WAPELLO Co.

PCC PAVEMENT - GRADE AND NEW

NHSX-063-2(155)--3H-90

LETTING DATE 11-20-2018

IOWA DOT

Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM

WAPELLO COUNTY

PCC PAVEMENT - GRADE AND NEW

River Rd./Co. Rd. J12 to US 34 in Ottumwa

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
481
PROJECT IDENTIFICATION NUMBER
04-90-063-030
PROJECT NUMBER
NHSX-063-2(155)--3H-90
R.O.W. PROJECT NUMBER
NHSN-063-2(121)--2R-90

INDEX OF SHEETS

No.	DESCRIPTION
A Sheets	**Title Sheets**
A.1	Title Sheet
A.2	Location Map Sheet
A.3	Ownership Maps
B Sheets	**Typical Cross Sections and Details**
B.1 - 13	Typical Cross Sections and Details
D Sheets	**Mainline Plan and Profile Sheets**
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2 - 13	US 63
E Sheets	**Side Road Plan and Profile Sheets**
* E.1 - 2	Bike Trail
* E.3	Relocated Rabbit Run Road
* E.4	Mary Street
G Sheets	**Survey Sheets**
G.1 - 9	Reference Ties and Bench Marks
G.10 - 13	Horizontal Control Tab. for all Alignments
G.14	Superelevation Tabulation
L Sheets	**Geometric, Staking and Jointing Sheets**
L.1 - 3	Geometric & Staking US 63 & Rabbit Run Road
L.4 - 5	Geometric & Staking US 63 & Mary Street
M Sheets	**Storm Sewer Sheets**
M.1	Storm Sewer Tabulations
* M.2	Storm Sewer Legend & Symbol Information Sheet
* M.3 - 8	Storm Sewer Plan and Profile Sheets US 63
U Sheets	**500 Series, Mod.Stds. and Detail Sheets**
U.1	Superelevation Detail Four Lane Raised Median
V Sheets	**Bridge and Culvert Situation Plans**
* V.1 - 4	Jefferson Drainage Channel Bridge TS&L
* V.5 - 6	Trail RCB under US 63 TS&L
* V.7	Trail RCB under Rabbit Run TS&L
W Sheets	**Mainline Cross Sections**
W.1	Cross Sections Legend & Symbol Information Sheet
W.2 - 371	US 63
X Sheets	**Side Road Cross Sections**
X.1 - 21	Railroad Trail Cross Sections
X.30 - 41	Rabbit Run Road Cross Sections
X.50 - 53	Mary Street Cross Sections
X.60 - 64	Ramp Cross Sections
	* Color Plan Sheets

Grading Needs:

Class 10 Excavation =	107,301 cu. yd.
Fill + 30% =	259,820 cu. yd.
Embankment in Place =	117,322 cu. yd.

For Project Location Map
Refer to Sheet A.2



DESIGN TRAFFIC DATA

2007 AADT	6300	V.P.D.
2035 AADT	8300	V.P.D.
2035 DHV	850	V.P.H.
TRUCKS	13	%
Total Design ESALs	--	

INDEX OF SEALS

SHEET NO.	NAME	TYPE
A.1	Paul W. Flattery	Roadway Design

PRELIMINARY PLANS

Subject to change by final design.

D5 PLAN
Date: October 21, 2016

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER A.1

1:29:48 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155A01.sht

R-14W

R-13W

34

STA. 917+45.66
END PROJECT
END CONSTRUCTION
MILE POST 33.74

Remove Bridge
FHWA# 50630
Maint.# 9033.0S063

Sta. 880+52.39
New 12′ x 10′ RCB
Design# 714
Maint.# 9033.0S063

Sta. 871+62.01
New 150′ x 47.5′ Bridge
FHWA# 50621
Maint.# 9032.8S063

Remove Bridge
FHWA# 50620
Maint.# 9032.8S063

STA. 841+55
BEGIN PROJECT
BEGIN CONSTRUCTION
MILE POST 32.33

(OTTUMWA CORPORATE LIMITS)

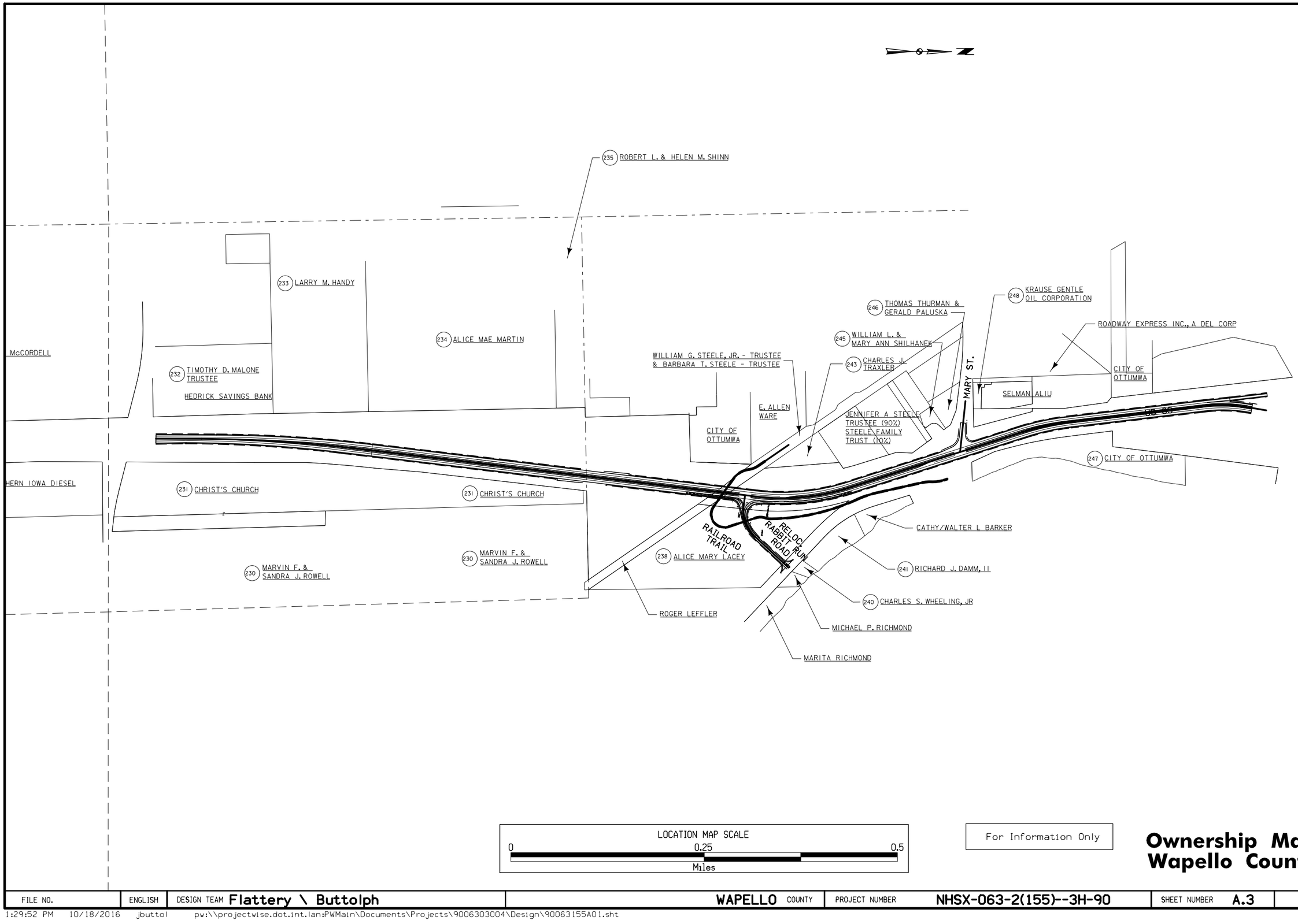
T-72N

LOCATION MAP SCALE
0 0.1 0.2 0.3
Miles

SW Corner City of Ottumwa Map

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER A.2

1:29:50 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155A01.sht



LOCATION MAP SCALE

0 0.25 0.5

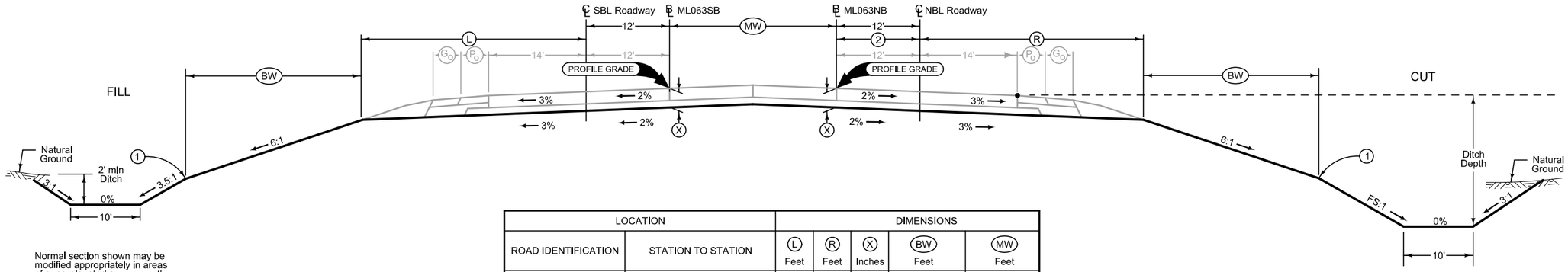
Miles

For Information Only

Ownership Map
Wapello County

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER A.3

1:29:52 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155A01.sht



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.

LOCATION			DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION		(L) Feet	(R) Feet	(X) Inches	(BW) Feet	(MW) Feet
US 63	841+55.00	843+62.82	51.68	51.68	16.0	18.56	0
US 63	843+62.82	852+60.95	51.68	51.68	16.0	18.56	(3)

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

(2) Right Inside Lane has a constant variable:
From: 16' Wide at Sta. 841+55.
To: 12' Wide at Sta. 843+55.

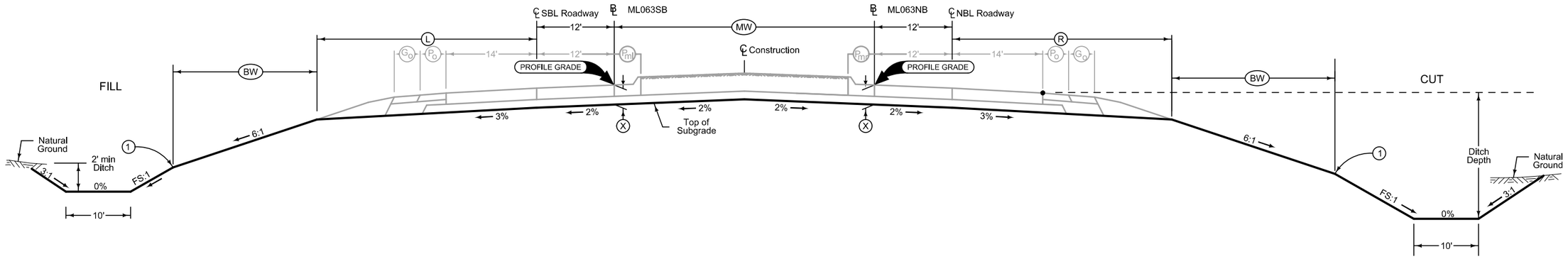
(3) Variable: 0' to 17.98'
Use baseline ML063NB, NBL inside edge of pavement
Use baseline ML063SB, SBL inside edge of pavement.

4 LANE GRADING

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER B.1

8:27:09 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155B01.sht

ML1_Grade Delayed
Modified



LOCATION			DIMENSIONS					
ROAD IDENTIFICATION	STATION TO STATION		(L) Feet	(R) Feet	(X) Inches	(BW) Feet	(MW) Feet	FS
US 63	852+60.95	856+32.50	33.12	33.12	16	18.56-12.88	(2)	3.5
US 63	856+32.50	865+77.23	33.12	33.12	16	12.88	24	3.5
US 63	865+77.23	875+00.00	33.12	33.12	16	12.88	24	3.5
US 63	875+00.00	875+75.00	33.12	33.12	16	12.88-2.88	24	3.5
US 63	875+75.00	884+00.00	33.12	33.12	16	2.88	24	3.5
US 63	884+00.00	884+50.00	33.12	33.12	16	2.88-0.88	24	3.5
US 63	884+50.00	901+46.24	33.12	33.12	16	0.88	24	3.5
US 63	901+46.24	904+99.63	33.12	33.12	16	0.88	24-17	3.5
US 63	904+99.63	914+18.63	33.12	33.12	16	0.88	17	3.5
US 63	914+18.63	914+42.76	33.12	33.12	16	0.88	17-17.02	3.5

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

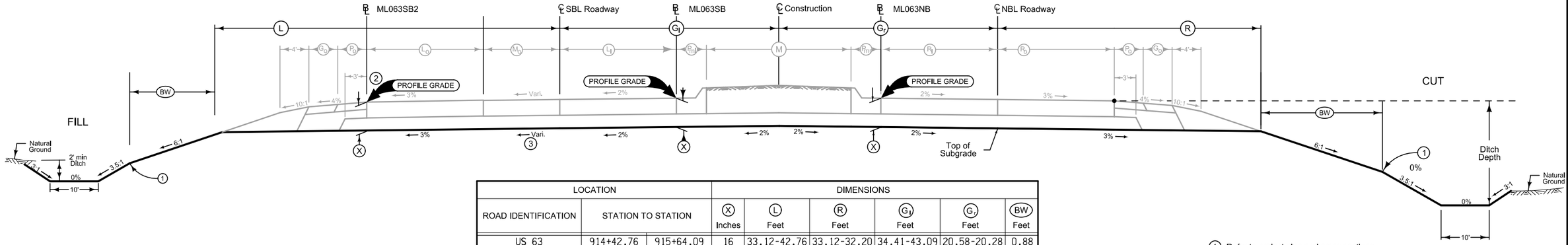
See Plan & Profiles sheets and cross sections for additional details of ditches and backslopes.

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

(2) Variable: 17.98' to 24'
Use baseline ML063NB, NBL inside edge of pavement
Use baseline ML063SB, SBL inside edge of pavement.

4-LANE DIVIDED ROADWAY
GRADING WITH RAISED MEDIAN

ML1



LOCATION			DIMENSIONS					
ROAD IDENTIFICATION	STATION TO STATION		(X) Inches	(L) Feet	(R) Feet	(G_l) Feet	(G_r) Feet	(BW) Feet
US 63	914+42.76	915+64.09	16	33.12-42.76	33.12-32.20	34.41-43.09	20.58-20.28	0.88
US 63	915+64.09	915+93.99	16	42.76-44.85	32.20-32.00	43.09-47.56	20.28	0.88

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

(2) Profile Grade for ML063SB2 is Prop. Southbound US 63 Ramp as shown on D sheet.

(3) Distance Variable:
From: 0.0' at Sta. 914+42.76
To: 12.0' at Sta. 915+64.09

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

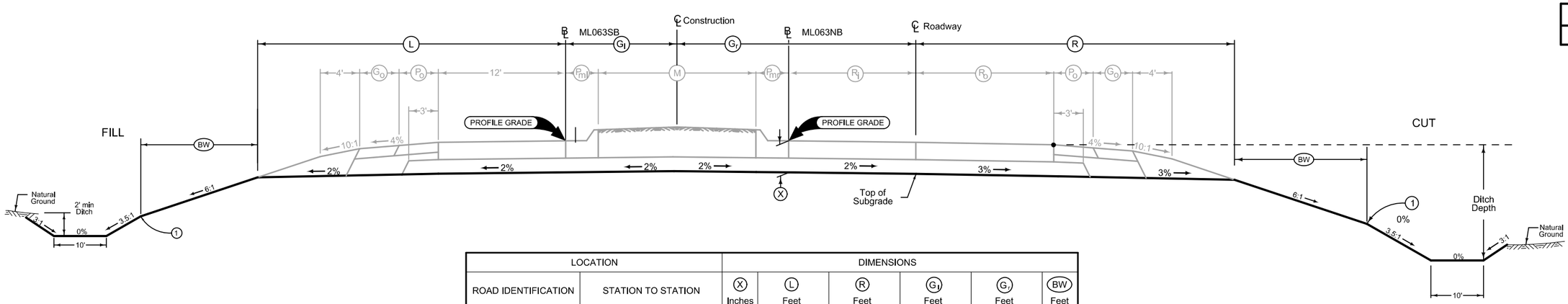
See Plan & Profiles sheets and cross sections for additional details of ditches and backslopes.

3-LANE DIVIDED ROADWAY
GRADING WITH ENTRY LANE & CURBED MEDIAN

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER B.3

8:27:12 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155B01.sht

ML4



LOCATION			DIMENSIONS					
ROAD IDENTIFICATION	STATION TO STATION		(X) Inches	(L) Feet	(R) Feet	(G_l) Feet	(G_r) Feet	(BW) Feet
US 63	915+93.99	917+07.12	16	19.12	33.12	8.59-8.63	8.23-8.00	0.88
US 63	917+07.12	917+25.00	16	19.12	33.12	8.63	8.00	0.88
US 63	917+25.00	917+45.66	16	19.12	33.12	8.63	8.00	0.88

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

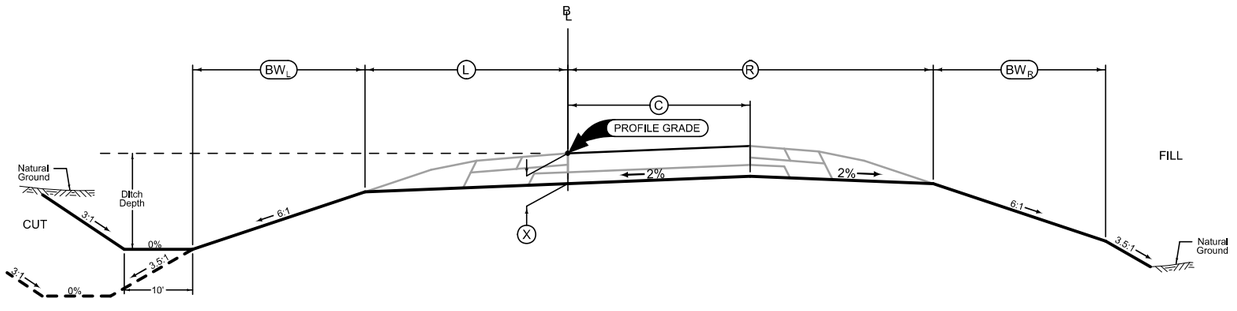
(1) Refer to project plan and cross sections for specific location of foreslope change.

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

3-LANE DIVIDED ROADWAY GRADING WITH CURBED MEDIAN

LOCATION				DIMENSIONS					
INTERCHANGE	RAMP	STATION TO STATION		(L) Feet	(R) Feet	(C) Feet	(X) Inches	(BW_L) Feet	(BW_R) Feet
US 63	SB	916+15.917	918+53.53	17.62	31.10	15	16	6.38	0

G_1R_Grade
04-15-14



RAMP GRADING

Section view is in direction of Stationing.

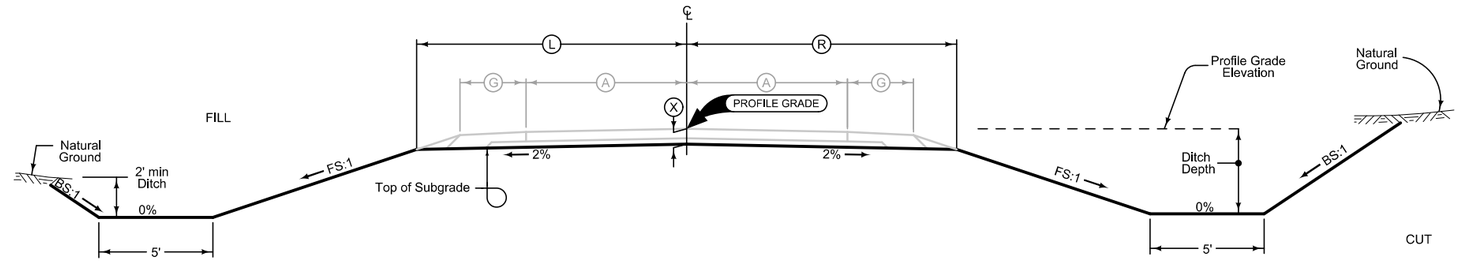
Normal sections shown may be appropriately modified for areas specifically designated by the Engineer such as intersections or superelevated curves.

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER B.4

8:27:13 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155B01.sht

LOCATION			DIMENSIONS				
ROAD IDENTIFICATION	STATION TO STATION		(L) Feet	(R) Feet	(X) Inches	FS	BS
Rabbit Run Rd.	8820+38.00	8826+05.79	20.87	20.87	16	3	3
Mary St.	8968+15.00	8869+73.46	28.71	28.71	16	3	3

SR GRADE



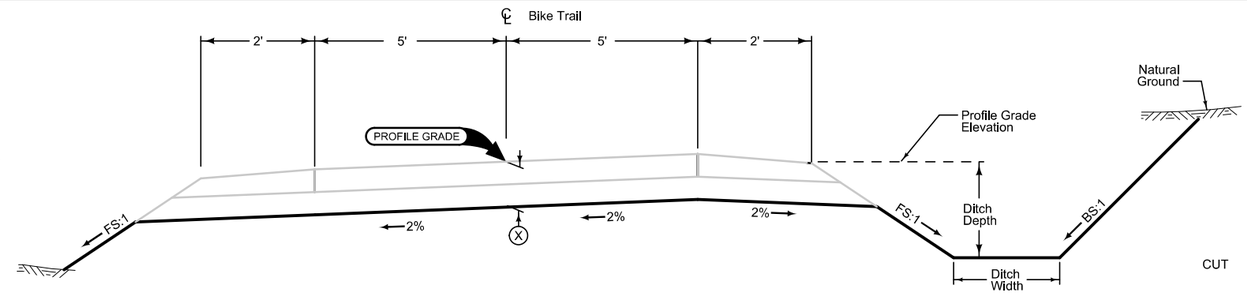
Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

See plan & profile sheets and cross sections for additional details of ditches and backslopes.

Paved SIderoad
2 LANE GRADING

LOCATION			DIMENSIONS		
ROAD IDENTIFICATION	STATION TO STATION		FS	BS	(X) Inches
Bike Trail	8796+82.31	8799+77.44	3	3	12
	RCB				
Bike Trail	8801+63.51	8804+50.00	3	3	12
	RCB				
Bike Trail	8805+82.00	8814+30.00	3	6	12
Bike Trail	8814+30.00	8817+70.00	3	(6)	12
Bike Trail	8817+70.00	8817+85.00	(1)	(2)	12
Bike Trail	8817+85.00	8818+00.00	(2)	(2)	12
Bike Trail	8818+00.00	8818+75.00	(2)	(2)	12
Bike Trail	8818+75.00	8819+40.07	(2)	(3)	12

Trail

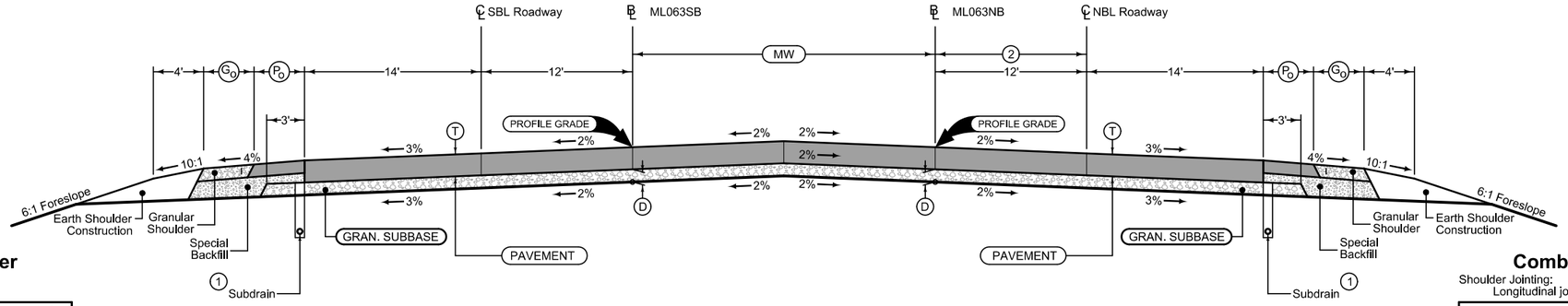


Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

See plan & profile sheets and cross sections for additional details of ditches and backslopes.

(1) Constant Variable from 3:1 to 6:1. See Cross Sections.
(2) 6:1 to Set Pt, the -2% from template to existing ground. See Cross Sections.
(3) Constant Variable from 6:1 to 2.2:1. See Cross Sections.

TRAIL GRADING AND SURFACING



Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

4_C_
10-15-13

Direction of Travel	BEGIN STATION	END STATION	P_o Feet	G_o Feet
SB	841+55.00	852+60.95	4.0	4.0

Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

4_C_
10-15-13

Direction of Travel	BEGIN STATION	END STATION	P_o Feet	G_o Feet
NB	841+55.00	852+60.95	4.0	4.0

LOCATION			MAINLINE		
ROAD IDENTIFICATION	STATION TO STATION		T Inches	D Inches	MW Feet
US 63	841+55.00	843+62.82	10	6	0
US 63	843+62.82	852+60.95	10	6	(3)

(1) Refer to Standard Road Plan RF-19C for details of subdrain installation.

(2) Right Inside Lane has a constant variable:
From: 16' Wide at Sta. 841+55.
To: 12' Wide at Sta. 843+55.

(3) Variable: 0' to 17.98'
Use baseline ML063NB, NBL inside edge of pavement
Use baseline ML063SB, SBL inside edge of pavement.

Shoulder:
6" uniform thickness
Longitudinal joint: B
Refer to Typical 4-_C_
for shoulder design and locations.

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

Refer to Standard Road
Plan PV-101 for Jointing Details

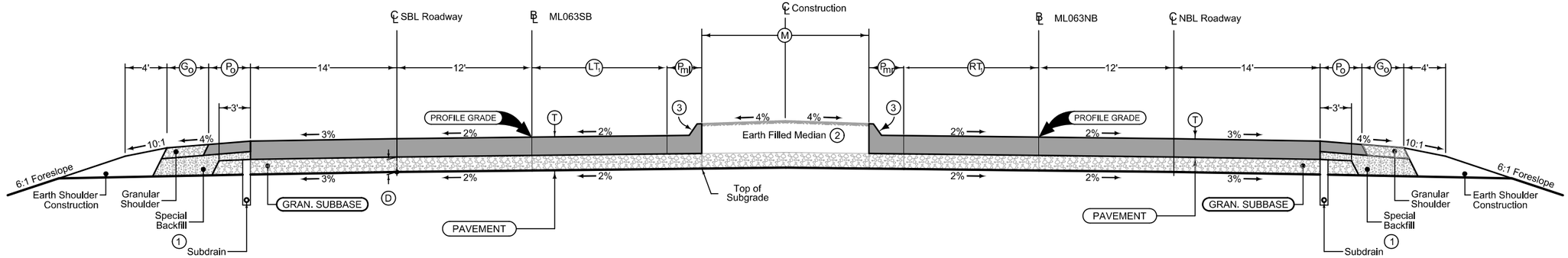
Normal section shown may be modified appropriately in areas of superelevated curves or other locations specifically designated by the Engineer.

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

4-LANE DIVIDED ROADWAY & GORE WITH COMPOSITE SHOULDERS

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER B.6

8:27:16 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155B01.sht



Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

4_C_ 10-15-13				
Direction of Travel	BEGIN STATION	END STATION	P_o Feet	G_o Feet
SB	852+60.95	914+42.76	4.0	4.0

Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

4_C_ 10-15-13				
Direction of Travel	BEGIN STATION	END STATION	P_o Feet	G_o Feet
NB	852+60.95	914+42.76	4.0	4.0

LOCATION			MAINLINE					MEDIAN SHOULDER/CURB	
ROAD IDENTIFICATION	STATION TO STATION		T Inches	D Inches	M Feet	LT_t Feet	RT_t Feet	P_{ml} Feet	P_{mr} Feet
US 63	852+60.95	856+32.50	10	6	4-10	0	0	7	7
US 63	856+32.50	881+61.00	10	6	10	0	0	7	7
US 63	881+61.00	882+39.00	10	6	0	12	0	0	0
US 63	882+39.00	884+40.00	10	6	4	12	0	1	7
US 63	884+40.00	885+00.00	10	6	4-10	12-6	0	1	7
US 63	885+00.00	885+60.00	10	6	10	6-0	0	1-7	7
US 63	885+60.00	894+05.00	10	6	10	0	0	7	7
US 63	894+05.00	894+65.00	10	6	10	0	0-6	7	7-1
US 63	894+65.00	895+25.00	10	6	10-4	0	6-12	7	1
US 63	895+25.00	896+76.00	10	6	4	0	12	7	1
US 63	896+76.00	897+54.00	10	6	0	0	12	0	0
US 63	897+54.00	901+46.24	10	6	10	0	0	7	7
US 63	901+46.24	901+64.56	10	6	10	0	0	7-6.90	7
US 63	901+64.56	901+83.02	10	6	10-10.30	0	0	6.90-6.53	7-6.76
US 63	901+83.02	904+63.71	10	6	10.30-14.83	0	0	6.53-1	6.76-1.56
US 63	904+63.71	904+99.63	10	6	14.83-15	0	0	1	1.56-1
US 63	904+99.63	914+18.63	10	6	15	0	0	1	1
US 63	914+18.63	914+19.65	10	6	15-15.38	0	0	1	0.63
US 63	914+19.65	914+42.76	10	6	15.75-15.77	0	0	0.63	0.63

Notes:

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

Refer to other drawings for details of shoulder design and construction.

(1) Refer to Standard Road Plan RF-19C for details of subdrain installation.

(2) Refer to PV-102 , and Typ. 6135 or Typ. 6136.
Typical 6140m Concrete Median Sta. 870+75.00 to Sta. 872+50.00

(3) 6" Sloped Curb Typical
6" Standard Curb Sta. 914+18.63 to Sta. 914+42.76 NB
6" Standard Curb Sta. 914+19.65 to Sta. 914+42.76 SB

Shoulder:
6" uniform thickness
Longitudinal joint: B
Refer to Typical 4-_C_
for shoulder design and locations.

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

Refer to Standard Road
Plan PV-101 for Jointing Details

4-LANE DIVIDED ROADWAY (COMPOSITE SHOULDERS) WITH RAISED MEDIAN AND AUXILIARY LANES

ML-2-P

Notes:

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

Refer to other drawings for details of shoulder design and construction.

(1) Refer to Standard Road Plan RF-19C for details of subdrain installation.

(2) Refer to Typical 6135

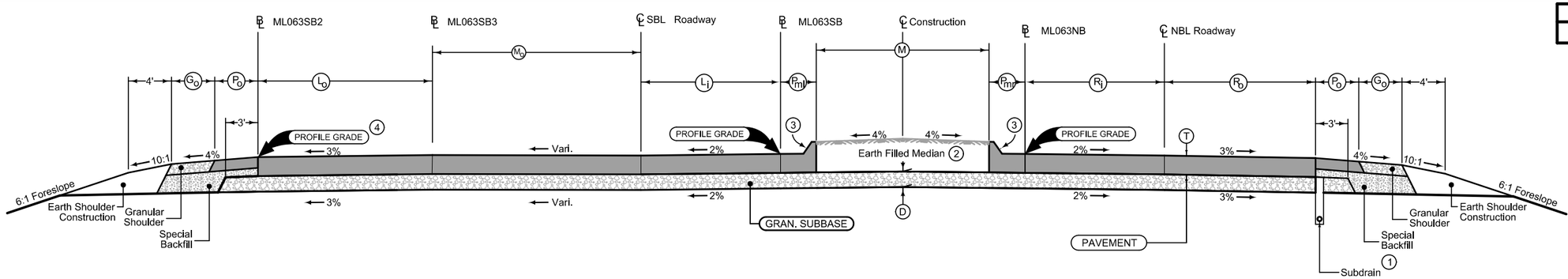
(3) 6" Standard Curb Typical

(4) Profile Grade for ML063SB2 is Prop. Southbound US 63 Ramp as shown on D sheet.

Shoulder:
6" uniform thickness
Longitudinal joint: B
Refer to Typical 4-_C_
for shoulder design and locations.

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

Refer to Standard Road
Plan PV-101 for Jointing Details



LOCATION			MAINLINE						SHOULDER			
ROAD IDENTIFICATION	STATION TO STATION		(T) Inches	(D) Inches	L_o Feet	M_o Feet	L_I Feet	M_I Feet	R_I Feet	R_o Feet	P_{ml} Feet	P_{mr} Feet	P_o Feet	G_o Feet
US 63	914+42.76	914+42.76	10	6	14.00-13.91	0	12.0	15.77-15.88	12.0	14.0	0.63	0.63	4	4
US 63	914+42.76	915+93.99	10	6	13.91-15.00	0-12.0	12.0	15.88-15.91	12.0 -11.74	14.0	0.63	0.63	4	4

3-LANE DIVIDED ROADWAY
(COMPOSITE SHOULDERS)
WITH ENTRY LANE & CURBED MEDIAN

ML-4-P

Notes:

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

Refer to other drawings for details of shoulder design and construction.

(1) Refer to Standard Road Plan RF-19C for details of subdrain installation.

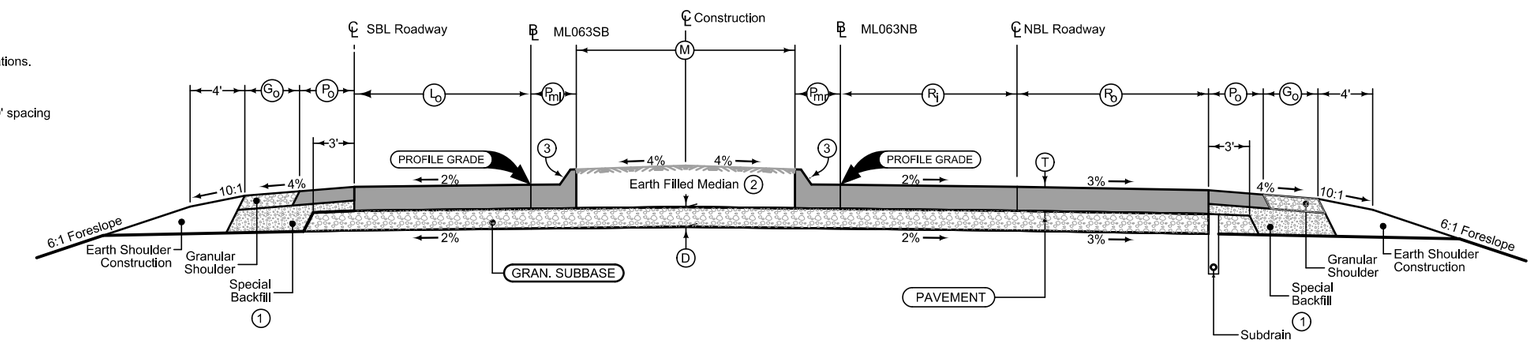
(2) Refer to Typical 6135

(3) 6" Standard Curb Typical

Shoulder:
6" uniform thickness
Longitudinal joint: B
Refer to Typical 4-_C_
for shoulder design and locations.

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

Refer to Standard Road
Plan PV-101 for Jointing Details

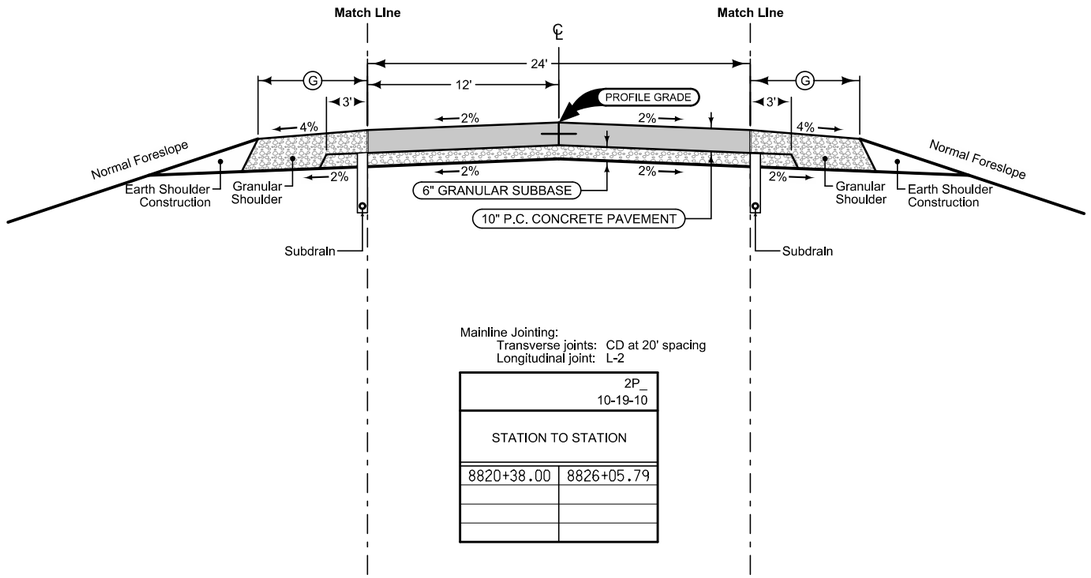


LOCATION			MAINLINE						SHOULDER			
ROAD IDENTIFICATION	STATION TO STATION		(T) Inches	(D) Inches	(M) Feet	L_o Feet	R_I Feet	R_o Feet	P_{ml} Feet	P_{mr} Feet	P_o Feet	G_o Feet
US 63	915+93.99	917+07.12	10	6	15.91-16.00	11.73-11.38	11.74-11.38	13.32-12.14	0.63	0.63	4	4
US 63	917+07.12	917+25.00	10	6	16.00	11.38	11.38	12.14-12	0.63	0.63	4	4
US 63	917+25.00	917+45.66	10	6	16.00	11.38	11.38	12	0.63	0.63	4	4

3-LANE DIVIDED ROADWAY
(COMPOSITE SHOULDERS)
WITH CURBED MEDIAN

Granular Shoulder

2_G_SR_ 10-19-10		
STATION TO STATION		(G) Feet
8820+38.00	8826+05.79	6.0



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

2P_ 10-19-10	
STATION TO STATION	
8820+38.00	8826+05.79

Granular Shoulder

2_G_SR_ 10-19-10		
STATION TO STATION		(G) Feet
8820+38.00	8826+05.79	6.0

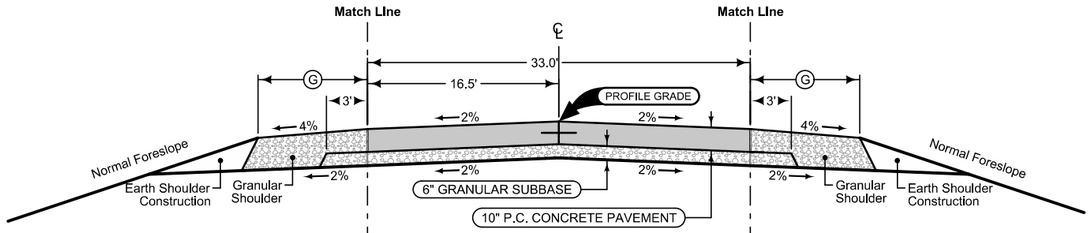
See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

RABBIT RUN ROAD

Granular Shoulder

2_G_SR_ 10-19-10		
STATION TO STATION		Ⓖ Feet
8968+15.00	8869+73.46	8.0



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

2P_ 10-19-10	
STATION TO STATION	
8968+15.00	8869+73.46

Granular Shoulder

2_G_SR_ 10-19-10		
STATION TO STATION		Ⓖ Feet
8968+15.00	8869+73.46	8.0

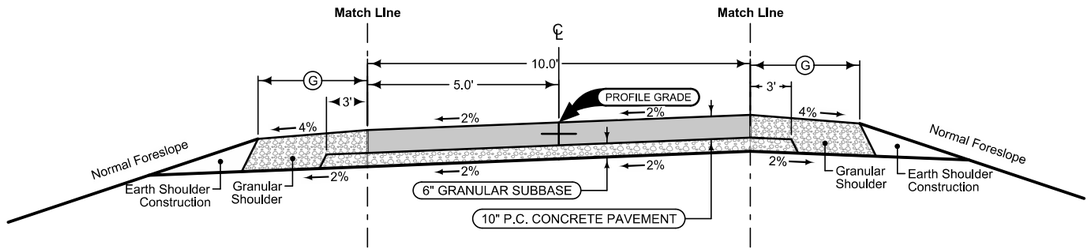
See Tab 100-24 or 100-25 for pavement quantities.

See Tab 112-9 for shoulder quantities.

MARY STREET

Granular Shoulder

2_G_SR_ 10-19-10		
STATION TO STATION		Ⓖ Feet
8796+82.31	8799+77.44	2.0
RCB		
8801+63.51	8804+50.00	2.0
RCB		
8805+82.00	8819+40.07	2.0



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

2P_ 10-19-10	
STATION TO STATION	
8796+82.31	8799+77.44
RCB	
8801+63.51	8804+50.00
RCB	
8805+82.00	8819+40.07

Granular Shoulder

2_G_SR_ 10-19-10		
STATION TO STATION		Ⓖ Feet
8796+82.31	8799+77.44	2.0
RCB		
8801+63.51	8804+50.00	2.0
RCB		
8805+82.00	8819+40.07	2.0

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

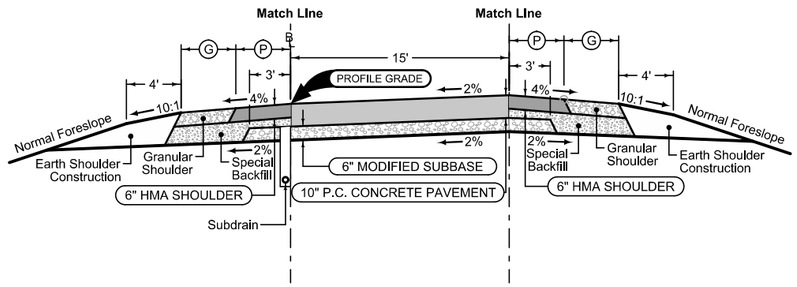
See Tab 112-9 for shoulder quantities.

BIKE TRAIL

Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

		2_C_ 10-15-13	
STATION TO STATION		(P) Feet	(G) Feet
916+15.917	918+53.53	4	4



Section shown in the direction of Stationing.

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

	1RP_ 10-19-10
BEGIN STATION	END STATION
916+15.917	918+53.53

Combination Shoulder

Shoulder Jointing:
Longitudinal joint: B

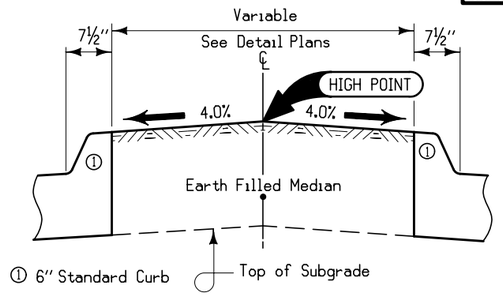
		2_C_ 10-15-13	
STATION TO STATION		(P) Feet	(G) Feet
916+15.917	918+53.53	4	2

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

See Tab 112-9 for shoulder quantities.

US 63 SB Ramp

6135
11-10-92

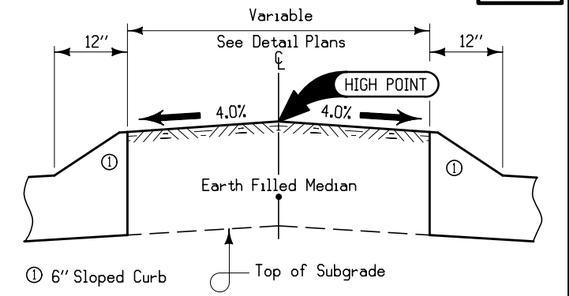


RAISED EARTH MEDIAN WITH STANDARD CURB

Note:

This section is typical only, and may be appropriately modified in areas specifically designated by the engineer. Material for filling median and the necessary finishing of the median surface are included in the appropriate items of "Estimate of Quantities".

6136
11-10-92

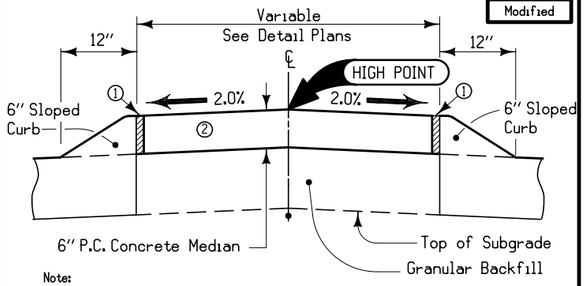


RAISED EARTH MEDIAN WITH SLOPED CURB

Note:

This section is typical only, and may be appropriately modified in areas specifically designated by the engineer. Material for filling median and the necessary finishing of the median surface are included in the appropriate items of "Estimate of Quantities".

6140m
Modified



Note:

This section is typical only, and may be appropriately modified in areas specifically designated by the Engineer. The furnishing and placing of granular backfill shall be incidental to the price bid for Portland Cement Concrete Median.

① 'E' Joint, refer to Standard Road Plan PV-101 for details.

② Construct 'C' Joints according to Standard Road Plan PV-101; match joints in adjacent pavement.

PAVED MEDIAN WITH SLOPED CURB

SURVEY SYMBOLS

- SIGN — SI Sign
- LUM Luminaire
- MH Utility Access (Manhole)
- ROW Approx. Right of Way Rail
- PPA Power Pole Co. 1
- MM — MM Mile Marker Post
- TDC Tree Deciduous
- SIGN — SL Speed Limit Sign
- EW Edge of Water
- DIK Centerline of Dike or Dam
- D Centerline Draw or Stream (Down)
- BB — BB Billboard
- FCL Chain Link and Security Fence
- GDL Guard Rail (Rail and Cable)
- RET Retaining Walls
- T2 — TLB Underground Telephone Line Co. 2
- FO — FOA Underground Fiber Optic Co. 1
- FO2 — FOB Underground Fiber Optic Co. 2
- T1 — TLA Underground Telephone Line Co. 1
- E1 — ELA Underground Electric Line Co. 1
- G — GLA Underground Gas Line Co. 1
- W — WLA Underground Water Line Co. 1
- W2 — WLB Underground Water Line Co. 2
- IN Storm Sewer Intake
- FW Wire Fence
- MIS Miscellaneous
- LC Approx. Lot Corner
- TP — TPD Telephone Pedestal
- TA — TA Tower Anchor
- EB — EB Electrical Box
- WEL Well
- TEV Evergeen Tree
- FWD Wood Fence
- FHD Fire Hydrants
- GP — GP Guard Post (Less Than 4 Posts)
- WHU — WHU RV Water Hook Up
- INB Storm Sewer Beehive Intake

UTILITY LEGEND

- T1
- T2
- FO
- FO2
- E1
- G
- W
- W2

UTILITY CONTACT INFORMATION

Citizens Mutual Telephone
Gary Mishler
114 W. Jefferson
Bloomfield, IA 52537
(641)-664-2074
gmishler@cmtel.com

Southern Iowa Electric Cooperative
Jeremy Wilcox
P.O. Box 70 22458 Hwy. 2
Bloomfield, IA 52537
641-664-2277
jwilcox@sie.coop

Windstream/PAETEC
Tim Flickinger
3630 109th Street
Urbandale, IA 50322
515-309-1135
timothy.flickinger@paetec.com

CenturyLink/QWEST
Steve Parker
2103 E University Ave., 1st Floor
Des Moines, IA 50317
515-265-0968
steven.parker4@centurylink.com

Wapello Rural Water
Lee Asher
PO Box 538
Ottumwa, IA 52501
641-682-8351
LAsher@wrh2o.com

Alliant Energy
Jason Hogan
4902 N Billmore Lane
Madison, WI 53718-2148
608-458-4871
jasonhogan@alliantenergy.com

Mediacom
Tim Eagen
546 Southgate Ave.
Iowa City, IA 52240
319-351-0408
teagan@mediacomcc.com

MidAmerican Energy
Phillip Davis
302 S Vine
Ottumwa, IA 52501
641-683-4171
pcdavis@midamerican.com

MidAmerican Energy
Jeff Ferguson
2411 N Market Street
Oskaloosa, IA 52577
641-660-3068
jaferguson@midamerican.com

City of Ottumwa
Larry Seals
105 E Third Street
Ottumwa, IA 52501
641-683-0680
lseals@ci.ottumwa.ia.us

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

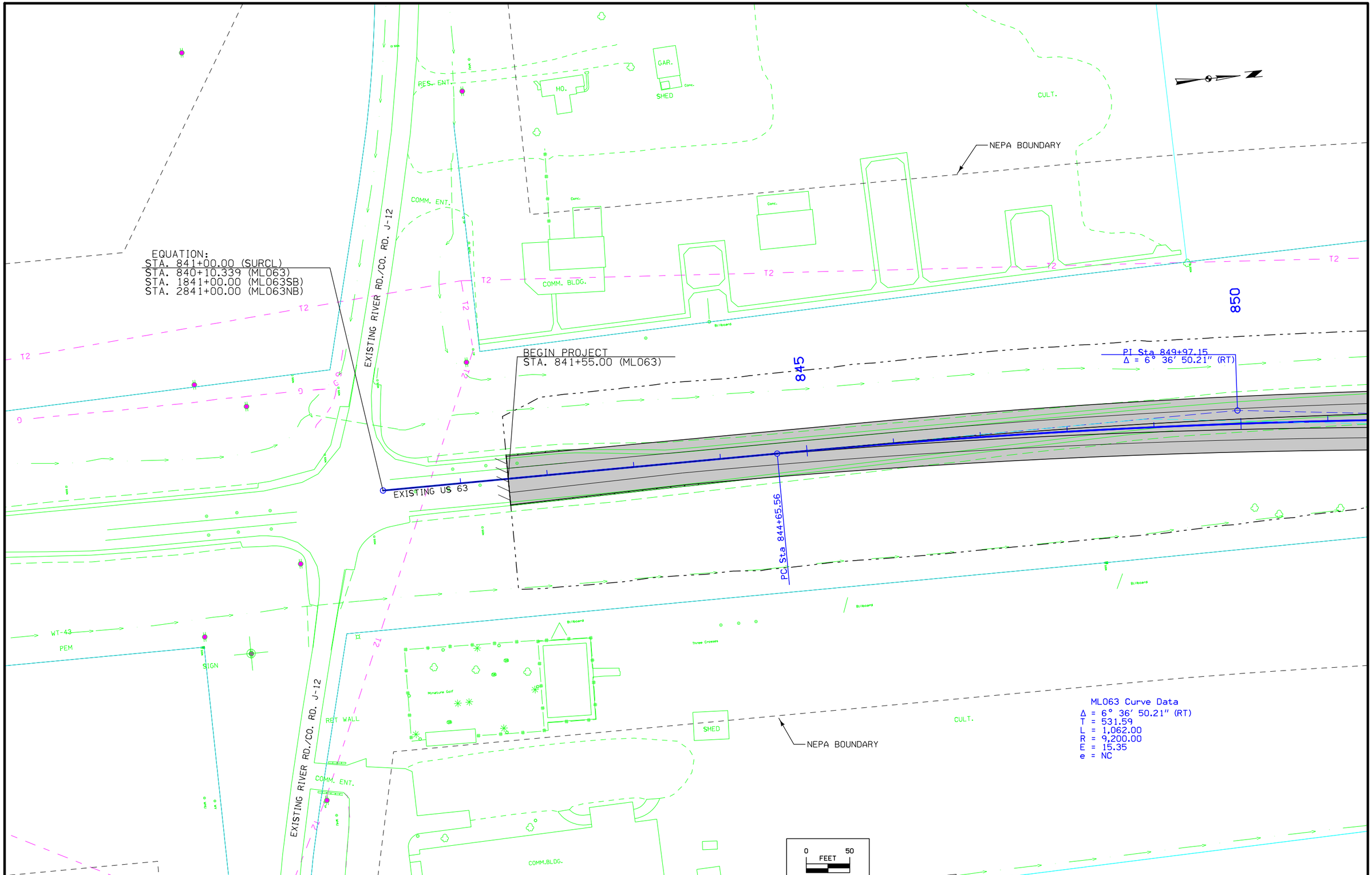
- Proposed Right-of-Way
- Existing Right of Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Easement (Temporary)
- Easement
- C/A — Access Control
- Property Line

PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

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

FILE NO.	ENGLISH	DESIGN TEAM **Flattery \ Buttolph**	**WAPELLO** COUNTY	PROJECT NUMBER **NHSX-063-2(155)--3H-90**	SHEET NUMBER **D.1**

11:20:52 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155_LGD.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER D.2

11:21:13 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155D01.sht

STA. 841+55.00
BEGIN PROJECT
TIE-IN ELEV. 646.63

-0.300%

-0.300%

+55 Rt.
639.04

-0.30% Rt. Ditch Grade

Existing Ground

Existing ℄ Grade

+55 Lt.
637.26

-0.80% Lt. Ditch Grade

+00 Lt.
636.10

-0.40% Lt. Ditch Grade

+00 Lt.
634.50

-0.30% Lt. Ditch Grade

675 670 665 660 655 650 645 640 635 630 625 620 615 610 605 600

Lt Med Rt

Ditch Grade

No Median

Conc. Median (No Curb)

Ditch Grade

646.65 646.57 646.49 646.42 646.34 646.27 646.19 646.12 646.04 645.97 645.89 645.82 645.74 645.67 645.59 645.52 645.44 645.37 645.29 645.22 645.14 645.07 644.99 644.92 644.84 644.77 644.69 644.62 644.54 644.47 644.39 644.32 644.24 644.17 644.09 644.02 643.94 643.87 643.79 643.72 643.64 643.57 643.49

837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER D.3

11:21:25 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155D01.sht

CULT.

NEPA BOUNDARY

T2

T2

T2

T2

PEM

PEM

PASTURE

855

860

SLOPE INTERCEPT

865

REMOVE
Ex. Pavement

CONSTRUCTION ℄

EXISTING US 63

PT Sta 855+27.56

SLOPE INTERCEPT

SIGN

CULT.

SIGN

NEPA BOUNDARY

0 FEET 50

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER D.4

11:21:38 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155D01.sht

675 670 665 660 655 650 645 640 635 630 625 620 615 610 605 600

Existing ℄ Grade

Existing Ground

-0.300%

-0.300%

+0.520%

+0.520%

VPI +00.000
Elv 640.49
K = 732
Len 600.00 ft

-0.30% Rt. Ditch Grade

-0.30% Lt. Ditch Grade

Ditch Grade

Lt Med Rt — Conc. Median (No Curb) — Raised Median — Lt Med Rt

Ditch Grade

643.42 643.34 643.27 643.19 643.12 643.04 642.97 642.89 642.82 642.74 642.67 642.59 642.52 642.44 642.37 642.29 642.22 642.14 642.07 641.99 641.92 641.84 641.77 641.69 641.62 641.54 641.47 641.39 641.32 641.26 641.20 641.16 641.12 641.09 641.07 641.06 641.06 641.07 641.08 641.11 641.14 641.18 641.23 641.28 641.35 641.42 641.51 641.60 641.70 641.81 641.92 642.05 642.18 642.31 642.44 642.57 642.70 642.83 642.96 643.09

852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER D.5

11:21:52 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155D01.sht

CENTER TWP.
T-72N R-13W
SEC. 31

CULT.

NEPA BOUNDARY

T2

JEFFERSON DRAINAGE CHANNEL

SLOPE INTERCEPT

PFO1

WT-45

870

875

880

REMOVE
Ex. Pavement

CONSTRUCTION ℄

EXISTING US 63

WT-44

SOUTHBOUND US 63

NORTHBOUND US 63

90°0'0"

WT-46

PEM

Billboard

SIGN

EQUATION:
STA. 880+52.39 (ML)
= STA. 8800+52.39 (TRAIL)

PFO1

RABBIT RUN RD

BIKE TRA

CULT.

WABASH/IOWA SOUTHERN RR
(ABANDONED)

NEPA BOUNDARY

SECTION LINE

Sta. 871+45.43
100' x 30' Conc Slab Bridge
Design No. 1962
(REMOVE)

Sta. 881+15.91
250' x 30' Cont Steel Bridge
Design No. 1862
(REMOVE)

Sta. 871+49.14 (SB)
Build 150' x 47'-6
Concrete Slab Bridge
Skew = 15° Rt. Ahd.
Design No. 514

Sta. 871+62.01 (NB)
Build 150' x 47'-6
Concrete Slab Bridge
Skew = 15° Rt. Ahd.
Design No. 614

EQUATION:
STA. 882+00.00 (ML)
= STA. 8820+00.00 (SR)

NEPA BOUNDARY

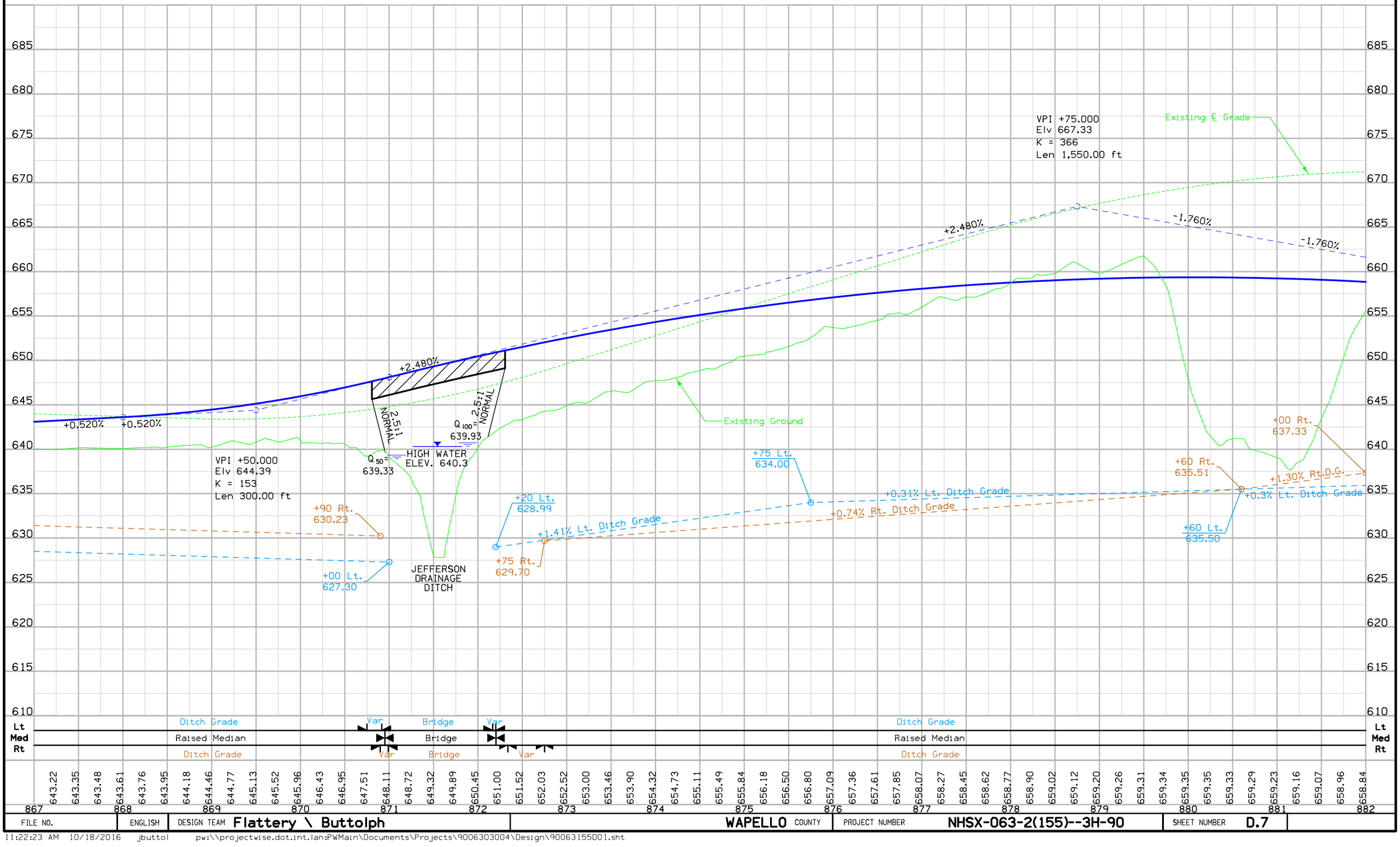
Sta. 880+52.39
Build 12' x 10'-4 x 145'-2 RCB
Skew = 28°34'04" Lt. Ahd.
Lt. 643.62
F.L. = Rt. 642.89
Stage 1 Design No. 714
Stage 2 Design No. 814

Sta. 881+86.59, 63, Lt
27" x 160' Conc.
DA = 16 Ac
(REMOVE)

0 FEET 50

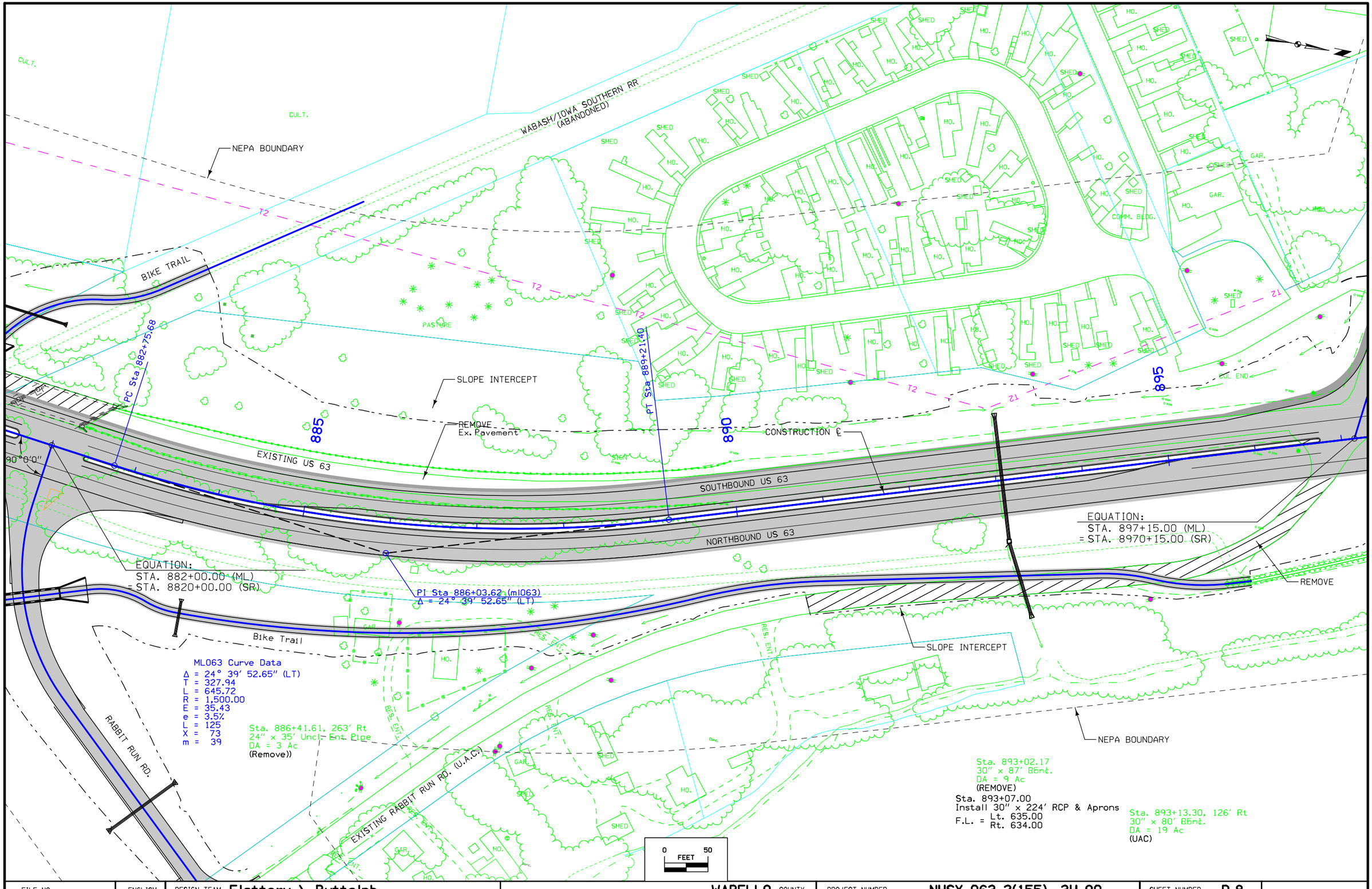
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER D.6

11:22:07 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155D01.sht



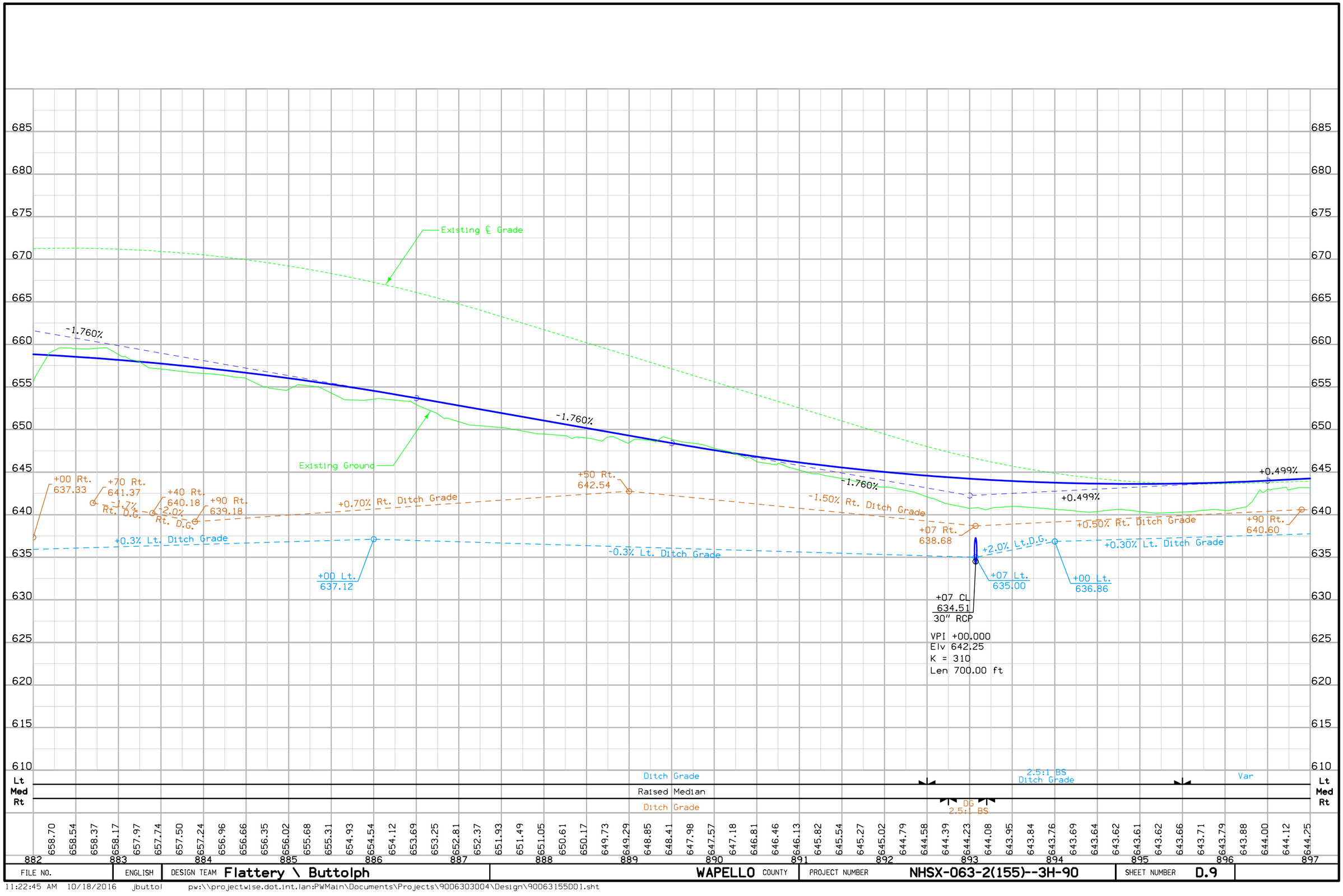
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER D.7

11:22:23 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155D01.sht

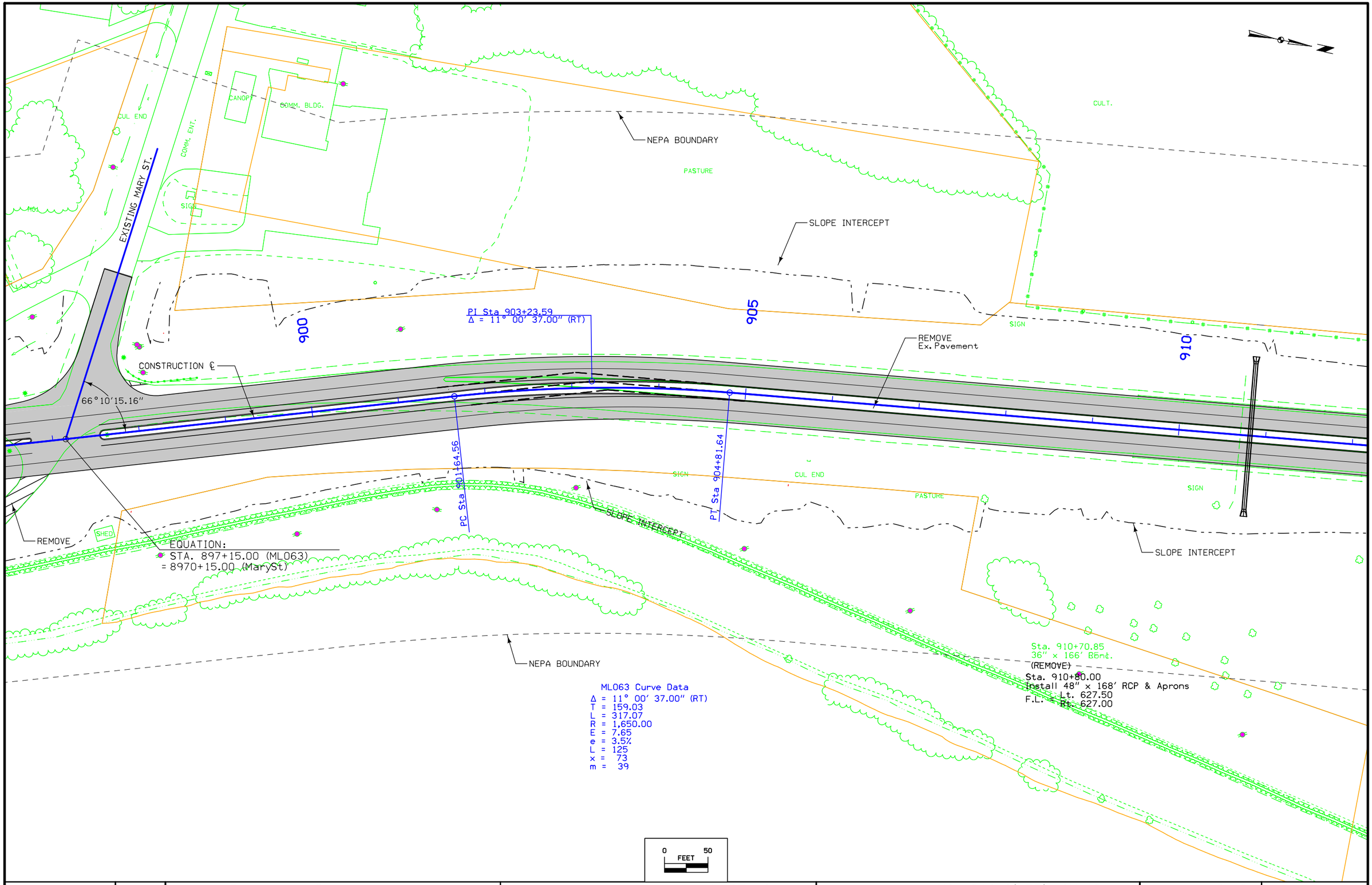


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER D.8

11:22:37 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\90063030004\Design\90063155D01.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER D.9



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER D.10

11:22:56 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155D01.sht

VPI +50.000
Elv 646.99
K = 289
Len 300.00 ft

Existing Ground
Existing ℄ Grade
+0.499%
+0.499%
-0.538%
-0.538%
-0.538%
-0.30% Rt. Ditch Grade
-1.90% Rt. Ditch Grade
-1.20% Rt. Ditch Grade
-2.00% Rt. Ditch Grade
-0.50% Rt. Ditch Grade
-0.3% Lt. Ditch Grade
-4.32% Lt. Ditch Grade
+0.95% Lt. Ditch Grade
-0.16% Lt. Ditch Grade
+2.91% Lt. Ditch Grade
+1.5% Rt.D.G.
+0.3% Lt. D.G.
0.58% Lt.D.G.
1.33% Lt.
+15 Lt. 638.00
+00 Lt. 638.20
+50 Lt. 637.91
+00 Lt. 630.00
+45 Rt. 639.23
+50 Rt. 637.24
+30 Rt. 633.88
+05 Rt. 628.38
+50 Lt. 627.15
+00 Lt. 627.63
+80 Lt. 627.50
+00 Lt. 628.06
+80 CL 627.25
+80 Rt. 627.00 48" RCP

675 670 665 660 655 650 645 640 635 630 625 620 615 610 605 600

Lt Med Rt: Var | S.R. | Var | Ditch Grade | Raised Median | Ditch Grade | No Ditch

644.37 644.49 644.62 644.74 644.87 644.99 645.12 645.24 645.37 645.49 645.62 645.74 645.87 645.99 646.12 646.24 646.35 646.45 646.52 646.57 646.59 646.60 646.58 646.55 646.49 646.41 646.30 646.18 646.05 645.91 645.78 645.64 645.51 645.37 645.24 645.11 644.97 644.84 644.70 644.57 644.43 644.30 644.16 644.03 643.89 643.76 643.63 643.49 643.36 643.22 643.09 642.95 642.82 642.68 642.55 642.42 642.28 642.15 642.01 641.88

897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER D.11

11:23:05 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155D01.sht

ML063 Curve Data
Δ = 16° 30' 00.03" (RT)
T = 144.99
L = 287.98
R = 1,000.00
E = 10.46
e(SB) = NC
e(NB) = 4.0%
L = 145
x = 73
m = 43.5

915

PC Sta 914+19.14

PT Sta 915+64.13

PT Sta 917+07.12

POT Sta 918+44.91

FO

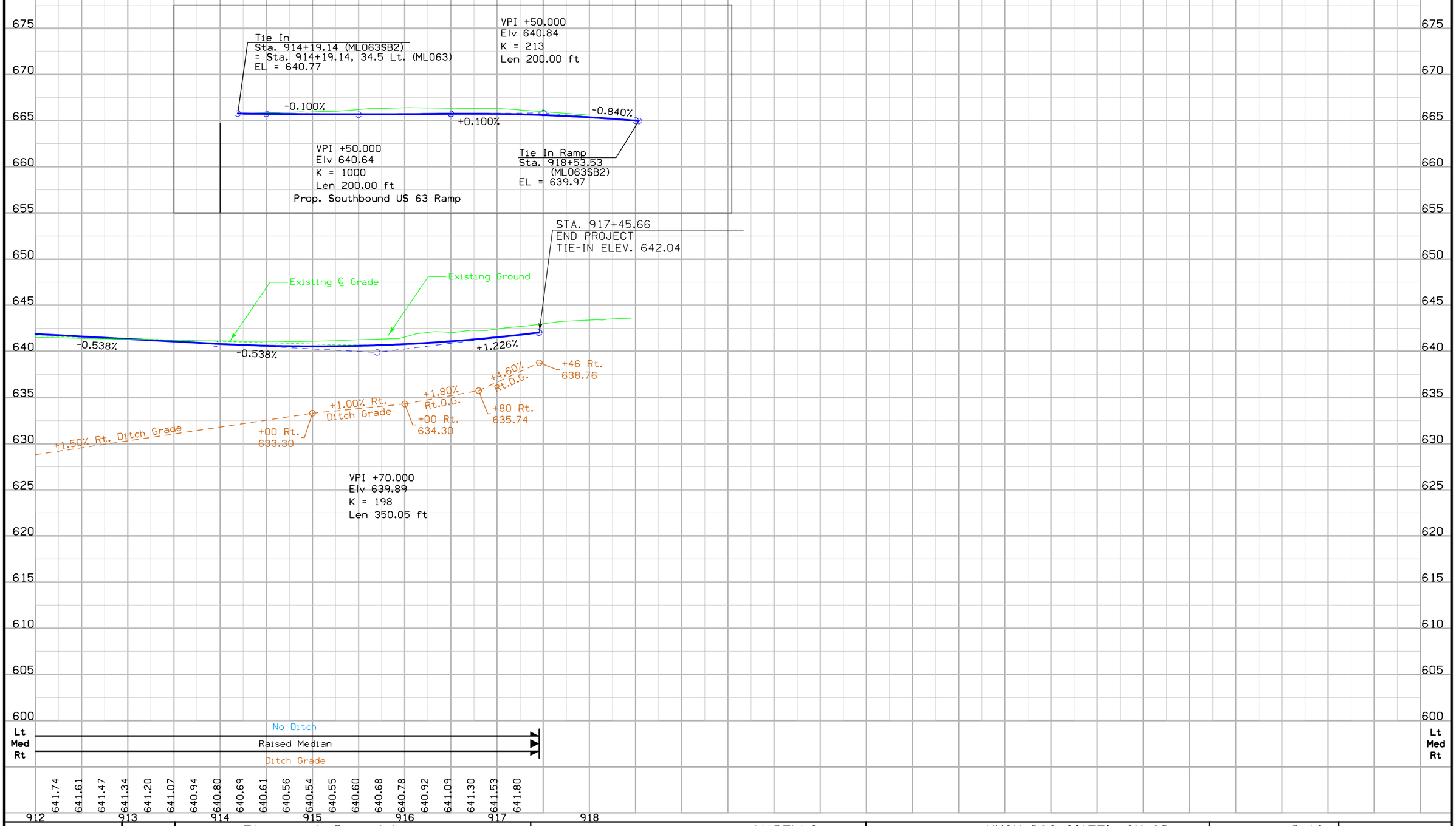
St.S.

E1

0 FEET 50

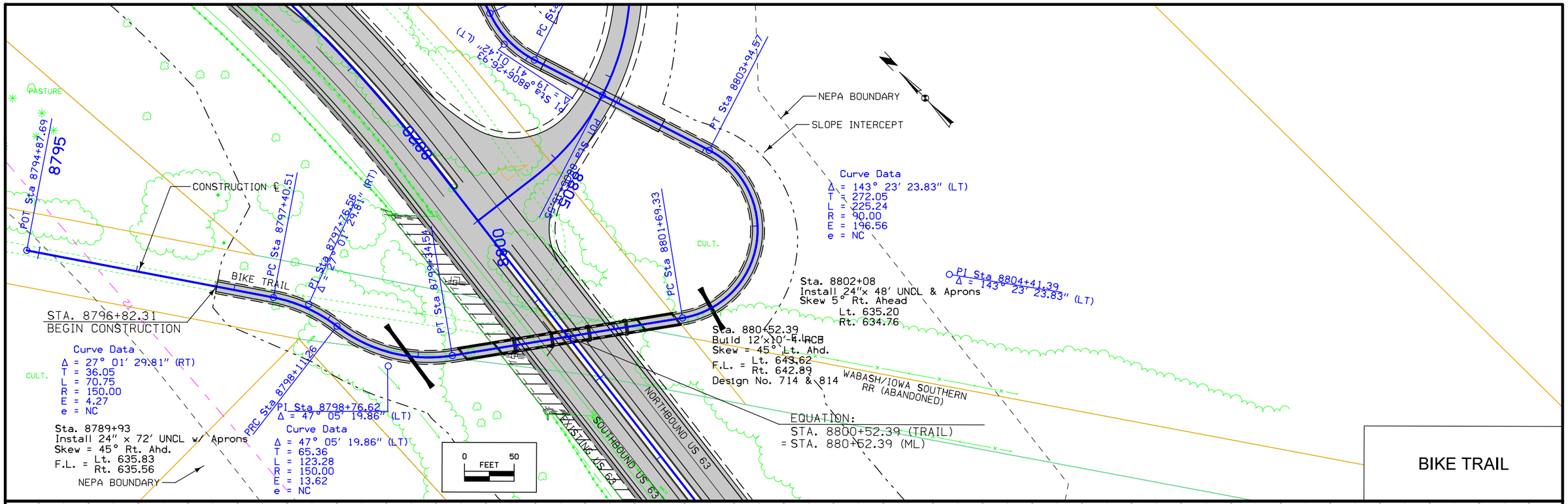
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER D.12

11:23:29 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155D01.sht



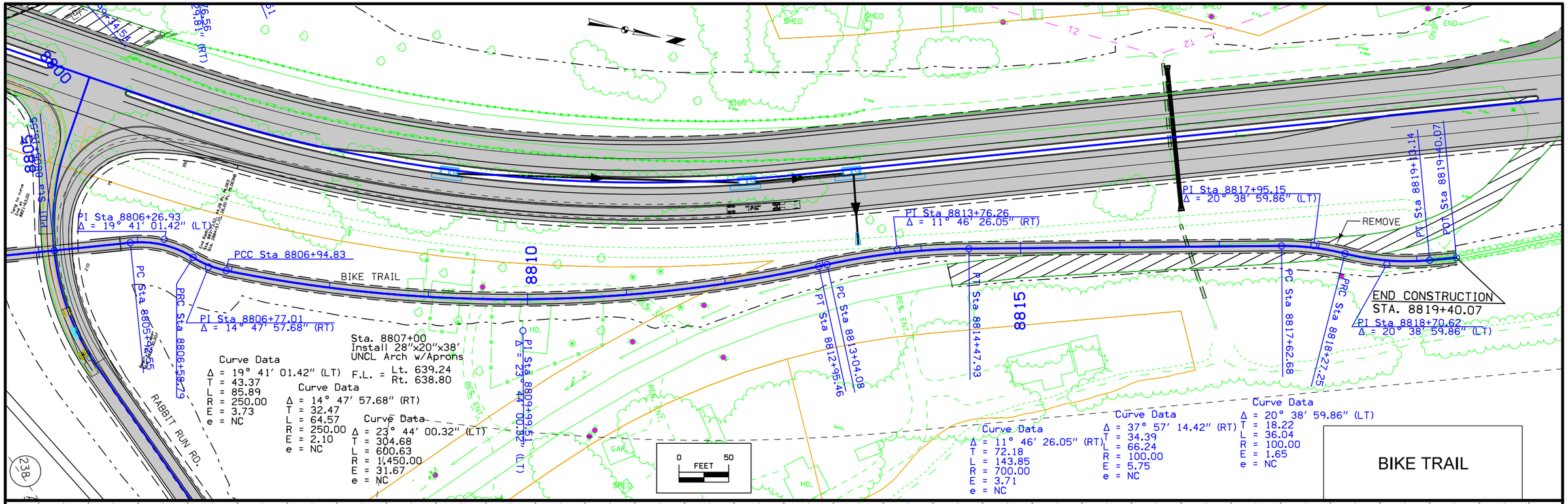
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER D.13

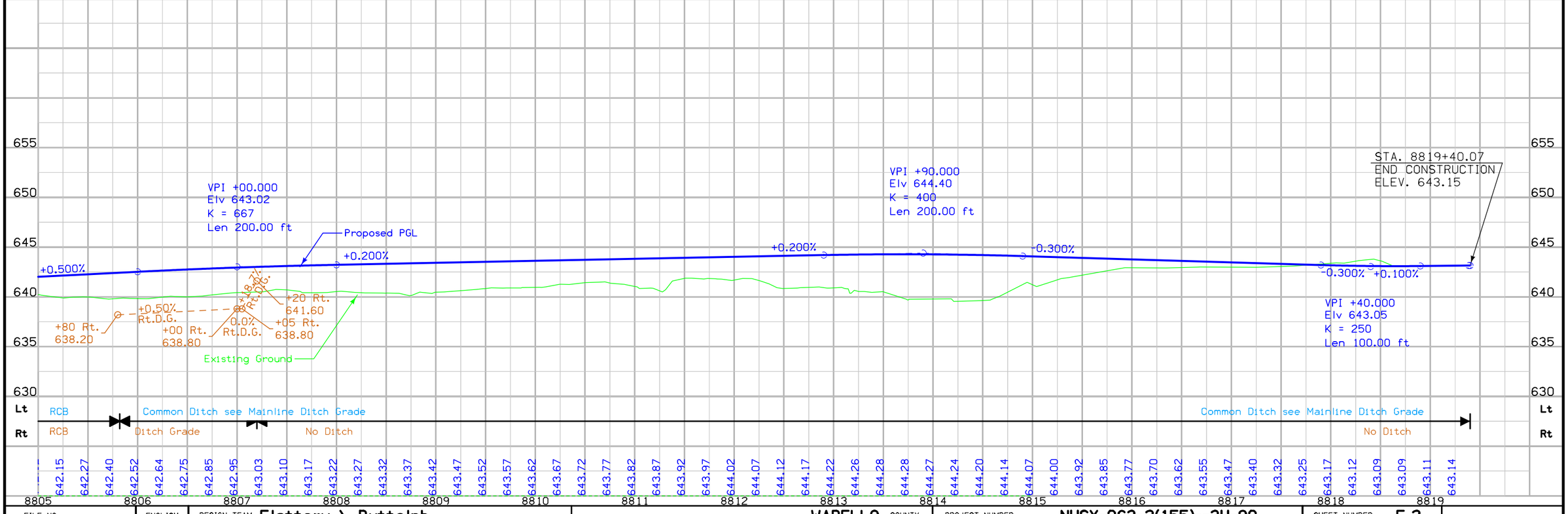
11:23:38 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155D01.sht



FILE NO.	ENGLISH	DESIGN TEAM	Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER	NHSX-063-2(155)--3H-90	SHEET NUMBER	E.1

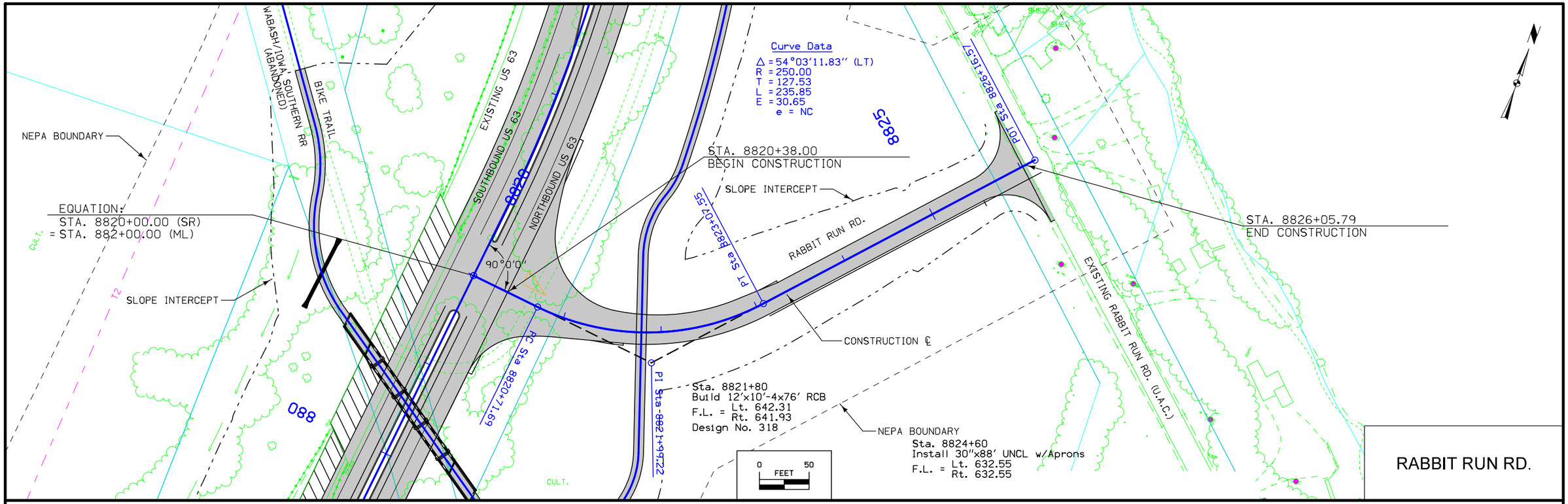
11:23:52 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155E01.sht

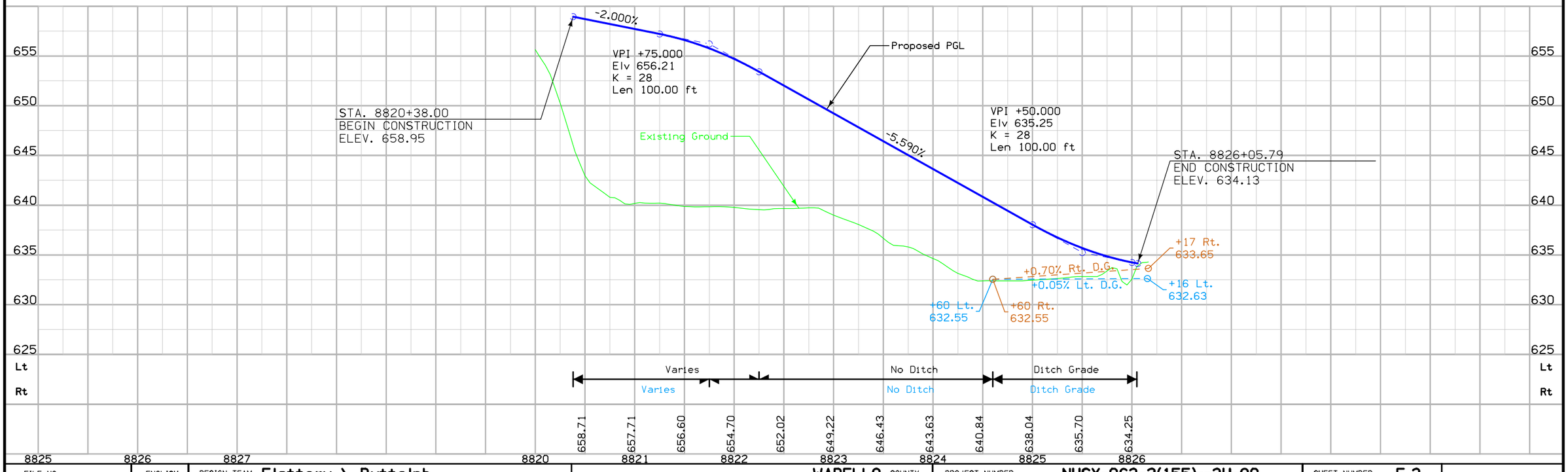




FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER E.2

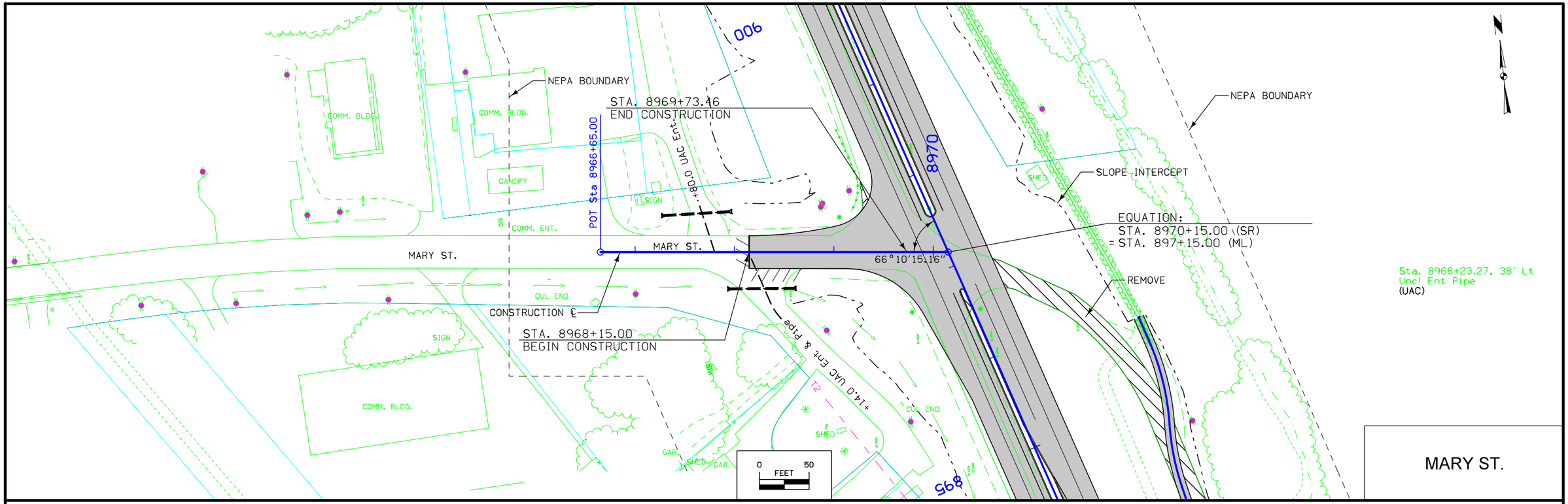
11:23:59 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155E01.sht

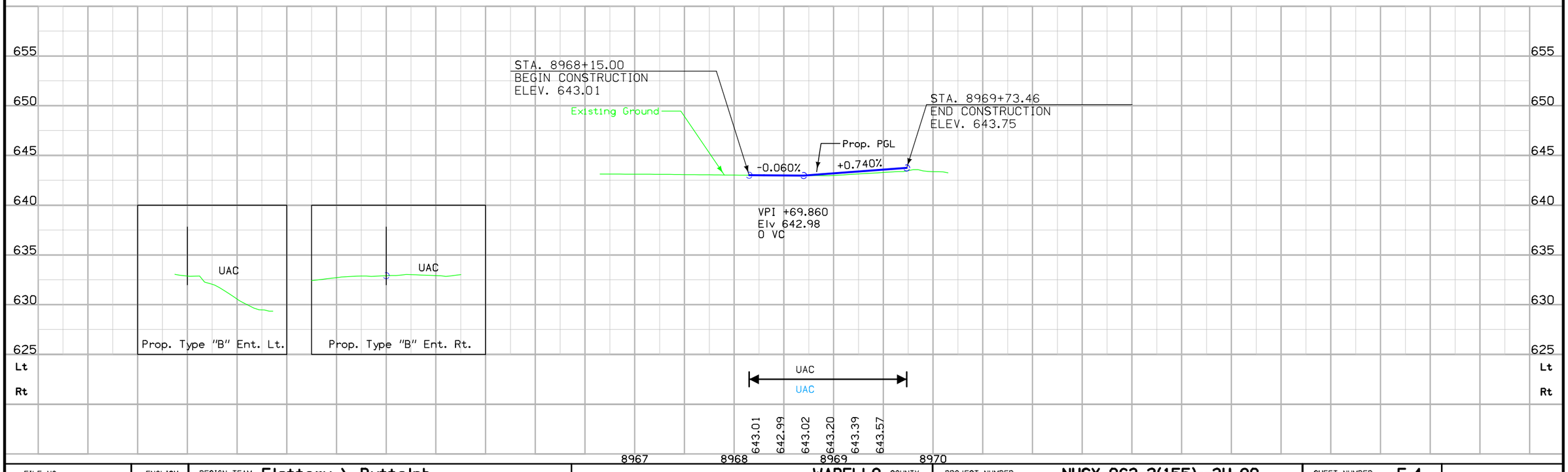




FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER E.3

11:24:13 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155E02.sht





FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER E.4

11:24:32 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155E02.sht

HORIZONTAL DATUM INFORMATION:

THE COORDINATES FOR ALL THE GPS POINTS (REFERRED TO AS CONTROL MONUMENTS), WERE PROVIDED BY THE IOWA DEPARTMENT OF TRANSPORTATION SURVEY AND PHOTOGRAMMETRY DEPARTMENT. THE COORDINATES USED ARE ON A MODIFIED STATE PLANE COORDINATE SYSTEM (REFERRED TO AS THE LOCAL PROJECT PLANE COORDINATES). THE CONTROL MONUMENT ELEVATIONS LISTED IN THESE G-SHEETS WERE ESTABLISHED FROM THE BENECHMARK LEVEL LOOP FOR THE PROJECT.

THE SUPPLEMENTAL CONTROL POINTS (REFERRED TO AS CONTROL POINTS), WERE SET FROM THE GPS CONTROL MONUMENTS. ELEVATIONS FOR SUPPLEMENTAL CONTROL WERE ESTABLISHED FROM THE BENCHMARK LEVEL LOOP.

THE ALIGNMENT FOR THIS SURVEY WAS ESTABLISHED BY LOCATING OR SETTING THE AS-BUILT P.I.'s. THIS SURVEY ALIGNMENT RUNS ALONG THE EXISTING CENTERLINE OF US 63.

ALL STATIONS AND OFFSETS ARE BASED ON THE SURVEY ALIGNMENT.

VERTICAL DATUM INFORMATION:

STANDARD ELEVATION BASED ON THE SEA-LEVEL DATUM NAVD 1988.
U.S.C.G.S. SECOND ORDER LEVELING.

NOTES:

⊗ DENOTES G.P.S. CONTROL MONUMENTS (GPS???) AND SUPPLEMENTAL CONTROL POINTS (CP ???). FOR CONVERSION OF GPS CONTROL MONUMENT AND CONTROL POINT PROJECT CORRDINATES TO STATE PLANE COORDINATES, CONTACT THE SURVEY/PHOTOGRAMMETRIC SECTION OF THE OFFICE OF DESIGN I-DOT. ALL COORDINATES AND DISTANCES ARE IN U.S. SURVEY FEET.

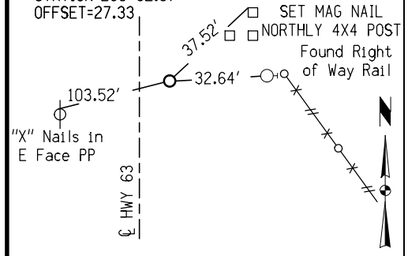
POINT NUMBER	STATION	OFFSET	DESCRIPTION	ELEVATION
29	337+97.442	34.15ft Lt.	BRASS PLUG IN CENTERLINE OF 3°2 RCB, WEST SIDE OF HWY 63	821.409
30	352+71.038	61.16ft Lt.	RAILROAD SPIKE IN TRANSFORMER POLE, WEST SIDE OF HWY 63	848.223
31	358+64.029	79.58ft Lt.	RAILROAD SPIKE IN POWER POLE AT N.W. COR OF HWY 63 & MULBERRY TR	843.548
32	367+15.117	310.90ft Rt.	X ON WEST BOLT OF WEST LEG OF WATER TOWER @ NE COR HWY 63 AND COUNTY ROAD J-15	845.059
34	385+83.115	48.41ft Lt.	X IN CENTERLINE OF 36" RCP , WEST SIDE OF HWY 63	788.274
35	392+64.285	63.38ft Lt.	X IN CENTERLINE OF 30" RCP, WEST SIDE OF HWY 63	791.504
36	399+57.384	83.31ft Rt.	BRASS PLUG IN CENTERLINE , 3 FT°2 RCB, EAST SIDE OF HWY 63	787.314
37	407+19.079	138.28ft Rt.	RAILROAD SPIKE IN POWER POLE, EAST SIDE OF HWY 63	833.762
39	417+76.908	67.15ft Lt.	BRASS PLUG IN CENTERLINE OF 3'X2' RCB, WEST SIDE OF HWY 63	796.526
40	428+29.140	46.56ft Rt.	X IN CENTERLINE 30" RCP, EAST SIDE OF HWY 63	793.466
41	439+74.486	61.51ft Rt.	X IN CENTERLINE OF 24" RCP, EAST SIDE OF HWY 63	793.190
43	455+52.753	100.76ft Rt.	RAILROAD SPIKE IN POWER POLE, EAST SIDE OF HWY 63	815.112
45	472+15.181	101.50ft Lt.	BRASS PLUG IN CENTERLINE 4 FT°2 RCB, WEST SIDE OF HWY 63	725.517
47	494+79.901	18.80ft Lt.	BRASS PLUG IN SOUTHWEST CORNER OF BRIDGE	695.149
49	520+59.496	101.38ft Lt.	RAILROAD SPIKE IN POWER POLE, WEST SIDE OF HWY 63	768.844
50	528+83.828	64.42ft Rt.	X IN CENTERLINE OF 30" RCP, EAST SIDE OF HWY 63	763.294
52	549+35.028	147.94ft Rt.	RAILROAD SPIKE IN POWER POLE, EAST SIDE OF HWY 63	810.937
53	558+86.808	41.87ft Rt.	BRASS PLUG IN CENTERLINE OF 3'X2' RCB, EAST SIDE OF HWY 63	820.960
54	564+85.789	75.30ft Rt.	RAILROAD SPIKE IN POWER POLE, EAST SIDE OF HWY 63	836.931
55	572+96.034	60.18ft Rt.	RAILROAD SPIKE IN POWER POLE, EAST SIDE OF HWY 63	824.022
56	583+52.282	89.89ft Lt.	BRASS PLUG IN CENTERLINE OF 4'X3' RCB, WEST SIDE OF HWY 63	773.333
57	594+85.268	37.10ft Rt.	X IN CENTERLINE OF 24" RCP, EAST SIDE OF HWY 63	813.312
58	602+25.191	65.54ft Lt.	BRASS PLUG IN CENTERLINE OF 3'X2' RCB, WEST SIDE OF HWY 63	803.802
59	620+47.786	18.82ft Lt.	BRASS PLUG IN NORTHWEST CORNER OF HWY 63	784.826
60	631+20.258	38.30ft Rt.	X IN CENTERLINE OF 24" RCP EAST SIDE OF HWY 63	776.424
61	640+24.977	100.97ft Lt.	RAILROAD SPIKE IN POWER POLE, WEST SIDE OF HWY 63	760.423
62	646+47.571	18.71ft Lt.	BRASS PLUG IN SOUTHWEST CORNER OF HWY 63 BRIDGE	725.564
63	656+92.182	81.31ft Rt.	RAILROAD SPIKE IN POWER POLE, EAST SIDE OF HWY 63	745.979
64	670+74.187	70.14ft Lt.	BRASS PLUG IN CENTERLINE OF 3'X2' RCB, WEST SIDE OF HWY 63	790.609
69	705+80.341	80.72ft Lt.	CUT SQUARE IN EAST BASE OF AMOCO SIGN, WEST OF HWY 63	808.155
70	712+58.988	31.80ft Rt.	X IN CENTERLINE OF 2' SQ RCB, EAST SIDE OF HWY 63	802.089
71	717+13.925	68.02ft Lt.	RAILROAD SPIKE IN POWER POLE, WEST SIDE OF HWY 63	806.829
72	724+15.685	79.58ft Rt.	RAILROAD SPIKE IN POWER POLE, EAST SIDE OF HWY 63	790.938
73	728+37.525	84.40ft Rt.	BRASS PLUG IN CENTERLINE OF 3'X2' RCB, EAST SIDE OF HWY 63	744.197
74	734+57.389	60.88ft Lt.	X IN CENTERLINE OF 24" RCP, WEST SIDE OF HWY 63	733.335
75	745+95.763	97.42ft Lt.	RAILROAD SPIKE IN TRANSFORMER POLE, WEST SIDE OF HWY 63	694.792
76	755+38.146	18.76ft Lt.	BRASS PLUG IN NORTHWEST CORNER OF HWY 63 BRIDGE OVER VILLAGE CREEK	666.625
77	765+08.715	81.78ft Rt.	RAILROAD SPIKE IN POWER POLE, EAST SIDE OF HWY 63	678.466
79	783+53.301	78.47ft Lt.	RAILROAD SPIKE IN POWER POLE, WEST SIDE HWY 63	760.558
80	790+95.879	116.76ft Lt.	RAILROAD SPIKE IN POWER POLE @ SOUTHWEST CORNER HWY 63 AND PAVED ROAD TO THE WEST	780.812
81	796+86.612	63.96ft Lt.	BRASS PLUG IN CENTERLINE OF 3'X2' RCB, WEST SIDE OF HWY 63	765.301
82	806+55.554	130.01ft Lt.	RAILROAD SPIKE IN POWER POLE, WEST SIDE OF HWY 63	763.410
85	838+80.807	147.42ft Rt.	RAILROAD SPIKE IN POWER POLE @ SOUTHEAST CORNER OF HWY 63 AND EAST-WEST PAVED ROAD	643.969
87	871+90.898	4.63ft Lt.	CUT SQUARE IN SOUTHEAST CORNER OF HWY 63 BRIDGE	647.436
88	883+51.211	39.97ft Lt.	BRASS PLUG @ NORTHWEST CORNER OF HWY 63 BRIDGE OVER RAILROAD TRACKS	669.179
89	898+88.685	89.16ft Lt.	RAILROAD SPIKE IN POWER POLE @ NORTHWEST CORNER OF HWY 63 AND MARY STREET	640.092

GPS Control Monument #G027

FOUND ⅝ I.R.- 96.8'± N HWY STA 280+00, 16.4'± E OF E EDGE OF HWY 63

YC=303771.69 XC=1945115.55 ZC=852.22

STATION=280+82.57
OFFSET=27.33

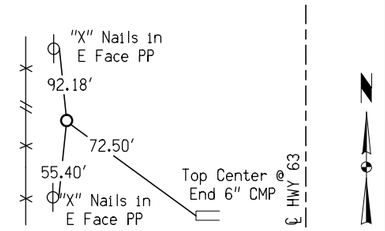


Survey Control Point #200

FOUND ⅝ I.R.- 72.2'± N HWY STA 290+00, 54.1'± W OF W EDGE OF HWY 63

YC=304741.837 XC=1944999.803

STATION=290+55.08
OFFSET=-66.50

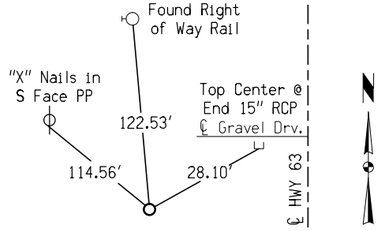


Survey Control Point #201

FOUND ⅝ I.R.- 24.6'± S HWY STA 305+00, 62.3'± W OF W EDGE OF HWY 63

YC=306148.392 XC=1944961.204

STATION=304+62.15
OFFSET=-73.37

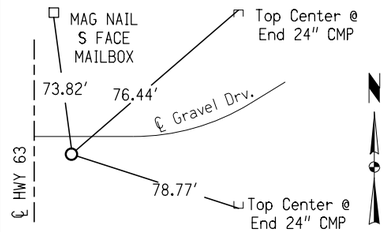


Survey Control Point #202

FOUND ⅝ I.R.- 12'± S HWY STA 315+00, 21'± E OF E EDGE OF HWY 63

YC=307153.136 XC=1945049.436

STATION=314+64.64
OFFSET=37.51

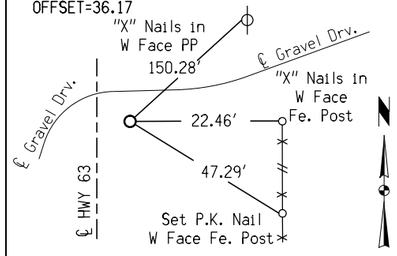


GPS Control Monument #G028

FOUND ⅝ I.R.- 30'± S HWY STA 325+00, 21'± E OF E EDGE OF HWY 63 @ TOE BACK SLOPE

YC=308110.69 XC=1945027.41 ZC=842.85

STATION=324+22.57
OFFSET=36.17

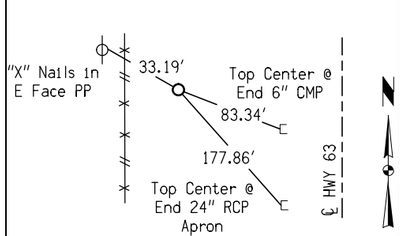


Survey Control Point #203

SET ⅝ Rebar.- 278'± N HWY STA 335+00, 3'± E OF N-S FENCE LINE @ TOP BACK SLOPE

YC=309242.376 XC=1944899.810

STATION=335+56.47
OFFSET=-70.20

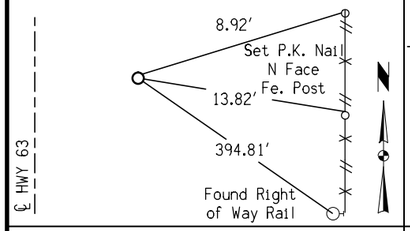


Survey Control Point #204

FOUND ⅝ I.R. - ACROSS FROM HWY STA. 345+00, 66'± E OF E EDGE HWY 63. PREVIOUS SURVEY CONTROL

YC=310166.969 XC=1945025.691

STATION=344+78.54
OFFSET=72.97

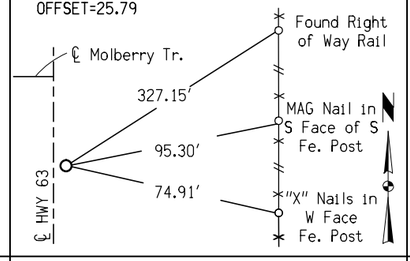


GPS Control Monument #G029

FOUND ⅝ I.R. - ACROSS FROM HWY STA. 355+00, 12'± E OF E EDGE HWY 63

YC=311171.39 XC=1944959.70 ZC=845.31

STATION=354+84.03
OFFSET=25.79

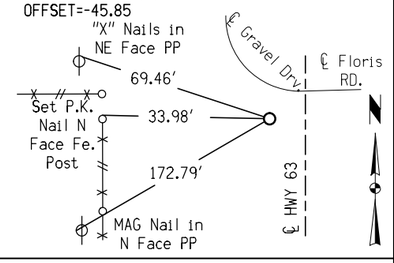


GPS Control Monument #G030

FOUND ⅝ I.R. - 30'± W OF W EDGE HWY 63, 30'± E OF N-S FENCE LINE @ GATE POST

YC=312295.90 XC=1944866.99 ZC=843.10

STATION=366+10.07
OFFSET=-45.85

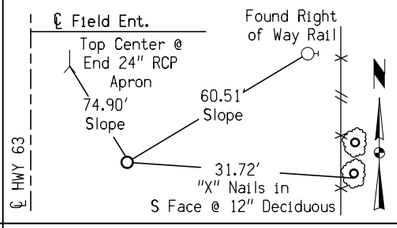


Survey Control Point #205

SET ⅝ I.R.- 60'± N HWY STA 375+00, 24'± W OF N-S FENCE LINE

YC=313217.603 XC=1944964.302

STATION=375+29.79
OFFSET=68.71

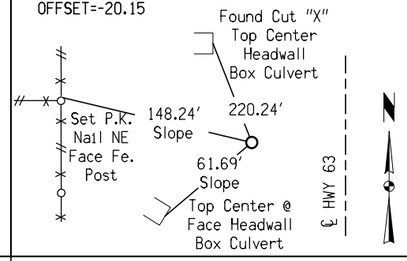


Survey Control Point #206

FOUND ⅝ I.R.- 90'± S HWY STA 385+00, 6'± W OF W EDGE OF HWY 63

YC=314048.94 XC=1944859.86

STATION=383+62.94
OFFSET=-20.15

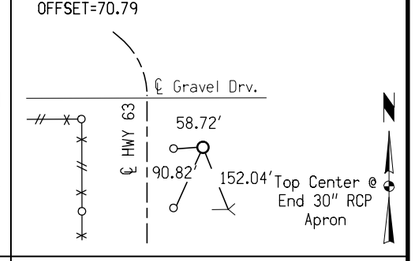


GPS Control Monument #G031

FOUND ⅝ I.R. - 75'± S HWY STA 395+00, 54'± E OF E EDGE HWY 63 MIDWAY OF BACKSLOPE

YC=315135.06 XC=1944759.56 ZC=810.67

STATION=394+46.02
OFFSET=70.79

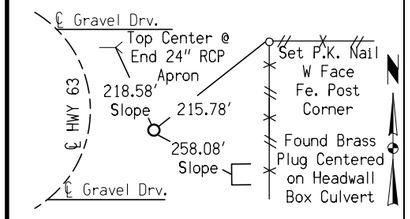


Survey Control Point #207

FOUND ⅝ I.R. - 225'± N HWY STA. 400+00, 45'± W OF N-S FENCE LINE @ TOP BACKSLOPE

YC=315825.31 XC=1944400.13

STATION=402+06.26
OFFSET=81.47

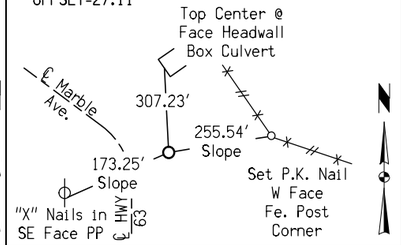


GPS Control Monument #G032

FOUND ⅝ I.R. - 15'± E OF E EDGE HWY 63 @ 411+00±

YC=316436.54 XC=1943748.11 ZC=814.86

STATION=410+87.83
OFFSET=27.11

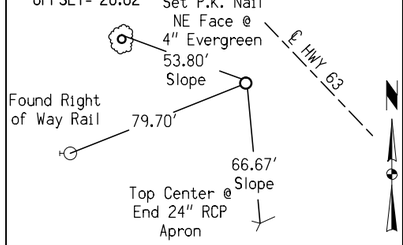


Survey Control Point #208

FOUND ⅝ I.R. - 45'± N HWY STA. 420+00, 6'± W OF W EDGE HWY 63.

YC=317098.83 XC=1942972.84

STATION=421+06.39
OFFSET=-20.02

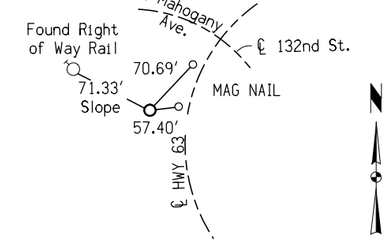


GPS Control Monument #G033

FOUND ⅝ I.R. - @ HWY STA 435+00±, 54'± W OF W EDGE HWY 63

YC=318205.10 XC=1942139.03 ZC=809.75

STATION=434+82.87
OFFSET=-70.11

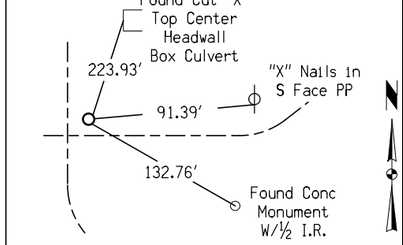


Survey Control Point #209

FOUND ⅝ I.R. - 12'± N ℄ LIME TR. ROAD, 8'± E OF E EDGE HWY 63

YC=319343.00 XC=1942026.50

STATION=446+19.56
OFFSET=19.87

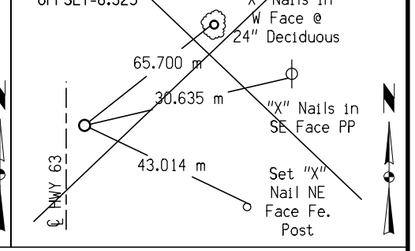


GPS Control Monument #G034

DESTROYED

YC=97599.635 XC=591930.465 ZC=246.996

STATION=138+63.751
OFFSET=8.325

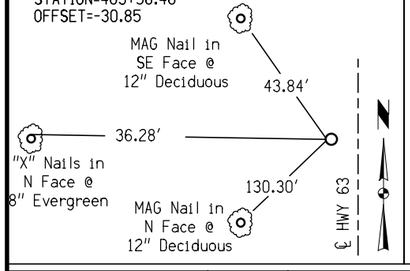


Survey Control Point #210

SET ⅝ I.R. - 90'± S HWY STA. 465+00, 9'± W OF W EDGE HWY 63

YC=321079.31 XC=1941958.24

STATION=463+56.46
OFFSET=-30.85

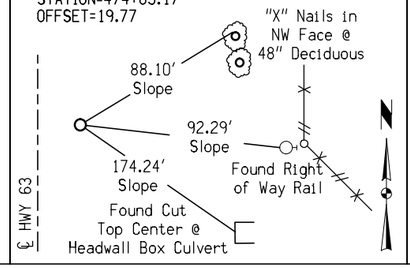


Survey Control Point #211

SET ⅝ I.R. - ACROSS FROM HWY STA. 475+00, 9'± E OF E EDGE HWY 63

YC=322206.47 XC=1941997.47

STATION=474+83.17
OFFSET=19.77

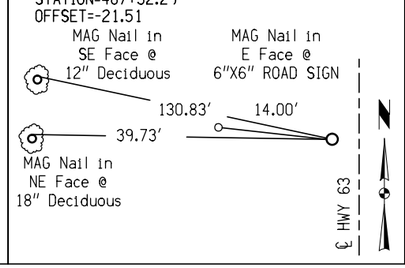


Survey Control Point #212

SET ⅝ I.R. - @ HWY STA. 487+50, 9'± W OF W EDGE HWY 63

YC=323455.11 XC=1941943.57

STATION=487+32.29
OFFSET=-21.51

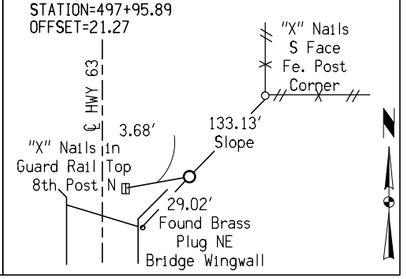


GPS Control Monument #G035

FOUND ⅝ I.R. - NE QUADRANT TOP BANK BRIDGE BERM

YC=324519.085 XC=1941975.601 ZC=693.52

STATION=497+95.89
OFFSET=21.27



DETAILS OF REFERENCE INFORMATION

All References are Plumb Distances unless otherwise noted.

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER G.2

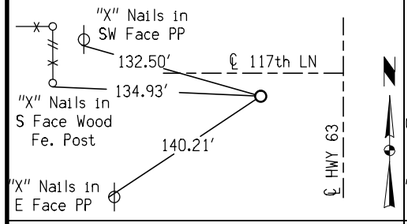
3:30:27 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155G01.sht

Survey Control Point #213

SET ⅝ I.R.- 18'± S ℄ 117th LN, 36'± W OF W EDGE HWY 63

YC=325886.99 XC=1941889.41

STATION=511+64.59
OFFSET=-51.10

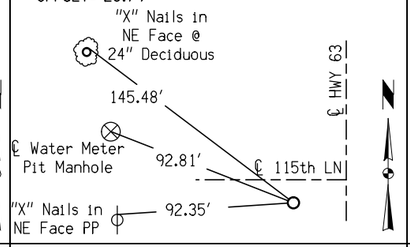


GPS Control Monument #G036

FOUND ⅝ I.R.- 15'± S ℄ 115th LN, 15'± W OF W EDGE OF HWY 63

YC=327285.64 XC=1941897.58 ZC=773.82

STATION=525+63.09
OFFSET=-28.79

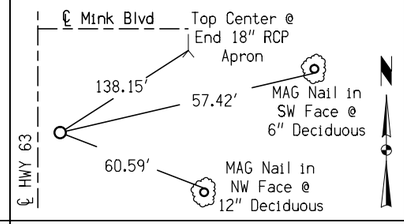


Survey Control Point #214

FOUND ⅝ I.R.- 132'± S ℄ MINK BLVD, 15'± E OF E EDGE HWY 63

YC=328052.96 XC=1941938.63

STATION=533+29.28
OFFSET=26.66

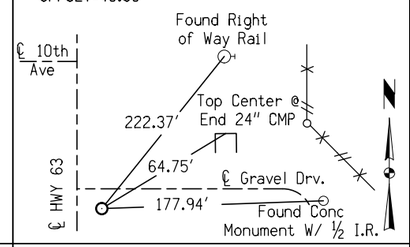


GPS Control Monument #G037

FOUND ⅝ I.R.- 150'± S. ℄ 10th ST., 15'± S OF ℄ DRIVE, 30'± E OF E EDGE HWY 63. GPS #93-31

YC=329532.18 XC=1941861.56 ZC=808.27

STATION=548+09.68
OFFSET=40.30

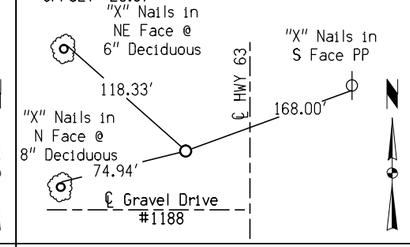


Survey Control Point #215

SET ⅝ I.R.-30'± N ℄ GRAVEL DRIVE #1188, 9'± W OF W EDGE HWY 63

YC=330472.77 XC=1941742.29

STATION=557+55.56
OFFSET=-20.87

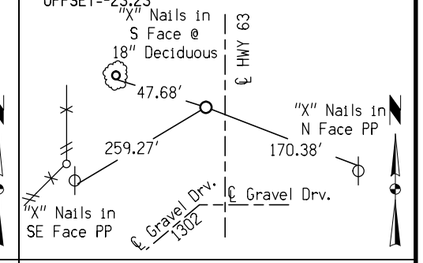


GPS Control Monument #G038

FOUND ⅝ I.R.-400'± N ℄ GRAVEL DRIVE#1302, 9'± W OF W EDGE HWY 63

YC=331343.92 XC=1941738.61 ZC=836.44

STATION=566+25.28
OFFSET=-23.23

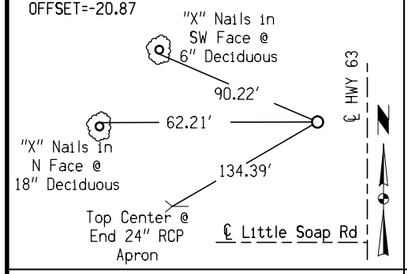


Survey Control Point #216

SET ⅝ I.R.-220'± N ℄ LITTLE SOAP RD., 9'± W OF W EDGE HWY 63

YC=332445.00 XC=1941780.17

STATION=577+27.13
OFFSET=-20.87

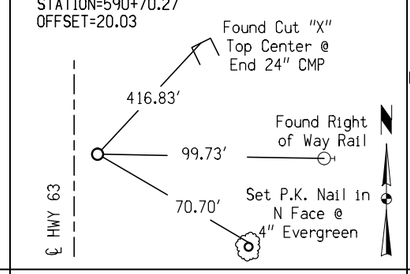


Survey Control Point #217

FOUND ⅝ I.R.-1450'± N ℄ LITTLE SOAP RD., 9'± E OF E EDGE HWY 63

YC=333785.84 XC=1941868.84

STATION=590+70.27
OFFSET=20.03

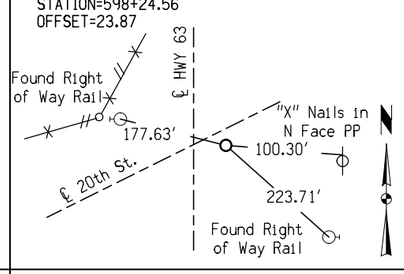


GPS Control Monument #G039

FOUND ⅝ I.R.-75'± S ℄ 20th ST., 9'± E OF E EDGE HWY 63

YC=334541.89 XC=1941862.16 ZC=820.59

STATION=598+24.56
OFFSET=23.87

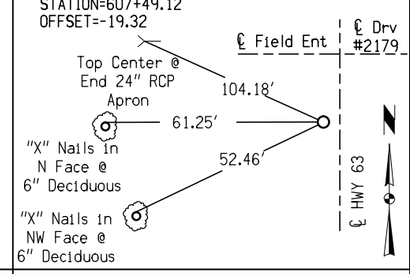


Survey Control Point #218

SET ⅝ I.R.-110'± S ℄ DRIVE #2179, 8'± W OF W EDGE HWY 63

YC=335462.17 XC=1941763.32

STATION=607+49.12
OFFSET=-19.32

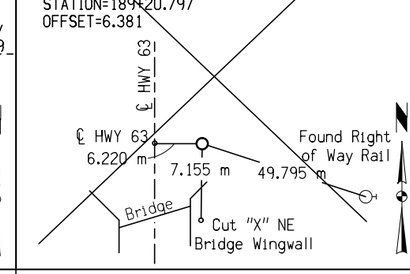


Survey Control Point #219

DESTROYED

YC=102653.507 XC=591838.517

STATION=189+20.797
OFFSET=6.381

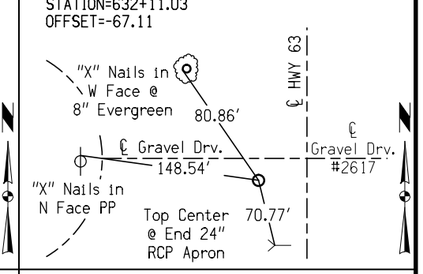


GPS Control Monument #G040

FOUND ⅝ I.R.-12'± S ℄ W DRIVE, 45'± W OF W EDGE HWY 63

YC=337924.87 XC=1941609.65 ZC=784.15

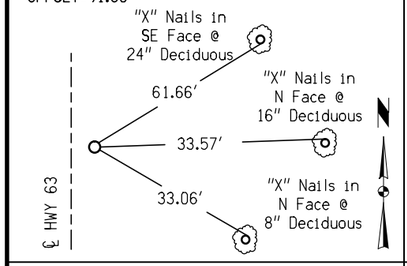
STATION=632+11.03
OFFSET=-67.11



Survey Control Point #220

SET ⅝ I.R.-520'± S ℄ DRIVE #2838., 80'± E OF E EDGE HWY 63

YC=338487.42 XC=1941796.15
STATION=637+81.76
OFFSET=91.80

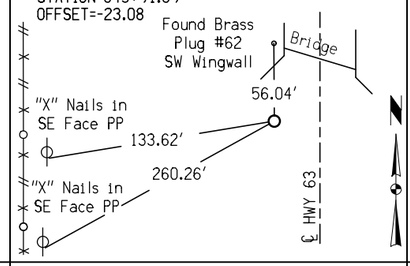


Survey Control Point #221

SET ⅝ I.R.-290'± N ℄ DRIVE #2838, 12'± W OF W EDGE HWY 63

YC=339301.98 XC=1941720.88

STATION=645+91.69
OFFSET=-23.08

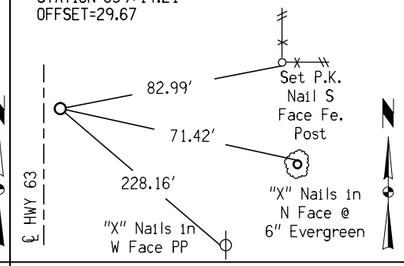


Survey Control Point #222

SET ⅝ I.R.- @ HWY STA 111+95, 9'± E OF E EDGE OF HWY 63

YC=340620.37 XC=1941838.02

STATION=659+14.21
OFFSET=29.67

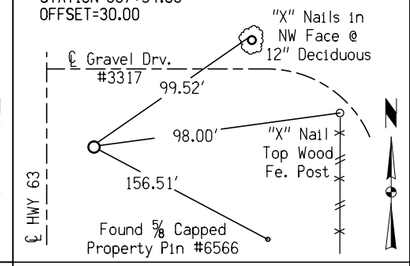


Survey Control Point #223

FOUND ⅝ I.R.- 57'± S ℄ DRIVE #3317, 8'± E. OF E EDGE OF HWY 63

YC=341462.45 XC=1941848.35

STATION=667+54.36
OFFSET=30.00

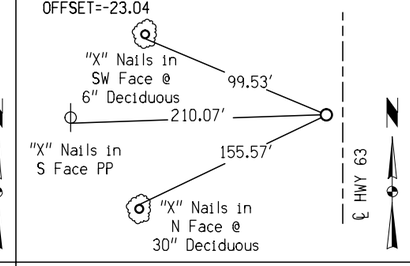


GPS Control Monument #G041

FOUND ⅝ I.R.-525'± S ℄ DRIVE #3390, 9'± W OF W EDGE HWY 63

YC=342126.86 XC=1941778.71 ZC=814.64

STATION=674+20.30
OFFSET=-23.04

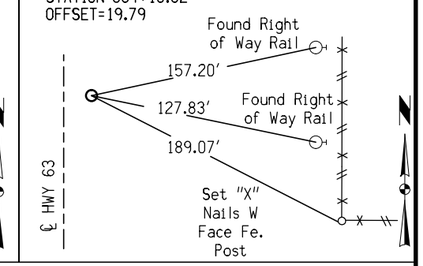


Survey Control Point #224

SET ⅝ I.R.-420'± N ℄ DRIVE #3529, 8'± E OF E EDGE HWY 63

YC=343126.15 XC=1941796.60

STATION=684+18.82
OFFSET=19.79

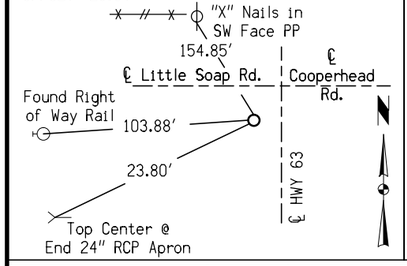


GPS Control Monument #G042

FOUND ⅝ I.R.- 60'± S ℄ LITTLE SOAP RD., 12'± W OF W EDGE OF HWY 63

YC=344150.35 XC=1941746.27 ZC=810.92

STATION=694+42.08
OFFSET=-25.14

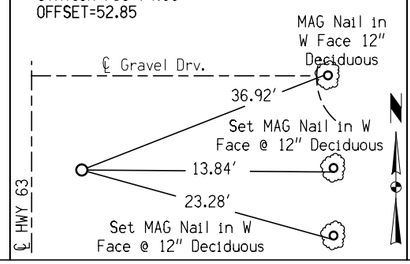


Survey Control Point #225

SET ⅝ I.R.-70'± S ℄ DRIVE, 36'± E OF E EDGE HWY 63

YC=345059.15 XC=1941987.97

STATION=703+79.88
OFFSET=52.85

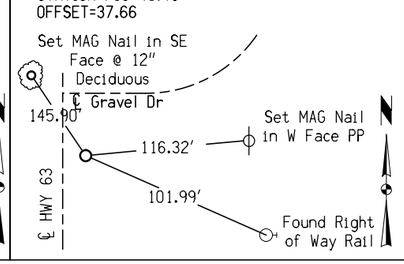


GPS Control Monument #G043

FOUND ⅝ I.R.- 25'± S ℄ DRIVE, 24'± E OF E EDGE OF HWY 63 GPS #93-32

YC=346049.15 XC=1942191.34 ZC=803.74

STATION=713+90.43
OFFSET=37.66

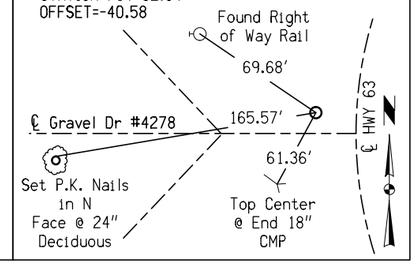


GPS Control Monument #G044

FOUND ⅝ I.R.- 18'± N ℄ DRIVE W #4270, 4278, 4172, 18'± W OF W EDGE OF HWY 63

YC=346595.81 XC=1942234.73 ZC=799.02

STATION=719+32.39
OFFSET=-40.58



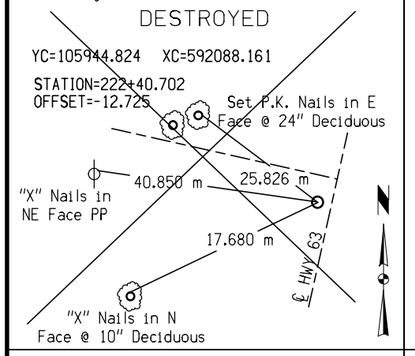
DETAILS OF REFERENCE INFORMATION

All References are Plumb Distances unless otherwise noted.

Survey Control Point #226
DESTROYED

YC=105944.824 XC=592088.161

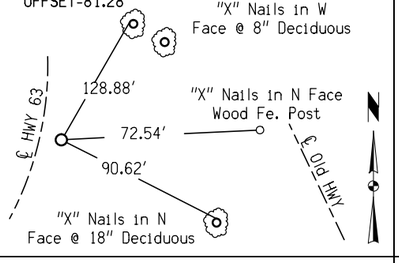
STATION=222+40.702
OFFSET=-12.725



GPS Control Monument #G045
FOUND ⅝ I.R.-260'± S ℄ 48th St., 72'± E OF E EDGE HWY 63

YC=348487.82 XC=1942964.45 ZC=731.08

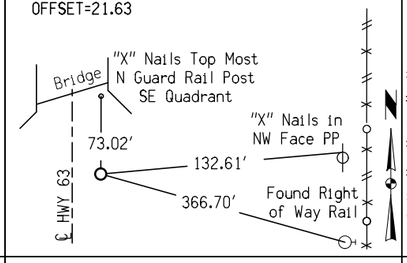
STATION=739+53.76
OFFSET=81.28



GPS Control Monument #G046
FOUND ⅝ I.R.-525.90'± N ℄ 48th St., 9'± E OF E EDGE HWY 63

YC=349864.39 XC=1943033.98 ZC=669.81

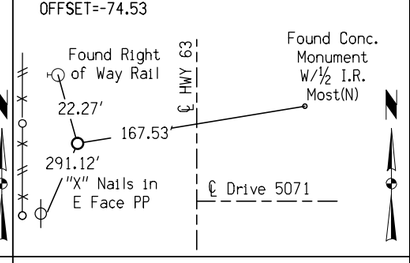
STATION=753+19.45
OFFSET=21.63



Survey Control Point #227
FOUND CONC. MONUMENT-164'± N ℄ DRIVE #5083, 5089, 60'± W OF W EDGE HWY 63

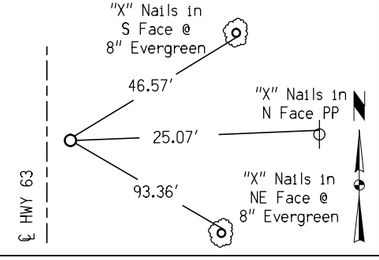
YC=350941.754 XC=1942921.216

STATION=763.98.42
OFFSET=-74.53



Survey Control Point #228
SET ⅝ I.R.-90'± N MILE MARKER 31, 36'± E OF E EDGE HWY 63

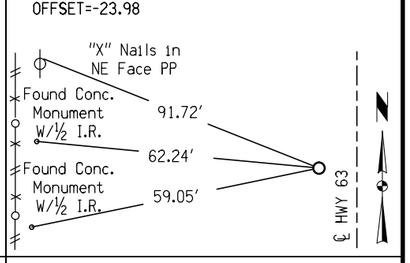
YC=351937.41 XC=1943022.05



GPS Control Monument #G047
FOUND ⅝ I.R.-650'± N MILE MARKER 31, 12'± W OF W EDGE HWY 63

YC=352822.01 XC=1942907.87 ZC=759.91

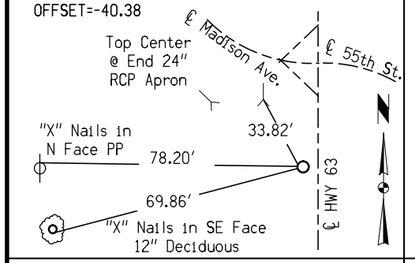
STATION=782+79.66
OFFSET=-23.98



Survey Control Point #229
SET ⅝ I.R.-24'± S ℄ MADISON AVE., 43'± W OF ℄ HWY 63

YC=353625.71 XC=1942871.80

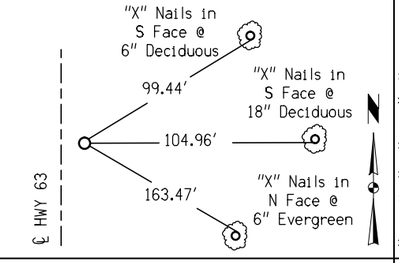
STATION=790+82.79
OFFSET=-40.38



GPS Control Monument #G048
FOUND ⅝ I.R.-260'± N ℄ 55th St., 9'± E OF E EDGE HWY 63

YC=354027.46 XC=1942945.74 ZC=777.42

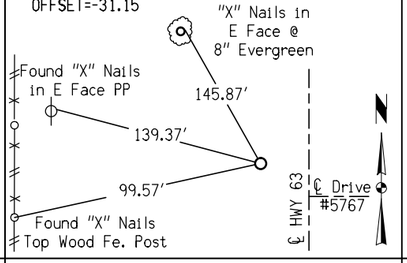
STATION=794+84.60
OFFSET=32.19



GPS Control Monument #G049
FOUND ⅝ I.R.-420'± N ℄ DRIVE #5767, 9'± W OF W EDGE HWY 63

YC=354927.60 XC=1942886.24 ZC=774.40

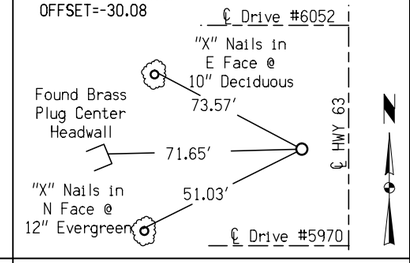
STATION=803+84.48
OFFSET=-31.15



Survey Control Point #230
SET ⅝ I.R.-193'± N ℄ DRIVE #5970, 9'± W OF W EDGE HWY 63

YC=355728.65 XC=1942890.72

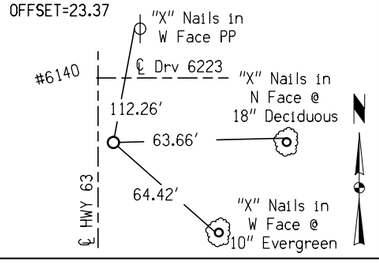
STATION=811+85.54
OFFSET=-30.08



Survey Control Point #231
SET ⅝ I.R.-55'± S ℄ DRIVE #6223, 11'± E OF E EDGE HWY 63

YC=356827.98 XC=1942948.87

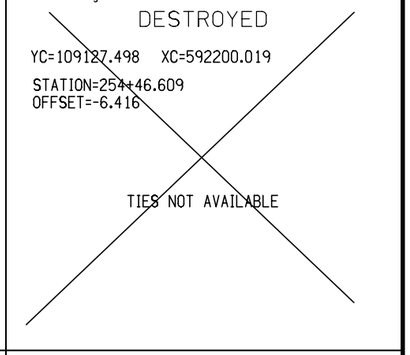
STATION=822+85.11
OFFSET=23.37



Survey Control Point #232
DESTROYED

YC=109127.498 XC=592200.019

STATION=254+46.609
OFFSET=-6.416

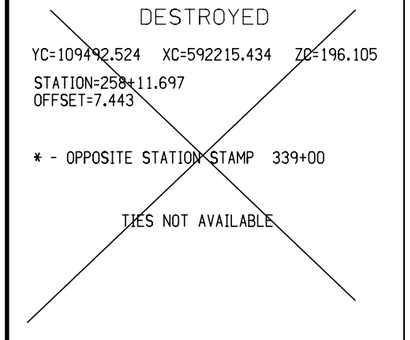


GPS Control Monument #G050
DESTROYED

YC=109492.524 XC=592215.434 ZC=196.105

STATION=258+11.697
OFFSET=7.443

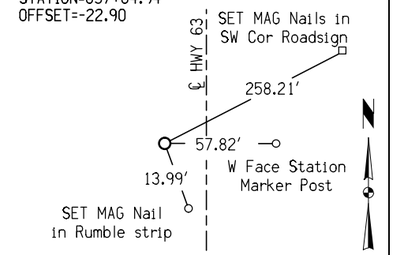
* - OPPOSITE STATION STAMP 339+00



Survey Control Point #233
SET ⅝ I.R.-9'± W OF W EDGE HWY 63

YC=360328.42 XC=1942966.51

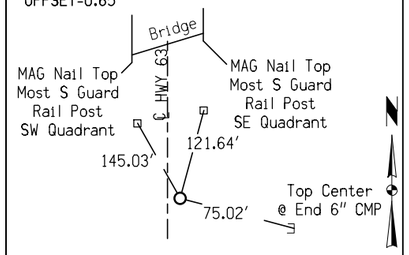
STATION=857+84.94
OFFSET=-22.90



Survey Control Point #234
SET ⅝ I.R.-ADJACENT FROM SPEED ZONE SIGN, 6'± W OF SIGN

YC=361458.75 XC=1943139.42

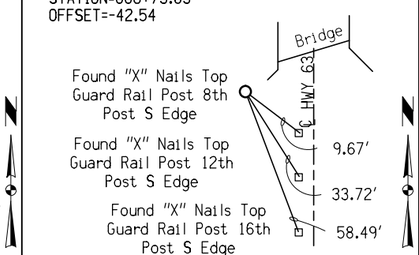
STATION=869+27.58
OFFSET=0.65



GPS Control Monument #G051
SET ⅝ I.R. FOUND FENO MONUMENT 120'± N OF SPEED LIMIT SIGN, 6'± W OF W EDGE HWY 63

YC=362602.30 XC=1943226.53 ZC=669.32

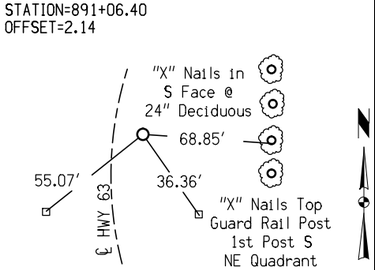
STATION=880+73.63
OFFSET=-42.54



Survey Control Point #235
SET ⅝ I.R.-700'± S ℄ RABBIT RUN, 24'± N OF SIGN-SOUTH 63, 11'± E OF E EDGE HWY 63

YC=363619.52 XC=1943226.76

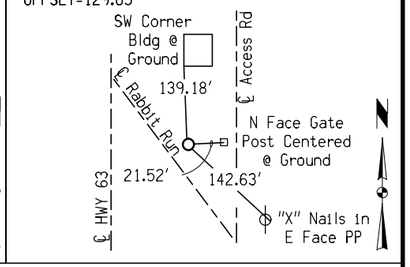
STATION=891+06.40
OFFSET=2.14



GPS Control Monument #G052
FOUND ⅝ I.R.-226'± SE ON CURVE FROM ℄ HWY 63, 5'± E OF E EDGE RABBIT ROAD

YC=364204.682 XC=1943174.713 ZC=642.97

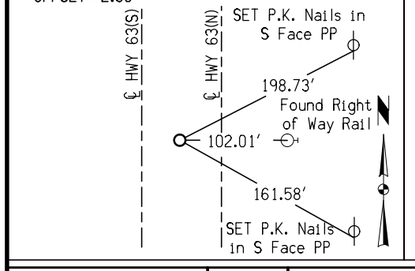
STATION=896+80.00
OFFSET=129.05



Survey Control Point #236
SET ⅝ I.R.-60'± N OF SIGN-STOP AHEAD, CENTERED IN MEDIAN, 6'± W OF E MEDIAN BACK CURB

YC=364957.03 XC=1942828.41

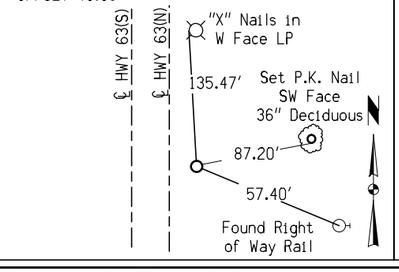
STATION=905+02.76
OFFSET=-2.30



GPS Control Monument #G053
FOUND ⅝ I.R.-62'± N OF SIGN- HWY 63, 11'± E OF E EDGE HWY 63

YC=365853.996 XC=1942764.218 ZC=638.946

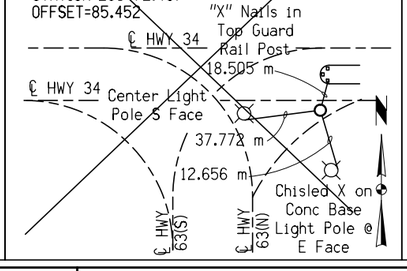
STATION=914+00.96
OFFSET=43.35



Survey Control Point #237
DESTROYED

YC=111734.772 XC=592201.668

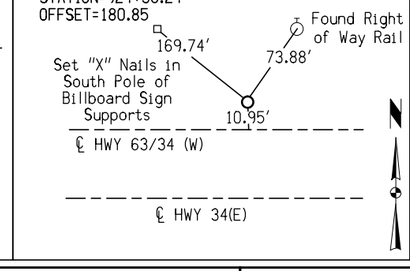
STATION=280+72.437
OFFSET=85.452



Survey Control Point #238
SET ⅝ I.R. 8'± N OF HWY 63/34 (W) STA. 1707 + 06

YC=366925.57 XC=1942735.78

STATION=924+36.24
OFFSET=180.85



DETAILS OF REFERENCE INFORMATION

All References are Plumb Distances unless otherwise noted.

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER G.4

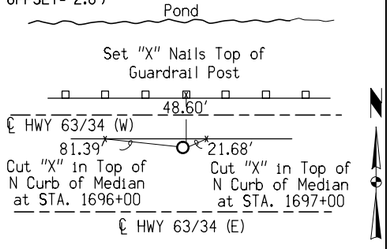
3:30:29 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155G01.sht

Survey Control Point #239

SET ⅝ I.R. 5'± N OF N CURB (HWY 63/34 EASTBOUND)
STA. 696480

YC=367697.18 XC=1942060.97

STATION=934+11.15
OFFSET=-2.89

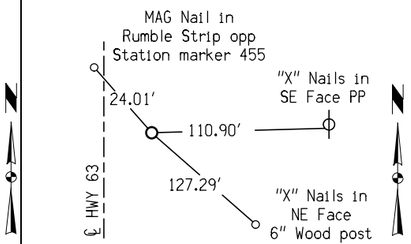


Survey Control Point #250

SET ⅝ I.R. 12'± WEST OF HWY 63

YC=320192.87 XC=1942025.96

STATION=454+69.38
OFFSET=27.91

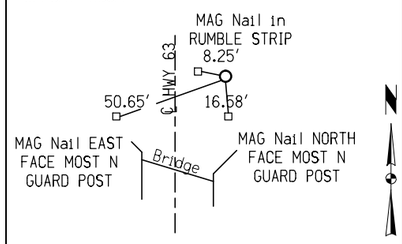


Survey Control Point #251

SET ⅝ I.R. 12'± WEST OF HWY 63

YC=336888.61 XC=1941718.11

STATION=621+75.70
OFFSET=21.52

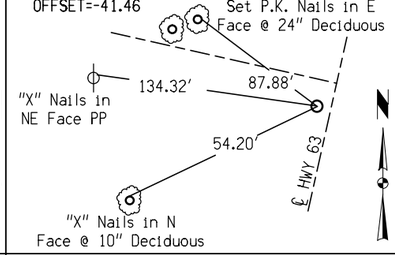


Survey Control Point #252

SET ⅝ I.R.-25'± S ℄ 48th St., 18'± W OF W EDGE HWY 63

YC=347582.01 XC=1942541.15

STATION=729+62.56
OFFSET=-41.46

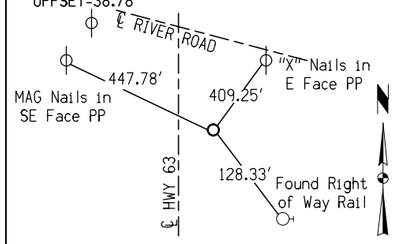


Survey Control Point #253

SET ⅝ I.R.-25'± E ℄ HWY 63

YC=358027.46 XC=1942969.38

STATION=834+84.67
OFFSET=38.78



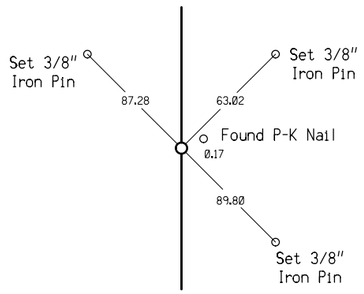
DETAILS OF REFERENCE INFORMATION

All References are Plumb Distances unless otherwise noted.

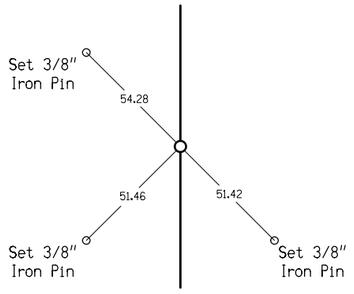
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER G.5

3:30:31 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155G01.sht

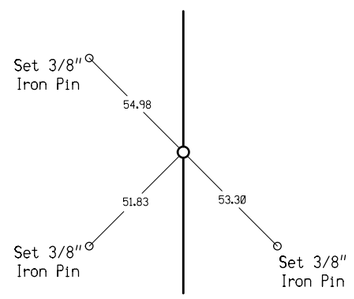
P.O.T. STA. 278+87.08
Point not Set
XC=1945092.64, YC=303575.64



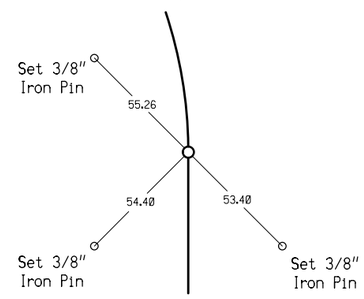
P.O.T. STA. 291+99.42
Set Mag Nail
XC=1945063.04, YC=304887.64



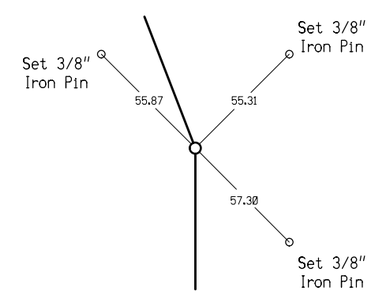
P.O.T. STA. 305+11.75
Set Mag Nail
XC=1945033.43, YC=306199.64



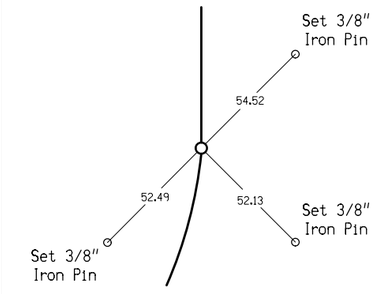
PC STA. 318+83.88
Set Mag Nail
XC=1945002.48, YC=307571.42



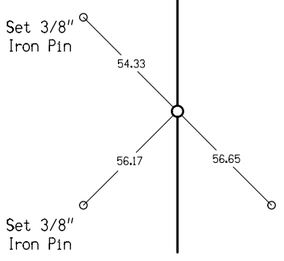
PI STA. 321+87.93
Set Mag Nail
XC=1944995.63, YC=307875.40



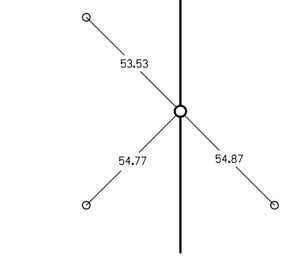
PT STA. 324+91.99
Set Mag Nail
XC=1944989.93, YC=308179.40



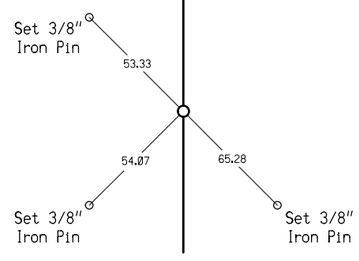
P.O.T. STA. 337+92.58
Set Mag Nail
XC=1944965.58, YC=309479.77



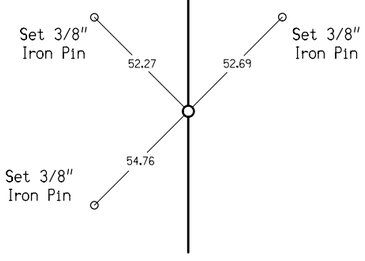
P.O.T. STA. 351+04.92
Set Mag Nail
XC=1944941.01, YC=310791.87



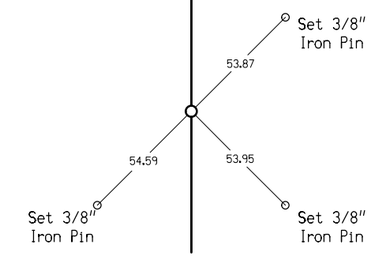
P.O.T. STA. 367+45.31
Set Mag Nail
XC=1944910.29, YC=312432.00



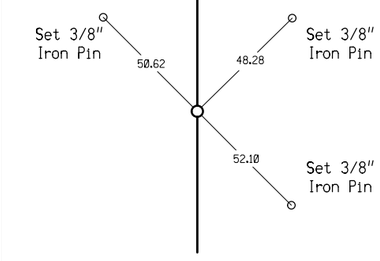
TS STA. 383+65.37
Set Mag Nail
XC=1944879.96 YC=314051.76



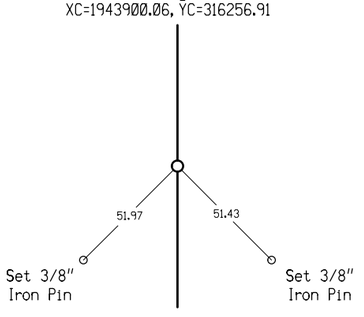
SC STA. 385+65.37
Set Mag Nail
XC=1944873.89 YC=314251.65



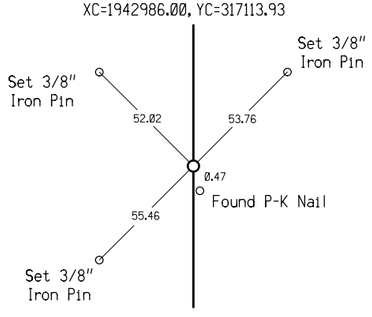
CS STA. 406+54.13
Set Mag Nail
XC=1944044.35 YC=316118.43



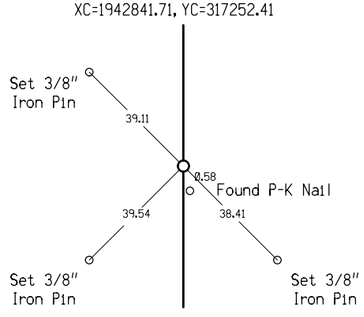
ST STA. 408+54.12
Set Mag Nail
XC=1943900.06, YC=316256.91



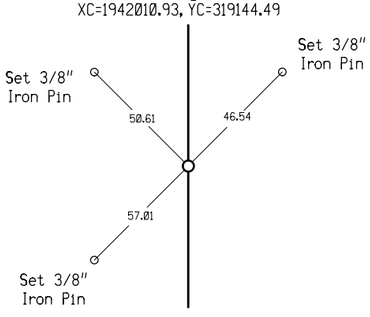
TS STA. 421+07.11
Point not Set
XC=1942986.00, YC=317113.93



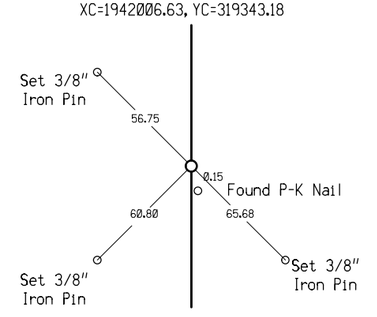
SC STA. 423+07.11
Point not Set
XC=1942841.71, YC=317252.41



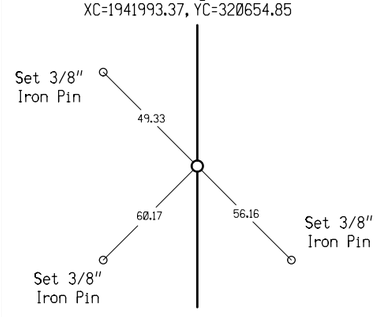
CS STA. 444+21.18
Set Mag Nail
XC=1942010.93, YC=319144.49



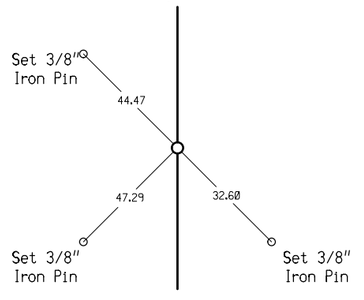
ST STA. 446+19.93
Point not Set
XC=1942006.63, YC=319343.18



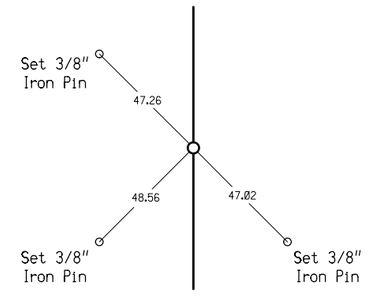
P.O.T. STA. 459+31.67
Set Mag Nail
XC=1941993.37, YC=320654.85



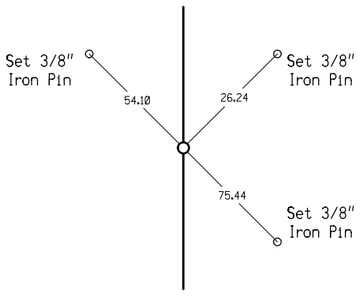
P.O.T. STA. 472+44.00
Set Mag Nail
XC=1941980.11, YC=321967.11



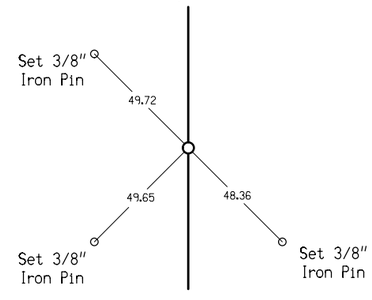
P.O.T. STA. 485+56.33
Set Mag Nail
XC=1941966.86, YC=323279.38



P.O.T. STA. 498+68.67
Set Mag Nail
XC=1941953.60, YC=324591.64



P.O.T. STA. 511+81.00
Set Mag Nail
XC=1941940.34, YC=325903.91



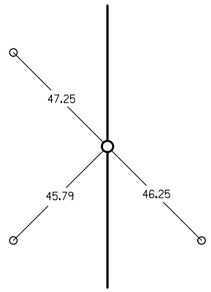
DETAILS OF REFERENCE INFORMATION

All References are Plumb Distances unless otherwise noted.

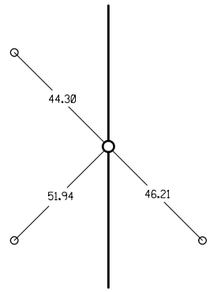
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER G.6

3:30:32 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155G01.sht

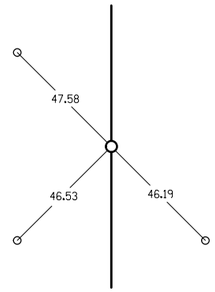
PC STA. 528+51.18
Set Mag Nail
XC=1941923.46, YC=327574.00



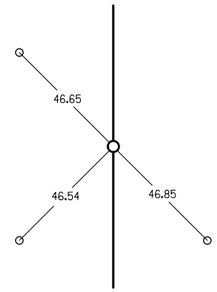
PI STA. 533+29.71
Set Mag Nail
XC=1941918.63, YC=328052.52



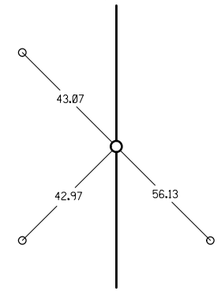
PT STA. 538+08.00
Set Mag Nail
XC=1941887.18, YC=328530.02



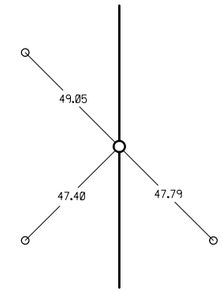
PC STA. 554+54.09
Set Mag Nail
XC=1941779.00, YC=330172.55



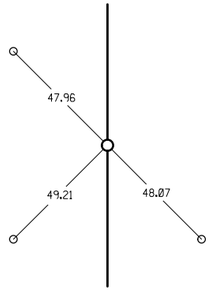
PI STA. 560+35.36
Set Mag Nail
XC=1941740.80, YC=330752.56



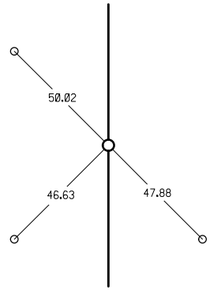
PT STA. 566+15.63
Set Mag Nail
XC=1941761.48, YC=331333.46



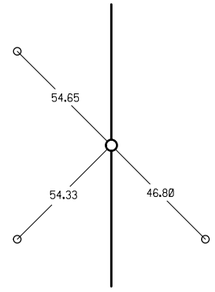
P.O.T. STA. 577+42.61
Set Mag Nail
XC=1941801.58, YC=332459.78



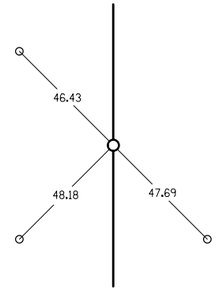
PC STA. 590+68.78
Set Mag Nail
XC=1941848.77, YC=333785.06



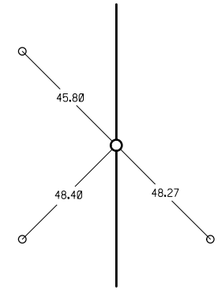
PI STA. 594+35.38
Set Mag Nail
XC=1941861.82, YC=334151.42



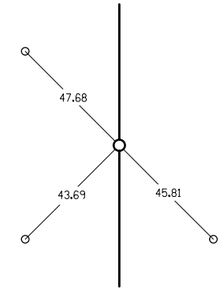
PT STA. 598+01.41
Set Mag Nail
XC=1941839.72, YC=334517.35



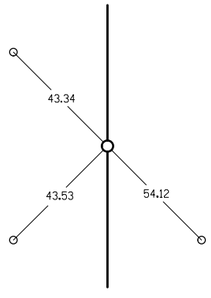
P.O.T. STA. 610+23.50
Set Mag Nail
XC=1941766.07, YC=335737.22



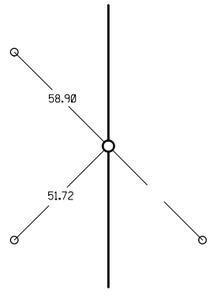
PC STA. 624+05.31
Set Mag Nail
XC=1941682.79, YC=337116.51



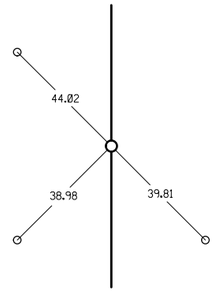
PI STA. 628+22.33
Set Mag Nail
XC=1941657.66, YC=337532.77



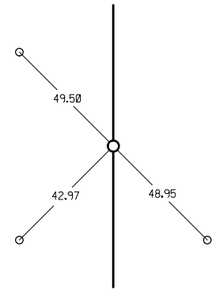
PT STA. 632+38.52
Set Mag Nail
XC=1941677.98, YC=337949.30



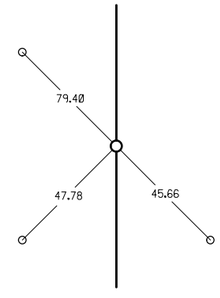
P.O.T. STA. 649+60.50
Set Mag Nail
XC=1941761.91, YC=339669.23



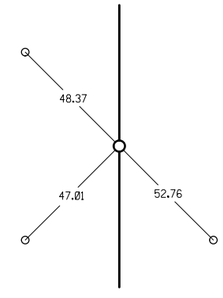
PC STA. 659+11.68
Set Mag Nail
XC=1941808.26, YC=340619.28



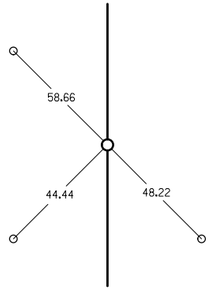
PI STA. 663+34.32
Set Mag Nail
XC=1941828.86, YC=341041.42



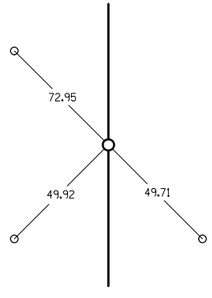
PT STA. 667+56.58
Set Mag Nail
XC=1941818.31, YC=341463.93



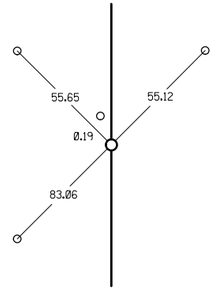
P.O.T. STA. 679+13.25
Set Mag Nail
XC=1941789.43, YC=342620.24



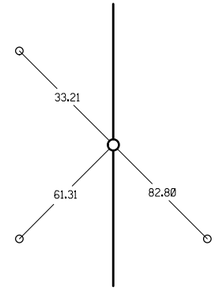
TS STA. 689+77.76
Set Mag Nail
XC=1941762.85, YC=343684.42



SC STA. 691+27.76
Point not Set
XC=1941760.09, YC=343834.39



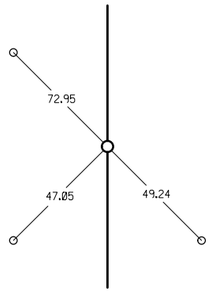
PI STA. 695+18.37
Set Mag Nail
XC=1941749.35, YC=344224.86



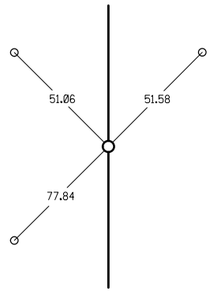
DETAILS OF REFERENCE INFORMATION

All References are Plumb Distances unless otherwise noted.

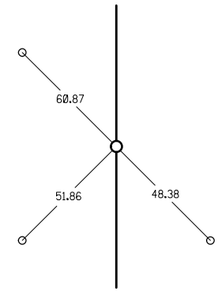
CS STA. 699+07.24
Set Mag Nail
XC=1941835.21, YC=344608.88



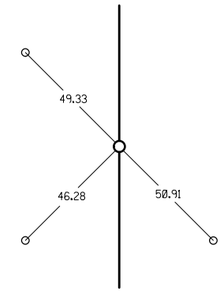
ST STA. 700+51.76
Set Mag Nail
XC=1941865.52, YC=344750.18



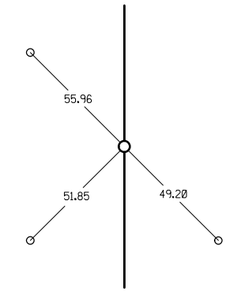
PC STA. 717+61.06
Set Mag Nail
XC=1942234.59, YC=346419.17



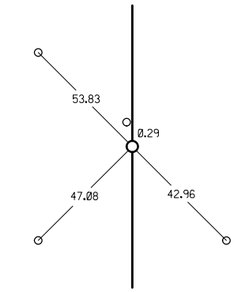
PI STA. 720+39.42
Set Mag Nail
XC=1942294.69, YC=346690.96



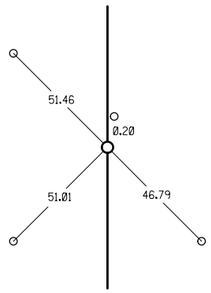
PT STA. 723+17.34
Set Mag Nail
XC=1942380.85, YC=346955.65



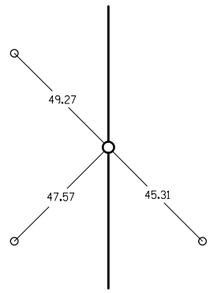
TS STA. 738+26.10
Point not Set
XC=1942847.88, YC=348390.30



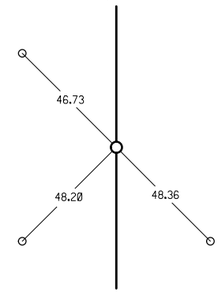
SC STA. 740+26.10
Point not Set
XC=1942907.57, YC=348581.18



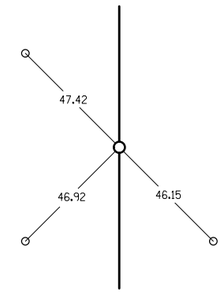
CS STA. 747+70.76
Set Mag Nail
XC=1943018.43, YC=349315.43



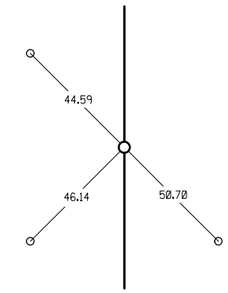
ST STA. 749+72.97
Set Mag Nail
XC=1943017.69, YC=349517.62



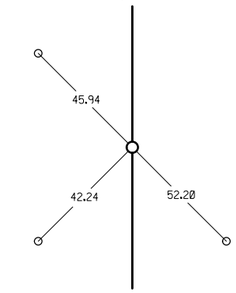
P.I. STA. 768+29.65
Set Mag Nail
XC=1942989.10, YC=351374.08



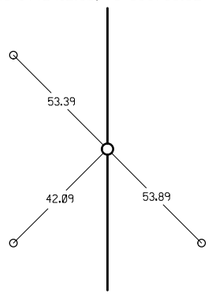
PC STA. 784+38.38
Set Mag Nail
XC=1942925.56, YC=352981.55



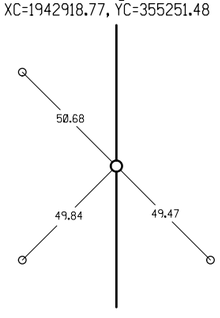
PI STA. 788+14.66
Set Mag Nail
XC=1942910.69, YC=353357.54



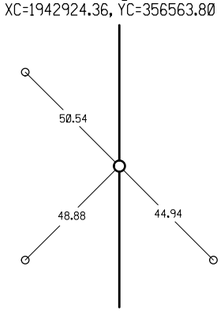
PT STA. 791+90.82
Set Mag Nail
XC=1942912.30, YC=353733.82



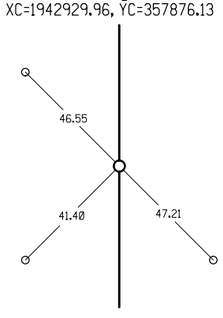
P.O.T. STA. 807+08.50
Set Mag Nail
XC=1942918.77, YC=355251.48



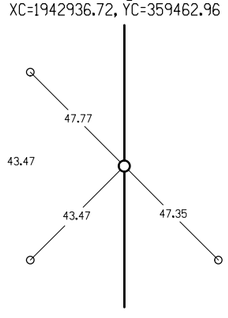
P.O.T. STA. 820+20.83
Set Mag Nail
XC=1942924.36, YC=356563.80



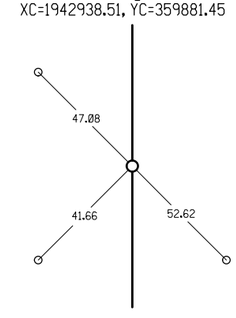
P.O.T. STA. 833+33.17
Set Mag Nail
XC=1942929.96, YC=357876.13



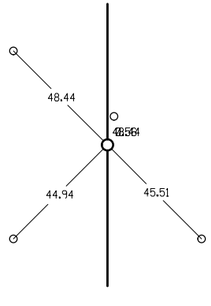
PC STA. 849+20.02
Set Mag Nail
XC=1942936.72, YC=359462.96



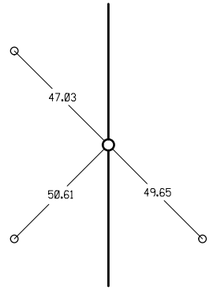
PI STA. 853+38.51
Set Mag Nail
XC=1942938.51, YC=359881.45



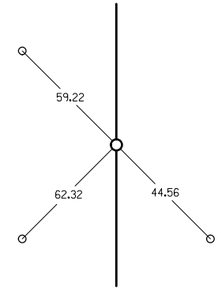
PT STA. 857+56.17
Point not Set
XC=1942985.99, YC=360297.25



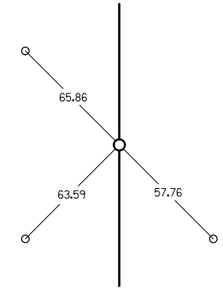
P.O.T. STA. 860+69.70(BK)
Set Mag Nail
XC=1943021.56, YC=360608.75



P.O.T. STA. 860+69.70(AH)
Set 5/8" Iron Rod
XC=1943041.44, YC=360606.48



P.O.T. STA. 869+42.08
Set 5/8" Iron Rod
XC=1943140.42, YC=361473.23



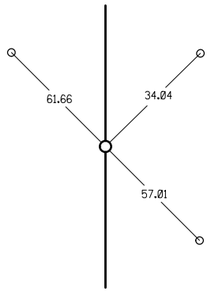
DETAILS OF REFERENCE INFORMATION

All References are Plumb Distances unless otherwise noted.

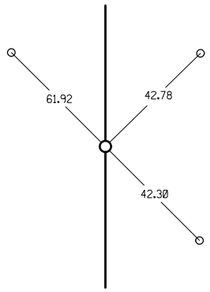
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER G.8

3:30:34 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155G01.sht

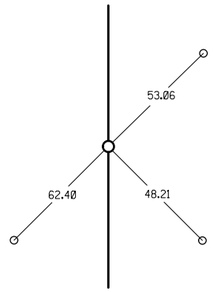
PC STA. 883+50.05
Set 5/8" Iron Rod
XC=1943300.17, YC=362872.10



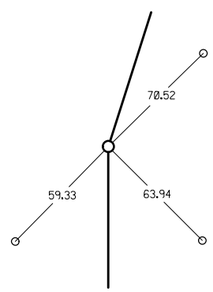
PT STA. 890+90.80
Set 5/8" Iron Rod
XC=1943229.42, YC=363604.00



PC STA. 901+01.05
Set Survey Marker Nail
XC=1942924.66, YC=364567.19



PI STA. 903+70.90
Set 5/8" Iron Rod
XC=1942843.25, YC=364824.48



DETAILS OF REFERENCE INFORMATION

All References are Plumb Distances unless otherwise noted.

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)
SURCL	EX. US 63 ℄ from Davis Co. Line to 860+69.70																		
100		278+87.08	303,575.64	1,945,092.64															
SURCL-1								318+83.88	307,571.42	1,945,002.48	321+87.93	307,875.40	1,944,995.63	324+91.99	308,179.40	1,944,989.93			
SURCL-2					383+65.37	314,051.75	1,944,879.96	385+65.37	314,251.65	1,944,873.89	396+75.00	315,361.15	1,944,855.43	406+54.13	316,118.44	1,944,044.35	408+54.12	316,256.91	1,943,900.07
SURCL-3					421+07.11	317,113.93	1,942,986.00	423+07.11	317,252.41	1,942,841.71	434+31.31	318,019.66	1,942,020.00	444+21.18	319,144.49	1,942,010.93	446+19.93	319,343.18	1,942,006.63
SURCL-4								528+51.18	327,574.00	1,941,923.46	533+29.71	328,052.52	1,941,918.63	538+08.00	328,530.02	1,941,887.18			
SURCL-5								554+54.09	330,172.55	1,941,779.00	560+35.36	330,752.56	1,941,740.80	566+15.63	331,333.46	1,941,761.48			
SURCL-6								590+68.78	333,785.06	1,941,848.77	594+35.38	334,151.42	1,941,861.82	598+01.41	334,517.35	1,941,839.72			
SURCL-7								624+05.31	337,116.51	1,941,682.79	628+22.33	337,532.77	1,941,657.66	632+38.52	337,949.30	1,941,677.98			
SURCL-8								659+11.68	340,619.28	1,941,808.26	663+34.32	341,041.42	1,941,828.86	667+56.58	341,463.93	1,941,818.31			
SURCL-9					689+77.76	343,684.42	1,941,762.85	691+27.76	343,834.39	1,941,760.09	695+18.37	344,224.86	1,941,749.35	699+07.24	344,608.88	1,941,835.21	700+51.76	344,750.18	1,941,865.52
SURCL-10								717+61.06	346,419.17	1,942,234.59	720+39.42	346,690.96	1,942,294.69	723+17.34	346,955.65	1,942,380.85			
SURCL-11					738+26.10	348,390.30	1,942,847.88	740+26.10	348,581.18	1,942,907.57	744+03.46	348,939.30	1,943,026.60	747+70.76	349,315.42	1,943,018.43	749+72.97	349,517.62	1,943,017.69
112		768+29.65	351,374.08	1,942,989.10															
SURCL-12								784+38.38	352,981.55	1,942,925.56	788+14.66	353,357.54	1,942,910.69	791+90.82	353,733.82	1,942,912.30			
SURCL-13								849+20.02	359,462.96	1,942,936.72	853+38.51	359,881.45	1,942,938.51	857+56.17	360,297.25	1,942,985.99			
115		860+69.70	360,608.75	1,943,021.56															
SURCL2	EX. US 63 ℄ from	860+69.70 to EOP																	
116		860+69.70	360,606.48	1,943,041.44															
SURCL2-1								883+50.05	362,872.10	1,943,300.17	887+25.97	363,245.60	1,943,342.82	890+90.80	363,604.00	1,943,229.42			
SURCL2-2								901+01.05	364,567.19	1,942,924.66	903+70.90	364,824.47	1,942,843.25	906+39.17	365,092.43	1,942,811.32			
SURCL2-3					919+71.24	366,415.14	1,942,653.69	921+71.24	366,613.26	1,942,626.56	926+15.97	367,055.35	1,942,577.39	930+32.01	367,400.62	1,942,297.10	932+32.17	367,559.15	1,942,174.93
120		946+72.53	368,684.51	1,941,275.94															
SURCL2-1												24° 04′ 21.23″	LT 375.92′	740.75′	1,763.08′	39.63′			
SURCL2-2												10° 45′ 41.70″	RT 269.85′	538.12′	2,864.99′	12.68′			
SURCL2-3		31° 49′ 23.93″ LT		3° 00′ 07.87″	-200.00′	TS	66.68′	199.95′	3.49′	133.46′	66.74′	25° 49′ 16.84″	LT 437.82′	860.77′	1,910.00′	49.54′			
ML063	Proposed US 63 ℄																		
ML1		840+10.34	358,642.95	1,942,933.23															
MLC1								844+65.56	359,098.17	1,942,935.17	849+97.15	359,629.75	1,942,937.44	855+27.56	360,157.54	1,943,000.91			
20012								882+75.68	362,885.99	1,943,329.07	886+03.62	363,211.59	1,943,368.24	889+21.40	363,523.82	1,943,267.95			
20013								901+64.56	364,707.43	1,942,887.79	903+23.59	364,858.84	1,942,839.16	904+81.64	365,016.75	1,942,820.34			
20014								914+19.14	365,947.66	1,942,709.40	915+64.13	366,091.64	1,942,692.24	917+07.12	366,234.56	1,942,716.68			
20015		918+44.91	366,370.38	1,942,739.91															
ML063SB	Inside SBL EOP ℄																		
SB1		1841+00.00	358,642.95	1,942,933.23															
SBC1								1846+57.96	359,200.91	1,942,935.61	1851+91.00	359,733.94	1,942,937.88	1857+22.85	360,263.16	1,943,001.53			
20022								1883+66.03	362,887.43	1,943,317.16	1886+91.34	363,210.42	1,943,356.01	1890+06.58	363,520.15	1,943,256.53			
20023								1902+31.42	364,686.31	1,942,881.97	1903+91.61	364,838.82	1,942,832.98	1905+50.80	364,997.88	1,942,814.03			
20024								1915+06.81	365,947.17	1,942,700.90	1916+52.96	366,092.29	1,942,683.60	1917+97.09	366,236.35	1,942,708.24			
20025		1919+34.53	366,371.83	1,942,731.40															
ML063NB	Inside NBL EOP ℄																		
NB1		2841+00.00	358,642.95	1,942,933.23															
NBC1								2844+52.48	358,995.43	1,942,934.73	2849+82.62	359,525.57	1,942,936.99	2855+11.59	360,051.92	1,943,000.30			
20032								2883+64.65	362,884.56	1,943,340.99	2886+95.21	363,212.76	1,943,380.46	2890+15.53	363,527.49	1,943,279.38			
20033								2902+77.03	364,728.55	1,942,893.61	2904+34.90	364,878.85	1,942,845.33	2905+91.79	365,035.62	1,942,826.65			
20034								2915+10.79	365,948.16	1,942,717.90	2916+54.63	366,090.98	1,942,700.88	2917+96.47	366,232.76	1,942,725.12			
20035		2919+34.61	366,368.92	1,942,748.41															
ML063SB2	Ramp & Outside SBL EOP ℄																		
20050		914+19.14	365,943.58	1,942,675.14															
20051		915+98.09	366,121.58	1,942,656.73															
20052		918+53.53	366,375.24	1,942,626.62															
ML063SB3	Ramp Lt EOP ℄																		
20060		914+19.14	365,969.20	1,942,686.48															
20061		915+73.78	366,123.15	1,942,671.85															
20062		915+75.72	366,125.07	1,942,671.60															

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER G.10

3:30:37 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155G01.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)
SRRR	Bike Trail ℄																		
56000		8794+87.69	363,109.08	1,942,976.26															
56001								8797+40.51	362,900.75	1,943,119.49	8797+76.56	362,871.05	1,943,139.91	8798+11.26	362,835.31	1,943,144.61			
56002								8798+11.26	362,835.31	1,943,144.61	8798+76.62	362,770.51	1,943,153.12	8799+34.54	362,732.62	1,943,206.38			
56006								8801+69.33	362,596.52	1,943,397.71	8804+41.39	362,438.82	1,943,619.39	8803+94.57	362,697.62	1,943,535.49			
56007		8805+15.55	362,812.70	1,943,498.18															
56007								8805+92.55	362,885.94	1,943,474.43	8806+26.93	362,918.65	1,943,463.82	8806+58.79	362,950.97	1,943,475.58			
56008								8806+58.79	362,950.97	1,943,475.58	8806+77.01	362,968.09	1,943,481.81	8806+94.83	362,986.31	1,943,481.60			
56009								8806+94.83	362,986.31	1,943,481.60	8809+99.51	363,290.97	1,943,478.09	8812+95.46	363,568.45	1,943,352.25			
56010								8813+04.08	363,576.31	1,943,348.69	8813+76.26	363,642.04	1,943,318.88	8814+47.93	363,712.48	1,943,303.11			
56011								8817+62.68	364,019.62	1,943,234.35	8817+95.15	364,051.31	1,943,227.26	8818+27.25	364,083.75	1,943,228.49			
56012								8818+27.25	364,083.75	1,943,228.49	8818+70.62	364,127.09	1,943,230.14	8819+13.14	364,168.45	1,943,217.10			
56013		8819+40.07	364,194.14	1,943,209.00															
SRRRR	Rabbit Run Road ℄																		
57000		8820+00.00	362,810.86	1,943,320.04															
57001								8820+71.69	362,802.30	1,943,391.22	8821+99.22	362,787.07	1,943,517.83	8823+07.55	362,880.63	1,943,604.49			
57002		8826+16.57	363,107.35	1,943,814.47															
SRMARY	Mary Street ℄																		
51000		8966+65.00	364,316.13	1,942,677.20															
51001		8970+15.00	364,279.40	1,943,025.27															
	Edge Profile ℄																		
RET_RRRSE	S.E. Rabbit Road Run																		
57600		88208+99.56	362,724.64	1,943,347.94															
57601								88208+99.56	362,724.64	1,943,347.94	88209+25.87	362,750.77	1,943,351.08	88209+48.00	362,762.97	1,943,374.40			
57603								88209+48.00	362,762.97	1,943,374.40	88209+95.90	362,785.18	1,943,416.84	88210+43.00	362,793.08	1,943,464.08			
57604		88210+43.00	362,793.08	1,943,464.08															
	Edge Profile ℄																		
RET_RRRNE	N.E. Rabbit Road Run																		
57500		88217+65.71	362,939.47	1,943,372.67															
57501								88217+65.71	362,939.47	1,943,372.67	88218+11.38	362,893.95	1,943,368.94	88218+55.71	362,850.85	1,943,384.03			
57503								88218+55.71	362,850.85	1,943,384.03	88218+87.66	362,820.69	1,943,394.59	88219+12.57	362,817.60	1,943,426.39			
57505								88219+12.57	362,817.60	1,943,426.39	88219+63.82	362,812.65	1,943,477.40	88220+12.57	362,834.66	1,943,523.69			
57506		88220+12.57	362,834.66	1,943,523.69															
	Edge Profile ℄																		
RET_MARYSW	S.W. Mary Street																		
51600		89690+09.22	364,273.82	1,942,920.88															
51601								89690+09.22	364,273.82	1,942,920.88	89690+61.66	364,268.32	1,942,973.03	89691+04.19	364,220.23	1,942,993.96			
51602		89692+03.69	364,129.00	1,943,033.66															
	Edge Profile ℄																		
RET_MARYNW	N.W. Mary Street																		
51500		89670+94.42	364,318.96	1,942,807.64															
51501								89671+14.47	364,316.85	1,942,827.58	89671+59.38	364,312.14	1,942,872.24	89672+03.92	364,317.45	1,942,916.84			
51502								89672+03.92	364,317.45	1,942,916.84	89672+58.53	364,323.90	1,942,971.06	89672+83.26	364,375.89	1,942,954.36			
51503		89673+04.23	364,395.86	1,942,947.95															

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER G.11

3:30:38 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155G01.sht

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	
SURCL	EX. US 63 ℄															
SURCL-1											0° 13′ 10.45″ RT	304.05′	608.10′	158,681.48′	0.29′	
SURCL-2		45° 46′ 17.85″ LT	1° 59′ 59.12″	-200.00′	TS	66.67′	199.98′	2.33′	133.34′	66.67′	41° 46′ 19.24″ LT	1,093.23′	2,088.75′	2,864.99′	201.49′	
SURCL-3		46° 15′ 56.16″ RT	1° 59′ 14.49″	200.00′	TS	66.67′	199.98′	2.33′	132.51′	66.26′	42° 16′ 42.19″ RT	1,107.76′	2,114.07′	2,864.99′	206.70′	
SURCL-4											3° 11′ 21.08″ LT	478.54′	956.82′	17,189.97′	6.66′	
SURCL-5											5° 48′ 26.18″ RT	581.27′	1,161.54′	11,459.98′	14.73′	
SURCL-6											5° 29′ 39.56″ LT	366.60′	732.63′	7,639.98′	8.79′	
SURCL-7											6° 14′ 55.20″ RT	417.02′	833.22′	7,639.98′	11.37′	
SURCL-8											4° 13′ 27.10″ LT	422.64′	844.90′	11,459.98′	7.79′	
SURCL-9		13° 54′ 00.05″ RT	1° 05′ 01.76″	150.00′	TS	50.00′	149.99′	0.98′	96.35′	48.17′	11° 41′ 28.58″ RT	391.09′	779.47′	3,819.99′	19.97′	
SURCL-10											5° 33′ 44.48″ RT	278.36′	556.28′	5,729.99′	6.76′	
SURCL-11		18° 54′ 50.44″ LT	2° 01′ 19.04″	-200.00′	TS	66.67′	199.98′	2.33′	134.82′	67.41′	14° 53′ 31.92″ LT	374.44′	744.66′	2,864.99′	24.37′	
SURCL-12											2° 30′ 28.70″ RT	376.28′	752.45′	17,189.97′	4.12′	
SURCL-13											6° 16′ 13.76″ RT	418.50′	836.16′	7,640.27′	11.45′	
SURCL2	EX. US 63 ℄ from 860+69.70 to EOP															
SURCL2-1											24° 04′ 21.23″ LT	375.92′	740.75′	1,763.08′	39.63′	
SURCL2-2											10° 45′ 41.70″ RT	269.85′	538.12′	2,864.99′	12.68′	
SURCL2-3		31° 49′ 23.93″ LT	3° 00′ 07.87″	-200.00′	TS	66.68′	199.95′	3.49′	133.46′	66.74′	25° 49′ 16.84″ LT	437.82′	860.77′	1,910.00′	49.54′	
ML063	Proposed US 63 ℄															
MLC1											6° 36′ 50.21″ RT	531.59′	1,062.00′	9,200.00′	15.35′	
20012											24° 39′ 52.65″ LT	327.94′	645.72′	1,500.00′	35.43′	
20013											11° 00′ 37.00″ RT	159.03′	317.07′	1,650.00′	7.65′	
20014											16° 30′ 00.03″ RT	144.99′	287.98′	1,000.00′	10.46′	
ML063SB	Inside SBL EOP ℄															
SBC1											6° 36′ 50.21″ RT	533.04′	1,064.89′	9,225.00′	15.39′	
20022											24° 39′ 52.65″ LT	325.32′	640.55′	1,488.00′	35.15′	
20023											11° 00′ 37.00″ RT	160.18′	319.38′	1,662.00′	7.70′	
20024											16° 30′ 00.03″ RT	146.15′	290.28′	1,008.00′	10.54′	
ML063NB	Inside NBL EOP ℄															
NBC1											6° 36′ 50.21″ RT	530.15′	1,059.12′	9,175.00′	15.30′	
20032											24° 39′ 52.65″ LT	330.56′	650.88′	1,512.00′	35.71′	
20033											11° 00′ 37.00″ RT	157.87′	314.77′	1,638.00′	7.59′	
20034											16° 30′ 00.03″ RT	143.83′	285.68′	992.00′	10.37′	
SRRR	Bike Trail ℄															
56001											27° 01′ 29.81″ RT	36.05′	70.75′	150.00′	4.27′	
56002											47° 05′ 19.86″ LT	65.36′	123.28′	150.00′	13.62′	
56006											143° 23′ 23.83″ LT	272.05′	225.24′	90.00′	196.56′	
56007											37° 57′ 14.42″ RT	34.39′	66.24′	100.00′	5.75′	
56008											20° 38′ 59.86″ LT	18.22′	36.04′	100.00′	1.65′	
56009											23° 44′ 00.32″ LT	304.68′	600.63′	1,450.00′	31.67′	
56010											11° 46′ 26.05″ RT	72.18′	143.85′	700.00′	3.71′	
56011											14° 47′ 57.68″ RT	32.47′	64.57′	250.00′	2.10′	
56012											19° 41′ 01.42″ LT	43.37′	85.89′	250.00′	3.73′	
SRRRR	Rabbit Run Road ℄															
57001											54° 03′ 11.83″ LT	127.53′	235.85′	250.00′	30.65′	

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	
	Edge Profile ℄														
RET_RRRSE	S.E. Rabbit Road Run														
57601											55° 30′ 46.69″ RT	26.31′	48.44′	50.00′	6.50′
57603											18° 08′ 37.19″ RT	47.90′	95.00′	300.00′	3.80′
	Edge Profile ℄														
RET_RRRNE	N.E. Rabbit Road Run														
57501											23° 59′ 03.41″ LT	45.67′	90.00′	215.00′	4.80′
57503											65° 09′ 33.48″ LT	31.95′	56.86′	50.00′	9.34′
57505											30° 58′ 14.49″ LT	51.25′	100.00′	185.00′	6.97′
	Edge Profile ℄														
RET_MARYSW	S.W. Mary Street														
51601											60° 27′ 35.58″ RT	52.44′	94.97′	90.00′	14.17′
	Edge Profile ℄														
RET_MARYNW	N.W. Mary Street														
51501											12° 48′ 44.76″ LT	44.91′	89.45′	400.00′	2.51′
51502											101° 01′ 00.08″ LT	54.61′	79.34′	45.00′	25.76′

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER G.13

3:30:40 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155G01.sht

SUPERELEVATION DATA

See PV-300 Series

Road Identification	Circular Curve or Spiral Curve Name	Radius	Superelevation Data			Standard Road Plan	Section A-A	Section B-B	Section C-C	Section D-D	Section E-E	Section F-F	Case A	Case B	Case C	Case S	Case T	Case U	Remarks
			e	L	x														
		FT	%	FT	FT														
US 63 SBL/NBL	20012	1500	3.6	130	73	PV-302	881+11.68	881+84.68	882+57.68	883+14.68			882+75.68						50 MPH 4% Super Table (1)
							890+85.40	890+12.40	889+39.40	888+82.40			889+21.40						50 MPH 4% Super Table (1)
US 63 SBL	20013	1650	3.5	125	73	PV-302	899+85.74	900+58.74	901+31.74	901+83.74			901+46.24						50 MPH 4% Super Table (1)
							906+24.24	905+51.24	904+78.24	904+26.24			904+63.74						50 MPH 4% Super Table (1)
US 63 NBL	20013	1638	3.5	125	73	PV-302	900+22.52	900+95.52	901+68.52	902+20.52			901+83.02						50 MPH 4% Super Table (1)
							906+60.12	905+87.12	905+14.12	904+62.12			904+99.62						50 MPH 4% Super Table (1)
US 63 SBL	20014	1000	4.0	145	73	PV-302	912+44.64	913+17.64	913+90.64	914+62.64			914+19.14			914+62.64			50 MPH 4% Super Table (2)
							918+81.62	918+08.62	917+35.62	916+63.62			917+07.12			916+63.62			50 MPH 4% Super Table (2)
US 63 NBL	20014	1000	4.0	145	73	PV-302	912+44.64	913+17.64	913+90.64	914+62.64			914+19.14			914+62.64	914+62.64		50 MPH 4% Super Table (2)
							918+81.62	918+08.62	917+35.62	916+63.62			917+07.12			916+63.62	916+63.62		50 MPH 4% Super Table (2)

(1) See U sheet for Super Transitions.

(1) See L sheet for Staking Layout.

Wapello ROW: NHSN-063-2(121)--2R-90 PIN 04-90-063-030
River Rd / Co Rd J12 to US 34 in Ottumwa

		STATE		COUNTY		CITY			BORROW							
PARCEL NO.	OWNER NAME	FEE	EASE	FEE	EASE	FEE	EASE	EXCESS	FEE	T.E.	MITIGATION	OTHER	HOUSE	BUILDING(S)	A/C ONLY	TOTAL ACQ.
231	Christ's Church - Fee	1.18 AC														
236	Roger Leffler - Fee	6986 SF														
237	William Steele III - Fee					5447 SF										
238	Ronald L. Lacey - Fee	13.25 AC											X	X		X
	Thomas R. Lacey - Fee															
245	Selman Aliu - Fee	.69 AC														
247	City of Ottumwa - Fee	.6 AC														
6 Parcels	"TOTALS	15.72 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC	0 AC					
		6986 SF	0 SF	0 SF	0 SF	5447 SF	0 SF	0 SF								

Keokuk TWP.
T-71N R-13W
SEC. 6

CULT.

NEPA BOUNDARY

T2

T2

T2

T2

PEM

PEM

PASTURE

855

860

865

SLOPE INTERCEPT

REMOVE
Ex. Pavement

CONSTRUCTION ℄

EXISTING US 63

PT Sta 855+27.56

854+95
℄121'±Ex.R/W

SLOPE INTERCEPT

SIGN

863+40
℄130'

CULT.

SIGN

231 CHRIST'S CHURCH

NEPA BOUNDARY

0 50
FEET

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: LARSON /GROAT
ROW #: NHSN-063-2(121)--2R-90
Plan Date: 03-08-17
Color Legend:
- **Property Lines**
- **Temporary Easement**
- **Permanent Acquisition**

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER H.1

2:13:01 PM 3/8/2017 sgroat pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\ROW\90063121H1.sht

CENTER TWP.
T-72N R-13W
SEC. 31

CULT.

NEPA BOUNDARY

T2

JEFFERSON DRAINAGE CHANNEL

SLOPE INTERCEPT

Construction Limits

WT-45

PFO1

875

880

870

REMOVE
Ex. Pavement

CONSTRUCTION ℄

EXISTING US 63

WT-44

SOUTHBOUND US 63

NORTHBOUND US 63

WT-46

90°0'0"

PEM

PFO1

EQUATION:
STA. 880+52.39 (ML)
= STA. 8800+52.39 (TRAIL)

878+05±P
℄180'

878+82±P
℄185'

RABBIT RUN RD

BIKE TRAIL

231 CHRIST'S CHURCH

871+00
℄170'

871+35±Prop. Cor.
℄185'(Prop. Cor.)

Construction Limits

STATE OF IOWA

236 WABASH/IOWA SOUTHERN RR (ABANDONED)

ROGER LEFFLER

EQUATION:
STA. 882+00.00 (ML)
= STA. 8820+00.00 (SR)

NEPA BOUNDARY

SECTION LINE

Sta. 871+45.43
100' x 30' Conc Slab Bridge
Design No. 1962
(REMOVE)

Sta. 881+15.91
250' x 30' Cont Steel Bridge
Design No. 1862
(REMOVE)

Sta. 871+49.14 (SB)
Build 150' x 47'-6
Concrete Slab Bridge
Skew = 15° Rt. Ahd.
Design No. 514

Sta. 871+62.01 (NB)
Build 150' x 47'-6
Concrete Slab Bridge
Skew = 15° Rt. Ahd.
Design No. 614

Sta. 880+52.39
Build 12' x 10'-4
Skew = 28°34'04"
Lt. 643.62
F.L. = Rt. 642.89
Stage 1 Design No
Stage 2 Design No

Keokuk TWP.
T-71N R-13W
SEC. 6

Center TWP.
T-72N R-13W
SEC. 31

0 50
FEET

Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: LARSON /GROAT
ROW #: NHSN-063-2(121)--2R-90
Plan Date: 03-08-17
Color Legend:
- Property Lines
- Temporary Easement
- Permanent Acquisition

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER H.2

2:14:30 PM 3/8/2017 sgroat pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\ROW\90063121H1.sht



Right of Way Design Information

THIS SHEET INCLUDED FOR INFORMATION ONLY

ROW Team: LARSON /GROAT
ROW #: NHSN-063-2(121)--2R-90
Plan Date: 03-08-17
Color Legend:
- Property Lines
- Temporary Easement
- Permanent Acquisition

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER H.3

2:16:20 PM 3/8/2017 sgroat pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\ROW\90063121H1.sht

Center TWP.
T-72N R-13W
SEC. 31

CUL END
+74±Prop. Cor.
9'(Prop. Cor.)
EXISTING MARY ST.
CANOPY
COMM. BLDG.
COMM. ENT.
898+82±Ex.R/W
℄180'
899+30
℄180'
899+80
℄122'±Ex.R/W
SIGN
901+40
℄150'
907+05
℄154'±P
904+00
℄165'
NEPA BOUNDARY
PASTURE
245
SELMAN ALIU
SLOPE INTERCEPT
907+45
℄150'
908+13±Prop. Cor.
℄127'(Prop. Cor.)
CULT.
247
PI Sta 903+23.59
Δ = 11° 00' 37.00" (RT)
900
905
910
SIGN
REMOVE
Ex. Pavement
CONSTRUCTION ℄
66°10'15.16"
PC Sta 901+64.56
PT Sta 904+81.64
SIGN
CUL END
PASTURE
SIGN
REMOVE
SHED
EQUATION:
STA. 897+15.00 (ML063)
= 8970+15.00 (MarySt)
899+50
℄80'
900+90
℄95'
901+10
℄105'
902+35
℄120'
SLOPE INTERCEPT
903+50
℄110'
905+75
℄135'±Prop. R/W
906+35
℄140'
907+73±P
℄130'
SLOPE INTERCEPT
900+20
℄73'±Ex.R/W
TEMPORARY EASEMENT
TO SHAPE
902+90
℄92'±Ex.R/W
898+00
℄95'
898+70
℄80'
897+80±R/W Cor.
℄88'(R/W Cor.)
897+69±Ex.R/W
℄125'
NEPA BOUNDARY
247 CITY OF OTTUMWA
Sta. 910+70.85
36" x 166' BSmt.
(REMOVE)
Sta. 910+80.00
Install 48" x 168' RCP & Aprons
Lt. 627.50
F.L. = Rt. 627.00

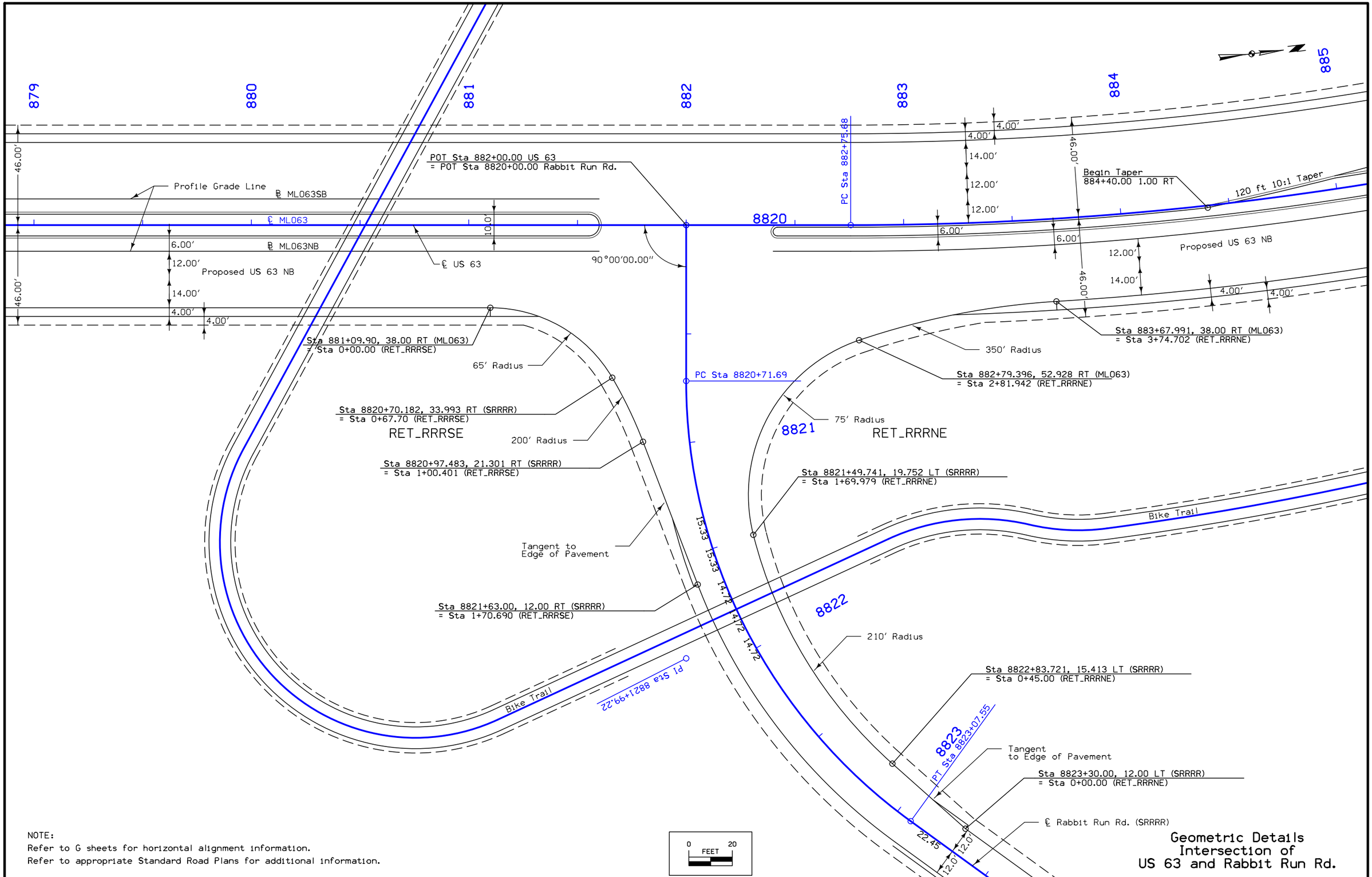
ML063 Curve Data
Δ = 11° 00' 37.00" (RT)
T = 159.03
L = 317.07
R = 1,650.00
E = 7.65
e = 3.5%
L = 125
x = 73
m = 39

0 50
FEET

Right of Way Design Information
THIS SHEET INCLUDED FOR INFORMATION ONLY
ROW Team: LARSON /GROAT
ROW #: NHSN-063-2(121)--2R-90
Plan Date: 03-08-17
Color Legend:
Property Lines
Temporary Easement
Permanent Acquisition

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER H.4

2:18:14 PM 3/8/2017 sgroat pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\ROW\90063121H1.sht



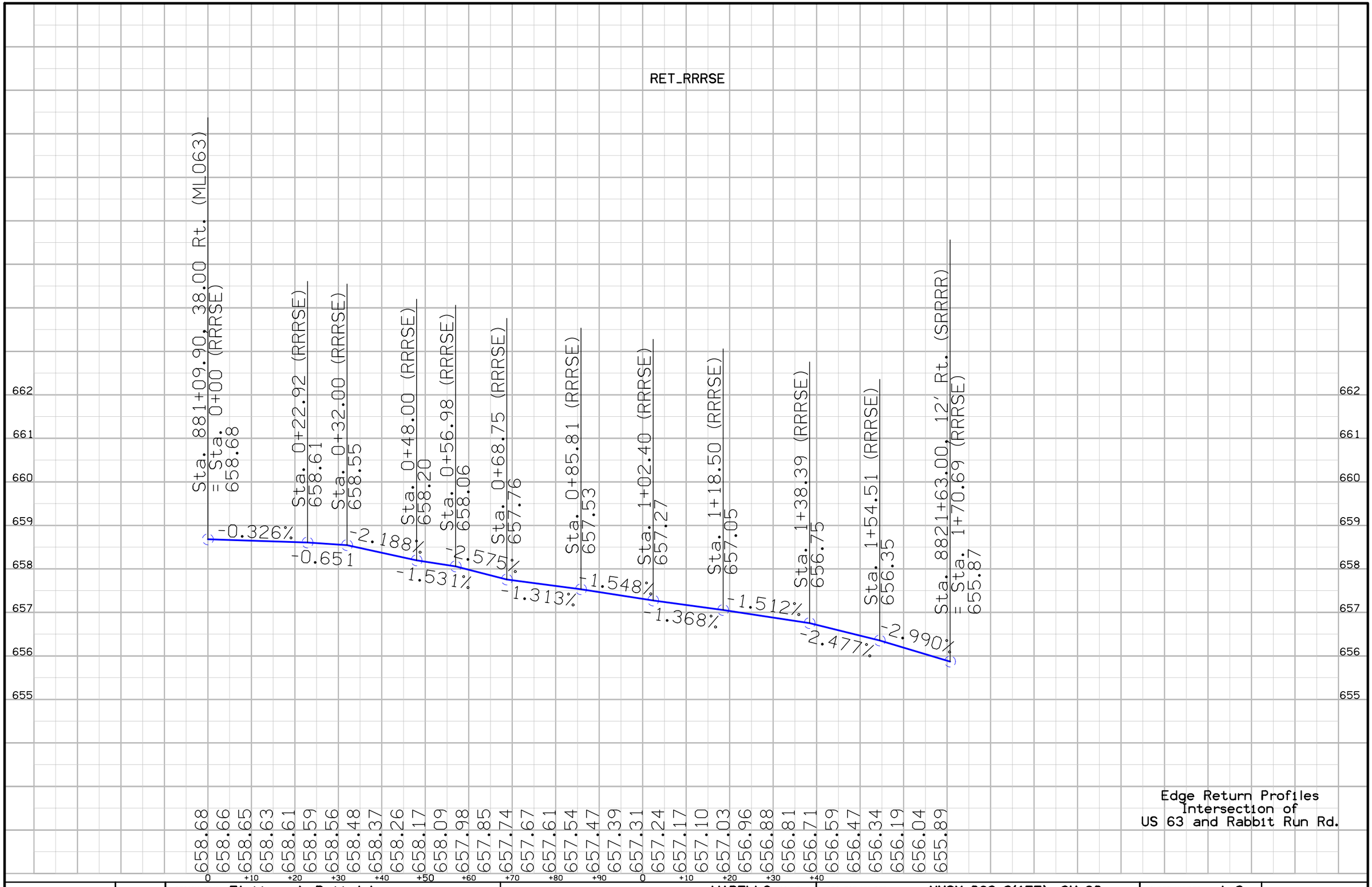
NOTE:
Refer to G sheets for horizontal alignment information.
Refer to appropriate Standard Road Plans for additional information.

Geometric Details
Intersection of
US 63 and Rabbit Run Rd.

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER L.1

8:31:05 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155L01.sht

RET_RRRSE

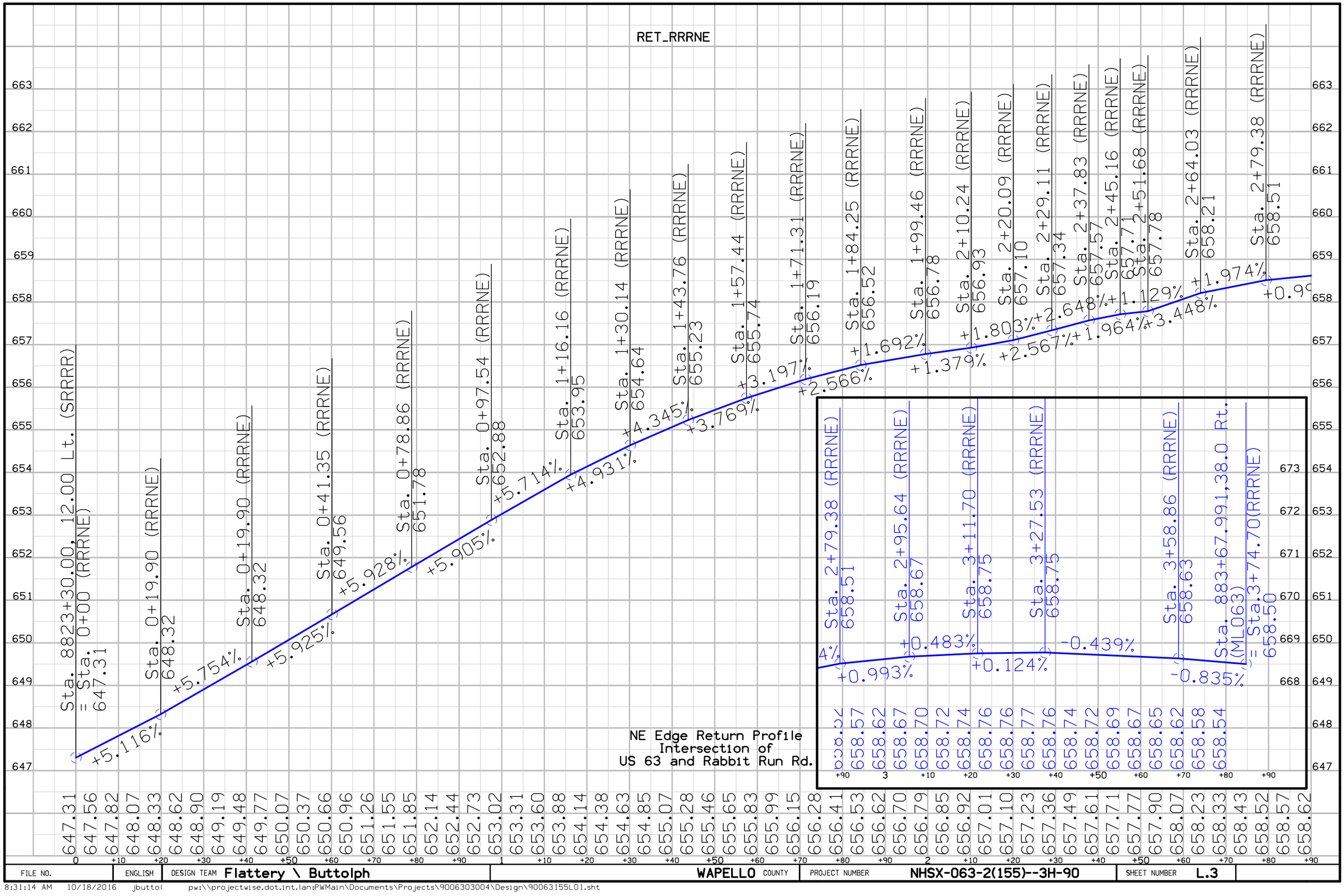


Edge Return Profiles
Intersection of
US 63 and Rabbit Run Rd.

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER L.2

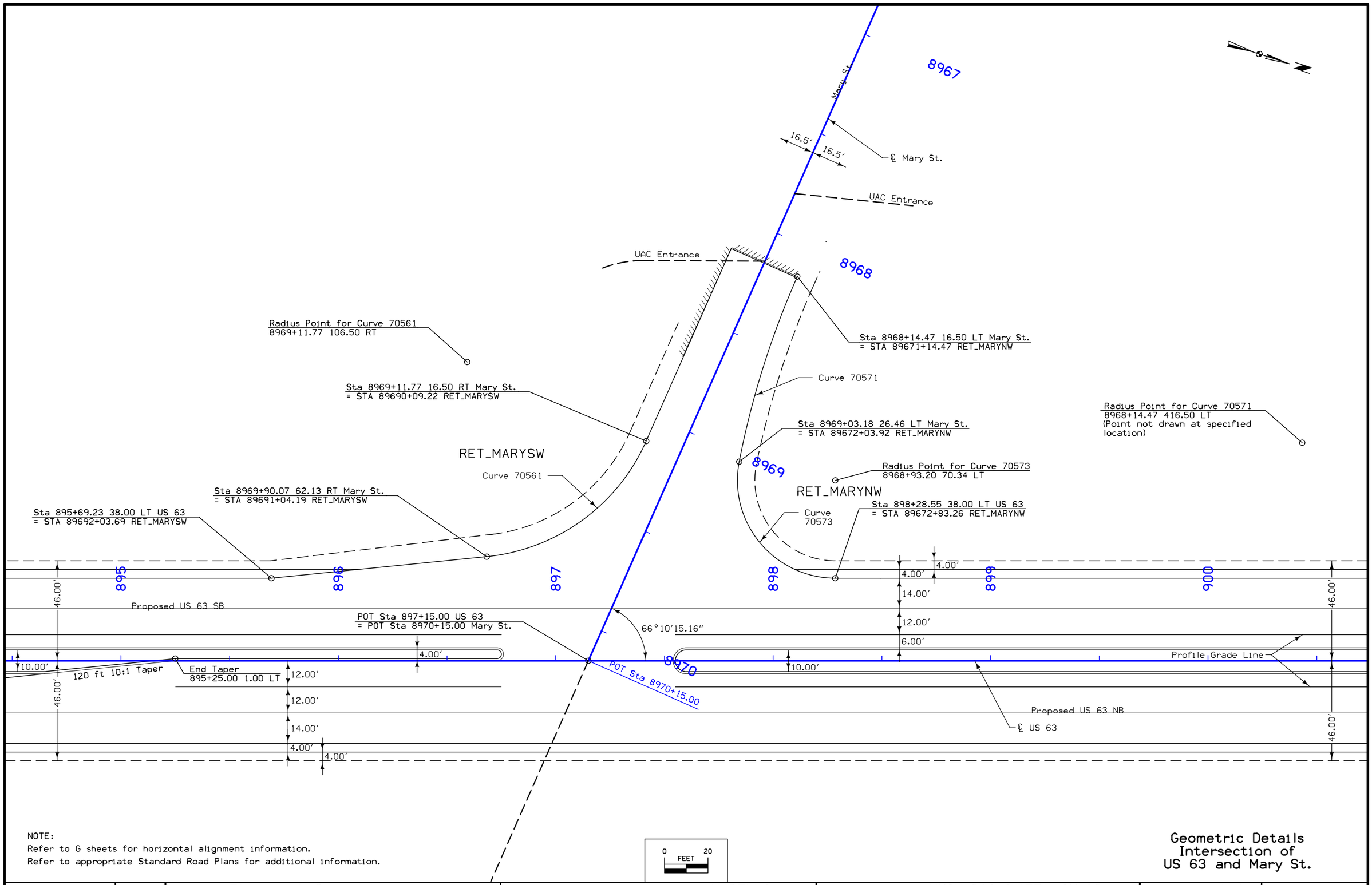
8:31:09 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155L01.sht

RET_RRRNE



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER L.3

8:31:14 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155L01.sht



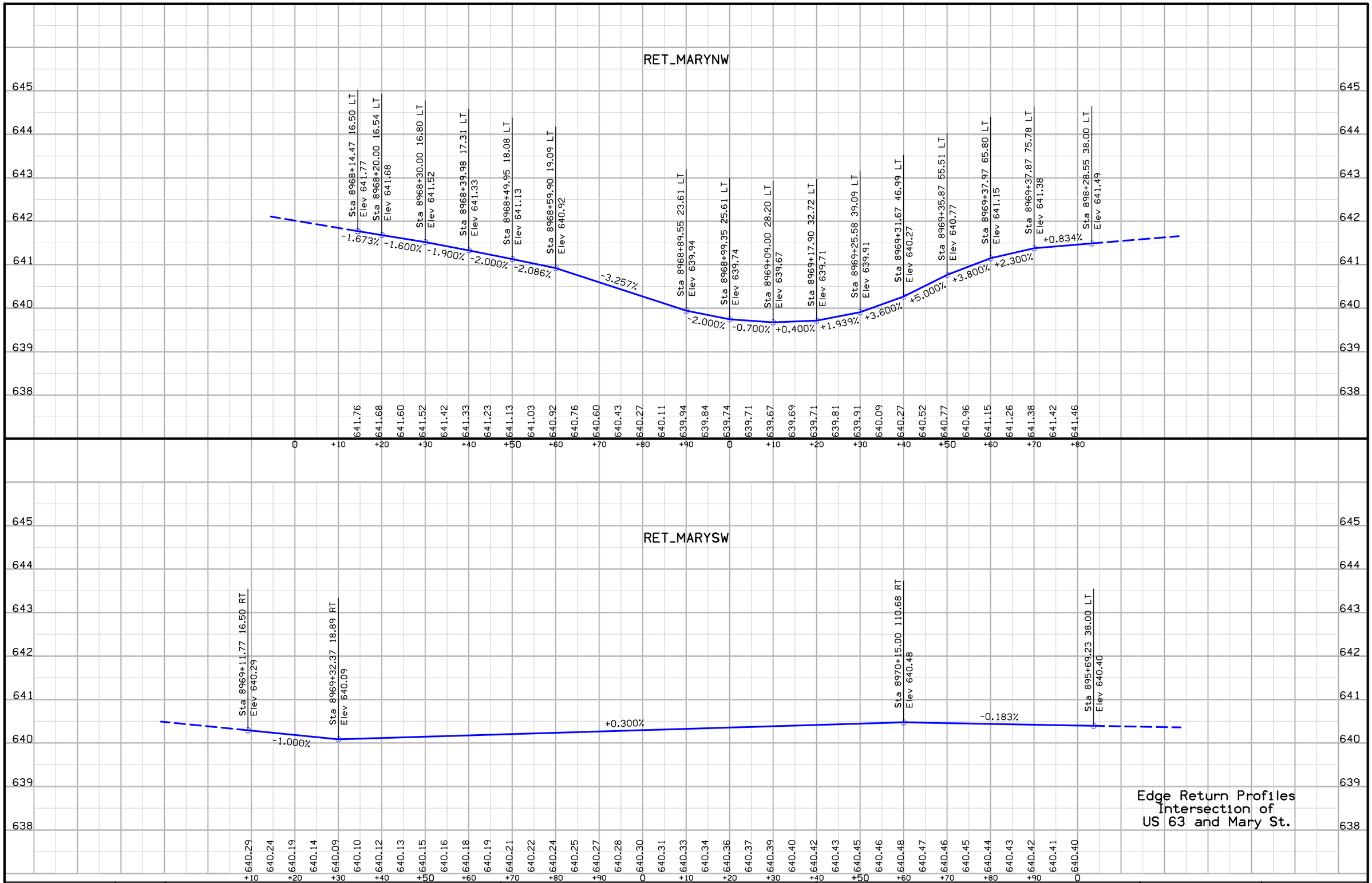
NOTE:
Refer to G sheets for horizontal alignment information.
Refer to appropriate Standard Road Plans for additional information.

0 FEET 20

Geometric Details Intersection of US 63 and Mary St.

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER L.4

8:31:20 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155L01.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER L.5

8:31:25 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155L01.sht

STORM SEWER

(1) Diameter or equivalent diameter
* Bid Item
** For SW-545

INTAKES AND UTILITY ACCESSES

No.	Location Station and Offset	*Type or Standard Road Plan	Form Grade Elev.	Bottom Well Elev.	Extension Length** FT	Notes
	Existing Structures					
E1	914+62, 4.0' Rt.					Remove
	Proposed Structures					
110	885+75, 5.0' Rt.	SW-509	654.93	646.6		
115	888+75, 5.0' Rt.	SW-509	649.48	641.04		
120	889+80, 5.0' Rt.	SW-509	647.82	639.77		
1200	889+80, 80.4' Rt.	DR-201	639.77			
135	905+30, 7.5' Lt.	SW-508	645.4	639.84		
1350	905+30, 85.8' Rt.	DR-201	635.25			
140	903+00, 6.3' Lt.	SW-508	644.46	639.68		
145	901+60, 5.0' Lt.	SW-508	643.7	637.54		
147	901+00, 5.0' Lt.	SW-508	643.52	636.65		
1470	901+00, 74.4' Rt.	DR-201	637.65			
150	915+02, 7.92' Rt.	SW-508	646.39	633.56		
1500	915+02, 68.92' Rt.	DR-201	633.56			

PIPES

Design Length, Slope, and Flowlines are calculated from inside wall to inside wall along CL of pipe. An additional 2 ft length is added to each side of the Design Length to account for estimated length to center of structures.

Line Number	Intake/ Utility Access No. From	To	Class 'D'	(1) Pipe Size IN	Bid* Length FT	Design Length FT	Slope %	Connected Pipe Joint (DR-121) Type	Flow Lines Inlet Elevation	Outlet Elevation	Other Elevation	Pipe Profile Sheet No.	Notes
P-110	110	115	2000	15	296.2	292.2	1.8	3	647.1	641.84		M.7	
P-115	115	120	2000	15	101.1	97.1	1	3	641.54	640.57		M.7	
P-120	120	1200	2000	15	77.1	75.1	0.5	3	640.27	639.89		M.7	
P-135	135	1350	2000	15	91.3	89.3	7.1	3	640.34	634		M.8	
P-140	140	145	2000	15	140.3	136.3	1.35	3	640.18	638.34		M.8	
P-145	145	147	2000	15	60	56.0	1.05	3	638.04	637.45		M.8	
P-147	147	1470	2000	15	77.4	75.4	1	3	637.15	636.4		M.8	
P-150	150	1500	2000	15	72	89.7	1	3	634.06	633.3		M.8	

SURVEY SYMBOLS

- SI Sign
- LUM Luminaire
- MH Utility Access (Manhole)
- ROW Approx. Right of Way Rail
- PPA Power Pole Co. 1
- MM Mile Marker Post
- TDC Tree Deciduous
- SL Speed Limit Sign
- EW Edge of Water
- DIK Centerline of Dike or Dam
- D Centerline Draw or Stream (Down)
- BB Billboard
- FCL Chain Link and Security Fence
- GDL Guard Rail (Rail and Cable)
- RET Retaining Walls
- TLB Underground Telephone Line Co. 2
- FOA Underground Fiber Optic Co. 1
- FOB Underground Fiber Optic Co. 2
- TLA Underground Telephone Line Co. 1
- ELA Underground Electric Line Co. 1
- GLA Underground Gas Line Co. 1
- WLA Underground Water Line Co. 1
- WLB Underground Water Line Co. 2
- IN Storm Sewer Intake
- FW Wire Fence
- MIS Miscellaneous
- LC Approx. Lot Corner
- TPD Telephone Pedestal
- TA Tower Anchor
- EB Electrical Box
- WEL Well
- TEV Evergeen Tree
- FWD Wood Fence
- FHD Fire Hydrants
- GP Guard Post (Less Than 4 Posts)
- WHU RV Water Hook Up
- INB Storm Sewer Beehive Intake

UTILITY LEGEND

- T1
- T2
- FO
- FO2
- E1
- G
- W
- W2

UTILITY CONTACT INFORMATION

Citizens Mutual Telephone
Gary Mishler
114 W. Jefferson
Bloomfield, IA 52537
(641)-664-2074
gmishler@cmtel.com

Southern Iowa Electric Cooperative
Jeremy Wilcox
P.O. Box 70 22458 Hwy. 2
Bloomfield, IA 52537
641-664-2277
jwilcox@sie.coop

Windstream/PAETEC
Tim Flickinger
3630 109th Street
Urbandale, IA 50322
515-309-1135
timothy.flickinger@paetec.com

CenturyLink/QWEST
Steve Parker
2103 E University Ave., 1st Floor
Des Moines, IA 50317
515-265-0968
steven.parker4@centurylink.com

Wapello Rural Water
Lee Asher
PO Box 538
Ottumwa, IA 52501
641-682-8351
LAsher@wrh2o.com

Alliant Energy
Jason Hogan
4902 N Biltmore Lane
Madison, WI 53718-2148
608-458-4871
jasonhogan@alliantenergy.com

Mediacom
Tim Eagen
546 Southgate Ave.
Iowa City, IA 52240
319-351-0408
teagan@mediacomcc.com

MidAmerican Energy
Phillip Davis
302 S Vine
Ottumwa, IA 52501
641-683-4171
pcdavis@midamerican.com

MidAmerican Energy
Jeff Ferguson
2411 N Market Street
Oskaloosa, IA 52577
641-660-3068
jaferguson@midamerican.com

City of Ottumwa
Larry Seals
105 E Third Street
Ottumwa, IA 52501
641-683-0680
lseals@ci.ottumwa.ia.us

PLAN VIEW COLOR LEGEND OF STORM SEWER SHEETS

LINEWORK	Design Color No.	
Gray, Dark	(112)	Existing Topographic Features, Utilities, and Labels
Black	(17)	Proposed Storm Sewer Details, Alignment, Stationing, Tic Marks, and Alignment Annotation
SHADING	Design Color No.	
Gray, Light	(48)	Proposed Pavement Shading

PROFILE VIEW COLOR LEGEND OF STORM SEWER SHEETS

LINEWORK	Design Color No.	
Gray, Dark	(112)	Existing Ground Line Profile and Existing Utilities Information
Black	(17)	Proposed Pipes and Intakes

PLAN VIEW LINE STYLE LEGEND OF STORM SEWER SHEETS

- Plug and Abandon Existing Pipe or Structure
- Removal of Existing Pipe or Structure
- Previously Constructed Pipe or Structure
- Direction of Pipe Flow

PROFILE VIEW LINE STYLE LEGEND OF STORM SEWER SHEETS

- Existing Ground
- Proposed Ground
- Previously Constructed Pipe or Structure
- Proposed Pipe or Structure

- Reference Point
- Survey Line
- Station
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Clearing & Grubbing Area
- Pavement Removal

RIGHT-OF-WAY LEGEND

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

STORM SEWER LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES M)

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER M.2

8:31:34 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155_LGD.sht

CULT.

T2

T2

T2

T2

PEM

PEM

PASTURE

855

860

865

105

P-105

1050

SIGN

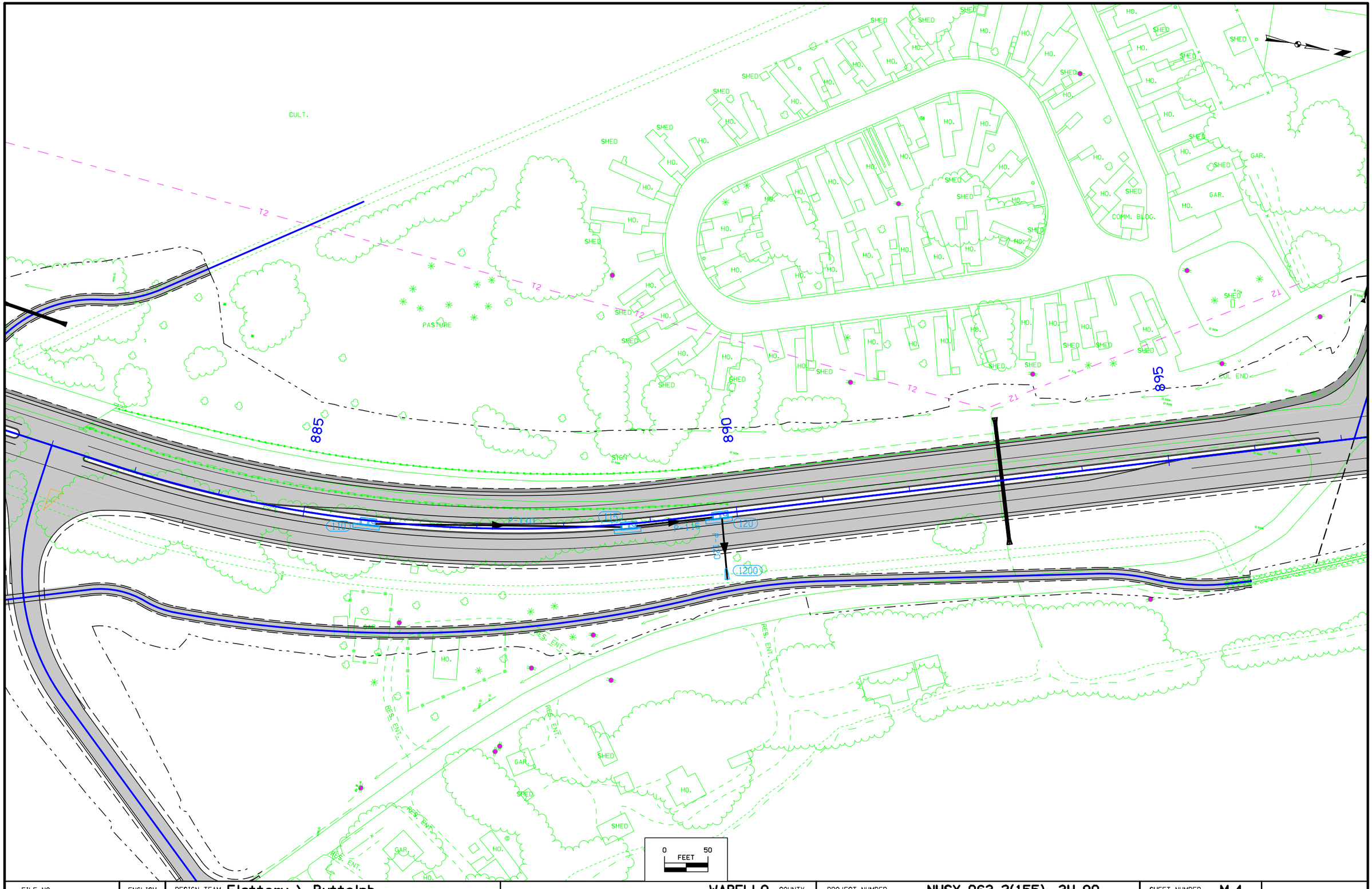
CULT.

SIGN

0 FEET 50

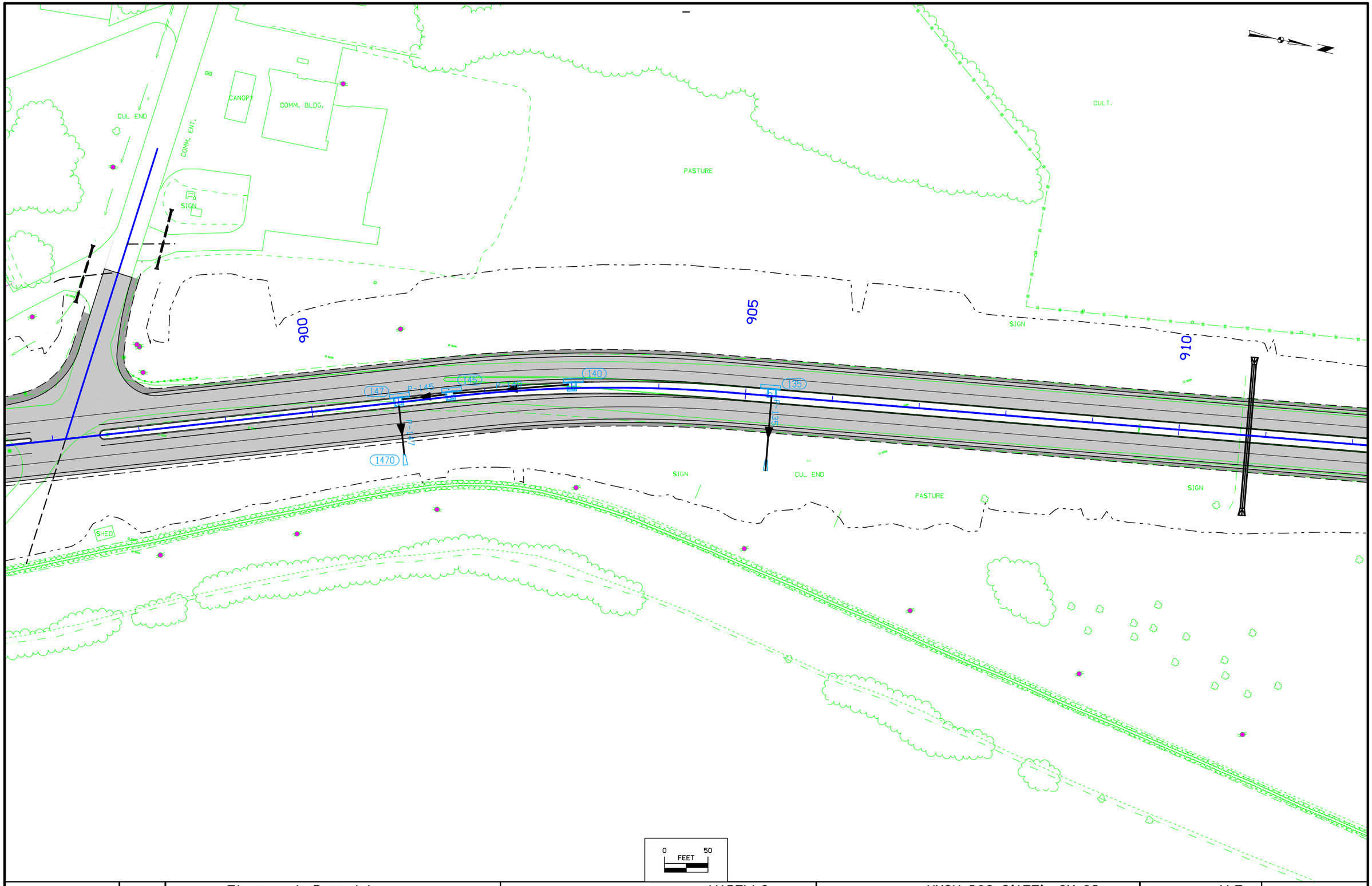
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER M.3

8:32:04 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155M02.sht



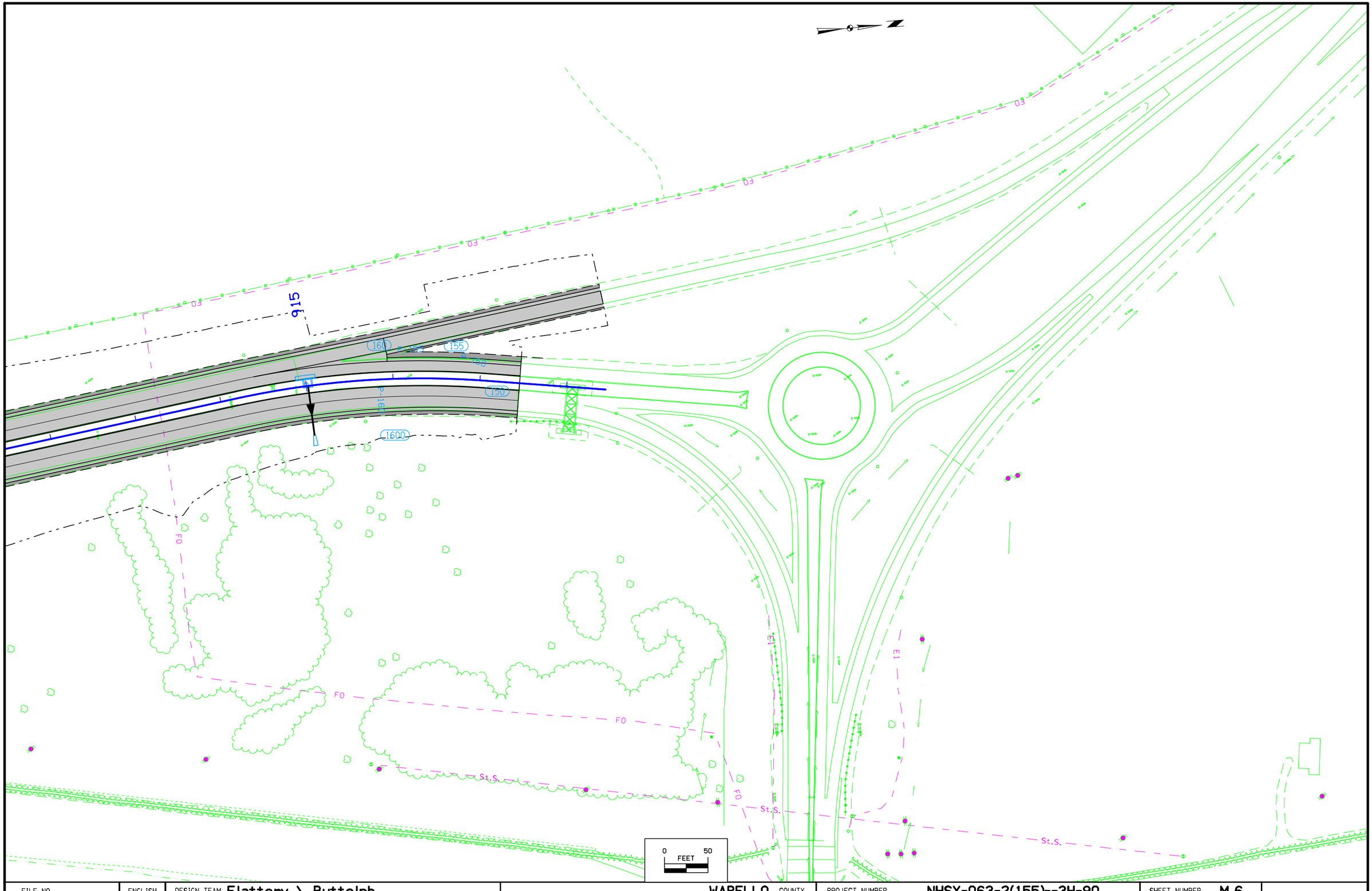
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER M.4

8:32:05 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155M02.sht



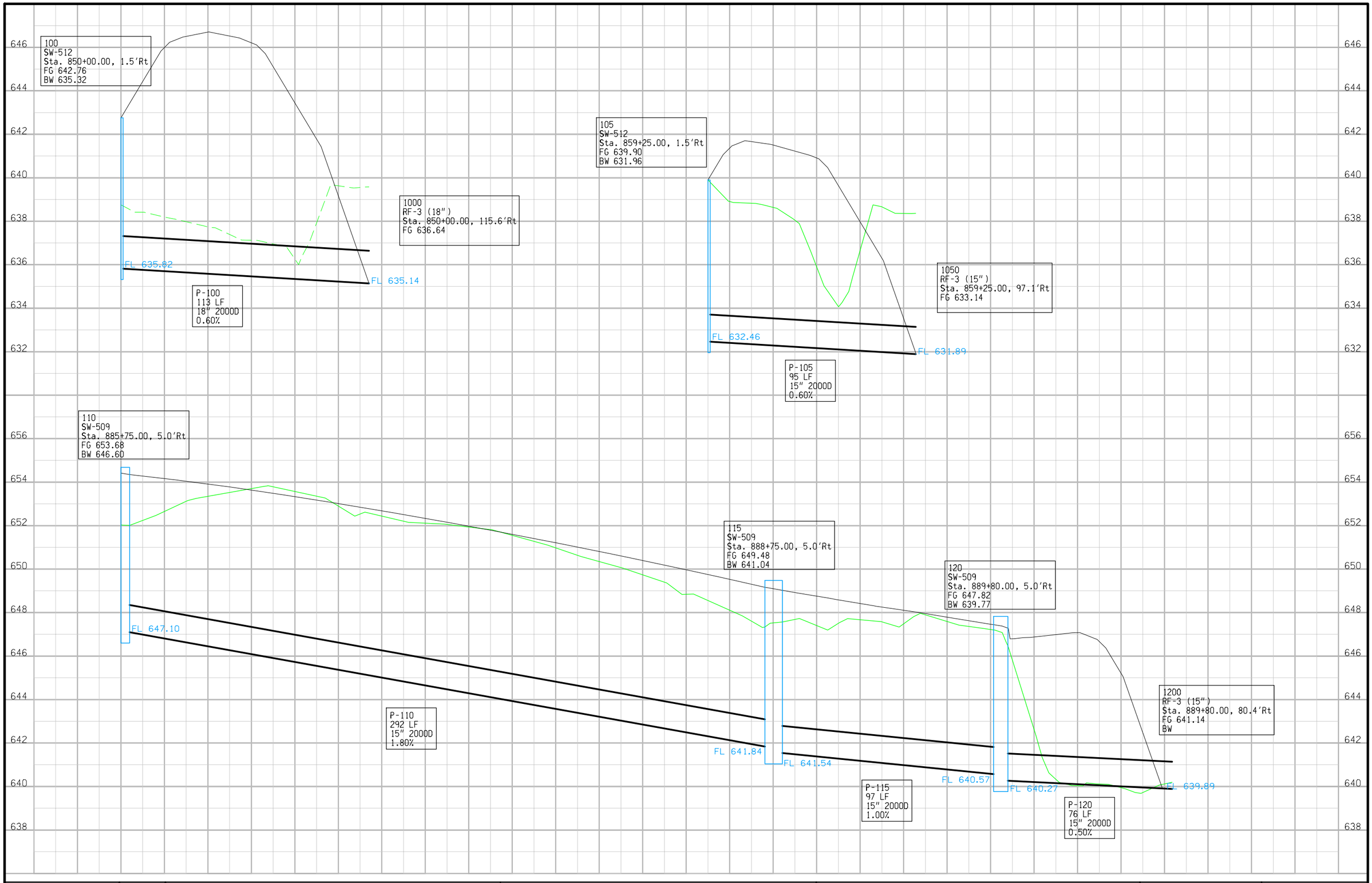
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER M.5

8:32:07 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155M02.sht



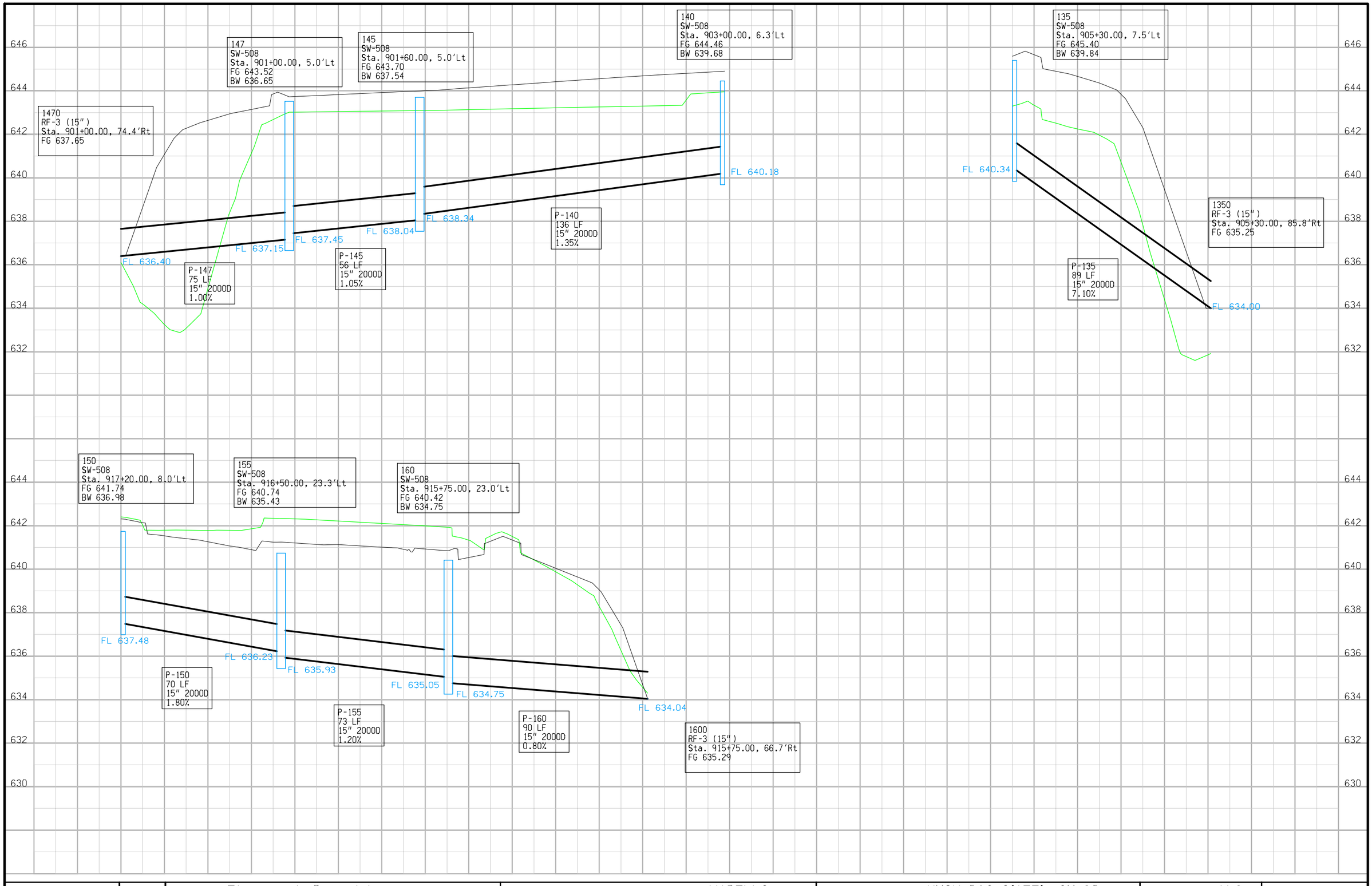
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER M.6

8:32:08 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155M02.sht



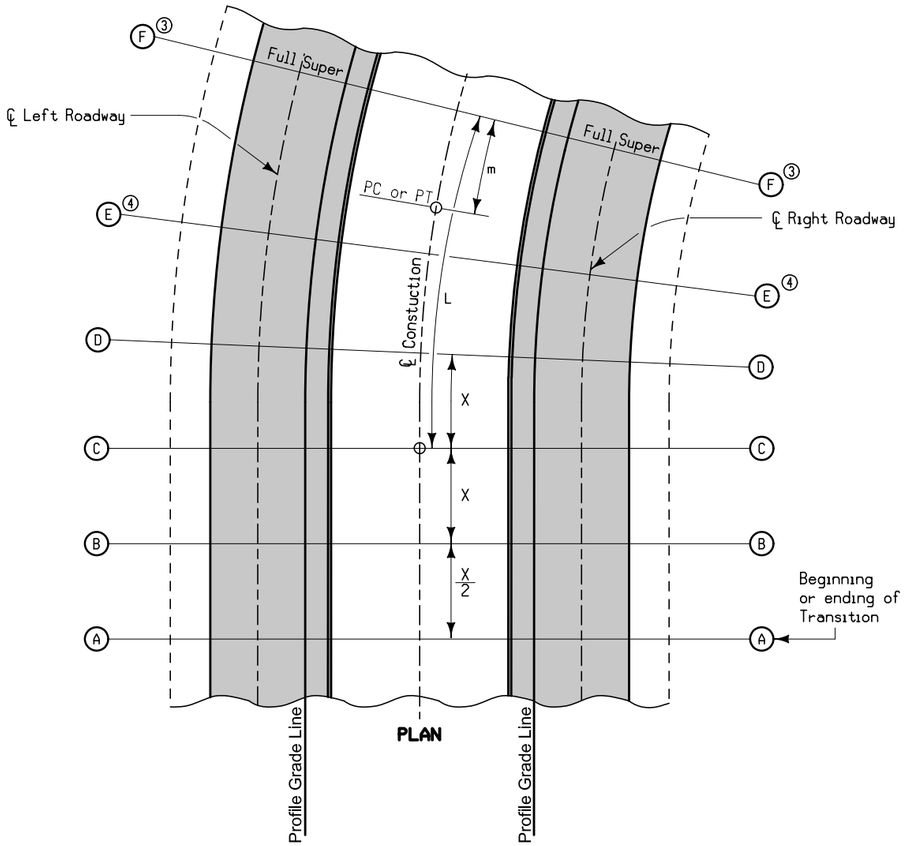
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER M.7

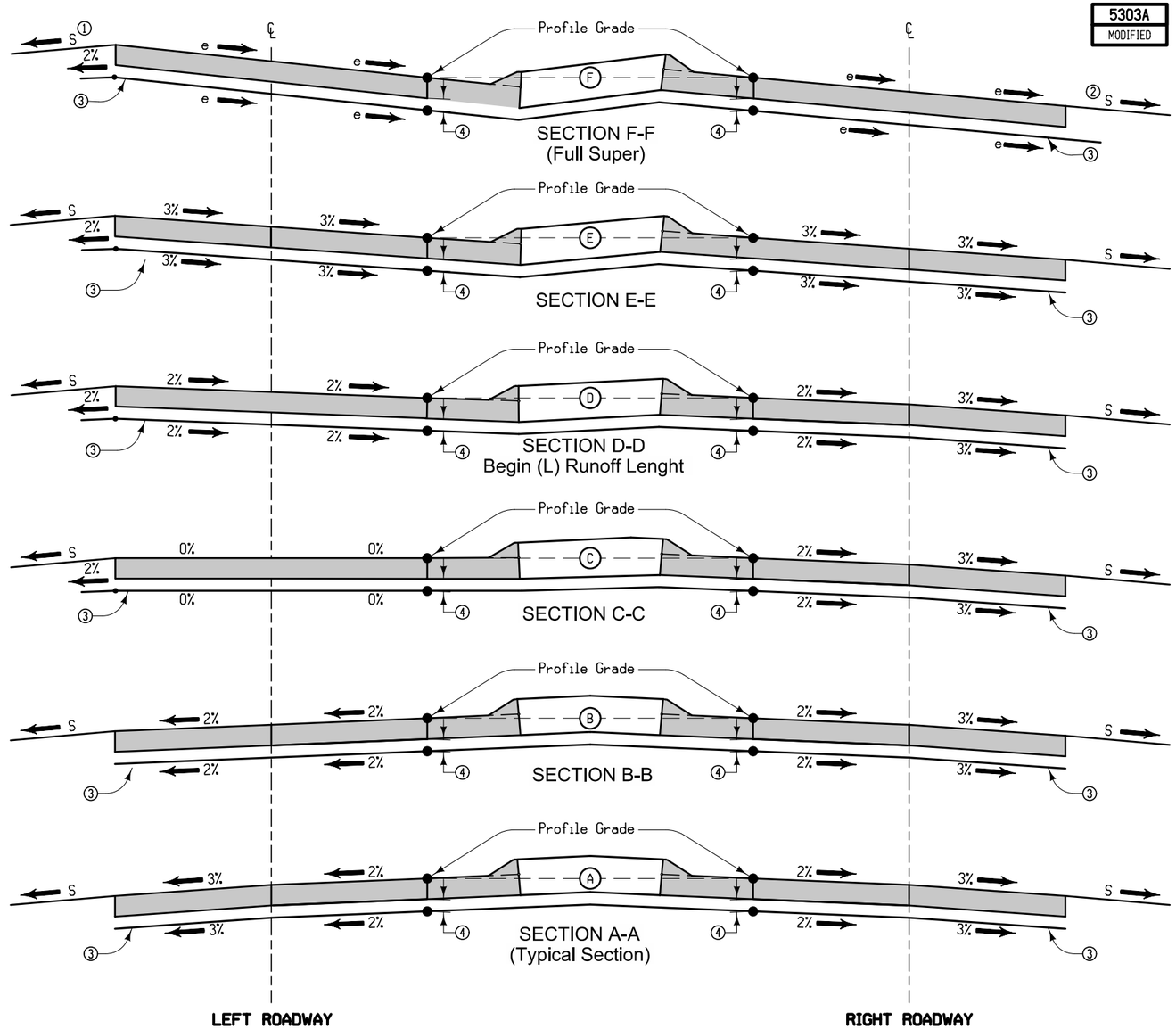
8:32:10 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155M02.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER M.8

8:32:11 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155M02.sht





Refer to specific curve data contained in project plans for tangent runout length (x), runoff length (L) and full superelevation (e).

Section F-F Full Super = PC+(m), or PT-(m)
Place 70% of full superelevation at the PC and PT
Place 30% of the runoff length within the curve.

Unless otherwise specified, all lengths are measured along the centerline of construction.

Superelevations on this sheet are shown for curves to the right. Curves to the left are a mirror image of what is shown.

Axis of rotation coincides with profile grade location.

4% Super Table were W=24 was used to establish used for this 26' pavement width.

① High Side Shoulder: Maintain normal shoulder cross slope (s), until the cross slope break with the adjacent pavement reaches 8.0%. Maintain 8% breakover until superelevation rate reaches 7%. If superelevation rate exceeds 7.0%, maintain a 1% shoulder cross slope away from the adjacent pavement.

② Low Side Shoulder: Maintain normal shoulder cross slope (s) until the adjacent pavement slope equals s, then slope the shoulder at the same cross slope as the adjacent pavement.

③ Subgrade Surface

④ Subbase Depth

e = Supereleavtion Rate

L = Runoff Lenght

x = Distance to Change Cross Slope from 0% to 2%

m = 30% of Runoff Length (L)

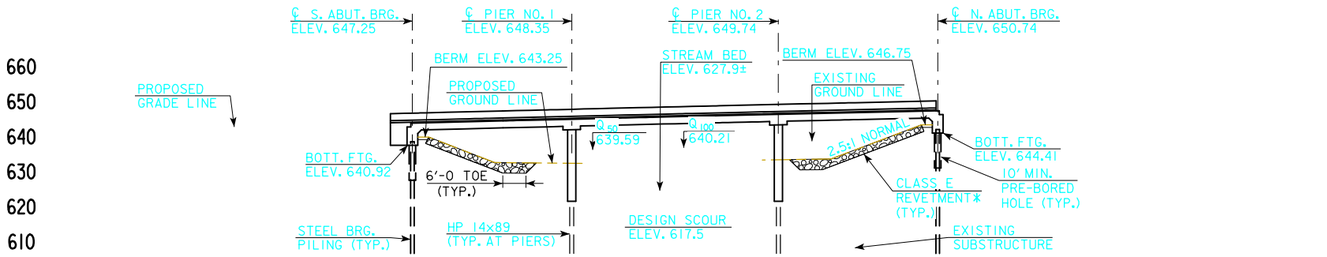
S = Normal Shoulder Slope

Possible Tabulation:
101-18

SUPERELEVATION DETAILS
FOUR LANE ROADWAY
RAISED MEDIAN

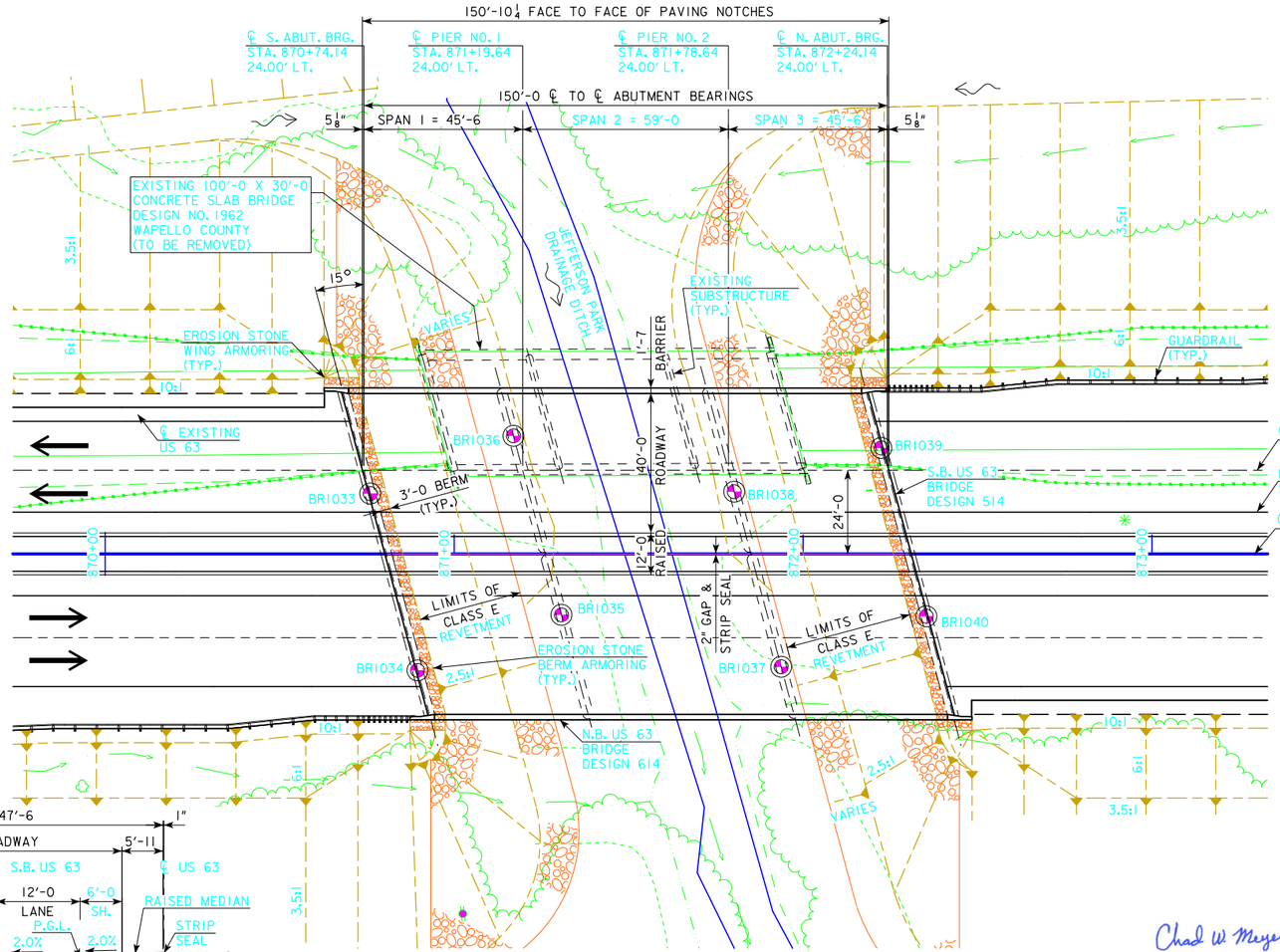
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER U.1

12:27:29 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155U01.sht

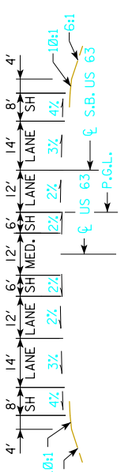


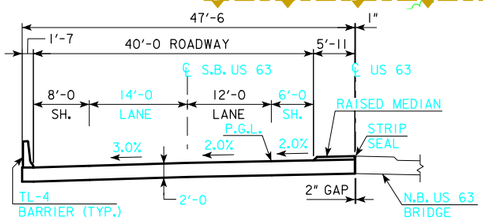
LONGITUDINAL SECTION ALONG ℄ S.B. US 63

* SEE SECTION THRU EMBEDDED REVETMENT BERM ON SHEET V.4



TYPICAL APPROACH SECTION





PROPOSED BRIDGE CROSS SECTION

SITUATION PLAN

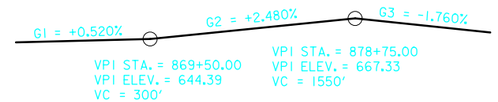
0 ENGLISH 40
SCALE IN FEET

This Sheet For Information Only

Chad W Meyer 8/17/16
Chad W. Meyer, P.E.

V.3 AND V.4

BENCH MARK NO. 87: STA. 871+90.90, 4.63' LT. CUT SQUARE IN SOUTHEAST CORNER OF HWY 63 BRIDGE, ELEV. 647.436.



S.B. US 63 PROPOSED GRADE

TRAFFIC ESTIMATE

2015 AADT	7870	V.P.D.
2035 AADT	10320	V.P.D.
2035 DHV	1066	V.P.H.
TRUCKS	11	%
TOTAL DESIGN ESALs		

UTILITIES LEGEND:

NO KNOWN UTILITIES

LOCATION

S.B. US 63 OVER JEFFERSON PARK DRAINAGE DITCH
T-71/72 N R-13 W
SECTION 6/31
KEOKUK/CENTER TOWNSHIP
WAPELLO COUNTY
BRIDGE MAINT. NO. 9032.8L063
FHWA NO. 50621
LATITUDE: 40.987722°
LONGITUDE: 92.403238°

HYDRAULIC DATA

DRAINAGE AREA = 4.77 SQ. MI.
STREAM SLOPE = 14.55 FT./MI.

Q2 = 1,450 CFS
STAGE = 636.14
CHANNEL VELOCITY = 5.32 FPS

Q_{50} = 4,350 CFS
STAGE = 639.59
BACKWATER = 0.73 FT.
AVG. BRIDGE VELOCITY = 7.88 FPS
(MIN. FREEBOARD = 5.4')

Q_{100} = 5,222 CFS
STAGE = 640.21
BACKWATER = 0.83 FT.
AVG. BRIDGE VELOCITY = 8.71 FPS
CALCULATED DESIGN SCOUR = 617.5

Q_{500} = 8,150 CFS
STAGE = 641.95
AVG. BRIDGE VELOCITY = 10.90 FPS
CALCULATED CHECK SCOUR = 615.5

ROADWAY OVERTOP = 642.2

EXTREME HW STAGE = 640.3
DATE = UNKNOWN
AVG. LOW WATER STAGE = 628.9

NOTES:
ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.
TL-4 BRIDGE RAILING PROPOSED.
TOP OF BRIDGE DECK AT ℄ S.B. US 63 IS 0.24' BELOW THE PROFILE GRADE TO ACCOUNT FOR DECK CROSS SLOPE.
PIER TYPE - SINGLE ROW INDIVIDUALLY ENCASED PILES.
A TWO INCH LONGITUDINAL STRIP SEAL IS LOCATED ALONG THE CENTER OF THE RAISED MEDIAN.
SEE SHEETS V.1 AND V.2 FOR N.B. US 63 BRIDGE OVER JEFFERSON PARK DRAINAGE DITCH.
SEE SHEET V.4 FOR OVERALL PLAN OF S.B. BRIDGE OVER JEFFERSON PARK DRAINAGE DITCH.
NORTHBOUND US 63 BRIDGE WILL BE BUILT FIRST. ONCE TRAFFIC IS SHIFTED ONTO NEW BRIDGE, REMOVE ENTIRE EXISTING BRIDGE. SOUTHBOUND US 63 BRIDGE WILL THEN BE CONSTRUCTED.

NOTES TO DESIGNER:
SUBSTRUCTURE AND FOUNDATION TYPE TO BE CONFIRMED DURING FINAL DESIGN. CONSIDER DRILLED SHAFTS AT PIERS DUE TO SHALLOW BEDROCK AND POTENTIAL SCOUR. APPROXIMATE BEDROCK ELEVATION IS 610.0±. TO BE CONFIRMED WHEN BRIDGE BORINGS ARE COMPLETE.
DEPENDING ON PIER TYPE, CONSIDER USING NON-MONOLITHIC PIER CAPS.
"RECORD OF COORDINATION - FLOODPLAIN DEVELOPMENT FORM" HAS BEEN COMPLETED.
BRIDGE BORING LOCATIONS ARE PROPOSED AND SUBJECT TO CHANGE PER APPROVED SITUATION PLAN.
DRAINAGE DITCH CHANNEL SHALL BE APPROXIMATELY CENTERED BETWEEN PIERS AT COMPLETION OF CONSTRUCTION.
DISTANCE FROM TOP OF SLAB TO BOTTOM OF FOOTING AT ℄ S.B. US 63 IS 6'-4. BOTTOM OF FOOTING IS LEVEL.

PRELIMINARY

DESIGN FOR 15° SKEW (R.A.)

150'-0 X 47'-6 CONTINUOUS CONCRETE SLAB S.B. BRIDGE

45'-6 END SPANS — 59'-0 CENTER SPAN

SITUATION PLAN

STATION 871+49.14, 24.00' LEFT — AUGUST 2016

WAPPELO COUNTY

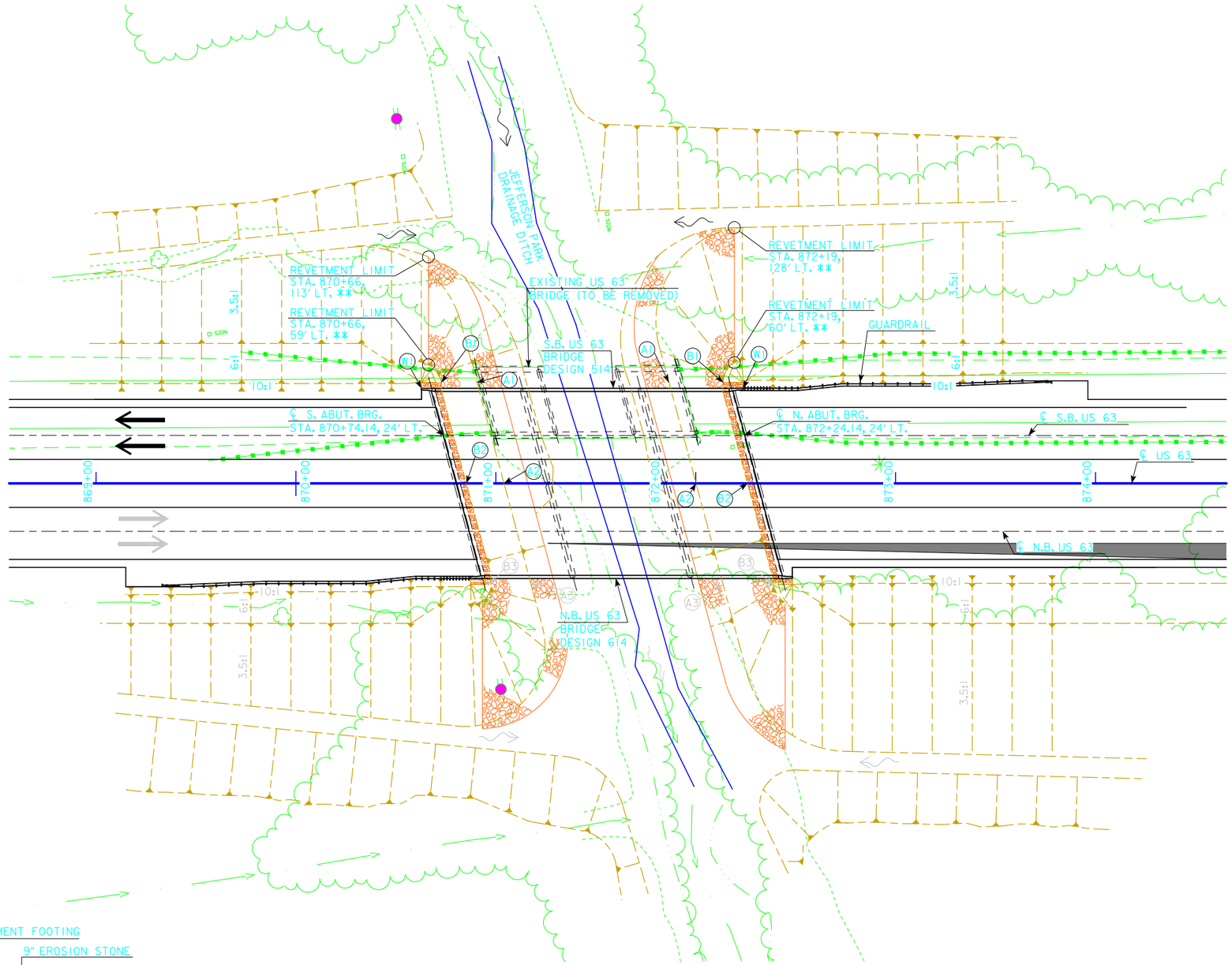
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 1 OF 2 — FILE NO. 29590 — DESIGN NO. 514

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER V.1

2:14:18 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155V01.sht

BENCH MARK NO. 87: STA. 871+90.90, 4.63' LT. CUT SQUARE IN SOUTHEAST CORNER OF HWY 63 BRIDGE, ELEV. 647.436.



SITE PLAN

END OF BRIDGE WING TABLE SOUTHBOUND BRIDGE

POINTS	SOUTH ABUTMENT			NORTH ABUTMENT		
	STATION	OFFSET*	ELEV	STATION	OFFSET*	ELEV
W1	870+62.69	23.58' LT.	646.33	872+23.80	23.58' LT.	650.07

UTILITIES LEGEND:

NO KNOWN UTILITIES

ESTIMATED REVETMENT QUANTITIES

CLASS 'E' REVETMENT	1,020 TONS
ENGINEERING FABRIC	940 SQ. YDS.
EROSION STONE	15 TONS
CLASS 10 EXCAVATION (INCLUDES EXCAVATION FOR CLASS 'E' REVETMENT ONLY)	610 CU. YDS.

NOTES:
ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.
TL-4 BRIDGE RAILING PROPOSED.
PIER TYPE - SINGLE ROW INDIVIDUALLY ENCASED PIER CAPS. A TWO INCH LONGITUDINAL STRIP SEAL IS LOCATED ALONG THE CENTER OF THE RAISED MEDIAN.
NORTHBOUND US 63 BRIDGE WILL BE BUILT FIRST. ONCE TRAFFIC IS SHIFTED ONTO NEW BRIDGE, REMOVE ENTIRE EXISTING BRIDGE. SOUTHBOUND US 63 BRIDGE WILL THEN BE CONSTRUCTED.
SEE SHEET V.3 FOR DETAILED S.B. BRIDGE DATA.
SEE SHEETS V.1 AND V.2 FOR N.B. US 63 BRIDGE.

* MEASURED FROM ℄ S.B. US 63
** MEASURED FROM ℄ US 63

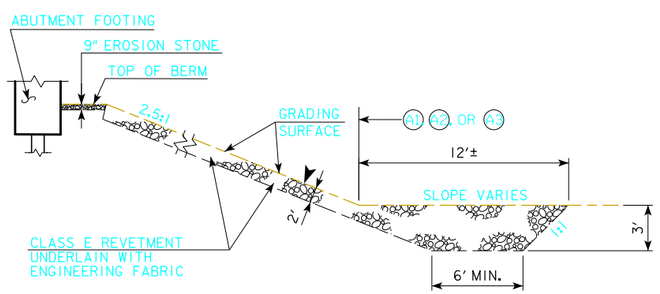
NOTES TO DESIGNER:
SUBSTRUCTURE AND FOUNDATION TYPE TO BE CONFIRMED DURING FINAL DESIGN. CONSIDER DRILLED SHAFTS AT PIERS DUE TO SHALLOW BEDROCK AND POTENTIAL SCOUR. APPROXIMATE BEDROCK ELEVATION IS 610.0±. TO BE CONFIRMED WHEN BRIDGE BORINGS ARE COMPLETED.
DEPENDING ON PIER TYPE, CONSIDER USING NON-MONOLITHIC PIER CAPS.
DRAINAGE DITCH CHANNEL SHALL BE APPROXIMATELY CENTERED BETWEEN PIERS AT COMPLETION OF CONSTRUCTION.
TOP OF BERM ELEVATION AT ABUTMENTS IS KEPT LEVEL BETWEEN N.B. AND S.B. BRIDGES.

LOCATION

S.B. US 63 OVER JEFFERSON PARK DRAINAGE DITCH
T-71/72 N R-13 W
SECTION 6/31
KEOKUK/CENTER TOWNSHIP
WAPELLO COUNTY
BRIDGE MAINT. NO. 9032.8L063
FHWA NO. 50621
LATITUDE: 40.987722°
LONGITUDE: 92.403238°

0 ENGLISH 60
SCALE RATIO: 1:60

PRELIMINARY



SECTION THRU EMBEDDED REVETMENT BERM

This Sheet For Information Only

BERM SLOPE LOCATION TABLE

POINTS	SOUTH ABUTMENT			NORTH ABUTMENT		
	STATION	OFFSET**	ELEV	STATION	OFFSET**	ELEV
A1	870+90.51	50.58' LT.	636.0	871+86.59	50.58' LT.	637.0
A2	871+04.07	0.00	636.0	872+00.15	0.00	637.0
A3	871+17.62	50.58' RT.	636.0	872+13.71	50.58' RT.	637.0
B1	870+71.68	50.58' LT.	643.3	872+12.36	50.58' LT.	646.8
B2	870+85.23	0.00	643.3	872+25.92	0.00	646.8
B3	870+98.79	50.58' RT.	643.3	872+39.47	50.58' RT.	646.8

DESIGN FOR 15° SKEW (R.A.)

150'-0 X 47'-6 CONTINUOUS CONCRETE SLAB S.B. BRIDGE

45'-6 END SPANS 59'-0 CENTER SPAN

SITUATION PLAN - SITE

STATION 871+49.14, 24.00' LEFT

AUGUST 2016

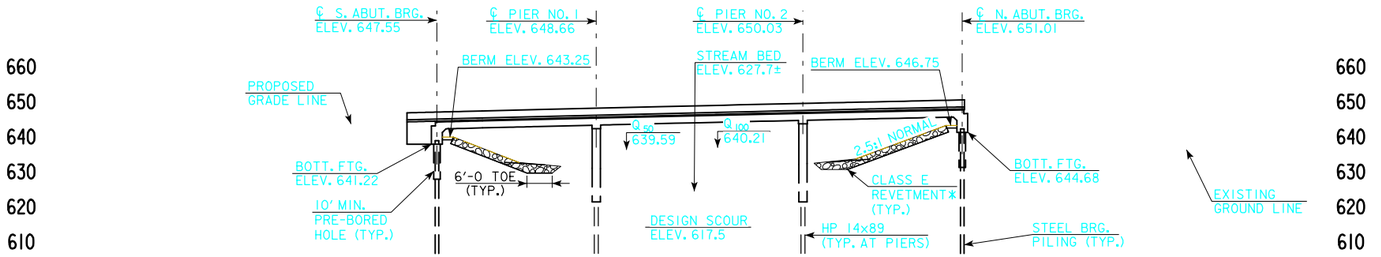
WAPELLO COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 2 OF 2 FILE NO. 29590 DESIGN NO. 514

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER V.2

2:14:20 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155V01.sht



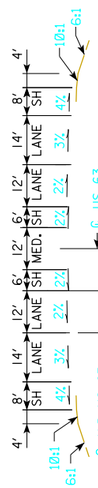
LONGITUDINAL SECTION ALONG ℄ N.B. US 63

* SEE SECTION THRU EMBEDDED REVETMENT BERM ON SHEET V.2

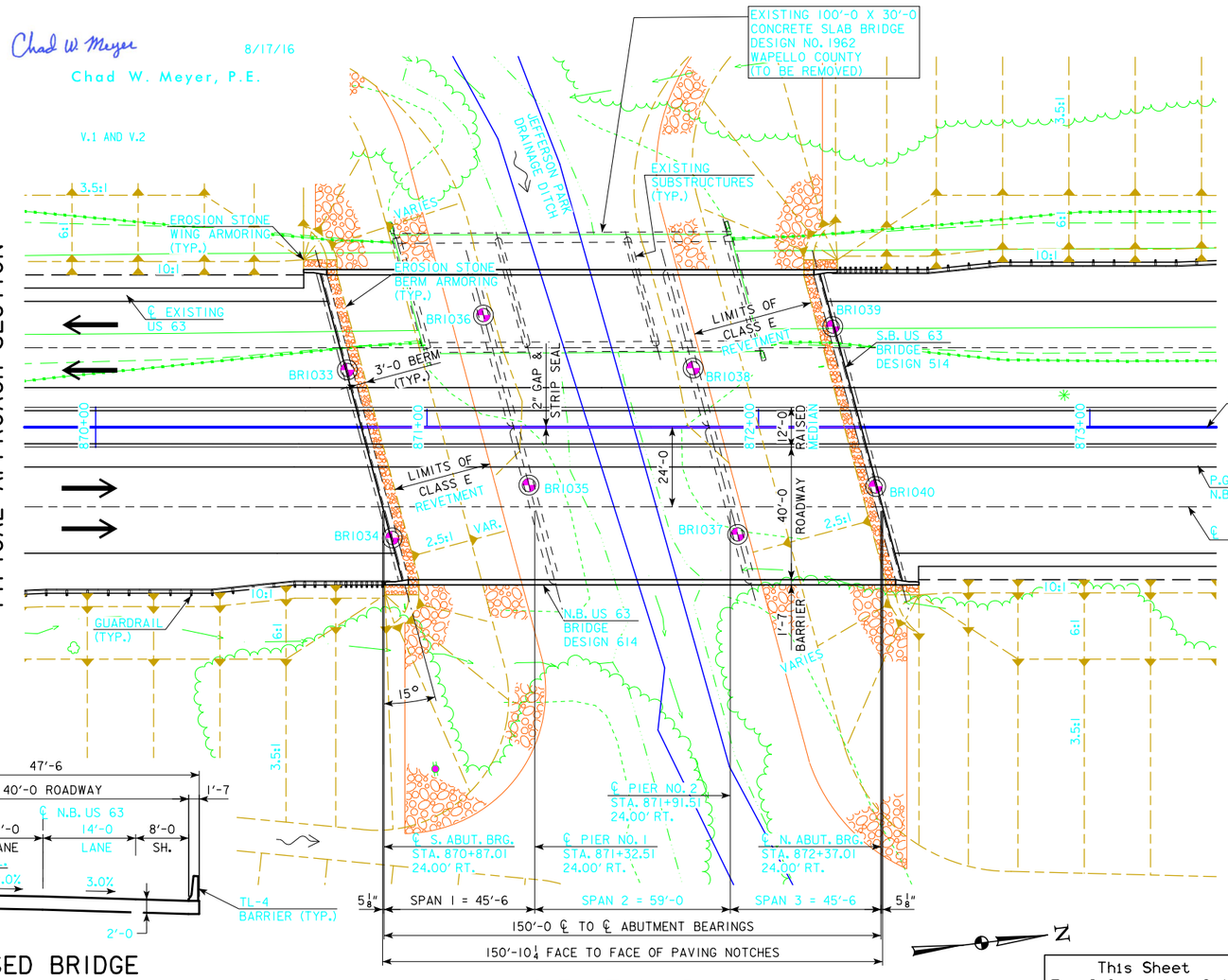
Chad W Meyer 8/17/16

Chad W. Meyer, P.E.

V.1 AND V.2



TYPICAL APPROACH SECTION



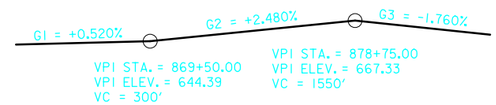
SITUATION PLAN

PROPOSED BRIDGE CROSS SECTION

This Sheet For Information Only

0 ENGLISH 40
SCALE IN FEET

BENCH MARK NO. 87: STA. 871+90.90, 4.63' LT. CUT SQUARE IN SOUTHEAST CORNER OF HWY 63 BRIDGE, ELEV. 647.436.



TRAFFIC ESTIMATE

2015 AADT	7870	V.P.D.
2035 AADT	10320	V.P.D.
2035 DHV	1066	V.P.H.
TRUCKS	11	%
TOTAL DESIGN ESALs		

UTILITIES LEGEND:

NO KNOWN UTILITIES

LOCATION

N.B. US 63 OVER JEFFERSON PARK DRAINAGE DITCH
T-71/72 N R-13 W
SECTION 6/31
KEOKUK/CENTER TOWNSHIP
WAPELLO COUNTY
BRIDGE MAINT. NO. 9032.8R063
FHWA NO. 700285
LATITUDE: 40.987722°
LONGITUDE: 92.403238°

N.B. US 63 PROPOSED GRADE HYDRAULIC DATA

DRAINAGE AREA = 4.77 SQ. MI.
STREAM SLOPE = 14.55 FT./MI.

Q_2 = 1,450 CFS
STAGE = 636.14
CHANNEL VELOCITY = 5.32 FPS

Q_{50} = 4,350 CFS
STAGE = 639.59
BACKWATER = 0.73 FT.
AVG. BRIDGE VELOCITY = 7.88 FPS
(MIN. FREEBOARD = 5.4')

Q_{100} = 5,222 CFS
STAGE = 640.21
BACKWATER = 0.83 FT.
AVG. BRIDGE VELOCITY = 8.71 FPS
CALCULATED DESIGN SCOUR = 617.5

Q_{500} = 8,150 CFS
STAGE = 641.95
AVG. BRIDGE VELOCITY = 10.90 FPS
CALCULATED CHECK SCOUR = 615.5

ROADWAY OVERTOP = 642.2

EXTREME HW STAGE = 640.3
DATE = UNKNOWN
AVG. LOW WATER STAGE = 628.7

NOTES:
ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.
TL-4 BRIDGE RAILING PROPOSED.
TOP OF BRIDGE DECK AT ℄ N.B. US 63 IS 0.24' BELOW THE PROFILE GRADE TO ACCOUNT FOR DECK CROSS SLOPE.
PIER TYPE - SINGLE ROW INDIVIDUALLY ENCASED PILES.
A TWO INCH LONGITUDINAL STRIP SEAL IS LOCATED ALONG THE CENTER OF THE RAISED MEDIAN.
SEE SHEETS V.3 AND V.4 FOR S.B. US 63 BRIDGE OVER JEFFERSON PARK DRAINAGE DITCH.
SEE SHEET V.2 FOR OVERALL PLAN OF N.B. BRIDGE OVER JEFFERSON PARK DRAINAGE DITCH.
NORTHBOUND US 63 BRIDGE WILL BE BUILT FIRST. ONCE TRAFFIC IS SHIFTED ONTO NEW BRIDGE, REMOVE ENTIRE EXISTING BRIDGE. SOUTHBOUND US 63 BRIDGE WILL THEN BE CONSTRUCTED.

NOTES TO DESIGNER:
SUBSTRUCTURE AND FOUNDATION TYPE TO BE CONFIRMED DURING FINAL DESIGN. CONSIDER DRILED SHAFTS AT PIERS DUE TO SHALLOW BEDROCK AND POTENTIAL SCOUR. APPROXIMATE BEDROCK ELEVATION IS 610.0±. TO BE CONFIRMED WHEN BRIDGE BORINGS ARE COMPLETED.
DEPENDING ON PIER TYPE, CONSIDER USING NON-MONOLITHIC PIER CAPS.
"RECORD OF COORDINATION - FLOODPLAIN DEVELOPMENT FORM" HAS BEEN COMPLETED.
BRIDGE BORING LOCATIONS ARE PROPOSED AND SUBJECT TO CHANGE PER APPROVED SITUATION PLAN.
DRAINAGE DITCH CHANNEL SHALL BE APPROXIMATELY CENTERED BETWEEN PIERS AT COMPLETION OF CONSTRUCTION.
DISTANCE FROM TOP OF SLAB TO BOTTOM OF FOOTING AT ℄ N.B. US 63 IS 6'-4. BOTTOM OF FOOTING IS LEVEL.

PRELIMINARY

DESIGN FOR 15° SKEW (R.A.)

150'-0 X 47'-6 CONTINUOUS CONCRETE SLAB N.B. BRIDGE

45'-6 END SPANS 59'-0 CENTER SPAN

SITUATION PLAN

STATION 871+62.01, 24.00' RIGHT AUGUST 2016

WAPPELO COUNTY

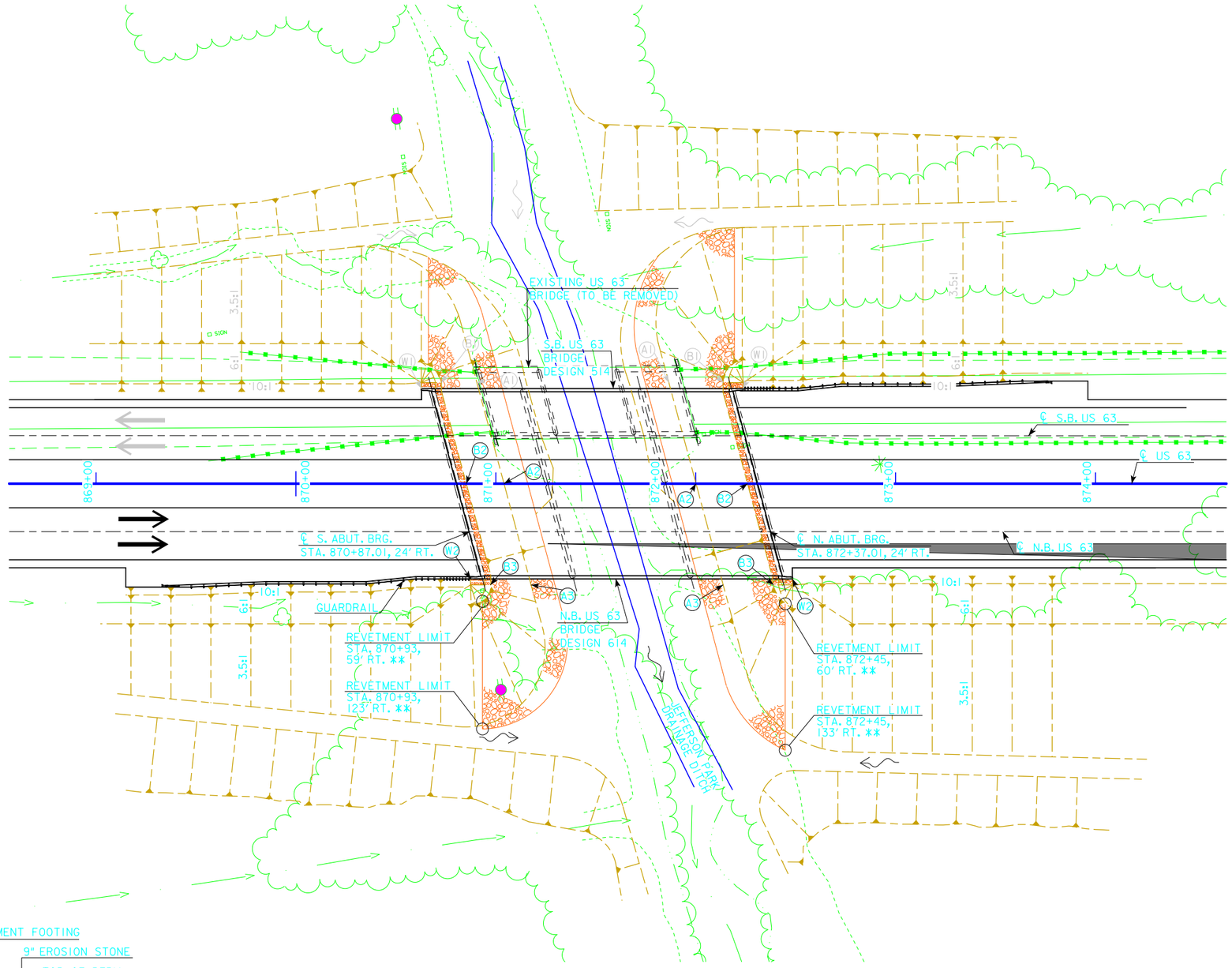
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 1 OF 2 FILE NO. 29590 DESIGN NO. 614

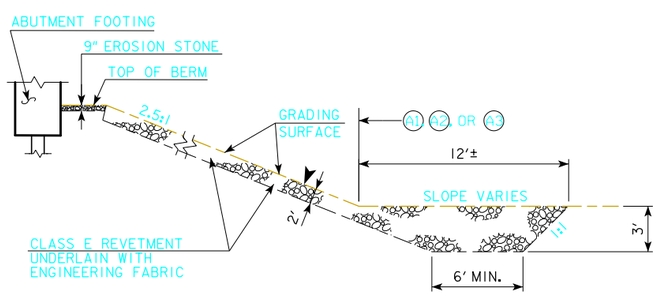
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER V.3

2:14:22 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155V01.sht

BENCH MARK NO. 87: STA. 871+90.90, 4.63' LT. CUT SQUARE IN SOUTHEAST CORNER OF HWY 63 BRIDGE, ELEV. 647.436.



SITE PLAN



SECTION THRU EMBEDDED REVETMENT BERM

This Sheet For Information Only

END OF BRIDGE WING TABLE NORTHBOUND BRIDGE

POINTS	SOUTH ABUTMENT			NORTH ABUTMENT		
	STATION	OFFSET△	ELEV	STATION	OFFSET△	ELEV
W2	870+87.35	23.58' RT.	646.90	872+48.46	23.58' RT.	650.59

UTILITIES LEGEND:

NO KNOWN UTILITIES

ESTIMATED REVETMENT QUANTITIES

CLASS 'E' REVETMENT	1,030 TONS
ENGINEERING FABRIC	940 SQ. YDS.
EROSION STONE	15 TONS
CLASS 10 EXCAVATION (INCLUDES EXCAVATION FOR CLASS 'E' REVETMENT ONLY)	610 CU. YDS.

NOTES:

ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.
TL-4 BRIDGE RAILING PROPOSED.
PIER TYPE - SINGLE ROW INDIVIDUALLY ENCASED PIER CAPS.
A TWO INCH LONGITUDINAL STRIP SEAL IS LOCATED ALONG THE CETNER OF THE RAISED MEDIAN.
NORTHBOUND US 63 BRIDGE WILL BE BUILT FIRST. ONCE TRAFFIC IS SHIFTED ONTO NEW BRIDGE, REMOVE ENTIRE EXISTING BRIDGE. SOUTHBOUND US 63 BRIDGE WILL THEN BE CONSTRUCTED.
SEE SHEET V.1 FOR DETAILED N.B. BRIDGE DATA.
SEE SHEETS V.3 AND V.4 FOR S.B. US 63 BRIDGE.

△ MEASURED FROM ℄ N.B. US 63.
** MEASURED FROM ℄ US 63

NOTES TO DESIGNER:

SUBSTRUCTURE AND FOUNDATION TYPE TO BE CONFIRMED DURING FINAL DESIGN. CONSIDER DRILLED SHAFTS AT PIERS DUE TO SHALLOW BEDROCK AND POTENTIAL SCOUR. APPROXIMATE BEDROCK ELEVATION IS 610.0±. TO BE CONFIRMED WHEN BRIDGE BORINGS ARE COMPLETED.
DEPENDING ON PIER TYPE, CONSIDER USING NON-MONOLITHIC PIER CAPS.
DRAINAGE DITCH CHANNEL SHALL BE APPROXIMATELY CENTERED BETWEEN PIERS AT COMPLETION OF CONSTRUCTION.
TOP OF BERM ELEVATION AT ABUTMENTS IS KEPT LEVEL BETWEEN N.B. AND S.B. BRIDGES.

LOCATION

N.B. US 63 OVER JEFFERSON PARK DRAINAGE DITCH
T-71/72 N R-13 W
SECTION 6/31
KEOKUK/CENTER TOWNSHIP
WAPELLO COUNTY
BRIDGE MAINT. NO. 9032.8R063
FHWA NO. 700285
LATITUDE: 40.987722°
LONGITUDE: 92.403238°

0 ENGLISH 60
SCALE RATIO: 1:60

PRELIMINARY

BERM SLOPE LOCATION TABLE

POINTS	SOUTH ABUTMENT			NORTH ABUTMENT		
	STATION	OFFSET**	ELEV	STATION	OFFSET**	ELEV
A1	870+90.51	50.58' LT.	636.0	871+86.59	50.58' LT.	637.0
A2	871+04.07	0.00	636.0	872+00.15	0.00	637.0
A3	871+17.62	50.58' RT.	636.0	872+13.71	50.58' RT.	637.0
B1	870+71.68	50.58' LT.	643.3	872+12.36	50.58' LT.	646.8
B2	870+85.23	0.00	643.3	872+25.92	0.00	646.8
B3	870+98.79	50.58' RT.	643.3	872+39.47	50.58' RT.	646.8

DESIGN FOR 15° SKEW (R.A.)

150'-0 X 47'-6 CONTINUOUS CONCRETE SLAB N.B. BRIDGE

45'-6 END SPANS 59'-0 CENTER SPAN

SITUATION PLAN - SITE

STATION 871+62.01, 24.00' RIGHT AUGUST 2016

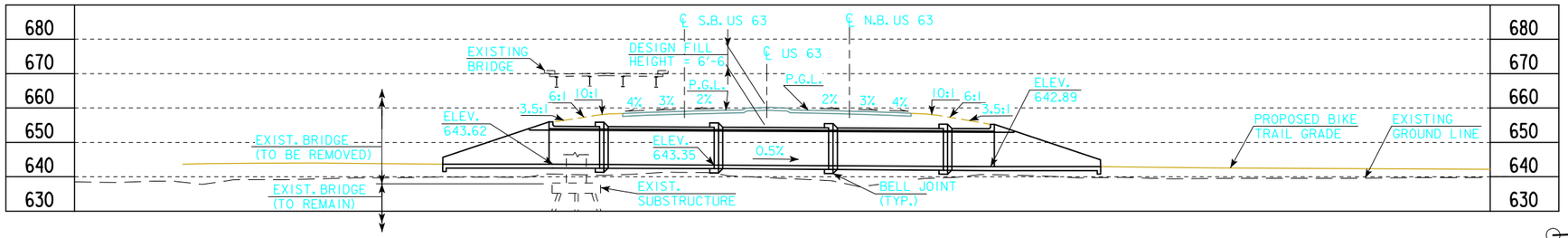
WAPELLO COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

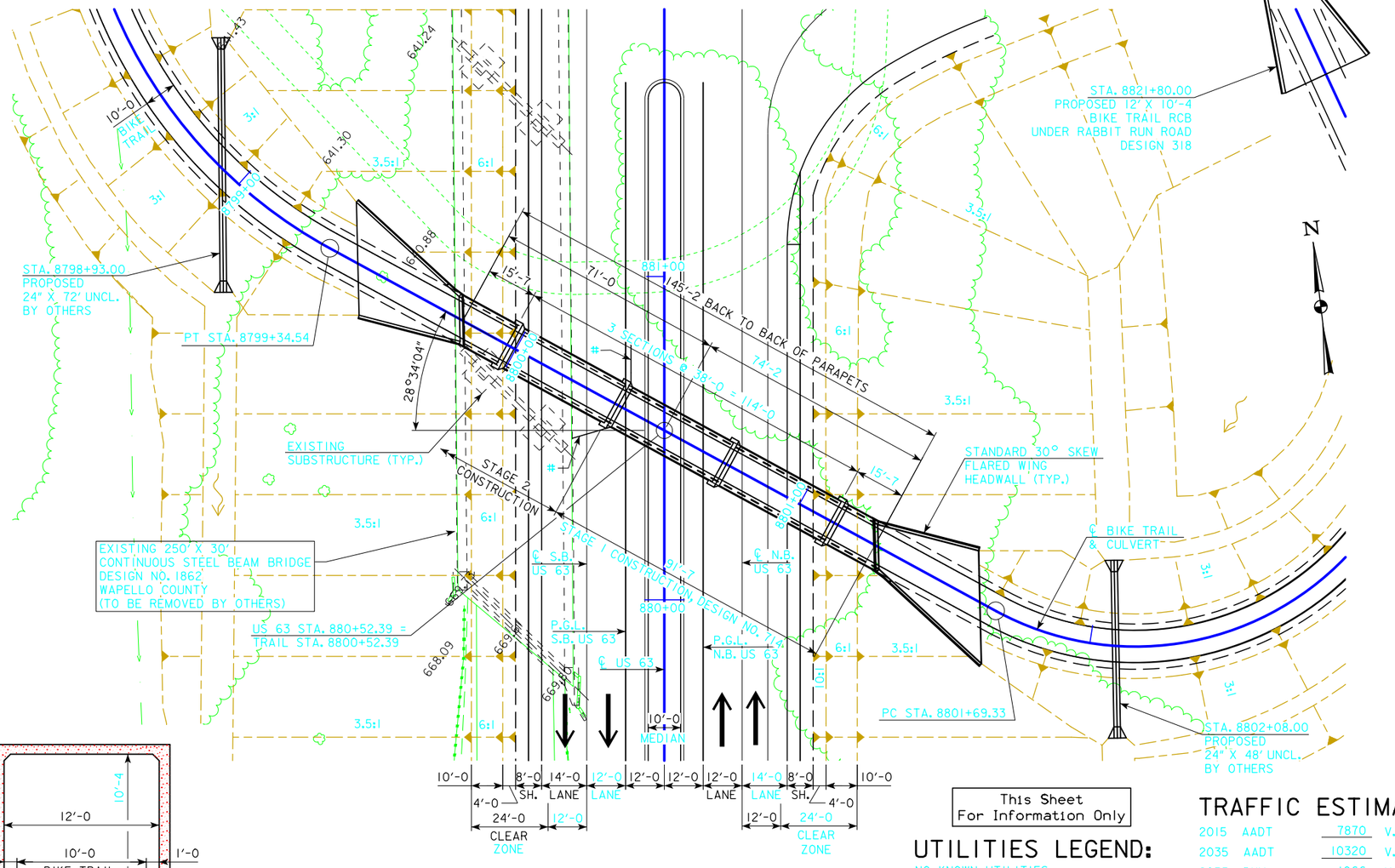
DESIGN SHEET NO. 2 OF 2 FILE NO. 29590 DESIGN NO. 614

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER V.4

2:14:24 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155V01.sht



LONGITUDINAL SECTION ALONG ℄ CULVERT



SITUATION PLAN

TEMPORARY SHEET PILING, IF REQUIRED.

CULVERT SECTION

This Sheet For Information Only

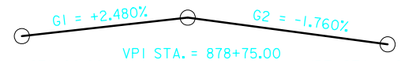
UTILITIES LEGEND:

NO KNOWN UTILITIES

TRAFFIC ESTIMATE

2015 AADT	7870	V.P.D.
2035 AADT	10320	V.P.D.
2035 DHV	1066	V.P.H.
TRUCKS	11	%
TOTAL DESIGN ESALs		

BENCH MARK NO. 88: STA. 883+51.21, 39.97' LT. BRASS PLUG @ NORTHWEST CORNER OF HWY 63 BRIDGE OVER RAILROAD TRACKS, ELEV. 669.179.



US 63
PROPOSED PROFILE GRADE



BIKE TRAIL
PROPOSED PROFILE GRADE

BIKE TRAIL CURVE DATA

PI STA. 8798+76.62	PI STA. 8804+41.39
Δ = 47°05'20"	Δ = 143°23'24"
D = 38°11'50"	D = 63°39'43"
T = 65.36	T = 272.05
L = 123.28	L = 225.24
E = 13.62	E = 196.56
R = 150.00	R = 90.00
PC STA. 8798+11.26	PC STA. 8801+69.33
PT STA. 8799+34.54	PT STA. 8803+94.57

NOTES:
ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.
STAGE 1 CONSTRUCTION TO BE COMPLETED WITH TRAFFIC ON EXISTING BRIDGE. TRAFFIC THEN TO BE MOVED ONTO COMPLETED N.B. US 63. EXISTING BRIDGE THEN TO BE REMOVED FOLLOWED BY COMPLETION OF STAGE 2 CONSTRUCTION.
SEE SHEET V.6 FOR STAGE 2 CONSTRUCTION.
EXISTING BRIDGE TO BE REMOVED BY OTHERS; DESIGN NO. 914.
INSIDE HEIGHT OF CULVERT IS A CONSTANT 10'-4 AS A FROST TROUGH IS NOT USED.

NOTES TO DESIGNER:
BELL JOINTS AND CAMBER ARE ANTICIPATED TO BE NEEDED DUE TO SETTLEMENTS. CAMBER ELEVATIONS AND DETAILS TO BE PROVIDED DURING FINAL DESIGN.
PIPE HANDRAIL ON HEADWALLS SHALL BE INCLUDED IN FINAL DESIGN.
LIGHTING FOR THE INSIDE OF THE CULVERT SHOULD BE CONSIDERED.
SEALING OF THE CULVERT JOINTS SHALL BE CONSIDERED.
3.5:1 SIDE SLOPES TO BE SLIGHTLY STEEPENED AROUND HEADWALLS TO ACCOMMODATE THE USE OF STANDARD HEADWALL DETAILS.

LOCATION

BIKE TRAIL UNDER US 63
T-72 N R-13 W
SECTION 31
CITY OF OTTUMWA
CENTER TOWNSHIP
WAPELLO COUNTY
LATITUDE: 40.990183°
LONGITUDE: 92.402806°

0 ENGLISH 40
SCALE IN FEET

PRELIMINARY

DESIGN FOR 28°34'04" SKEW (L.A.)

12' X 10'-4 X 91'-7 REINFORCED CONCRETE BOX CULVERT

SITUATION PLAN-STAGE 1

STATION 880+52.39 SEPTEMBER 2016

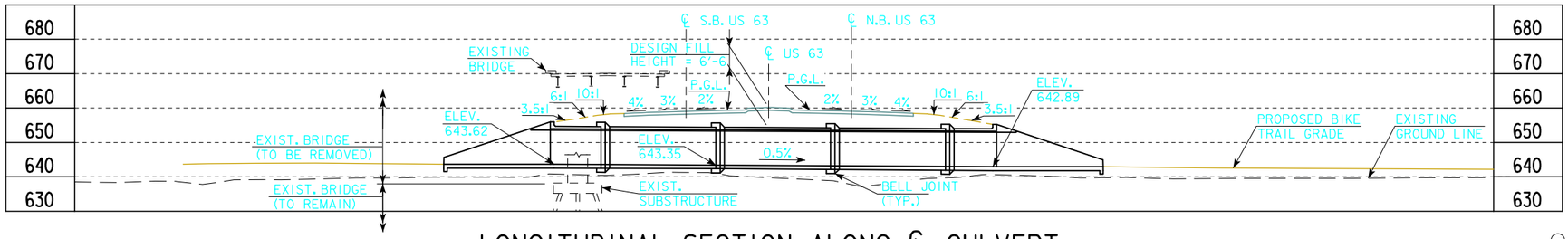
WAPELLO COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

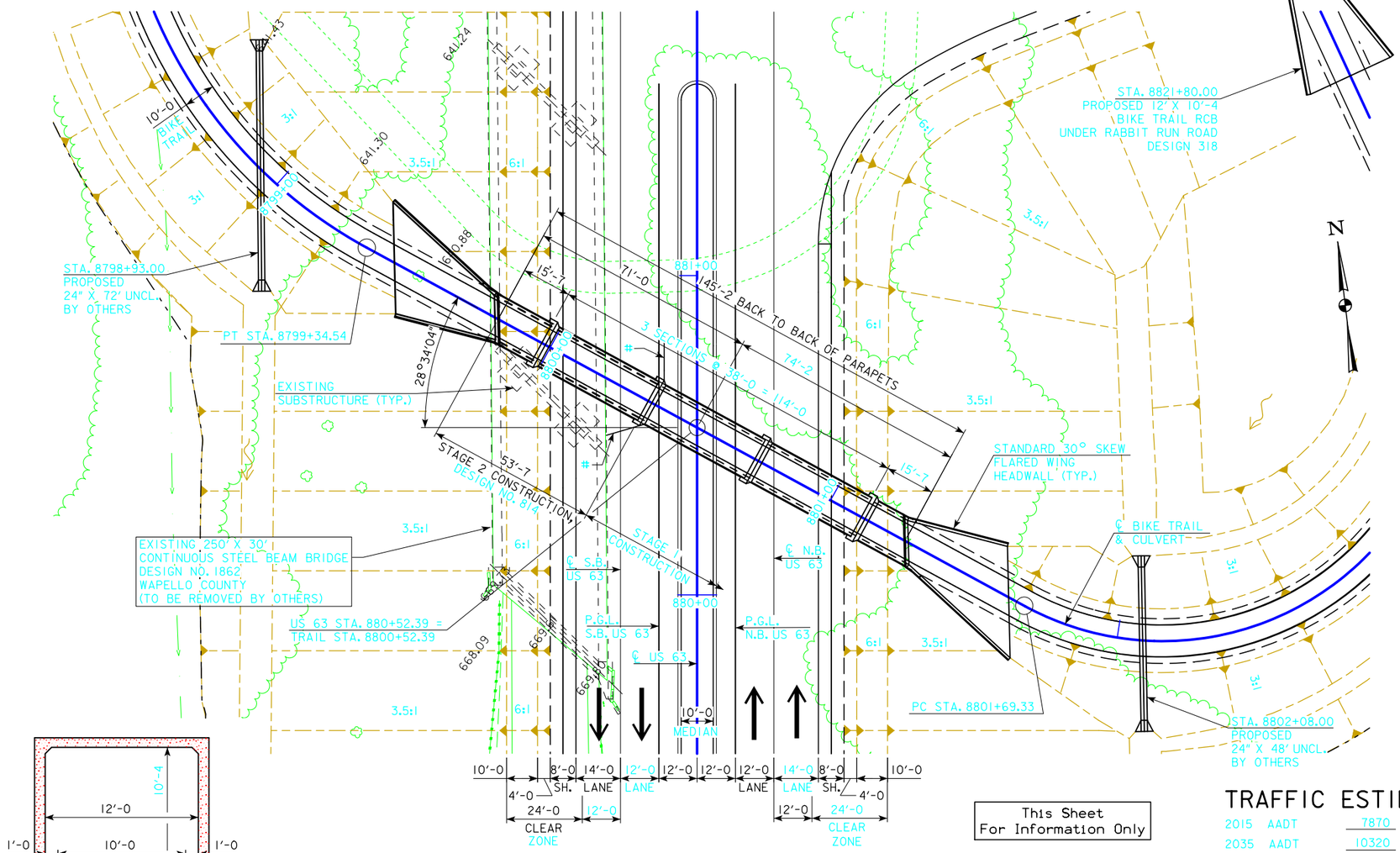
DESIGN SHEET NO. 1 OF 2 FILE NO. 29590 DESIGN NO. 714

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER V.5

2:14:26 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155V01.sht



LONGITUDINAL SECTION ALONG ℄ CULVERT



SITUATION PLAN

TEMPORARY SHEET PILING, IF REQUIRED.

CULVERT SECTION

This Sheet For Information Only

UTILITIES LEGEND:

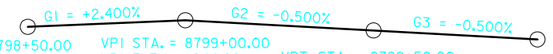
NO KNOWN UTILITIES

BENCH MARK NO. 88: STA. 883+51.21, 39.97' LT. BRASS PLUG @ NORTHWEST CORNER OF HWY 63 BRIDGE OVER RAILROAD TRACKS, ELEV. 669.179.



VPC STA. = 871+00.00
VPC ELEV. = 648.11
VPI STA. = 878+75.00
VPI ELEV. = 667.33
VC = 1550'
VPT STA. = 886+50.00
VPT ELEV. = 653.69

US 63 PROPOSED PROFILE GRADE



VPC STA. = 8798+50.00
VPT ELEV. = 642.82
VPI STA. = 8799+00.00
VPI ELEV. = 644.02
VC = 100'
VPT STA. = 8799+50.00
VPT ELEV. = 643.77
VPI STA. = 8804+00.00
VPI ELEV. = 641.52

BIKE TRAIL PROPOSED PROFILE GRADE

BIKE TRAIL CURVE DATA

PI STA. 8798+76.62	PI STA. 8804+41.39
Δ = 47°05'20"	Δ = 143°23'24"
D = 38°11'50"	D = 63°39'43"
T = 65.36	T = 272.05
L = 123.28	L = 225.24
E = 13.62	E = 196.56
R = 150.00	R = 90.00
PC STA. 8798+11.26	PC STA. 8801+69.33
PT STA. 8799+34.54	PT STA. 8803+94.57

NOTES:
ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.
STAGE 1 CONSTRUCTION TO BE COMPLETED WITH TRAFFIC ON EXISTING BRIDGE. TRAFFIC THEN TO BE MOVED ONTO COMPLETED N.B. US 63. EXISTING BRIDGE THEN TO BE REMOVED FOLLOWED BY COMPLETION OF STAGE 2 CONSTRUCTION.
SEE SHEET V.5 FOR STAGE 1 CONSTRUCTION.
EXISTING BRIDGE TO BE REMOVED BY OTHERS; DESIGN NO. 914.
INSIDE HEIGHT OF CULVERT IS A CONSTANT 10'-4 AS A FROST TROUGH IS NOT USED.

NOTES TO DESIGNER:
BELL JOINTS AND CAMBER ARE ANTICIPATED TO BE NEEDED DUE TO SETTLEMENTS. CAMBER ELEVATIONS AND DETAILS TO BE PROVIDED DURING FINAL DESIGN.
PIPE HANDRAIL ON HEADWALLS SHALL BE INCLUDED IN FINAL DESIGN.
LIGHTING FOR THE INSIDE OF THE CULVERT SHOULD BE CONSIDERED.
SEALING OF THE CULVERT JOINTS SHALL BE CONSIDERED.
3.5:1 SIDE SLOPES TO BE SLIGHTLY STEEPENED AROUND HEADWALLS TO ACCOMMODATE THE USE OF STANDARD HEADWALL DETAILS.

LOCATION

BIKE TRAIL UNDER US 63
T-72 N R-13 W
SECTION 31
CITY OF OTTUMWA
CENTER TOWNSHIP
WAPELLO COUNTY
LATITUDE: 40.990183°
LONGITUDE: 92.402806°

0 ENGLISH 40
SCALE IN FEET

TRAFFIC ESTIMATE

2015 AADT	7870	V.P.D.
2035 AADT	10320	V.P.D.
2035 DHV	1066	V.P.H.
TRUCKS	11	%
TOTAL DESIGN ESALs		

PRELIMINARY

DESIGN FOR 28°34'04" SKEW (L.A.)

12' X 10'-4 X 53'-7 REINFORCED CONCRETE BOX CULVERT

SITUATION PLAN-STAGE 2

STATION 880+52.39 SEPTEMBER 2016

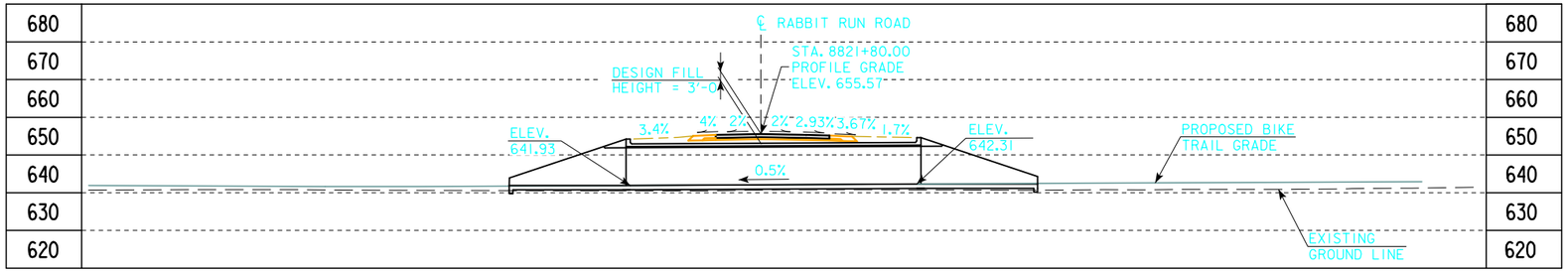
WAPELLO COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

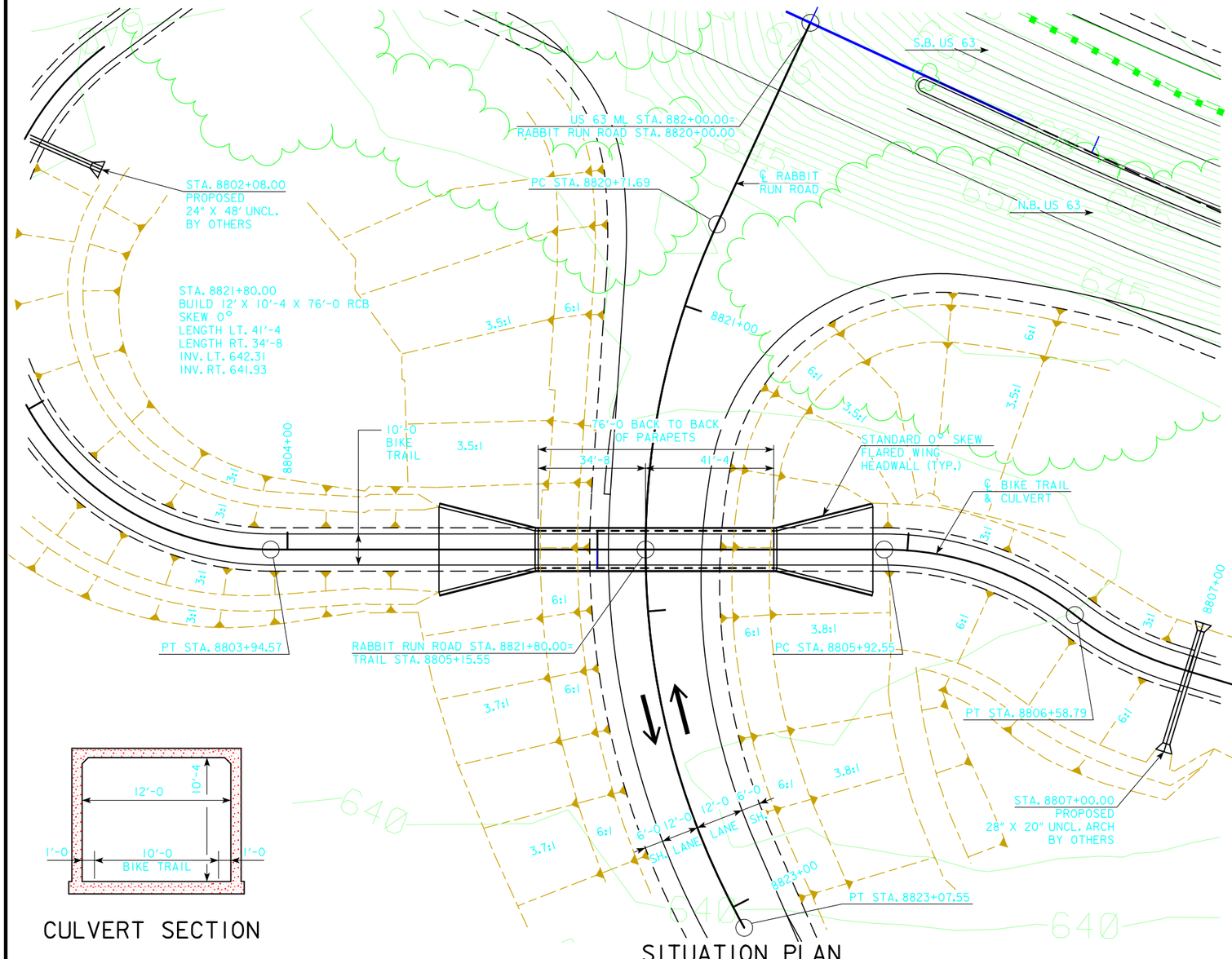
DESIGN SHEET NO. 2 OF 2 FILE NO. 29590 DESIGN NO. 814

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER V.6

2:14:27 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155V01.sht



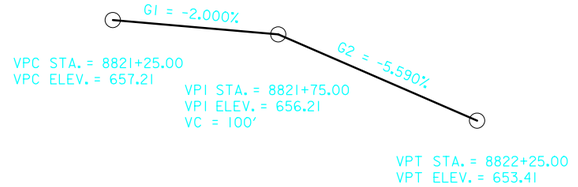
LONGITUDINAL SECTION ALONG ℄ CULVERT



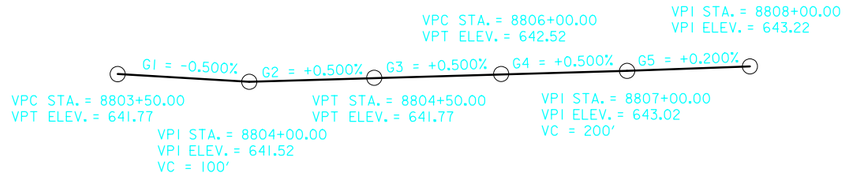
SITUATION PLAN

CULVERT SECTION

BENCH MARK NO. 88: STA. 883+51.21, 39.97' LT. BRASS PLUG @ NORTHWEST CORNER OF HWY 63 BRIDGE OVER RAILROAD TRACKS, ELEV. 669.179.



RABBIT RUN ROAD PROPOSED PROFILE GRADE



BIKE TRAIL PROPOSED PROFILE GRADE

RABBIT RUN ROAD CURVE DATA

PI STA. 8821+99.22
Δ = 54°03'12"
D = 22°55'06"
T = 127.53
L = 235.85
E = 30.65
R = 250.00
PC STA. 8820+71.69
PT STA. 8823+07.55

BIKE TRAIL CURVE DATA

PI STA. 8804+41.39	PI STA. 8806+26.93
Δ = 143°23'24"	Δ = 19°41'1"
D = 63°39'43"	D = 22°55'6"
T = 272.05	T = 43.37
L = 225.24	L = 85.89
E = 196.56	E = 3.73
R = 90.00	R = 250.00
PC STA. 8801+69.33	PC STA. 8805+92.55
PT STA. 8803+94.57	PT STA. 8806+58.79

NOTES:
ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.

INSIDE HEIGHT OF CULVERT IS A CONSTANT 10'-4 AS A FROST TROUGH IS NOT USED.

NOTES TO DESIGNER:

PIPE HANDRAIL ON HEADWALLS SHALL BE INCLUDED IN FINAL DESIGN. LIGHTING FOR THE INSIDE OF THE CULVERT SHOULD BE CONSIDERED.

This Sheet
For Information Only

LOCATION

BIKE TRAIL UNDER
RABBIT RUN ROAD
T-72 N R-13 W
SECTION 31
CITY OF OTTUMWA
CENTER TOWNSHIP
WAPELLO COUNTY
LATITUDE: 40.990593°
LONGITUDE: 92.402093°

UTILITIES LEGEND:

NO KNOWN UTILITIES

0 ENGLISH 40
SCALE IN FEET

PRELIMINARY

TRAFFIC ESTIMATE

2014 AADT	850	V.P.D.
20 AADT	_____	V.P.D.
20 DHV	_____	V.P.H.
TRUCKS	_____	%
TOTAL DESIGN ESALs	_____	

DESIGN FOR 0° SKEW

12' X 10'-4 X 76'-0 REINFORCED CONCRETE BOX CULVERT SITUATION PLAN

STATION 8821+80.00 SEPTEMBER 2016

WAPELLO COUNTY

I I 29590 318

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER V.7

2:14:29 PM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155V01.sht

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 Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.1

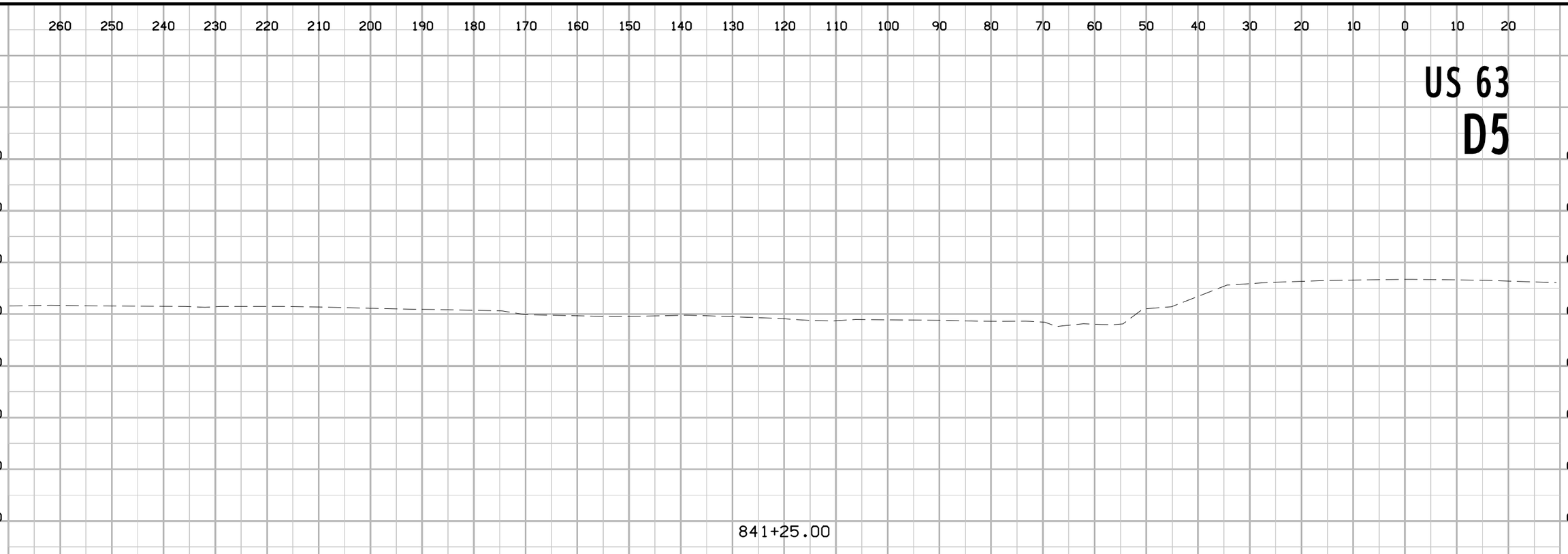
8:38:37 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155_LGD.sht

US 63
D5

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

670
660
650
640
630
620
610
600

841+25.00



841+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 Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.2

8:40:01 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

US 63

D5

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

670 660 650 640 630 620 610 600

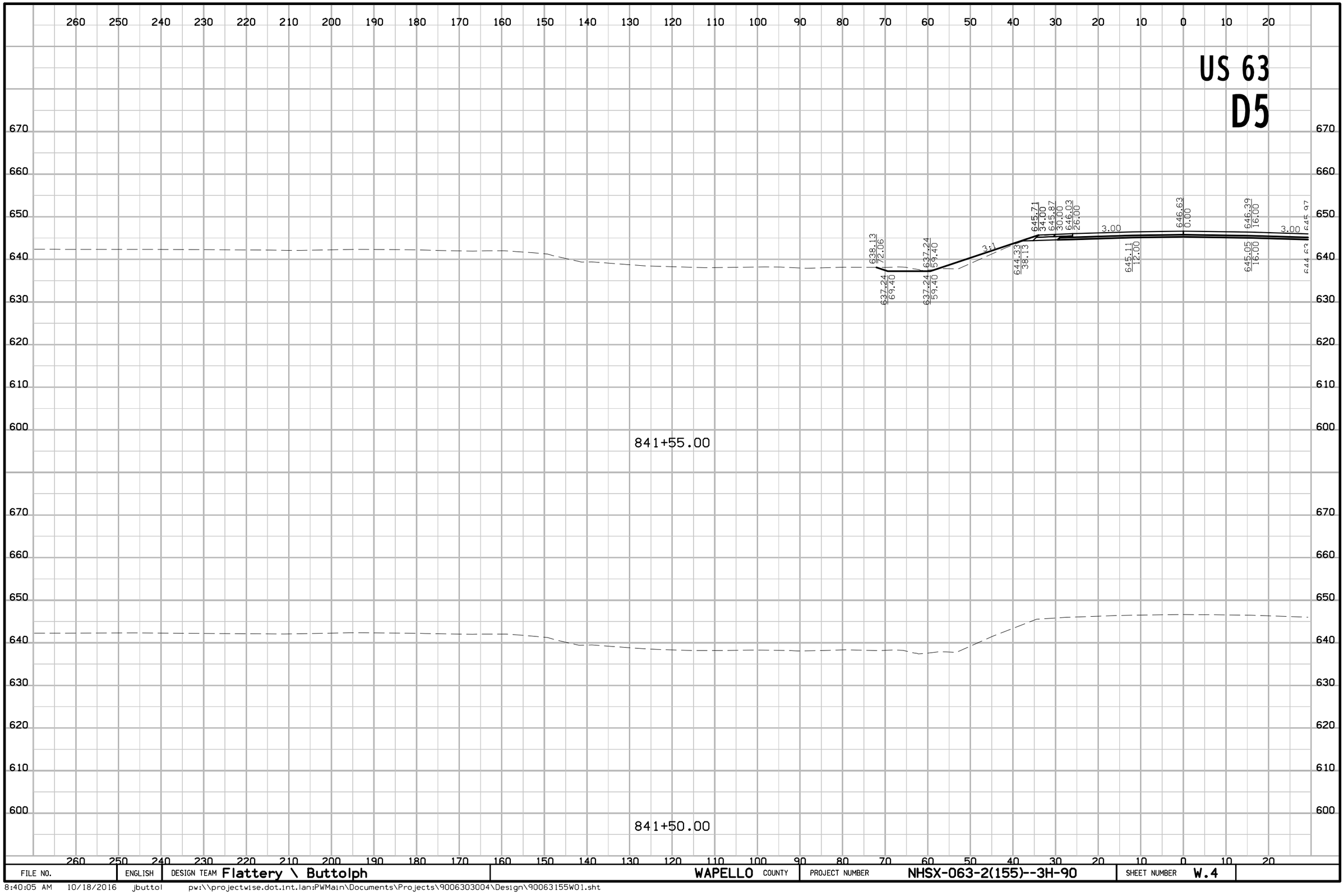
841+25.00

841+00.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.3

8:40:03 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

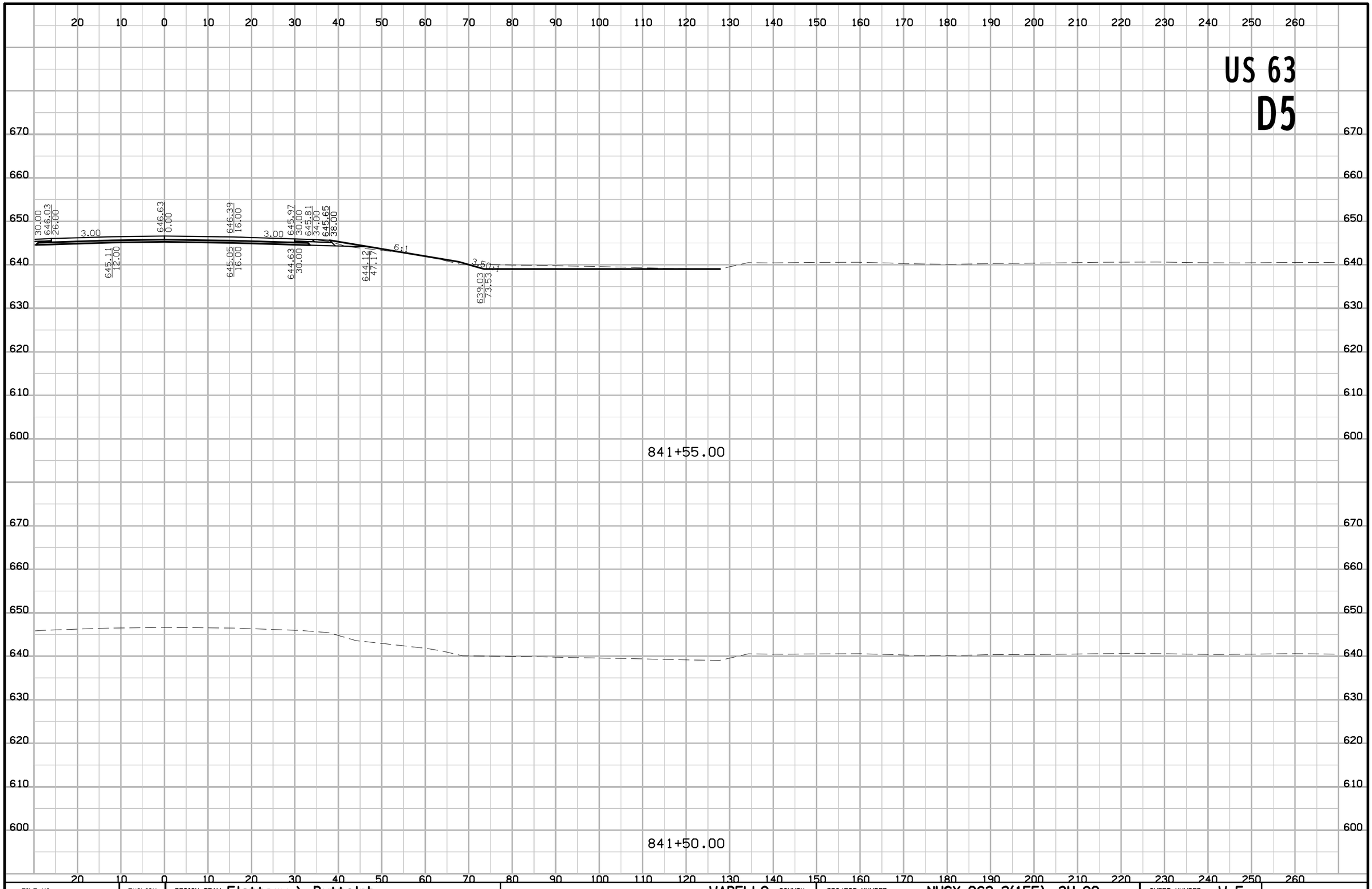
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.4

8:40:05 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

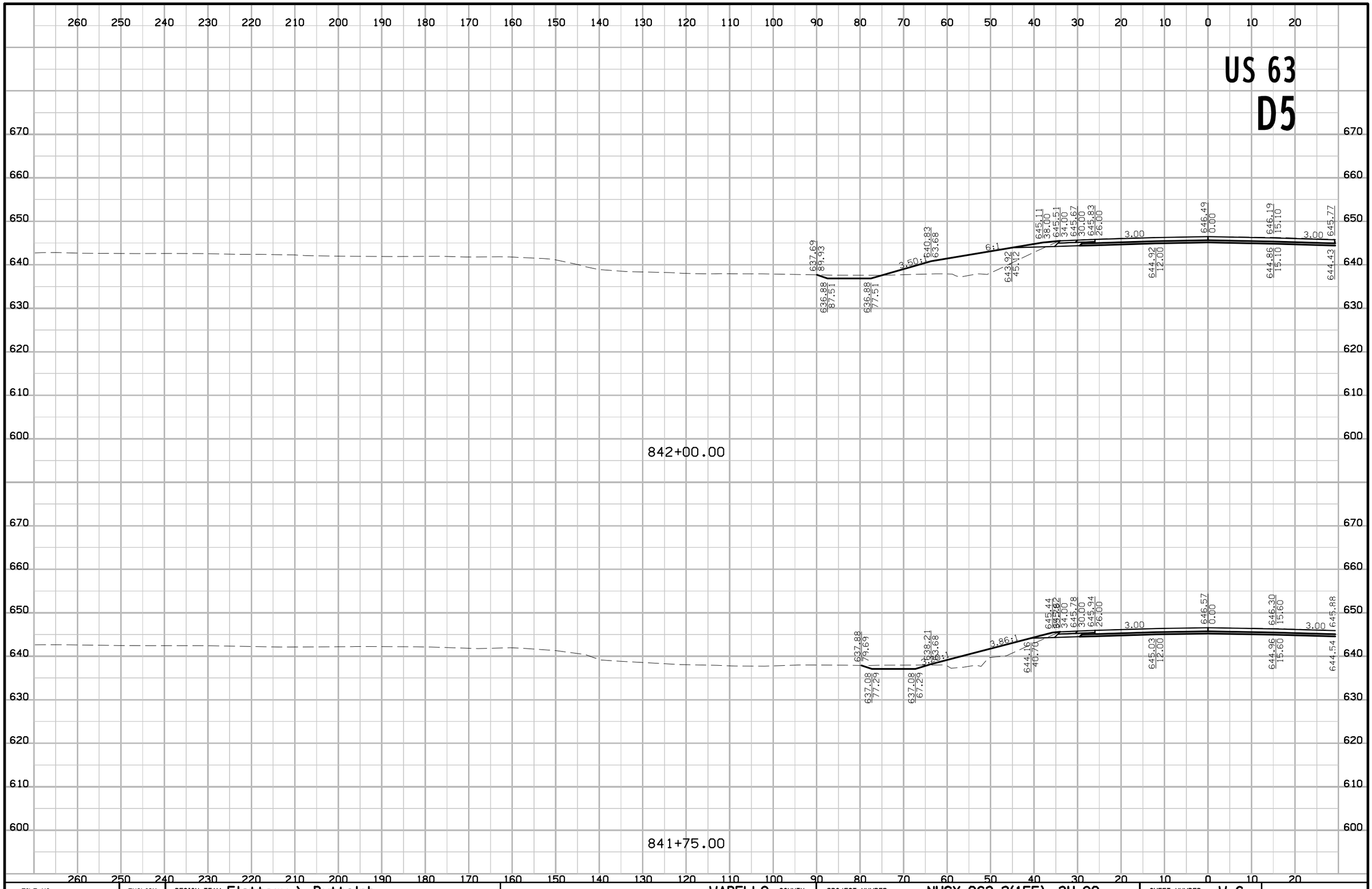
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.5

8:40:08 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

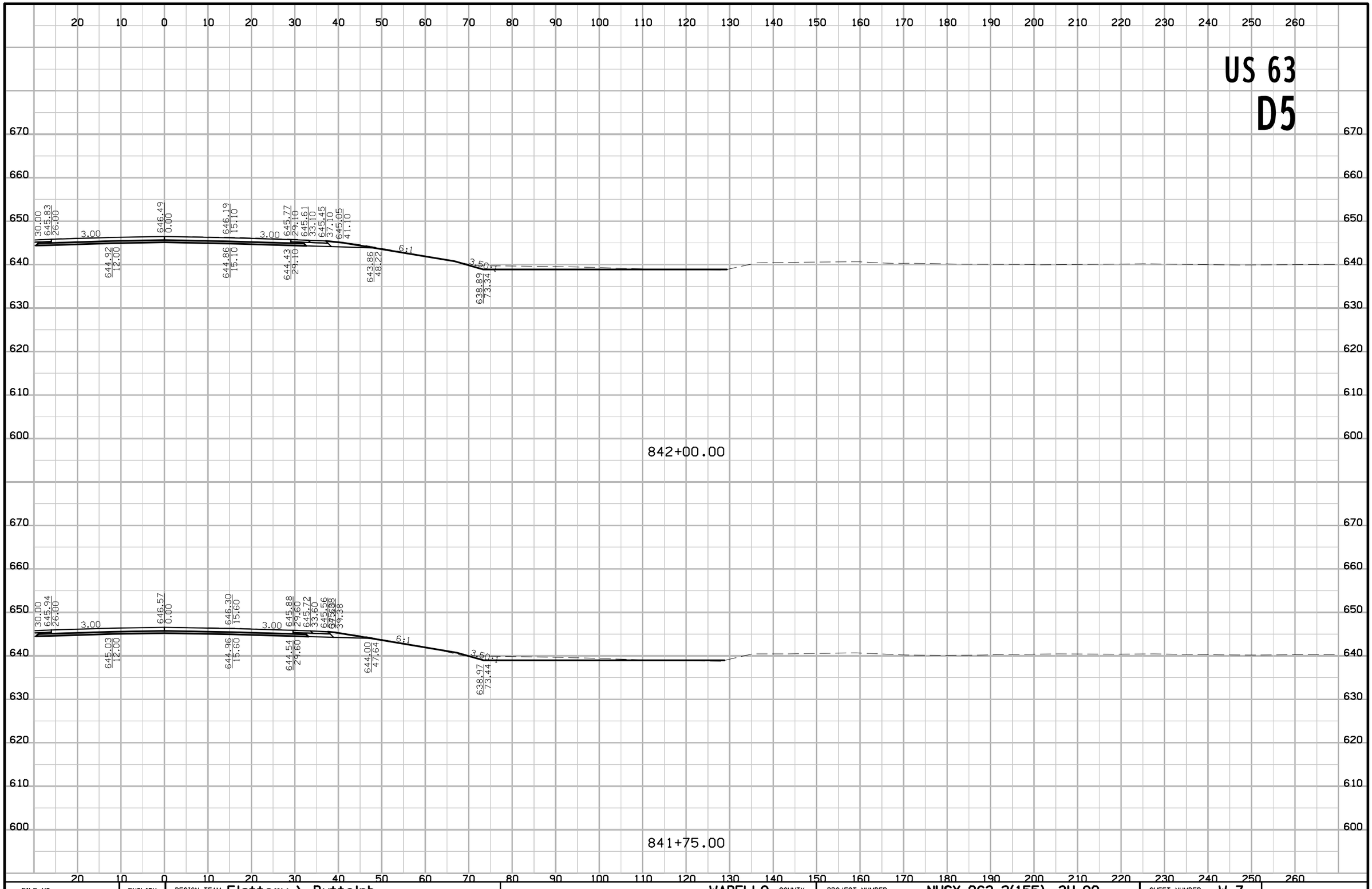
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.6

8:40:10 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

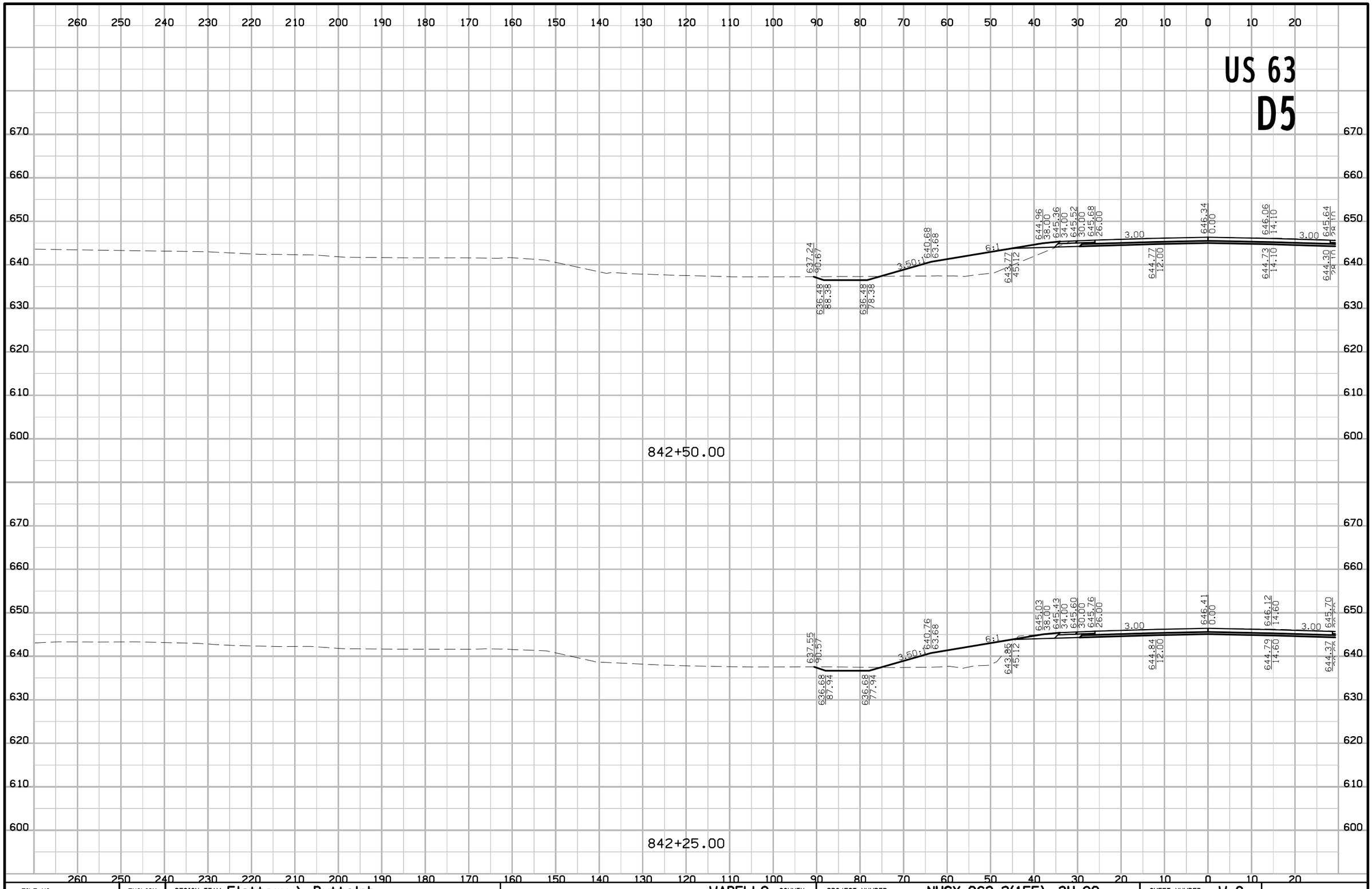
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.7

8:40:12 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

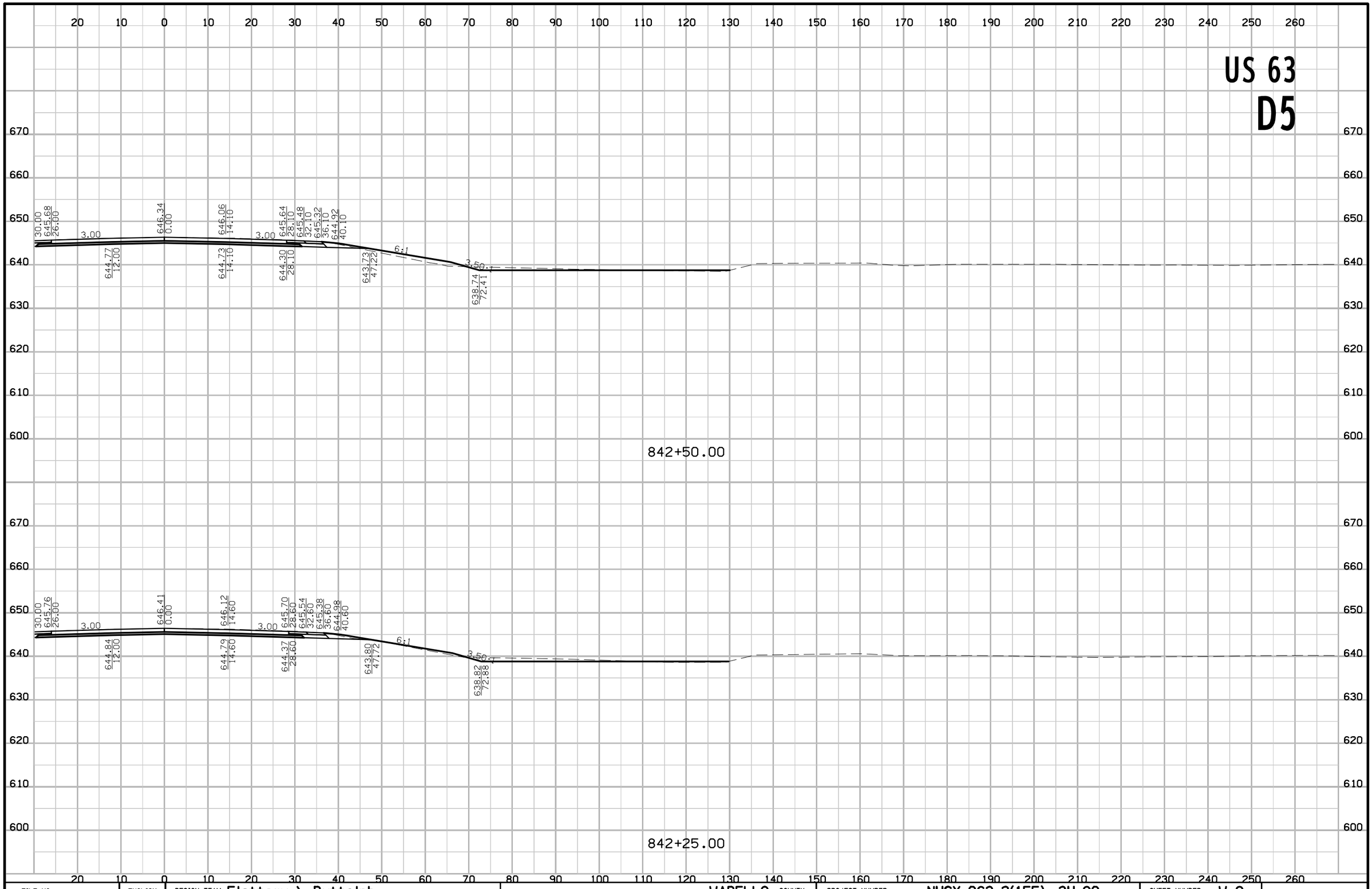
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.8

8:40:14 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

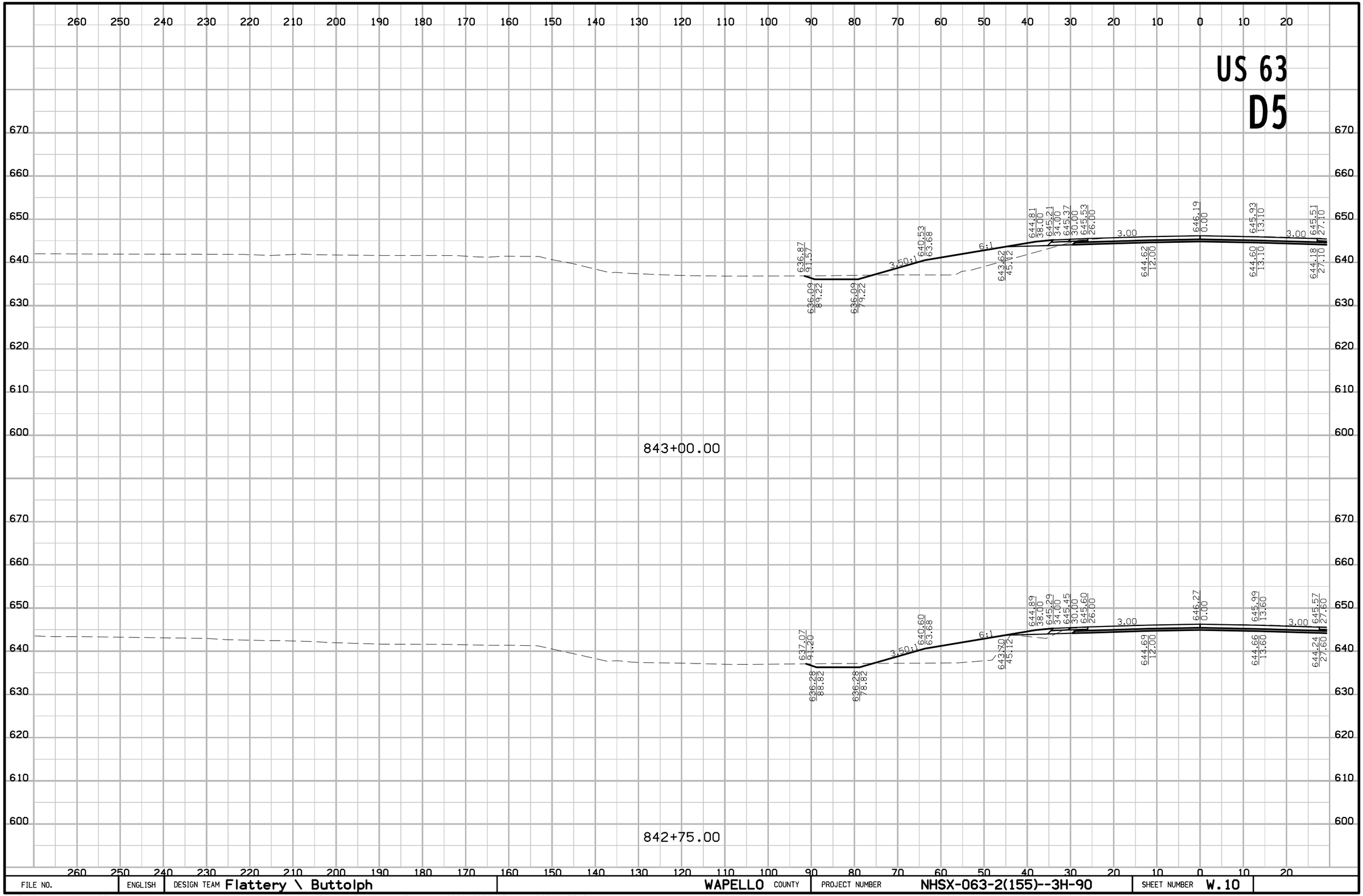
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.9

8:40:16 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

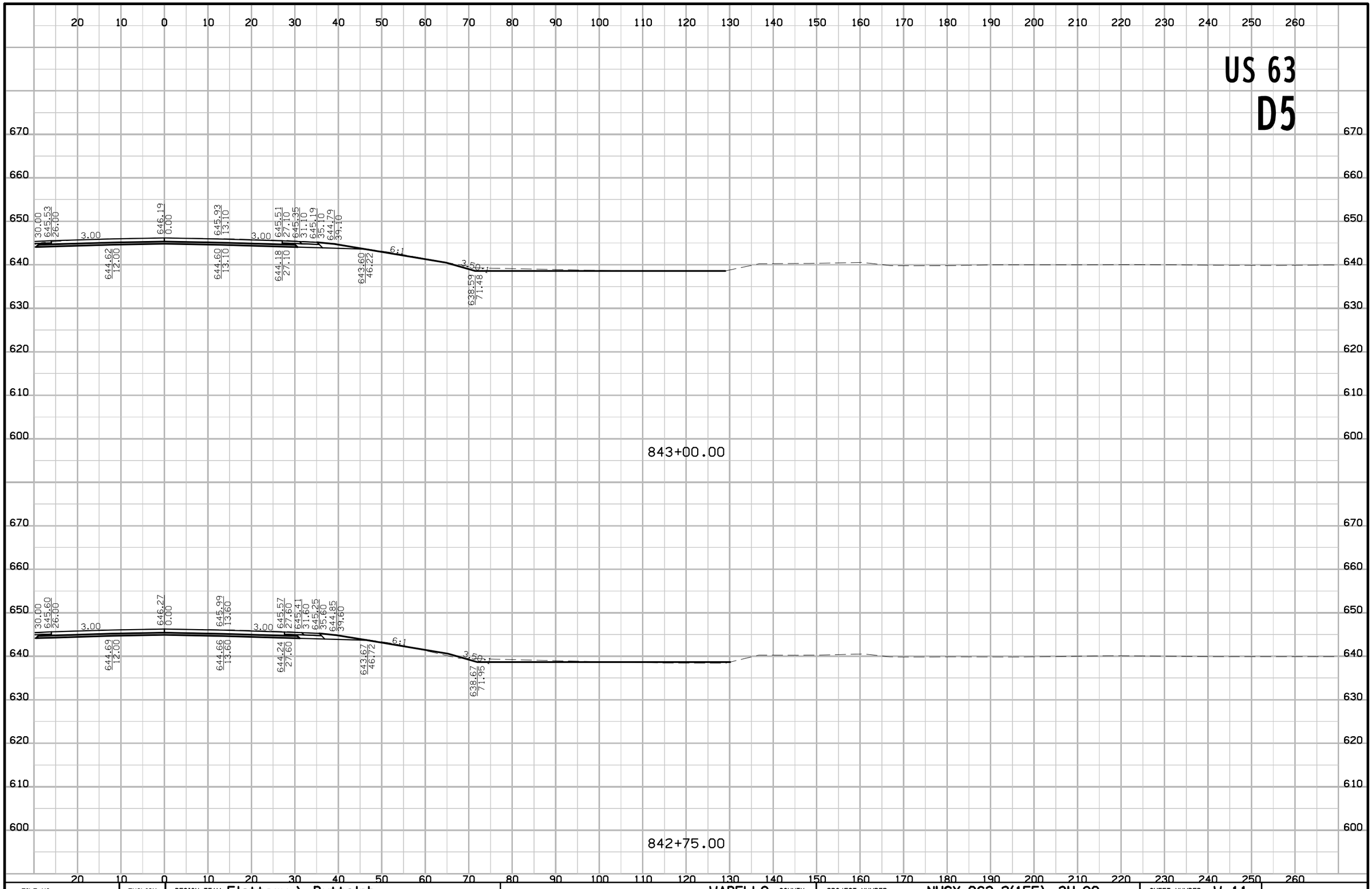
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.10

8:40:18 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

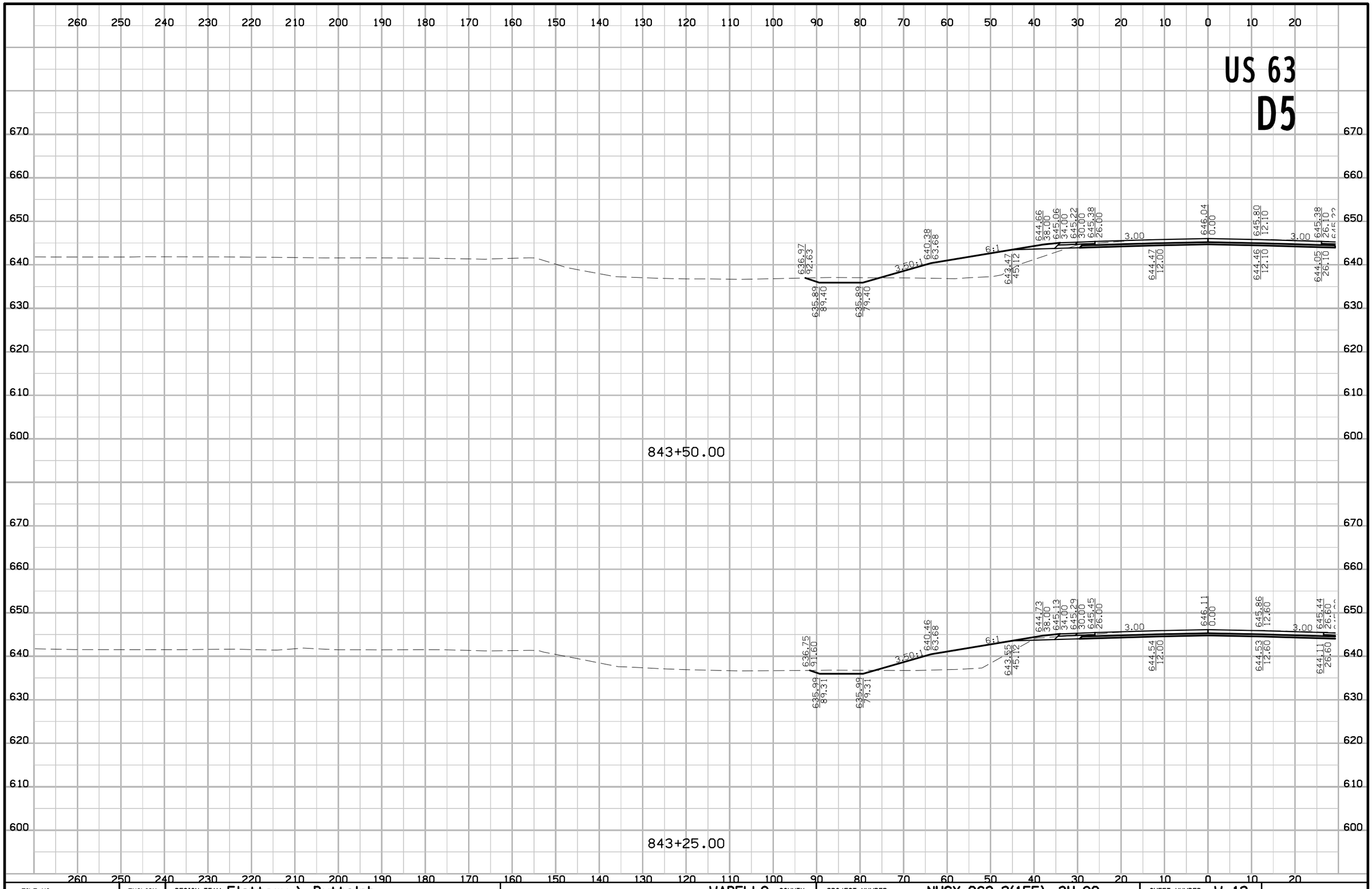
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.11

8:40:20 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

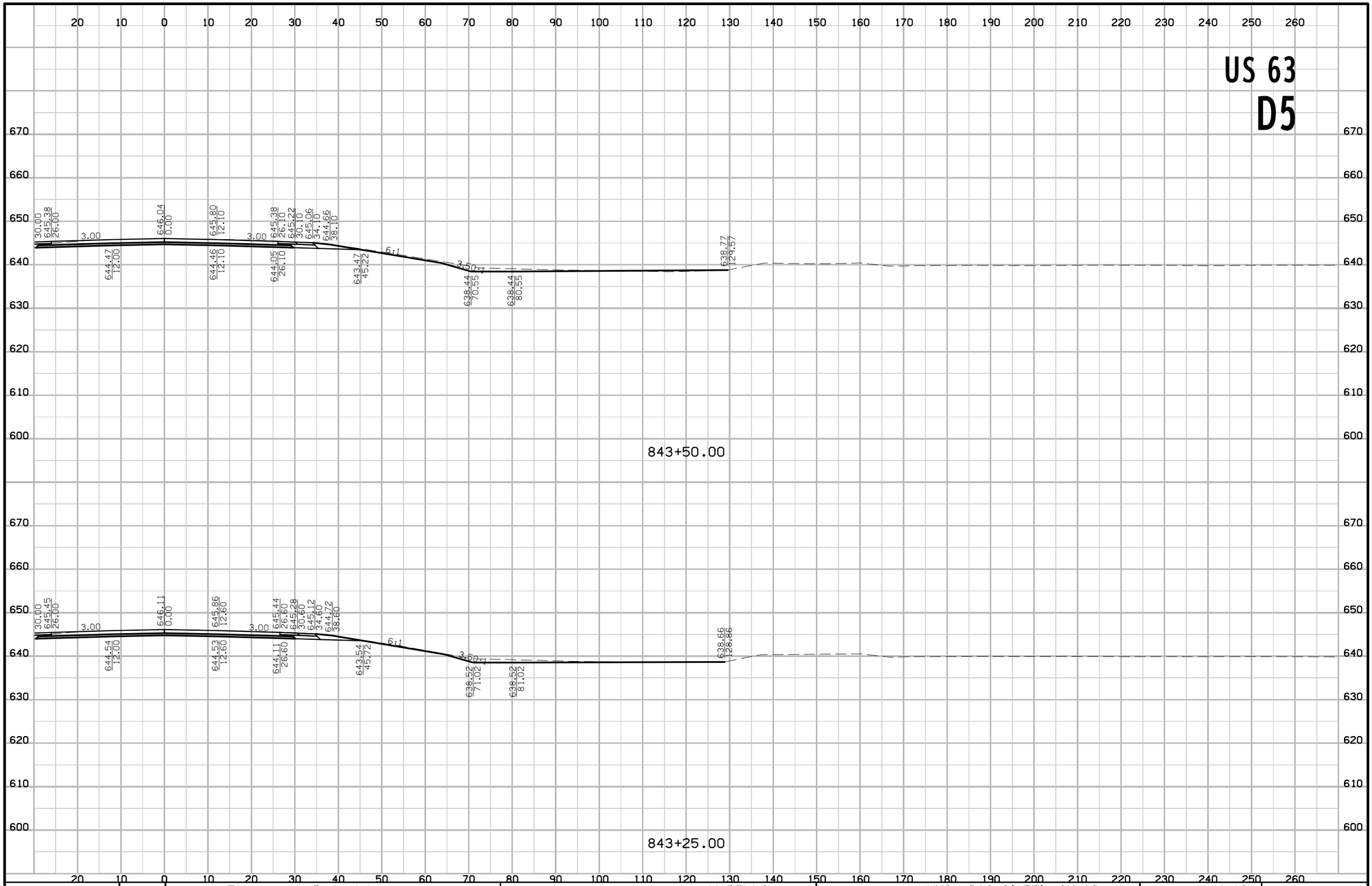
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.12

8:40:22 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.13

8:40:24 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

US 63
D5

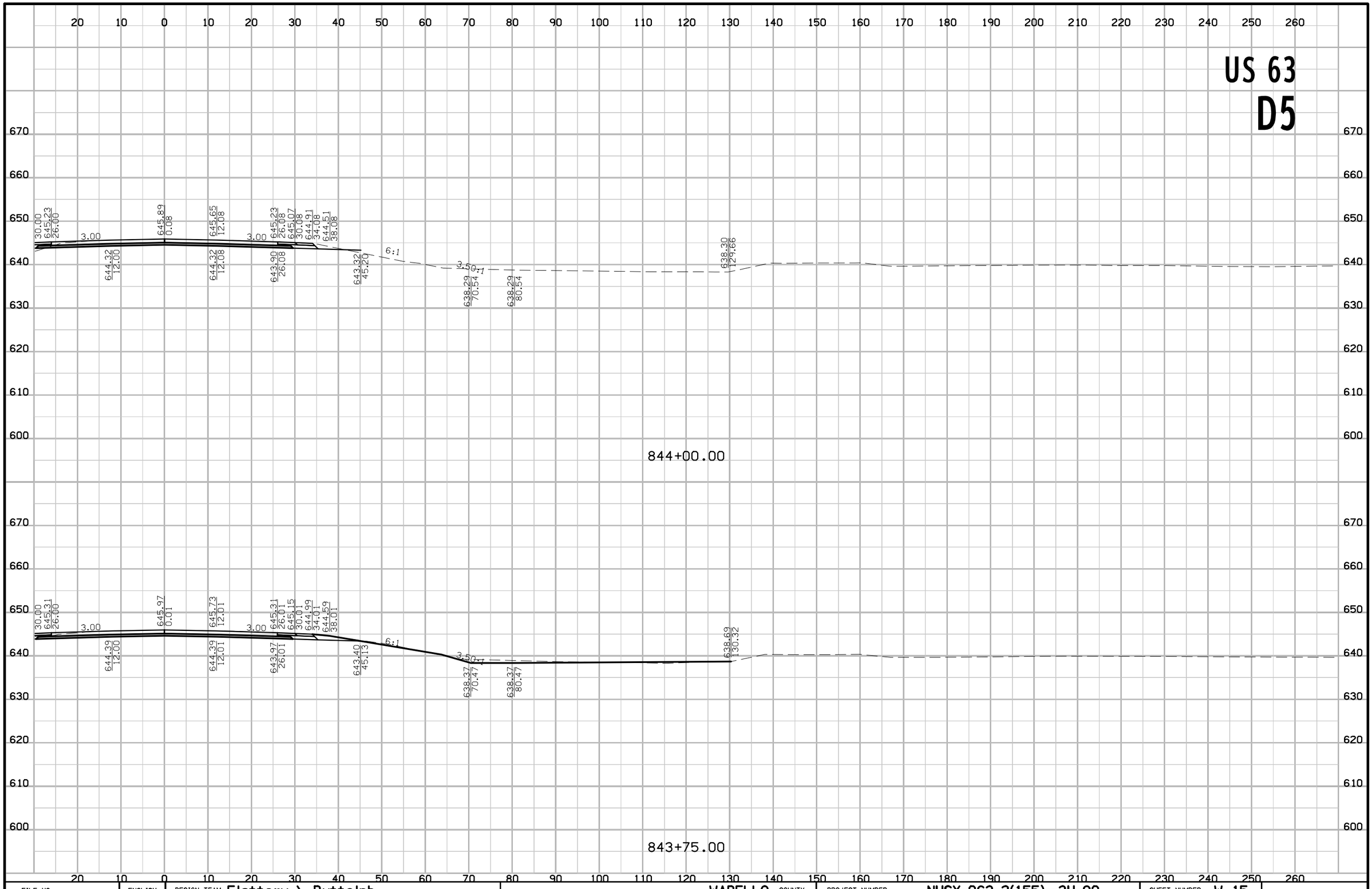
844+00.00

843+75.00

FILE NO. | ENGLISH | DESIGN TEAM Flattery \ Buttolph | WAPELLO COUNTY | PROJECT NUMBER NHSX-063-2(155)--3H-90 | SHEET NUMBER W.14

8:40:26 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

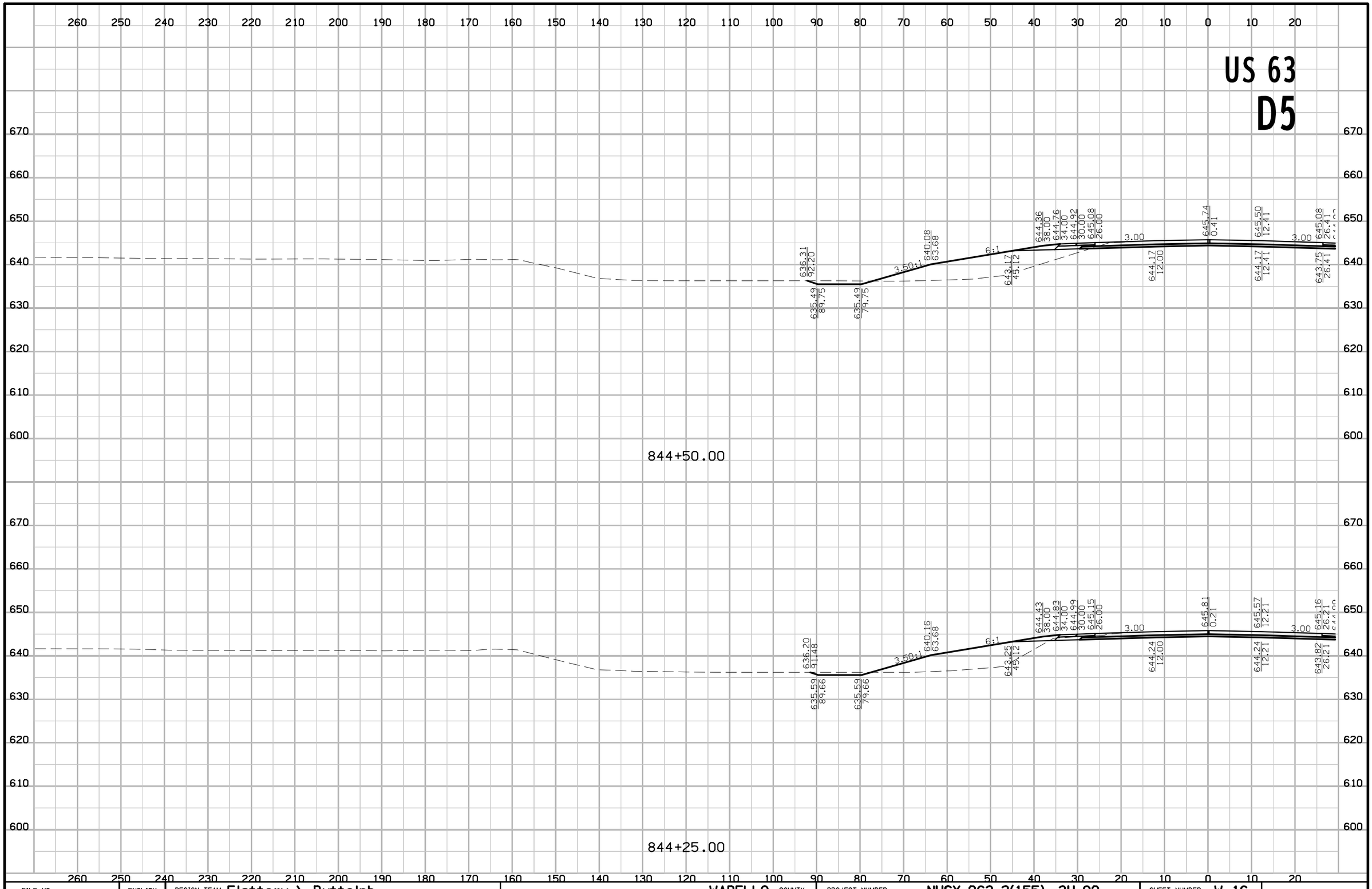
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.15

8:40:29 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

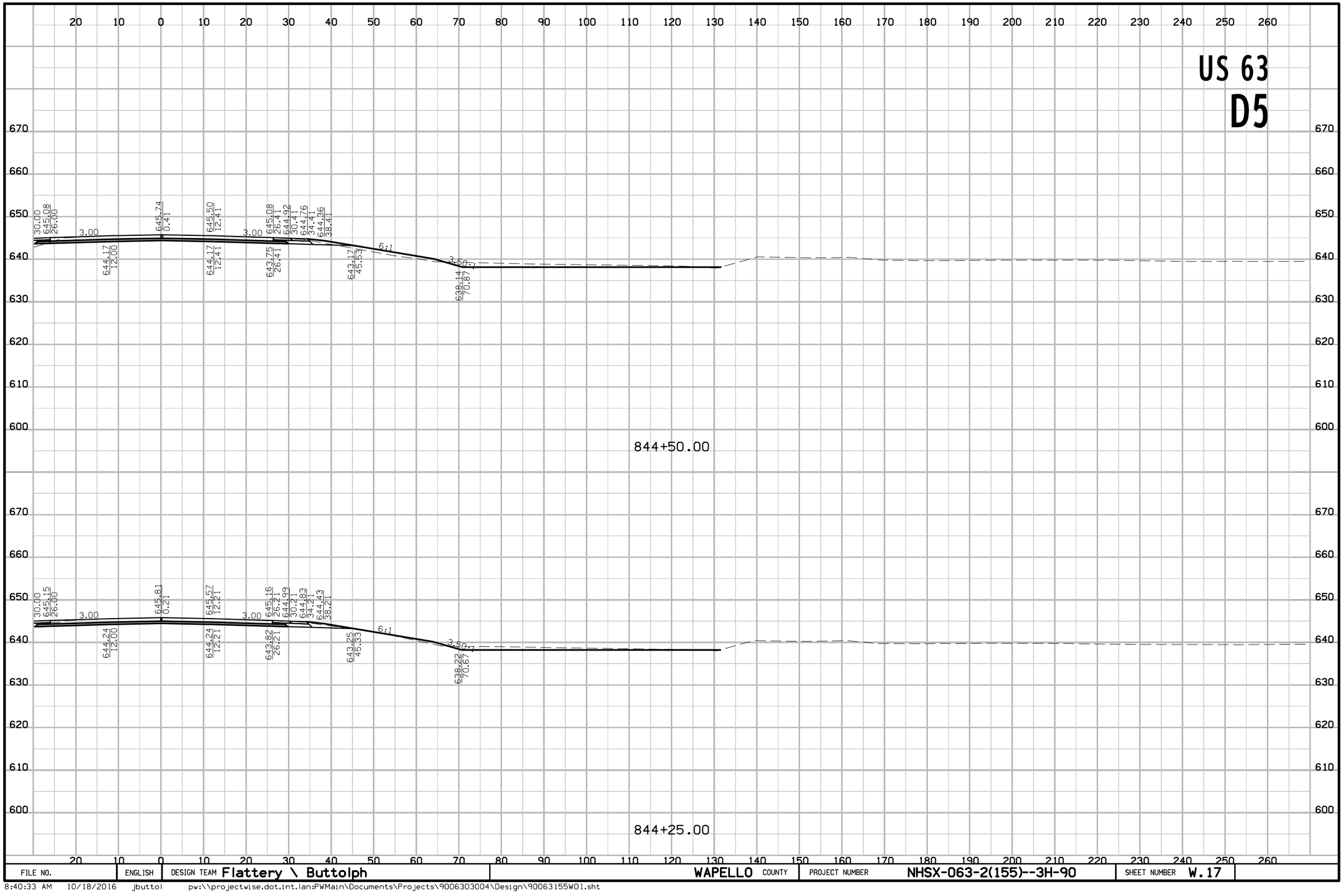
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.16

8:40:31 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

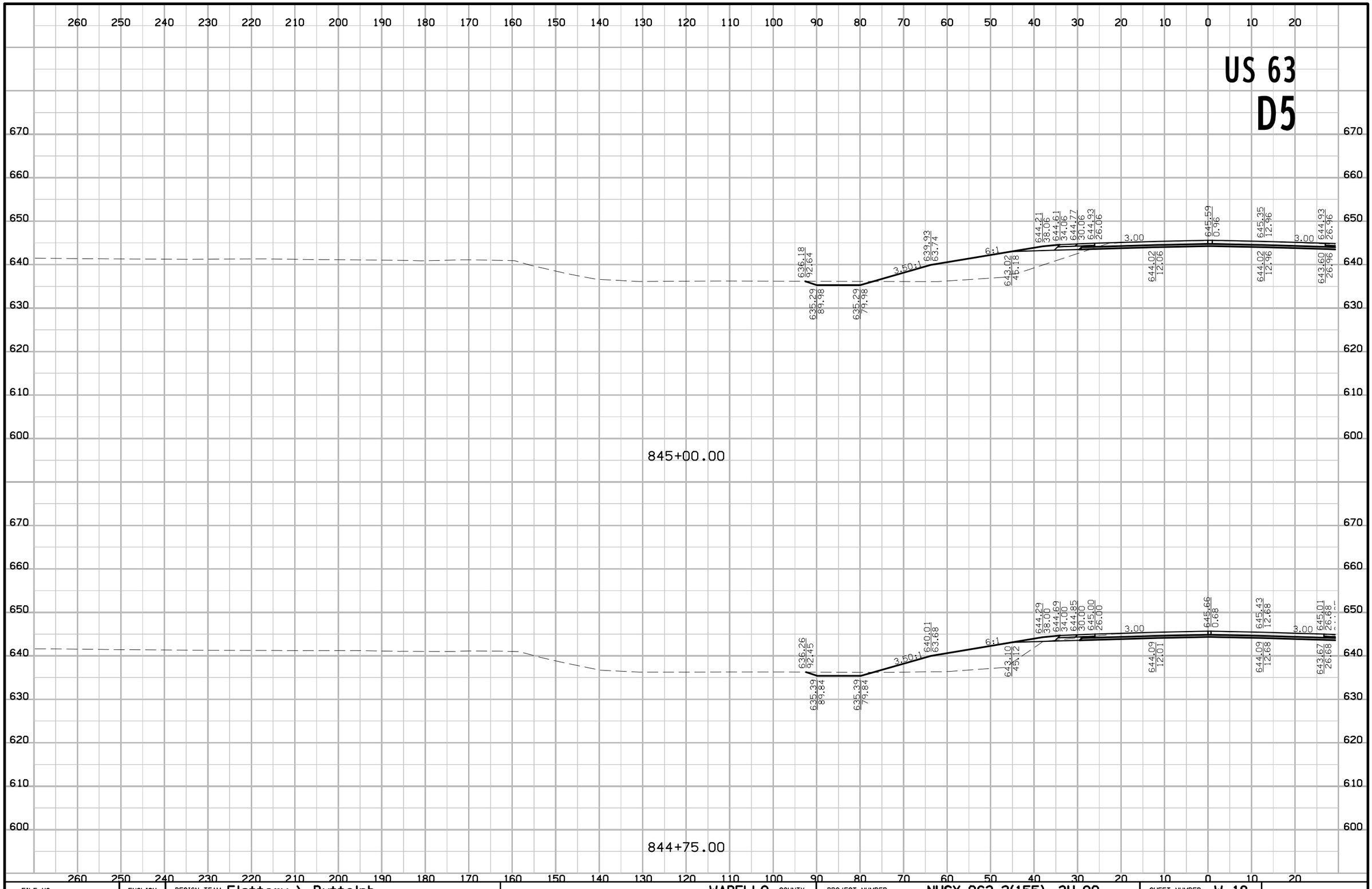
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.17

8:40:33 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

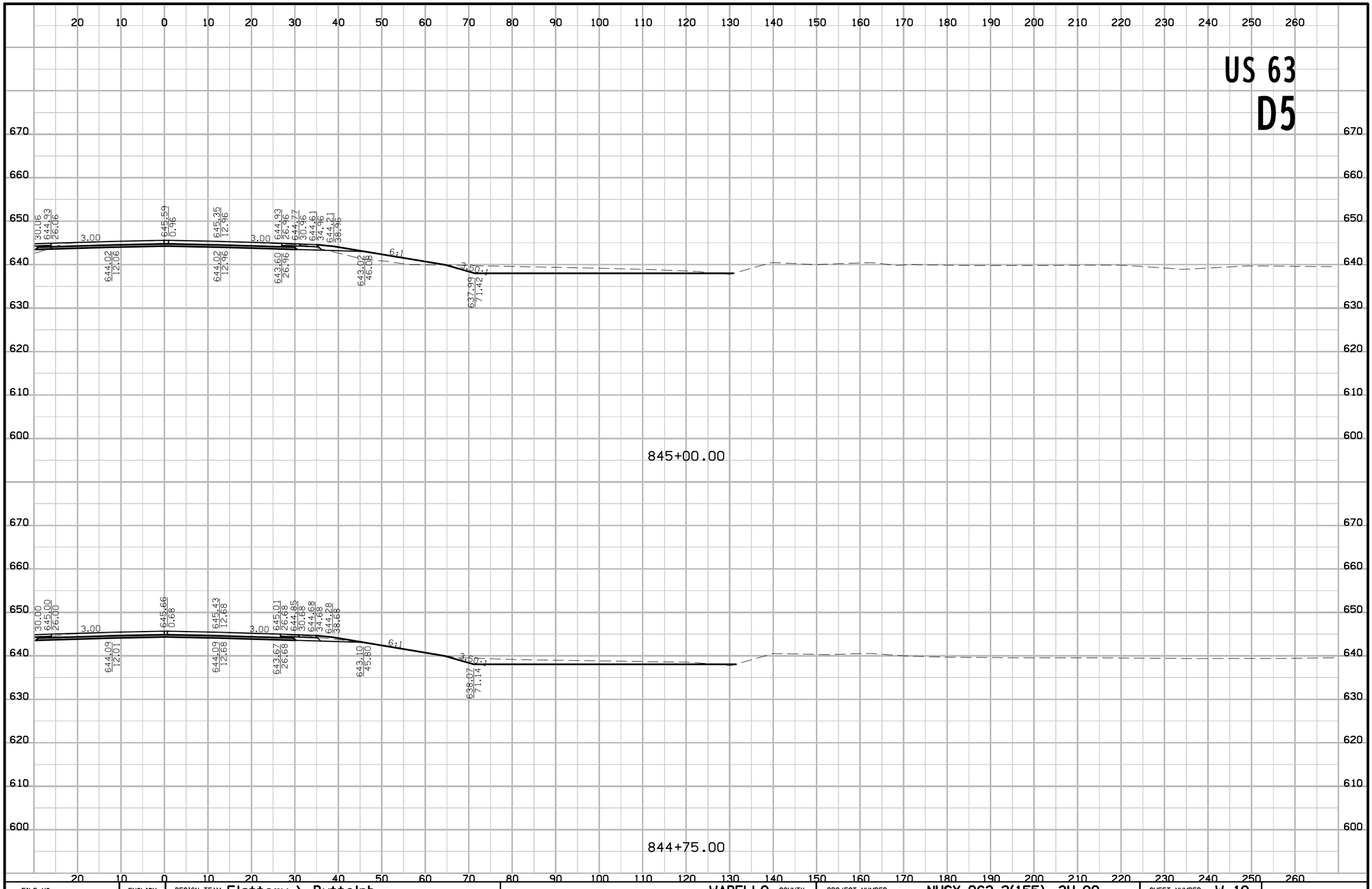
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.18

8:40:35 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

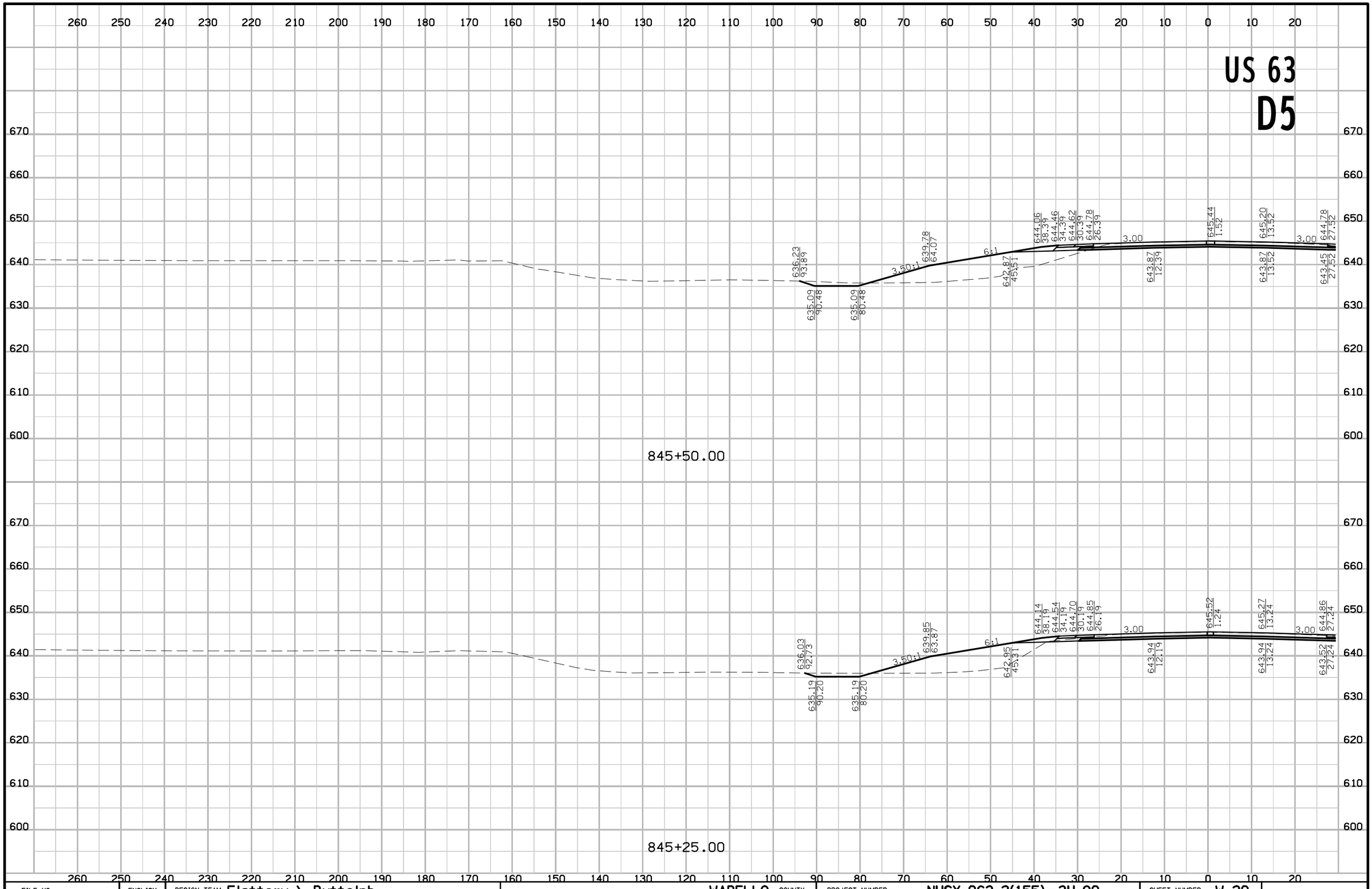
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.19

8:40:38 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

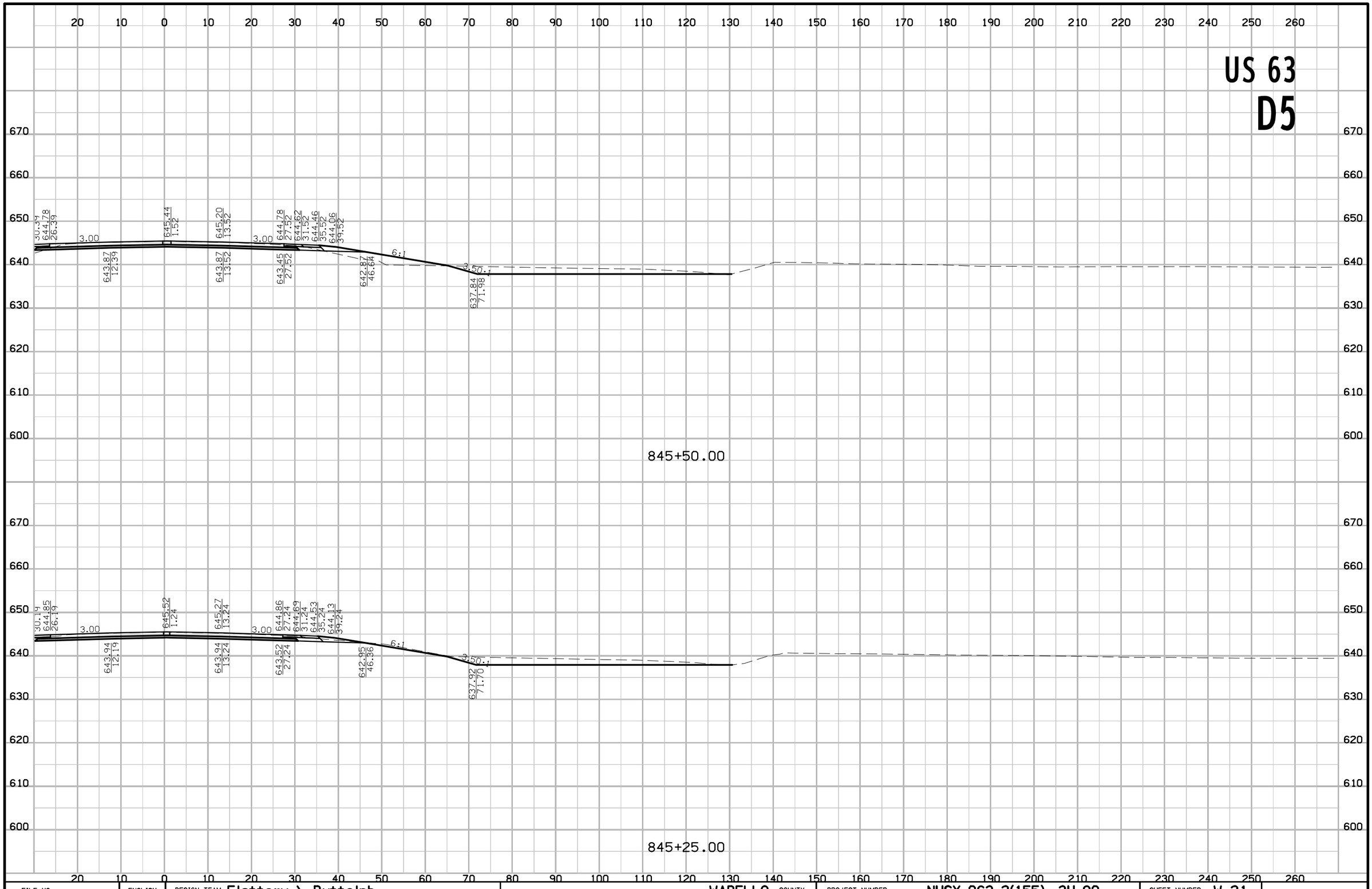
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.20

8:40:40 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

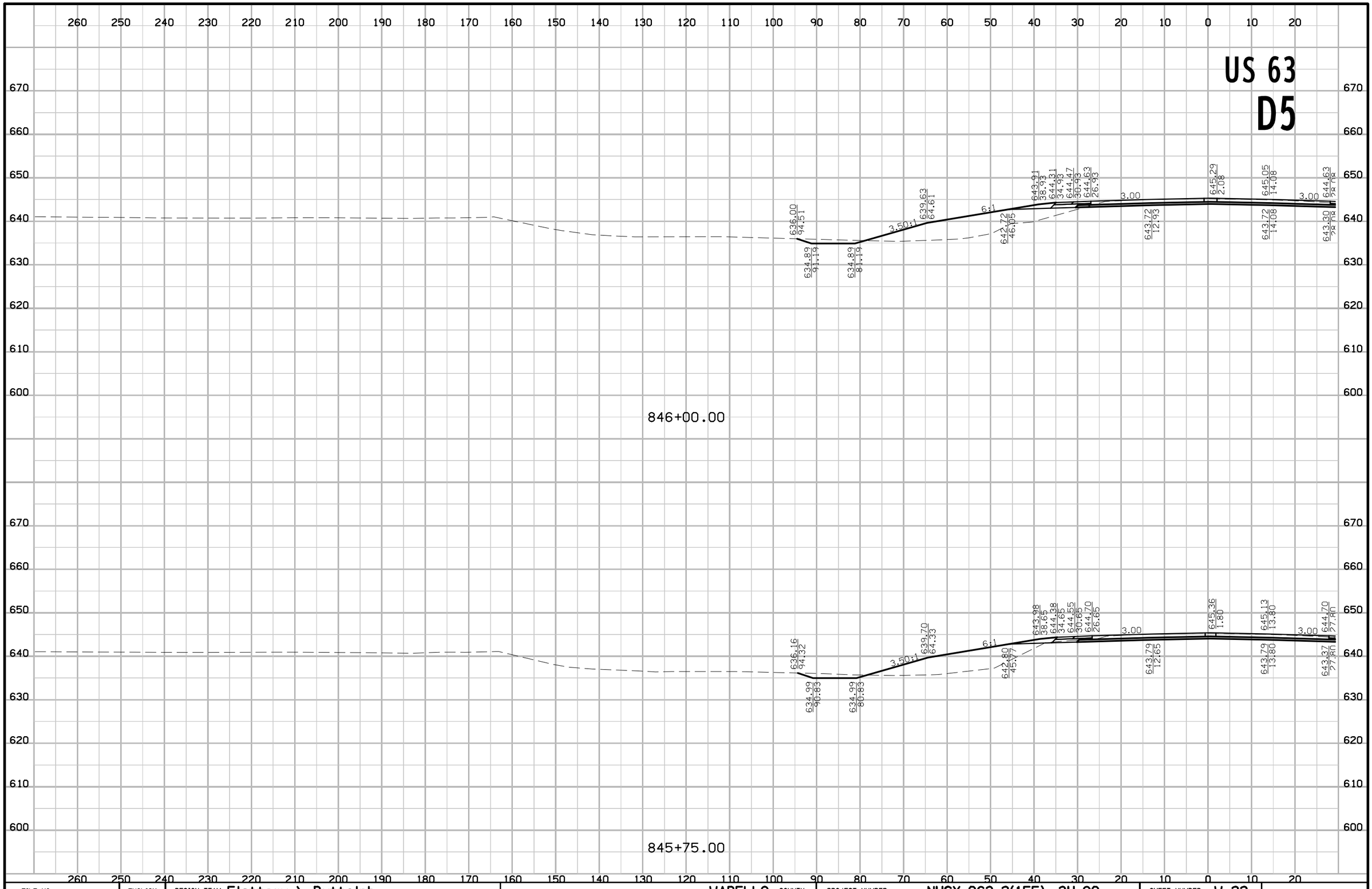
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.21

8:40:42 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

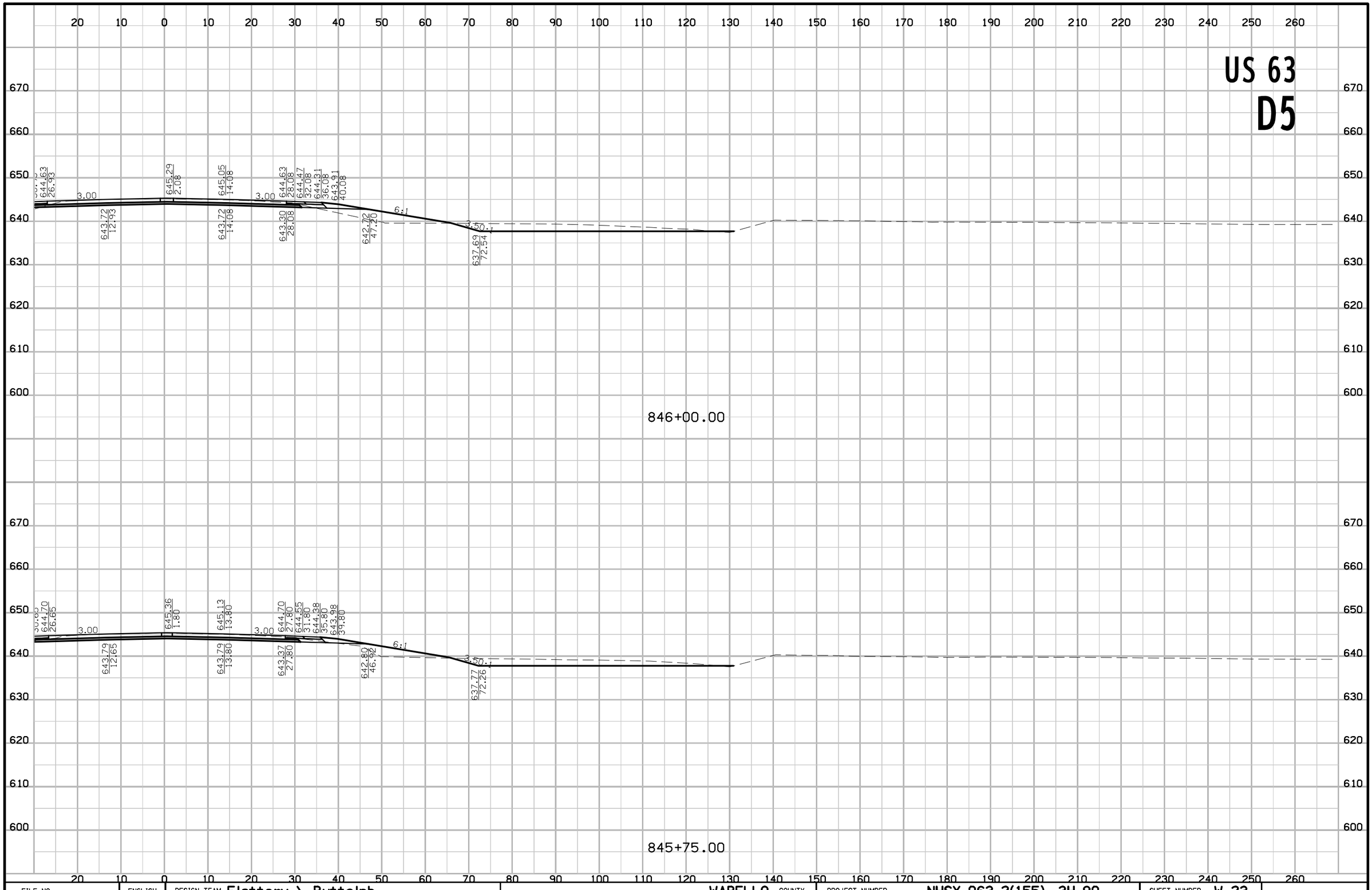
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.22

8:40:44 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

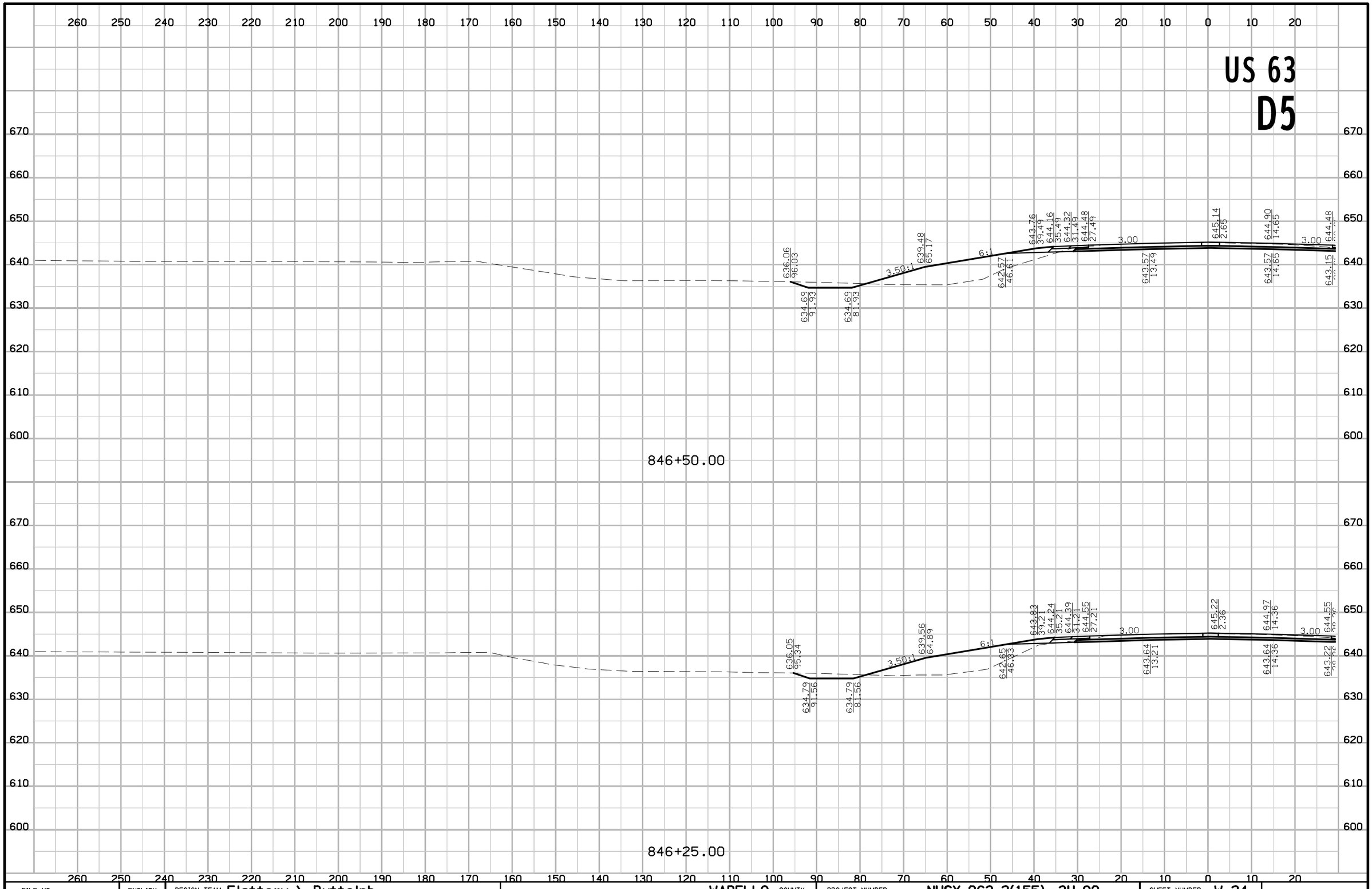
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.23

8:40:46 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

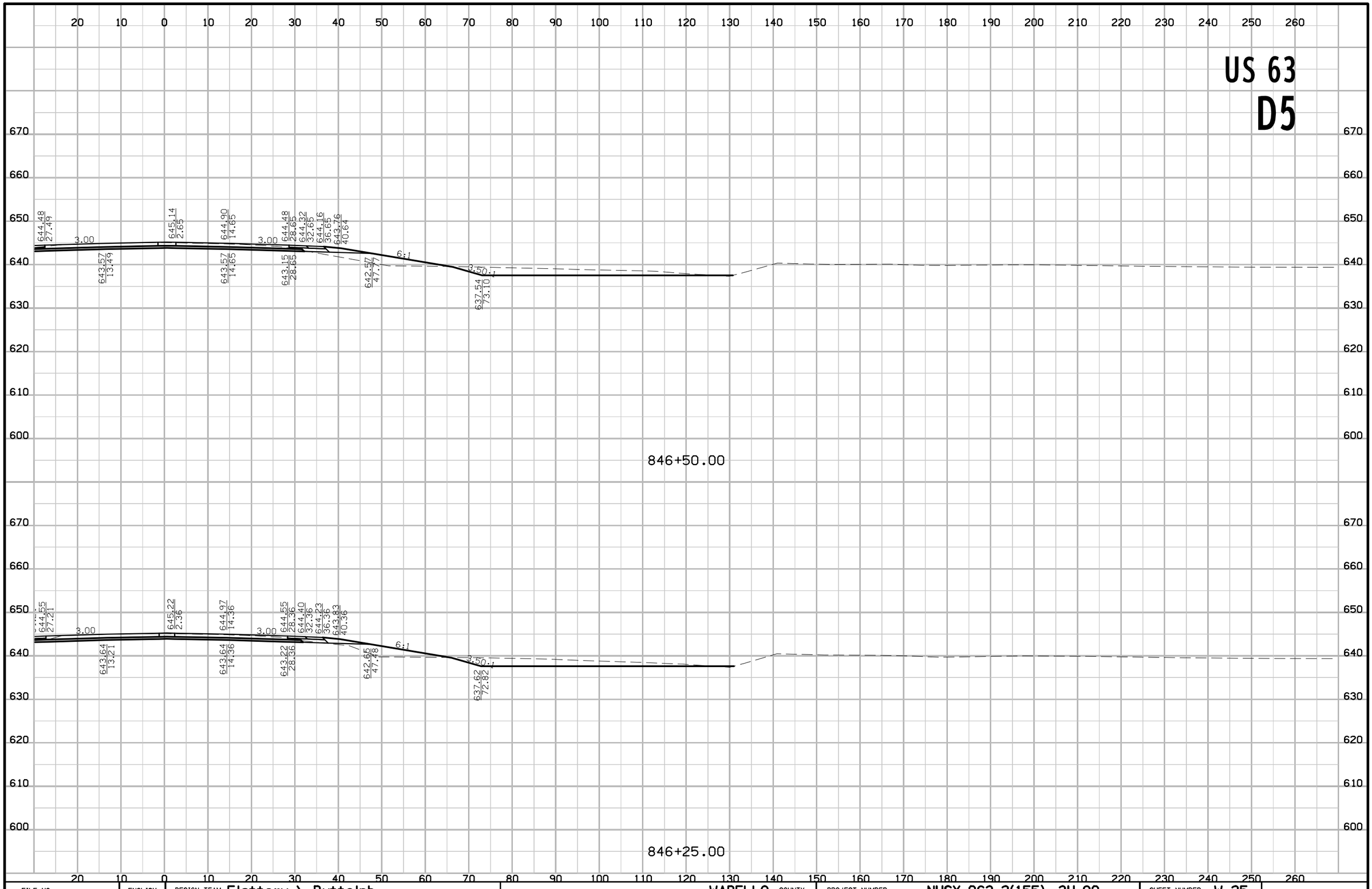
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.24

8:40:49 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

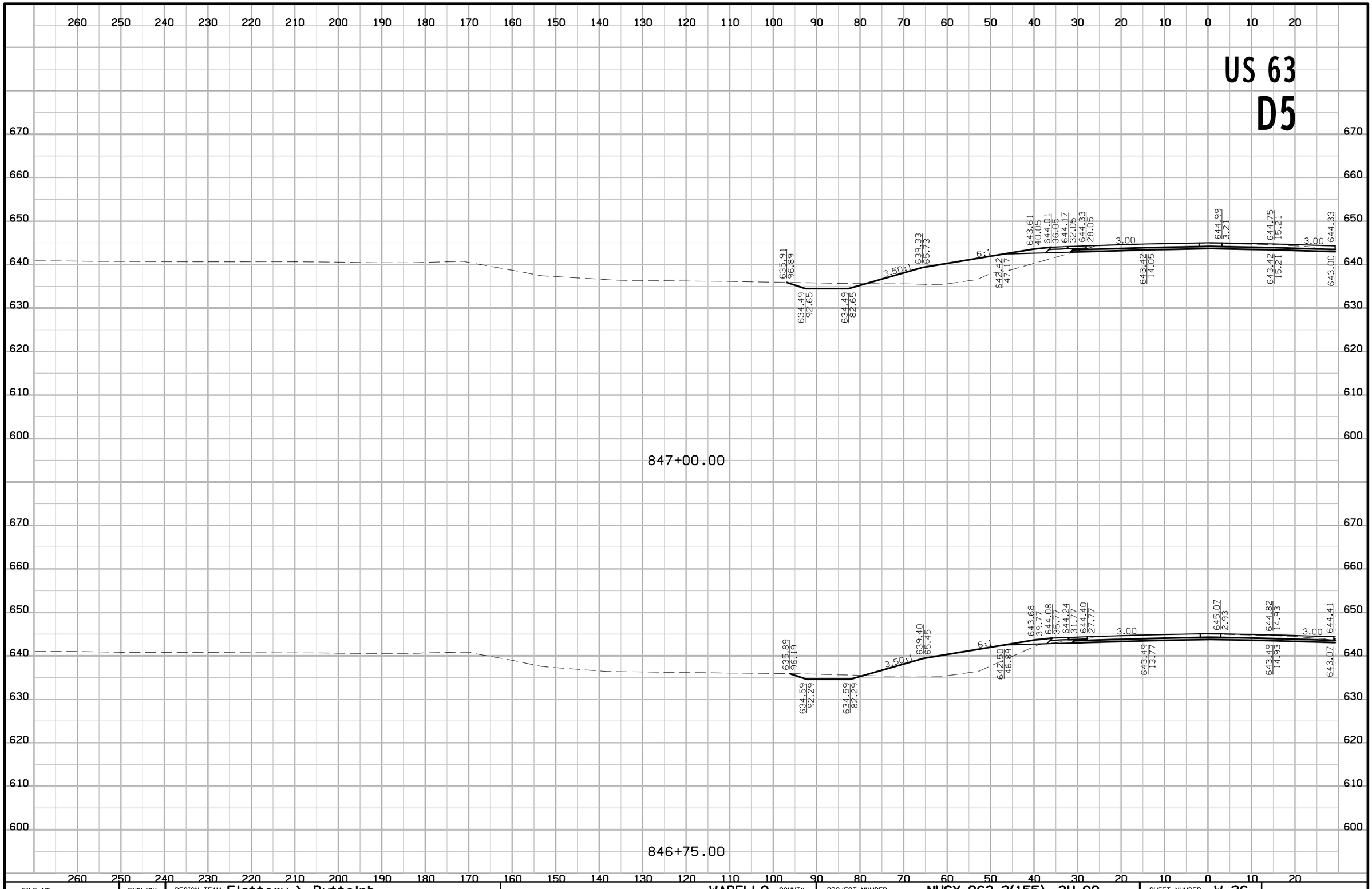
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.25

8:40:51 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

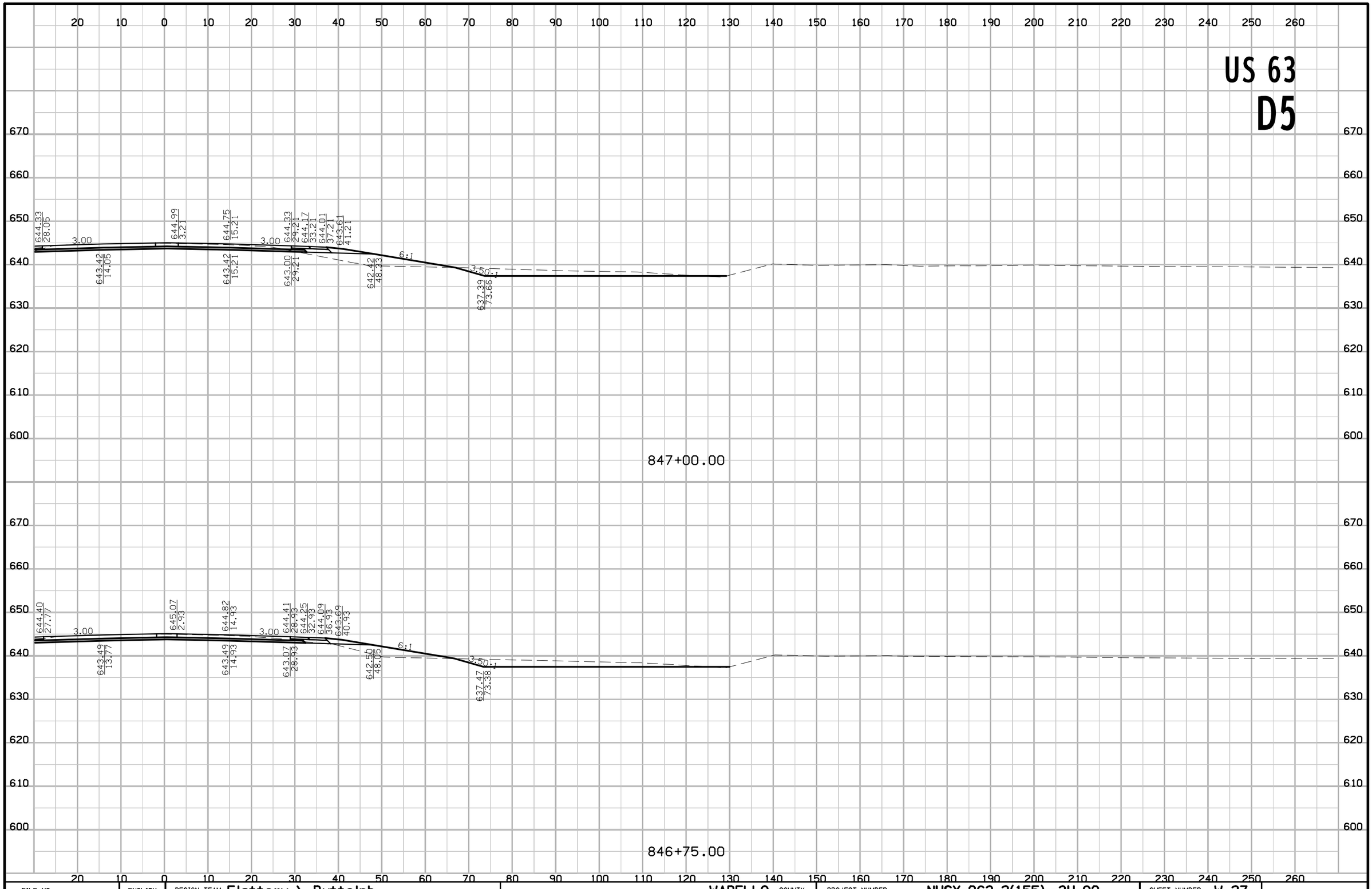
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.26

8:40:53 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

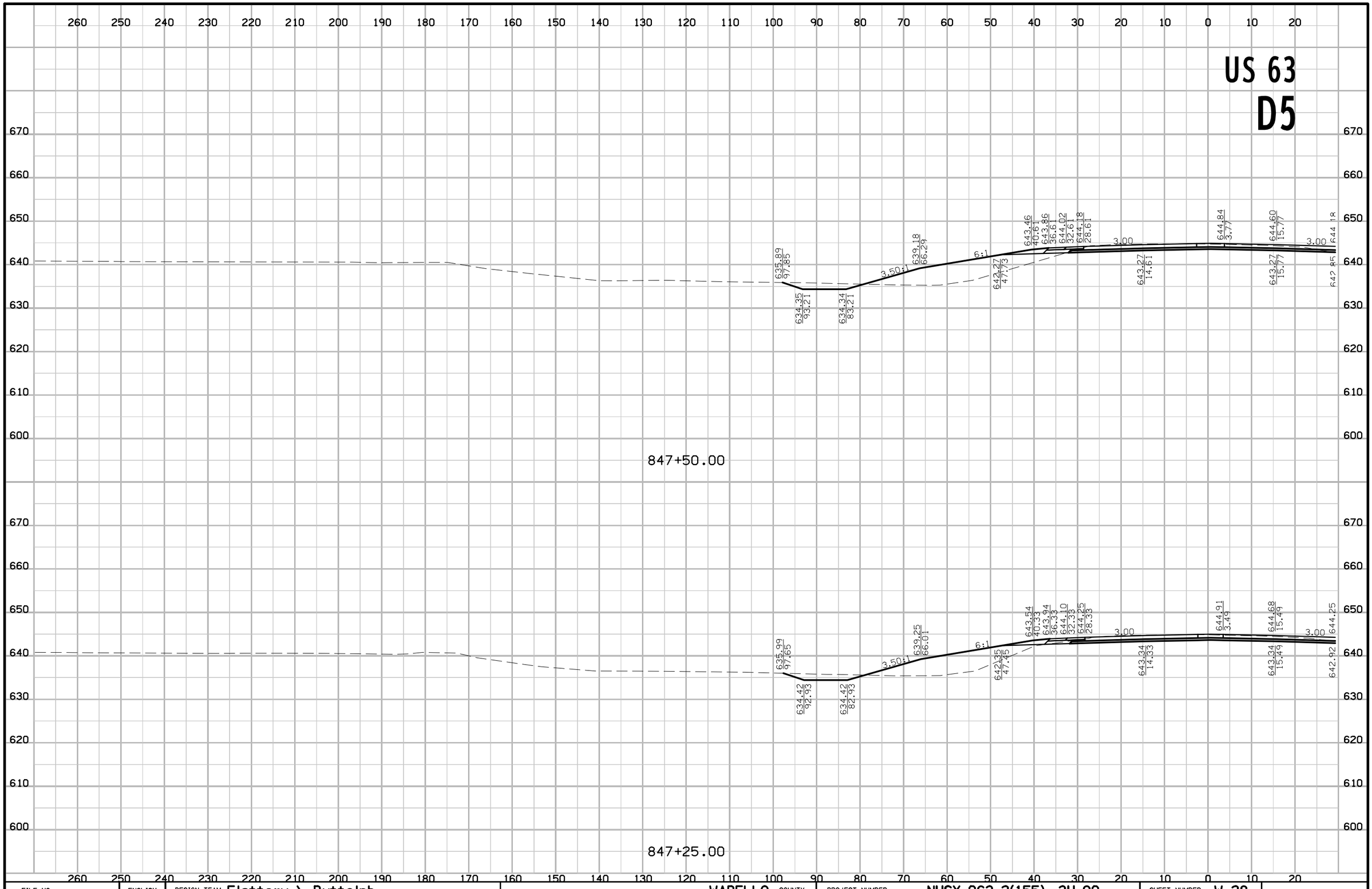
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.27

8:40:55 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

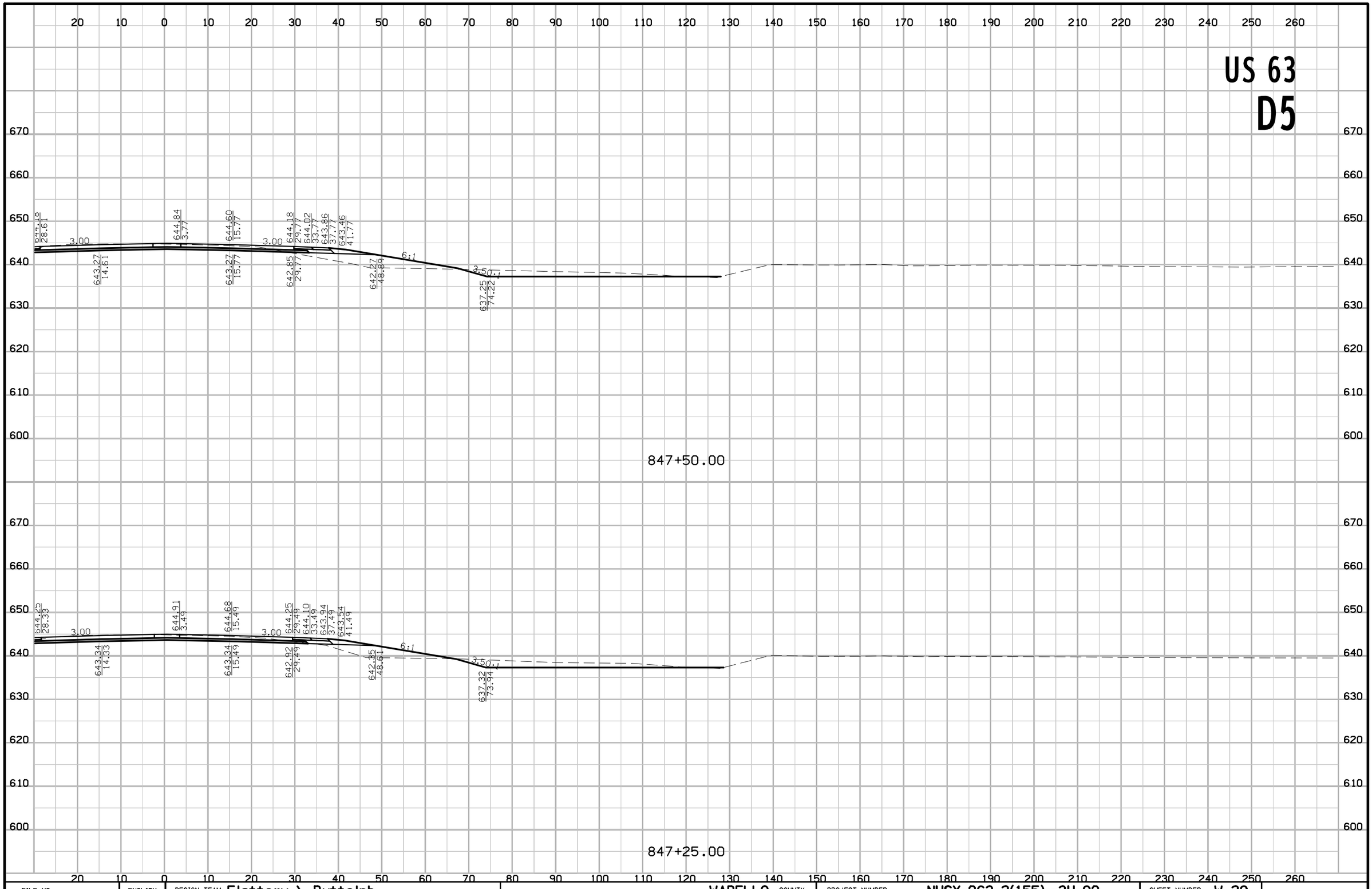
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.28

8:40:57 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

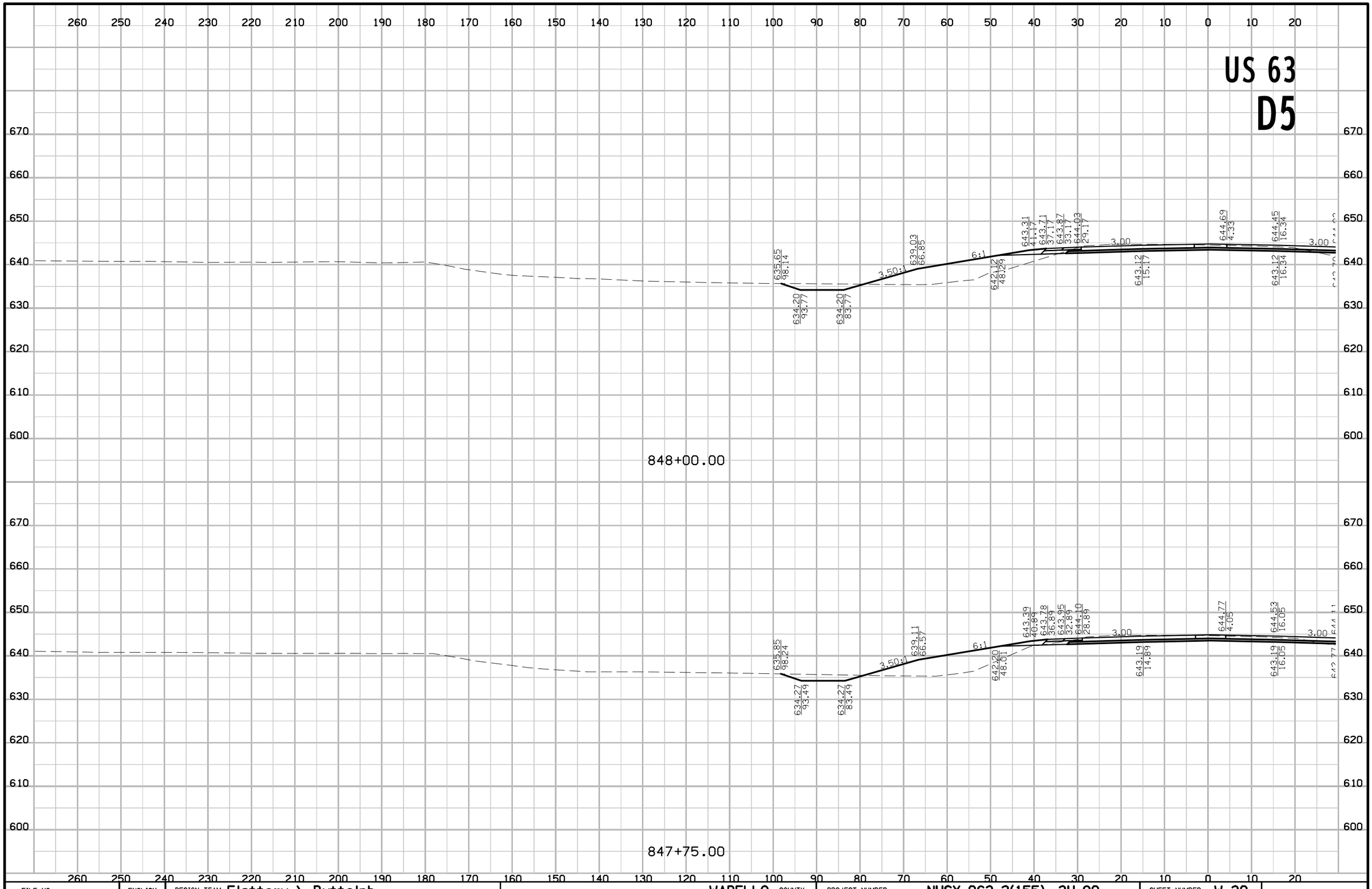
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.29

8:40:59 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

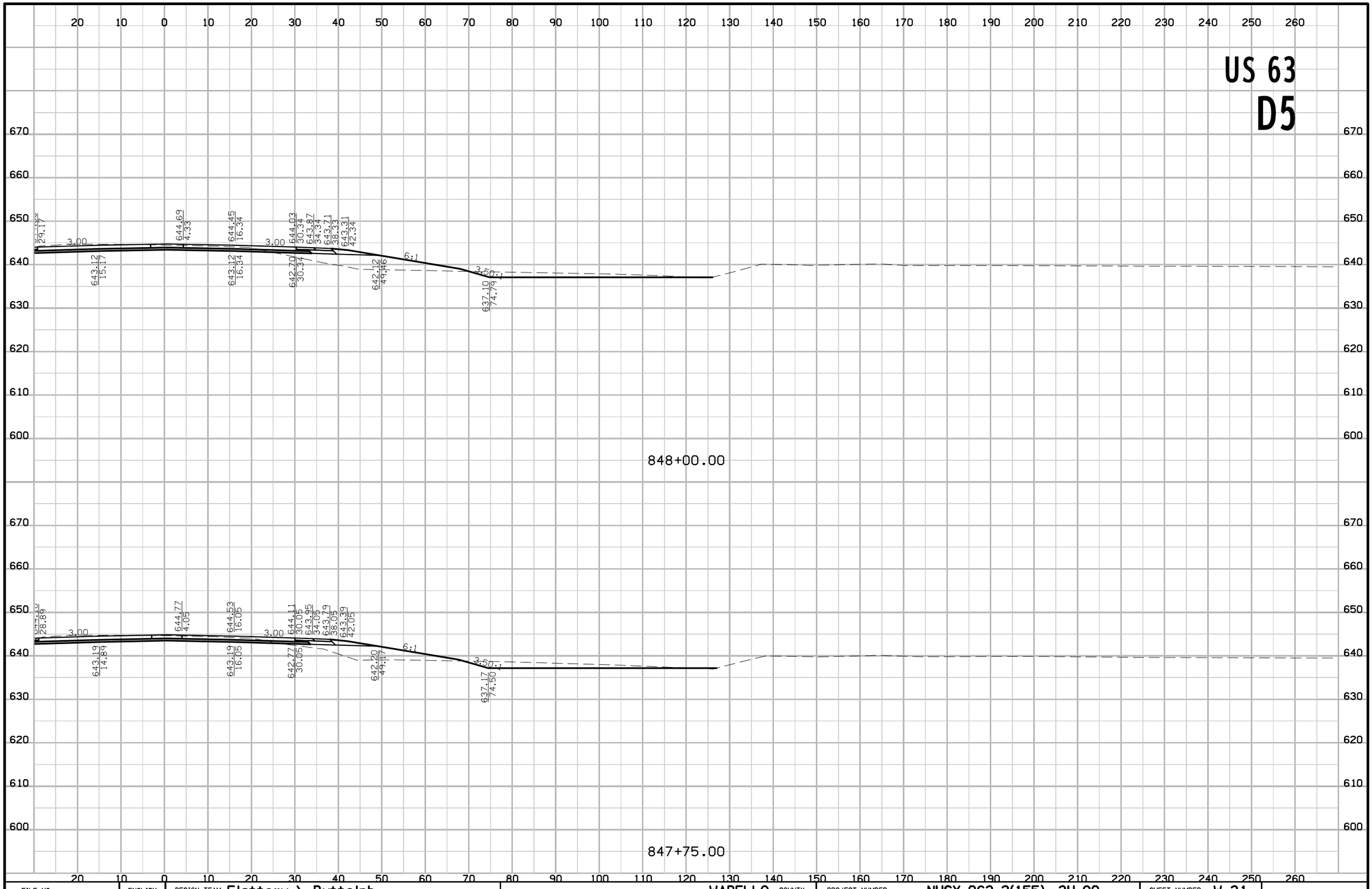
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.30

8:41:01 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

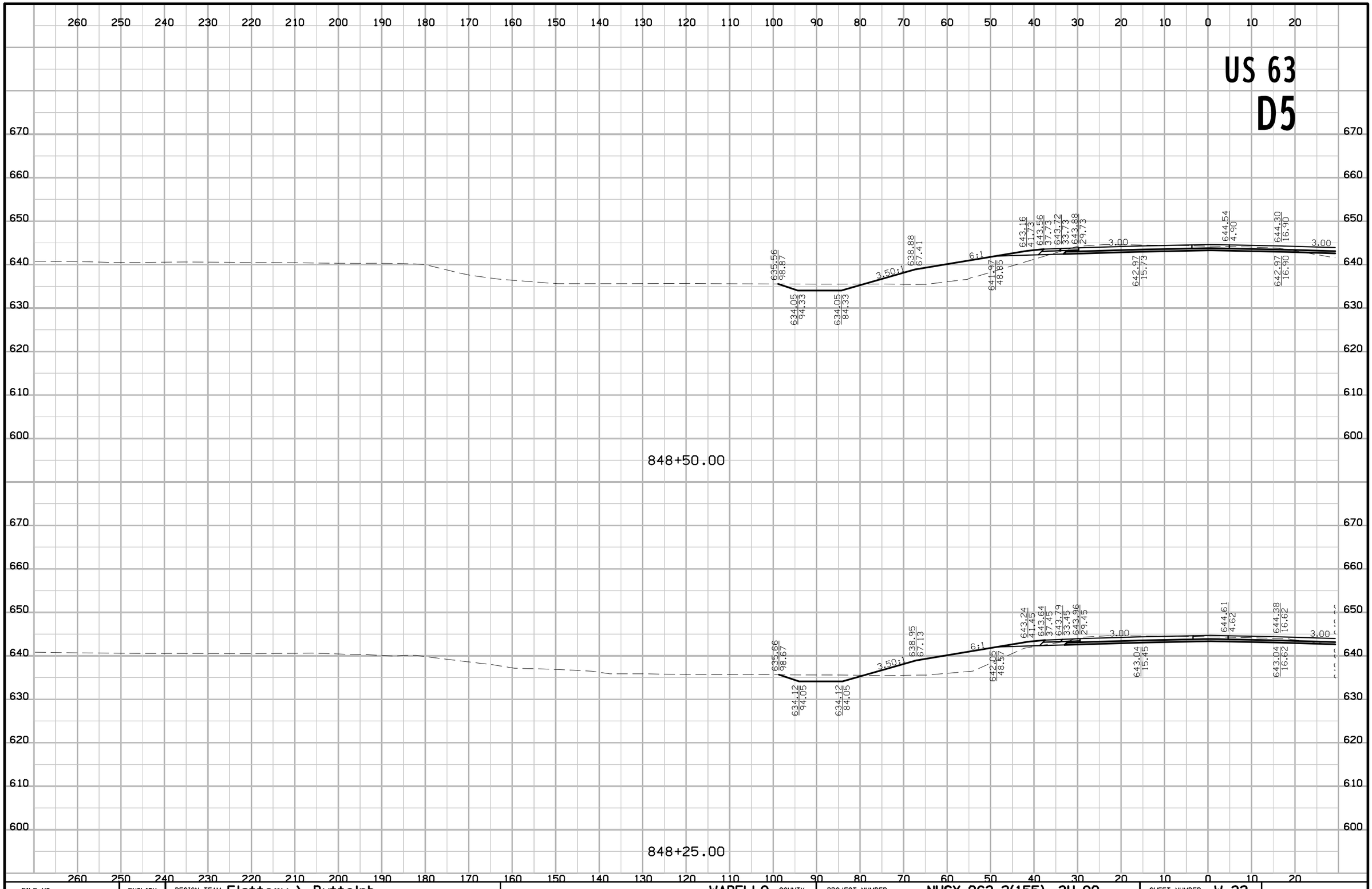
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.31

8:41:03 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

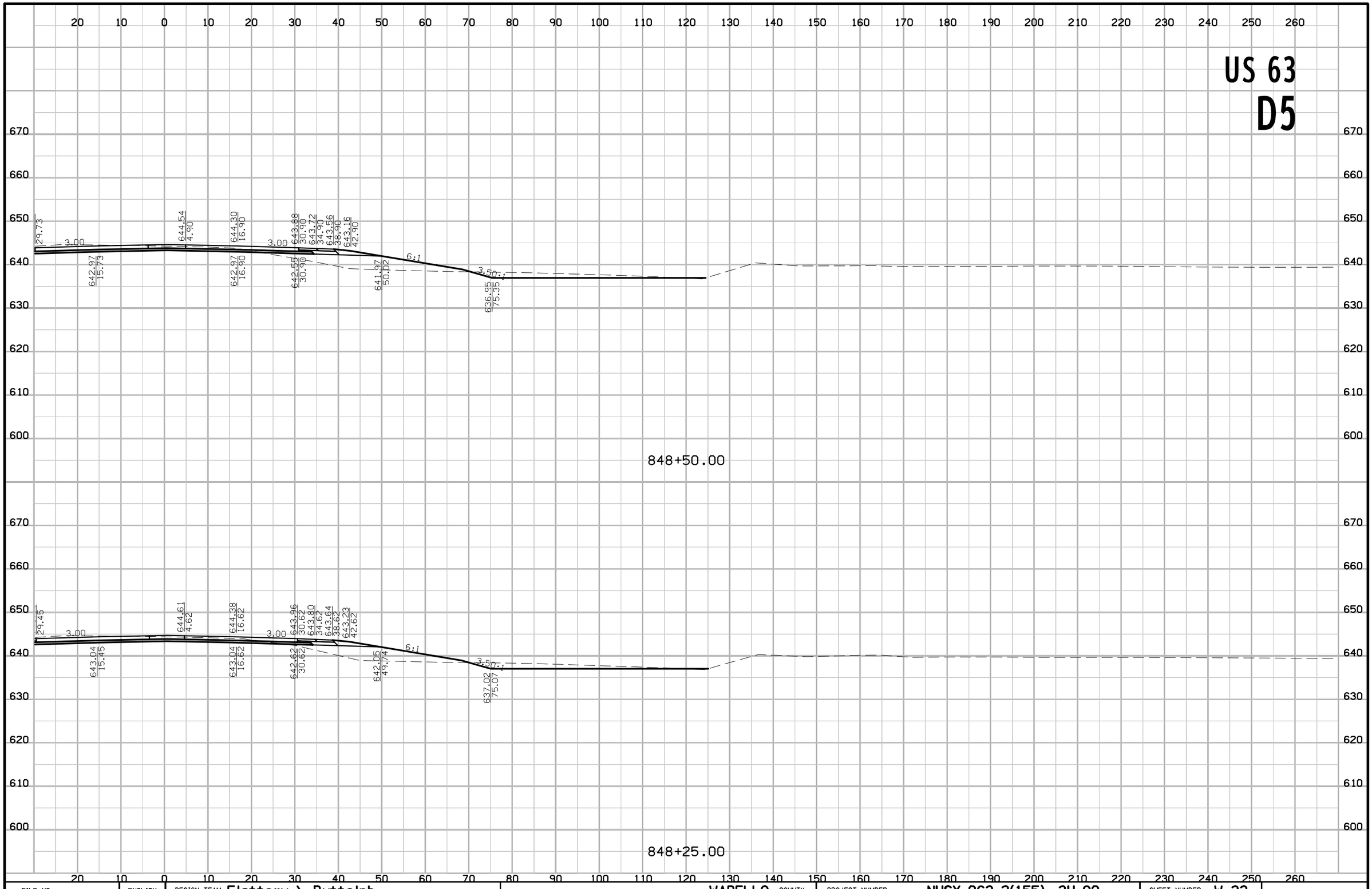
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.32

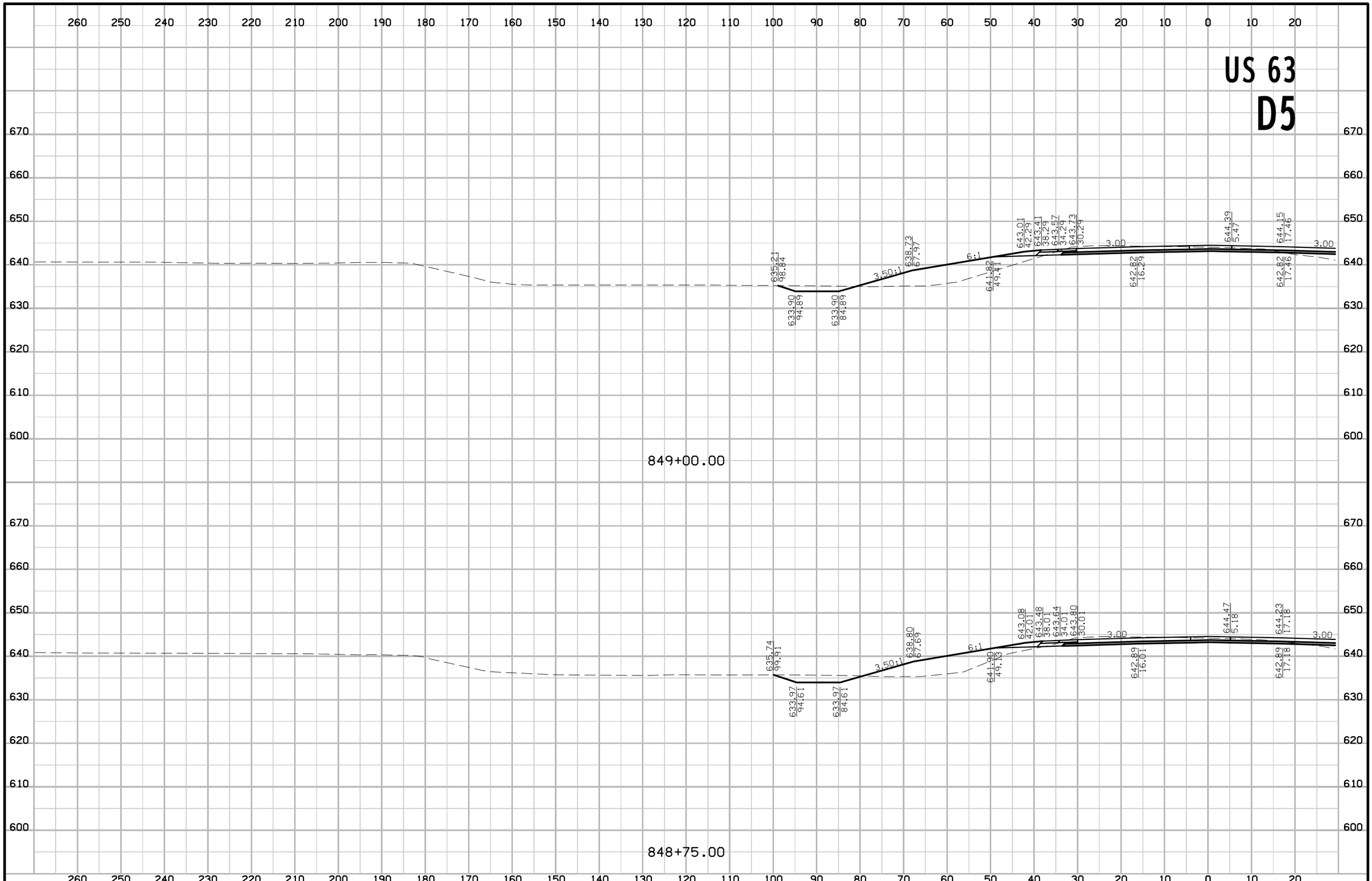
8:41:05 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.33

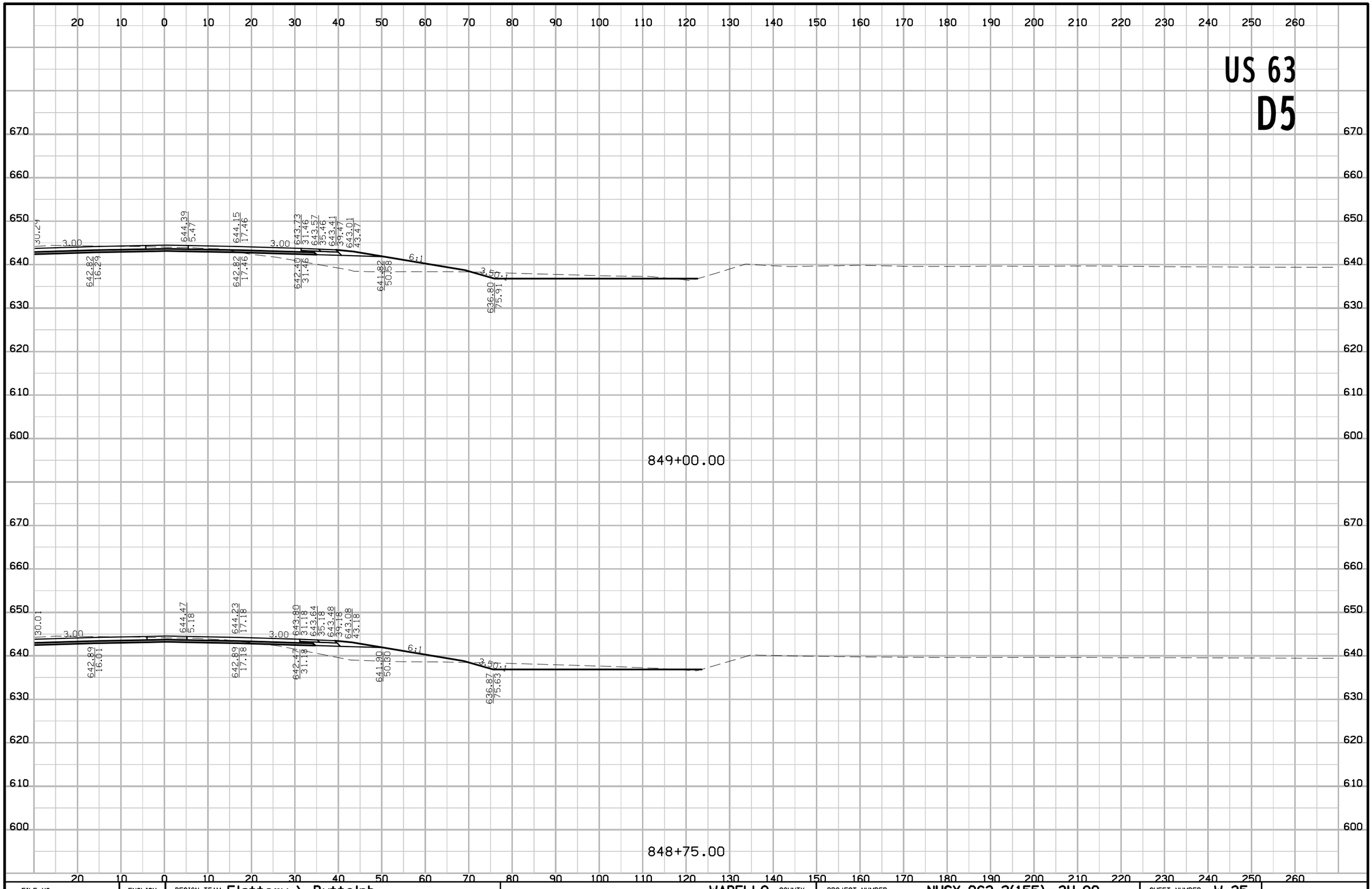
8:41:07 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.34

8:41:09 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

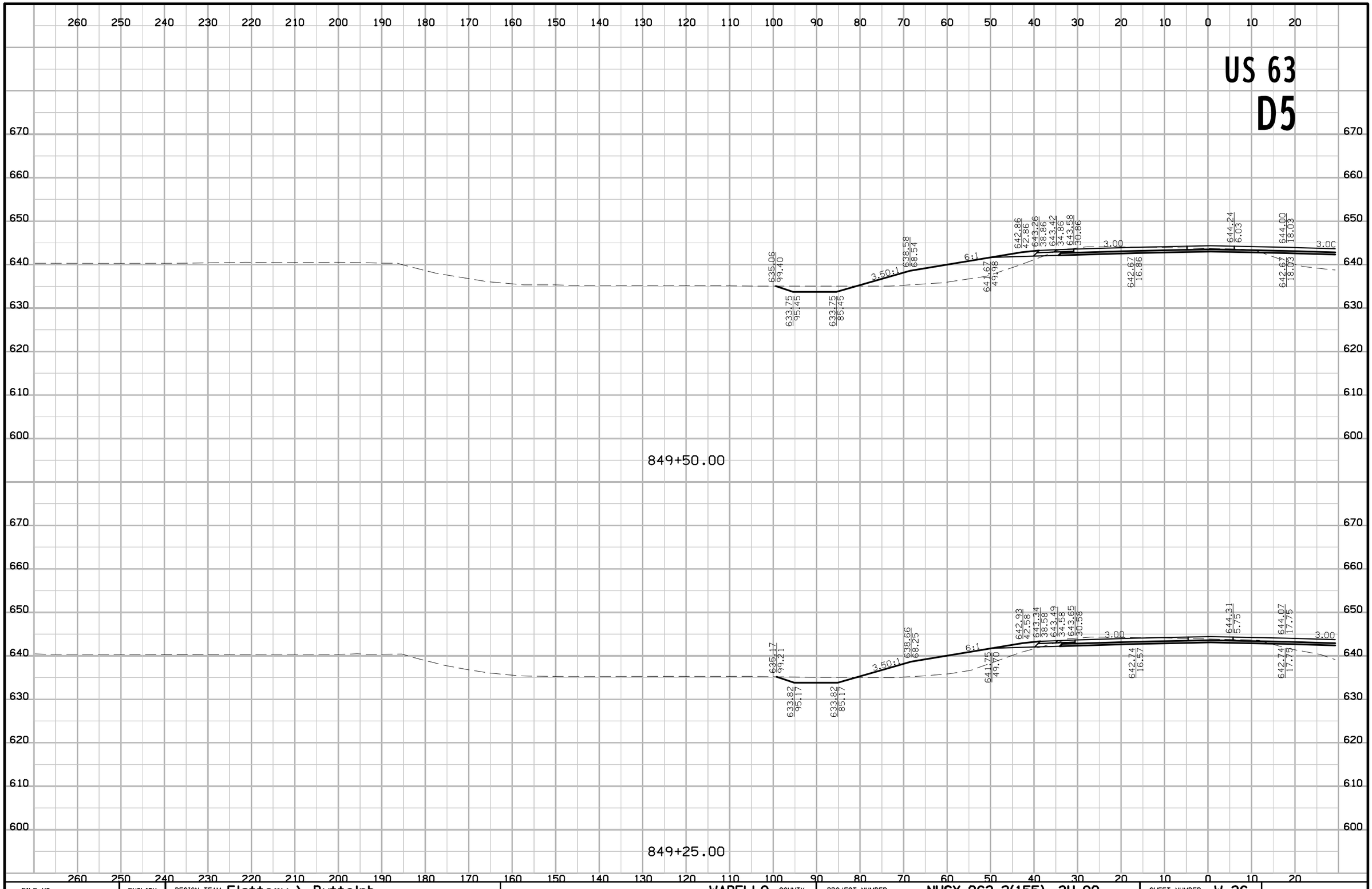
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.35

8:41:11 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

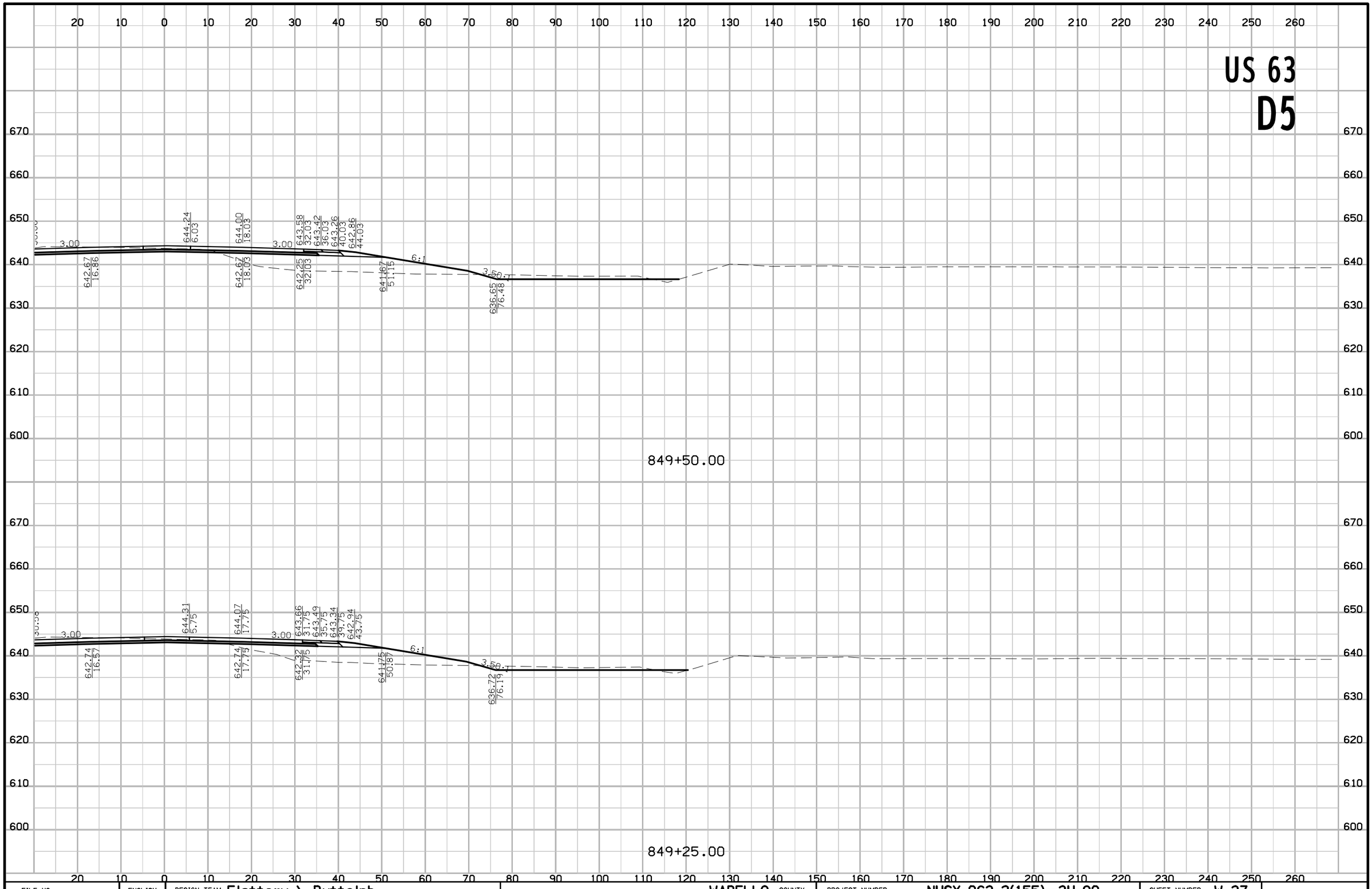
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.36

8:41:13 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

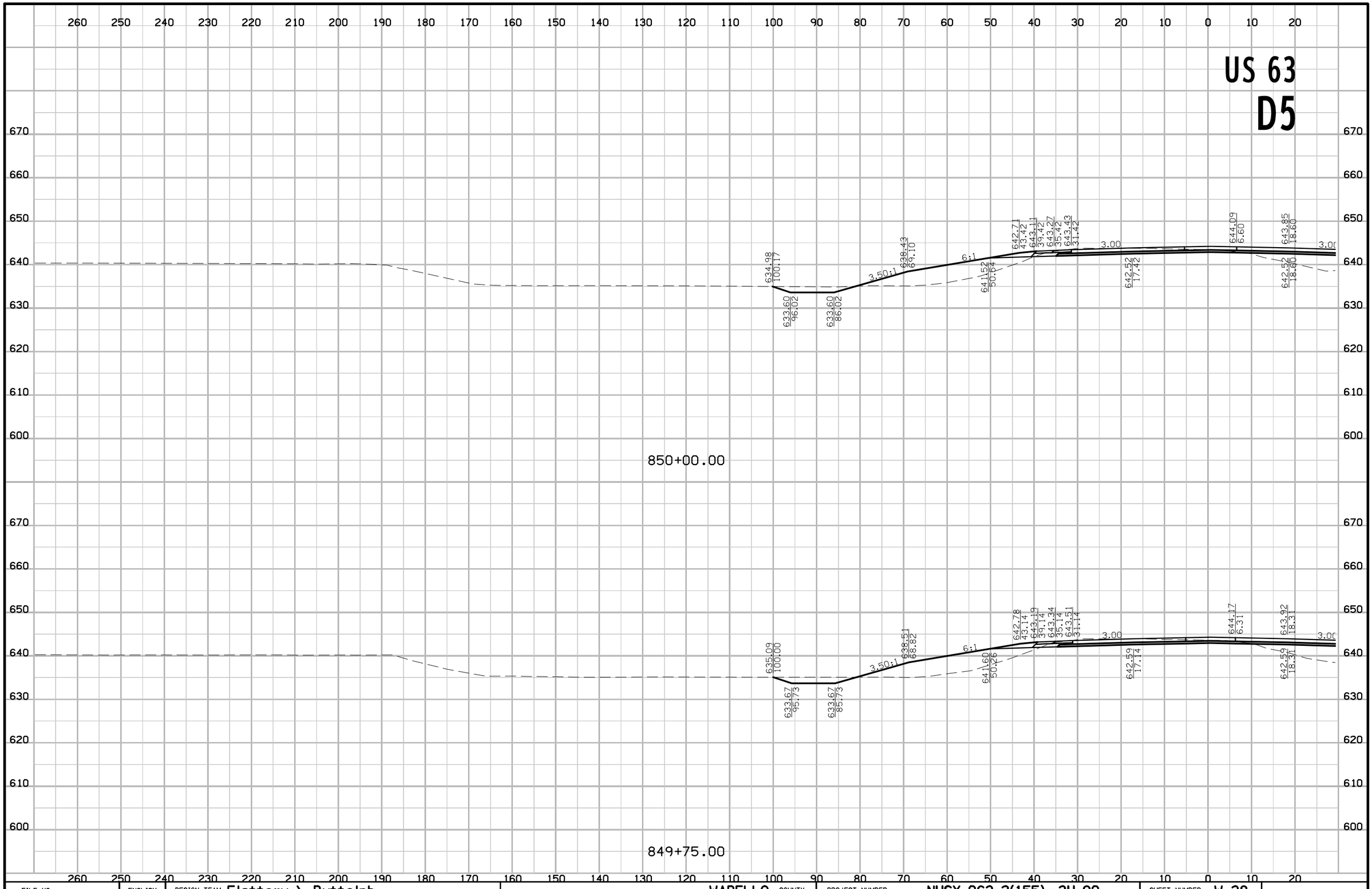
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.37

8:41:15 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

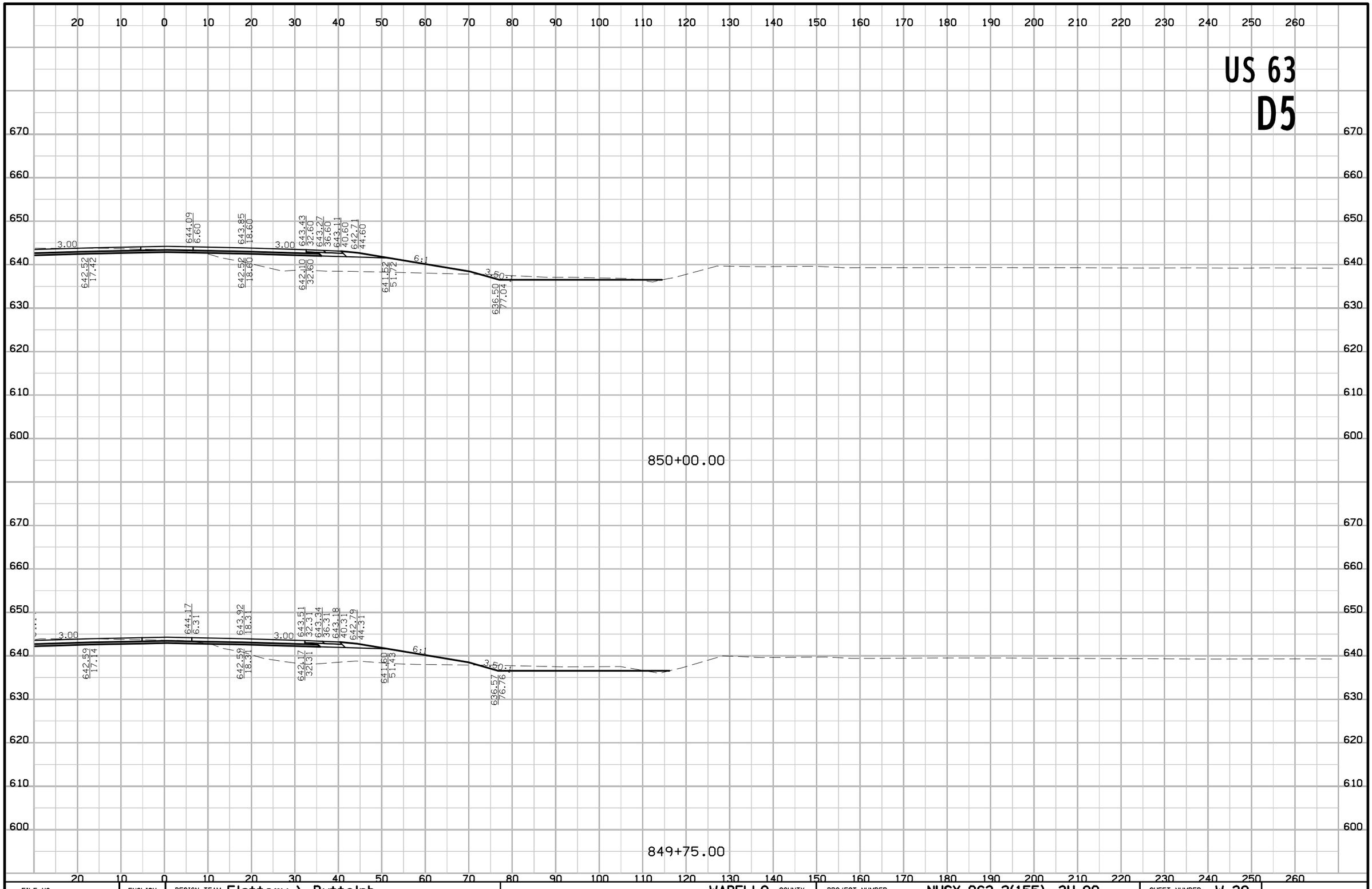
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.38

8:41:17 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

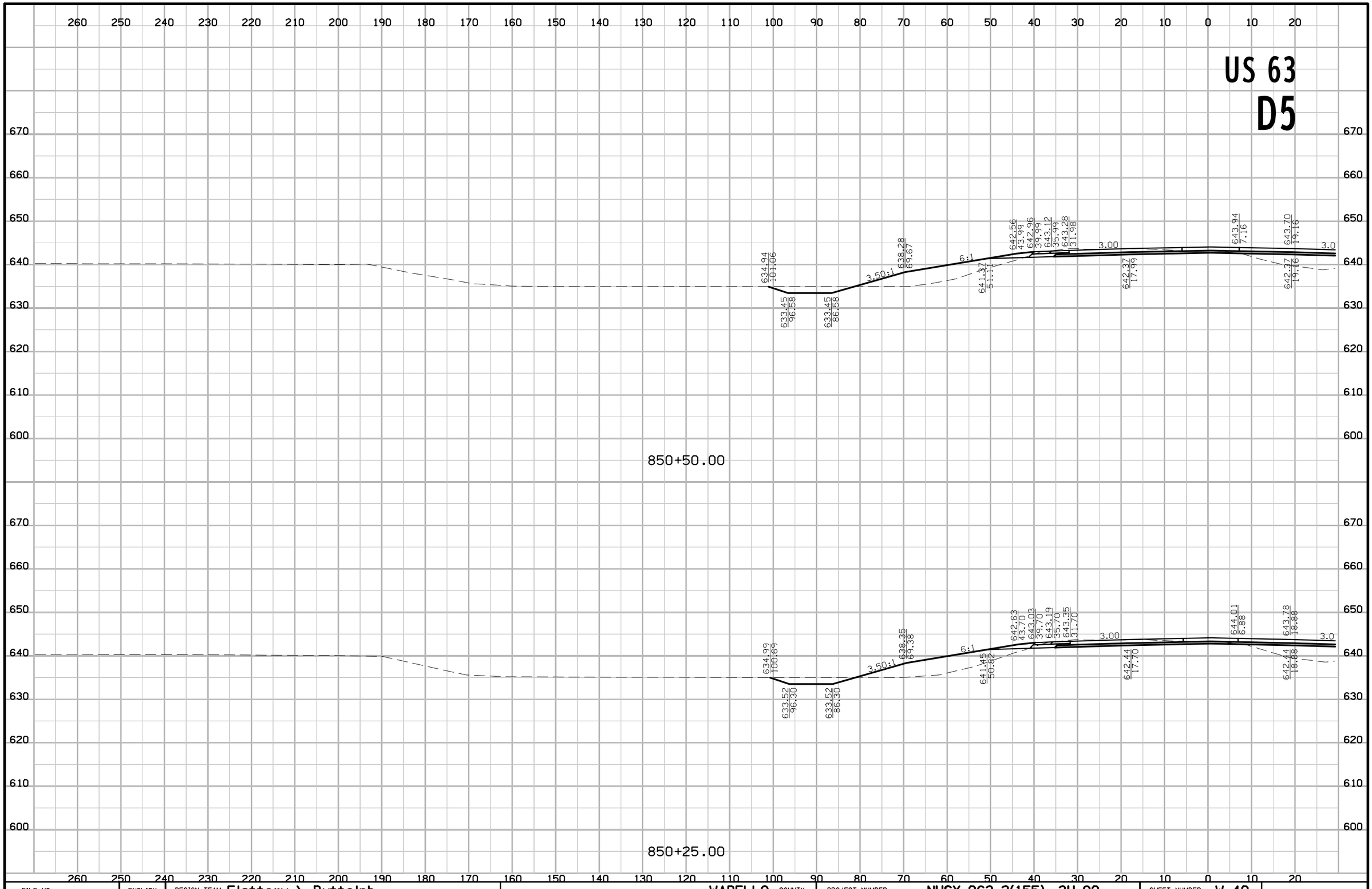
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.39

8:41:19 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

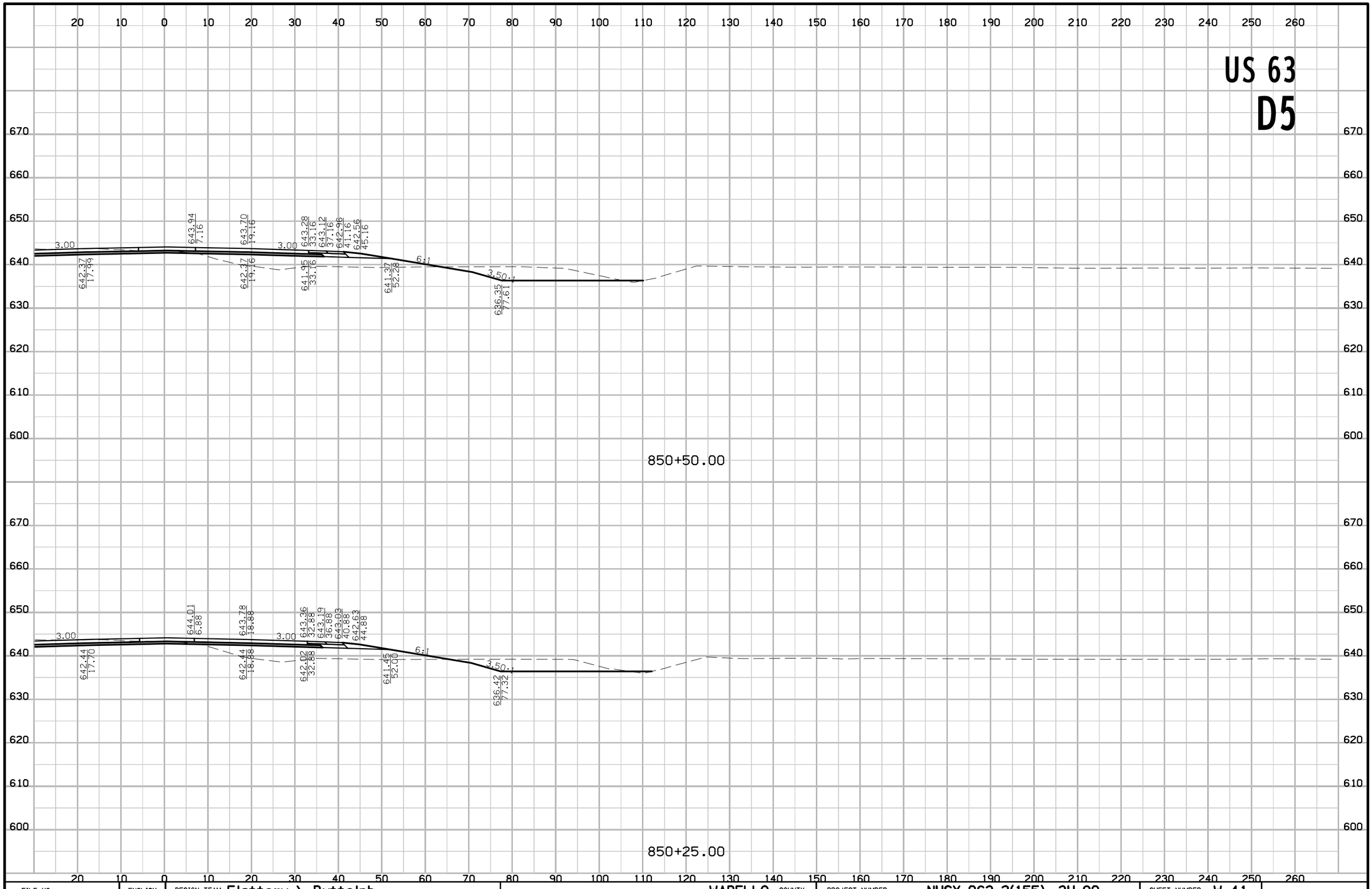
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.40

8:41:21 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

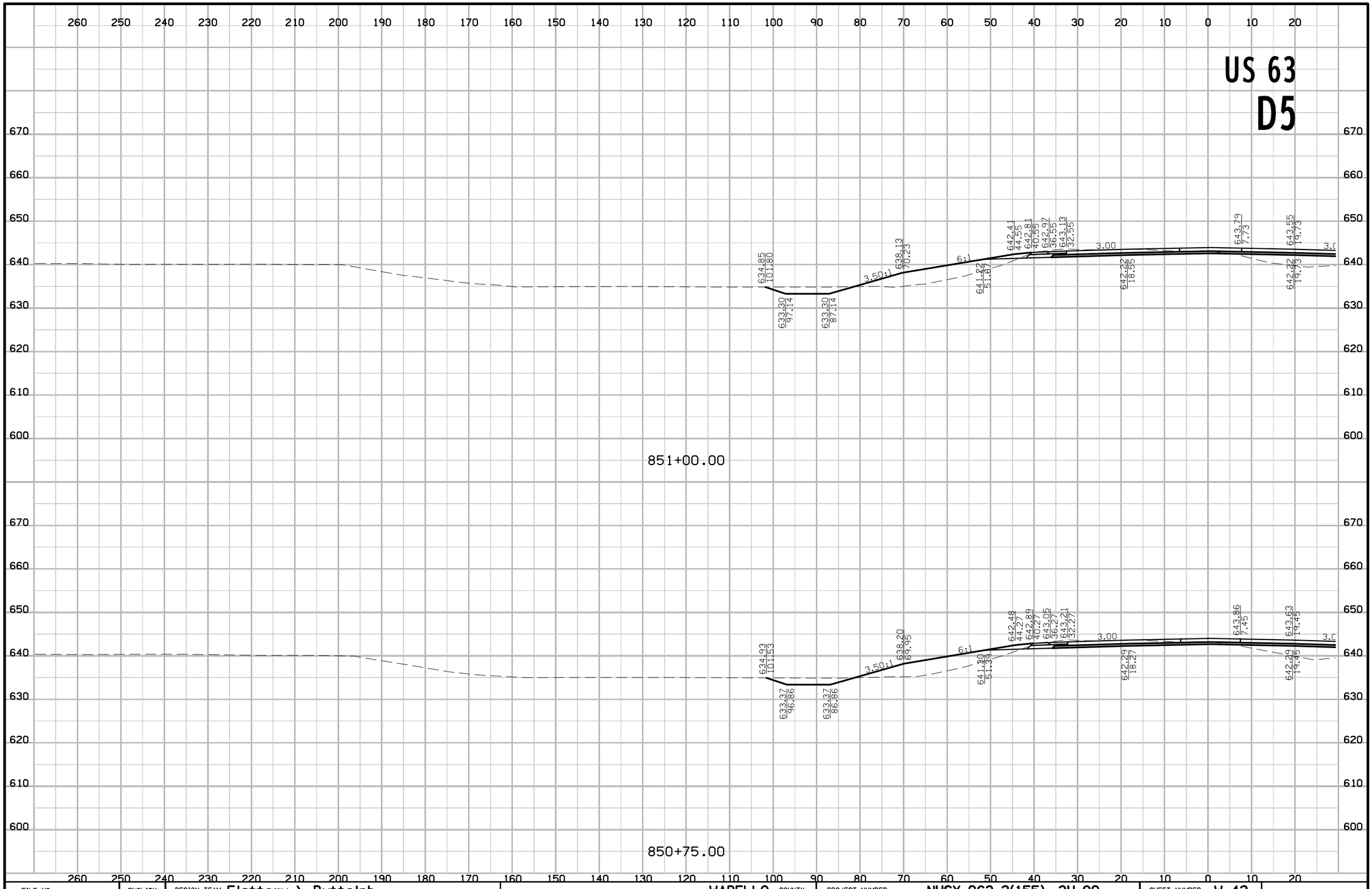
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.41

8:41:24 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

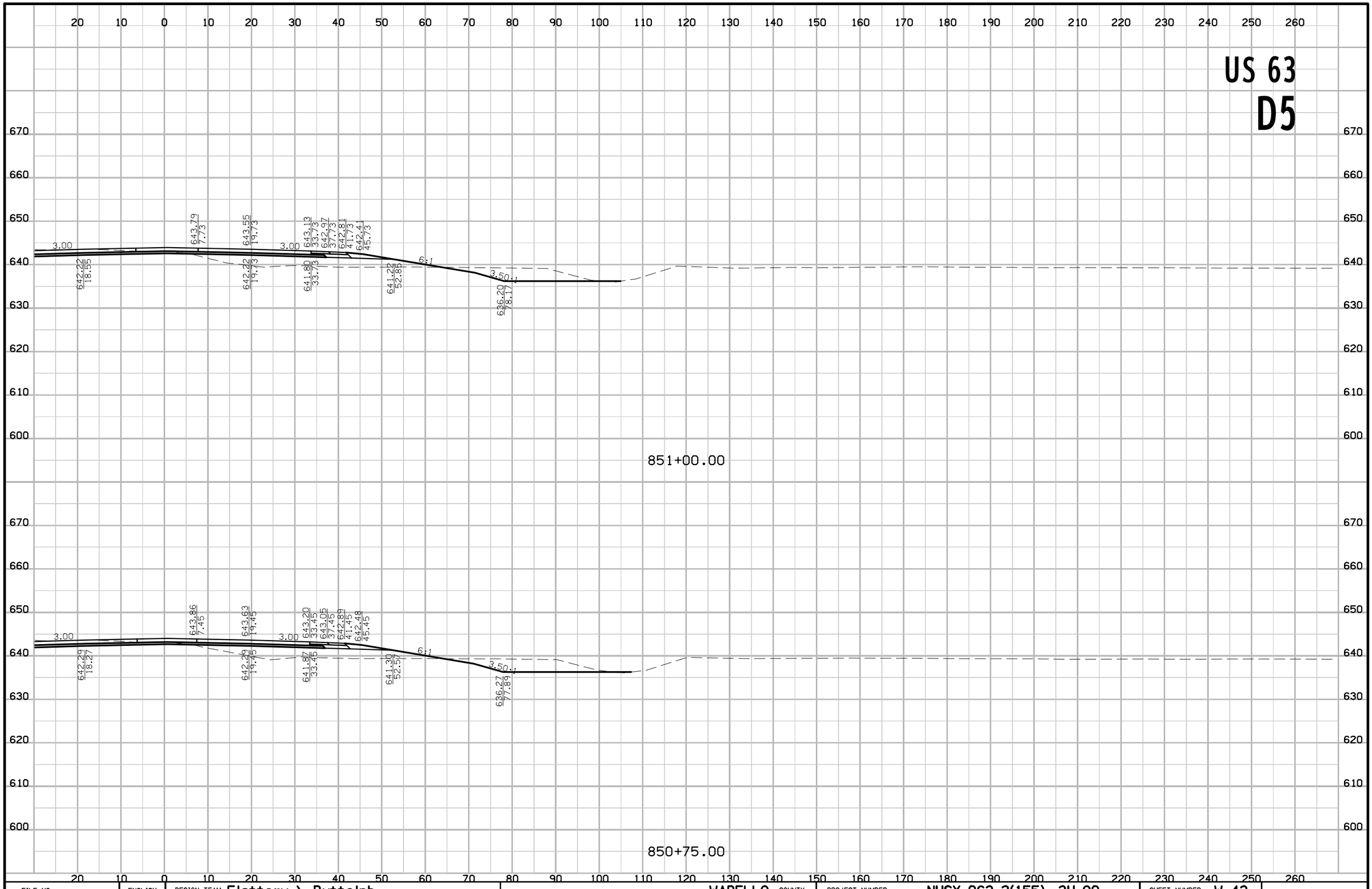
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.42

8:41:26 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

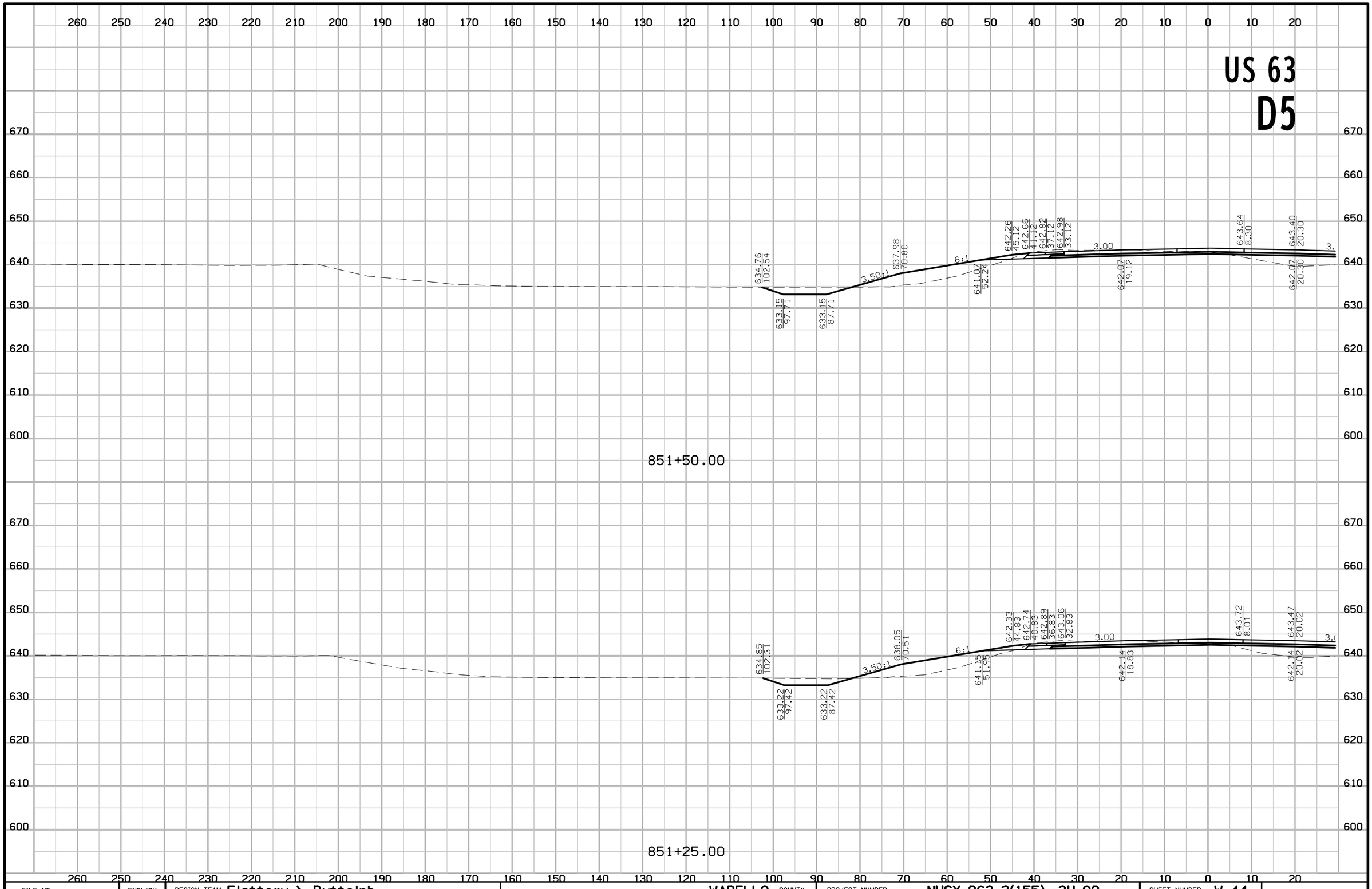
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.43

8:41:27 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

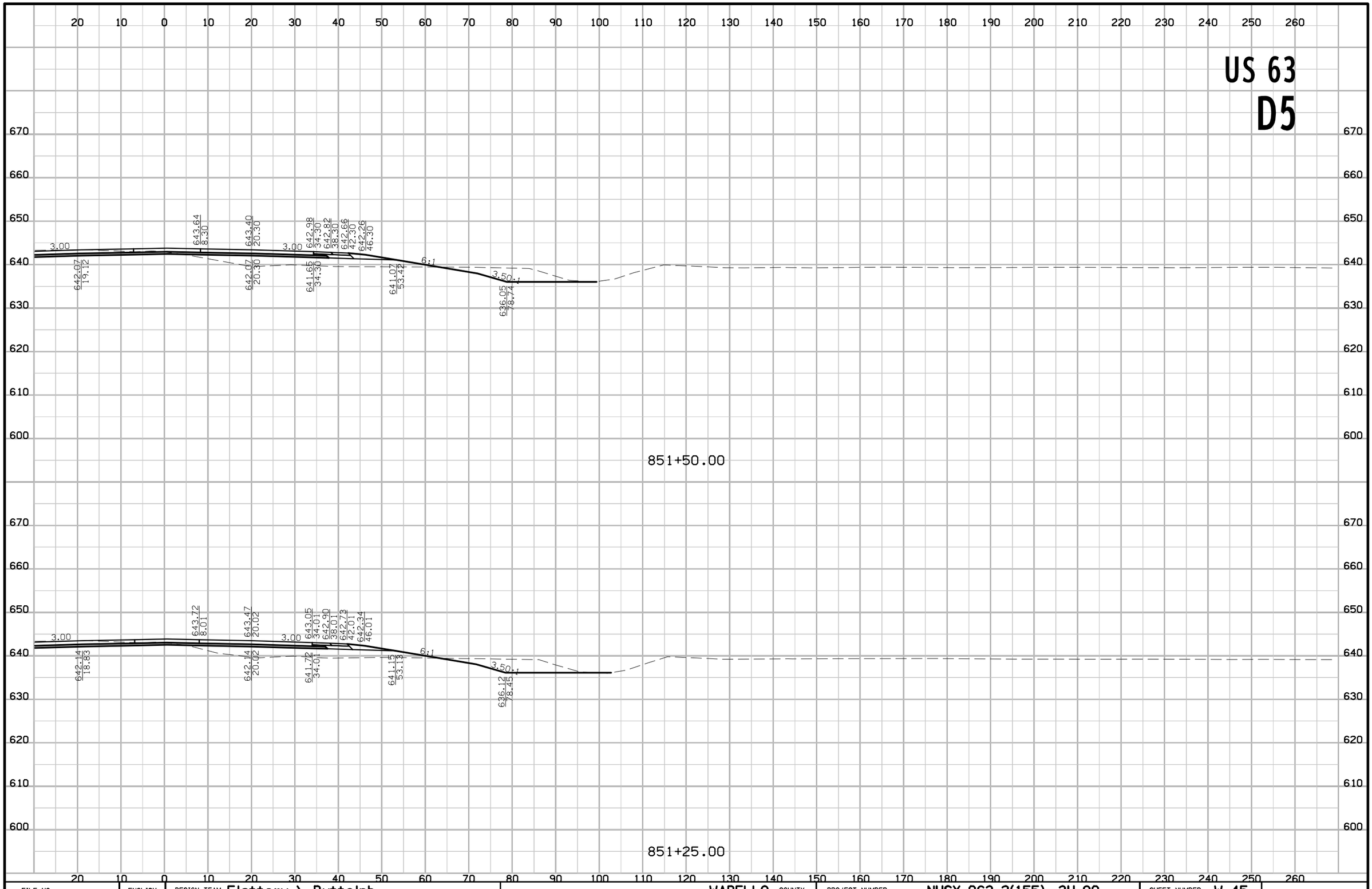
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.44

8:41:30 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

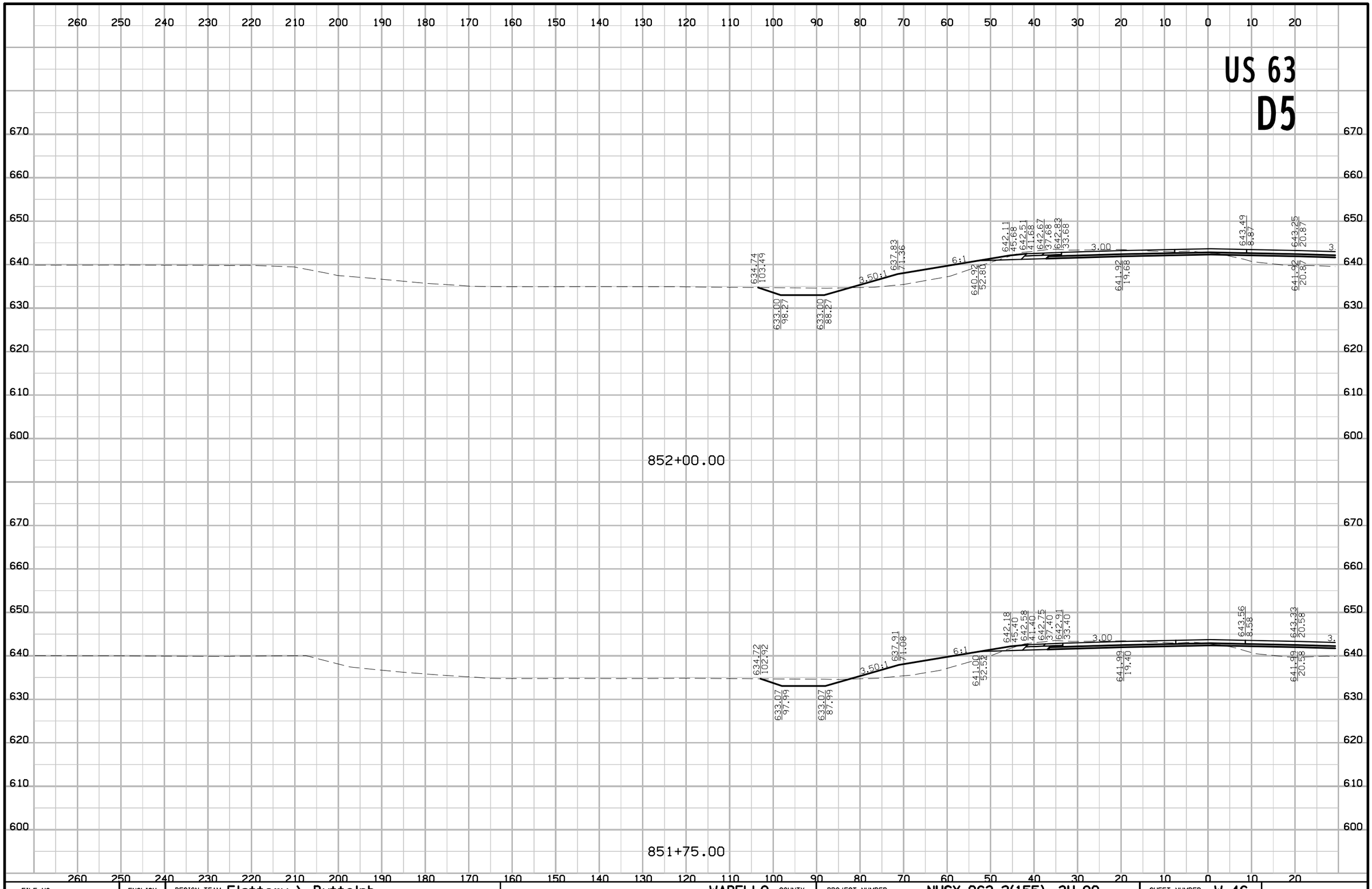
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.45

8:41:32 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

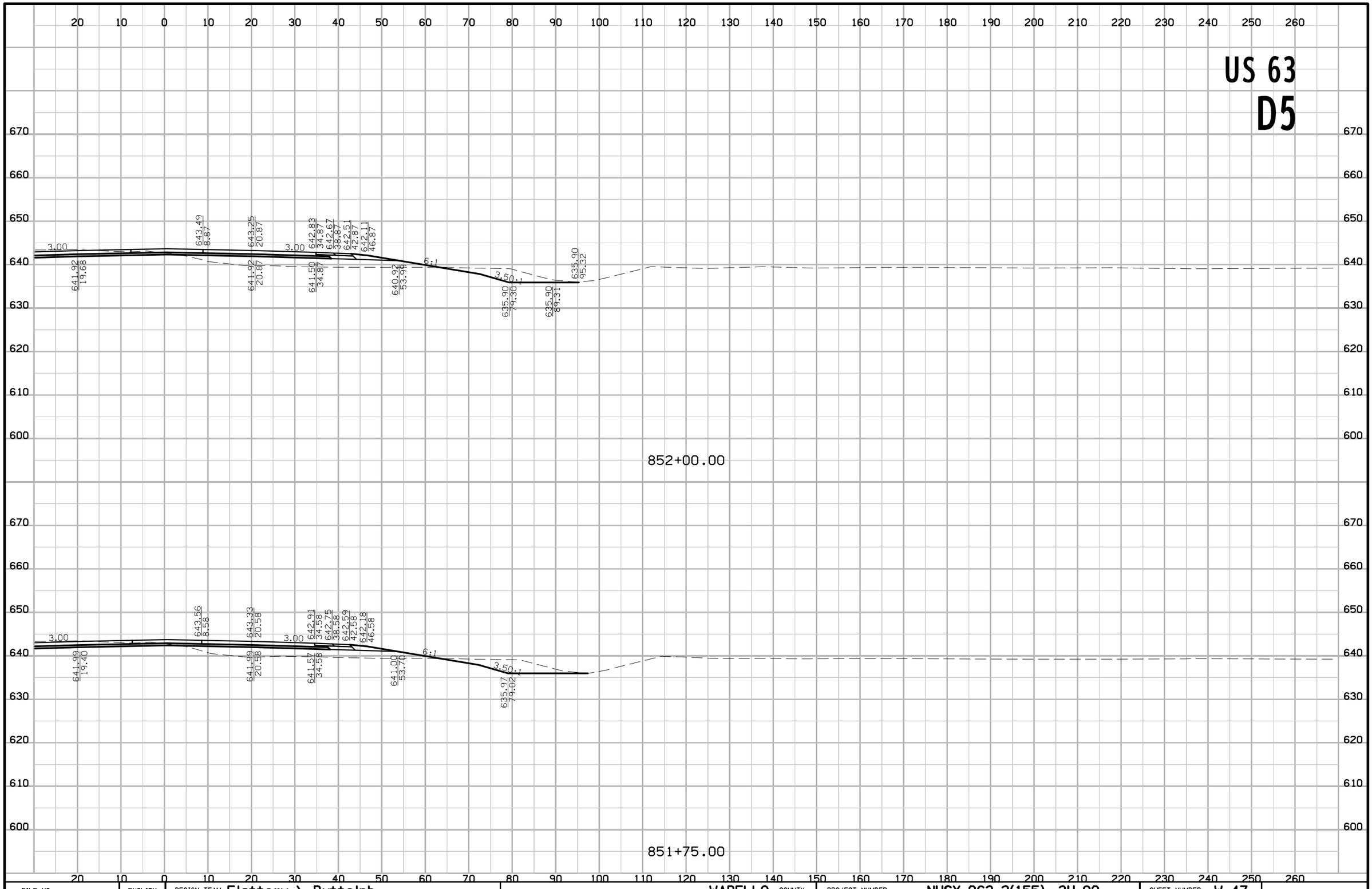
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.46

8:41:34 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

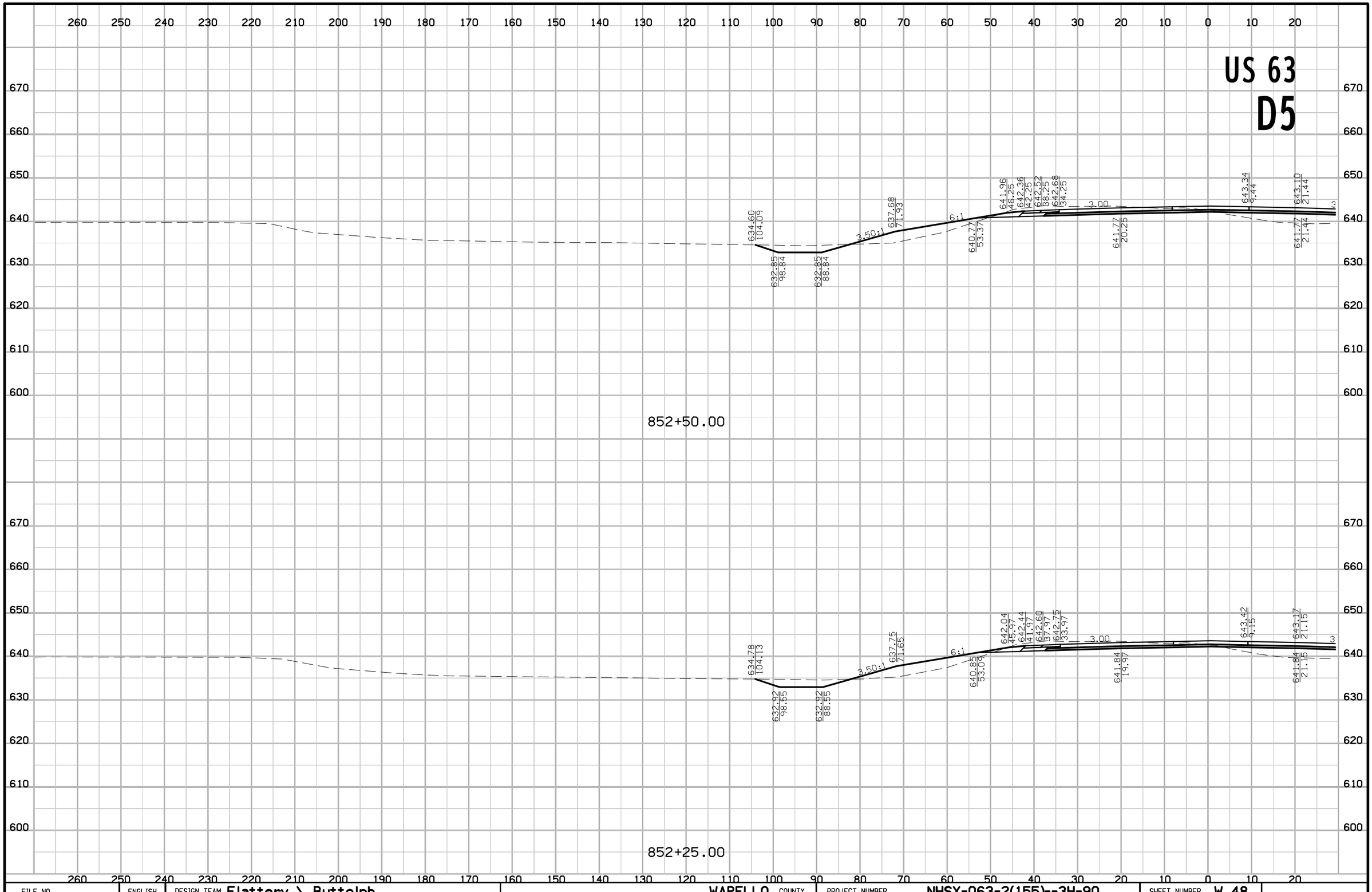
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.47

8:41:36 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

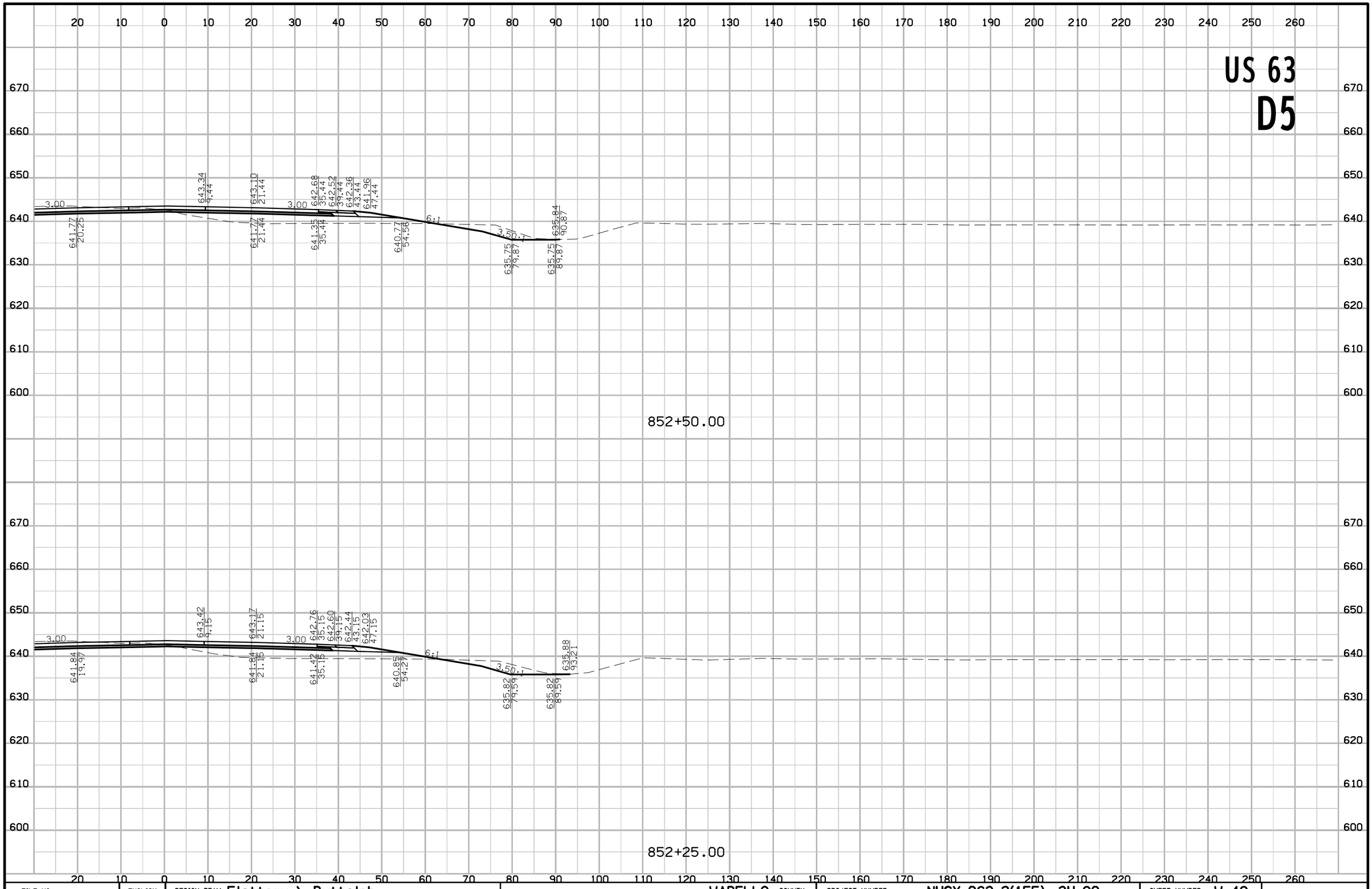
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.48

8:41:39 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

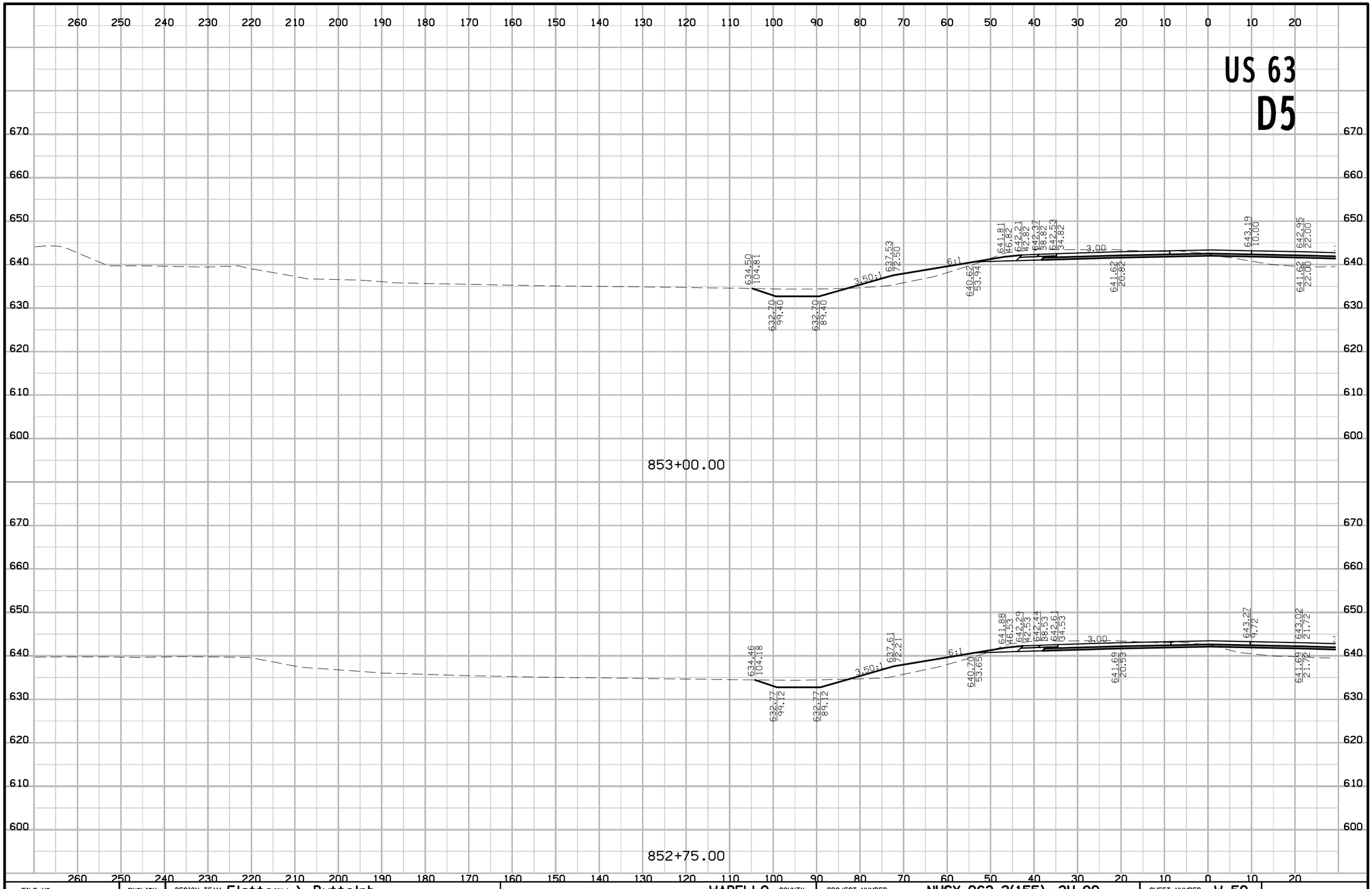
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.49

8:41:41 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

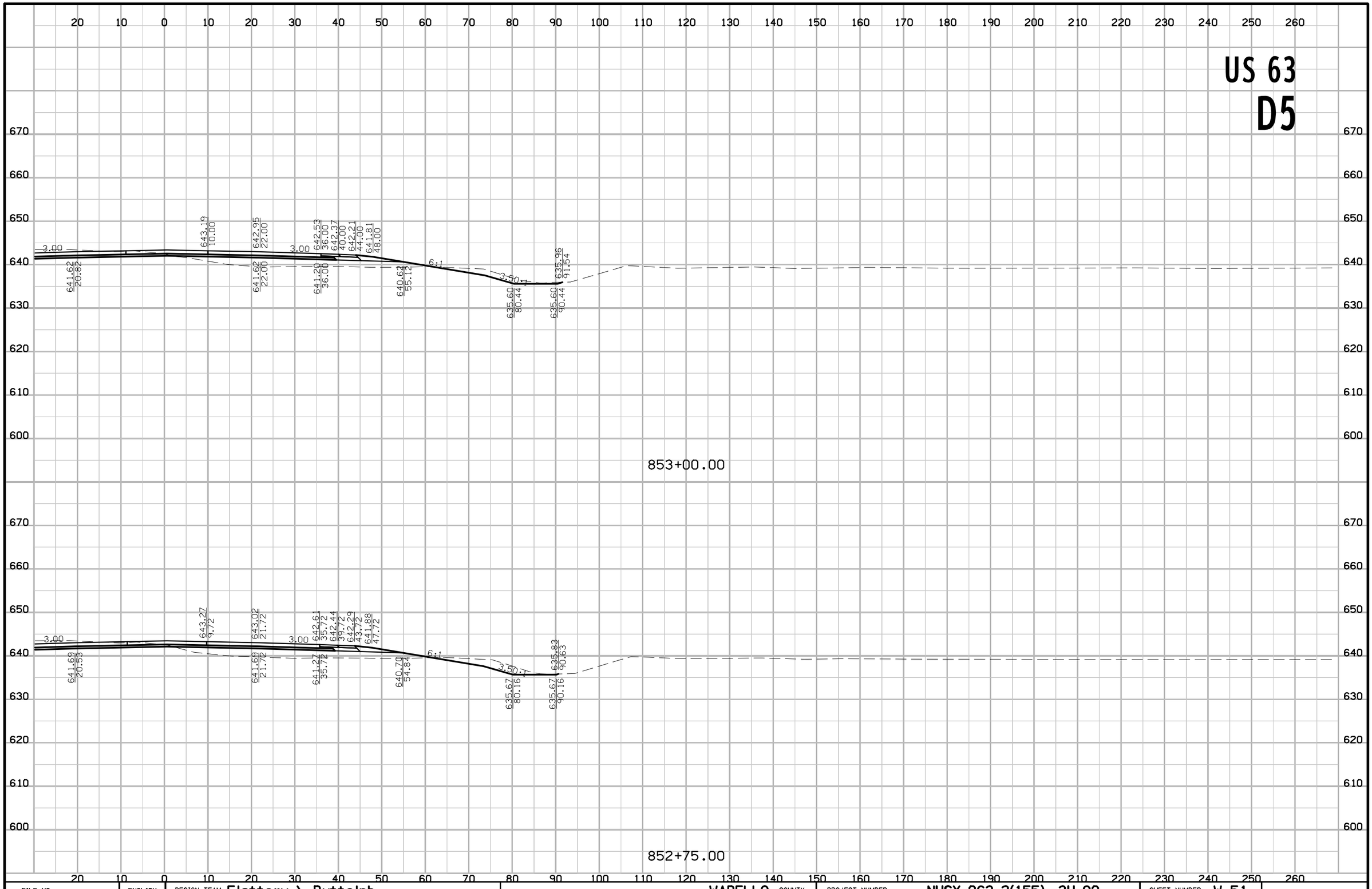
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.50

8:41:43 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

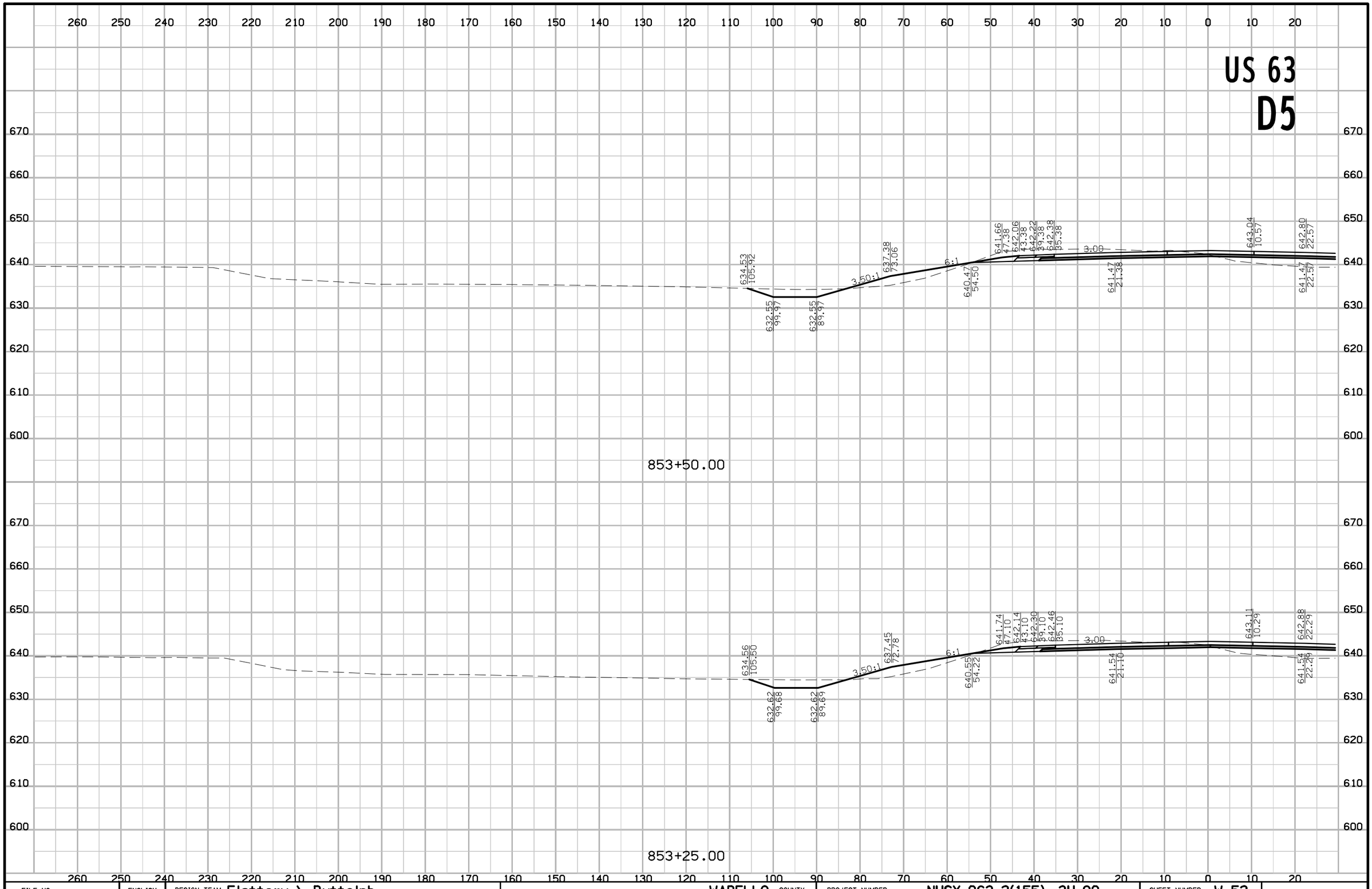
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.51

8:41:45 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

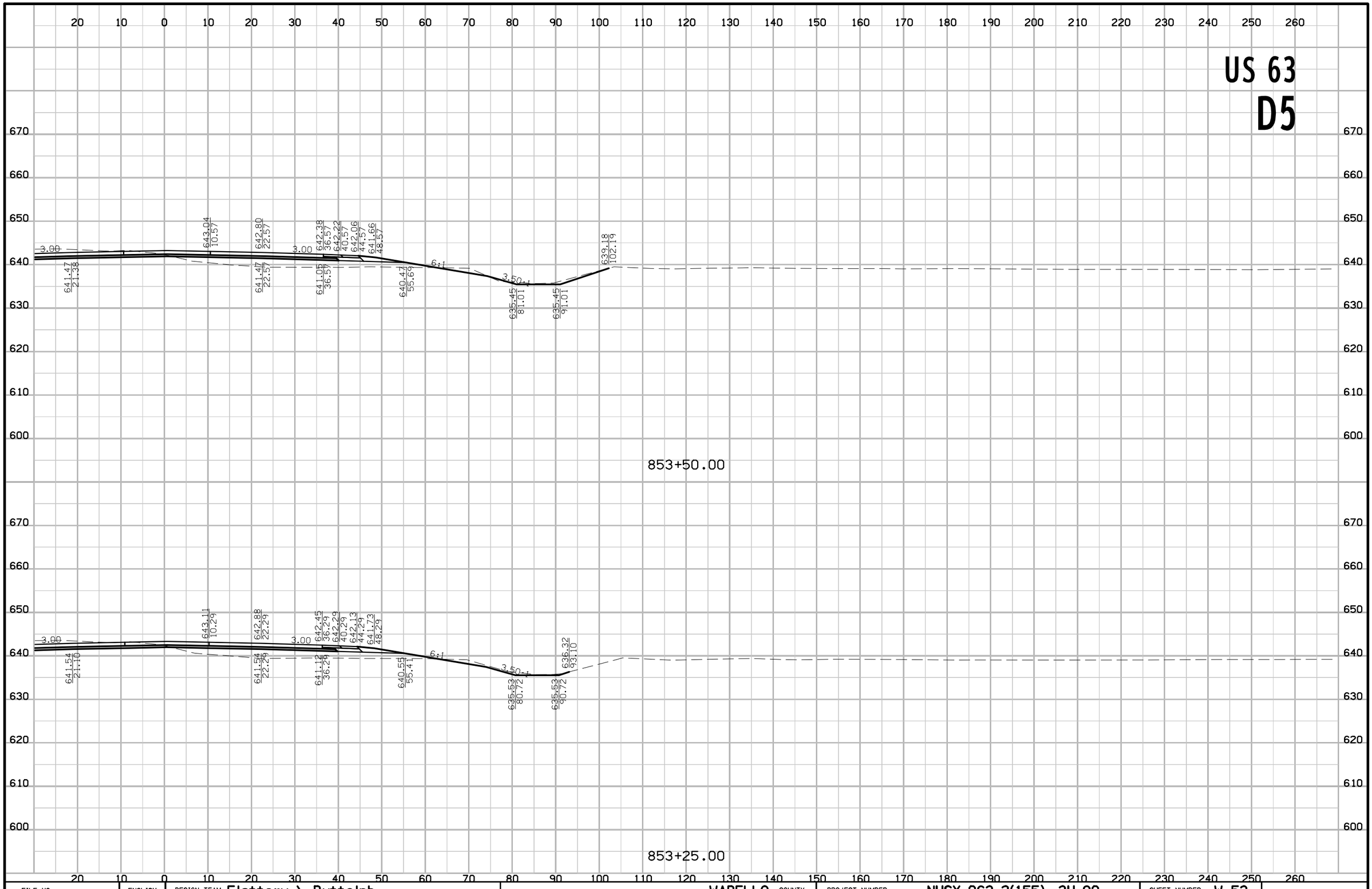
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.52

8:41:47 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

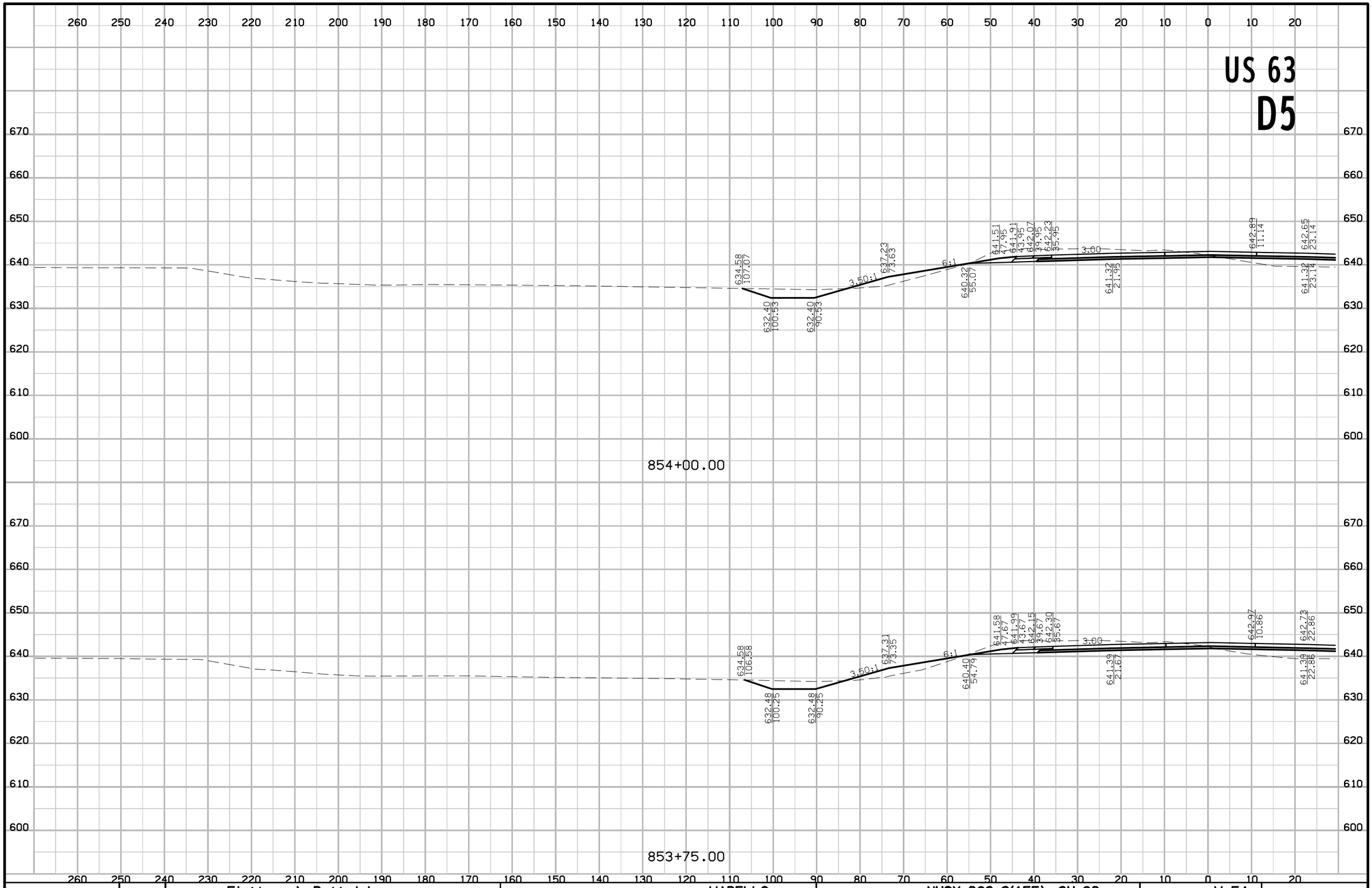
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.53

8:41:49 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

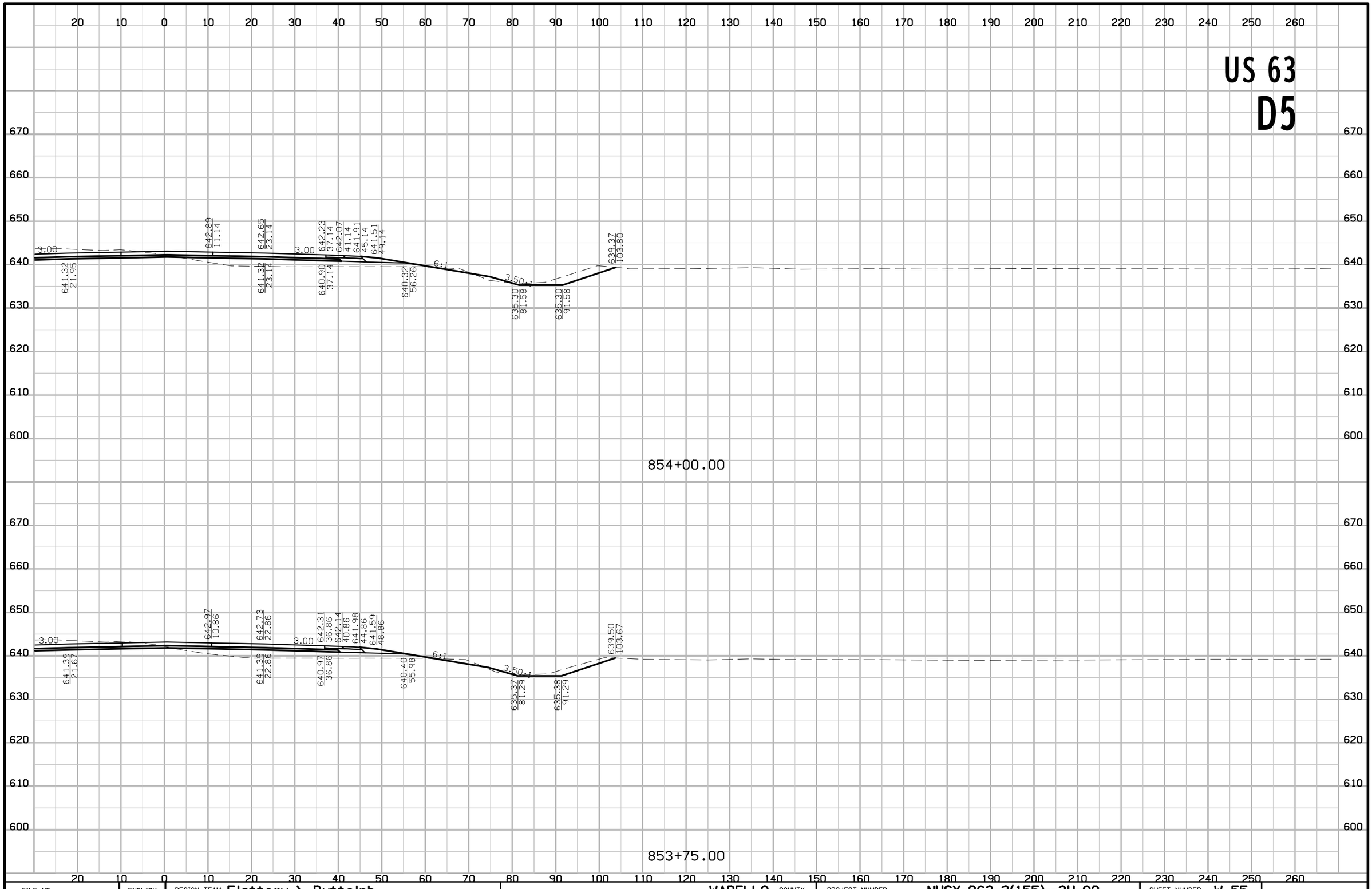
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.54

8:41:51 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

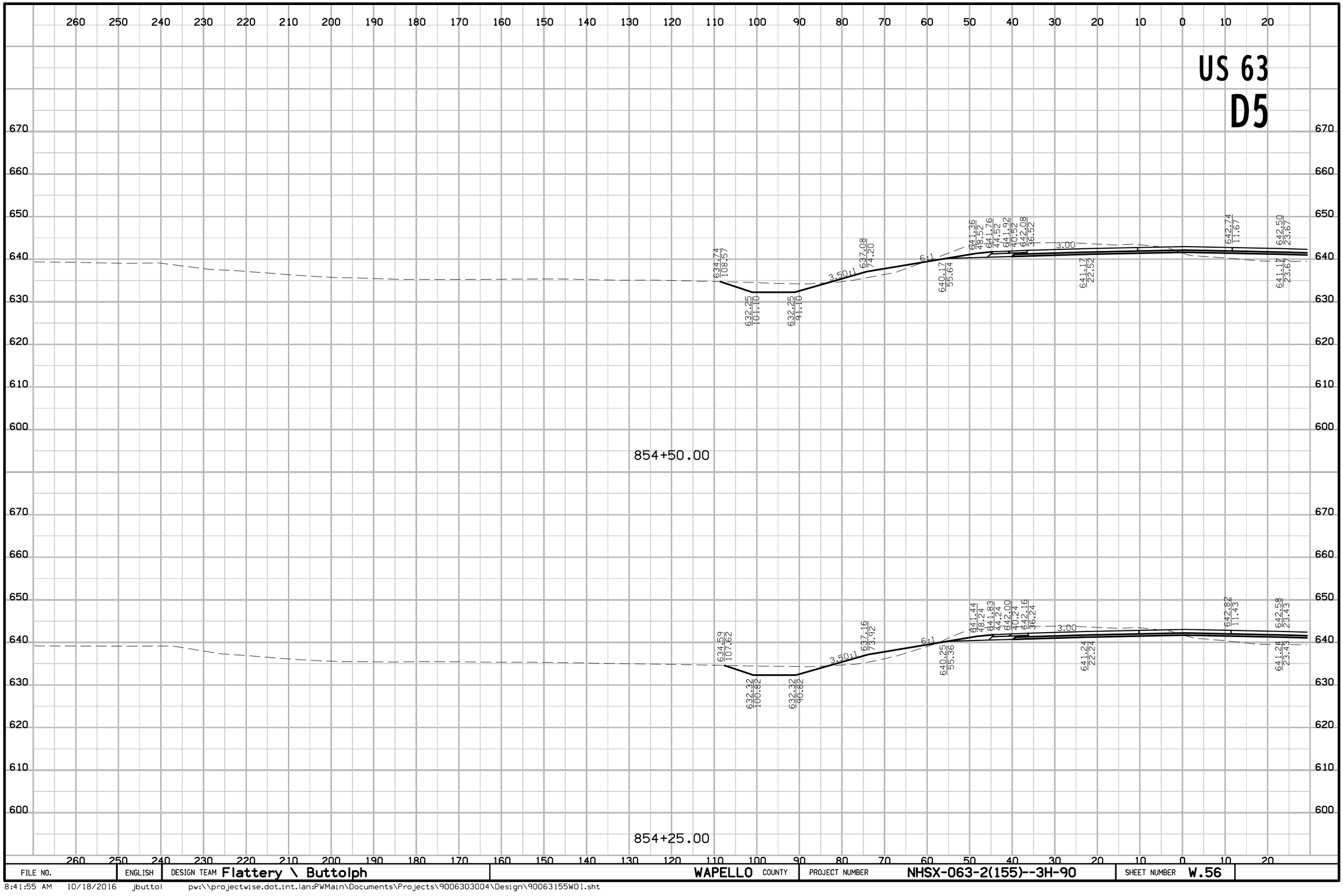
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.55

8:41:53 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

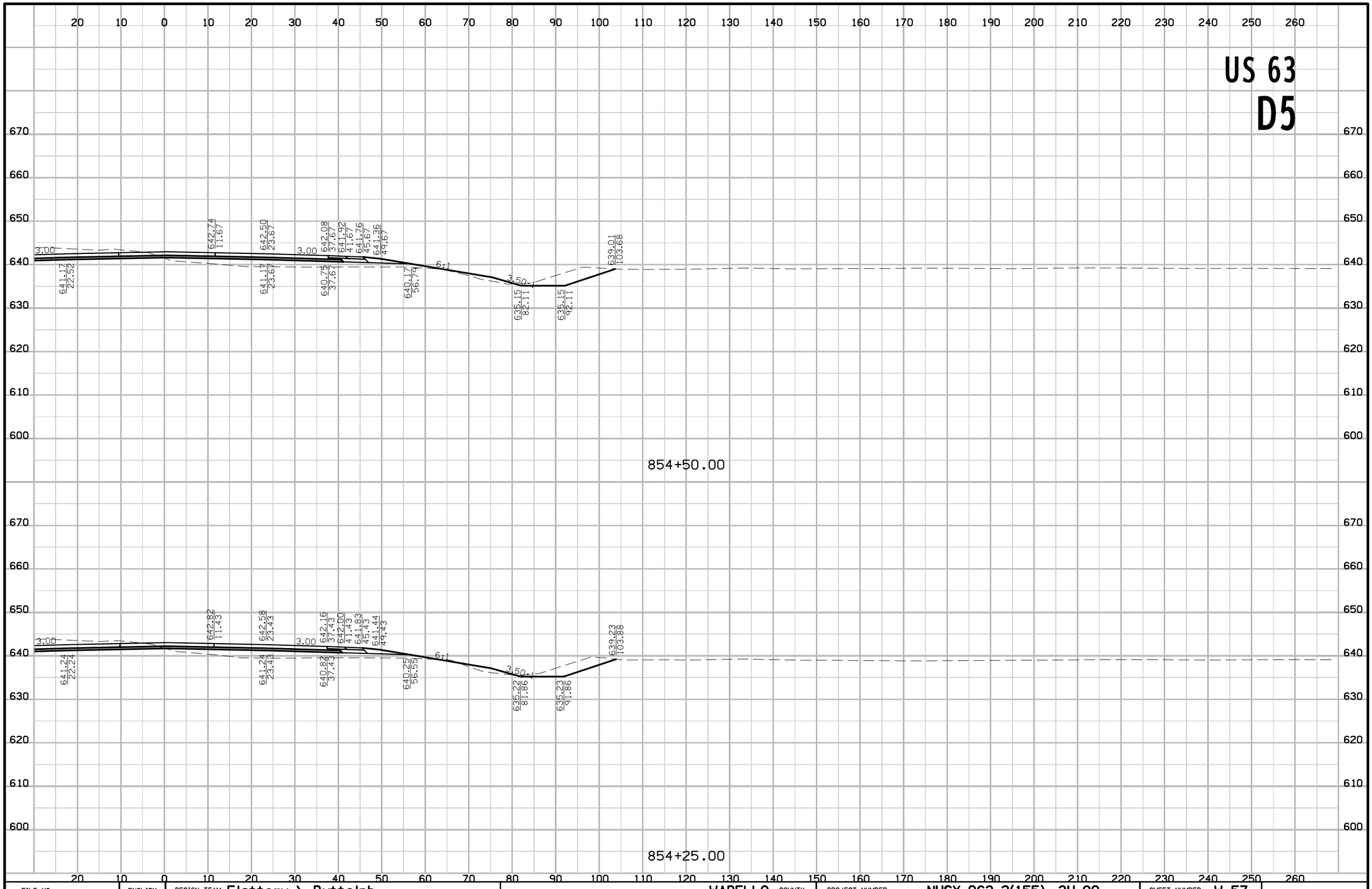
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.56

8:41:55 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

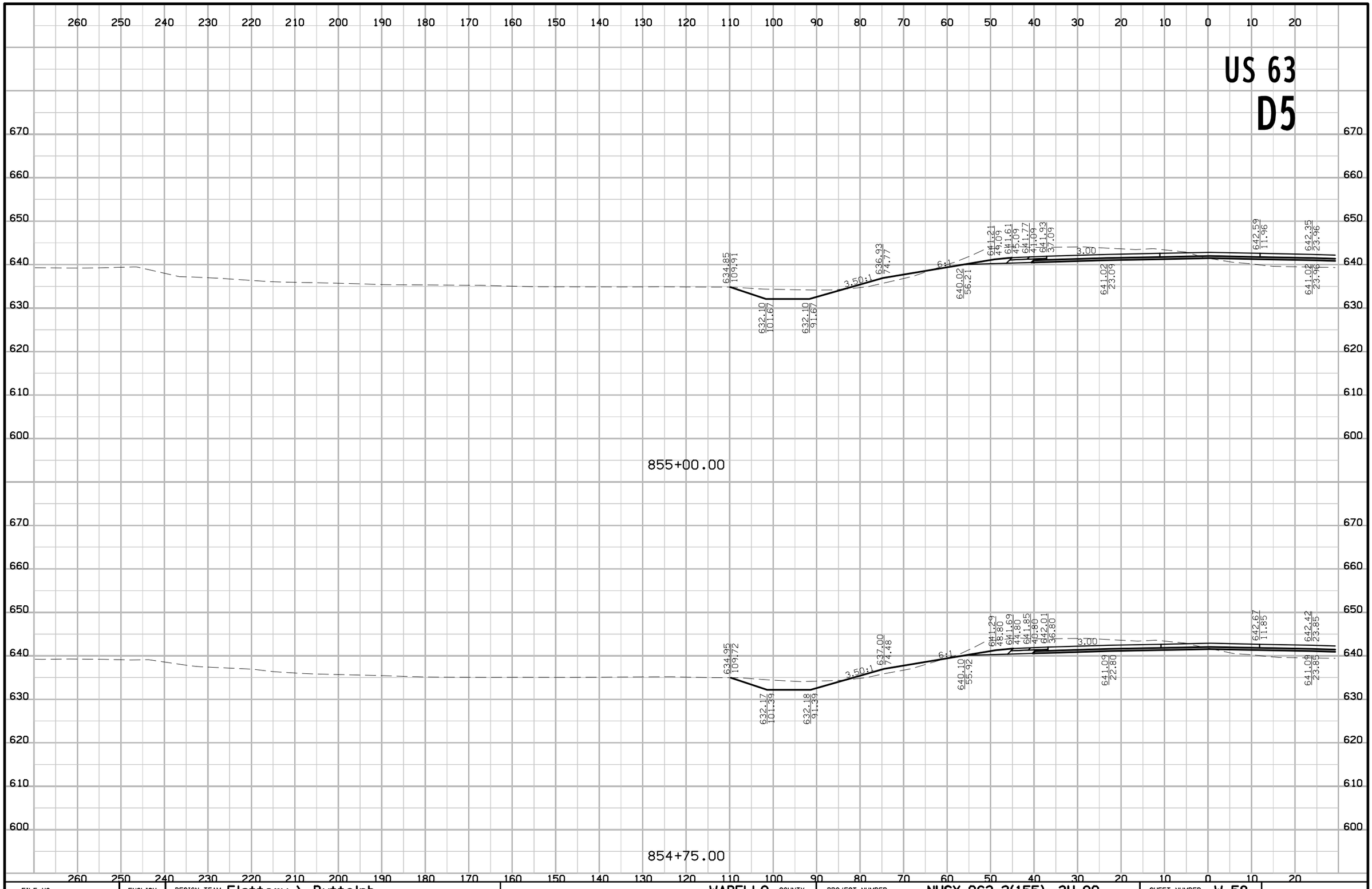
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.57

8:41:57 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

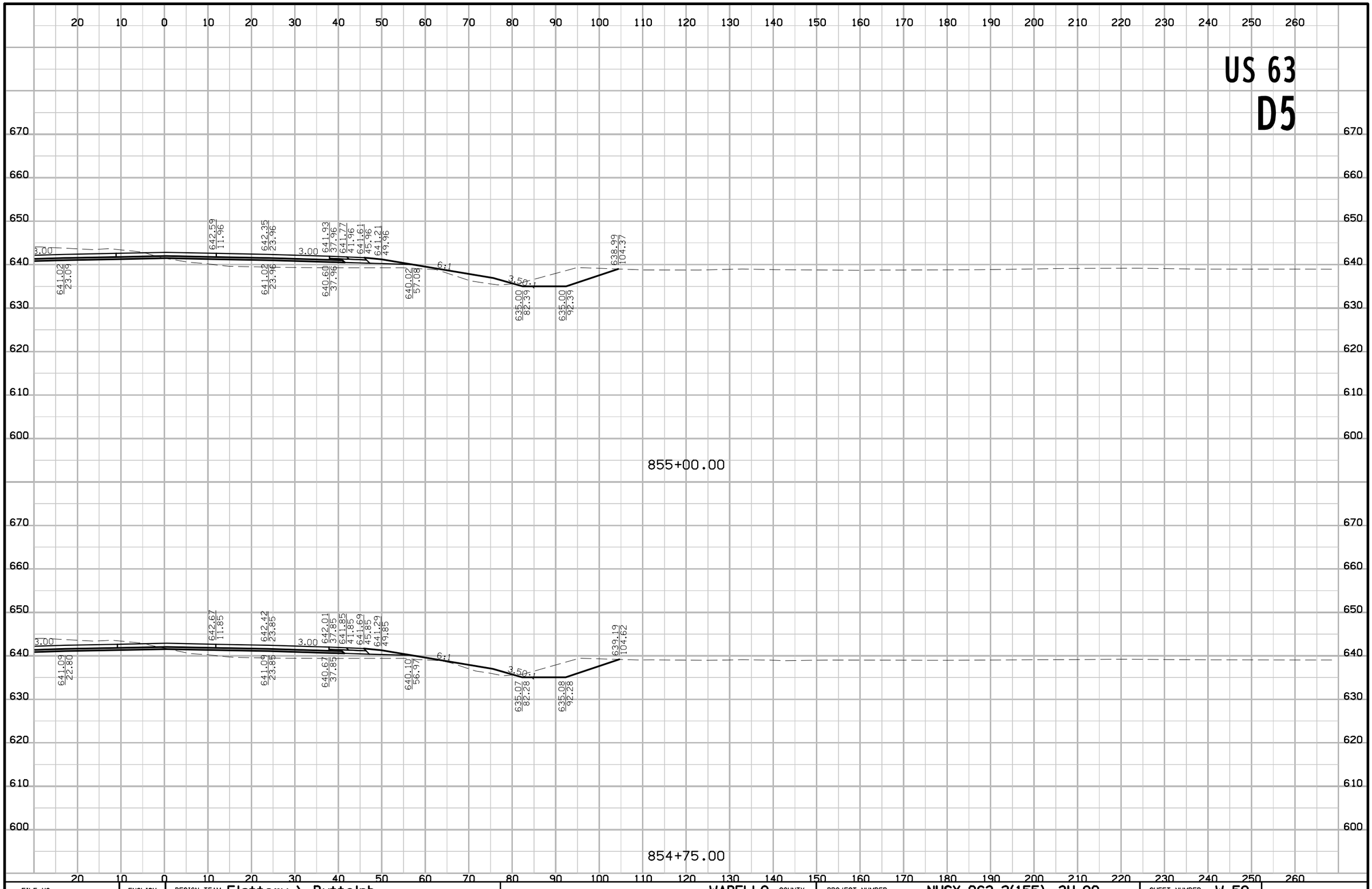
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.58

8:41:59 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

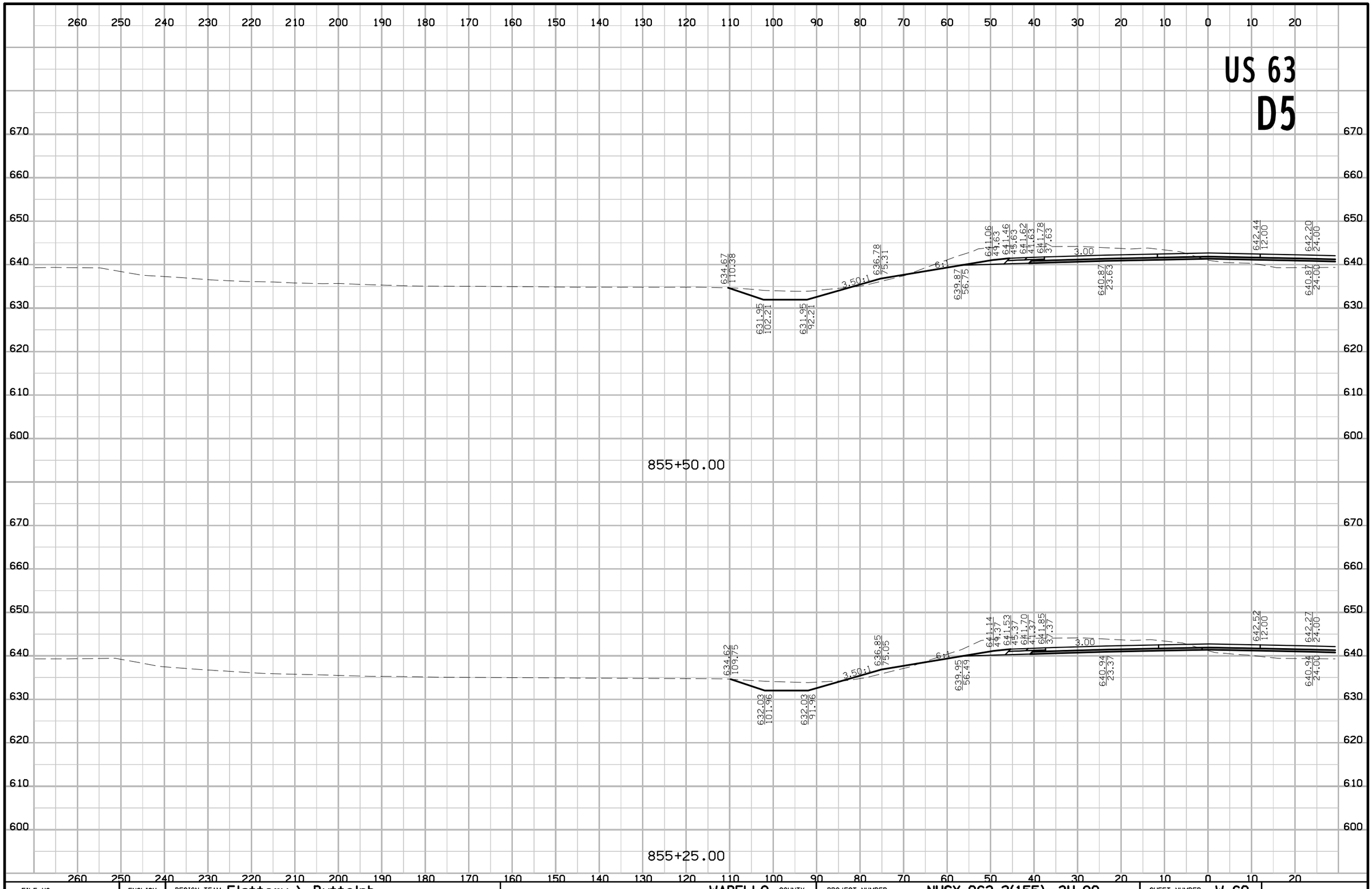
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.59

8:42:01 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

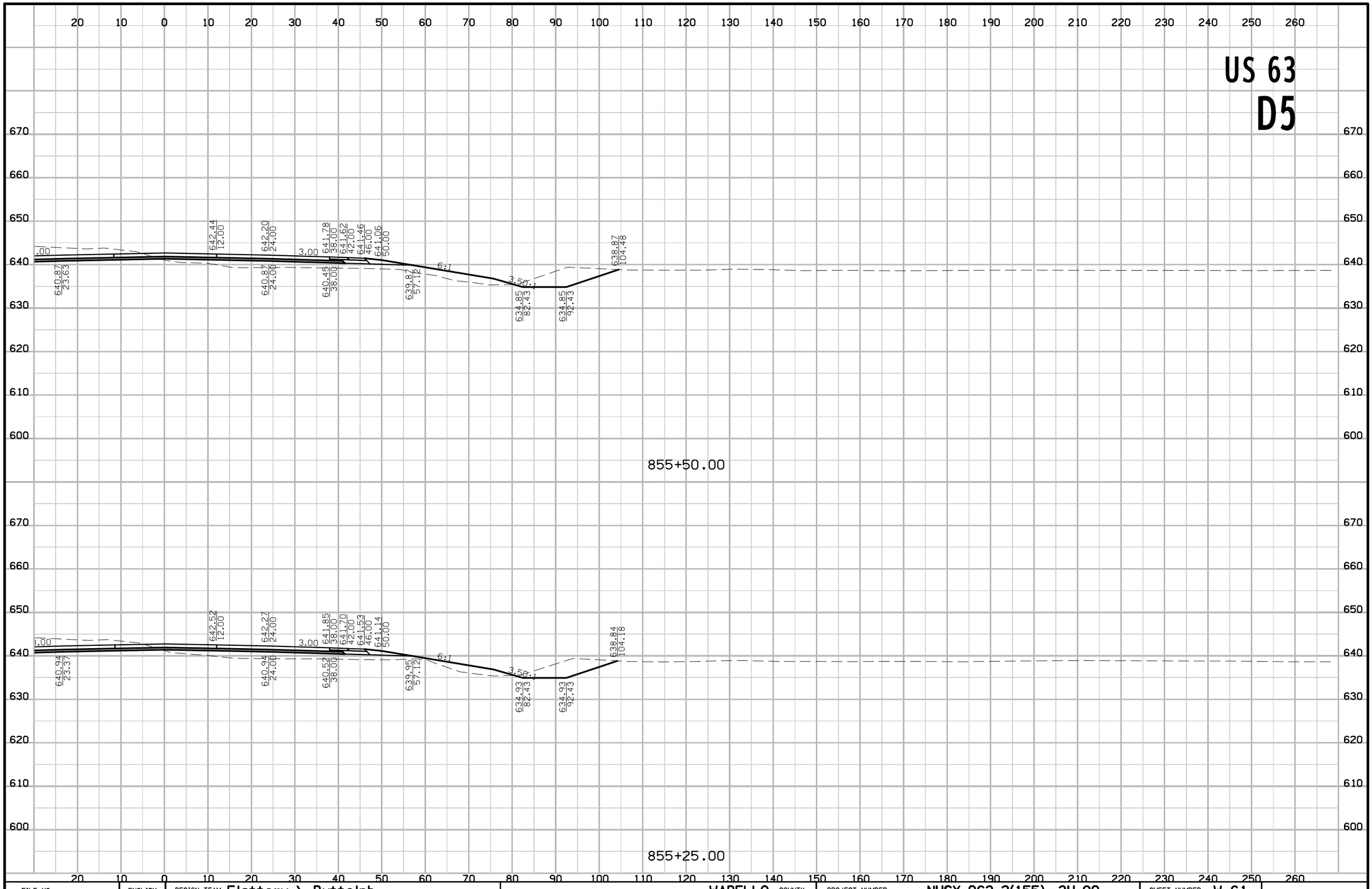
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.60

8:42:03 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

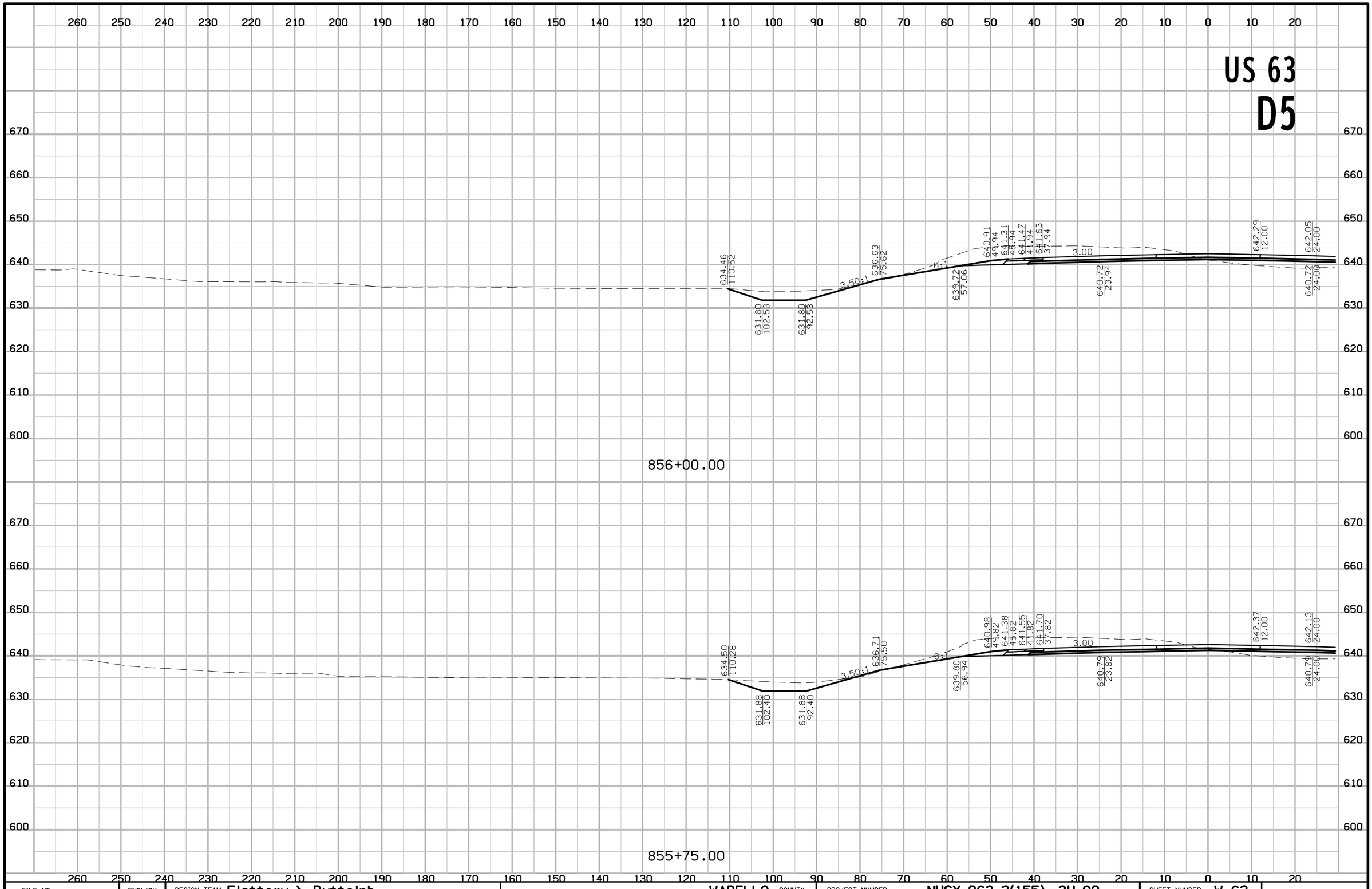
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.61

8:42:06 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

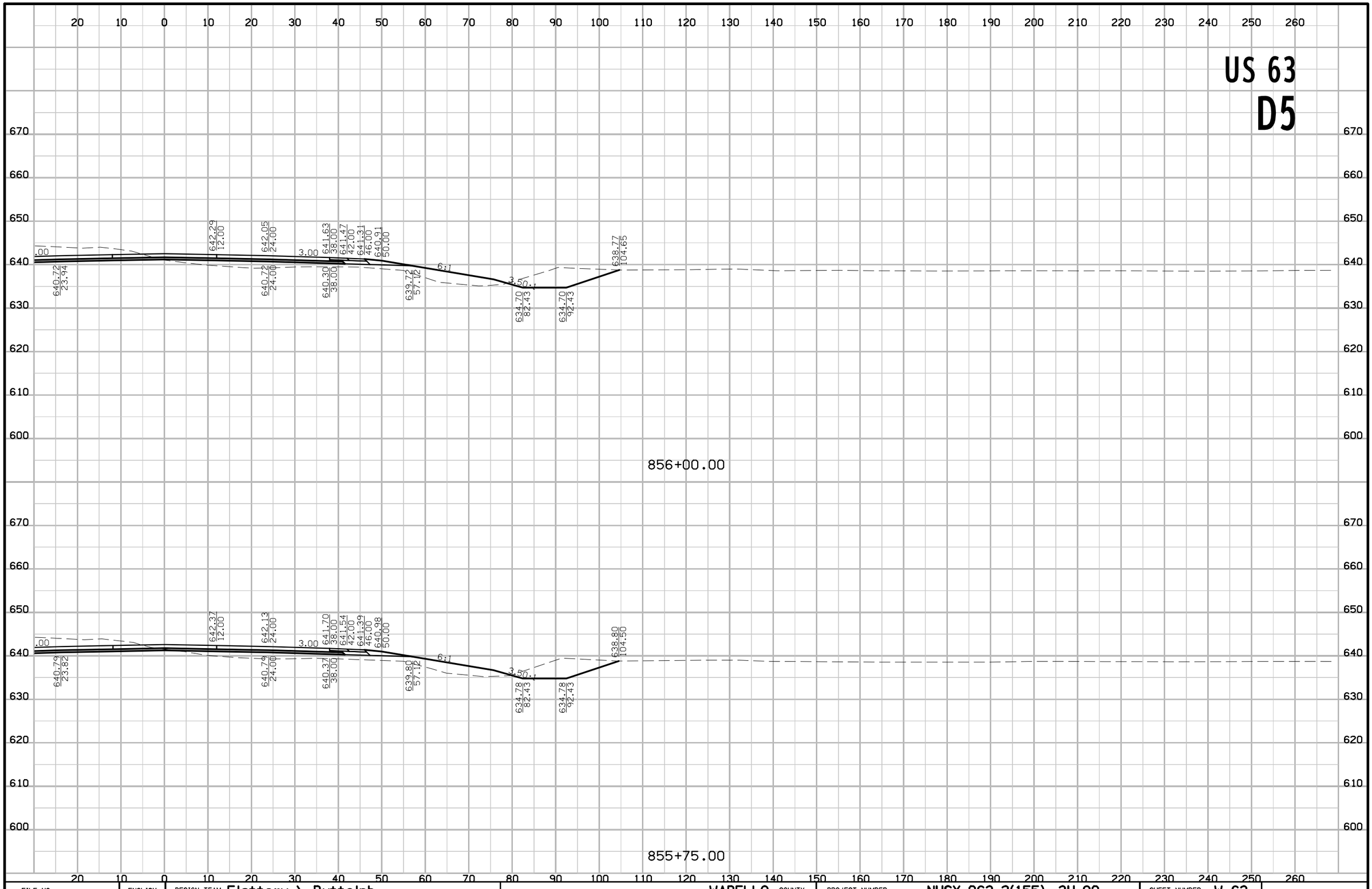
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.62

8:42:08 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

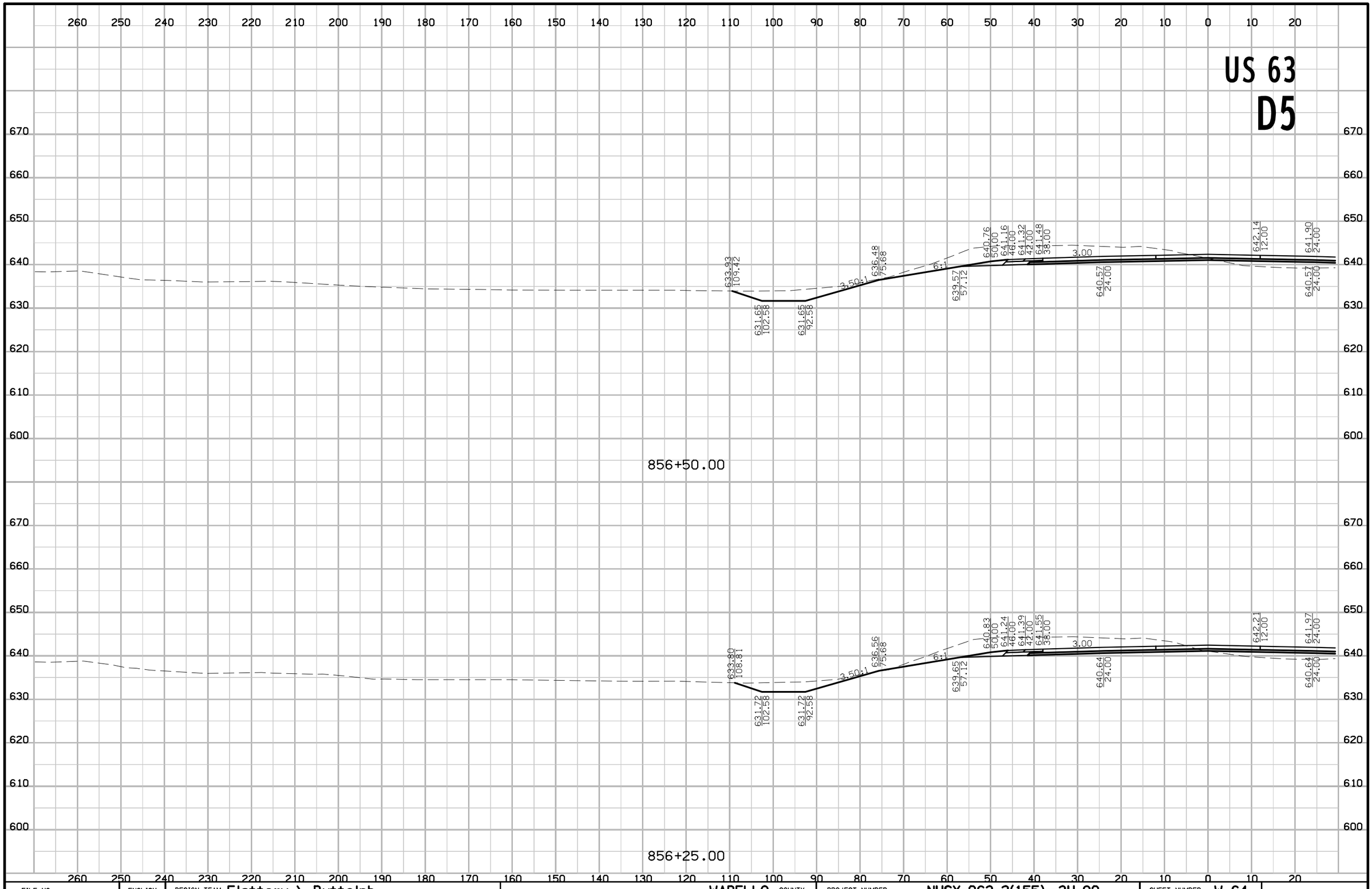
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.63

8:42:10 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

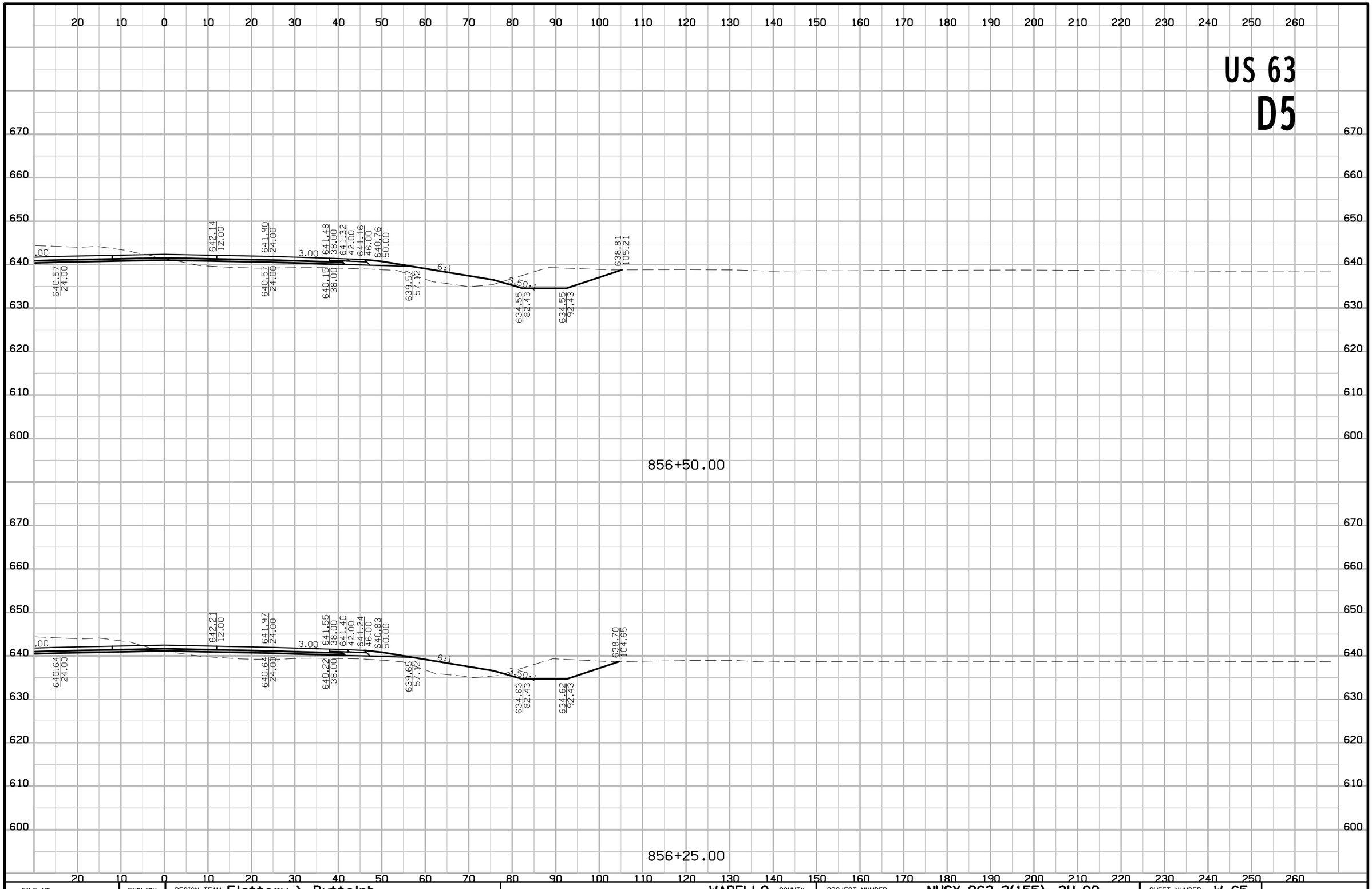
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.64

8:42:12 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

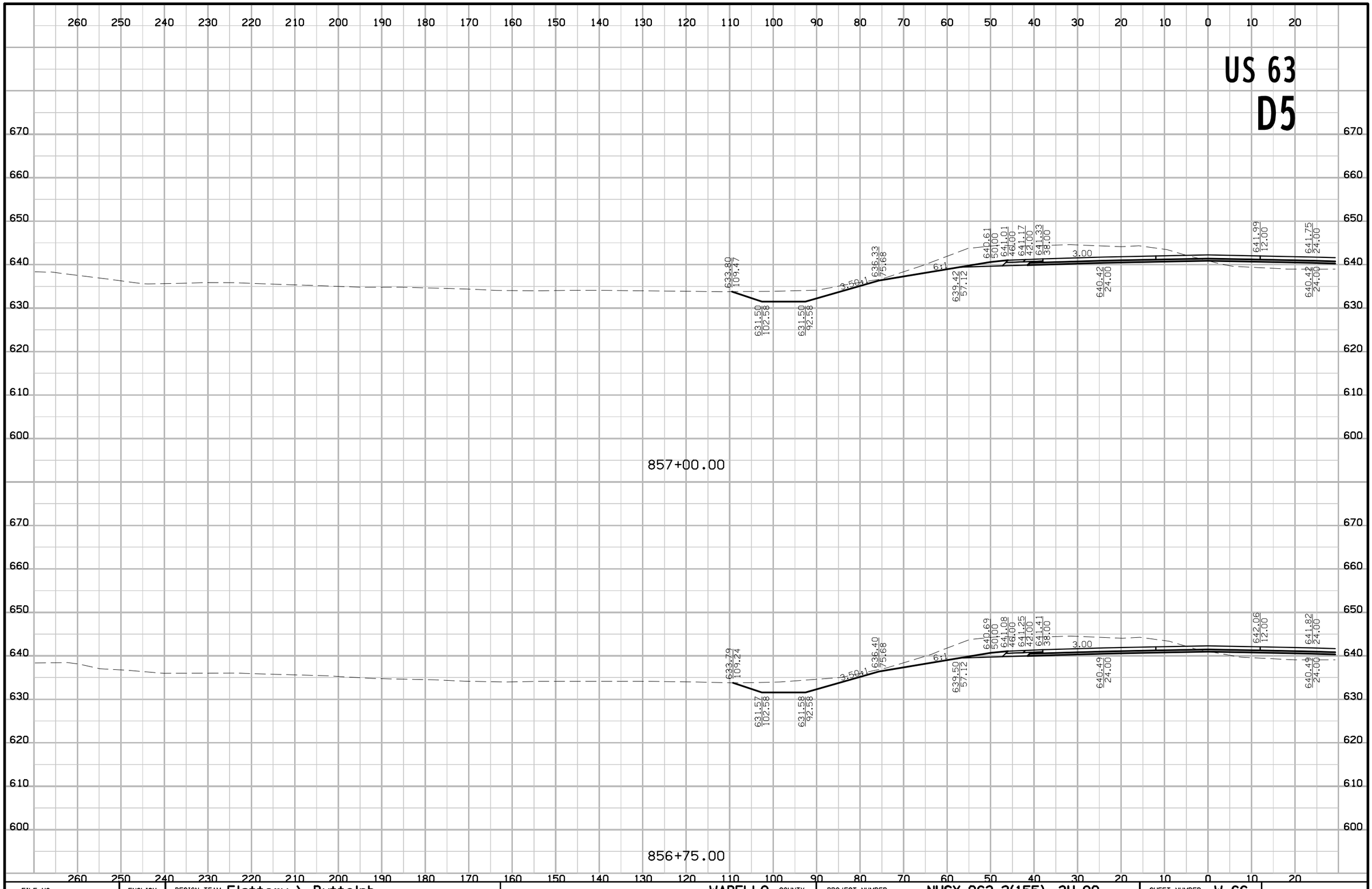
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.65

8:42:14 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

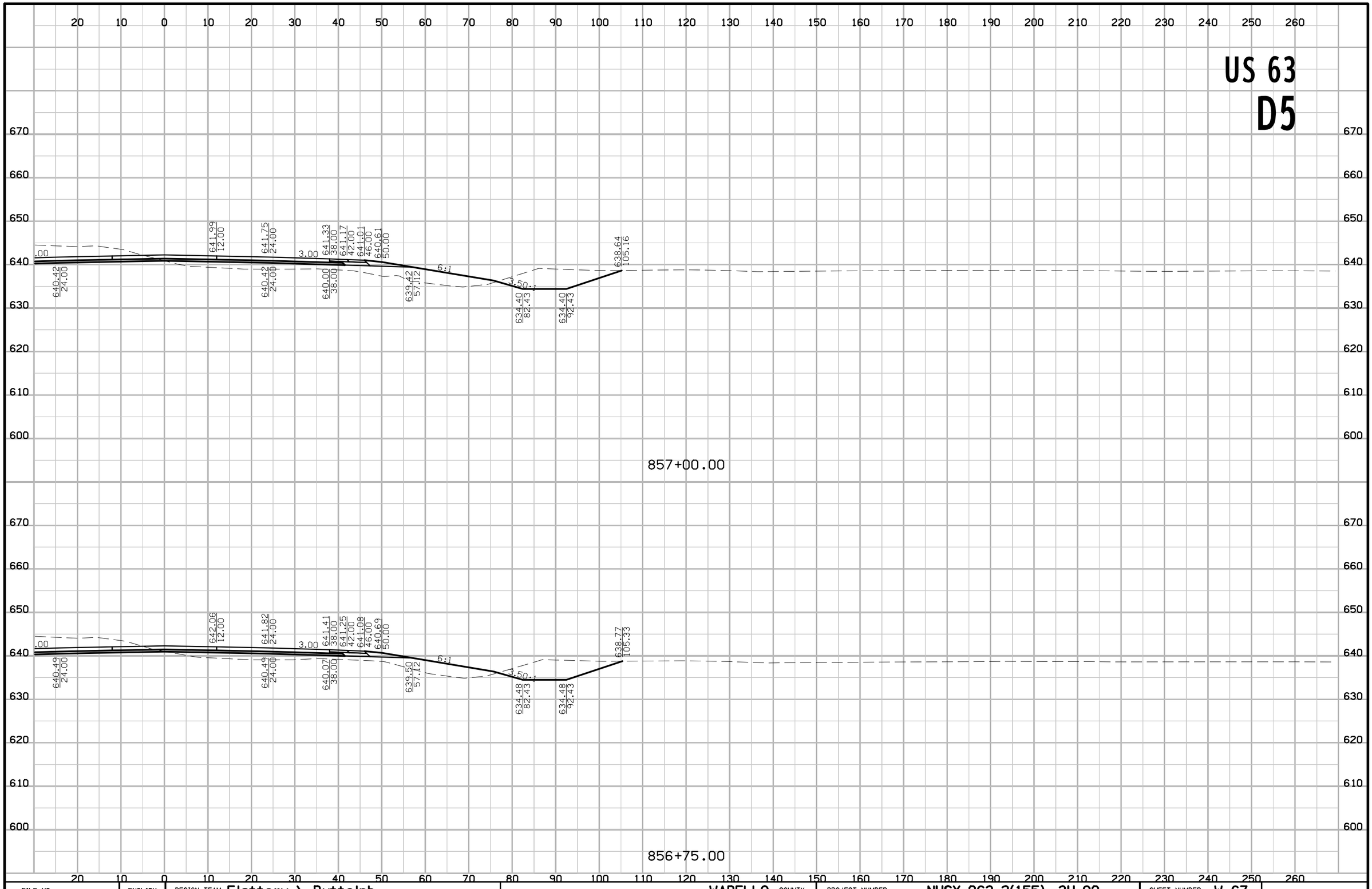
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.66

8:42:16 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

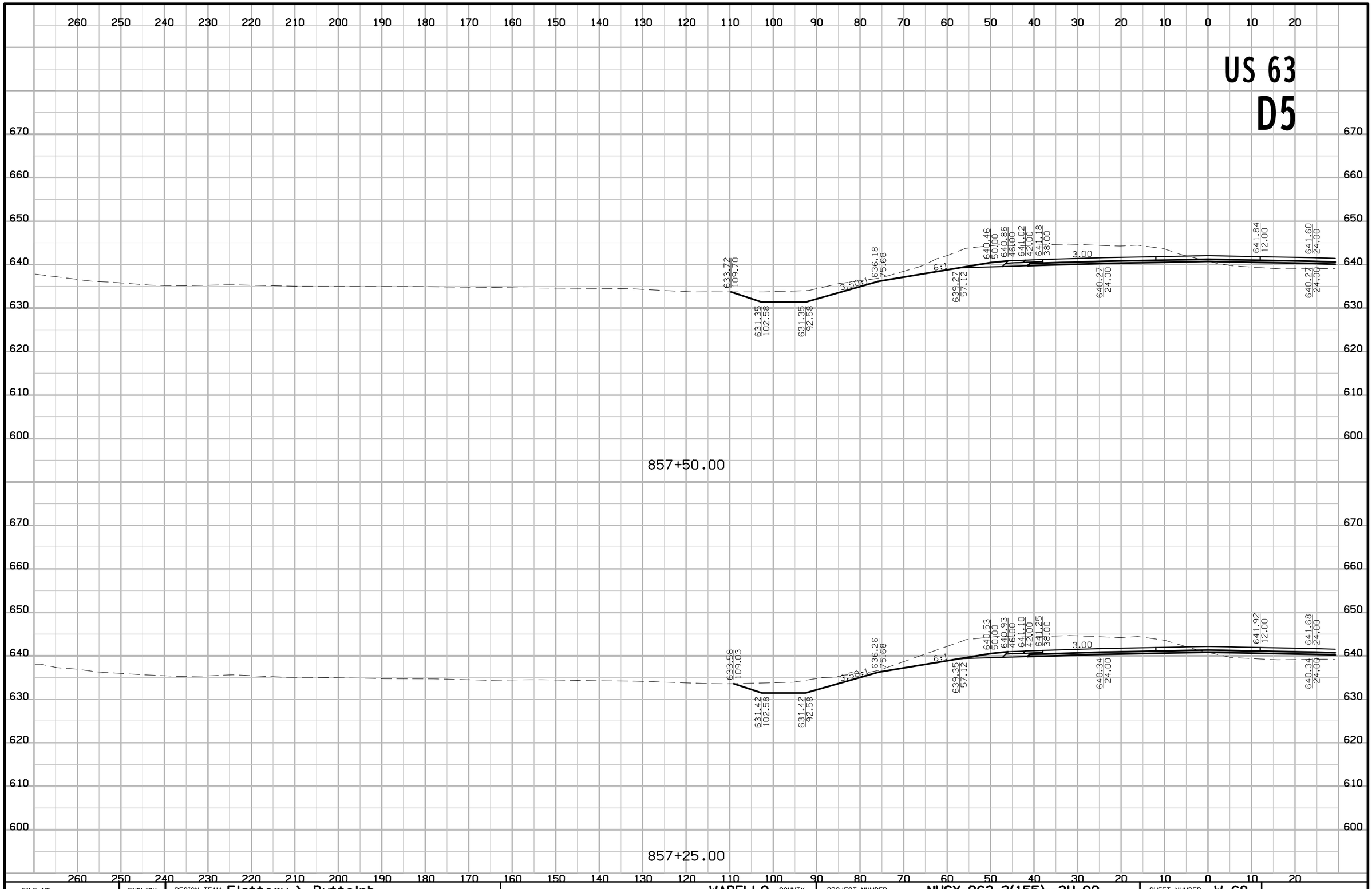
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.67

8:42:18 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

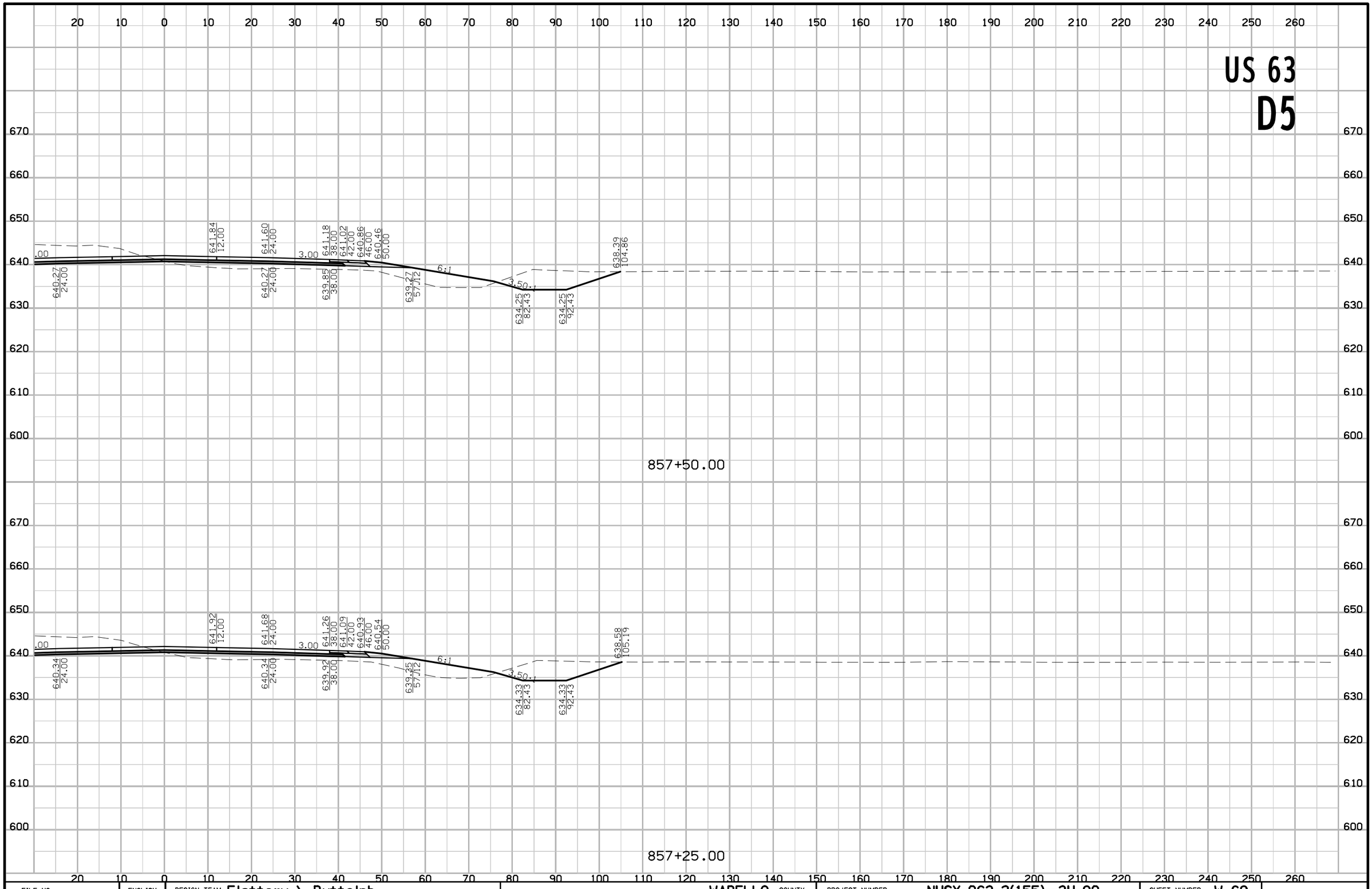
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.68

8:42:21 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.69

8:42:23 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

US 63
D5

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

670 660 650 640 630 620 610 600

633.23
108.67

631.20
102.58

631.20
92.58

636.03
75.68

3.50:1

6:1

640.31
50.00

640.71
46.00

640.87
42.00

641.03
38.00

3.00

639.12
57.12

640.12
24.00

641.69
12.00

641.45
24.00

640.12
24.00

858+00.00

633.65
109.72

631.28
102.58

631.27
92.58

636.11
75.68

3.50:1

6:1

640.38
50.00

640.79
46.00

640.94
42.00

641.10
38.00

3.00

639.20
57.12

640.19
24.00

641.77
12.00

641.53
24.00

640.19
24.00

857+75.00

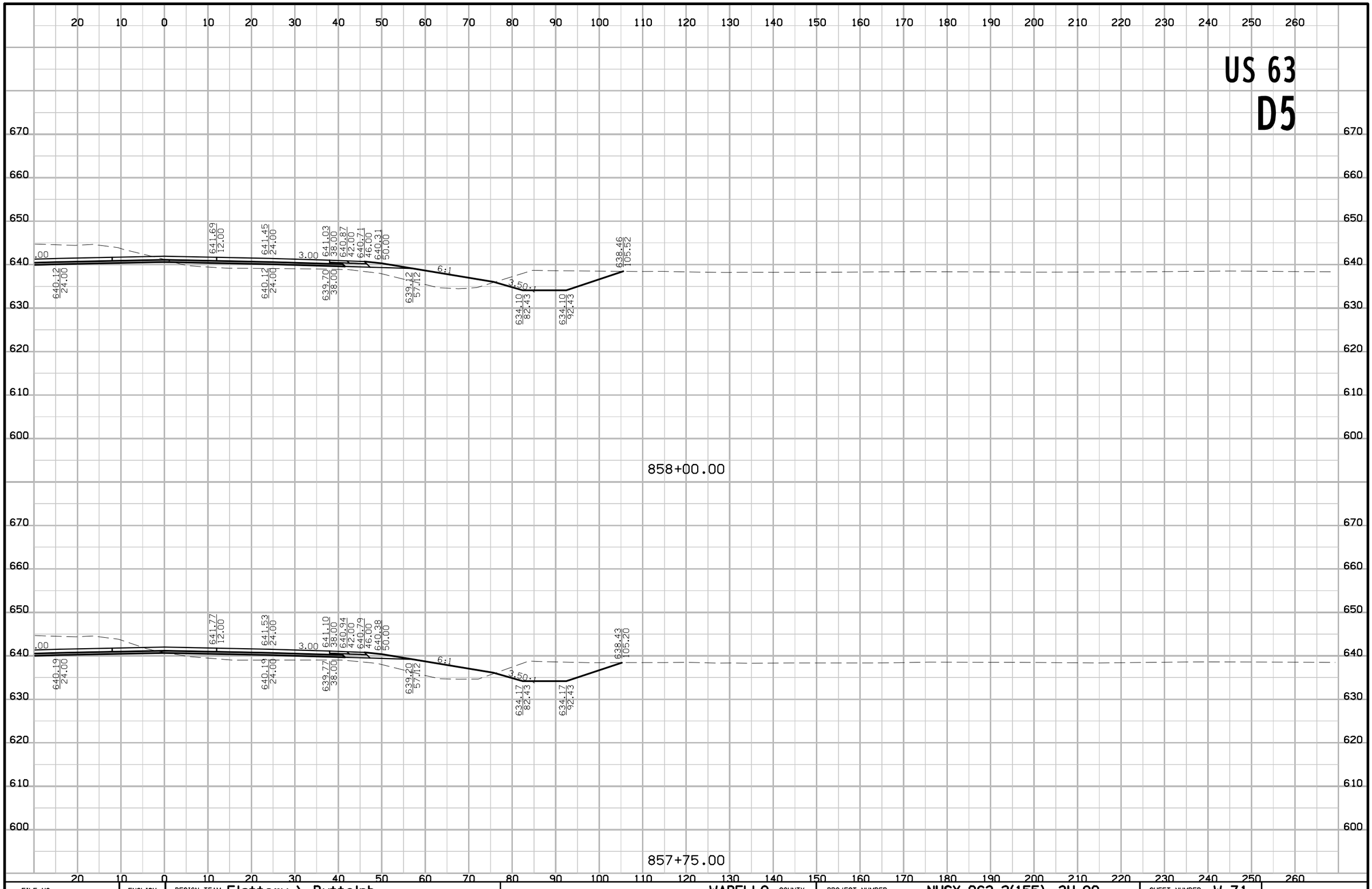
260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20

670 660 650 640 630 620 610 600

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.70

8:42:25 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

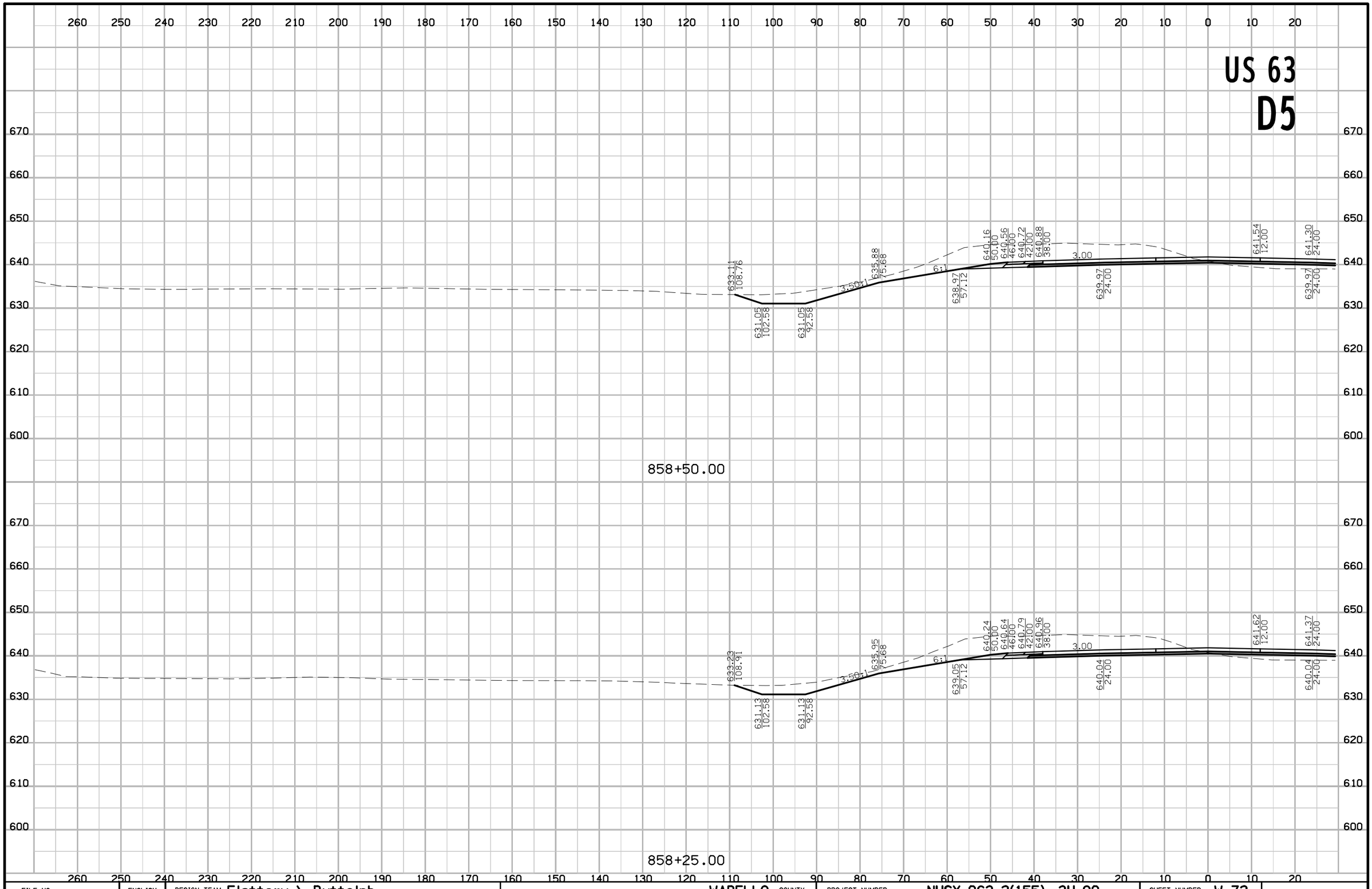
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.71

8:42:27 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

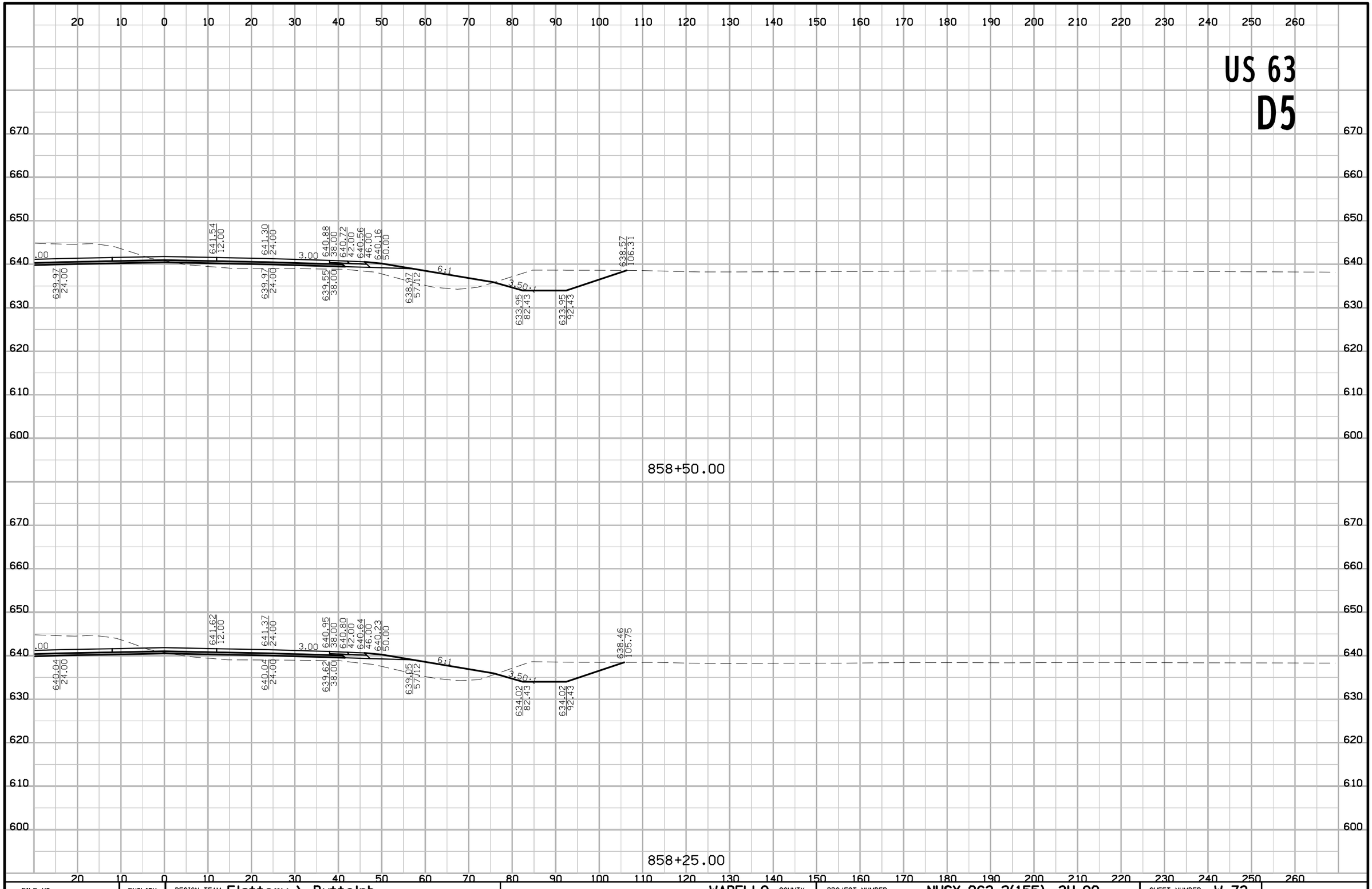
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.72

8:42:29 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

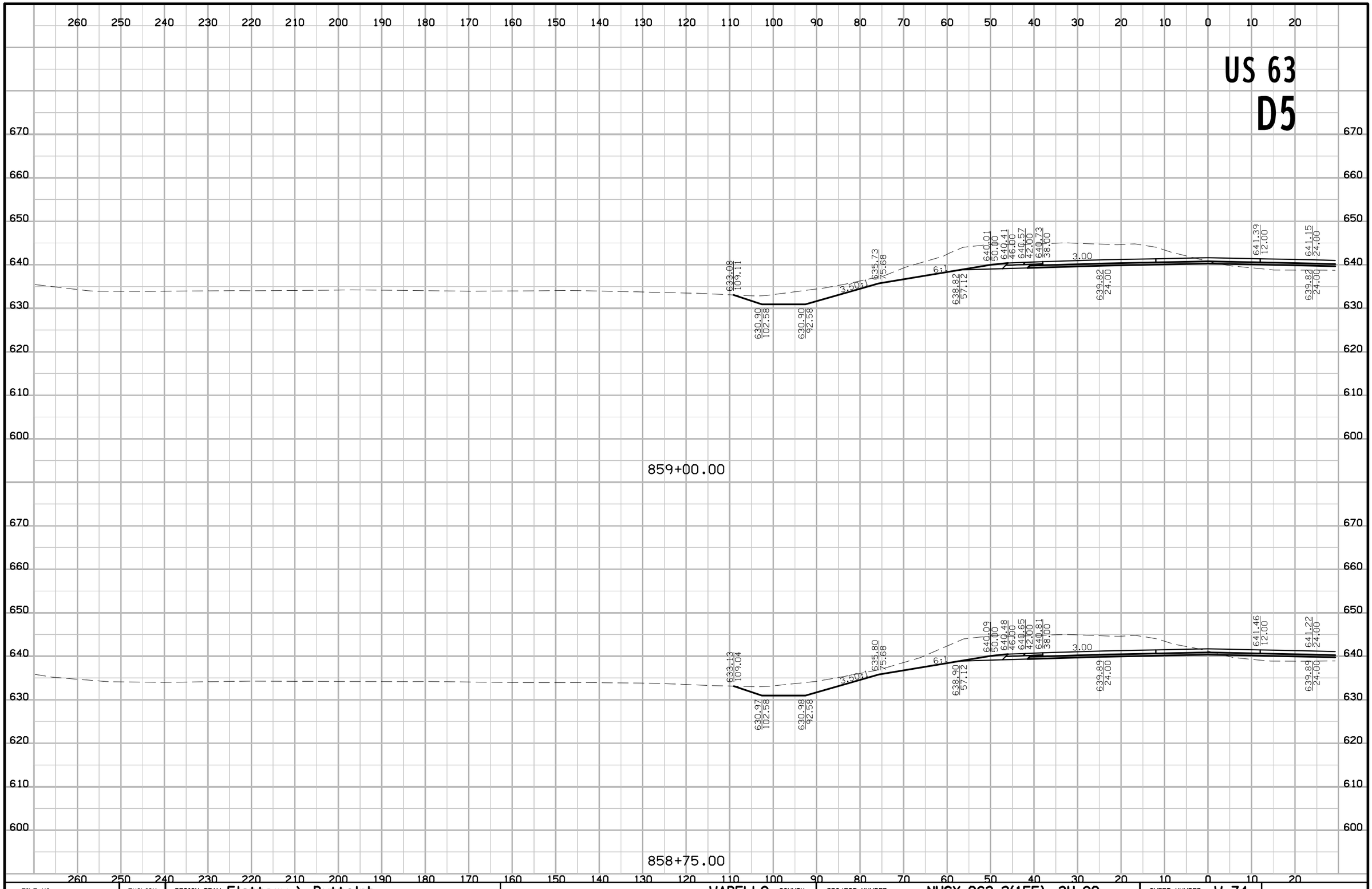
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.73

8:42:31 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

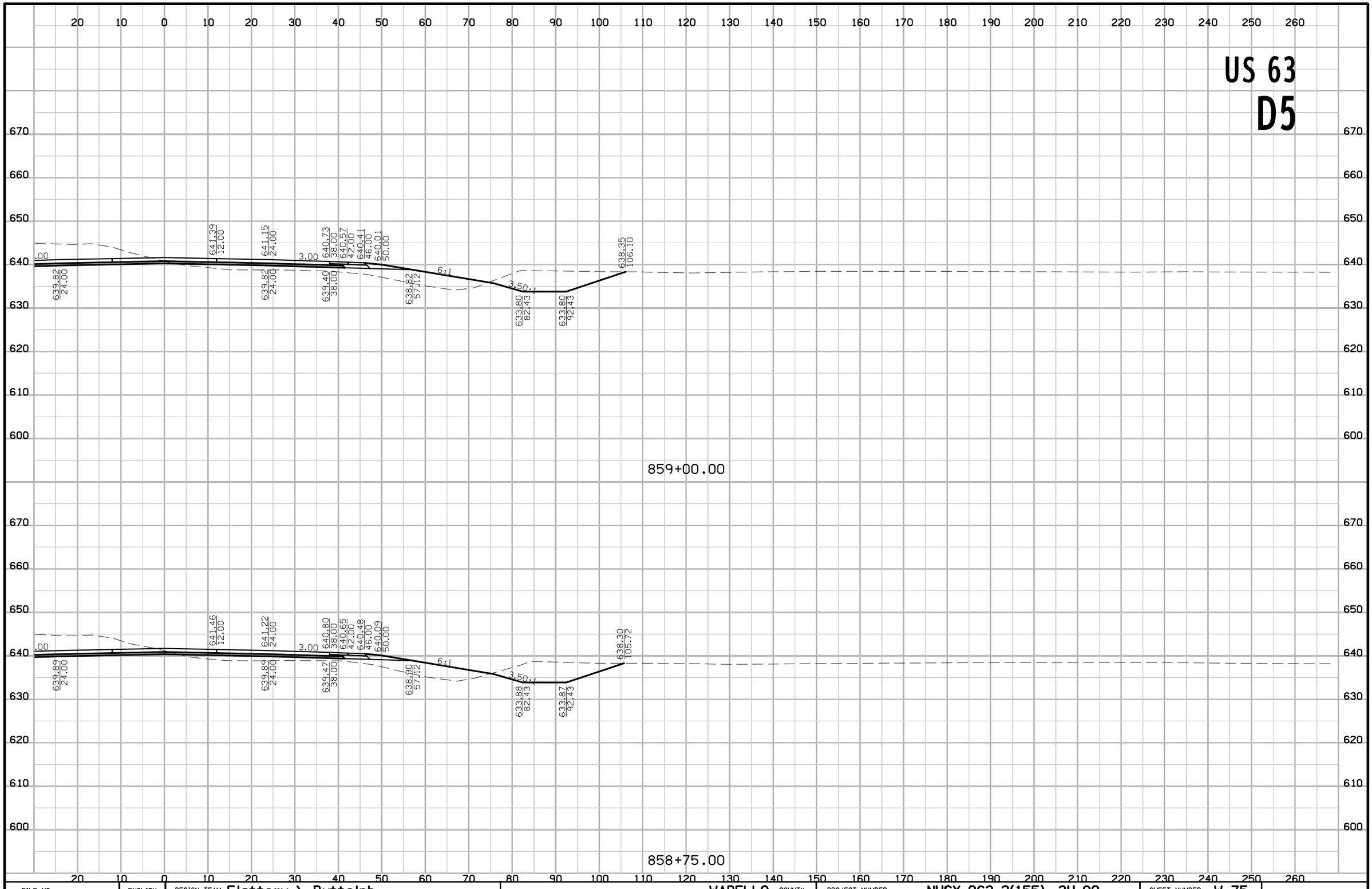
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.74

8:42:33 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

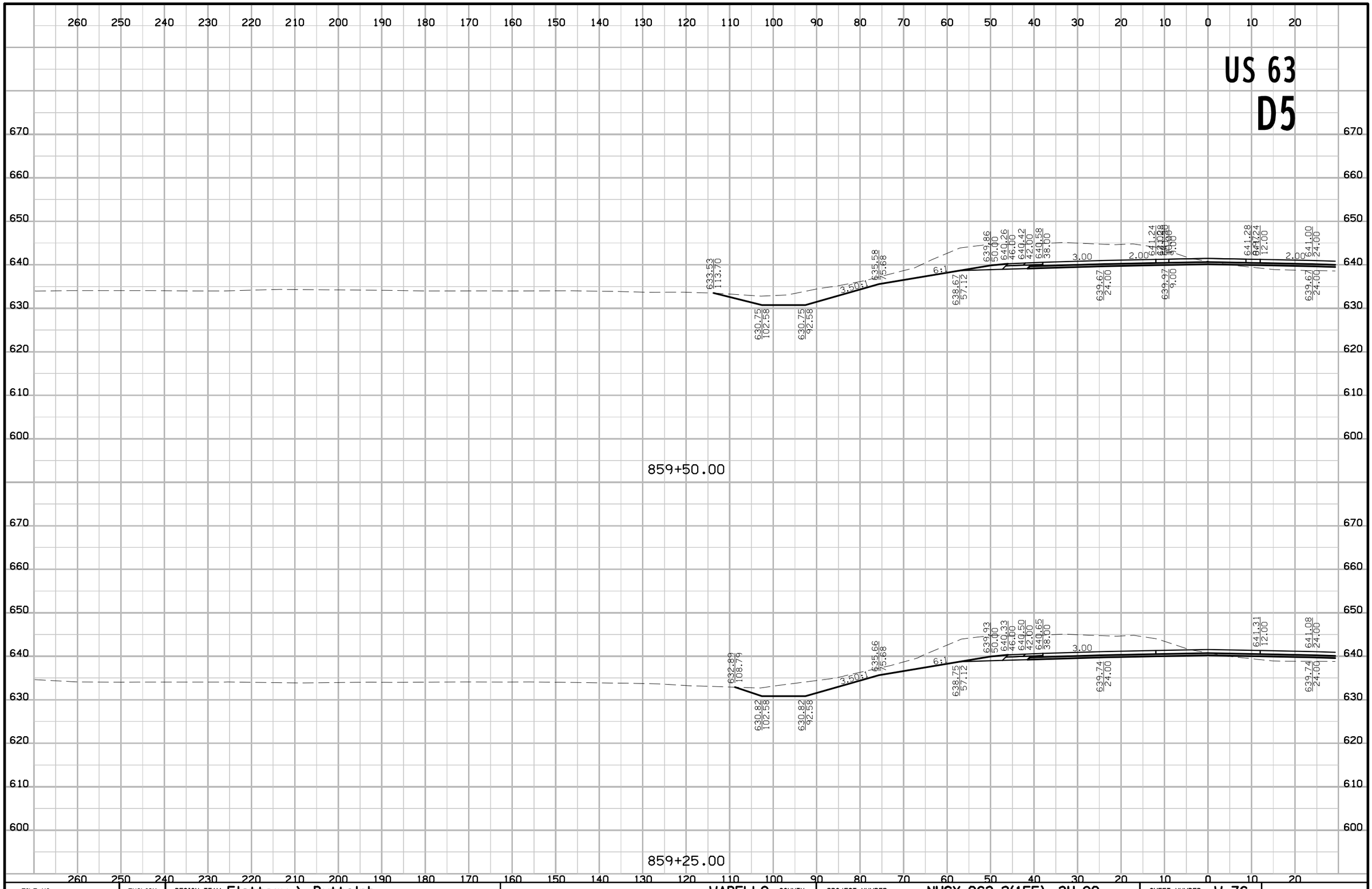
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.75

8:42:35 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

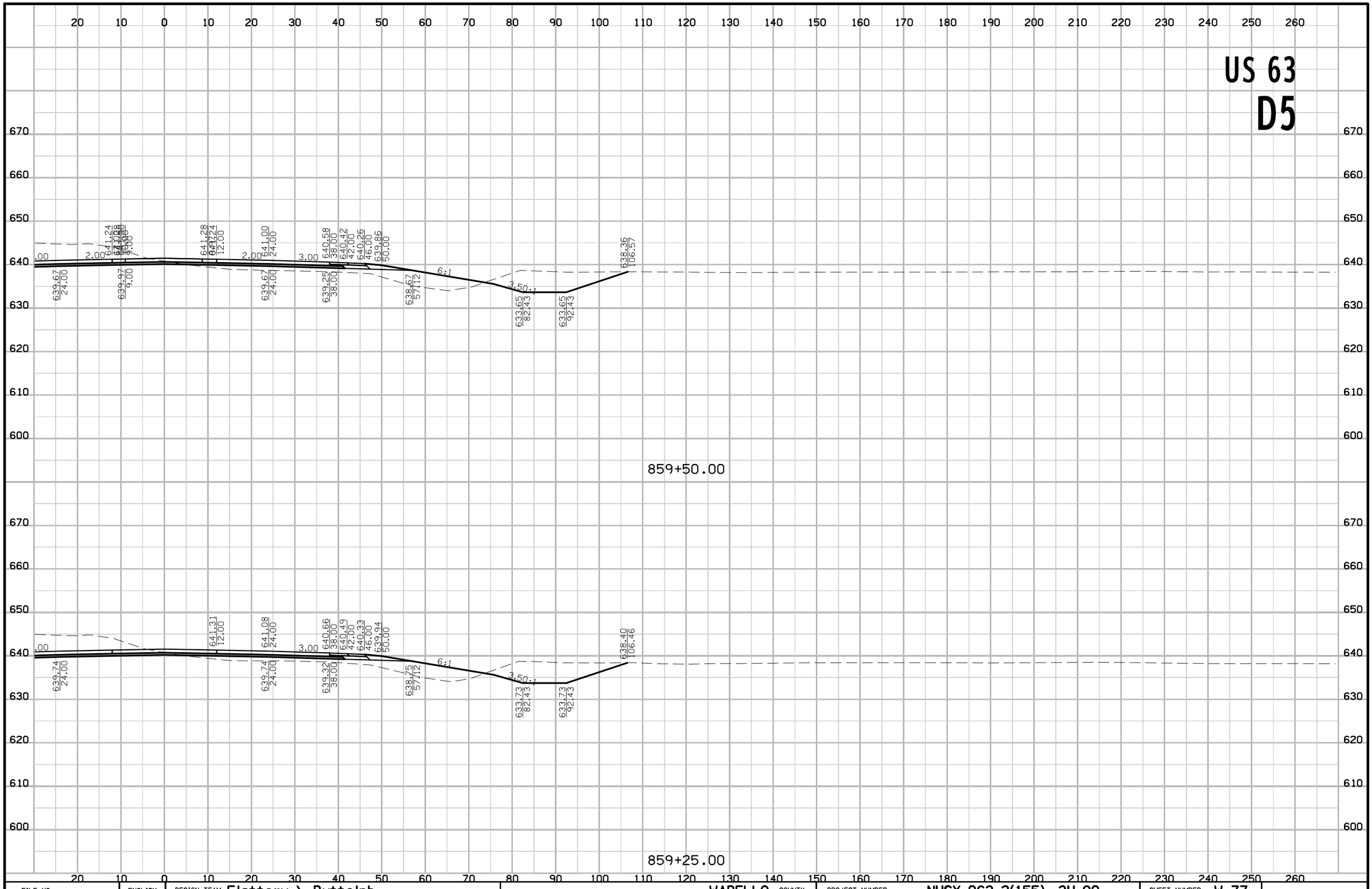
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.76

8:42:37 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

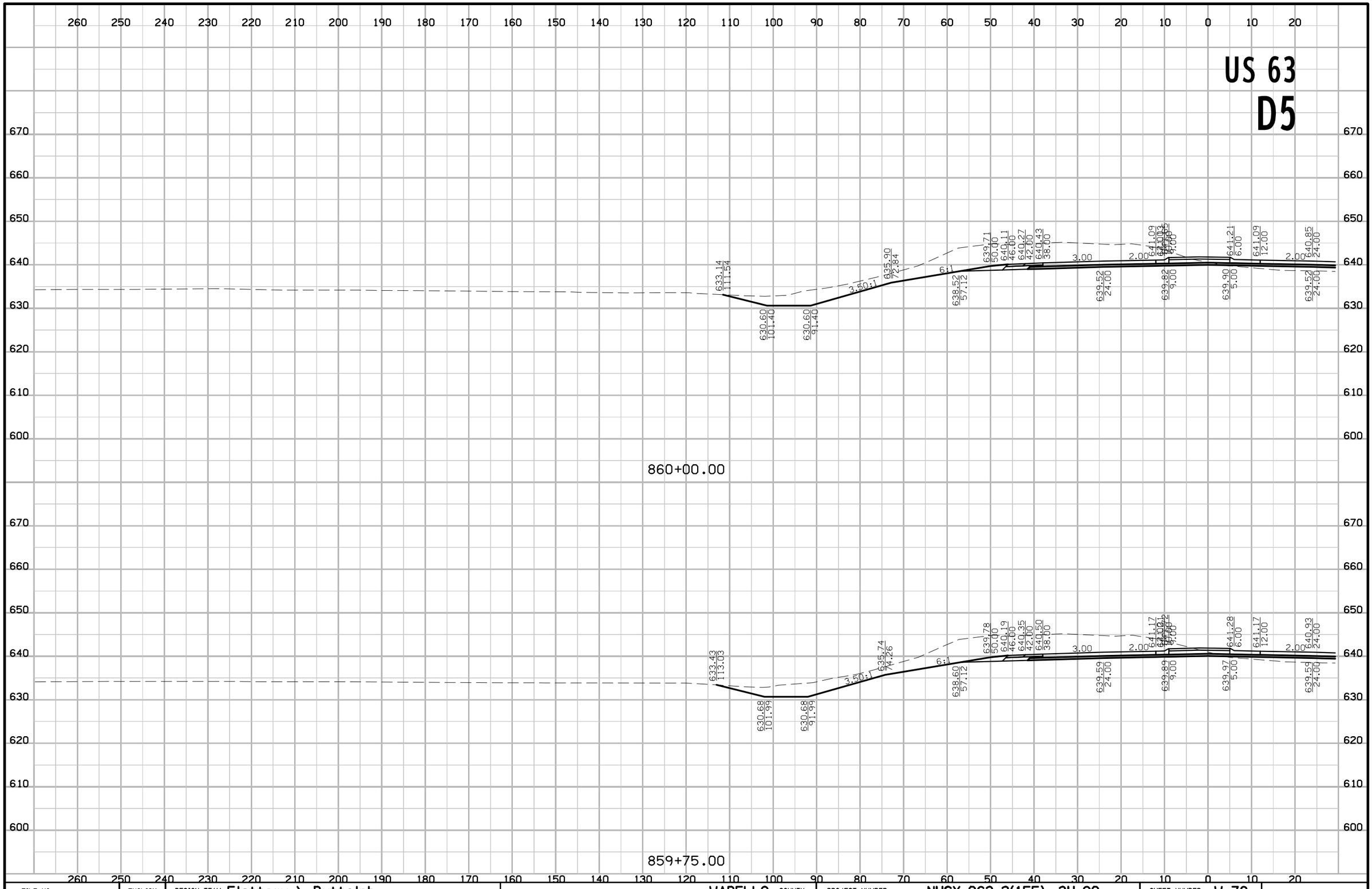
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.77

8:42:39 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

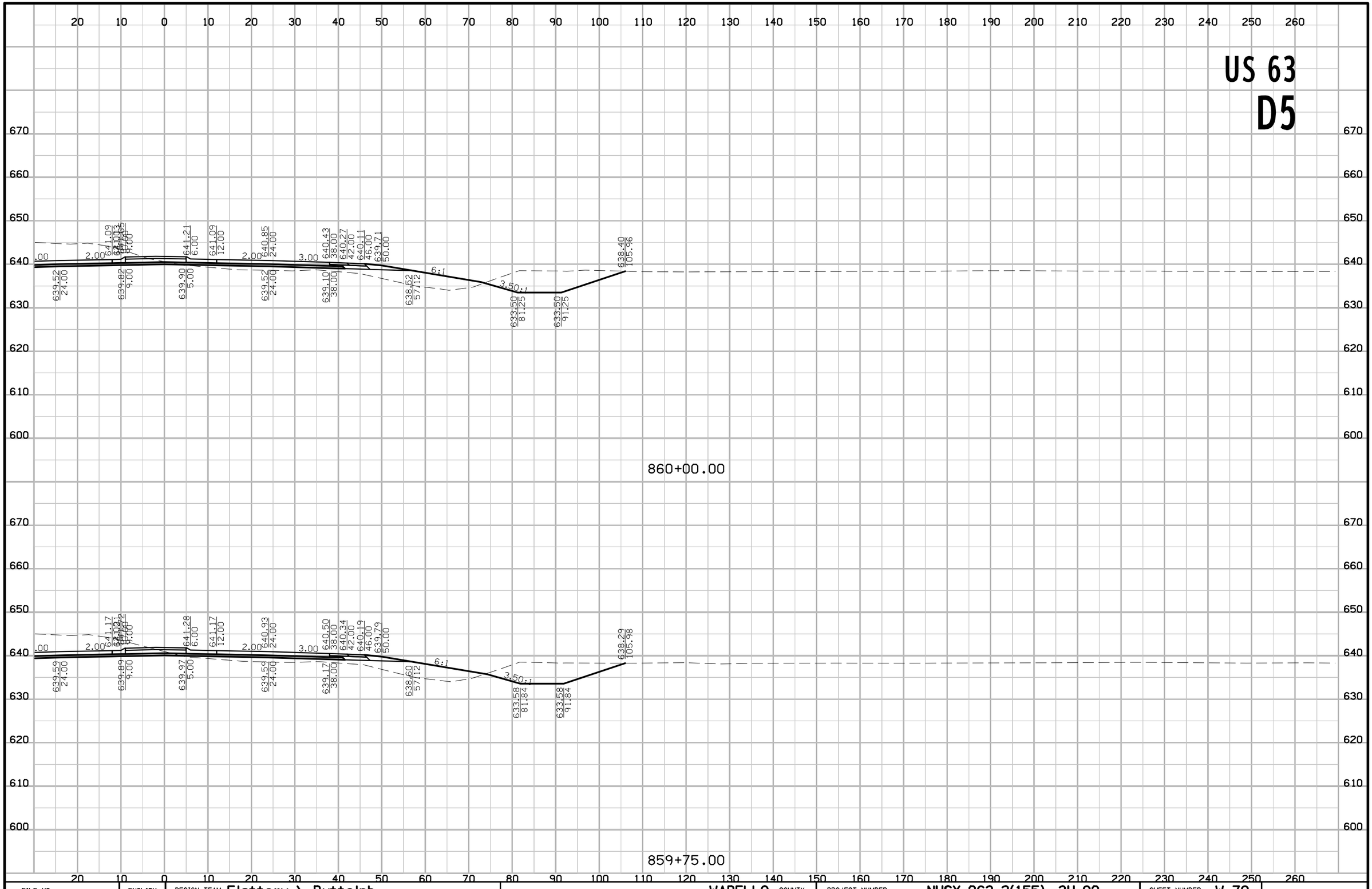
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.78

8:42:42 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

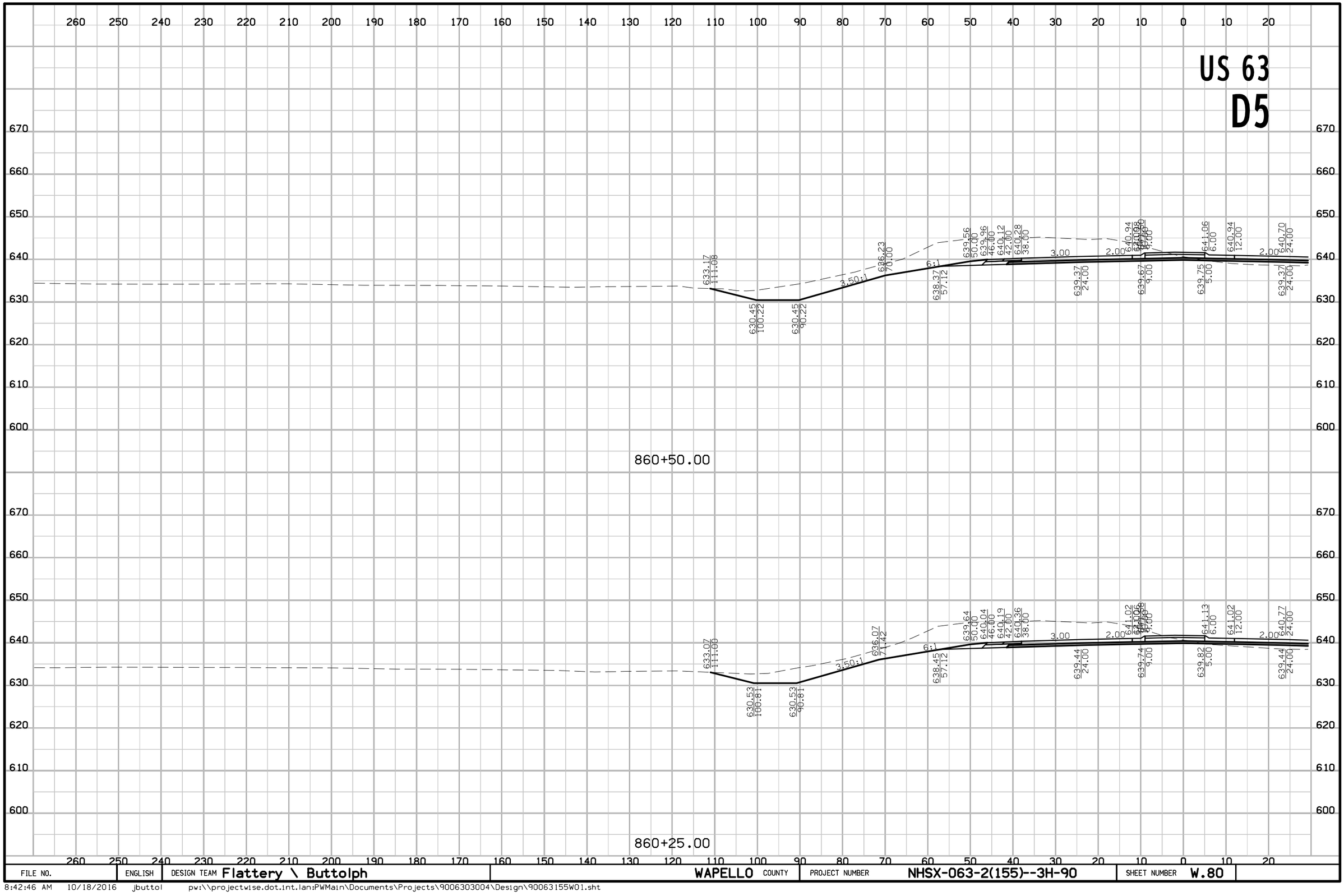
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.79

8:42:44 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

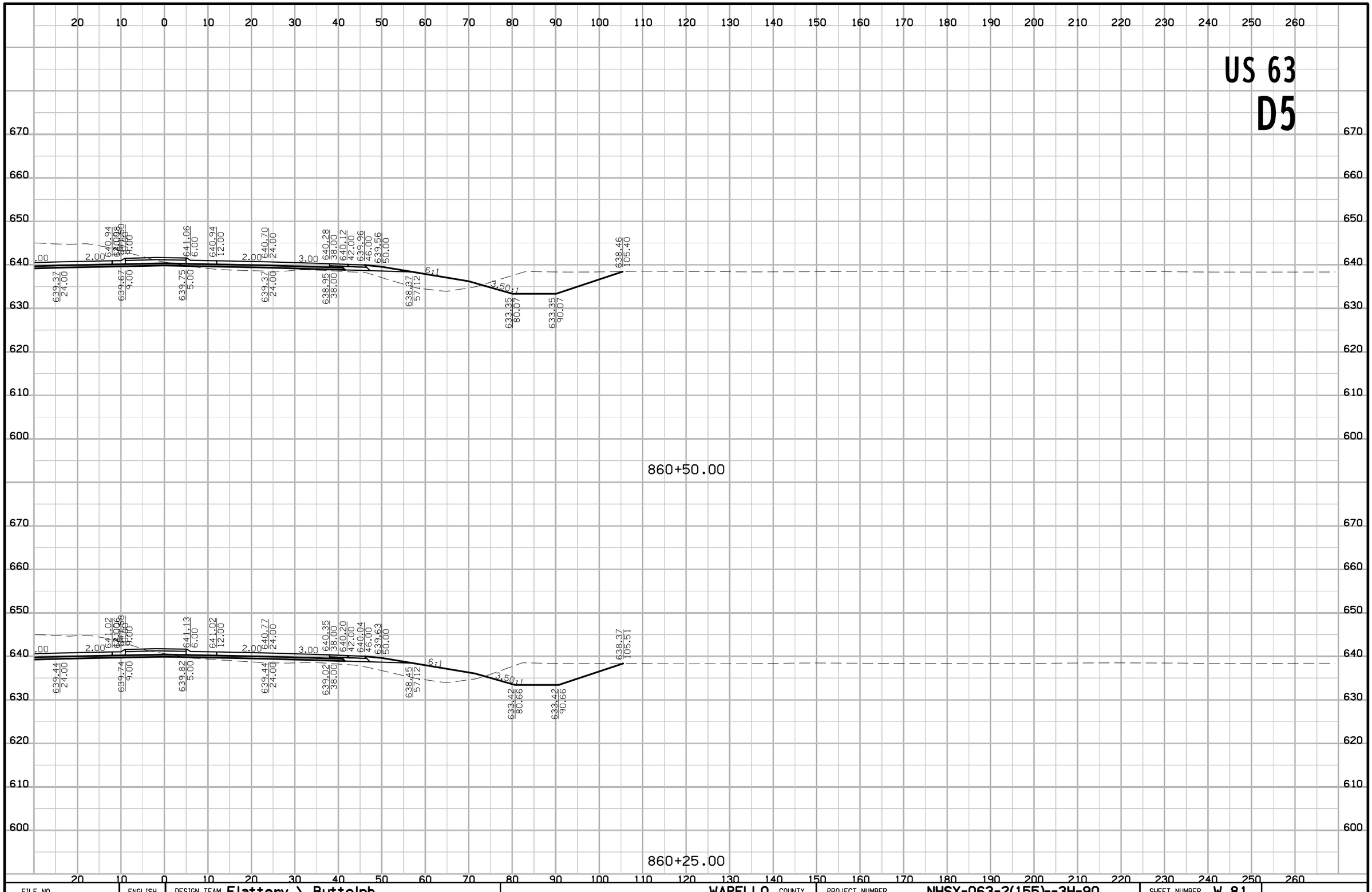
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.80

8:42:46 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

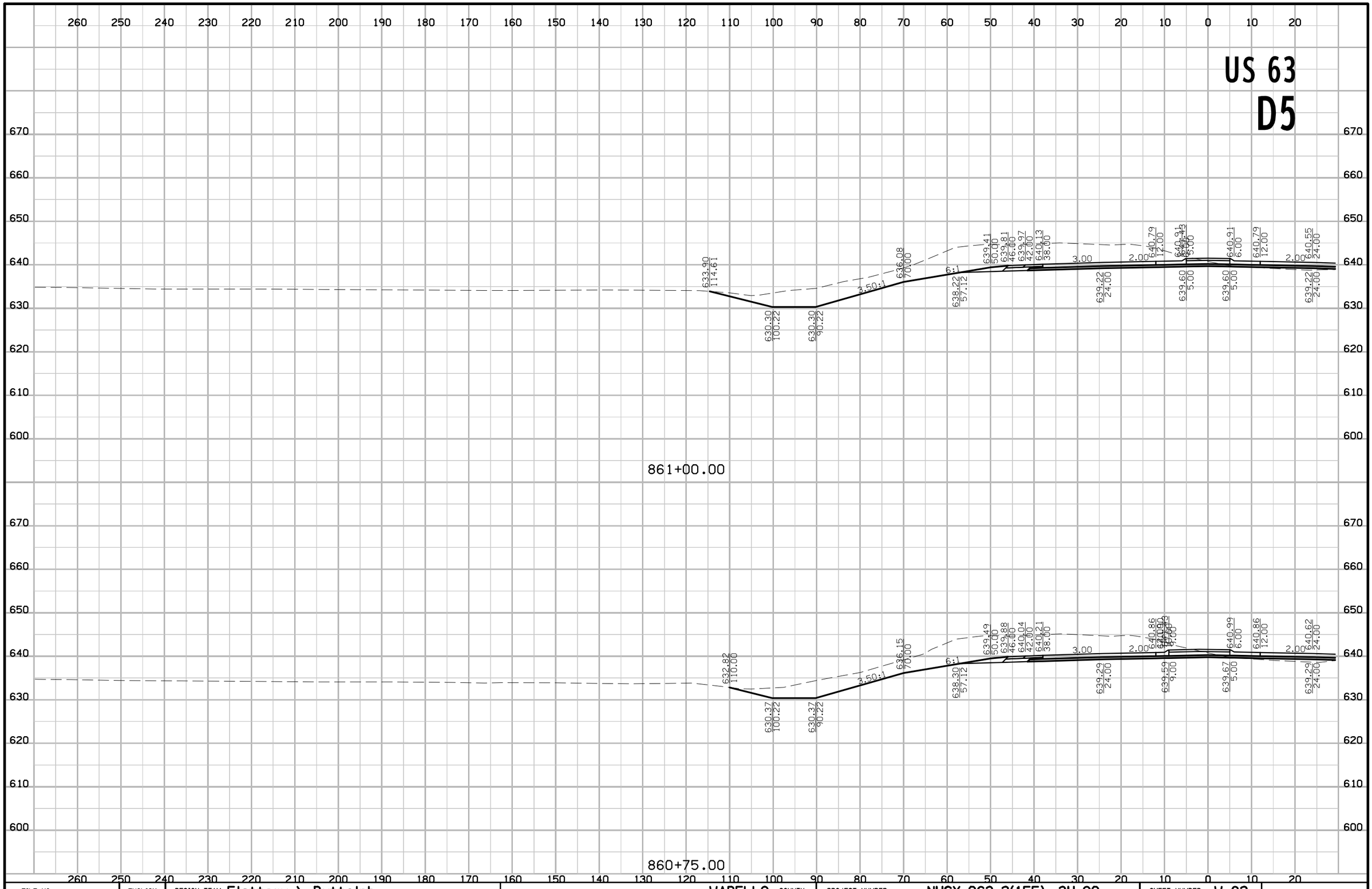
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.81

8:42:48 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

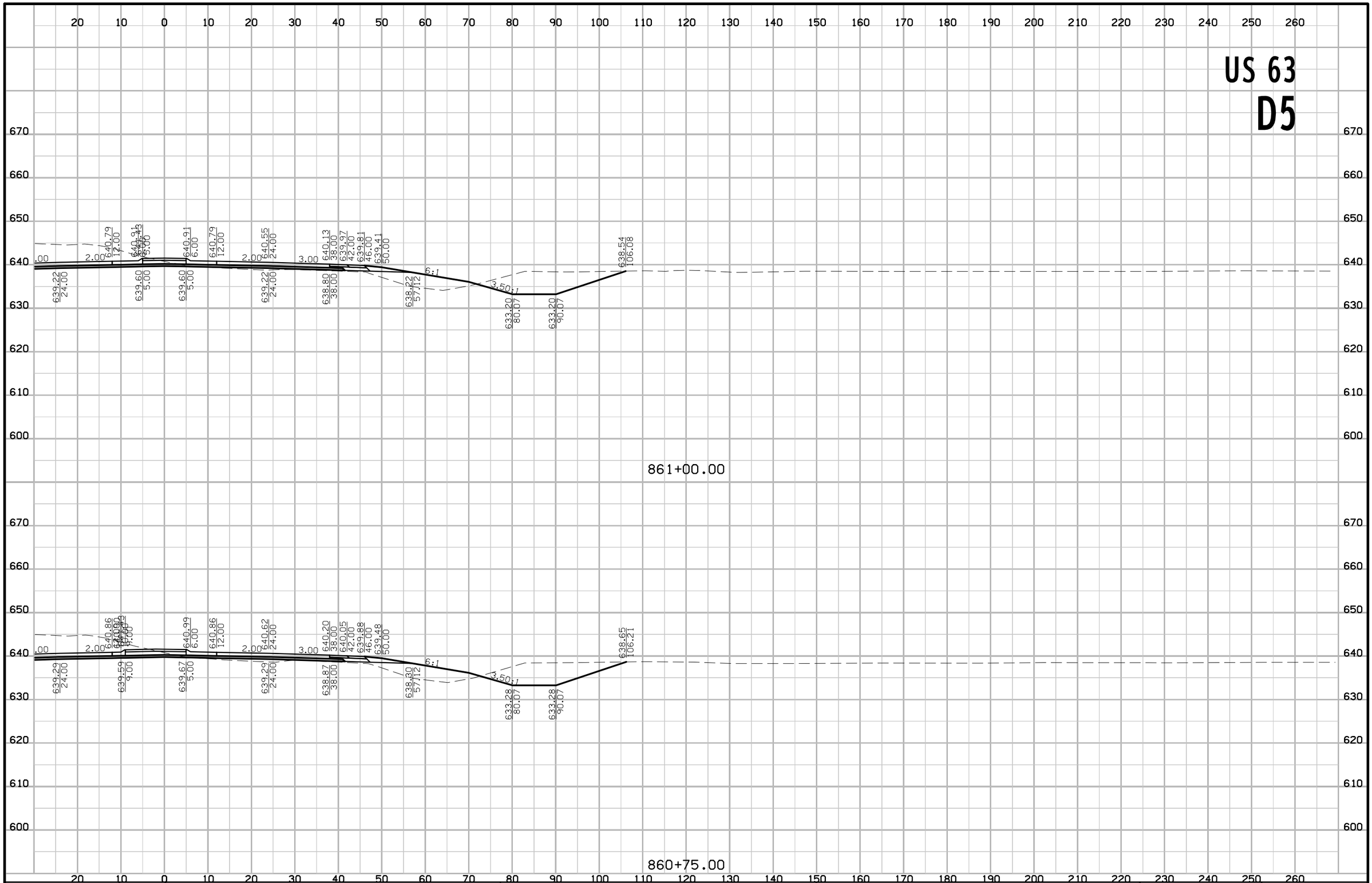
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.82

8:42:50 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

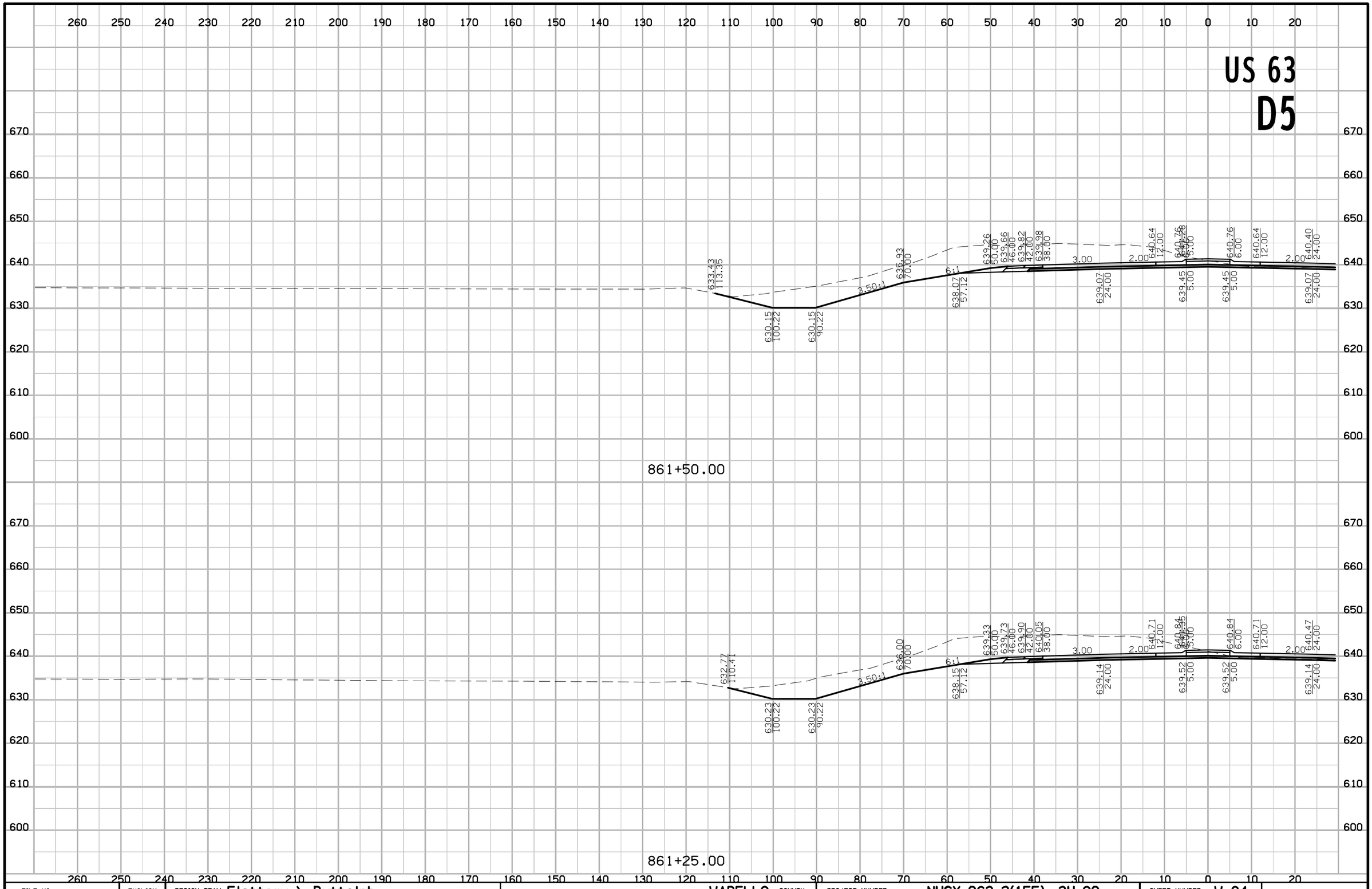
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.83

8:42:52 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

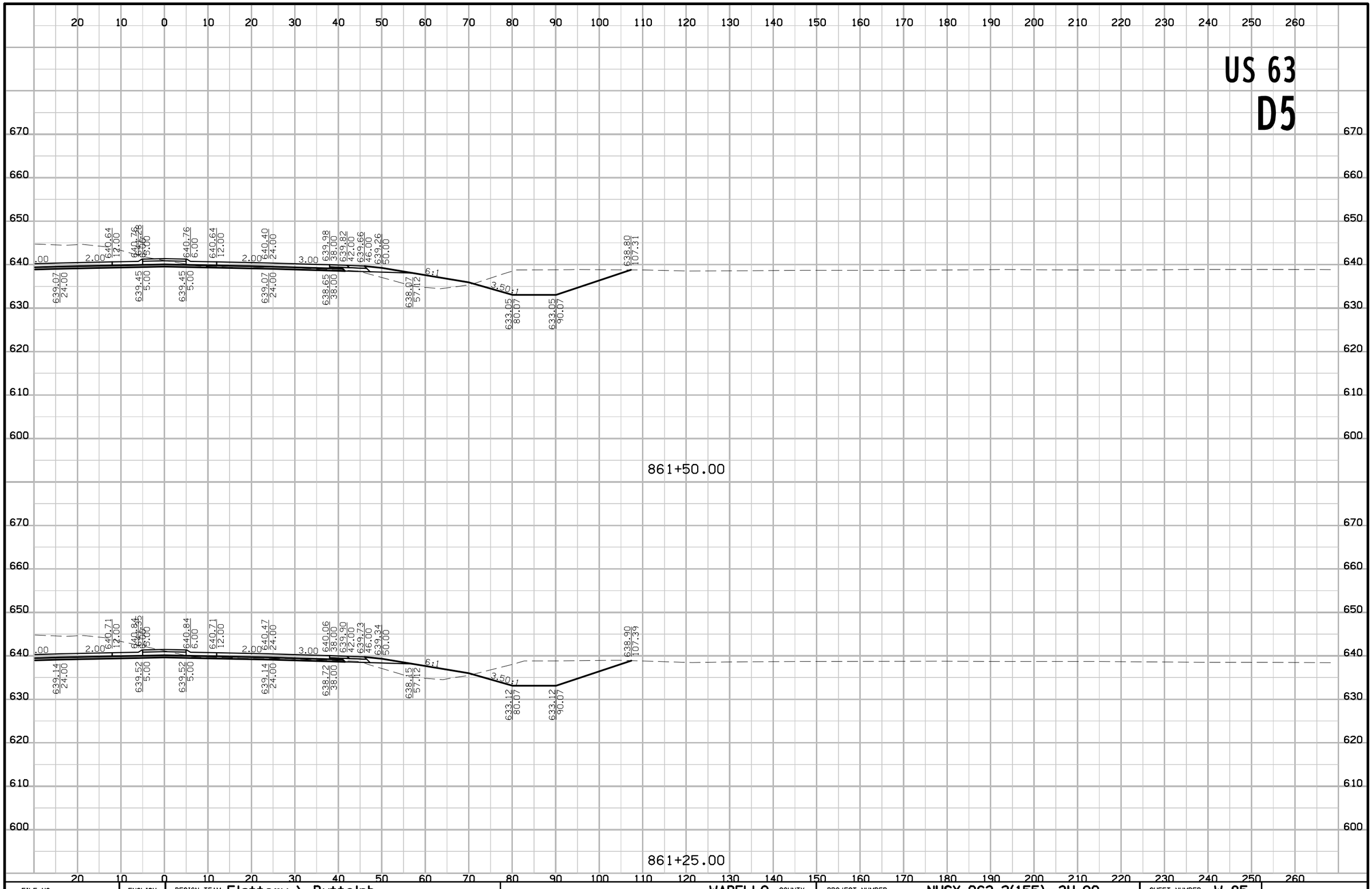
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.84

8:42:55 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

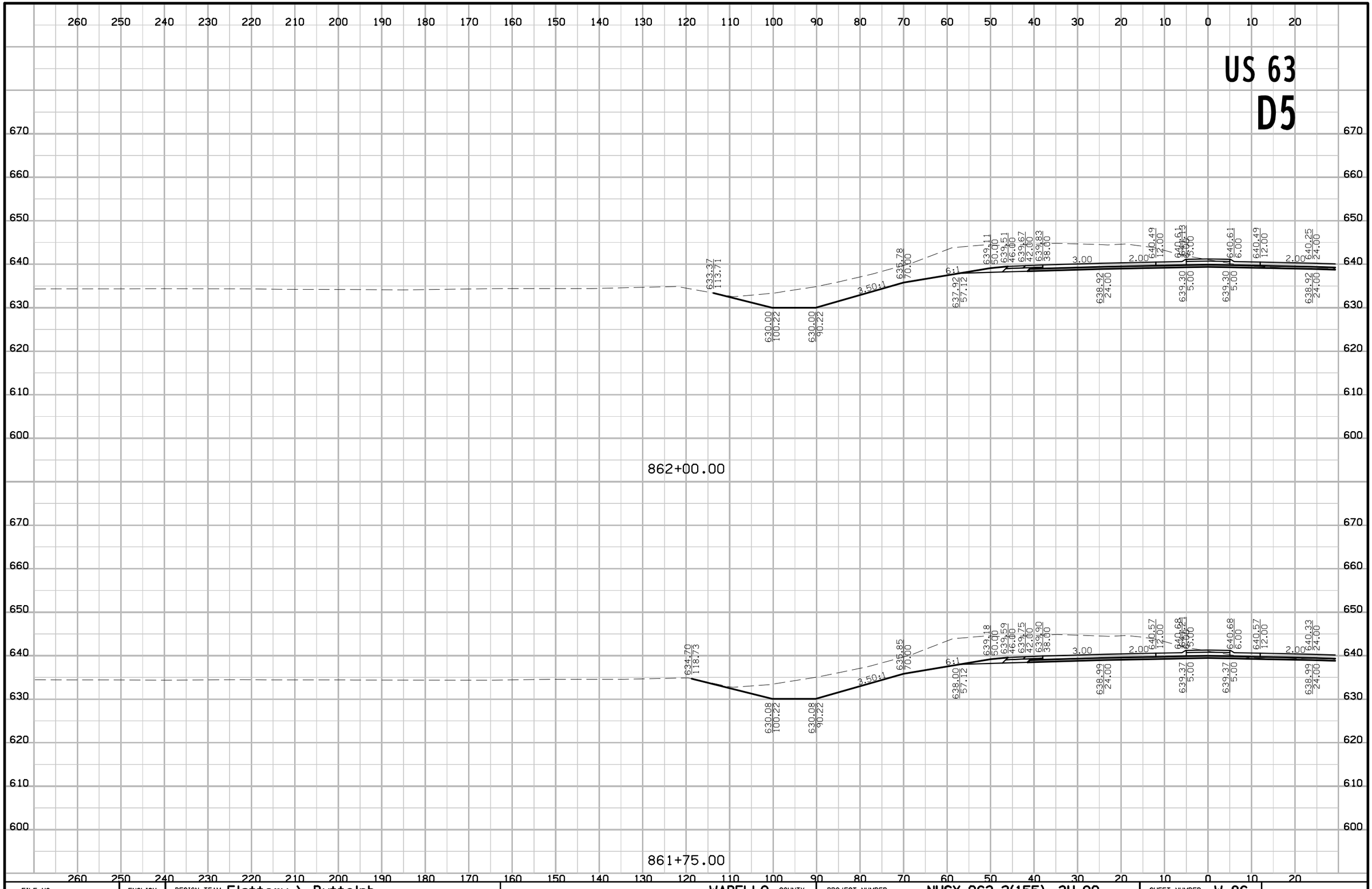
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.85

8:42:57 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

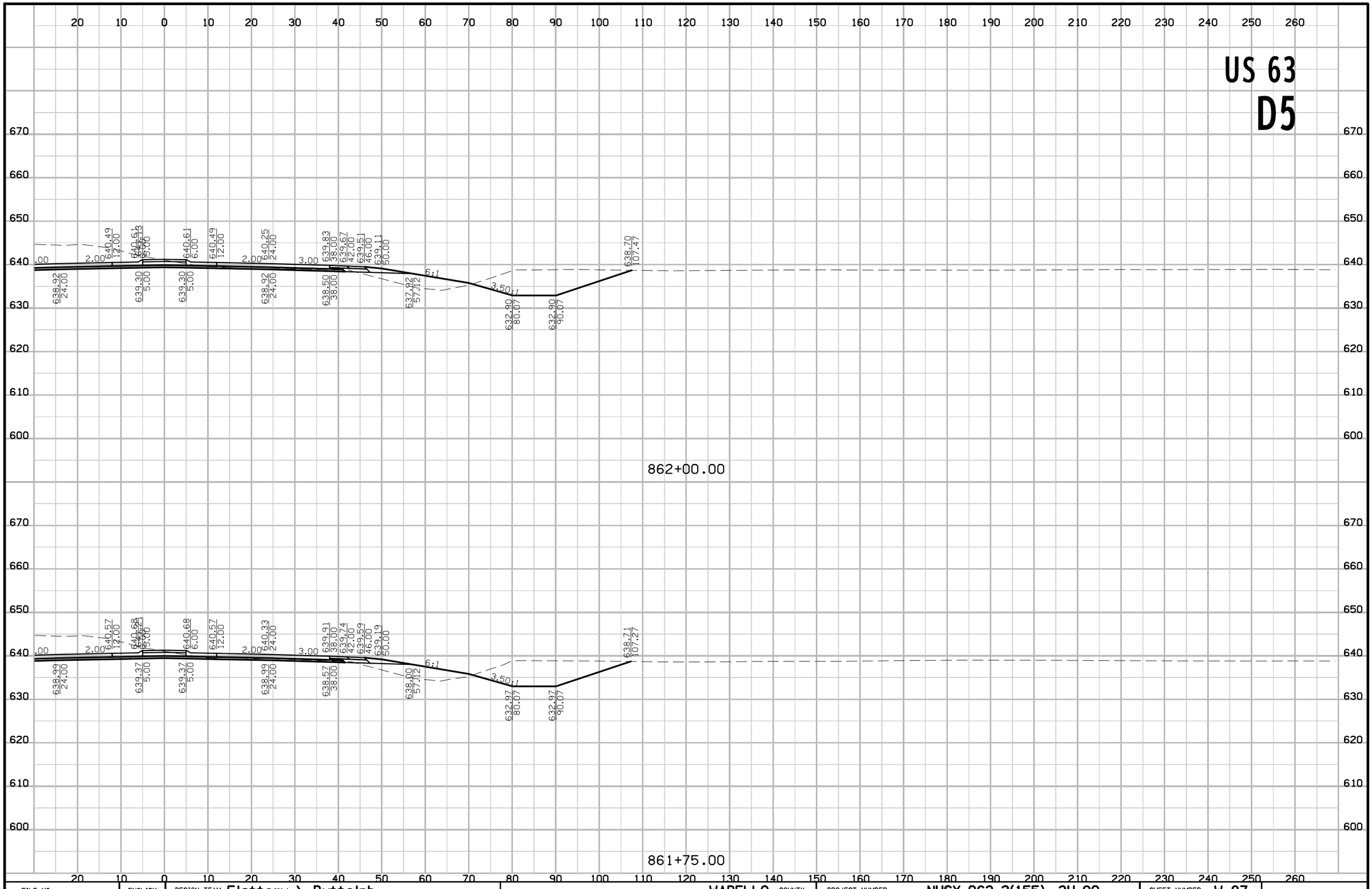
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.86

8:42:59 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

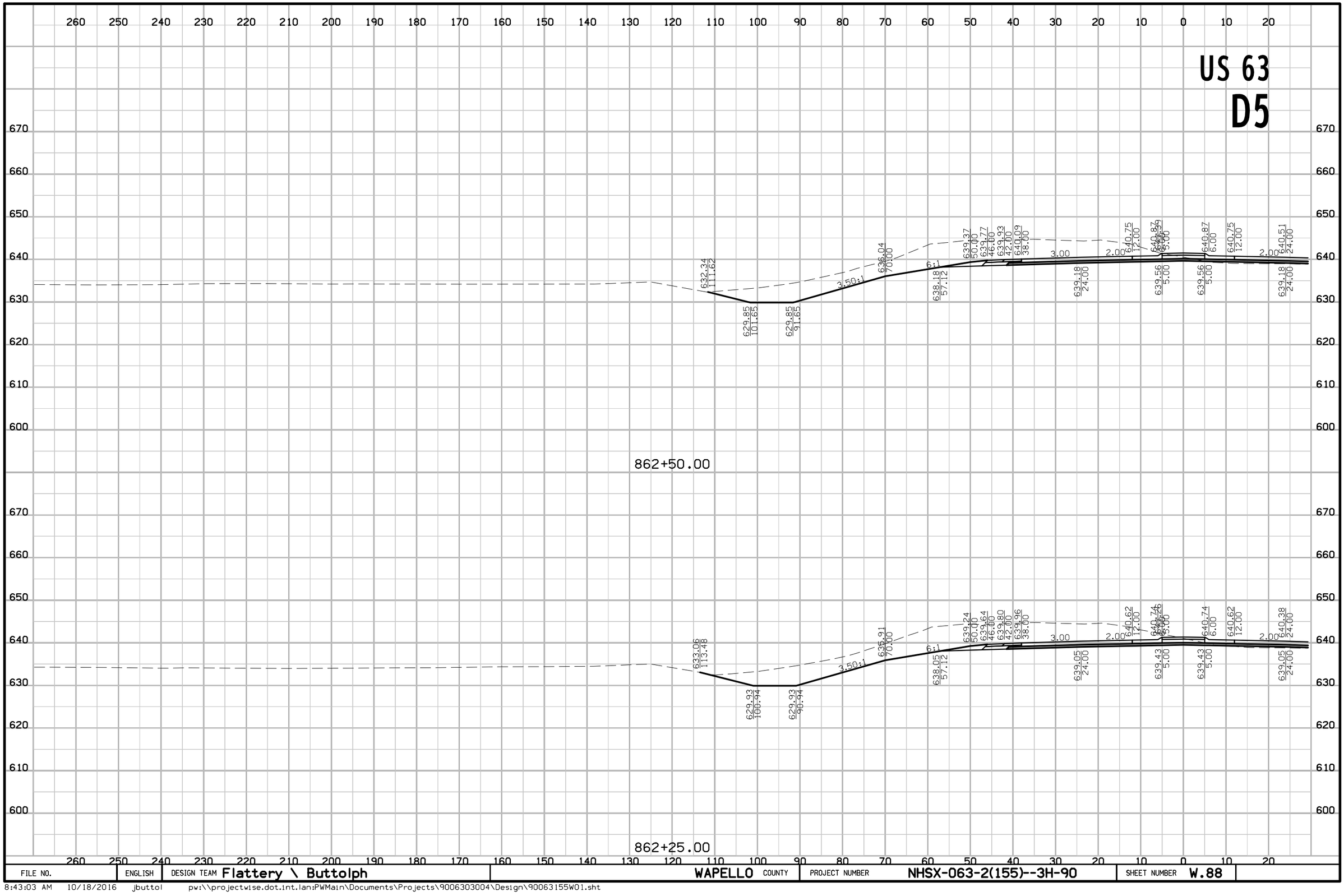
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.87

8:43:01 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

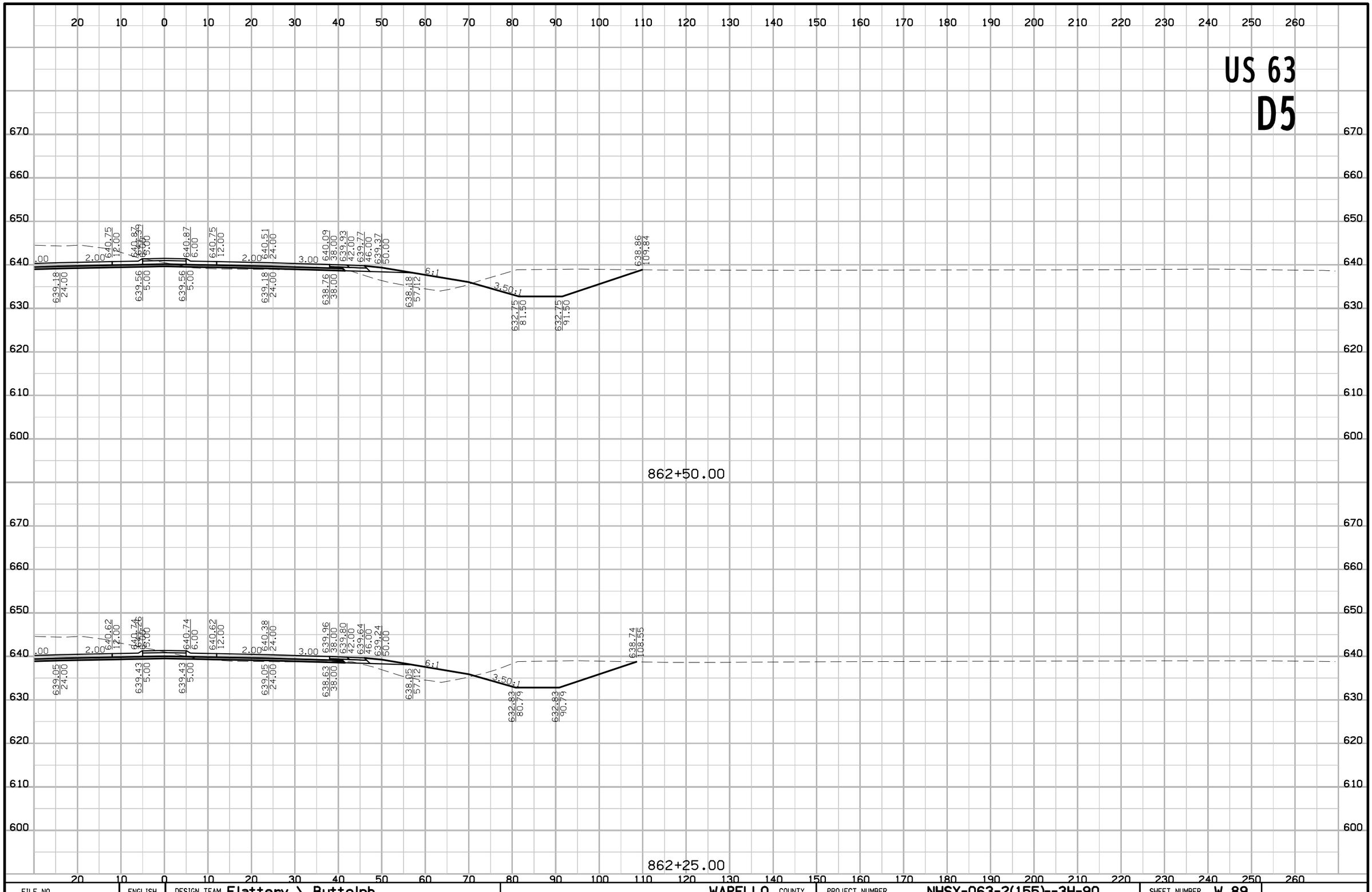
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.88

8:43:03 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

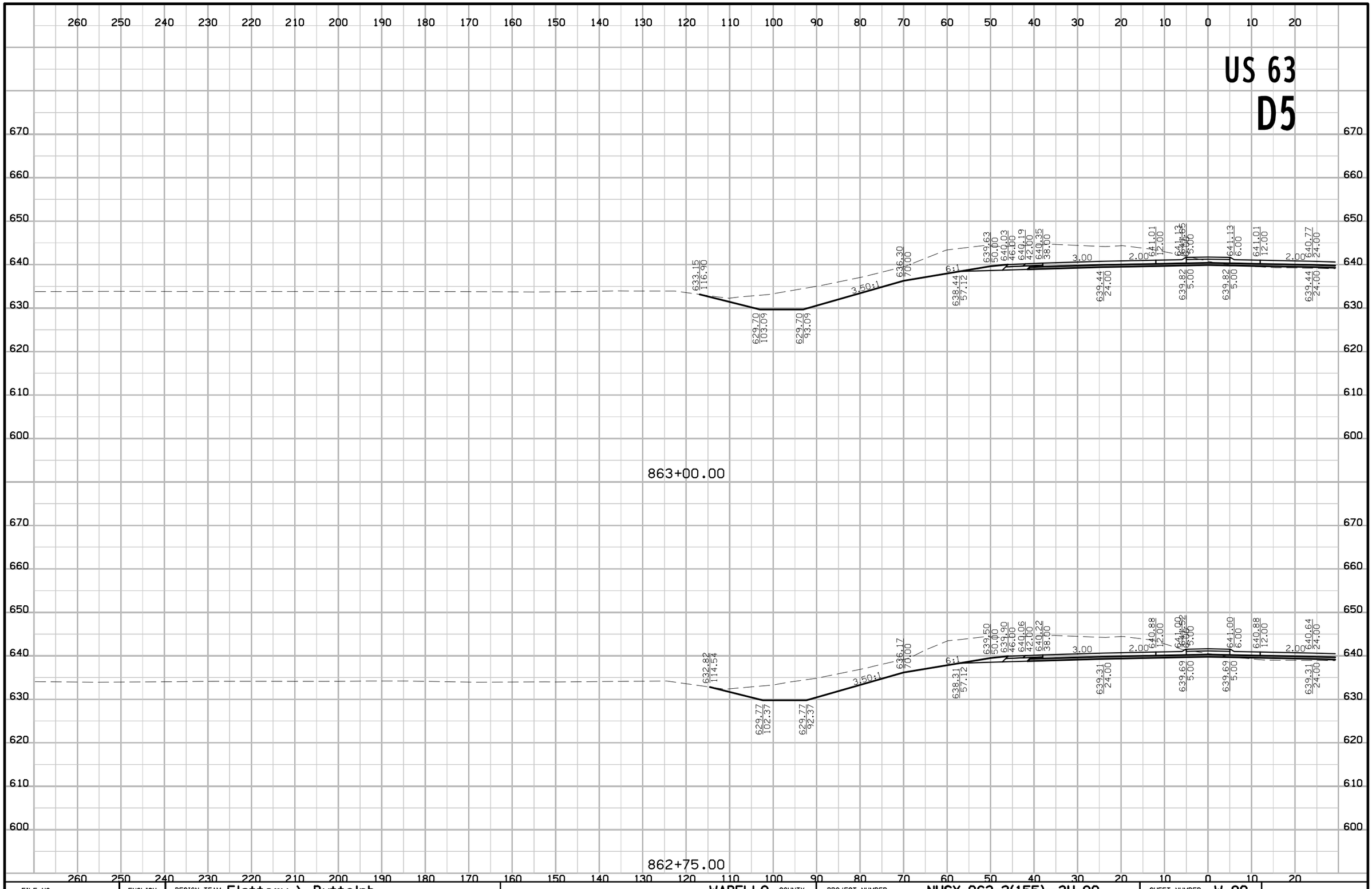
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.89

8:43:05 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

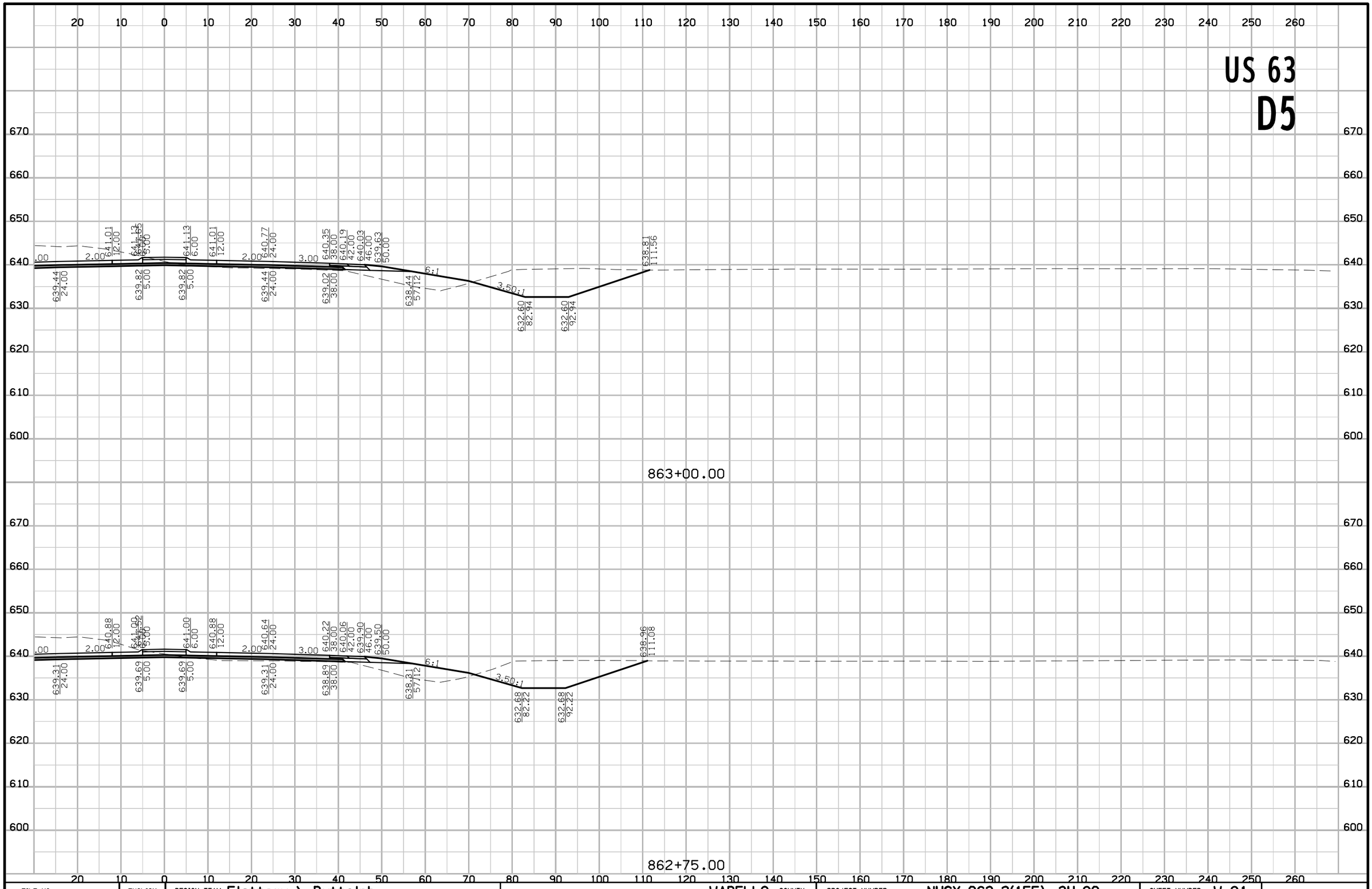
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.90

8:43:07 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

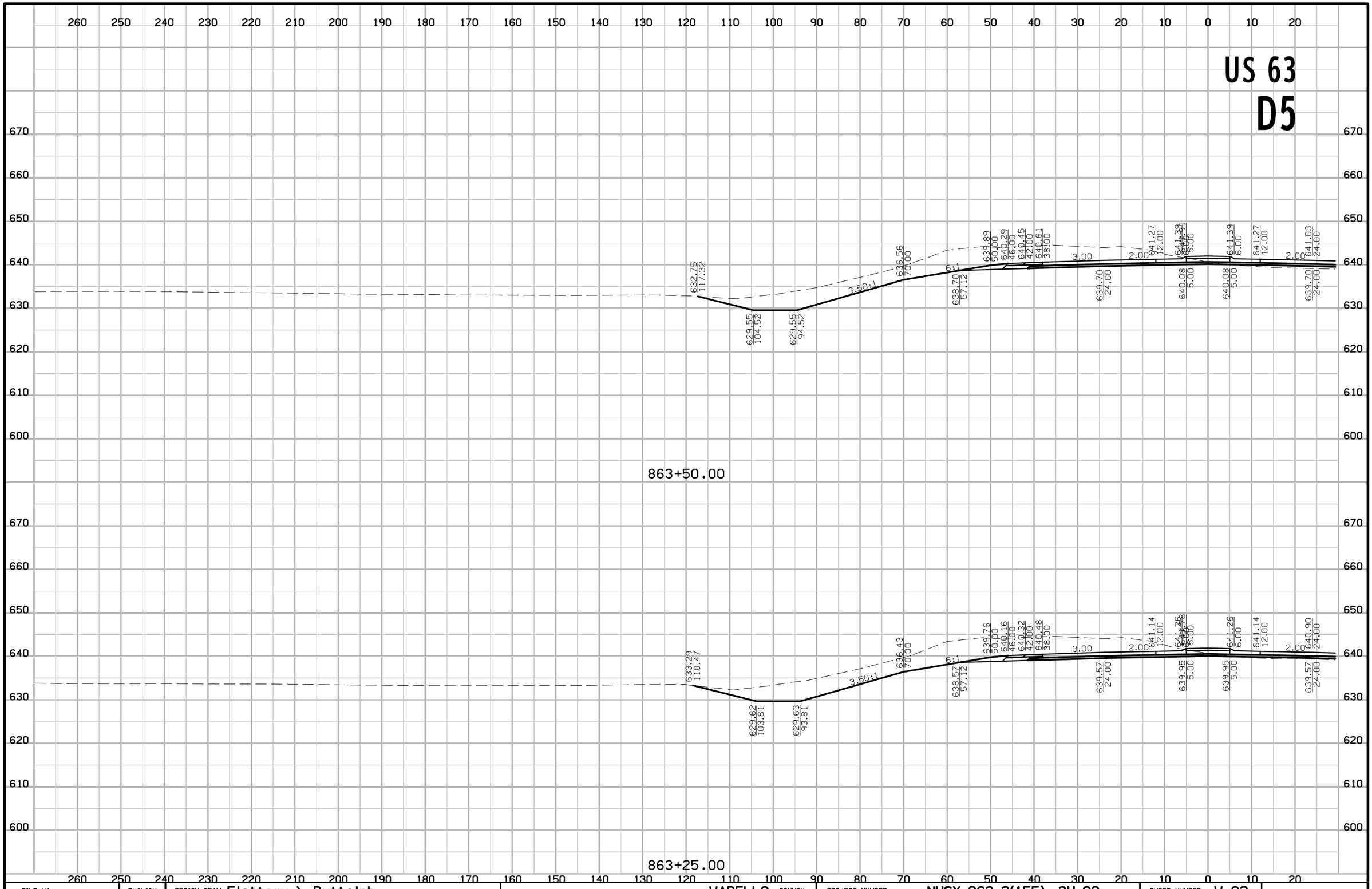
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.91

8:43:10 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

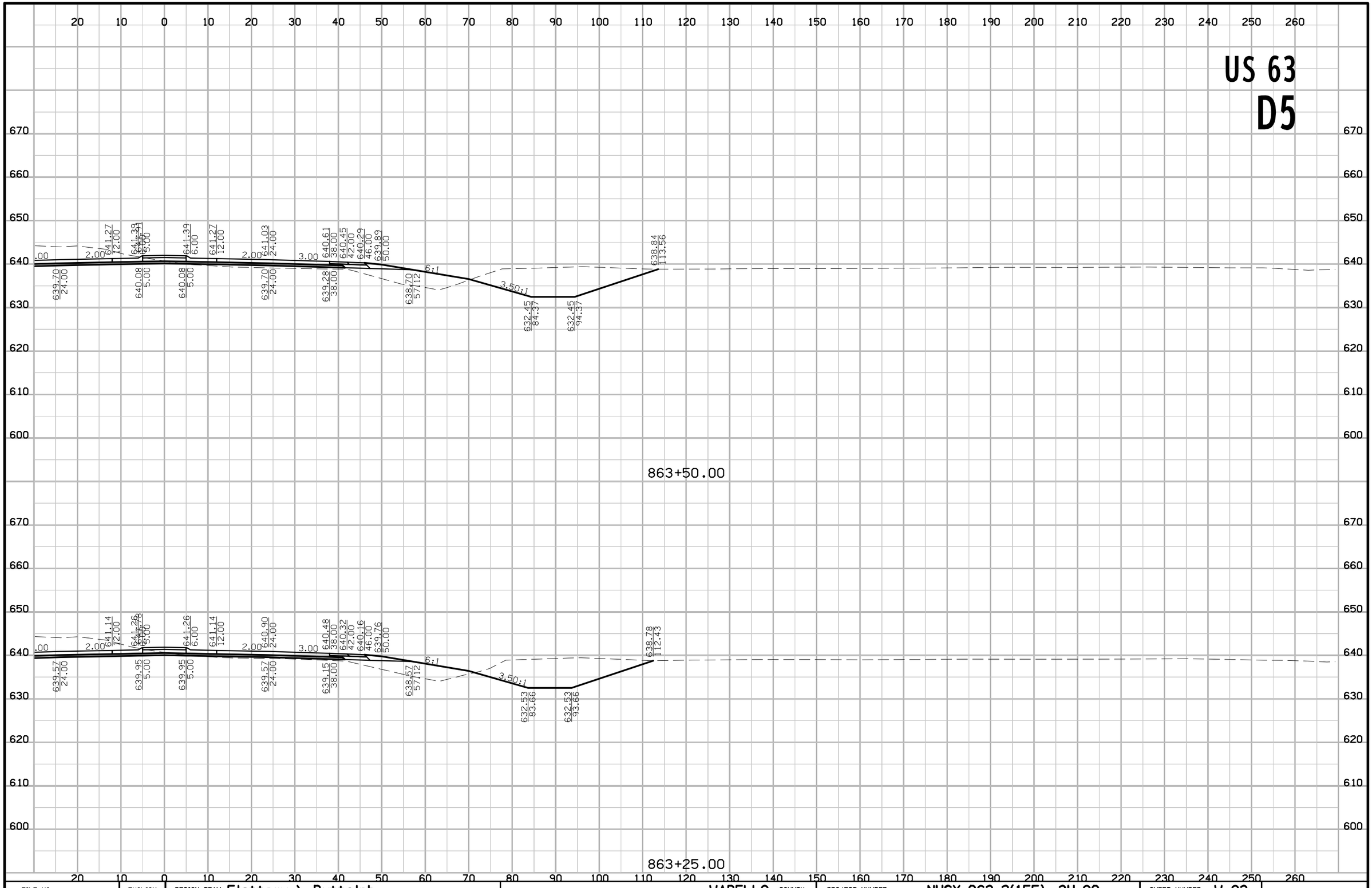
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.92

8:43:12 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

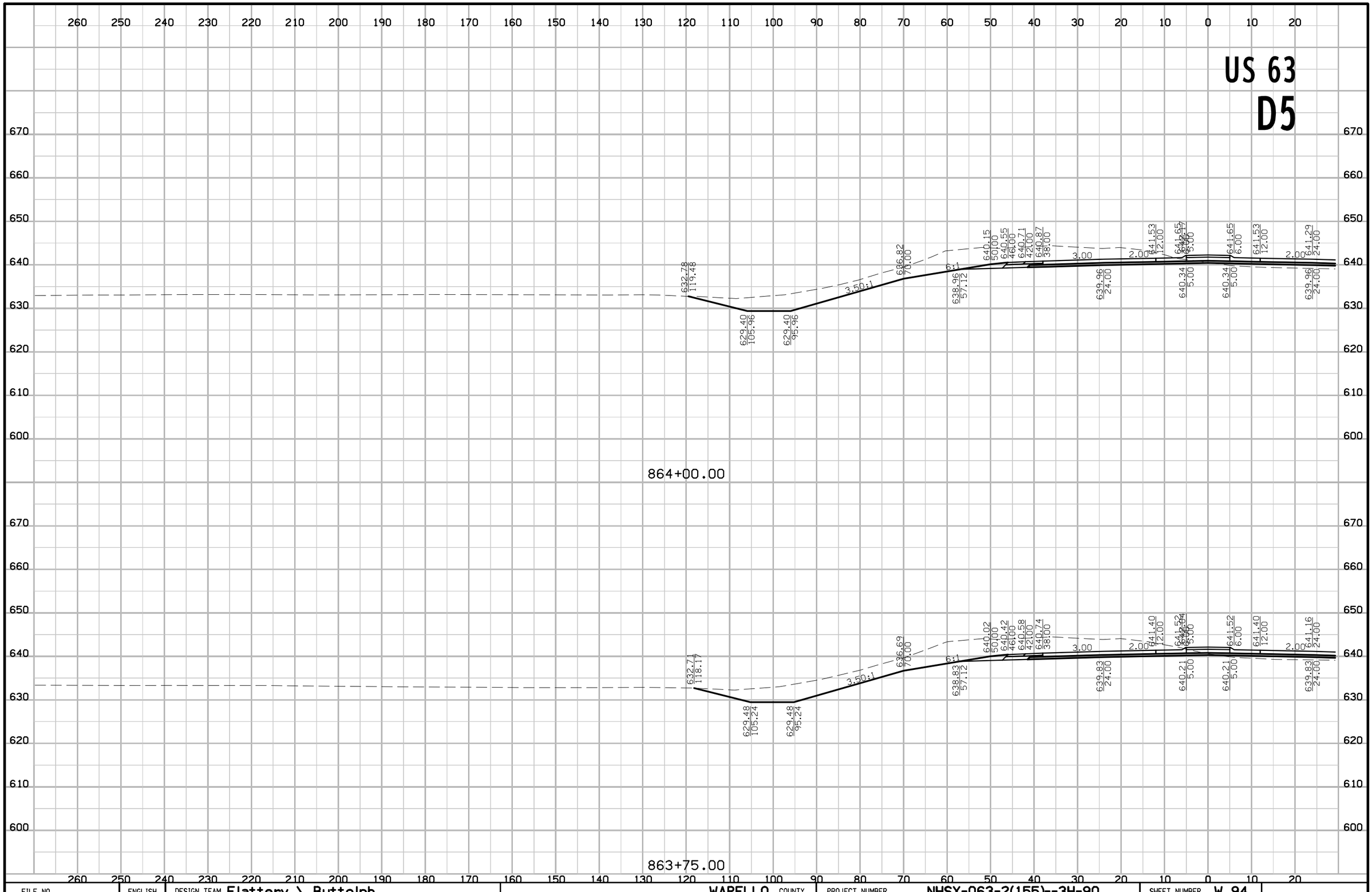
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.93

8:43:14 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

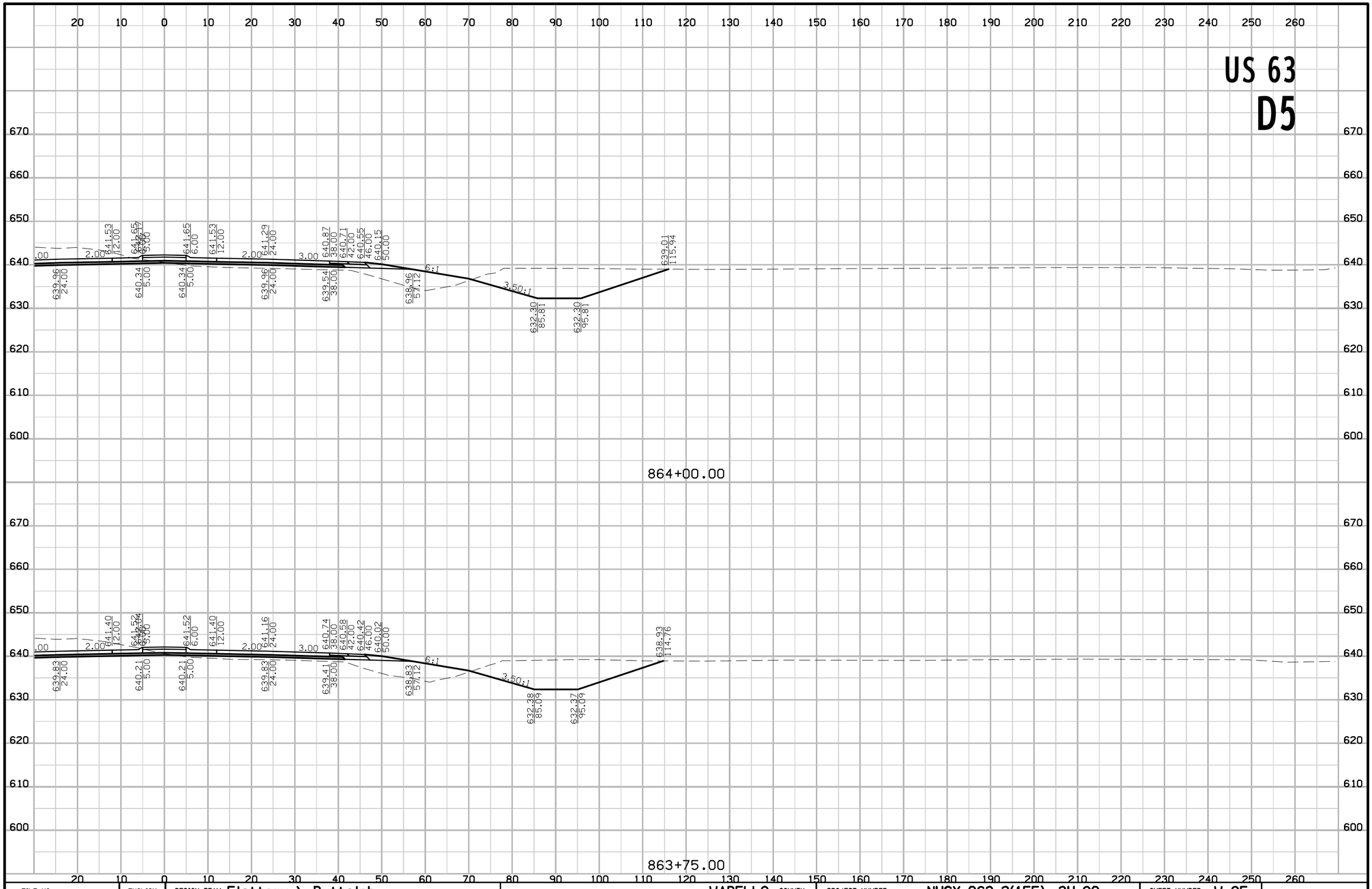
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.94

8:43:16 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

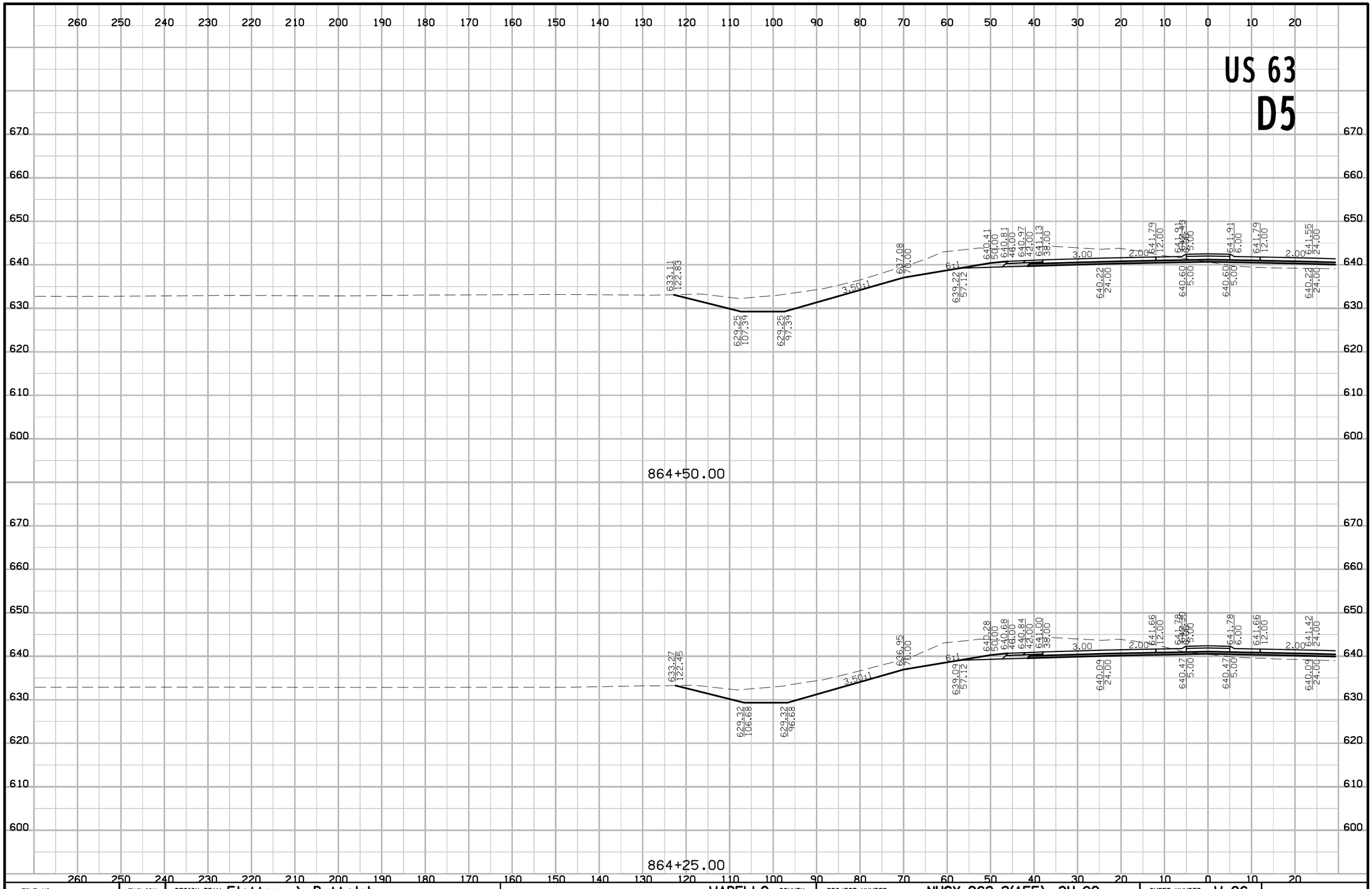
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.95

8:43:18 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

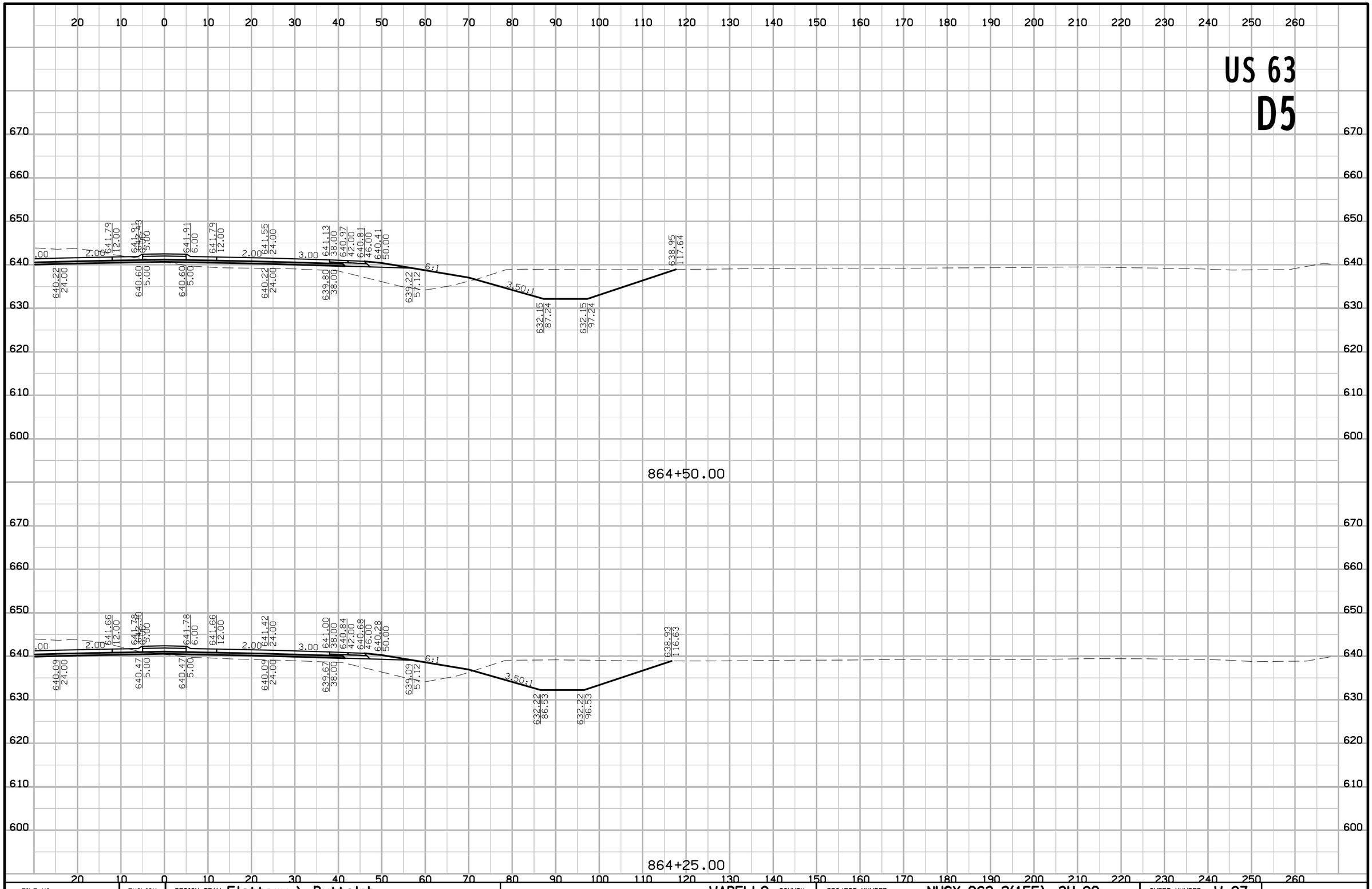
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.96

8:43:20 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

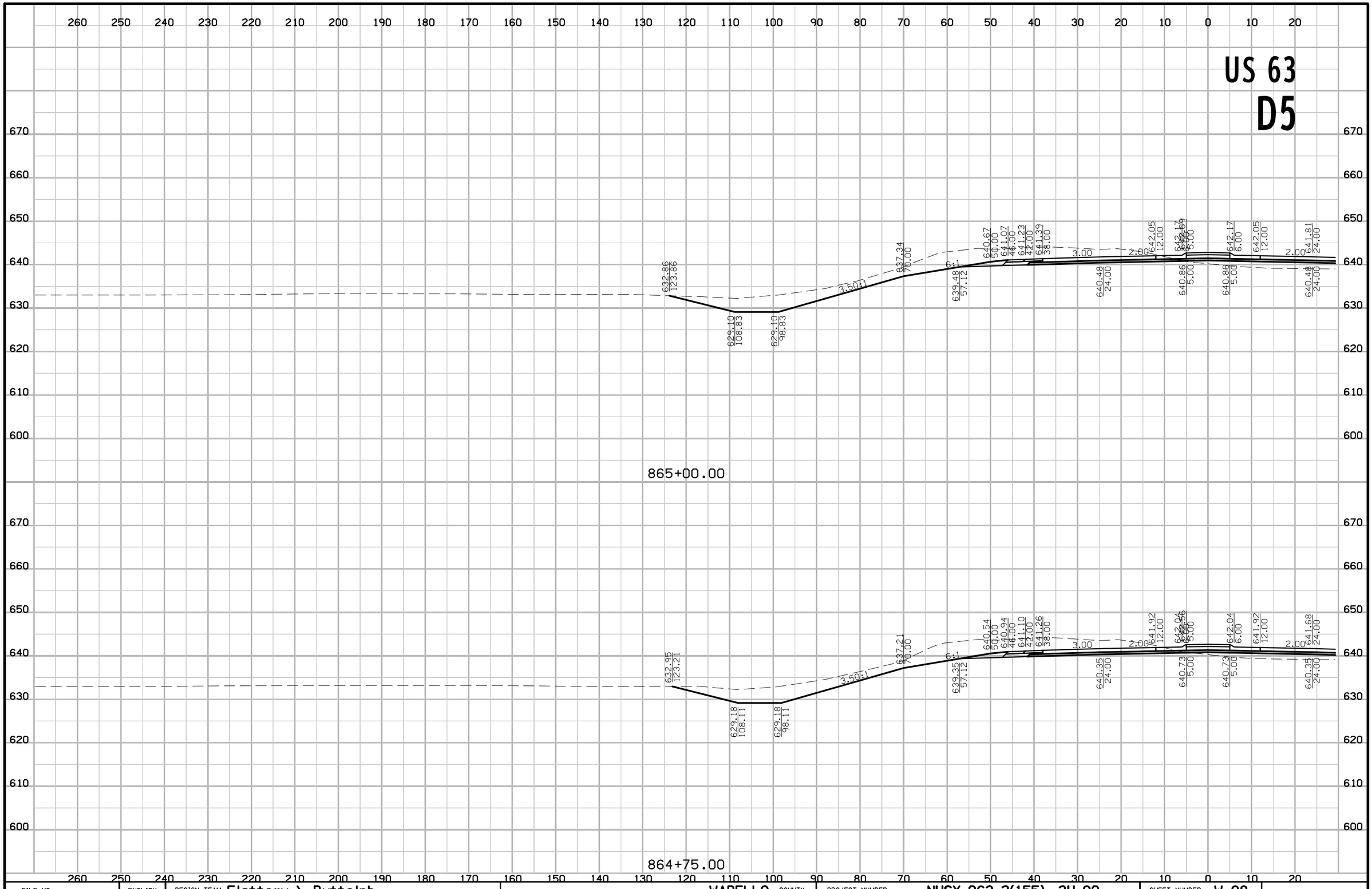
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.97

8:43:22 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

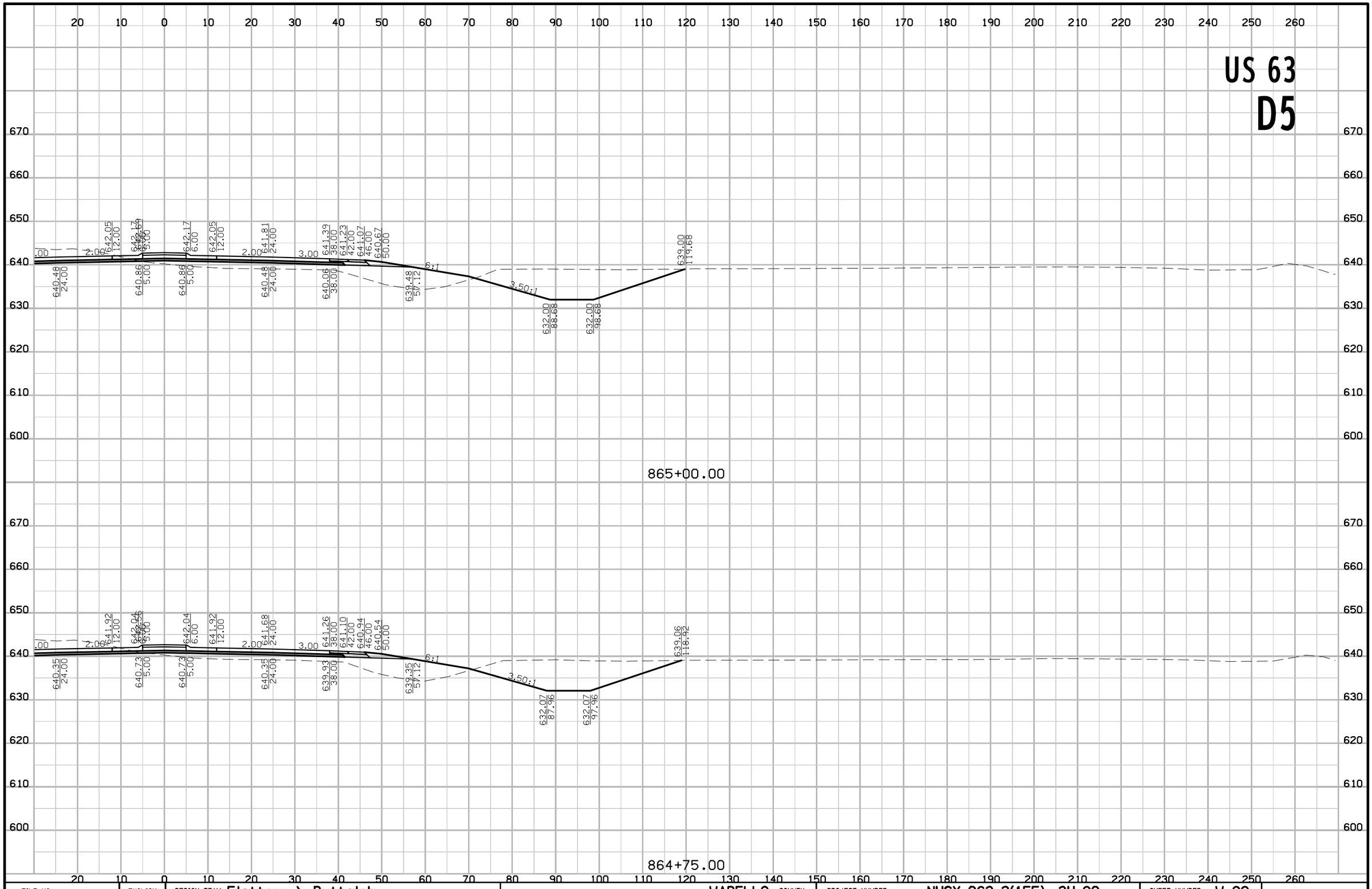
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.98

8:43:34 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

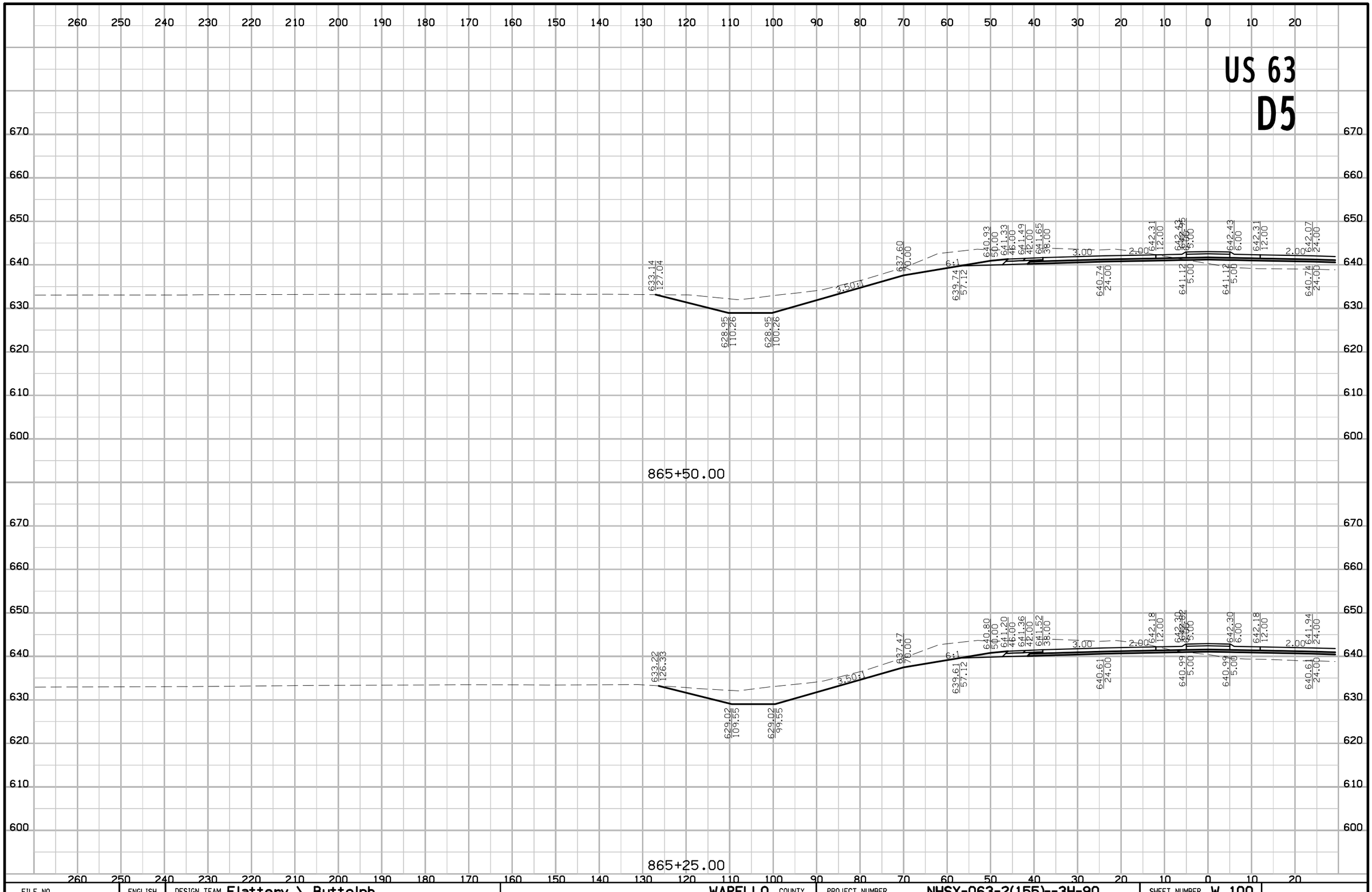
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.99

8:43:36 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

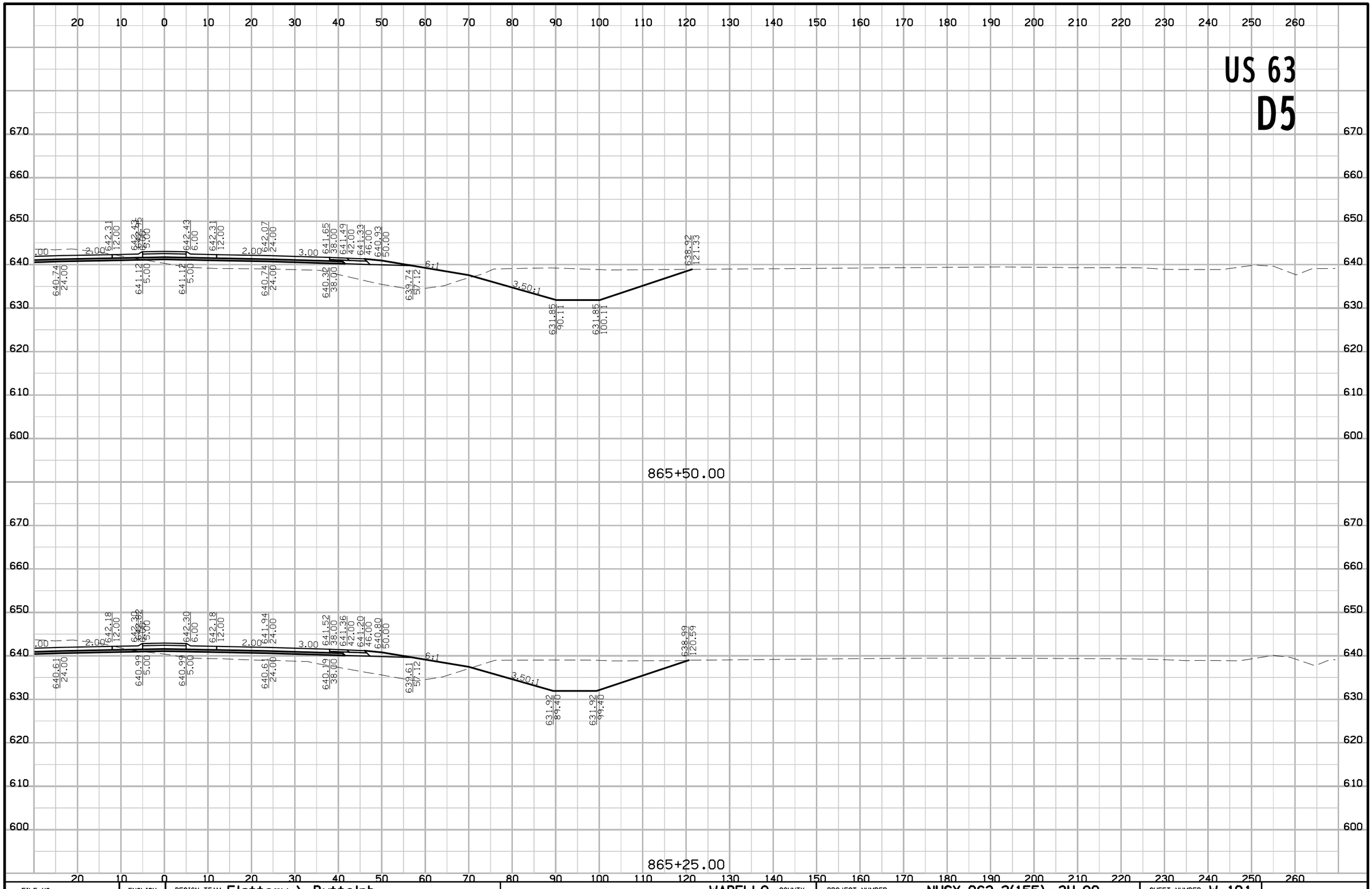
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.100

8:43:38 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

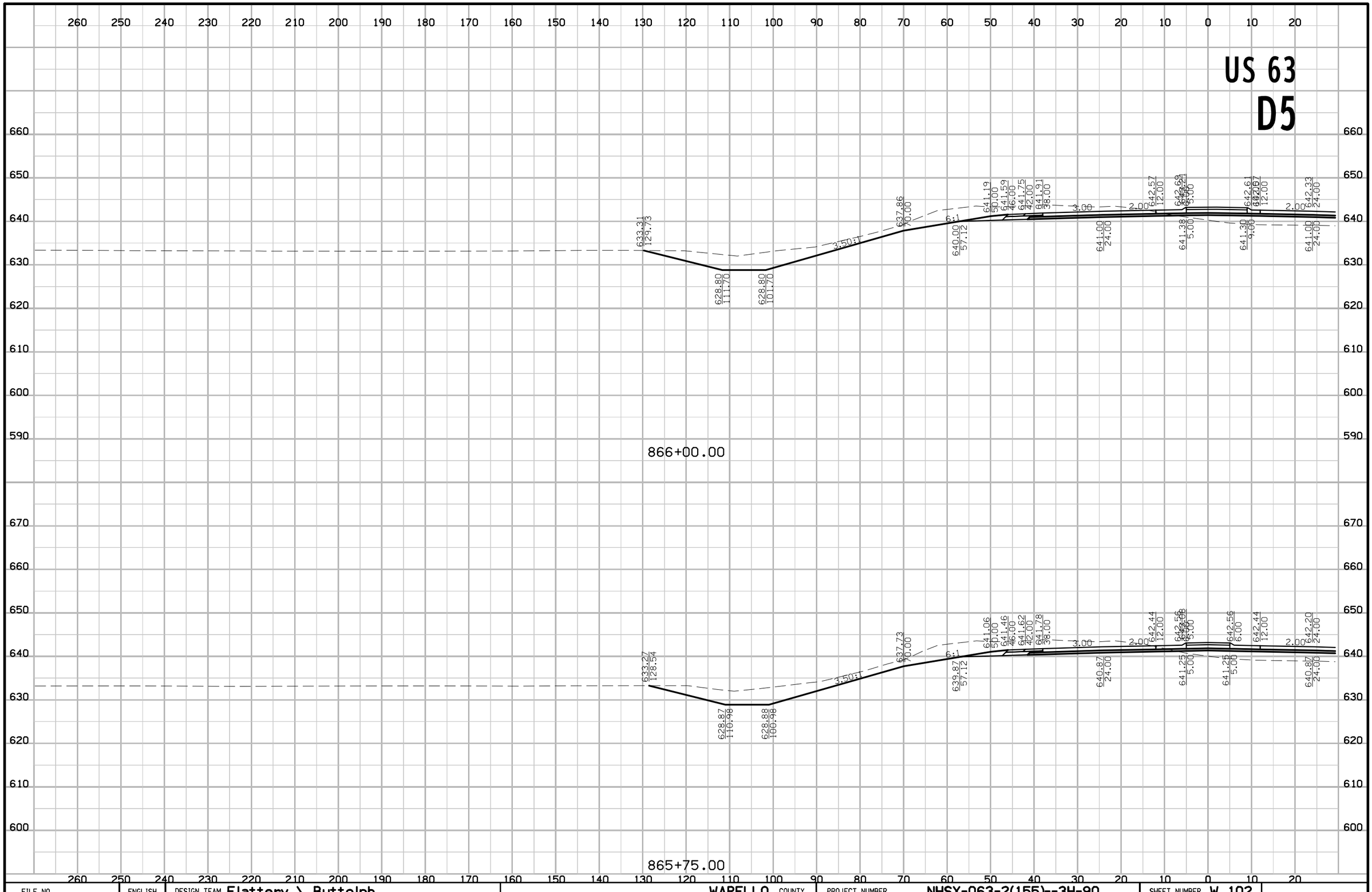
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.101

8:43:40 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W01.sht

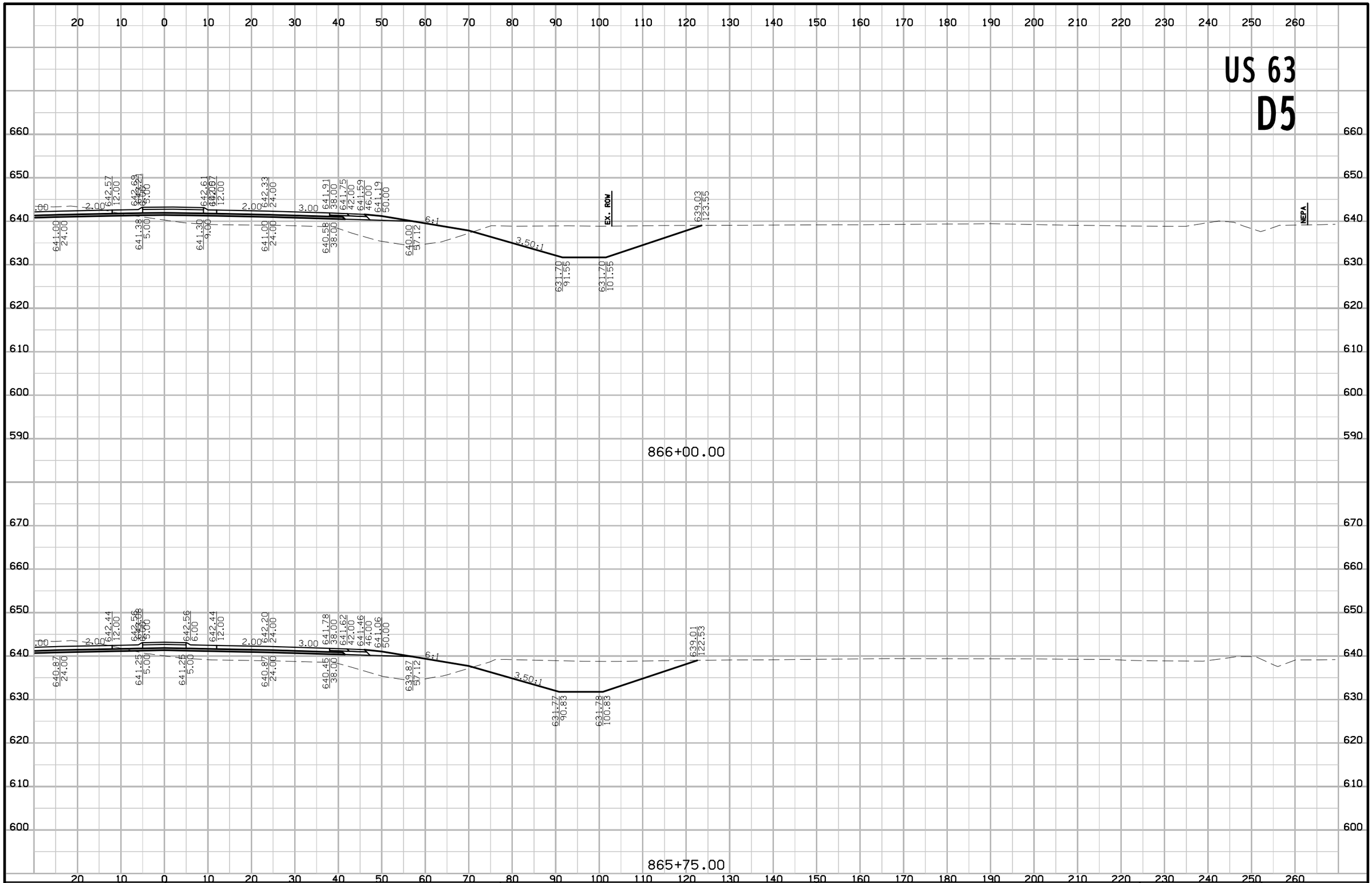
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.102

8:45:59 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

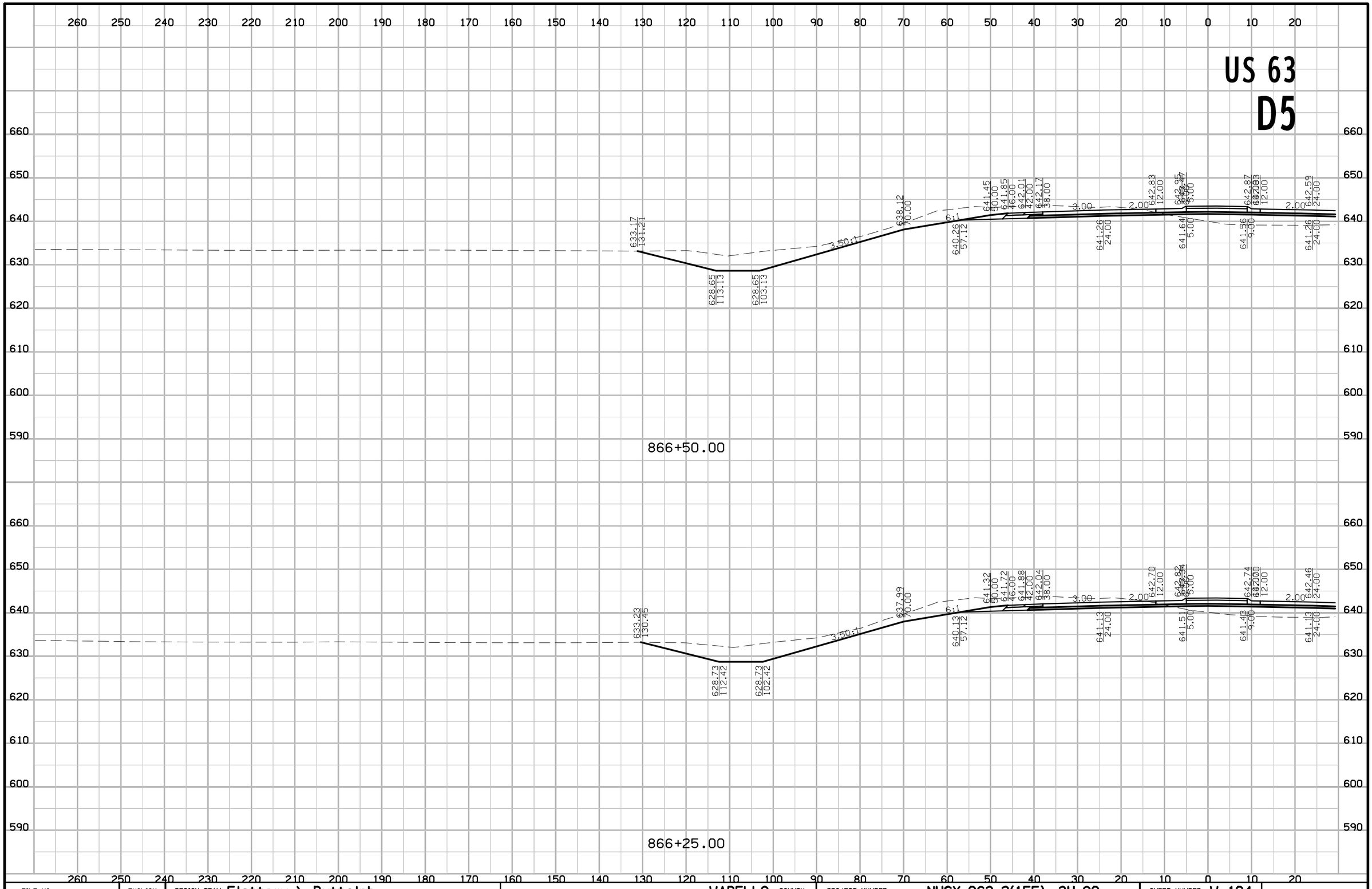
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.103

8:46:02 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

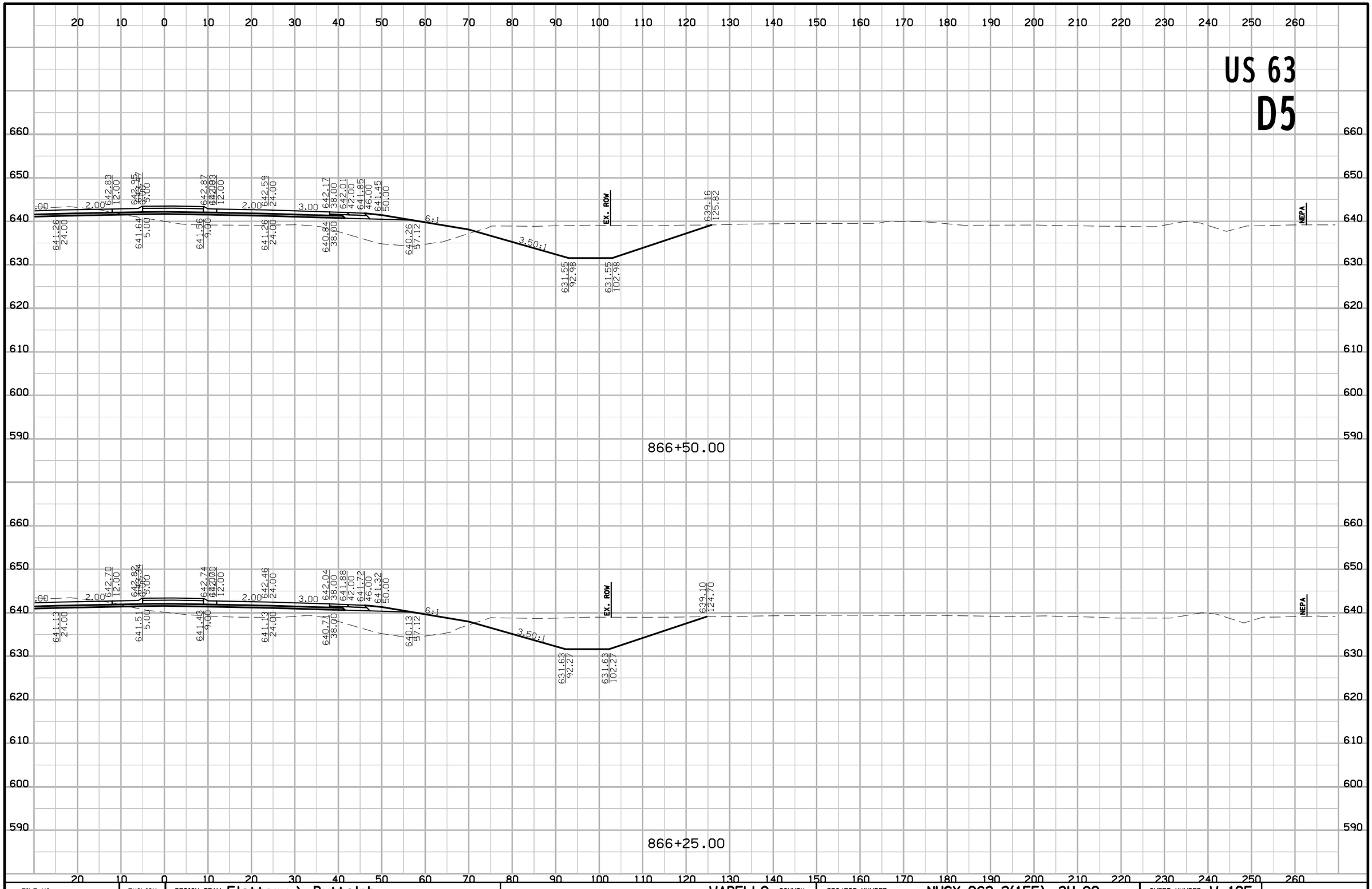
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.104

8:46:04 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

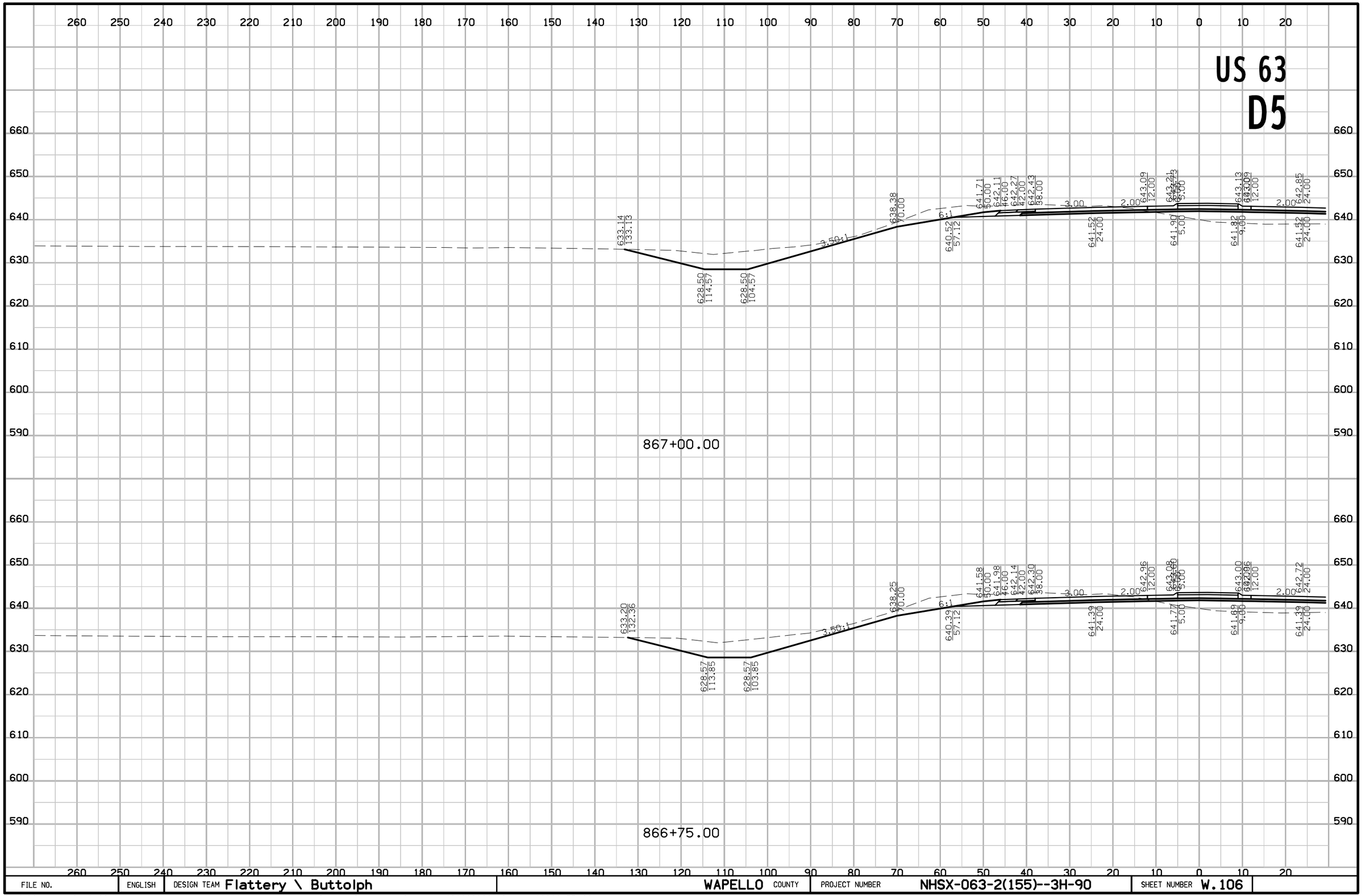
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.105

8:46:08 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

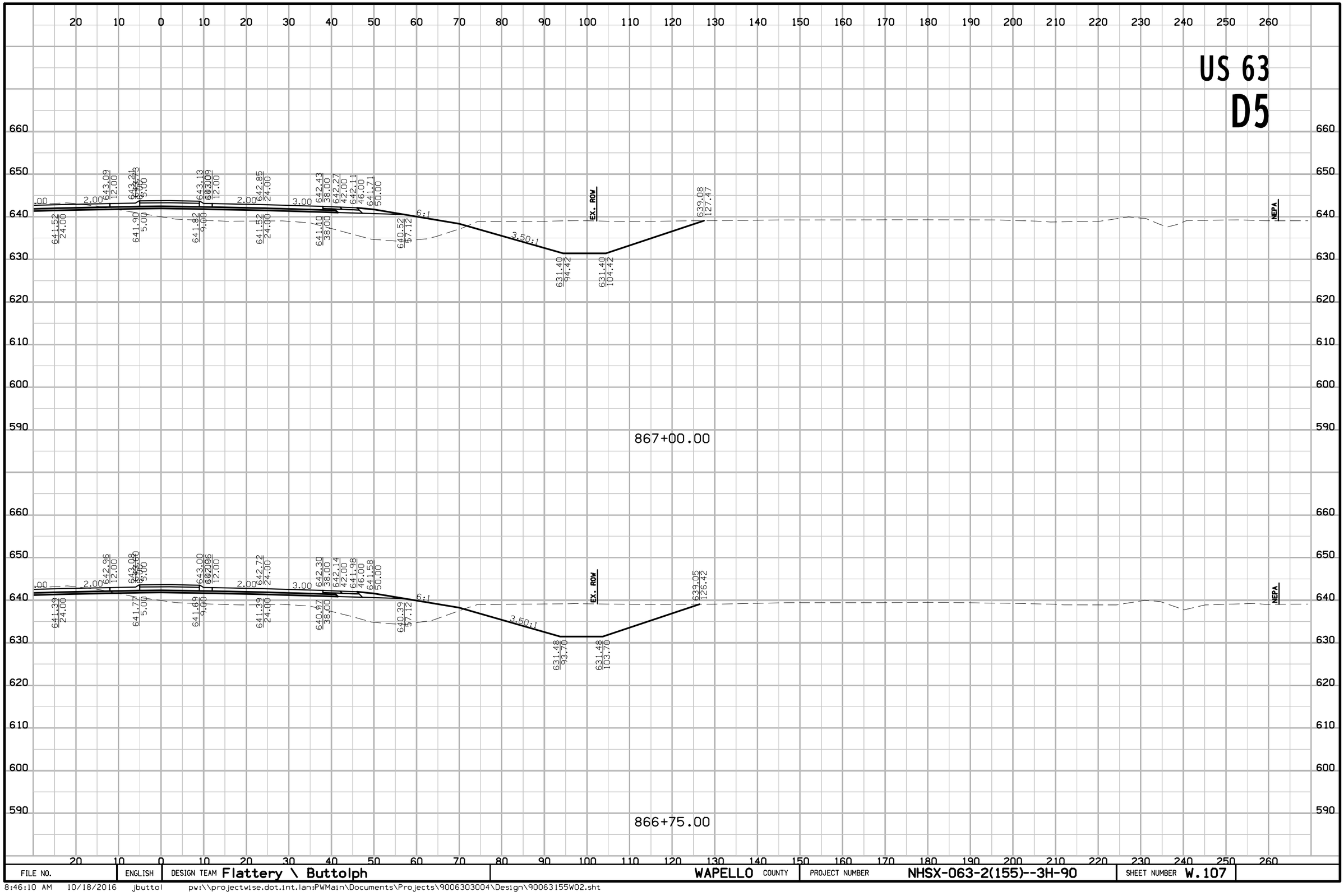
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.106

8:46:09 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

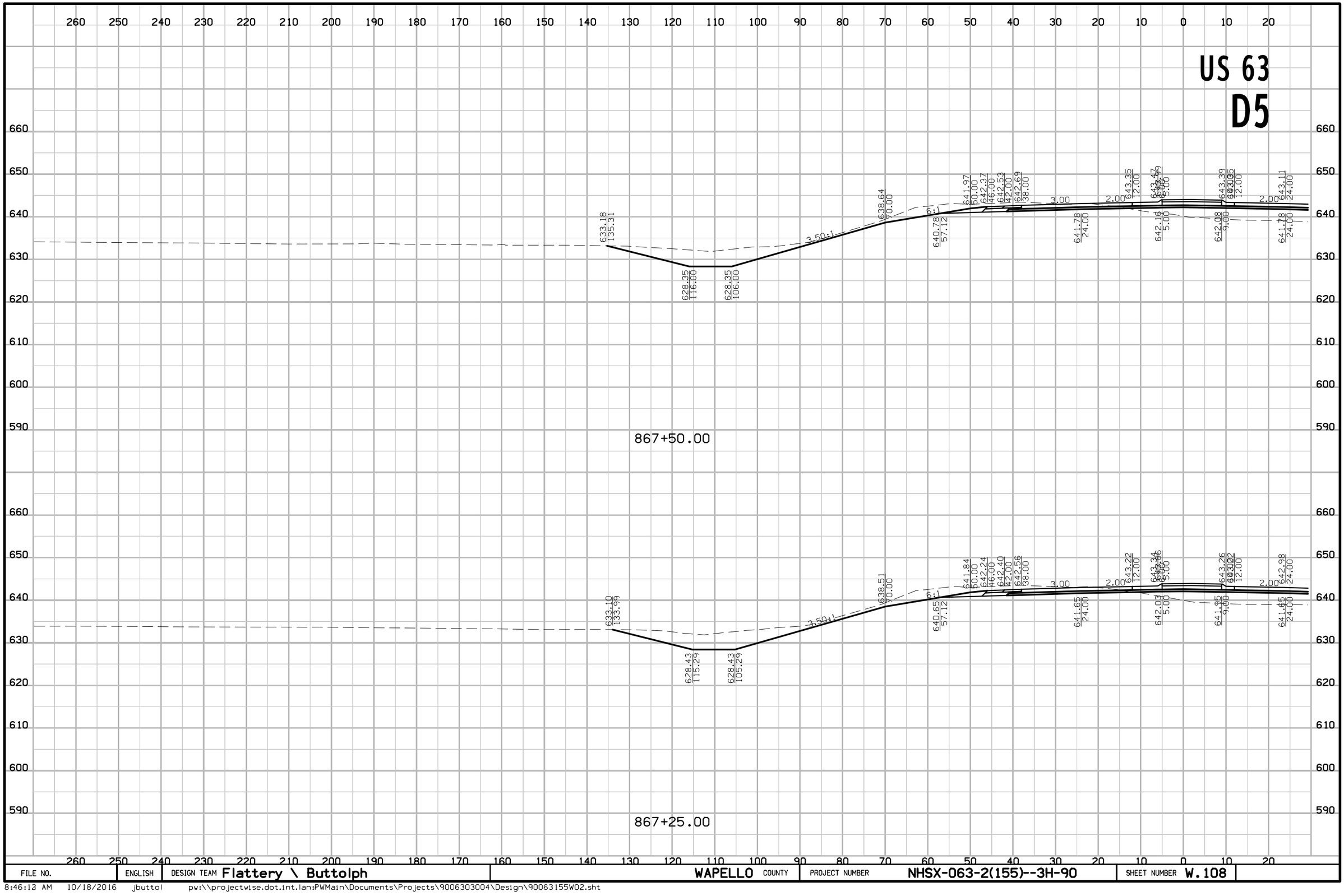
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.107

8:46:10 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

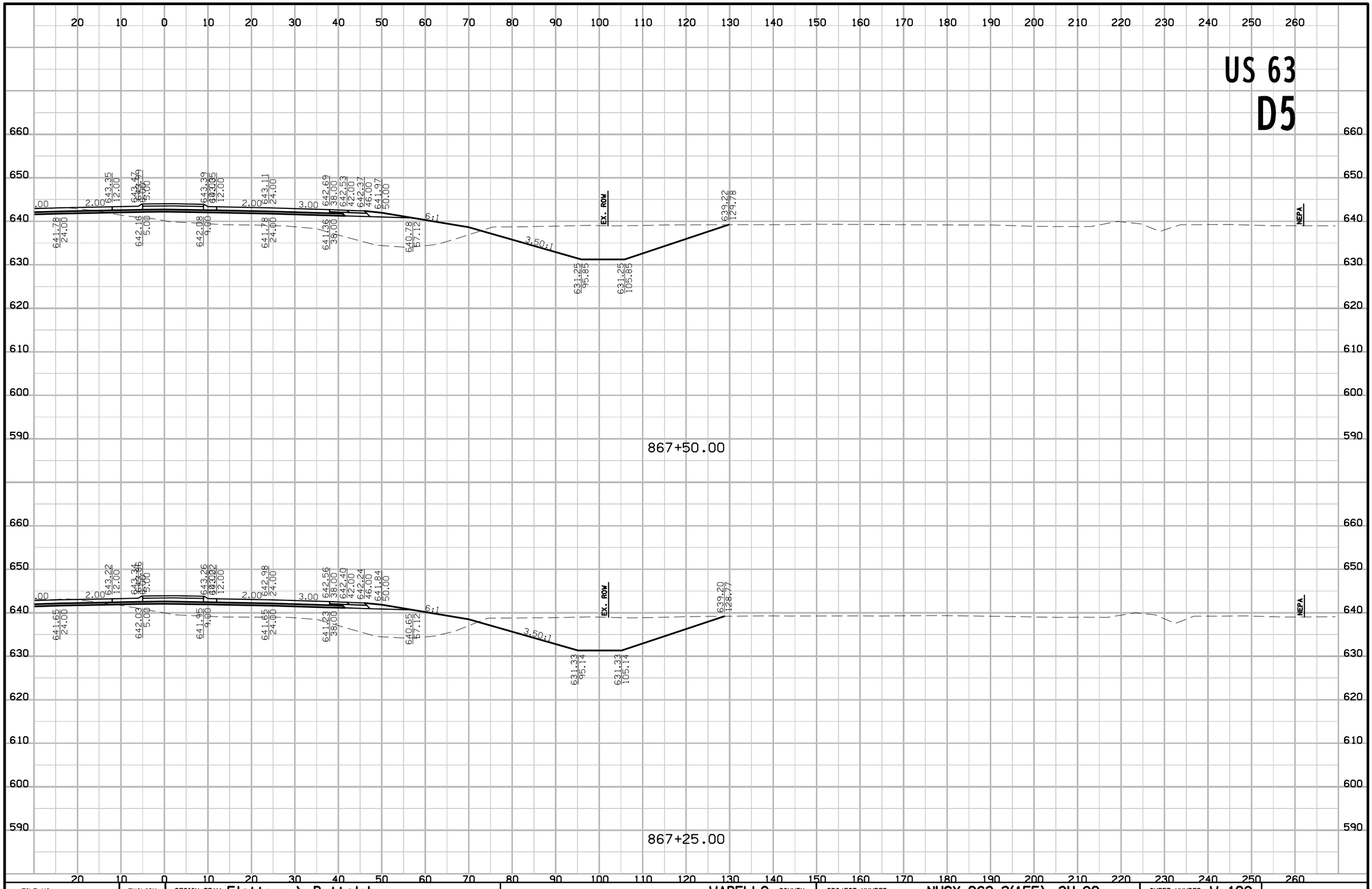
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.108

8:46:12 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

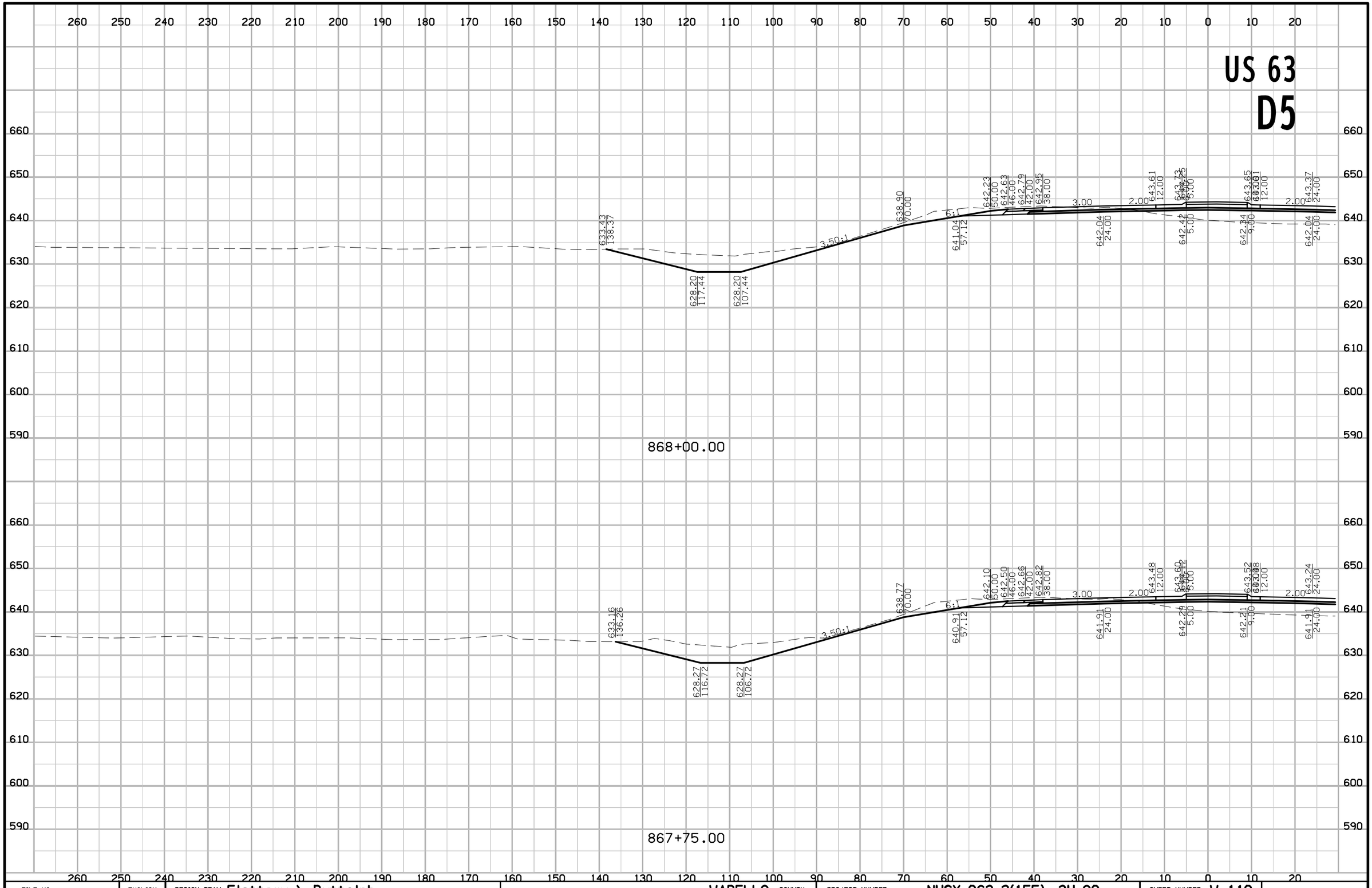
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.109

8:46:15 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

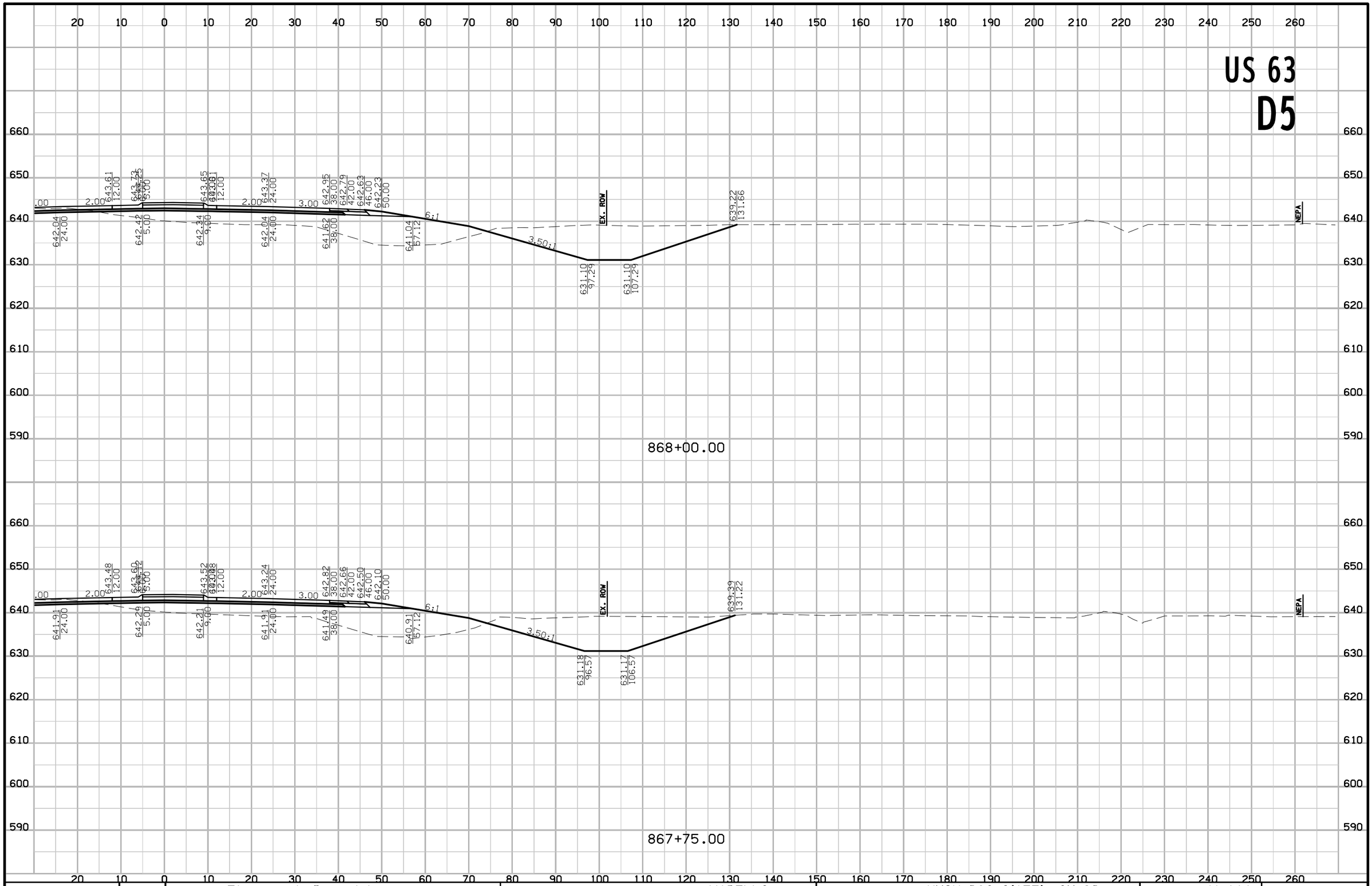
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.110

8:46:17 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

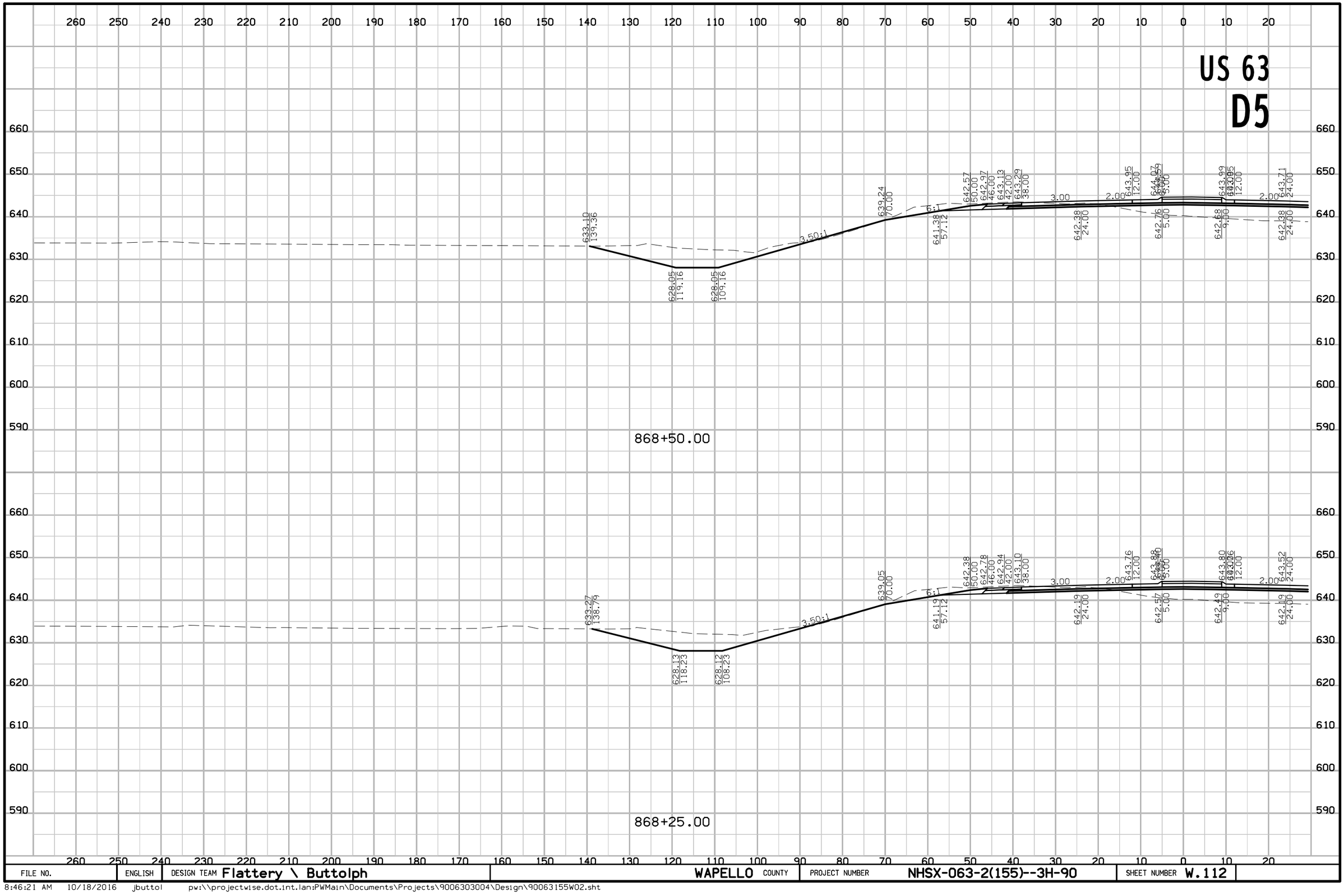
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.111

8:46:19 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

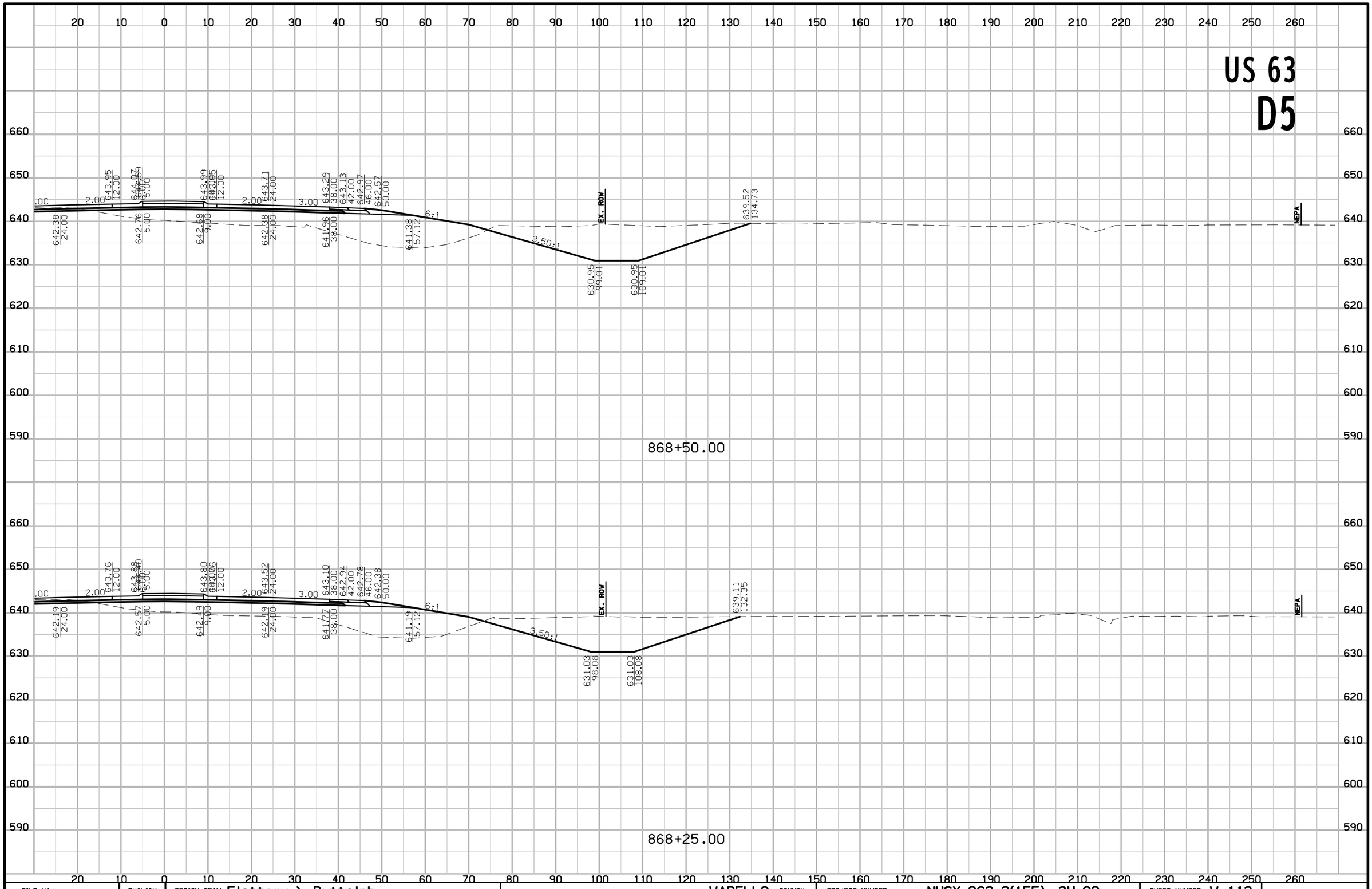
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.112

8:46:21 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

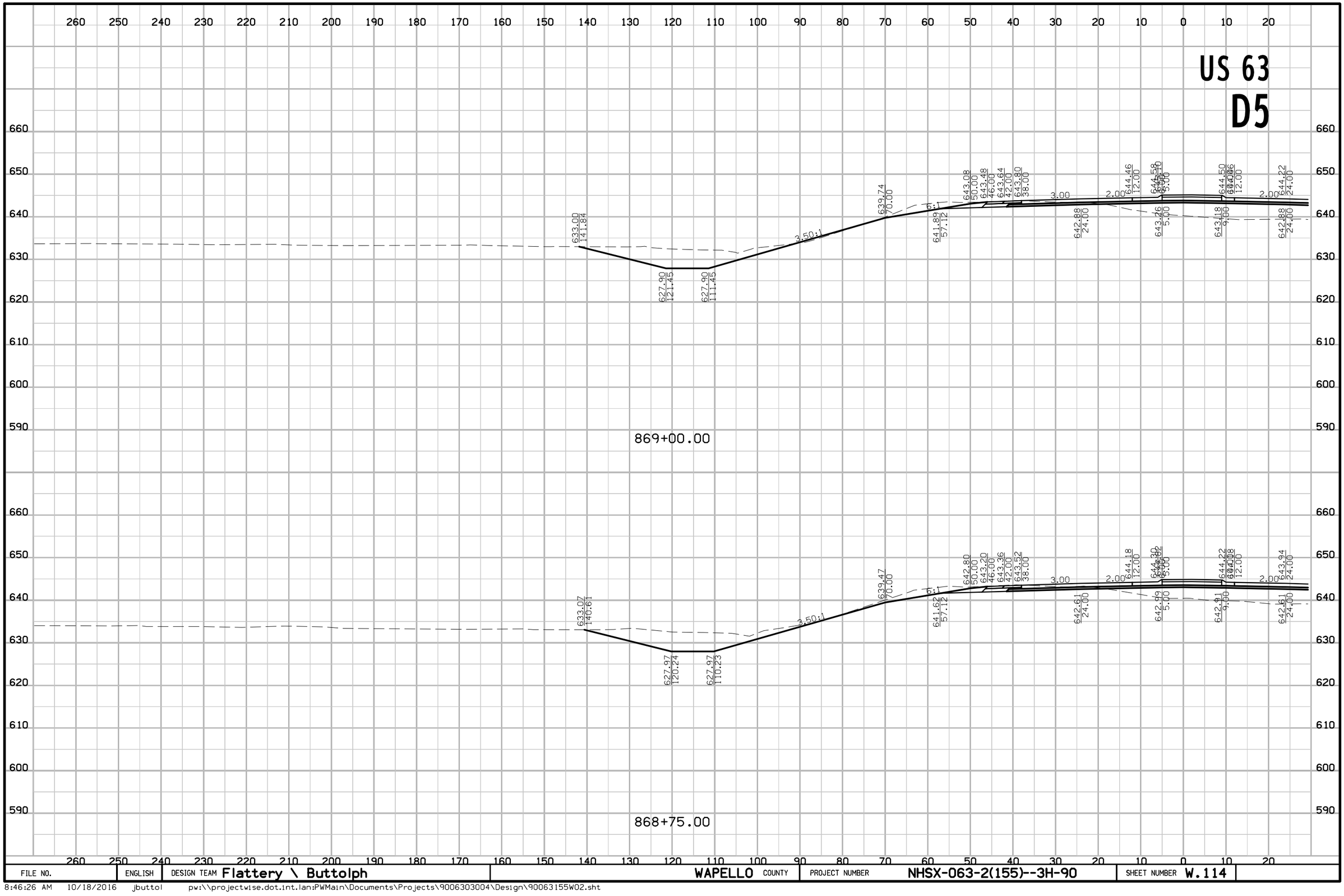
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.113

8:46:24 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

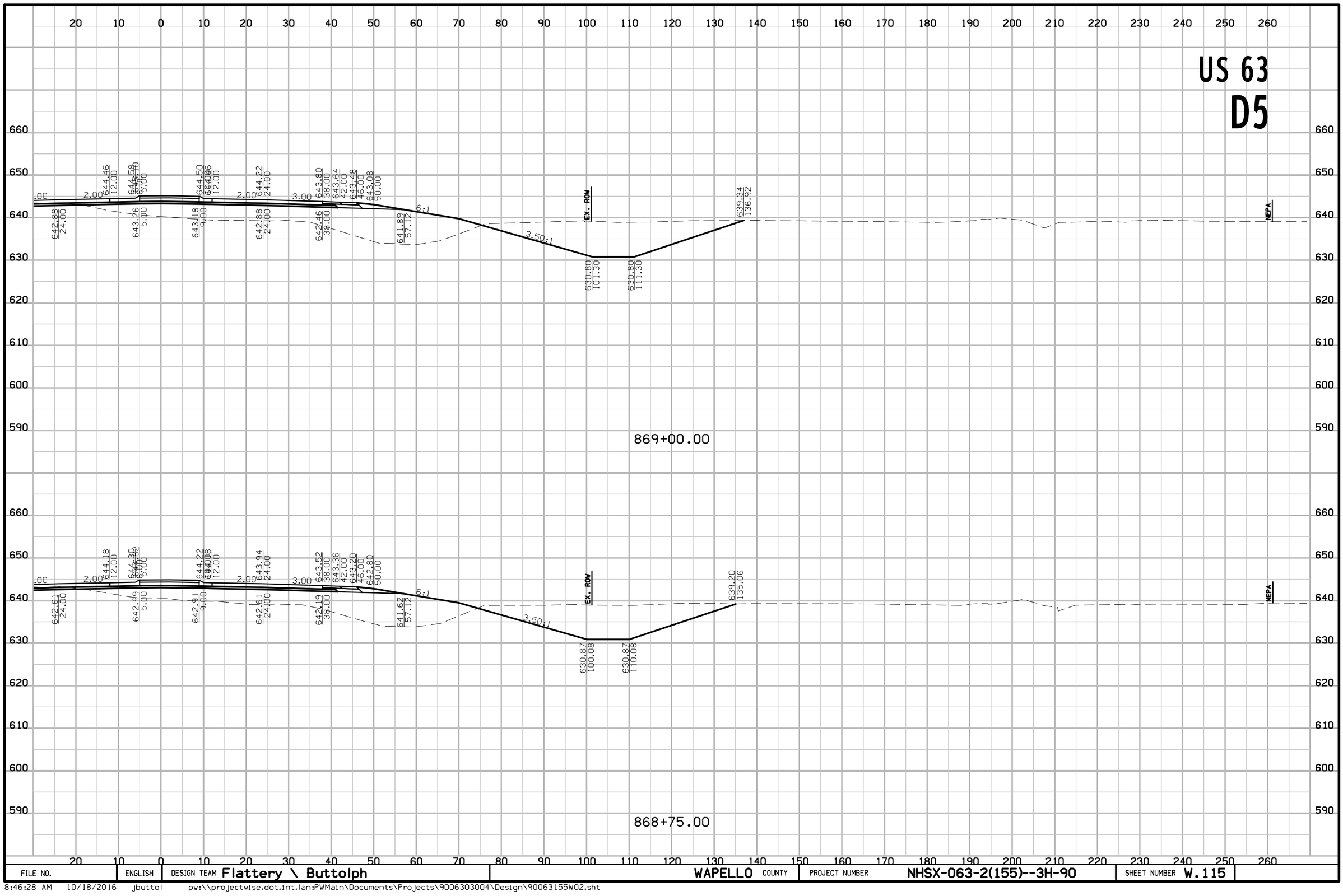
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.114

8:46:26 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

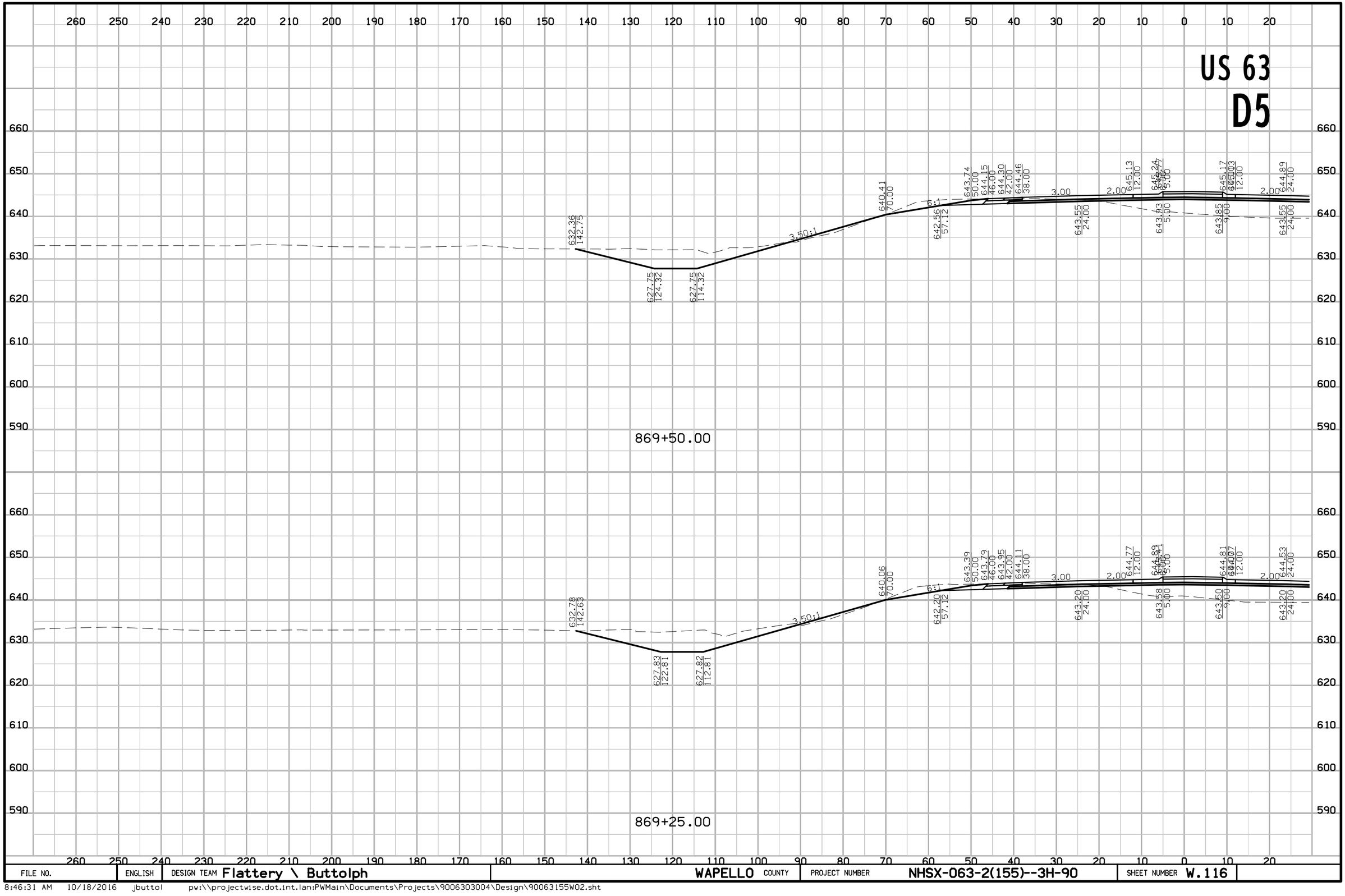
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.115

8:46:28 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

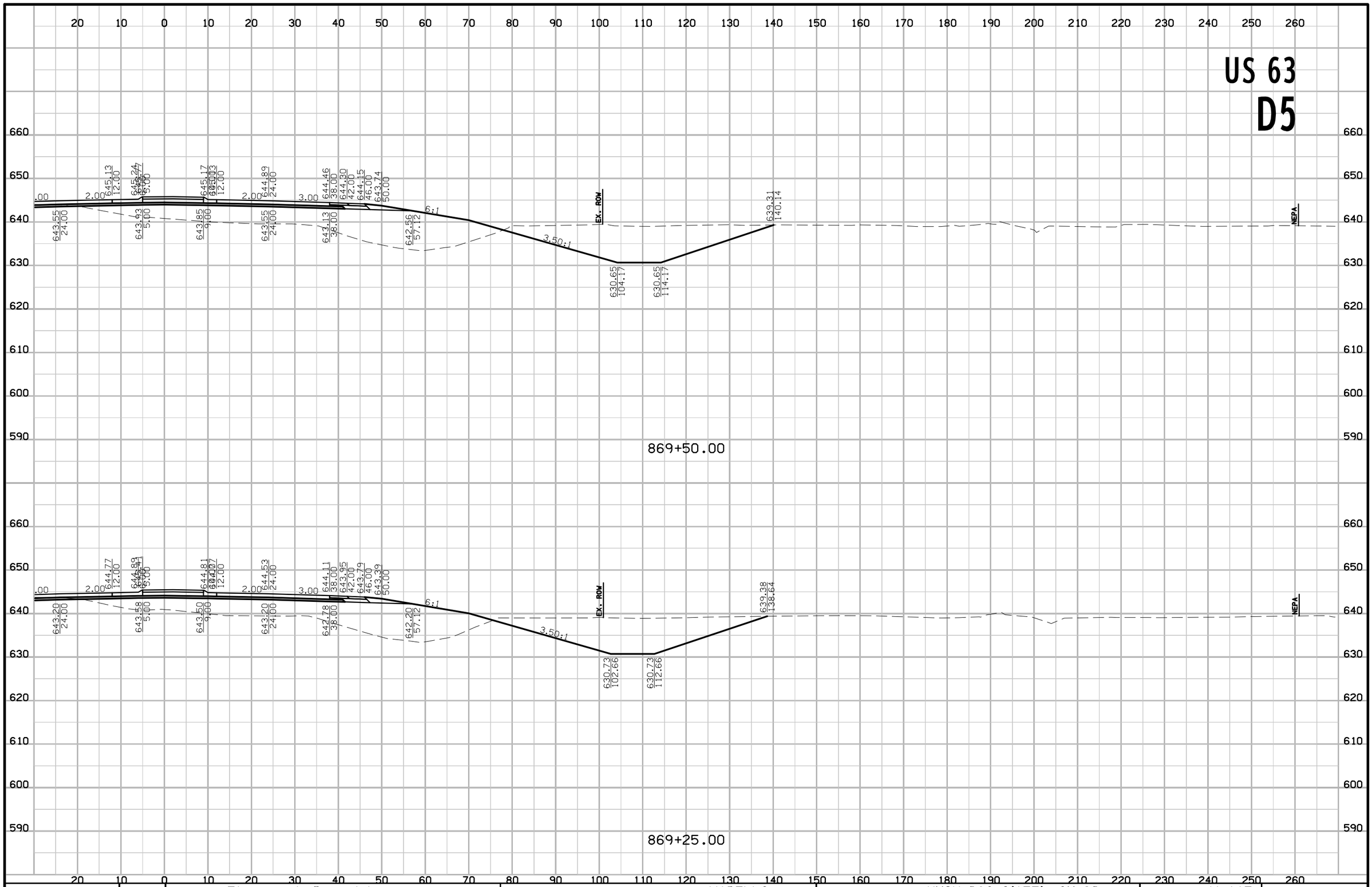
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.116

8:46:31 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

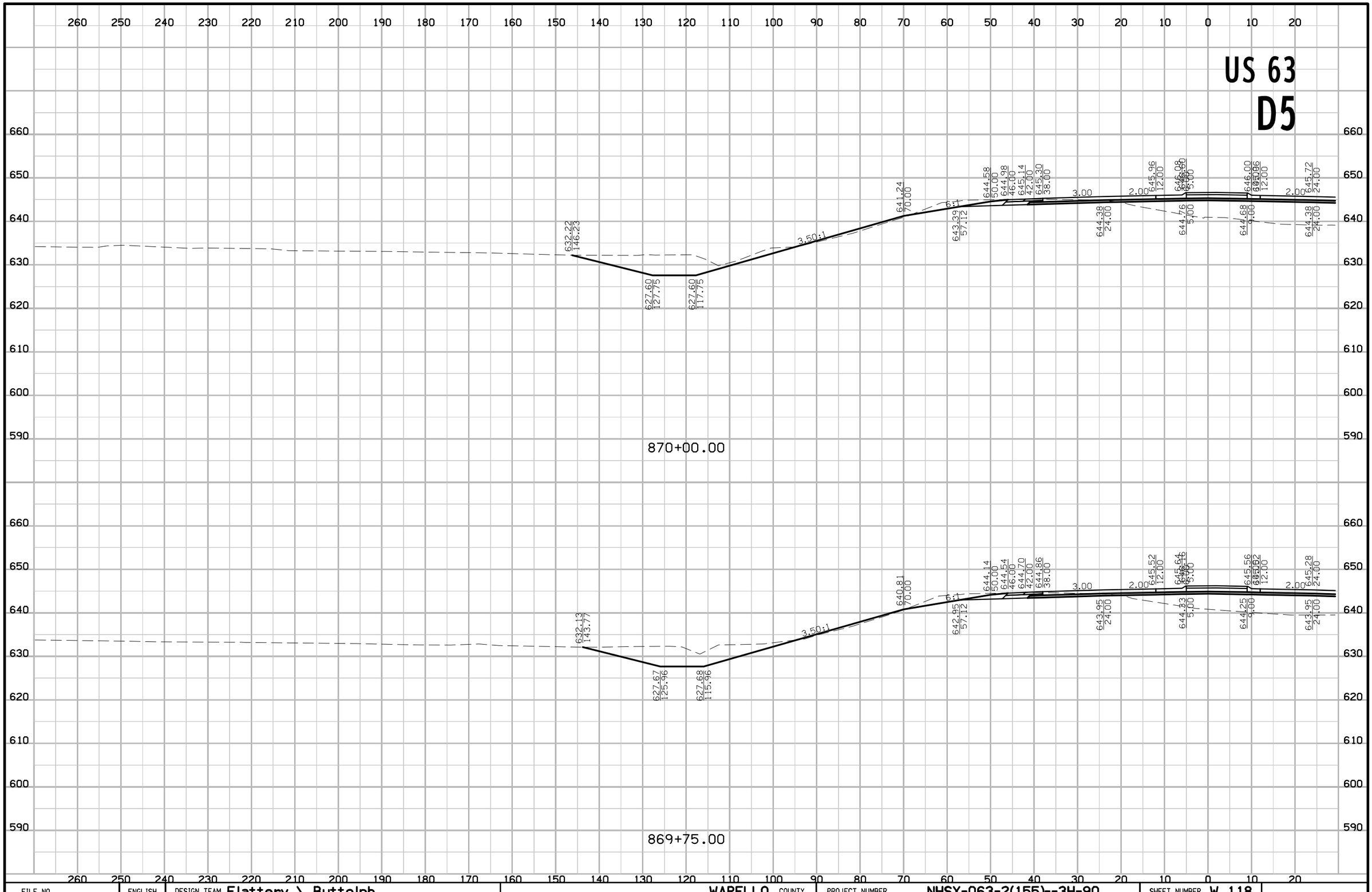
US 63
D5



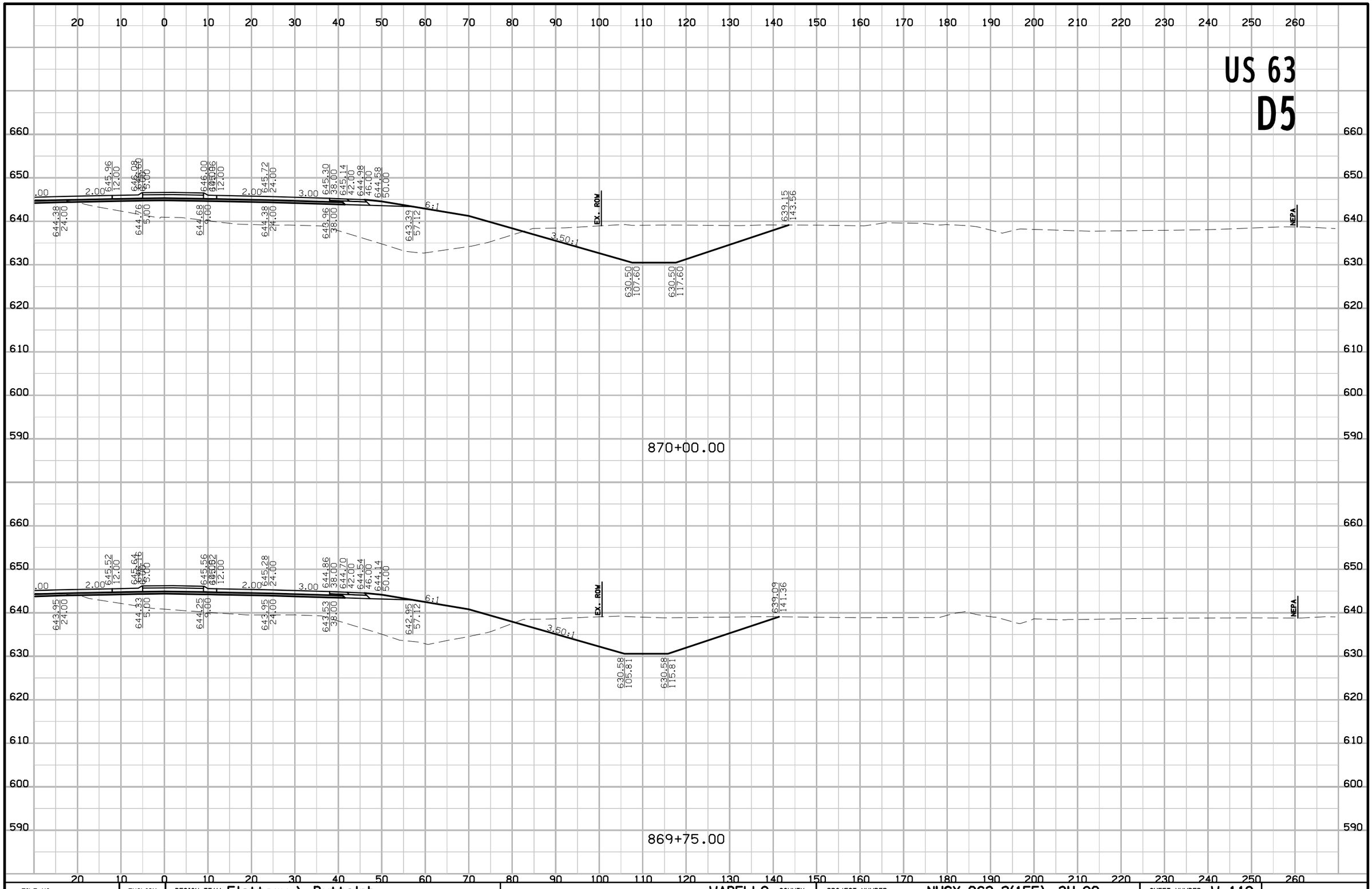
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.117

8:46:33 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

US 63
D5


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
660 650 640 630 620 610 600 590
632.22
146.23
627.60
127.75
627.60
117.75
3.50:1
641.24
70.00
6:1
643.39
57.12
644.58
50.00
644.98
46.00
645.14
42.00
645.30
38.00
3.00
644.38
24.00
2.00
645.96
12.00
646.08
646.00
646.00
646.00

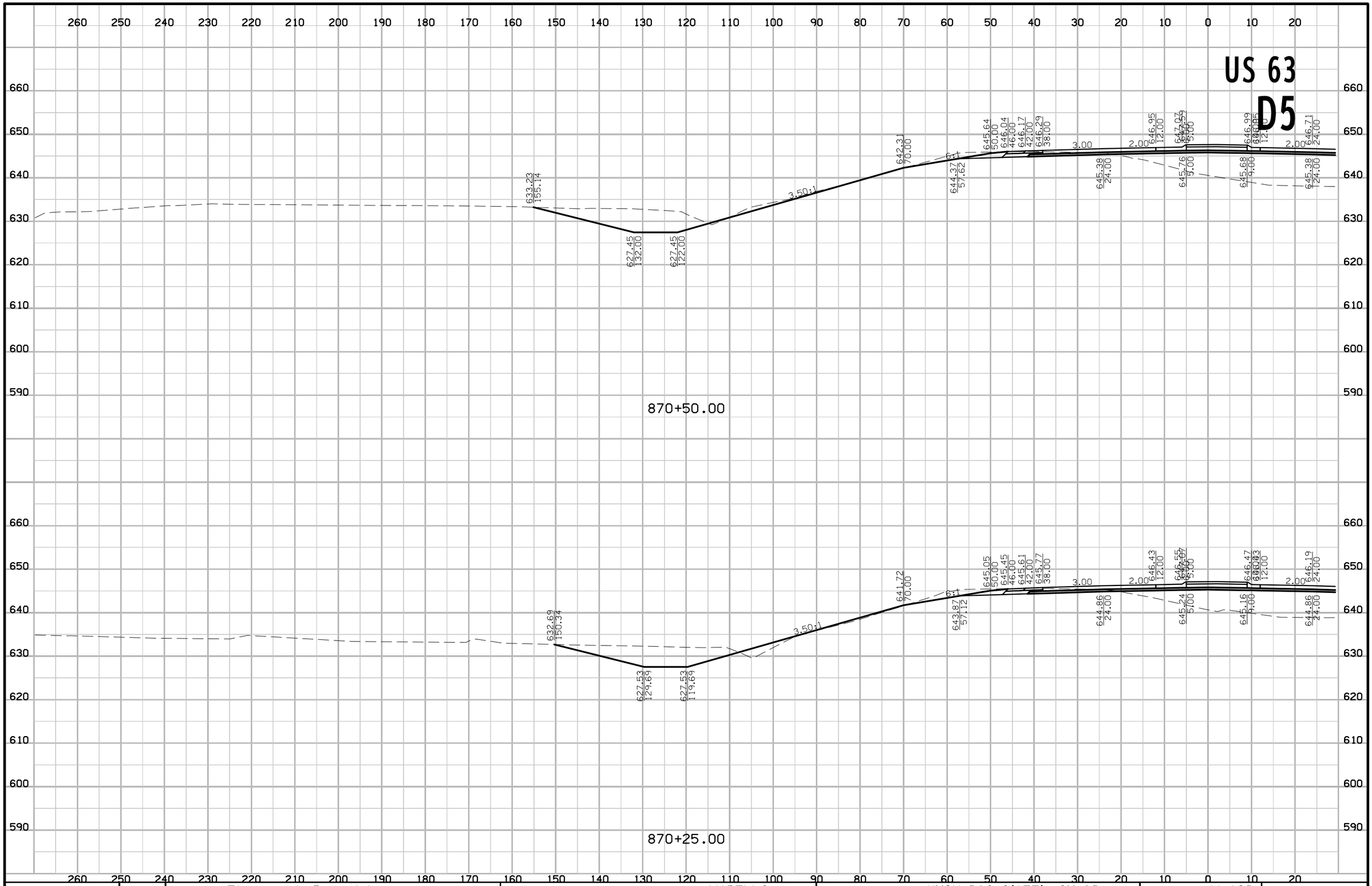
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.119

8:46:37 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

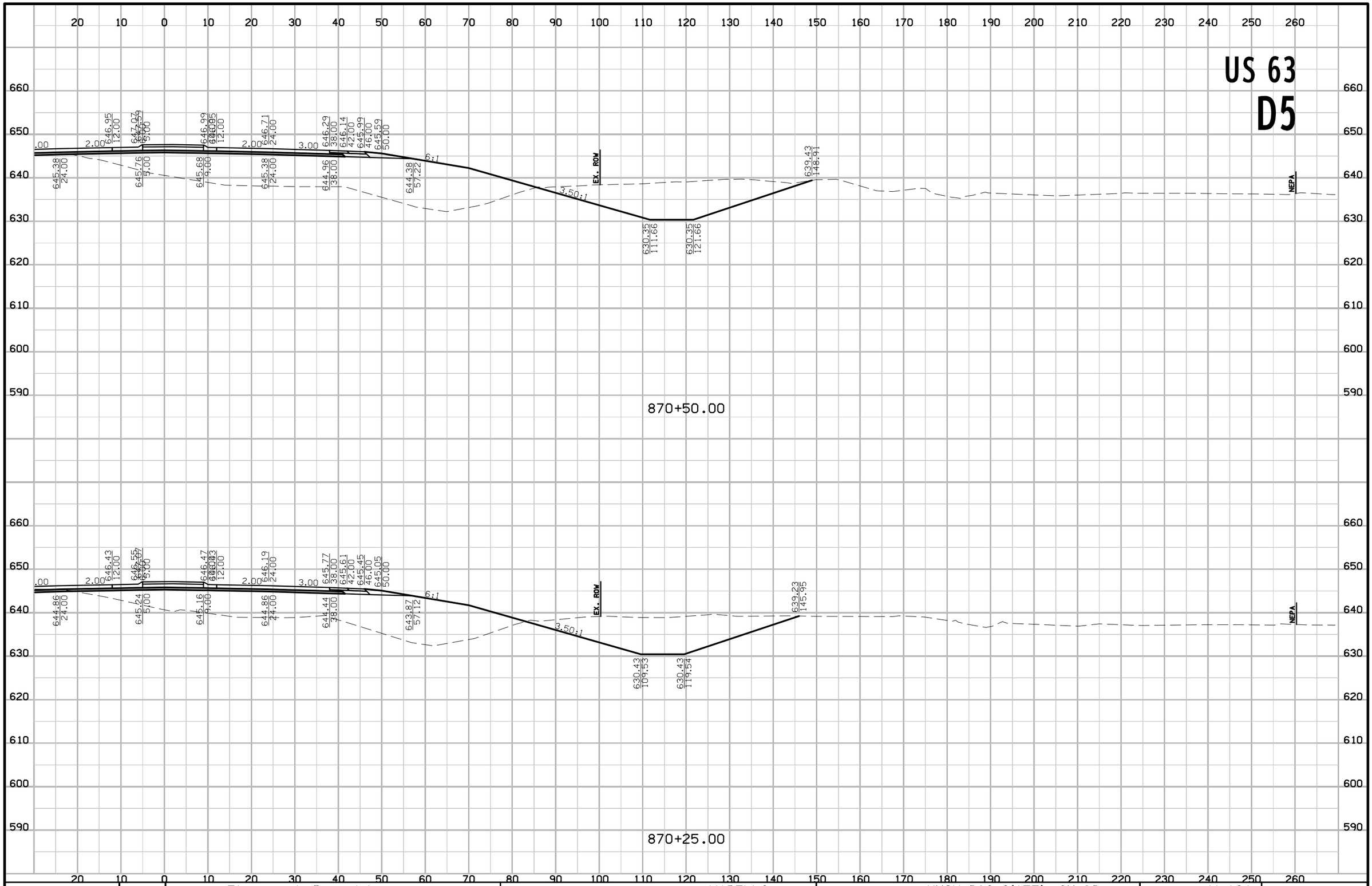
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.120

8:46:39 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

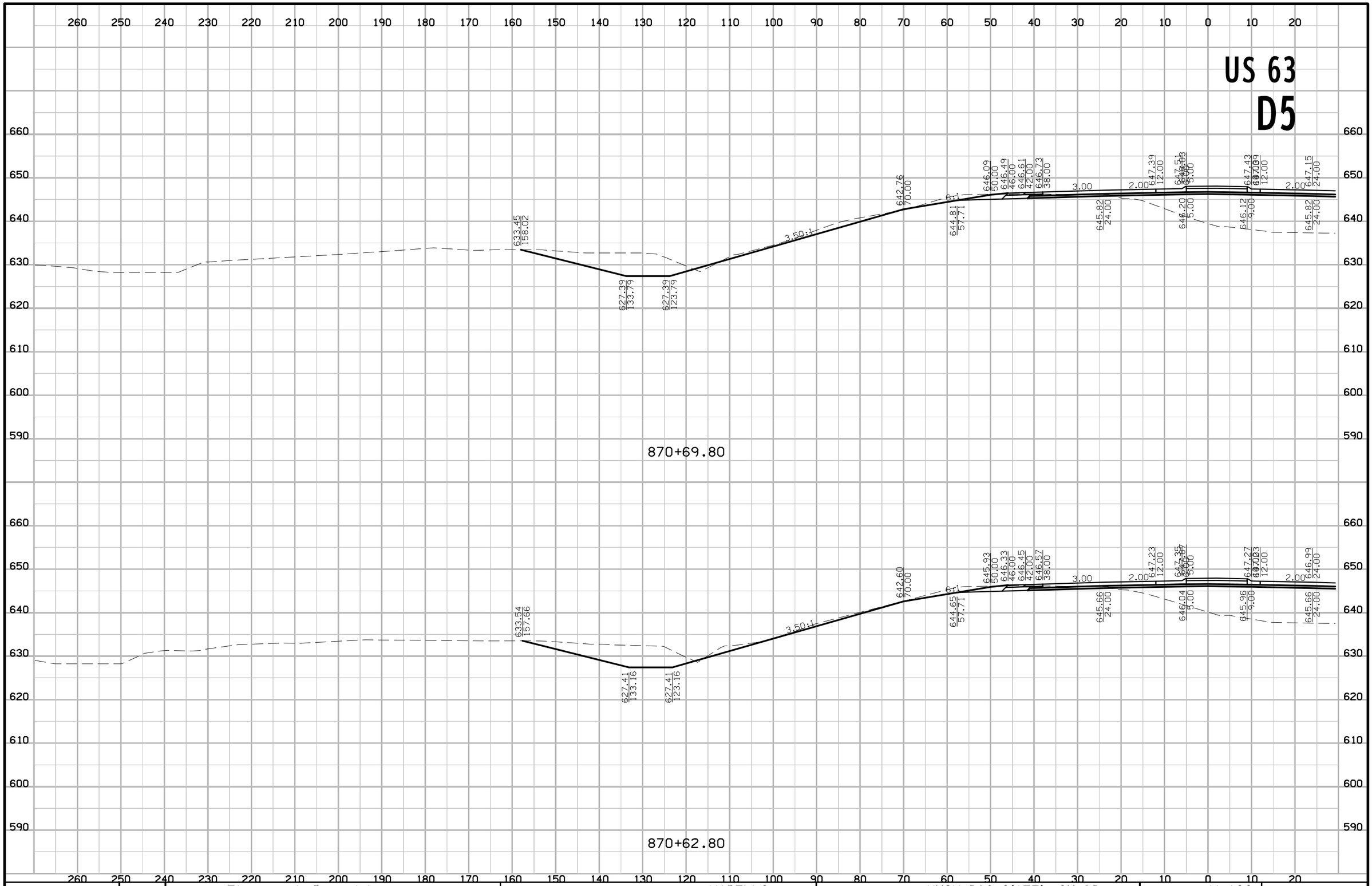
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.121

8:46:42 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

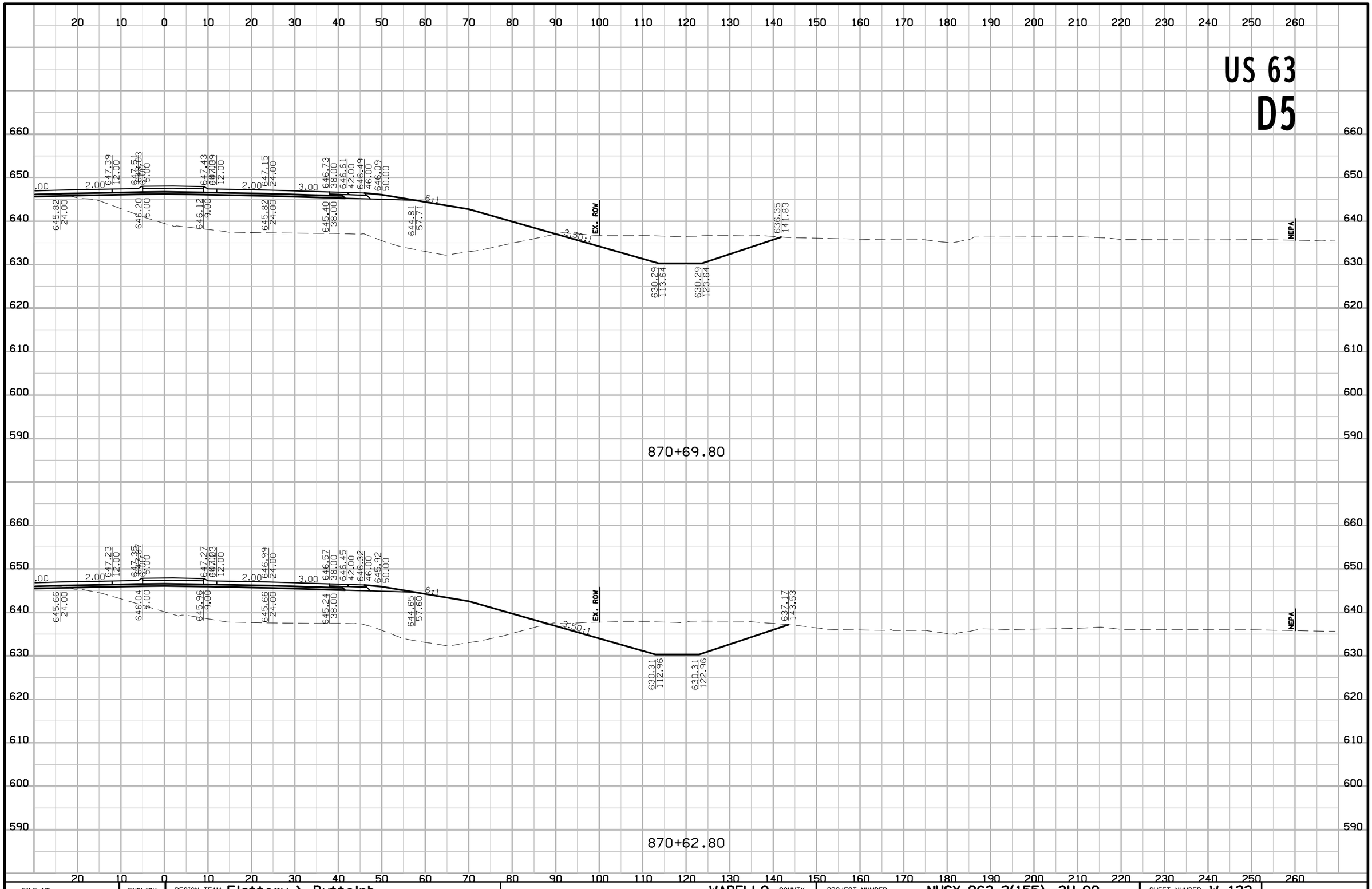
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.122

8:46:44 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

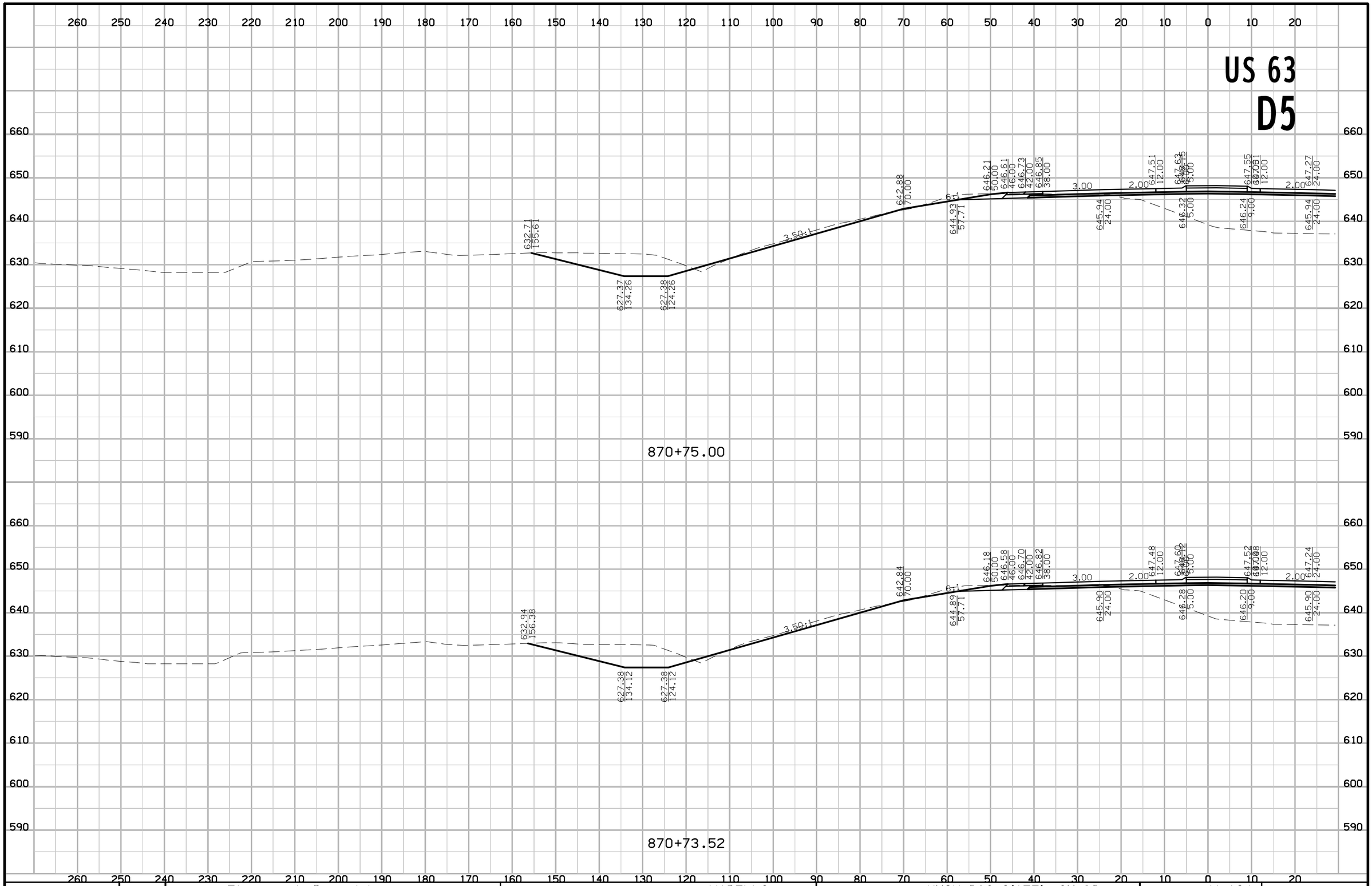
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.123

8:46:46 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

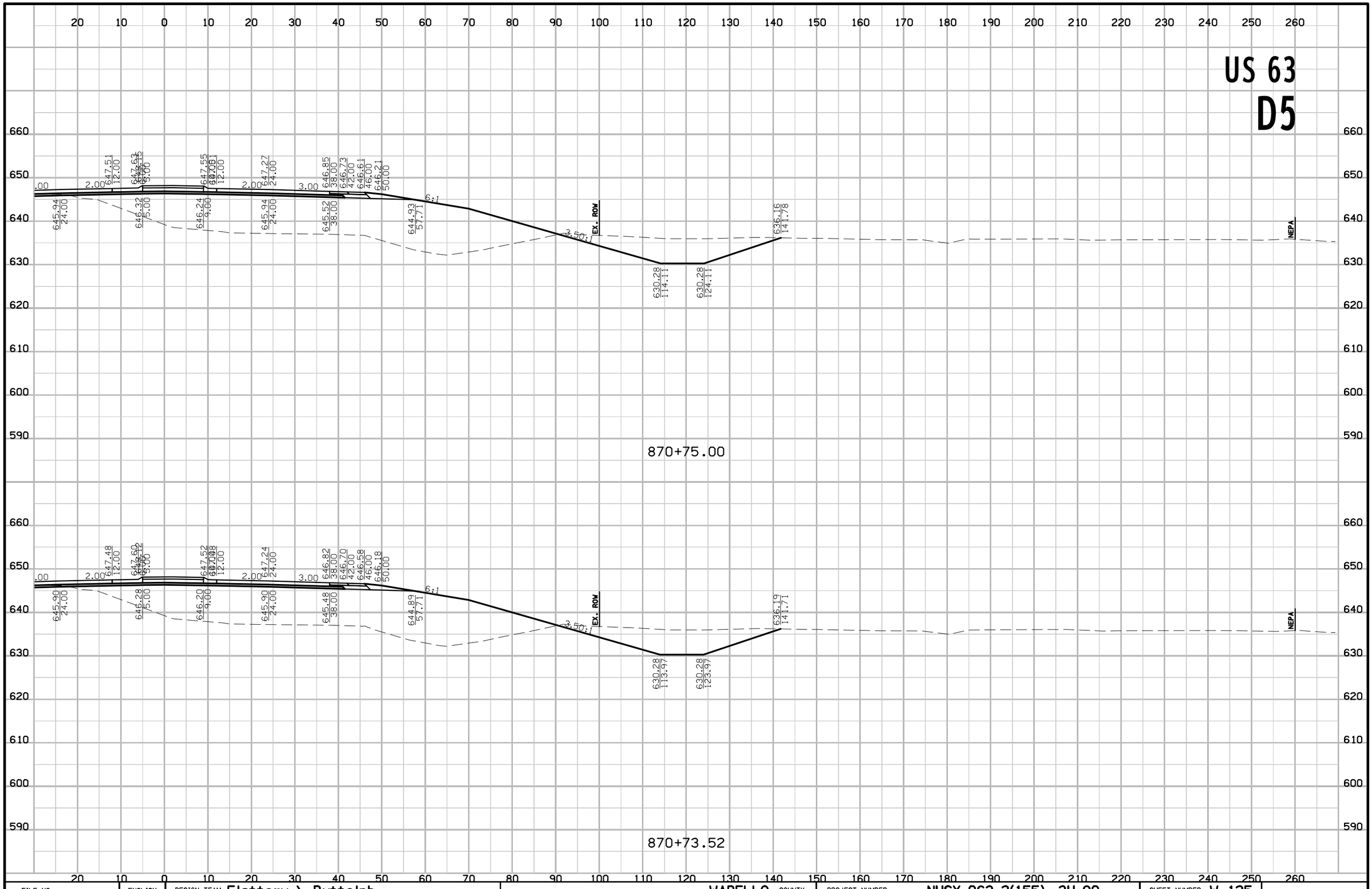
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.124

8:46:48 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

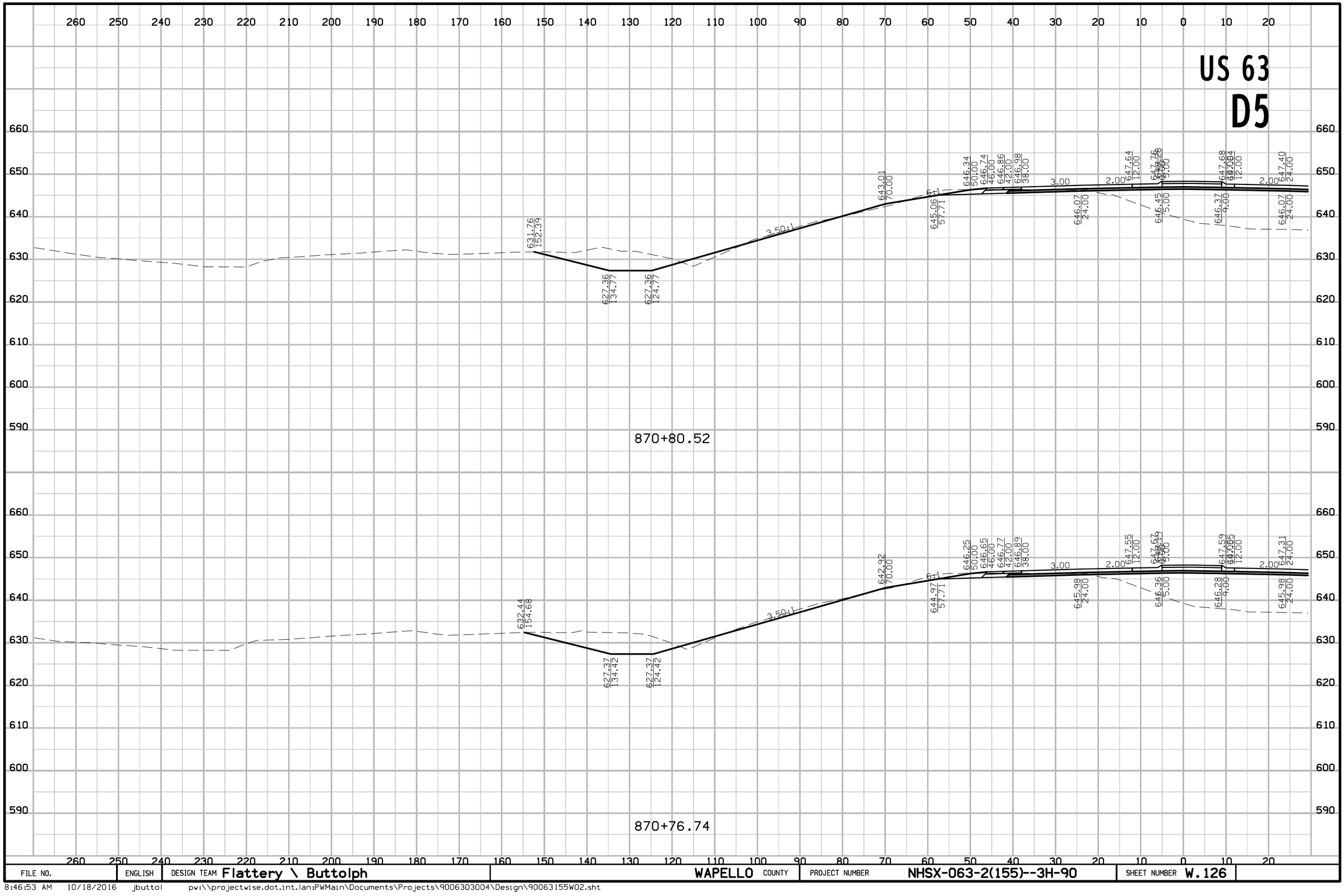
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.125

8:46:51 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

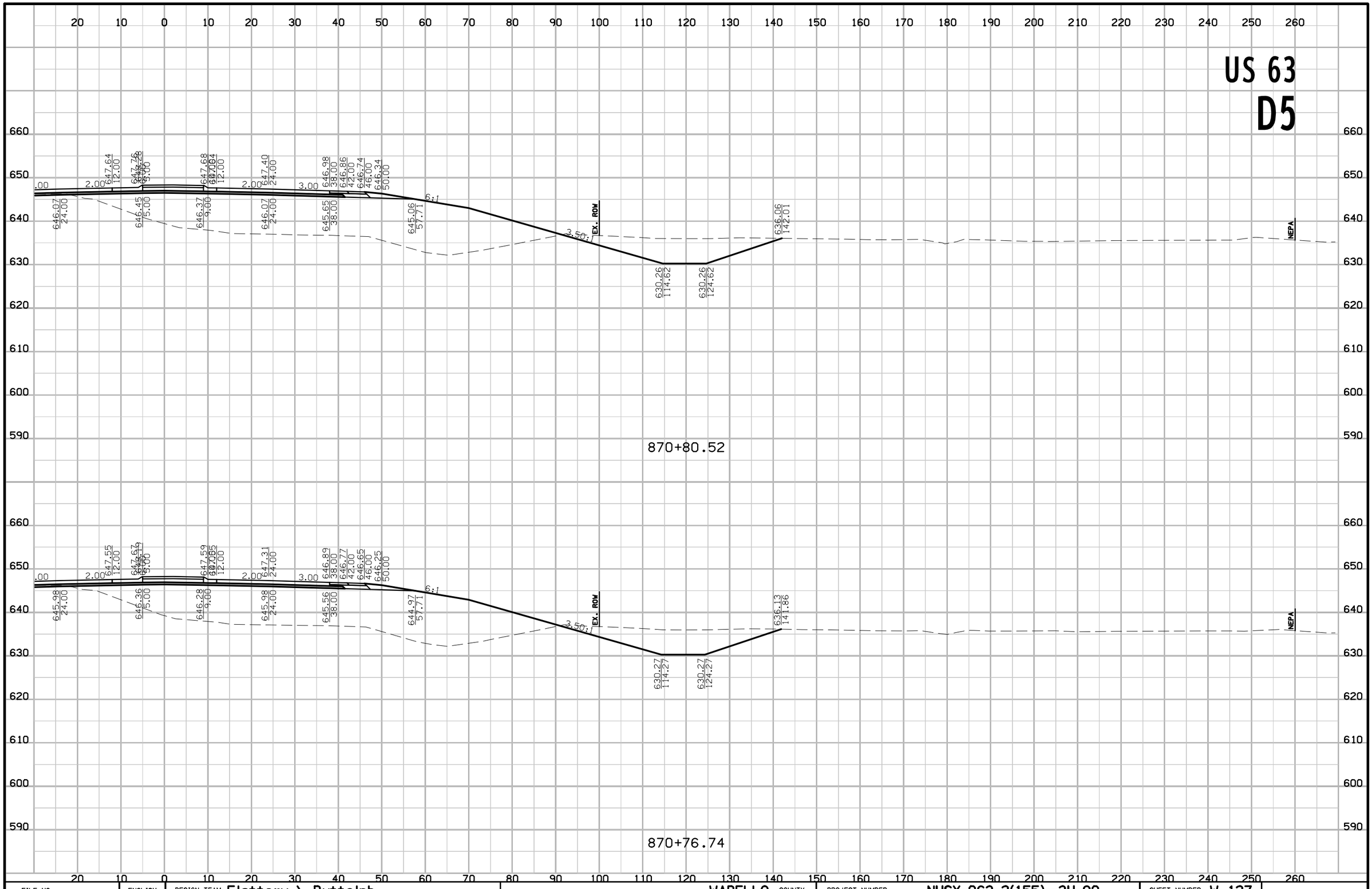
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.126

8:46:53 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

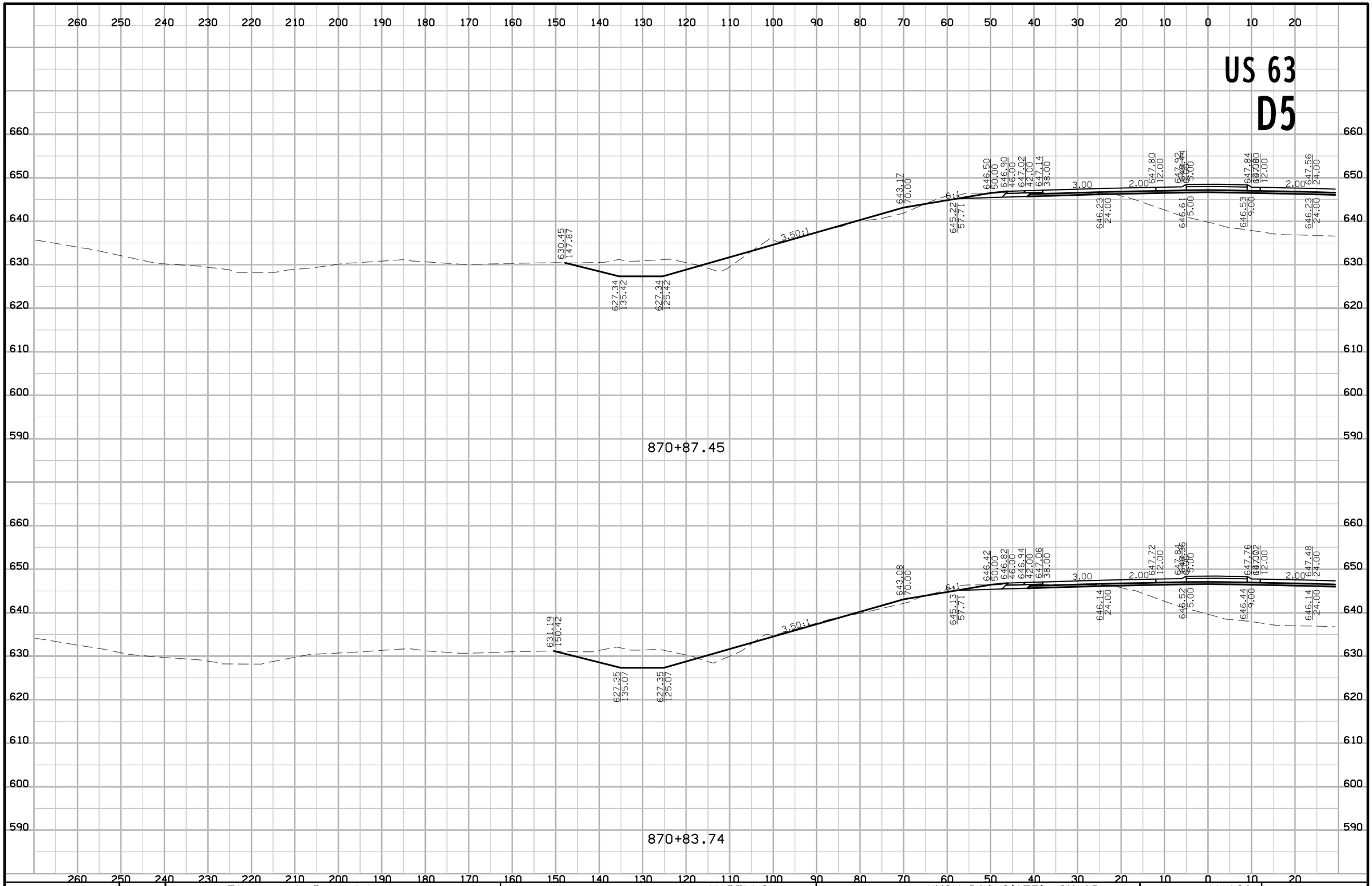
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.127

8:46:55 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

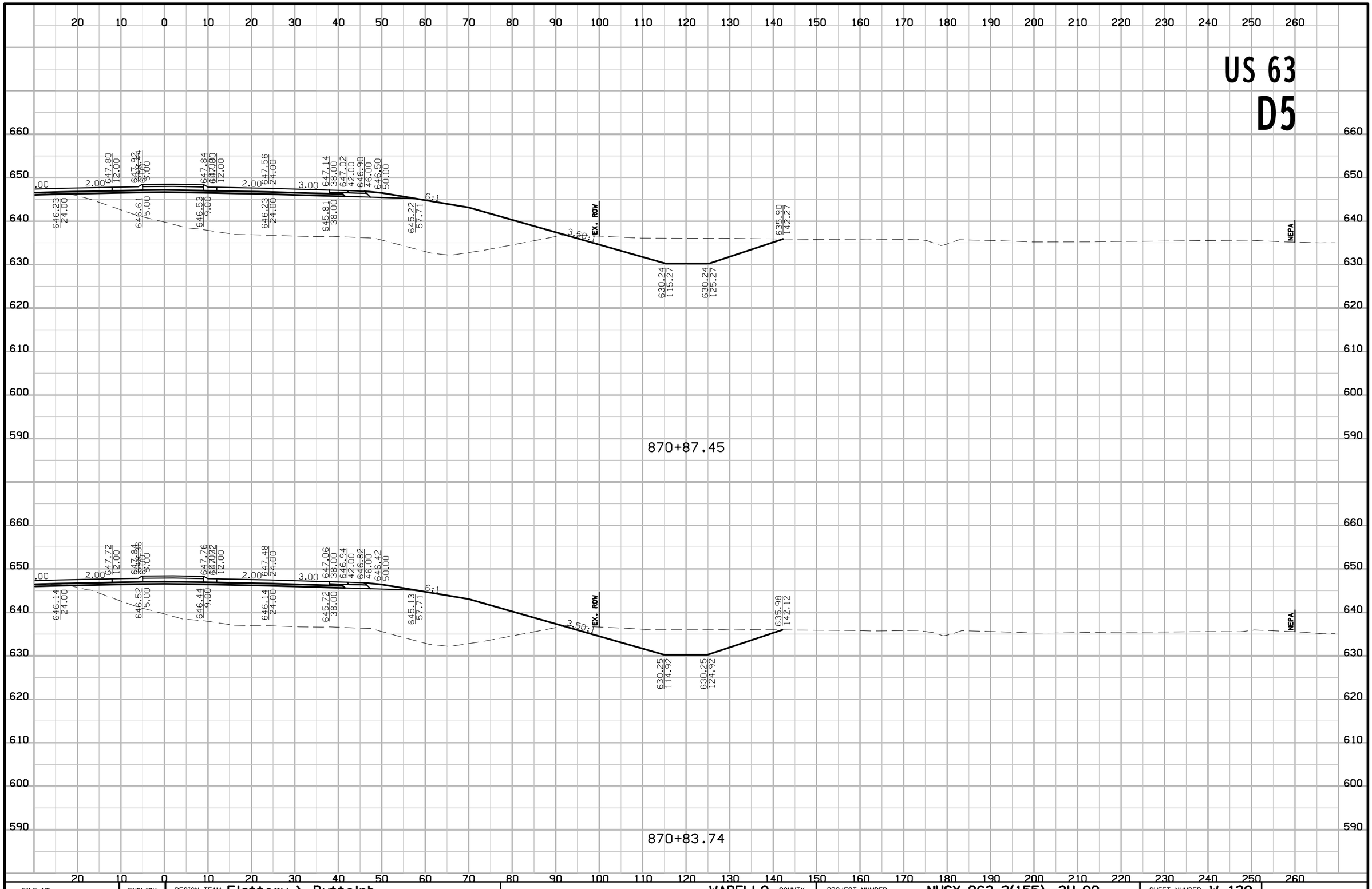
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.128

8:46:57 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

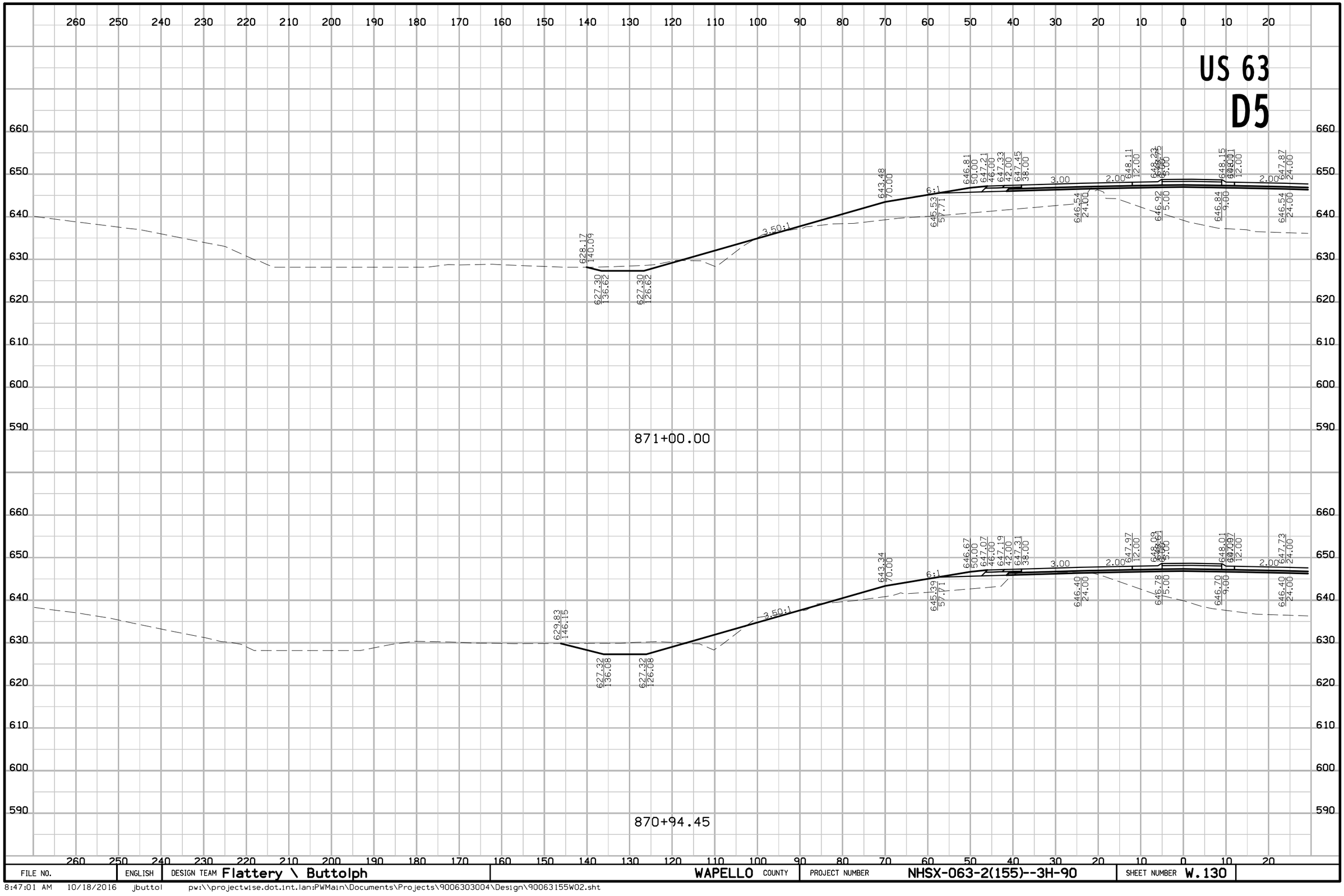
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.129

8:46:59 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

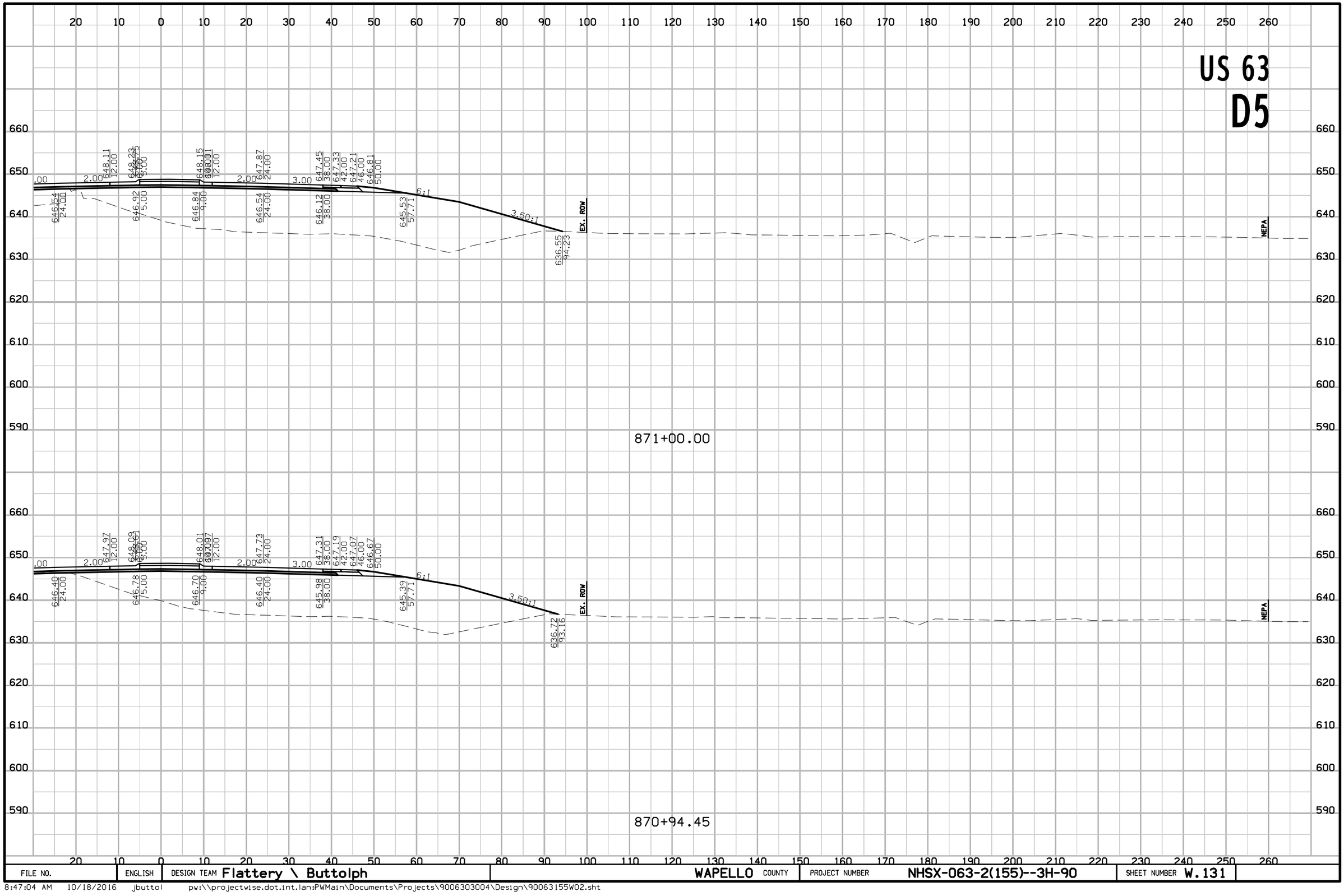
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.130

8:47:01 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

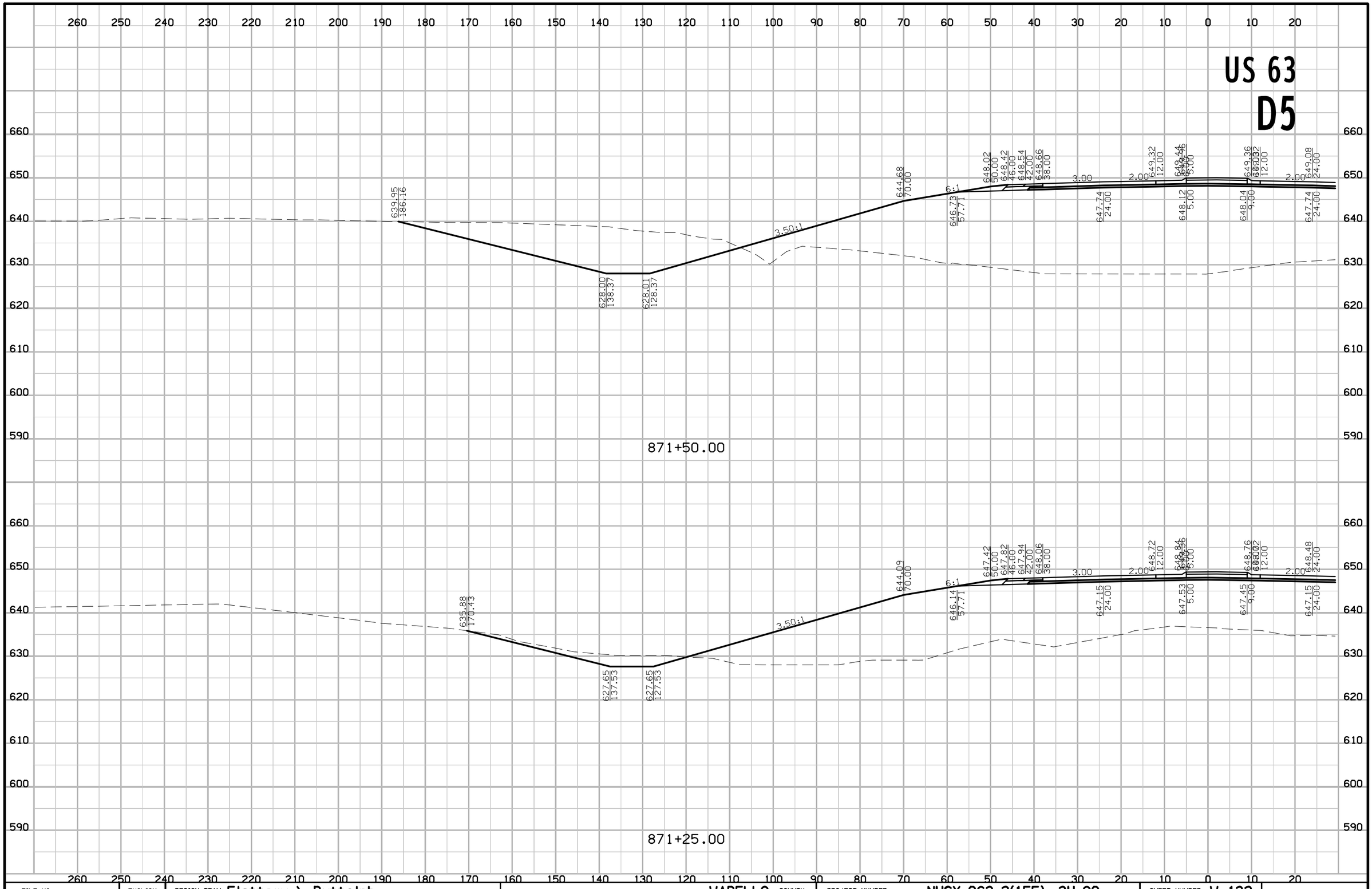
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.131

8:47:04 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

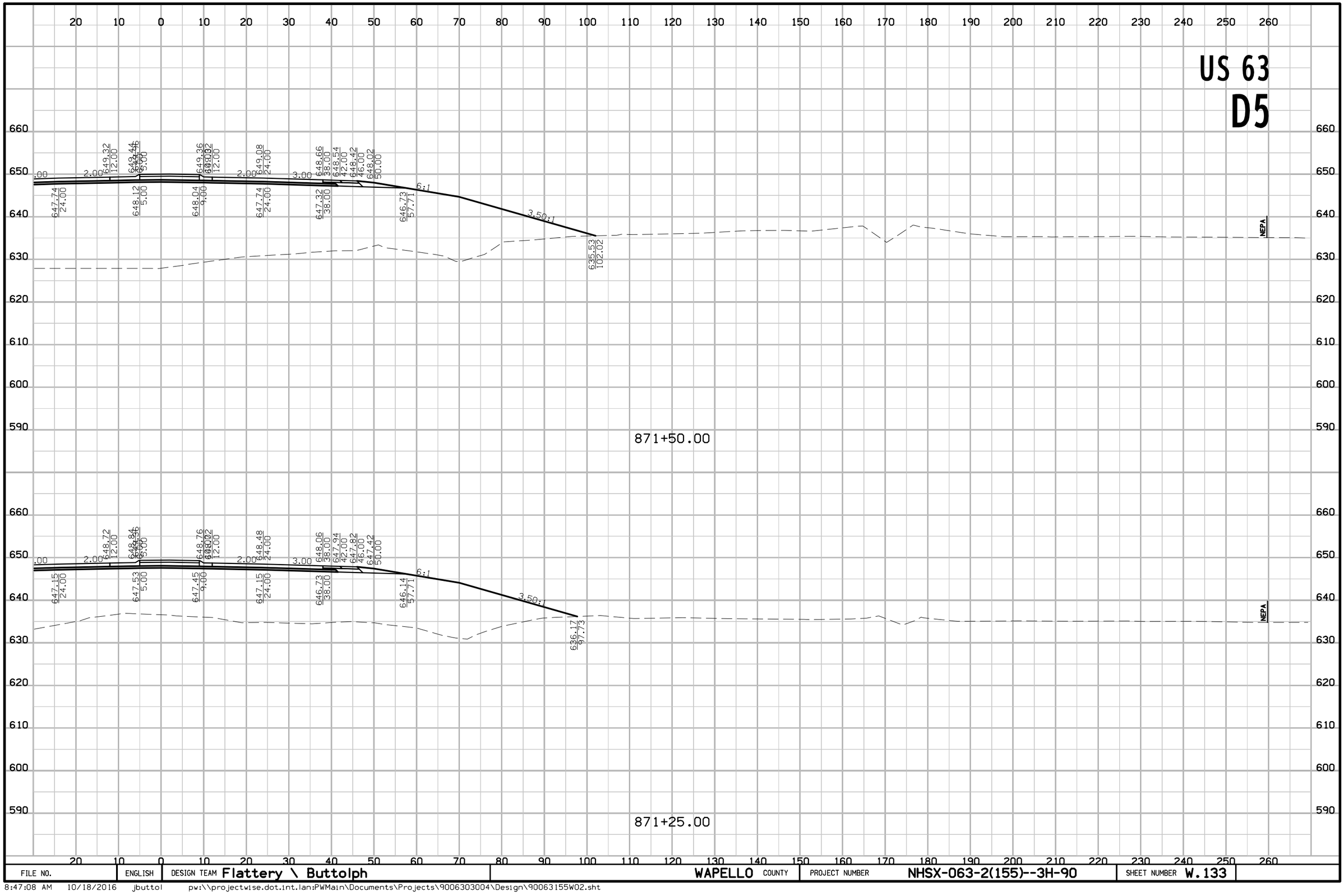
US 63
D5

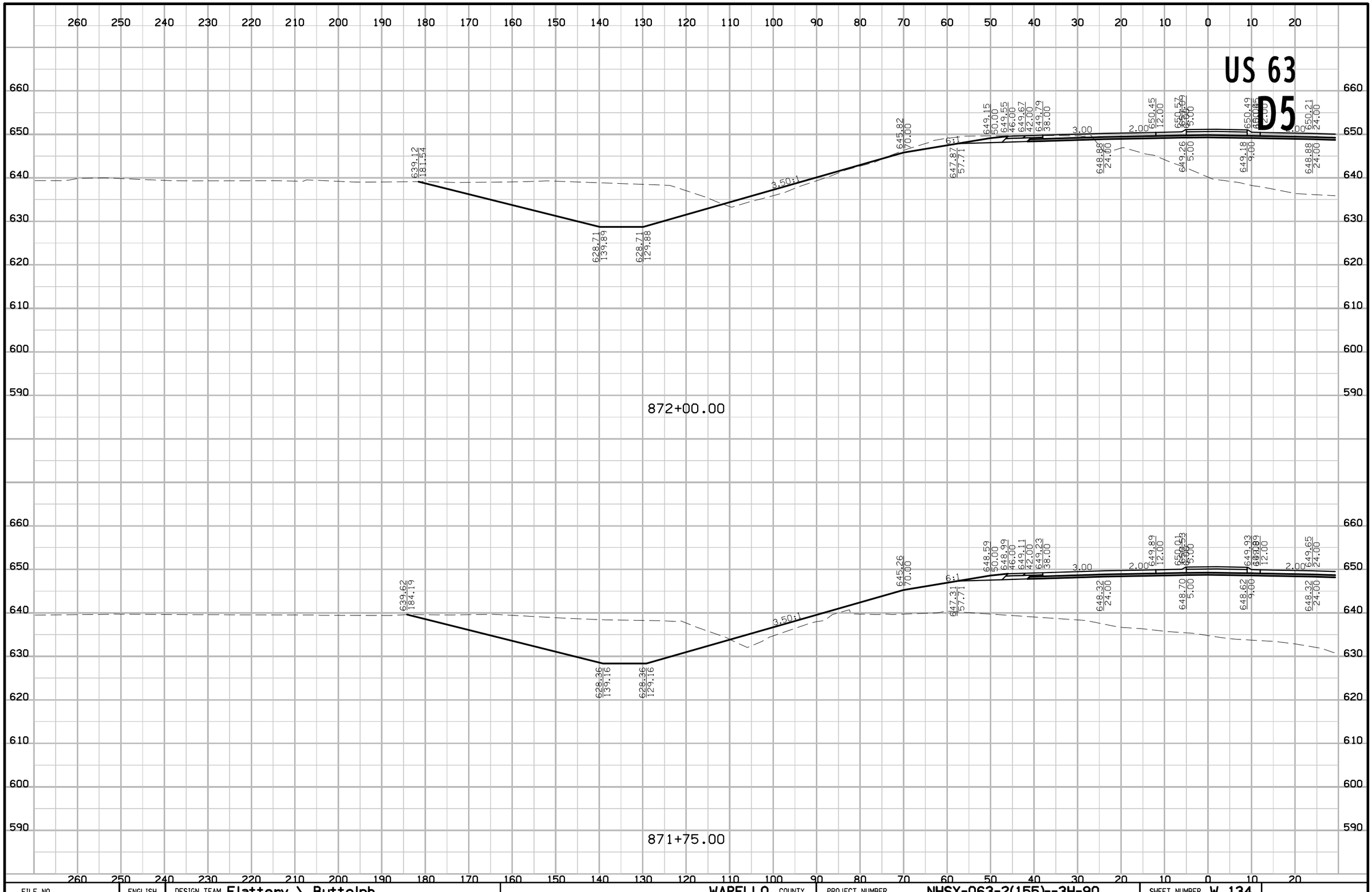


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.132

8:47:06 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

US 63
D5

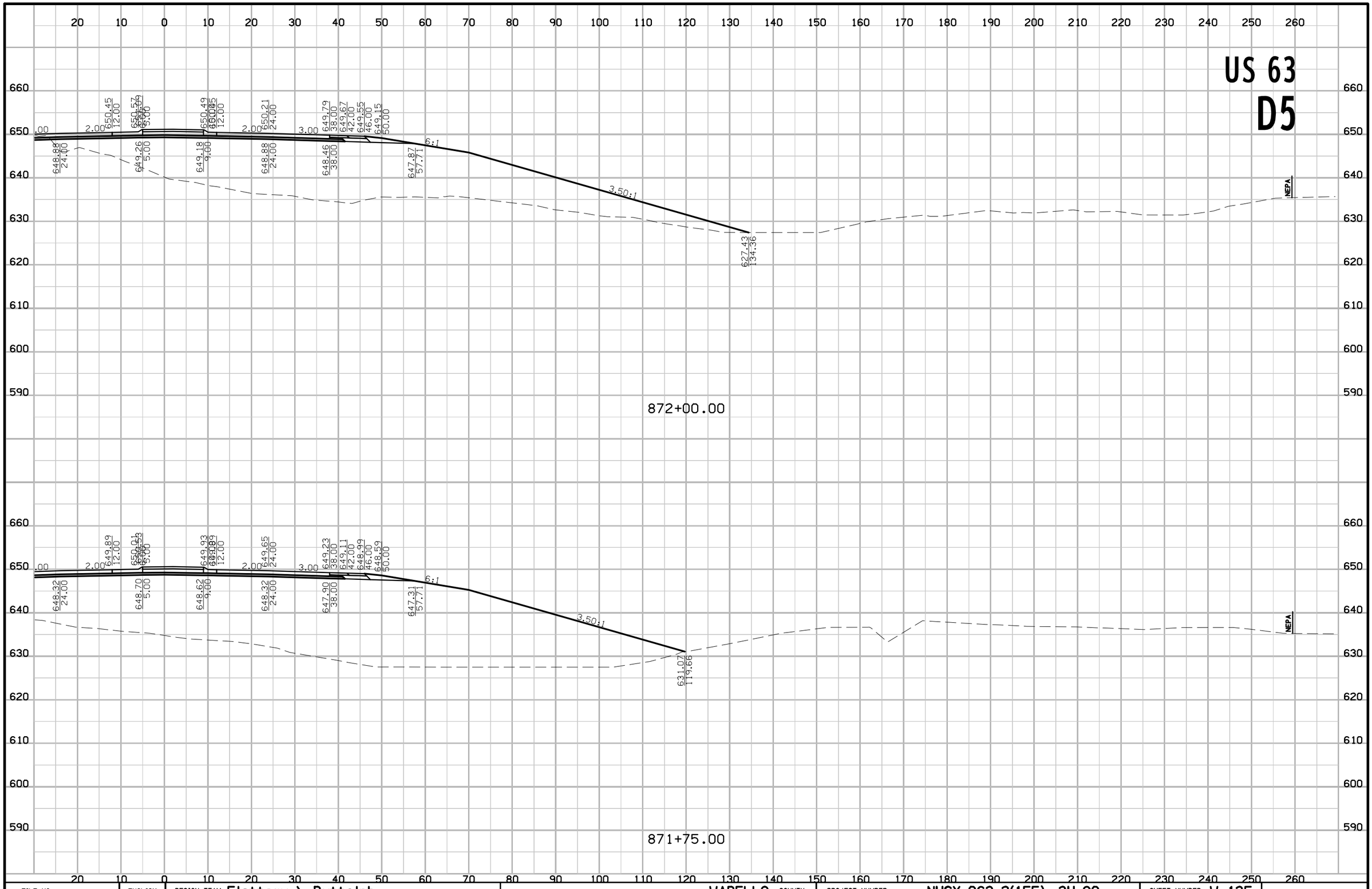

20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260
660 650 640 630 620 610 600 590
.00
2.00
647.74
24.00
649.32
12.00
649.44
649.56
649.68
649.80
649.92
650.04
5.00
648.12
5.00
649.36
649.48
649.60
649.72
649.84
649.96
650.08
650.20
650.32
650.44
650.56
650.68
650.80
650.92
651.04
651.16
651.28
651.40
651.52
651.64
651.76
651.88
652.00
652.12
652.24
652.36
652.48
652.60
652.72
652.84
652.96
653.08
653.20
653.32
653.44
653.56
653.68
653.80
653.92
654.04



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.134

8:47:11 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

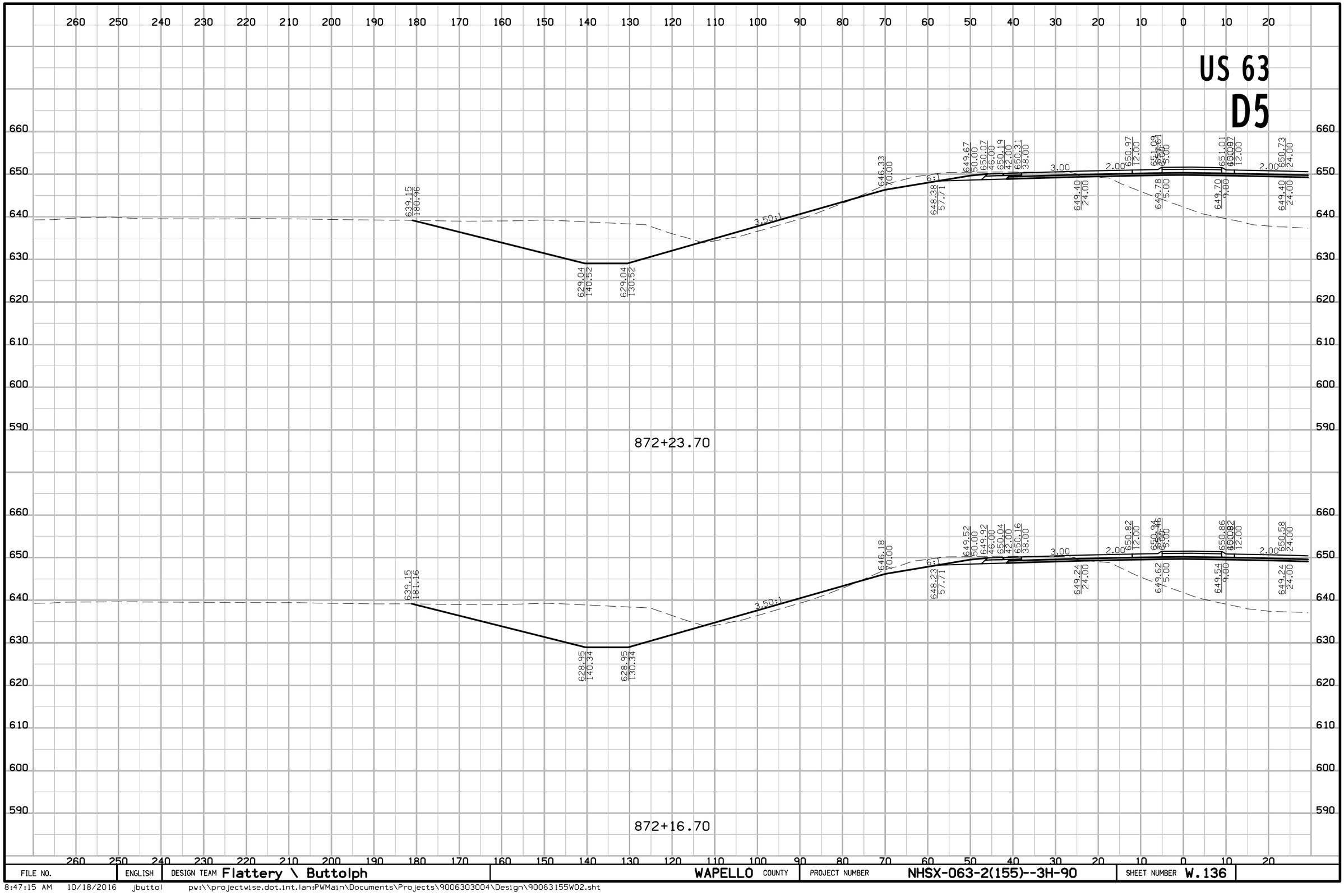
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.135

8:47:13 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

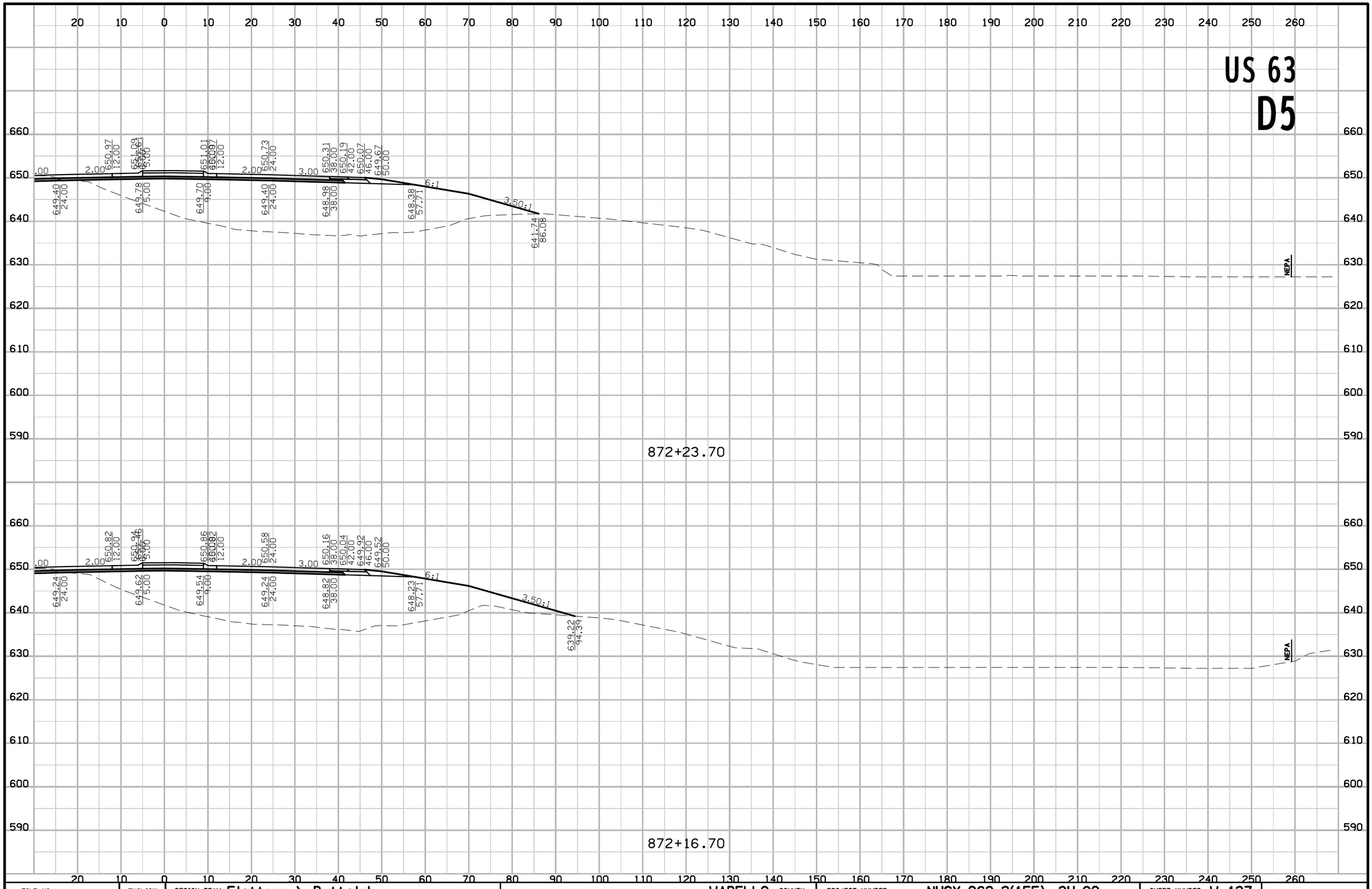
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.136

8:47:15 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

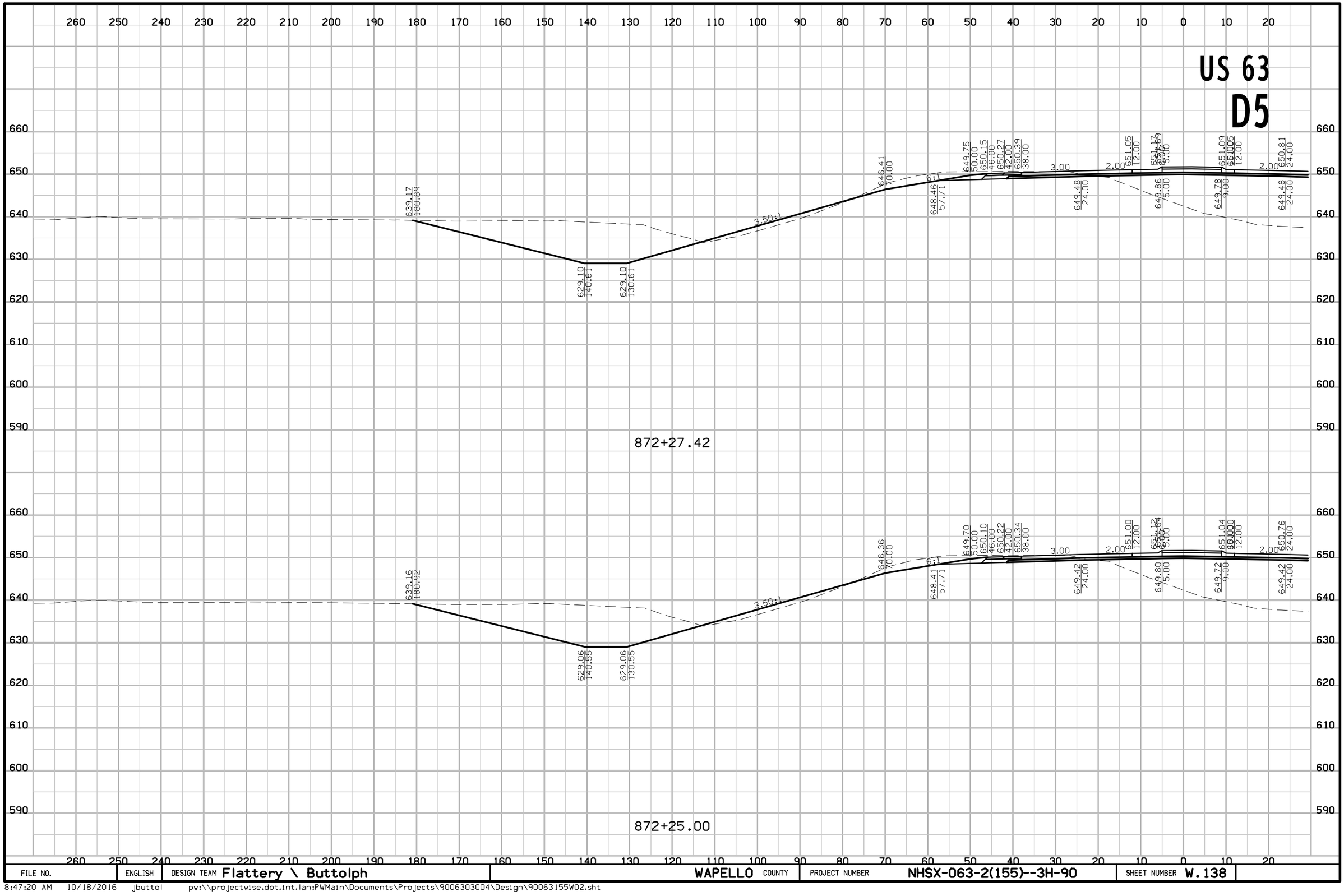
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.137

8:47:17 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

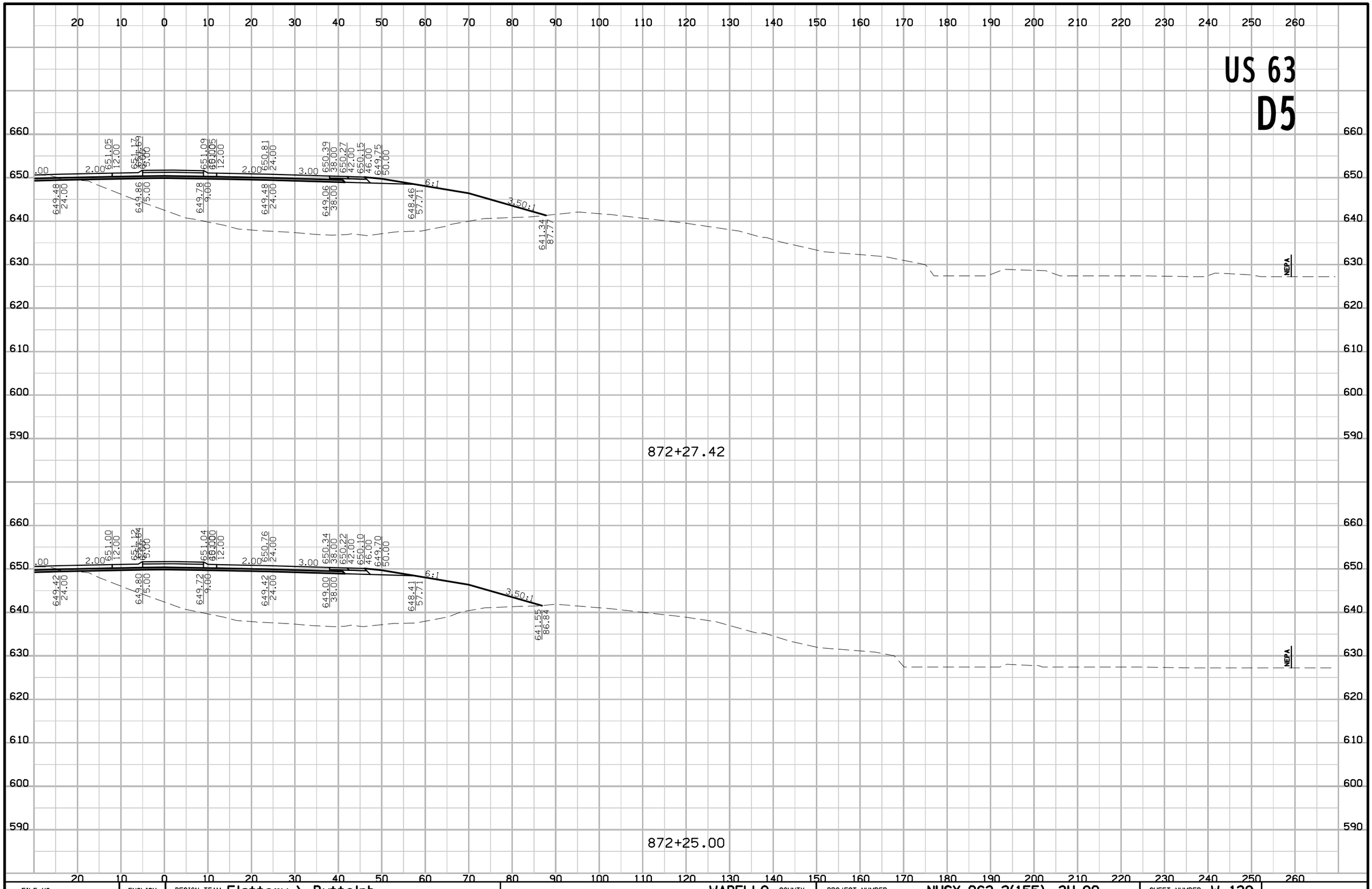
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.138

8:47:20 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

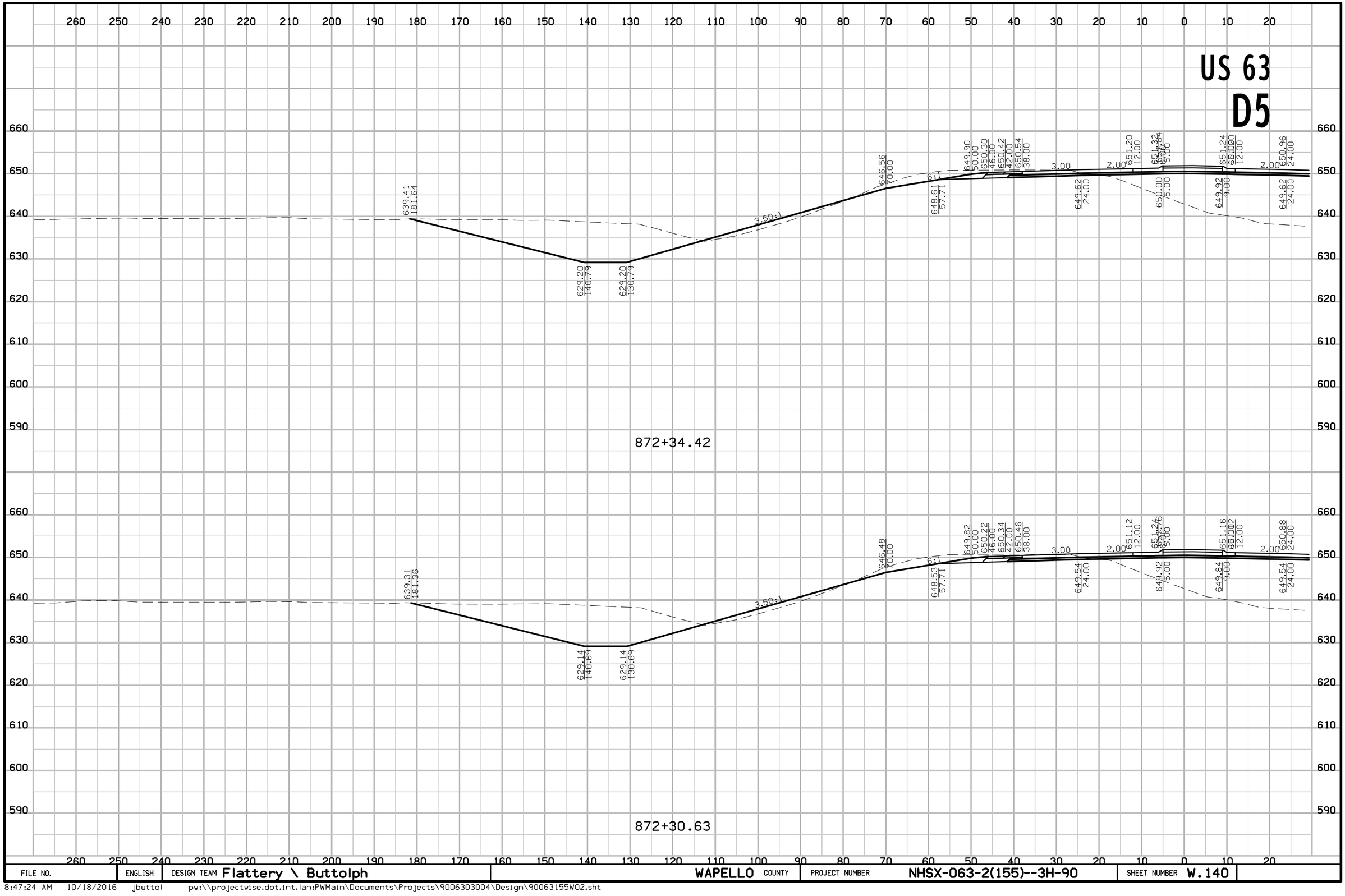
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.139

8:47:22 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

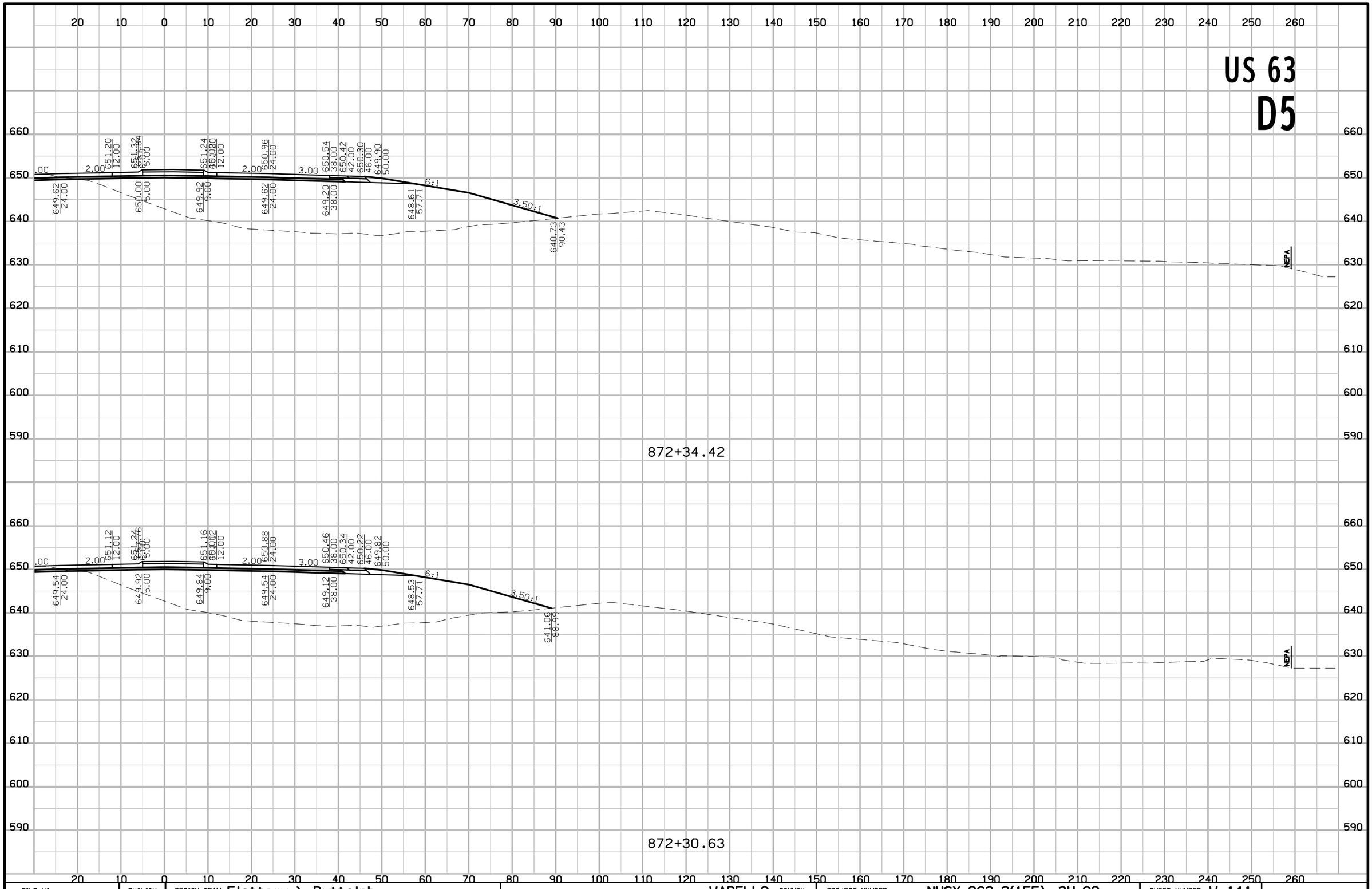
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.140

8:47:24 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

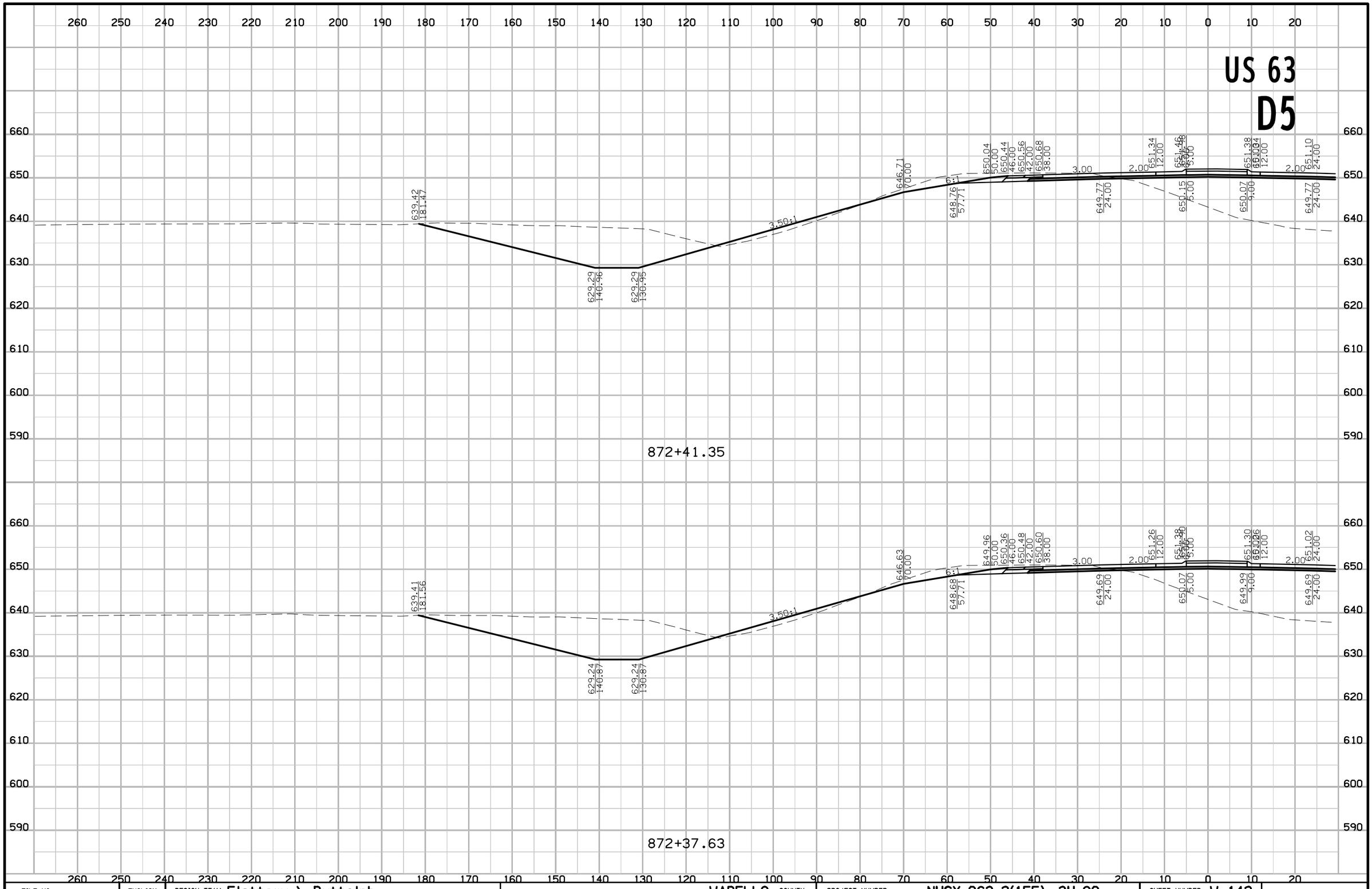
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.141

8:47:26 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

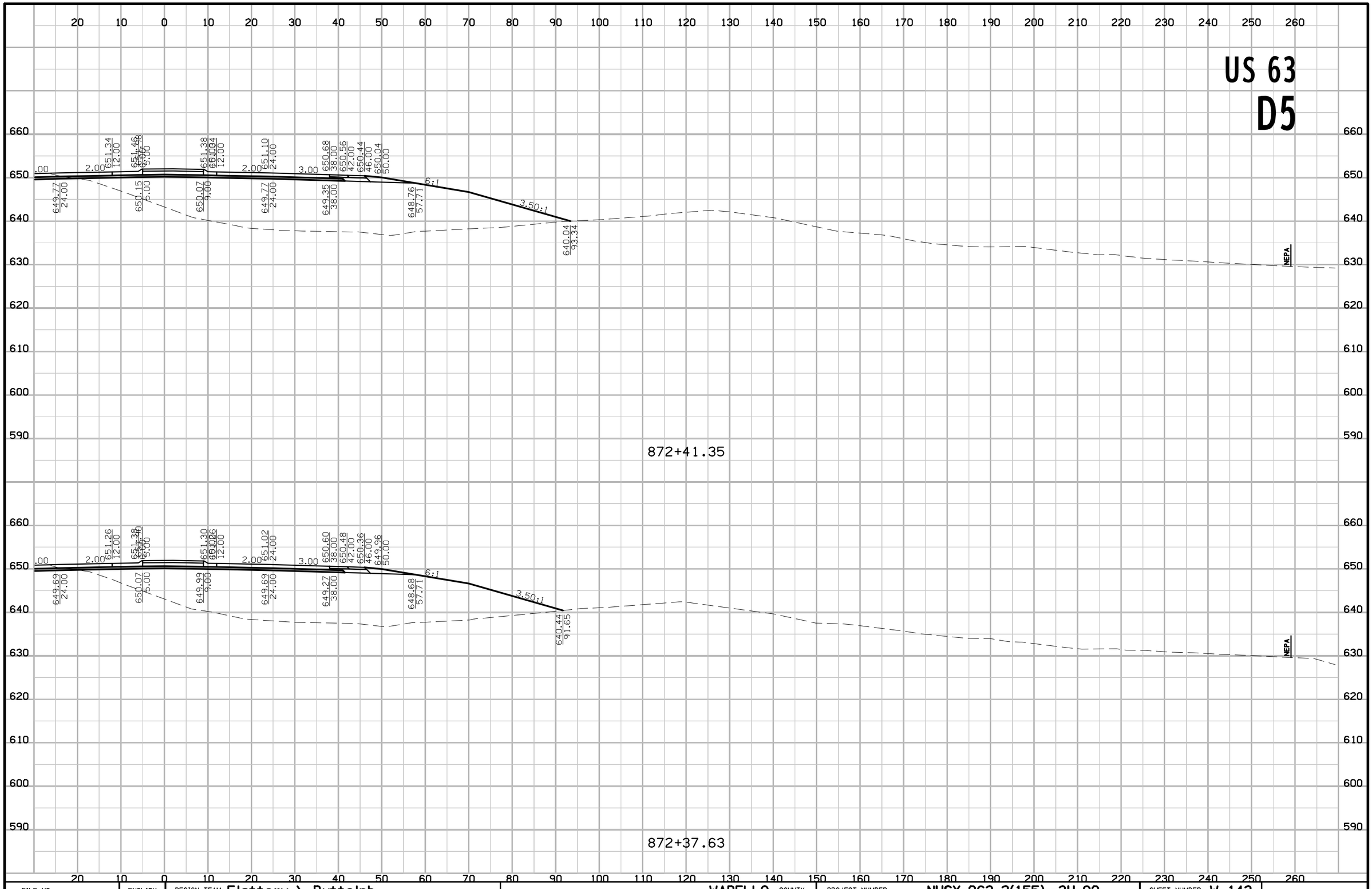
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.142

8:47:28 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

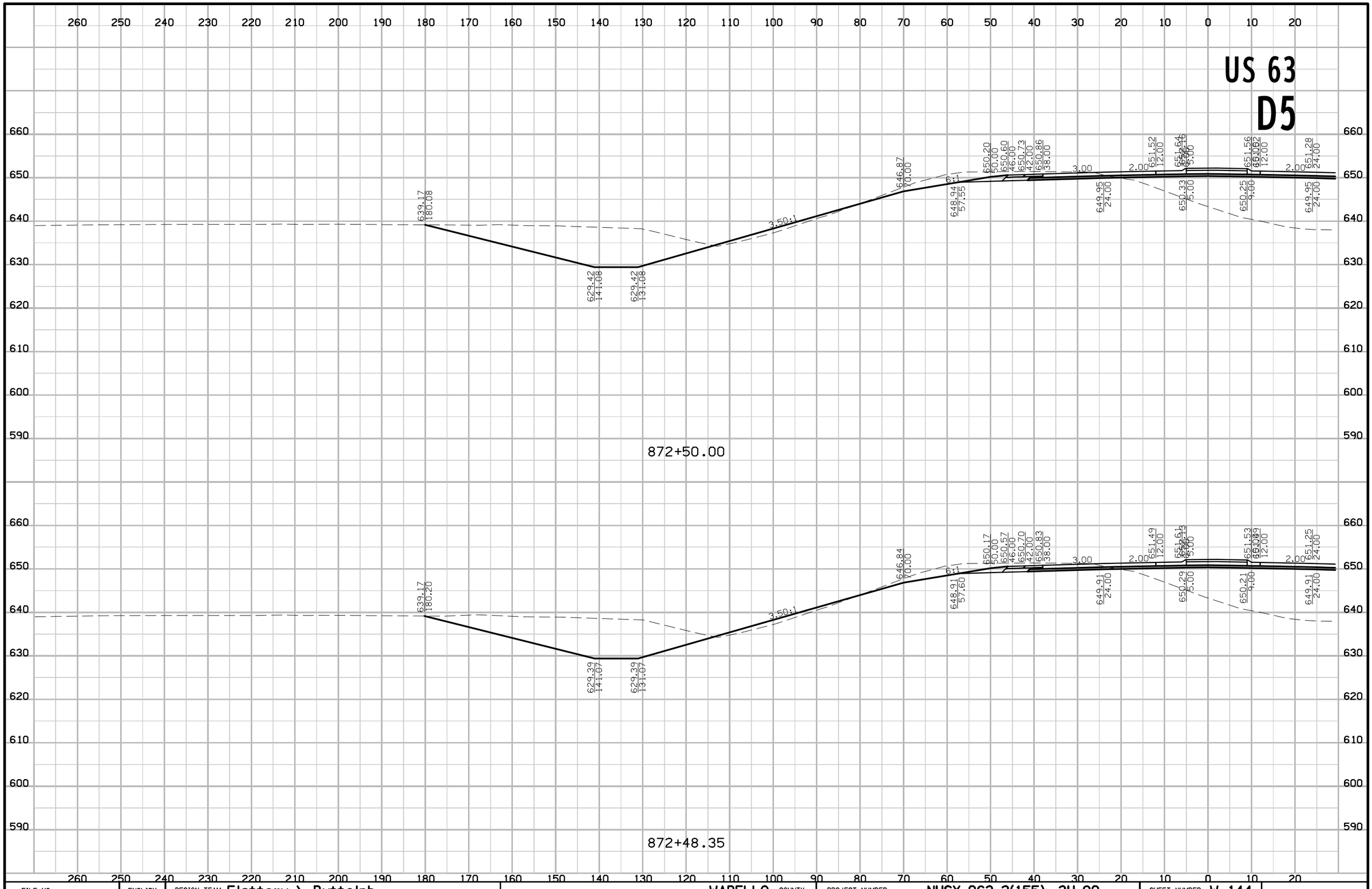
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.143

8:47:30 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

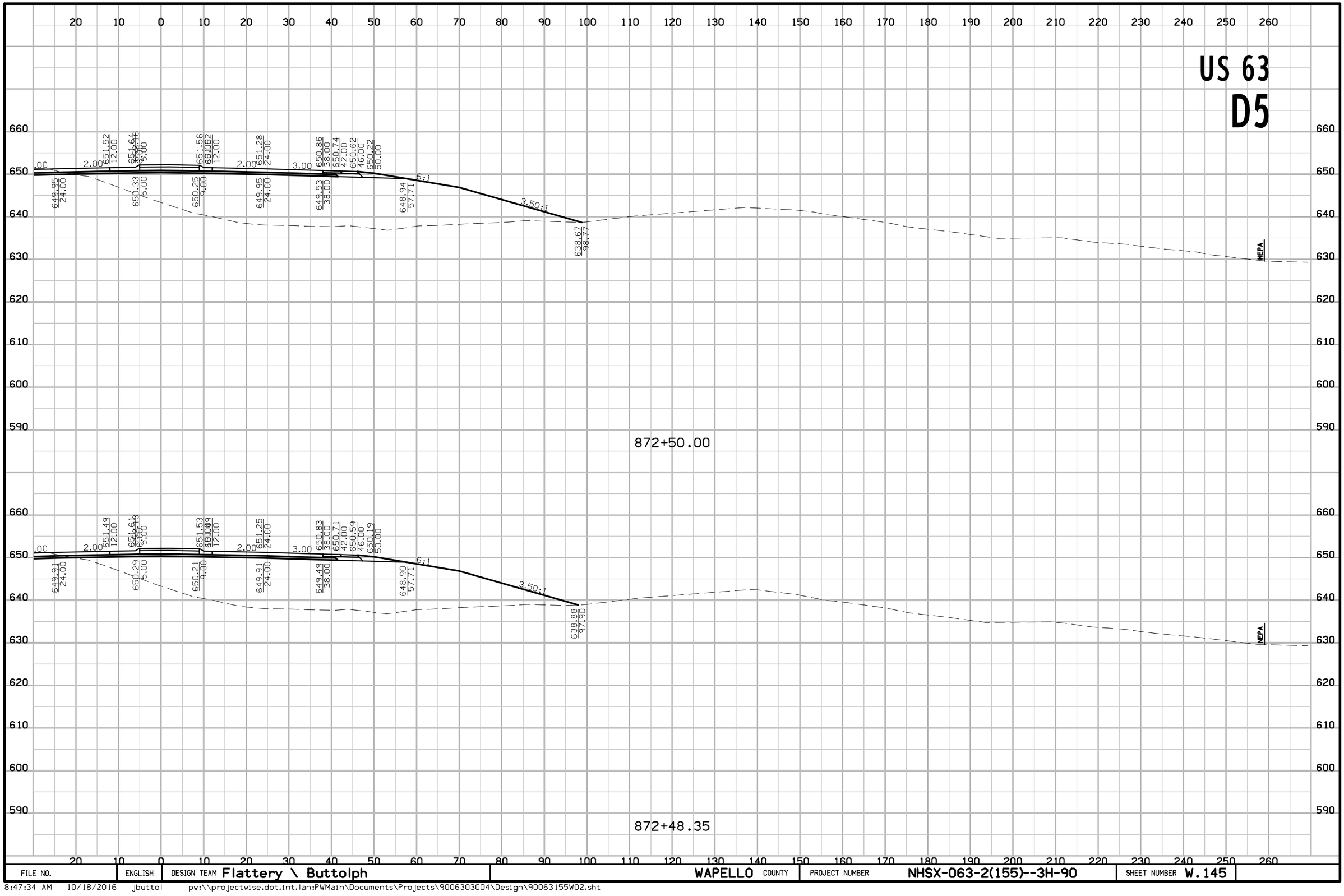
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.144

8:47:32 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

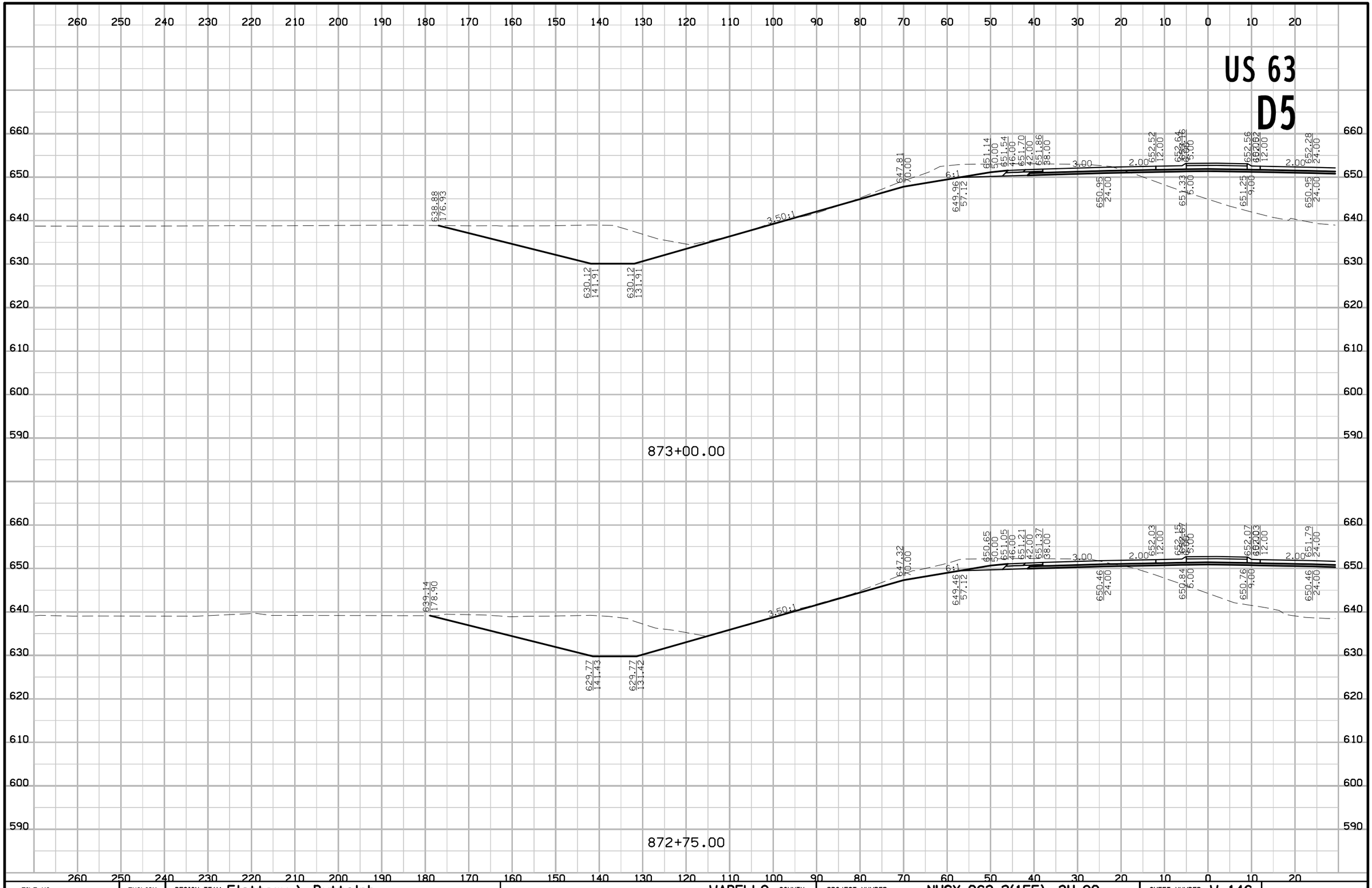
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.145

8:47:34 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

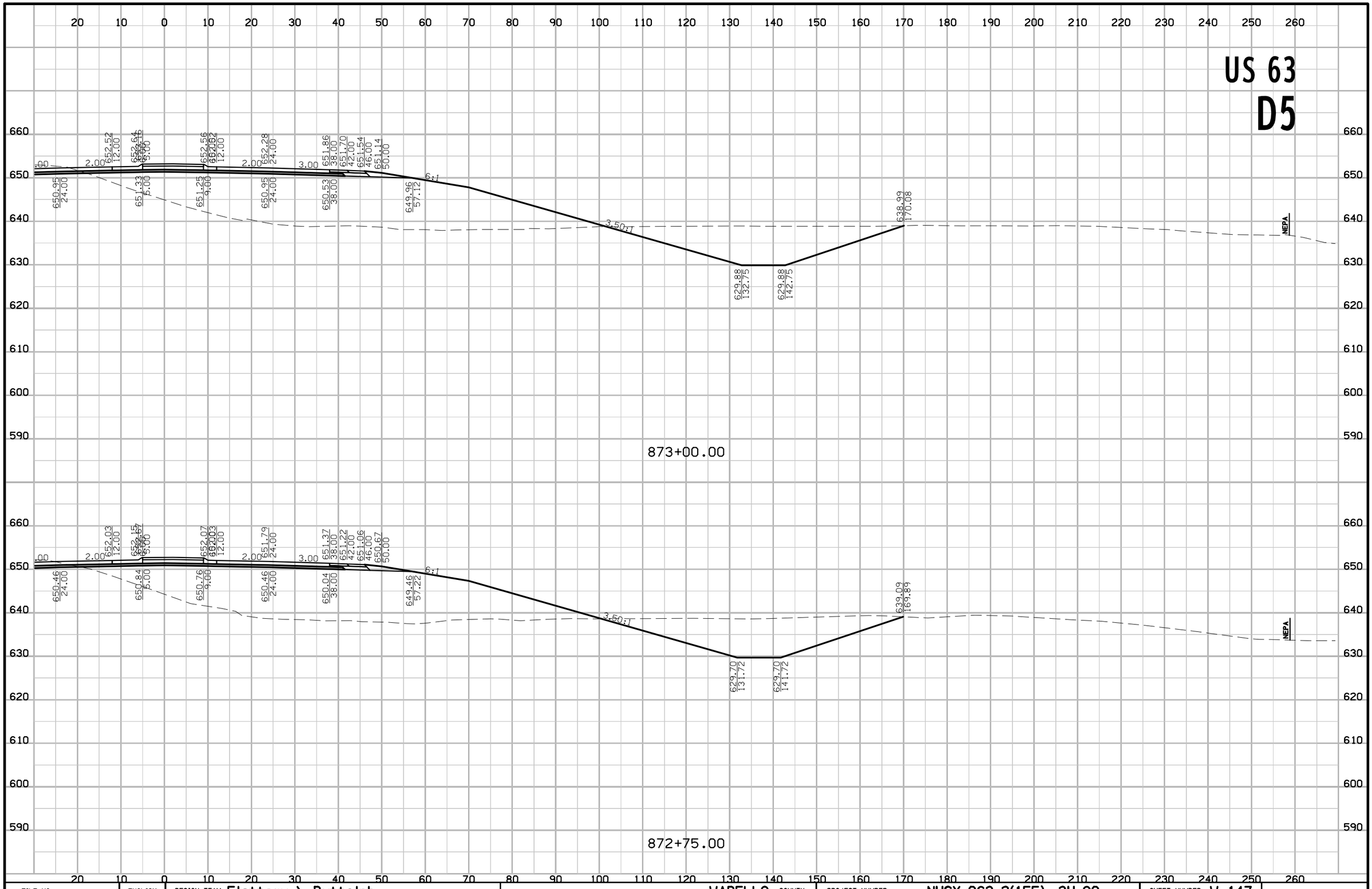
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.146

8:47:37 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

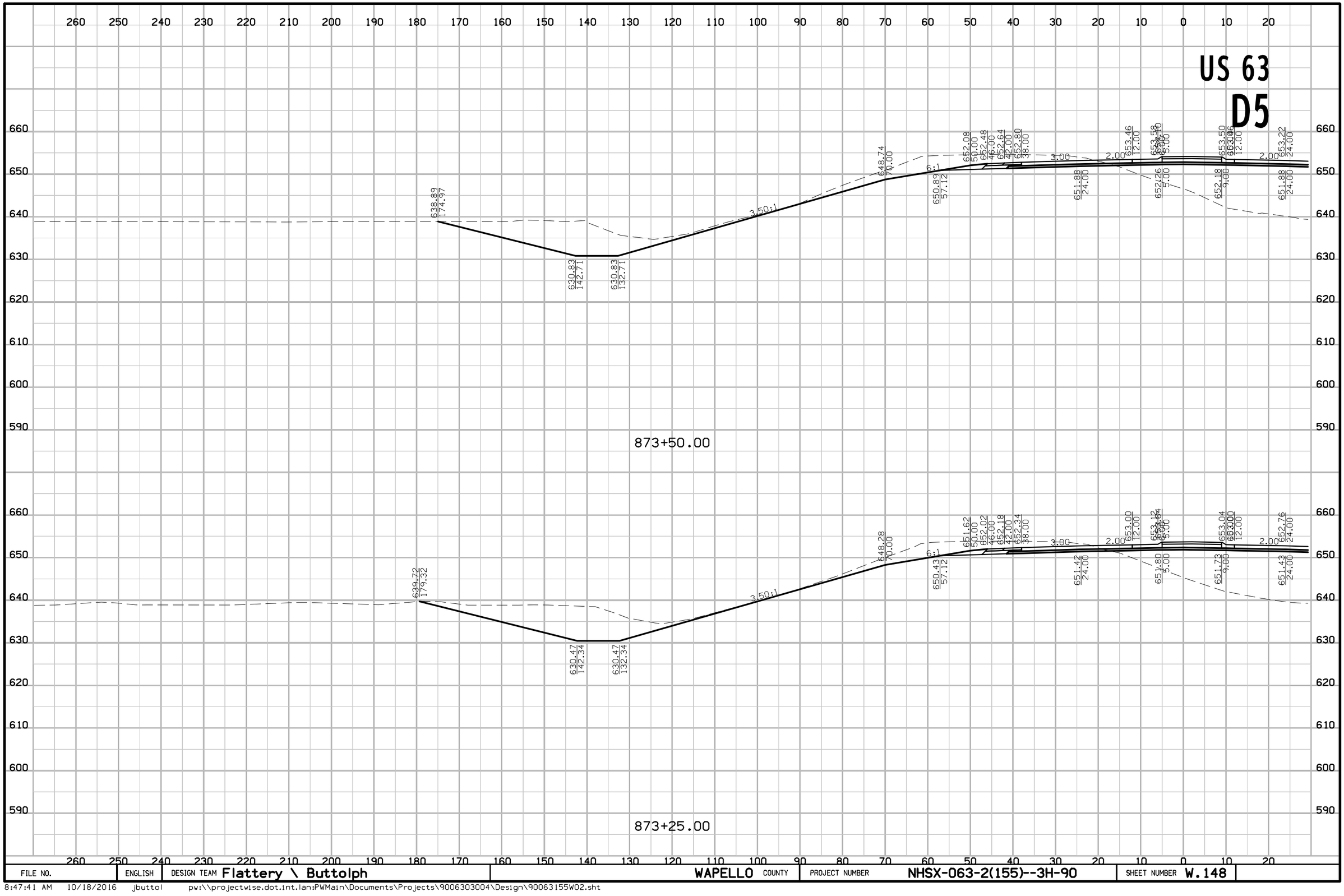
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.147

8:47:39 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

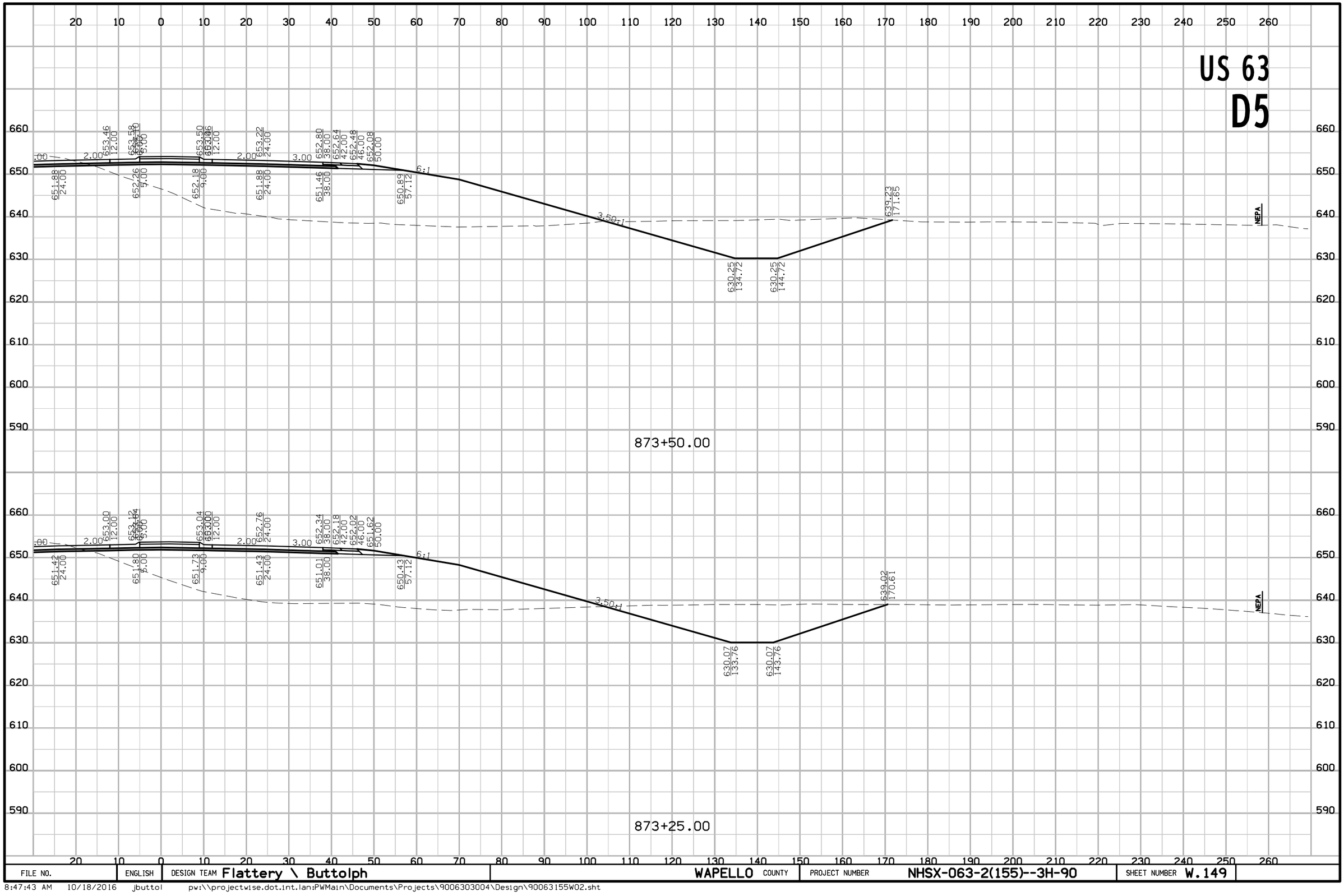
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.148

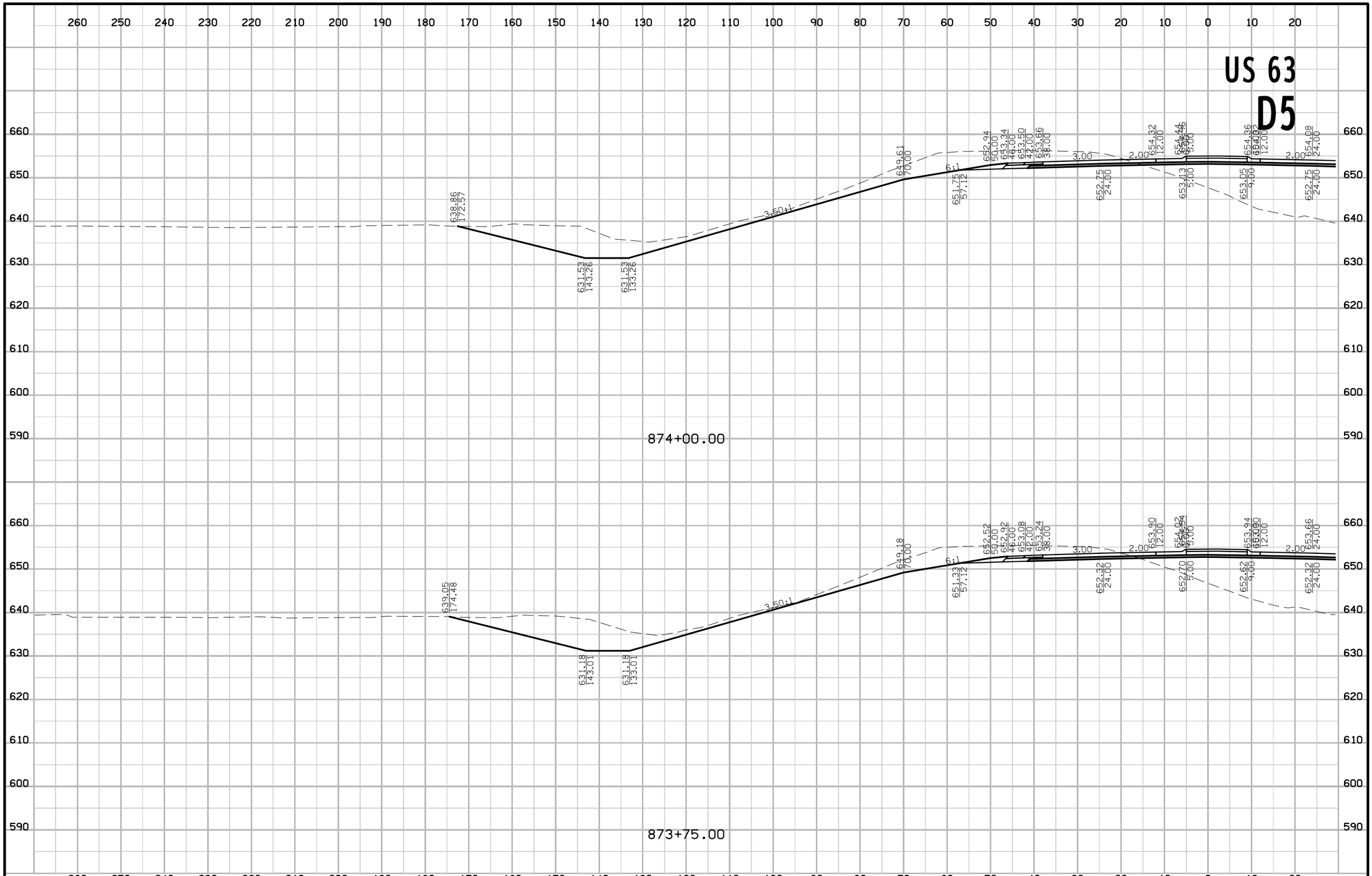
8:47:41 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.149

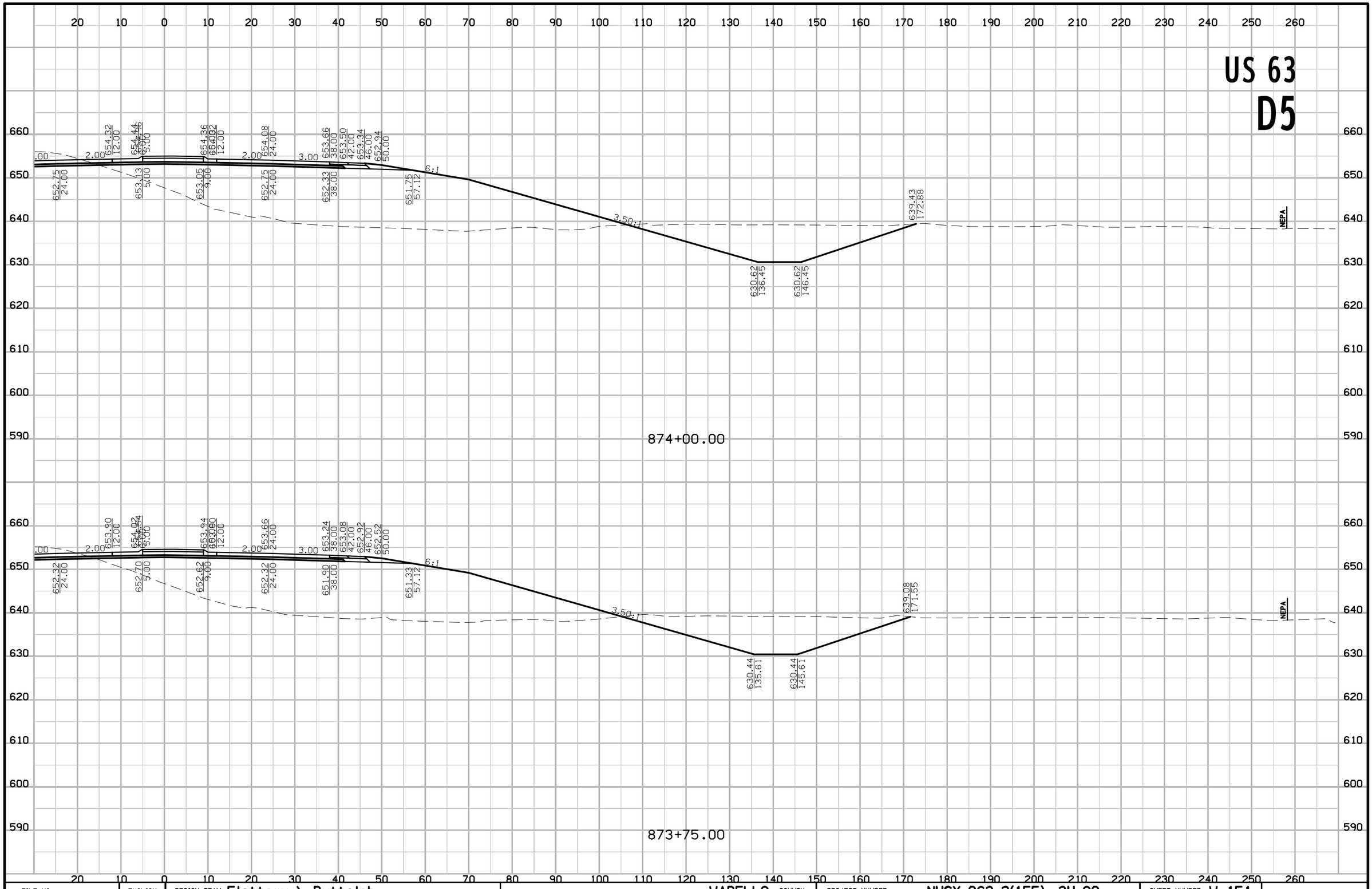
8:47:43 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.150

8:47:45 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

US 63
D5

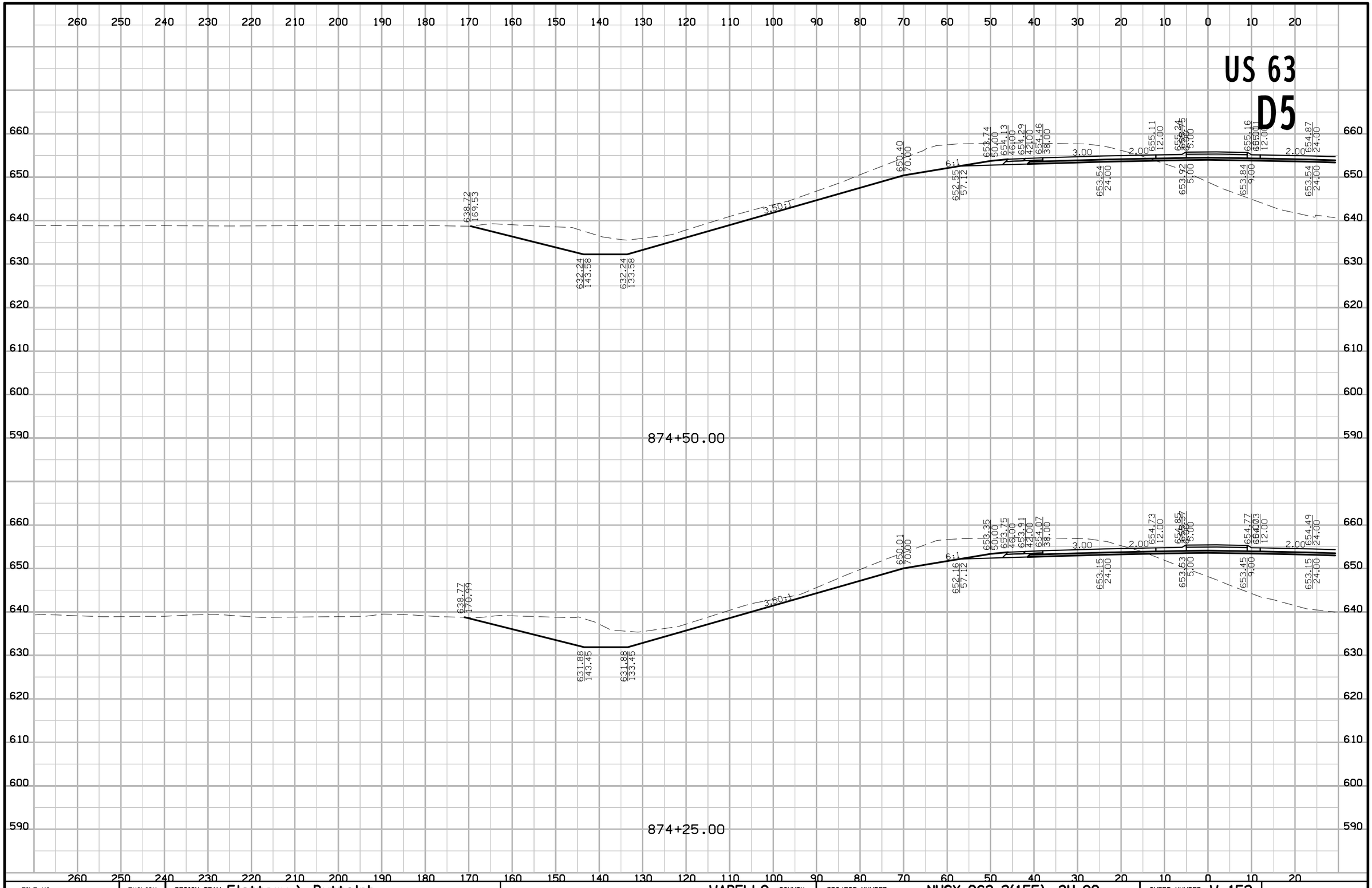


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.151

8:47:47 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

US 63

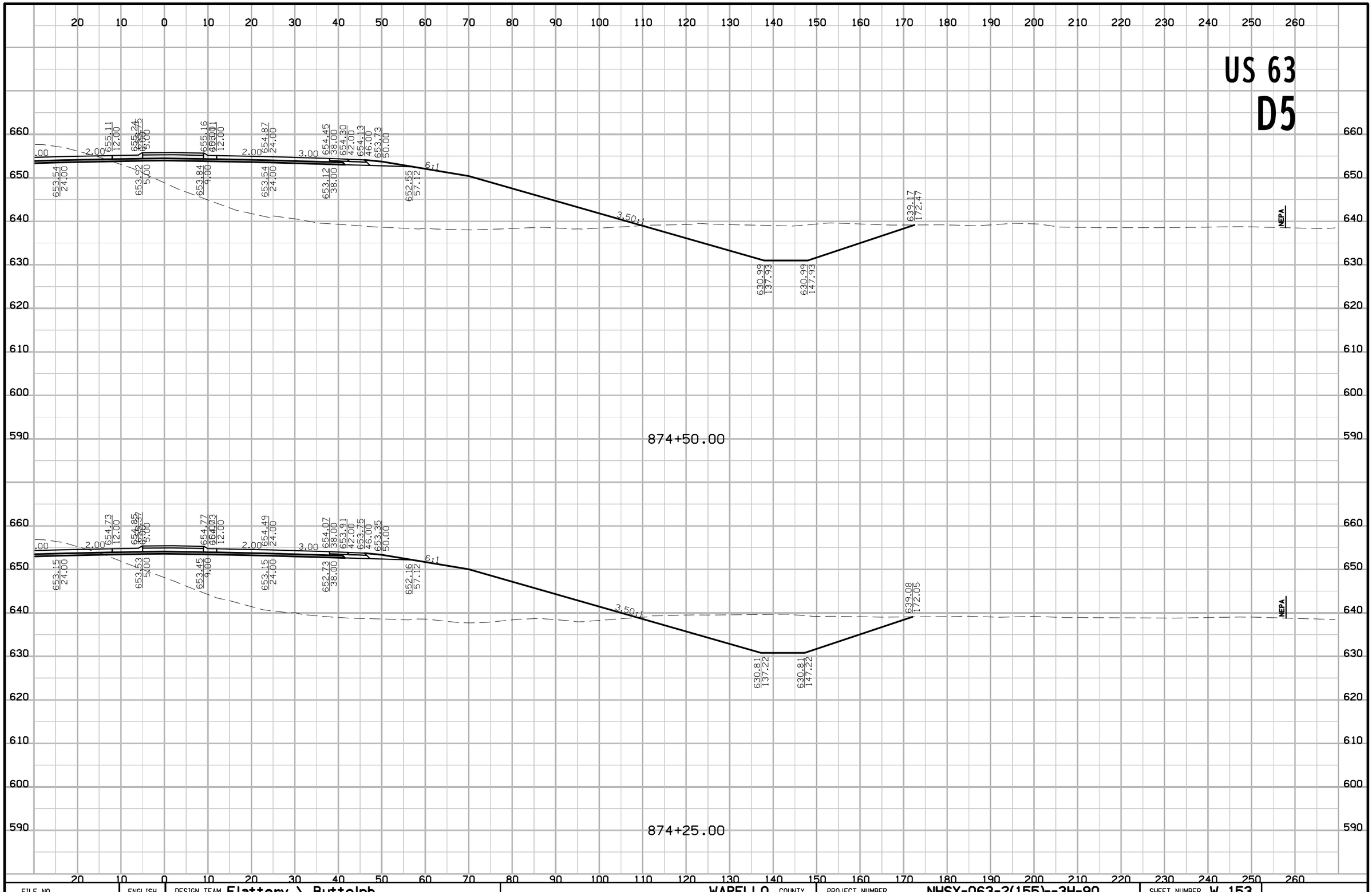
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.152

8:47:49 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

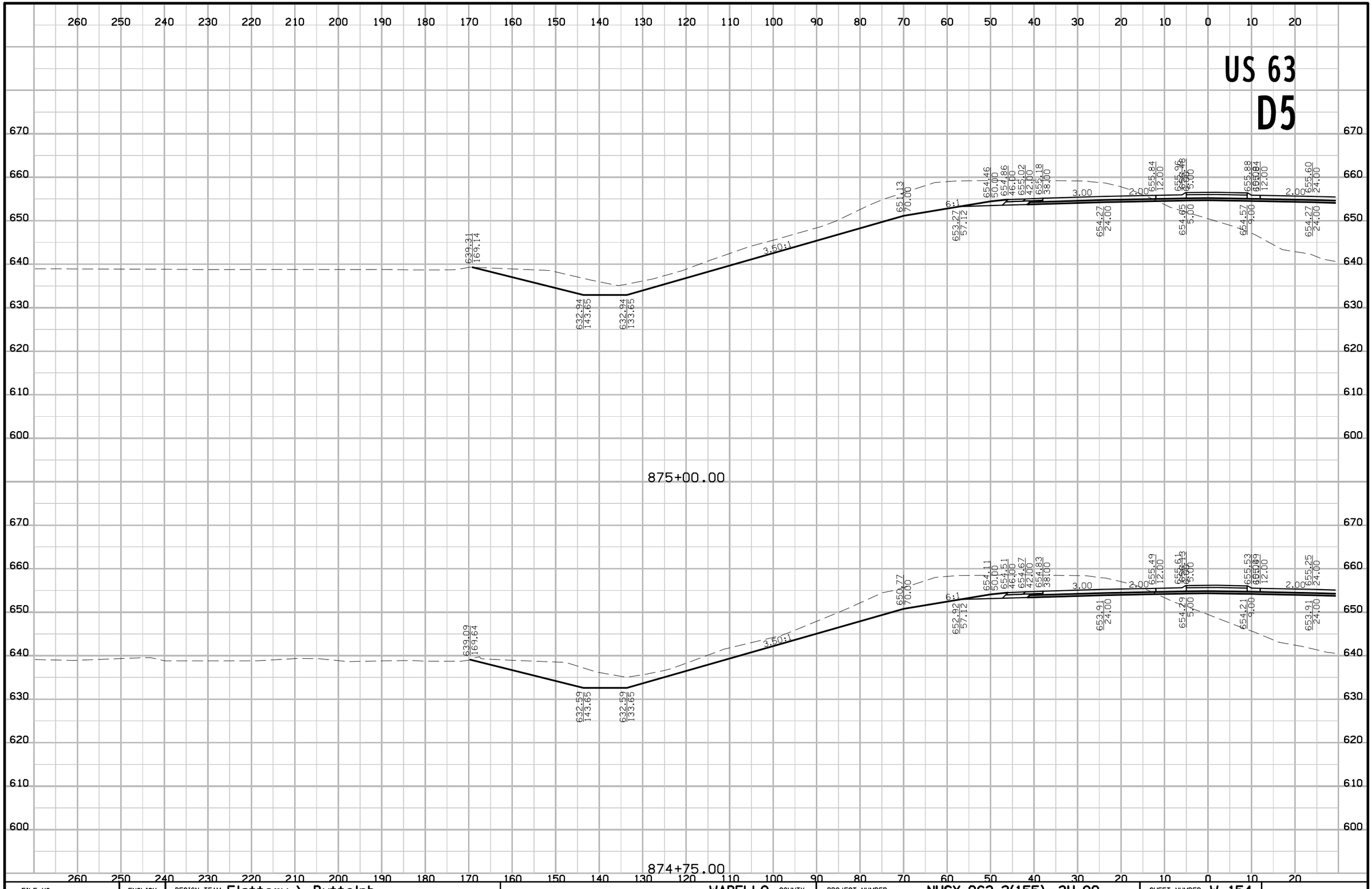
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.153

8:47:51 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

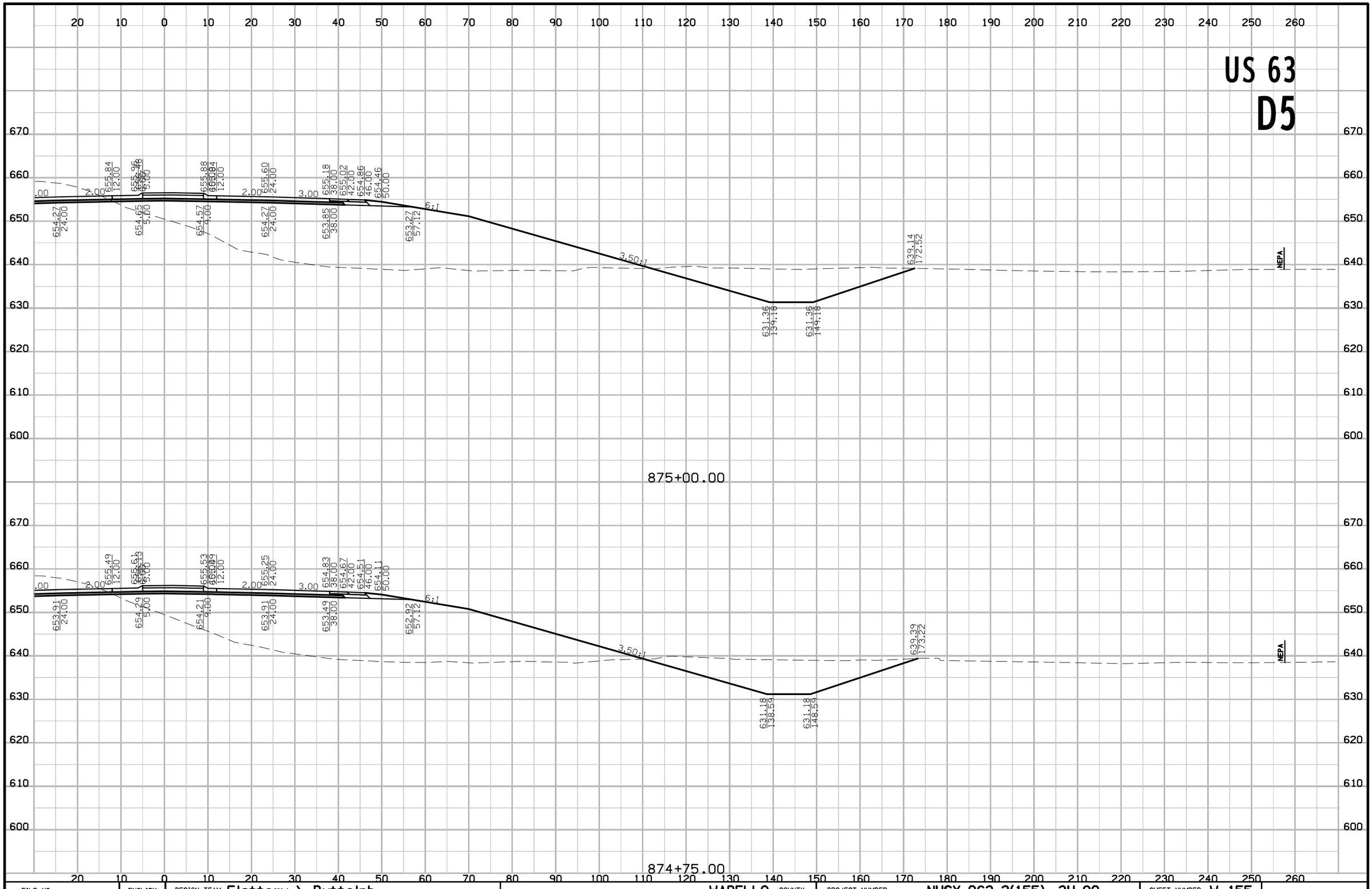
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.154

8:47:53 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

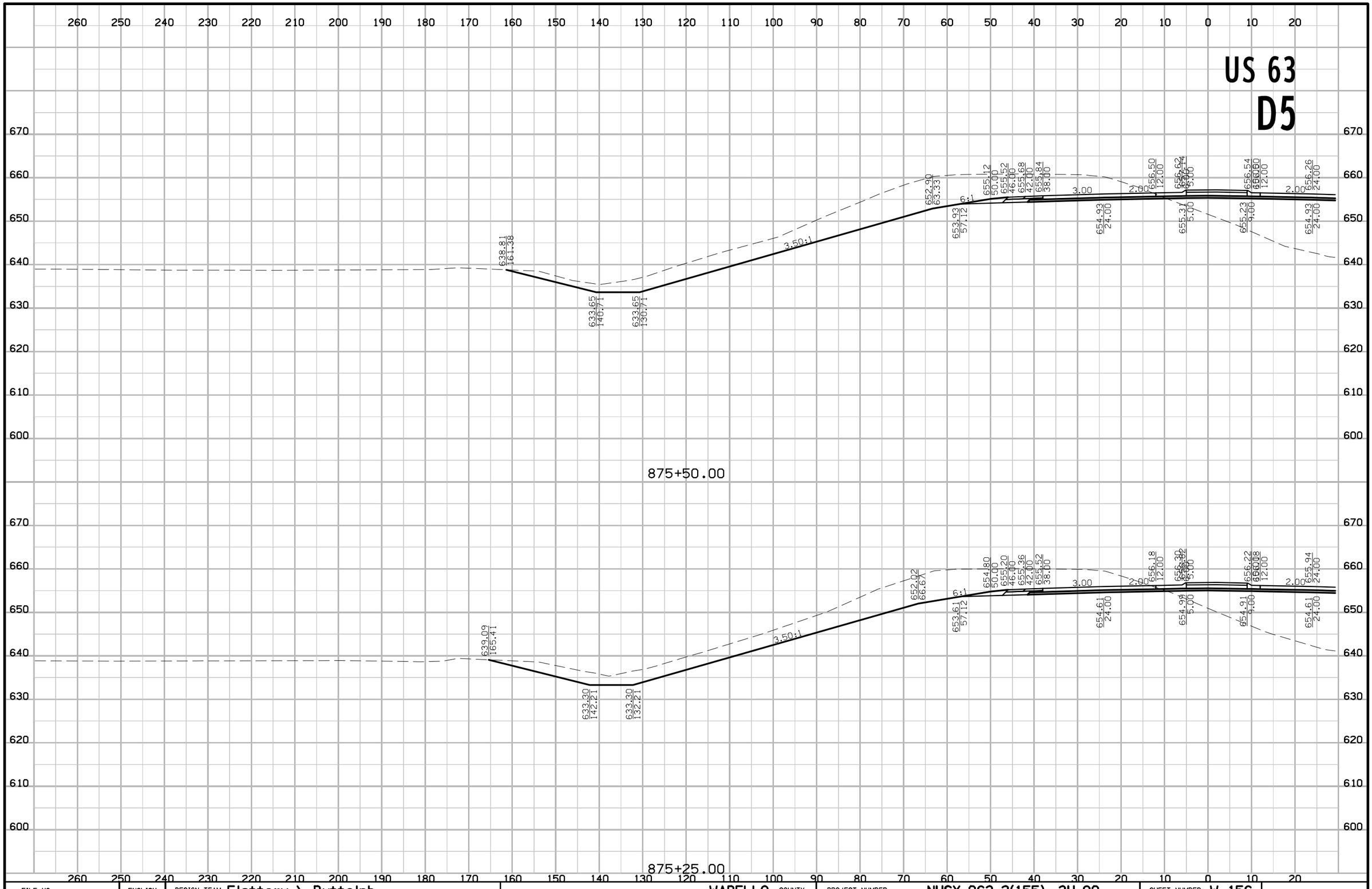
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.155

8:47:55 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

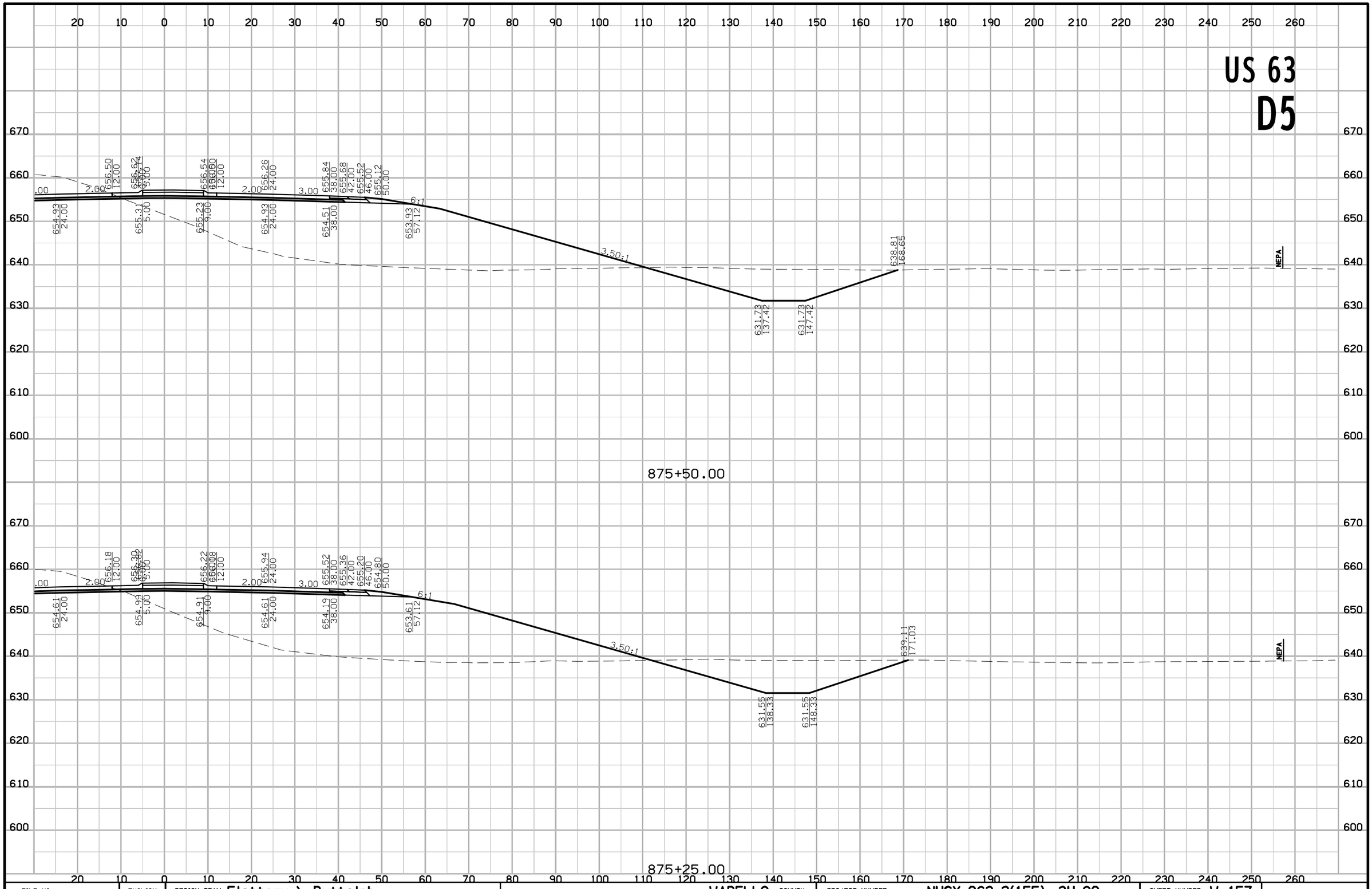
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.156

8:47:57 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

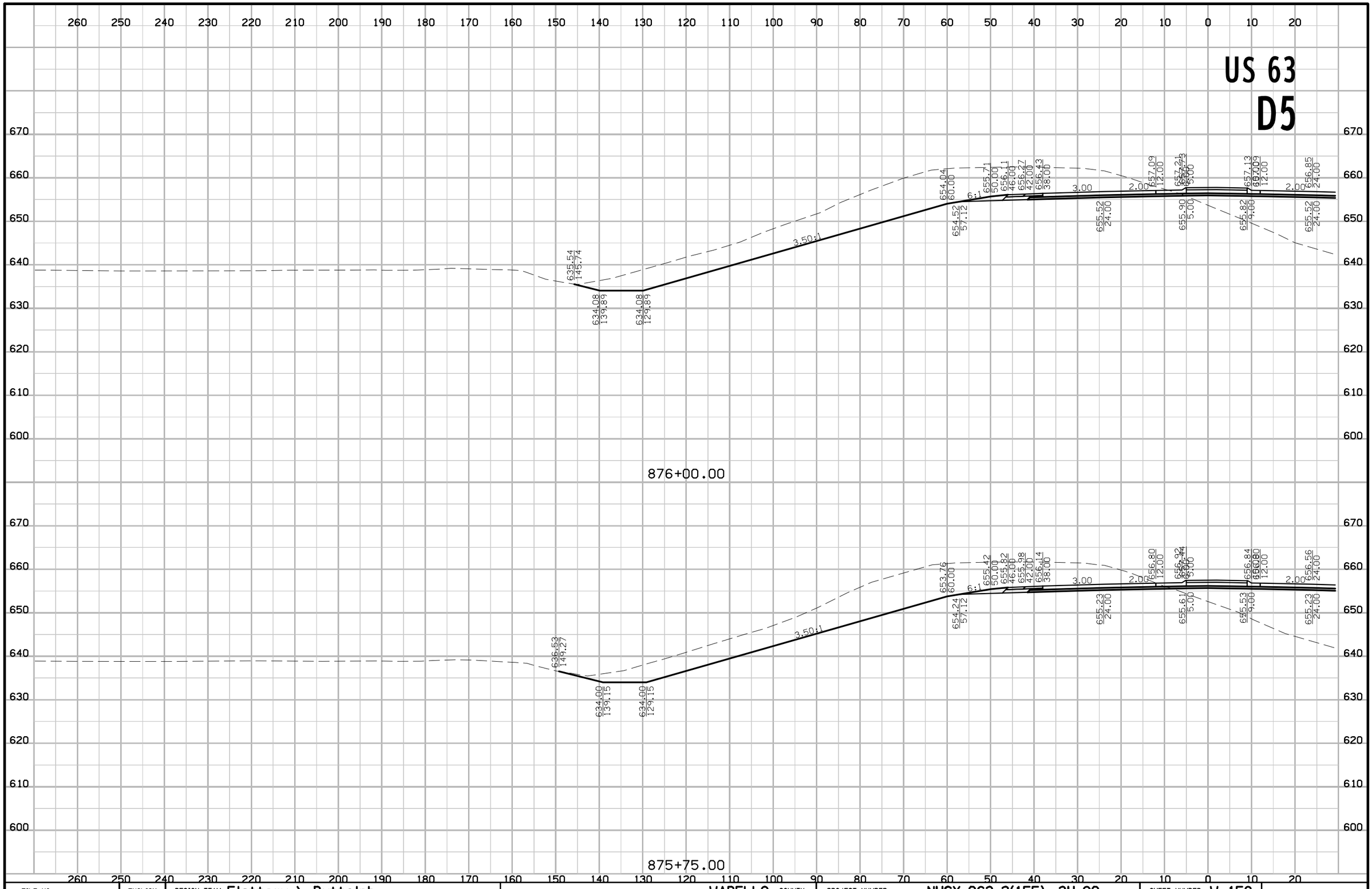
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.157

8:47:59 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

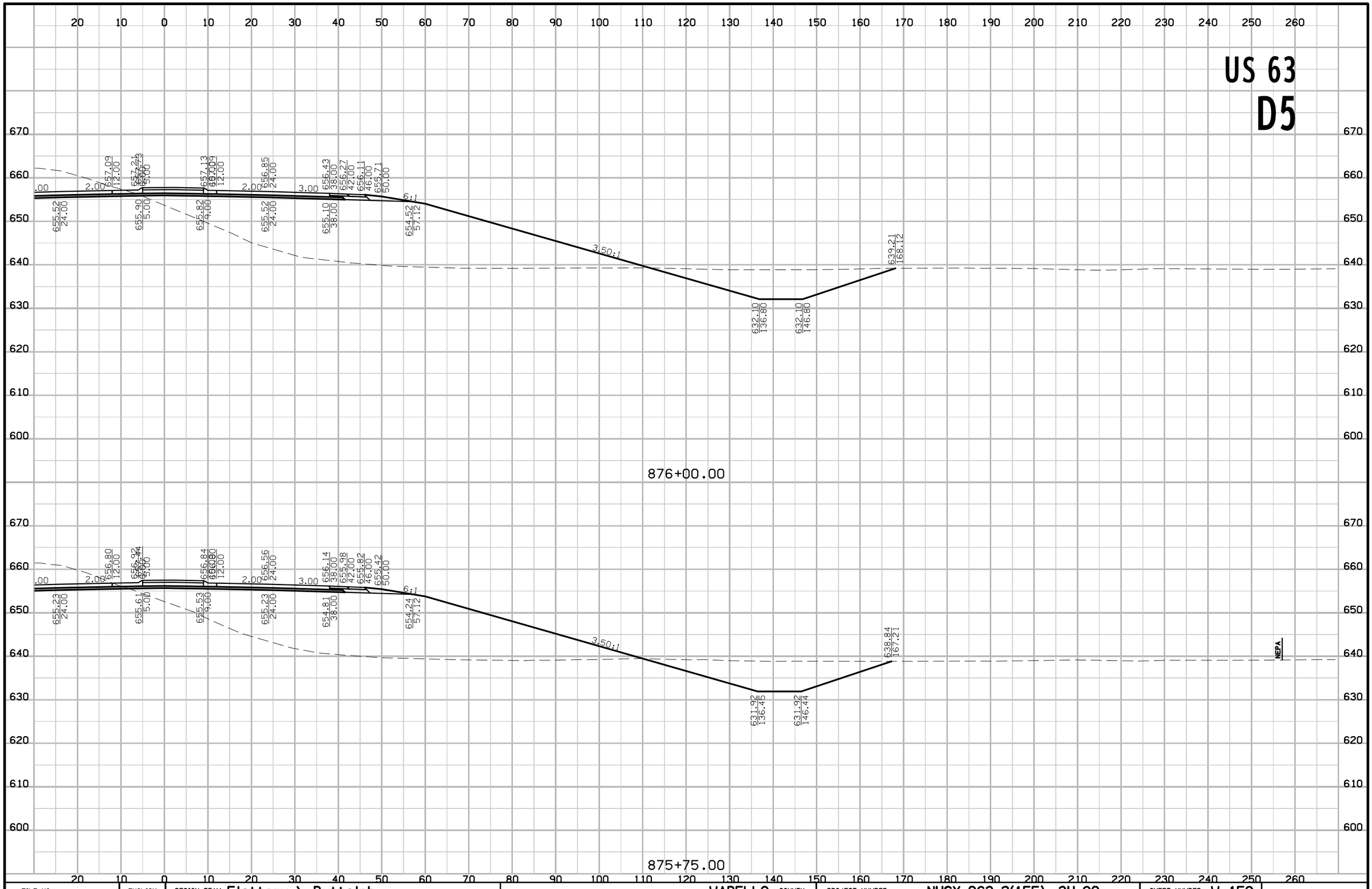
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.158

8:48:01 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

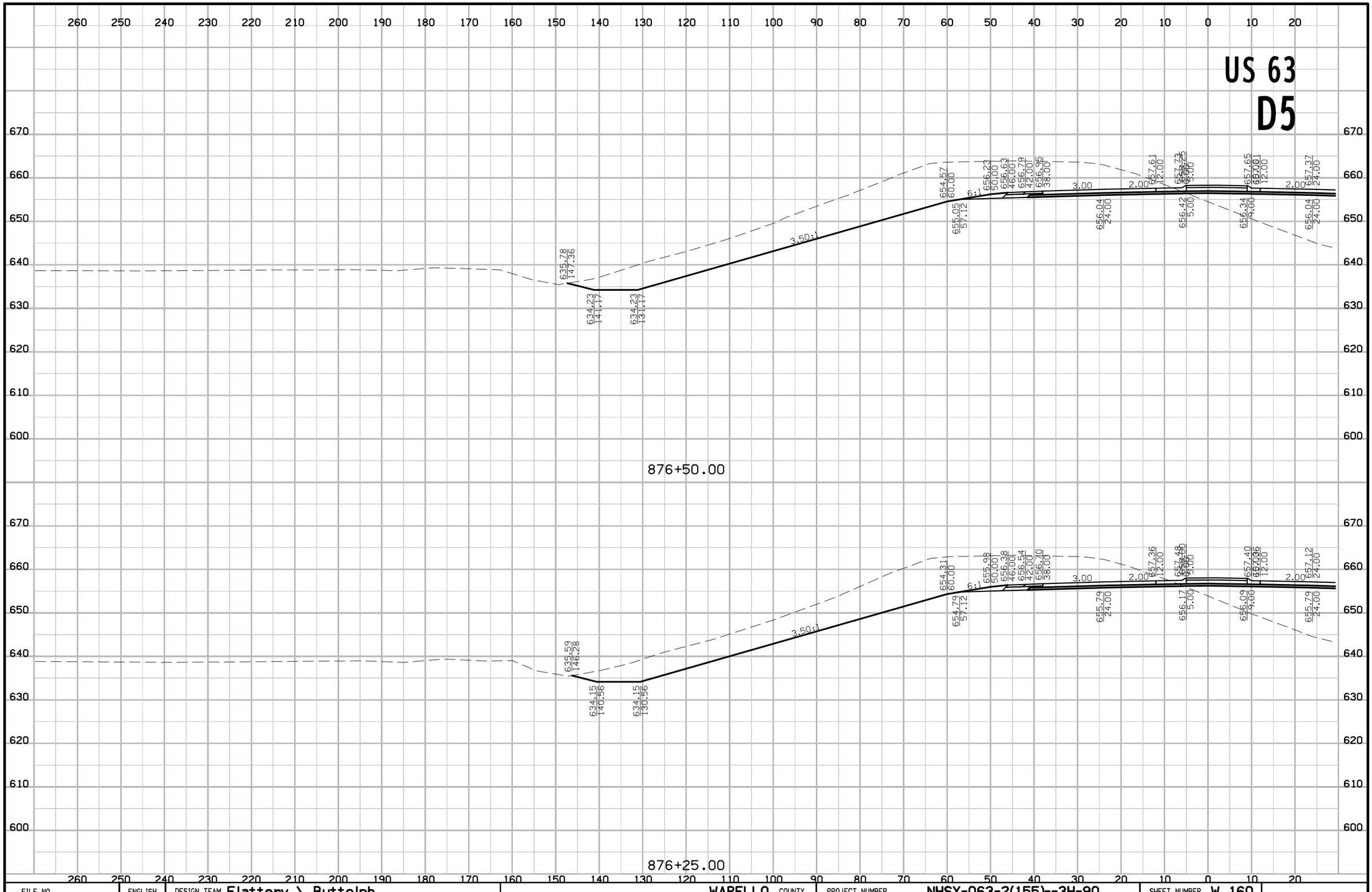
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.159

8:48:04 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

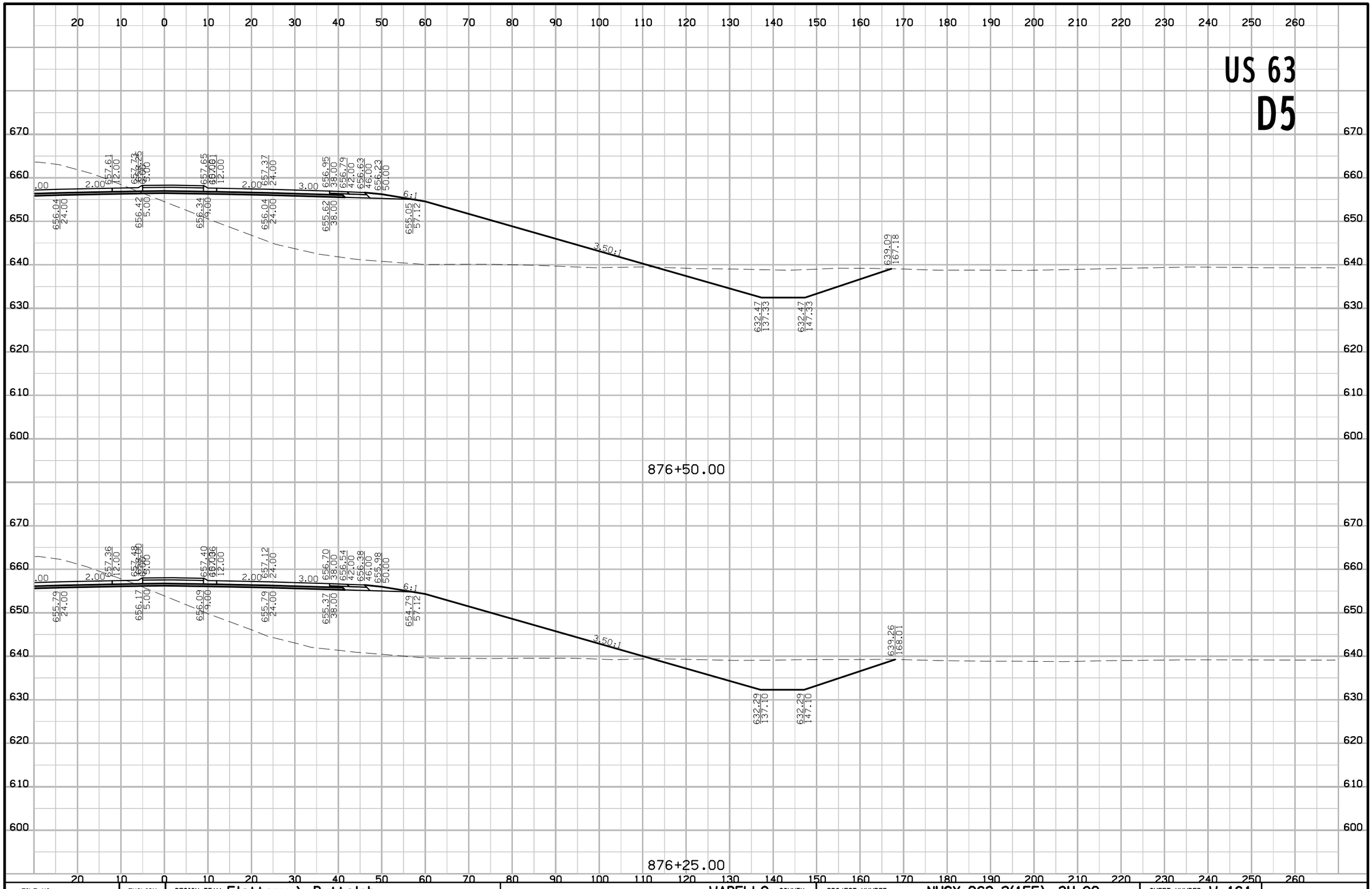
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.160

8:48:06 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

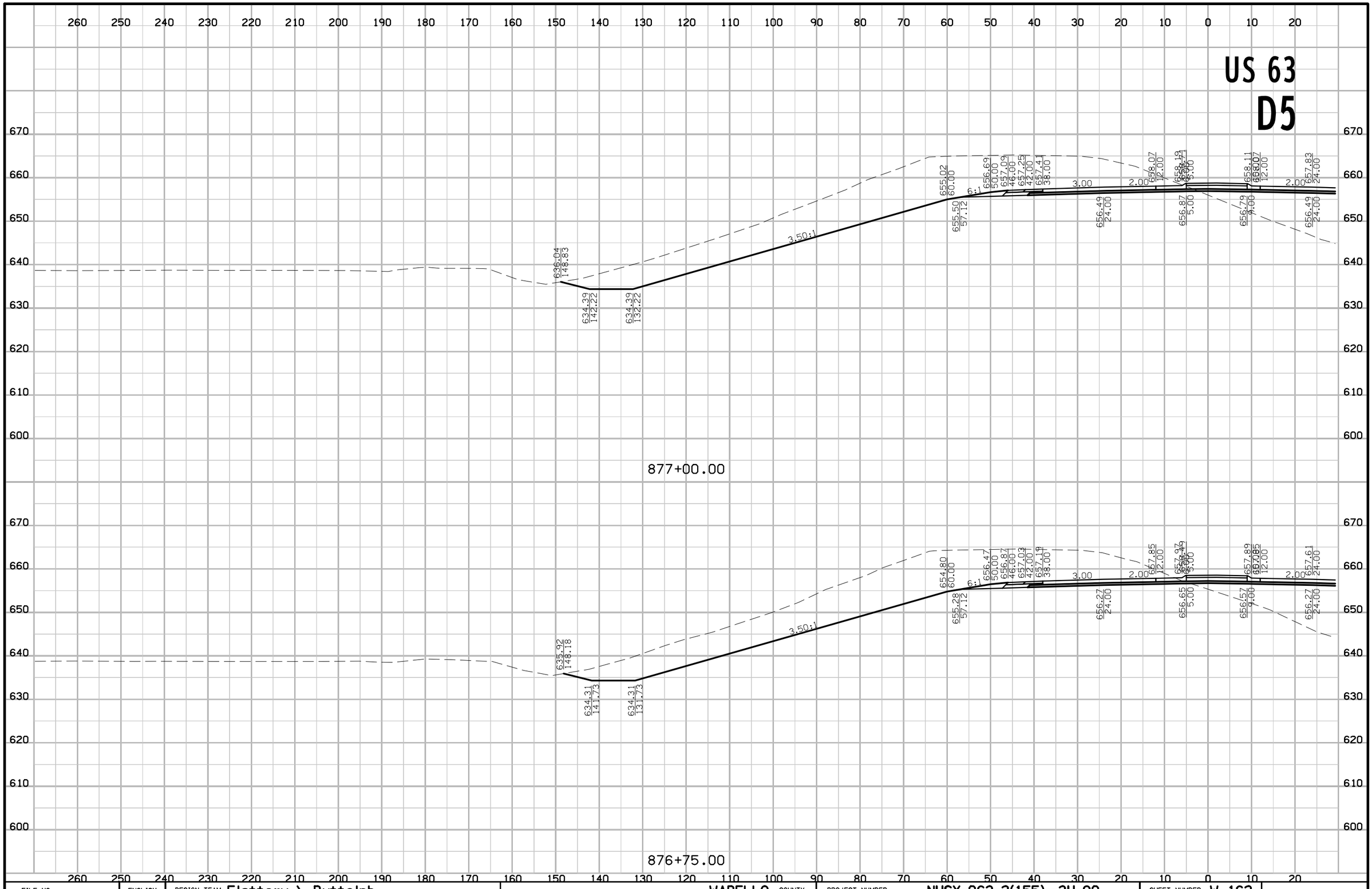
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.161

8:48:07 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

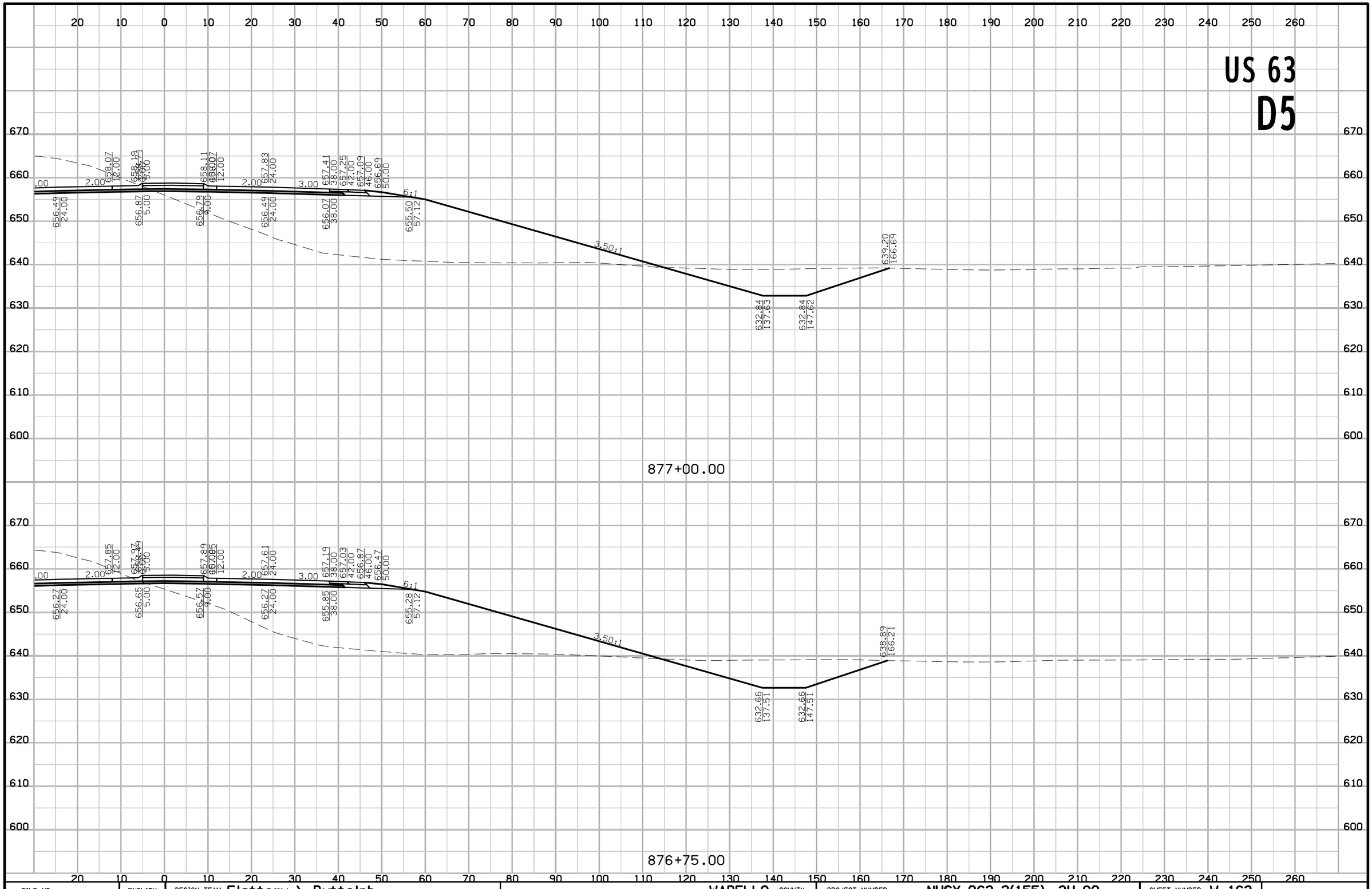
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.162

8:48:09 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

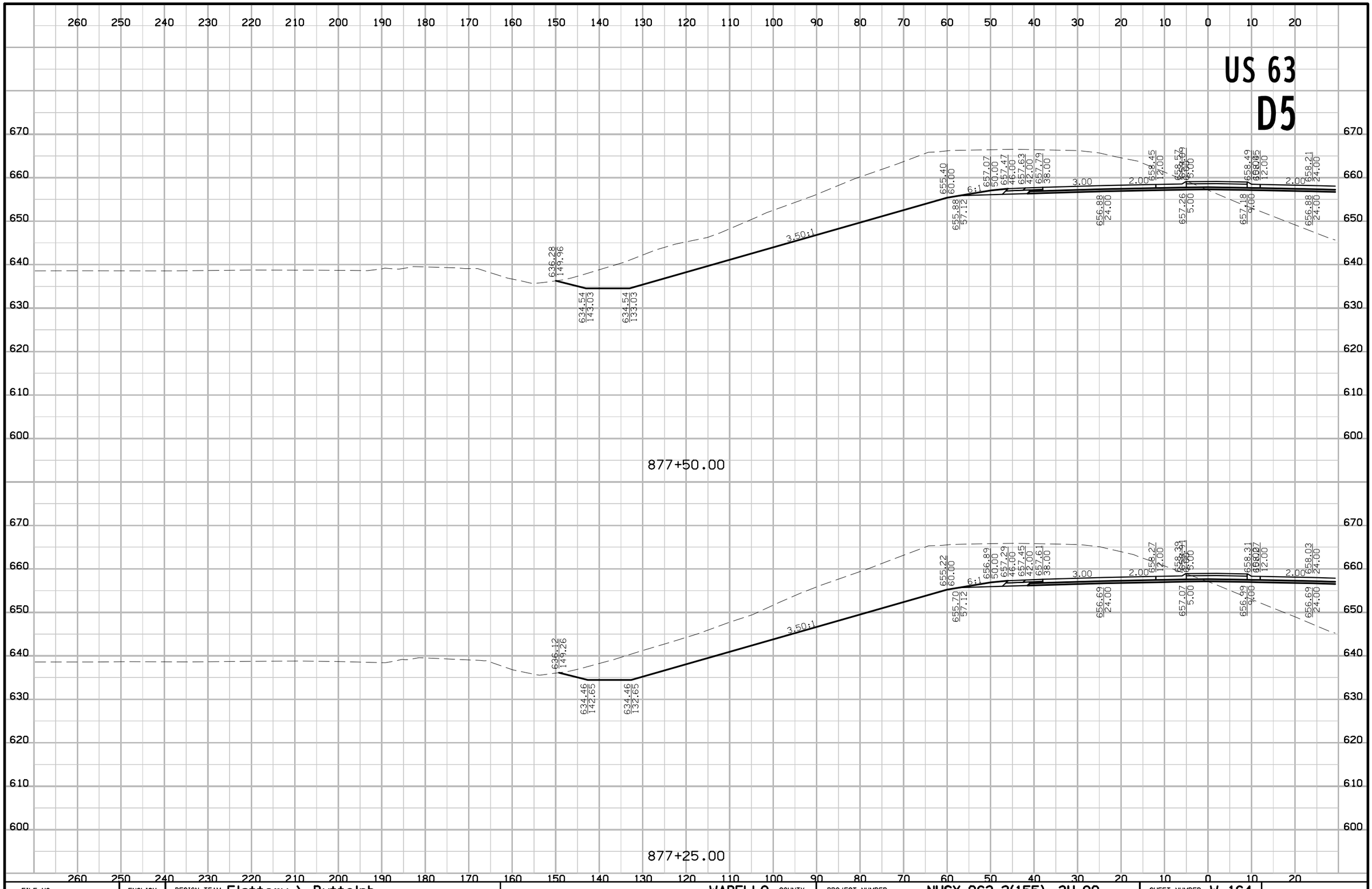
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.163

8:48:11 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

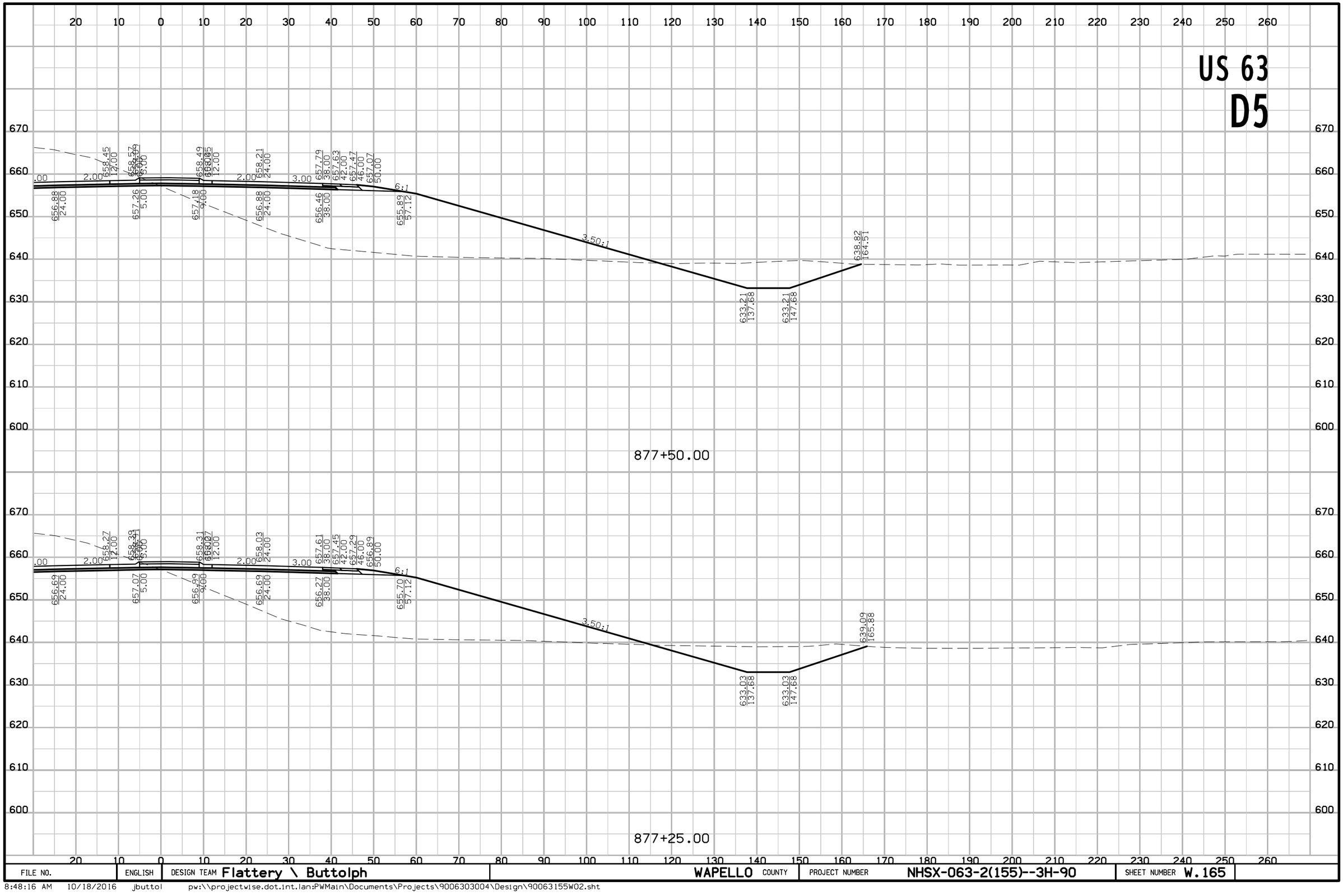
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.164

8:48:14 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

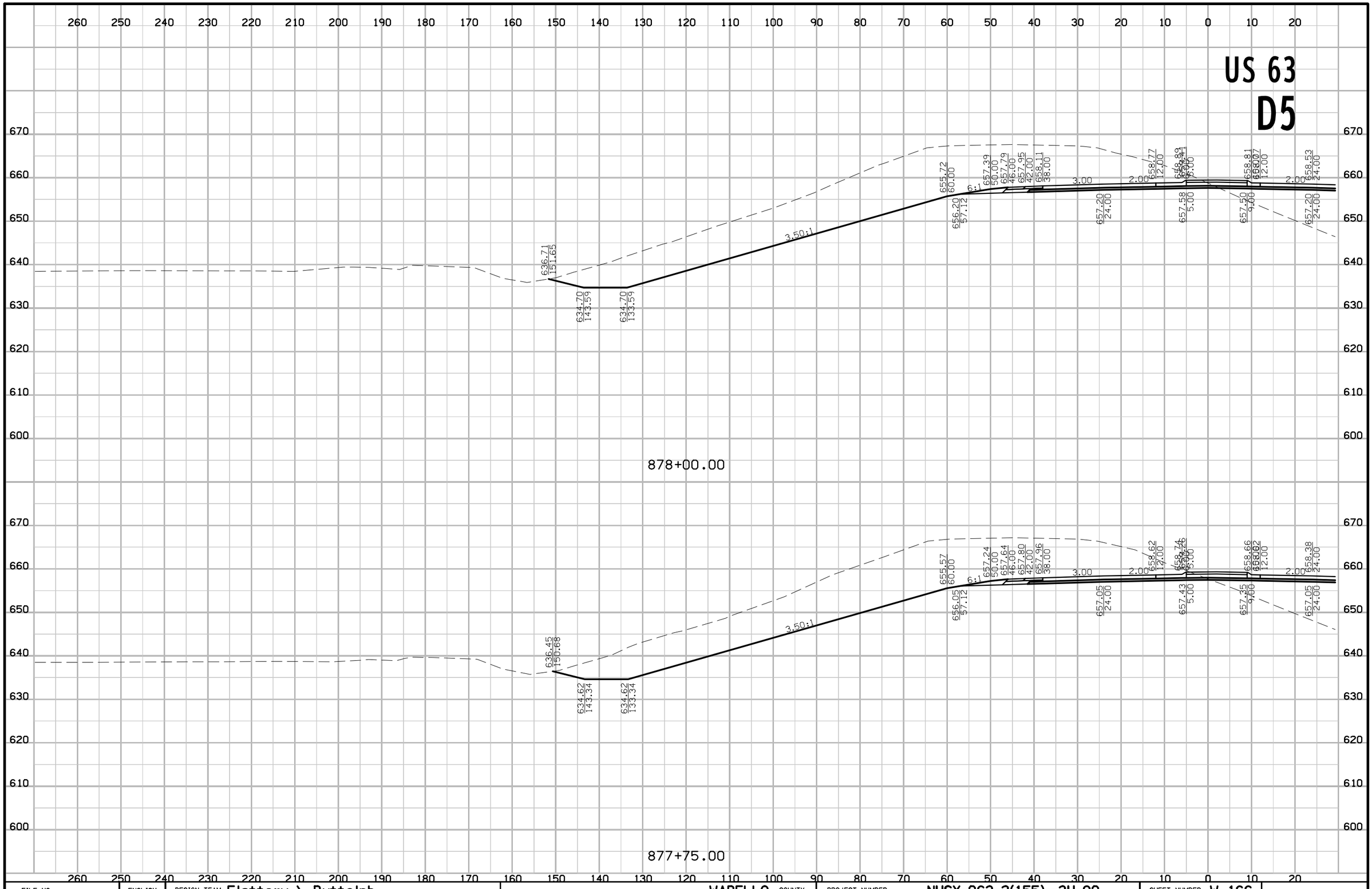
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.165

8:48:16 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

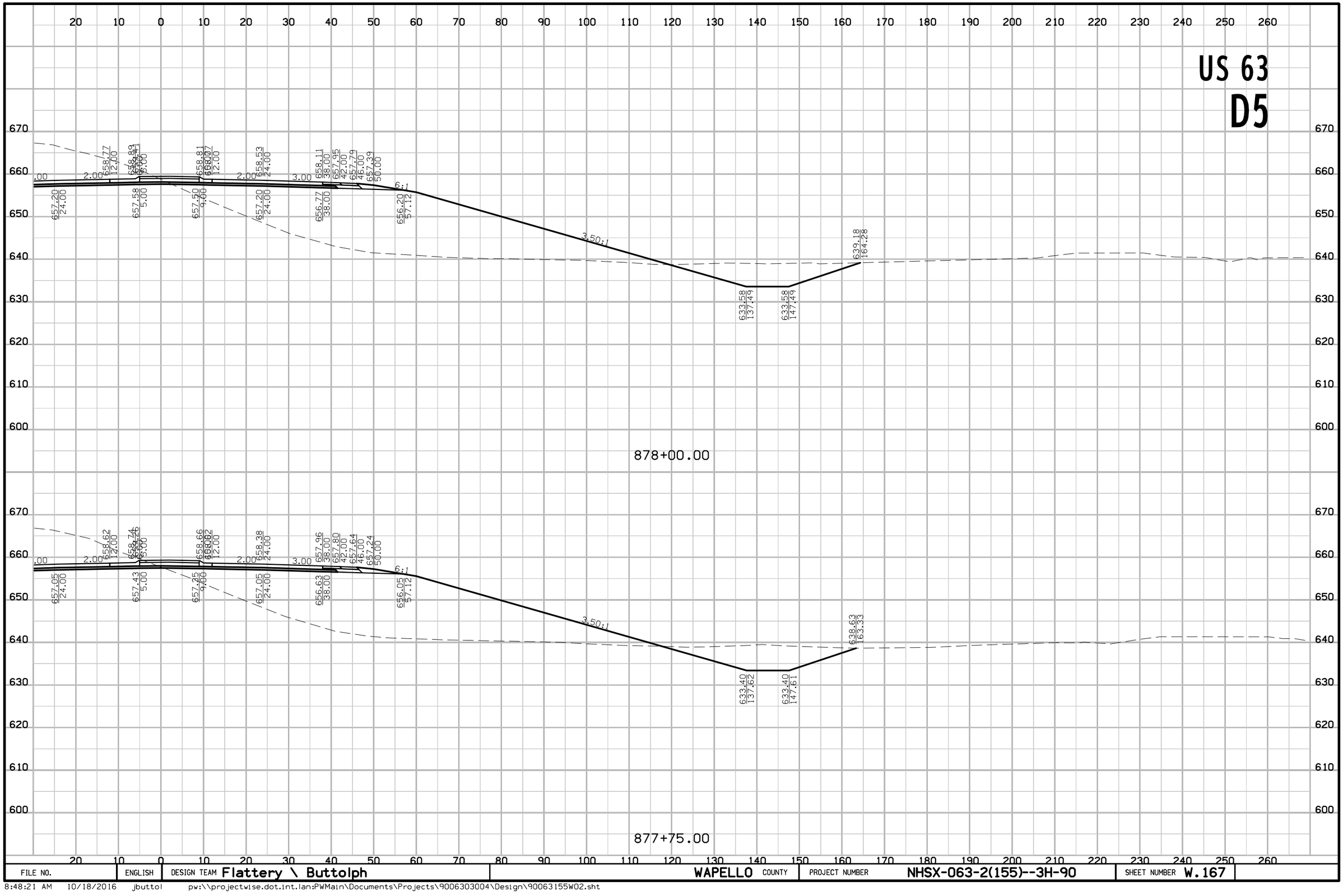
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.166

8:48:19 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

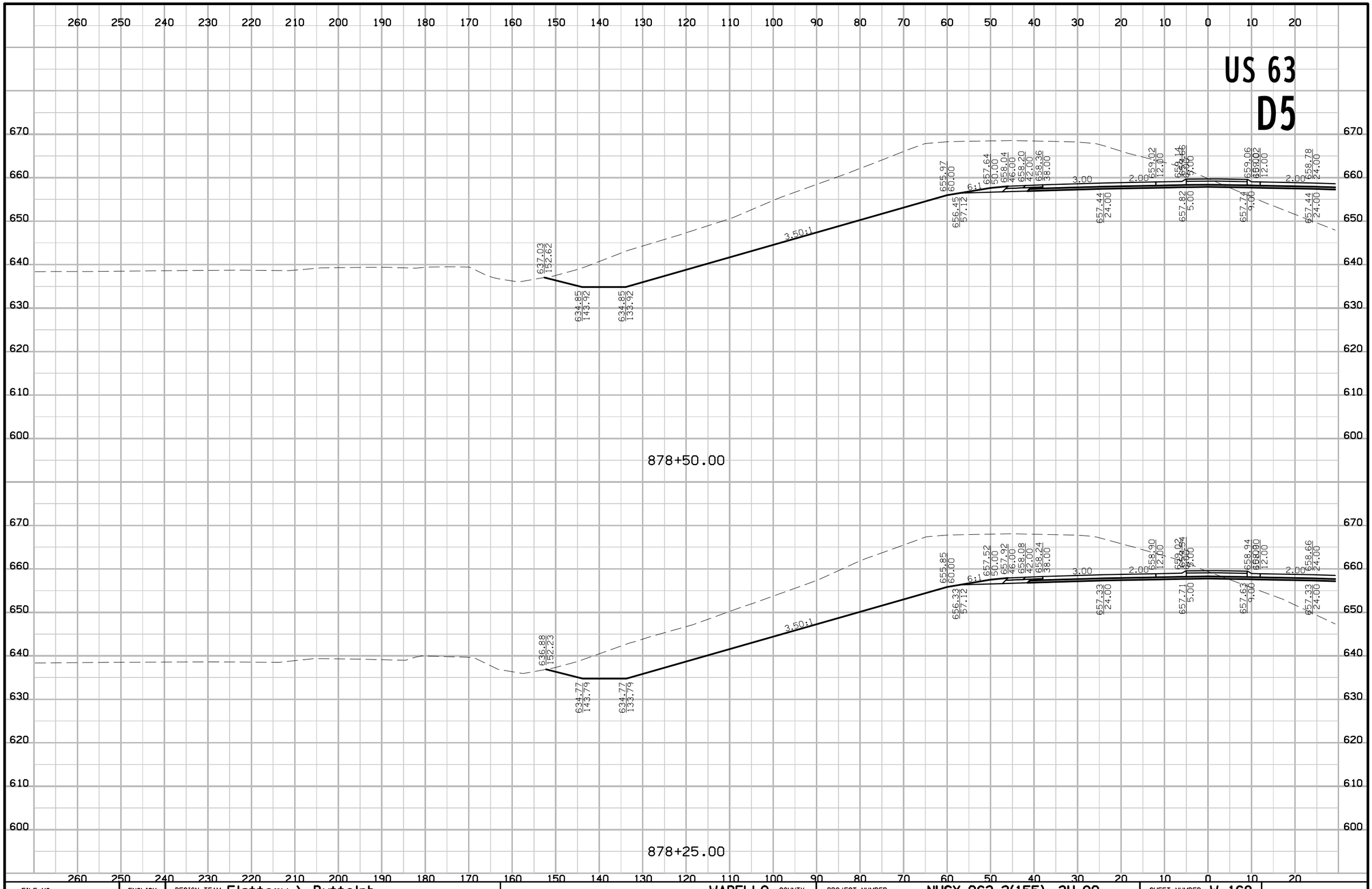
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.167

8:48:21 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

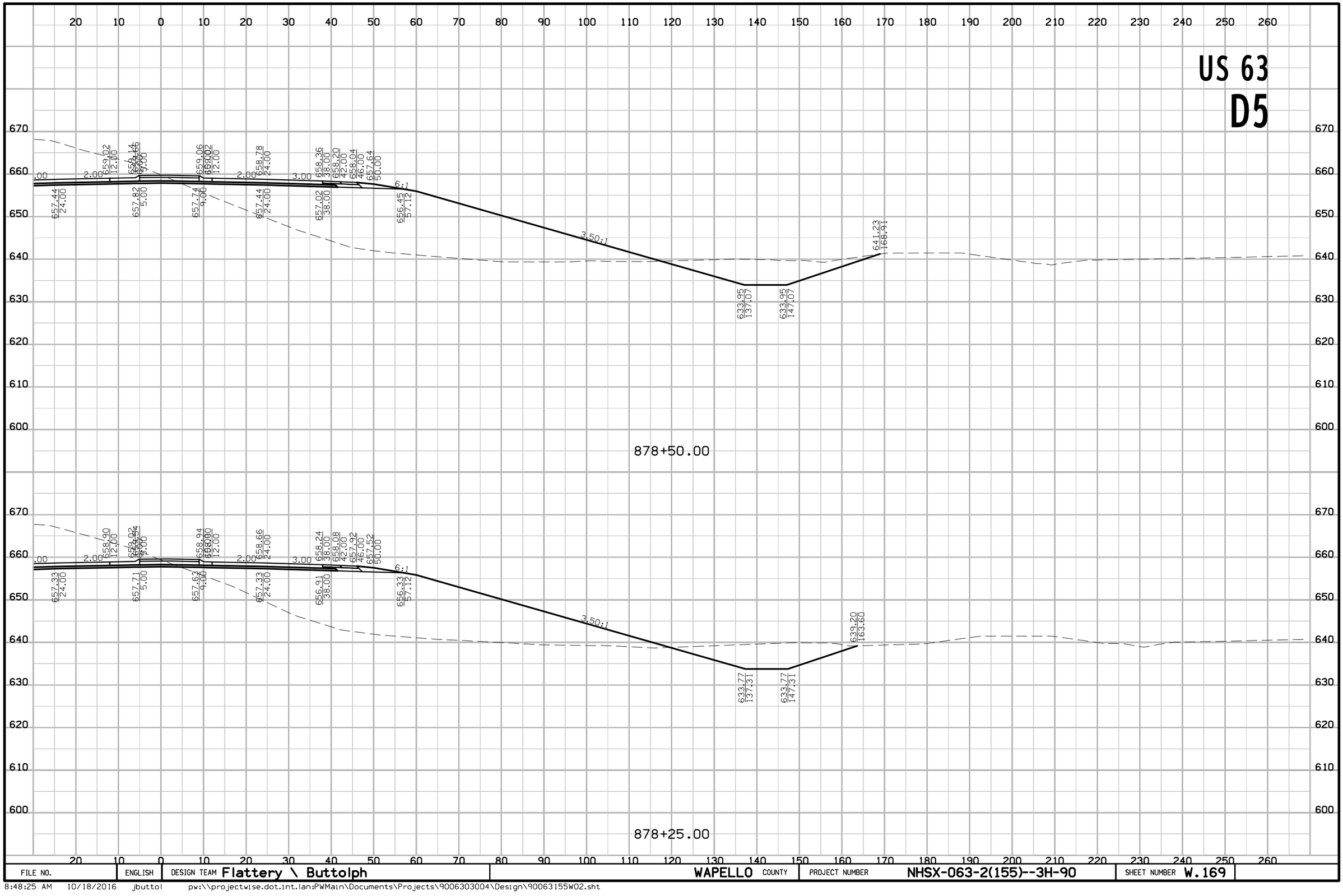
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.168

8:48:23 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.169

8:48:25 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

US 63
D5

879+00.00

637.24
152.95

635.01
144.01

635.01
134.01

3.50:1

656.15
60.00

6:1

657.82
50.00

658.22
46.00

658.38
42.00

658.54
38.00

3.00

657.62
24.00

2.00

659.20
12.00

658.00
5.00

659.24
12.00

657.92
9.00

2.00

658.96
24.00

878+75.00

637.05
152.50

634.93
144.00

634.93
134.00

3.50:1

656.07
60.00

6:1

657.74
50.00

658.13
46.00

658.29
42.00

658.46
38.00

3.00

657.54
24.00

2.00

659.11
12.00

658.00
5.00

659.16
12.00

657.84
9.00

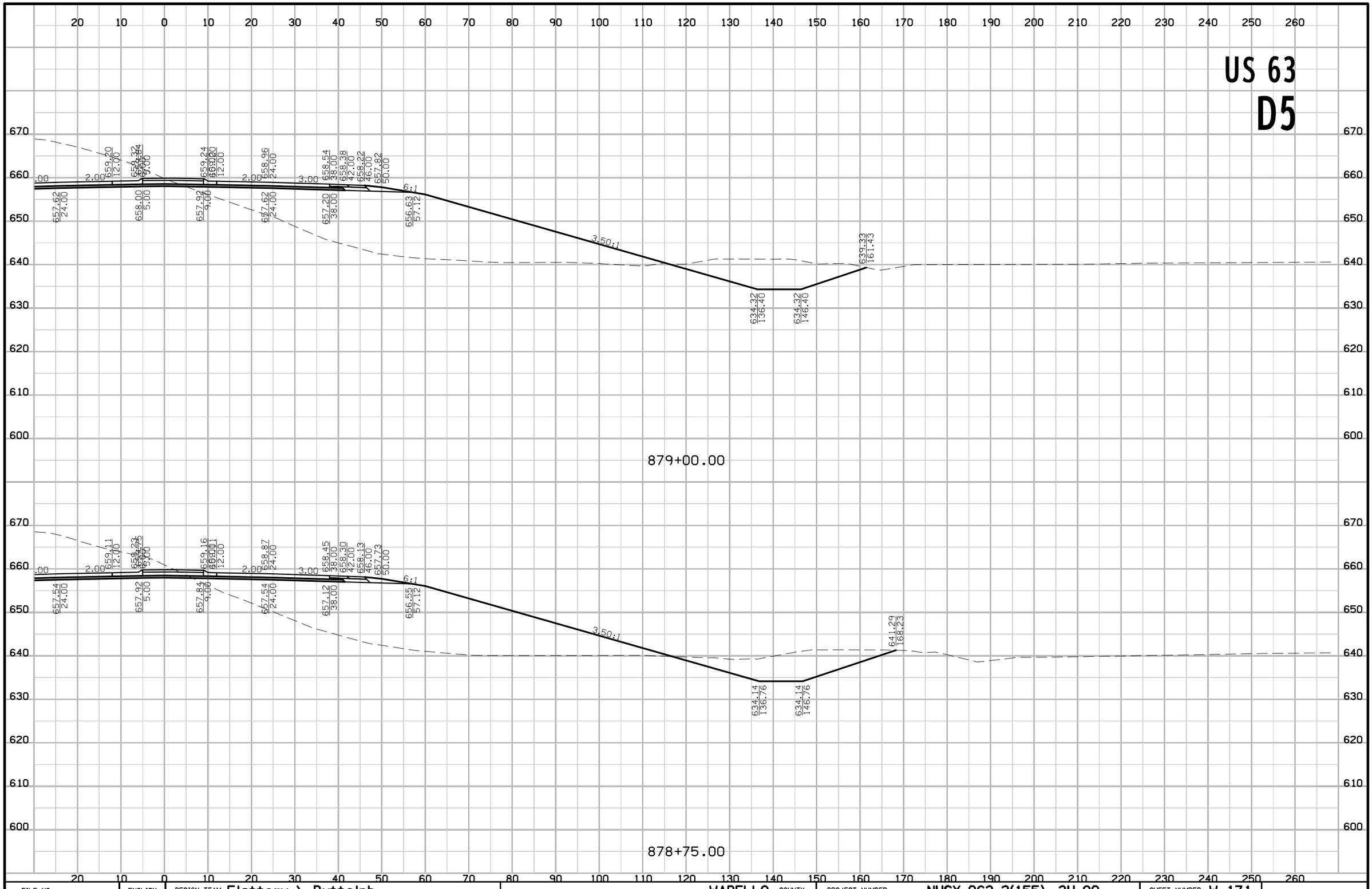
2.00

658.87
24.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.170

8:48:27 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

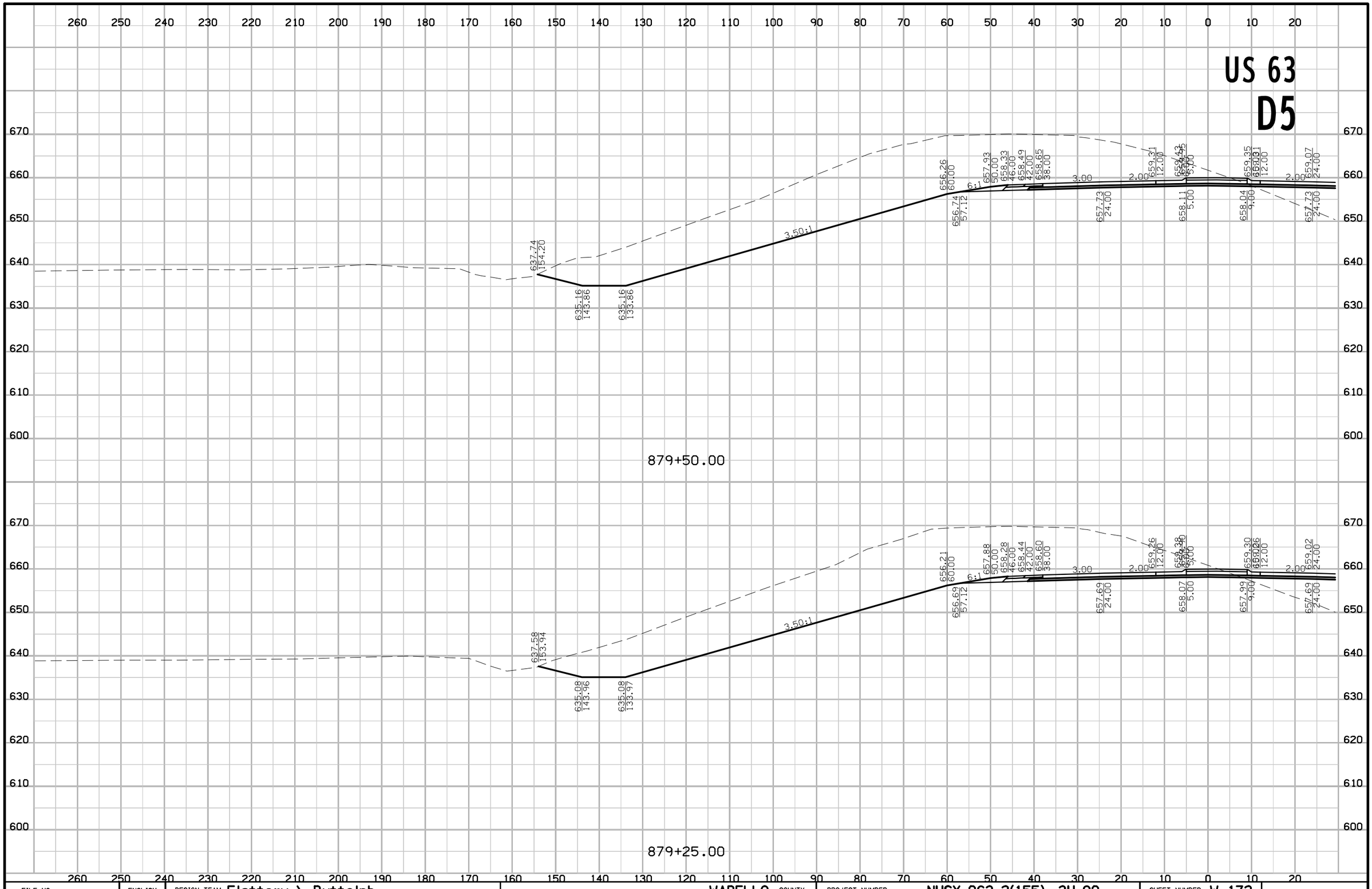
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.171

8:48:29 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

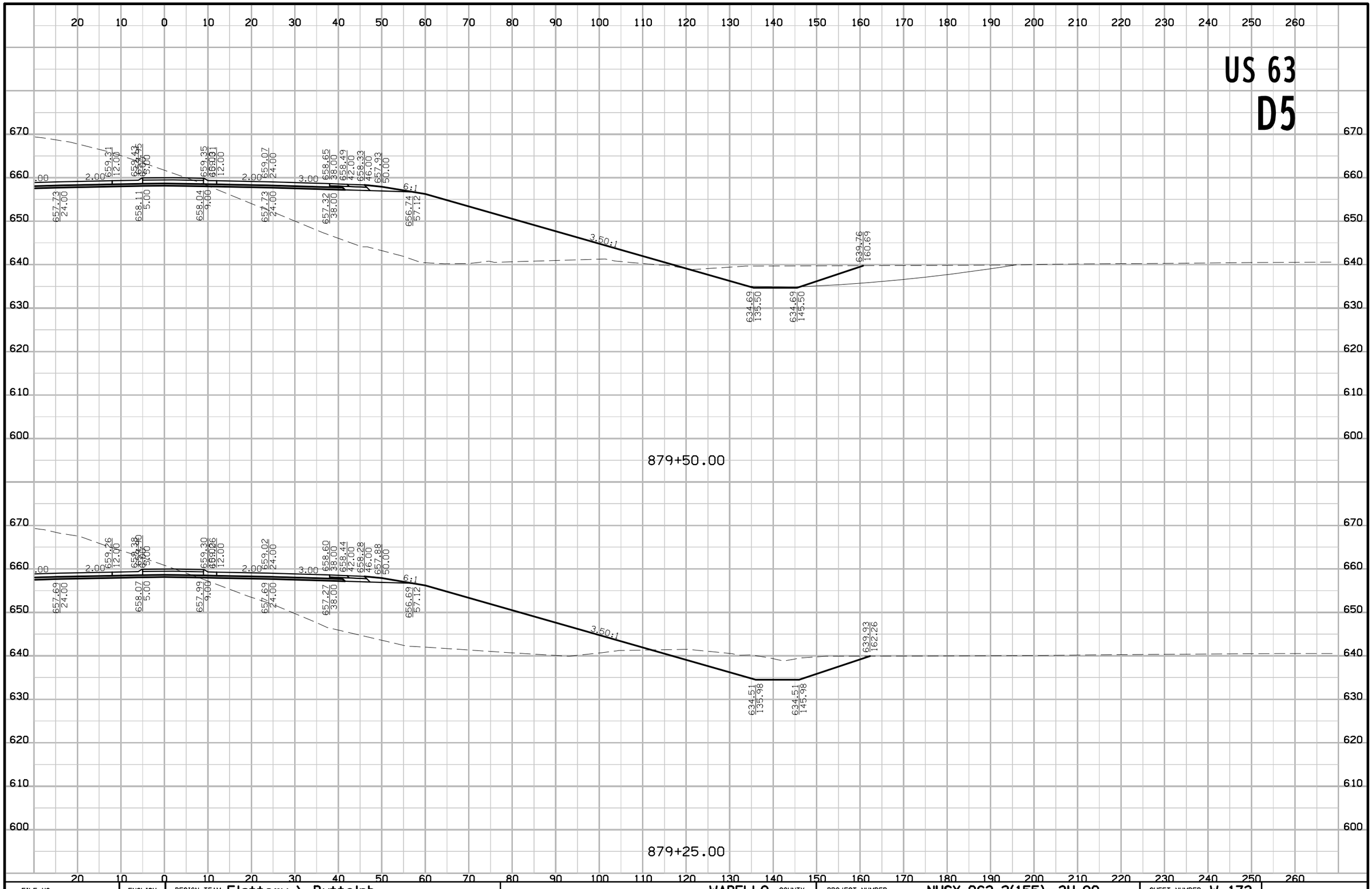
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.172

8:48:31 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

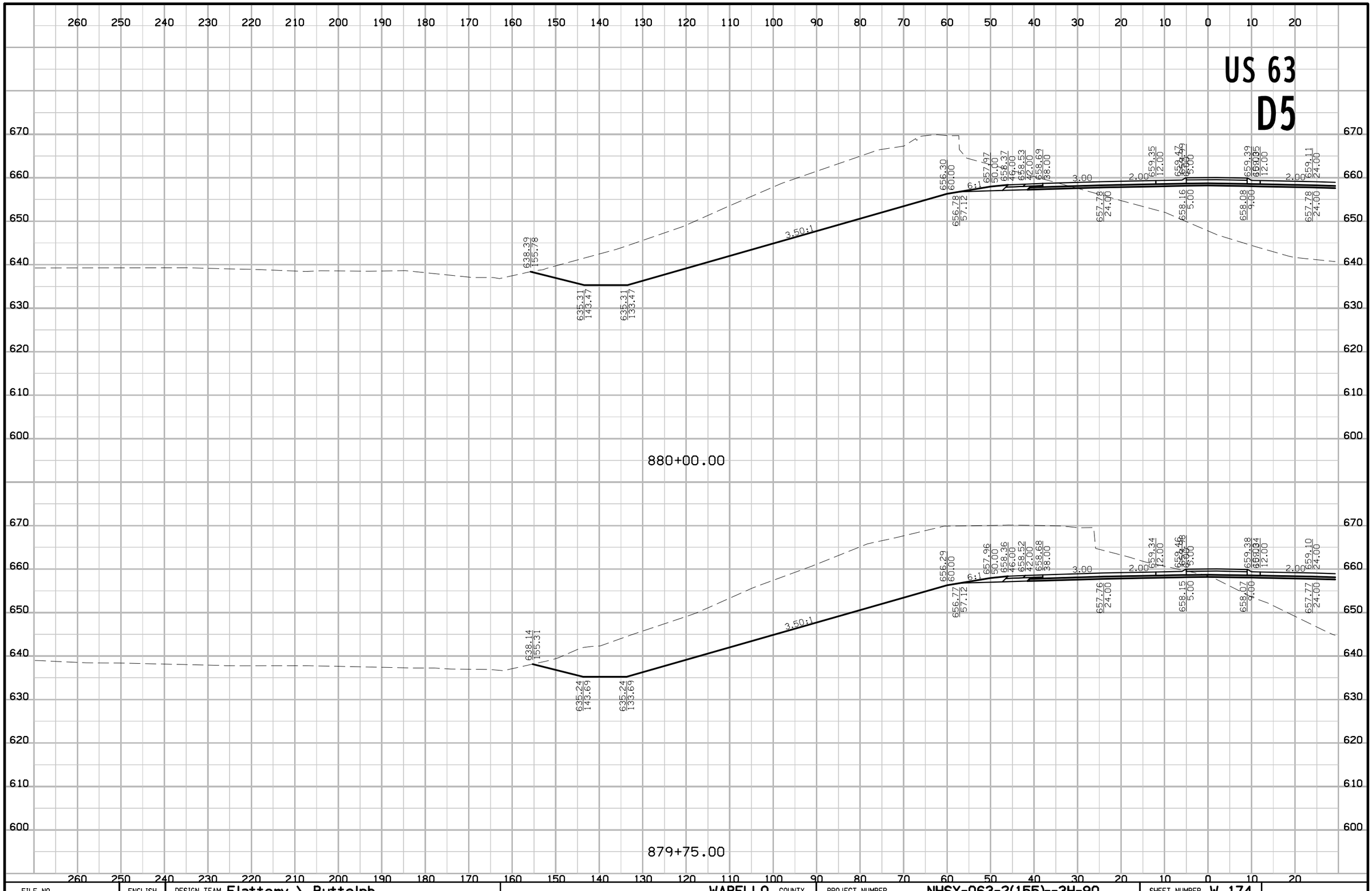
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.173

8:48:33 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

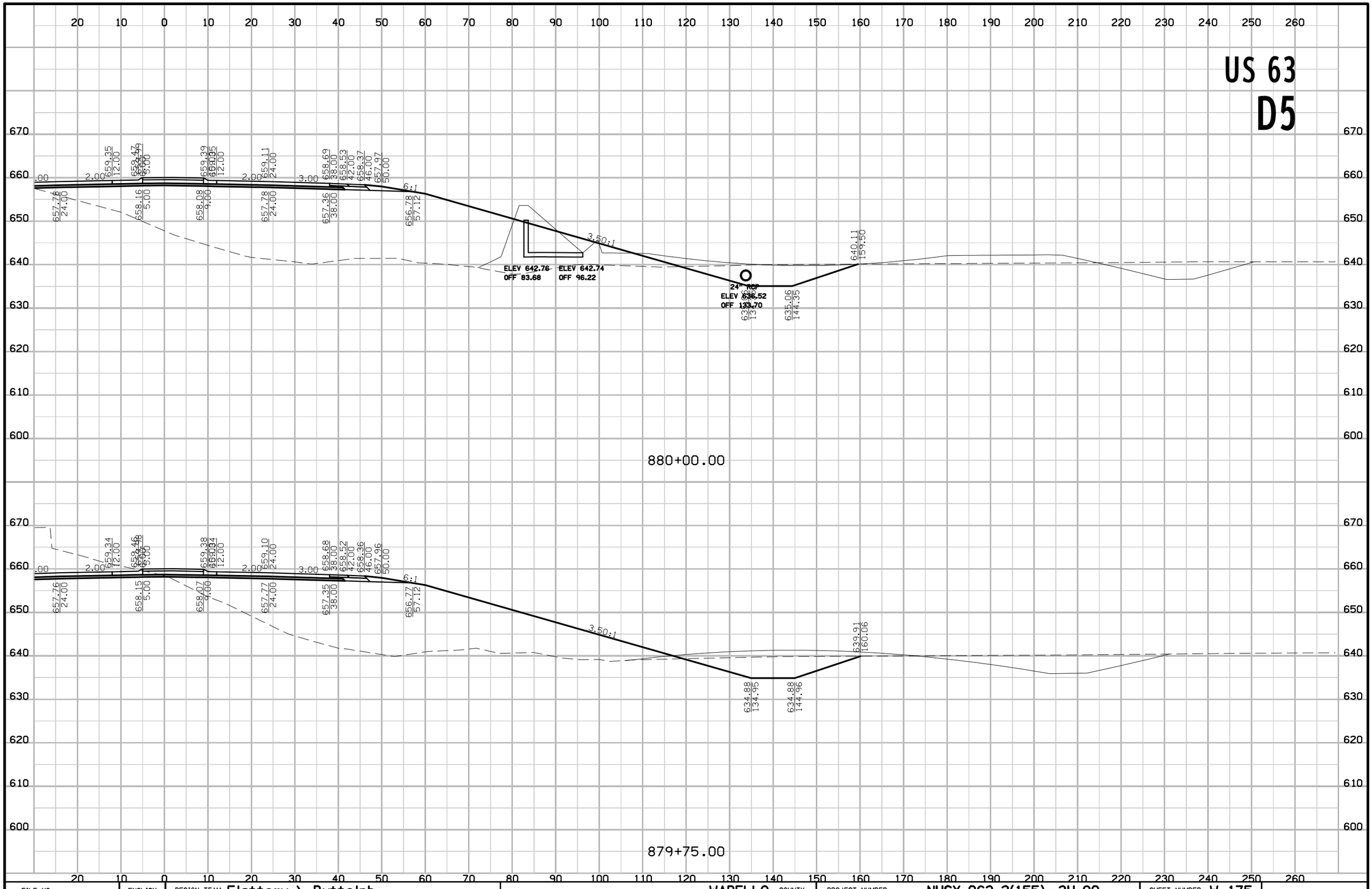
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.174

8:48:36 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

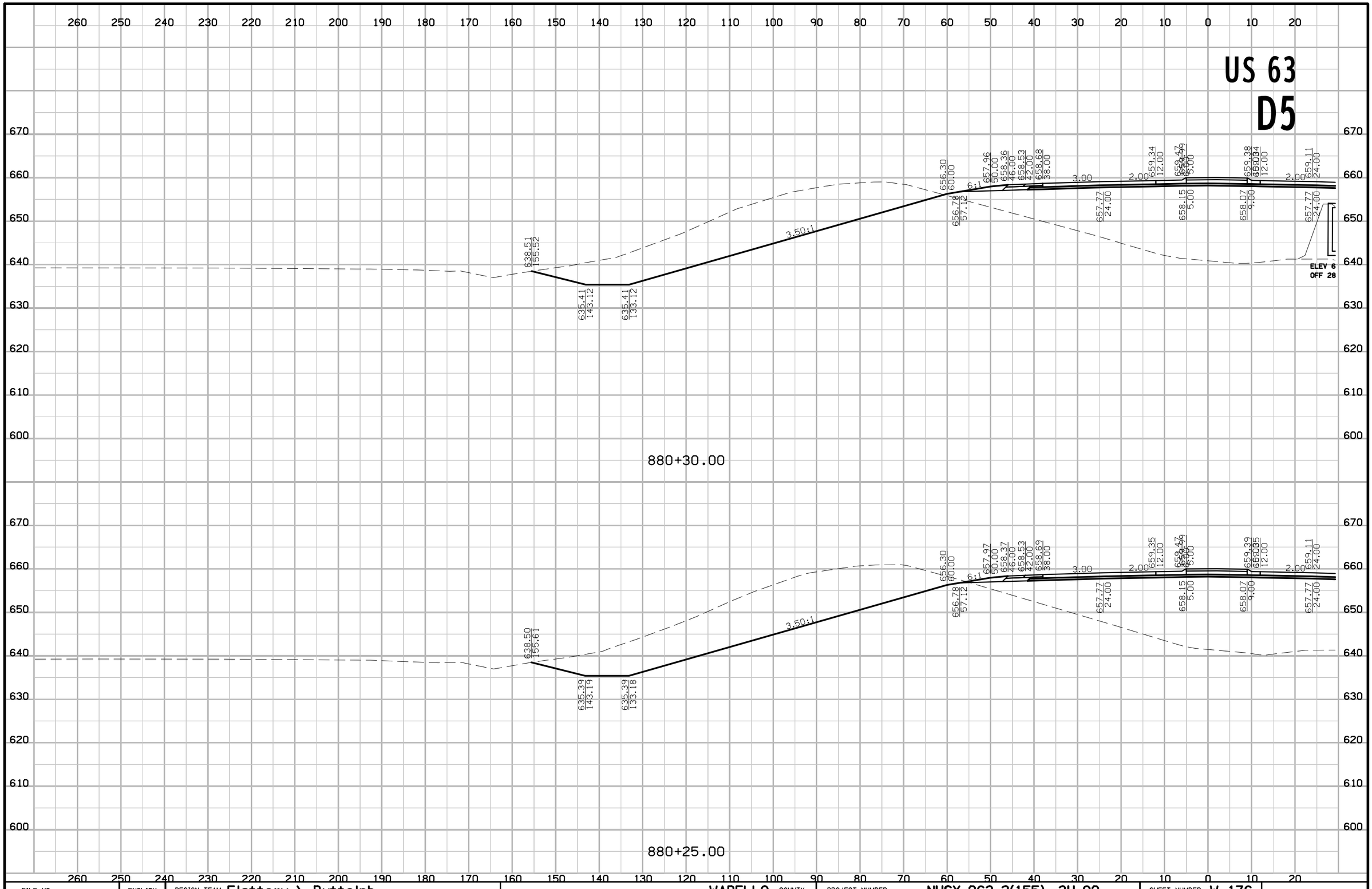
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.175

8:48:38 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

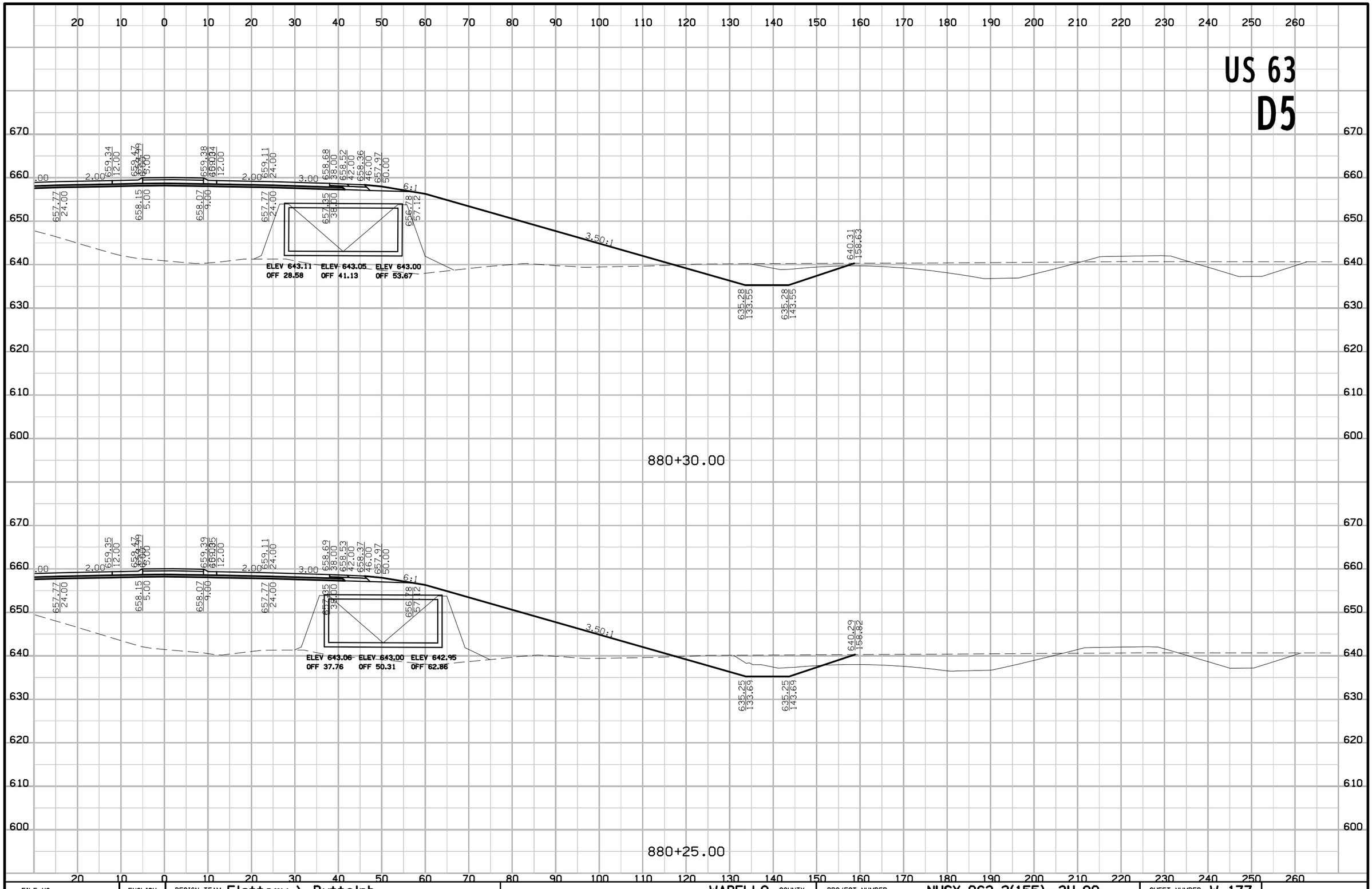
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.176

8:48:40 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

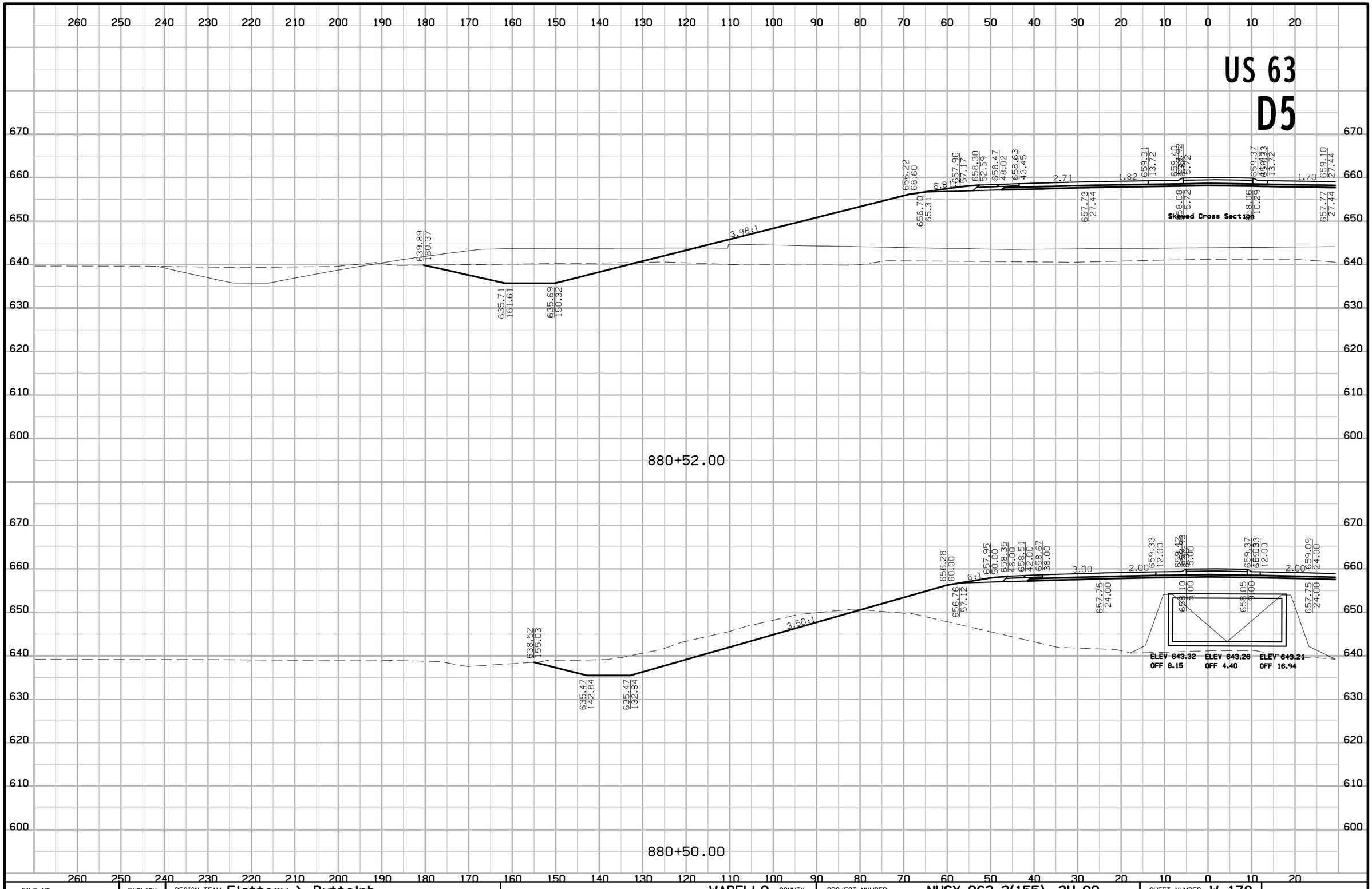
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.177

8:48:42 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

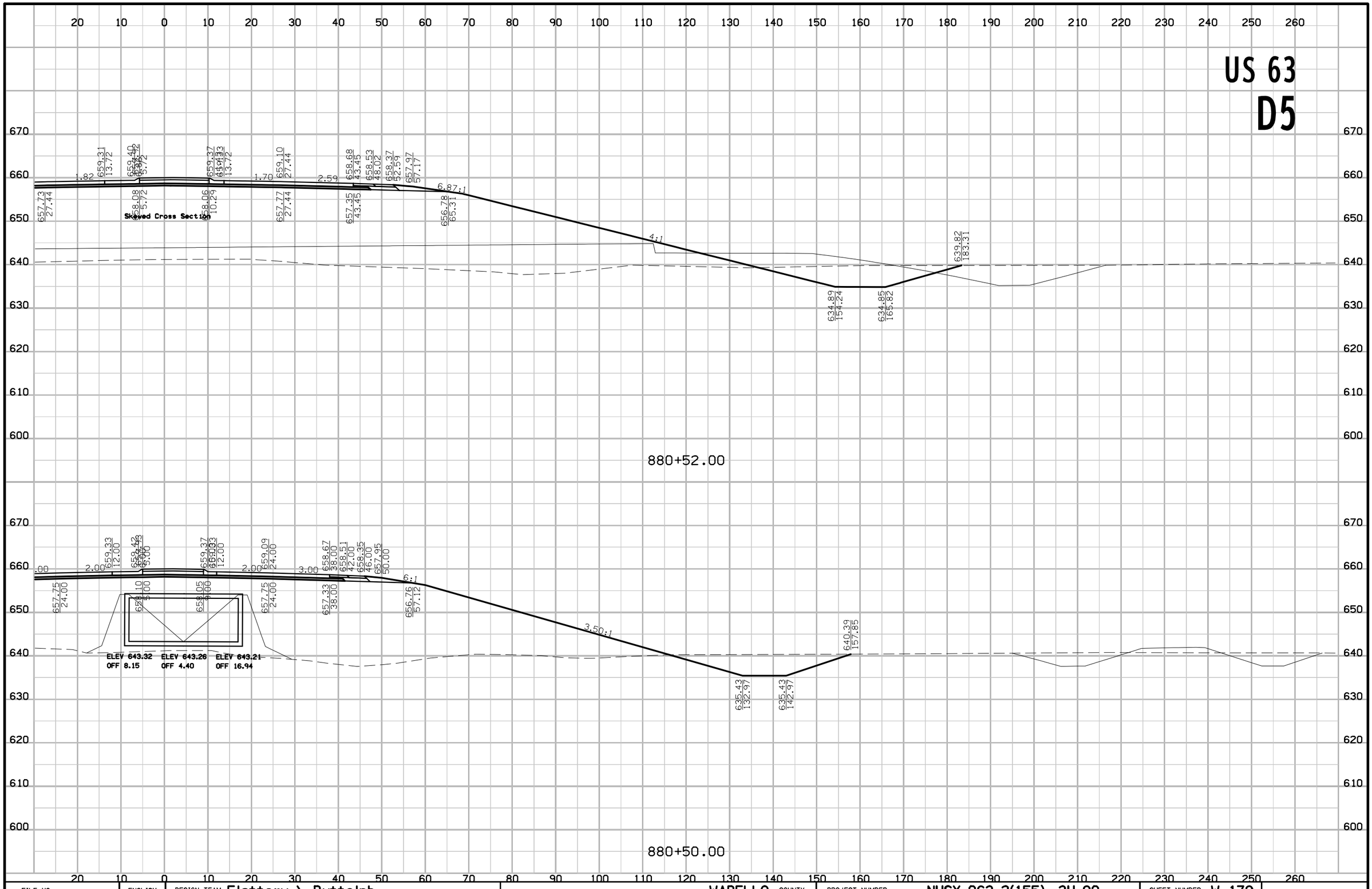
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.178

8:48:44 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

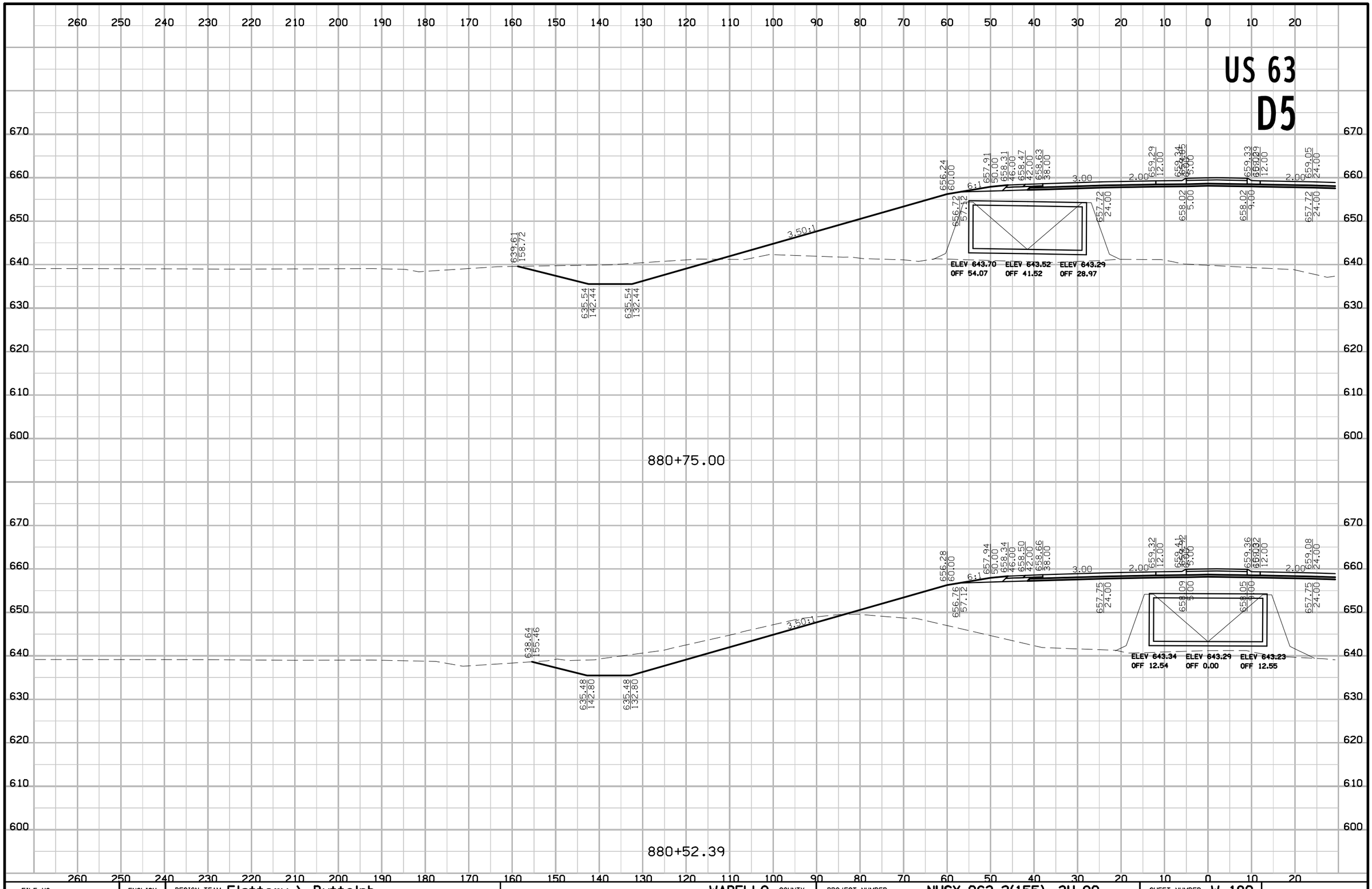
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.179

8:48:46 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

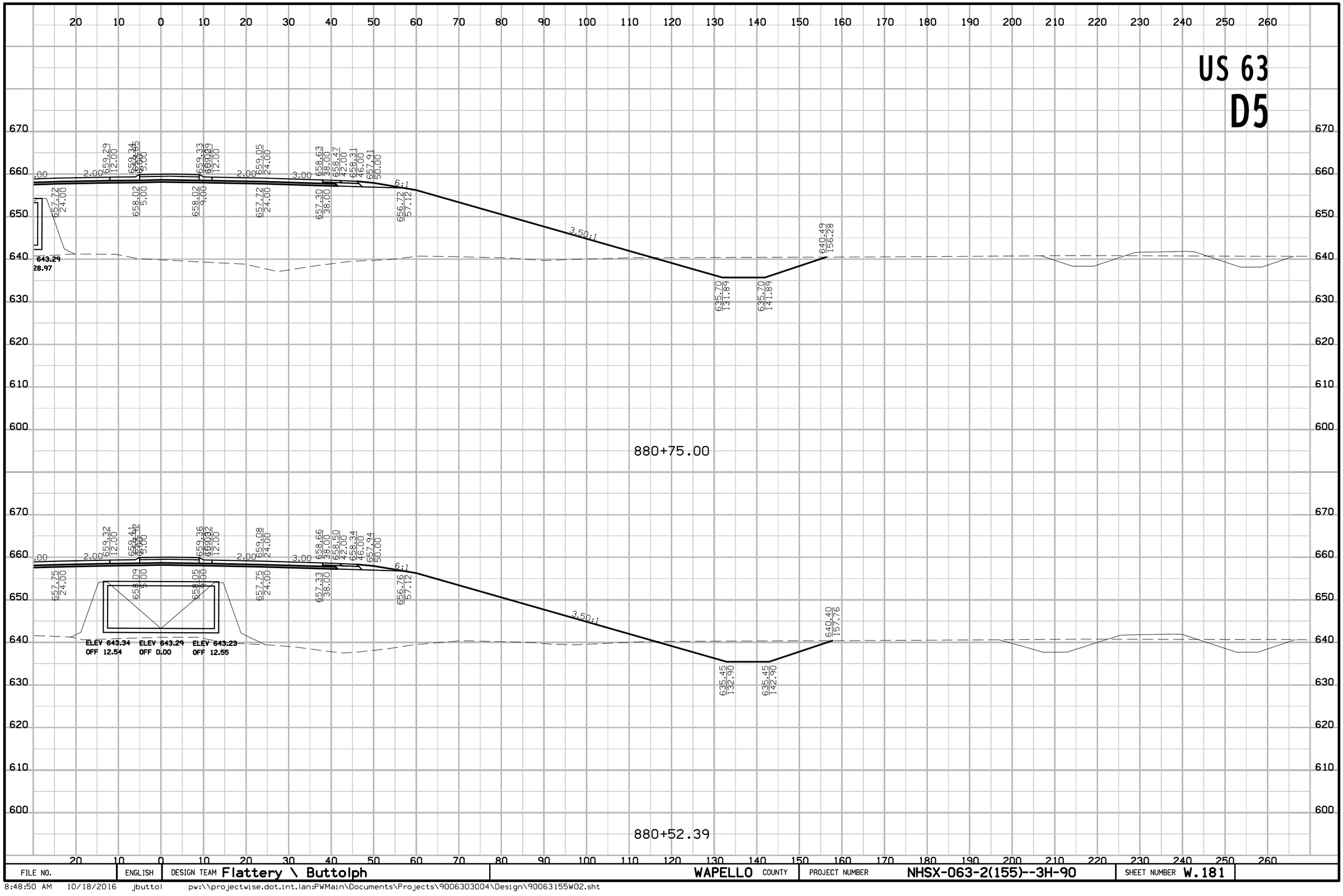
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.180

8:48:48 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

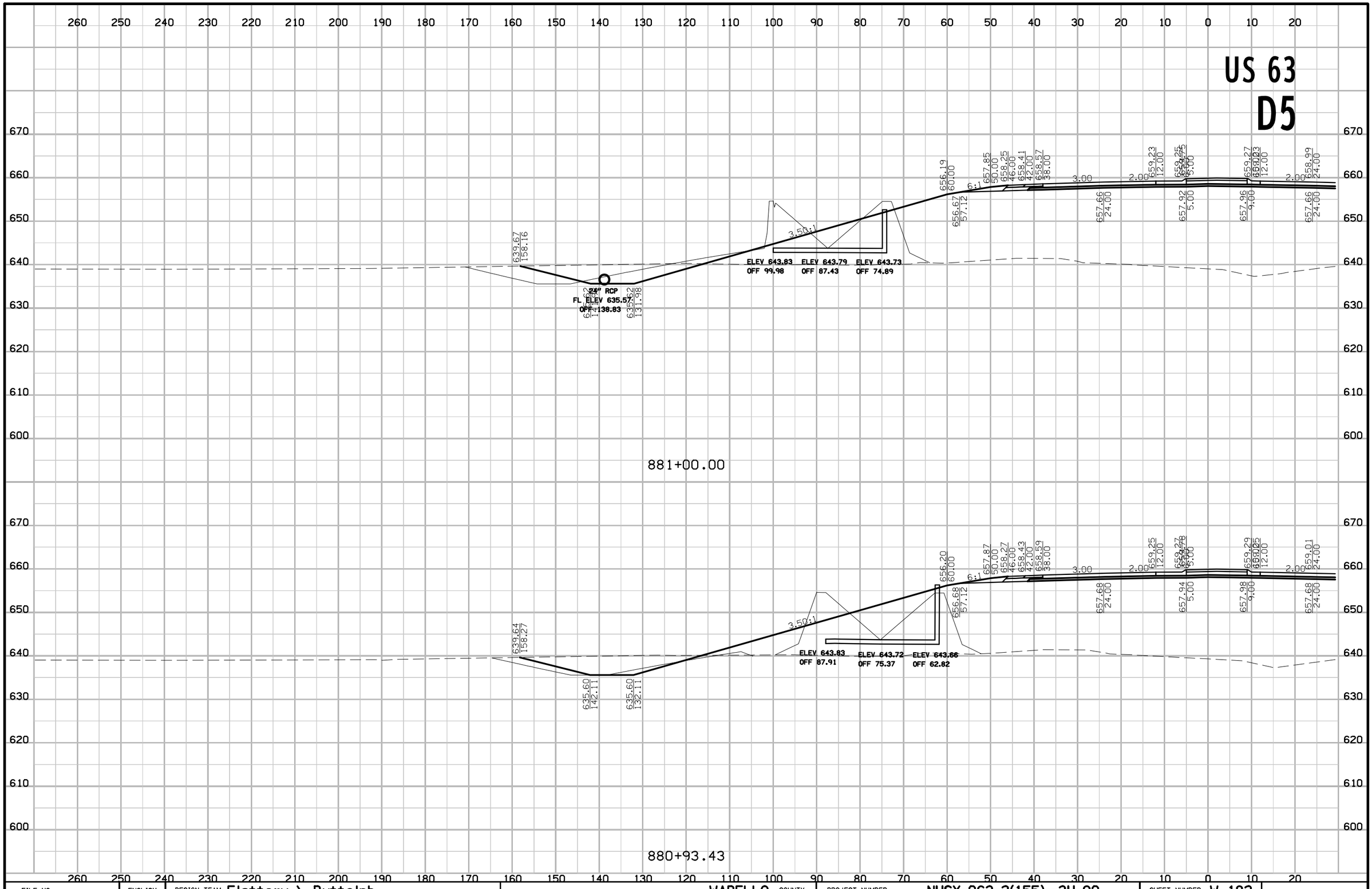
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.181

8:48:50 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

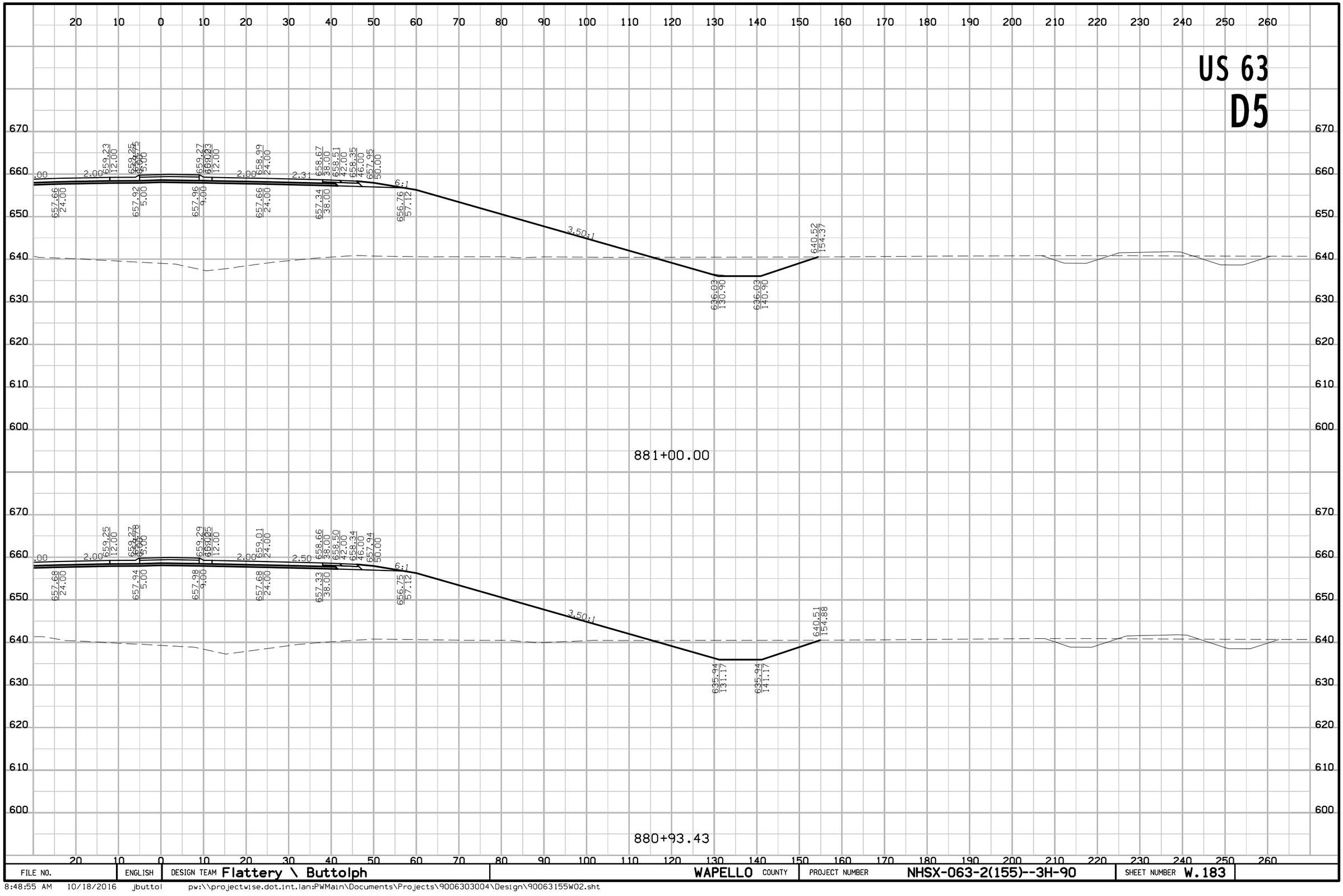
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.182

8:48:53 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

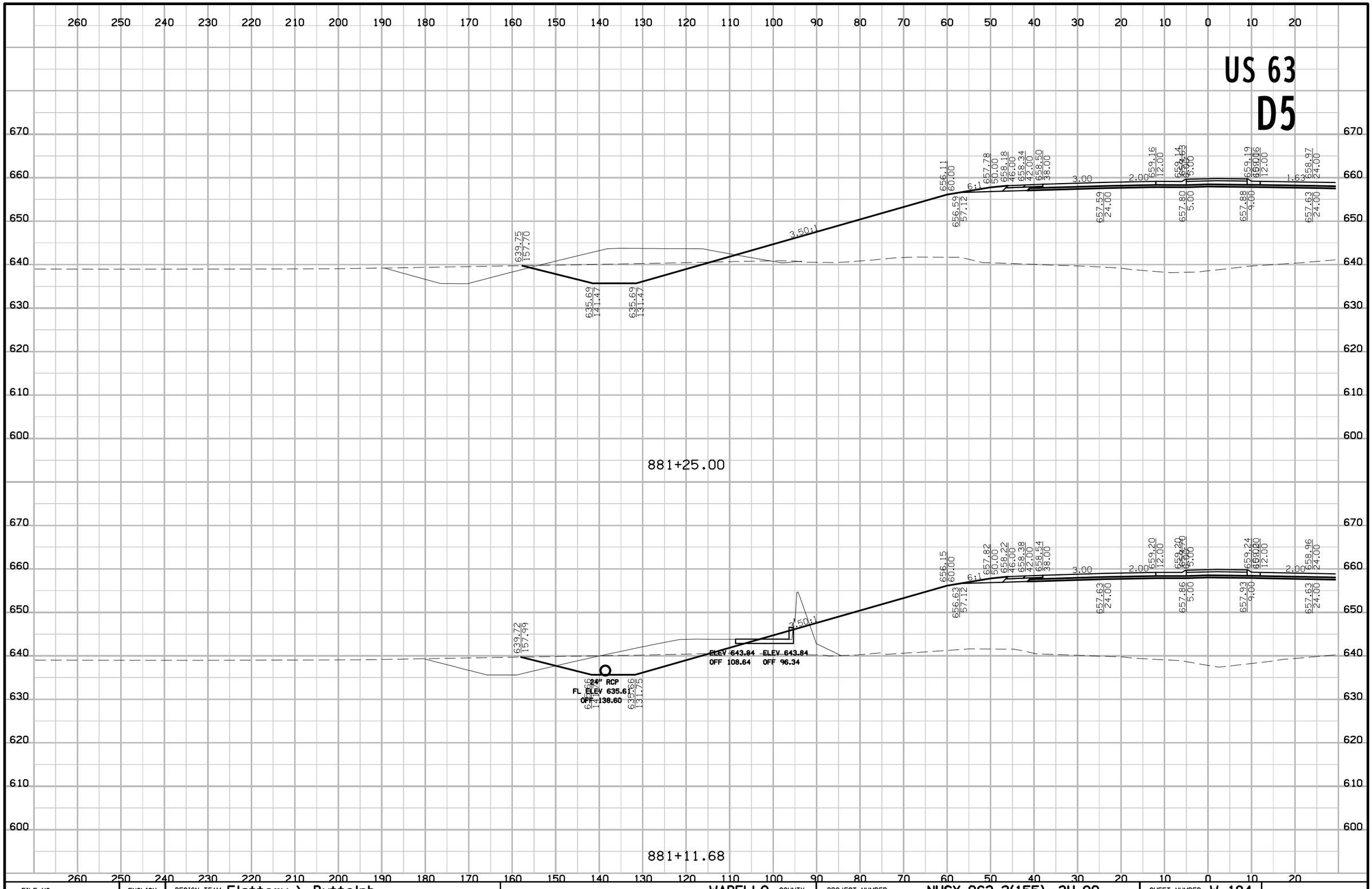
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.183

8:48:55 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

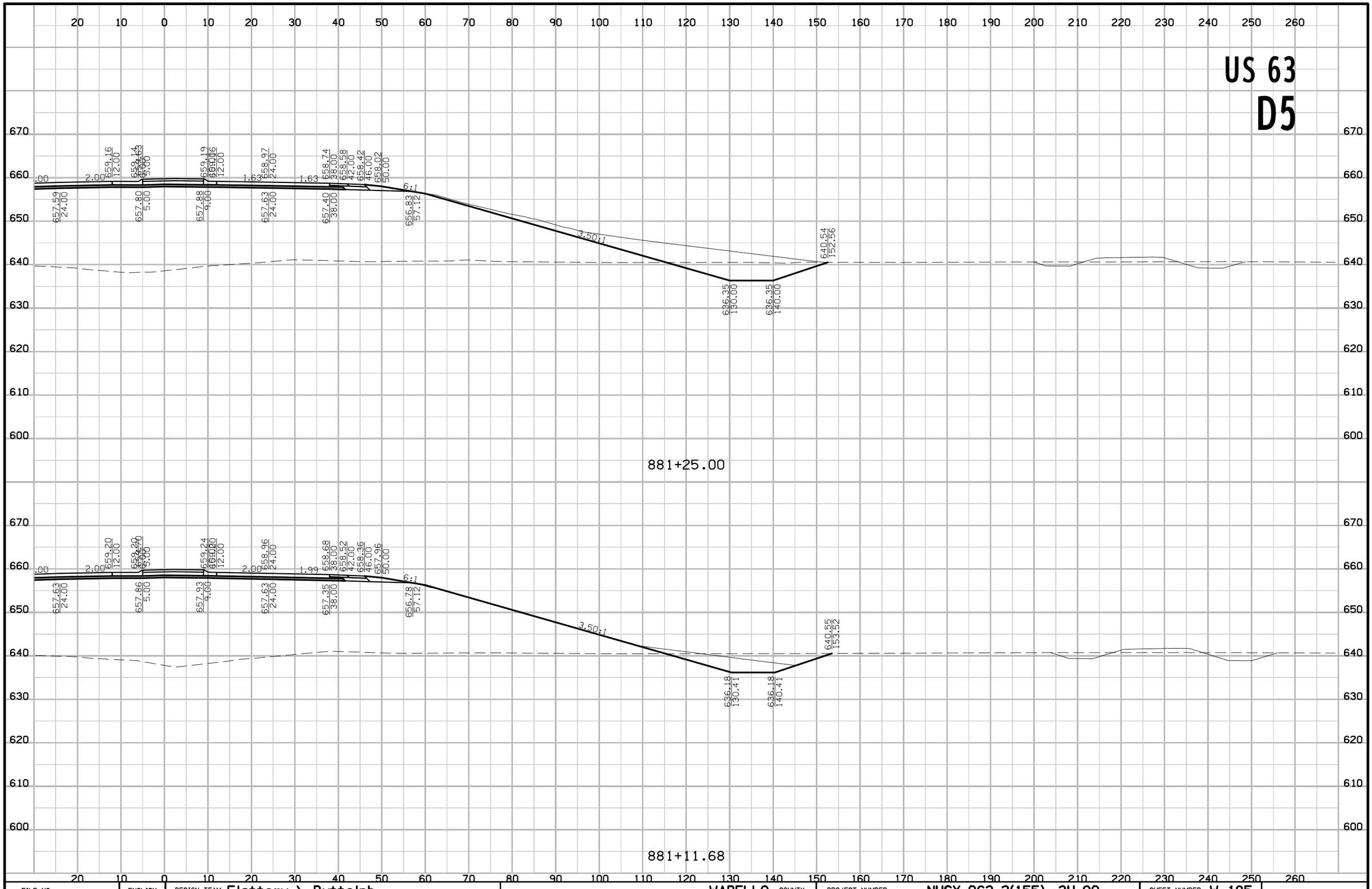
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.184

8:48:57 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.185

8:48:59 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

US 63

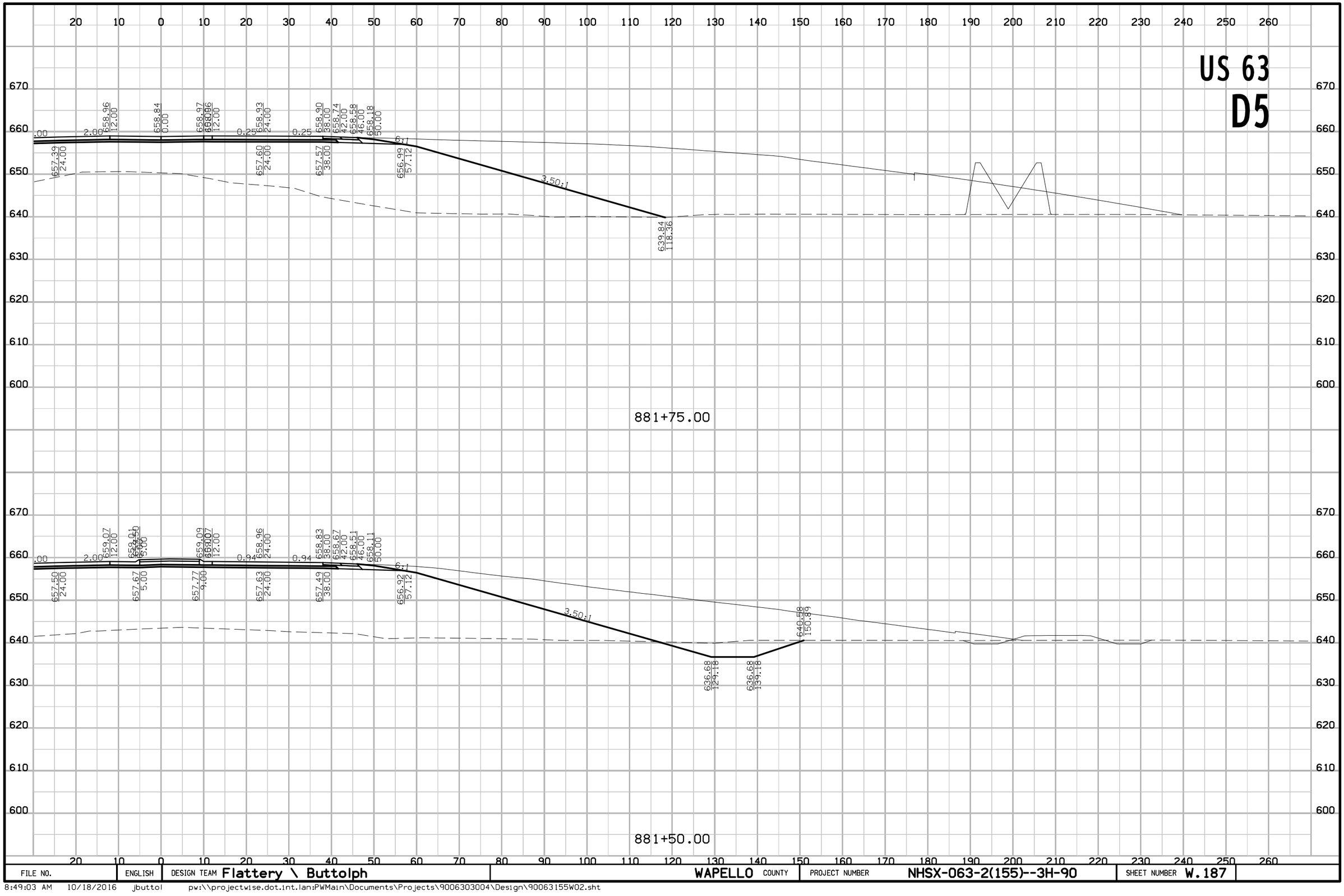
D5

881+75.00

881+50.00

| | | |

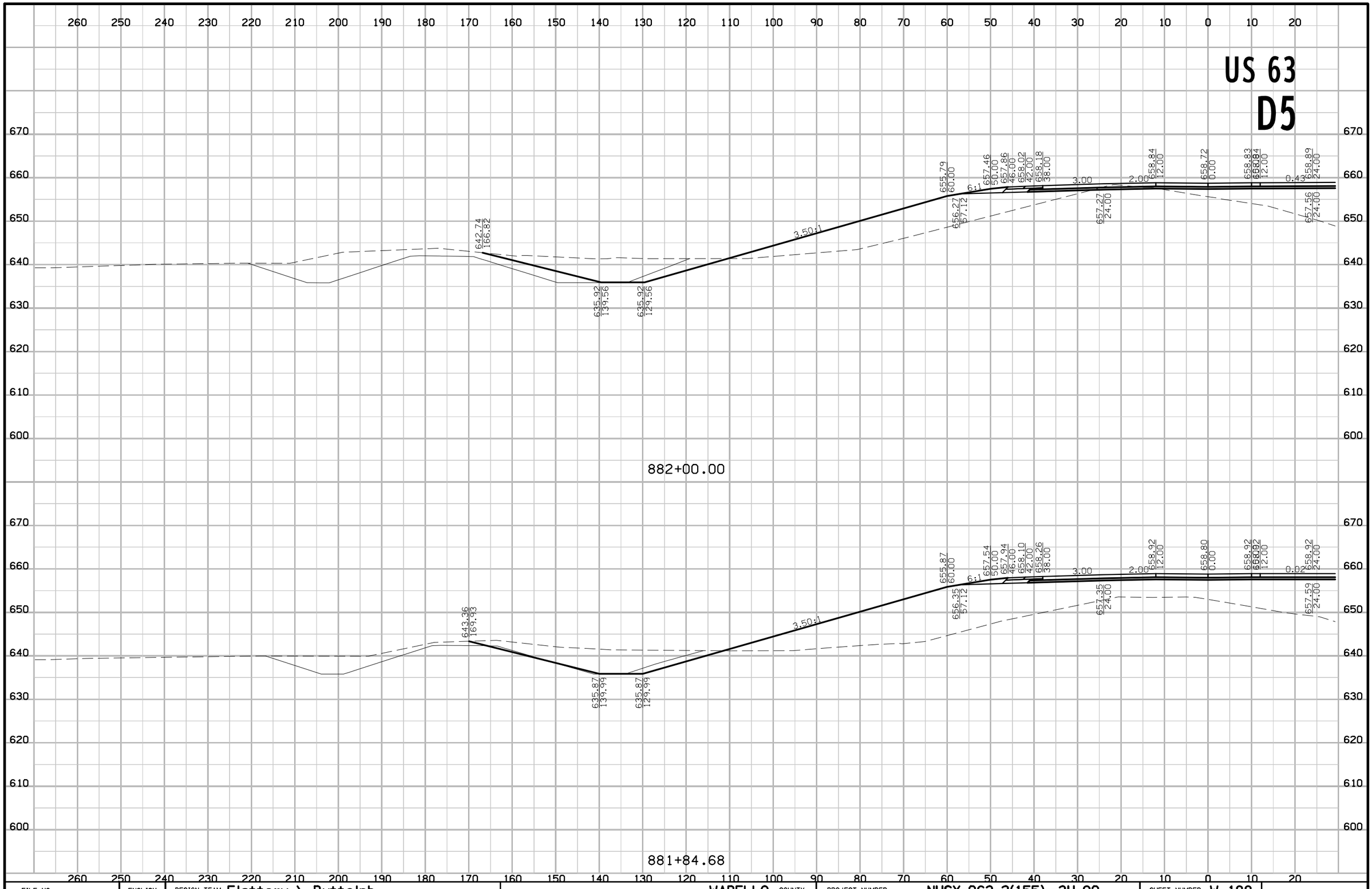
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.187

8:49:03 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

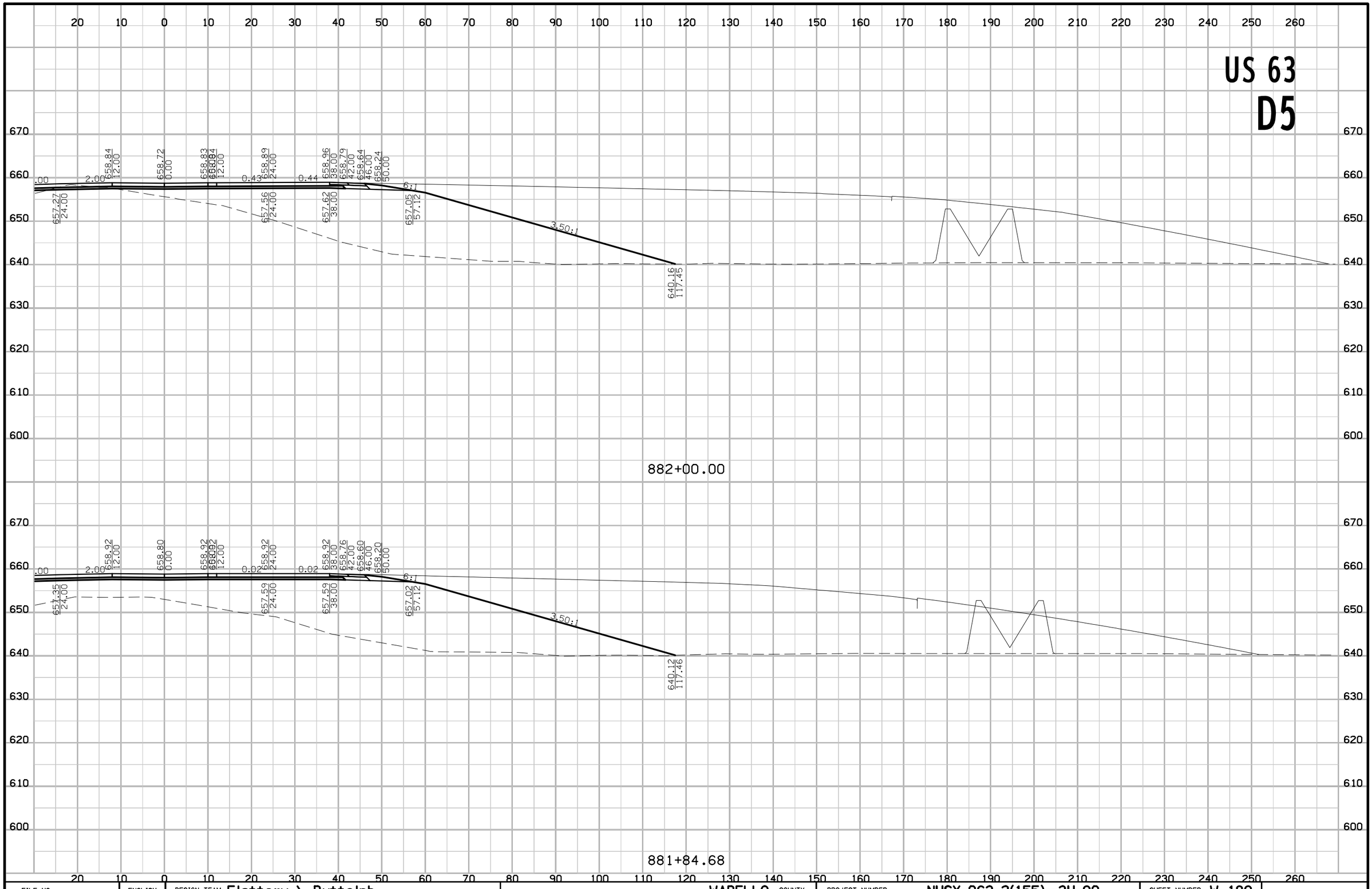
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.188

8:49:06 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

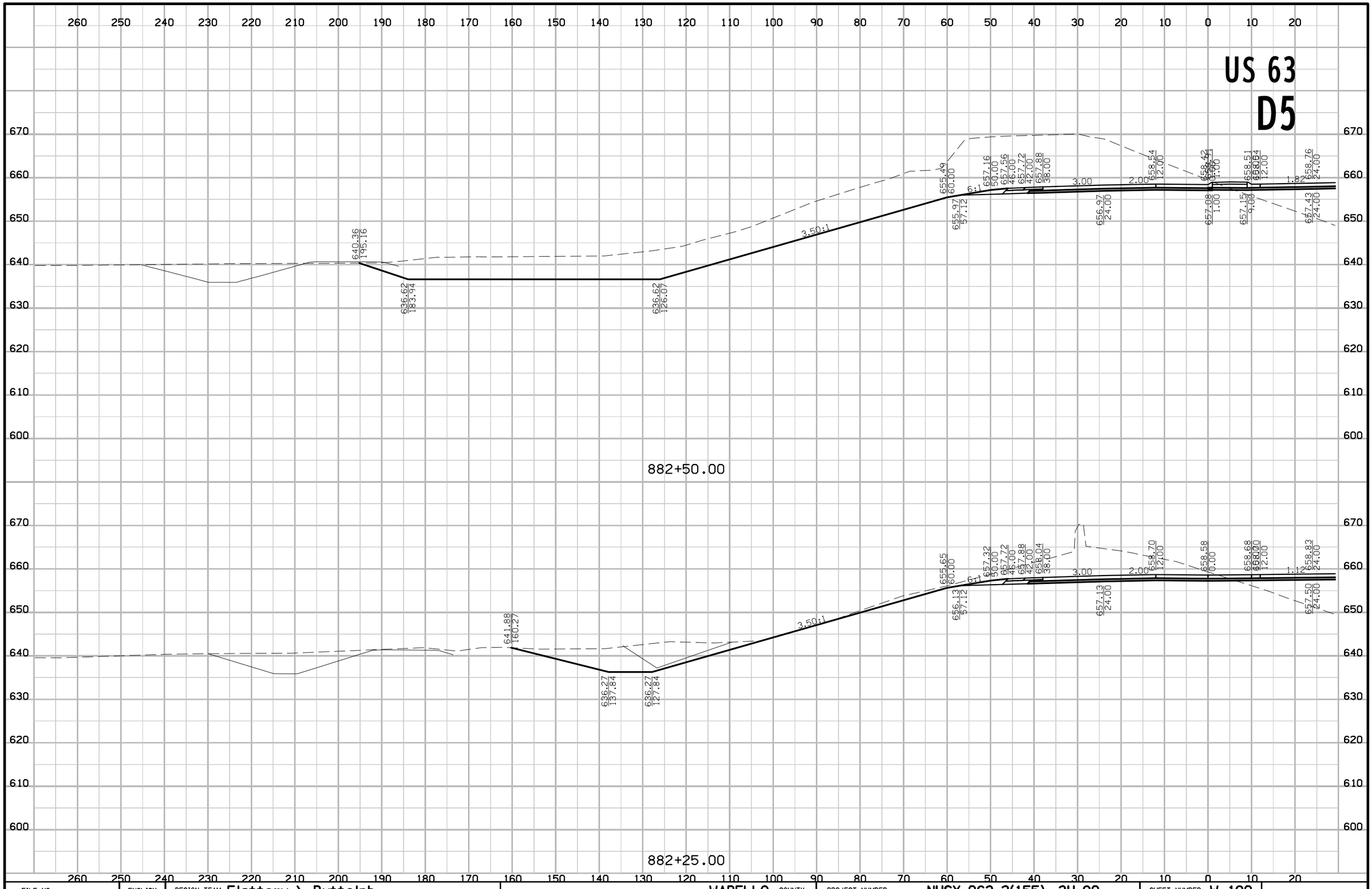
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.189

8:49:08 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

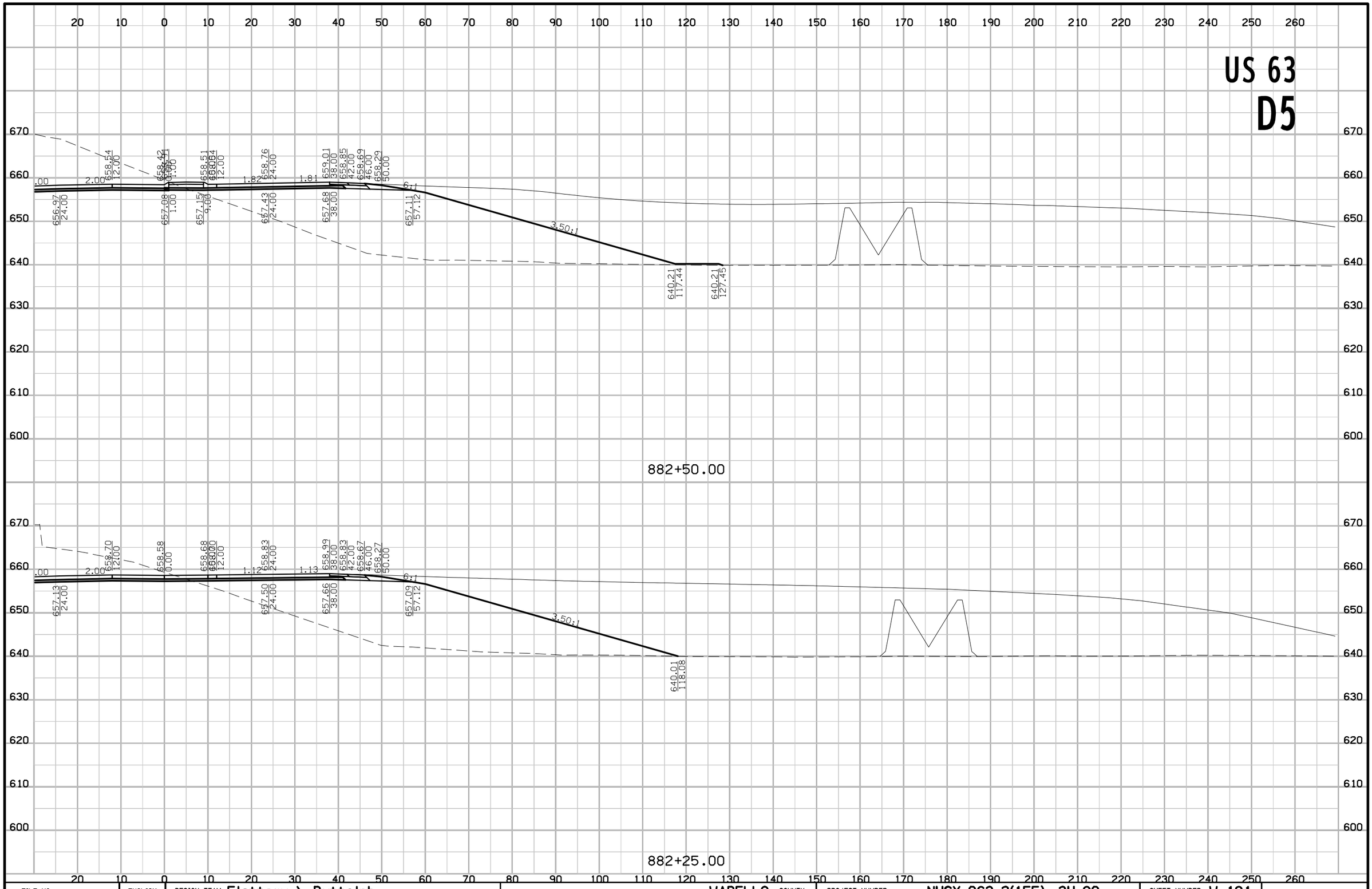
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.190

8:49:10 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

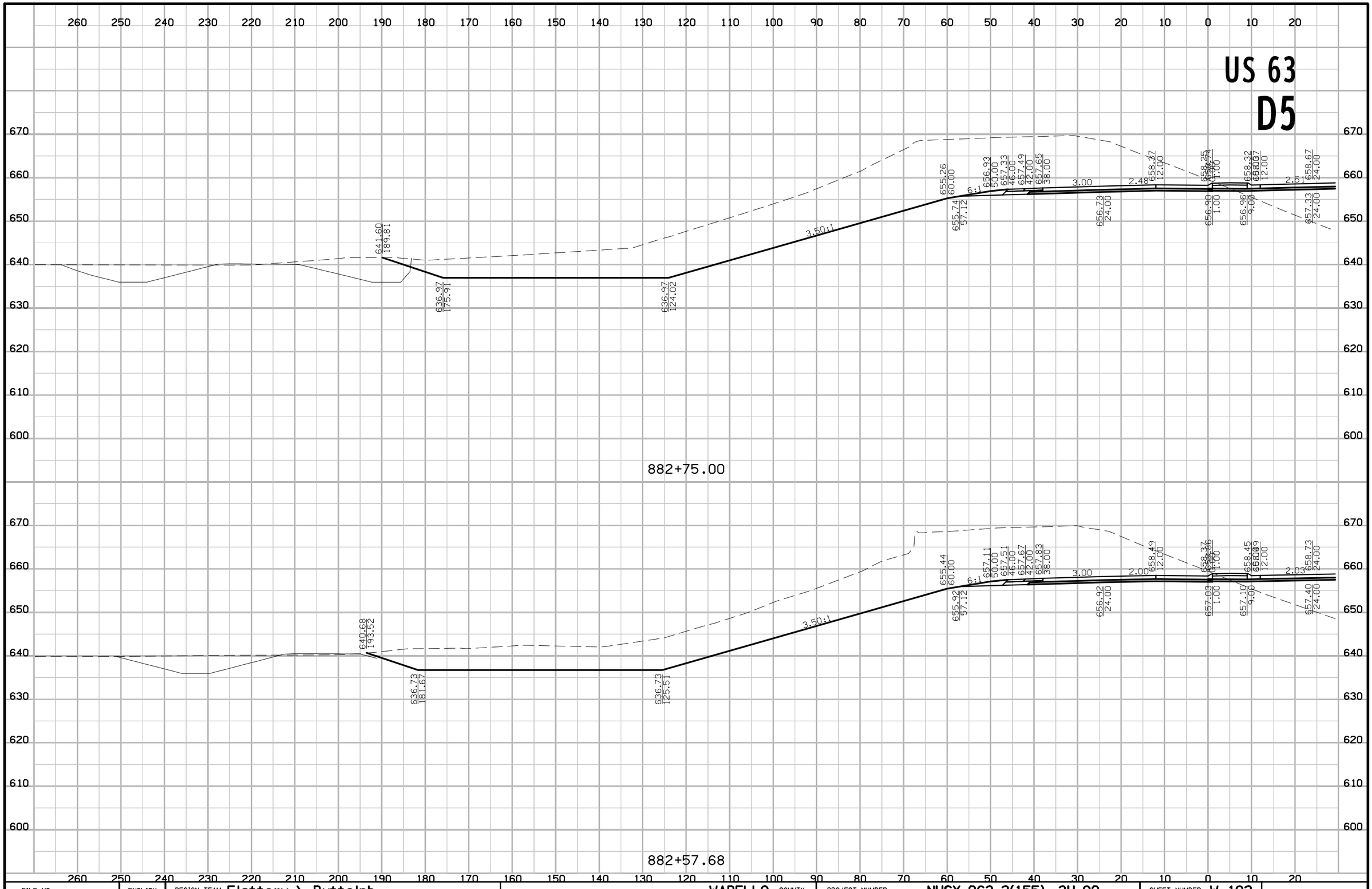
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.191

8:49:12 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

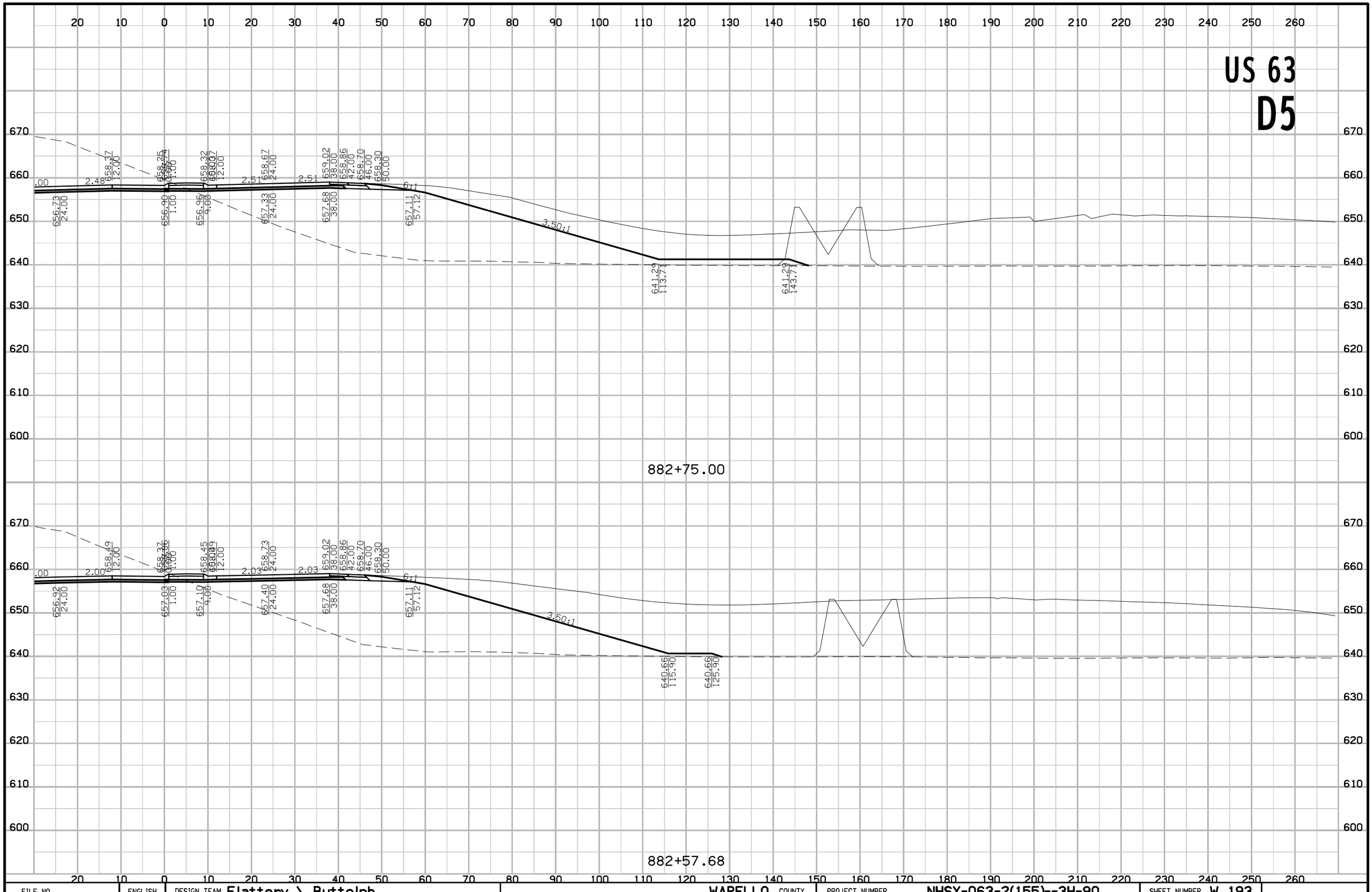
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.192

8:49:14 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

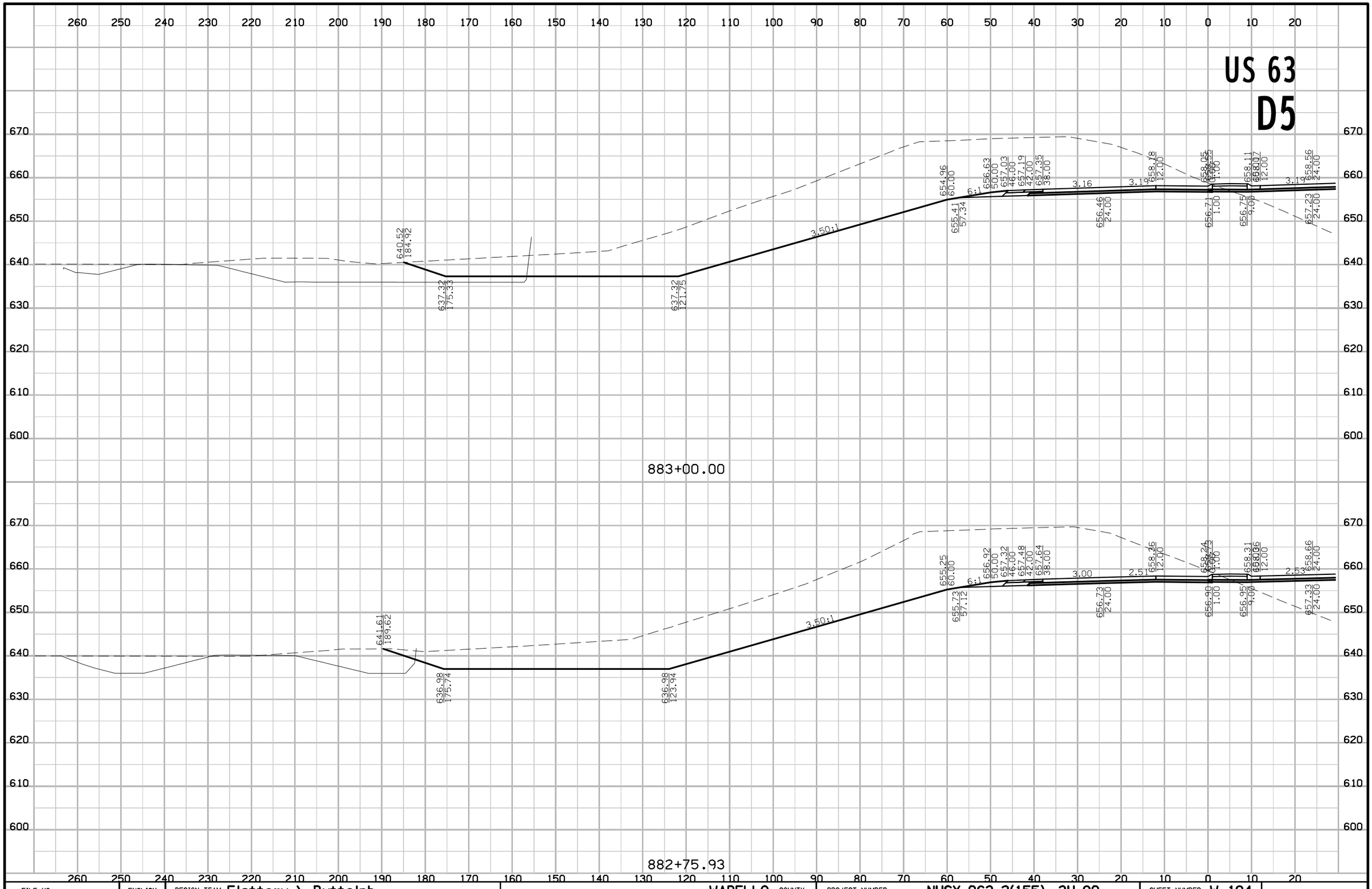
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.193

8:49:16 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

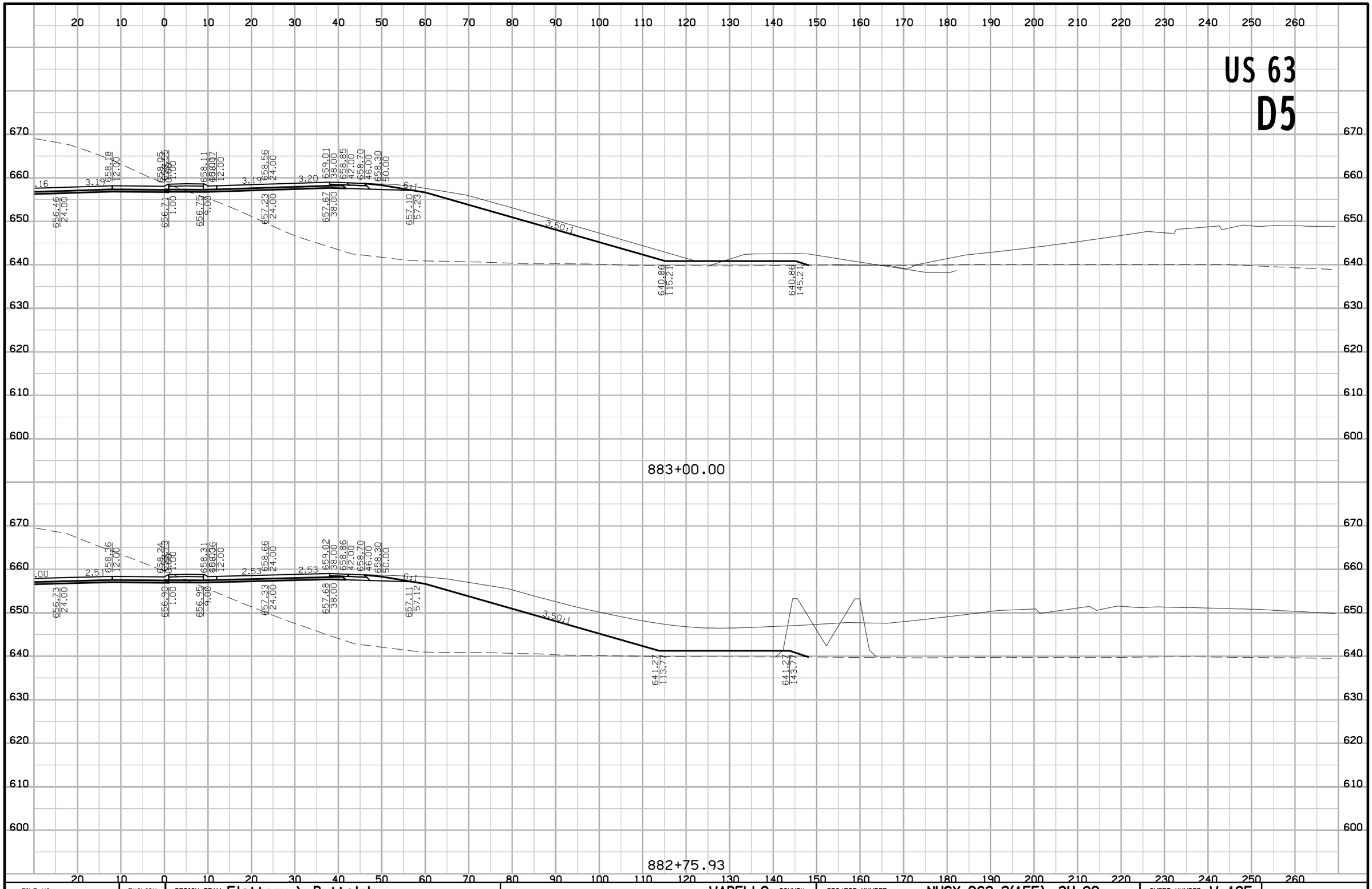
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.194

8:49:18 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

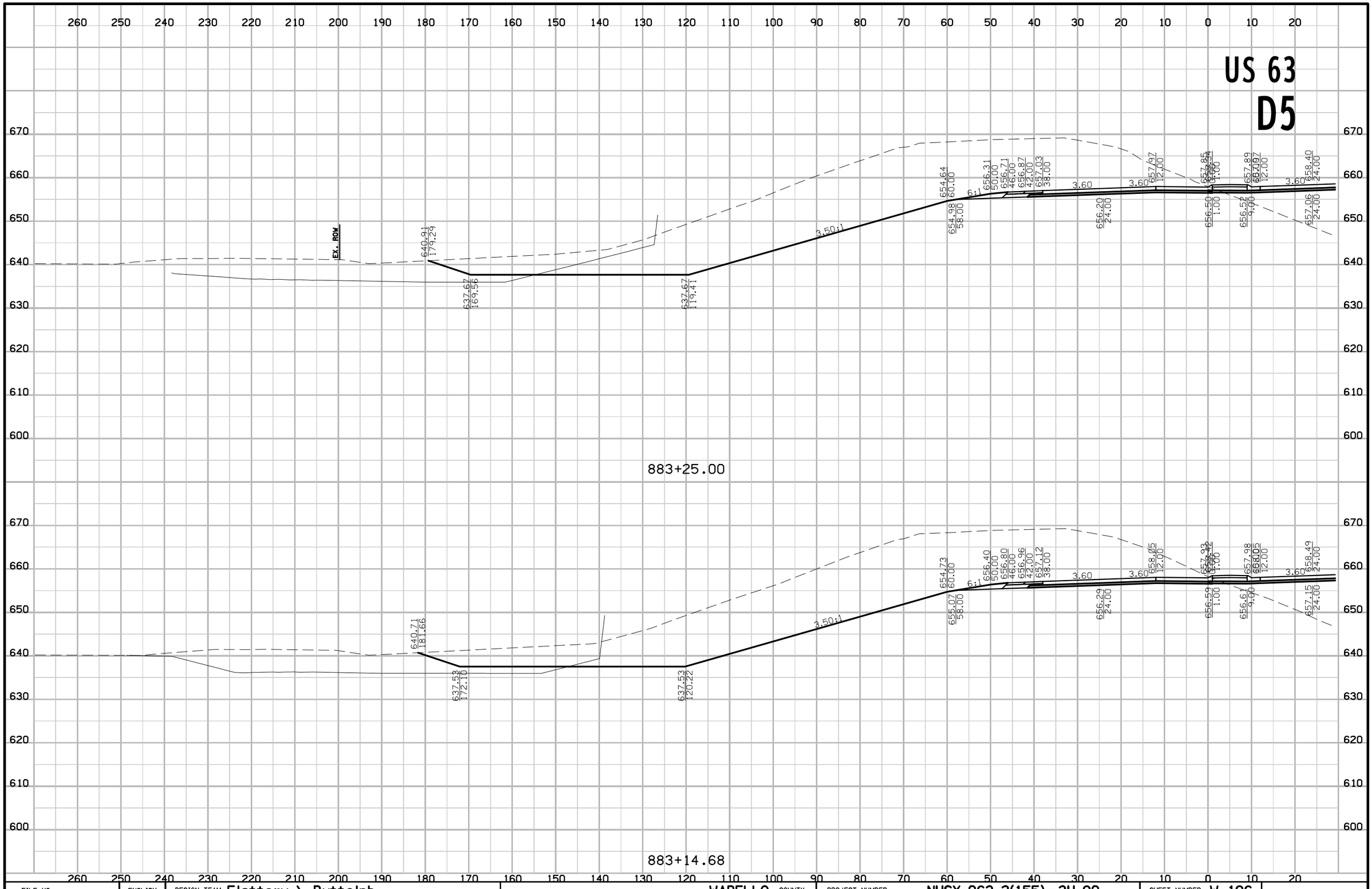
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.195

8:49:21 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

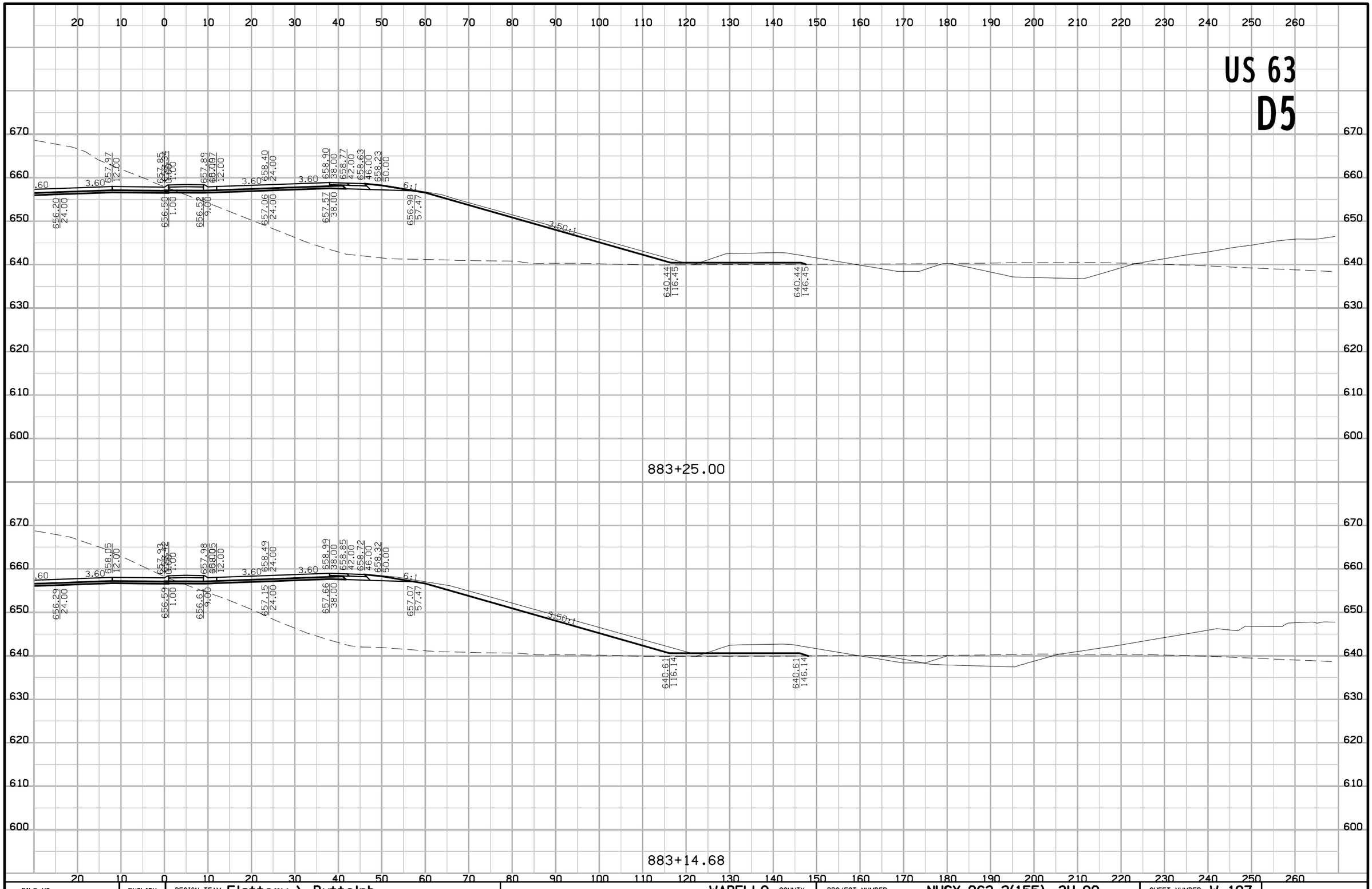
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.196

8:49:23 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

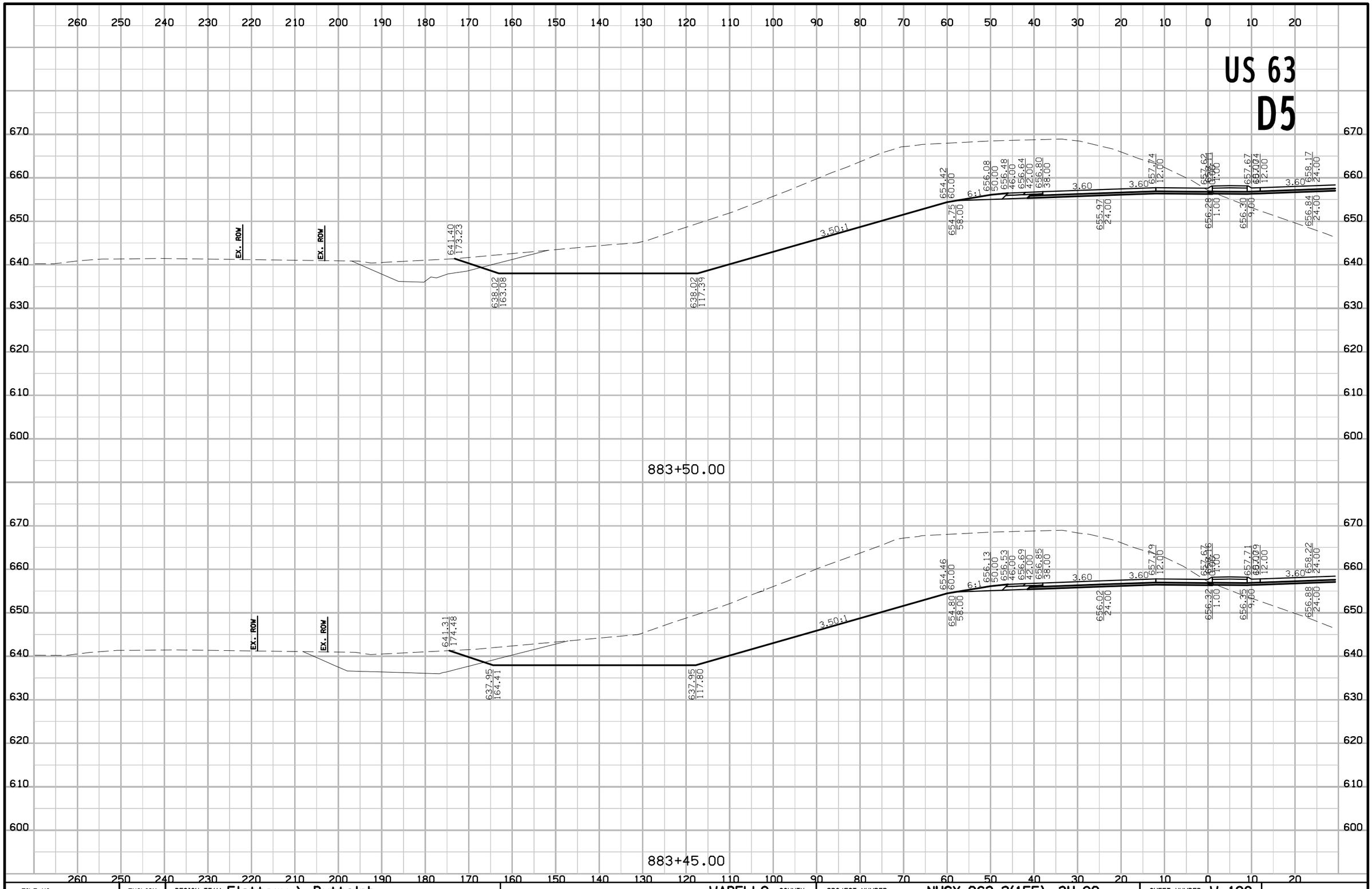
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.197

8:49:33 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

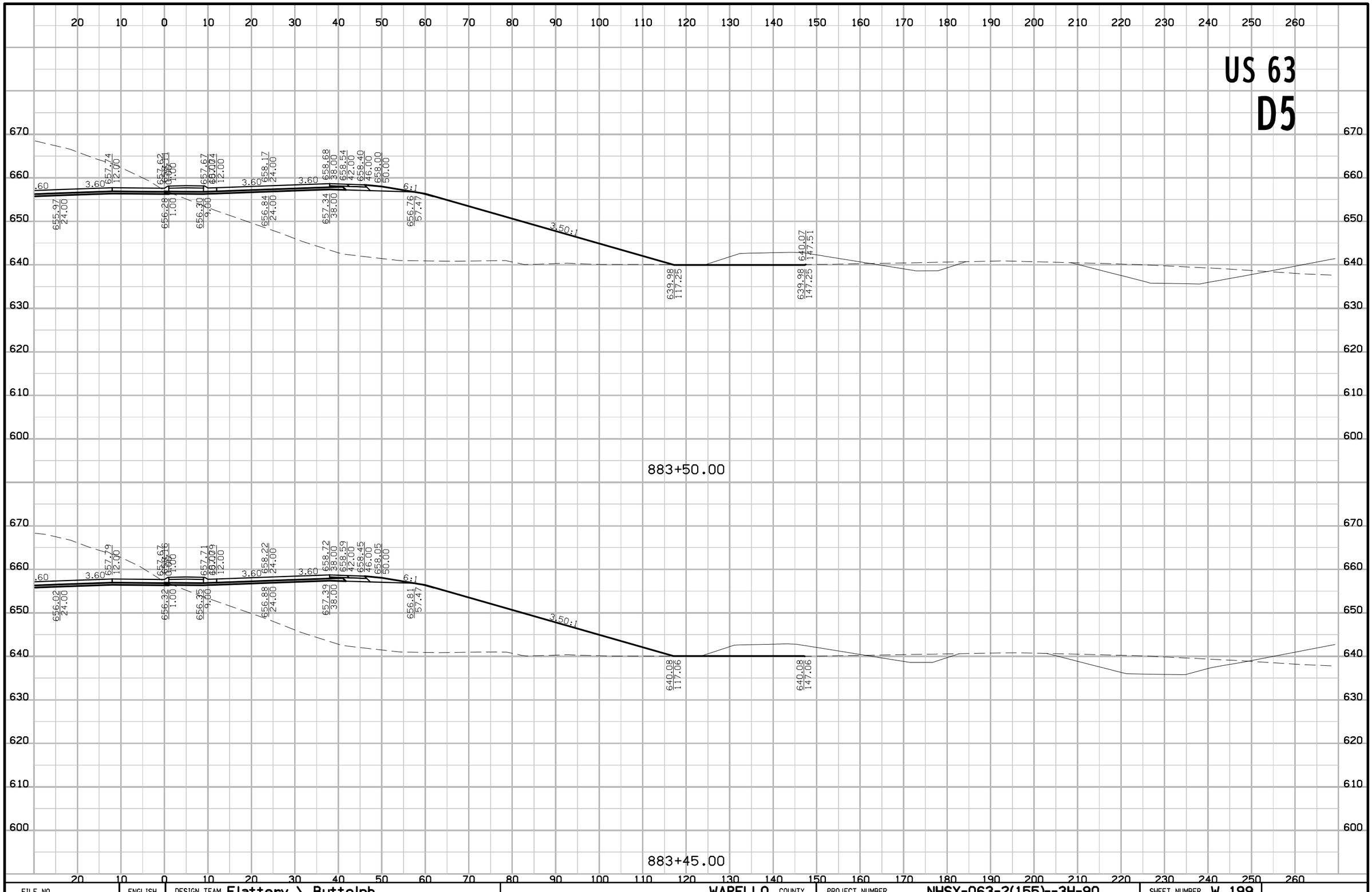
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.198

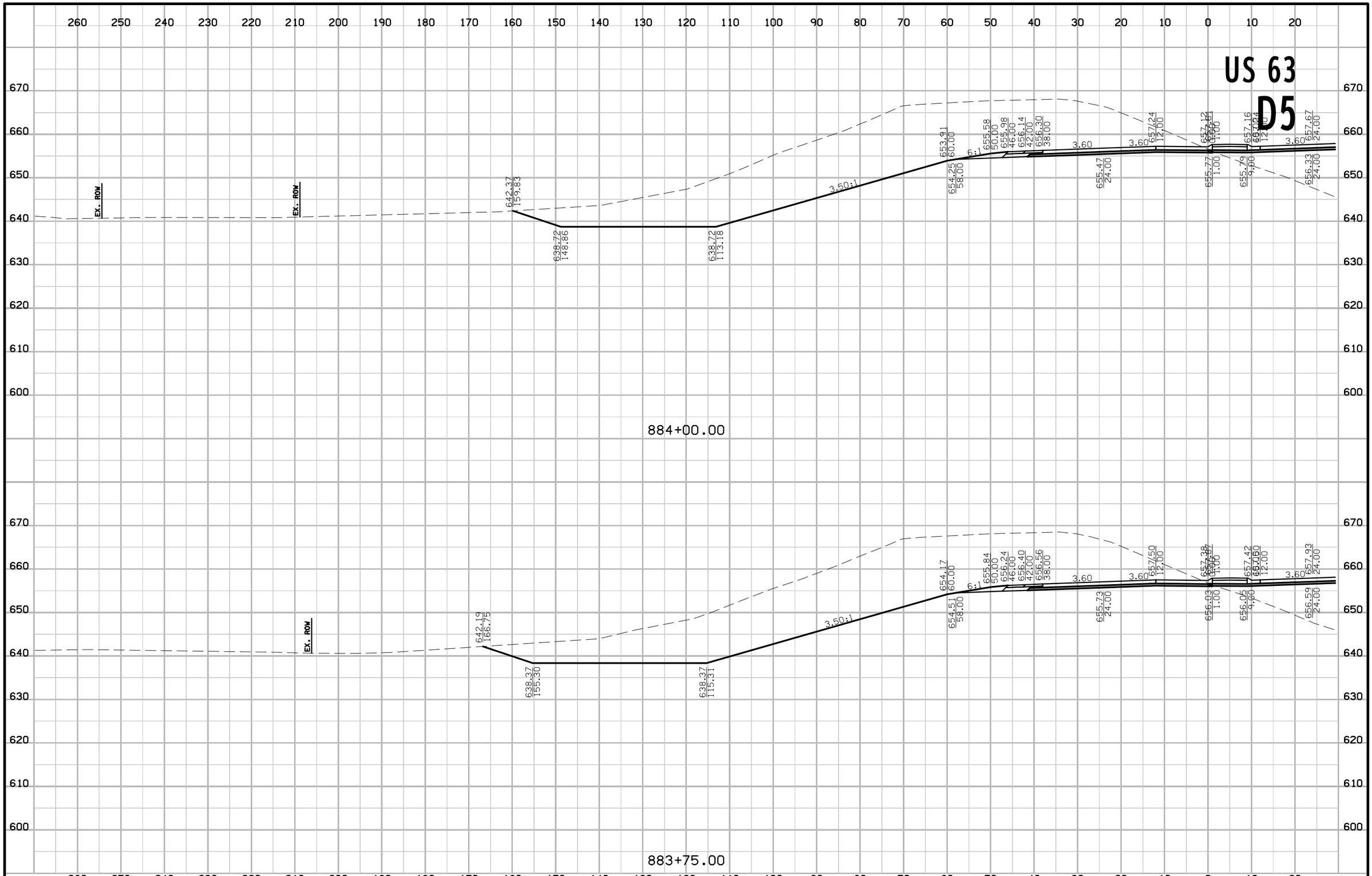
8:49:35 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.199

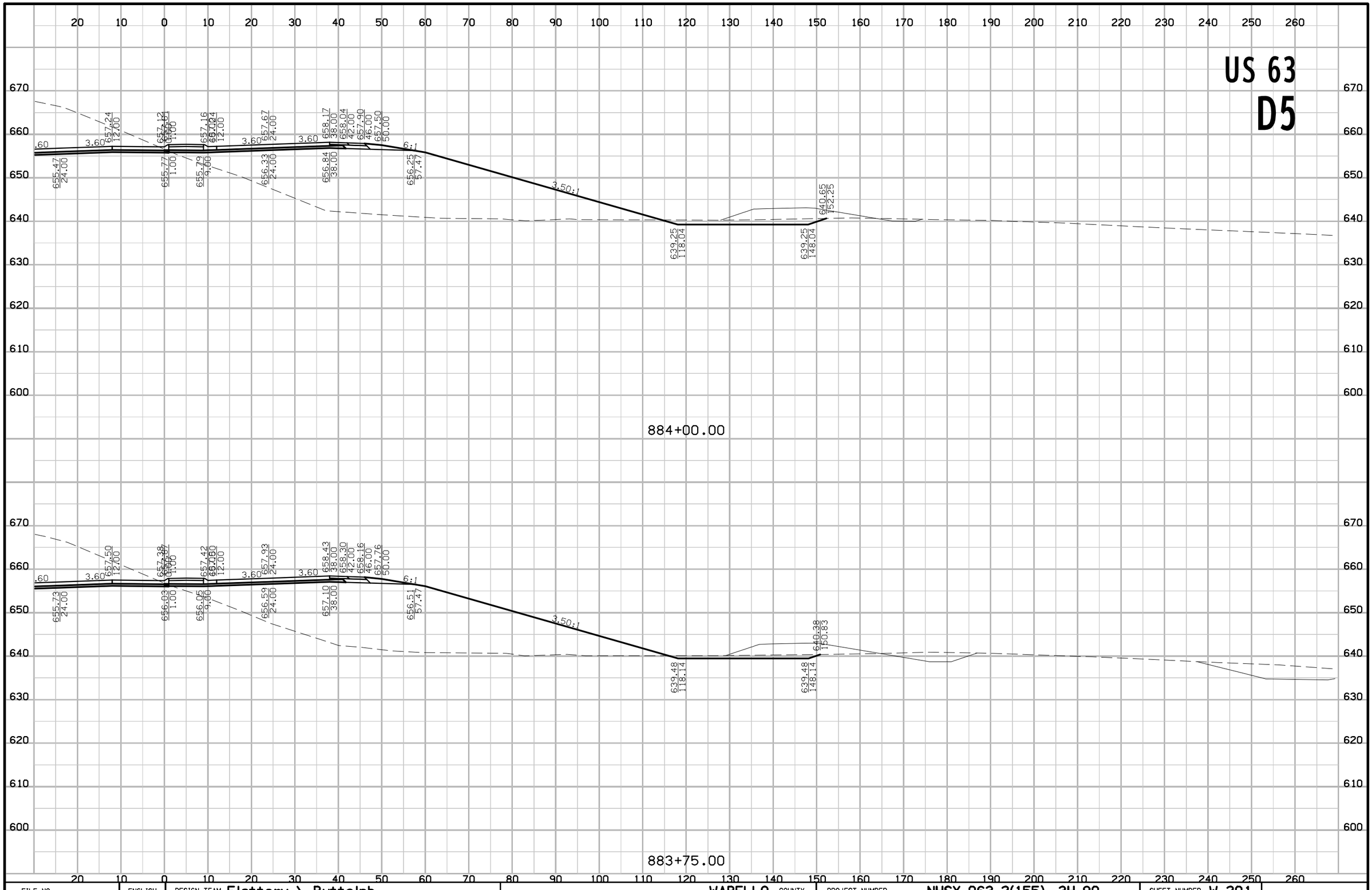
8:49:37 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.200

8:49:39 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

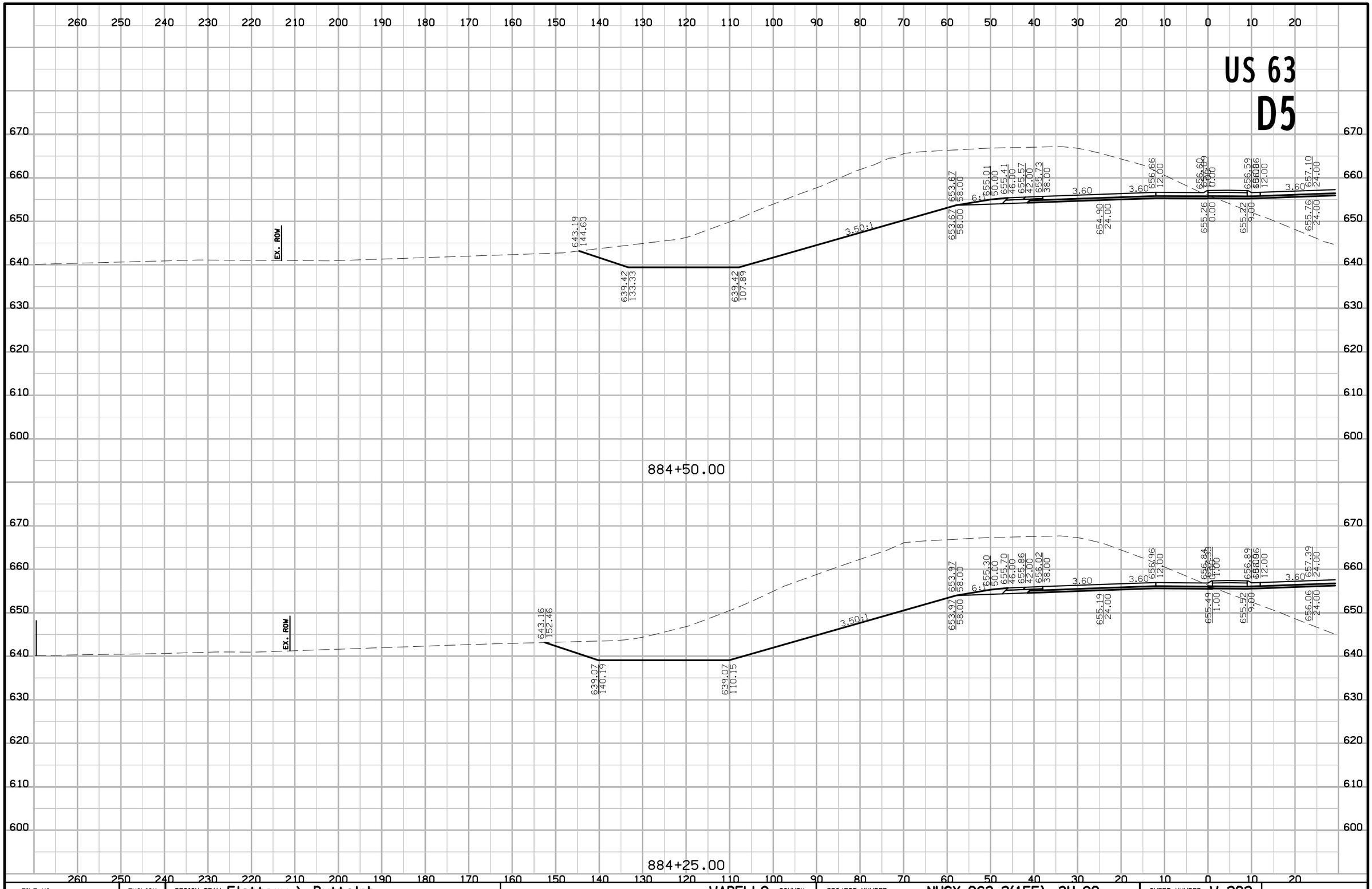
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.201

8:49:41 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W02.sht

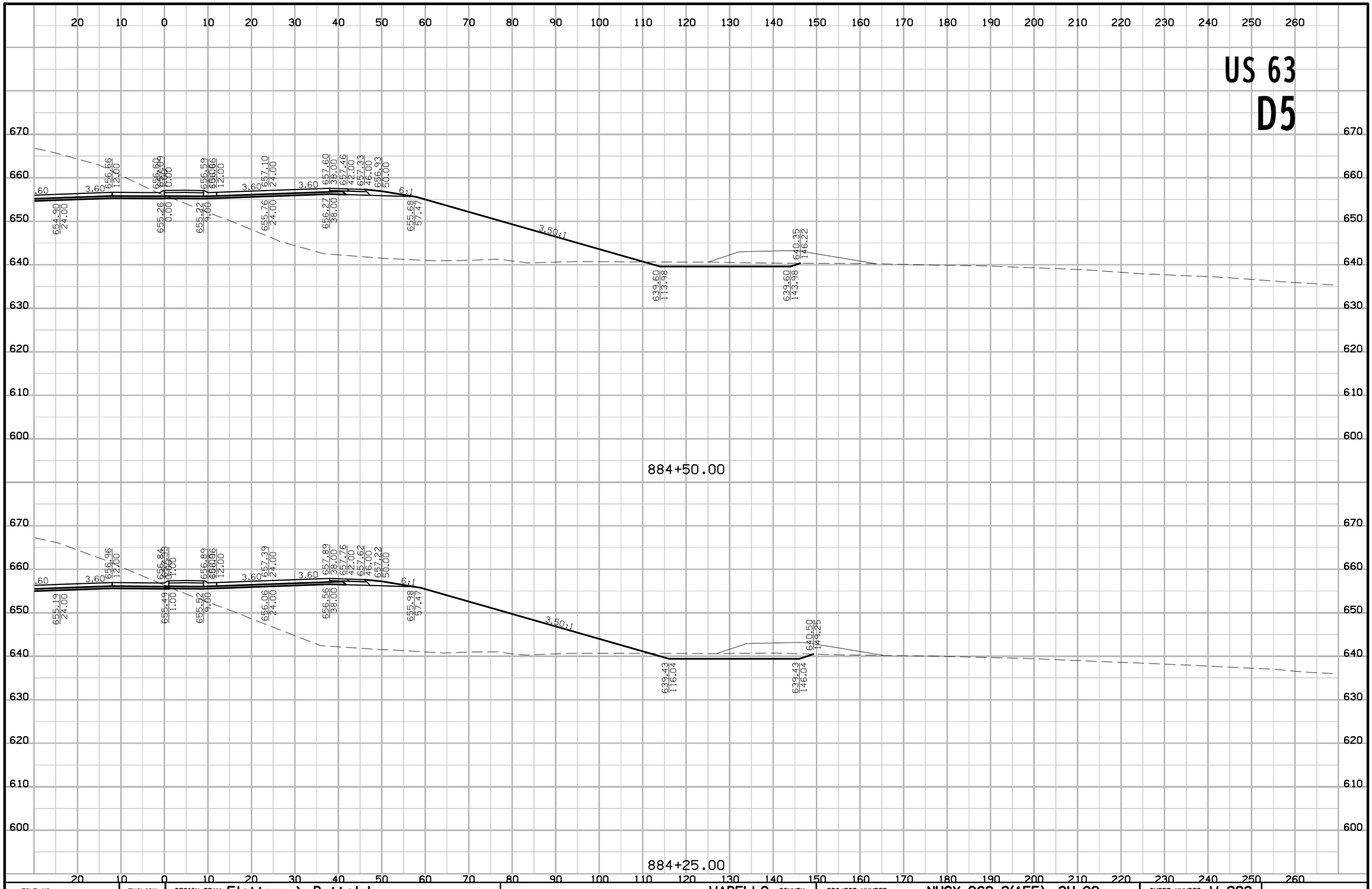
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.202

8:51:25 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

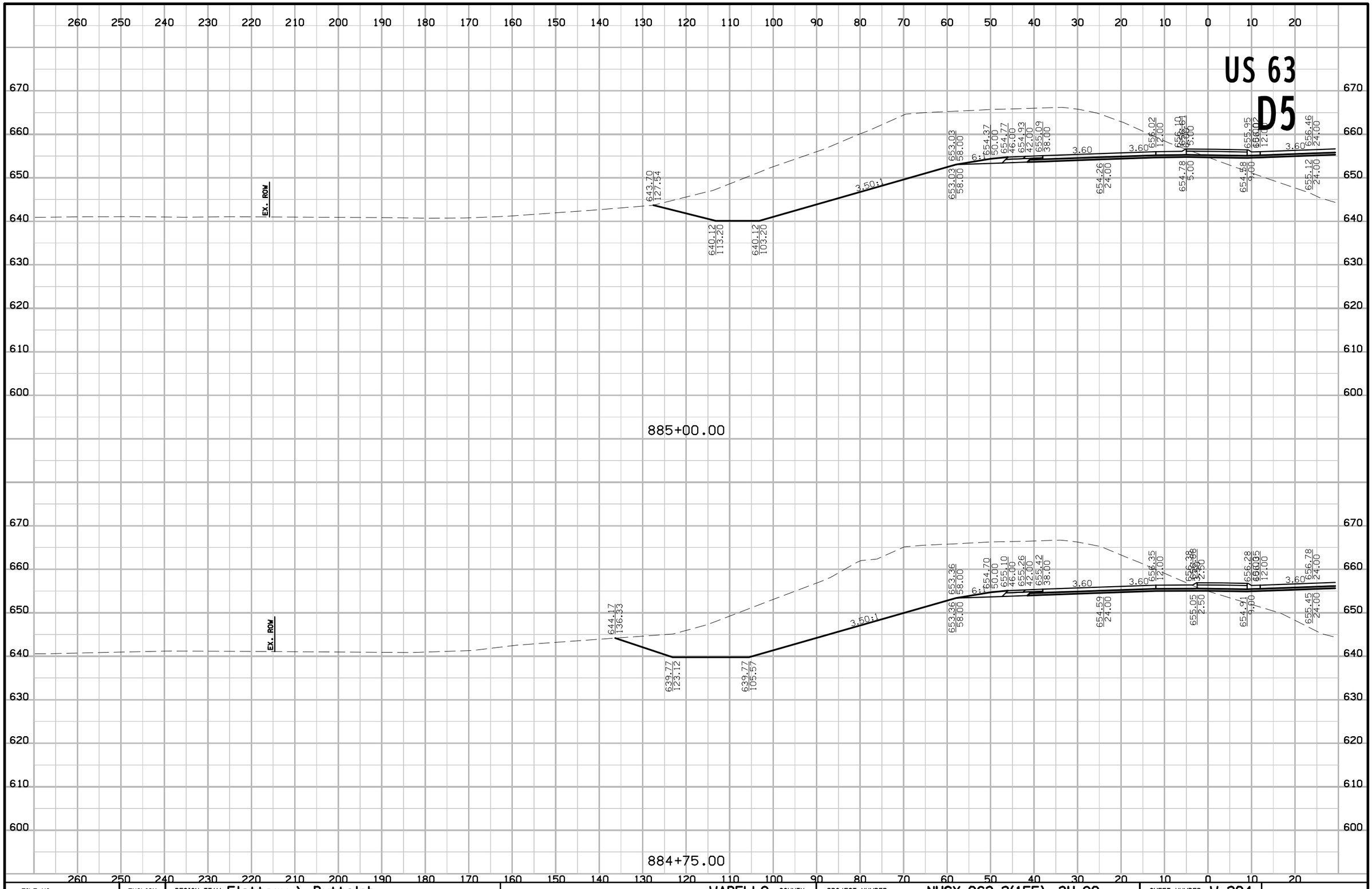


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.203

8:51:27 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

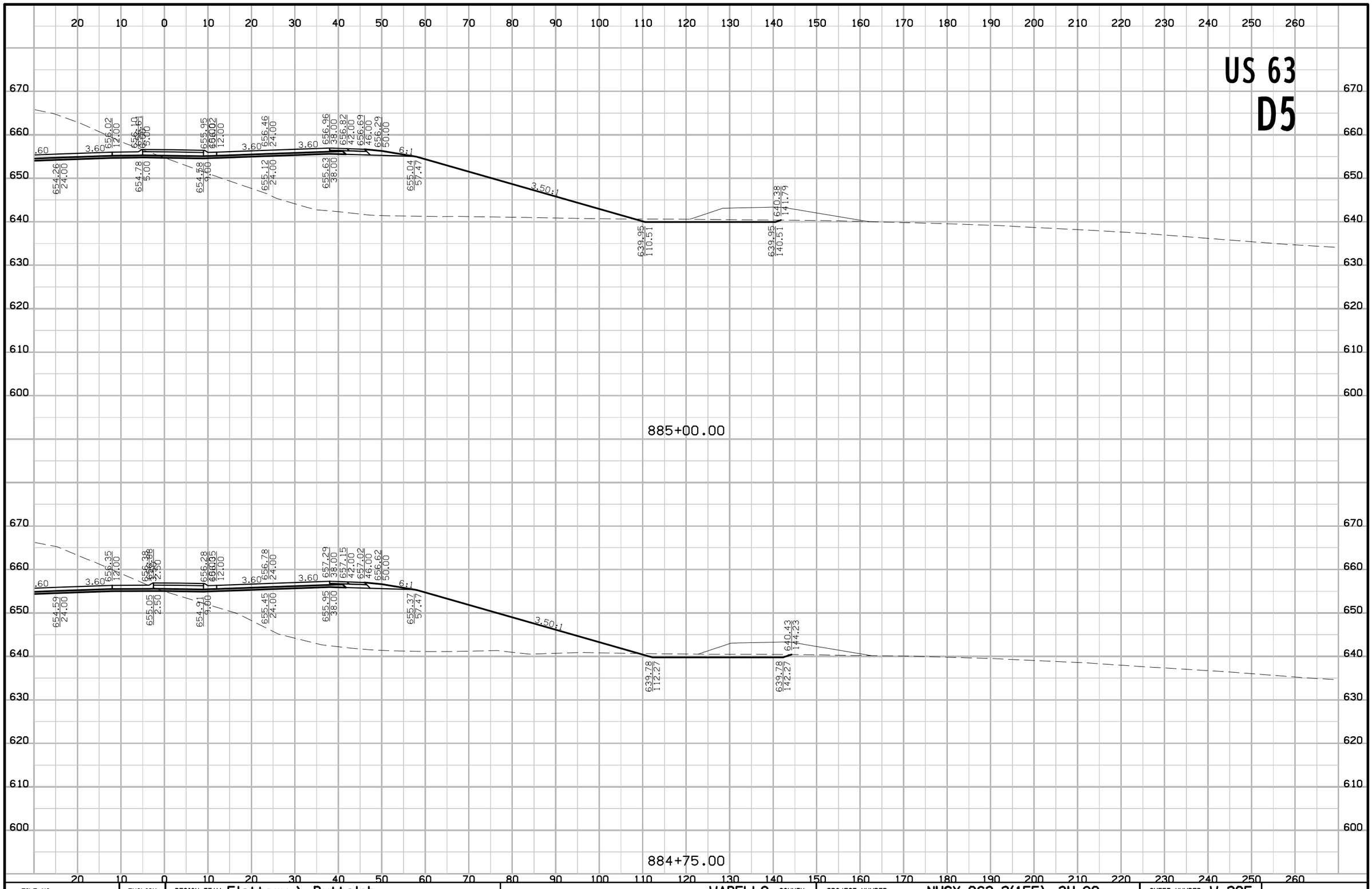
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.204

8:51:29 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

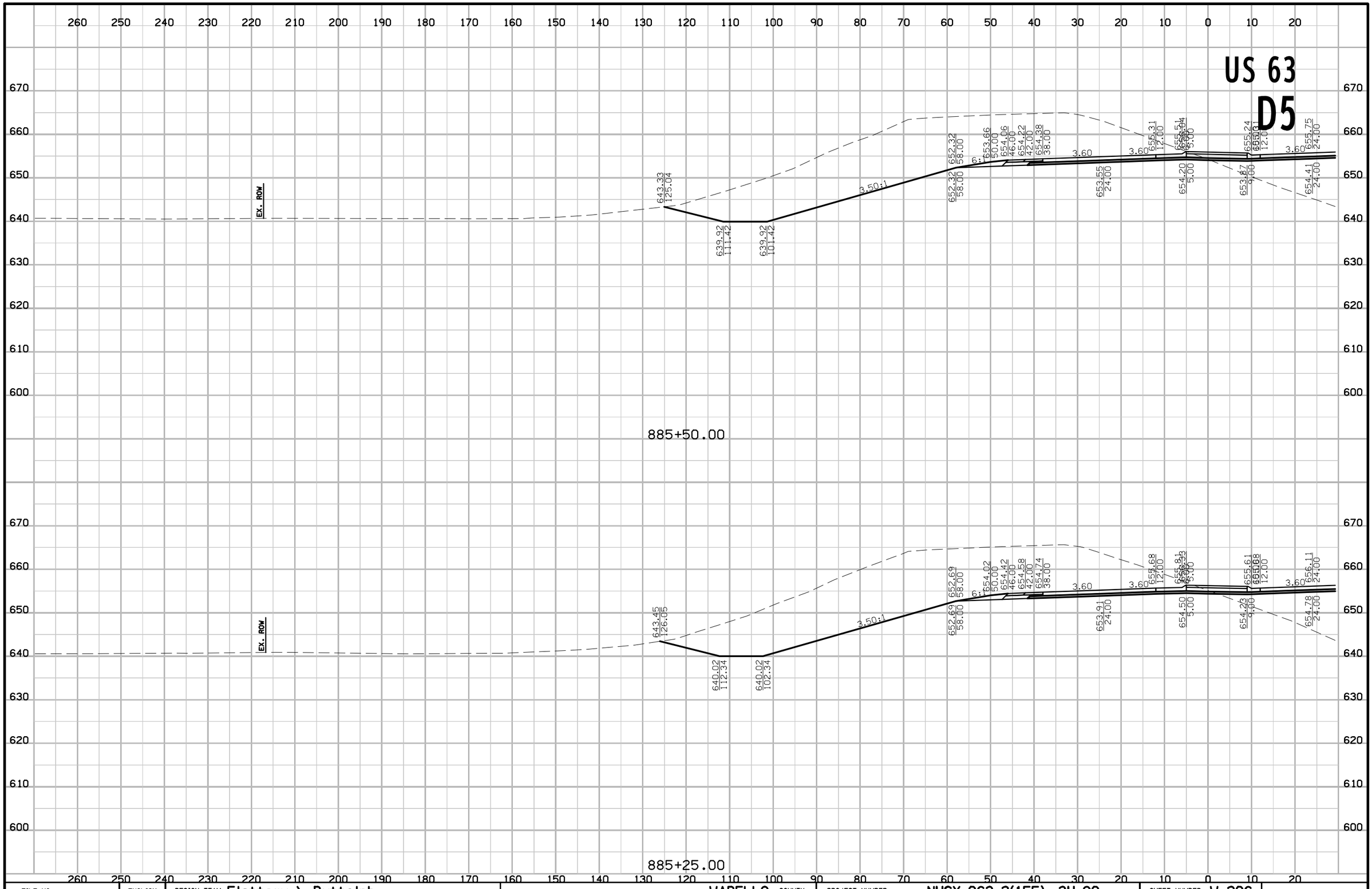


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.205

8:51:31 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

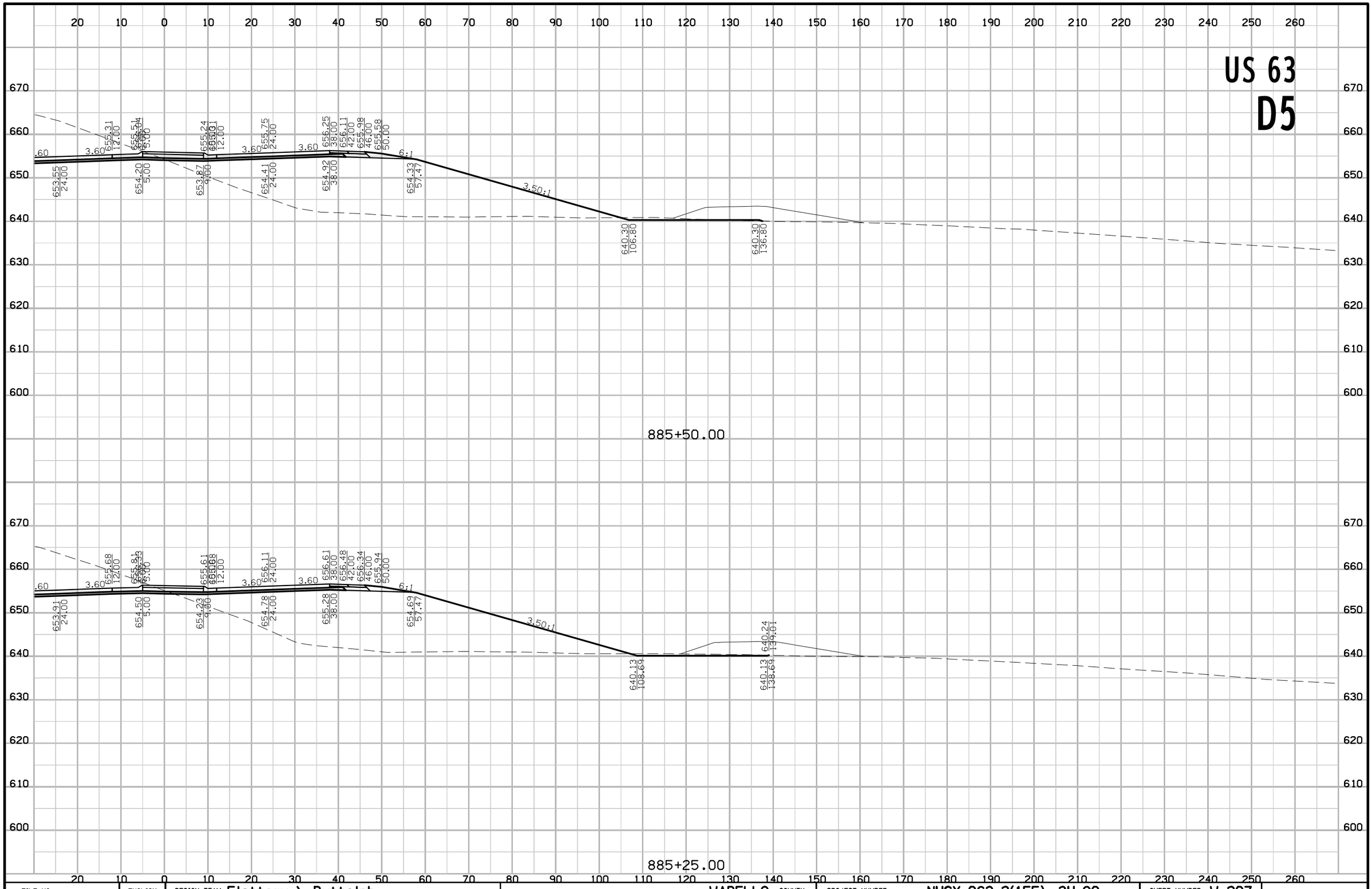
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.206

8:51:33 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

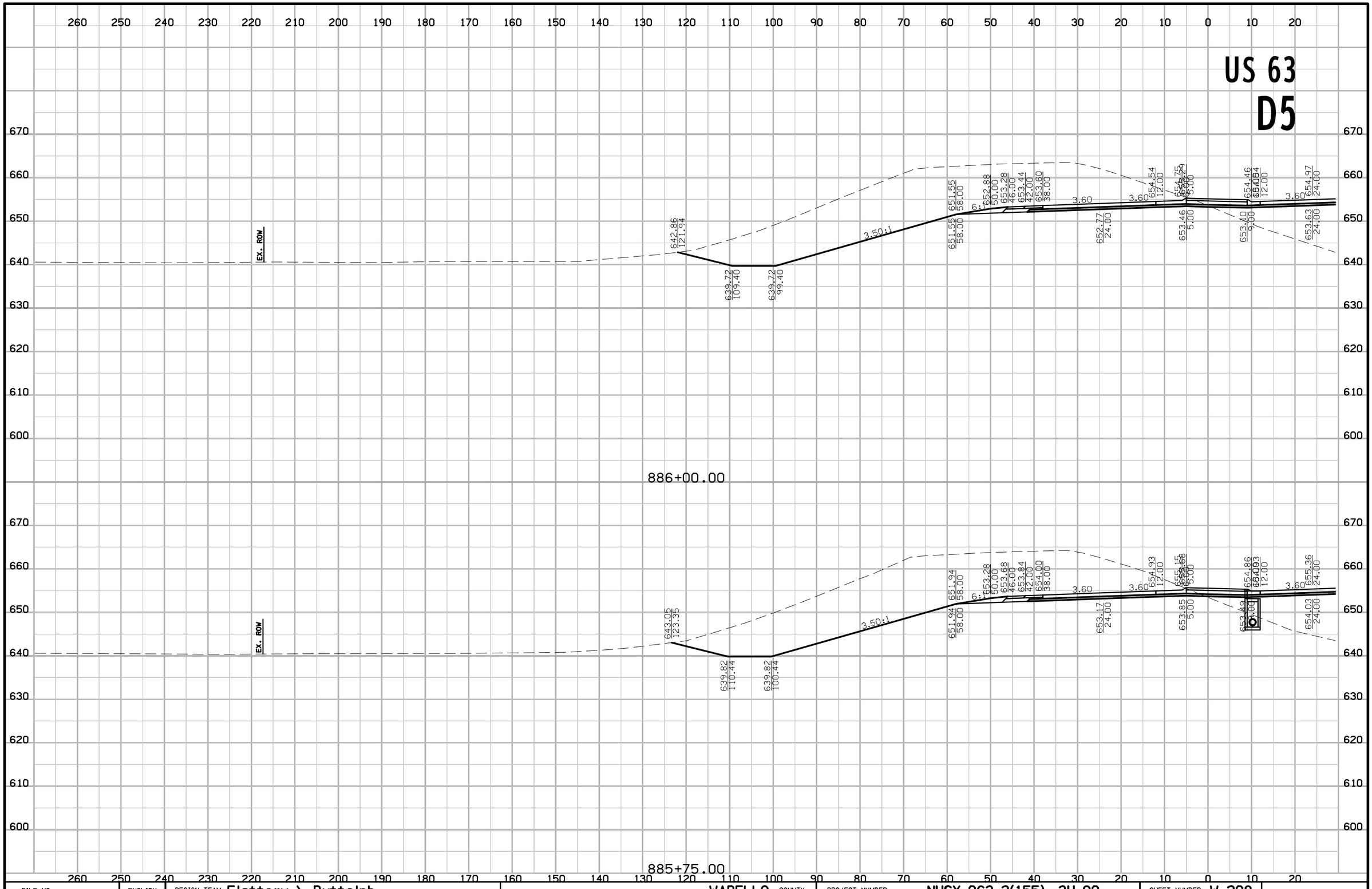
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.207

8:51:35 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

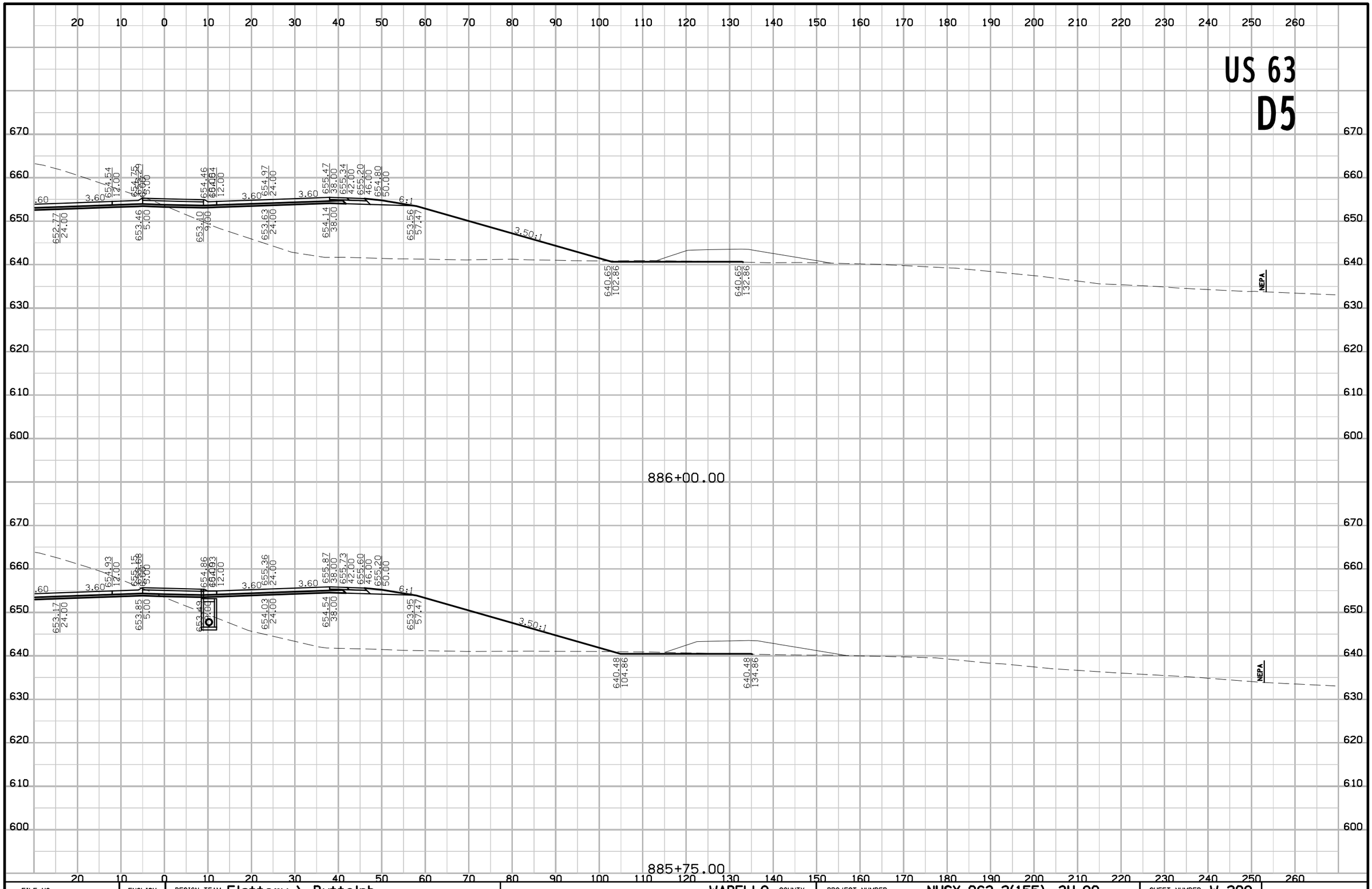
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.208

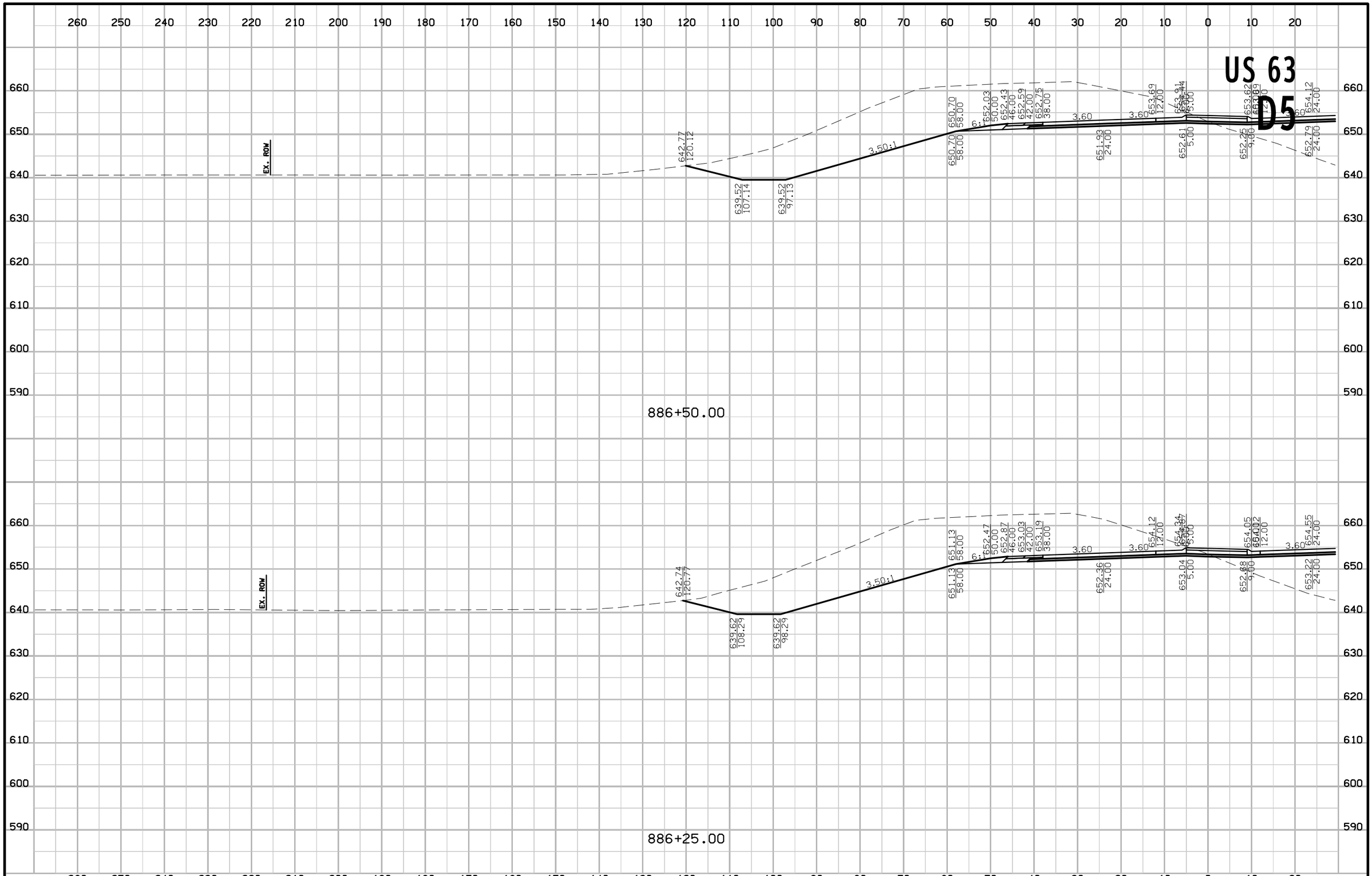
8:51:37 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.209

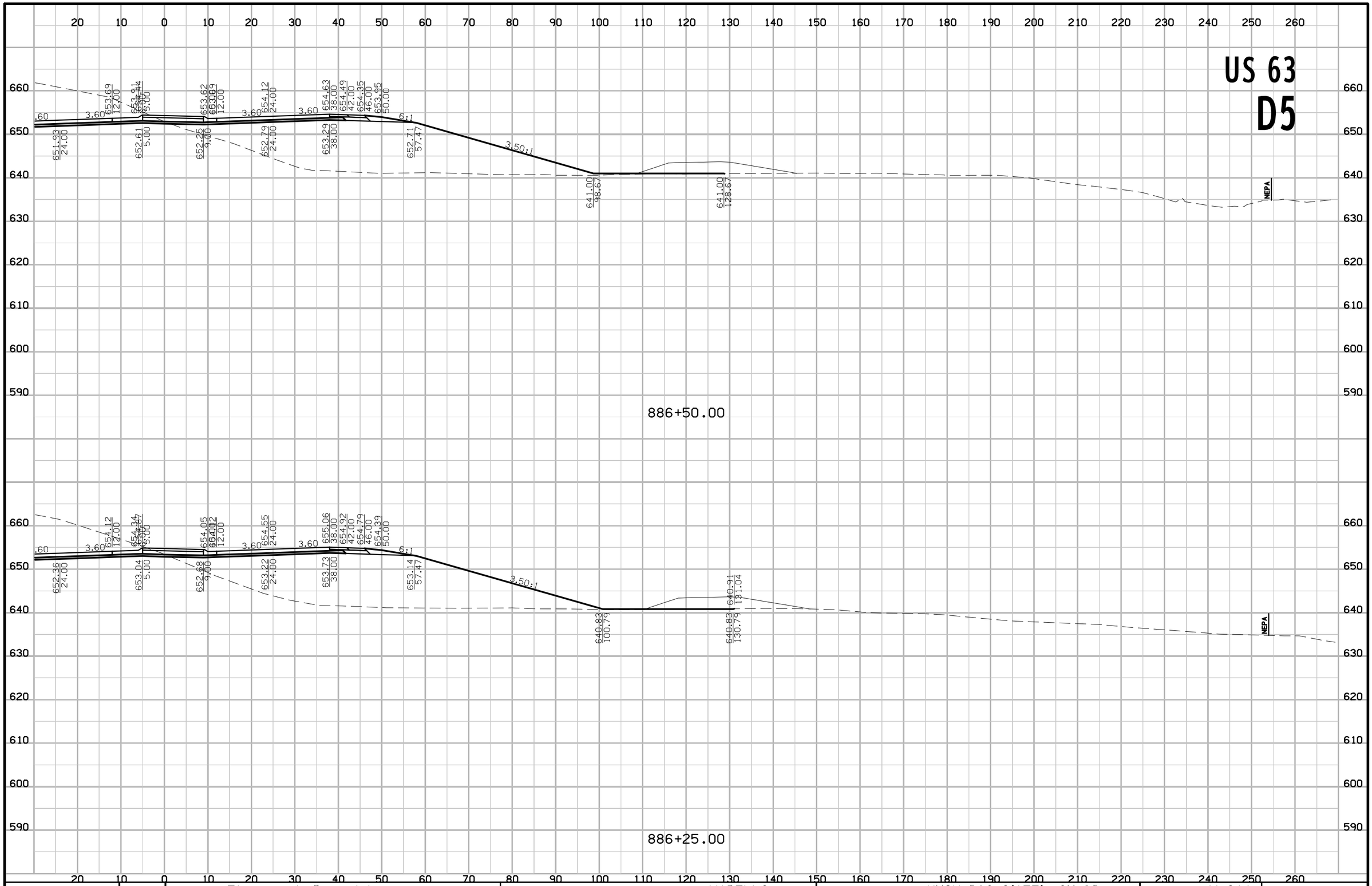
8:51:40 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.210

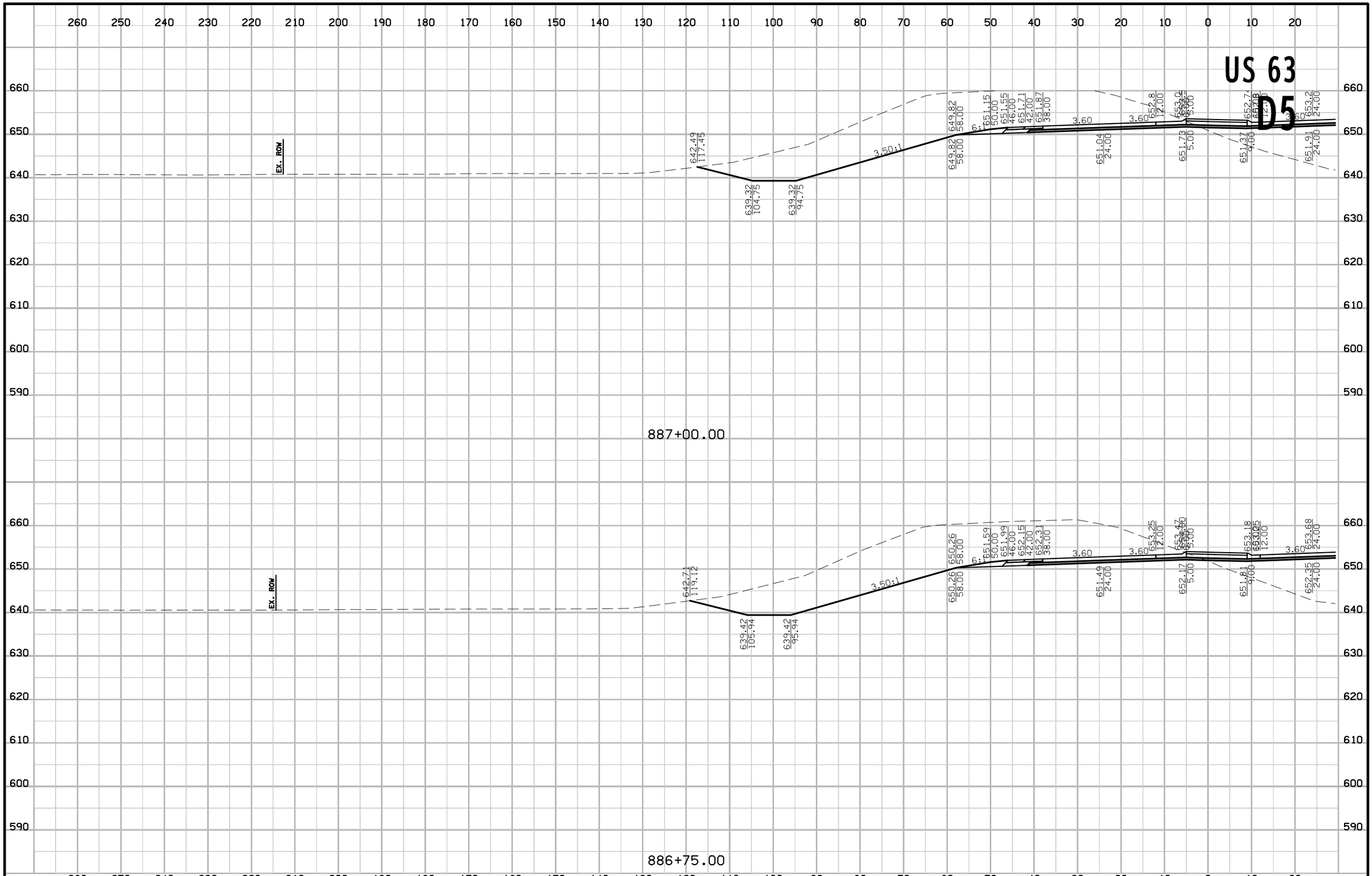
8:51:42 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.211

8:51:44 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.212

8:51:46 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

887+00.00

886+75.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER	NHSX-063-2(155)--3H-90	SHEET NUMBER W.213	

8:51:48 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

887+50.00

887+25.00

EX. ROW

642.07
114.19

639.12
102.37

639.12
92.37

3.50:1

648.94
58.00

650.27
50.00

650.67
46.00

650.83
42.00

650.99
38.00

3.60

650.16
24.00

651.93
12.00

652.15
8.00

650.85
5.00

650.49
9.00

651.86
12.00

652.36
24.00

651.03
24.00

642.21
115.51

639.22
103.56

639.22
93.56

649.38
58.00

650.71
50.00

651.11
46.00

651.27
42.00

651.43
38.00

650.61
24.00

652.37
12.00

652.59
8.00

651.29
5.00

650.93
9.00

652.30
12.00

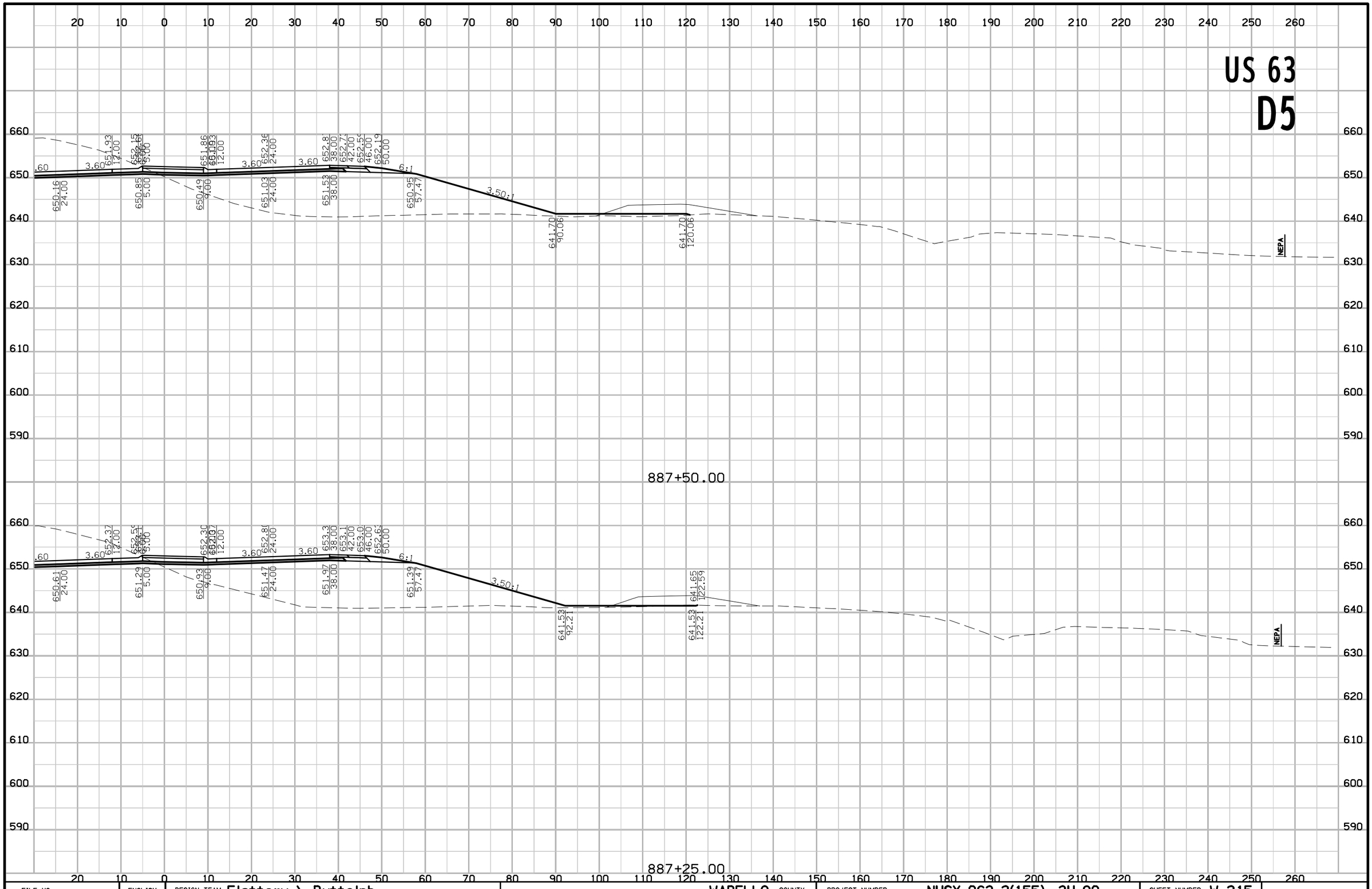
652.80
24.00

651.47
24.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.214

8:51:51 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

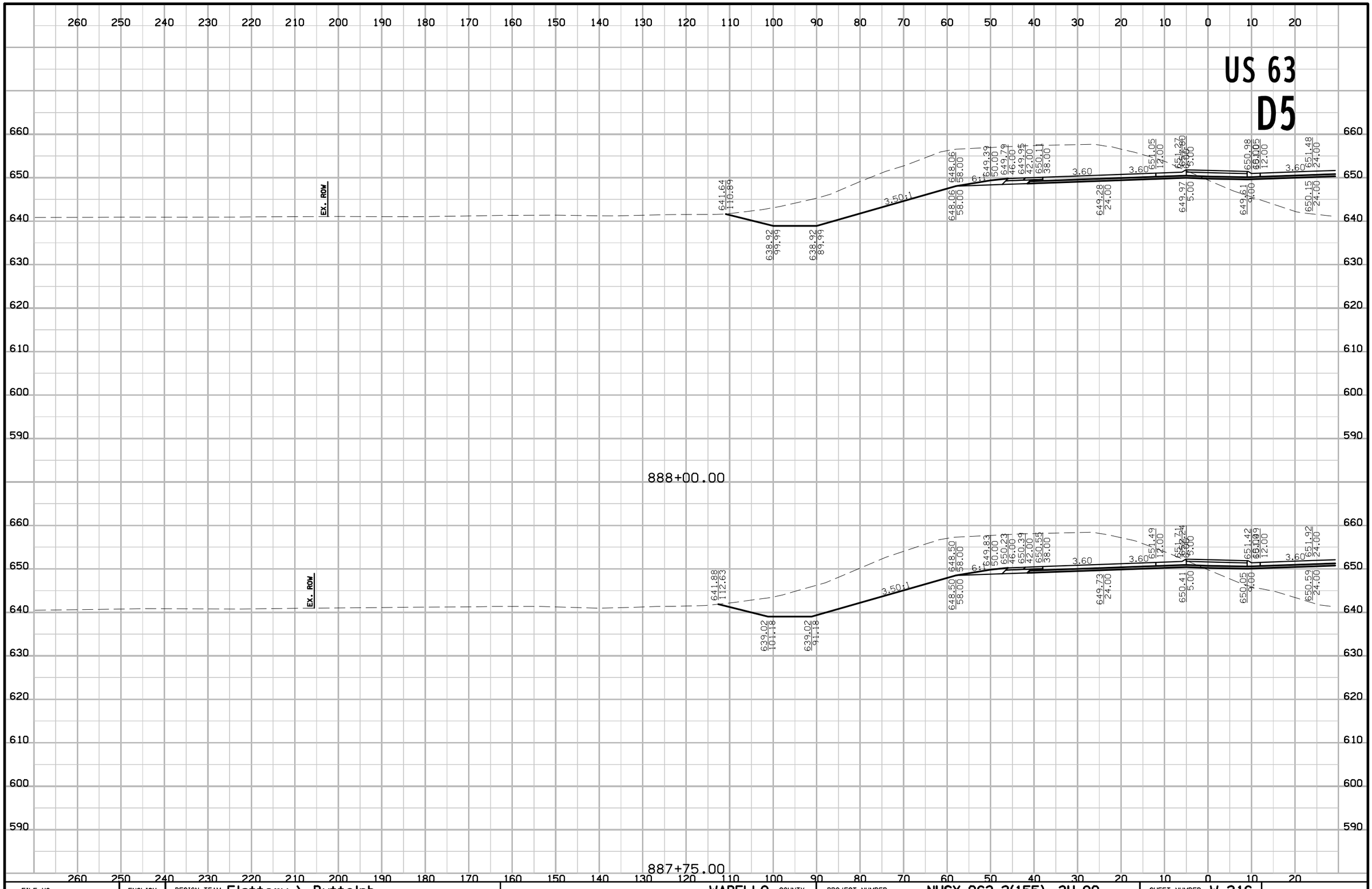
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.215

8:51:53 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.216

8:51:55 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

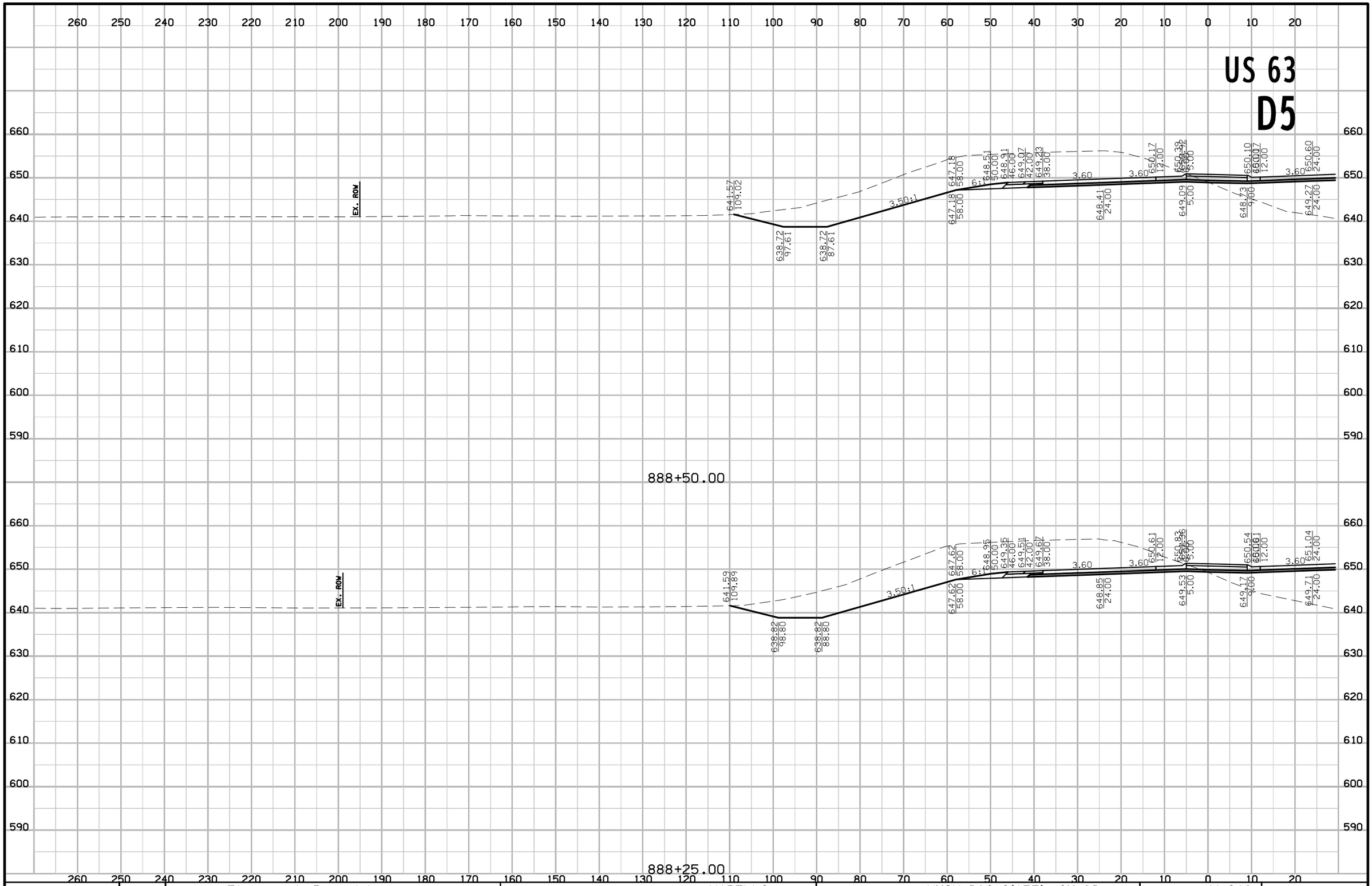
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.217

8:51:57 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

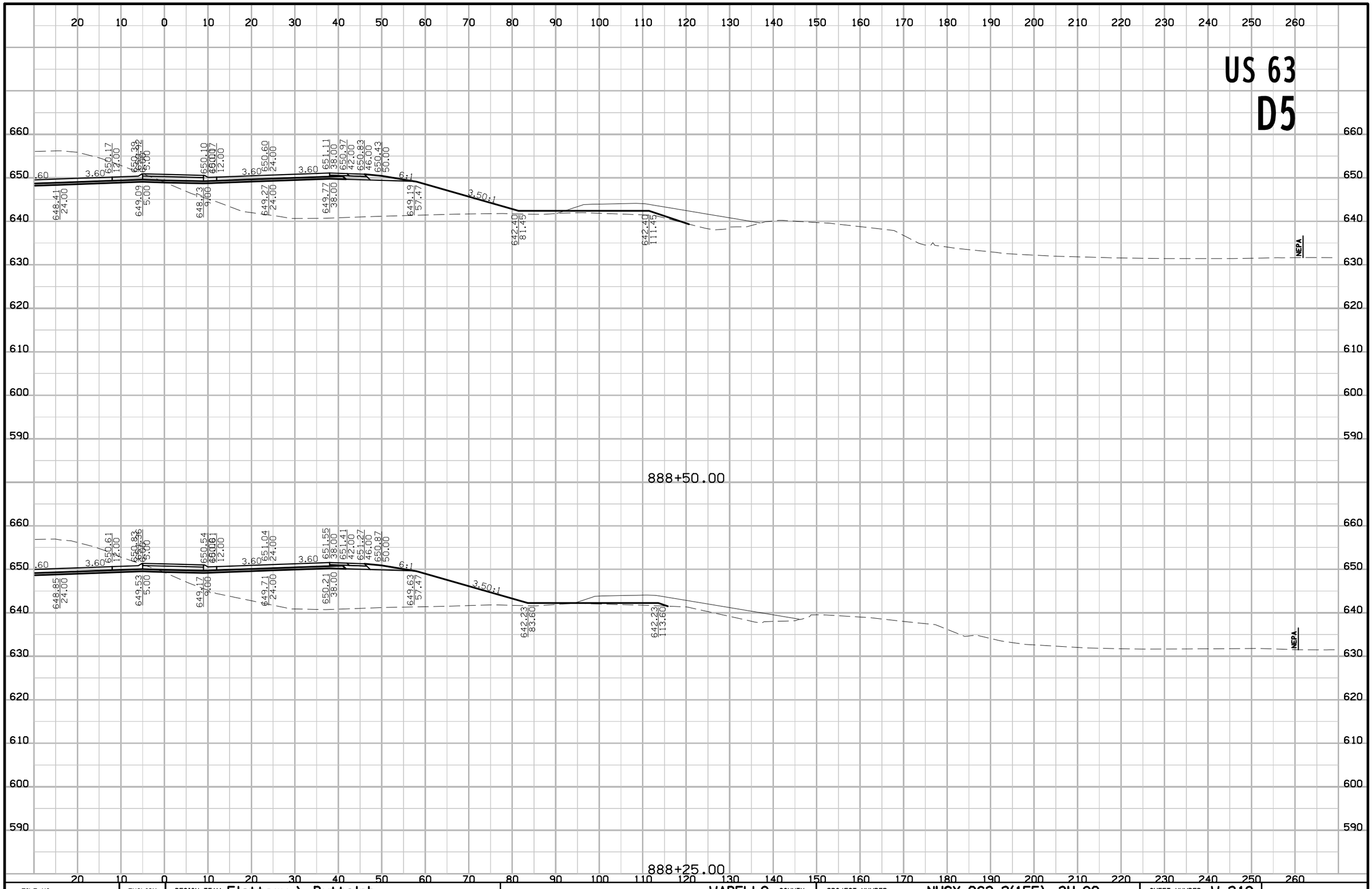
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.218

8:51:59 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

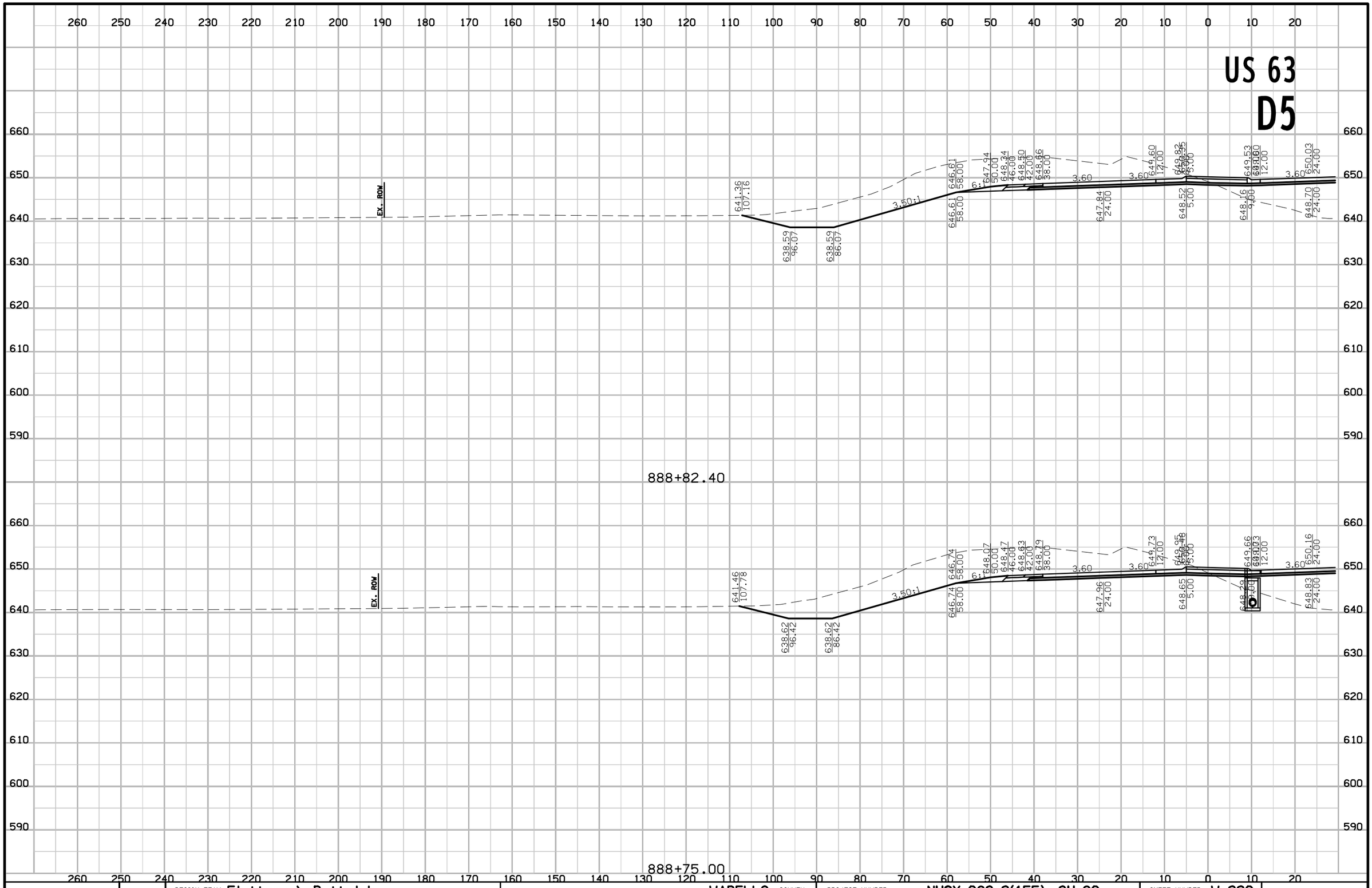
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.219

8:52:02 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

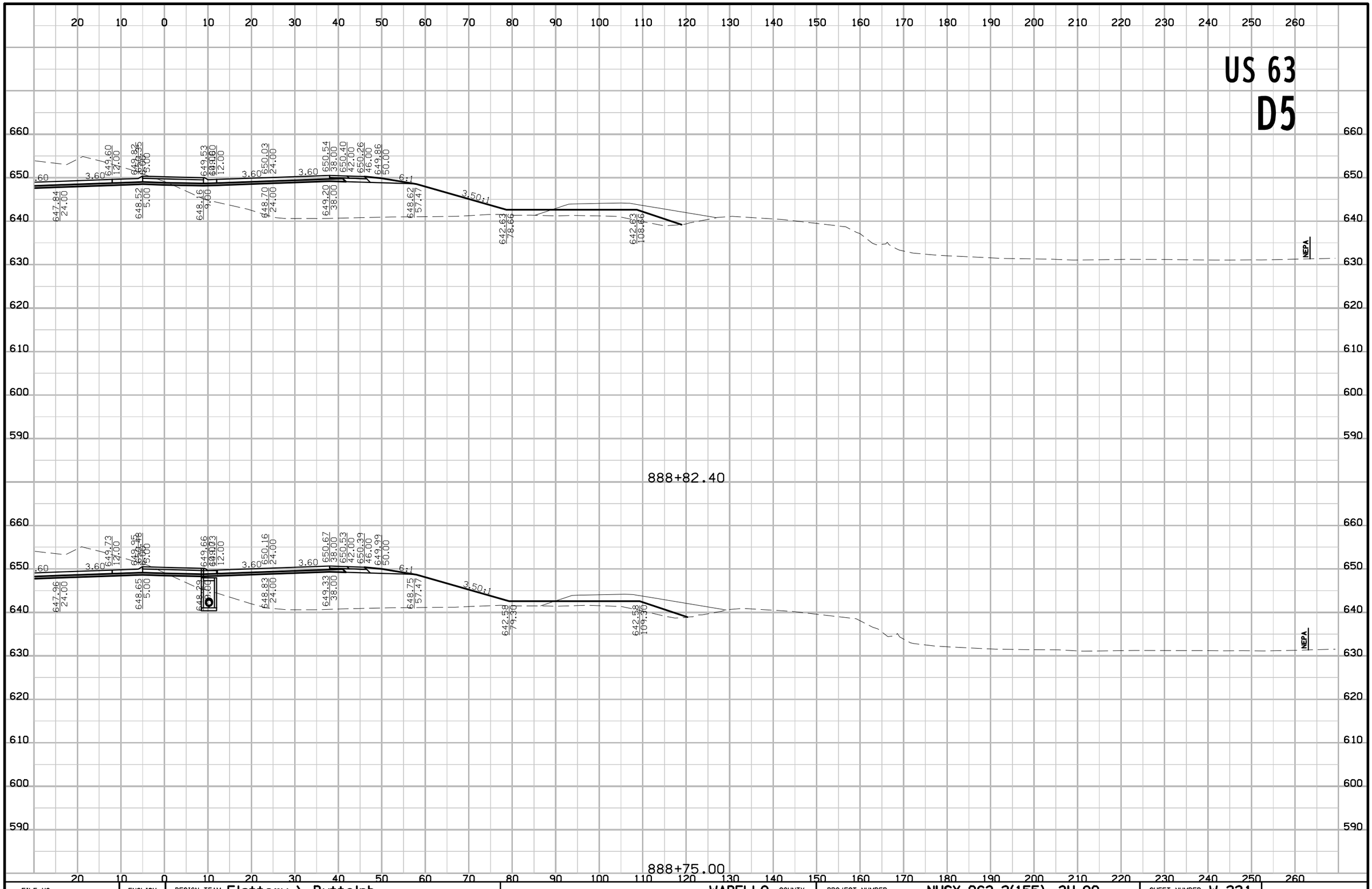
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.220

8:52:04 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

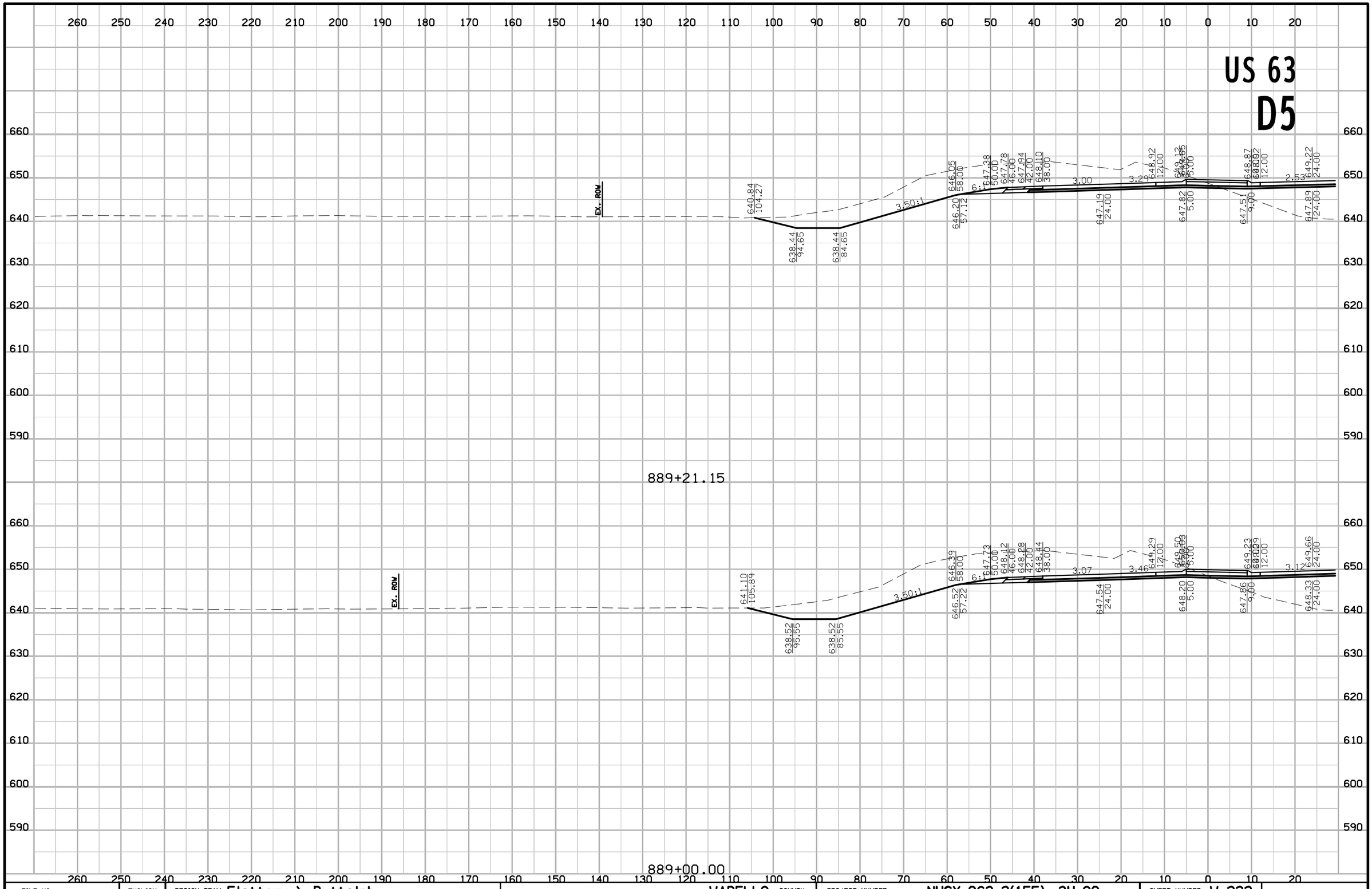
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.221

8:52:06 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

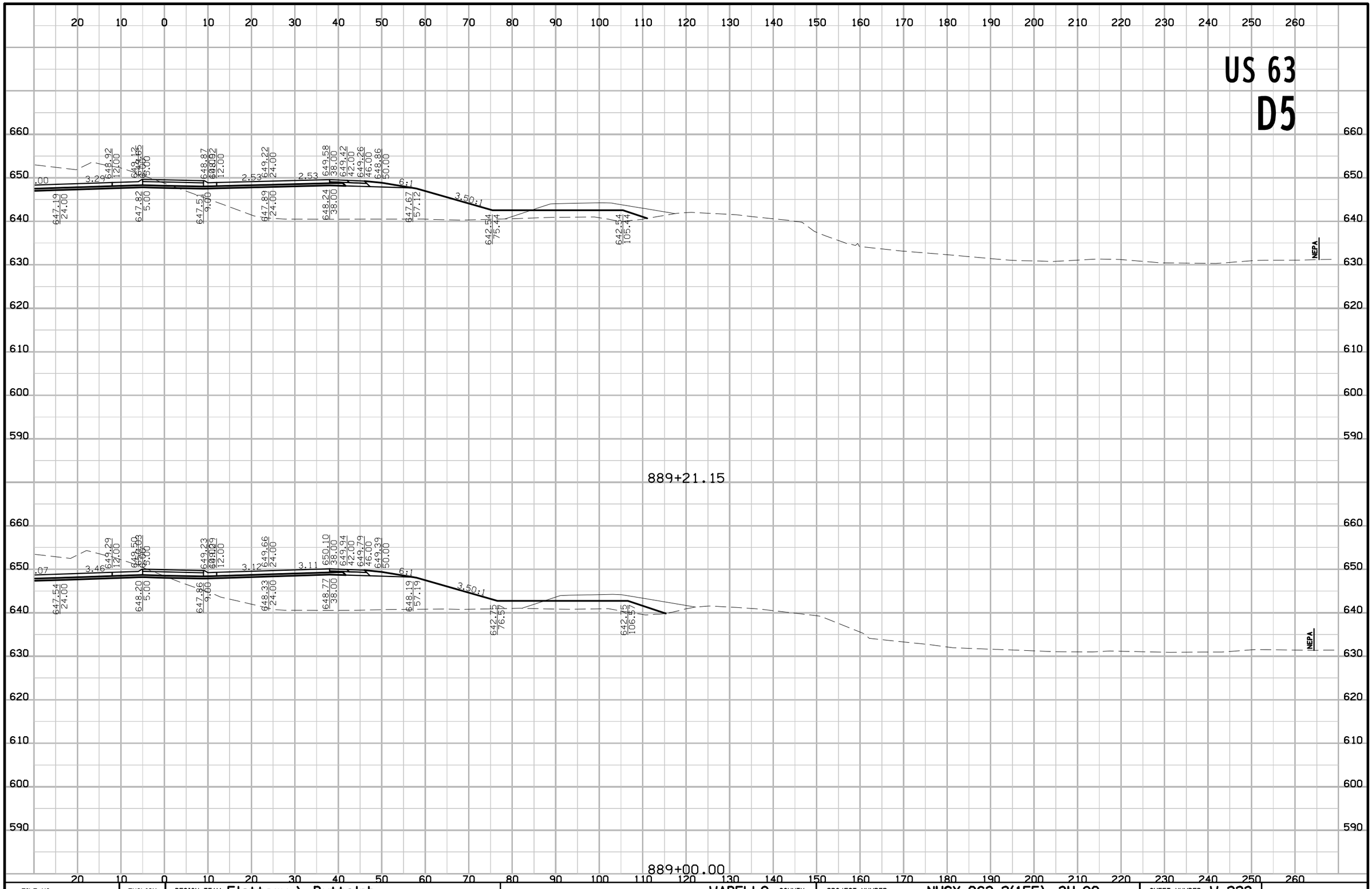
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.222

8:52:08 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

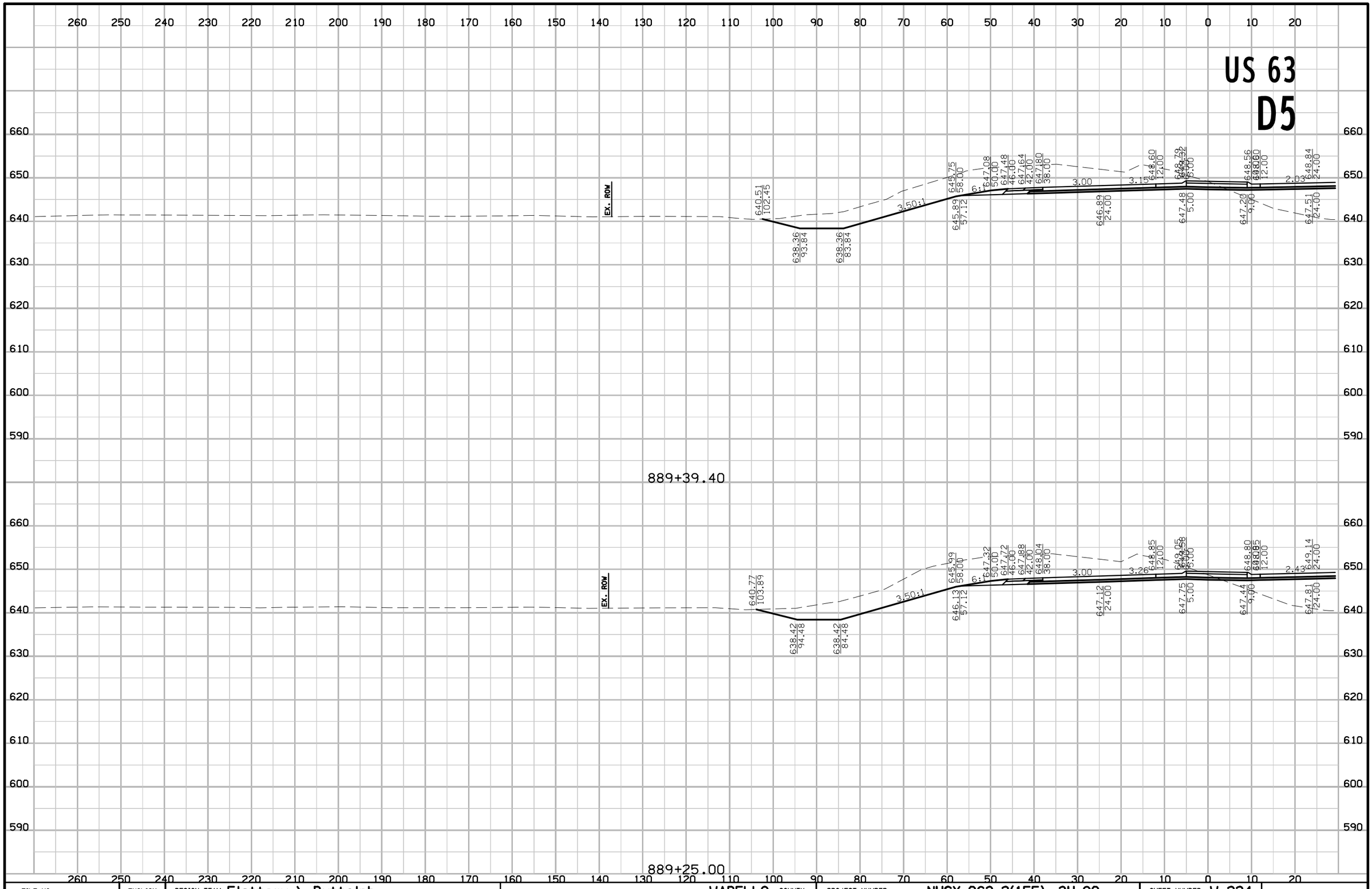
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.223

8:52:10 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

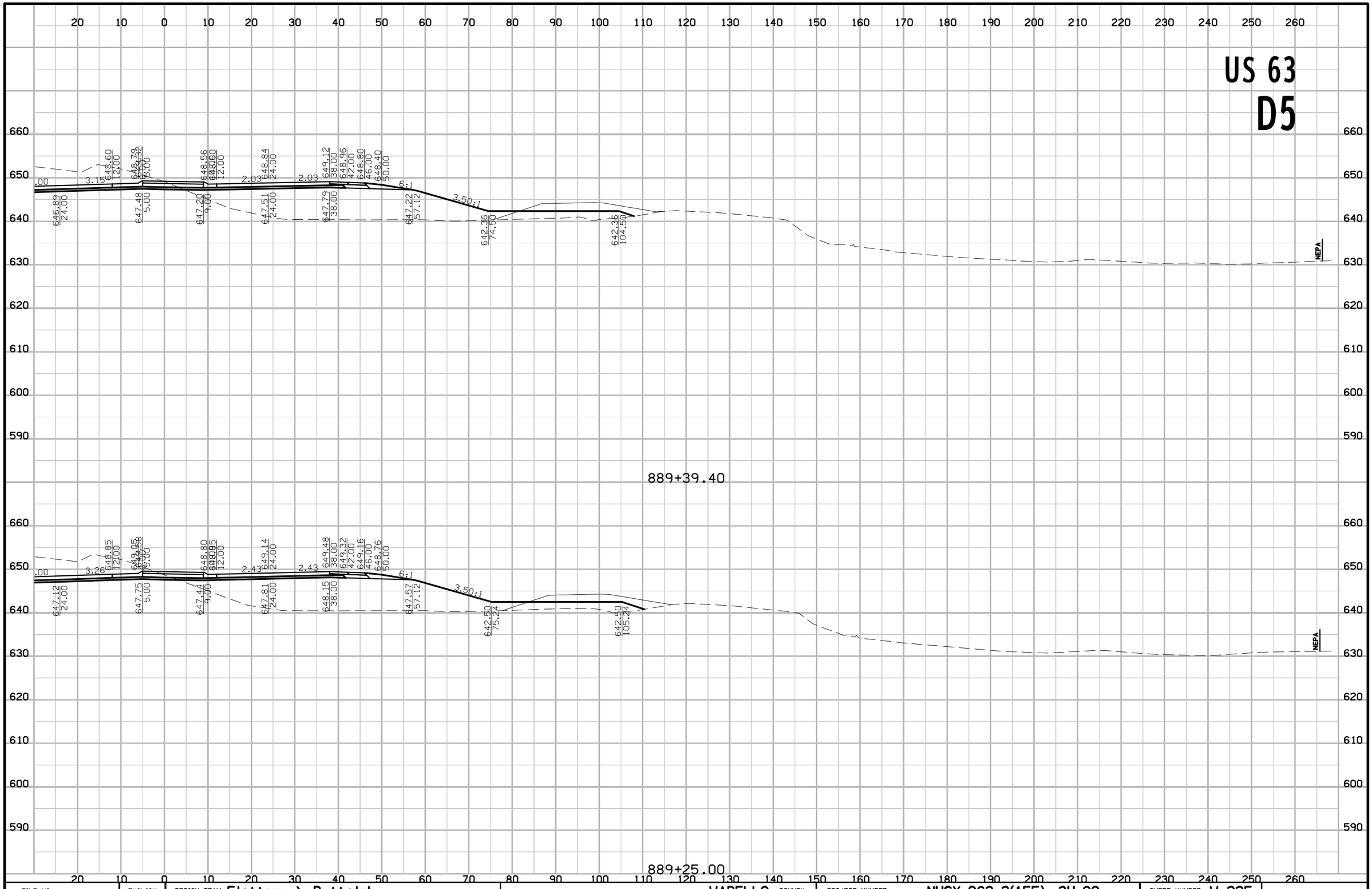
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.224

8:52:12 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

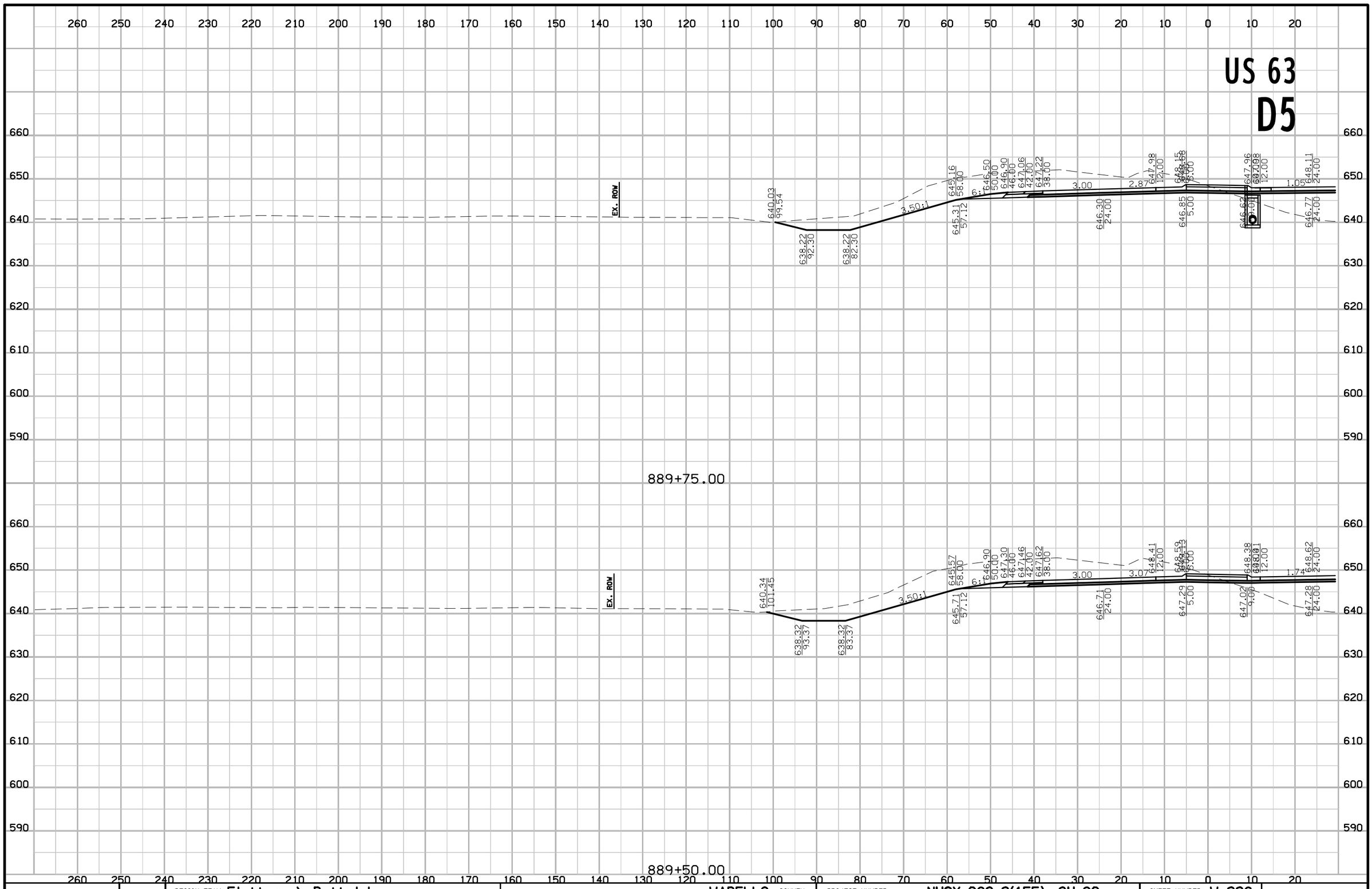
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.225

8:52:15 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

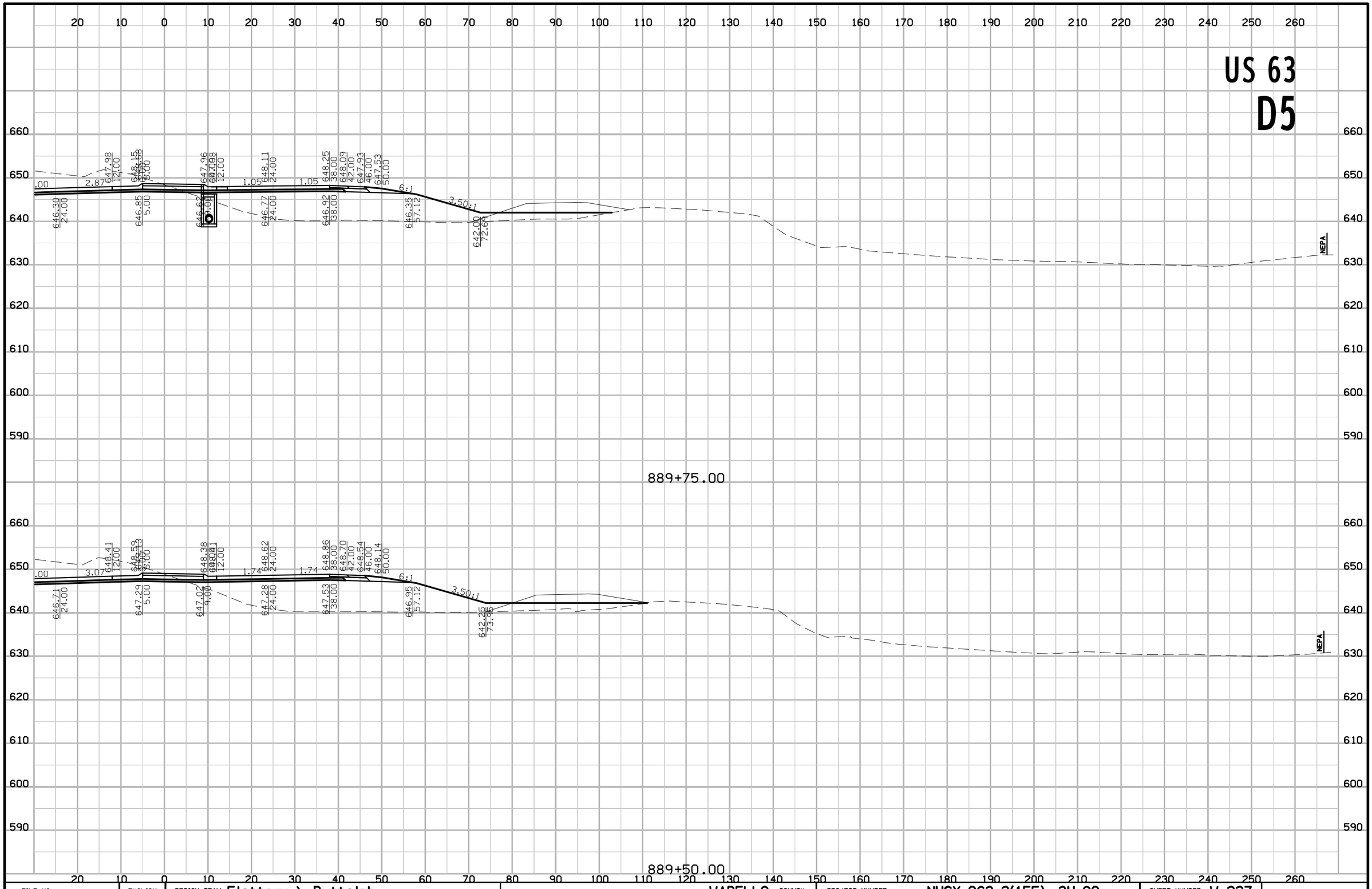
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.226

8:52:17 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

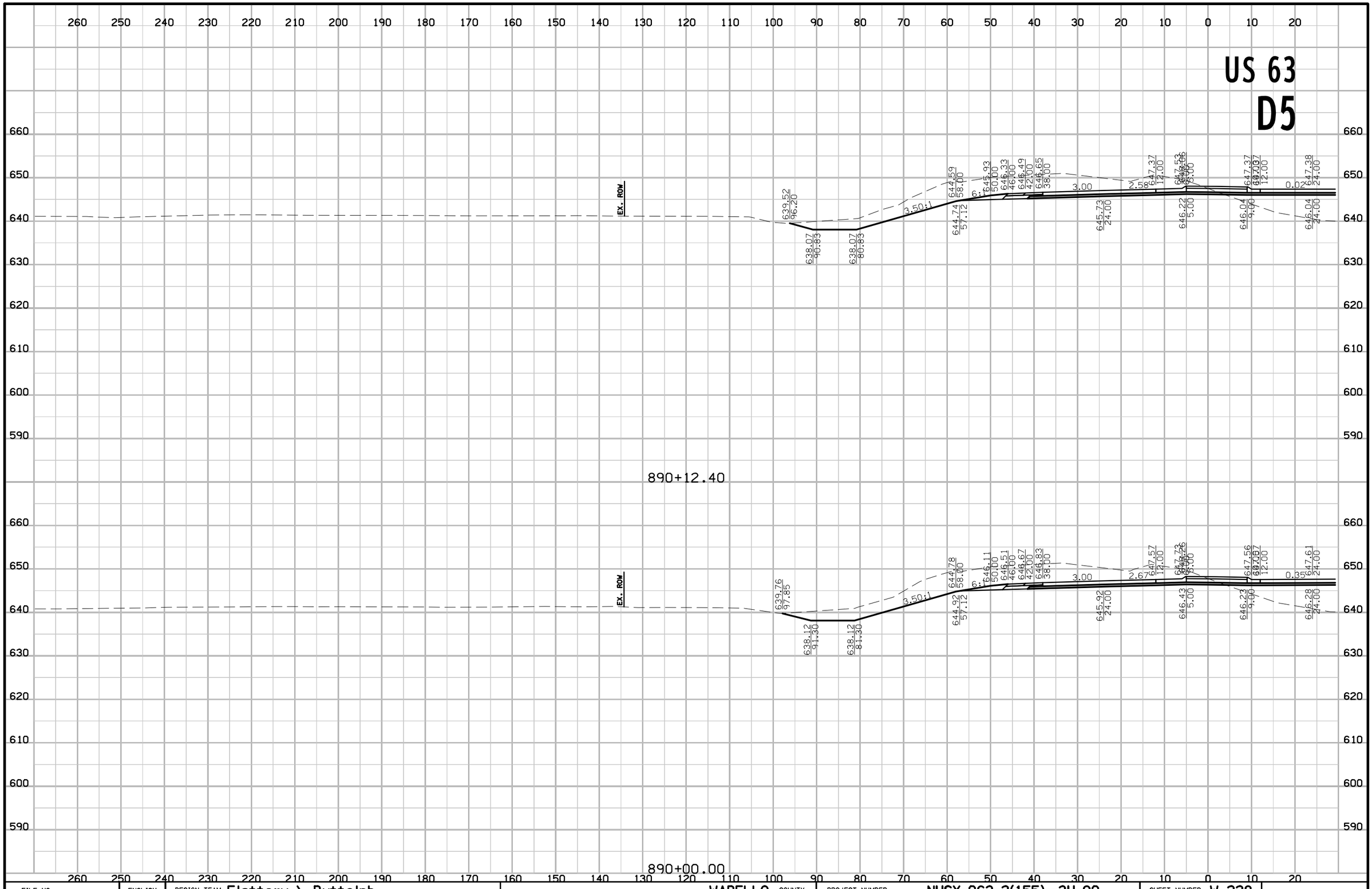
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.227

8:52:19 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

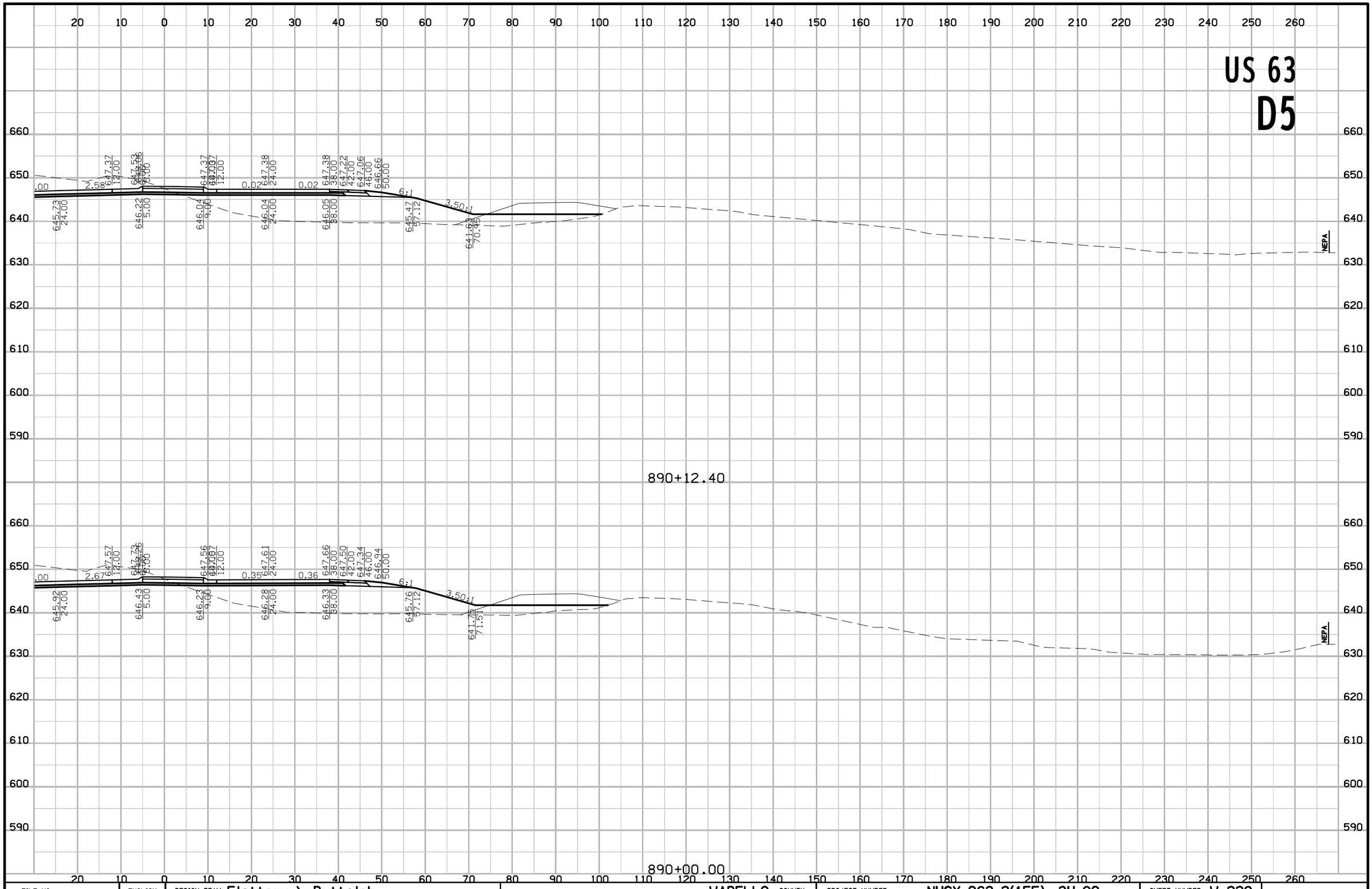
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.228

8:52:21 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

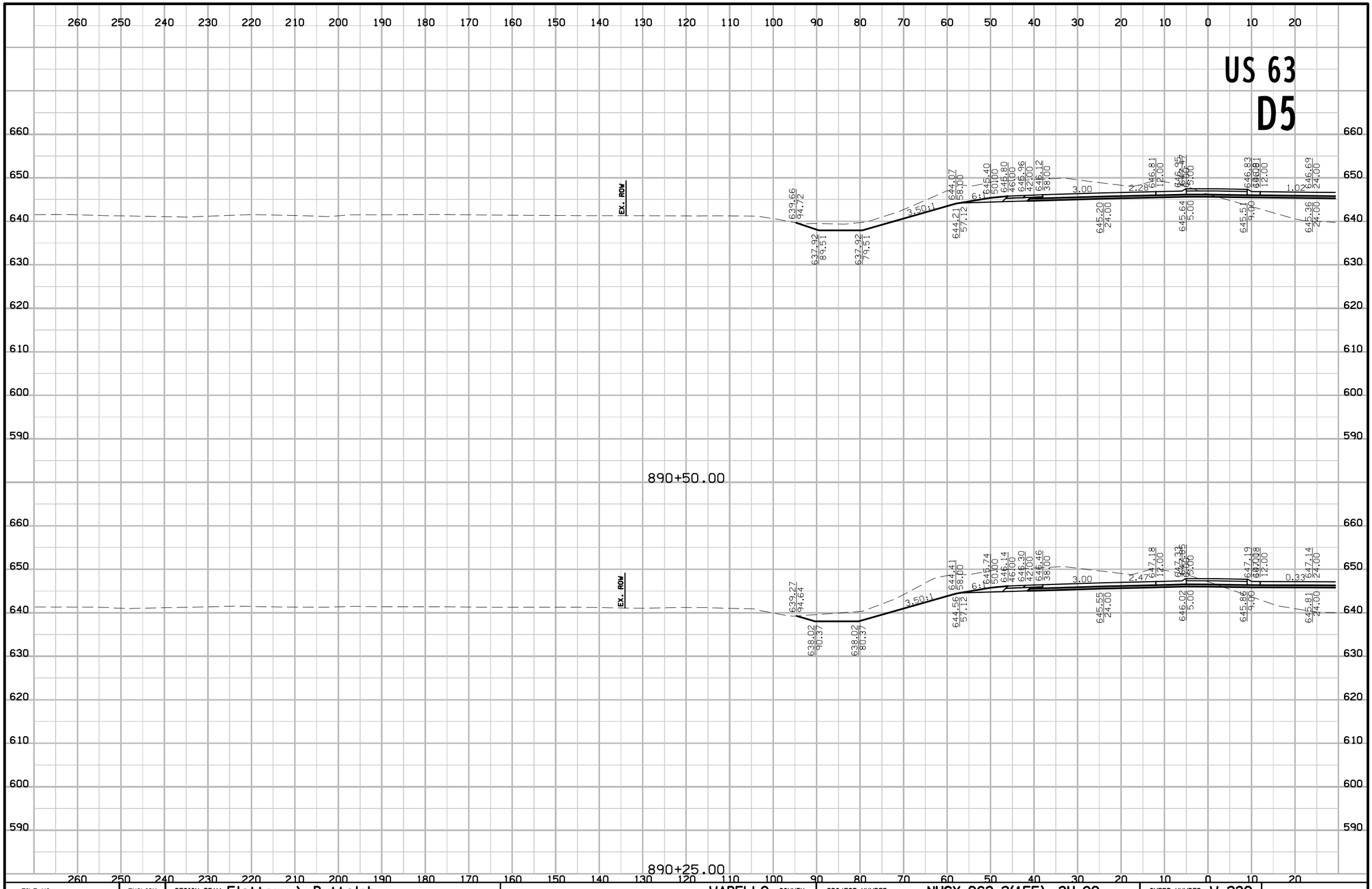
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.229

8:52:24 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

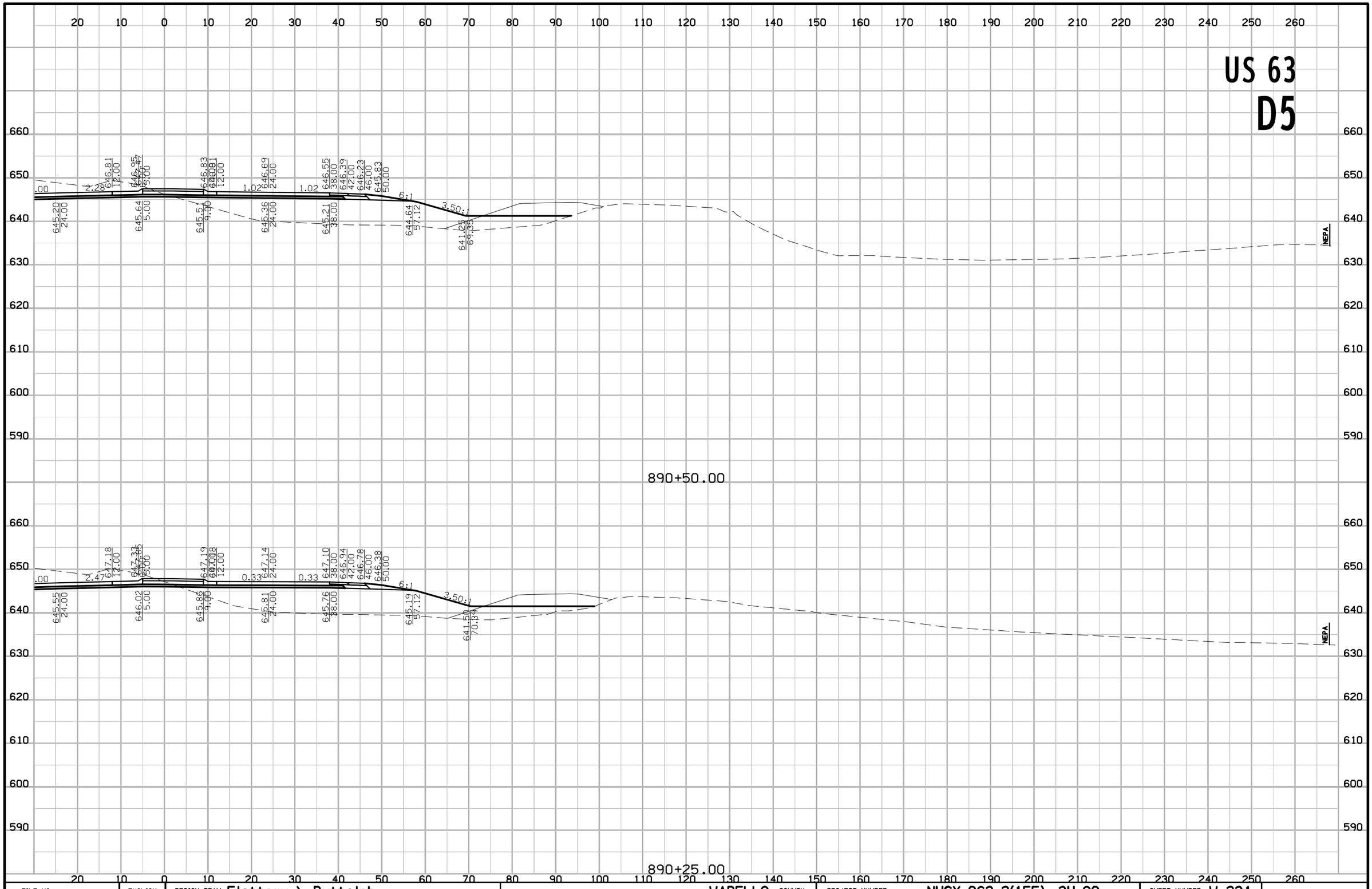
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.230

8:52:26 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

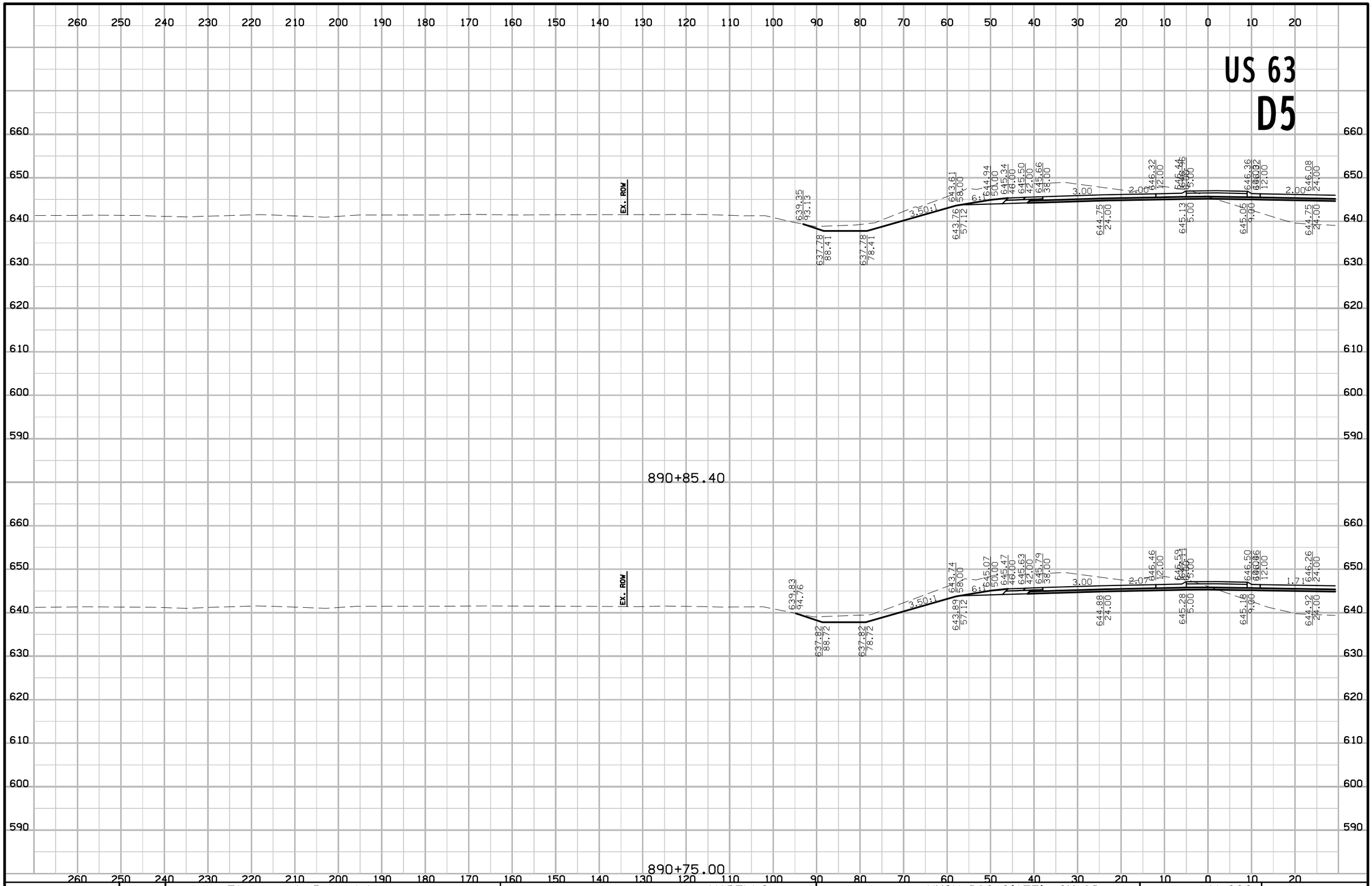
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.231

8:52:28 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

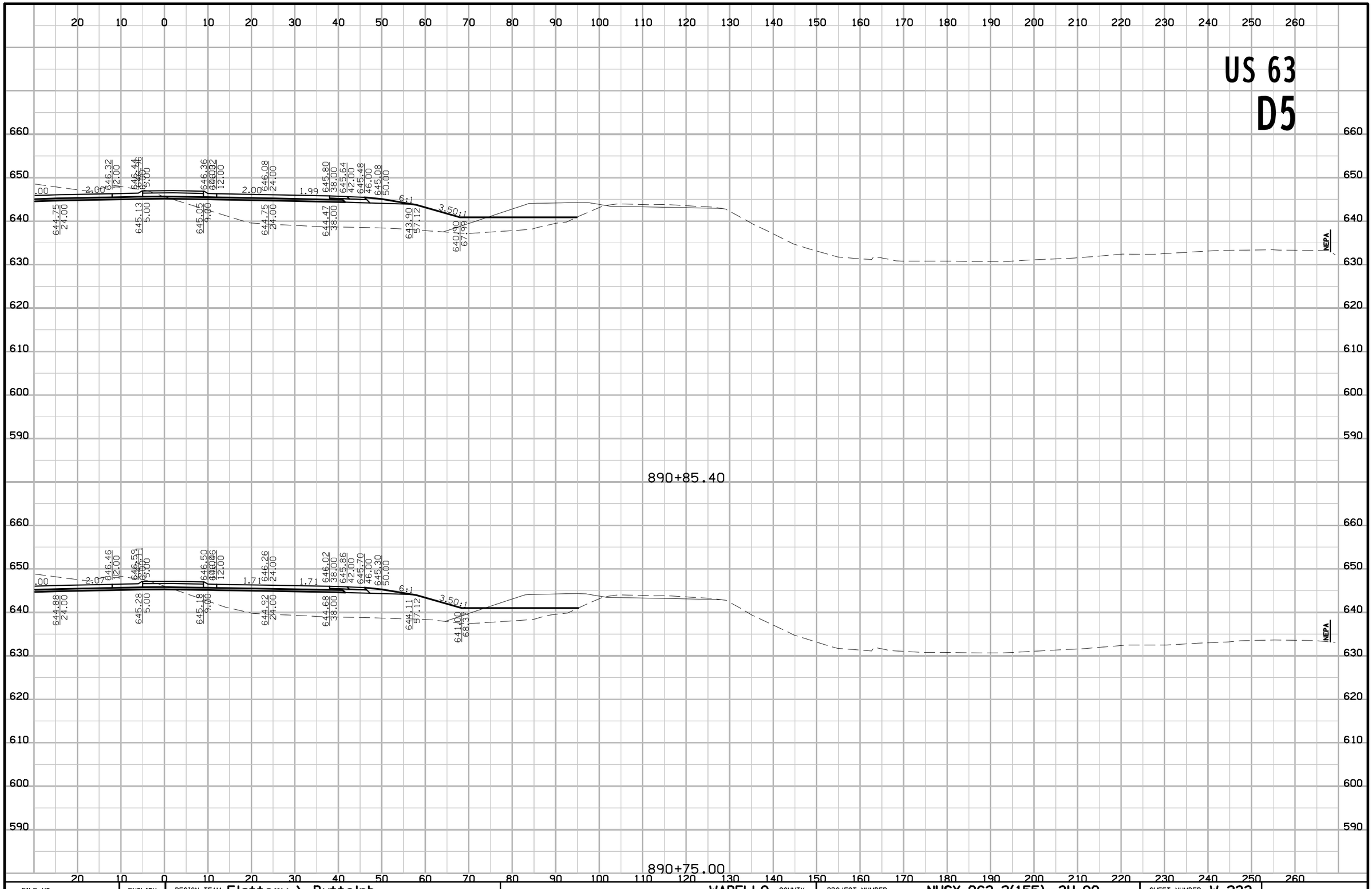
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.232

8:52:30 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

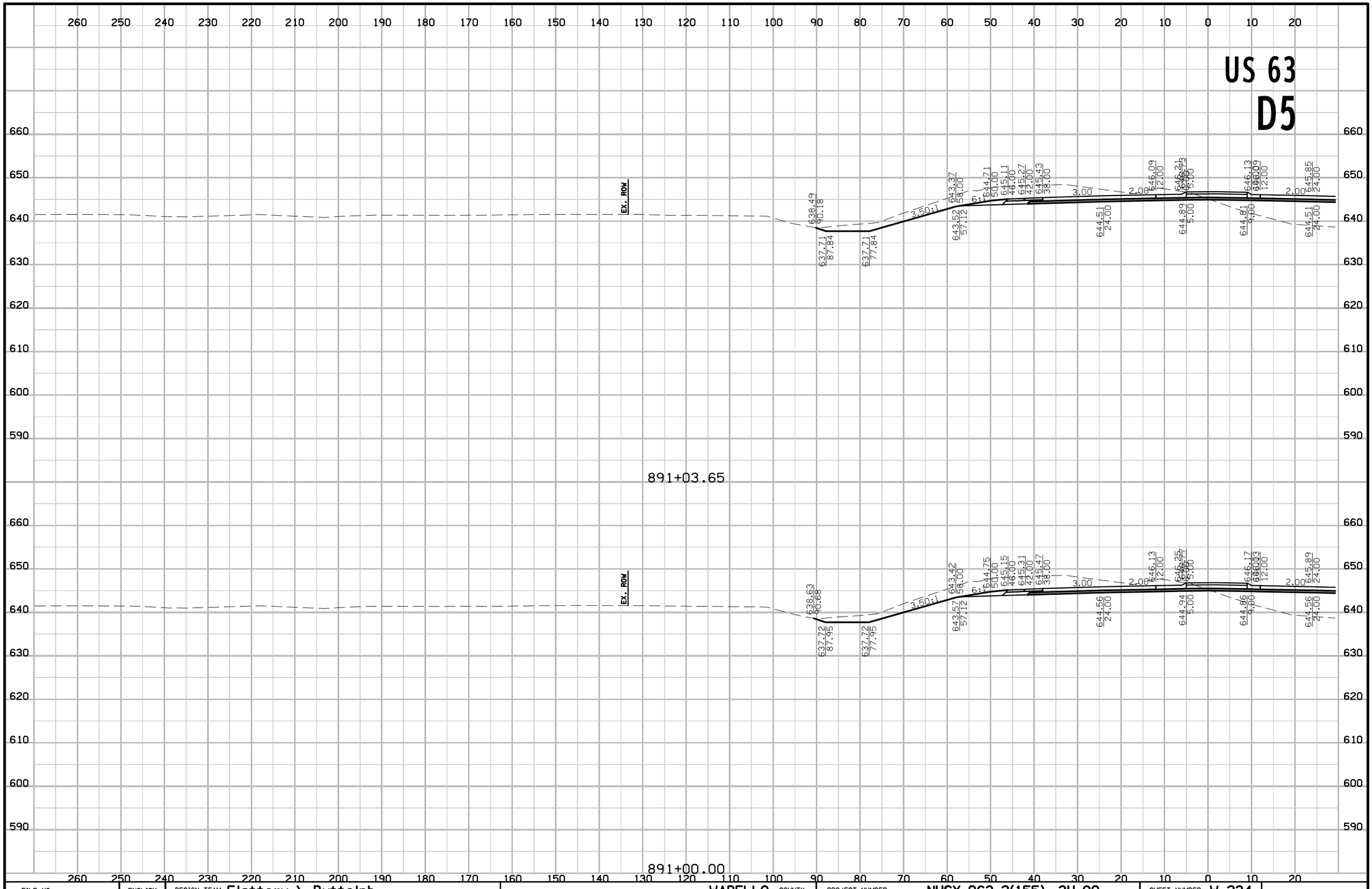
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.233

8:52:32 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

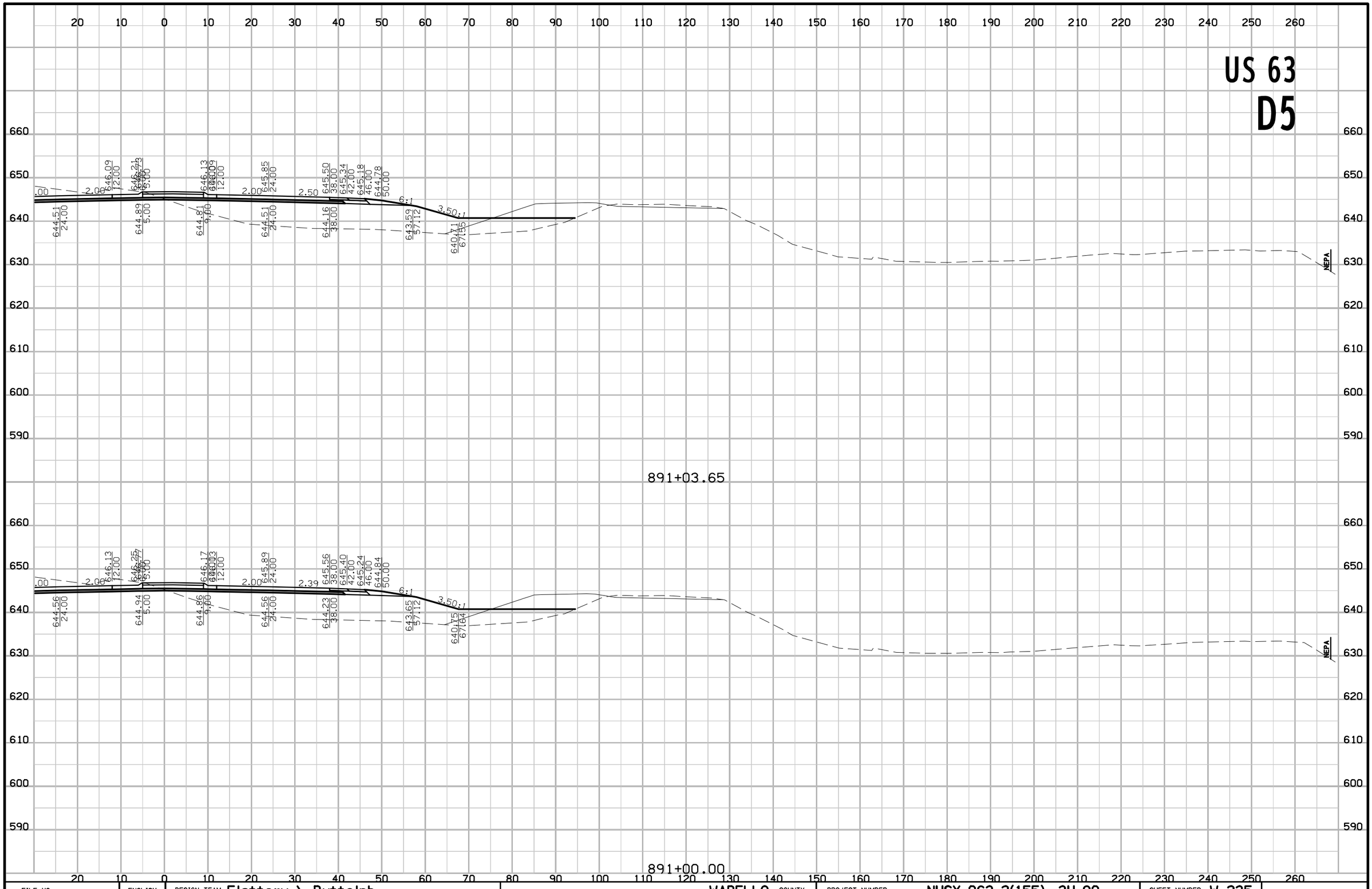
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.234

8:52:35 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

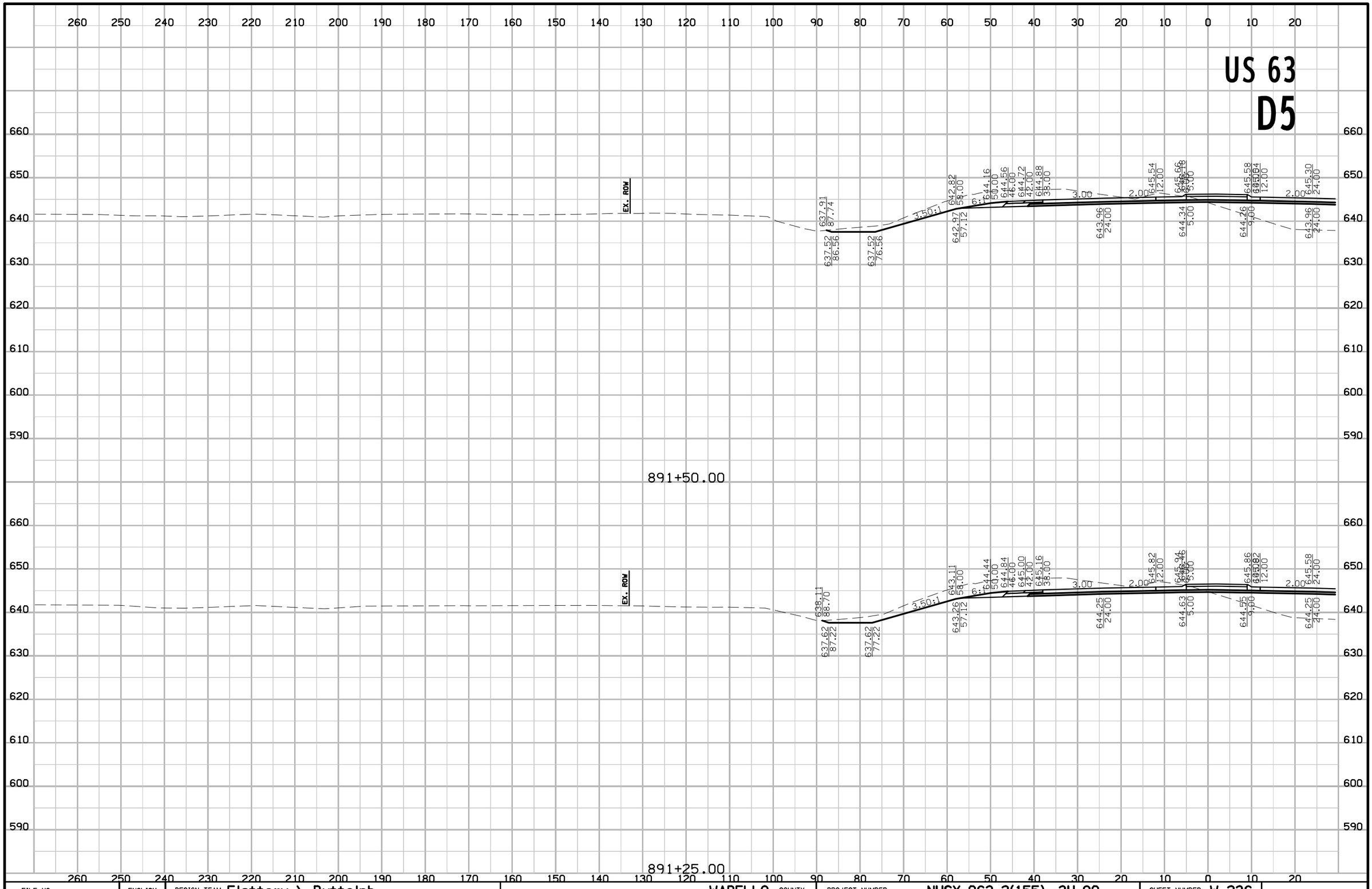
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.235

8:52:37 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

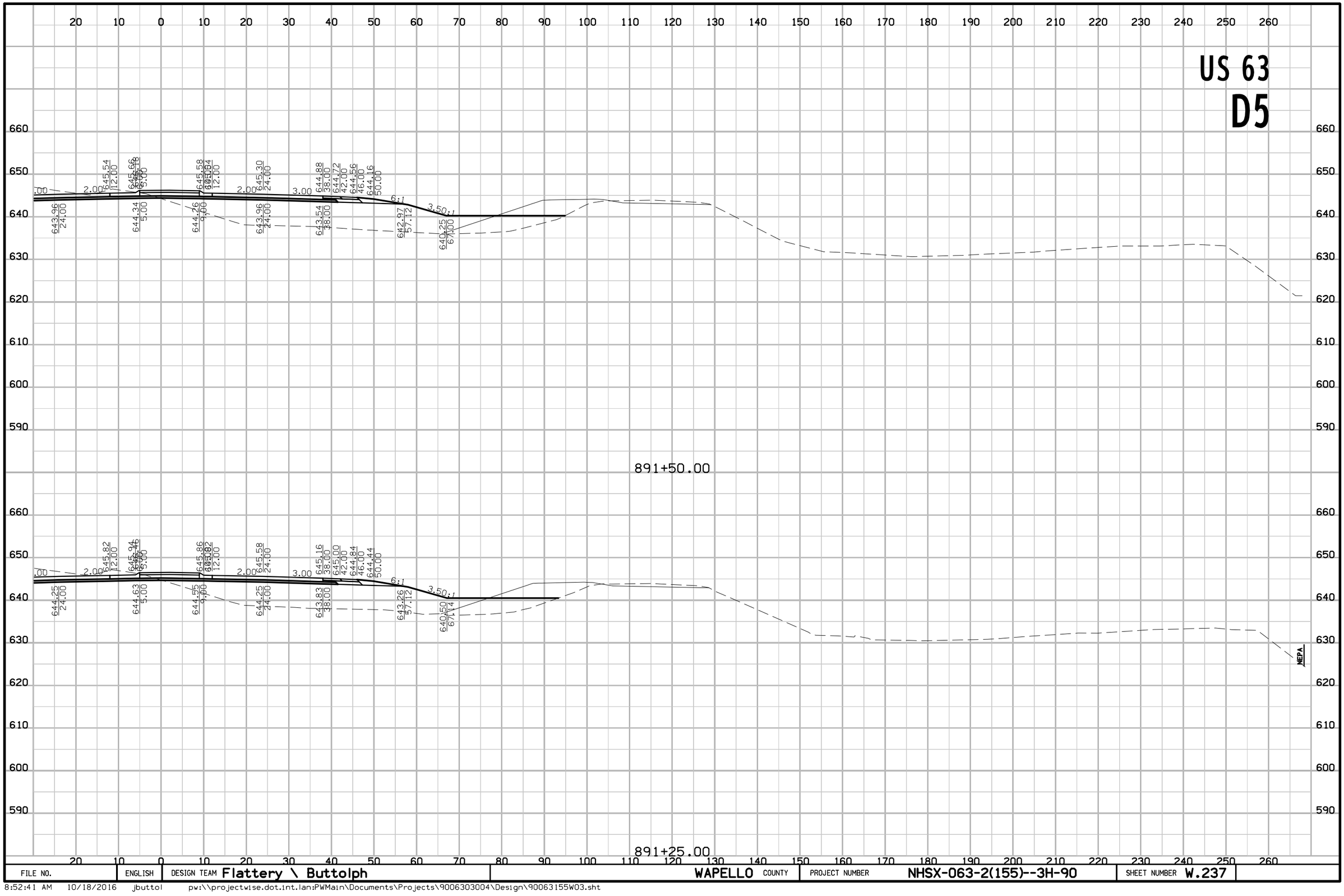
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.236

8:52:39 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.237

8:52:41 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

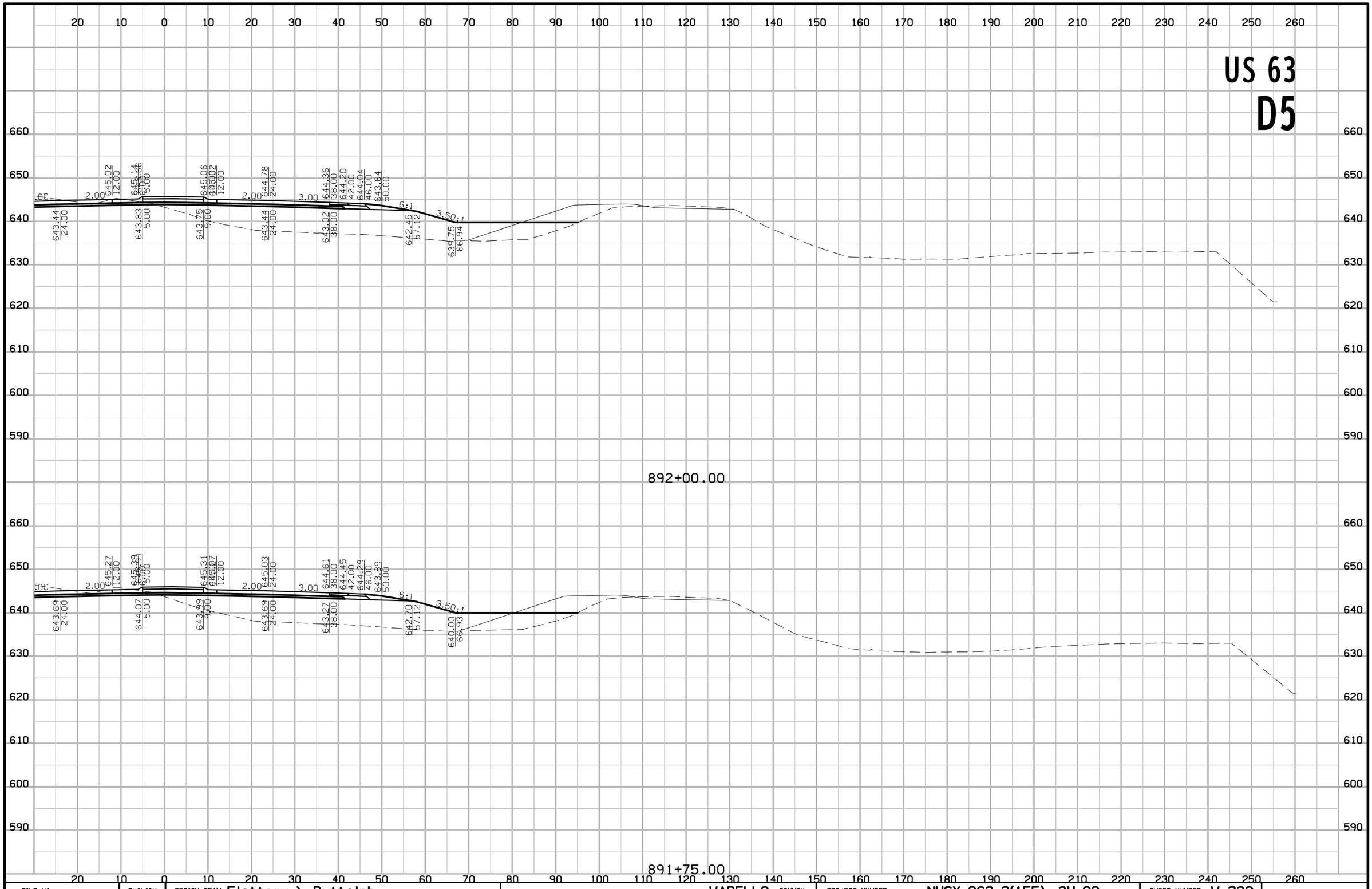
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.238

8:52:44 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

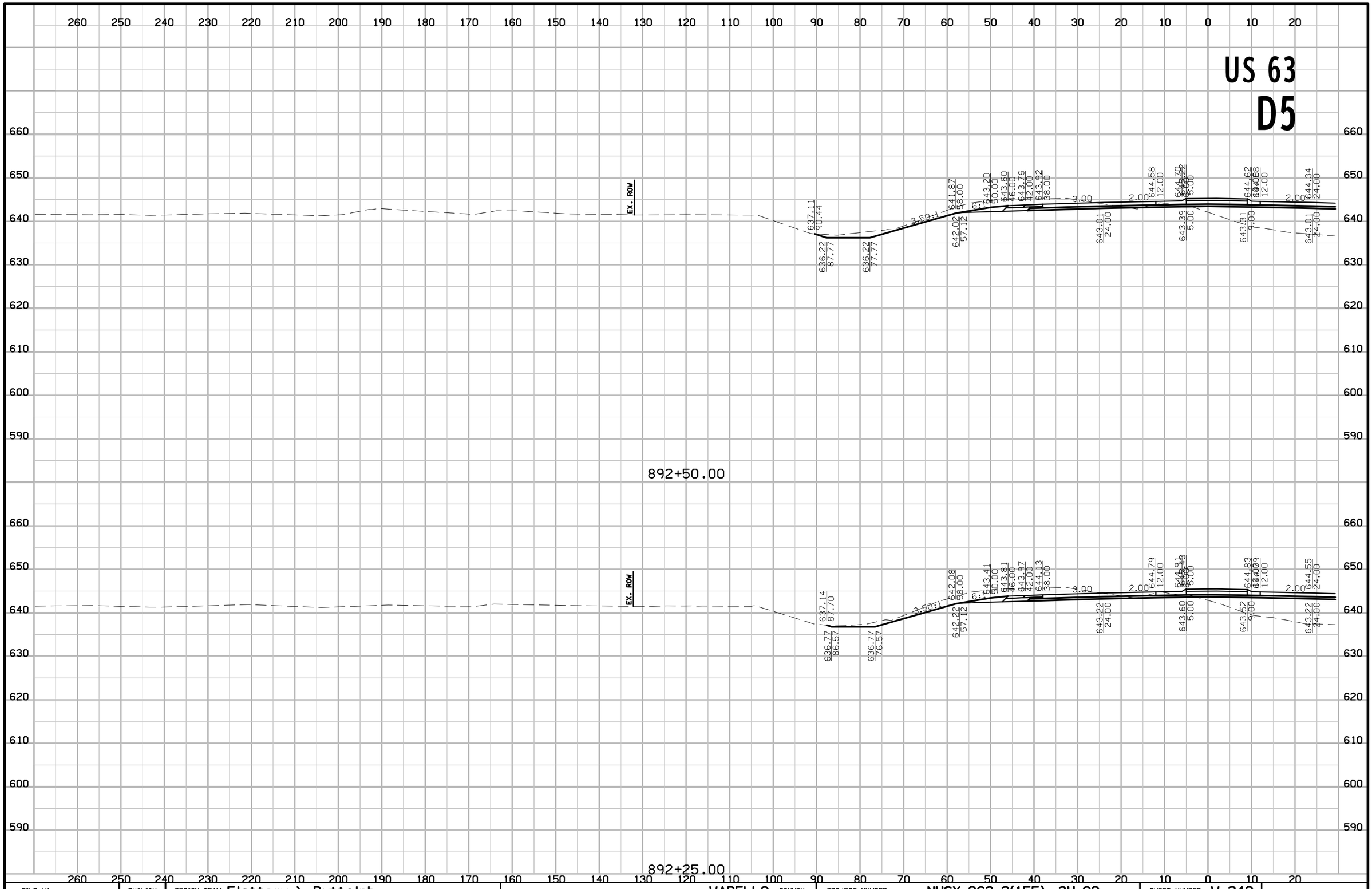
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.239

8:52:46 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

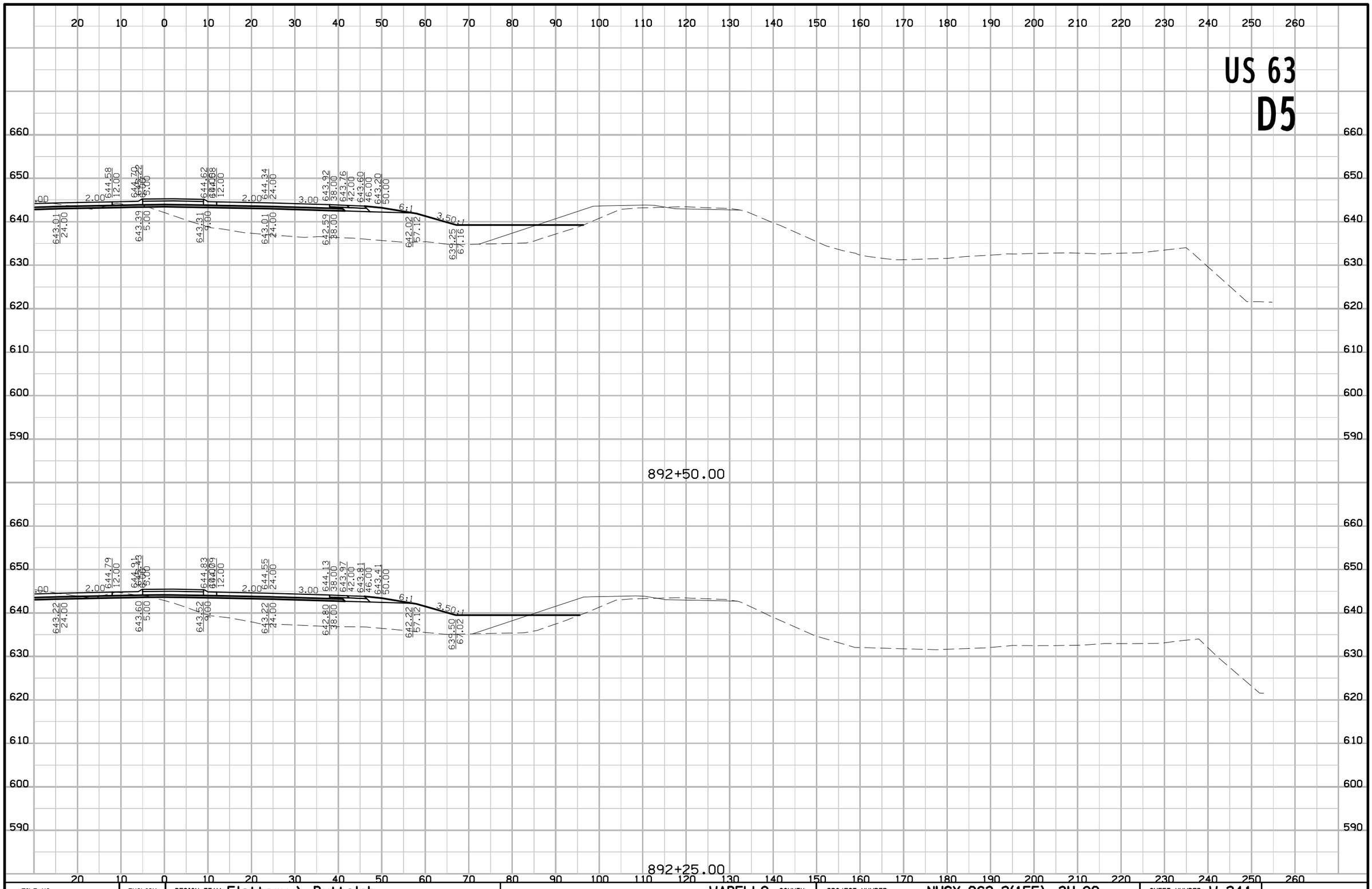
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.240

8:52:48 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

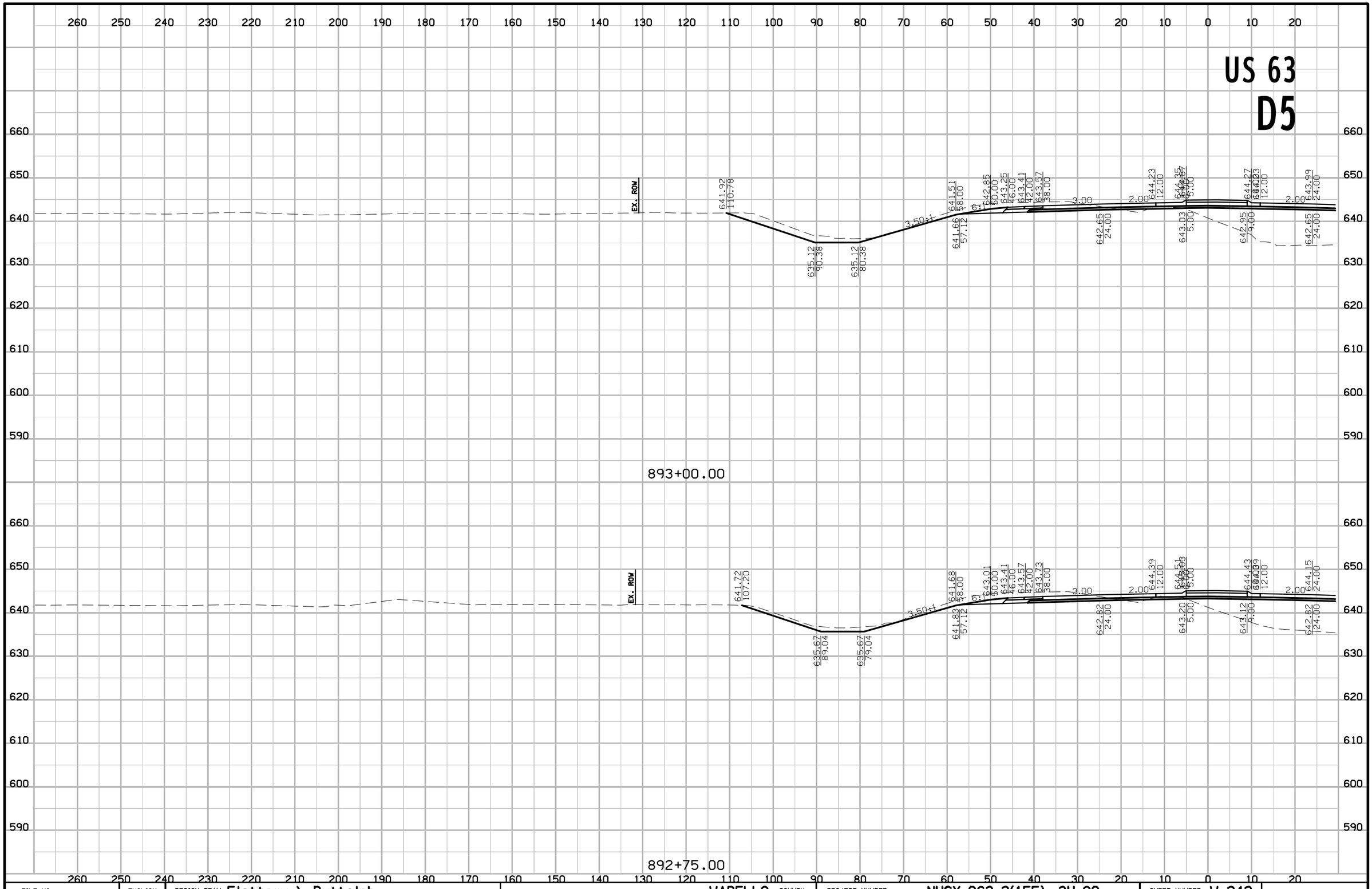
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.241

8:52:50 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

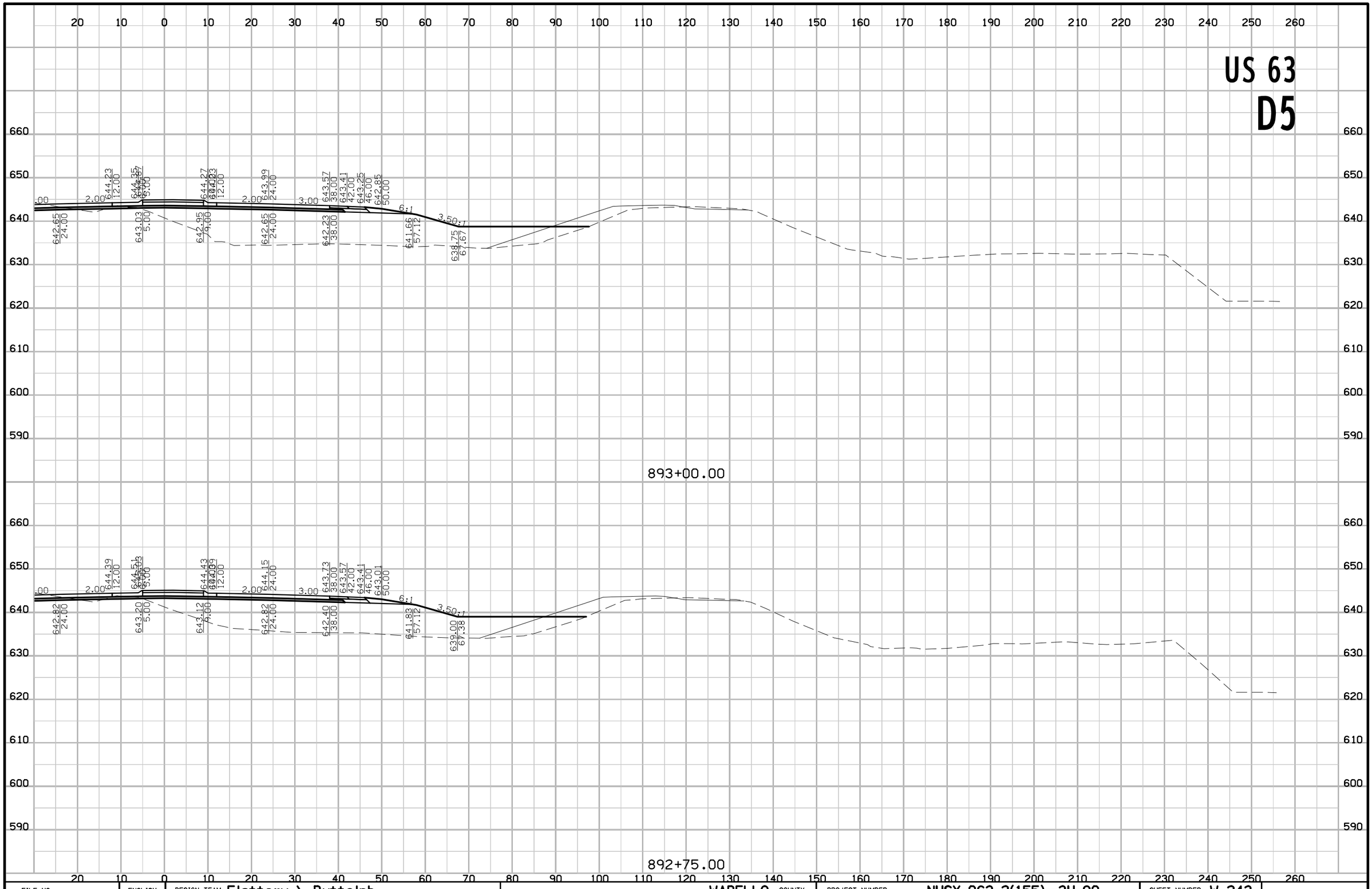
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.242

8:52:52 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

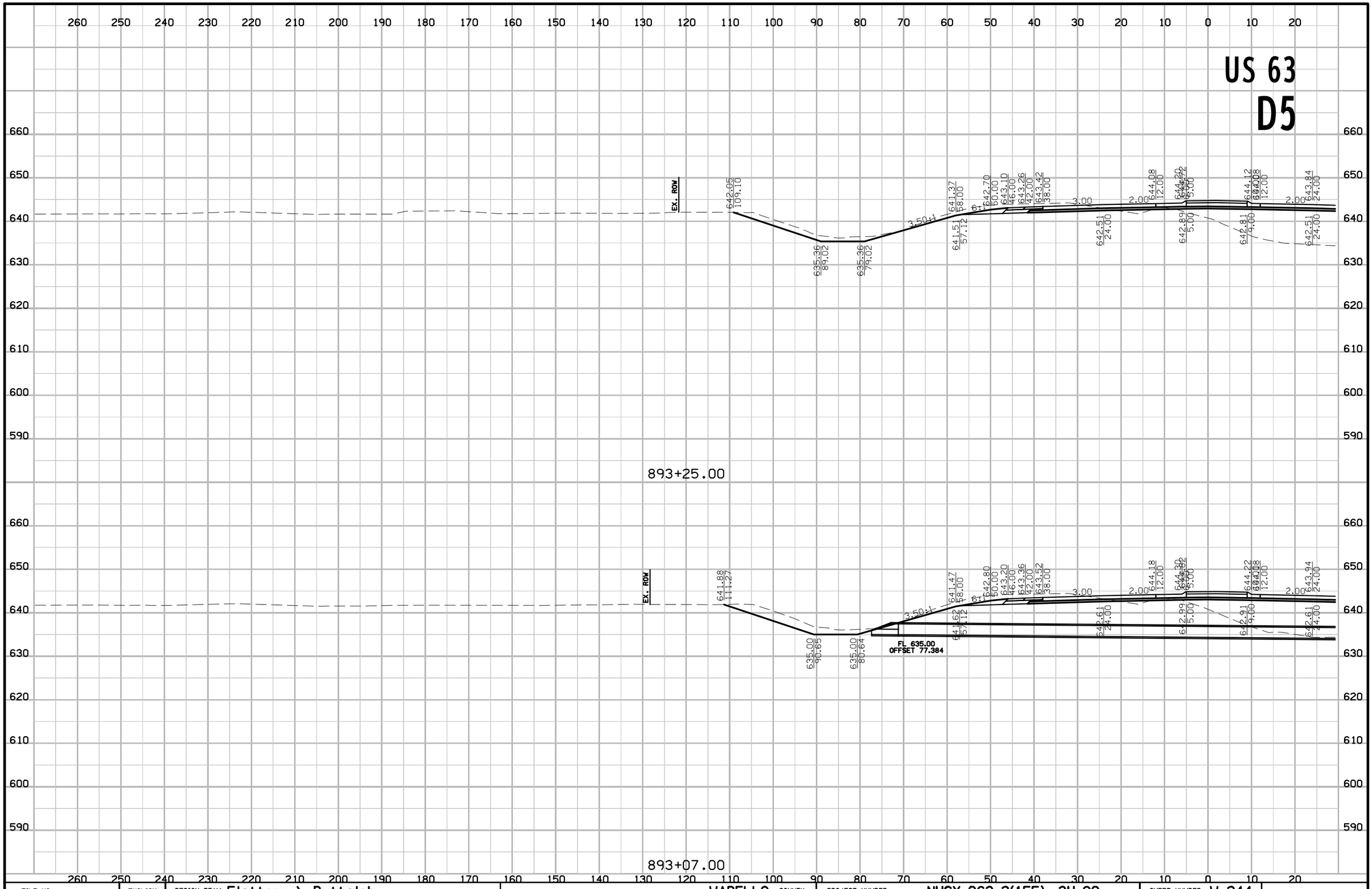
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.243

8:52:54 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

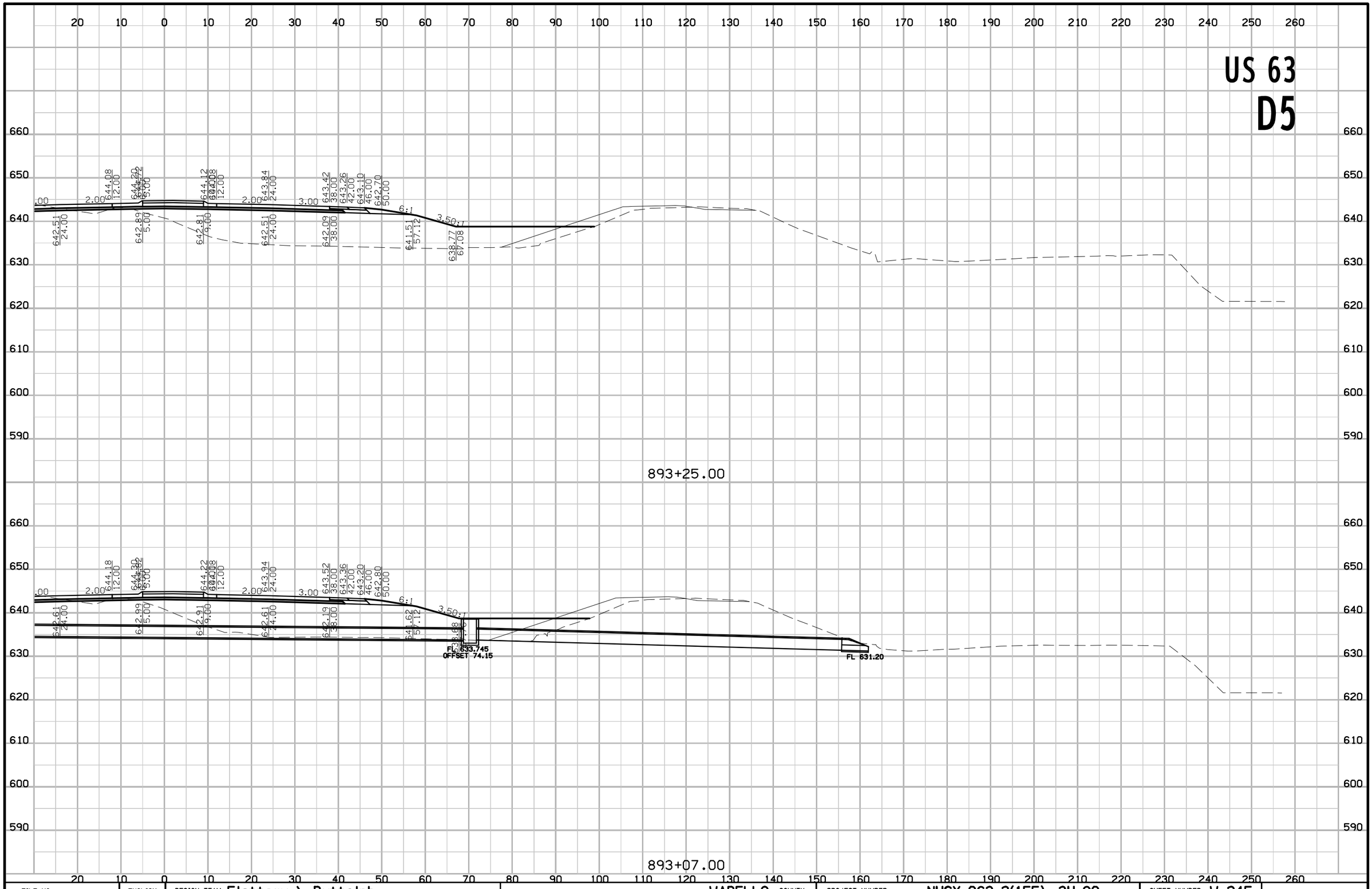
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.244

8:52:56 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

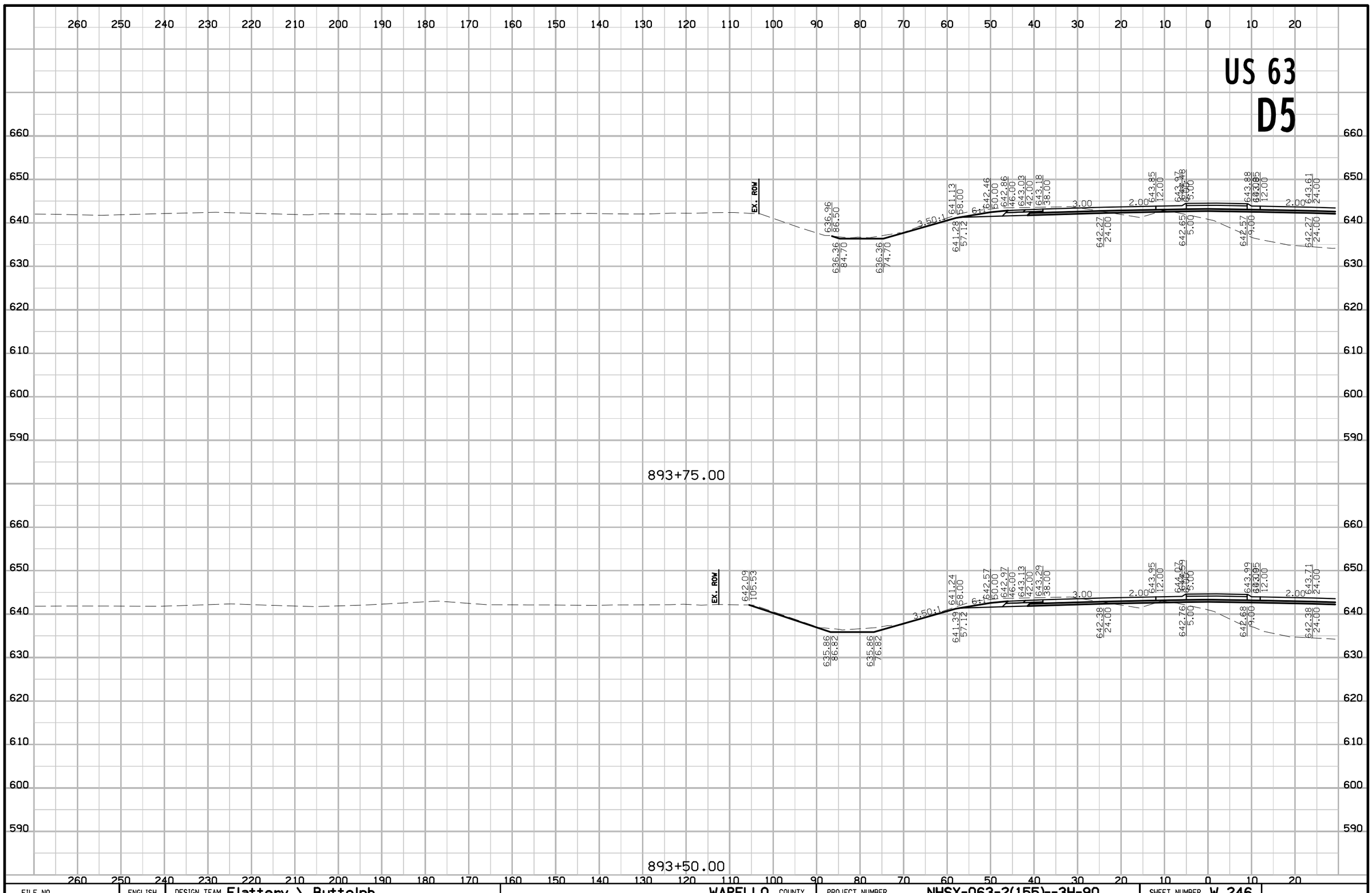
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.245

8:52:58 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

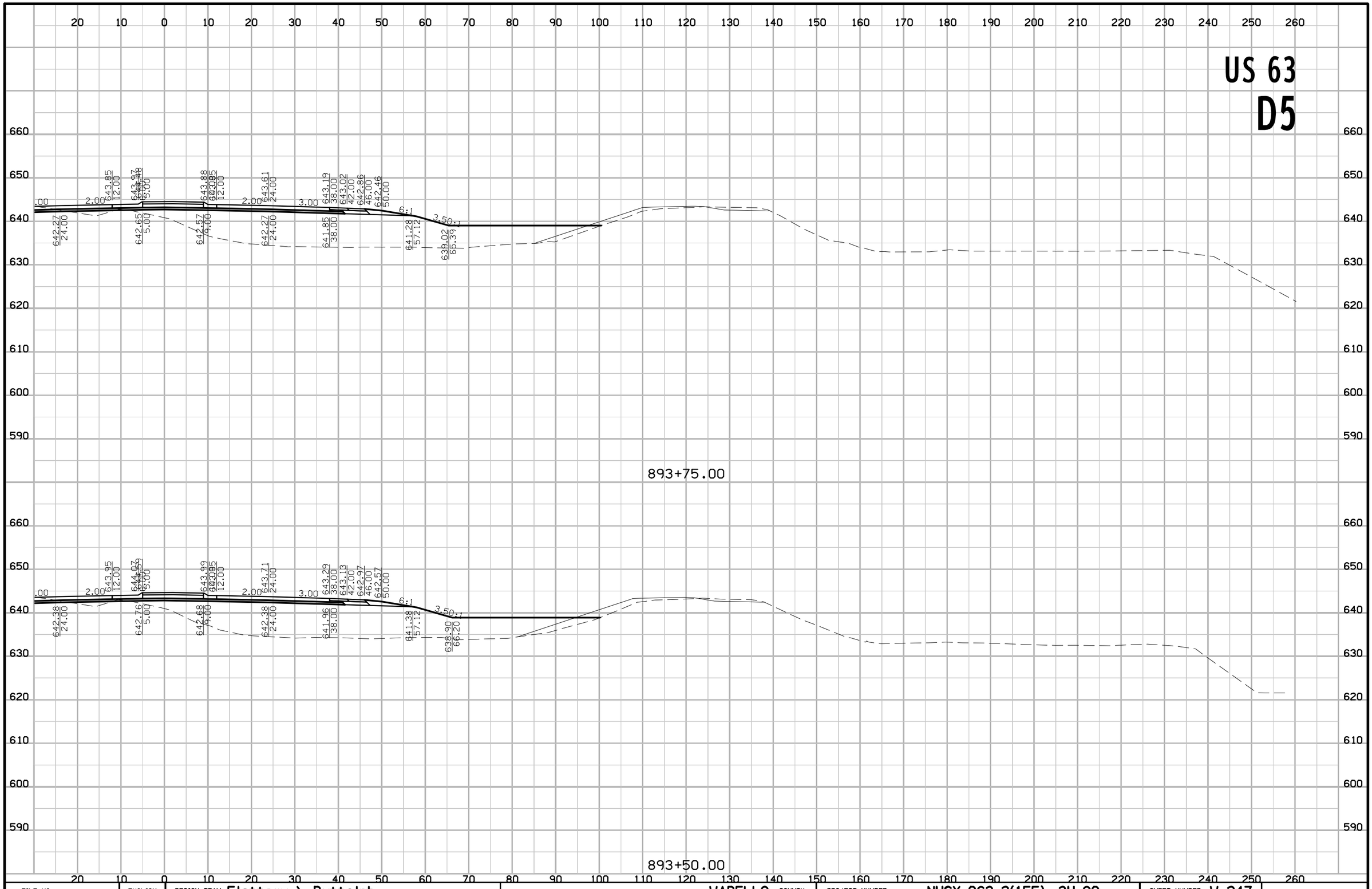
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.246

8:53:00 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

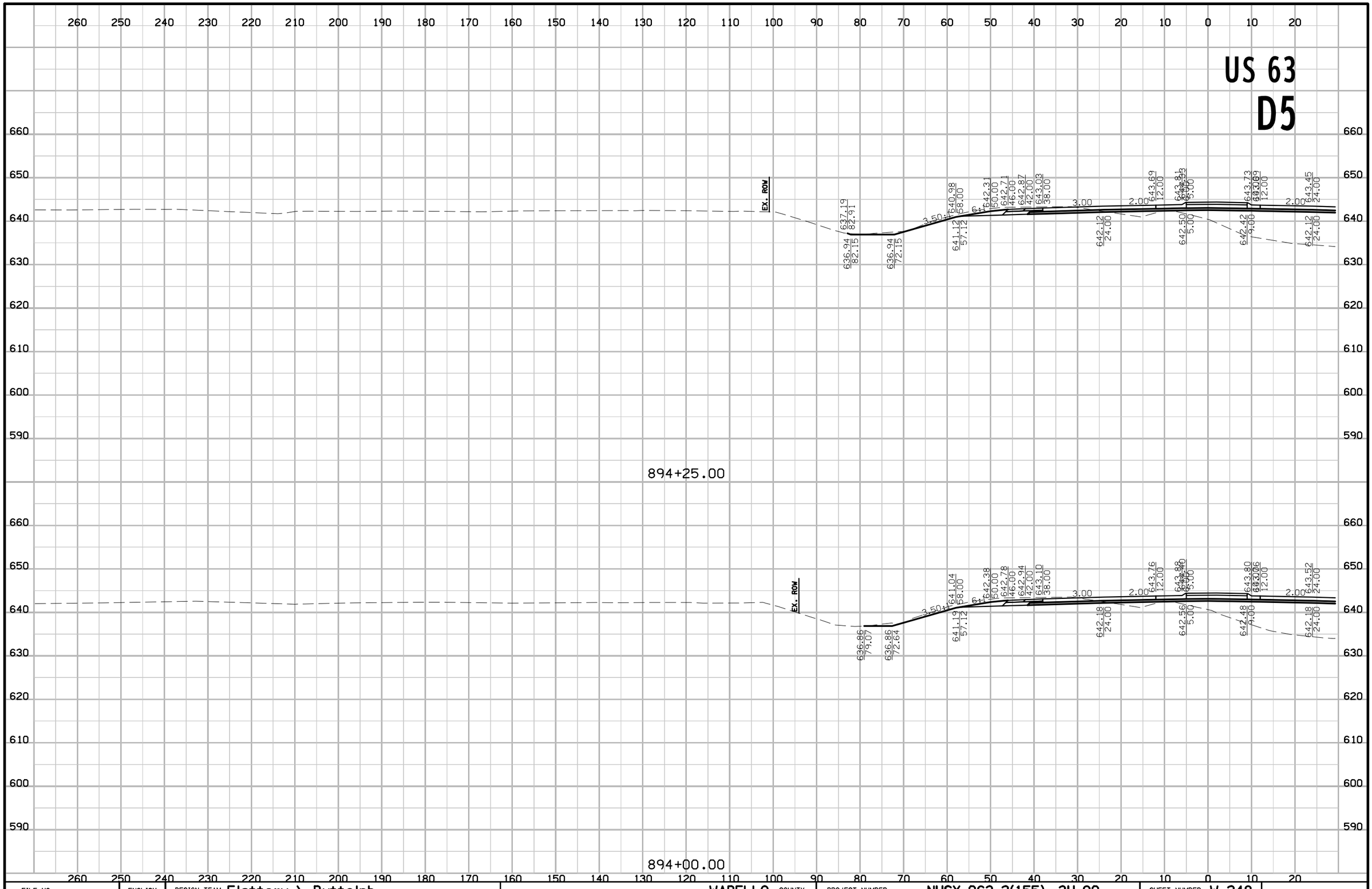
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.247

8:53:02 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

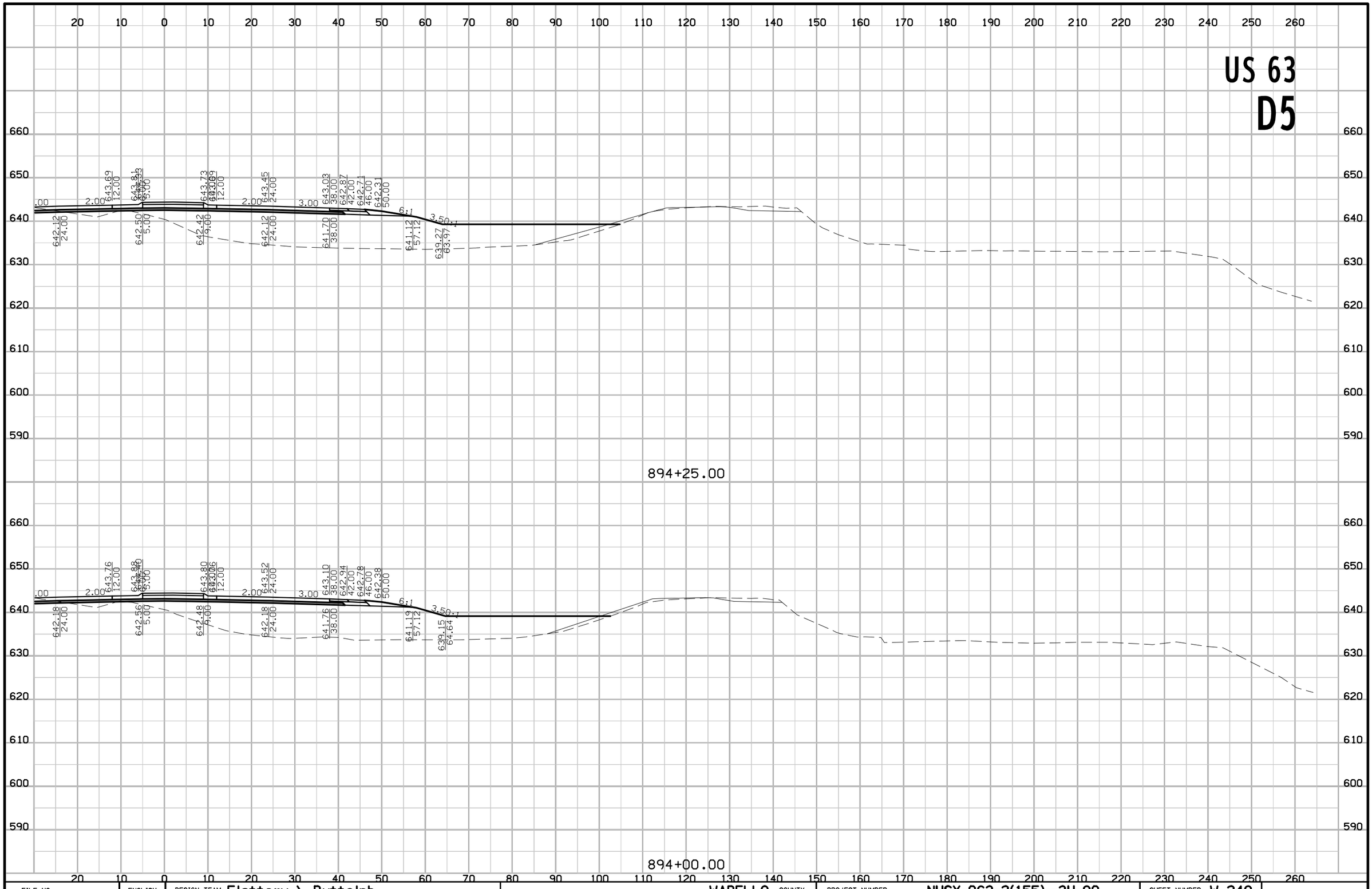
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.248

8:53:05 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

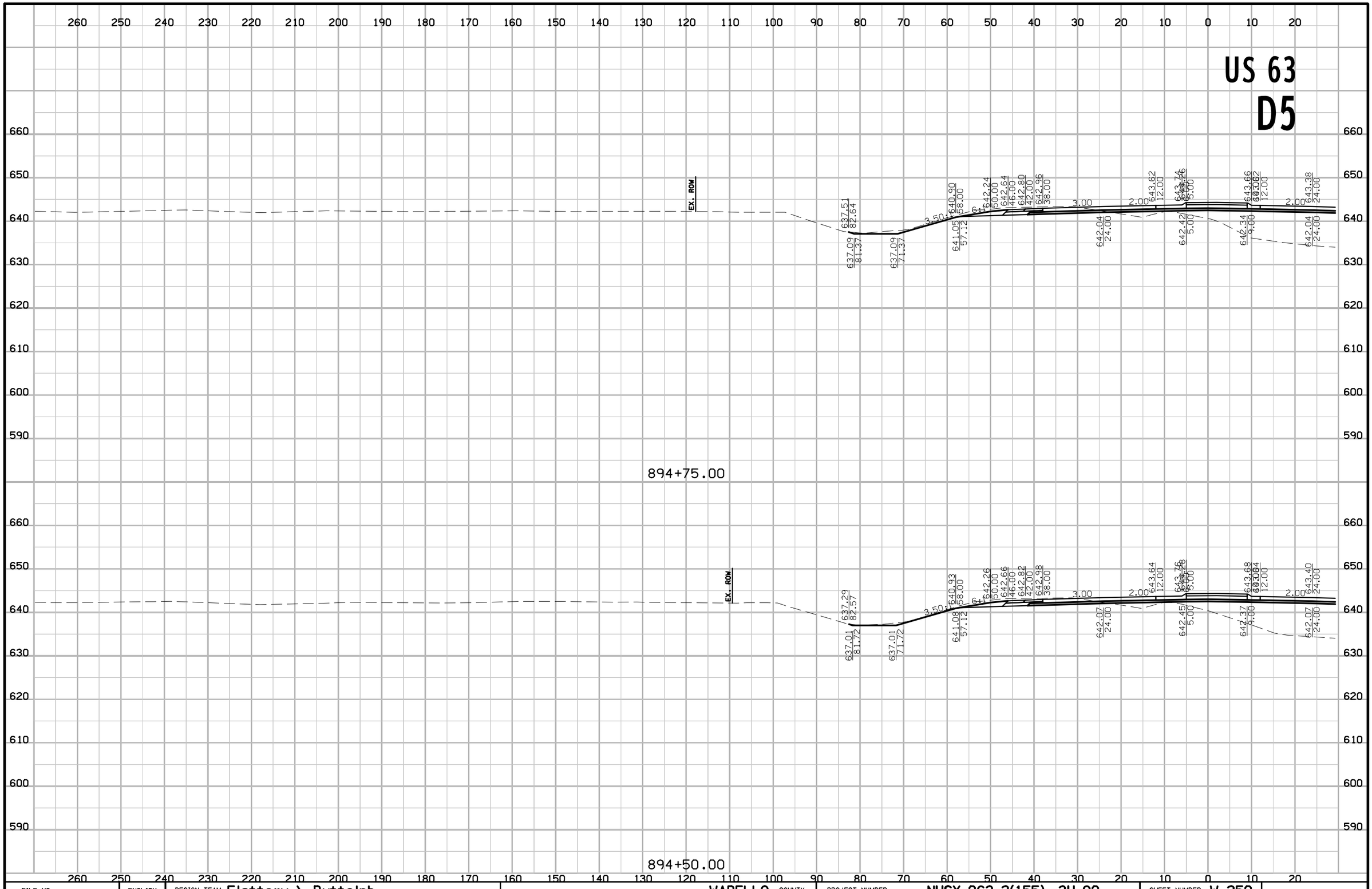
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.249

8:53:07 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.250

8:53:10 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

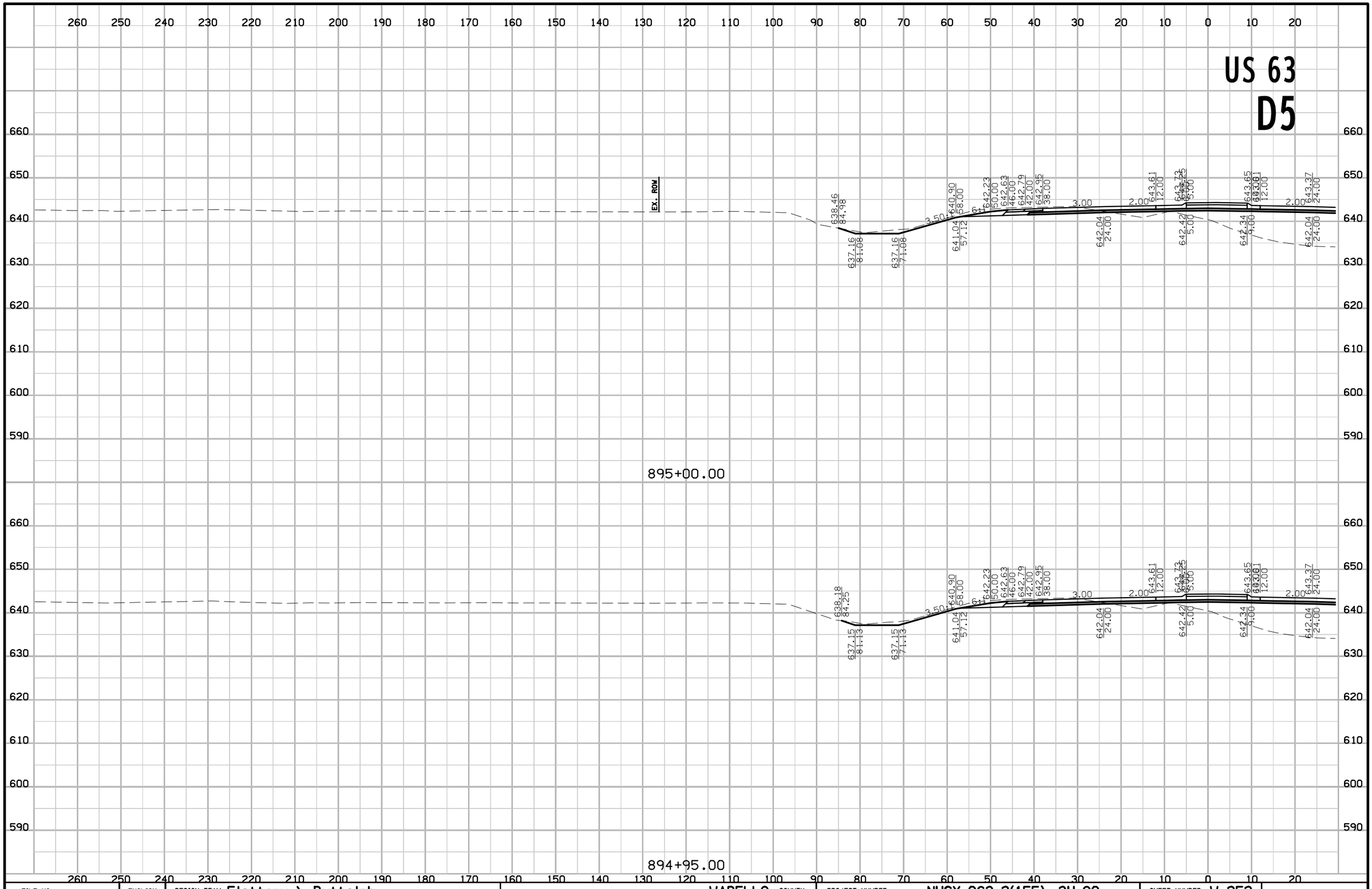
894+75.00

894+50.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.251

8:53:12 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

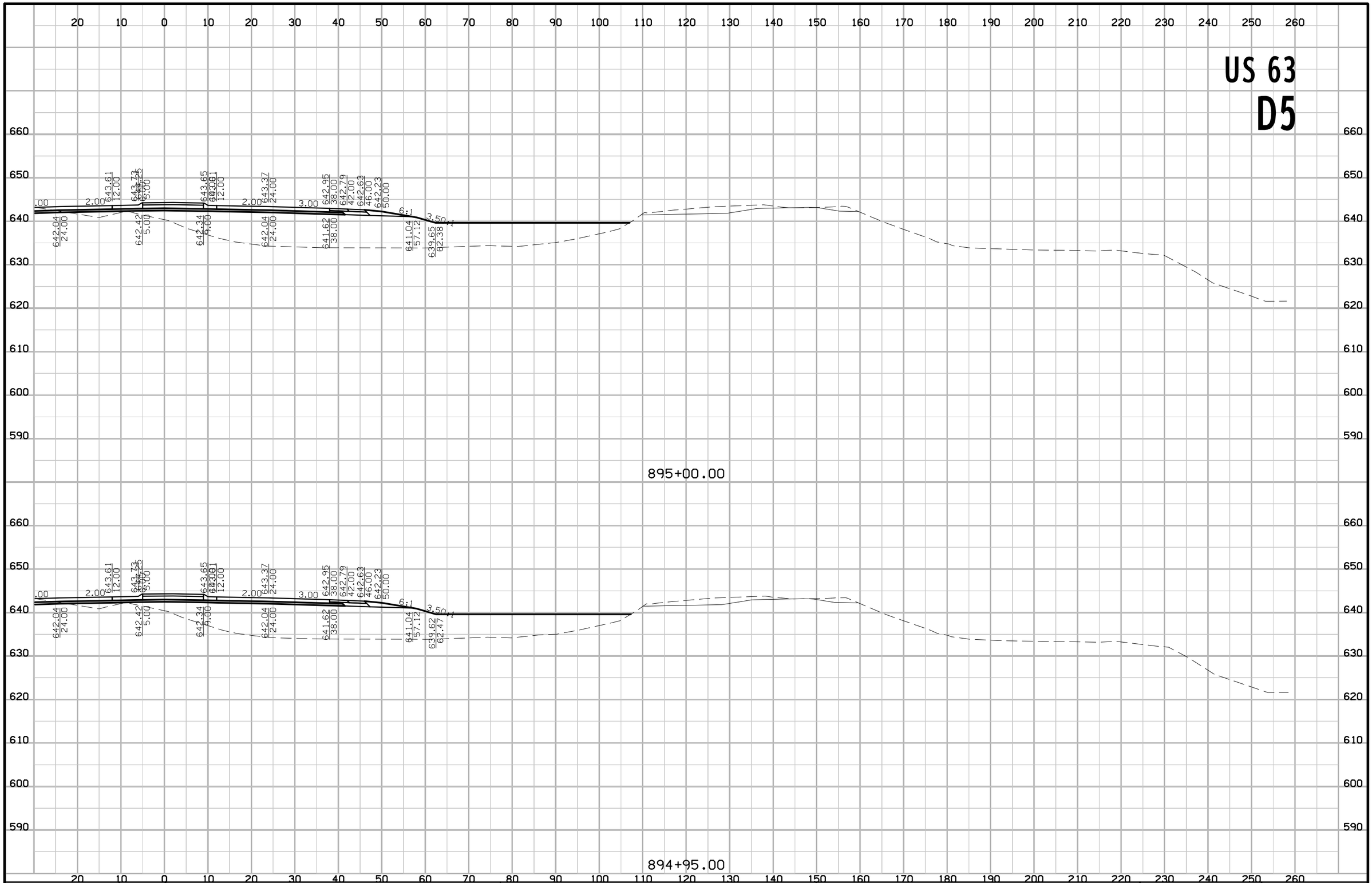
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.252

8:53:14 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

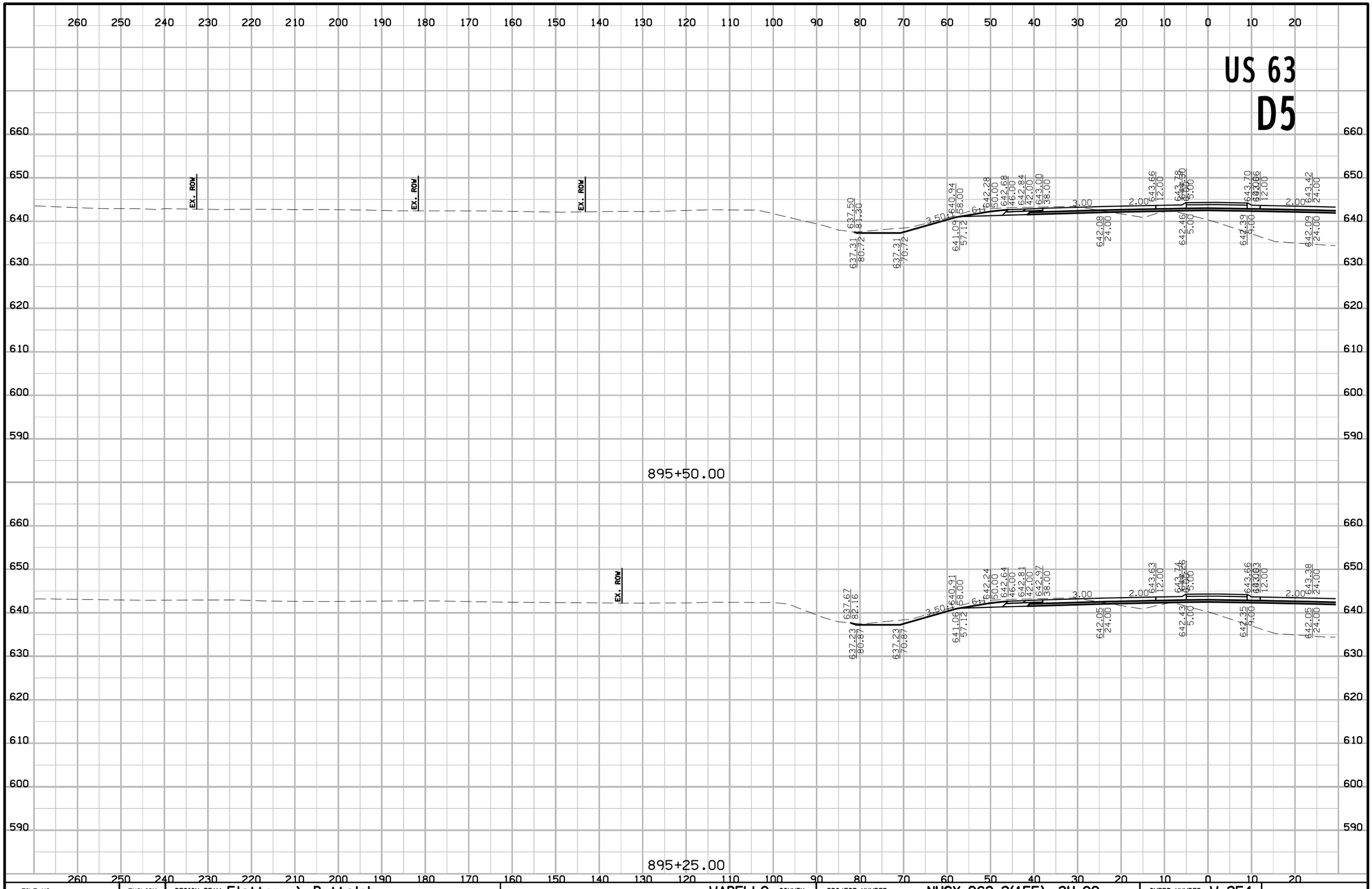
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.253

8:53:16 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

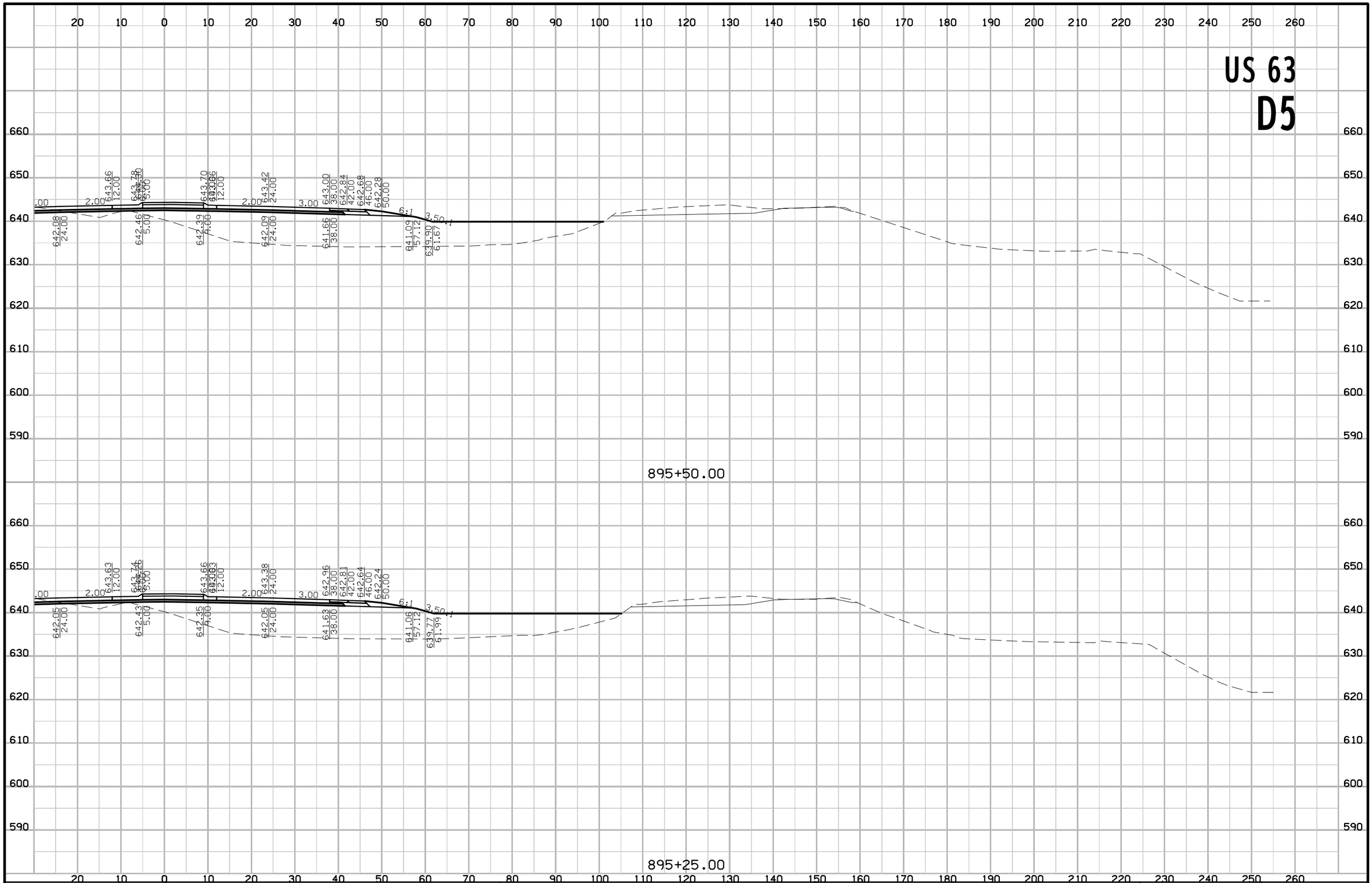
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.254

8:53:19 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

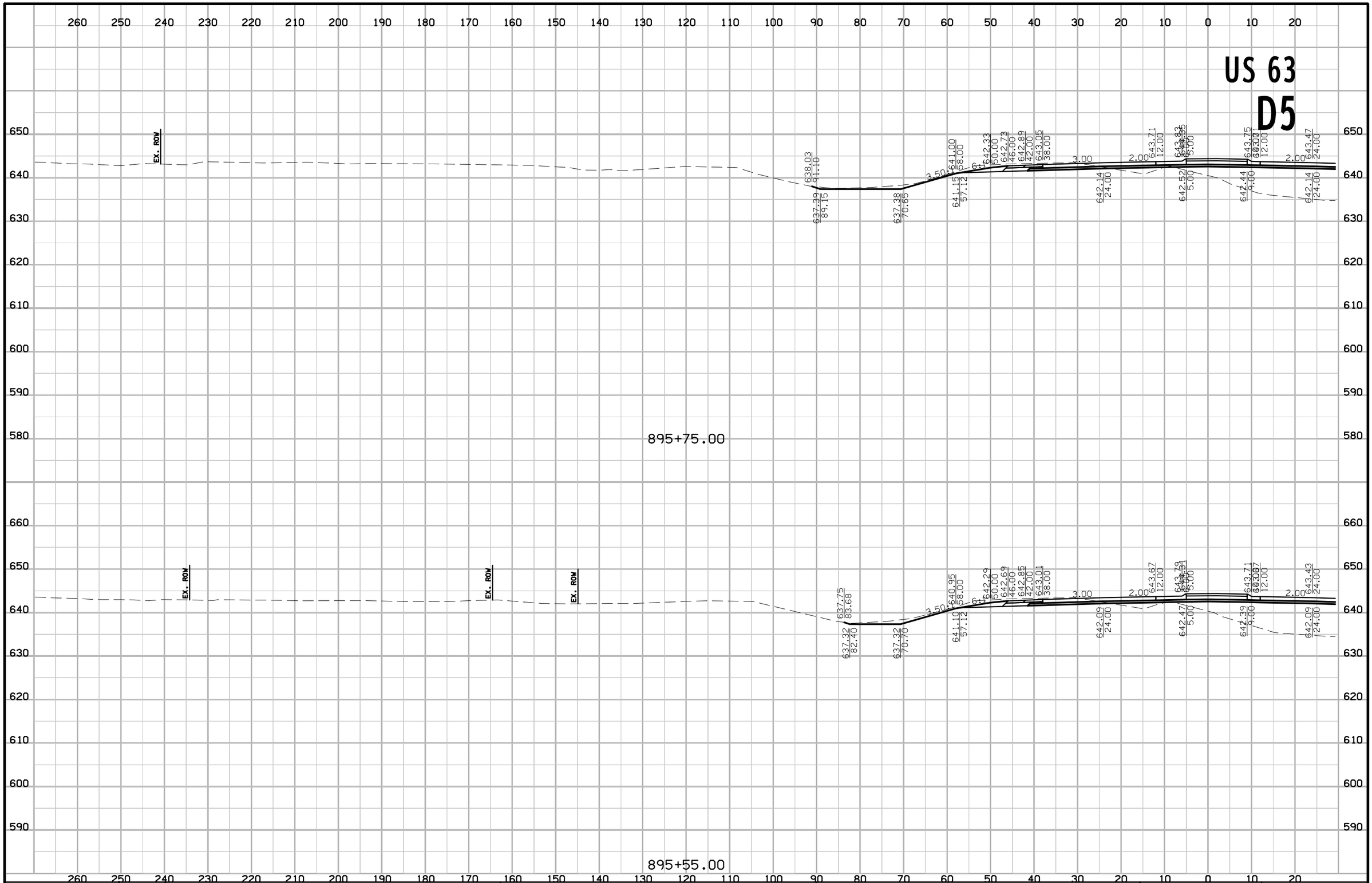
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.255

8:53:21 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

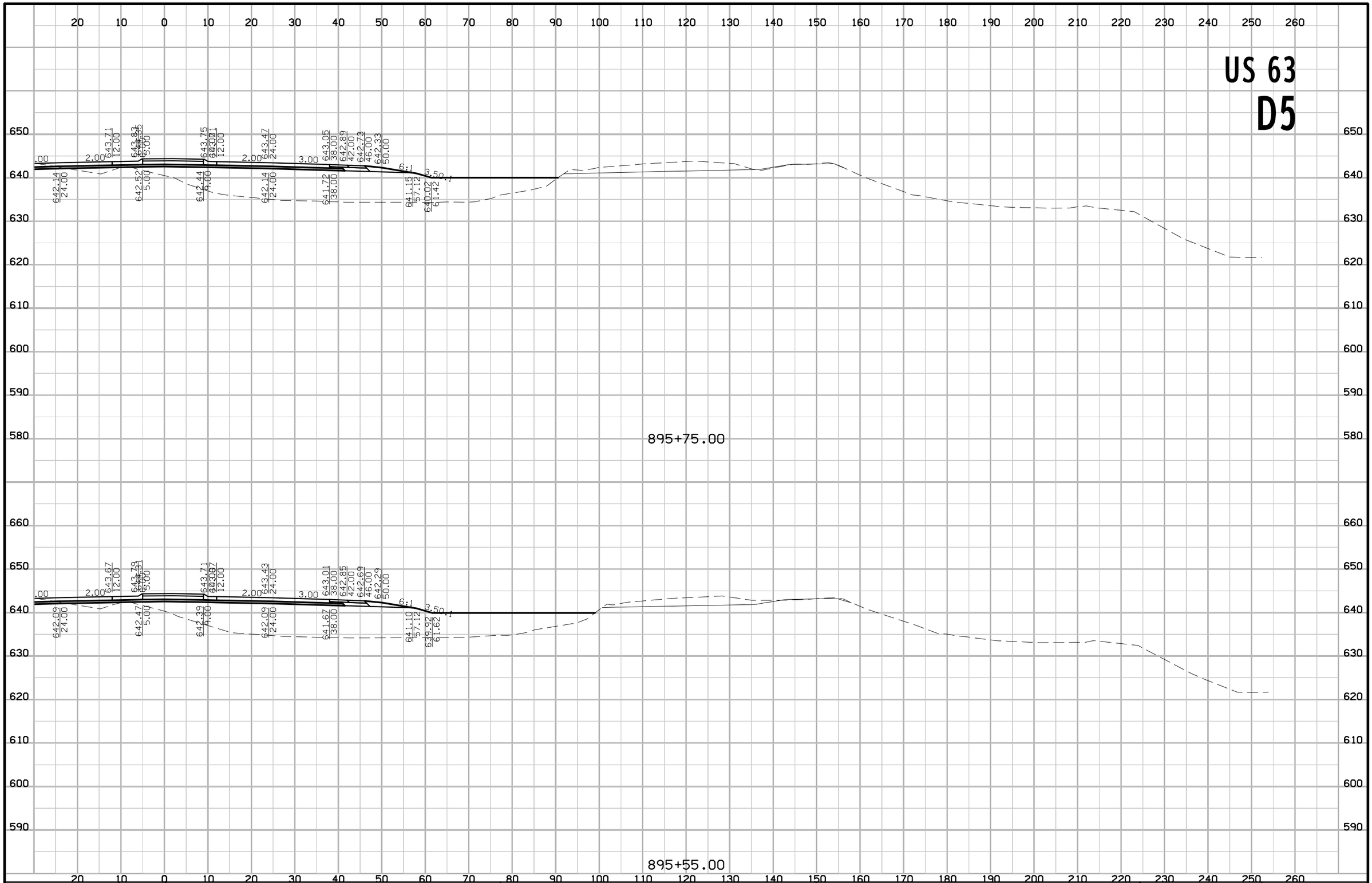
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.256

8:53:23 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.257

8:53:25 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

D5

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

650 640 630 620 610 600 590 580

EX. ROW

637.54
70.72

641.31
57.12

641.17
58.00

642.50
50.00

642.90
46.00

643.06
42.00

643.22
38.00

3.50

6

3.00

2.00

642.31
24.00

643.88
12.00

644.00
5.00

642.69
5.00

642.61
9.00

643.92
643.88
12.00

2.00

643.64
24.00

896+25.00

EX. ROW

637.48
97.70

637.46
70.65

641.22
57.12

641.07
58.00

642.41
50.00

642.81
46.00

642.97
42.00

643.13
38.00

3.50

6

3.00

2.00

642.21
24.00

643.79
12.00

643.91
643.87
5.00

642.59
5.00

642.51
9.00

643.83
643.79
12.00

2.00

643.55
24.00

896+00.00

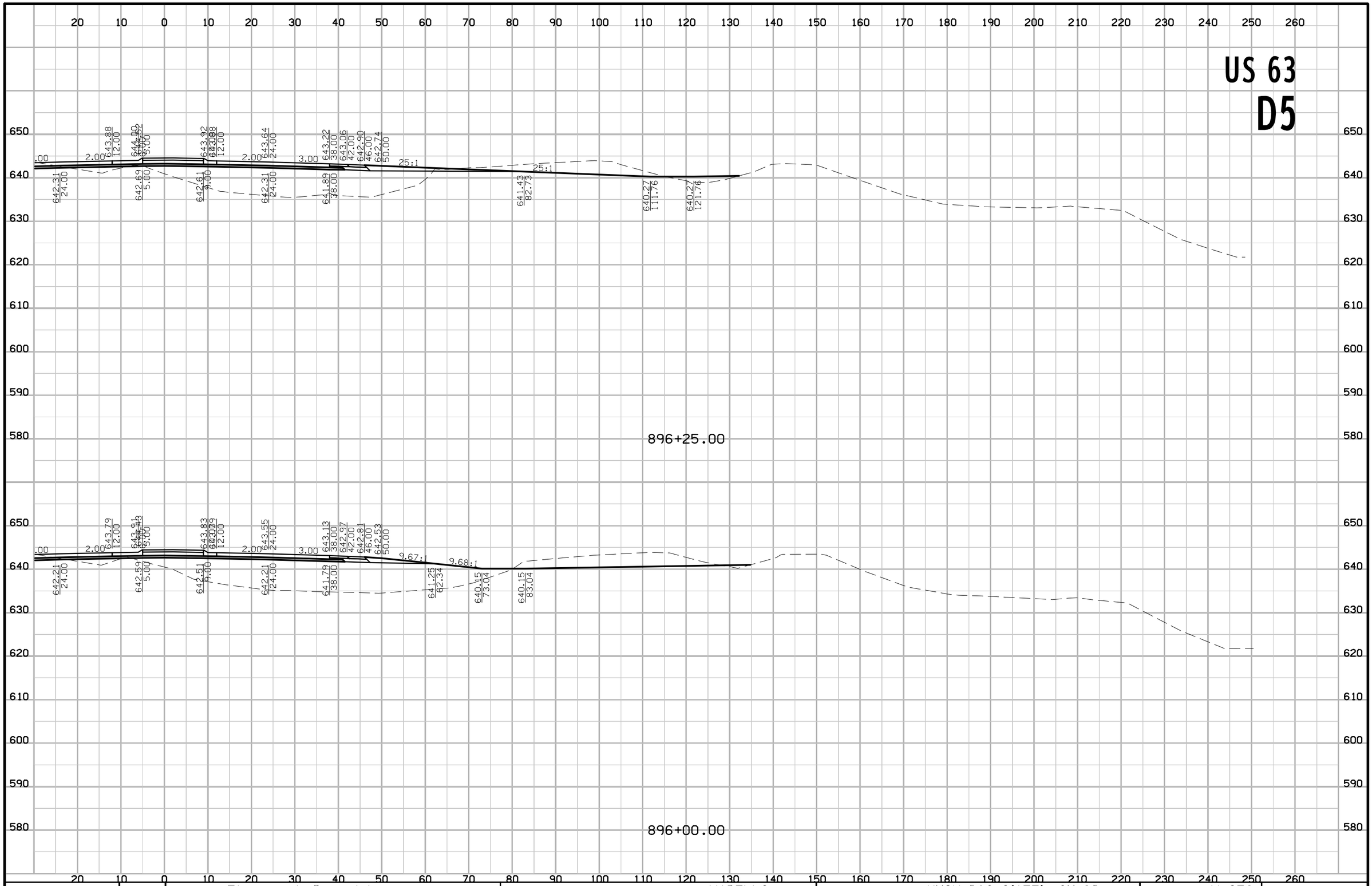
260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20

650 640 630 620 610 600 590 580

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.258

8:53:27 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

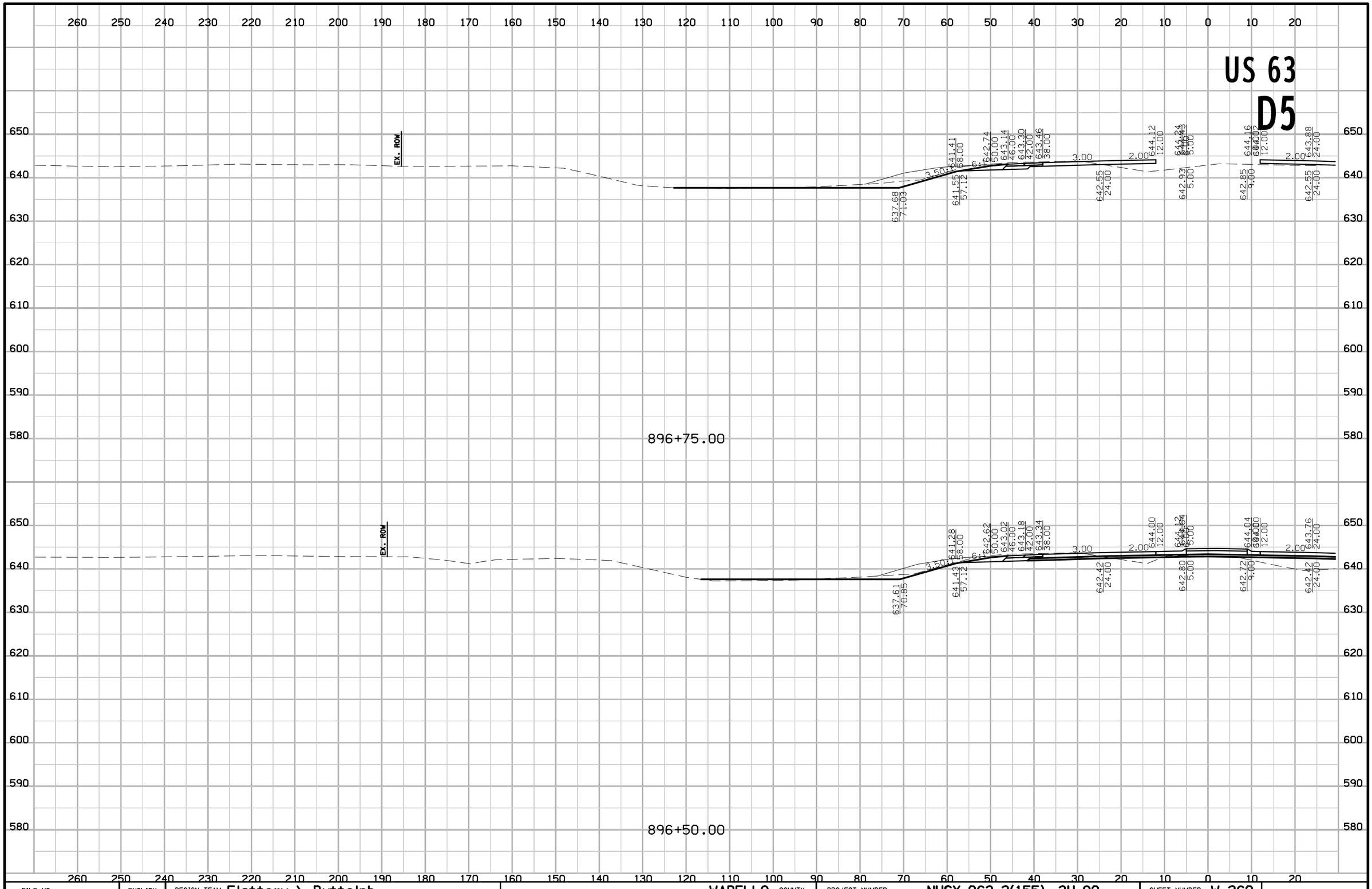
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.259

8:53:29 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

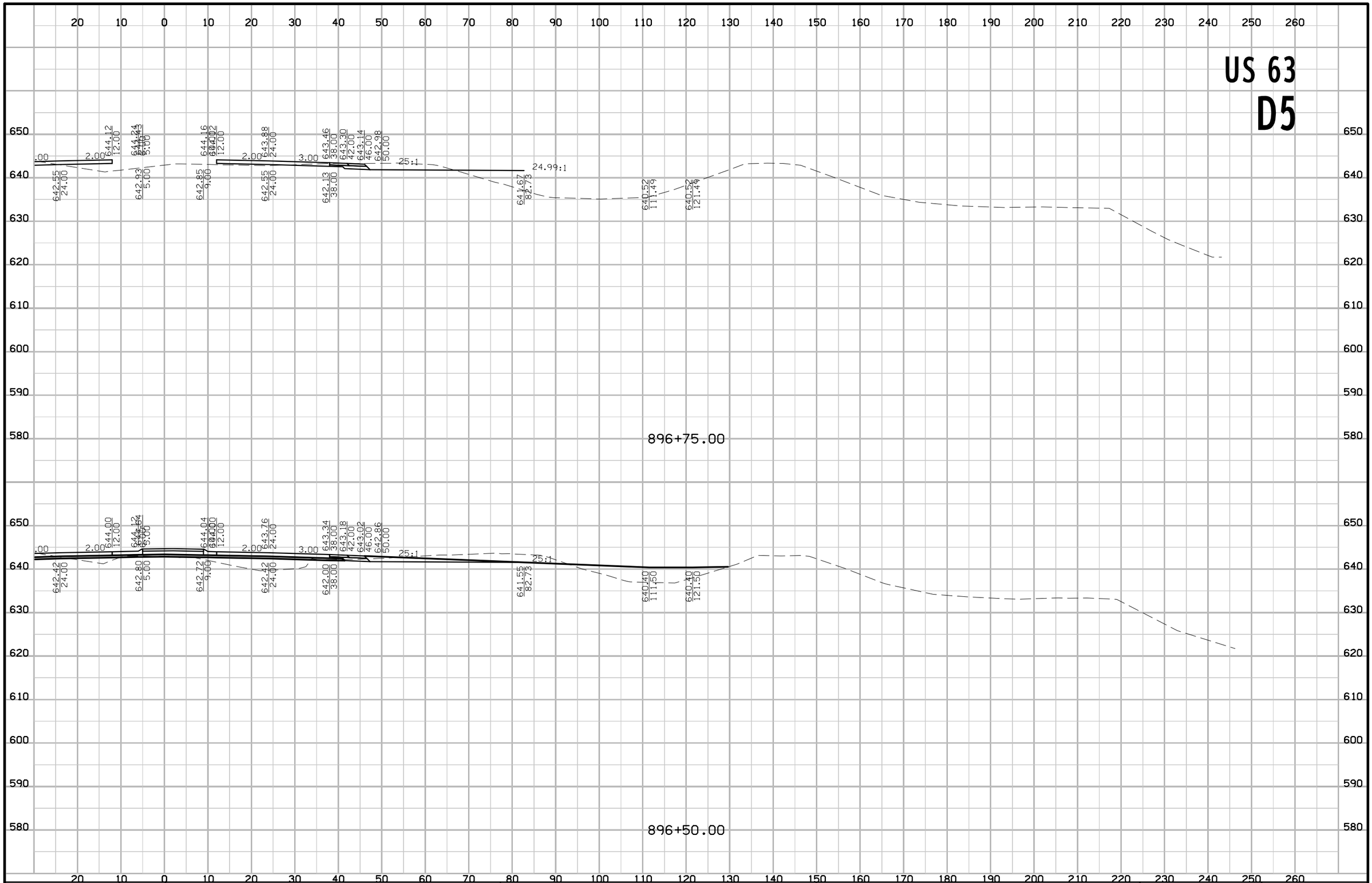
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.260

8:53:31 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

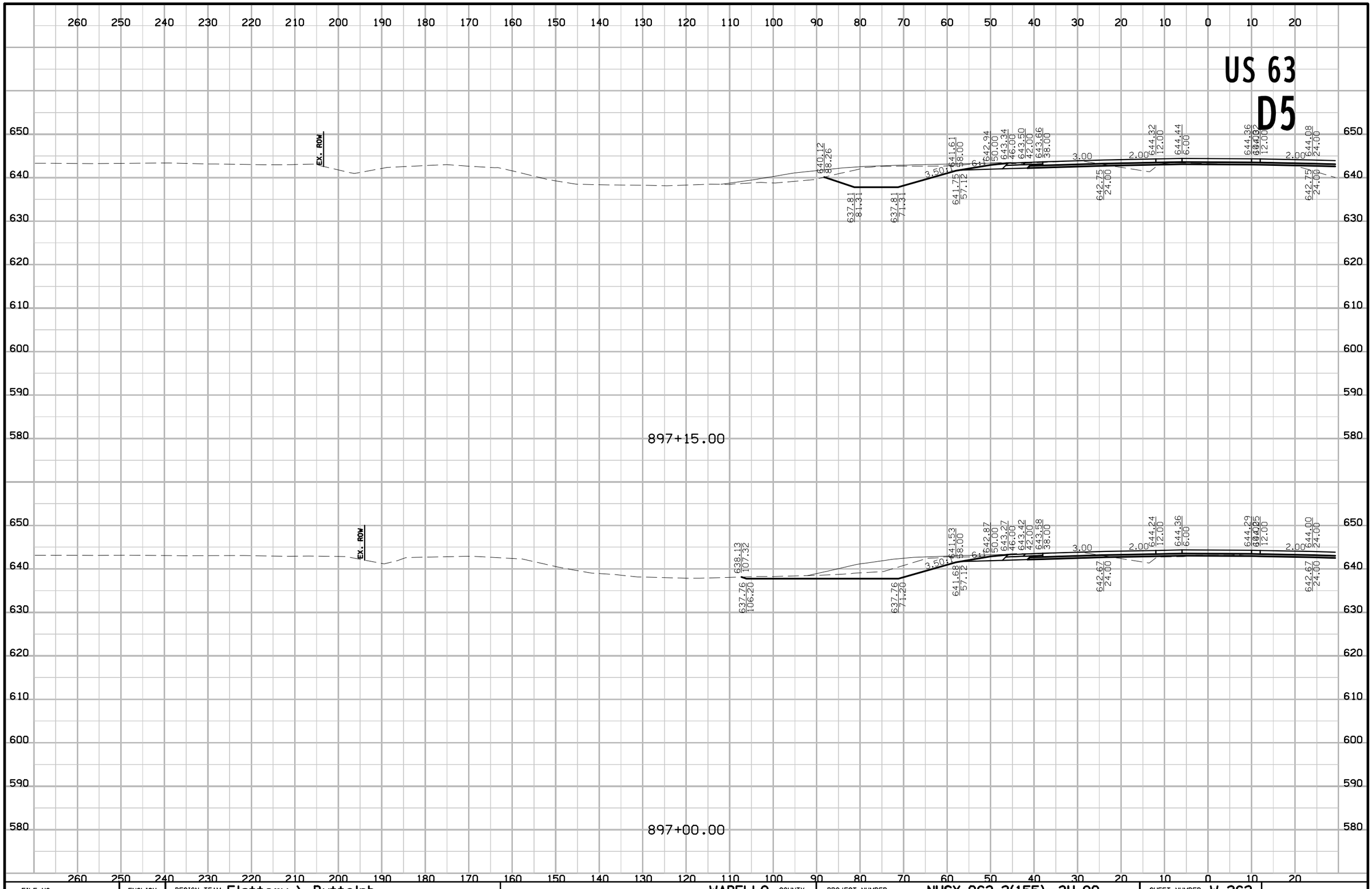
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.261

8:53:33 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

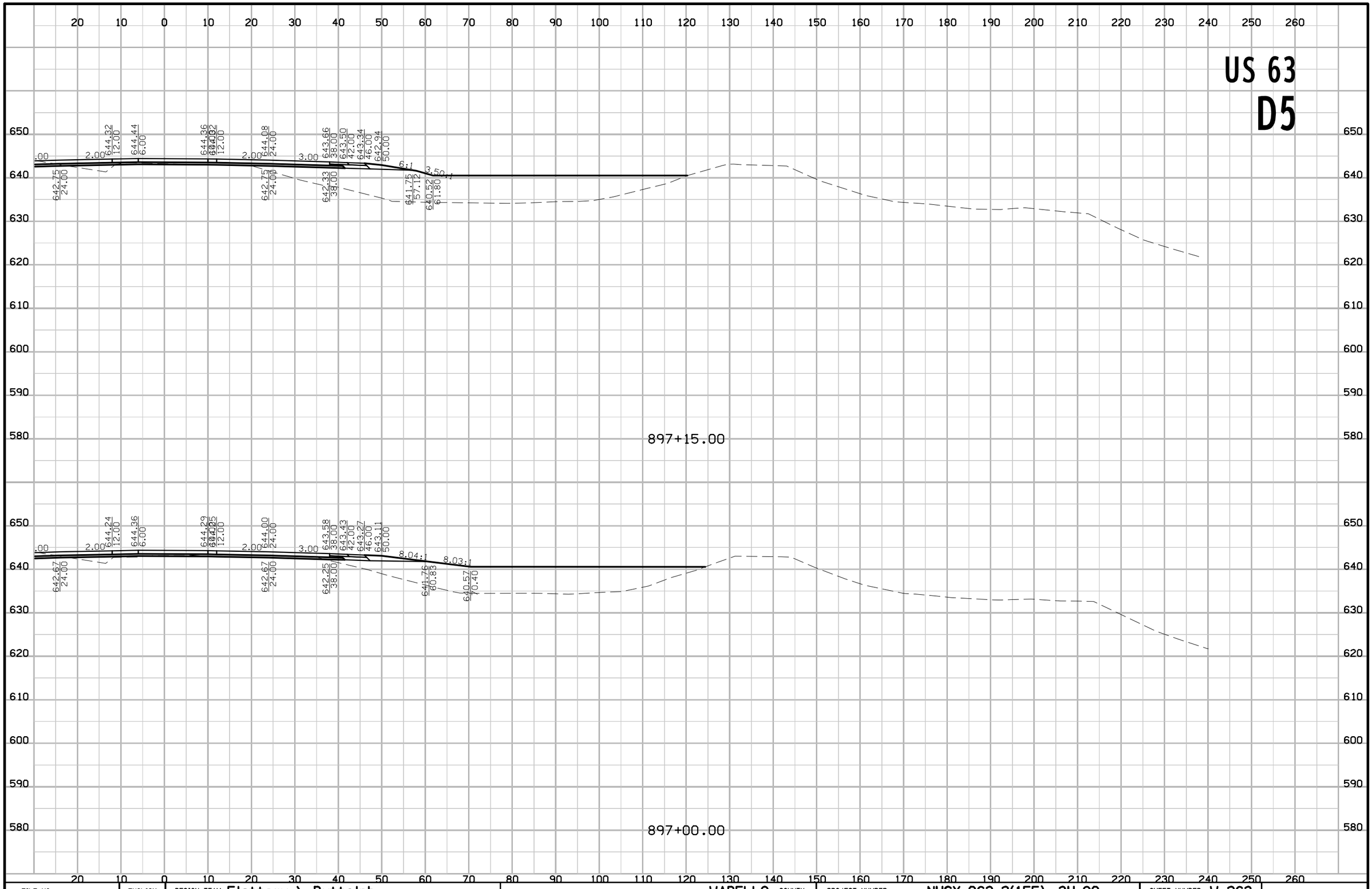
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.262

8:53:35 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

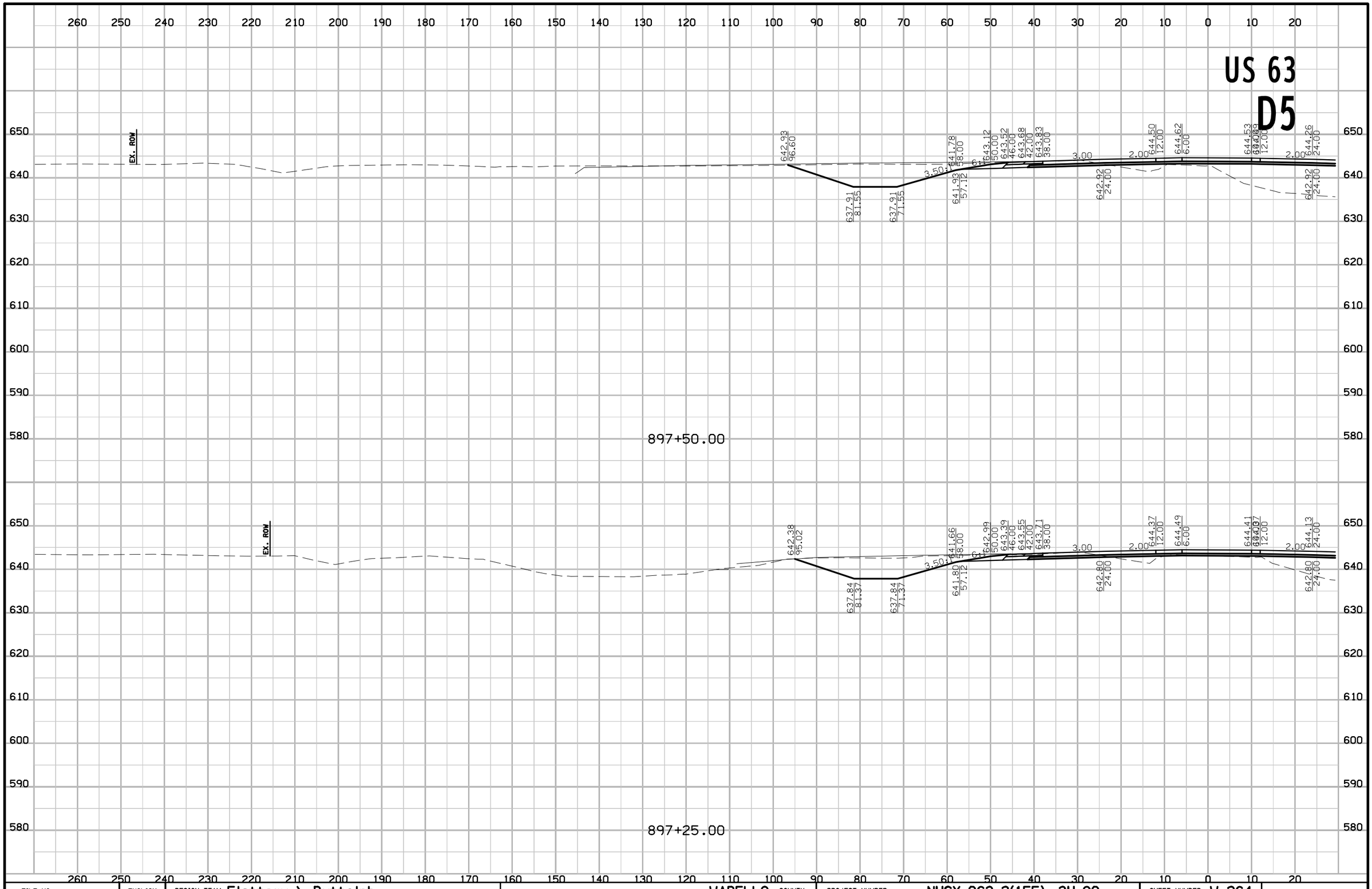
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.263

8:53:37 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

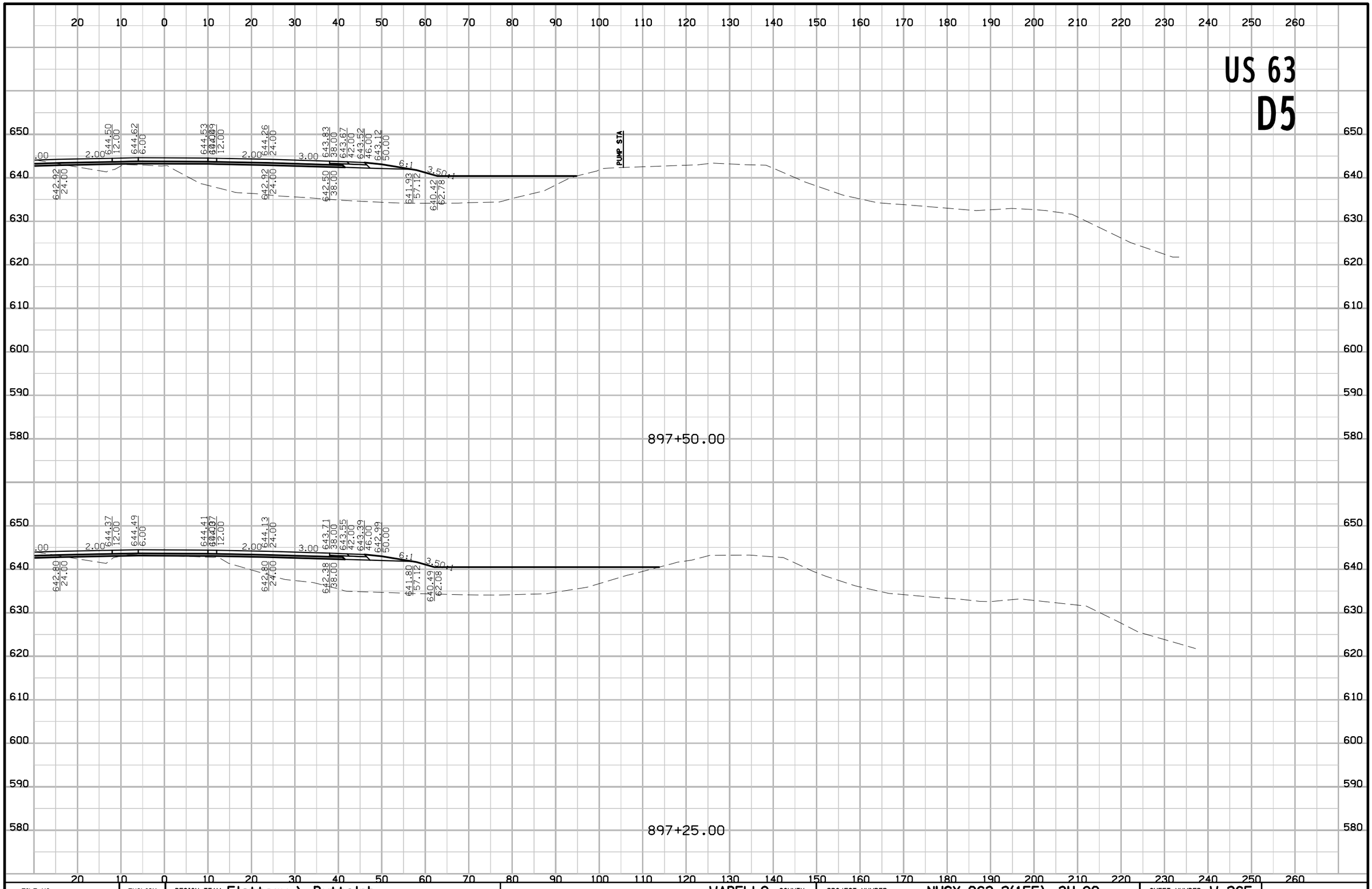
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.264

8:53:39 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

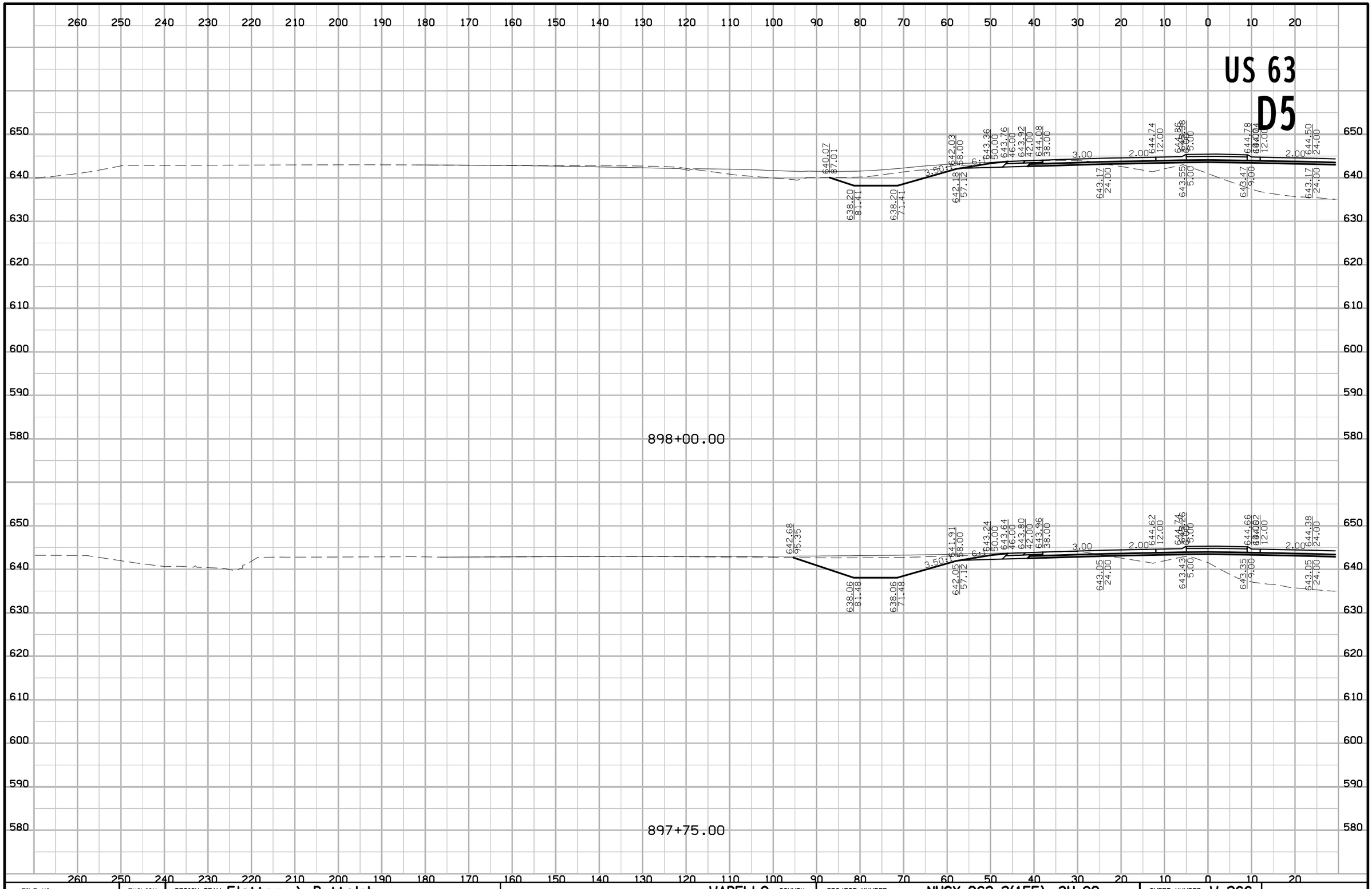


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.265

8:53:41 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

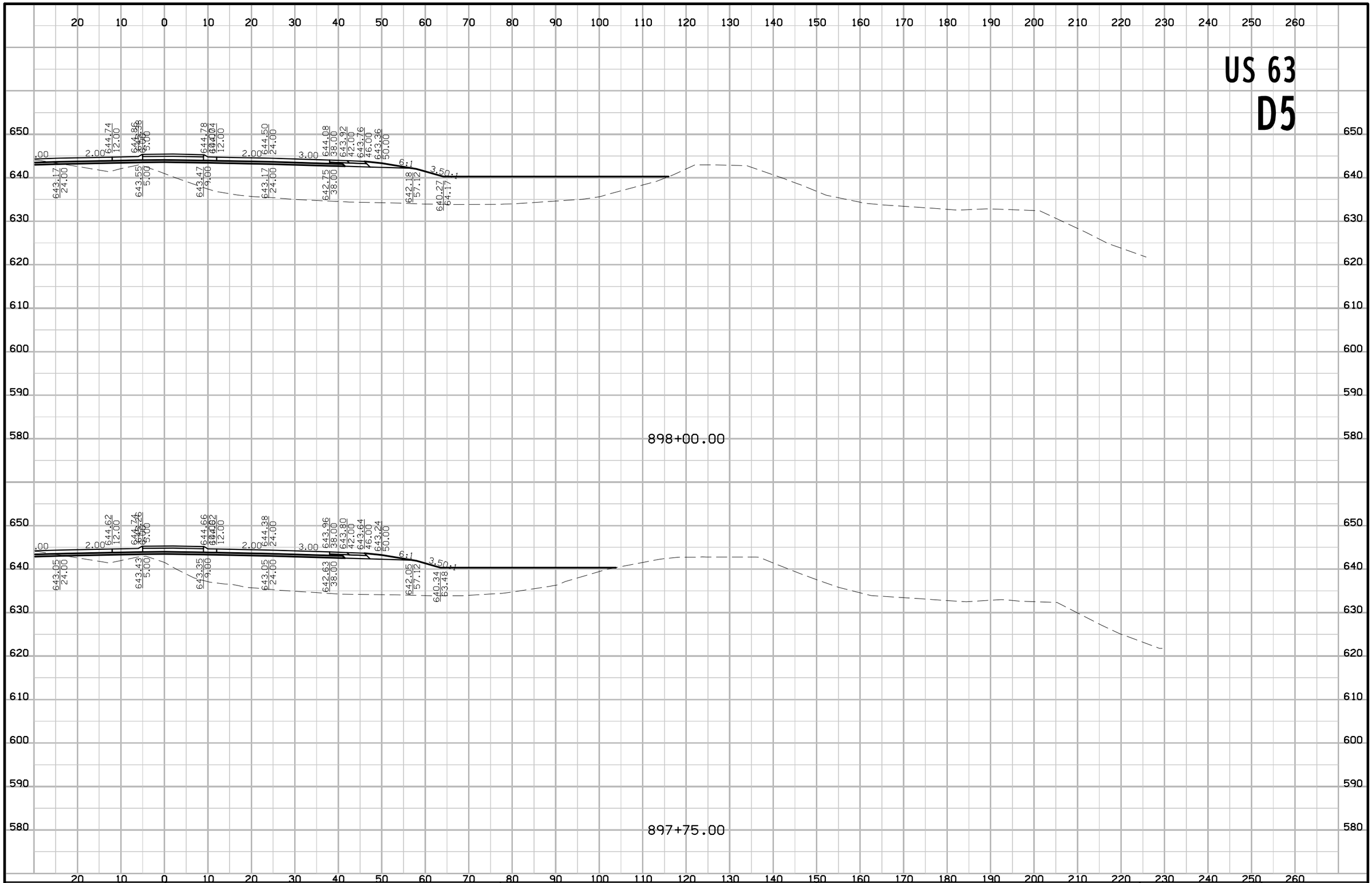
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.266

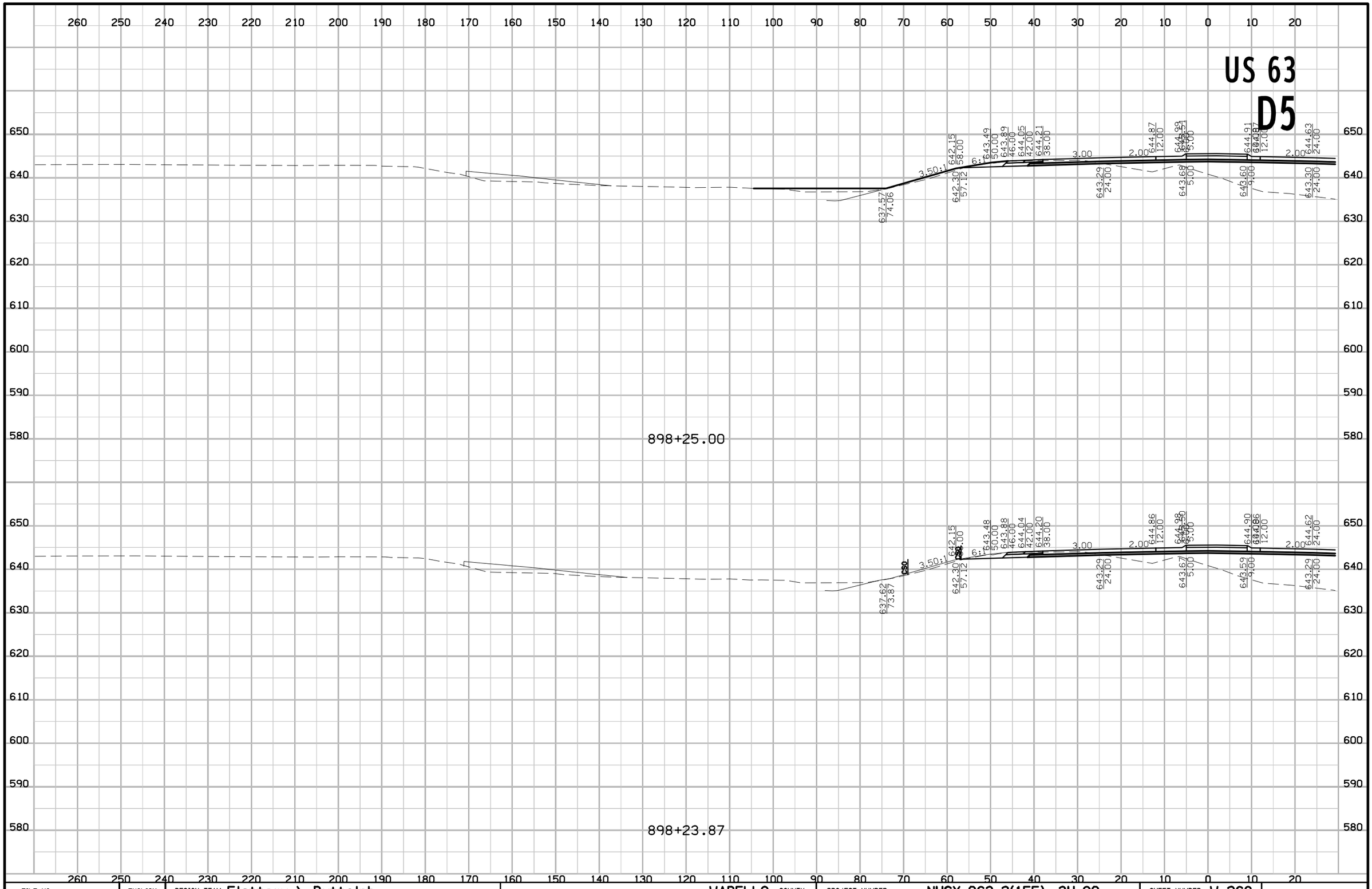
8:53:43 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

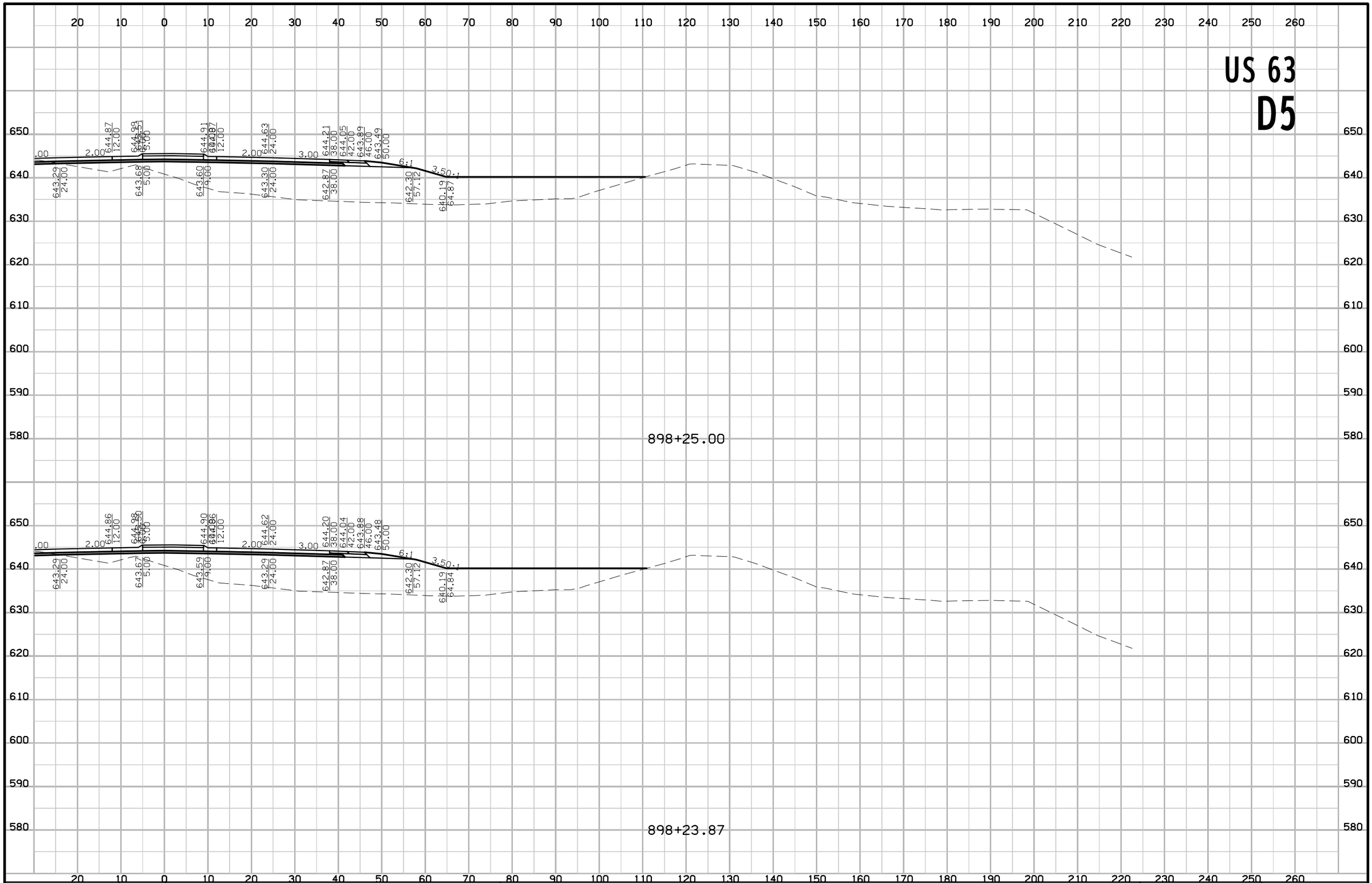

20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260
650
640
630
620
610
600
590
580
.00
2.00
644.74
12.00
644.86
644.98
5.00
644.78
644.90
644.94
644.96
644.98
644.99
644.99
644.99

US 63

D5


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
650 640 630 620 610 600 590 580
898+25.00
637.57
74.06
642.30
57.12
642.15
58.00
643.49
50.00
643.89
46.00
644.05
42.00
644.21
38.00
3.00
2.00
644.87
12.00
643.29
24.00
643.68
5.00
644.91
644.98
644.99
644.91
644.98
644.99
644.91
644.98
644.99

US 63
D5

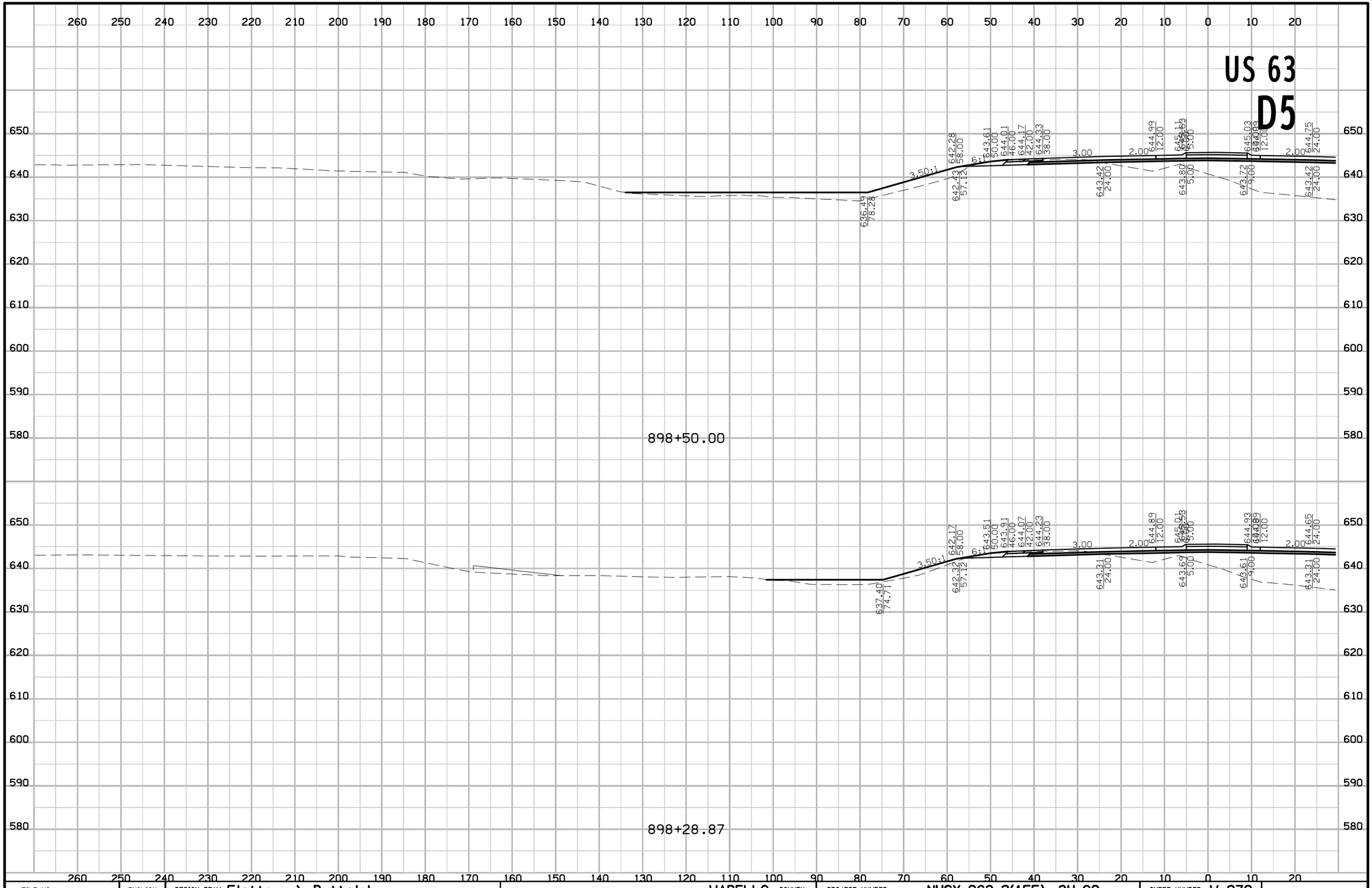


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.269

8:53:50 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

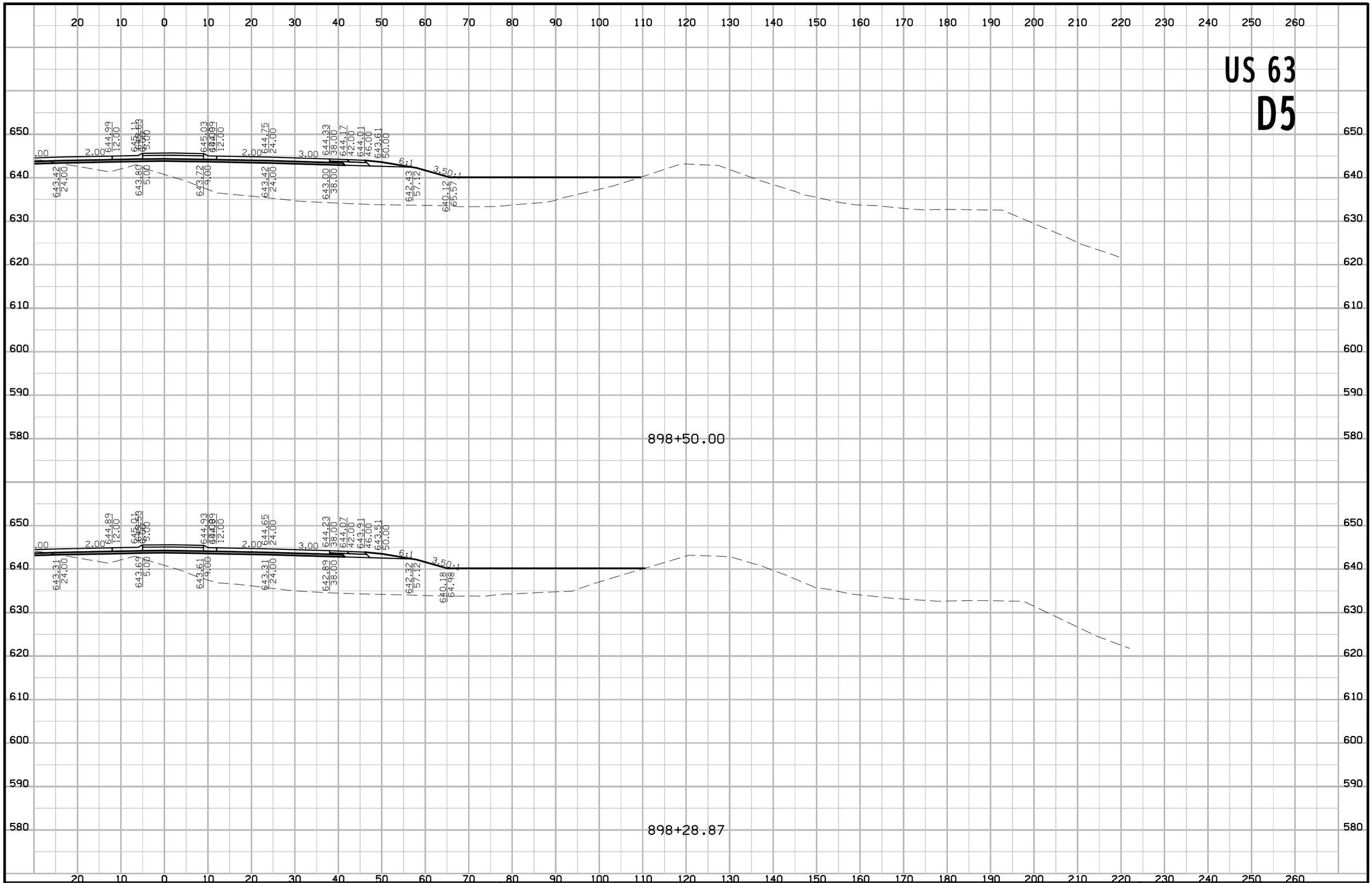
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.270

8:53:53 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

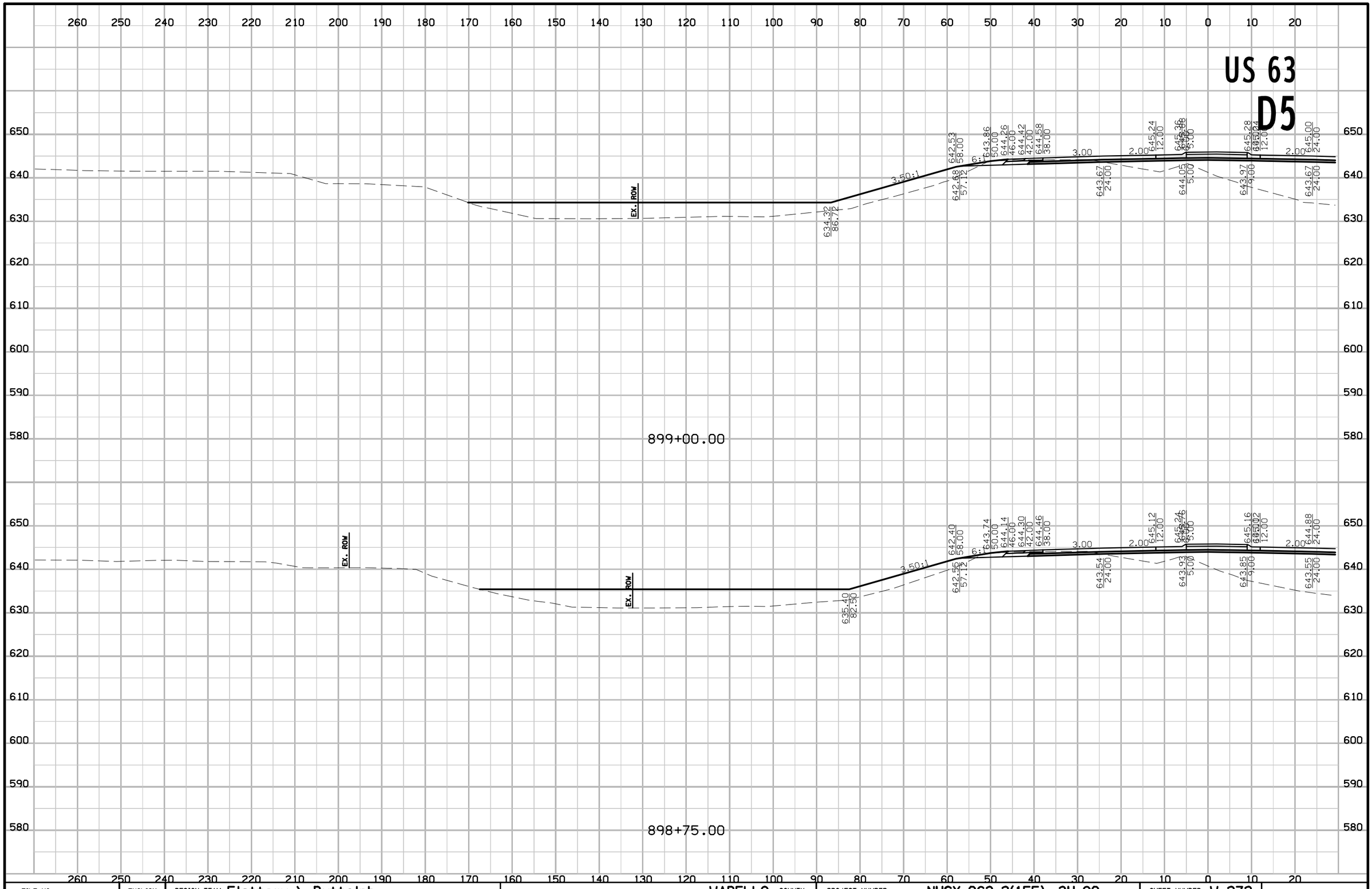
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.271

8:53:55 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

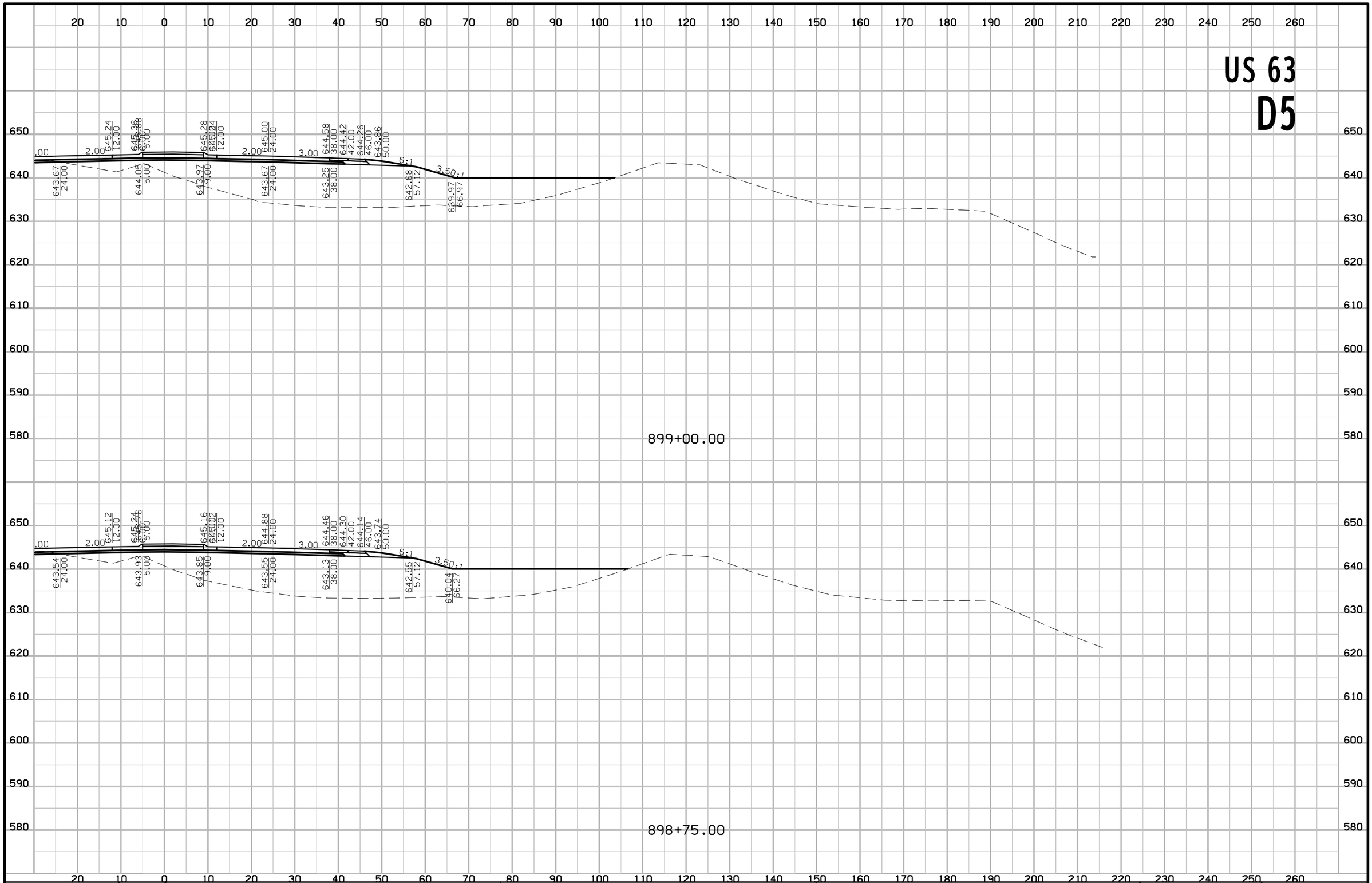
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.272

8:53:57 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

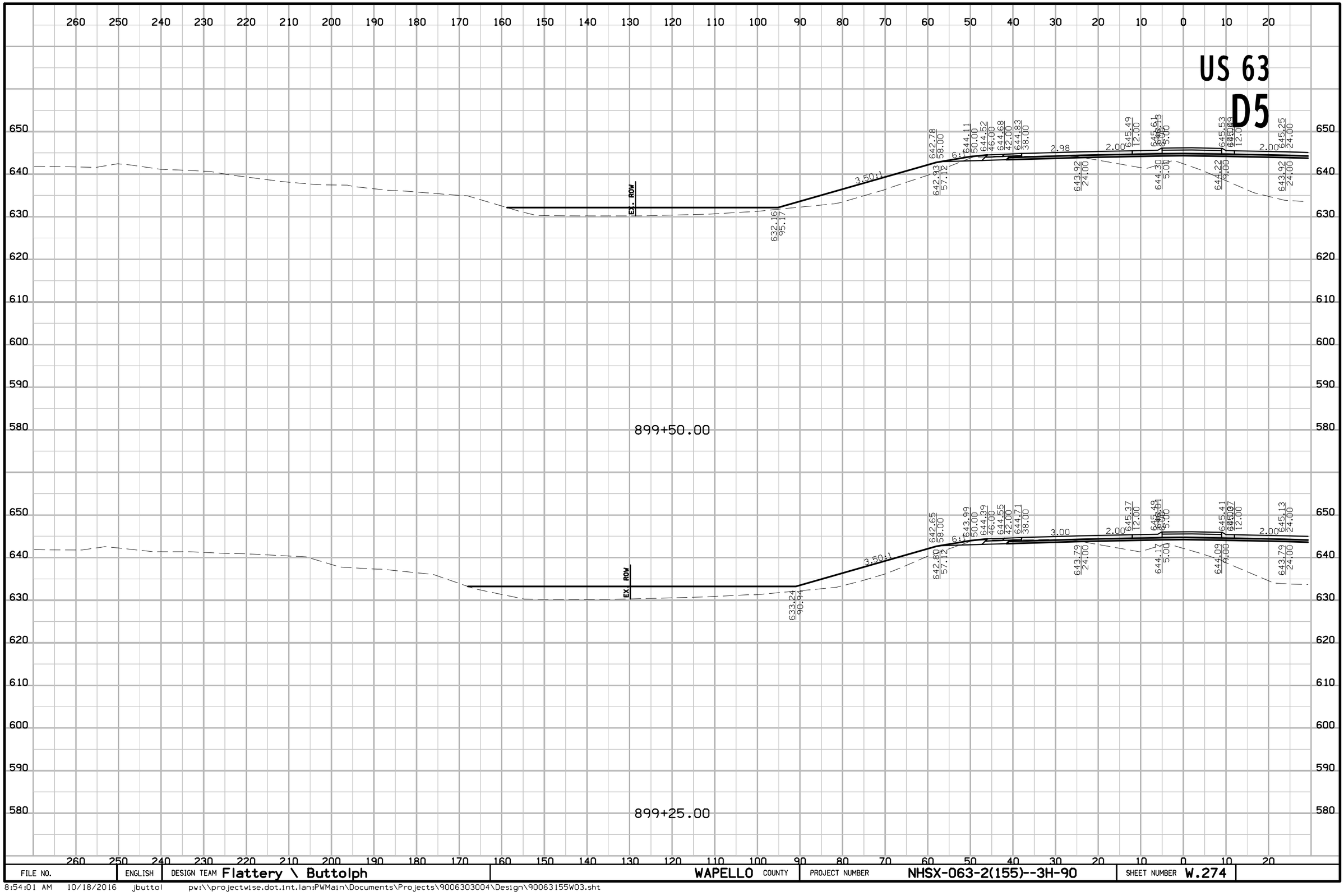


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.273

8:53:59 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

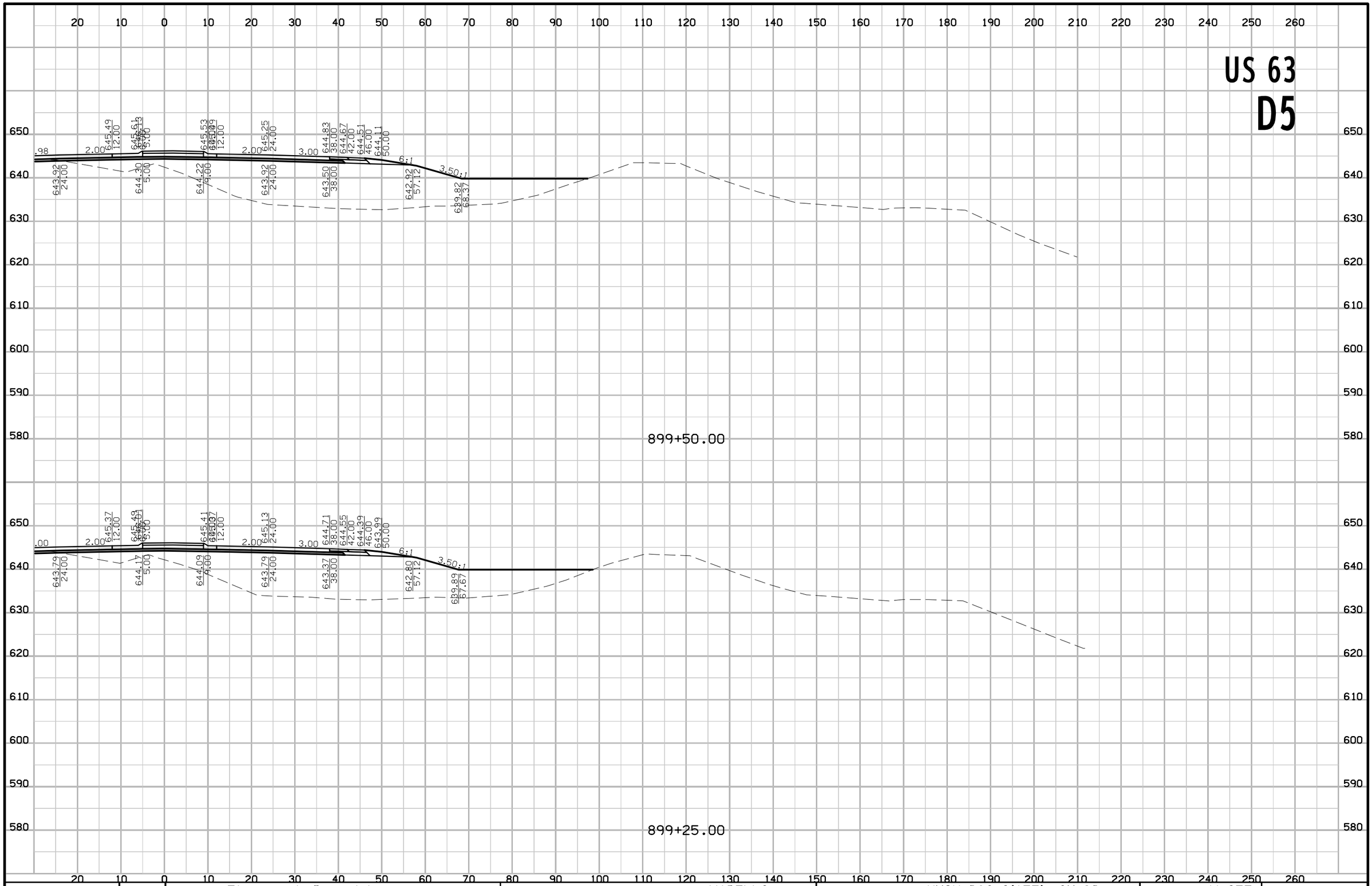
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.274

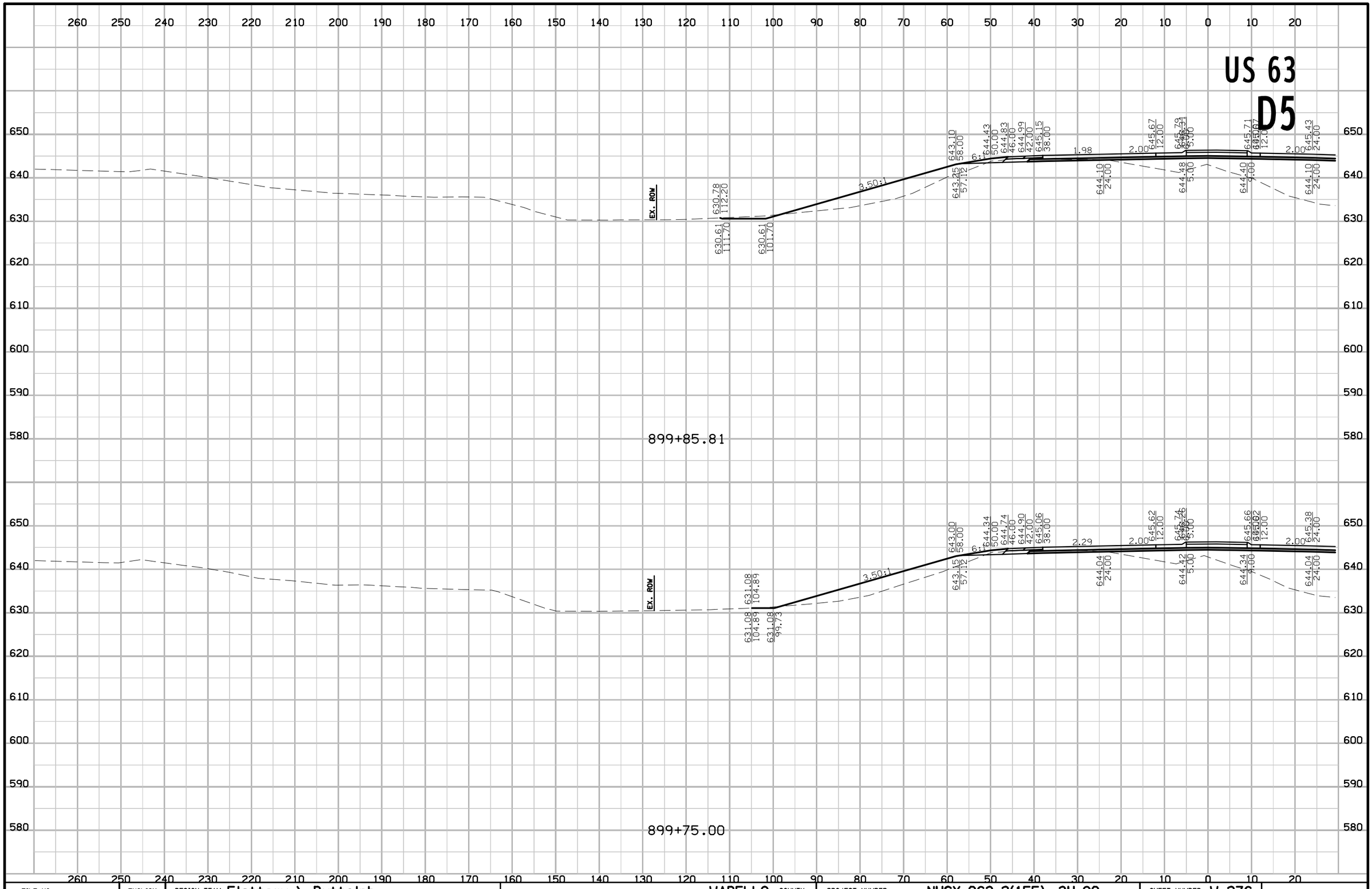
8:54:01 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5


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
650
640
630
620
610
600
590
580
.98
2.00
645.49
12.00
645.61
645.61
645.61

US 63

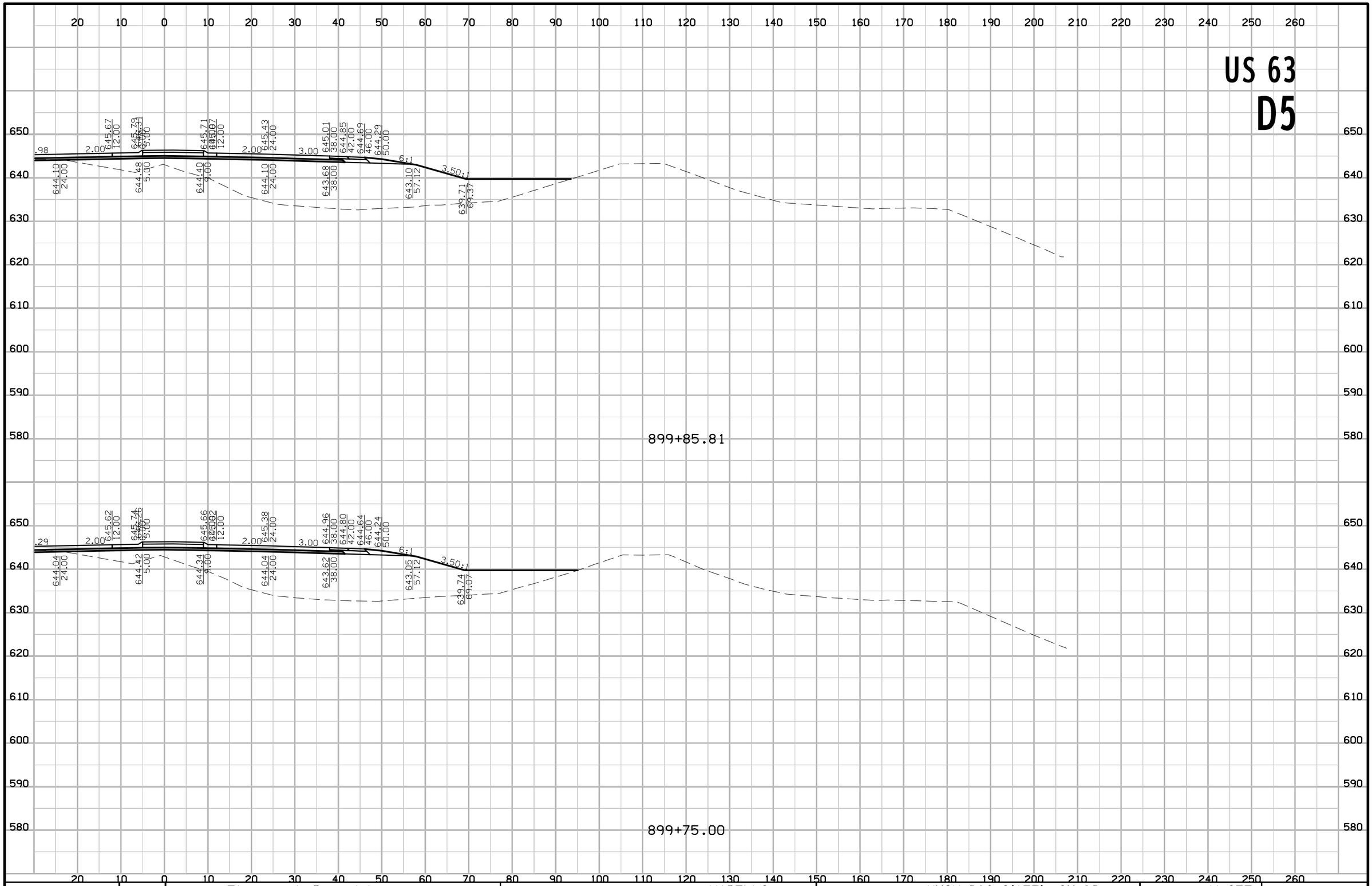
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.276

8:54:05 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

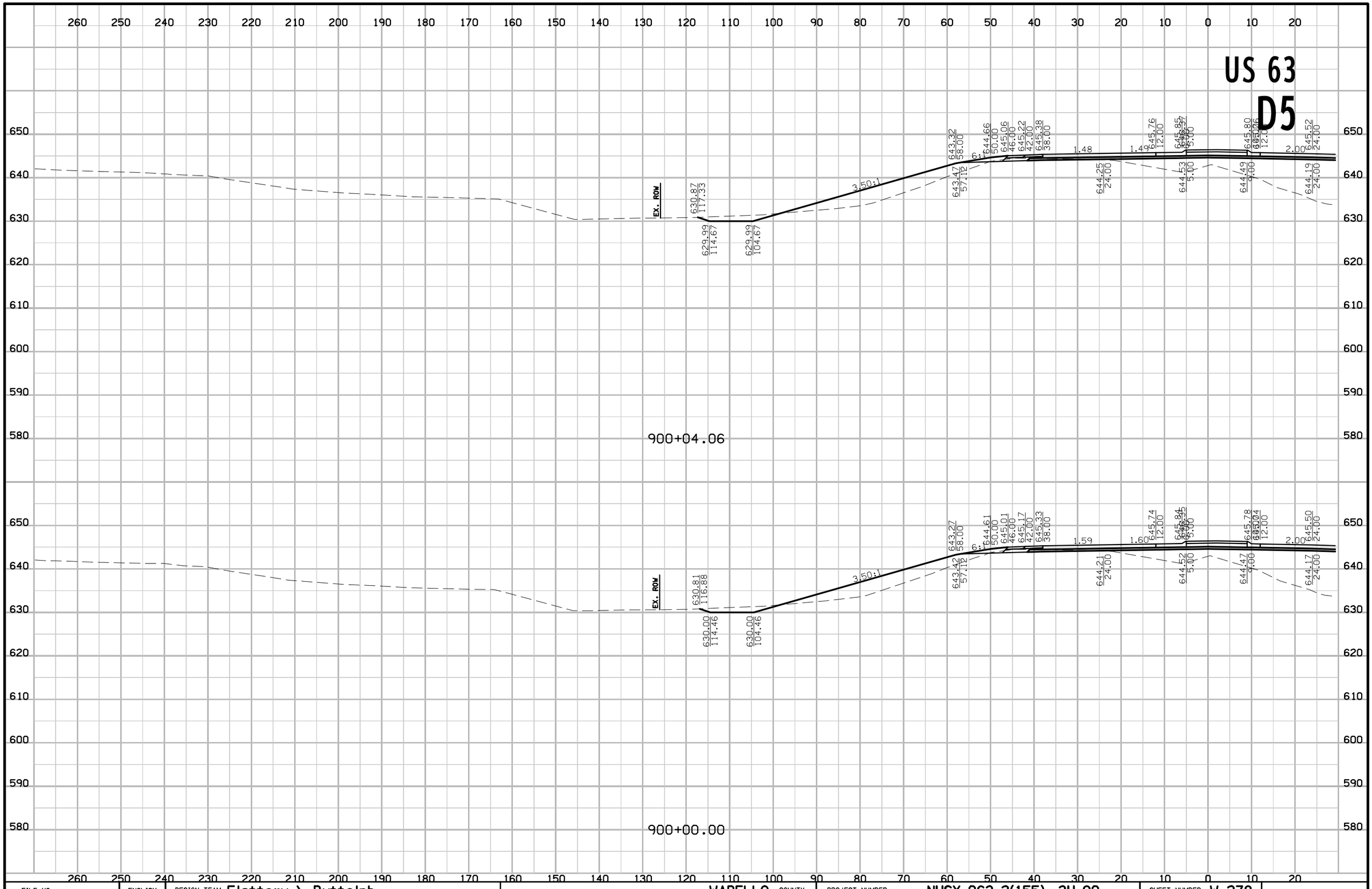


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.277

8:54:07 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

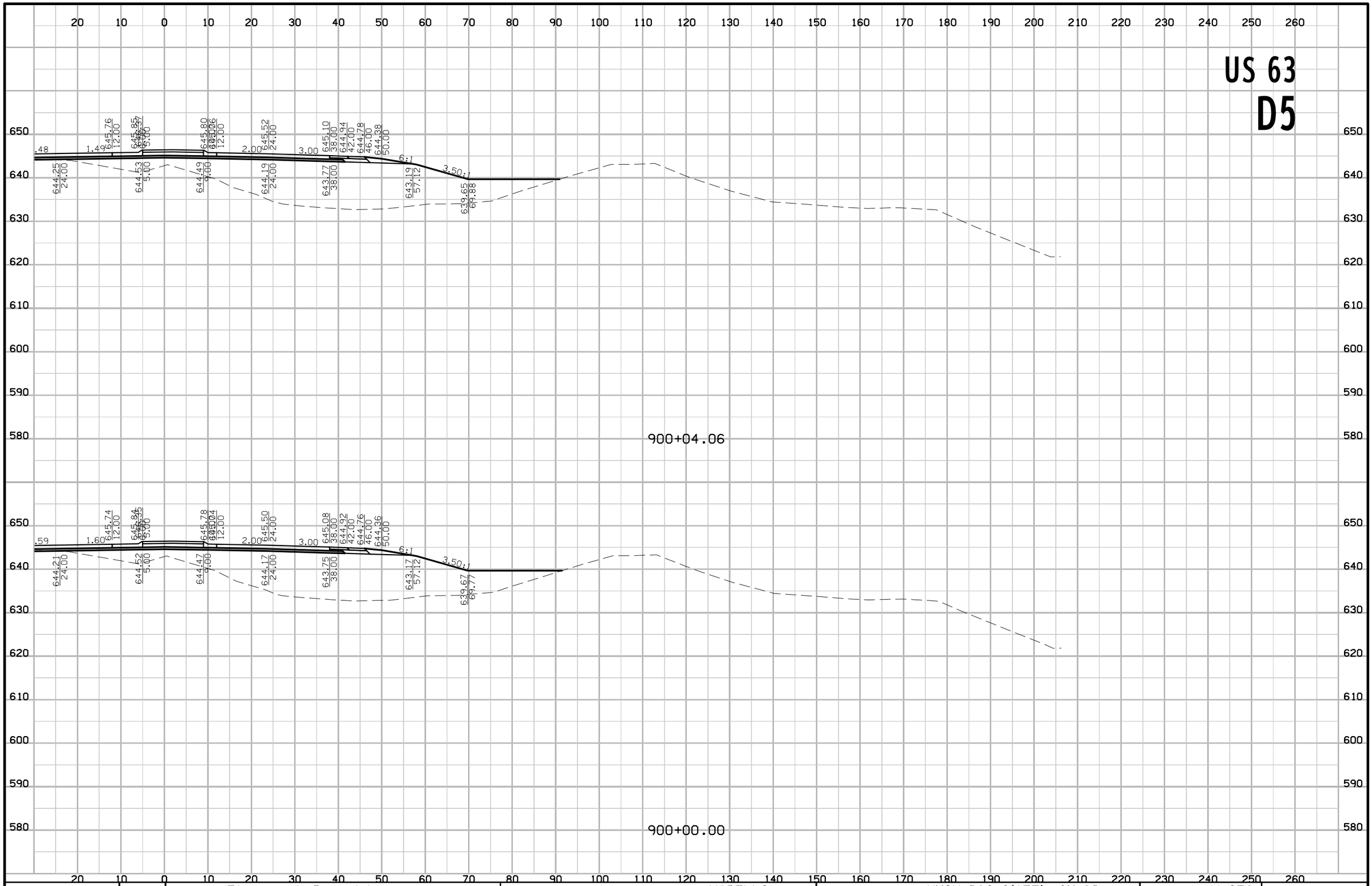
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.278

8:54:09 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

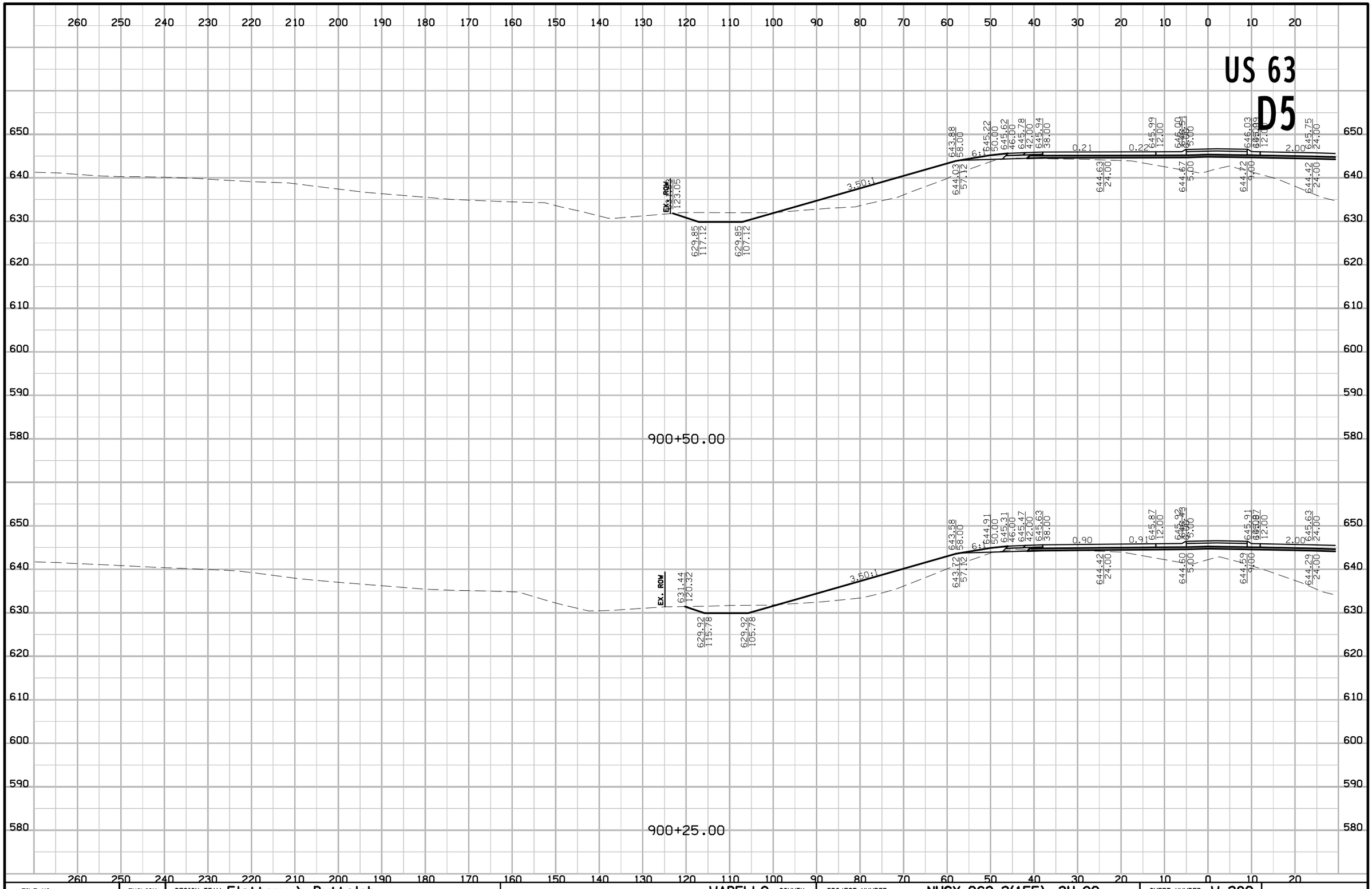


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.279

8:54:11 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

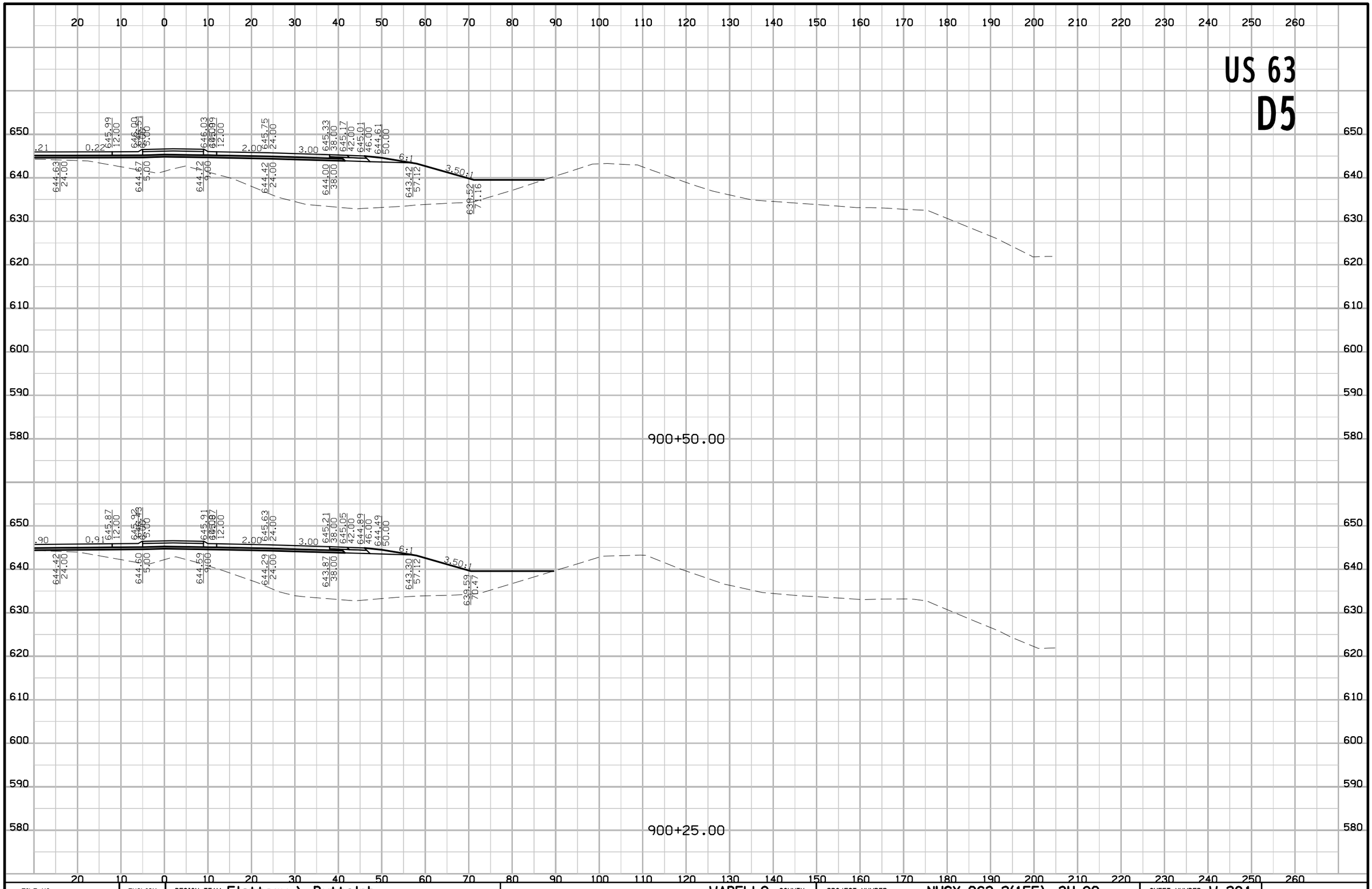
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.280

8:54:13 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

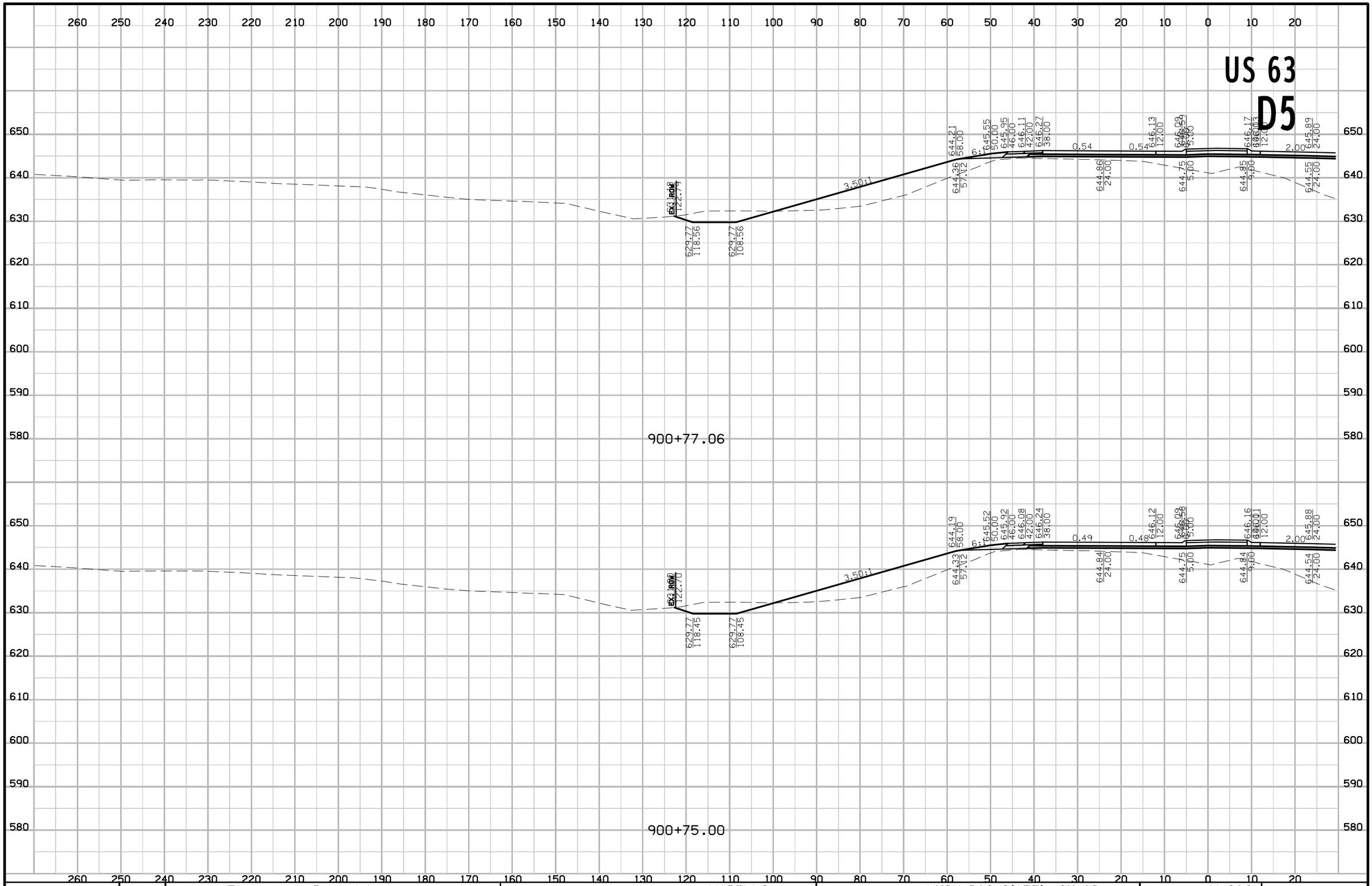


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.281

8:54:15 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

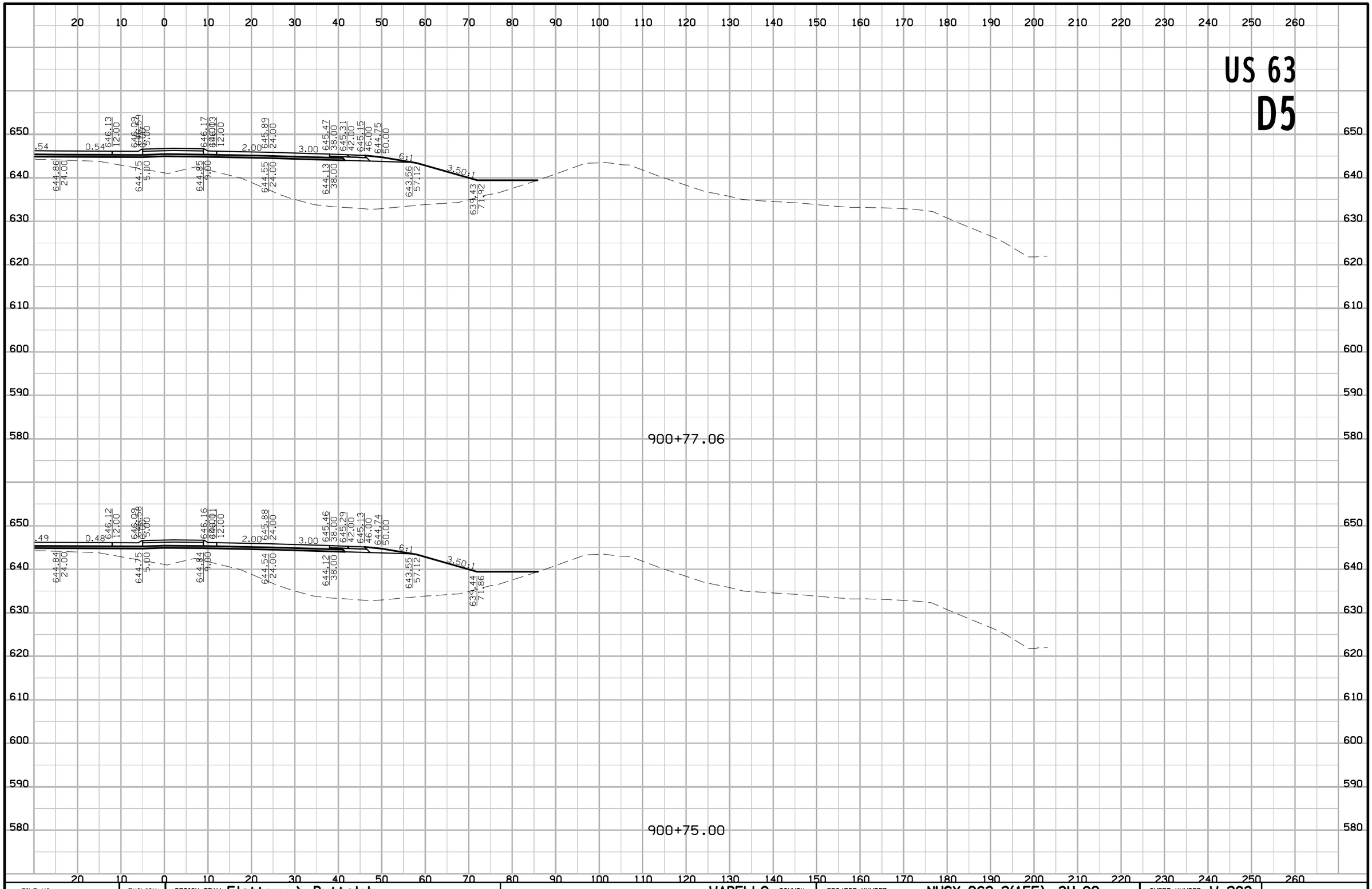
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.282

8:54:17 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

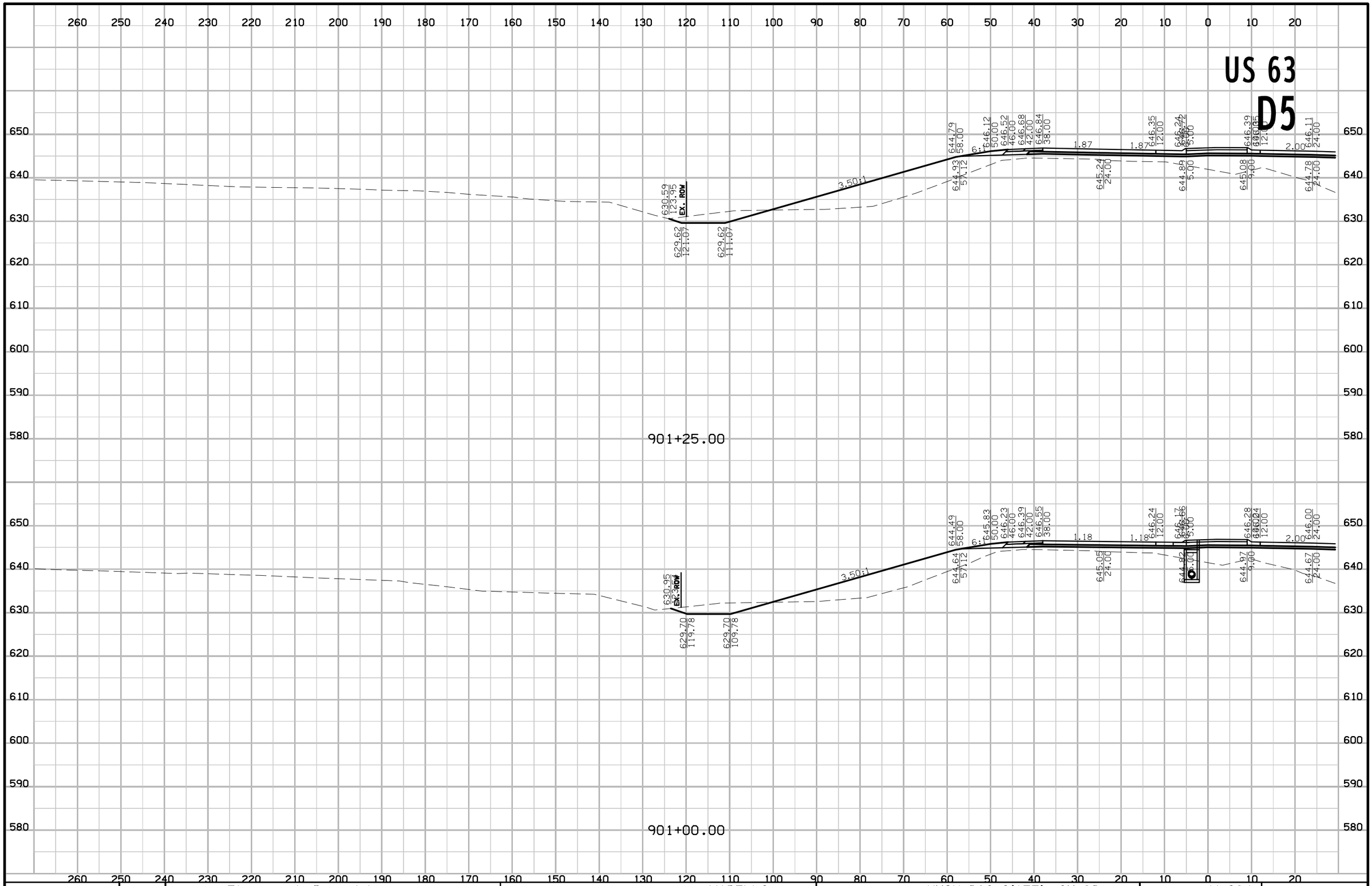


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.283

8:54:20 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

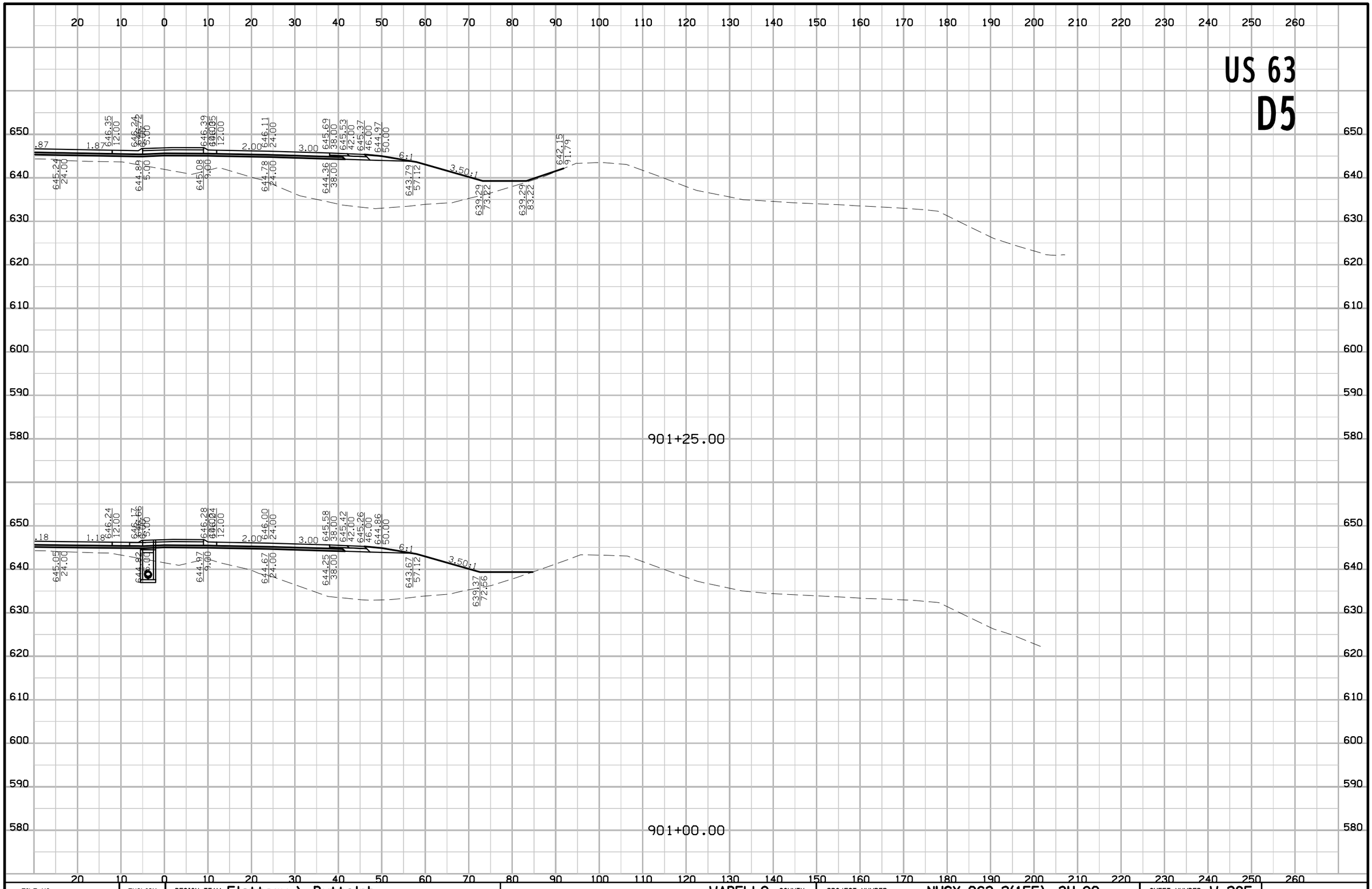
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.284

8:54:22 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

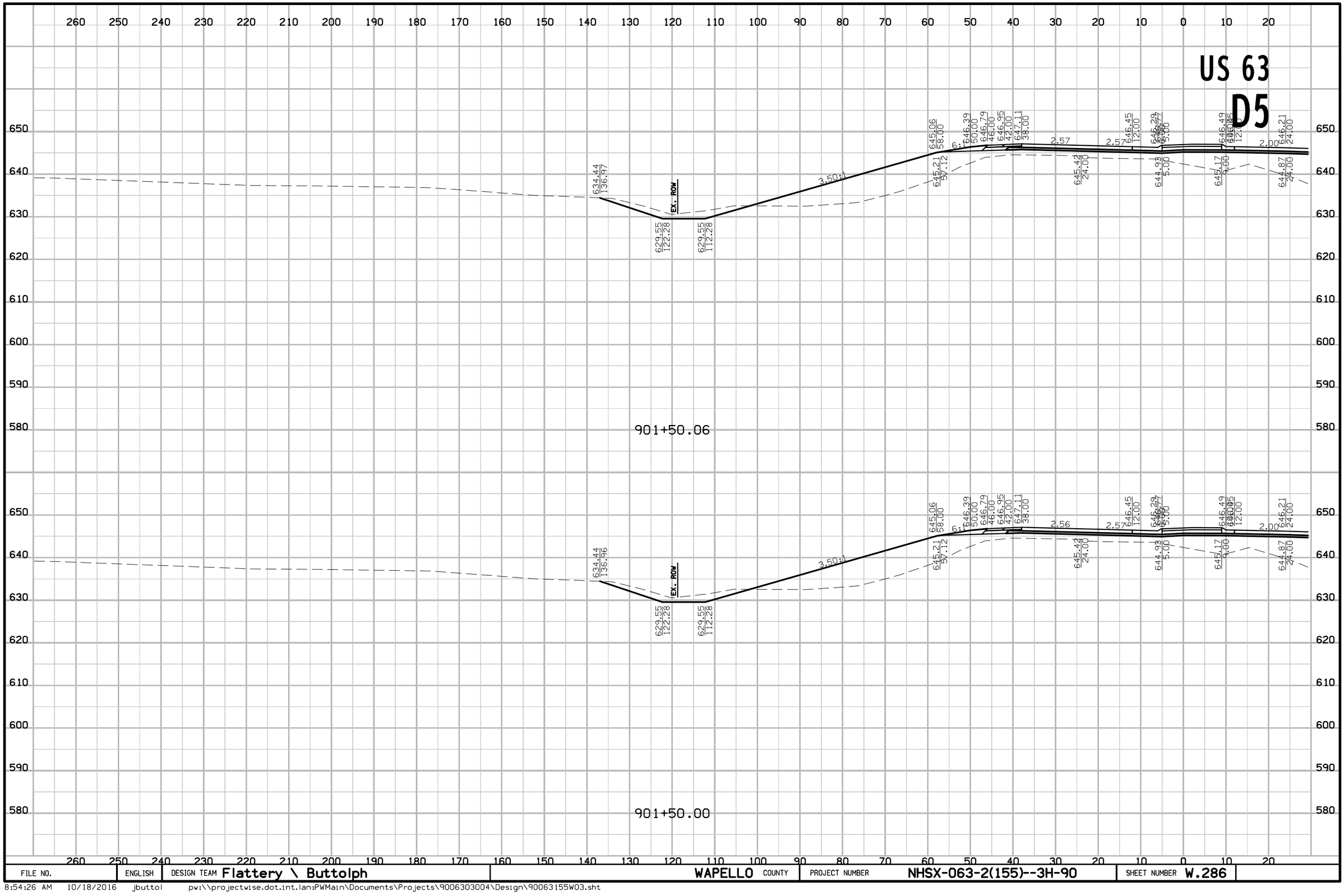


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.285

8:54:24 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

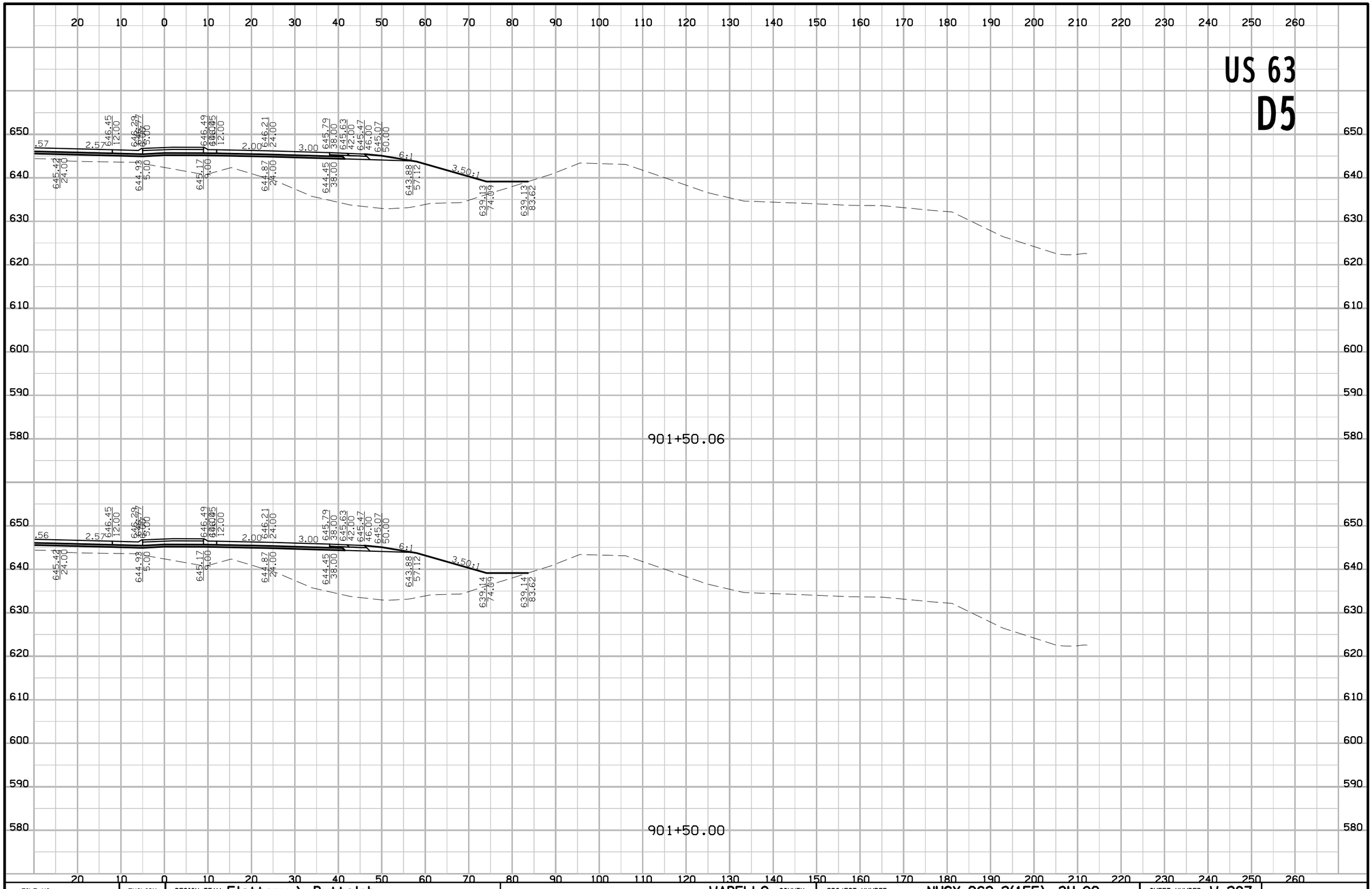
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.286

8:54:26 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

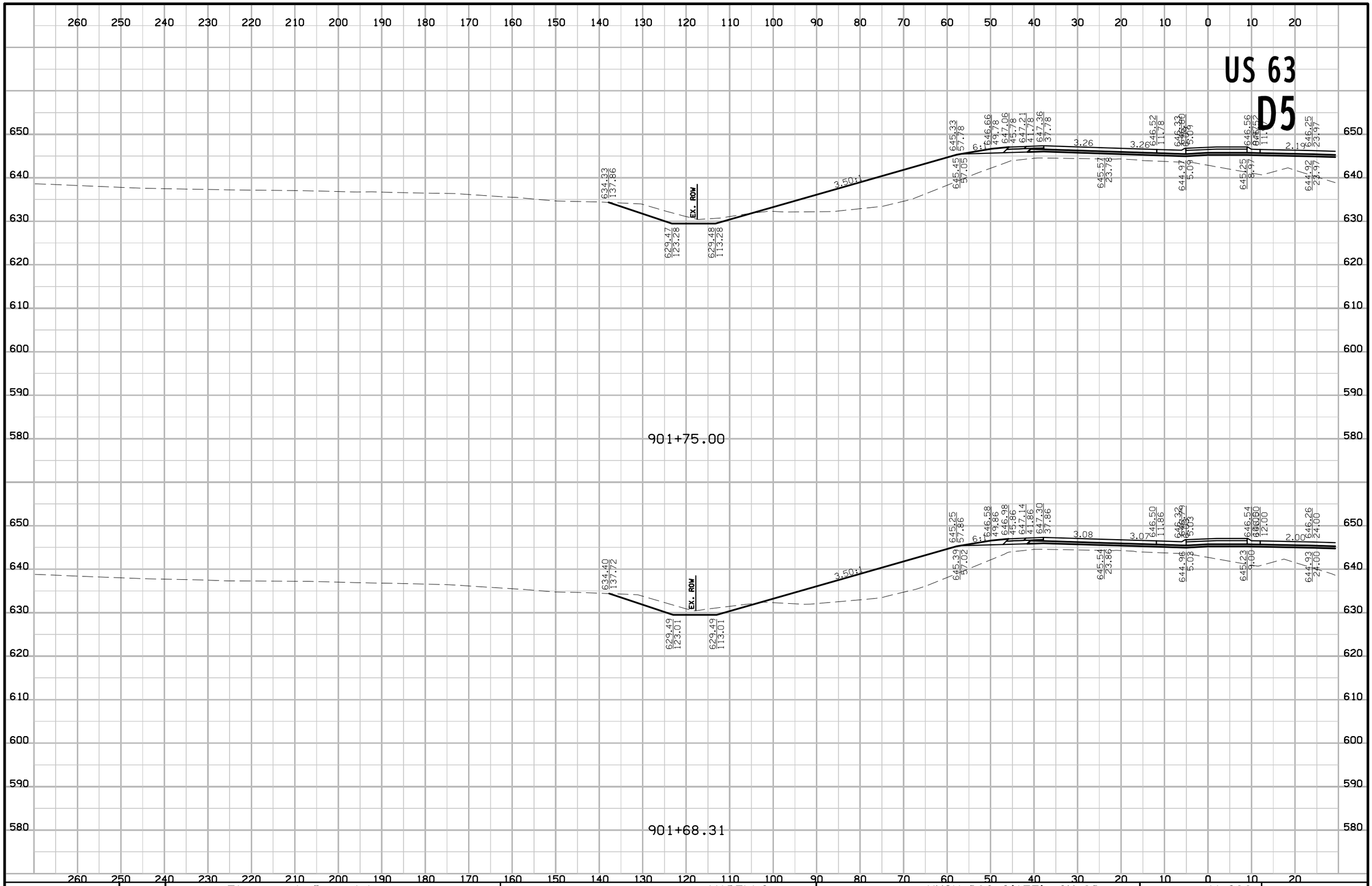


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.287

8:54:28 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

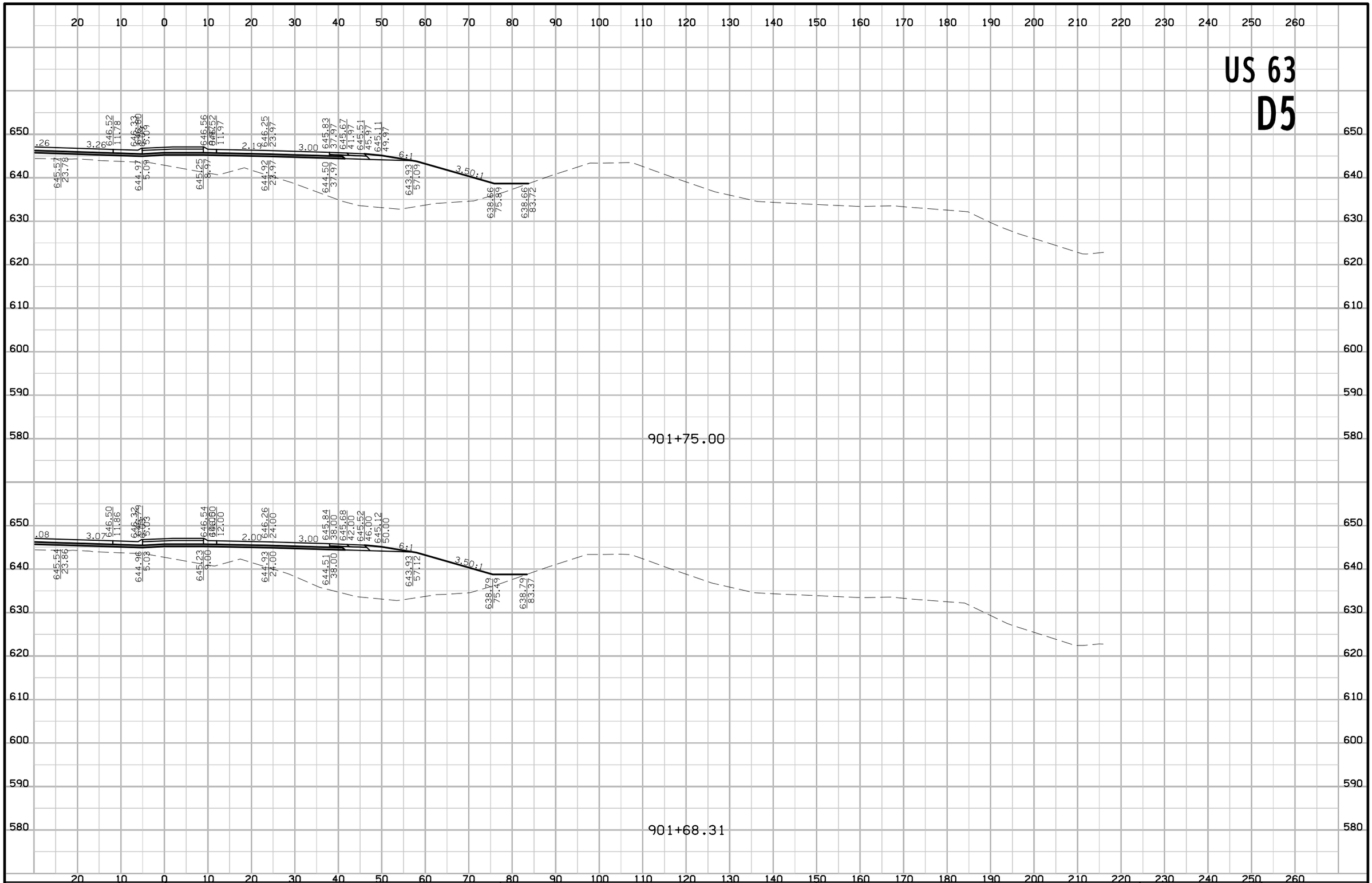
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.288

8:54:30 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

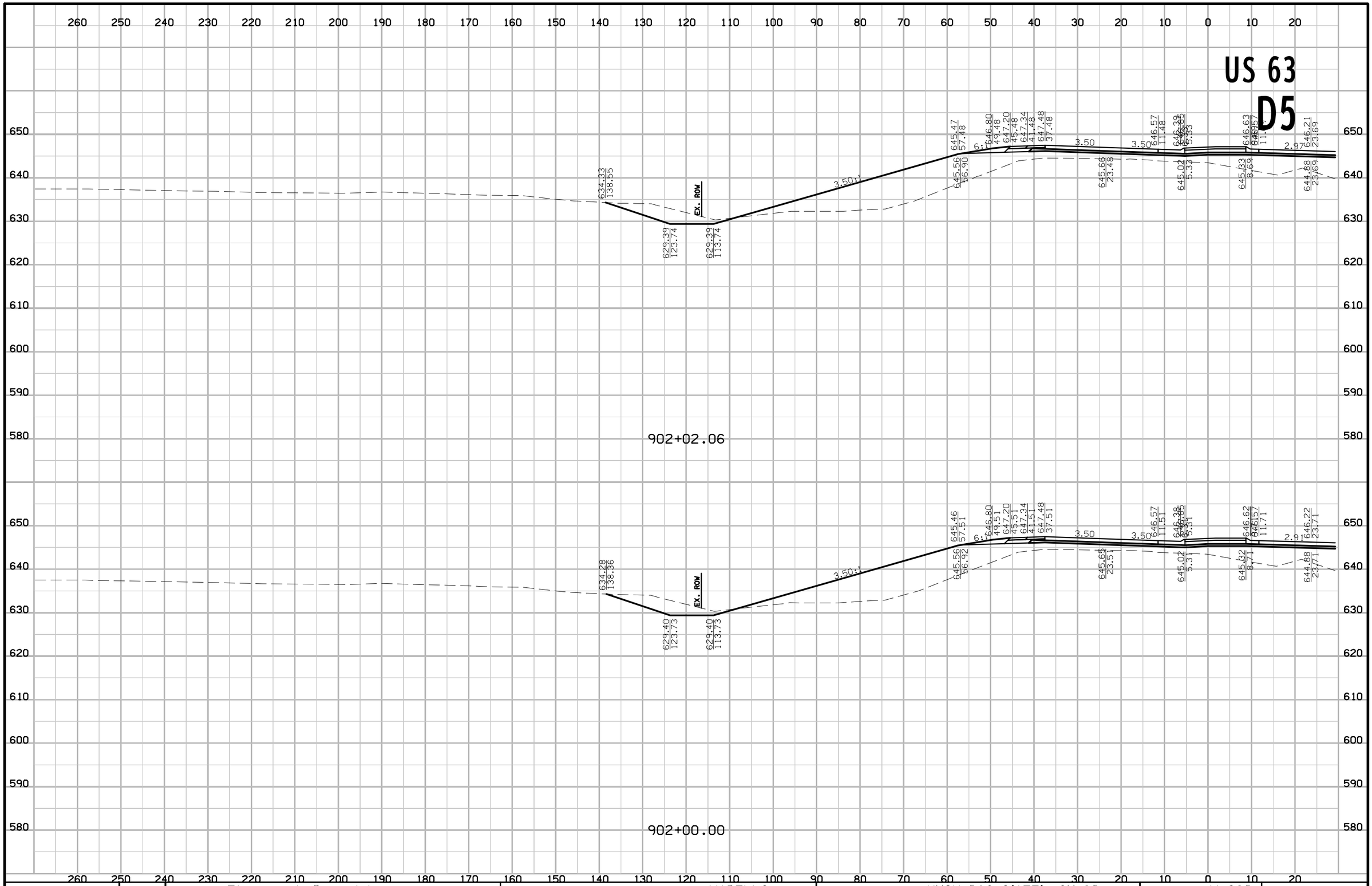


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.289

8:54:32 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

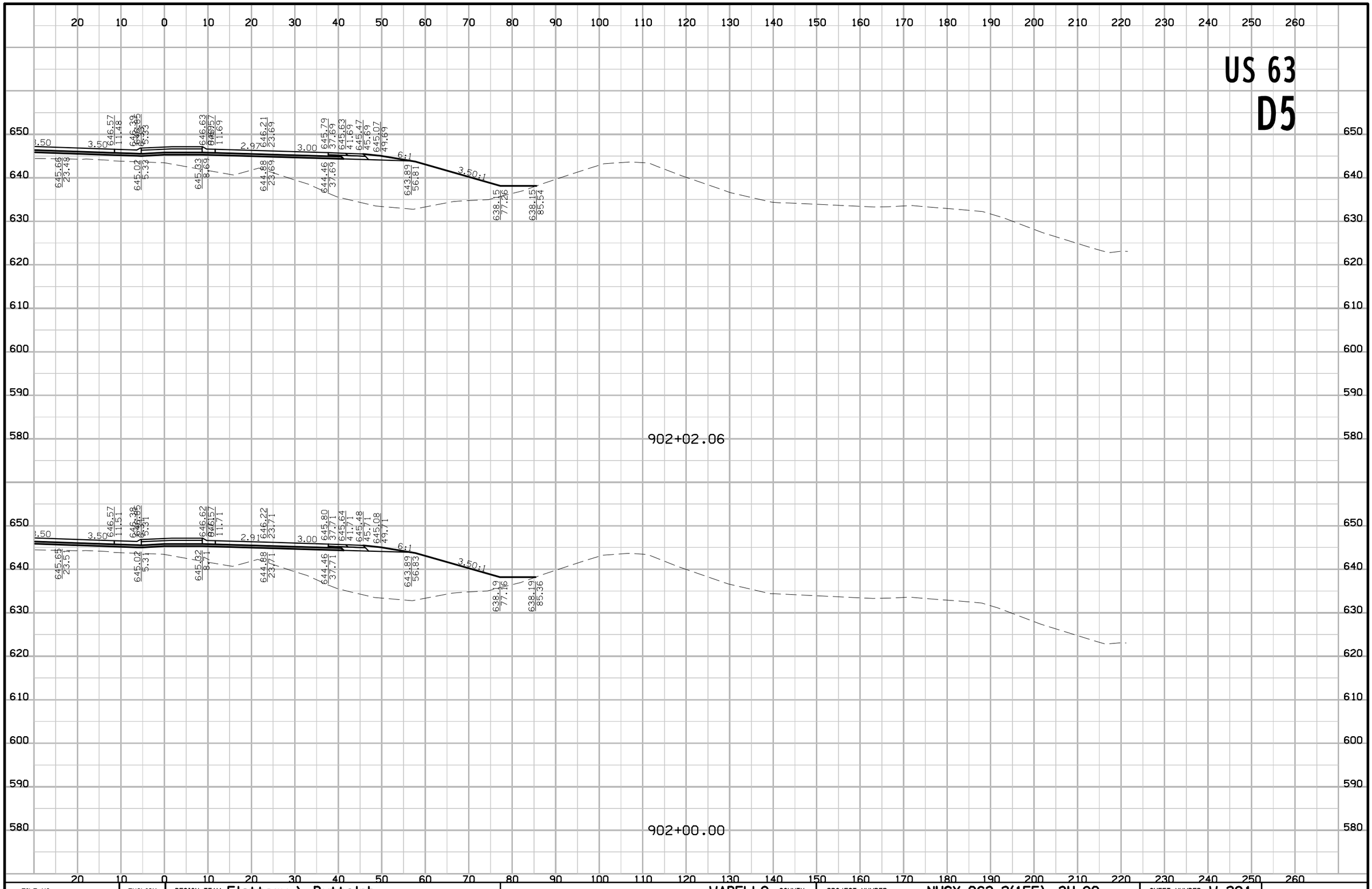
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.290

8:54:34 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

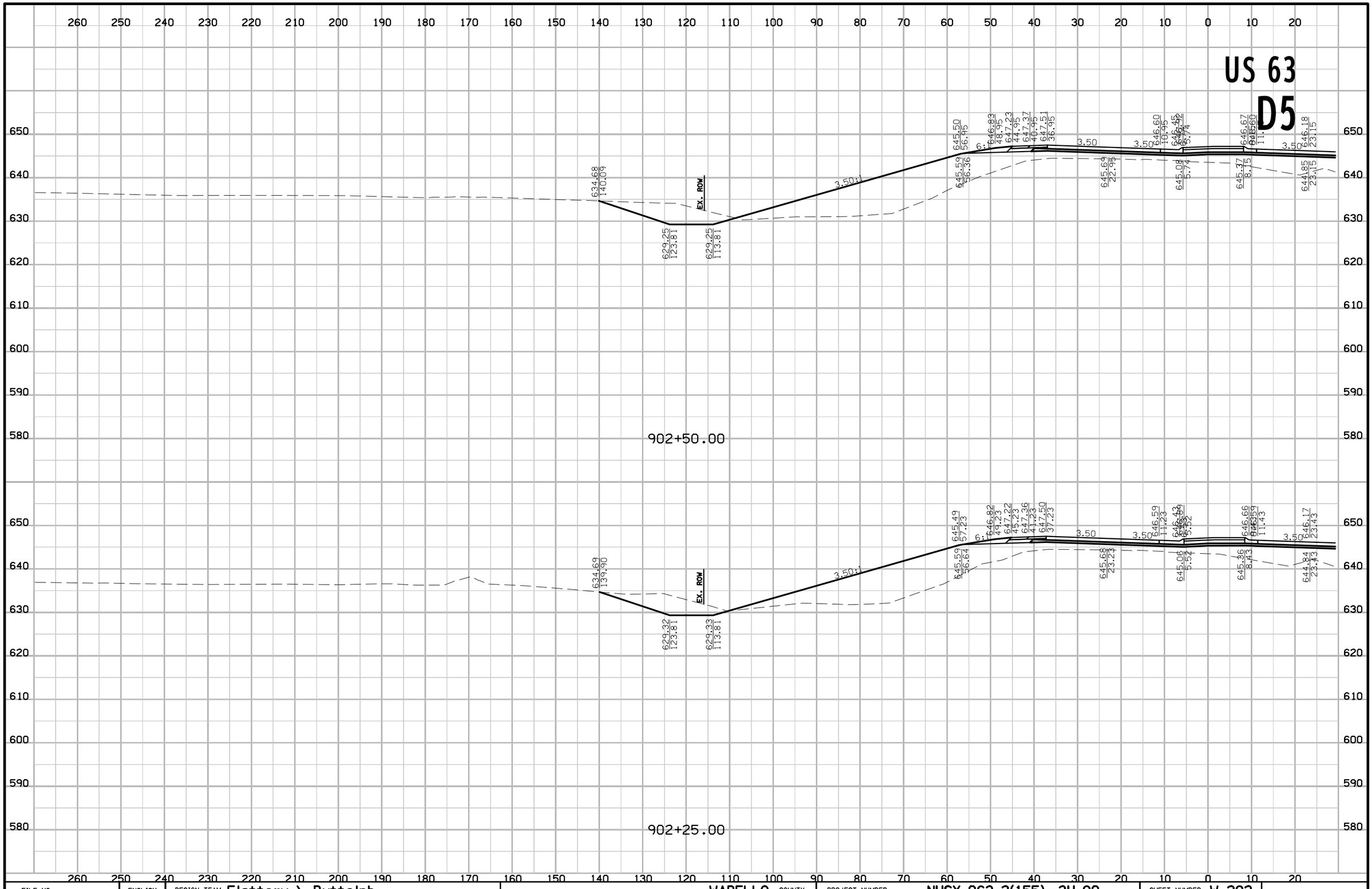


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.291

8:54:36 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

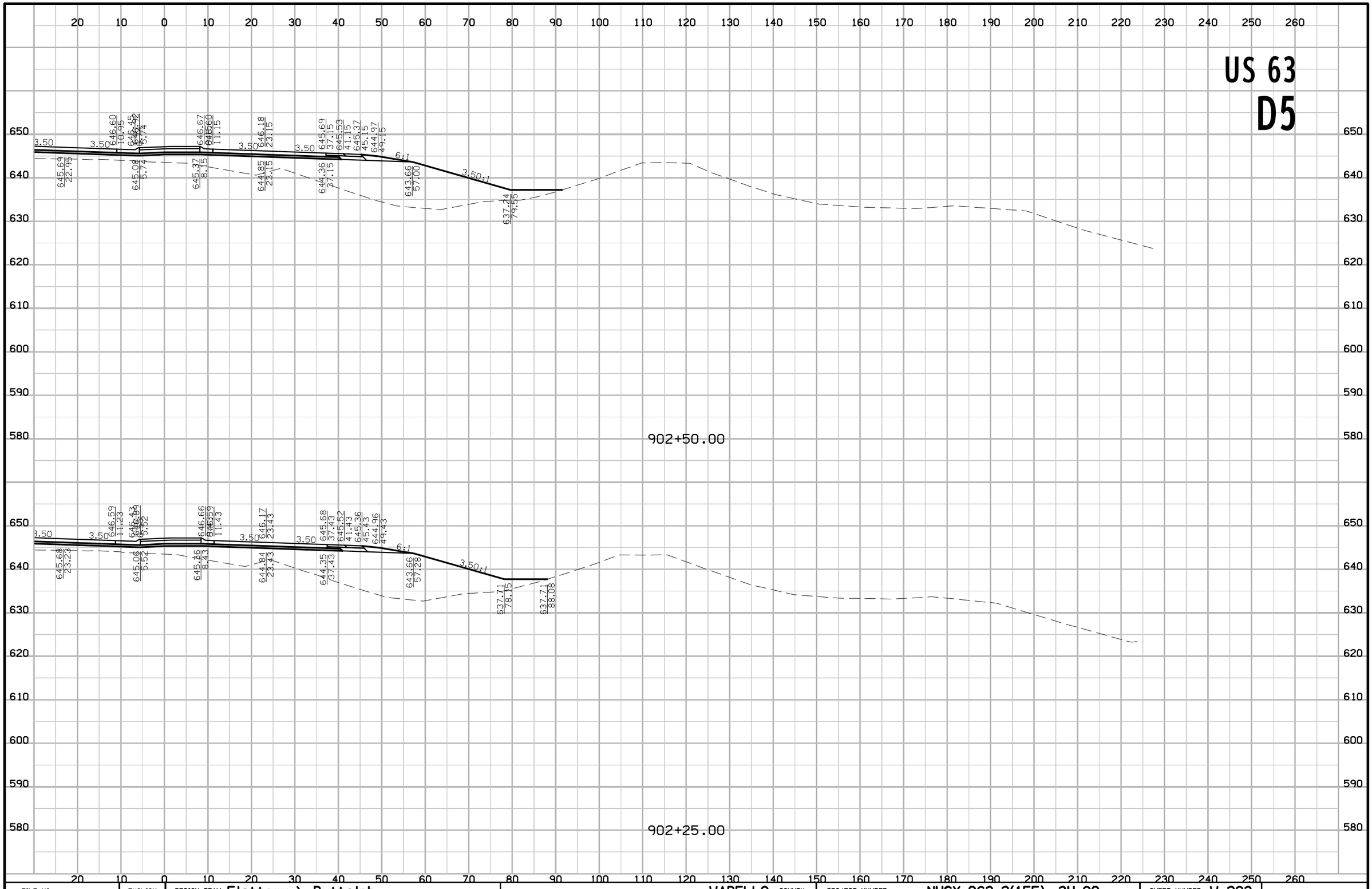
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.292

8:54:38 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

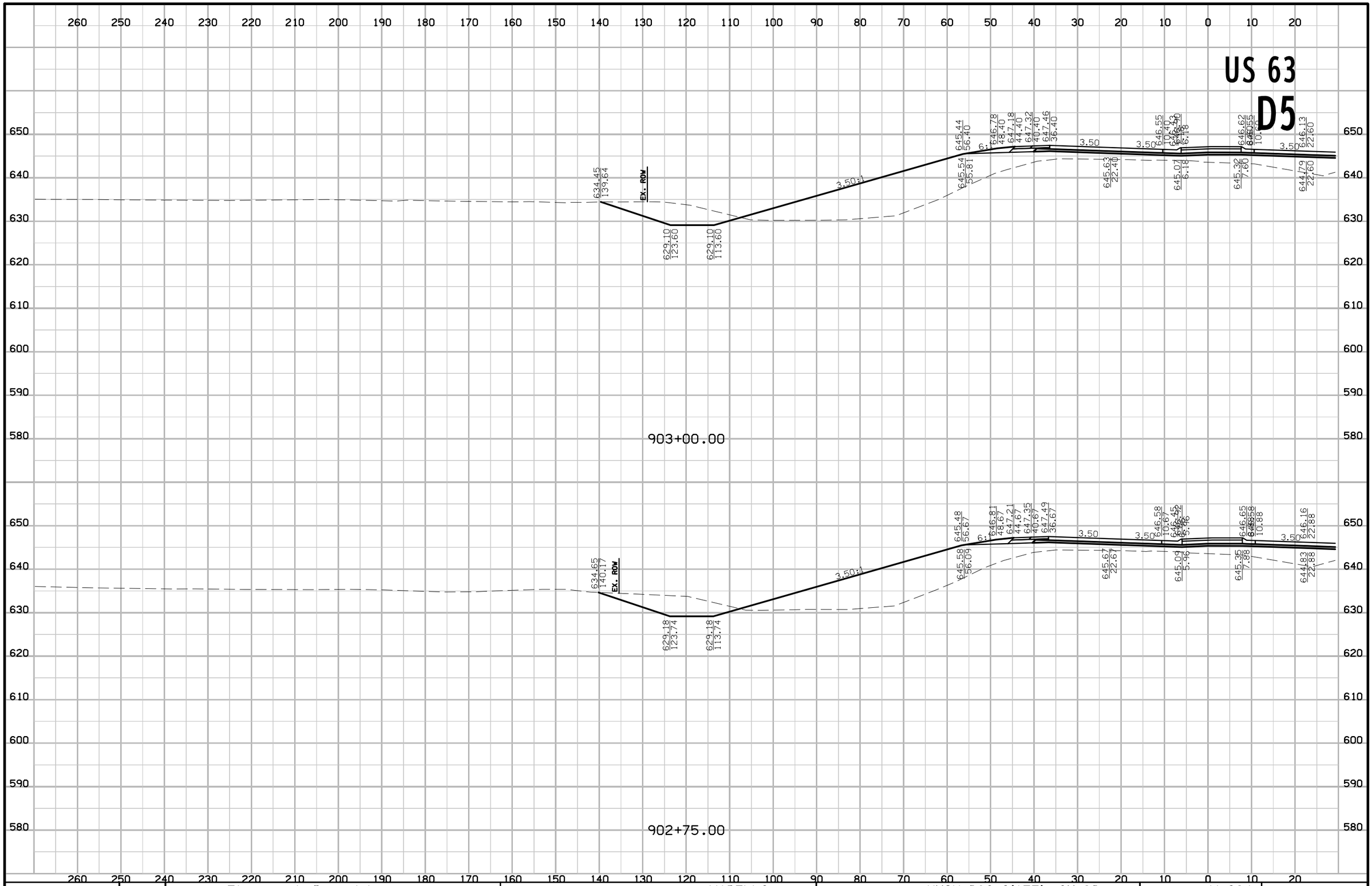


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.293

8:54:41 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

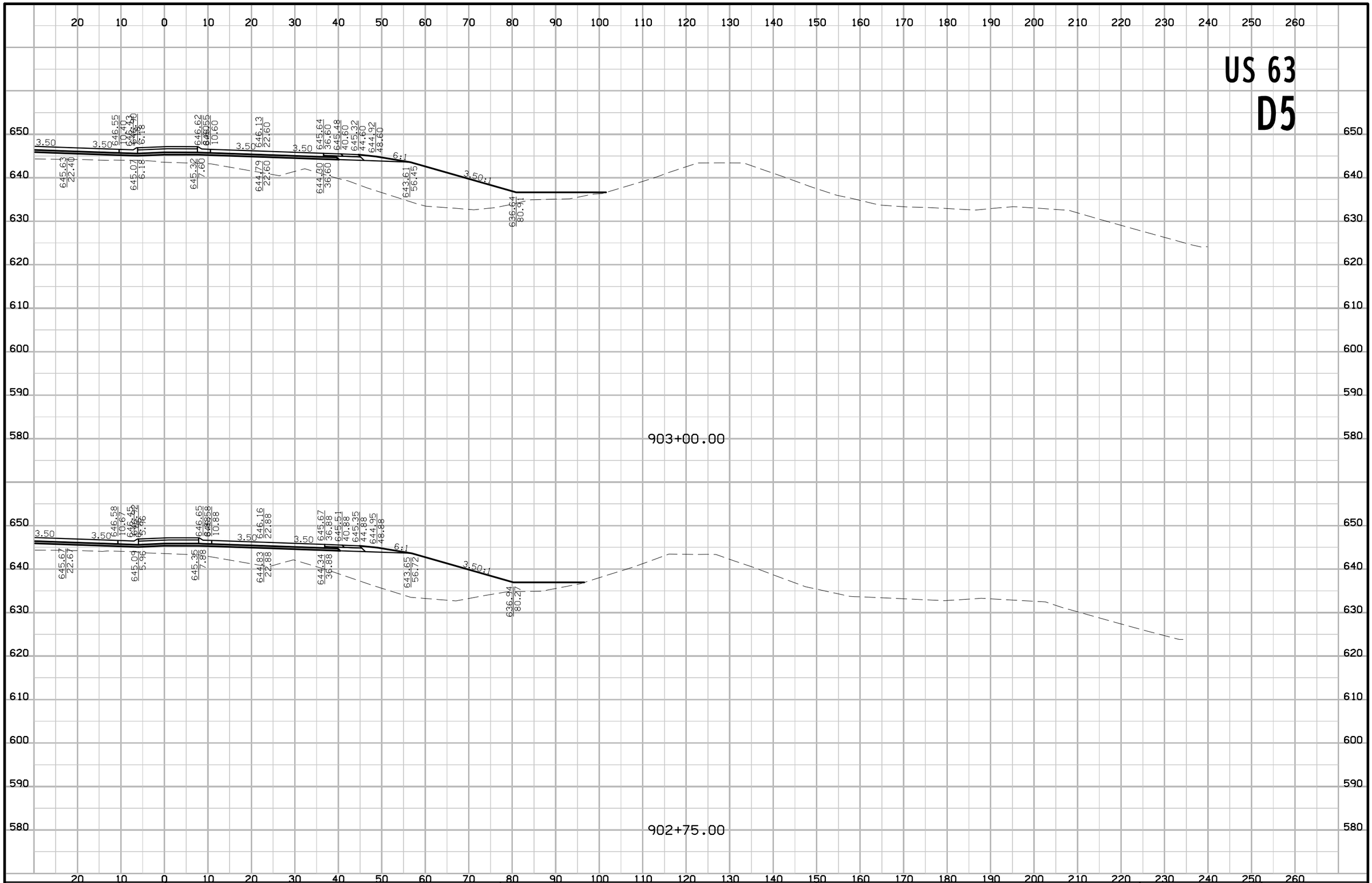
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.294

8:54:43 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

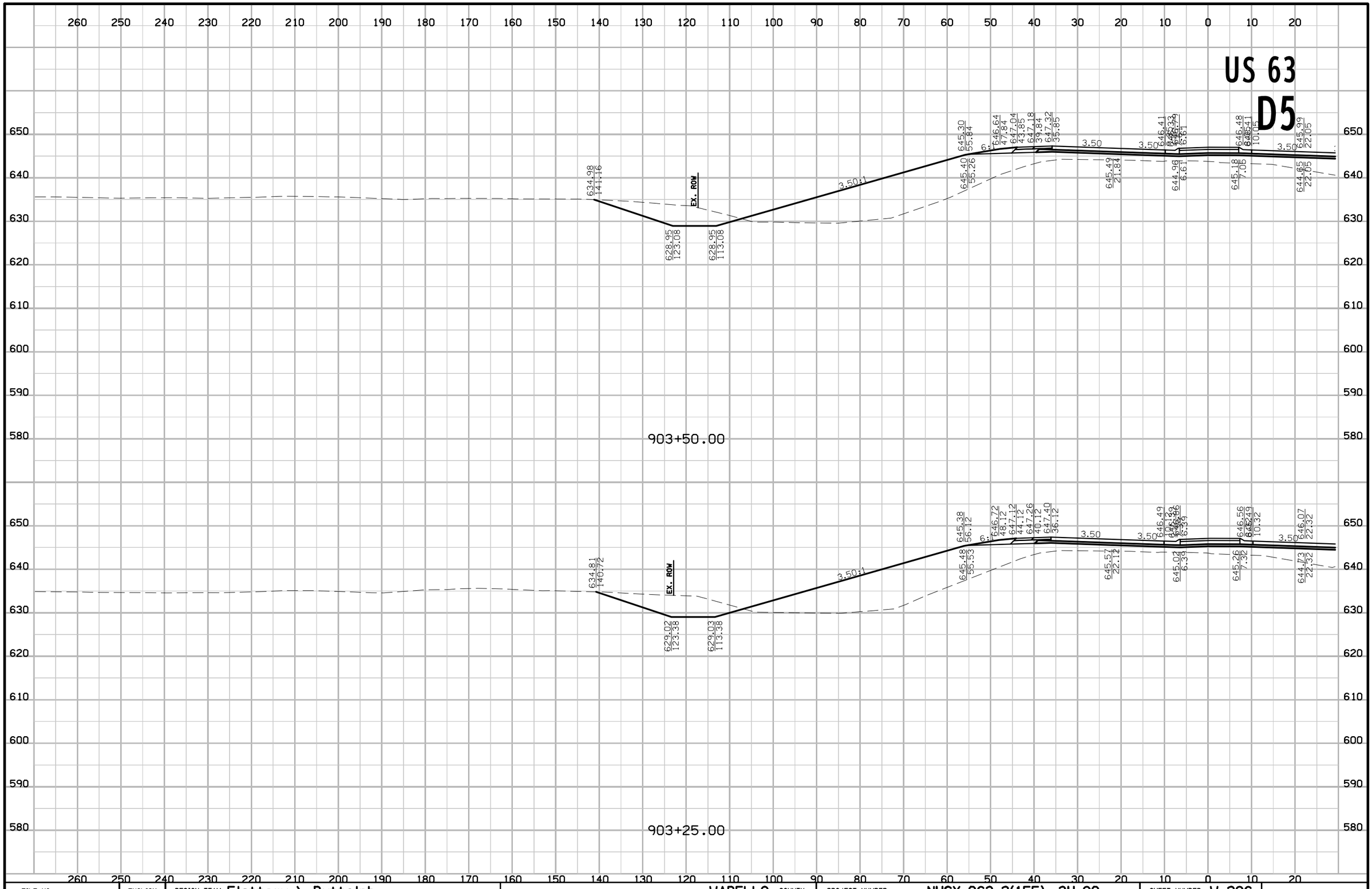


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.295

8:54:45 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

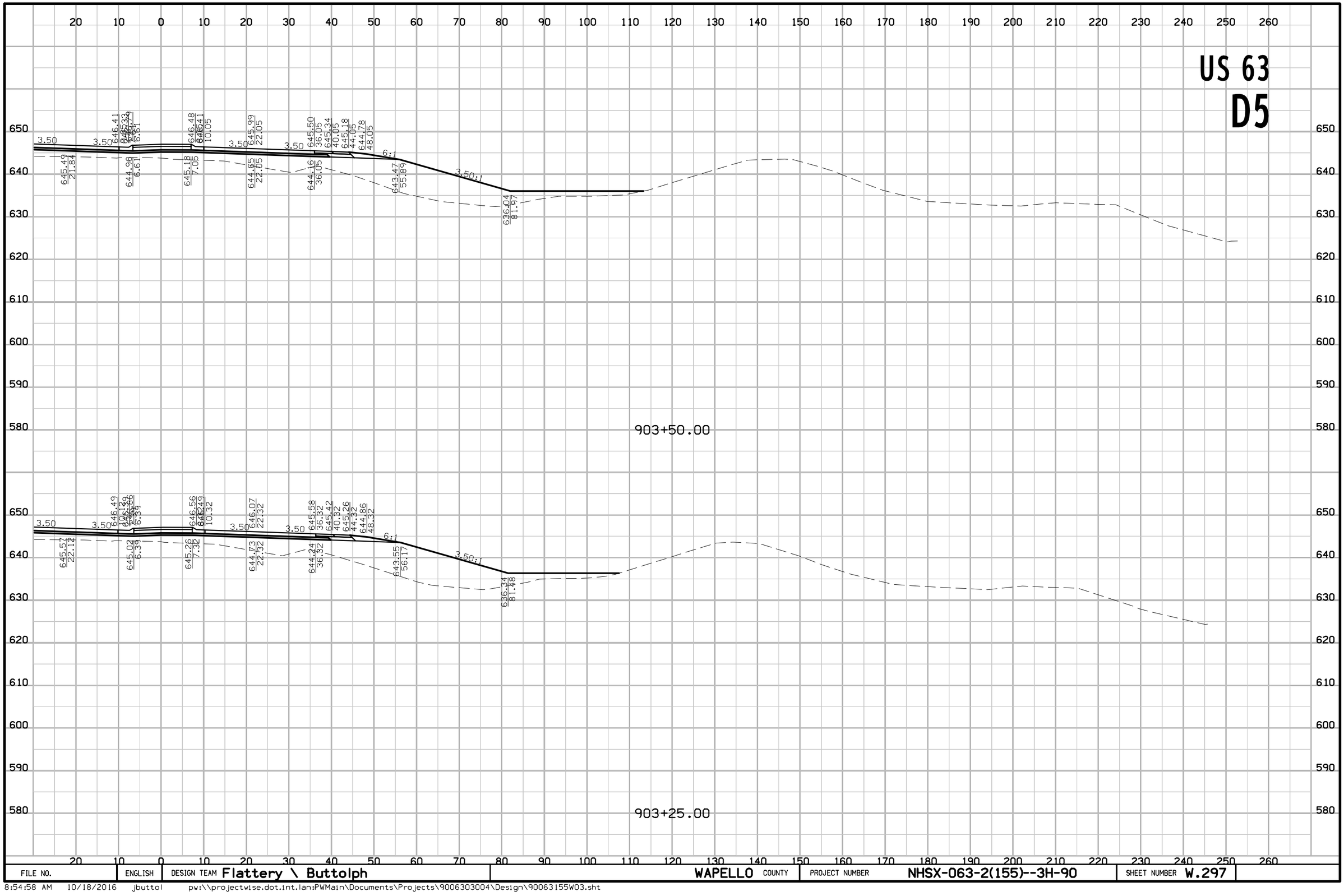
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.296

8:54:56 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

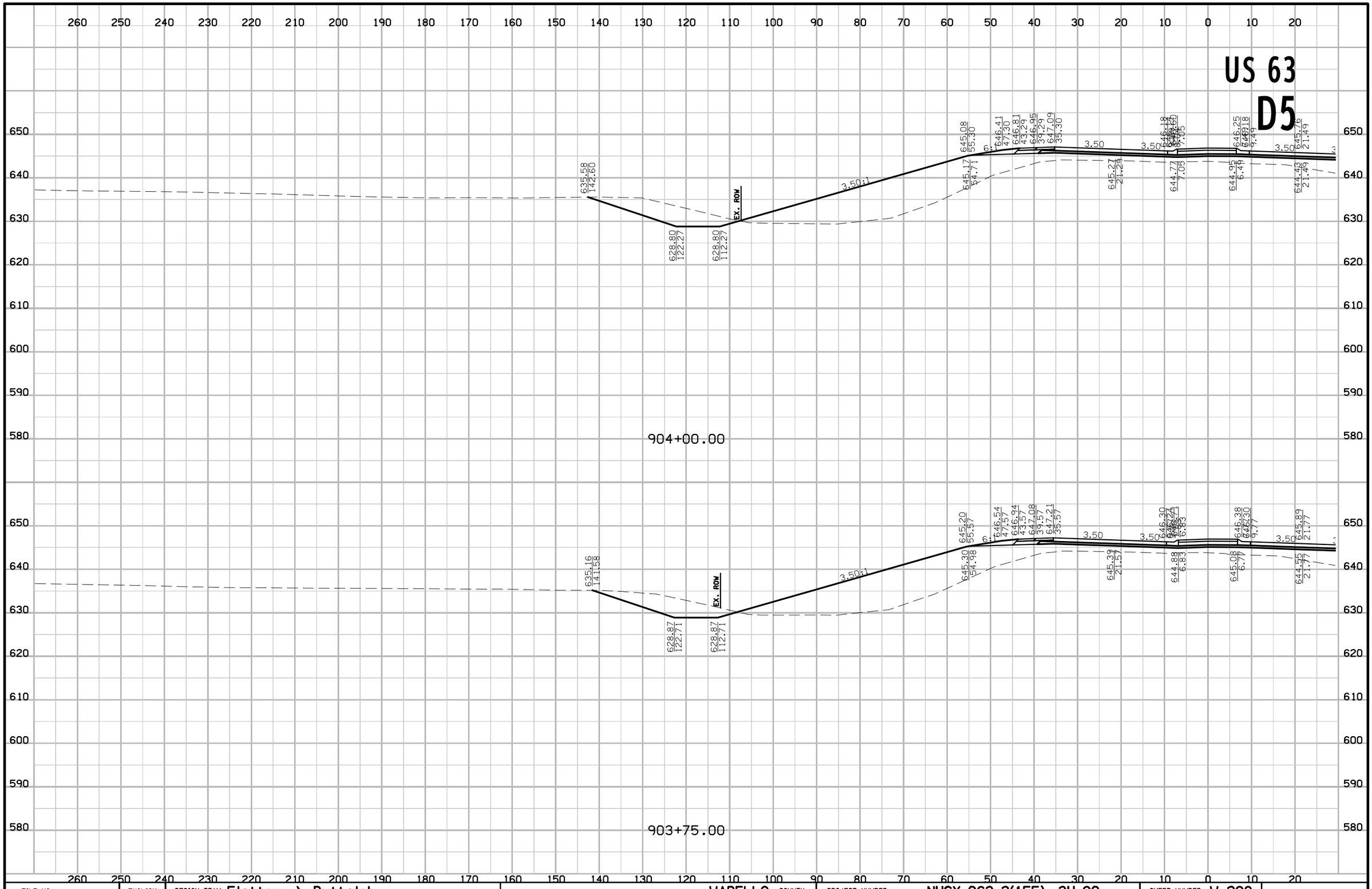


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.297

8:54:58 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

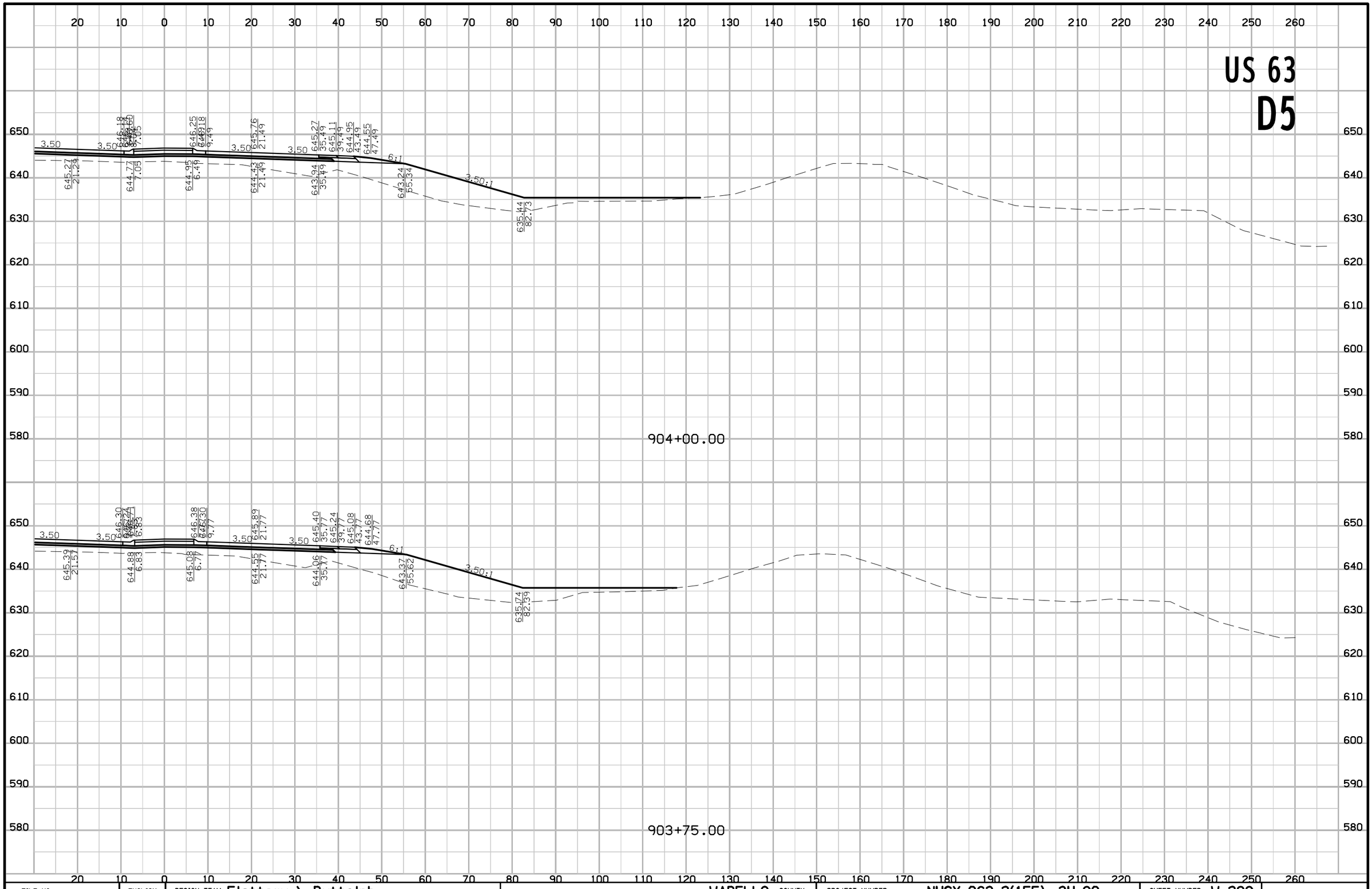
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.298

8:55:00 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

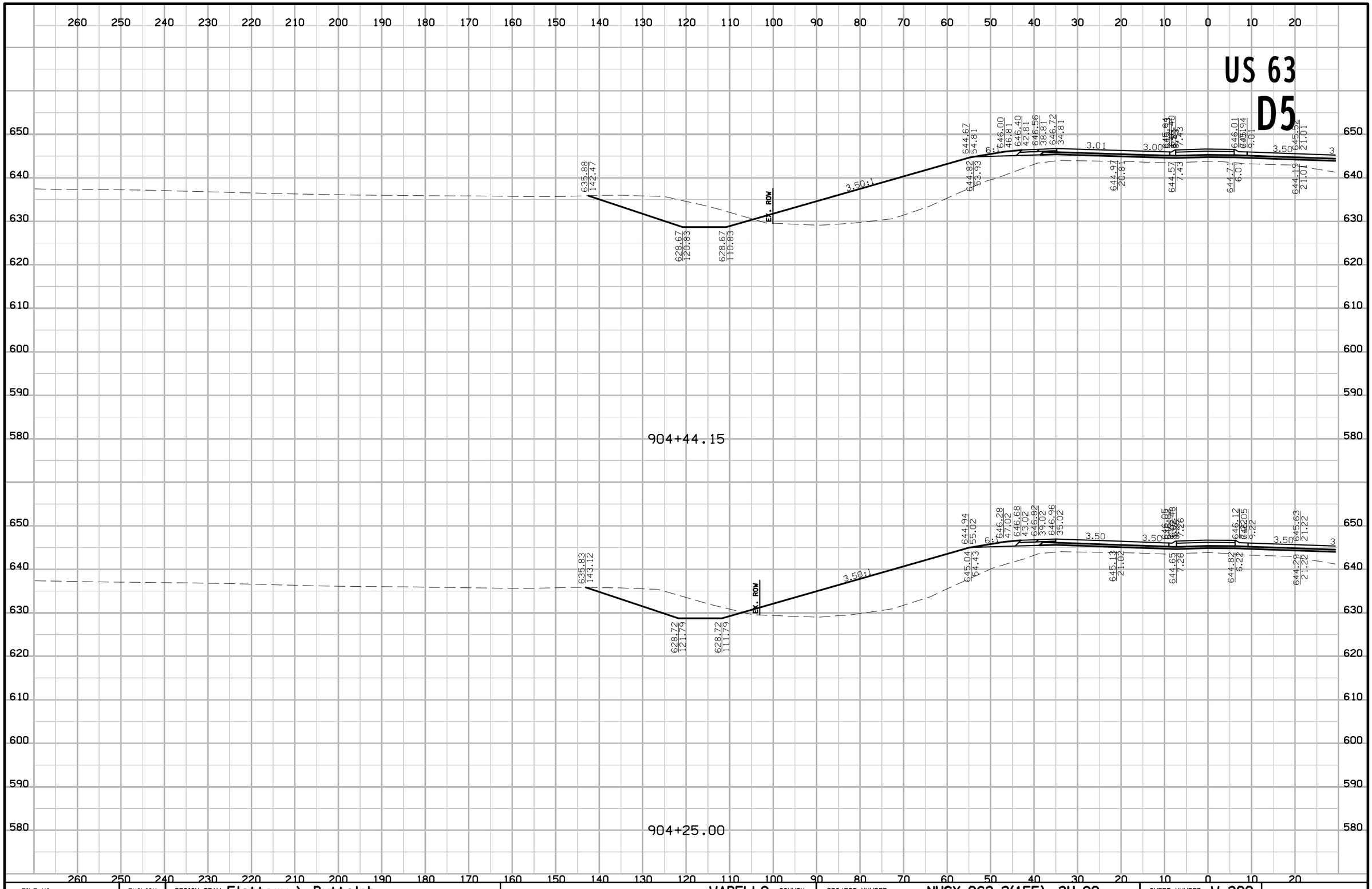


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.299

8:55:02 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

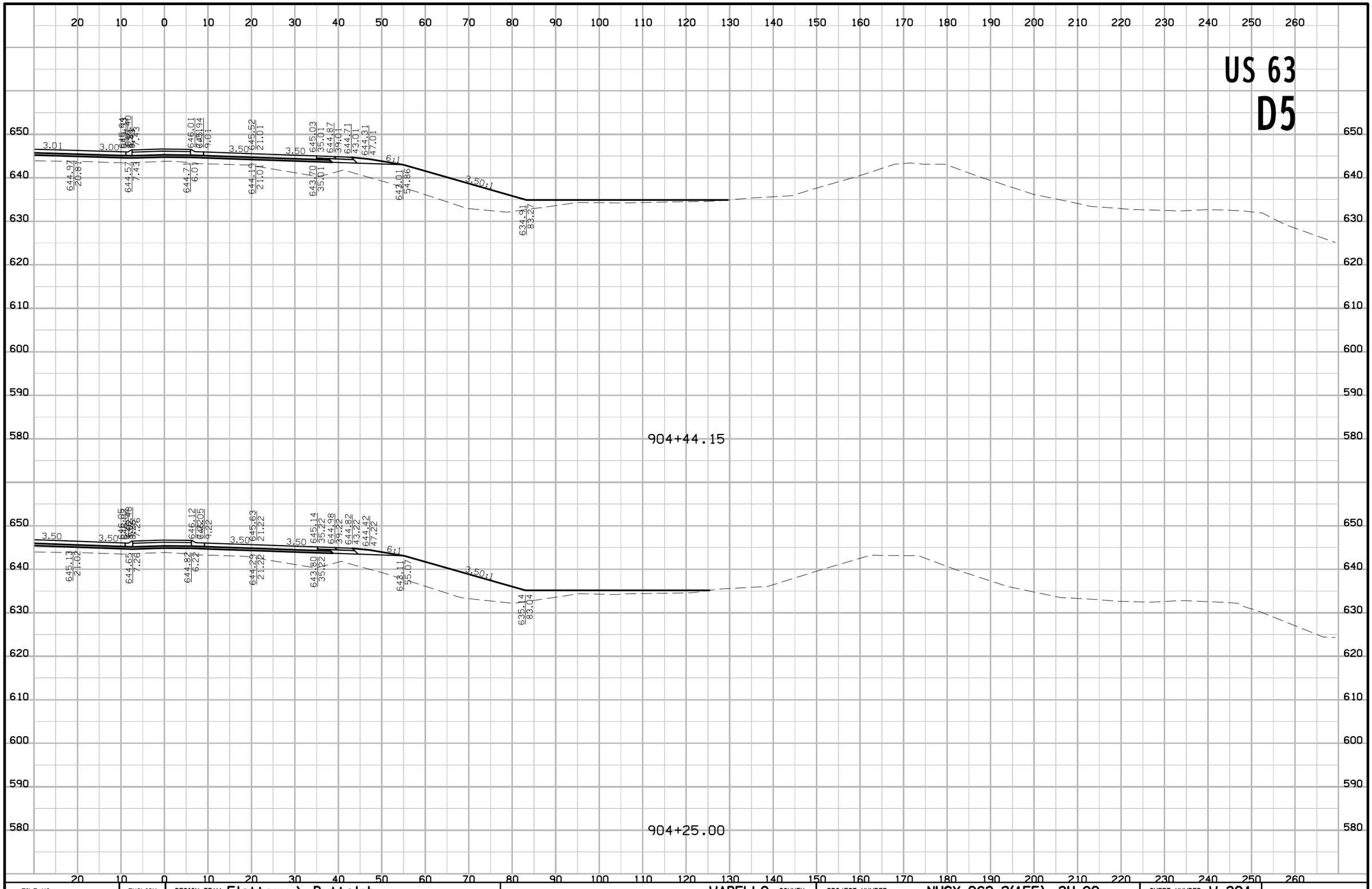
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.300

8:55:04 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63
D5

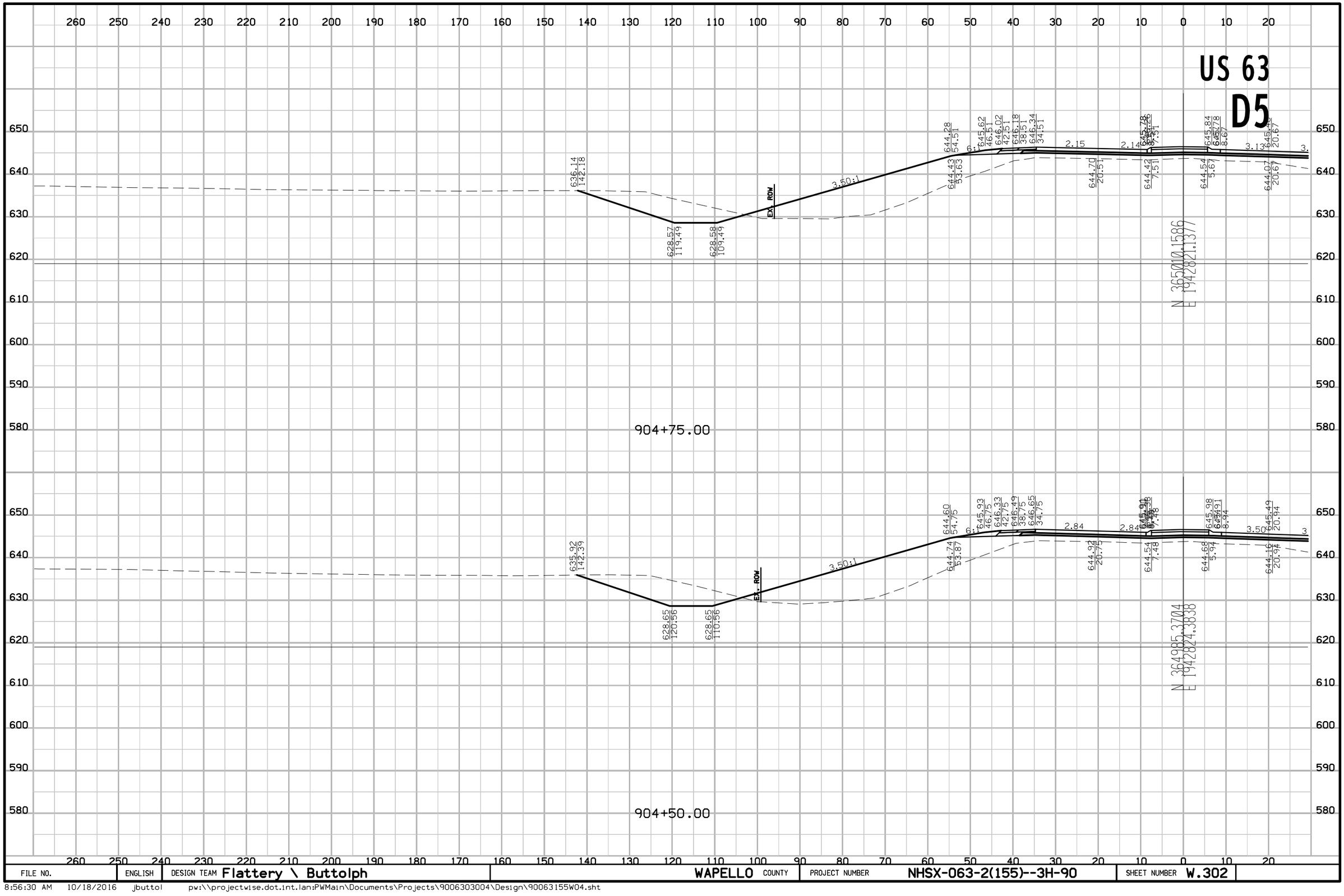


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.301

8:55:06 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W03.sht

US 63

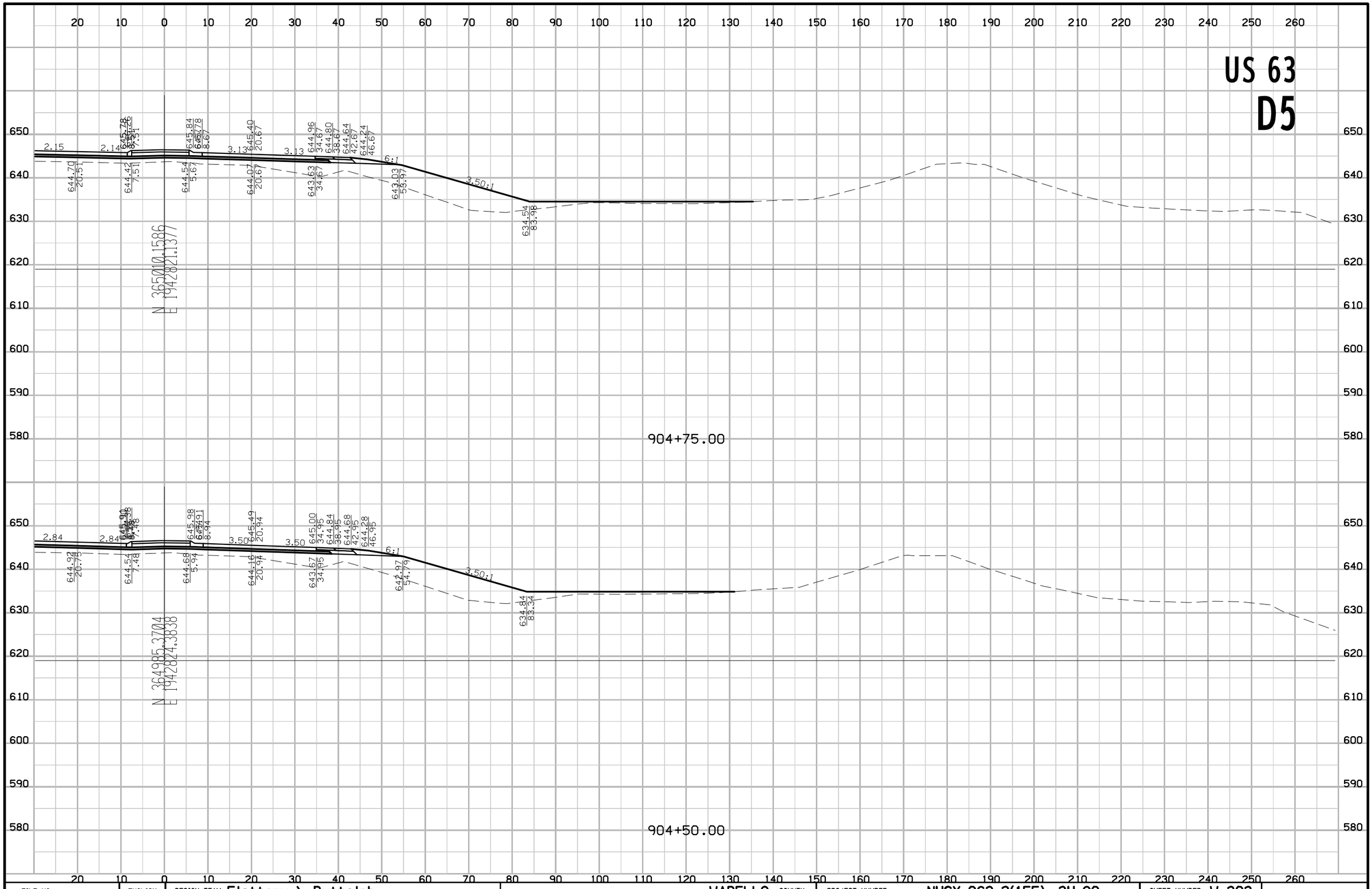
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.302

8:56:30 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

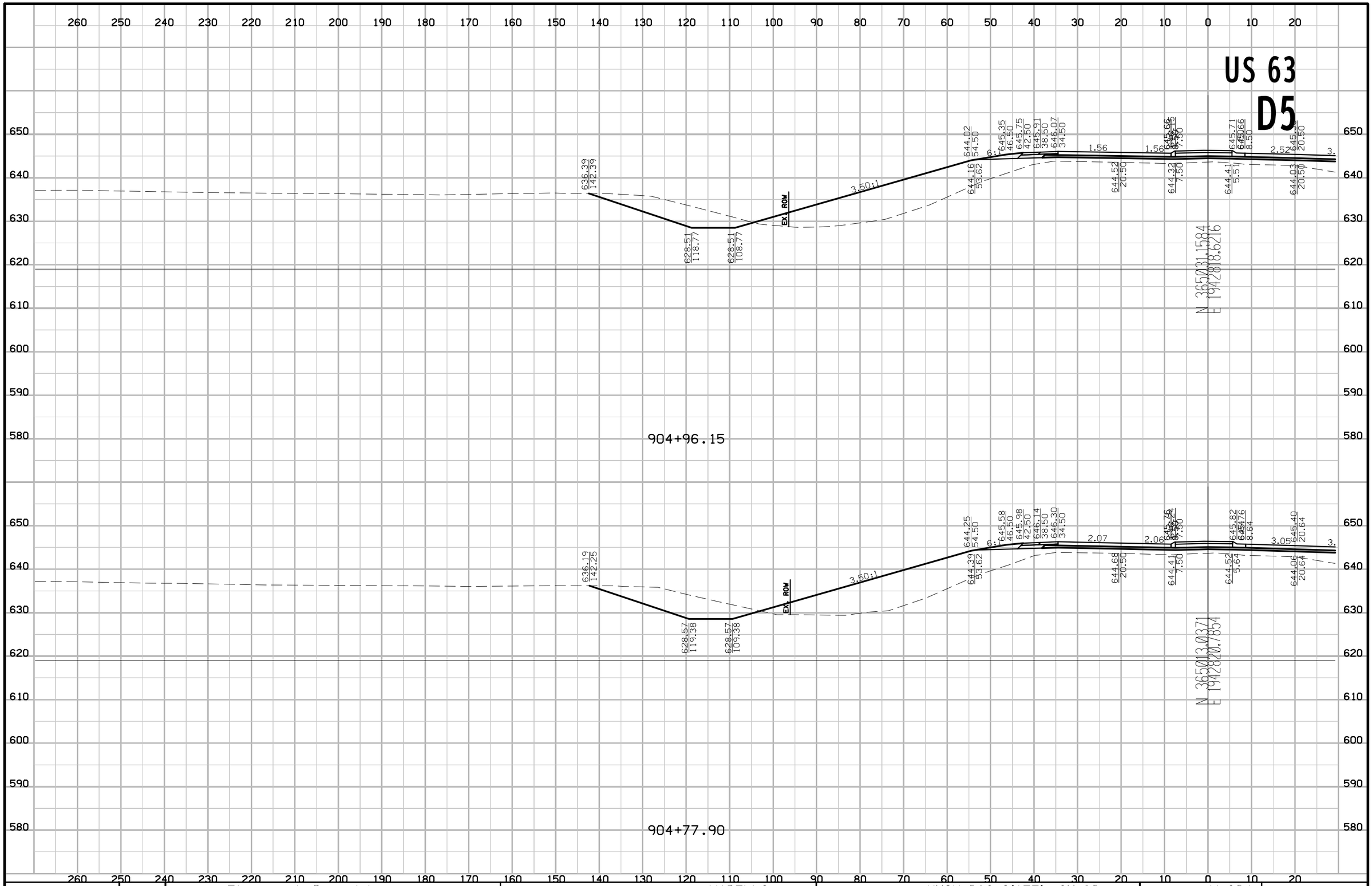
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.303

8:56:32 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

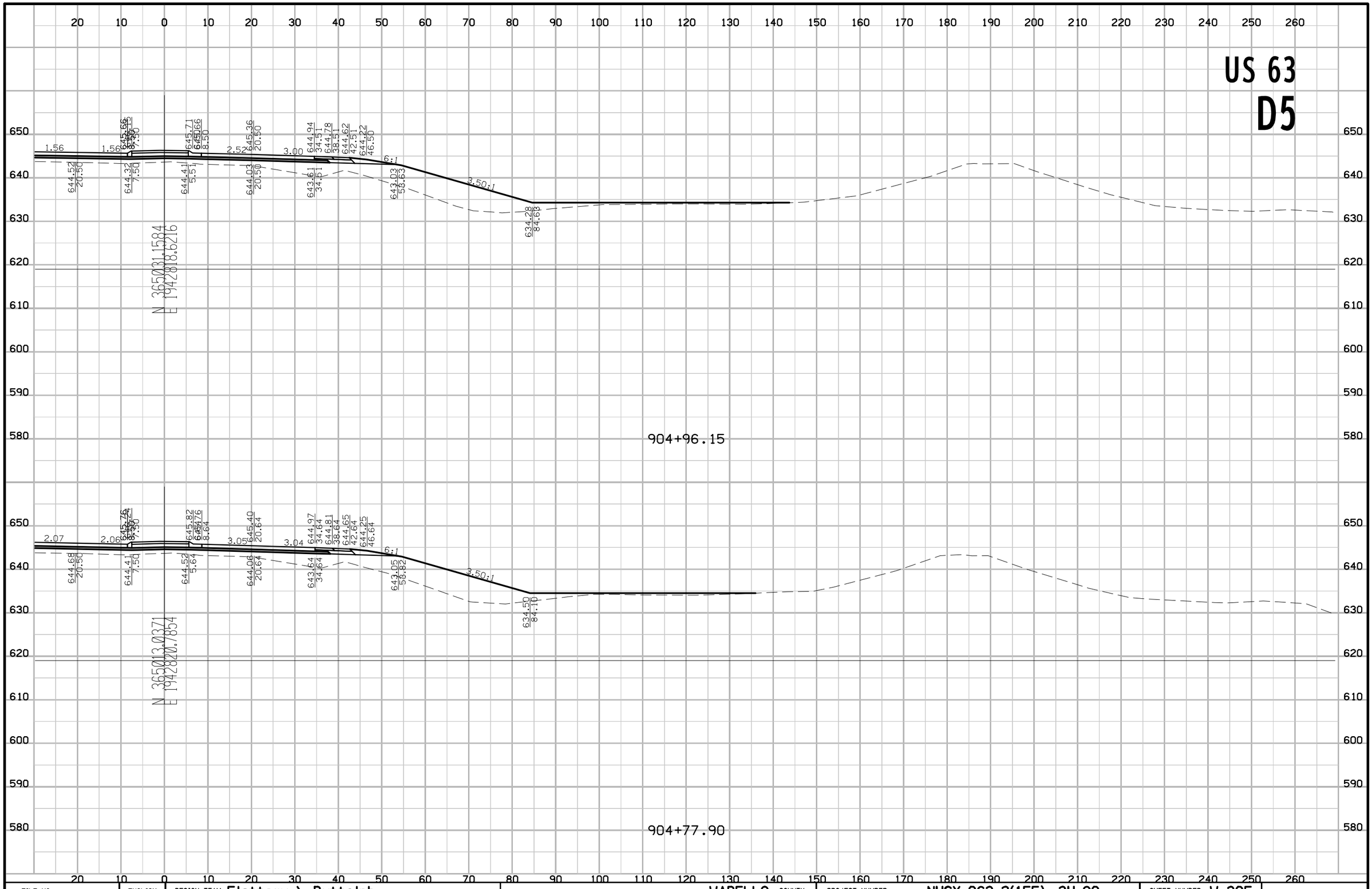
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.304

8:56:34 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

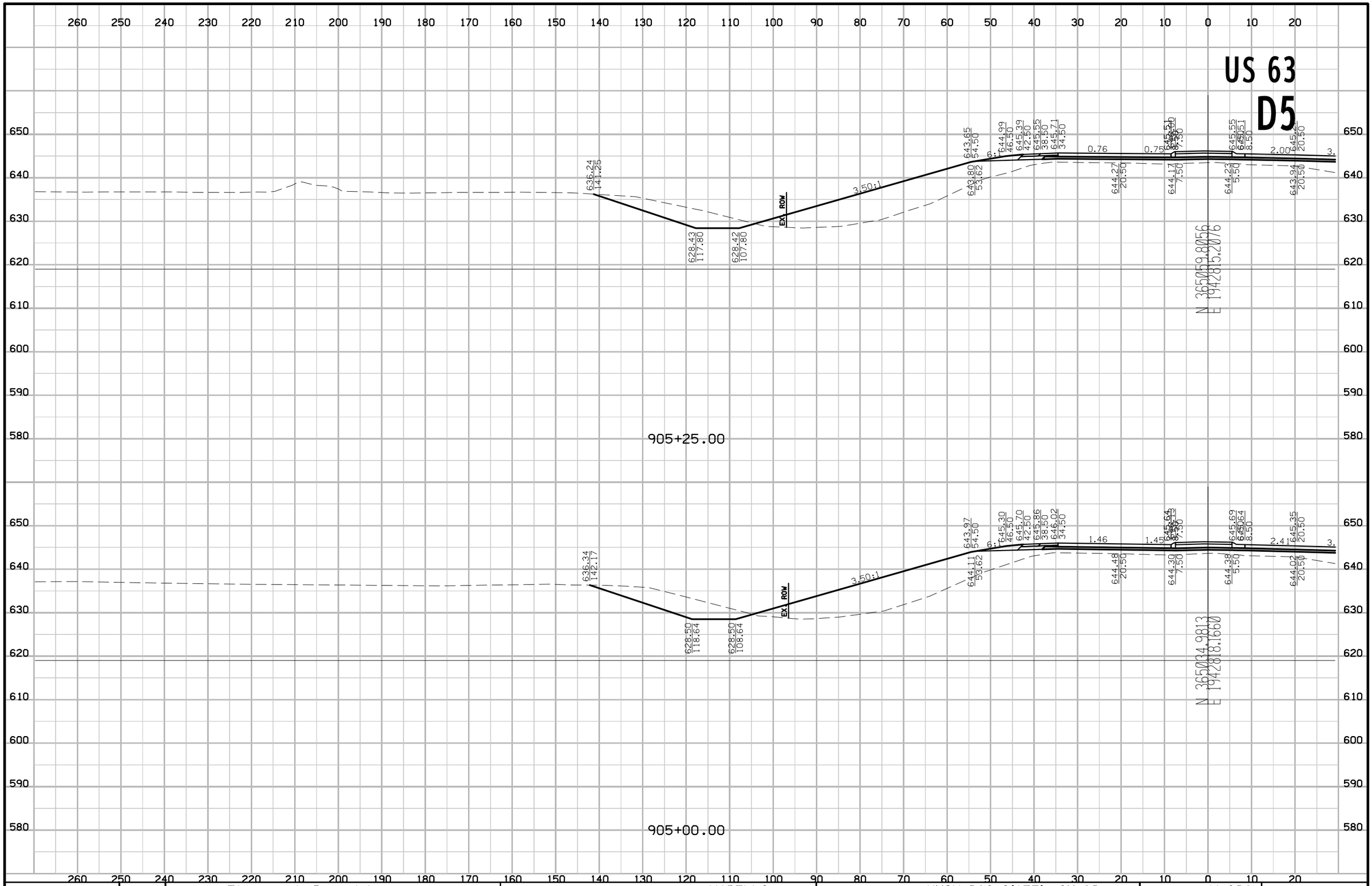
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.305

8:56:36 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

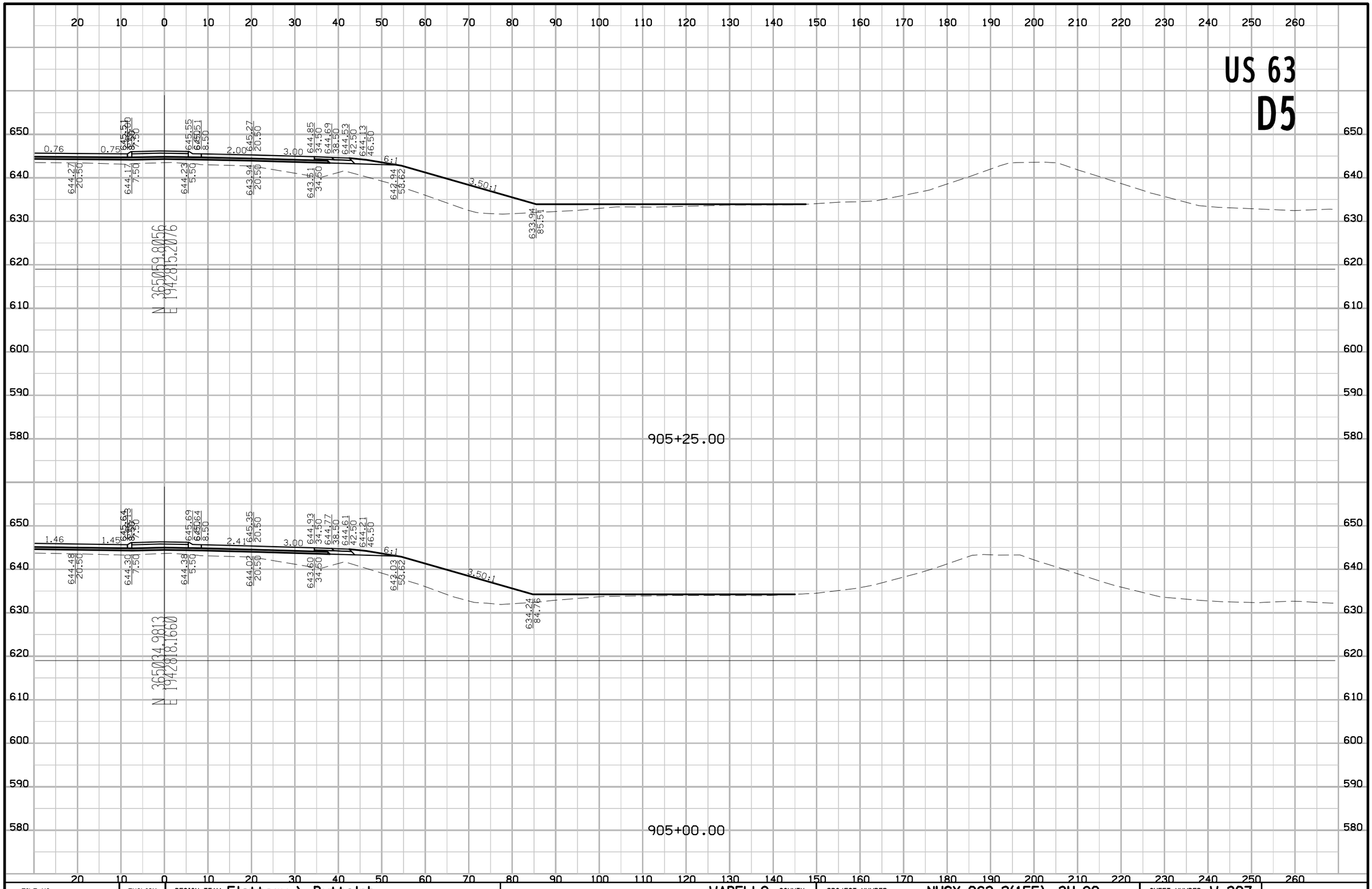
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.306

8:56:38 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

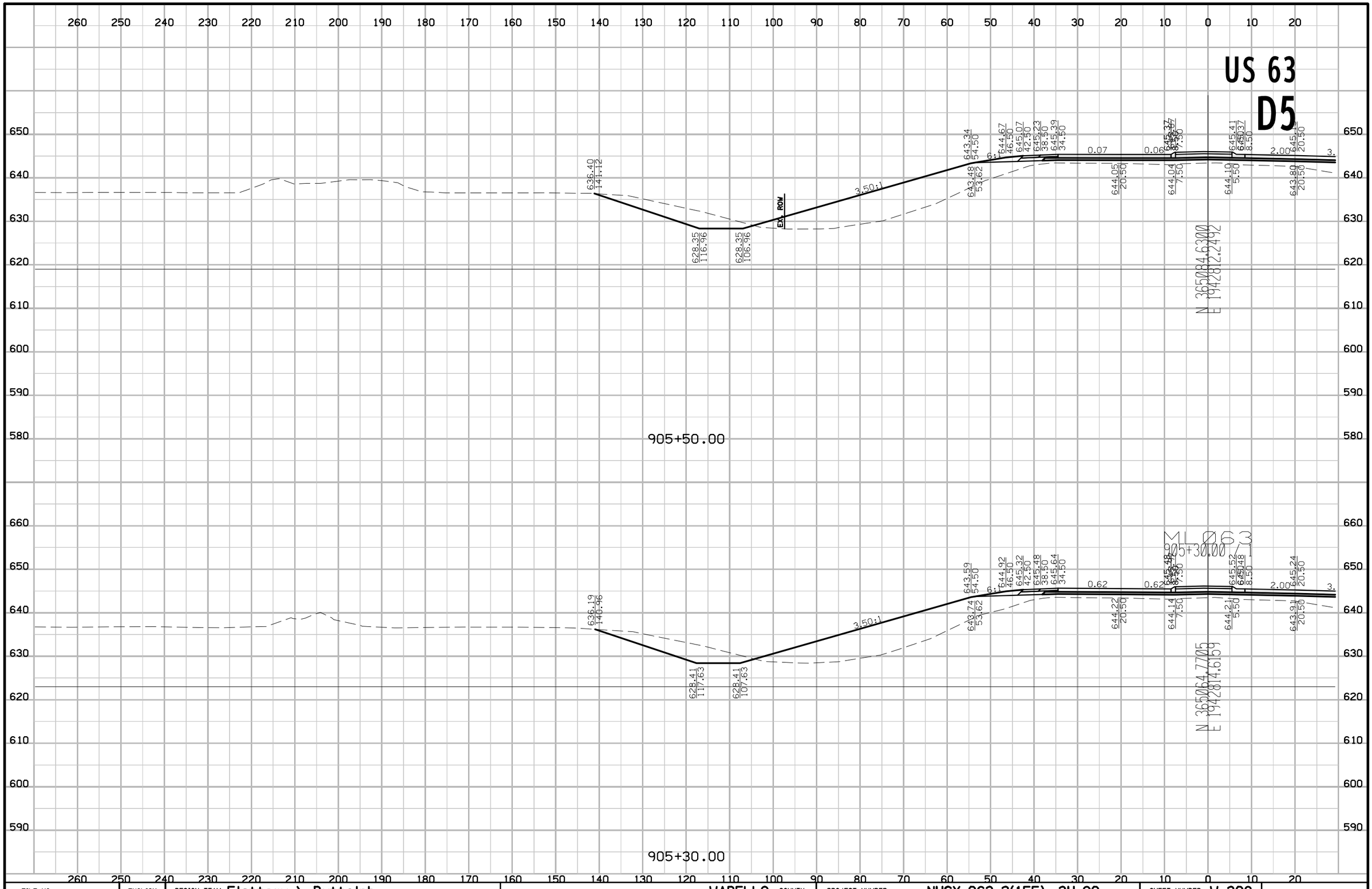
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.307

8:56:39 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

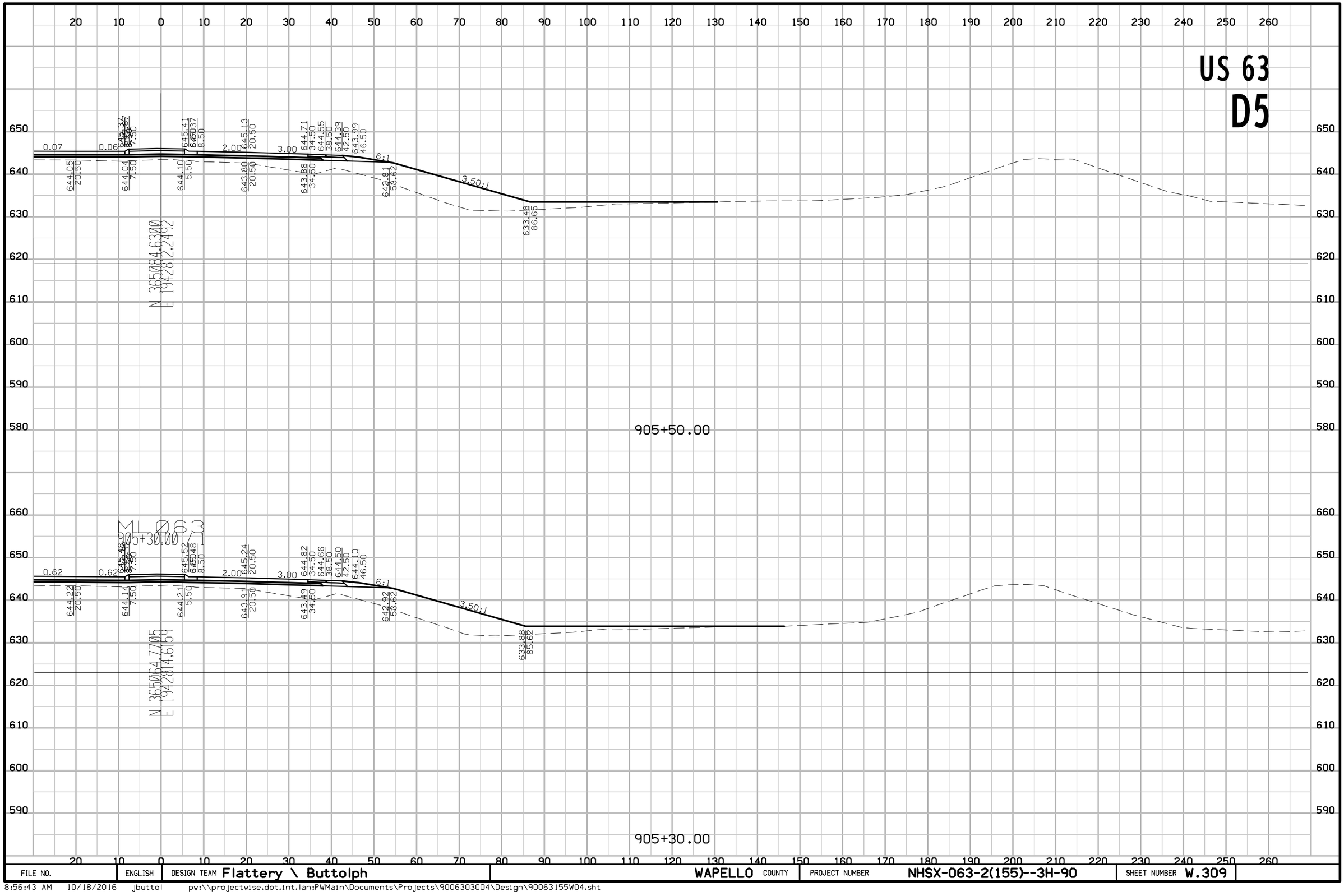
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.308

8:56:41 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

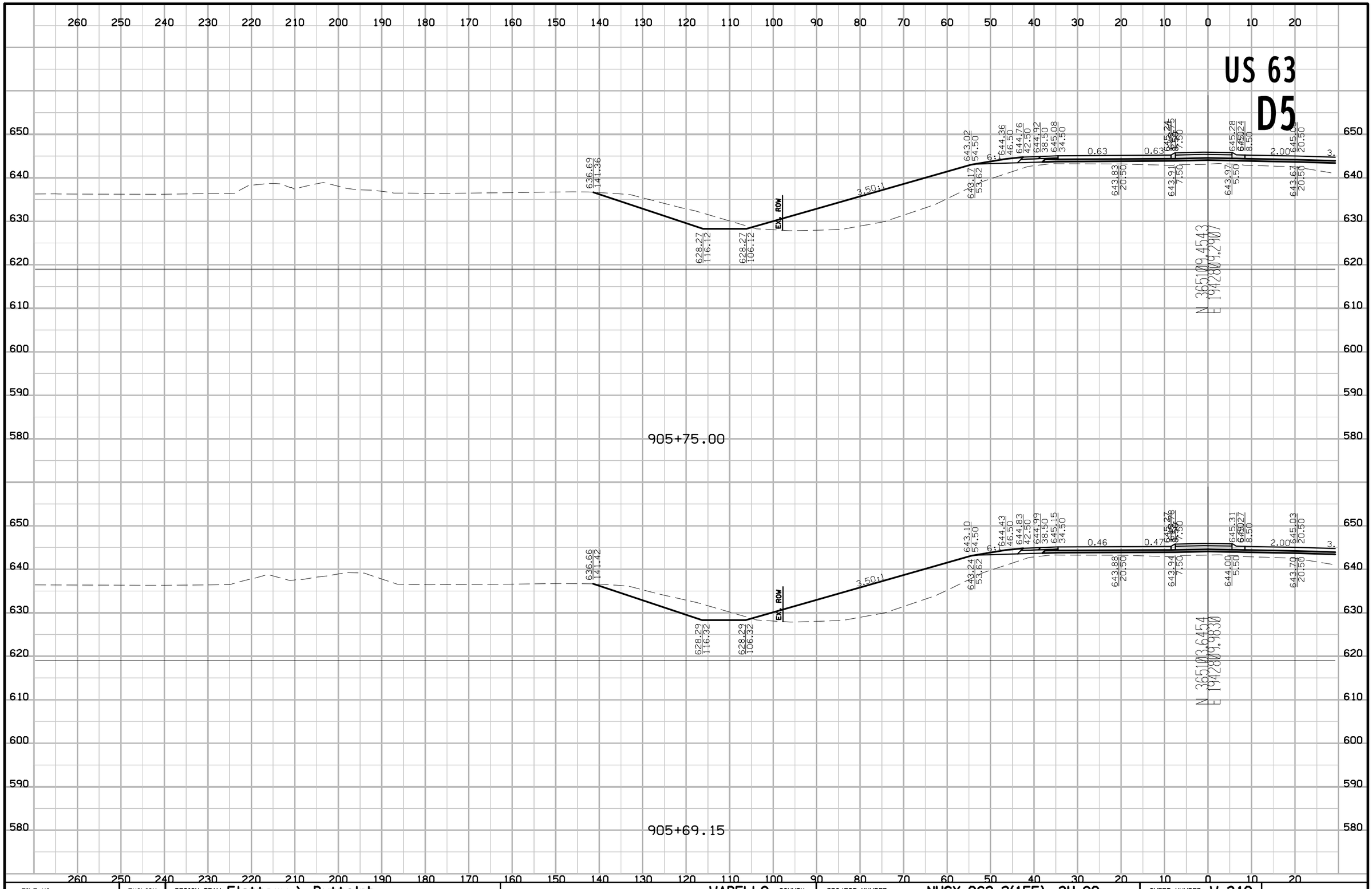
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.309

8:56:43 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

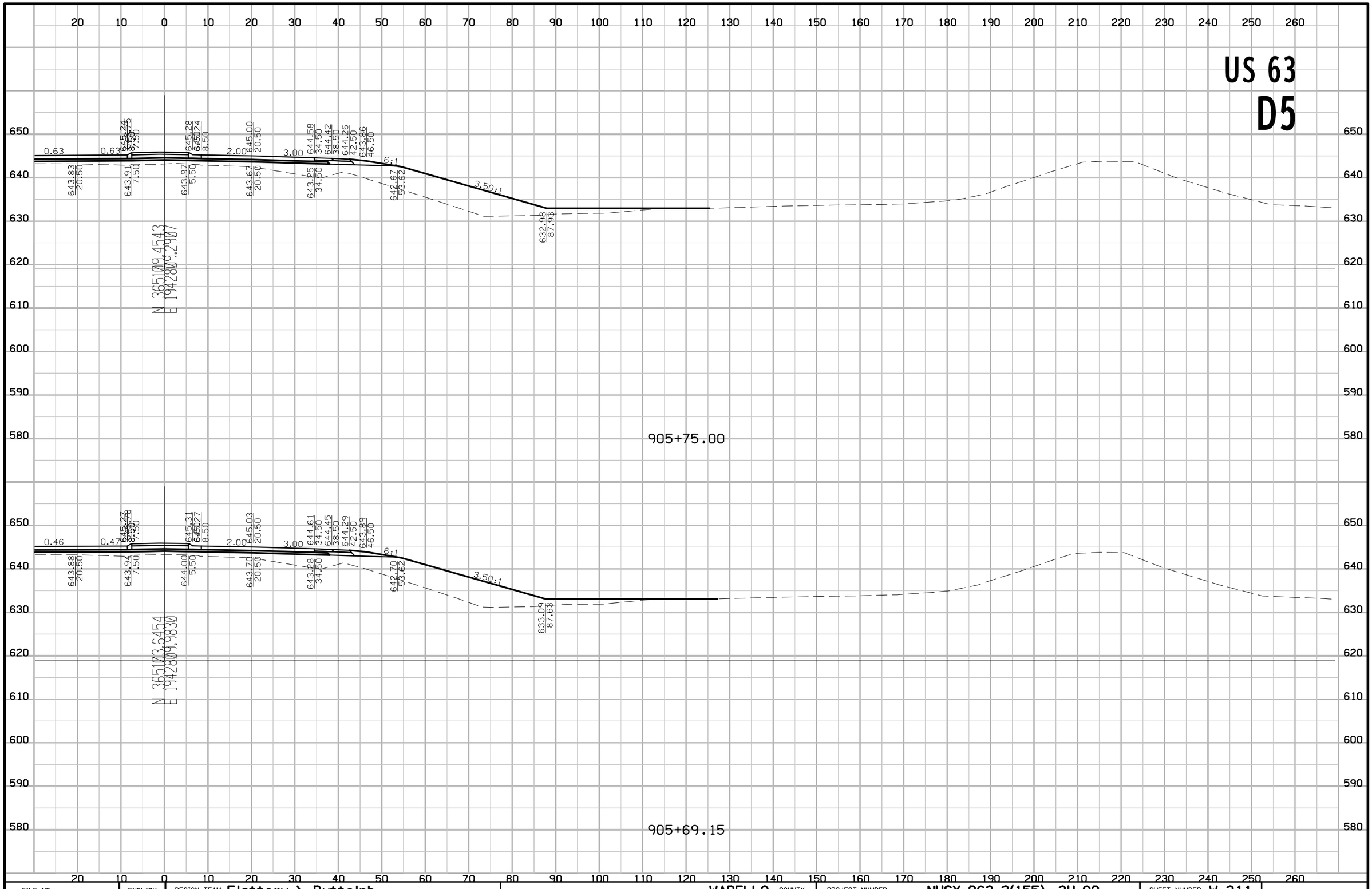
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.310

8:56:45 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

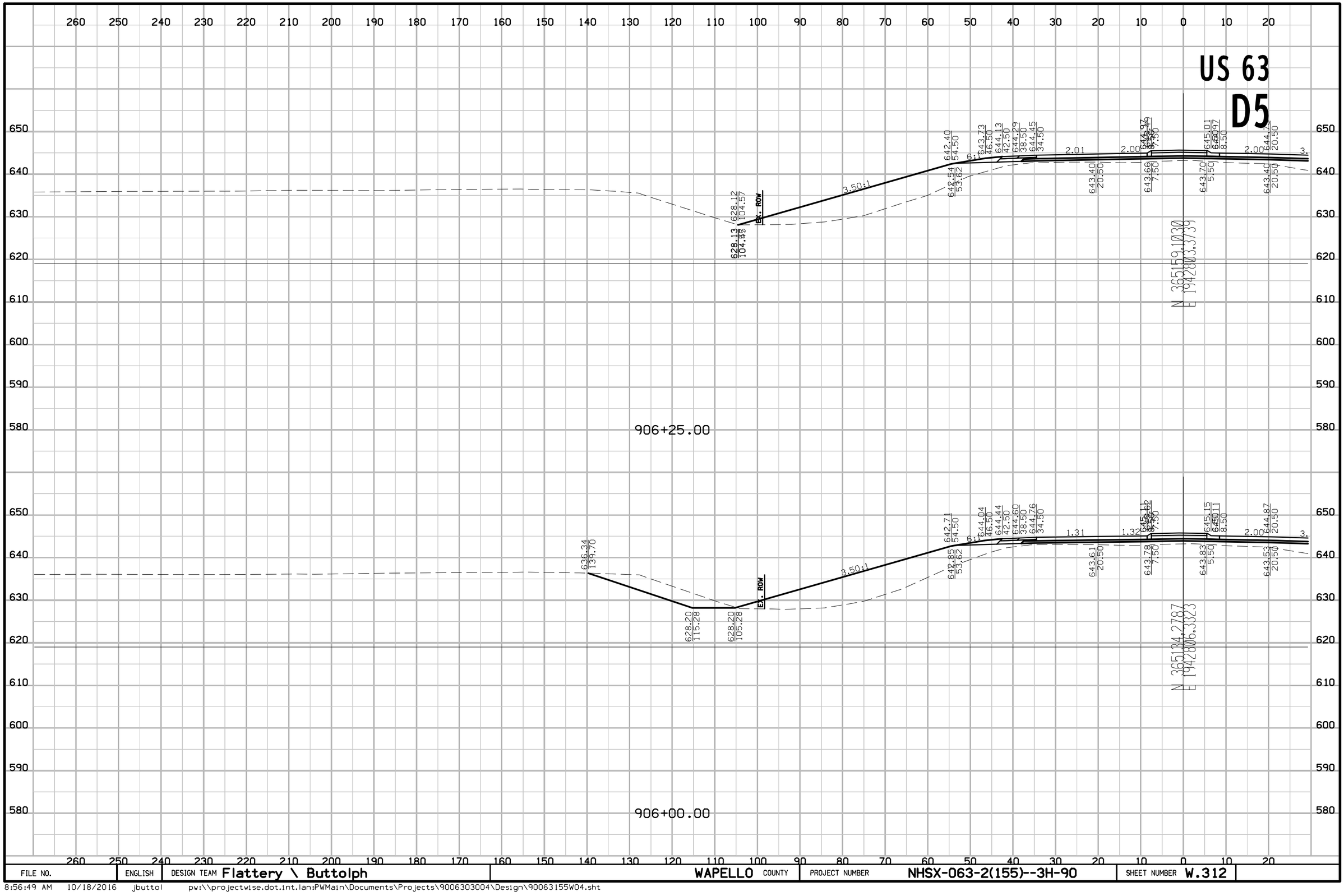
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.311

8:56:47 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

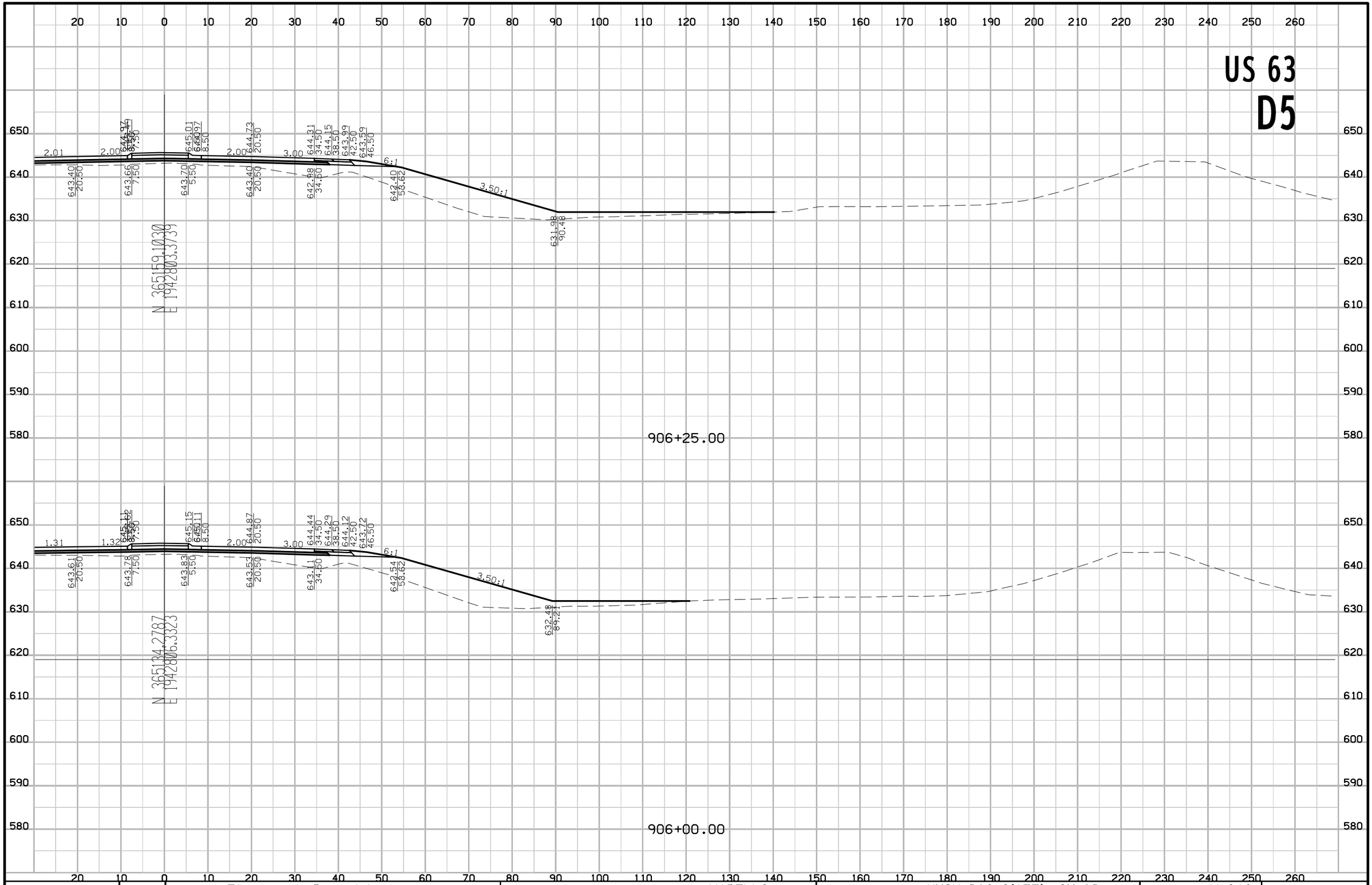
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.312

8:56:49 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

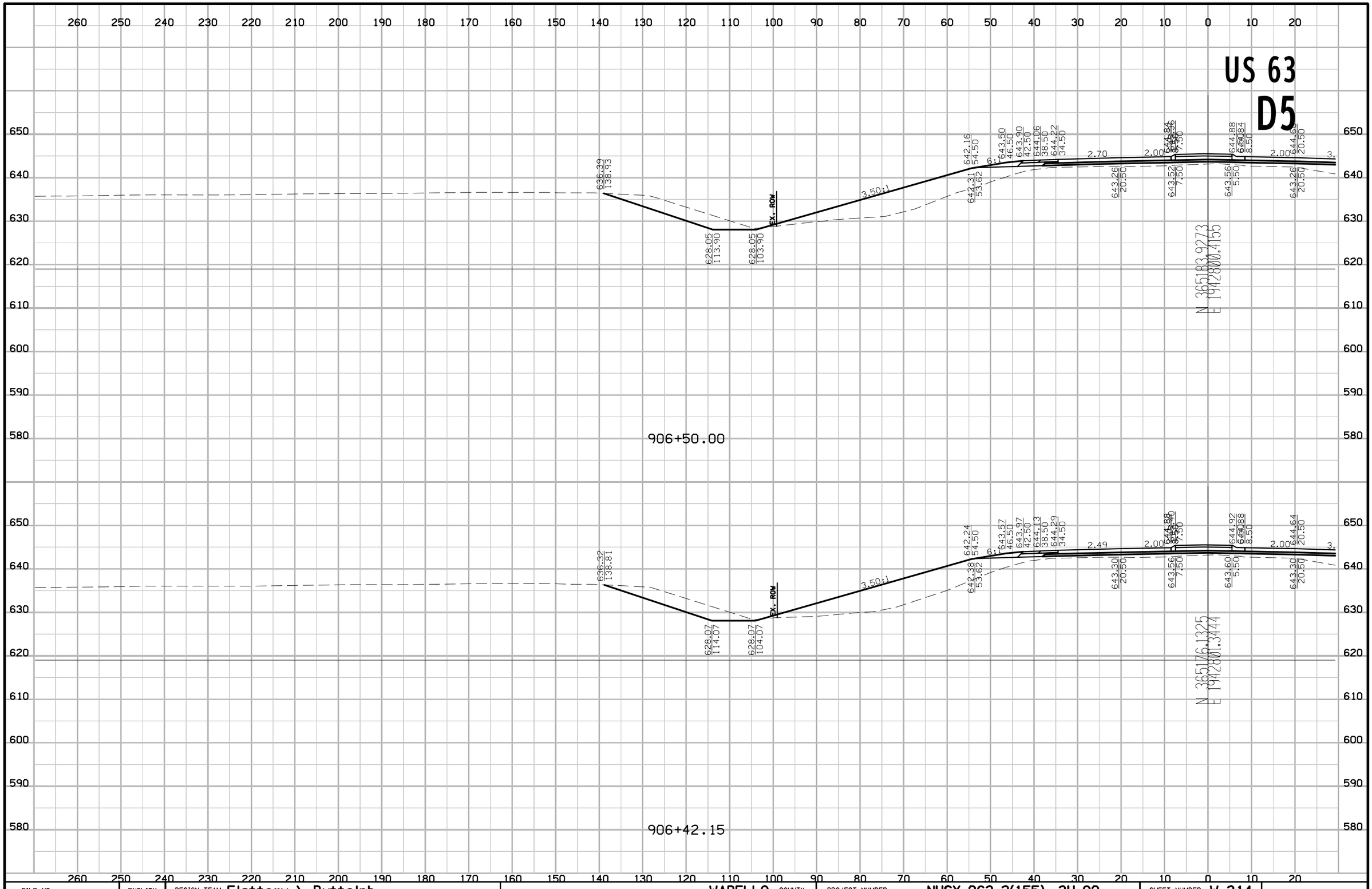
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.313

8:56:51 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

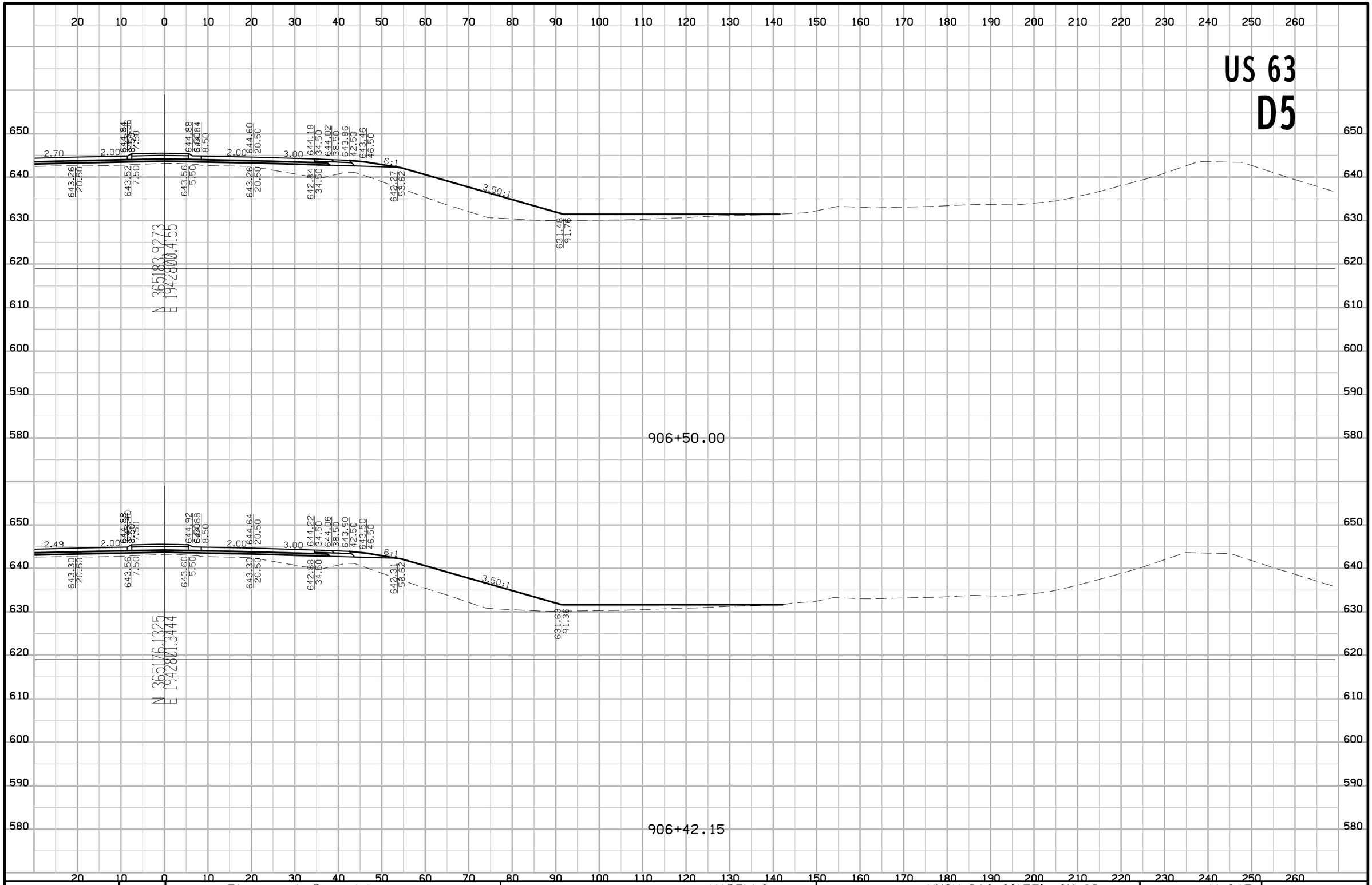
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.314

8:56:53 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

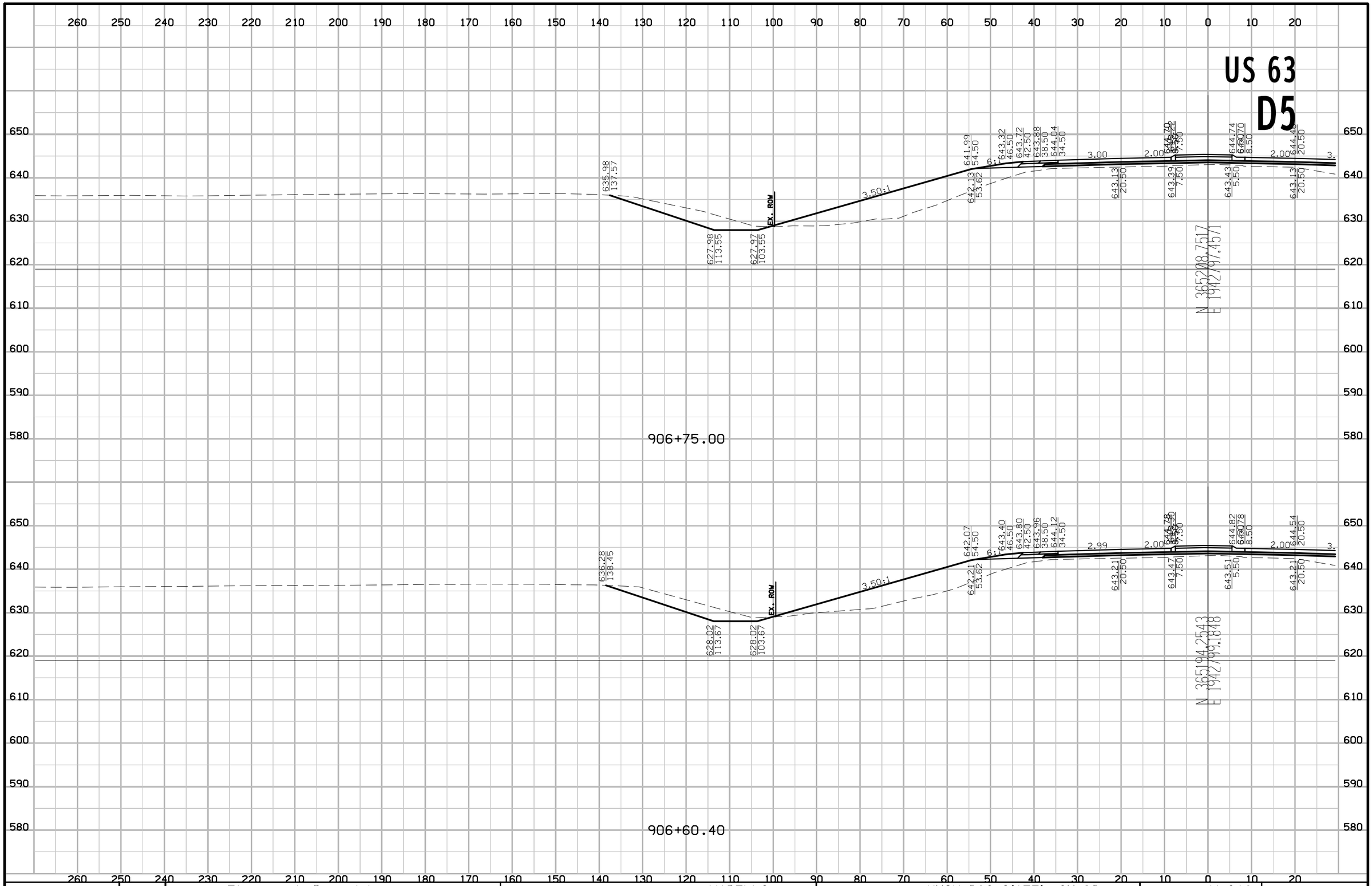
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.315

8:56:55 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

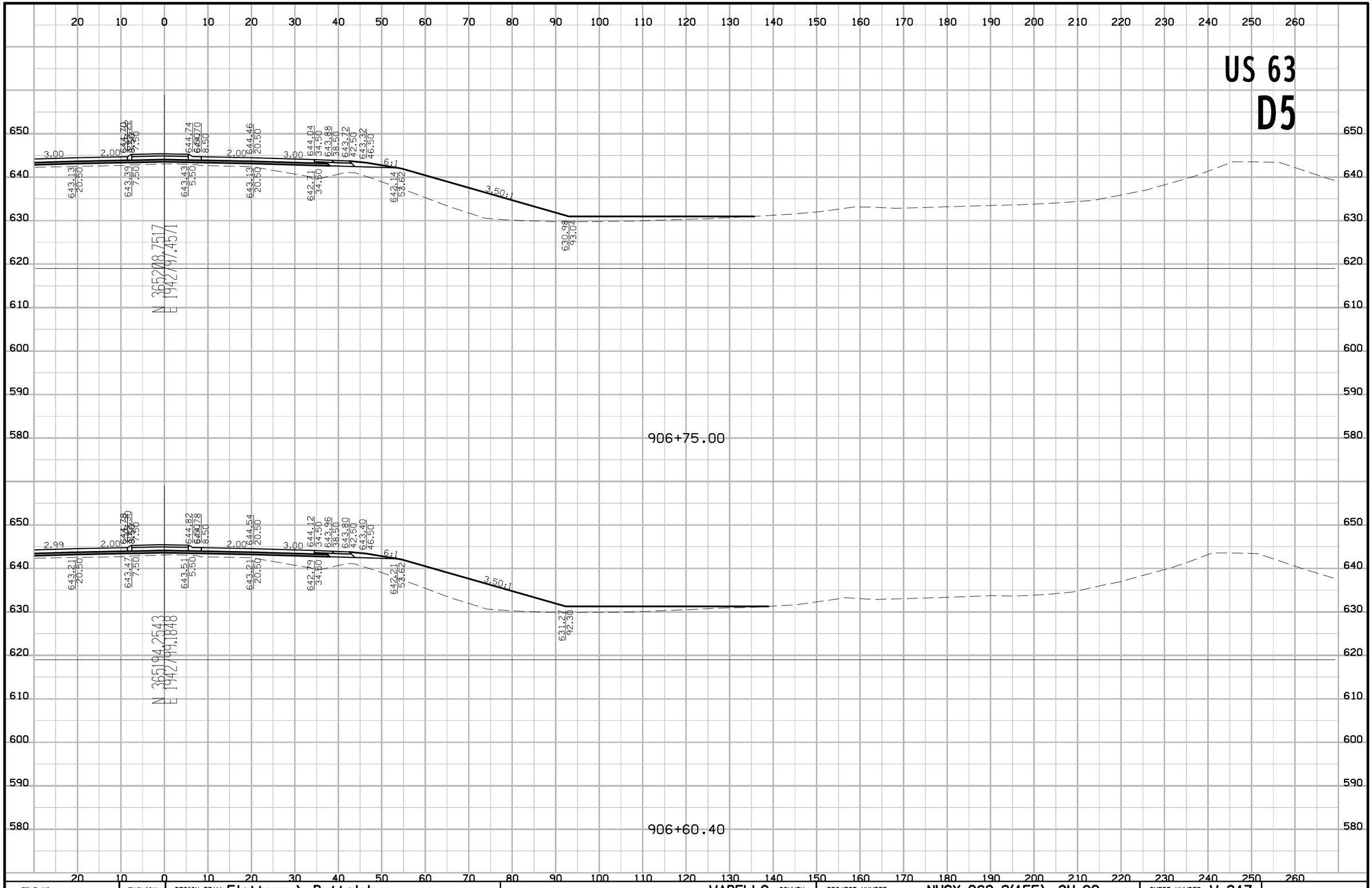
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.316

8:56:57 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63
D5

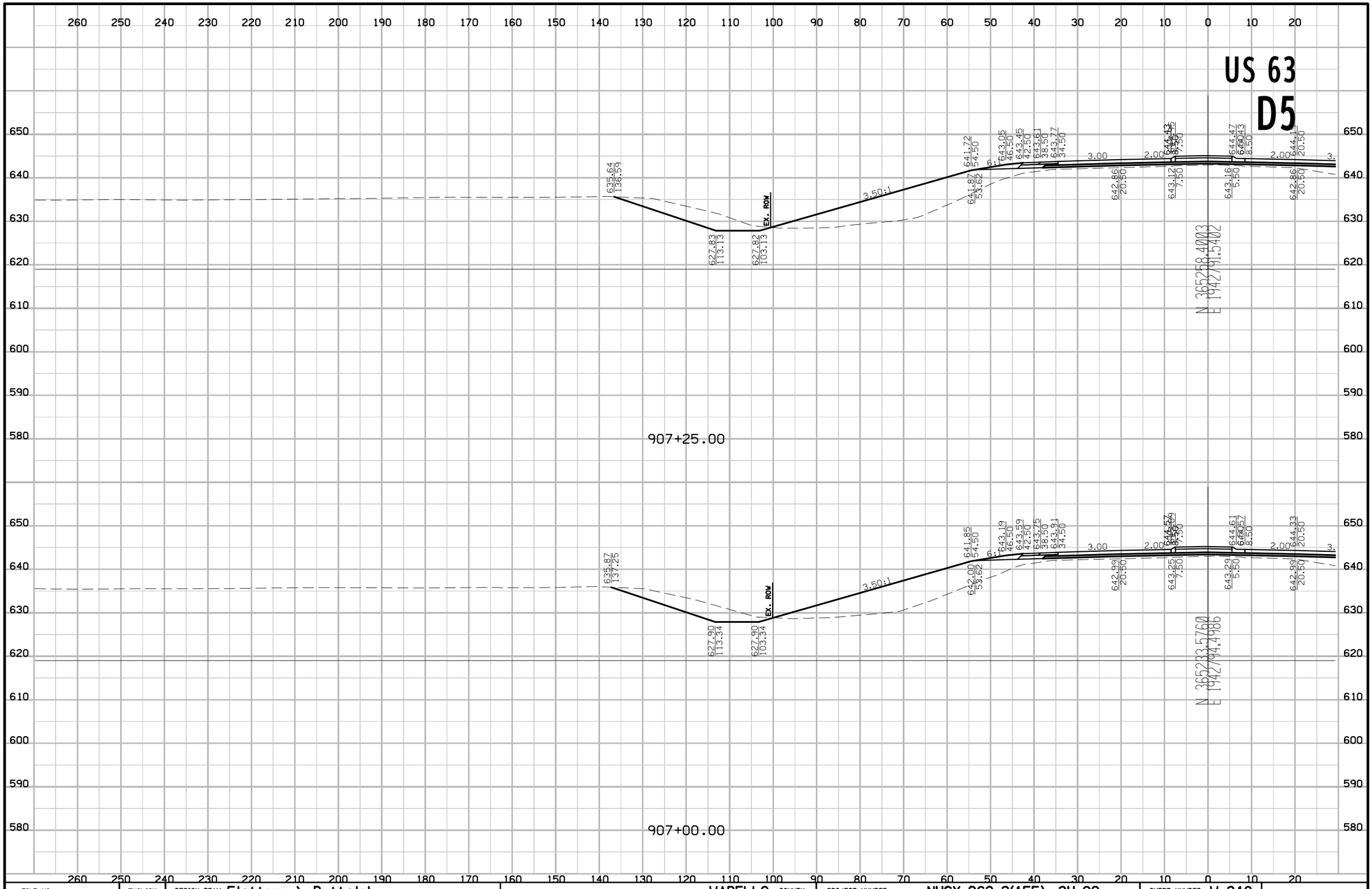


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.317

8:56:59 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63

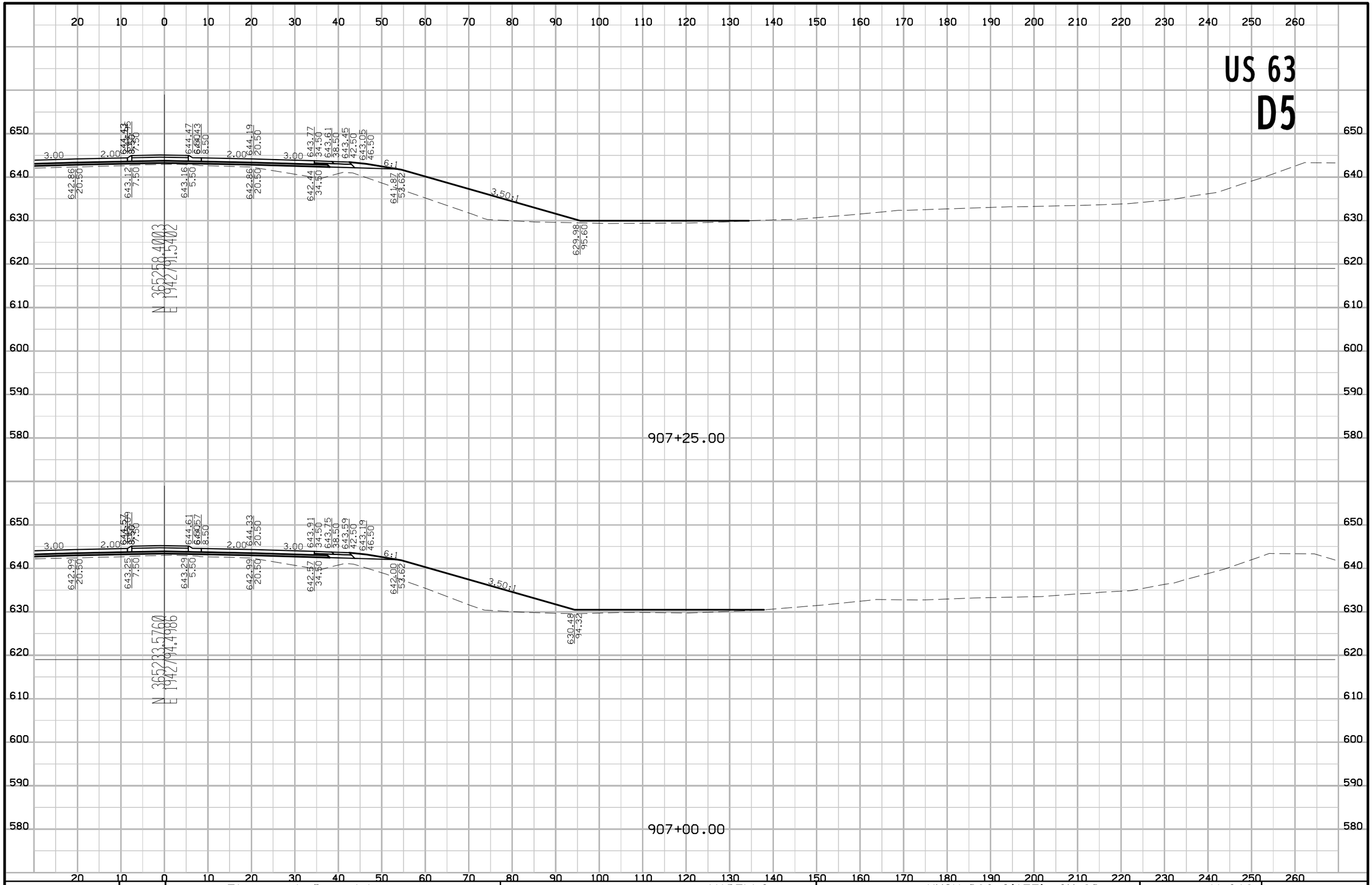
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.318

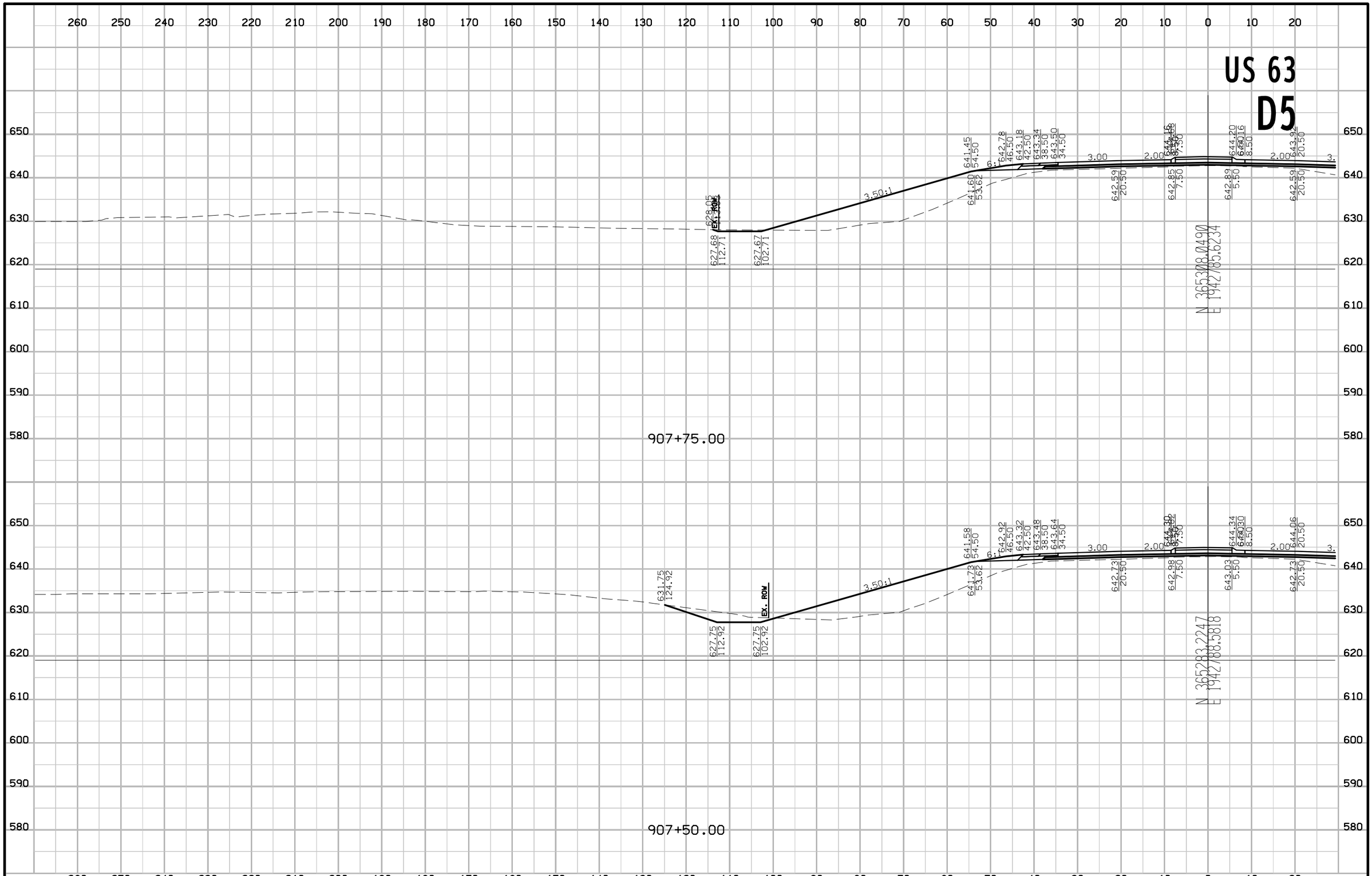
8:57:01 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.319

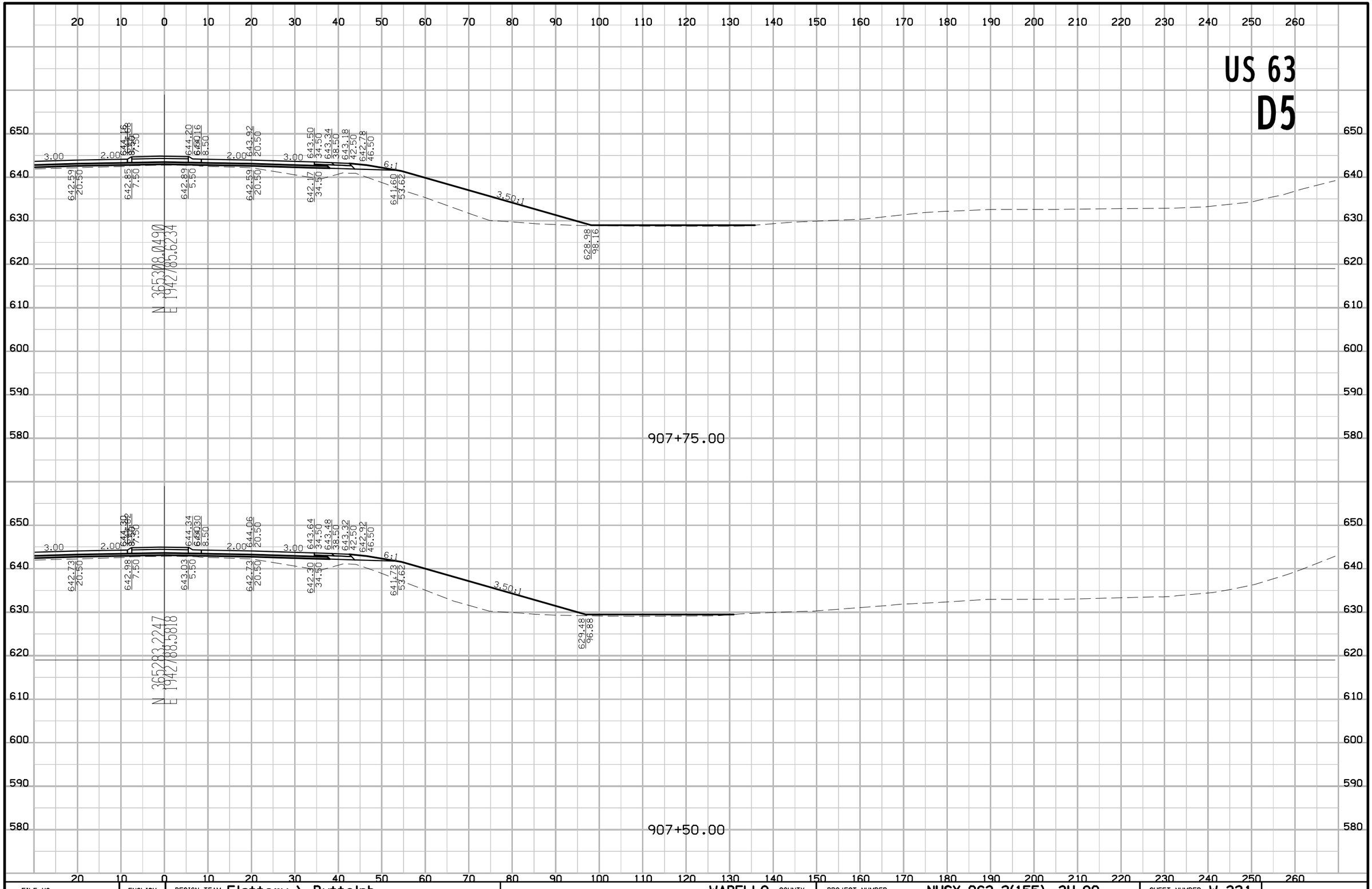
8:57:03 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.320

8:57:05 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63
D5

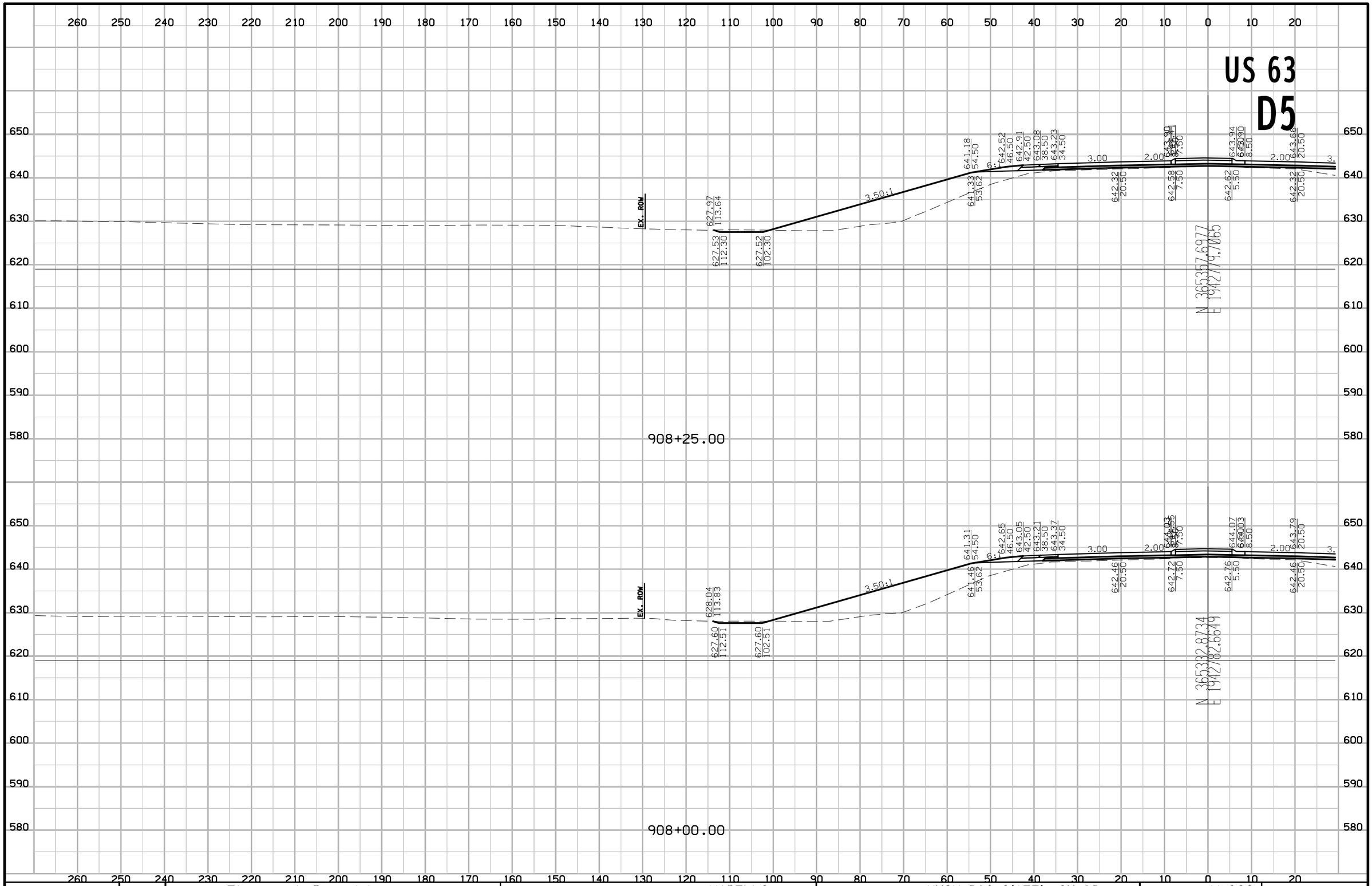


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.321

8:57:07 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63

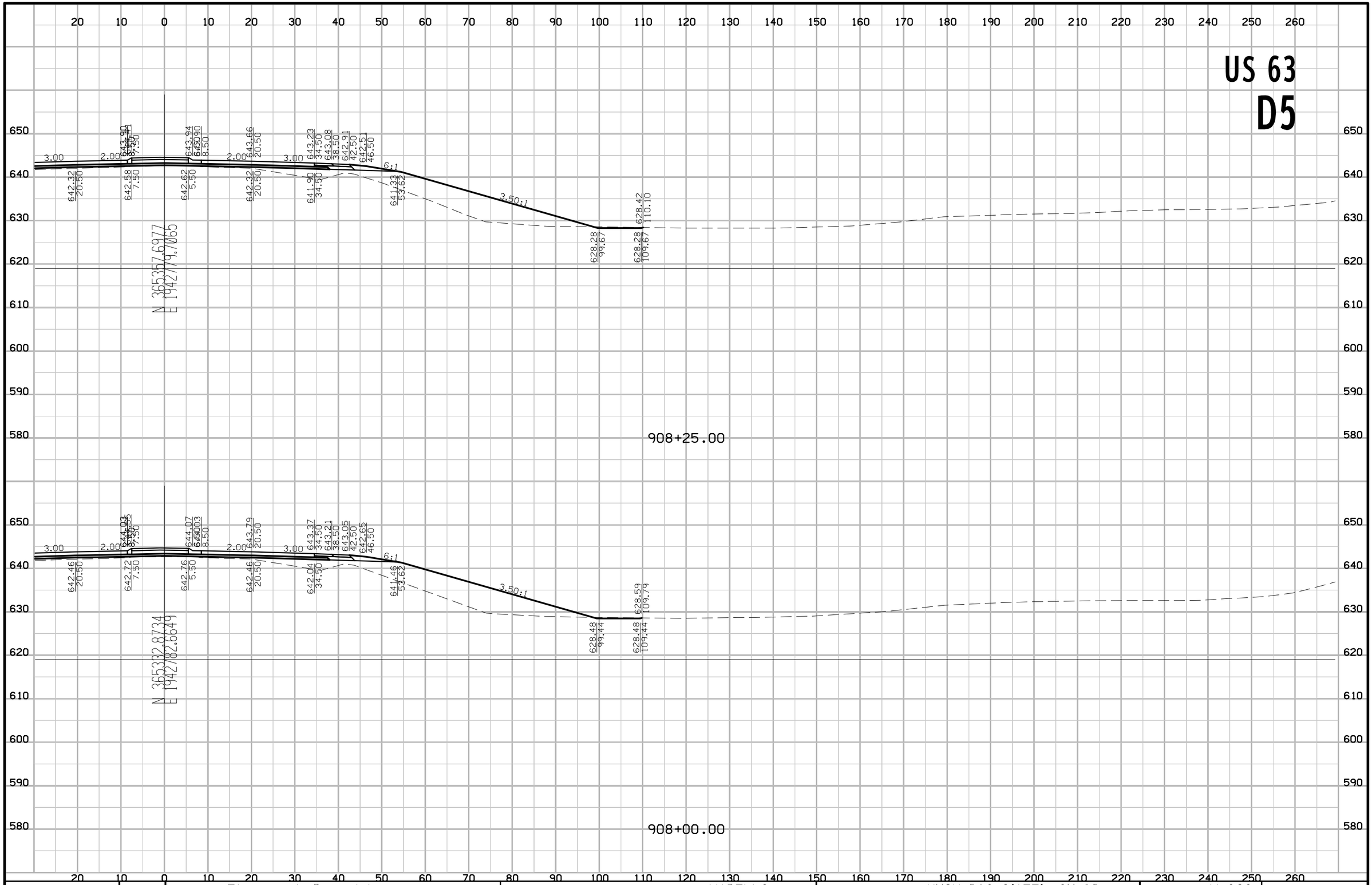
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.322

8:57:09 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

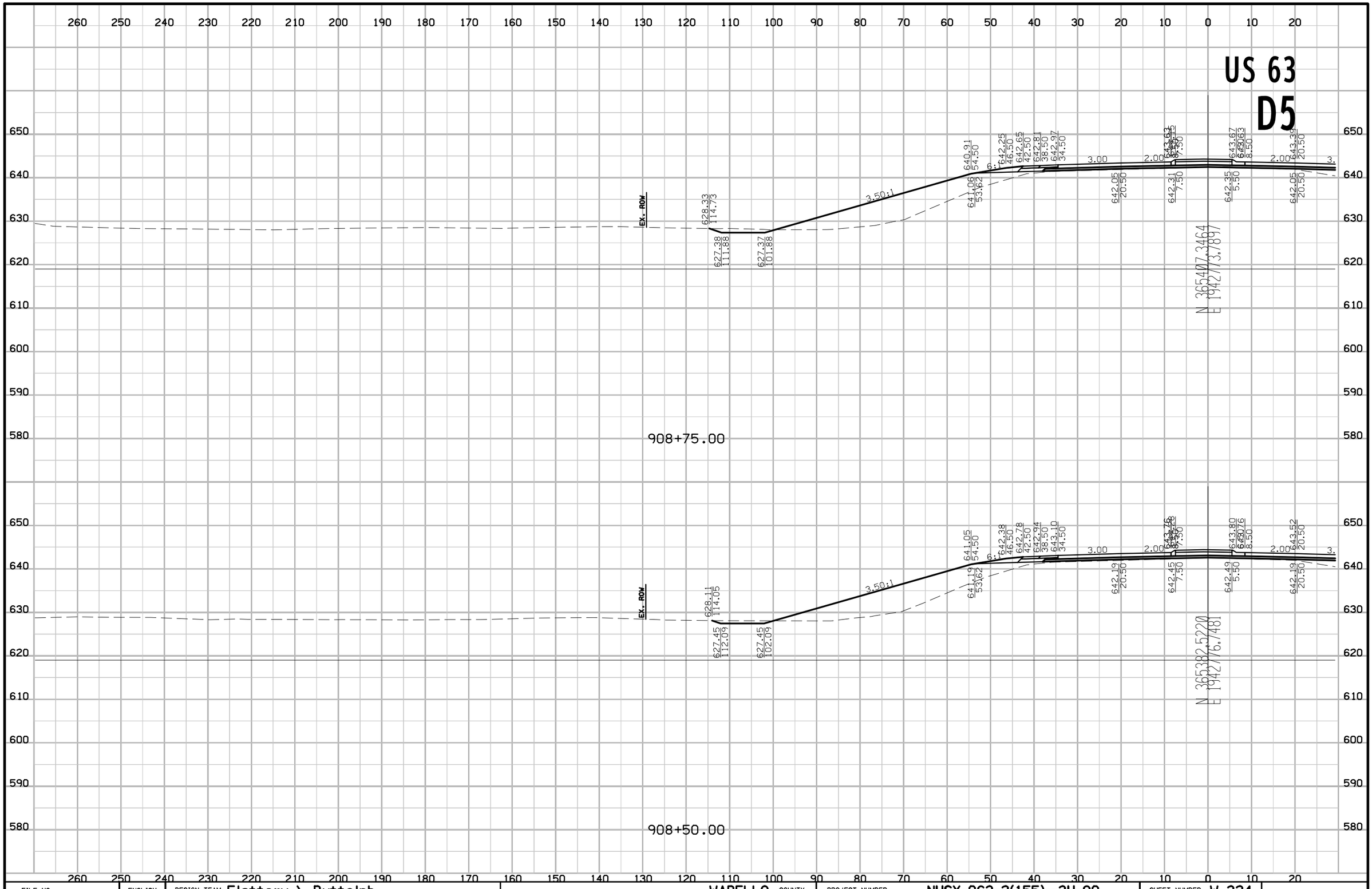
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.323

8:57:11 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

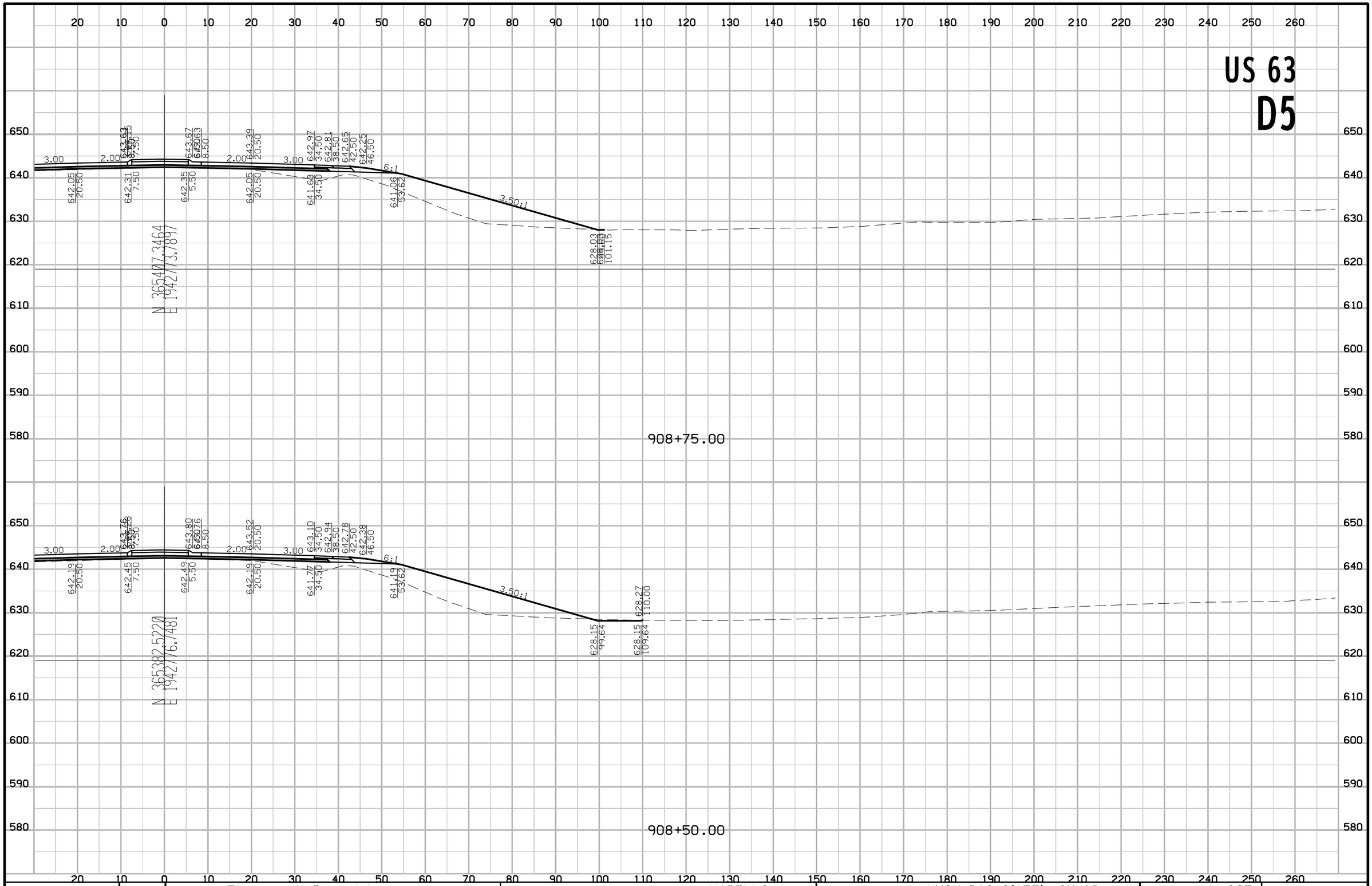
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.324

8:57:13 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

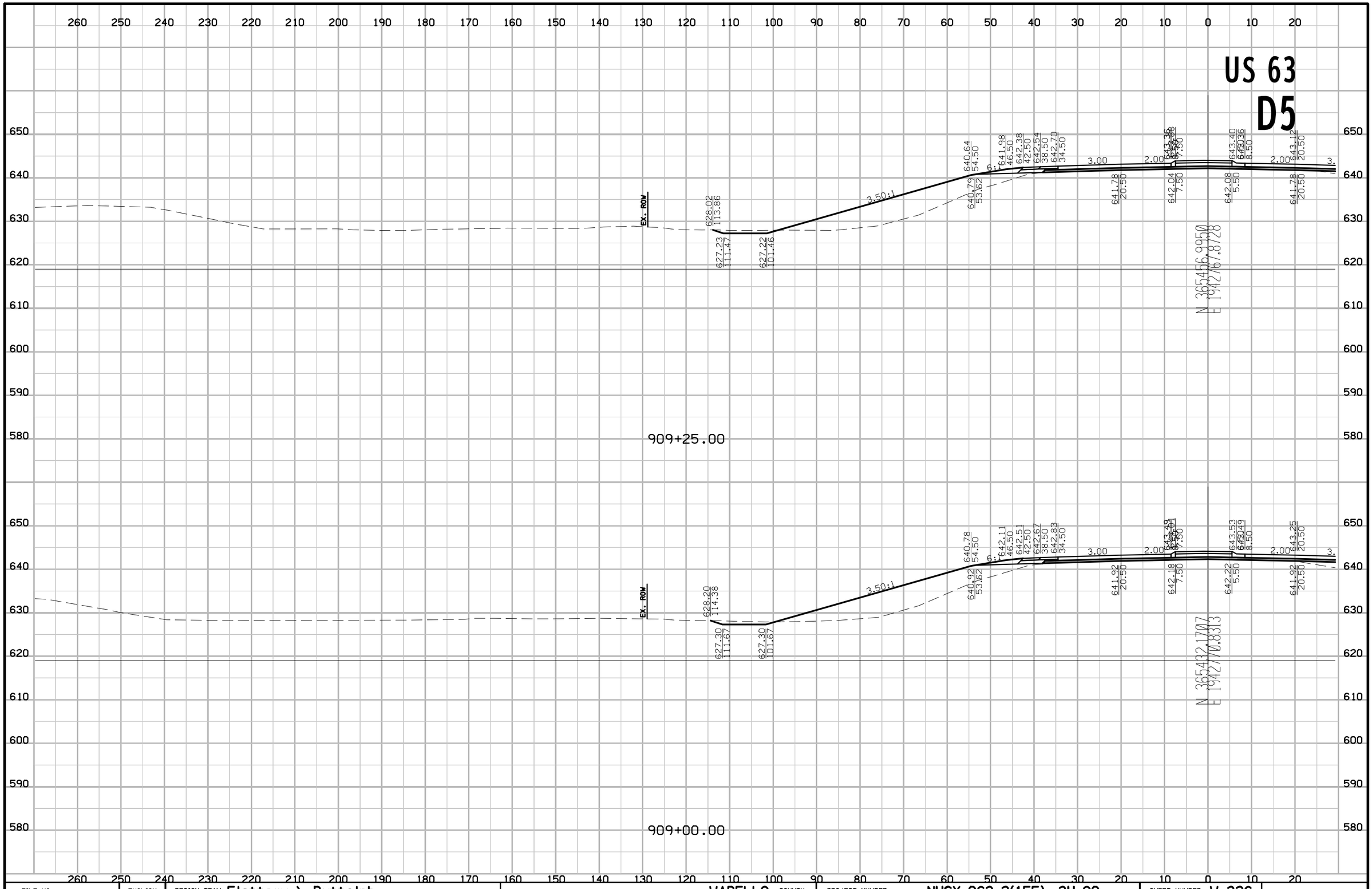
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.325

8:57:24 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

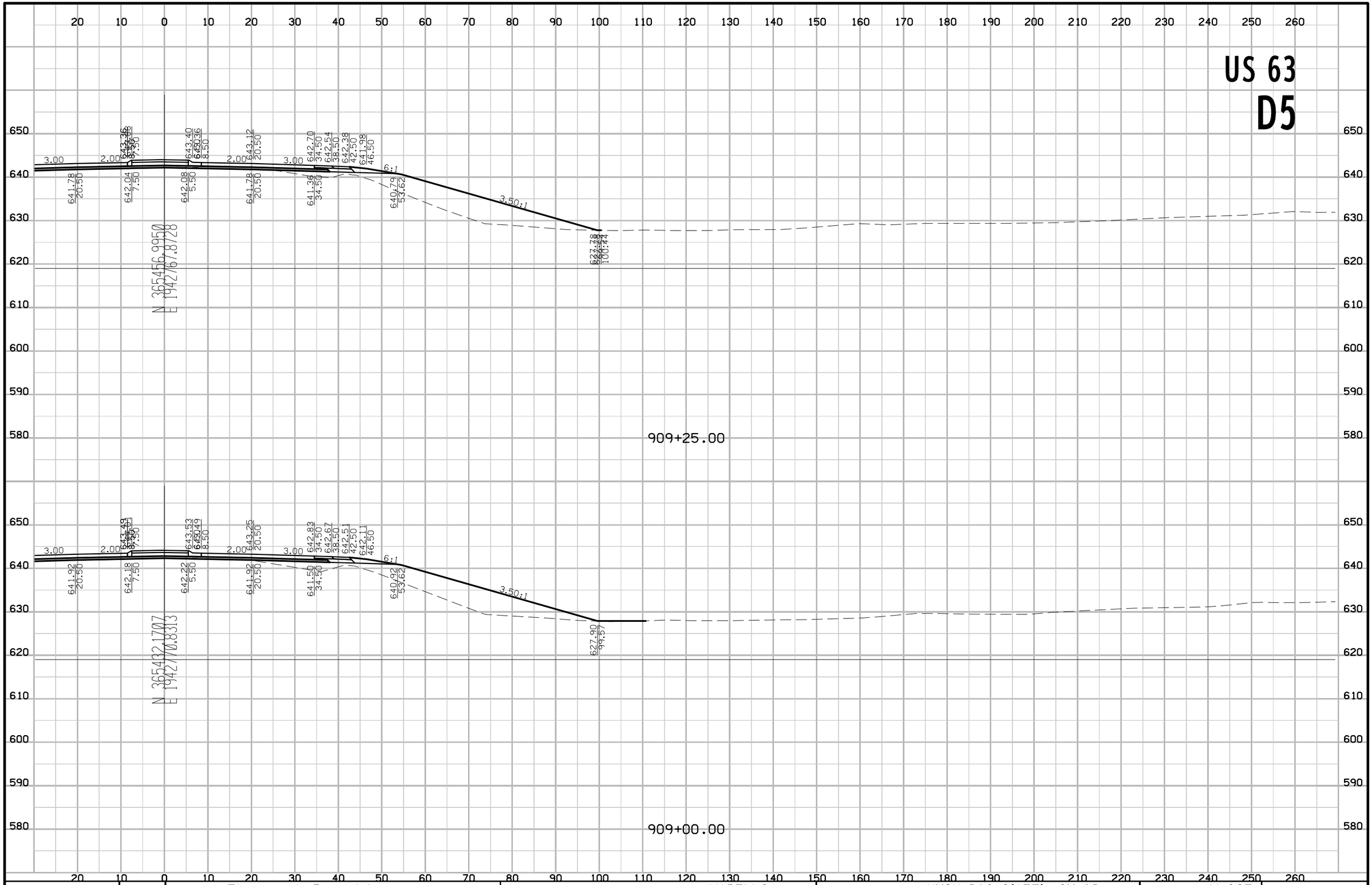
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.326

8:57:26 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

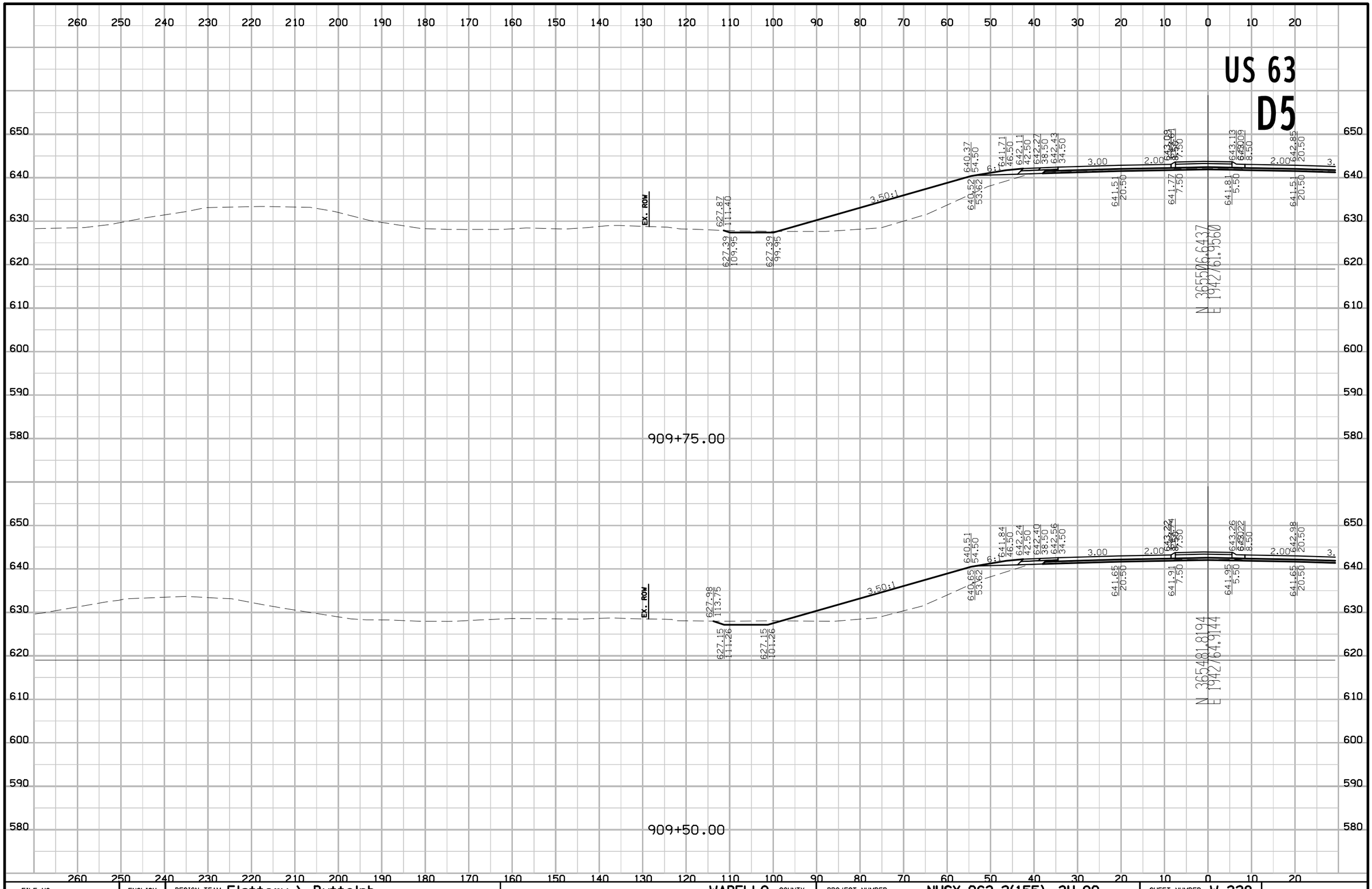
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.327

8:57:28 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

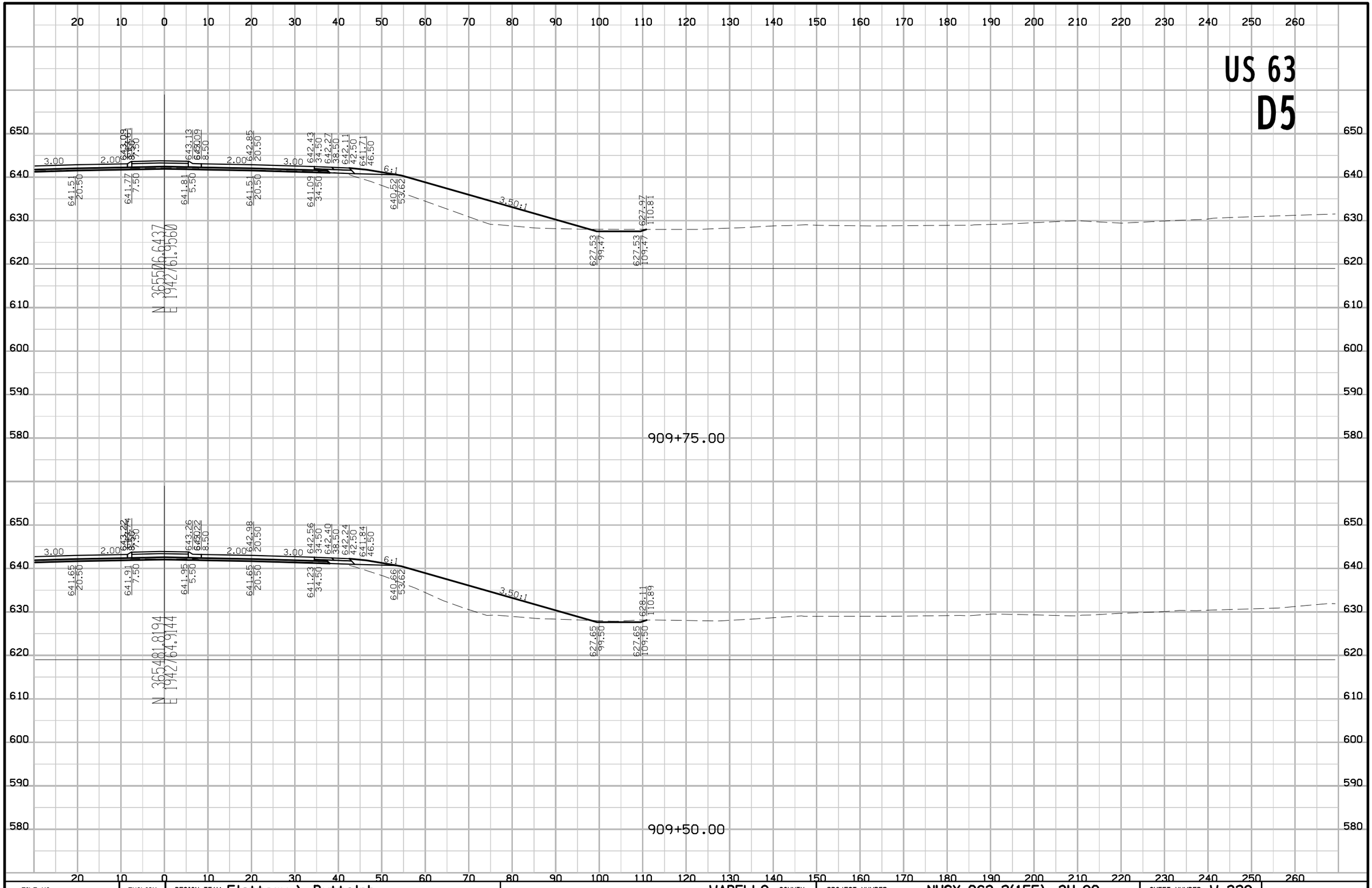
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.328

8:57:30 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

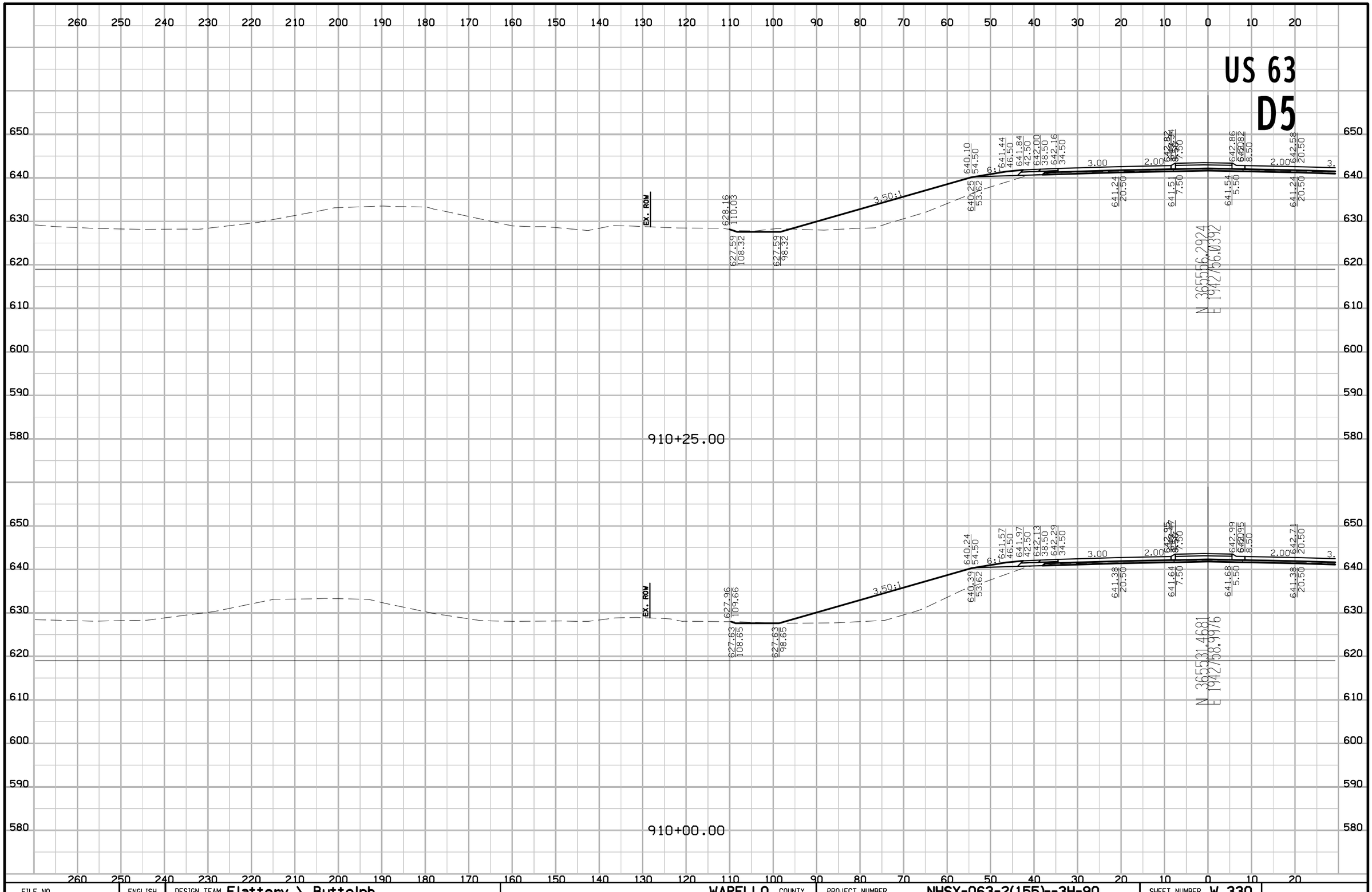
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.329

8:57:31 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

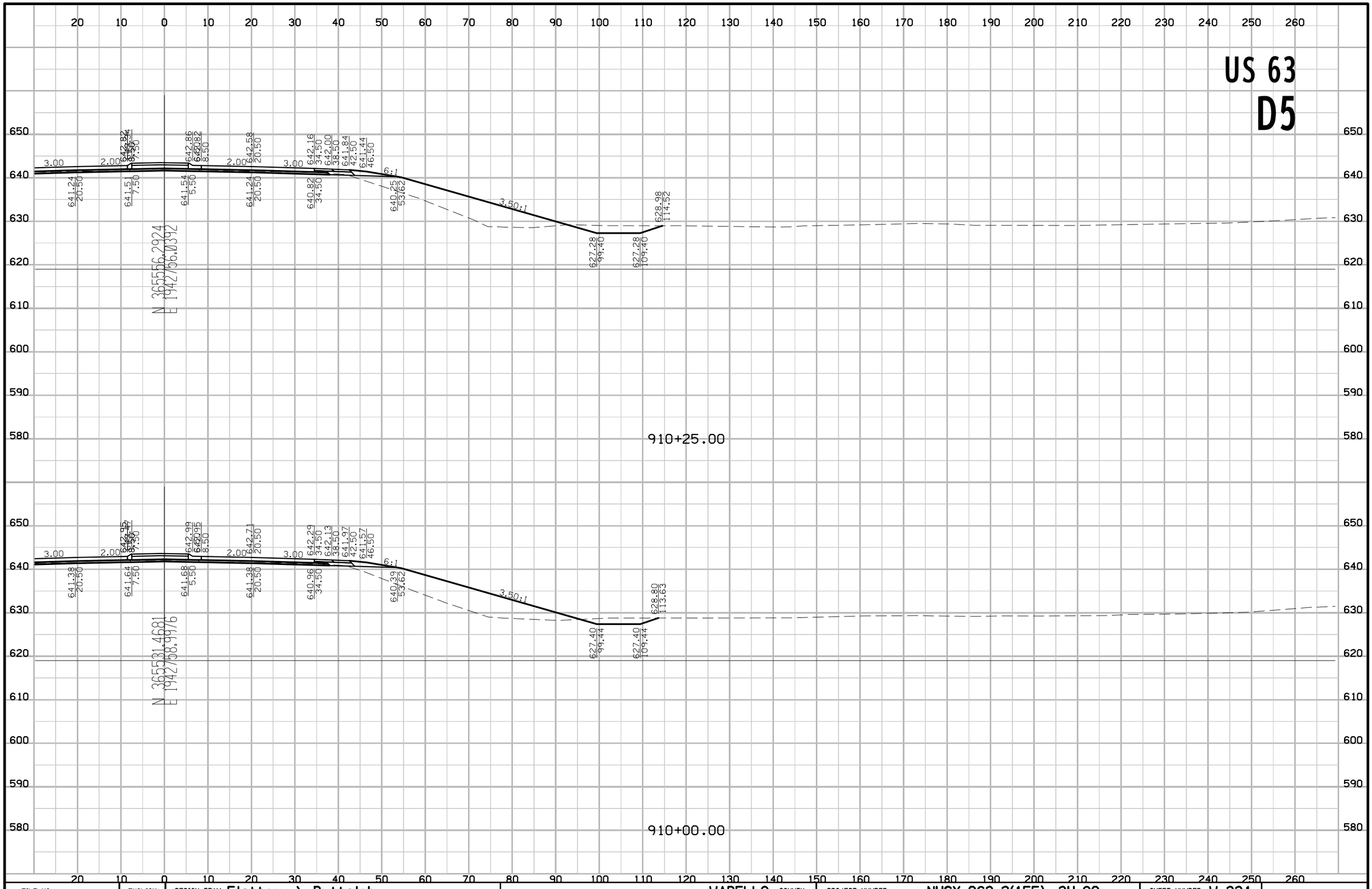
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.330

8:57:33 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63
D5

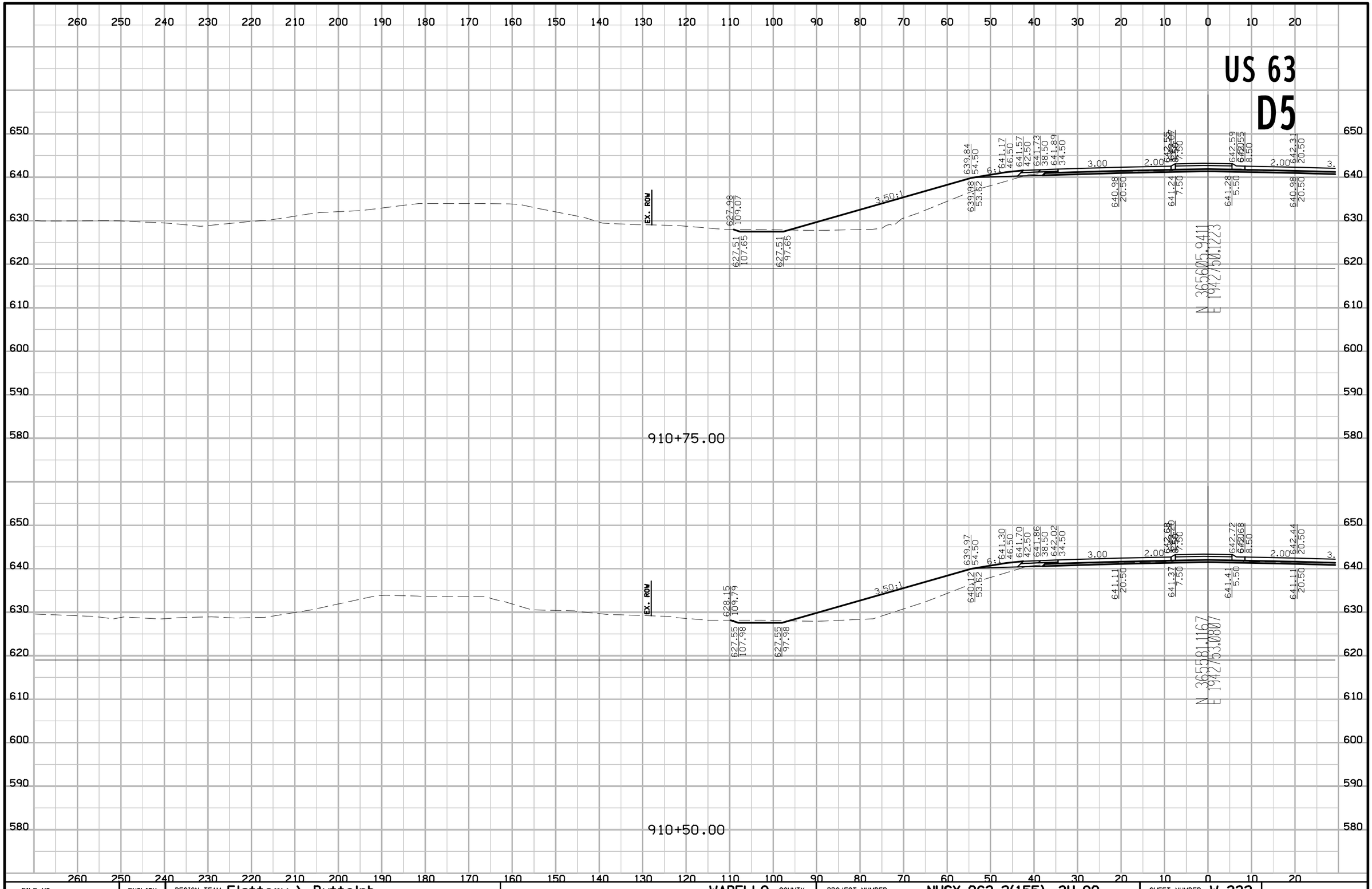


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.331

8:57:35 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63

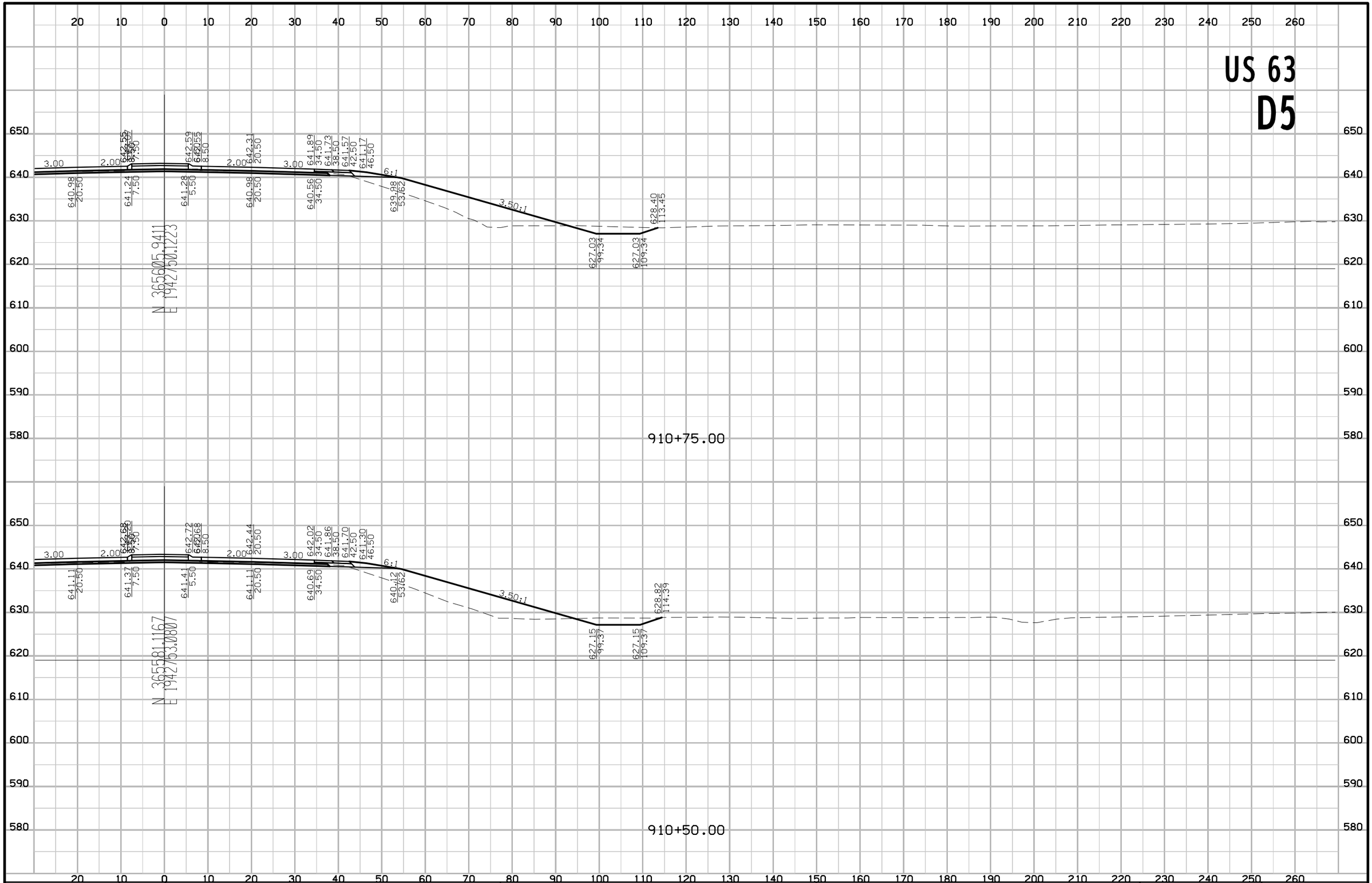
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.332

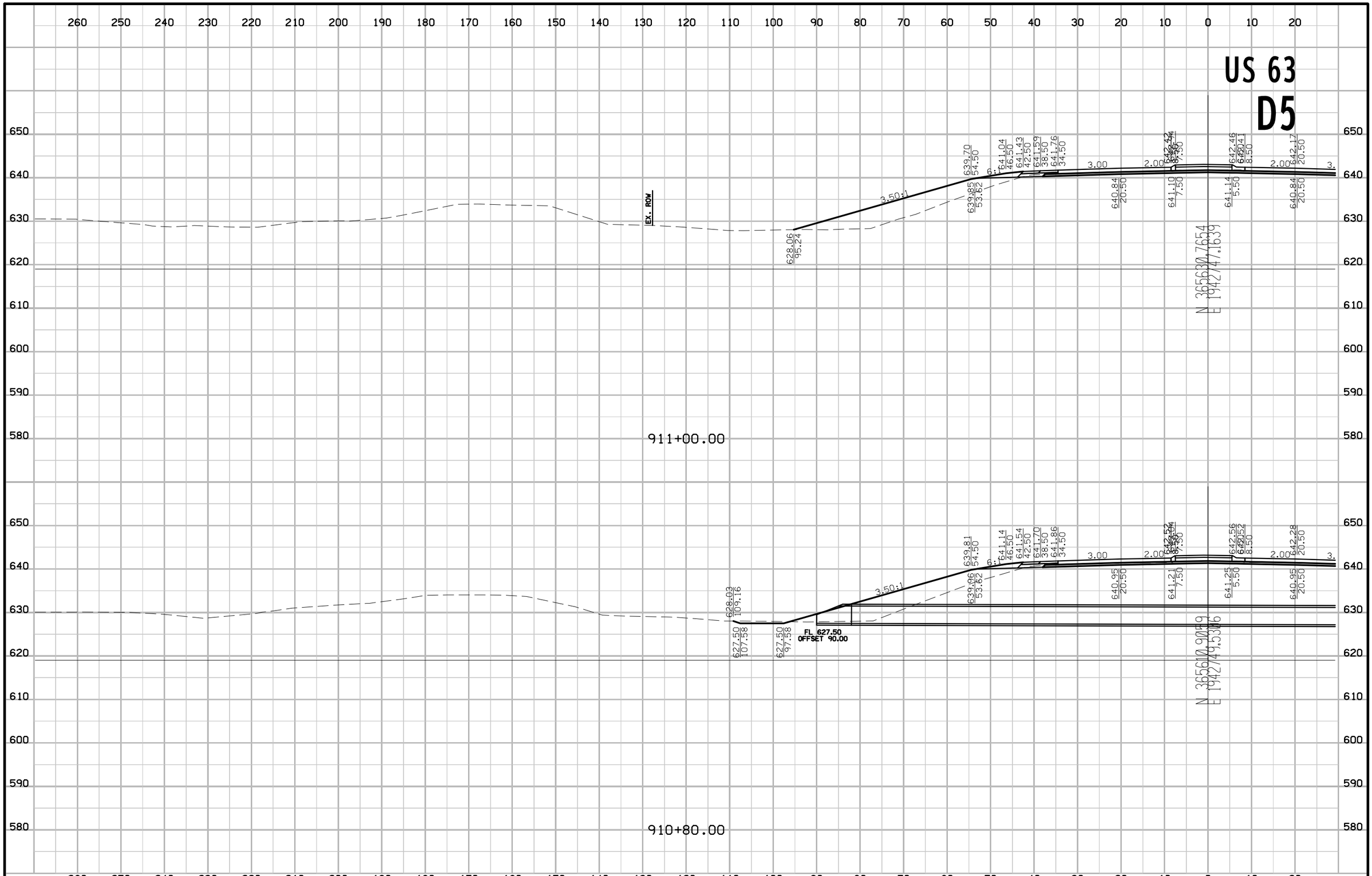
8:57:37 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.333

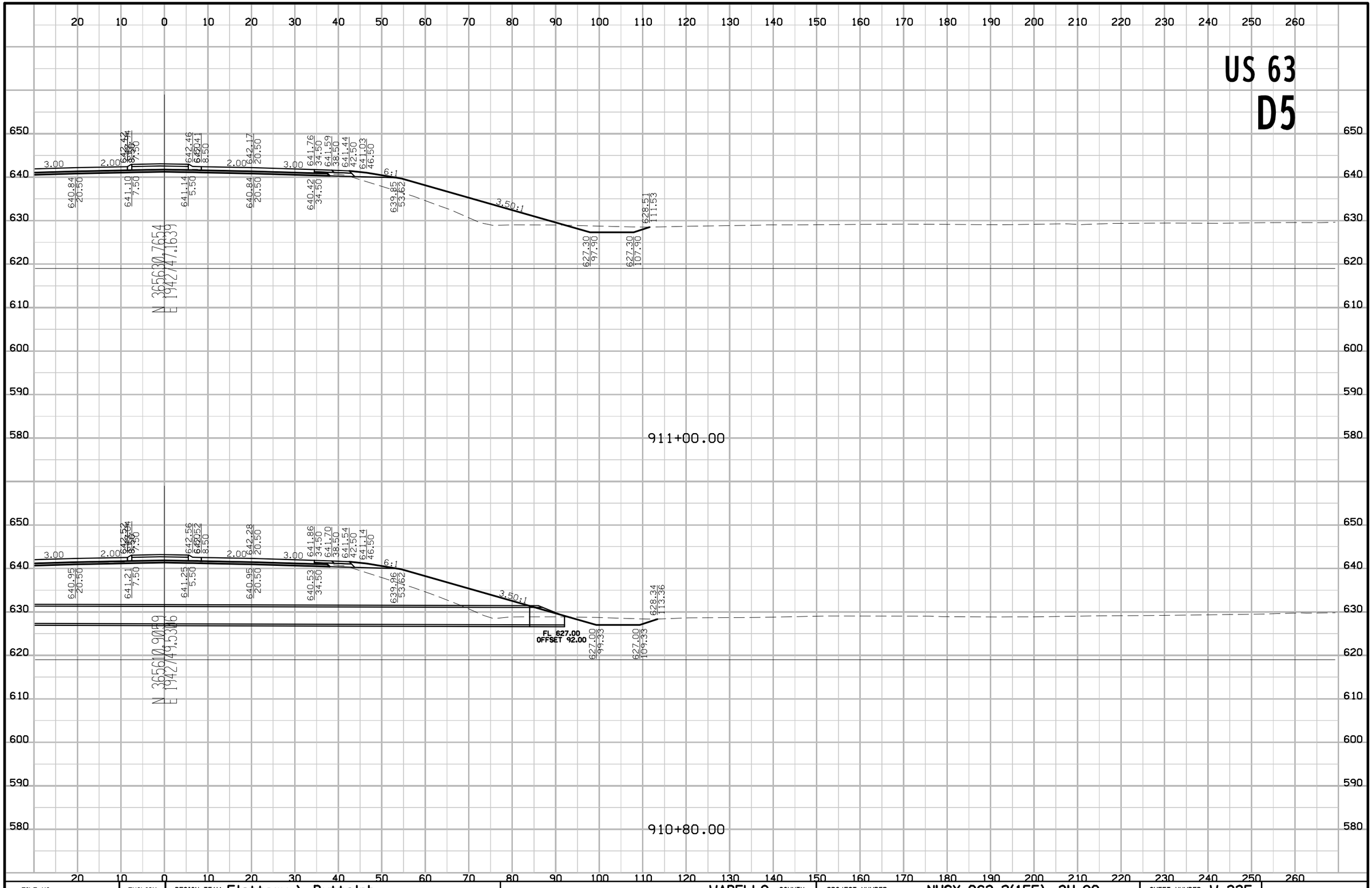
8:57:39 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.334

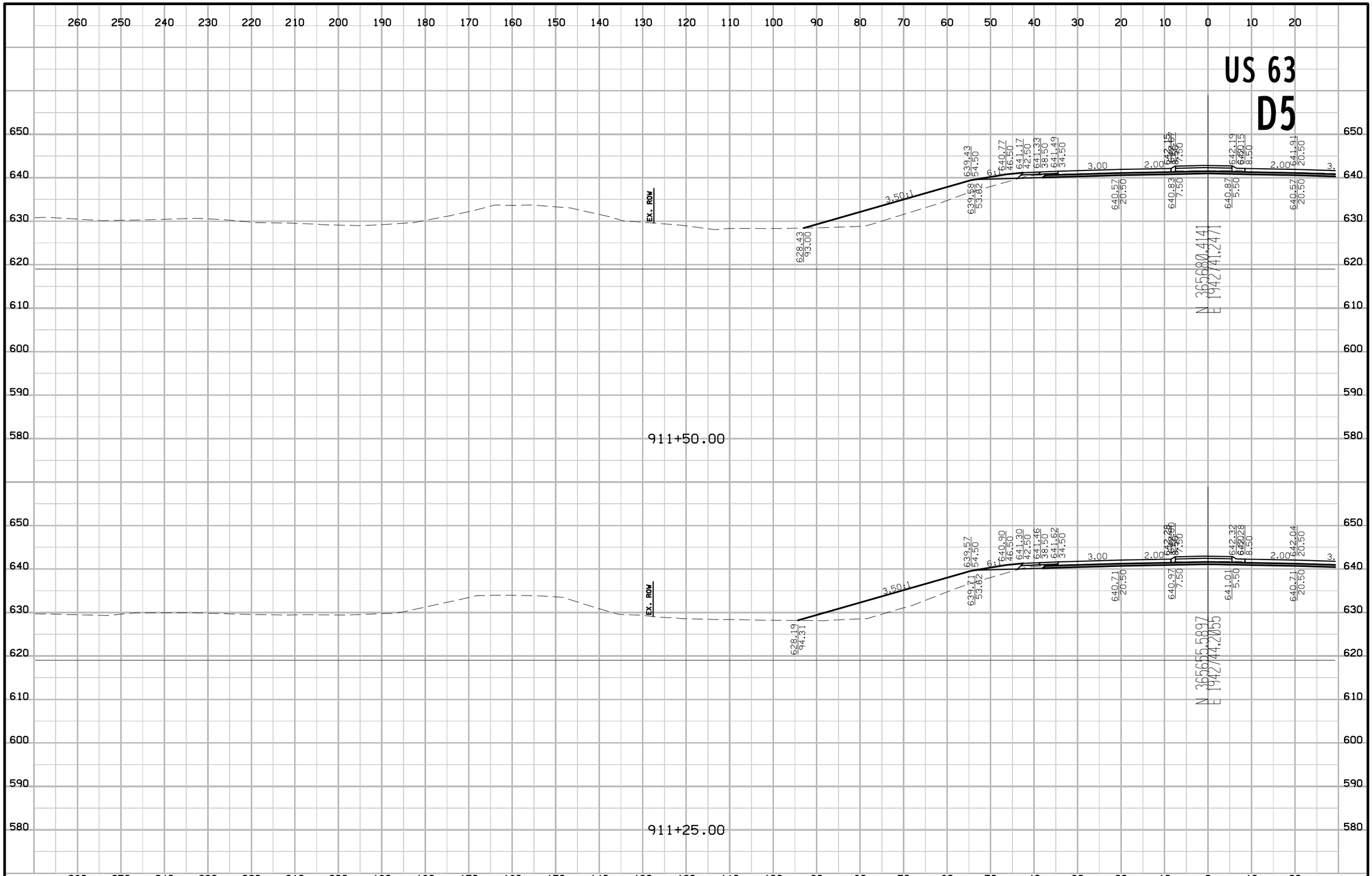
8:57:41 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.335

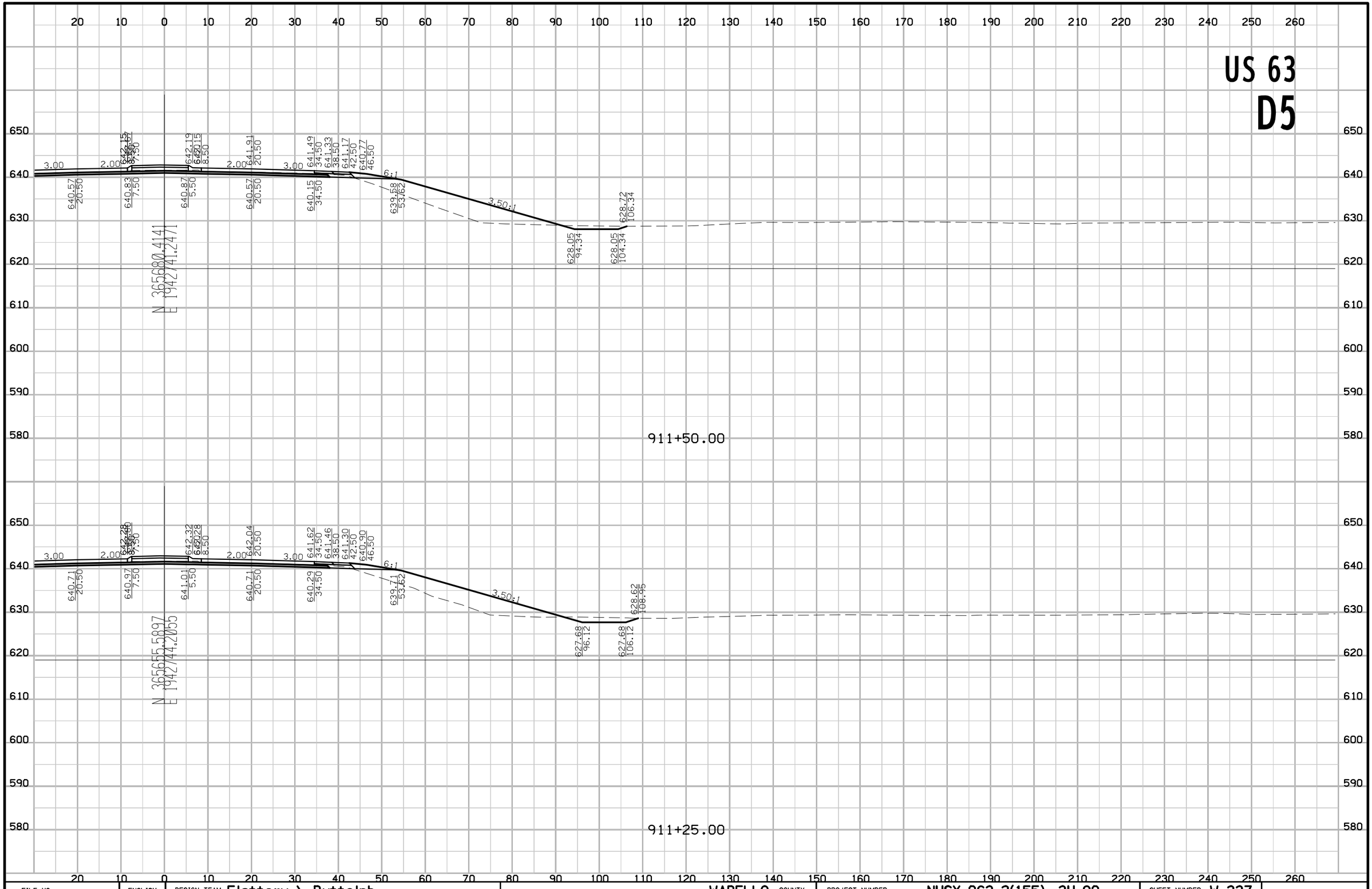
8:57:43 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.336

8:57:44 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

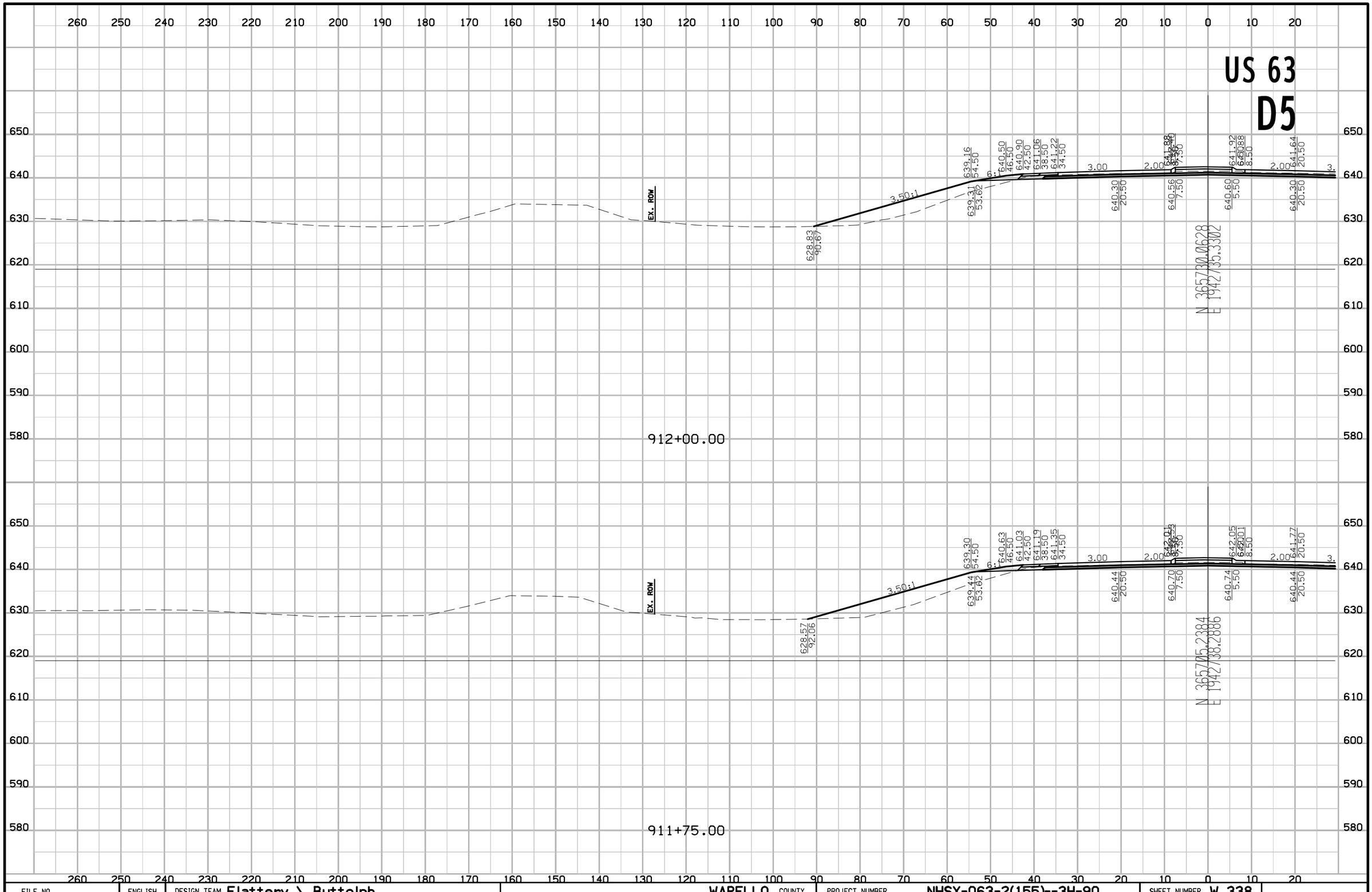
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.337

8:57:46 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

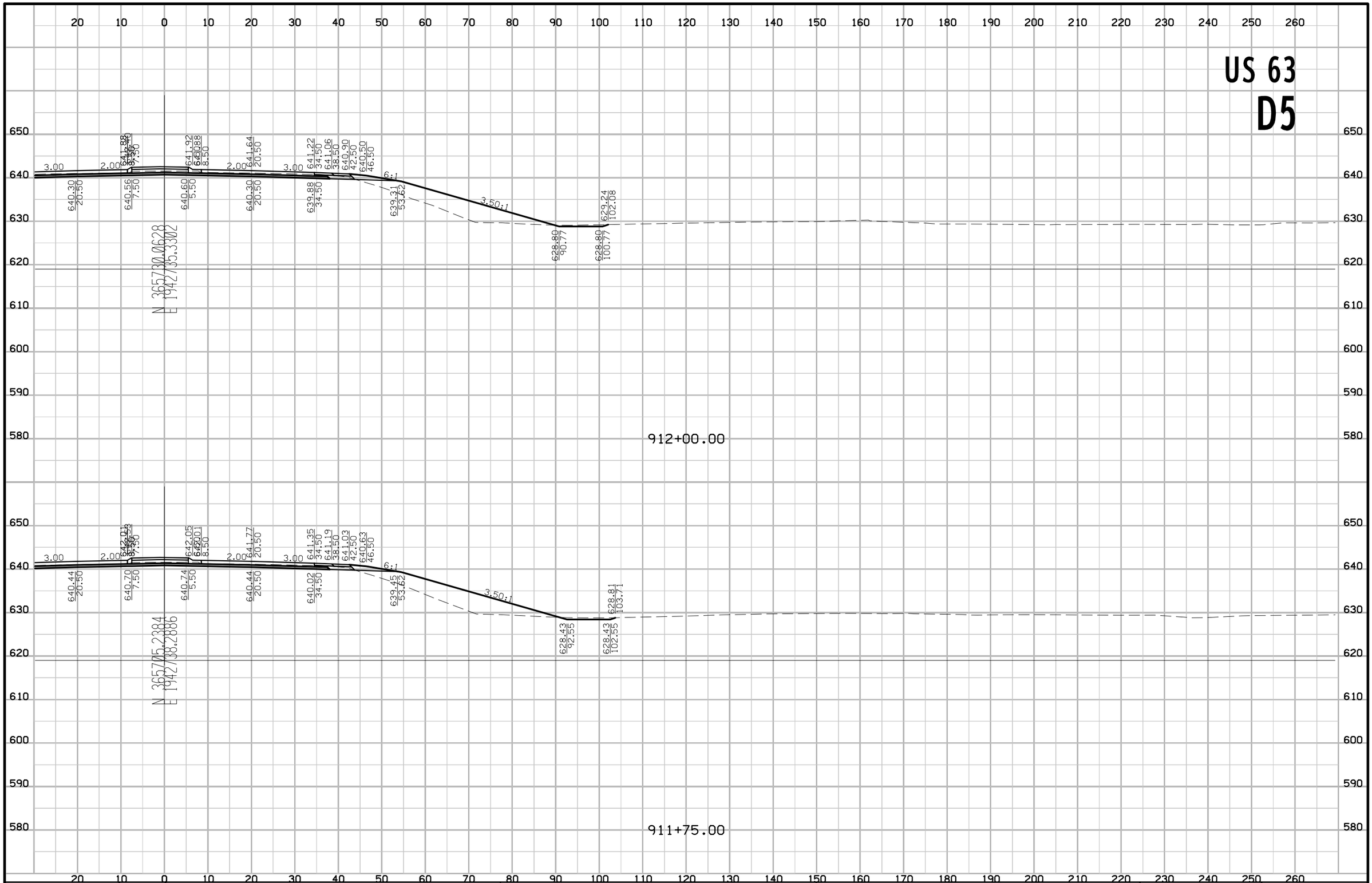
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.338

8:57:48 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

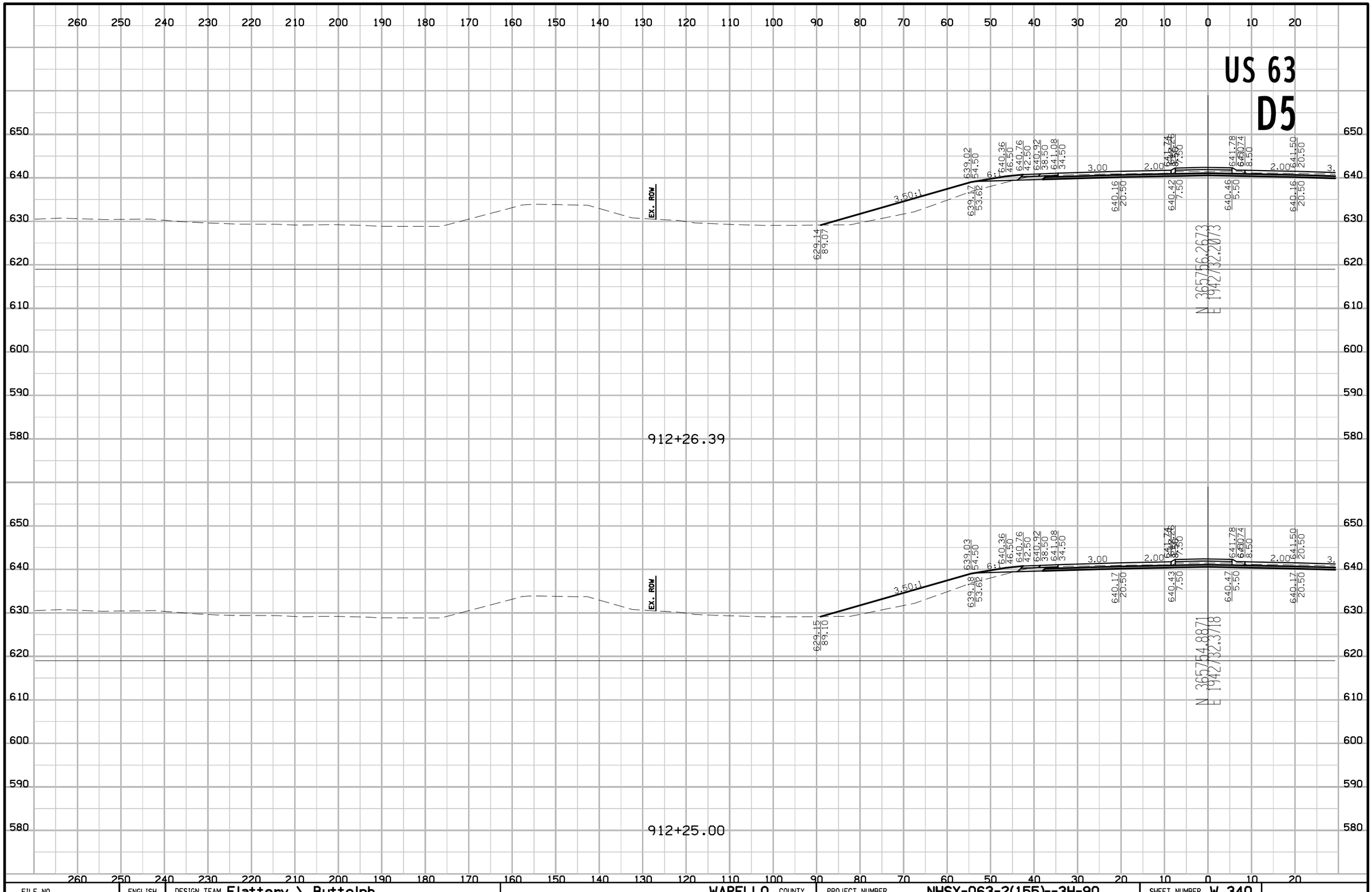
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.339

8:57:50 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

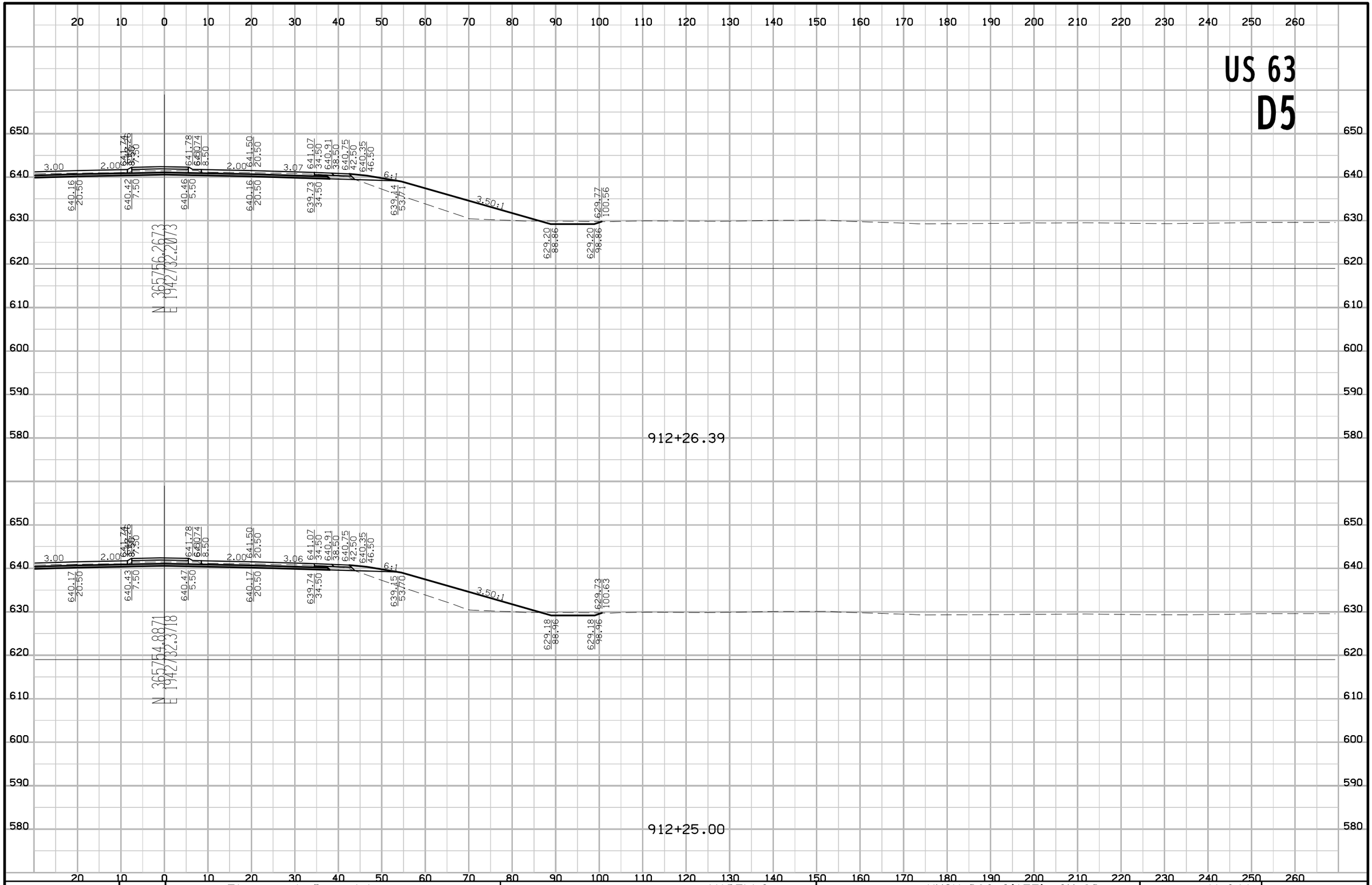
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.340

8:57:51 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

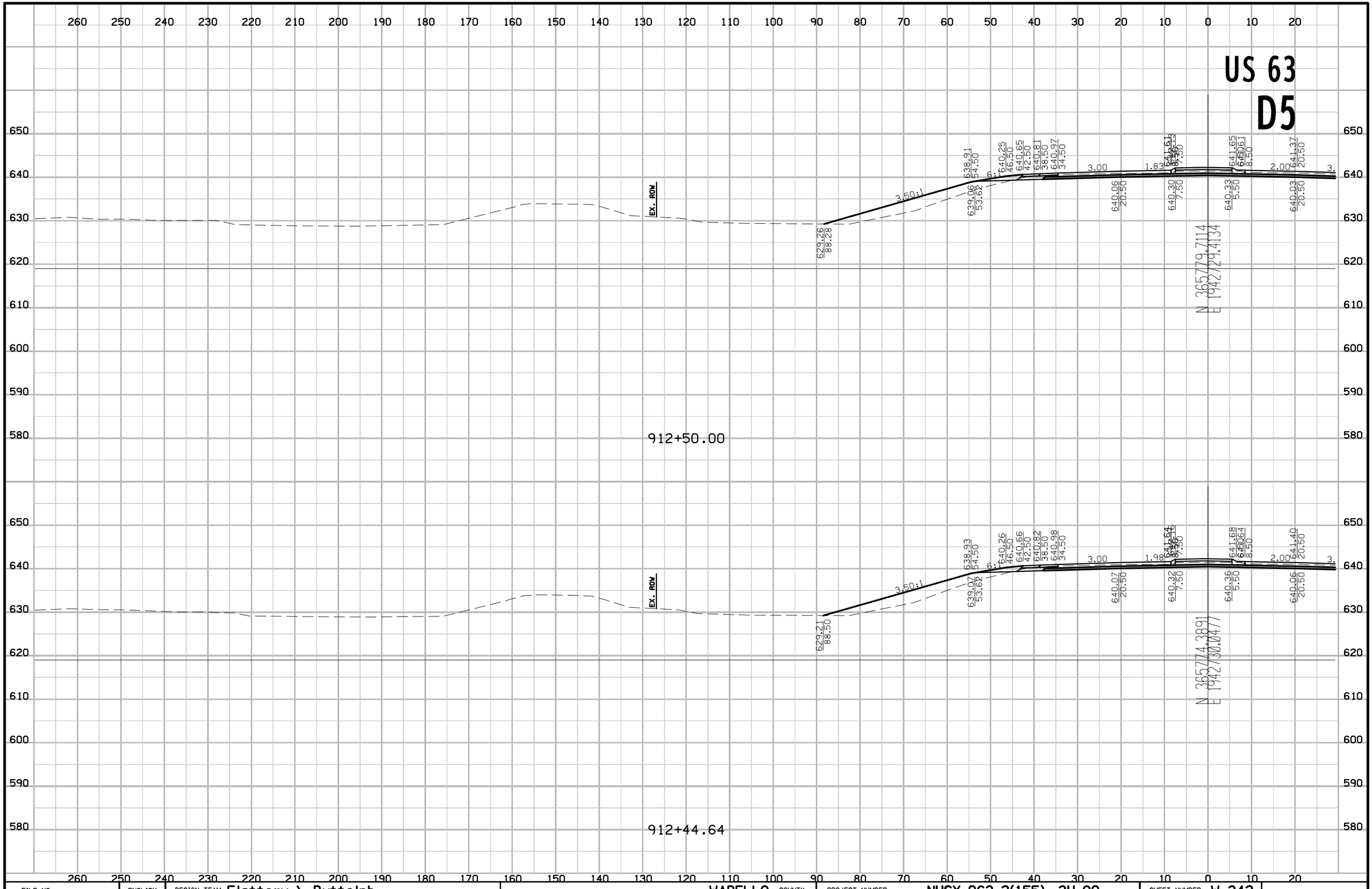
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.341

8:57:53 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

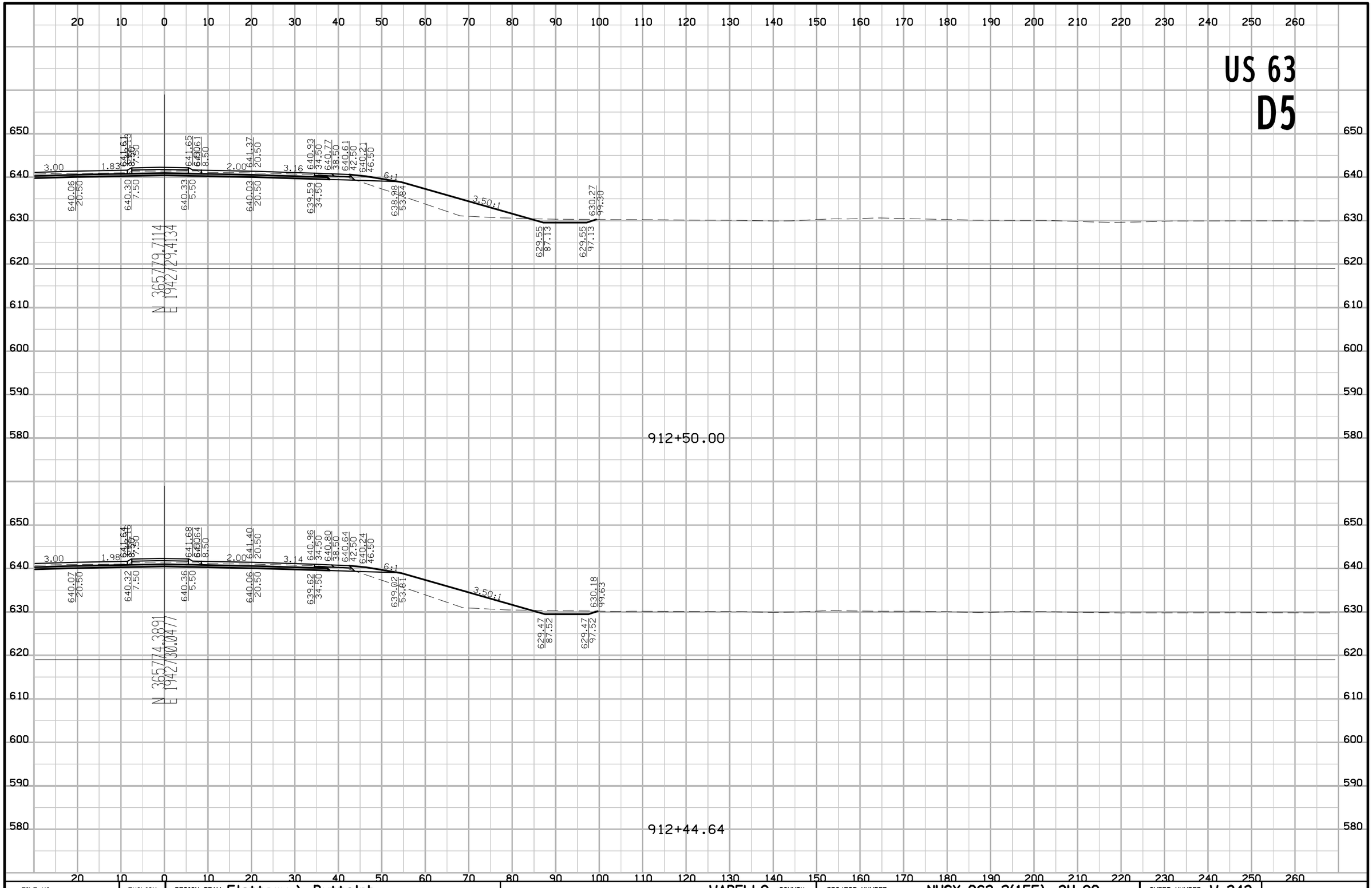
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.342

8:57:55 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

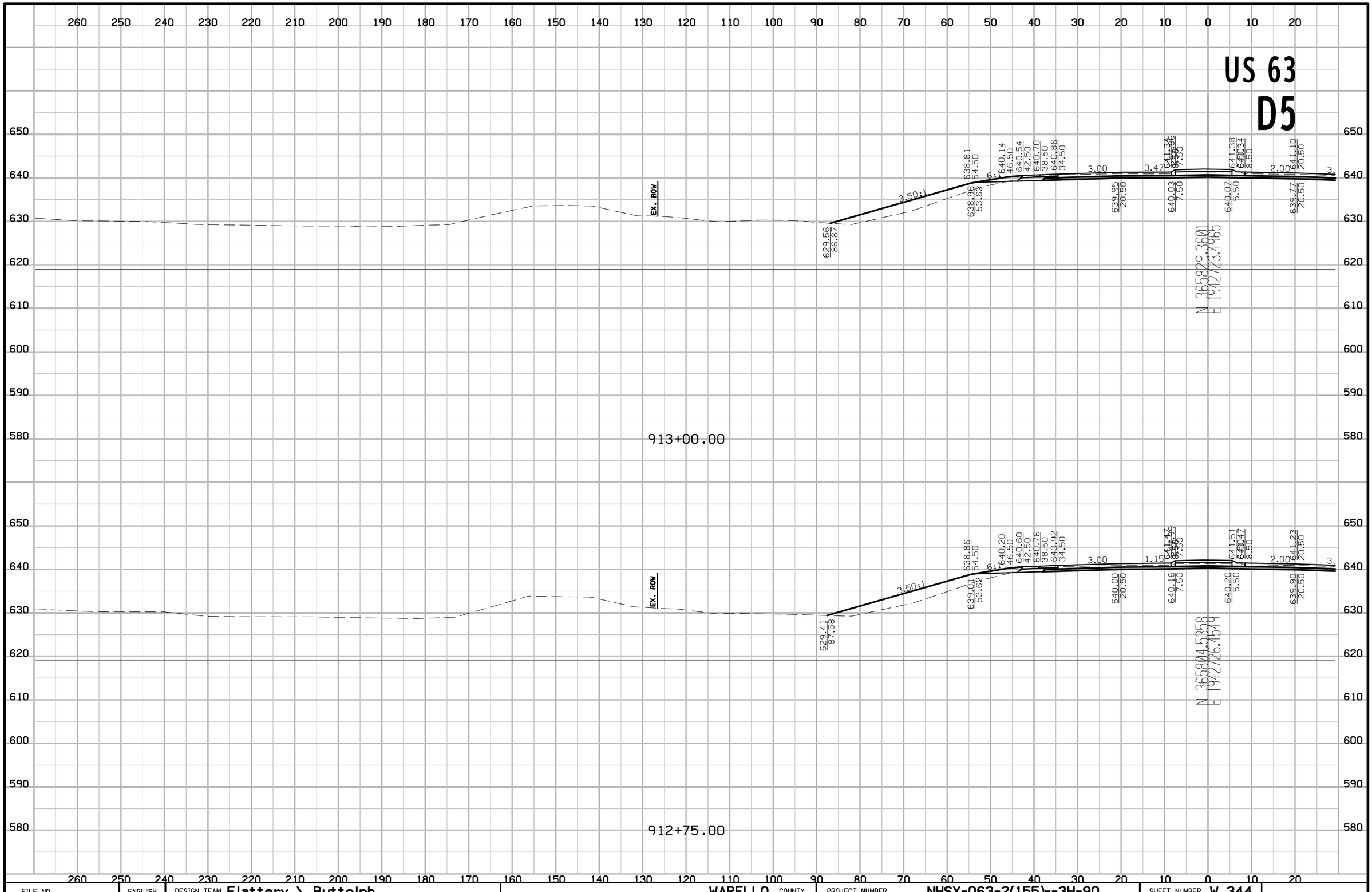
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.343

8:57:57 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

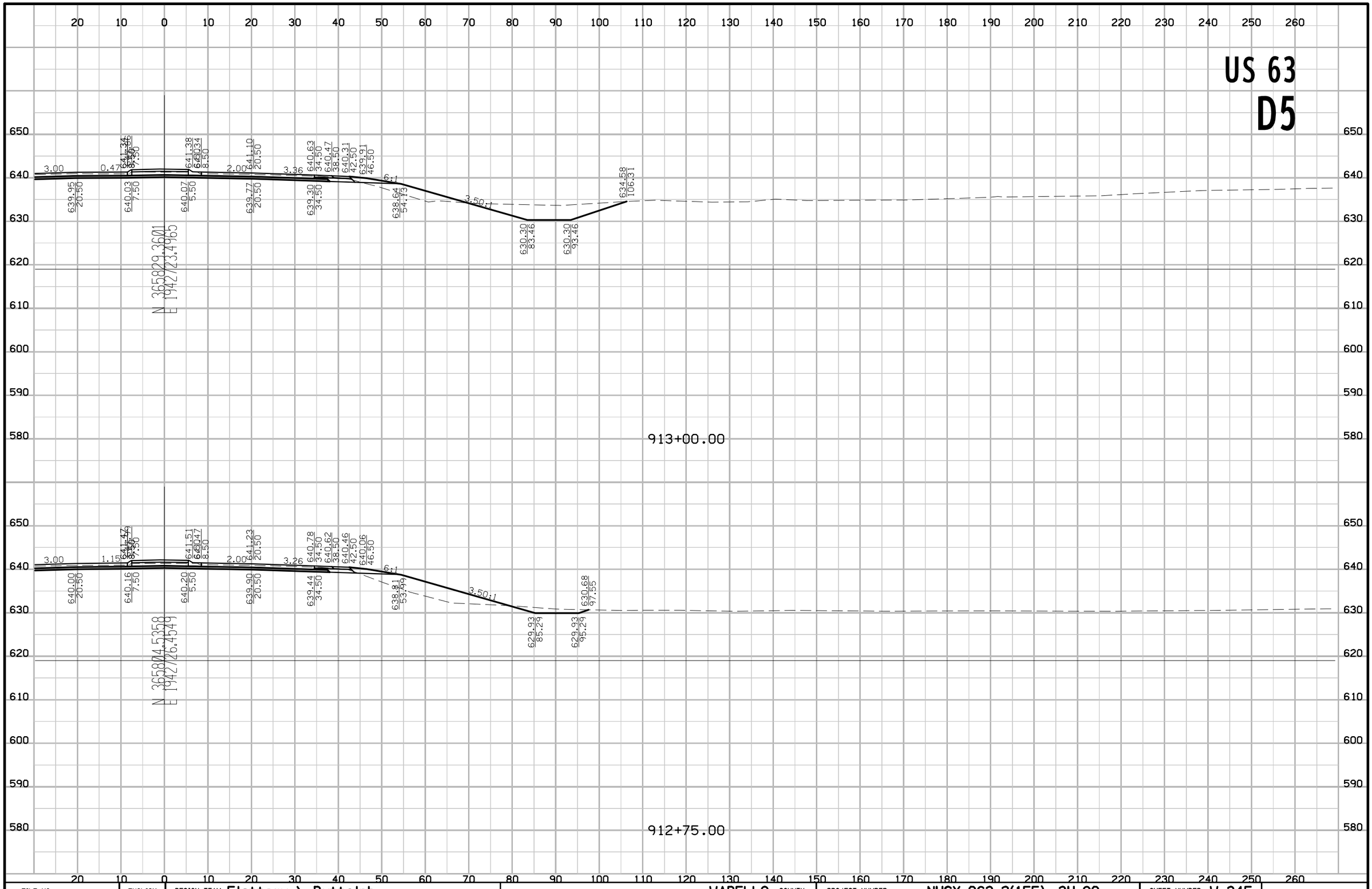
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.344

8:57:58 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

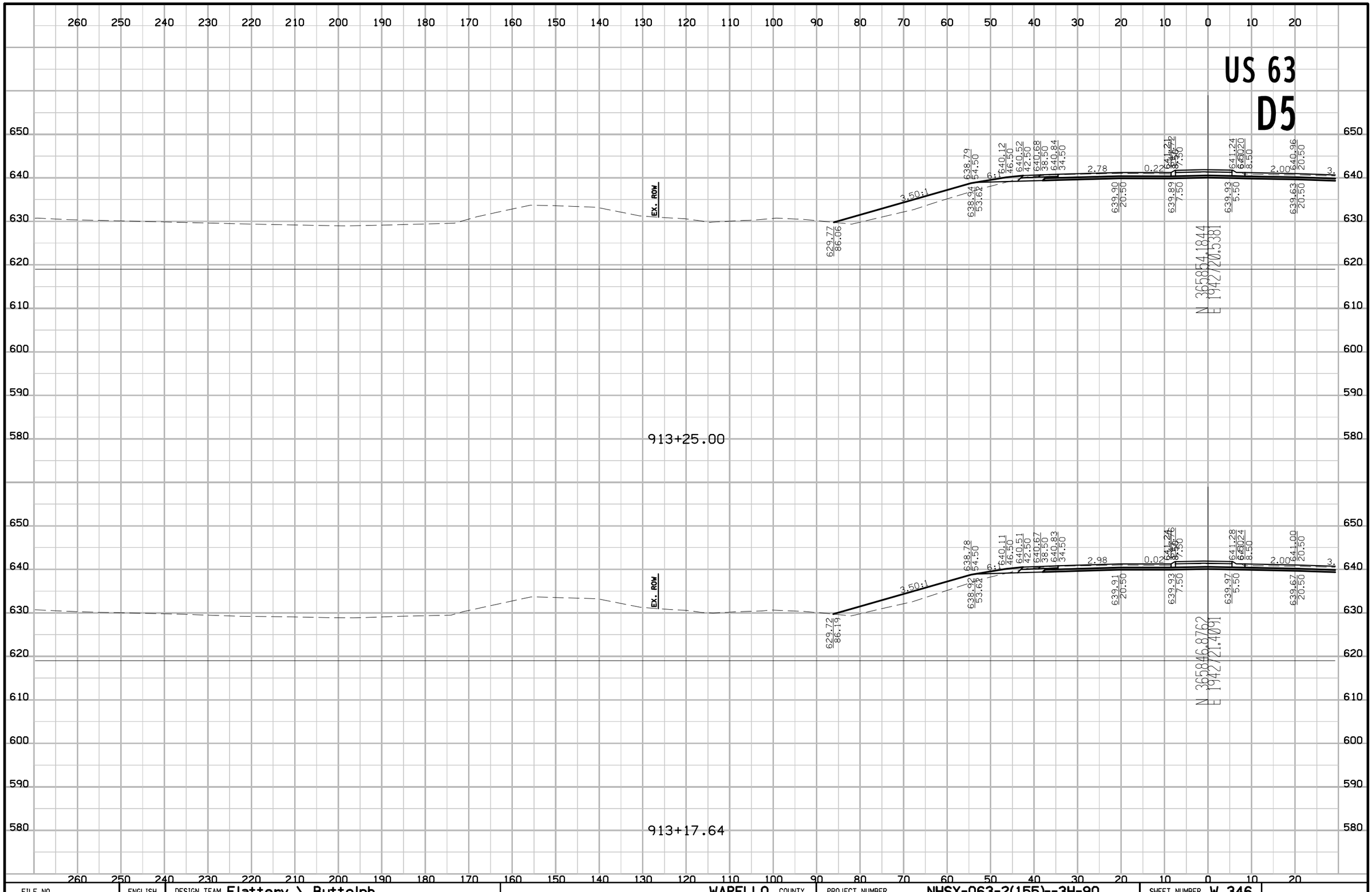
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.345

8:58:00 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

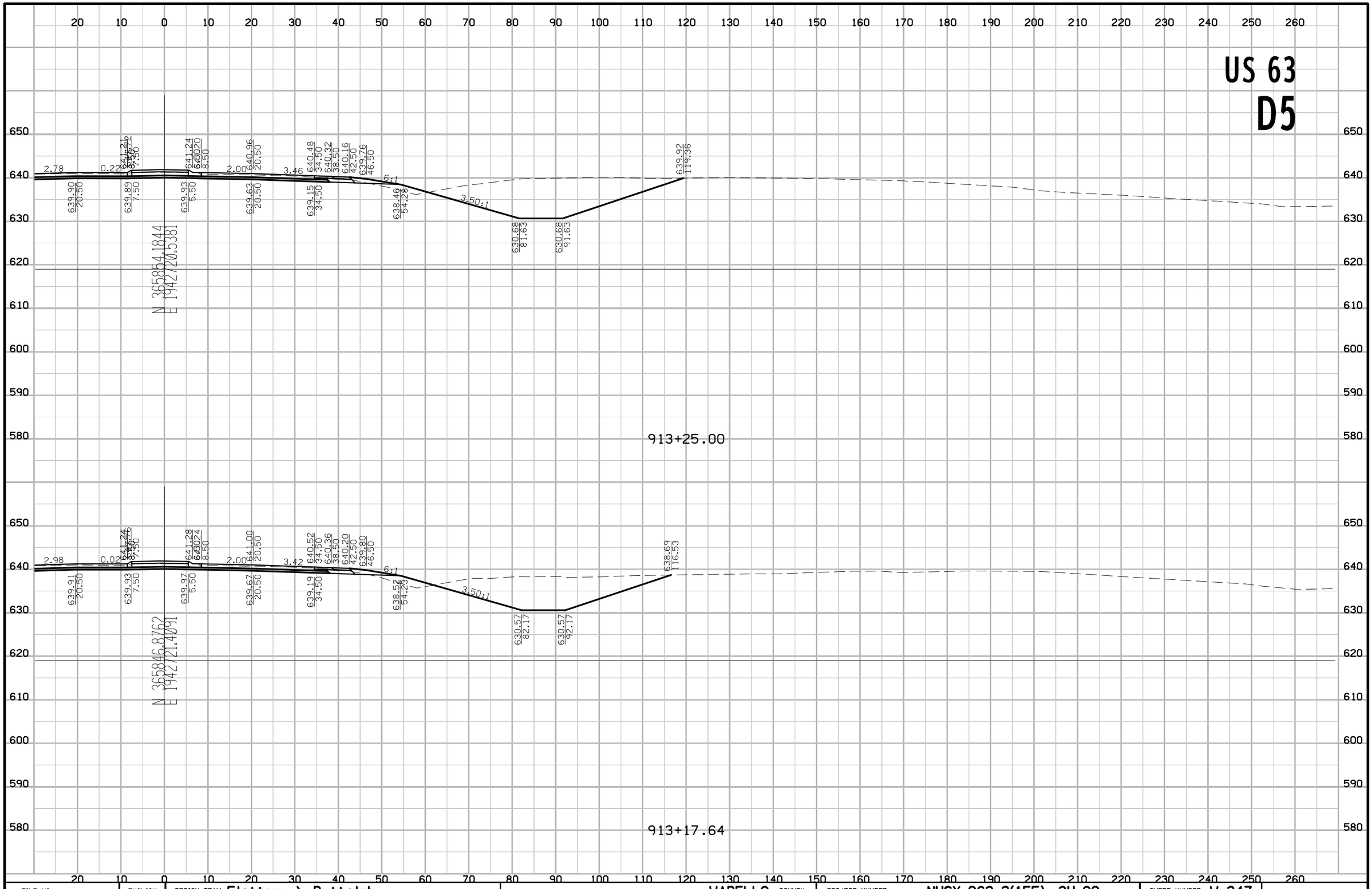
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.346

8:58:02 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

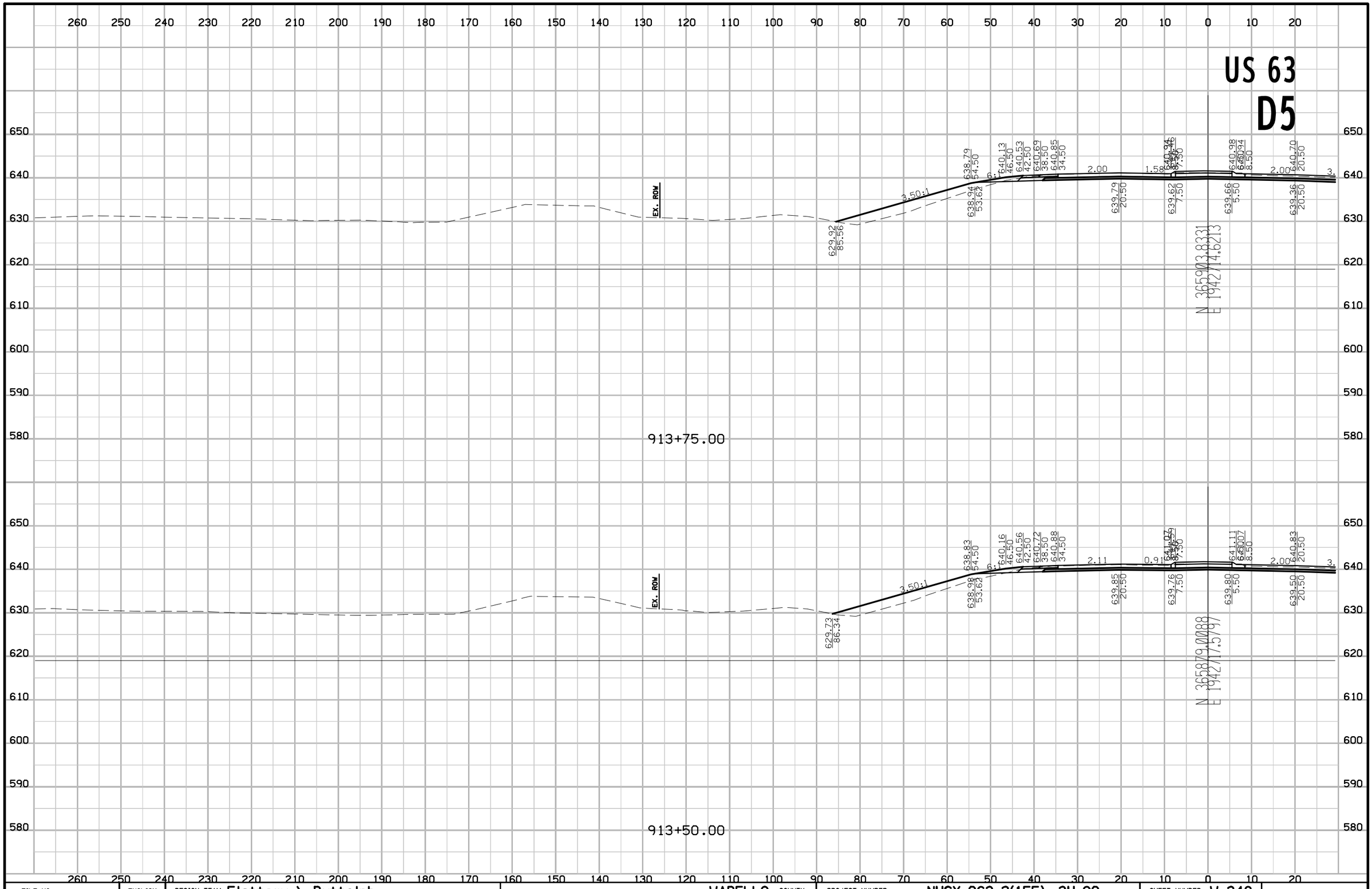
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.347

8:58:04 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

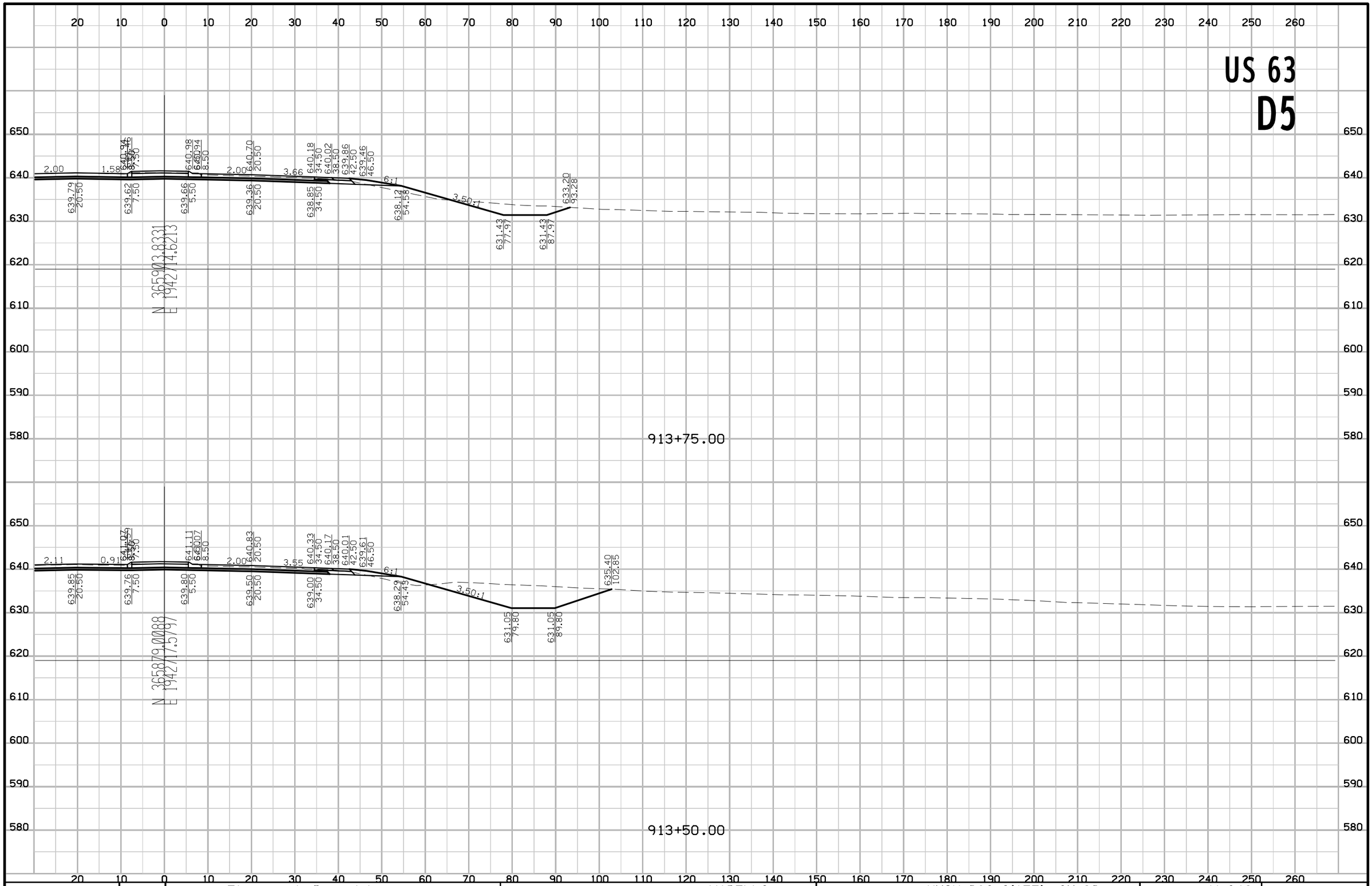
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.348

8:58:05 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

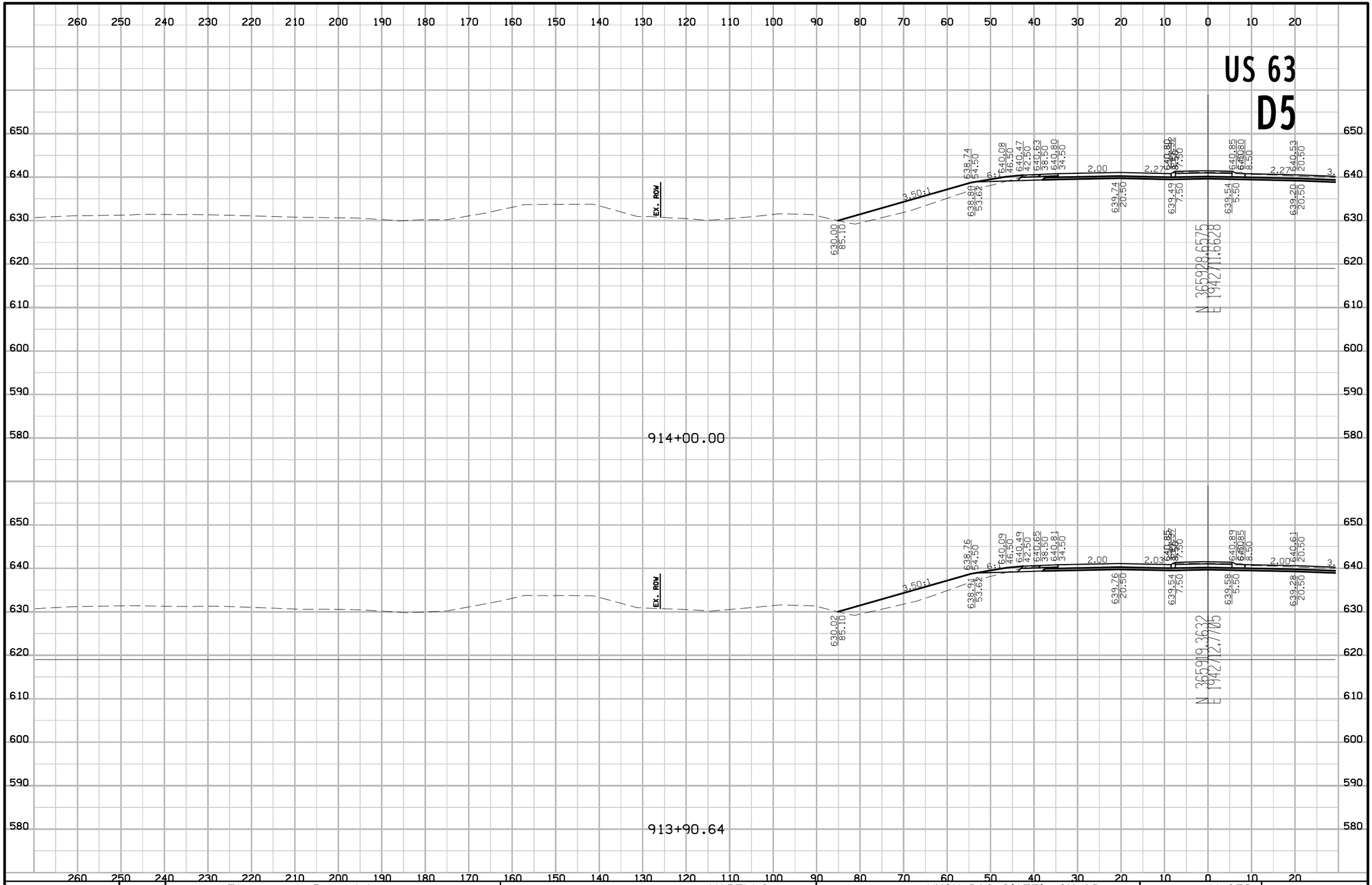
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.349

8:58:07 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

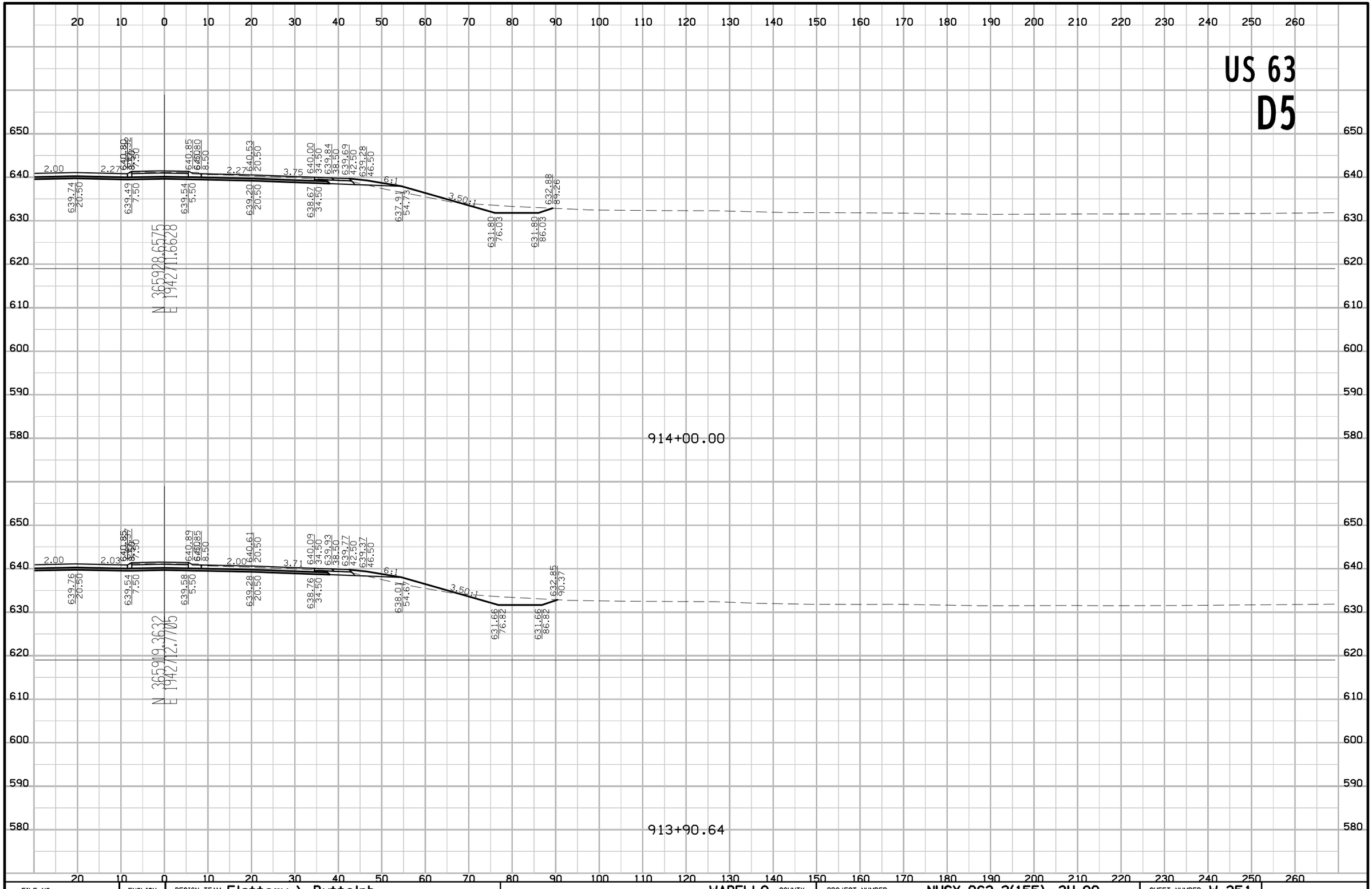
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.350

8:58:09 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

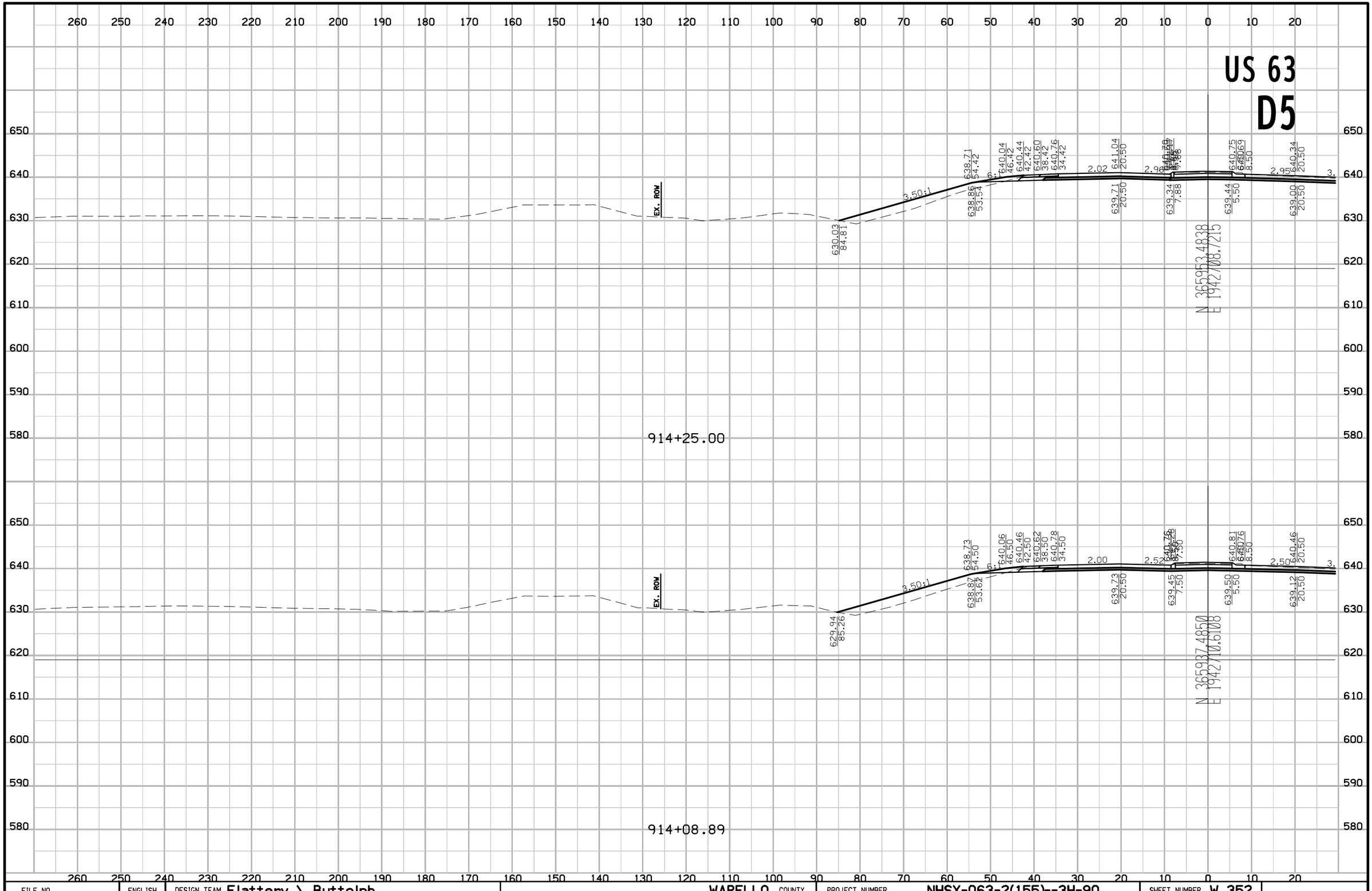
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.351

8:58:11 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

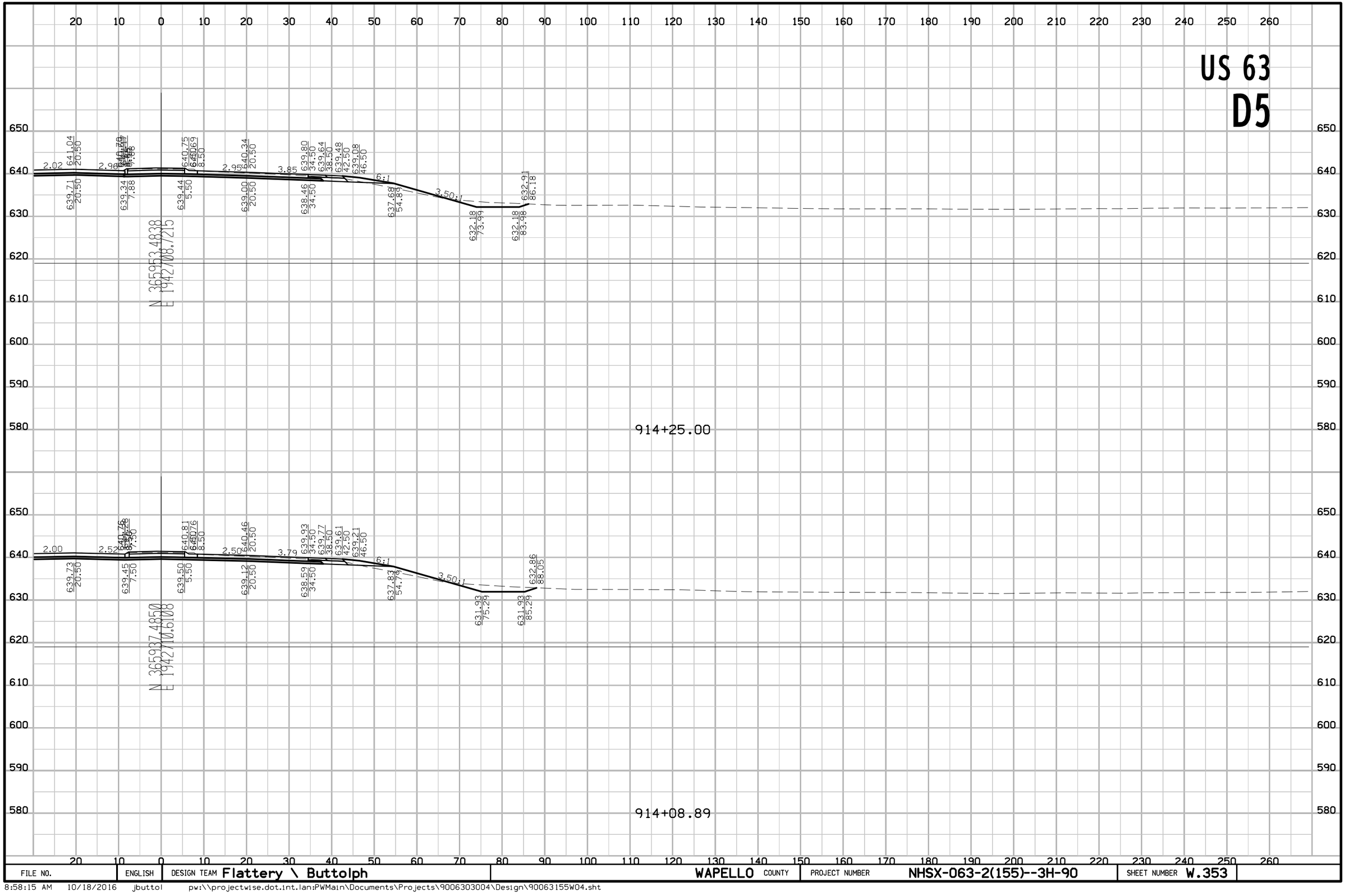
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.352

8:58:13 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

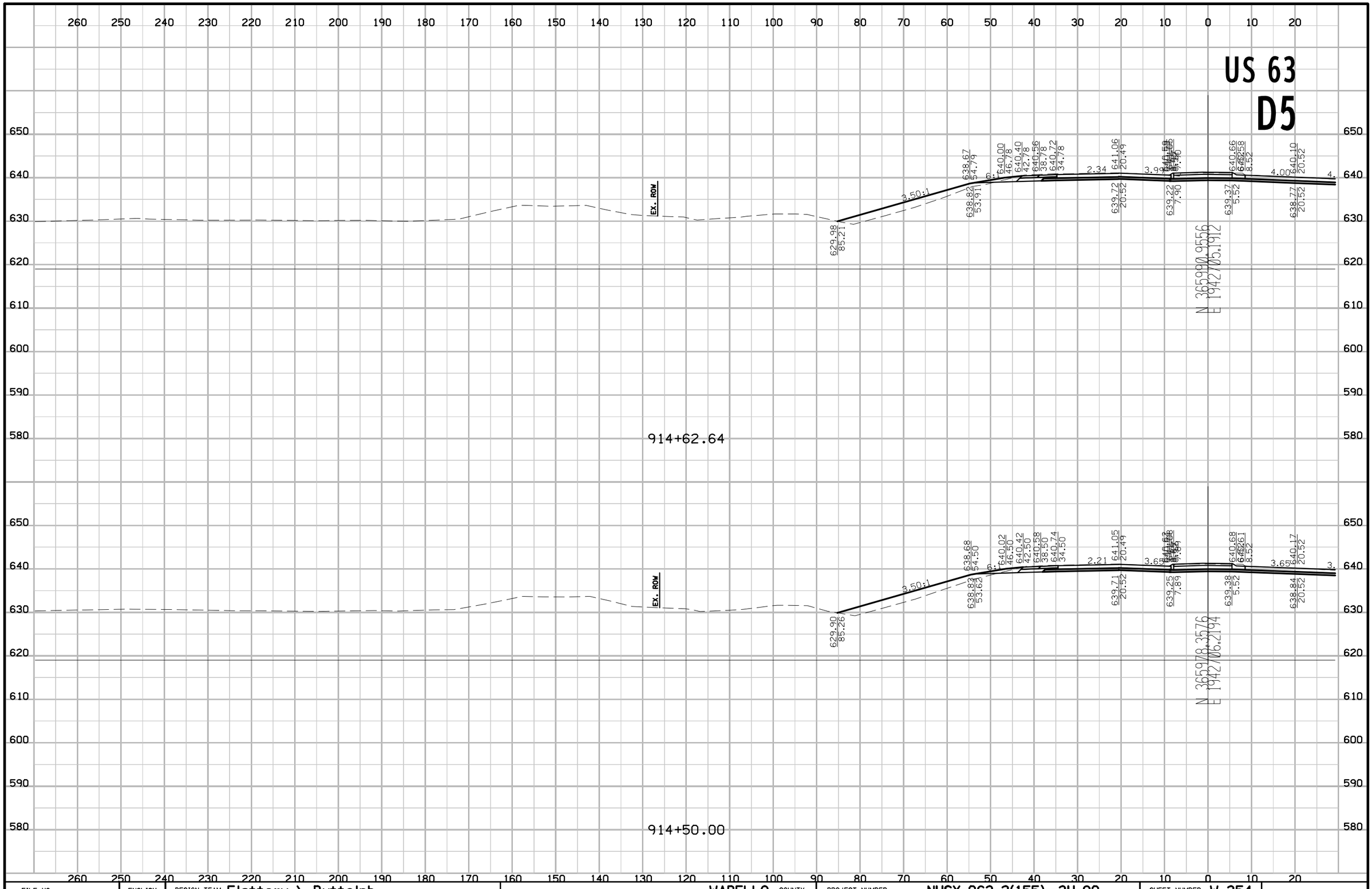
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.353

8:58:15 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

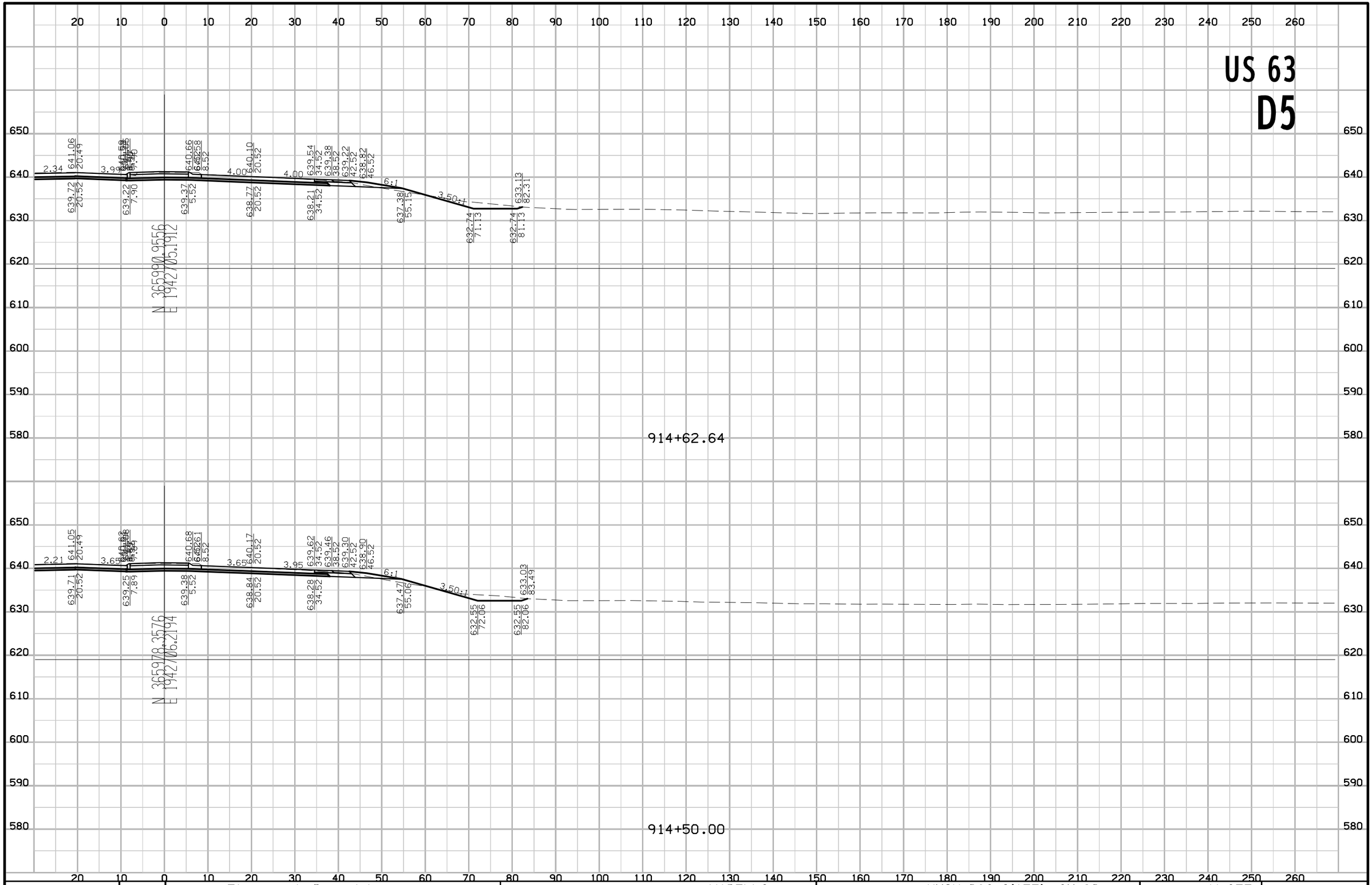
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.354

8:58:17 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

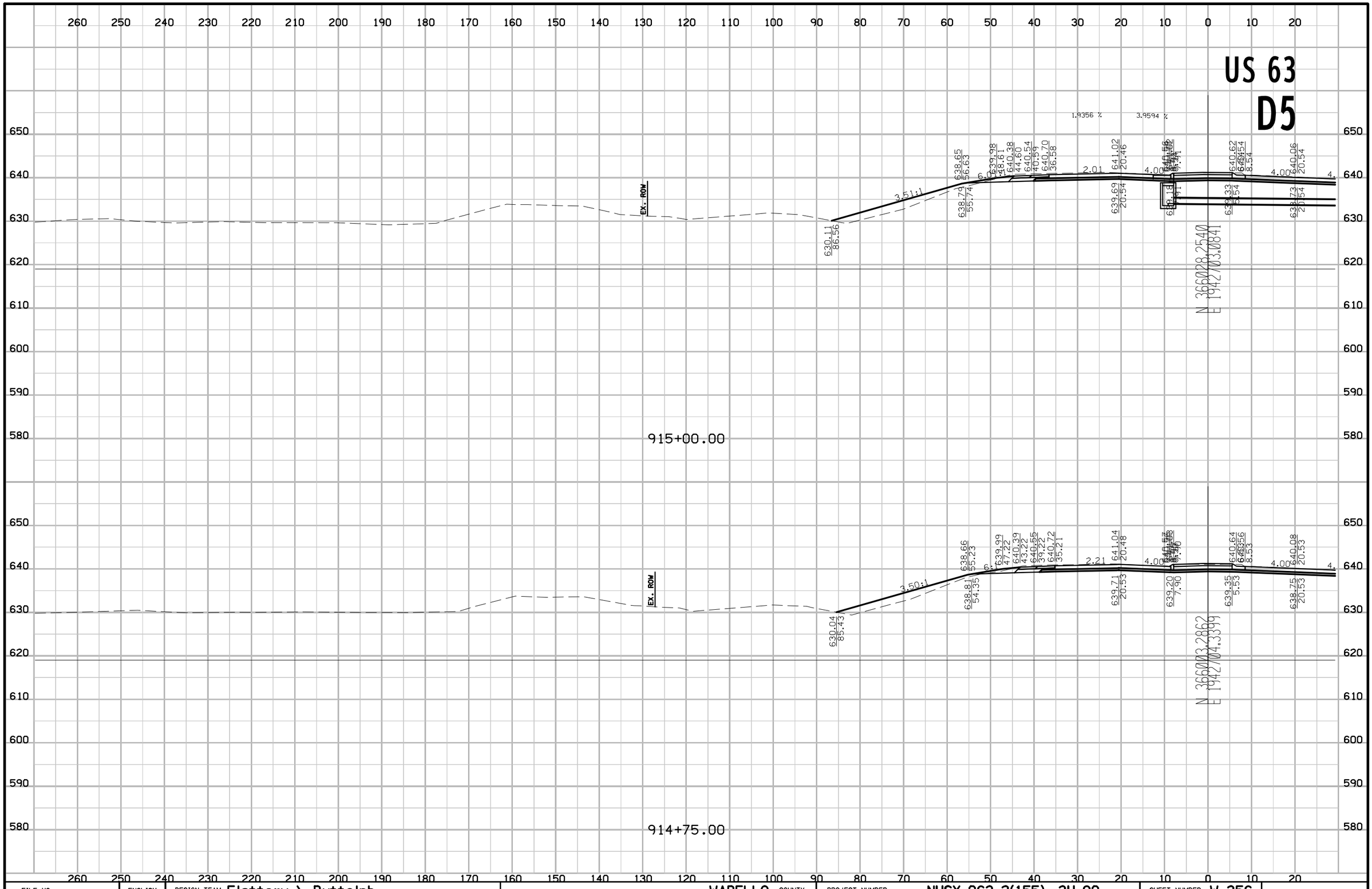
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.355

8:58:19 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

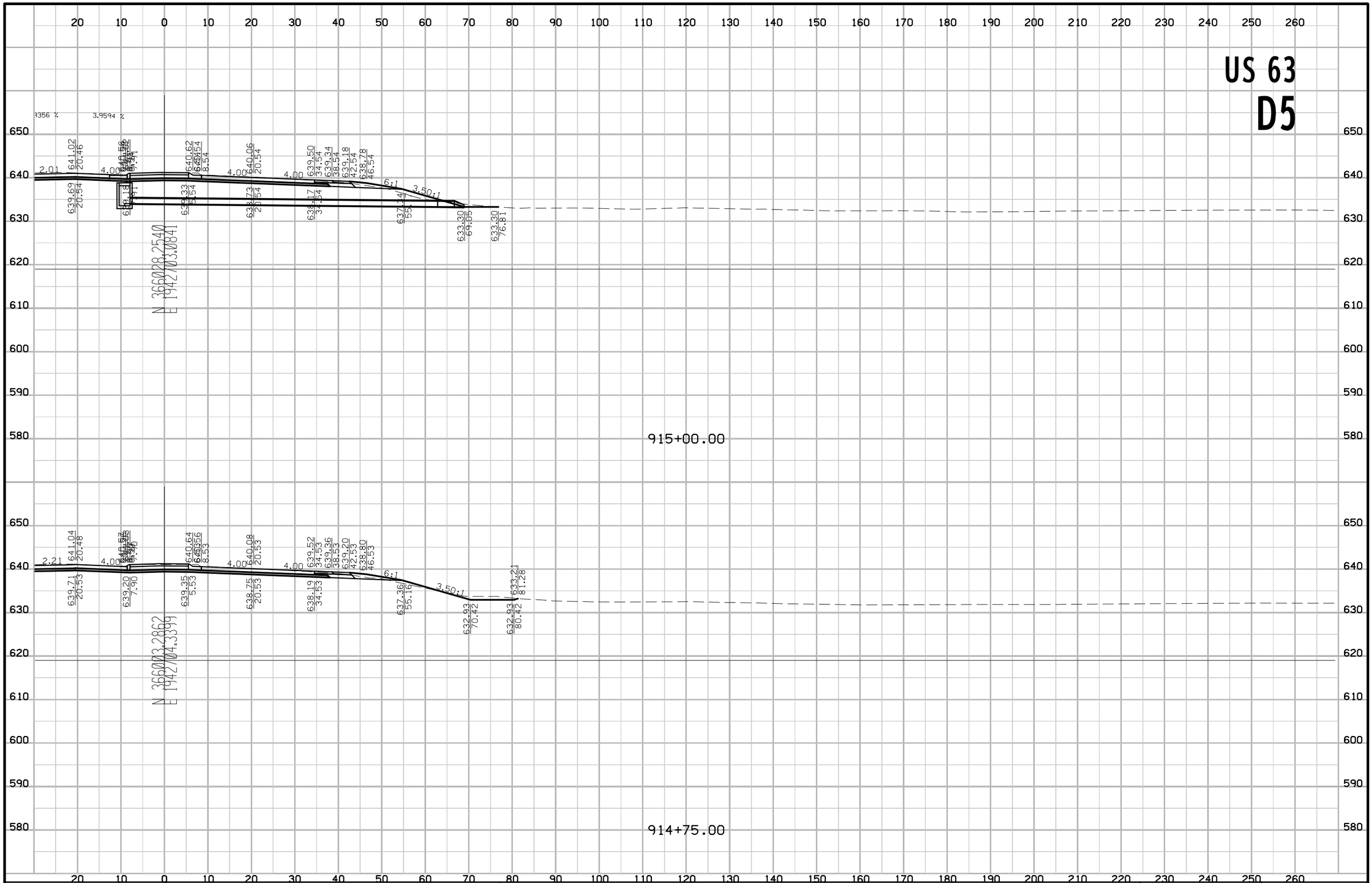
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.356

8:58:21 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

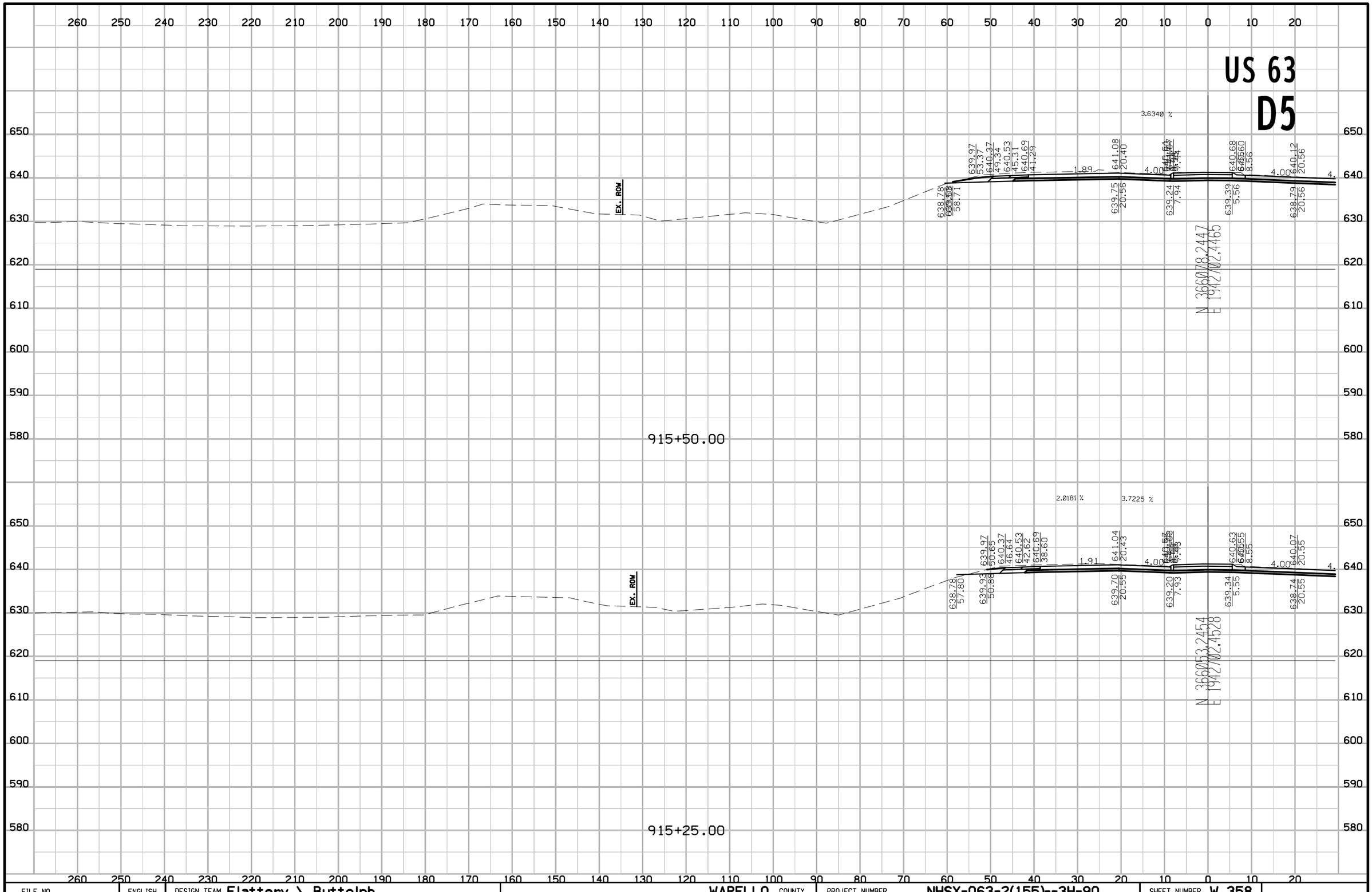
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.357

8:58:23 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

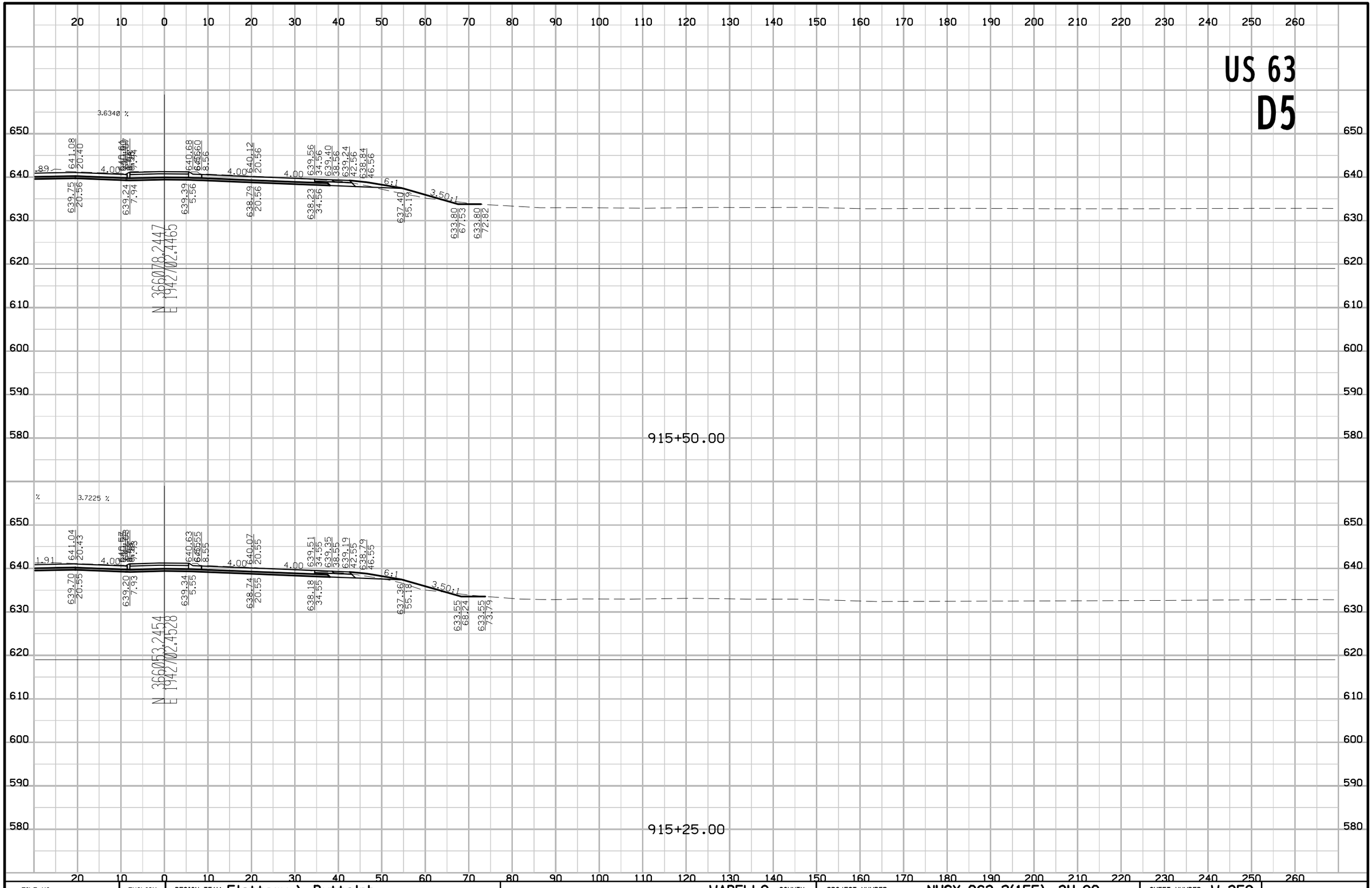
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.358

8:58:24 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.359

8:58:26 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63

D5

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

650 640 630 620 610 600 590 580

EX. ROW

916+00.00

3.7078 %

639.99
61.01
640.39
56.95
640.55
52.89
640.71
48.81
641.08
27.47
639.93
20.58
639.43
7.96
640.86
5.58
638.97
20.58
638.80
68.25
639.44
64.37

N 366128.2048
E 1942704.3081

915+75.00

3.7351 %

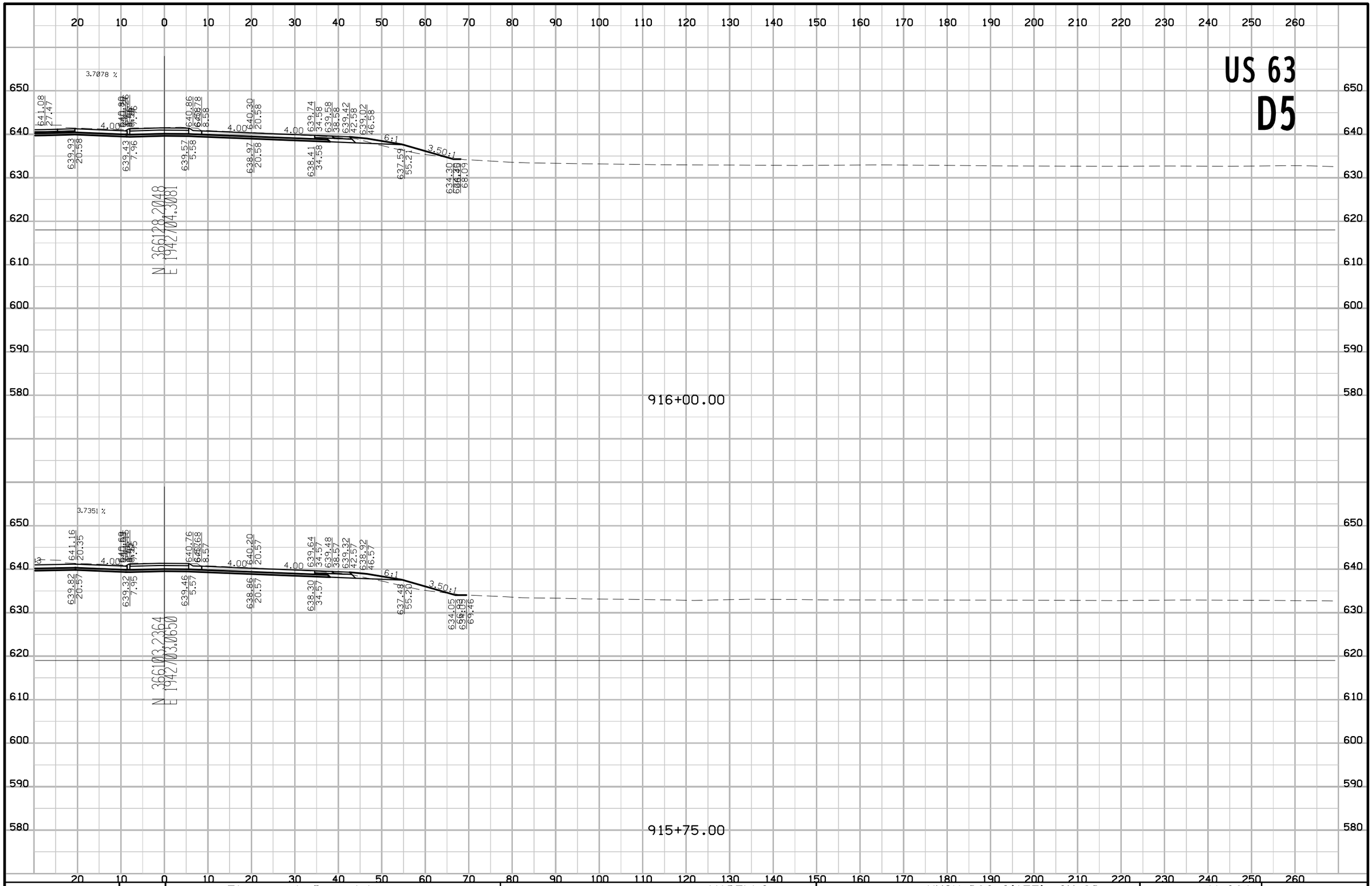
639.97
56.76
640.37
52.72
640.53
48.68
640.69
44.64
641.16
20.35
639.82
20.57
639.32
7.95
640.76
5.57
640.20
20.57
638.79
63.95
639.40
60.23

N 366103.2364
E 1942703.0650

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.360

8:58:28 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.361

8:58:30 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

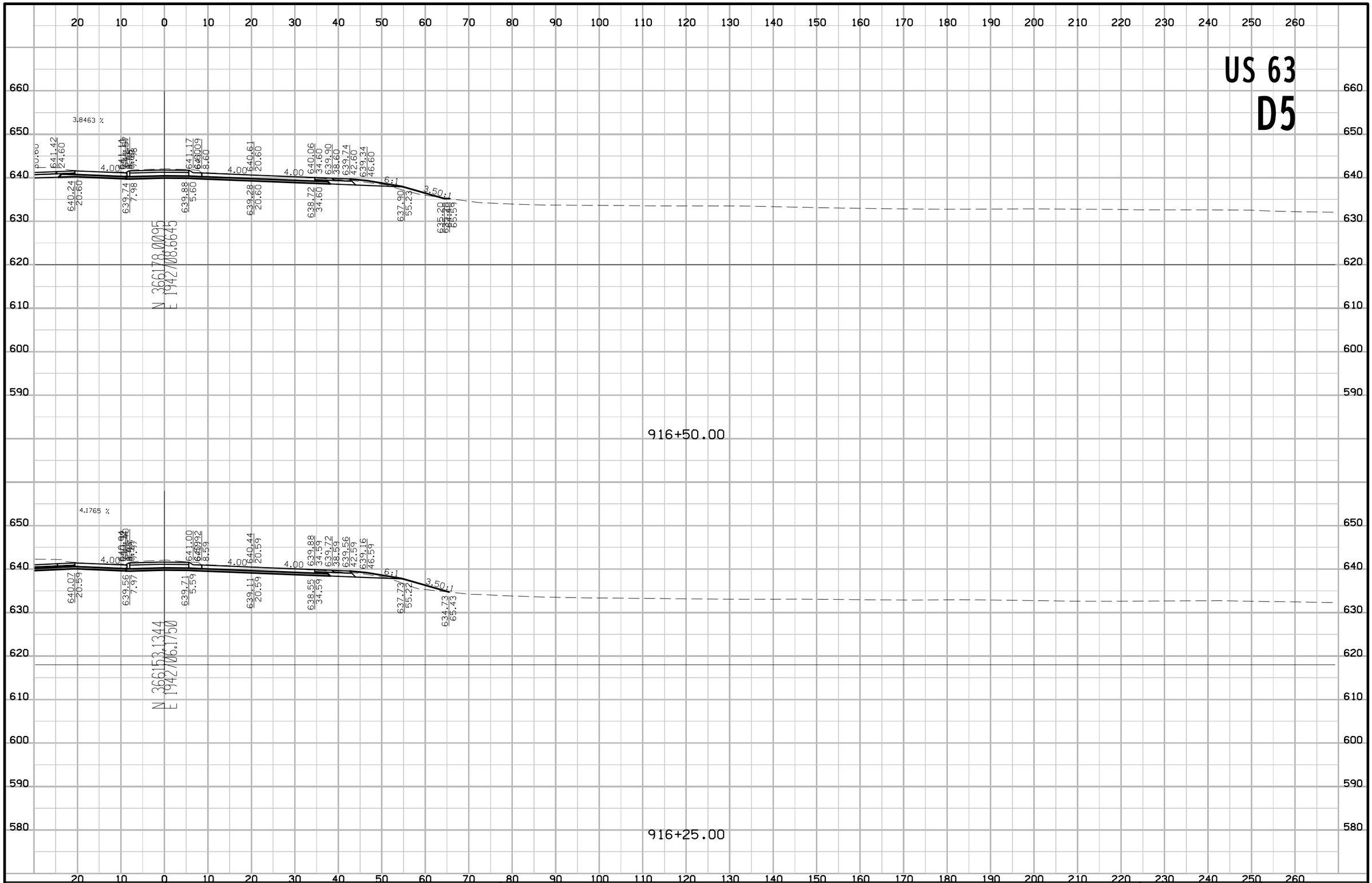
US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.362

8:58:31 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.363

8:58:33 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63
D5

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

660 650 640 630 620 610 600 590

EX. ROW

641.02
53.87

639.94
50.61

639.78
40.61

640.94
40.61

641.34
34.61

641.58
30.61

641.58
24.61

640.40
20.61

639.94
7.99

641.37
5.61

640.86
20.61

639.52
20.61

3.4772 %

N 366202.8146
E 1942711.7749

916+75.00

641.74
56.19

639.88
50.61

639.72
40.61

640.88
40.61

641.28
34.61

641.52
30.61

641.52
24.61

640.35
20.61

639.84
7.98

641.28
5.61

640.72
20.61

639.39
20.61

3.6620 %

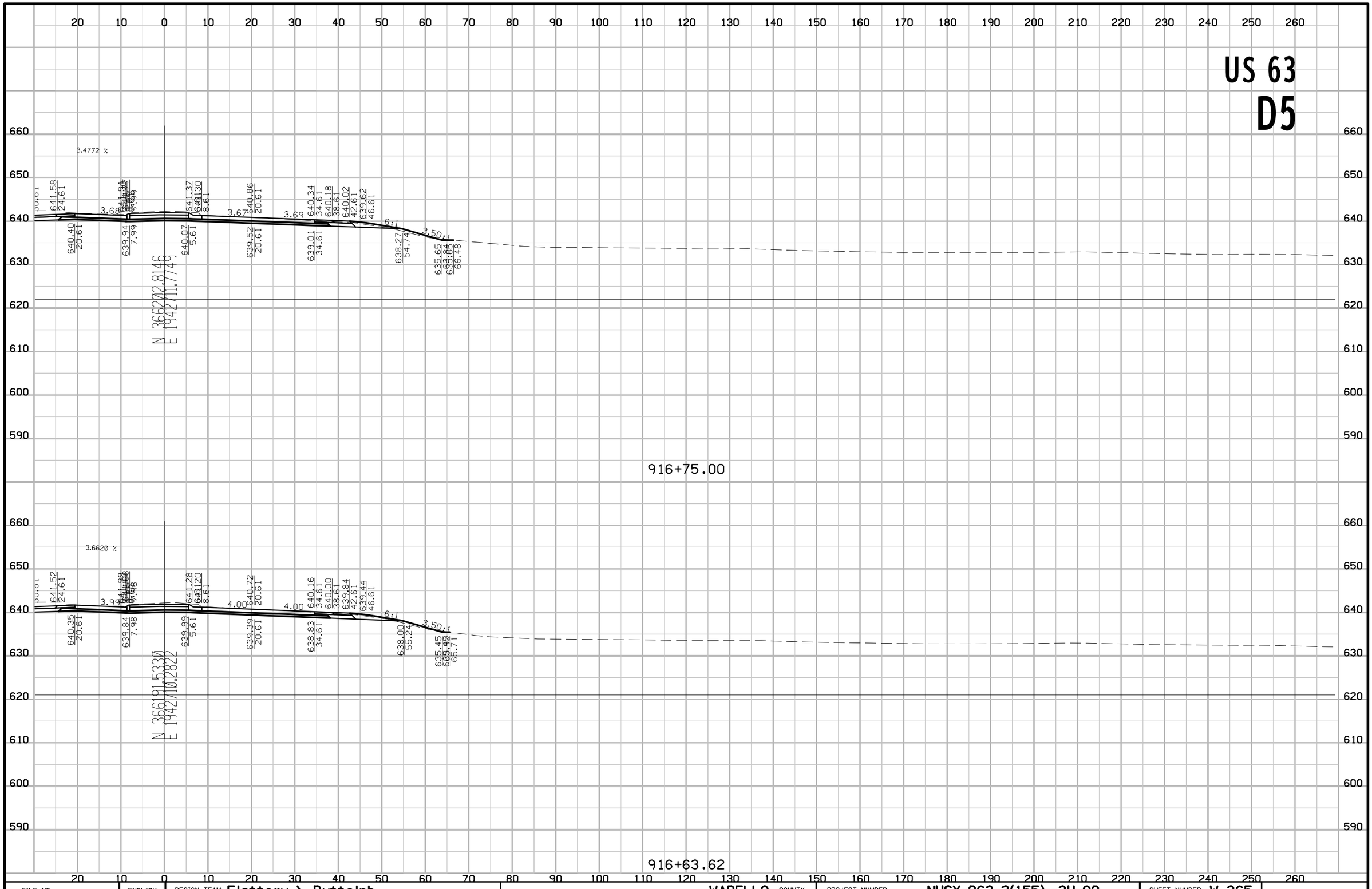
N 366191.5330
E 1942710.2822

916+63.62

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.364

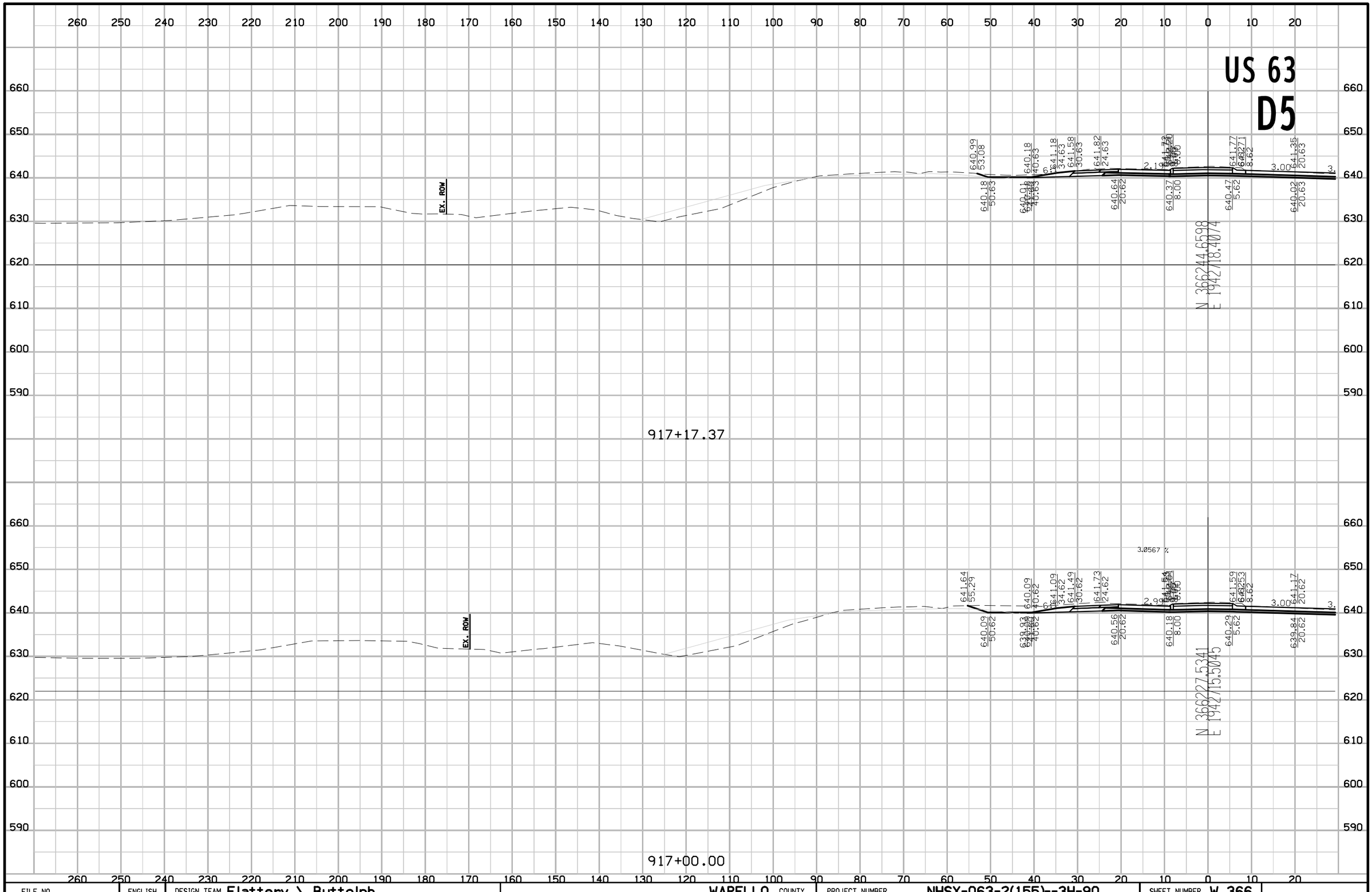
8:58:35 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.365

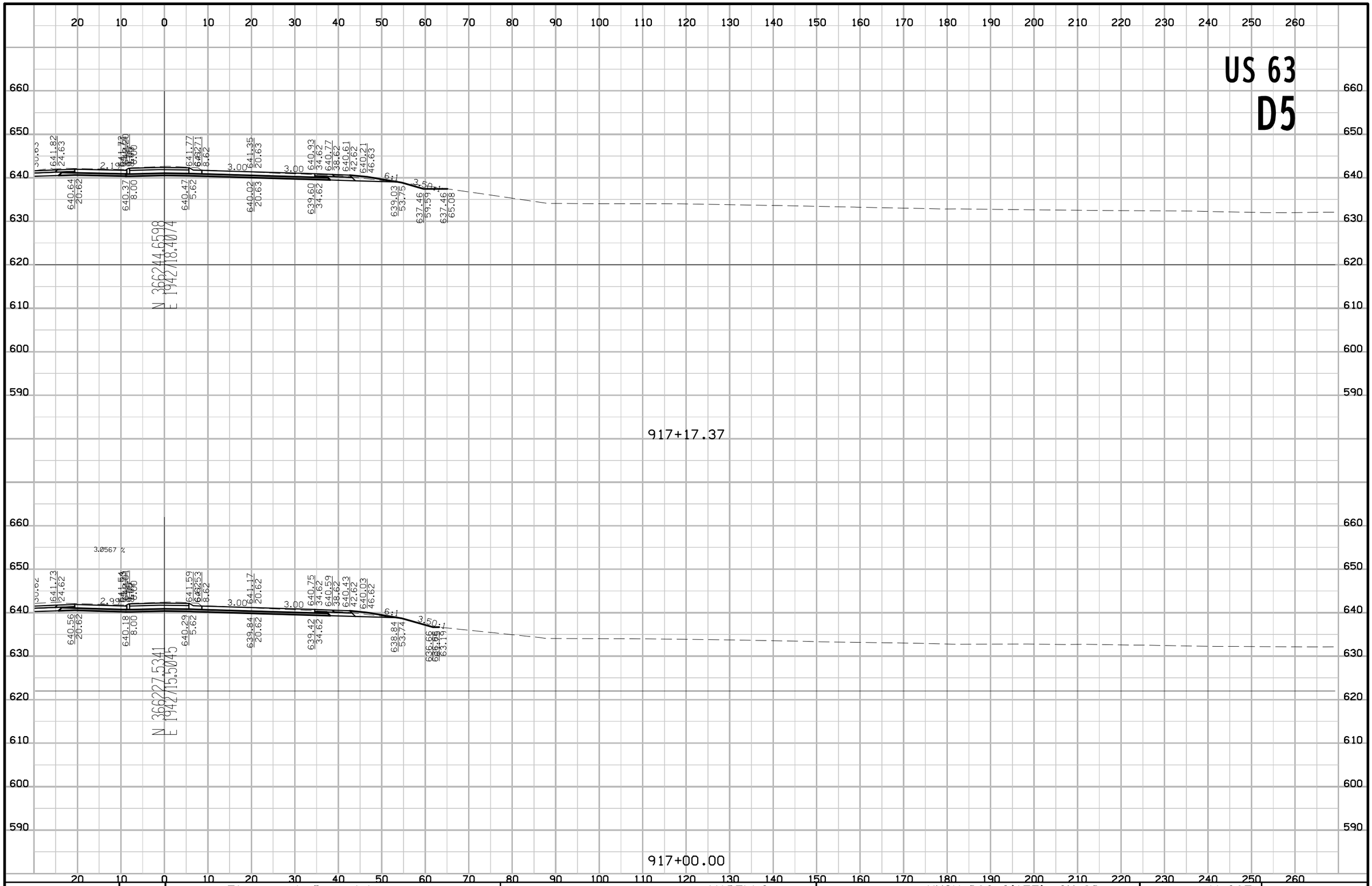
8:58:37 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.366

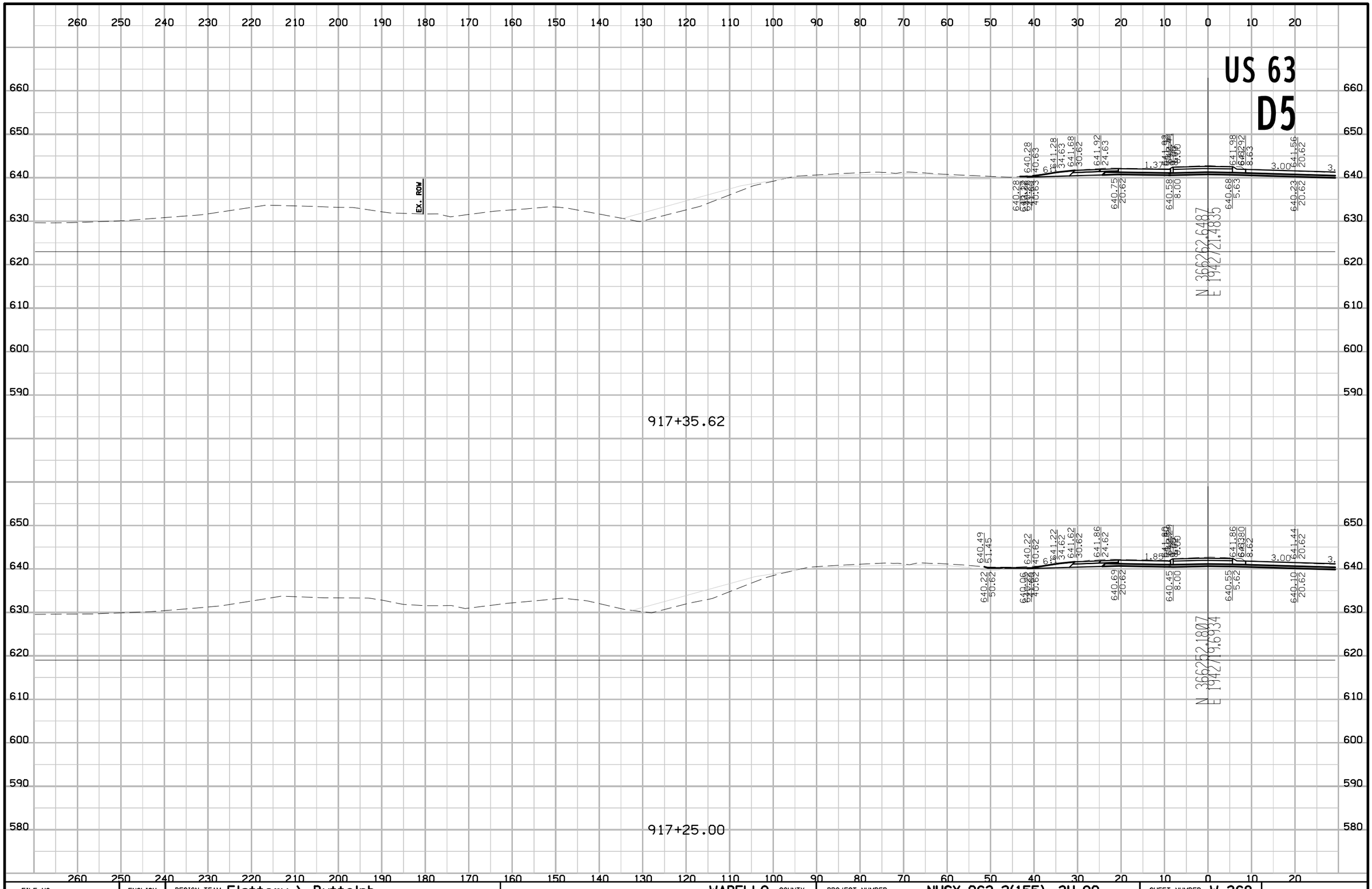
8:58:39 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.367

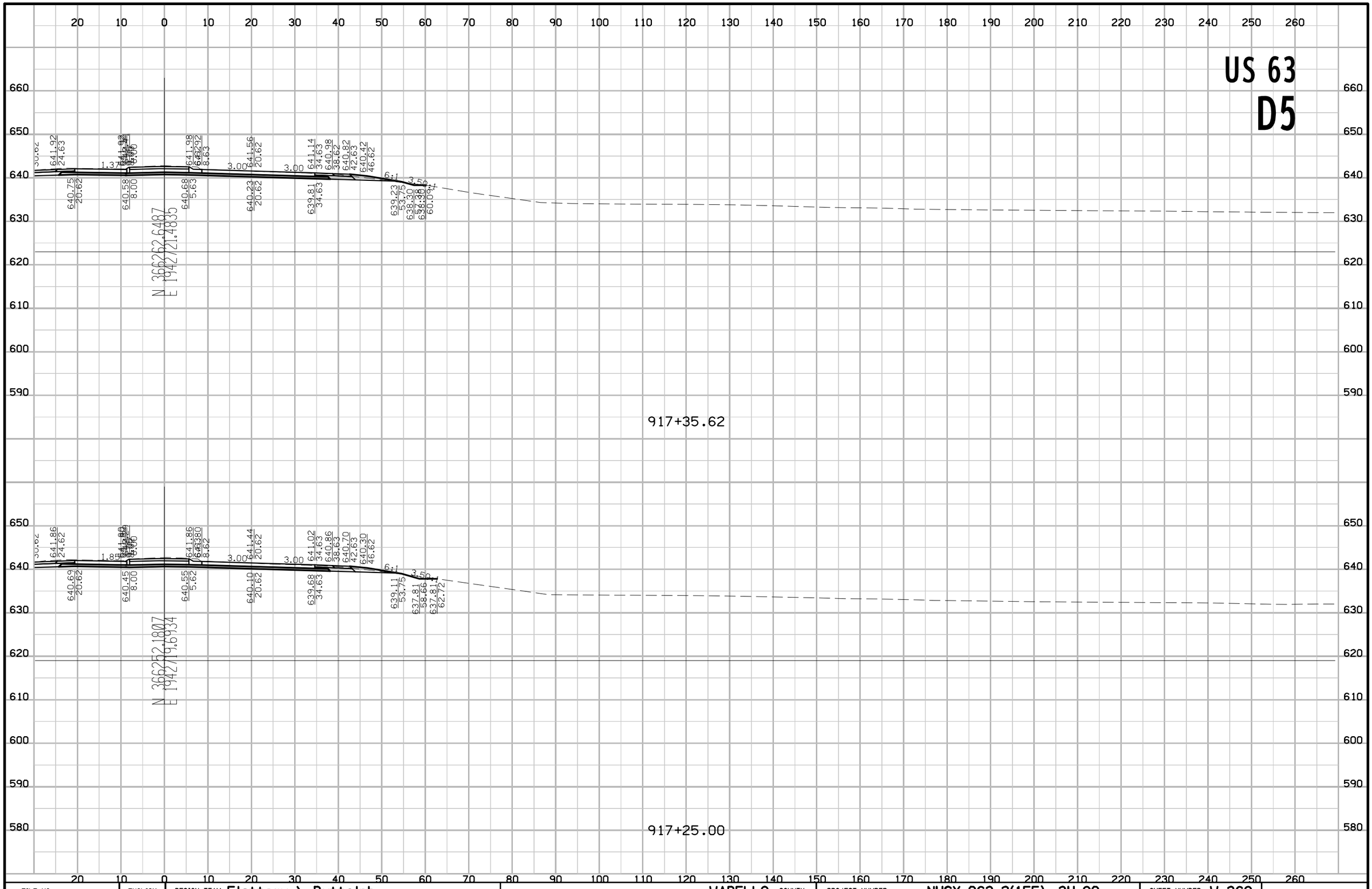
8:58:41 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.368

8:58:42 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63
D5

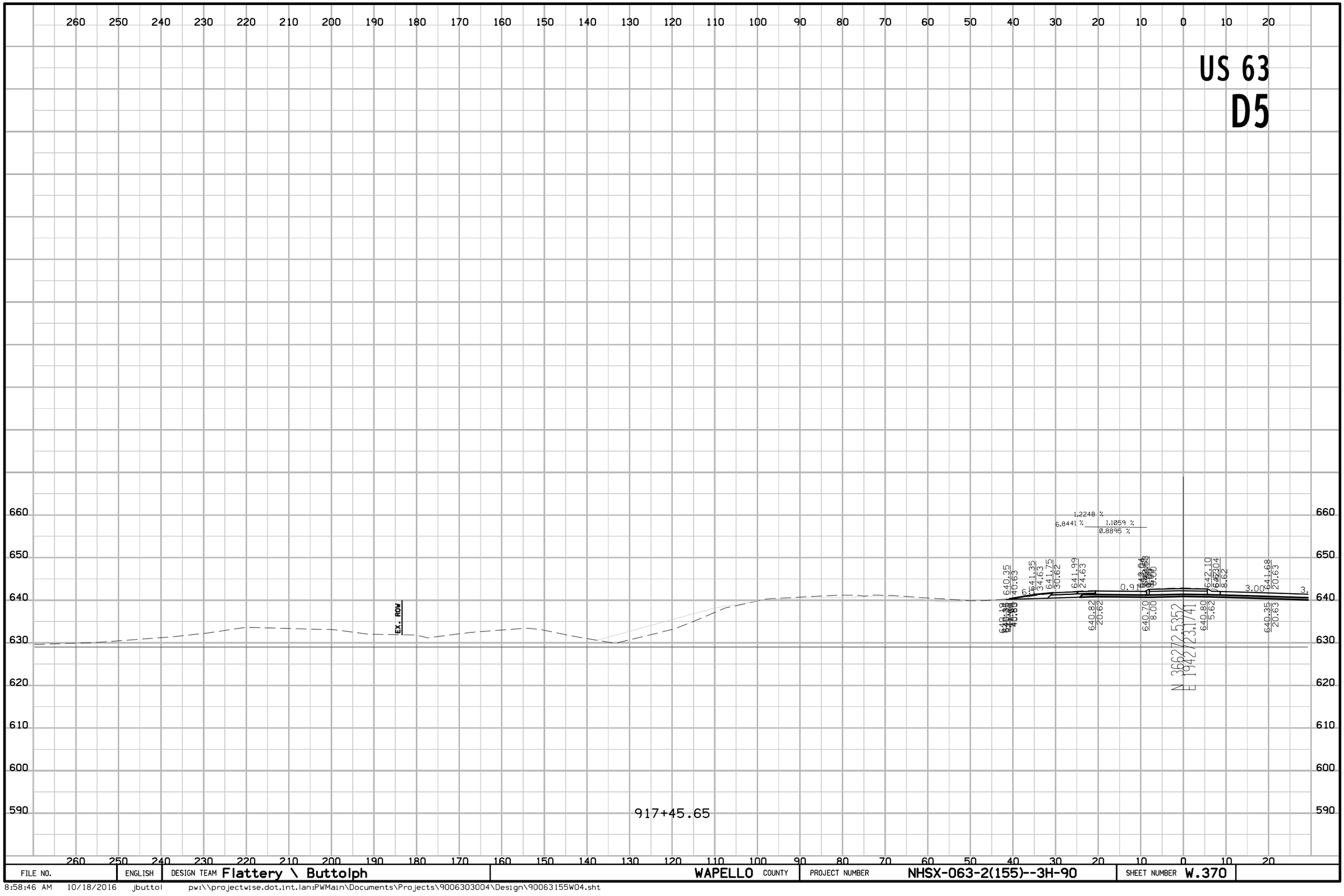


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.369

8:58:44 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63

D5

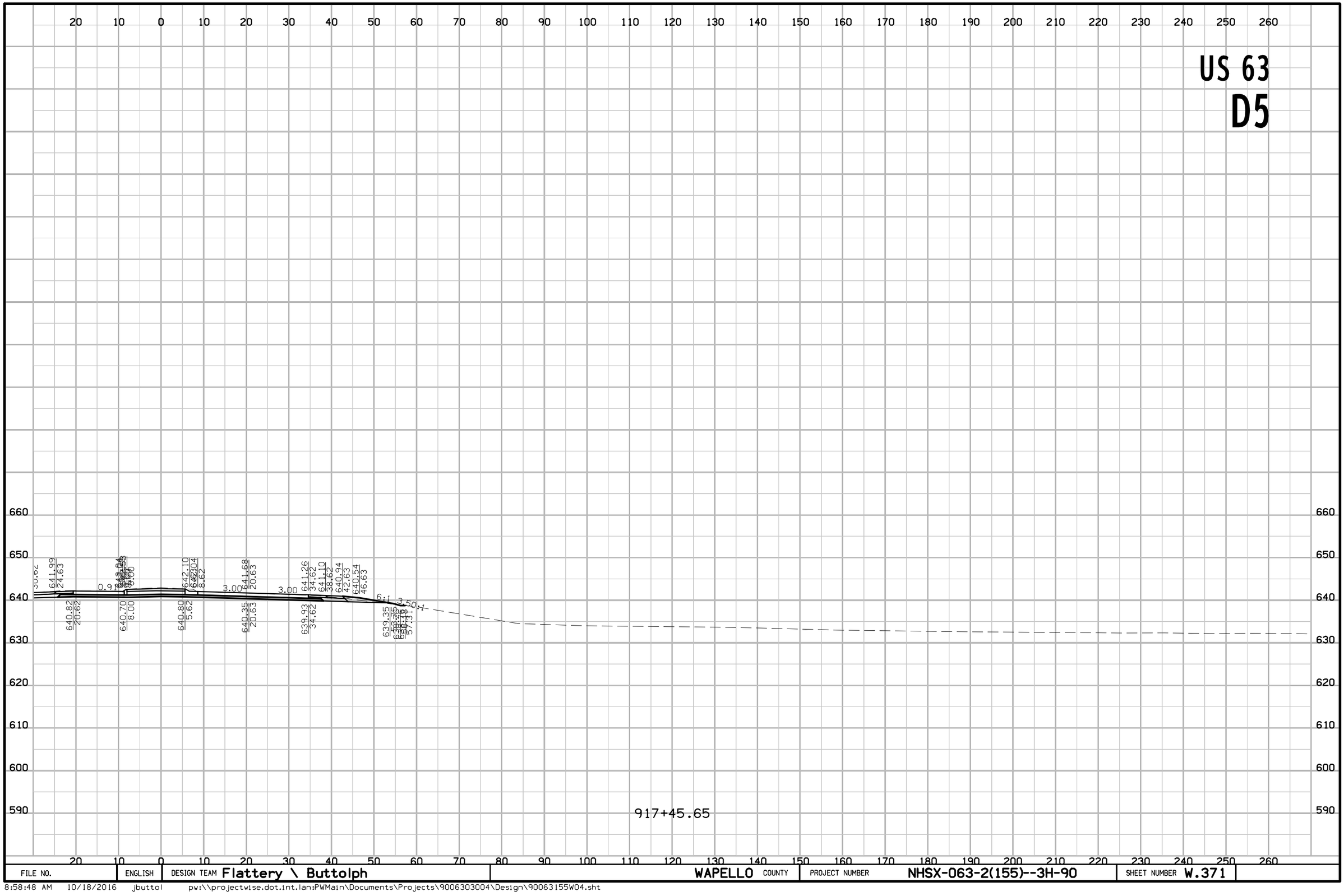


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.370

8:58:46 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

US 63

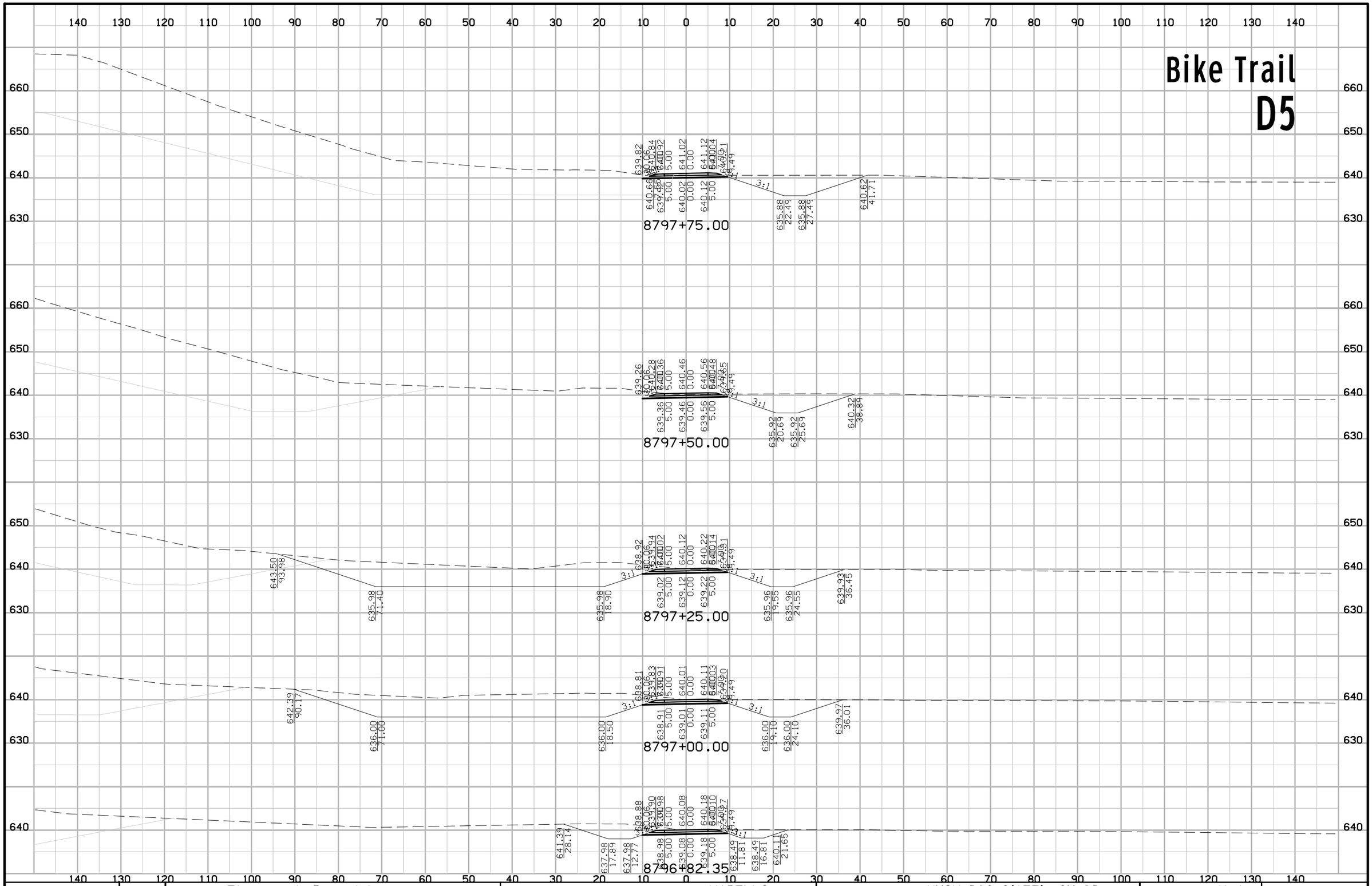
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER W.371

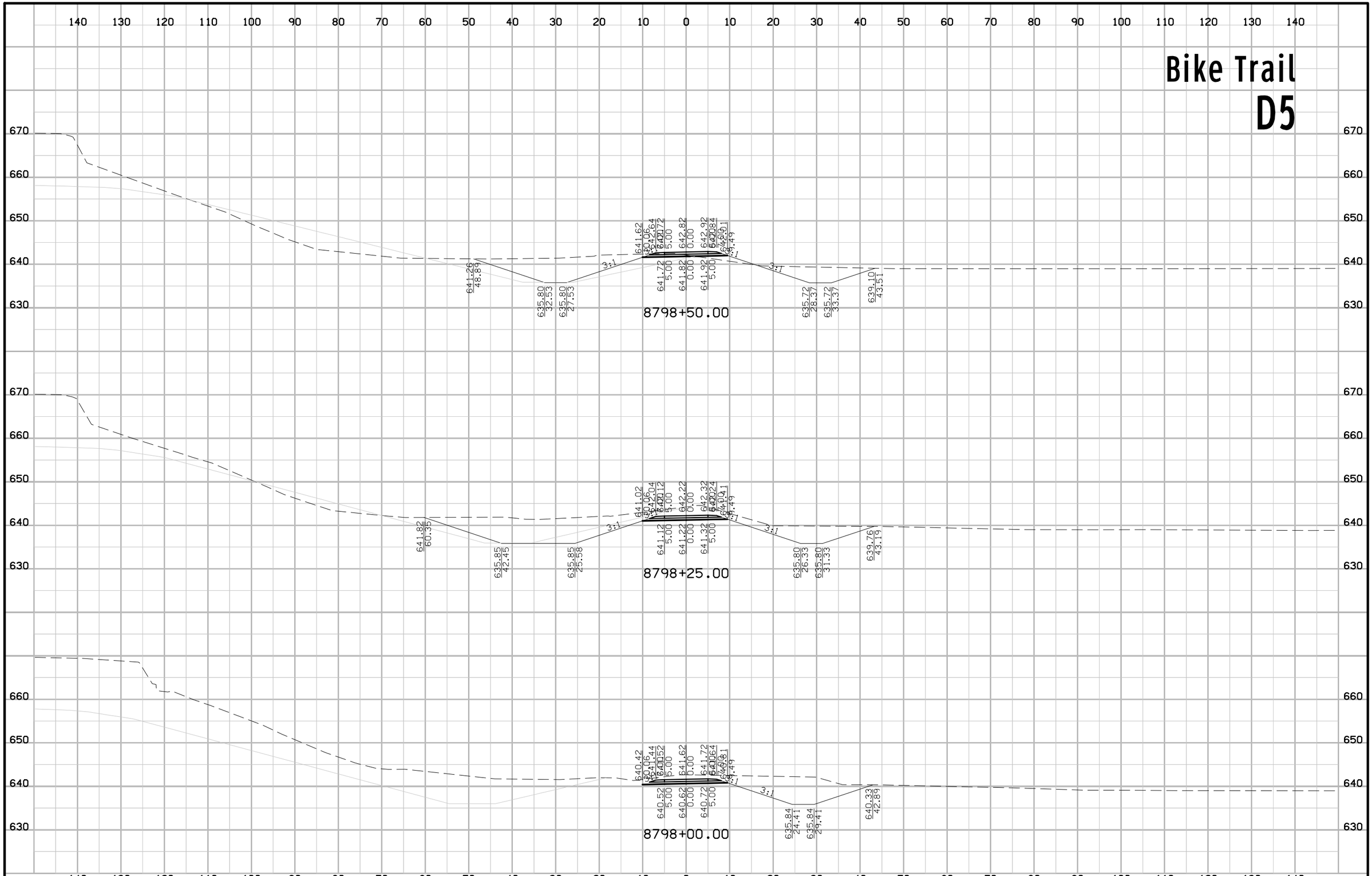
8:58:48 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155W04.sht

Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.1

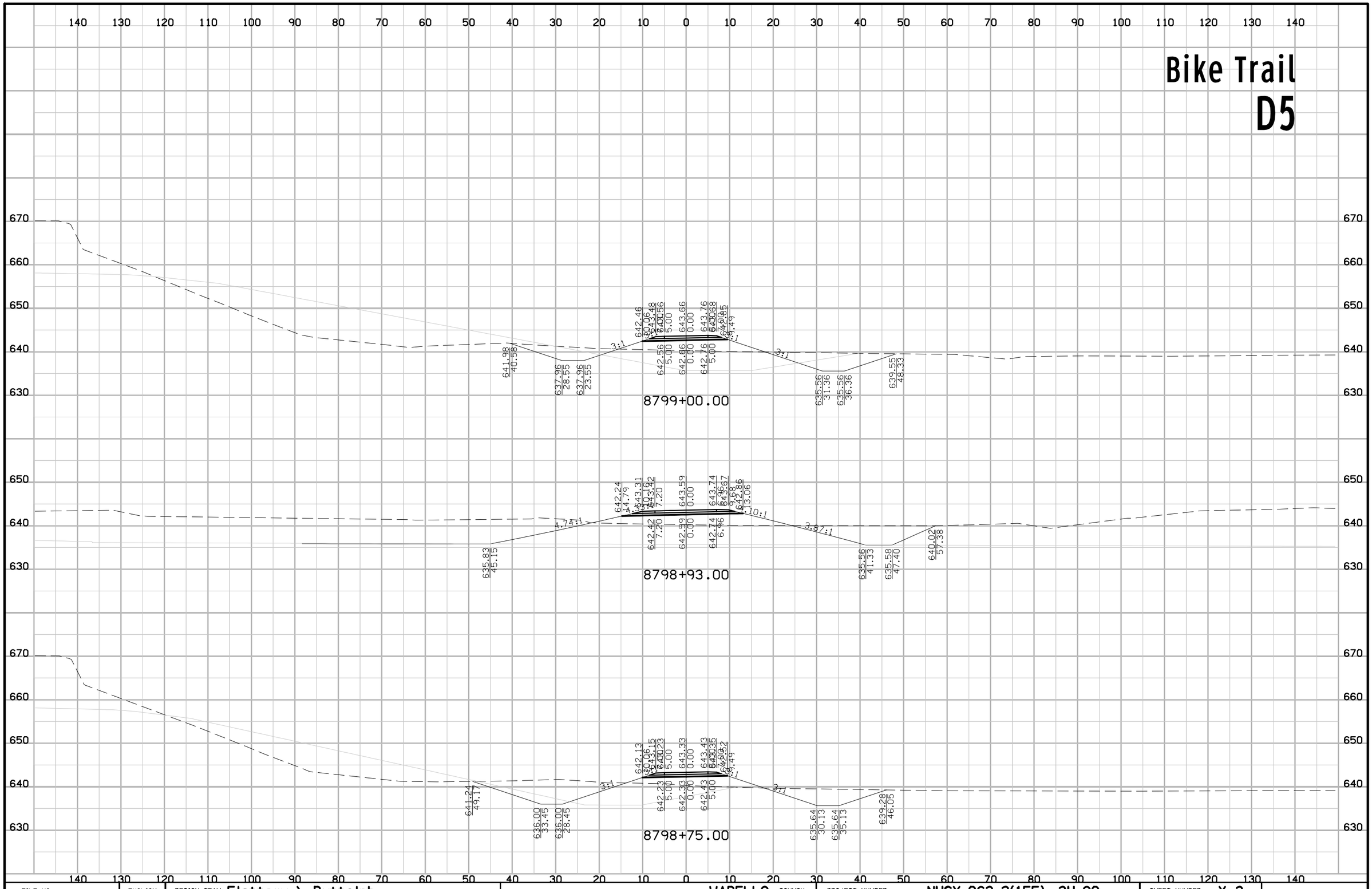
8:59:12 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.2

8:59:13 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht

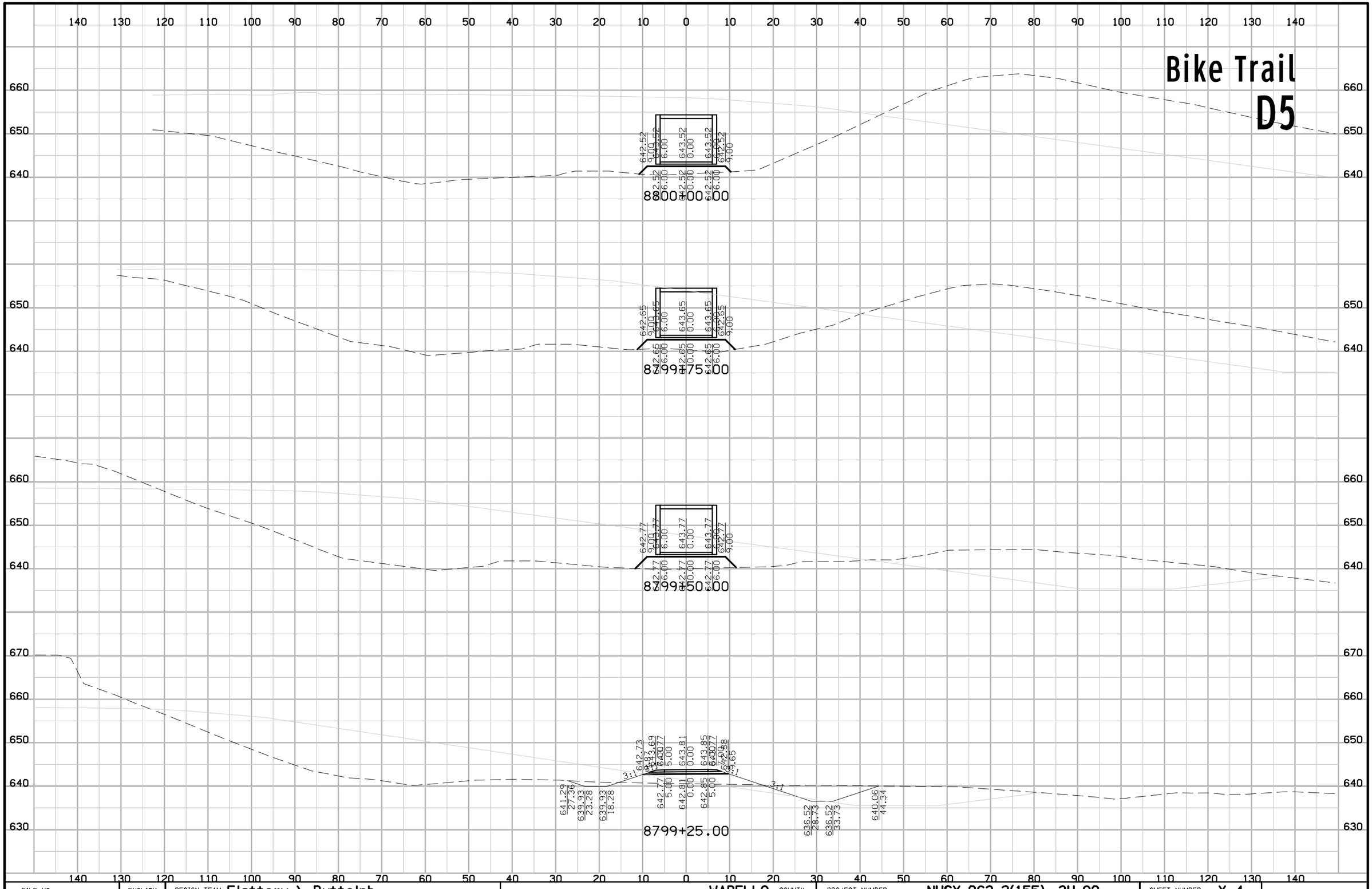
Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.3

8:59:15 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht

Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.4

8:59:16 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht

Bike Trail
D5

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

660 650 640

642.02 9.00 643.02 6.00 643.02 0.00 643.02 6.00 642.02 9.00
642.02 6.00 642.02 10.00 642.02 6.00
8801+00.00

660 650 640

642.15 9.00 643.15 6.00 643.15 0.00 643.15 6.00 642.15 9.00
642.15 6.00 642.15 10.00 642.15 6.00
8800+75.00

670 660 650 640

642.27 9.00 643.27 6.00 643.27 0.00 643.27 6.00 642.27 9.00
642.27 6.00 642.27 10.00 642.27 6.00
8800+50.00

670 660 650 640

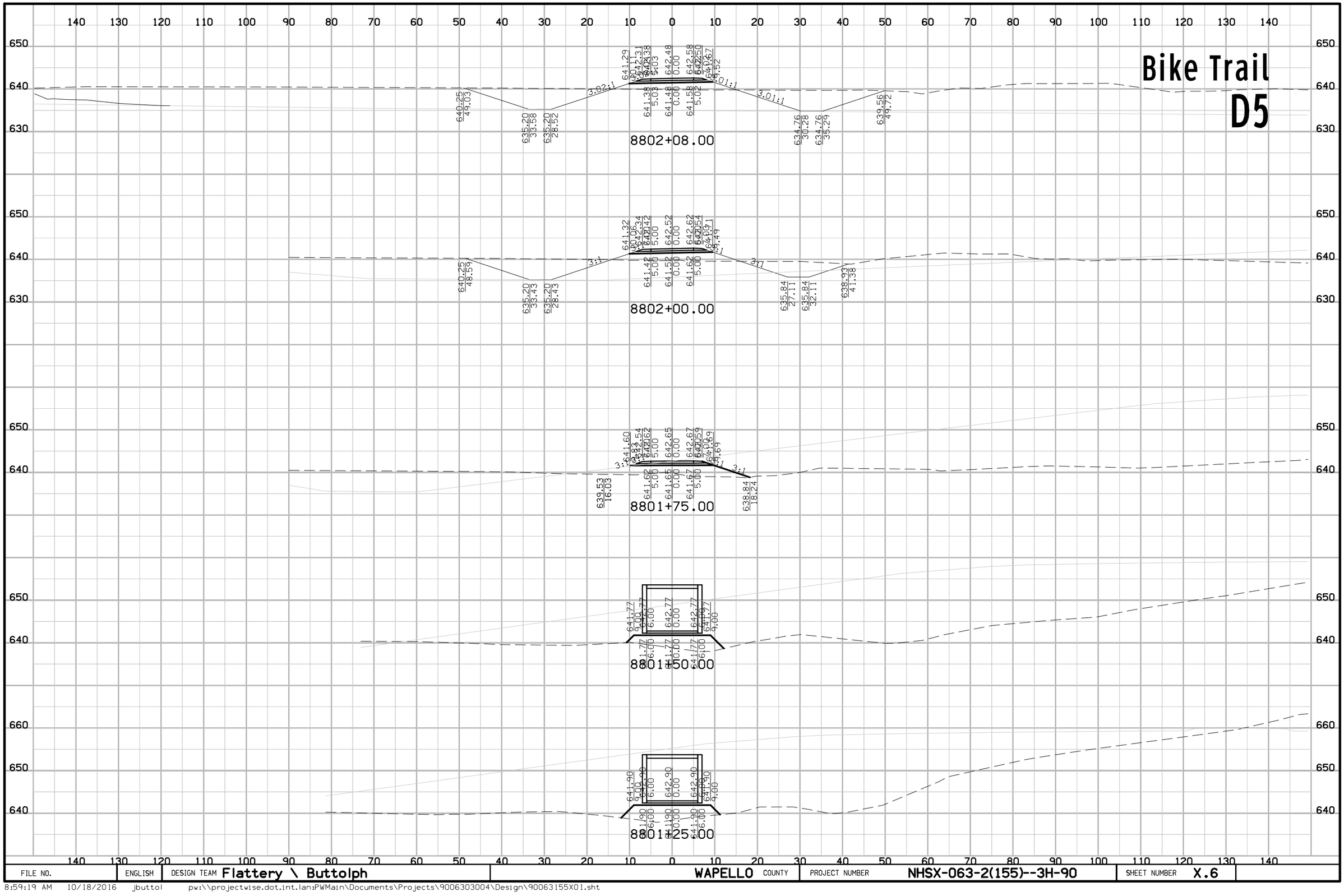
642.40 9.00 643.40 6.00 643.40 0.00 643.40 6.00 642.40 9.00
642.40 6.00 642.40 10.00 642.40 6.00
8800+25.00

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 Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.5

8:59:17 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht

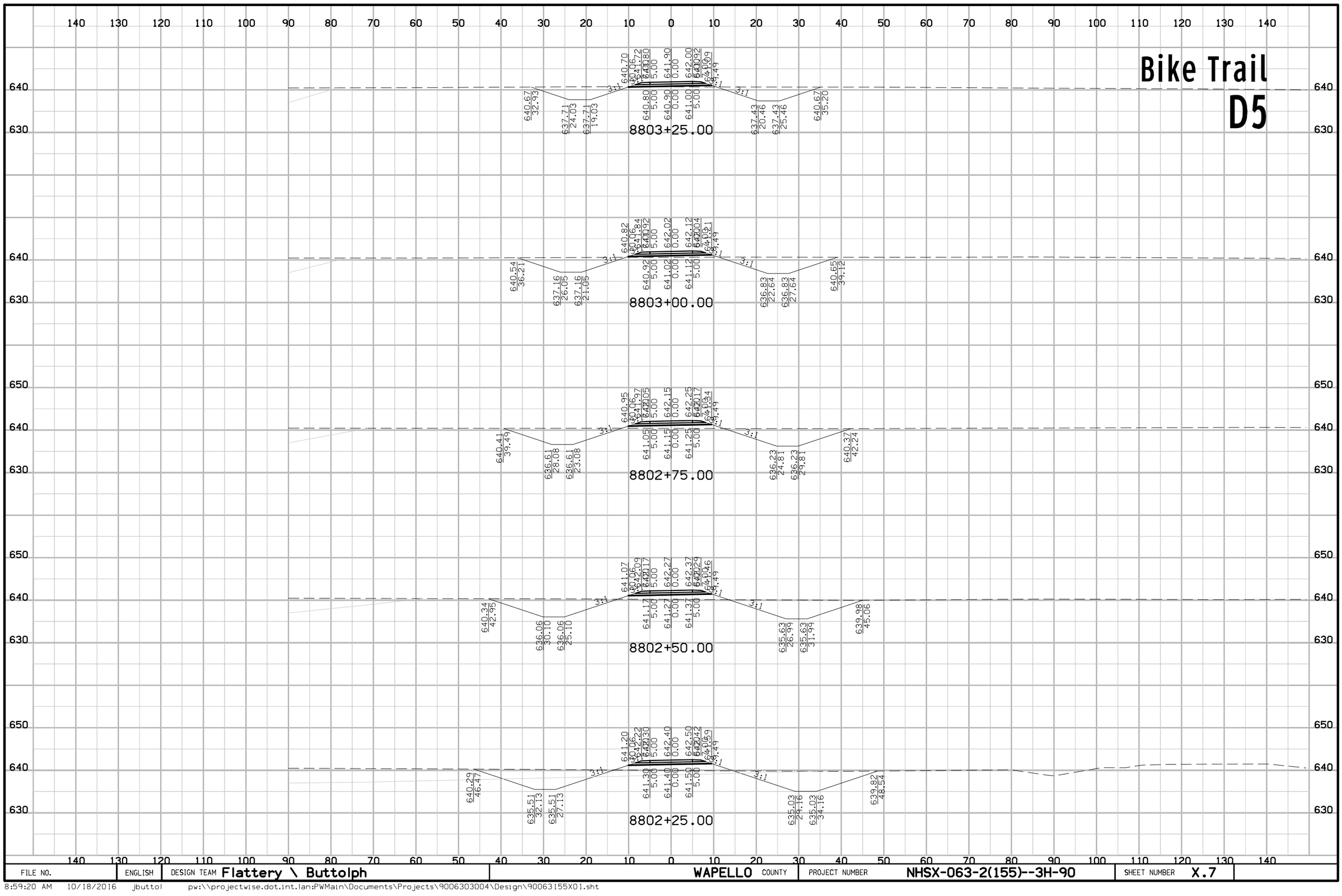
Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.6

8:59:19 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht

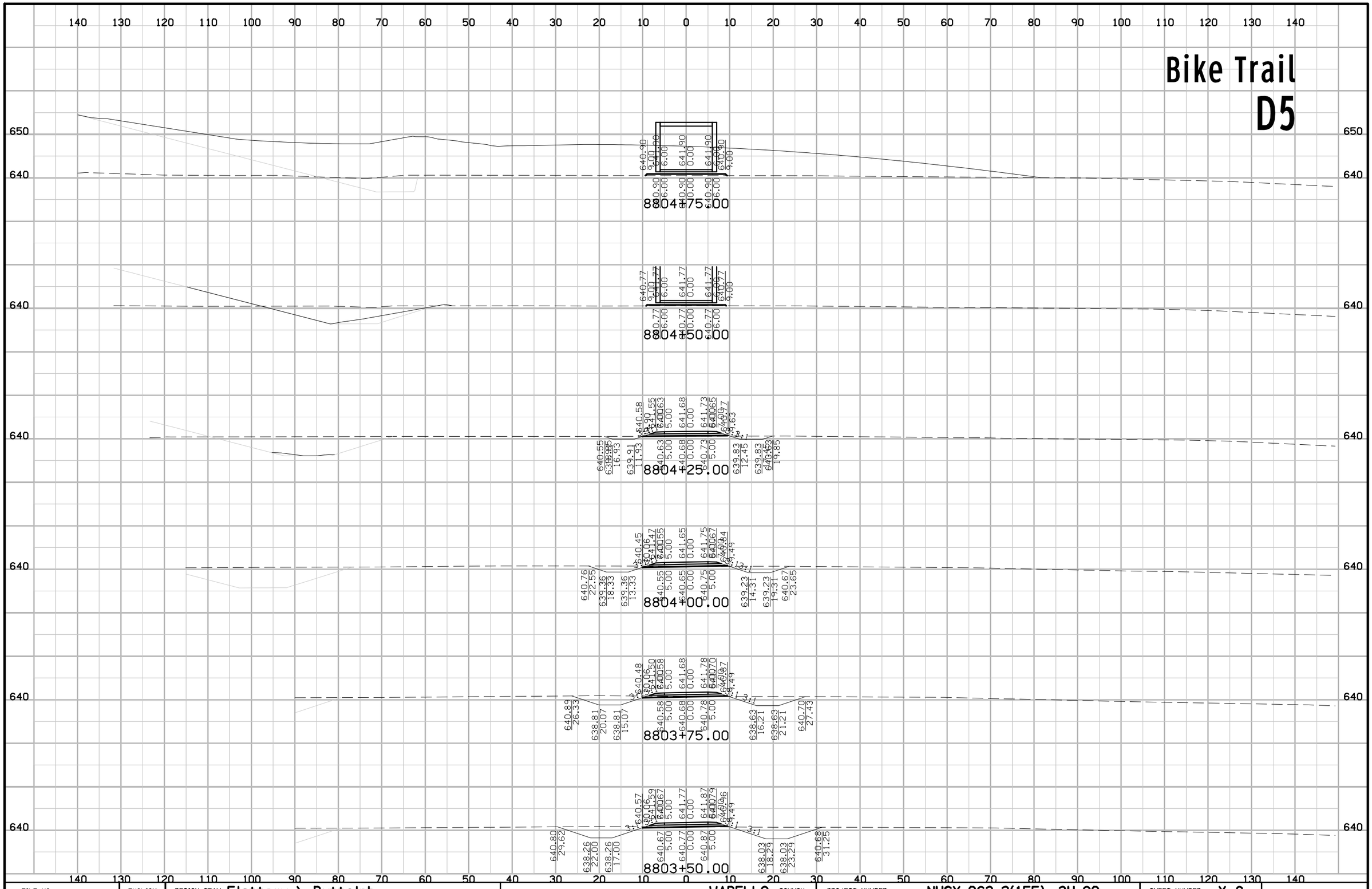
Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.7

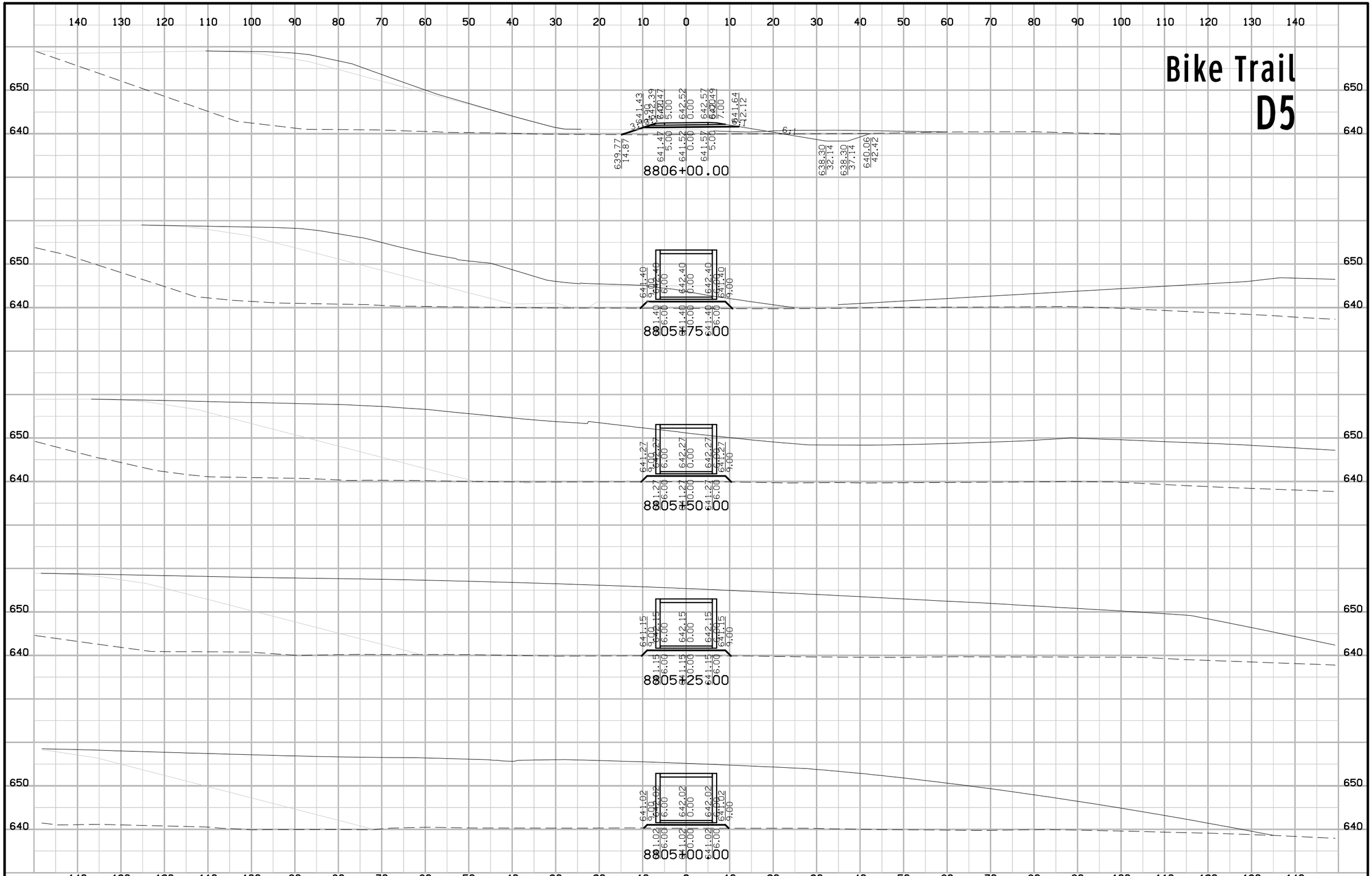
8:59:20 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht

Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.8

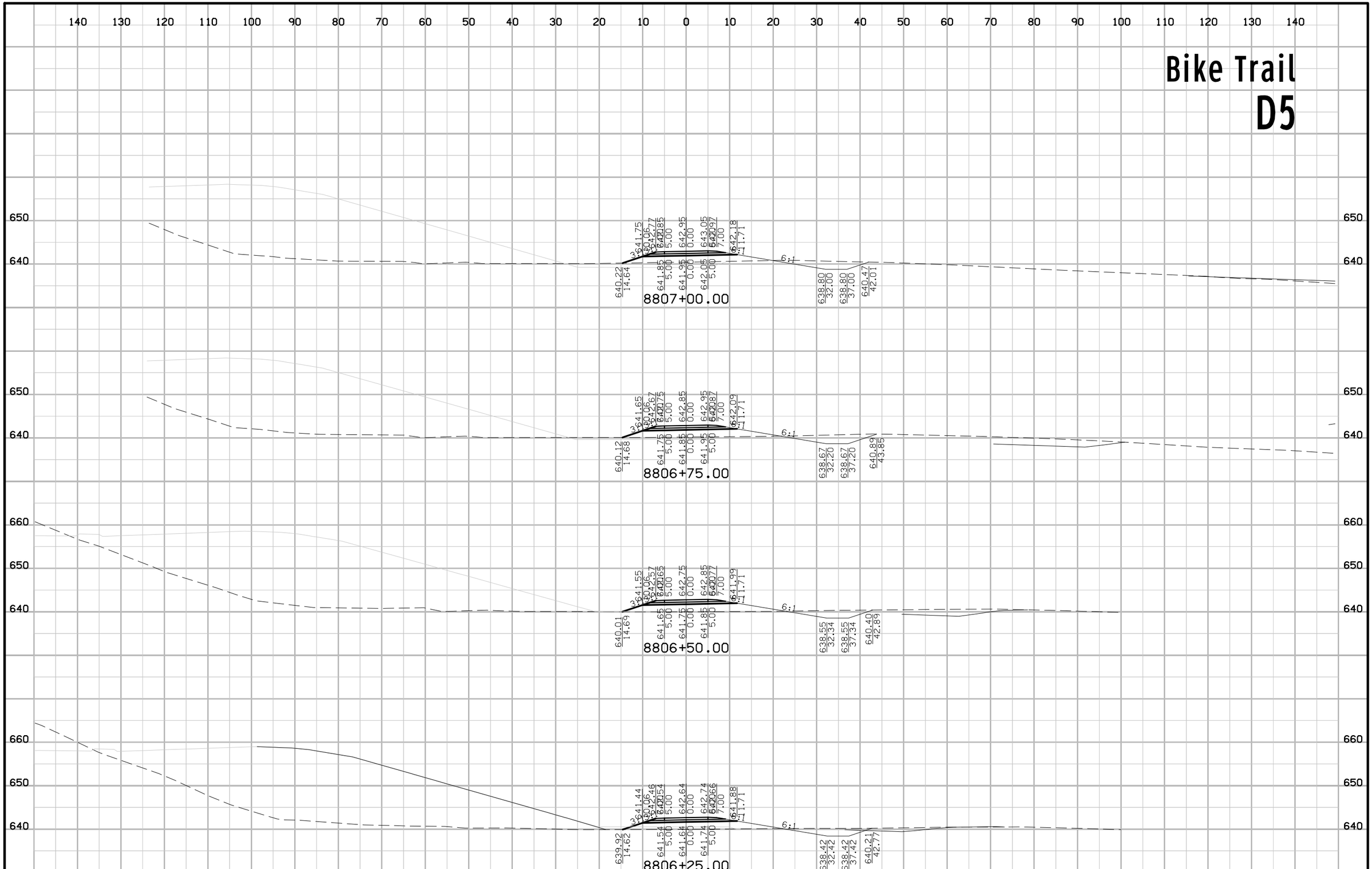
8:59:22 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.9

8:59:24 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht

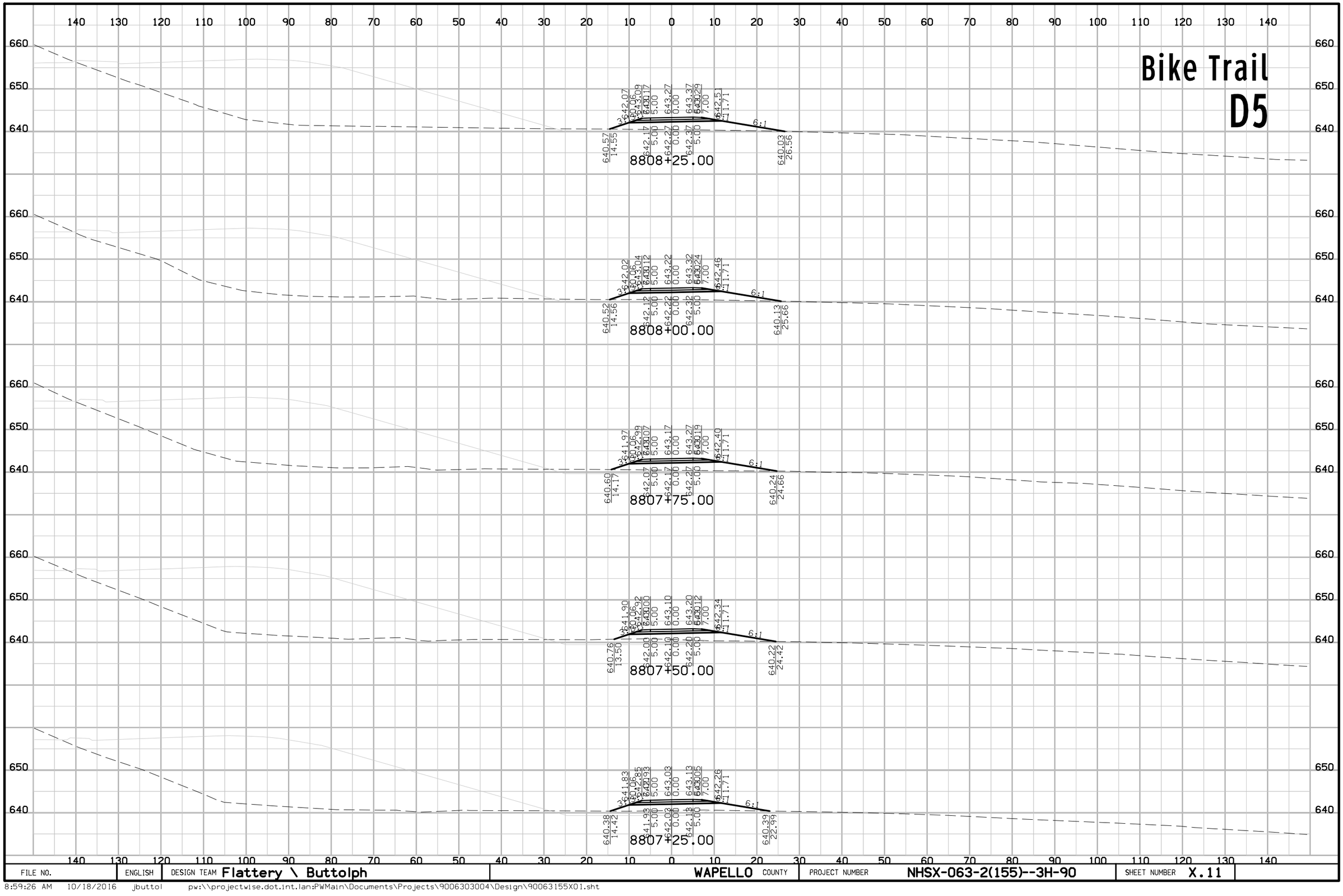
Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.10

8:59:25 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht

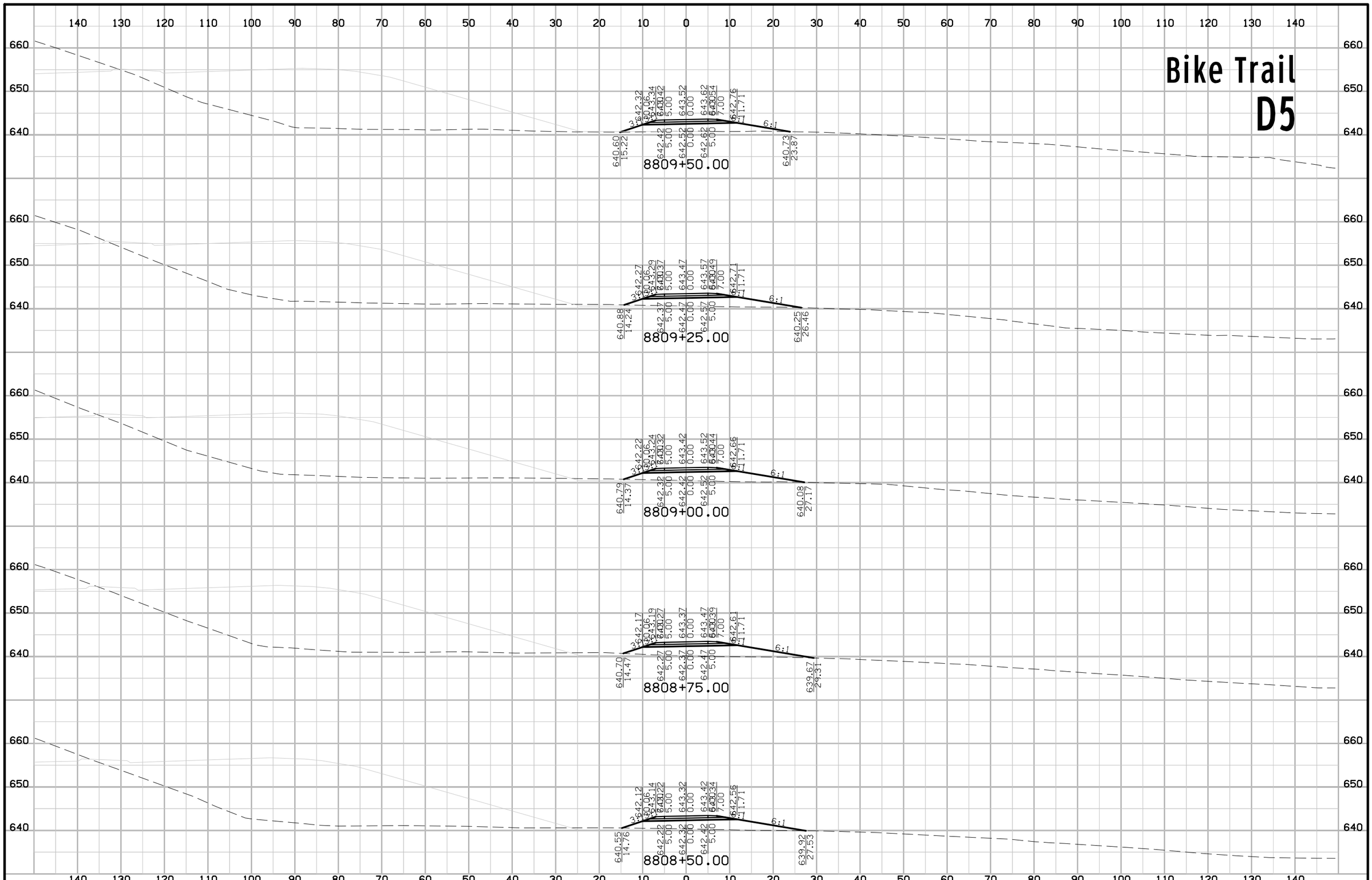
Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.11

8:59:26 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht

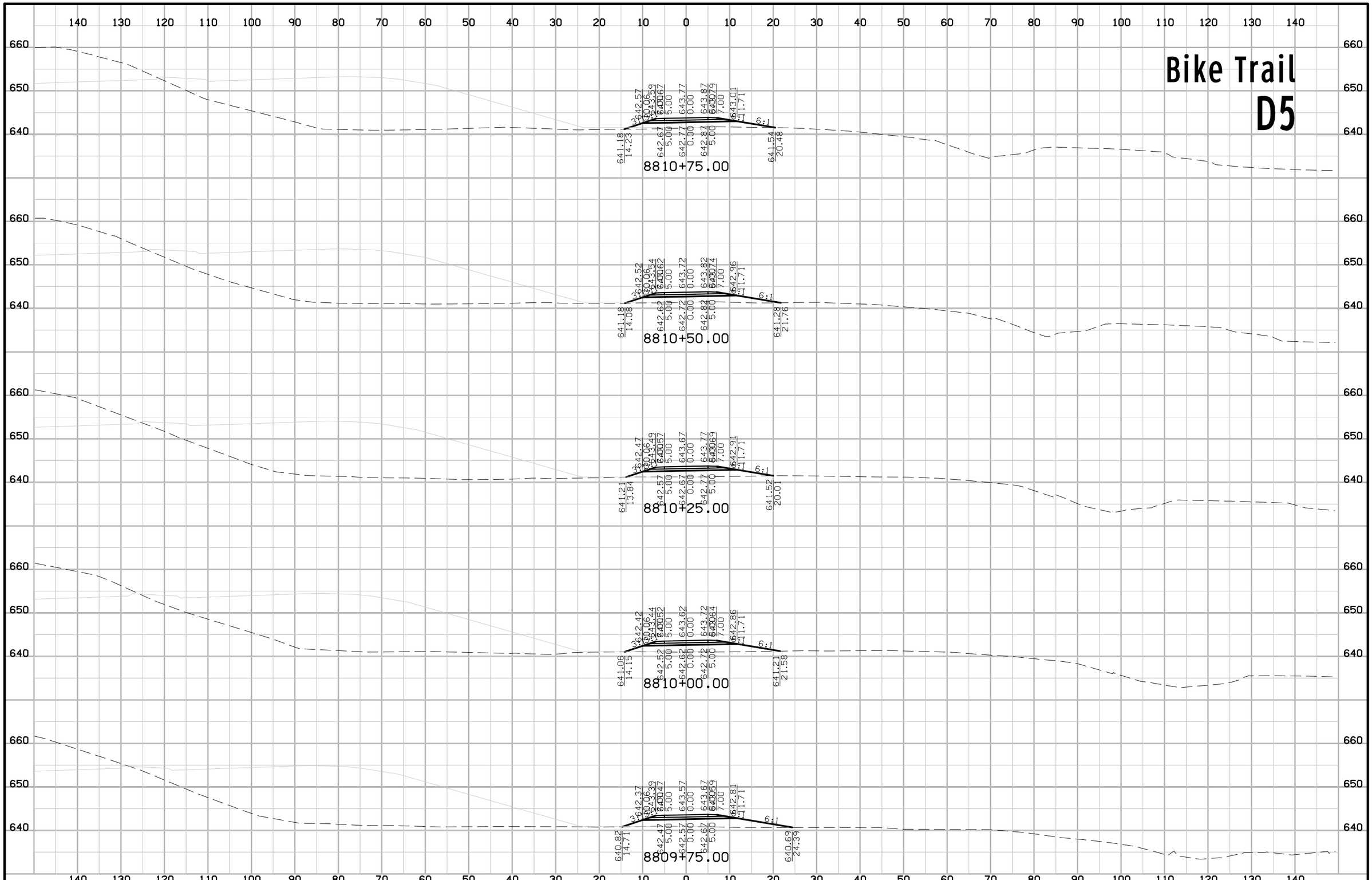
Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.12

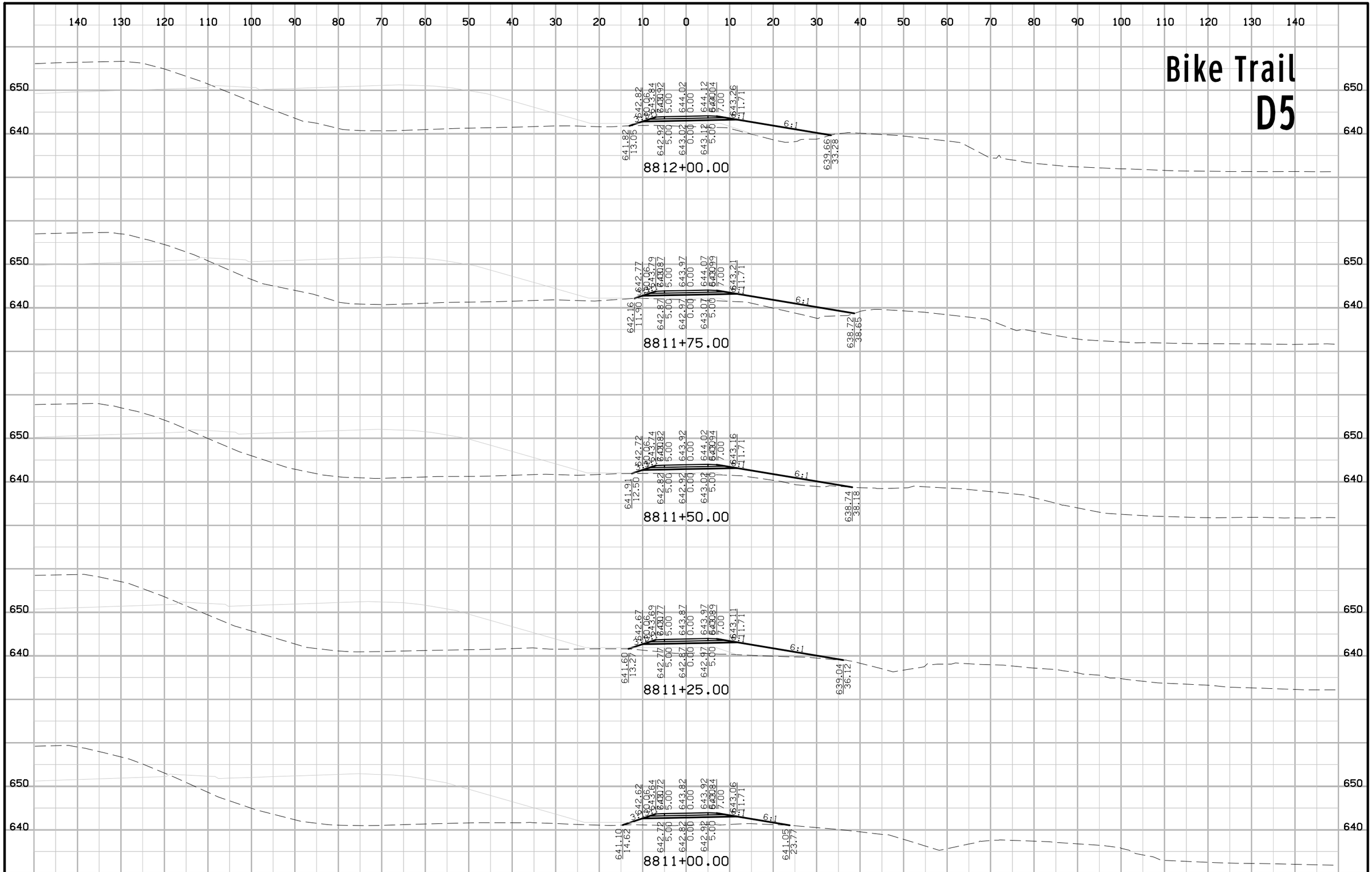
8:59:28 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht

Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.13

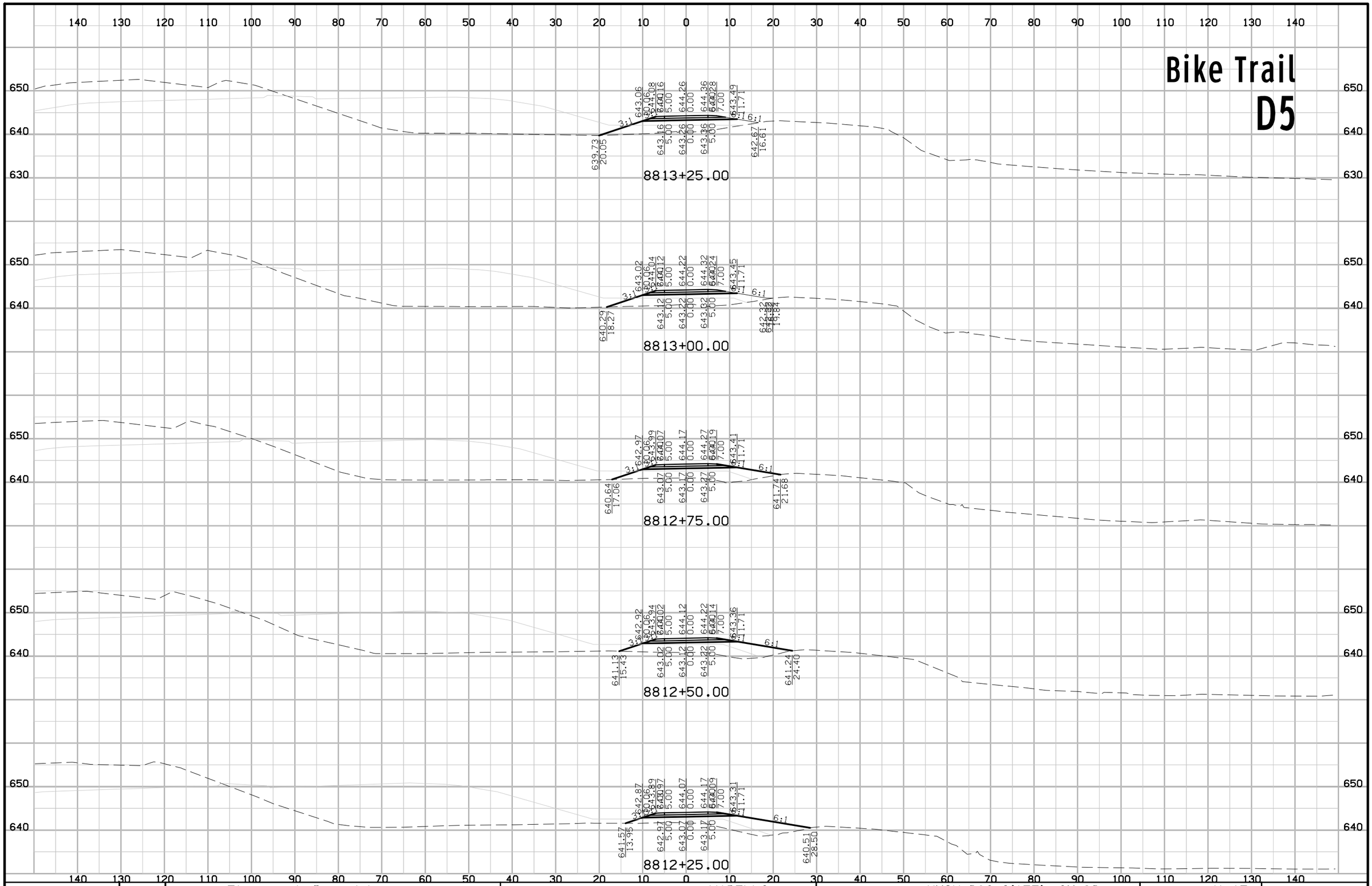
8:59:29 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.14

8:59:30 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht

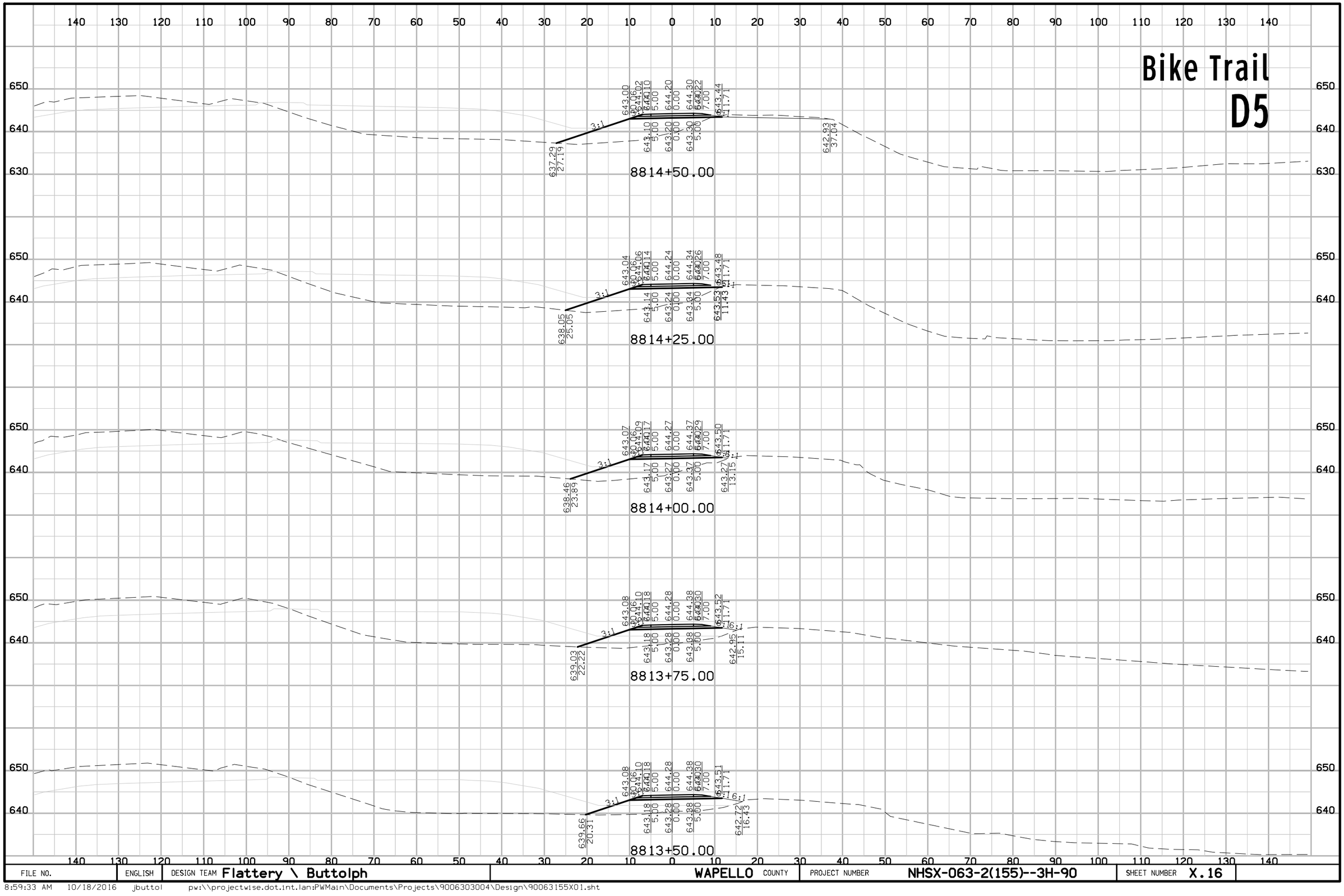
Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.15

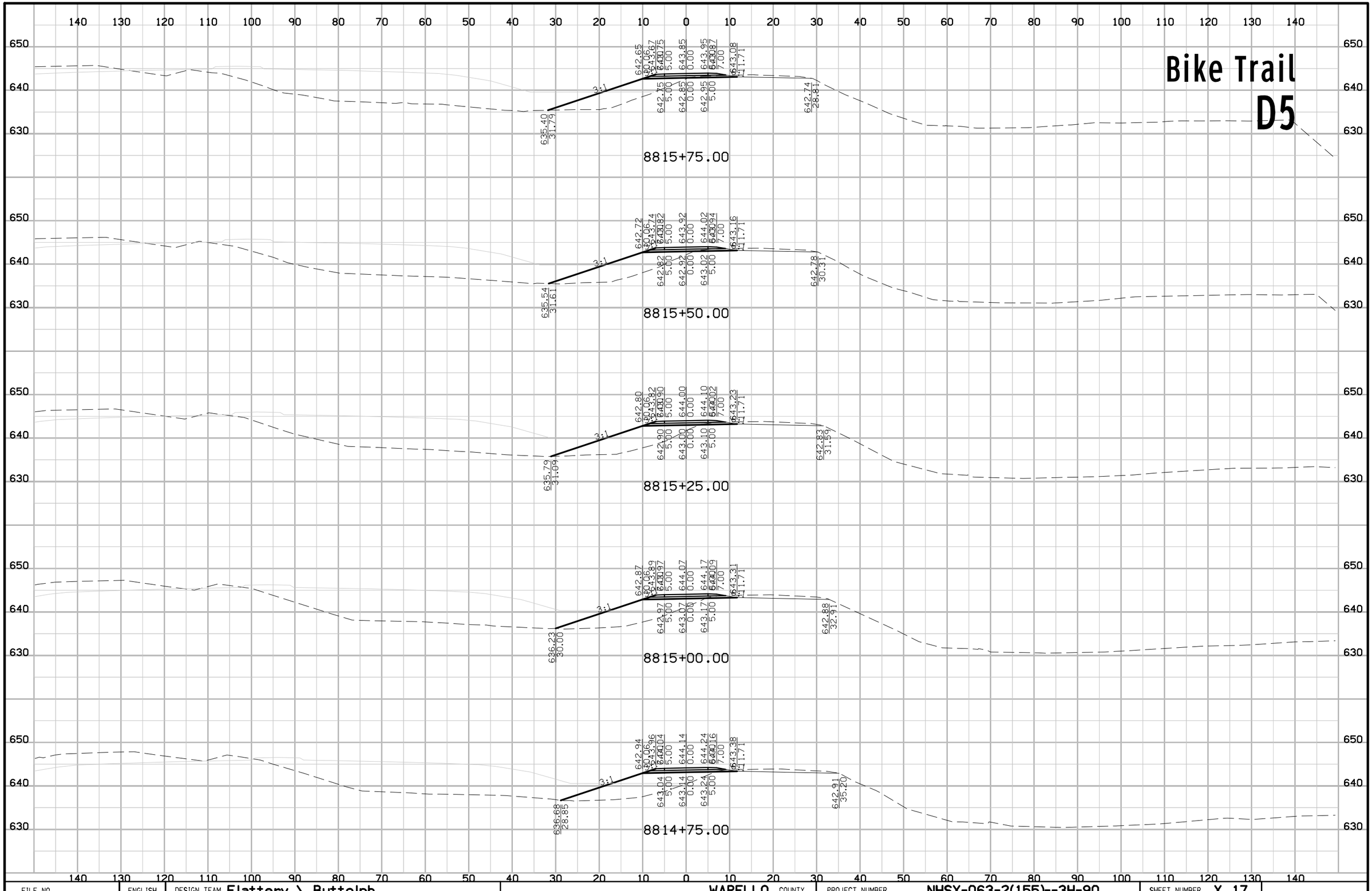
8:59:31 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht

Bike Trail
D5



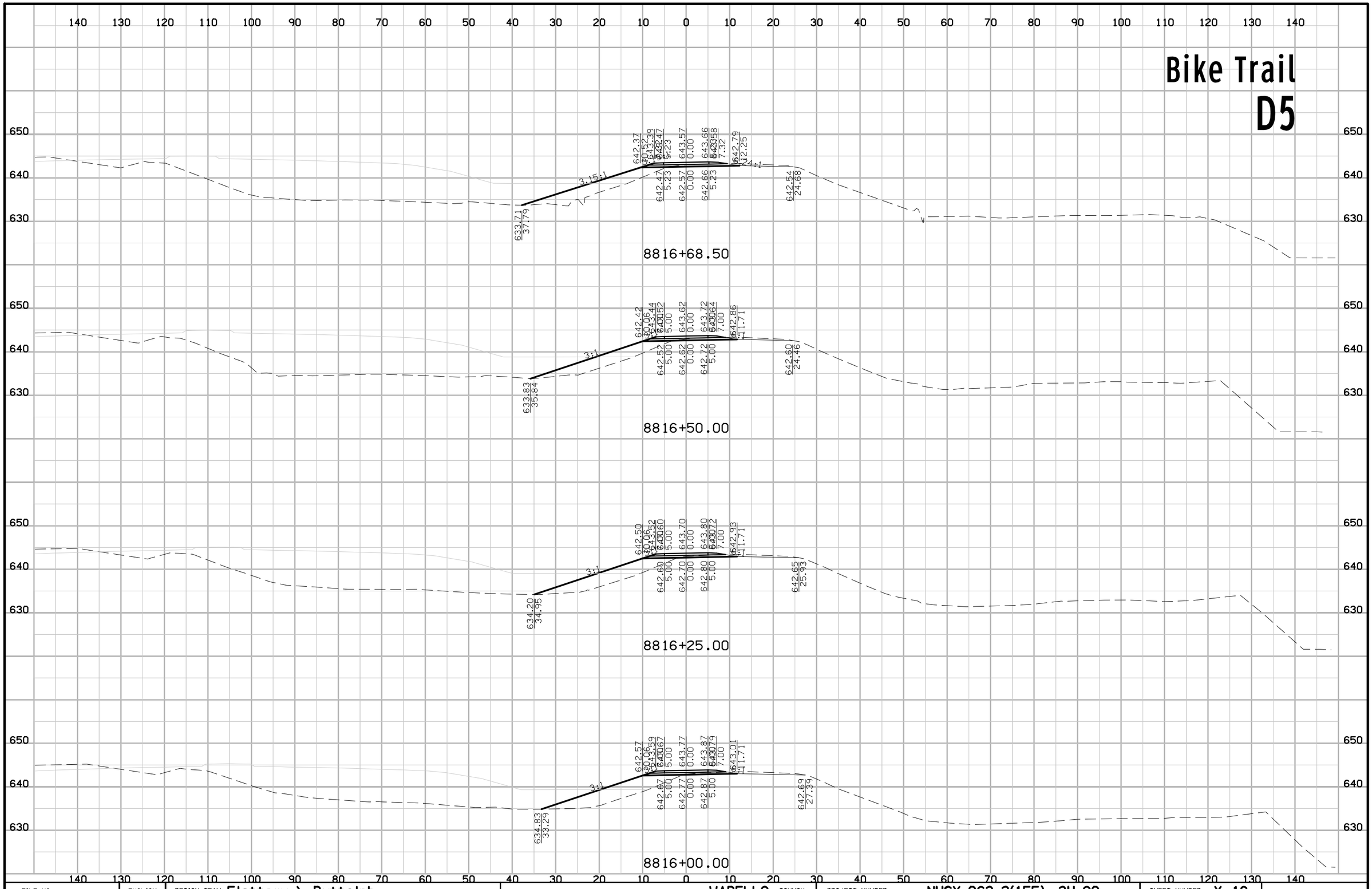
FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.16

Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.17

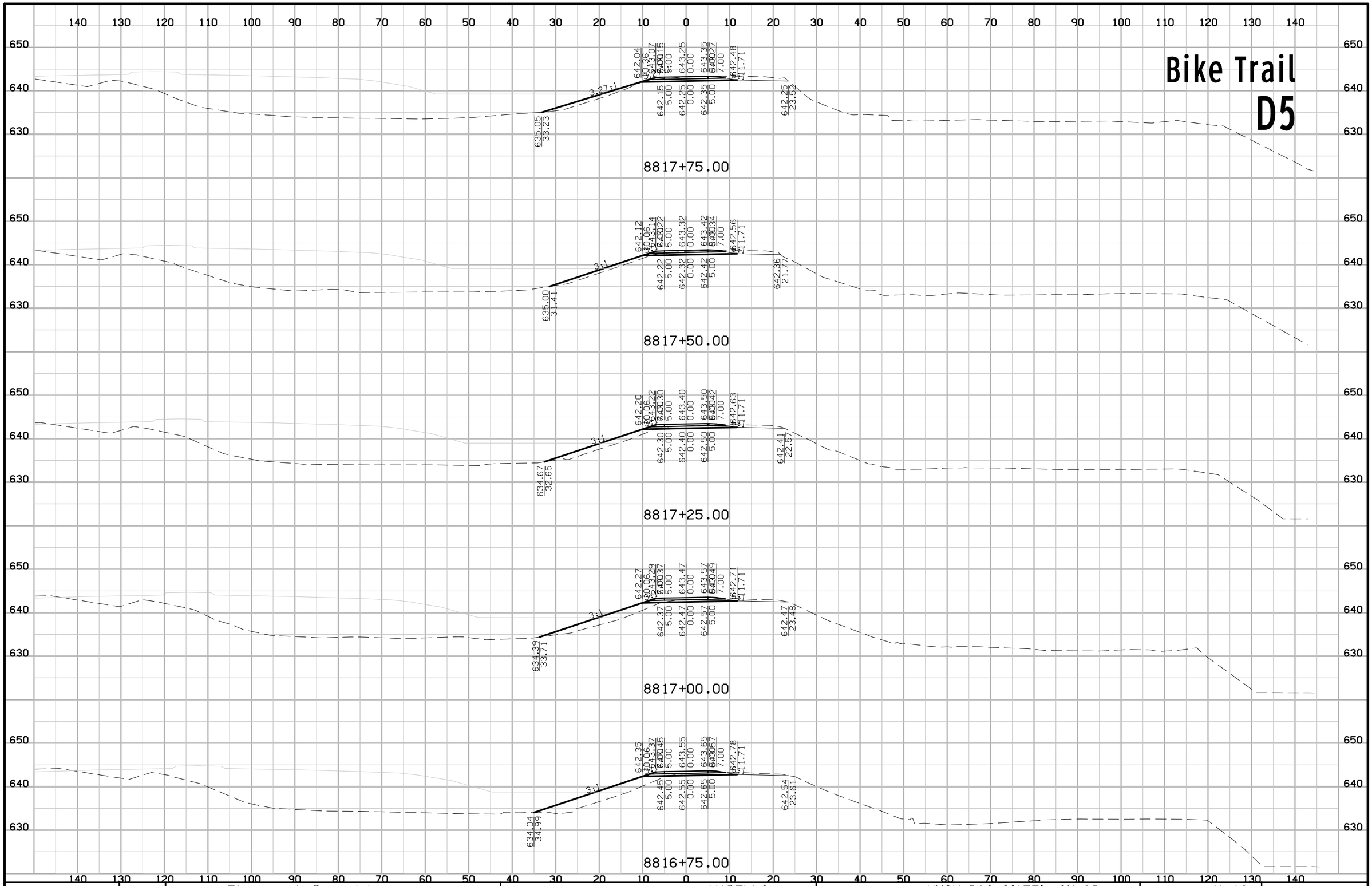
Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.18

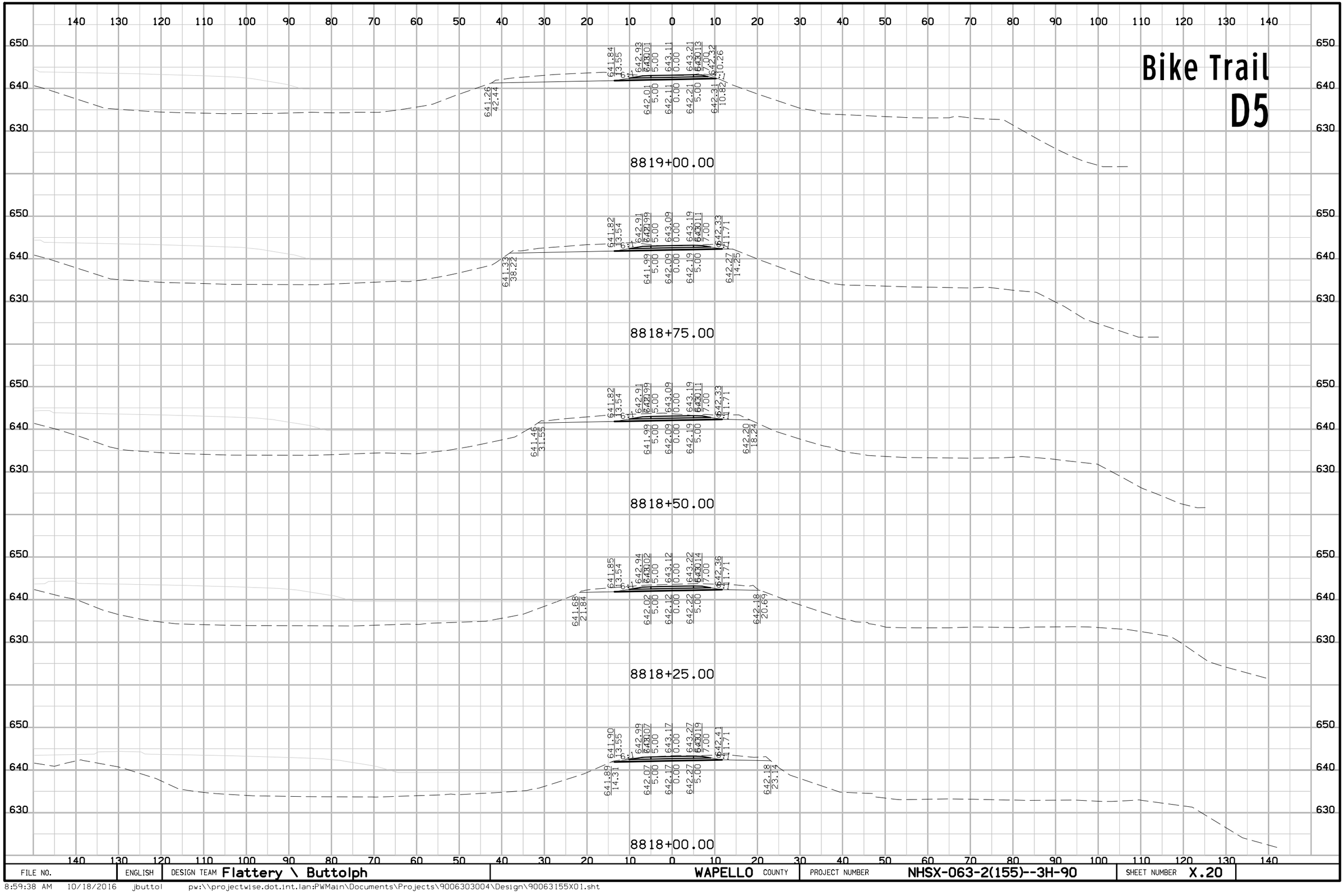
8:59:35 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht

Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.19

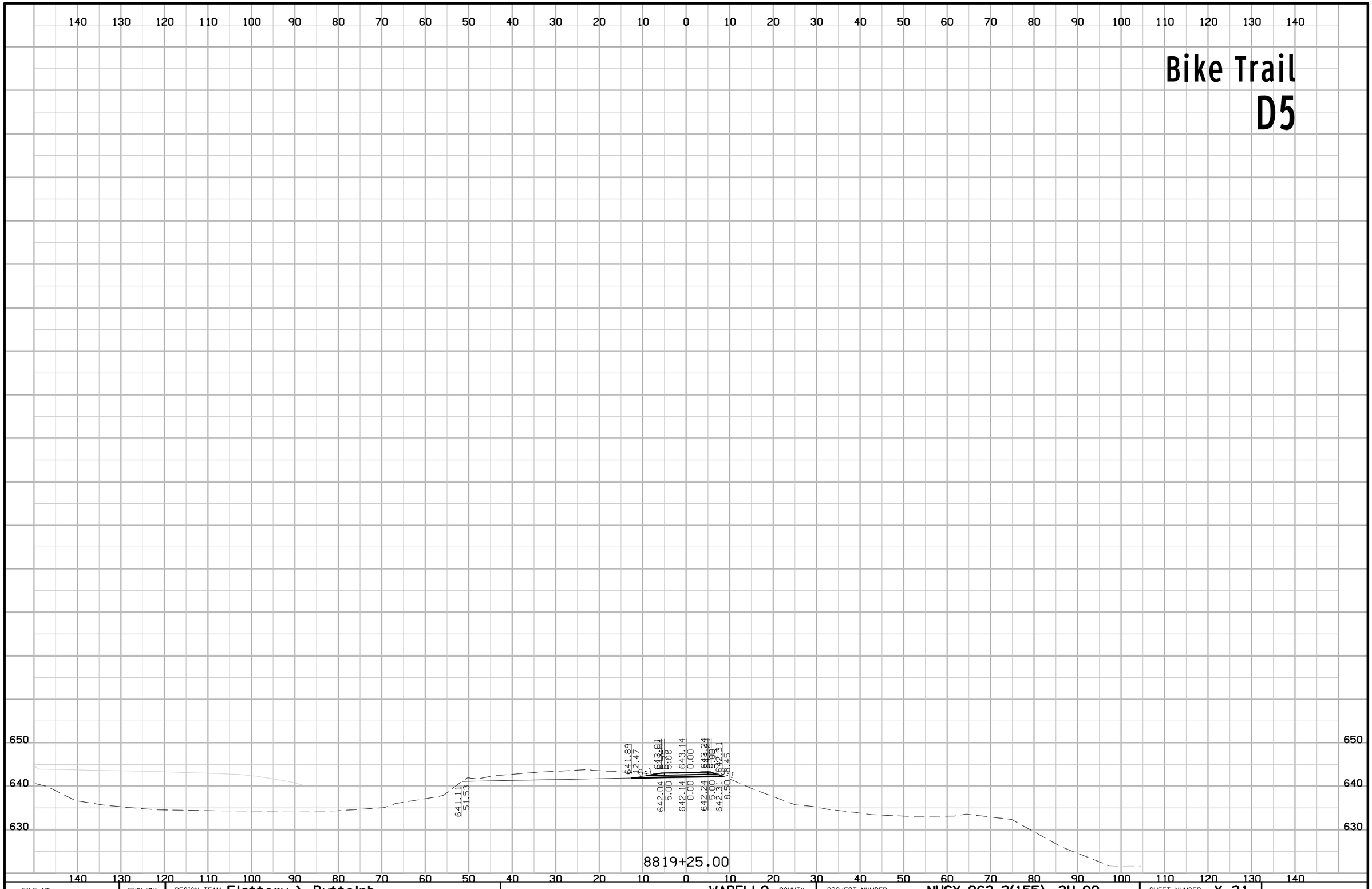
Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.20

8:59:38 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht

Bike Trail
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.21

8:59:39 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X01.sht

Rabbit Run Road

D5

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

665
660
655
650
645
640

658.67
12.00

658.71
0.00

657.38
0.00

8820+50.00

658.93
12.00

658.95
0.00

657.62
0.00

8820+38.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.30

9:00:09 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X02.sht

Rabbit Run Road

D5

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

665 660 655 650 645 640

654.85
59.15

655.50
52.99

656.55
44.09

656.88
39.38

657.05
32.49

657.47
12.00

657.71
0.00

656.38
0.00

8821+00.00

74.64

657.23
61.78

657.51
55.70

657.86
47.30

658.05
12.00

658.21
0.00

656.88
0.00

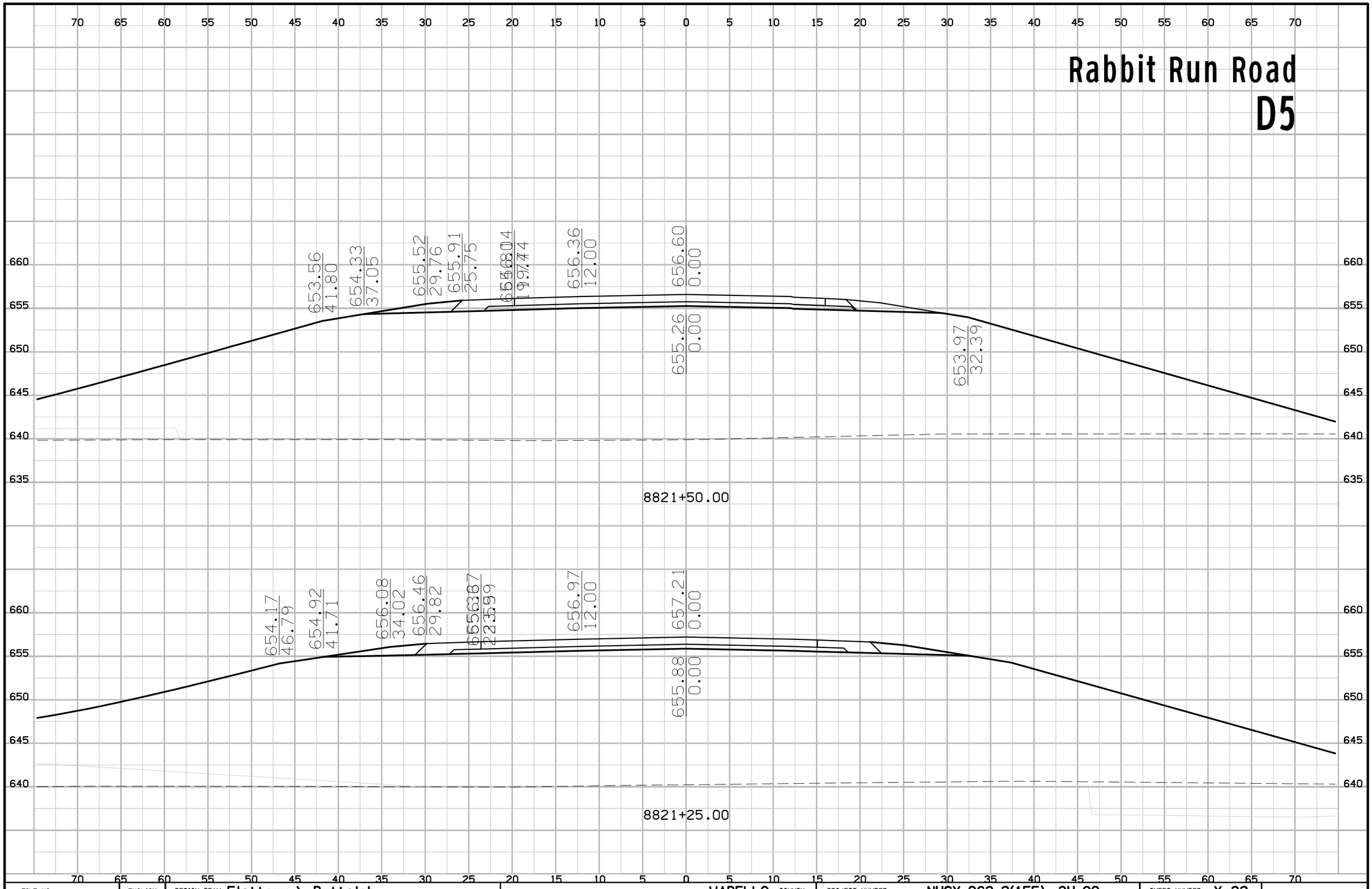
8820+75.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.31

9:00:10 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X02.sht

Rabbit Run Road

D5

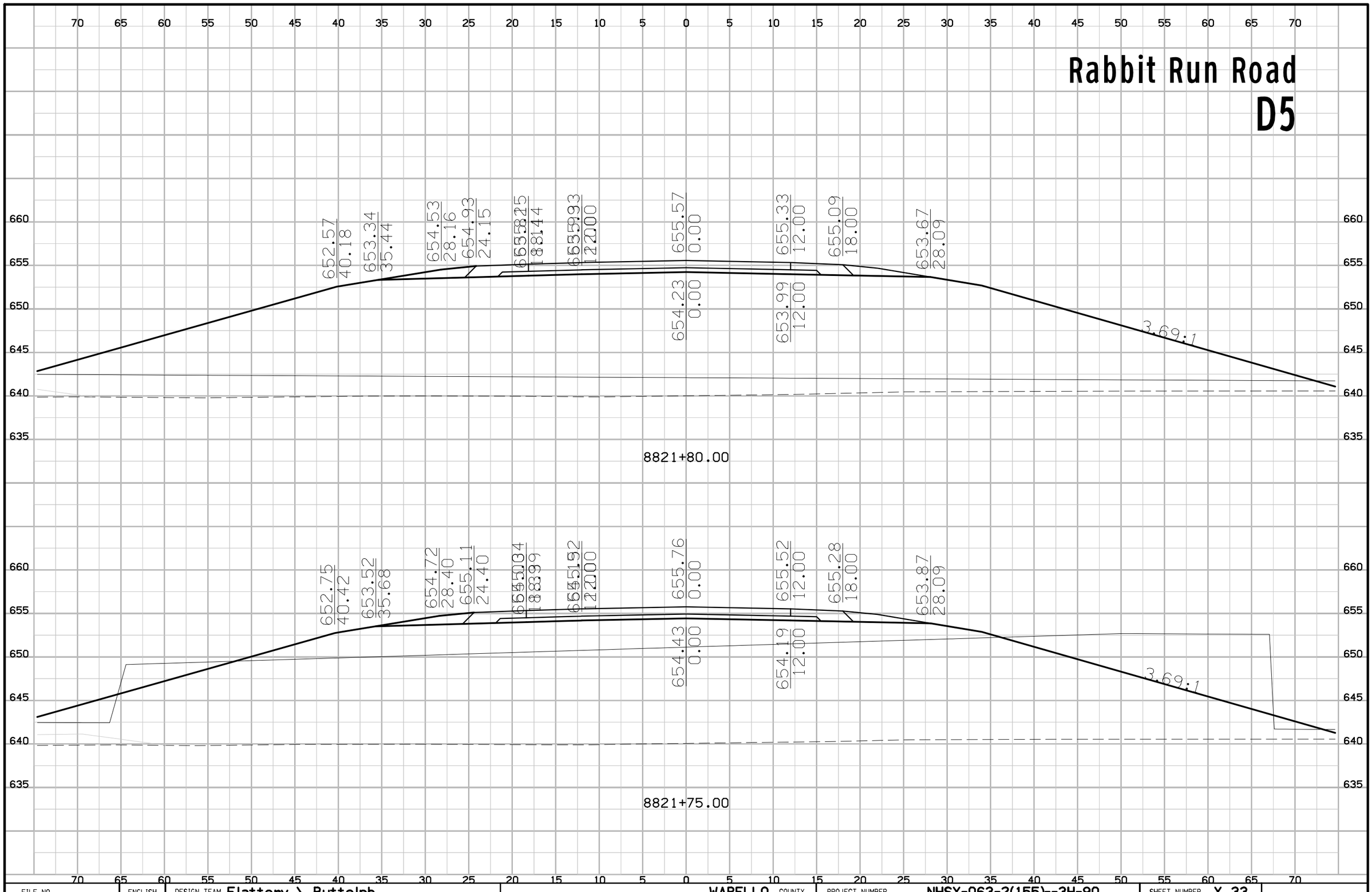


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.32

9:00:11 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X02.sht

Rabbit Run Road

D5

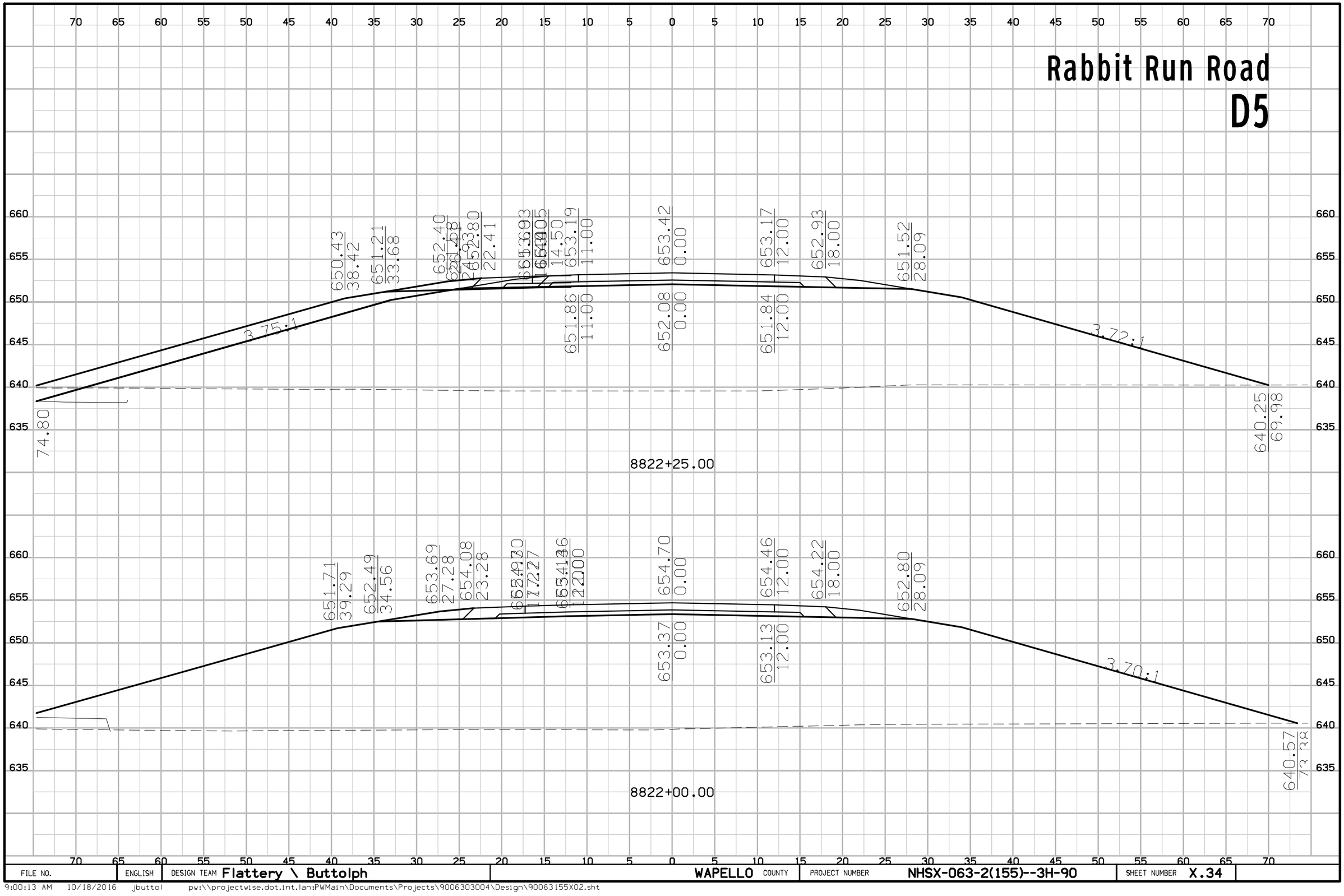


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.33

9:00:12 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X02.sht

Rabbit Run Road

D5

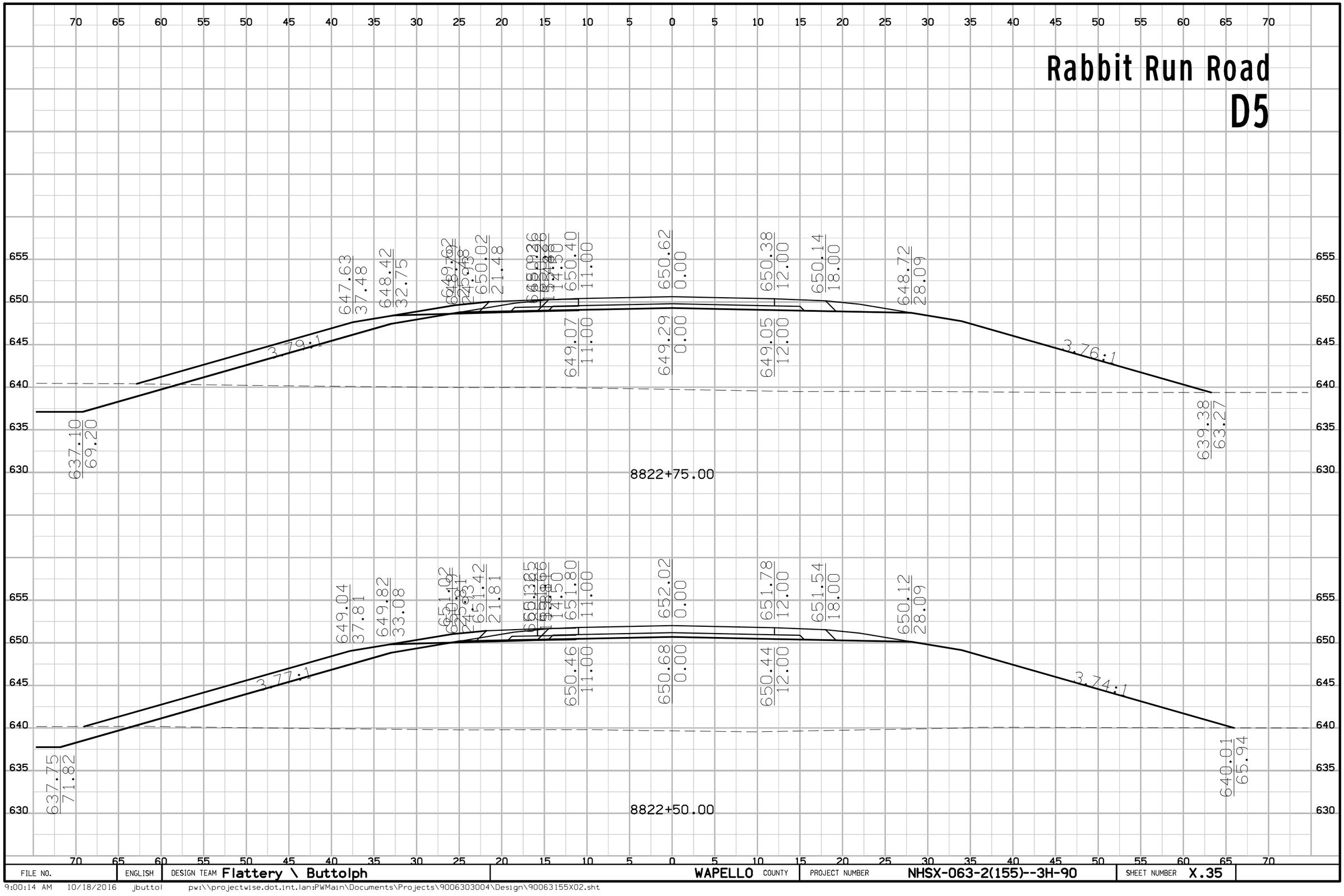


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.34

9:00:13 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X02.sht

Rabbit Run Road

D5

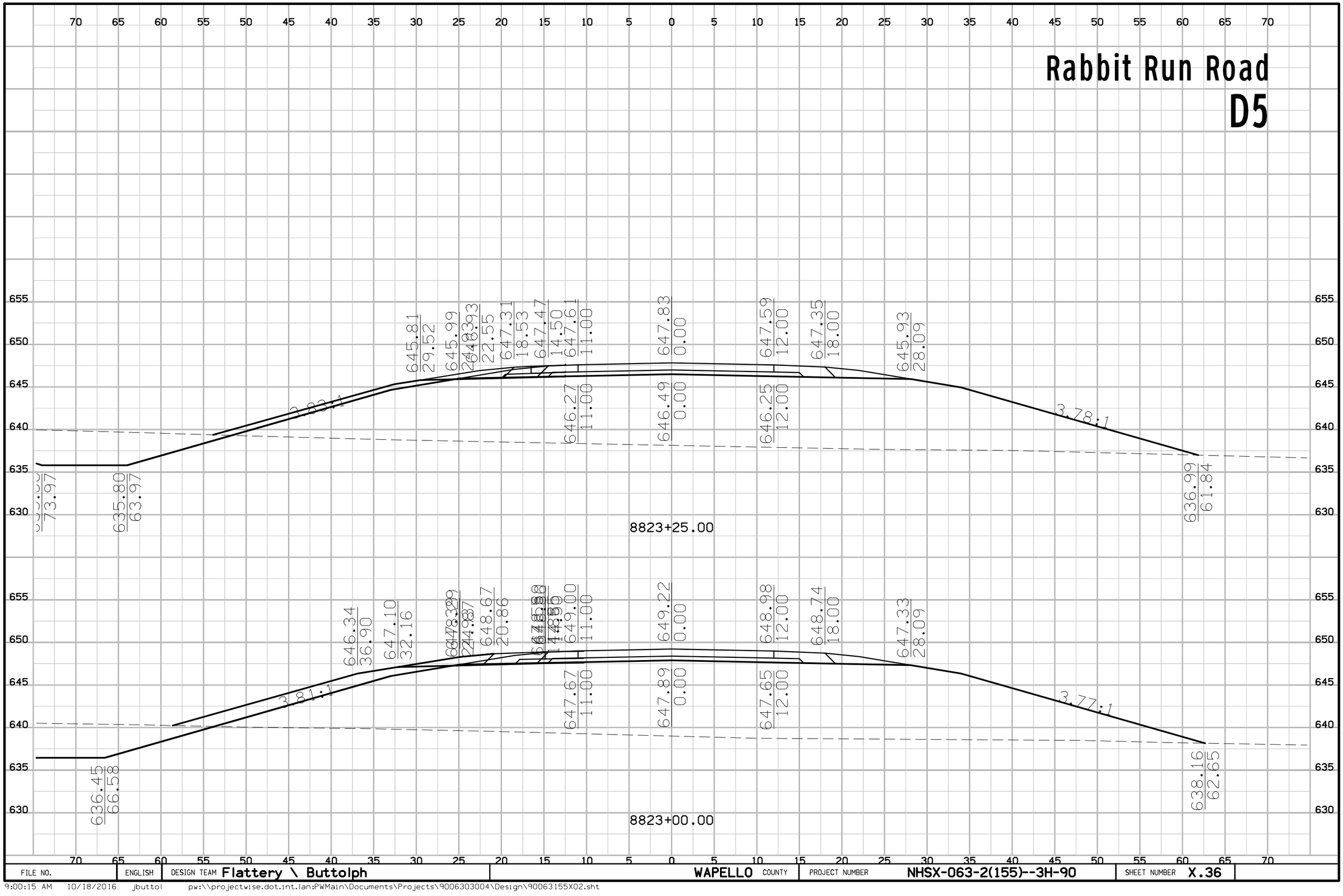


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.35

9:00:14 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X02.sht

Rabbit Run Road

D5

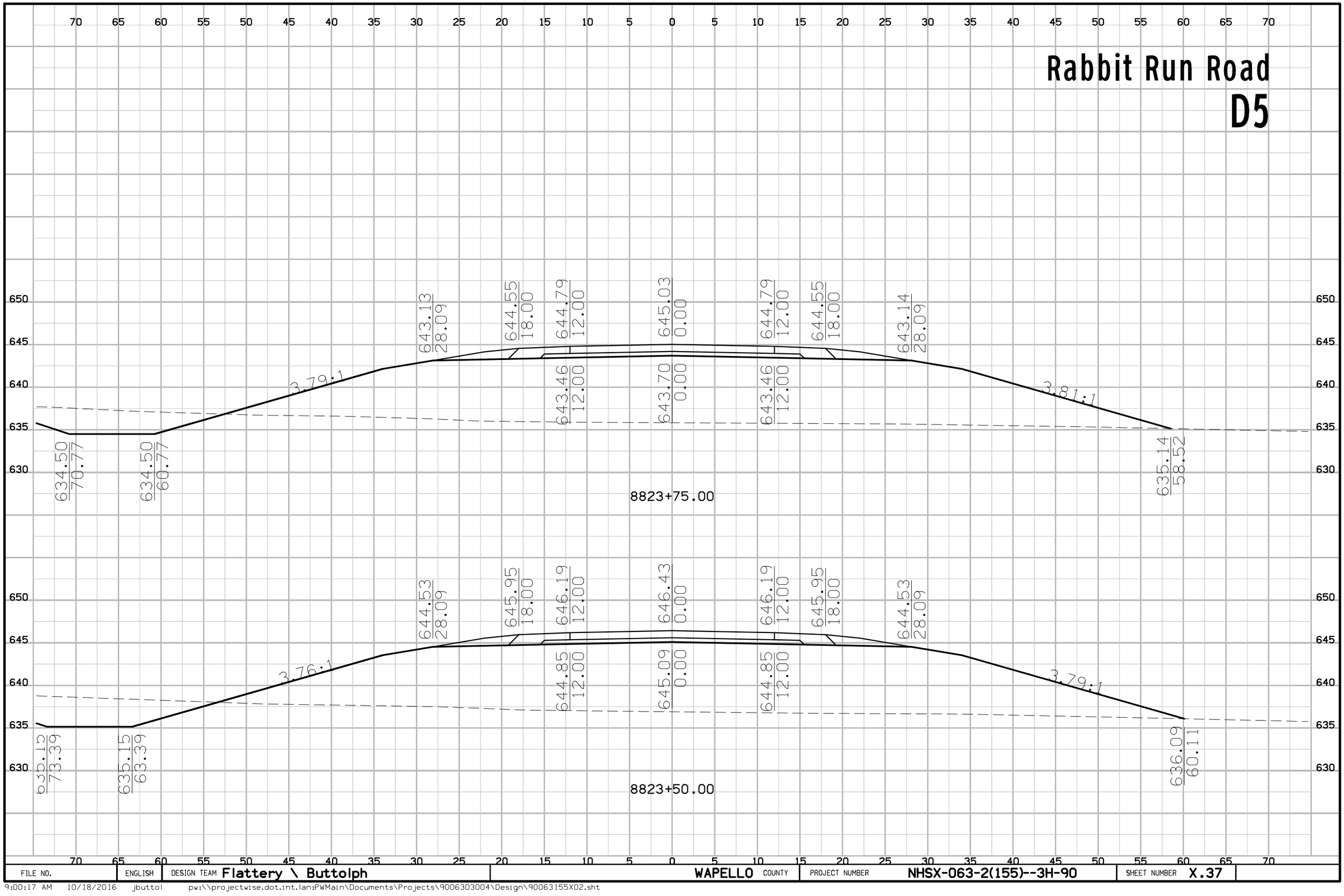


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.36

9:00:15 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X02.sht

Rabbit Run Road

D5

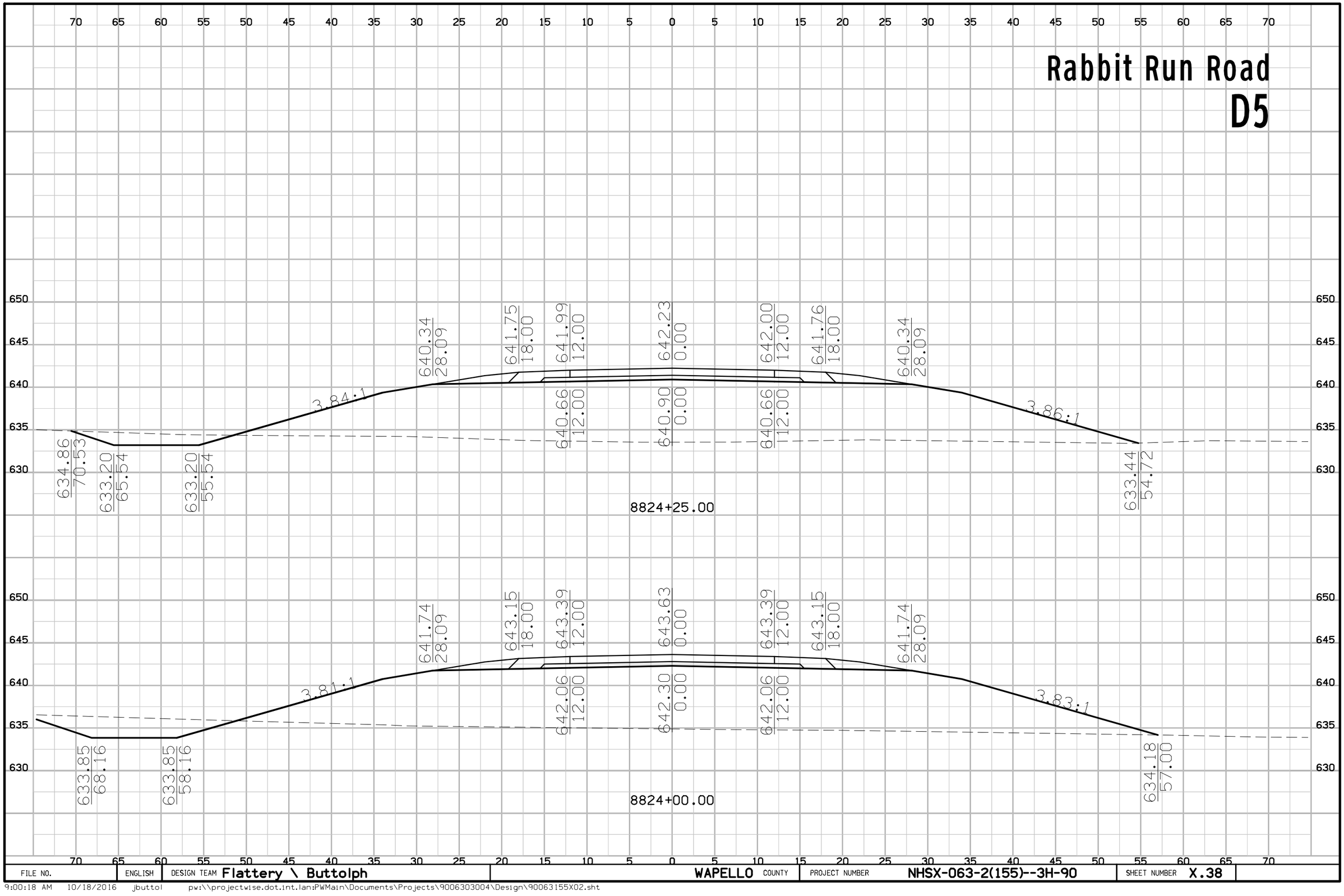


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.37

9:00:17 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X02.sht

Rabbit Run Road

D5

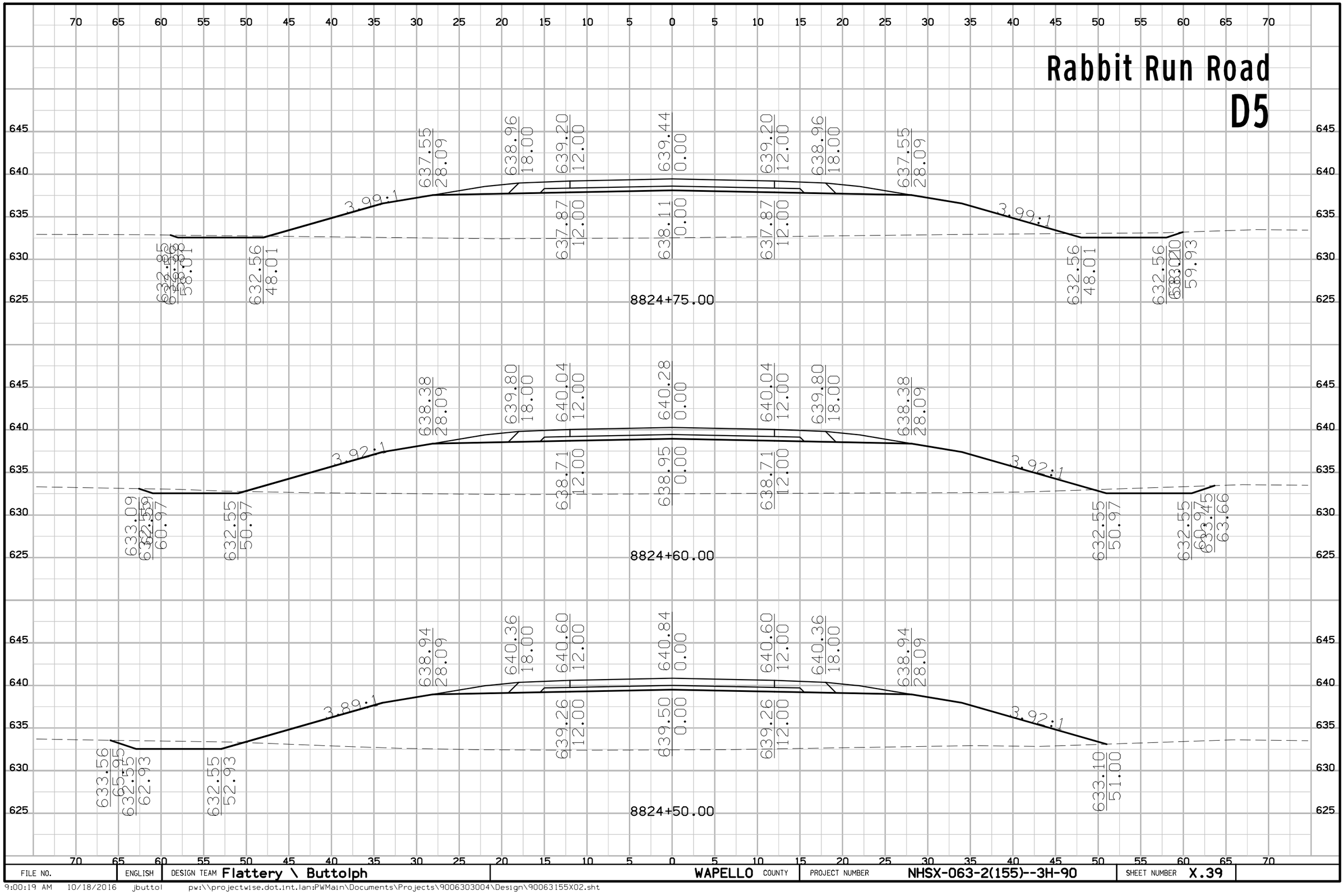


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.38

9:00:18 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X02.sht

Rabbit Run Road

D5

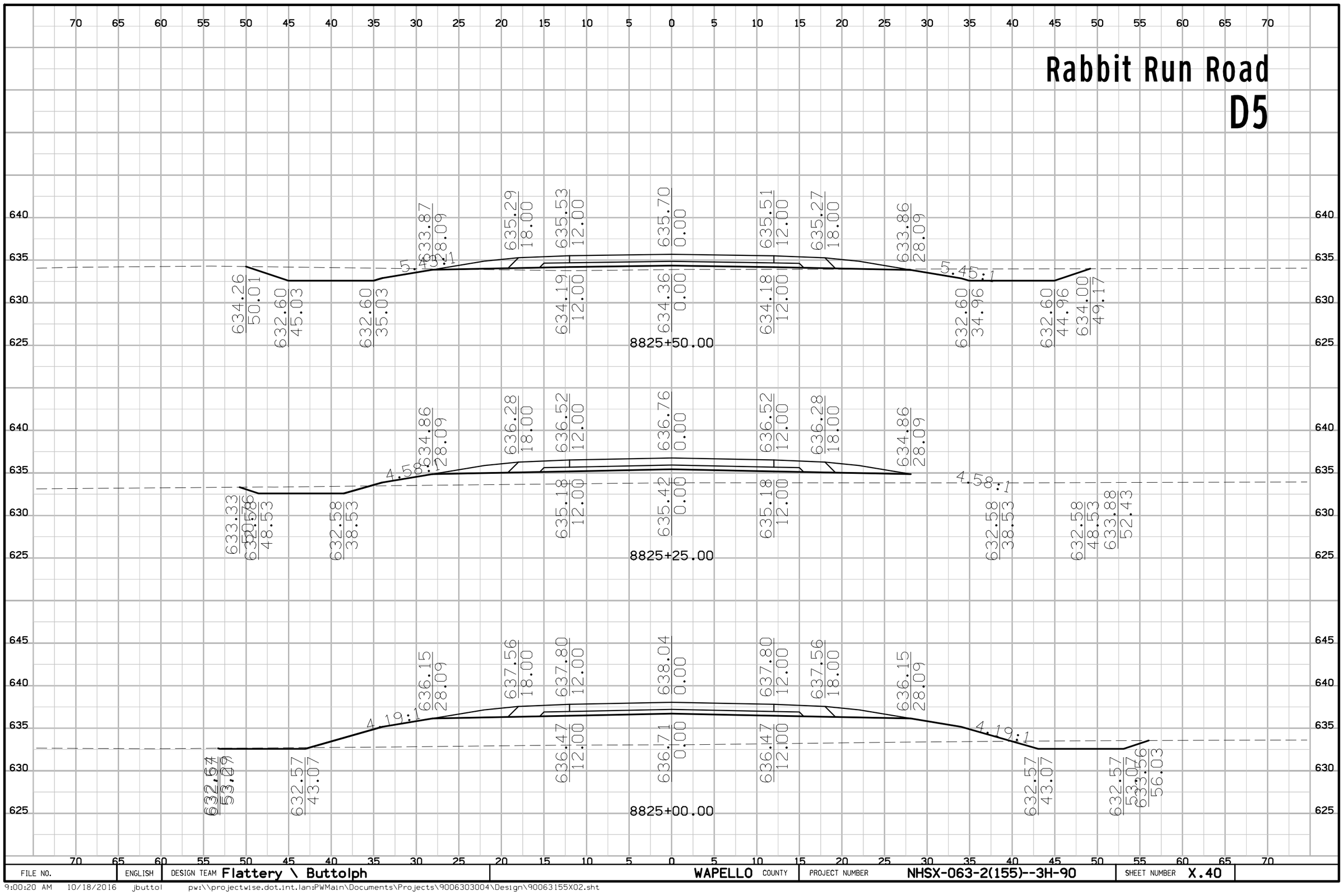


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.39

9:00:19 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X02.sht

Rabbit Run Road

D5

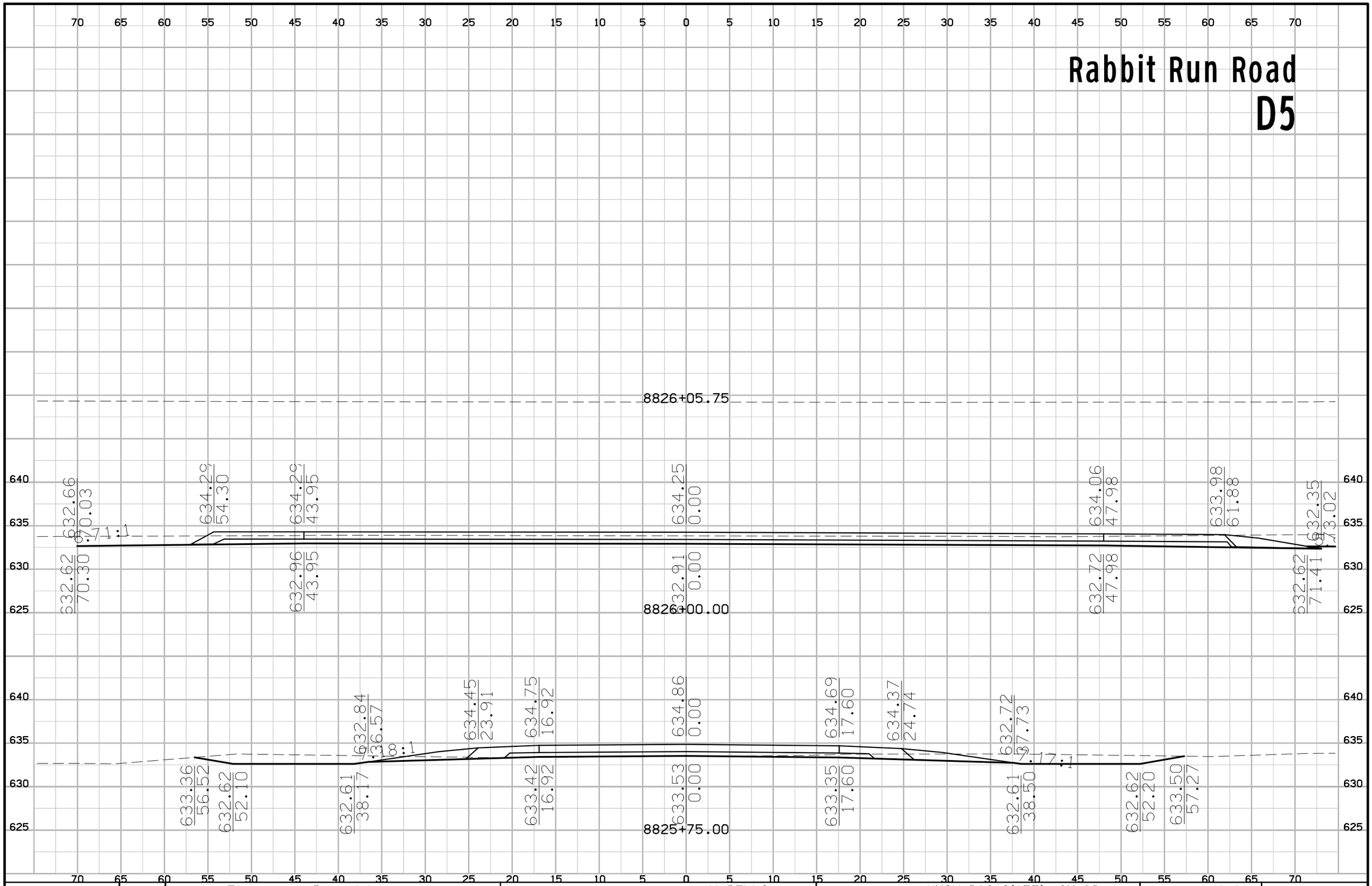


FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.40

9:00:20 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X02.sht

Rabbit Run Road

D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.41

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

Mary St.
D5

640
635

8967+95.00

640
635

8967+80.00

640
635

8967+75.00

640
635

8967+65.00

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.50

9:00:48 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X03.sht

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

Mary St.
D5

650 645 640 635

638.32 44.23 | 640.37 37.06 | 641.99 29.47 | 642.39 25.46 | 642.73 17.03 | 642.83 12.00 | 643.00 0.00 | 642.78 16.50

640.86 34.77 | 641.40 17.03 | 641.50 12.00 | 641.67 0.00 | 641.45 16.50

8968+35.00

650 645 640 635

638.45 43.60 | 640.44 36.65 | 642.05 29.11 | 642.45 25.11 | 642.78 16.64 | 642.86 12.00 | 643.00 0.00 | 642.80 16.50

640.92 34.40 | 641.45 16.64 | 641.53 12.00 | 641.67 0.00 | 641.46 16.50

8968+25.00

640 635

638.51 43.49 | 640.50 36.50 | 642.10 29.00 | 642.50 25.00 | 642.84 16.50 | 642.89 12.00 | 643.01 0.00 | 642.81 16.50

640.97 34.28 | 641.51 16.50 | 641.56 12.00 | 641.68 0.00 | 641.48 16.50

8968+15.00

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.51

9:00:49 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X03.sht

Mary St.
D5

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

650 645 640 635

641.39 / 58.12
641.49 / 56.42
642.42 / 45.57
642.74 / 40.44
642.99 / 30.97
641.66 / 30.97
643.23 / 12.00
641.90 / 12.00
643.31 / 0.00
641.98 / 0.00
643.08 / 12.00
641.74 / 12.00
642.98 / 16.56
641.65 / 16.56
642.64 / 25.10
641.01 / 36.58
638.45 / 45.53

8969+15.00

636.88 / 71.44
640.96 / 45.37
640.82 / 46.28
642.12 / 38.05
642.51 / 33.95
641.48 / 25.75
642.81 / 25.75
643.07 / 12.00
641.73 / 12.00
643.20 / 0.00
641.87 / 0.00
642.98 / 12.00
641.65 / 12.00
642.90 / 16.50
641.56 / 16.50
642.49 / 26.60
641.29 / 30.12

8969+00.00

637.92 / 49.44
640.72 / 38.81
640.19 / 41.35
641.84 / 33.45
642.23 / 29.40
641.21 / 21.11
642.54 / 21.11
642.79 / 12.00
641.46 / 12.00
643.02 / 0.00
641.68 / 0.00
642.83 / 12.00
641.50 / 12.00
642.76 / 16.50
641.43 / 16.50
642.36 / 26.50
641.15 / 30.12
639.80 / 34.17

8968+75.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.52

9:00:50 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X03.sht

Mary St.
D5

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

650 645 640 635

643.75 0.00
642.41 0.00
643.53 12.00
642.20 12.00
643.07 40.98
641.74 40.98
642.65 55.05
641.21 73.37

8969+73.46

643.85 19.81
642.52 19.81
643.68 0.00
642.35 0.00
643.47 12.00
642.14 12.00
643.03 33.74
641.69 33.74
642.68 45.74
641.20 60.70

8969+64.71

643.10 51.43
643.20 38.51
641.86 38.51
643.34 12.00
642.01 12.00
643.39 0.00
642.05 0.00
643.16 12.00
641.82 12.00
643.04 17.49
641.71 17.49
642.70 26.25
641.10 37.76
638.37 47.55

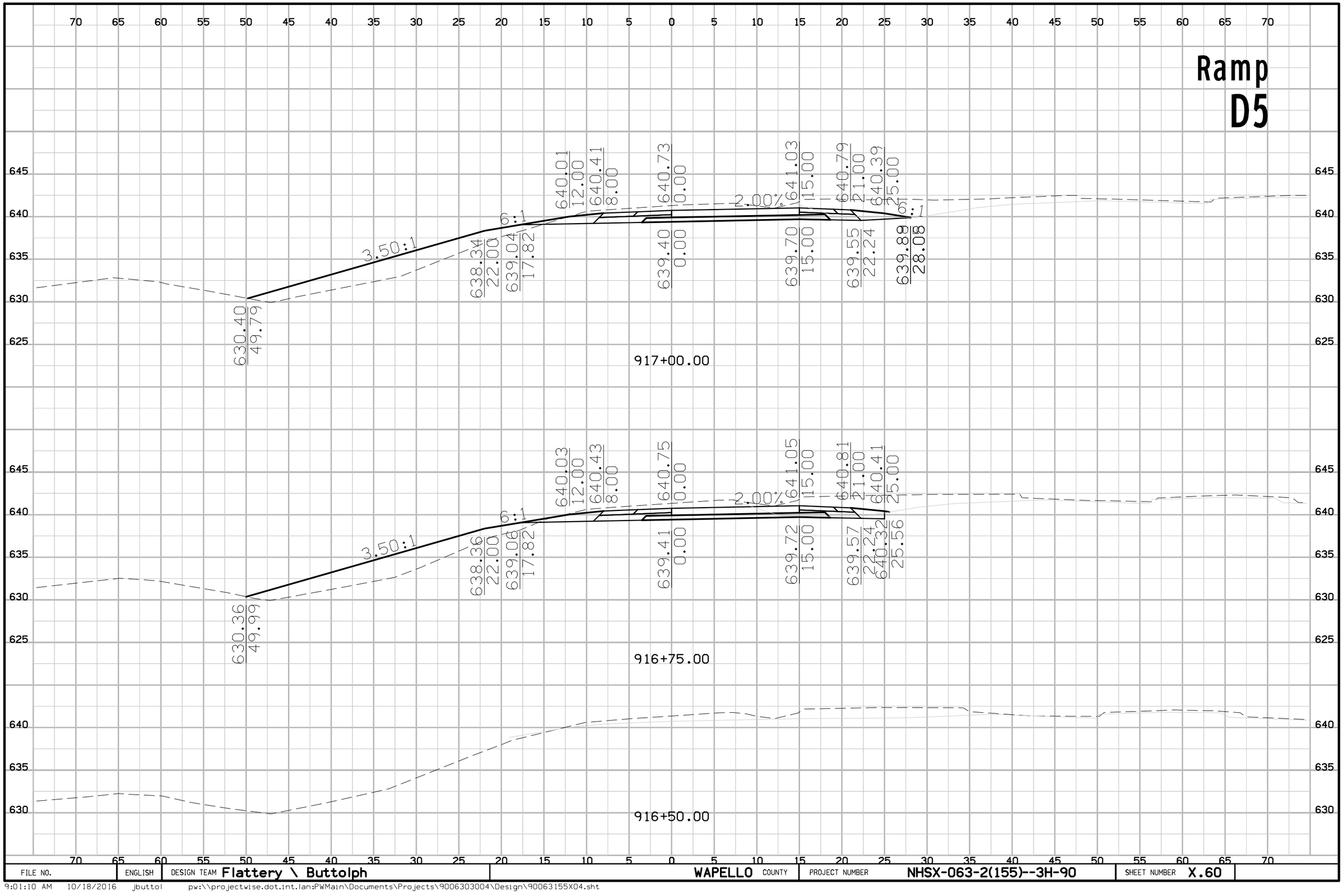
8969+25.00

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.53

9:00:51 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X03.sht

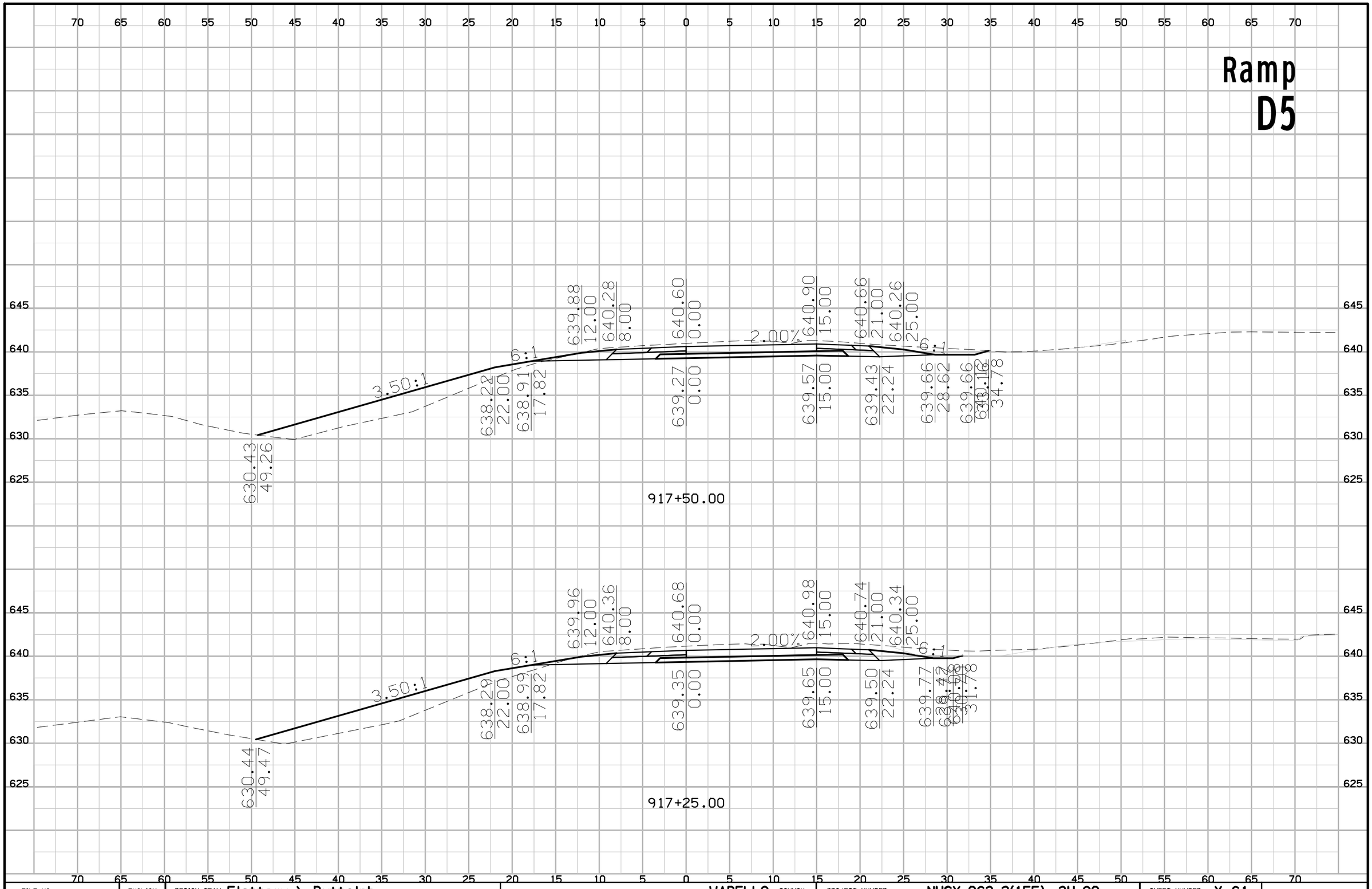
Ramp D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.60

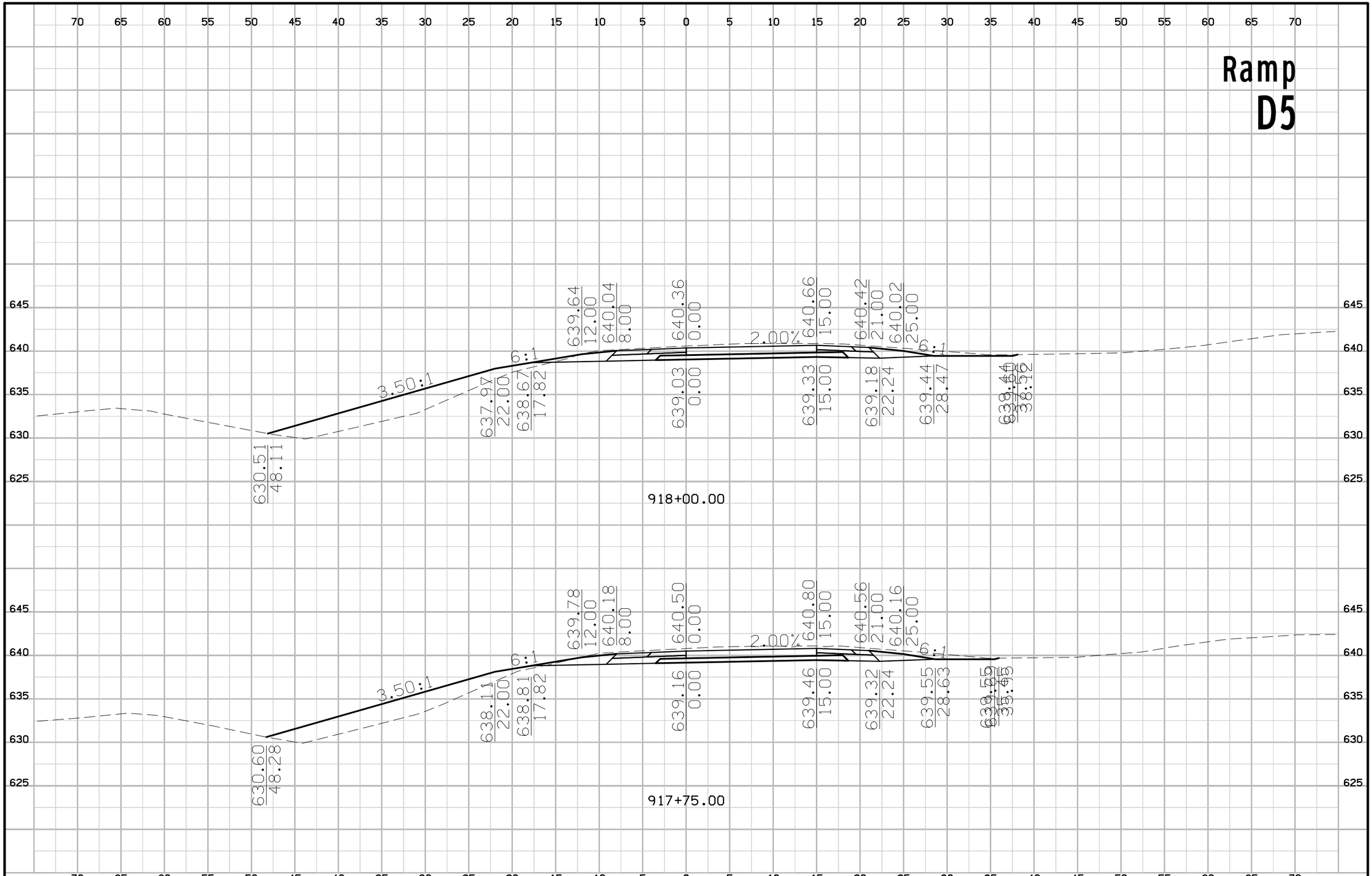
9:01:10 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X04.sht

Ramp
D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.61

9:01:11 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X04.sht



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.62

9:01:12 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X04.sht

Ramp
D5

70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

645 640 635 630 625

630.21 / 43.65

3.03:1

637.36 / 22.00

6:1

638.34 / 16.12

639.68 / 8.06

640.00 / 0.00

638.66 / 0.00

2.00%

640.30 / 15.00

638.96 / 15.00

640.06 / 21.00

638.82 / 22.24

639.66 / 25.00

6:1

639.22 / 27.63

639.22 / 40.38

918+50.00

630.35 / 45.81

3.25:1

637.68 / 22.00

6:1

638.52 / 16.97

639.66 / 8.00

640.19 / 0.00

638.86 / 0.00

2.00%

640.49 / 15.00

639.16 / 15.00

640.25 / 21.00

639.02 / 22.24

639.85 / 25.00

6:1

639.33 / 28.14

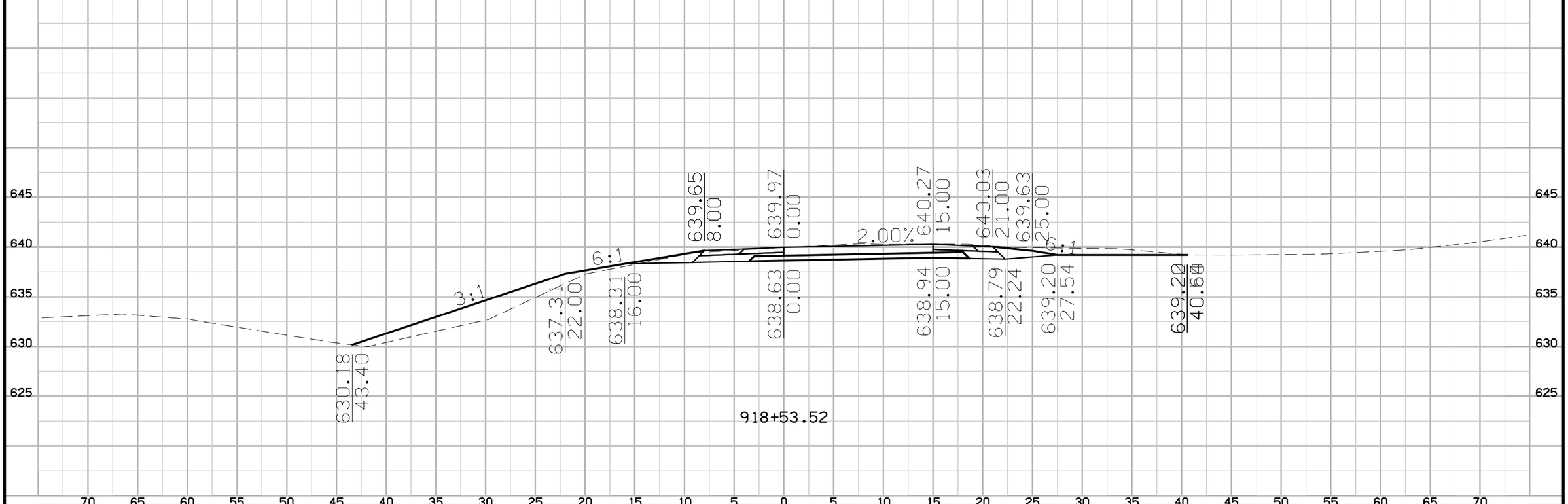
639.38 / 39.17

918+25.00

FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.63

9:01:13 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X04.sht

Ramp D5



FILE NO.	ENGLISH	DESIGN TEAM Flattery \ Buttolph	WAPELLO COUNTY	PROJECT NUMBER NHSX-063-2(155)--3H-90	SHEET NUMBER X.64

9:01:14 AM 10/18/2016 jbuttol pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\9006303004\Design\90063155X04.sht