

INDEX OF SHEETS 06-15-12 LETTING ITEM 227

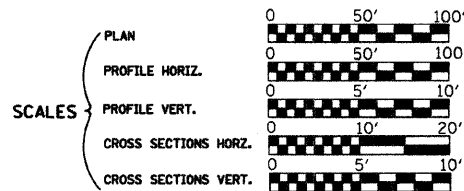
- 1 Cover Sheet
- 2 Summary of Quantities, General Notes, and Typical Sections
- 3 Plan and Profile
- 4 Horizontal Layout
- 5-11 Station Cross Sections
- 12 Stormwater Pollution Prevention & Erosion Control Plan
- 13-19 Bridge Plans

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
LOCAL AGENCY IMPROVEMENT

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 25	06-00213-00-BR	MACON	19	1
FED. ROAD DIST. NO.		ILLINOIS PROJECT: BRS-0544(104)		

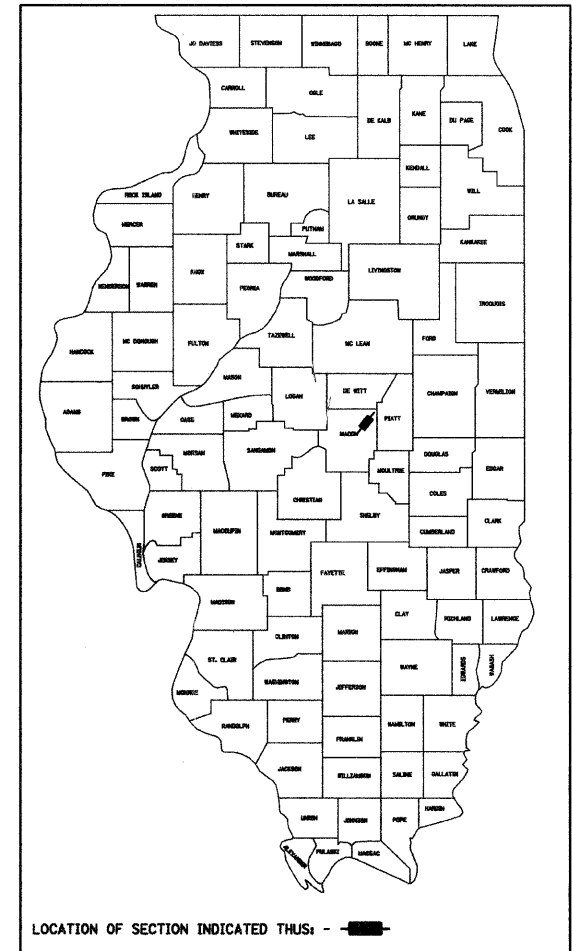
CONTRACT NO. 95680

LIST OF STANDARDS	
Standard 000001-06	Standard symbols, abbreviations and patterns
Standard 280001-06	Temporary erosion control systems
Standard 515001-03	Name plate for bridges
Standard 542401-01	Metal End Section for Pipe Culverts
Standard 630301-05	Shoulder Widening for Type 1 (Special) Guardrail Terminals
Standard 631032-07	Traffic Barrier Terminal Type 6A
Standard 635006-03	Reflector and Terminal Marker Placement
Standard 701011-02	Off-road moving operations, 2-l, 2-w, day only, for speeds > 45 mph
Standard 701301-04	Lane closure, 2-l, 2-w, short time operations
Standard 701901-02	Traffic control devices
Standard BLR-21-9	Typical application of traffic control devices for Construction on Rural Local Highways
Standard BLR-22-7	Typical application of traffic control devices 2-l, 2-w, rural, Road closed to Thru Traffic



HIGHWAY BRIDGE PROGRAM
C.H. 25 (FAS 544) OVER
KICKAPOO CREEK
SECTION 06-00213-00-BR
MACON COUNTY
PROJECT BRS-0544(104)

C-97-081-12

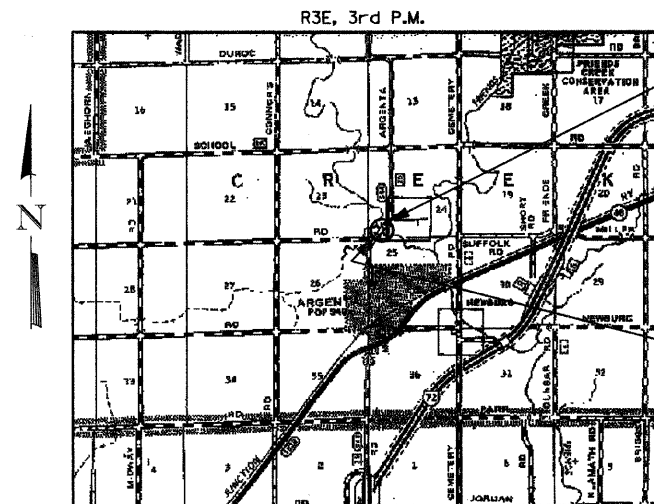


ROADWAY CLASSIFICATION: MAJOR COLLECTOR, (NON-URBAN)
2031 ADT = 900
DESIGN SPEED: 50 MPH
DESIGN GUIDELINES: RURAL
VARIANCES GRANTED: 4 FOOT SHOULDERS
COMMITMENTS: NONE

JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS
J.U.L.I.E. Telephone No. Toll Free 1-800-892-0123

CONTRACT NO. : 95680

URS
345 EAST ASH AVENUE, SUITE B
DECATUR, ILLINOIS 62526
PH. 217-875-4800



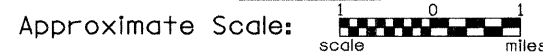
IMPROVEMENT ENDS
STA. 23+10.00

EXIST. STR. NO. 058-3000
PROP. STR. NO. 058-3394

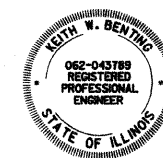
IMPROVEMENT BEGINS
STA. 16+00.00

IMPROVEMENT CONSISTS OF THE REMOVAL OF A TWO SPAN CONCRETE DECK ON WF BEAM SUPERSTRUCTURE ON CLOSED TIMBER ABUTMENTS WITH TIMBER WINGWALLS AND TIMBER PIER, 0-0 DECK = 25'-2", BK.-BK. ABUTMENTS = 64'-6" AND THE CONSTRUCTION OF A SINGLE SPAN PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE ON CONCRETE SPILL THRU ABUTMENTS. TOTAL LENGTH = 99'-4 3/4", WIDTH = 28'-0" O.-O. DECK AND NECESSARY APPROACH ROADWAY WORK.

LAYOUT



Total and Net Length of Improvement 710.00 Feet = 0.134 Miles



EXP. 11/30/2013

Keith W. Bentz
Illinois Professional No. 43789

APPROVED FEBRUARY 29, 2012
John A. B.
COUNTY ENGINEER

PASSED April 17, 2012
Maureen Cavel
DISTRICT SEVEN ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW April 17, 2012
Page J. Brubaker
DEPUTY DIRECTOR OF HIGHWAYS, REGION FOUR ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

3/1/2012
Date

SUMMARY OF QUANTITIES

CONSTRUCTION TYPE CODE 00N

CODE NO.	ITEM	UNIT	QUANTITY
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	111
20200100	EARTH EXCAVATION	CU YD	686
20300100	CHANNEL EXCAVATION	CU YD	230
20400800	FURNISHED EXCAVATION	CU YD	1515
25000200	SEEDING, CLASS 2	ACRE	1.00
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	90
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	90
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	90
25100115	MULCH, METHOD 2	ACRE	1.00
28000200	EARTH EXCAVATION FOR EROSION CONTROL	CU YD	42
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	100
28000315	AGGREGATE DITCH CHECKS	TON	21
28000400	PERIMETER EROSION BARRIER	FOOT	272
28000500	INLET AND PIPE PROTECTION	EACH	2
28100107	STONE RIPRAP, CLASS A4	SQ YD	898
28200200	FILTER FABRIC	SQ YD	898
30200650	PROCESSING MODIFIED SOIL 12"	SQ YD	1653
30201700	PORTLAND CEMENT	TON	70
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	73
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GAL	211
40603080	HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N50	TON	521
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	206
48100100	AGGREGATE SHOULDERS, TYPE A	TON	235
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	33.5
50400705	PRECAST PRESTRESSED CONCRETE DECK BEAMS (42" DEPTH)	SQ FT	2735
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	4400
Δ50901050	STEEL RAILING, TYPE SM	FOOT	196
51200958	FURNISHING METAL SHELL PILES 14" x 0.250"	FOOT	395
51202305	DRIVING PILES	FOOT	395
51203200	TEST PILE METAL SHELLS	EACH	2
51500100	NAME PLATES	EACH	1
542D0229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	88
54215559	METAL END SECTIONS 24"	EACH	4
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	304
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	586
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	63.7
Δ63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4
Δ63100167	TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT	EACH	4
67100100	MOBILIZATION	L SUM	1
Δ78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4

• SEE SPECIAL PROVISIONS
 Δ SPECIALTY ITEMS

GENERAL NOTES

THE AREA TO BE SEEDD SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT-OF-WAY AS DIRECTED BY THE ENGINEER.

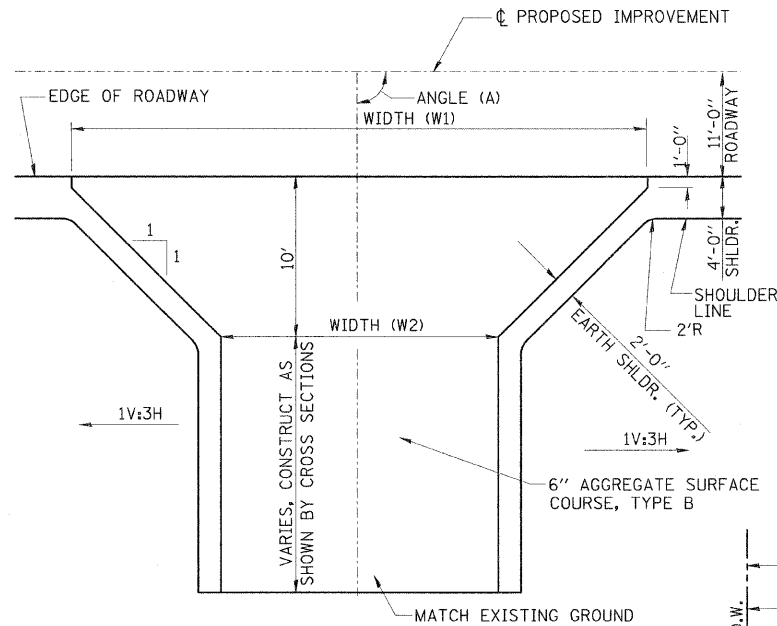
LAYOUT OF EROSION CONTROL ITEMS MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITY FACILITIES. HE SHALL ALSO OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULES OF THE UTILITY COMPANIES FOR THEIR MARKING OF THE EXACT LOCATION.

REMOVAL OF EXISTING PAVEMENT MATERIAL AND EXISTING FENCE SHALL BE INCLUDED IN EARTH EXCAVATION.

APPLICATION RATES

FERTILIZER NUTRIENTS	90	LBS./ACRE
MULCH METHOD 2	2	TONS/ACRE
TEMPORARY EROSION CONTROL SEEDING	100	LBS./ACRE
PORTLAND CEMENT (MODIFIED SOIL)	85	LBS./SQ. YD.
BITUMINOUS MATERIALS-PRIME COAT	0.10	GALS./S. Y.
BITUMINOUS MATERIALS-FOG COAT	0.03	GALS./S. Y.
HOT MIX ASPHALT	112	LBS./S. Y./INCH
AGGREGATE SHOULDERS	2.05	TONS/CU. YD.

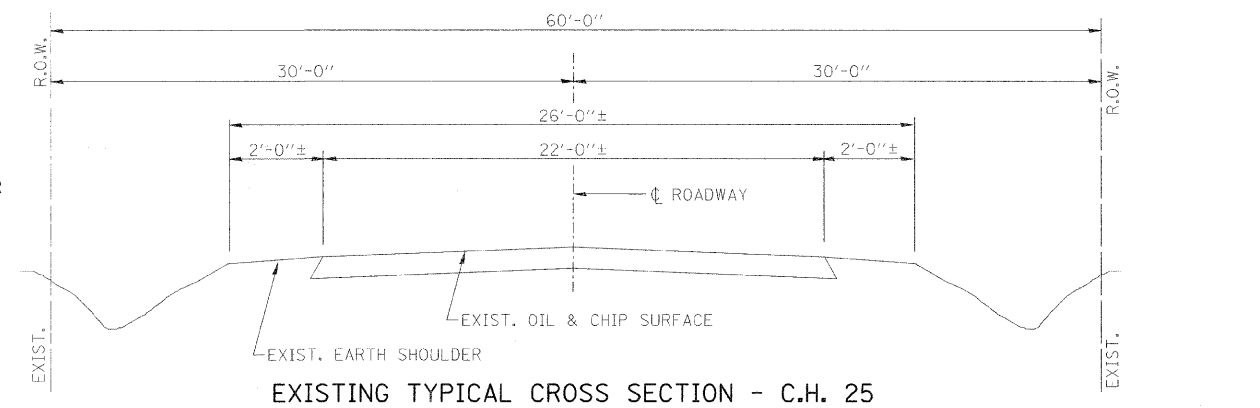


ENTRANCE DETAIL

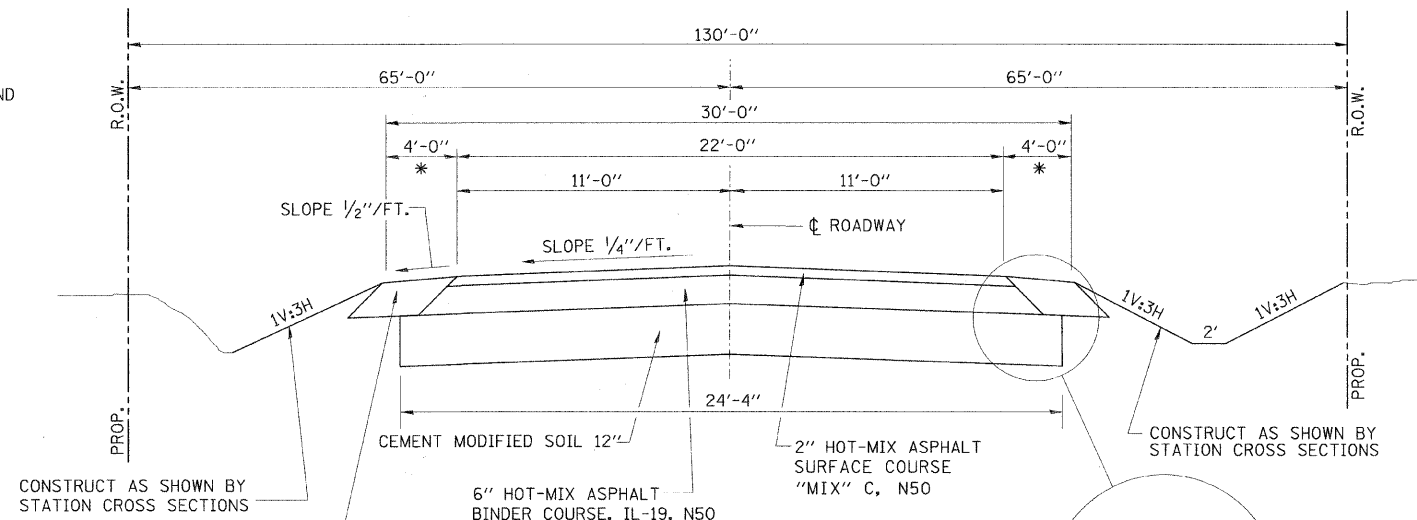
F.E. LT., STA. 17+40.82 = 38 TONS
 (W1 = 34', W2 = 16', A = 90°)
 F.E. LT., STA. 22+24.47 = 23 TONS
 (W1 = 34', W2 = 16', A = 90°)
 P.E. RT., STA. 22+38.70 = 12 TONS
 (W1 = 30', W2 = 12', A = 86°)
 AGGREGATE SURFACE COURSE, TYPE B
 TOTAL = 73 TONS

BITUMINOUS MIXTURE REQUIREMENTS

LOCATION	CH 25	CH 25
MIX USE	BINDER	SURFACE
AC/PG	PG 58-28	PG 58-28
RAP %	25	15
DESIGN VOIDS	4.0 @ N=50	4.0 @ N=50
MIXTURE COMPOSITION (GRAD. MIXTURE)	IL-19.0	IL-9.5
FRICTION	N/A	MIX C



EXISTING TYPICAL CROSS SECTION - C.H. 25



PROPOSED TYPICAL CROSS SECTION - C.H. 25

STA. 16+50.00 TO STA. 19+50.41
 STA. 20+49.81 TO STA. 22+60.00
 (TRANSITION STA. 16+00.00 TO STA. 16+50.00
 (TRANSITION STA. 22+60.00 TO STA. 23+10.00
 * 8'-0" WIDTH (4'-0" AGG. & 4'-0" EARTH)
 CONSTRUCT IN ACCORDANCE WITH
 STANDARD 630301
 FOR AGG. SHOULDER TRANSITION AT
 BRIDGE, SEE SHEET 4 OF 19.

ROADWAY QUANTITY SCHEDULE

LOCATION	PROC MOD SOIL 12" (SQ YD)	PORTLAND CEMENT (TON)	BITUMINOUS MATERIALS (PRIME COAT) (GAL)	HMA BC IL-19.0 N50 (TON)	HMA SC "C" N50 (TON)	AGGREGATE SHLDS A (TON)
M.L. STA. 16+00.00 TO STA. 19+50.41	949	40	121	299	97	136
M.L. STA. 20+49.81 TO STA. 23+10.00	704	30	90	222	72	99
OVERLAY AT STRUCTURE					37	
TOTALS	1653	70	211	521	206	235

GENERAL DATA

Date	Designed MJP	C.H. 25 OVER KICKAPOO CREEK SECTION 06-00213-00-BR MACON COUNTY STA. 20+00.00 PROP. STR. NO. 058-3394
Revisions	Drawn REZ	
	Checked GAC	
	Approved KWB	
Prepared by:	URS 345 East Ash Avenue Decatur, IL 62526	URS Job No. 36431926

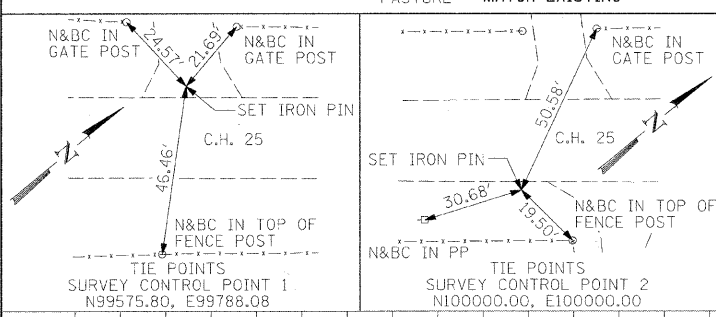
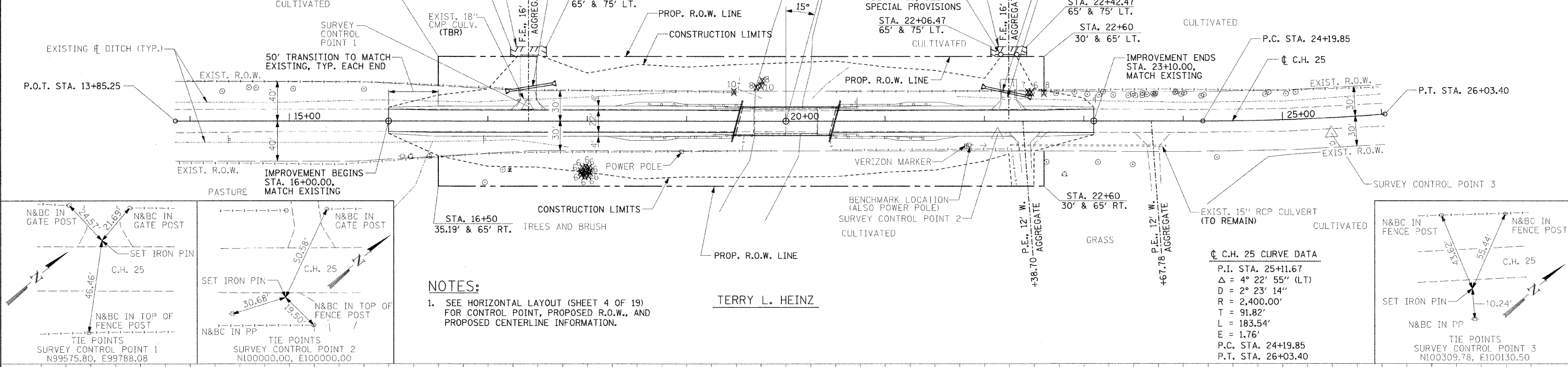
BENCHMARK:

SPIKE NAIL FOUND IN POWER POLE
 STA. 21+84, 24' RT.
 ELEV. 652.81

EXISTING STRUCTURE NO. 058-3000

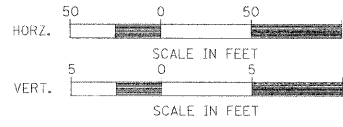
TWO SPAN CONCRETE DECK AND WF BEAM SUPERSTRUCTURE
 ON CLOSED TIMBER ABUTMENTS WITH TIMBER WINGWALLS
 AND TIMBER PIER.
 O. TO O. DECK = 25'-2"
 BK. TO BK. ABUTMENTS = 64'-6"

TERRY L. HEINZ

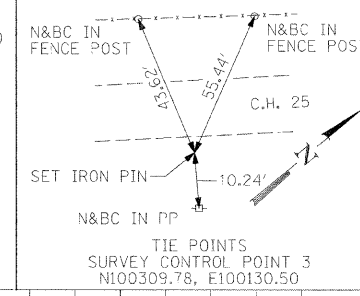


NOTES:
 1. SEE HORIZONTAL LAYOUT (SHEET 4 OF 19)
 FOR CONTROL POINT, PROPOSED R.O.W., AND
 PROPOSED CENTERLINE INFORMATION.

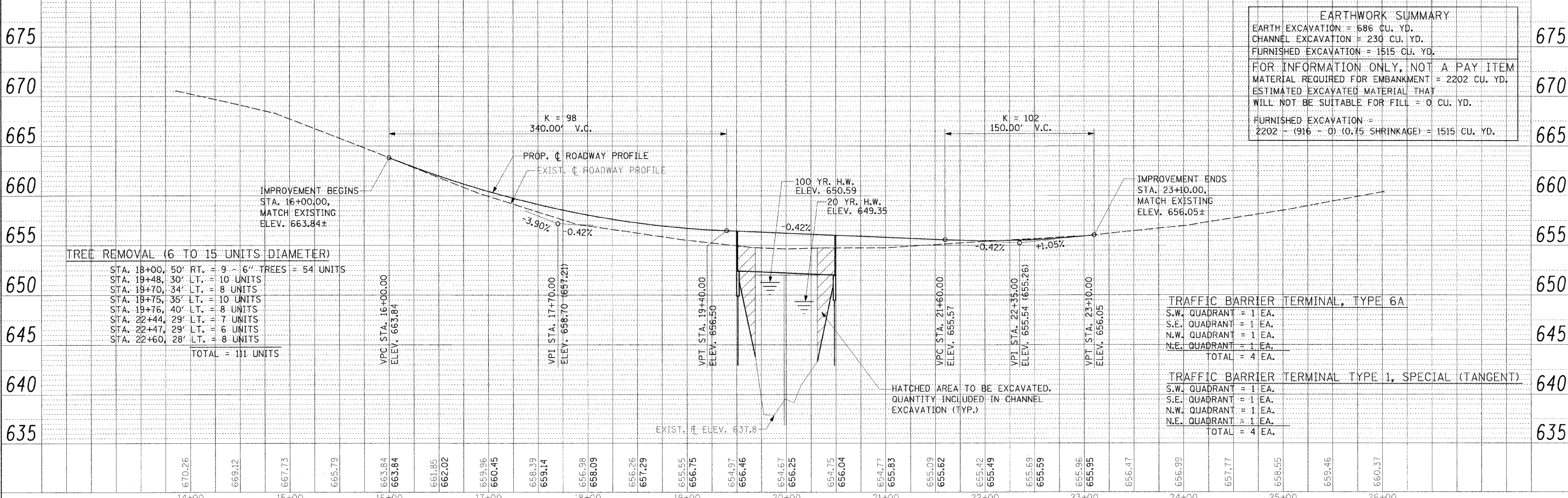
TERRY L. HEINZ



C.H. 25 CURVE DATA
 P.I. STA. 25+11.67
 $\Delta = 4^\circ 22' 55''$ (LT)
 $D = 2^\circ 23' 14''$
 $R = 2,400.00'$
 $T = 91.82'$
 $L = 183.54'$
 $E = 1.76'$
 P.C. STA. 24+19.85
 P.T. STA. 26+03.40



EARTHWORK SUMMARY	
EARTH EXCAVATION = 686 CU. YD.	675
CHANNEL EXCAVATION = 230 CU. YD.	
FURNISHED EXCAVATION = 1515 CU. YD.	670
FOR INFORMATION ONLY, NOT A PAY ITEM	
MATERIAL REQUIRED FOR EMBANKMENT = 2202 CU. YD.	
ESTIMATED EXCAVATED MATERIAL THAT	
WILL NOT BE SUITABLE FOR FILL = 0 CU. YD.	665
FURNISHED EXCAVATION =	
2202 - (916 - 0) (0.75 SHRINKAGE) = 1515 CU. YD.	660

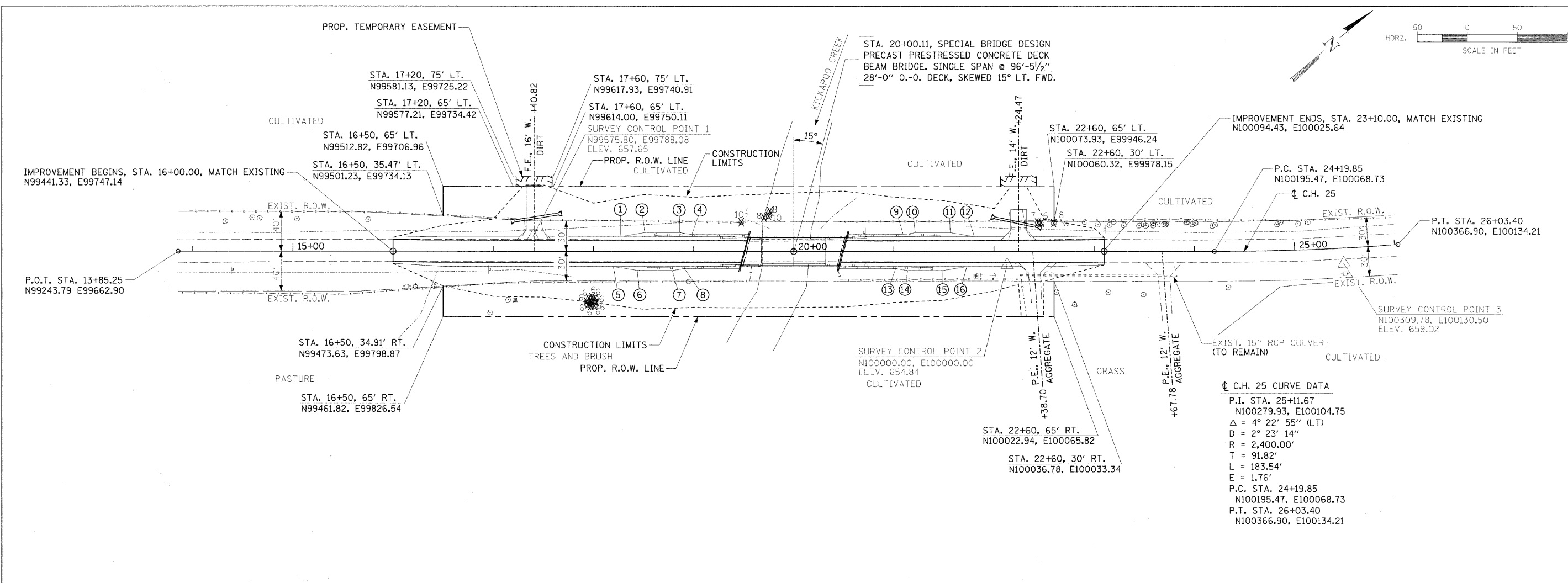
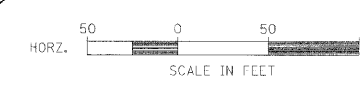


TREE REMOVAL (6 TO 15 UNITS DIAMETER)
 STA. 18+00, 50' RT. = 9 - 6" TREES = 54 UNITS
 STA. 19+48, 30' LT. = 10 UNITS
 STA. 19+70, 34' LT. = 8 UNITS
 STA. 19+75, 35' LT. = 10 UNITS
 STA. 19+76, 40' LT. = 8 UNITS
 STA. 22+44, 29' LT. = 7 UNITS
 STA. 22+47, 29' LT. = 6 UNITS
 STA. 22+60, 28' LT. = 8 UNITS
TOTAL = 111 UNITS

TRAFFIC BARRIER TERMINAL, TYPE 6A
 S.W. QUADRANT = 1 EA.
 S.E. QUADRANT = 1 EA.
 N.W. QUADRANT = 1 EA.
 N.E. QUADRANT = 1 EA.
TOTAL = 4 EA.

TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)
 S.W. QUADRANT = 1 EA.
 S.E. QUADRANT = 1 EA.
 N.W. QUADRANT = 1 EA.
 N.E. QUADRANT = 1 EA.
TOTAL = 4 EA.

FILE NAME =	USER NAME = #USER#	DESIGNED - MJP	REVISED -	STATE OF ILLINOIS	PLAN AND PROFILE	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	PLOT DATE = #DATE#	DATE -	REVISED -		STA. 13+85.25 TO STA. 26+03.40	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT:	CONTRACT NO. 95680	



☉ C.H. 25 CURVE DATA
 P.I. STA. 25+11.67
 N100279.93, E100104.75
 $\Delta = 4^\circ 22' 55''$ (LT)
 $D = 2^\circ 23' 14''$
 $R = 2,400.00'$
 $T = 91.82'$
 $L = 183.54'$
 $E = 1.76'$
 P.C. STA. 24+19.85
 N100195.47, E100068.73
 P.T. STA. 26+03.40
 N100366.90, E100134.21

PROPOSED STRUCTURE LAYOUT

SOUTH ABUTMENT	NORTH ABUTMENT
BK. OF S. ABUT. STA. 19+50.41 N99763.66, E99884.59	BK. OF N. ABUT. STA. 20+49.81 N99855.09, E99923.58
☉ S. ABUT. STA. 19+51.70 N99764.85, E99885.10	☉ N. ABUT. STA. 20+48.52 N99853.90, E99923.07

SHOULDER WIDENING FOR GUARDRAIL TERMINALS (STANDARD 630301)

- | | |
|--------------------------|--------------------------|
| ① STA. 18+27.30, 15' LT. | ⑨ STA. 21+09.43, 17' LT. |
| ② STA. 18+51.30, 19' LT. | ⑩ STA. 21+21.43, 19' LT. |
| ③ STA. 18+86.30, 19' LT. | ⑪ STA. 21+56.43, 19' LT. |
| ④ STA. 18+98.30, 17' LT. | ⑫ STA. 21+80.43, 15' LT. |
| ⑤ STA. 18+19.79, 15' RT. | ⑬ STA. 21+01.92, 17' RT. |
| ⑥ STA. 18+43.79, 19' RT. | ⑭ STA. 21+13.92, 19' RT. |
| ⑦ STA. 18+78.79, 19' RT. | ⑮ STA. 21+48.92, 19' RT. |
| ⑧ STA. 18+90.79, 17' RT. | ⑯ STA. 21+72.92, 15' RT. |

NOTE:
 FOR TIE POINTS AND BENCHMARK LOCATION,
 SEE SHEET 3 OF 19.

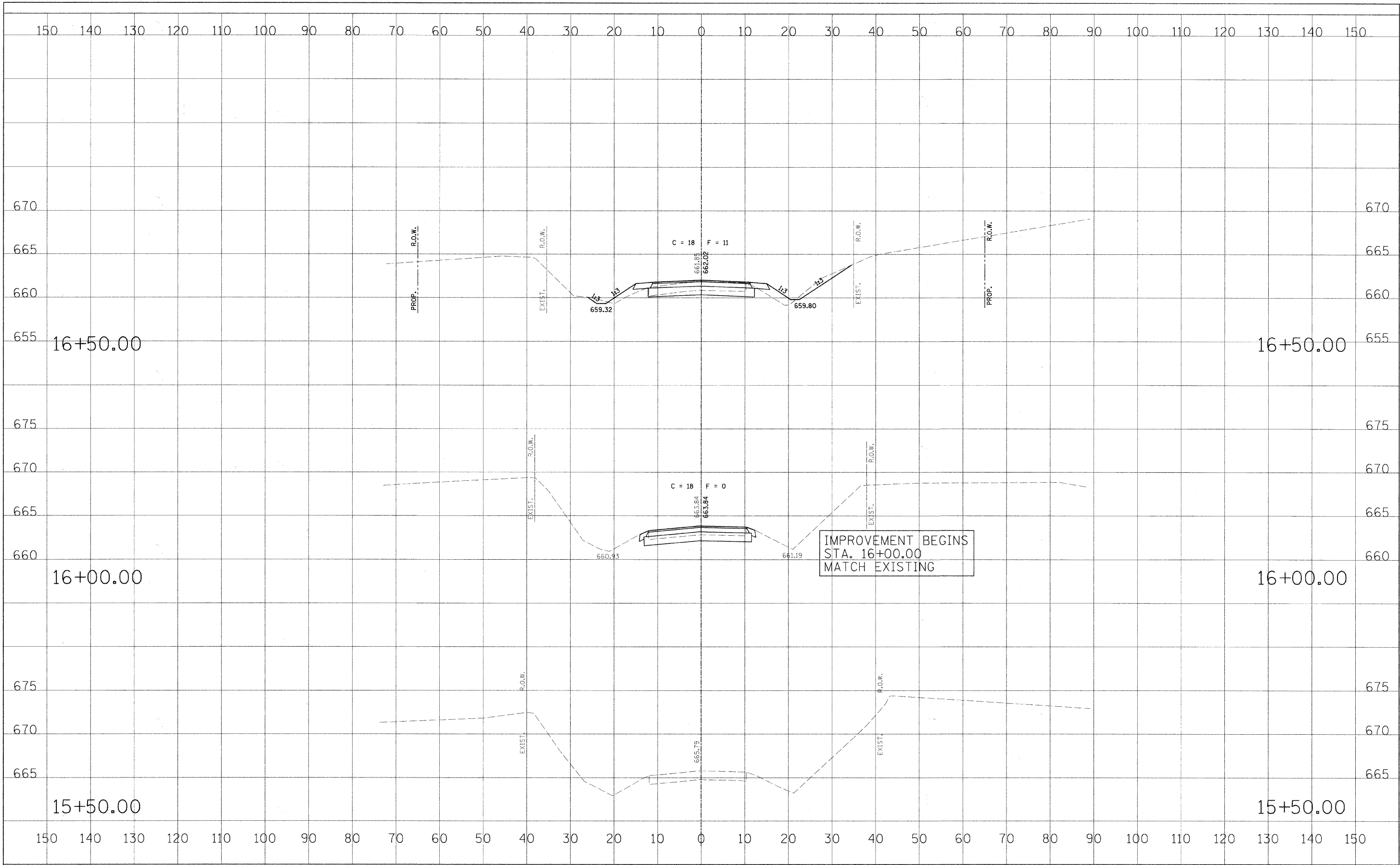
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NOTE BOOK	PLOTTED	
NO.	ALIGNED CHECKED	
	DATE FILE NAME	

PROFILE	DESIGNED	DATE
NOTE BOOK	PLOTTED	
NO.	GRADES CHECKED	
	STRUCTURE NOTATIONS OFFD	

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PLOT DATE = #DATE#	DATE	REVISED -	REVISED -			SCALE: AS SHOWN	SHEET NO. 1 OF 1 SHEETS	STA. 13+85.25 TO STA. 26+03.40		

FINAL SURVEY	DATE
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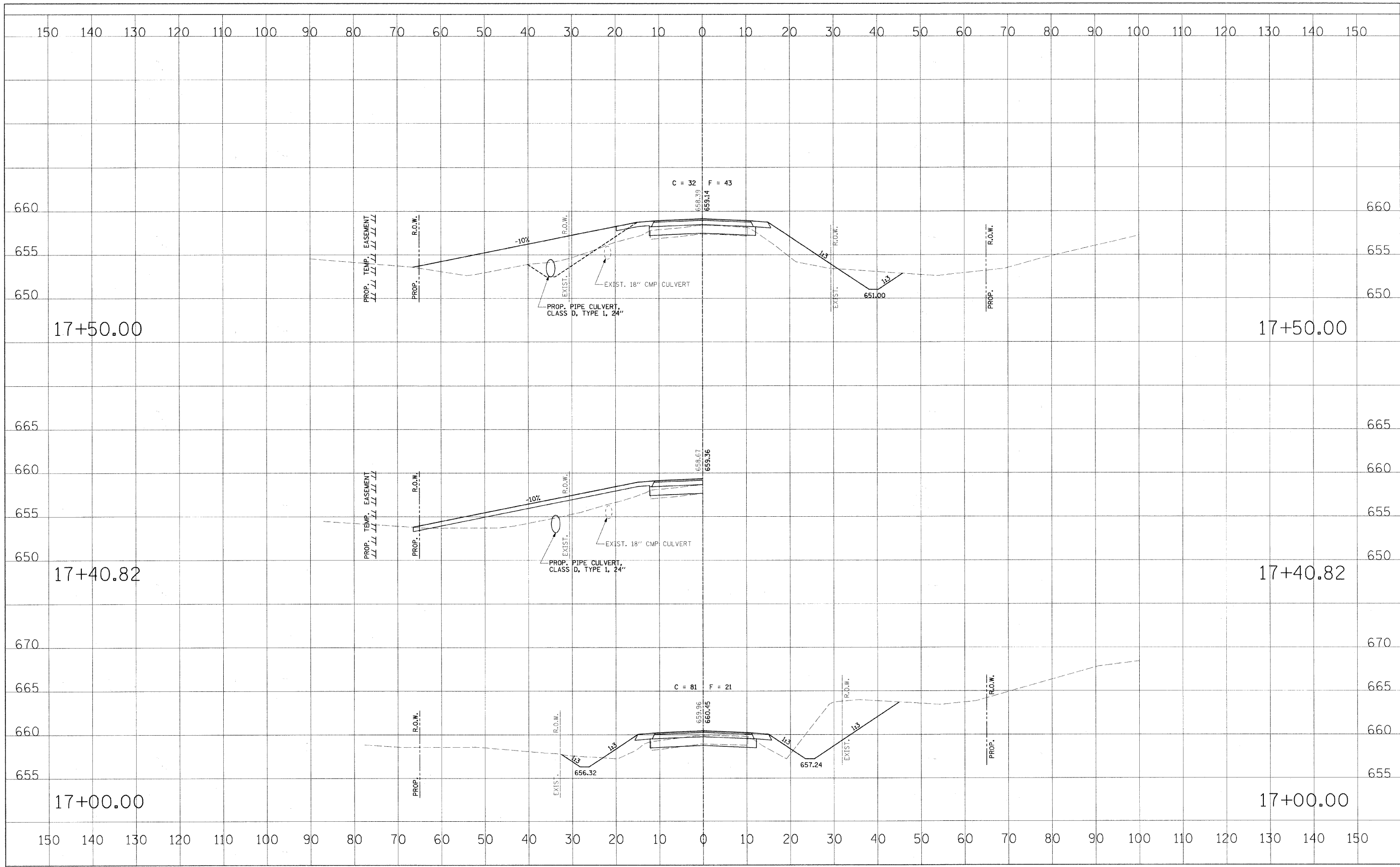
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					SCALE: AS SHOWN	SHEET NO. 1 OF 7 SHEETS		STA. 15+50.00 TO STA. 16+50.00			

FINAL SURVEY	DATE
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NOTED	NO.
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ORIGINAL SURVEY	DATE
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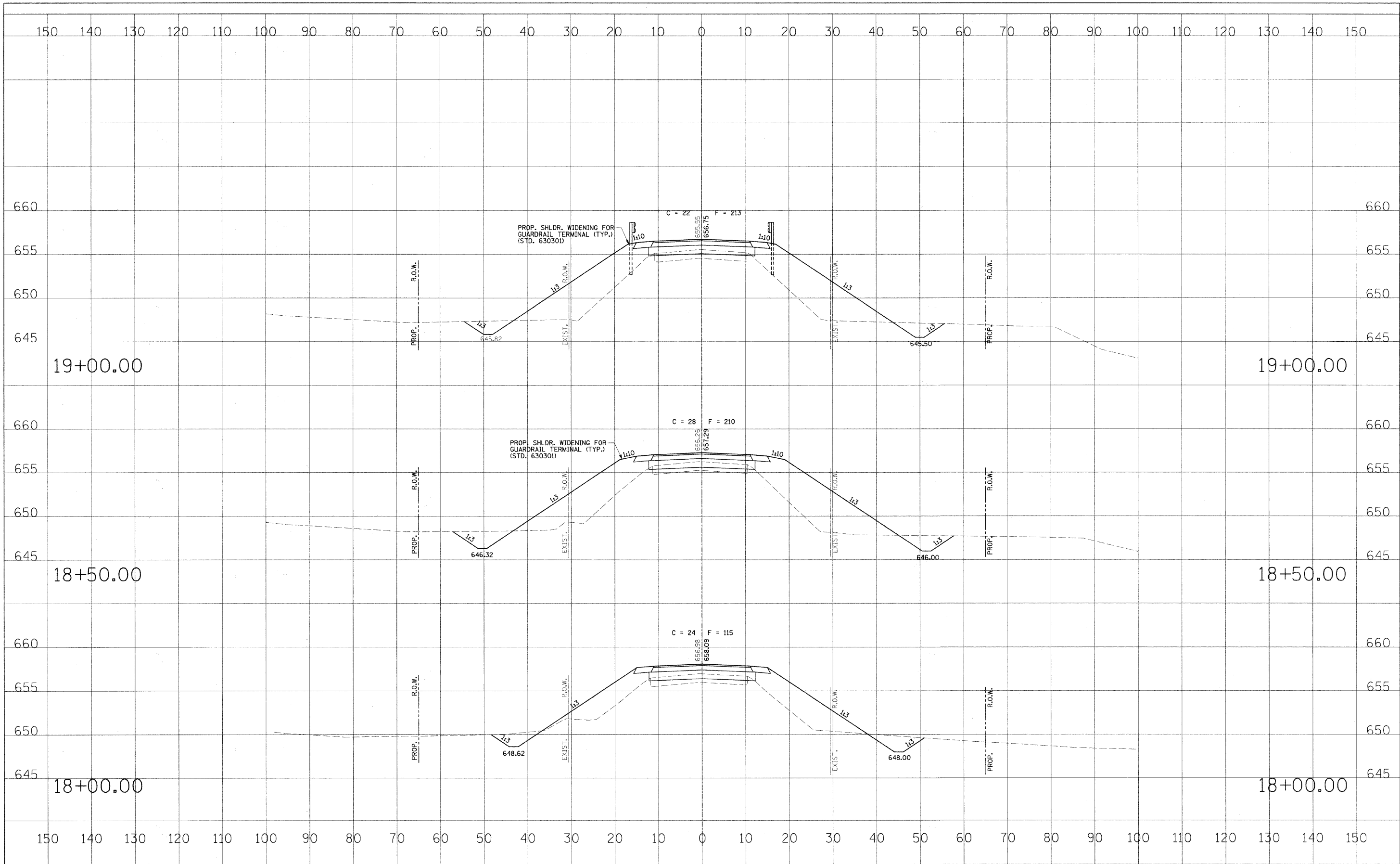


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		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT: BRS-0544(104)					

SCALE: AS SHOWN SHEET NO. 2 OF 7 SHEETS STA. 17+00.00 TO STA. 17+50.00

FINAL	DATE
SURVEY	BY
NOTE BOOK	
AREAS CHECKED	
NO.	

ORIGINAL	DATE
SURVEY	BY
NOTE BOOK	
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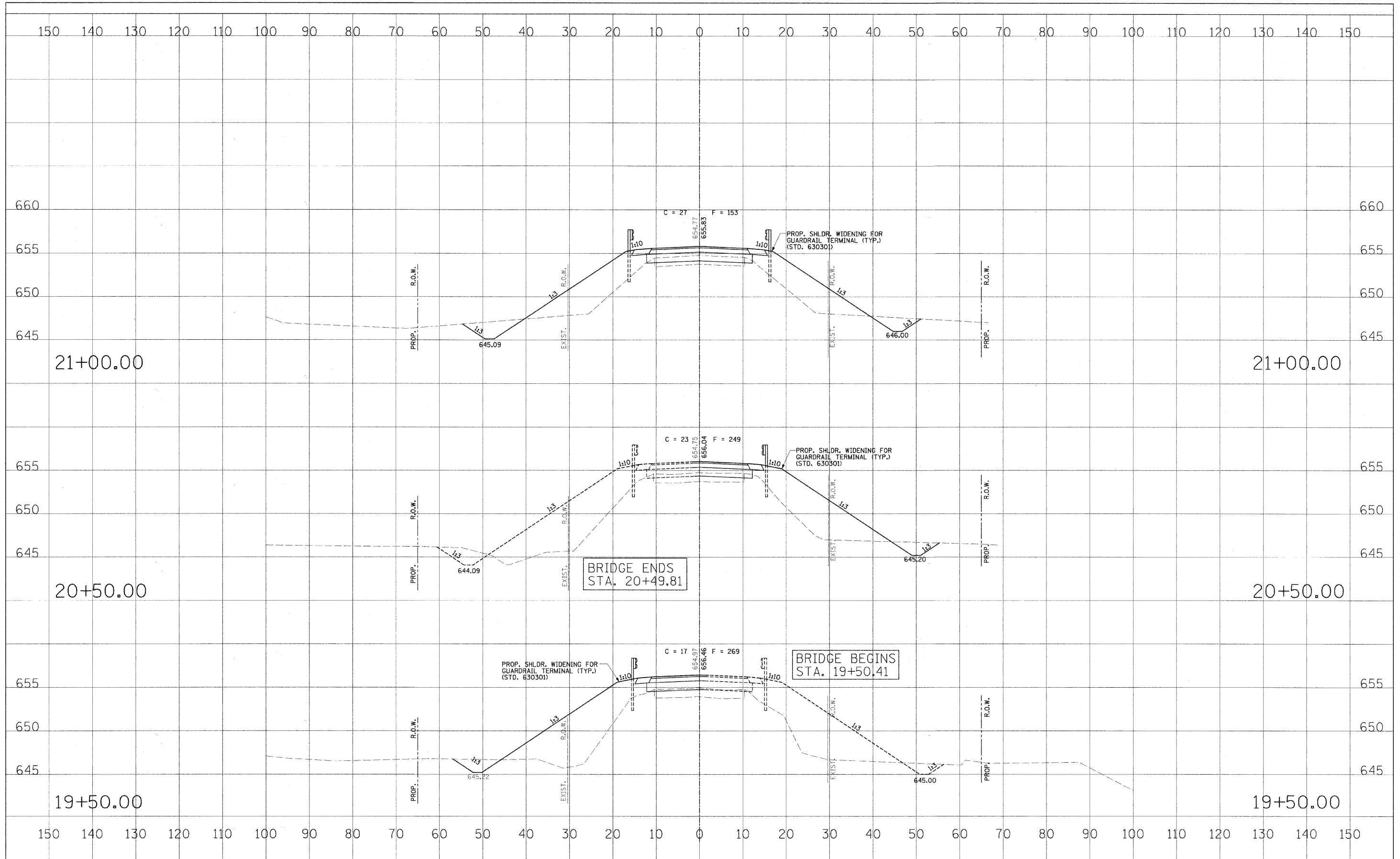


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		DATE - -----	REVISED - ---			FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT: BRS-0544(104)					

SCALE: AS SHOWN SHEET NO. 3 OF 7 SHEETS STA. 18+00.00 TO STA. 19+00.00

FINAL	DATE
SURVEYED	BY
NOTE BOOK	NO.
AREAS CHECKED	

ORIGINAL	DATE
SURVEYED	BY
NOTE BOOK	NO.
AREAS CHECKED	

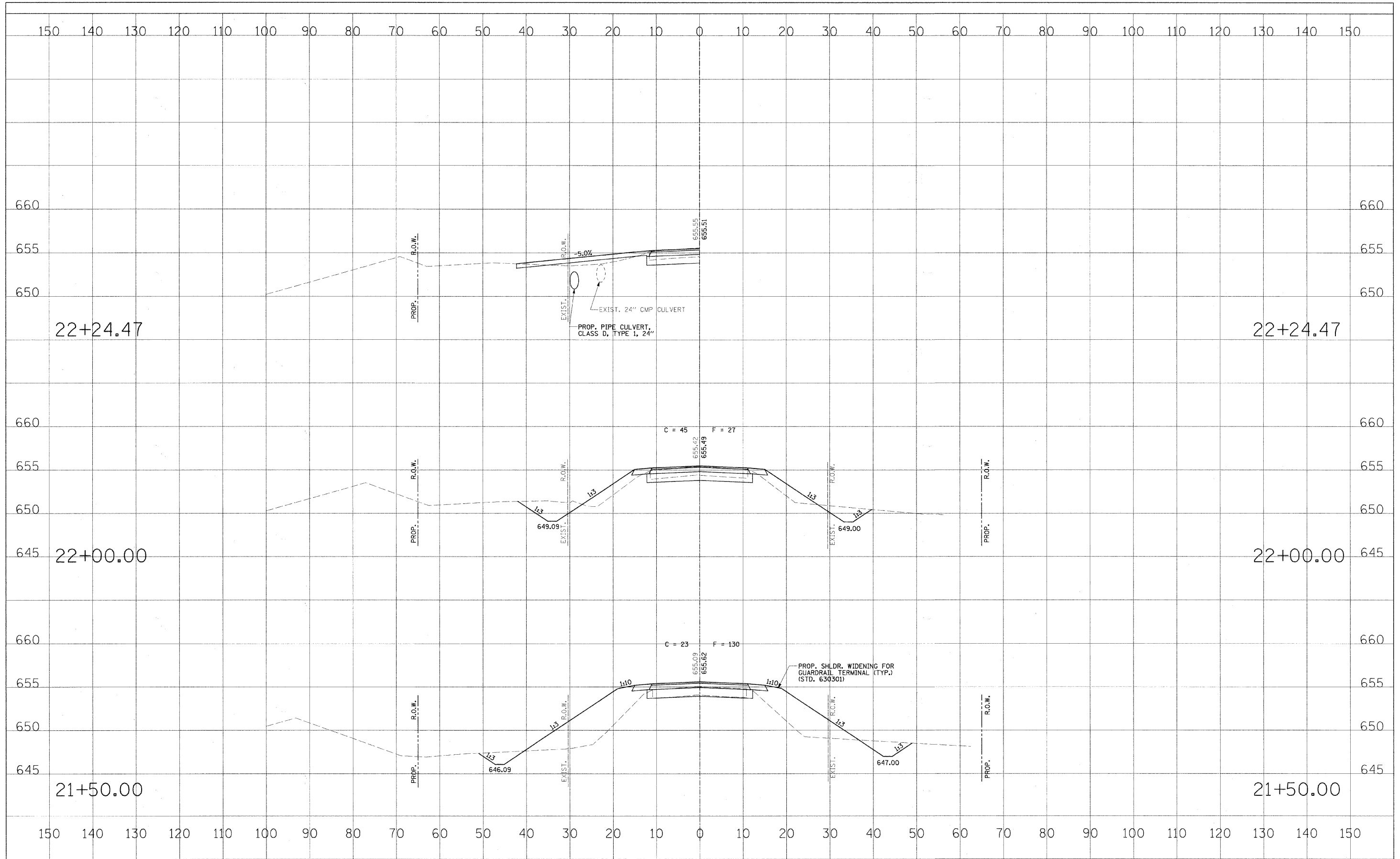


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		DATE -	REVISED -			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT: BRS-0544(104)					

SCALE: AS SHOWN SHEET NO. 4 OF 7 SHEETS STA. 19+50.00 TO STA. 21+00.00

FINAL	DATE
SURVEYED	BY
REVISIONS	
NOTE BOOK	
AREAS	
CHECKED	
NO.	

ORIGINAL	DATE
SURVEYED	BY
REVISIONS	
NOTE BOOK	
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CHECKED	
NO.	

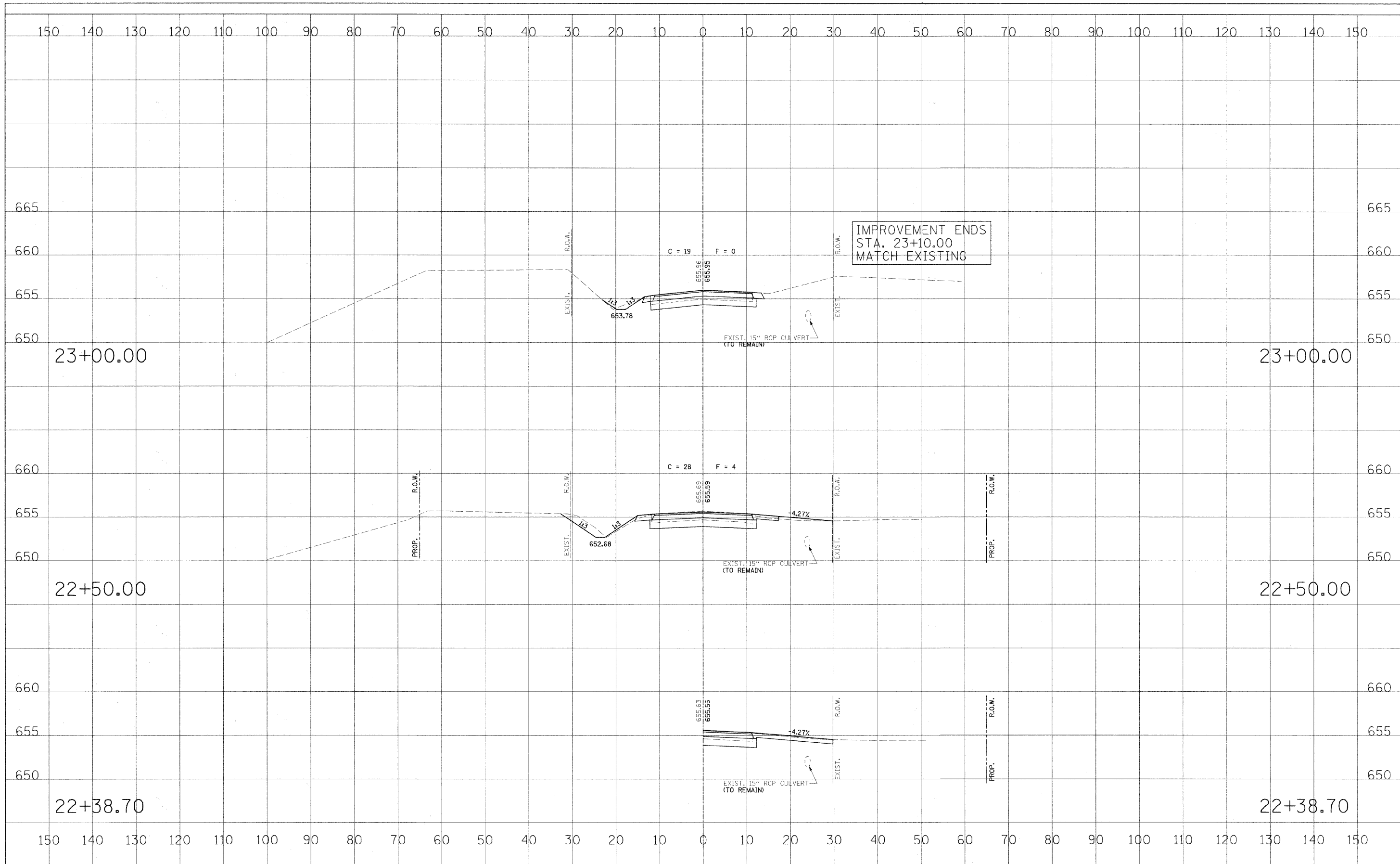


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PLOT DATE = *DATE*		DATE -	REVISED -			FED. ROAD DIST. NO. - [ILLINOIS] FED. AID PROJECT: BRS-05441041					

SCALE: AS SHOWN SHEET NO. 5 OF 7 SHEETS STA. 21+50.00 TO STA. 22+24.47

FINAL	DATE
SURVEY	BY
NOTE BOOK	
TEMPLATE	
AREAS	
CHECKED	
NO.	

ORIGINAL	DATE
SURVEY	BY
NOTE BOOK	
TEMPLATE	
AREAS	
CHECKED	
NO.	



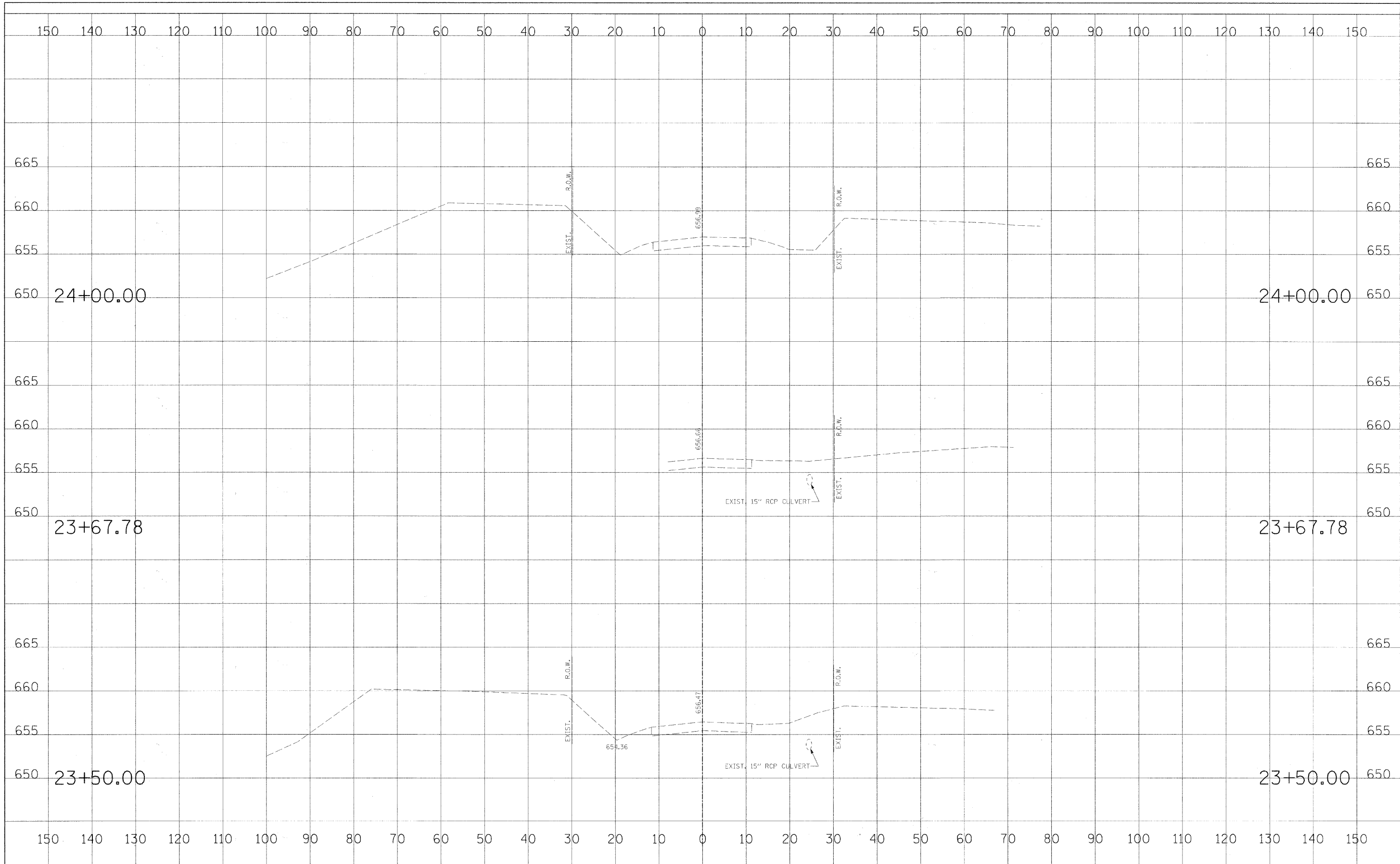
IMPROVEMENT ENDS
STA. 23+10.00
MATCH EXISTING

FILE NAME =	USER NAME = #USER#	DESIGNED - MJP	REVISED - ---	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS			RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#		DRAWN - REZ	REVISED - ---		CH 25	06-00213-00-BR	MACON	19	10			
PLOT SCALE = #SCALE#		CHECKED - KWB	REVISED - ---		CONTRACT NO. 95680							
PLOT DATE = #DATE#		DATE -	REVISED - ---		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT: BRS-0544(04)							

SCALE: AS SHOWN SHEET NO. 6 OF 7 SHEETS STA. 22+38.70 TO STA. 23+00.00

FINAL	SURVEY	DATE
SURVEYED	BY	
NOTE BOOK	TEMP. #	
AREAS	CHECKED	
NO.		

ORIGINAL	SURVEY	DATE
SURVEYED	BY	
NOTE BOOK	TEMP. #	
AREAS	CHECKED	
NO.		

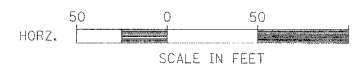
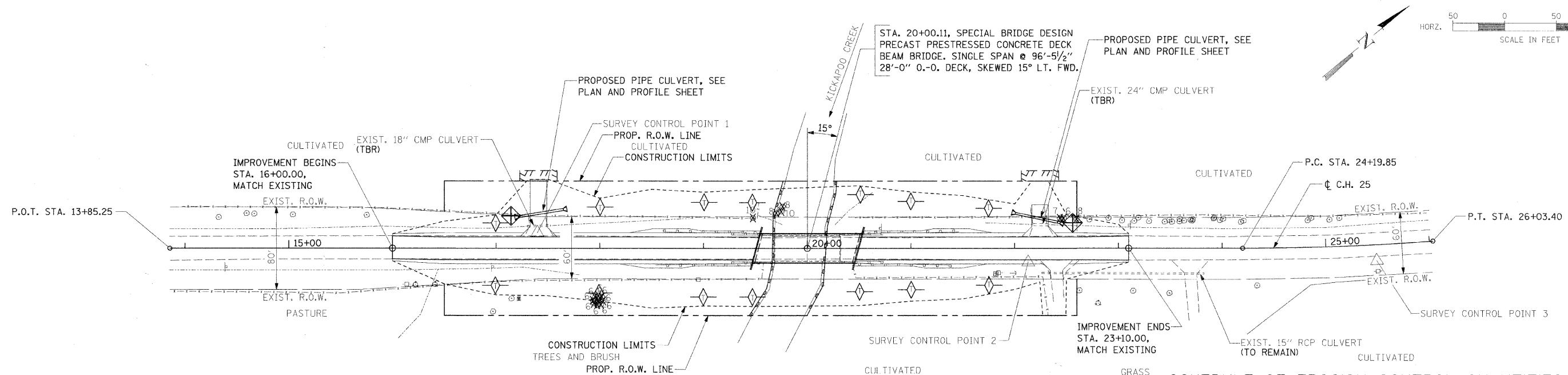


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	PLOT DATE = #DATE#	CHECKED - KWB	REVISED - ---			CONTRACT NO. 95680					
		DATE - -----	REVISED - ---			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT: BRS-0544(104)					

SCALE: AS SHOWN SHEET NO. 7 OF 7 SHEETS STA. 23+50.00 TO STA. 24+00.00

DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	

DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	
DATE	
BY	
REVISIONS	
NO.	



- LEGEND**
- PERIMETER EROSION BARRIER
 - ◇ AGGREGATE DITCH CHECK (TYP.) (SEE STD. 280001)
 - ⊕ TEMPORARY PIPE PROTECTION

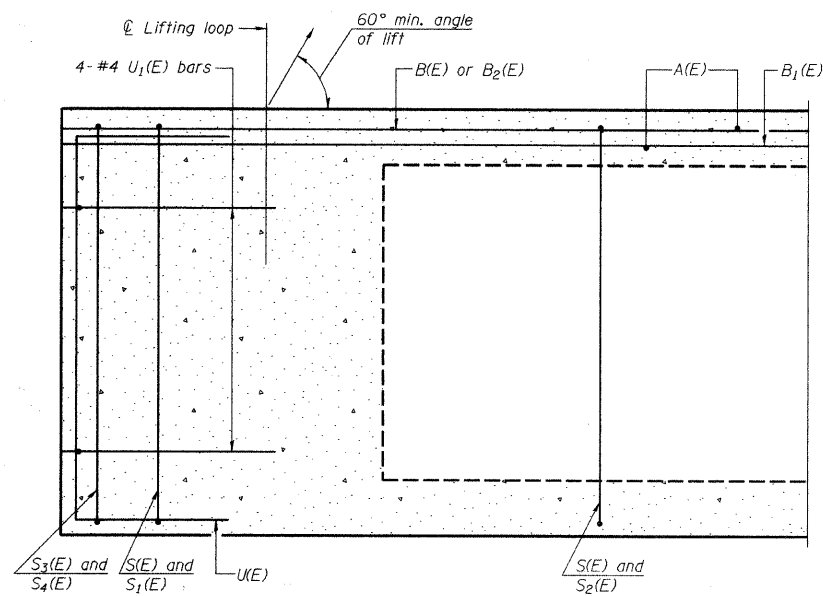
- STORM WATER POLLUTION PREVENTION PLAN**
- DESCRIPTION OF INTENDED SEQUENCE FOR MAJOR CONSTRUCTION ACTIVITIES:
1. INSTALLATION OF PERIMETER EROSION BARRIER.
 2. REMOVAL OF EXISTING STRUCTURE.
 3. EXCAVATION WILL BE COMPLETED ALONG THE ENTIRE LENGTH OF THE JOB TO REMOVE THE EXISTING ROADWAY AND GRADE THE PROPOSED DITCHES.
 4. NECESSARY EMBANKMENT WILL BE PLACED ALONG THE ENTIRE LENGTH OF THE JOB FOR THE PROPOSED ROADWAY.
 5. PLACEMENT, MAINTENANCE, REMOVAL AND PROPER CLEAN-UP OF TEMPORARY EROSION CONTROL ITEMS, SUCH AS AGGREGATE DITCH CHECKS, TEMPORARY SEEDING AND OTHER MISCELLANEOUS EROSION CONTROL MEASURES. INSTALLATION OF CULVERTS AND TEMPORARY PIPE PROTECTION.
 6. CONSTRUCT NEW BRIDGE SUBSTRUCTURE UNITS.
 7. PLACEMENT OF PERMANENT EROSION CONTROL ITEMS, INCLUDING RIPRAP AND SEEDING.
 8. CONSTRUCT NEW BRIDGE SUPERSTRUCTURE AND APPROACH ROADWAY.
 9. FINAL GRADING AND OTHER MISCELLANEOUS ITEMS.

SCHEDULE OF EROSION CONTROL QUANTITIES

- SEEDING, CLASS 2
AREA INSIDE OF CONSTRUCTION LIMITS, LESS ROADWAY.
TOTAL = 1.00 ACRES
- NITROGEN FERTILIZER NUTRIENT
TOTAL = 90 POUNDS
- PHOSPHORUS FERTILIZER NUTRIENT
TOTAL = 90 POUNDS
- POTASSIUM FERTILIZER NUTRIENT
TOTAL = 90 POUNDS
- MULCH, METHOD 2
TOTAL = 1.00 ACRES
- EARTH EXCAVATION FOR EROSION CONTROL
TOTAL = 42 CU. YD.
- TEMPORARY EROSION CONTROL SEEDING
100 LBS/ACRE X 1.00 ACRES = 100 POUNDS
- AGGREGATE DITCH CHECK
STA. 17+00, LT. & RT. = 3 TON
STA. 18+00, LT. & RT. = 3 TON
STA. 19+00, LT. & RT. = 3 TON
STA. 19+50, LT. & RT. = 3 TON
STA. 20+50, LT. & RT. = 3 TON
STA. 21+00, LT. & RT. = 3 TON
STA. 21+75, LT. & RT. = 3 TON
TOTAL = 21 TON
- PERIMETER EROSION BARRIER
TO BE CONSTRUCTED AT LOCATIONS SHOWN ON PLANS. LAYOUT MAY VARY AS DIRECTED BY THE ENGINEER.
TOTAL = 272 FOOT
- INLET AND PIPE PROTECTION
30.6' LT., STA. 17+21.4 = 1 EACH
24.8' LT., STA. 22+43.9 = 1 EACH
TOTAL = 2 EACH
- STONE RIPRAP, CLASS A4
SOUTH BRIDGE ABUT. SLOPE = 522 SQ YD
NORTH BRIDGE ABUT. SLOPE = 376 SQ YD
TOTAL = 898 SQ YD
- FILTER FABRIC
TOTAL = 898 SQ YD

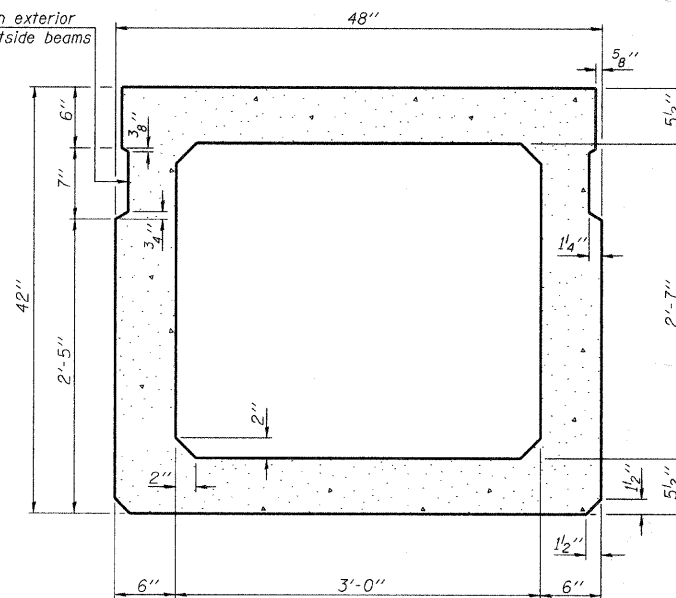
FILE NAME =	USER NAME = #USER#	DESIGNED - MJP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STORM WATER POLLUTION PREVENTION AND EROSION CONTROL PLAN	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILE#	PLOT SCALE = #SCALE#	DRAWN - REZ	REVISED -			CH 25	06-00213-00-BR	MACON	19	12	
	PLOT DATE = #DATE#	CHECKED - KWB	REVISED -			CONTRACT NO. 95680					
		DATE -	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT: BRS-0544004					

SCALE: AS SHOWN SHEET NO. 1 OF 1 SHEETS STA. 13+85.25 TO STA. 26+03.40

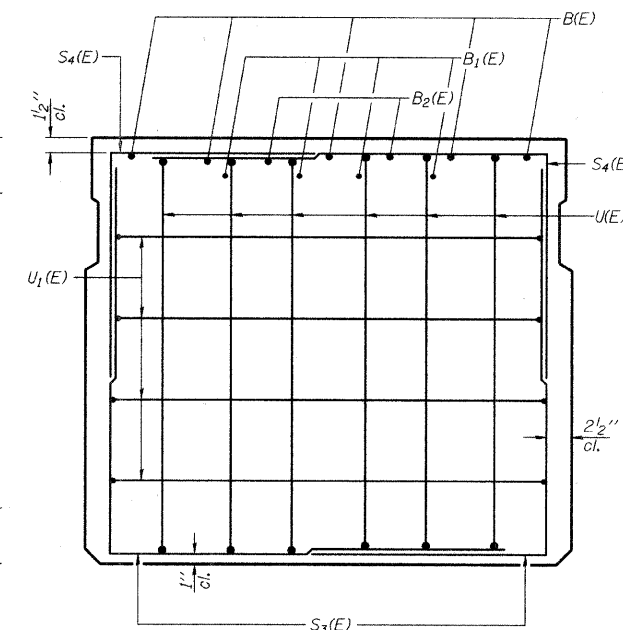


SECTION A-A

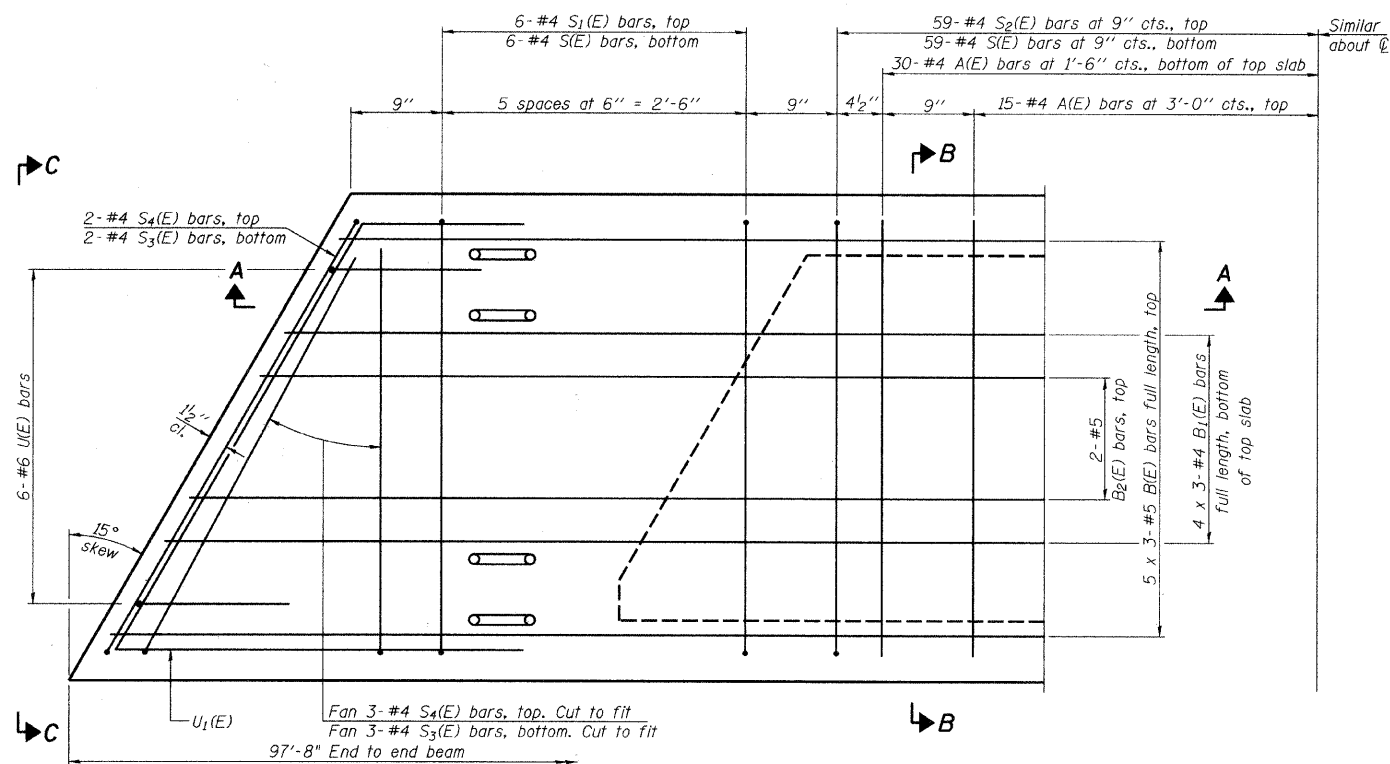
Omit key on exterior face of outside beams



SECTION B-B
(Showing dimensions)



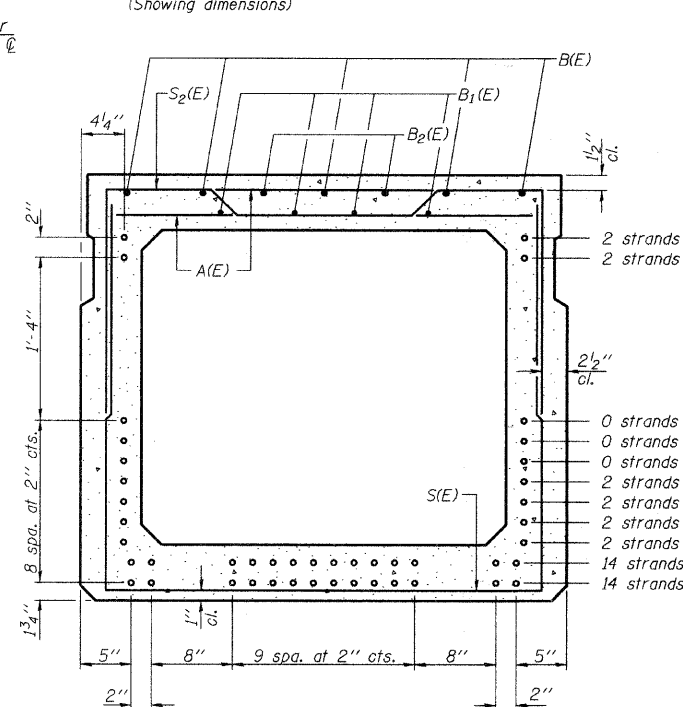
VIEW C-C



PLAN VIEW

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

MINIMUM BAR LAP
#4 bar = 2'-0"
#5 bar = 2'-6"



SECTION B-B
(Showing reinforcement and permissible strand locations)
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	90	#4	3'-7"	—
B(E)	15	#5	34'-2"	—
B1(E)	12	#4	33'-10"	—
B2(E)	4	#5	10'-0"	—
S(E)	131	#4	9'-11"	—
S1(E)	12	#4	7'-3"	—
S2(E)	119	#4	7'-6"	—
S3(E)	10	#4	5'-10"	—
S4(E)	10	#4	4'-6"	—
U(E)	12	#6	5'-9"	—
U1(E)	8	#4	7'-3"	—

Notes:
See sheet 3 of 7 for additional details and Bill of Material.
Bars indicated thus 2 x 3-#5 etc. indicates 2 lines of bars with 3 lengths per line.

42" x 48" PPC DECK BEAM
STRUCTURE NO. 058-3394

SUPERSTRUCTURE

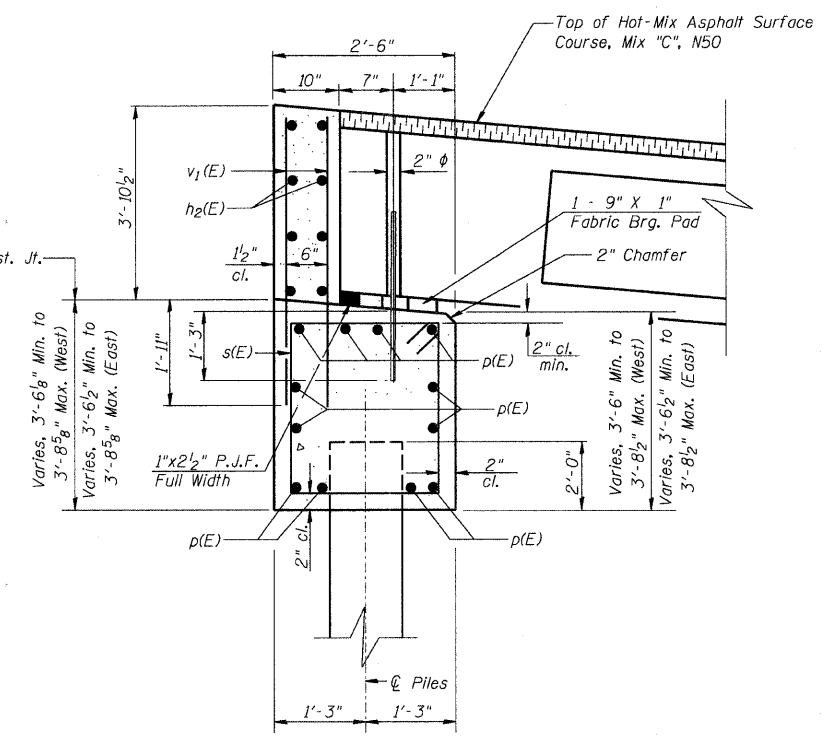
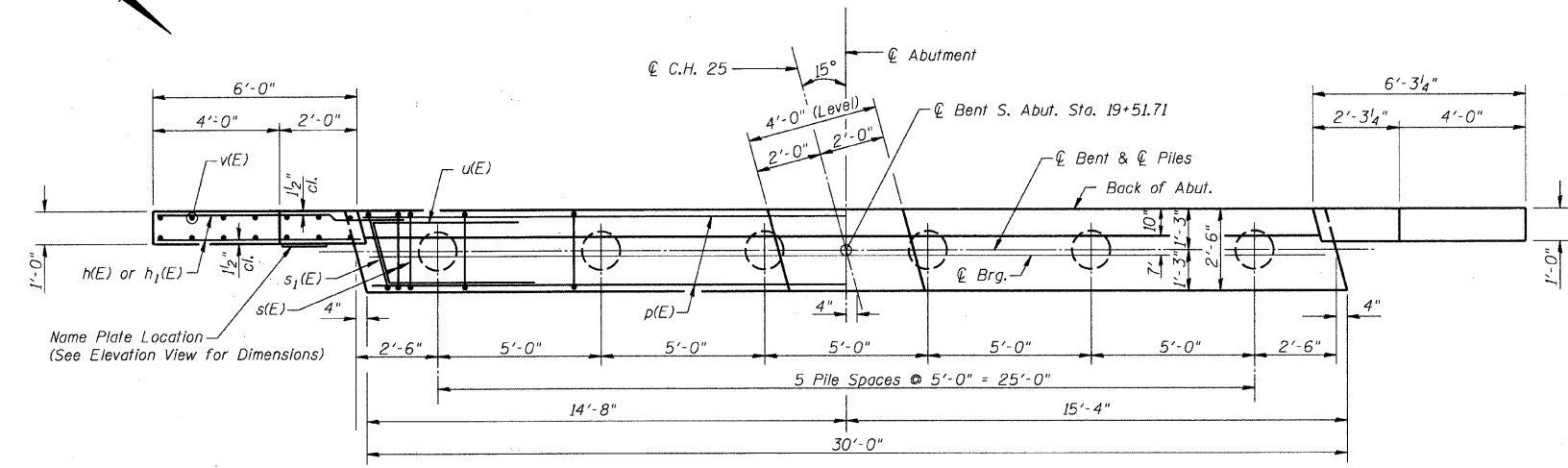
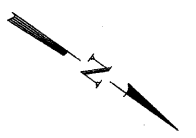
Date	Designed MJP	C.H. 25 OVER KICKAPOO CREEK SECTION 06-00213-00-BR MACON COUNTY STA. 20+00.11 PROP. STR. NO. 058-3394	Sheet No.
Revisions	Drawn REZ		2
	Checked KWB		
	Approved KWB		
Prepared by:	URS 345 East Ash Avenue Decatur, IL 62526		of 7 URS Job No. 36431926

NOTES

- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
- 1" dia. x 2'-6" dowel rods in 1 1/2" dia. holes drilled in cap (2 each beam). Dowel rods to be grouted after beams are in place and allowed to cure (min. 24 hrs.) prior to grouting the shear keys. The grout shall be an approved non-shrink grout.
- Reinforcement bars designated (E) shall be Epoxy coated.
- Reinforcement bars shall conform to the requirements of A.S.T.M A706 Grade 60. See Special Provisions. Bonded Const. Jt.
- Space reinforcement in cap to miss dowel rods.
- The Contractor shall drive test piles to 110 Percent of the Nominal Required Bearing indicated in the Pile Data information before ordering the remainder of the piles.

DESIGN STRESSES

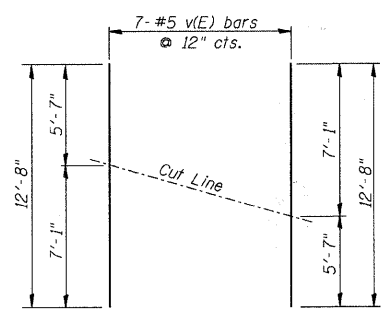
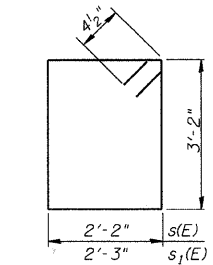
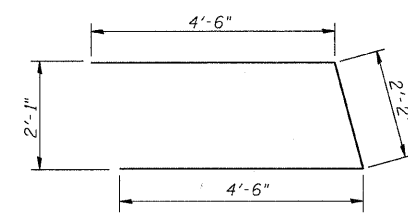
$f'_c = 3,500 \text{ psi}$
 $f_y = 60,000 \text{ psi}$



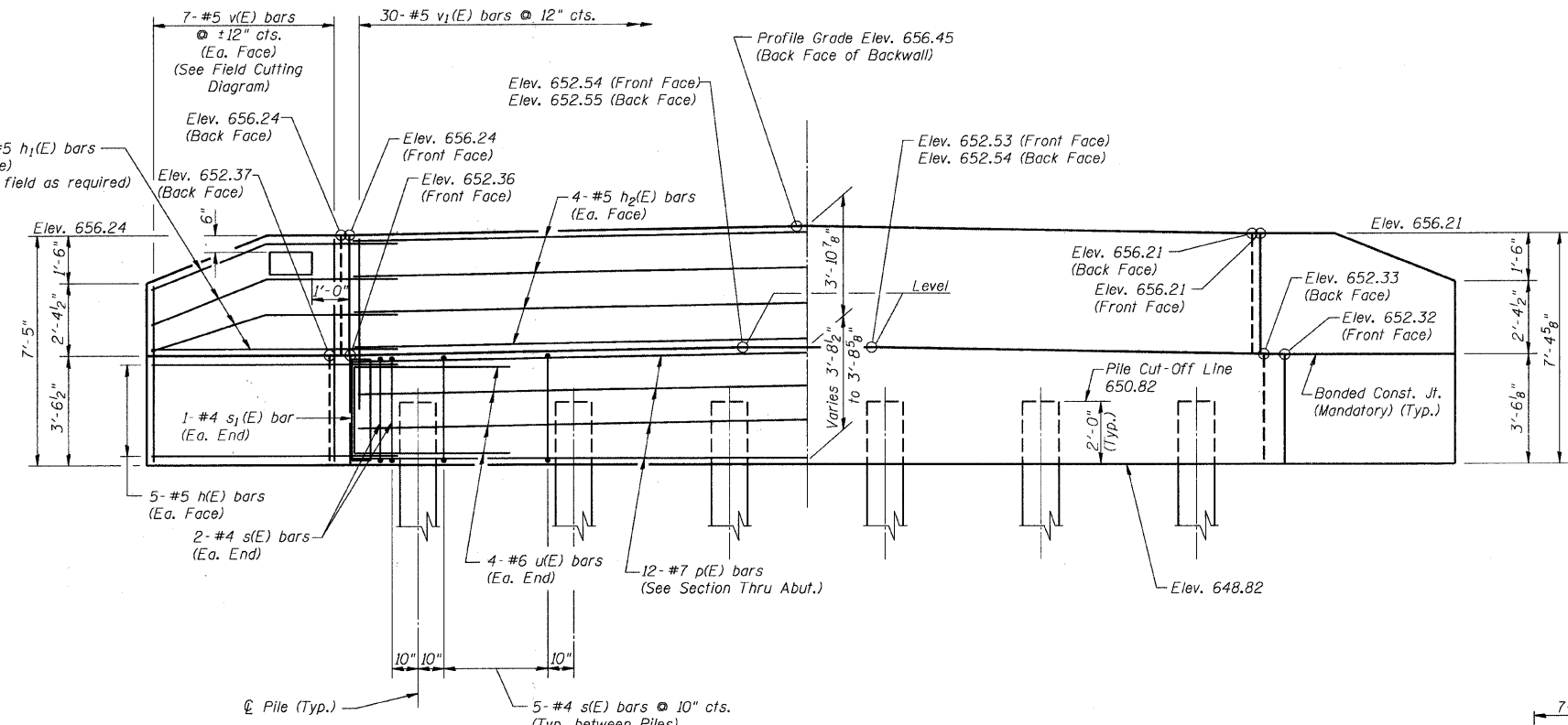
SECTION THRU ABUT.
(At Rt. Angles)

BILL OF MATERIAL SOUTH ABUTMENT

Bar	No.	Size	Length	Shape
h(E)	20	#5	8'-3"	—
h ₁ (E)	16	#5	8'-6"	—
h ₂ (E)	8	#5	29'-8"	—
p(E)	12	#7	29'-8"	—
s(E)	29	#4	11'-5"	□
s ₁ (E)	2	#4	11'-7"	□
u(E)	8	#6	11'-2"	—
v(E)	14	#5	12'-8"	—
v ₁ (E)	60	#5	5'-7"	—
Concrete Structures			Cu. Yd.	16.75
Reinforcement Bars, Epoxy Coated			Pound	2200
Metal Shell Pile 14" X 0.250"			Foot	130
Test Pile Metal Shell			Each	1

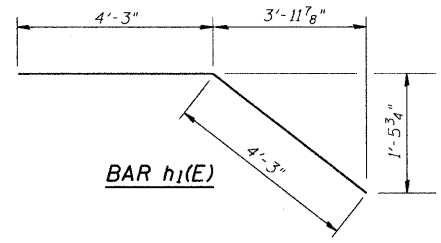


Order bars full length. Cut to fit as shown and use remainder of bars in other face.



PILE DATA

Type & Size: Metal Shell - 14" dia. x 0.250 in. walls
 Nominal Required Bearing: 331 Kips
 Factored Resistance Available: 182 Kips
 Estimated Length: 26'-0"
 No. Required: 5 plus 1 Permanent Test Pile



SOUTH ABUTMENT		Sheet No.
Date	Designed MJP	C.H. 25 OVER KICKAPOO CREEK SECTION 06-00213-00-BR MACON COUNTY STA. 20+00.11 PROP. STR. NO. 058-3394
Revisions	Drawn BKN	
	Checked KWB	
	Approved KWB	
Prepared by: URS	345 East Ash Avenue Decatur, IL 62526	URS Job No. 36431926

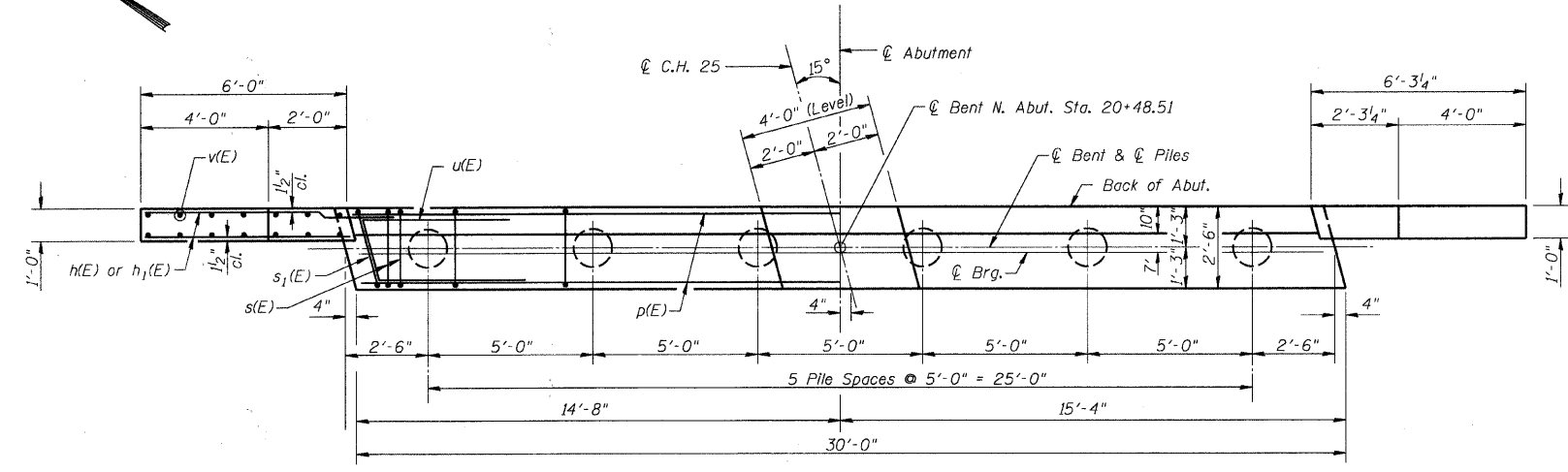
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 25	06-00213-00-BR	MACON	19	18
FED. ROAD DIST. NO.	ILLINOIS PROJECT:	BR5-0544(104)		
CONTRACT NO. 95680				

NOTES

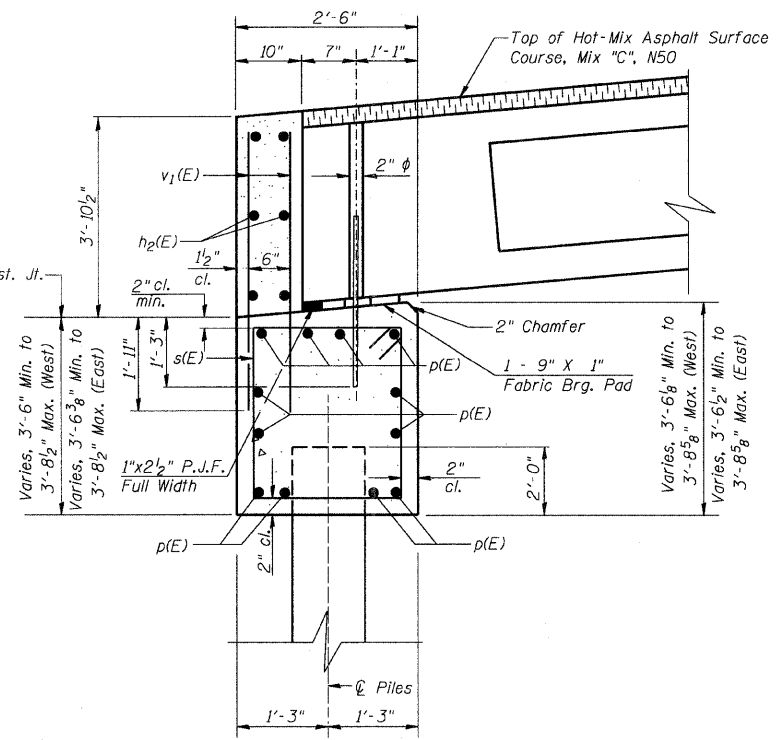
- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
- 1" dia. x 2'-6" dowel rods in 1/2" dia. holes drilled in cap (2 each beam). Dowel rods to be grouted after beams are in place and allowed to cure (min. 24 hrs.) prior to grouting the shear keys. The grout shall be an approved non-shrink grout.
- Reinforcement bars designated (E) shall be Epoxy coated.
- Reinforcement bars shall conform to the requirements of A.S.T.M A706 Grade 60. See Special Provisions.
- Space reinforcement in cap to miss dowel rods.
- The Contractor shall drive test piles to 110 Percent of the Nominal Required Bearing indicated in the Pile Data information before ordering the remainder of the piles.

DESIGN STRESSES

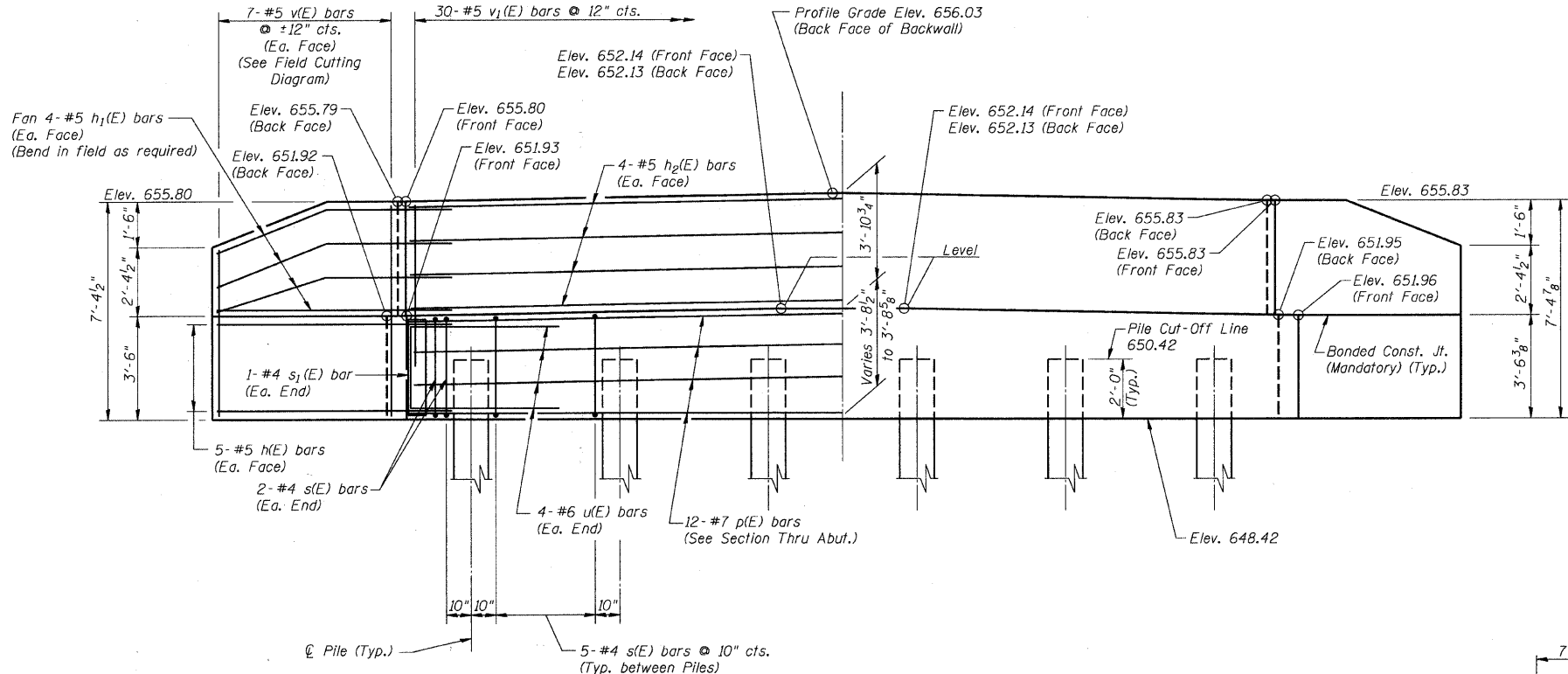
$f'_c = 3,500 \text{ psi}$
 $f_y = 60,000 \text{ psi}$



PLAN



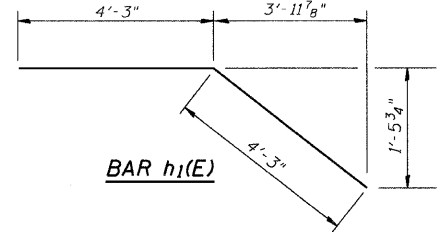
SECTION THRU ABUT.
(At Rt. Angles)



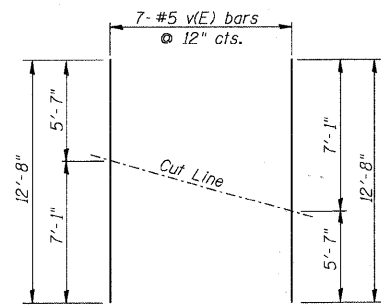
ELEVATION
(Looking North)

PILE DATA

Type & Size: Metal Shell - 14" dia. x 0.250 in. walls
 Nominal Required Bearing: 331 Kips
 Factored Resistance Available: 182 Kips
 Estimated Length: 53'-0"
 No. Required: 5 plus 1 Permanent Test Pile



BAR h1(E)



FIELD CUTTING DIAGRAM

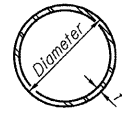
Order bars full length. Cut to fit as shown and use remainder of bars in other face.

BILL OF MATERIAL NORTH ABUTMENT

Bar	No.	Size	Length	Shape
h(E)	20	#5	8'-3"	—
h1(E)	16	#5	8'-6"	—
h2(E)	8	#5	29'-8"	—
p(E)	12	#7	29'-8"	—
s(E)	29	#4	11'-5"	□
s1(E)	2	#4	11'-7"	□
u(E)	8	#6	11'-2"	—
v(E)	14	#5	12'-8"	—
v1(E)	60	#5	5'-7"	—
		Concrete Structures	Cu. Yd.	16.75
		Reinforcement Bars, Epoxy Coated	Pound	2200
		Metal Shell Pile 14" X 0.250"	Foot	265
		Test Pile Metal Shell	Each	1

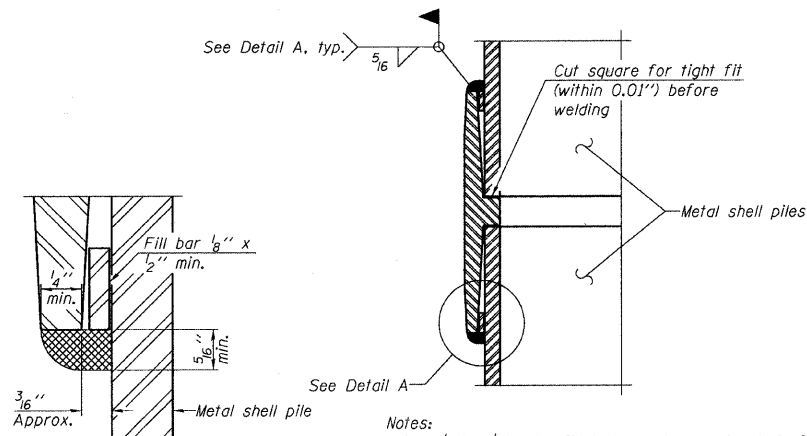
NORTH ABUTMENT

Date	Designed MJP	C.H. 25 OVER KICKAPOO CREEK SECTION 06-00213-00-BR MACON COUNTY STA. 20+00.11 PROP. STR. NO. 058-3394	Sheet No.	
Revisions	Drawn BKN		6	
	Checked KWB			of 7
	Approved KWB			URS Job No. 36431926
Prepared by:	URS 345 East Ash Avenue Decatur, IL 62526			



METAL SHELL PILE TABLE

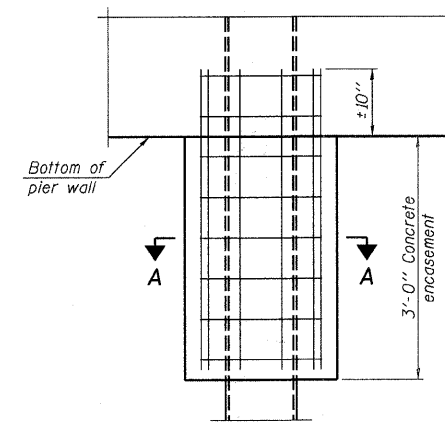
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. ³ /ft.)
PP12	0.179"	22.60	0.0274
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361



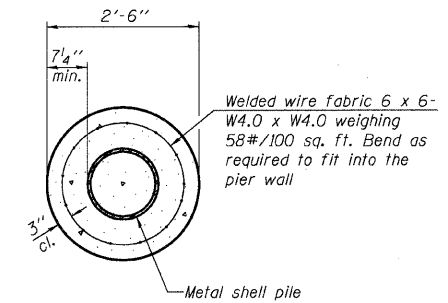
DETAIL A

Notes:
 The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.
 Pile segments shall be driven to solid contact with splicer before welding.

WELDED COMMERCIAL SPLICE



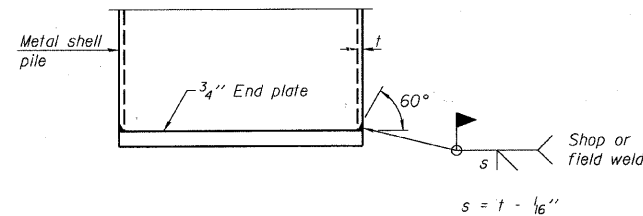
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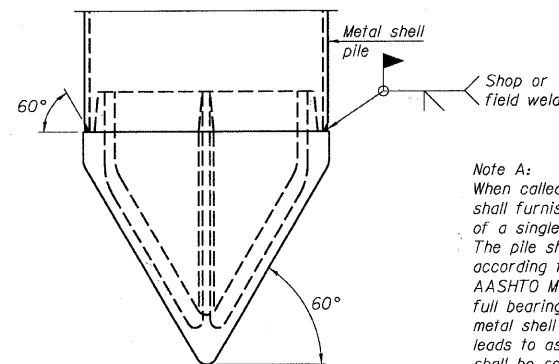
SECTION A-A

Note:
 Forms for encasement may be omitted when soil conditions permit.

CONCRETE ENCASEMENT AT PIERS



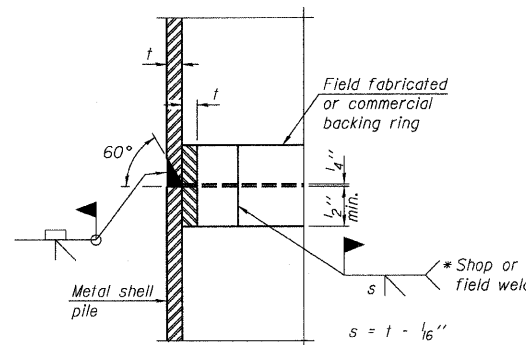
END PLATE ATTACHMENT



METAL SHELL PILE SHOE ATTACHMENT

(See Note A)

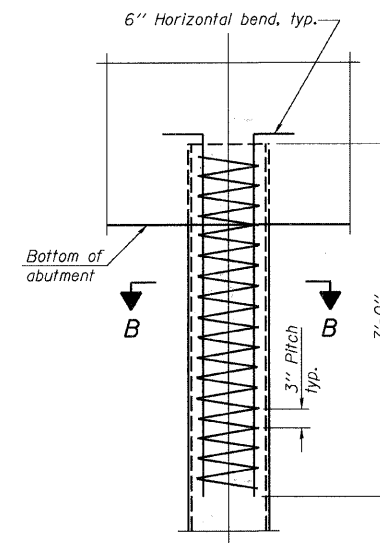
Note A:
 When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld.



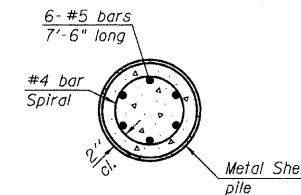
COMPLETE PENETRATION WELD SPLICE

* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.

Note:
 The metal shell piles shall be according to ASTM A 252 Grade 3.



ELEVATION



SECTION B-B

METAL SHELL REINFORCEMENT AT ABUTMENTS

**METAL SHELL PILE DETAILS
 STRUCTURE NO. 058-3394**

PILE DETAILS

Date	Designed MJP	C.H. 25 OVER KICKAPOO CREEK SECTION 06-00213-00-BR MACON COUNTY STA. 20+00.11 PROP. STR. NO. 058-3394	Sheet No.
Revisions	Drawn BKN		7
	Checked KWB		of 7
	Approved KWB		URS Job No. 36431926
Prepared by: URS 3040 North University Avenue Decatur, IL 62526			