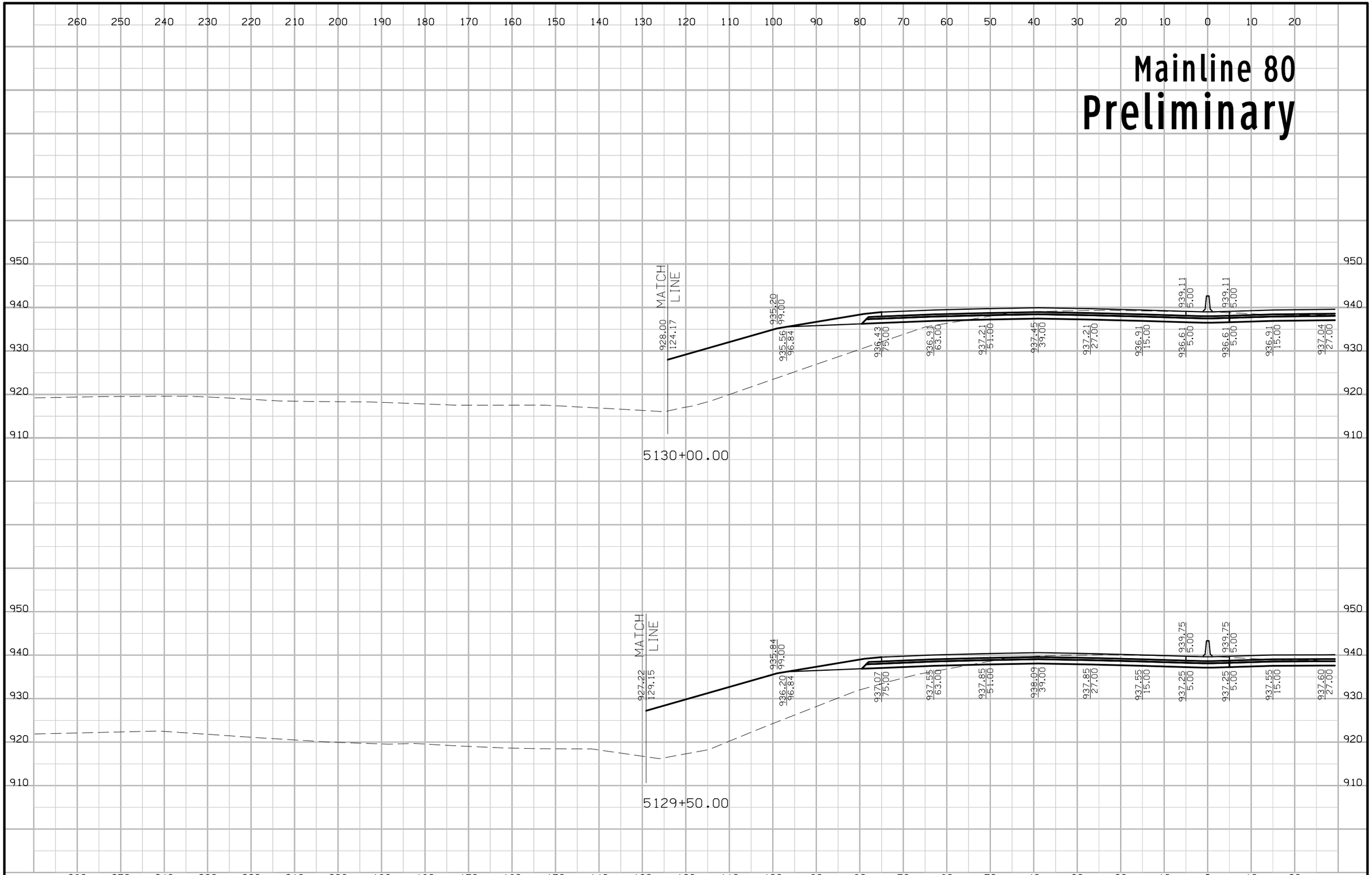
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.136

5:12:36 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80
Preliminary

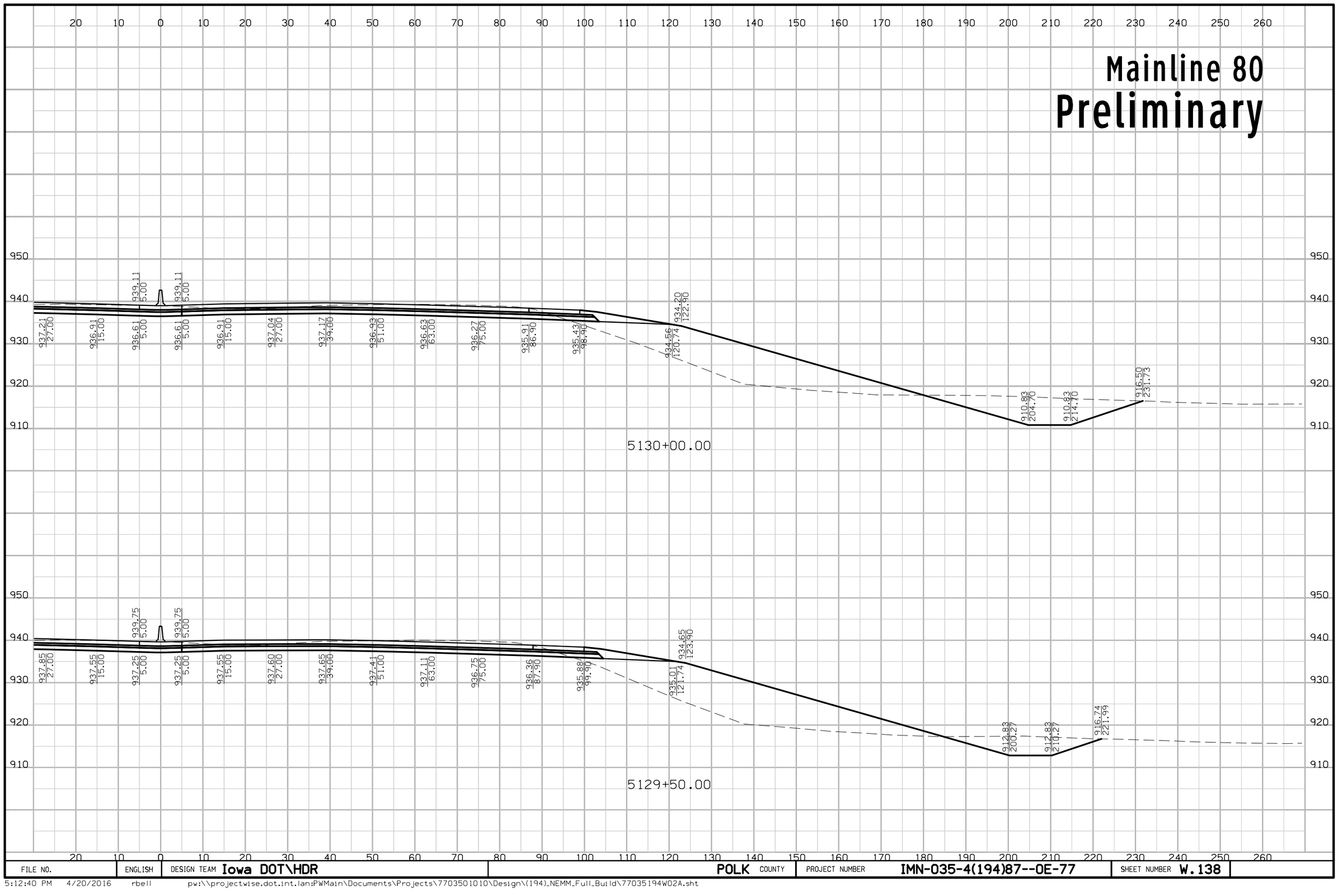


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.137

5:12:38 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

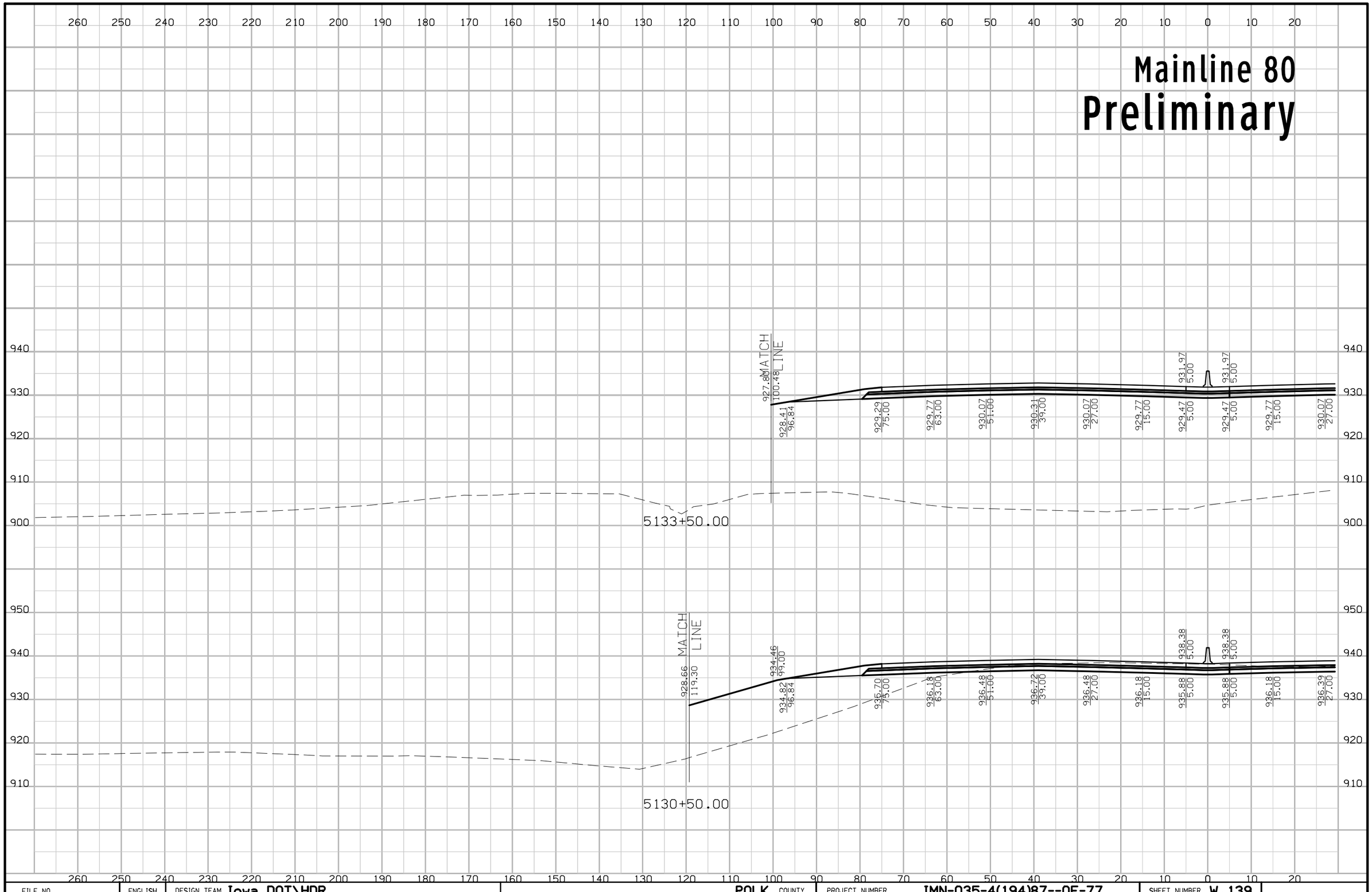
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.138

5:12:40 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194WO2A.sht

Mainline 80
Preliminary

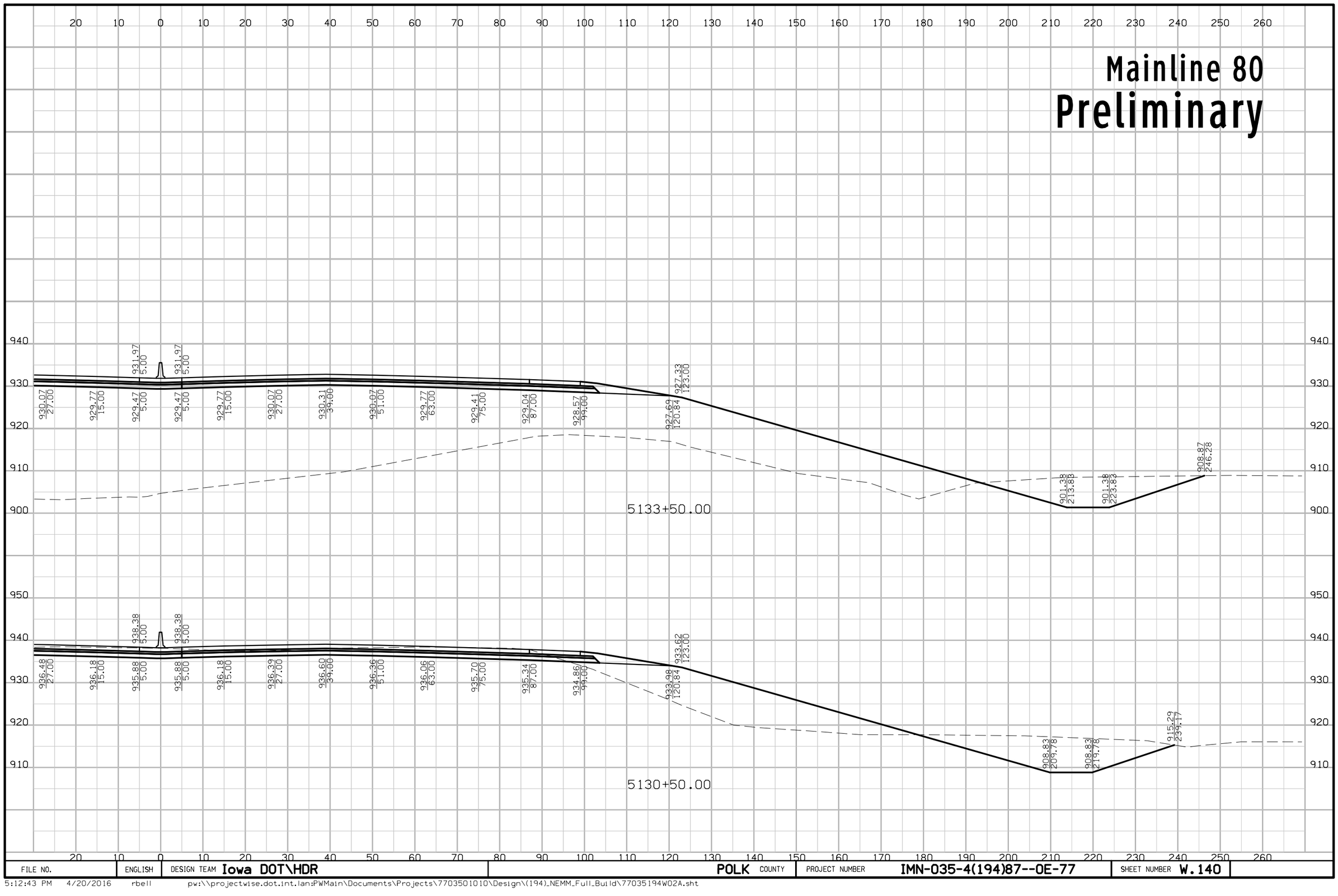


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.139

5:12:42 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

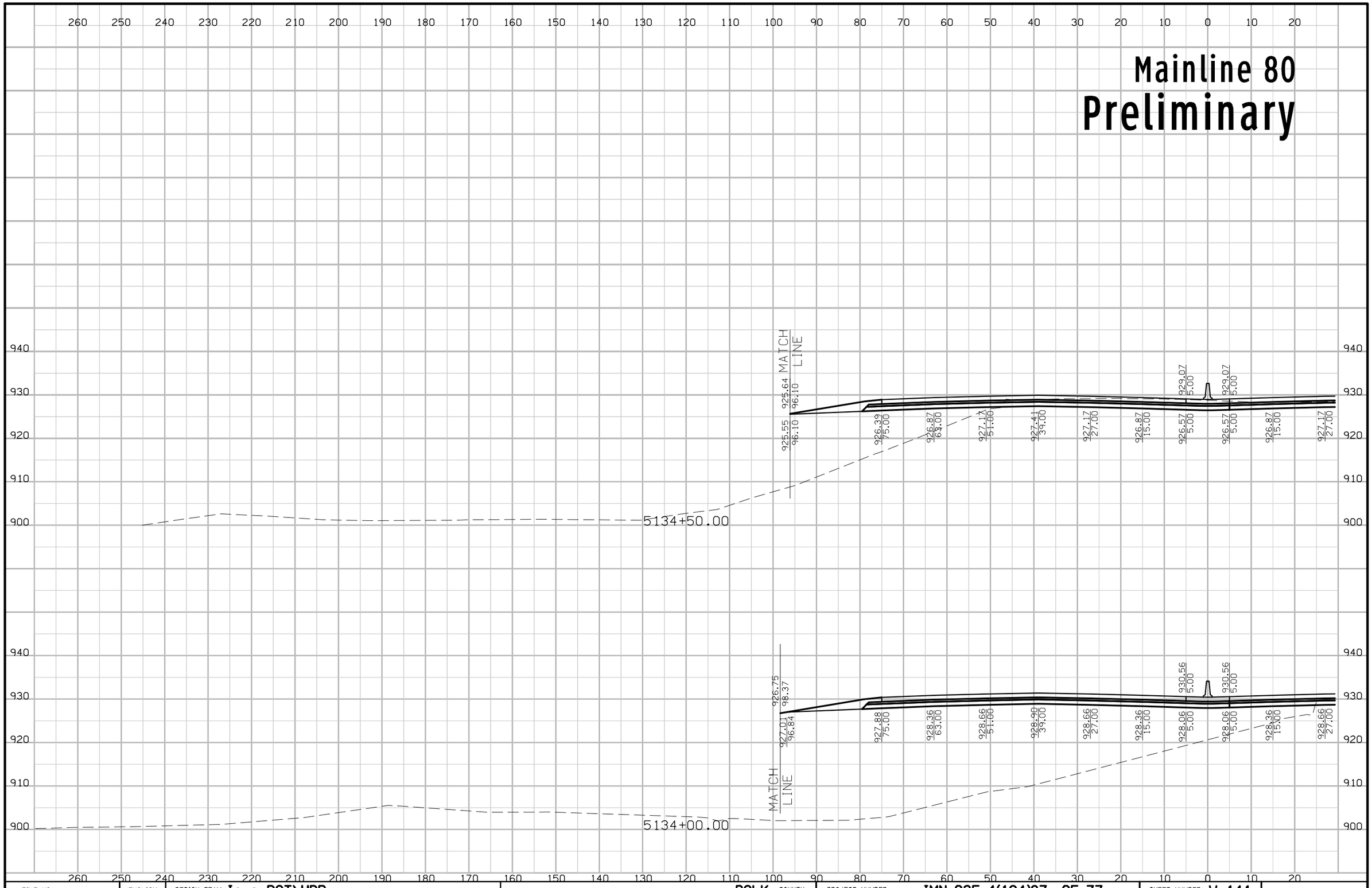
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.140

5:12:43 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

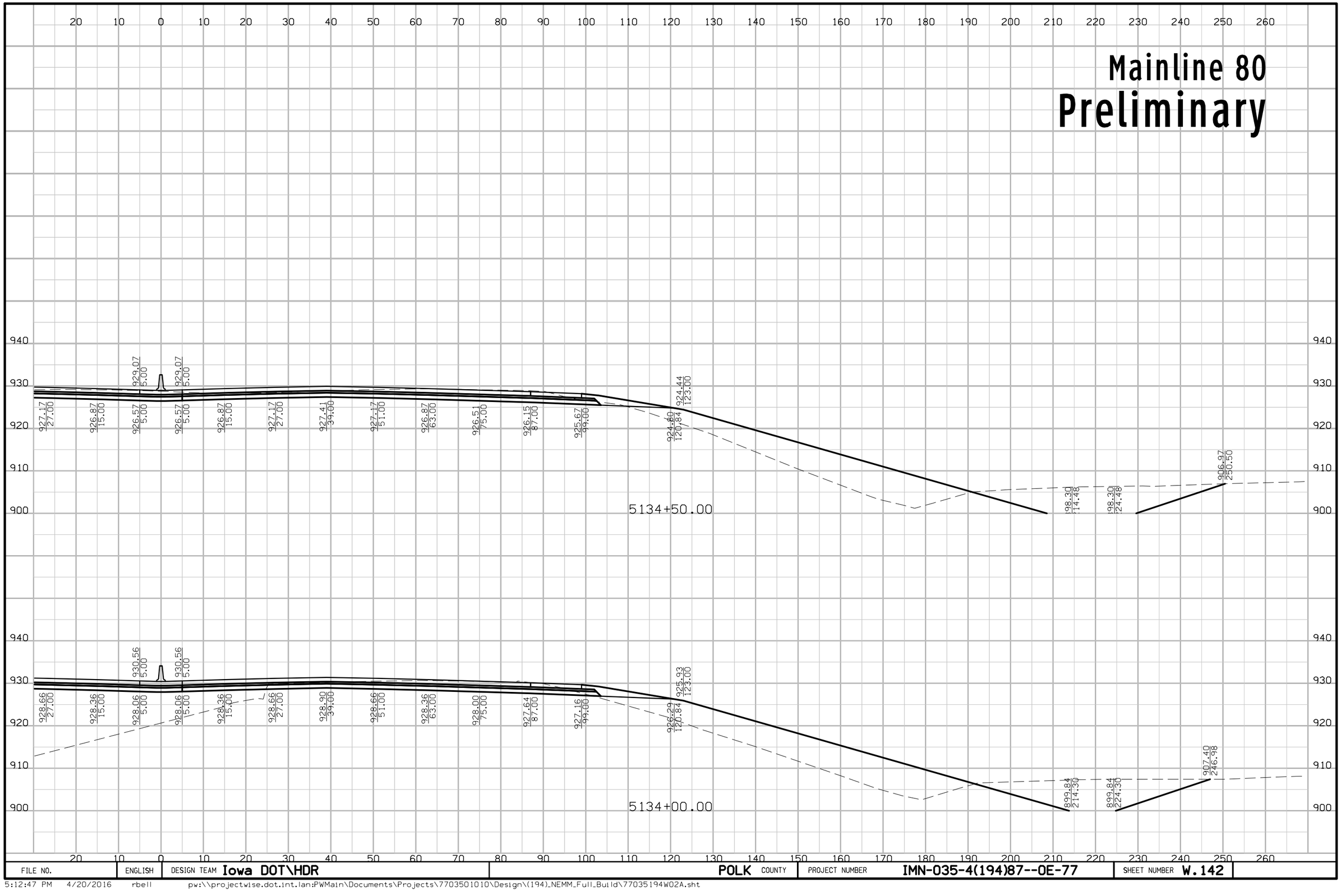
Mainline 80
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.141

5:12:45 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

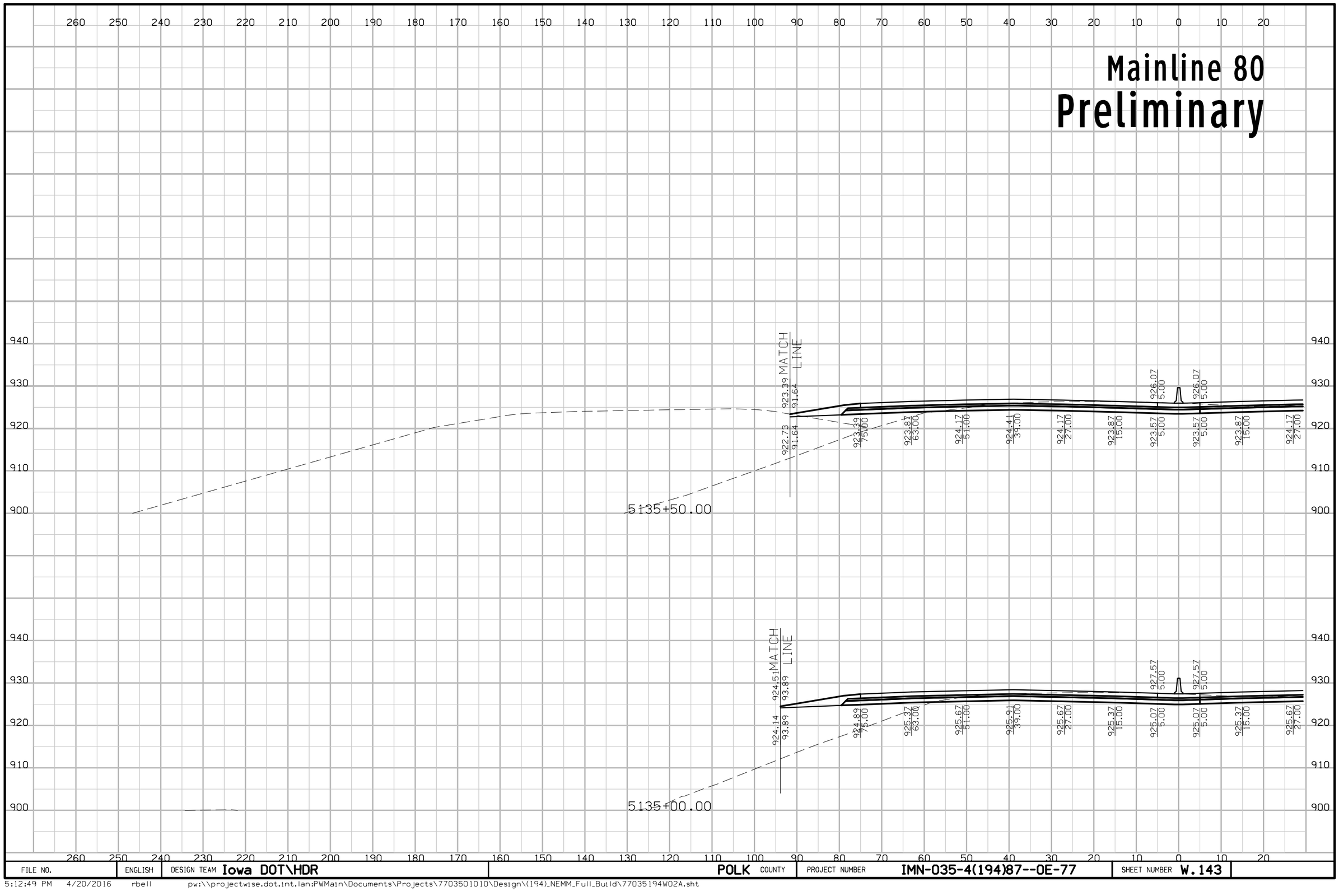
Mainline 80
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.142

5:12:47 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

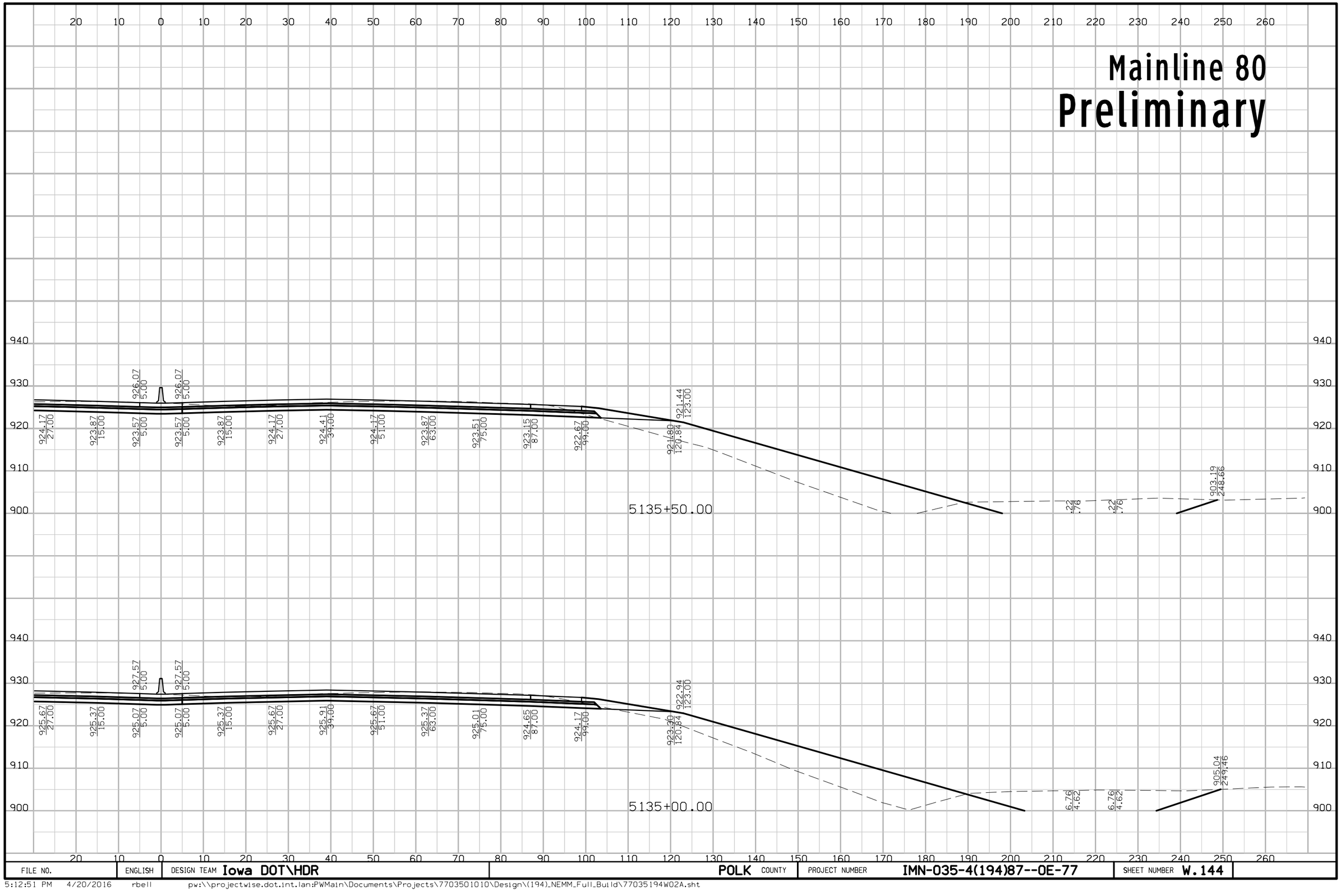
Mainline 80
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.143

5:12:49 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80
Preliminary

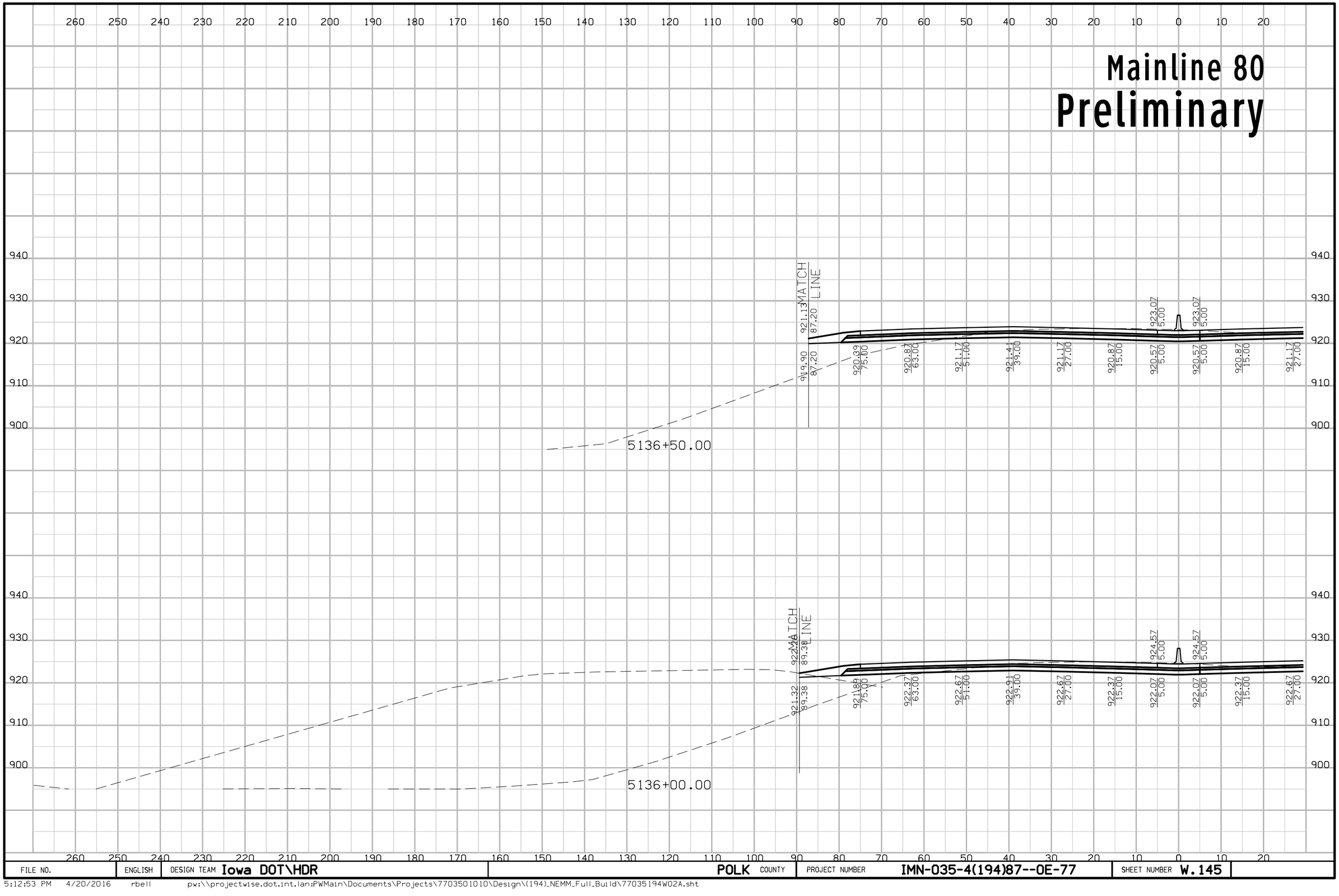


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.144

5:12:51 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

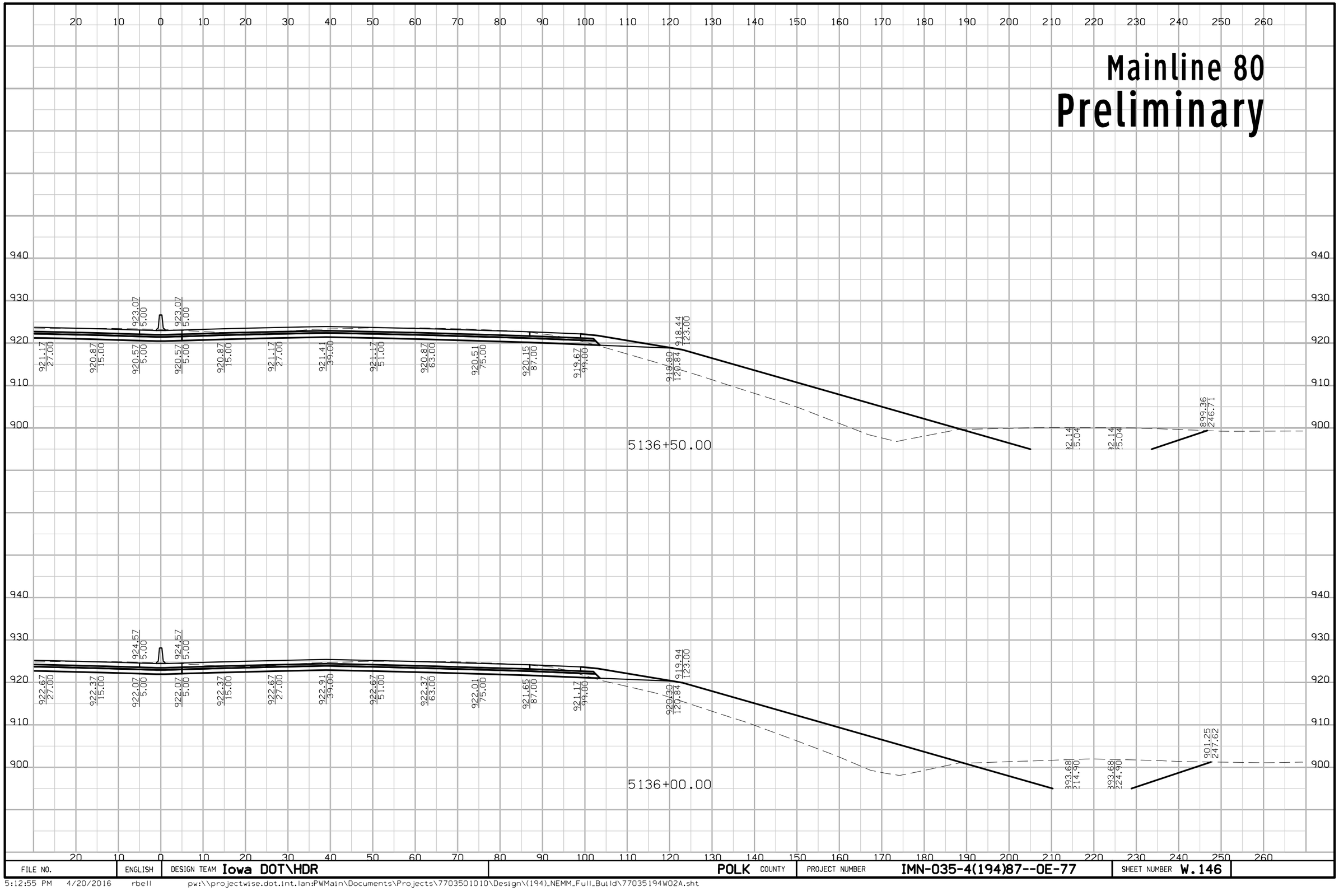
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.145

5:12:53 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

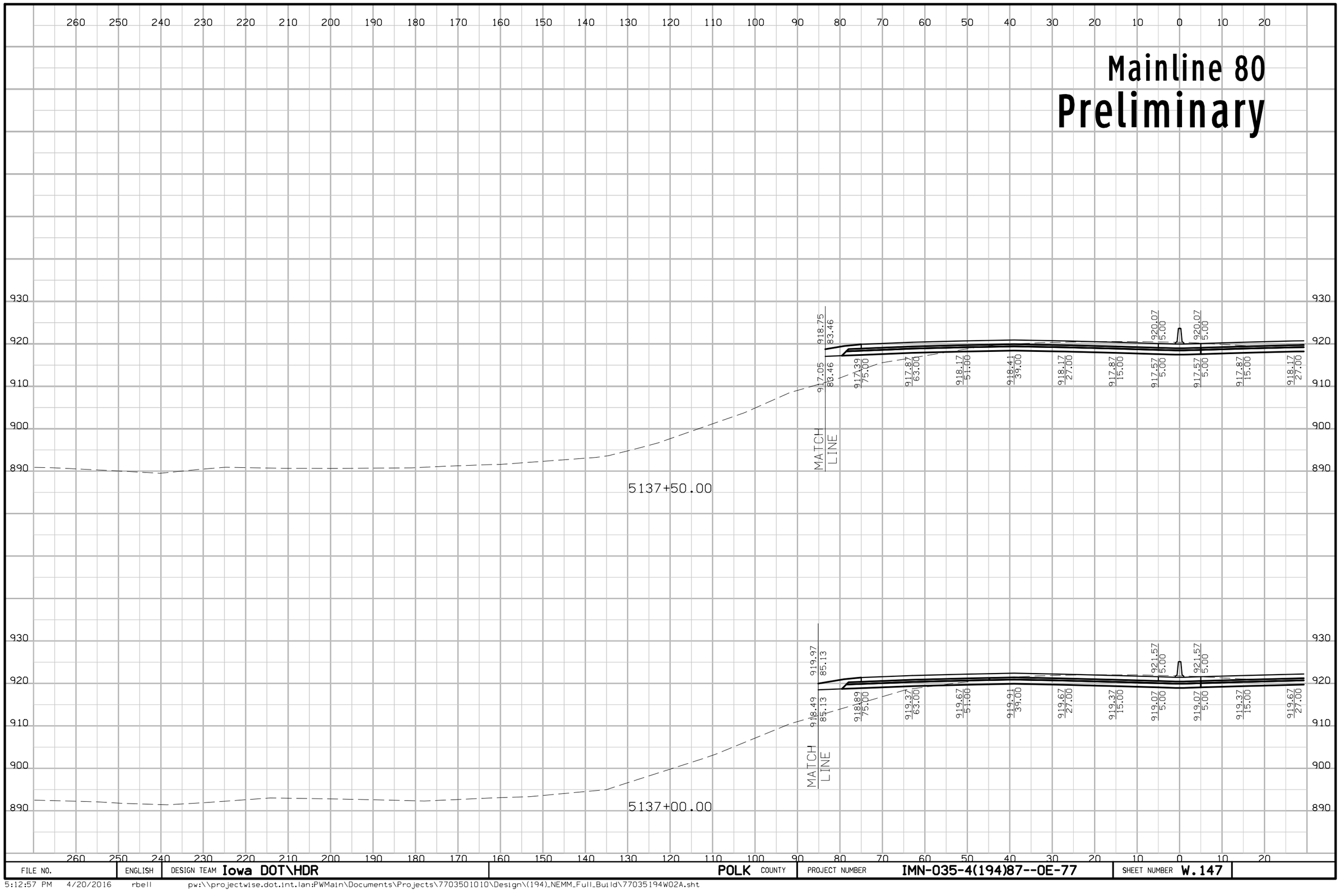
Mainline 80
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.146

5:12:55 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80
Preliminary

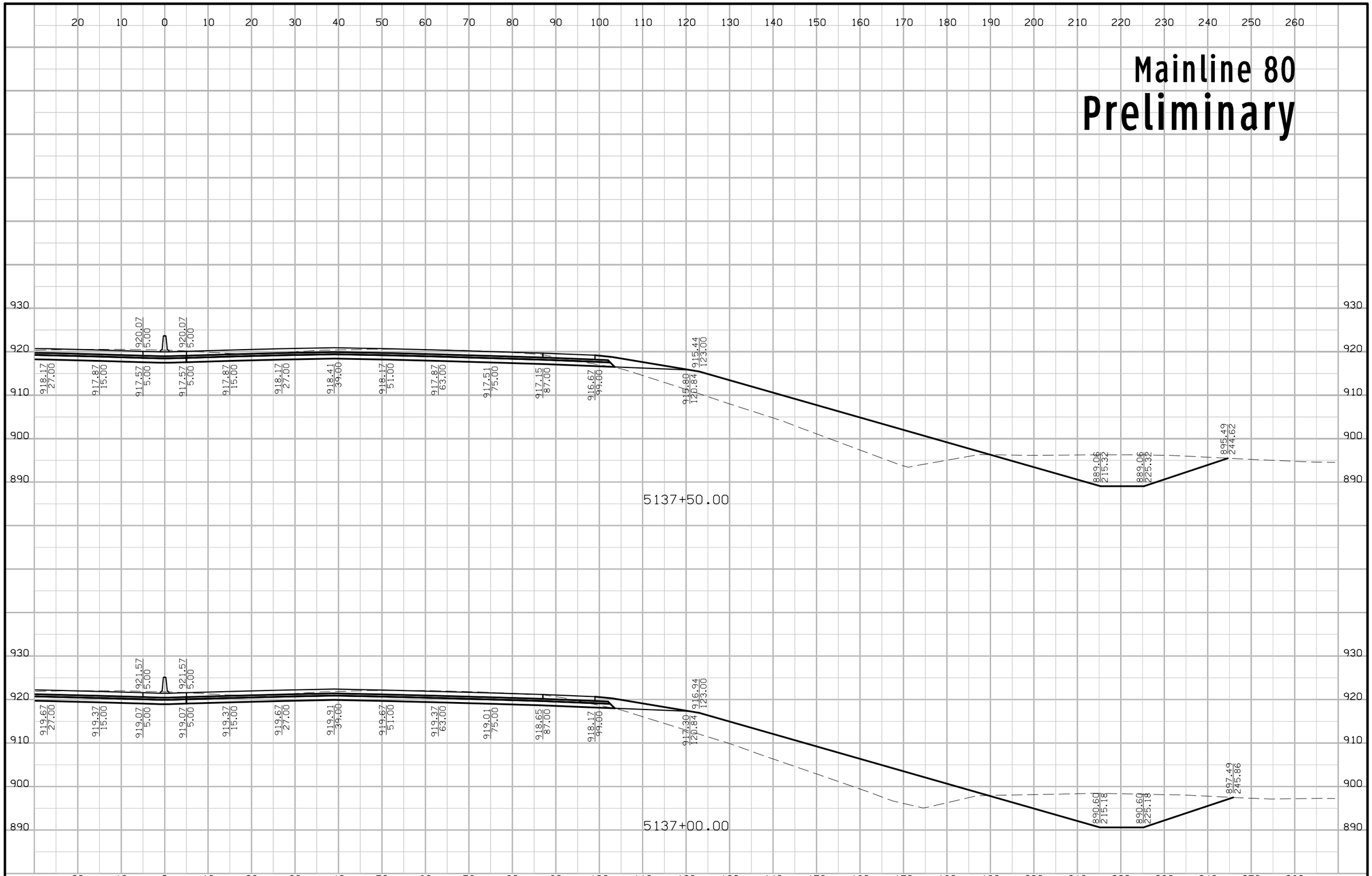


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.147

5:12:57 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

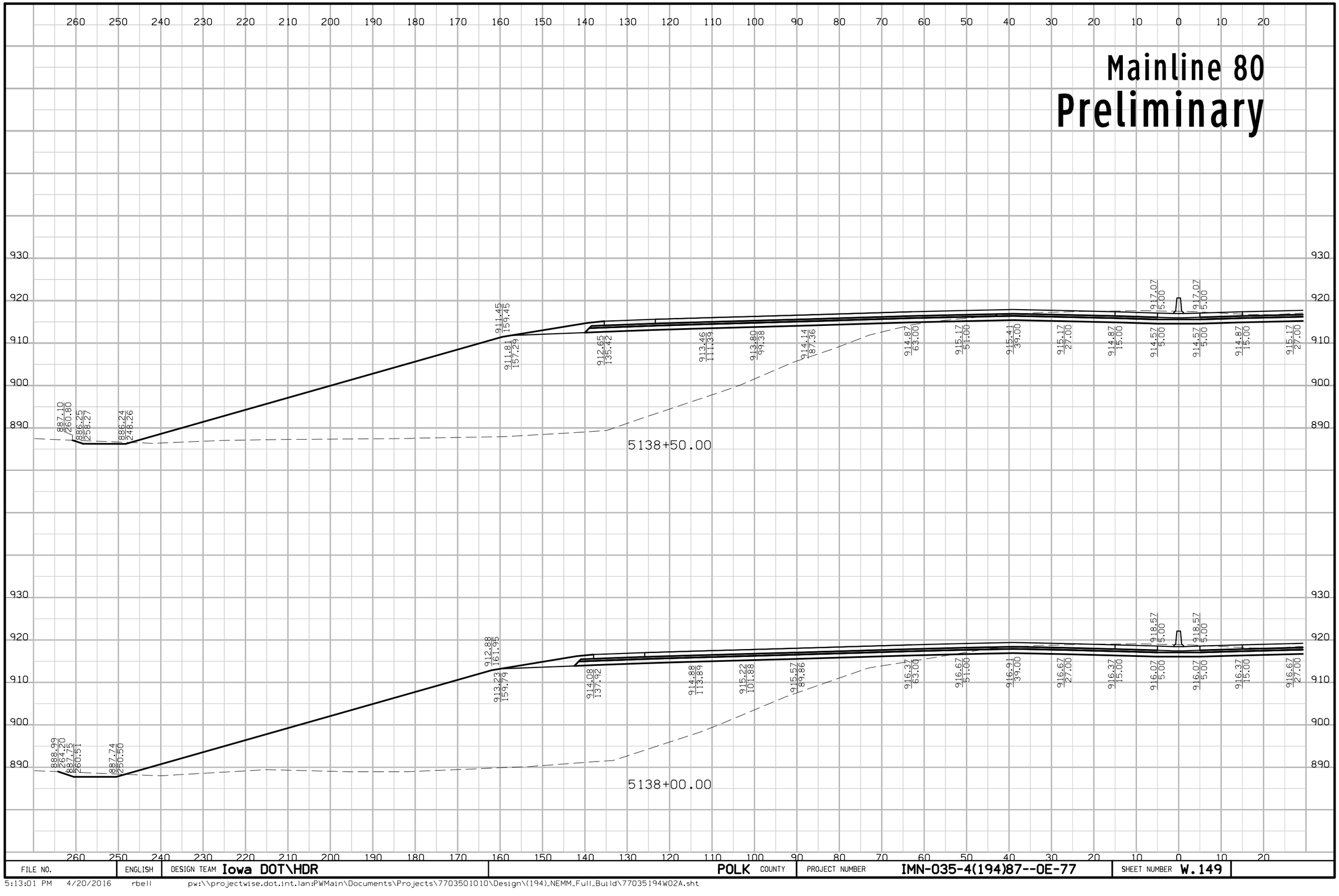
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.148

5:12:59 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

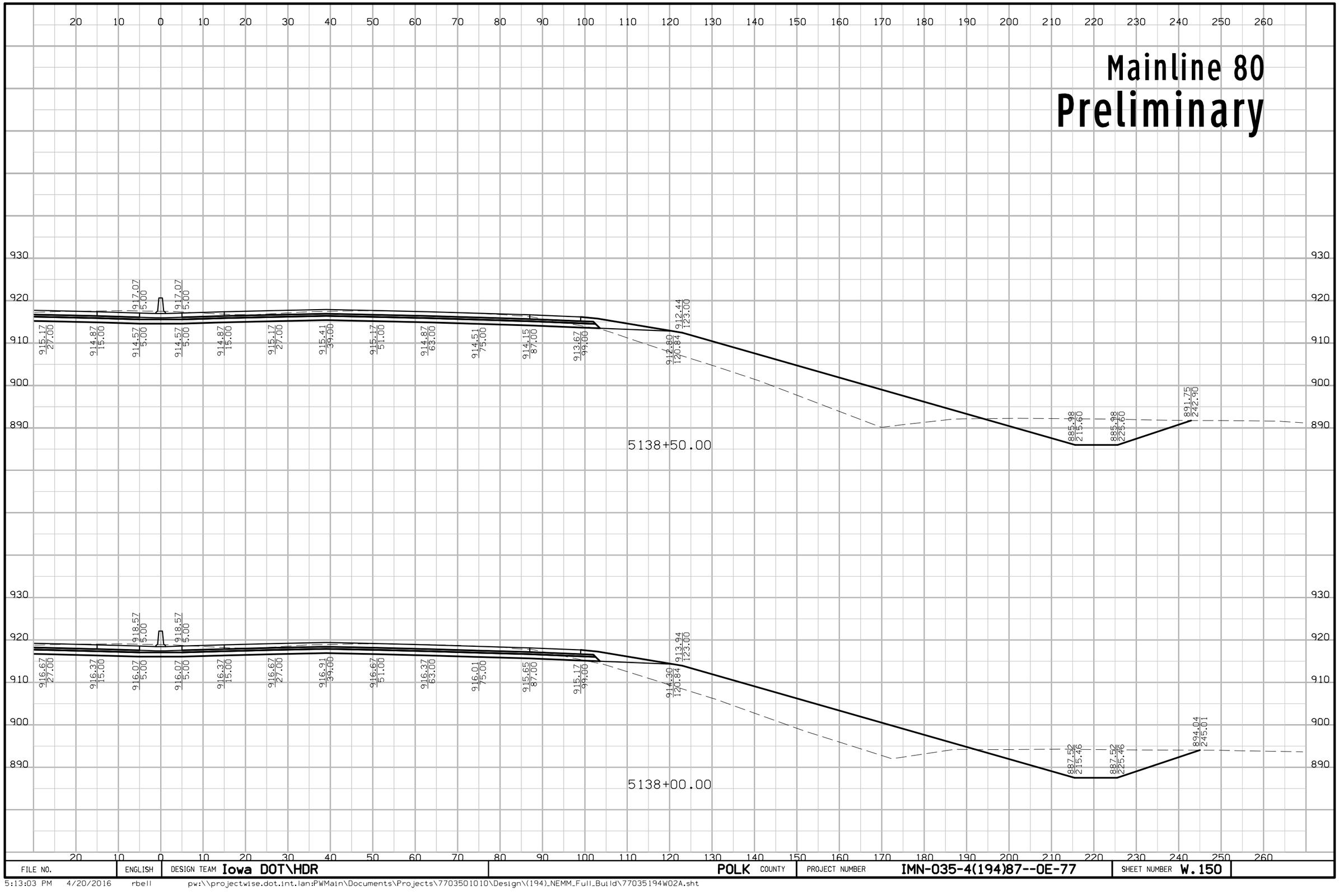
Mainline 80
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.149

5:13:01 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80
Preliminary

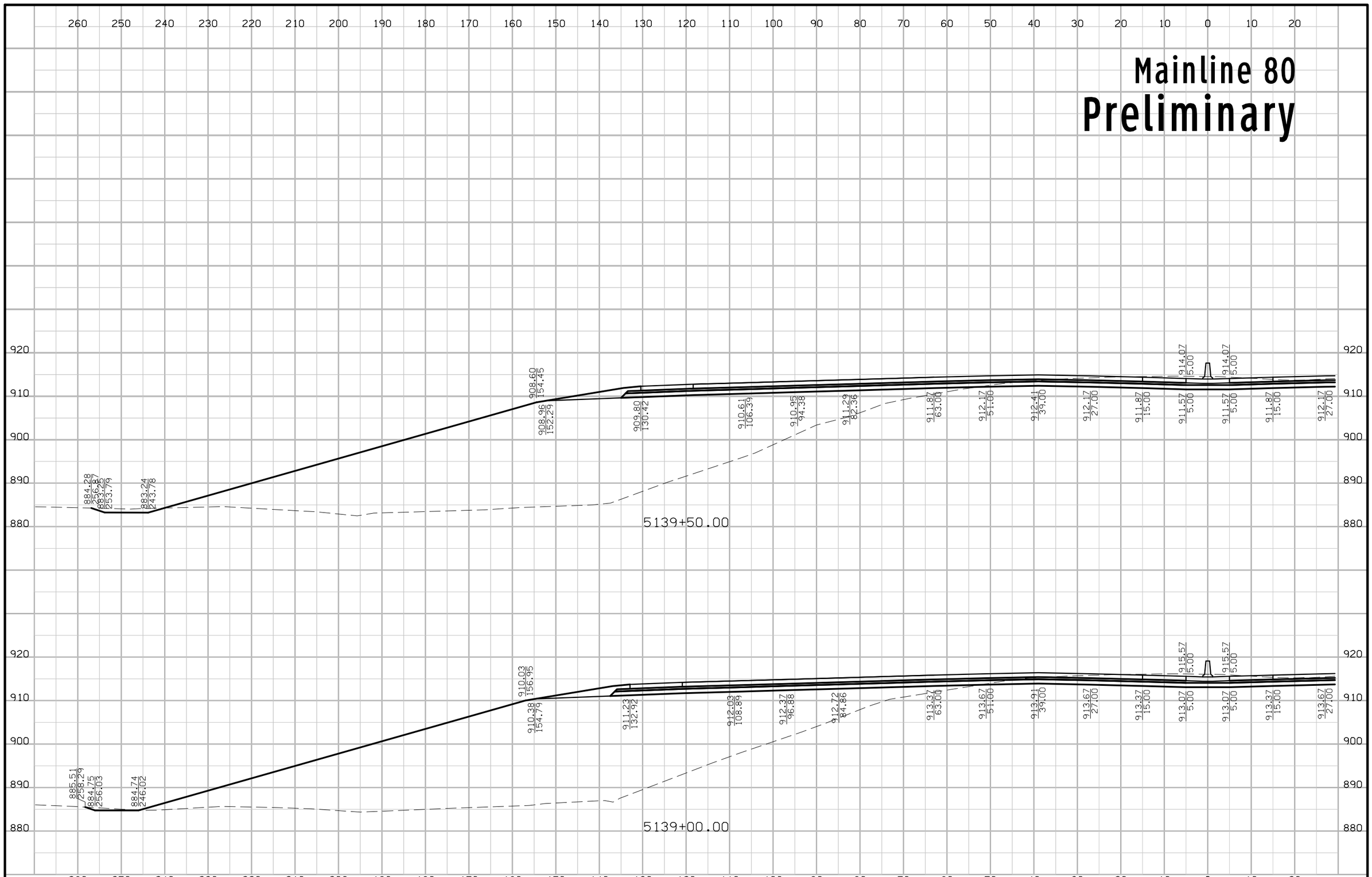


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.150

5:13:03 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

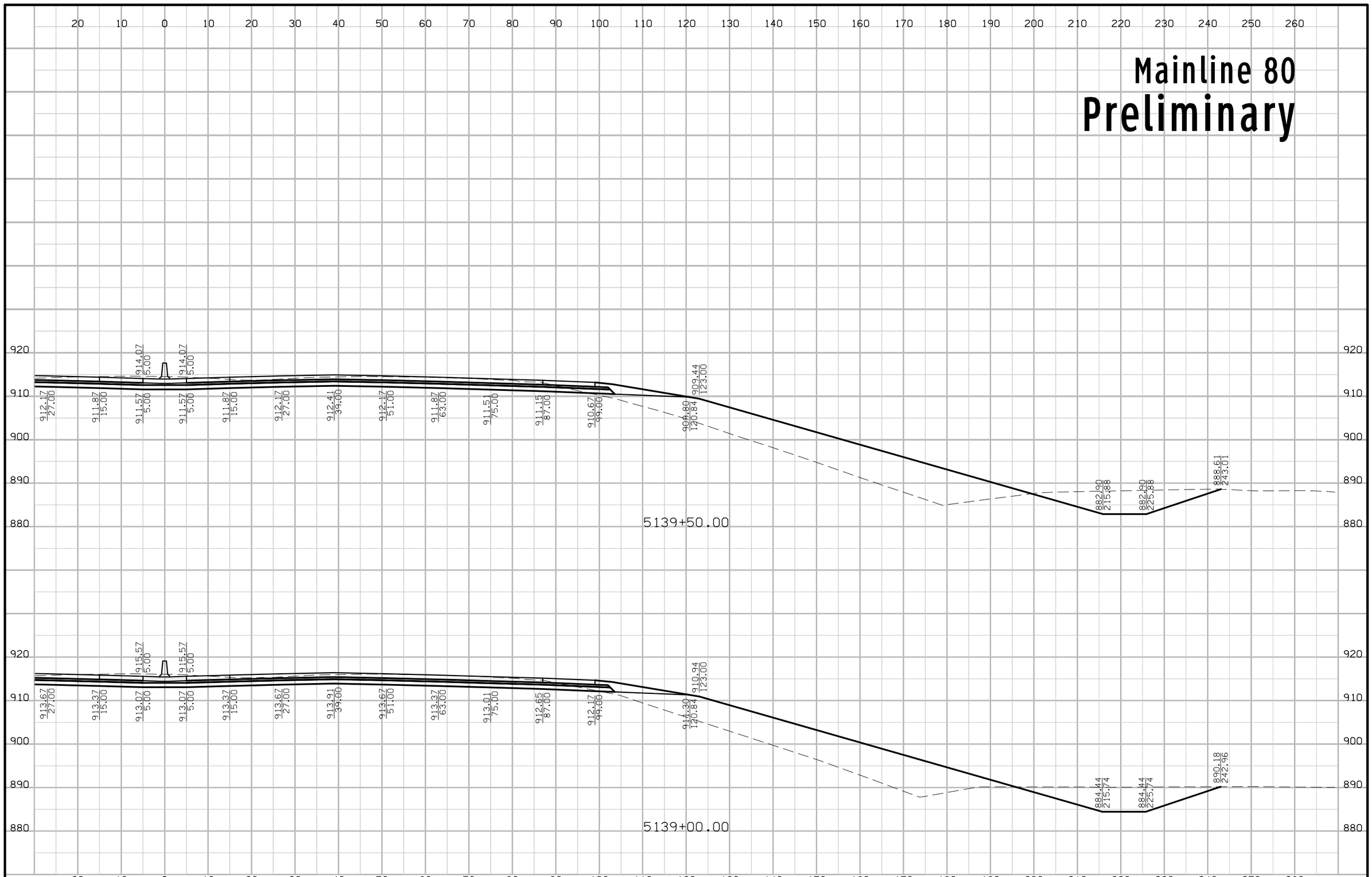
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.151

5:13:05 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80
Preliminary

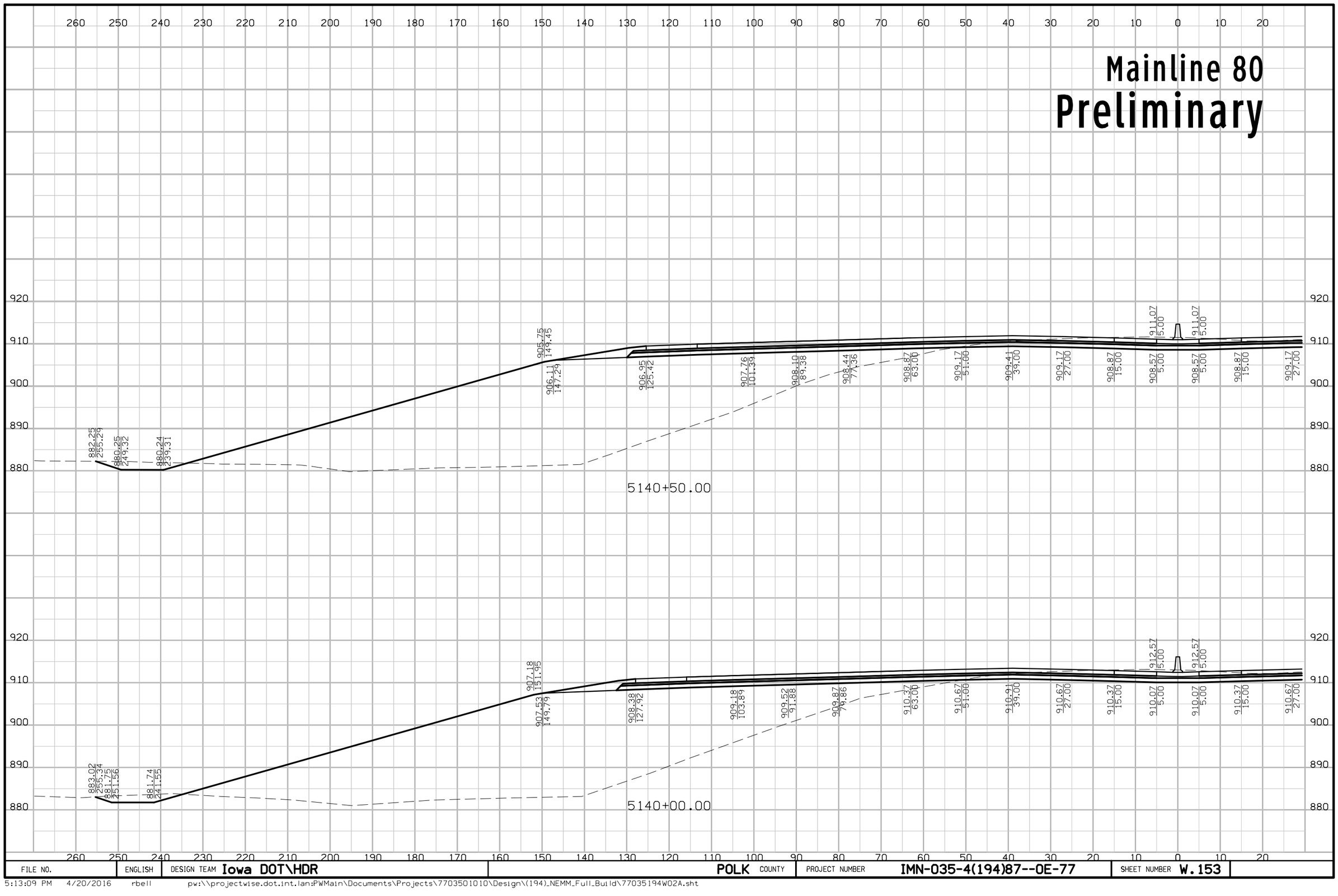


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.152

5:13:07 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

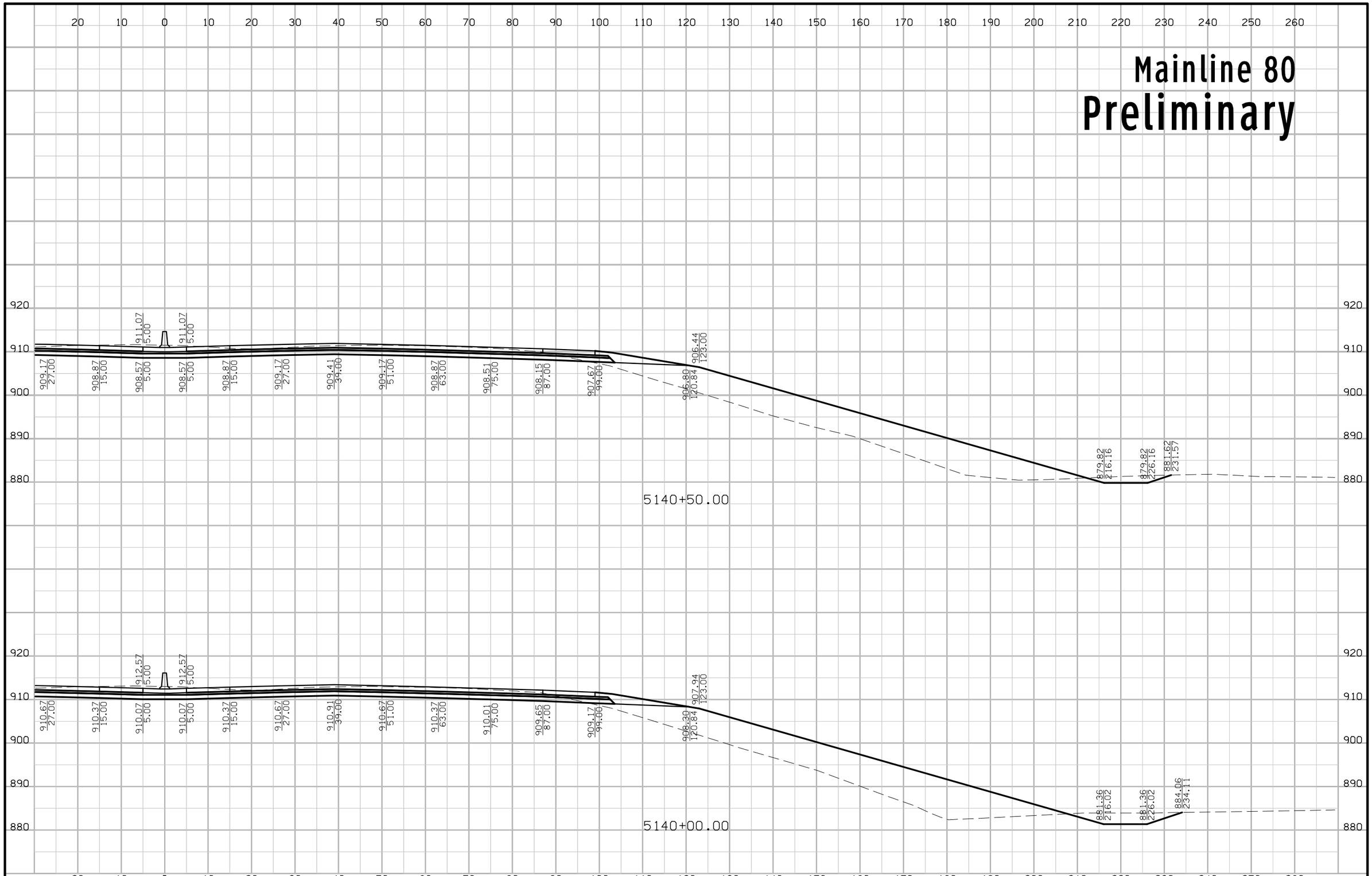
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.153

5:13:09 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

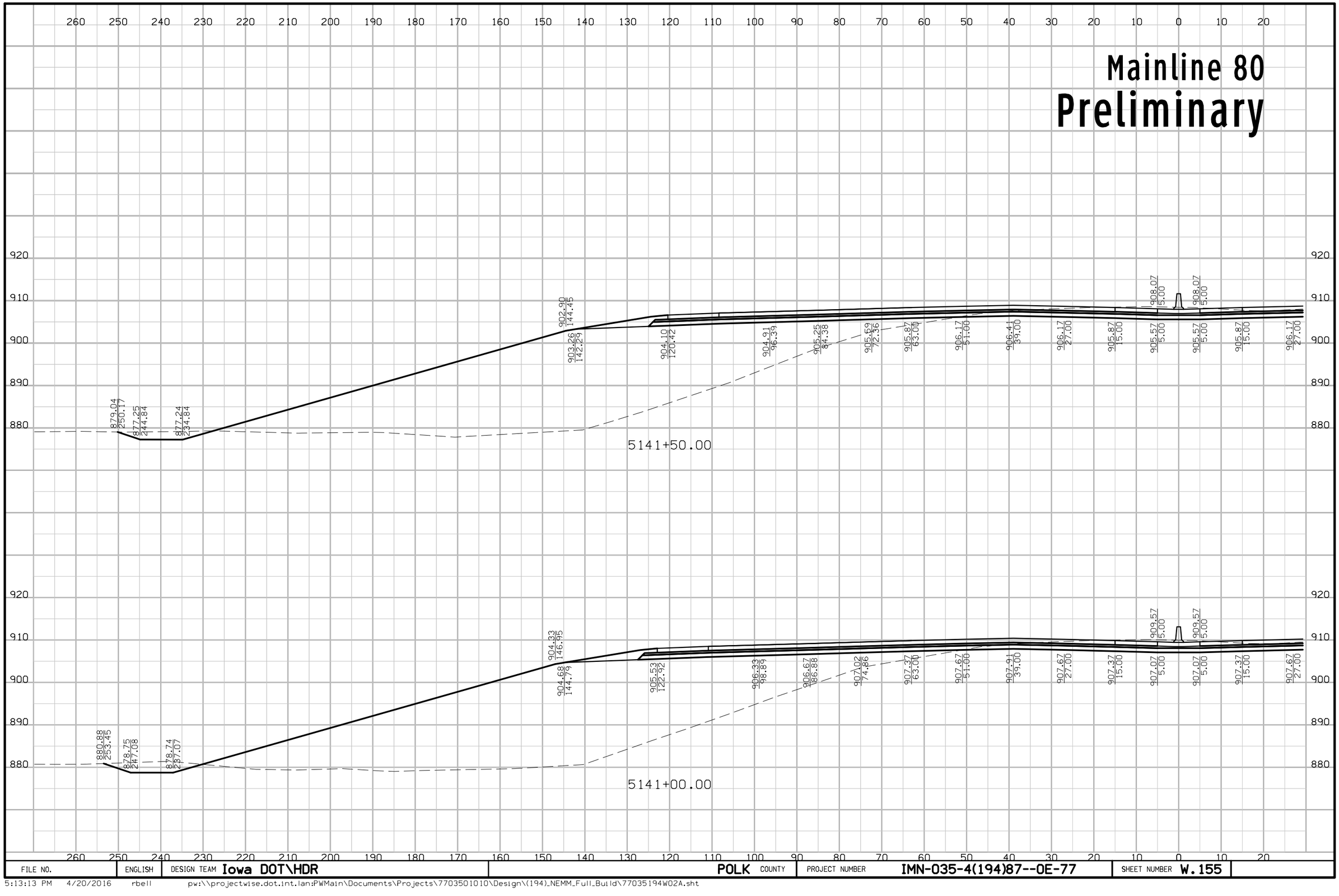
Mainline 80
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.154

5:13:11 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194WO2A.sht

Mainline 80
Preliminary

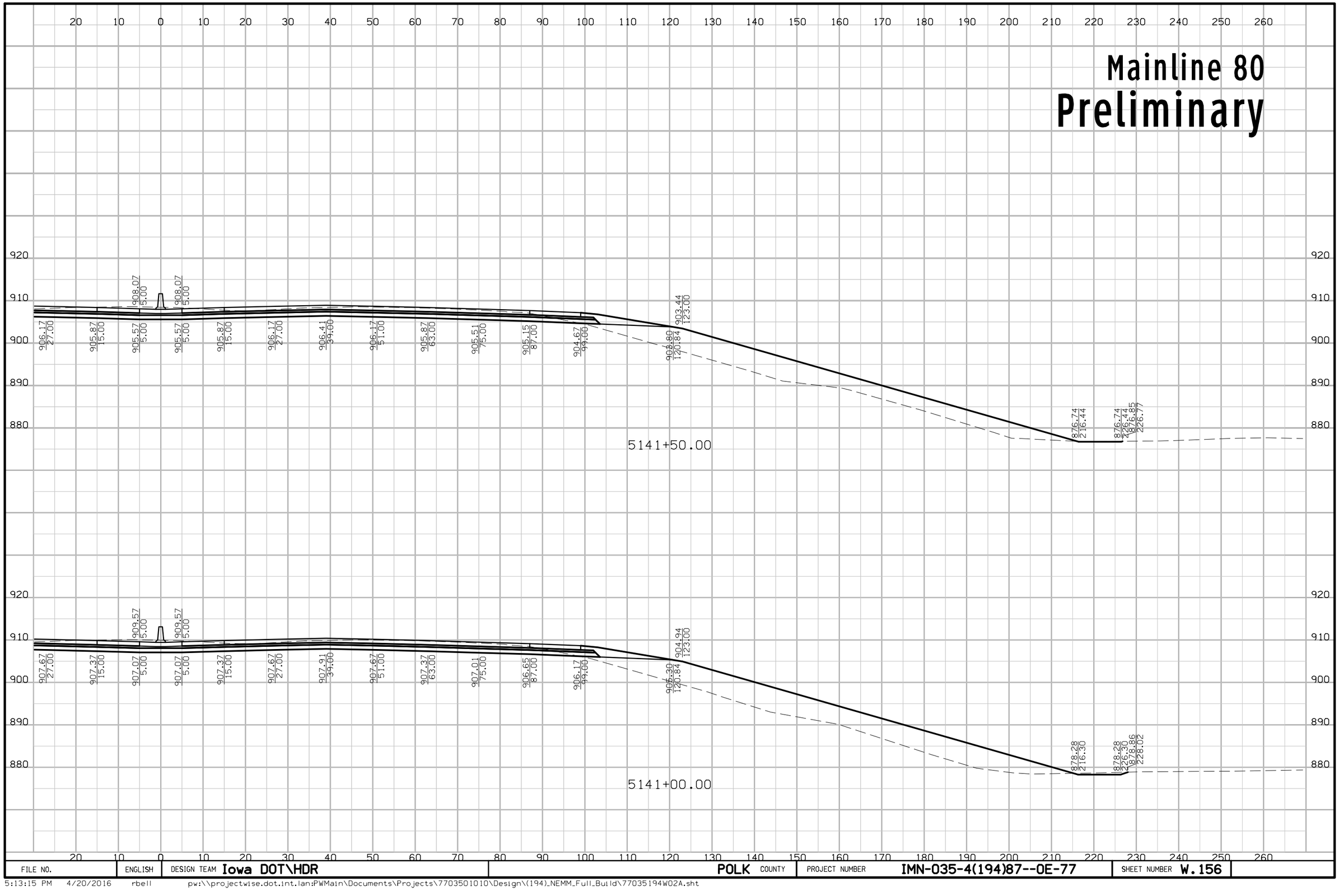


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.155

5:13:13 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

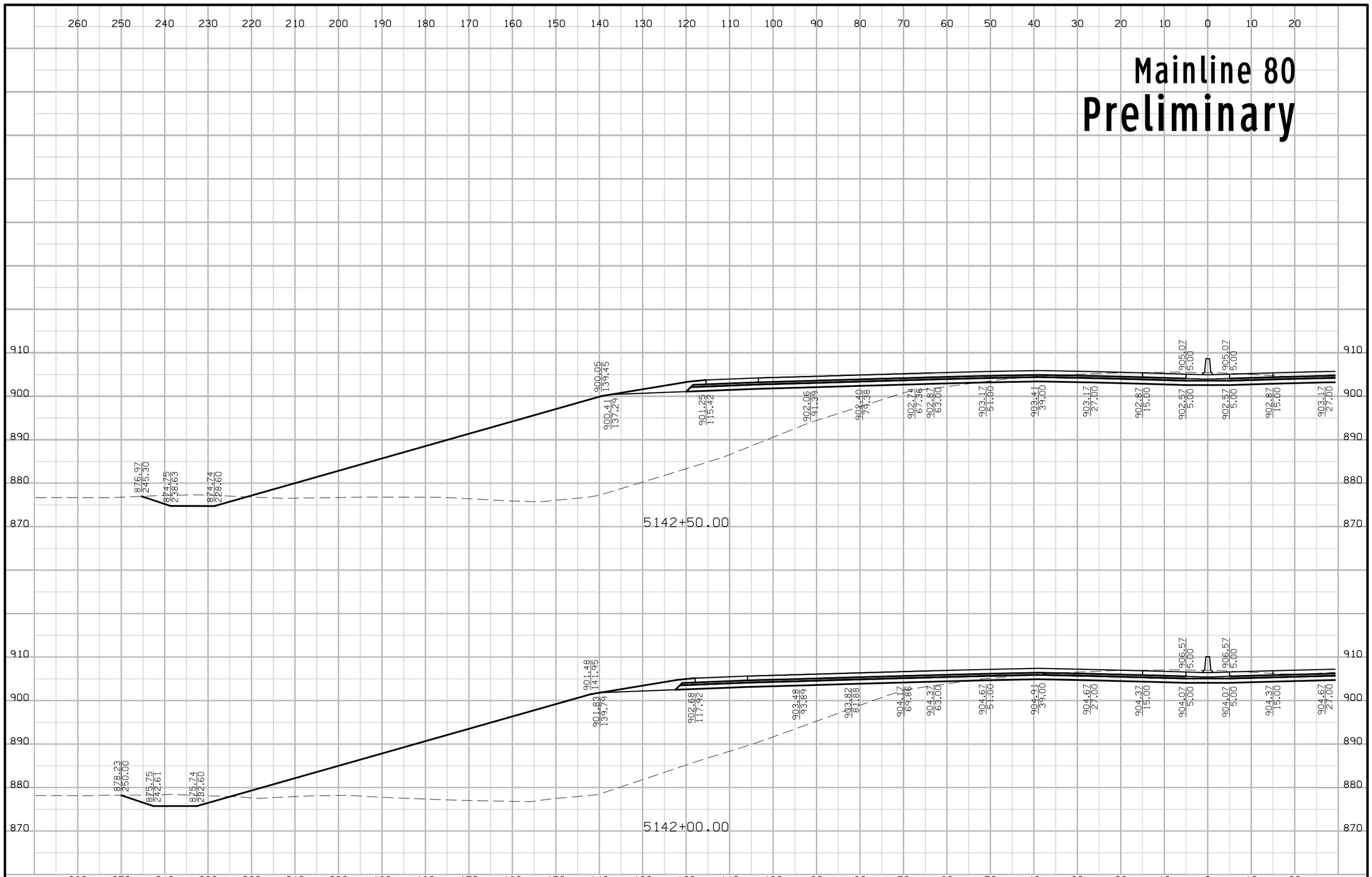
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.156

5:13:15 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

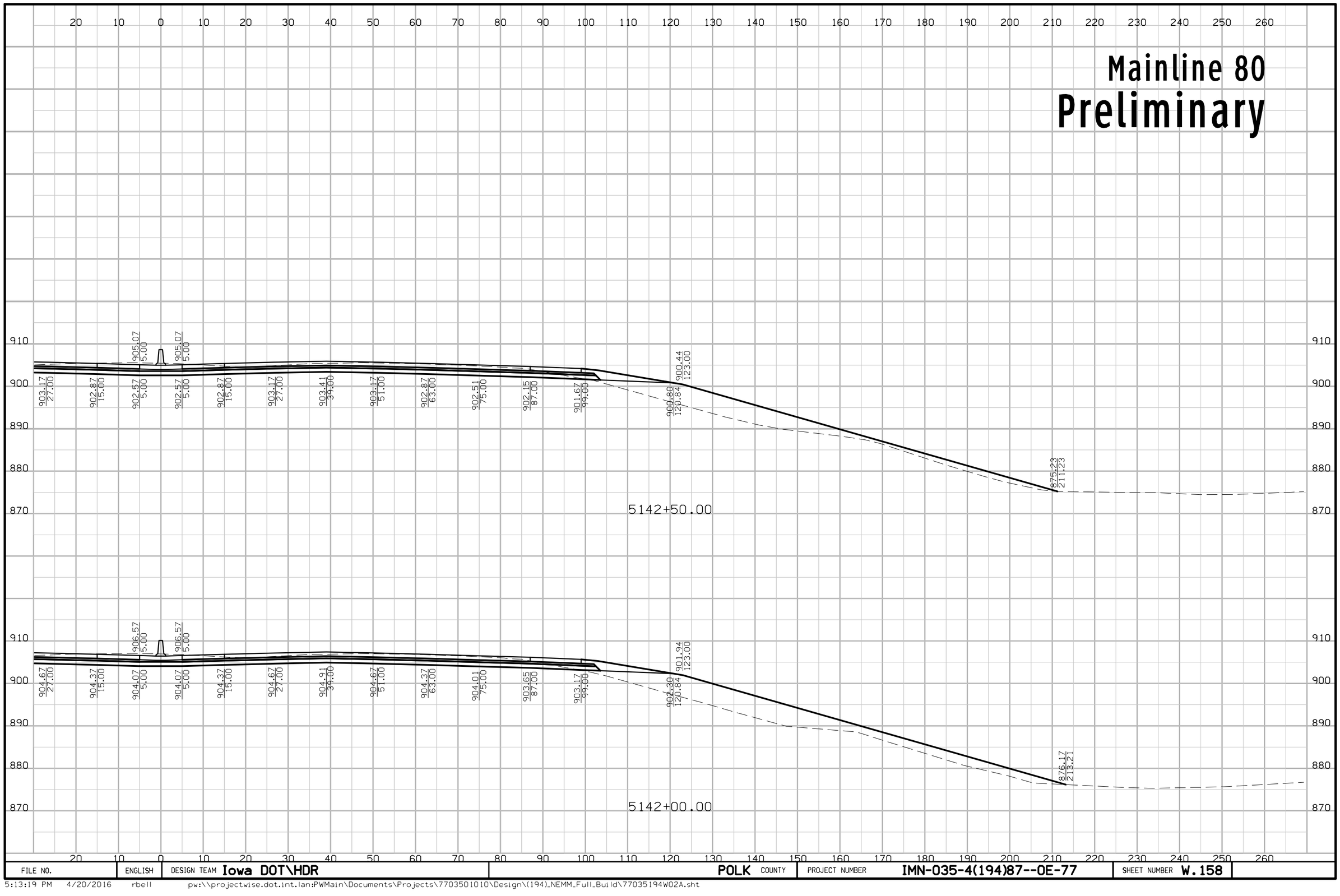
Mainline 80
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.157

5:13:17 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.158

5:13:19 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

Preliminary

260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20

910 900 890 880 870

874.75 235.32 | 872.80 429.47 | 872.80 219.46

897.10 134.41 | 897.46 132.25 | 898.33 110.41 | 899.17 186.39 | 899.53 74.38 | 899.87 63.00 | 900.17 51.00 | 900.41 39.00 | 900.17 27.00 | 899.87 15.00 | 899.57 5.00 | 902.07 5.00 | 899.57 5.00 | 902.07 5.00 | 899.87 15.00 | 900.17 27.00

5143+50.00

874.99 237.72 | 873.85 234.28 | 873.84 224.25

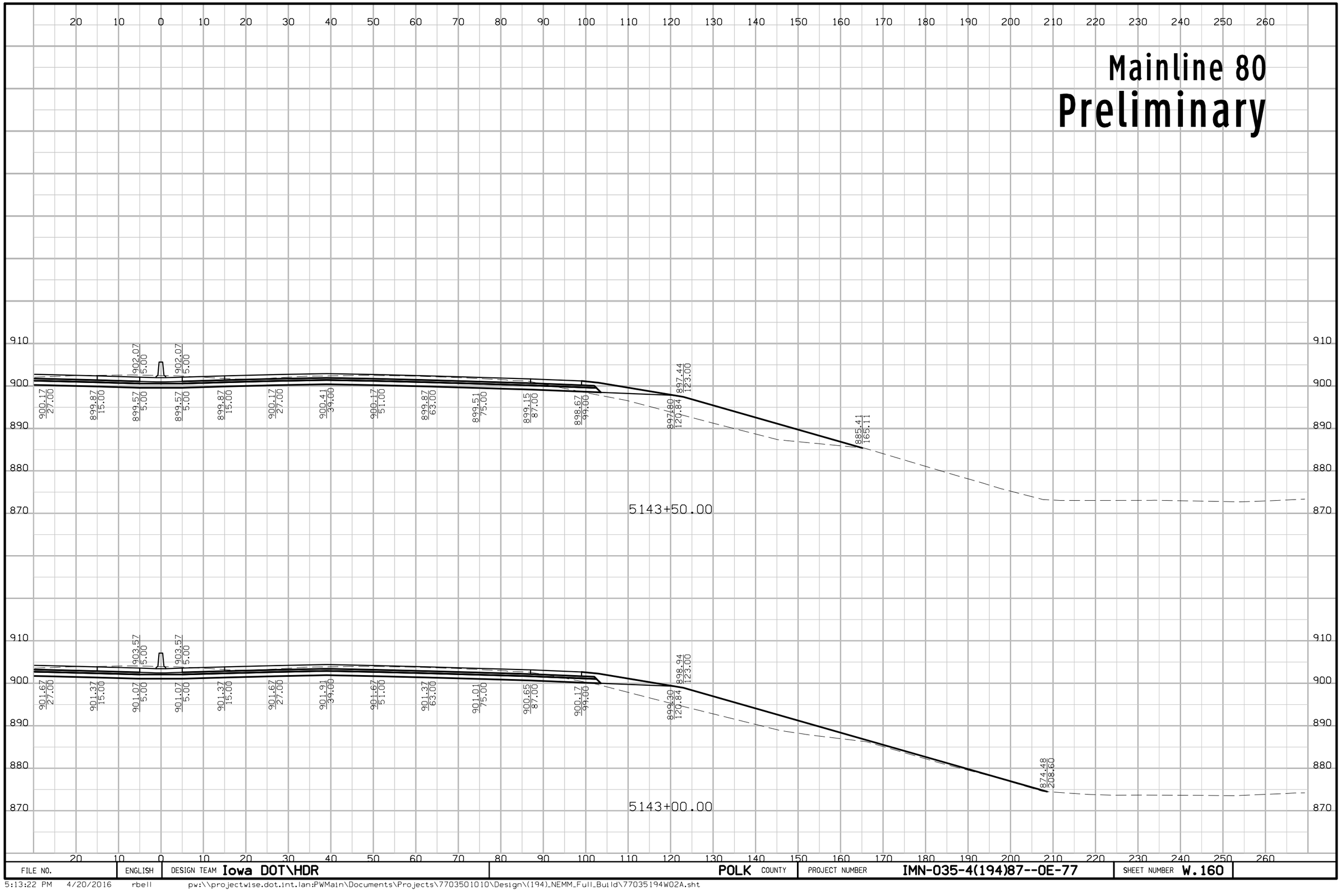
898.63 136.95 | 898.98 134.79 | 899.83 112.92 | 900.63 88.89 | 900.97 76.88 | 901.32 64.88 | 901.37 63.00 | 901.67 51.00 | 901.91 39.00 | 901.67 27.00 | 901.37 15.00 | 901.07 5.00 | 903.57 5.00 | 901.07 5.00 | 903.57 5.00 | 901.37 15.00 | 901.67 27.00

5143+00.00

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.159

5:13:21 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.160

5:13:22 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

Preliminary

260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20

910 900 890 880 870

871.90 223.54 | 871.00 220.82 | 871.00 210.82

894.25 129.45 | 894.61 127.29 | 895.48 105.45 | 896.32 81.43 | 896.68 69.42 | 896.87 63.00 | 897.17 51.00 | 897.41 39.00 | 897.17 27.00 | 896.87 15.00 | 896.57 5.00 | 899.07 5.00 | 899.07 5.00 | 896.87 15.00 | 897.17 27.00

5144+50.00

873.17 228.94 | 871.90 225.13 | 871.90 215.13

895.67 131.91 | 896.03 129.75 | 896.91 107.91 | 897.75 83.89 | 898.11 71.88 | 898.37 63.00 | 898.67 51.00 | 898.91 39.00 | 898.67 27.00 | 898.37 15.00 | 898.07 5.00 | 900.57 5.00 | 898.07 5.00 | 898.37 15.00 | 898.67 27.00

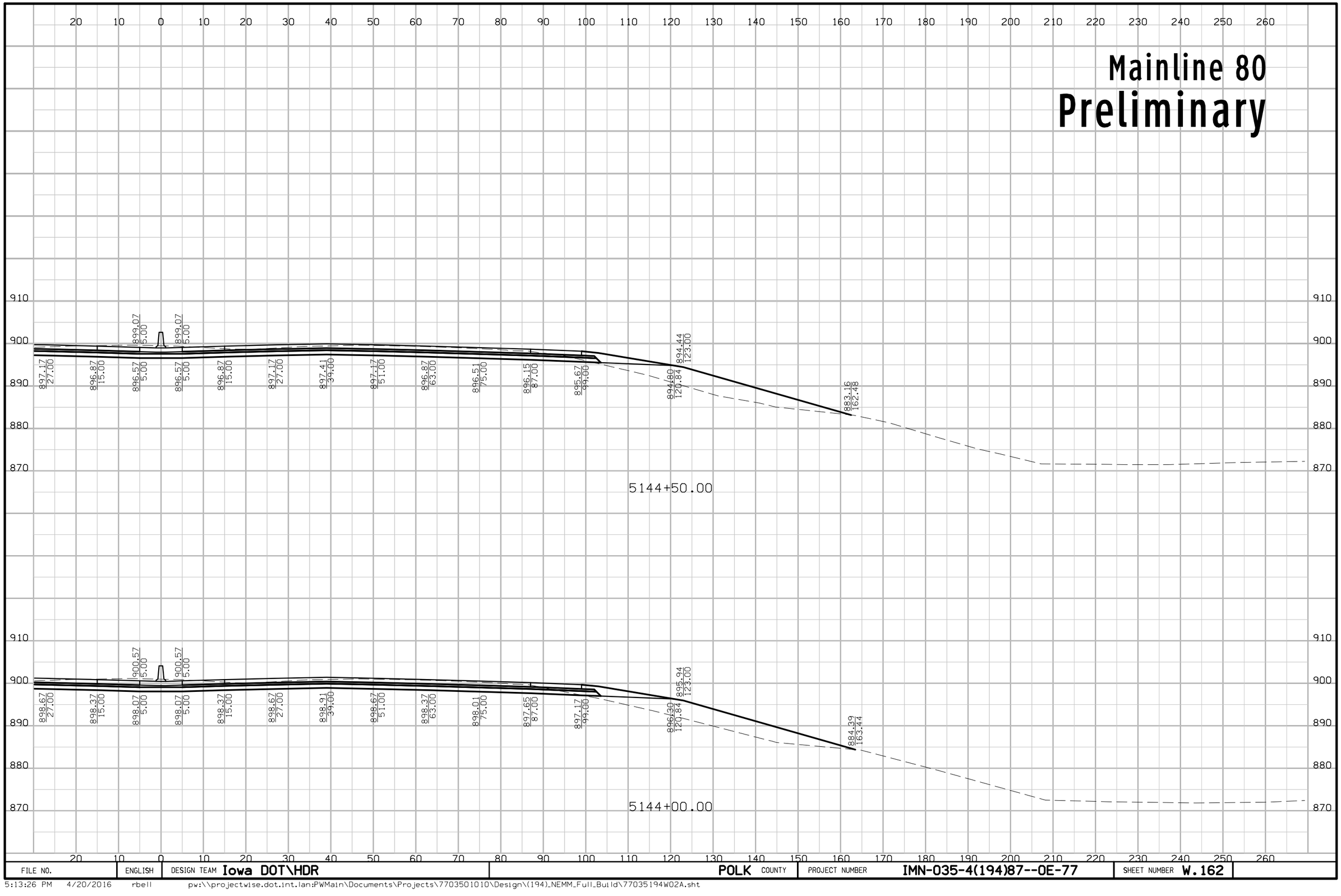
5144+00.00

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.161

5:13:24 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

Preliminary

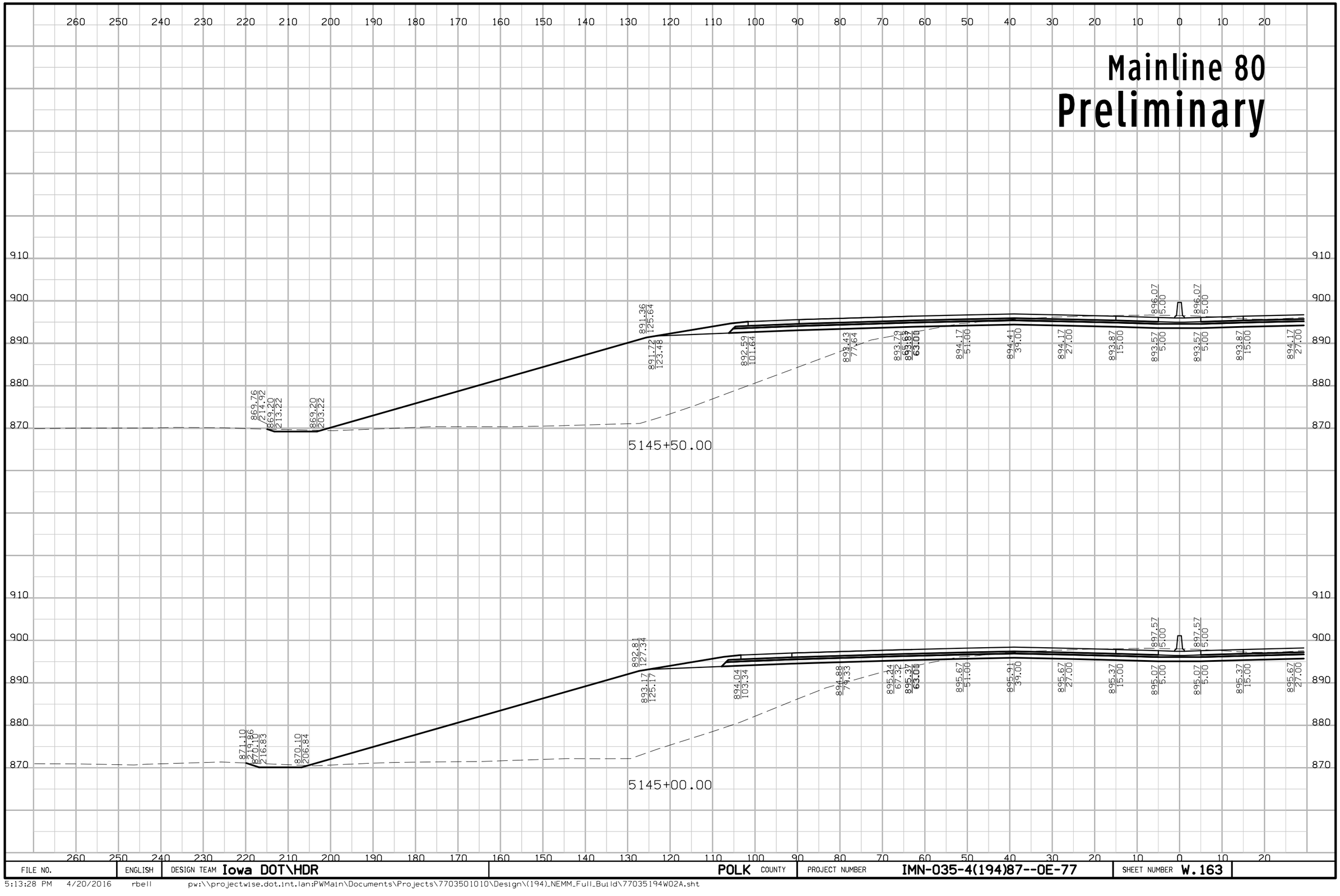


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.162

5:13:26 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

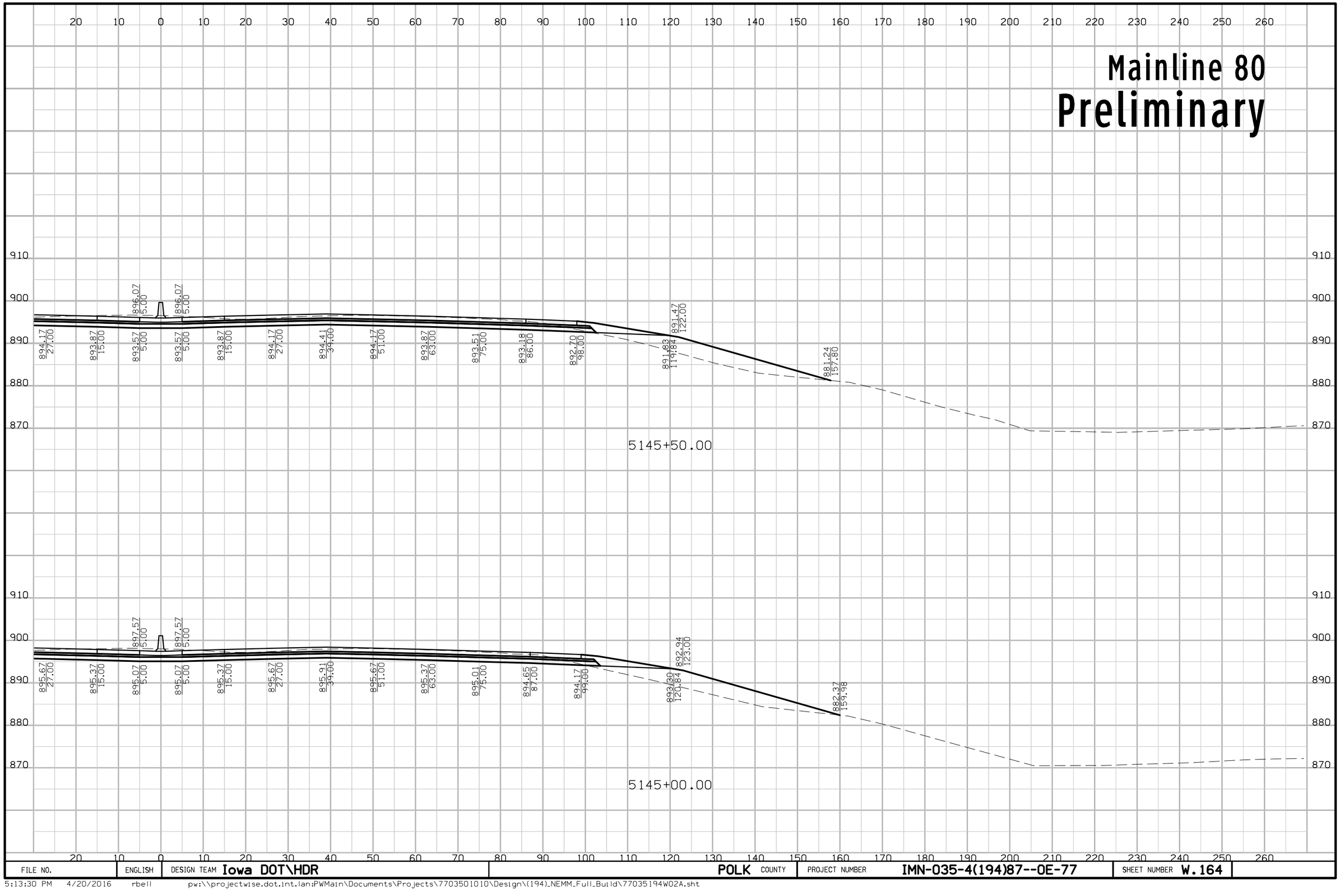
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.163

5:13:28 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80
Preliminary

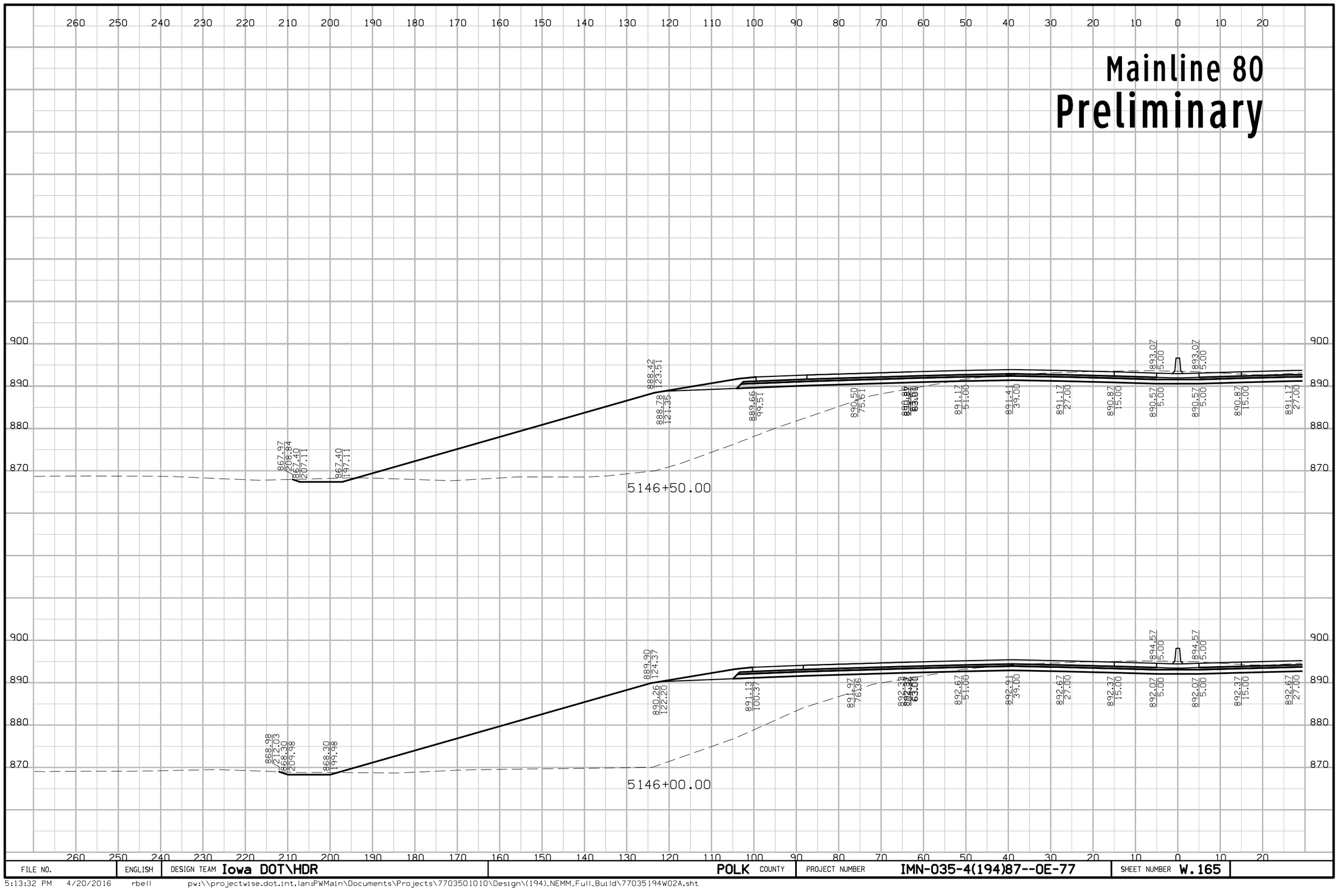


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.164

5:13:30 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

Preliminary

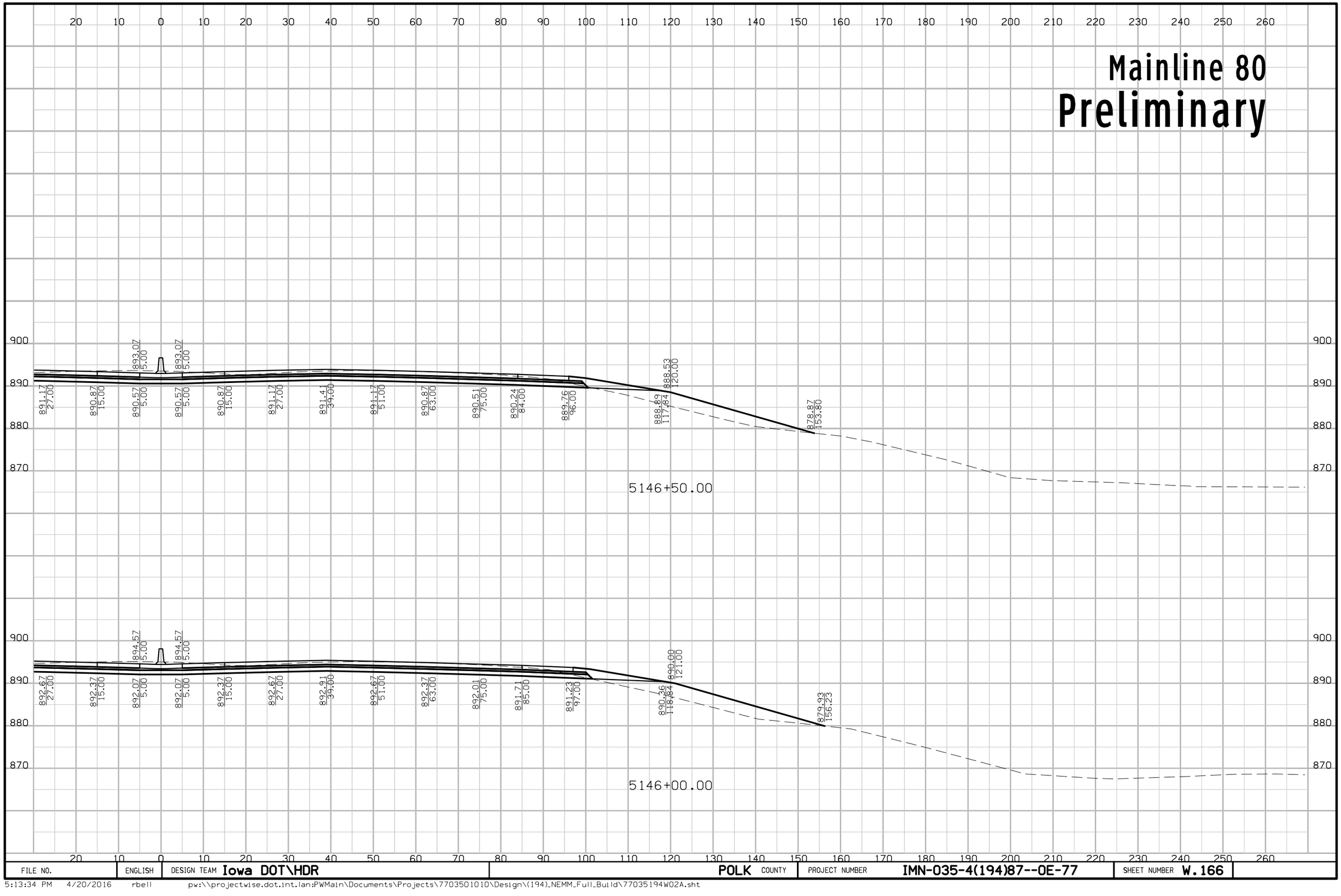


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.165

5:13:32 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194WO2A.sht

Mainline 80

Preliminary

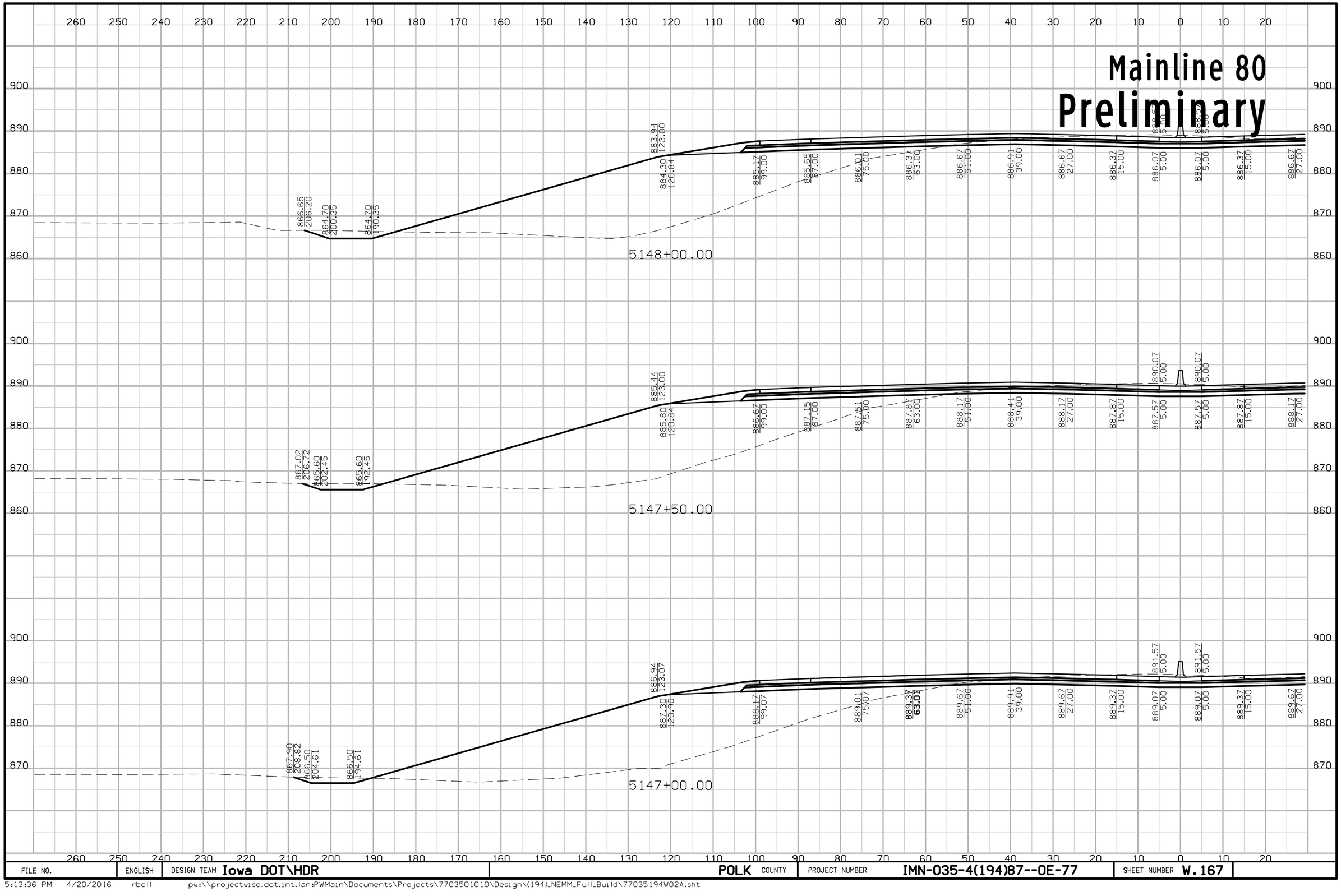


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.166

5:13:34 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.167

5:13:36 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

Preliminary

5148+00.00

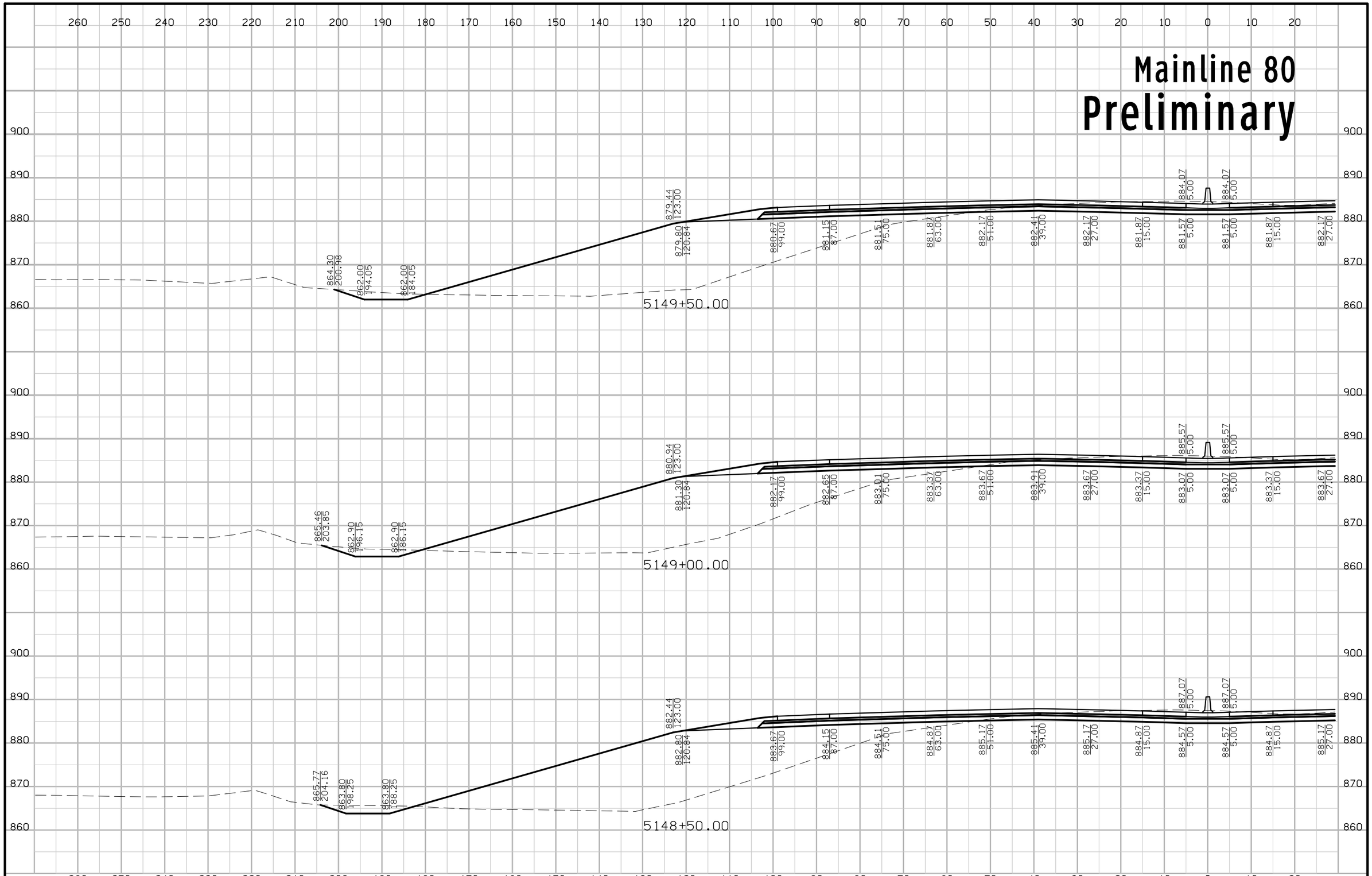
5147+50.00

5147+00.00

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.168	

5:13:38 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80
Preliminary

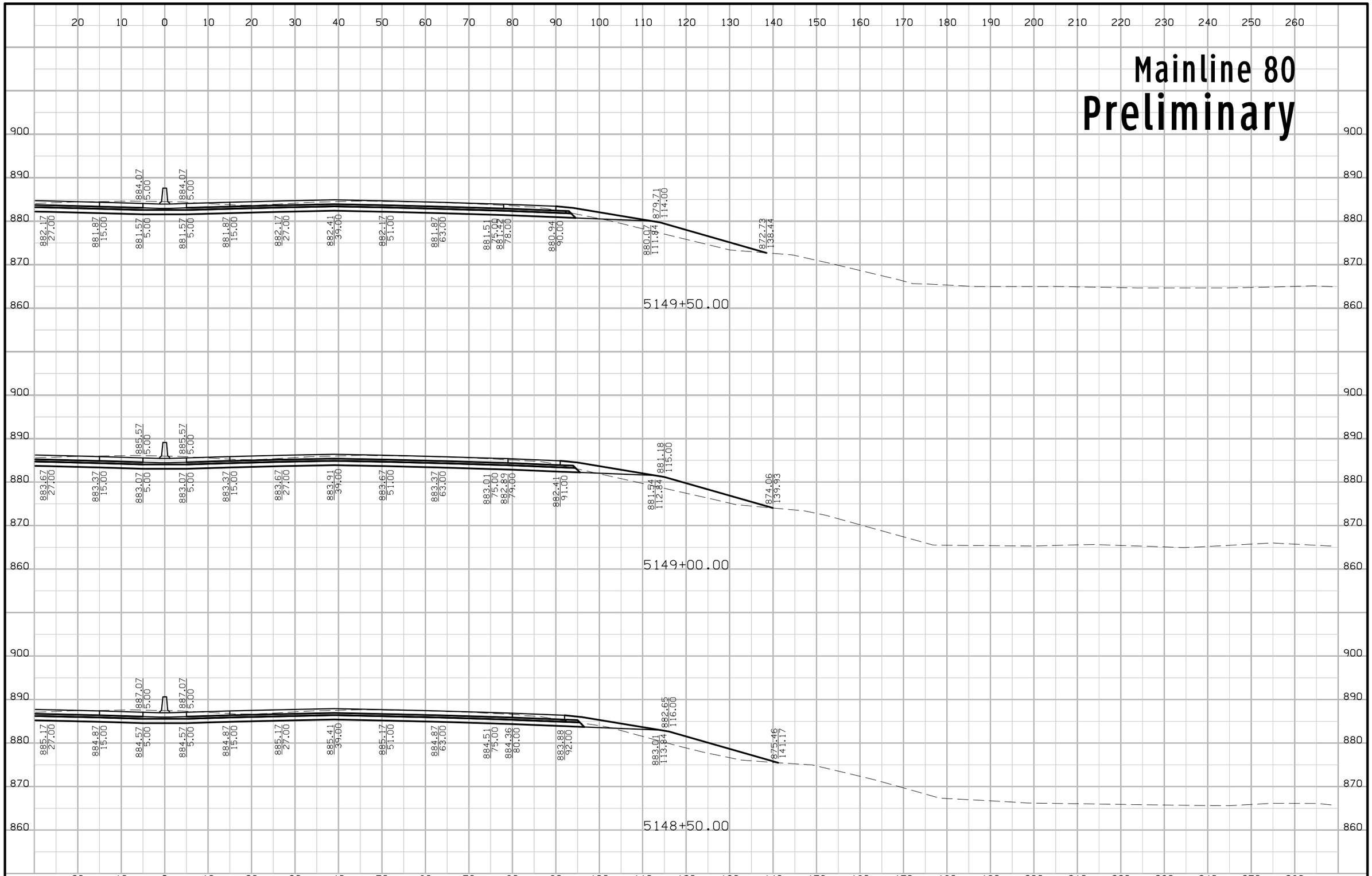


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.169

5:13:40 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194WO2A.sht

Mainline 80

Preliminary

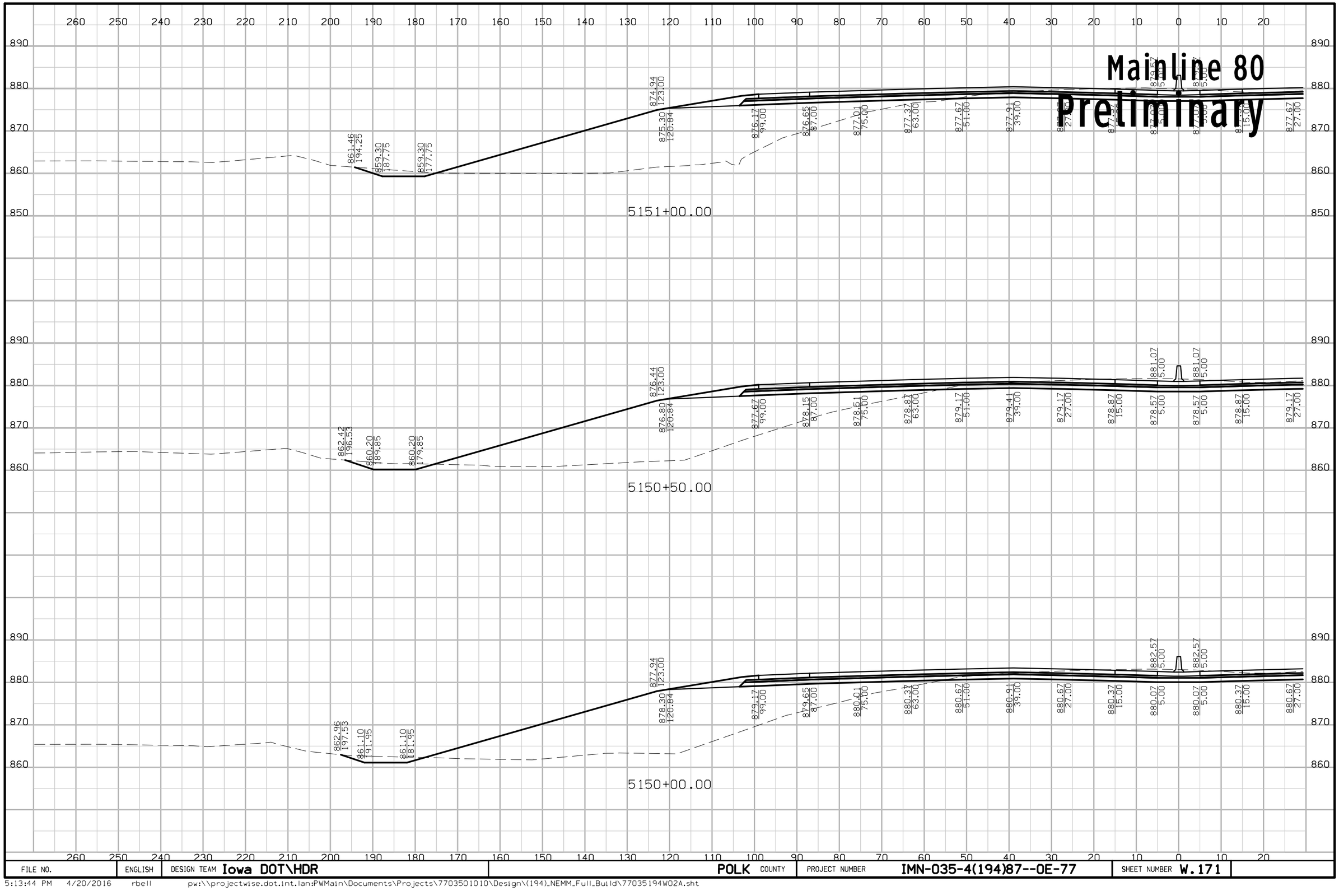


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.170

5:13:42 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.171

5:13:44 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

Preliminary

5151+00.00

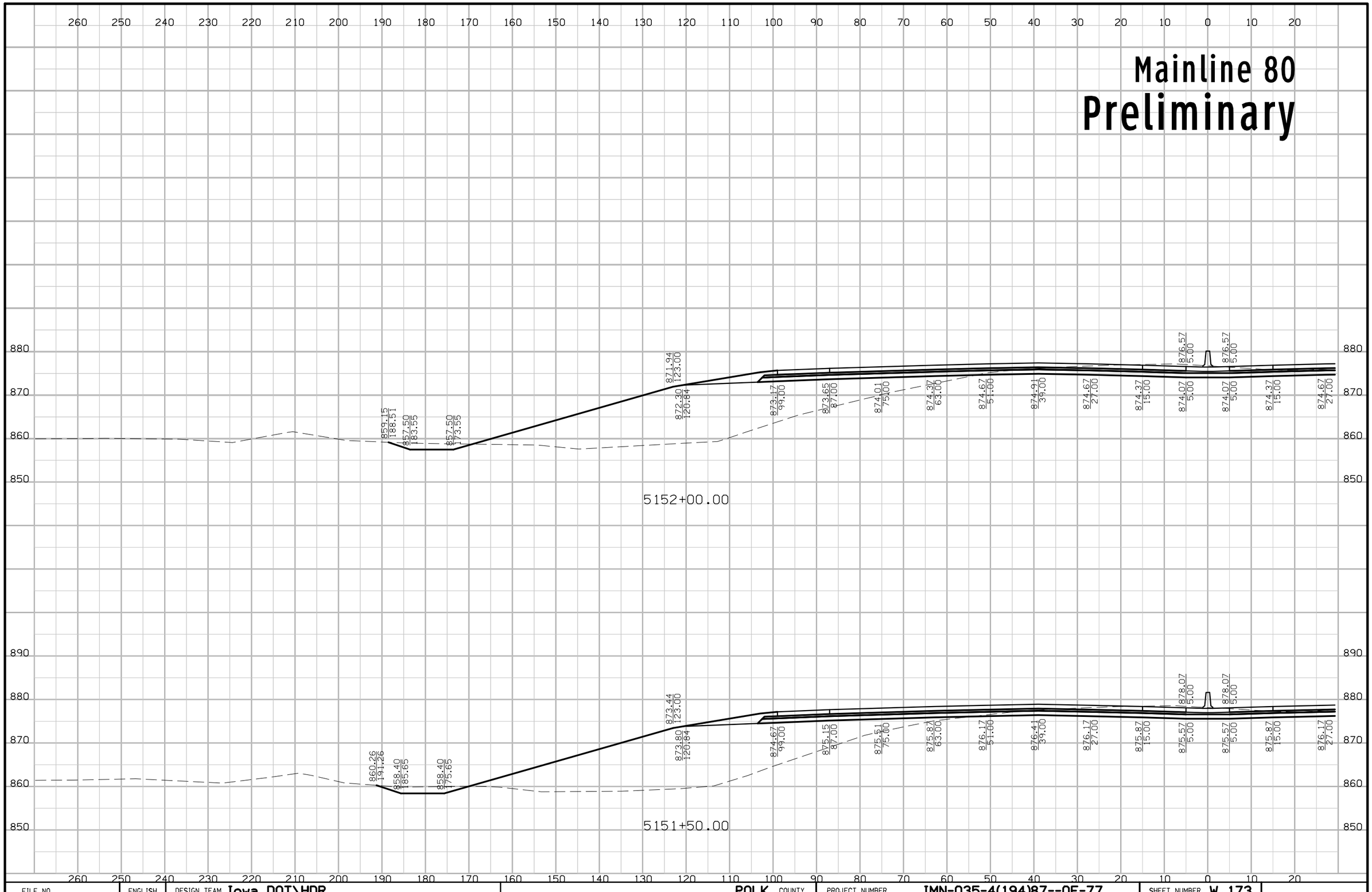
5150+50.00

5150+00.00

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.172

5:13:46 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80
Preliminary

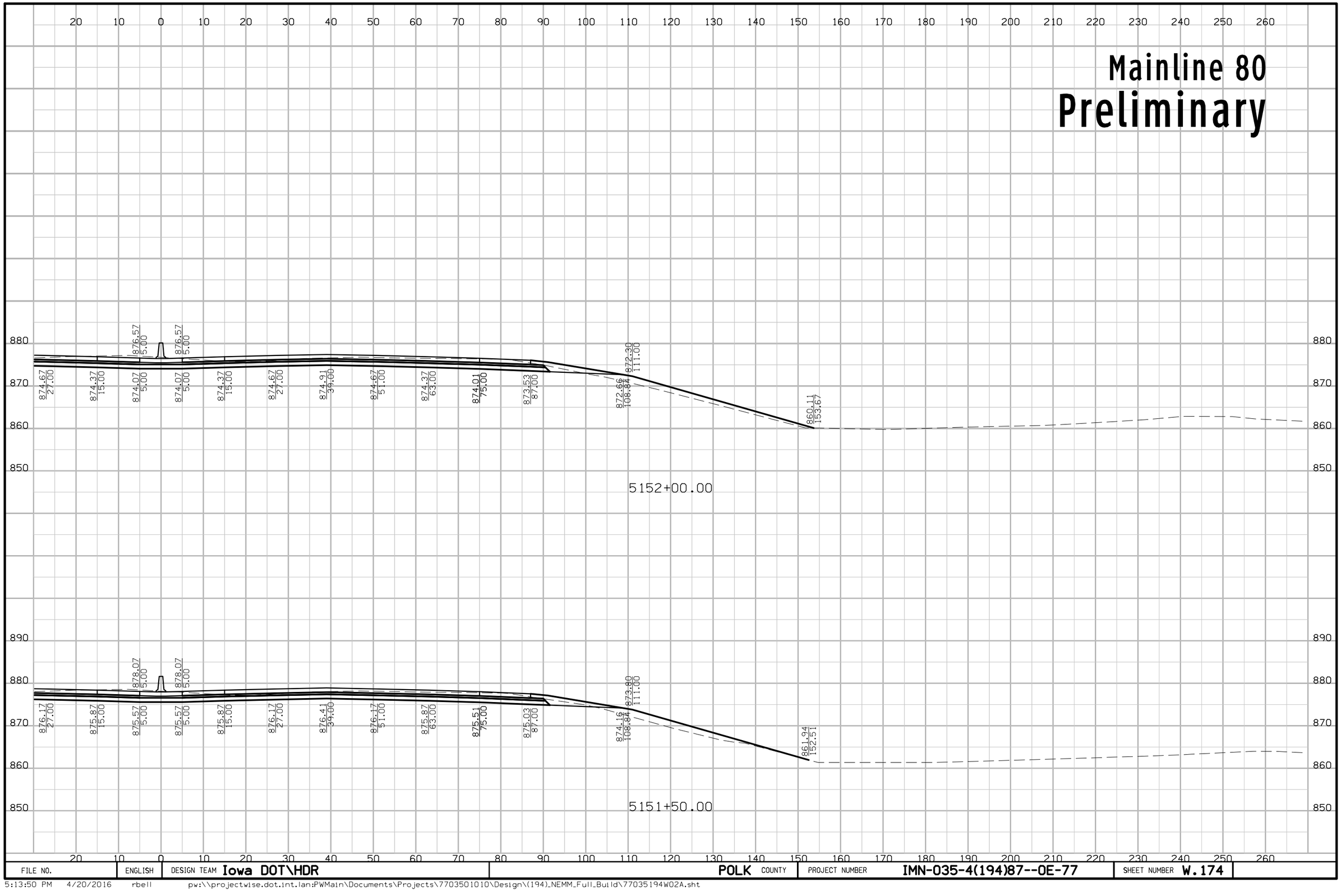


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.173

5:13:48 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

Preliminary

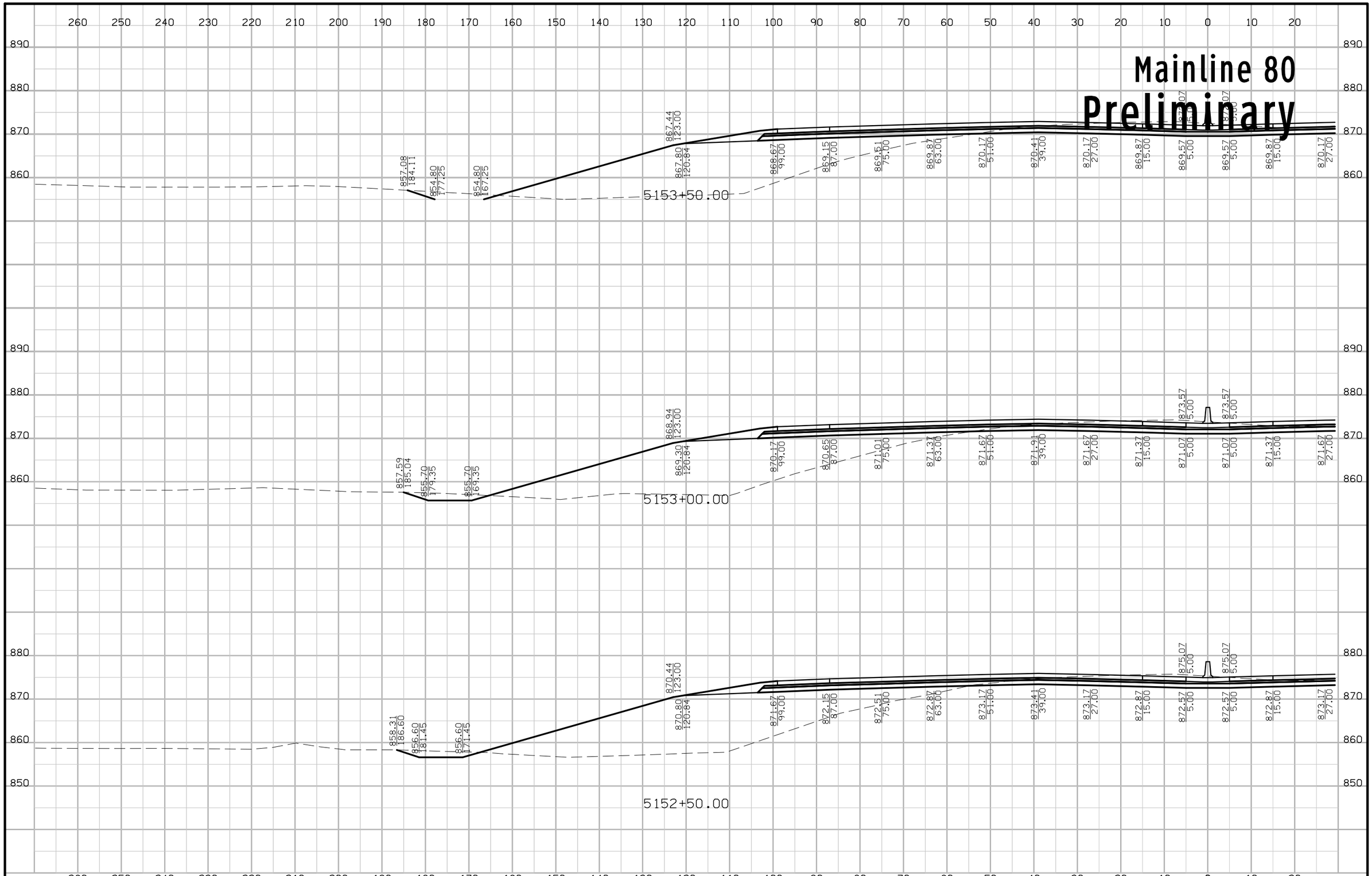


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.174

5:13:50 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

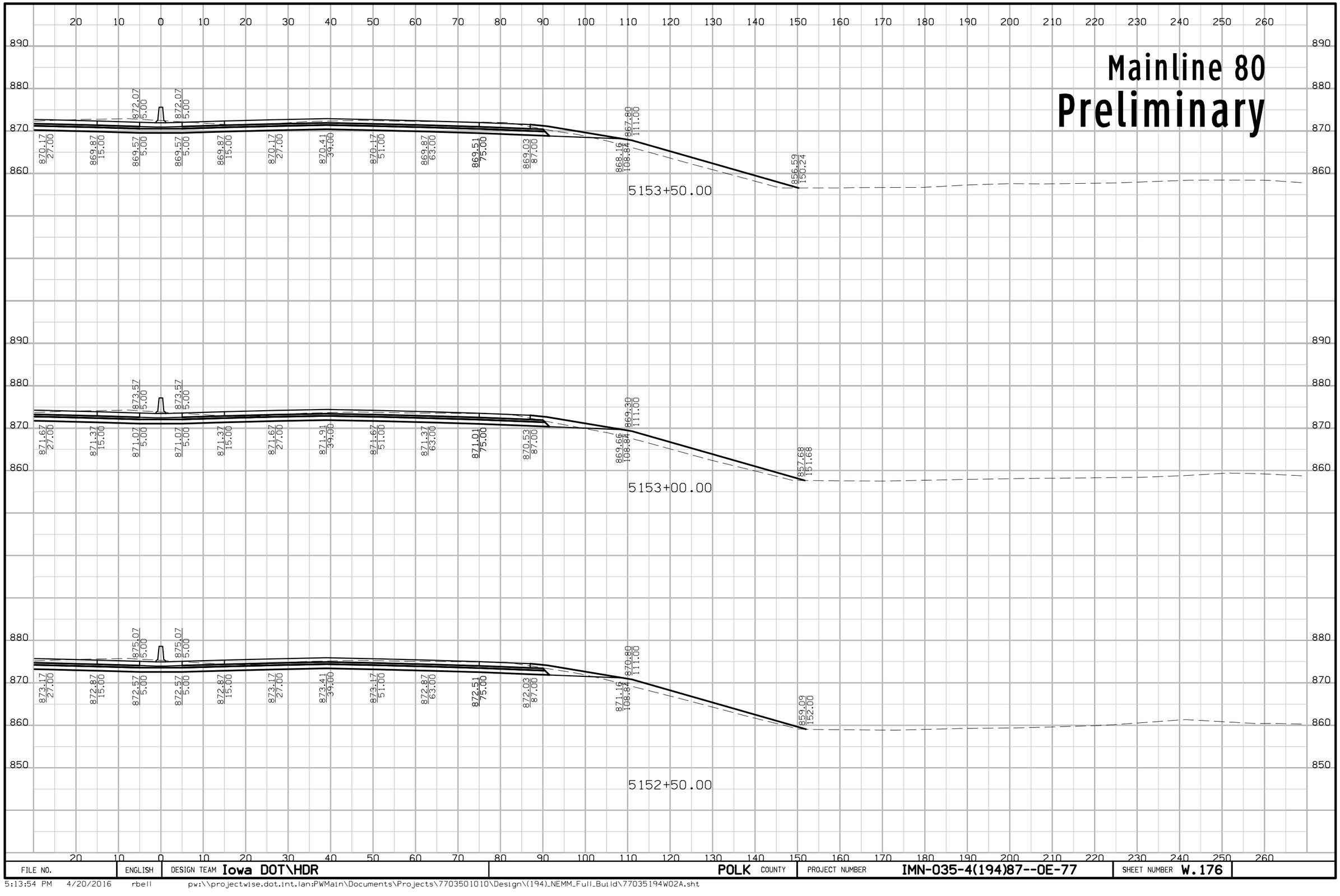
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.175

5:13:52 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80
Preliminary

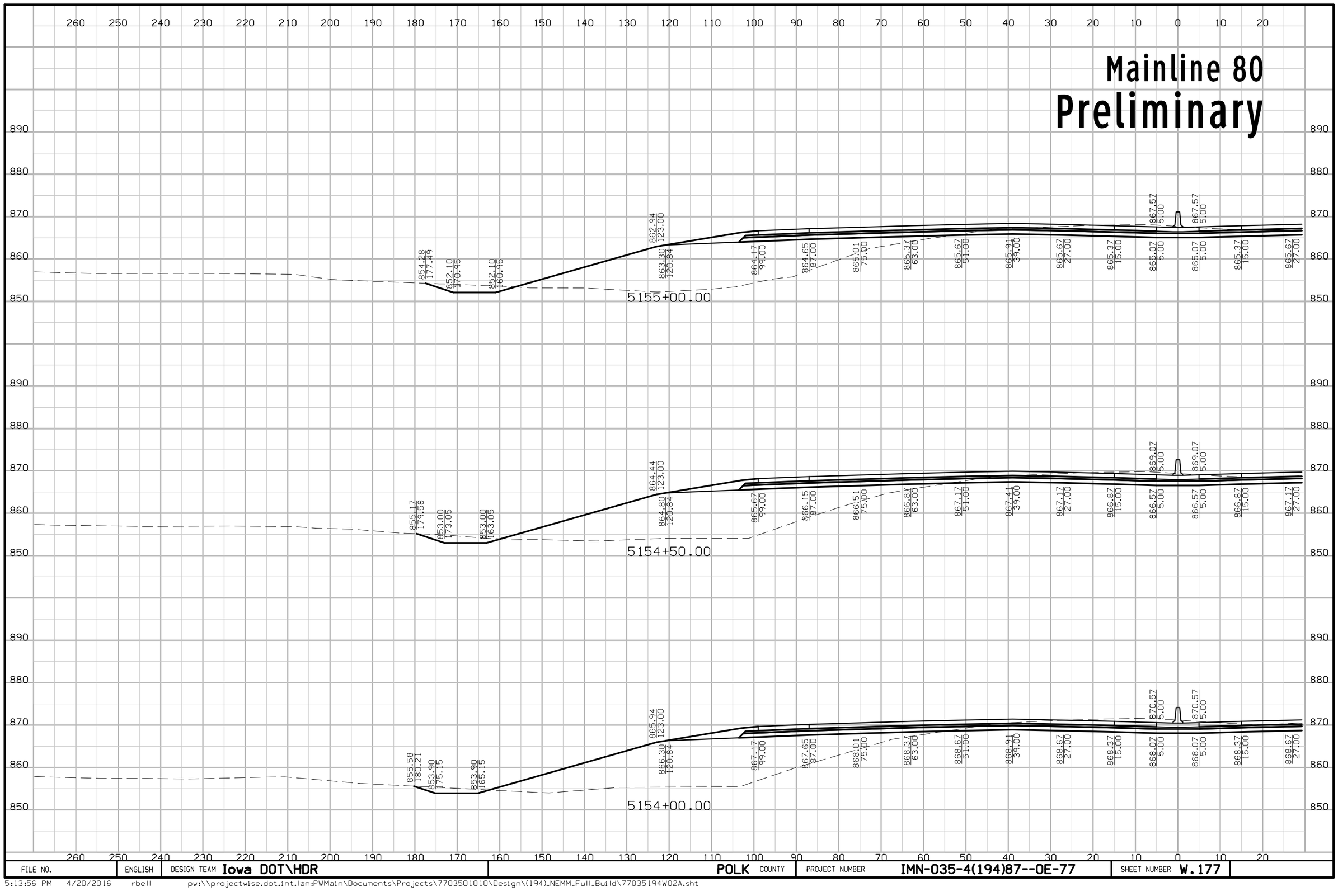


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.176

5:13:54 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

Preliminary

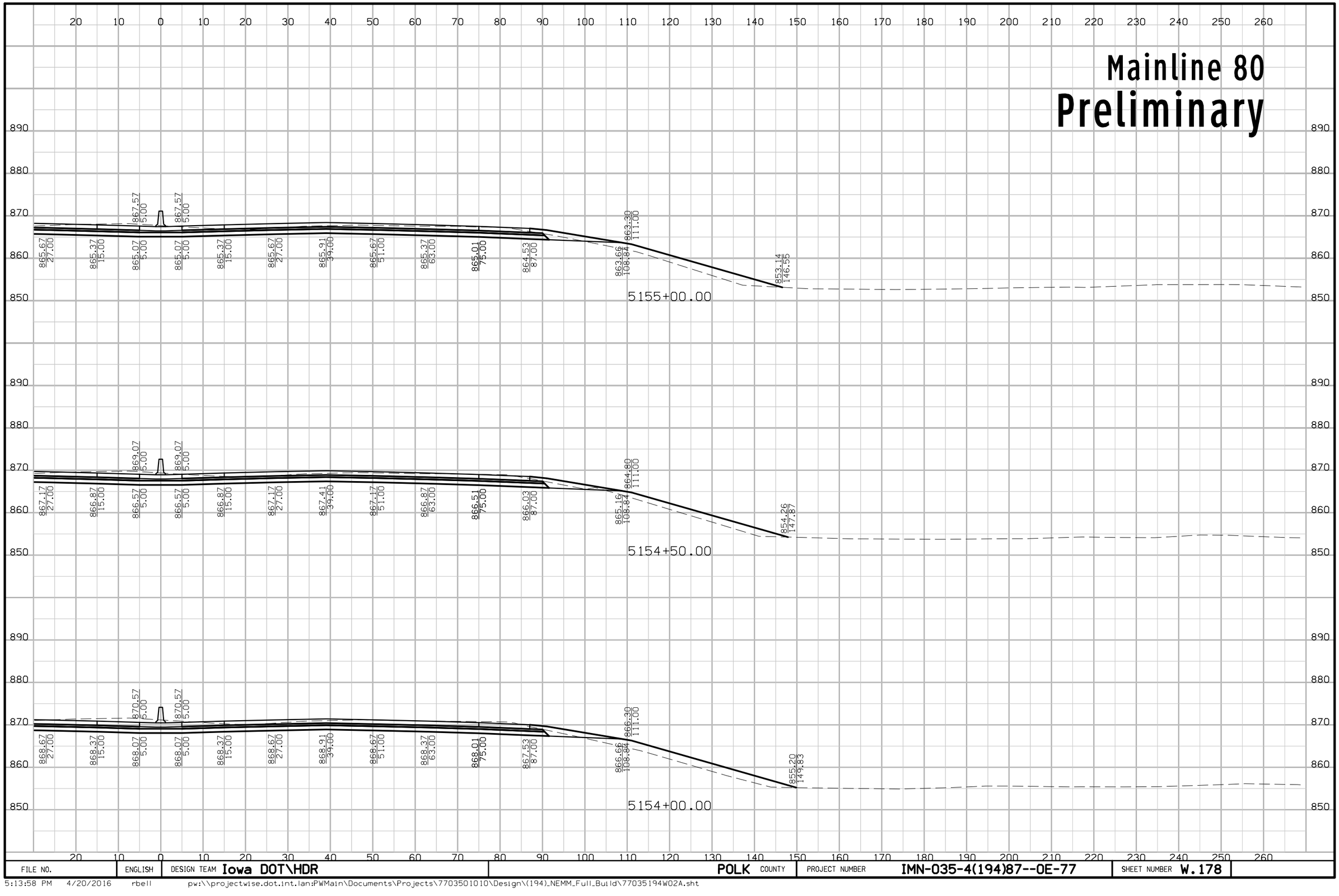


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.177

5:13:56 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02A.sht

Mainline 80

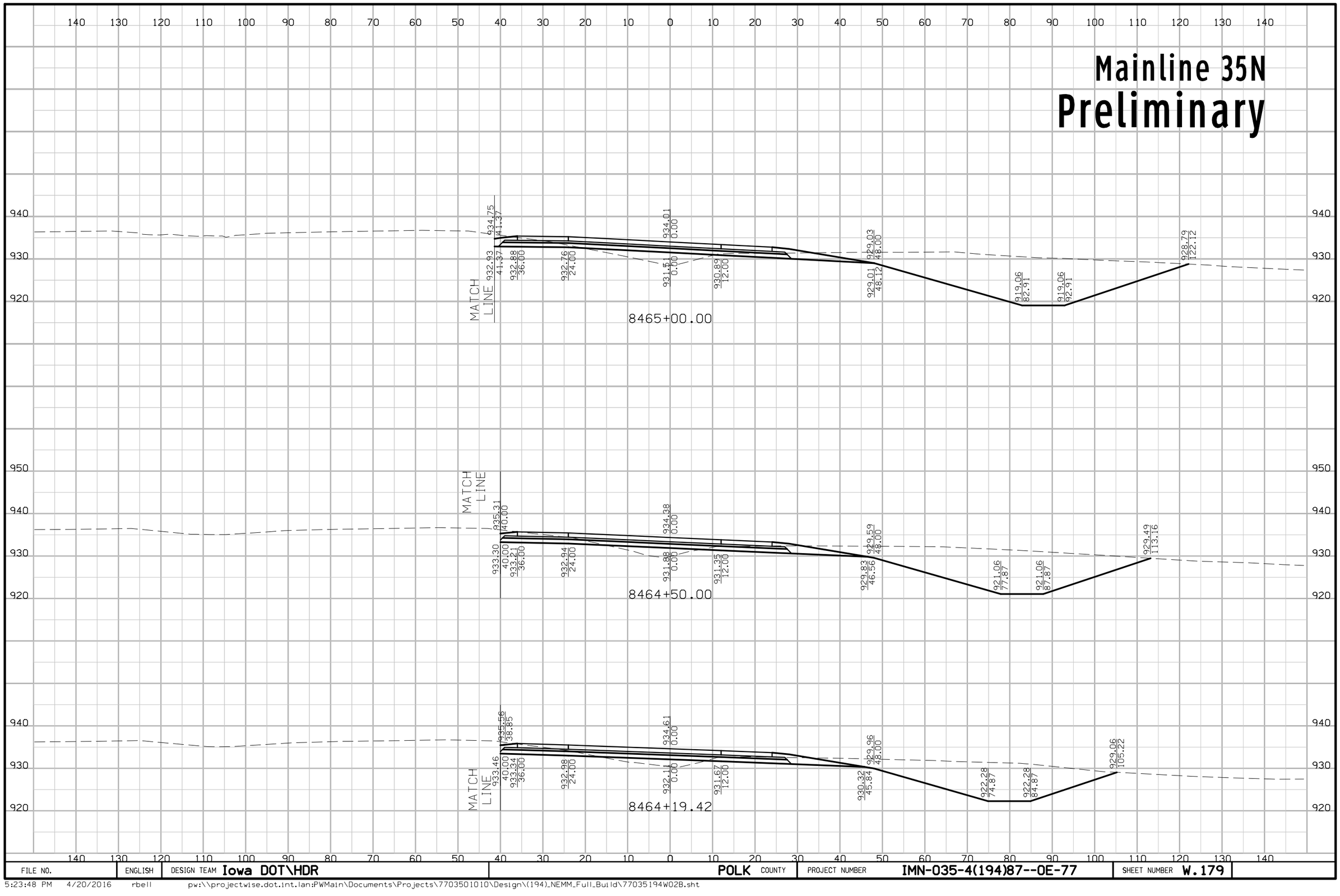
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.178

5:13:58 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194WO2A.sht

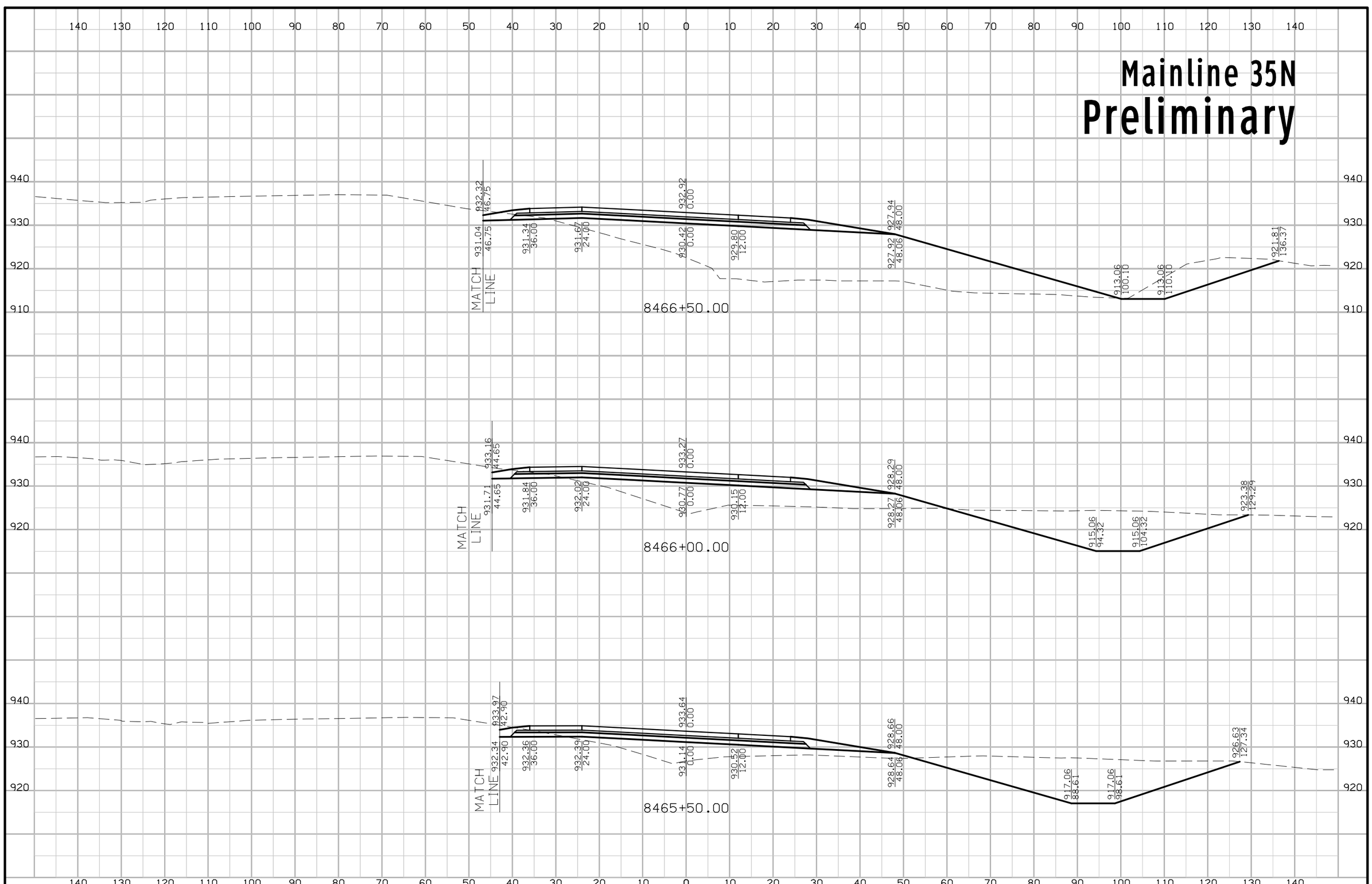
Mainline 35N
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.179

5:23:48 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N
Preliminary

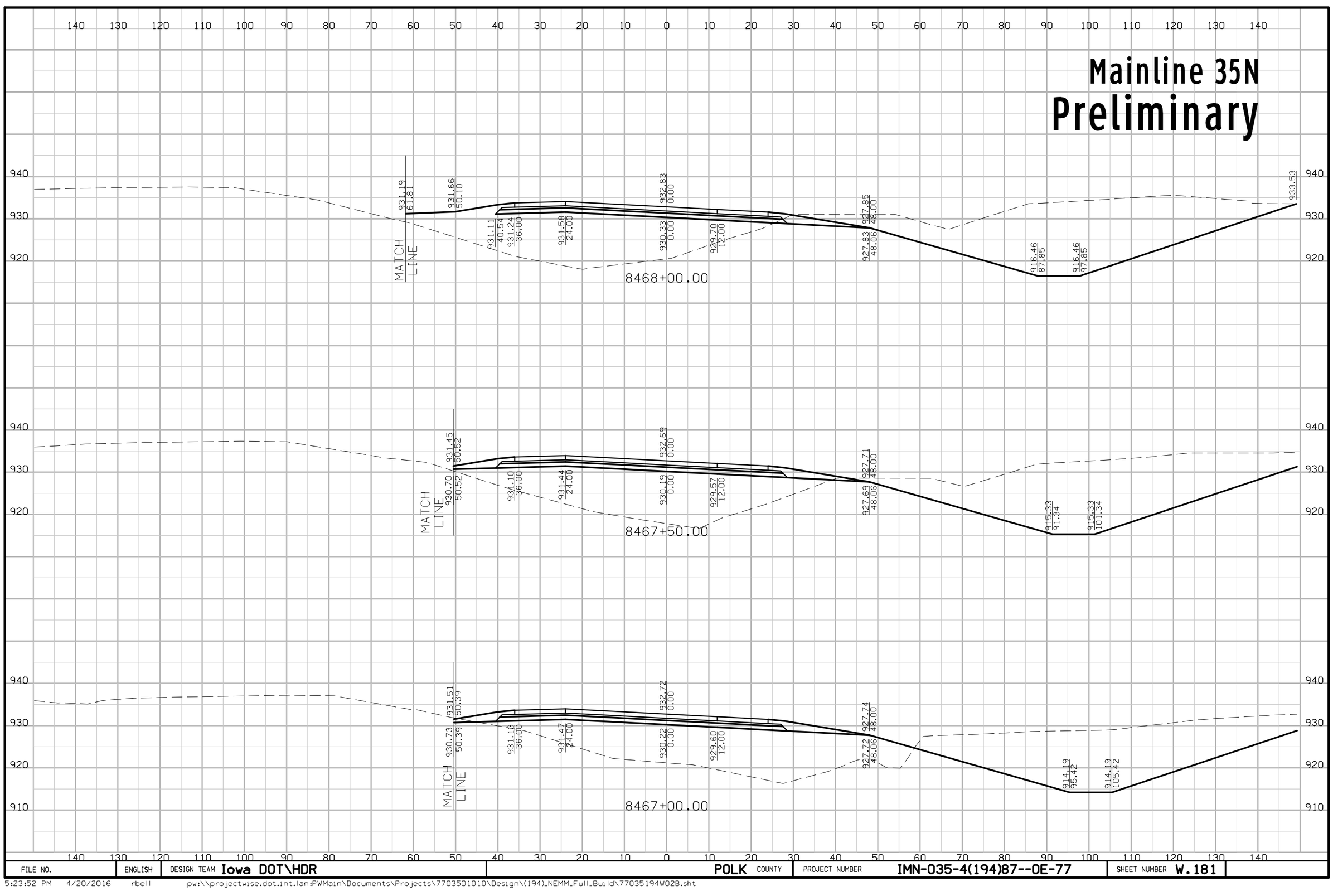


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.180

5:23:50 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N

Preliminary

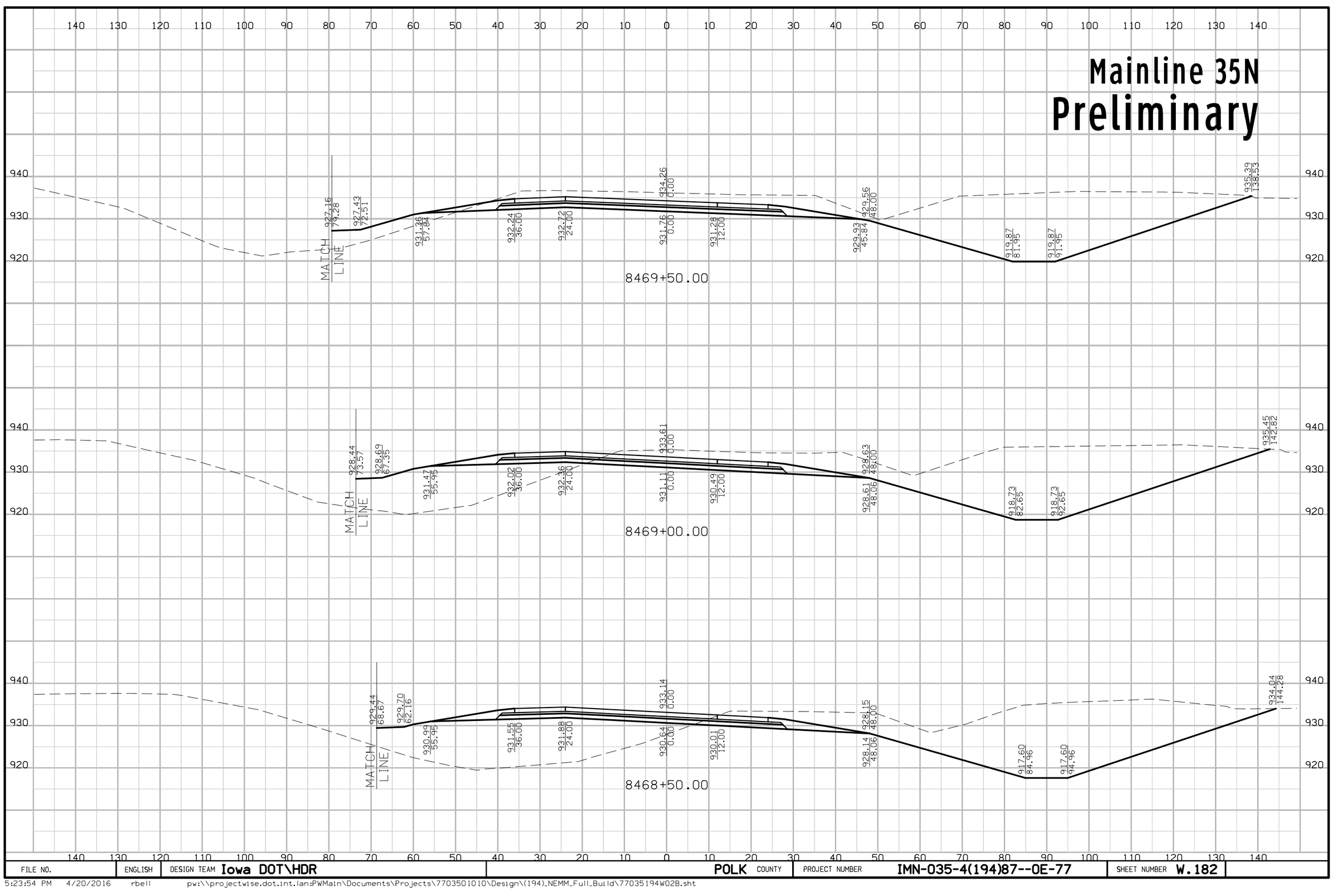


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.181

5:23:52 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N

Preliminary

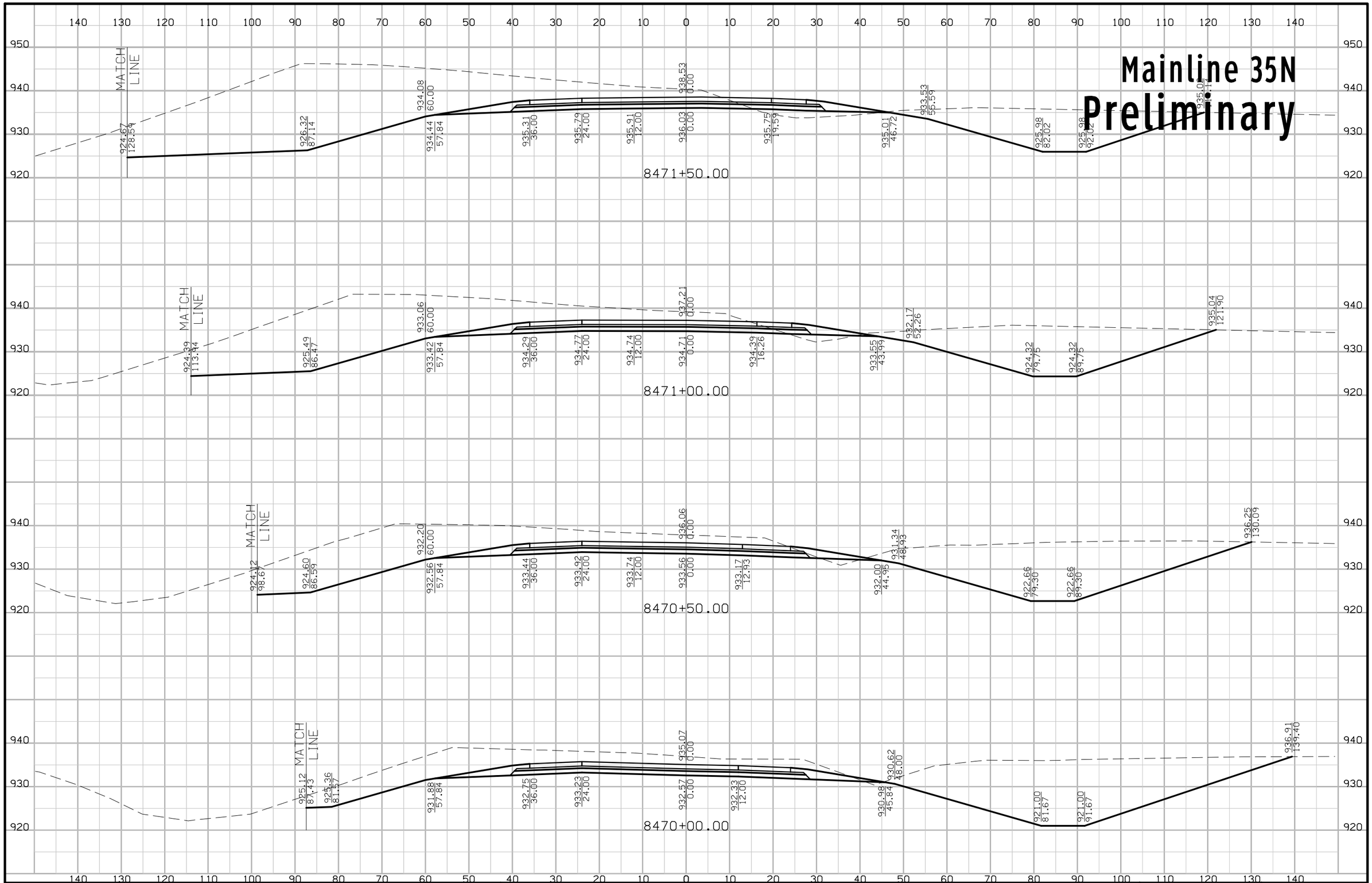


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.182

5:23:54 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N

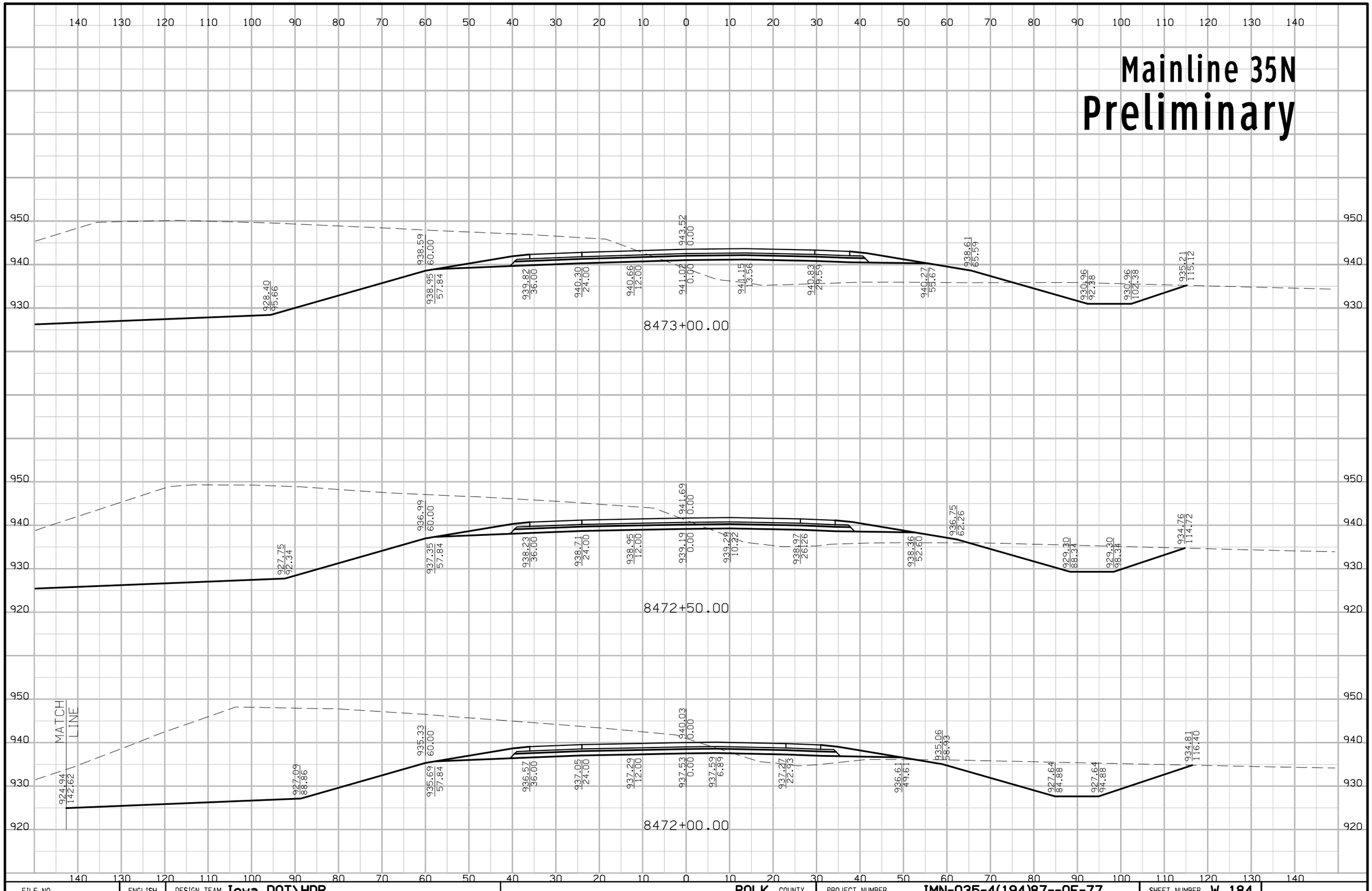
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.183

5:23:56 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

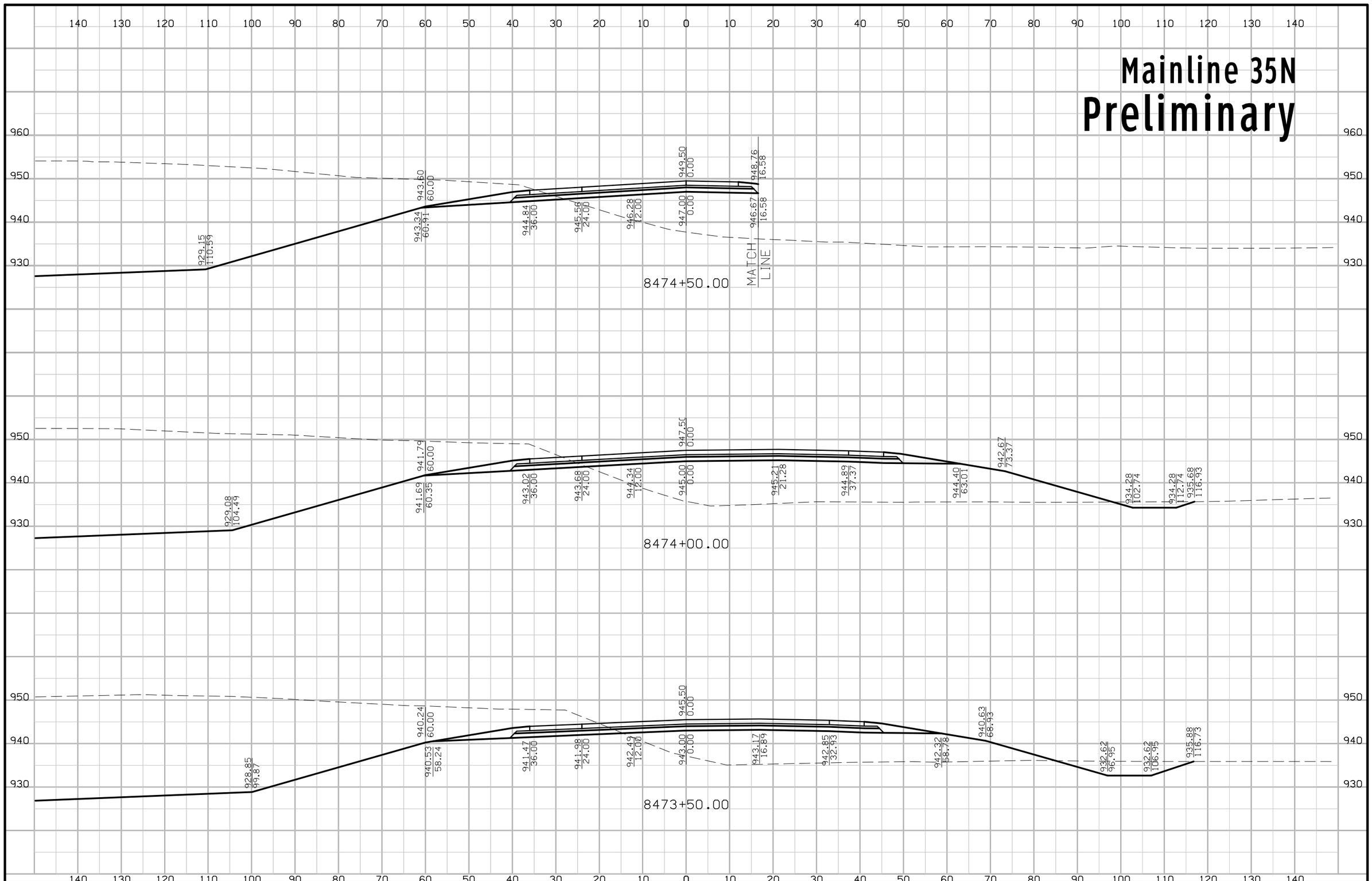
Mainline 35N
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.184

5:23:58 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.185

5:24:00 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N

Preliminary

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

960
950
940
930

929.93
121.85

947.34
60.91

947.60
60.00

948.84
36.00

949.56
24.00

950.28
12.00

951.00
0.00

953.50
0.00

950.44
27.87

950.88
27.87

MATCH LINE

8475+50.00

960
950
940
930

929.07
117.85

945.34
60.91

945.60
60.00

946.84
36.00

947.56
24.00

948.28
12.00

949.00
0.00

951.50
0.00

948.57
21.46

949.95
21.46

MATCH LINE

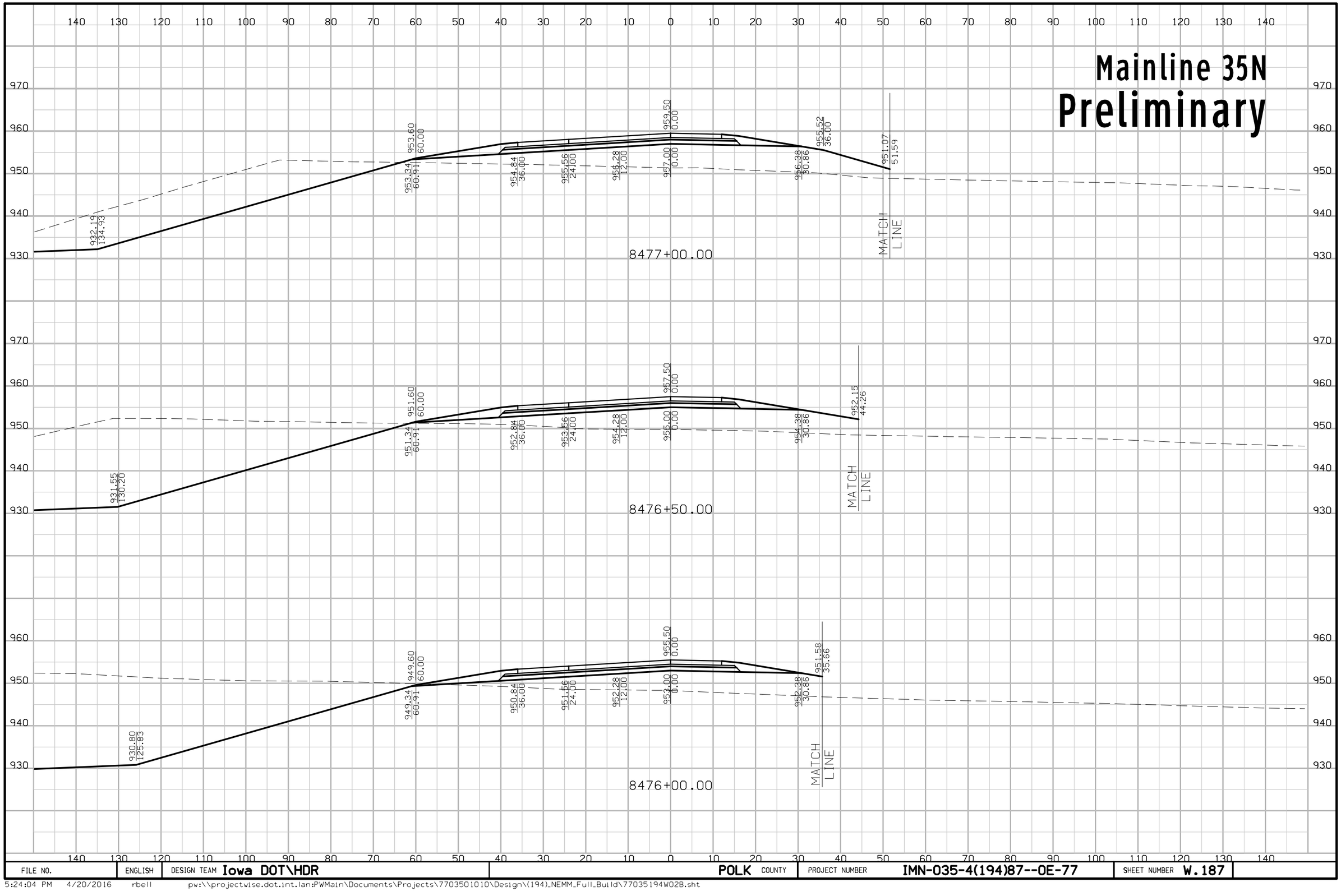
8475+00.00

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.186

5:24:02 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N
Preliminary

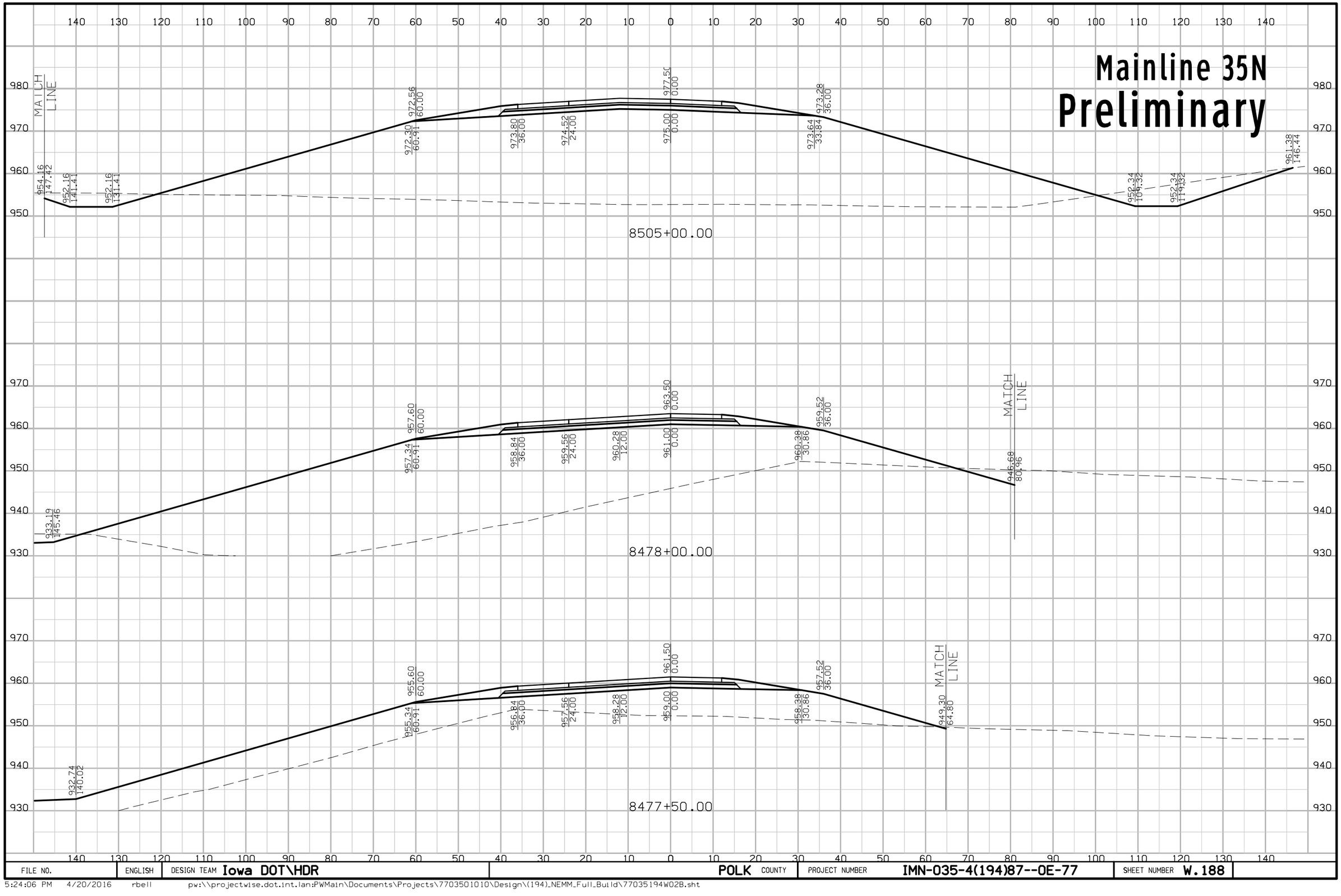


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.187

5:24:04 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N

Preliminary

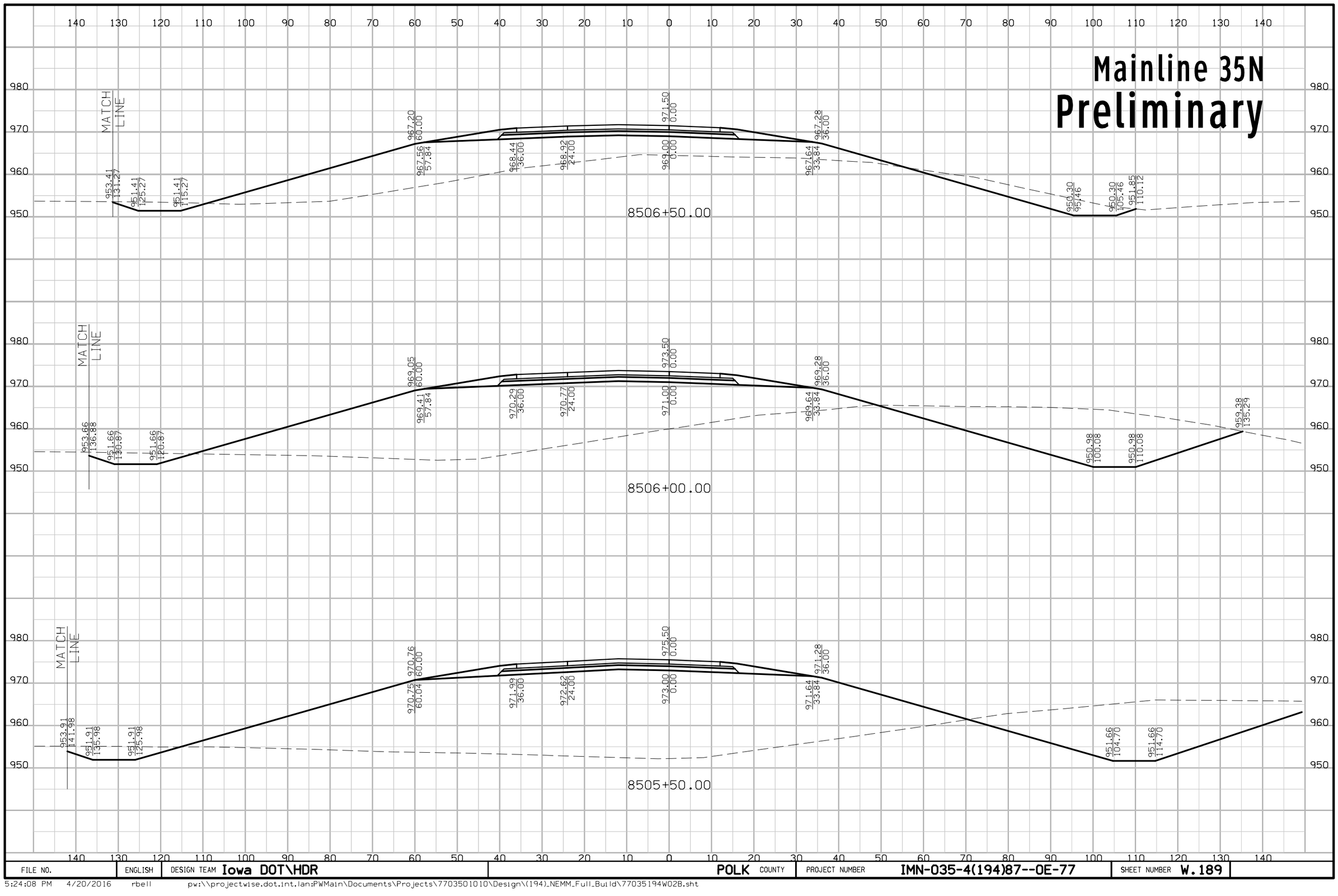


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.188

5:24:06 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N

Preliminary

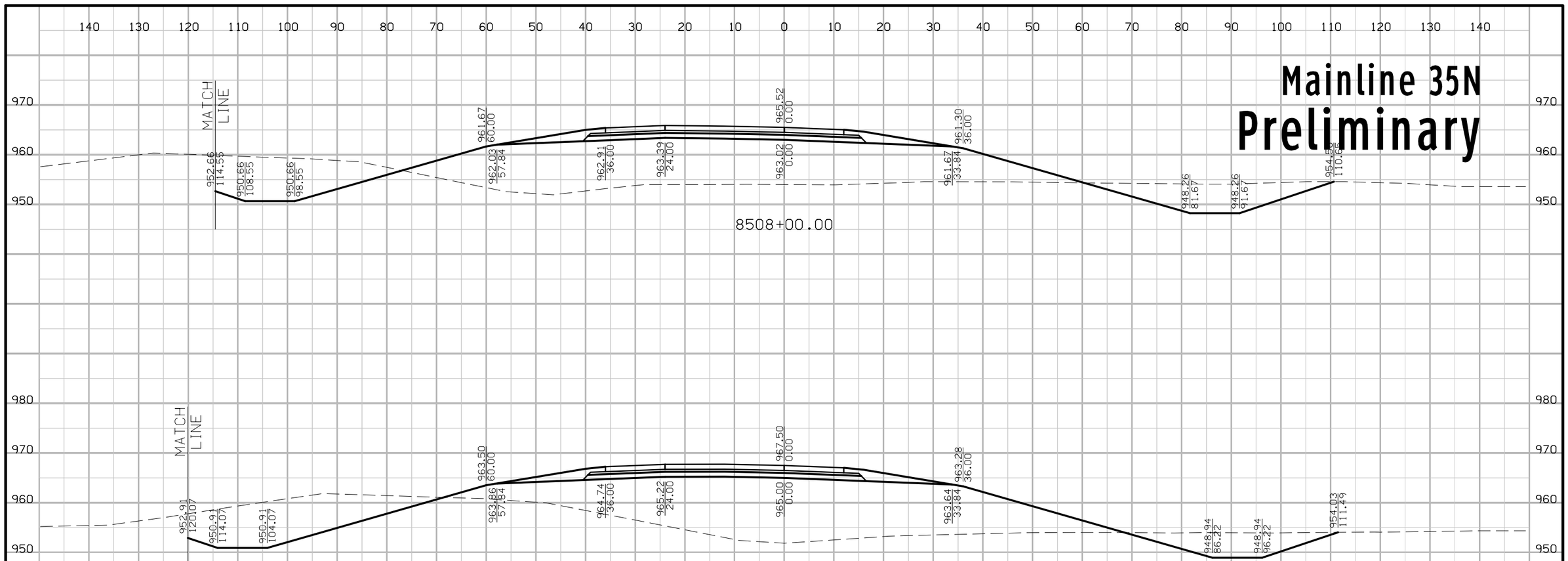


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.189

5:24:08 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N

Preliminary

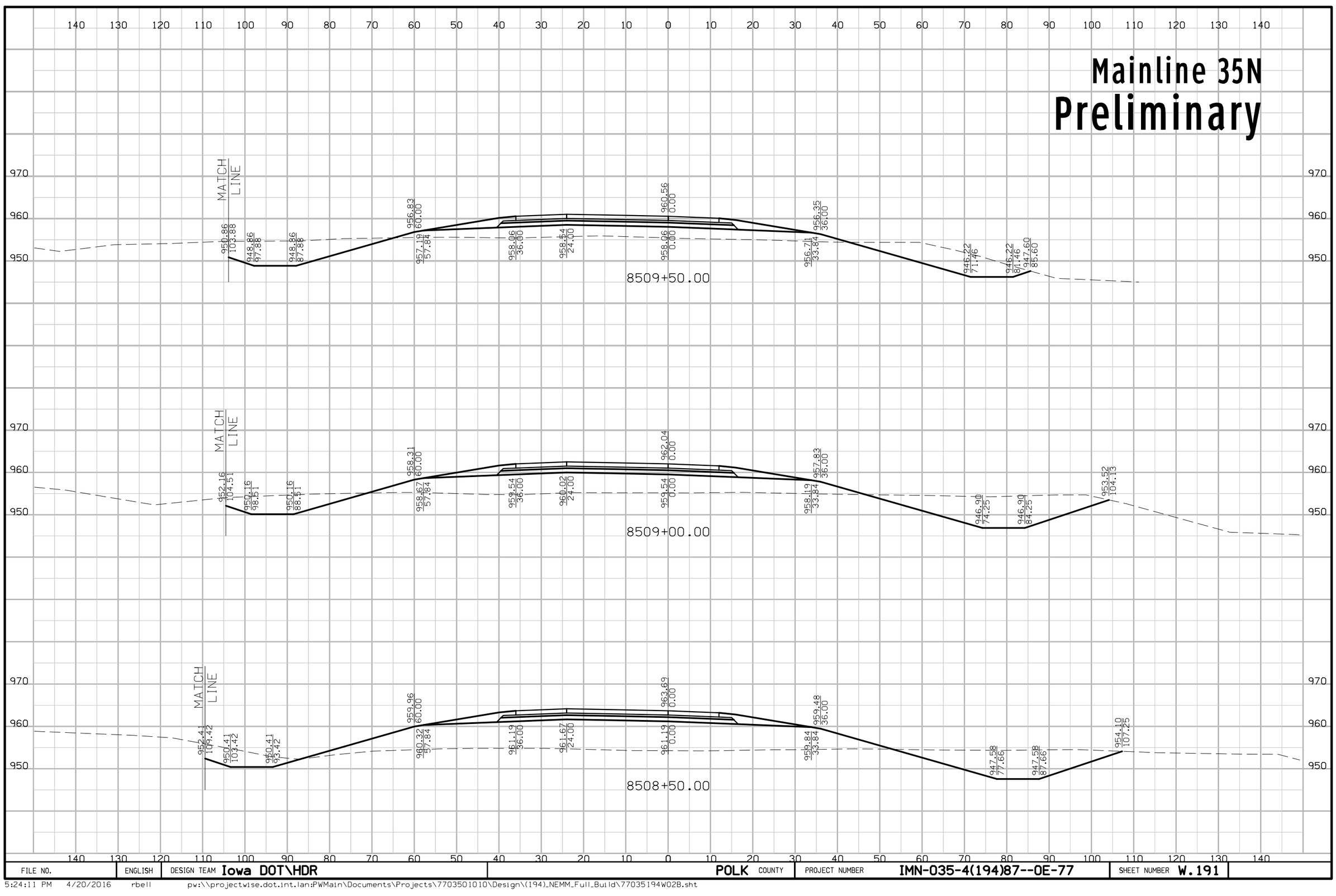


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.190

5:24:10 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N

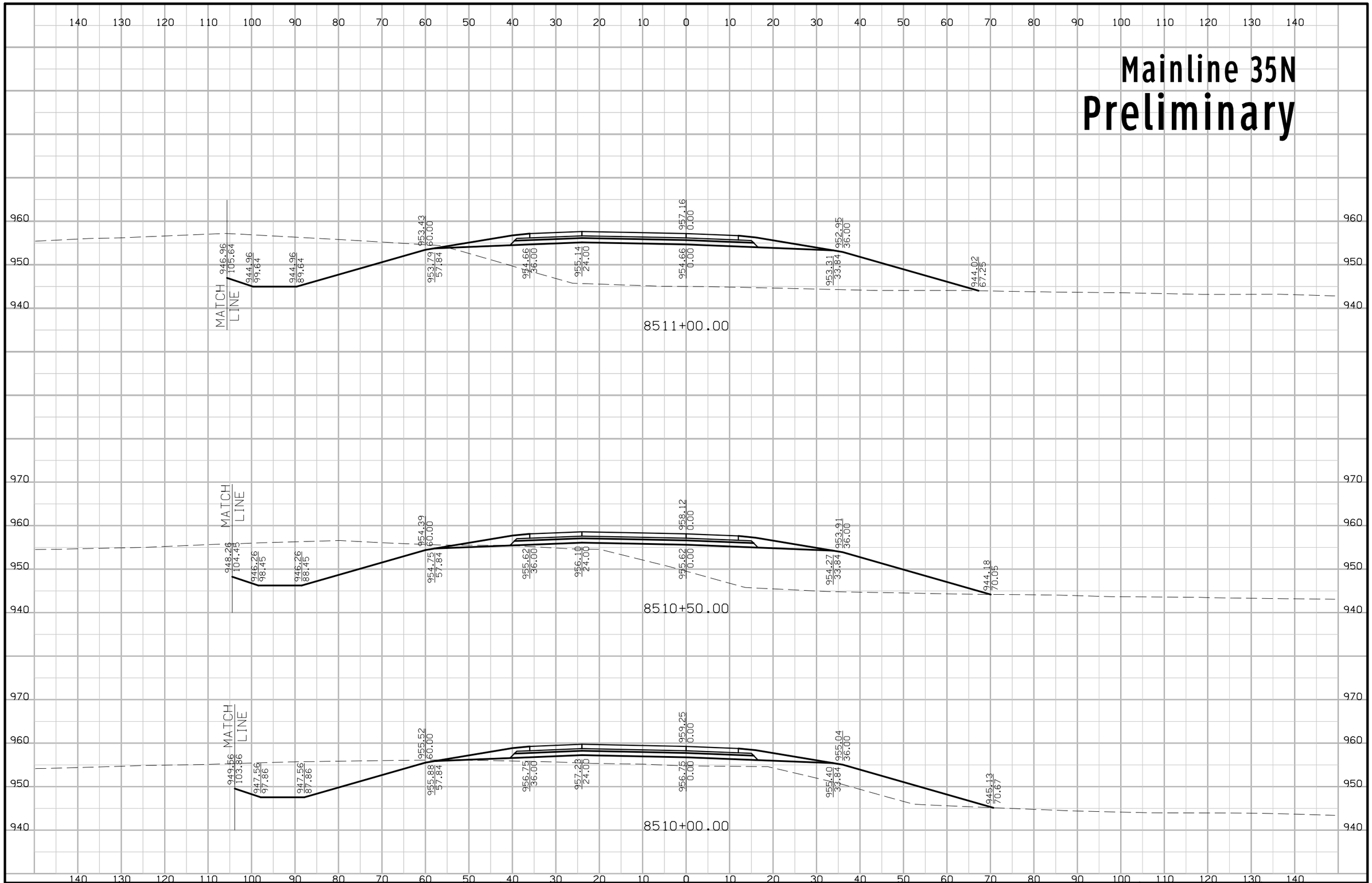
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.191

5:24:11 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N
Preliminary

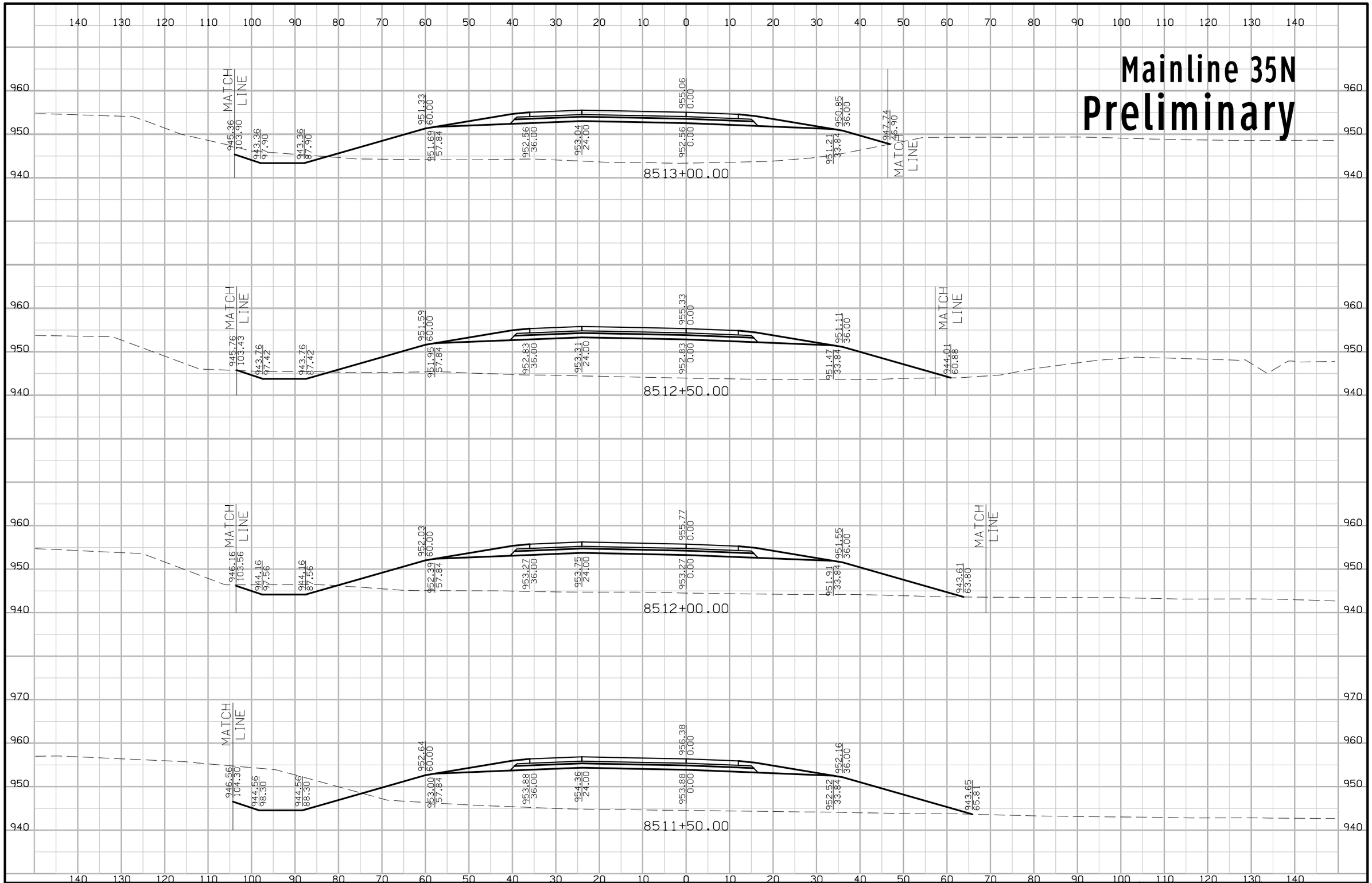


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.192

5:24:13 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N

Preliminary

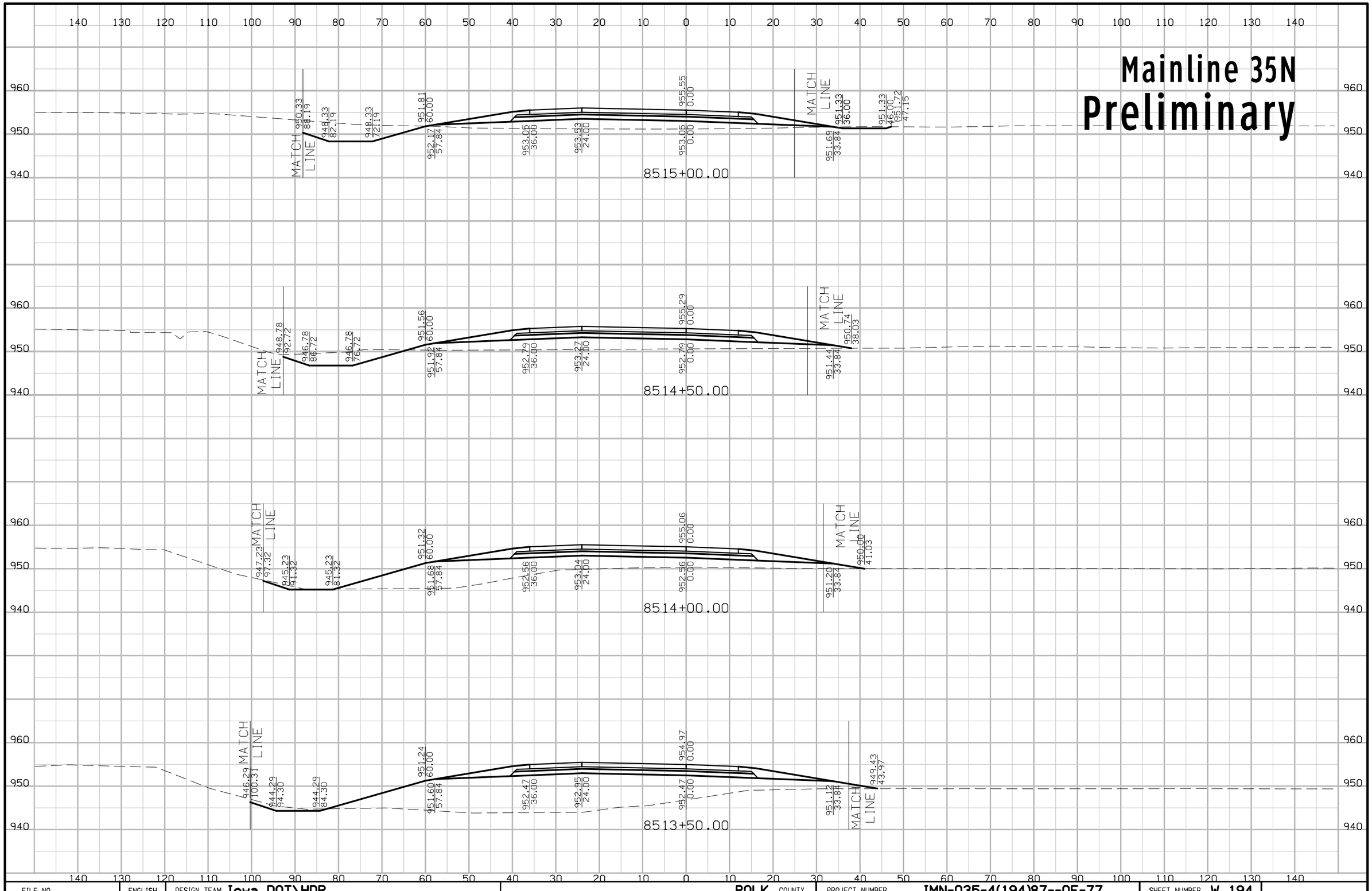


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.193

5:24:15 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N

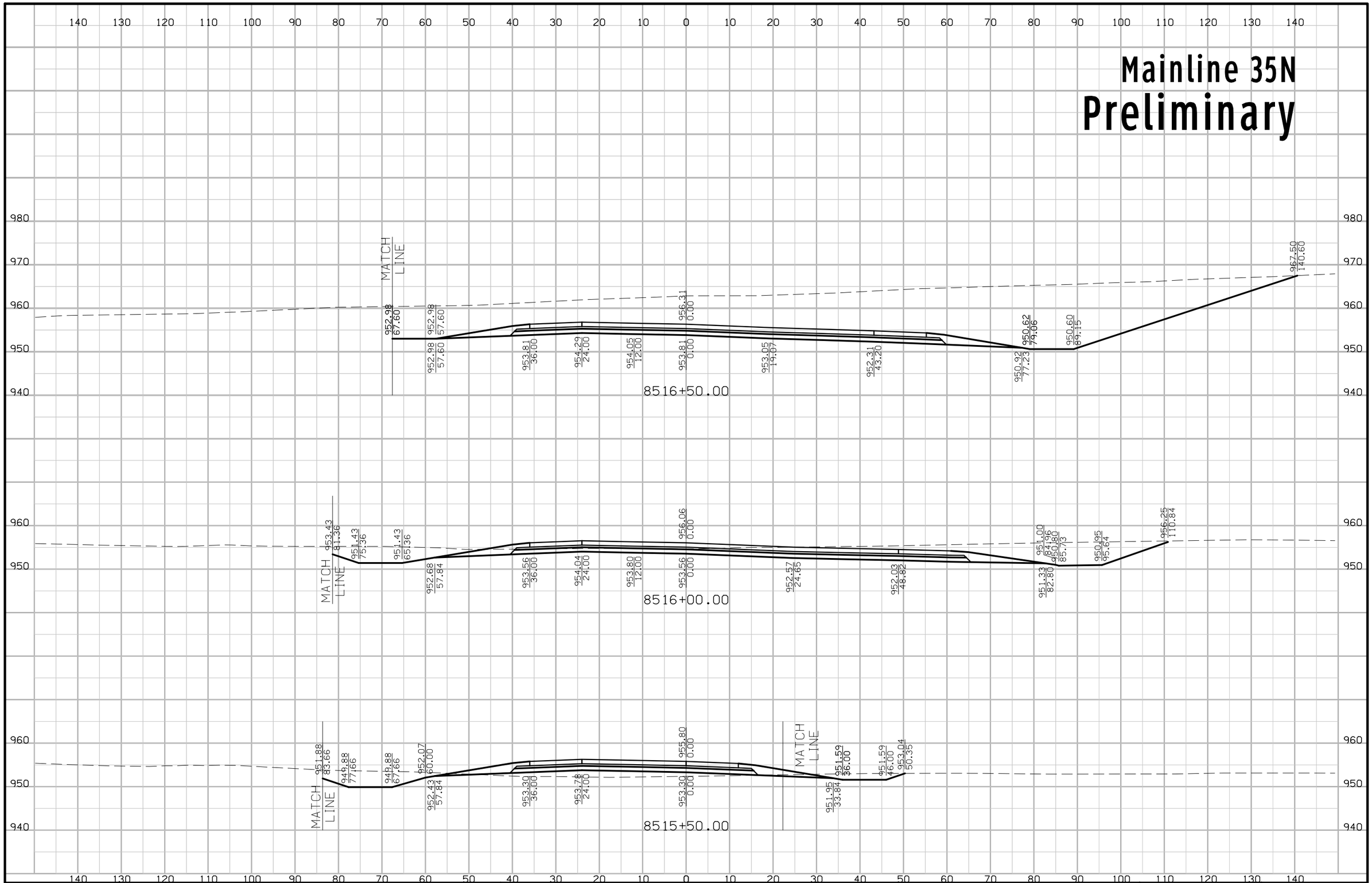
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.194

5:24:17 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

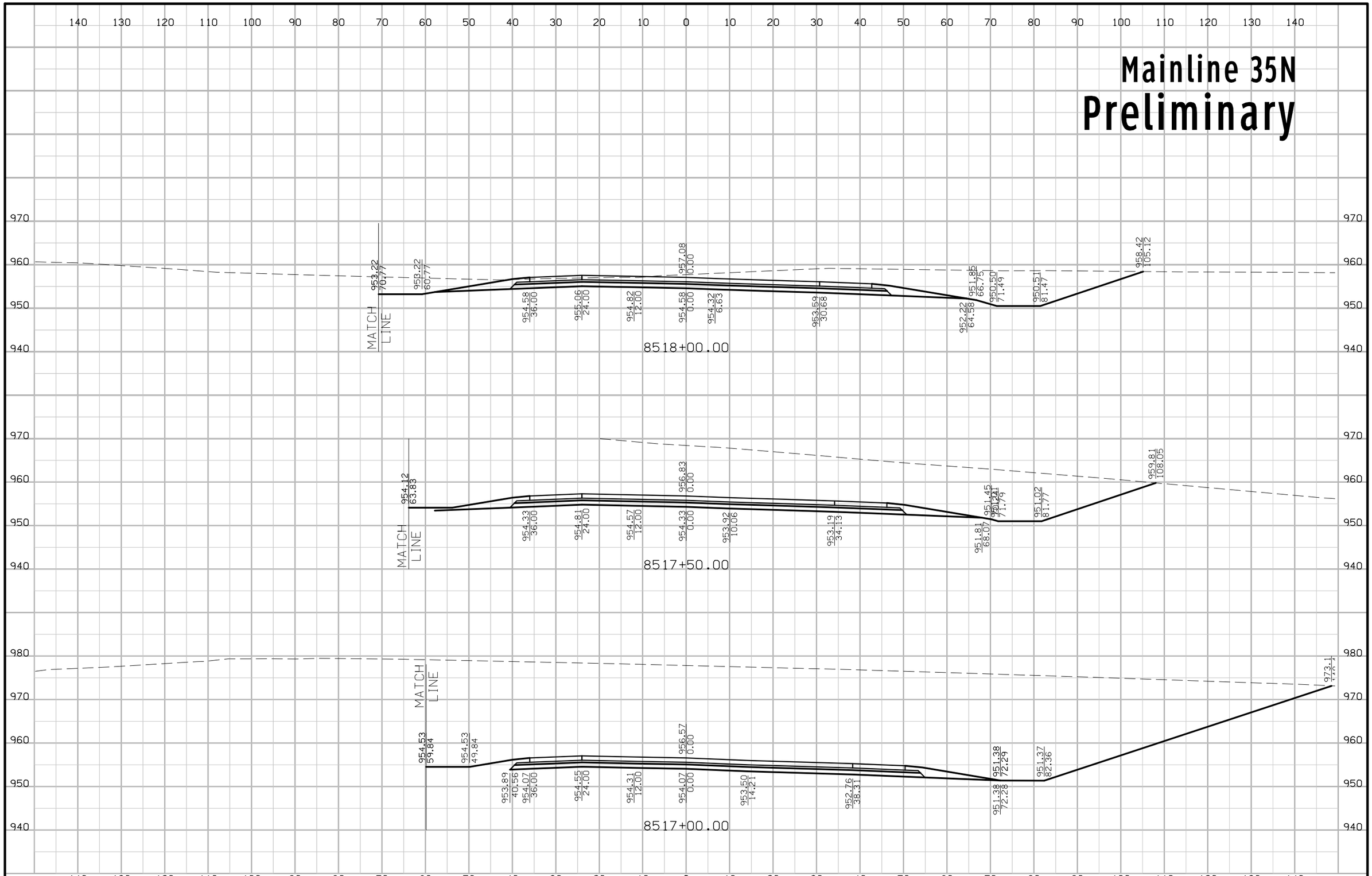
Mainline 35N
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.195

5:24:19 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

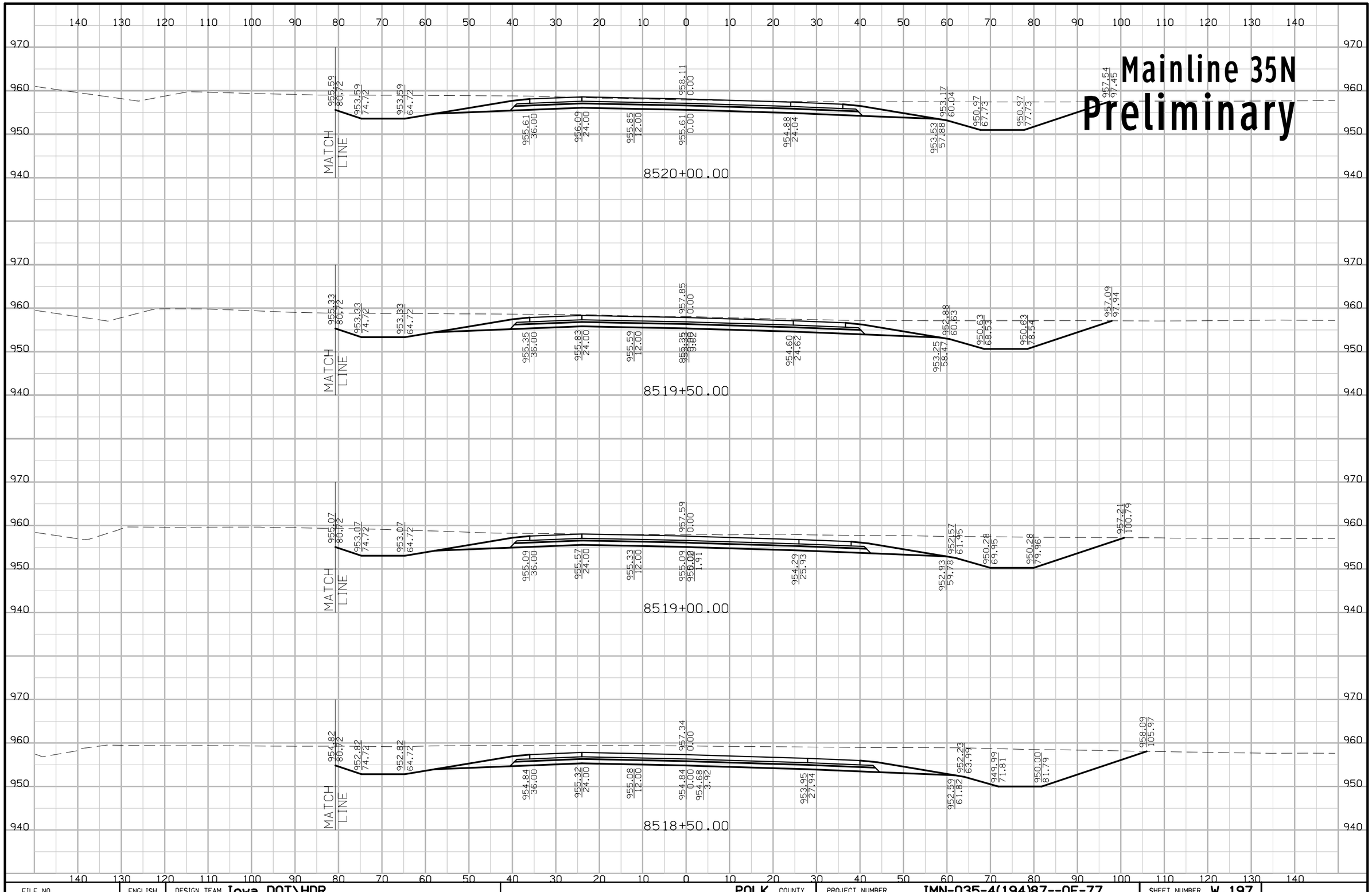
Mainline 35N
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.196

5:24:21 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N
Preliminary

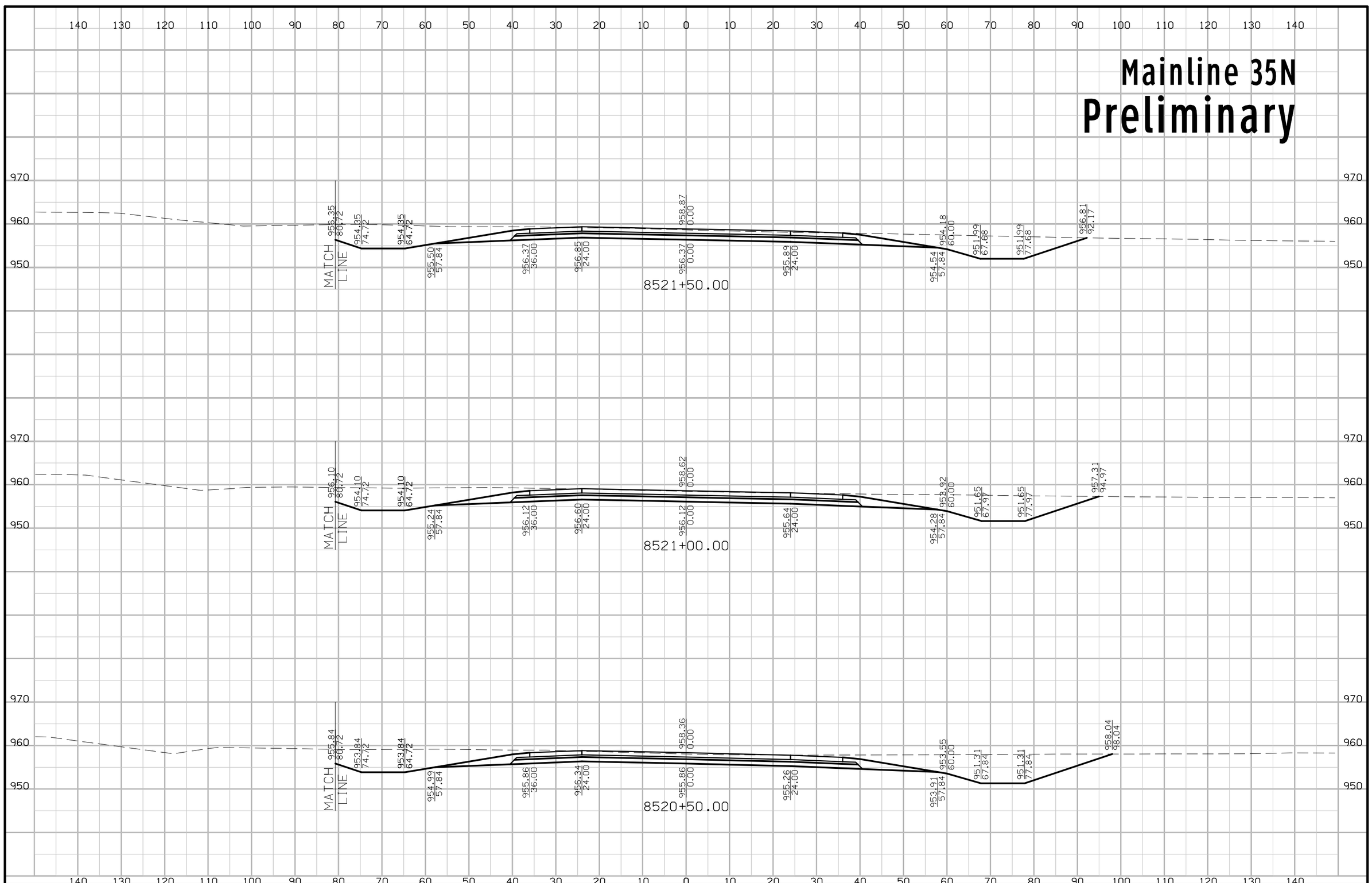


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.197

5:24:23 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N

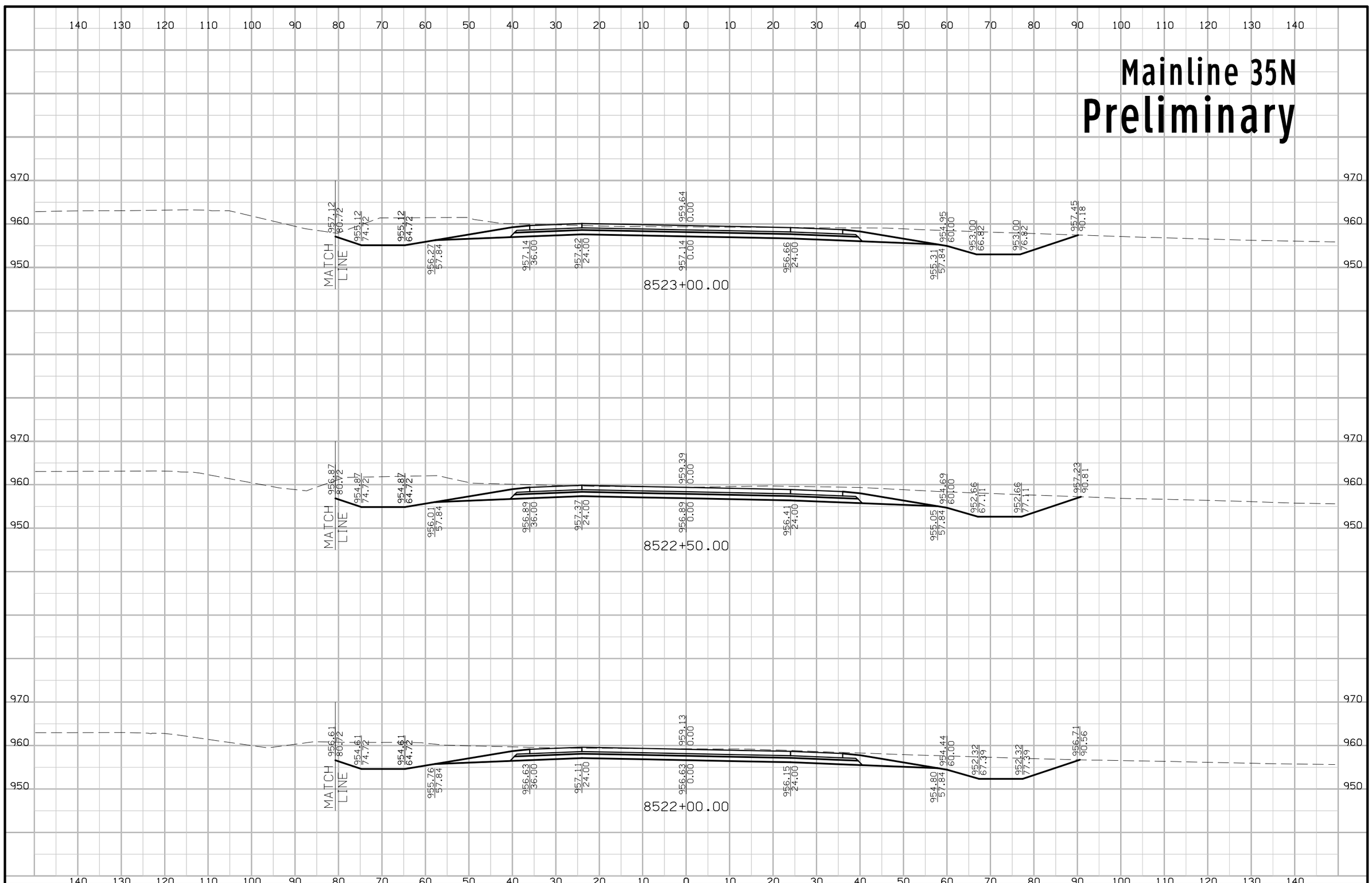
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.198

5:24:25 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

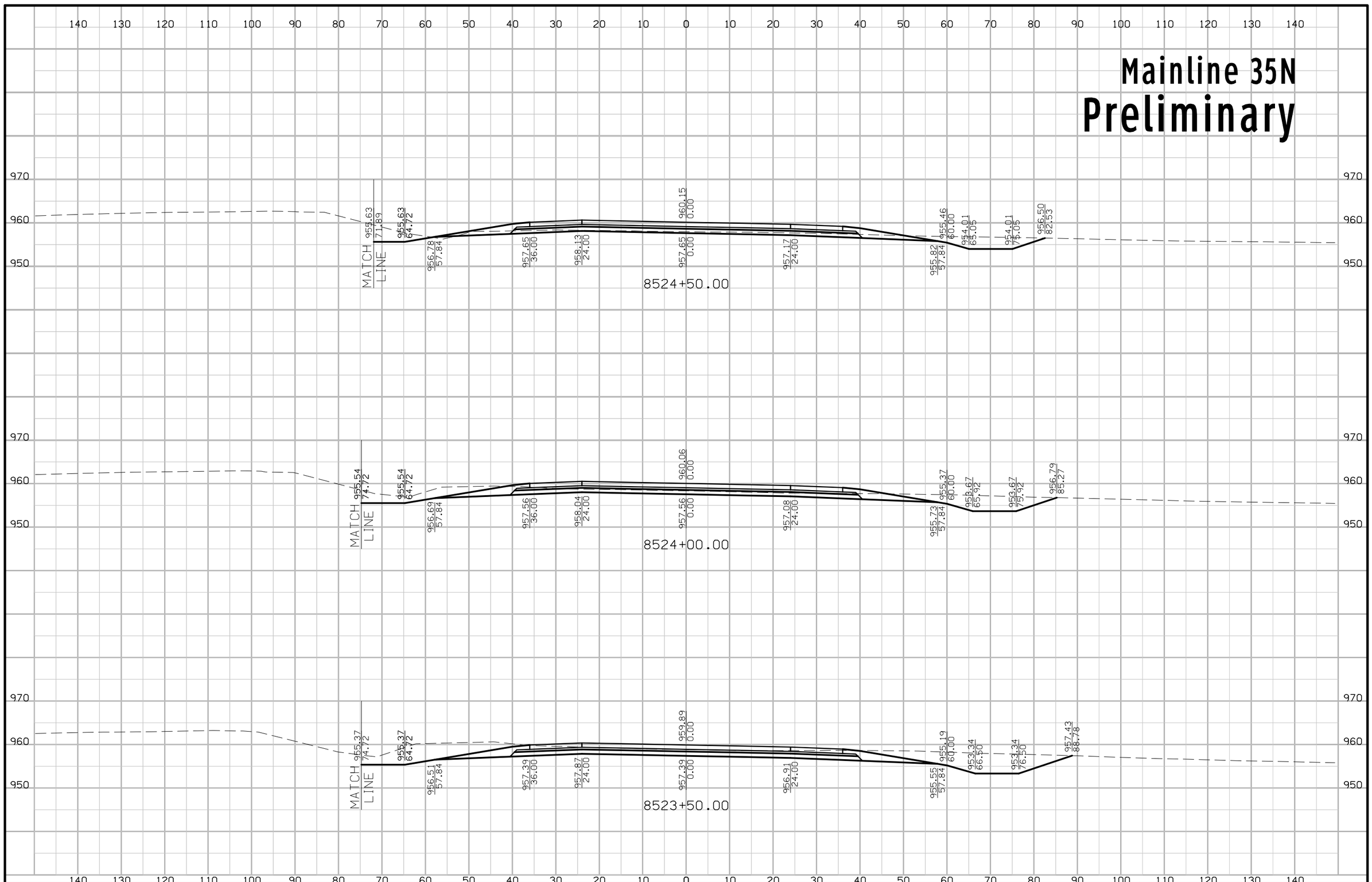
Mainline 35N
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.199

5:24:27 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

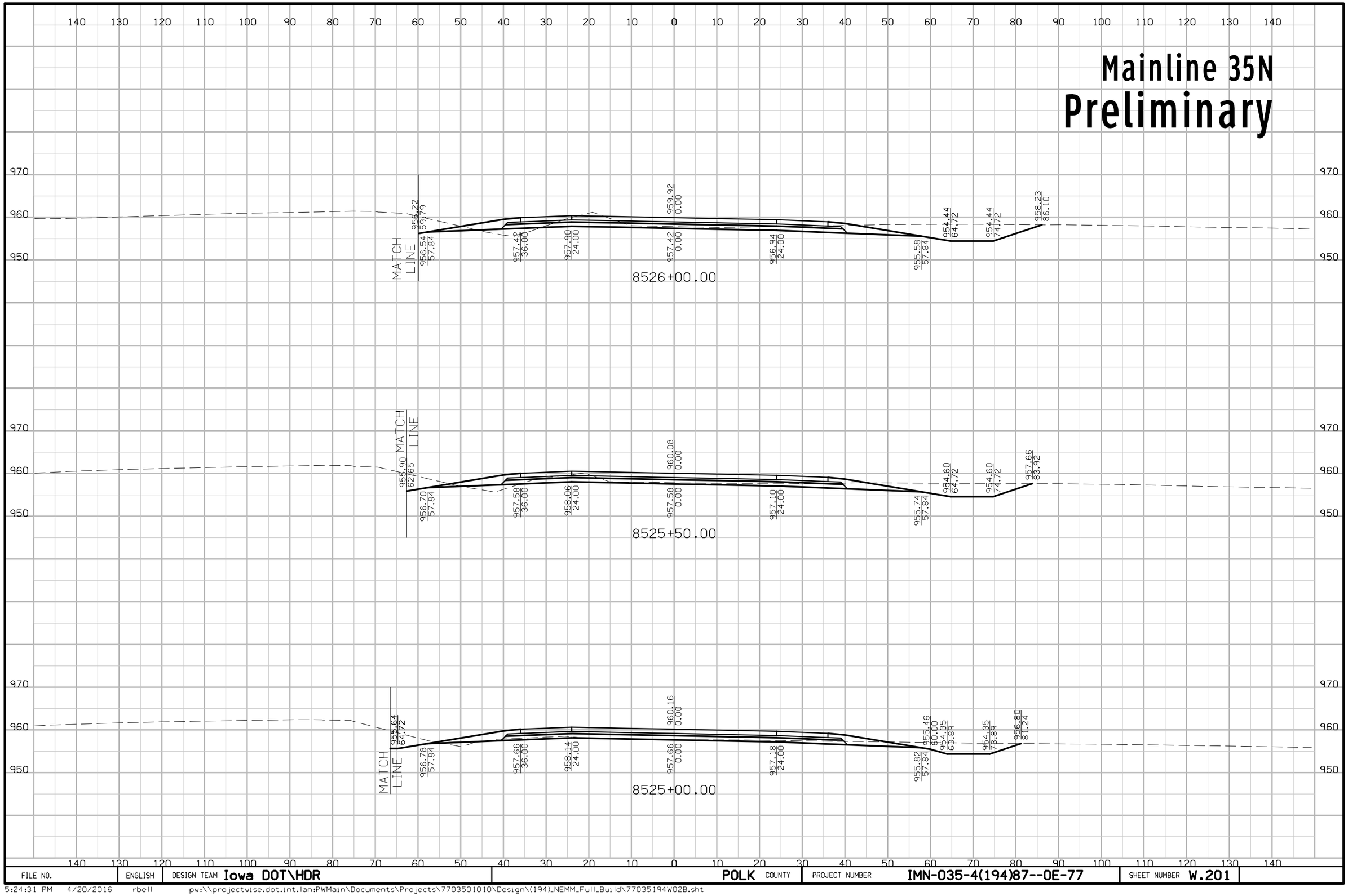
Mainline 35N
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.200

5:24:29 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

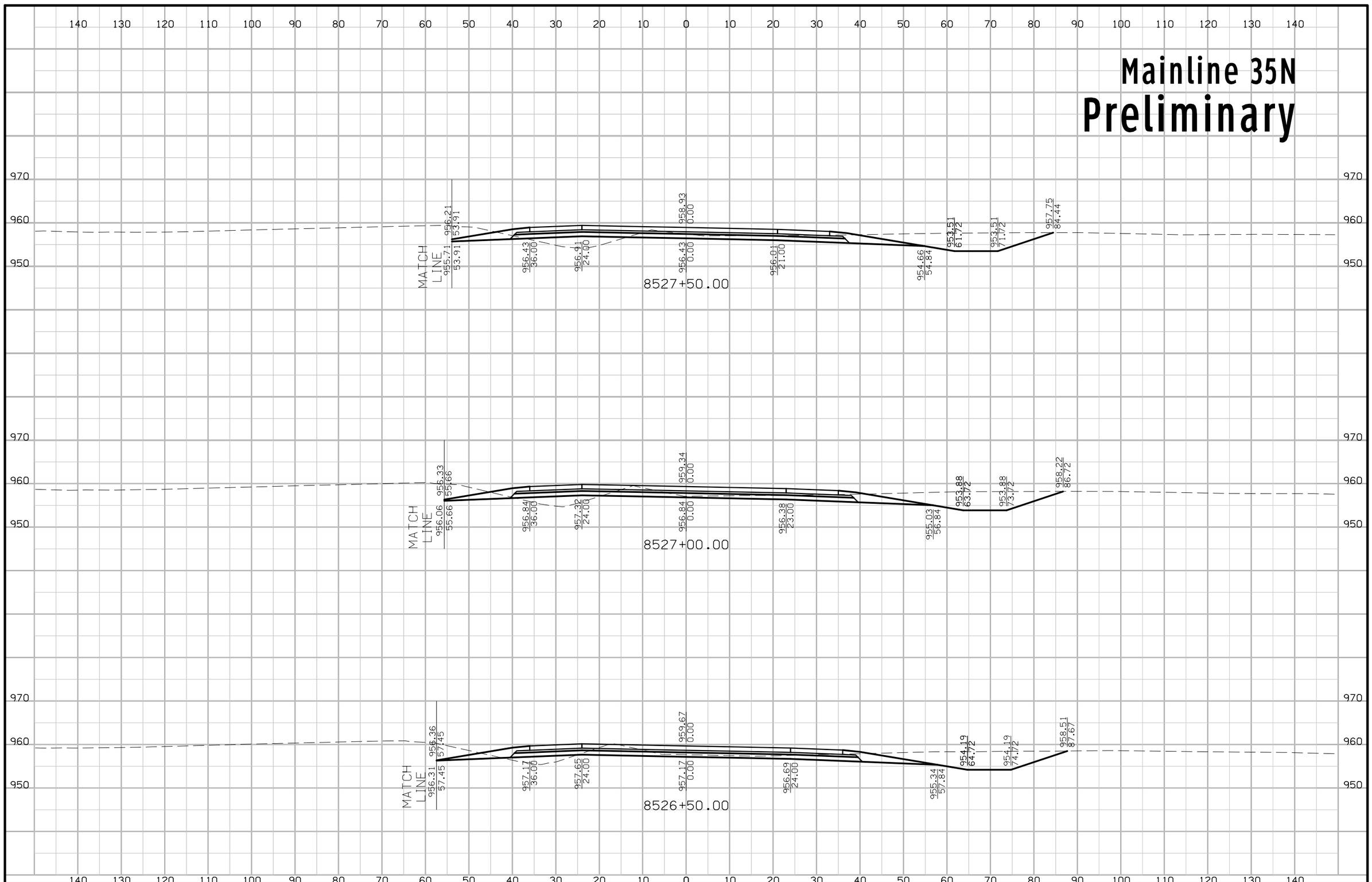
Mainline 35N
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.201

5:24:31 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N
Preliminary

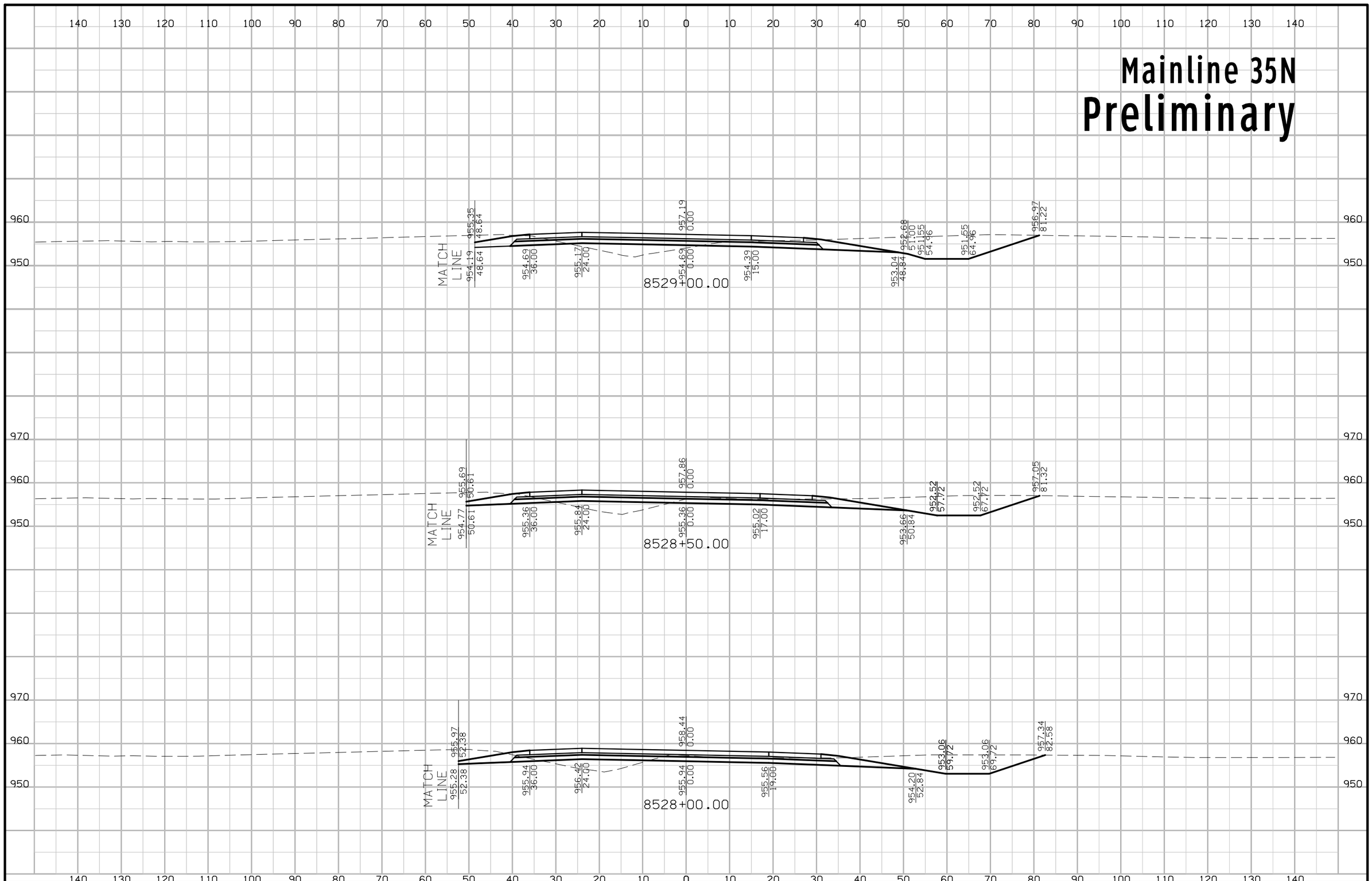


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.202

5:24:33 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N

Preliminary

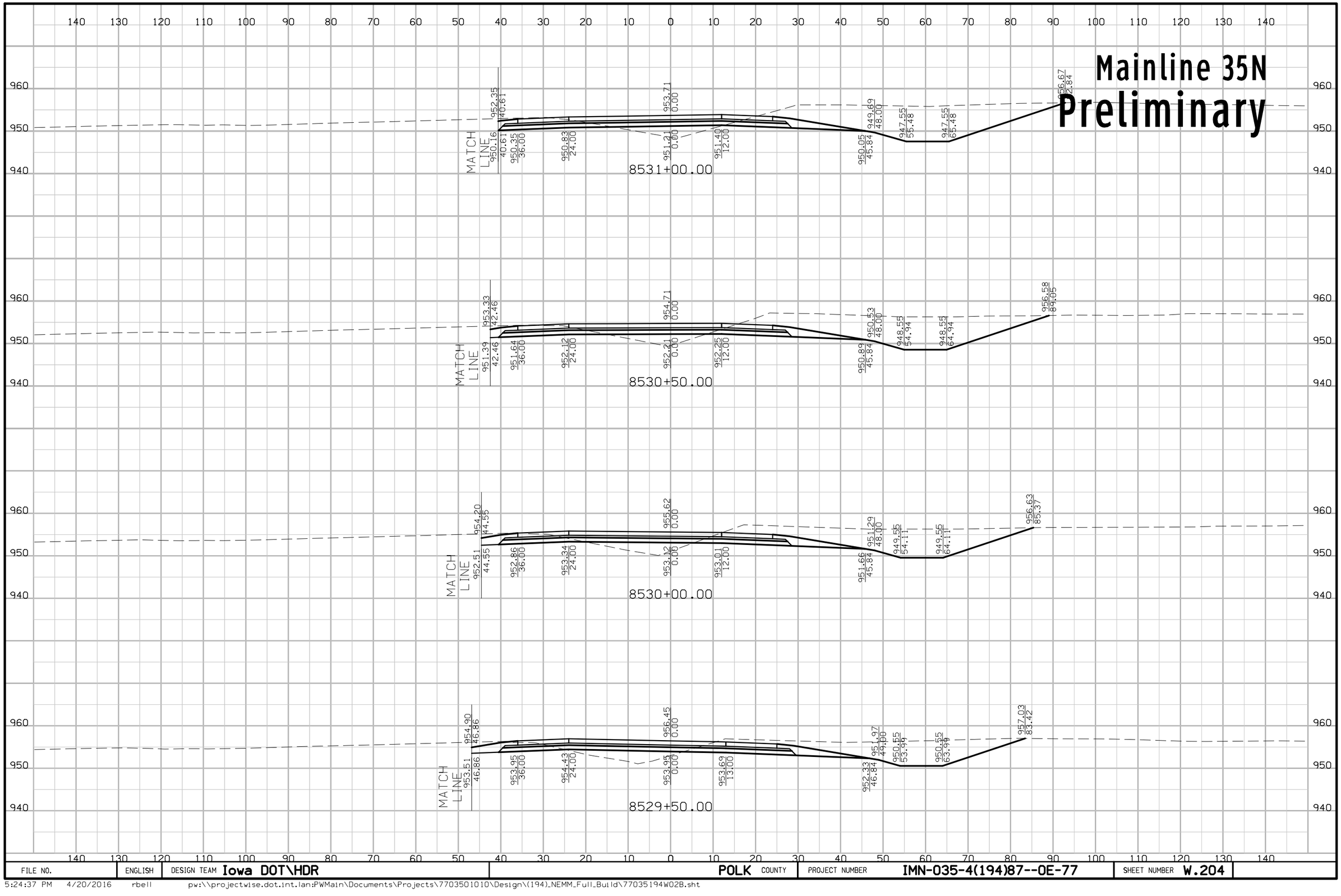


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.203

5:24:35 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N

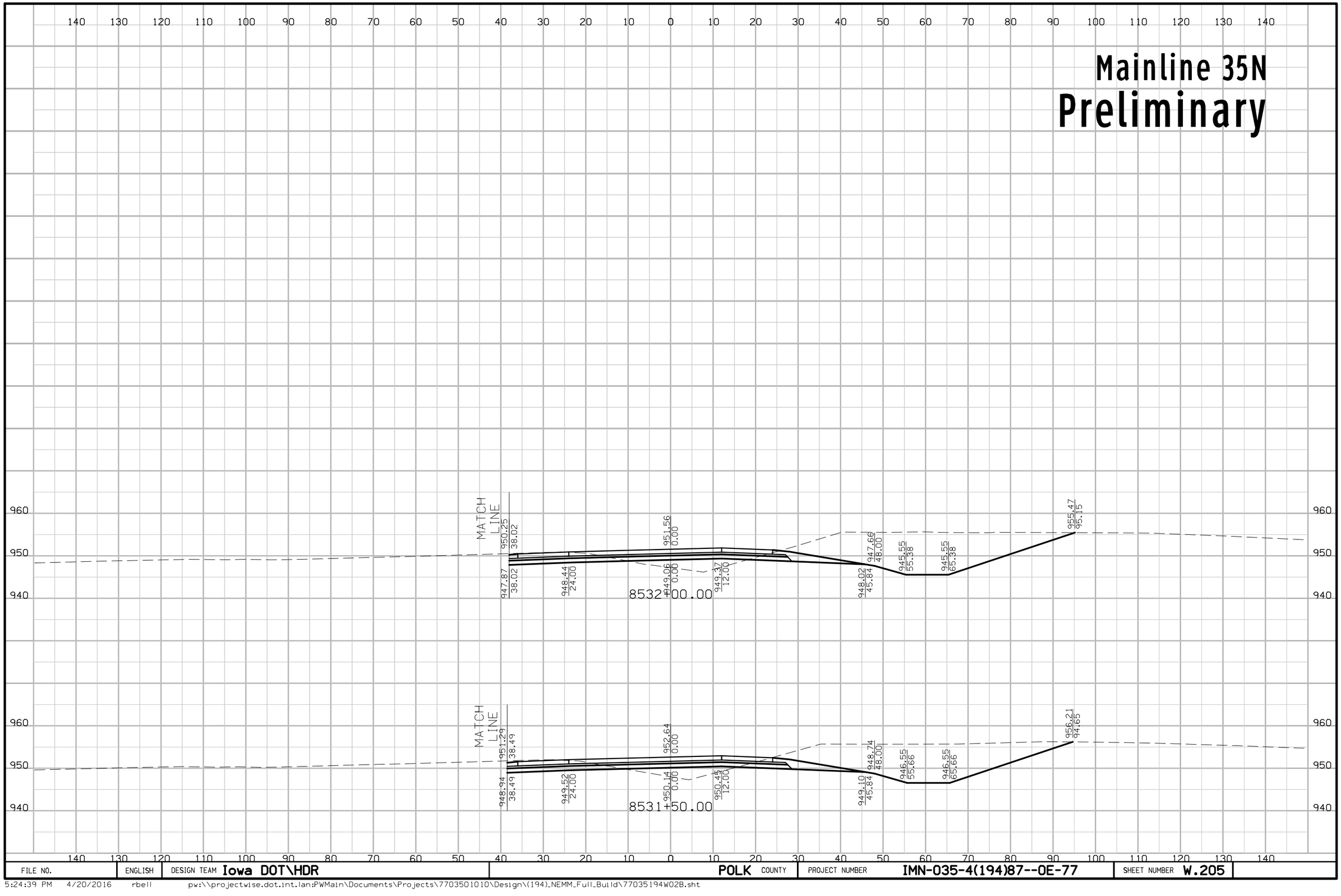
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.204

5:24:37 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35N
Preliminary

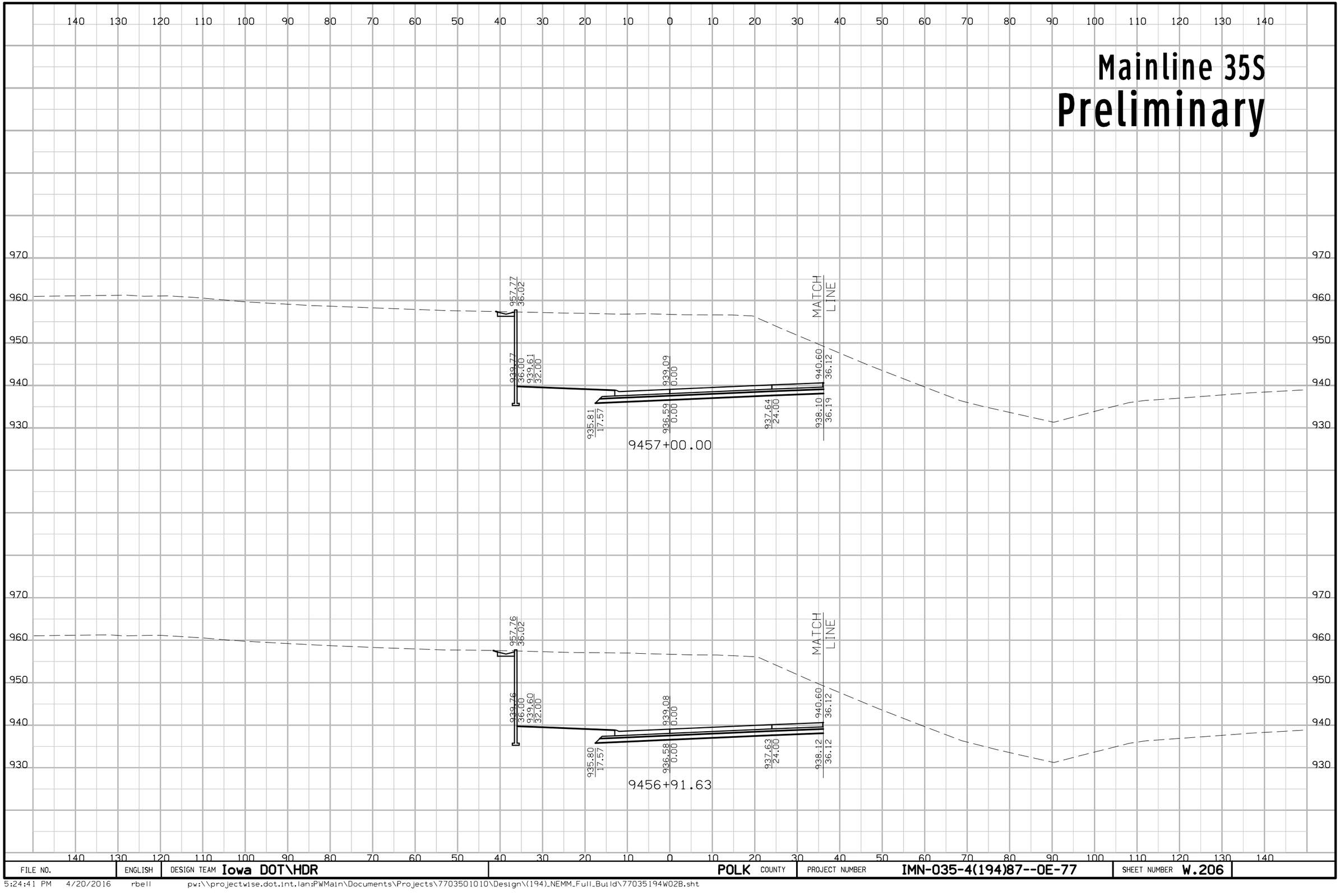


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.205

5:24:39 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

Preliminary

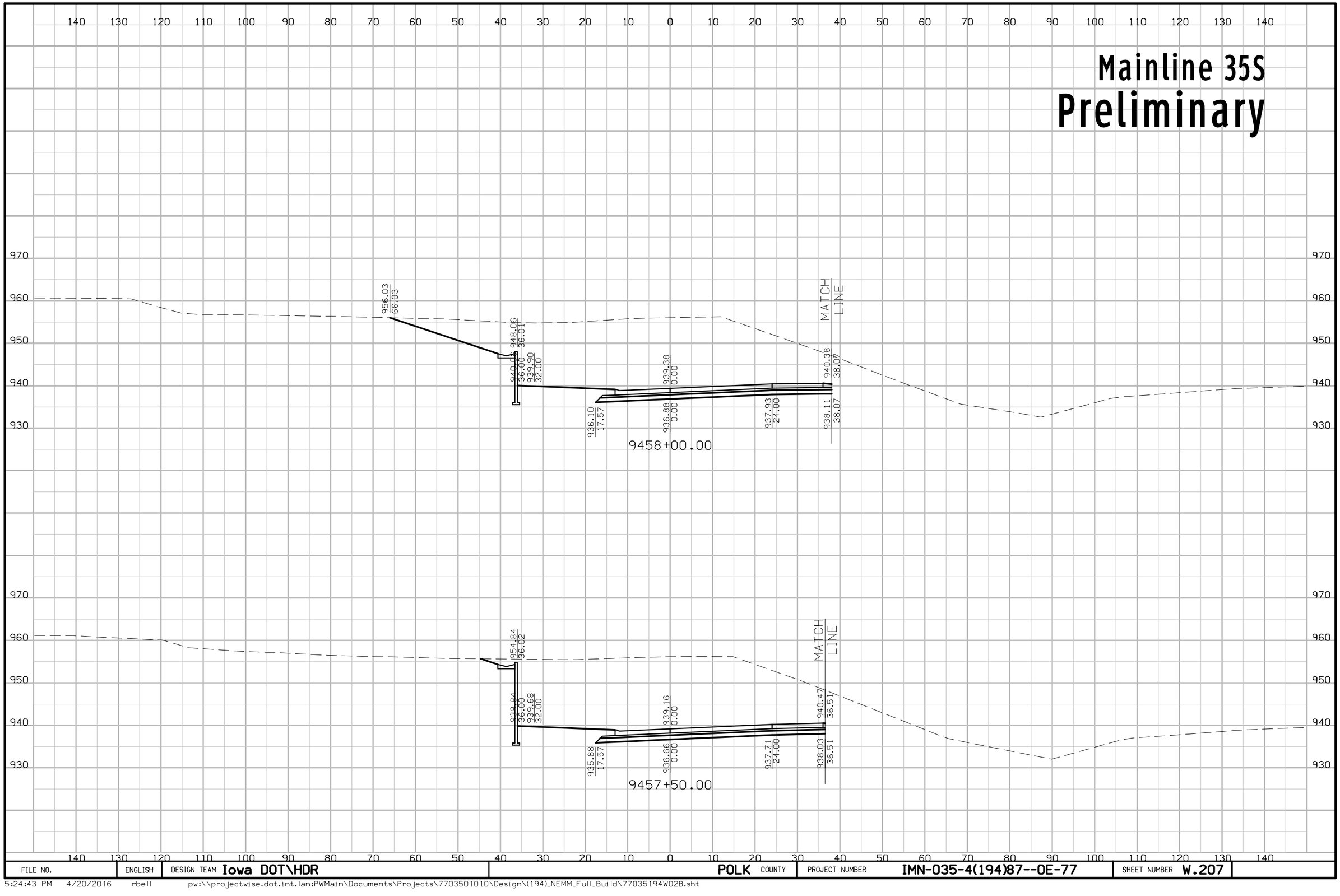


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.206

5:24:41 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

Preliminary

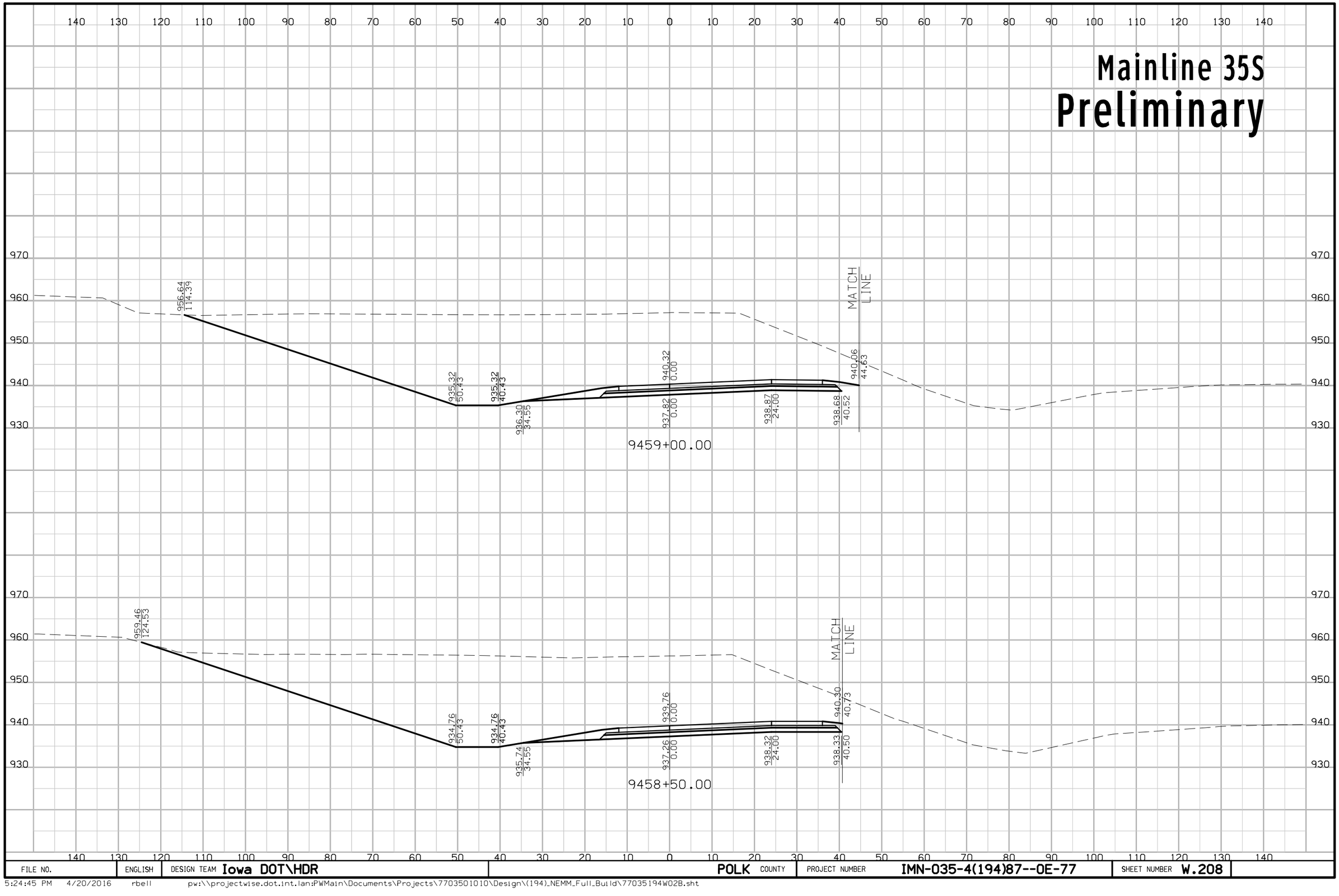


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.207

5:24:43 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

Preliminary

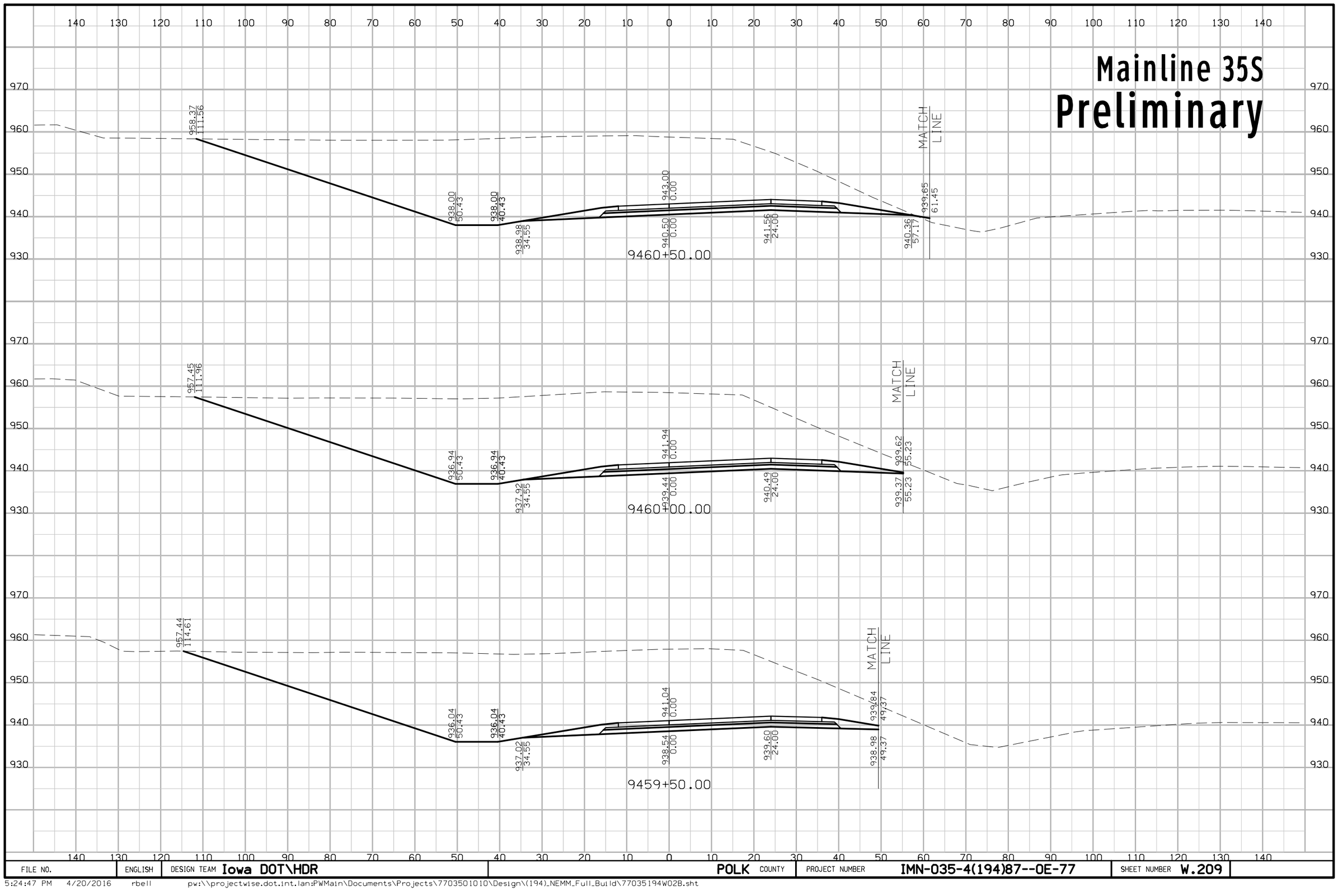


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.208

5:24:45 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

Preliminary

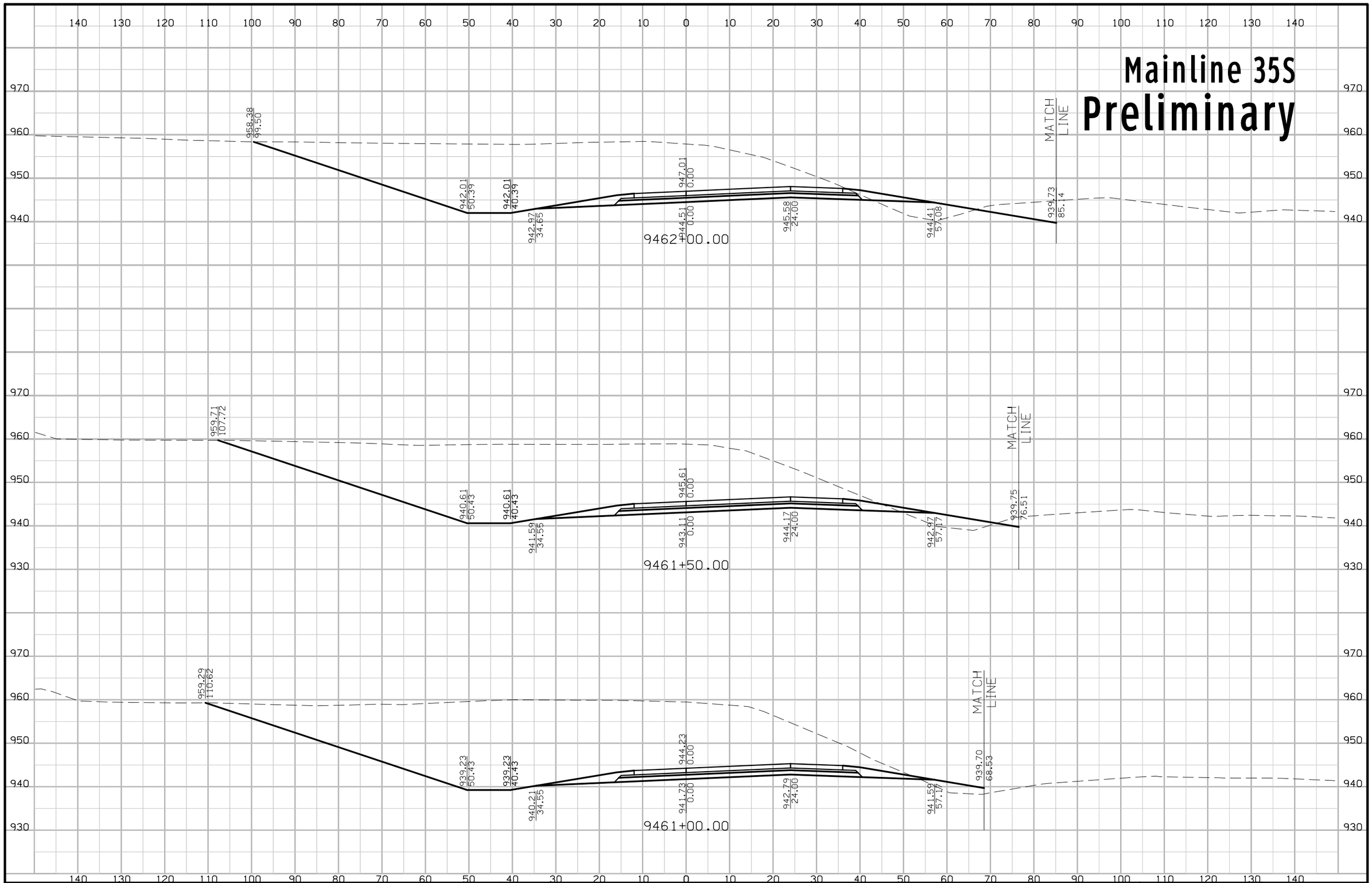


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.209

5:24:47 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

Preliminary

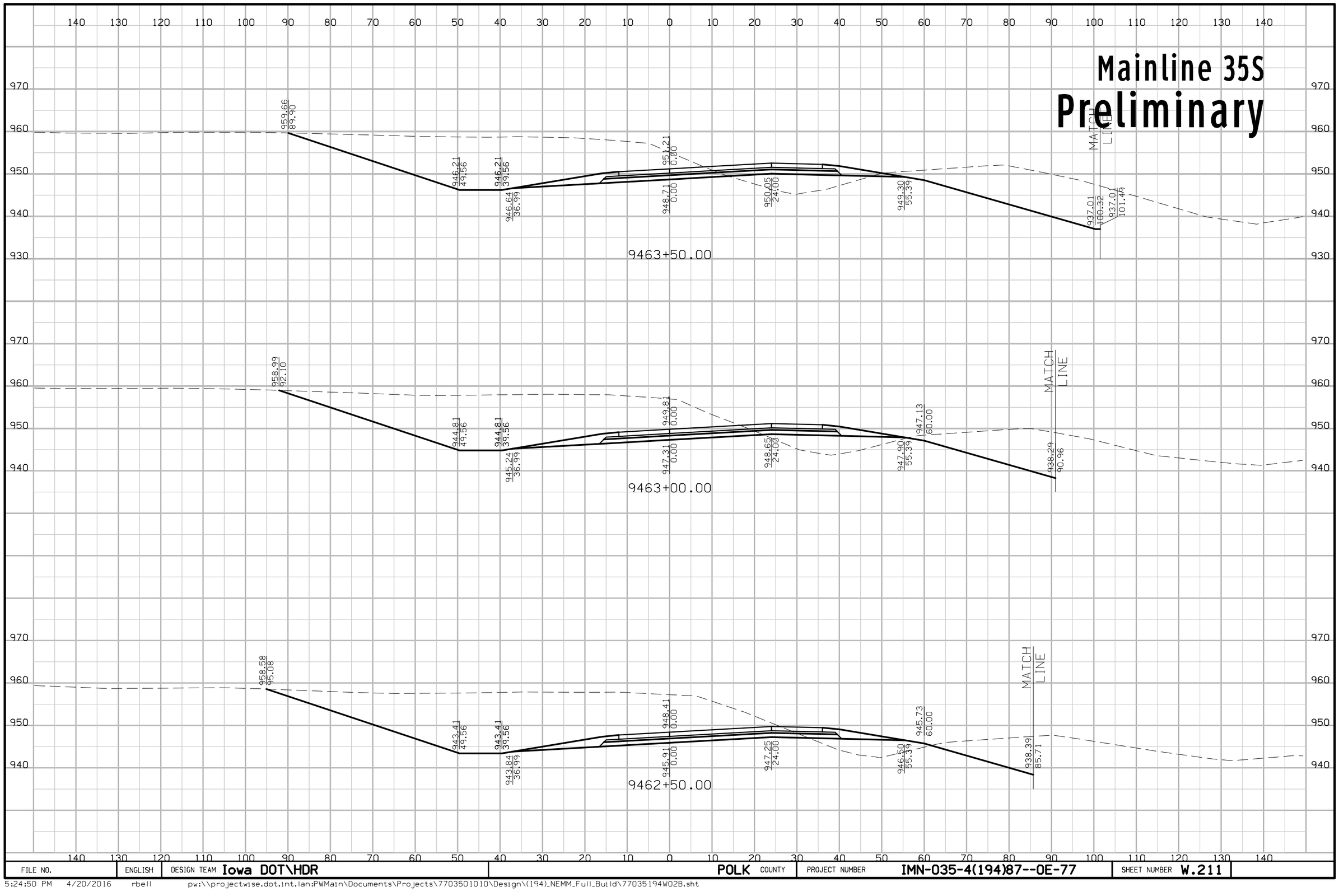


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.210

5:24:49 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

Preliminary

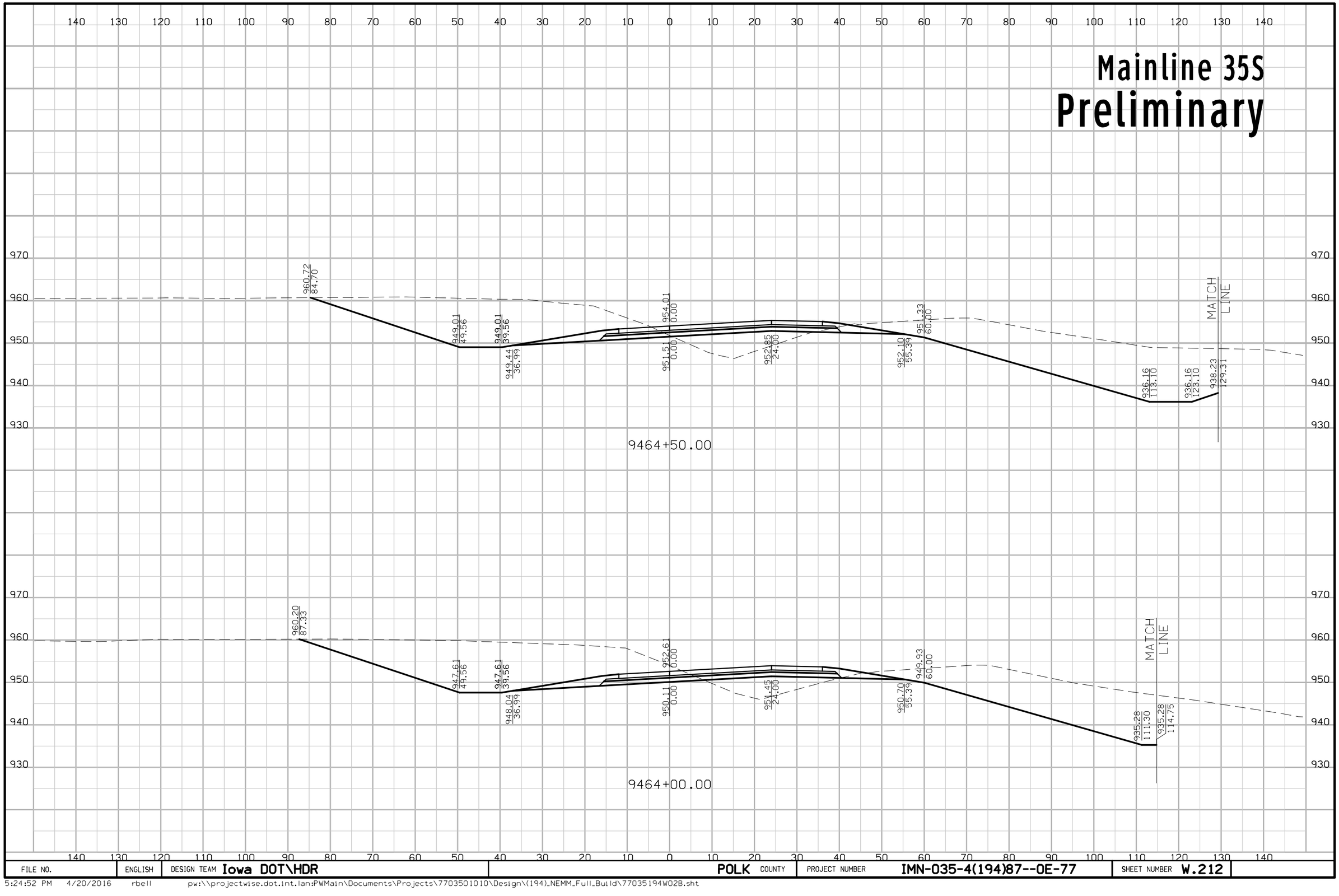


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.211

5:24:50 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

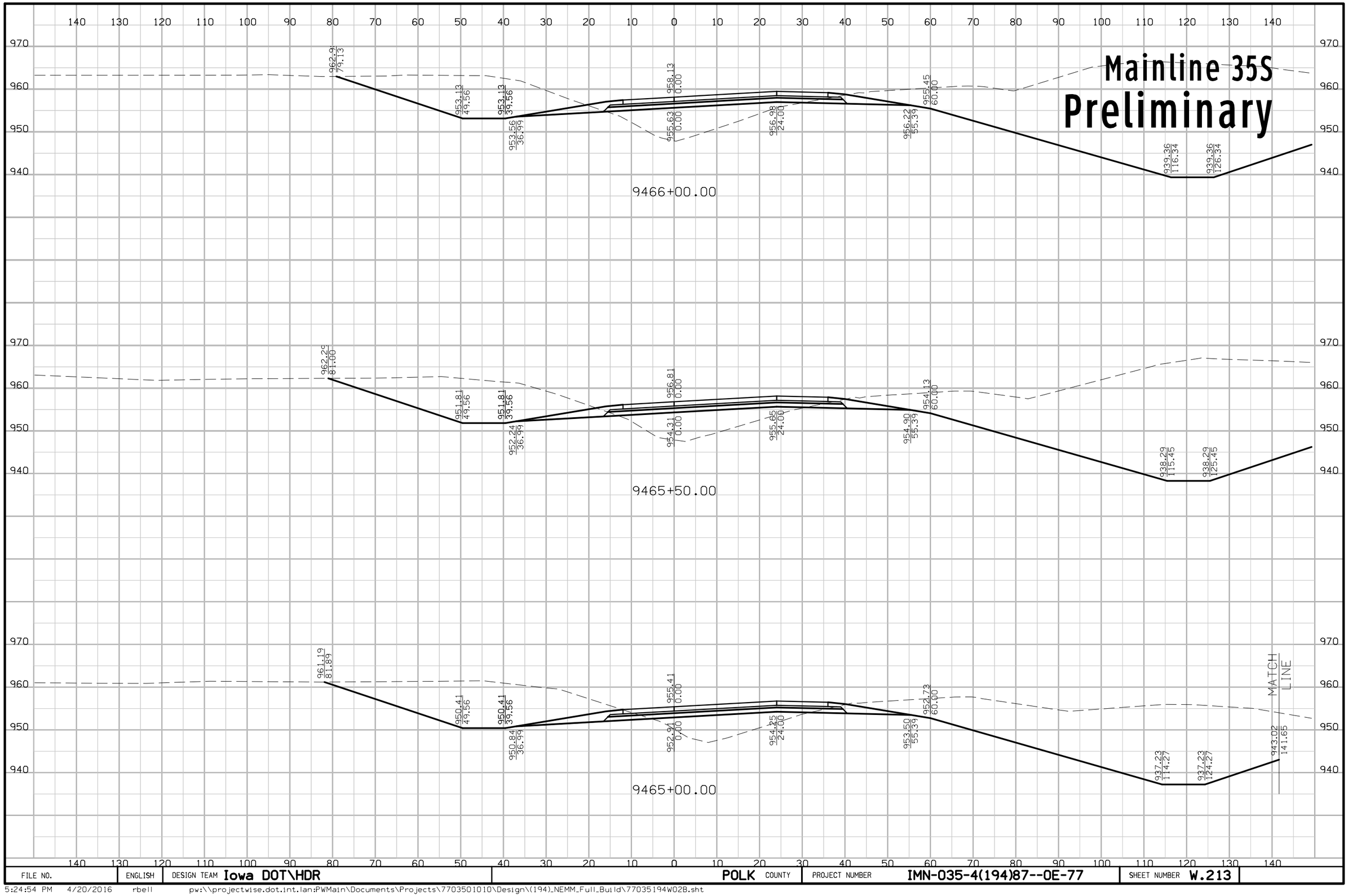
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.212

5:24:52 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S
Preliminary

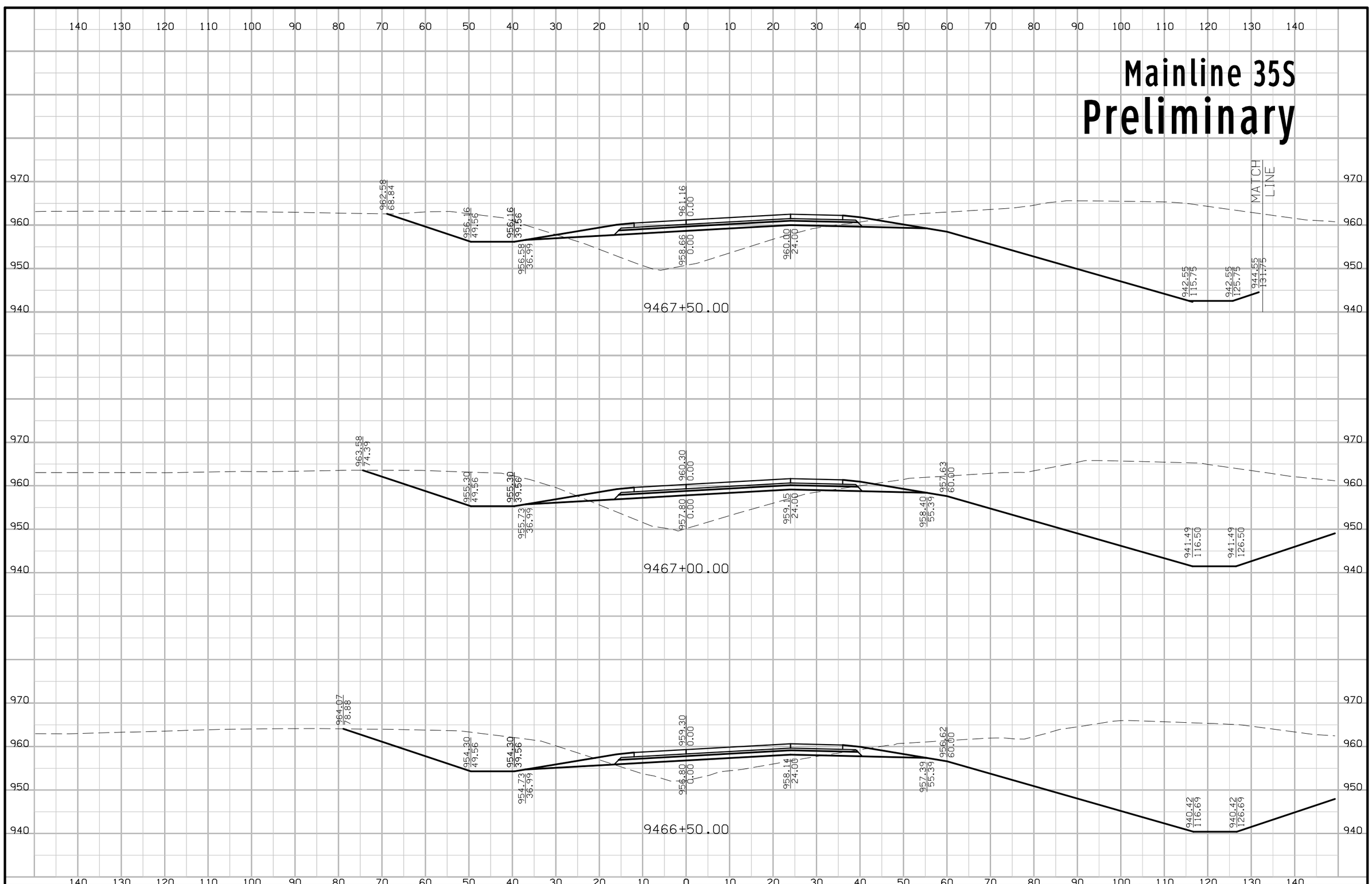


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.213

5:24:54 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

Preliminary

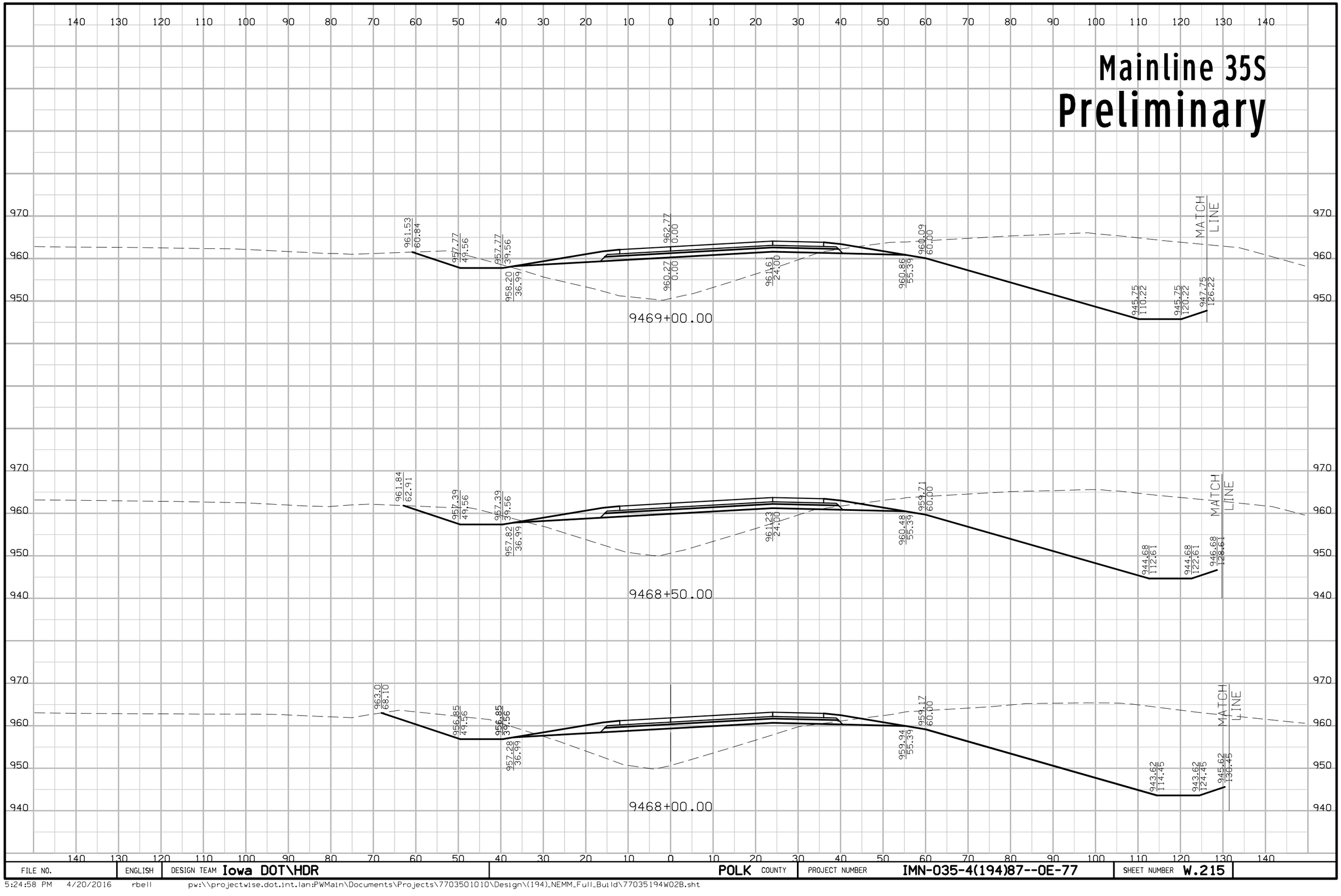


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.214

5:24:56 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

Preliminary

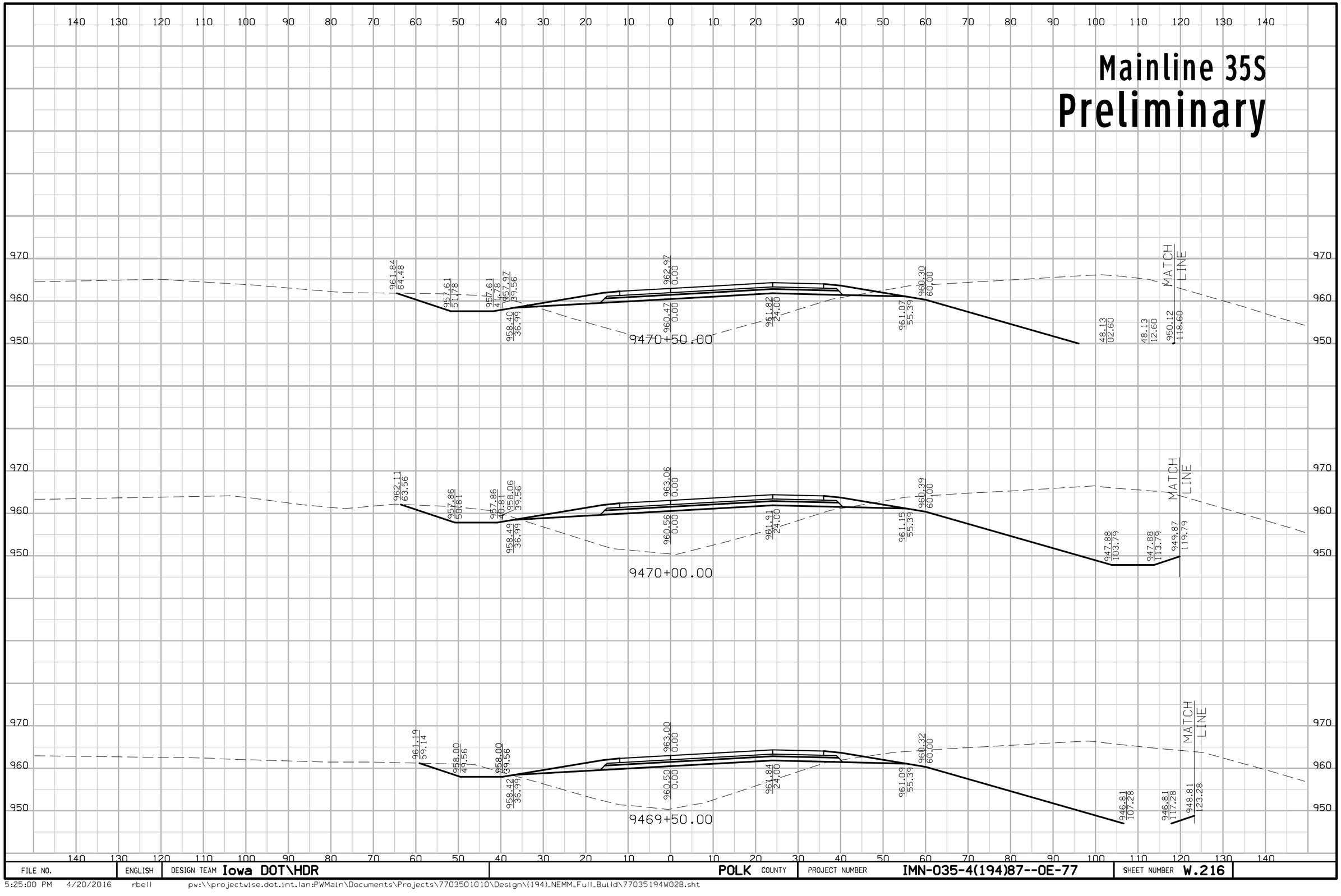


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.215

5:24:58 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

Preliminary

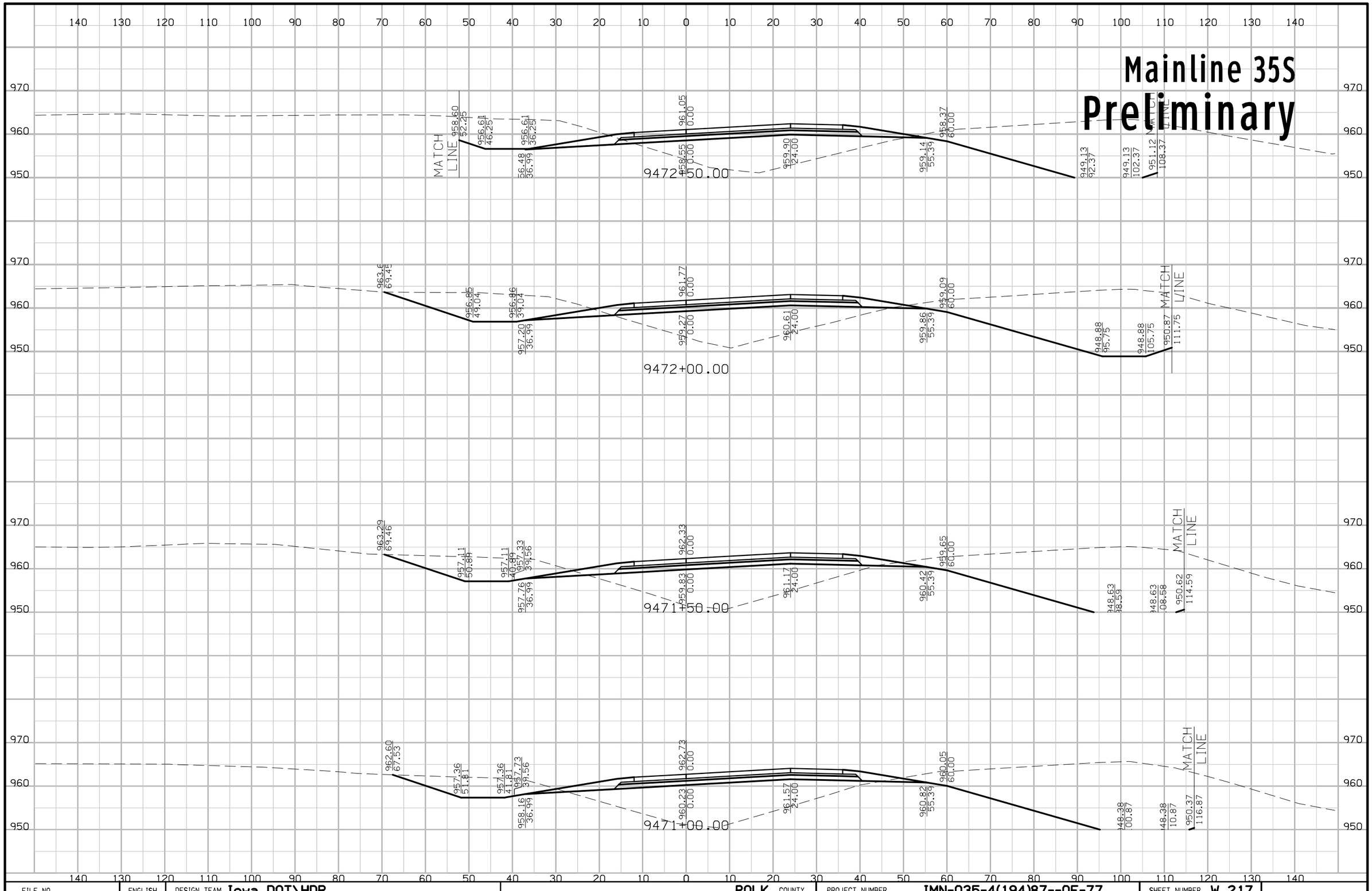


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.216

5:25:00 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

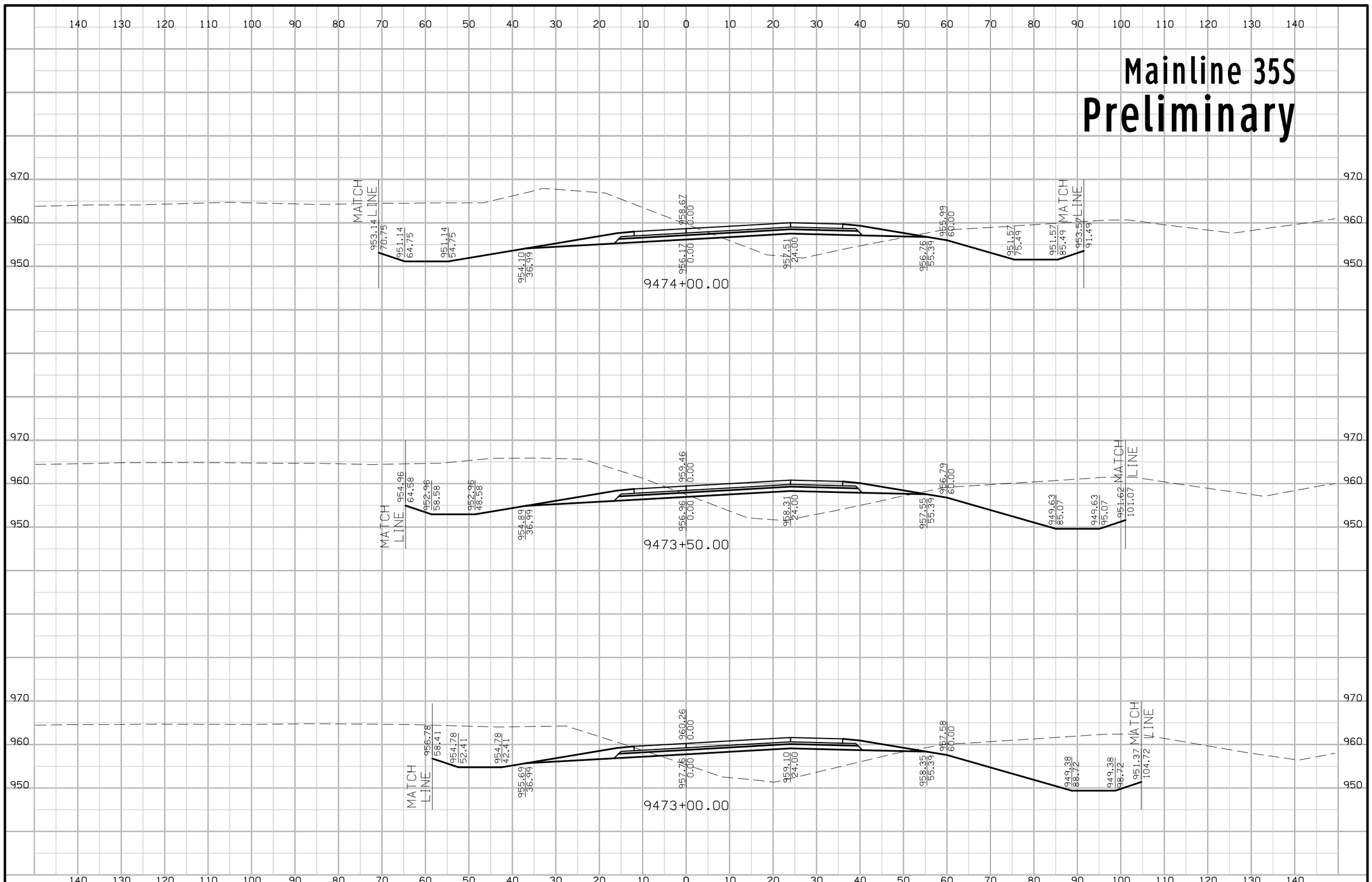
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.217

5:25:02 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

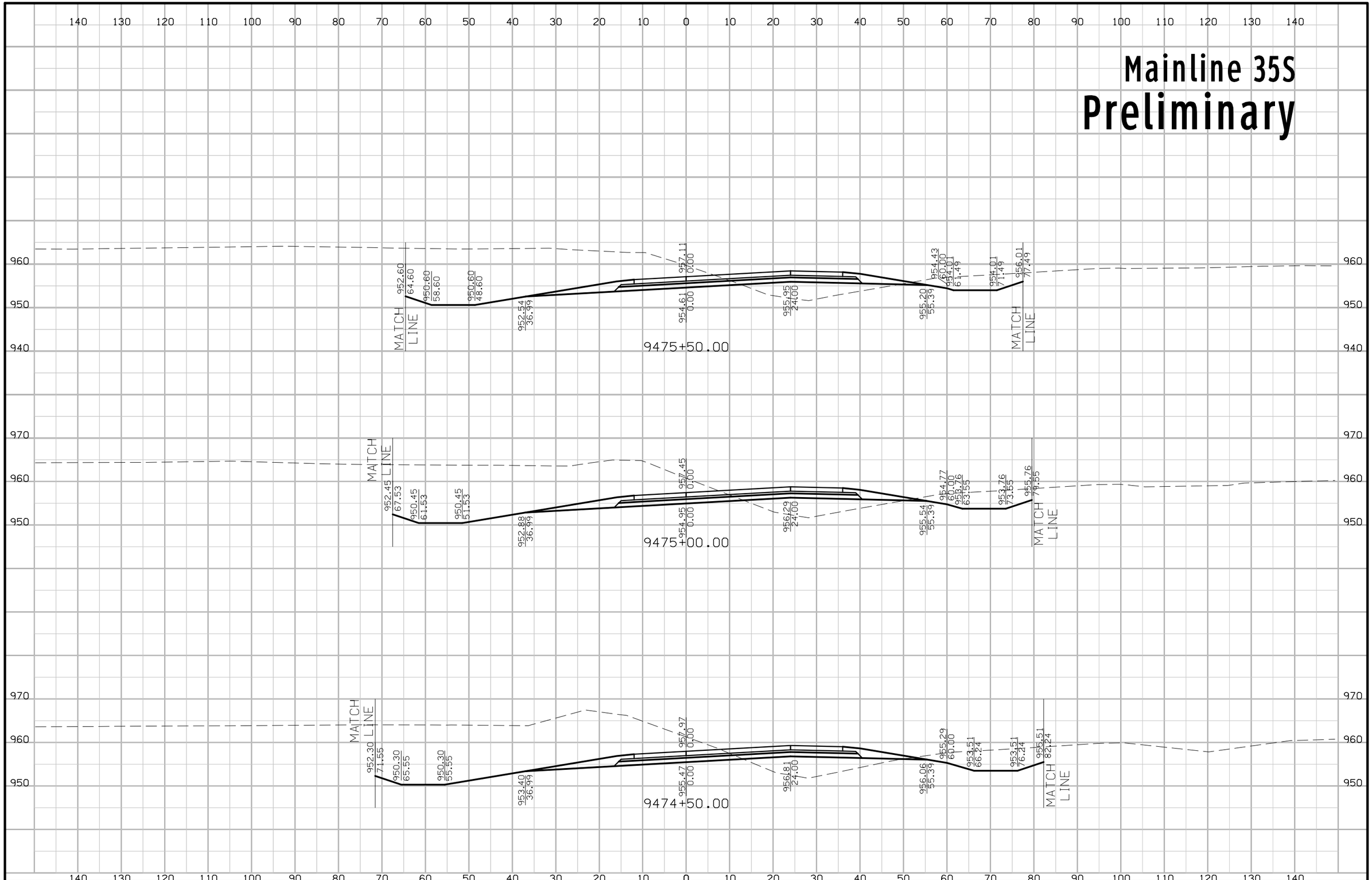
Mainline 35S
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.218

5:25:04 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S
Preliminary

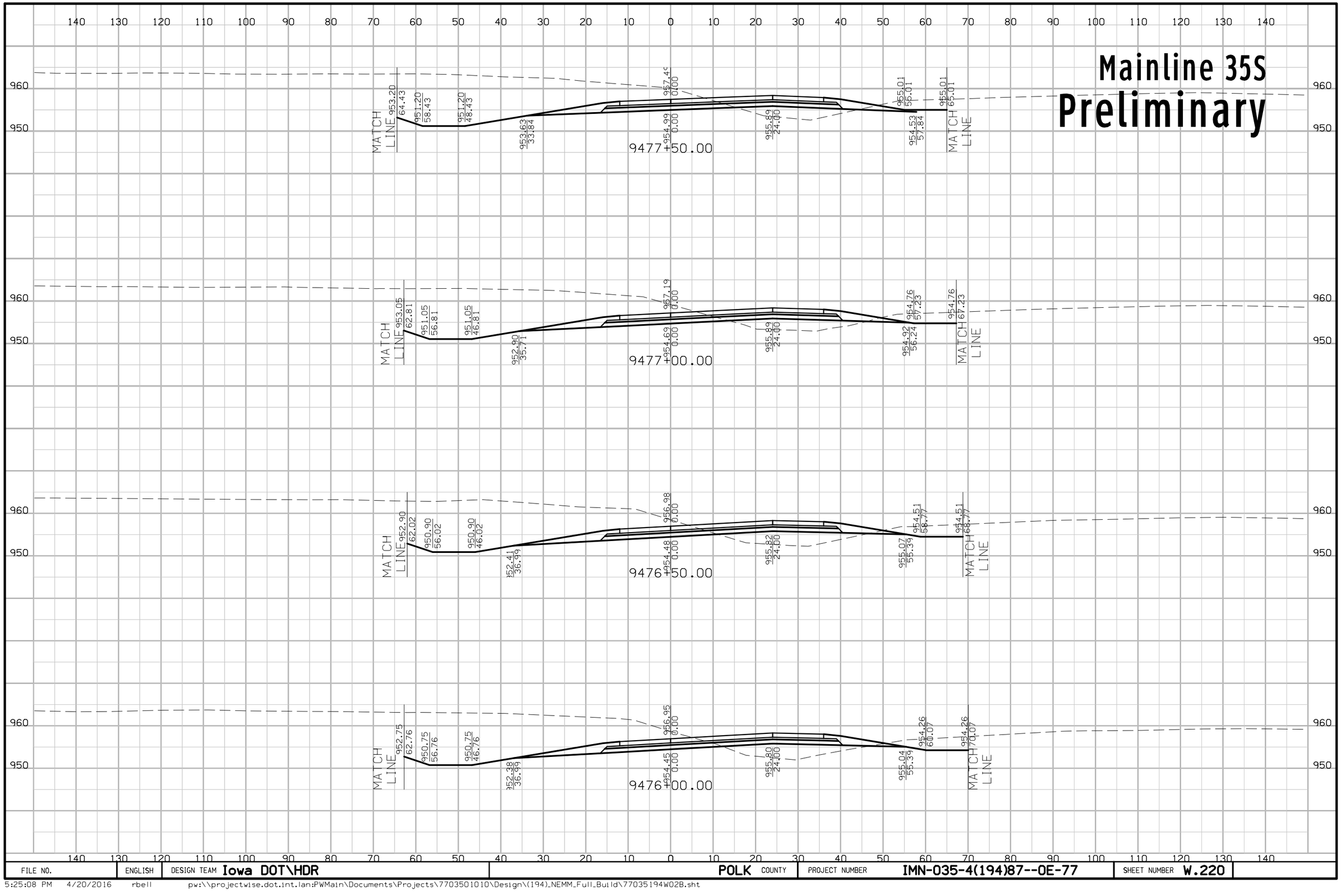


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.219

5:25:06 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

Preliminary

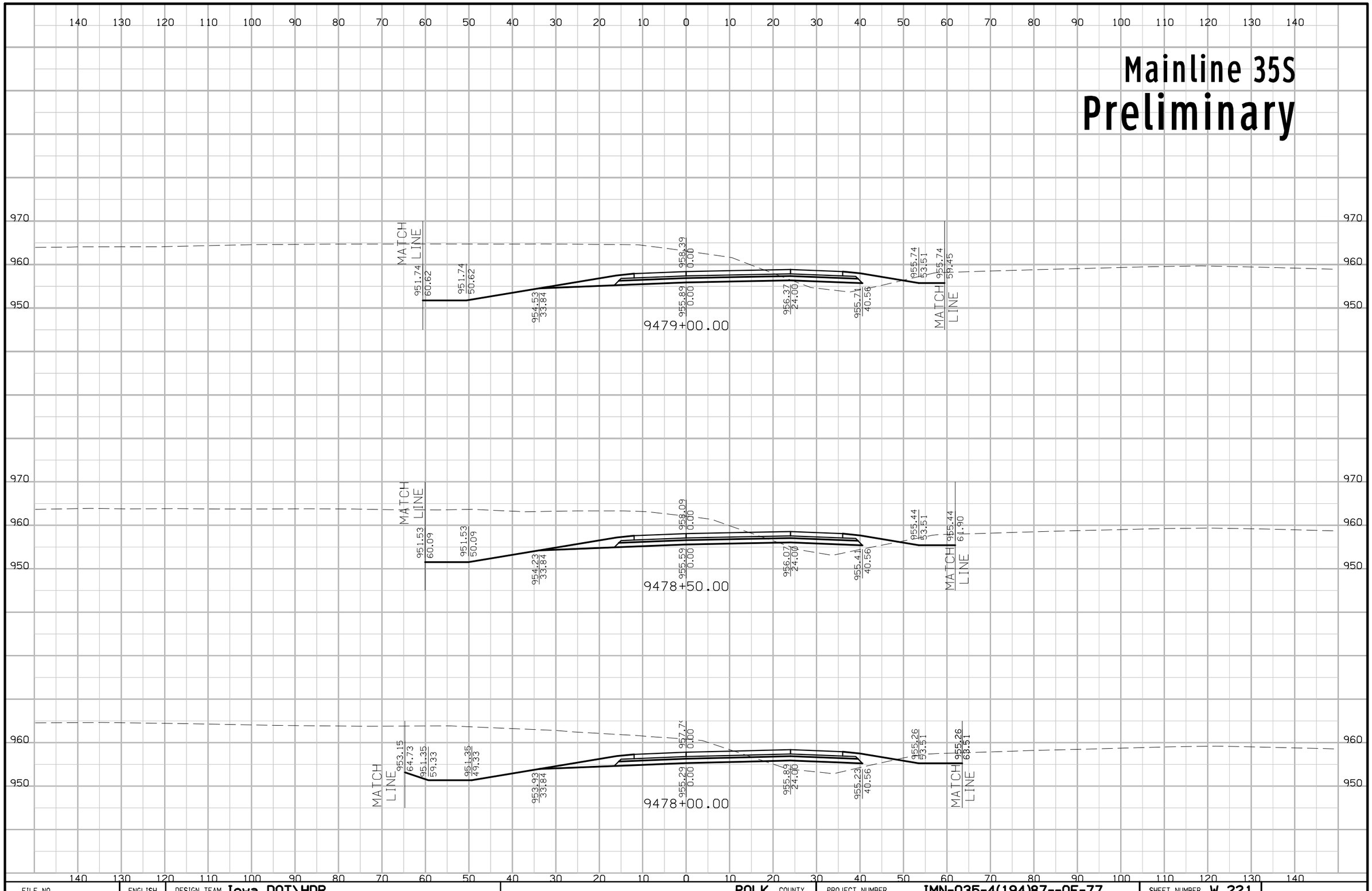


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.220

5:25:08 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

Preliminary

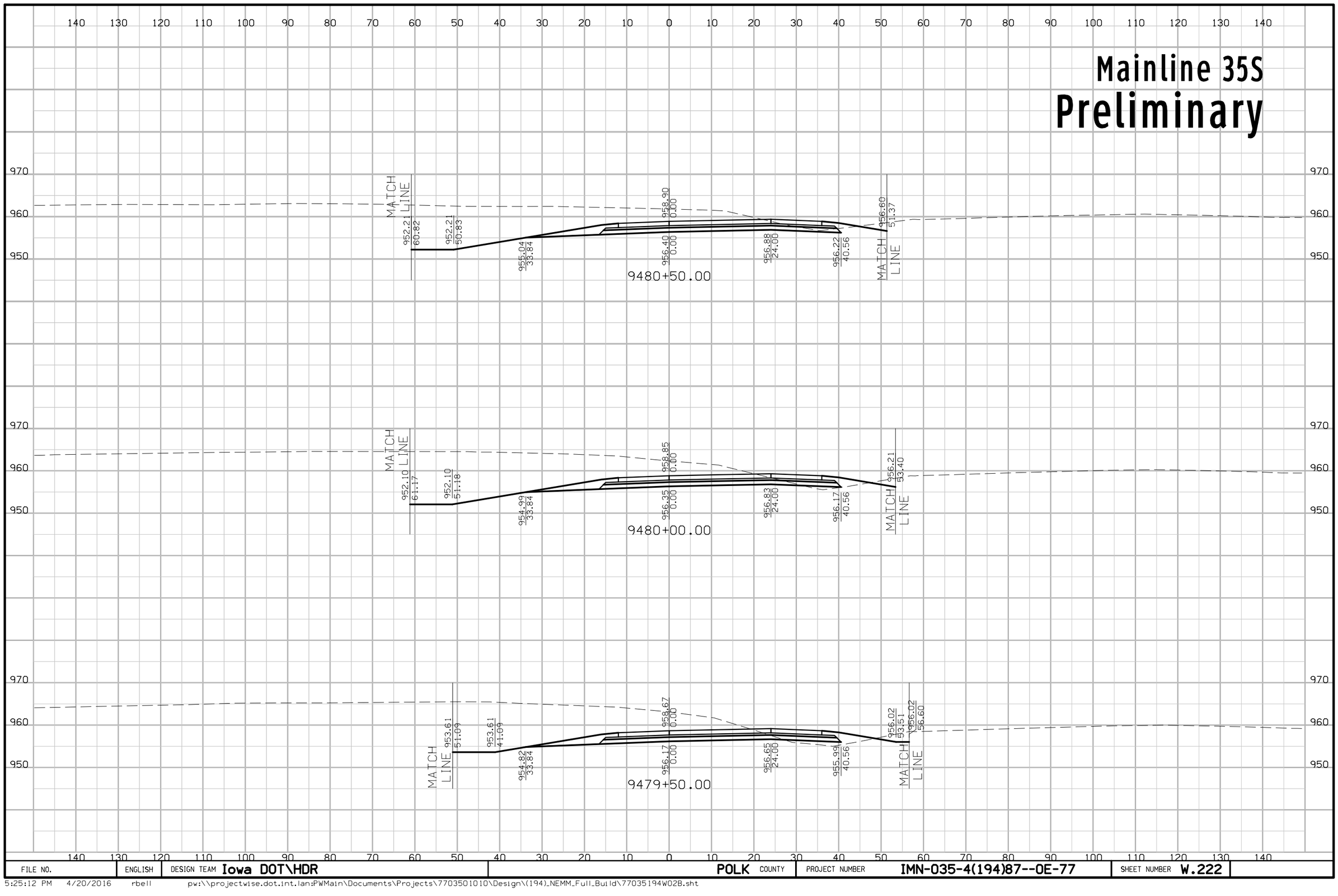


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.221

5:25:10 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

Preliminary

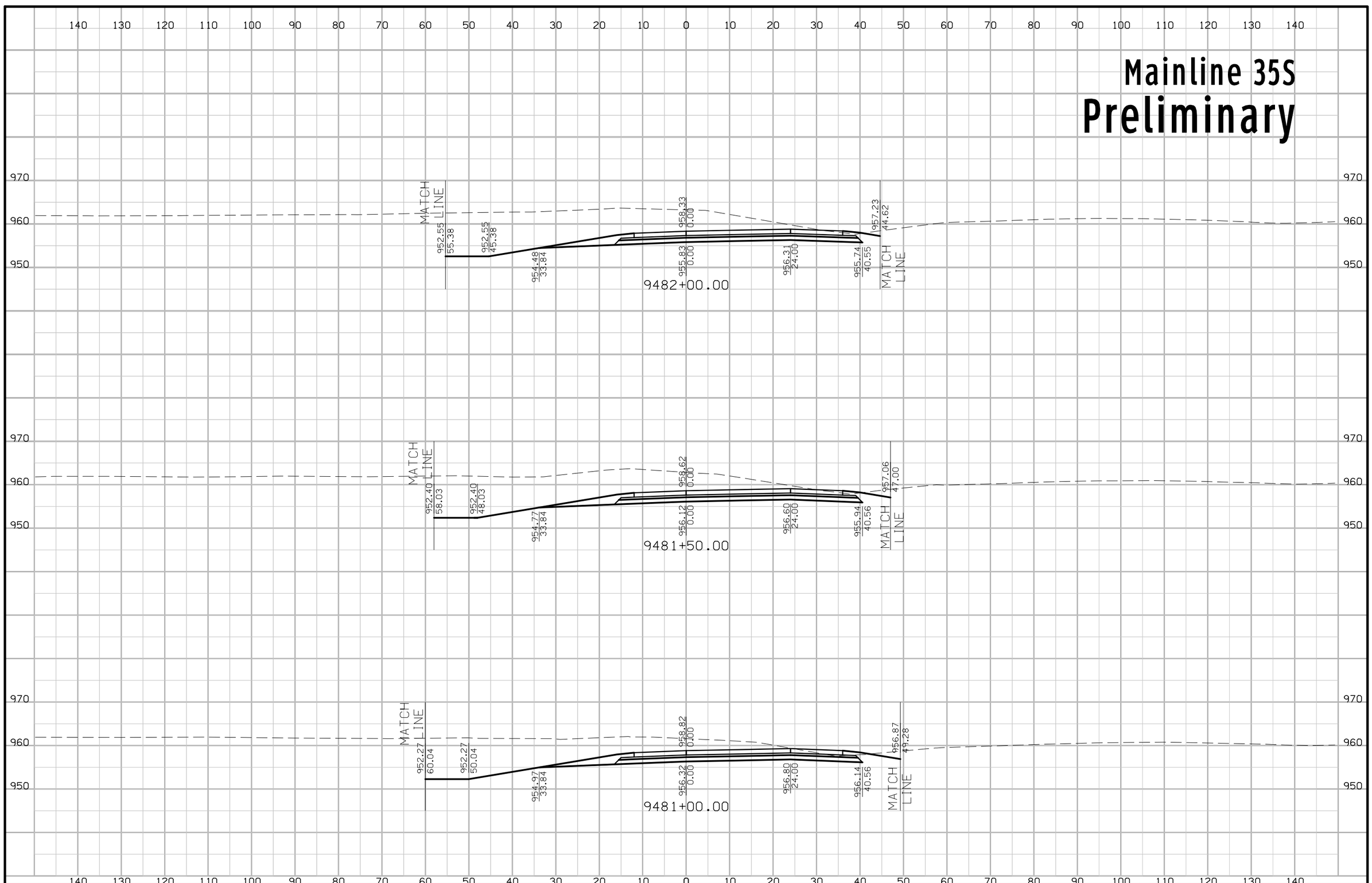


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.222

5:25:12 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

Preliminary

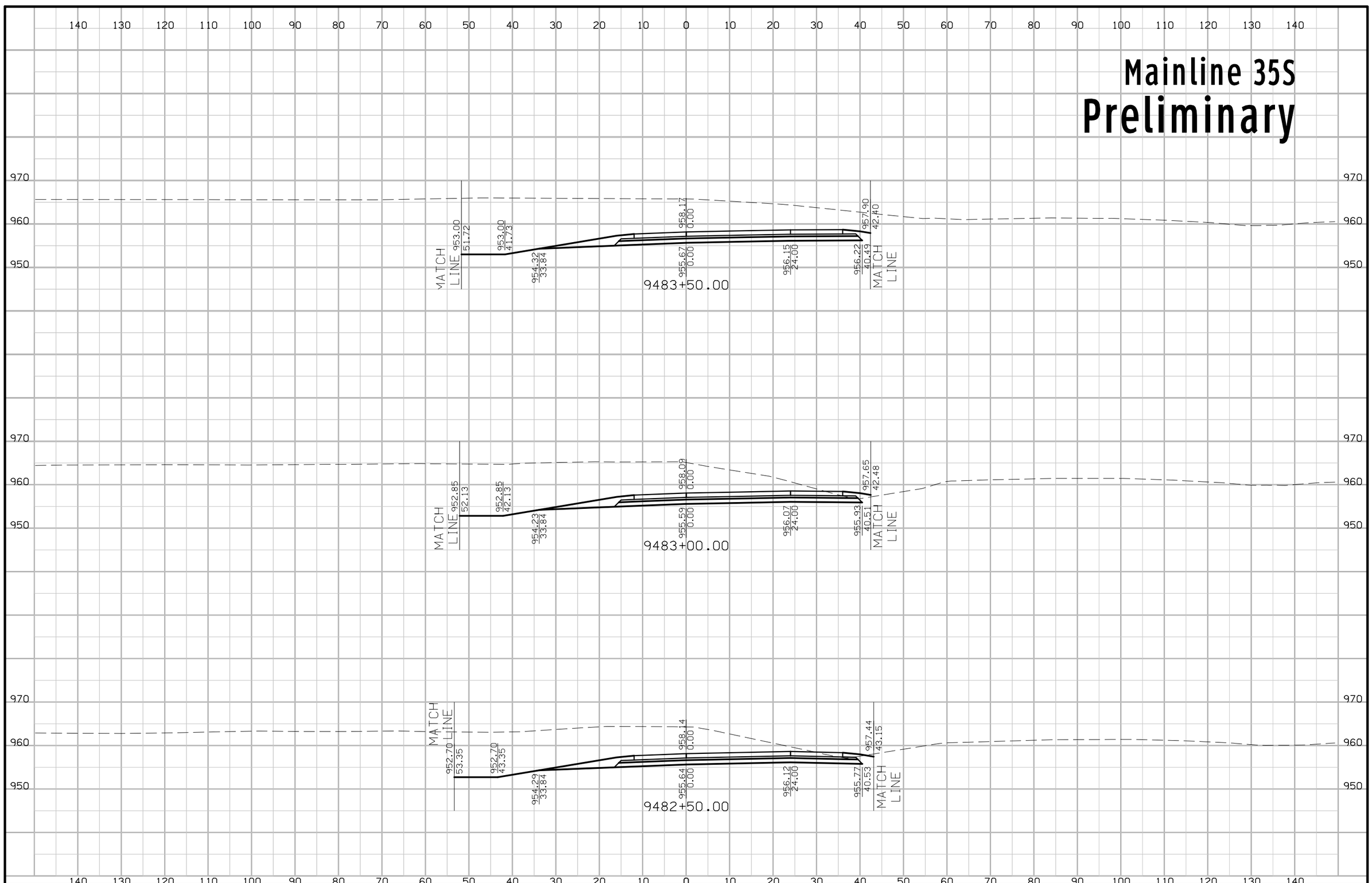


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.223

5:25:14 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

Preliminary

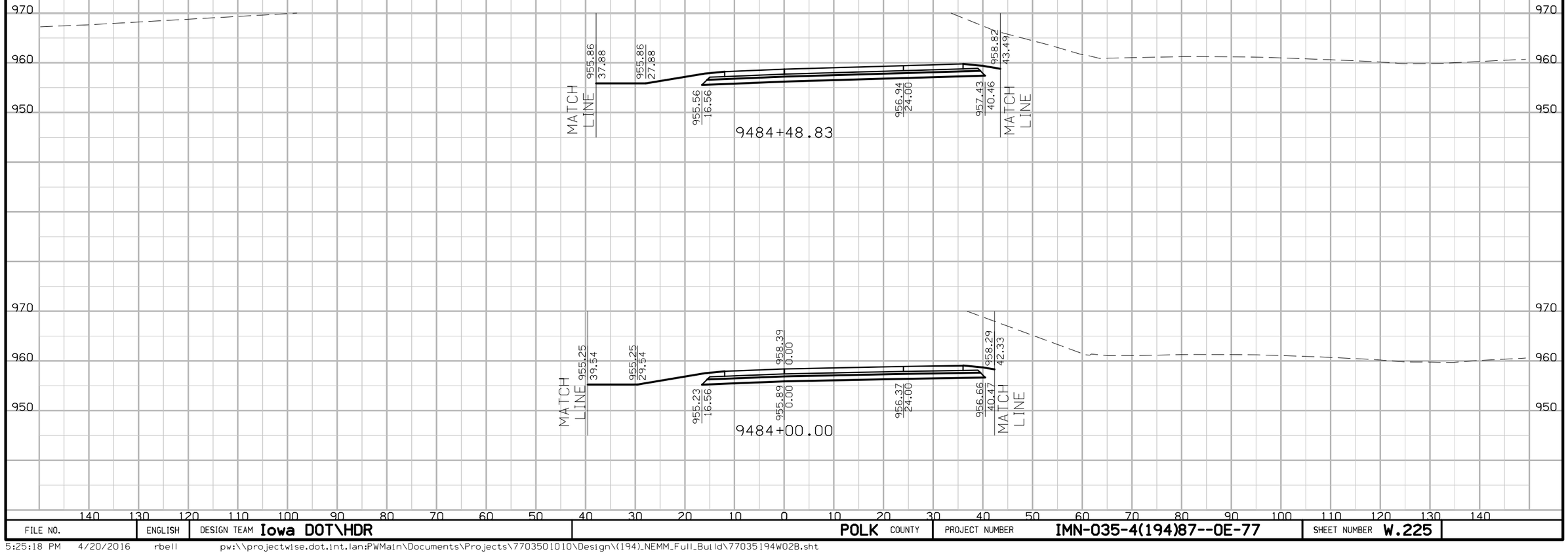


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.224

5:25:16 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 35S

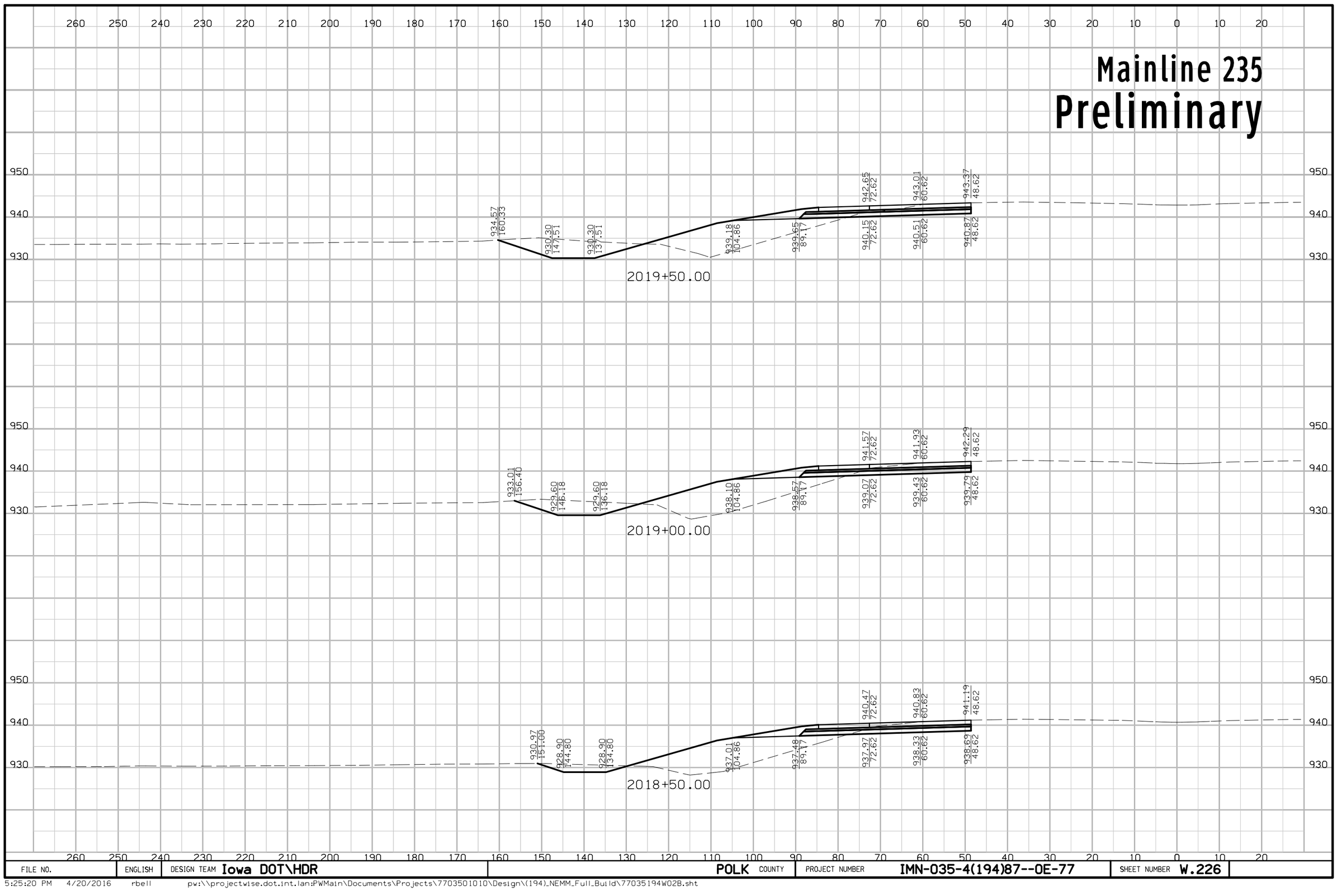
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.225

5:25:18 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

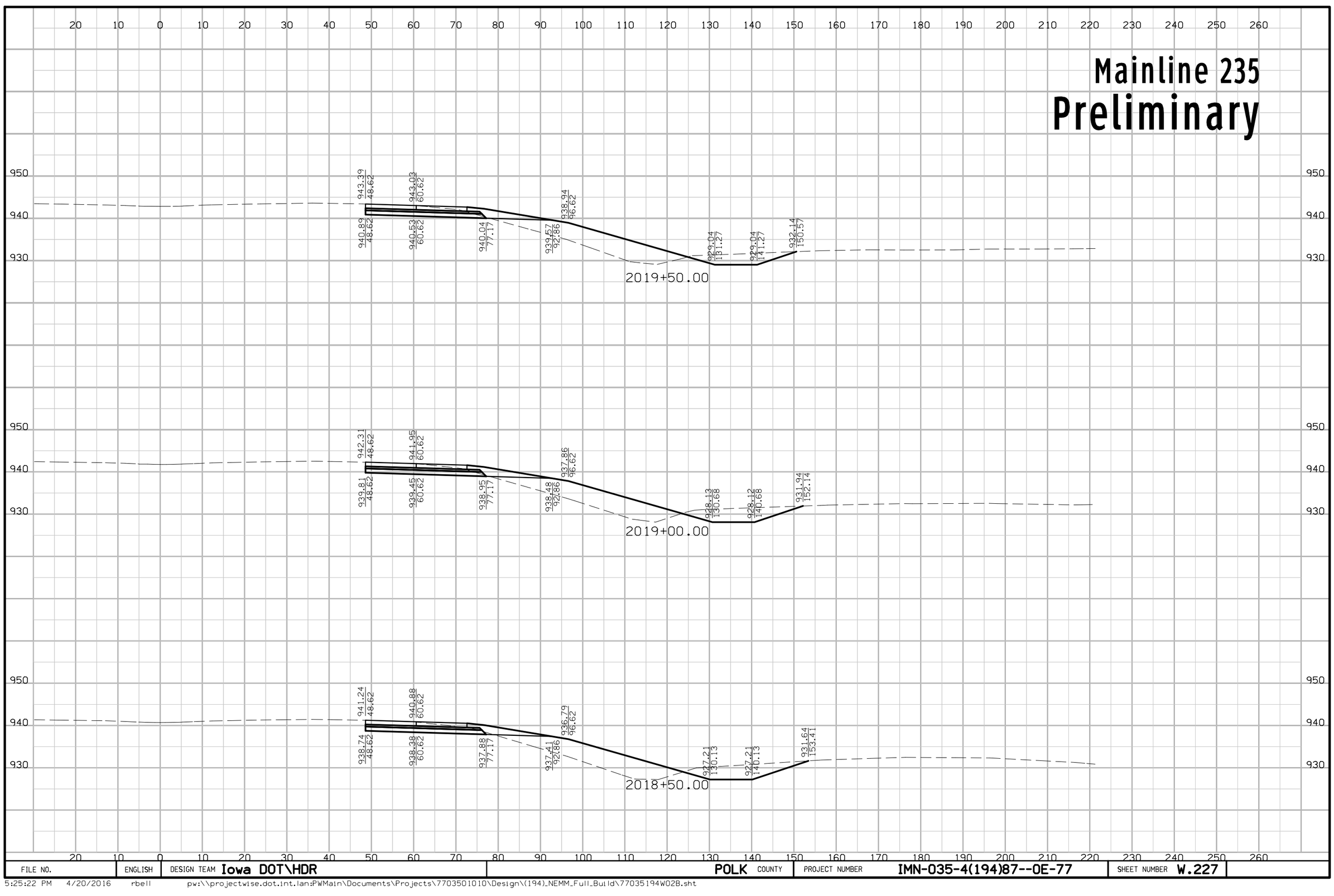
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.226

5:25:20 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

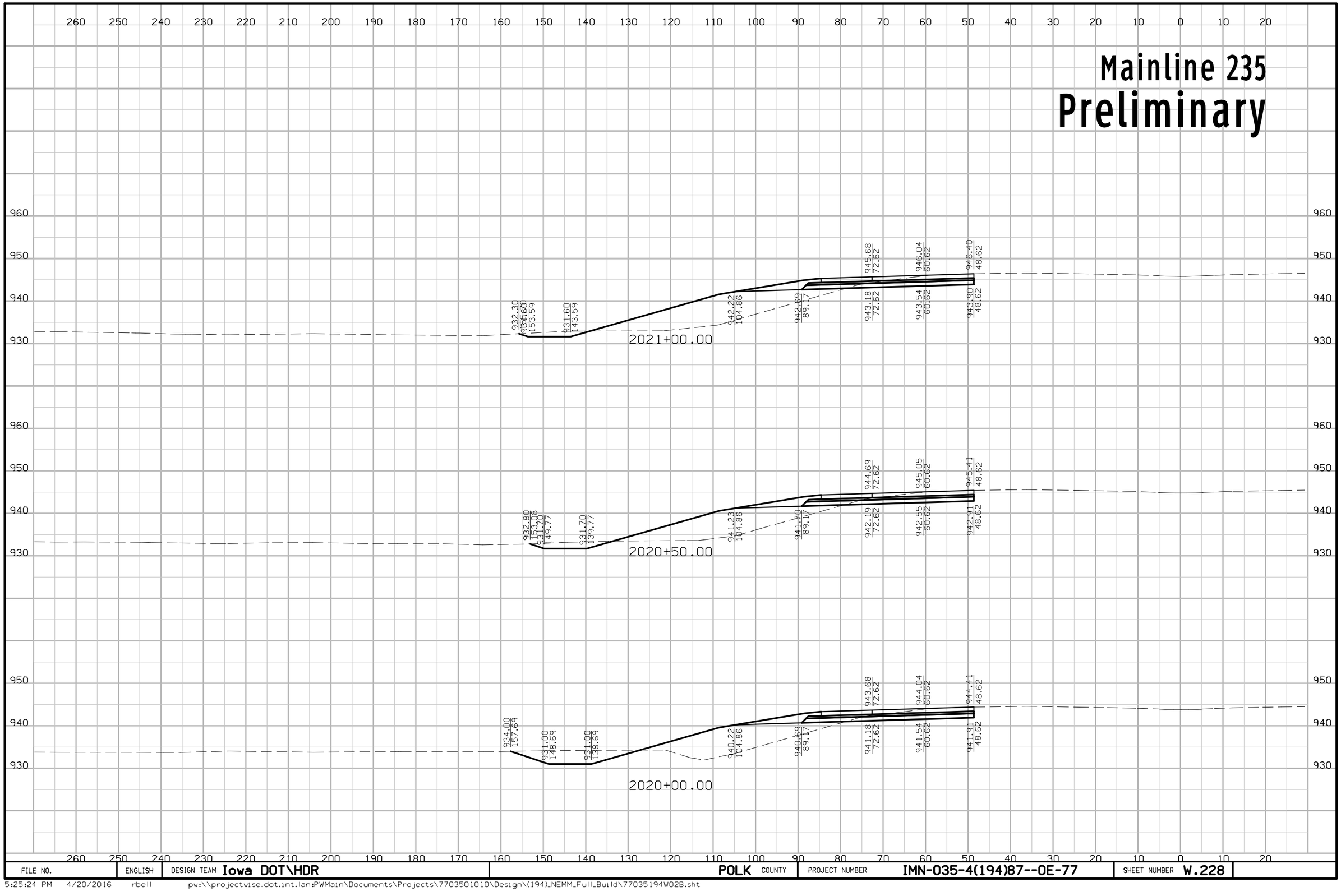
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.227

5:25:22 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

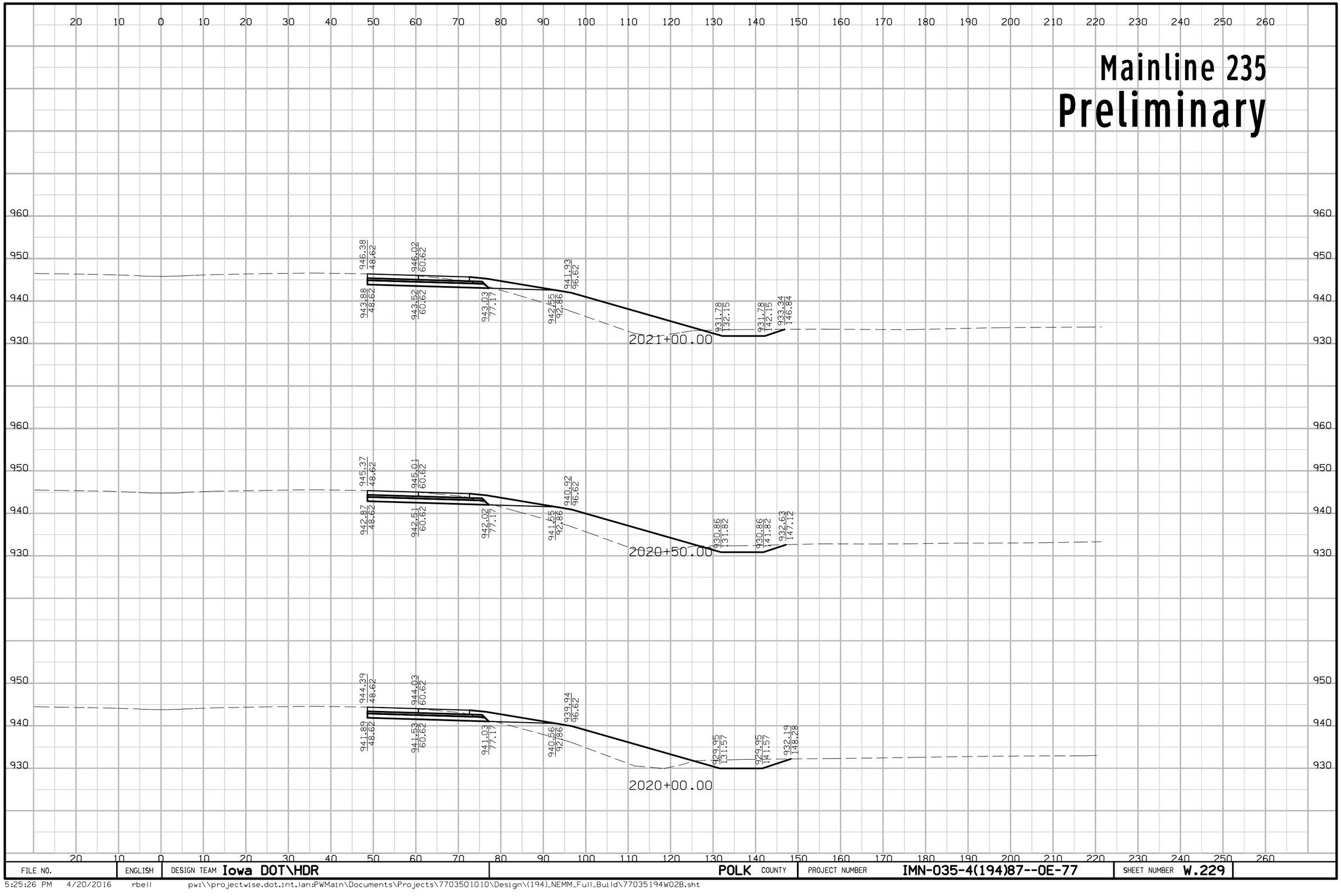
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.228

5:25:24 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

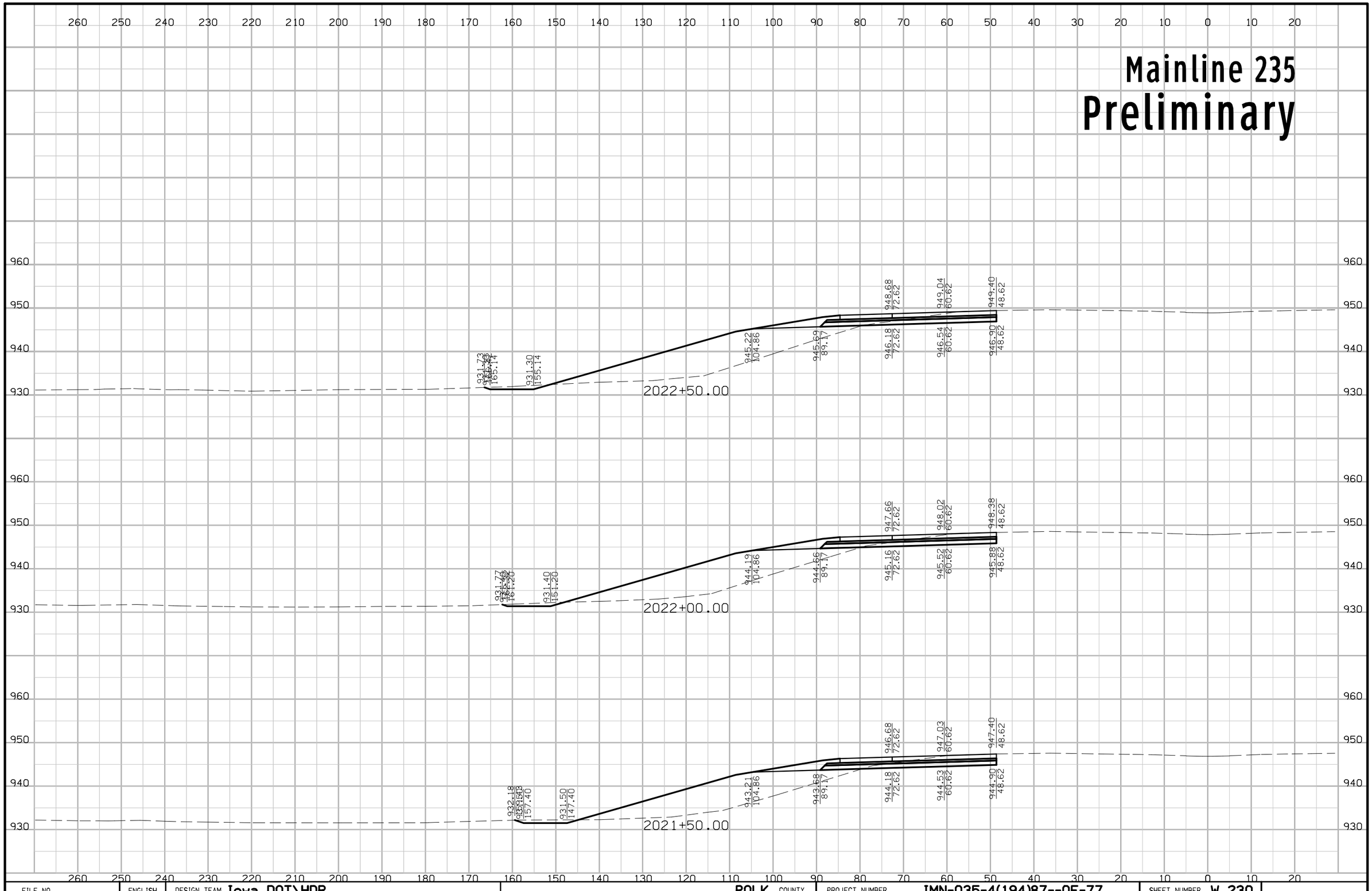
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.229

5:25:26 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

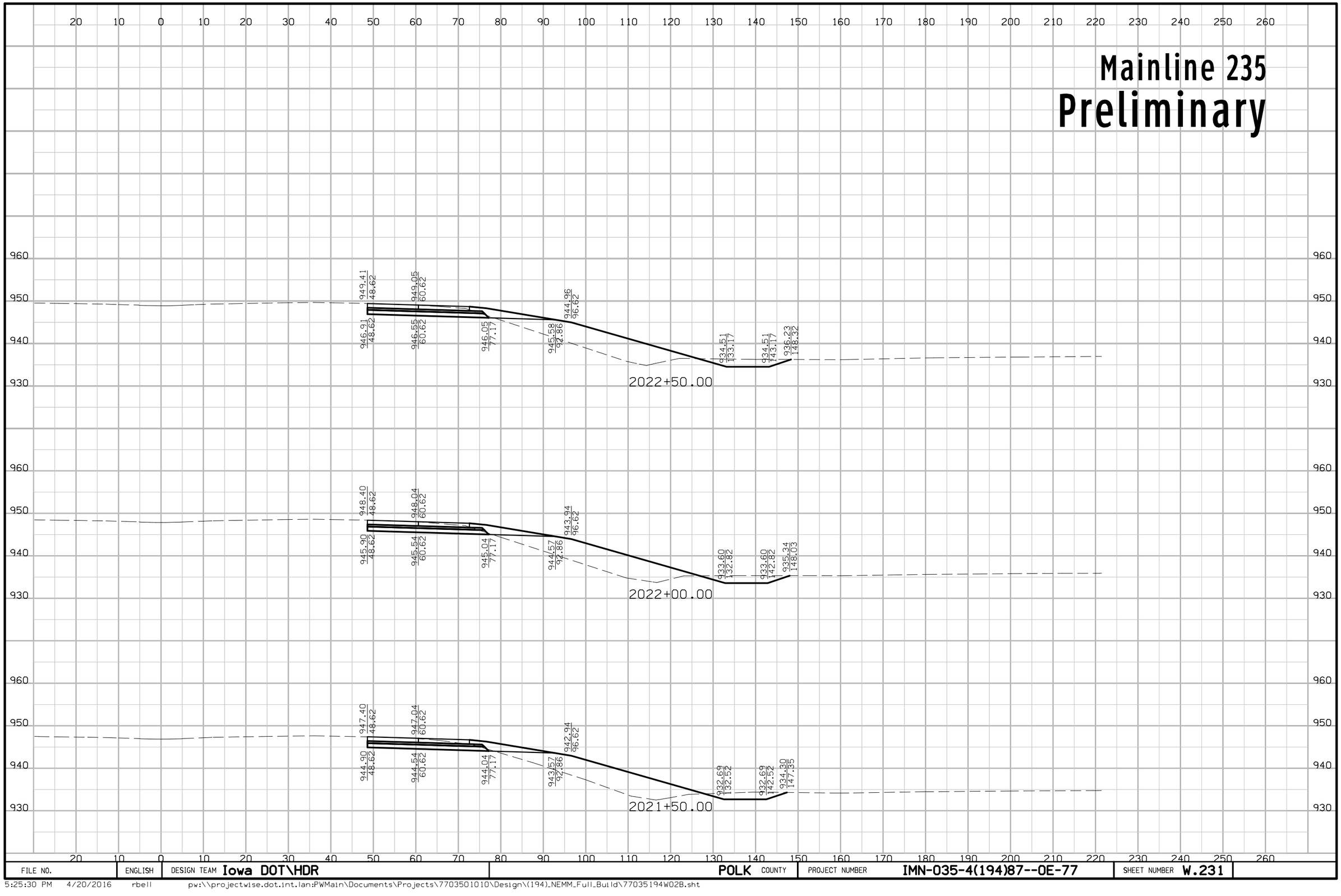
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.230

5:25:28 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

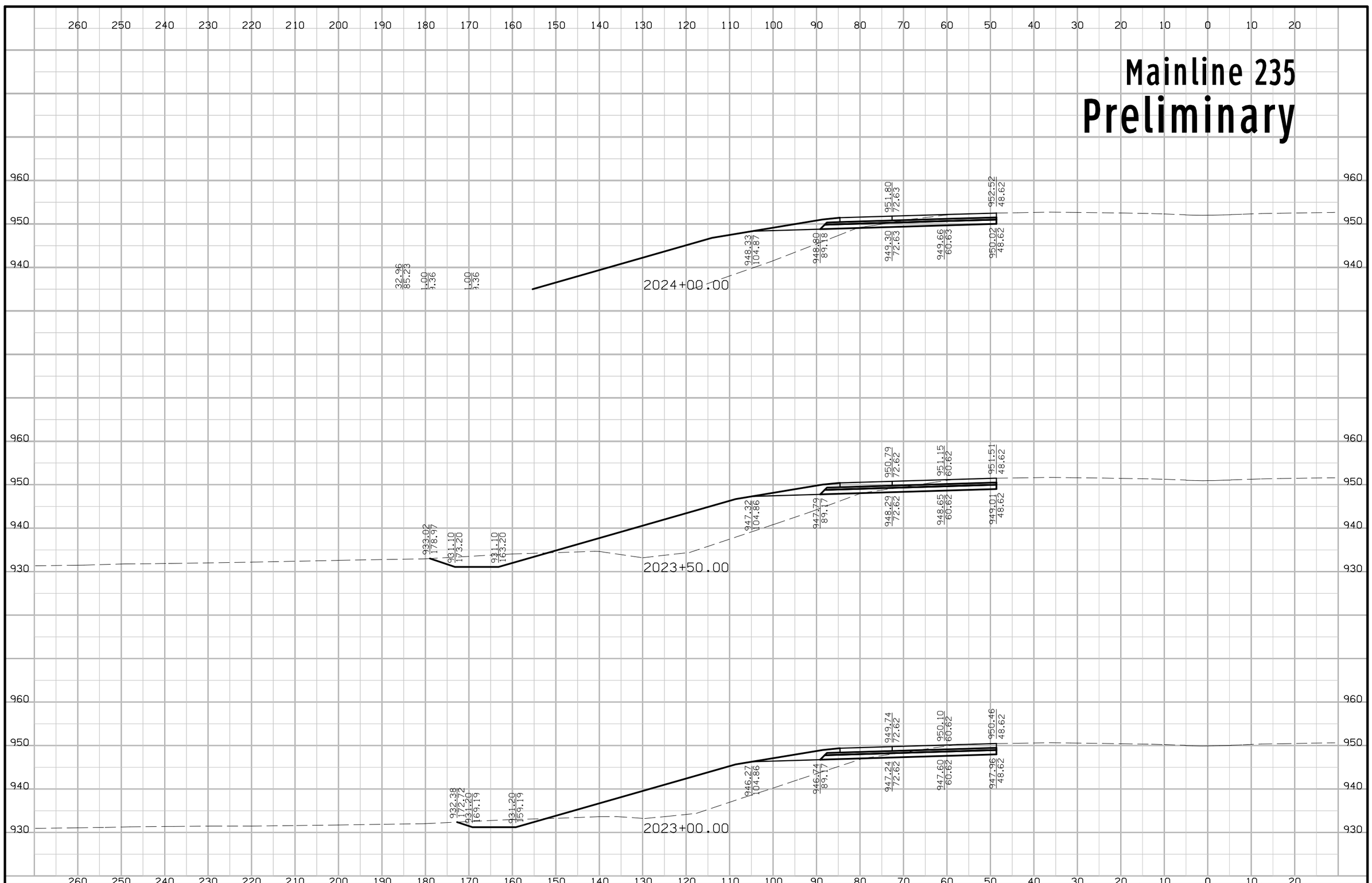
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.231

5:25:30 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

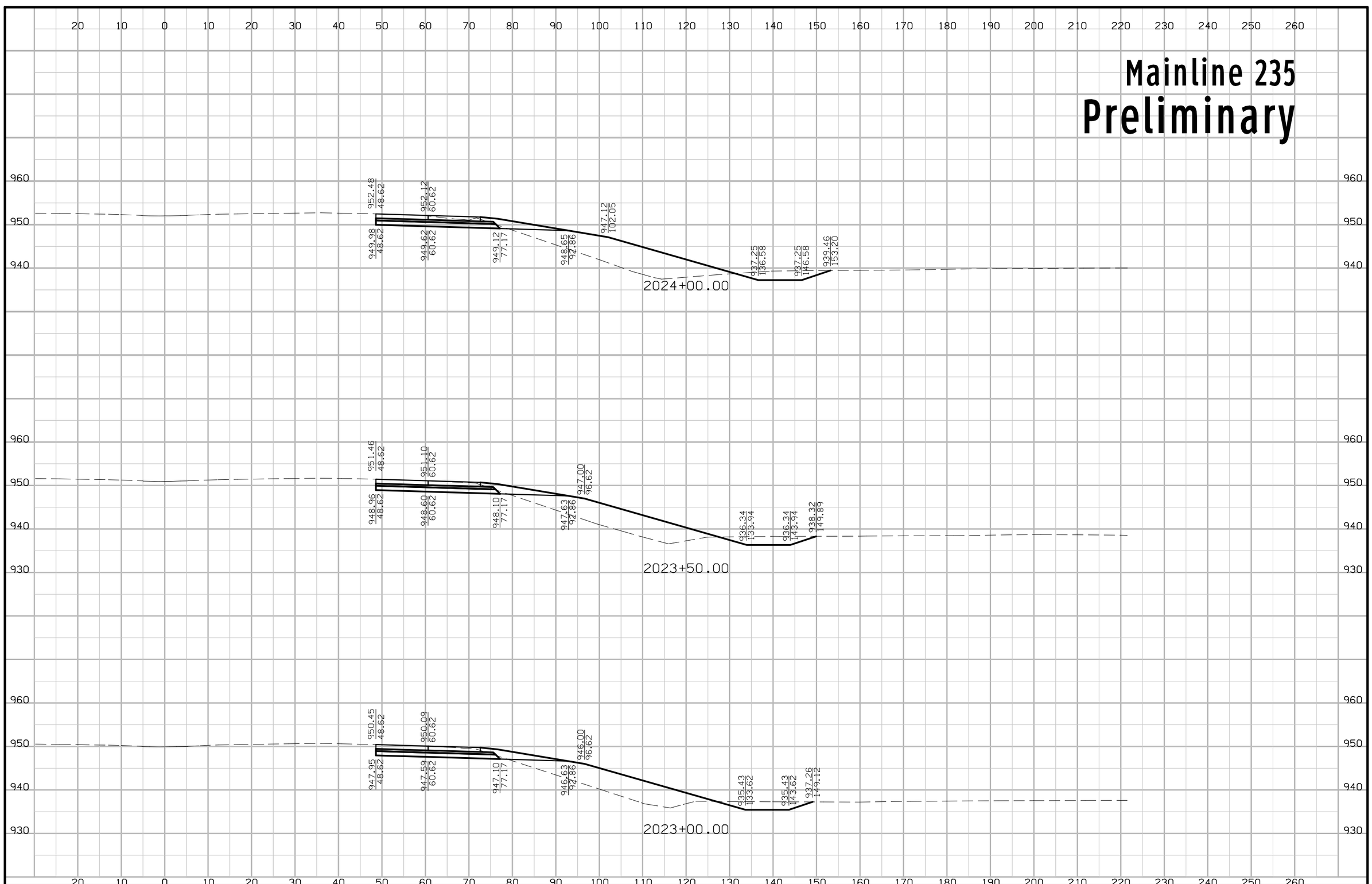
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.232

5:25:32 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

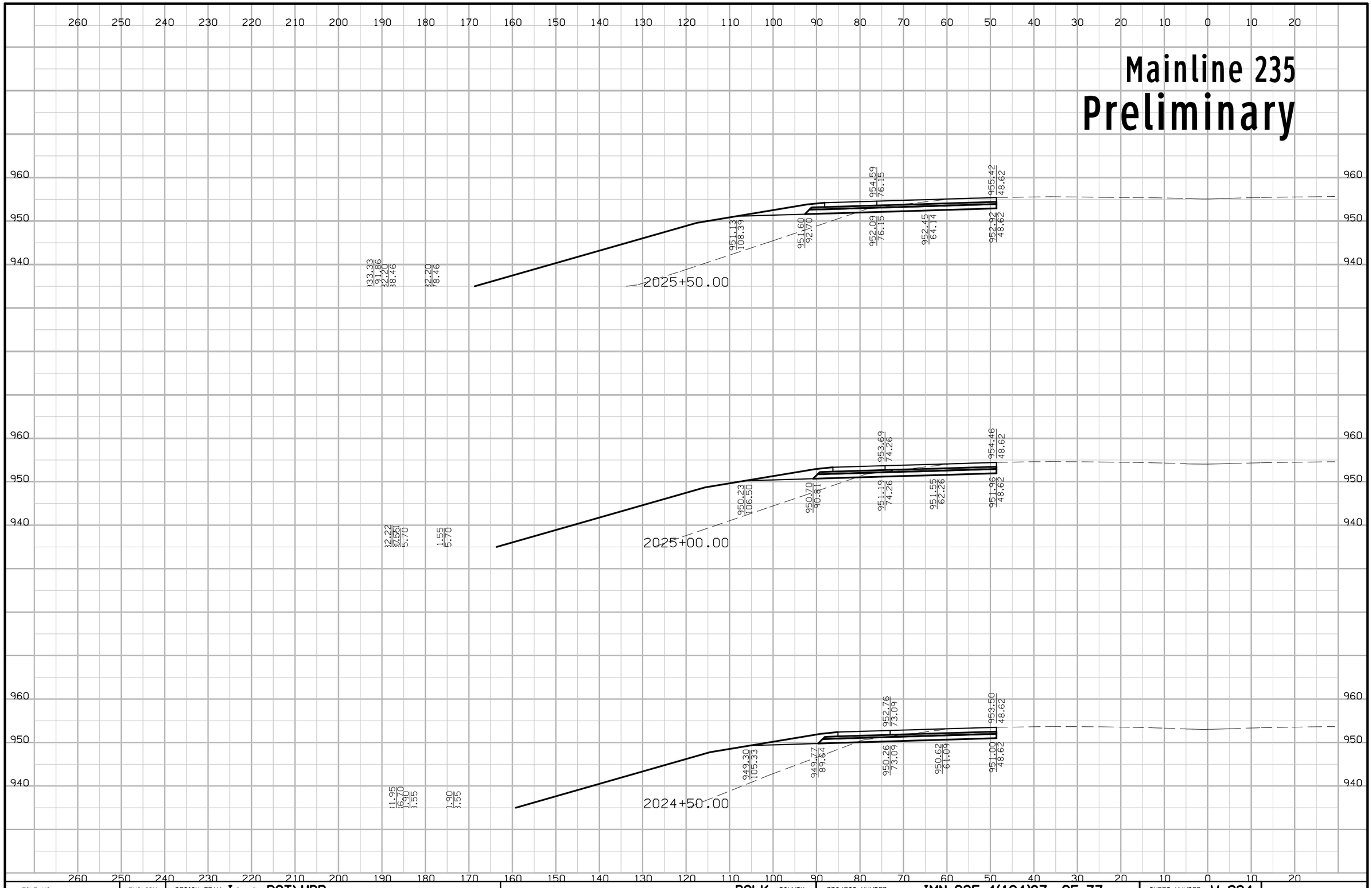


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.233

5:25:34 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235

Preliminary

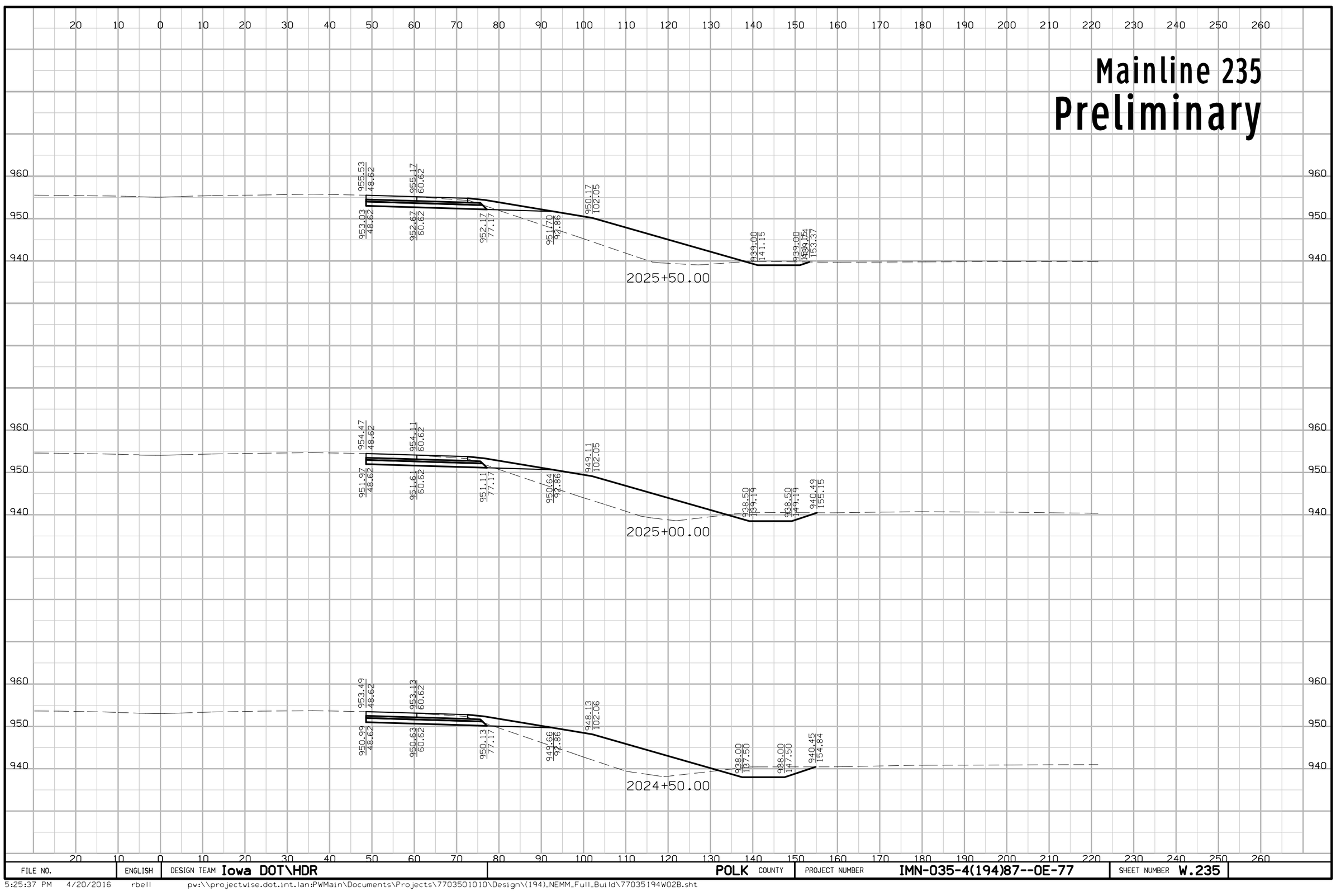


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.234

5:25:36 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235

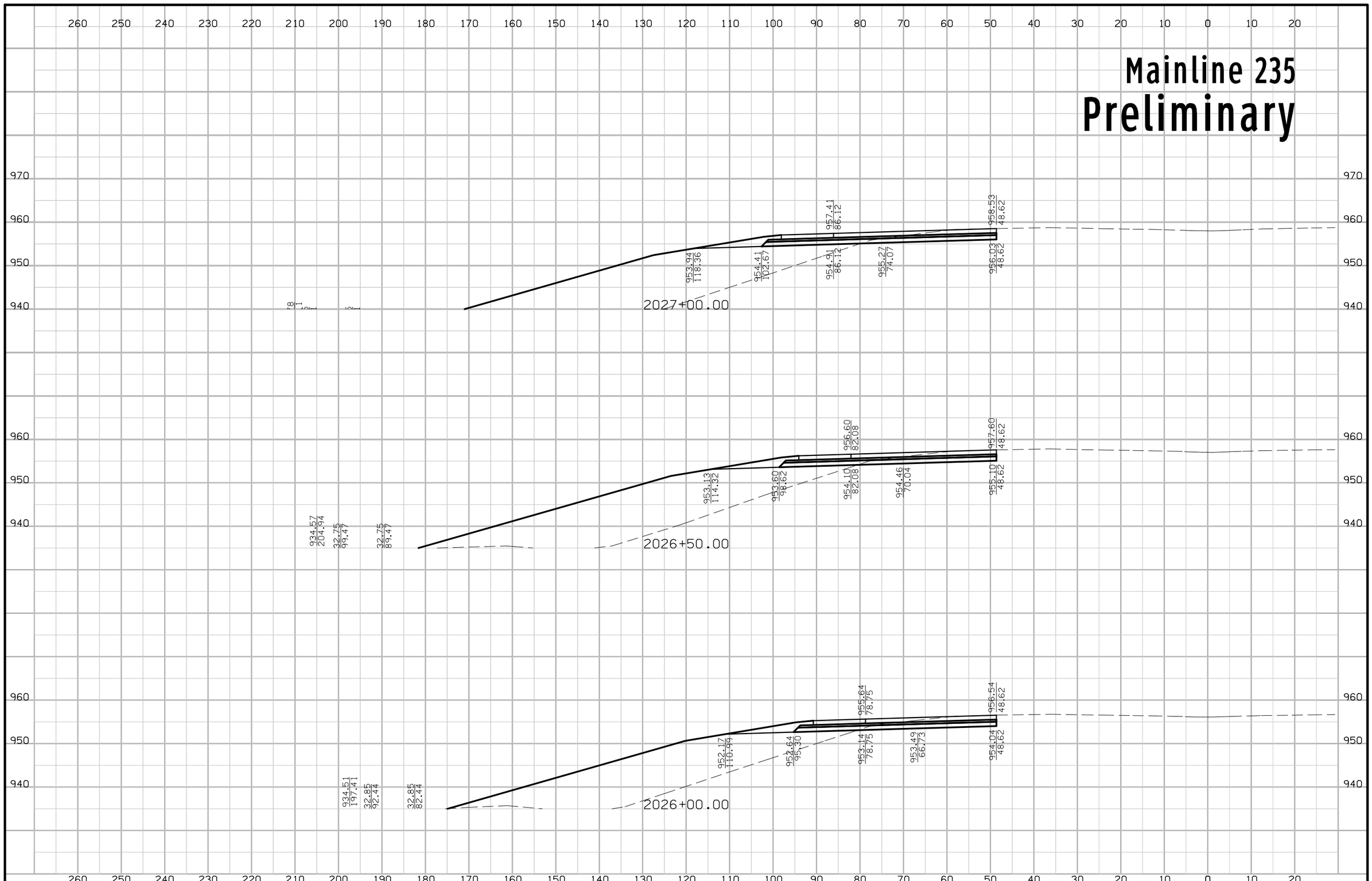
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.235

5:25:37 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

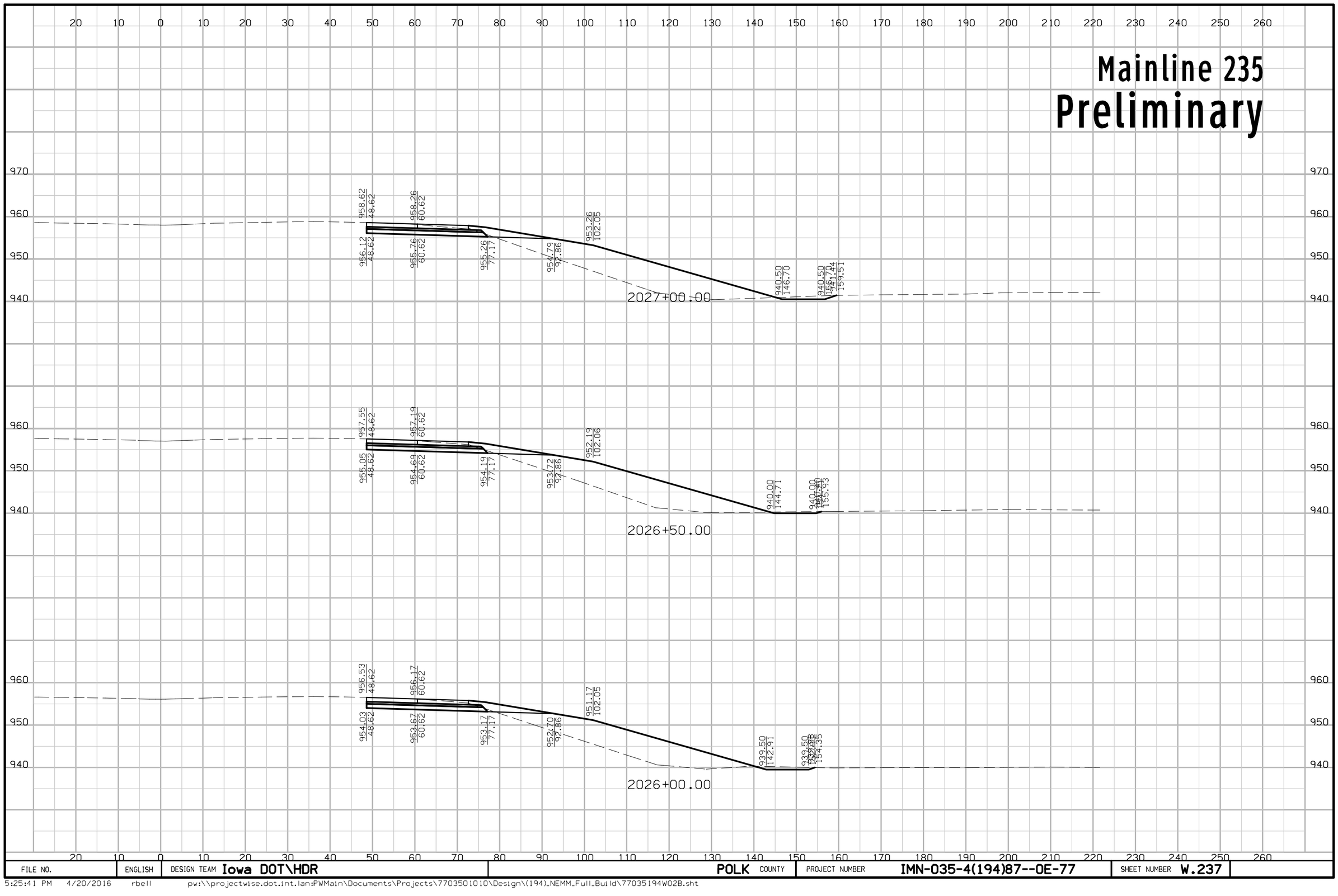
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.236

5:25:39 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.237

5:25:41 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20

970 960 950 940

2028+50.00

958.84
96.37
960.27
48.62
955.37
128.61
955.84
112.92
956.34
96.37
956.70
84.26
957.77
48.62

2028+00.00

958.16
90.88
959.42
48.62
954.69
123.12
955.16
107.43
955.66
90.88
956.02
78.82
956.32
48.62

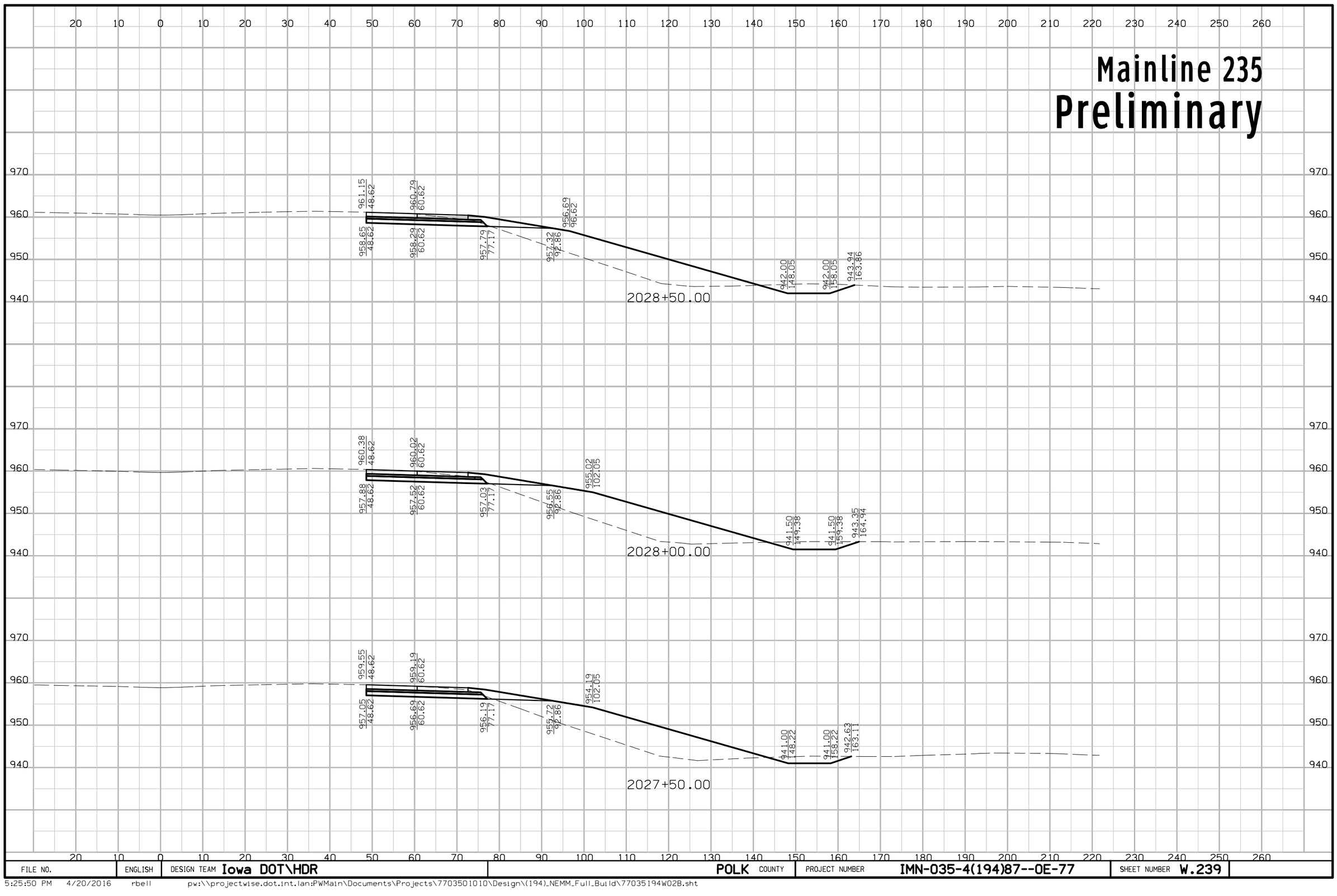
2027+50.00

32.78
32.55
14.44
54.44

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.238

5:25:43 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

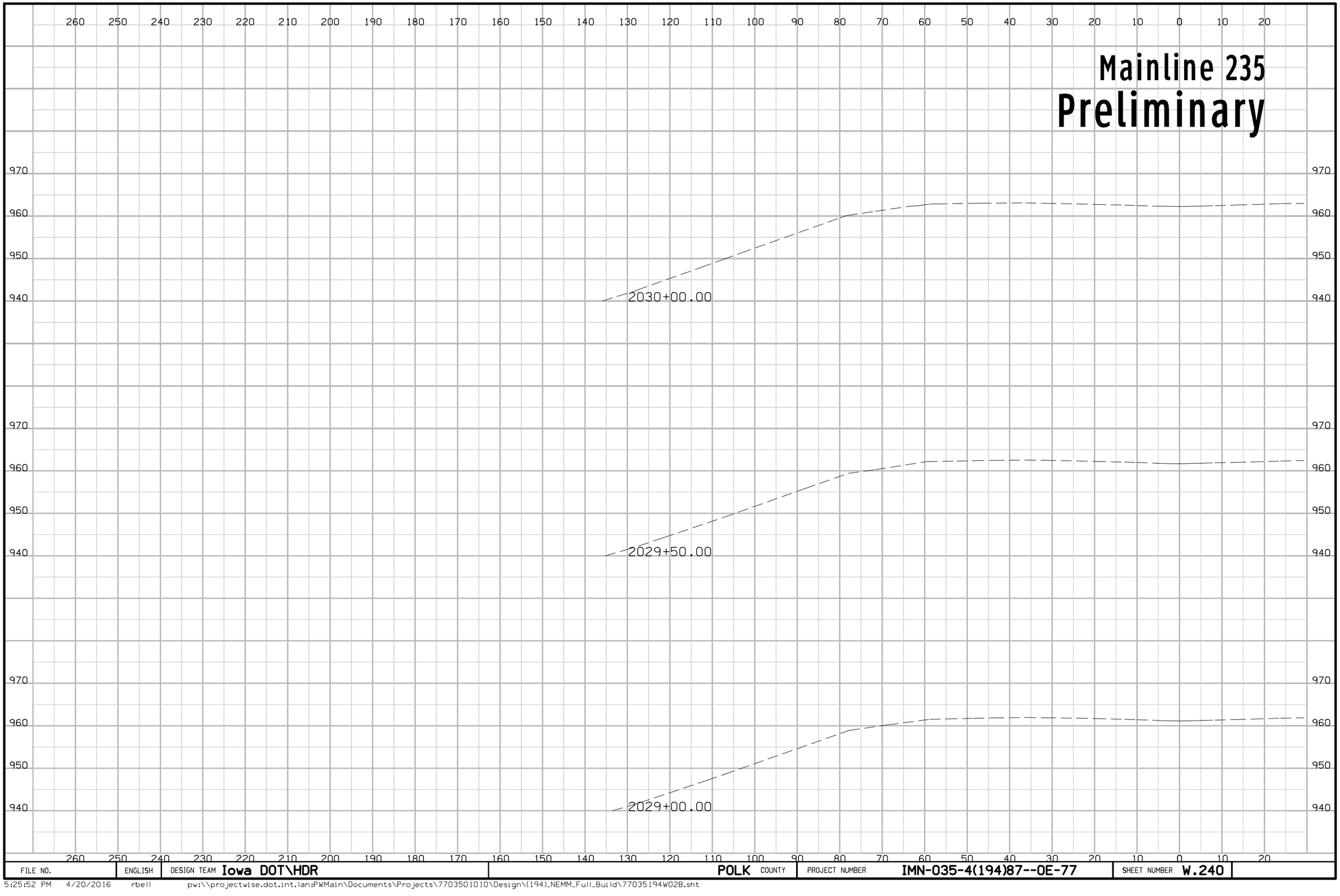
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.239

5:25:50 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

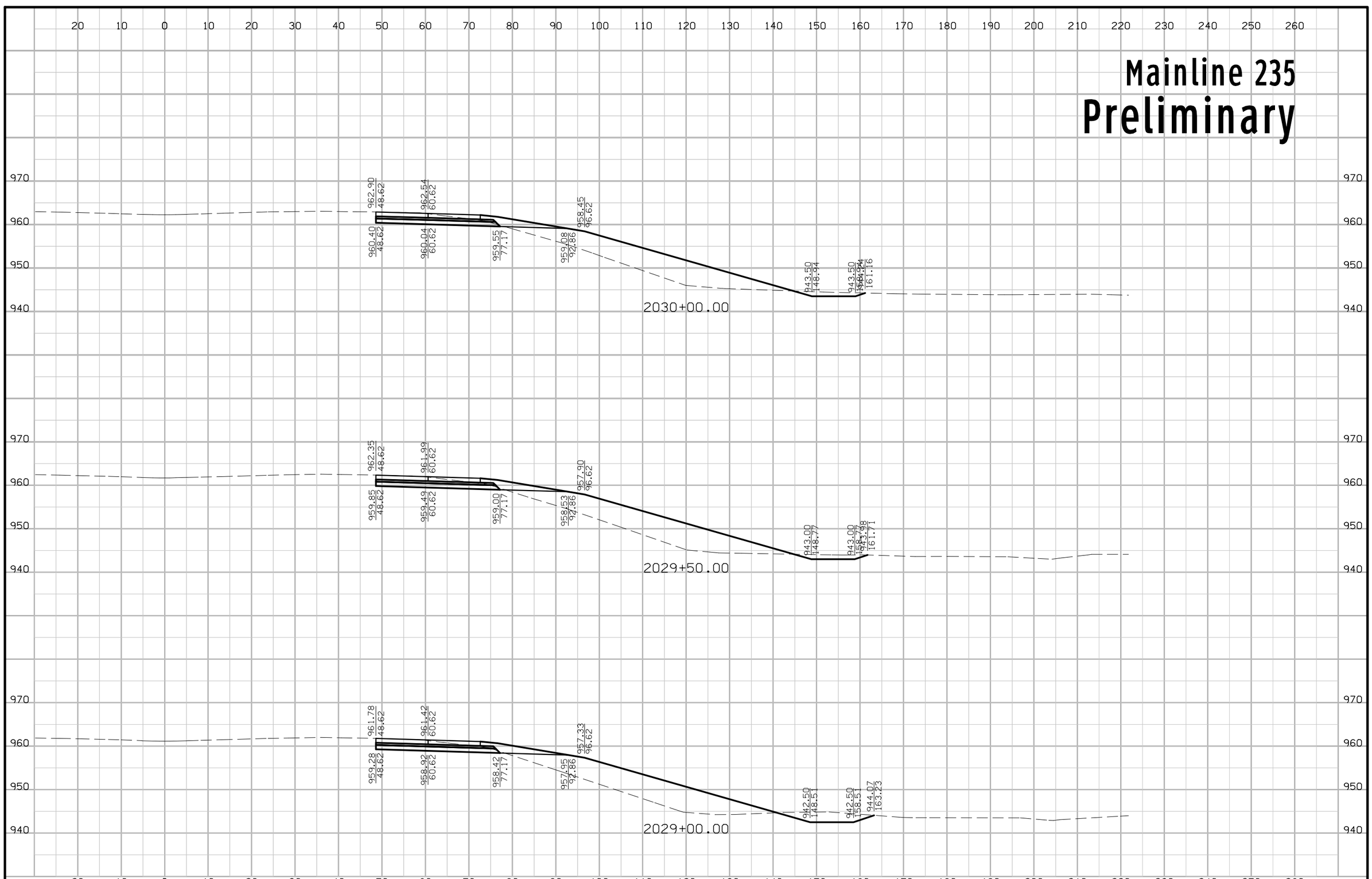
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.240

5:25:52 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.241

5:25:54 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20

970 960 950 940 930 920

2031+00.00

980 970 960 950 940 930

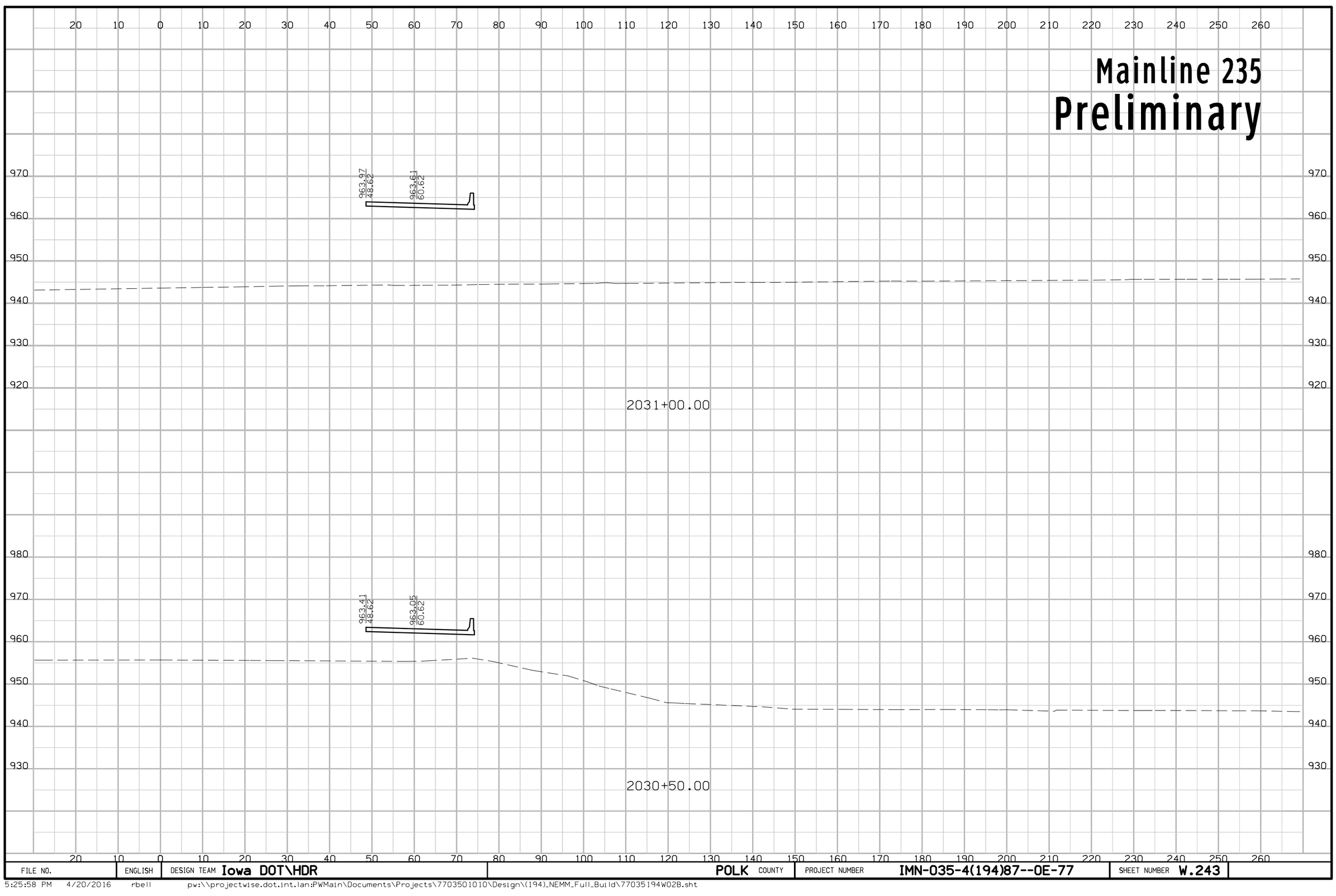
2030+50.00

260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.242

5:25:56 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.243

5:25:58 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20

970
960
950
940

2032+00.00

970
960
950
940
930
920

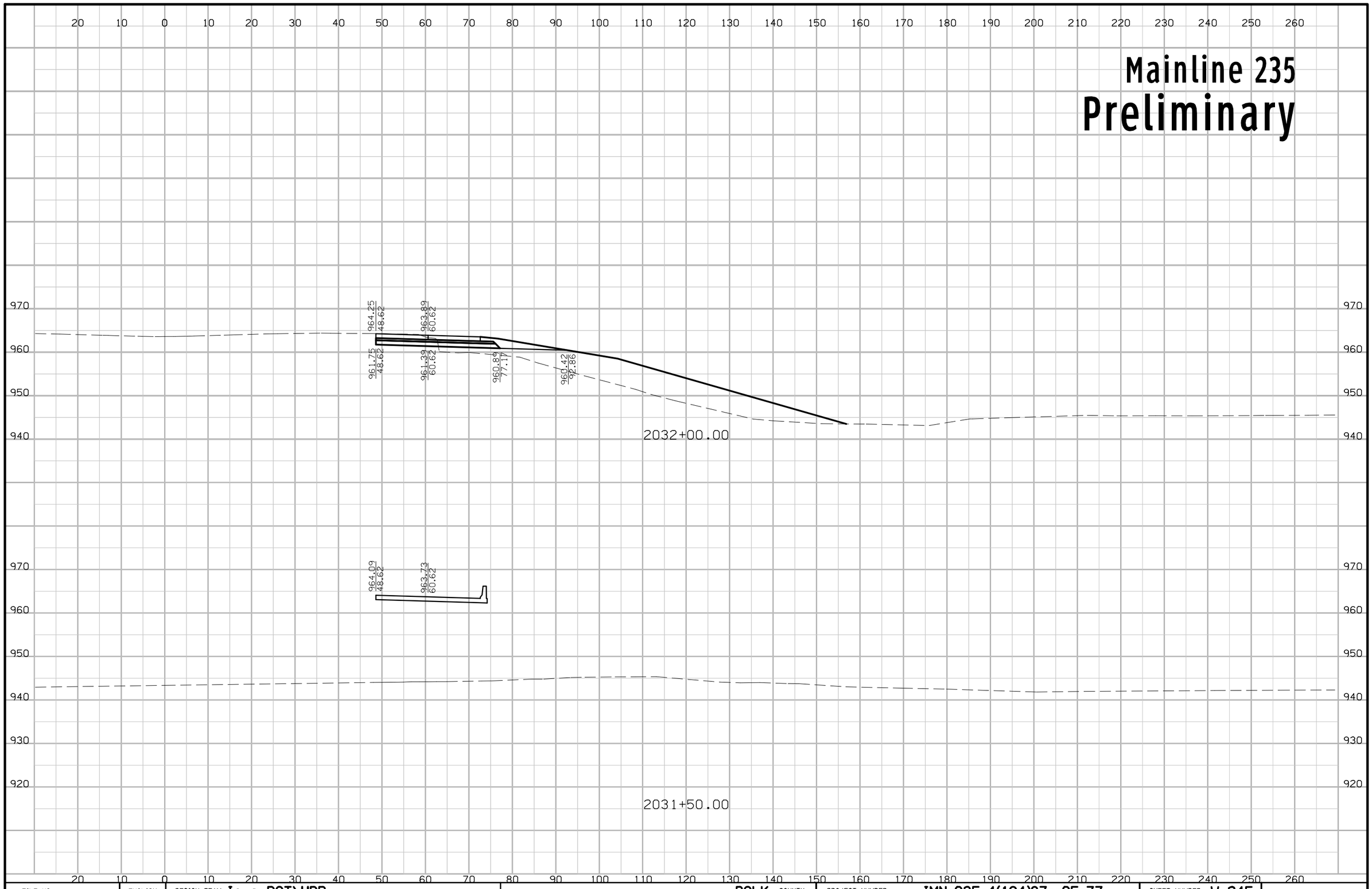
2031+50.00

260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.244

5:26:00 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

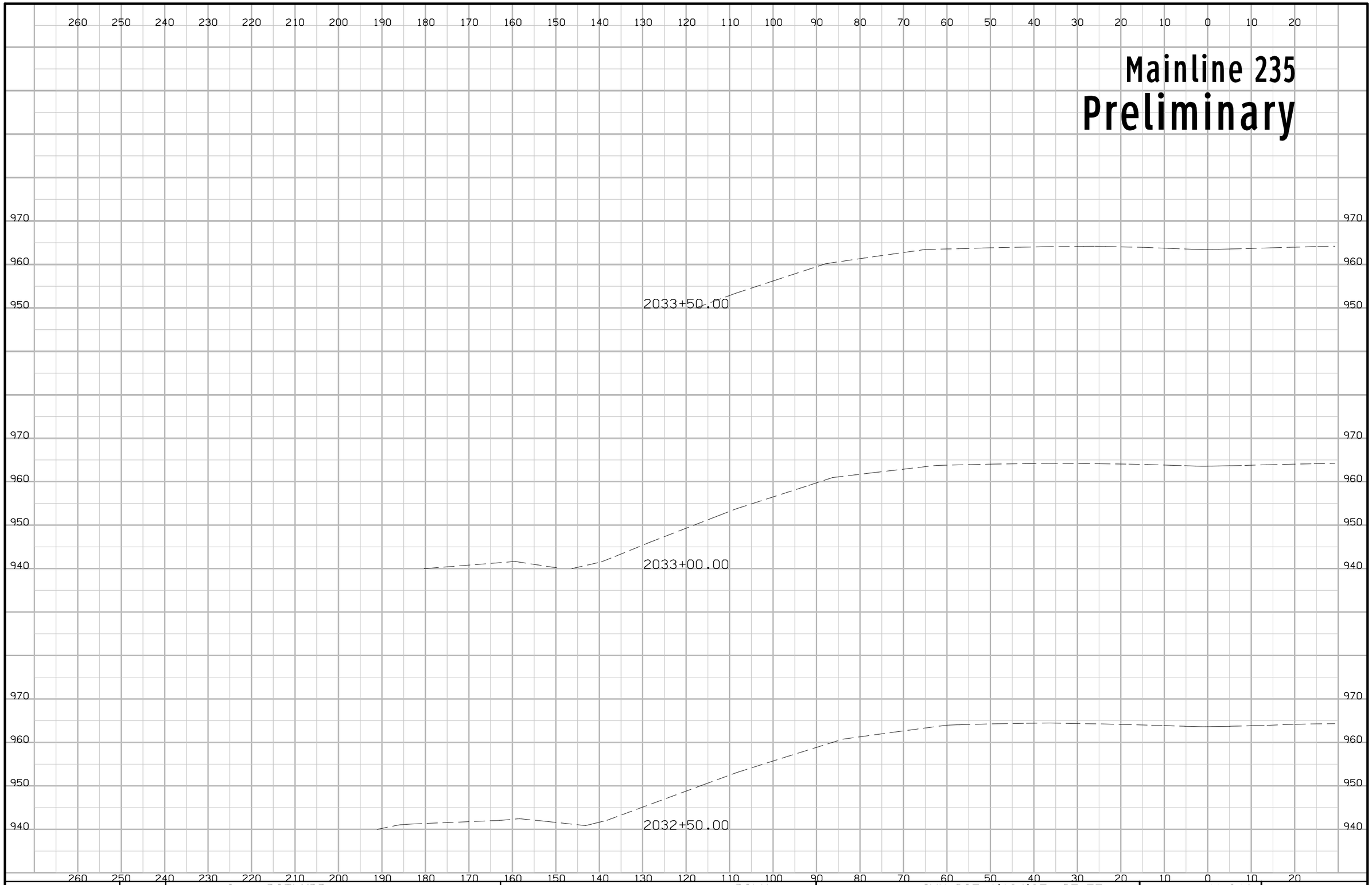
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.245

5:26:02 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

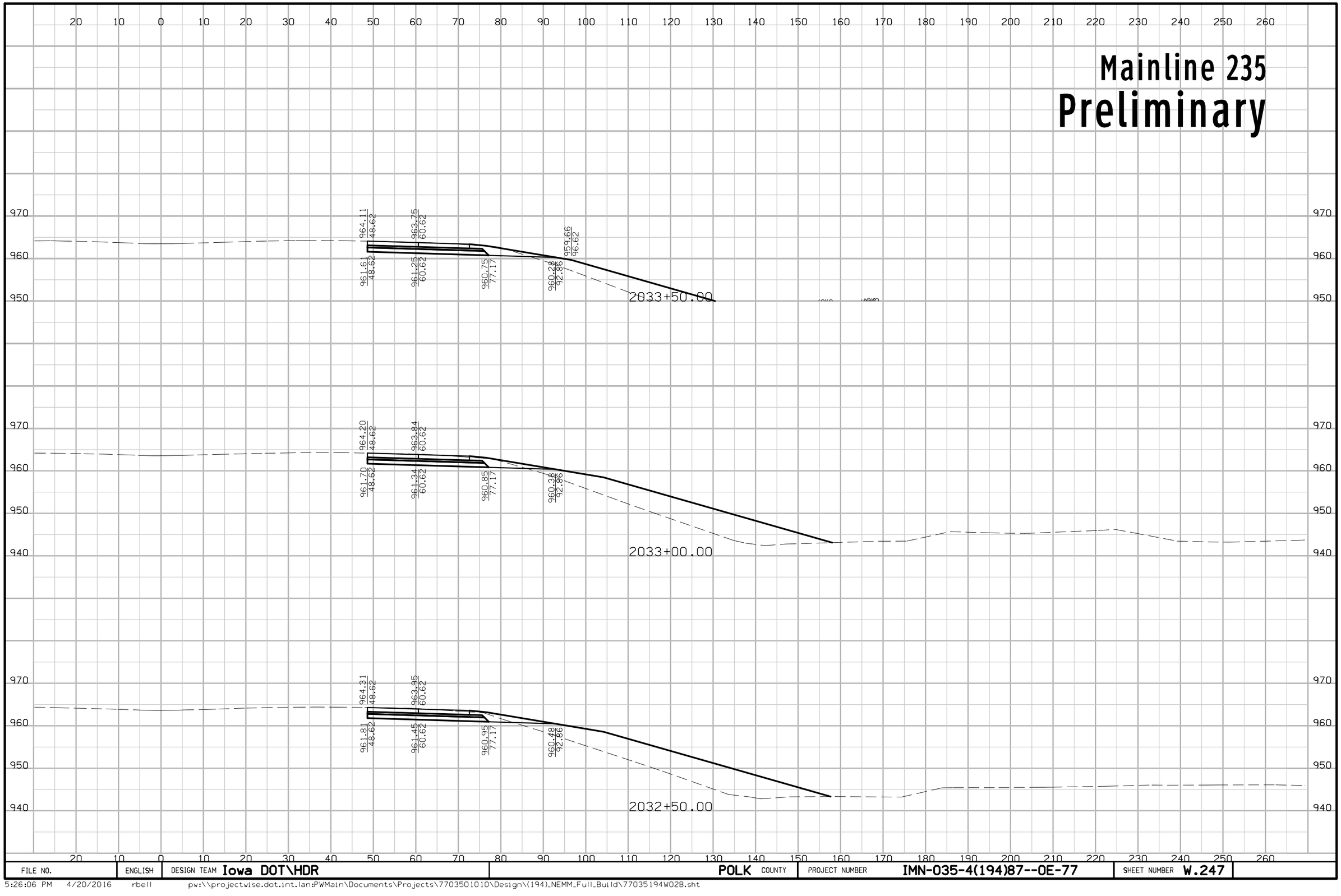
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.246

5:26:04 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

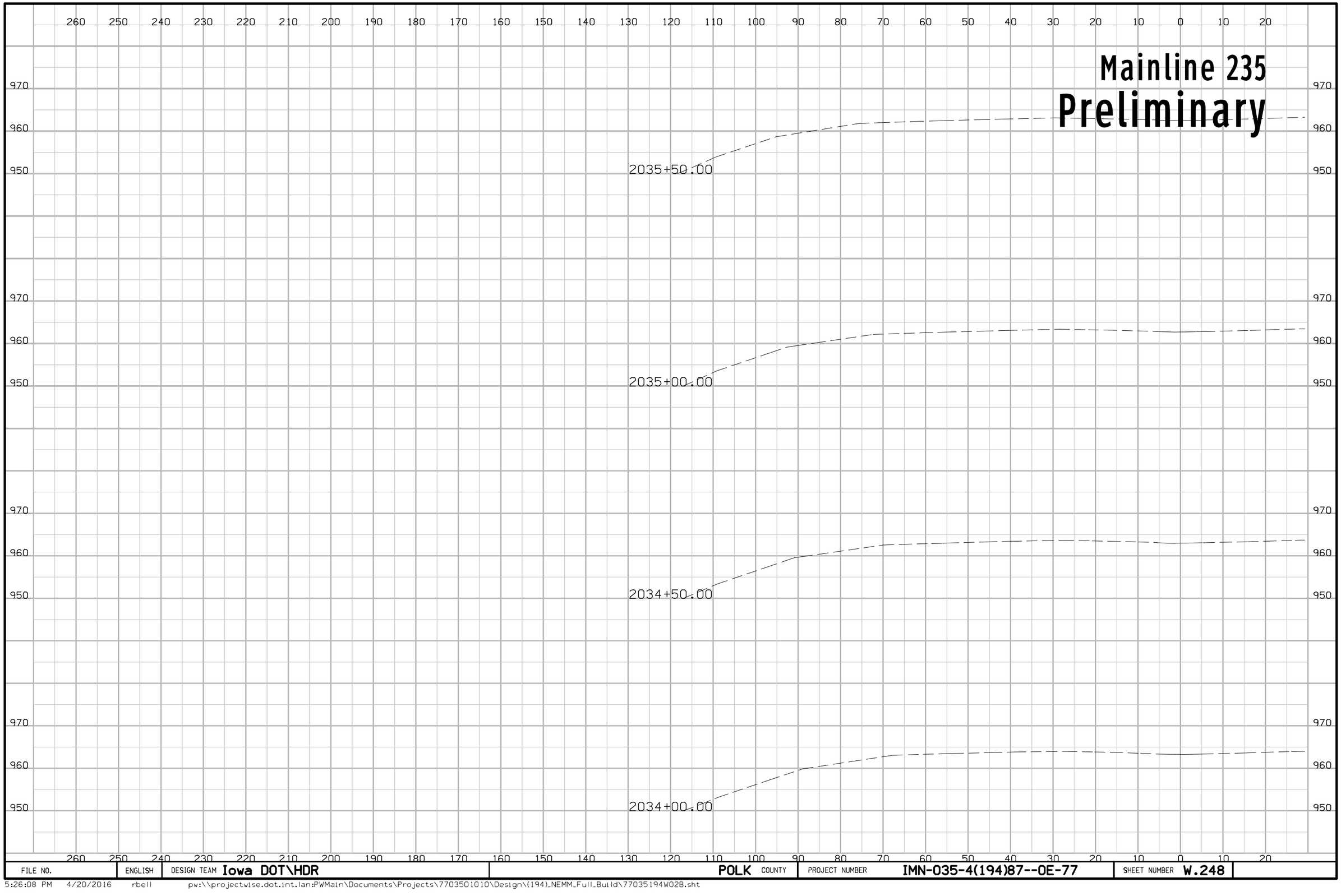


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.247

5:26:06 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235

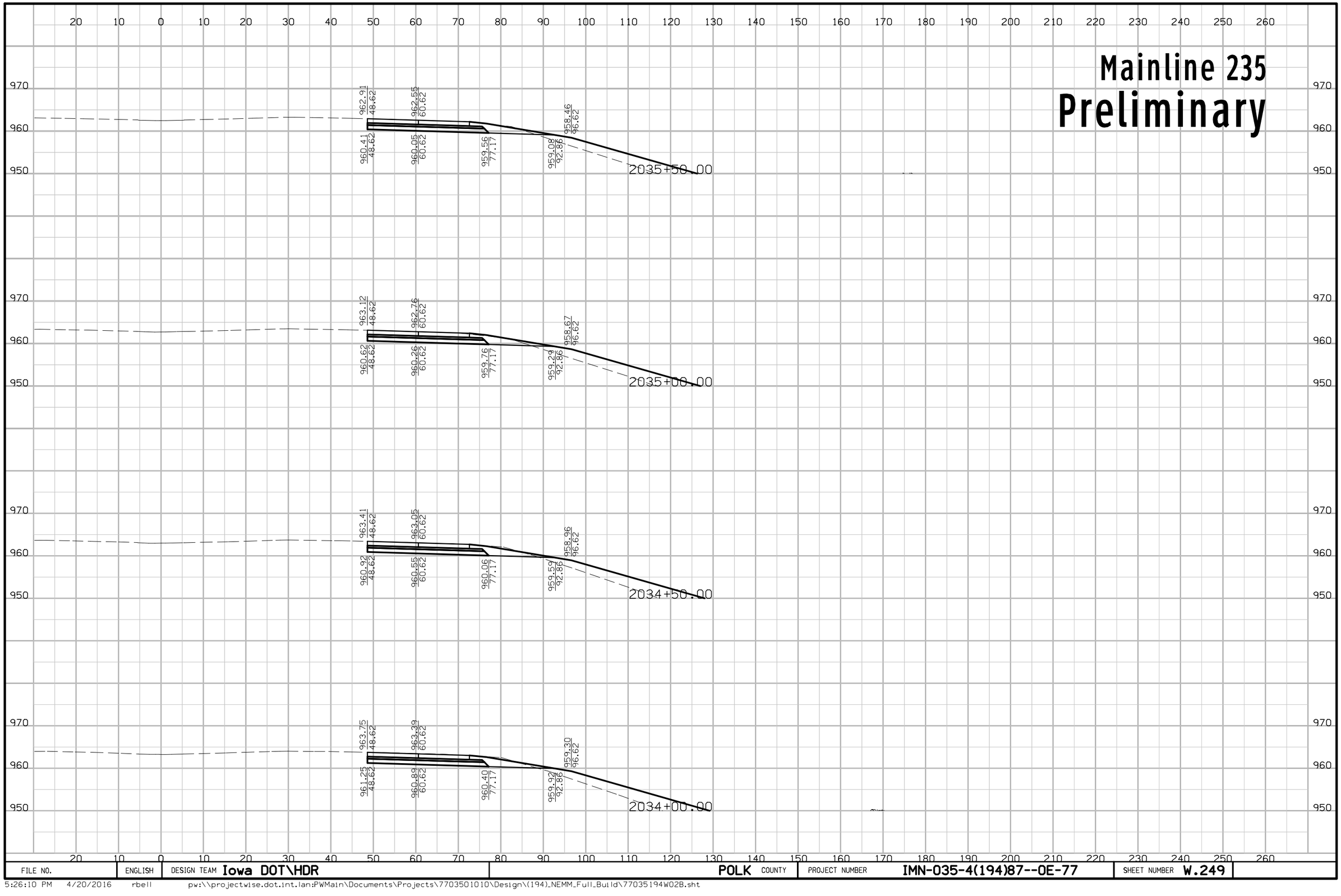
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.248

5:26:08 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

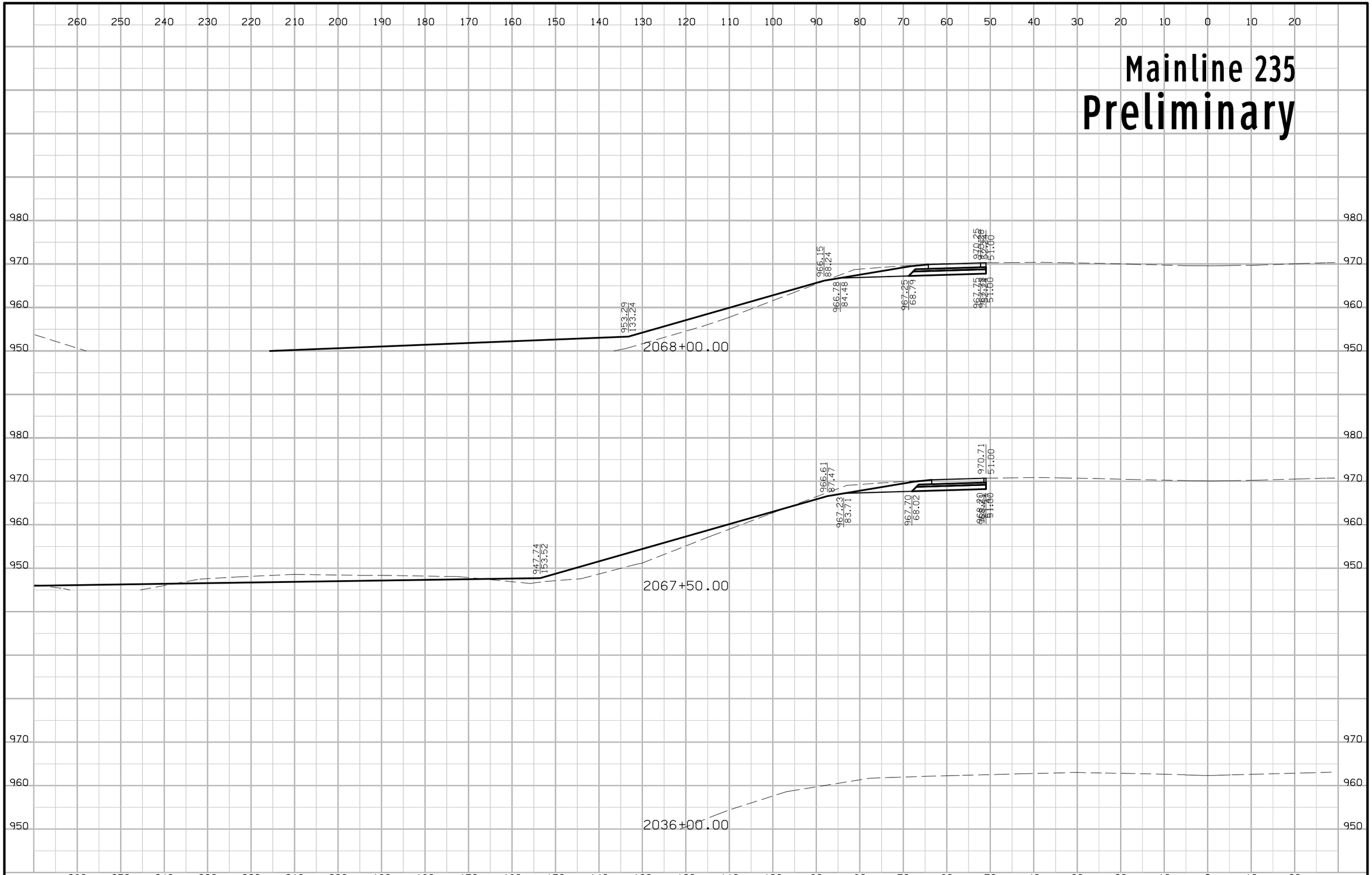


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.249

5:26:10 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235

Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.250

5:26:11 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260

980
970
960
950

2068+00.00

2067+50.00

2036+00.00

962.80
48.62

962.45
60.62

960.31
48.62

959.95
60.62

959.45
77.17

958.98
92.80

958.35
96.62

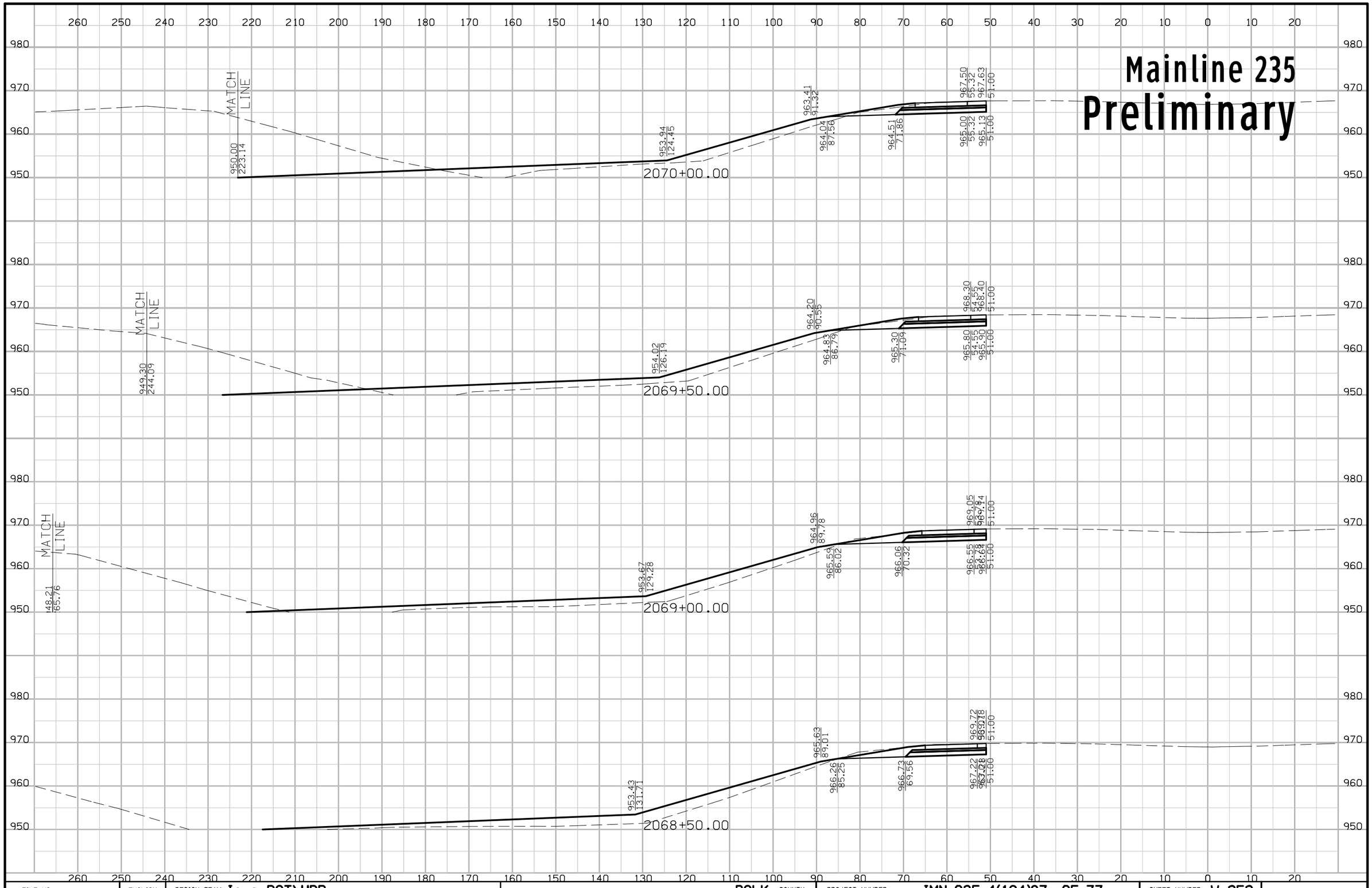
.21
.04

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.251

5:26:13 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235

Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.252

5:26:15 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

2070+00.00

2069+50.00

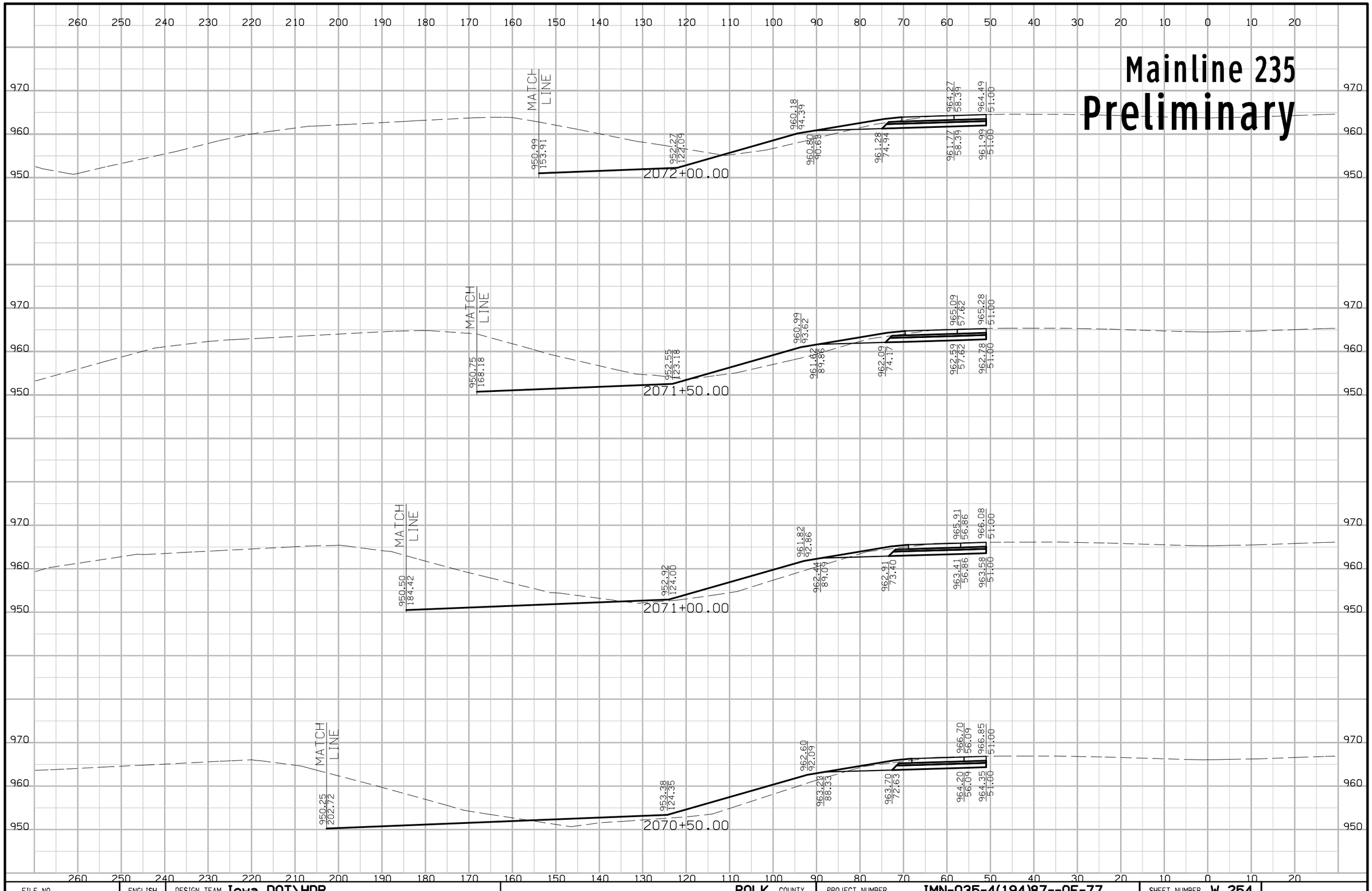
2069+00.00

2068+50.00

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.253

5:26:17 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.254

5:26:19 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260

970
960
950

2072+00.00

2071+50.00

2071+00.00

2070+50.00

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.255

5:26:21 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20

970
960
950

MATCH LINE
952.08 / 122.16
952.37 / 114.75
957.53 / 96.70
958.16 / 92.94
958.63 / 77.25
961.62 / 60.70
959.12 / 60.70
961.91 / 51.00
959.41 / 51.00
2073+50.00

MATCH LINE
951.48 / 130.53
951.96 / 118.54
958.42 / 95.93
959.04 / 92.17
959.51 / 76.48
962.51 / 59.93
960.01 / 59.93
962.78 / 51.00
960.28 / 51.00
2073+00.00

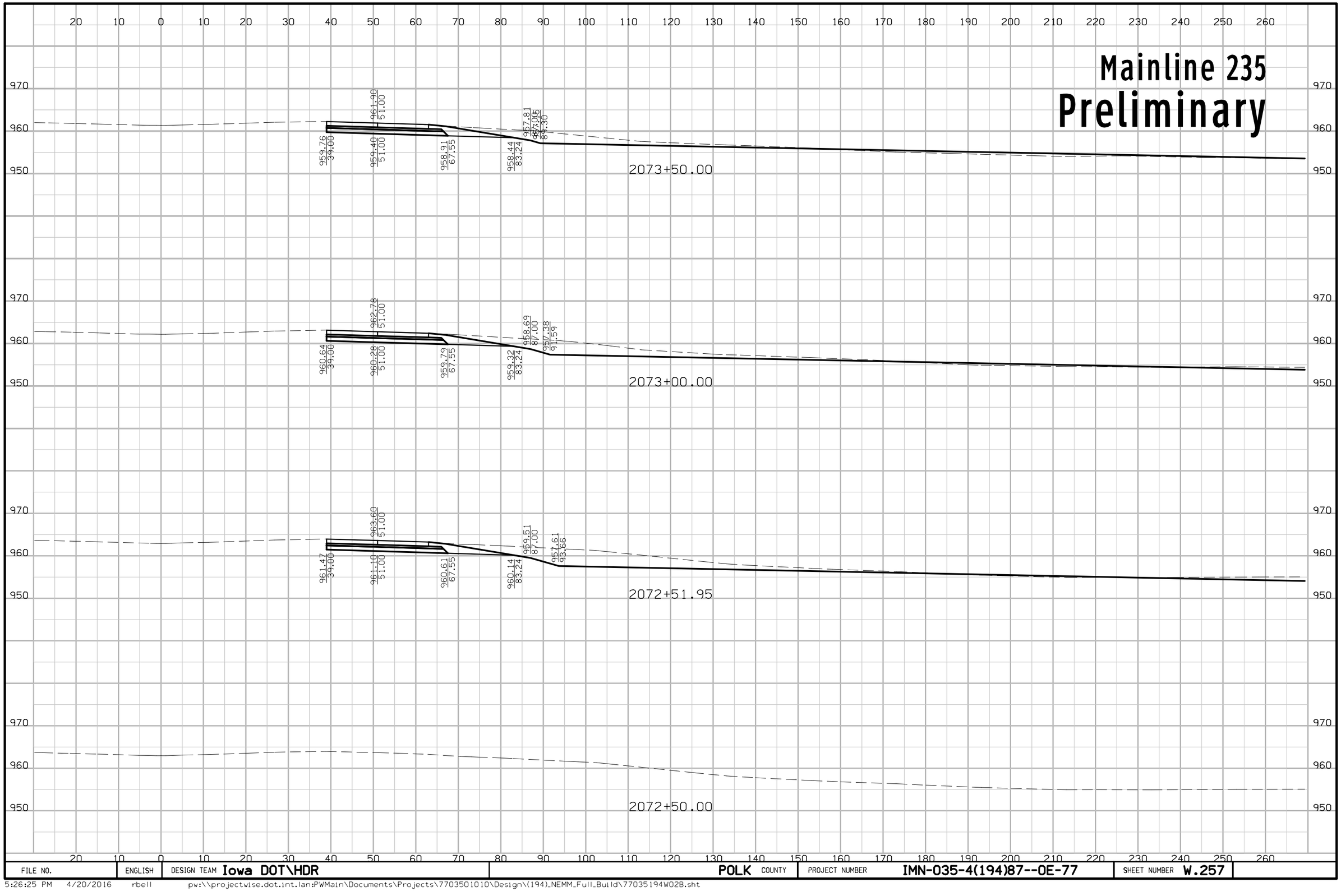
MATCH LINE
951.25 / 141.05
952.06 / 120.62
959.33 / 95.19
959.96 / 91.43
960.43 / 75.74
963.42 / 59.19
960.92 / 59.19
963.67 / 51.00
961.17 / 51.00
2072+51.95

MATCH LINE
951.24 / 141.51
952.07 / 120.87
959.36 / 95.16
959.98 / 91.40
960.46 / 75.71
963.45 / 59.16
960.95 / 59.16
963.70 / 51.00
961.20 / 51.00
2072+50.00

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.256

5:26:23 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

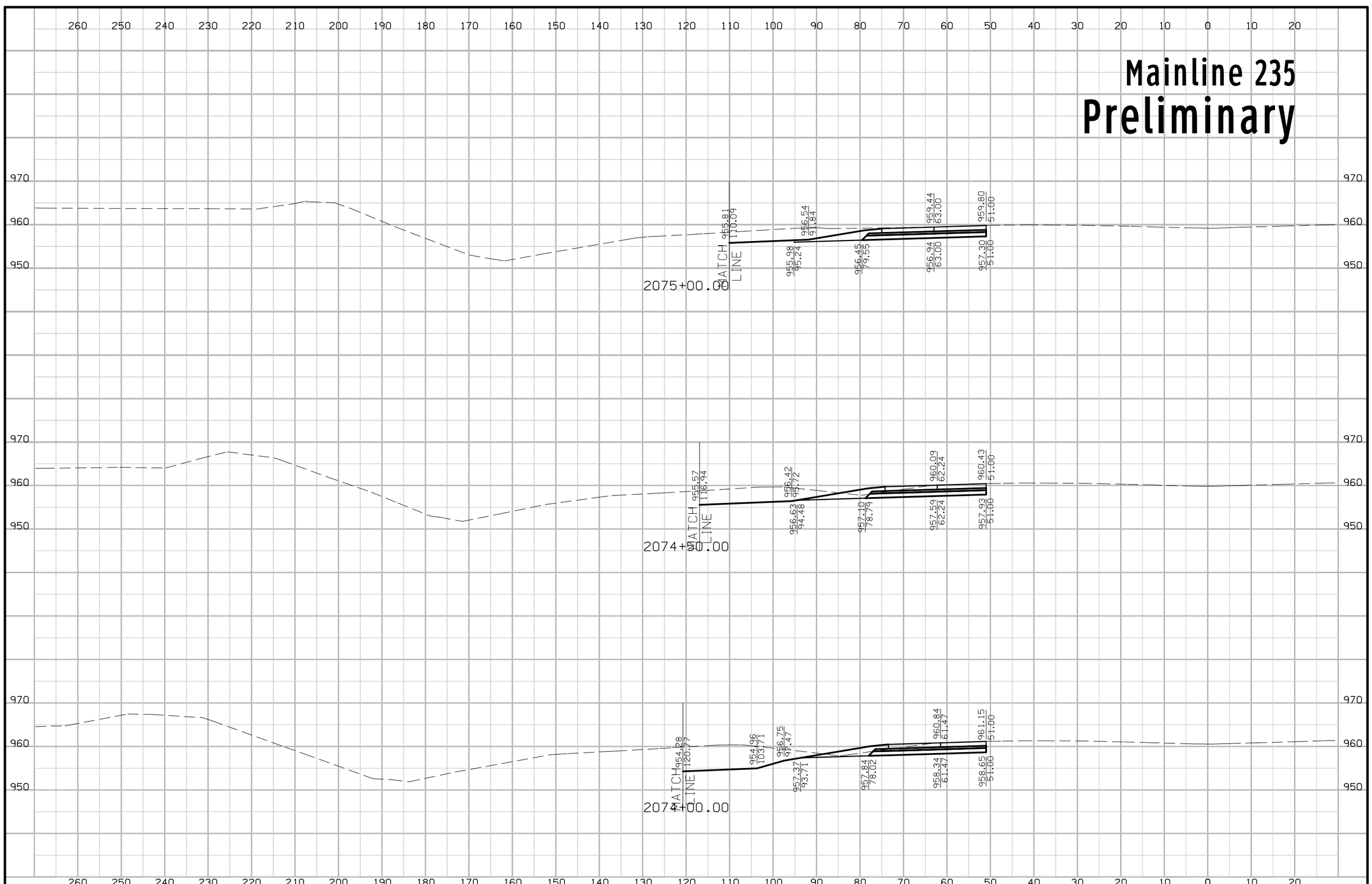
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.257

5:26:25 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

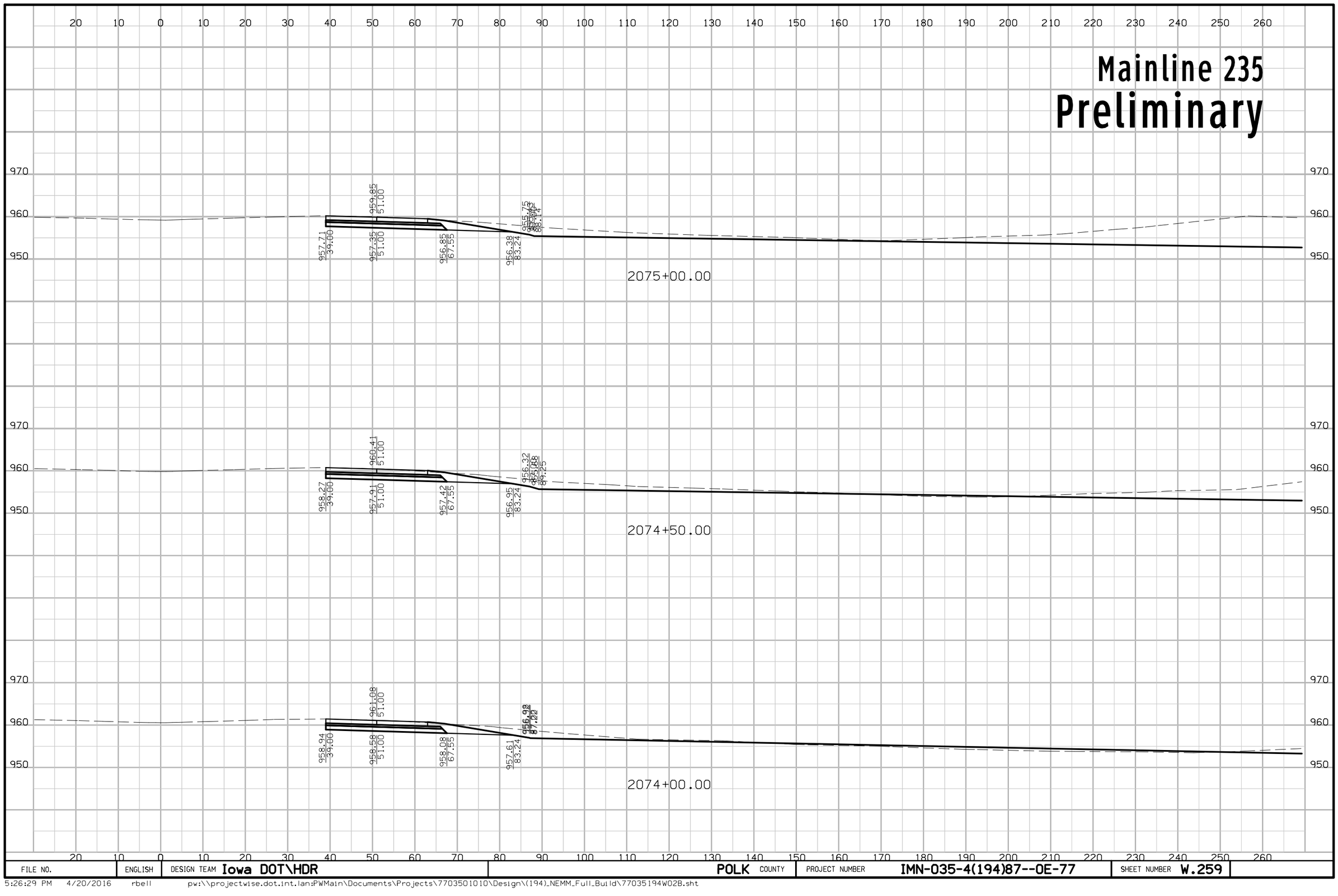


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.258

5:26:27 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235

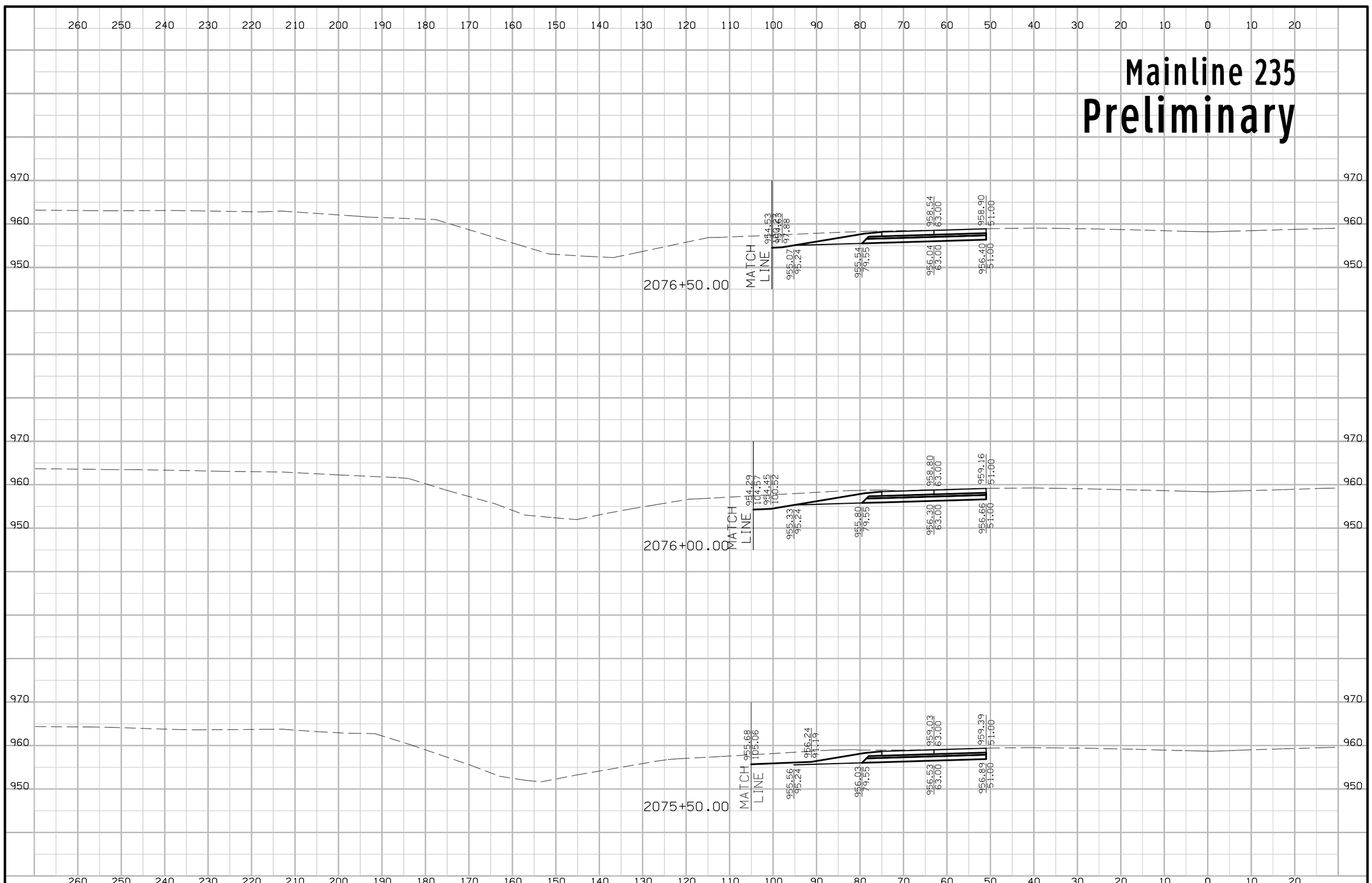
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.259

5:26:29 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

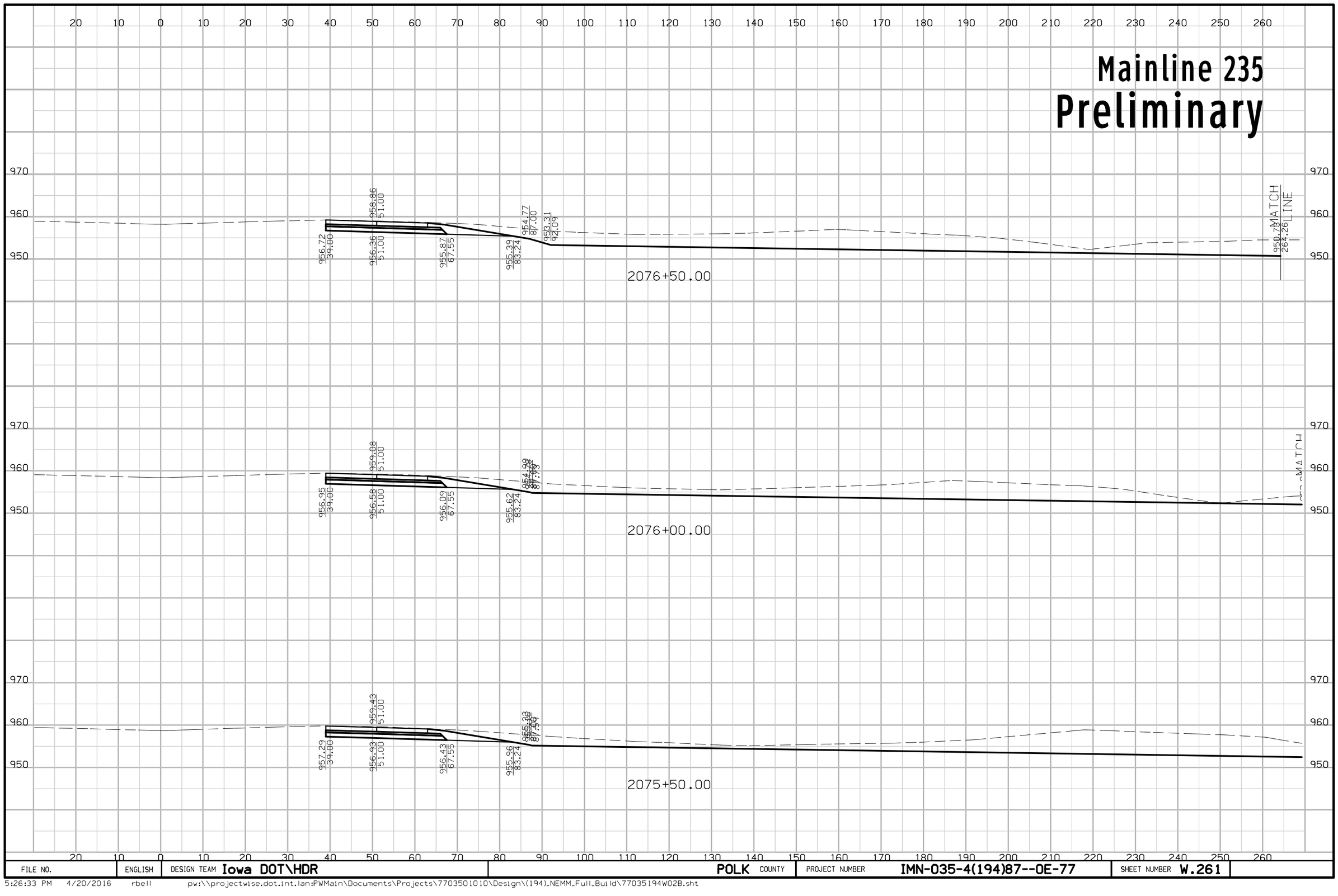
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.260

5:26:31 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

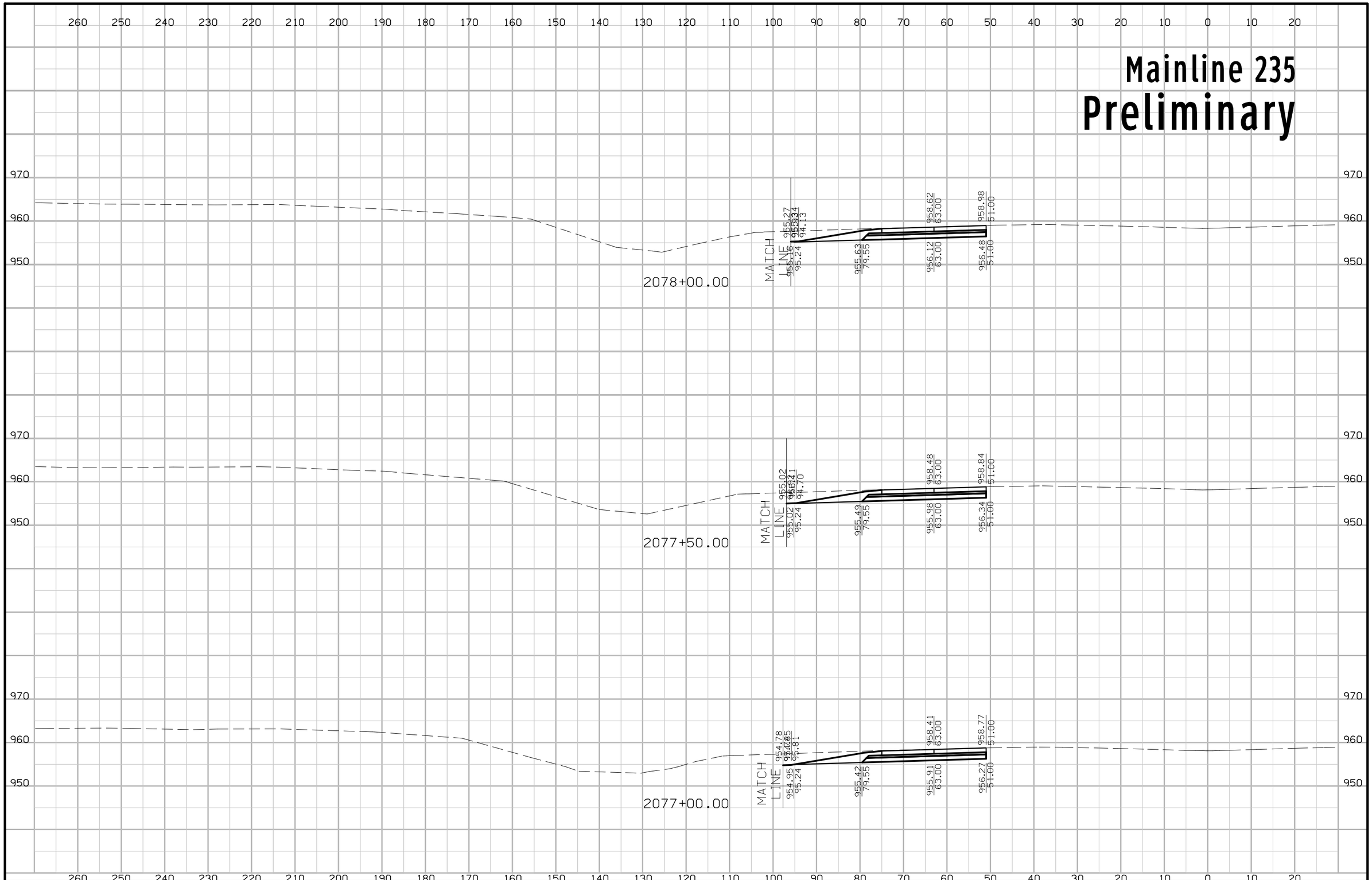
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.261

5:26:33 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

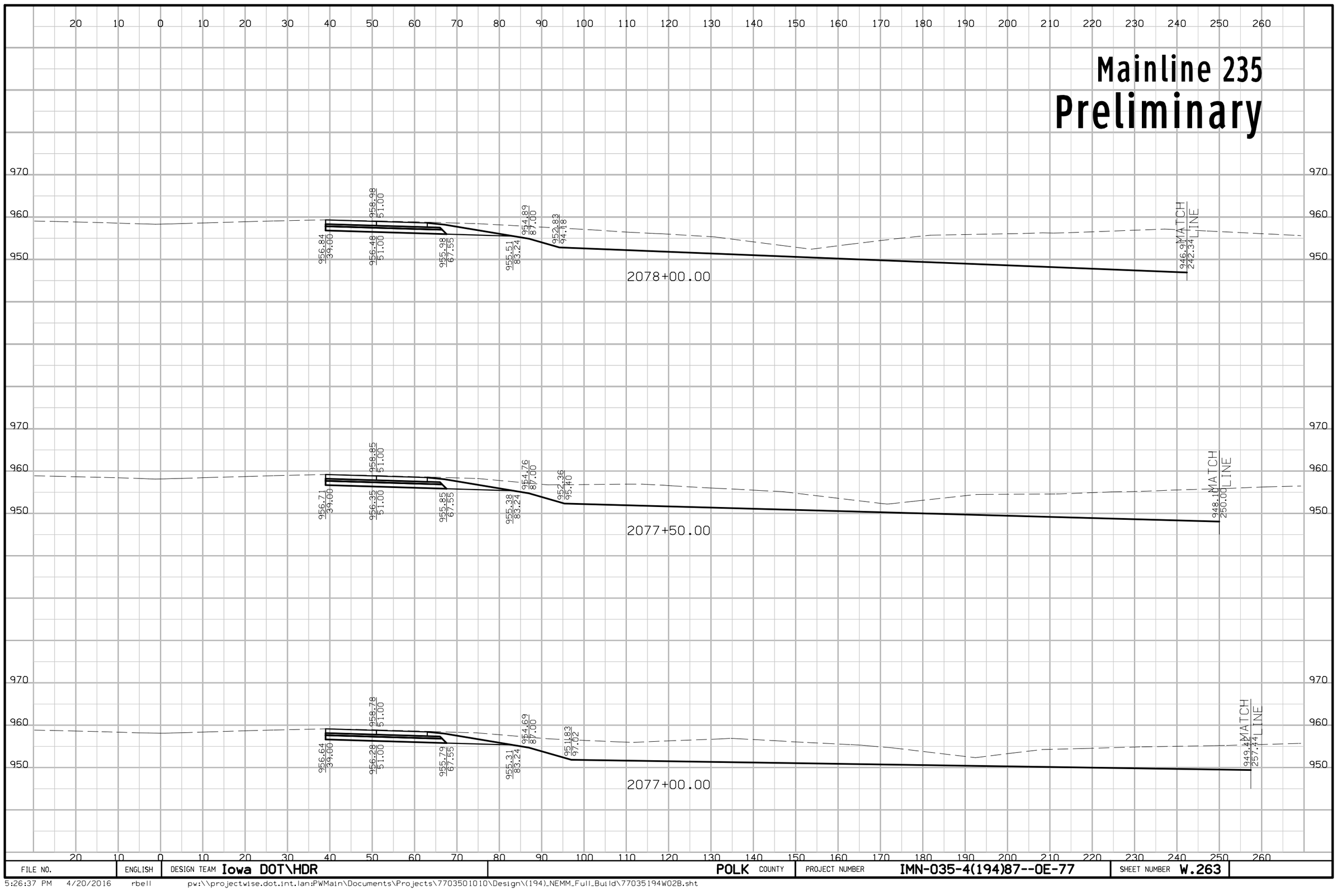
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.262

5:26:35 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

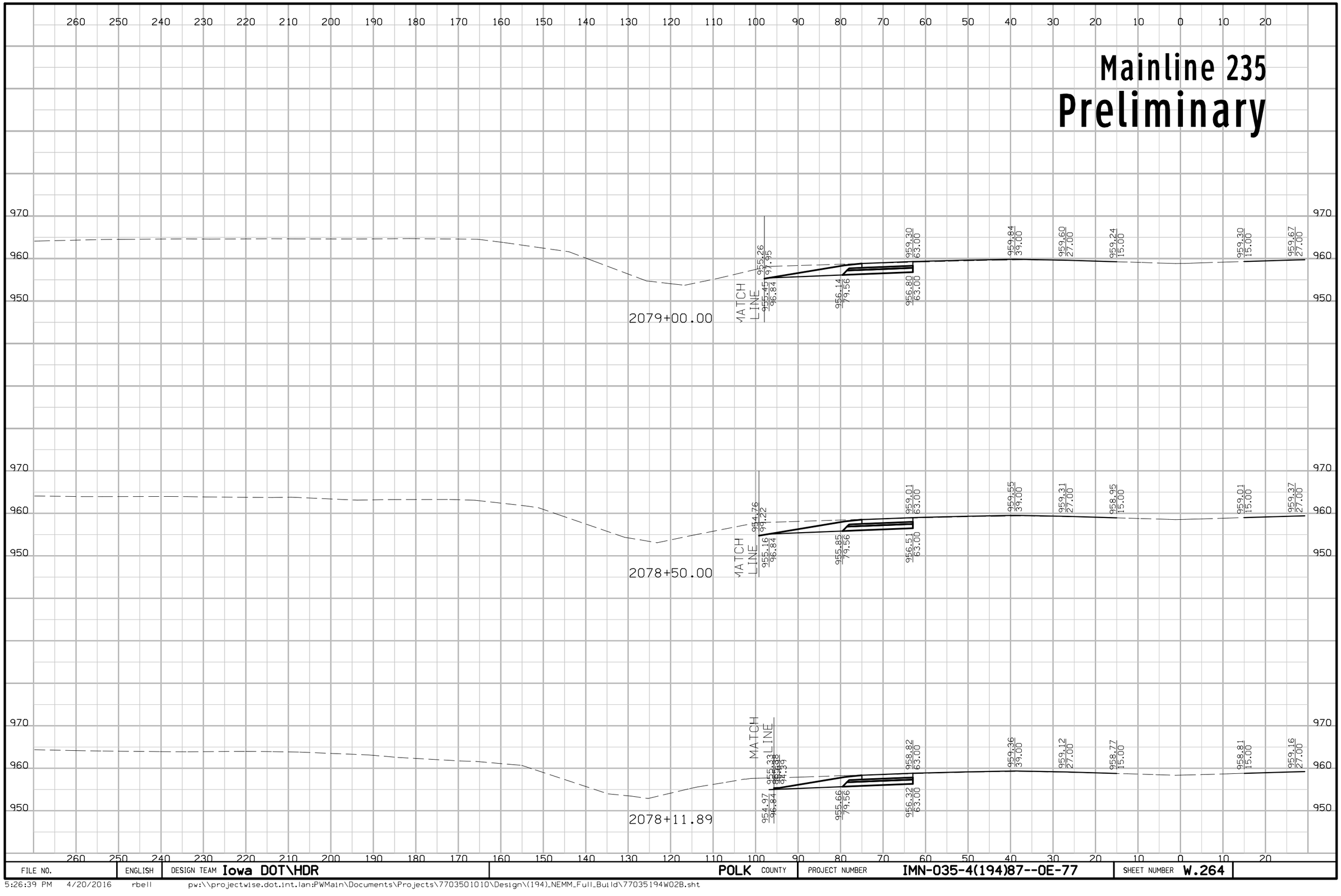
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.263

5:26:37 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.264

5:26:39 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260

970
960
950

959.60 27.00
959.24 15.00
959.30 15.00
959.67 27.00
959.90 34.00
959.66 51.00
957.16 51.00
956.50 67.56
955.81 84.84
950.72 115.40

2079+00.00

946.10 MATCH LINE 230.75

959.31 27.00
958.95 15.00
959.01 15.00
959.37 27.00
959.61 39.00
959.37 51.00
956.87 51.00
956.21 67.56
955.52 84.84
951.66 107.96

2078+50.00

946.50 MATCH LINE 236.86

959.12 27.00
958.77 15.00
958.81 15.00
959.16 27.00
959.41 39.00
959.17 51.00
956.67 51.00
956.00 67.56
955.31 84.84
952.35 102.60

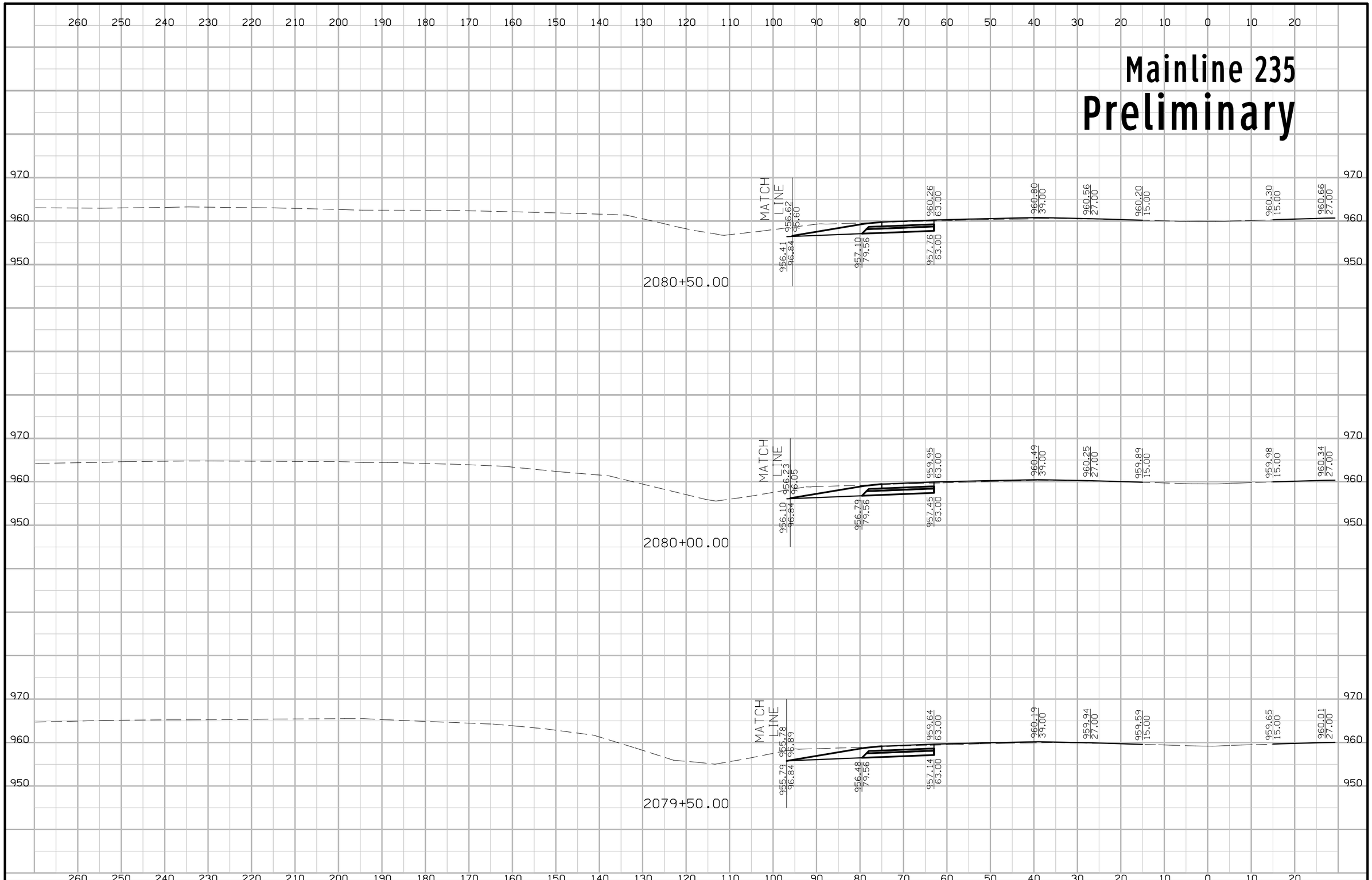
2078+11.89

946.80 MATCH LINE 241.10

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.265

5:26:41 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

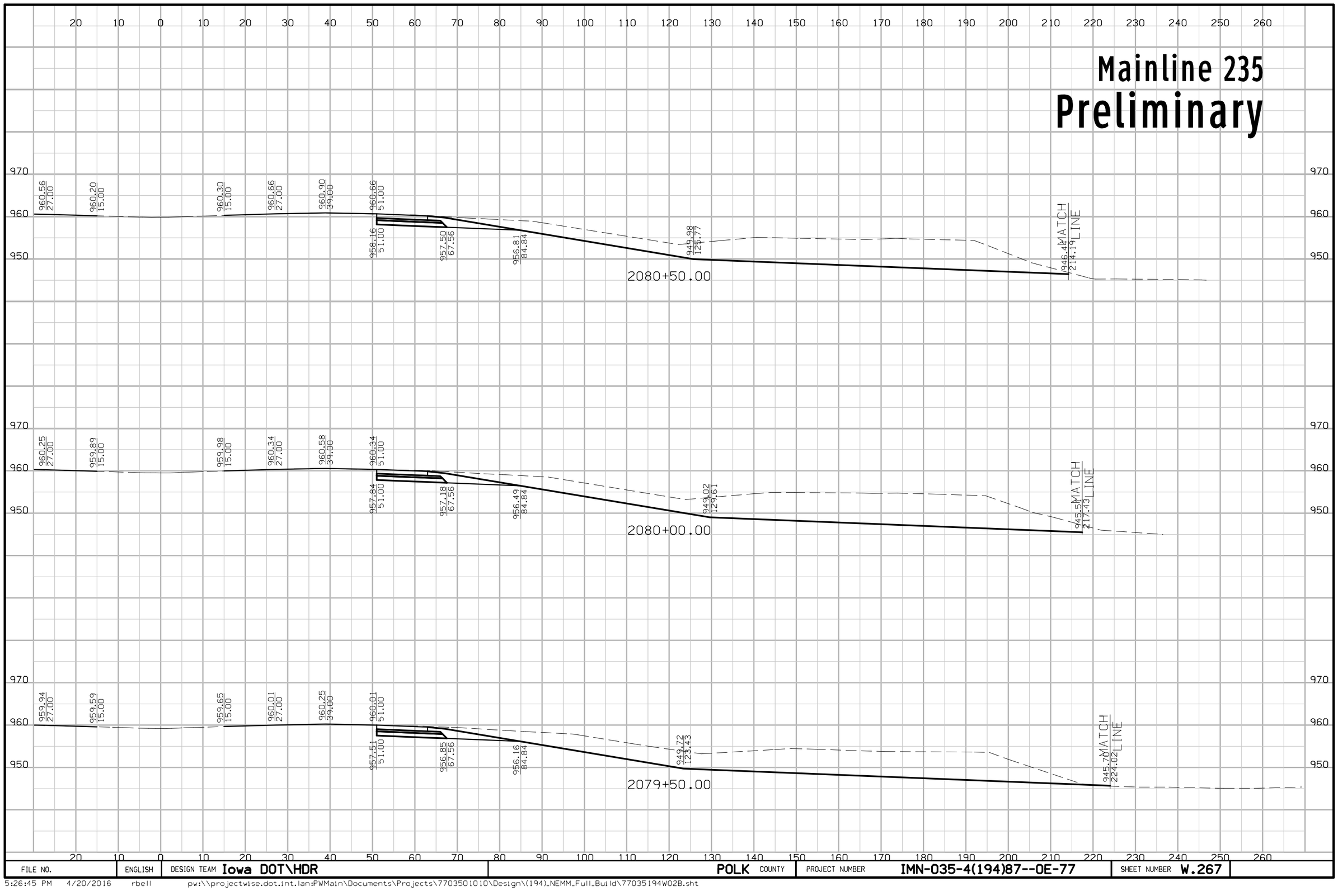
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.266

5:26:43 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

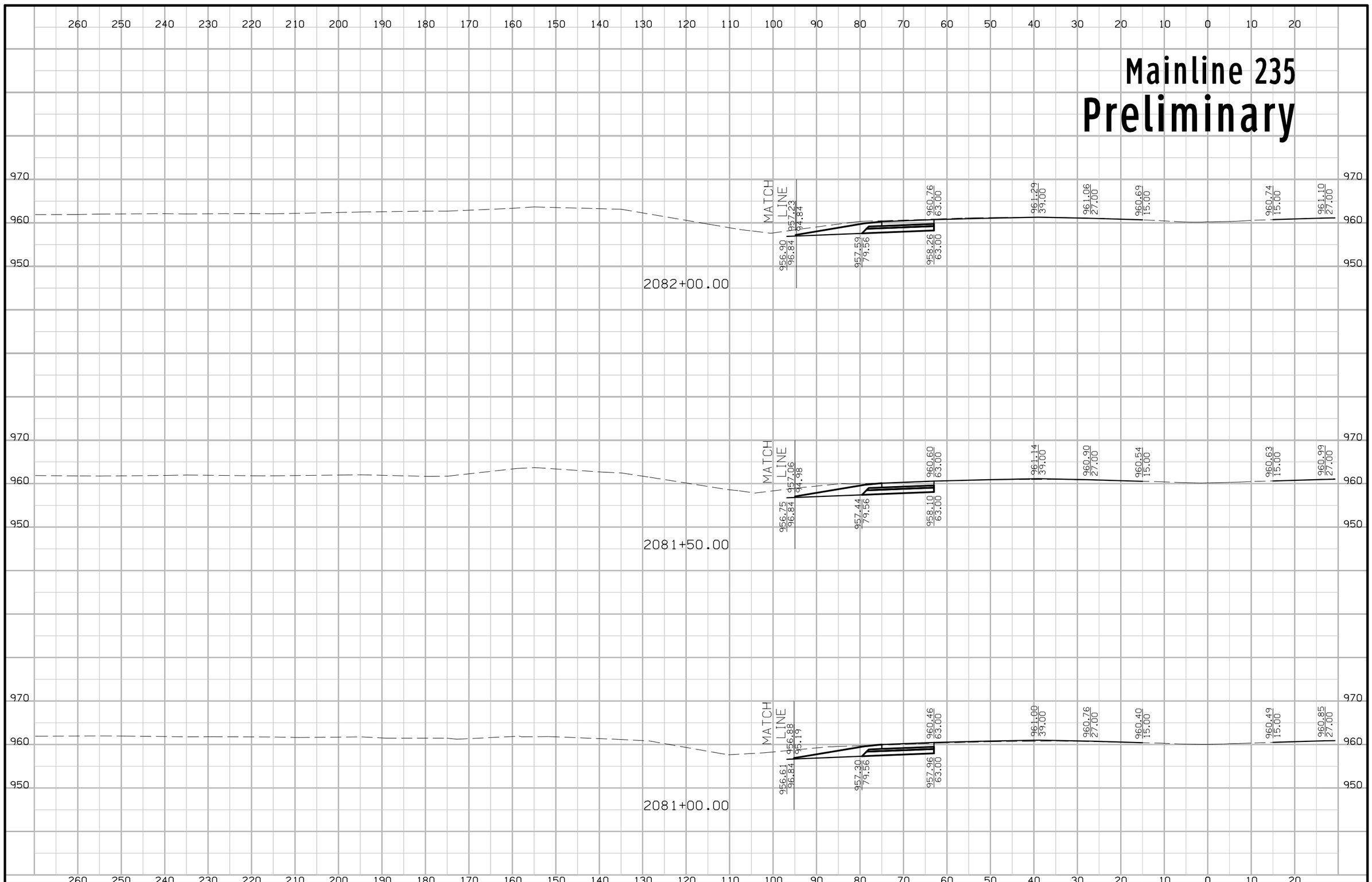
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.267

5:26:45 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

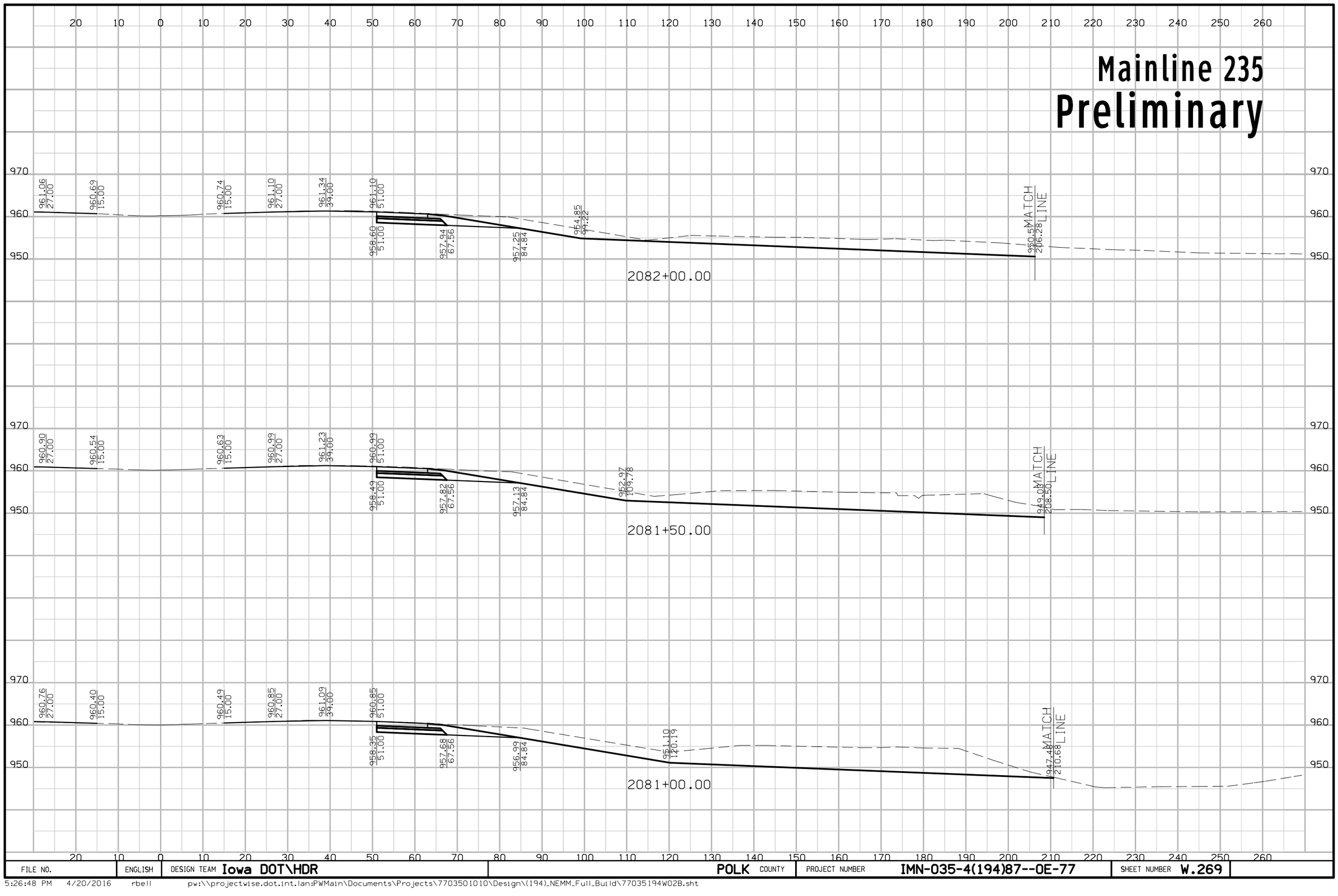
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.268

5:26:47 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

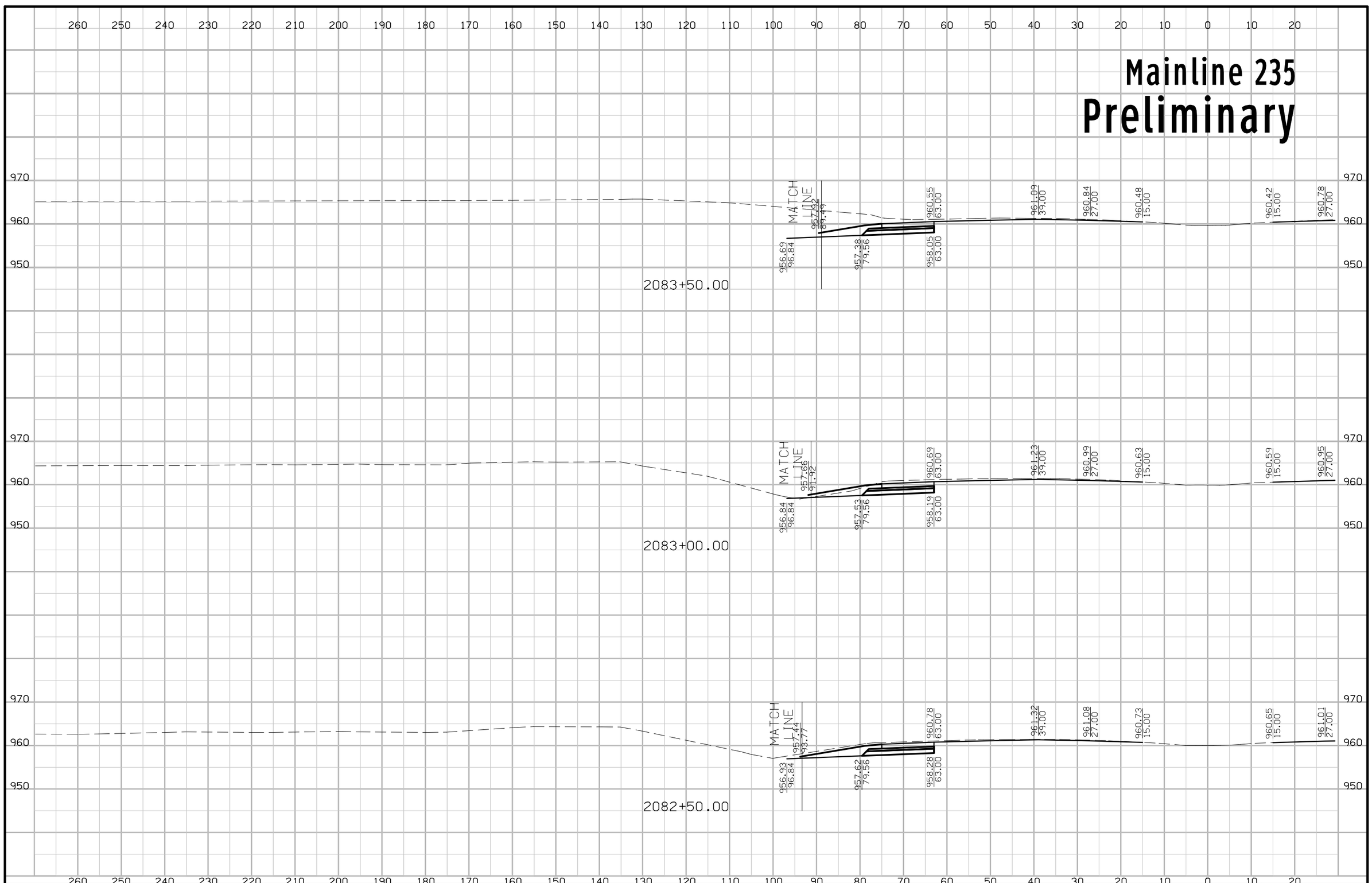
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.269

5:26:48 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

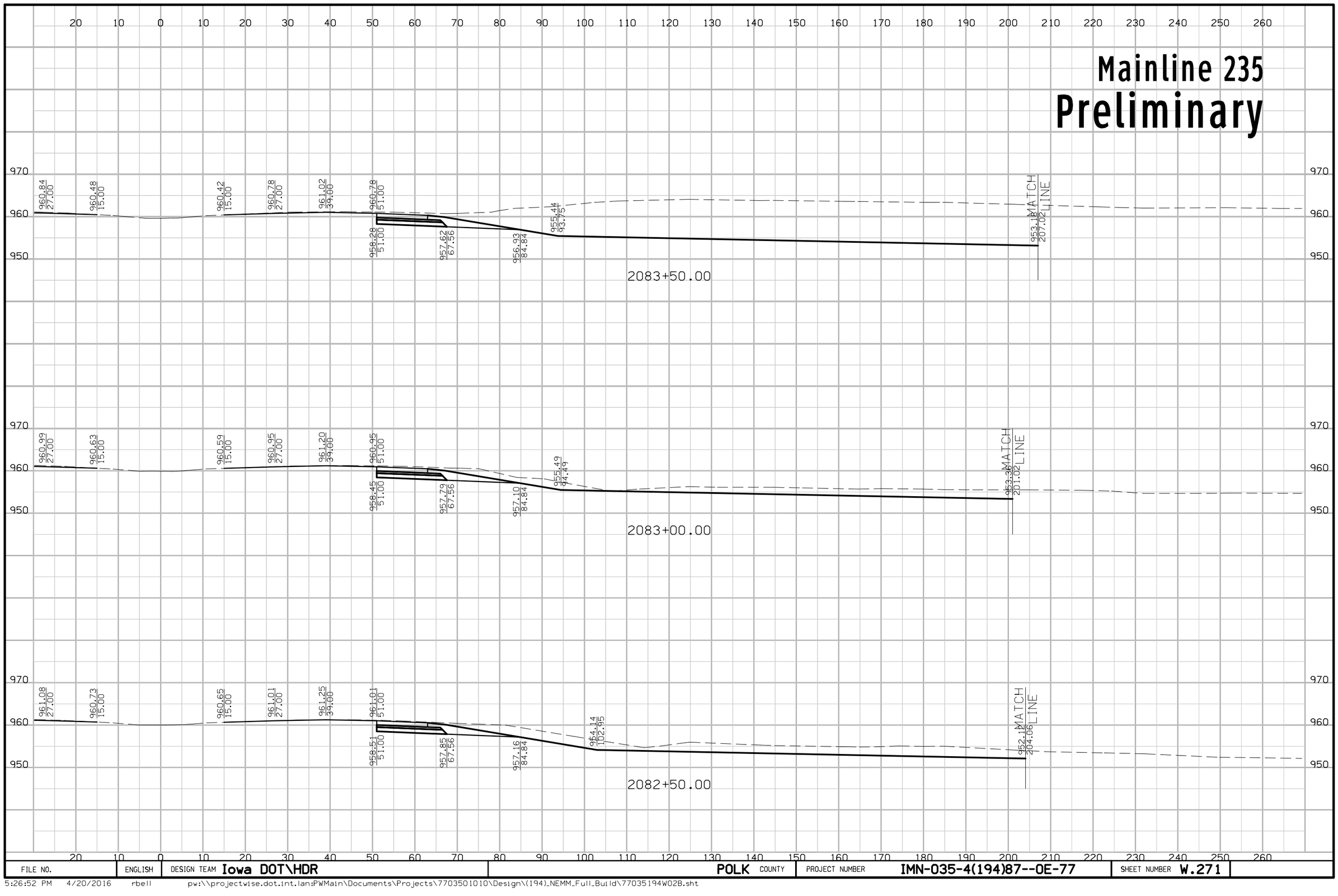
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.270

5:26:50 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

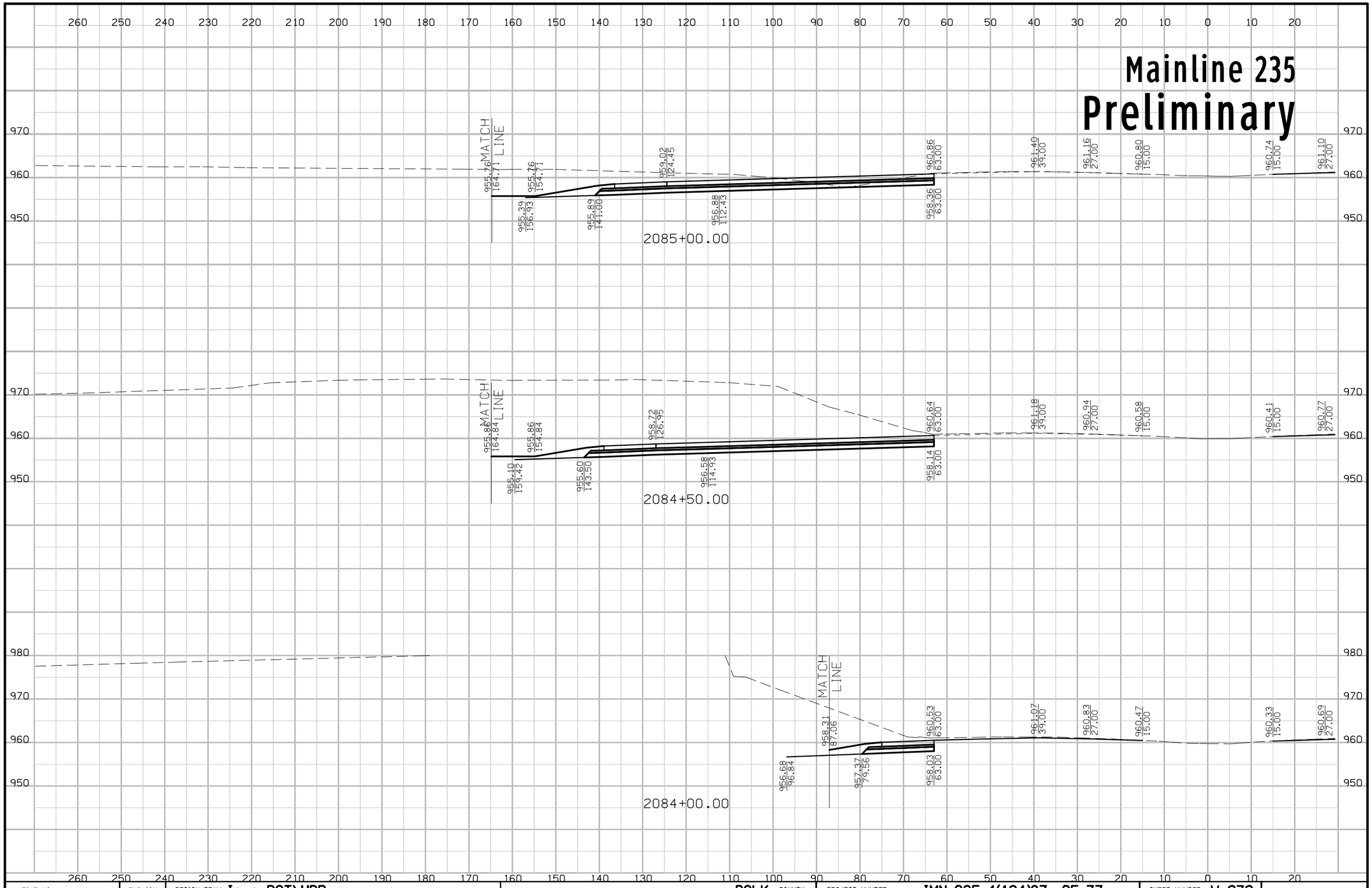
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.271

5:26:52 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

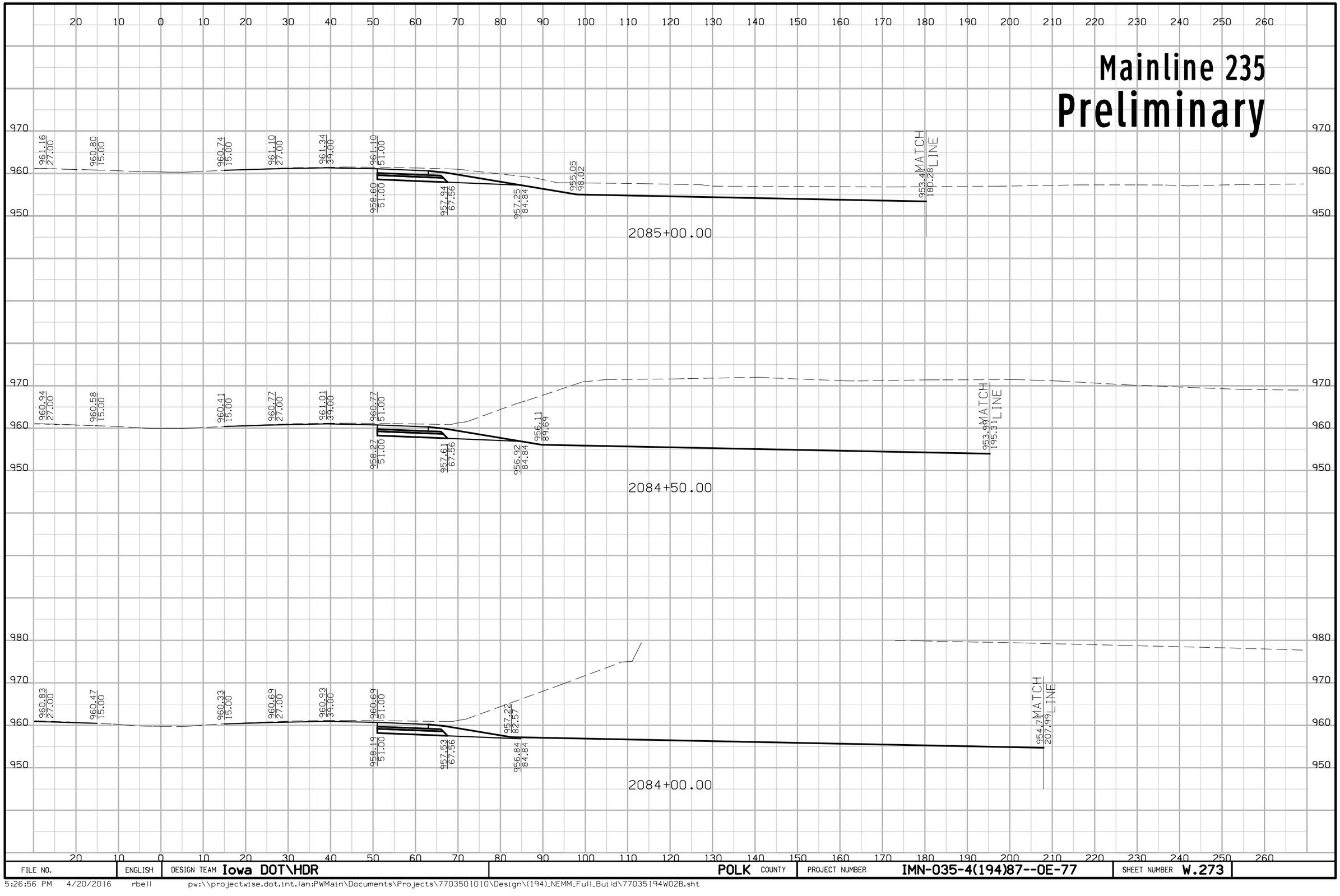
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.272

5:26:54 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

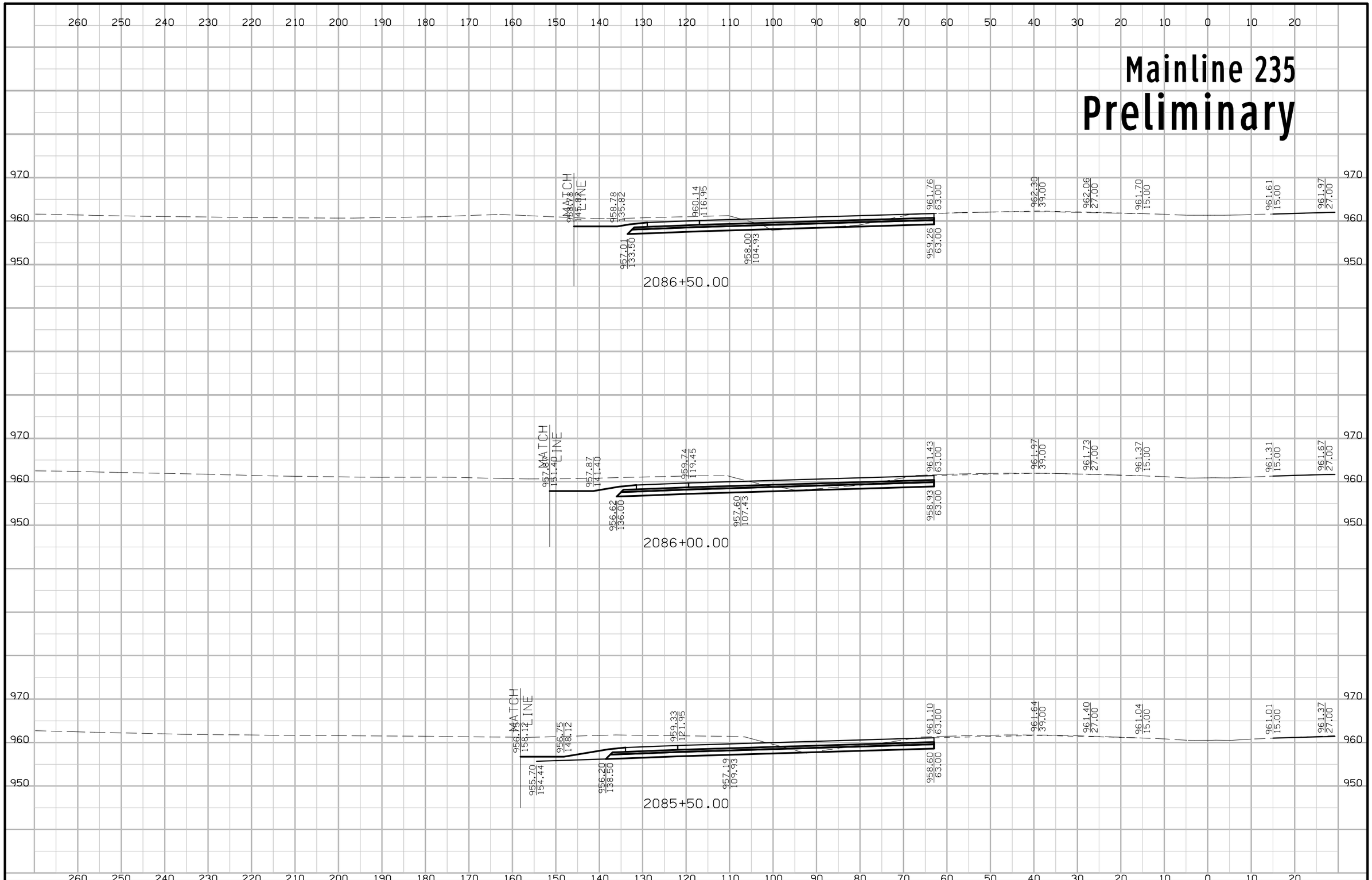
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.273

5:26:56 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

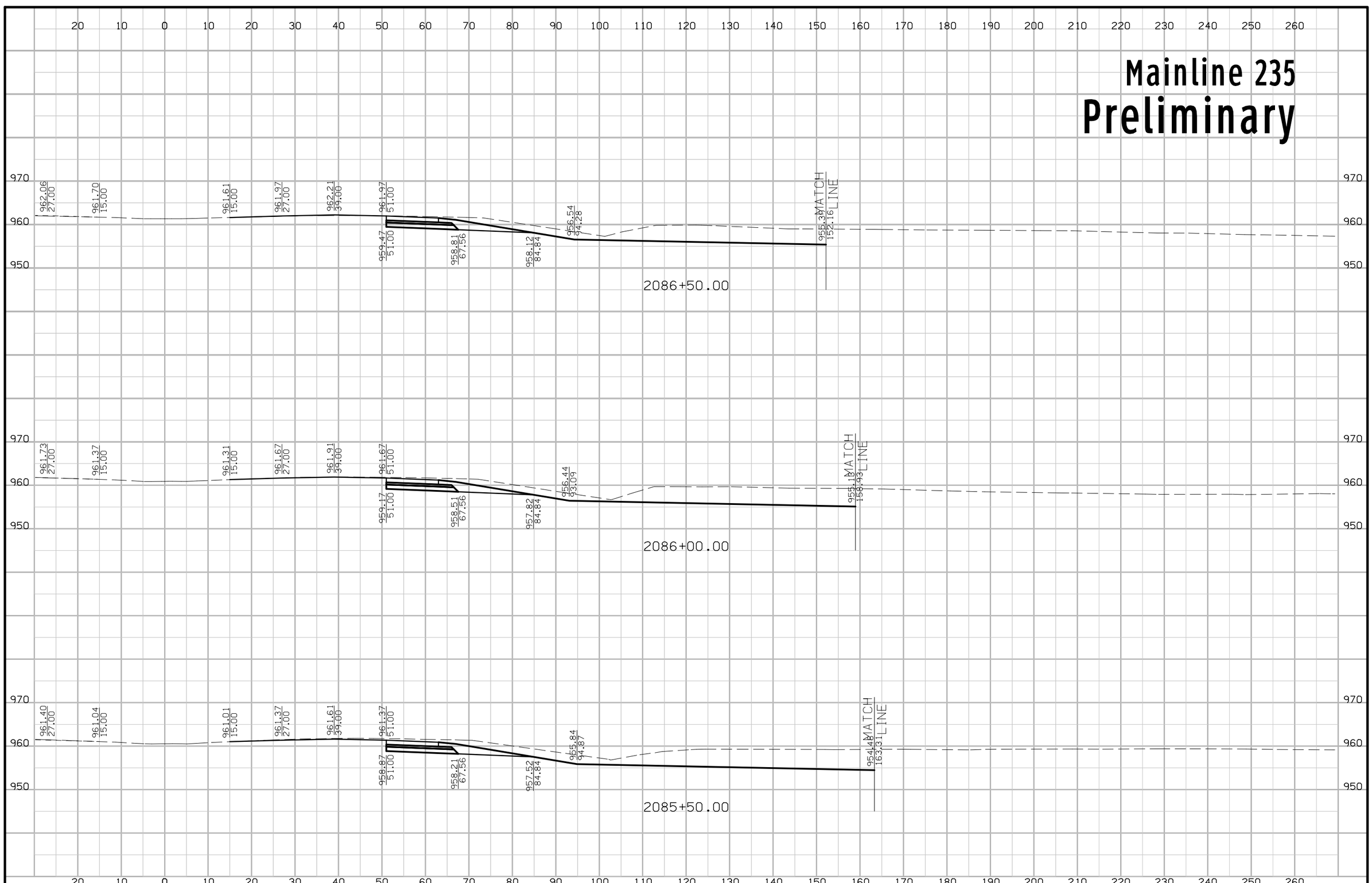
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.274

5:26:58 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

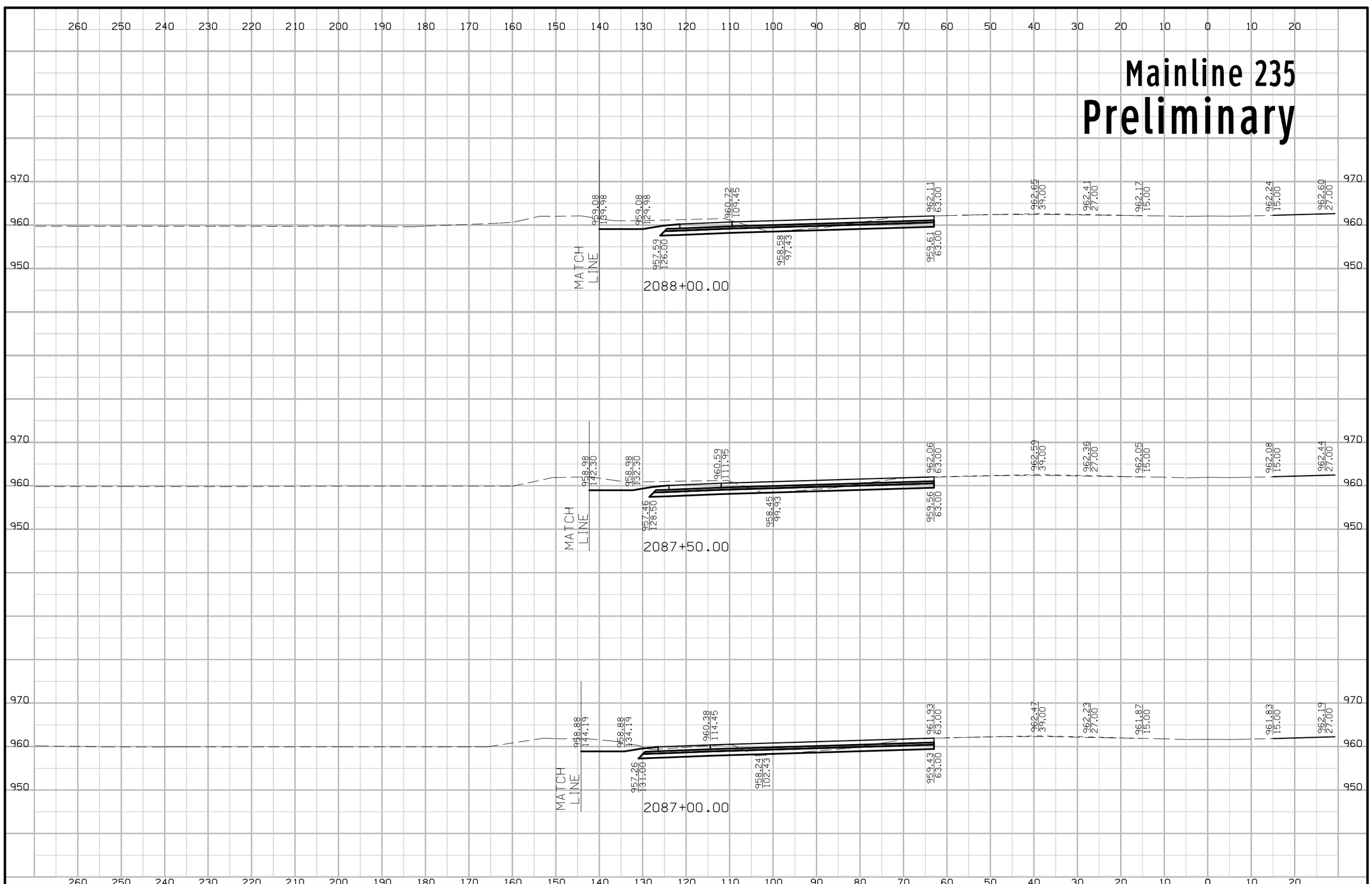
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.275

5:27:00 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

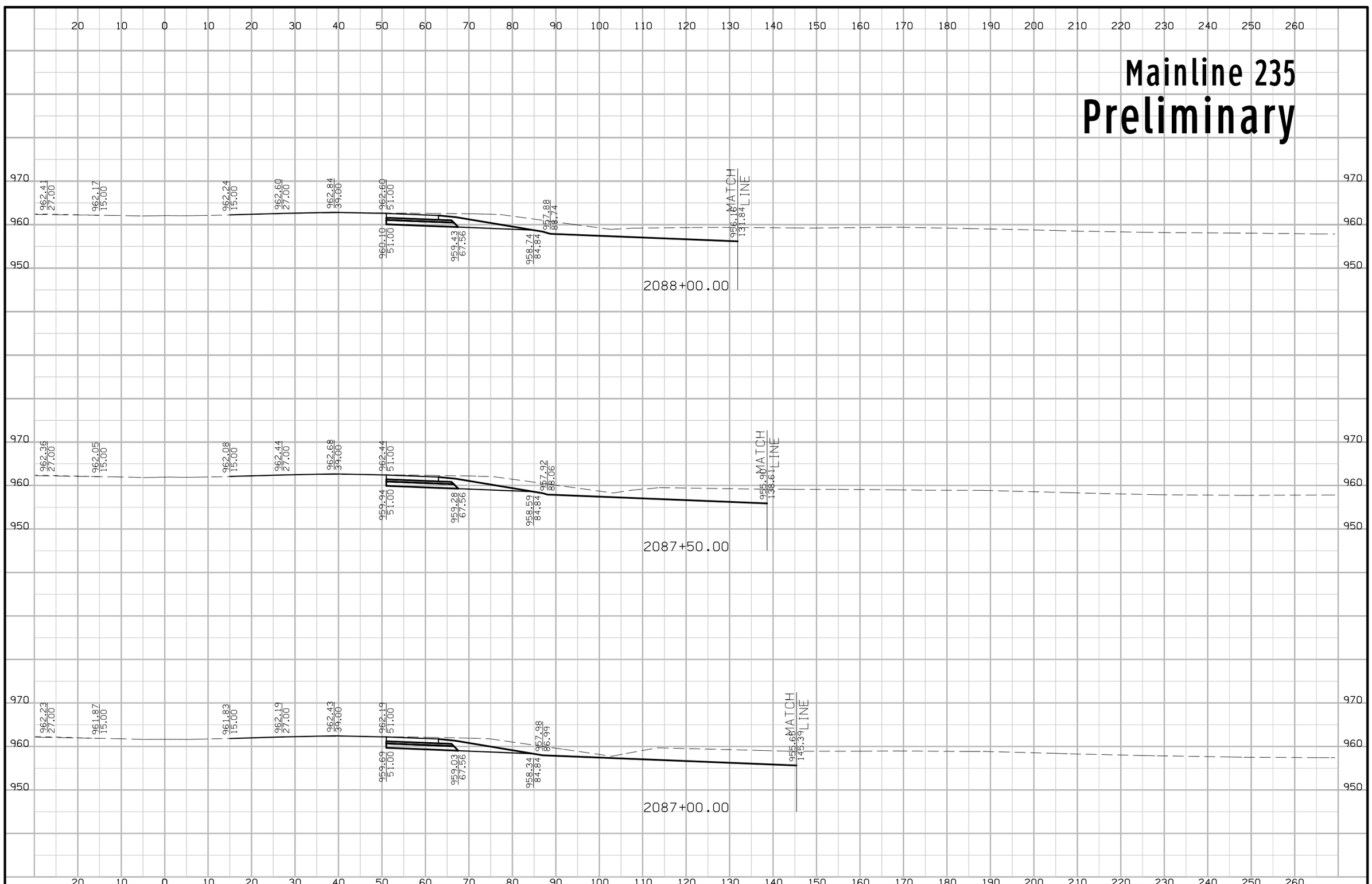
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.276

5:27:02 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.277

5:27:04 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20

970
960
950

959.29
123.82

960.65
101.95

958.51
89.93

961.81
63.00

959.31
63.00

962.35
39.00

962.30
27.00

962.25
15.00

962.30
15.00

962.66
27.00

MATCH LINE

2089+50.00

959.35
129.94

960.71
104.45

957.59
121.00

958.57
92.43

961.96
63.00

959.46
63.00

962.50
39.00

962.38
27.00

962.26
15.00

962.36
15.00

962.72
27.00

MATCH LINE

2089+00.00

959.36
185.82

960.72
106.95

957.60
123.50

958.58
94.93

962.04
63.00

959.54
63.00

962.58
39.00

962.40
27.00

962.22
15.00

962.30
15.00

962.66
27.00

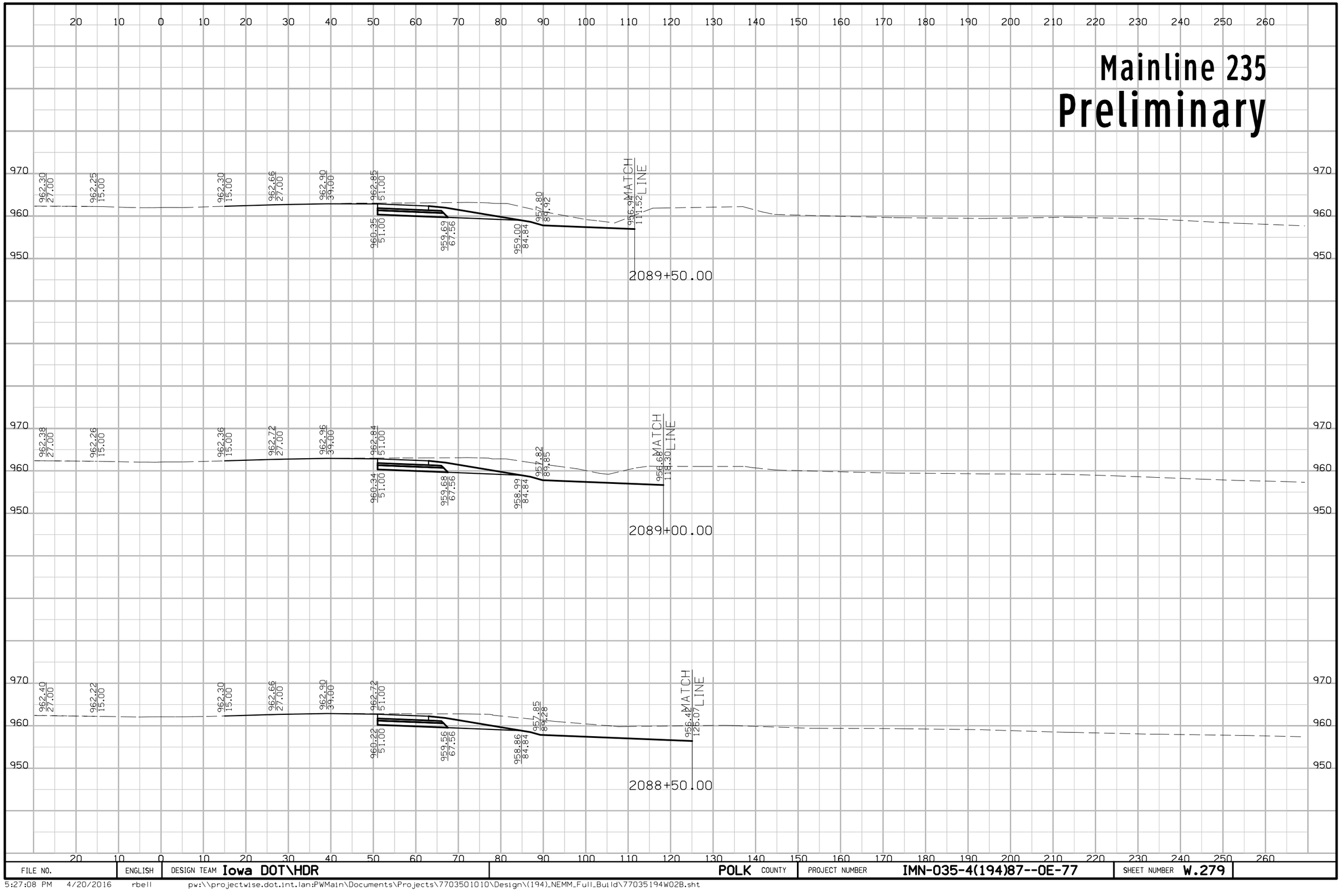
2088+50.00

260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.278

5:27:06 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.279

5:27:08 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20

970
960
950

958.99
113.73

960.07
96.48

961.08
63.00

957.93
84.46

958.58
63.00

961.62
39.00

961.70
27.00

961.78
15.00

961.83
15.00

962.19
27.00

MATCH LINE

2090+89.42

970
960
950

959.03
114.42

960.15
96.95

961.17
63.00

958.01
84.93

958.67
63.00

961.71
39.00

961.78
27.00

961.85
15.00

961.87
15.00

962.23
27.00

2090+50.00

970
960
950

959.14
118.50

960.52
99.45

961.62
63.00

958.38
87.43

959.12
63.00

962.16
39.00

962.17
27.00

962.17
15.00

962.16
15.00

962.52
27.00

MATCH LINE

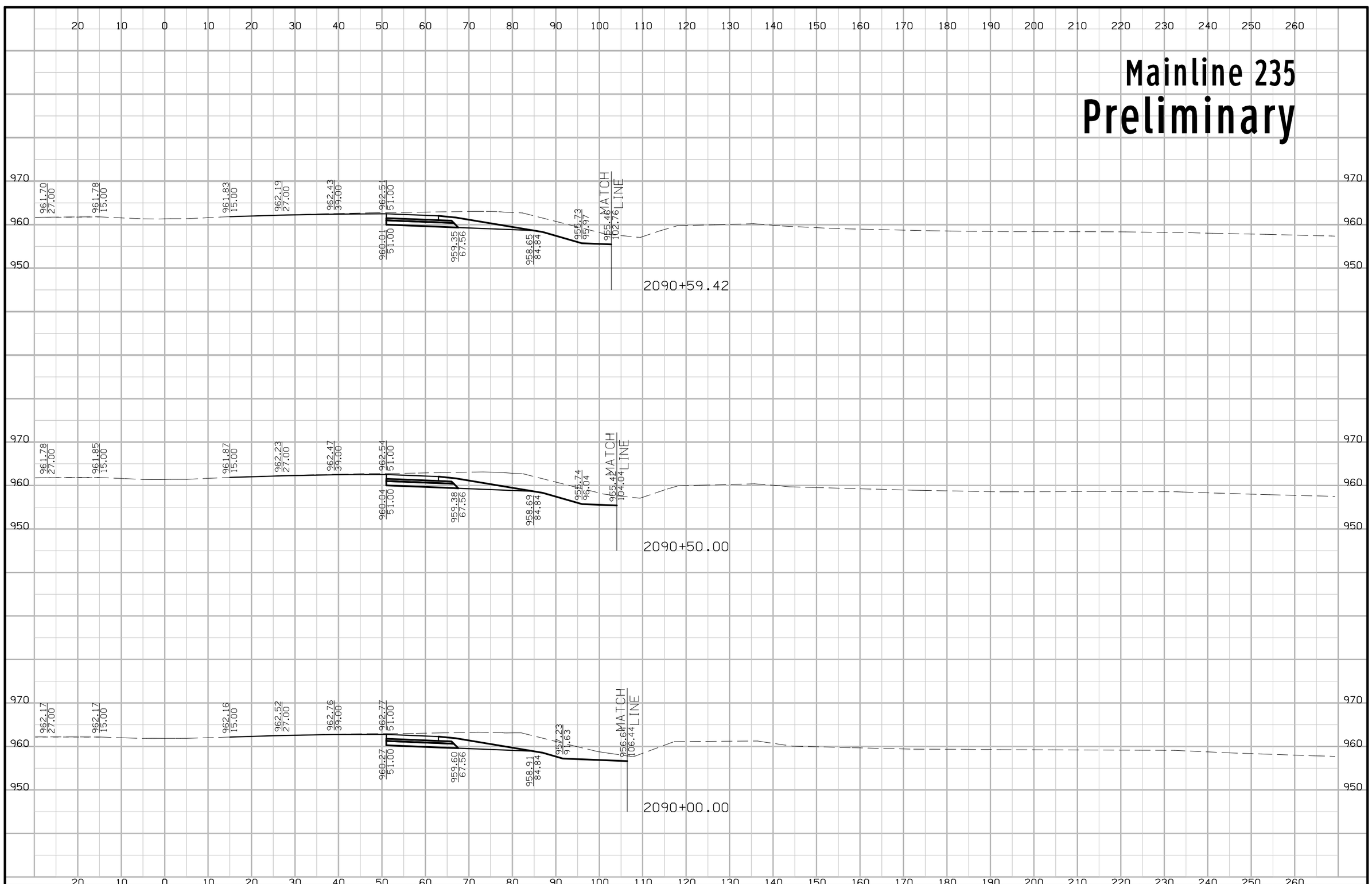
2090+00.00

260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.280

5:27:10 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

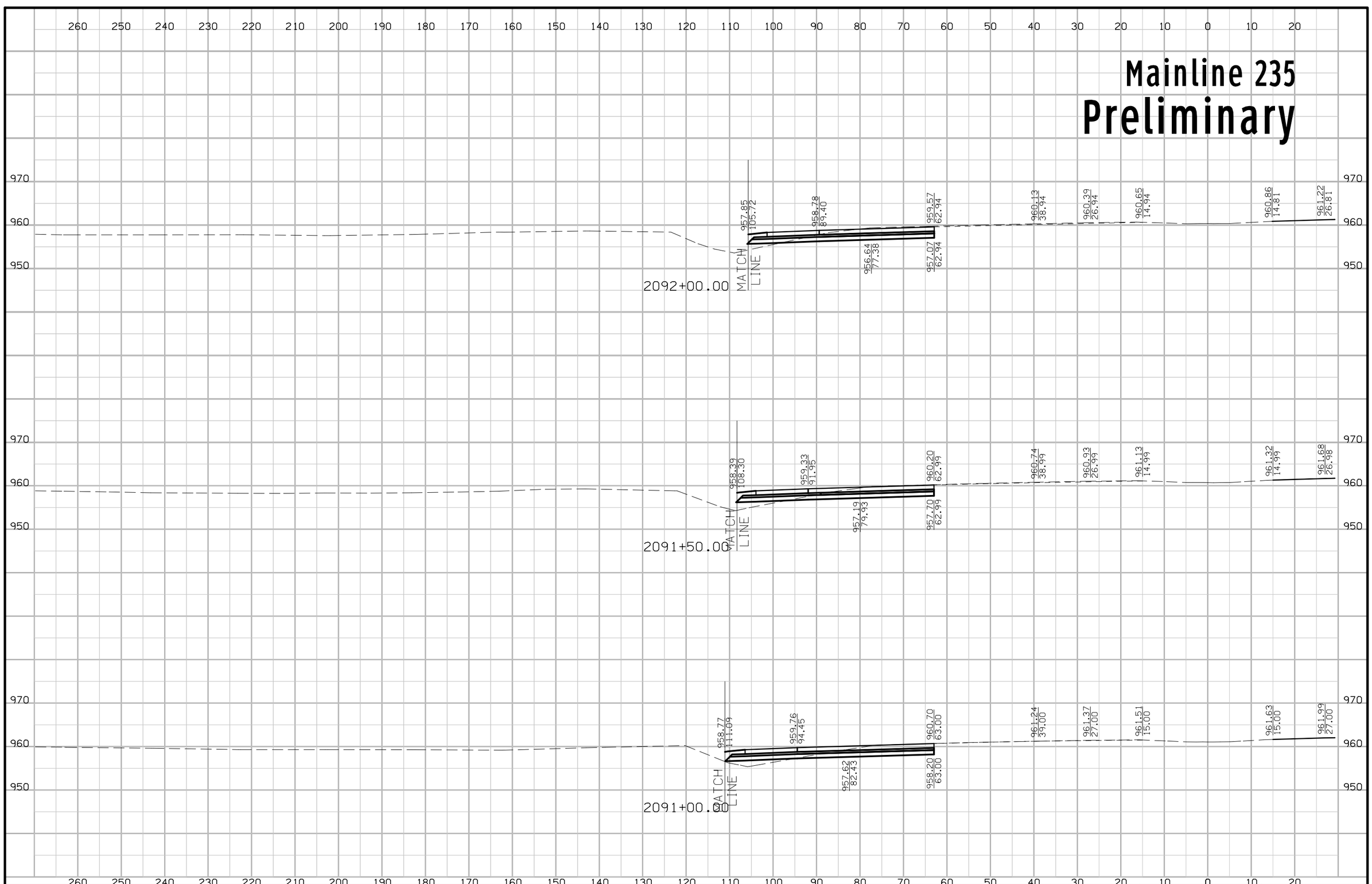
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.281

5:27:12 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

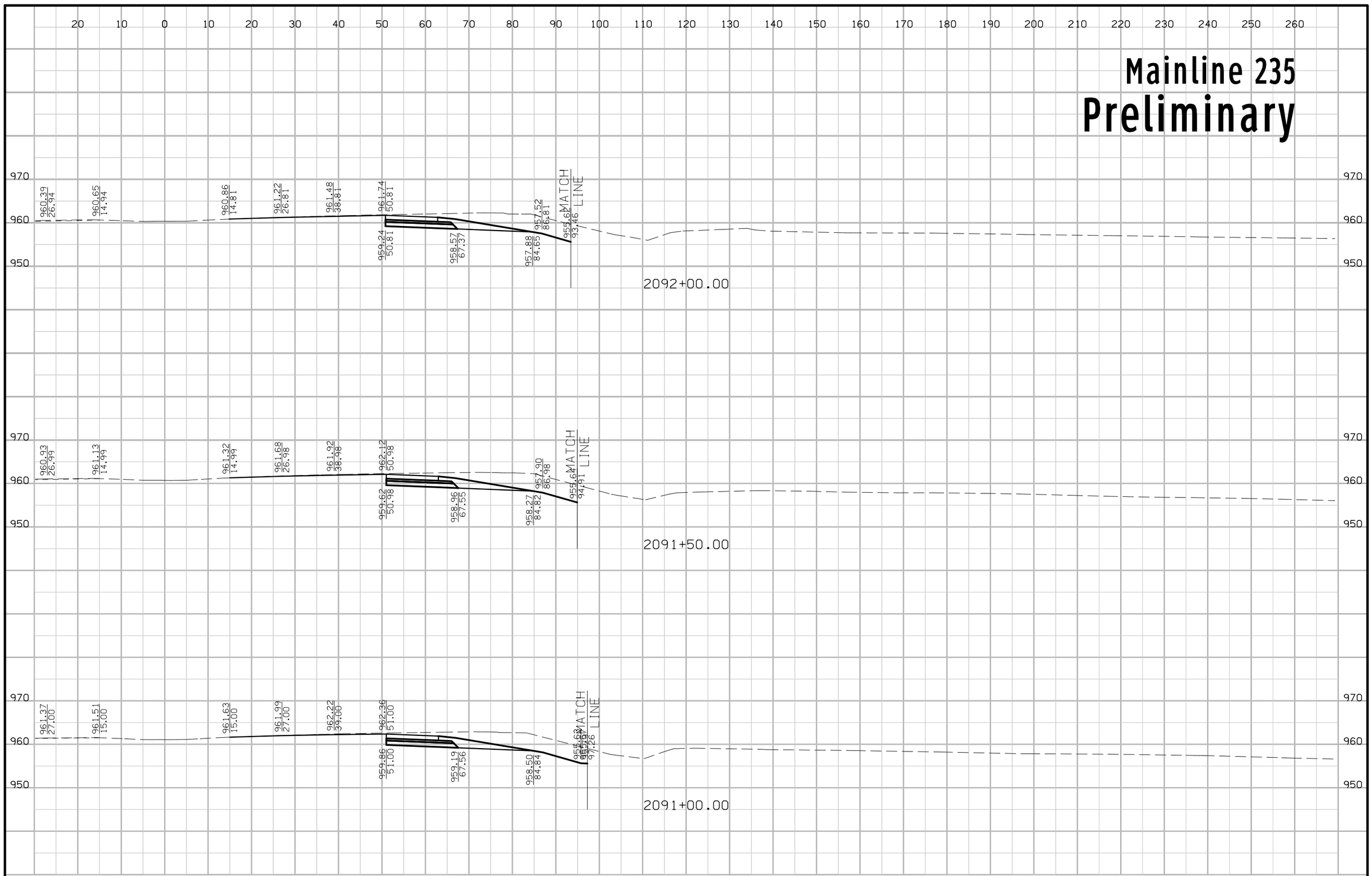
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.282

5:27:14 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

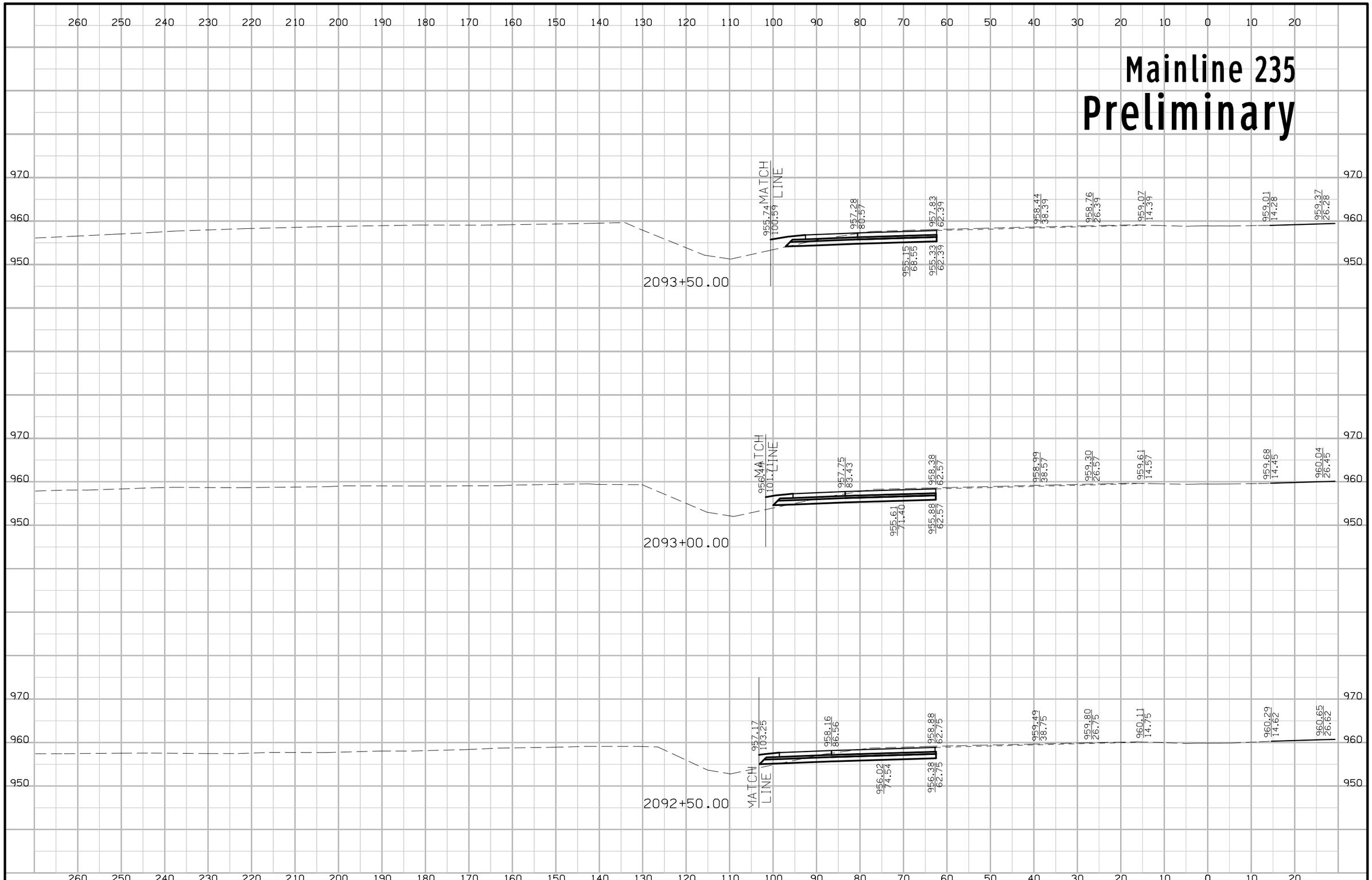
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.283

5:27:16 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

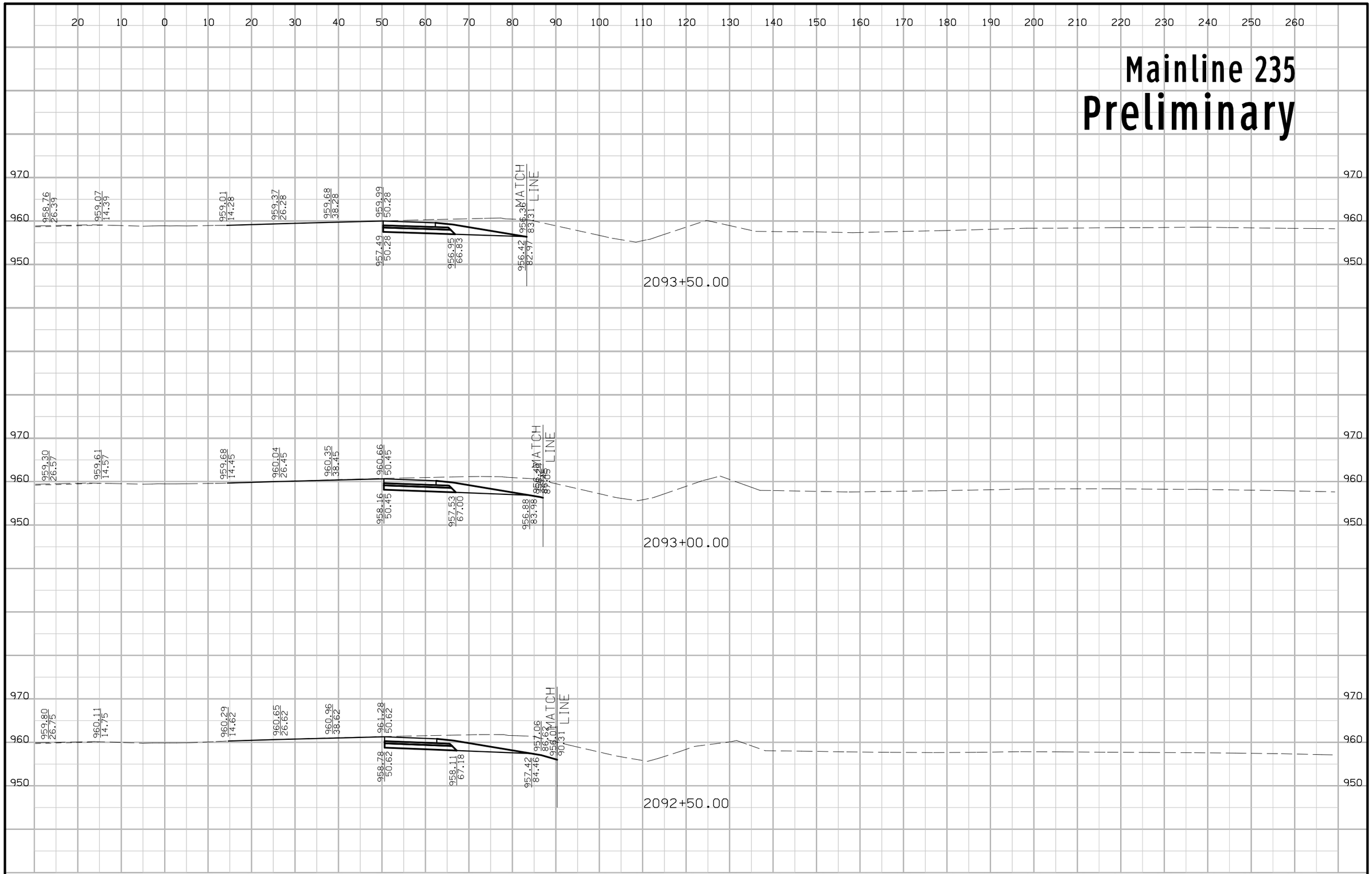
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.284

5:27:18 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

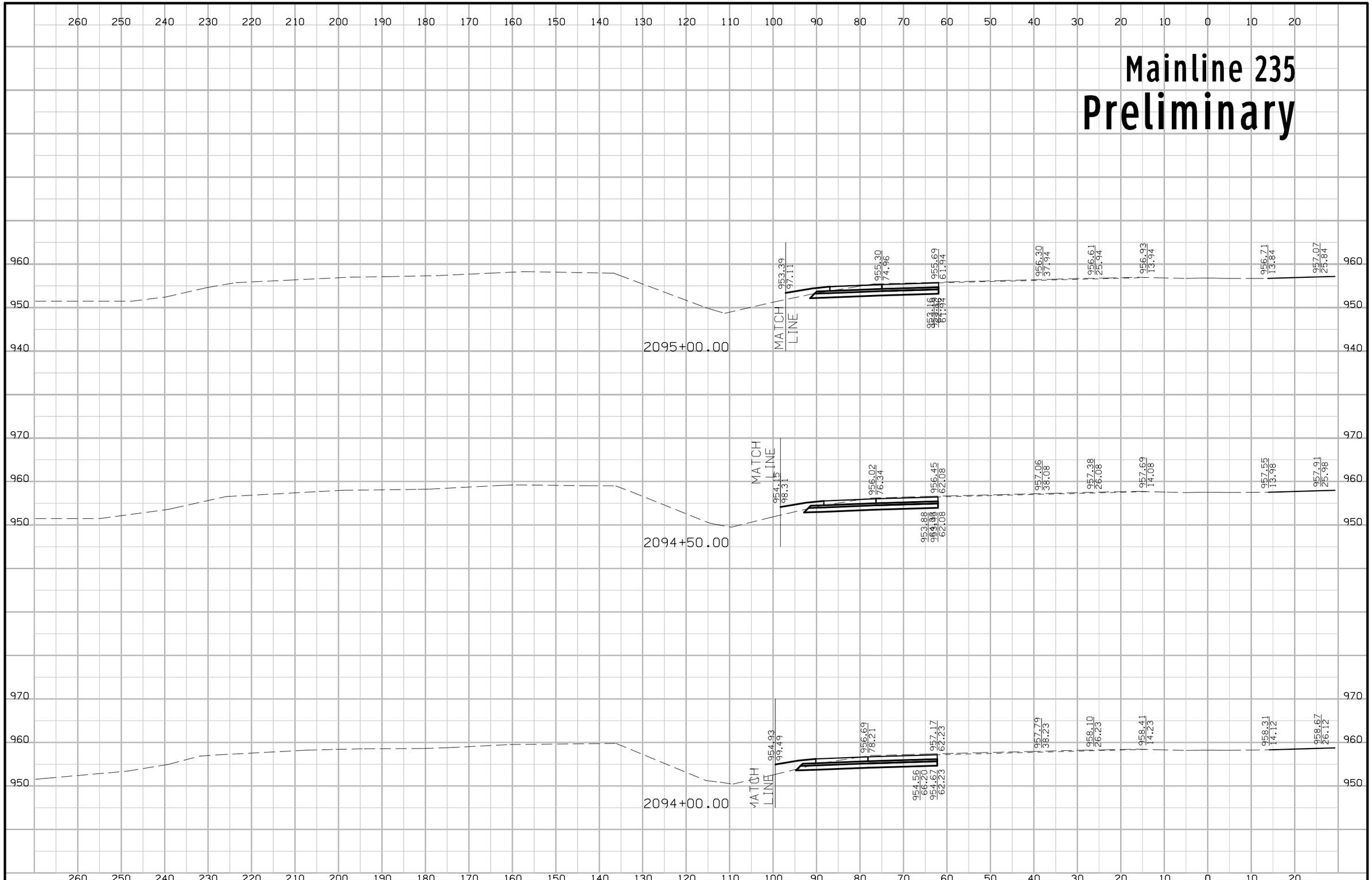
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.285

5:27:20 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

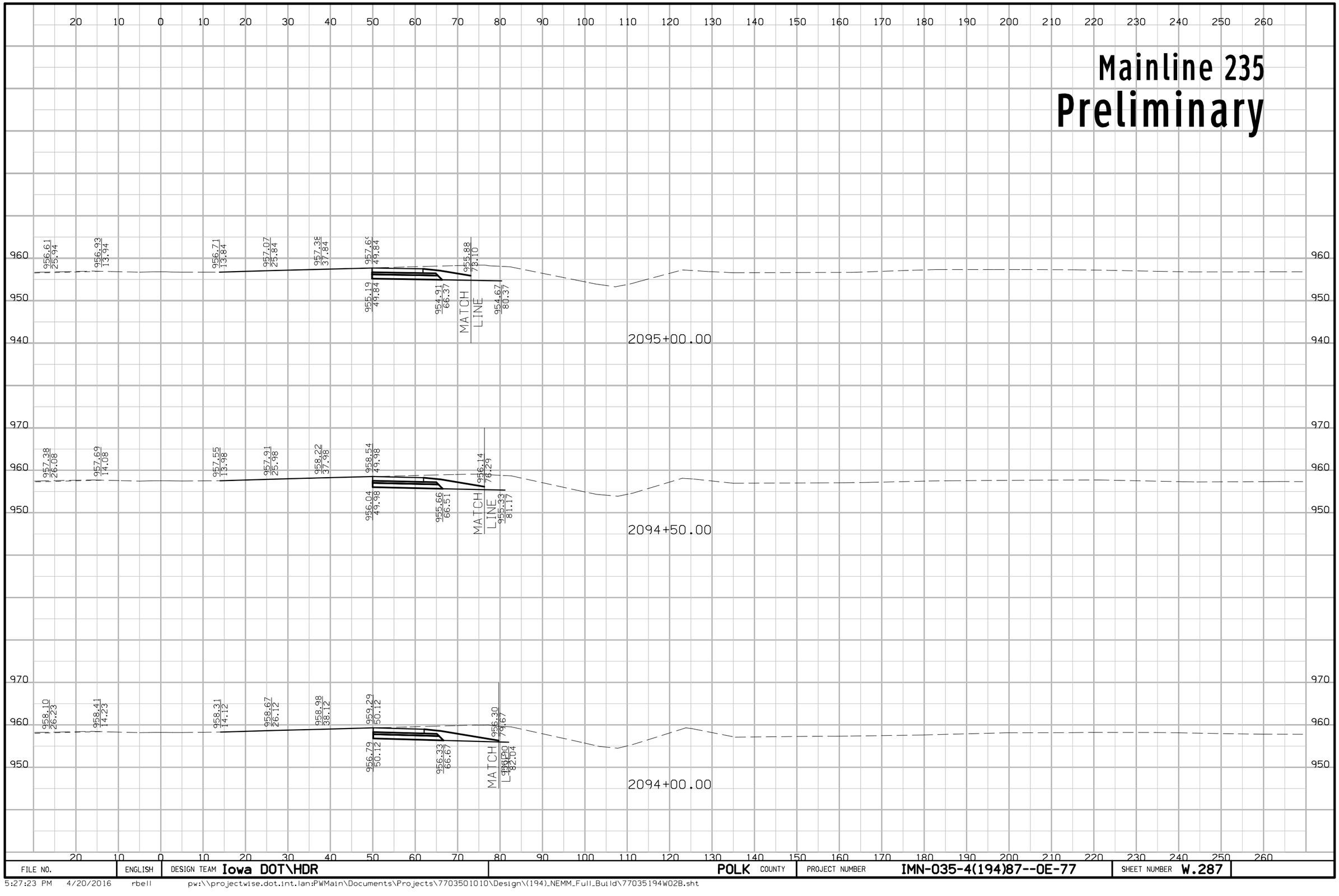
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.286

5:27:22 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

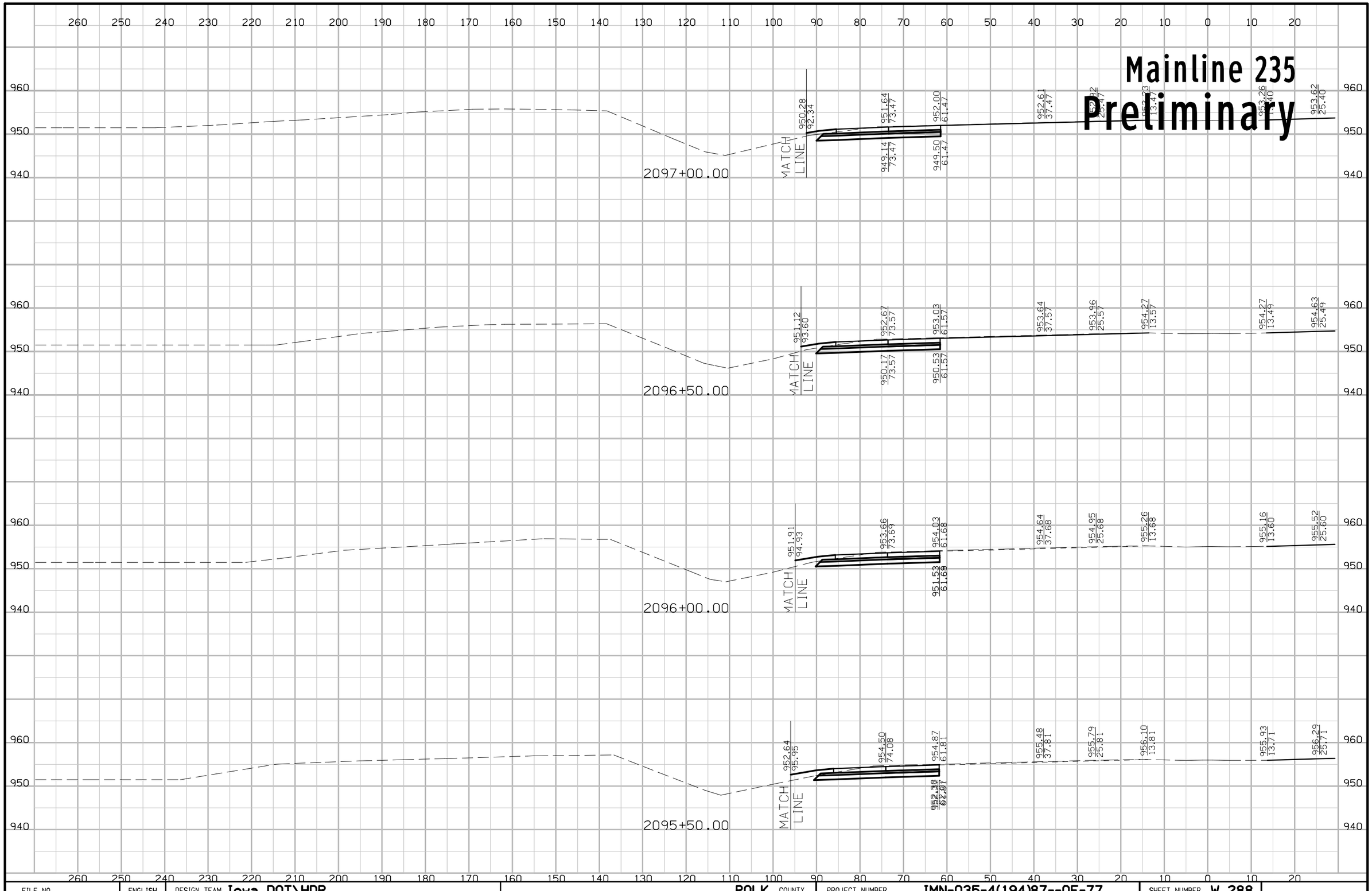


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.287

5:27:23 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235

Preliminary

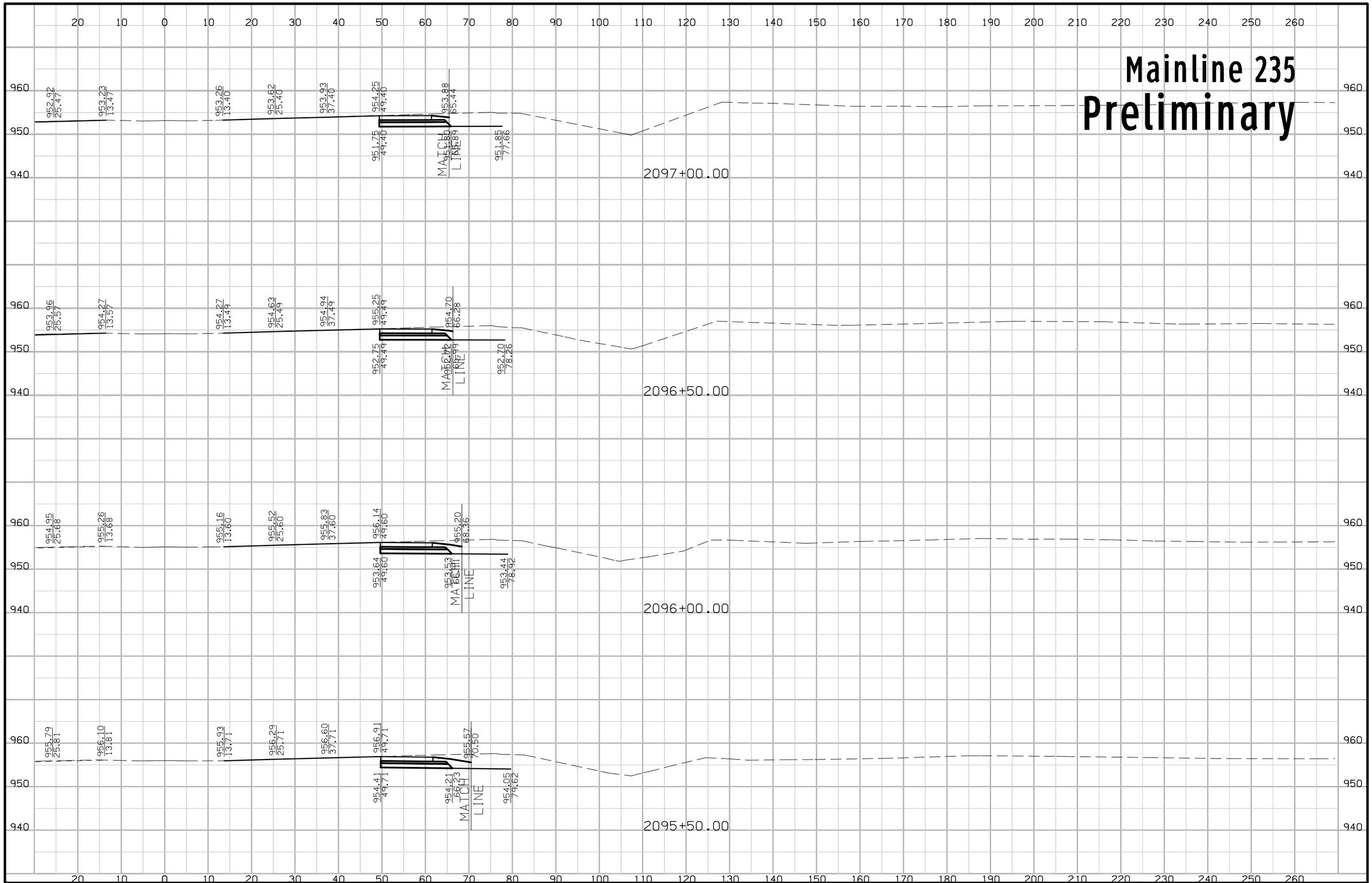


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.288

5:27:25 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235

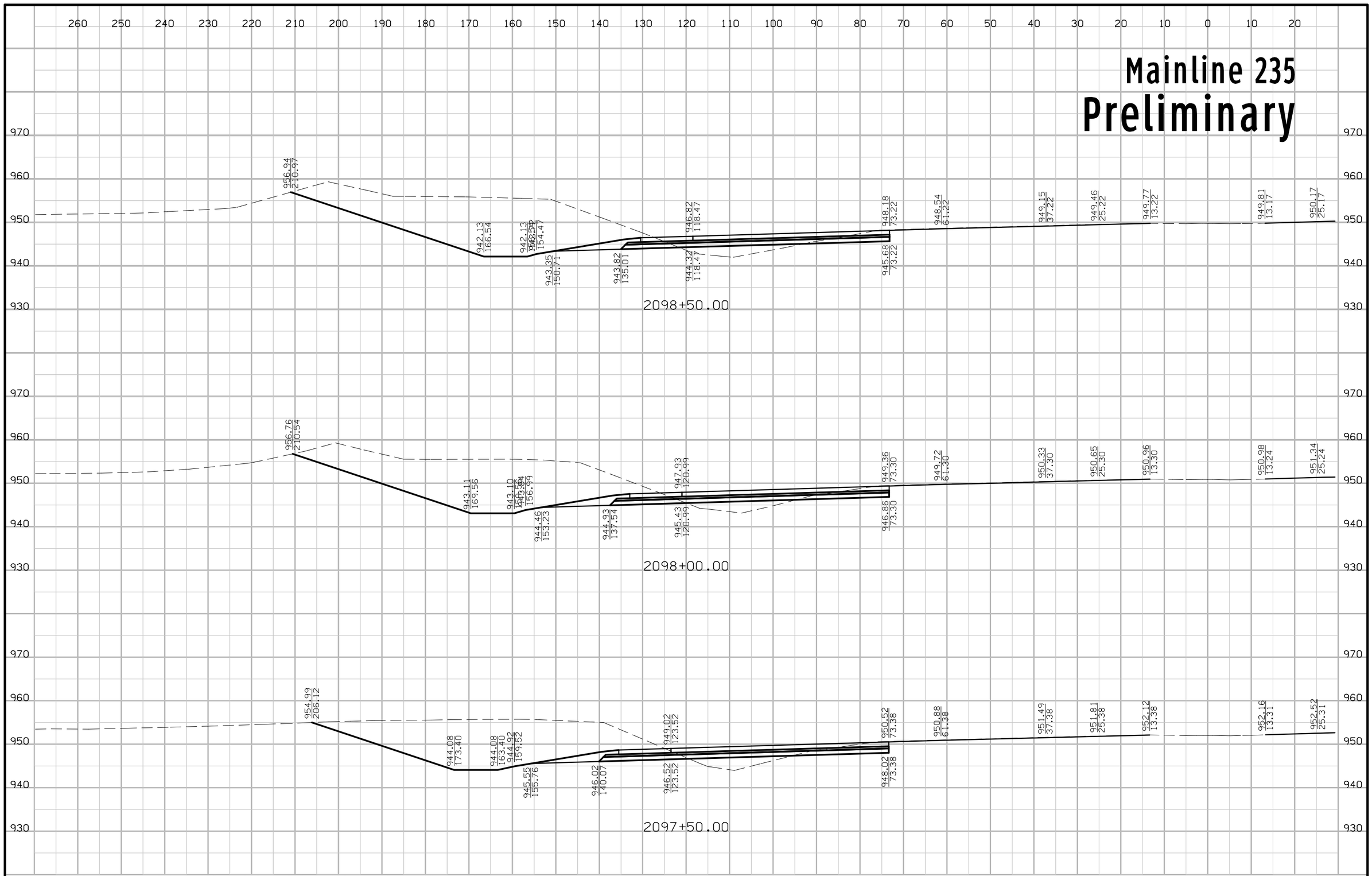
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.289

5:27:27 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

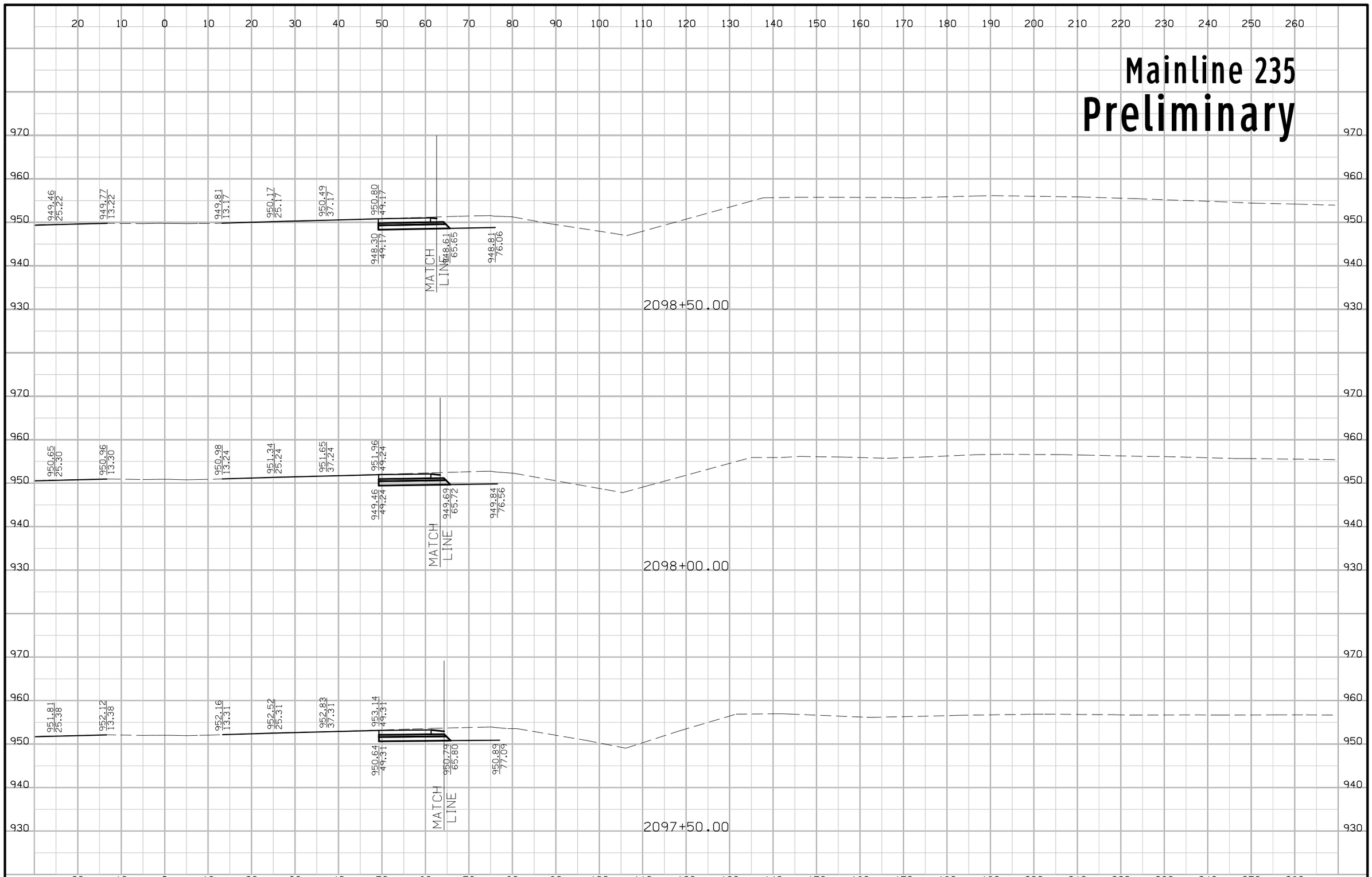
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.290

5:27:29 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

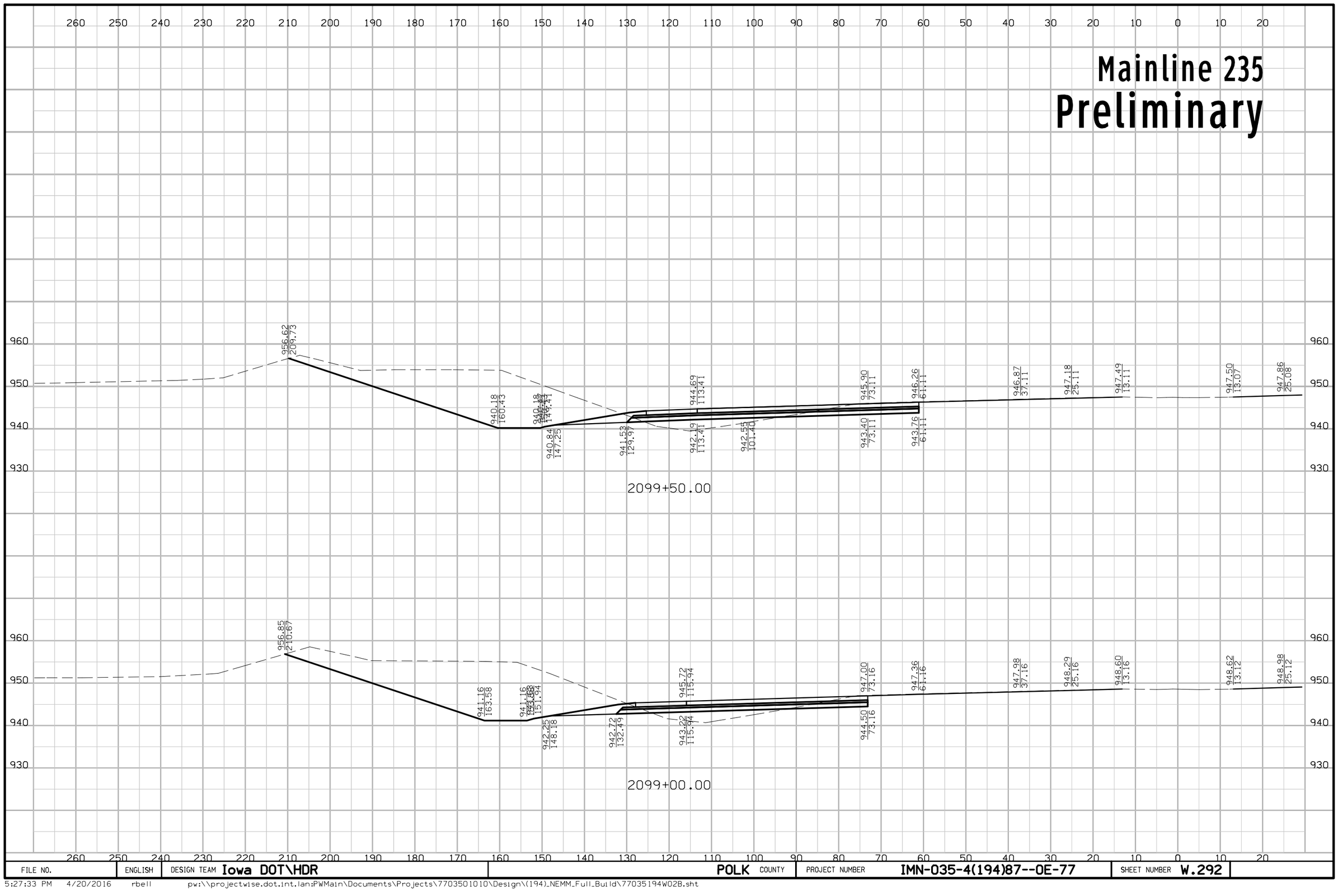
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.291

5:27:31 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

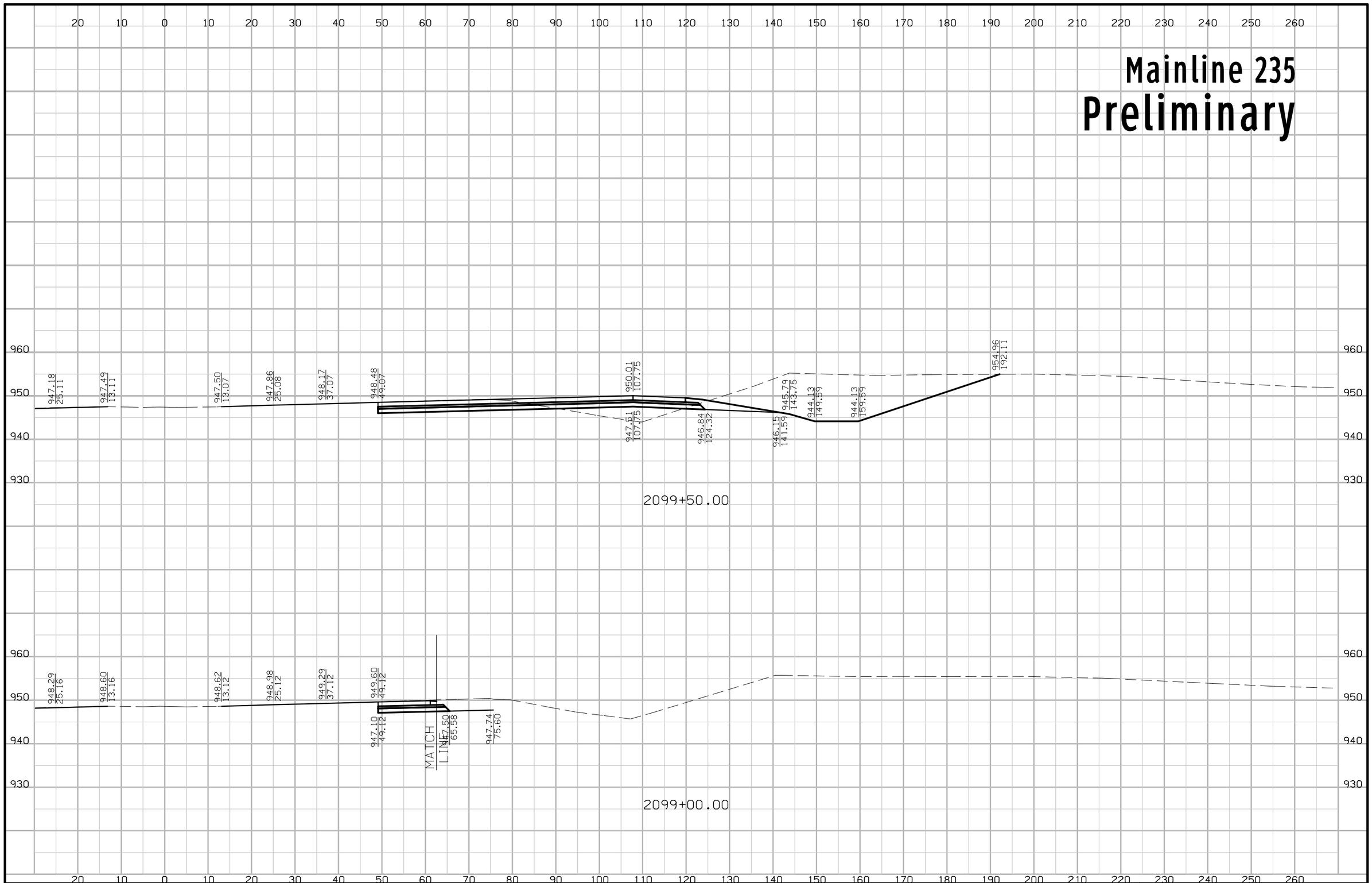


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.292

5:27:33 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235

Preliminary

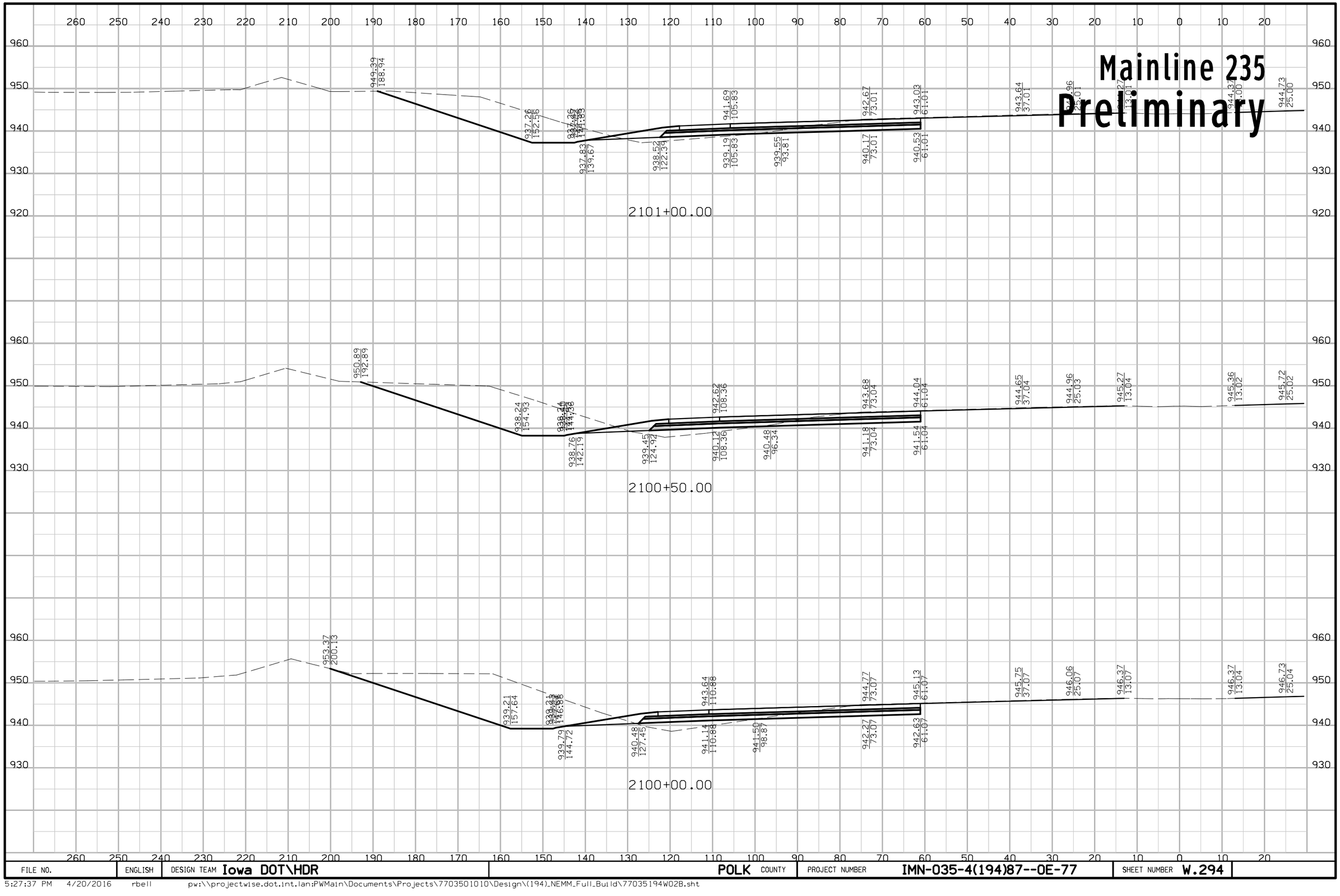


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.293

5:27:35 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235

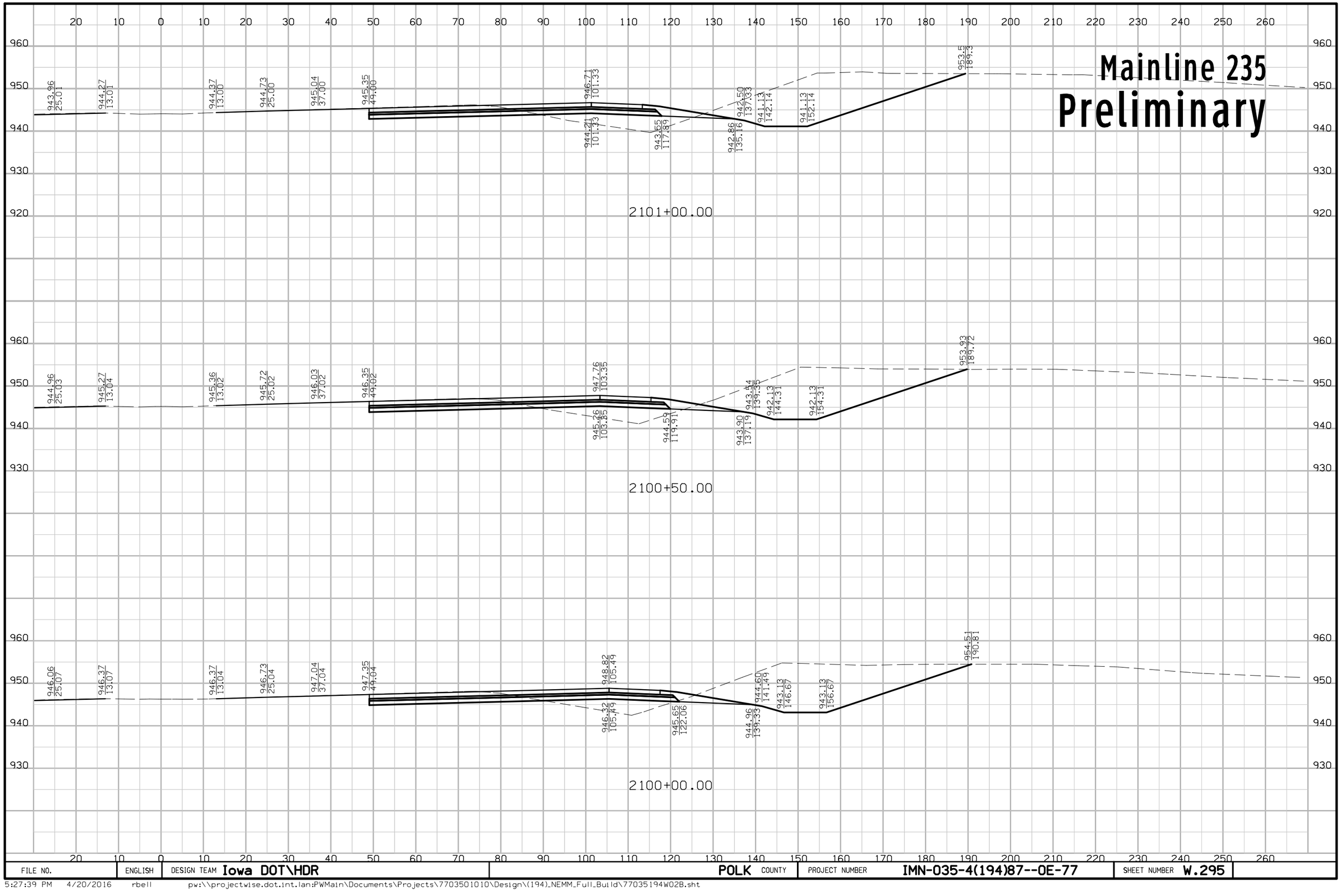
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.294

5:27:37 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

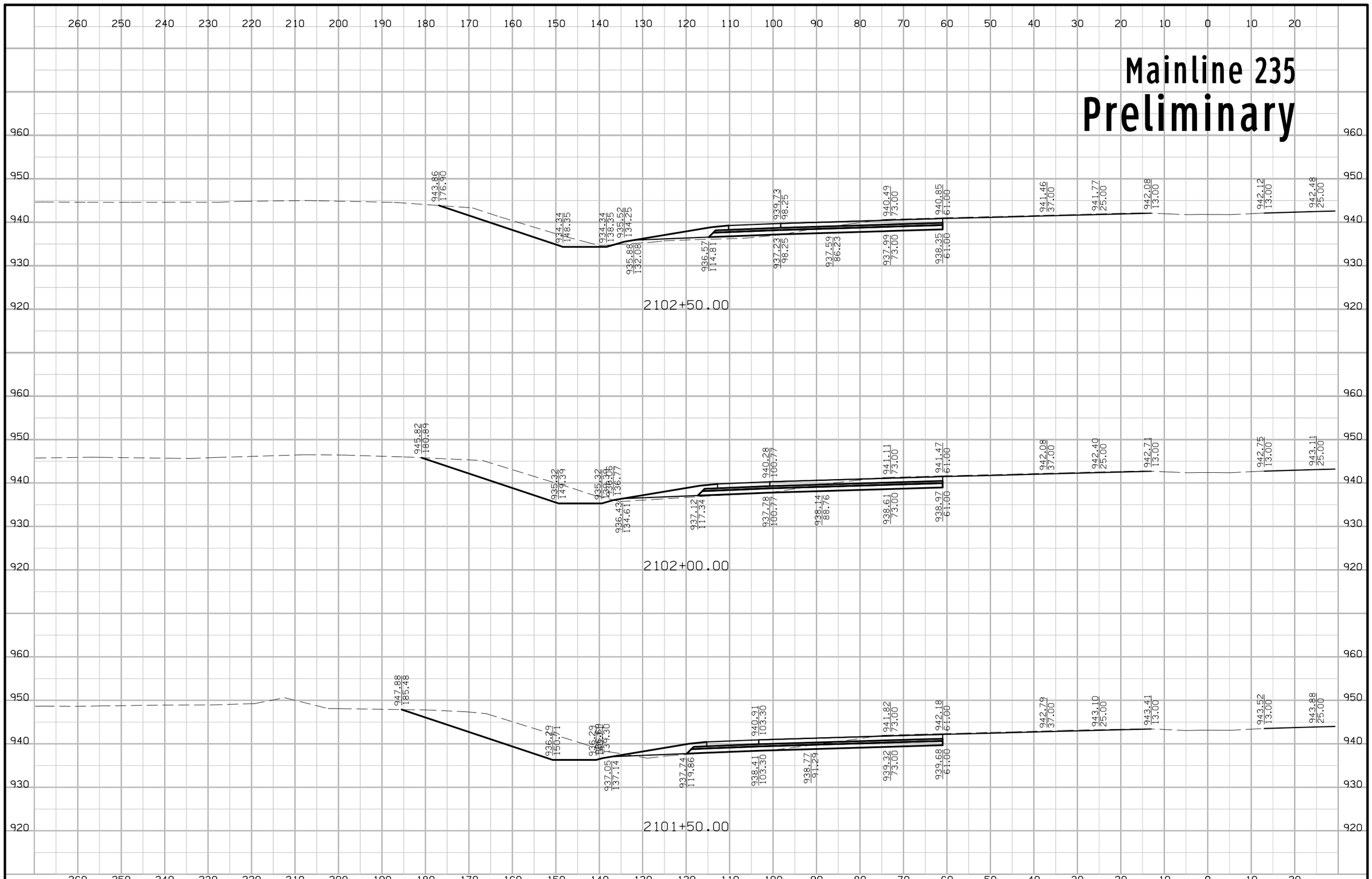
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.295

5:27:39 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

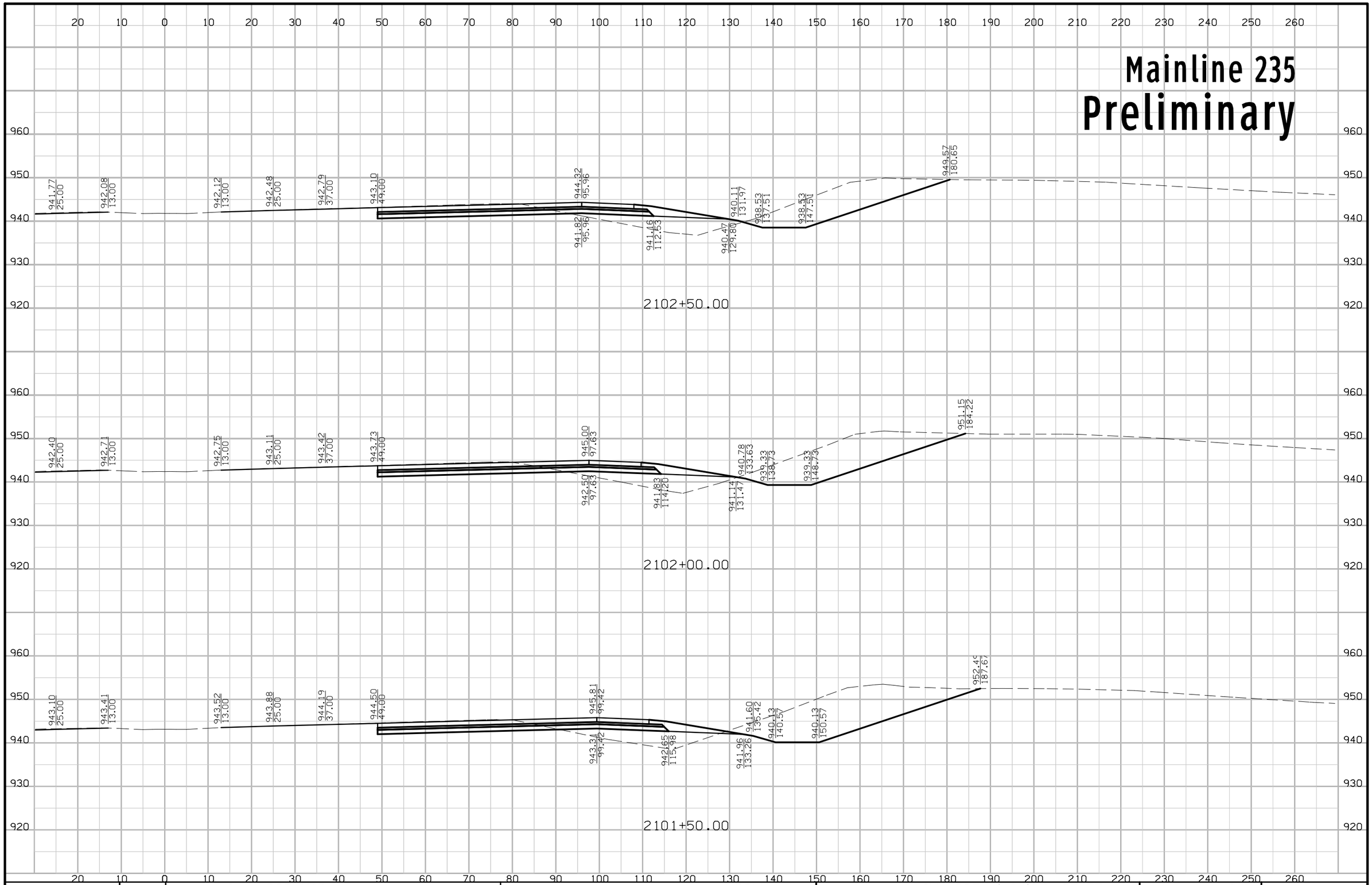
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.296

5:27:41 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

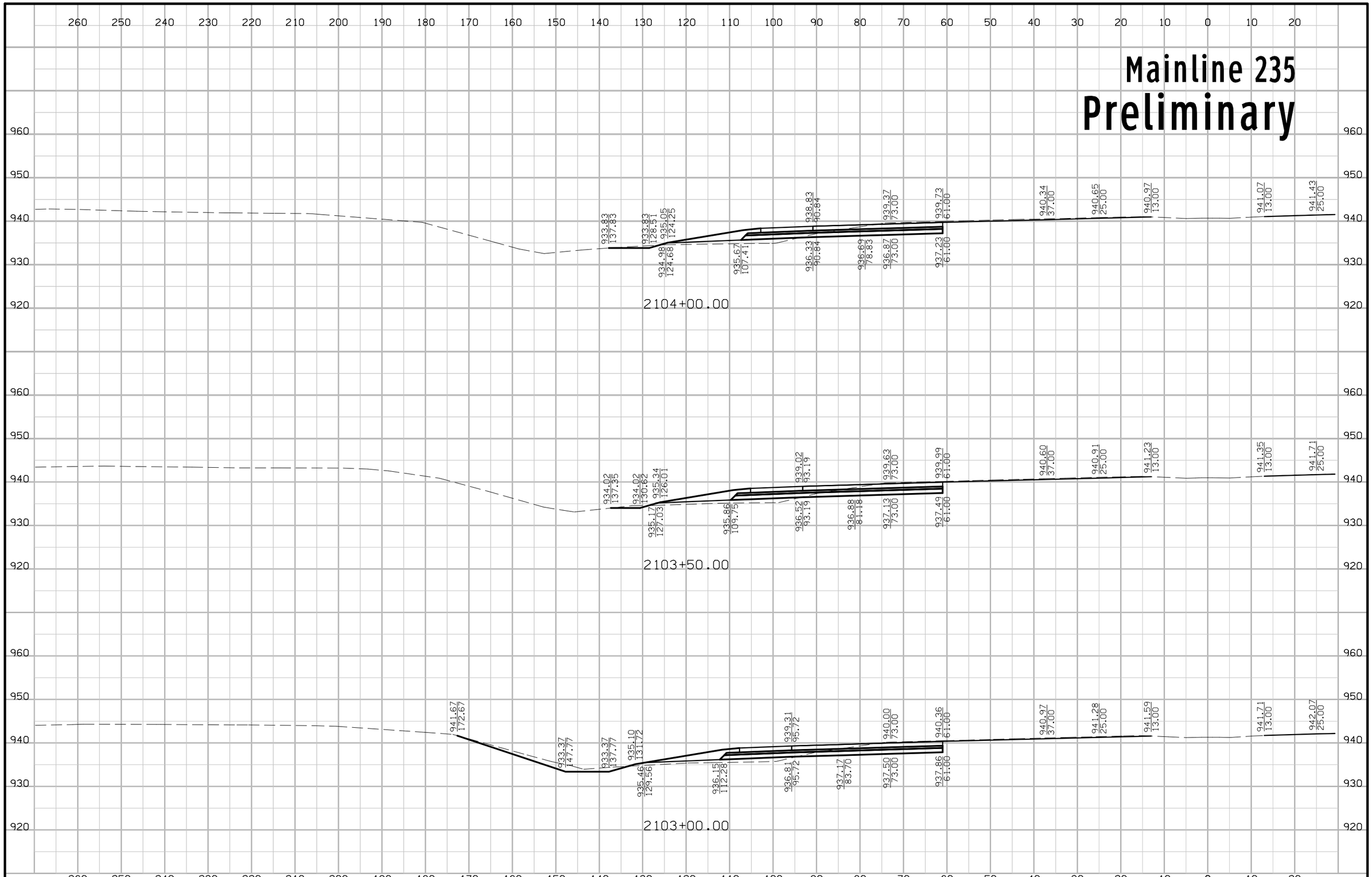
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.297

5:27:43 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

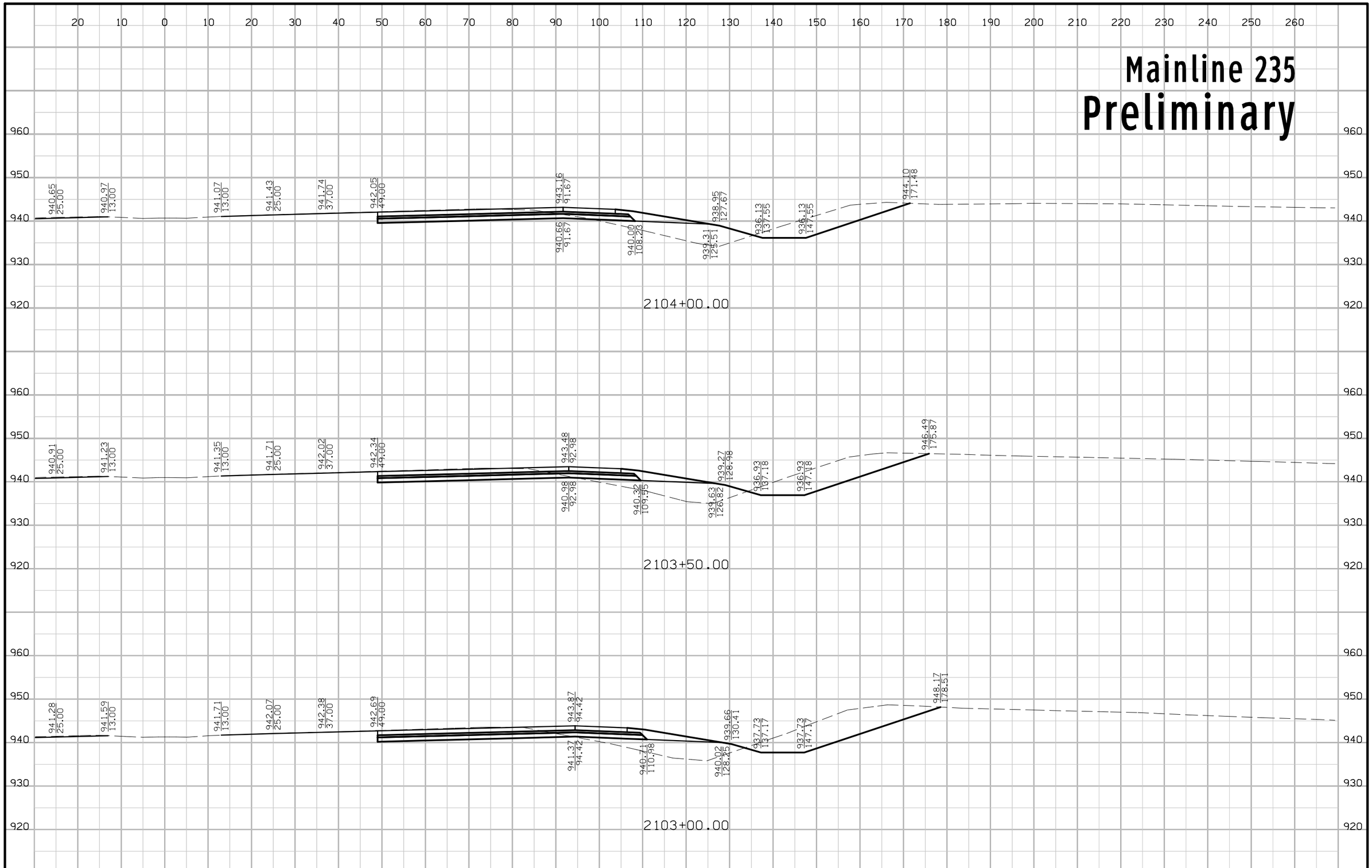


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.298

5:27:45 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235

Preliminary

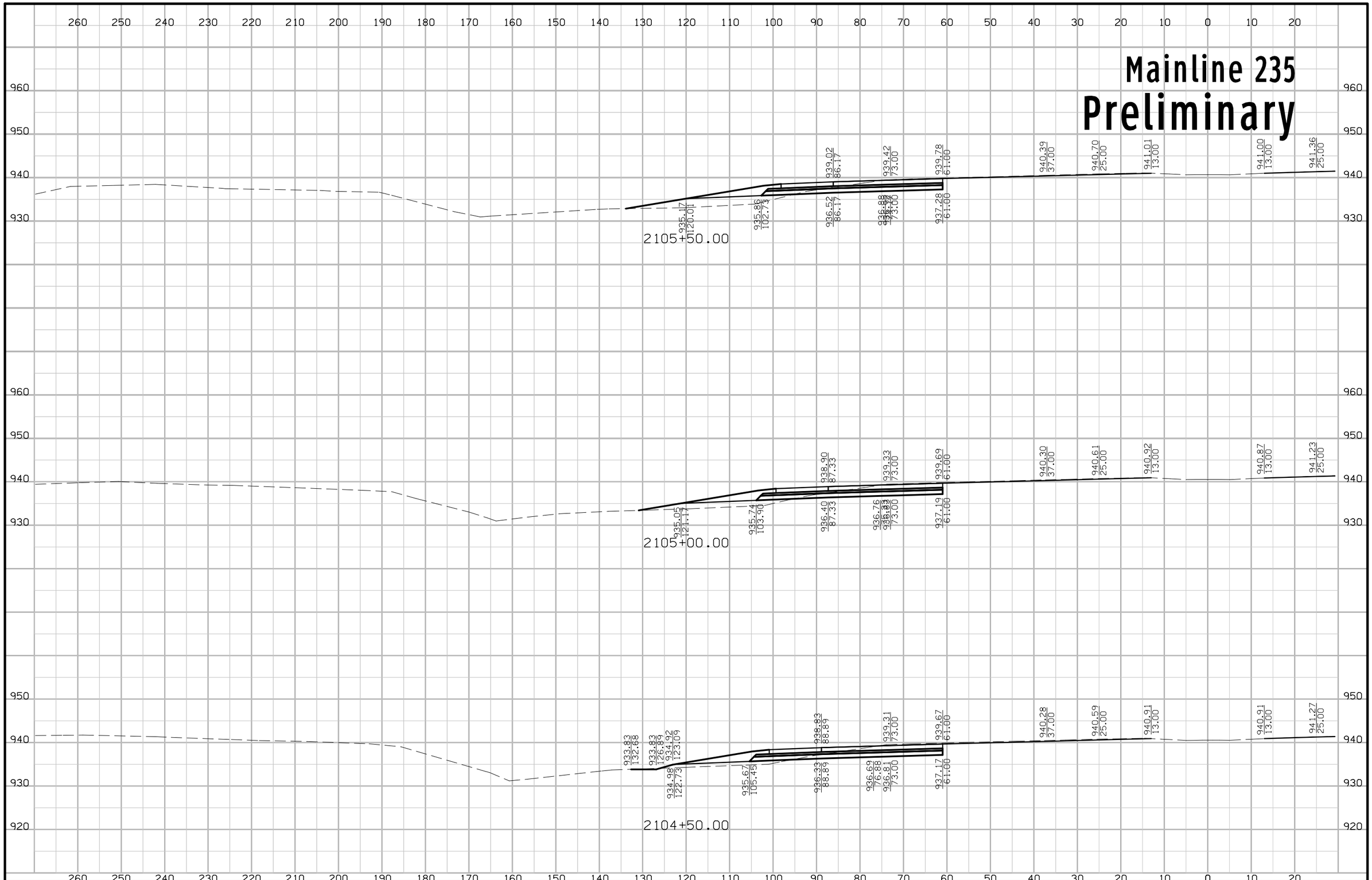


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.299

5:27:47 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235

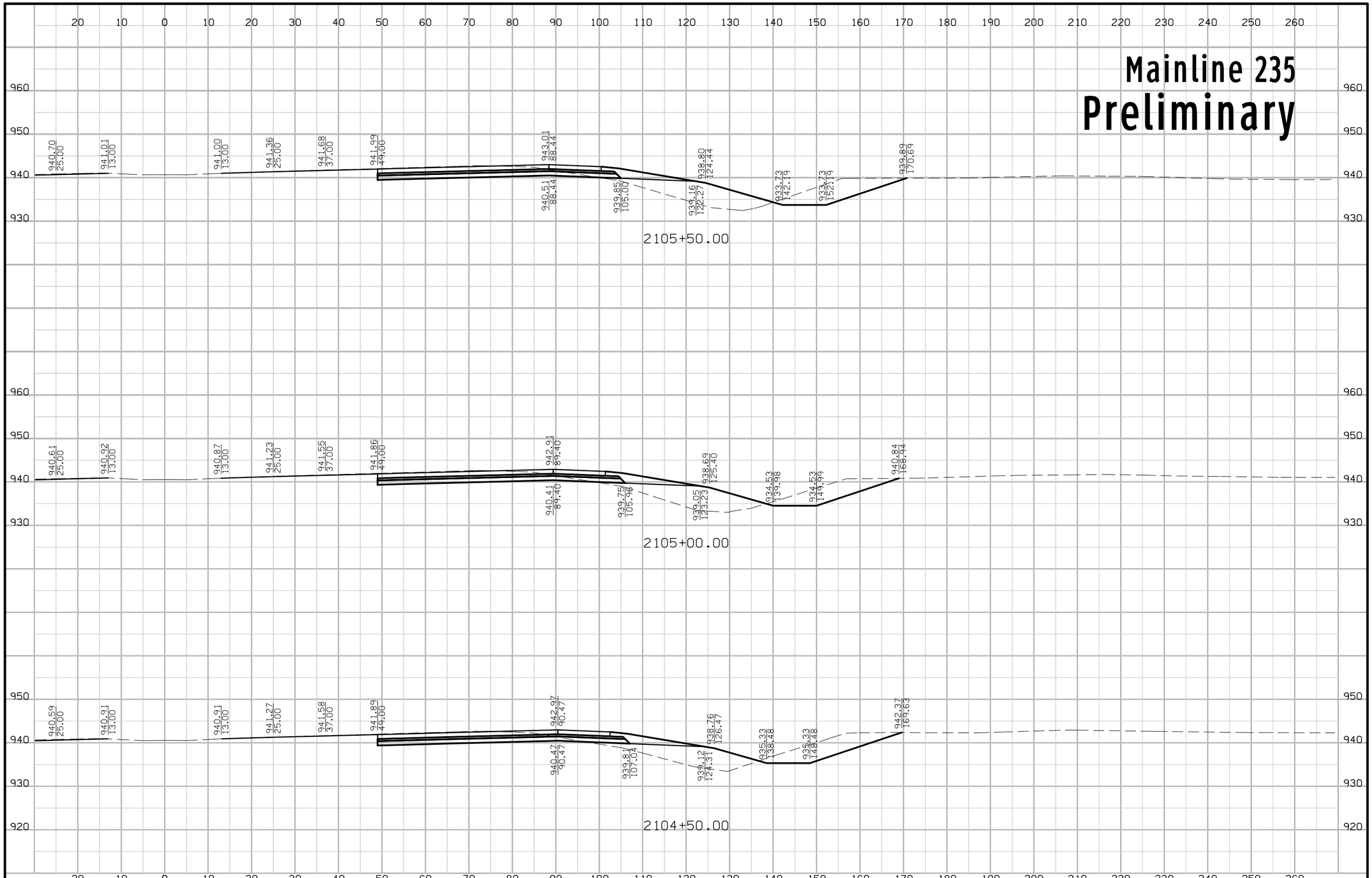
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.300

5:27:49 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

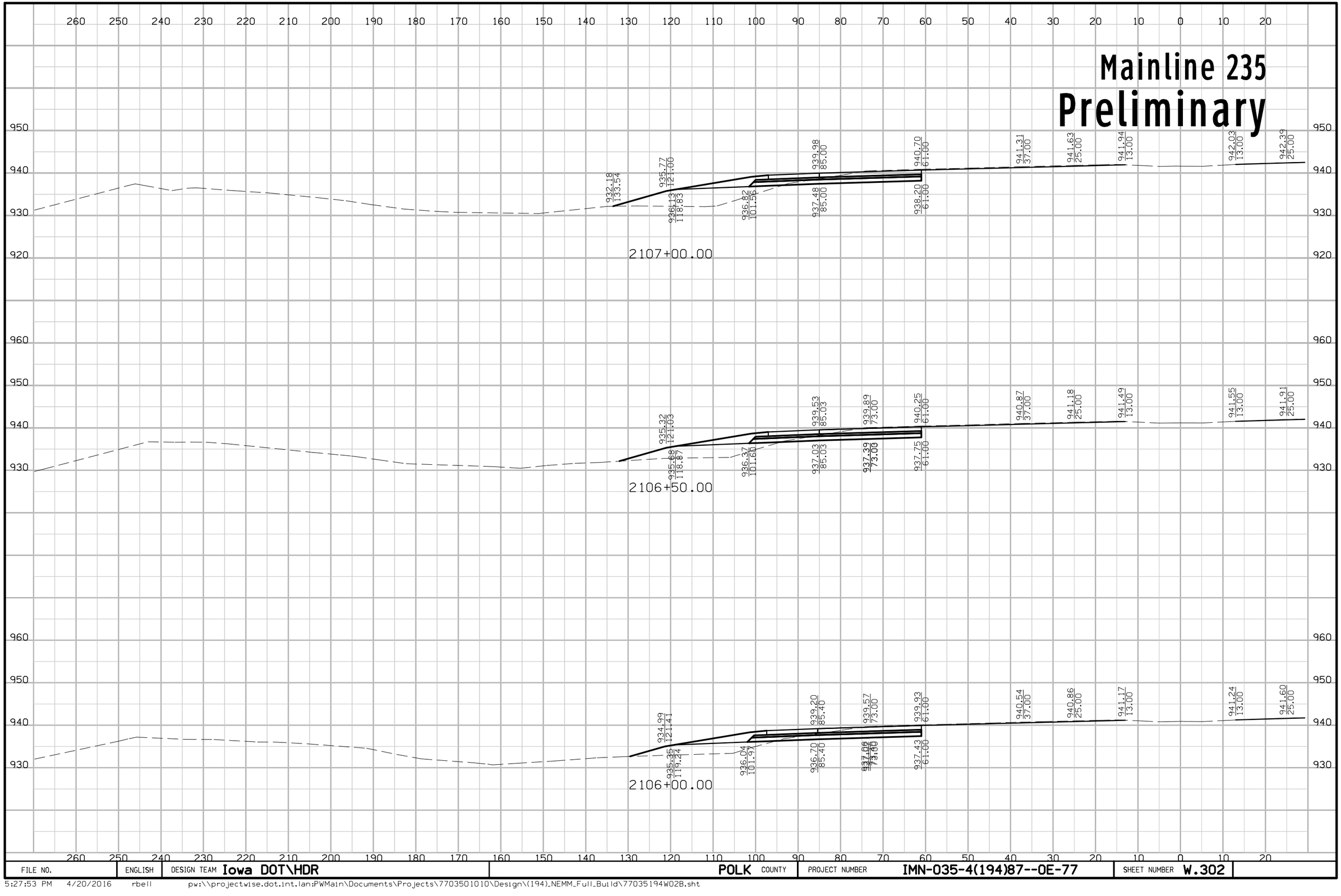


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.301

5:27:51 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235

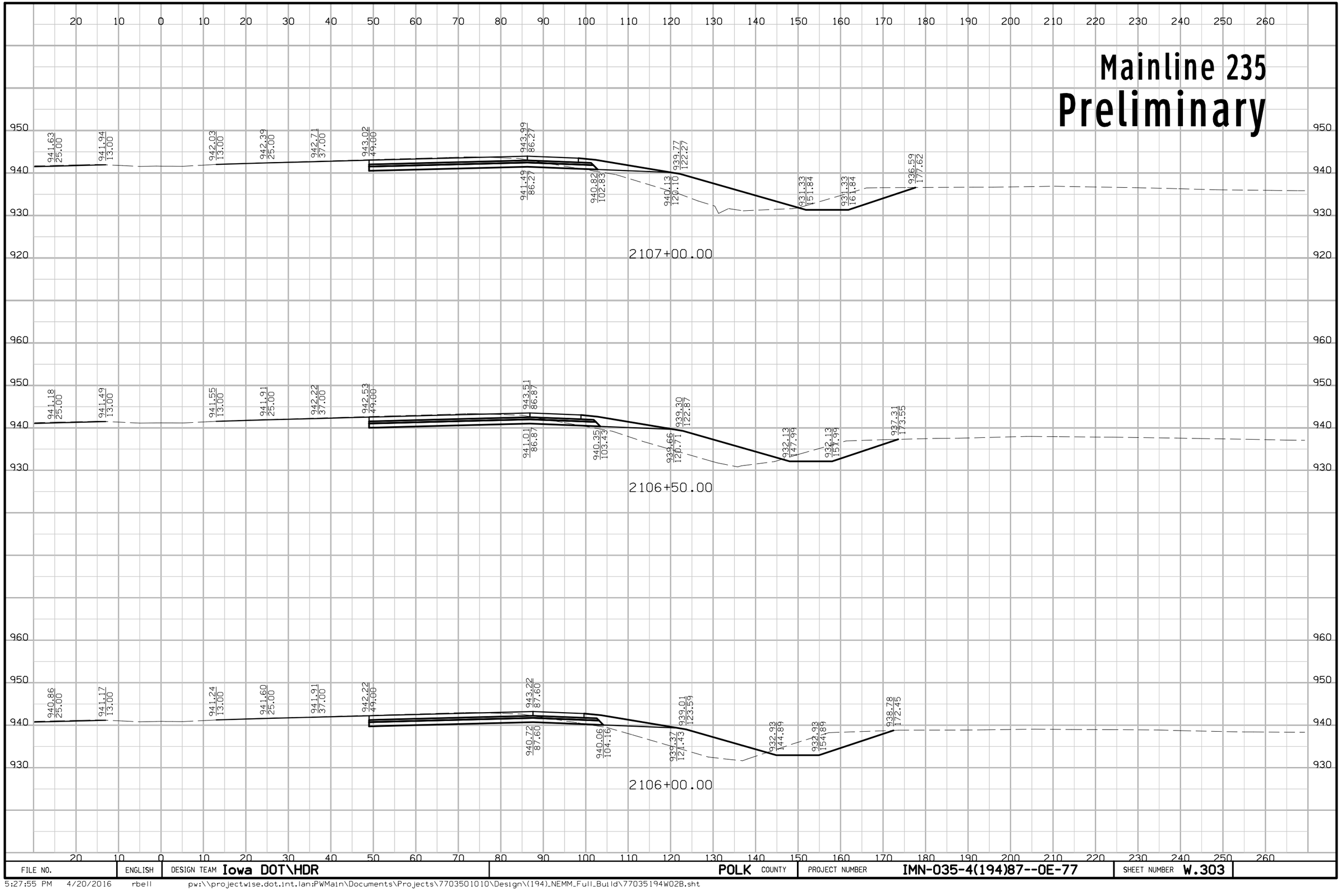
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.302

5:27:53 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

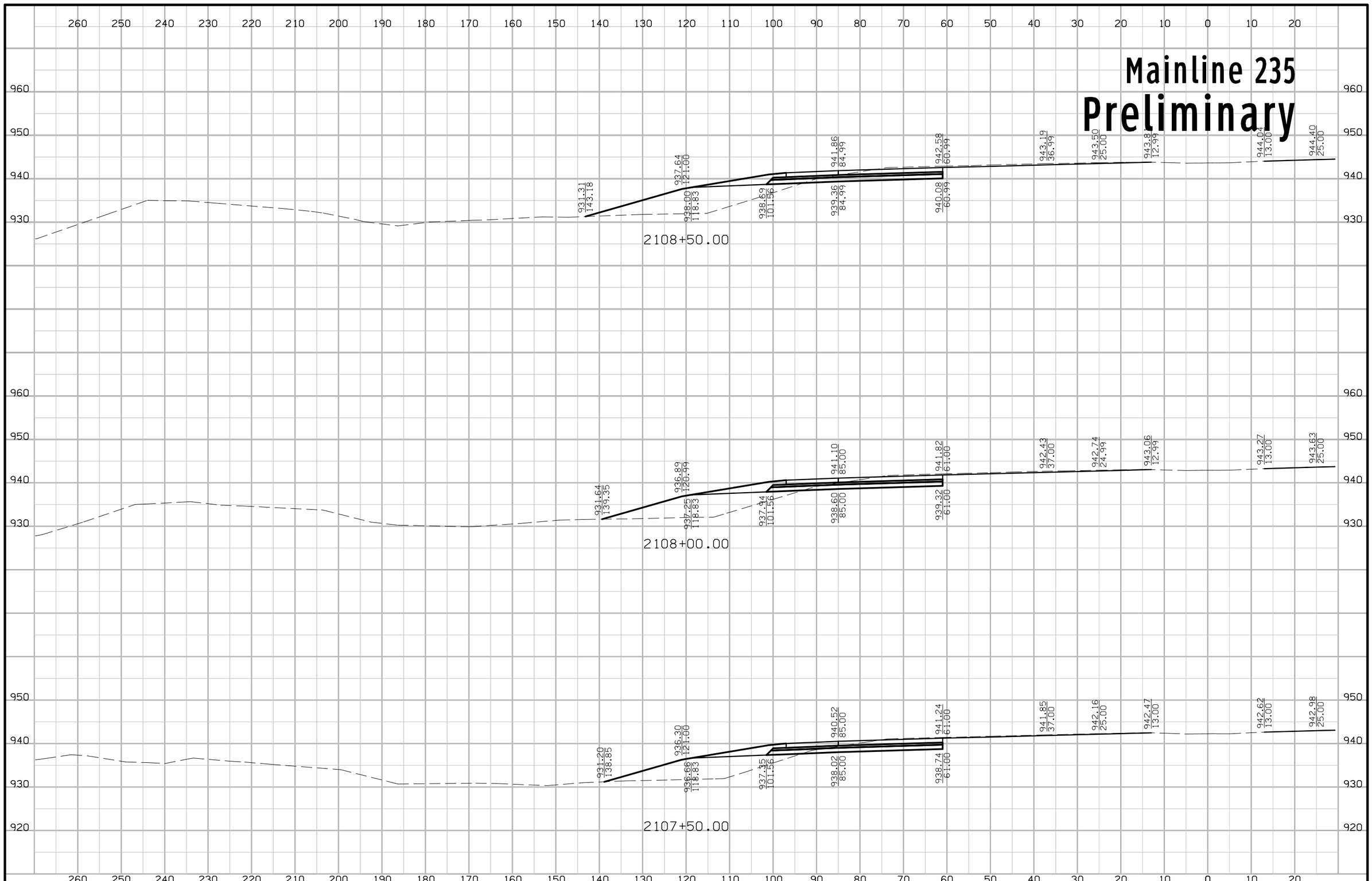


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.303

5:27:55 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235

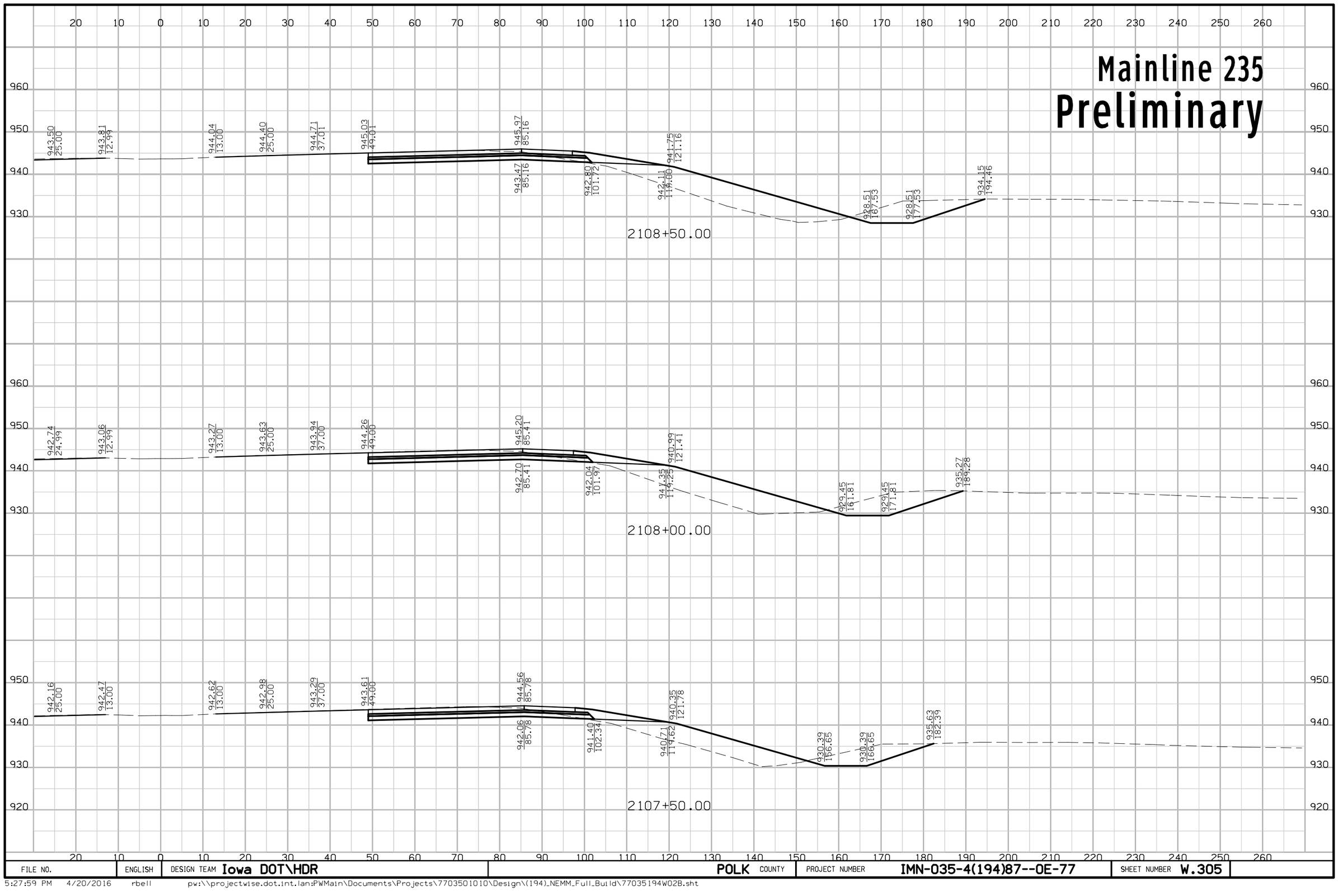
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.304

5:27:57 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

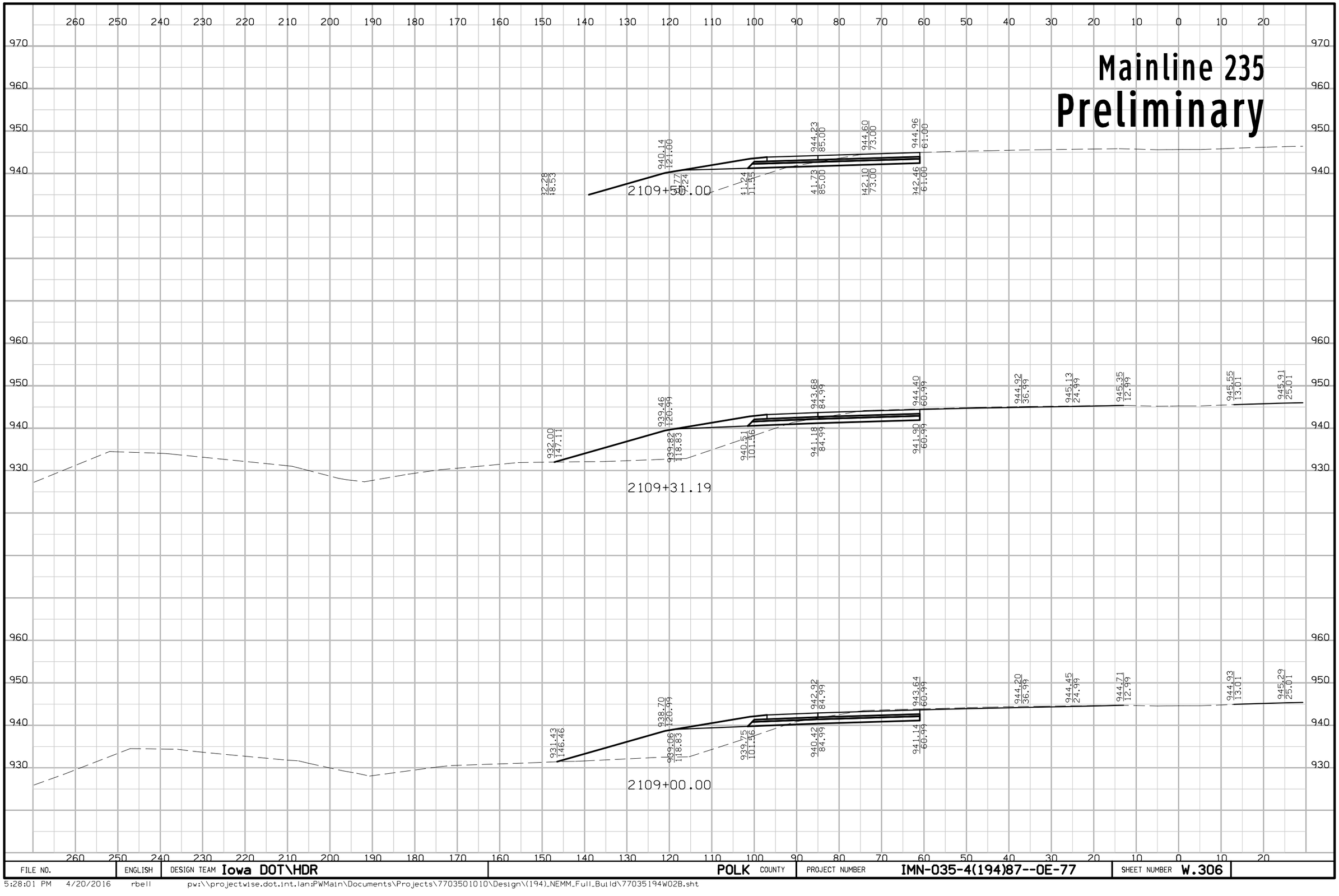
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.305

5:27:59 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

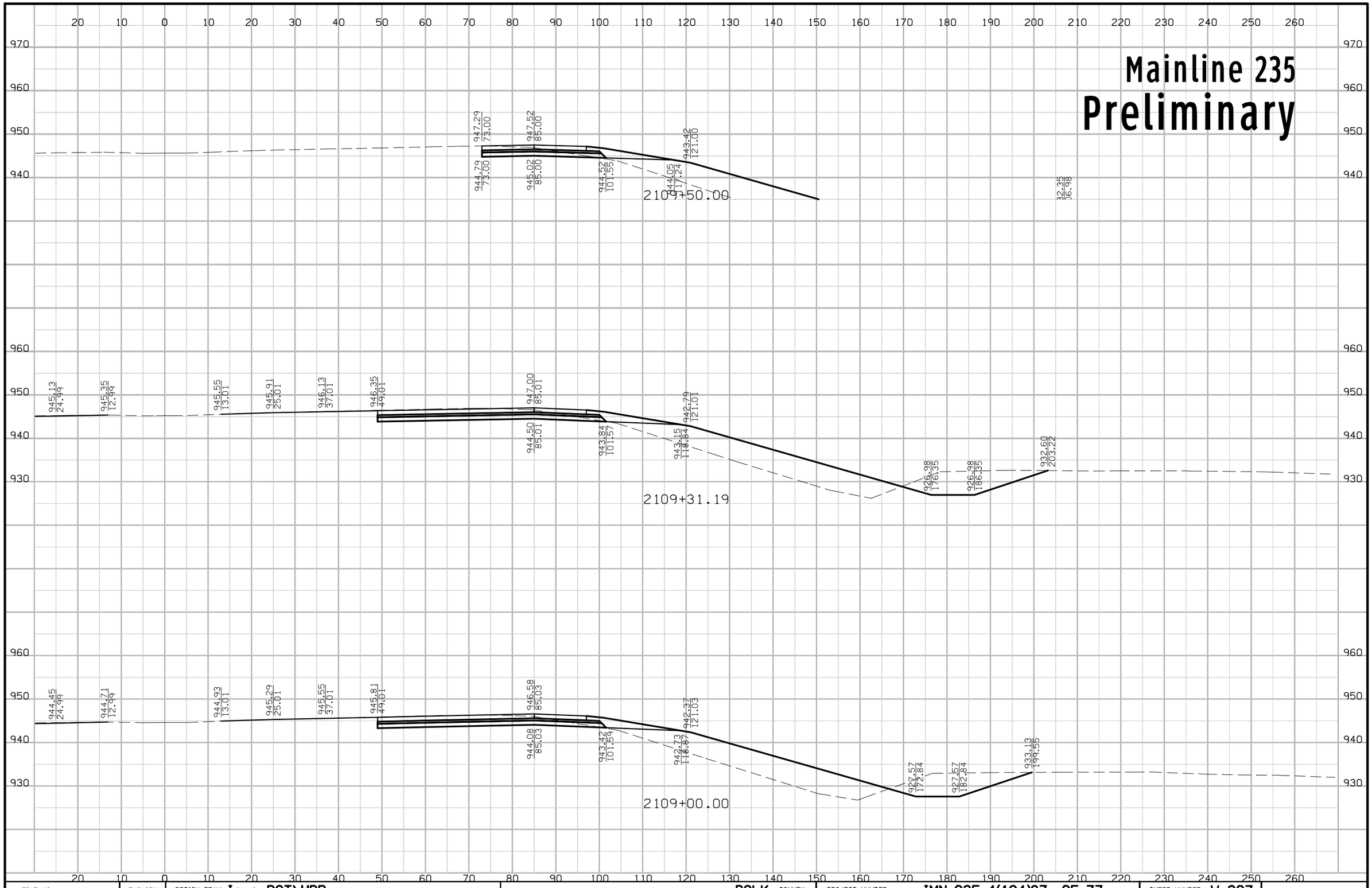
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.306

5:28:01 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

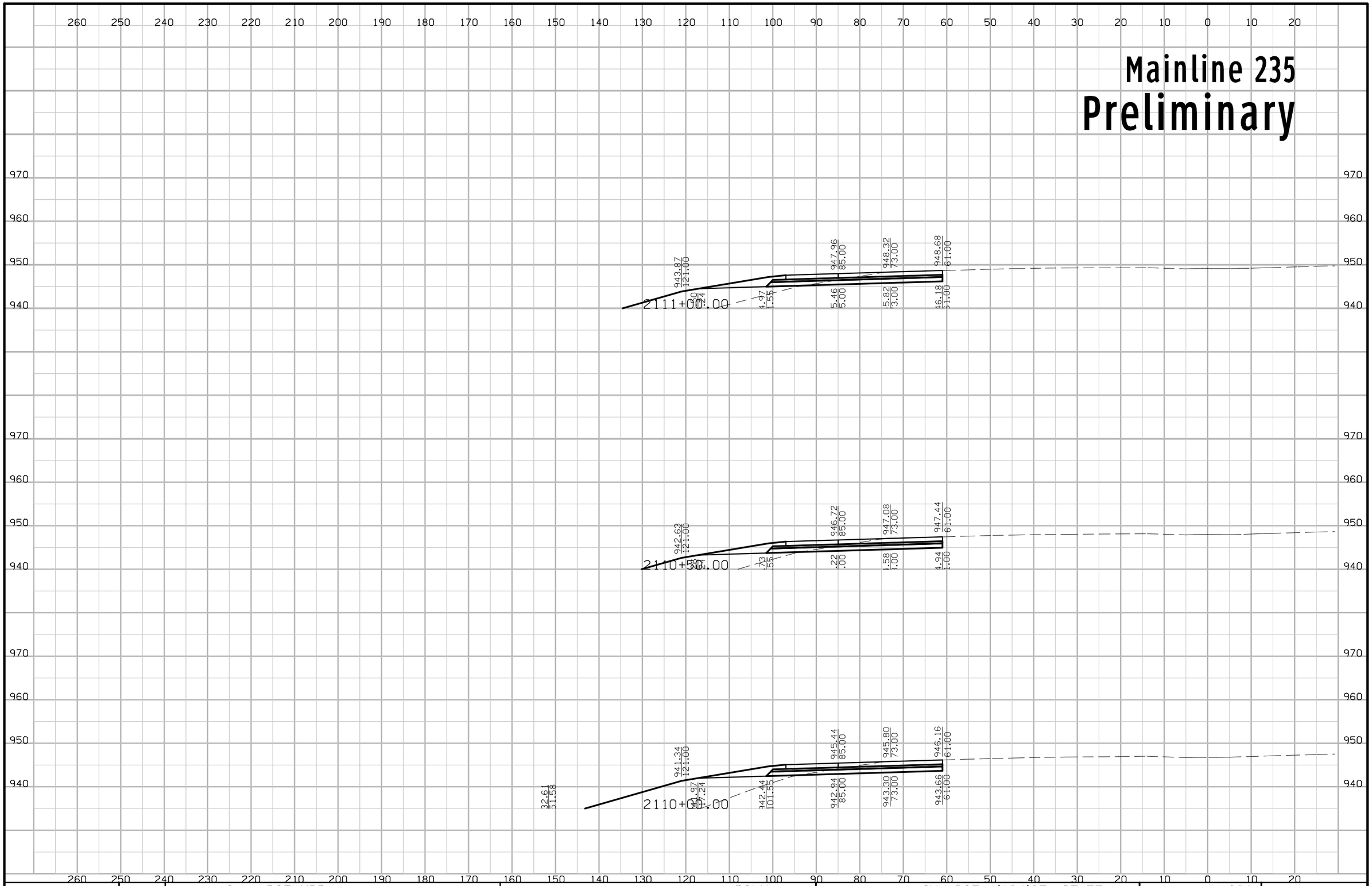
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.307

5:28:02 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.308

5:28:04 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260

970
960
950
940

950.22
73.00
950.31
85.00
946.22
121.00
947.72
73.00
947.81
85.00
947.32
101.55
946.85
117.24

2115+00.00

949.22
73.00
949.36
85.00
945.27
121.00
946.72
73.00
946.86
85.00
946.37
101.55
946.89
117.24

2115+50.00

948.24
73.00
948.42
85.00
944.33
121.00
945.74
73.00
945.92
85.00
945.43
101.55
944.96
117.24

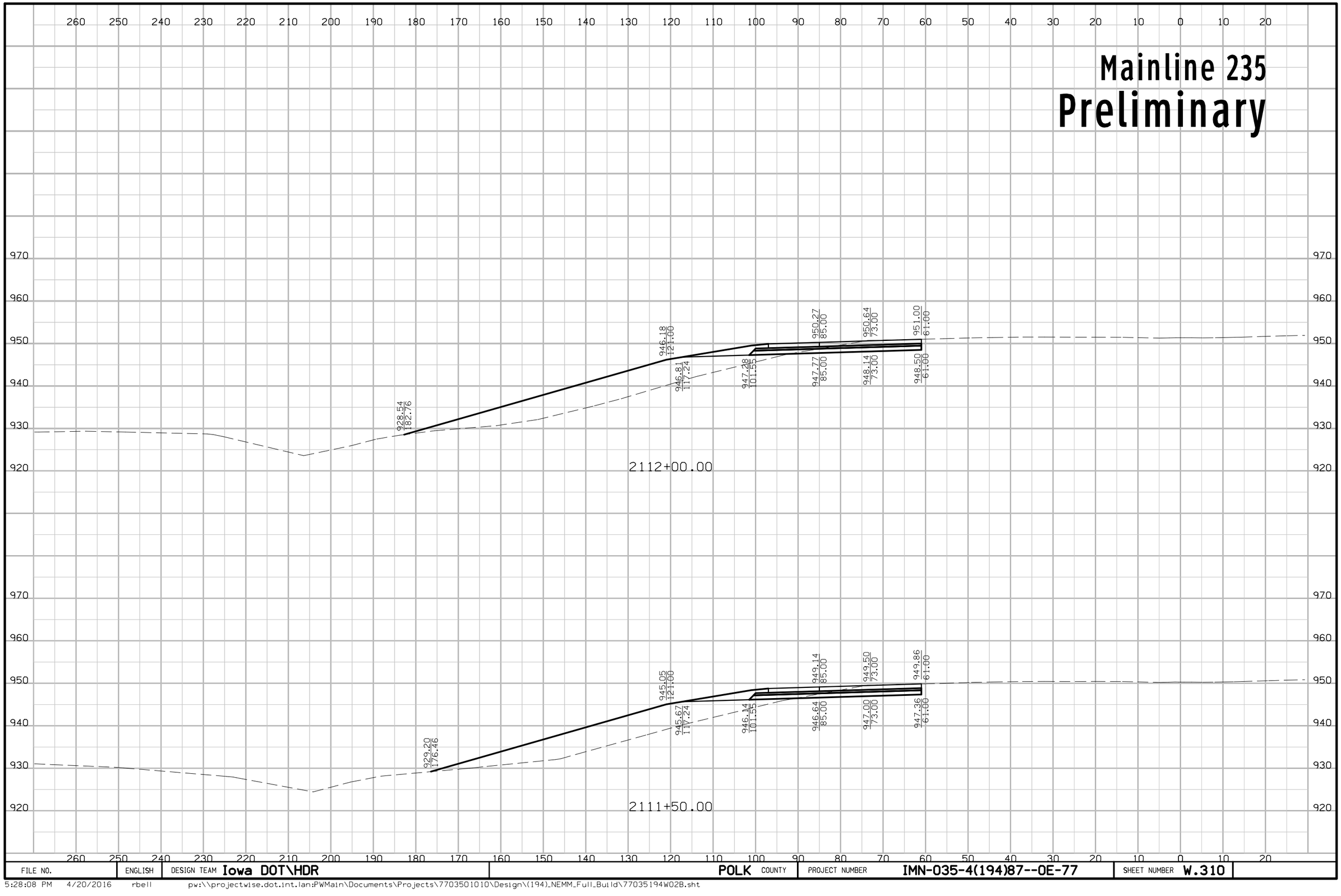
2110+00.00

1.39
3.36

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.309

5:28:06 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

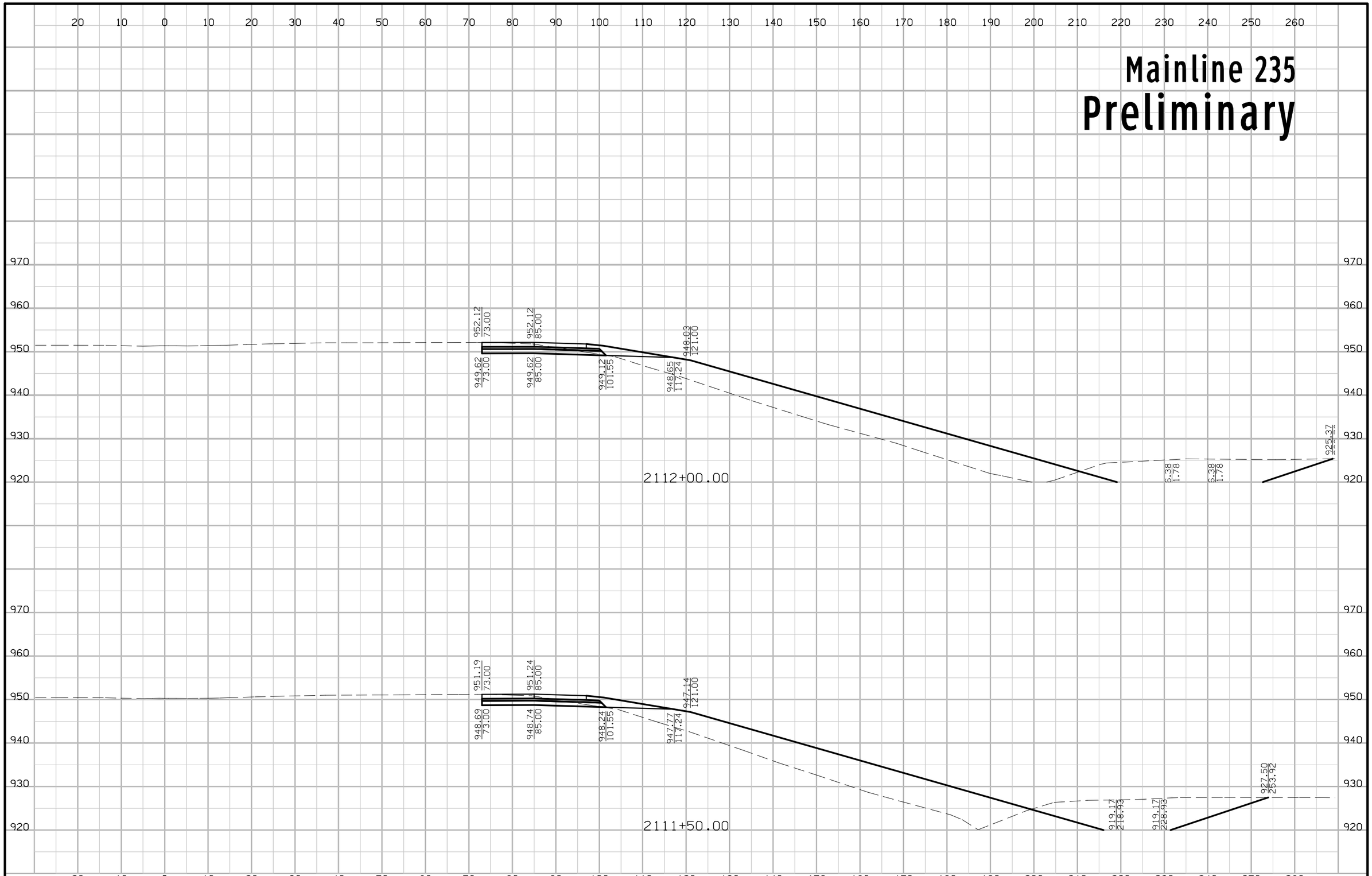
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.310

5:28:08 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

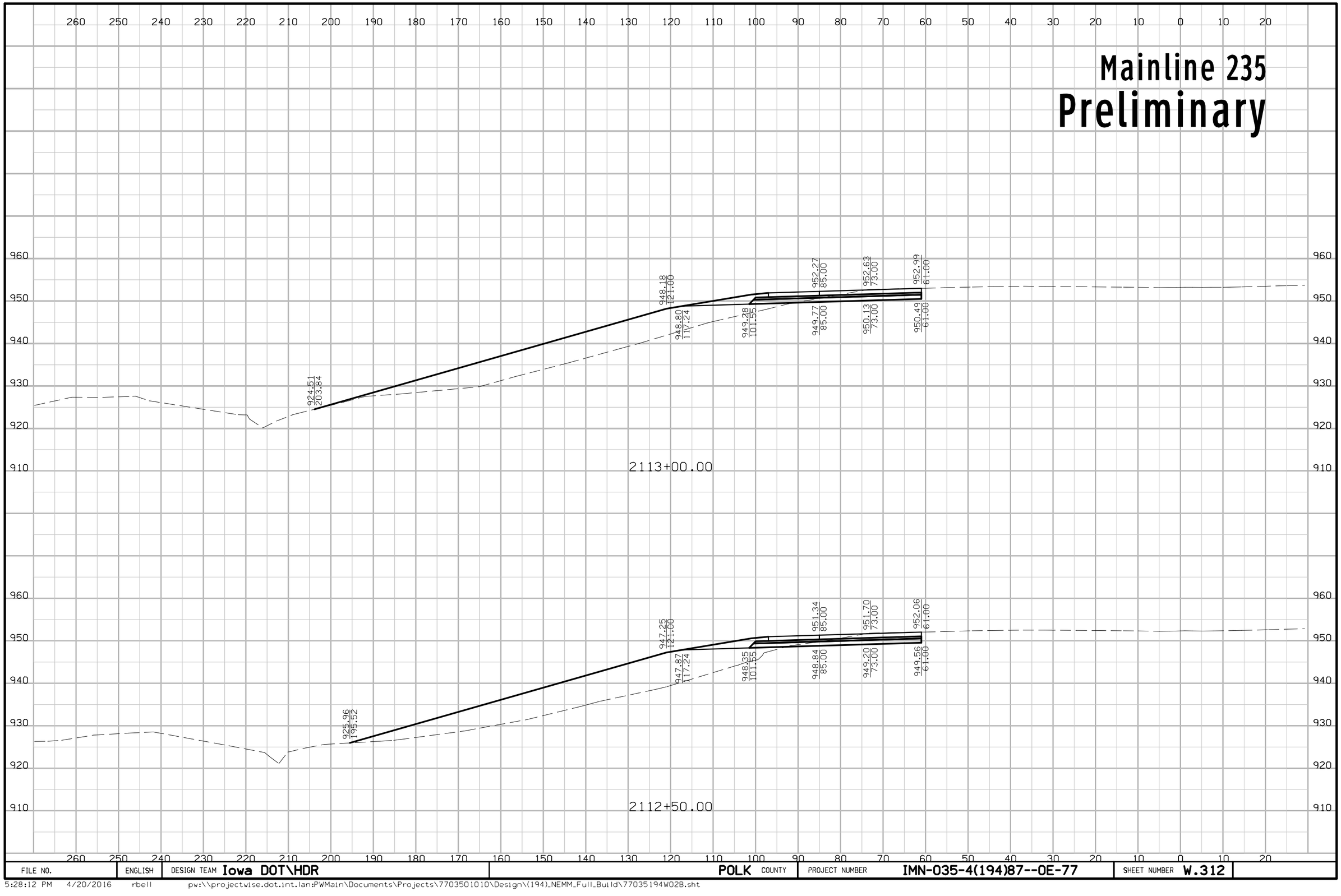
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.311

5:28:10 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

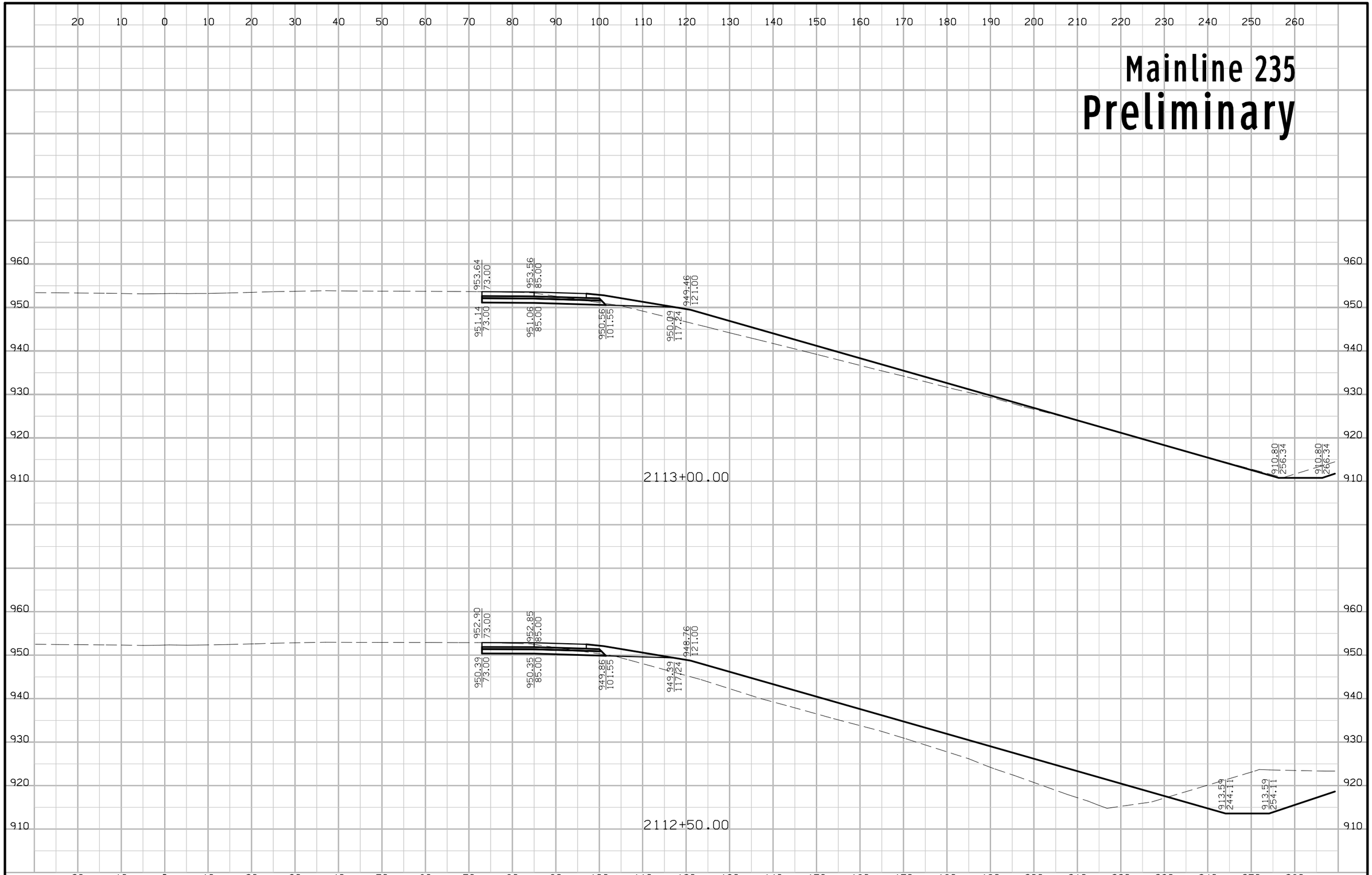
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.312

5:28:12 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

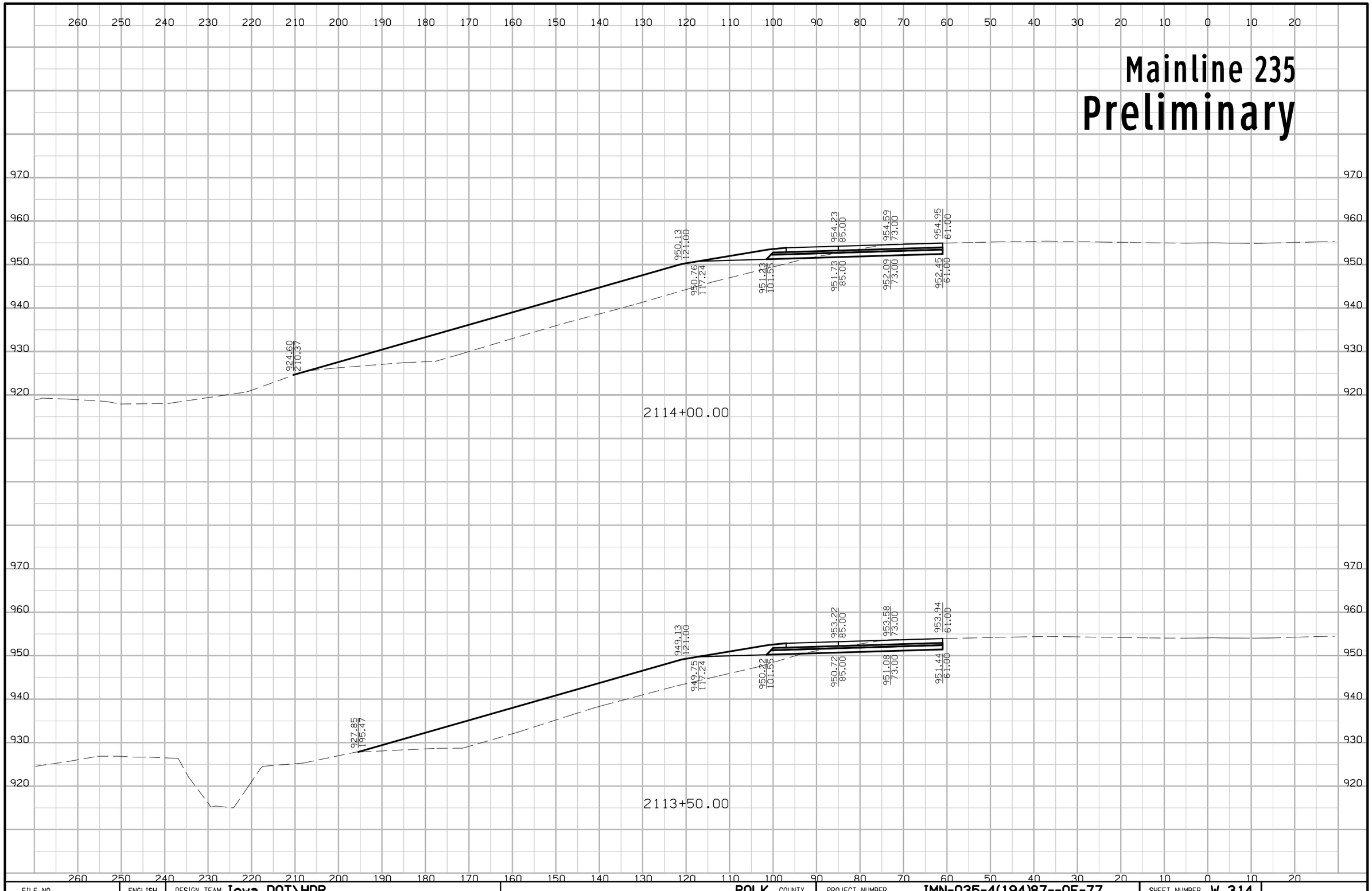
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.313

5:28:14 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

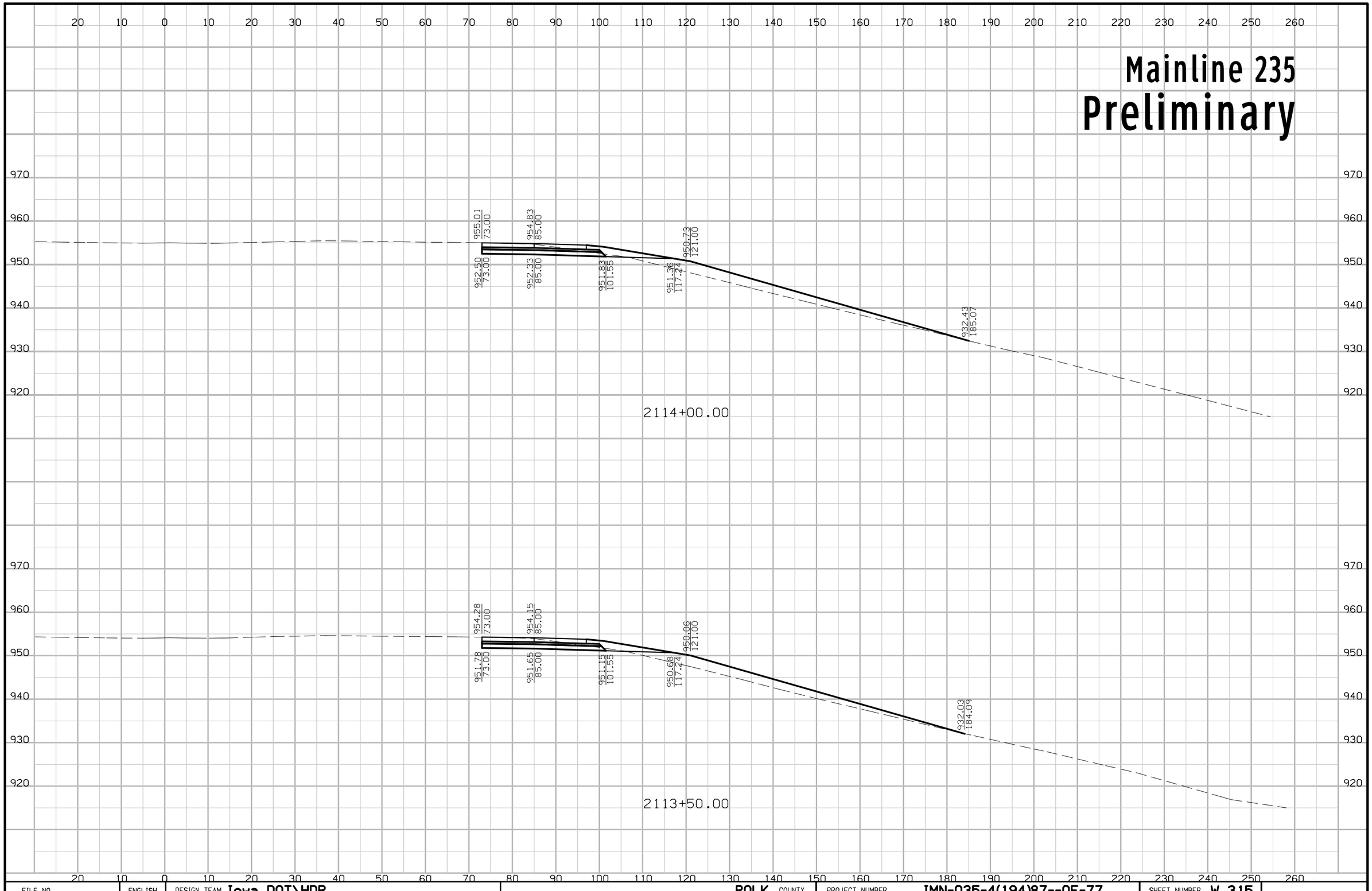
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.314

5:28:16 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

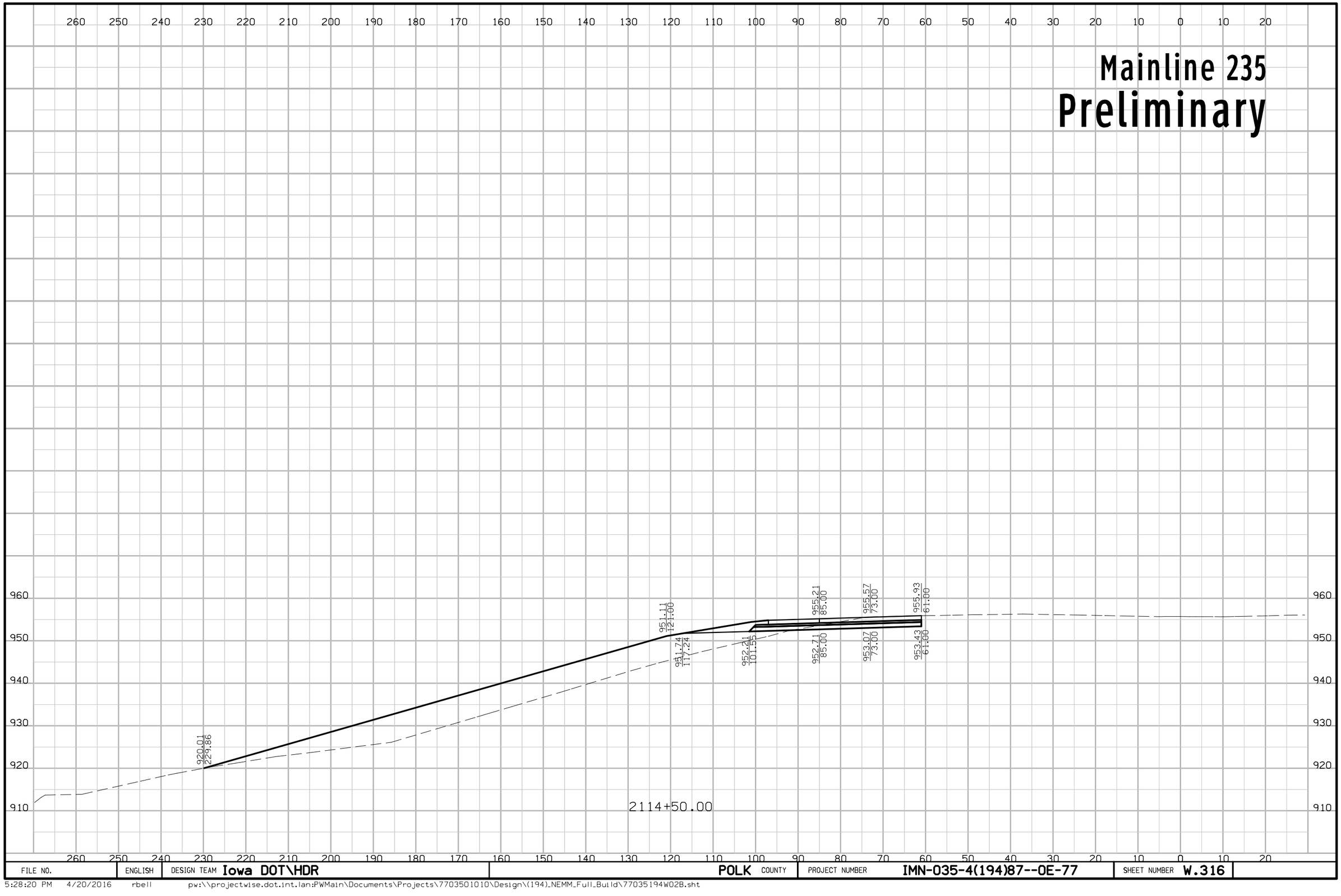
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.315

5:28:18 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

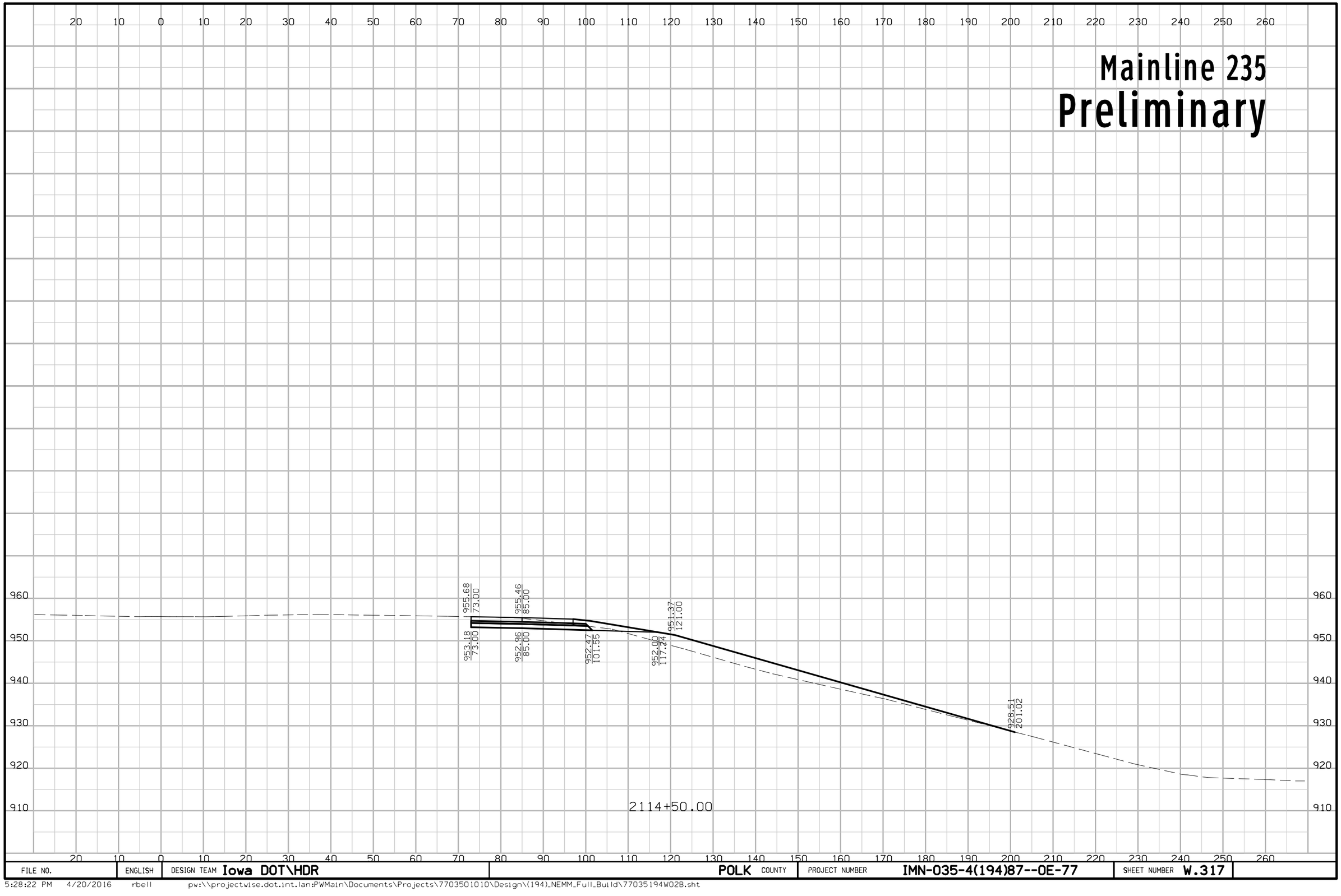
Mainline 235
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.316

5:28:20 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Mainline 235
Preliminary

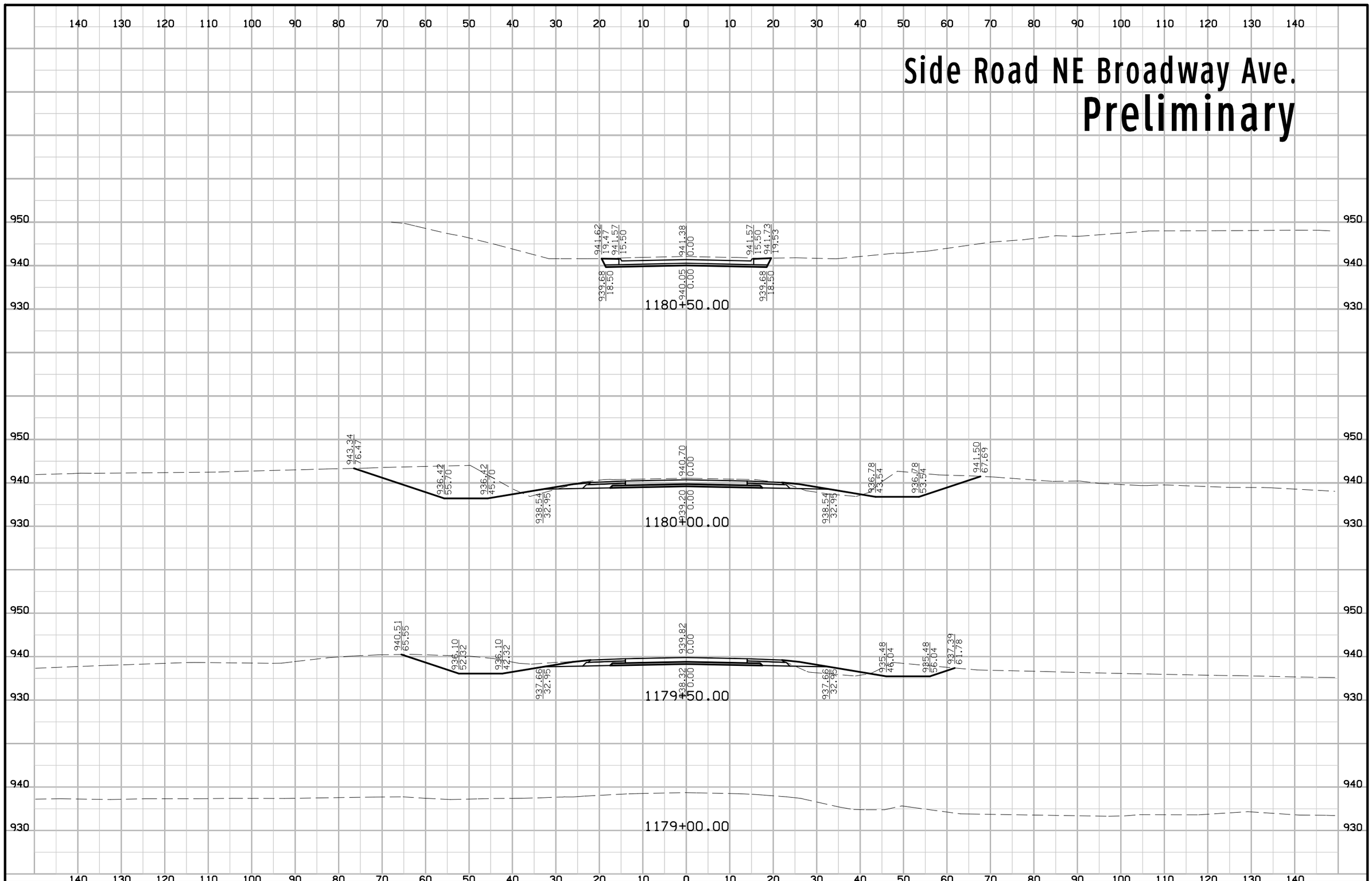


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER W.317

5:28:22 PM 4/20/2016 rbell pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194W02B.sht

Side Road NE Broadway Ave.

Preliminary

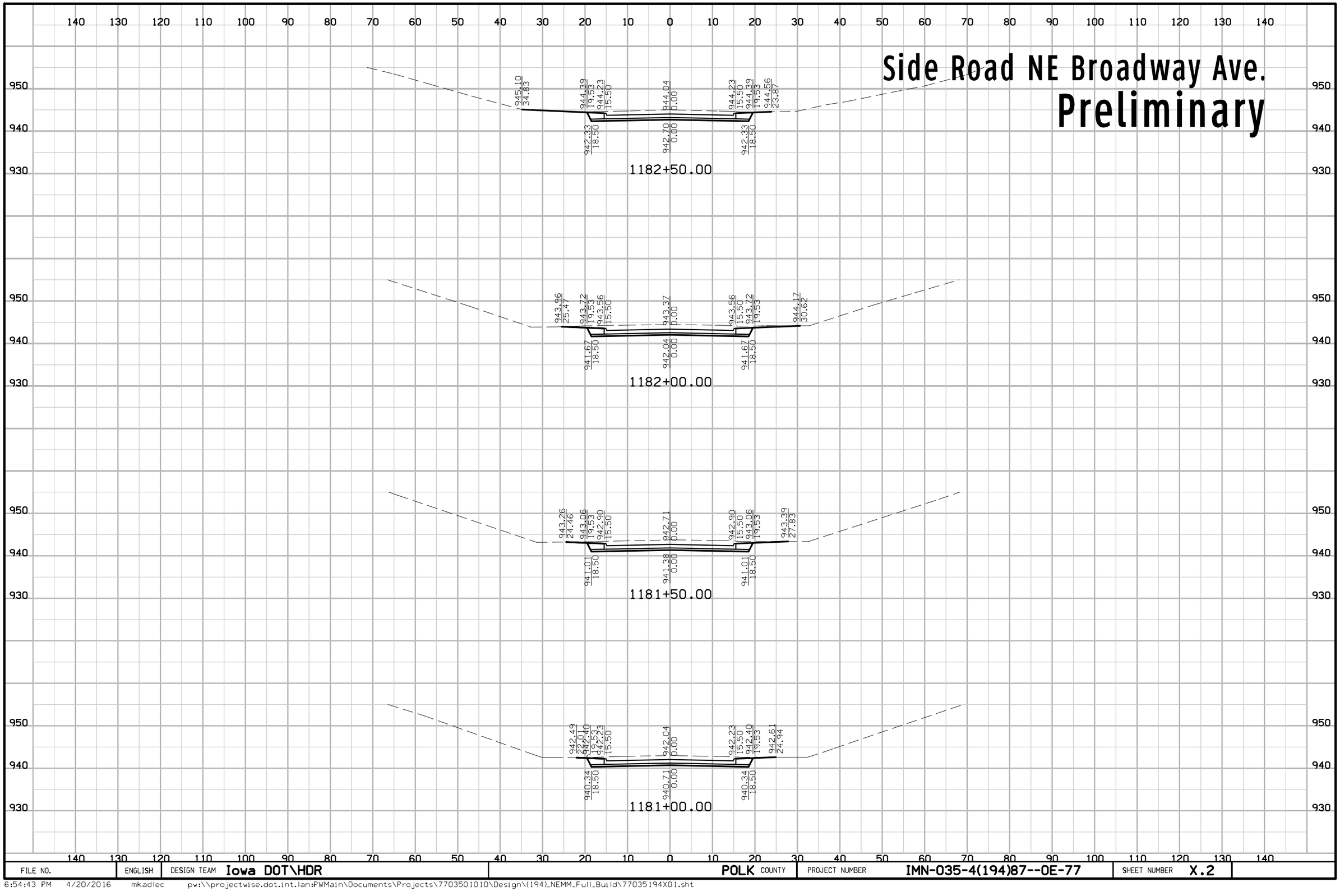


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER X.1

6:54:42 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194X01.sht

Side Road NE Broadway Ave.

Preliminary

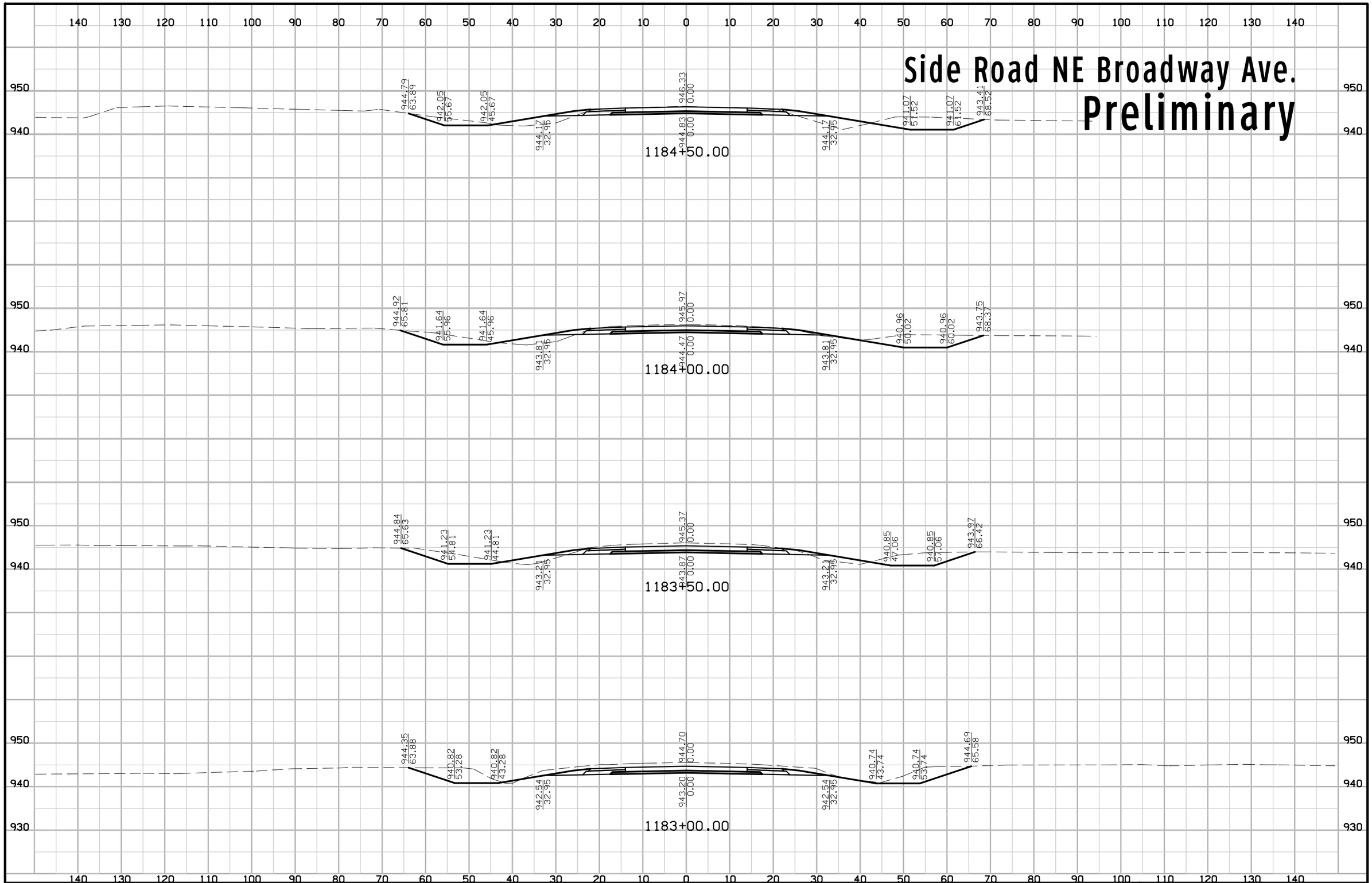


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER X.2	

6:54:43 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194X01.sht

Side Road NE Broadway Ave.

Preliminary

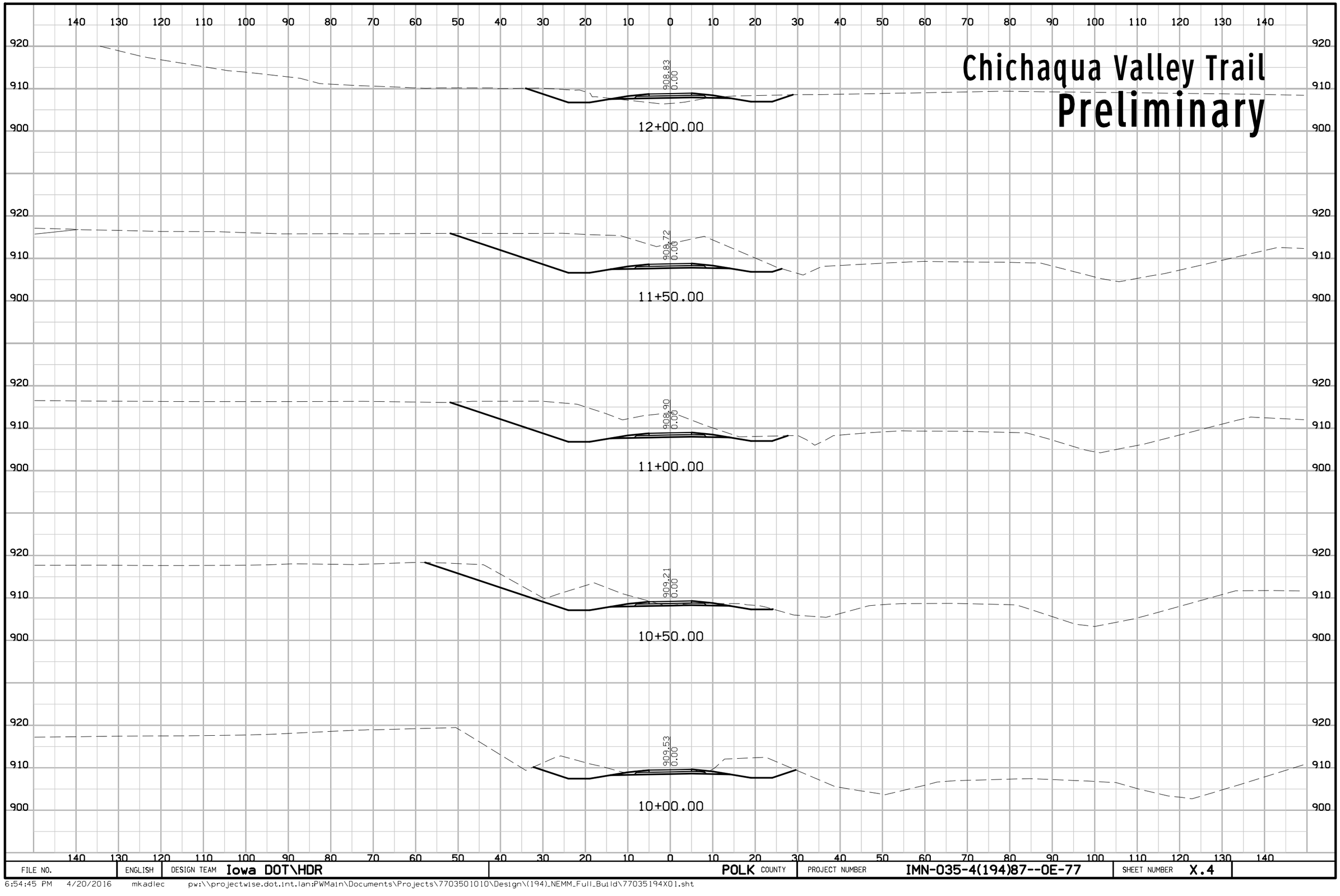


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER X.3

6:54:44 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194X01.sht

Chichaqua Valley Trail

Preliminary

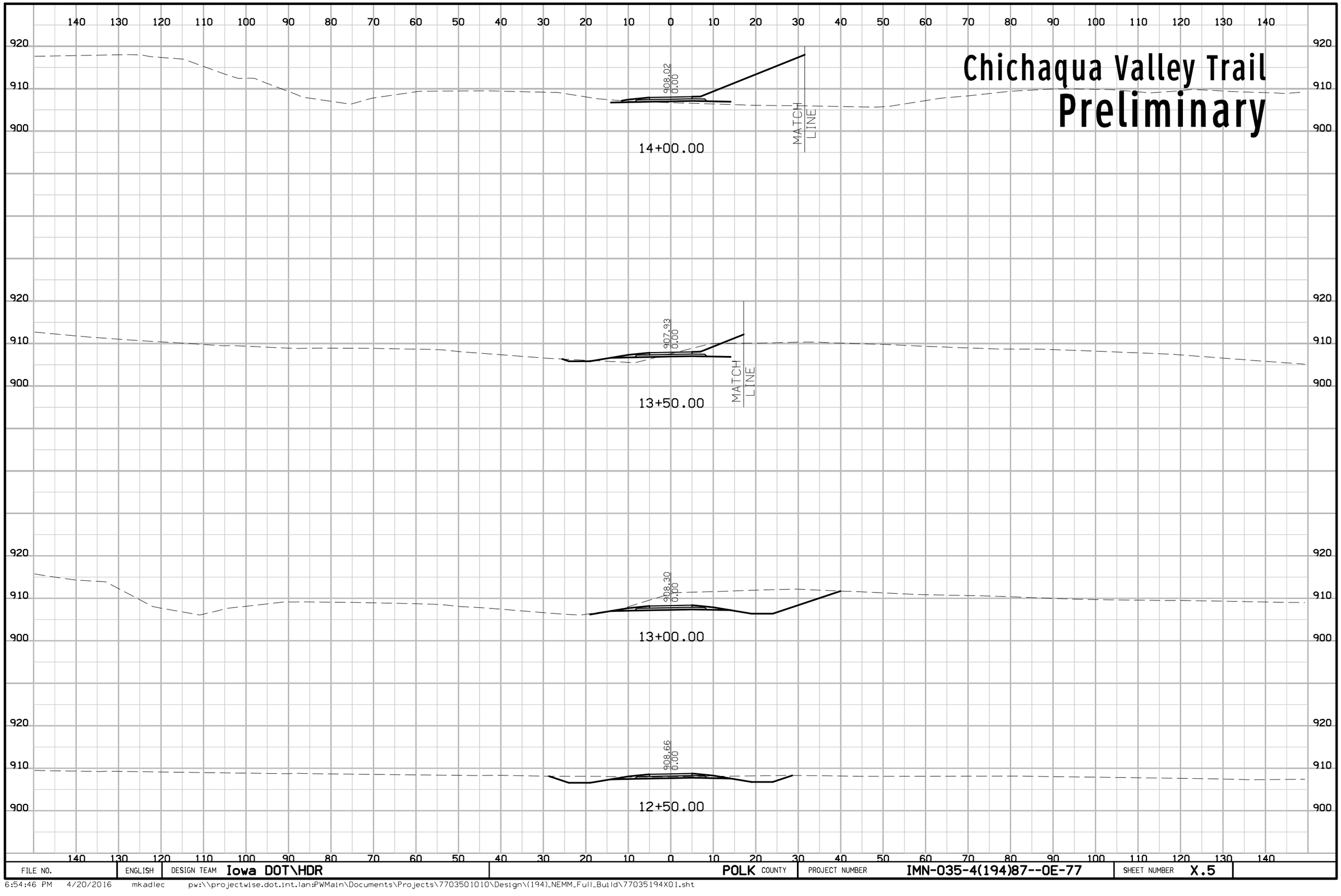


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER X.4

6:54:45 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194X01.sht

Chichaqua Valley Trail

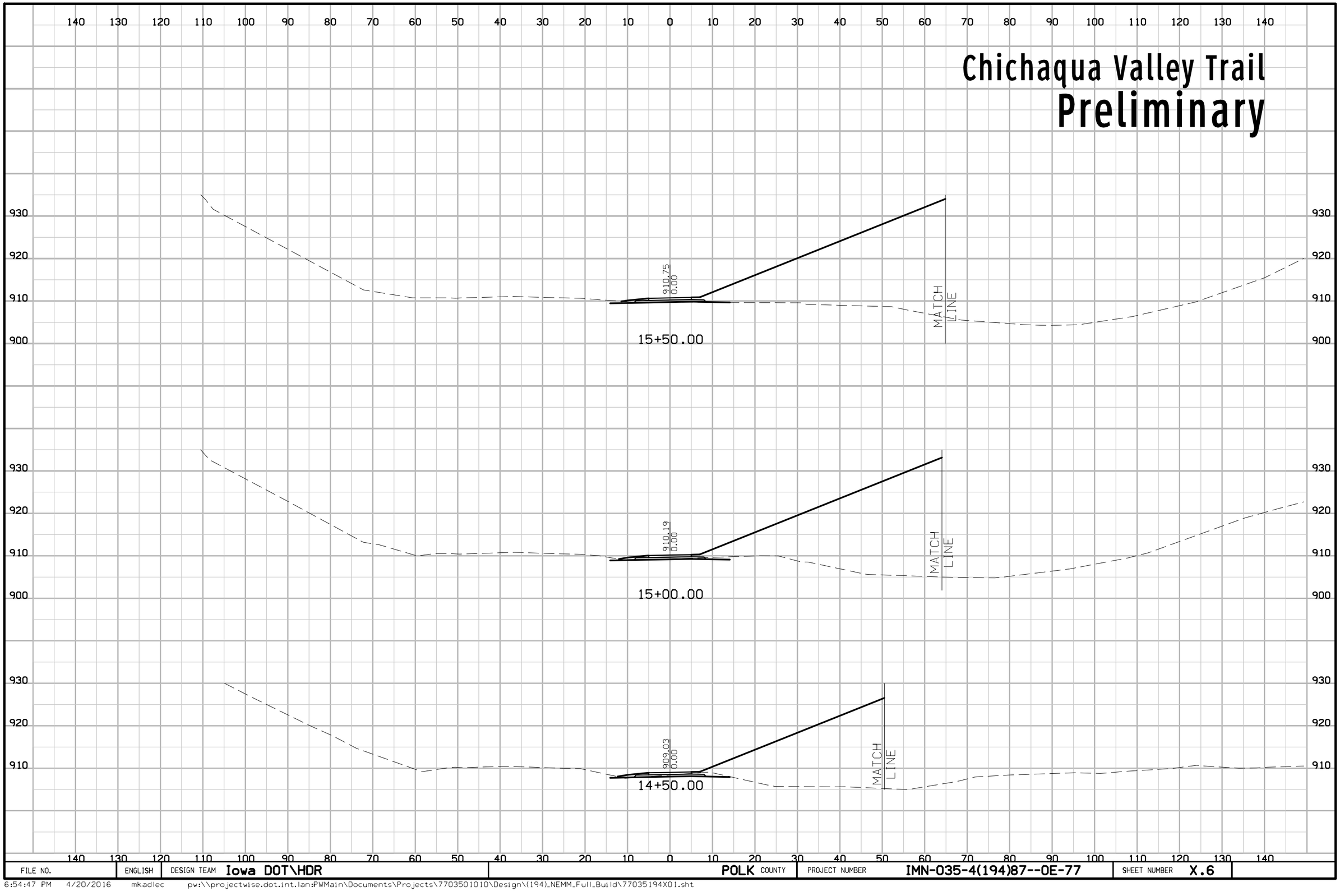
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER X.5

6:54:46 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194X01.sht

Chichaqua Valley Trail
Preliminary

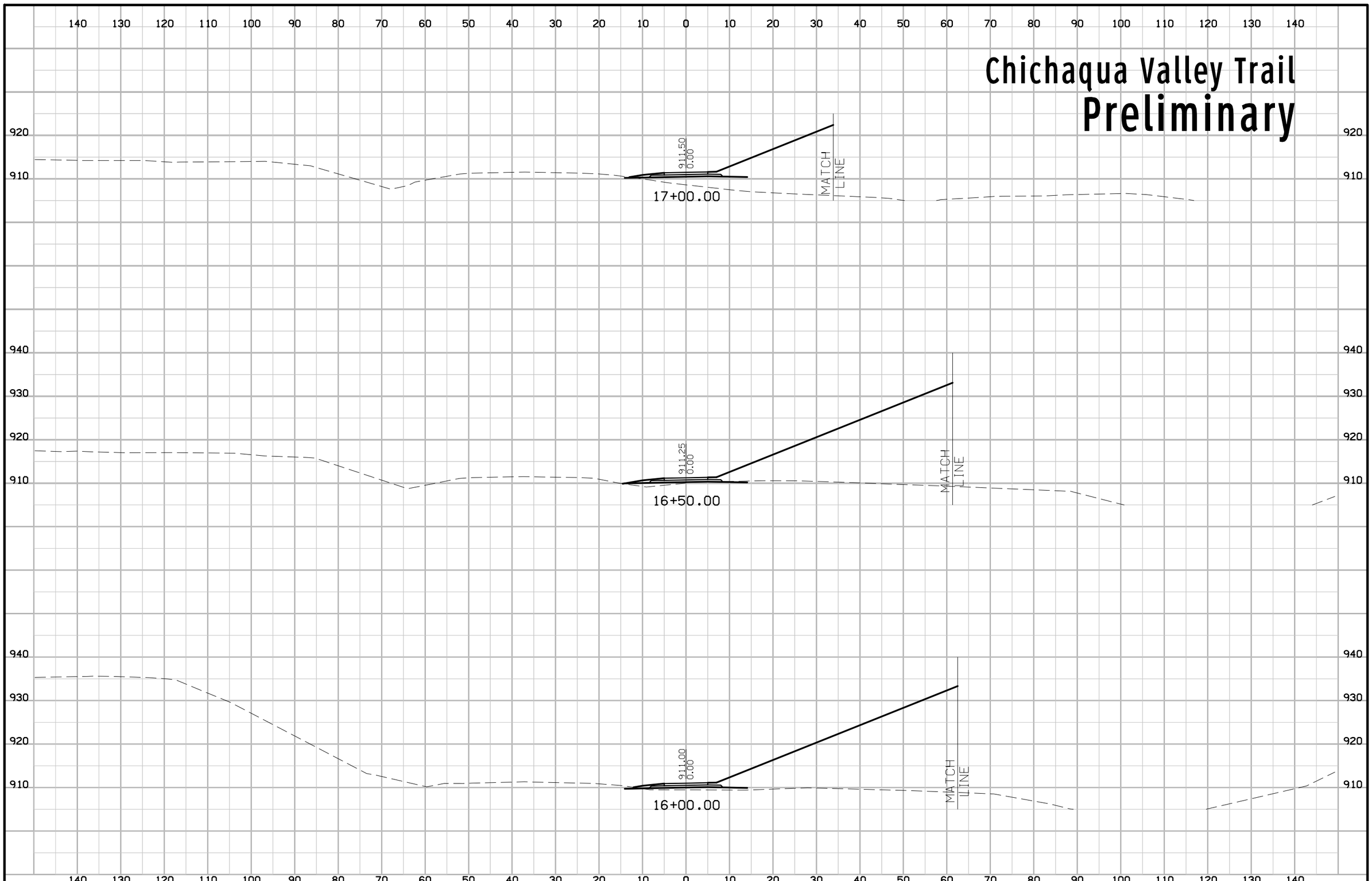


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER X.6

6:54:47 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194X01.sht

Chichaqua Valley Trail

Preliminary

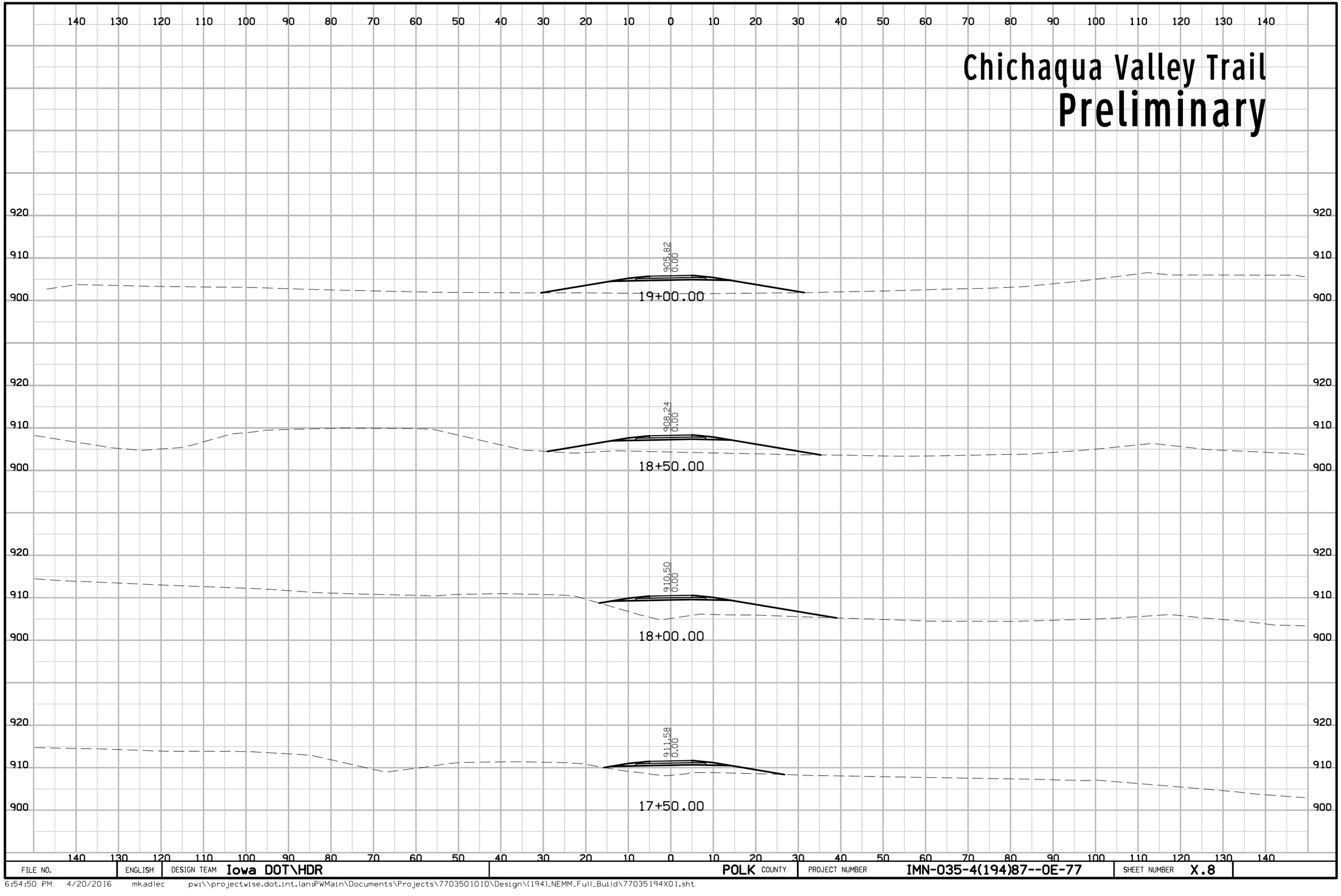


FILE NO.	ENGLISH	DESIGN TEAM	Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER	IMN-035-4(194)87--0E-77	SHEET NUMBER	X.7

6:54:48 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194X01.sht

Chichaqua Valley Trail

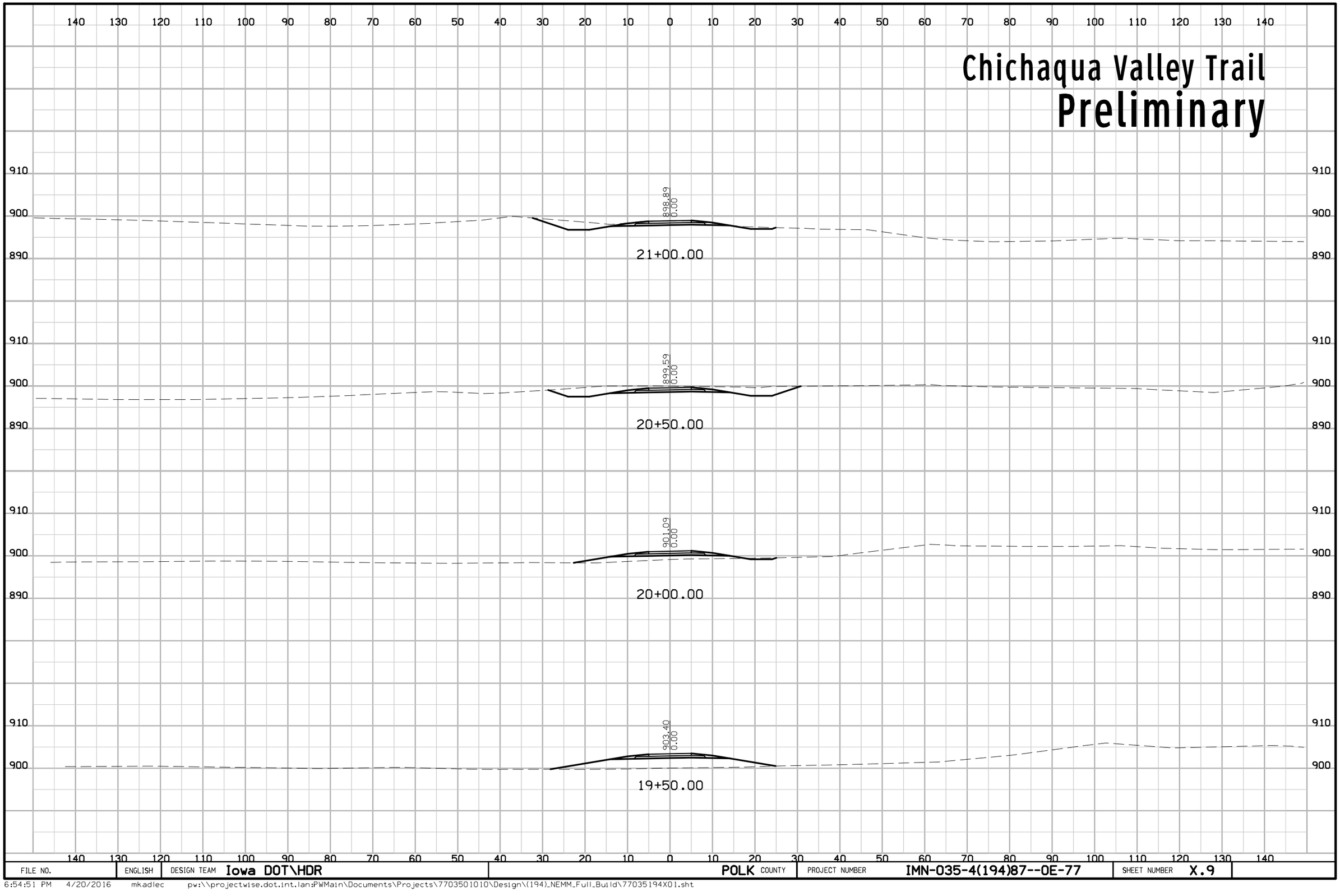
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER X.8

6:54:50 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194X01.sht

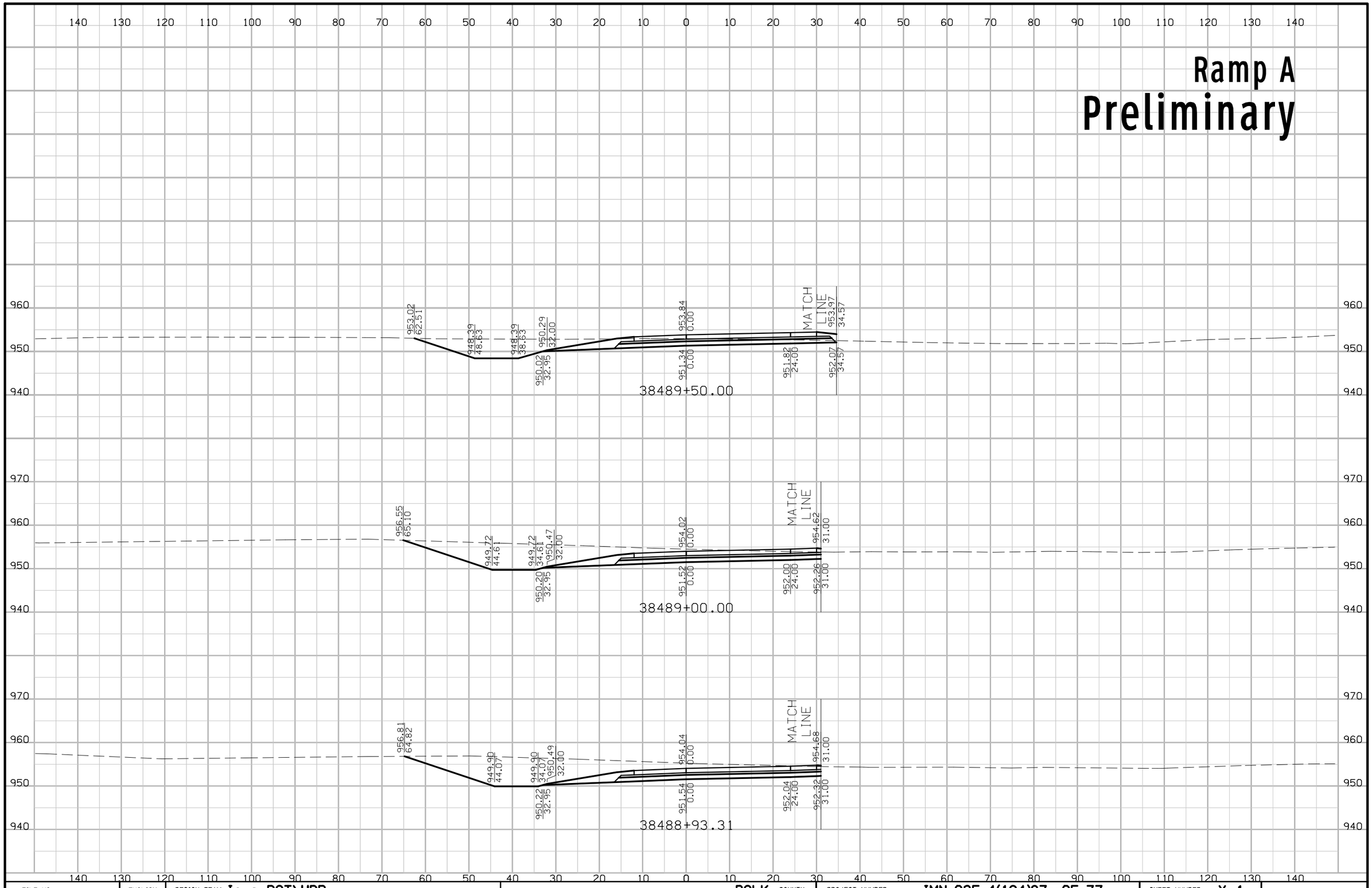
Chichaqua Valley Trail
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER X.9

6:54:51 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194X01.sht

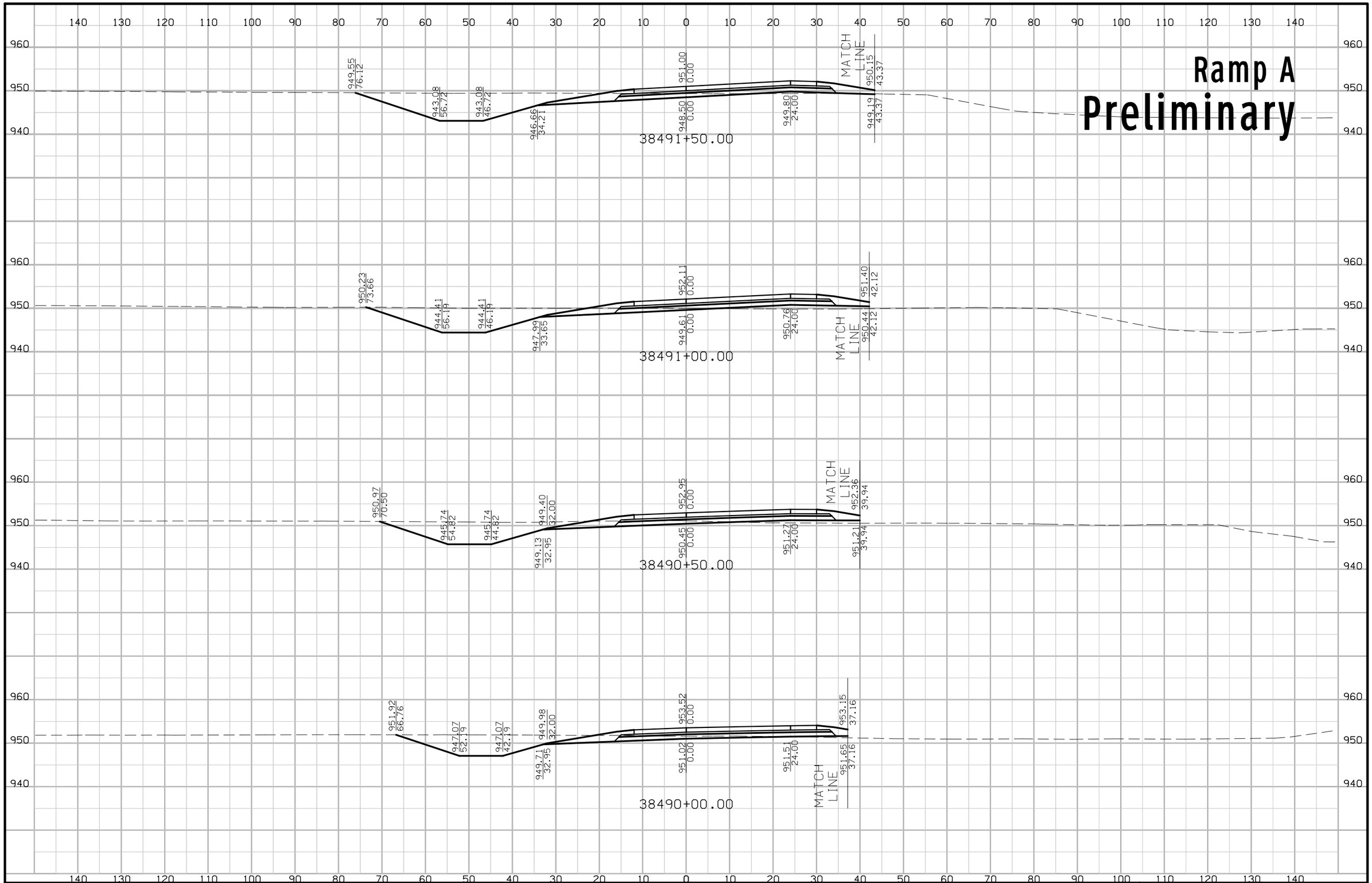
Ramp A
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.1

7:30:24 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

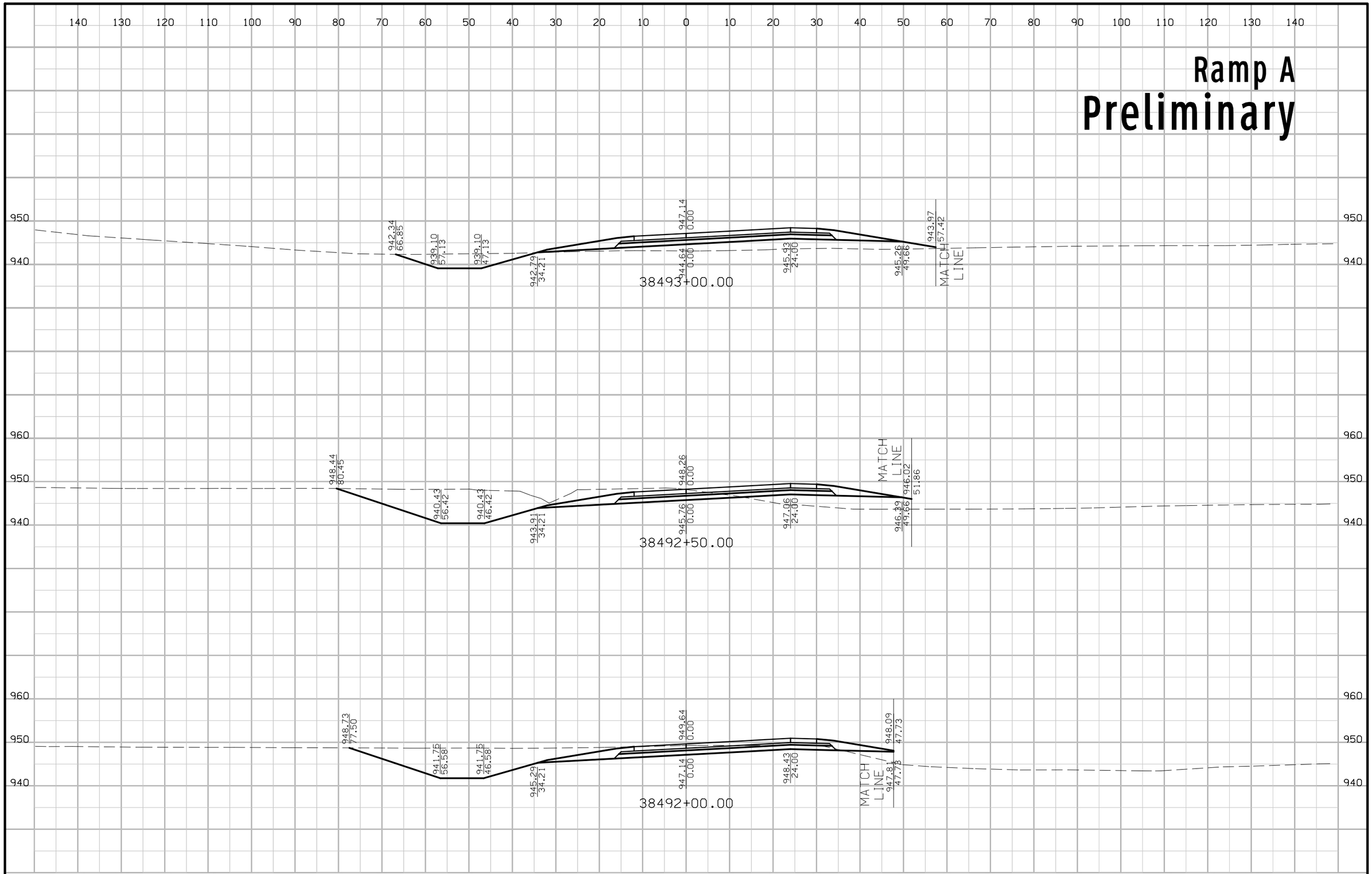
Ramp A
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.2

7:30:26 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

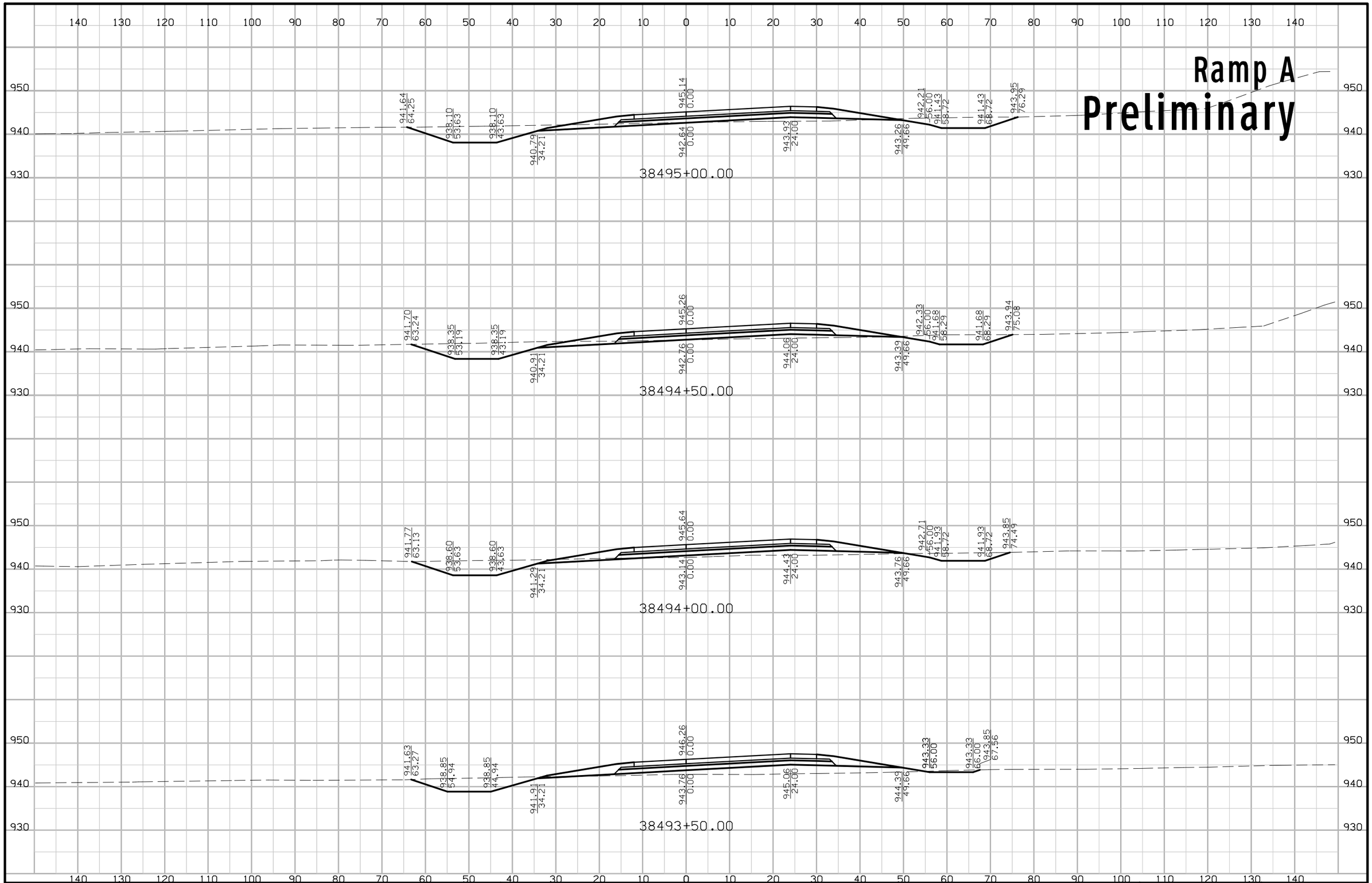
Ramp A
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.3

7:30:28 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

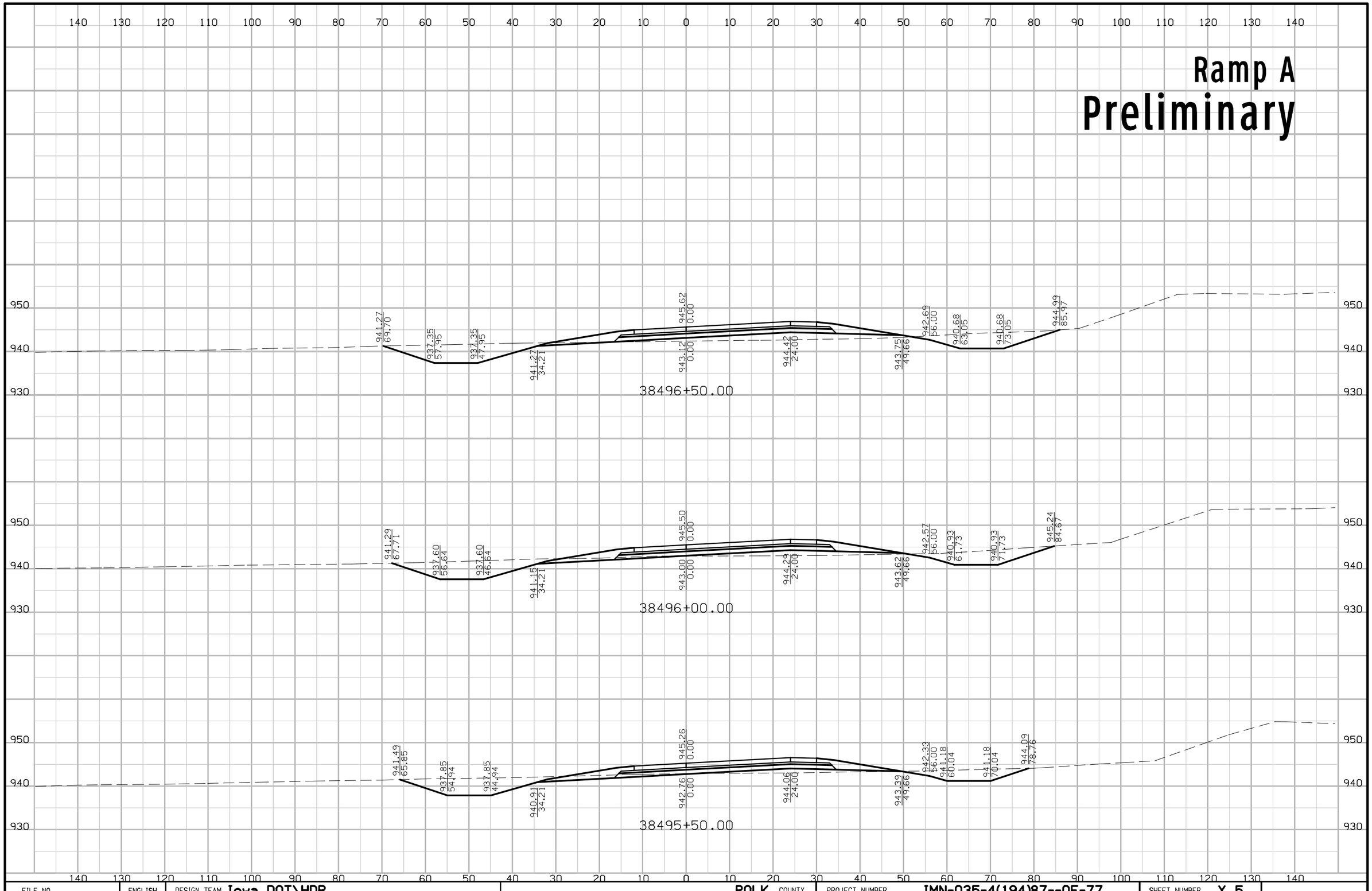
Ramp A
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.4

7:30:30 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

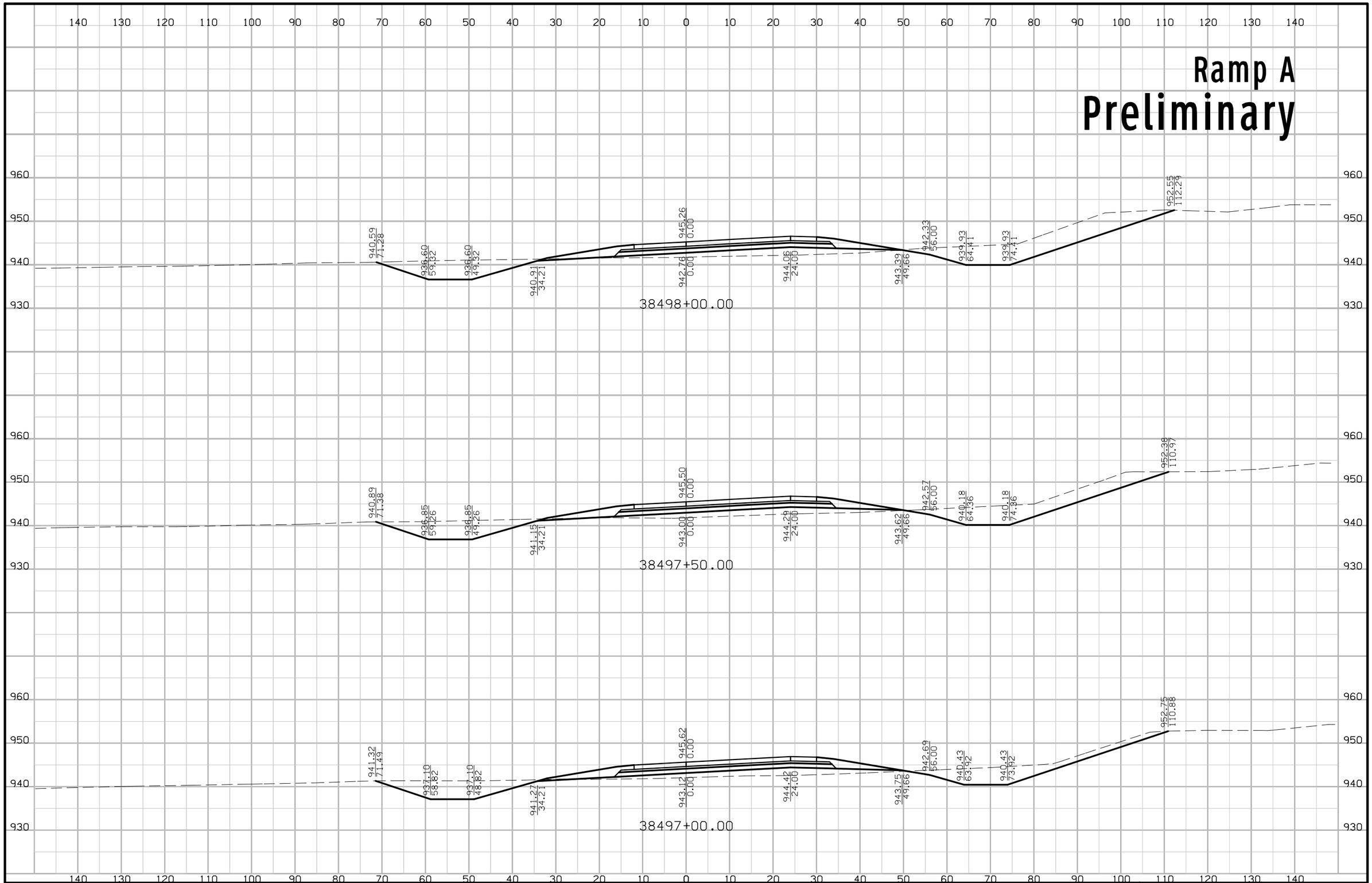
Ramp A
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.5

7:30:31 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

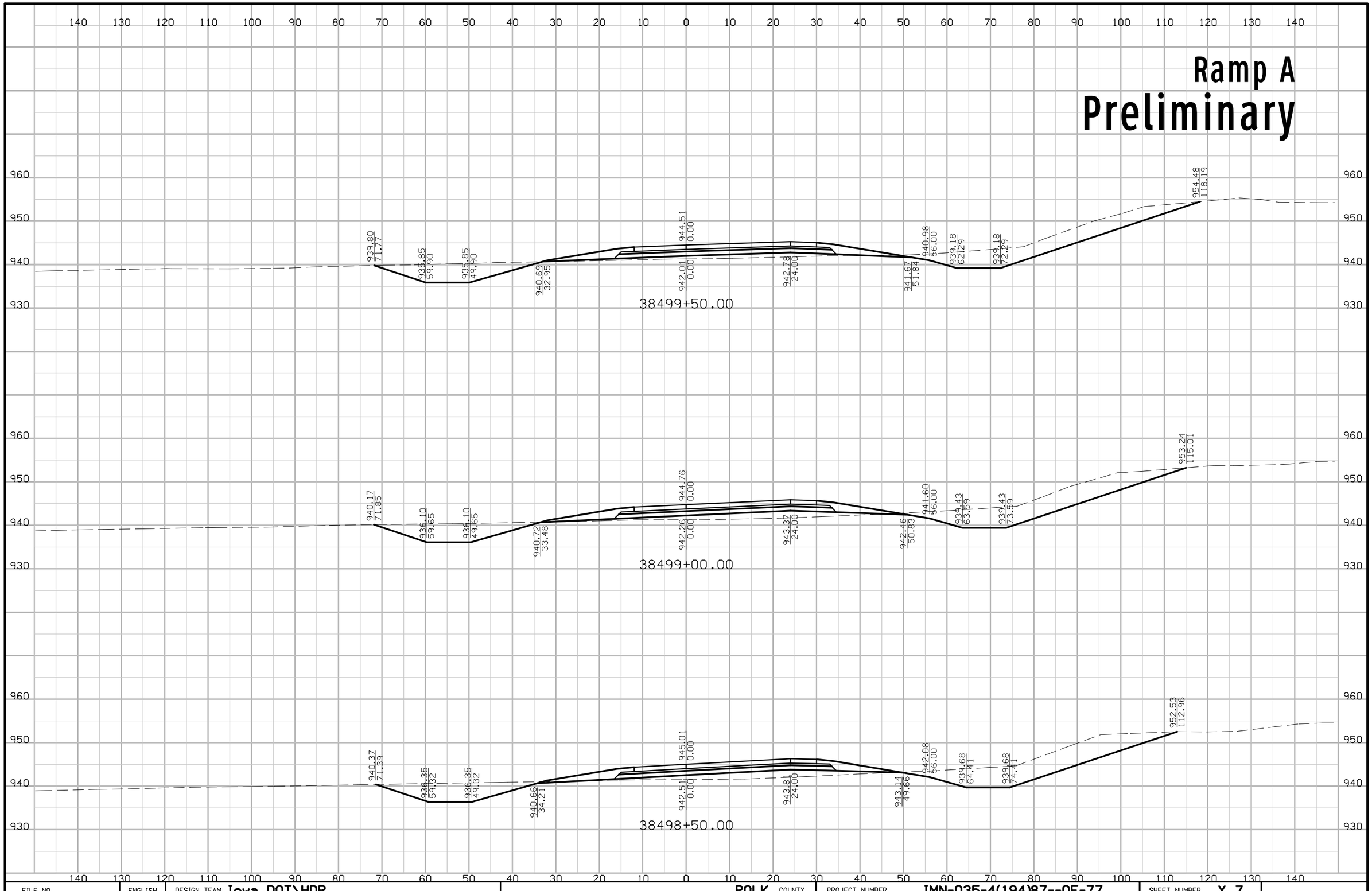
Ramp A
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.6

7:30:33 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

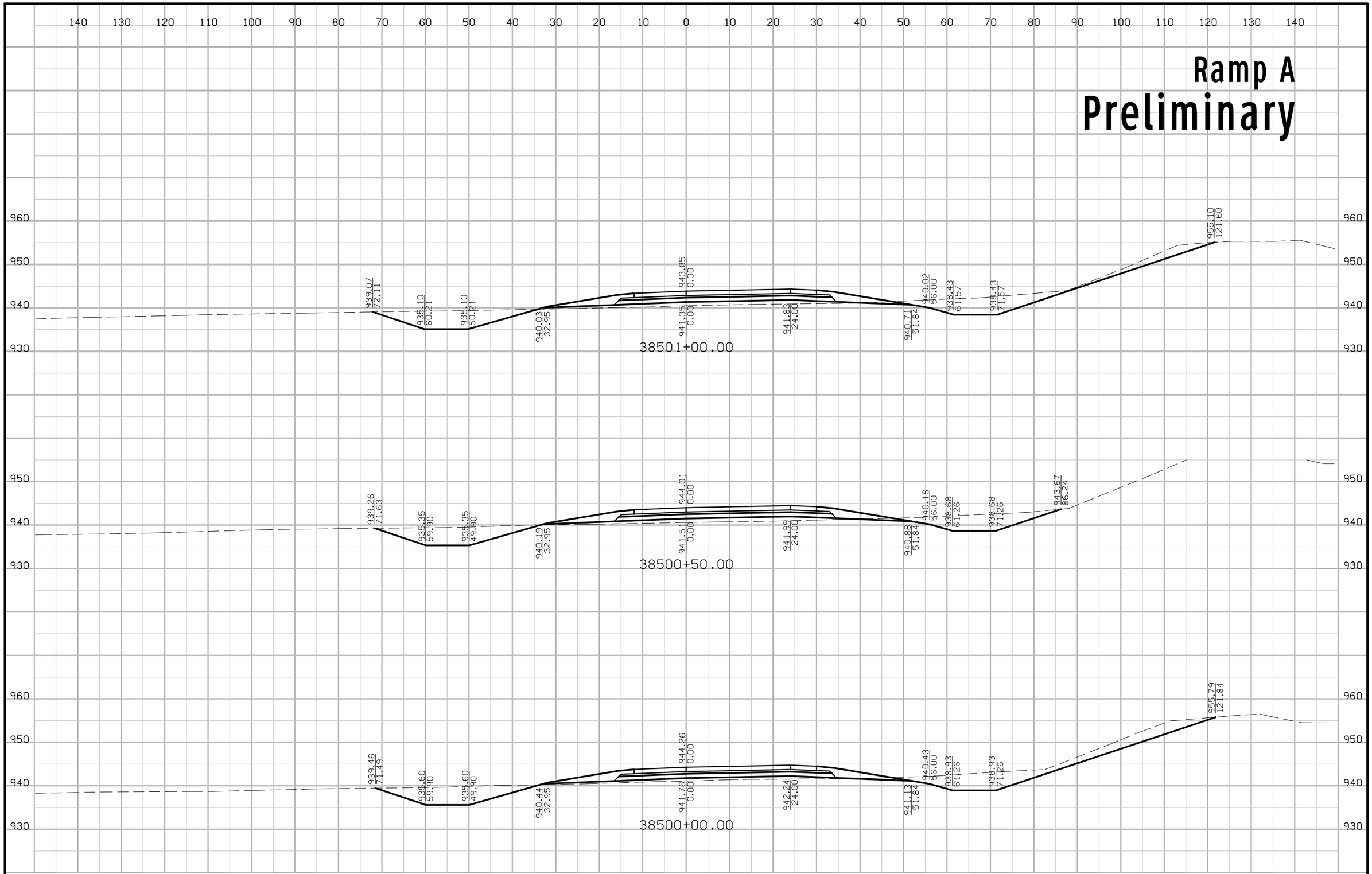
Ramp A
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.7

7:30:35 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

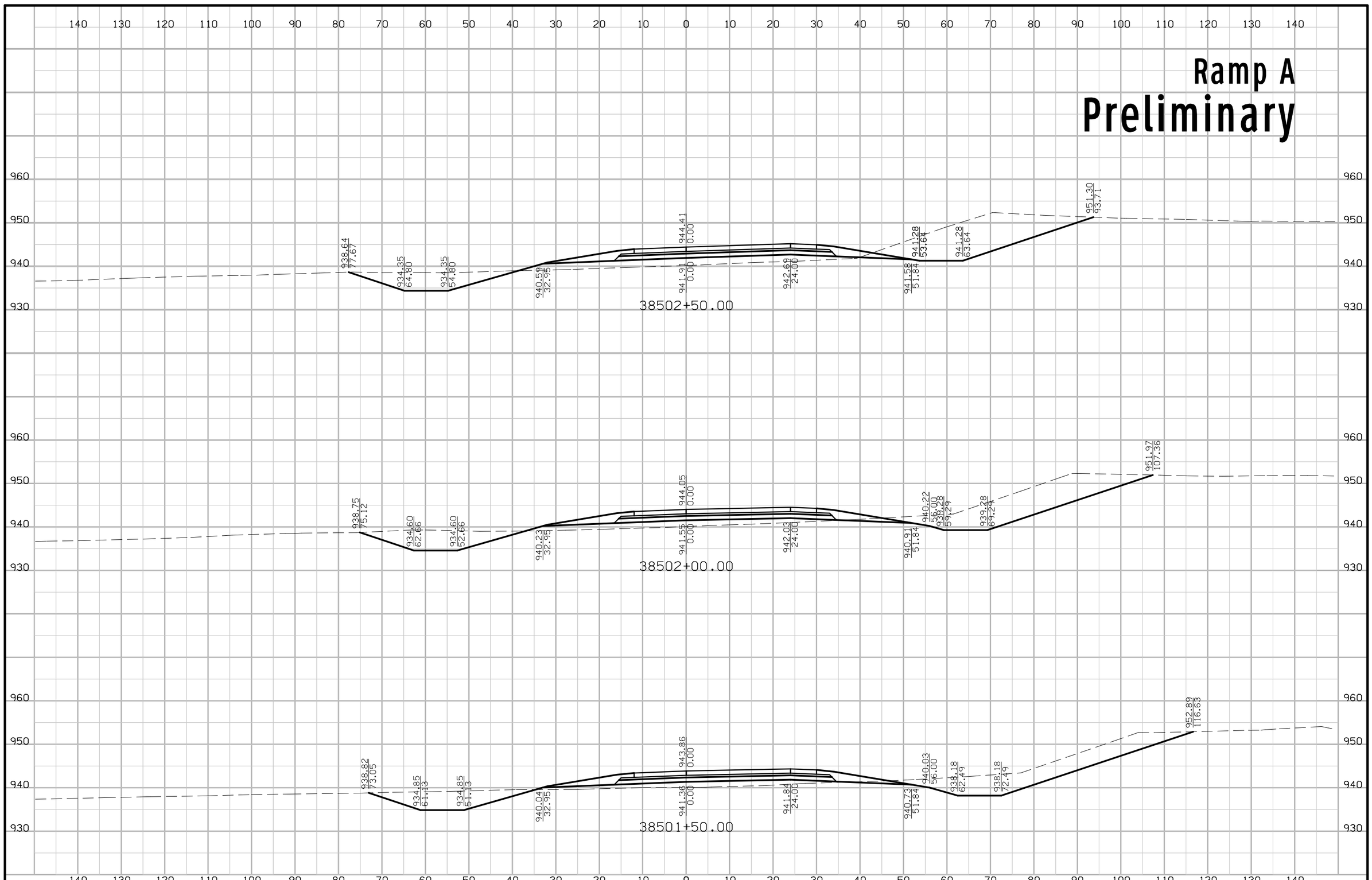
Ramp A
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.8

7:30:37 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp A
Preliminary

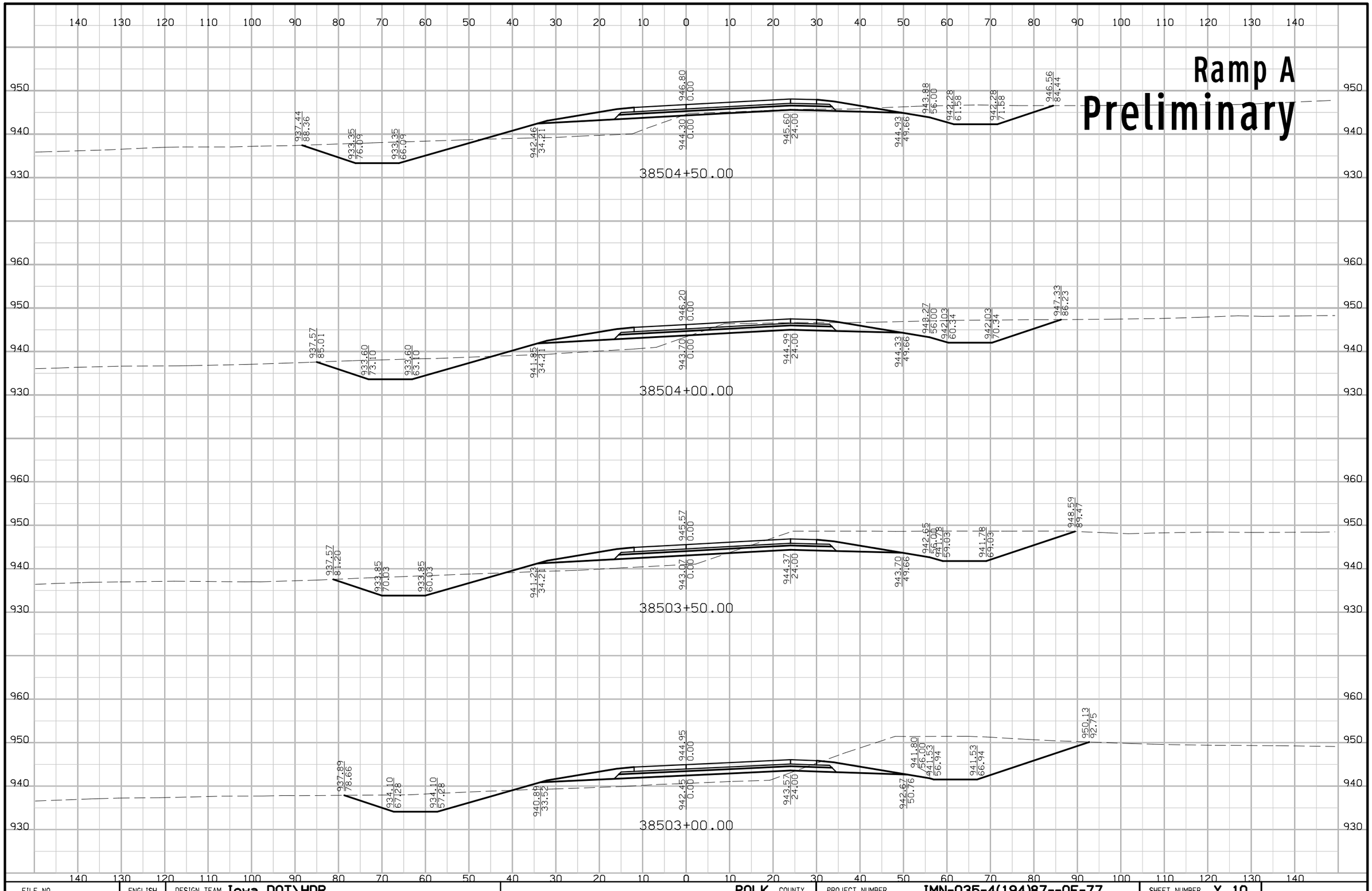


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.9

7:30:38 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp A

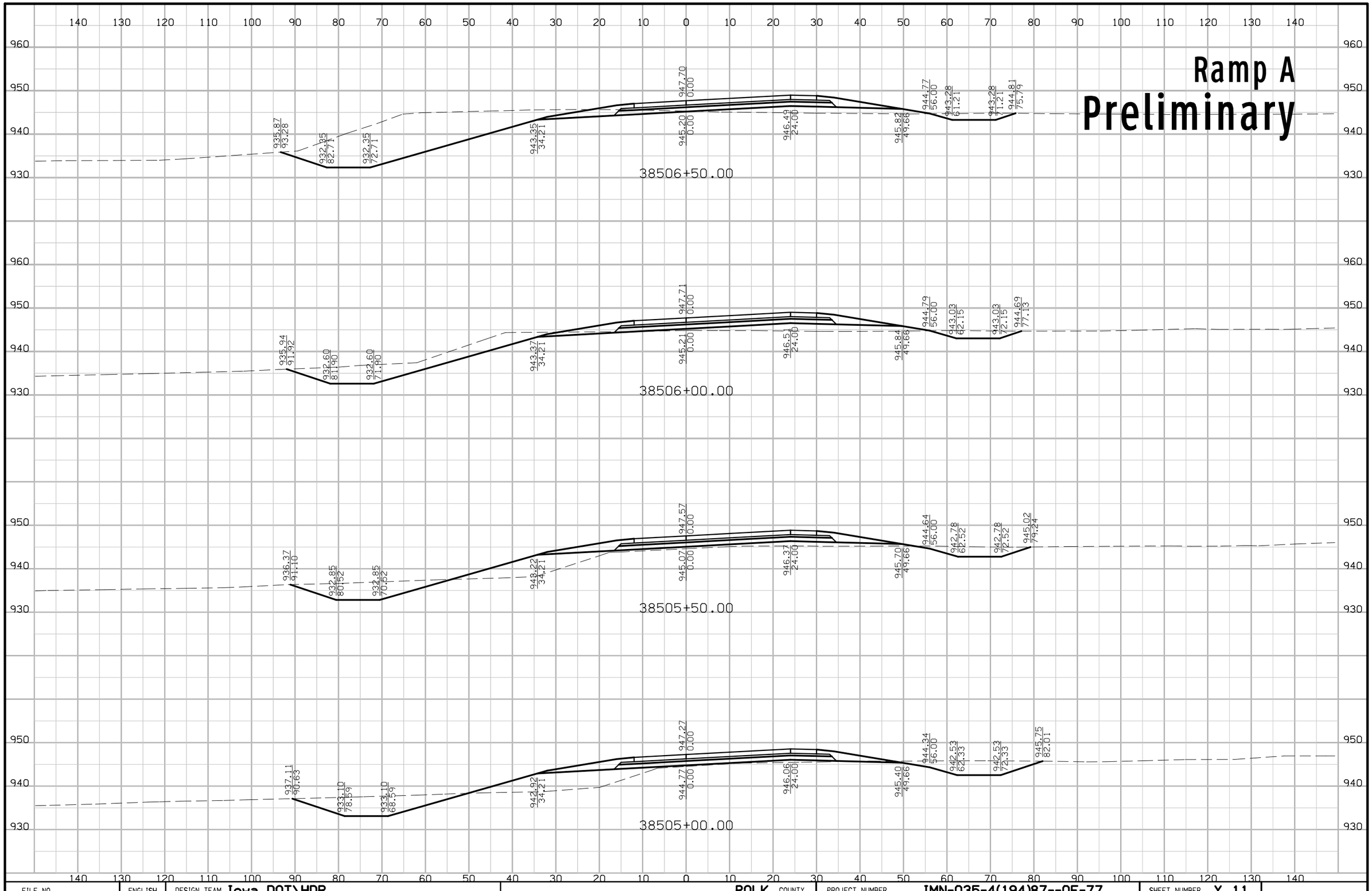
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.10

7:30:40 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

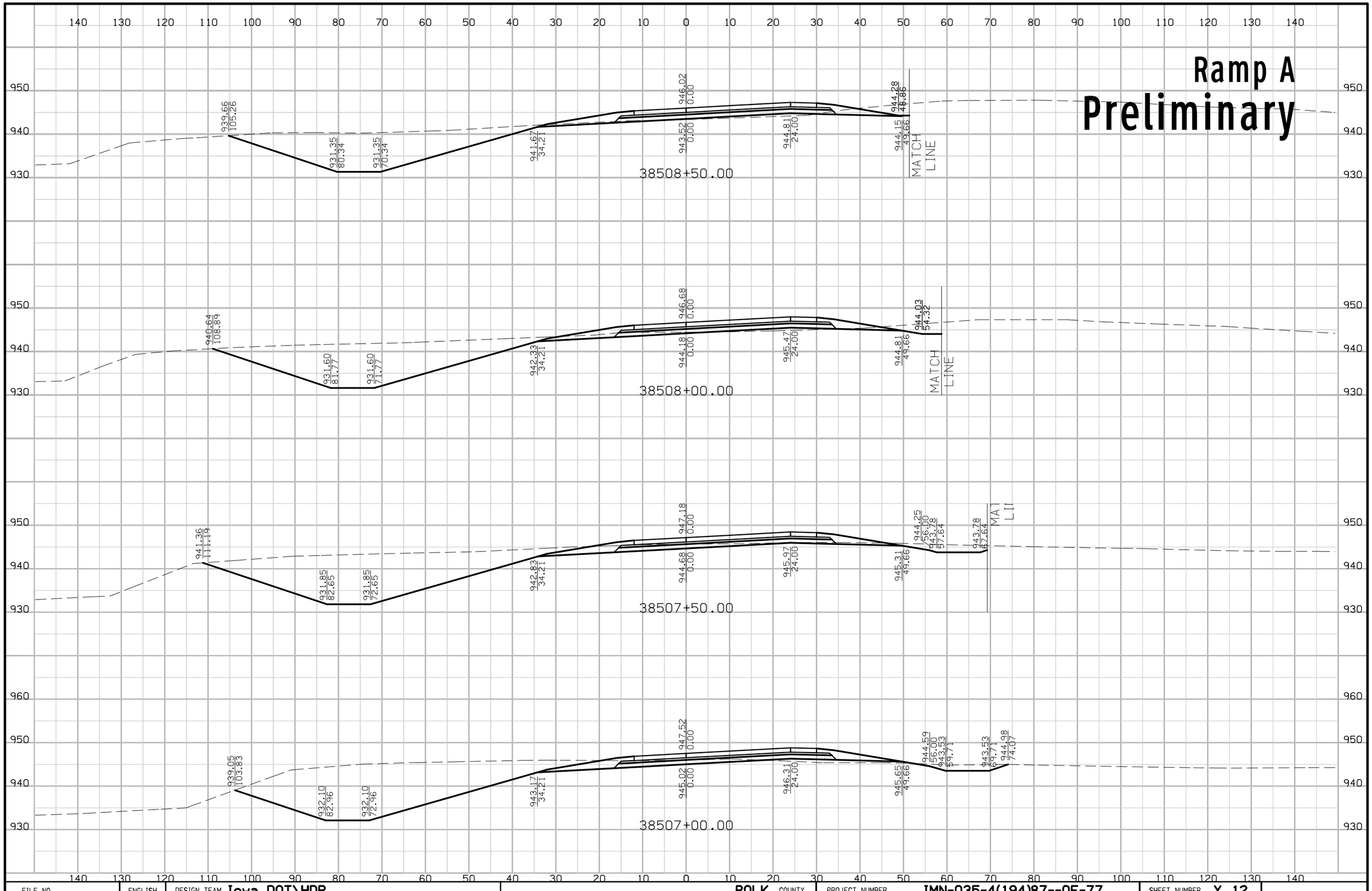
Ramp A
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.11

7:30:42 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

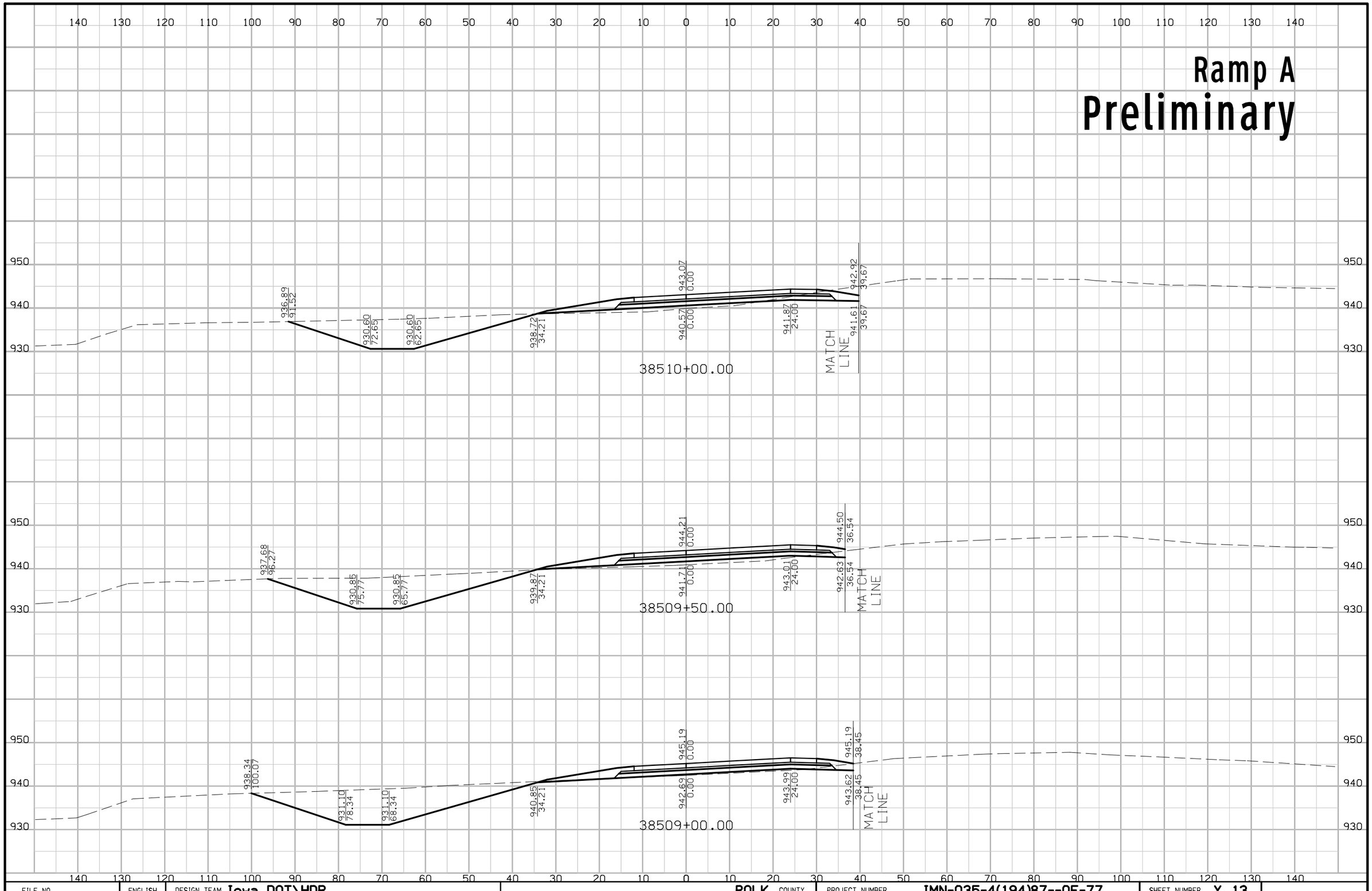
Ramp A
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.12

7:30:44 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

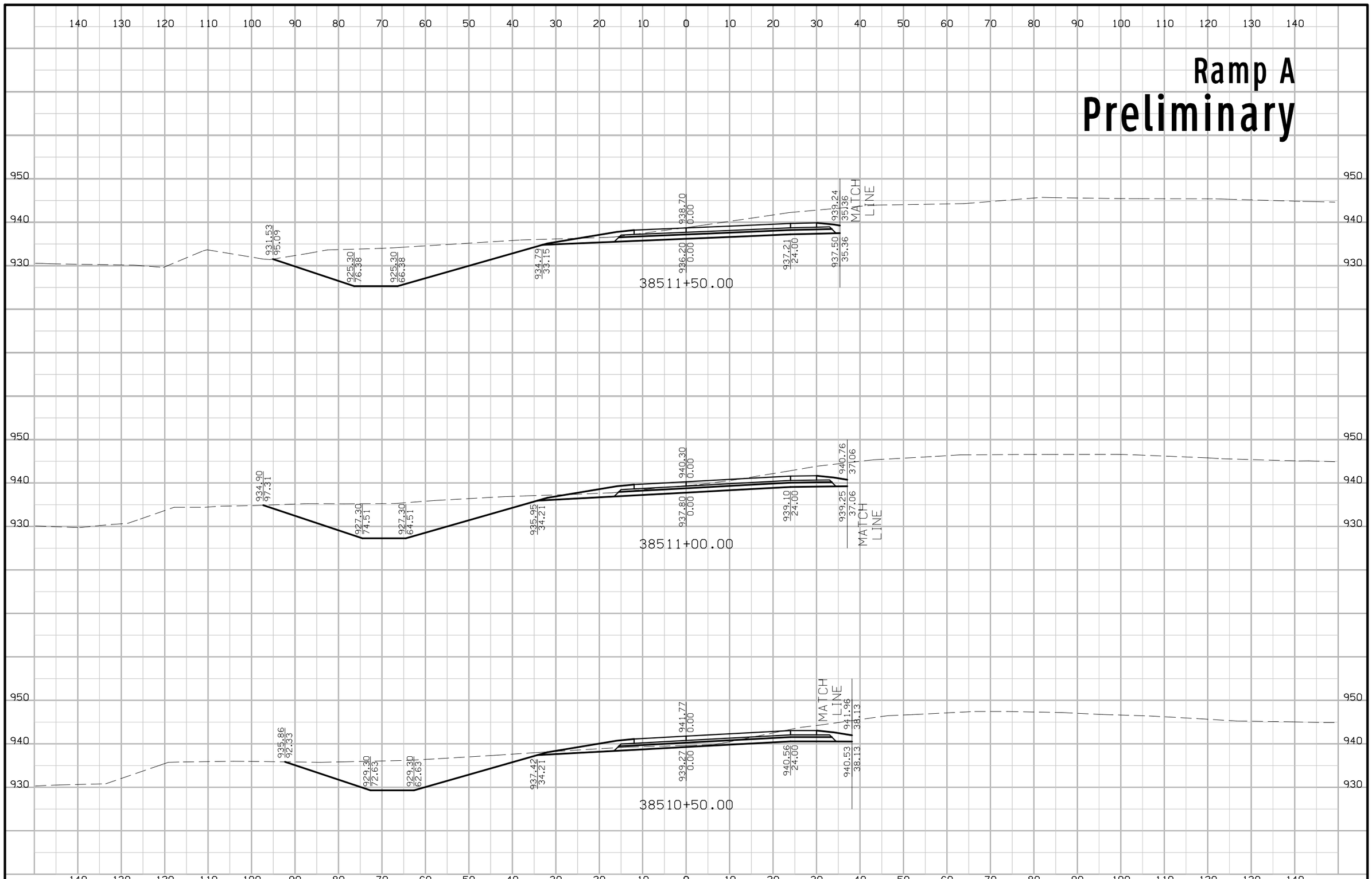
Ramp A
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.13

7:30:45 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

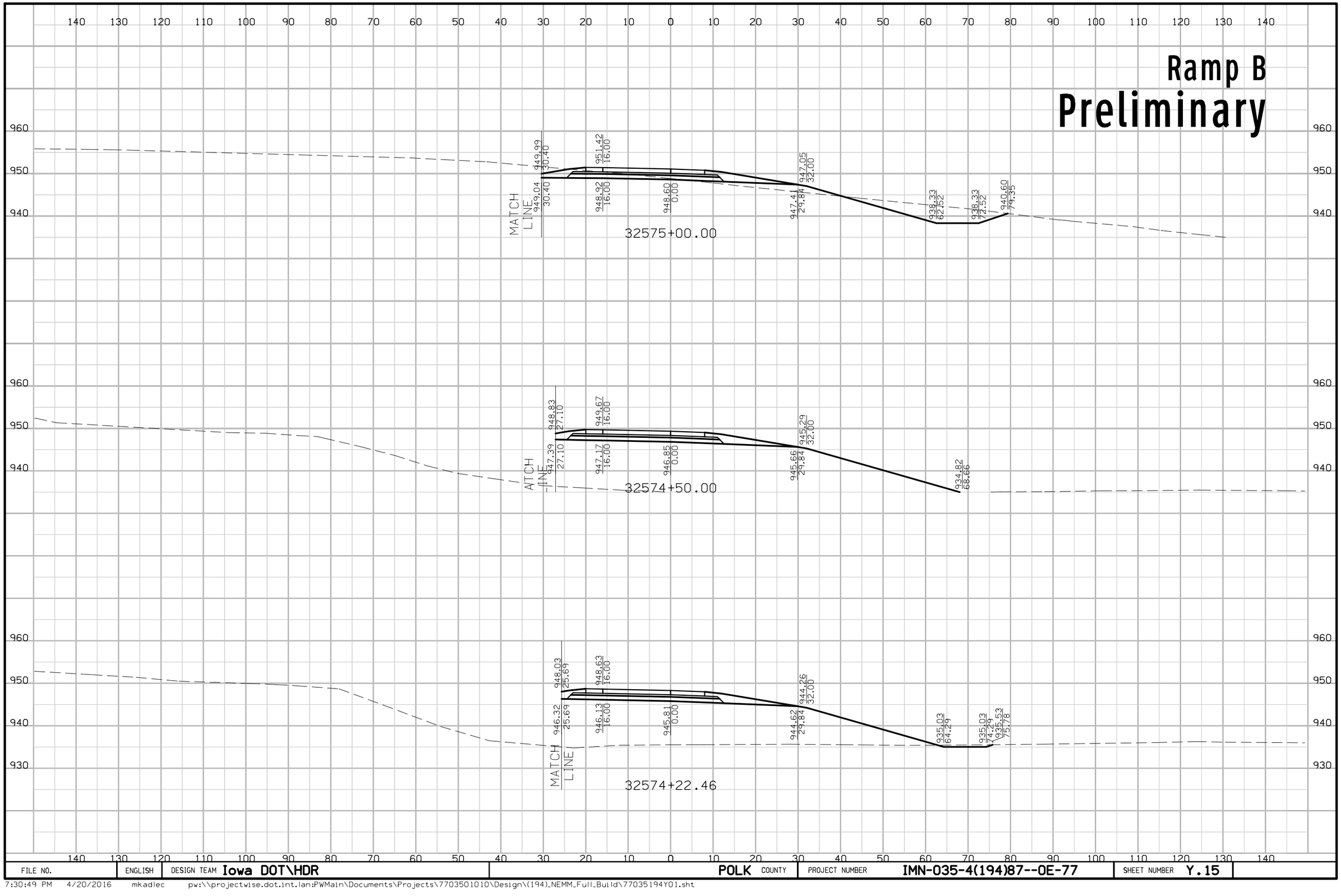
Ramp A
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.14

7:30:47 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

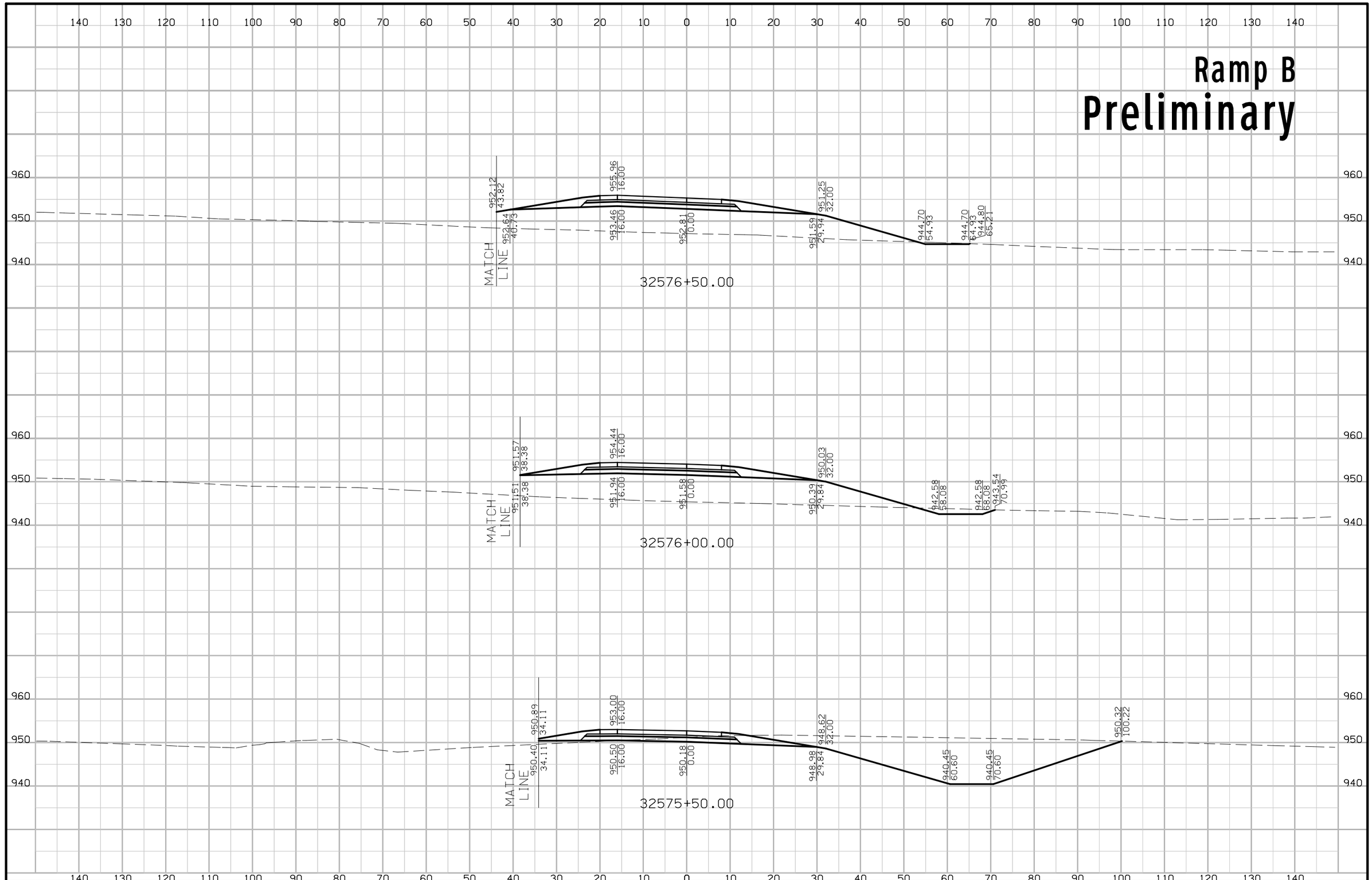
Ramp B
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.15

7:30:49 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

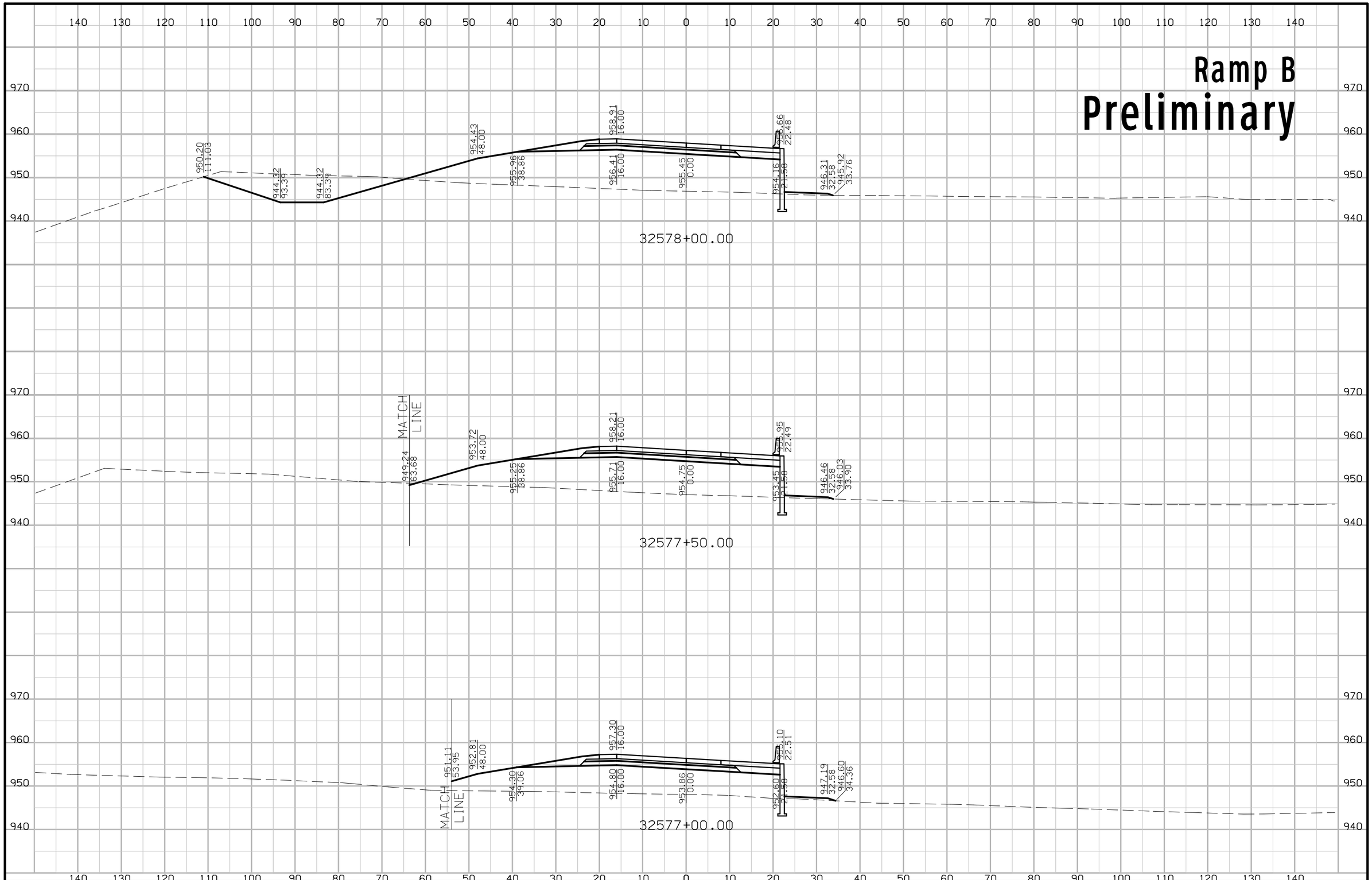
Ramp B
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.16

7:30:51 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

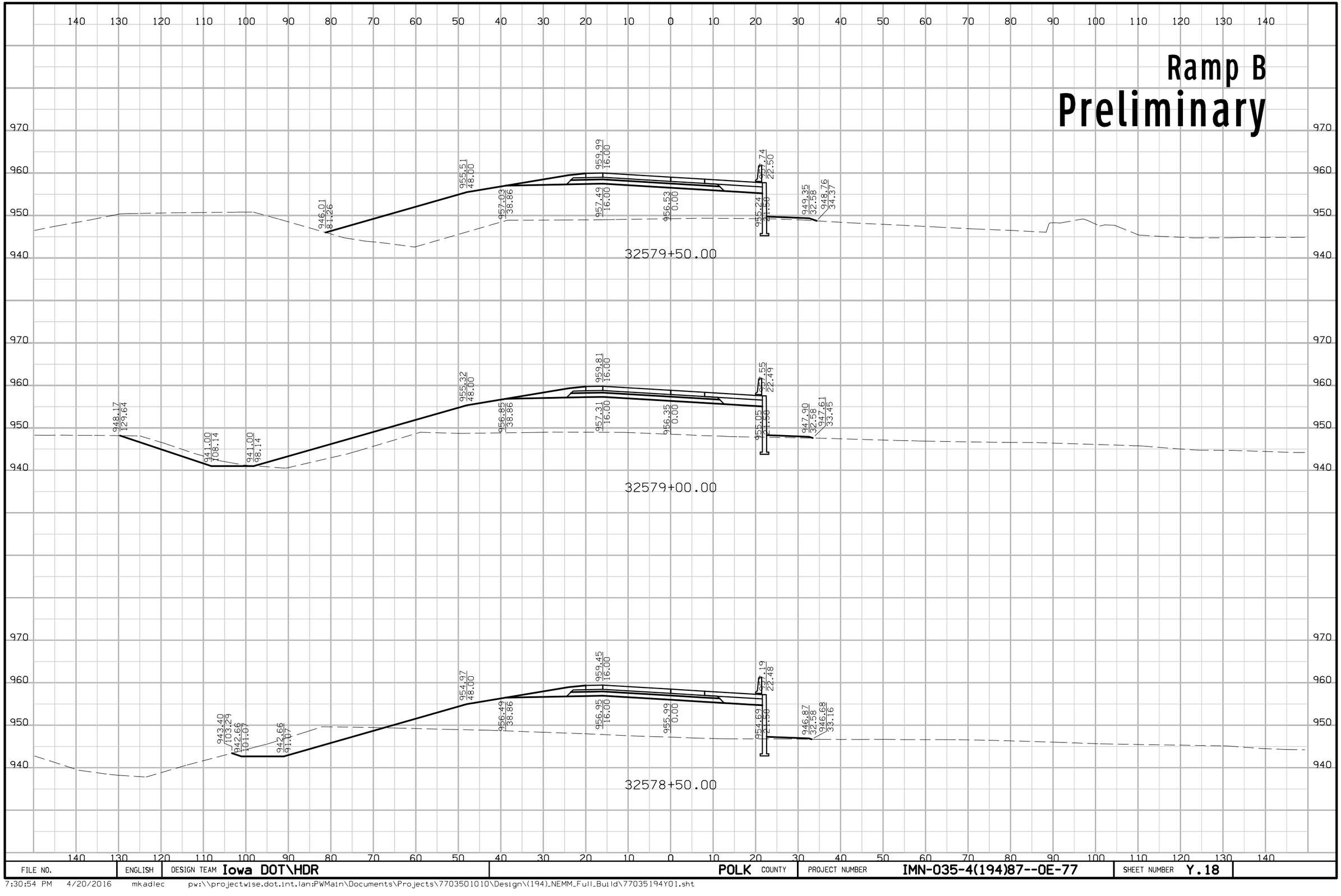
Ramp B
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.17

7:30:52 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

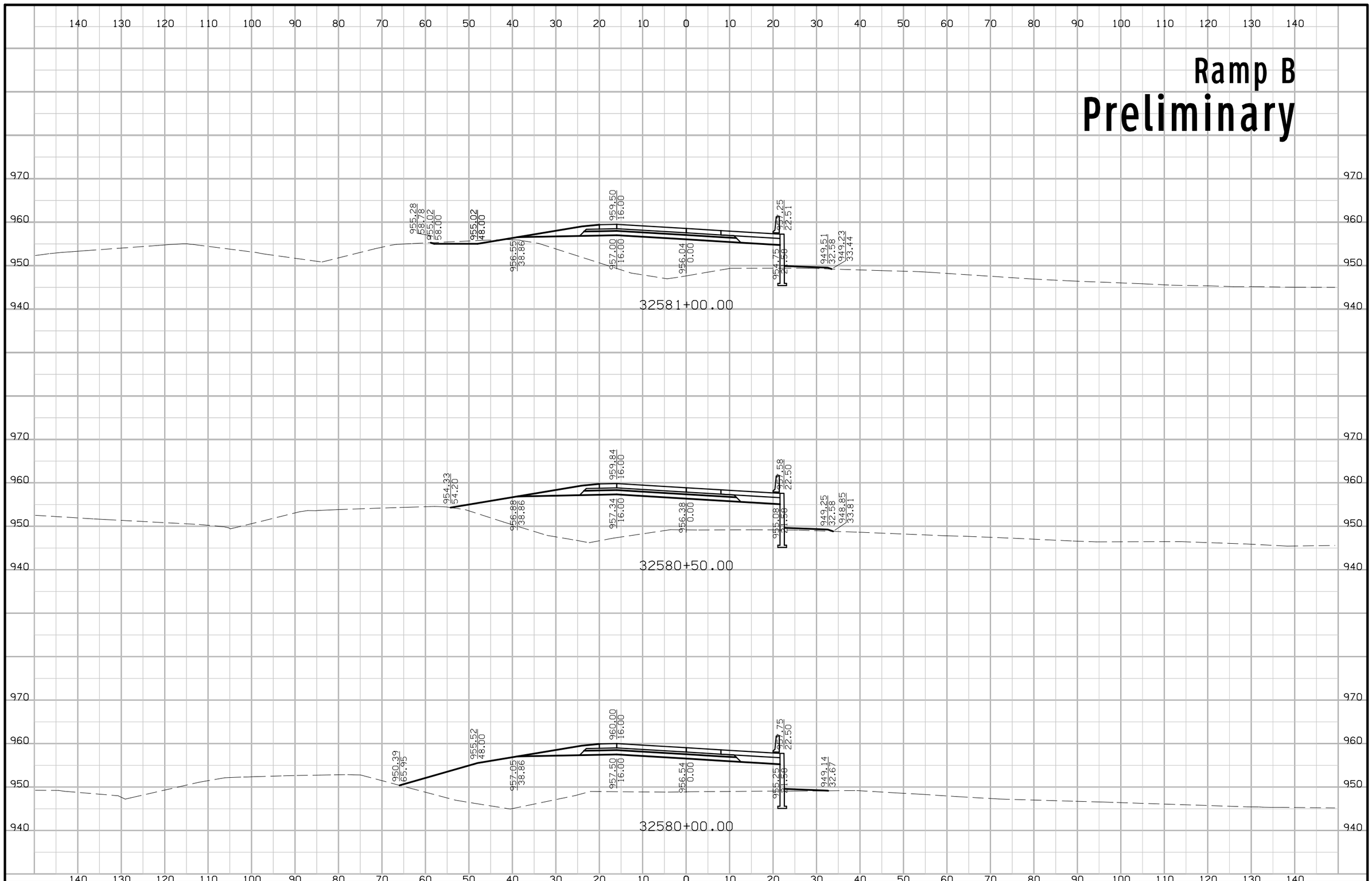
Ramp B
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.18

7:30:54 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

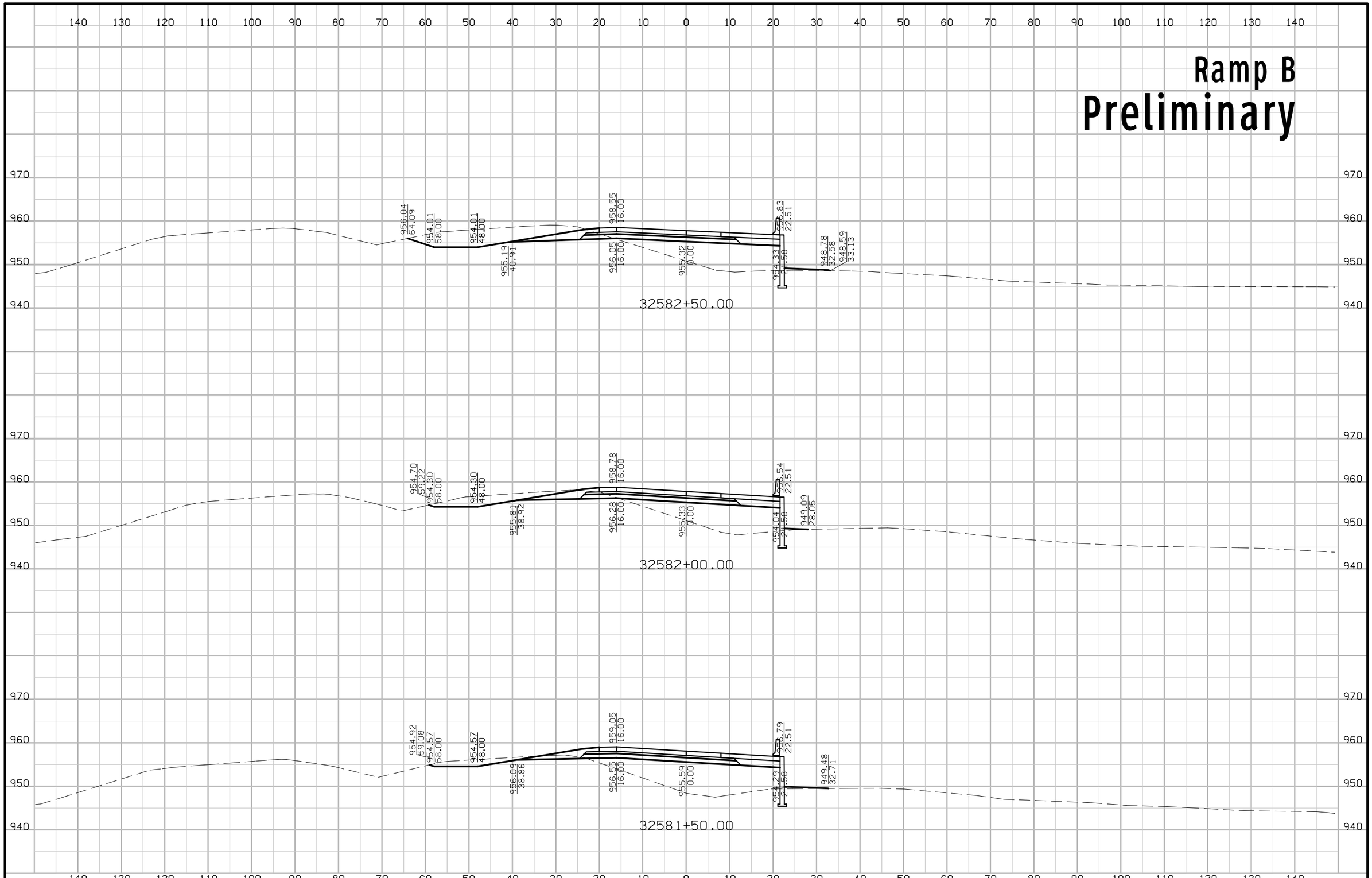
Ramp B
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.19

7:30:56 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

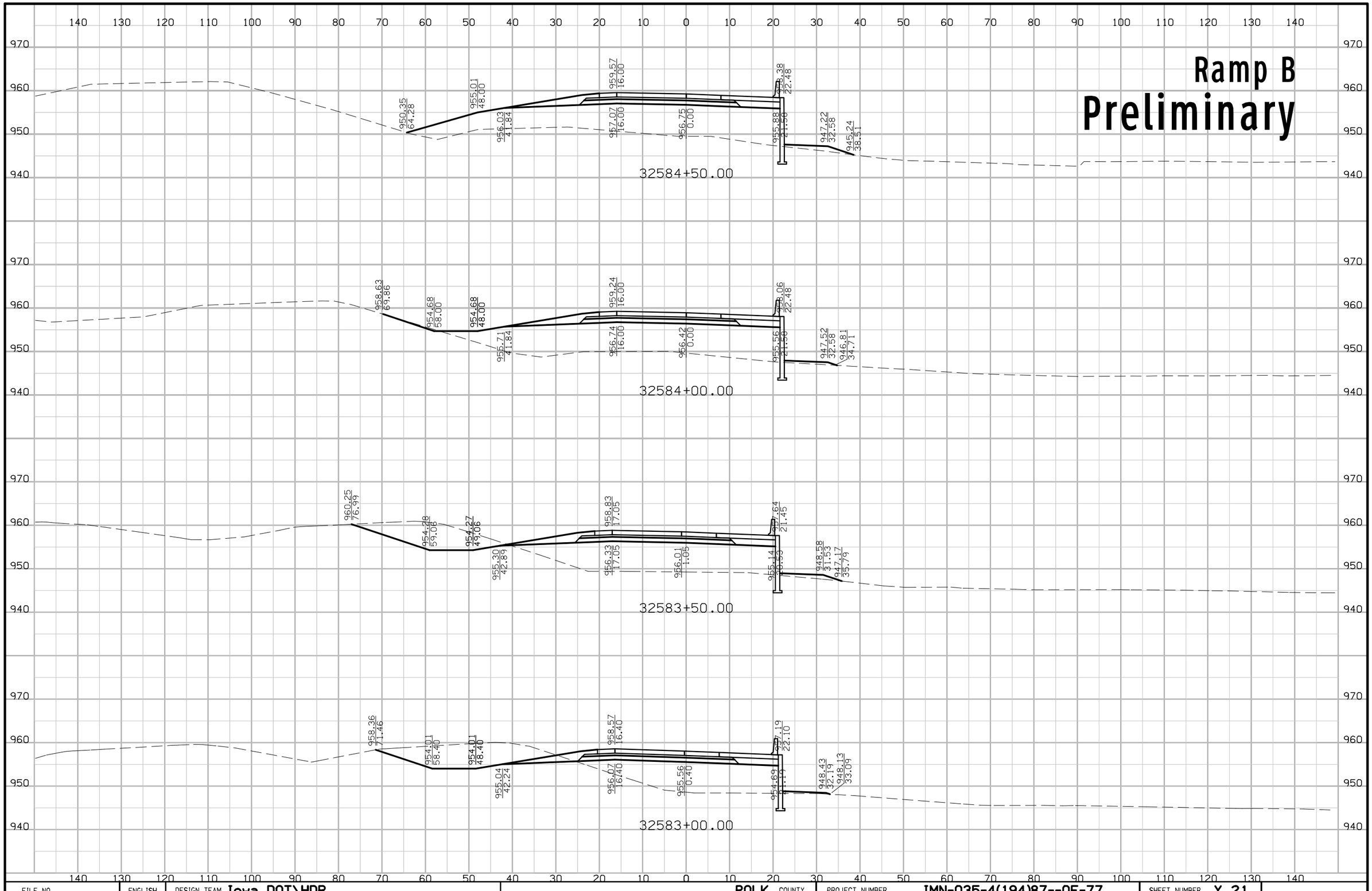
Ramp B
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.20

7:30:58 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

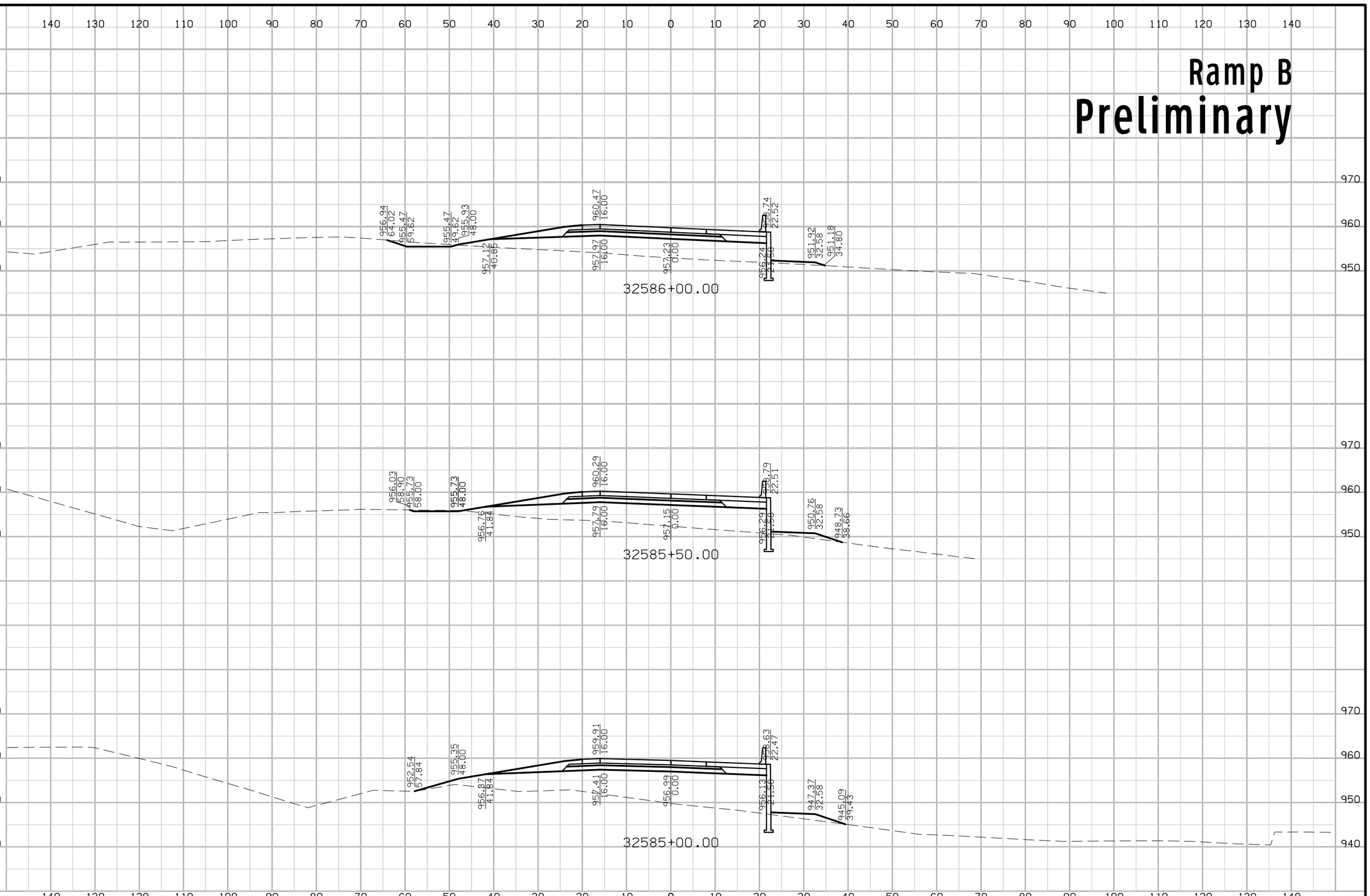
Ramp B
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.21

7:30:59 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

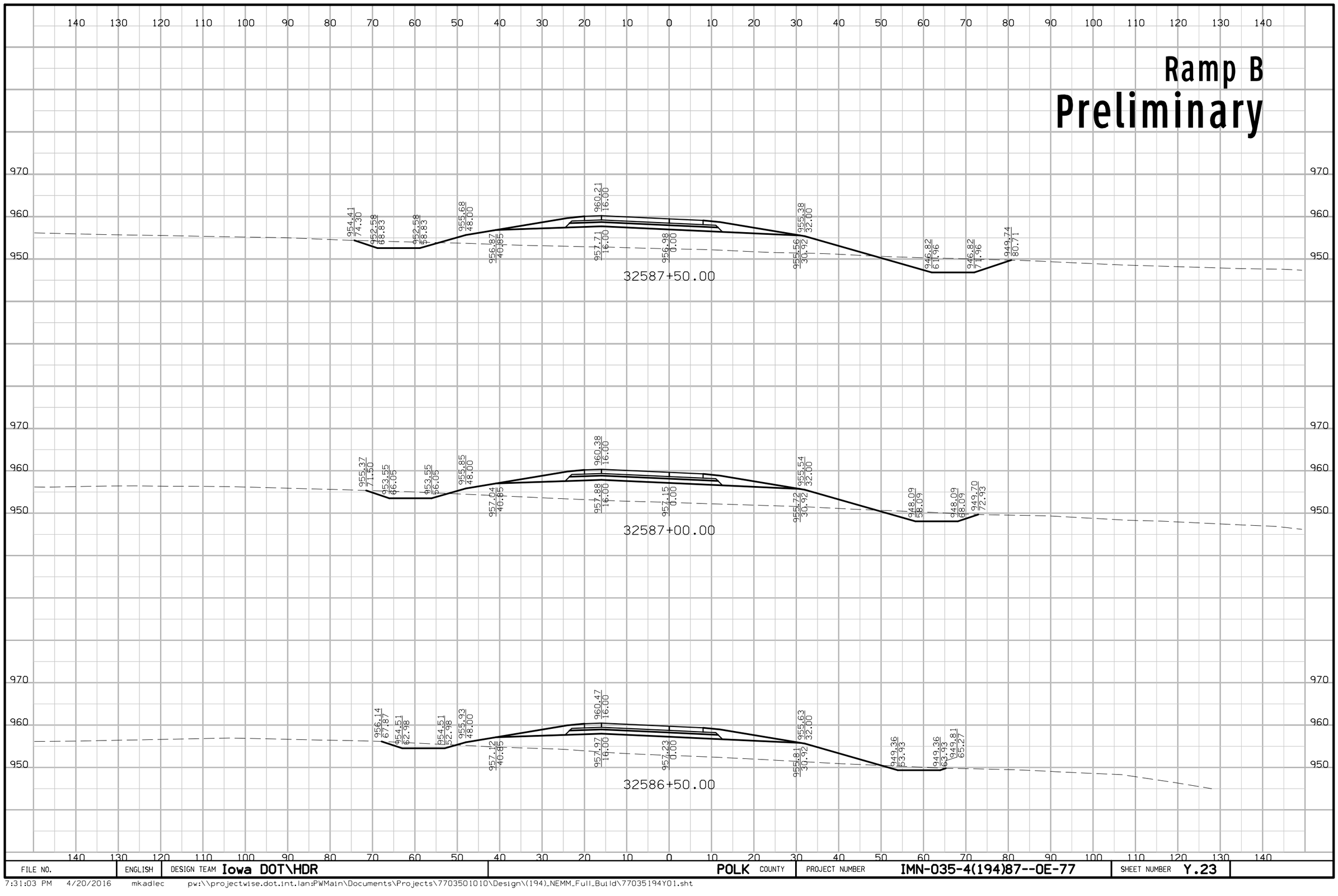
Ramp B
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.22

7:31:01 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

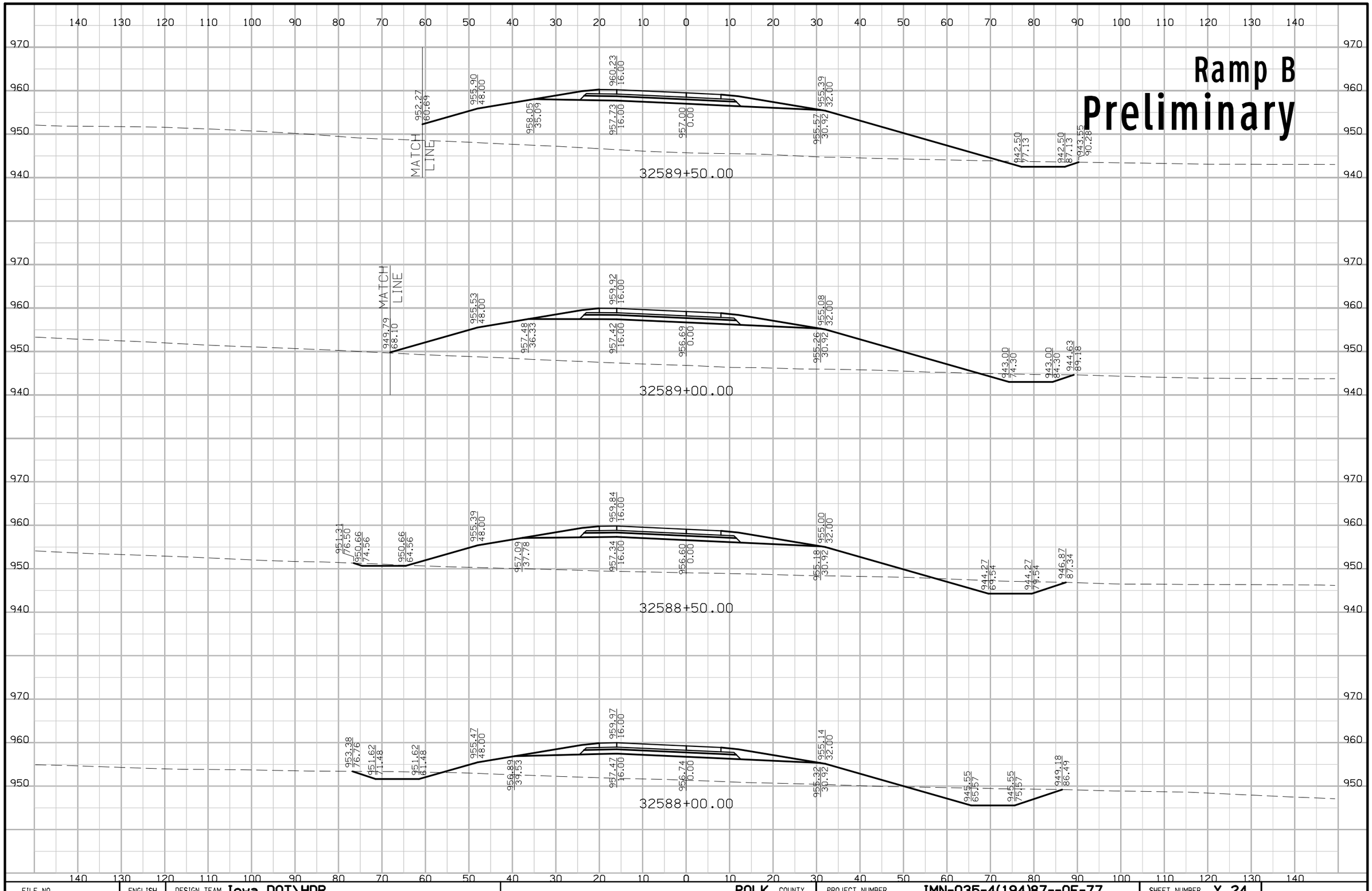
Ramp B
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.23

7:31:03 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

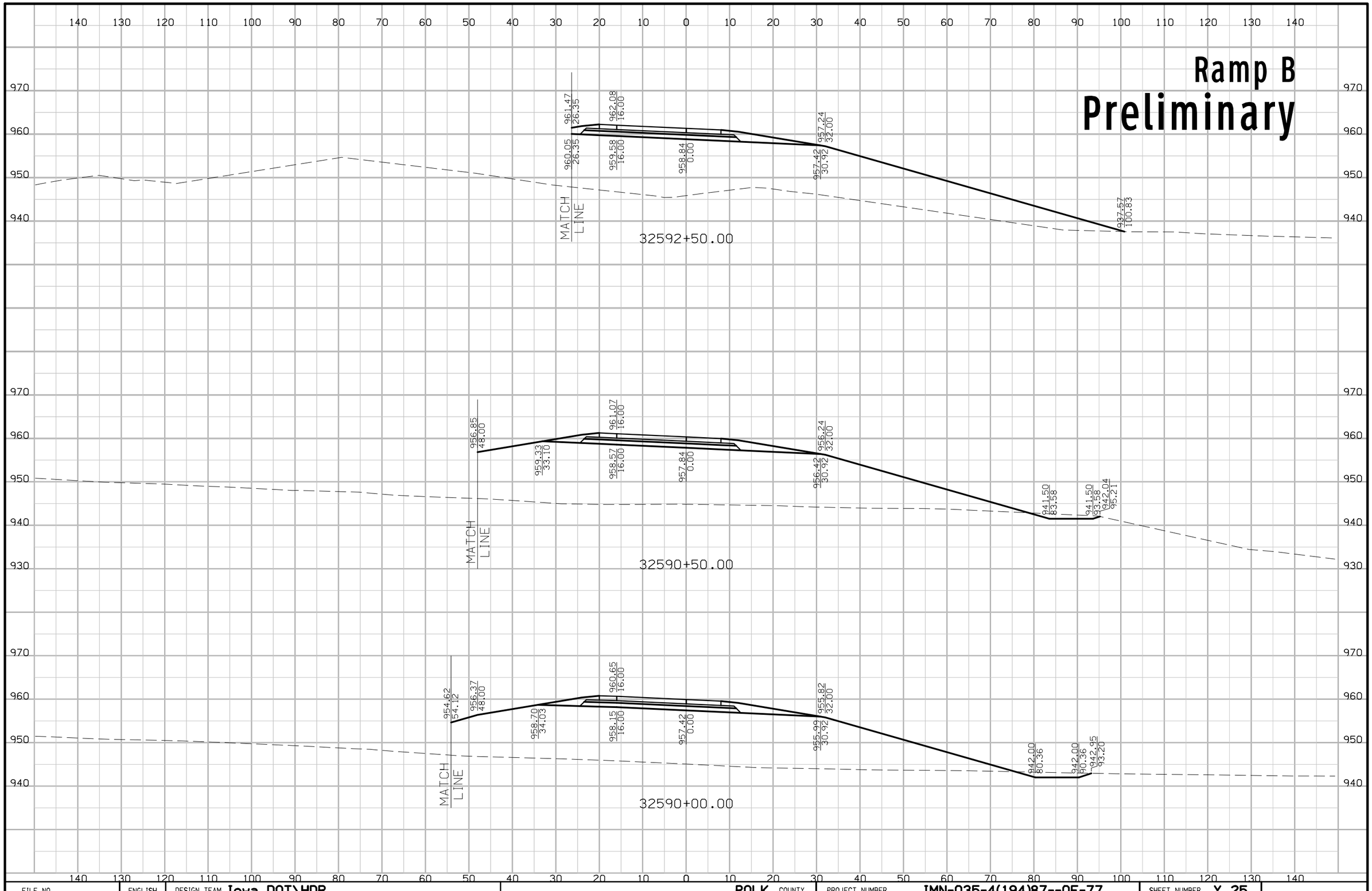
Ramp B
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.24

7:31:05 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

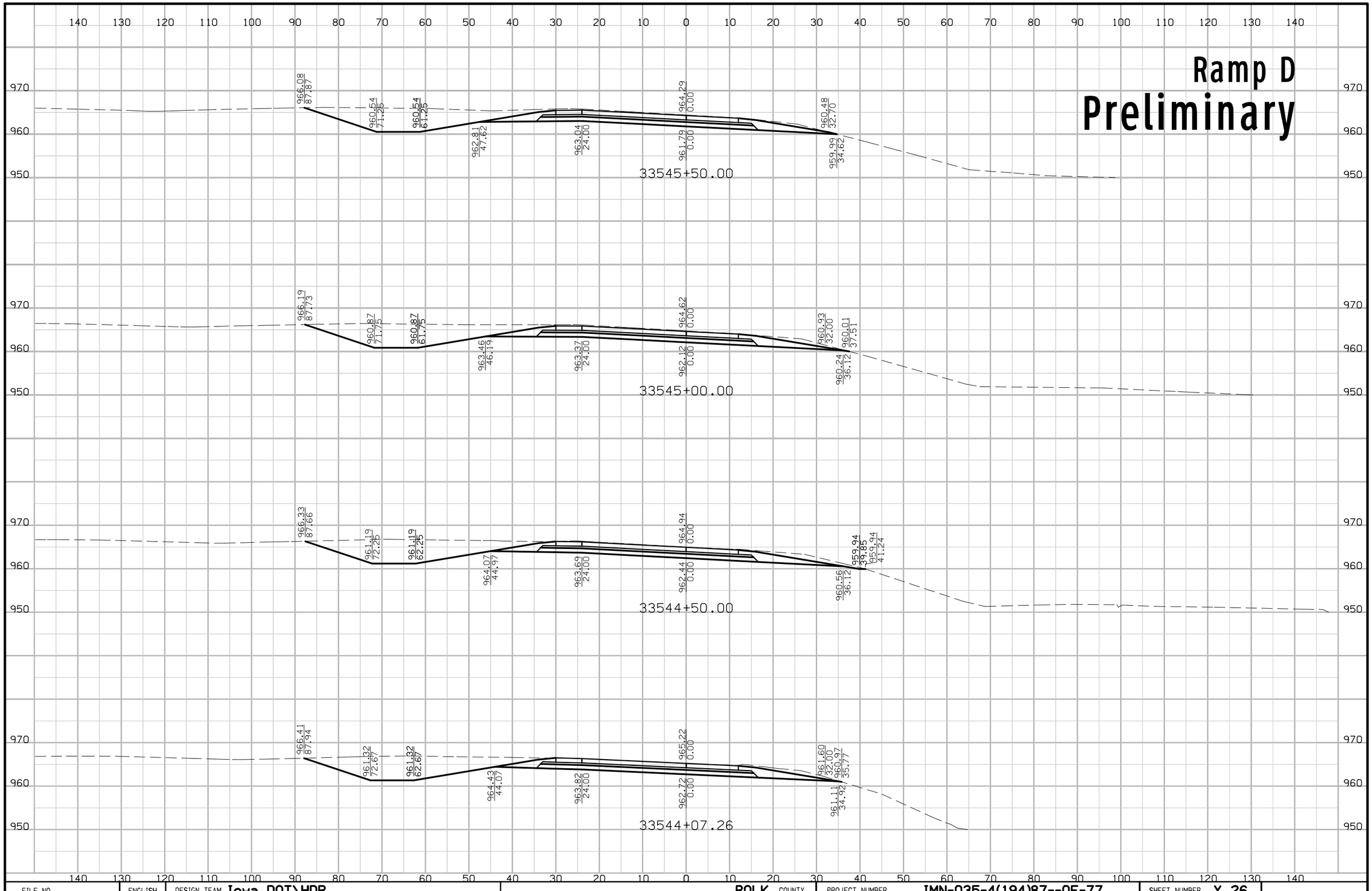
Ramp B
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.25

7:31:06 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

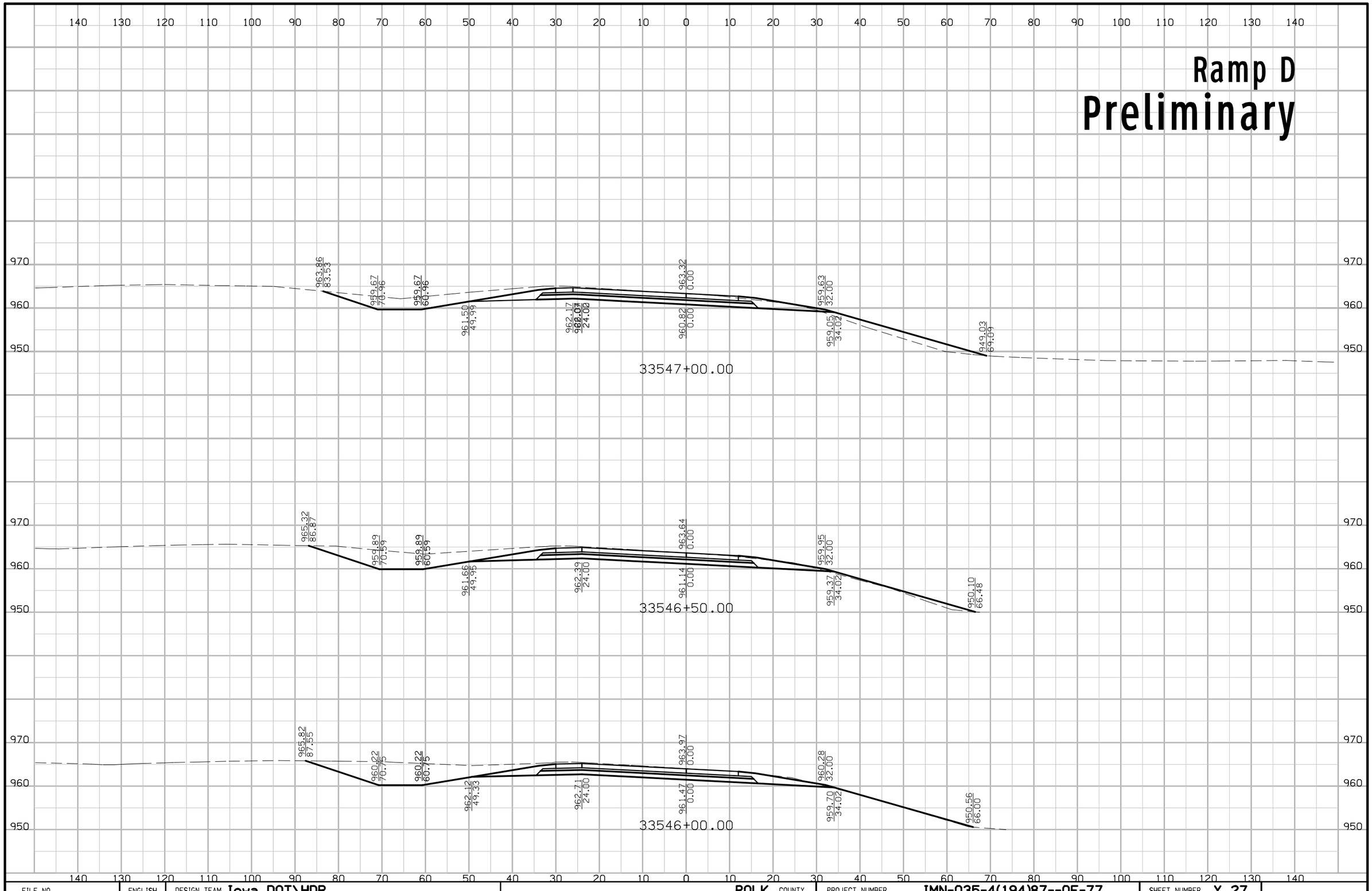
Ramp D
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.26

7:31:08 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

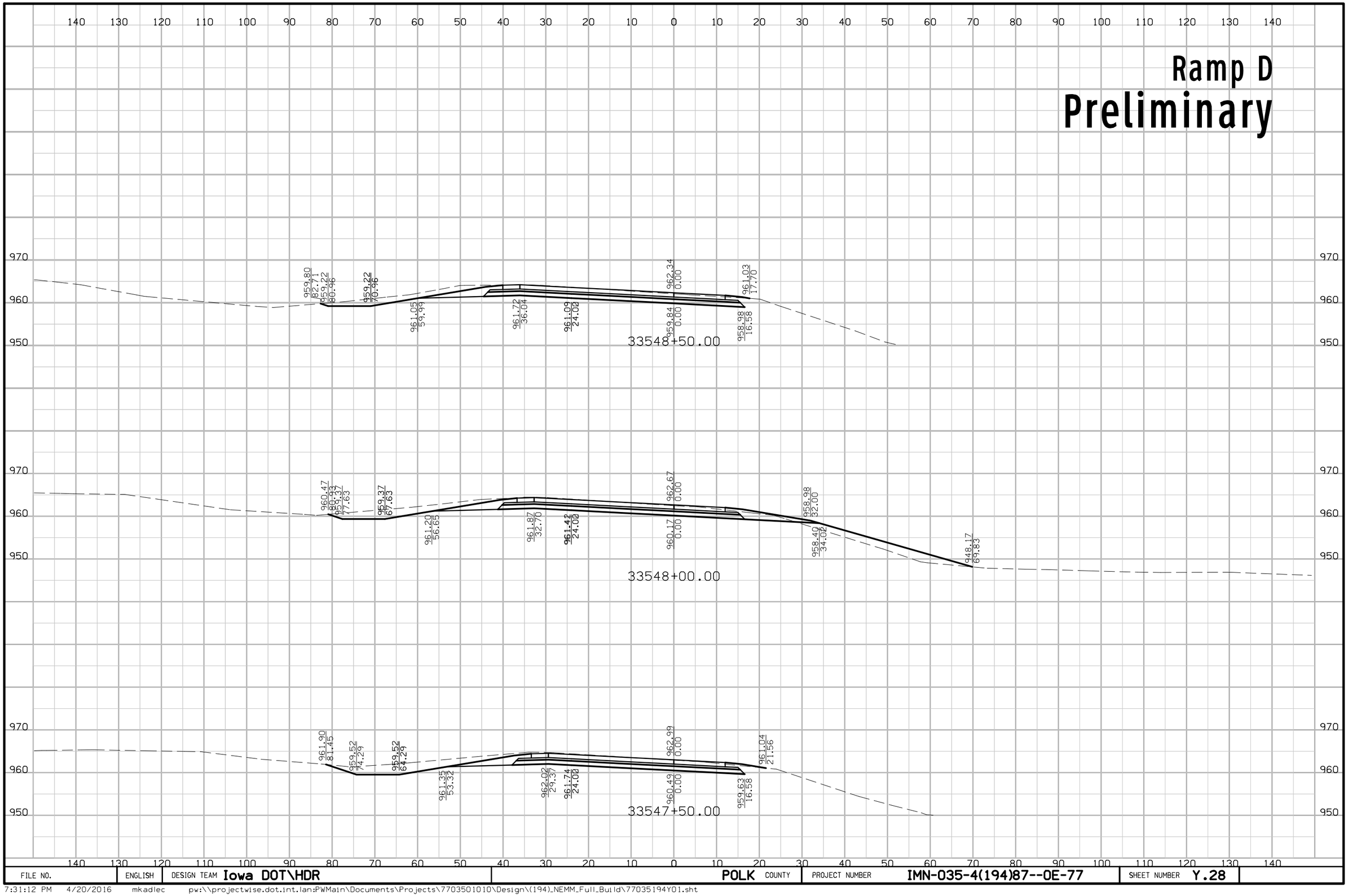
Ramp D
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.27

7:31:10 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

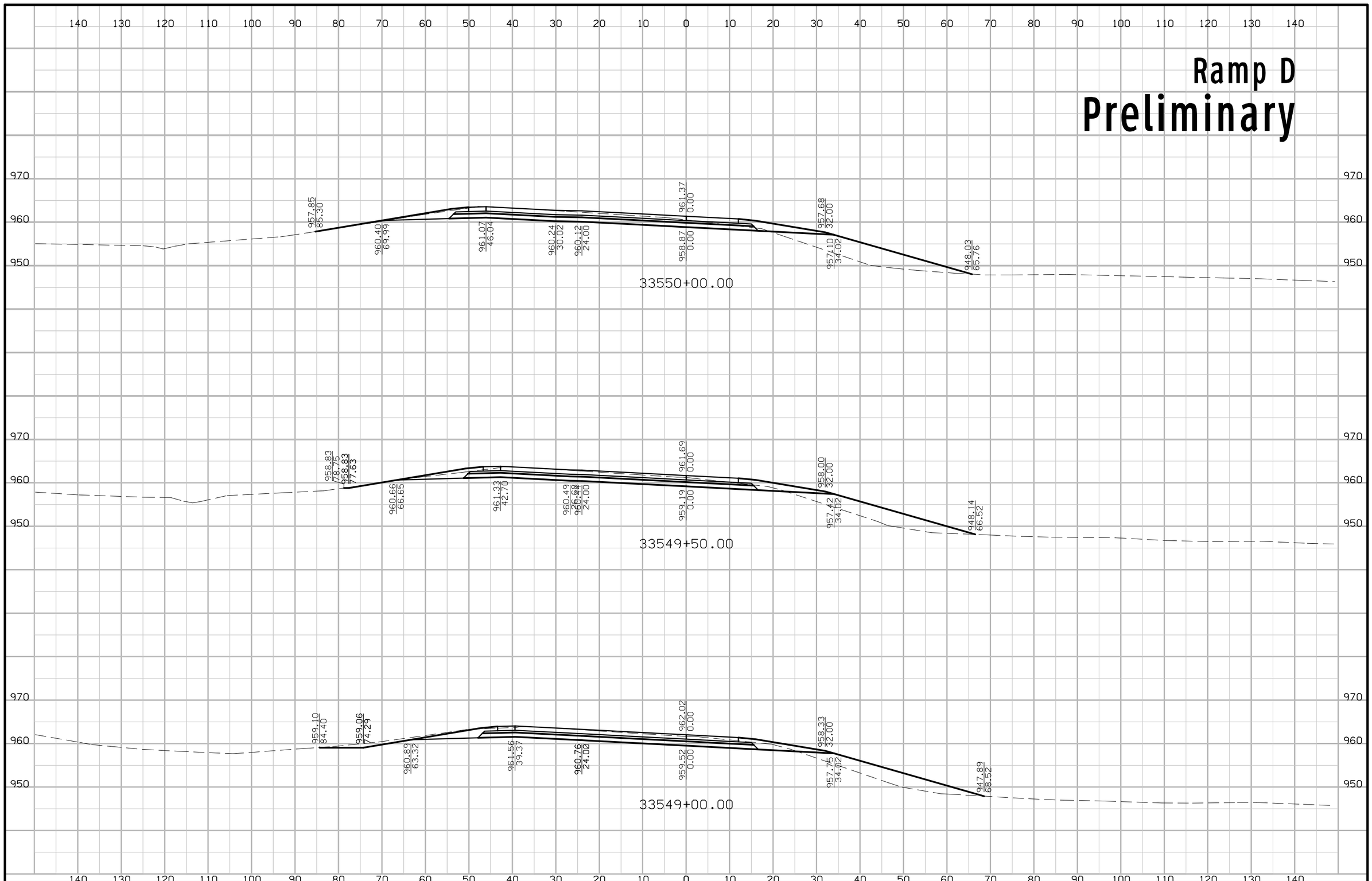
Ramp D
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.28

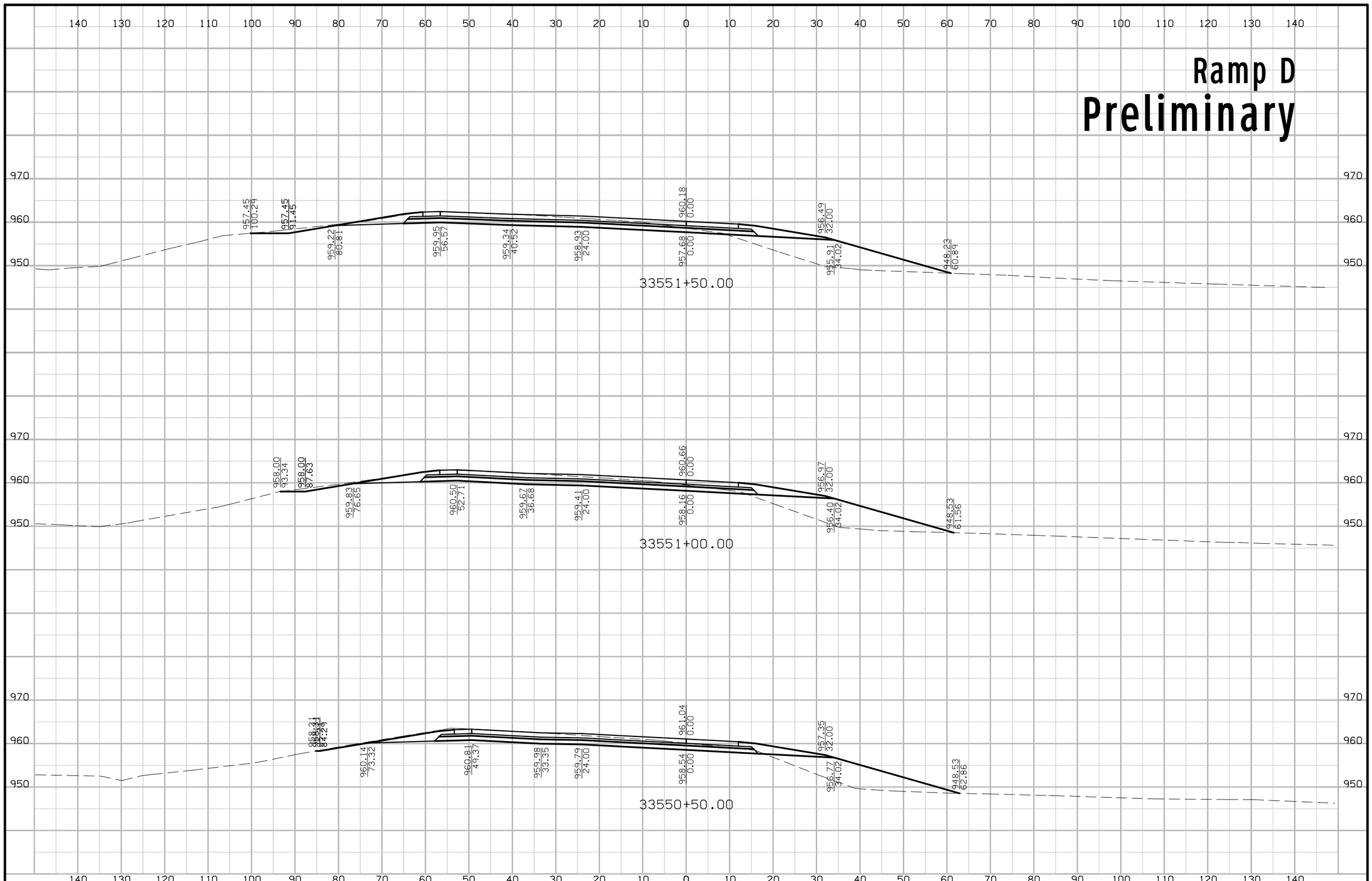
7:31:12 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp D
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.29

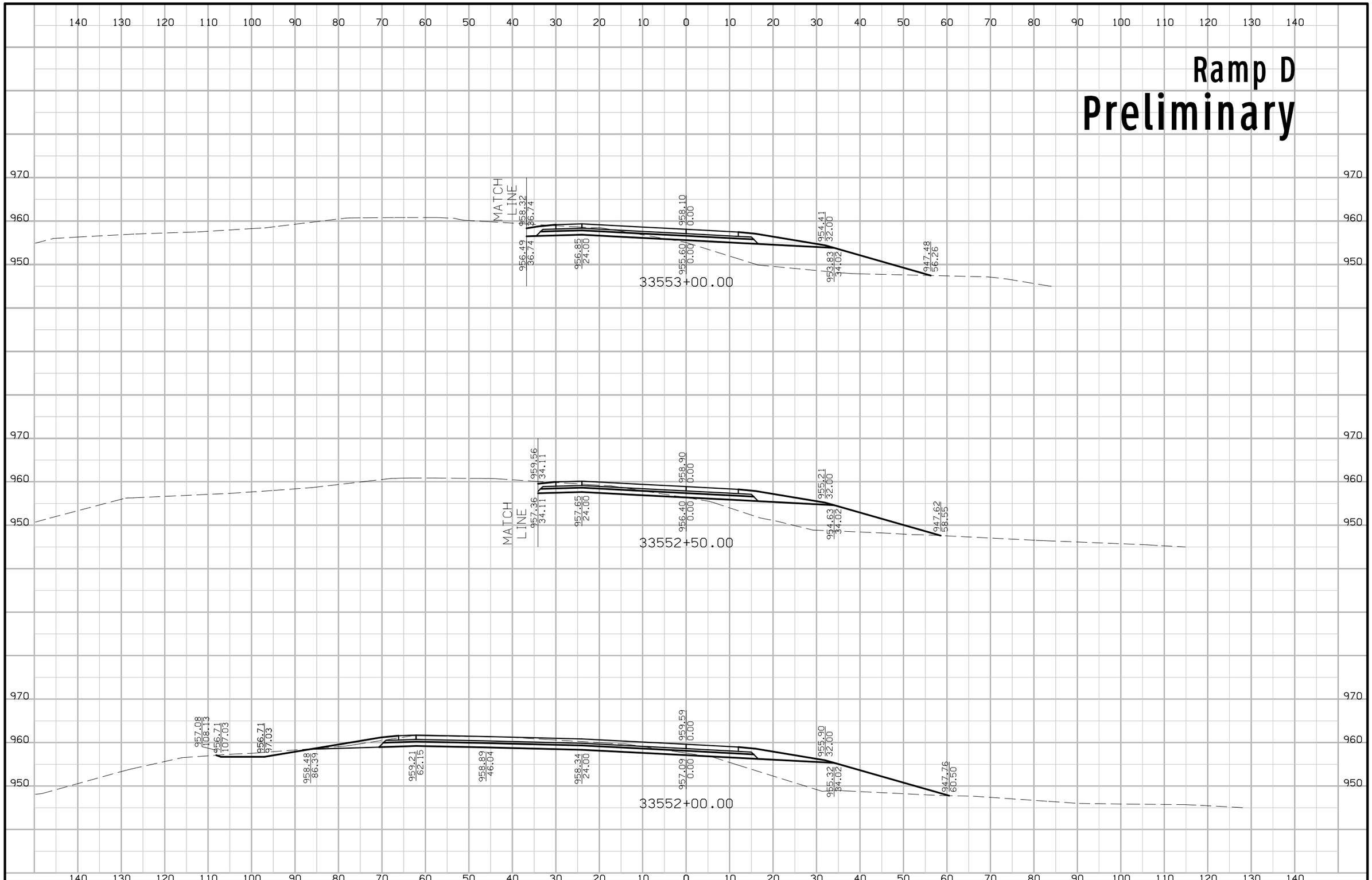
Ramp D
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.30

7:31:15 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

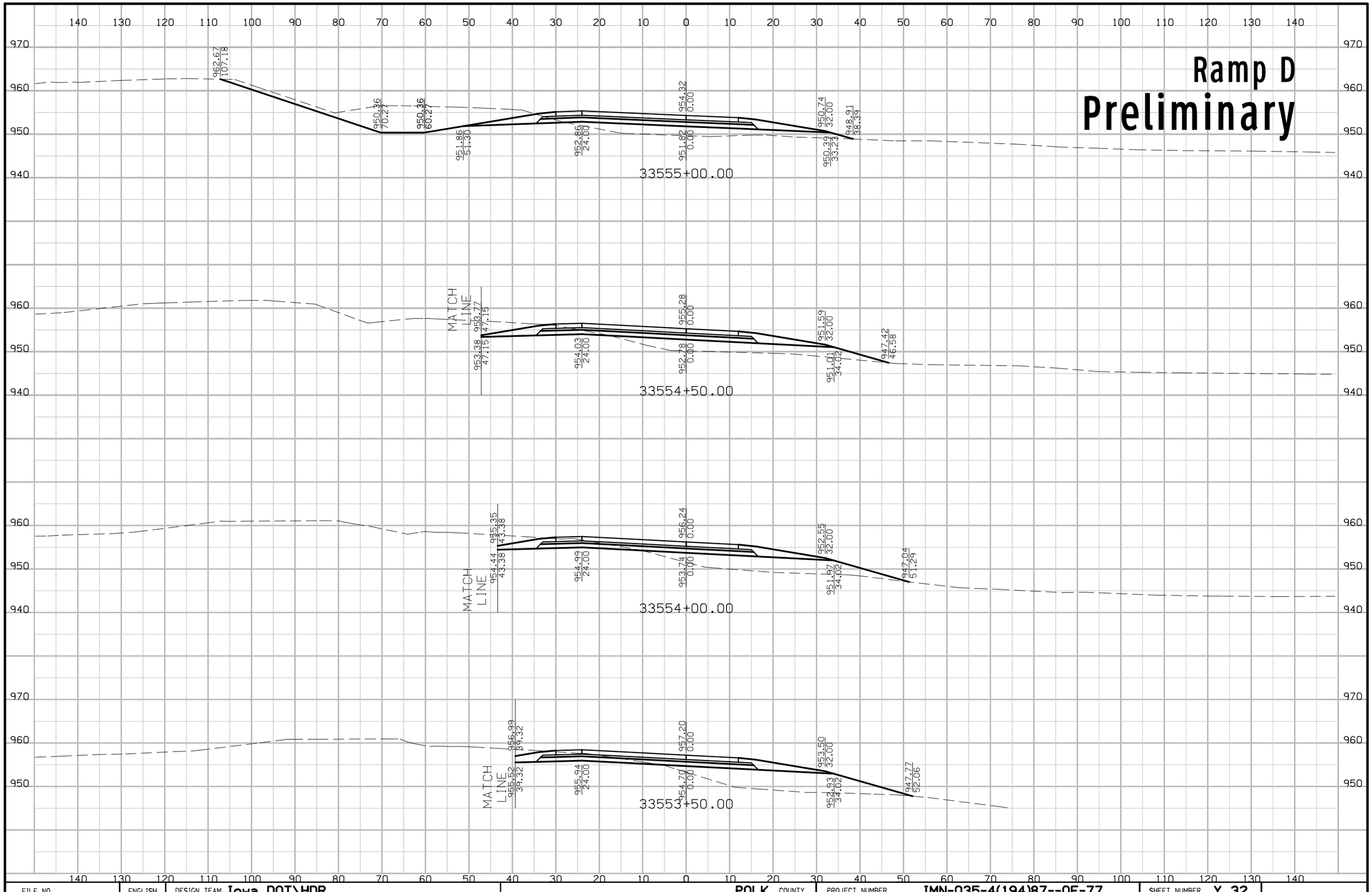
Ramp D
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.31

7:31:17 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194YO1.sht

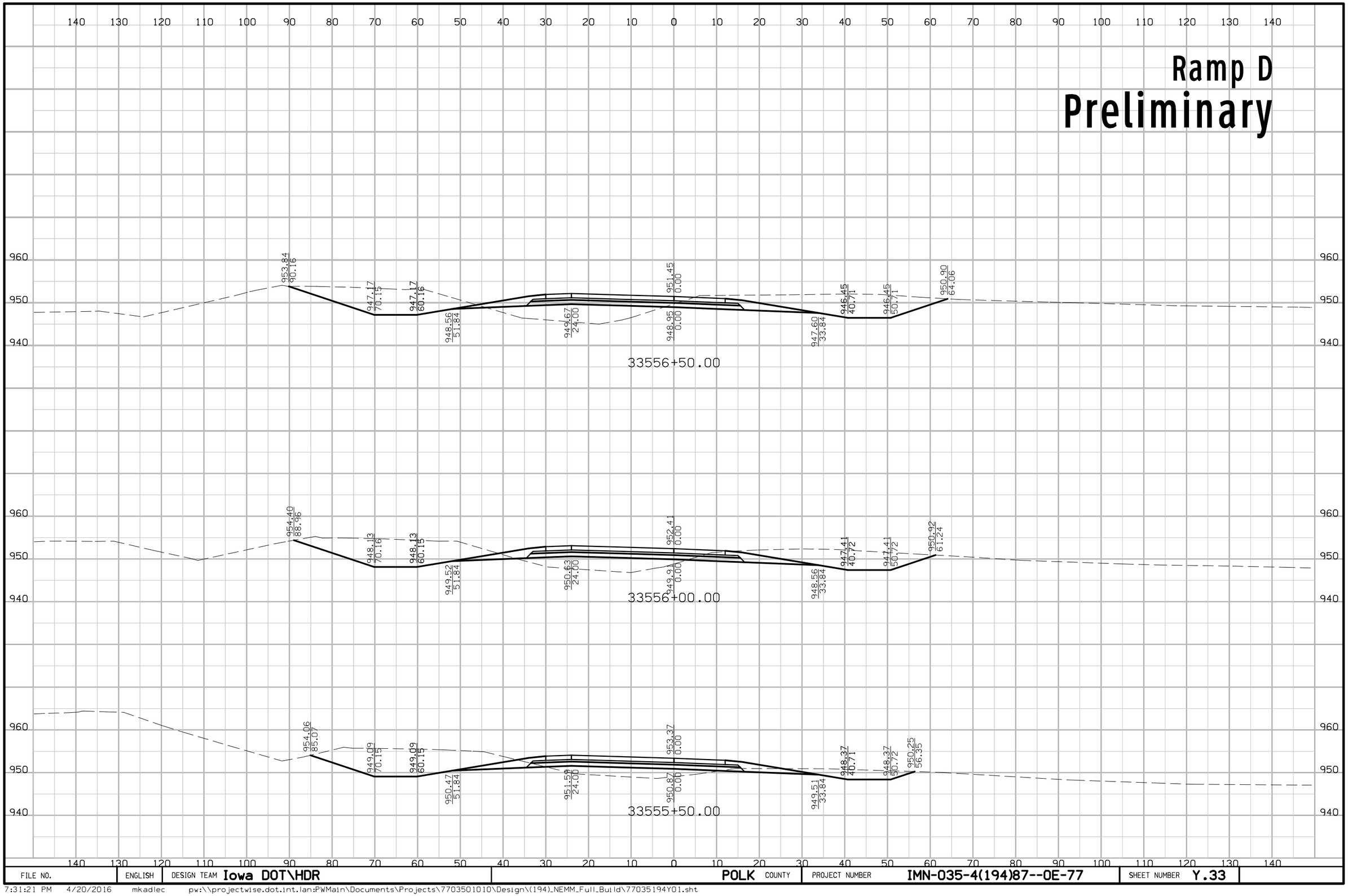
Ramp D
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.32

7:31:19 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

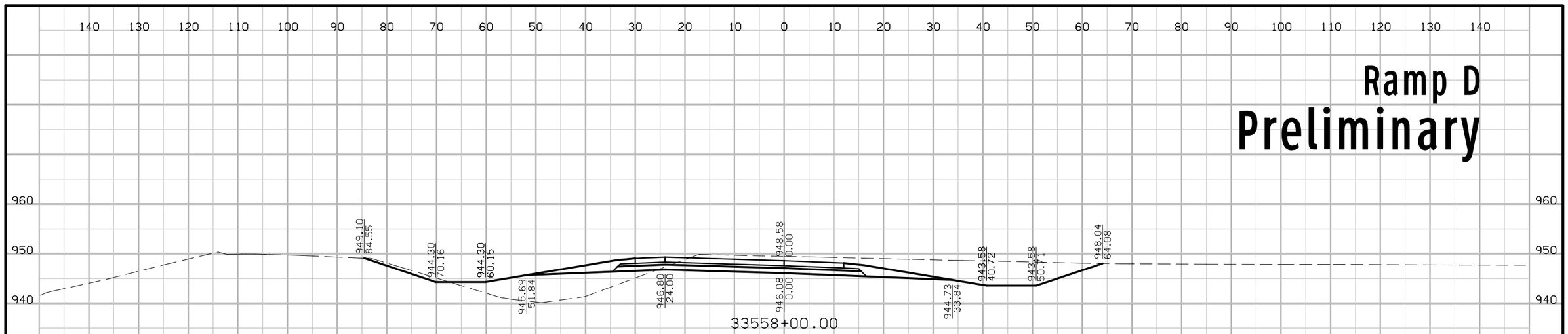
Ramp D
Preliminary

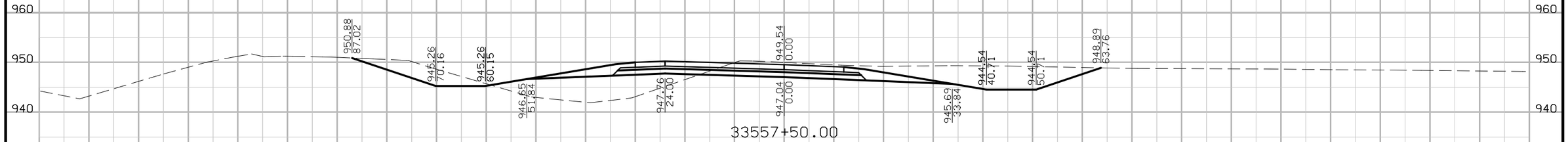


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.33

7:31:21 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp D
Preliminary

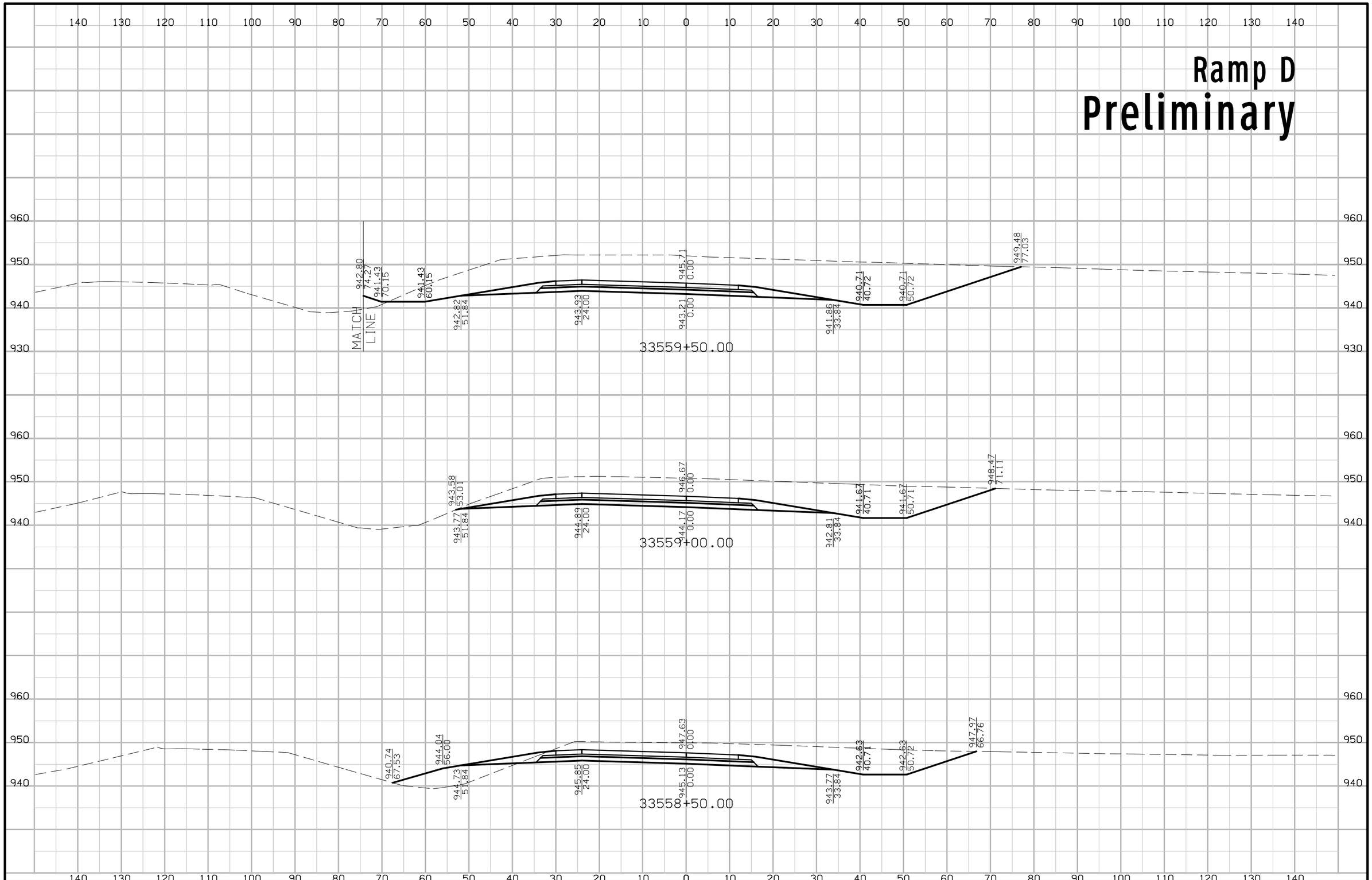




FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.34

7:31:22 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp D
Preliminary

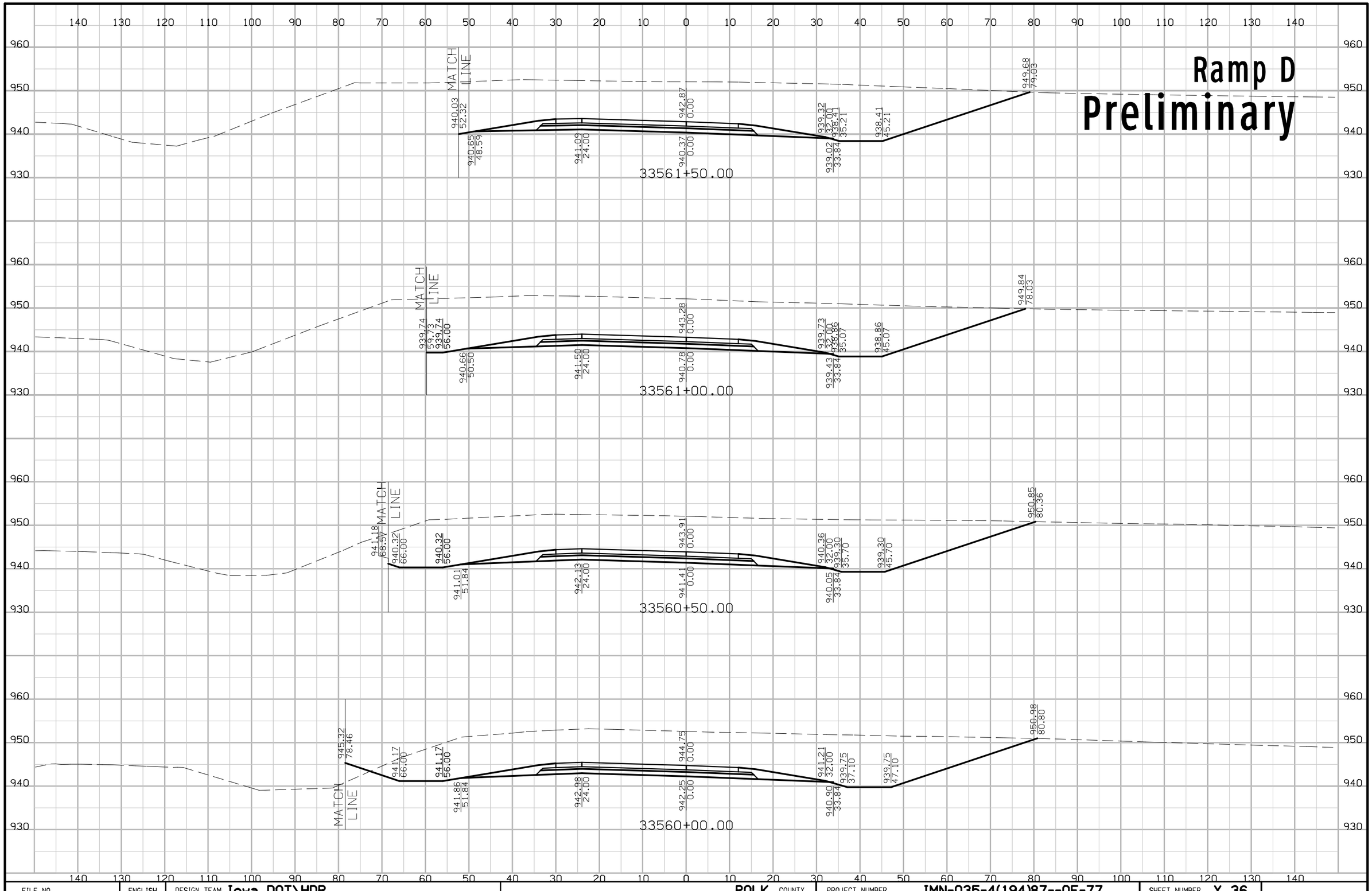


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.35

7:31:24 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp D

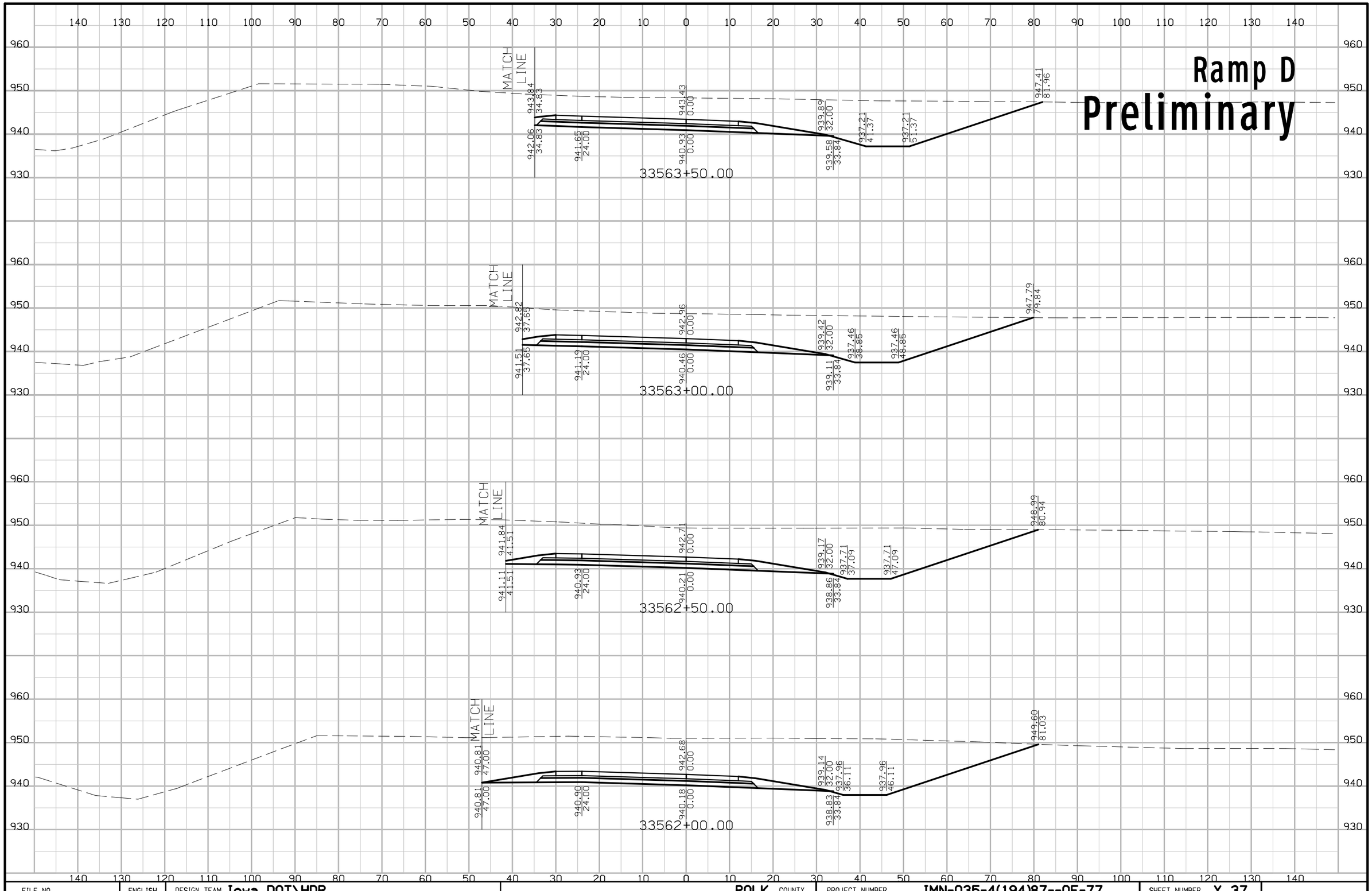
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.36

7:31:26 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

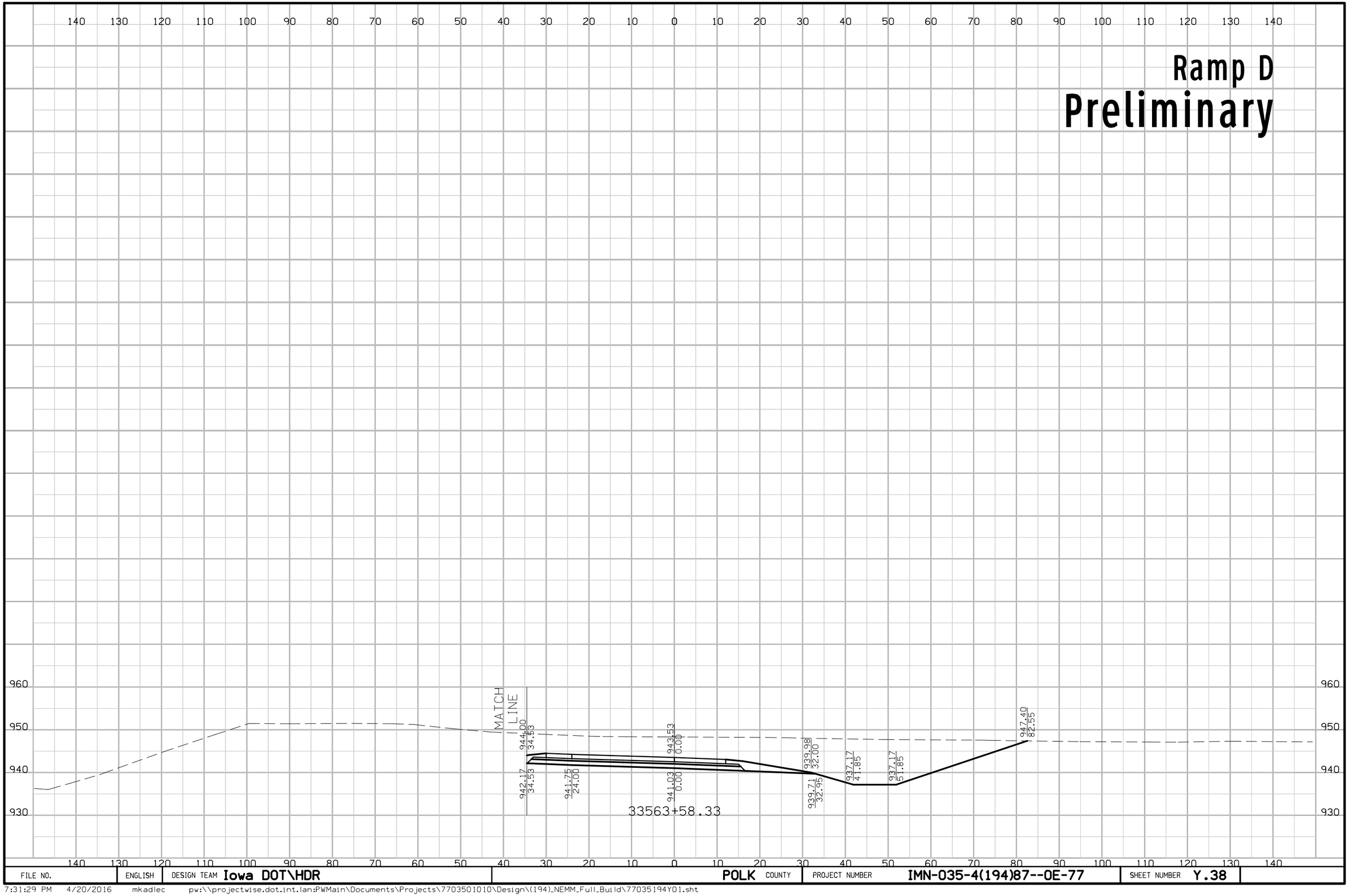
Ramp D
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.37

7:31:28 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp D
Preliminary

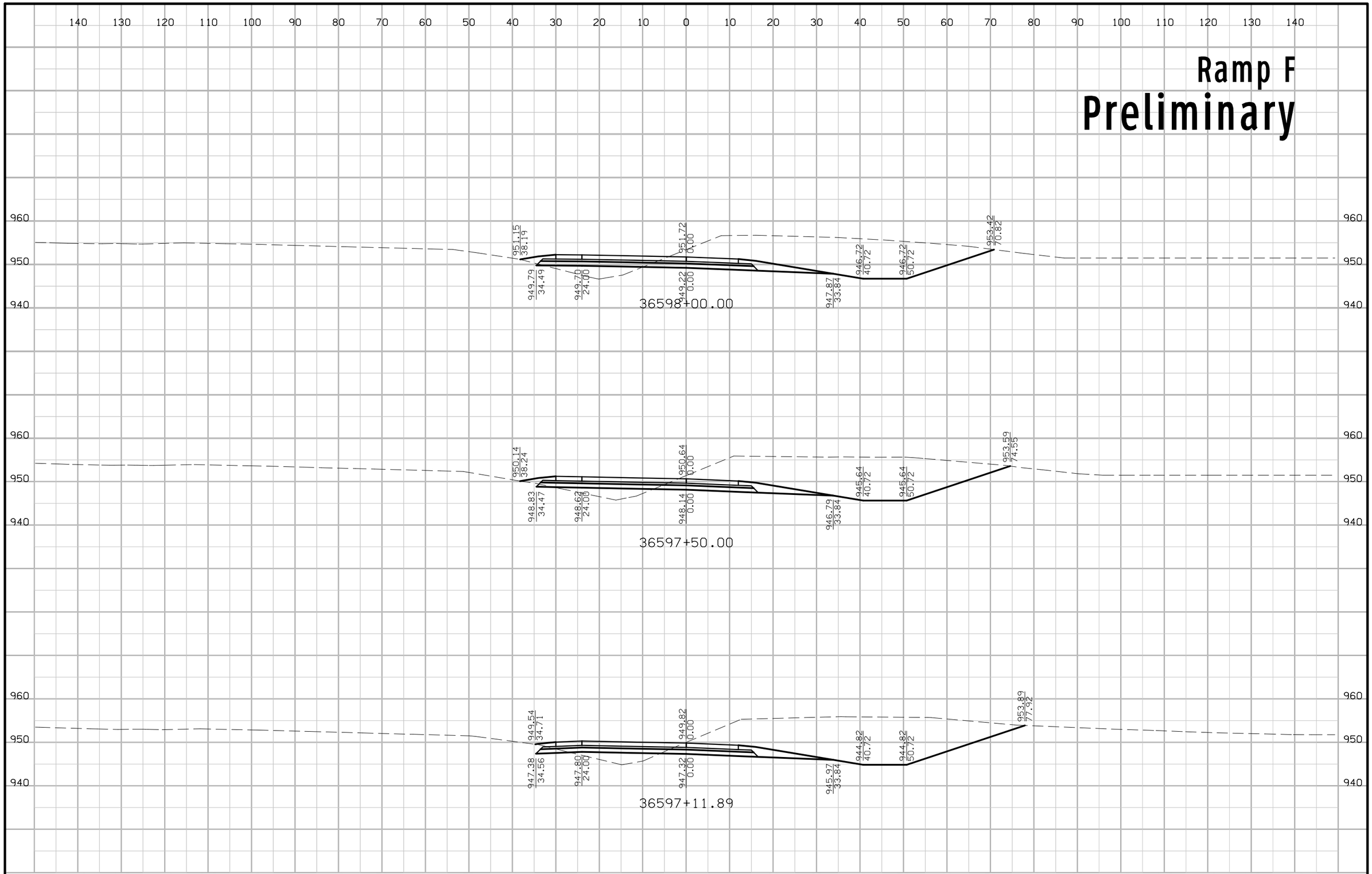


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.38

7:31:29 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp F

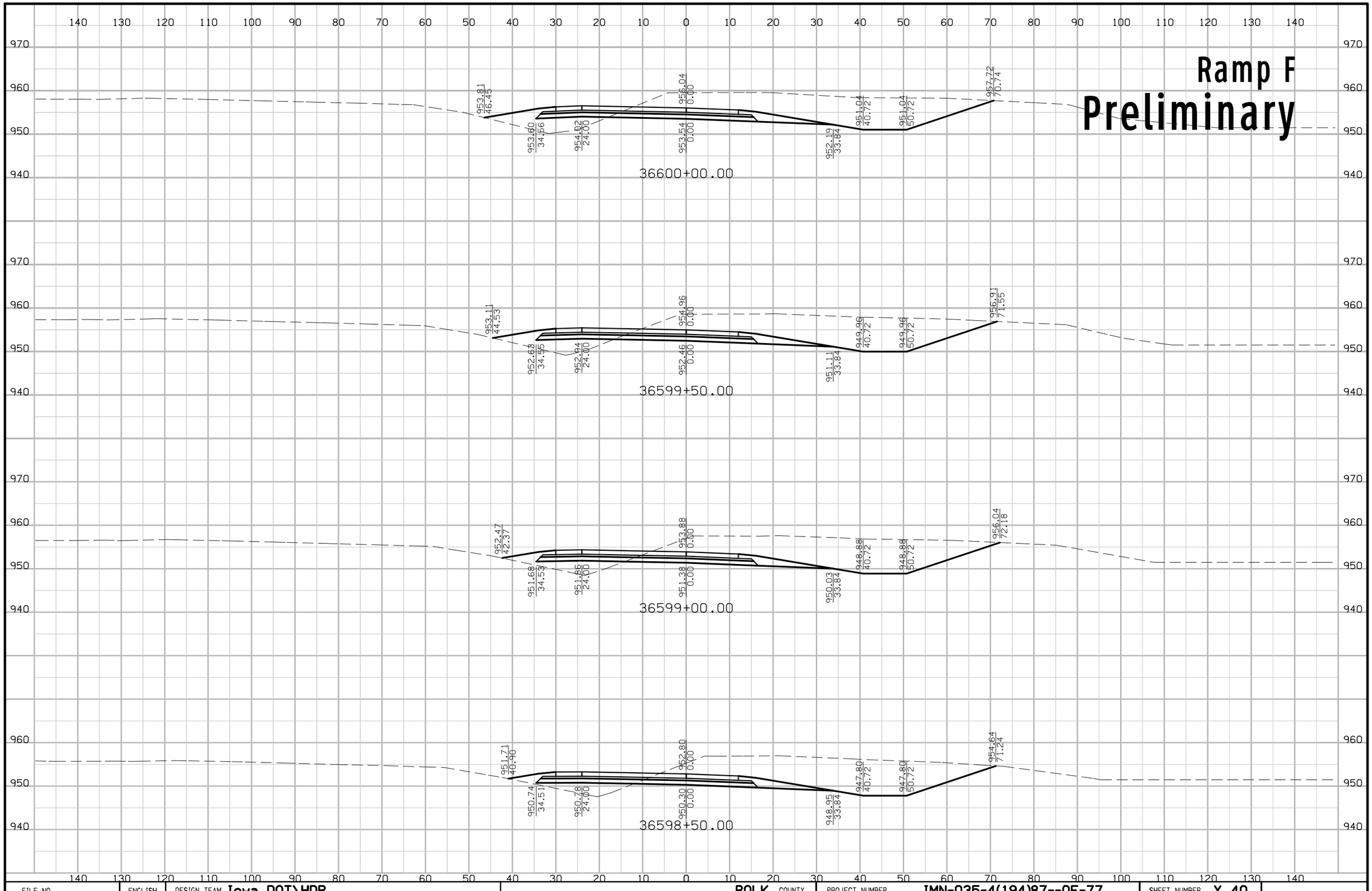
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.39

7:31:31 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

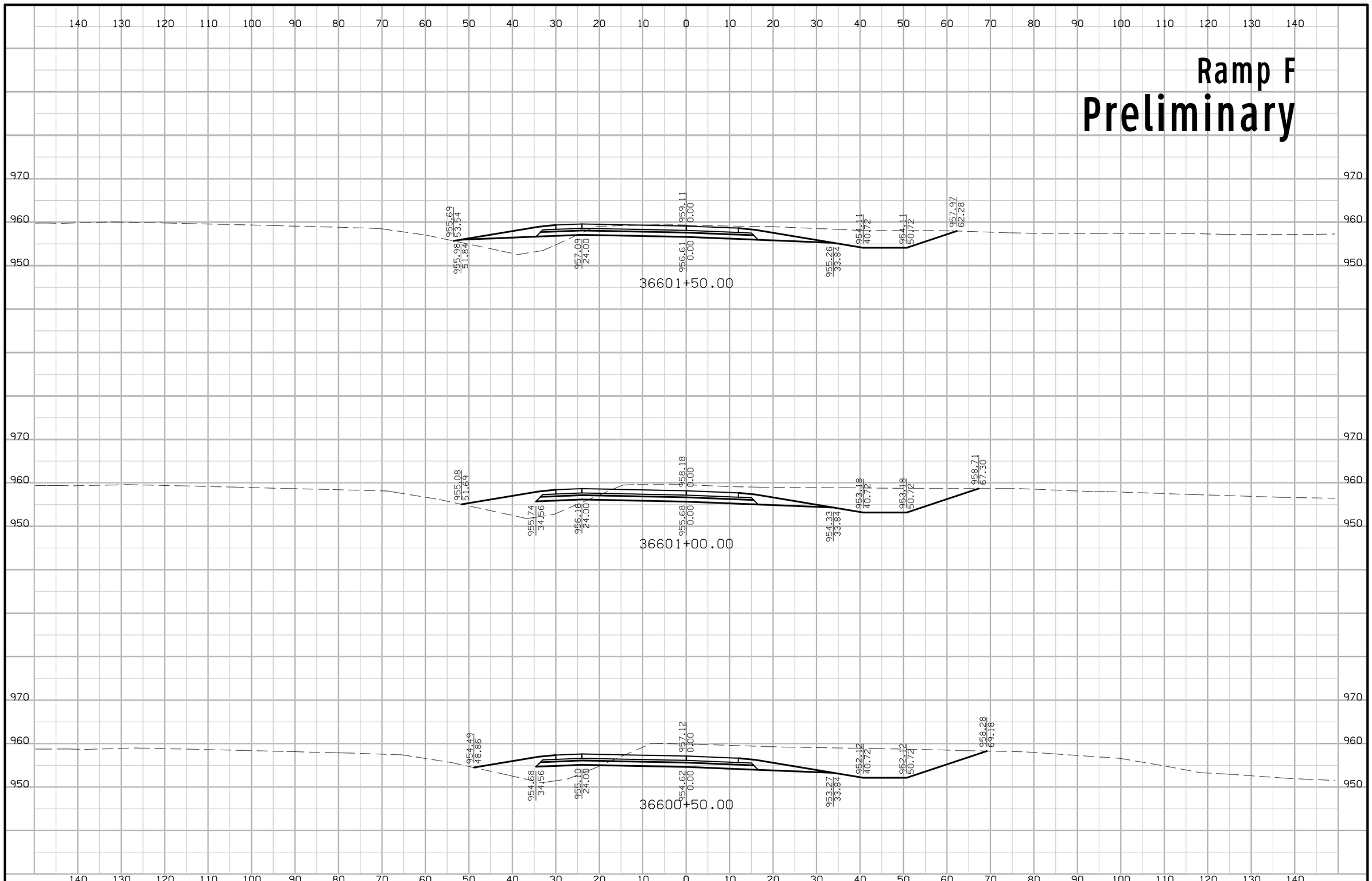
Ramp F
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.40

7:31:33 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp F
Preliminary

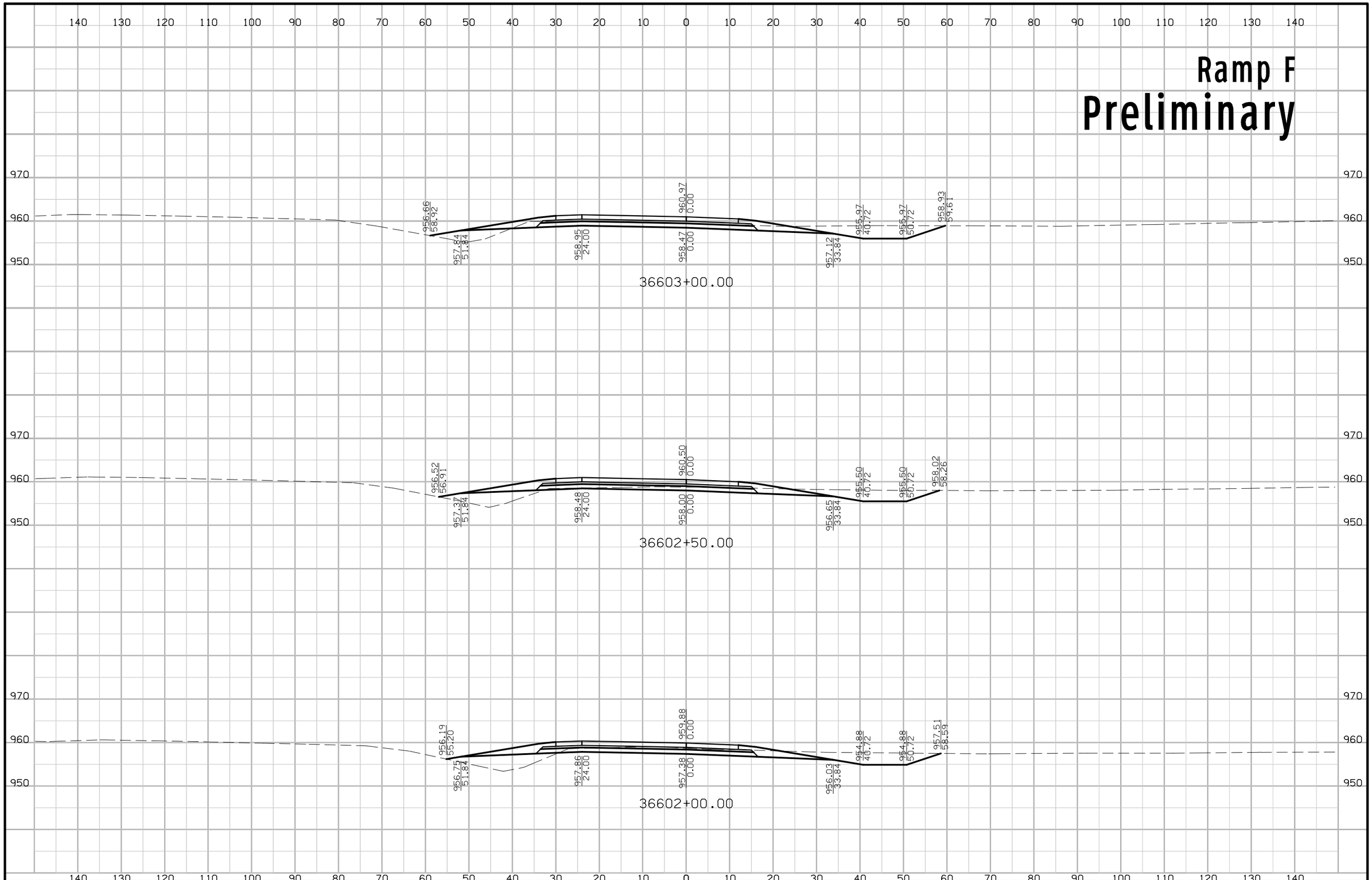


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.41

7:31:35 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194YO1.sht

Ramp F

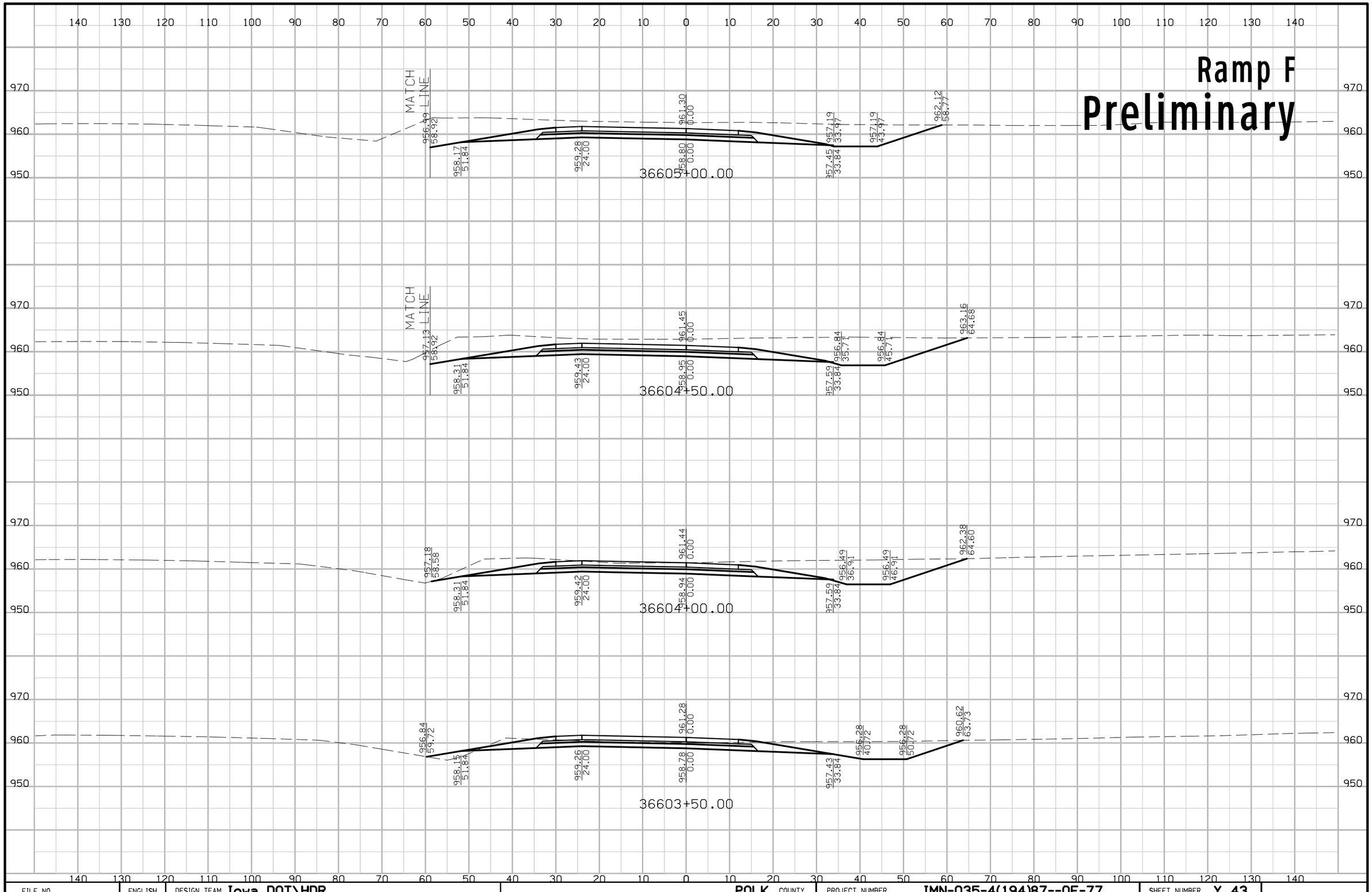
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.42

7:31:36 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp F
Preliminary

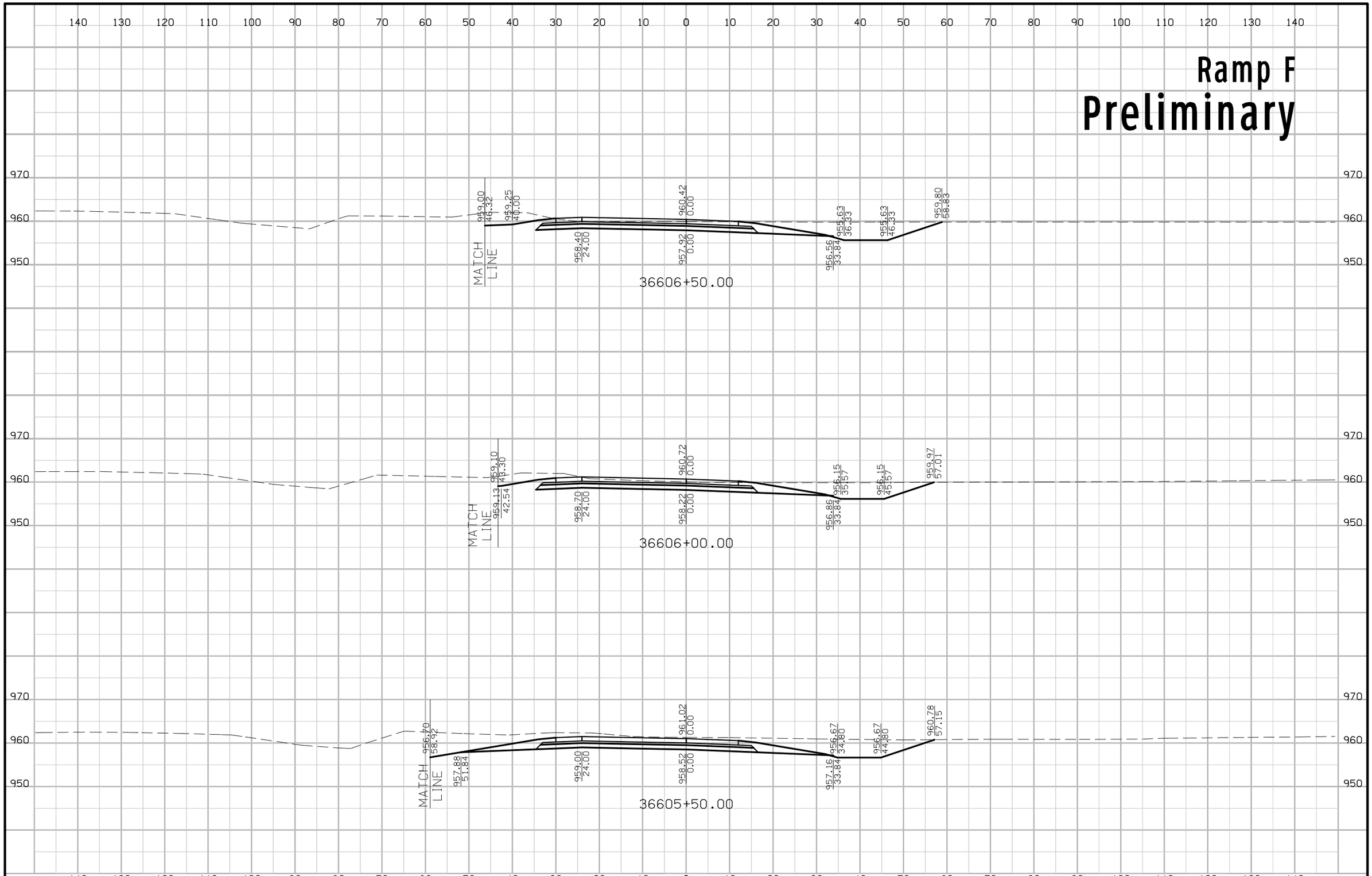


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.43

7:31:38 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp F

Preliminary

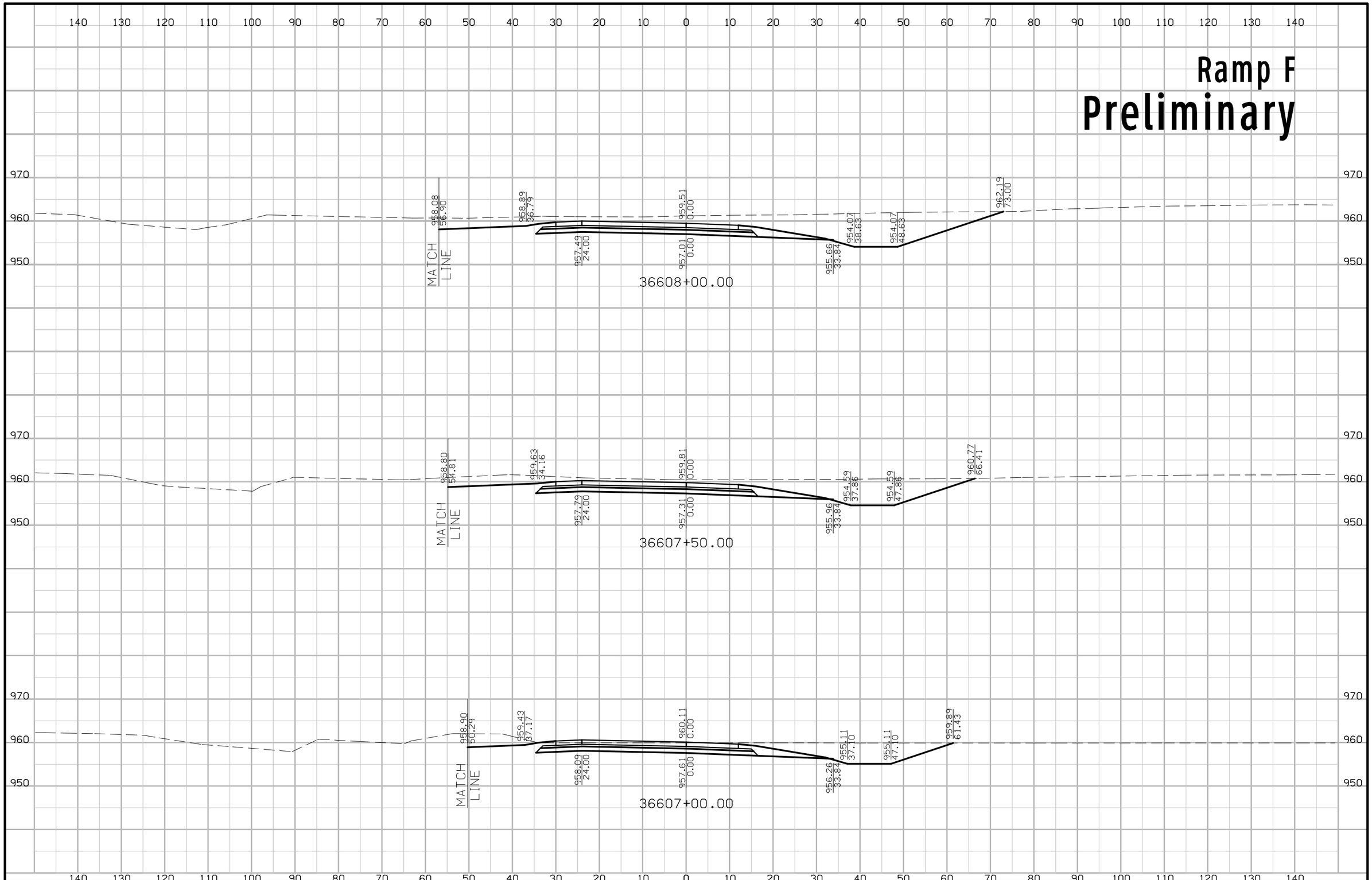


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.44

7:31:40 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp F

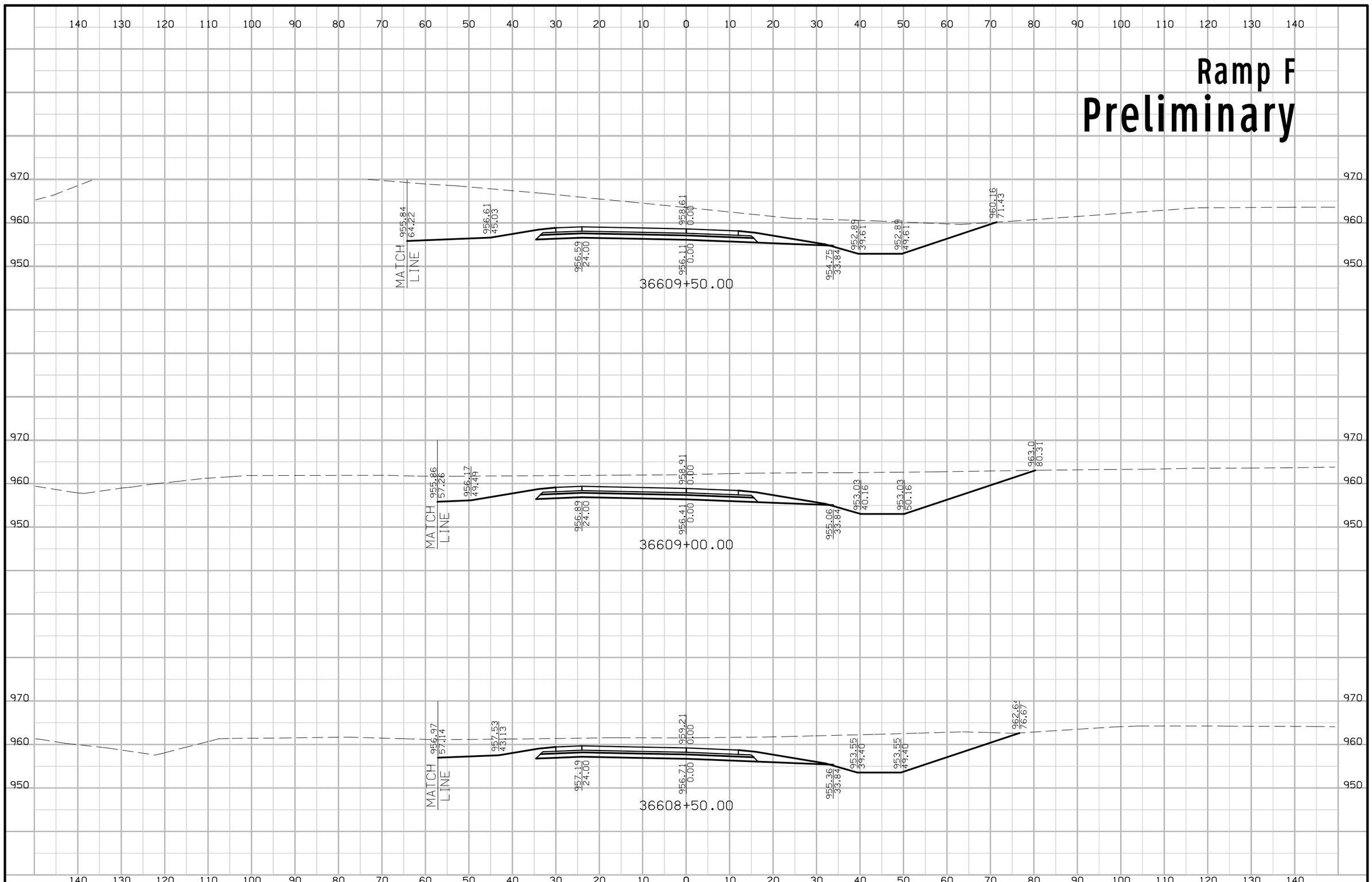
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.45

7:31:42 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

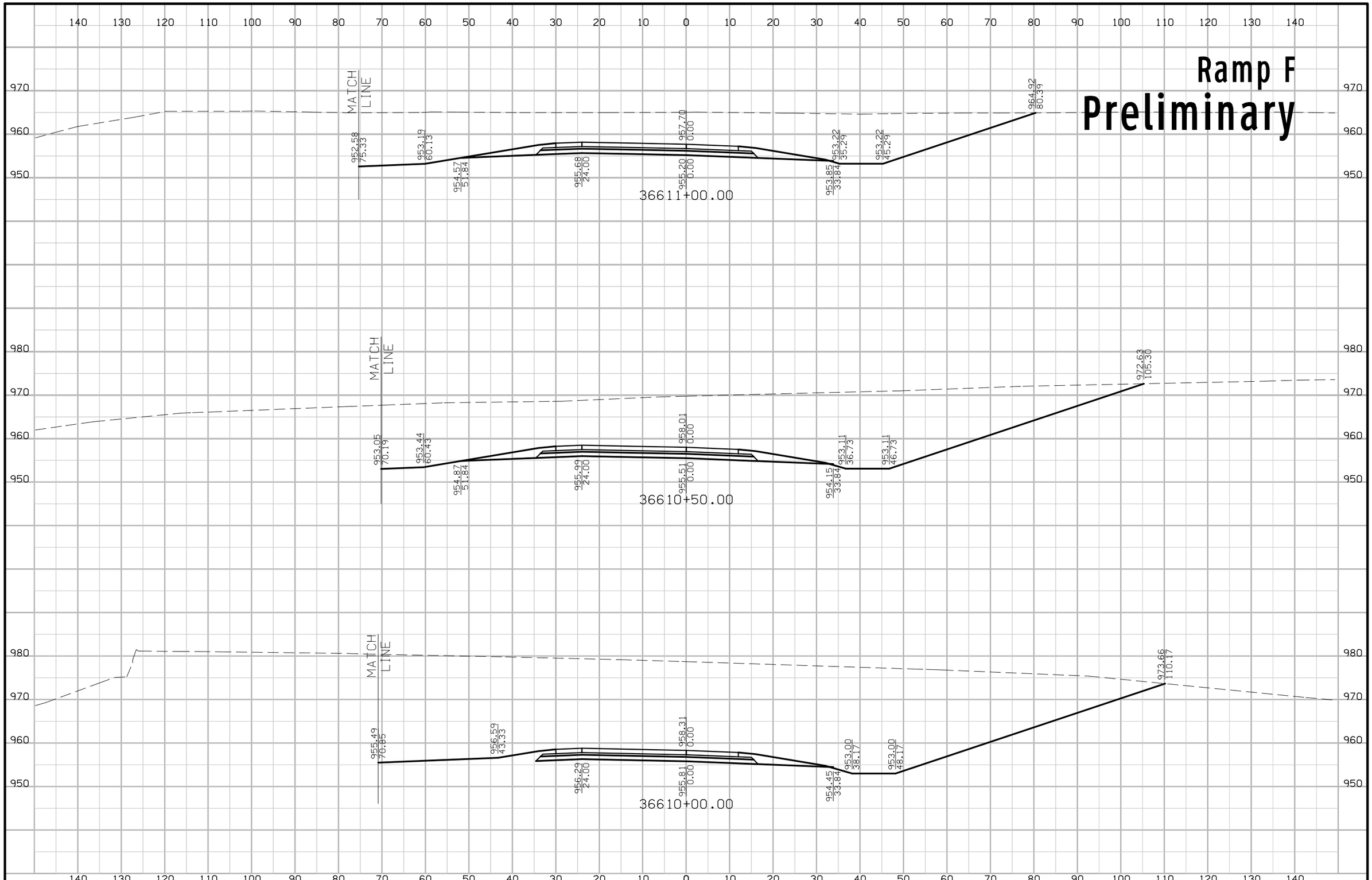
Ramp F
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.46

7:31:43 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

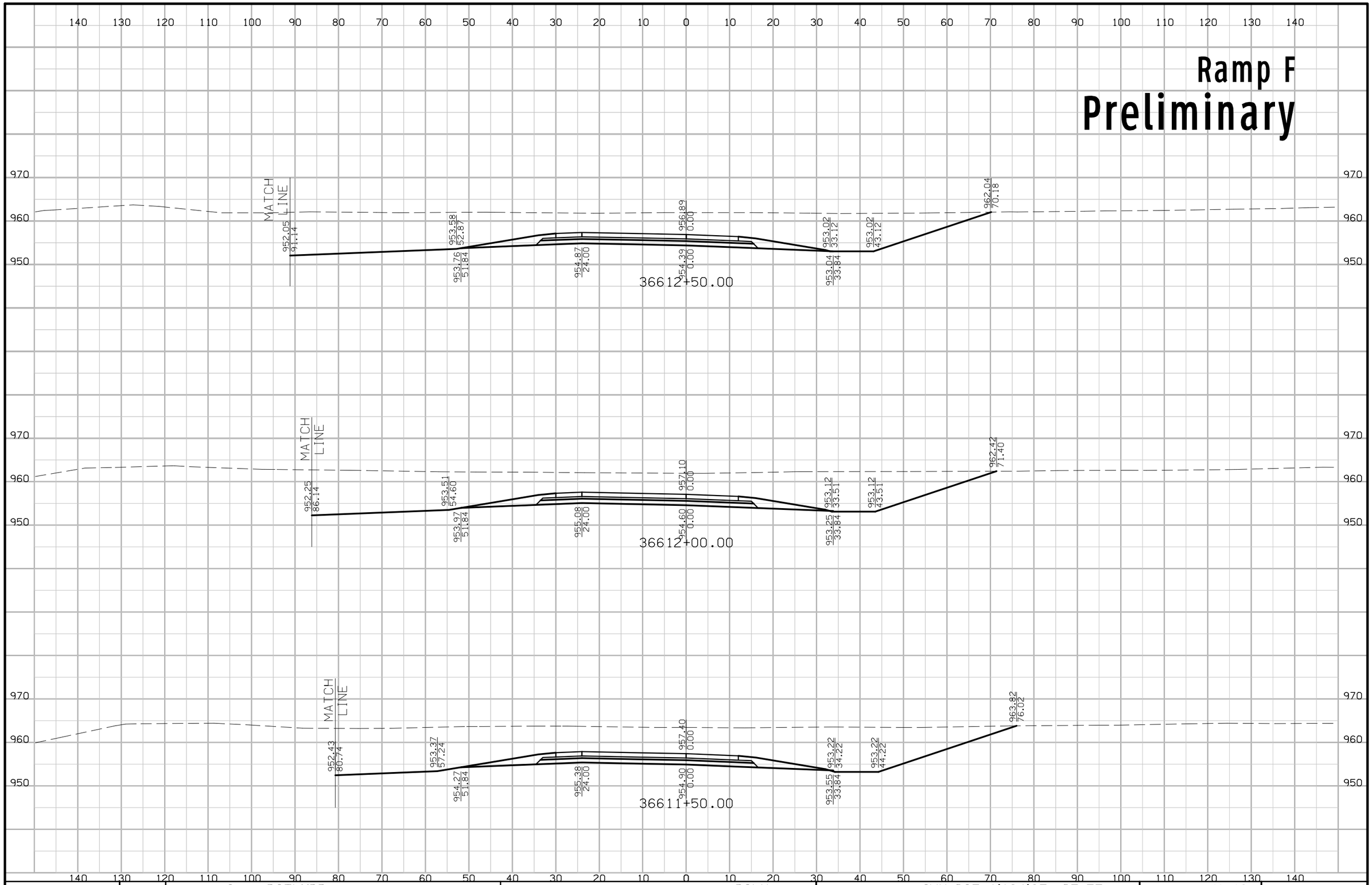
Ramp F
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.47

7:31:45 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

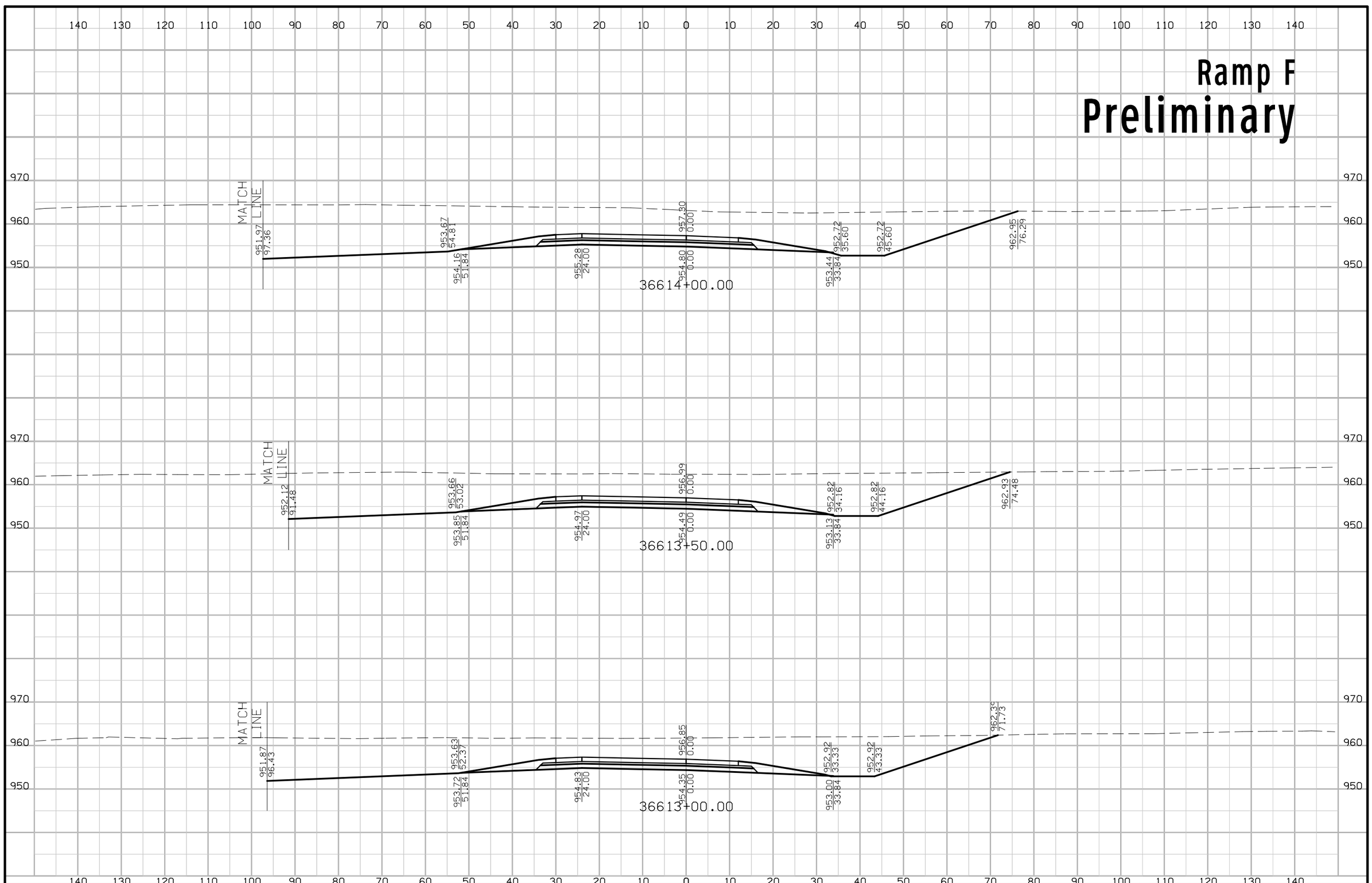
Ramp F
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.48

7:31:47 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

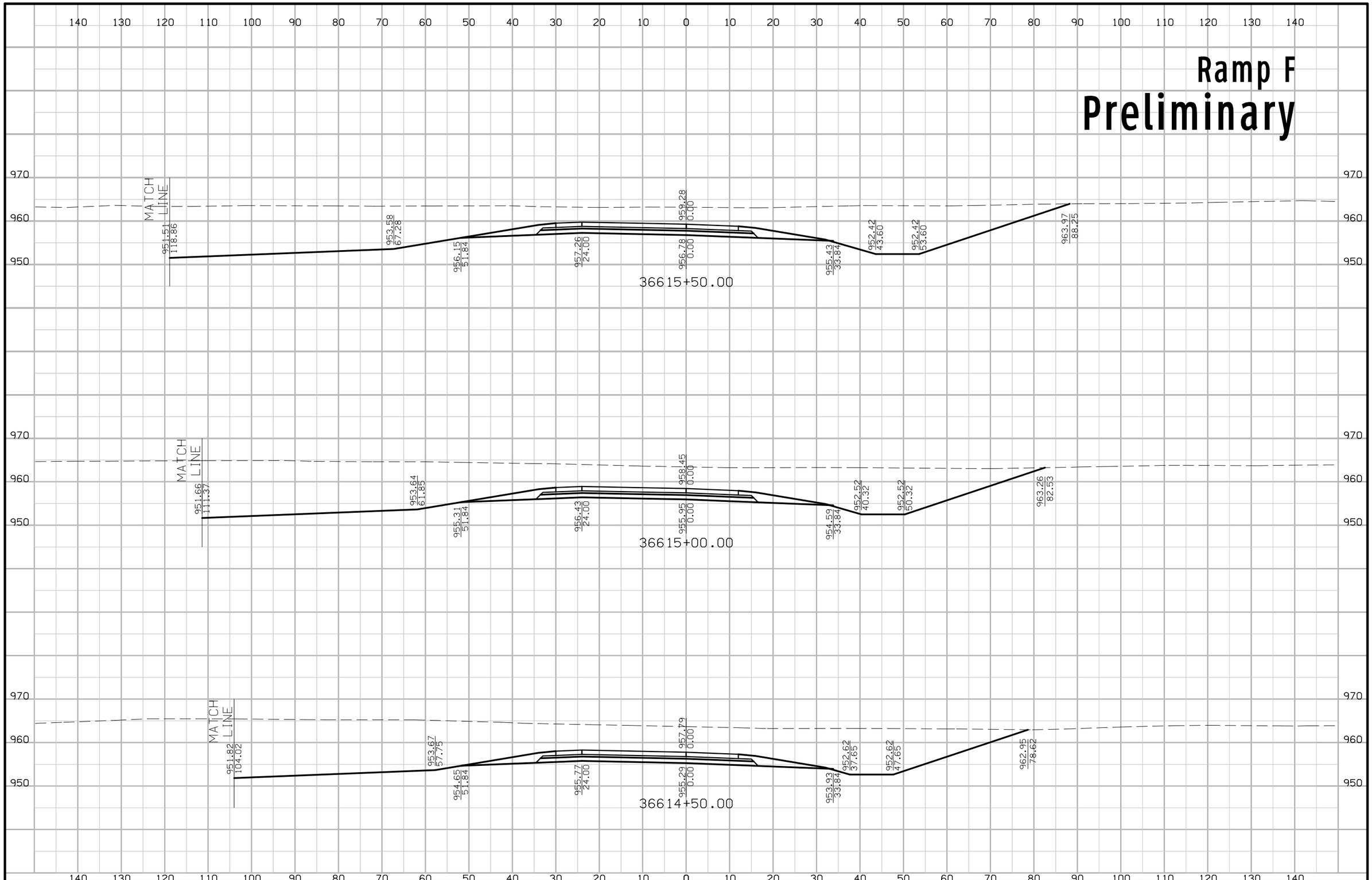
Ramp F
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.49

7:31:49 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194YO1.sht

Ramp F
Preliminary

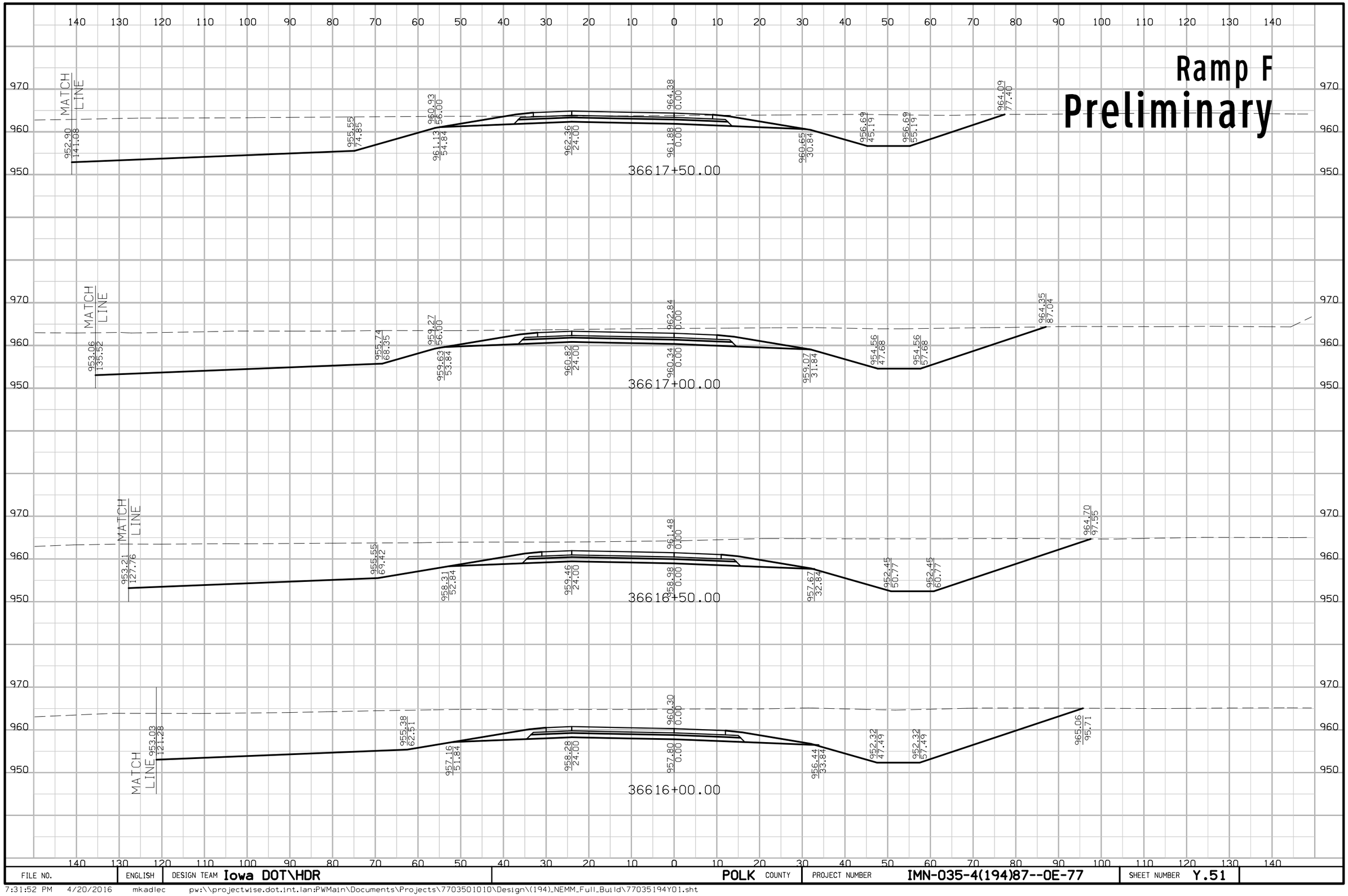


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.50

7:31:51 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp F

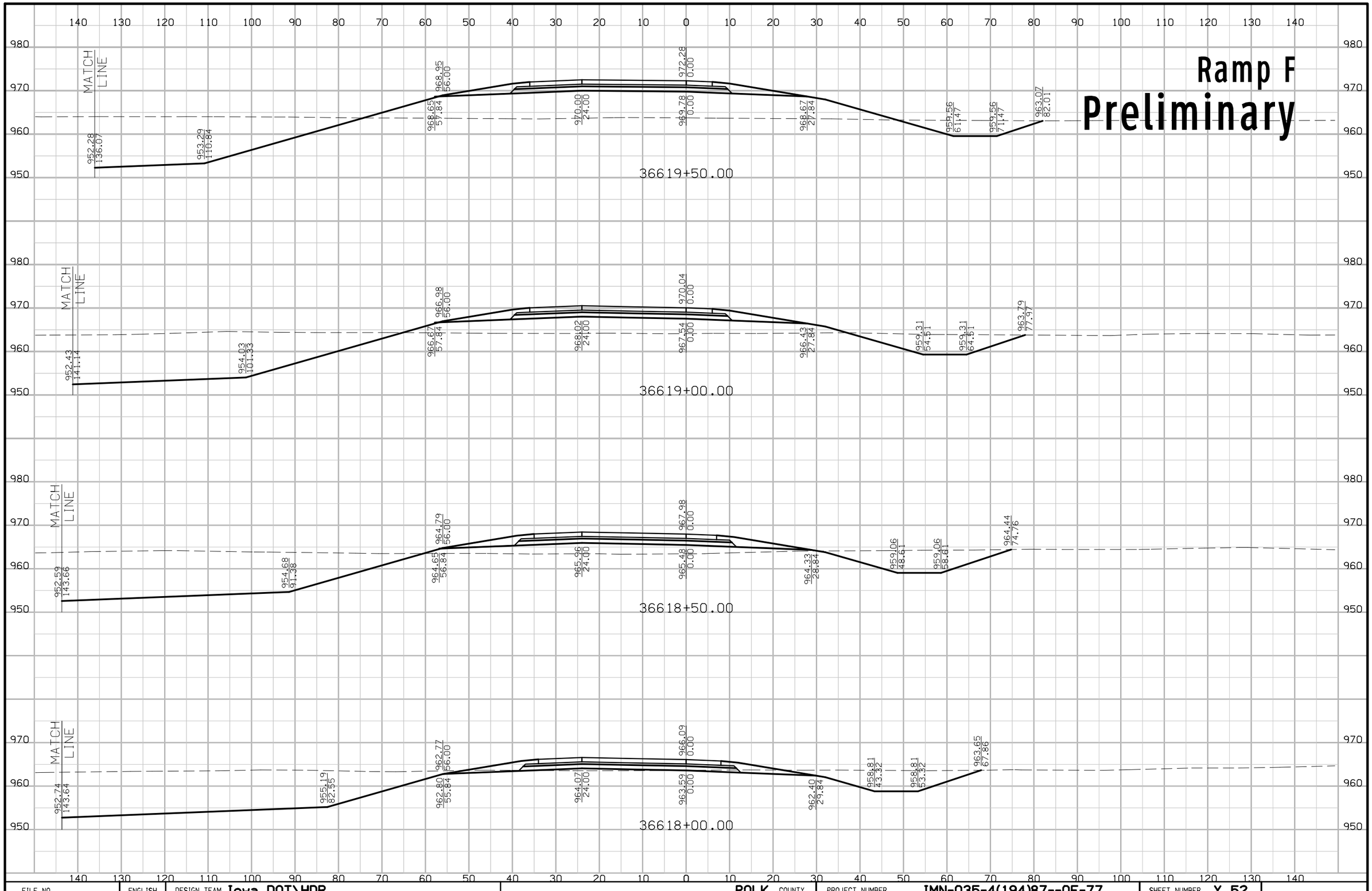
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.51

7:31:52 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

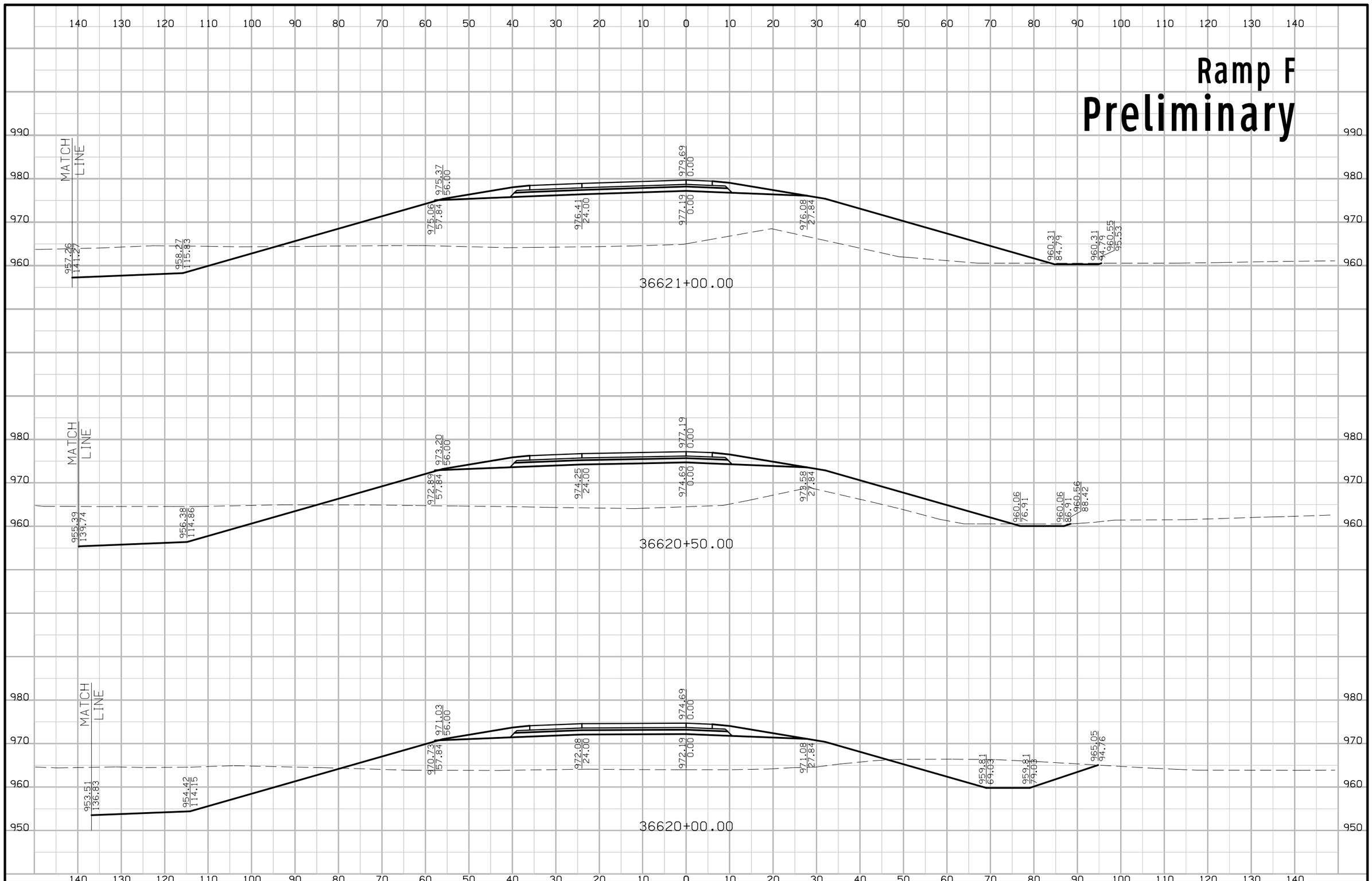
Ramp F
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.52

7:31:54 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp F
Preliminary

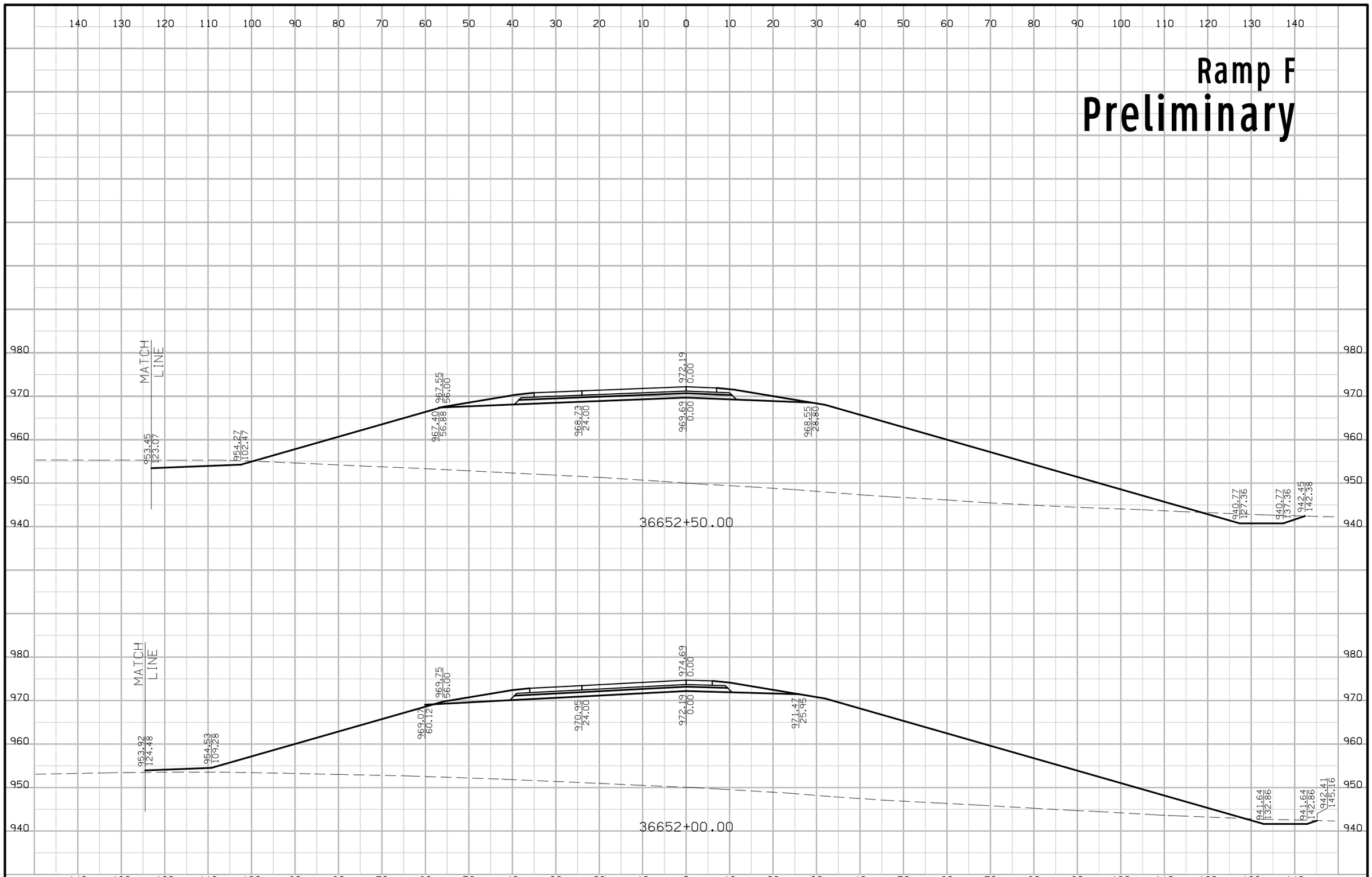


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.53

7:31:56 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp F

Preliminary

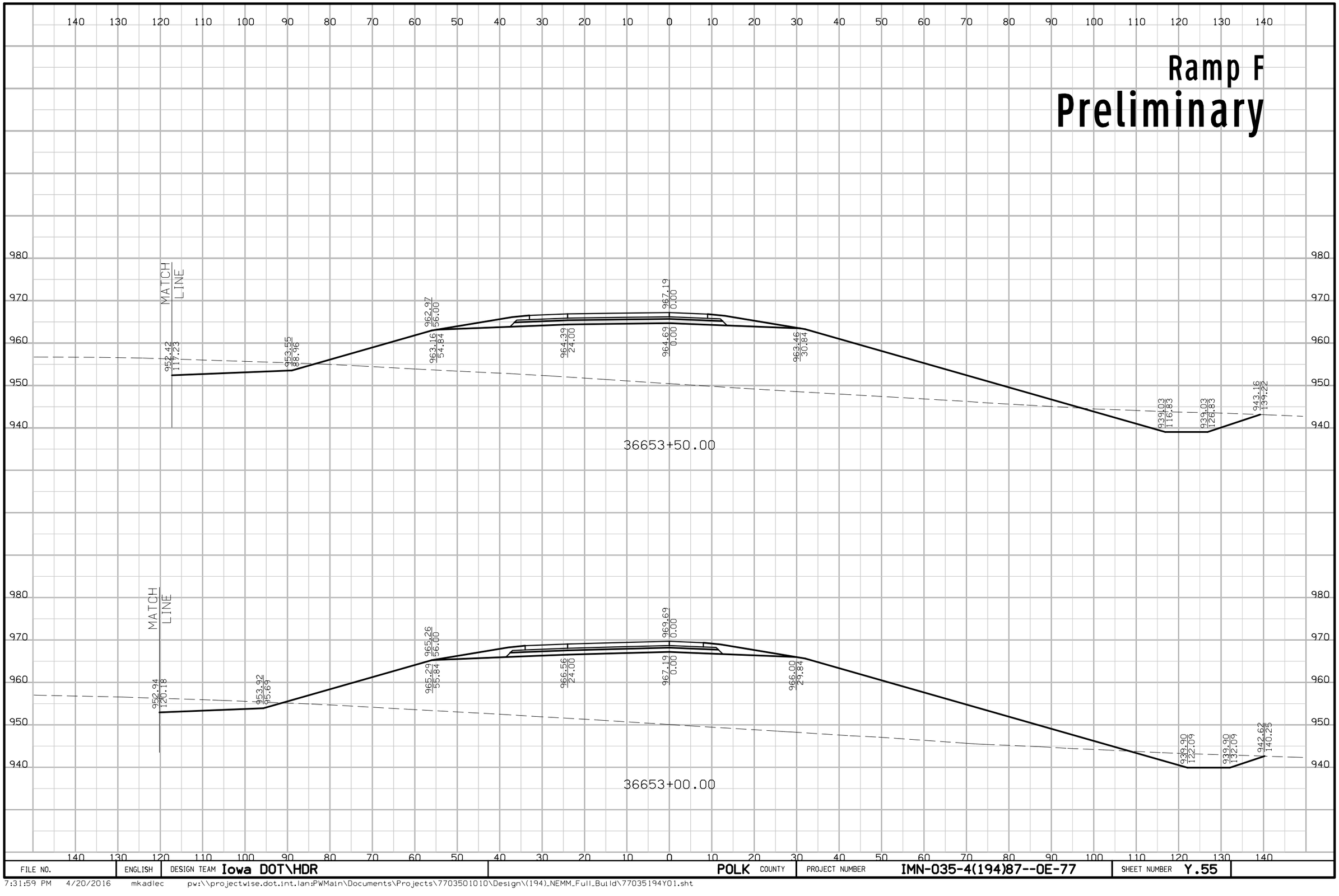


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.54

7:31:58 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp F

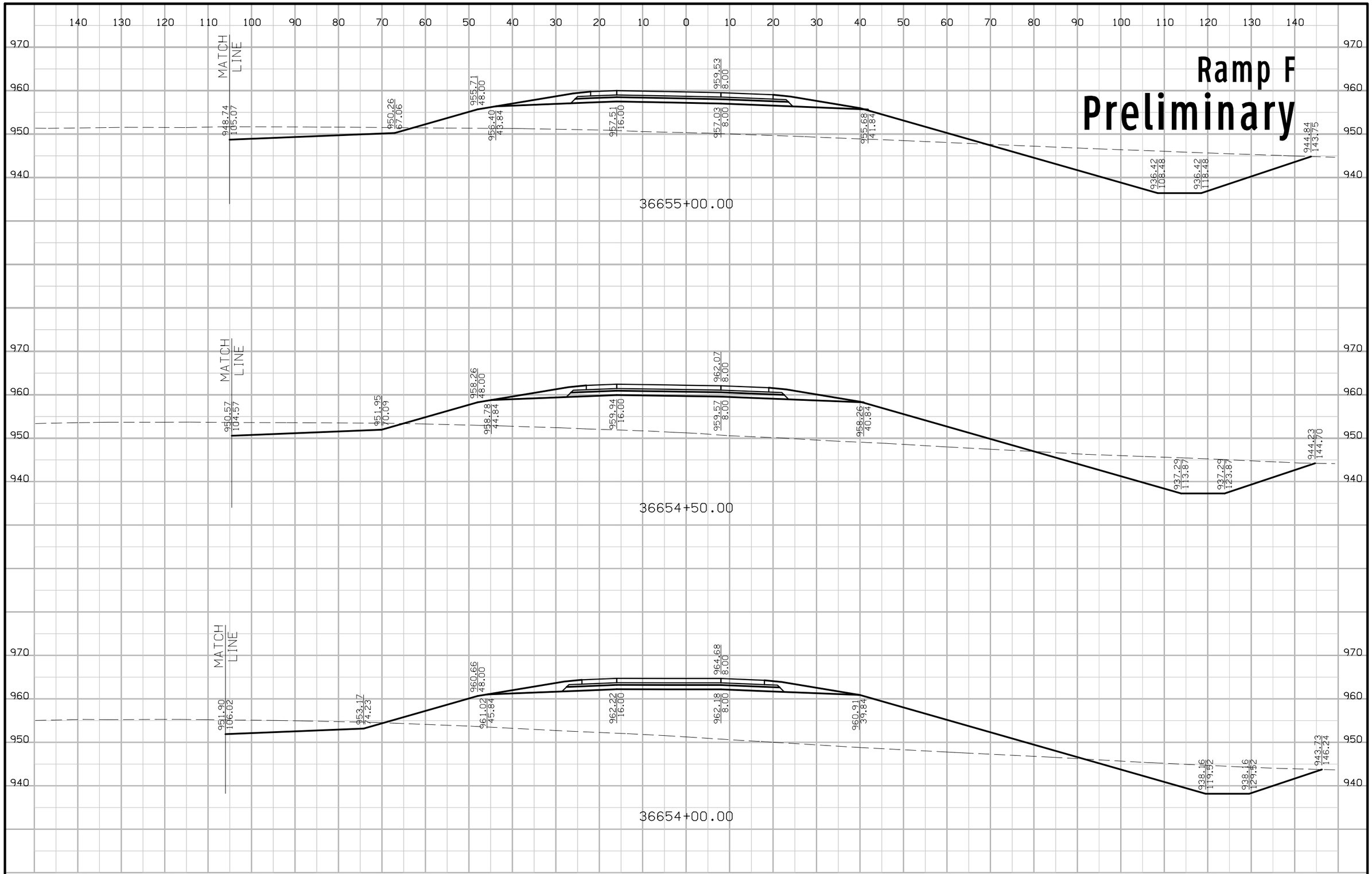
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.55

7:31:59 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

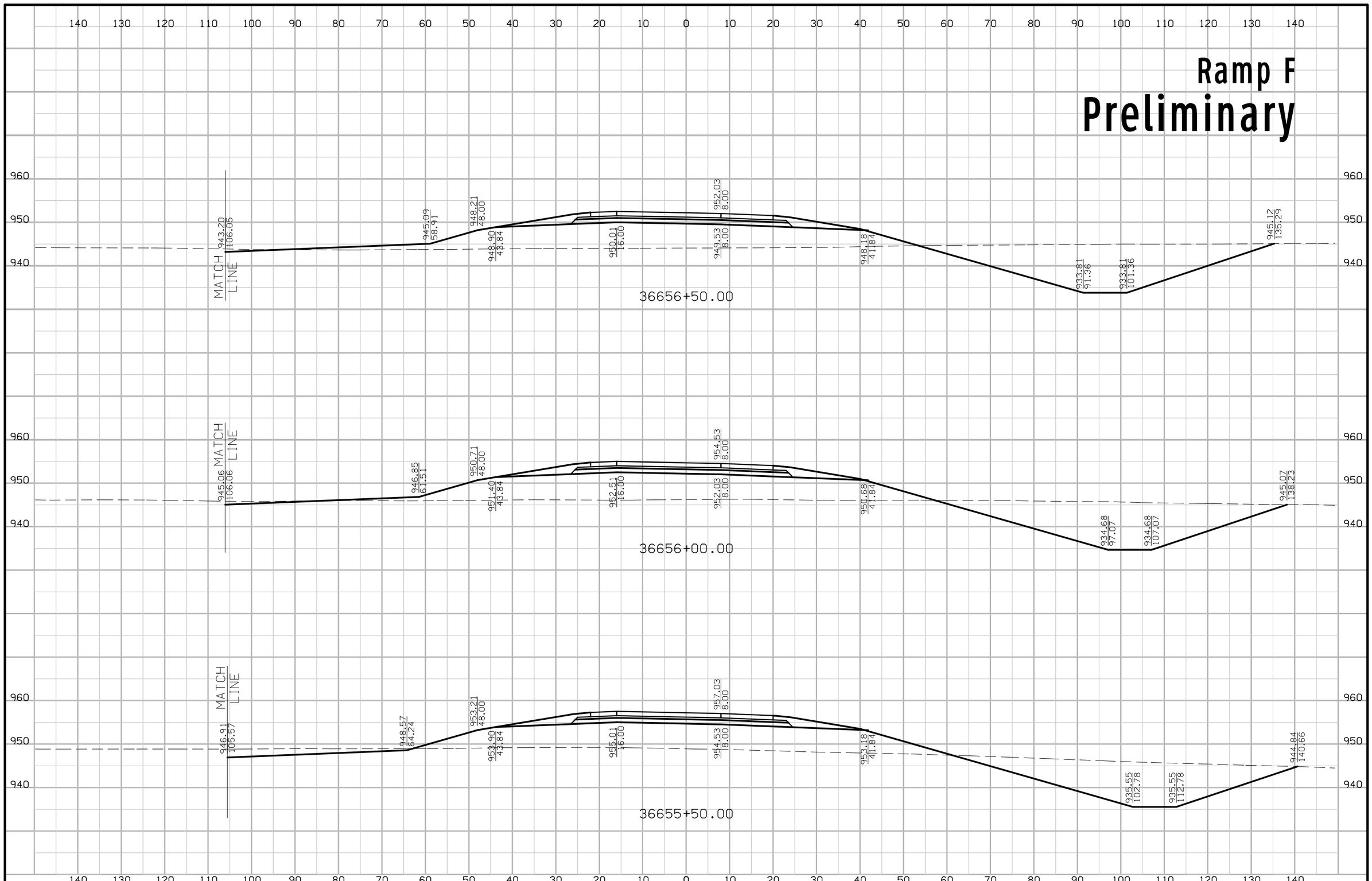
Ramp F
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.56

7:32:01 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp F
Preliminary

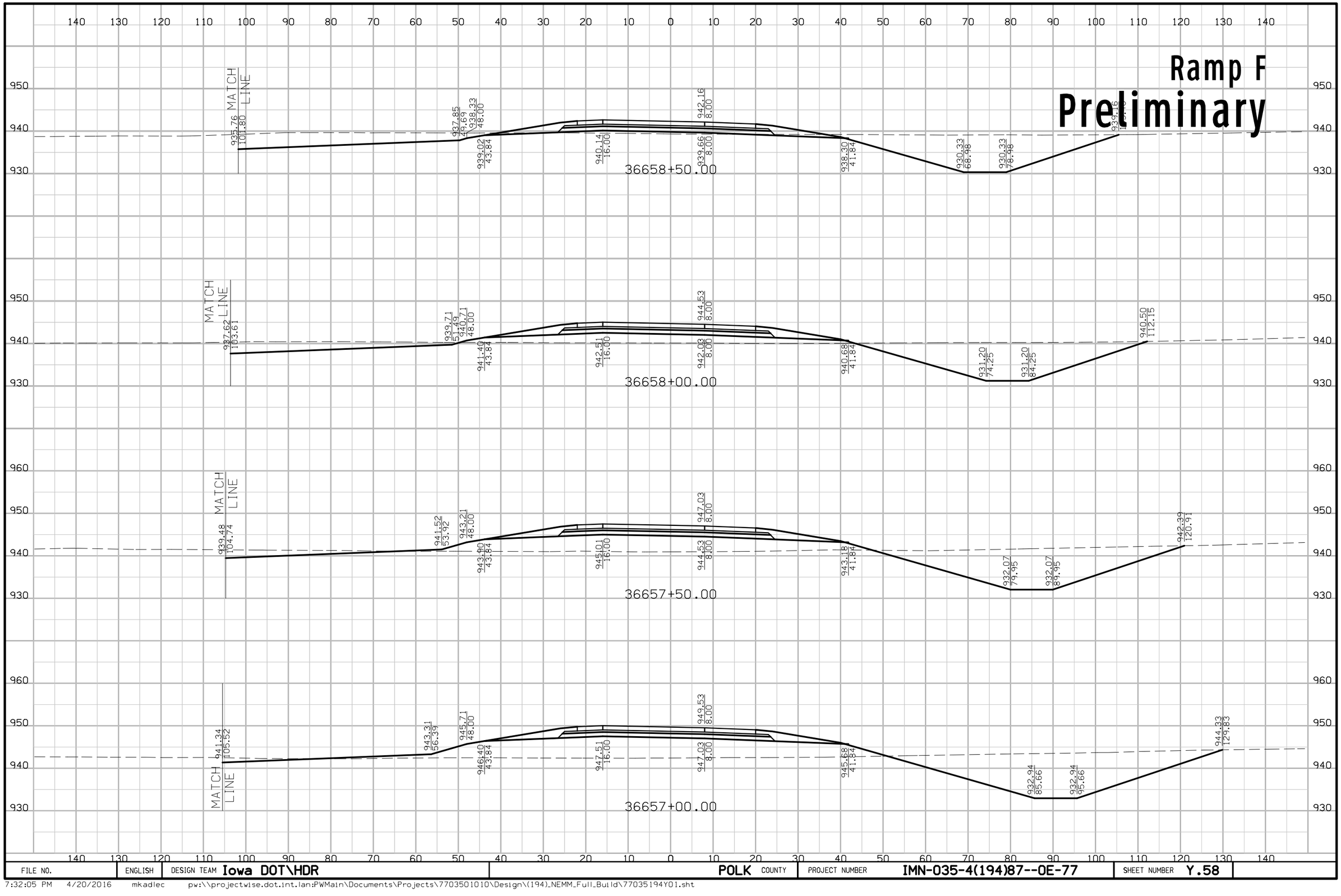


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.57

7:32:03 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp F

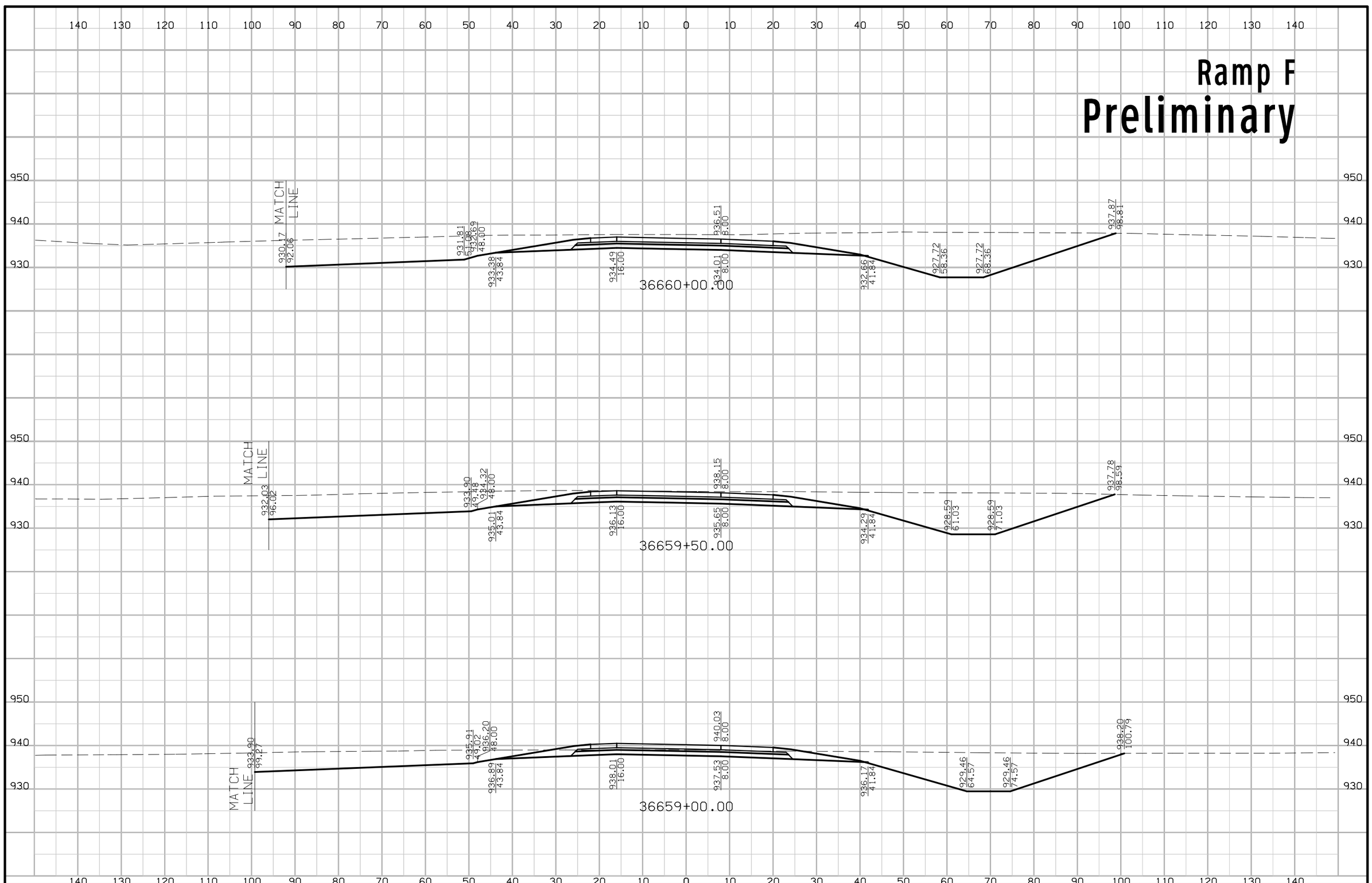
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.58

7:32:05 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp F
Preliminary

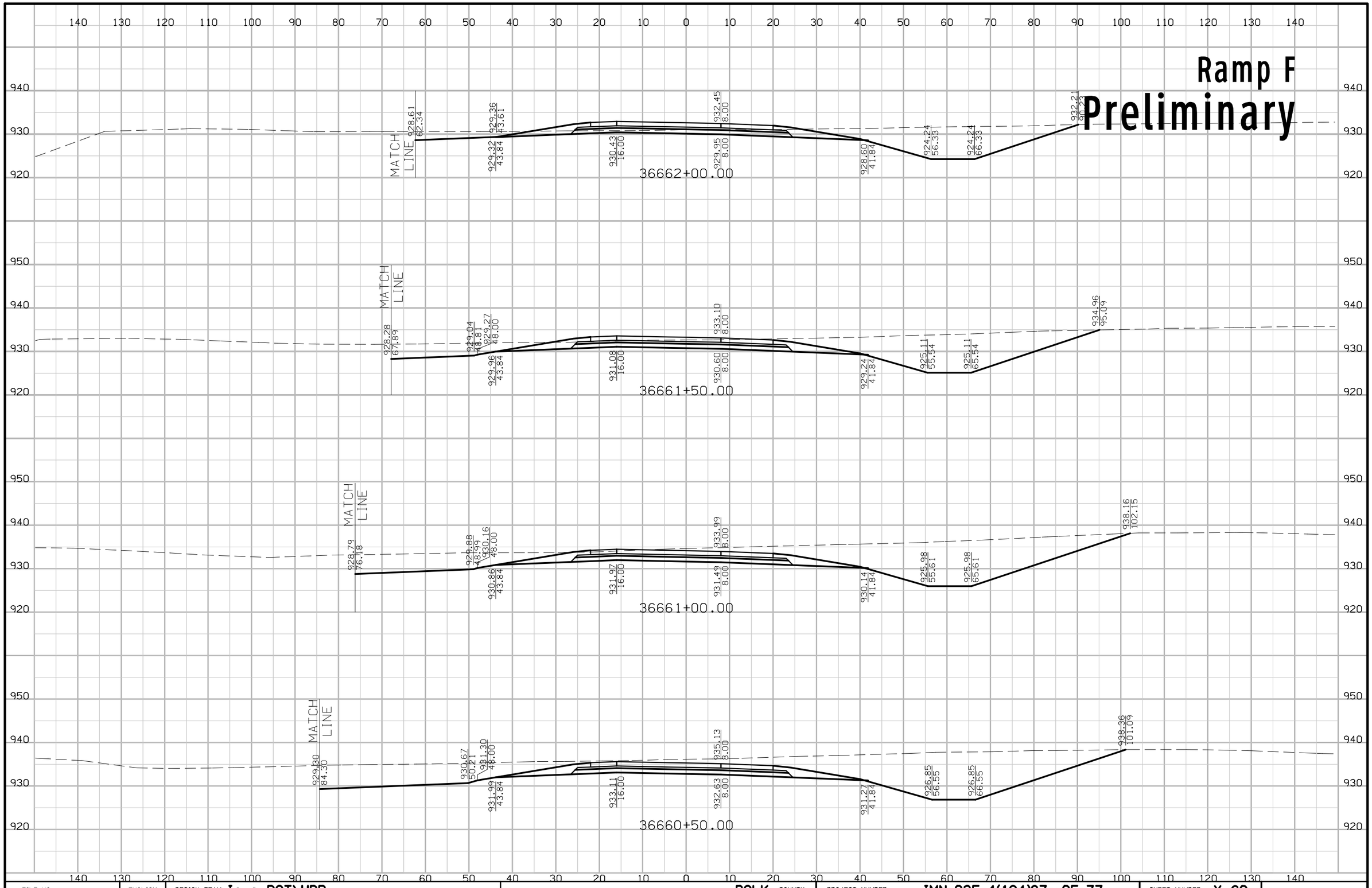


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.59

7:32:06 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp F

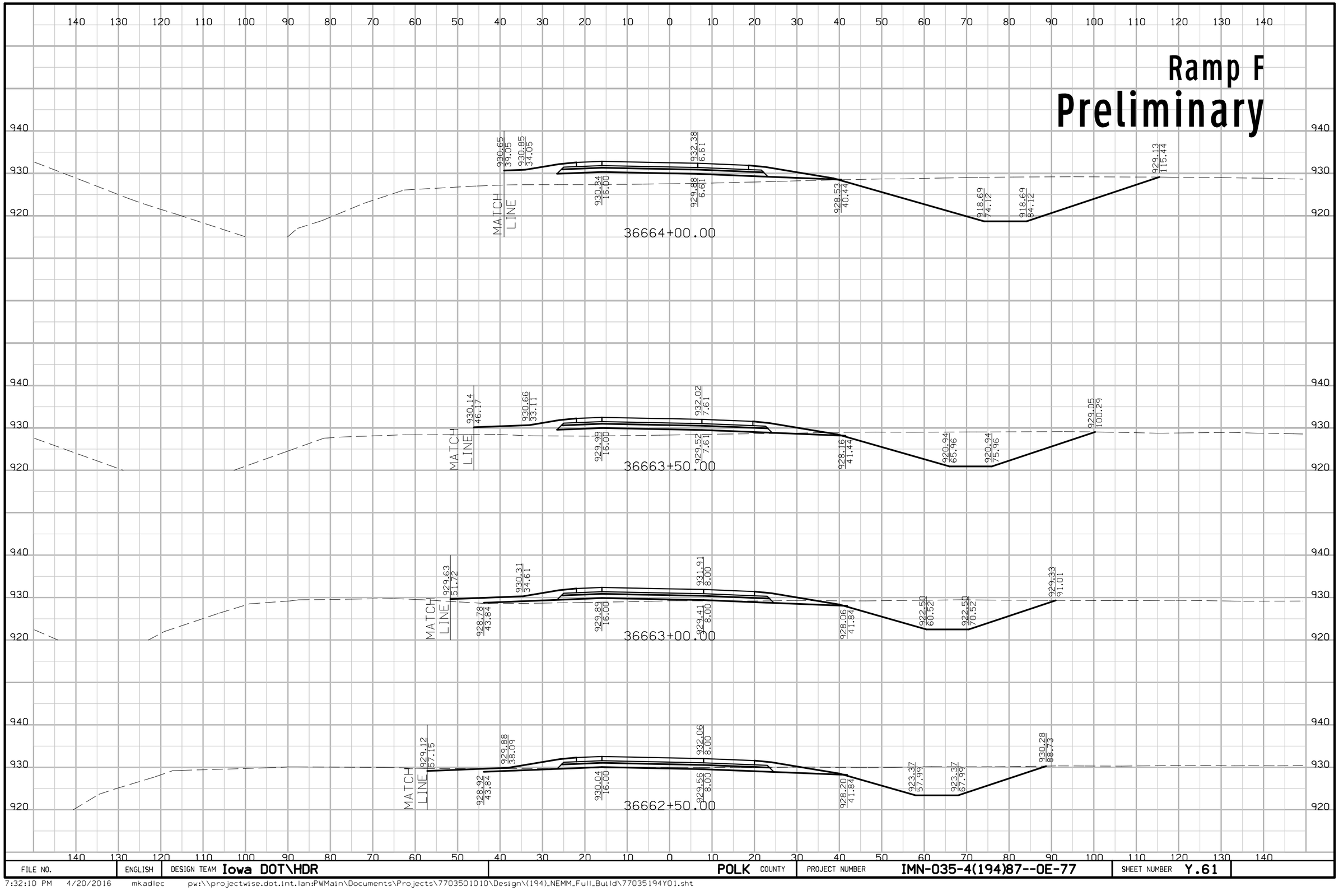
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.60

7:32:08 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

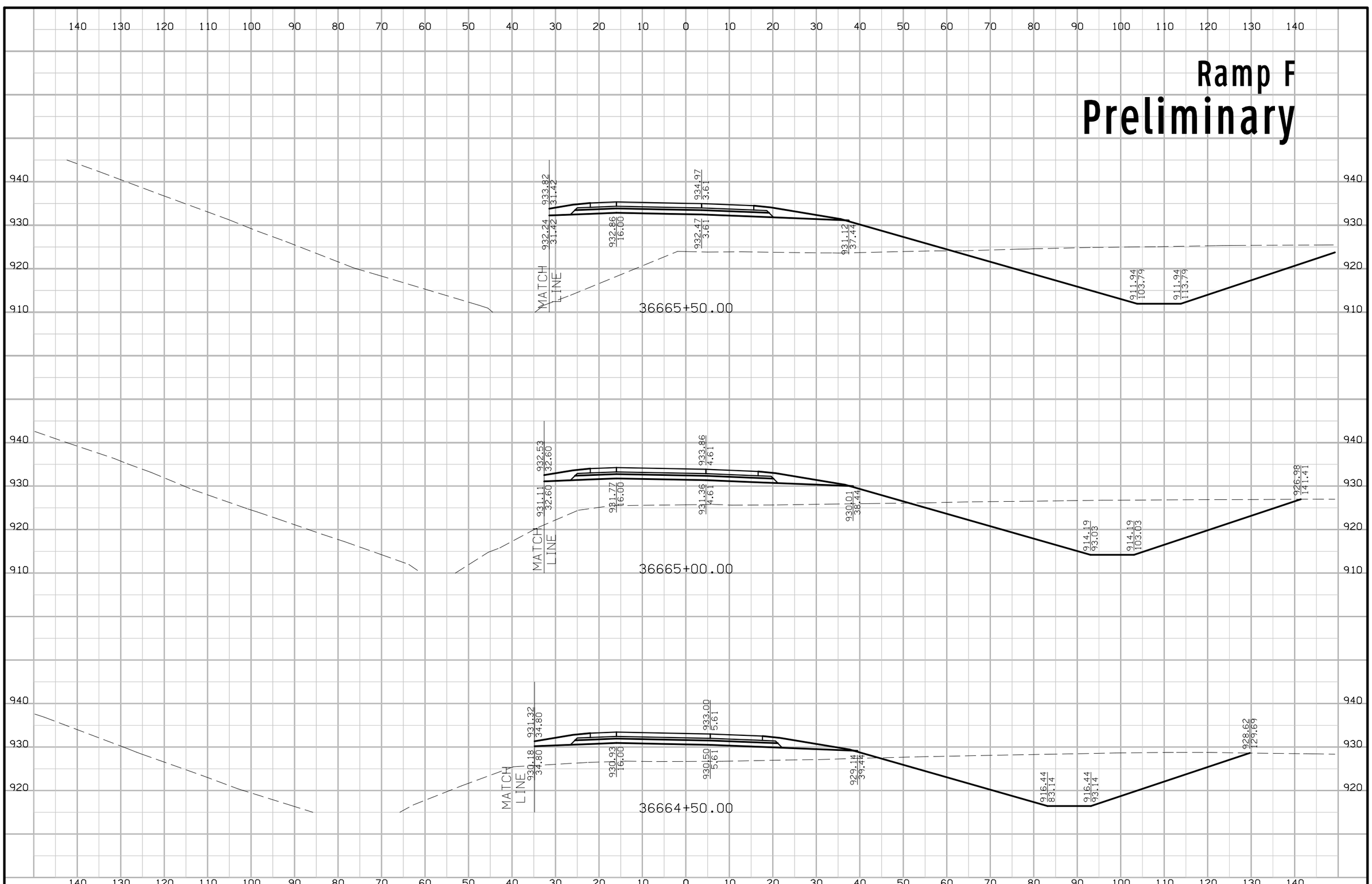
Ramp F
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.61

7:32:10 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

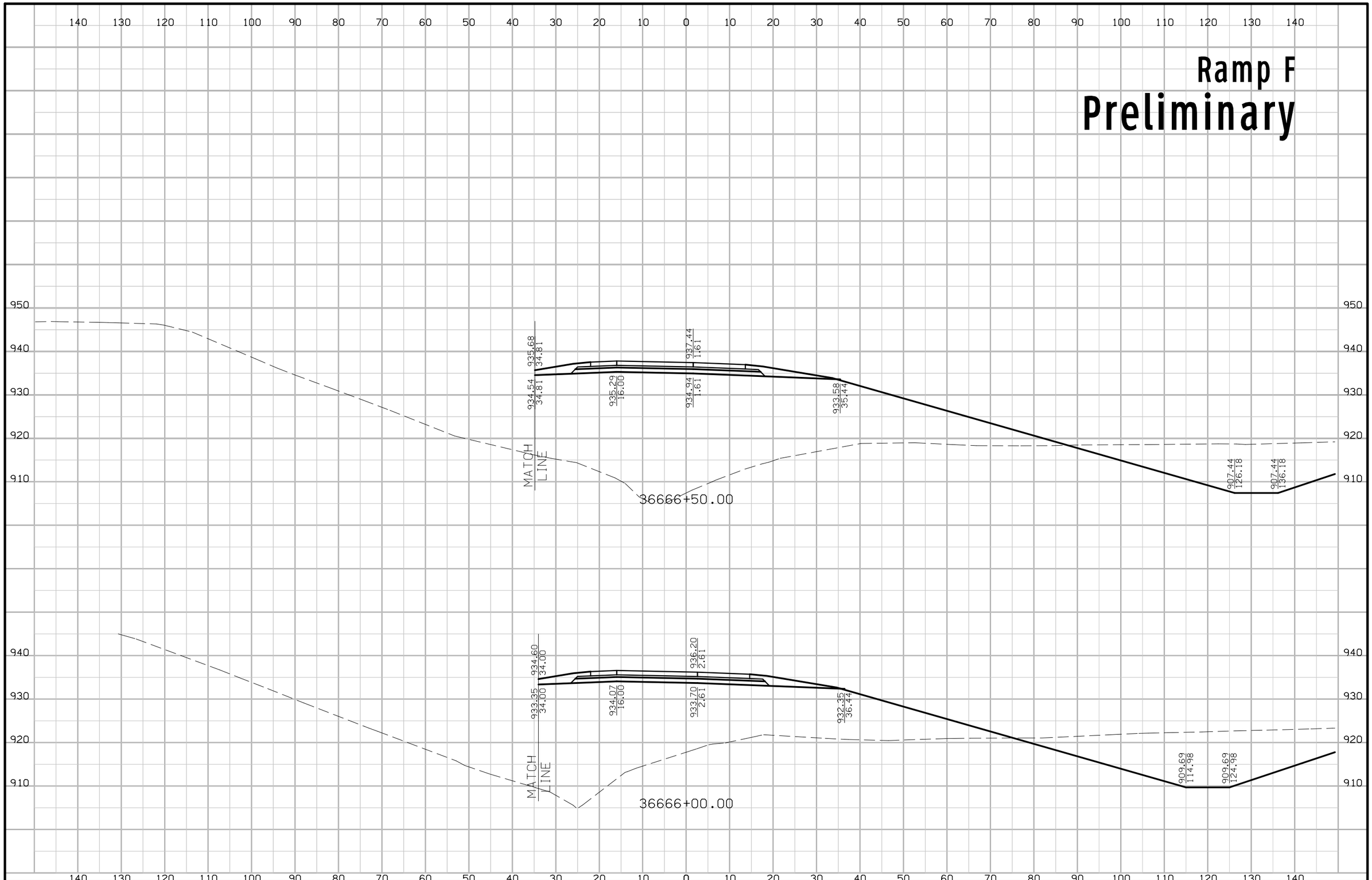
Ramp F
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.62

7:32:12 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

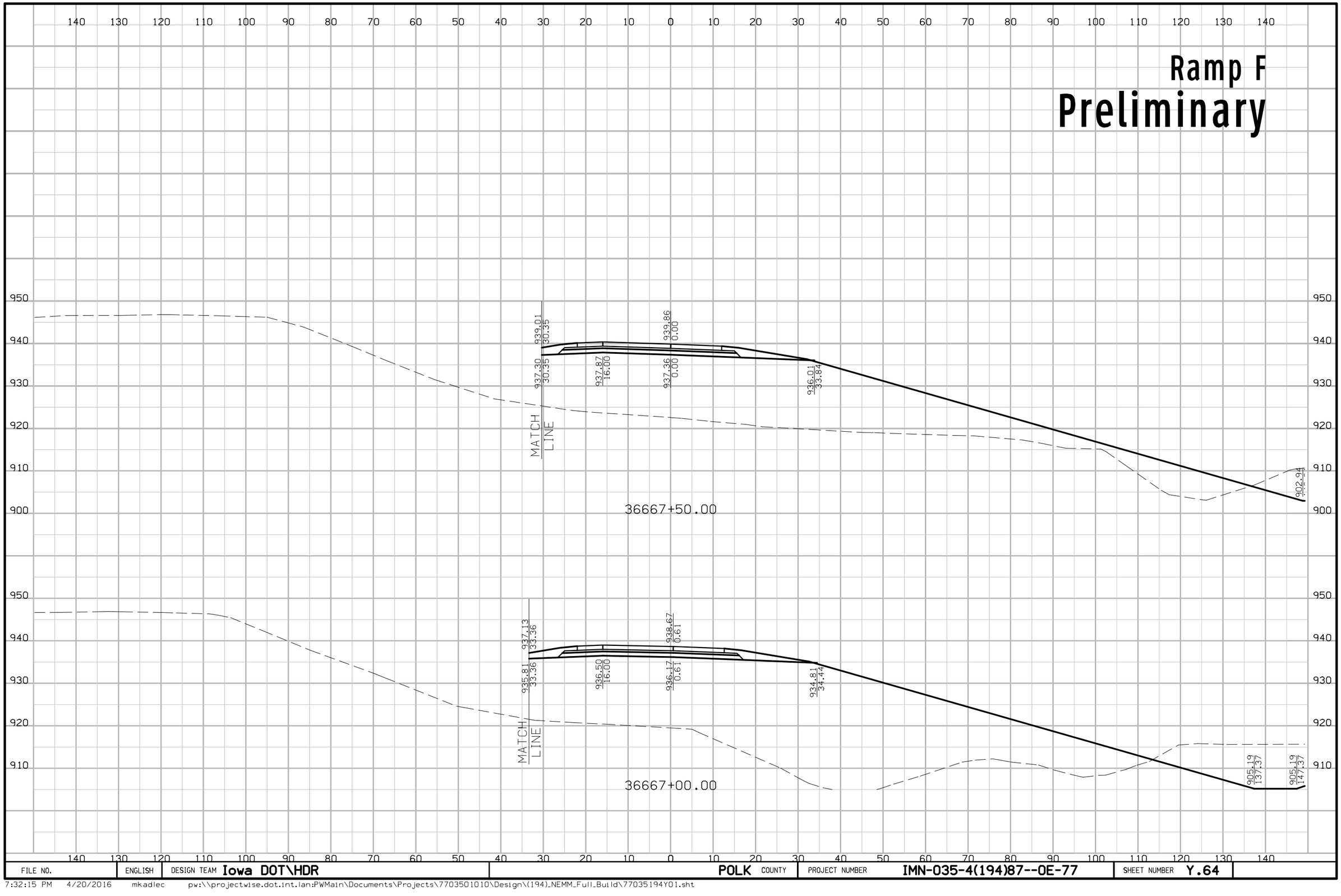
Ramp F
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.63

7:32:13 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

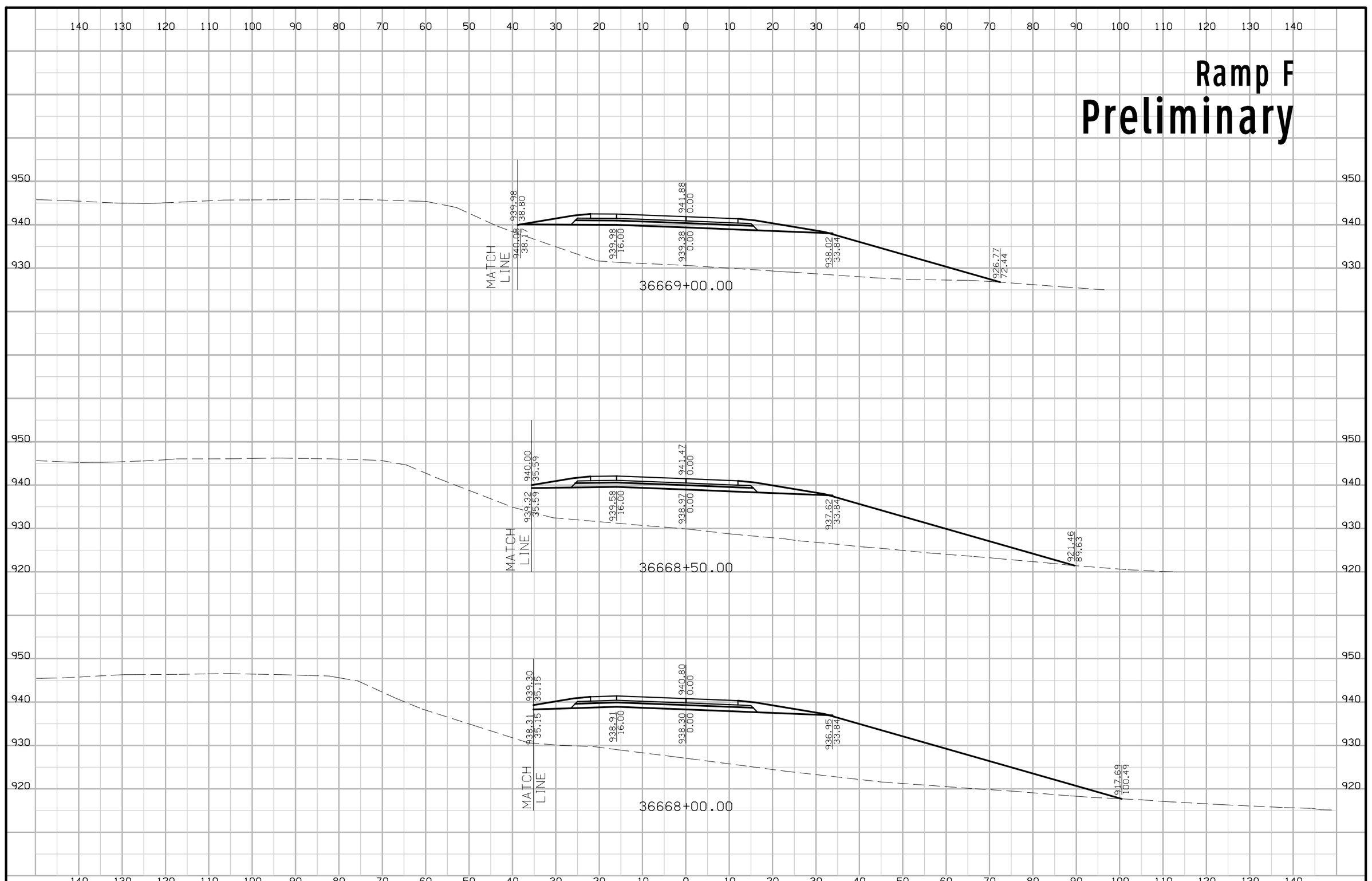
Ramp F
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.64

7:32:15 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

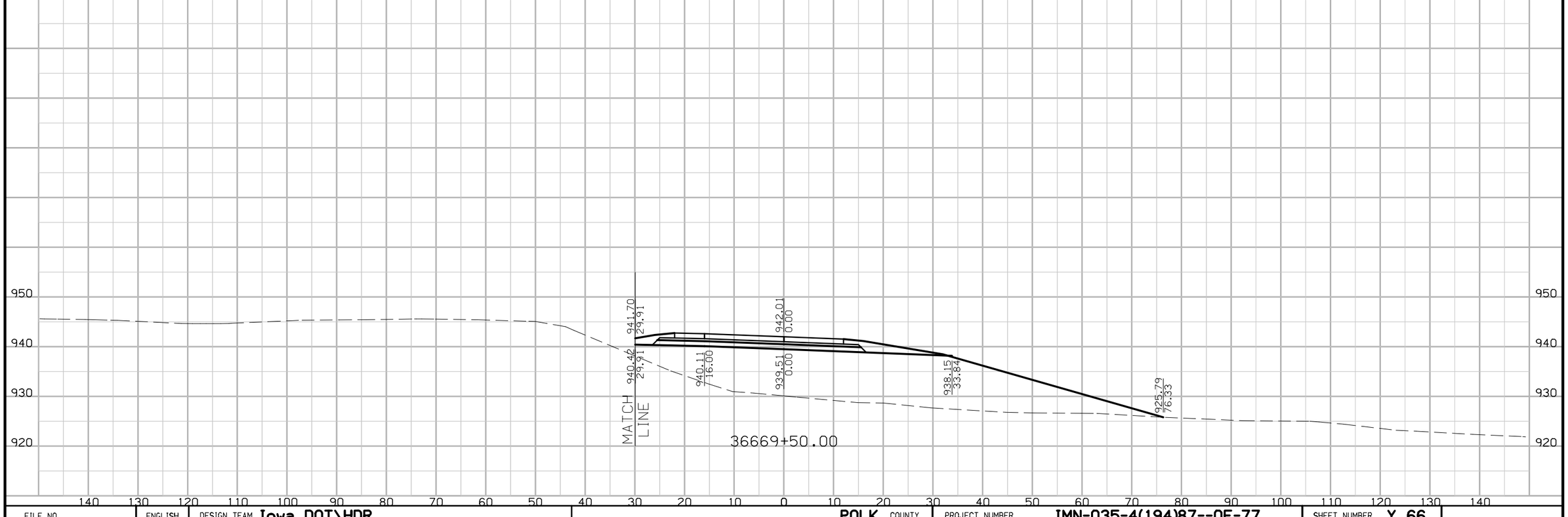
Ramp F
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.65

7:32:17 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

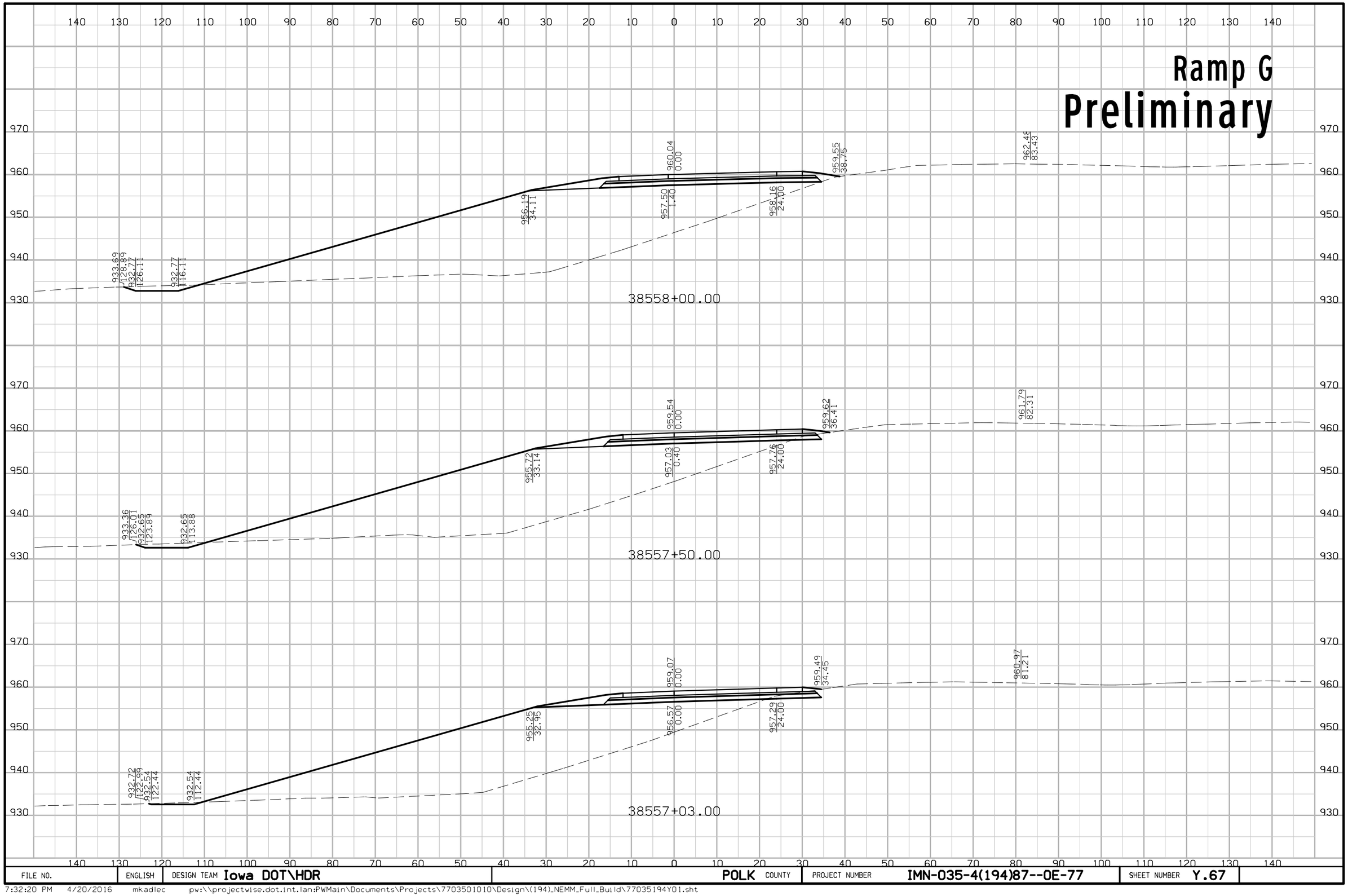
Ramp F
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.66

7:32:19 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp G
Preliminary

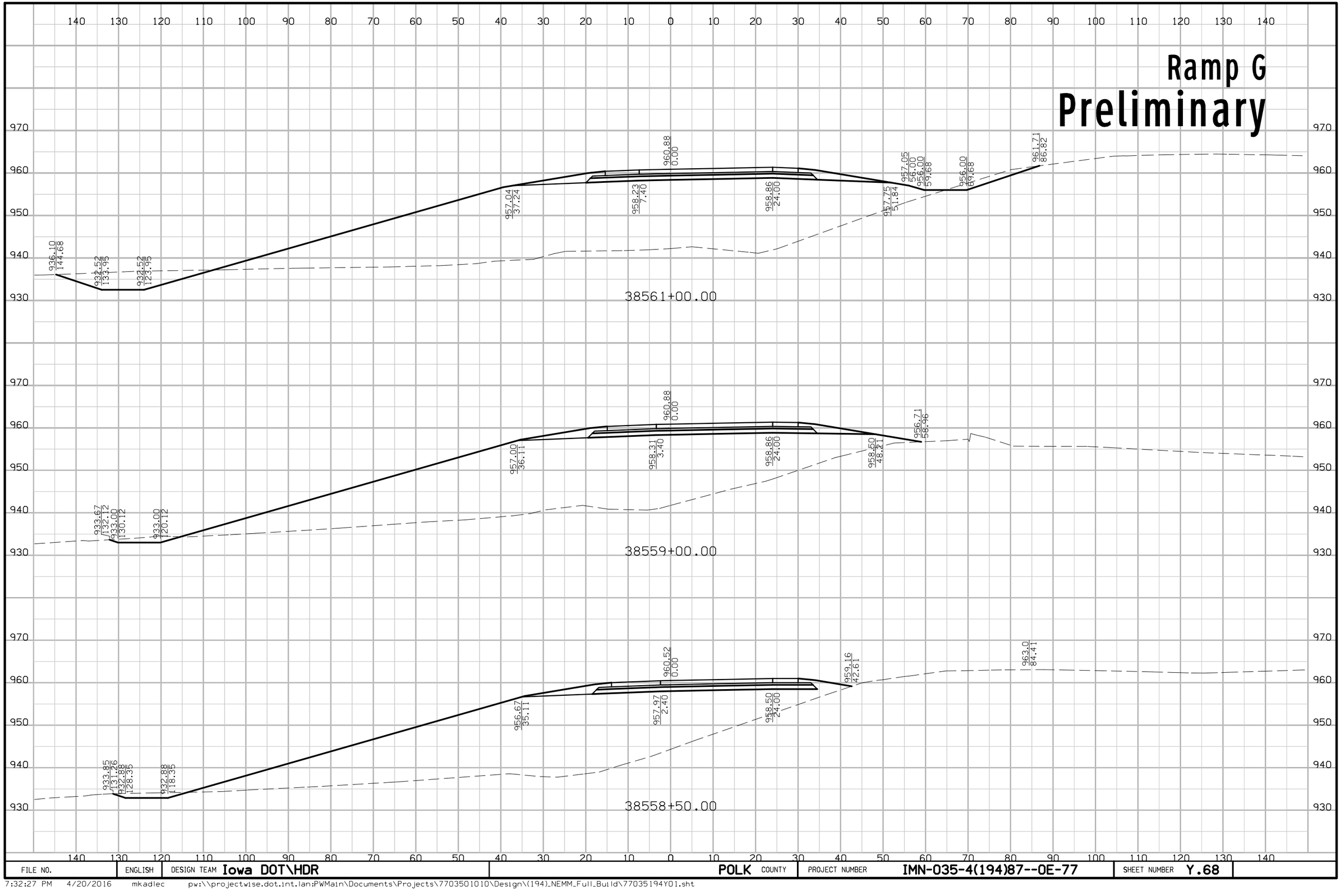


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.67

7:32:20 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp G

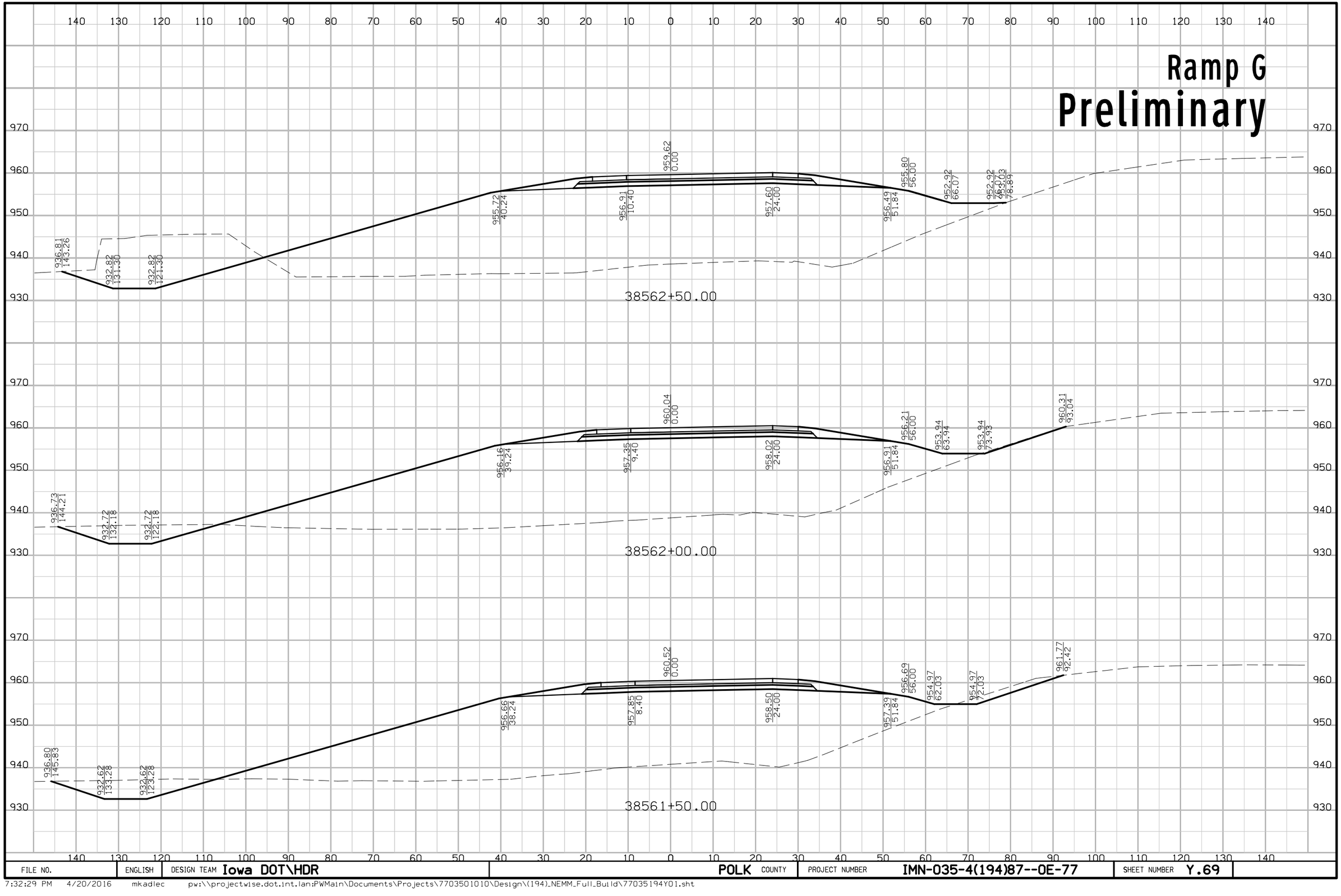
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.68

7:32:27 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

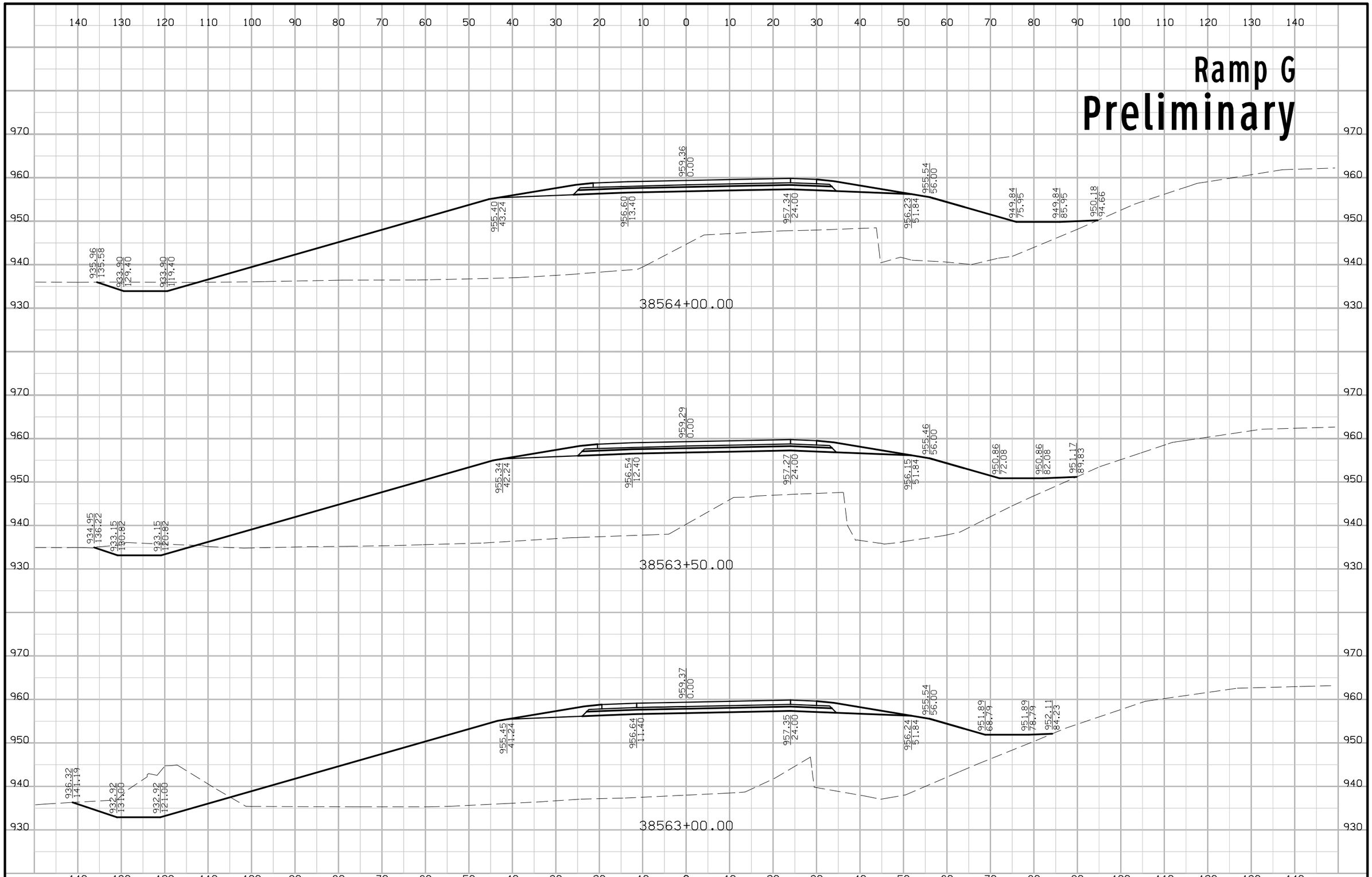
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.69

7:32:29 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

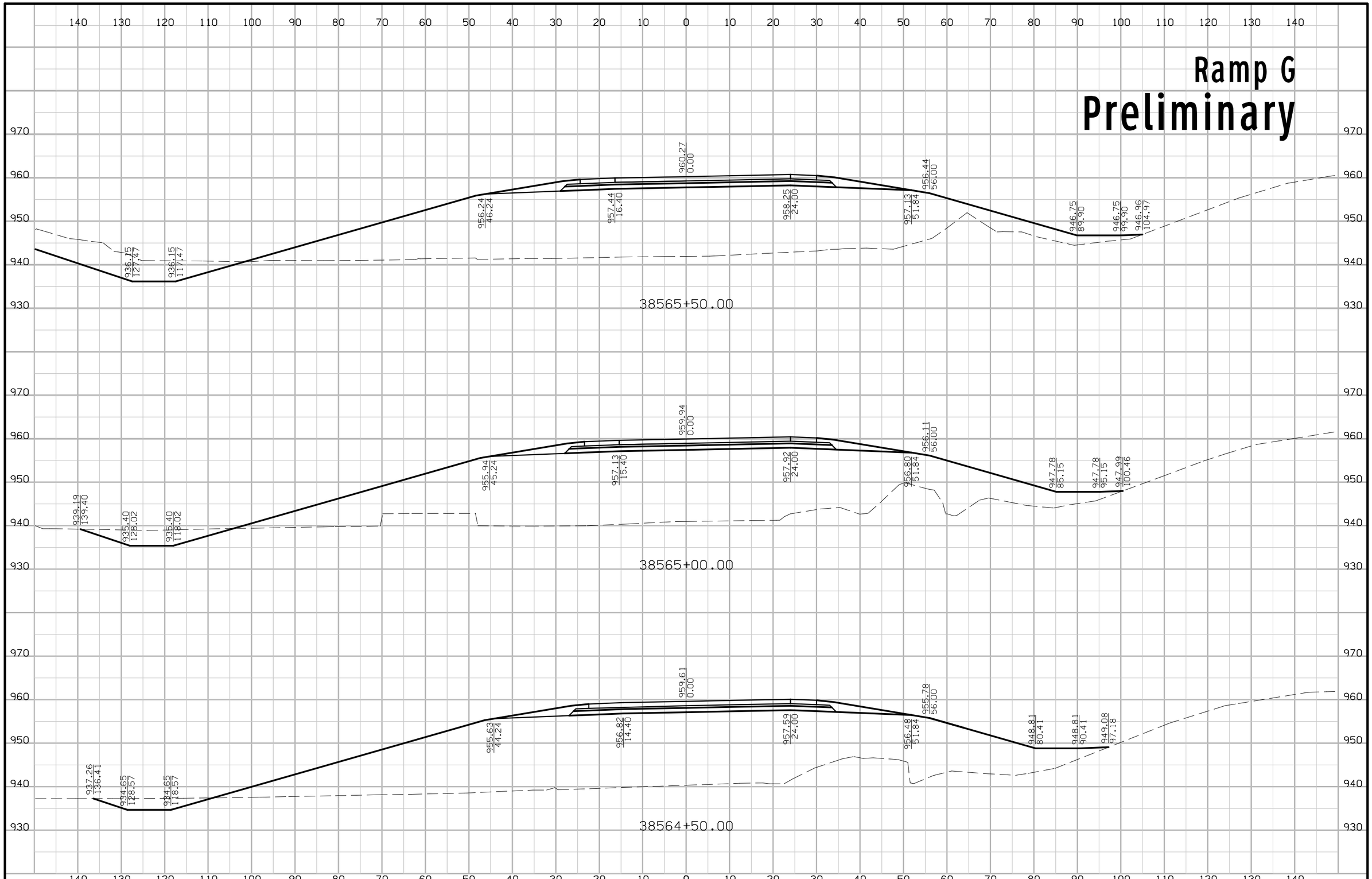
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.70

7:32:30 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

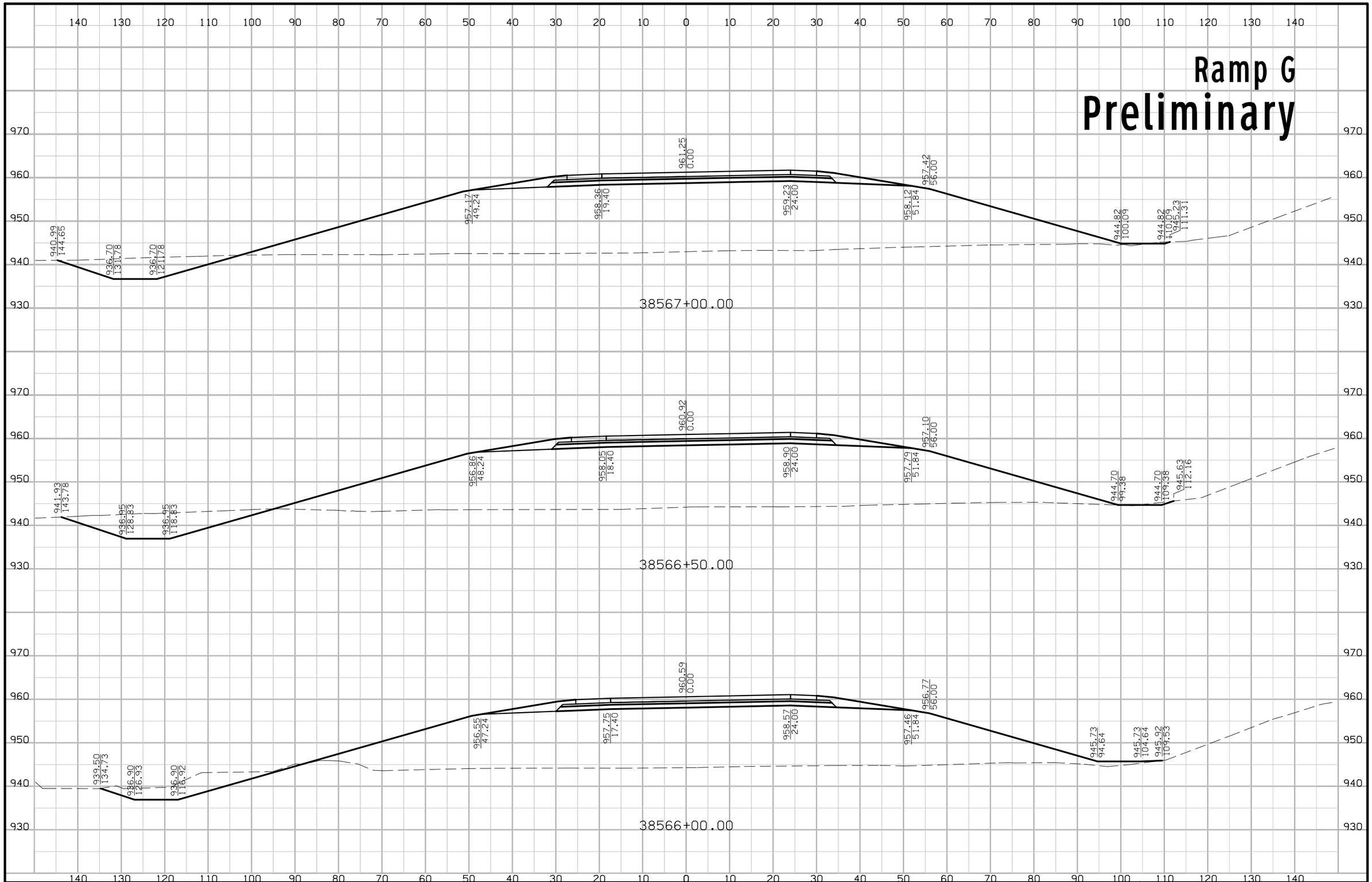
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.71

7:32:32 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

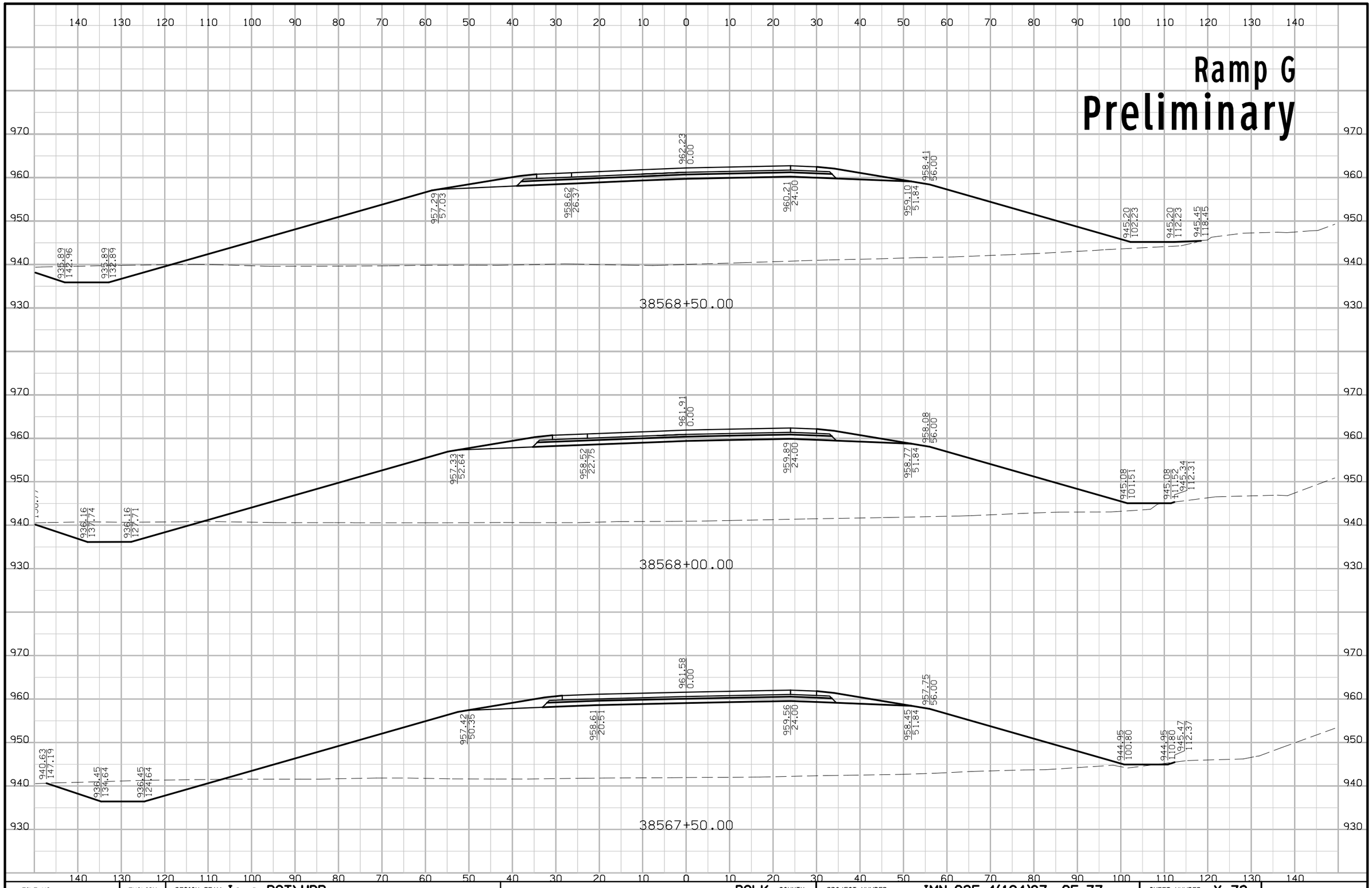
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.72

7:32:34 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194YO1.sht

Ramp G
Preliminary

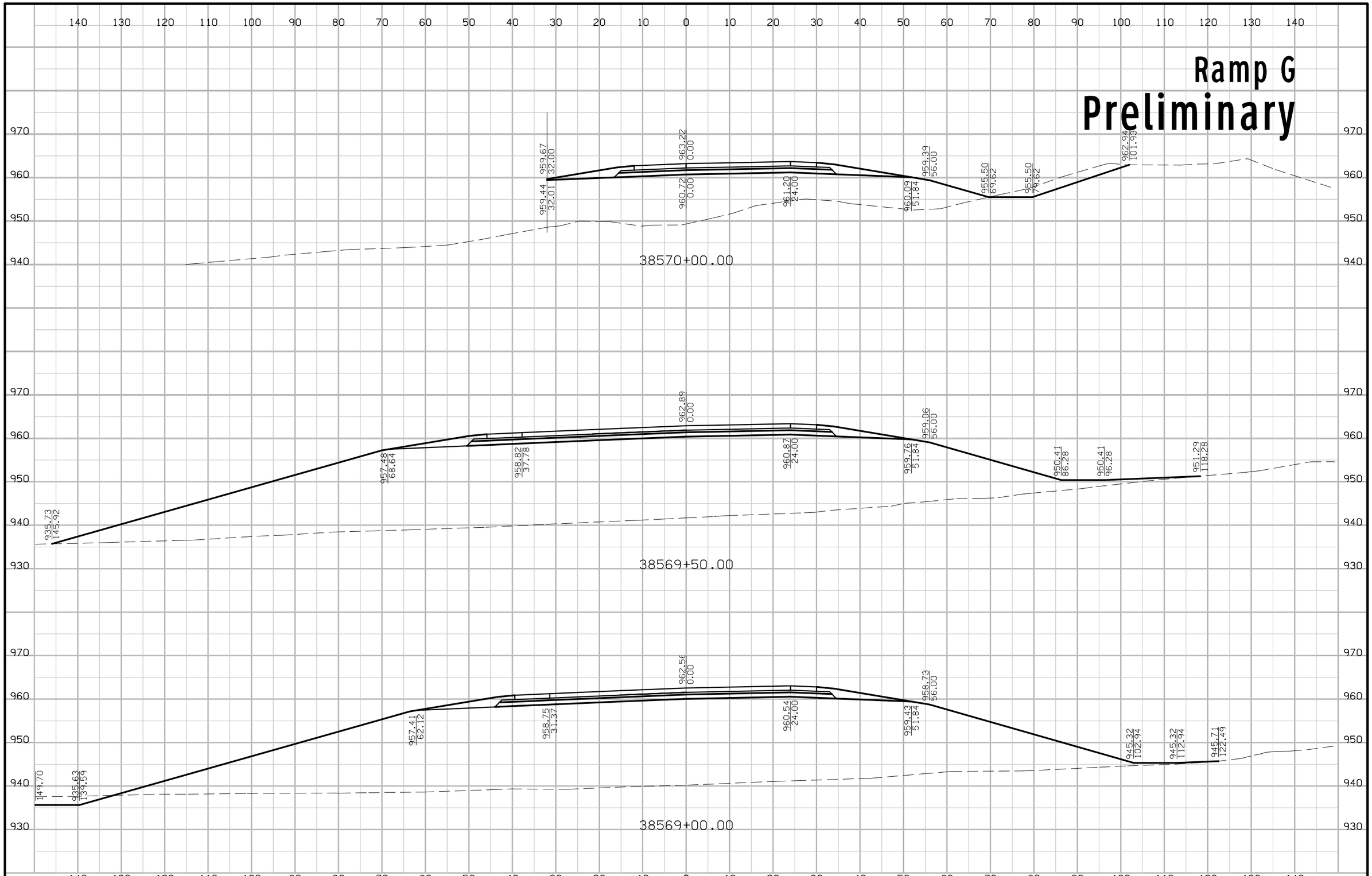


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.73

7:32:36 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp G

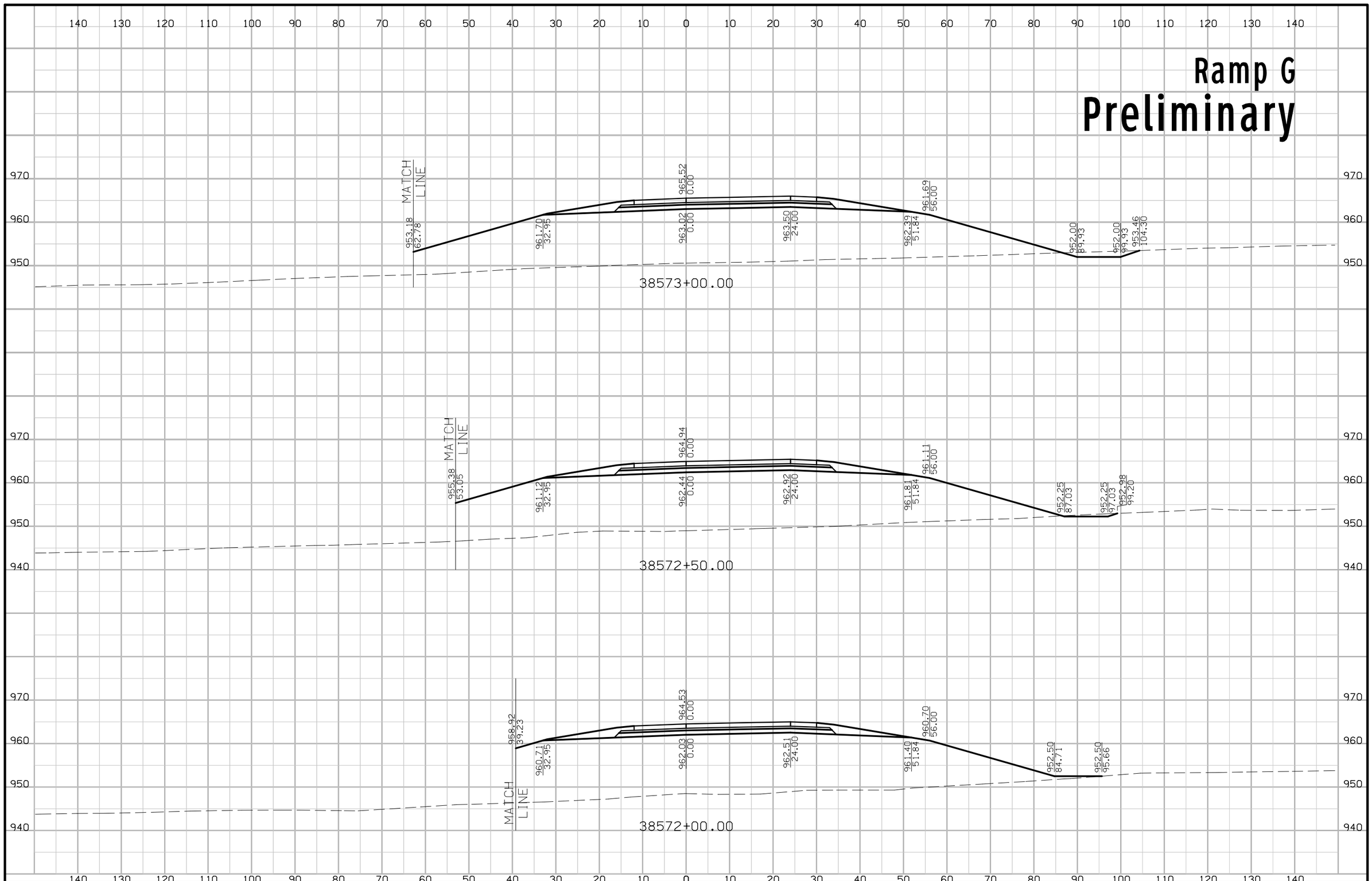
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.74

7:32:37 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

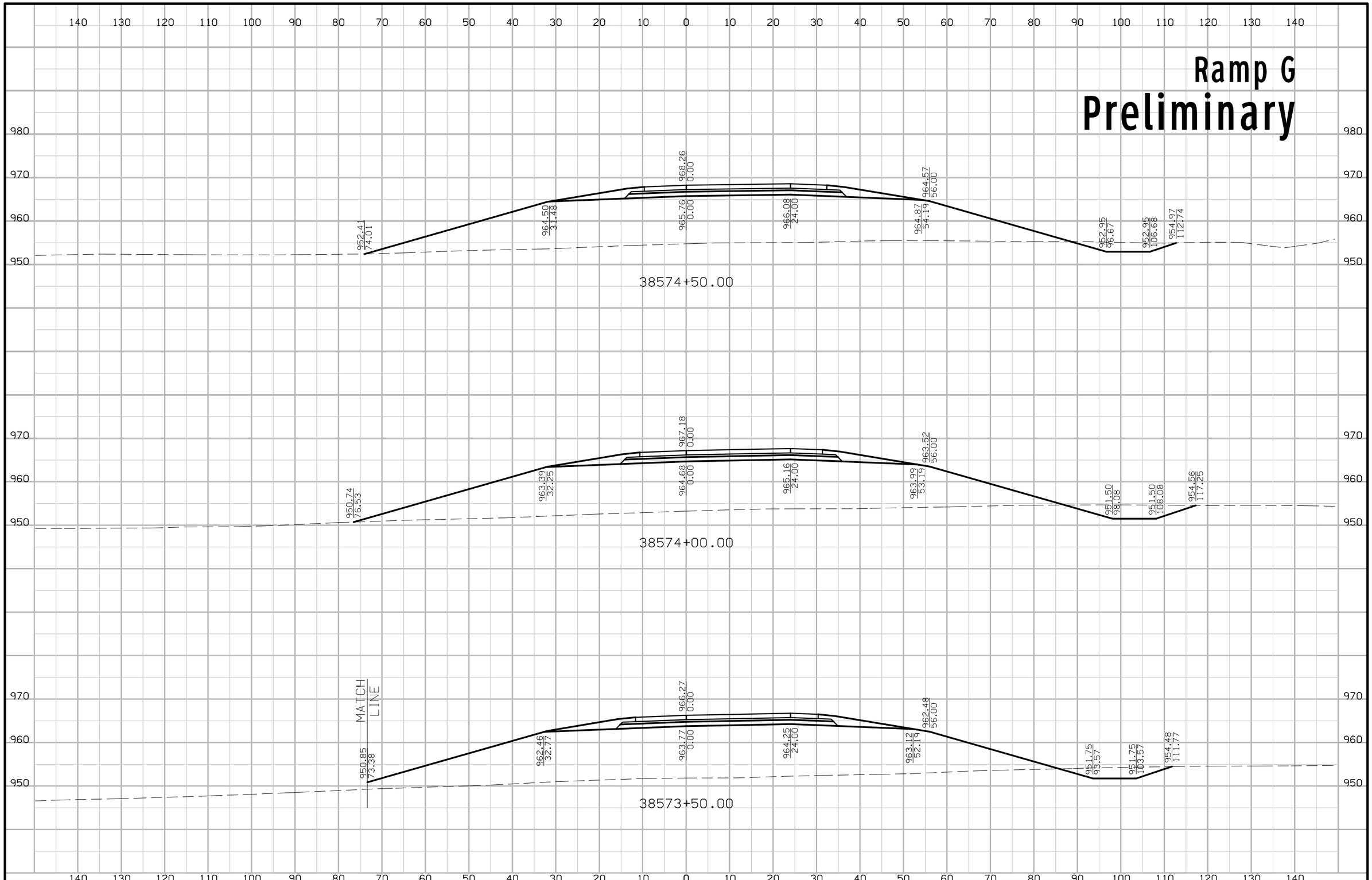
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.75

7:32:39 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

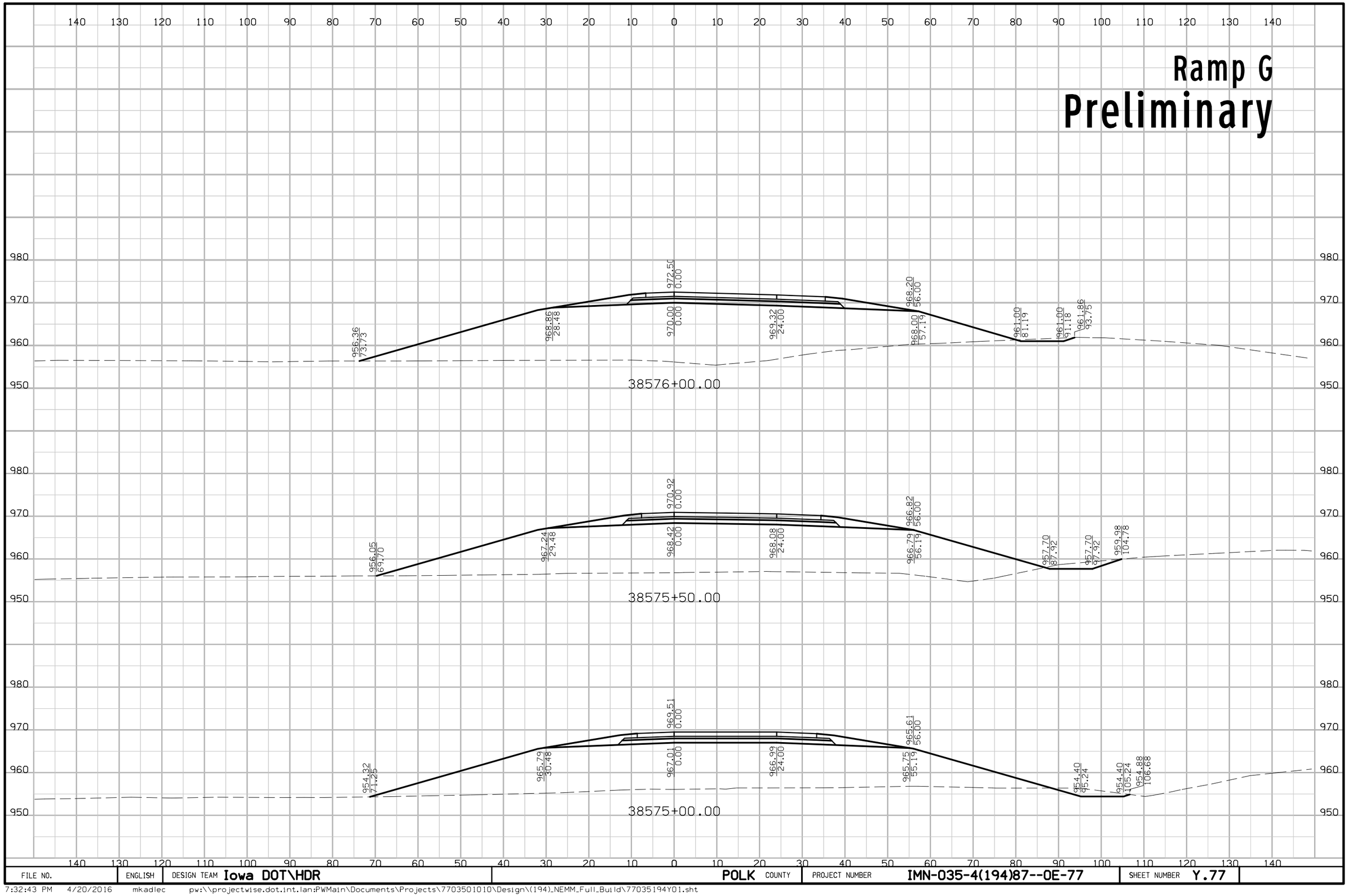
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.76

7:32:41 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

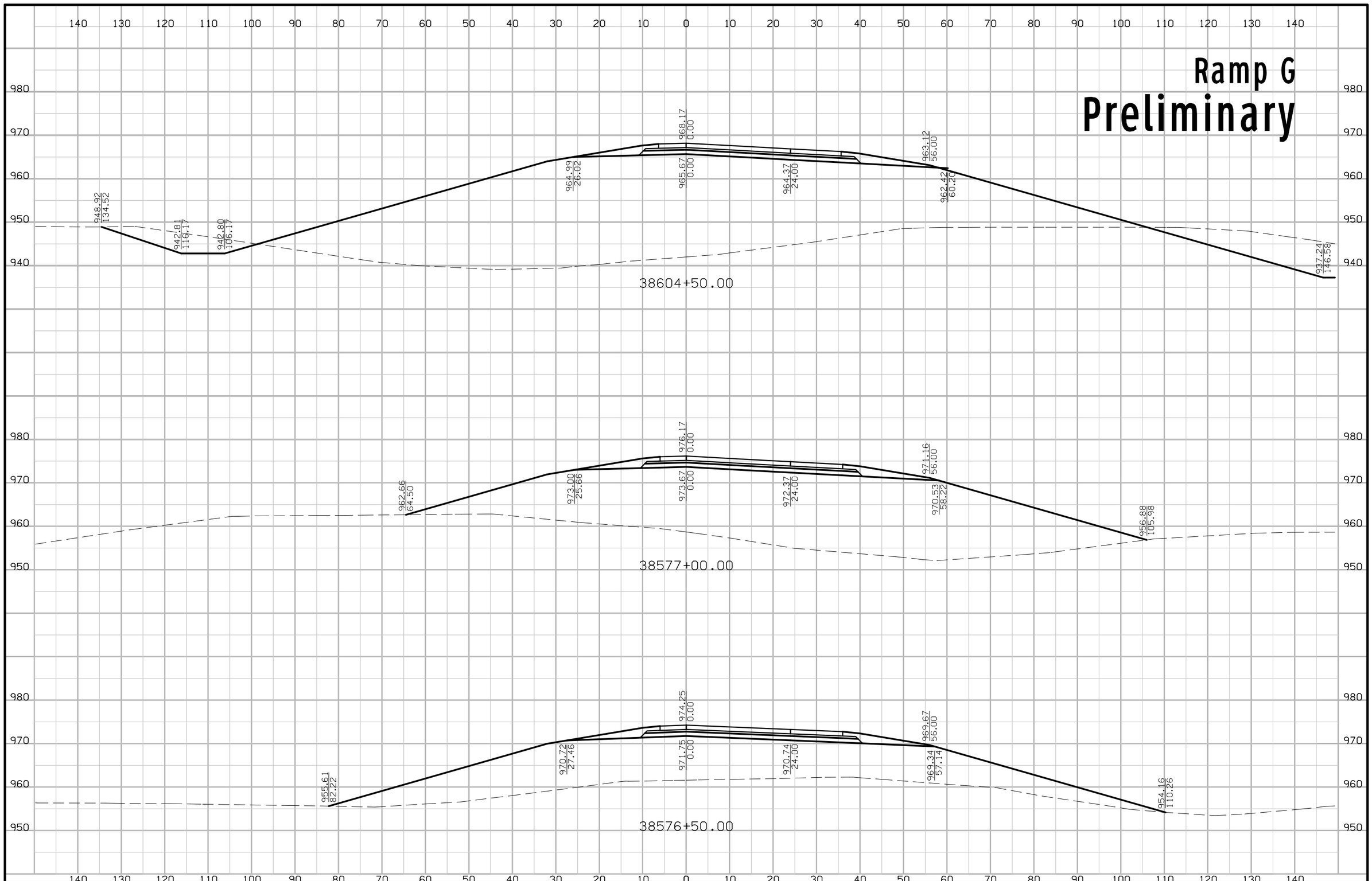
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.77

7:32:43 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

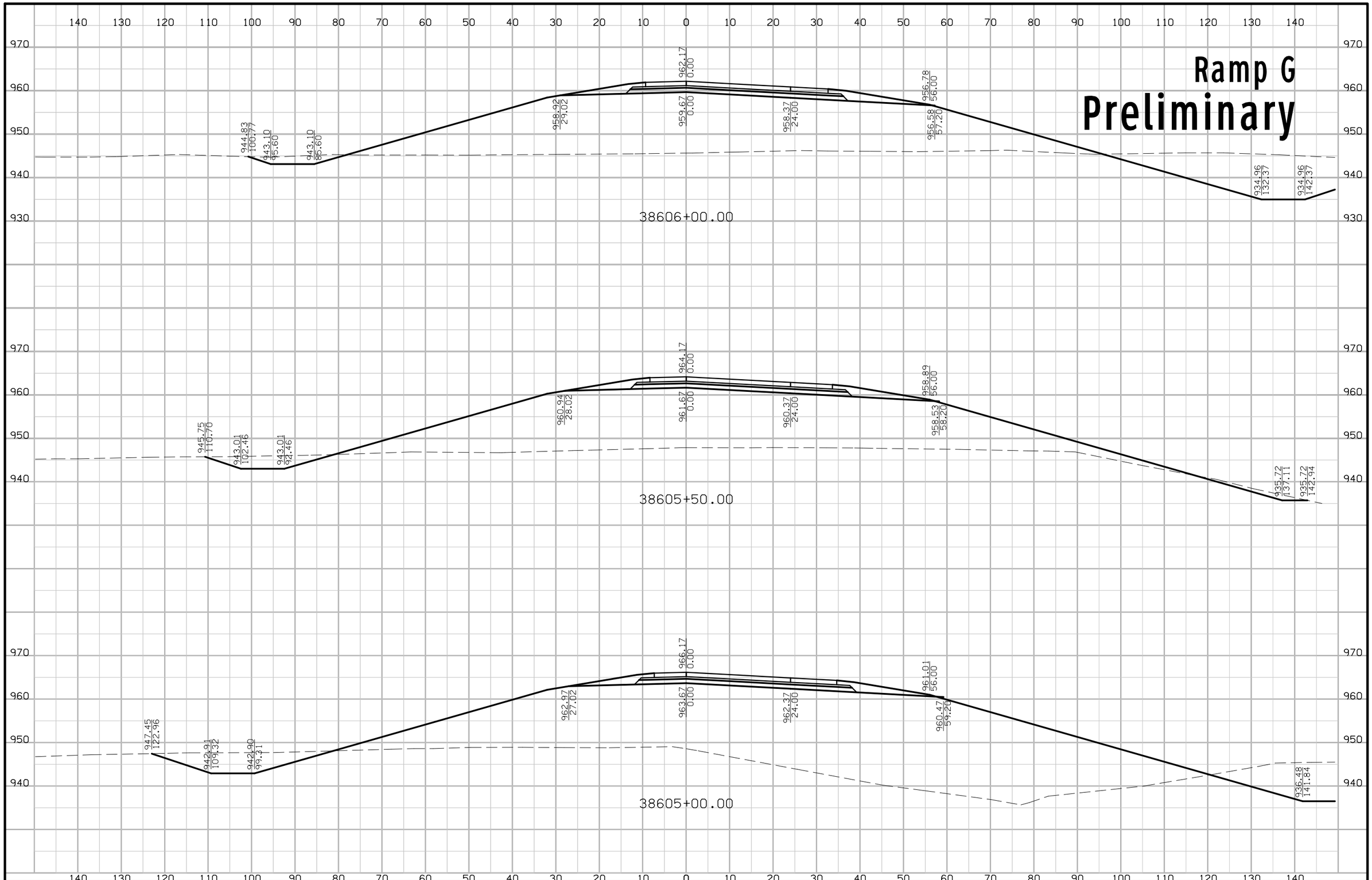
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.78

7:32:44 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

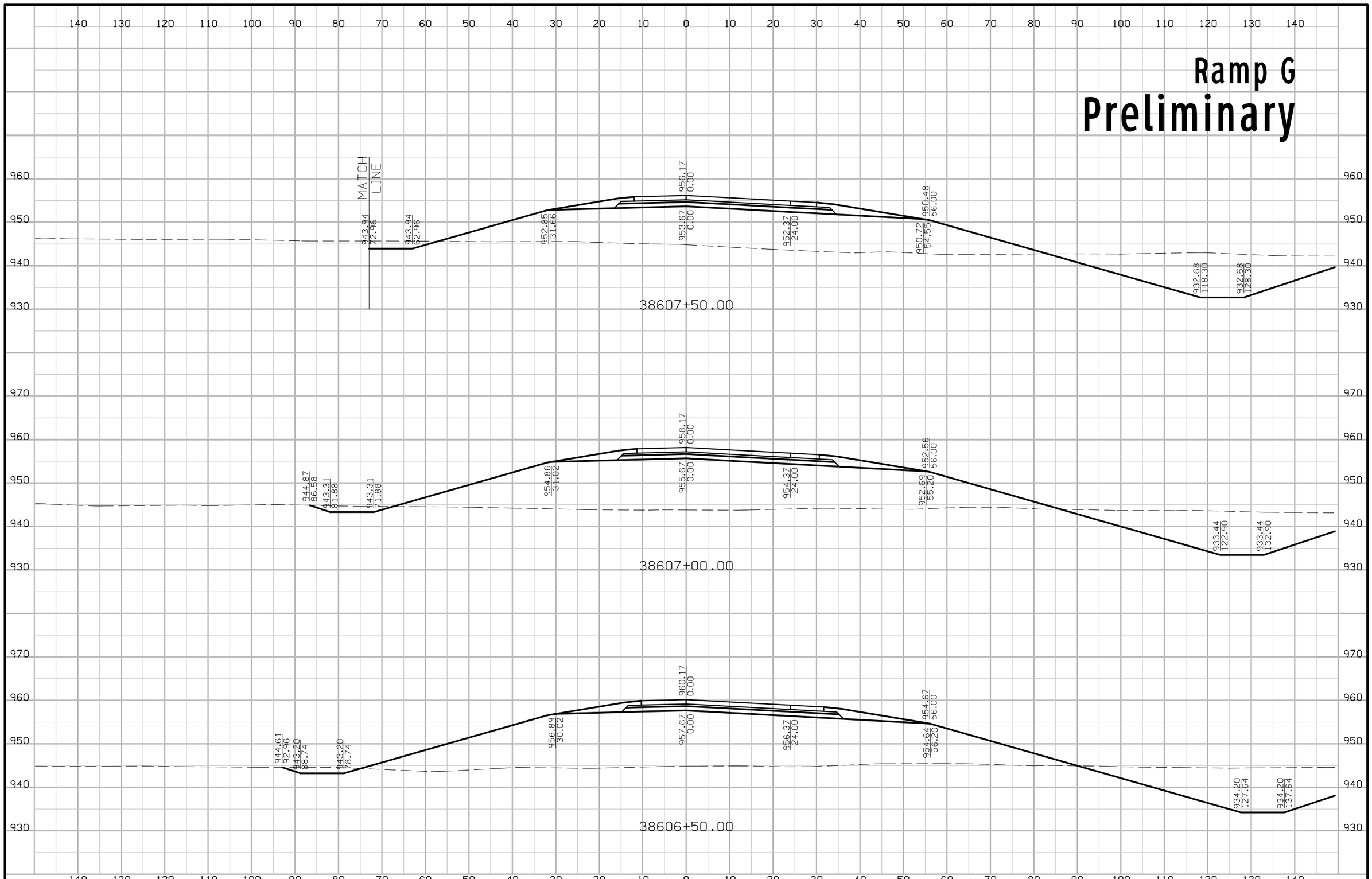
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.79

7:32:46 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

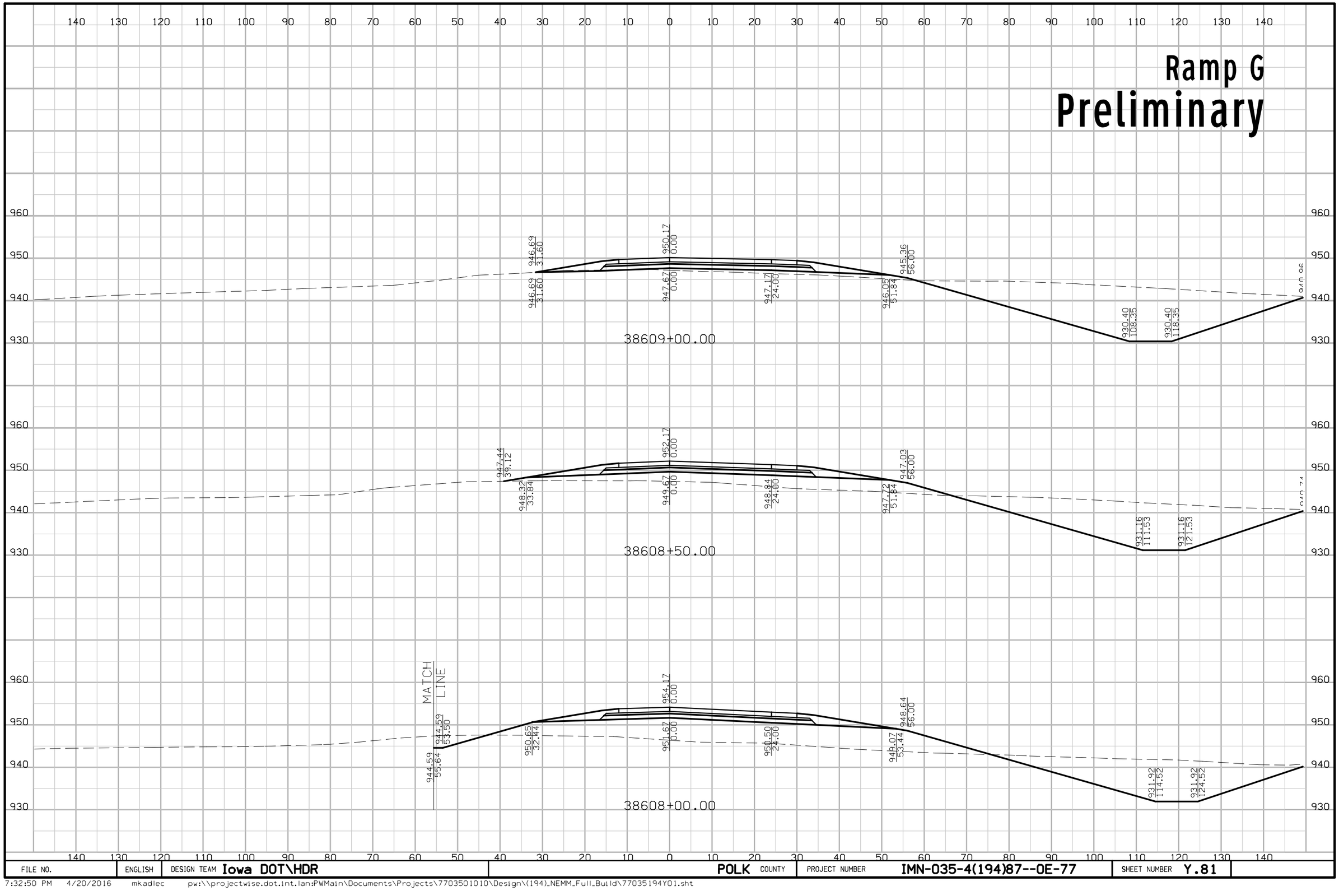
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.80

7:32:48 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

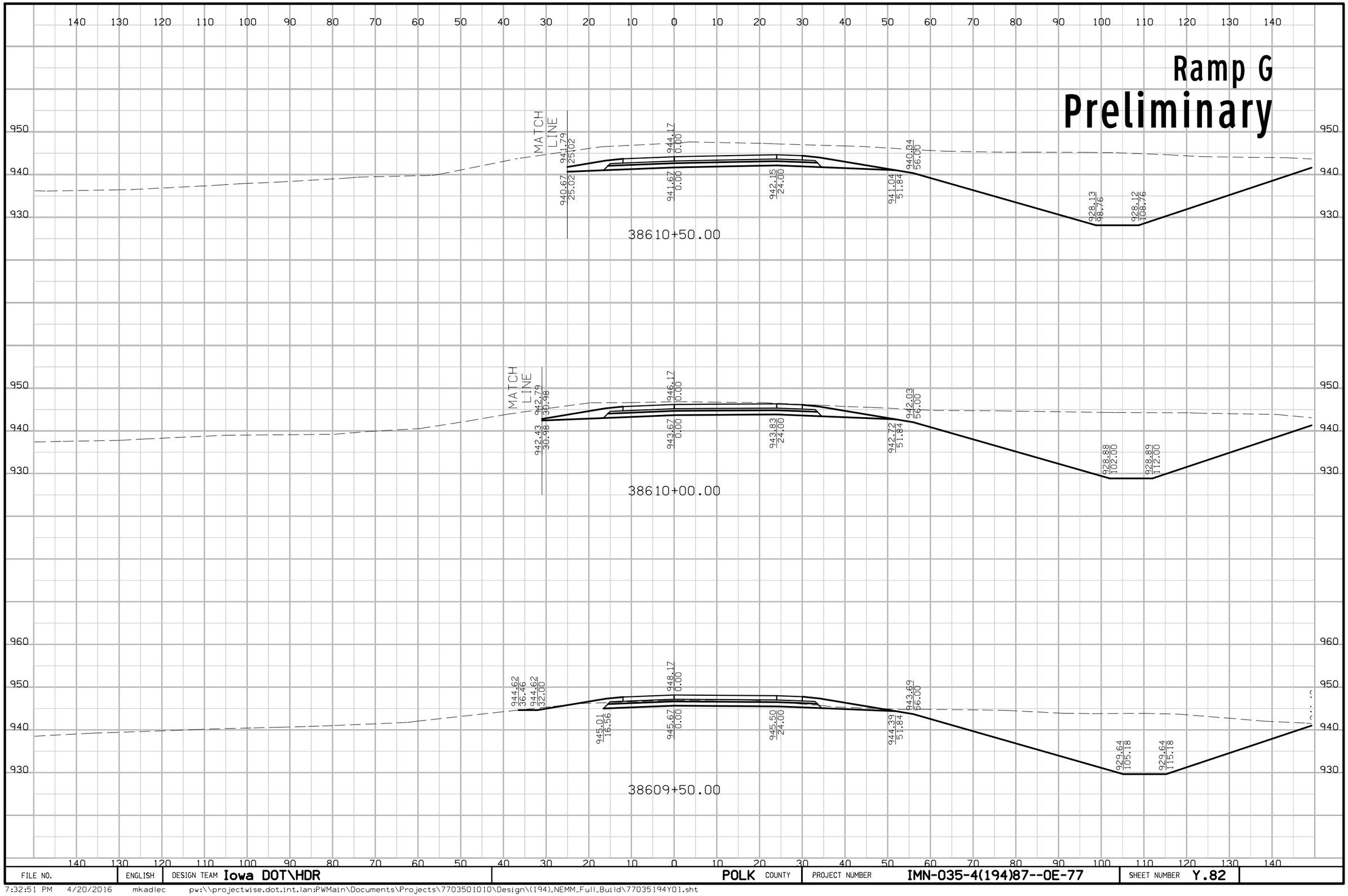
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.81

7:32:50 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

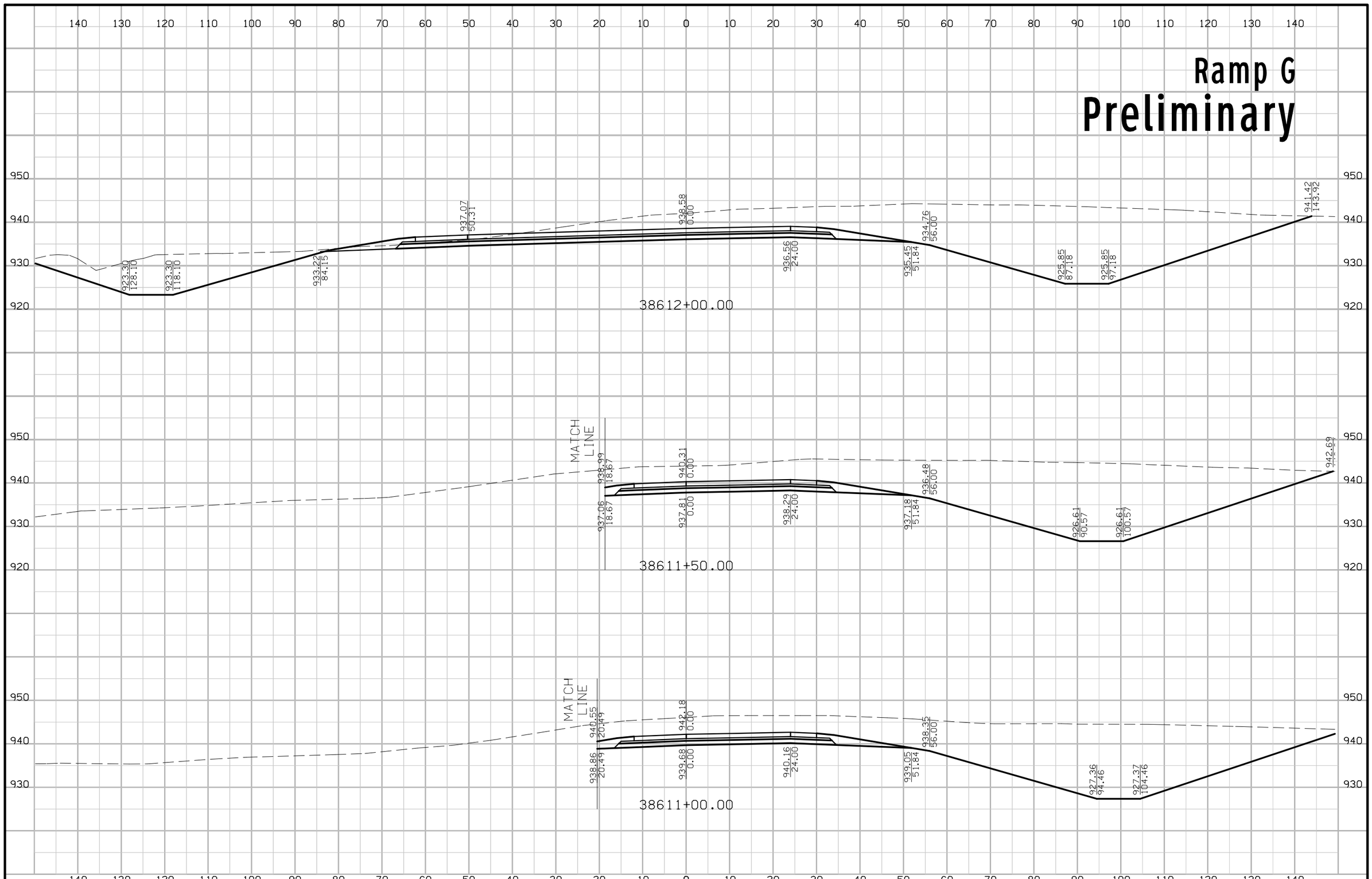
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.82

7:32:51 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

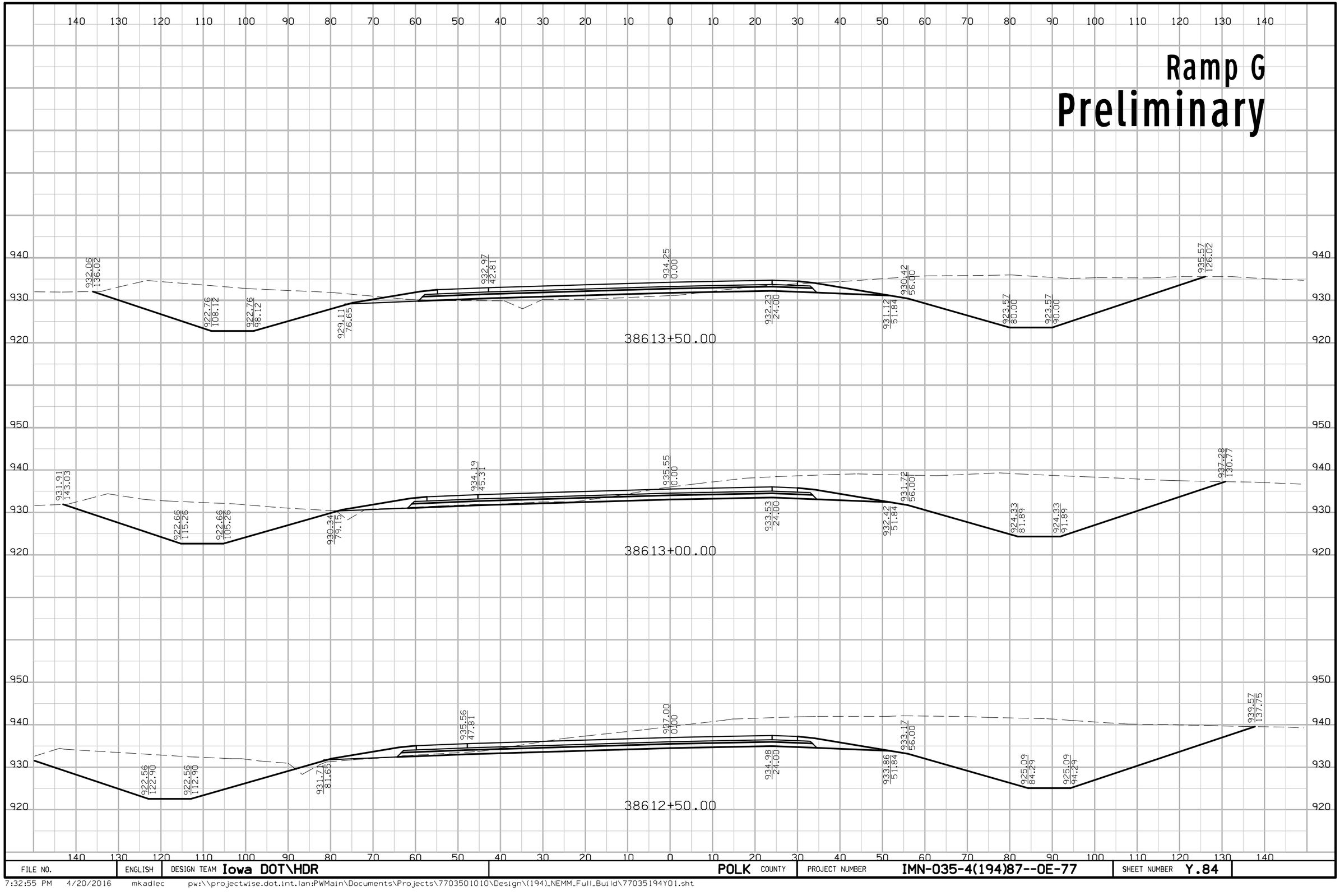
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.83

7:32:53 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

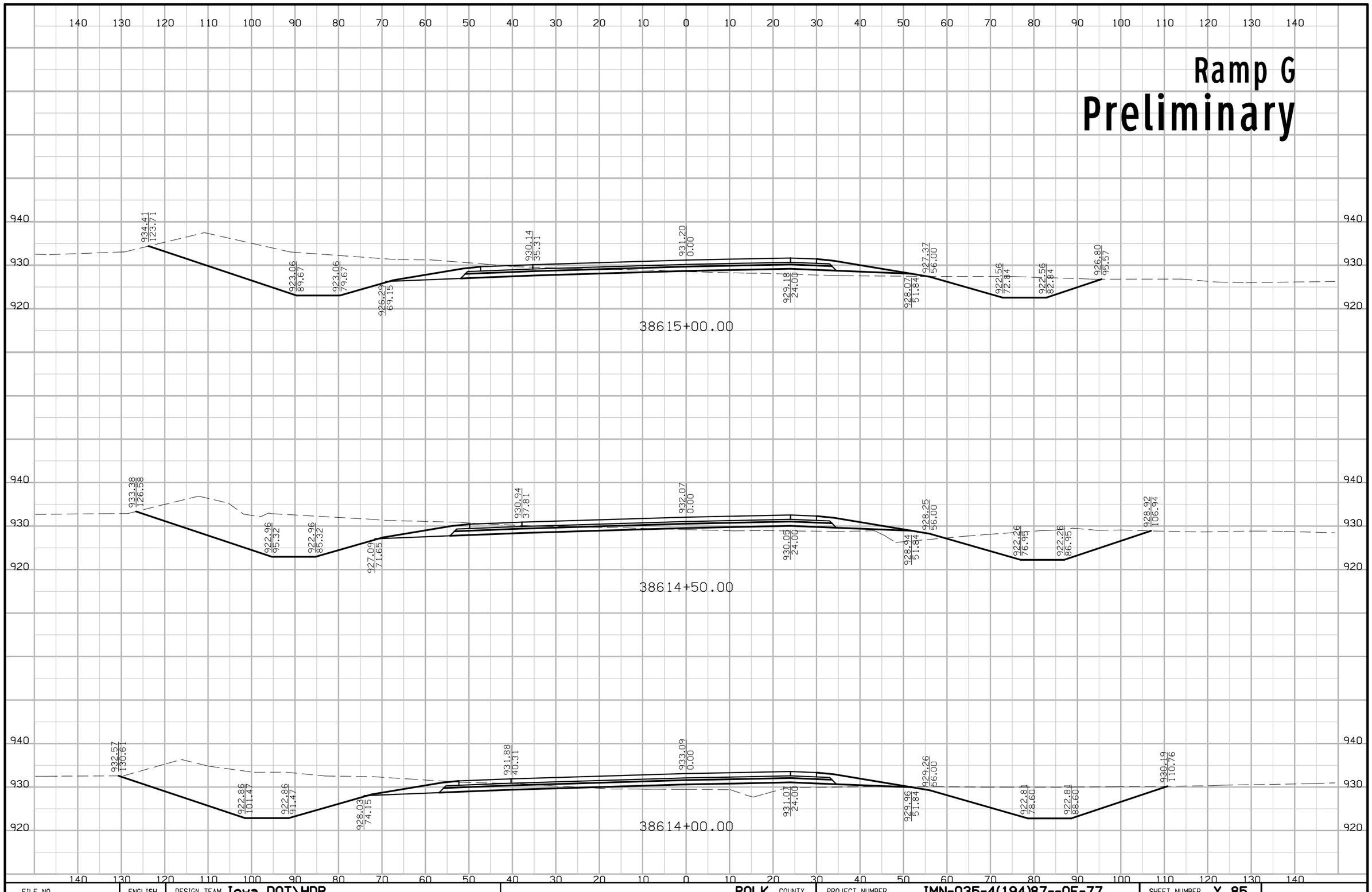
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.84

7:32:55 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

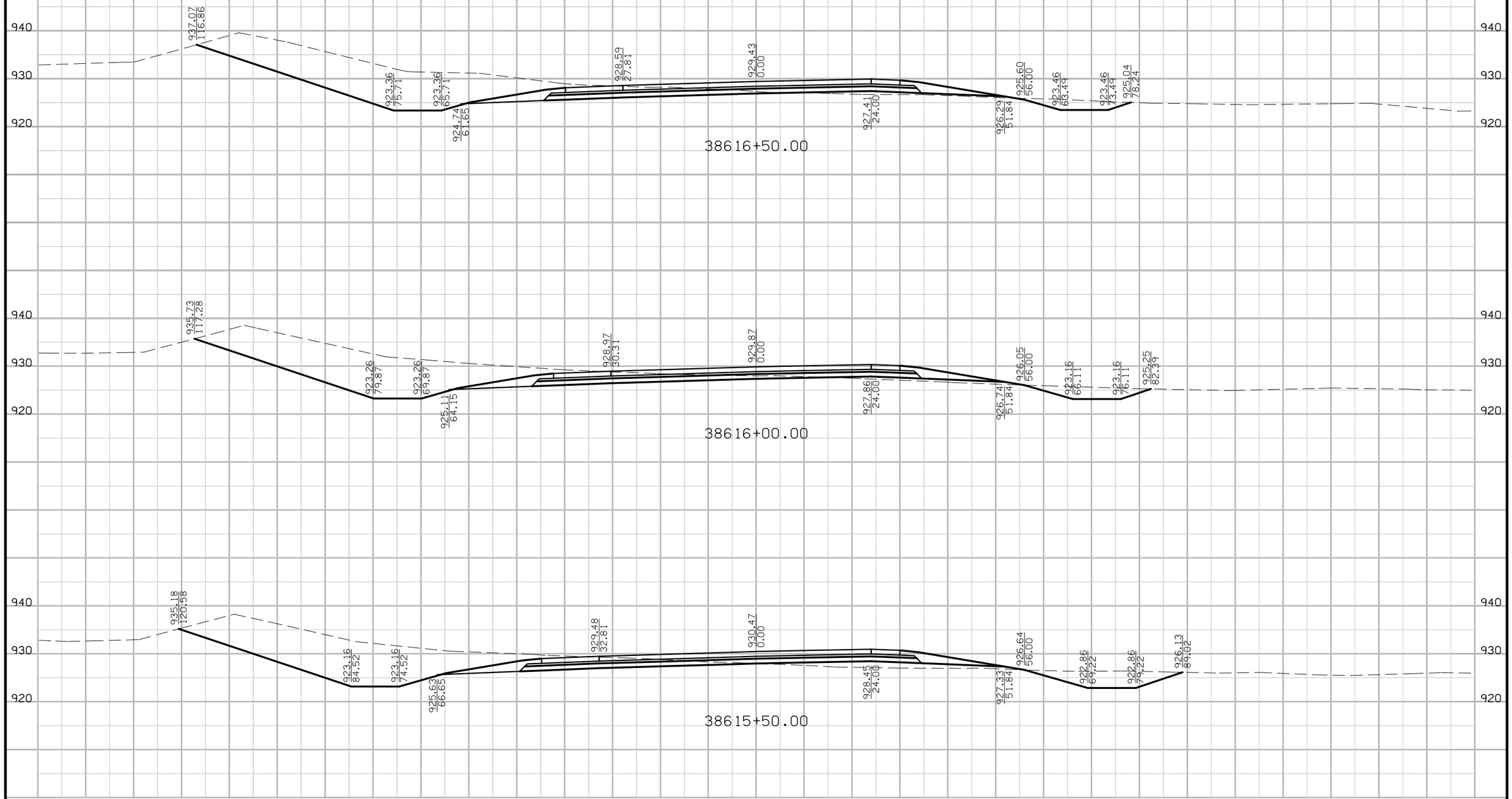
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.85

7:32:57 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

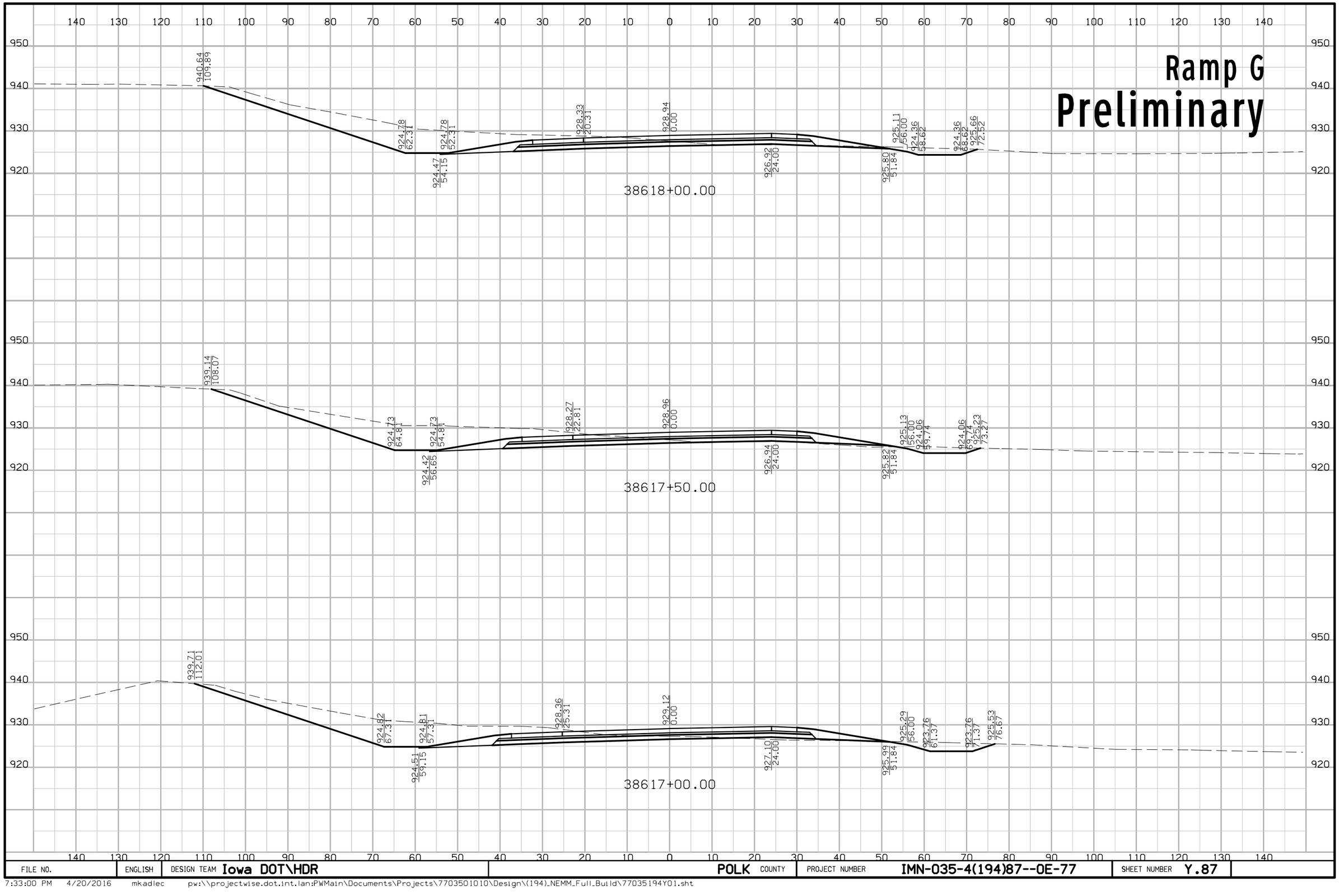
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.86

7:32:58 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.87

7:33:00 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp G

Preliminary

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

950
940
930
920

943.66
113.06

925.27
57.89

925.27
47.89

924.97
49.72

928.82
15.89

929.30
0.00

927.27
24.00

926.16
51.84

925.22
57.48

38619+00.00

941.95
110.82

924.97
59.89

924.97
49.89

924.67
51.73

928.52
17.89

929.06
0.00

927.04
24.00

925.92
51.84

925.23
56.00

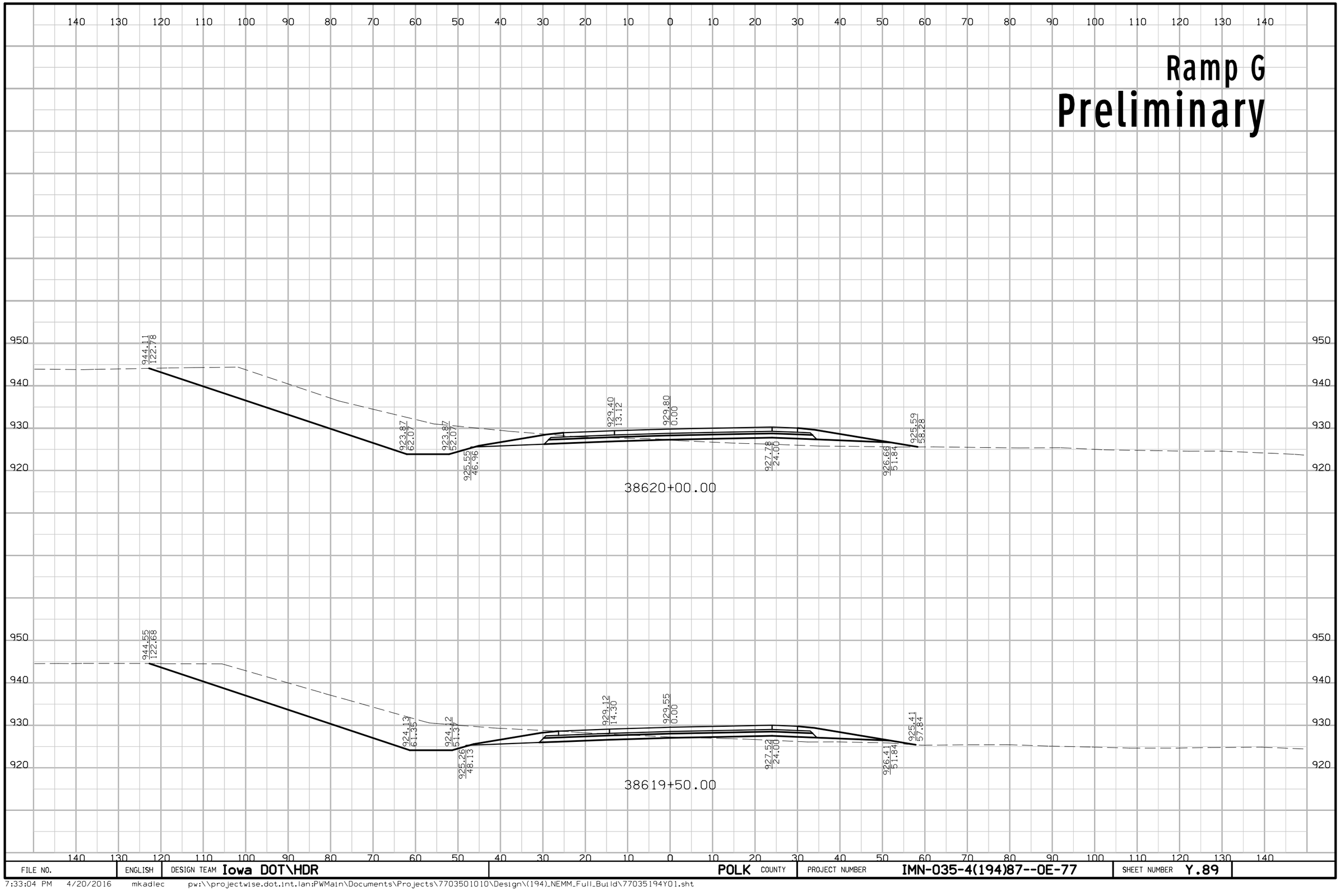
925.34
66.34

38618+50.00

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.88

7:33:02 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

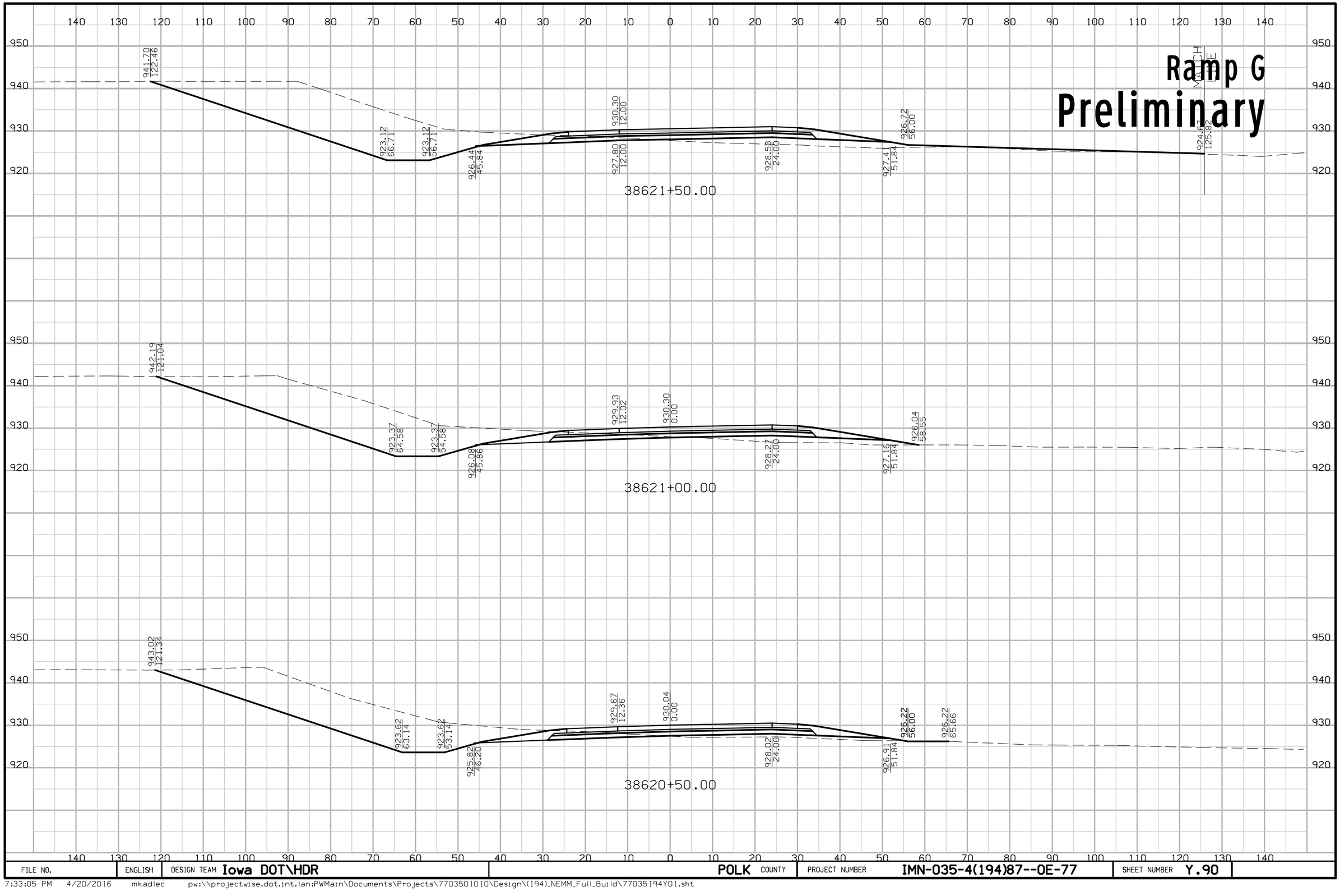
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.89

7:33:04 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

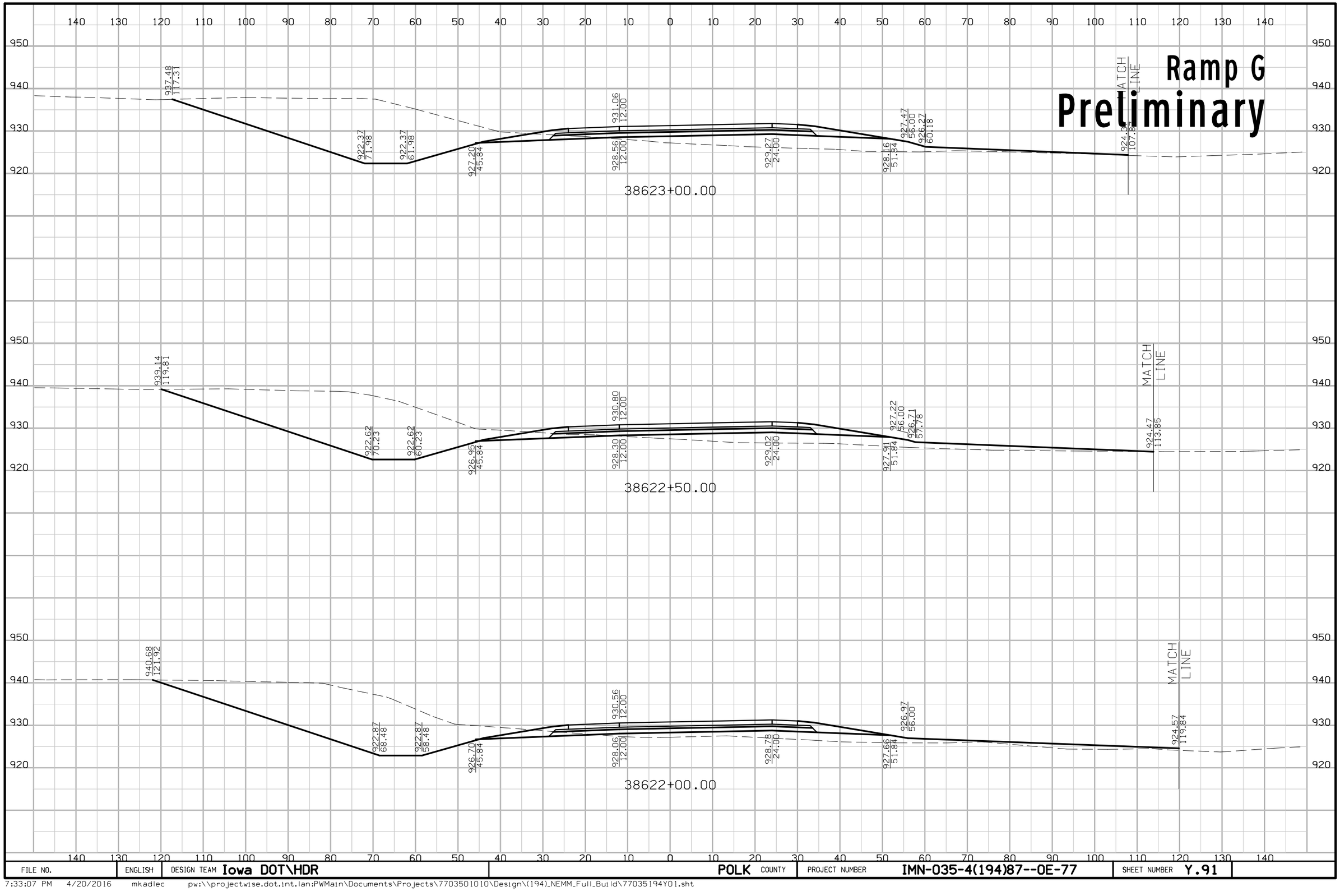
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.90

7:33:05 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

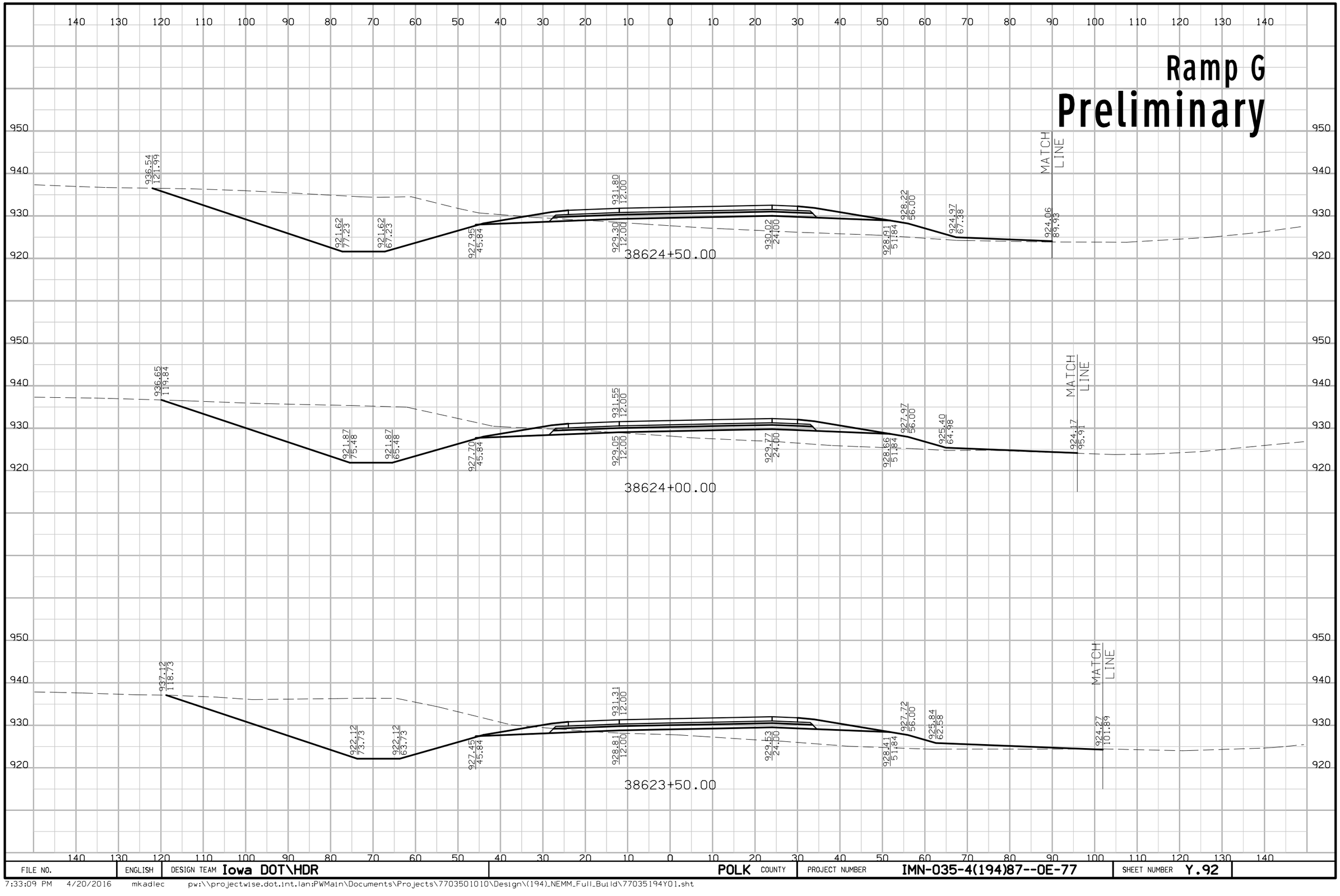
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.91

7:33:07 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

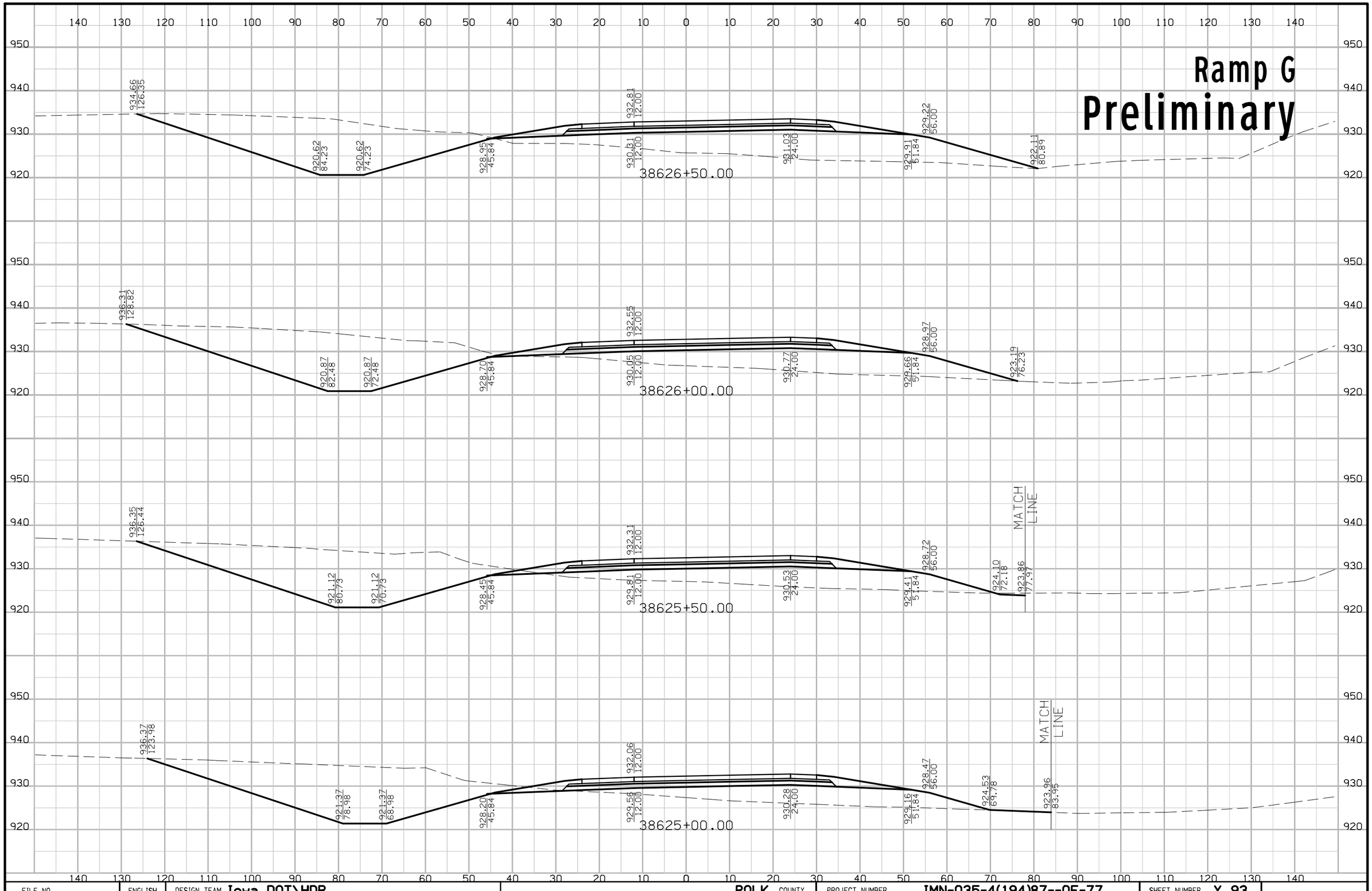
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.92

7:33:09 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

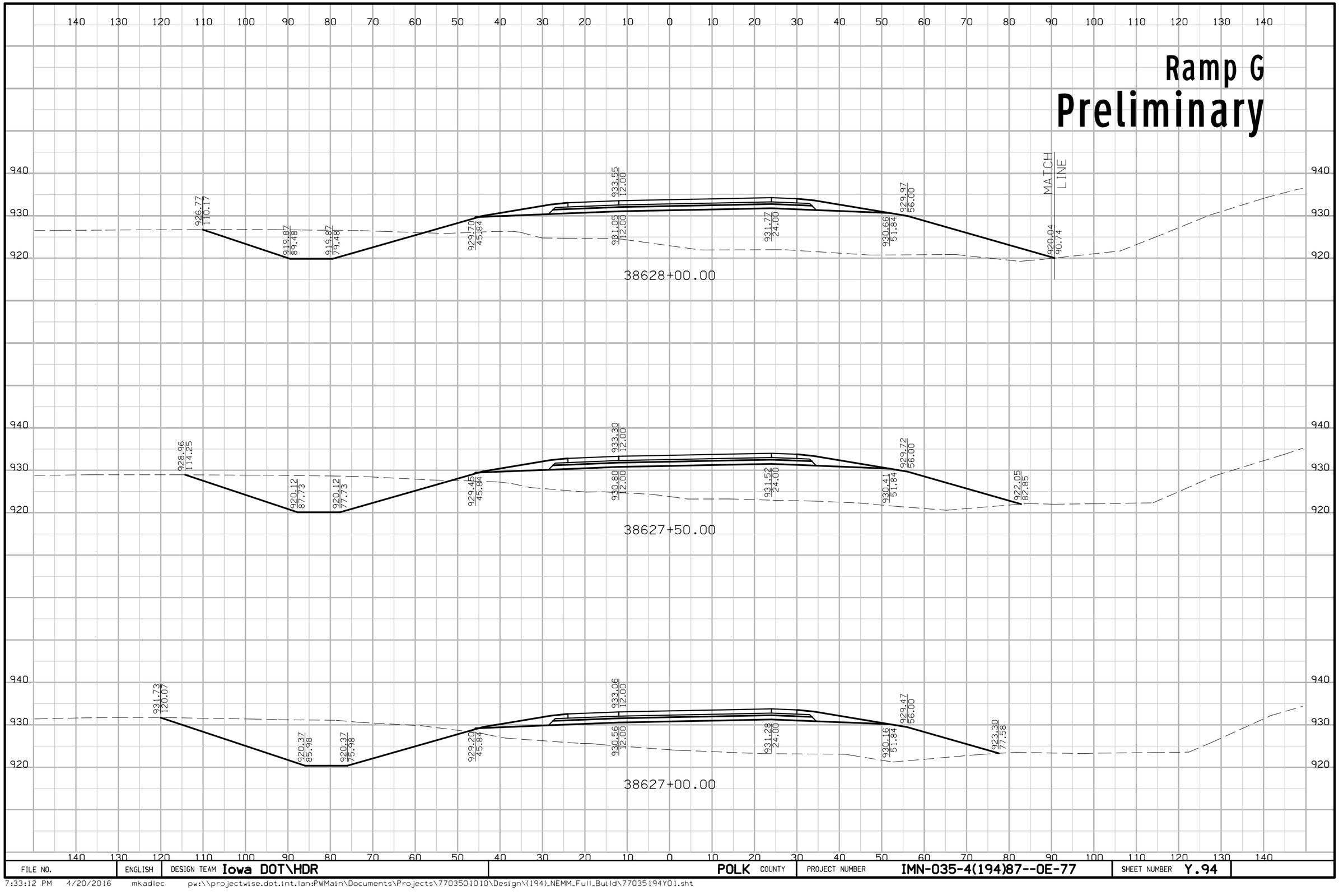
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.93

7:33:10 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

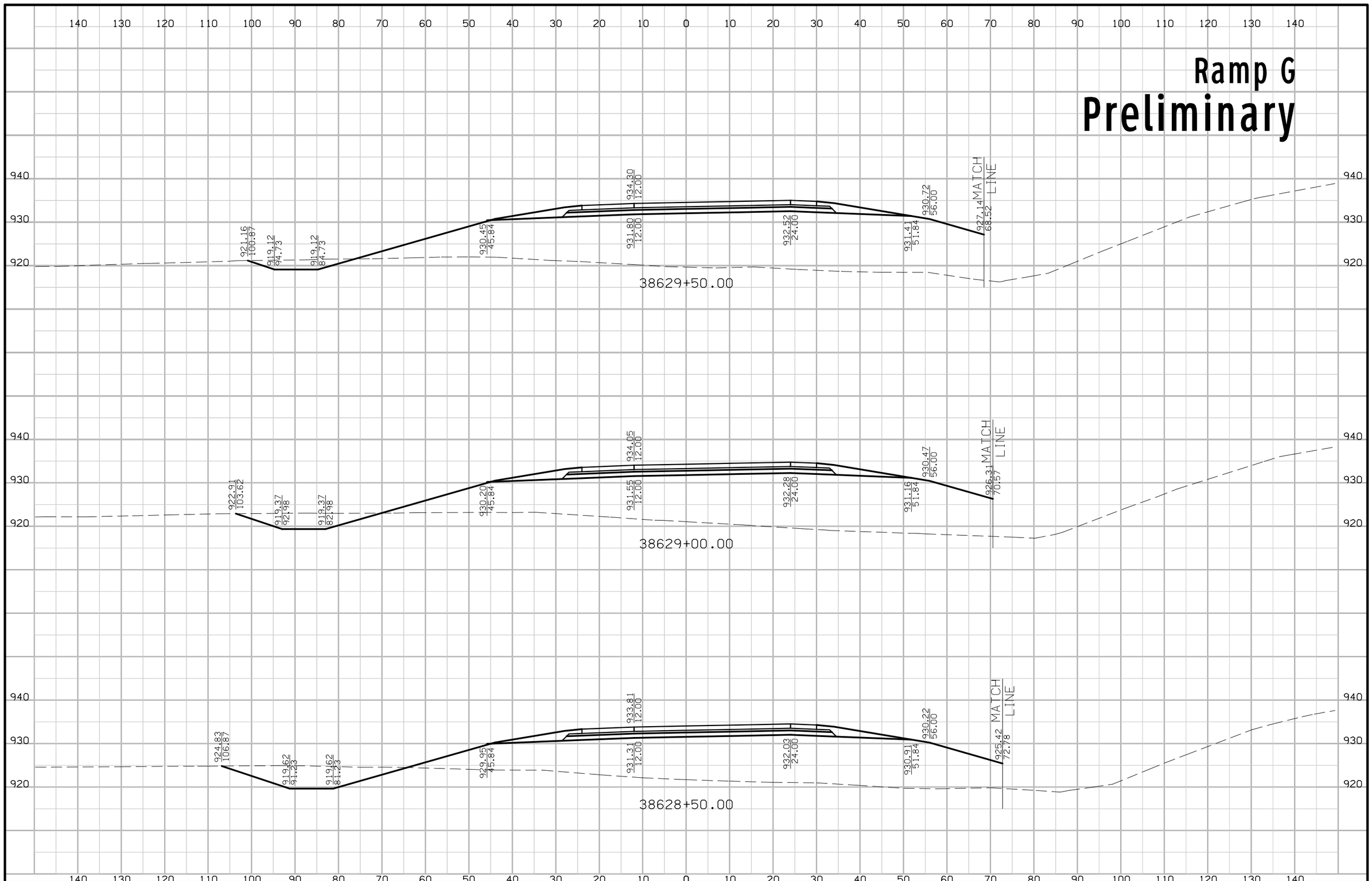
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.94

7:33:12 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

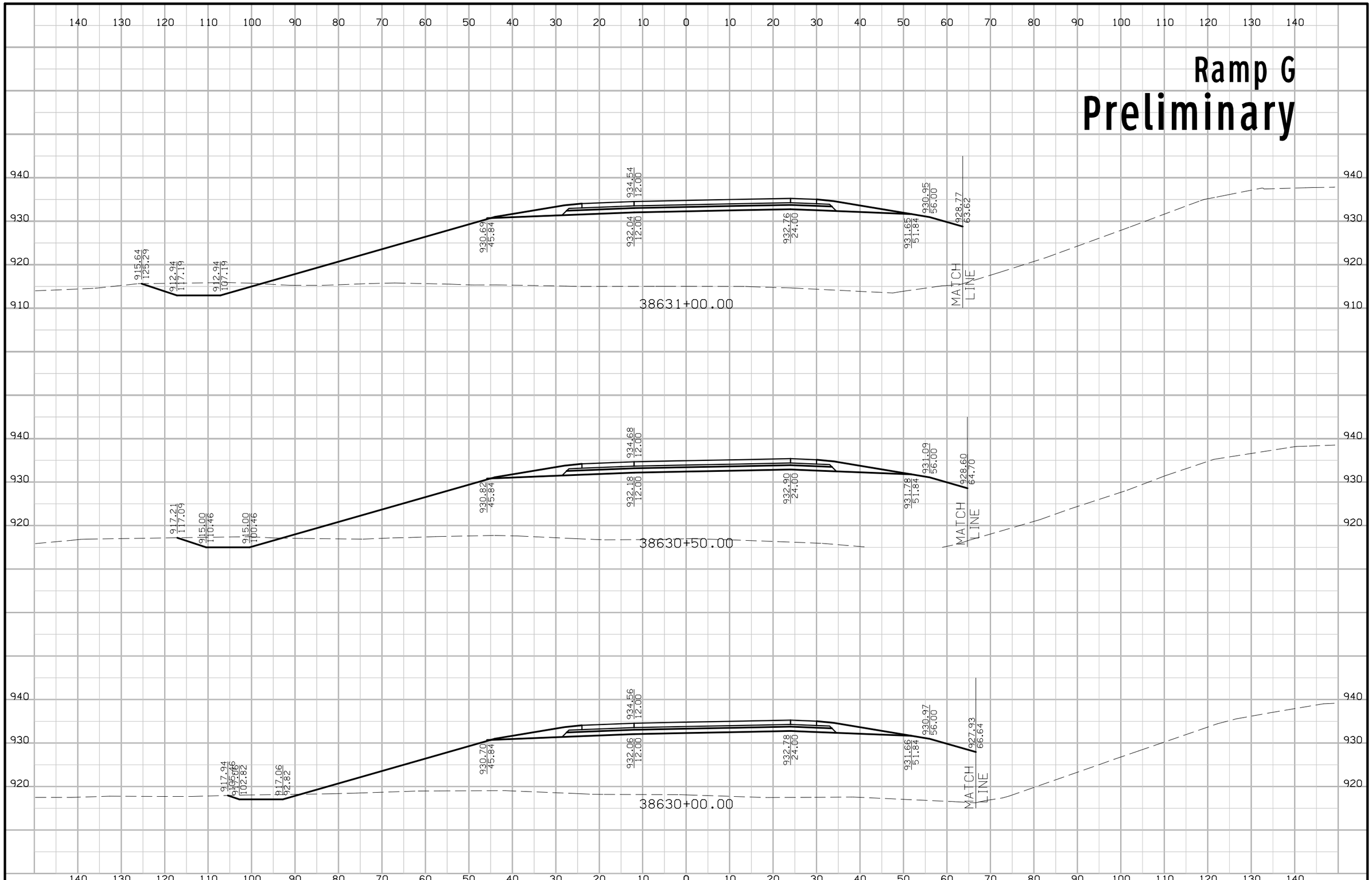
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.95

7:33:14 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp G
Preliminary

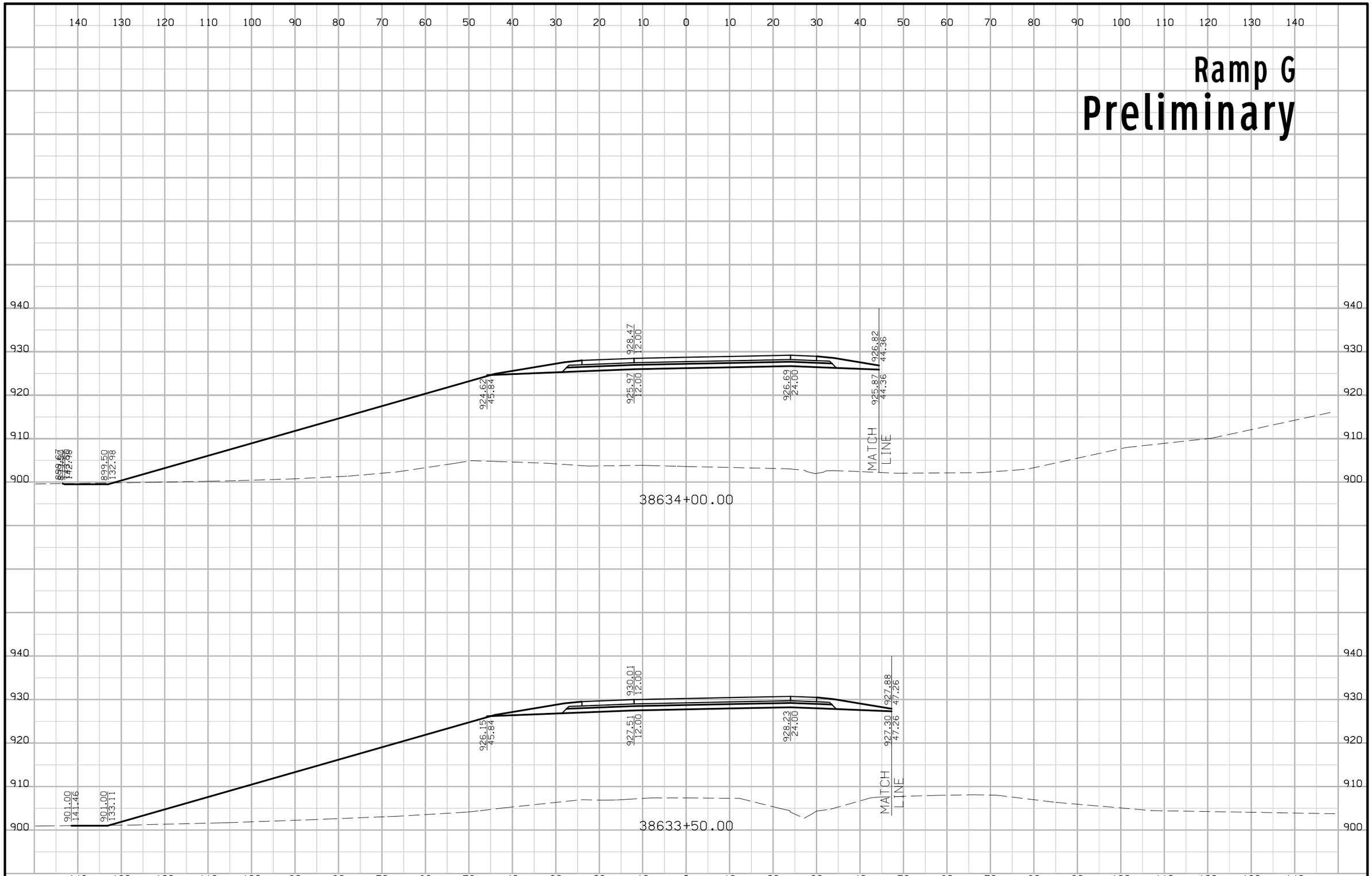


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.96

7:33:16 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp G

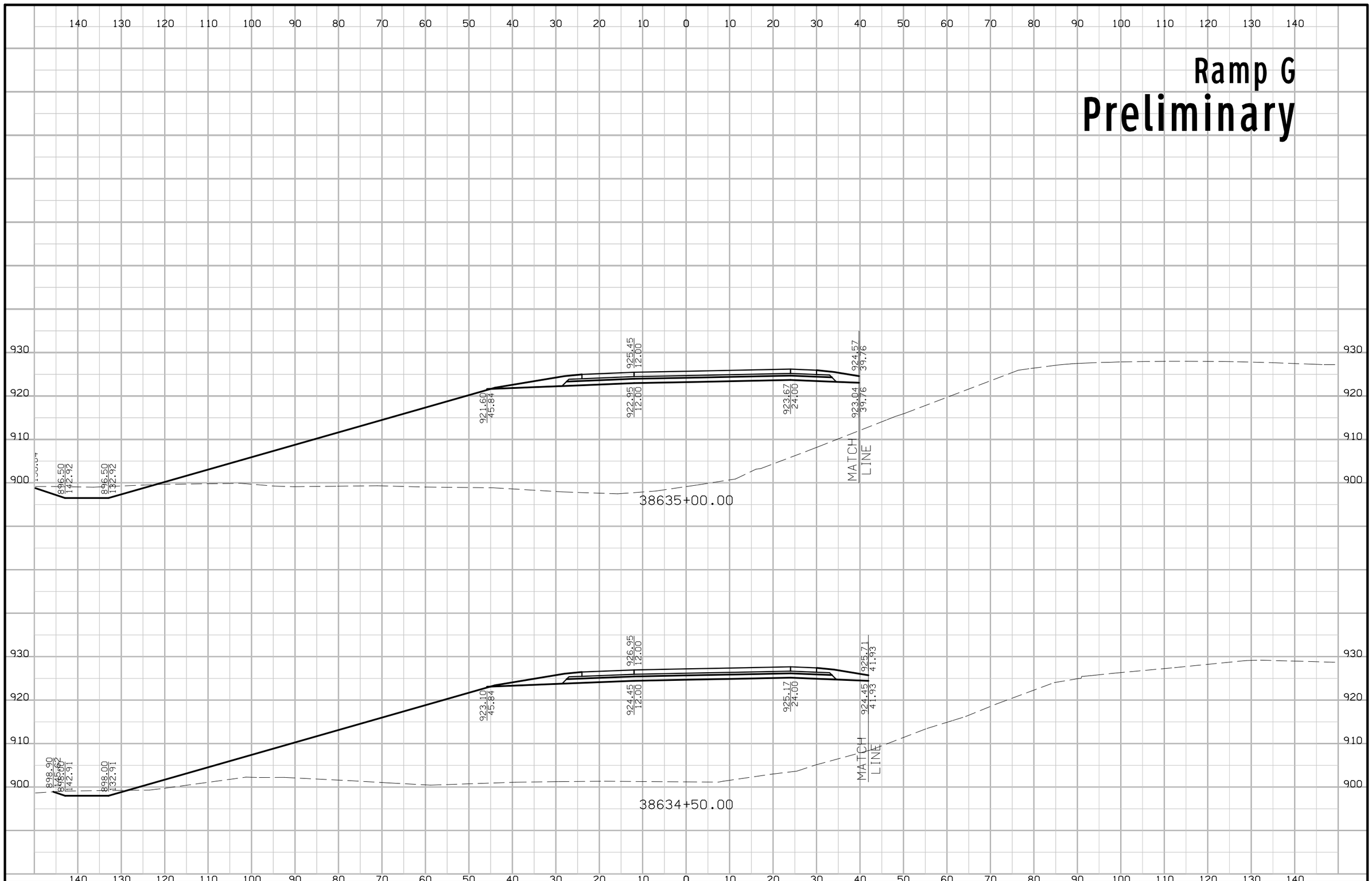
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.97

7:33:17 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.98

7:33:19 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp G

Preliminary

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

930
920
910
900
890

894.98
147.59
893.50
143.16
893.50
133.16
918.67
45.84
922.52
12.00
920.02
12.00
920.74
24.00
922.31
36.45
920.50
36.45
MATCH LINE

38636+00.00

930
920
910
900
890

149.97
895.00
143.00
895.00
133.00
920.12
45.84
923.98
12.00
921.48
12.00
922.20
24.00
923.44
37.93
921.73
37.93
MATCH LINE

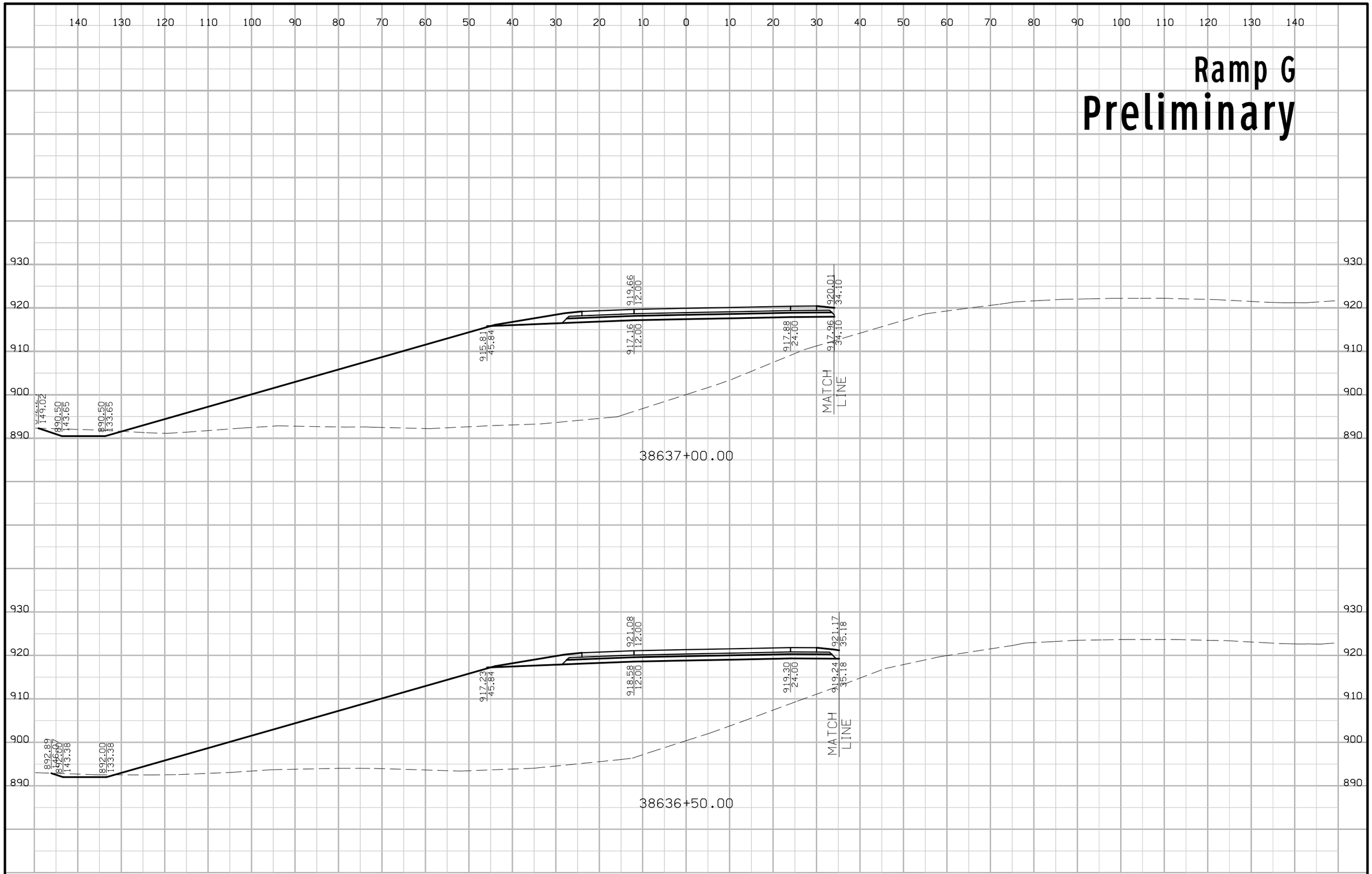
38635+50.00

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140

FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.99

7:33:21 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

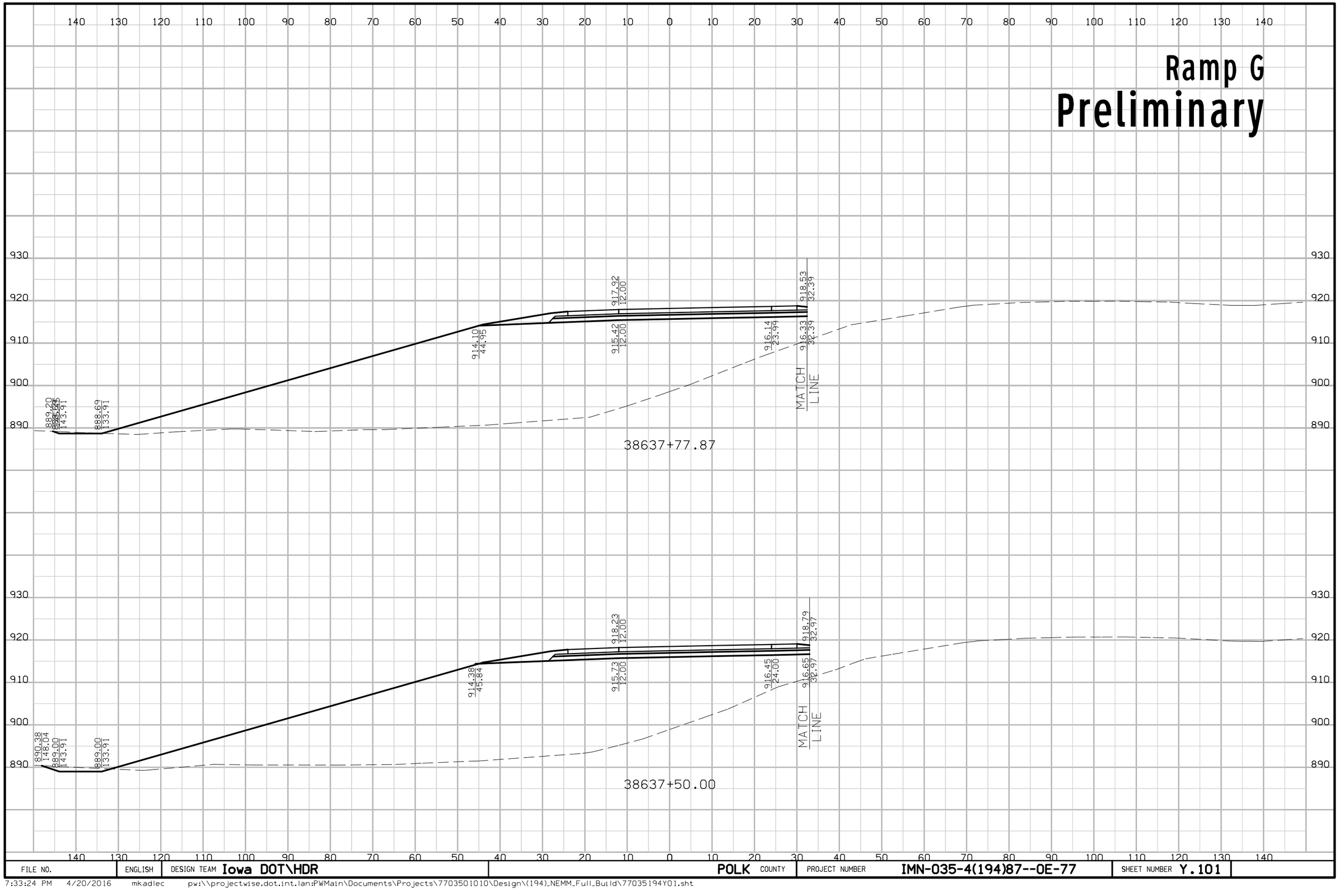
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.100

7:33:23 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

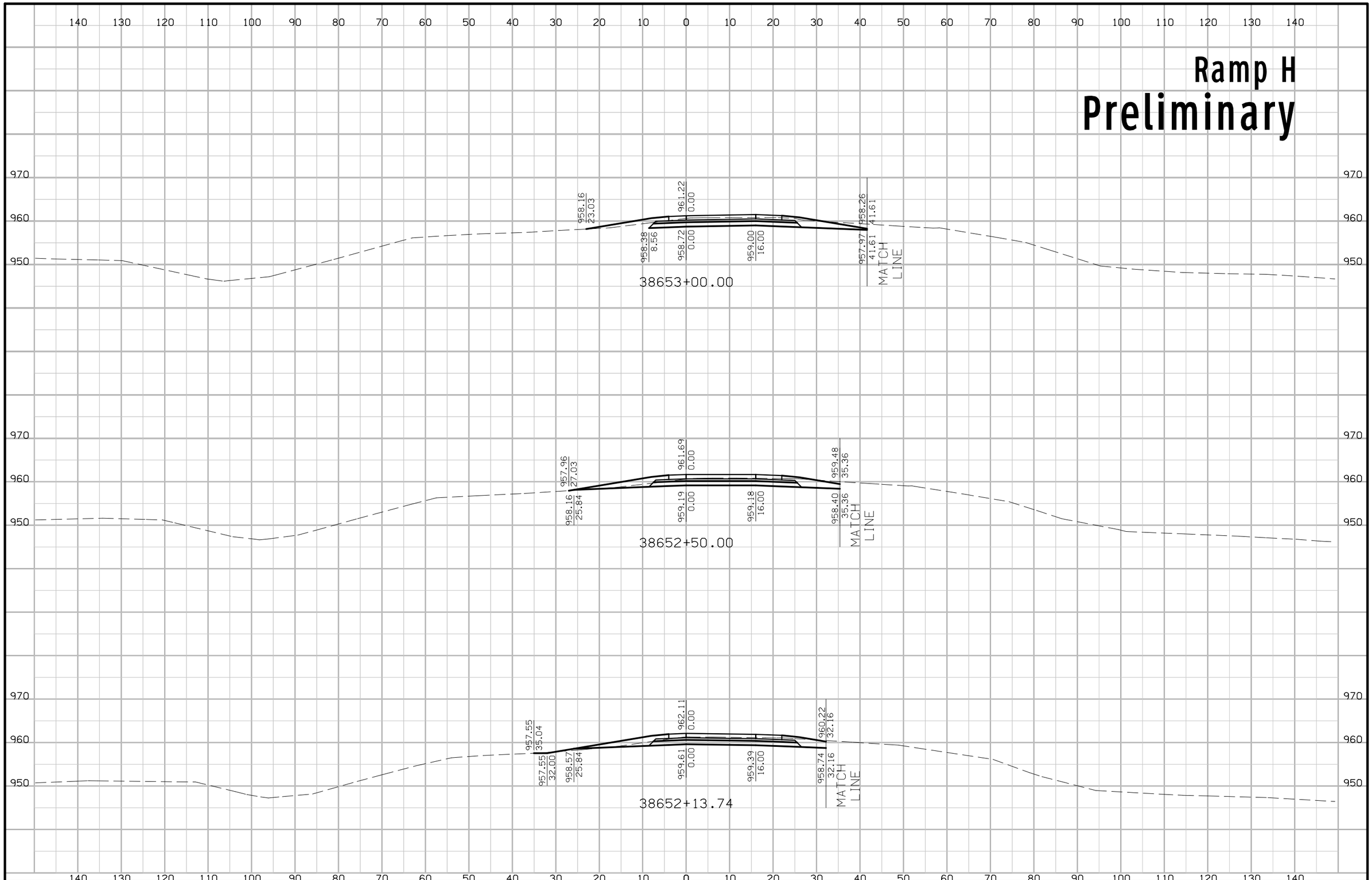
Ramp G
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.101

7:33:24 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

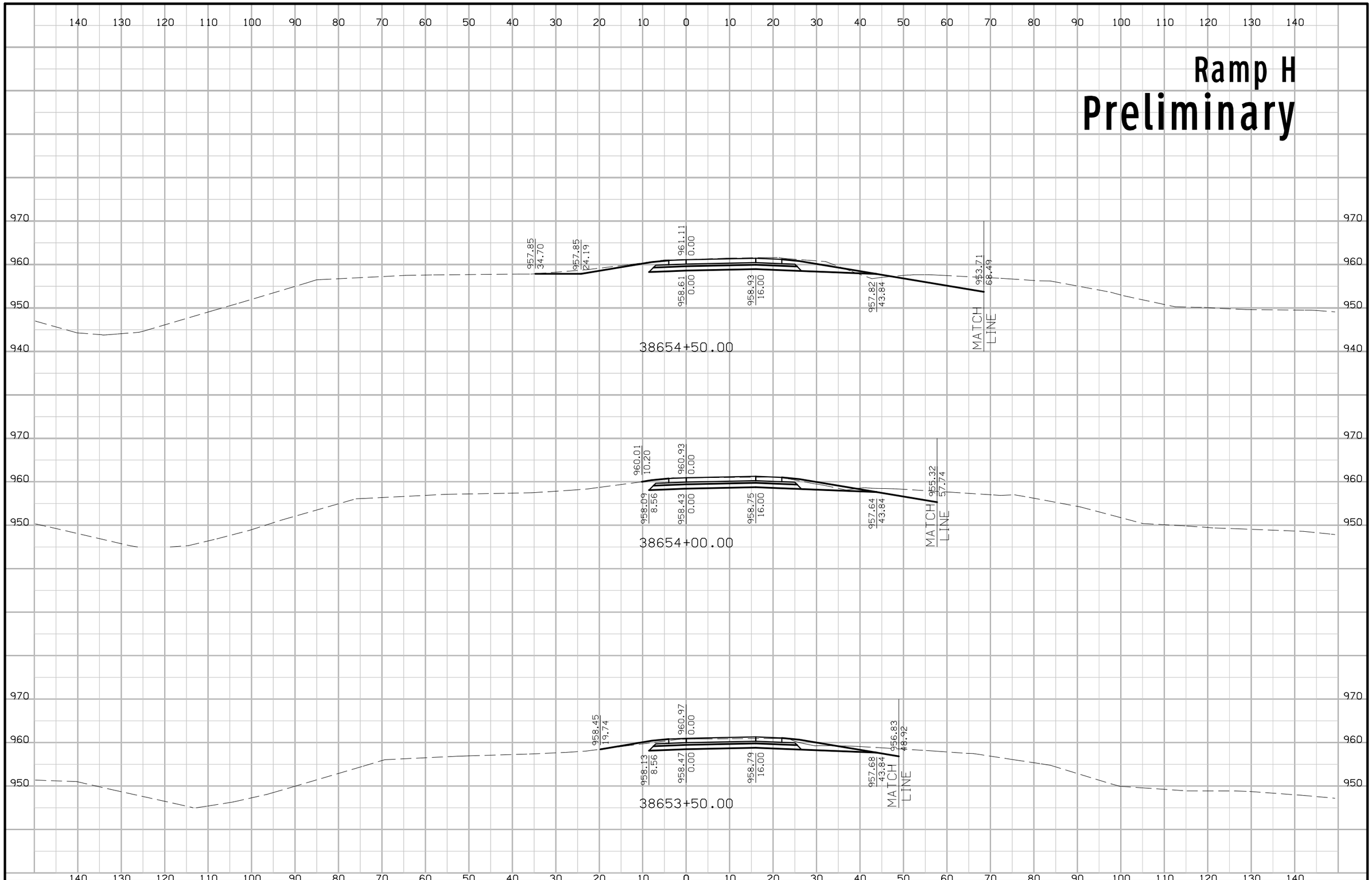
Ramp H
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.102

7:33:26 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp H
Preliminary

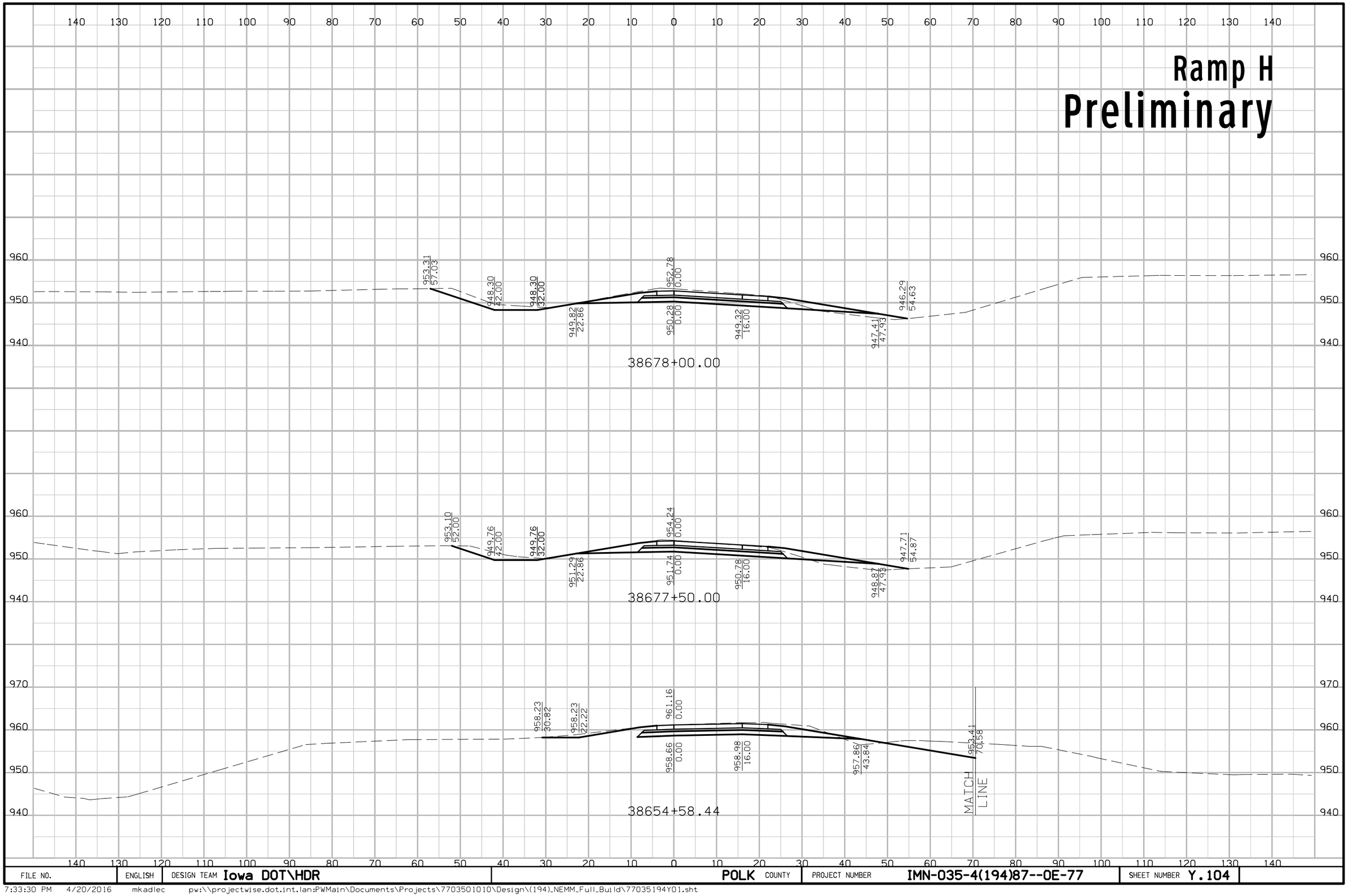


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.103

7:33:28 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp H

Preliminary

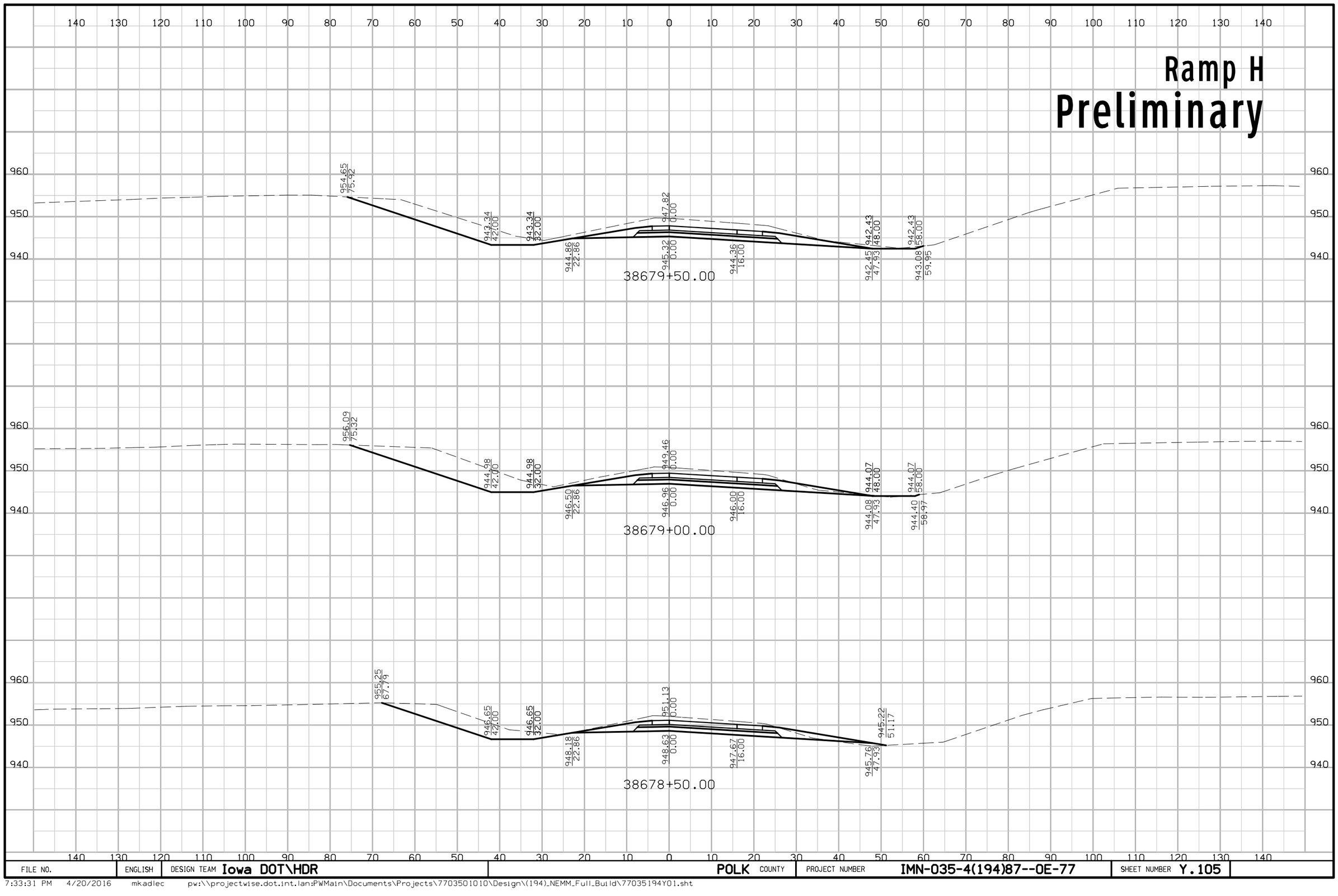


FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.104

7:33:30 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp H

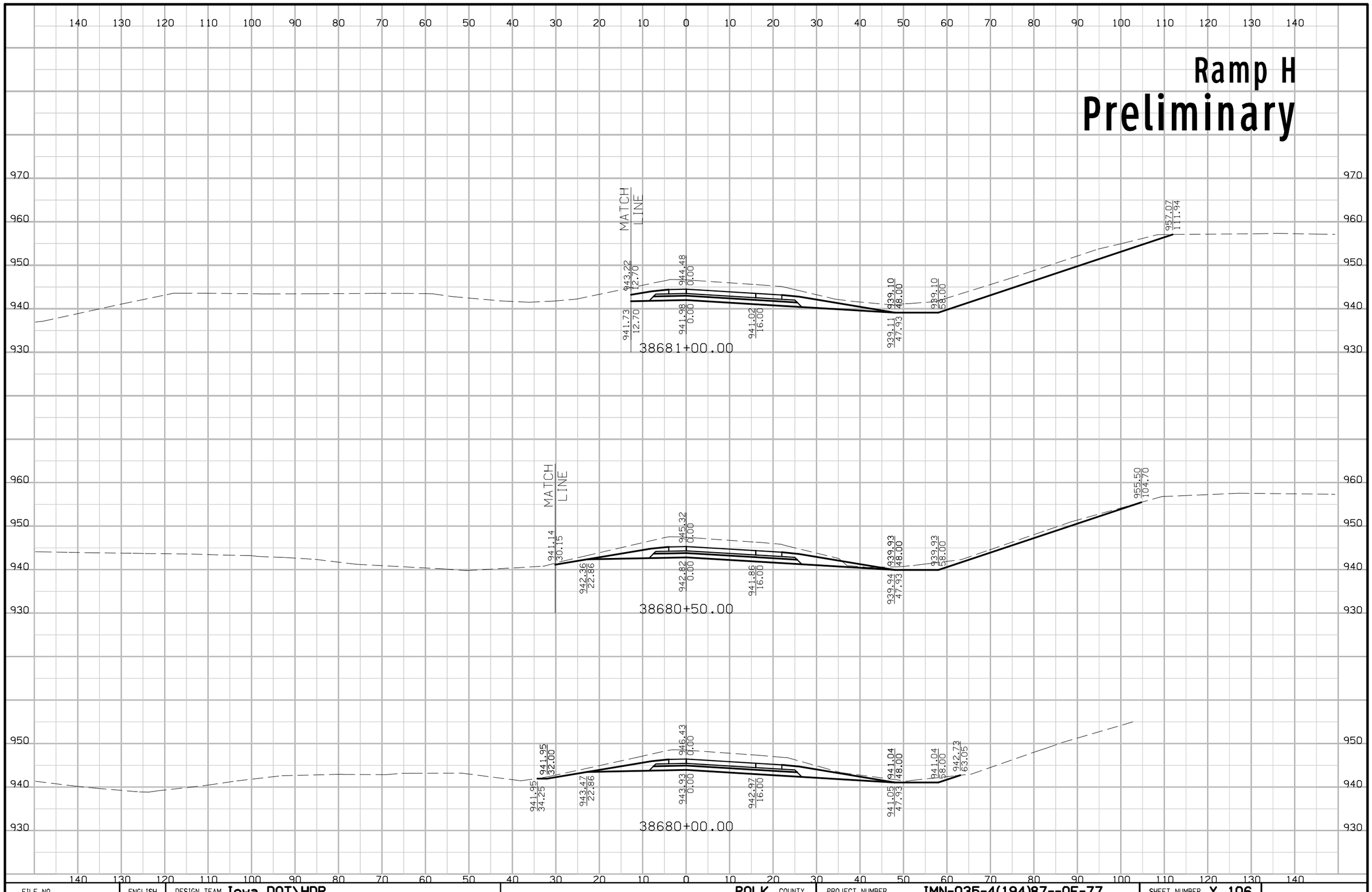
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.105

7:33:31 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht

Ramp H
Preliminary



FILE NO.	ENGLISH	DESIGN TEAM Iowa DOT\HDR	POLK COUNTY	PROJECT NUMBER IMN-035-4(194)87--0E-77	SHEET NUMBER Y.106

7:33:33 PM 4/20/2016 mkadlec pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7703501010\Design\(194)_NEMM_Full_Build\77035194Y01.sht