

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

RECEIVED

JUL 14 2017

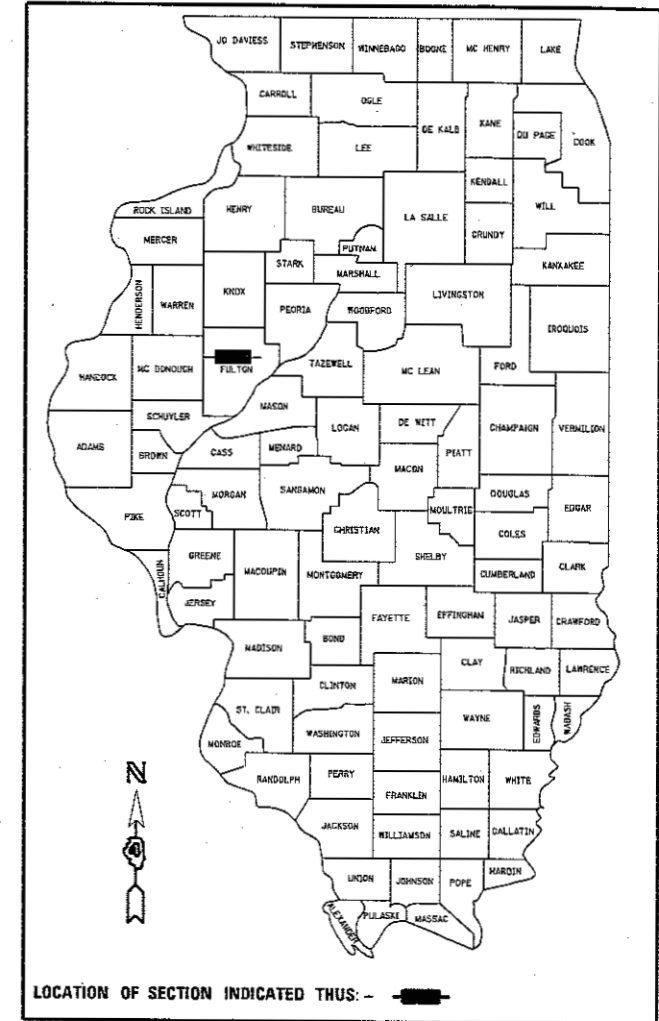
BUREAU OF
DESIGN & ENVIRONMENT

PROPOSED
HIGHWAY PLANS

FAP 687 (IL 95)
SECTION 123-I-2
SLOPE STABILIZATION
FULTON COUNTY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	123-I-2	FULTON	44	1
SLOPE STABILIZATION		ILLINOIS	CONTRACT NO. 68C25	

D-94-006-15



INDEX OF SHEETS:

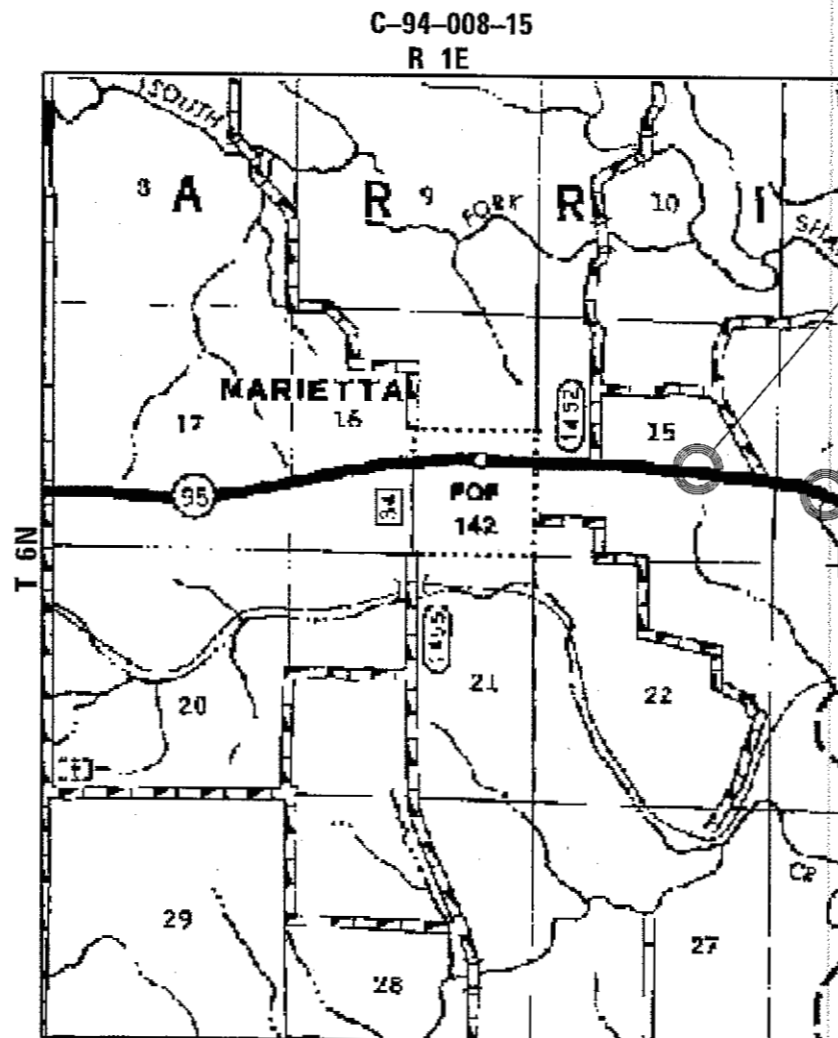
1. COVER SHEET
2. GENERAL NOTES & COMMITMENTS
- 3-5. SUMMARY OF QUANTITIES
- 6-8. SCHEDULE OF QUANTITIES
9. GENERAL OVERVIEW LOCATION
10. EXISTING PLAN VIEW
- 11.-12. RECOVERY TIES & BENCHMARKS
- 13-28. A1 CULVERT DETAILS
- 29-44. A2 CULVERT DETAILS

HIGHWAY STANDARDS:

- 280001-07
- 542201-02
- 701006-05
- 701201-04
- 701301-04
- 701901-05
- 701001-02
- 701011-04
- ADT: 1500 (2015)
- PV: 88%
- SU: 7%
- MU: 5%

CADD STANDARDS:

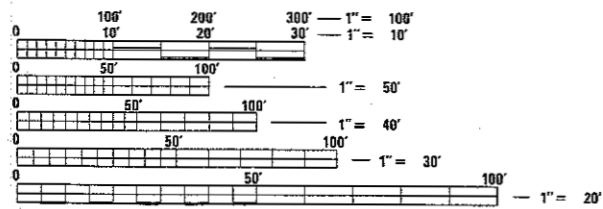
- 210001-D4
- 281001-D4
- 281101-D4
- 540000-D4
- 540001-D4
- 542011-D4



029S095m003.86
6' X 8' CONCRETE BOX

029S095m004.26
3' DIA. CONCRETE PIPE

DESCRIPTION: TWO SLOPE STABILIZATIONS WITH CULVERT EXTENSIONS EAST OF MARIETTA ALONG THE SOUTH OF IL95, 0.34 MILE EAST OF SHAW CREEK ROAD AND 0.05 MILE EAST OF PHEASANT LANE



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: RICH DOTSON
PROJECT MANAGER: MIKE LEWIS

CONTRACT NO. 68C25 CAT. NO. 035192-00D

GROSS LENGTH = 5333 FT. = 1.1 MILE
NET LENGTH = 5333 FT. = 1.1 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED July 11 2017

Kensel A Barnett (KSD)
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

August 13 2017
Markham M. Addio
ENGINEER OF DESIGN AND ENVIRONMENT

August 18 2017
James [Signature]
DIRECTOR OF PROGRAM DEVELOPMENT

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

REV

DESIGNER: CLARK JONES

Ph: (309) 671-3452

ENGINEER: RICH DOTSON

Ph: (309) 671-3455

S:\GEN-DRAFT-STD&PLNS-SQUODBRIDGES-CULVERT CONTRACTS-68C25_IL95near-Morletto-IL95_Plan.dgn

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE	
				100% STATE CULVERT A1	100% STATE CULVERT A2
20100500	TREE REMOVAL ACRES	ACRE	0.5	0.5	0
20200100	EARTH EXCAVATION	CUYD	886	700	186
20400800	FURNISHED EXCAVATION	CUYD	5706	3617	2089
20900110	POROUS GRANULAR BACKFILL	CUYD	31	21	10
21101615	TOPSOIL FURNISH & PLACE, 4"	SOYD	3500	2452	1048
21400100	GRADING AND SHAPING DITCHES	FOOT	540	336	204
25000300	SEEDING, CLASS 3	ACRE	1.5	1.0	0.5
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	90	60	30
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	90	60	30
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	90	60	30
25100115	MULCH, METHOD 2	ACRE	1.5	1.0	0.5
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SOYD	3500	2452	1048
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	150	110	40
28000305	TEMPORARY DITCH CHECKS	FOOT	98	75	23
28000400	PERIMETER EROSION BARRIER	FOOT	555	370	185

RURAL

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	PLT DATE = 7/12/2017	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	123-I-2	FULTON	44	3
SLOPE STABILIZATION		CONTRACT NO. 68C25		
ILLINOIS FED. AID PROJECT				

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RURAL

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE	CONST. CODE
				0004	0004
				100% STATE CULVERT A1	100% STATE CULVERT A2
28100225	STONE RIPRAP, CLASS B3	TON	687	494	193
28200200	FILTER FABRIC	SOYD	700	502	198
44004000	PAVED DITCH REMOVAL	FOOT	120	120	0
48101200	AGGREGATE SHOULDERS, TYPE B	TON	108	70	38
50102400	CONCRETE REMOVAL	CUYD	1.2	1.2	0
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	5535	5535	0
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	1	1	0
54002020	EXPANSION BOLTS 3/4 INCH	EACH	26	18	8
54003000	CONCRETE BOX CULVERTS	CUYD	37	37	0
54214521	PRECAST REINFORCED CONCRETE PRECAST FLARED END SECTIONS, = ROUND-SIZE 36"	EACH	1	0	1
54248510	CONCRETE COLLAR	CUYD	2.2	1.7	0.5
542A1081	PIPE CULVERTS, CLASS A, TYPE 2 36"	FOOT	40	0	40
66600105	FURNISHING & ERECTING RIGHT-OF-WAY MARKERS	EACH	4	4	0
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CALMO	3	2	1
67100100	MOBILIZATION	LSUM	1	0.5	0.5

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	123-I-2	FULTON	44	4
SLOPE STABILIZATION		CONTRACT NO. 68C25		
ILLINOIS FED. AID PROJECT				

REV

6/1/17

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RURAL

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONST. CODE	CONST. CODE
				0004	0004
				100% STATE CULVERT A1	100% STATE CULVERT A2
70100450	TRAFFIC CONTROL & PROTECTION, STANDARD 701201	LSUM	1	0.5	0.5
X7015005	CHANGEABLE MESSAGE SIGN	CALDA	70	35	35
Z0005300	BOX CULVERT TO BE CLEANED	EACH	1	1	0
Z0013798	CONSTRUCTION LAYOUT	LSUM	1	0.5	0.5

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	123-I-2	FULTON	44	5
SLOPE STABILIZATION			CONTRACT NO. 68C25	
ILLINOIS FED. AID PROJECT				

REV

SCHEDULE OF QUANTITIES

TREE REMOVAL	
LOCATION	ACRE
(A1)	0.5
(A2)	0
TOTAL	0.5

POTASSIUM	
LOCATION	POUND
(A1)	60
(A2)	30
TOTAL	90

EARTHWORK					
LOCATION	EARTH EXCAVATION (CUT) CY	For Information Only			FURNISHED EXCAVATION CY
		ADJUSTED EARTH EXCAVATION (ADJ. CUT)	EMBANKMENT (FILL - CY)	WASTE CY	
(A1) STA. 373+50 to 376+25	695	556	4173	0	3617
(A2) STA. 394+60 to 396+10	191	153	2242	0	2089
TOTAL	886	709	6415	0	5706

MULCH, METHOD 2	
LOCATION	ACRE
(A1)	1.0
(A2)	0.5
TOTAL	1.5

POROUS GRANULAR BACKFILL	
LOCATION	CUYD
(A1)	21
(A2)	10
TOTAL	31

SEEDING, CLASS 3	
LOCATION	ACRE
(A1)	1.0
(A2)	0.5
TOTAL	1.5

H.D. EROSION CONTROL BLANKET	
LOCATION	SQYD
(A1)	2452
(A2)	1048
TOTAL	3500

TOPSOIL FURNISH & PLACE, 4"	
LOCATION	SQYD
(A1)	2452
(A2)	1048
TOTAL	3500

NITROGEN	
LOCATION	POUND
(A1)	60
(A2)	30
TOTAL	90

TEMP. EROSION CONTROL SEEDING	
LOCATION	POUND
(A1)	110
(A2)	40
TOTAL	150

GRADING & SHAPING DITCHES	
LOCATION	FOOT
(A1)	336
(A2)	204
TOTAL	540

PHOSPHORUS	
LOCATION	POUND
(A1)	60
(A2)	30
TOTAL	90

TEMP. DITCH CHECKS	
LOCATION	FOOT
(A1)	75
(A2)	23
TOTAL	98

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SCHEDULE OF QUANTITIES

<i>PERIMETER EROSION BARRIER</i>	
<i>LOCATION</i>	<i>FOOT</i>
(A1)	370
(A2)	185
<i>TOTAL</i>	555

<i>CONCRETE REMOVAL</i>	
<i>LOCATION</i>	<i>CUYD</i>
(A1)	1.2
(A2)	0
<i>TOTAL</i>	1.2

<i>CONCRETE FLARED END SECTIONS, 36"</i>	
<i>LOCATION</i>	<i>EACH</i>
(A1)	0
(A2)	1
<i>TOTAL</i>	1

<i>STONE RIPRAP, CLASS B3</i>	
<i>LOCATION</i>	<i>TON</i>
(A1)	494
(A2)	193
<i>TOTAL</i>	687

<i>REINFORCEMENT BARS, EPOXY COATED</i>	
<i>LOCATION</i>	<i>POUND</i>
(A1)	5535
(A2)	0
<i>TOTAL</i>	5535

<i>CONCRETE COLLAR</i>	
<i>LOCATION</i>	<i>CUYD</i>
(A1)	1.7
(A2)	0.5
<i>TOTAL</i>	2.2

<i>FILTER FABRIC</i>	
<i>LOCATION</i>	<i>SQYD</i>
(A1)	502
(A2)	198
<i>TOTAL</i>	700

<i>BOX CULVERT END SECTIONS, CULV. 1</i>	
<i>LOCATION</i>	<i>EACH</i>
(A1)	1
(A2)	0
<i>TOTAL</i>	1

<i>PIPE CULVERTS, CLASS A, TYPE 2 36"</i>	
<i>LOCATION</i>	<i>FOOT</i>
(A1)	0
(A2)	40
<i>TOTAL</i>	40

<i>PAVED DITCH REMOVAL</i>	
<i>LOCATION</i>	<i>FOOT</i>
(A1)	120
(A2)	0
<i>TOTAL</i>	120

<i>EXPANSION BOLTS, 3/4"</i>	
<i>LOCATION</i>	<i>EACH</i>
(A1)	18
(A2)	4
<i>TOTAL</i>	22

<i>FURNISH & ERECT ROW MARKERS</i>	
<i>LOCATION</i>	<i>EACH</i>
(A1)	4
(A2)	0
<i>TOTAL</i>	4

<i>AGG. SHLDRS., TYPE B</i>	
<i>LOCATION</i>	<i>TON</i>
(A1) STA. 373+50 to 376+25	70
(A2) STA. 394+60 to 396+10	38
<i>TOTAL</i>	108

<i>CONCRETE BOX CULVERTS</i>	
<i>LOCATION</i>	<i>CUYD</i>
(A1)	37
(A2)	0
<i>TOTAL</i>	37

<i>ENGINEER'S FIELD OFFICE, TYPE A</i>	
<i>LOCATION</i>	<i>CALMO</i>
(A1)	2
(A2)	1
<i>TOTAL</i>	3

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SCHEDULE OF QUANTITIES

<i>MOBILIZATION</i>	
<i>LOCATION</i>	<i>LSUM</i>
<i>(A1)</i>	<i>1</i>
<i>(A2)</i>	<i>0</i>
<i>TOTAL</i>	<i>1</i>

<i>T.C. & P. STANDARD 701201</i>	
<i>LOCATION</i>	<i>LSUM</i>
<i>(A1)</i>	<i>0.5</i>
<i>(A2)</i>	<i>0.5</i>
<i>TOTAL</i>	<i>1</i>

<i>CHANGEABLE MESSAGE SIGN</i>	
<i>LOCATION</i>	<i>CALDA</i>
<i>(A1)</i>	<i>35</i>
<i>(A2)</i>	<i>35</i>
<i>TOTAL</i>	<i>70</i>

<i>BOX CULVERT TO BE CLEANED</i>	
<i>LOCATION</i>	<i>EACH</i>
<i>(A1)</i>	<i>1</i>
<i>(A2)</i>	<i>0</i>
<i>TOTAL</i>	<i>1</i>

<i>CONSTRUCTION LAYOUT</i>	
<i>LOCATION</i>	<i>EACH</i>
<i>(A1)</i>	<i>0.5</i>
<i>(A2)</i>	<i>0.5</i>
<i>TOTAL</i>	<i>1</i>

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	123-1-2	FULTON	44	8
SLOPE STABILIZATION			CONTRACT NO. 68C25	
ILLINOIS FED. AID PROJECT				

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NOTE:
 Area 1 (A1): is a 6'x 8'x ±171' concrete box culvert listed at Sta. 374+50 and 0.34 mi. East of Shaw Creek Rd. or 0.35 mi. West of Pheasant Lane.
 Area 2 (A2): is a 65°skewed 3' dia. concrete pipe 0.05 mi. East of Pheasant Lane at Sta. 395+10

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

GENERAL OVERVIEW LOCATION			
SN. 029S095m003.860			
SCALE:	SHEET	OF	SHEETS
			STA. 374+15.00 TO STA. 396+10.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	123-1-2	FULTON	44	9
SLOPE STABILIZATION			CONTRACT NO. 68C25	
ILLINOIS FED. AID PROJECT				



AREA 1

STA: 373+00
B.M.10

STA: 376+00

IL 95

B.M.11

AREA 1

SET:
BM# 901 CHISEL ON EAST END OF GUTTER

SECTION @ SOUTH E.P. 12.5' Rt.
PAVEMENT STA. -
ELEVATION: 601.278

LATITUDE: 40° 30' 02.02846" N.
LONGITUDE: 90° 22' 38.75175" W
ELLIPTICAL: 491.209'



AREA 2

STA: 394+00

STA: 396+00

B.M.12

AREA 2

SET:
BM# 902 CHISEL ON NO. 8 END"

P.C.C. HEADWALL for CULVERT
under FULTON CO. 395E (NE QUAD.)
40' Lt. PAVEMENT STA. - 392+40
ELEVATION: 644.993

WGS84
ILSPC83W ('11)
NAVD88 (VRS)
GEOID1ZA
COMB. FACT: 0.999925

VRS Calibrated to: Horiz. & Vert. 0.046
N.G.S.
A057 LATITUDE: 40° 28' 58.38293" N.
LONGITUDE: 90° 29' 42.10243" W.
ELLIPTICAL: HGT.
ELEVATION: 657.50

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

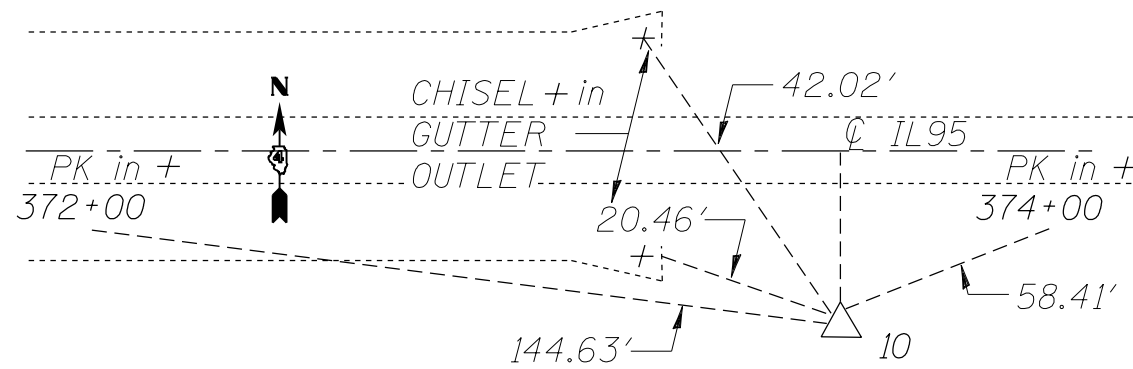
IL 95 CULVERT SURVEY LOCATIONS
SN. 029S095m003.860 & 004.260

SCALE: SHEET OF SHEETS STA. 374+15 TO STA.

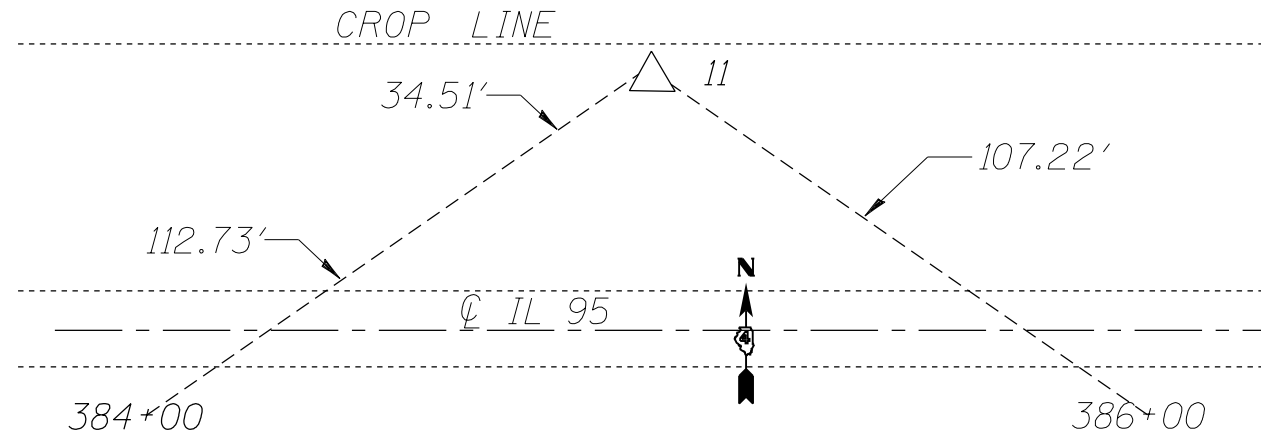
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687	123-1-2	FULTON	44	11
CONTRACT NO. 68C25			ILLINOIS FED. AID PROJECT	

RECOVERY TIES

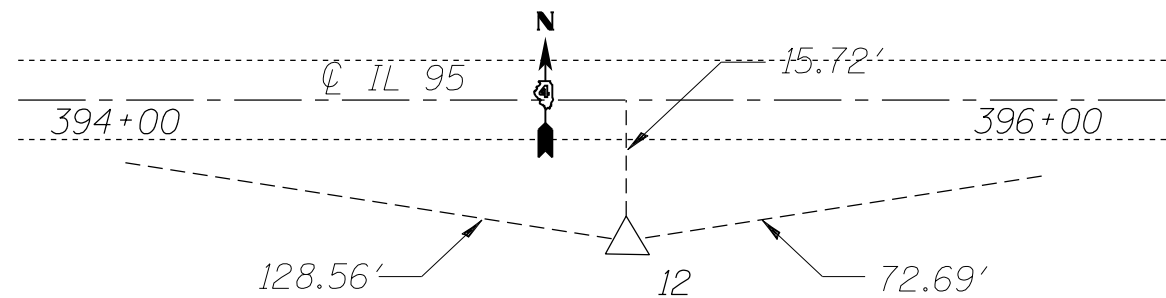
RECOVERY TIES TO BM#10



RECOVERY TIES TO BM#11



RECOVERY TIES TO BM#12



BENCHMARKS

BM#10 TEN INCH SPIKE & RIBBON, FLUSH
 GROUND: 1396388.536
 2238139.650
 ELEVATION: 600.126

LATITUDE: 40° 30' 02.02846" N.
 LONGITUDE: 90° 22' 38.75175" W
 ELIPTICAL: 491.209'

BM#11 TEN INCH SPIKE & RIBBON, FLUSH
 GROUND: 1396355.574
 2239300.809
 ELEVATION: 648.624

LATITUDE: 40° 30' 01.72989" N.
 LONGITUDE: 90° 22' 23.72026" W
 ELIPTICAL: 539.703'

BM#12 TEN INCH SPIKE & RIBBON, FLUSH
 GROUND: 1396225.577
 2240318.981
 ELEVATION: 644.328

LATITUDE: 40° 30' 00.46871" N.
 LONGITUDE: 90° 22' 10.53679" W
 ELIPTICAL: 539.405'

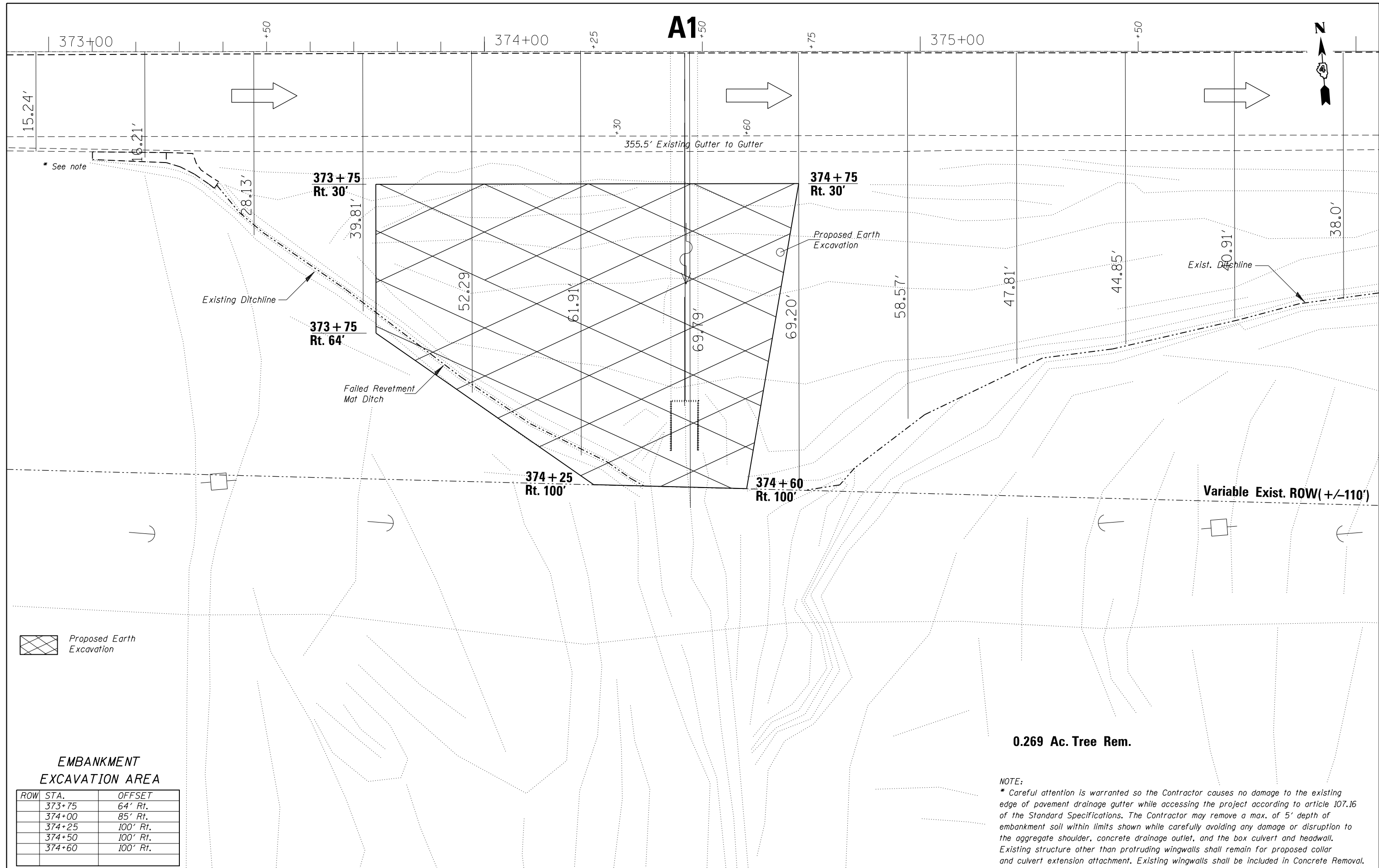
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

IDOT RECOVERY TIES & BENCHMARKS
IL 95, SN. 029S095m003.860 & 004.260
 SCALE: SHEET OF SHEETS STA. 374+15 TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	123-1-2	FULTON	44	12
CONTRACT NO. 68C25				
ILLINOIS FED. AID PROJECT				

A1



Proposed Earth Excavation

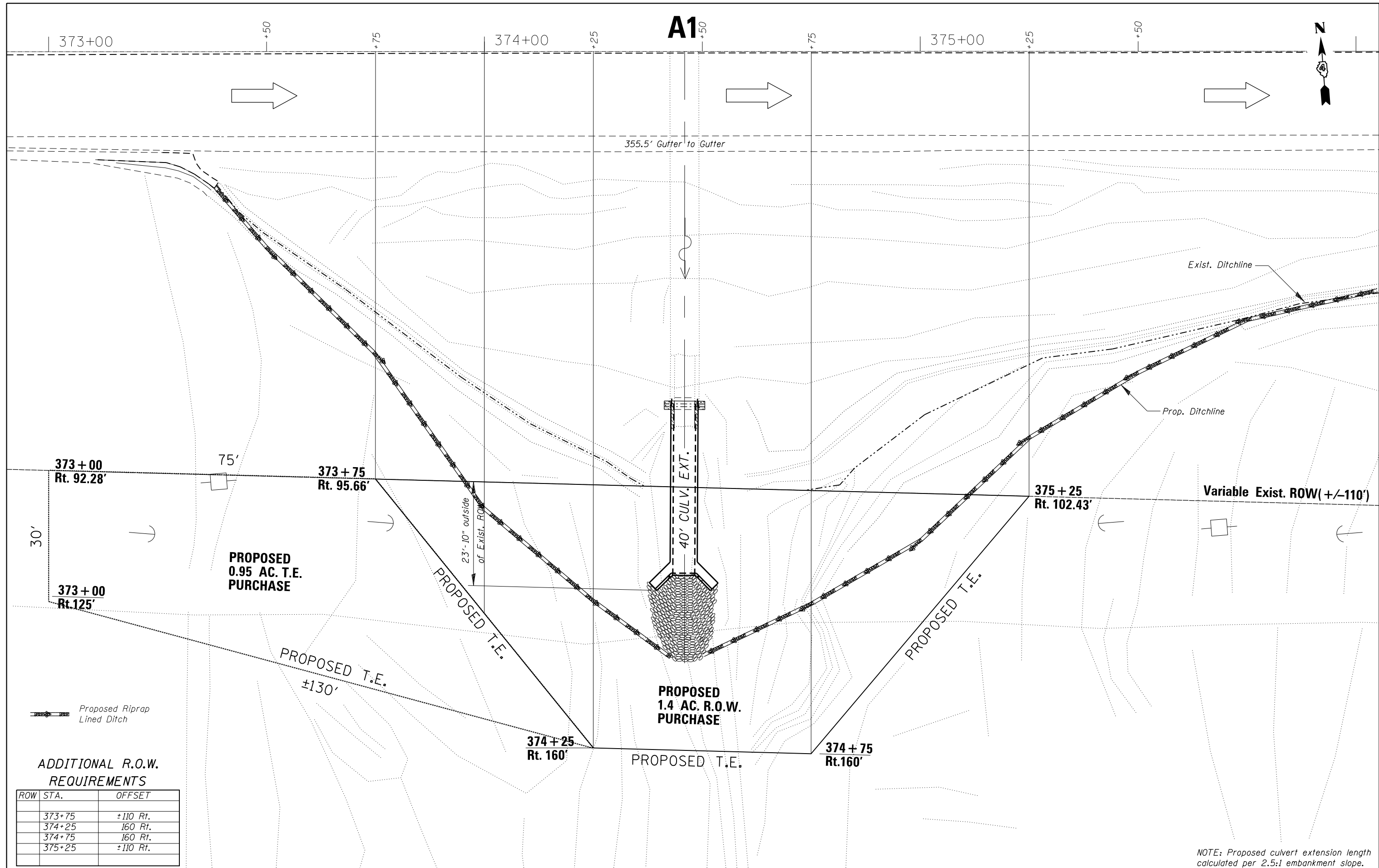
EMBANKMENT EXCAVATION AREA

ROW	STA.	OFFSET
	373+75	64' Rt.
	374+00	85' Rt.
	374+25	100' Rt.
	374+50	100' Rt.
	374+60	100' Rt.

0.269 Ac. Tree Rem.

NOTE:
 * Careful attention is warranted so the Contractor causes no damage to the existing edge of pavement drainage gutter while accessing the project according to article 107.16 of the Standard Specifications. The Contractor may remove a max. of 5' depth of embankment soil within limits shown while carefully avoiding any damage or disruption to the aggregate shoulder, concrete drainage outlet, and the box culvert and headwall. Existing structure other than protruding wingwalls shall remain for proposed collar and culvert extension attachment. Existing wingwalls shall be included in Concrete Removal.

A1



373+00
Rt. 92.28'

373+00
Rt. 125'

**PROPOSED
0.95 AC. T.E.
PURCHASE**

PROPOSED T.E.
±130'

PROPOSED T.E.

374+25
Rt. 160'

PROPOSED T.E.

**PROPOSED
1.4 AC. R.O.W.
PURCHASE**

374+75
Rt. 160'

PROPOSED T.E.

375+25
Rt. 102.43'

Variable Exist. ROW (+/-110')

Proposed Riprap
Lined Ditch

**ADDITIONAL R.O.W.
REQUIREMENTS**

ROW	STA.	OFFSET
	373+75	±110 Rt.
	374+25	160 Rt.
	374+75	160 Rt.
	375+25	±110 Rt.

NOTE: Proposed culvert extension length calculated per 2.5:1 embankment slope.

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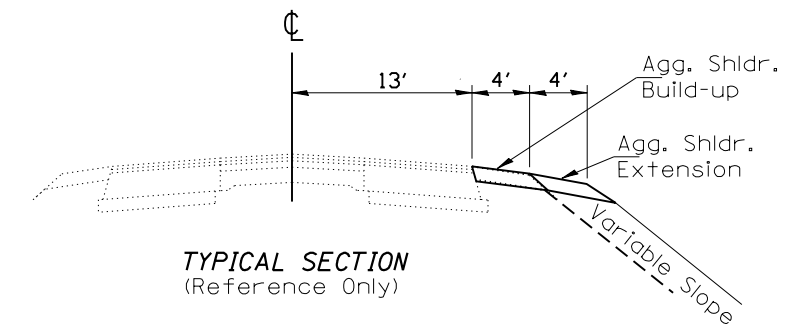
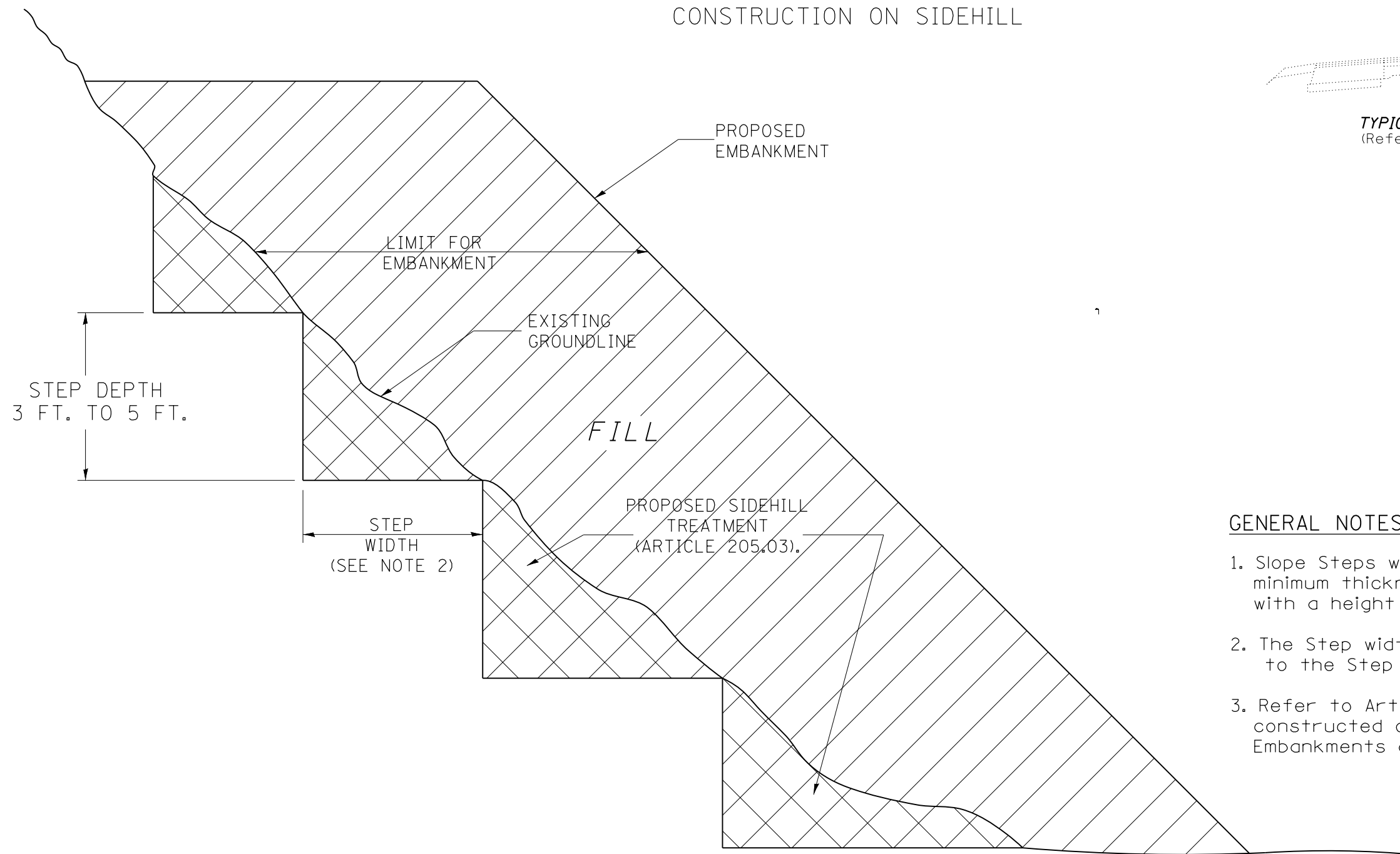
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PROPOSED PLAN		F.A.P. RTE.		SECTION		COUNTY		TOTAL SHEETS		SHEET NO.	
SN. 029S095m003.86		687		123-1-2		FULTON		44		14	
SCALE: 1.5:1		SHEET		OF		SHEETS		STA. 373+25		TO STA. 376+75	

SLOPE STABIL. & CULV. EXT.		CONTRACT NO. 68C25		ILLINOIS FED. AID PROJECT	
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SLOPE STEPS DETAIL

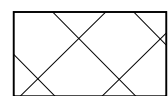
TYPICAL CROSS-SECTION EMBANKMENT CONSTRUCTION ON SIDEHILL



GENERAL NOTES:

1. Slope Steps will be required for all 12(300) minimum thickness "silver fills" and on a fills with a height of 10'(3.0m).
2. The Step width shall be approximately equal to the Step depth.
3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.

REPLACEMENT MATERIAL:



STANDARD EMBANKMENT
(IN ACCORDANCE WITH SECTION 205
OF THE STANDARD SPECIFICATIONS)

NOTE
All dimensions are in inches unless otherwise noted.
There shall be no excavated elevation drop-off
left overnight within 8 feet of the open traffic lane.

1-1-97	RENUM. L-5.03, NEW REVISION BOX, REVISED TITLE	T.P.
	BOX, REVISED GENERAL NOTES.	
10-16-06	REVISED TO 2007 SPEC.	M.A.

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

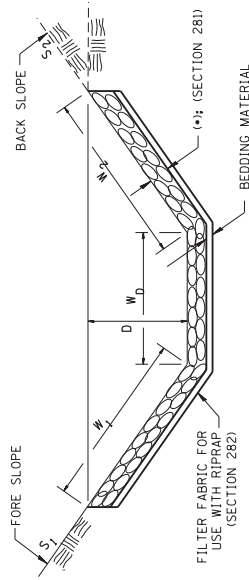
SLOPE STEPS DETAIL

NOT TO SCALE

CADD STD. 205001-D4

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	123-1-2	FULTON	44	15
SLOPE STABIL. & CULV. EXT.			CONTRACT NO. 68C25	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CASE 1
(DITCH)

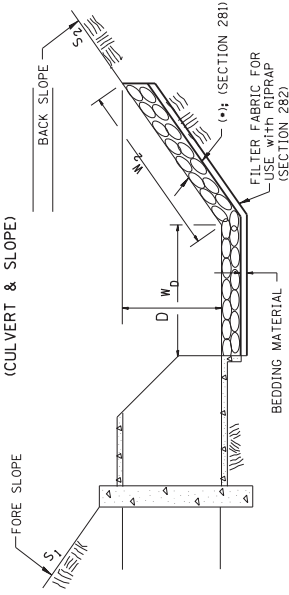


*STONE RIPRAP, CLASS B3 (1.5' AVERAGE THICKNESS)

LOCATION	WIDTH (1)	LENGTH (1)	VOLUME	RIPRAP	FABRIC
STA TO STA	lin ft (m)	lin ft (m)	cu yd (m ³)	tons (m tons)	sq yds (m ²)
373+30-374+40	12'-4"	110	50	75	150
374+50-376+70	10'-0"	220	122	183	244
394+40-395+20	8'-4"	80	37	56	74
395+30-396+50	10'-9"	120	72	108	143
TOTAL		281	281	422	611

(1) WIDTH = $W_1 + W_2 + W_0$

CASE 2
(CULVERT & SLOPE)

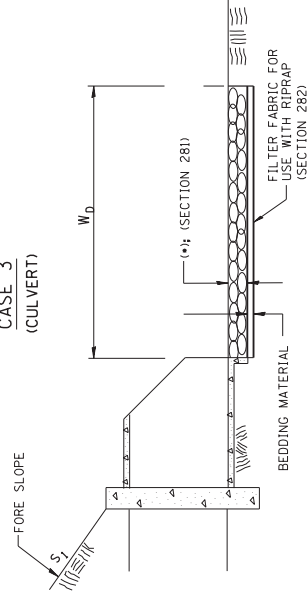


*STONE RIPRAP, CLASS B3 (1.5' AVERAGE THICKNESS)

LOCATION	WIDTH (1)	LENGTH (1)	RIPRAP	FABRIC
STA TO STA	lin ft (m)	lin ft (m)	tons (m tons)	sq yds (m ²)
TOTAL				

(1) WIDTH = $W_2 + W_0$

CASE 3
(CULVERT)



*STONE RIPRAP, CLASS B3 (1.5' AVERAGE THICKNESS)

LOCATION	WIDTH (1)	LENGTH (1)	VOLUME	RIPRAP	FABRIC
STA TO STA	lin ft (m)	lin ft (m)	cu yd (m ³)	tons (m tons)	sq yds (m ²)
374+40	20	16	18	27	35
395+00-395+40	20	16	18	27	35
TOTAL		36	36	54	70

(1) WIDTH = W_0

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).
All dimensions are in inches (millimeters) unless otherwise noted.

1-1-97	REVISION, A-12.02, NEW REVISION BOX	T.P.									
12-1-97	CORRECT FILTER FABRIC LEADER ARROW	J.A.									
10-16-06	REVISED TO 2007 SPEC.	M.A.									
9-6-12	REMOVED A DESIGNER NOTE AND MADE MINOR CHANGES	R.D.									

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

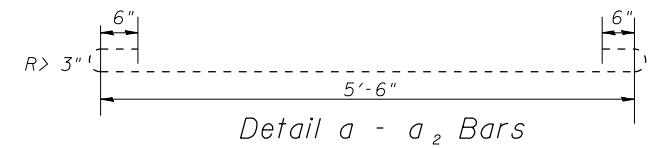
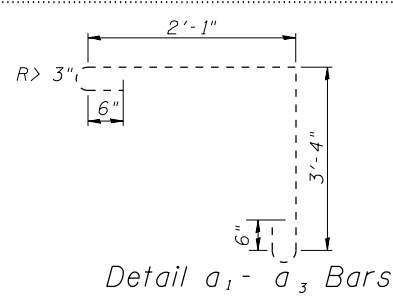
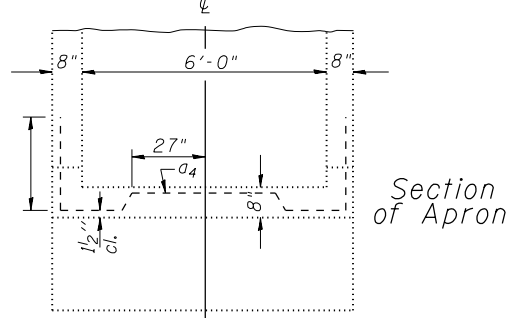
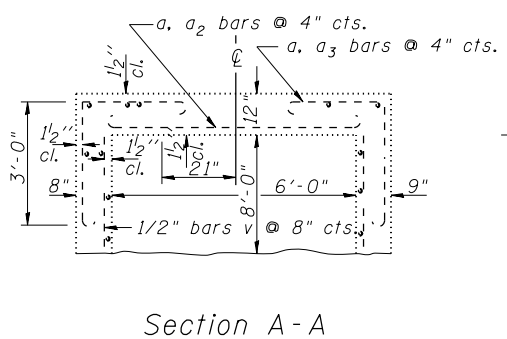
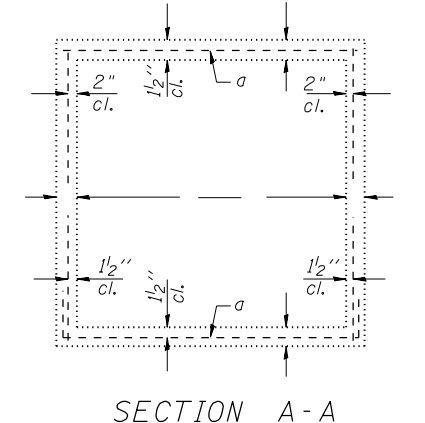
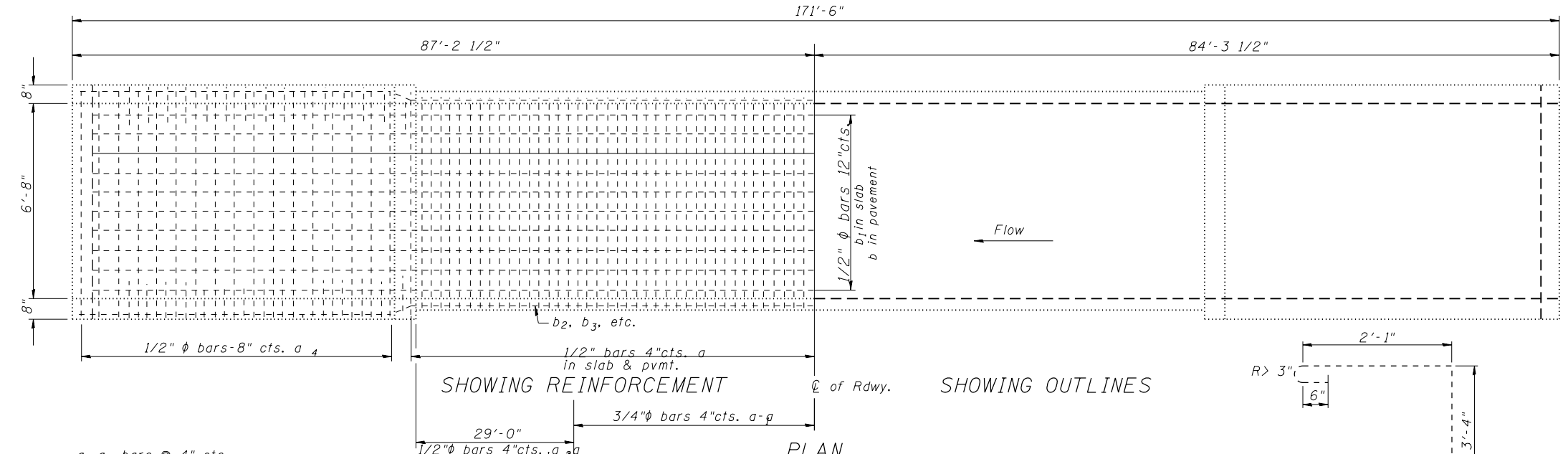
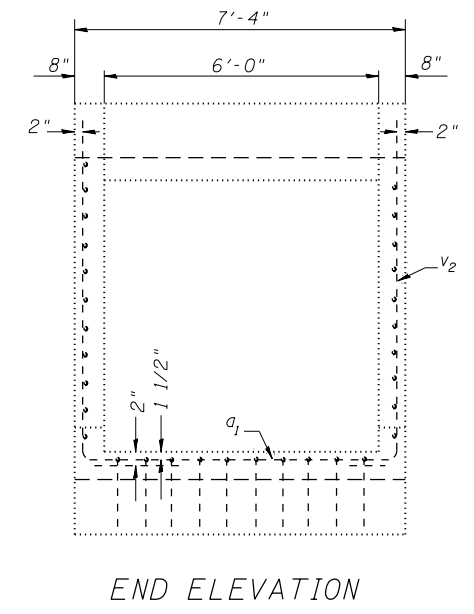
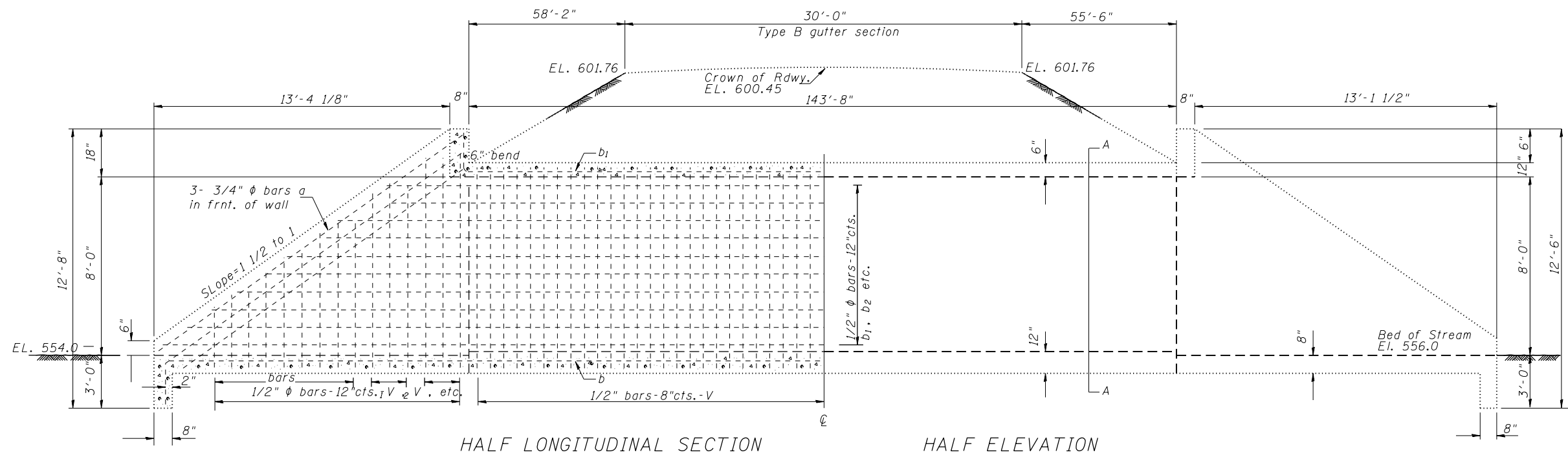
RIPRAP DITCH FOR EROSION PROTECTION
IL 95 SN 026S095m003.860 & 004.260

NOT TO SCALE

CADD STD. 281001-D4

881	SECTION	123-1-2	FULTON	CONTRACT NO.	68C25
881	SECTION	123-1-2	FULTON	CONTRACT NO.	68C25
881	SECTION	123-1-2	FULTON	CONTRACT NO.	68C25

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TOTAL BILL OF MATERIAL

Bar	No	Size	Length	Bar	No	Size	Length
a	516	3/4"	8'-0"	v	432	1/2"	8'-9"
a ₁	1032	1/4"-1/2"	8'-0"	v1	16	"	2'-9"
a ₂	348	1/2"	8'-0"	v2	8	"	4'-3"
b	42	1/2"	26'-9"	v3	8	"	5'-6"
b ₁	60	1/2"	25'-6"	v4	8	"	7'-0"
b ₂	96	1/2"	25'-6"	v5	12	1/2"	8'-3"
b ₃		1/2"					

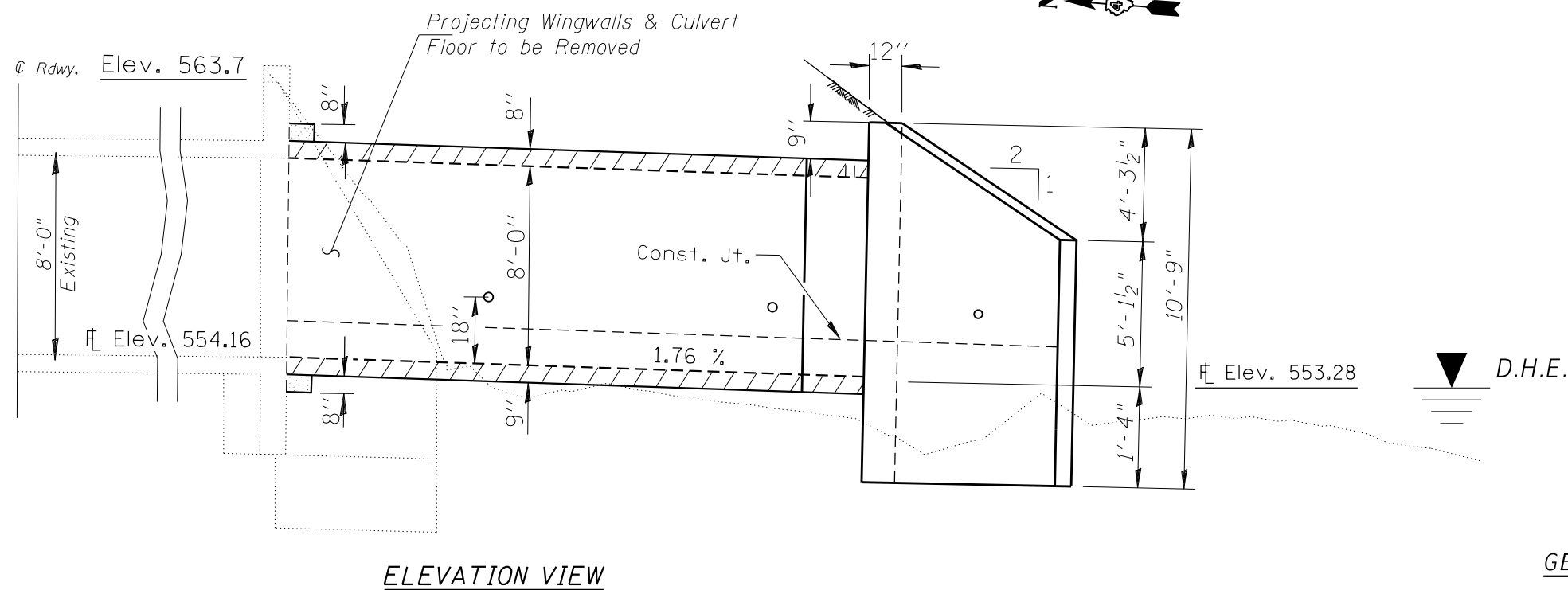
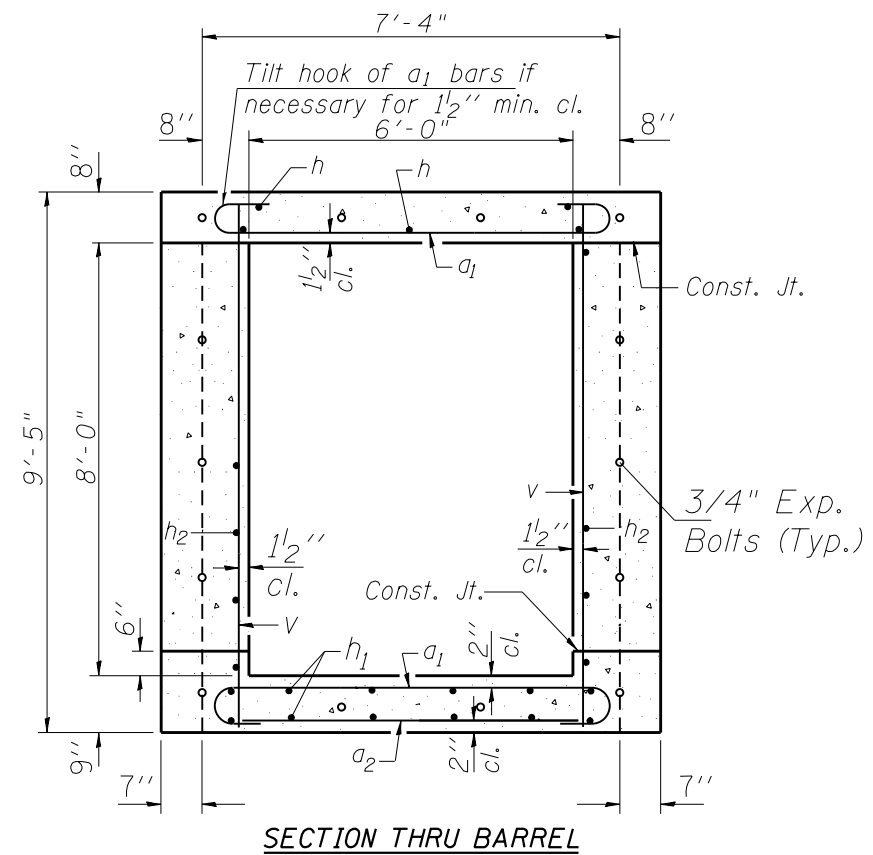
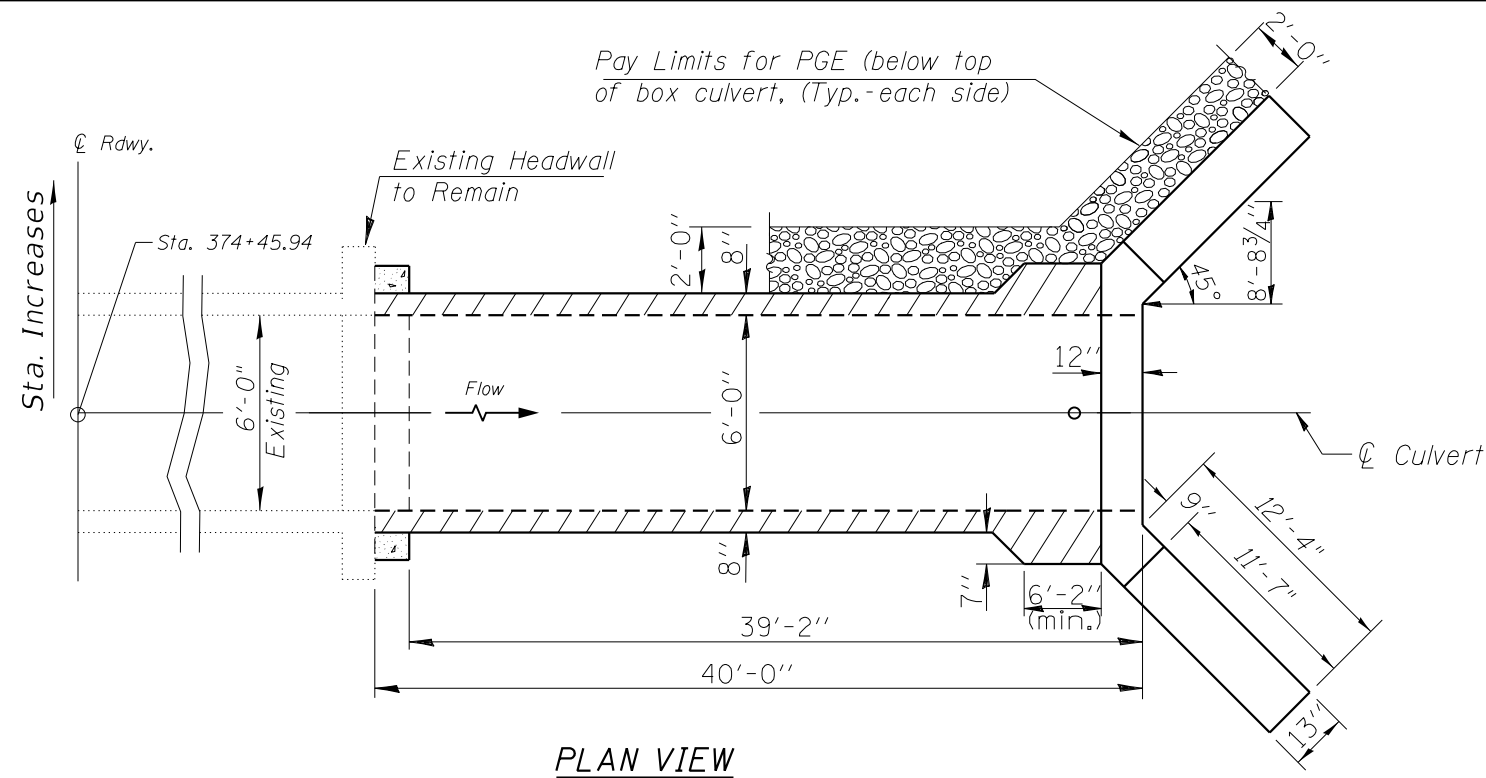
FOR
INFORMATION
ONLY

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

EXISTING PLAN & ELEVATION			
SN. 029S095m03.86			
SCALE:	SHEET	OF SHEETS	STA. 374+15 TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	123-1-2	FULTON	44	17
SLOPE STABILIZATION		CONTRACT NO. 68C25		
ILLINOIS FED. AID PROJECT				



GENERAL NOTES

Drain holes shall be provided on exterior culvert walls for each precast box segment with a clear rise greater than 3 ft. The drain hole shall be located within 1/3 of the clear rise of the box culvert, shall not intercept the haunch, and shall conform to the requirements of Article 503.11 of the Standard Specification.

The 6 in. thick layer of porous granular material required for the concrete culvert according to plan drawings and per Art. 540 of the Standard Specifications shall also apply to the end sections. Cost of the porous granular material will not be paid for separately but shall be included in the unit price of the work for which it is required.

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

Box culvert end sections shall be backfilled with Porous Granular Embankment below the top of the box culvert extending to a vertical plane 2 ft from the exterior sides of the culvert, 2 ft from the back face of the end sections, and not closer than 2 ft from the face of embankment.

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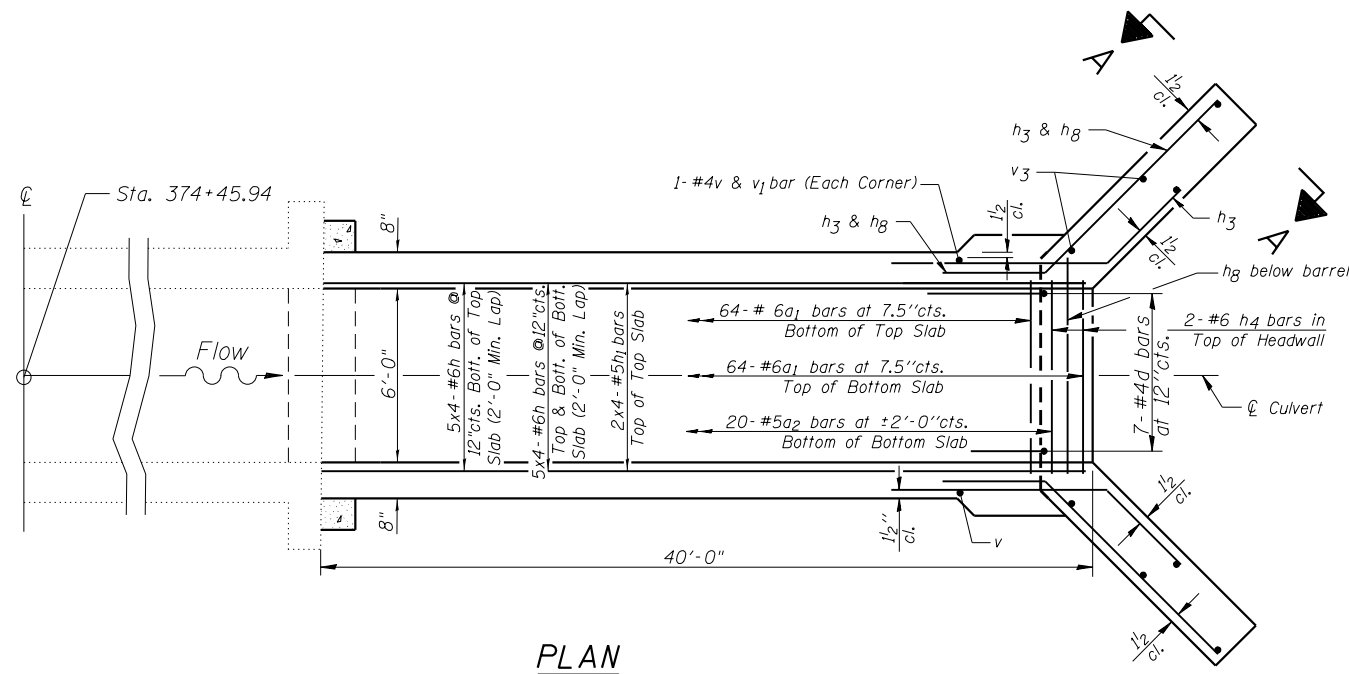
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PROPOSED CULVERT DETAIL
SN. 029S095m003.86**

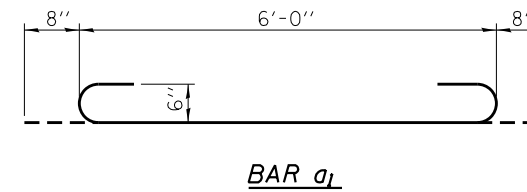
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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SLOPE STABILIZATION			CONTRACT NO. 68C25	
ILLINOIS FED. AID PROJECT				

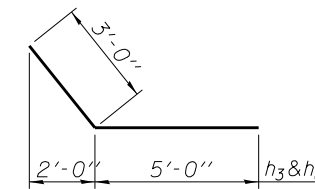
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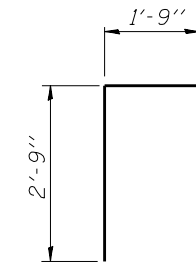
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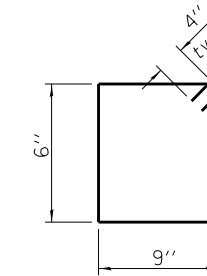
BAR a1



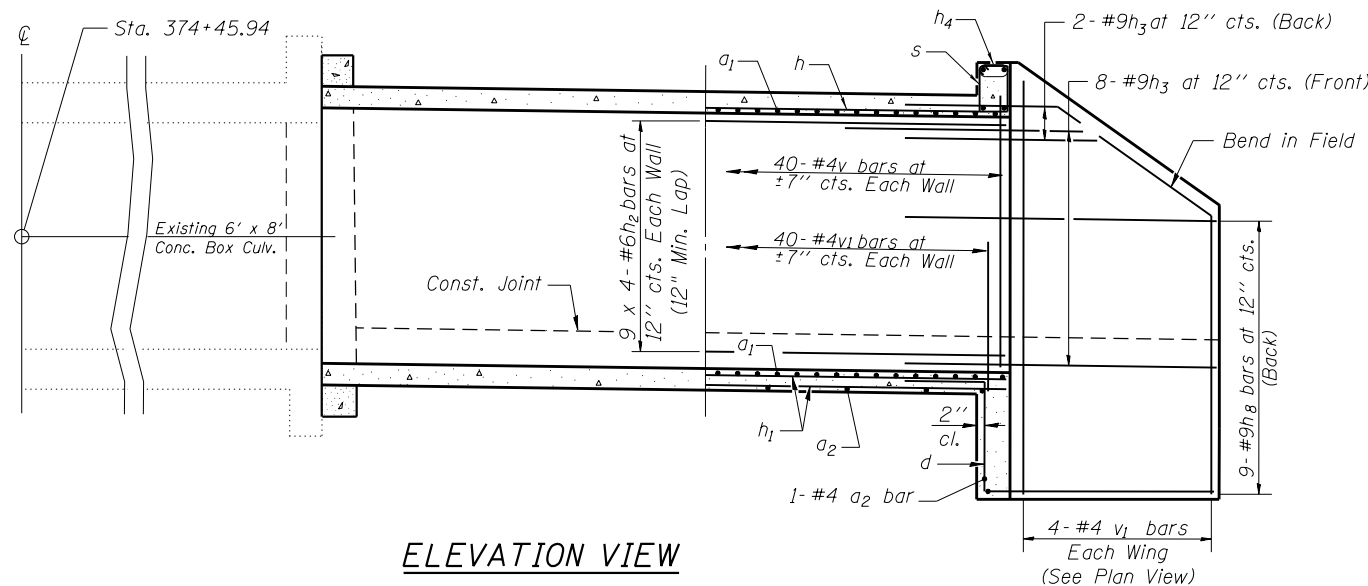
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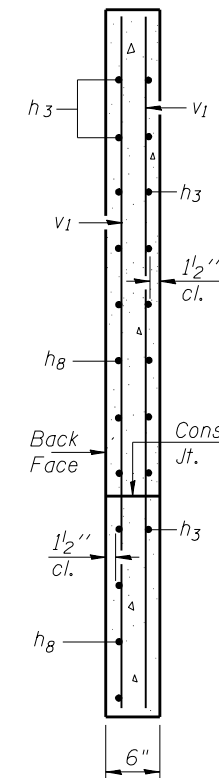
BAR d



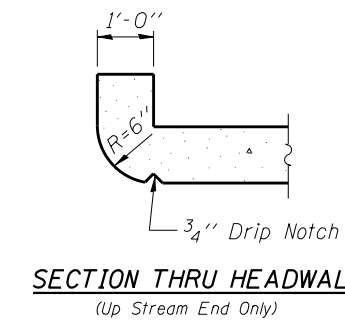
BAR s



ELEVATION VIEW



SECTION A-A



SECTION THRU HEADWALL
(Up Stream End Only)

DESIGN STRESSES

$f_y = 60,000 \text{ psi}$
 $f'_c = 3,500 \text{ psi}$

LOADING HS 20-44 & ALT.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1	128	#6	7'-4"	U
a2	20	#5	6'-3"	—
d	7	#4	4'-6"	L
h	40	#6	11'-0"	—
h1	24	#5	11'-0"	—
h2	72	#6	11'-0"	—
h3	20	#9	8'-0"	—
h4	8	#6	8'-6"	—
h8	18	#9	8'-0"	—
s	8	#4	3'-2"	□
v	80	#4	8'-10"	—
v1	88	#4	8'-10"	—
v3	8	#4	10'-6"	—
* 3/4 Expansion Bolts		Each	18	
Concrete Box Culverts		Cu. Yd.	37	
Reinforcement Bars		Pound	5535	
* Concrete Collar		Cu. Yd.	1.7	

* For Information Only

NOTES

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.

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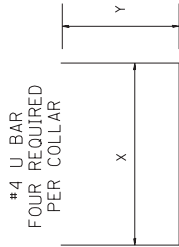
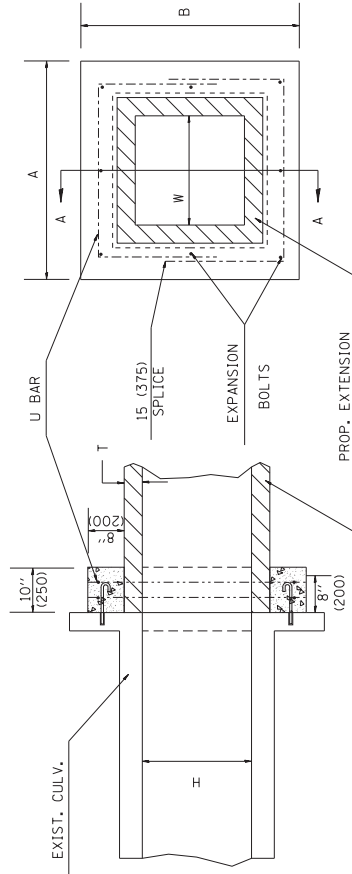
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CULVERT DETAIL
SN. 029S095m003.86

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	123-1-2	FULTON	44	19
SLOPE STABILIZATION		CONTRACT NO. 68C25		
ILLINOIS FED. AID PROJECT				

• MINIMUM 1' LAP ON U BARS



GENERAL NOTES

1. The collar shall be constructed entirely of class SI concrete and in accordance with the applicable portions of section 503 of the Standard Specifications. Reinforcement bars shall conform to section 508.
2. Expansion bolts shall consist of approved expansion anchors, and 3/4" (M20) hook bolts which conform to Section 1006.09, and These bolts shall extend at least 8"(200) into the new concrete.
3. This work will be paid for by the cubic yard (cubic meter) for CONCRETE COLLAR, by the pound (kg) for REINFORCEMENT BARS, and by Each for EXPANSION BOLTS of the size indicated.

SECTION A - A

END VIEW

DIMENSIONS

EXISTING BOX		COLLAR FOR BOX CULVERT EXTENSIONS			EACH COLLAR		EXPANSION BOLTS	
W	H	A	B	T	CL SI	REINFORCEMENT	BARS	EXPANSION BOLTS
ft	ft	ft	ft	ft	cu. yd. (m ³)	X	Y	NO.
2 (600)	2 (600)	4'-0" (1.22m)	4'-0" (1.22m)	4(100)	0.27(0.21)	3'-4"(1.02m)	27.5(698)	21 (9.5)
3 (900)	2 (600)	5'-0" (1.52m)	4'-0" (1.22m)	4(100)	0.32(0.24)	4'-4"(1.32m)	27.5(698)	24 (11)
3 (900)	2.5 (750)	5'-0" (1.52m)	4'-6" (1.37m)	4(100)	0.34(0.26)	4'-4"(1.32m)	30.5(774)	25 (11.5)
3 (900)	3 (900)	5'-0" (1.52m)	5'-0" (1.52m)	4(100)	0.36(0.28)	4'-4"(1.32m)	33.5(850)	26.5 (12)
3 (900)	4 (1200)	5'-2" (1.57m)	6'-2" (1.88m)	5(125)	0.41(0.31)	4'-6"(1.37m)	40.5(1.03m)	30 (13.5)
4 (1200)	3 (900)	6'-2" (1.88m)	5'-2" (1.57m)	5(125)	0.41(0.31)	5'-6"(1.68m)	34.5(876)	30 (13.5)
4 (1200)	4 (1200)	6'-2" (1.88m)	6'-2" (1.88m)	5(125)	0.45(0.34)	5'-6"(1.68m)	40.5(1.03m)	33 (15)
4 (1200)	5 (1500)	6'-4" (1.93m)	7'-4" (2.24m)	6(150)	0.51(0.39)	5'-8"(1.73m)	3'-11.5"(1.21m)	36 (16.5)
5 (1500)	4 (1200)	7'-4" (2.24m)	6'-4" (1.93m)	6(150)	0.51(0.39)	6'-8"(2.03m)	3'-5.5"(1.05m)	36 (16.5)
5 (1500)	5 (1500)	7'-4" (2.24m)	7'-4" (2.24m)	6(150)	0.55(0.42)	6'-8"(2.03m)	3'-11.5"(1.21m)	39 (17.5)
5 (1500)	6 (1800)	7'-6" (2.29m)	8'-6" (2.59m)	7(175)	0.60(0.46)	6'-10"(2.08m)	4'-6.5"(1.38m)	42.5 (19)
6 (1800)	4 (1200)	8'-6" (2.59m)	6'-6" (1.98m)	7(175)	0.56(0.43)	7'-10"(2.39m)	3'-6.5"(1.08m)	40 (18)
6 (1800)	5 (1500)	8'-6" (2.59m)	7'-6" (2.29m)	7(175)	0.60(0.46)	7'-10"(2.39m)	4'-0.5"(1.23m)	42.5 (19)
6 (1800)	6 (1800)	8'-6" (2.59m)	8'-6" (2.59m)	7(175)	0.64(0.49)	7'-10"(2.39m)	4'-6.5"(1.38m)	45 (20.5)
6 (1800)	8 (2400)	10'-8" (3.25m)	10'-8" (3.25m)	8(200)	0.74(0.57)	8'-0"(2.44m)	5'-7.5"(1.71m)	83 (37.8)
8 (2400)	8 (2400)	10'-8" (3.25m)	10'-8" (3.25m)	8(200)	0.82(0.63)	10'-0"(3.05m)	5'-7.5"(1.71m)	57 (26)

QUANTITIES

CALC. BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

COLLAR FOR BOX CULVERT EXTENSIONS
 SLOPE STABILIZATION F.A.P. 687
 CADD STD. 540001-D4 MKD. 95

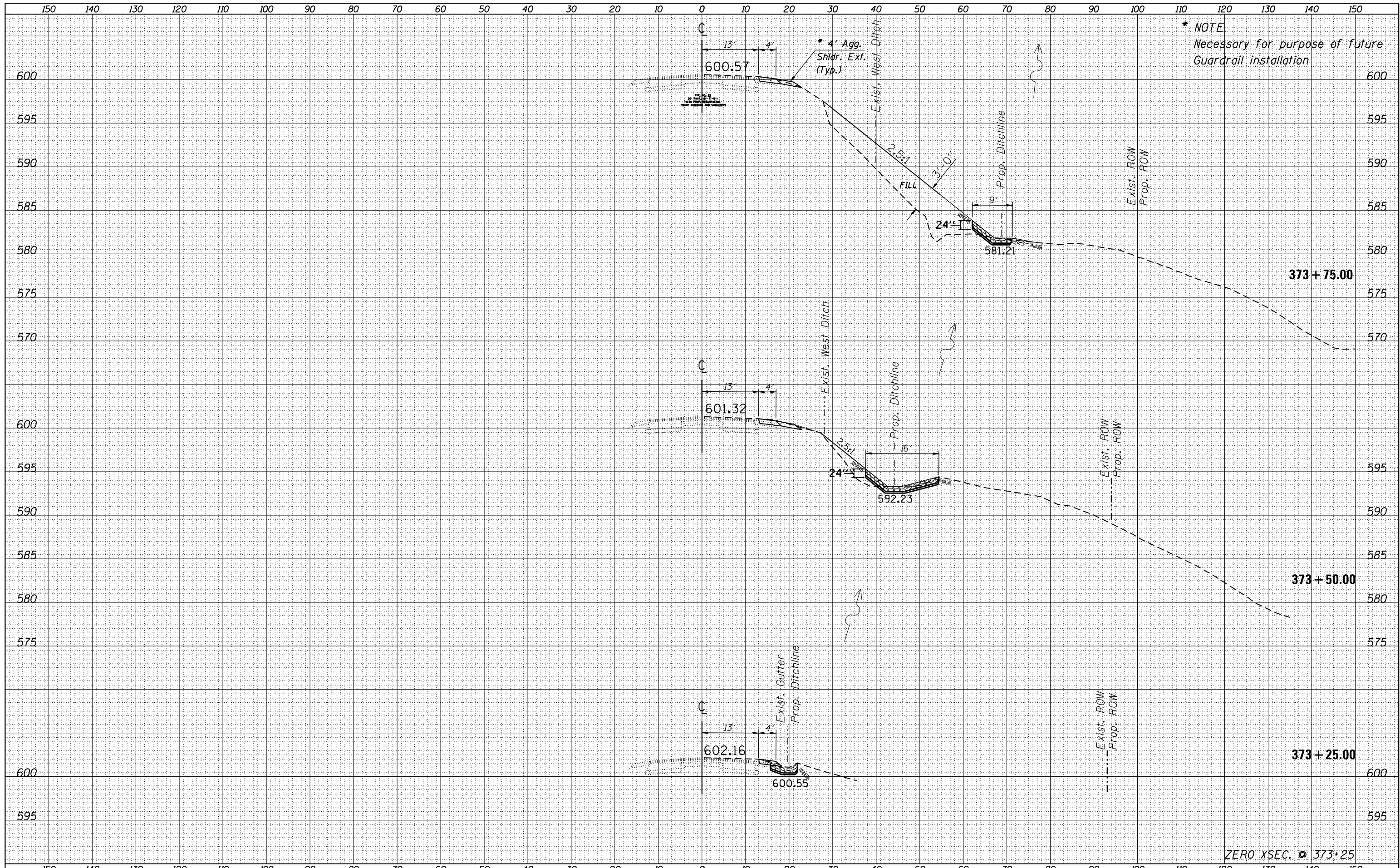
SECTION 123-1-2
 COUNTY FULTON
 CONTRACT NO. 68C25

SHEET TOTAL NO.
 44 20

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	
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	AREAS CHECKED

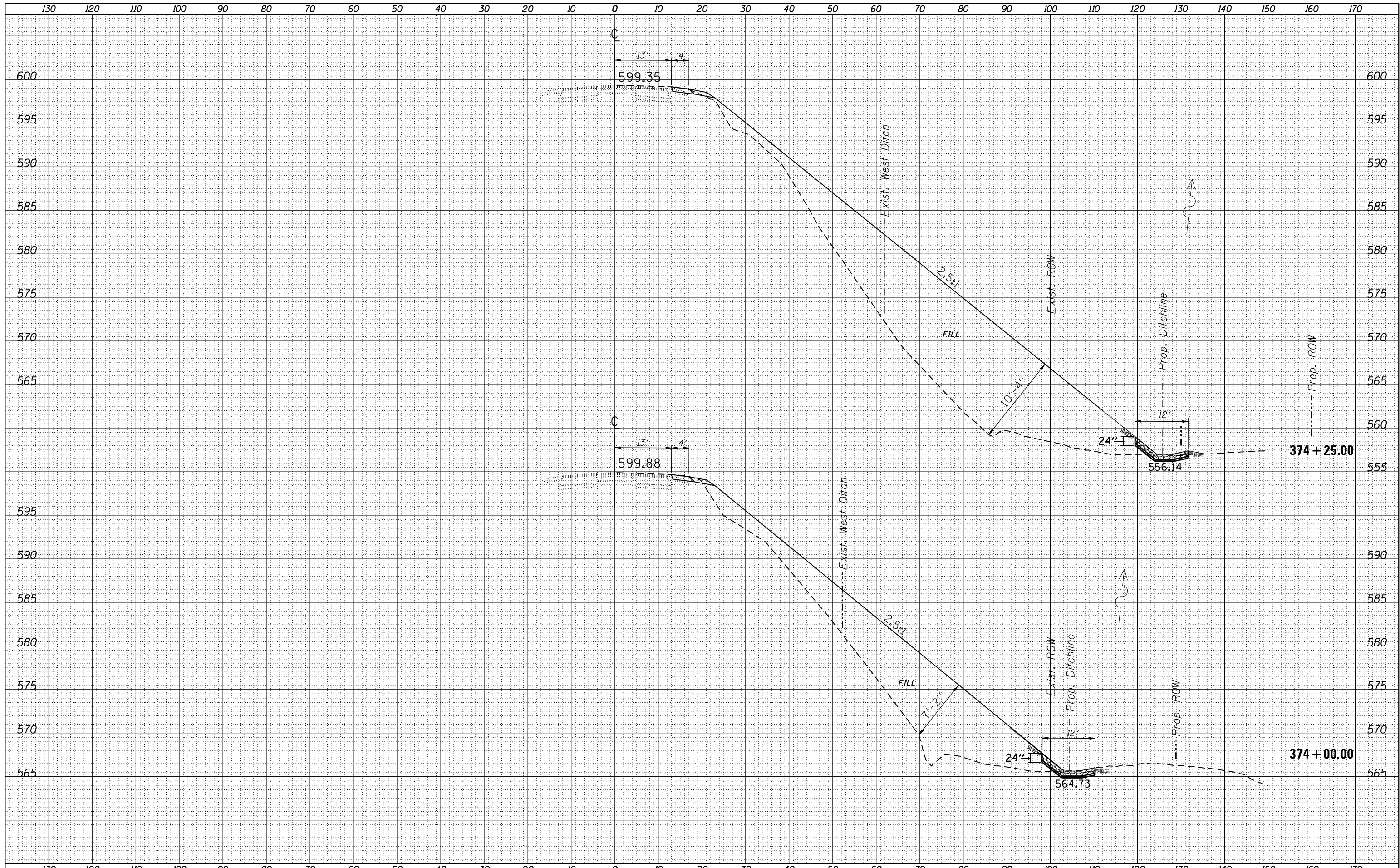
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	AREAS CHECKED



* NOTE
Necessary for purpose of future
Guardrail installation

DATE	
BY	
FINAL SURVEY	SURVEYED
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NO.	TEMPLATE
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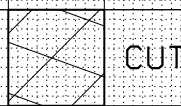
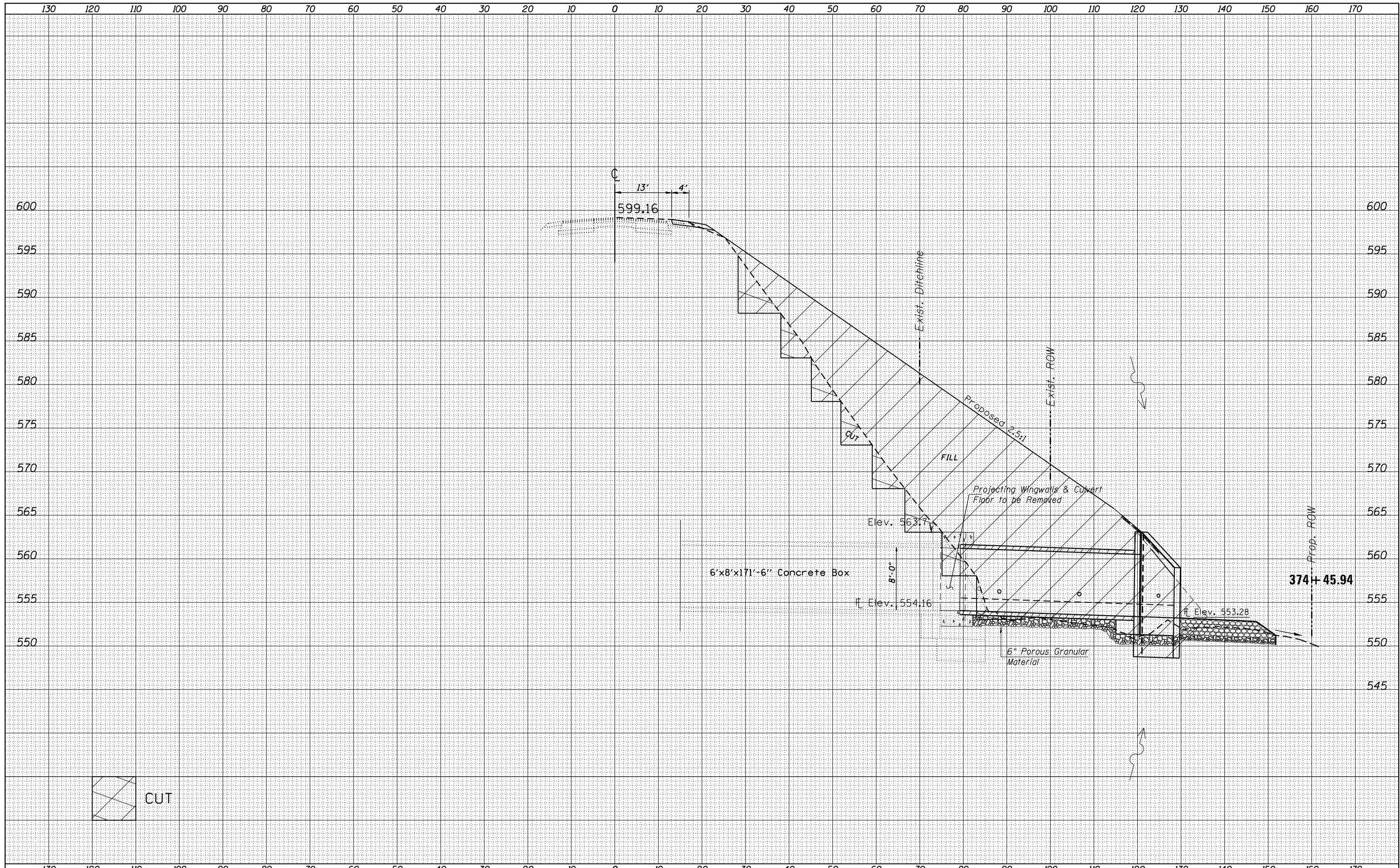
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		CHECKED -	REVISIED -		ILLINOIS FED. AID PROJECT							
MODELNAME		DATE -	REVISIED -									

BY	DATE
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TEMPLATE	
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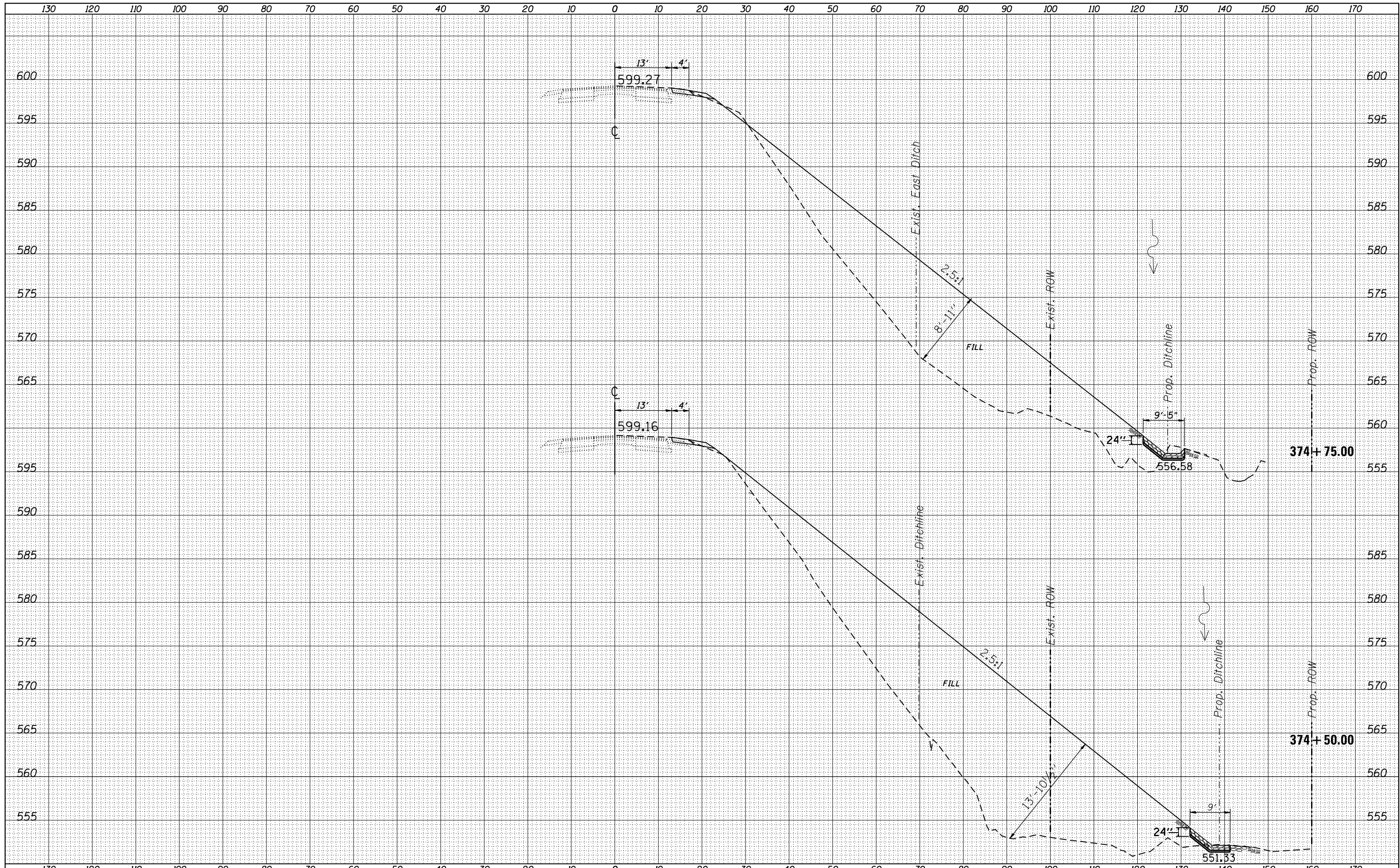
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NOTE BOOK	
AREAS CHECKED	
NO.	



FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISIED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS			F.A.P. RTE. 687	SECTION 123-1-2	COUNTY FULTON	TOTAL SHEETS 44	SHEET NO. 24
FILE		DRAWN -	REVISIED -		SCALE: 1.5:1	SHEET	OF	SHEETS	STA. 373+25.00	TO STA. 376+75.00	CONTRACT NO. 68C25	
		CHECKED -	REVISIED -		SLOPE STABIL. & CULV. EXT.							
MODELNAME		DATE -	REVISIED -		ILLINOIS FED. AID PROJECT							

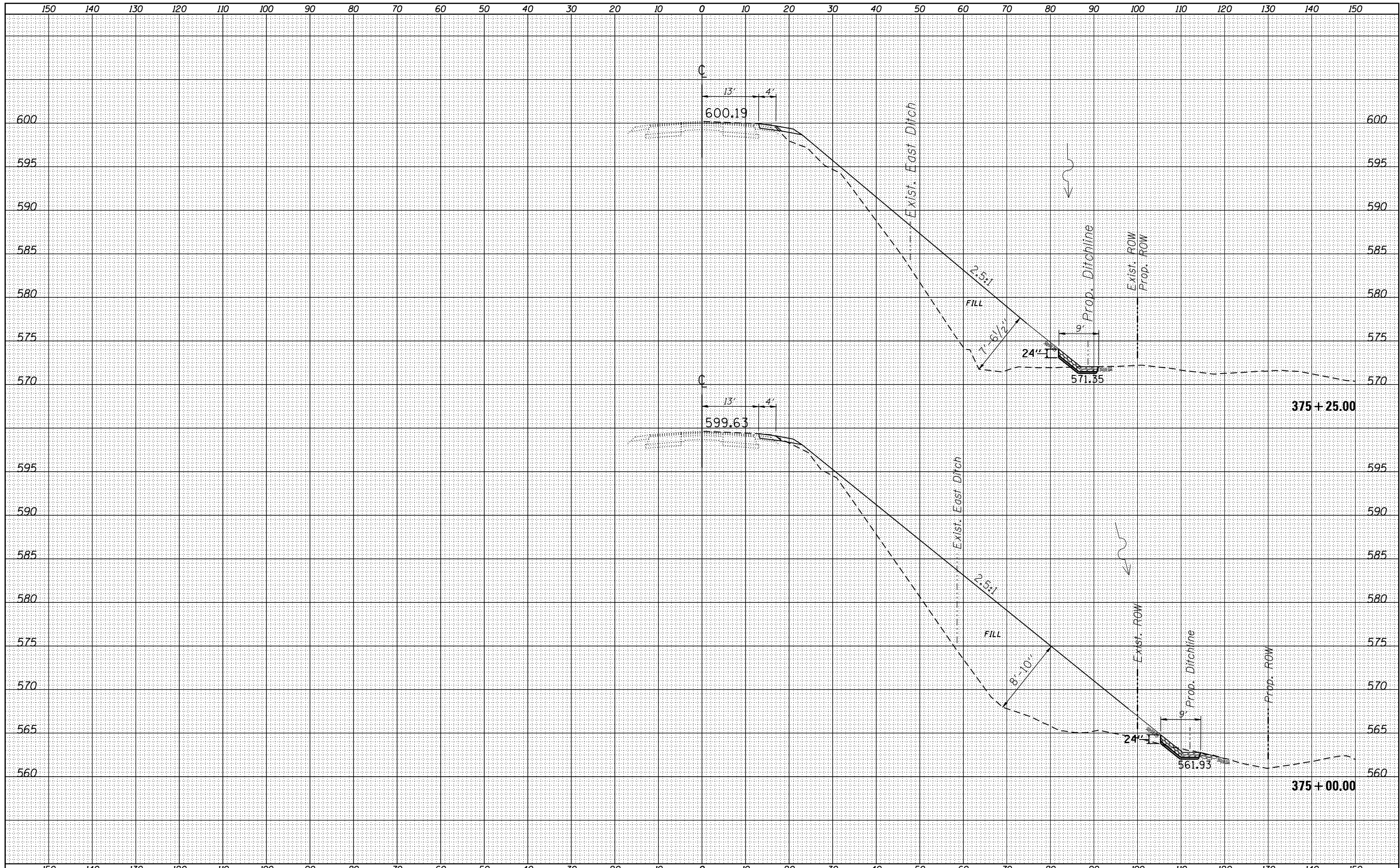
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BY	
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NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

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



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

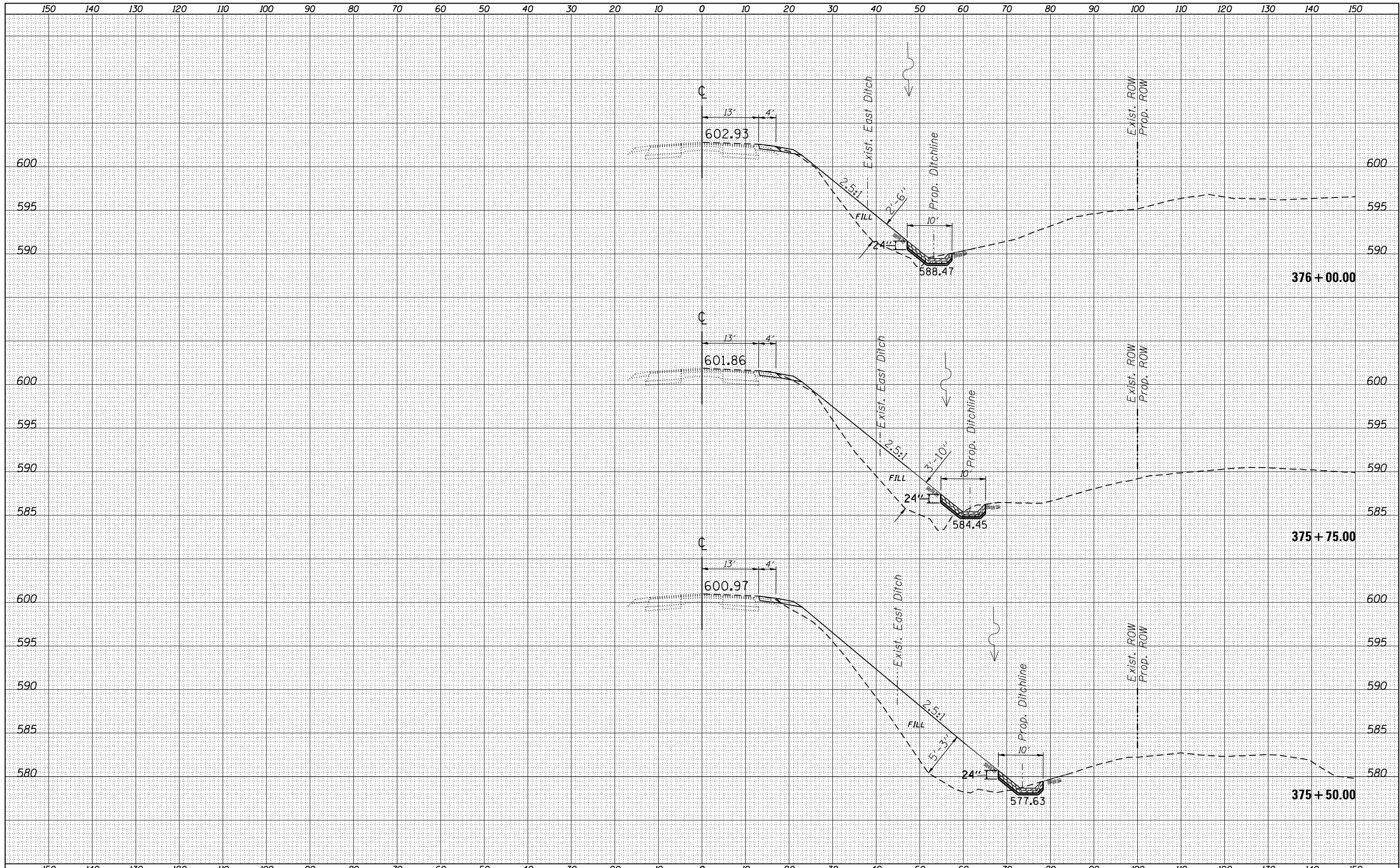
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BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK NO.	PLOTTED
	TEMPLATE
	AREAS CHECKED



FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISIED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS SN. 029S095m003.86	F.A.P. RTE. 687	SECTION 123-1-2	COUNTY FULTON	TOTAL SHEETS 44	SHEET NO. 26		
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		CHECKED -	REVISIED -			ILLINOIS FED. AID PROJECT						
MODELNAME		DATE -	REVISIED -									

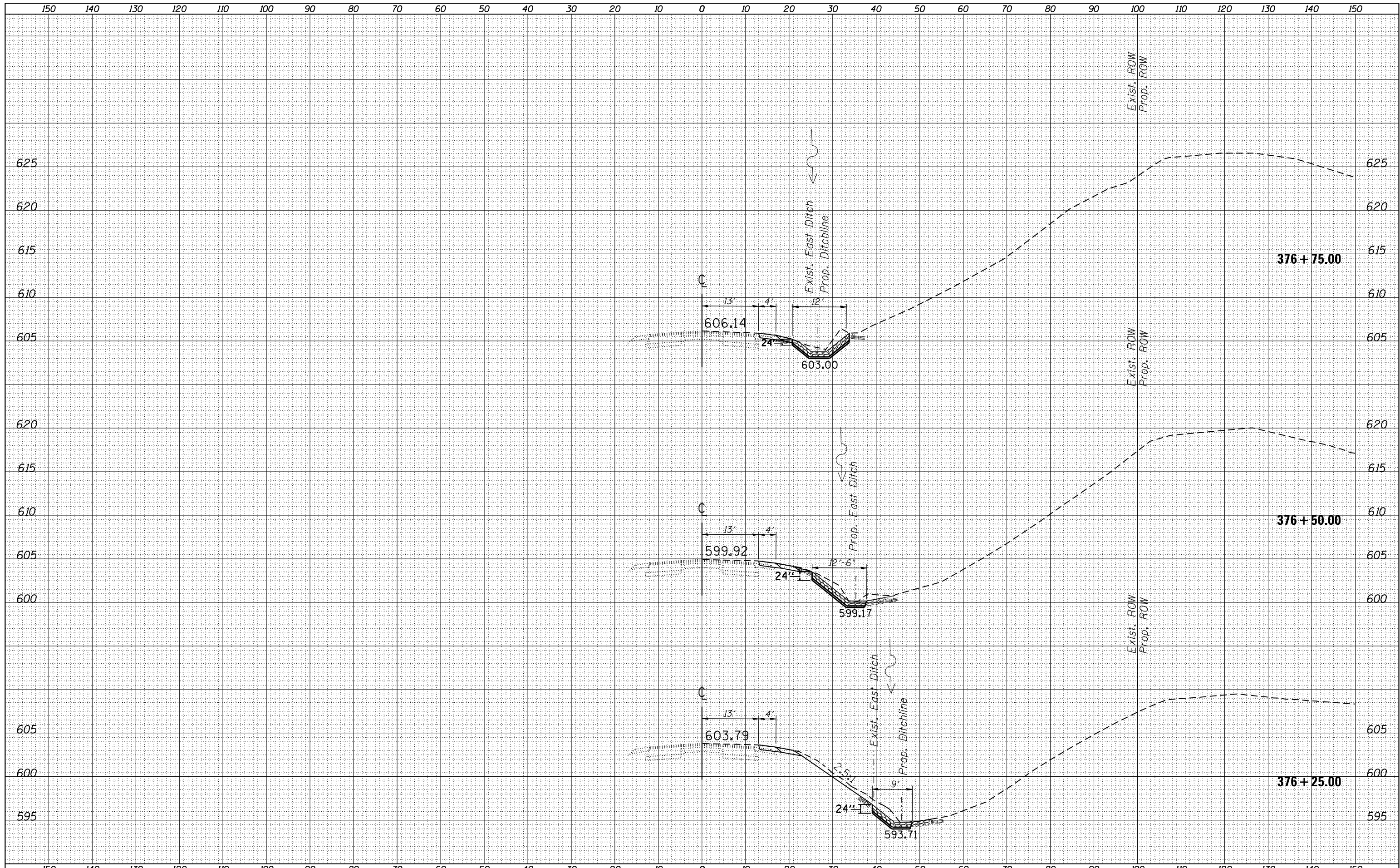
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DATE	BY	FINAL SURVEY	NOTE BOOK	NO.	

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

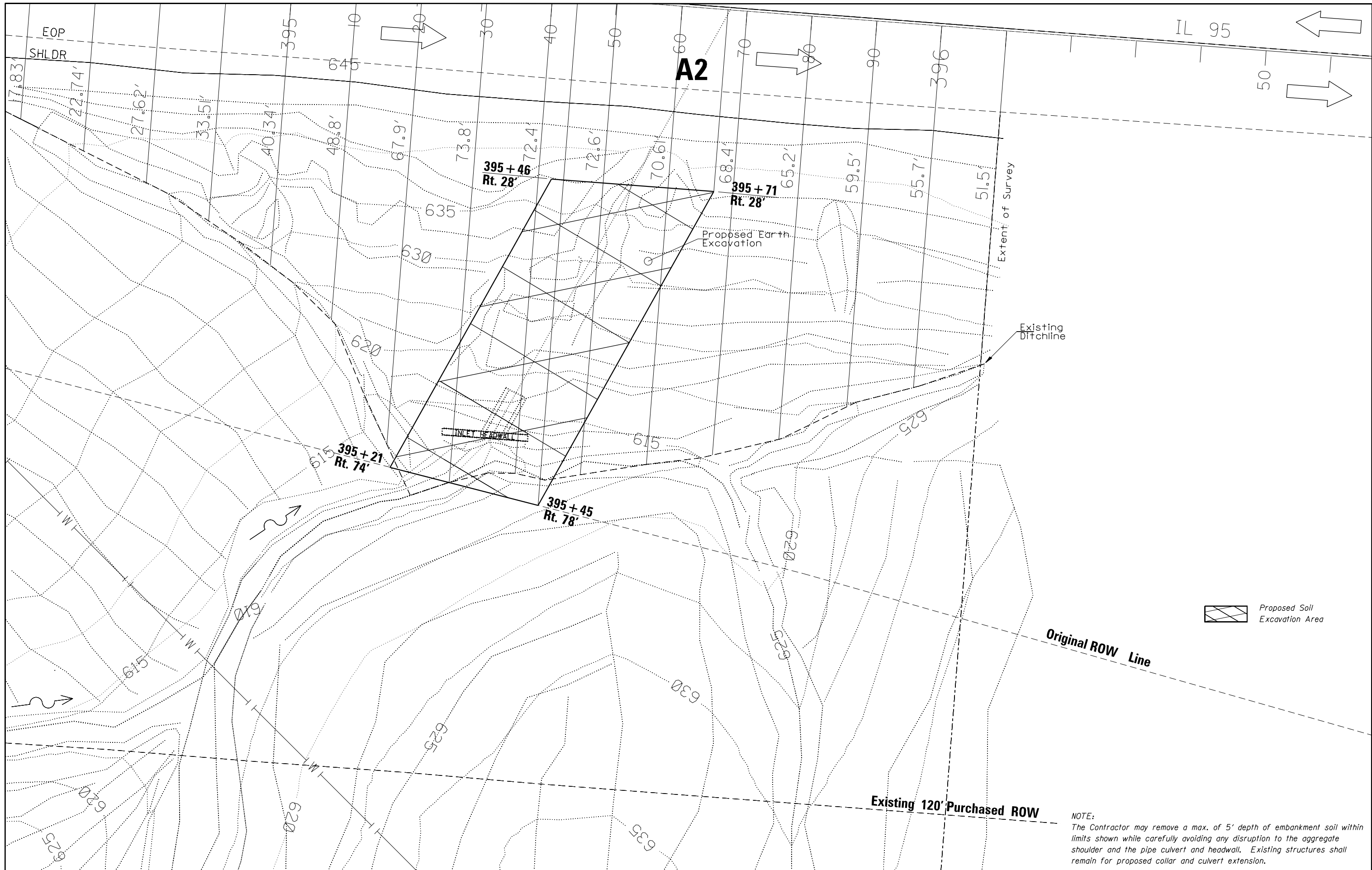


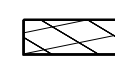
DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

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



FILE NAME =	USER NAME = *USER*	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS SN. 029S095m003.86		F.A.P. RTE. 687	SECTION 123-1-2	COUNTY FULTON	TOTAL SHEETS 44	SHEET NO. 28	
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		CHECKED -	REVISED -		ILLINOIS FED. AID PROJECT							
MODELNAME		DATE -	REVISED -									



 Proposed Soil Excavation Area

NOTE:
 The Contractor may remove a max. of 5' depth of embankment soil within limits shown while carefully avoiding any disruption to the aggregate shoulder and the pipe culvert and headwall. Existing structures shall remain for proposed collar and culvert extension.

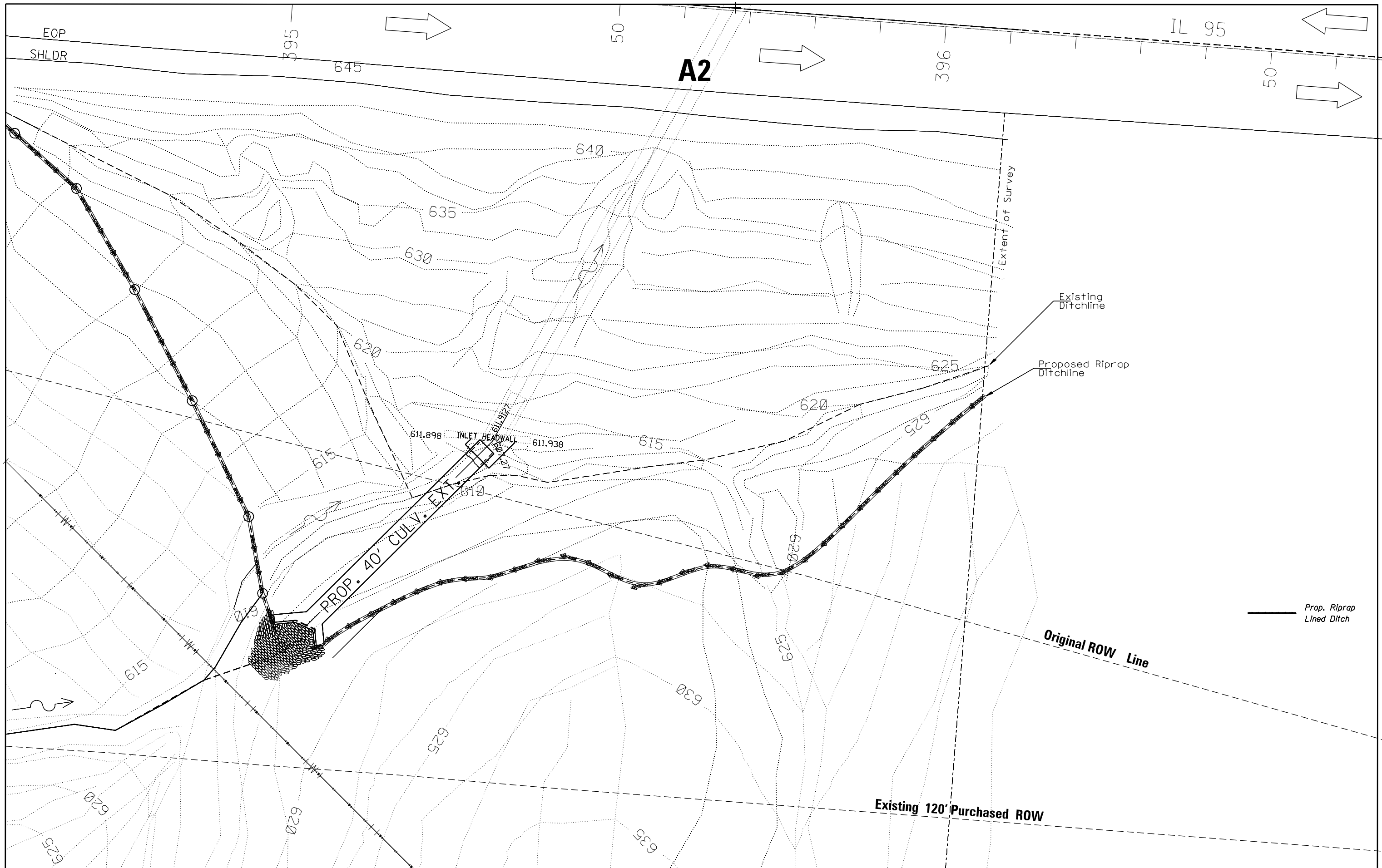
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Default	PLOT SCALE = 200.1279' / in.	CHECKED -	REVISED -
	PLOT DATE = 7/12/2017	DATE - 3/9/16	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

PROPOSED PLAN VIEW
 SN. 029S095m004.26

SCALE: 15:1 SHEET OF SHEETS STA. 394+60 TO STA. 396+10

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	123-1-2	FULTON	44	29
CULV. EXT. & SLOPE STABILIZING			CONTRACT NO. 68C25	
ILLINOIS FED. AID PROJECT				



FILE NAME =	USER NAME = aubreys	DESIGNED - CEJ	REVISED -
C:\Users\aubreys\Desktop\68C25\IL95.XT\PLAN.dgn		DRAWN - CEJ	REVISED -
Default	PLOT SCALE = 200.1279' / 1" =	CHECKED -	REVISED -
	PLOT DATE = 7/12/2017	DATE - 3/9/16	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

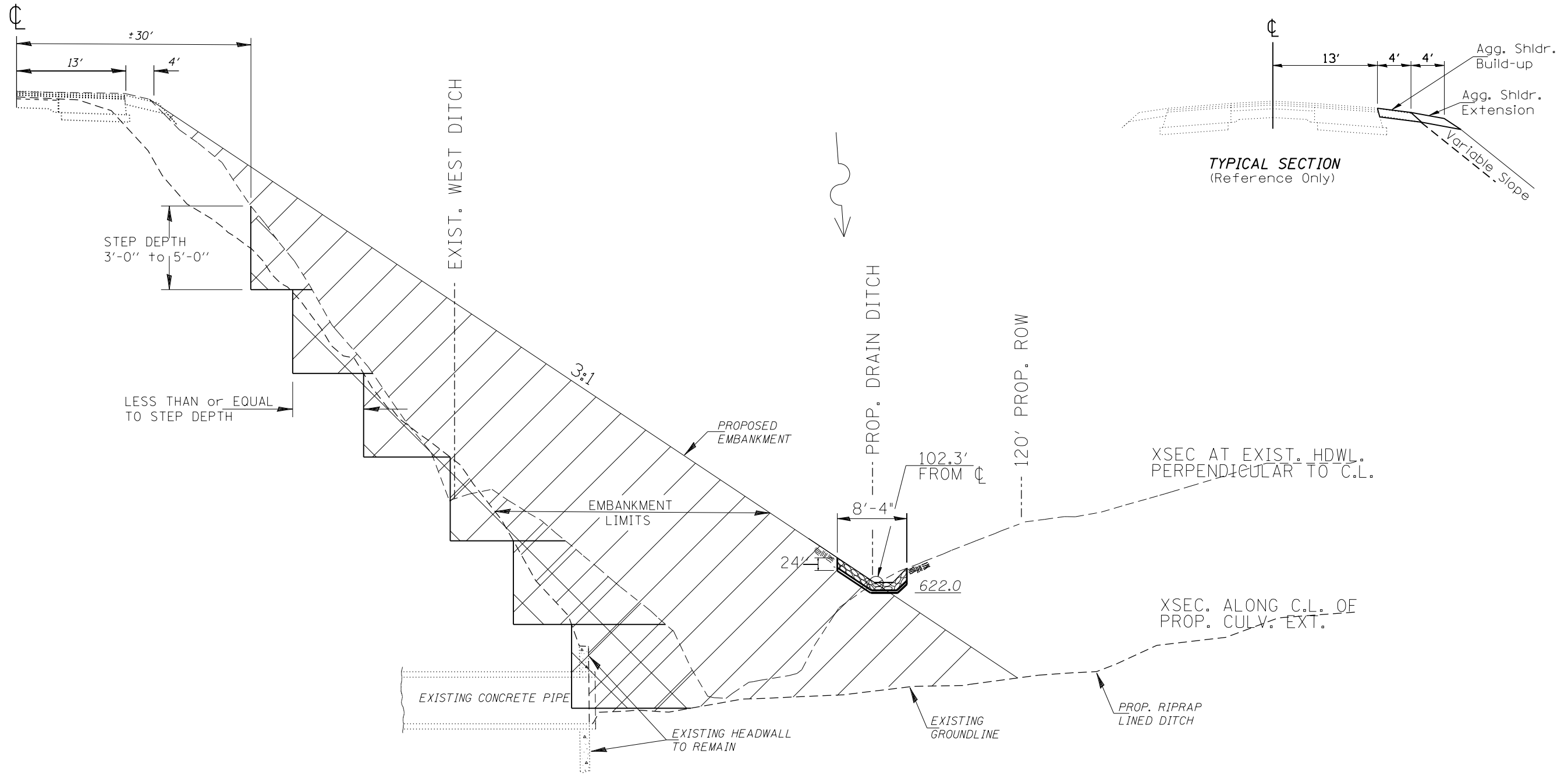
PROPOSED PLAN VIEW
SN. 029S095m004.26

SCALE: 15:1 SHEET OF SHEETS STA. 394+60 TO STA. 396+10

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	123-1-2	FULTON	44	30
CULV. EXT. & SLOPE STABILIZING			CONTRACT NO. 68C25	
ILLINOIS FED. AID PROJECT				

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
REVISIONS	
NO.	

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
REVISIONS	
NO.	



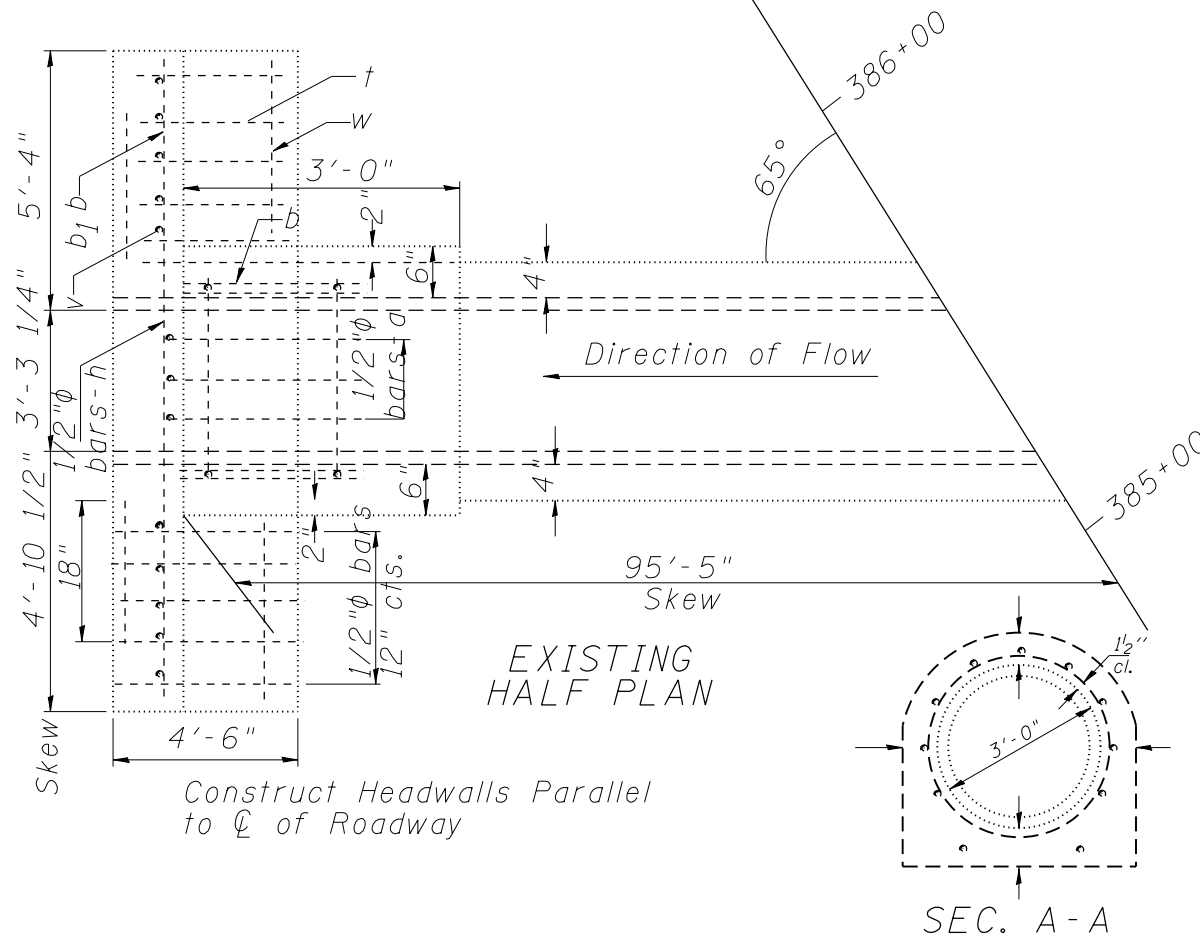
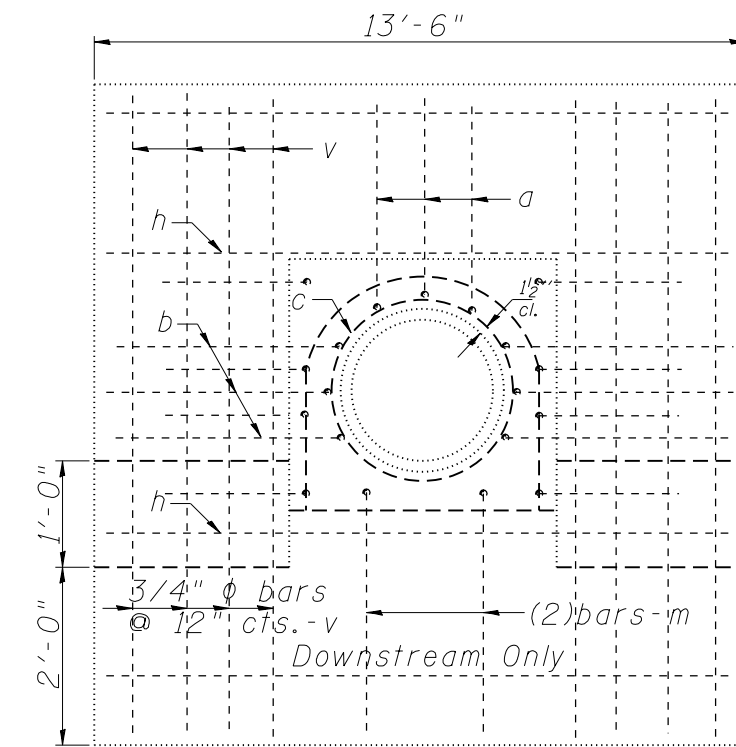
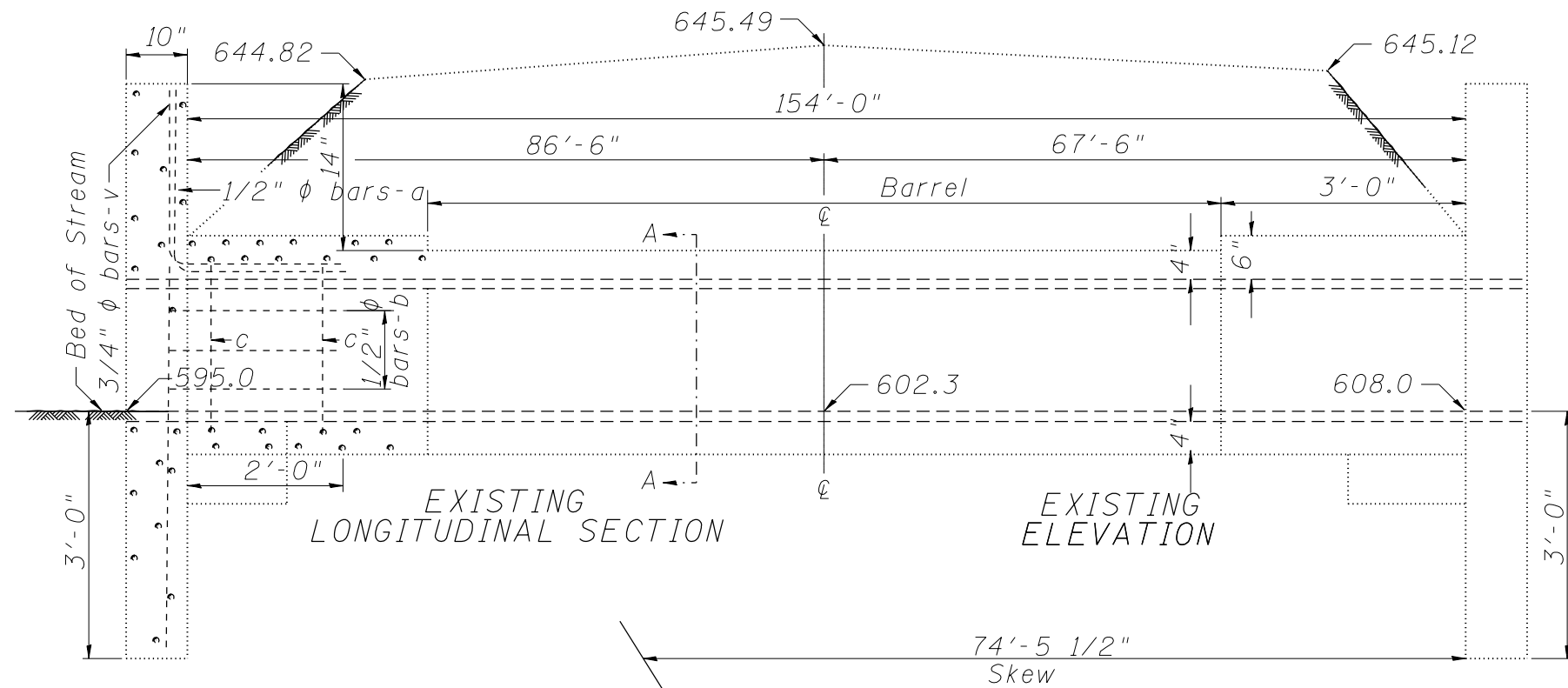
BENCHING LIMITS
 STA. 394+60 Rt. to 396+60 Rt.

REPLACEMENT MATERIAL:
 "STANDARD EMBANKMENT" constructed in accordance with Section 205 of the Standard Specifications

NOTE
 All dimensions are in inches unless otherwise noted.
 There shall be no excavated elevation drop-off left overnight within 8 feet of the open traffic lane.

FILE NAME =	USER NAME = aubreys	DESIGNED -	REVISIONS -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EMBANKMENT BENCHING DETAIL SN.029S095m004.26			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C:\Users\aubreygs\Desktop\68C25\IL95_Xfer_PLANDgn		DRAWN -	REVISIONS -					687	123-1-2	FULTON	44	31
Default		PLOT SCALE = 200.1279' / 1in.	CHECKED -		REVISIONS -	SLOPE STABIL. & CULV. EXT.			CONTRACT NO. 68C25			
		PLOT DATE = 7/12/2017	DATE -		REVISIONS -	SCALE: 3:1	SHEET OF SHEETS	STA. 373+50.00 TO STA. 395+90.00	ILLINOIS FED. AID PROJECT			

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BILL OF MATERIAL

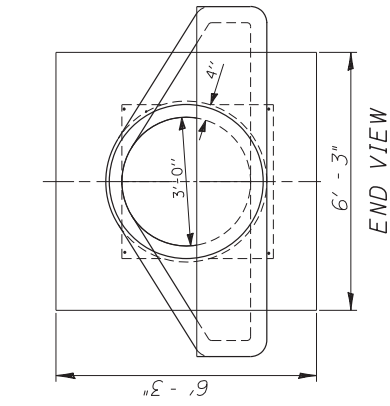
Steel 1/2" phi	Design No.	Diameter	Headwall Length	Reinforcing Steel						CuFt/Ft of Barrel	CuFt for 2 Hdws.	CuFt for Rect. Sec.	Total Steel (Lbs.)	CuFt/Ft of Barrel
				1/2" phi Bars		1/2" phi Bars		3/4" phi Bars						
m				w	a	b	c	h	v	t				
	1	12"	5'-8"	16	6	12	4	8	4	4	1.93	40.11	19.48	
	2	14"	6'-3"	16	6	12	4	8	4	4	2.21	46.75	22.25	
	3	15"	6'-6"	16	6	12	4	8	4	4	2.35	49.22	23.61	
	4	16"	7'-0"	16	6	12	4	8	4	4	2.50	53.99	25.06	
	5	18"	7'-6"	16	6	12	4	8	4	4	2.75	56.78	27.56	
	6	20"	8'-0"	16	6	12	4	8	4	4	3.05	64.11	30.50	
	7	22"	8'-5"	16	6	12	4	8	4	4	3.36	71.78	33.58	
	8	24"	9'-6"	16	6	12	4	8	4	4	3.62	79.66	30.25	
	9	27"	10'-6"	16	8	12	4	8	4	4	4.17	90.93	41.71	
	Special	36"	13'-6"	4	4	4	4	10	20	20	5.75	218.91	58.38	590*

FOR INFORMATION ONLY

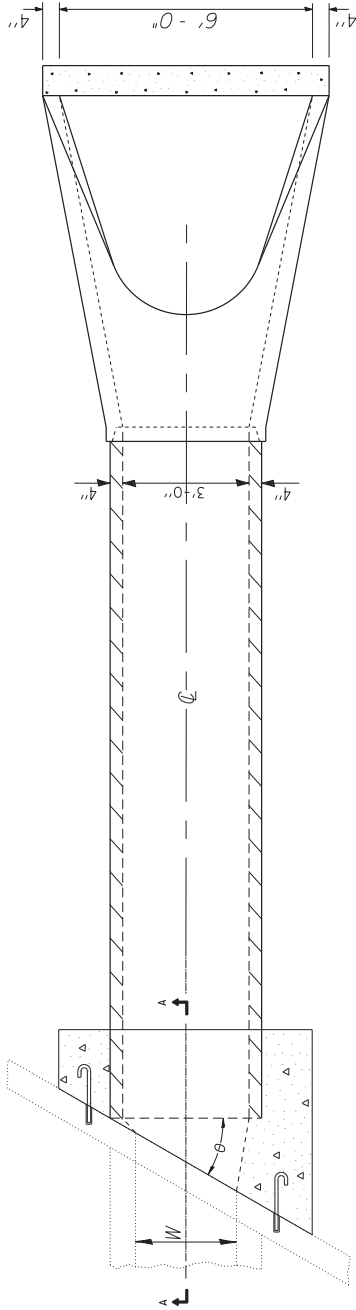
Class X Concrete shall be used throughout.
 Vitrified drain tile shall be used for the inside form and shall be left in place.
 If a removable form is used, the concrete barrel shall be 6" thick instead of 4".

STATION 385+80
 STATE BOND ISSUE
 ROUTE 95-SEC.123A
 FULTON COUNTY
 DEC.-29-1931

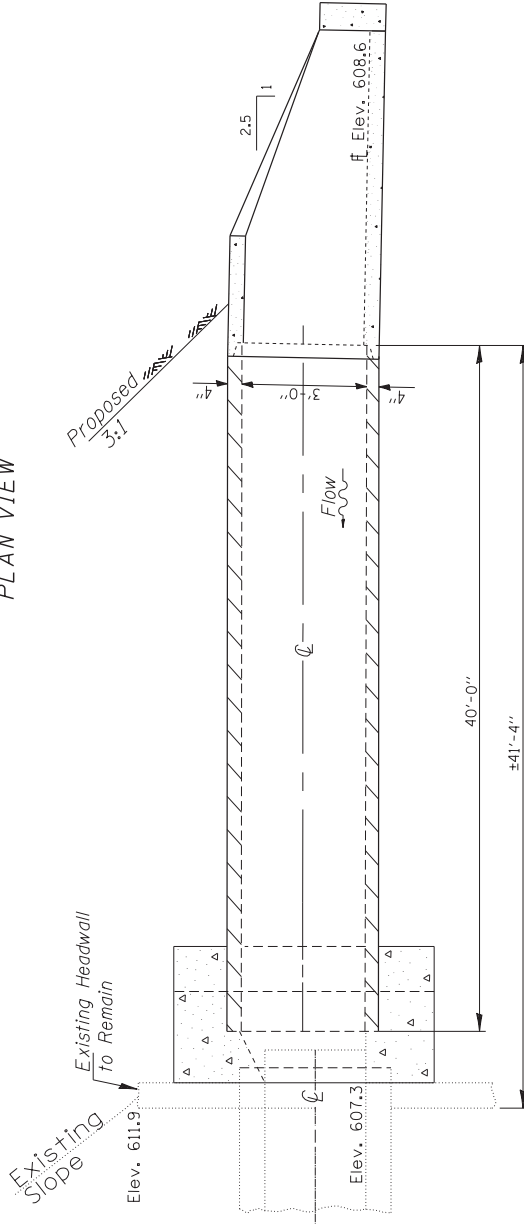
FILE NAME =	USER NAME = aubreys	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLAN & ELEVATION SN. 029S095m04.26				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C:\Users\aubreygs\Desktop\68C25\IL95.Xf\PLAN.dgn		DRAWN -	REVISED -		687	123-I-2	FULTON	44	32				
PLOT SCALE = 200.1279' / 1in.		CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.				SLOPE STABILIZATION	CONTRACT NO. 68C25			
Default		DATE -	REVISED -						ILLINOIS FED. AID PROJECT				



END VIEW



PLAN VIEW

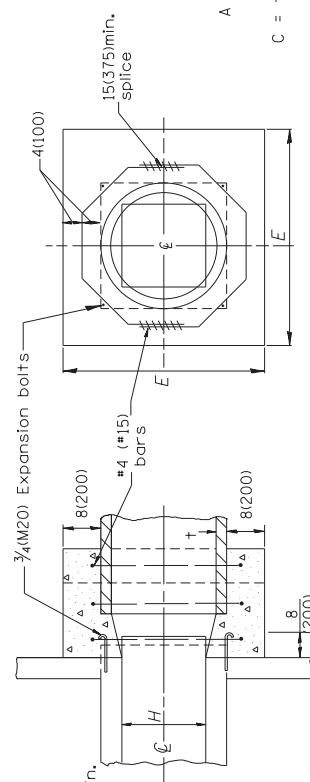
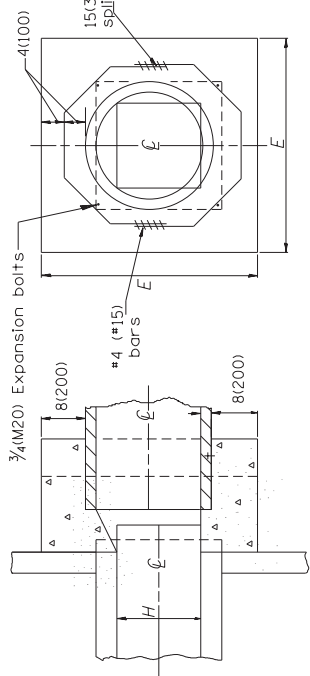


ELEVATION VIEW

Section A-A

NOTES
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr-60 (LL Modified). Reinforcement bars designated (E) shall be epoxy coated. Protective coat shall not be applied to all exterior concrete surfaces of new structures after required curing time has elapsed.
 The Contractor shall consult with the Engineer in regard to the exact length of the box/pipe culverts, storm sewers, road/or pipe drains required prior to ordering these items.

FILE NAME =	USER NAME =	DESIGNED =	REVISED =	PROPOSED CULVERT DETAIL	SHEET	SCALE:	TO STA.
D:\Temp\JUNK\CLV\1195\1195_Plan.dwg	h.kay@p...	-	-	SN-0293095m004.26	OF	SHEETS	STA.
PLOT SCALE = 200.0000 / 1"	DRWN =	REVISIONS	REVISIONS	STATE OF ILLINOIS			
PLOT DATE = 8/16/2017	CHECKED =	REVISIONS	REVISIONS	DEPARTMENT OF TRANSPORTATION			
	DATE =	REVISIONS	REVISIONS				
Default							



END VIEW

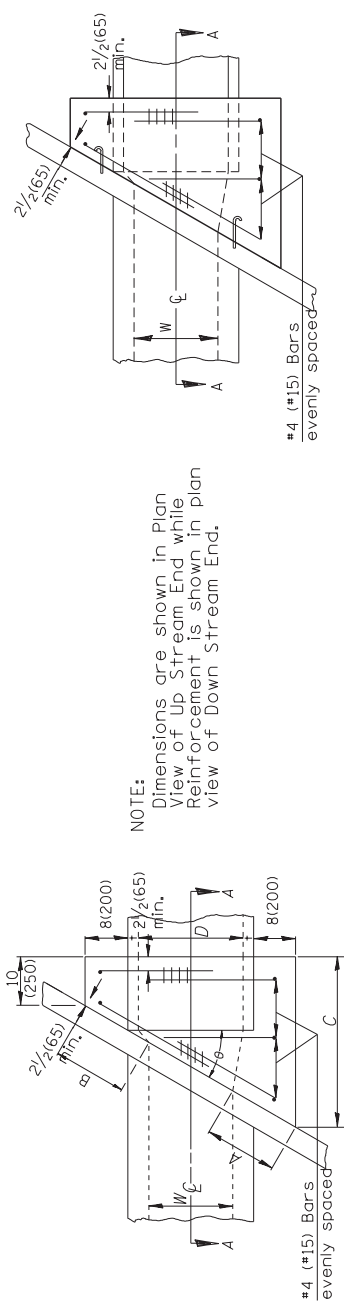
END VIEW

$$A = B = \frac{D - W}{2} + t + 8(200) \cos \theta$$

$$C = \tan \theta [D + 2t + 16(410)] + 10(250)$$

$$G = \frac{D + 2t + 8(200)}{2.4142 [\cos \theta]}$$

(Note: 'G' is based upon maximum skewed length)



NOTE: Dimensions are shown in Plan View of Up Stream End while Reinforcement is shown in plan view of Down Stream End.

GENERAL NOTES

1. The collar shall be constructed entirely of CLASS SI CONCRETE and in accordance with the applicable portions of section 503 of the Standard Specifications. Reinforcement bars shall conform to section 508.
2. Expansion bolts shall consist of approved expansion anchors, and 3/4 (M20) hook bolts which conform to section 1006.09. These bolts shall extend at least 8(200) into the new concrete.
3. This work will be paid for by the cubic yard (cubic meter) for CONCRETE COLLAR, by the pound (kg) for REINFORCEMENT BARS, and by Each for EXPANSION BOLTS of the size indicated.

PLAN VIEW DOWN STREAM

EXISTING BOX		EACH COLLAR REINFORCEMENT BARS				CONCRETE		EXPAN. BOLTS					
W	H	A	B	C	D	E	t	CU. YD. (m³)	K(LBS.)	EACH			
		INCHES				G	L	INCHES					
36"	36"	16°	20	20	31.4	44.6	74.6	7	0.48	28.7"	120.8"	35.7	8

All dimensions are in inches (millimeters) unless otherwise noted.

01-01-97	REVISION, 2-11-03, NEW REVISION BOX, REVISED	T.P.	
10-16-06	TITLE BOX, ADDED QUANTITY CALCULATION BOX	M.A.	
2-15-11	CHANGED REBAR DETAIL	R.D.	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

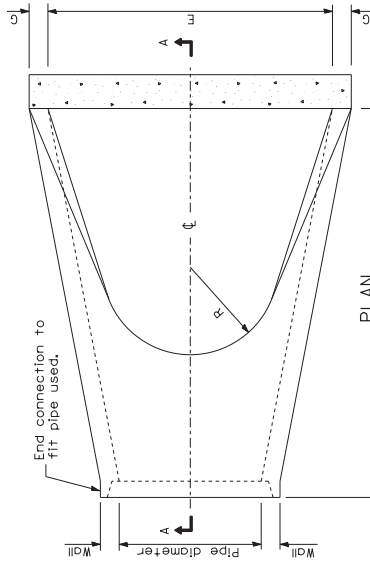
SKewed PIPE CULVERT EXPANSION COLLAR (WITH END SECTION)

FILE NO.	SECTION	SHEET NO.
123-1-2		44
SLOPE STABILIZATION	FULTON COUNTY	34
CADD STD. 54201-D4	ILLINOIS FED. AID PROJECT	CONTRACT NO. 68C25

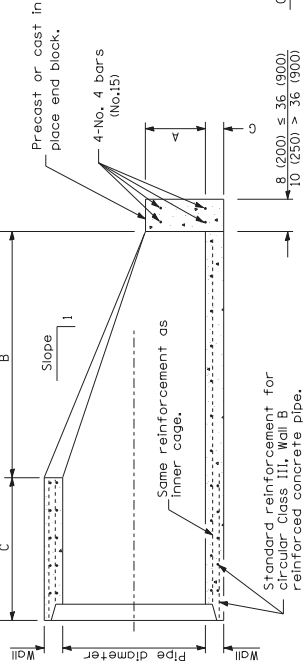
NOT TO SCALE

PIPE DIA.	APPROX. QTY./lbs (kg)	WALL	A	B	C	D	E	G	R	APPROX. SLOPE
12	530	2	4	24	4'-0 7/8"	6'-0 7/8"	24	2	9	1:2.4
(300)	(240)	(51)	(102)	(610)	(1,241 m)	(1,851 m)	(610)	(51)	(229)	1:2.4
15	740	2 1/4	6	27	3'-10"	6'-1"	30	2 1/4	11	1:2.4
(375)	(335)	(57)	(152)	(686)	(1,168 m)	(1,854 m)	(762)	(57)	(280)	1:2.4
18	990	2 1/2	9	27	3'-10"	6'-1"	36	2 1/2	12	1:2.4
(450)	(450)	(64)	(229)	(686)	(1,168 m)	(1,854 m)	(914)	(64)	(305)	1:2.4
21	1280	2 3/4	9	35	3'-6 1/4"	6'-1 1/4"	36	2 3/4	13	1:2.4
(625)	(580)	(70)	(229)	(889)	(965)	(1,854 m)	(1,067 m)	(70)	(330)	1:2.4
24	1520	3	9 1/2	3'-7 1/2"	30	6'-1 1/2"	4'-0"	3	14	1:2.5
(600)	(690)	(76)	(241)	(1,105 m)	(762)	(1,867 m)	(1,219 m)	(76)	(356)	1:2.5
27	1930	3 1/4	10 1/2	4'-0"	25 1/2	6'-1 1/2"	4'-6"	3 1/4	14 1/2	1:2.4
(675)	(875)	(83)	(267)	(1,219 m)	(648)	(1,867 m)	(1,372 m)	(83)	(368)	1:2.4
30	2190	3 1/2	12	4'-6"	19 3/4	6'-1 3/4"	5'-0"	3 1/2	15	1:2.5
(750)	(995)	(89)	(305)	(1,375 m)	(502)	(1,874 m)	(1,524 m)	(89)	(381)	1:2.5
33	3200	3 3/4	13 1/2	4'-10 1/2"	39 1/4	8'-1 3/4"	5'-6"	3 3/4	17 1/2	1:2.5
(825)	(1,450)	(95)	(343)	(1,486 m)	(997)	(2,483 m)	(1,676 m)	(95)	(445)	1:2.5
36	4100	4	15	5'-3"	34 3/4	8'-1 3/4"	6'-0"	4	20	1:2.5
(900)	(1,860)	(102)	(381)	(1,6 m)	(883)	(2,483 m)	(1,829 m)	(102)	(508)	1:2.5
42	5380	4 1/2	21	5'-3"	35	8'-2"	6'-6"	4 1/2	22	1:2.5
(1,050)	(2,440)	(114)	(533)	(1,6 m)	(889)	(2,488 m)	(1,981 m)	(114)	(559)	1:2.5
48	6550	5	24	6'-0"	26	8'-2"	7'-0"	5	22	1:2.5
(1,200)	(2,910)	(121)	(610)	(1,829 m)	(1,660)	(2,489 m)	(2,134 m)	(121)	(559)	1:2.5
54	8240	5 1/2	27	5'-5"	35	8'-4"	7'-6"	5 1/2	24	1:2.0
(1,350)	(3,740)	(140)	(686)	(1,651 m)	(889)	(2,54 m)	(2,286 m)	(140)	(610)	1:2.0
60	8730	6	35	5'-0"	39	8'-3"	8'-0"	5	24	1:1.9
(1,500)	(3,960)	(152)	(889)	(1,524 m)	(991)	(2,515 m)	(2,438 m)	(152)	24	1:1.9
66	10710	6 1/2	30	6'-0"	27	8'-3"	8'-6"	5 1/2	24	1:1.7
(1,650)	(4,860)	(165)	(762)	(1,829 m)	(686)	(2,515 m)	(2,591 m)	(165)	24	1:1.7
72	12520	7	36	6'-6"	21	8'-3"	9'-0"	6	24	1:1.8
(1,800)	(5,680)	(178)	(914)	(1,981 m)	(533)	(2,514 m)	(2,743 m)	(178)	24	1:1.8
78	14770	7 1/2	36	7'-6"	21	9'-3"	9'-6"	6 1/2	24	1:1.8
(1,950)	(6,700)	(191)	(914)	(2,286 m)	(533)	(2,819 m)	(2,896 m)	(191)	24	1:1.8
84	18160	8	36	7'-6 1/2"	21	9'-3 1/2"	10'-0"	6 1/2	24	1:1.6
(2,100)	(8,240)	(203)	(914)	(2,299 m)	(533)	(2,832 m)	(3,048 m)	(203)	24	1:1.6

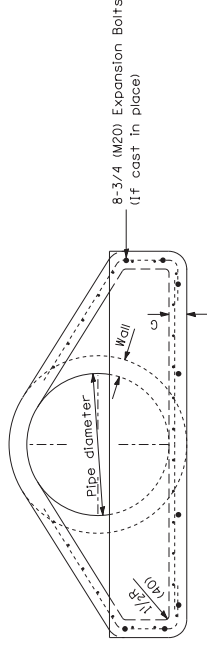
* Radius as furnished by manufacturer



PLAN



SECTION A-A



END VIEW

GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	SECTION	COUNTY	FILE NO.
123-1-2	123-1-2	FULTON	44
887	887	SLOPE STABILIZATION	35
ILLINOIS FED. ROAD DIST. NO.	ILLINOIS FED. ROAD DIST. NO.	CONTRACT NO.	68C25

STATE OF ILLINOIS	PRECAST REINFORCED CONCRETE FLARED DROP BOX END SECTION
DEPARTMENT OF TRANSPORTATION	NOT TO SCALE
	CAUD. STD. 542301-D4

10-18-06	REVISED TO 2007 SPEC.
M.A.	



SOIL BORING LOG

ROUTE IL 95 DESCRIPTION IL-95 LOGGED BY Syed

SECTION IL 95 slide E of Marietta LOCATION IL-95 SEC., TWP. Harris, RNG.,
Latitude 40.500592°, Longitude -90.377203°

COUNTY Fulton DRILLING METHOD Hollow Stem Auger HAMMER TYPE AUTO

STRUCT. NO.	DEPTH	BLOW	UCS	MOIST	Surface Water Elev.	DEPTH	BLOW	UCS	MOIST
Station	H	S	Qu	T	ft	H	S	Qu	T
BORING NO. 1					Groundwater Elev.:				
Station 373+86					First Encounter 560.4 ft				
Offset 14.0 ft RT					Upon Completion				
Ground Surface Elev. 599.40 ft	(ft)	(/6")	(tsf)	(%)	After	(ft)	(/6")	(tsf)	(%)
ASPHALT, approximately 10"					CLAY, brown and gray, medium stiff to stiff (continued)	6		S	
598.6						7			
TOPSOIL, approximately 2"					brown below about 21 feet	3			
598.4	5					4	1.3	21	
CLAY, brown, stiff						5			
	4	1.5	19			5			
	4					3			
	4					3	0.6	20	
	4	1.7	18			3			
	4					4			
	3				574.4	4			
CLAY, brown and gray, medium stiff to stiff	5				CLAY, brown, stiff	3			
	4	0.7	17			4	0.3	21	
	4					6			
	5					6			
	3				CLAY, brown and gray, medium stiff to very stiff	3			
	3	1.3	18			3	0.9	21	
	4					4			
	4					4			
	3					5			
	3	1.1	18			6	2.0	20	
	5					8			
	6					8			
	3					4			
	4	1.7	23			6	1.1	19	
	6					6			
	6					7			
brown below about 13 feet	4					4			
	4	0.9	15			5	1.0	18	
	4					6			
	4					6			
	6					6			
	6					7			
	3					4			
	4	1.5	22			4	1.1	16	
	5					5			
	6					5			
	3					4			
	4	1.5	15			4	1.0	17	
	6					4			
	5					4			
	3				560.4	2			
	5	1.1	13		CLAY, gray, medium stiff to stiff	2			
	-20					2	1.0	17	

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

BBS, form 137 (Rev. 8-99)



SOIL BORING LOG

ROUTE IL 95 DESCRIPTION IL-95 LOGGED BY Syed

SECTION IL 95 slide E of Marietta LOCATION IL-95 SEC., TWP. Harris, RNG.,
Latitude 40.500592°, Longitude -90.377203°

COUNTY Fulton DRILLING METHOD Hollow Stem Auger HAMMER TYPE AUTO

STRUCT. NO.	DEPTH	BLOW	UCS	MOIST	Surface Water Elev.	DEPTH	BLOW	UCS	MOIST
Station	H	S	Qu	T	ft	H	S	Qu	T
BORING NO. 1					Groundwater Elev.:				
Station 373+86					First Encounter 560.4 ft				
Offset 14.0 ft RT					Upon Completion				
Ground Surface Elev. 599.40 ft	(ft)	(/6")	(tsf)	(%)	After	(ft)	(/6")	(tsf)	(%)
CLAY, gray, medium stiff to stiff (continued)						2		S	
					558.4	6			
WEATHERED SHALE, gray						21			
						50/5"			12
						24			
						50/4"			11
						-45			
						50/4"			10
						50/4"			
						50/4"			9
						50/3"			9
						-50			
						50/2"			9
						546.4			
End of Boring						-55			
						-60			

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

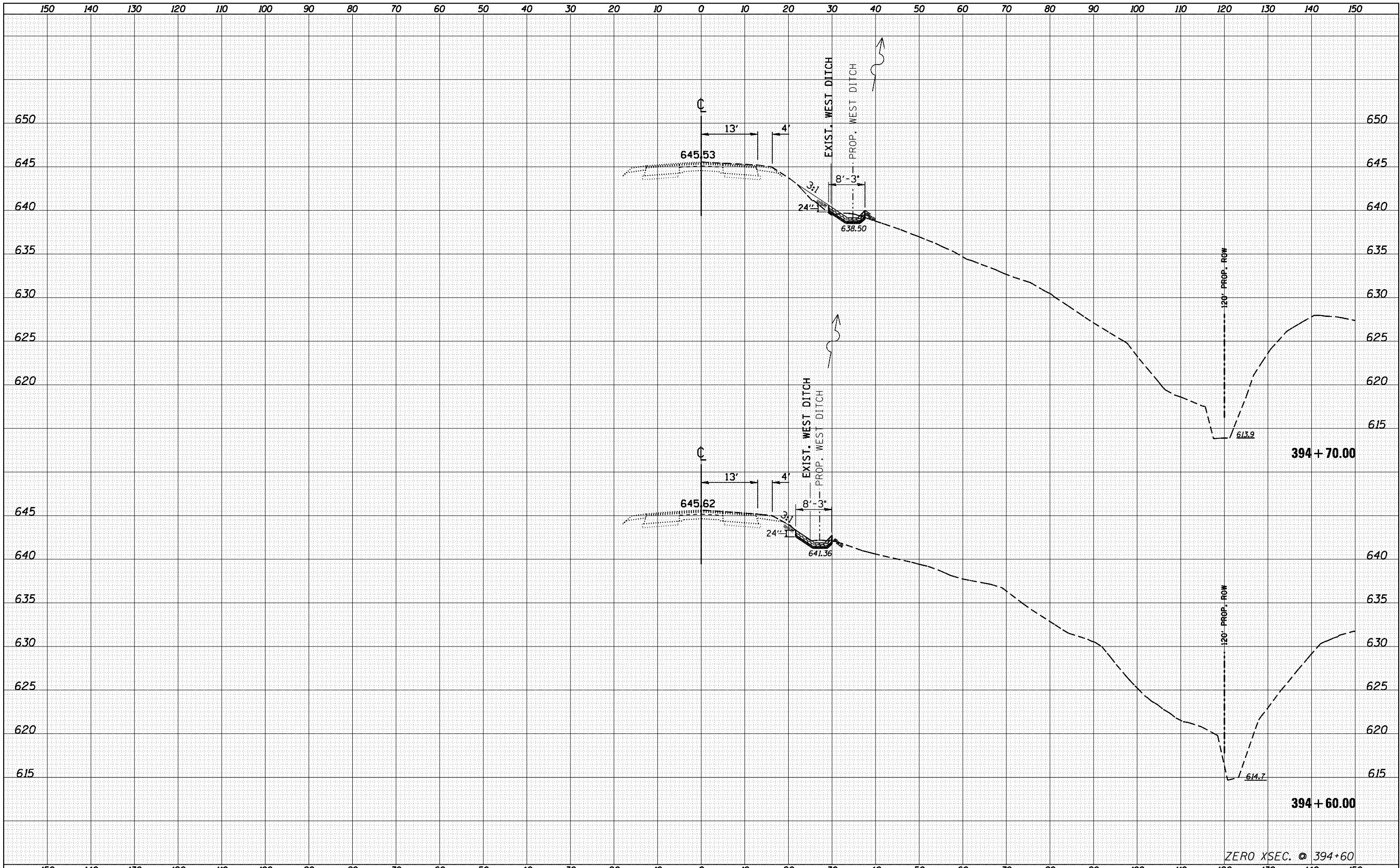
BBS, form 137 (Rev. 8-99)

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PLOT SCALE = 200.1279' / in.	CHECKED -	REVISED -	SLOPE STABILIZATION					CONTRACT NO. 68C25				
Default	DATE -	REVISED -	ILLINOIS FED. AID PROJECT									

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BY	
SURVEYED	
PLOTTED	
NOTE DATE	
AREAS CHECKED	
FINAL SURVEY	
NOTE BOOK	
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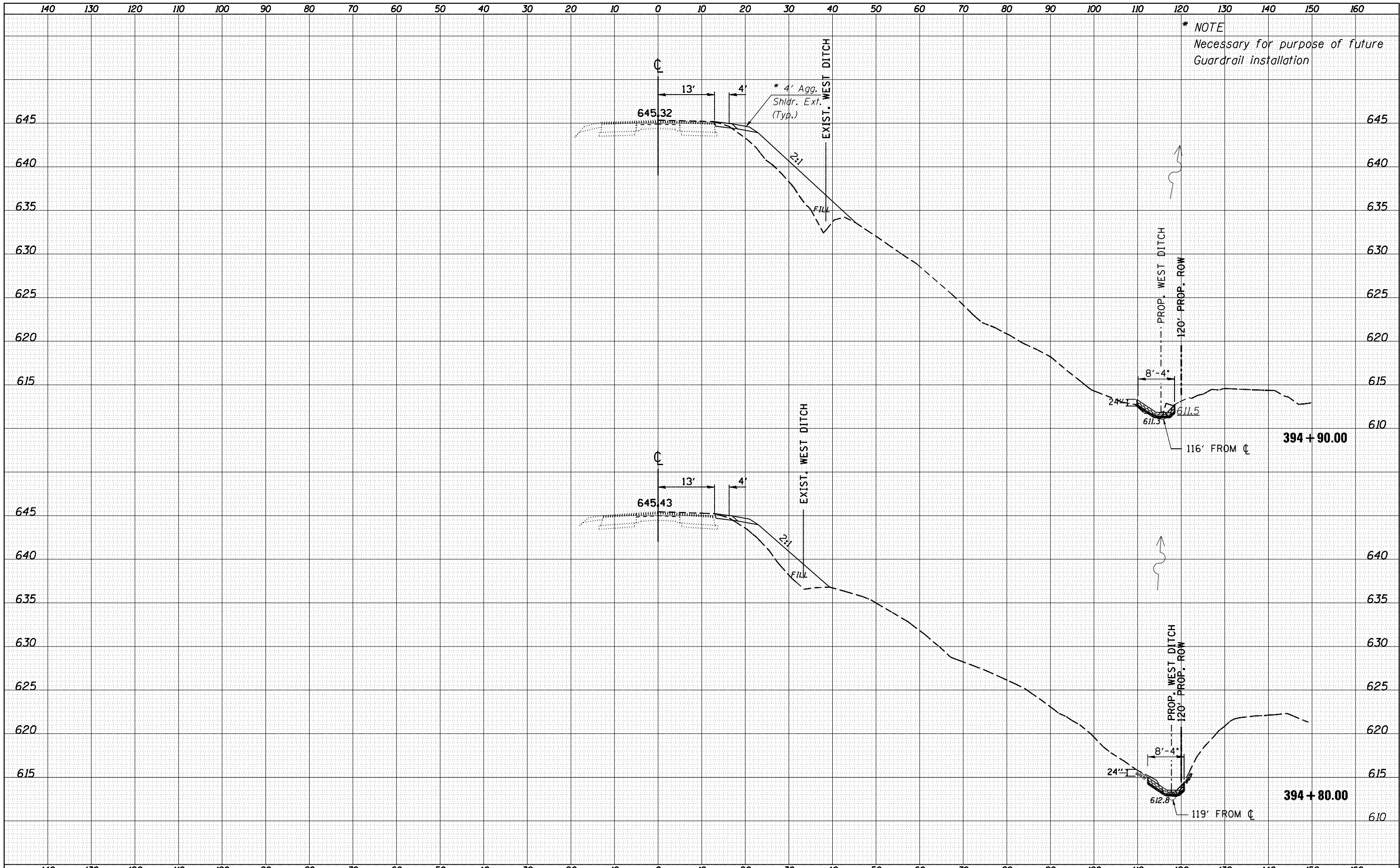
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Default	PLOT SCALE = 200.1279' / in.	CHECKED -	REVISED -		SLOPE STABILIZING & CULV. EXT. CONTRACT NO. 68C25							
	PLOT DATE = 7/12/2017	DATE - 3/9/16	REVISED -		ILLINOIS FED. AID PROJECT							

SCALE: 1.5:1 SHEET OF SHEETS STA. 394+60 TO STA. 396+10

ZERO XSEC. @ 394+60

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

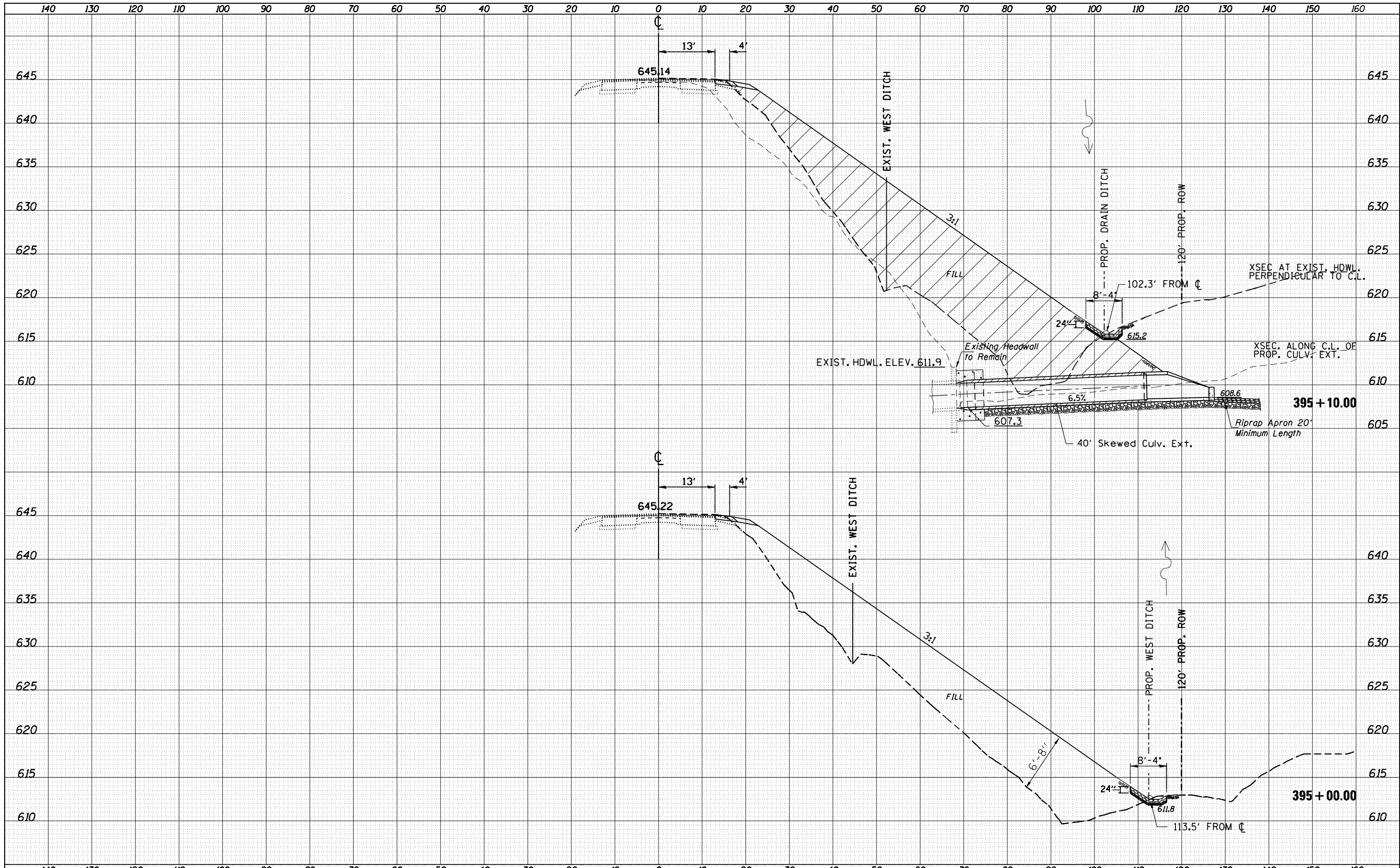
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SN. 029S095m004.26**

SCALE: 1.5:1 SHEET OF SHEETS STA. 394+60 TO STA. 396+10

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	123-1-2	FULTON	44	38
CULV. EXT. & SLOPE STABILIZING			CONTRACT NO. 68C25	
ILLINOIS FED. AID PROJECT				

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 PLOT DATE = 7/12/2017

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

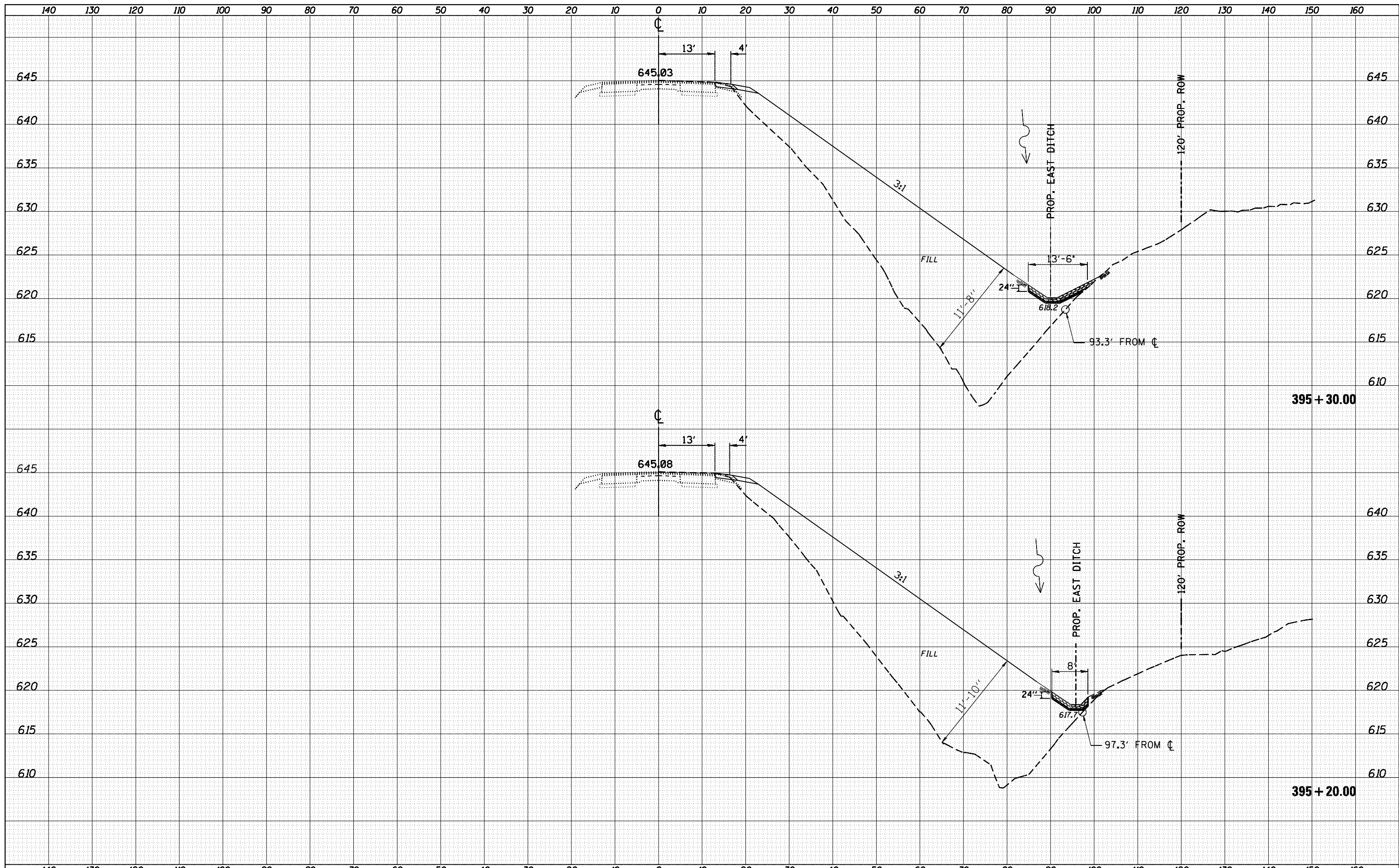
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 SN. 029S095m004.26**

SCALE: 1.5:1 SHEET OF SHEETS STA. 394+60 TO STA. 396+10

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
687	123-1-2	FULTON	44	39
CULV. EXT. & SLOPE STABILIZING			CONTRACT NO. 68C25	
ILLINOIS FED. AID PROJECT				

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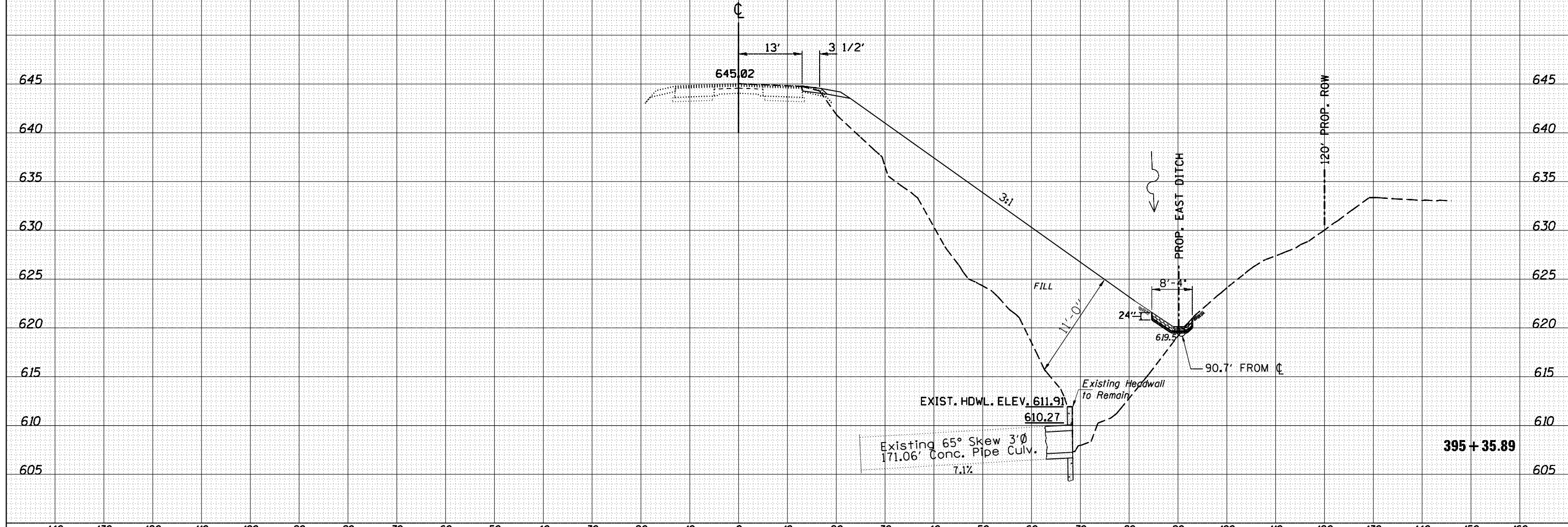
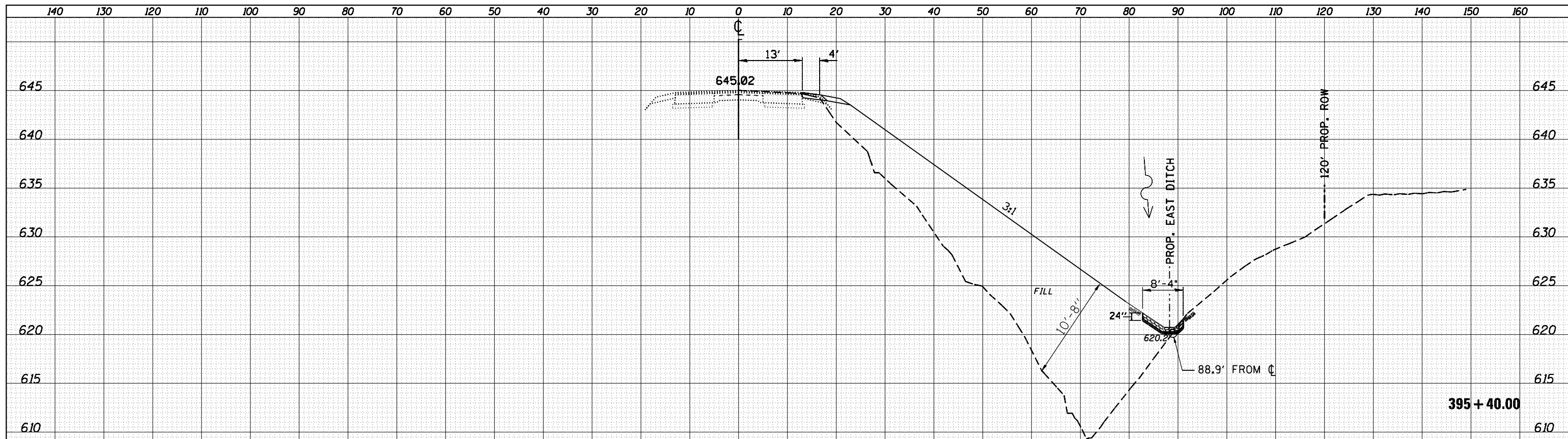
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PLOT SCALE = 200.1279' / in.		CHECKED -	REVISED -		SCALE: SHEET OF SHEETS STA. 394+60 TO STA. 396+10				ILLINOIS FED. AID PROJECT				
Default		DATE - 3/9/16	REVISED -										

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NOTE BOOK	PLOTTED
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	AREAS CHECKED

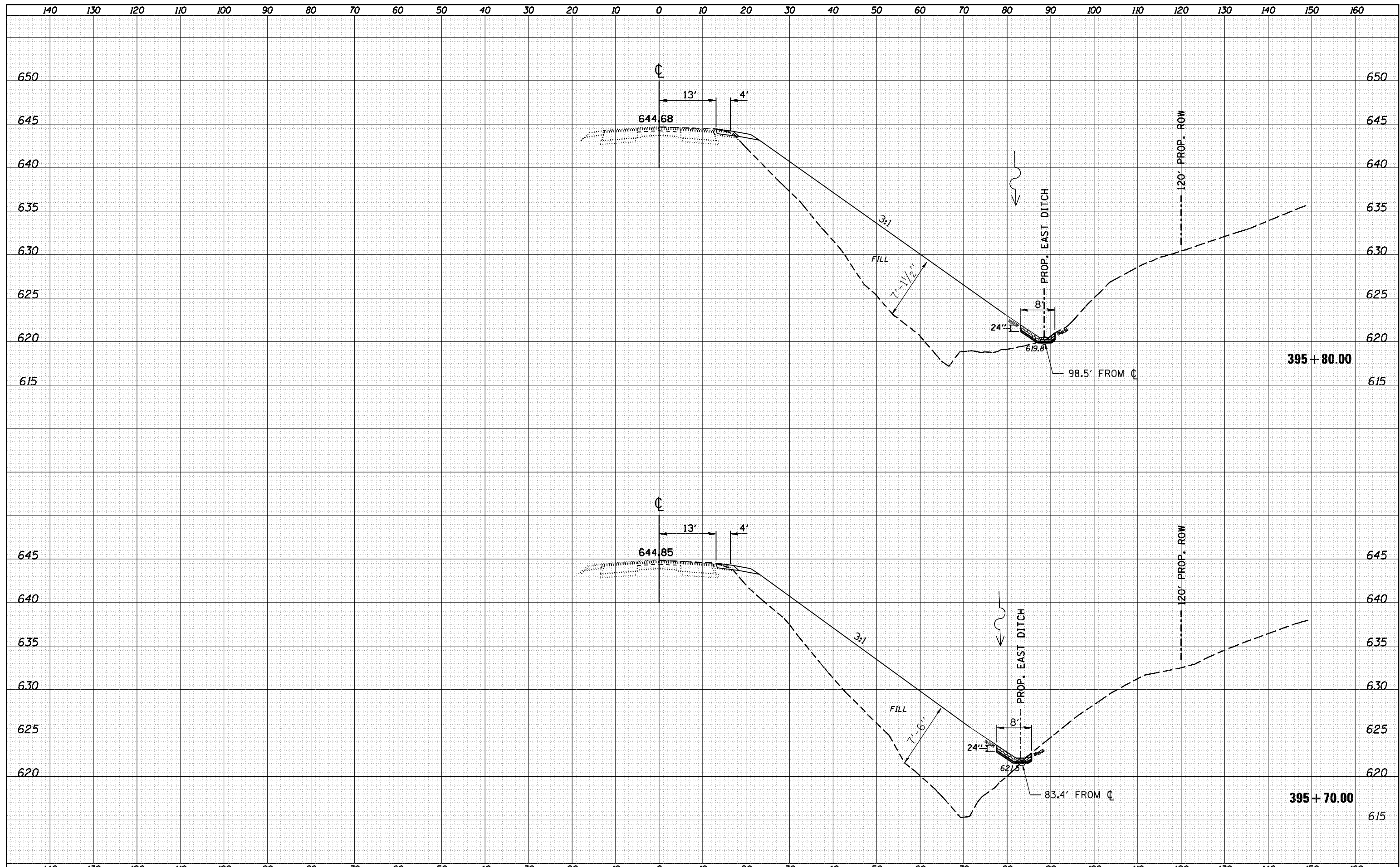
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	AREAS CHECKED



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Default		CHECKED -	REVISED -							ILLINOIS FED. AID PROJECT		
		DATE - 3/9/2016	REVISED -									

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	PLOT DATE = 7/12/2017	DATE - 3/9/16	REVISED -		ILLINOIS FED. AID PROJECT							

