11-7-08 Letting, Item 079

INDEX OF SHEETS

0 50' 100' — 1" = 20'

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

DISTRICT 3 NO. (815) 434-6131
PROJECT ENGINEER: JOSEPH KANNEL
UNIT CHIEF: MICHELE LINDEMANN
TOWNSHIP: LYMAN, BRENTON
CONTRACT NO. 66698

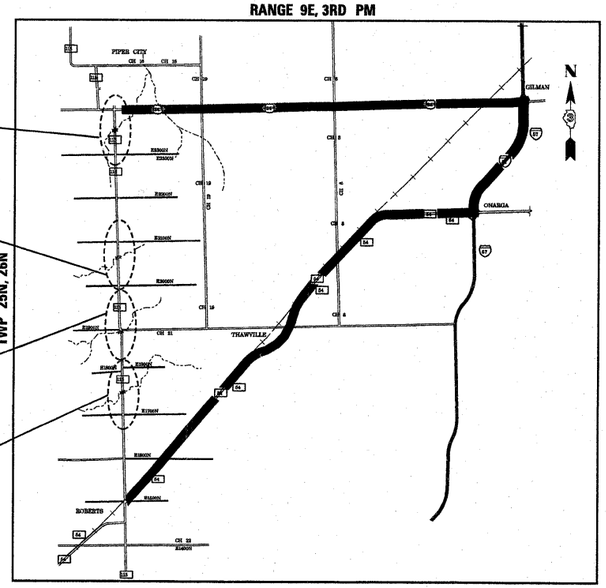
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAP ROUTE 798 (IL RTE 115)
SECTION (107)BR&BR-1; (108)BR&BR-1
PROJECT ACF-ACBRF-0798(004)
FORD COUNTY
C-93-026-07

REMOVAL AND REPLACEMENT OF FOUR STRUCTURES OVER UNNAMED DITCHES ON IL 115 BETWEEN PIPER CITY TO ROBERTS

RANGE 9E, 3RD PM



S.N. 027-0039 (EXIST.)
S.N. 027-2014 (PROP.)
STA 24+09.00

S.N. 027-0040 (EXIST.)
S.N. 027-0095 (PROP.)
STA 178+88.00

S.N. 027-0030 (EXIST.)
S.N. 027-2015 (PROP.)
STA 265+75.00

S.N. 027-0031 (EXIST.)
S.N. 027-2016 (PROP.)
STA 318+81.70

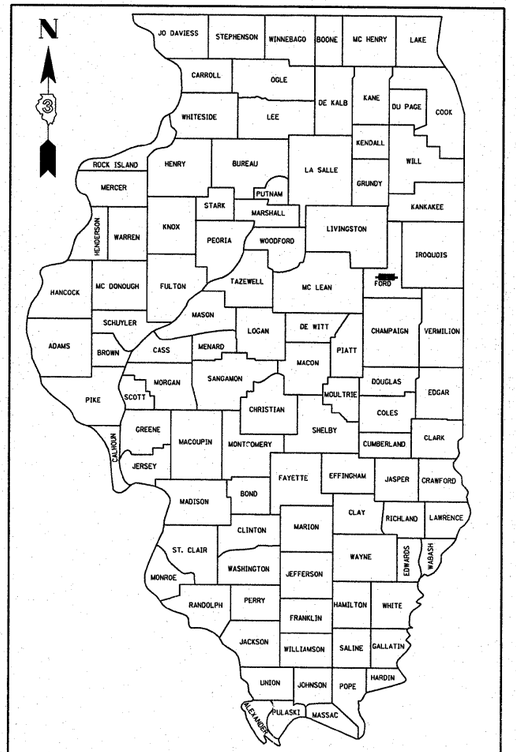
LOCATION MAP
NOT TO SCALE

GROSS LENGTH = 2506 FT. = 0.475 MI
NET LENGTH = 2506 FT. = 0.475 MI.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	•	FORD	92	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 66698		

• (107)BR & BR-1, (108)BR & BR-1

D-93-046-06 P-93-071-98 P-93-070-98 P-93-004-05
D-93-051-04 P-93-051-04



LOCATION OF SECTION INDICATED THUS: –

FUNCTIONAL CLASSIFICATION
RURAL MINOR ARTERIAL
2009 ADT = 850
P.V. = 85.0% S.U. = 7.5% M.U. = 7.5%

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED August 28 20 08
George Rynn
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
October 3, 20 08
Eric E. Harm
Interim ENGINEER OF DESIGN AND ENVIRONMENT
October 3, 20 08
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

GENERAL NOTES

THE TOP 6 INCHES OF TOPSOIL SHALL BE STRIPPED FROM ALL DISTURBED AREAS OUTSIDE OF THE EXISTING BRIDGE ABUTMENTS. THIS MATERIAL SHALL BE STOCKPILED AT A LOCATION APPROVED BY THE ENGINEER AND REPLACED AFTER MAJOR GRADING OPERATIONS ARE COMPLETED. THIS WORK SHALL BE PAID FOR AS TOPSOIL EXCAVATION AND PLACEMENT. SEE EARTHWORK QUANTITIES LEGEND THIS SHEET.

THE HMA SURFACE OF ALL MAILBOX TURNOUTS, PRIVATE ENTRANCES, COMMERCIAL ENTRANCES, AND SIDE ROADS SHALL BE MADE NEATLY, IN A WORKMANLIKE MANNER, AND SHALL ACCURATELY CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. IF REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SAW CUT THE HMA SURFACE TO CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. THIS WORK SHALL BE INCLUDED IN THE COST OF THE HMA SURFACE.

EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

BEFORE ORDERING PIPE CULVERTS OR PIPE DRAINS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS.

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ON EXISTING PAVEMENT WHICH MAY BE SUPERELEVATED, THE NEW HMA PAVEMENT SHALL BE BUILT WITH THE SAME SUPERELEVATION UNLESS NEW SUPERELEVATION RATES ARE GIVEN ON THE PLANS.

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS / CU YD
BITUMINOUS MAT PRIME COAT	0.08 0.375	GAL / SQ YD OR GAL / SQ YD
HMA RESURFACING	112	LBS / SQ YD / IN
MIX FOR CRACKS, JTS & FLGWYS	0.0003	TONS / SQ YD
LEVEL BINDER (HAND METHOD)	0.0005	TONS / SQ YD
SUPPLEMENTAL WATERING	3	GAL / SQ YD / APPLICATION
TEMPORARY DITCH CHECKS	5	TONS AGGREGATE

MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE: EASTERN ILLINI ELECTRIC & VERIZON NORTH, INC.

THE SIGNS DISPLACED BY SHOULDER WIDENING ARE TO BE REINSTALLED IN LOCATIONS AS DETERMINED BY THE ENGINEER AND THE COST SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

STANDARDS

BLR 22-5	TYPICAL APP OF T.C.D. RURAL LOCAL HIGHWAY (2-LANE 2-WAY RURAL TRAF.) (ROAD CLOSED TO THRU TRAFFIC)
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-01	AREAS OF REINFORCEMENT BARS
280001-04	TEMPORARY EROSION CONTROL SYSTEMS
420401-06	BRIDGE APPROACH PAVEMENT
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
482011-03	HMA SHOULDER STRIPS/SHOULDERS WITH RS OR WIDENING & RS PROJECTS
515001-02	NAME PLATE FOR BRIDGES
542301-01	PRECAST REINFORCED CONCRETE FLARED END SECTION
542401	METAL END SECTION FOR PIPE CULVERTS
601101	CONCRETE HEADWALL FOR PIPE DRAINS
609006-03	BRIDGE APPROACH PAVEMENT (DRAIN DETAIL)
630001-07	STEEL PLATE BEAM GUARDRAIL
630101-07	GUARDRAIL MOUNTED ON EXISTING CULVERTS
630201-05	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-04	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-06	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
665001-01	WOVEN WIRE FENCE
666001	RIGHT-OF-WAY MARKERS
667101	PERMANENT SURVEY MARKERS
701001-01	OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 4.5 m (15') AWAY
701006-02	OFF-ROAD OPERATIONS 2L, 2W, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701011-01	OFF-ROAD MOVING OPERATIONS 2L, 2W, DAY ONLY
701201-02	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS P 45 MPH
701301-02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-01	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS P 45 MPH
701901	TRAFFIC CONTROL DEVICES
720011	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
780001-01	TYPICAL PAVEMENT MARKINGS

COMMITMENTS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

PREPARED BY: Rick Powell
DISTRICT STUDIES & PLANS ENGINEER

DATE: 8-28-08

EXAMINED BY:
DISTRICT CONSTRUCTION ENGINEER

DISTRICT MATERIALS ENGINEER

DISTRICT OPERATIONS ENGINEER

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			92	2
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES 80%/20% FED./STATE

CODE NO.	CONSTRUCTION CODE TYPE: ITEM	UNIT	TOTAL QUANT	X088-2A 027-2015 ACBRF QUANT	X088-2A 027-2016 ACBRF QUANT	X088-2A 027-2014 ACF QUANT	X020-2A 027-0095 ACF QUANT
20200100	EARTH EXCAVATION	CU YD	815	320	170	50	275
20300100	CHANNEL EXCAVATION	CU YD	390				390
20700220	POROUS GRANULAR EMBANKMENT	CU YD	1386	590	284	512	
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	378.8	44	37	227	70.8
21400100	GRADING AND SHAPING DITCHES	FOOT	3266	1062	1100	1104	
• 25000300	SEEDING, CLASS 3	ACRE	1.68	.37	.44	.37	0.5
• 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	150	33	39	33	45
• 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	150	33	39	33	45
• 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	150	33	39	33	45
• 25100630	EROSION CONTROL BLANKET	SQ YD	10368	2582	2530	2836	2420
• 28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	268	37	44	37	150
28000300	TEMPORARY DITCH CHECKS	EACH	38	10	9	10	9
28000400	PERIMETER EROSION BARRIER	FOOT	891	306	485	100	
28000500	INLET AND PIPE PROTECTION	EACH	6	2	1	3	
28100107	STONE RIPRAP, CLASS A4	SQ YD	1908	437	389	555	527
28200200	FILTER FABRIC	SQ YD	1908	437	389	555	527
31100500	SUB-BASE GRANULAR MATERIAL, TYPE A 6"	SQ YD	695	217	276	202	
35501327	HOT-MIX ASPHALT BASE COURSE, 10 3/4"	SQ YD	599	187	238	174	
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	27				27
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	743	161	160	134	288
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	3	1	1	1	
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	207	83	26	42	56
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	1280	320	320	320	320
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	624	169	168	141	146
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	194				194
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	44				44
44000100	PAVEMENT REMOVAL	SQ YD	1112	231	355	225	301
44000152	HOT-MIX ASPHALT SURFACE REMOVAL, 3/4"	SQ YD	3771	1162	1329	1280	
48101200	AGGREGATE SHOULDERS, TYPE B	TON	71	10	23	20	18
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	2975	797	844	788	546
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1	1			
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1			1	
50100500	REMOVAL OF EXISTING STRUCTURES NO. 3	EACH	1		1		

SUMMARY OF QUANTITIES (CONTINUED) 80%/20% FED./STATE

CODE NO.	CONSTRUCTION CODE TYPE: ITEM	UNIT	TOTAL QUANT	X088-2A 027-2015 ACBRF QUANT	X088-2A 027-2016 ACBRF QUANT	X088-2A 027-2014 ACF QUANT	X020-2A 027-0095 ACF QUANT
50100600	REMOVAL OF EXISTING STRUCTURES NO. 4	EACH	1				1
50105200	REMOVE EXISTING CULVERTS	EACH	4	2	1		1
50200100	STRUCTURE EXCAVATION	CU YD	2850	867	515	1348	120
50300100	FLOOR DRAINS	EACH	8				8
50300225	CONCRETE STRUCTURES	CU YD	73.8				73.8
50300255	CONCRETE SUPERSTRUCTURE	CU YD	162.8				162.8
50300260	BRIDGE DECK GROOVING	SQ YD	252				252
50300300	PROTECTIVE COAT	SQ YD	540				540
50800105	REINFORCEMENT BARS	POUND	27890	5050	16370	6470	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	35130	790	350	1080	32910
51201400	FURNISHING STEEL PILES HP10X42	FOOT	766				766
51202305	DRIVING PILES	FOOT	766				766
51203400	TEST PILE STEEL HP10X42	EACH	2				2
51500100	NAME PLATES	EACH	4	1	1	1	1
54003000	CONCRETE BOX CULVERTS	CU YD	187	51	70	66	
54011208	PRECAST CONCRETE BOX CULVERT 12' X 8'	FOOT	98	98			
54021006	PRECAST CONCRETE BOX CULVERT 10' X 6' (M273)	FOOT	64		64		
54021210	PRECAST CONCRETE BOX CULVERT 12' X 10' (M273)	FOOT	84			84	
542D0220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	42				42
542C0223	PIPE CULVERTS, CLASS C, TYPE 1 18"	FOOT	77	77			
542D0223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	30		30		
54213447	END SECTIONS 12"	EACH	4				4
54213450	END SECTIONS 15"	EACH	2				2
54213453	END SECTIONS 18"	EACH	6	4	2		
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	44				44
60100945	PIPE DRAINS 12"	FOOT	36				36
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	110				110
60900140	TYPE B INLET BOX, STANDARD 609006	EACH	4				4
• 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	1875	437.5	612.5	300	525
63000025	STEEL PLATE BEAM GUARD RAIL, ATTACHED TO STRUCTURES	FOOT	225	100	75	50	
• 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4				4
• 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	10	2	4		4
• 63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	6	2		4	

• SPECIALITY ITEM

• (107)BR & BR-1, (108)BR & BR-1

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		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 1 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	•	FORD	92	3
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES (CONTINUED) 80%/20% FED/STATE

CODE NO.	CONSTRUCTION CODE TYPE: ITEM	UNIT	TOTAL QUANT	X088-2A 027-2015 ACBRF QUANT	X088-2A 027-2016 ACBRF QUANT	X088-2A 027-2014 ACF QUANT	X020-2A 027-0095 ACF QUANT
63200310	GUARDRAIL REMOVAL	FOOT	2417	500	869	558	490
66500105	WOVEN WIRE FENCE, 4'	FOOT	149		149		
66502300	WOVEN WIRE FENCE REMOVAL	FOOT	141		141		
66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	19	3	8	8	
66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	1	1			
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	1.5	1.5	1.5	1.5
67100100	MOBILIZATION	L SUM	1	0.25	0.25	0.25	0.25
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	0.25	0.25	0.25	0.25
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	0.25	0.25	0.25	0.25
70101835	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 22	L SUM	1	0.25	0.25	0.25	0.25
▪ 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	5488	1716	1400	1200	1172
▪ 78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	640	155	175	150	160
▪ 78200410	GUARDRAIL MARKERS, TYPE A	EACH	98	30	36	22	10
▪ 78200420	GUARDRAIL MARKERS, TYPE B	EACH	2				2
▪ 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	16	4	4	4	4
X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1				1
X7011005	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	L SUM	1	0.25	0.25	0.25	0.25
XX006675	FIELD TILE REPLACEMENT	FOOT	30				30

▪ SPECIALITY ITEM

▪ (107)BR & BR-1, (108)BR & BR-1

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 2 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	▪	FORD	92	4
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	5
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 66698		

P-93-071-98 D-93-046-06
P-93-070-98
P-93-044-05

INDEX OF SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAP ROUTE 798 (IL RTE 115)
SECTION 107–BR, 108–BR, 108–BR–1
PROJECT
FORD COUNTY
C – 93 – 026 – 07

REPLACE THREE SINGLE SPAN REINFORCED CONCRETE SLAB BRIDGES OVER A DRAINAGE DITCH WITH THREE DOUBLE BOX CULVERTS

LOCATION OF SECTION INDICATED THUS: –

BEGIN IMPROVEMENT
STA – 21+00.00

S.N. 027–2014
STA 24+09.00
12' X 10' PRECAST
CONCRETE BOX CULVERT

END IMPROVEMENT
STA – 27+00.00

BEGIN IMPROVEMENT
STA – 263+20.00

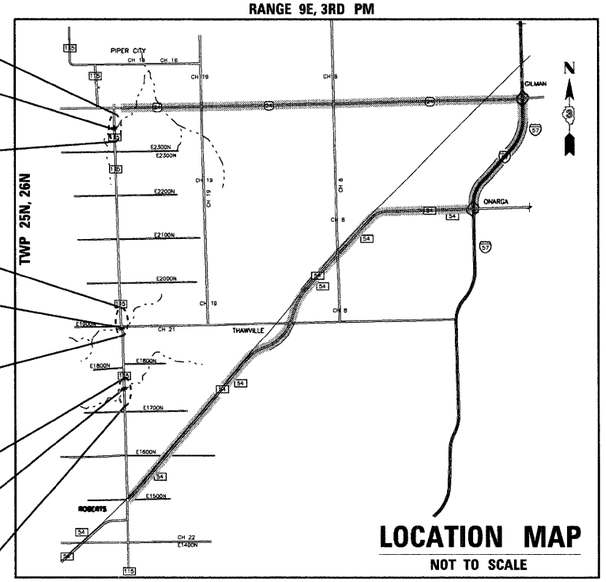
S.N. 027–2015
STA 265+75.00
12' X 8' PRECAST
CONCRETE BOX CULVERT

END IMPROVEMENT
STA – 269+10.00

BEGIN IMPROVEMENT
STA – 315+00.00

S.N. 027–2016
STA 318+81.70
10' X 6' PRECAST
CONCRETE BOX CULVERT

END IMPROVEMENT
STA – 322+00.00



LOCATION MAP
NOT TO SCALE

GROSS LENGTH = 1890 FT. = 0.36 MI.
NET LENGTH = 1890 FT. = 0.36 MI.

0 50' 100' — 1" = 20'

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

DISTRICT 3 NO. (815) 434–6131
PROJECT ENGINEER: JOSEPH KANNEL, P.E.
UNIT CHIEF: MICHELE LINDEMANN, P.E.
TOWNSHIP: LYMAN, BRENTON
CONTRACT NO. 66698

Syed M. Kazi
Licensed Professional Engineer
State of Illinois
Lic. No. 062-033486
Expires: 11-30-2009
Signature and Seal apply to Civil Drawings

Syed M. Kazi
Licensed Structural Engineer
State of Illinois
Lic. No. 081-004047
Expires: 11-30-2008
Signature and Seal apply to Structural Drawings

FUNCTION CLASSIFICATION

RURAL MINOR ARTERIAL
2009 ADT = 850
P.V. = 85.0% S.U. = 7.5% M.U. = 7.5%

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED _____ **20** _____

_____
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

_____ **20** _____

_____
ENGINEER OF DESIGN AND ENVIRONMENT

_____ **20** _____

_____
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

DELTA ENGINEERING, INC.
CONSULTING ENGINEERS, CONSTRUCTION MANAGERS, SURVEYORS
111 West Jackson Blvd., Suite 910 Chicago, IL 60604-2001

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GENERAL NOTES

1. THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.

2. THE HMA SURFACE OF ALL MAILBOX TURNOUTS, PRIVATE ENTRANCES, COMMERCIAL ENTRANCES, AND SIDE ROADS SHALL BE MADE NEATLY, IN A WORKMANLIKE MANNER, AND SHALL ACCURATELY CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. IF REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SAW CUT THE HMA SURFACE TO CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. THIS WORK SHALL BE INCLUDED IN THE COST OF THE HMA SURFACE.

3. EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

4. BEFORE ORDERING PIPE CULVERTS OR PIPE DRAINS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS & FIELD VERIFY.

5. THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

6. FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

7. SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.

8. THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

9. ON EXISTING PAVEMENT WHICH MAY BE SUPERELEVATED, THE NEW HMA PAVEMENT SHALL BE BUILT WITH THE SAME SUPERELEVATION UNLESS NEW SUPERELEVATION RATES ARE GIVEN ON THE PLANS.

10. ALL ELEVATIONS REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.

11. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

12. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS INCLUDED IN THESE PLANS.

13. THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS / CU YD
BITUMINOUS MAT PRIME COAT	0.08	GAL / SQ YD
HMA RESURFACING	112	LBS / SQ YD / IN
MIX FOR CRACKS, JTS & FLGWYS	0.0003	TONS / SQ YD
LEVEL BINDER (HAND METHOD)	0.0005	TONS / SQ YD
SUPPLEMENTAL WATERING	3	GAL / SQ YD / APPLICATION
TEMPORARY DITCH CHECKS	5	TONS AGGREGATE

14. MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE: VERIZON AND EASTERN ILLINI ELECTRIC CO-OP

15. THE SIGNS DISPLACED BY SHOULDER WIDENING ARE TO BE REINSTALLED IN LOCATIONS AS DETERMINED BY THE ENGINEER AND THE COST SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

LIST OF STANDARDS

000001-05	STANDARDS SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-01	AREA OF REINFORCEMENT BARS
280001-04	TEMPORARY EROSION CONTROL SYSTEMS
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
482011-03	HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
515001-02	NAME PLATE FOR BRIDGES
542301-01	PRECAST REINFORCED CONCRETE FLARED END SECTION
542401	METAL END SECTION FOR PIPE CULVERTS
630001-07	STEEL PLATE BEAM GUARDRAIL
630101-07	GUARDRAIL MOUNTED ON EXISTING CULVERTS
630201-05	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-04	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
665001-01	WOVEN WIRE FENCE
666001	RIGHT OF WAY MARKERS
667101	PERMANENT SURVEY MARKERS
701001-01	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 4.5M (15') AWAY
701006-02	OFF-ROAD OPERATIONS, 2L, 2W, 4.5M (15') TO 600MM (24") FROM PAVEMENT EDGE
701011-01	OFF ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-02	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
701301-02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-01	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS >= 45 MPH
701901	TRAFFIC CONTROL DEVICES
720011	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
780001-01	TYPICAL PAVEMENT MARKINGS
B.L.R. 22-5	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (TWO-LANE TWO WAY RURAL TRAFFIC) (ROAD CLOSED TO THRU TRAFFIC)

COMMITMENTS

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND LIST OF STANDARDS

SCALE: NONE | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	6
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BILL OF MATERIALS

	CODE NO.	CONSTRUCTION CODE TYPE: ITEM	UNIT	TOTAL QUANTITY	X088-2A 027-2015 QUANTITY	X088-2A 027-2016 QUANTITY	X088-2A 027-2014 QUANTITY
	20200100	EARTH EXCAVATION	CU YD	540	320	170	50
	20700220	POROUS GRANULAR EMBANKMENT	CU YD	1386	590	284	512
	20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	308	44	37	227
	21400100	GRADING AND SHAPING DITCHES	FOOT	3266	1062	1100	1104
▪	25000300	SEEDING, CLASS 3	ACRE	1.18	.37	.44	.37
▪	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	105	33	39	33
▪	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	105	33	39	33
▪	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	105	33	39	33
▪	25100630	EROSION CONTROL BLANKET	SQ YD	7948	2582	2530	2836
▪	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	118	37	44	37
	28000300	TEMPORARY DITCH CHECKS	EACH	29	10	9	10
	28000400	PERIMETER EROSION BARRIER	FOOT	891	306	485	100
	28000500	INLET AND PIPE PROTECTION	EACH	6	2	1	3
	28100107	STONE RIPRAP, CLASS A4	SQ YD	1381	437	389	555
	28200200	FILTER FABRIC	SQ YD	1381	437	389	555
	31100500	SUB-BASE GRANULAR MATERIAL, TYPE A 6"	SQ YD	695	217	276	202
	35501327	HOT-MIX ASPHALT BASE COURSE 10 3/4"	SQ YD	599	187	238	174
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	455	161	160	134
	40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	3	1	1	1
	40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	151	83	26	42
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	960	320	320	320
	40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	478	169	168	141
	44000100	PAVEMENT REMOVAL	SQ YD	811	231	355	225
	44000152	HOT-MIX ASPHALT SURFACE REMOVAL, 3/4"	SQ YD	3771	1162	1329	1280
	48101200	AGGREGATE SHOULDERS, TYPE B	TON	53	10	23	20
	48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	2429	797	844	788
	50700300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1	1		
	50700400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1			1
	50700500	REMOVAL OF EXISTING STRUCTURES NO. 3	EACH	1		1	

BILL OF MATERIALS

	CODE NO.	CONSTRUCTION CODE TYPE: ITEM	UNIT	TOTAL QUANTITY	X088-2A 027-2015 QUANTITY	X088-2A 027-2016 QUANTITY	X088-2A 027-2014 QUANTITY
	50105200	REMOVE EXISTING CULVERTS	EACH	3	2	1	
	50200100	STRUCTURE EXCAVATION	CU YD	2730	867	515	1348
	50800105	REINFORCEMENT BARS	POUND	27890	5050	16370	6470
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2220	790	350	1080
	51500100	NAME PLATES	EACH	3	1	1	1
	54003000	CONCRETE BOX CULVERTS	CU YD	187	51	70	66
	54011208	PRECAST CONCRETE BOX CULVERT 12' X 8'	FOOT	98	98		
	54021006	PRECAST CONCRETE BOX CULVERT 10' X 6' (M273)	FOOT	64		64	
	54021210	PRECAST CONCRETE BOX CULVERT 12' X 10' (M273)	FOOT	84			84
	542C0223	PIPE CULVERTS, CLASS C, TYPE 1 18"	FOOT	77	77		
	54200223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	30		30	
	5421 3453	END SECTIONS 18"	EACH	6	4	2	
▪	63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	1350	437.5	612.5	300
▪	63000025	STEEL PLATE BEAM GUARD RAIL, ATTACHED TO STRUCTURES	FOOT	225	100	75	50
▪	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	6	2	4	
▪	63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	6	2		4
	63200310	GUARDRAIL REMOVAL	FOOT	1927	500	869	558
	66500105	WOVEN WIRE FENCE, 4'	FOOT	149		149	
	66502300	WOVEN WIRE FENCE REMOVAL	FOOT	141		141	
	66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	19	3	8	8
	66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	1	1		
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	2	2	2
	67100100	MOBILIZATION	L SUM	1	0.33	0.33	0.33
	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	0.33	0.33	0.33
	70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	0.33	0.33	0.33
	70101835	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 22	L SUM	1	0.33	0.33	0.33
▪	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	4316	1716	1400	1200
▪	78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	480	155	175	150
▪	78200410	GUARDRAIL MARKERS, TYPE A	EACH	88	30	36	22
▪	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	12	4	4	4
	X7011005	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	L SUM	1	0.33	0.33	0.33

▪ SPECIALITY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BILL OF MATERIALS

SCALE: NONE | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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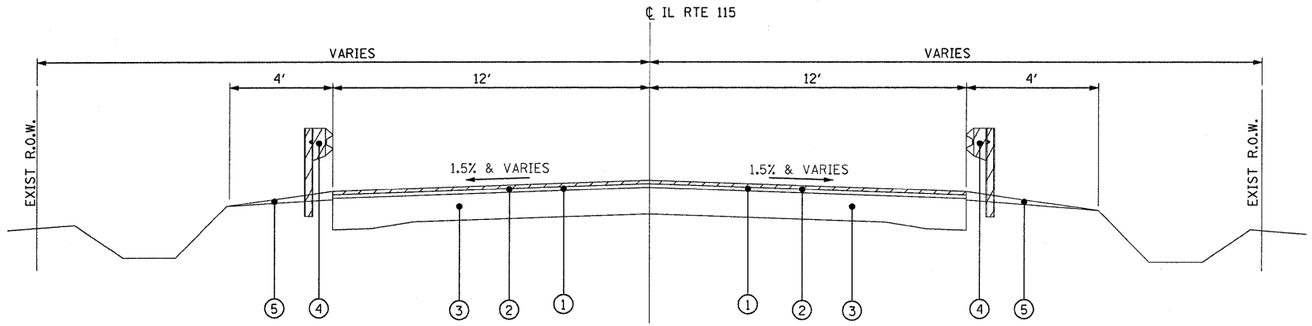
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING STRUCTURE TYPICAL SECTION

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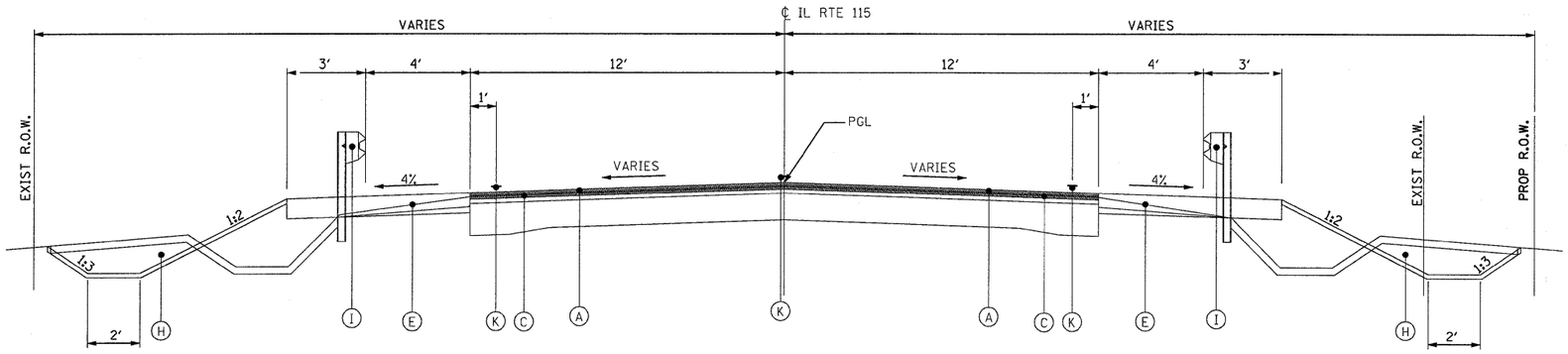

PROPOSED ROADWAY WITH GUARD RAIL TYPICAL SECTION

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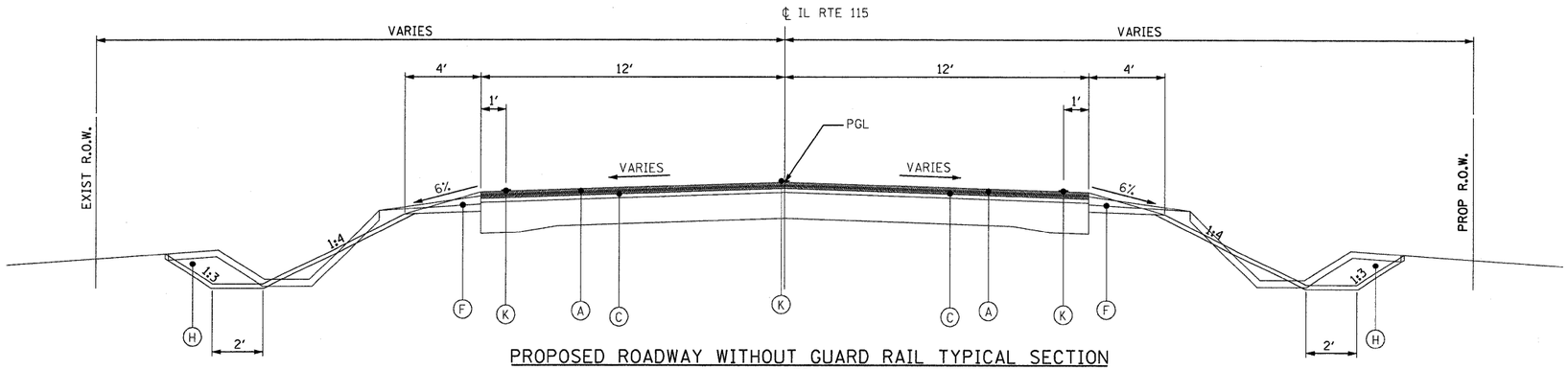

PROPOSED ROADWAY WITHOUT GUARD RAIL TYPICAL SECTION

NTS

BITUMINOUS MIXTURE REQUIREMENTS

PAY ITEM	HMA LEVEL BINDER	HMA SURFACE	HMA BINDER	HMA SHOULDERS
PG GRADE	PG64-22	PG64-22	PG64-22	PG58-22
MAX. % RAP ALLOWABLE **	25%	15%	25%	50%
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50	4.0% @ N50	3.0% @ N50
MIXTURE COMPOSITION	IL 9.5	IL 12.5 OR IL 9.5	IL 19.0	IL 19.0
FRICTION AGGREGATE		MIXTURE C		
DENSITY TEST METHOD	SATISFACTION OF THE ENGINEER	NUCLEAR / CORES	NUCLEAR / CORES	*

* MATERIAL SHALL BE COMPACTED TO 93.0 - 97.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY, EXCEPT THAT WHEN PLACED AS FIRST LIFT ON AN UNIMPROVED SUBGRADE THE MINIMUM PERCENT COMPACTION SHALL BE 92.0 PERCENT. THE MAXIMUM THEORETICAL DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE AS SPECIFIED IN THE QC/QA SPECIFICATION.

** IF RAP OPTION IS DIFFERENT THAN LISTED ABOVE, THE PG GRADE MAY NEED TO BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.

LEGEND:

EXISTING

(1) EXISTING HOT-MIX ASPHALT BINDER/SURFACE COURSE ± 3"
(2) HOT-MIX ASPHALT SURFACE REMOVAL, 3/4"
(3) EXISTING PCC PAVEMENT, ± 12"
(4) EXISTING GUARD RAIL REMOVAL
(5) EXISTING AGGREGATE SHOULDER

PROPOSED

(A) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX C, N50, 1 1/2"
(B) PROPOSED LEVELING BINDER (MACHINE METHOD), N50, 3/4"
(C) PROPOSED LEVELING BINDER (MACHINE METHOD), N50, VARIABLE DEPTH
(D) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE A, 6"
(E) PROPOSED HOT-MIX ASPHALT SHOULDERS, 8"
(F) PROPOSED AGGREGATE SHOULDER, TYPE B
(G) PROPOSED POROUS GRANULAR EMBANKMENT
(H) PROPOSED EARTH EXCAVATION
(I) PROPOSED STEEL PLATE BEAM GUARD RAIL
(J) PROPOSED PRECAST CONCERET BOX CULVERT, 12' X 10' (M273)
(K) PAVEMENT MARKING, SEE PAVEMENT MARKING SHEET FOR DETAIL

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F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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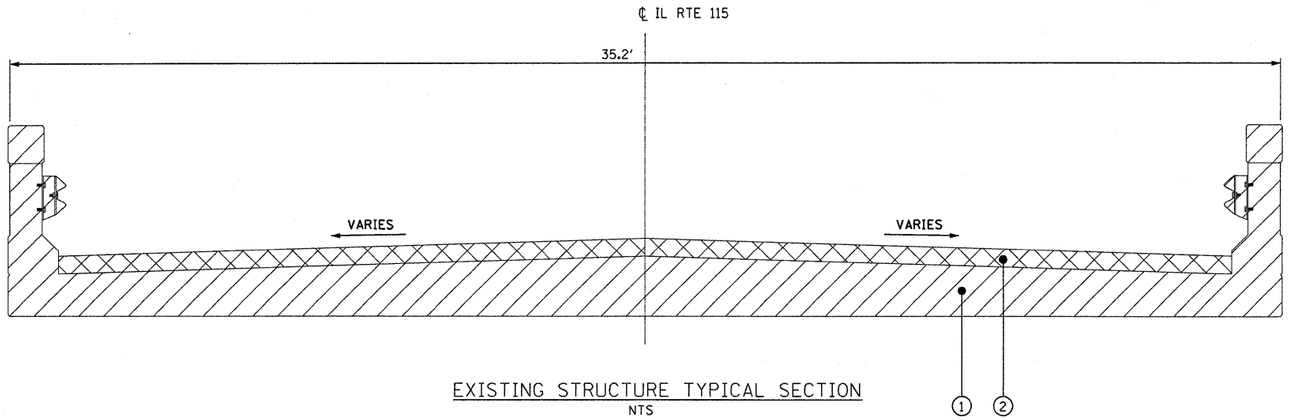
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING STRUCTURE TYPICAL SECTION

NTS

LEGEND:

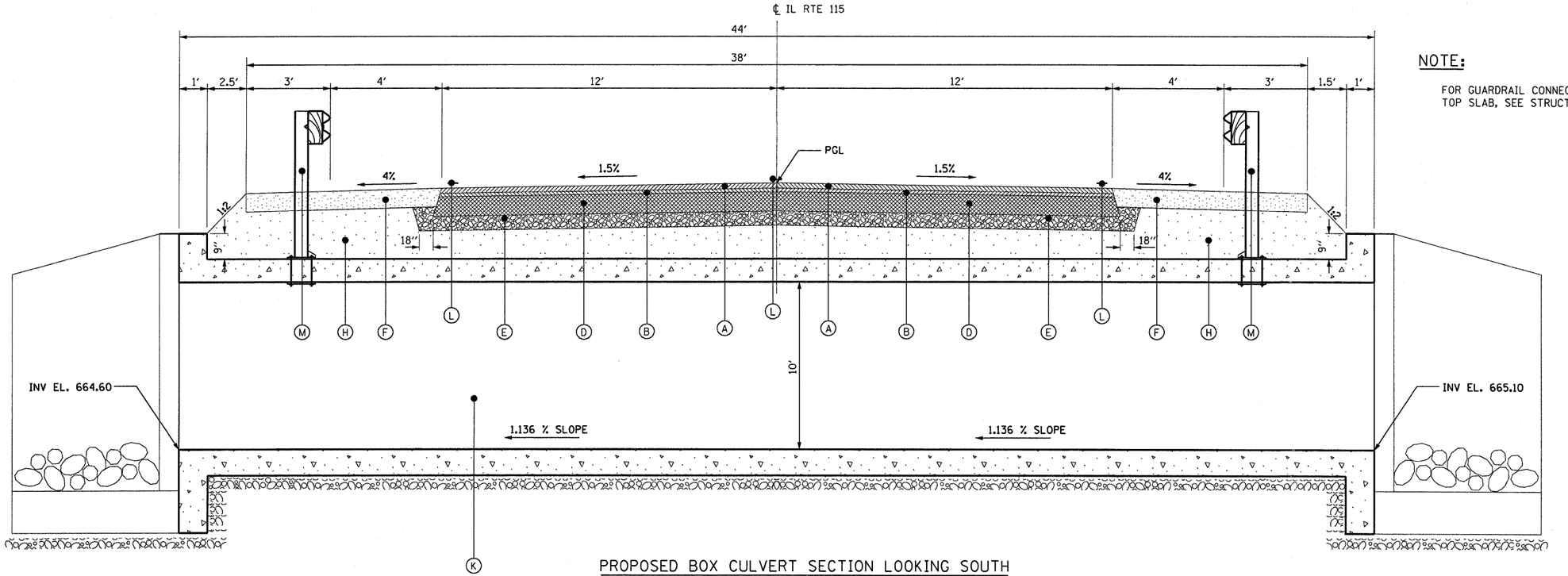
EXISTING:

(1) REMOVAL OF EXISTING STRUCTURES NO. 2

(2) PAVEMENT REMOVAL

PROPOSED

(A) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX C, N50, 1 1/2"
(B) PROPOSED LEVELING BINDER (MACHINE METHOD), N50, 3/4"
(C) PROPOSED LEVELING BINDER (MACHINE METHOD), N50, VARIABLE DEPTH
(D) PROPOSED HOT-MIX ASPHALT BASE COURSE 10 3/4"
(E) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE A, 6"
(F) PROPOSED HOT-MIX ASPHALT SHOULDERS, 8"
(G) PROPOSED AGGREGATE SHOULDER, TYPE B
(H) PROPOSED POROUS GRANULAR EMBANKMENT
(I) PROPOSED EARTH EXCAVATION
(J) PROPOSED STEEL PLATE BEAM GUARD RAIL
(K) PROPOSED PRECAST CONCRETE BOX CULVERT 12' X 10' (M273)
(L) PAVEMENT MARKING, SEE PAVEMENT MARKING SHEET FOR DETAIL
(M) STEEL PLATE BEAM GUARD RAIL, ATTACHED TO STRUCTURES.



PROPOSED BOX CULVERT SECTION LOOKING SOUTH

NTS

NOTE:

FOR GUARDRAIL CONNECTION TO CULVERT TOP SLAB, SEE STRUCTURAL SHEETS.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
SN 027-2014 SHEET 2 OF 2

SCALE: NTS | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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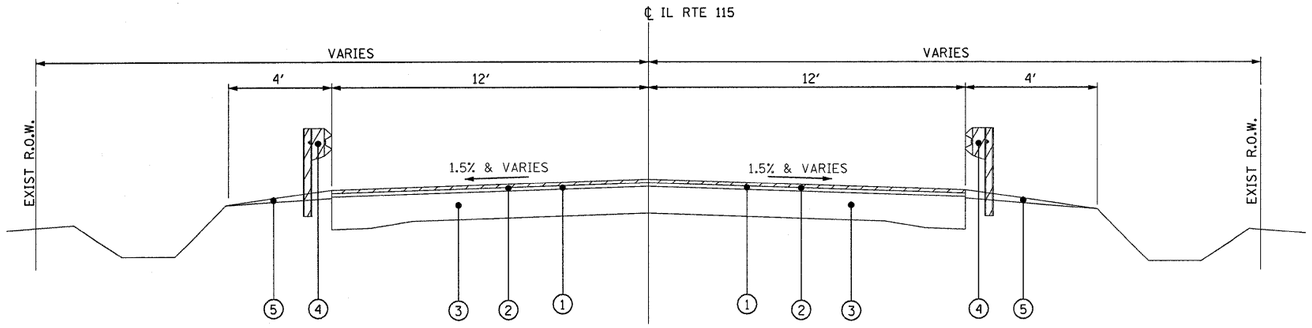
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING ROADWAY TYPICAL SECTION

NTS

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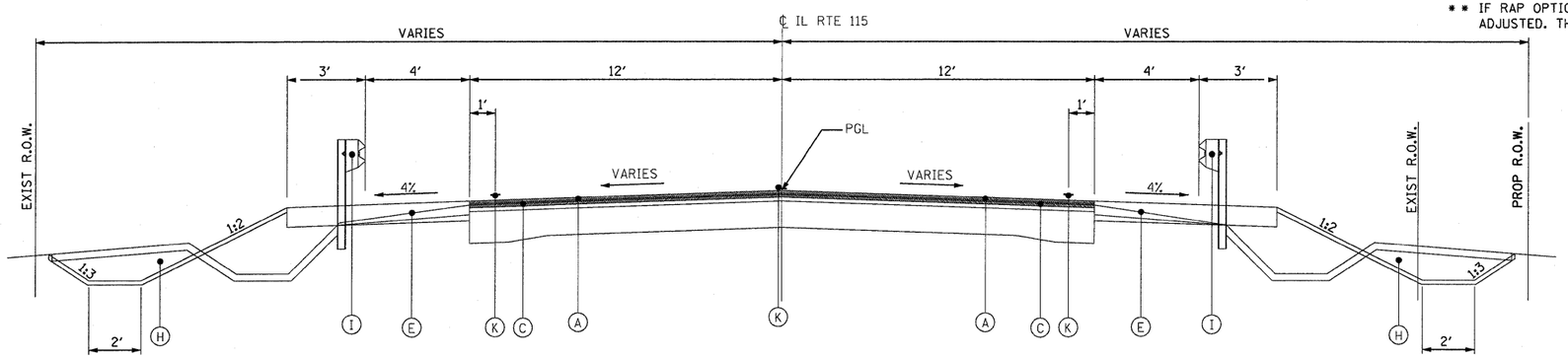

PROPOSED ROADWAY WITH GUARD RAIL TYPICAL SECTION

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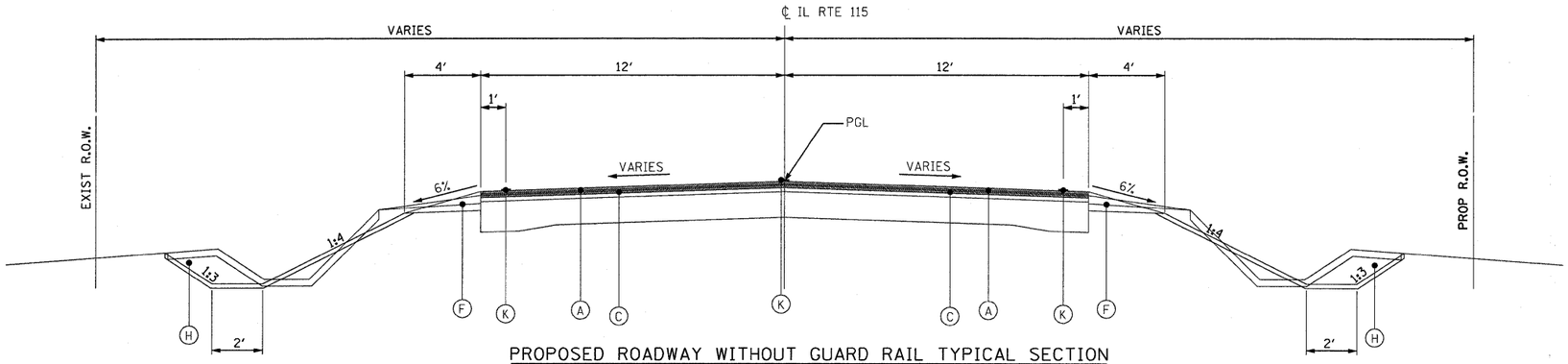

PROPOSED ROADWAY WITHOUT GUARD RAIL TYPICAL SECTION

NTS

BITUMINOUS MIXTURE REQUIREMENTS

PAY ITEM	HMA LEVEL BINDER	HMA SURFACE	HMA BINDER	HMA SHOULDERS
PG GRADE	PG64-22	PG64-22	PG64-22	PG58-22
MAX. % RAP ALLOWABLE **	25%	15%	25%	50%
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50	4.0% @ N50	3.0% @ N50
MIXTURE COMPOSITION	IL 9.5	IL 12.5 OR IL 9.5	IL 19.0	IL 19.0
FRICTION AGGREGATE		MIXTURE C		
DENSITY TEST METHOD	SATISFACTION OF THE ENGINEER	NUCLEAR / CORES	NUCLEAR / CORES	*

* MATERIAL SHALL BE COMPACTED TO 93.0 - 97.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY, EXCEPT THAT WHEN PLACED AS FIRST LIFT ON AN UNIMPROVED SUBGRADE THE MINIMUM PERCENT COMPACTION SHALL BE 92.0 PERCENT. THE MAXIMUM THEORETICAL DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE AS SPECIFIED IN THE QC/QA SPECIFICATION.

** IF RAP OPTION IS DIFFERENT THAN LISTED ABOVE, THE PG GRADE MAY NEED TO BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.

LEGEND:

EXISTING

(1) EXISTING HOT-MIX ASPHALT BINDER/SURFACE COURSE ± 3″
(2) HOT-MIX ASPHALT SURFACE REMOVAL, 3/4″
(3) EXISTING PCC PAVEMENT, ± 12″
(4) EXISTING GUARD RAIL REMOVAL
(5) EXISTING AGGREGATE SHOULDER

PROPOSED

(A) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX C, N50, 1 1/2″
(B) PROPOSED LEVELING BINDER (MACHINE METHOD), N50, 3/4″
(C) PROPOSED LEVELING BINDER (MACHINE METHOD), N50, VARIABLE DEPTH
(D) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE A, 6″
(E) PROPOSED HOT-MIX ASPHALT SHOULDERS, 8″
(F) PROPOSED AGGREGATE SHOULDERS, TYPE B
(G) PROPOSED POROUS GRANULAR EMBANKMENT
(H) PROPOSED EARTH EXCAVATION
(I) PROPOSED STEEL PLATE BEAM GUARD RAIL
(J) PROPOSED PRECAST CONCRETE BOX CULVERT, 12′ X 8′
(K) PAVEMENT MARKING, SEE PAVEMENT MARKING SHEET FOR DETAIL

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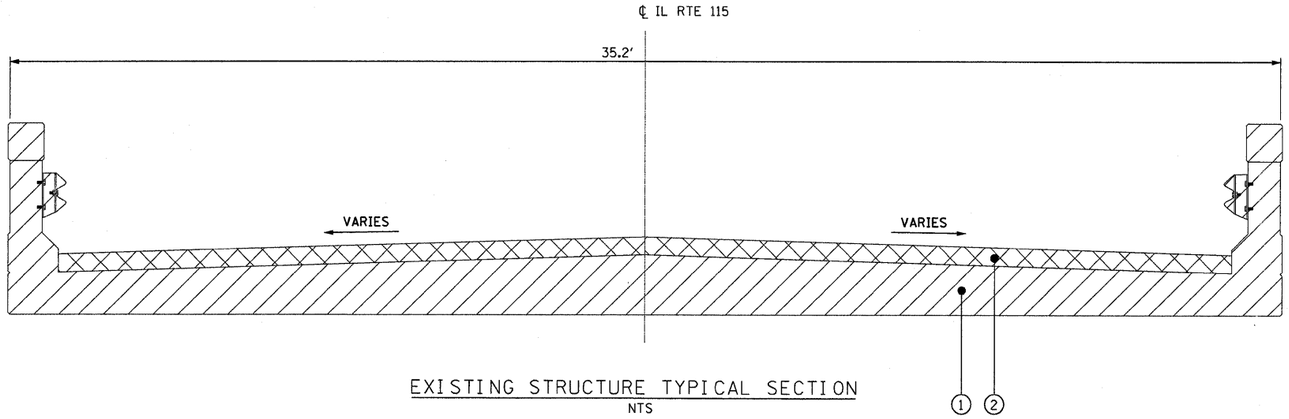
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
SN 027-2015 SHEET 1 OF 2

SCALE: 1IN=25′ | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR, 108-BR, 108-BR-1	FORD	92	10
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING STRUCTURE TYPICAL SECTION

NTS

LEGEND:

EXISTING:

(1) REMOVAL OF EXISTING STRUCTURES NO. 1

(2) PAVEMENT REMOVAL

PROPOSED

(A) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX C, N50, 1 1/2"

(B) PROPOSED LEVELING BINDER (MACHINE METHOD), N50, 3/4"

(C) PROPOSED LEVELING BINDER (MACHINE METHOD), N50, VARIABLE DEPTH

(D) PROPOSED HOT- MIX ASPHALT BASE COURSE 10 3/4"

(E) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE A, 6"

(F) PROPOSED HOT-MIX ASPHALT SHOULDERS, 8"

(G) PROPOSED AGGREGATE SHOULDER, TYPE B

(H) PROPOSED POROUS GRANULAR EMBANKMENT

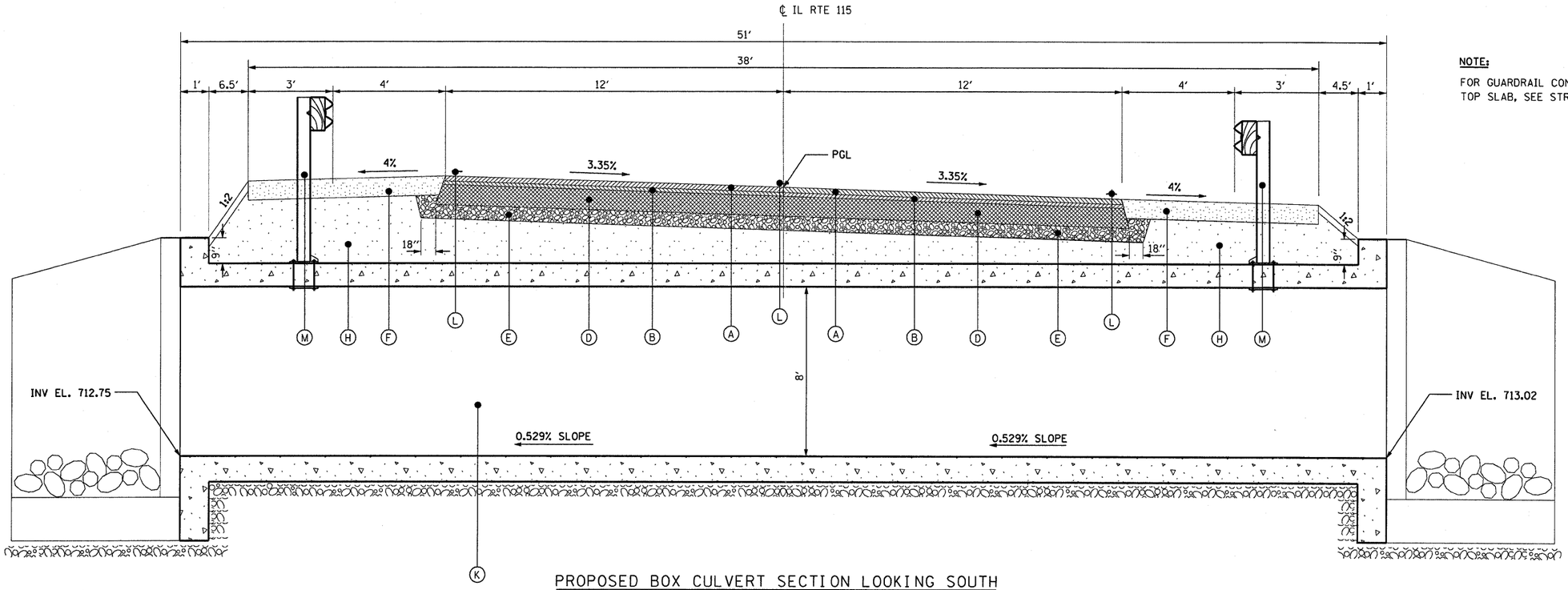
(I) PROPOSED EARTH EXCAVATION

(J) PROPOSED STEEL PLATE BEAM GUARD RAIL

(K) PROPOSED PRECAST CONCRETE BOX CULVERT 12' X 8'

(L) PAVEMENT MARKING, SEE PAVEMENT MARKING SHEET FOR DETAIL

(M) STEEL PLATE BEAM GUARD RAIL, ATTACHED TO STRUCTURES.



PROPOSED BOX CULVERT SECTION LOOKING SOUTH

NTS

NOTE:

FOR GUARDRAIL CONNECTION TO CULVERT TOP SLAB, SEE STRUCTURAL SHEETS.

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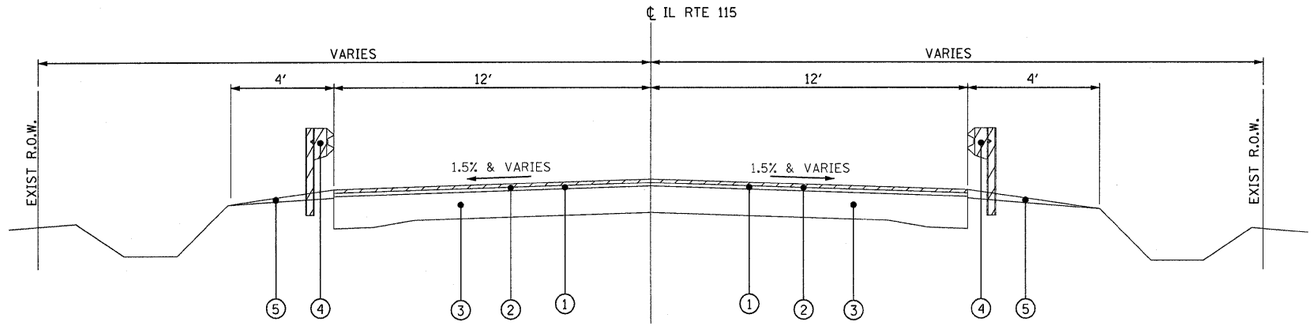
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
SN 027-2015 SHEET 2 OF 2

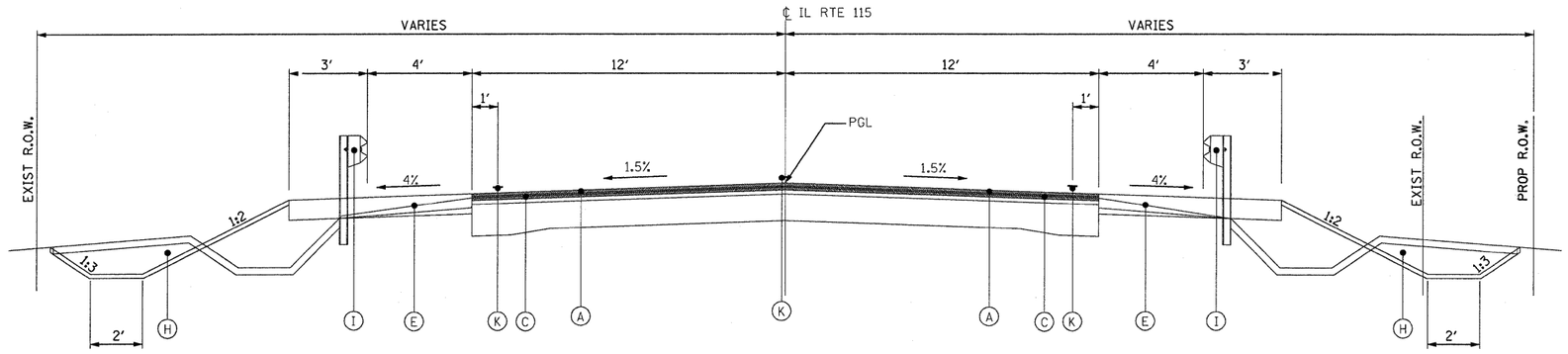
SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR, 108-BR, 108-BR-1	FORD	92	11
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



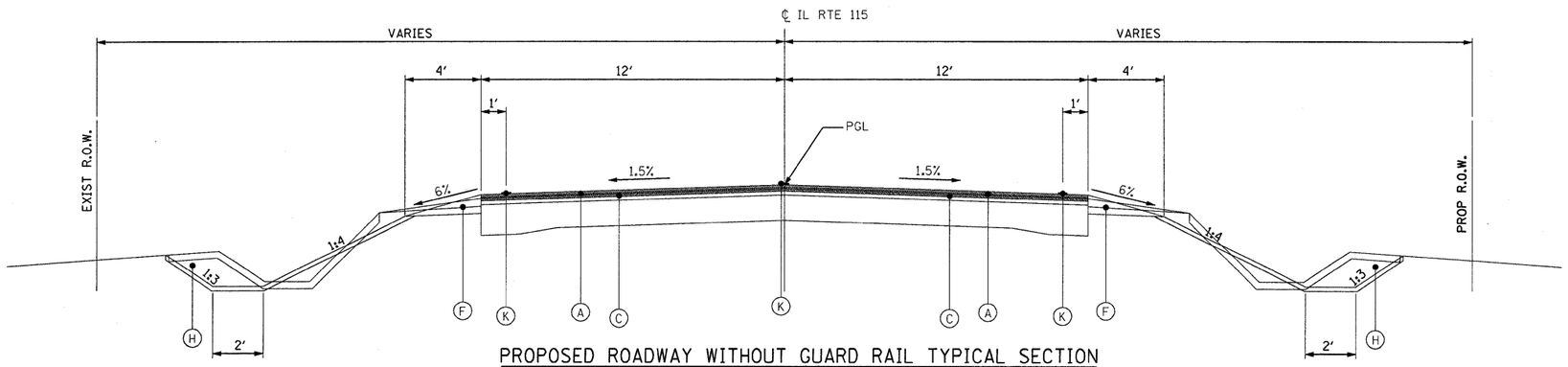
EXISTING ROADWAY TYPICAL SECTION

NTS
FROM STA 315+00 TO STA 318+69.43
FROM STA 318+95.77 TO STA 322+00



PROPOSED ROADWAY WITH GUARD RAIL TYPICAL SECTION

NTS



PROPOSED ROADWAY WITHOUT GUARD RAIL TYPICAL SECTION

NTS

BITUMINOUS MIXTURE REQUIREMENTS

PAY ITEM	HMA LEVEL BINDER	HMA SURFACE	HMA BINDER	HMA SHOULDERS
PG GRADE	PG64-22	PG64-22	PG64-22	PG58-22
MAX. % RAP ALLOWABLE **	25%	15%	25%	50%
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50	4.0% @ N50	3.0% @ N50
MIXTURE COMPOSITION	IL 9.5	IL 12.5 OR IL 9.5	IL 19.0	IL 19.0
FRICTION AGGREGATE		MIXTURE C		
DENSITY TEST METHOD	SATISFACTION OF THE ENGINEER	NUCLEAR / CORES	NUCLEAR / CORES	*

* MATERIAL SHALL BE COMPACTED TO 93.0 - 97.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY, EXCEPT THAT WHEN PLACED AS FIRST LIFT ON AN UNIMPROVED SUBGRADE THE MINIMUM PERCENT COMPACTION SHALL BE 92.0 PERCENT. THE MAXIMUM THEORETICAL DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE AS SPECIFIED IN THE QC/QA SPECIFICATION.

** IF RAP OPTION IS DIFFERENT THAN LISTED ABOVE, THE PG GRADE MAY NEED TO BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.

LEGEND:

EXISTING

(1) EXISTING HOT-MIX ASPHALT BINDER/SURFACE COURSE ± 3"
(2) HOT-MIX ASPHALT SURFACE REMOVAL, 3/4"
(3) EXISTING PCC PAVEMENT, ± 12"
(4) EXISTING GUARD RAIL REMOVAL
(5) EXISTING AGGREGATE SHOULDER

PROPOSED

(A) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX C, N50, 1 1/2"
(B) PROPOSED LEVELING BINDER (MACHINE METHOD), N50, 3/4"
(C) PROPOSED LEVELING BINDER (MACHINE METHOD), N50, VARIABLE DEPTH
(D) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE A, 6"
(E) PROPOSED HOT-MIX ASPHALT SHOULDERS, 8"
(F) PROPOSED AGGREGATE SHOULDERS, TYPE B
(G) PROPOSED POROUS GRANULAR EMBANKMENT
(H) PROPOSED EARTH EXCAVATION
(I) PROPOSED STEEL PLATE BEAM GUARD RAIL
(J) PROPOSED PRECAST CONCRETE BOX CULVERT, 10' X 6' (M273)
(K) PAVEMENT MARKING, SEE PAVEMENT MARKING SHEET FOR DETAIL

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	typ-0031-sht1.dgn	DRAWN - RM/FZ/DK/NS	REVISED -
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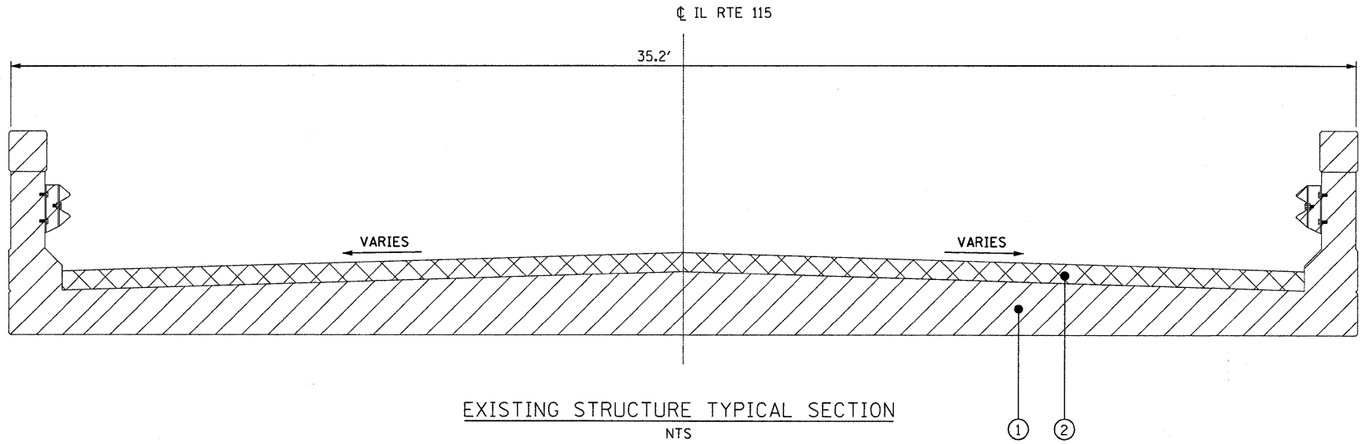
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
SN 027-2016 SHEET 1 OF 2

SCALE: NTS | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR, 108-BR, 108-BR-1	FORD	92	12
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING STRUCTURE TYPICAL SECTION

NTS

LEGEND:

EXISTING:

(1) REMOVAL OF EXISTING STRUCTURES NO. 3

(2) PAVEMENT REMOVAL

PROPOSED

(A) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX C, N50, 1 1/2″

(B) PROPOSED LEVELING BINDER (MACHINE METHOD), N50, 3/4″

(C) PROPOSED LEVELING BINDER (MACHINE METHOD), N50, VARIABLE DEPTH

(D) PROPOSED HOT MIX ASPHALT BASE COURSE 10 3/4″

(E) PROPOSED SUBBASE GRANULAR MATERIAL, TYPE A, 6″

(F) PROPOSED HOT-MIX ASPHALT SHOULDERS, 8″

(G) PROPOSED AGGREGATE SHOULDER, TYPE B

(H) PROPOSED POROUS GRANULAR EMBANKMENT

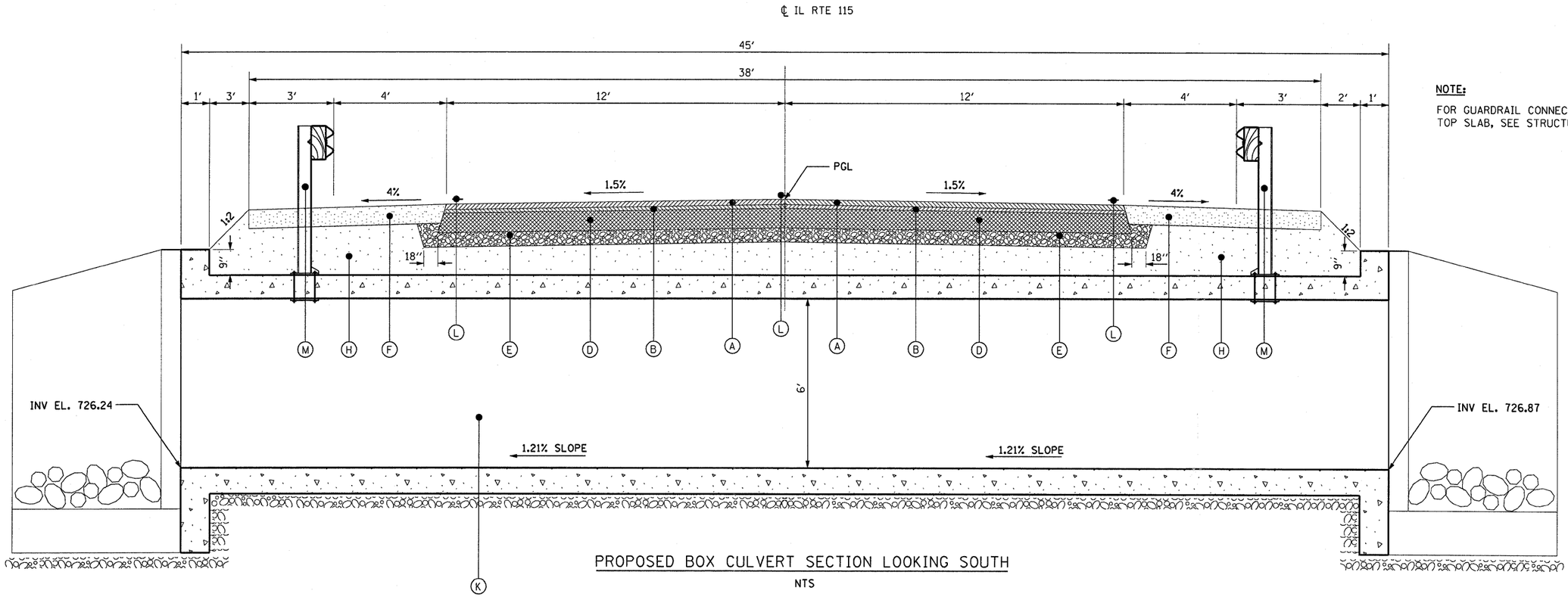
(I) PROPOSED EARTH EXCAVATION

(J) PROPOSED STEEL PLATE BEAM GUARD RAIL

(K) PROPOSED PRECAST CONCRETE BOX CULVERT, 10′ X 6′

(L) PAVEMENT MARKING, SEE PAVEMENT MARKING SHEET FOR DETAIL

(M) STEEL PLATE BEAM GUARD RAIL, ATTACHED TO STRUCTURES.



PROPOSED BOX CULVERT SECTION LOOKING SOUTH

NTS

NOTE:

FOR GUARDRAIL CONNECTION TO CULVERT TOP SLAB, SEE STRUCTURAL SHEETS.

NOTE:

ALL DIMENSIONS ARE SHOWN PERPENDICULAR TO CENTERLINE OF ROADWAY. STRUCTURE NO. S.N. 027-2016 IS 30° LT SKEW PERPENDICULAR TO CENTERLINE OF ROADWAY.

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	PLOT DATE = Aug 22, 2008 - 01:45:09 PM	DATE - AUGUST 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
SN 027-2016 SHEET 2 OF 2

SCALE: NTS | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR, 108-BR, 108-BR-1	FORD	92	13
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PAVEMENT SCHEDULE

LOCATION			SIDE	SUBBASE GRANULAR MATERIAL TY A, 6"	PROPOSED HMA BASE COURSE 10 3/4"	HOT-MIX ASPHALT SHOULDERS 8"	HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT	HOT-MIX ASPHALT SURFACE REMOVAL, 3/4"	PAVEMENT REMOVAL	PROPOSED AGGREGATE SHOULDER, TYPE B	MIXTURE FOR CRACKS, JOINTS AND FLANGEWAYS	BITUMINOUS MATERIAL (PRIME COAT)	LEVELING BINDER (MACHINE METHOD), N50	HOT MIX ASPHALT SURFACE CSE MIX "C", N50
STATION	TO	STATION	LT/RT	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)	(TON)		GAL	(TON)	(TON)
21+00.00	TO	21+60.00					160							
21+00.00	TO	22+51.67	LT							6				
21+00.00	TO	22+29.98	RT							5				
21+00.00	TO	23+79.20											19	
21+60.00	TO	26+40.00						1,280						
22+51.67	TO	25+91.88	LT			399								
22+29.98	TO	25+65.12	RT			389								
23+79.20	TO	24+38.80		202	174				225				7	
24+38.80	TO	27+00.00											16	
25+91.88	TO	27+00.00	LT							4				
25+65.12	TO	27+00.00	RT							5				
26+40.00	TO	27+00.00					160							
21+00.00	TO	27+00.00										134		141
ASSUMED											1			
TOTAL				202	174	788	320	1,280	225	20	1	134	42	141

GUARDRAIL SCHEDULE

LOCATION			SIDE	GUARDRAIL REMOVAL	GUARDRAIL ATTACHED TO STRUCTURE	STEEL PLATE BEAM GUARD RAIL, TYPE A	TBT TY 1 (SPECIAL) FLARED	TERMINAL MARKER - DIRECT APPLIED	GUARDRAIL MARKER
STATION	TO	STATION	LT/RT	(FOOT)	(FOOT)	(FOOT)	(EACH)	(EACH)	(EACH)
22+30.00	TO	25+88.00	LT	358					
23+09.00	TO	25+09.00	RT	200					
22+59.00	TO	23+09.00	RT				1	1	
22+84.00	TO	23+34.00	LT				1	1	
23+09.00	TO	23+96.50	RT			88			
23+34.00	TO	23+96.50	LT			63			
23+96.50	TO	24+21.50	LT		25				
23+96.50	TO	24+21.50	RT		25				
24+21.50	TO	24+84.00	RT			63			
24+21.50	TO	25+09.00	LT			88			
24+84.00	TO	25+34.00	RT				1	1	
25+09.00	TO	25+59.00	LT				1	1	
22+61.28	TO	25+36.73	RT						11
22+81.28	TO	25+56.62	LT						11
TOTAL				558	50	300	4	4	22

SEEDING AND EROSION CONTROL SCHEDULE

LOCATION	SIDE	SEEDING CL 3	NIT FERT NUT	PHOS FERT NUT	POT FERT NUT	TEMP EROSION CONTROL SEEDING	EROSION CONTROL BLANKET	PERIMETER EROSION BARRIER	INLET & PIPE PROTECTION	TEMP DITCH CHECKS
STATION TO STATION		(ACRE)	(LB)	(LB)	(LB)	(LB)	(SQ FT)	(LF)	(EACH)	(EACH)
21+00.00 TO 27+00.00	LT	0.19	17	17	17	19	1,209			
21+00.00 TO 27+00.00	RT	0.18	16	16	16	18	1,072			
23+50.00 TO 25+00.00	LT						283			
23+50.00 TO 25+00.00	RT						256			
25+86.63 TO 25+97.47	LT						8			
25+94.48 TO 26+03.91	RT						8			
26+33.00	RT								1	
26+25.00	LT								1	
26+70.00	LT								1	
23+40.00	LT									1
23+40.00	RT									1
23+98.00	LT									1
23+98.00	RT									1
24+20.00	LT									1
24+20.00	RT									1
25+10.00	LT									1
25+10.00	RT									1
26+84.00	LT									1
28+48+00	RT									1
NE OF BRIDGE	LT							27		
SE OF BRIDGE	LT							27		
NW OF BRIDGE	RT							23		
SW OF BRIDGE	RT							23		
TOTAL		0.37	33	33	33	37	2836	100	3	10

PAVEMENT MARKING SCHEDULE

LOCATION			SIDE	PAINT PAVEMENT MARKING-LINE 4"	PAINT PAVEMENT MARKING-LINE 6"
STATION	TO	STATION	LT/RT/CL	WHITE (FOOT)	YELLOW SKIP DASH (EACH)
21+00.00	TO	27+00.00	LT	600	
21+00.00	TO	27+00.00	RT	600	
21+00.00	TO	27+00.00	CL		150
TOTAL				1,200	150

RIPRAP SCHEDULE

LOCATION			SIDE	STONE RIPRAP CLASS A4	FILTER FABRIC
STATION	TO	STATION	LT/RT	SQ YD	SQ YD
23+50.00	TO	25+00.00	LT	283	283
23+50.00	TO	25+00.00	RT	256	256
25+86.63	TO	25+97.47	LT	8	8
25+94.48	TO	26+03.91	RT	8	8
TOTAL				555	555

EARTHWORK SCHEDULE

STATION		SIDE	CUT VOLUME	ADJUSTED	FILL VOLUME	EARTHWORK	SUB TOTAL
			EARTH EXCAVATION	FOR SHRINKAGE	EMBANKMENT (FURNISHED EXCAVATION	BALANCE	
						WASTE (+) OR SHORTAGE (-)	
FROM	TO		CU YD	CU YD	CU YD	CU YD	
21+00.00	27+00.00	LT	365	274	250	24	24
21+00.00	27+00.00	RT	335	251	225	26	26
				TOTAL			50

GRADING AND SHAPING DITCHES

LOCATION			SIDE	GRADING AND SHAPING DITCHES
STATION	TO	STATION	LT/RT	FT
21+00.00	TO	23+85.00	LT	285
21+00.00	TO	23+85.00	RT	285
24+33.00	TO	27+00.00	LT	267
24+33.00	TO	27+00.00	RT	267
TOTAL				1,104

RIGHT-OF-WAY MARKERS

LOCATION	EACH
STA. 21+00, 33' RT	1
STA. 22+00, 55' RT	1
STA. 22+00, 33' LT	1
STA. 23+00, 60' LT	1
STA. 25+00, 55' RT	1
STA. 26+00, 33' RT	1
STA. 26+34, 60' LT	1
STA. 26+34, 33' LT	1
TOTAL	8

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DESIGNED - DB
DRAWN - RM/FZ/DK/NS
CHECKED - AS
DATE - AUGUST 2008

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES SN 027-2014

SCALE: NONE | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR, 108-BR, 108-BR-1	FORD	92	14
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PAVEMENT SCHEDULE

LOCATION			SIDE	SUBBASE GRANULAR MATERIAL TY A, 6"	PROPOSED HMA BASE COURSE 10 3/4"	HOT-MIX ASPHALT SHOULDERS 8"	HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT	PAVEMENT REMOVAL	PROPOSED AGGREGATE SHOULDER, TYPE B	LEVELING BINDER (MACHINE METHOD), N50	HOT MIX ASPHALT SURFACE CSE MIX "C", N50	BITUMINOUS MATERIAL (PRIME COAT)	MIXTURE FOR CRACKS, JOINTS AND FLANGEWAYS	HOT-MIX ASPHALT SURFACE REMOVAL, 3/4"
STATION	TO	STATION	LT/RT	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)	(TON)	(TON)	(TON)	(GAL)	(TON)	(SQ YD)
262+90.00	TO	263+50.00	LT				160		2					
262+90.00	TO	263+50.00	RT						2					
263+50.00	TO	264+14.36	LT						1					
263+50.00	TO	263+93.77	RT						1					
263+20.00	TO	269+10.00									149	142		
263+50.00	TO	265+42.82								31				514
264+13.95	TO	264+25.64	RT						1					
264+21.73	TO	268+07.66	RT			370								
264+40.03	TO	264+44.09	LT						1					
264+44.16	TO	269+10.00	LT			427								
265+42.82	TO	266+07.06		217	187			231		8				
266+07.06	TO	268+50.00												648
266+07.06	TO	269+10.00								44				
268+07.66	TO	269+10.00	RT						4					
268+50.00	TO	269+10.00					160							
ASSUMED													1	
THAWVILLE ROAD			LT								12	11		
THAWVILLE ROAD			RT								8	8		
TOTAL				217	187	797	320	231	12	83	169	161	1	1,162

SEEDING AND EROSION CONTROL SCHEDULE

LOCATION	SIDE	SEEDING CL 3	NIT FERT NUT	PHOS FERT NUT	POT FERT NUT	TEMP EROSION CONTROL SEEDING	EROSION CONTROL BLANKET	PERIMETER EROSION BARRIER	INLET & PIPE PROTECTION	TEMP DITCH CHECKS
STATION TO STATION		(ACRE)	(LB)	(LB)	(LB)	(LB)	(SQ FT)	(LF)	(EACH)	(EACH)
262+90.00 TO 269+10.00	LT	0.19	17	17	17	19	1,097			
262+90.00 TO 269+10.00	RT	0.18	16	16	16	18	1,048			
264+00.17 TO 266+50.62	LT						238			
264+99.76 TO 266+51.69	RT						189			
268+00.00 TO 269+10.00	LT							110		
268+00.00 TO 269+10.00	RT							110		
263+70.00	RT									1
263+80.00	LT									1
263+80.00	RT								1	1
263+90.00	LT								1	
264+23.00	RT						5			
264+48.00	LT						5			
264+90.00	LT									1
265+63.00	LT									1
265+63.00	RT									1
265+87.00	LT									1
265+87.00	RT									1
266+60.00	LT									1
266+60.00	RT									1
NE OF BRIDGE	LT							28		
SE OF BRIDGE	LT							22		
NW OF BRIDGE	RT							19		
SW OF BRIDGE	RT							17		
TOTAL		0.37	33	33	33	37	2582	306	2	10

GUARDRAIL SCHEDULE

LOCATION				GUARDRAIL REMOVAL	GUARD RAIL ATTACHED TO STRUCTURES	STEEL PLATE BEAM GUARD RAIL, TYPE A	TBT, TY1 (SP) TANGENT	TBT, TY 1 (SP) FLARED	TERMINAL MARKER-DIRECT APPLIED	GUARDRAIL MARKER
STATION	TO	STATION	SIDE	(FOOT)	(FOOT)	(FT)	(EACH)	(EACH)	(EACH)	(EACH)
264+33.01	TO	266+75.05	RT	242						
264+37.50	TO	264+87.50	RT					1		
264+62.50	TO	265+12.50	LT					1		
264+75.77	TO	267+34.07	LT	258						
264+87.50	TO	265+50.00	RT			62.5				
265+12.50	TO	265+50.00	LT			37.5				
265+50.00	TO	266+00.00	LT		50					
265+50.00	TO	266+00.00	RT		50					
266+00.00	TO	268+12.50	LT			212.5				
266+00.00	TO	267+25.00	RT			125				
267+25.00	TO	267+75.00	RT				1			
268+12.50	TO	268+62.50	LT				1			
264+62.50	TO	268+62.50	LT							16
264+37.50	TO	267+75.00	RT							14
APPLIED AT EACH FACE OF TBT									4	
TOTAL				500	100	437.5	2	2	4	30

EARTHWORK SCHEDULE

STATION		SIDE	CUT VOLUME	ADJUSTED	FILL VOLUME	EARTHWORK	SUB TOTAL
			EARTH EXCAVATION	FOR SHRINKAGE	EMBANKMENT	BALANCE	
						WASTE (+) OR SHORTAGE (-)	
FROM	TO		CU YD	CU YD		CU YD	
262+90.00	269+10.00	LEFT	570	428	216	212	212
262+90.00	269+10.00	RIGHT	338	254	184	70	70
			TOTAL				281

DRAINAGE STRUCTURE SCHEDULE

LOCATION			SIDE	REMOVE EXISTING CULVERTS	PIPE CULVERTS CLASS C, TY 1 18"	END SECTIONS 18"	STONE RIPRAP CLASS A4	FILTER FABRIC
STATION	TO	STATION		(EACH)	(FOOT)	(EACH)	(SQ YD)	(SQ YD)
263+89.95			RT			1		
263+92.00	TO	264+21.00	RT	1				
263+99.00	TO	264+50.00	LT	1				
264+03.84			LT			1		
263+89.95	TO	264+23.46	RT		33			
264+03.63	TO	264+48.02	LT		44			
264+23.46			RT			1		
264+48.02			LT			1		
265+00.00	TO	266+51.00	LT				238	238
265+00.00	TO	266+51.00	RT				189	189
264+23.00			RT				5	5
264+48.00			LT				5	5
TOTAL				2	77	4	437	437

GRADING AND SHAPING DITCHES

LOCATION			SIDE	GRADING AND SHAPING DITCHES
STATION	TO	STATION	LT/RT	(FOOT)
262+90.00	TO	264+03.84	LT	114
262+90.00	TO	263+89.95	RT	60
264+48.02	TO	265+50.00	LT	102
264+23.46	TO	265+50.00	RT	127
266+00.00	TO	269+10.00	LT	310
266+00.00	TO	269+10.00	RT	310
TOTAL				1,023

PAVEMENT MARKING SCHEDULE

LOCATION			SIDE	PAINT PAVEMENT MARKING-LINE 4"	PAINT PAVEMENT MARKING-LINE 6"
				WHITE	YELLOW SKIP DASH
STATION	TO	STATION		(FOOT)	(FOOT)
262+90.00	TO	263+80.78	LT	91	
262+90.00	TO	263+77.71	RT	88	
262+90.00	TO	269+10.00	CL	620	155
264+40.56	TO	269+10.00	RT	469	
264+61.83	TO	269+10.00	LT	448	
TOTAL				1,716	155

RIGHT-OF-WAY MARKERS

LOCATION	EACH
STA. 264+35.72, 50' RT	1
STA. 266+00, 50' RT	1
STA. 267+00, 34' RT	1
TOTAL	3

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES SN 027-2015

SCALE: 1"=20' NONE | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR, 108-BR, 108-BR-1	FORD	92	15
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PAVEMENT SCHEDULE

LOCATION			SIDE	SUBBASE GRANULAR MATERIAL TY A, 6"	HMA BASE COURSE 10 3/4"	HOT-MIX ASPHALT SHOULDERS 8"	HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT	PAVEMENT REMOVAL	AGGREGATE SHOULDER, TYPE B	BITUMINOUS MATERIAL (PRIME COAT)	LEVELING BINDER (MACHINE METHOD), N50	HOT MIX ASPHALT SURFACE REMOVAL, 3/4"	MIXTURE FOR CRACKS, JOINTS AND FLANGEWAYS	HOT MIX ASPHALT SURFACE CSE MIX "C", N50
STATION	TO	STATION		(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)	(TON)	GAL	(TON)	(SQ YD)	(TON)	(TON)
315+00.00	TO	315+60.00					160							
315+00.00	TO	322+00.00								160				168
315+00.00	TO	318+40.85									9			
315+00.00	TO	316+54.36	LT						5					
315+00.00	TO	315+98.75	RT						10					
315+60.00	TO	318+40.85										749		
315+98.75	TO	321+02.26	RT			416								
316+54.36	TO	321+72.21	LT			428								
318+40.85	TO	319+22.54		276	238			355			10			
319+22.55	TO	321+40.00										580		
319+22.55	TO	322+00.00									7			
321+40.00	TO	322+00.00					160							
321+72.21	TO	322+00.00	LT						3					
321+02.25	TO	322+00.00	RT						5					
ASSUMMED													1	
TOTAL				276	238	844	320	355	23	160	26	1,329	1	168

SEEDING AND EROSION CONTROL SCHEDULE

LOCATION	SIDE	SEEDING CL 3	NIT FERT NUT	PHOS FERT NUT	POT FERT NUT	TEMP EROSION CONTROL SEEDING	EROSION CONTROL BLANKET	PERIMETER EROSION BARRIER	INLET & PIPE PROTECTION	TEMP DITCH CHECKS
STATION TO STATION		(ACRE)	(LB)	(LB)	(LB)	(LB)	(SQ FT)	(LF)	(EACH)	(EACH)
315+00.00 TO 322+00.00	LT	0.16	14	14	14	16	759			
315+00.00 TO 322+00.00	RT	0.28	25	25	25	28	1,382			
315+45.00									1	
315+00.00 TO 317+00.00	LT							200		
315+92.72	RT						5			
318+00.00 TO 320+00.00	LT						188			
318+00.01 TO 319+50.00	RT						196			
315+30.00	RT									1
317+90.00	LT									1
317+90.00	RT									1
318+50.00	LT									1
318+90.00	RT									1
318+75.00	LT									1
319+15.00	RT									1
319+60.00	RT									1
320.10.00	LT									1
320+00.00 TO 322+00.00	LT							200		
NE OF BRIDGE	LT							15		
SE OF BRIDGE	LT							21		
NW OF BRIDGE	RT							24		
SW OF BRIDGE	RT							25		
TOTAL		0.44	39	39	39	44	2530	485	1	9

DRAINAGE STRUCTURE SCHEDULE

LOCATION			SIDE	REMOVE EXISTING CULVERTS	PIPE CULVERT CLASS D, TY 1 18"	END SECTION 18"	STONE RIPRAP CLASS A4	FILTER FABRIC
STATION	TO	STATION	LT/RT	(EACH)	(FOOT)	(EACH)	(SQ. YD.)	(SQ. YD.)
315+47.20	TO	315+76.93	RT		30			
315+38.75			RT			1		
315+85.22			RT			1		
315+92.72			RT				5	5
316+35.07	TO	316+58.83	RT	1				
318+00.00	TO	320+00.00	LT				188	188
318+00.01	TO	319+50.00	RT				196	196
TOTAL				1	30	2	389	389

EARTHWORK SCHEDULE

STATION		SIDE	CUT VOLUME	ADJUSTED	FILL VOLUME	EARTHWORK	SUB TOTAL
			EARTH EXCAVATION	FOR SHRINKAGE	EMBANKMENT	BALANCE	
						WASTE (+) OR SHORTAGE (-)	
FROM	TO		CU YD	CU YD		CU YD	
315+00.00	322+00.00	LEFT	150	113	120	-10.00	-10
315+00.00	322+00.00	RIGHT	440	415	235	180	180
			TOTAL				170

GUARDRAIL SCHEDULE

LOCATION			SIDE	GUARDRAIL REMOVAL	STEEL PLATE BEAM GUARD RAIL, TYPE A	GUARDRAIL ATTACHED TO STRUCTURE	TBT TY 1 (SPECIAL) TANGENT	TERMINAL MARKER - DIRECT APPLIED	GUARDRAIL MARKER
STATION	TO	STATION	LT/RT	(FOOT)	(FOOT)	(FOOT)	(EACH)	(EACH)	(EACH)
316+35.00	TO	316+85.00	RT				1	1	
316+91.00	TO	317+41.00	LT				1	1	
316+35.00	TO	320+72.50	RT						18
316+85.00	TO	318+72.50	RT		187.5				
316+91.00	TO	321+41.00	LT						18
317+17.93	TO	323+08.53	RT	590					
317+41.00	TO	318+53.50	LT		112.5				
317+68.32	TO	320+46.98	LT	279					
318+53.50	TO	318+91.00	LT			37.5			
318+72.50	TO	319+10.00	RT			37.5			
318+91.00	TO	320+91.00	LT		200				
319+10.00	TO	320+22.50	RT		112.5				
320+22.50	TO	320+72.50	RT				1	1	
320+91.00	TO	321+41.00	LT				1	1	
TOTAL				869	612.5	75	4	4	36

WOVEN WIRE FENCE SCHEDULE

LOCATION			SIDE	WOVEN WIRE FENCE REMOVAL	WOVEN WIRE FENCE, 4"
STATION	TO	STATION	LT/RT	(FOOT)	(EACH)
317+50	TO	318+50.00	LT		100
317+50	TO	318+50.00	LT	100	
318+80.00	TO	319+29.00	LT		49
318+88.00	TO	319+29.00	LT	41	
TOTAL				141	149

RIGHT-OF-WAY MARKERS

LOCATION	EACH
STA. 317+50, 34' RT	1
STA. 317+50, 34' LT	1
STA. 318+50, 50' RT	1
STA. 319+00, 50' LT	1
STA. 321+00, 50' LT	1
STA. 322+00, 34' LT	1
STA. 322+50, 50' RT	1
STA. 323+50, 34' RT	1
TOTAL	8

PAVEMENT MARKING SCHEDULE

LOCATION			SIDE	PAINT PAVEMENT MARKING-LINE 4"	PAINT PAVEMENT MARKING-LINE 6"
STATION	TO	STATION	LT/RT	WHITE (FOOT)	YELLOW SKIP DASH (FOOT)
315+00.00	TO	322+00.00	LT	700	
315+00.00	TO	322+00.00	RT	700	
315+00.00	TO	322+00.00	CL		175
TOTAL				1,400	175

GRADING AND SHAPING DITCHES

LOCATION			SIDE	GRADING AND SHAPING DITCHES
STATION	TO	STATION	LT/RT	(FOOT)
317+00.00	TO	318+41.00	LT	141
315+00.00	TO	318+79.00	RT	379
318+96.00	TO	322+00.00	LT	304
319+24.00	TO	322+00.00	RT	276
TOTAL				1,100

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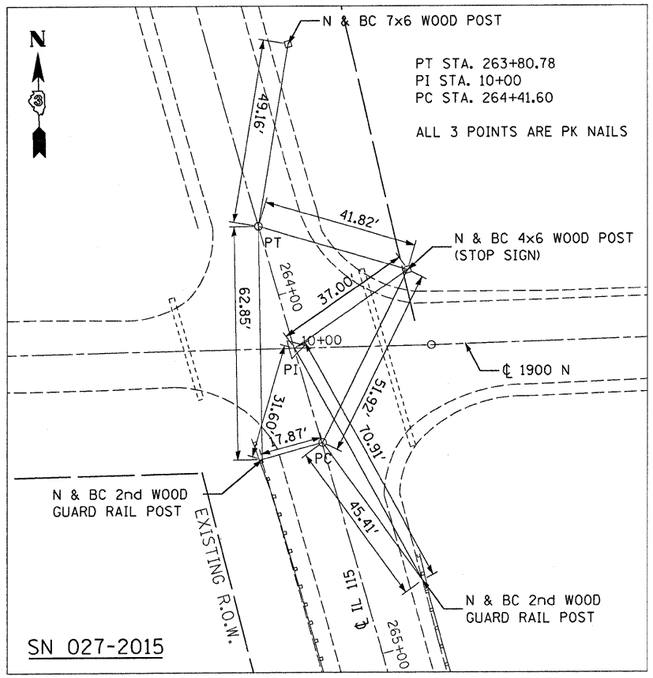
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES SN 027-2016

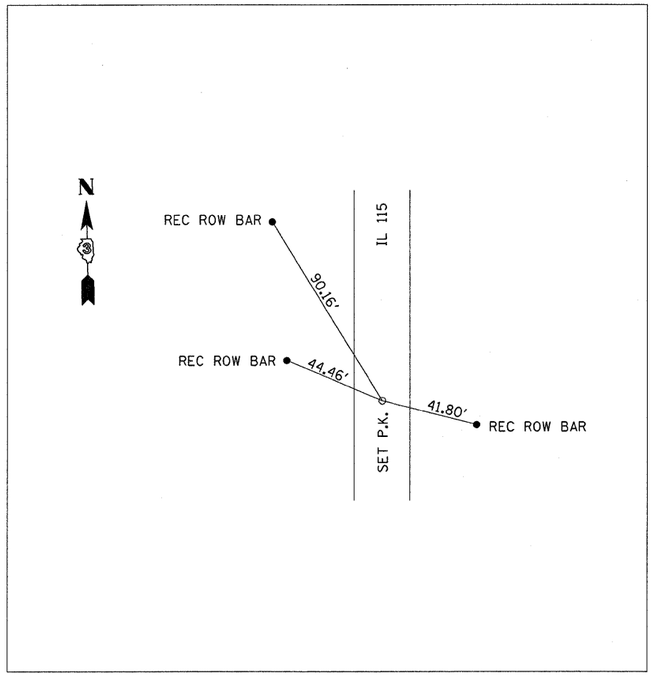
SCALE: NONE | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR, 108-BR, 108-BR-1	FORD	92	16
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



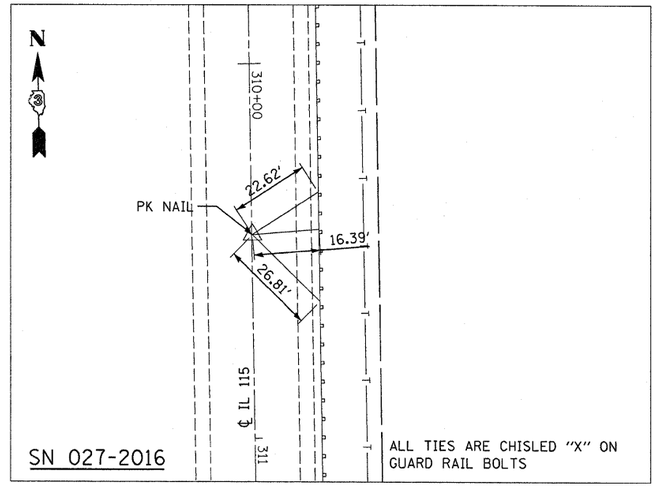
PT STA. 263+80.78, PI STA. 10+00, PC STA. 264+41.60

REPLACE WITH PERMANENT SURVEY MARKER



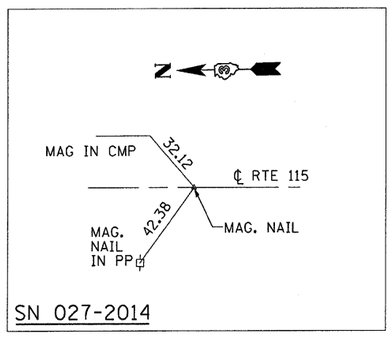
W 1/4 COR. SEC. 10

REPLACE WITH PERMANENT SURVEY MARKER



POT STA. 310+45.40

MONUMENT RECORD
LAND SURVEY MONUMENTS SITUATED IN
SECTION 10 TWP 26 NORTH
RANGE 9 EAST, 3RD P.M.
FORD COUNTY, IL.



P.O.T. STA. 20+00.00
MAG. NAIL

BENCH MARK INFORMATION

POINT ID	X	Y	Z	DESCRIPTION
				For Culvert SN 027-2015 & SN 027-2016
BM#1	1026847.737	1460189.013	729.22	R.R. SPIKE IN P.P. AT STA. 263+32.544, 150.47' RT
BM#2	1027206.924	1455002.317	736.876	R.R. SPIKE IN P.P. AT STA. 315+78.739, 32.528' RT
BM#3	1027225.83	1454673.613	735.048	CHISELED "X" AT TOP OF WINGWALL, STA. 319+07.705, 18.95' RT
				For Culvert SN 027-2014
TBM# 117	1026073.06	1484555.71	678.13	R.R. SPIKE IN P.P. WITH GUY WIRE, STA. 19+71, 31' RT
TBM#118	1026083.70	1484184.49	676.74	R.R. SPIKE IN P.P. WITH GUY WIRE, STA. 23+43, 32' RT

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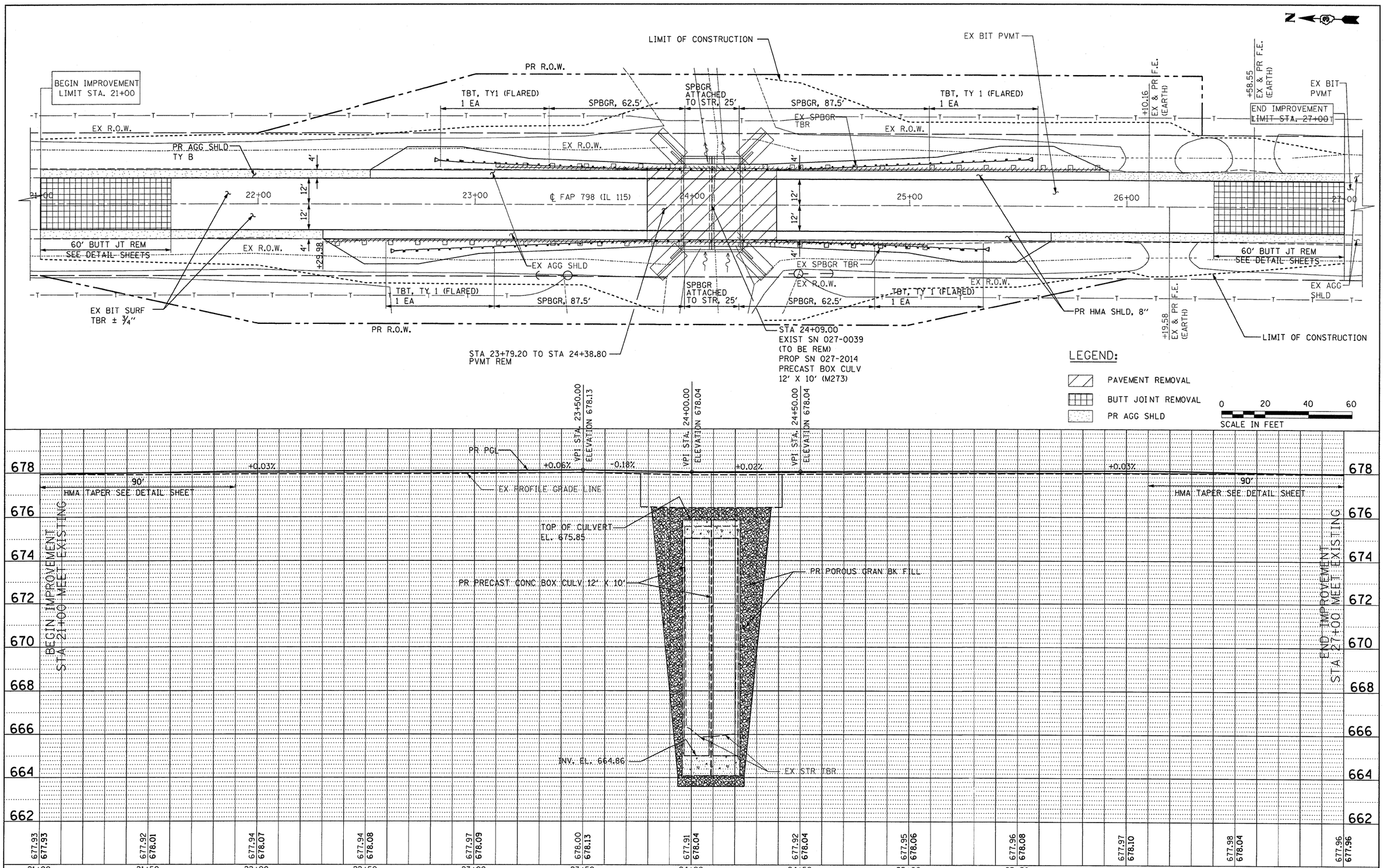
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT AND TIES

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR, 108-BR, 108-BR-1	FORD	92	17
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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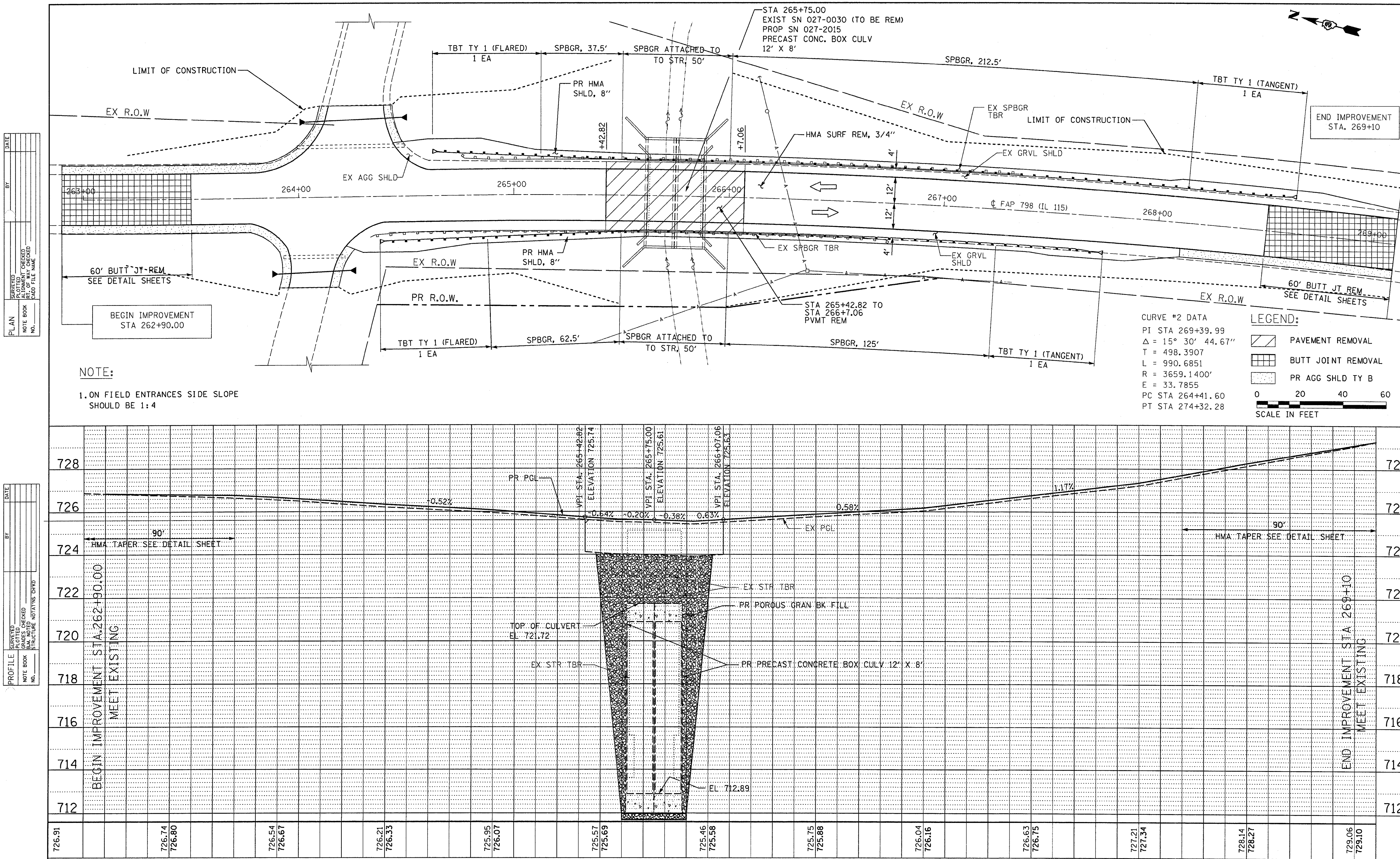
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
SN 027-2014

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 21+00 | TO STA. 27+00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	18
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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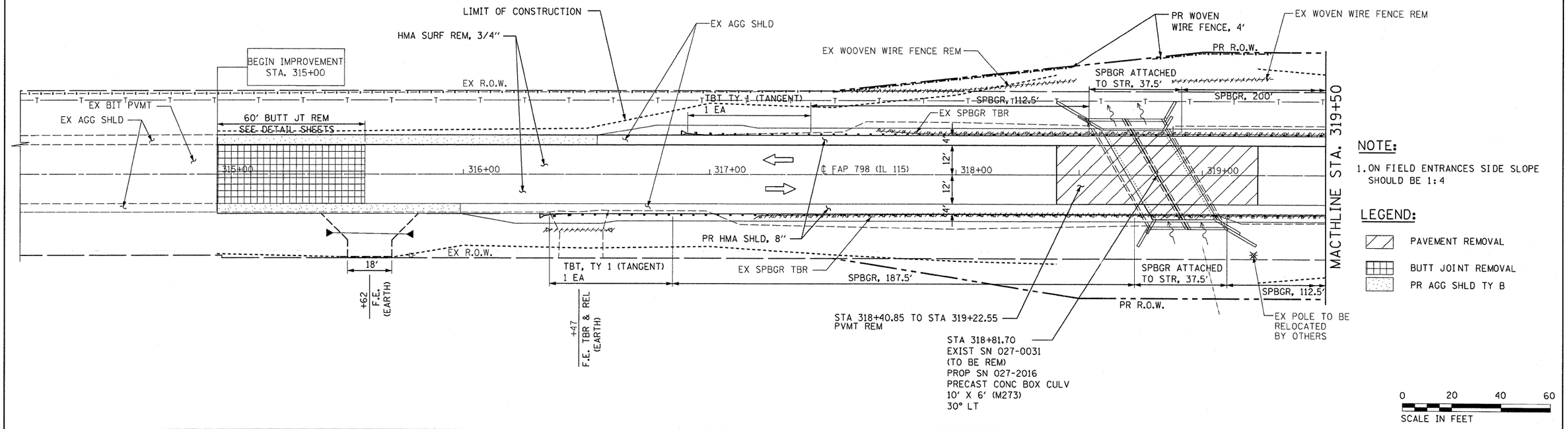
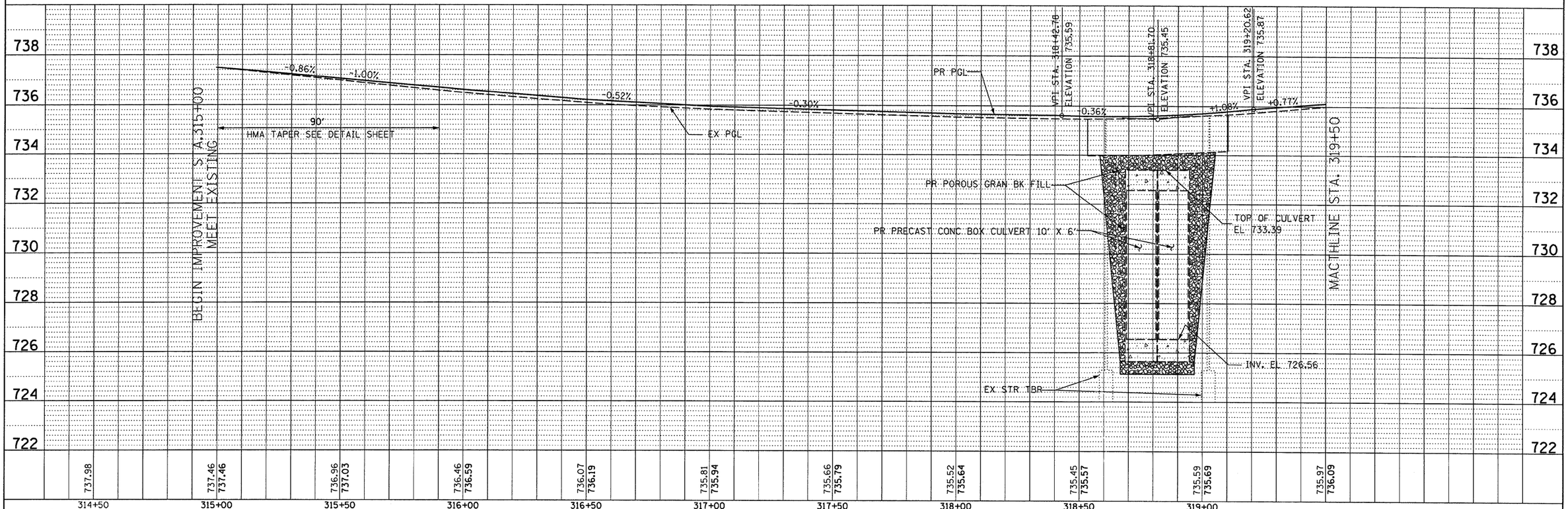
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
SN 027-2015

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 263+20.00 TO STA. 269+10.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	19
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





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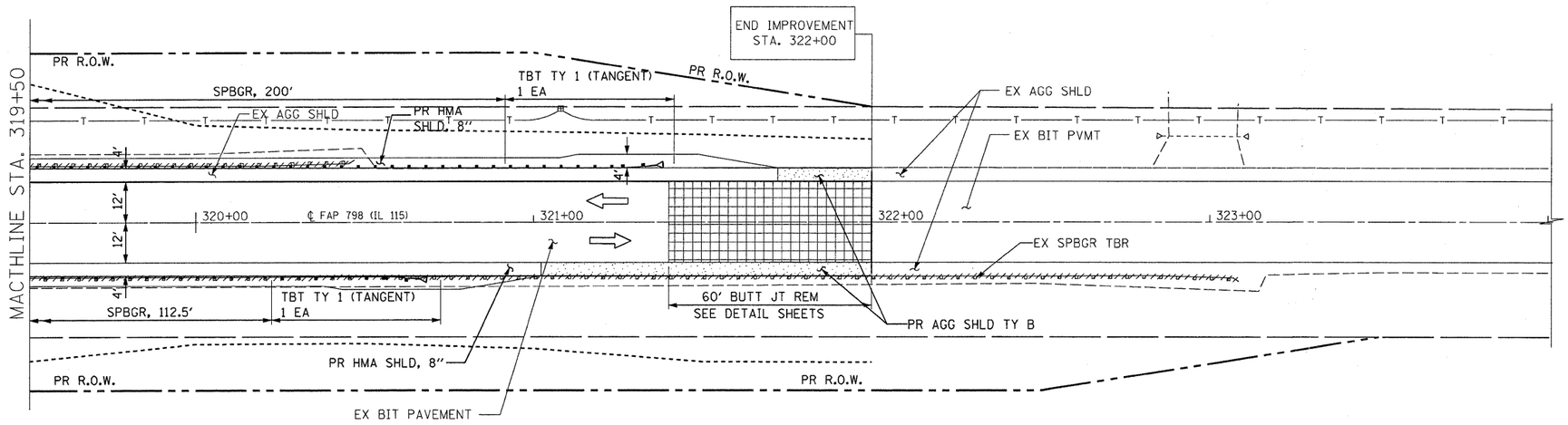
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
SN 027-2016 SHEET 1 OF 2

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 315+00 | TO STA. 319+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	20
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



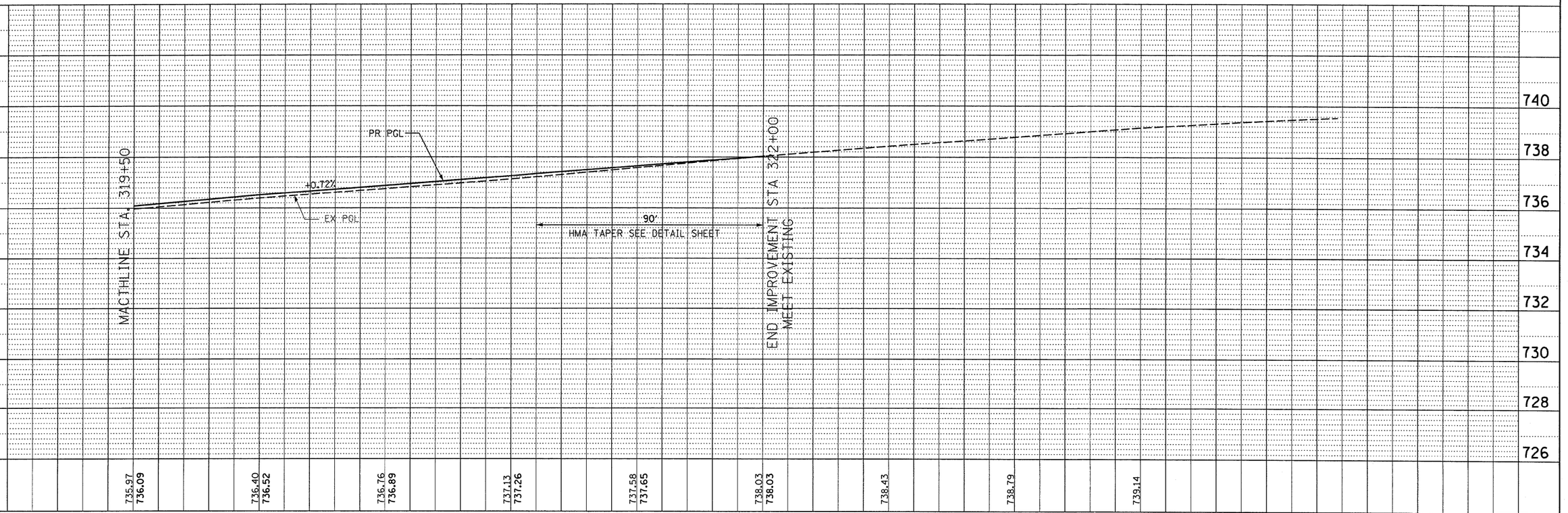
LEGEND:

BUTT JOINT REMOVAL

PR AGG SHLD

0 20 40 60

SCALE IN FEET



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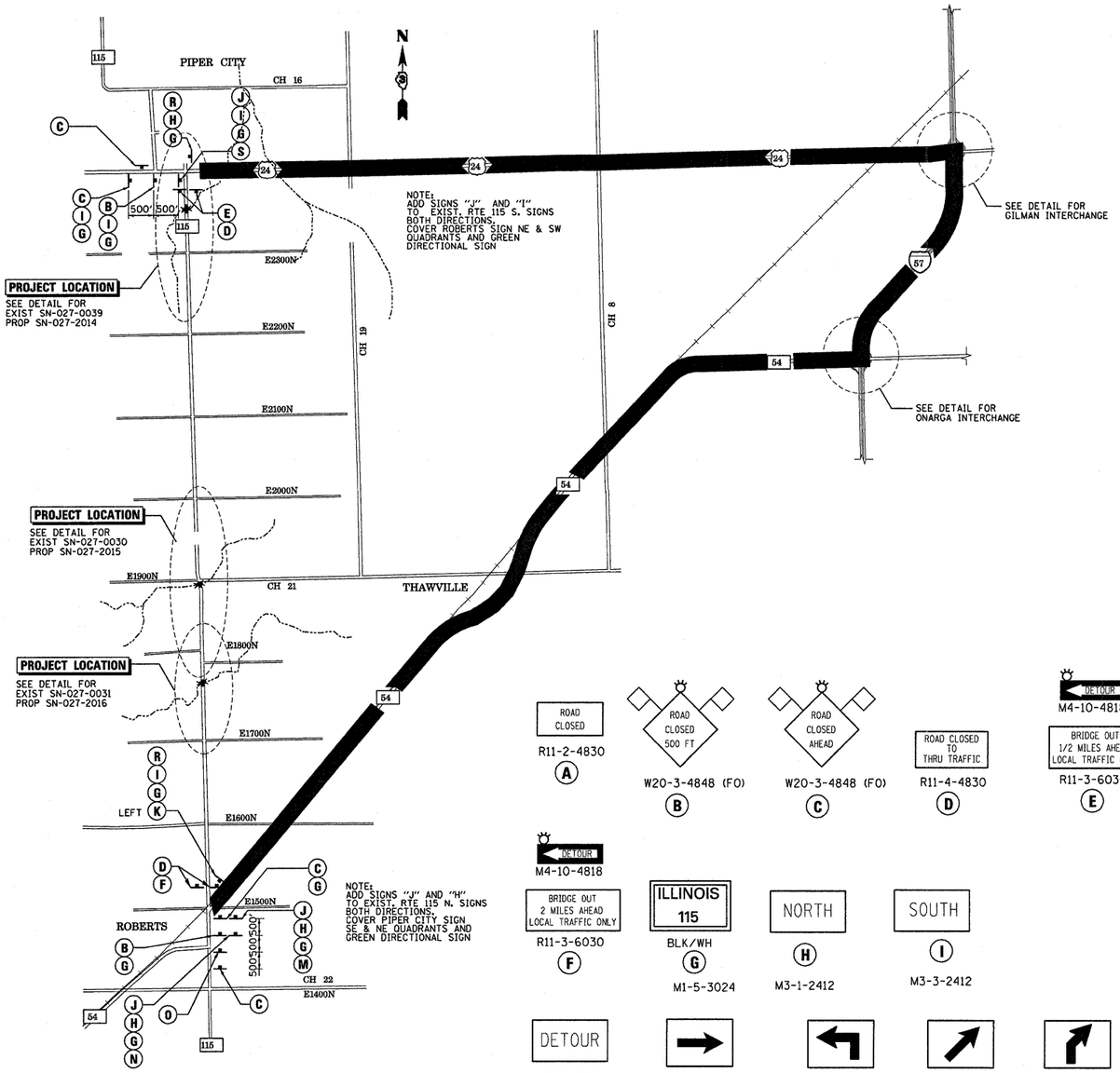
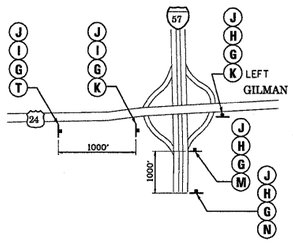
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
SN 027-2016 SHEET 2 OF 2

SCALE: 1":20' | SHEET NO. OF SHEETS | STA. 319+50 | TO STA. 322+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	21
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





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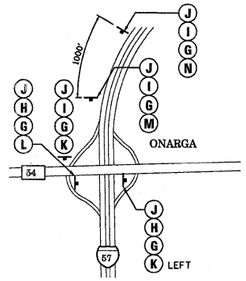

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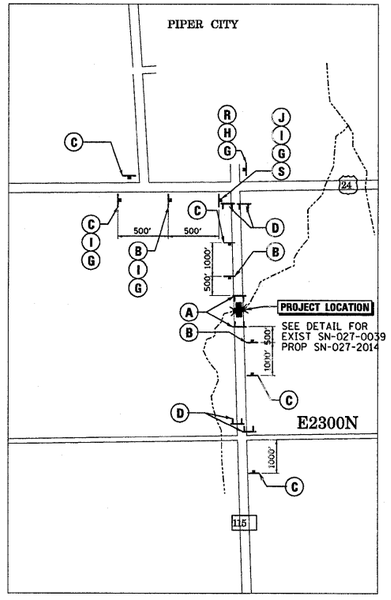

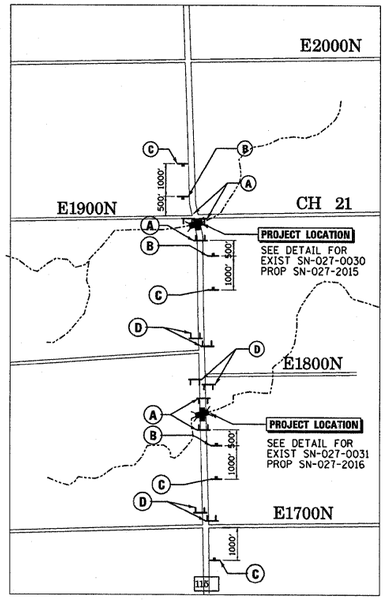

ROAD CLOSED — R11-2-4830 (A)

ROAD CLOSED 500 FT — W20-3-4848 (FO) (B)

ROAD CLOSED AHEAD — W20-3-4848 (FO) (C)

ROAD CLOSED TO THRU TRAFFIC — R11-4-4830 (D)

DETOUR — M4-10-4818 (E)
BRIDGE OUT 1/2 MILES AHEAD LOCAL TRAFFIC ONLY — R11-3-6030

DETOUR — M4-10-4818
BRIDGE OUT 2 MILES AHEAD LOCAL TRAFFIC ONLY — R11-3-6030 (F)

ILLINOIS 115 — BLK/WH (G) — M1-5-3024

NORTH — M3-1-2412 (H)

SOUTH — M3-3-2412 (I)

DETOUR — M4-8-2412 (J)

M6-1-2115 (K)

M5-1-2115 (L)

M6-2-2115 (M)

M5-2-2115 (N)

DETOUR AHEAD — W20-2-4848 (O)

JCT — M2-1-2115 (P)

END DETOUR — M4-8A-2418 (R)

M6-3-2115 (S)

M5-1-2115 (T)

LEGEND

- TYPE III BARRICADES CONFORMING TO STD. 702001 "ROAD CLOSED TO ALL TRAFFIC" WITH 2 FLASHING LIGHTS PER BARRICADE
- TYPE III BARRICADES CONFORMING TO STD. 702001 "ROAD CLOSED TO THRU TRAFFIC" WITH 2 FLASHING LIGHTS PER BARRICADE
- SIGNS ON PERMANENT SUPPORTS
- FLASHING LIGHT ABOVE SIGN
- 18"x18" ORANGE FLAG
- DETOUR ROUTE

GENERAL NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR.
2. ALL SIGNS NOT ATTACHED TO BARRICADES SHALL BE POST MOUNTED, UNLESS OTHERWISE NOTED.
3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
4. SEE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR.

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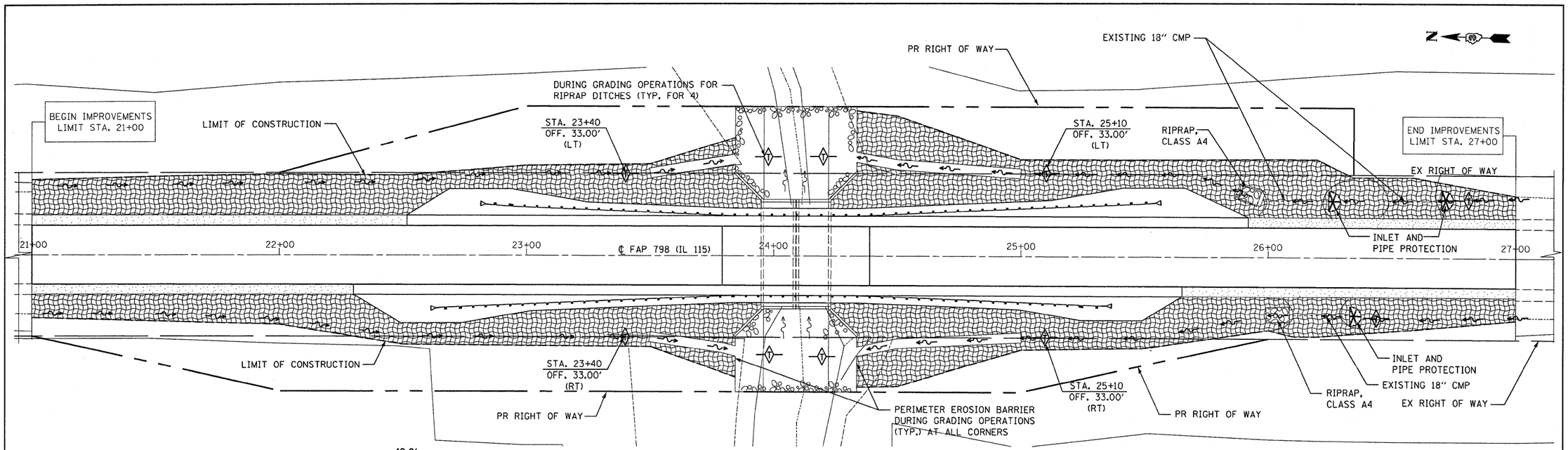
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

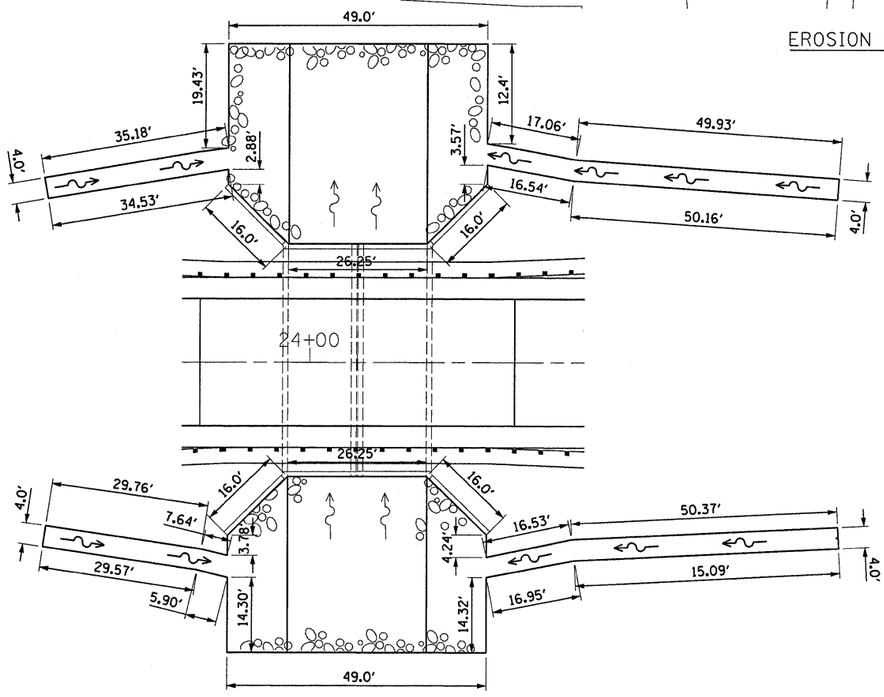
DETOUR PLAN

SCALE: NONE | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	22
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EROSION CONTROL PLAN



RIPRAP LAYOUT PLAN
N.T.S.

LEGEND:

- PROPOSED DITCH
- PROPOSED SWALE
- END SECTION
- TEMPORARY DITCH CHECK
- RIPRAP, CLASS A4
- EROSION CONTROL BLANKET AND PERMANENT SEEDING CLASS 3 (TEMPORARY EROSION CONTROL SEEDING AS NEEDED)
- INLET AND PIPE PROTECTION
- RIPRAP
- PERIMETER EROSION BARRIER

0 20 40 60
SCALE IN FEET

NEW SN 027-2014

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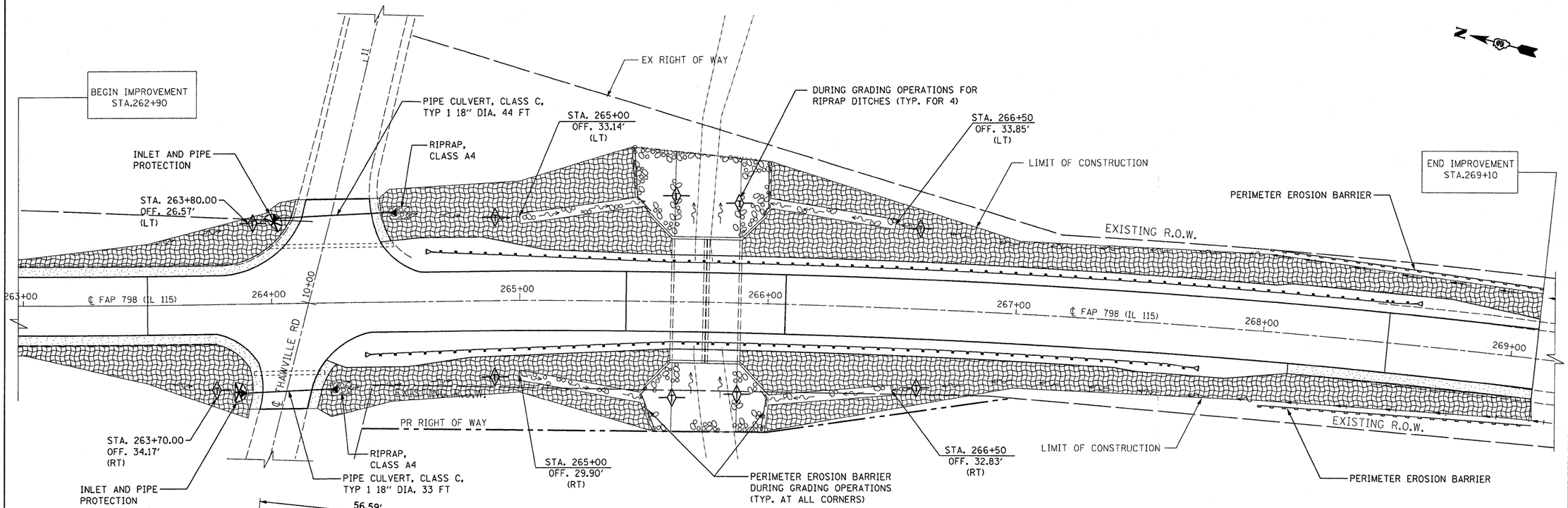
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

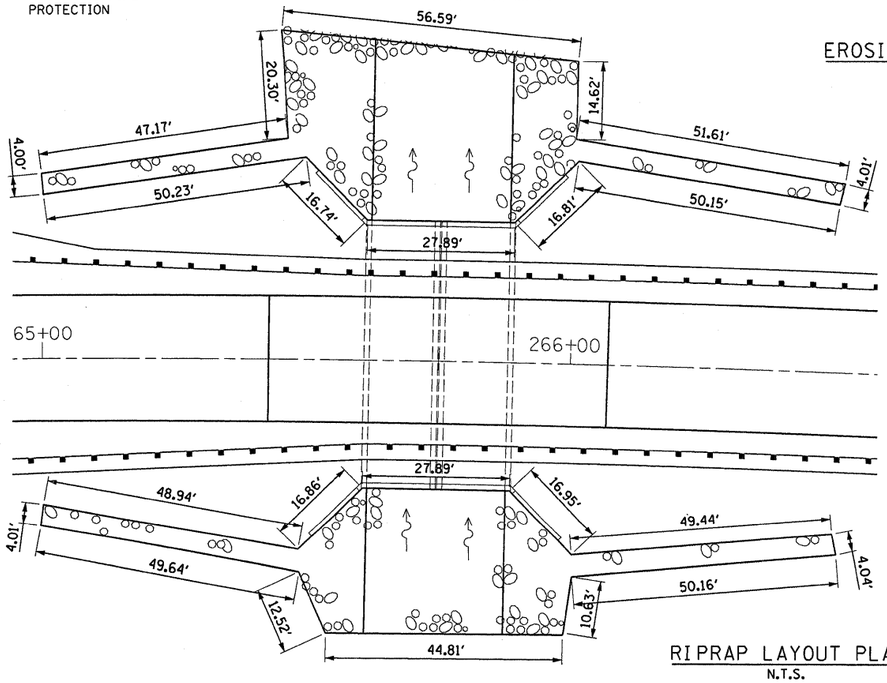
EROSION AND SEDIMENT CONTROL PLAN
SN 027-2014

SCALE: 1":20' | SHEET NO. OF SHEETS | STA. 21+00 | TO STA. 27+00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR, 108-BR, 108-BR-1	FORD	92	23
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EROSION CONTROL PLAN



RIPRAP LAYOUT PLAN
N.T.S.

LEGEND:

- PROPOSED DITCH
- PROPOSED SWALE
- END SECTION
- TEMPORARY DITCH CHECK
- RIPRAP, CLASS A4
- INLET AND PIPE PROTECTION
- EROSION CONTROL BLANKET AND PERMANENT SEEDING CLASS 3 (TEMPORARY EROSION CONTROL SEEDING AS NEEDED)
- RIPRAP
- PERIMETER EROSION BARRIER

0 20 40 60
SCALE IN FEET

SN 027-2015

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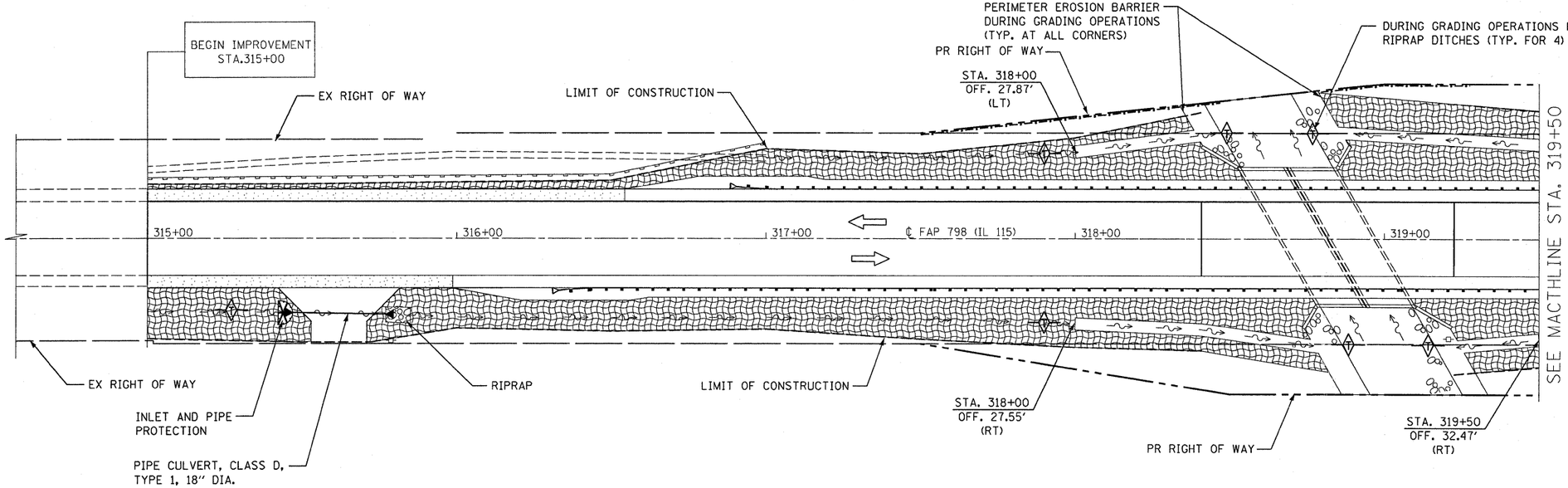
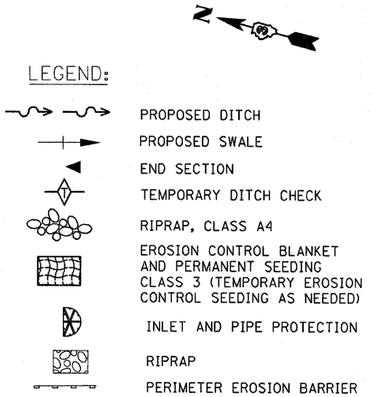
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

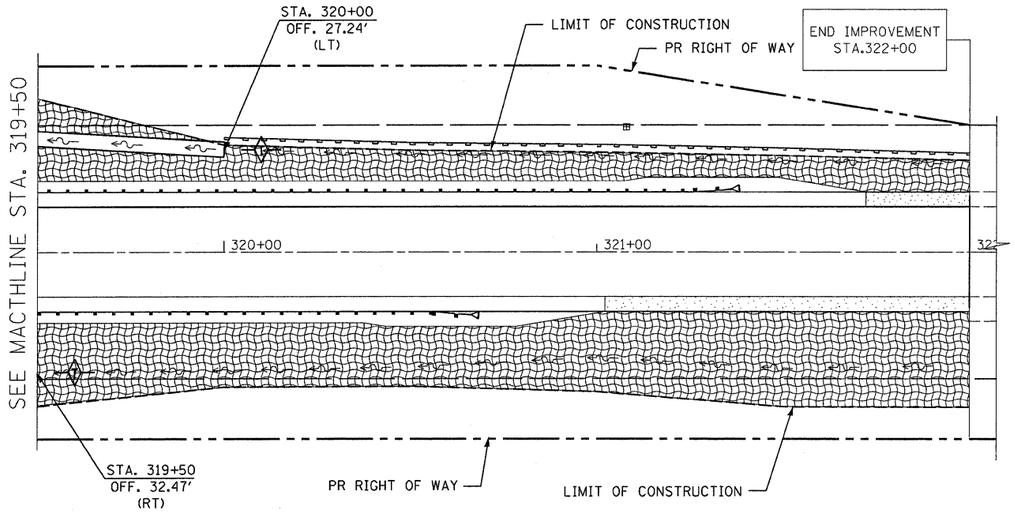
EROSION AND SEDIMENT CONTROL PLAN
SN 027-2015

SCALE: 1":20' | SHEET NO. OF SHEETS | STA. 263+20 | TO STA. 269+10

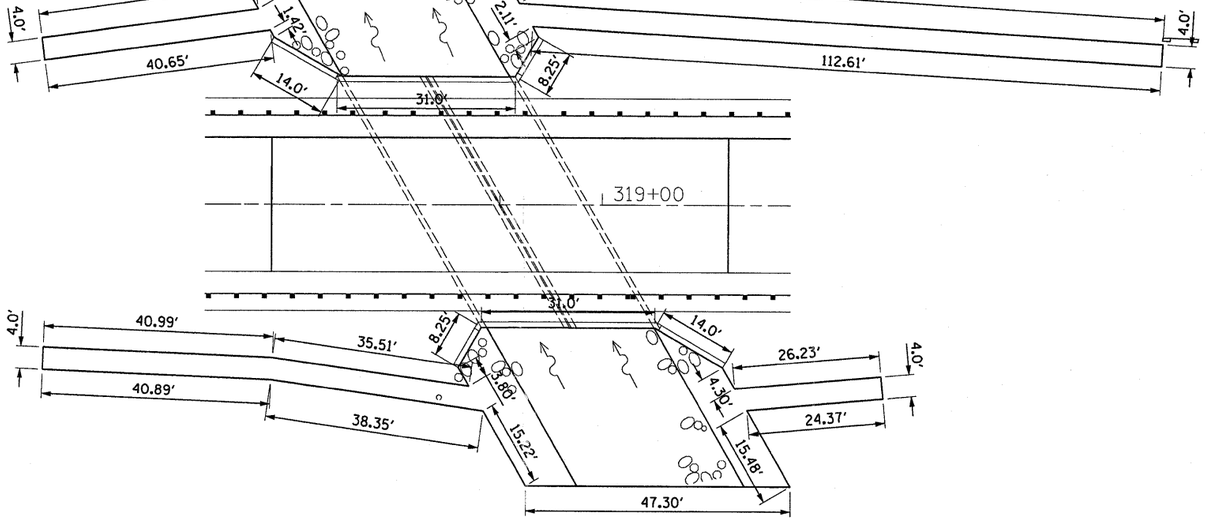
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	24
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		







EROSION CONTROL PLAN



RIPRAP LAYOUT PLAN
N.T.S.

0 20 40 60
SCALE IN FEET

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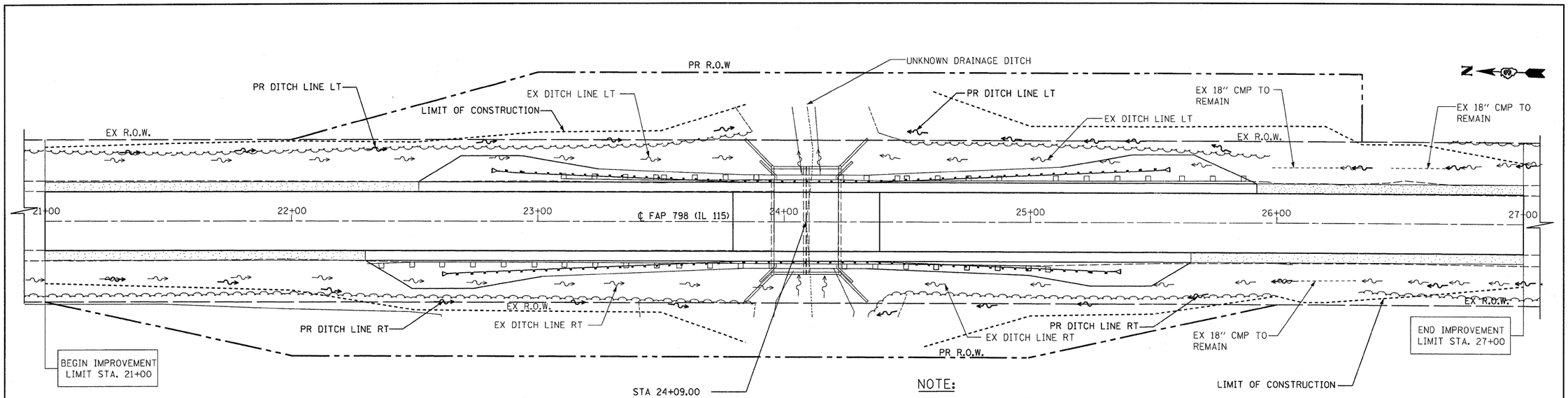
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL PLAN
SN 027-2016

SCALE: 1": 20' | SHEET NO. OF SHEETS | STA. 315+00 TO STA. 322+00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	25
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
GRADES CHECKED
ALL NOTES REVIEWED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE



NOTE:

1. ON FIELD ENTRANCES SIDE SLOPE SHOULD BE 1:4

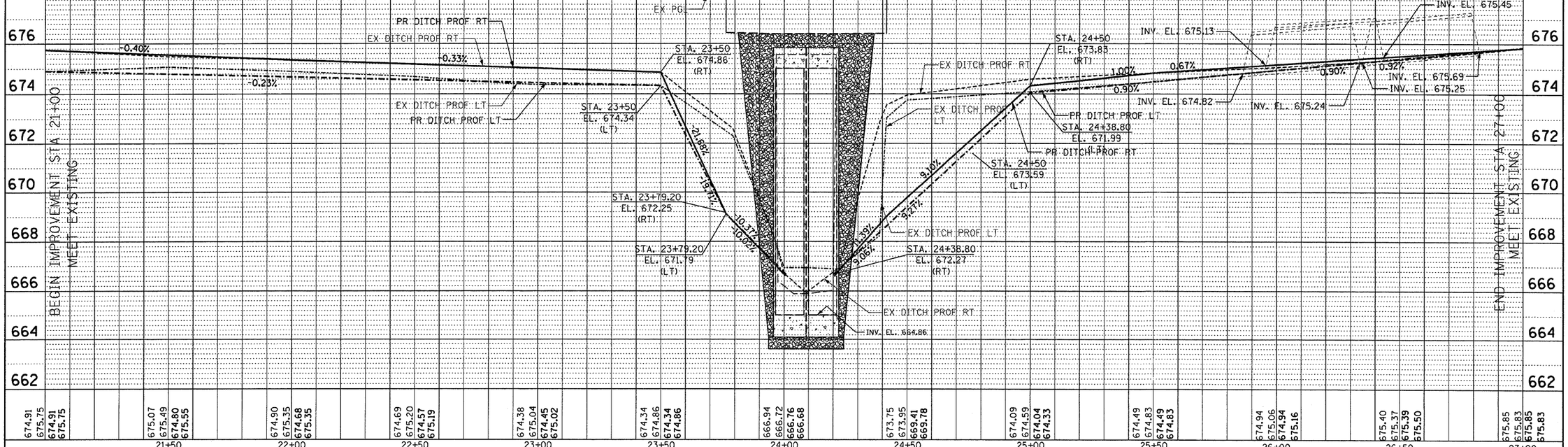
LEGEND:

EXISTING DITCH

PROPOSED DITCH

0 20 40 60
SCALE IN FEET

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
ALL NOTES REVIEWED
STRUCTURE NOTATNS CK'KD
NOTE BOOK
NO.
BY
DATE



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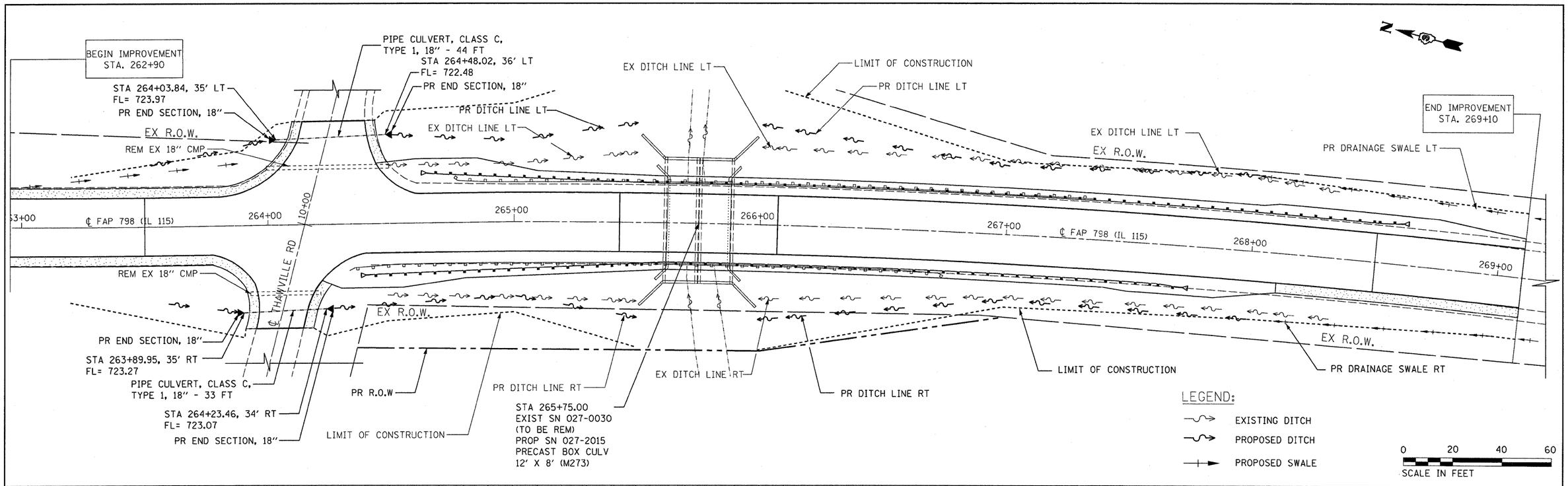
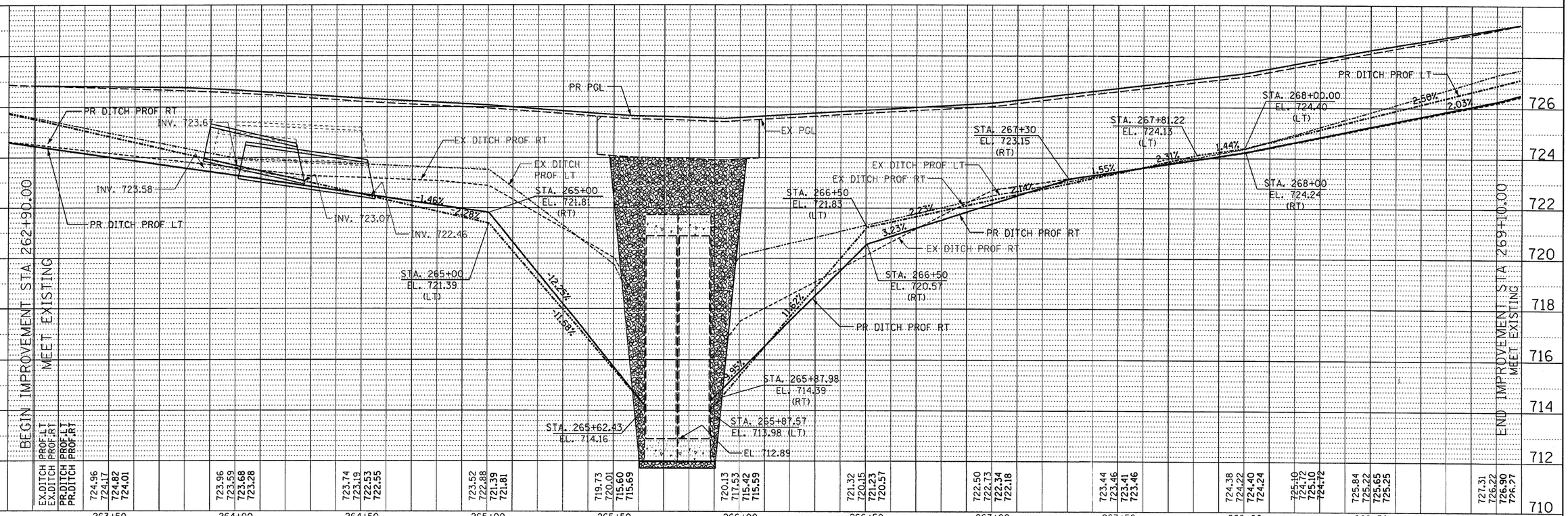
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE PLAN AND PROFILE
SN 027-2014

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 21+00 | TO STA. 27+00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	26
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





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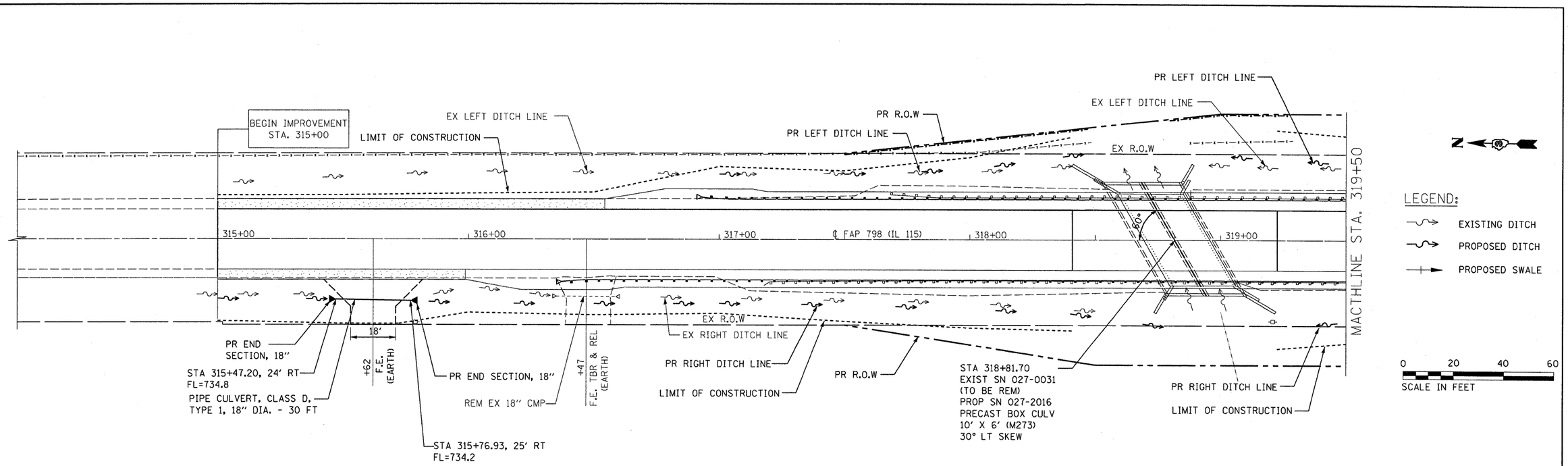
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

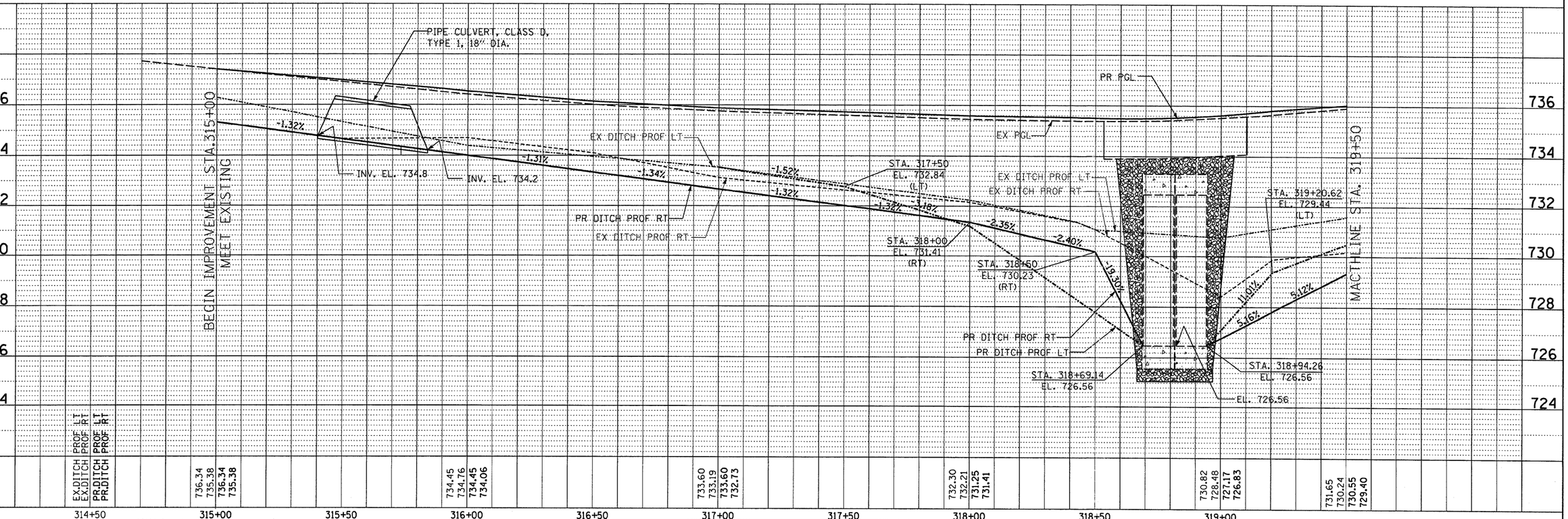
S.N. 027-2015 DRAINAGE PLAN AND PROFILE

SCALE: 1":20' | SHEET NO. OF SHEETS | STA. 264+56.69 TO STA. 268+45

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	27
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, NOTE BOOK, NO., BY, DATE
PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, ALIGNMENT CHECKED, STRUCTURE, NOTE BOOK, NO., BY, DATE





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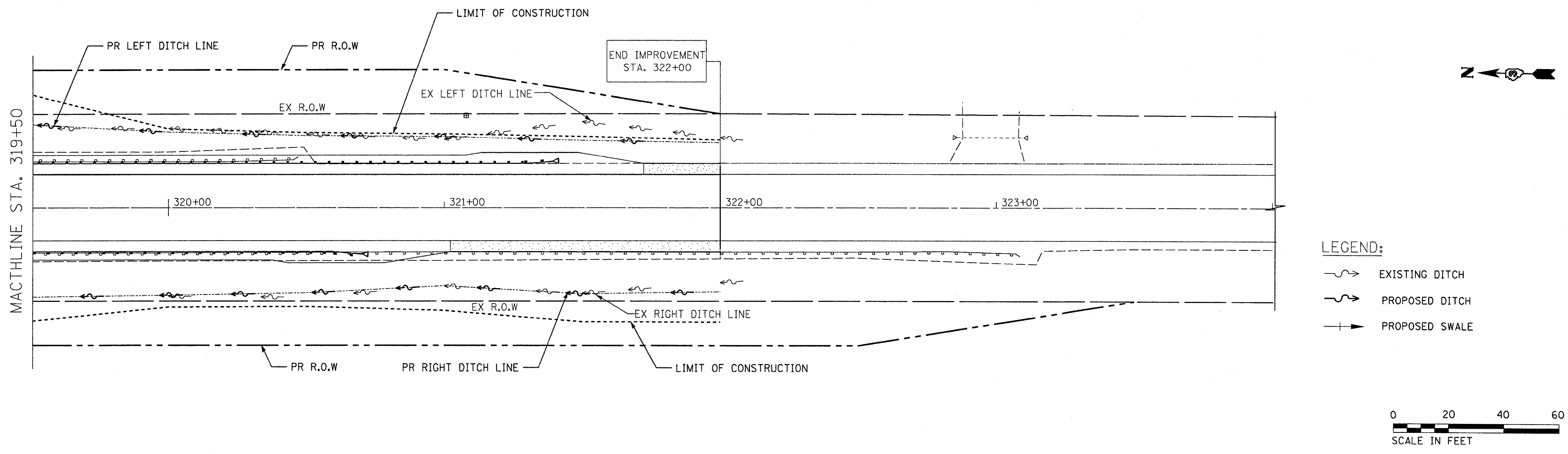
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

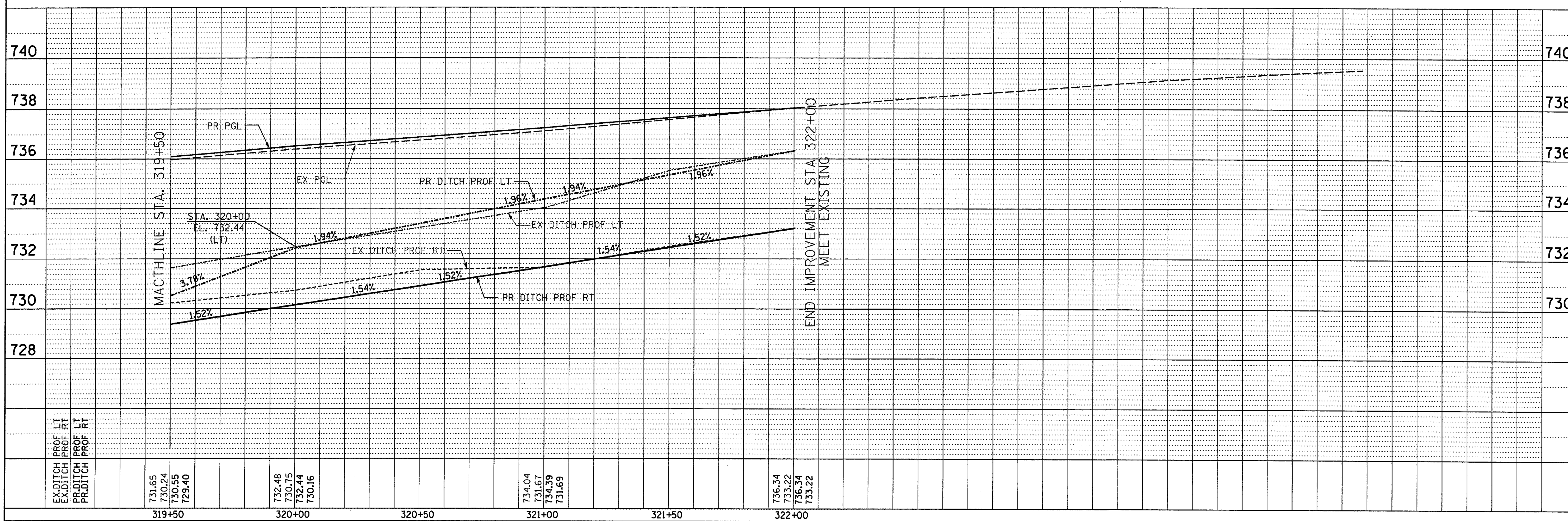
DRAINAGE PLAN AND PROFILE
SN 027-2016 SHEET 1 OF 2

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 315+00 TO STA. 319+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	28
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN / PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
ALIGNMENT CHECKED
STRUCTURE NO(S)/FA'S CHKD
NOTE BOOK
NO.
BY
DATE





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	PLOT SCALE = 20.00 ' / IN.	DRAWN RM/FZ/DK/NS	REVISED -		
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		DATE AUGUST 2008	REVISED -		SCALE: 1"=20' SHEET NO. OF SHEETS STA. 319+50 TO STA. 322+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	29
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

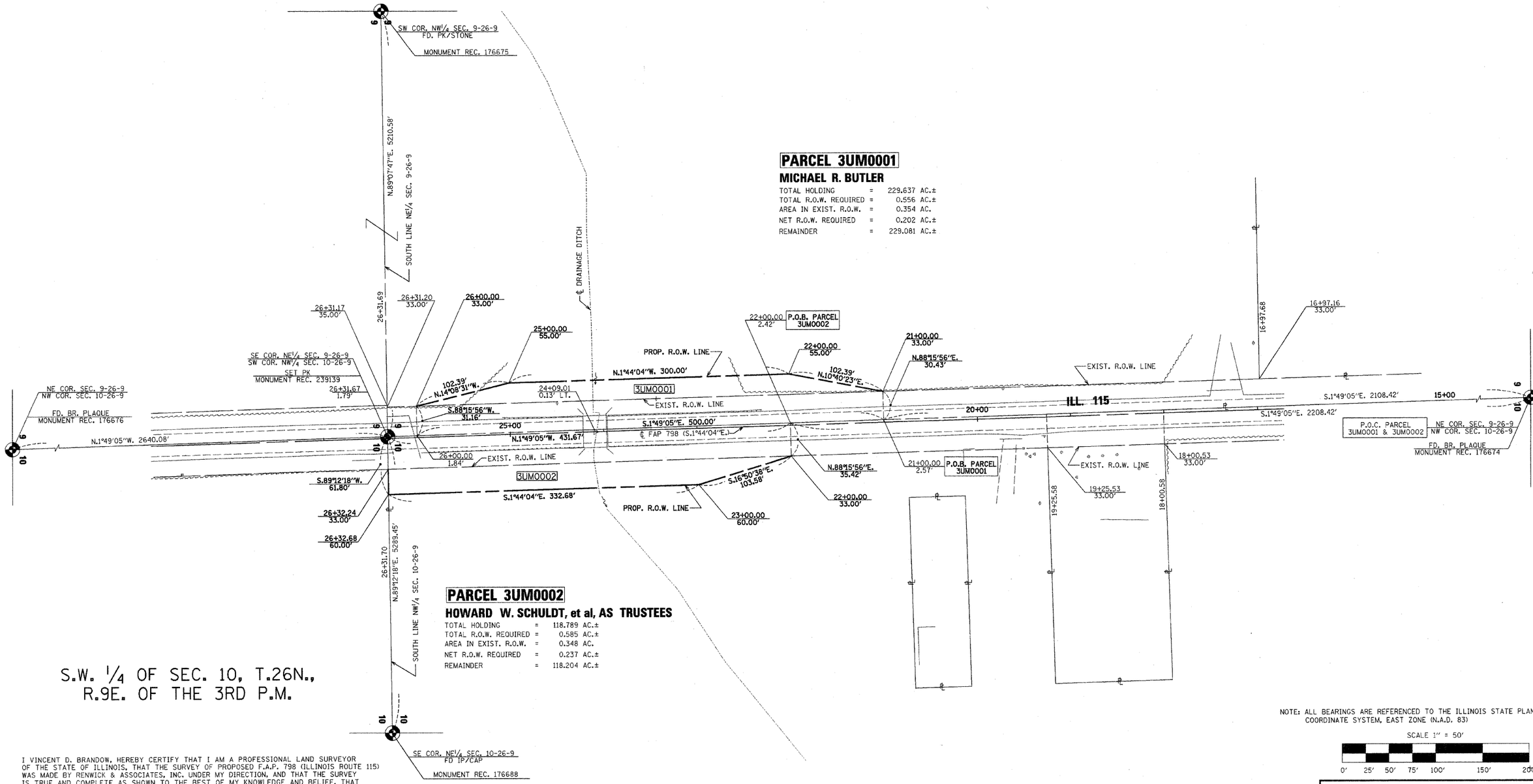
PLAN: NOTE BOOK, NO., SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, CADD FILE NAME, BY, DATE

PROFILE: NOTE BOOK, NO., SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTAT'NS CHK'D, BY, DATE

RECORDED AS DOCUMENT NO.

S.E. 1/4 OF SEC. 9, T.26N., R.9E. OF THE 3RD P.M.

N.E. 1/4 OF SEC. 9, T.26N., R.9E. OF THE 3RD P.M.



PARCEL 3UM0001

MICHAEL R. BUTLER

TOTAL HOLDING	=	229.637 AC.±
TOTAL R.O.W. REQUIRED	=	0.556 AC.±
AREA IN EXIST. R.O.W.	=	0.354 AC.
NET R.O.W. REQUIRED	=	0.202 AC.±
REMAINDER	=	229.081 AC.±

PARCEL 3UM0002

HOWARD W. SCHULDT, et al, AS TRUSTEES

TOTAL HOLDING	=	118.789 AC.±
TOTAL R.O.W. REQUIRED	=	0.585 AC.±
AREA IN EXIST. R.O.W.	=	0.348 AC.
NET R.O.W. REQUIRED	=	0.237 AC.±
REMAINDER	=	118.204 AC.±

S.W. 1/4 OF SEC. 10, T.26N., R.9E. OF THE 3RD P.M.

N.W. 1/4 OF SEC. 10, T.26N., R.9E. OF THE 3RD P.M.

NOTE: ALL BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE (N.A.D. 83)

SCALE 1" = 50'

0' 25' 50' 75' 100' 150' 200'

I VINCENT D. BRANDOW, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, THAT THE SURVEY OF PROPOSED F.A.P. 798 (ILLINOIS ROUTE 115) WAS MADE BY RENWICK & ASSOCIATES, INC. UNDER MY DIRECTION, AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT ALL MONUMENTS AND MARKS ARE OF THE CHARACTER AND OCCUPY THE POSITION SHOWN THEREON, AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

DATE: 04-11-08

Vincent D. Brandow
ILLINOIS PROFESSIONAL LAND SURVEYOR
NO. 2655

SURVEY BOOK NO. _____

11-30-08
EXPIRATION DATE

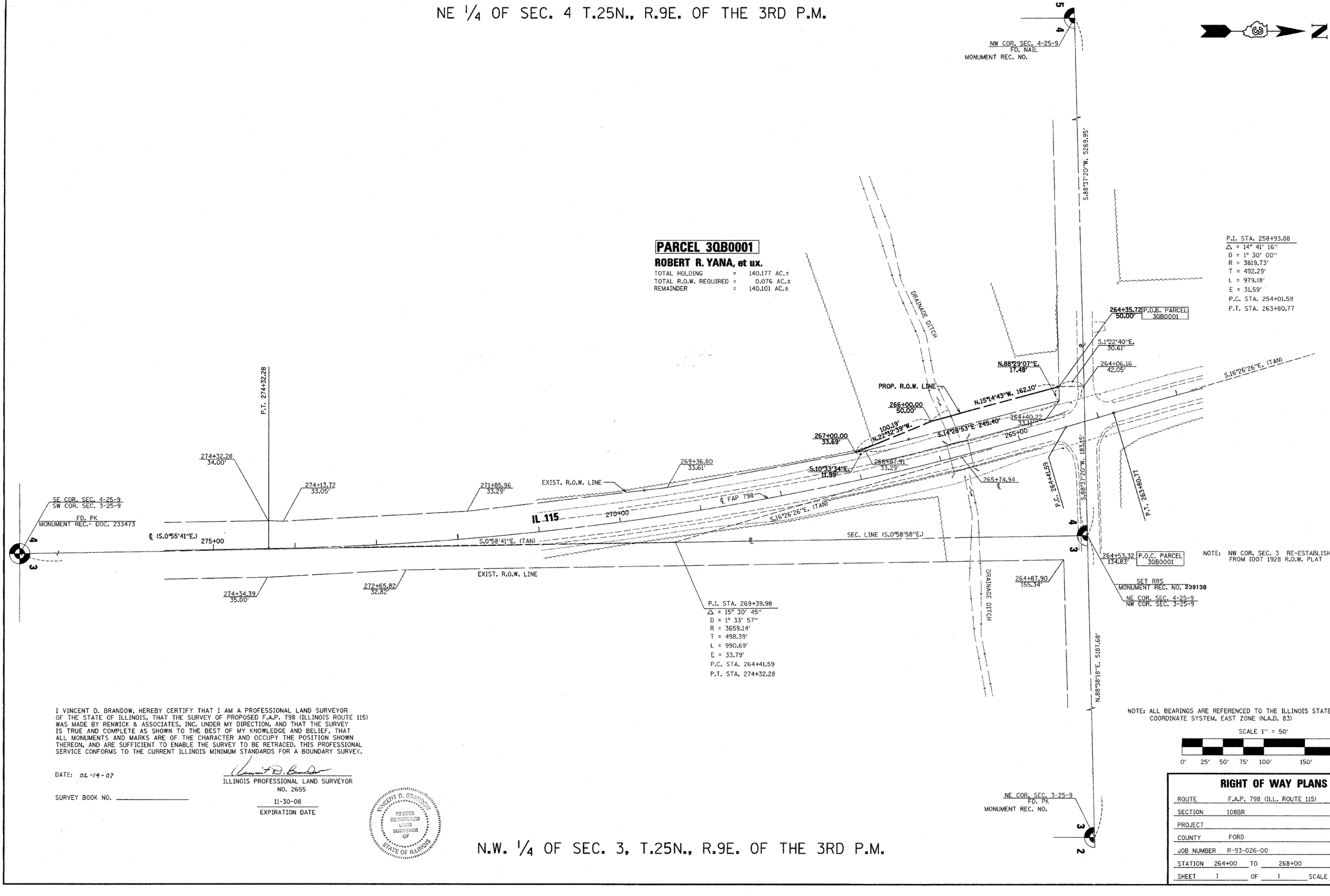
VINCENT D. BRANDOW
062-035155
REGISTERED
LAND
SURVEYOR
OF
STATE OF ILLINOIS

RIGHT OF WAY PLANS

ROUTE	F.A.P. 798 (ILL. ROUTE 115)
SECTION	107BR
PROJECT	
COUNTY	FORD
JOB NUMBER	R-93-005-07
STATION	20+00 TO 27+00
SHEET	1 OF 1 SCALE 1" = 50'

RECORDED AS DOCUMENT NO.

NE 1/4 OF SEC. 4 T.25N., R.9E. OF THE 3RD P.M.



I VINCENT D. BRANDOW, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, THAT THE SURVEY OF PROPOSED F.A.P. 798 (ILLINOIS ROUTE 115) WAS MADE BY RENWICK & ASSOCIATES, INC. UNDER MY DIRECTION, AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT ALL MONUMENTS AND MARKS ARE OF THE CHARACTER AND OCCUPY THE POSITION SHOWN THEREON, AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

DATE: 02-14-07

ILLINOIS PROFESSIONAL LAND SURVEYOR
NO. 2655

11-30-08
EXPIRATION DATE

SURVEY BOOK NO. _____

VINCENT D. BRANDOW
2655
REGISTERED
LAND
SURVEYOR
OF
STATE OF ILLINOIS

N.W. 1/4 OF SEC. 3, T.25N., R.9E. OF THE 3RD P.M.

NOTE: ALL BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE (N.A.D. 83)

SCALE 1" = 50'

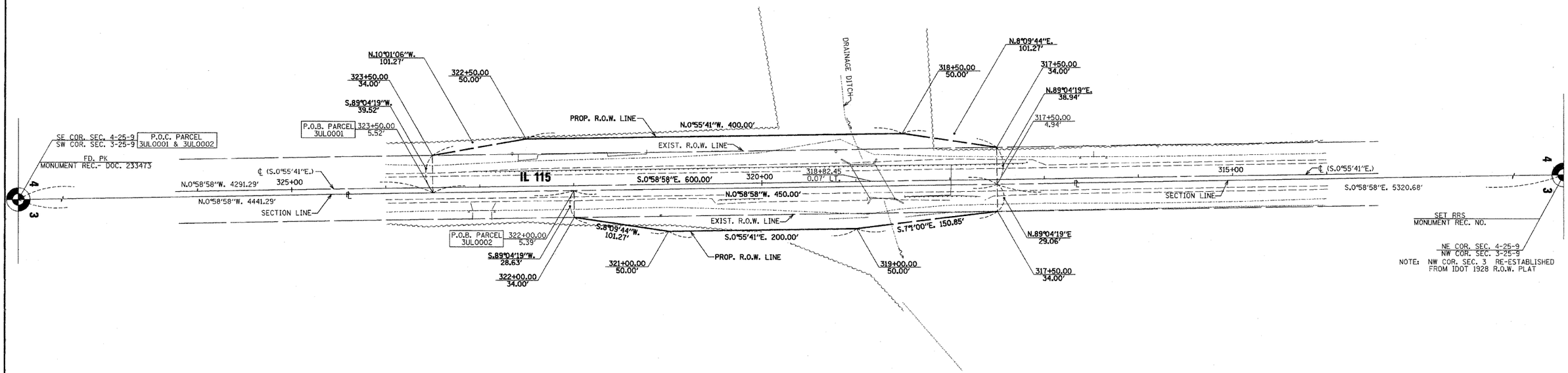
0' 25' 50' 75' 100' 150' 200'

RIGHT OF WAY PLANS

ROUTE	F.A.P. 798 (ILL. ROUTE 115)
SECTION	108BR
PROJECT	
COUNTY	FORD
JOB NUMBER	R-93-026-00
STATION	264+00 TO 268+00
SHEET	1 OF 1 SCALE 1" = 50'

RECORDED AS DOCUMENT NO.

NE 1/4 OF SEC. 4 T.25N., R.9E. OF THE 3RD P.M.



PARCEL 3UL0001

VERA EVADELL JOHNSON, LIFE ESTATE

TOTAL HOLDING	=	165.441 AC.±
TOTAL R.O.W. REQUIRED	=	0.724 AC.±
AREA IN EXIST. R.O.W.	=	0.540 AC.±
NET R.O.W. REQUIRED	=	0.184 AC.±
REMAINDER	=	164.717 AC.±

PARCEL 3UL0002

DOROTHY L. BRADBURY, TRUSTEE

TOTAL HOLDING	=	228.615 AC.±
TOTAL R.O.W. REQUIRED	=	0.417 AC.±
AREA IN EXIST. R.O.W.	=	0.298 AC.±
NET R.O.W. REQUIRED	=	0.119 AC.±
REMAINDER	=	228.198 AC.±

I VINCENT D. BRANDOW, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, THAT THE SURVEY OF PROPOSED F.A.P. 798 (ILLINOIS ROUTE 115) WAS MADE BY RENWICK & ASSOCIATES, INC. UNDER MY DIRECTION, AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT ALL MONUMENTS AND MARKS ARE OF THE CHARACTER AND OCCUPY THE POSITION SHOWN THEREON, AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

DATE: 2-14-2007

Vincent D. Brandow
ILLINOIS PROFESSIONAL LAND SURVEYOR
NO. 2655

11-30-08
EXPIRATION DATE

SURVEY BOOK NO. _____

VINCENT D. BRANDOW 2655 REGISTERED LAND SURVEYOR STATE OF ILLINOIS

N.W. 1/4 OF SEC. 3, T.25N., R.9E. OF THE 3RD P.M.

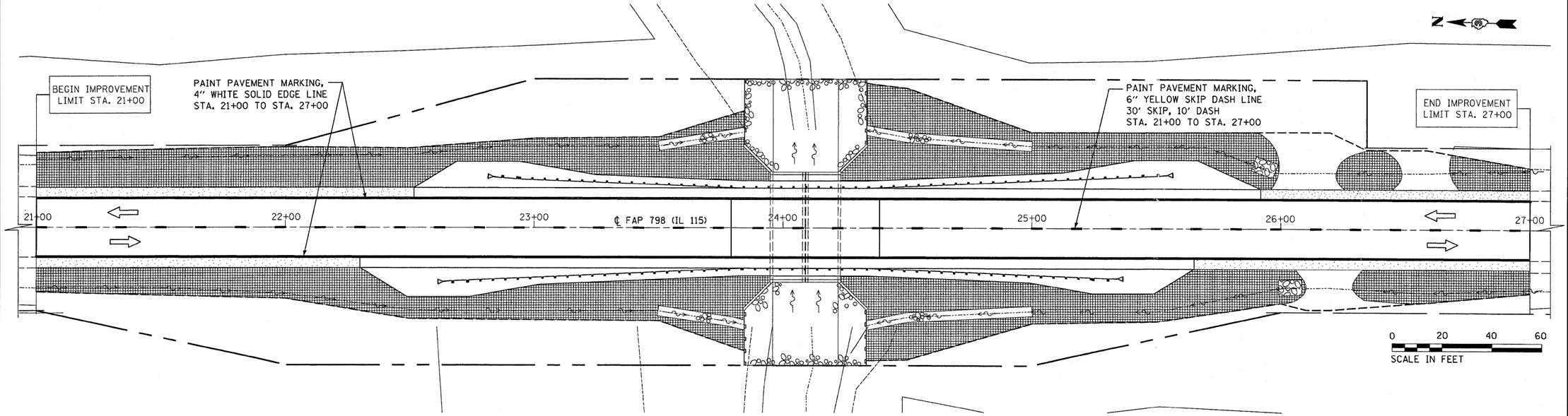
NOTE: ALL BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE (N.A.D. 83)

SCALE 1" = 50'

0' 25' 50' 75' 100' 150' 200'

RIGHT OF WAY PLANS

ROUTE	F.A.P. 798 (ILL. ROUTE 115)
SECTION	108BR-1
PROJECT	
COUNTY	FORD
JOB NUMBER	R-93-004-07
STATION	317+00 TO 325+00
SHEET	1 OF 1 SCALE 1" = 50'



PAVEMENT MARKING DETAILS AND LANDSCAPING PLAN

LEGEND:

RIPRAP, CLASS A4

PERMANENT SEEDING CLASS 3
WITH EROSION CONTROL BLANKET
(TEMPORARY EROSION CONTROL
SEEDING AS NEEDED)

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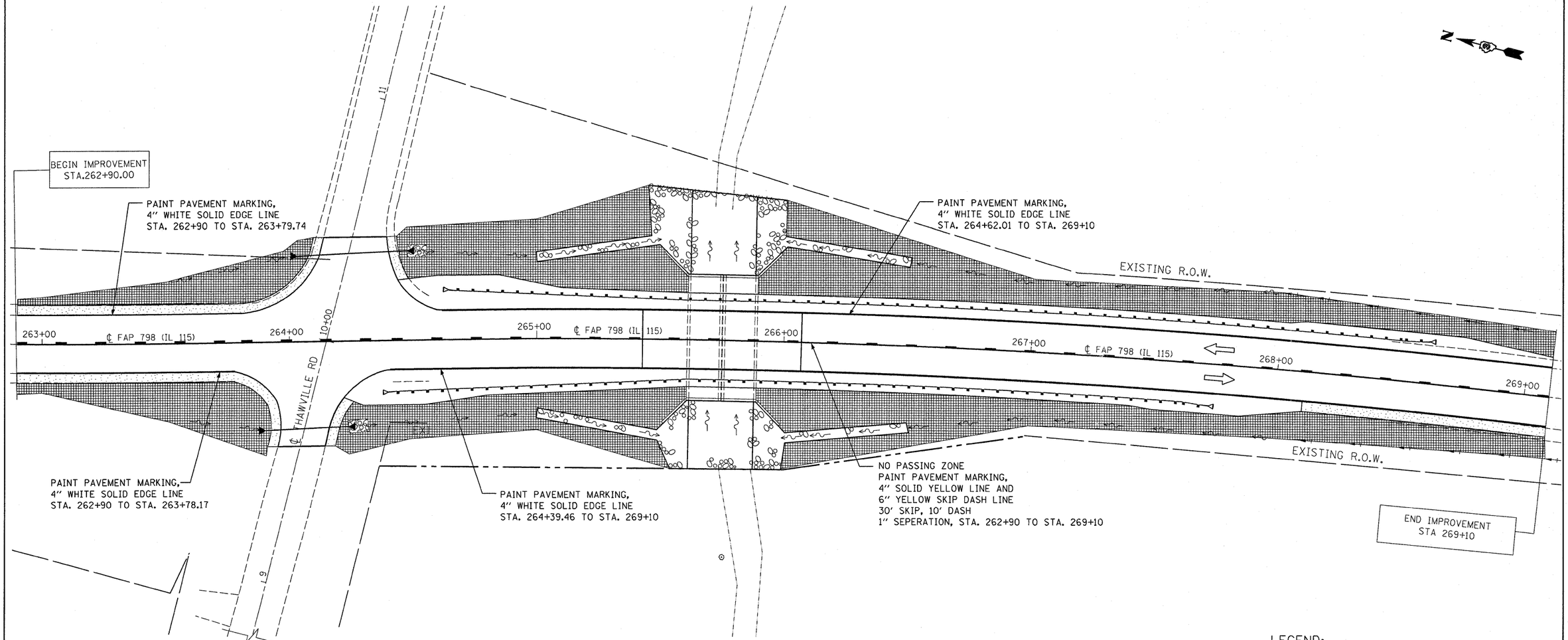
		DRAWN - RM/FZ/DK/NS	REVISED -
	PLOT SCALE = 21.176 ' / IN.	CHECKED - AS	REVISED -
	PLOT DATE = Aug 22, 2008 - 01:17:35 PM	DATE - AUGUST 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND LANDSCAPING PLAN
SN 027-2014

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 21+00.00 | TO STA. 27+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR, 108-BR, 108-BR-1	FORD	92	33
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PAVEMENT MARKING DETAILS AND LANDSCAPING PLAN

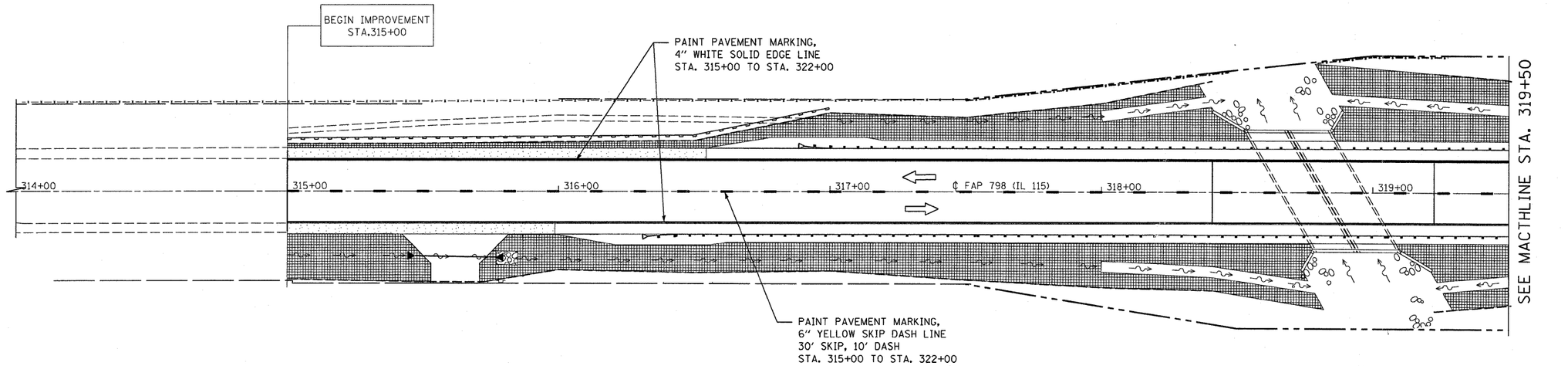
FILE NAME = c:\pw_work\PWIDOT\CARPENTERDJ\dms30072\cpvmt-landscp-2030.dgn	USER NAME = carpenterdj	DESIGNED - DB	REVISED -
		DRAWN - RM/FZ/DK/NS	REVISED -
	PLOT SCALE = 20.00 ' / IN.	CHECKED - AS	REVISED -
	PLOT DATE = Aug 22, 2008 - 01:16:30 PM	DATE - AUGUST 2008	REVISED -

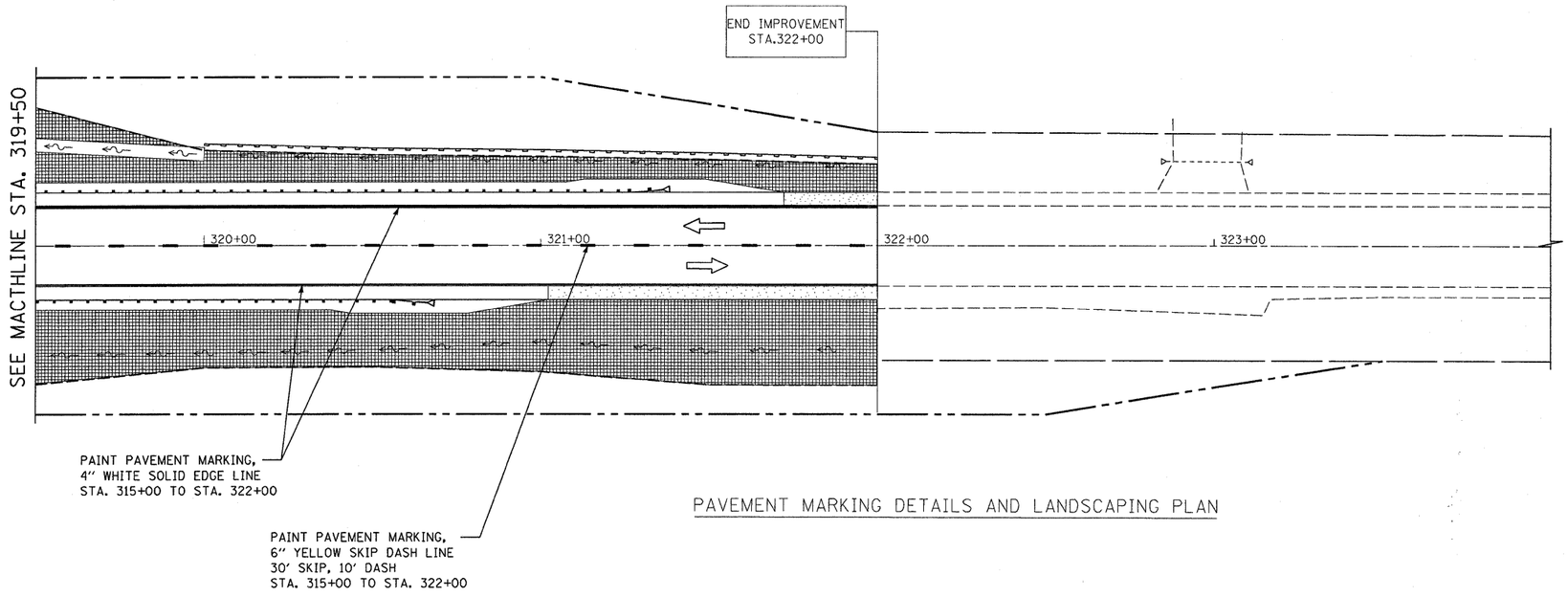
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND LANDSCAPING PLAN
SN 027-2015

SCALE: 1"=20' | SHEET NO. OF SHEETS | STA. 264+56.69 TO STA. 268+45

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	34
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





LEGEND:

RIPRAP, CLASS A4

PERMANENT SEEDING CLASS 3 WITH EROSION CONTROL BLANKET (TEMPORARY EROSION CONTROL SEEDING AS NEEDED)

PAVEMENT MARKING DETAILS AND LANDSCAPING PLAN

0 20 40 60

SCALE IN FEET

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	PLOT DATE = Aug 22, 2008 - 01:14:54 PM	DATE - AUGUST 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND LANDSCAPING PLAN
SN 027-2016

SCALE: 1": 20' | SHEET NO. OF SHEETS | STA. 315+00 TO STA. 322+00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	35
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Bench Mark No. 112:
Chiseled square top west side of headwall, Elev. 671.771

Existing Structure:
The existing structure number 027-0039, built in 1927 as SBI Route 115, Section 107BR, Ford County at station 24+09.00 is a one span reinforced concrete slab bridge, with closed abutments supported on untreated timber piles. The existing bridge is 26'-0" long back to back of abutments & 36'-2" wide out to out of slab. The existing structure to be removed and replaced by 2-12' wide x 10' deep Pre-Cast Concrete Box Culverts. Traffic to be mainained utilizing detour.
No Salvage.

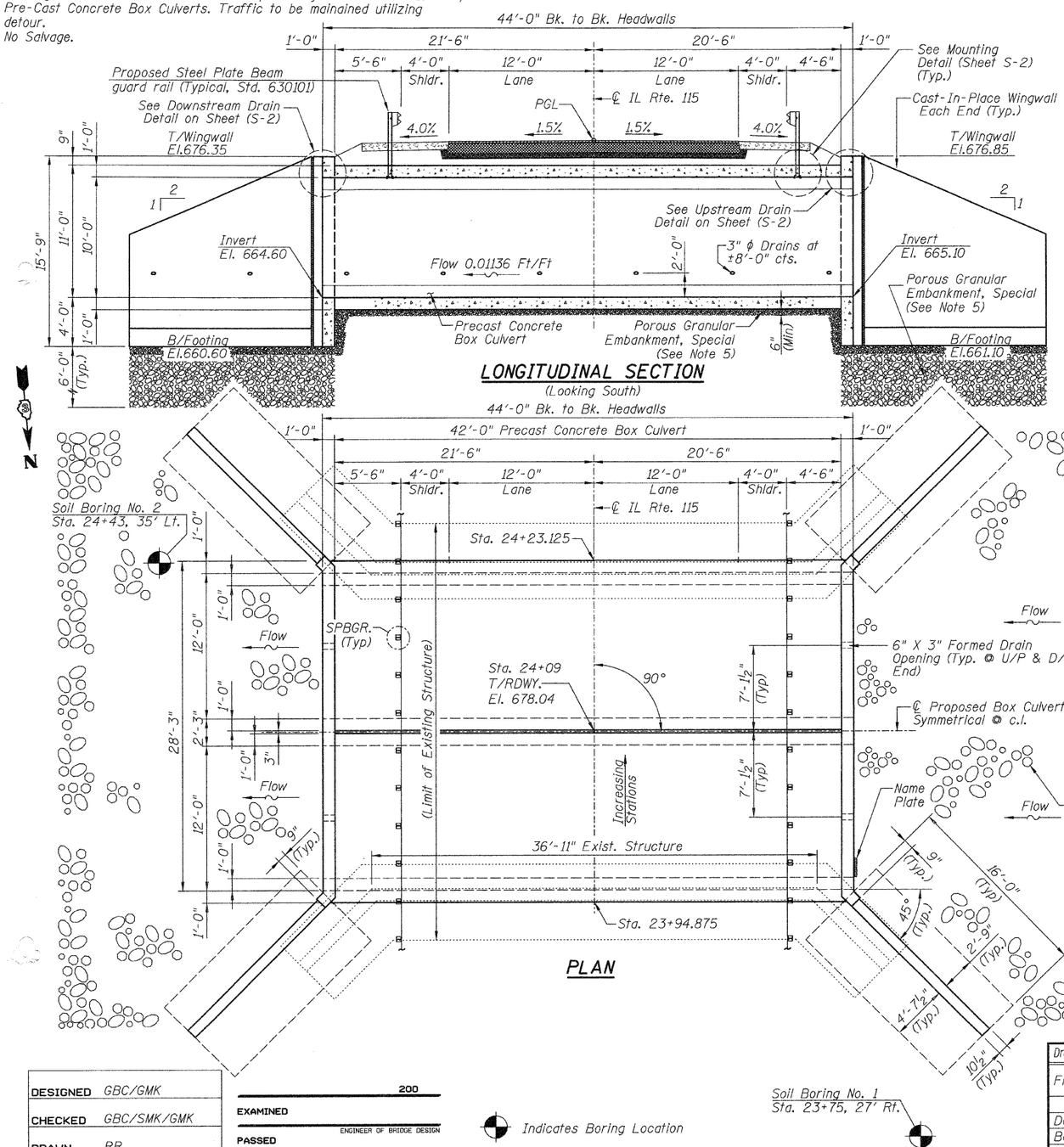
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 798	*	FORD	92	36
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-	

SHEET NO. S1
S4 SHEETS

* 107-BR, 108-BR, 108-BR-1 Contract # 66698



LONGITUDINAL SECTION
(Looking South)

PLAN

Soil Boring No. 1
Sta. 23+75, 27' Rt.

Indicates Boring Location

DESIGNED	GBC/GMK
CHECKED	GBC/SMK/GMK
DRAWN	RR
CHECKED	SMK

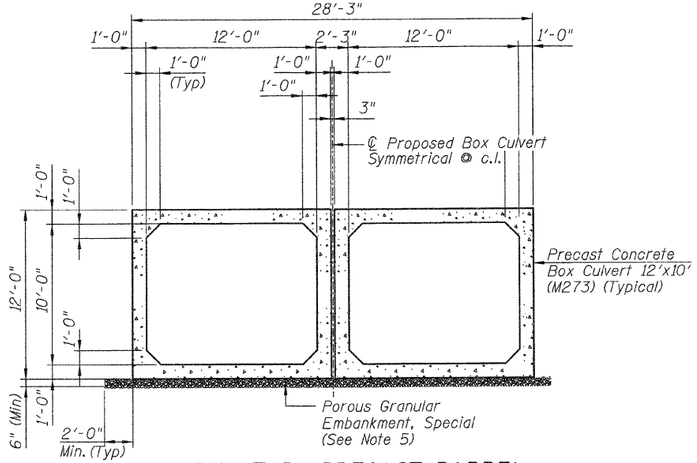
200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES



SECTION THRU PRECAST BARREL

3" nominal space shall be left between adjacent precast sections. After the precast cells are in place and backfill has been placed to mid height of the precast concrete box section on each side, the space between the cells shall be filled with class SI concrete. Cost included with pay item for "precast concrete box culvert 12'x10' (M273)".

HIGHWAY CLASSIFICATION

F.A.P. RTE. 798-IL.RTE 115
Functional Class: Minor Arterial (Non-Urban)
ADT: 750 (2005); ADT 1000 (2025)
ADTT: 175 (2005); 230 (2025)
DHV: 75
Design Speed: 55 Mph
Posted Speed: 55 Mph

LOADING HS20-44

Allow 50 #/sq. ft. for Future Wearing Surface

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

Field Units
Cast-In-Place Reinforced Concrete
f'c = 3,500 psi (Concrete)
fy = 60,000 psi (Reinforcement)
Precast Concrete Box Culvert, Design as per AASHTO M 273 (ASTM C850).
f'c = 5,000 psi
fy = 65,000 psi (Welded Wire Fabric)

SEISMIC DATA

Seismic Performance Category (S.P.C.)=A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0

WATERWAY INFORMATION

Drainage Area = 4.84 Sq. Mi. Exist. Low Grade El. = 677.91 ft. @ Sta. 24+00.00 Prop. Low Grade El. = 677.91 ft. @ Sta. 24+00.00

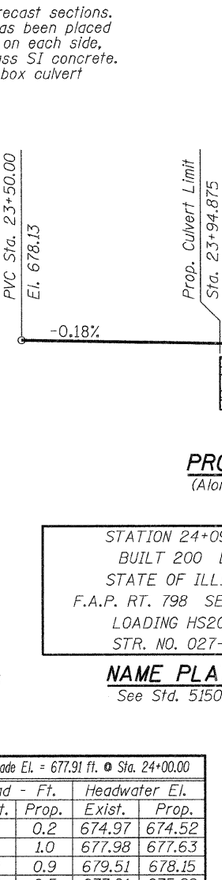
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	1211	202	222	674.33	0.6	0.2	674.97	674.52
Design	50	2001	229	240	676.62	1.4	1.0	677.98	677.63
Base	100	2358	229	240	677.30	2.2	0.9	679.51	678.15
Overtopping (Exist.)	21	1583	229	240	675.51	2.4	0.5	677.91	675.99
Overtopping (Prop.)	59	2110	229	240	676.85	1.9	1.1	678.70	677.91
Max. Calc.	500	3233	-	-	677.95	-	-	-	-

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	512.0
Porous Granular Embankment, Special	Cu. Yd.	227.0
Removal of Existing Structures No. 3	Each	1
Structure Excavation	Cu. Yd.	1,348.0
Reinforcement Bars	Pound	6,470.0
Reinforcement Bars, (Epoxy Coated)	Pound	1,080.0
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	66.0
Precast Concrete Box Culvert 12'x10' (M273)	Foot	84.0

GENERAL NOTES

1. Reinforcement bars shall Conform to the requirements of ASTM A 706, Grade 60 (IL Modified). See Special Provisions.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
4. Excavation behind existing abutment walls shall be done before removing the existing supestructure.
5. The material used to replace the unsuitable material removed below the bottom of the proposed precast concrete box culvert and cast-in-place concrete wingwalls shall be clean crushed material CA-1 on the bottom 5'-6" layer and CA-7 on the top 6" layer and shall be paid for as "Porous Granular Embankment, Special".



PROFILE GRADE
(Along ℄ Il. Route 115)

STATION 24+09.00
BUILT 200 BY
STATE OF ILLINOIS
F.A.P. RT. 798 SEC. 107BR
LOADING HS20-44
STR. NO. 027-2014

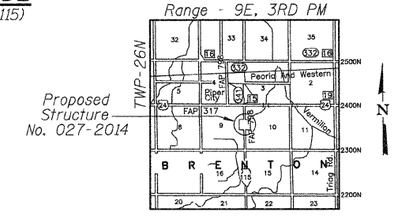
NAME PLATE
See Std. 515001

STATE OF ILLINOIS
SYED M. KAZI
081-004047
REGISTERED STRUCTURAL ENGINEER

Syed M. Kazi
Licensed Structural Engineer
State of Illinois
Lic. No. 081-004047
Expires: 11-30-2008

CURVE DATA:
Length of Curve = 100.00 Ft.
PVI Sta 24+00.00
El. 678.04'

Range - 9E, 3RD PM



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 115 OVER DRAINAGE DITCH
F.A.P. ROUTE 798 - SECTION 107-BR
FORD COUNTY
STATION 24+09.00
EXISTING STRUCTURE NO. 027-0039
PROPOSED STRUCTURE NO. 027-2014
Scale: None August 2008

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

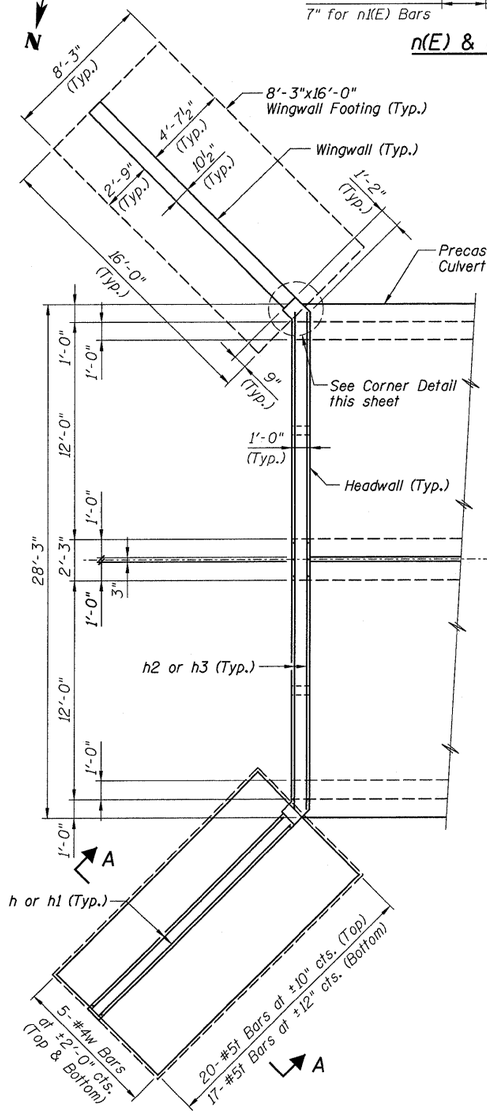
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 798	*	FORD	92	37
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-	

SHEET NO. S2
S4 SHEETS

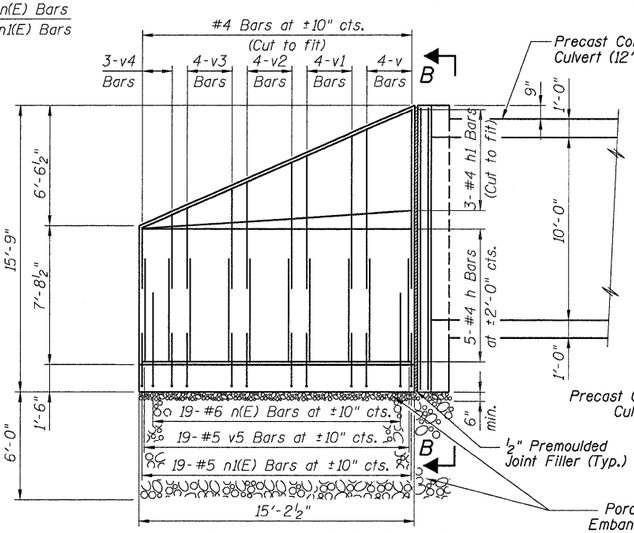
* 107-BR, 108-BR, 108-BR-1 Contract # 66698

n(E) & n1(E) BARS

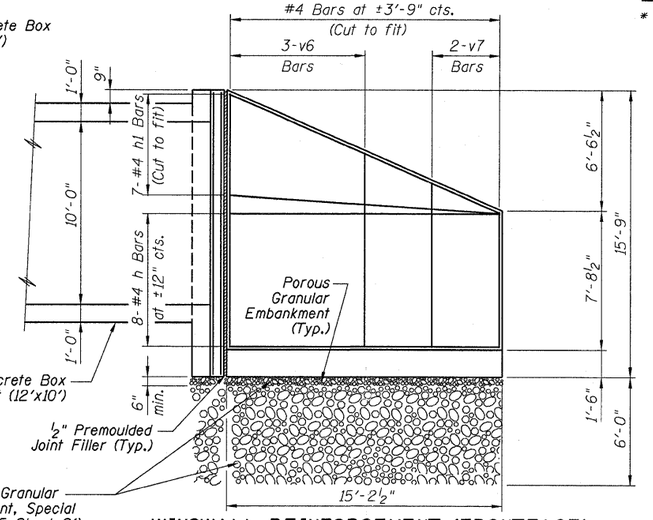
8" for n(E) Bars
7" for n1(E) Bars
5'-2" for n(E) Bars
2'-11" for n1(E) Bars



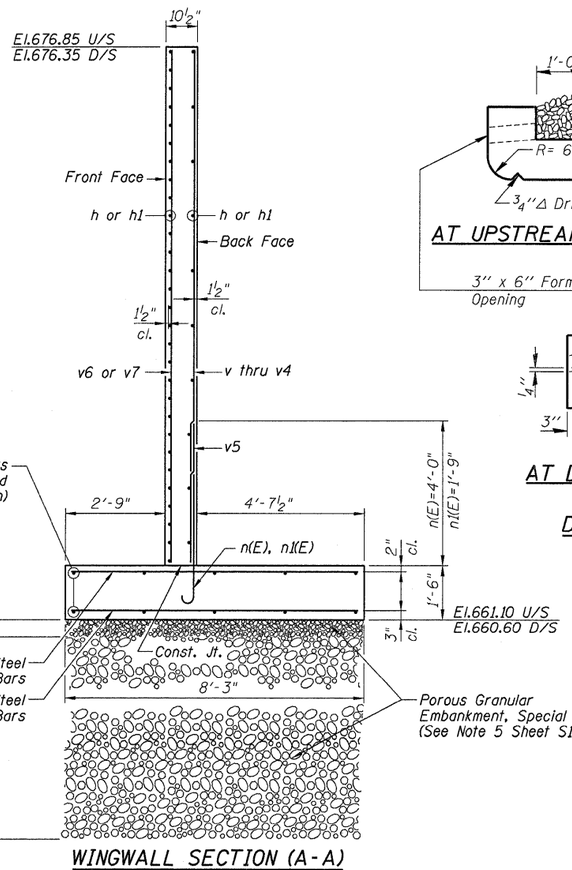
PLAN



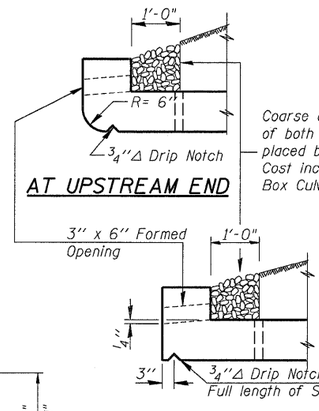
WINGWALL REINFORCEMENT (BACKFACE)



WINGWALL REINFORCEMENT (FRONTFACE)

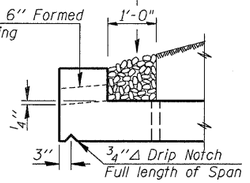


WINGWALL SECTION (A-A)
Allowable Soil Bearing Capacity = 3,200 psf



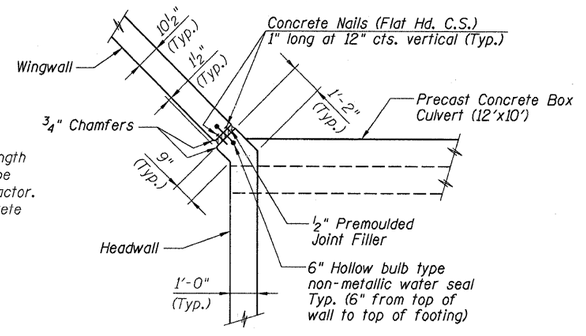
AT UPSTREAM END

Coarse aggregate full length of both headwalls. To be placed by Grading Contractor. Cost included with Concrete Box Culverts.

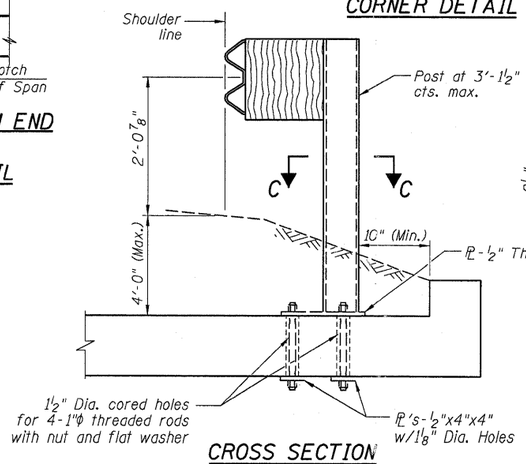


AT DOWNSTREAM END

DRAIN DETAIL

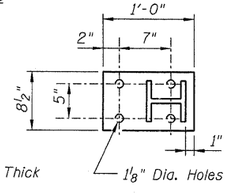


CORNER DETAIL



CROSS SECTION

GUARD RAIL MOUNTED ON TOP SLAB OF BOX CULVERT



SECTION C-C

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d1	16	#4	5'-8"	
d2	16	#4	5'-0"	
h	56	#4	15'-0"	
h1	40	#4	16'-4"	
h2	8	#8	27'-5"	
h3	12	#7	27'-5"	
h4	12	#5	27'-5"	
n(E)	76	#6	5'-10"	
n1(E)	76	#5	3'-6"	
n2(E)	28	#4	6'-0"	
s	56	#4	5'-3"	
s1	32	#4	3'-3"	
s2	16	#4	6'-3"	
t	148	#5	8'-0"	
u	112	#4	5'-9"	
v	16	#4	9'-10"	
v1	16	#4	8'-5"	
v2	16	#4	7'-0"	
v3	16	#4	5'-7"	
v4	12	#4	4'-2"	
v5	76	#5	5'-9"	
v6	12	#4	13'-11"	
v7	8	#4	9'-1"	
v8	12	#4	11'-6"	
v9	8	#4	12'-2"	
v10	8	#4	13'-2"	
w	40	#4	15'-9"	
Concrete Box Culvert			Cu. Yd.	66
Reinforcement Bars, Epoxy Coated			Pound	1,080
Reinforcement Bars			Pound	6,470

Notes:
1. Quantities shown are for four wingwalls and two headwalls.

DESIGNED	GBC/GMK
CHECKED	GBC/SMK/GMK
DRAWN	RR
CHECKED	SMK

200

EXAMINED
ENGINEER OF BRIDGE DESIGN

PASSED
ENGINEER OF BRIDGES AND STRUCTURES

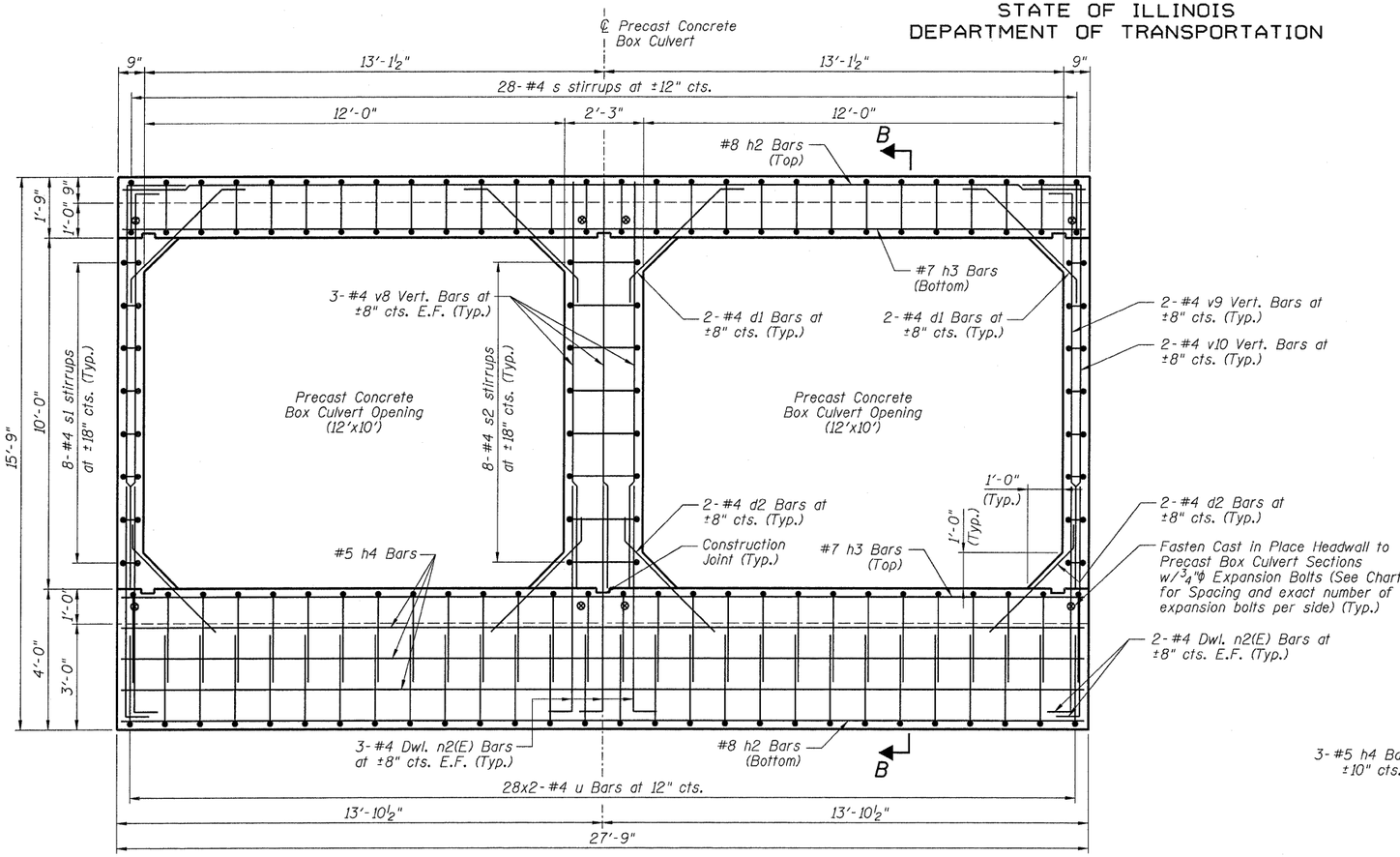
WINGWALL SECTIONS AND DETAILS
ILLINOIS ROUTE 115 OVER DRAINAGE DITCH
F.A.P. ROUTE 798 - SECTION 107-BR
FORD COUNTY
STATION 24+09.00
EXISTING STRUCTURE NO. 027-0039
PROPOSED STRUCTURE NO. 027-2014
Scale: None August 2008

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

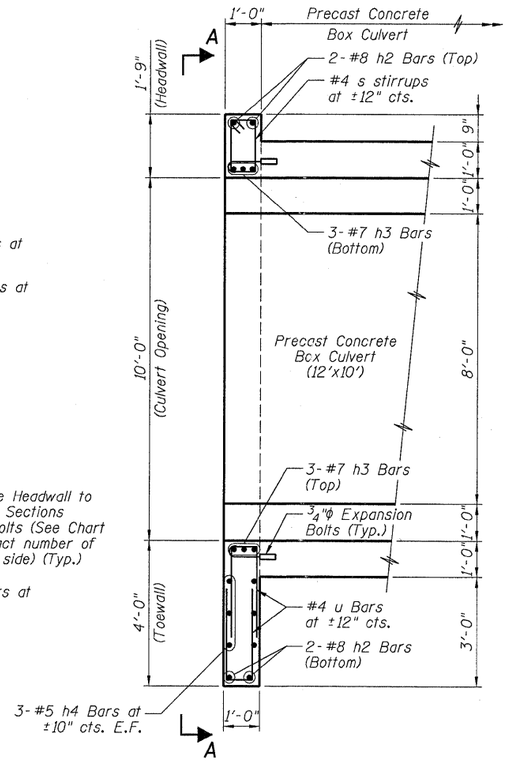
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 798	*	FORD	92	38
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		

SHEET NO. S3
S4 SHEETS

* 107-BR, 108-BR, 108-BR-1 Contract # 66698



HEADWALL SECTION (A-A)



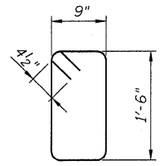
HEADWALL SECTION (B-B)

EXPANSION BOLT TABLE

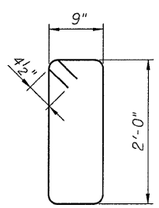
Clear Span or Clear Height	No. of ¾"φ Expansion bolts Req'd per side	
	No. *	Spacing
10.0	7	18"
12.0	8	19"

Notes:

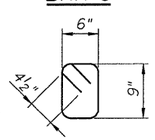
1. Use minimum of (1) one expansion bolt at each corner.
2. Total number of expansion bolts required = 120.
3. Expansion bolts shall be ¾"φ hooked bolts. Hooked bolts shall extend a minimum of 9" into the new concrete. Precast concrete manufacturer shall provide holes in precast concrete box culvert for ¾"φ expansion bolt inserts at specified locations.
4. Cost of ¾"φ expansion bolts included with pay item for "Precast Concrete Box Culvert 12'x10'" (M273).



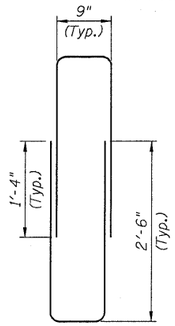
BAR s



BAR s2



BAR s1



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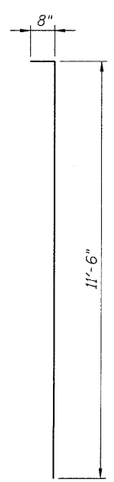
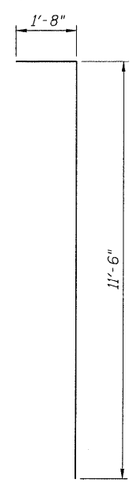
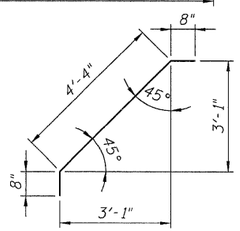


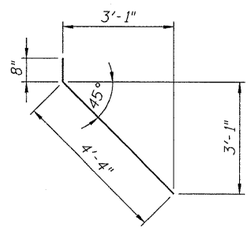
BAR v9



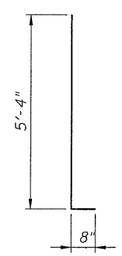
BAR v10



BAR d1



BAR d2



BAR n2(E)

DESIGNED	GBC/GMK
CHECKED	GBC/SMK/GMK
DRAWN	RR
CHECKED	SMK

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

HEADWALL SECTIONS AND DETAILS
ILLINOIS ROUTE 115 OVER DRAINAGE DITCH
F.A.P. ROUTE 798 - SECTION 107-BR
FORD COUNTY
STATION 24+09.00
EXISTING STRUCTURE NO. 027-0039
PROPOSED STRUCTURE NO. 027-2014
Scale: None August 2008

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 798	*	FORD	92	39
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. S4
S4 SHEETS

* 107-BR, 108-BR, 108-BR-1 Contract # 66698

Illinois Department of Transportation
Division of Highways
District 65, Ottawa

SOIL BORING LOG

Page 1 of 1

Date 10/8/05

ROUTE FAP 798 (IL 115) DESCRIPTION IL 115 over Drainage Ditch LOGGED BY Larry Myers

SECTION (107) BR LOCATION NE 1/4, SEC. 9, TWP. 26N, RNG. 9E, 3rd PM

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME automatic

STRUCT. NO. 027-0039
Station 024+09

BORING NO. #1: NW quad
Station 23+75
Offset 27.00ft Rt
Ground Surface Elev. 674.92 ft

Surface Water Elev. 686.67 ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion 664.9 ft ▽
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Augered, brown to black, Silty Clay fill			
672.92			
Stiff, brown to gray, Silty Clay	2		
	3 3	2.0 P	25.2
-5	1		
	2 2	1.0 P	25.0
668.42			
Stiff, gray, Silty Clay Loam Till	3		
	4 4	1.3 B	14.1
▽-10	3		
	3 3	1.5 B	14.3
	2		
	4 5	1.9 B	14.5
660.42			
Stiff, gray, Silt and fine. Sand	3		
-15			
	3 1	1.5 P	21.0
658.42			
Loose, gray, loamy, fine, Sand to coarse, Gravel	3		
	4 5		8.2
655.92			
-20	5		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Medium, gray, loamy, fine, Sand to coarse, Gravel with layers of fine to coarse, Sand *(continued)*			
650.42			
Hard, gray, Silt to Loam Till	-25 7		
	17 27	>4.5 P	21.3
	30		
	30 40	>4.5 P	11.5
-30	21		
	41 45	7.4 S	9.0
	15		
-35			
	25 25	5.1 S	8.0
638.92			
End of Boring			
-40			

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

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
District 65, Ottawa

SOIL BORING LOG

Page 1 of 1

Date 10/11/05

ROUTE FAP 798 (IL 115) DESCRIPTION IL 115 over Drainage Ditch LOGGED BY Larry Myers

SECTION (107) BR LOCATION NE 1/4, SEC. 9, TWP. 26N, RNG. 9E, 3rd PM

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME automatic

STRUCT. NO. 027-0039
Station 024+09

BORING NO. #2: SE quad
Station 24+43
Offset 35.00ft Lt
Ground Surface Elev. 675.61 ft

Surface Water Elev. 686.67 ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion 664.8 ft ▽
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Augered, black, Silty Clay fill			
673.11			
Hard, black, Silty Clay fill	3		
	3 3	>4.5 P	8.0
671.11			
Very stiff, brown to gray, Silty clay Loam Till	-5 3		
	3 4	3.5 P	18.3
668.61			
Stiff, brown to gray, Silty Clay Loam Till	3		
	6 7	1.1 S	16.6
665.61	-10		
Very stiff, gray, Silty Clay Loam Till	3		
▽	6 7	2.2 B	17.2
	5		
	7 8	3.5 B	13.0
661.11			
Stiff, brown, Silt with minor Clay	-15 2		
	2 2	1.0 P	19.2
658.11			
Loose, brown, fine, Sand to coarse, Gravel	1		
	2 5		20.4
656.11			
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Medium, gray, fine, Sand to coarse, Gravel- loamy *(continued)*	7		
	10 8		17.5
652.61			
	2		
	7 7	2.0 S	12.2
-25			
	5		
	17 19	3.0 P	11.0
	11		
	30 41	5.2 S	13.0
-30			
	15		
	21 25	4.8 S	8.7
-35			
	15		
	25 36	6.0 S	8.5
End of Boring			
-40			

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

BBS, from 137 (Rev. 8-99)

DESIGNED	GBC/GMK
CHECKED	GBC/SMK/GMK
DRAWN	RR
CHECKED	SMK

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SOIL BORING LOGS
ILLINOIS ROUTE 115 OVER DRAINAGE DITCH
F.A.P. ROUTE 798 - SECTION 107-BR
FORD COUNTY
STATION 24+09.00
EXISTING STRUCTURE NO. 027-0039
PROPOSED STRUCTURE NO. 027-2014
Scale: None August 2008

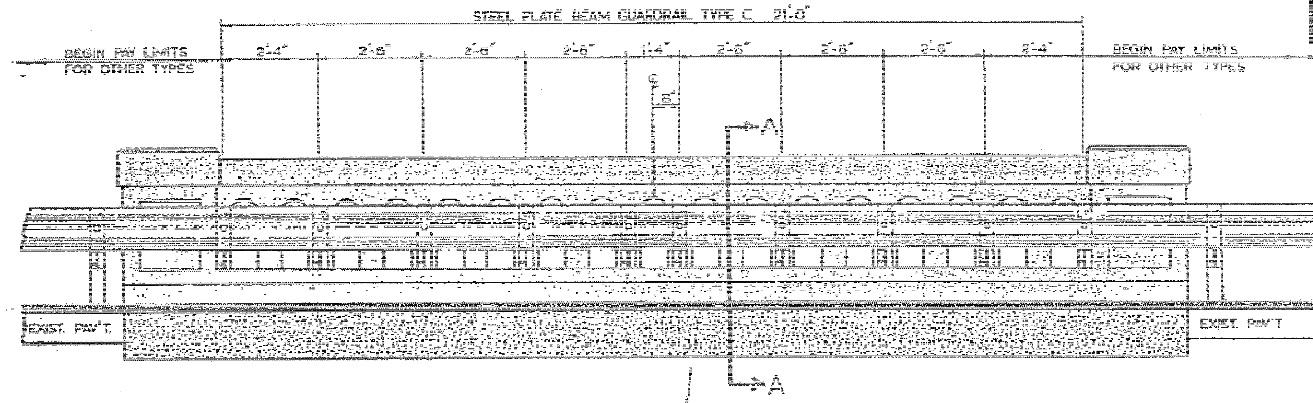
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FA 798	*	FORD	52	32

F.H.W.A. REG. 5 | ILLINOIS | PROJECT

* (107,108) W & RS

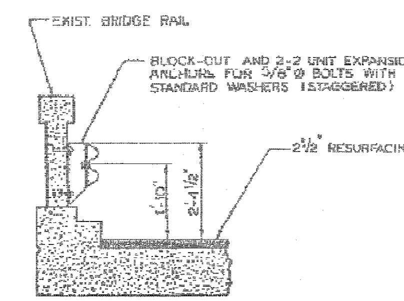
EXISTING PLANS FOR INFORMATION ONLY

STR. NO. 027-0030
STR. NO. 027-0031
STR. NO. 027-0039

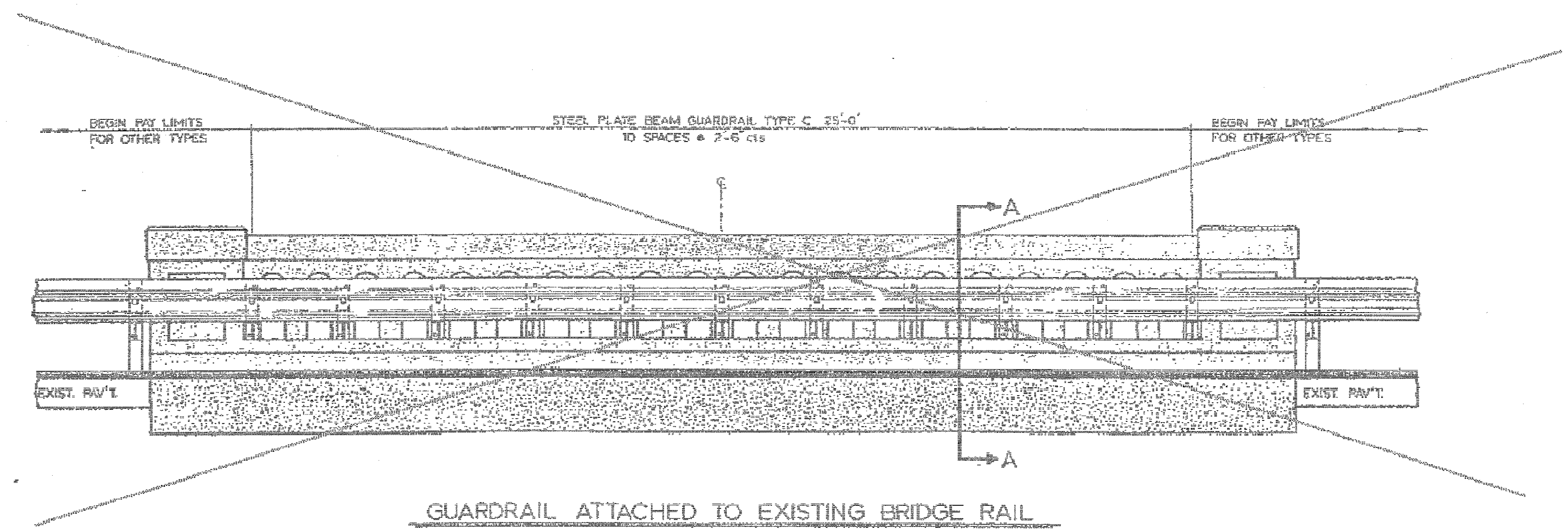


GUARDRAIL ATTACHED TO EXISTING BRIDGE RAIL

STRUCTURE No.'s 027-0039
027-0030
027-0031
027-0032



SECTION A-A



GUARDRAIL ATTACHED TO EXISTING BRIDGE RAIL

STRUCTURE No. 027-0040

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - STRUCTURAL

SCALE: ________ SHEET NO. __ OF ___ SHEETS STA. _________ TO STA. _________

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR,108-BR,108-BR-1	FORD	92	40

CONTRACT NO. 66698

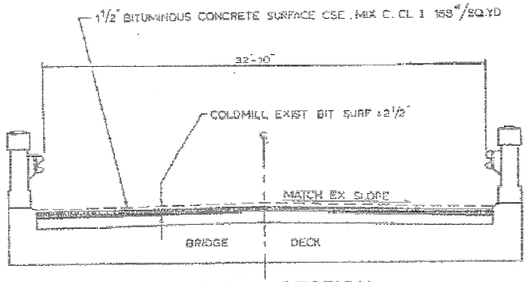
FED. ROAD DIST. NO. _ | ILLINOIS | FED. AID PROJECT

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FA 798	*	FORD	32	3
F.A.S.	RTE. 9	ILLINOIS	PROJECT	

* (107, 108) W & RS

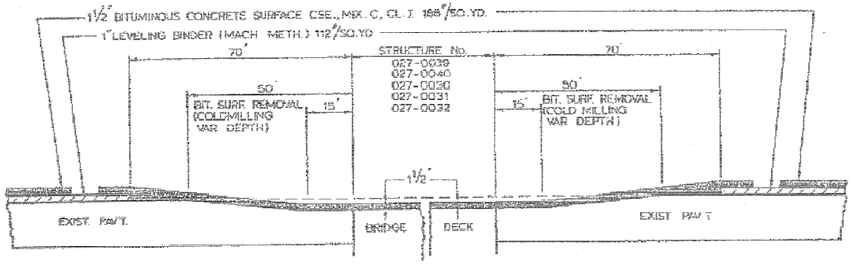
EXISTING PLANS
FOR INFORMATION ONLY

STR. NO. 027-0030
STR. NO. 027-0031
STR. NO. 027-0039

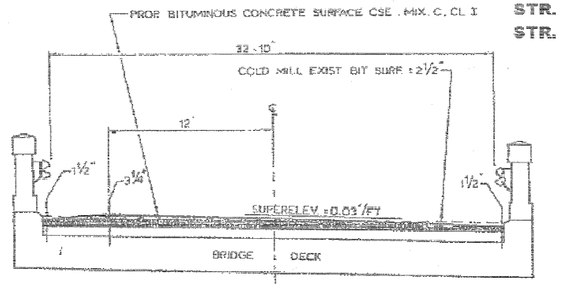


TYPICAL SECTION

STRUCTURE No.'S 027-0039
027-0040
027-0031
027-0032

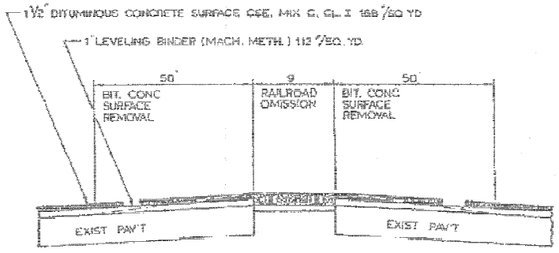


TYPICAL TAPER FOR STRUCTURES



TYPICAL SECTION

STRUCTURE No. 027-0030



DETAIL AT RAILROAD

1 MILE 8.96

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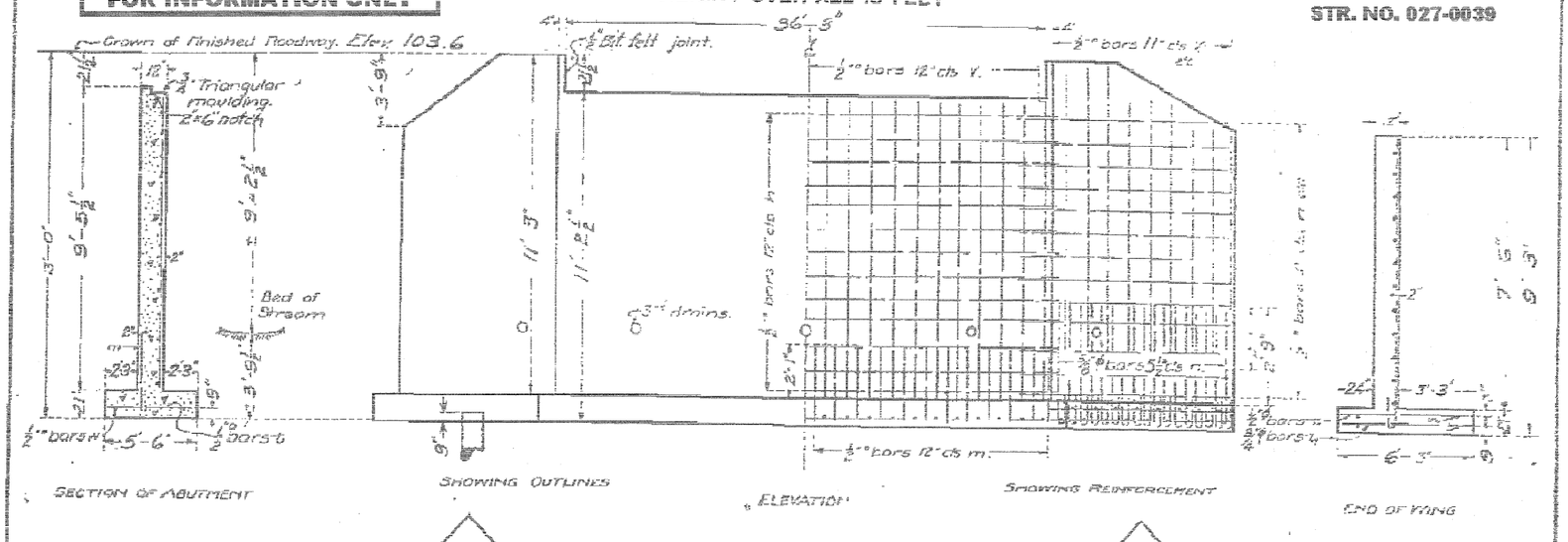
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – STRUCTURAL

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR,108-BR,108-BR-1	FORD	92	41
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



B.M. #3 S&W in F.P. Rt. Sta. 21+91 Elev. 103.02
Existing structure: I-Beam bridge 15' rdy 22'-span. To be removed by bridge contractor.

EXISTING PLANS
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

R.C. ABUTMENTS FOR SLAB BRIDGE
HEIGHT OVER ALL 13 FEET

ROUTE NO.	COUNTY	SEC.	TOTAL SHEETS	SHEET NO.
115	Ford	107B	28	26

Sheet No. 2
2 Sheets.

STR. NO. 027-0039

Class X concrete shall be used throughout.

All reinforcing steel shall be securely wired in place before concrete is poured.

10T untreated piles 12" butt 8" tip 56 required. Estimated length 1120 lin. ft.

BILL OF MATERIAL

Bars	No.	Size	Length
v	74	½"	9'-0"
[illegible]	8	½"	10'-0"
[illegible]	16	½"	8'-6"
[illegible]	16	½"	7'-0"
[illegible]	40	½"	18'-0"
h	32	½"	10'-6"
[illegible]	8	½"	6'-6"
r	60	⅜"	5'-3"
t	154	½"	5'-3"
s	88	¾"	6'-
z	88	⅜"	6'-
w	8	½"	20'-0"
w	16	½"	10'-0"
m	74	½"	3'-0"
Reinforcing Steel Lbs. 4550			
Concrete C. Yds. X - 78.0			

S.B.I. ROUTE 115 SEC 107-B
FORD COUNTY
STA 24+09

STANDARD	COMPUTED - H.P.D.
	CHECKED - E.D. [illegible]
	DRAWN - [illegible]
	CHECKED - H.P.D.
SPECIAL	ASSEMBLED - [illegible]
	CHECKED - [illegible]

EXAMINED Dec. 6 1923
BRIDGE ENGINEER
PASSED
ENGINEER OF DESIGN
APPROVED
CHIEF HIGHWAY ENGINEER

978

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – STRUCTURAL

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR,108-BR,108-BR-1	FORD	92	42

CONTRACT NO. 66698

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

EXISTING PLANS FOR INFORMATION ONLY

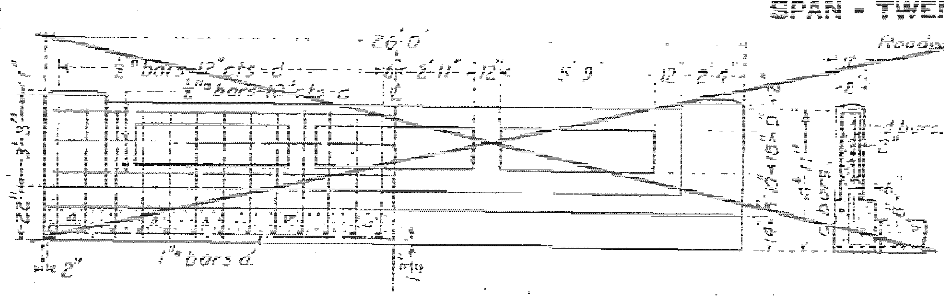
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

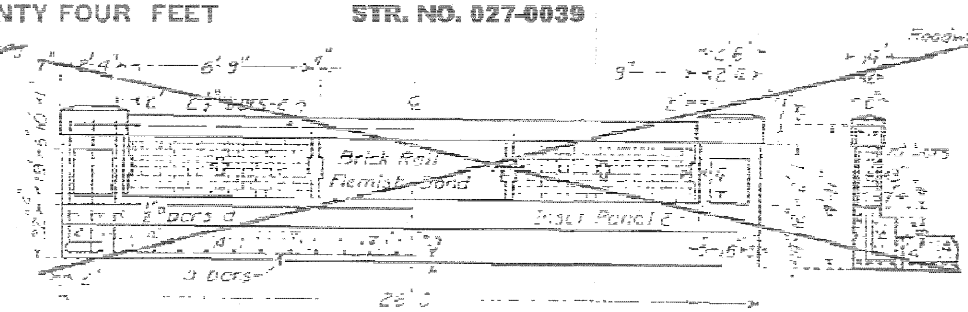
REINFORCED CONCRETE SLAB
SPAN - TWENTY FOUR FEET

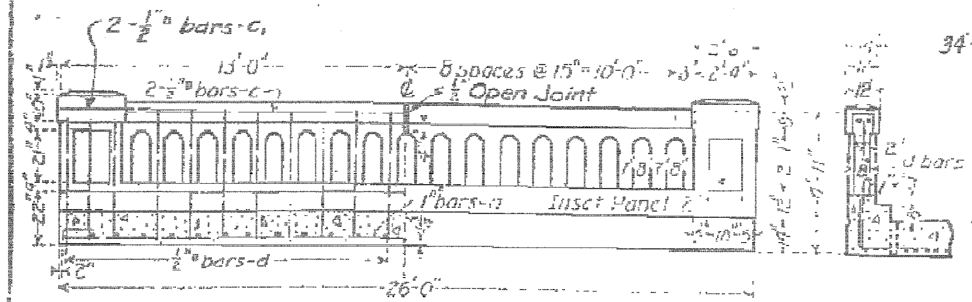
STR. NO. 027-0039

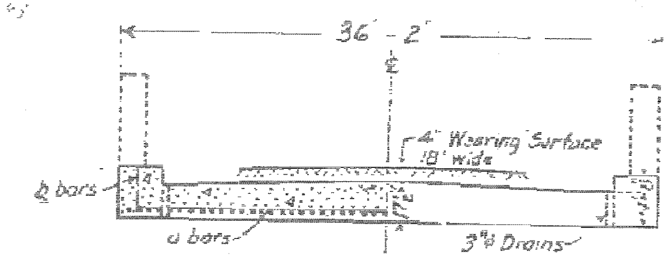
BOND ISSUE ROUTE NO.	COUNTY	SEC	TOTAL SHEETS	SHEET NO.
115	Ford	107B	28	26

Sheet 1 of 2 Sheets

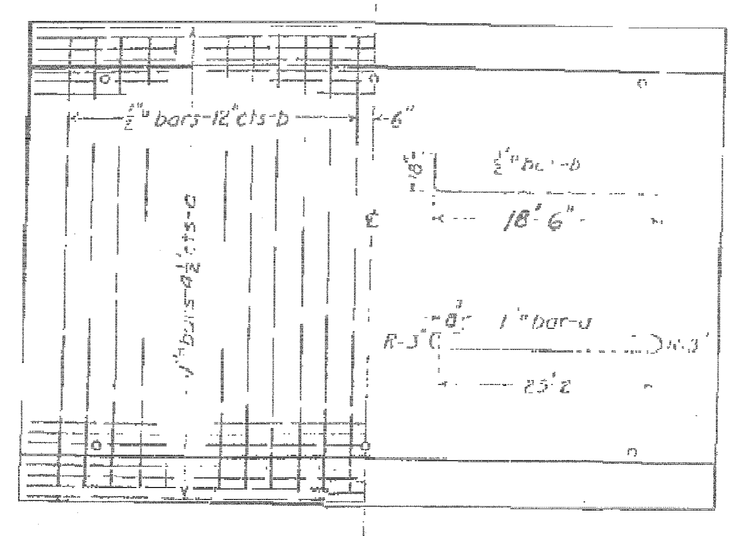








CROSS SECTION OF SLAB.



PLAN.

BILL OF MATERIAL

	16 FT ROADWAY				18 FT ROADWAY				20 FT. ROADWAY				24 FT. ROADWAY				34 FT. ROADWAY			
	Bars	No.	Size	Length	Bars	No.	Size	Length	Bars	No.	Size	Length	Bars	No.	Size	Length	Bars	No.	Size	Length
RAIL A	a	48	1"	26'-0"	a	53	1"	28'-0"	a	58	1"	28'-0"	a	69	1"	28'-0"	a	85	1"	28'-0"
	b	24	1/2"	20'-0"	b	24	1/2"	22'-0"	b	24	1/2"	24'-0"	b	12	1/2"	28'-0"	b	48	1/2"	18'-0"
	c	6	1/2"	25'-6"	c	6	1/2"	25'-6"	c	6	1/2"	25'-6"	c	6	1/2"	25'-6"	c	6	1/2"	25'-6"
	d	52	1/2"	4'-6"	d	52	1/2"	4'-6"	d	52	1/2"	4'-6"	d	52	1/2"	4'-6"	d	52	1/2"	4'-6"
	Steel-Lbs			5370	Steel-Lbs			5820	Steel-Lbs.			6340	Steel-Lbs			7470	Steel-Lbs			8160
	Concrete-Cu Yds			28.0	Concrete-Cu Yds			30.4	Concrete-Cu Yds			32.9	Concrete-Cu Yds			37.8	Concrete-Cu Yds			43.2
RAIL B	a	48	1"	26'-0"	a	53	1"	28'-0"	a	58	1"	28'-0"	a	69	1"	28'-0"	a	85	1"	28'-0"
	b	24	1/2"	20'-0"	b	24	1/2"	22'-0"	b	24	1/2"	24'-0"	b	24	1/2"	28'-0"	b	48	1/2"	18'-0"
	c	4	1/2"	25'-6"	c	4	1/2"	25'-6"	c	4	1/2"	25'-6"	c	4	1/2"	25'-6"	c	4	1/2"	25'-6"
	d	12	1/2"	4'-6"	d	12	1/2"	4'-6"	d	12	1/2"	4'-6"	d	12	1/2"	4'-6"	d	12	1/2"	4'-6"
	Steel-Lbs			5?15	Steel-Lbs			5530	Steel-Lbs			6150	Steel-Lbs			7270	Steel-Lbs			8960
	Concrete-Cu Yds			26.6	Concrete-Cu Yds			29.1	Concrete-Cu Yds			31.5	Concrete-Cu Yds			36.4	Concrete-Cu Yds			43.7
	Brick Rail-Cu Yds			2.0	Brick Rail-Cu Yds			2.0	Brick Rail-Cu Yds			2.0	Brick Rail-Cu Yds			2.0	Brick Rail-Cu Yds			[illegible]
RAIL C																	[illegible]	8	1/2"	4'-6"
	a	48	1"	26'-0"	a	53	1"	28'-0"	a	58	1"	28'-0"	a	69	1"	28'-0"	a	96	1"	28'-0"
	b	24	1/2"	20'-0"	b	24	1/2"	22'-0"	b	24	1/2"	24'-0"	b	24	1/2"	28'-0"	b	48	1/2"	20'-0"
	c	4	1/2"	25'-6"	c	4	1/2"	25'-6"	c	4	1/2"	25'-6"	c	4	1/2"	25'-6"	c	8	1/2"	10'-6"
	d	44	1/2"	4'-6"	d	44	1/2"	4'-6"	d	44	1/2"	4'-6"	d	44	1/2"	4'-6"	d	[illegible]	1/2"	4'-6"
	Steel-Lbs			5220	Steel-Lbs			5750	Steel-Lbs			6270	Steel-Lbs			7?00	Steel-Lbs			10250
	Concrete-Cu Yds			27.4	Concrete-Cu Yds			29.5	Concrete-Cu Yds			32.3	Concrete-Cu Yds			[illegible]	Concrete-Cu Yds A			47.2
																	Concrete-Cu Yds X			4.0

Span Rail.

Use class A Concrete throughout

USE RAIL C, 34 FT ROADWAY.

STANDARD	COMPUTED	Walter A. Todd
	CHECKED	[illegible]
	DRAWN	[illegible]
	CHECKED	[illegible]
SPECIAL	DETAILED	[illegible]
	CHECKED	[illegible]

EXAMINED Dec. 6, 28
[illegible signatures]
BRIDGE ENGINEER
ENGINEER OF DESIGN
APPROVED
CHIEF HIGHWAY ENGINEER

S.B.I. ROUTE 115 SEC 107B
FORD COUNTY
STA 24+09

(12800)—1M—7-22?

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		DATE - August 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – STRUCTURAL

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR,108-BR,108-BR-1	FORD	92	43

CONTRACT NO. 66698

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

Bench Mark No. 1:
Set rail road spike in power pole sta. 263+32.544, 150,470 ft. right, El. 729.220.

Existing Structure:
The existing structure number 027-0030, built in 1928 as SBI Route 115, Section 108B, Ford County at station 265+74.96. The structure is a one span reinforced concrete slab bridge, With closed abutments supported on untreated timber piles. The existing bridge is 26'-0" long back to back of abutments & 36'-2" wide out to out of slab. The existing structure to be removed and replaced by 2-12' wide x 8' deep Pre-Cast Concrete Box Culverts. Traffic to be mainained utilizing detour.
No Salvage

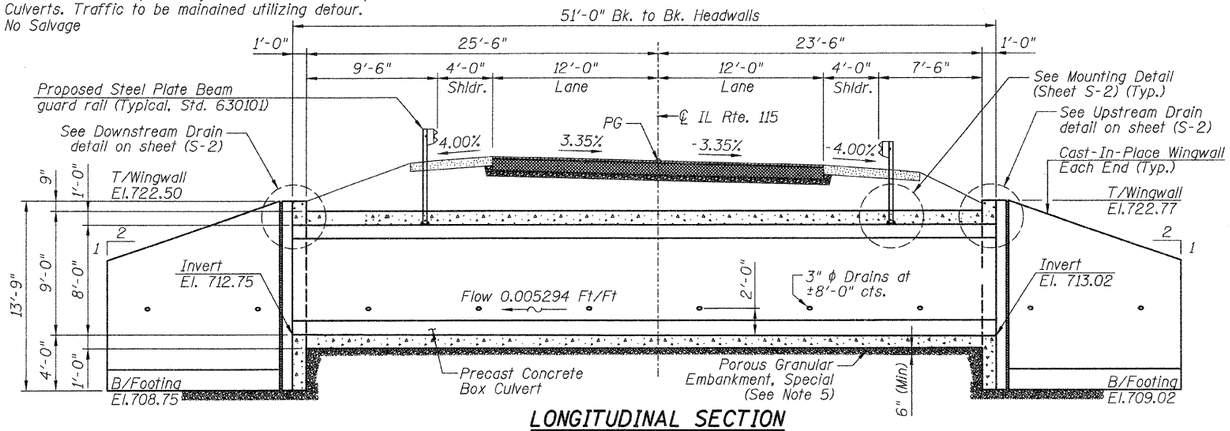
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS

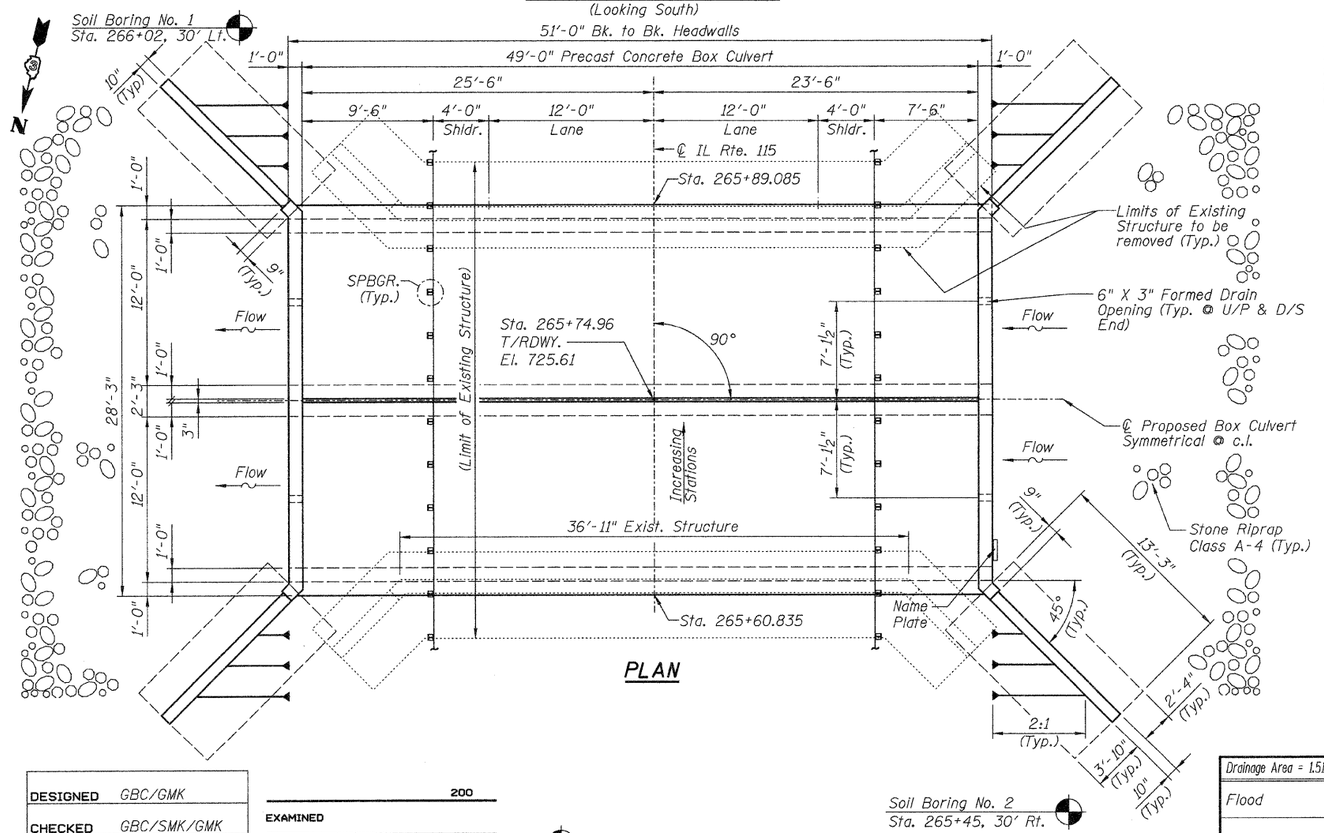
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 798	*	FORD	92	44
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. S1
S4 SHEETS

*107-BR,108-BR,108-BR-1 Contract #66698



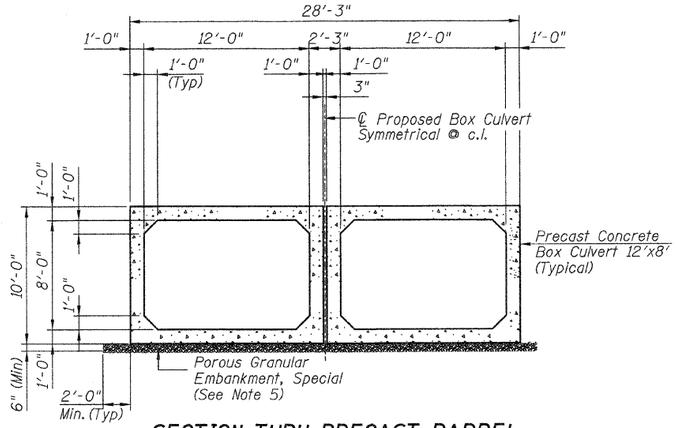
LONGITUDINAL SECTION
(Looking South)



PLAN

Soil Boring No. 2
Sta. 265+45, 30' Rt.

Indicates Boring Location



SECTION THRU PRECAST BARREL

3" nominal space shall be left between adjacent precast sections. After the precast cells are in place and backfill has been placed to mid height of the precast concrete box section on each side, the space between the cells shall be filled with class SI concrete. Cost included with pay item for "precast concrete box culvert 12'x8'.

HIGHWAY CLASSIFICATION

F.A.P. RTE. 798-IL.RTE 115
Functional Class: Minor Arterial
ADT: 800 (2005); ADT 1000 (2018)
ADTT: 15%
DHV: 91 (1998); 125 (2018)
Design Speed: 55 Mph
Posted Speed: 55 Mph

LOADING HS20-44

Allow 50 #/sq. ft. for Future Wearing Surface

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

Field Units
Cast-In-Place Reinforced Concrete
f'c = 3,500 psi (Concrete)
fy = 60,000 psi (Reinforcement)
Precast Concrete Box Culvert, Design as per AASHTO M 259 (ASTM C789):
f'c = 5,000 psi
fy = 65,000 psi (Welded Wire Fabric)

SEISMIC DATA

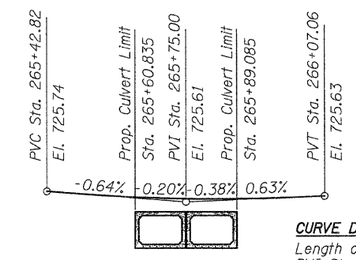
Seismic Performance Category (S.P.C.)=A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	590.0
Porous Granular Embankment, Special	Cu. Yd.	44.0
Removal of Existing Structures No. 1	Each	1
Structure Excavation	Cu. Yd.	867.0
Reinforcement Bars	Pound	5,050.0
Reinforcement Bars, (Epoxy Coated)	Pound	790.0
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	51.0
Precast Concrete Box Culvert 12'x8'	Foot	98.0

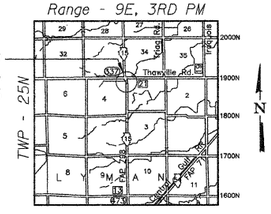
GENERAL NOTES

1. Reinforcement bars shall Conform to the requirements of ASTM A 706, Grade 60 (IL Modified). See Special Provisions.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
4. Excavation behind existing abutment walls shall be done before removing the existing supestructure.
5. The material used to replace the unsuitable material removed below the bottom of the proposed precast concrete box culvert and cast-in-place concrete wingwalls shall be clean crushed material CA-7 for 6" layer and shall be paid for as "Porous Granular Embankment, Special".



PROFILE GRADE
(Along ℄ Il. Route 115)

CURVE DATA:
Length of Curve = 64.24 Ft.
PVI Sta 265+75.00
El. 725.61'



LOCATION SKETCH

STATION 265+74.96
BUILT 200 BY
STATE OF ILLINOIS
F.A.P. RT. 798 SEC. 108-B
LOADING HS20-44
STR. NO. 027-2015

NAME PLATE
See Std. 515001

WATERWAY INFORMATION

Drainage Area = 1.51 sq. mi. Exist. Low Grade Elev. = 725.64 @ Sta. 791+79.76 Prop. Low Grade Elev. = 725.64 @ Sta. 791+79.76

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	767	129	184	720.7	0.2	0.0	720.9	720.7
Design	50	1308	162	192	722.1	0.5	0.4	722.7	722.5
Base	100	1558	170	192	722.5	0.9	0.9	723.4	723.4
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	2182	181	192	723.2	2.1	2.3	725.2	725.5

DESIGNED	GBC/GMK
CHECKED	GBC/SMK/GMK
DRAWN	RR
CHECKED	SMK

200

EXAMINED
ENGINEER OF BRIDGE DESIGN

PASSED
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
SYED M KAZI
081-004047
REGISTERED STRUCTURAL ENGINEER

Syed M. Kazi
Licensed Structural Engineer
State of Illinois
Lic. No. 081-004047
Expires: 11-30-2008

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 115 OVER DRAINAGE DITCH
F.A.P. ROUTE 798 - SECTION 108-BR-1
FORD COUNTY
STATION 265+74.96
EXISTING STRUCTURE NO. 027-0030
PROPOSED STRUCTURE NO. 027-2015

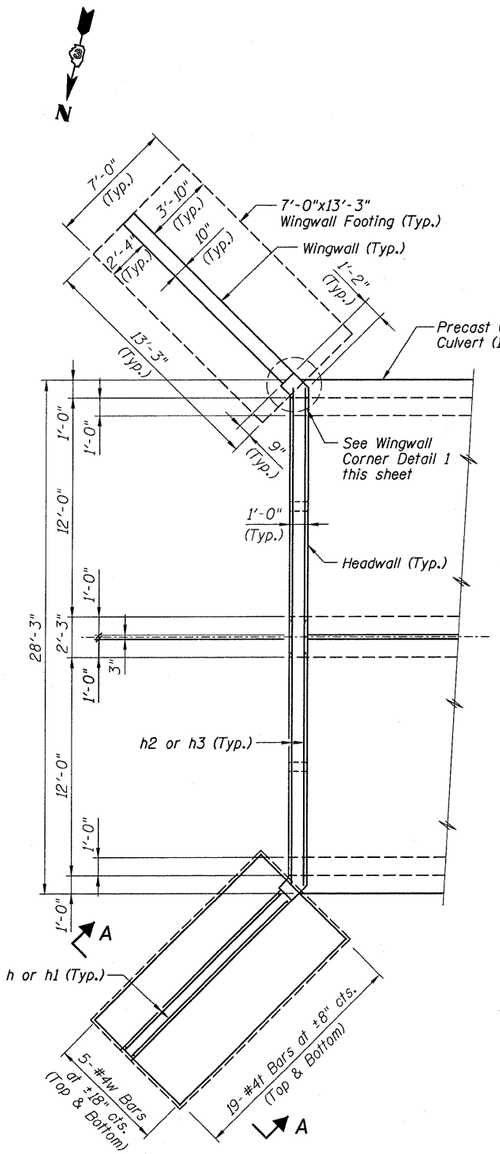
Scale: None August 2008

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

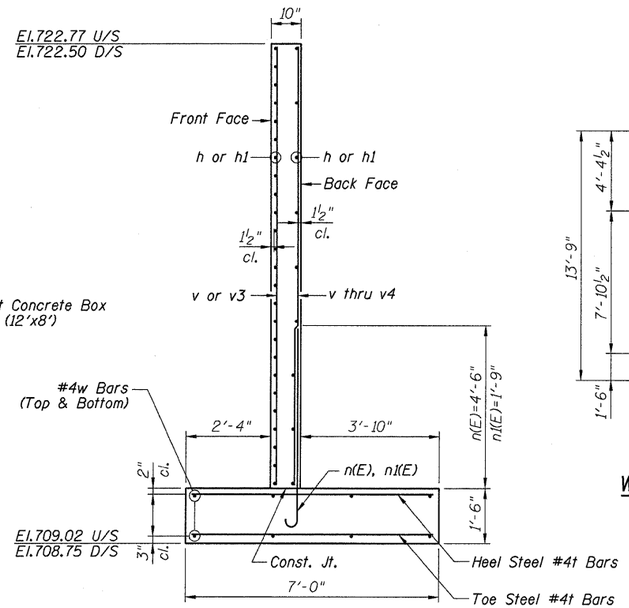
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 798	*	FORD	92	45
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. S2
S4 SHEETS

*107-BR, 108-BR, 108-BR-1 Contract #66698

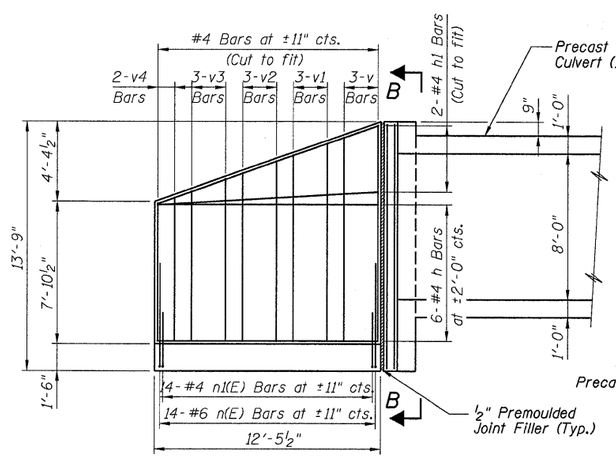


PLAN

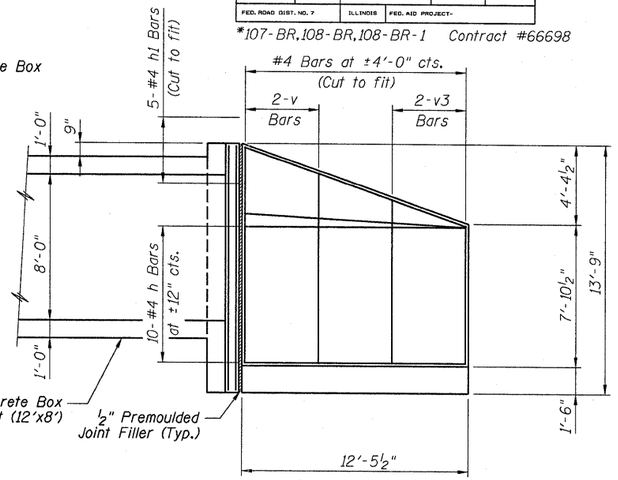


WINGWALL SECTION A-A

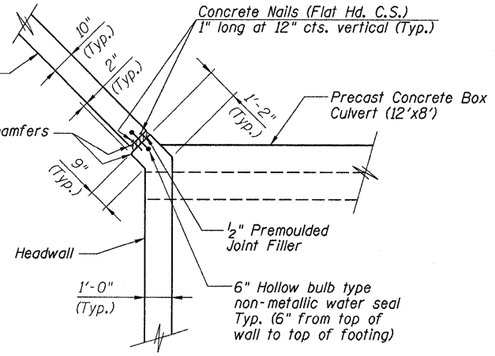
Allowable Soil Bearing Capacity = 3,526 psf



WINGWALL REINFORCEMENT (BACKFACE)



WINGWALL REINFORCEMENT (FRONTFACE)



CORNER DETAIL

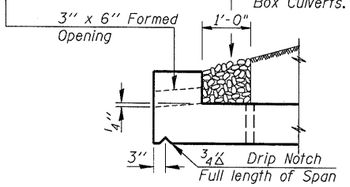
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d1	16	#4	5'-8"	
d2	16	#4	5'-0"	
h	64	#4	12'-3"	——
h1	28	#4	13'-0"	——
h2	8	#8	27'-5"	——
h3	12	#7	27'-5"	——
h4	12	#5	27'-5"	——
n(E)	56	#6	6'-4"	
n1(E)	56	#4	3'-5"	
n2(E)	28	#4	6'-0"	
s	56	#4	5'-3"	
s1	28	#4	3'-3"	
s2	14	#4	6'-3"	
t	152	#4	6'-9"	——
u	112	#4	5'-9"	
v	20	#4	11'-11"	——
v1	12	#4	11'-0"	——
v2	12	#4	10'-0"	——
v3	20	#4	9'-0"	——
v4	8	#4	8'-0"	——
v5	12	#4	9'-6"	——
v6	8	#4	10'-2"	
v7	8	#4	11'-2"	
w	40	#4	13'-0"	——
Concrete Box Culvert			Cu. Yd.	51
Reinforcement Bars, Epoxy Coated			Pound	790
Reinforcement Bars			Pound	5,050

Notes:
1. Quantities shown are for four wingwalls and two headwalls.

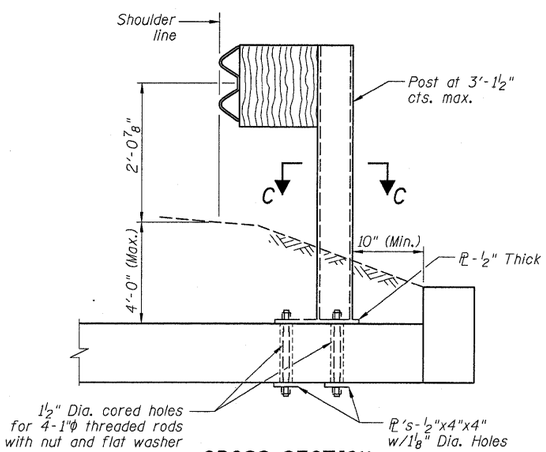
AT UPSTREAM END

Coarse aggregate full length of both headwalls. To be placed by Grading Contractor. Cost included with Concrete Box Culverts.



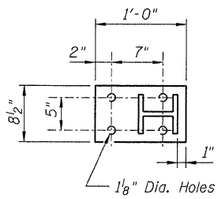
AT DOWNSTREAM END

DRAIN DETAIL

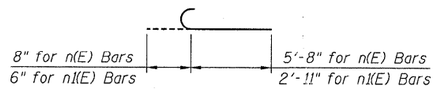


CROSS SECTION

GUARD RAIL MOUNTED ON TOP SLAB OF BOX CULVERT



SECTION C-C



n(E) & n1(E) BARS

DESIGNED	GBC/GMK
CHECKED	GBC/SMK/GMK
DRAWN	RR
CHECKED	SMK

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

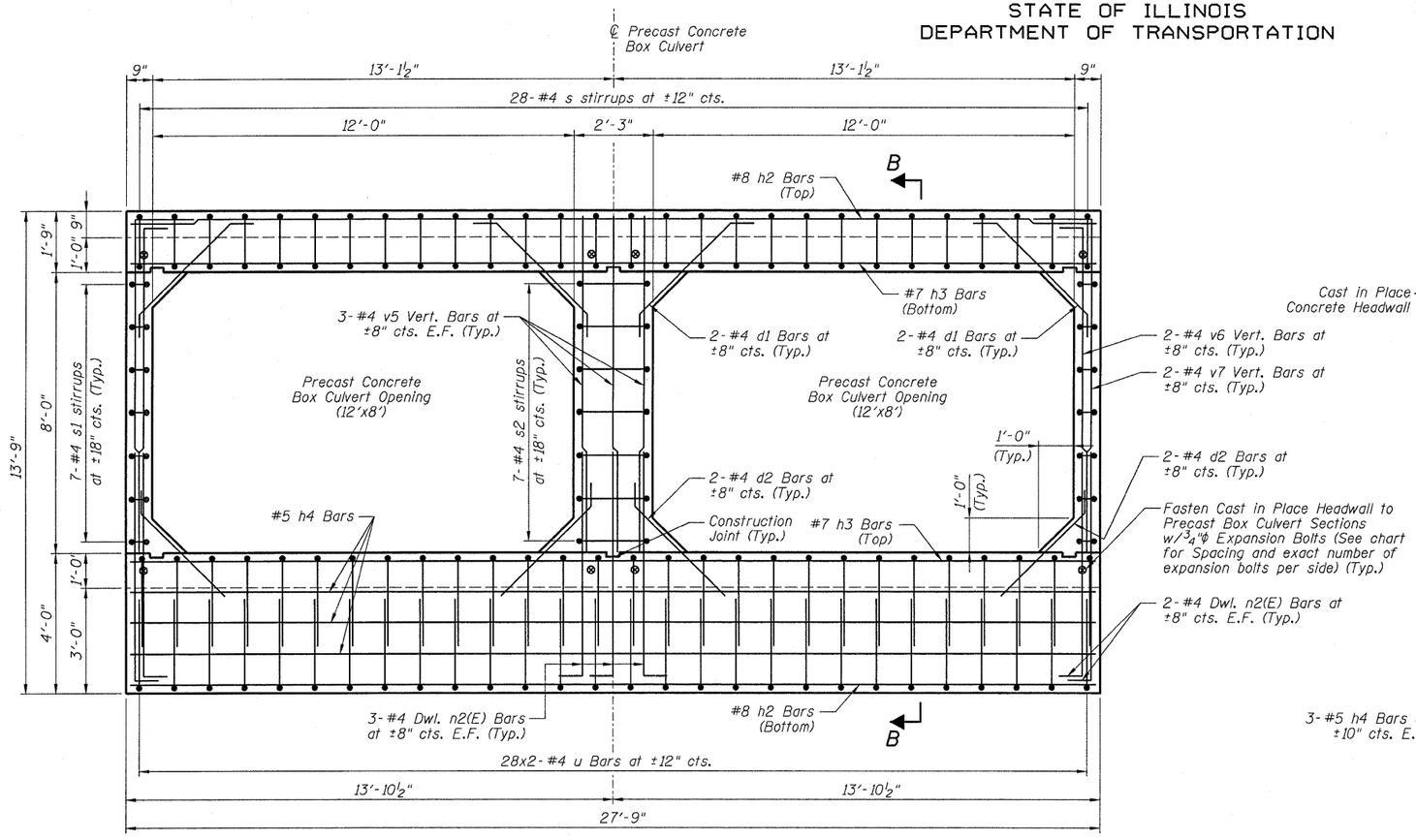
WINGWALL SECTIONS AND DETAILS
ILLINOIS ROUTE 115 OVER DRAINAGE DITCH
F.A.P. ROUTE 798 - SECTION 108-BR-1
FORD COUNTY
STATION 265+74.96
EXISTING STRUCTURE NO. 027-0030
PROPOSED STRUCTURE NO. 027-2015
Scale: None August 2008

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

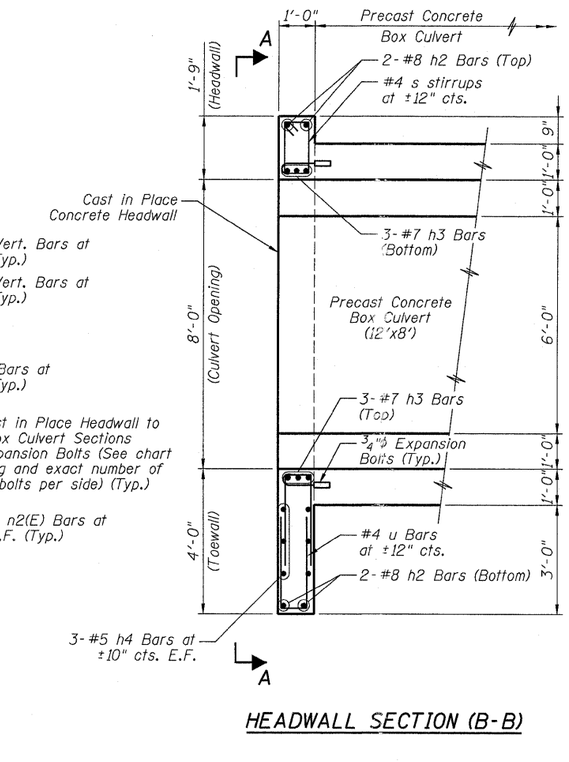
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 798	*	FORD	92	46
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		

SHEET NO. S3
S4 SHEETS

* 107-BR, 108-BR, 108-BR-1 Contract # 66698



HEADWALL SECTION (A-A)



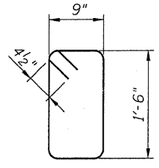
HEADWALL SECTION (B-B)

EXPANSION BOLT TABLE

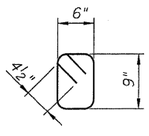
Clear Span or Clear Height	No. of ¾"ϕ Expansion bolts Req'd per side	
	No. *	Spacing
8.0	6	17"
12.0	8	19"

Notes:

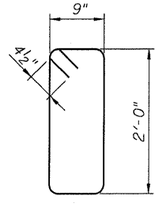
1. Use minimum of (1) one expansion bolt at each corner.
2. Total number of expansion bolts required = 112.
3. Expansion bolts shall be ¾"ϕ hooked bolts. Hooked bolts shall extend a minimum of 9" into the new concrete. Precast concrete manufacturer shall provide holes in precast concrete box culvert for ¾"ϕ expansion bolt inserts at specified locations.
4. Cost of ¾"ϕ expansion bolts included with pay item for "Precast Concrete Box Culvert 12'x8'".



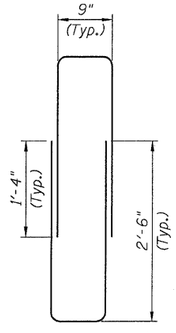
BAR s



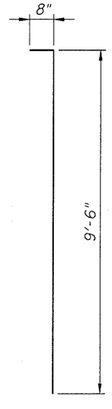
BAR s1



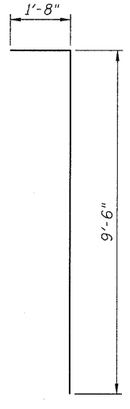
BAR s2



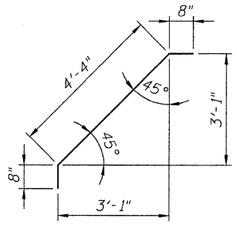
BAR u



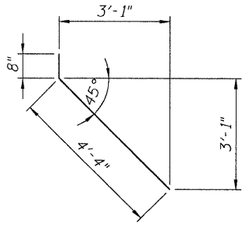
BAR v6



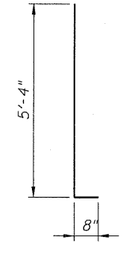
BAR v7



BAR d1



BAR d2



BAR n2(E)

DESIGNED	GBC/GMK
CHECKED	GBC/SMK/GMK
DRAWN	RR
CHECKED	SMK

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

HEADWALL SECTIONS AND DETAILS
ILLINOIS ROUTE 115 OVER DRAINAGE DITCH
F.A.P. ROUTE 798 - SECTION 108-BR-1
FORD COUNTY
STATION 265+74.96
EXISTING STRUCTURE NO. 027-0030
PROPOSED STRUCTURE NO. 027-2015
Scale: None August 2008

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 798	*	FORD	92	47
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		

SHEET NO. S4
S4 SHEETS

* 107-BR, 108-BR, 108-BR-1 Contract # 66698

Illinois Department of Transportation
Division of Highways
District #8, Ottawa

SOIL BORING LOG

Page 1 of 1
Date 10/6/05

ROUTE IL 115 DESCRIPTION IL 115- 3.97mi N of IL54 LOGGED BY Larry Myers
SECTION 108-B LOCATION NW 1/4, SEC. 3, TWP. 25n, RNG. 9E
COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME automatic

STRUCT. NO. 027-0030
Station 265+75
BORING NO. 1 SE quad
Station 266+02
Offset 30.00ft Lt
Ground Surface Elev. 219.91 ft

Surface Water Elev. ____ ft
Stream Bed Elev. ____ ft
Groundwater Elev.:
First Encounter ____ ft
Upon Completion ____ ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Augered. black. Silty Clay with Gravel pieces- fill			
217.41			
Stiff. gray brown. Silty Clay Loam Till	3		
	4 4	1.6 P	19.5
-5			
	2		
	3 7	1.2 S	21.9
212.91			
Hard, brown, Silty Clay Till	3		
	7 10	6.6 S	17.3
209.91 -10			
Very stiff, gray. Silty Clay Till	3		
	4 4	3.9 S	16.9
	3		
	5 6	2.2 B	16.8
-15			
	2		
	4 5	2.1 B	21.7
202.91			
Medium, gray, Silty Clay Till	2		
	3 3	1.9 B	25.1
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	2		
Medium, gray, Silty Clay Till (continued)	3 3	0.8 B	25.8
197.91			
Stiff, gray, Clay	2		
	3 5	1.0 B	28.7
-25			
194.41	1	1.2 B	27.1
Medium, brown gray, Silt and fine, Sand with minor. Clay	4 3	0.5 P	21.9
	2		
191.41			13.7
Very stiff, gray. Silty Clay Loam Till	4 4	3.0 P	15.7
-30	2		
	5 7	2.1 B	13.6
-35	2		
	4 5	2.0 B	13.7
183.41			
End of Boring			
-40			

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

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
District #8, Ottawa

SOIL BORING LOG

Page 1 of 1
Date 10/6/05

ROUTE IL 115 DESCRIPTION IL 115- 3.97mi N of IL54 LOGGED BY Larry Myers
SECTION 108-B LOCATION NW 1/4, SEC. 3, TWP. 25n, RNG. 9E
COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME automatic

STRUCT. NO. 027-0030
Station 265+75
BORING NO. 2 NW quad
Station 265+45
Offset 30.00ft Rt
Ground Surface Elev. 220.08 ft

Surface Water Elev. ____ ft
Stream Bed Elev. ____ ft
Groundwater Elev.:
First Encounter ____ ft
Upon Completion ____ ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Augered. black. Silty Clay fill			
218.08			
Medium, brown. Silty Clay	2		
	3 3	1.0 P	31.1
-5	1		
	1 2	0.8 P	31.2
213.58			
Stiff, gray brown, Silty Clay with layers of Silt	2		
	2 4	1.5 P	25.8
210.58			
Very stiff, gray brown, Silty Clay Loam Till- all gray after 11"	4		
-10	7 8	3.8 S	17.2
	2		
	4 6	2.0 S	16.9
-15	3		
	5 6	2.2 S	18.5
203.58			
Stiff, gray, Silty Clay Till	3		
	4 5	1.5 S	23.4
-20	2		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	3		
Stiff. gray. Silty Clay Till (continued)	3	1.1 B	25.4
	1		
-25	1		
	2 3	1.1 B	25.9
	2		
	3	1.1 B	27.8
193.58			
Stiff, olive, Silty Clay Loam Till with Silt pocket at 34'	2		
	4 4	1.7 S	16.6
-30	2		
	4 5	1.5 S	15.2
-35	3		
	4 5	1.1 S	18.5
184.08			
End of Boring			
-40			

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

BBS, from 137 (Rev. 8-99)

DESIGNED	GBC/GMK
CHECKED	GBC/SMK/GMK
DRAWN	RR
CHECKED	SMK

200
EXAMINED
ENGINEER OF BRIDGE DESIGN
PASSED
ENGINEER OF BRIDGES AND STRUCTURES

SOIL BORING LOGS
ILLINOIS ROUTE 115 OVER DRAINAGE DITCH
F.A.P. ROUTE 798 - SECTION 108-BR-1
FORD COUNTY
STATION 265+74.96
EXISTING STRUCTURE NO. 027-0030
PROPOSED STRUCTURE NO. 027-2015
Scale: None August 2008

EXISTING PLANS FOR INFORMATION ONLY

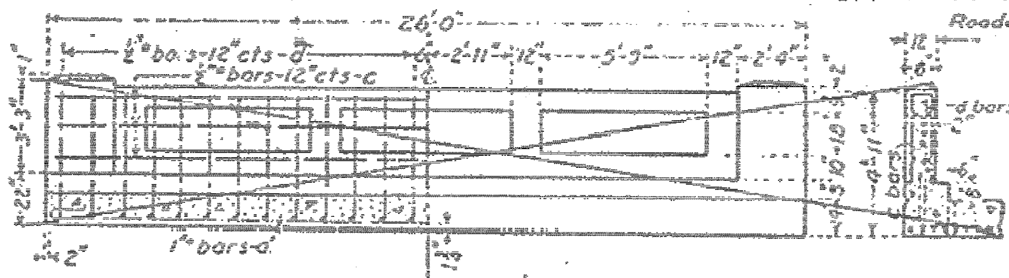
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

REINFORCED CONCRETE SLAB

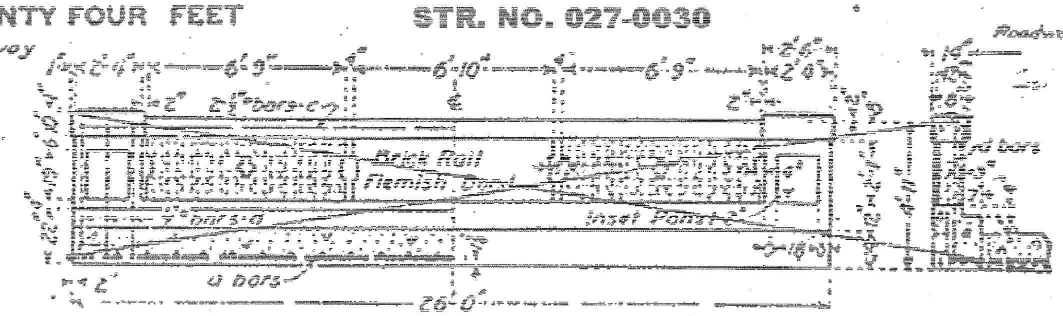
SPAN - TWENTY FOUR FEET — STR. NO. 027-0030

BOND ISSUE ROUTE NO.	COUNTY	SEC.	TOTAL SHEETS	SHEET NO.
115	Ford	108-B	26	23

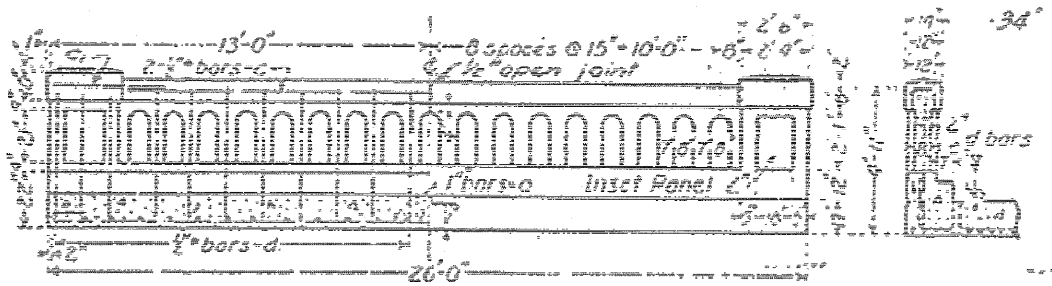
Sheet No 1 2 Sheets.



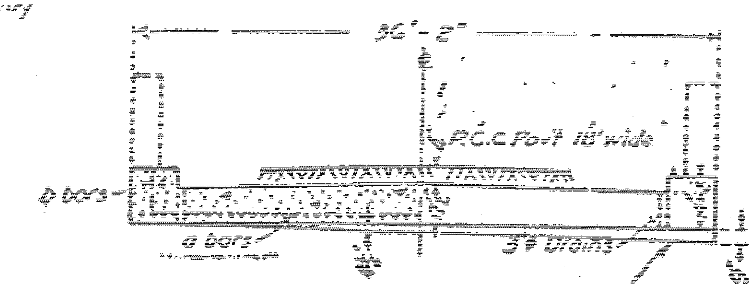
RAIL A.



RAIL B.

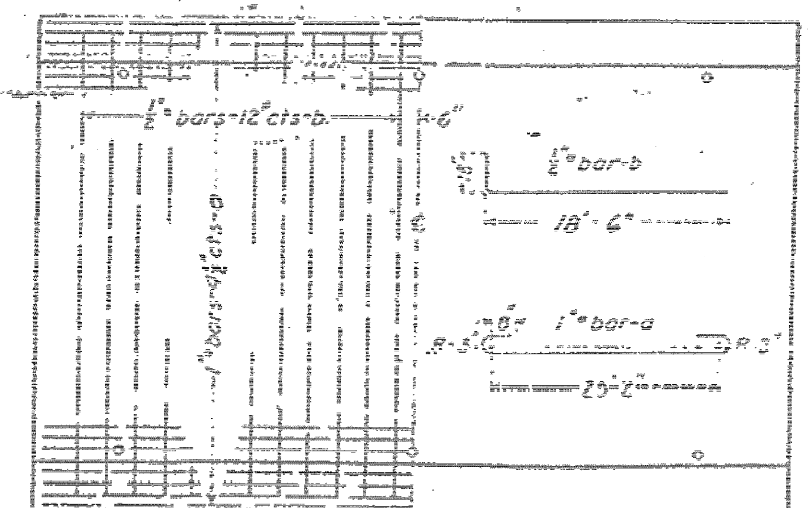


RAIL C.



CROSS SECTION OF SLAB.

Superelevate bridge with concrete block, 12" wide, at each end.



PLAN.

BILL OF MATERIAL

	16 FT. ROADWAY				18 FT. ROADWAY				20 FT. ROADWAY				24 FT. ROADWAY				34 FT. ROADWAY			
	Bars	No.	Size	Length	Bars	No.	Size	Length	Bars	No.	Size	Length	Bars	No.	Size	Length	Bars	No.	Size	Length
RAIL A	a	48	1"	28'-0"	a	53	1"	28'-0"	a	58	1"	28'-0"	a	69	1"	28'-0"	a	89	1"	28'-0"
	b	[illegible]	[illegible]	20'-0"	b	24	½"	22'-0"	b	24	½"	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	b	[illegible]	½"	[illegible]
	c	[illegible]	[illegible]	25'-6"	c	6	½"	25'-6"	c	6	½"	25'-6"	c	6	½"	25'-6"	c	6	½"	25'-6"
	d	32	½"	4'-6"	d	32	½"	4'-6"	d	32	½"	4'-6"	d	32	½"	4'-6"	d	32	½"	4'-6"
	Steel-Lbs			5310	Steel-Lbs			5620	Steel-Lbs			6840	Steel-Lbs			7470	Steel-Lbs			9160
	Concrete-Cu Yds			28.0	Concrete-Cu Yds			30.4	Concrete-Cu Yds			32.9	Concrete-Cu Yds			31.8	Concrete-Cu Yds			45.2
RAIL B	a	48	1"	28'-0"	a	53	1"	28'-0"	a	58	1"	28'-0"	a	69	1"	28'-0"	a	89	1"	28'-0"
	b	24	½"	20'-0"	b	24	½"	22'-0"	b	24	½"	24'-0"	b	24	½"	28'-0"	b	48	½"	18'-0"
	c	4	½"	25'-6"	c	4	½"	25'-6"	c	4	½"	25'-6"	c	4	½"	25'-6"	c	4	½"	25'-6"
	d	12	½"	4'-6"	d	12	½"	4'-6"	d	12	½"	4'-6"	d	12	½"	4'-6"	[illegible]	[illegible]	[illegible]	[illegible]
	Steel-Lbs			5110	Steel-Lbs			5650	Steel-Lbs			6150	Steel-Lbs			7270	Steel-Lbs			8980
	Concrete-Cu Yds			26.6	Concrete-Cu Yds			29.1	Concrete-Cu Yds			31.5	Concrete-Cu Yds			36.4	Concrete-Cu Yds			[illegible]
	Brick Rail-Cu Yds			[illegible]	Brick Rail-Cu Yds			[illegible]	Brick Rail-Cu Yds			7.0	Brick Rail-Cu Yds			[illegible]	Brick Rail-Cu Yds			[illegible]
RAIL C	a	48	1"	28'-0"	a	53	1"	28'-0"	a	58	1"	28'-0"	a	69	1"	28'-0"	a	96	1"	28'-0"
	b	24	½"	20'-0"	b	24	½"	22'-0"	b	24	½"	24'-0"	b	24	½"	28'-0"	b	48	½"	20'-0"
	c	[illegible]	½"	25'-6"	c	4	½"	25'-6"	c	4	½"	25'-6"	c	4	½"	25'-6"	c	8	½"	10'-6"
	d	44	½"	4'-6"	d	44	½"	4'-6"	d	44	½"	4'-6"	d	44	½"	4'-6"	d	44	½"	4'-6"
	Steel-Lbs			5230	Steel-Lbs			5750	Steel-Lbs			6270	Steel-Lbs			7400	Steel-Lbs			10290
	Concrete-Cu Yds			27.4	Concrete-Cu Yds			29.8	Concrete-Cu Yds			32.[illegible]	Concrete-Cu Yds			37.[illegible]	Concrete-Cu Yds X			48.2
																	Cl. X Conc. Cu Yds			4.0
																	[illegible]			[illegible]

Use class X Concrete Throughout.

USE RAIL C, 34' FT ROADWAY.

STANDARD	COMPUTED	[illegible]
	CHECKED	[illegible]
	DRAWN	[illegible]
	CHECKED	[illegible]
	AMENDED	[illegible]
SPECIAL	CHECKED	J. P. Graham

Dec. 6, 29

SB I. ROUTE 115 SECTION-108 B
FORD COUNTY
STATION 265 + 75

FILE NAME = c:\pw_work\PWIDOT\CARPENTERDJ\dms30072\exist_struct_1.3.dgn	USER NAME = carpenterdj	DESIGNED - GC/GMK	REVISED -
	PLOT SCALE = 1.0000 FT / IN.	DRAWN - RR	REVISED -
	PLOT DATE = Aug 22, 2008 - 11:24:24 AM	CHECKED - GC/GMK	REVISED -
		DATE - August 2008	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - STRUCTURAL

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR,108-BR,108-BR-1	FORD	92	48

CONTRACT NO. 66698

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

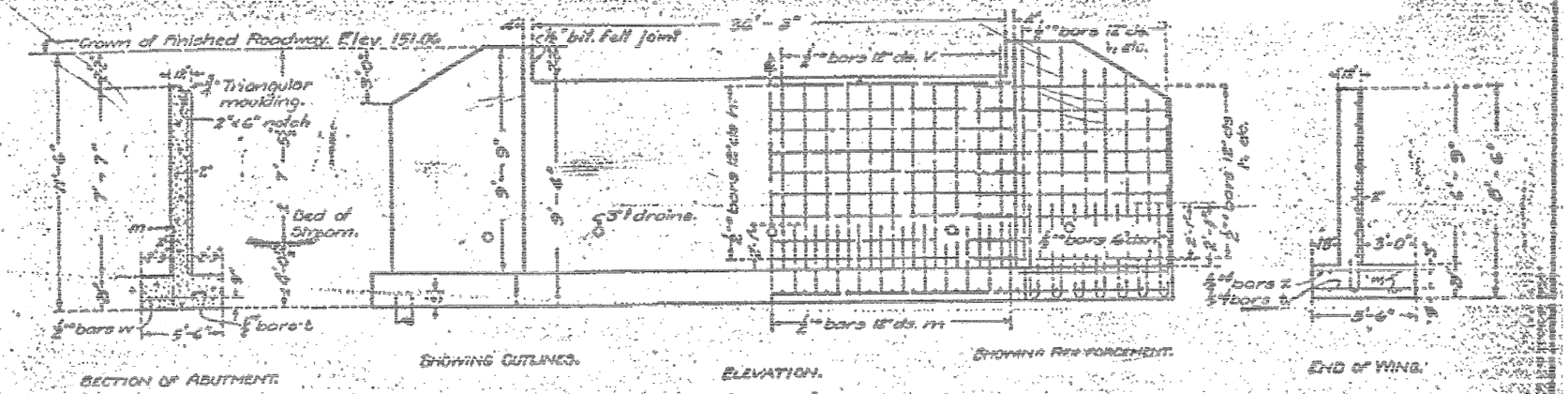
BOND ISSUE ROUTE NO.	COUNTY	SEC.	TOTAL SHEETS	SHEET NO.
115	Ford	108-BR	92	49

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

B.M. "29" - S.& W. in T.P. 150' Lt. Sta. 264+50 Elev. 154.76
Existing structure 16' I.B. span 14' Rdy. to be left in place.

R.C. ABUTMENTS FOR SLAB BRIDGE
HEIGHT OVER ALL 11 FEET 6 INCHES

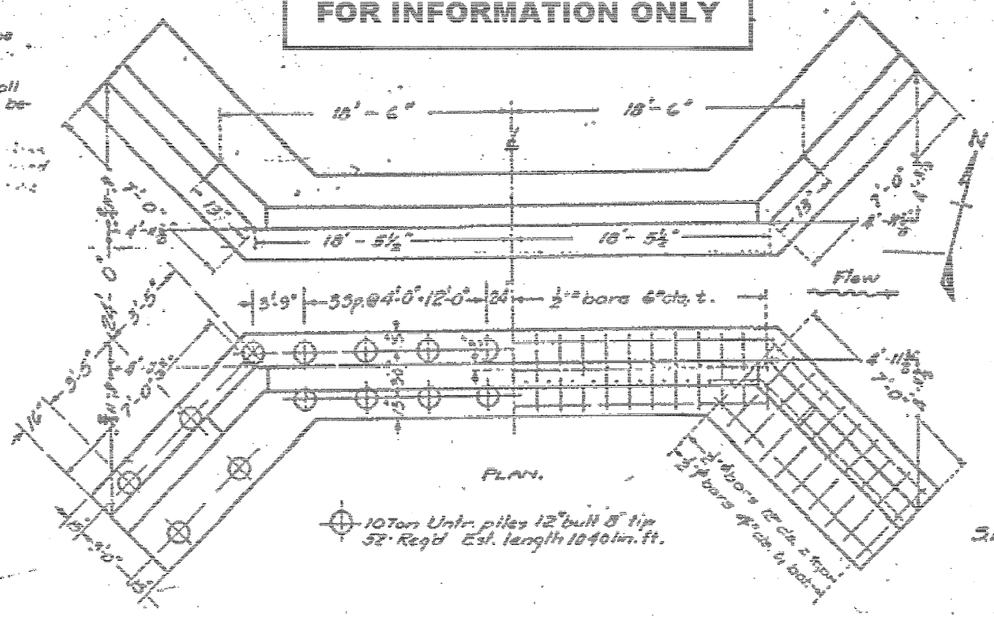
STR. NO. 027-0030



EXISTING PLANS
FOR INFORMATION ONLY

Class X concrete shall be used throughout.

All reinforcing steel shall be securely wired in place before concrete is poured.



BILL OF MATERIAL.

Bars	No	Size	Length
v	72	½"	7'-0"
v1	8	½"	9'-4"
v2	8	½"	8'-0"
v3	12	"	6'-6"
h	32	½"	19'-0"
h1	32	½"	6'-6"
b	140	½"	5'-3"
b1	104	½"	5'-3"
x	32	½"	5'-3"
w	8	½"	18'-6"
w1	16	½"	8'-0"
m	72	½"	7'-0"
m1	56	½"	4'-3"
Reinforcing Steel Lbs.			9150
Concrete Cu. Yds. Cl X			64.3

STANDARD	Computed - H.P.D.	
	Checked - E.D. Looney	
	Drawn - J.R. Zalar	
	Checked - H.P.D.	
SPECIAL	Assembled - H.P.D.	
	Checked - J.R. Graham	

S.B.I. ROUTE 115 SECTION 108-BR
FORD COUNTY
STATION 265+75

97A

FILE NAME =	USER NAME = carpenterdj	DESIGNED - GC/GMK	REVISED -
c:\pw_work\pwidot\carpenterdj\dms30272\	DRAWN - RR	REVISED -	
	PLOT SCALE = 1.0000 FT / IN.	CHECKED - GC/GMK	REVISED -
	PLOT DATE = Aug 22, 2008 - 02:12:08 PM	DATE - August 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – STRUCTURAL

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR,108-BR,108-BR-1	FORD	92	49
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Bench Mark No. 2:
Set rail road spike in power pole sta. 315.78.739, 32,528 ft. right. El. 736.876.

Bench Mark No. 3:
found Chiseled Square Top Wing Wall,
Sta. 319+07.705, 18,950 ft. Right,
El. 735.048.

Existing Structure:
The existing structure number 027-0031, built in 1928 is located 207 ft. South of the original structure. The existing structure was built as SBI Route 115, Section 108B, Ford County at station 318+82.42. The structure is a one span reinforced concrete slab bridge, with closed abutments supported on untreated timber piles. The existing bridge is 26'-3¾" long back to back of abutments & 36'-2" wide out to out of slab. The bridge is at 30° RF skew. The existing structure to be removed and replaced by 2-10' wide x 6' deep Pre-Cast Concrete Box Culverts. Traffic to be mainained utilizing detour.
No Salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 798	*	FORD	92	50
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-	

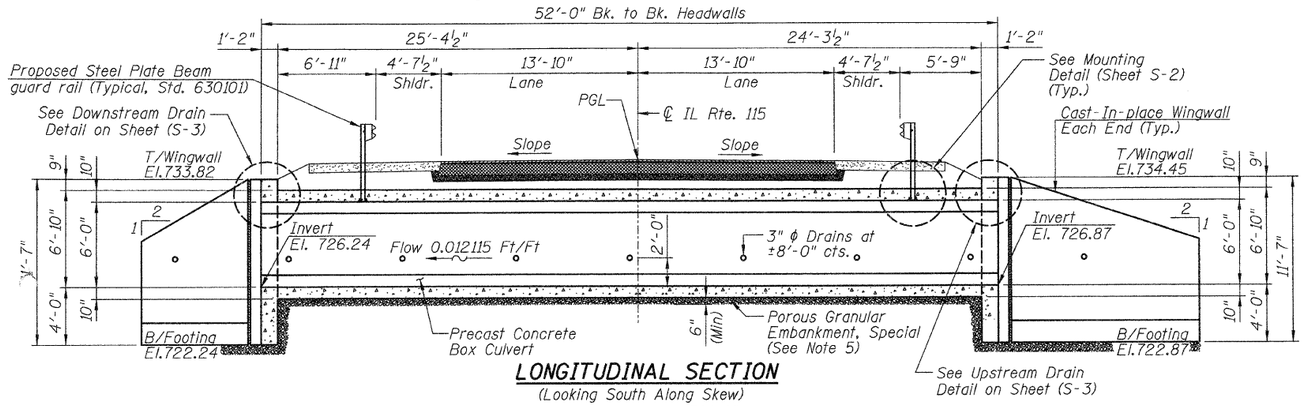
SHEET NO. S1
S4 SHEETS

*107-BR, 108-BR, 108-BR-1 Contract #66698

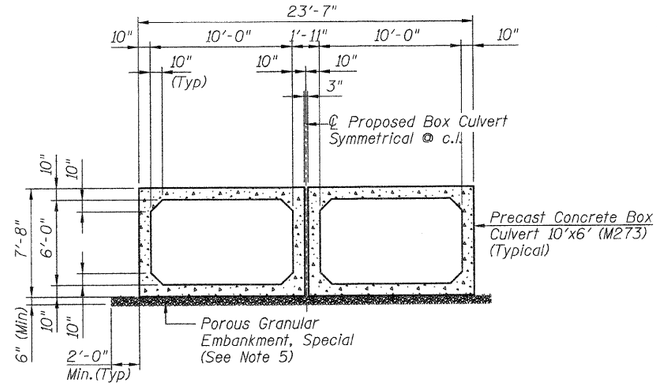
INDEX OF SHEETS

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	284.0
Porous Granular Embankment, Special	Cu. Yd.	37.0
Removal of Existing Structures No. 2	Each	1
Structure Excavation	Cu. Yd.	515.0
Reinforcement Bars	Pound	16,370.0
Reinforcement Bars, (Epoxy Coated)	Pound	350.0
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	70.0
Precast Concrete Box Culvert 10'x6' (M273)	Foot	64.0



LONGITUDINAL SECTION
(Looking South Along Skew)

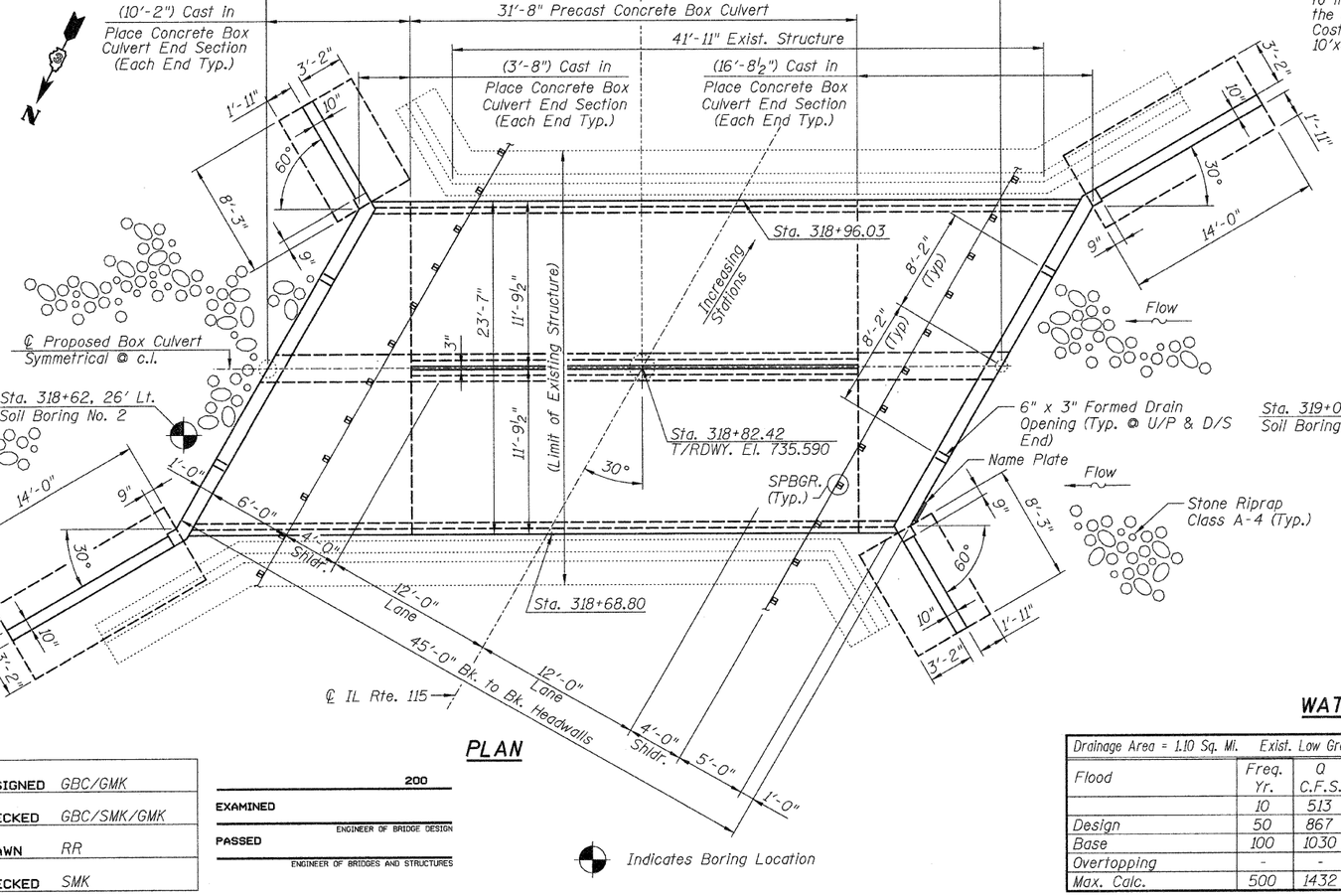


SECTION THRU PRECAST BARREL

3" nominal space shall be left between adjacent precast sections. After the precast cells are in place and backfill has been placed to mid height of the precast concrete box section on each side, the space between the cells shall be filled with class SI concrete. Cost included with pay item for "precast concrete box culvert 10'x6' (M273)

GENERAL NOTES

1. Reinforcement bars shall Conform to the requirements of ASTM A 706, Grade 60 (IL Modified). See Special Provisions.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
4. Excavation behind existing abutment walls shall be done before removing the existing supestructure.
5. The material used to replace the unsuitable material removed below the bottom of the proposed precast concrete box culvert and cast-in-place concrete wingwalls shall be clean crushed material CA-7 for 6" layer and shall be paid for as "Porous Granular Embankment, Special".



PLAN

HIGHWAY CLASSIFICATION

F.A.P. RTE. 798-IL.RTE 115
Functional Class: Minor Arterial
ADT: 800 (2005); ADT 1000 (2018)
DHV: 91(1998); 125 (2018)
ADTT: 15.0 %
Design Speed: 55 Mph
Posted Speed: 55 Mph

LOADING HS20-44

Allow 50 #/sq. ft. for Future Wearing Surface

DESIGN SPECIFICATIONS

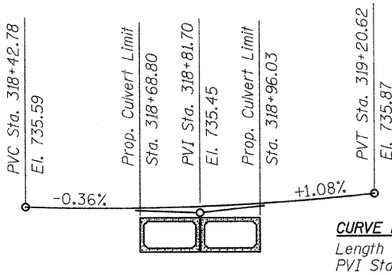
2002 AASHTO

DESIGN STRESSES

Field Units
Cast-In-Place Reinforced Concrete
f'c = 3,500 psi (Concrete)
fy = 60,000 psi (Reinforcement)
Precast Concrete Box Culvert, Design as per AASHTO M 273 (ASTM C850).
f'c = 5,000 psi
fy = 65,000 psi (Welded Wire Fabric)

SEISMIC DATA

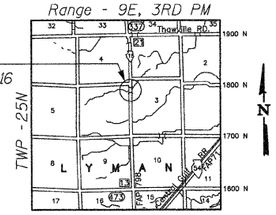
Seismic Performance Category (S.P.C.)=A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0



PROFILE GRADE
(Along ℄ Il. Route 115)

CURVE DATA:
Length of Curve = 77.84 Ft.
PVI Sta 318+81.70
El. 735.45'

Range - 9E, 3RD PM



LOCATION SKETCH

STATION 318+82.42
BUILT 200 BY
STATE OF ILLINOIS
F.A.P. RT. 798 SEC. 108-B
LOADING HS20-44
STR. NO. 027-2016

NAME PLATE
See Std. 515001

WATERWAY INFORMATION

Drainage Area = 1.10 Sq. Mi.	Exist. Low Grade El. = 735.5 @ Sta. 318+75		Prop. Low Grade El. = 735.7 @ Sta. 318+75						
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	513	69.2	102.6	732.0	2.0	0.3	734.0	732.3
Design	50	867	87.9	120	732.9	2.5	0.7	735.5	733.6
Base	100	1030	94.1	120	733.2	2.4	0.9	735.6	734.1
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	1432	96.6	120	734.0	2.4	1.5	736.4	735.5

DESIGNED	GBC/GMK
CHECKED	GBC/SMK/GMK
DRAWN	RR
CHECKED	SMK

200

EXAMINED
ENGINEER OF BRIDGE DESIGN

PASSED
ENGINEER OF BRIDGES AND STRUCTURES

Syed M. Kazi
Licensed Structural Engineer
State of Illinois
Lic. No. 081-004047
Expires: 11-30-2008

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 115 OVER DRAINAGE DITCH
F.A.P. ROUTE 798 - SECTION 108-BR
FORD COUNTY
STATION 318+82.42
EXISTING STRUCTURE NO. 027-0031
PROPOSED STRUCTURE NO. 027-2016

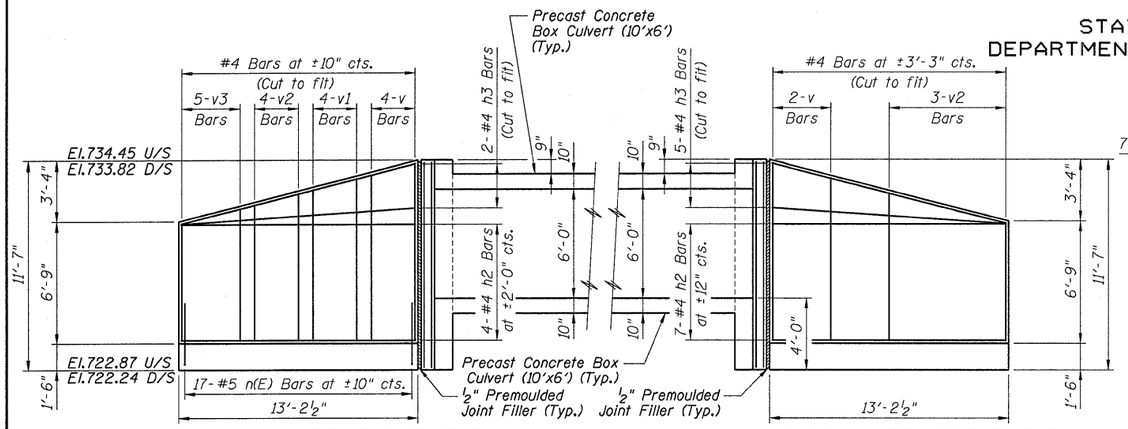
Scale: None August 2008

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 798	*	FORD	92	51
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-	

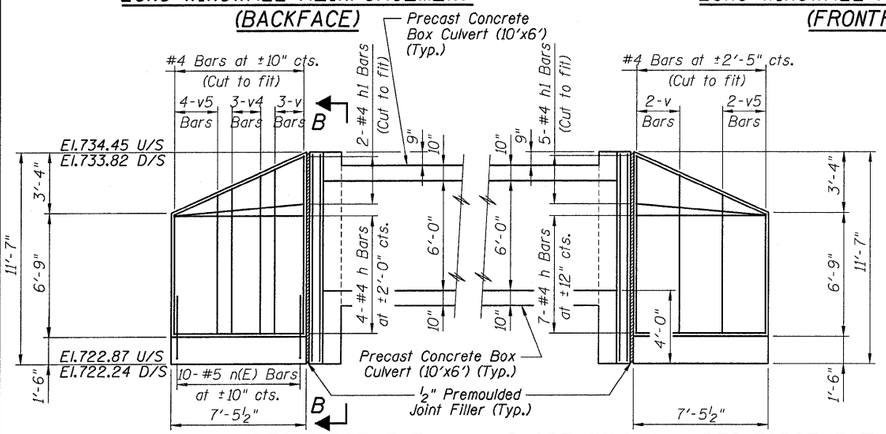
SHEET NO. S2
S4 SHEETS

* 107-BR, 108-BR, 108-BR-1 Contract # 66698



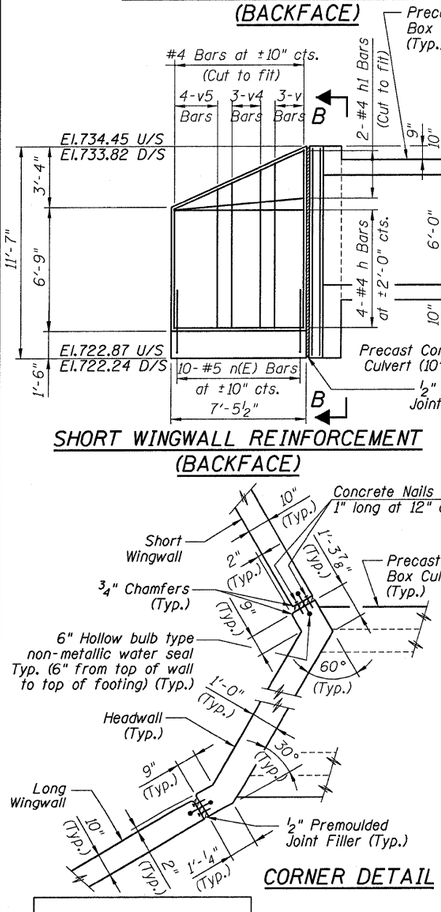
LONG WINGWALL REINFORCEMENT (BACKFACE)

LONG WINGWALL REINFORCEMENT (FRONTFACE)



SHORT WINGWALL REINFORCEMENT (BACKFACE)

SHORT WINGWALL REINFORCEMENT (FRONTFACE)



CORNER DETAIL

DESIGNED	GBC/GMK
CHECKED	GBC/SMK/GMK
DRAWN	RR
CHECKED	SMK

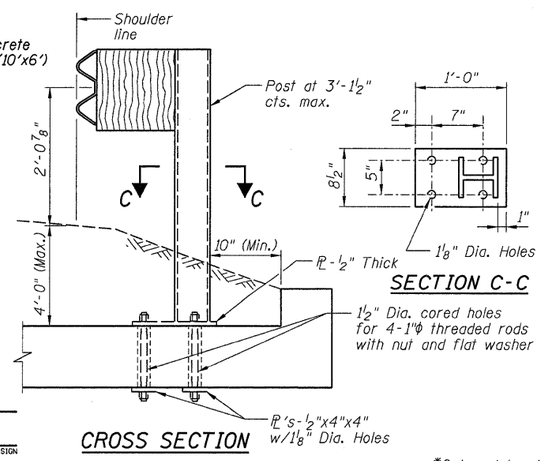
200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

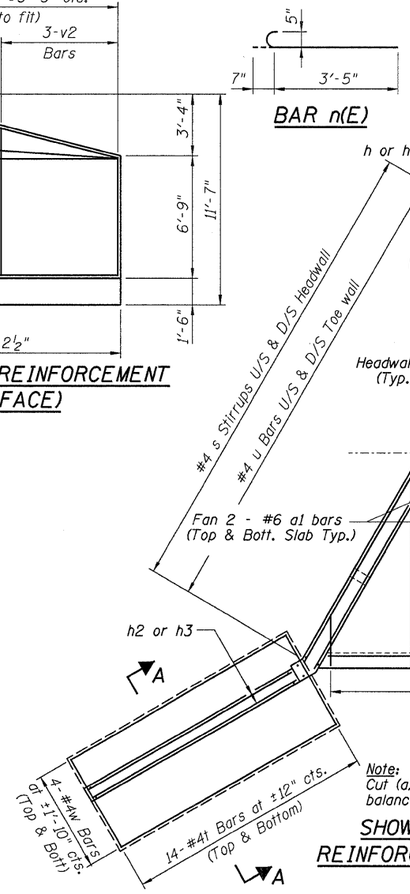
ENGINEER OF BRIDGES AND STRUCTURES



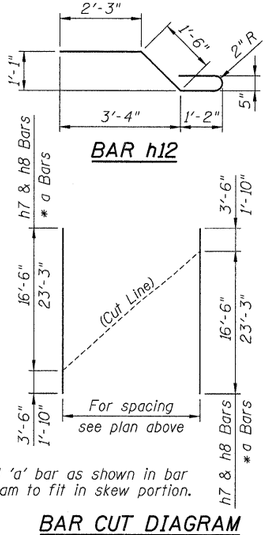
SECTION C-C

CROSS SECTION

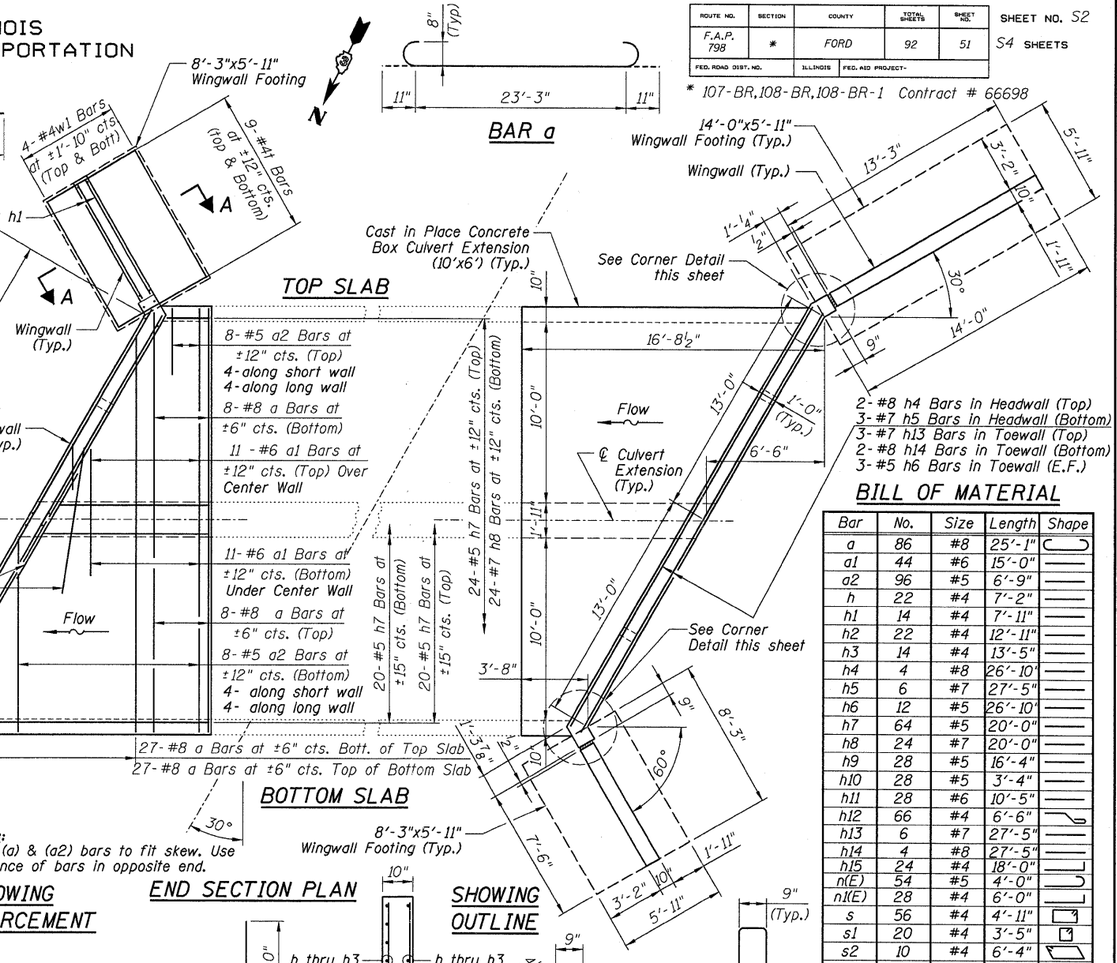
GUARD RAIL MOUNTED ON TOP SLAB OF BOX CULVERT



*Cut and bend 'a' bar as shown in bar bending diagram to fit in skew portion.



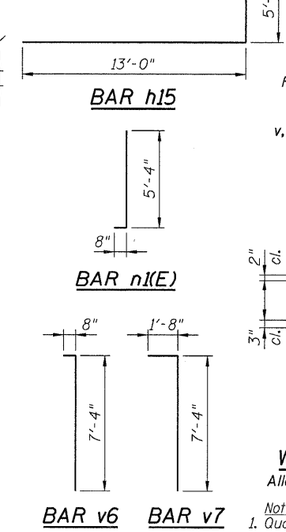
BAR CUT DIAGRAM

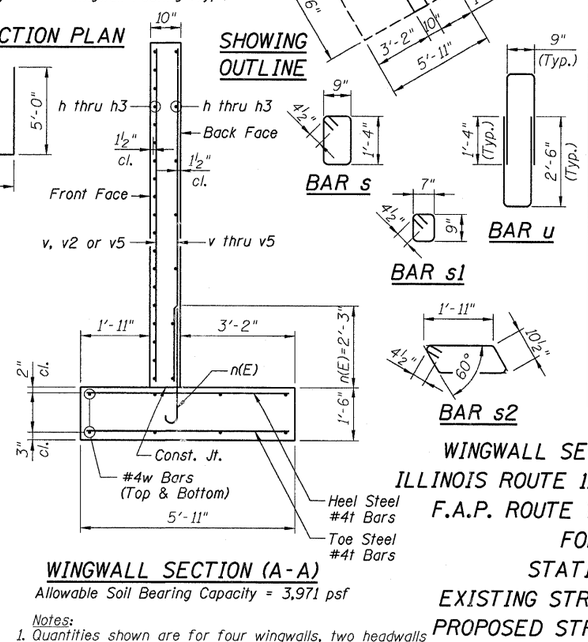


SHOWING REINFORCEMENT

END SECTION PLAN

SHOWING OUTLINE





Notes:
1. Quantities shown are for four wingwalls, two headwalls and cast-in-place portion of the box culverts.

2-#8 h4 Bars in Headwall (Top)
3-#7 h5 Bars in Headwall (Bottom)
3-#7 h13 Bars in Toewall (Top)
2-#8 h14 Bars in Toewall (Bottom)
3-#5 h6 Bars in Toewall (E.F.)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	86	#8	25'-1"	
a1	44	#6	15'-0"	
a2	96	#5	6'-9"	
h	22	#4	7'-2"	
h1	14	#4	7'-11"	
h2	22	#4	12'-11"	
h3	14	#4	13'-5"	
h4	4	#8	26'-10"	
h5	6	#7	27'-5"	
h6	12	#5	26'-10"	
h7	64	#5	20'-0"	
h8	24	#7	20'-0"	
h9	28	#5	16'-4"	
h10	28	#5	3'-4"	
h11	28	#6	10'-5"	
h12	66	#4	6'-6"	
h13	6	#7	27'-5"	
h14	4	#8	27'-5"	
h15	24	#4	18'-0"	
n(E)	54	#5	4'-0"	
n1(E)	28	#4	6'-0"	
s	56	#4	4'-11"	
s1	20	#4	3'-5"	
s2	10	#4	6'-4"	
t	92	#4	5'-8"	
u	112	#4	5'-9"	
v	22	#4	9'-10"	
v1	8	#4	9'-0"	
v2	14	#4	8'-2"	
v3	10	#4	7'-5"	
v4	6	#4	8'-9"	
v5	12	#4	7'-8"	
v6	8	#4	8'-0"	
v7	8	#4	9'-0"	
v8	164	#4	7'-4"	
w	16	#4	13'-9"	
w1	16	#4	8'-0"	
Concrete Box Culvert		Cu. Yd.	70.0	
Reinforcement Bars, (Epoxy Coated)		Pound	350	
Reinforcement Bars		Pound	16,370	

WINGWALL SECTIONS AND DETAILS
ILLINOIS ROUTE 115 OVER DRAINAGE DITCH
F.A.P. ROUTE 798 - SECTION 108-BR
FORD COUNTY
STATION 318+82.42
EXISTING STRUCTURE NO. 027-0031
PROPOSED STRUCTURE NO. 027-2016

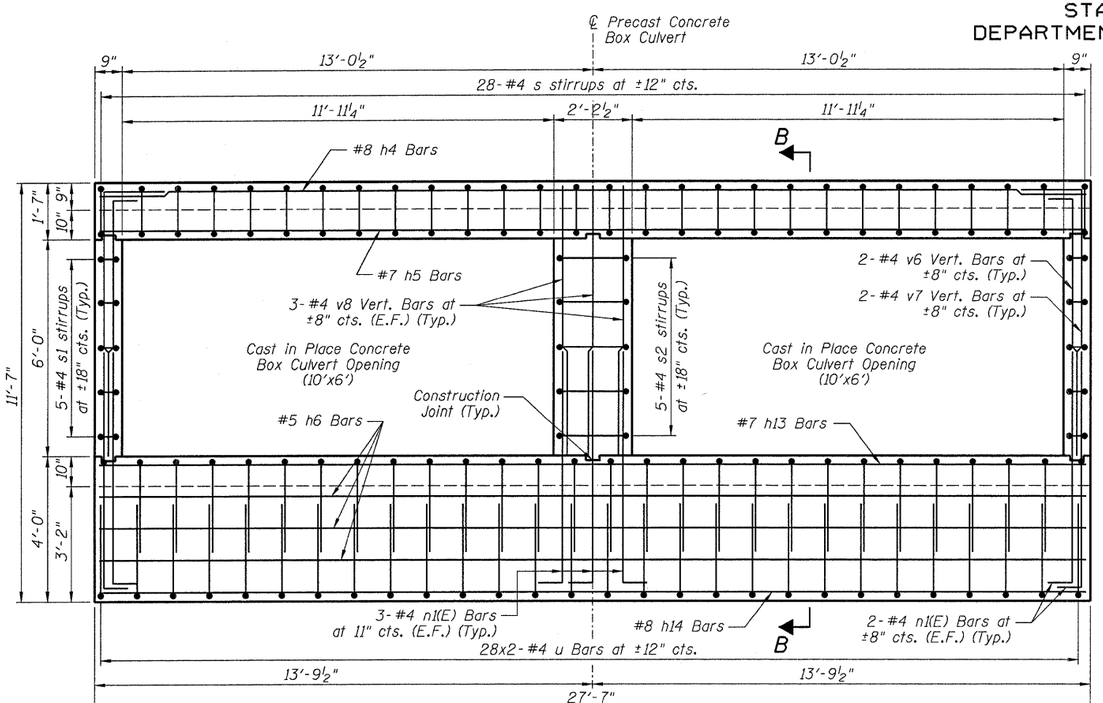
Scale: None August 2008

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

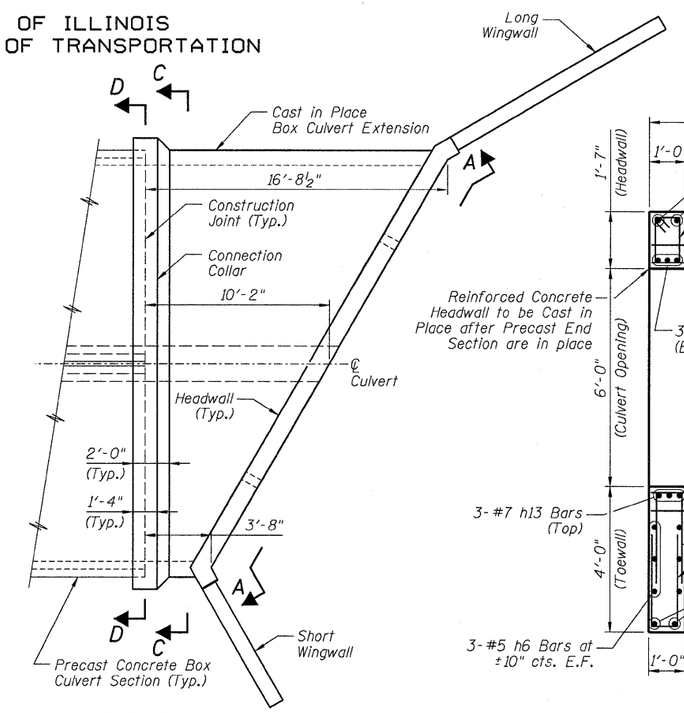
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 798	*	FORD	92	52
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		

SHEET NO. S3
S4 SHEETS

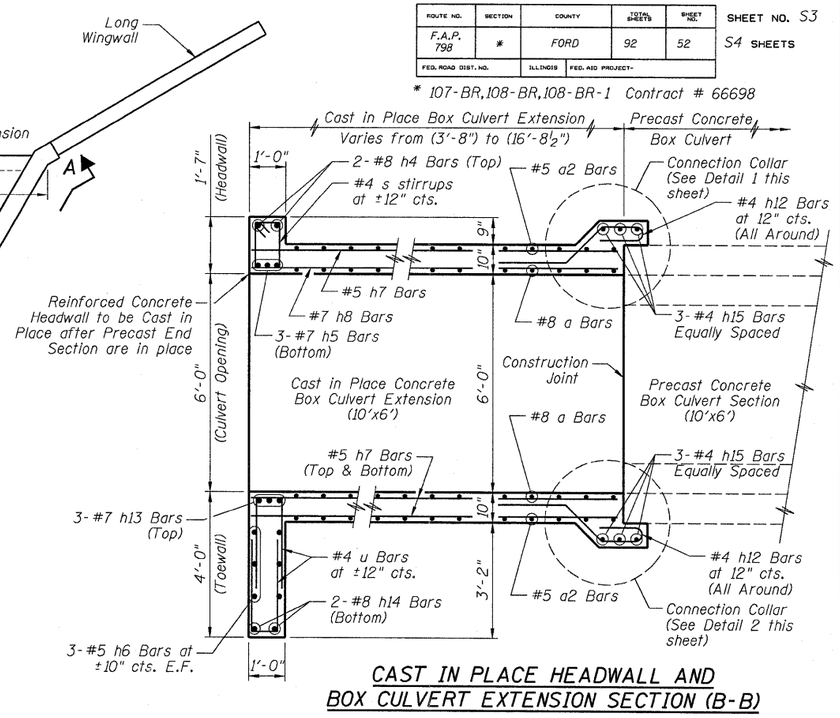
* 107-BR, 108-BR, 108-BR-1 Contract # 66698



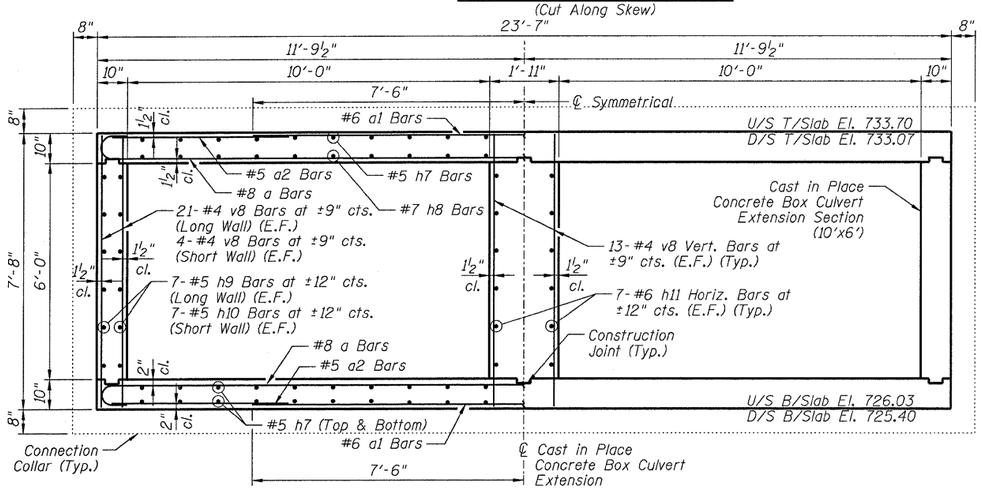
HEADWALL SECTION (A-A)



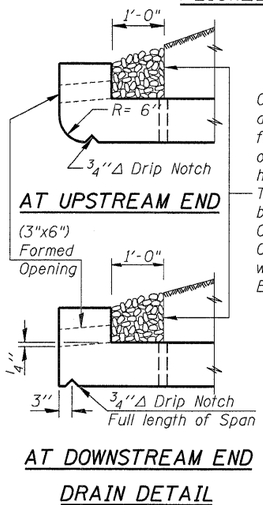
ALIGNED PRECAST SECTION

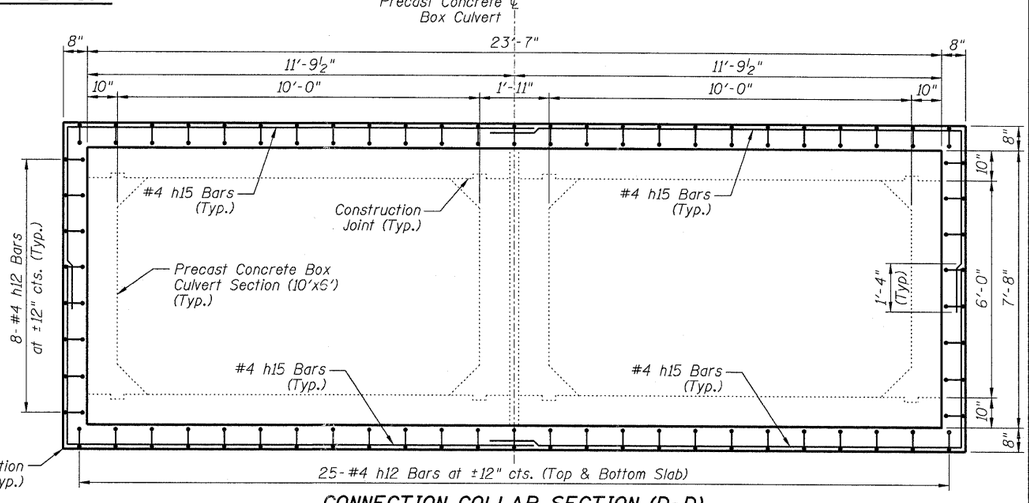


CAST IN PLACE HEADWALL AND BOX CULVERT EXTENSION SECTION (B-B)

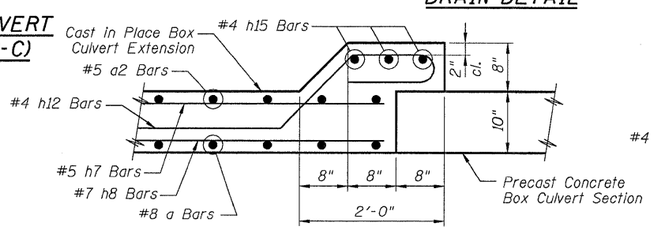


CAST IN PLACE BOX CULVERT EXTENSION SECTION (C-C)

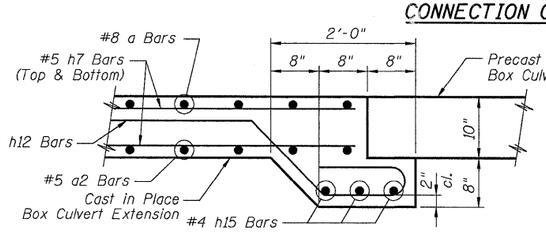




CONNECTION COLLAR SECTION (D-D)



CONNECTION COLLAR DETAIL 1



CONNECTION COLLAR DETAIL 2

DESIGNED	GBC/GMK
CHECKED	GBC/SMK/GMK
DRAWN	RR
CHECKED	SMK

200

EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

HEADWALL SECTIONS AND DETAILS
ILLINOIS ROUTE 115 OVER DRAINAGE DITCH
F.A.P. ROUTE 798 - SECTION 108-BR
FORD COUNTY
STATION 318+82.42
EXISTING STRUCTURE NO. 027-0031
PROPOSED STRUCTURE NO. 027-2016

Scale: None August 2008

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 798	*	FORD	92	53
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT-	

SHEET NO. S4
S4 SHEETS

* 107-BR, 108-BR, 108-BR-1 Contract # 66698

Illinois Department of Transportation
Division of Highways
District #3, Ottawa

SOIL BORING LOG

Page 1 of 1

Date 10/5/05

ROUTE IL 115 DESCRIPTION IL 115 over Drainage Ditch LOGGED BY Larry Myers

SECTION 108-B LOCATION NW 1/4, SEC. 3, TWP. 25, RNG. 9 E

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME automatic

STRUCT. NO. 027-0031
Station 318+82.42

BORING NO. 1 SW Quad
Station 319+07
Offset 50.00ft Rt.
Ground Surface Elev. 732.05 ft

Surface Water Elev. 727.91 ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion Dry ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Augered Black Silt			
729.55			
	2		
Stiff Gray / Brown Silty Clay / Silty clay loam	2 2	1.0 P	32.6
727.05 -5			
	1		
Stiff Gray / Brown Silty clay loam Till	3 4	1.6 S	21.0
725.05			
Hard Gray Silty clay loam till	4		
	6 10	4.6 S	17.5
-10	5		
	8 11	5.6 S	16.1
720.05	3		
Very stiff Gray Silty clay loam till	7 7	3.5 B	18.7
717.55			
Stiff Gray Silty clay loam till -15	2		
	3 5	1.5 B	20.5
	2		
	4 6	1.8 B	20.0
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Stiff Gray Silty clay loam till (continued)	2		
	3 4	1.8 B	21.4
	2		
	3 4	1.3 B	24.2
707.55			
Stiff Gray clay / Silty clay till -25	2		
	3 4	1.3 B	23.0
	3		
	4 5	1.2 S	24.5
-30	1		
	2 3	1.2 B	26.2
-35	3		
	4 5	1.2 B	26.1
695.55			
End of Boring			
-40			

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

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
District #3, Ottawa

SOIL BORING LOG

Page 1 of 1

Date 10/5/05

ROUTE IL 115 DESCRIPTION IL 115 over Drainage Ditch LOGGED BY Larry Myers

SECTION 108-B LOCATION NW 1/4, SEC. 3, TWP. 25, RNG. 9 E

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME automatic

STRUCT. NO. 027-0031
Station 318+82.42

BORING NO. 2 NE Quad
Station 318+82
Offset 26.00ft Lt
Ground Surface Elev. 732.19 ft

Surface Water Elev. 727.91 ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion Dry ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Augered Silty clay			
730.19			
Stiff black silty clay / silty clay loam	wh		
	2 3	1.5 P	34.4
-5	2		
	2 3	1.5 P	24.3
725.69			
Very stiff brown / gray silty clay loam till	3		
	5 7	3.4 S	19.9
723.19			
Very stiff gray silty clay loam till -10	3		
	4 3	2.1 B	19.2
	2		
	5 6	2.5 S	19.7
718.19			
Stiff gray silty clay loam till -15	2		
	4 6	1.6 B	20.4
	2		
	6 10	1.9 B	20.7
-20	2		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Stiff gray silty clay loam till (continued)	3 5	1.8 B	20.6
	2		
	3 5	1.5 B	22.6
-25	2		
	3 5	1.5 P	18.5
705.69			
Stiff gray silty clay / clay till	2		
	3 5	1.4 B	23.8
-30	2		
	3 5	1.5 B	28.1
-35	2		
	3 4	1.3 B	28.6
696.19			
End of Boring			
-40			

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

BBS, from 137 (Rev. 8-99)

DESIGNED	GBC/GMK
CHECKED	GBC/SMK/GMK
DRAWN	RR
CHECKED	SMK

200

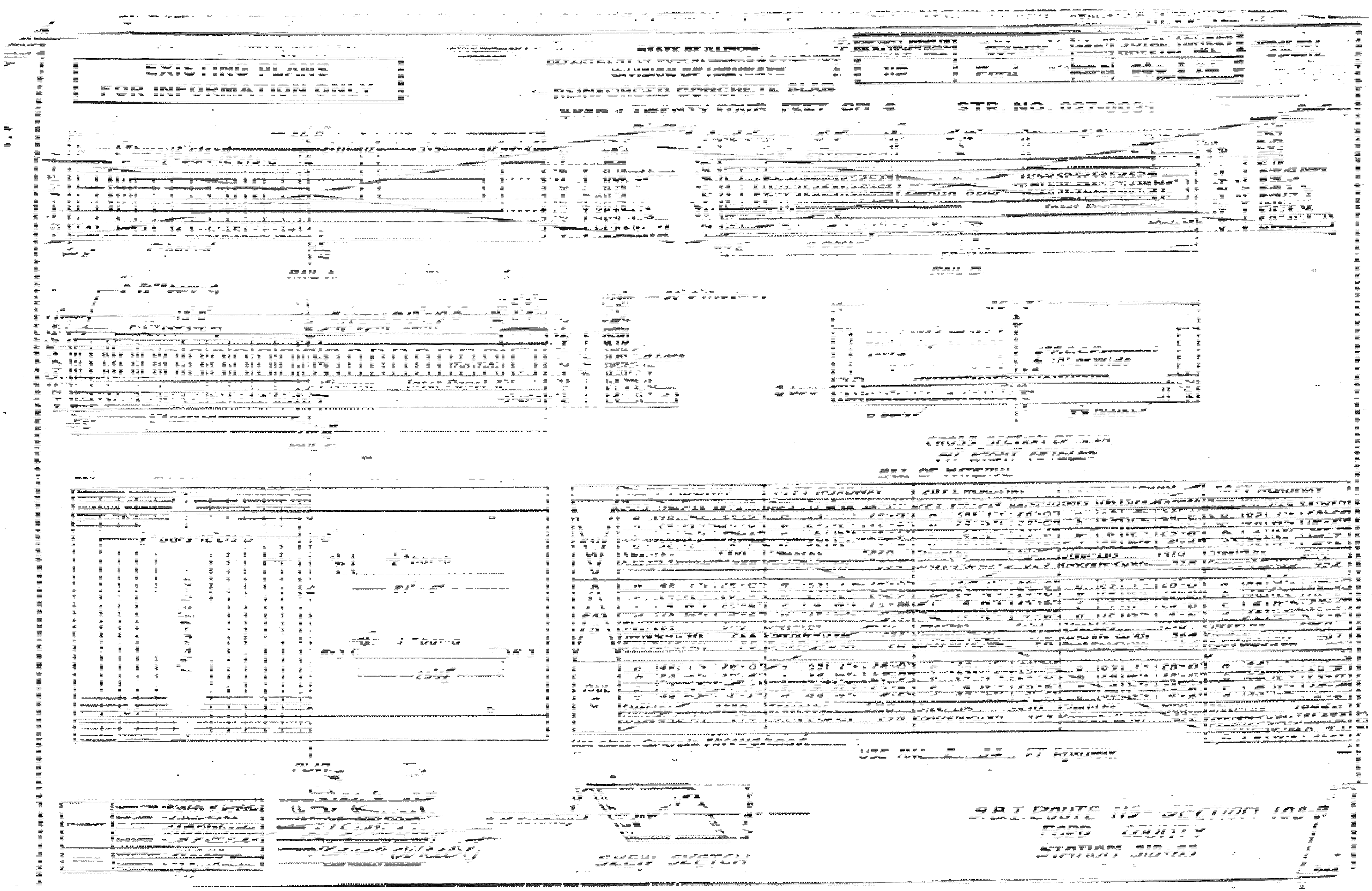
EXAMINED

ENGINEER OF BRIDGE DESIGN

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

SOIL BORING LOGS
ILLINOIS ROUTE 115 OVER DRAINAGE DITCH
F.A.P. ROUTE 798 - SECTION 108-BR
FORD COUNTY
STATION 318+82.42
EXISTING STRUCTURE NO. 027-0031
PROPOSED STRUCTURE NO. 027-2016
Scale: None August 2008



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	PLOT DATE = Aug 22, 2008 - 11:07:27 AM	DATE - August 2008	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - STRUCTURAL

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR,108-BR,108-BR-1	FORD	92	54
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

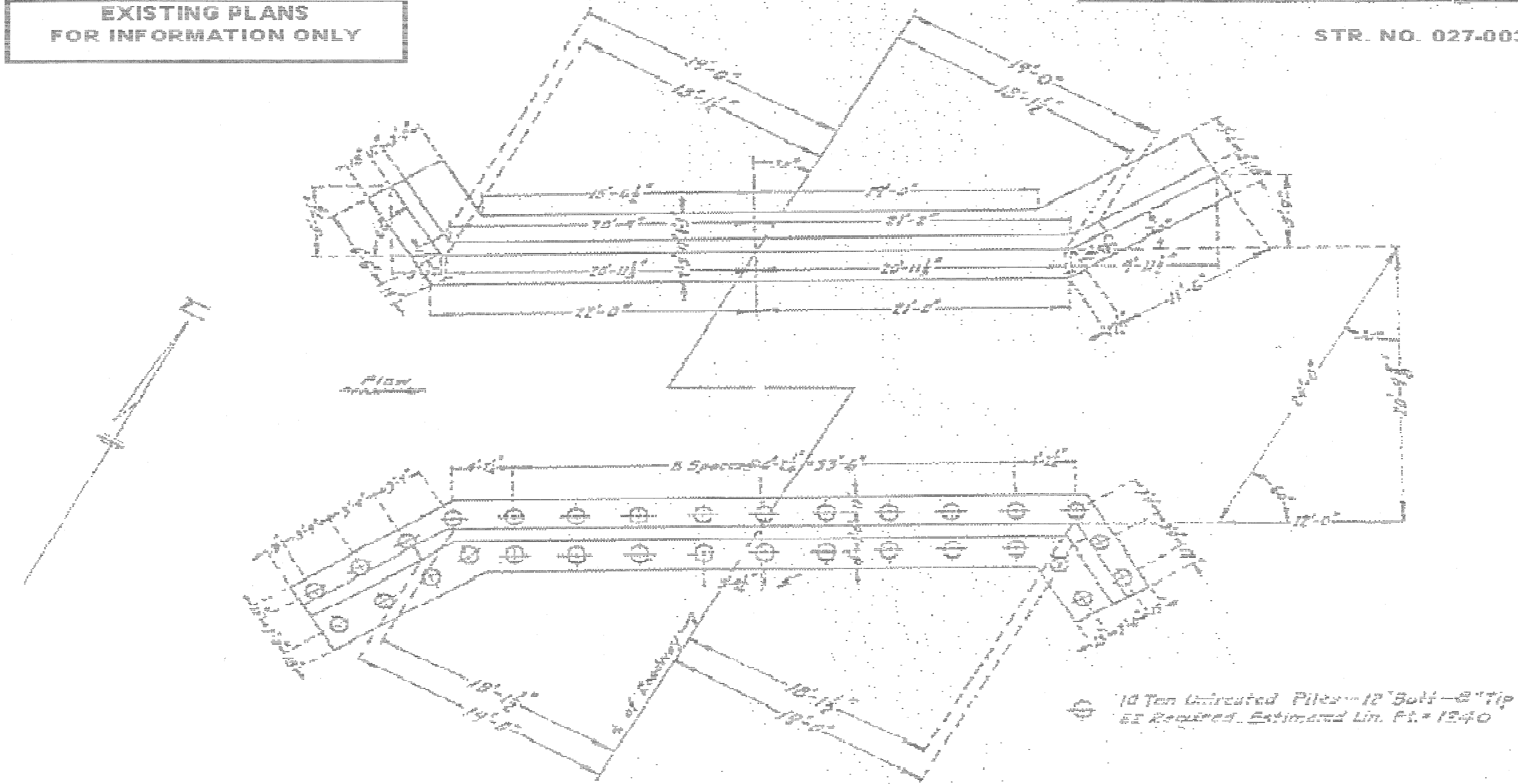
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

Sheet No. 3
9 Sheets

BOND ISSUE ROUTE NO.	COUNTY	SEC.	TOTAL SHEETS	SHEET NO.
115	Ford	108-B	25	24

EXISTING PLANS
FOR INFORMATION ONLY

STR. NO. 027-0031



⊖ 10 Ton Untreated Piles—12" Butt—8" Tip
22 Required. Estimated Lin. Ft. = 1240

EXAMINED ______ 1938
BRIDGE ENGINEER
PASSED
ENGINEER OF DESIGN
APPROVED
CHIEF HIGHWAY ENGINEER

SPECIAL	DRAWN —
	CHECKED —

S.B.I. ROUTE 115 — SECTION 108-B
FORD COUNTY
STATION 318+83

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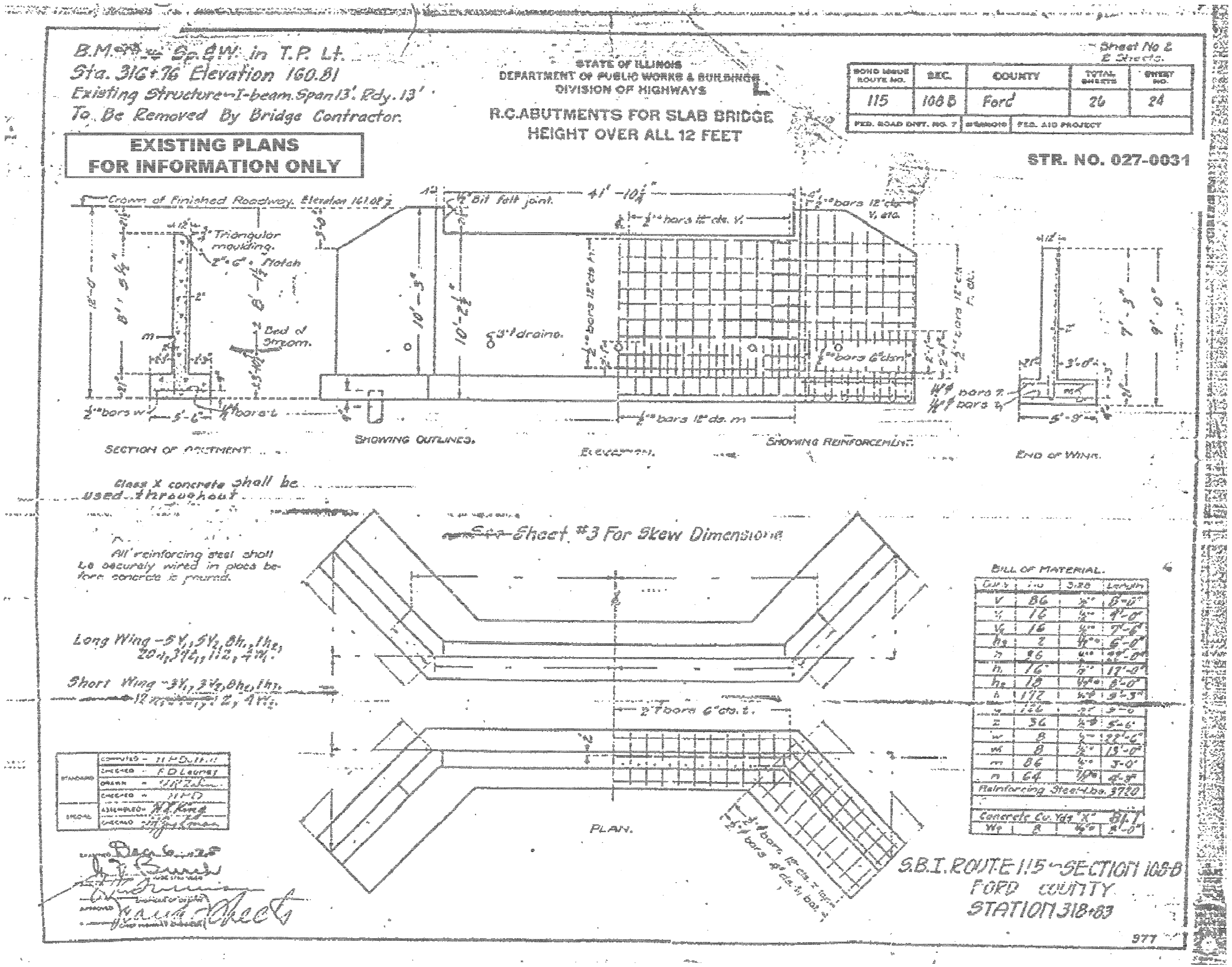
	PLOT SCALE = 1.0000 FT / IN.	DRAWN - RR	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 66698		
	PLOT DATE = Aug 22, 2008 - 11:06:11 AM	CHECKED - GC/GMK	REVISED -					FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	
		DATE - August 2008	REVISED -							


B.M. Sp. E.W. in T.P. Lt.
Sta. 316+76 Elevation 160.81
Existing Structure–I-beam. Span 13'. Rdy. 13'
To Be Removed By Bridge Contractor.
EXISTING PLANS
FOR INFORMATION ONLY
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
R.C. ABUTMENTS FOR SLAB BRIDGE
HEIGHT OVER ALL 12 FEET
Sheet No 2
115
108 B
Ford
26
24
STR. NO. 027-0031
Crown of Finished Roadway, Elevation 161.08
41'-10½"
Triangular moulding.
Bed of Stream.
SECTION OF ABUTMENT
SHOWING OUTLINES.
ELEVATION.
SHOWING REINFORCEMENT.
END OF WING.
Class X concrete shall be used throughout
See Sheet #3 For Skew Dimensions
All reinforcing steel shall be securely wired in place before concrete is poured.
BILL OF MATERIAL.
Reinforcing Steel-Lbs. 3720
PLAN.
S.B.I. ROUTE 115 – SECTION 108-B
FORD COUNTY
STATION 318+83
977

FILE NAME = c:\pw_work\PWIDOT\CARPENTERDJ\dms30072\exist_struct_2.3.dgn	USER NAME = carpenterdj	DESIGNED - GC/GMK	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**EXISTING PLANS – STRUCTURAL**
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		DATE - August 2008	REVISED -		

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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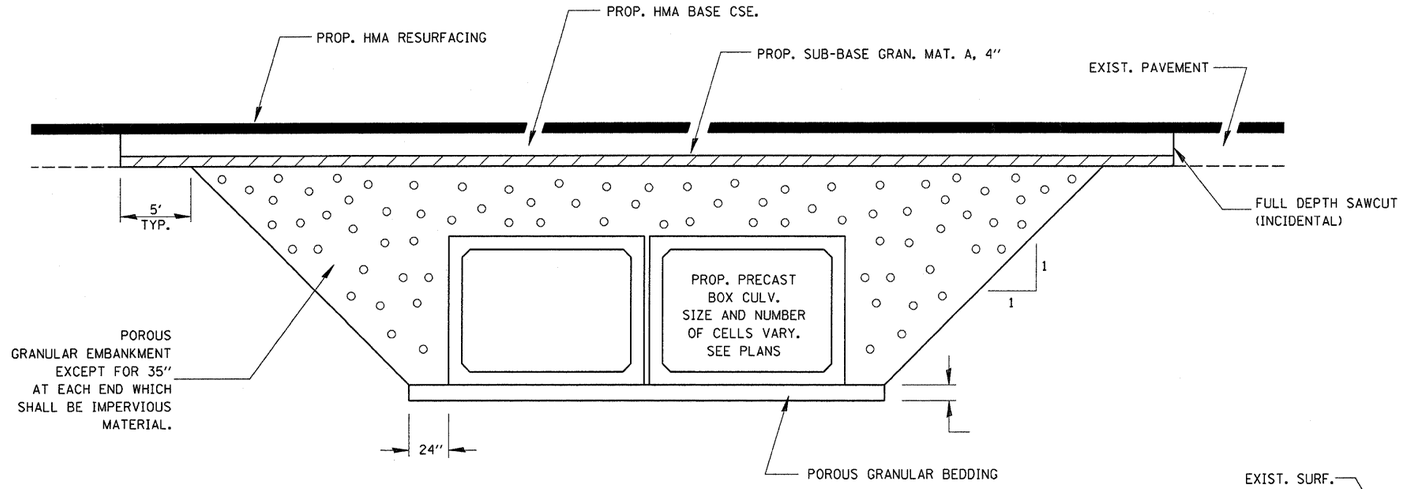
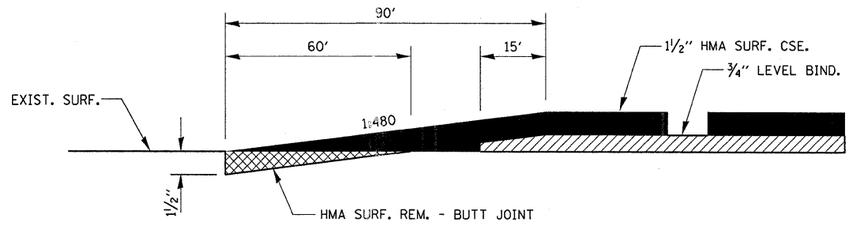
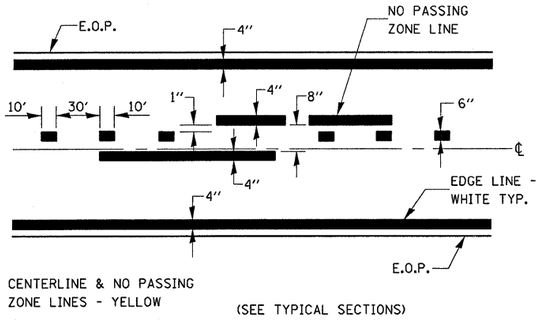
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



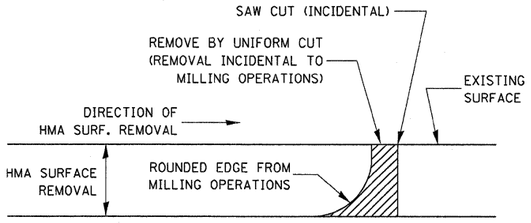
SECTION THROUGH PRECAST BOX CULVERT



BUTT JOINT

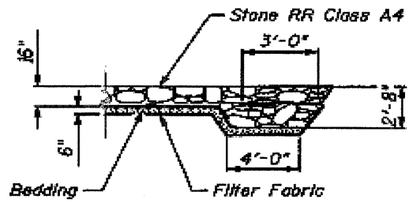


PAVEMENT MARKING

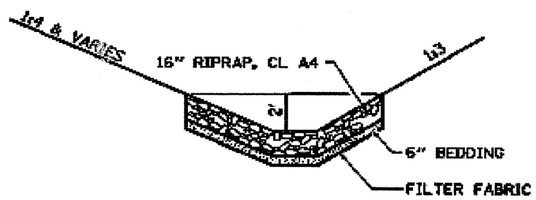


NOTE:
WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL

HMA DETAIL AT BUTT JOINTS



SECTION A-A FLANK DETAIL



RIPRAP LINED DITCH DETAIL

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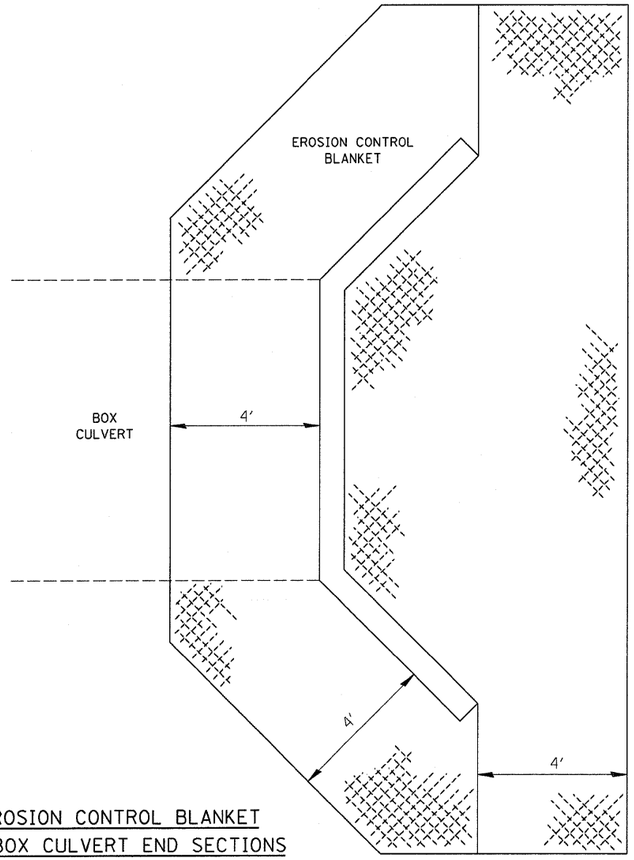
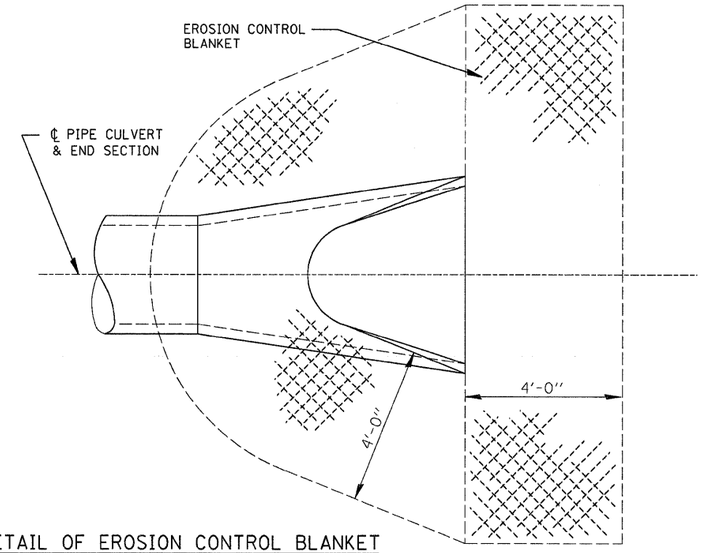
	district-cadetl-sht3.dgn	DRAWN - RM/FZ/DK/NS	REVISED -							798	107 BR, 108-BR, 108-BR-1	FORD	92	57
	PLOT SCALE = 21.18 ' / IN.	CHECKED - AS	REVISED -									CONTRACT NO. 66698		
	PLOT DATE = Aug 22, 2008 - 11:01:03 AM	DATE - AUGUST 2008	REVISED -		SCALE: NONE	SHEET NO. OF SHEETS	STA.	TO STA.		FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

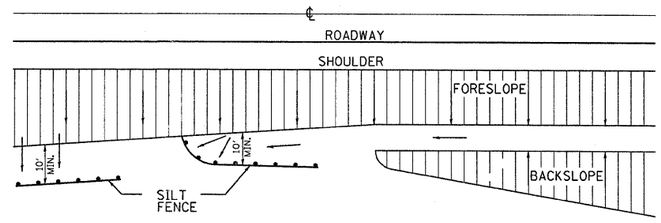


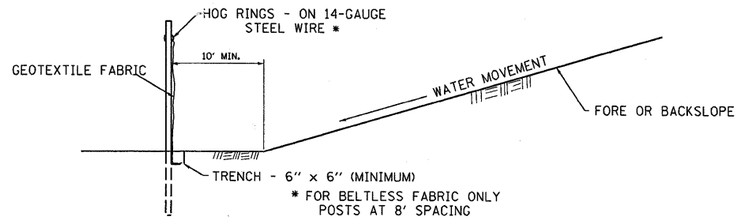
EROSION CONTROL BLANKET
AT BOX CULVERT END SECTIONS



DETAIL OF EROSION CONTROL BLANKET
LINING AROUND END SECTION

NOTE: PRC FLARED END SECTION SHOWN.
TREATMENT SAME FOR OTHER
END SECTIONS.





DETAILS OF SILT FENCE

EROSION CONTROL DETAILS
FOR SILT FENCE

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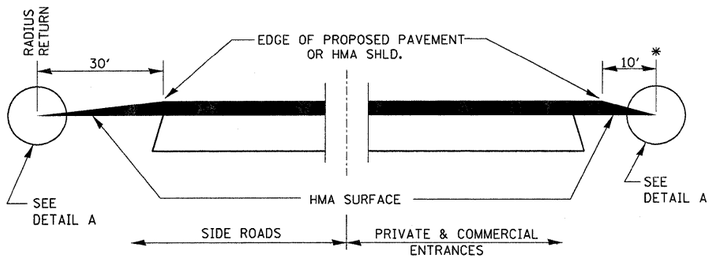
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS

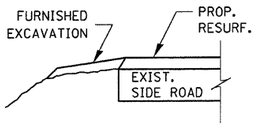
SCALE: NONE | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	58
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



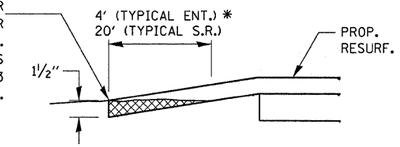
SECTION A-A

DETAILS AT ENTRANCES & SIDE ROADS

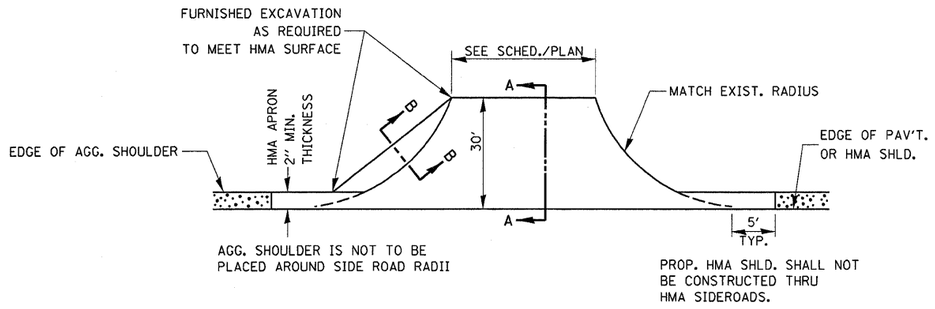


SECTION B-B

THE COST OF REMOVAL AT EXISTING HMA OR P.C.C. LOCATIONS SHALL BE PAID FOR PER SQ. YD. BY THE APPROPRIATE PAY ITEM. REMOVAL AT THE EXISTING AGG. LOCATIONS SHALL BE INCIDENTAL TO THE HMA. A-3 LOCATIONS SHALL BE FEATHER TAPERED.



DETAIL A



PLAN AT SIDE ROADS

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	district-codetl-sht2.dgn	DRAWN - RM/FZ/DK/NS	REVISED -					798	107-BR, 108-BR, 108-BR-1	FORD	92	59
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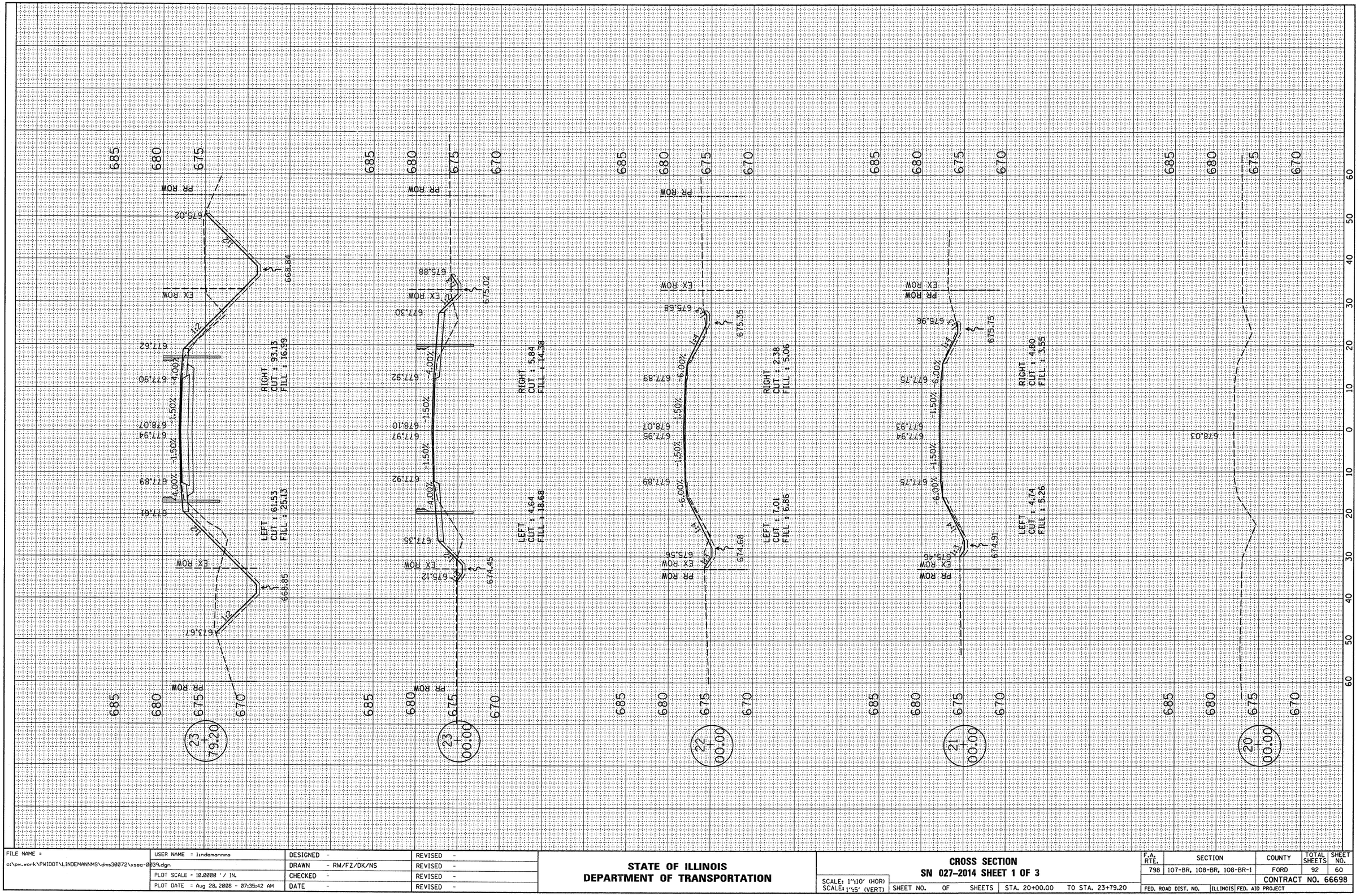
FINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



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

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		DRAWN - RM/FZ/DK/NS	REVISED -
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	PLOT DATE = Aug 28, 2008 - 07:35:42 AM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTION
SN 027-2014 SHEET 1 OF 3

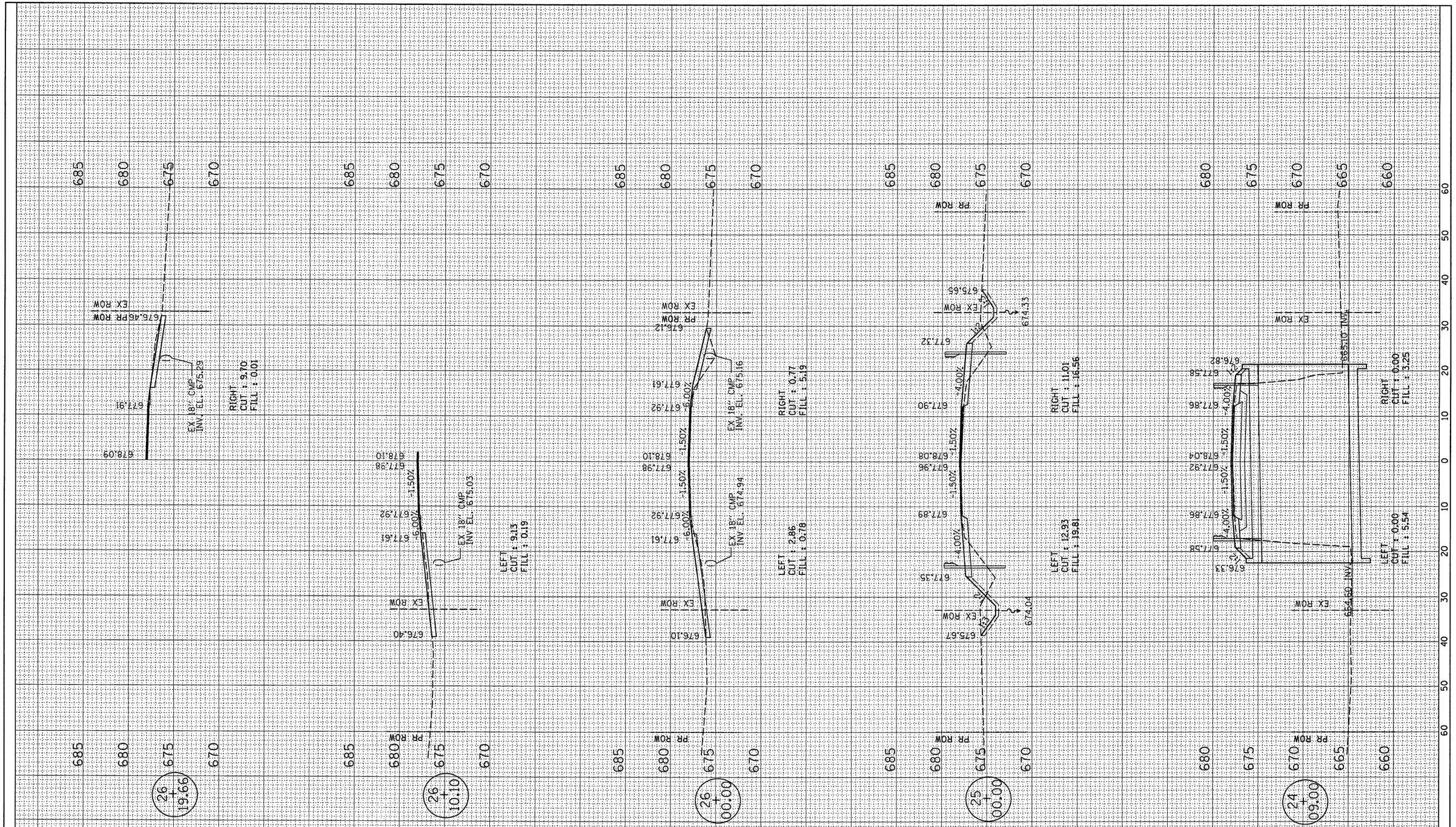
SCALE: 1":10' (HOR)
SCALE: 1":5' (VERT)

SHEET NO. OF SHEETS | STA. 20+00.00 | TO STA. 23+79.20

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	60
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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



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	PLOT DATE = Aug 28, 2008 - 07:35:22 AM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTION
SN 027-2014 SHEET 2 OF 3

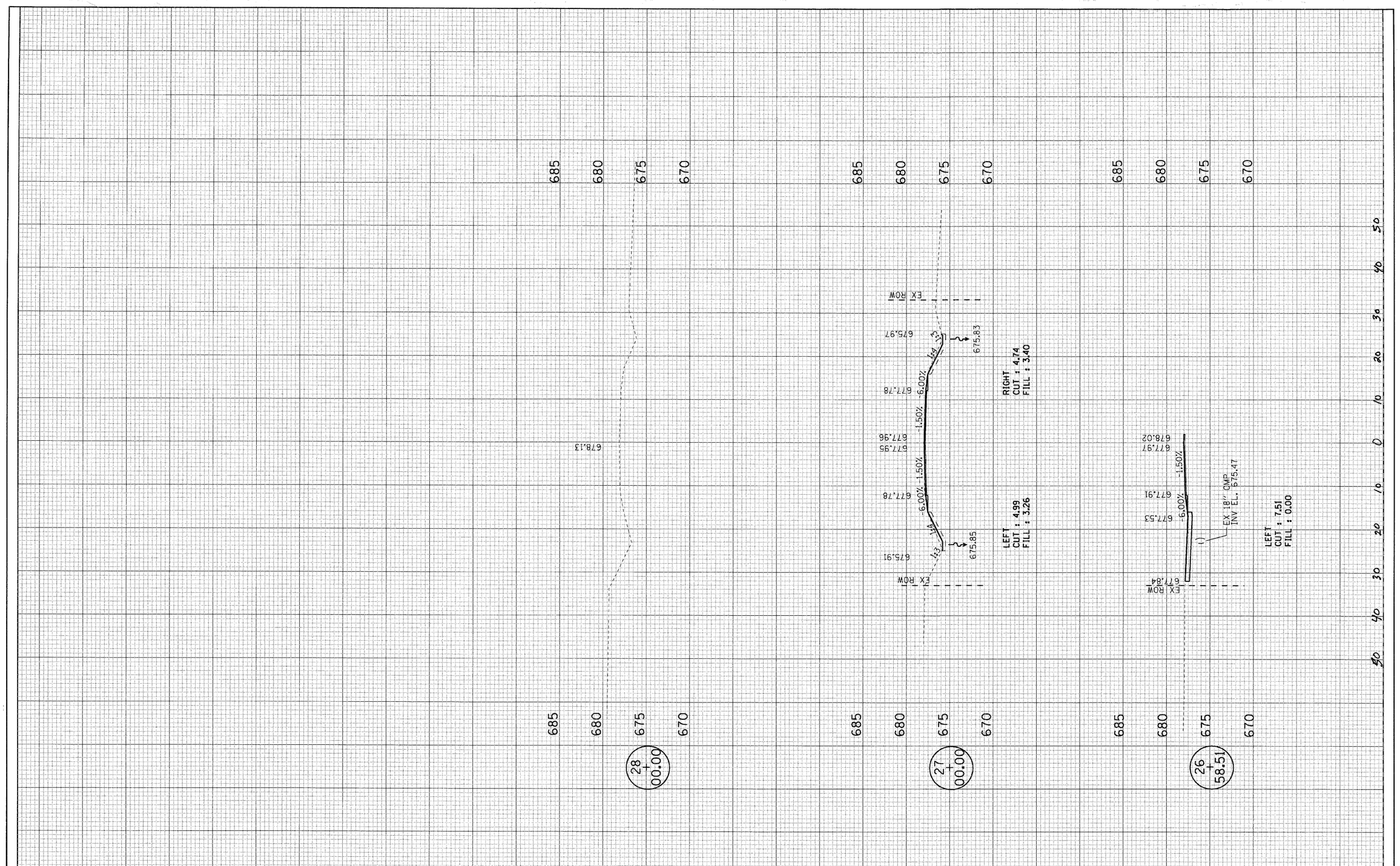
SCALE: 1"=10' (HOR)
SCALE: 1"=5' (VERT)

SHEET NO. OF SHEETS | STA. 24+09.00 | TO STA. 26+58.51

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	61
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	VERIFIED & C		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	VERIFIED & C		
	AREAS		
	AREAS CHECKED		



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	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

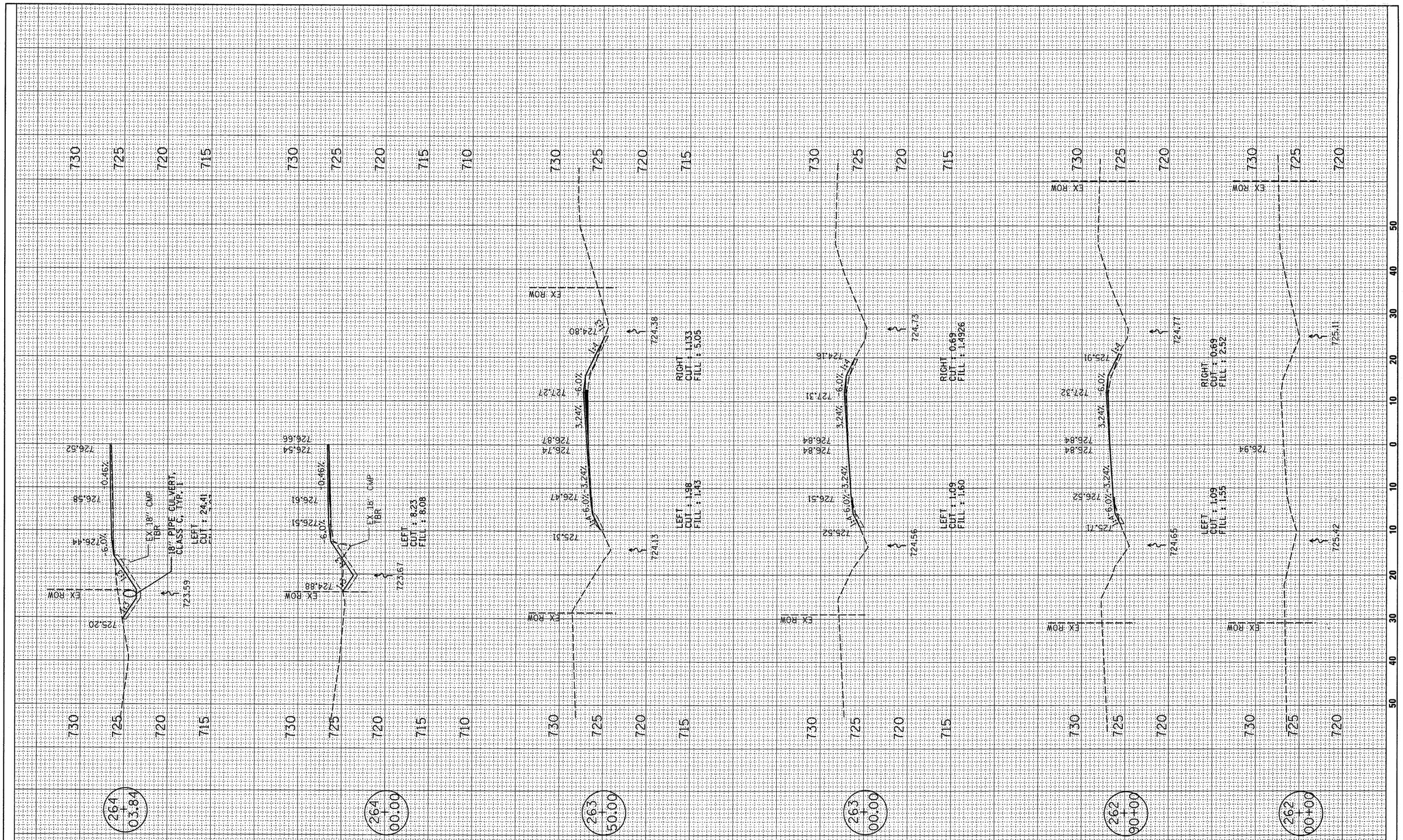
CROSS SECTION
SN 027-2014 SHEET 3 OF 3

SCALE: 1":10' (HOR)
SCALE: 1":5' (VERT)
SHEET NO. OF SHEETS STA. 27+00.00 TO STA. 28+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	62
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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



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	PLOT DATE = Aug 28, 2008 - 07:32:57 AM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

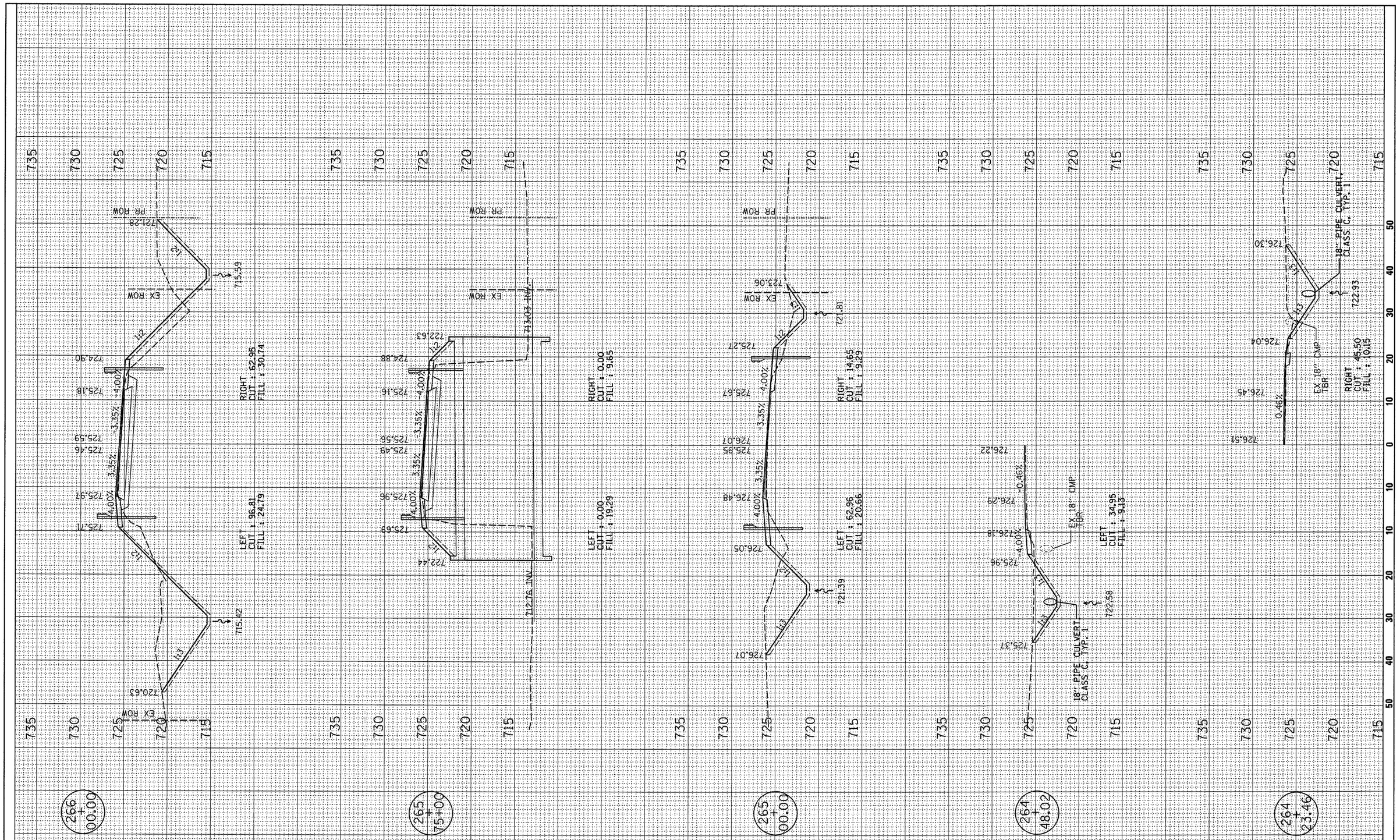
CROSS SECTION
SN 027-2015 SHEET 1 OF 3

SCALE: 1"=10' (HOR)
SCALE: 1"=5' (VERT)
SHEET NO. OF SHEETS STA. 263+00.00 TO STA. 264+03.84

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	63
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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



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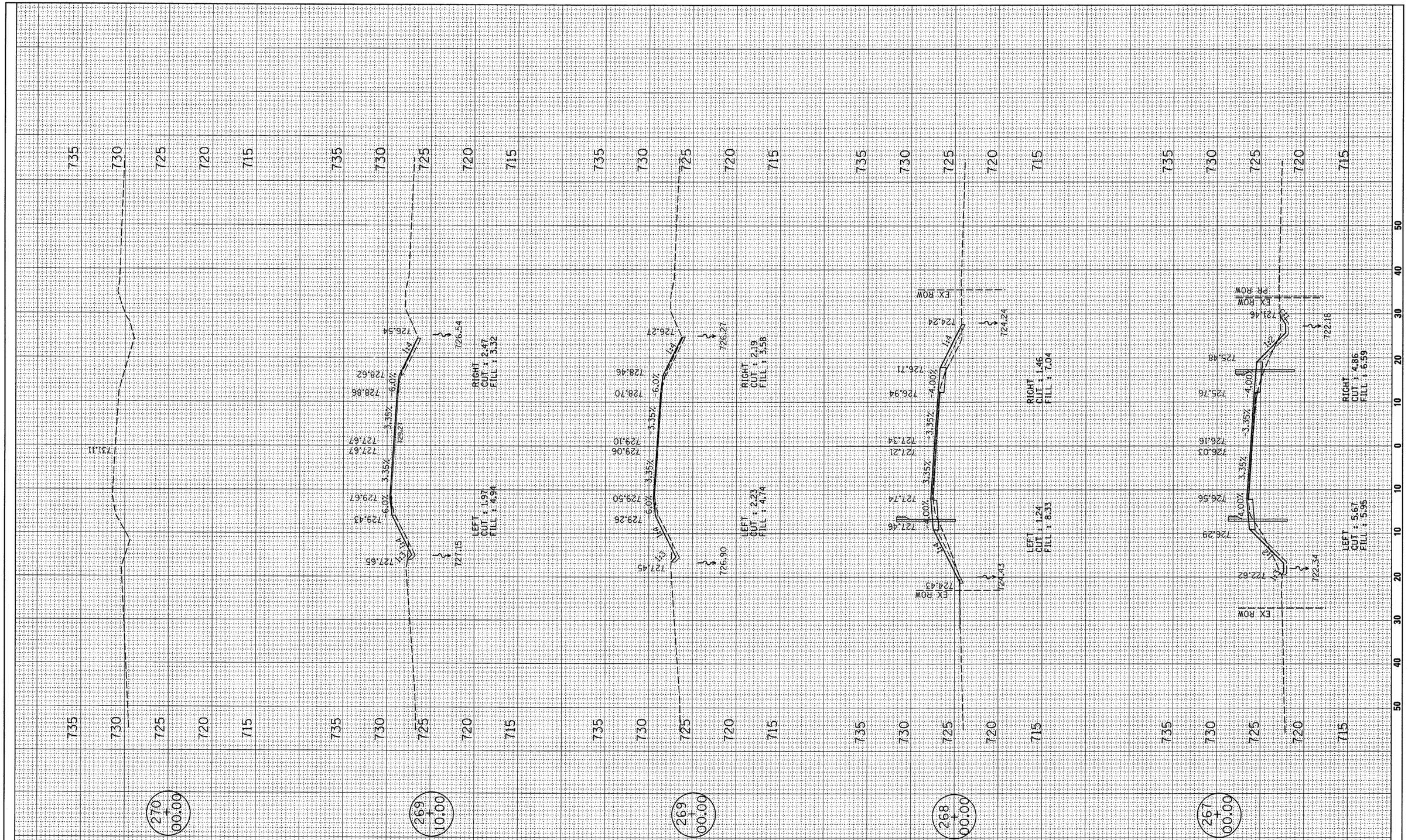
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTION
SN 027-2015 SHEET 2 OF 3

SCALE: 1"=10' (HOR)
SCALE: 1"=5' (VERT)
SHEET NO. OF SHEETS STA. 264+23.46 TO STA. 266+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	64
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

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

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DESIGNED -
DRAWN - RM/FZ/DK/NS
CHECKED -
DATE -

REVISED -
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REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTION
SN 027-2015 SHEET 3 OF 3

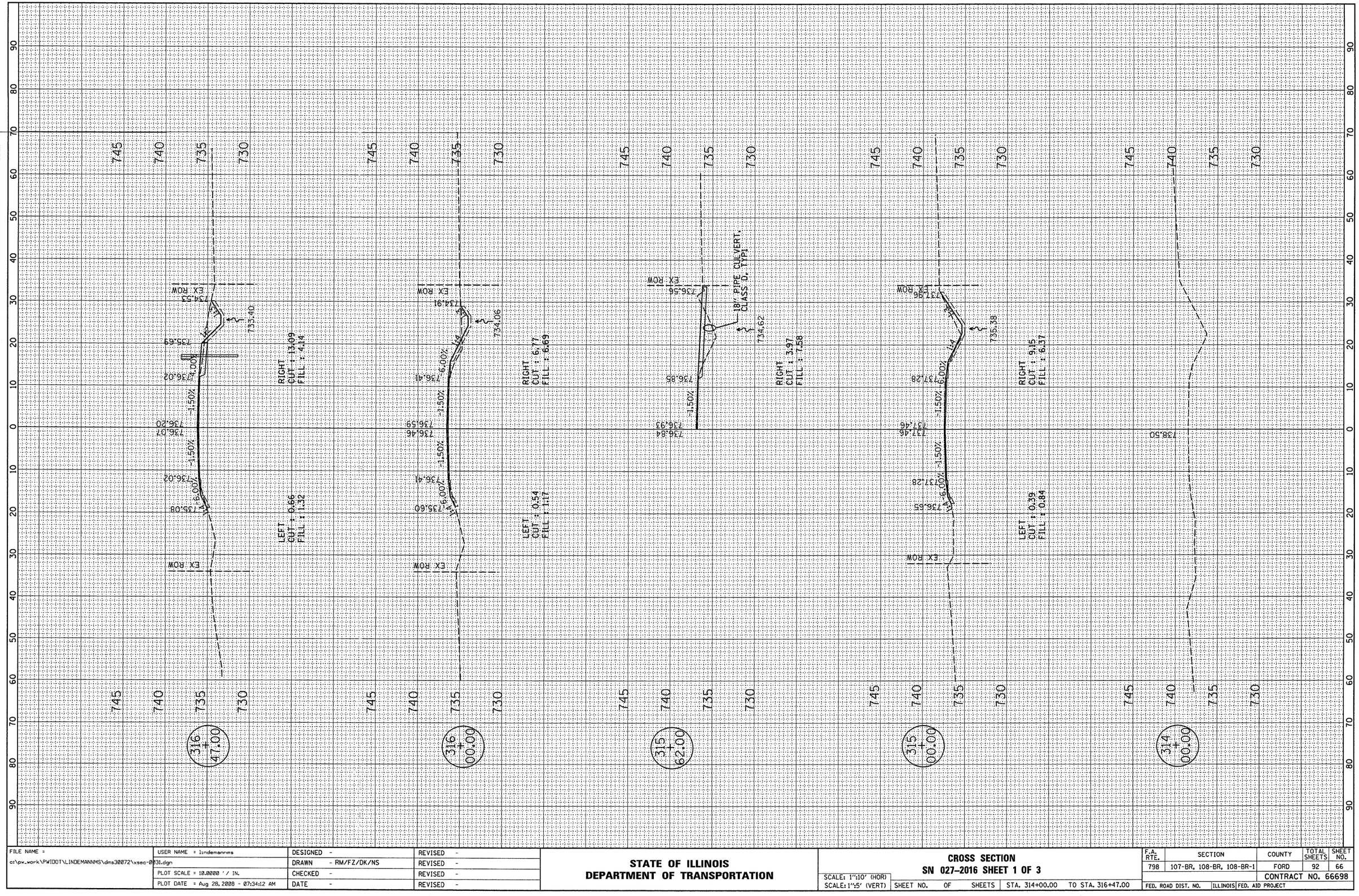
SCALE: 1"=10' (HOR)
SCALE: 1"=5' (VERT)
SHEET NO. OF SHEETS
STA. 267+00.00 TO STA. 268+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	65
		CONTRACT NO. 66698		

FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

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

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



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

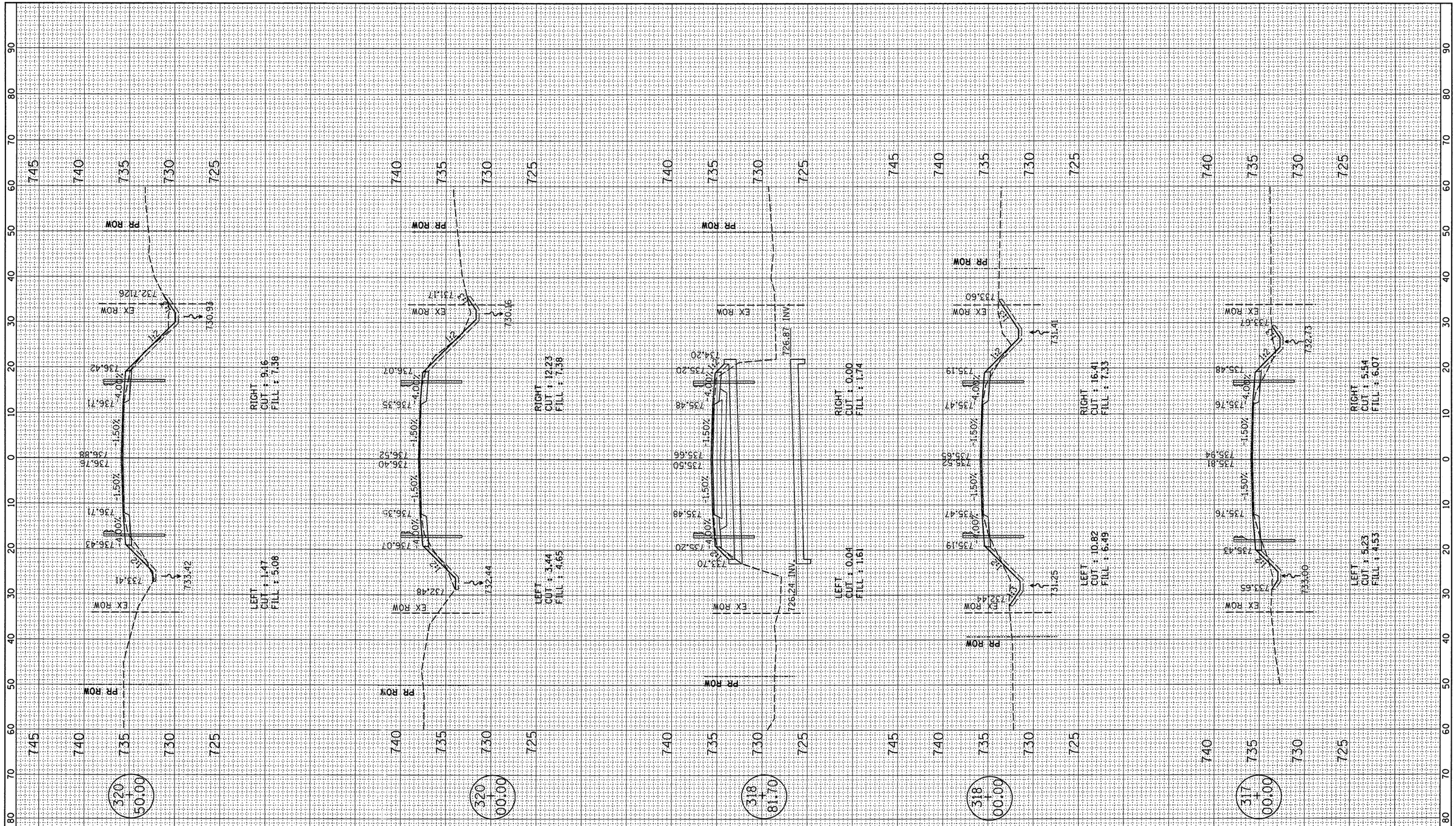
CROSS SECTION
SN 027-2016 SHEET 1 OF 3

SCALE: 1"=10' (HOR)
SCALE: 1"=5' (VERT)
SHEET NO. OF SHEETS STA. 314+00.00 TO STA. 316+47.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	66
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

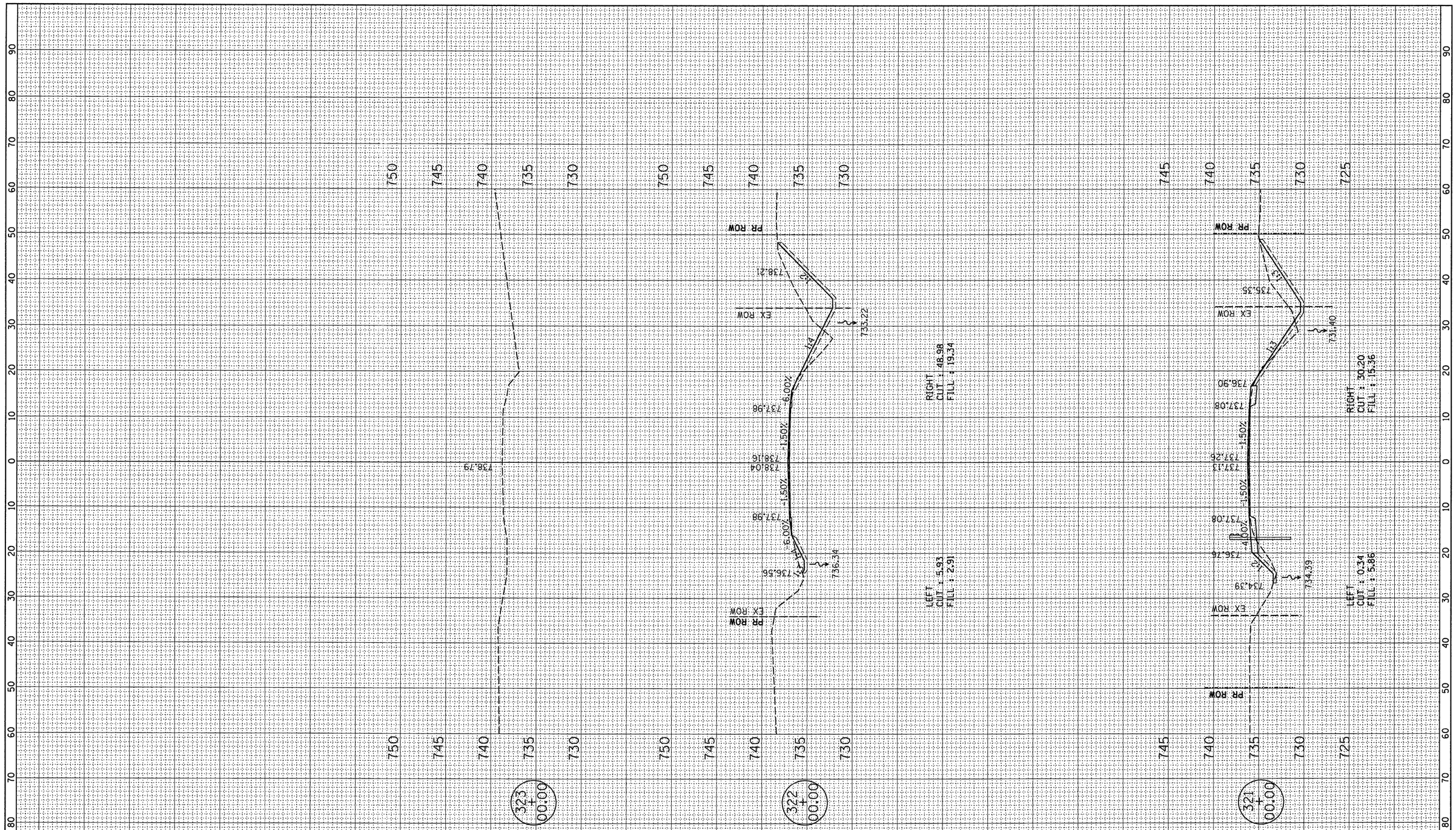
CROSS SECTION
SN 027-2016 SHEET 2 OF 3

SCALE: 1":10' (HOR)
SCALE: 1":5' (VERT)

SHEET NO. OF SHEETS | STA. 317+00.00 TO STA. 320+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	67
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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



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

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTION
SN 027-2016 SHEET 3 OF 3

SCALE: 1"=10' (HOR)
SCALE: 1"=5' (VERT)

SHEET NO. OF SHEETS | STA. 321+00.00 TO STA. 323+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR, 108-BR, 108-BR-1	FORD	92	68
		CONTRACT NO. 66698		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. [redacted]

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR-1	FORD	92	69
F.H.W.A. REG. 5	ILLINOIS	PROJECT		

P-93-039-03
D-93-051-04

INDEX OF SHEETS

HIGHWAY STANDARDS

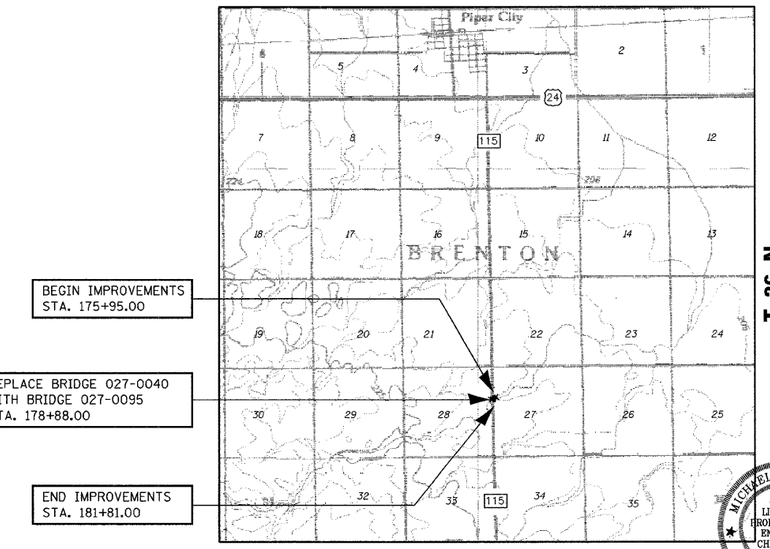
SEE SHEET 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY
FAP ROUTE 798 (IL RTE 115)
SECTION 107 BR-1
PROJECT
FORD COUNTY

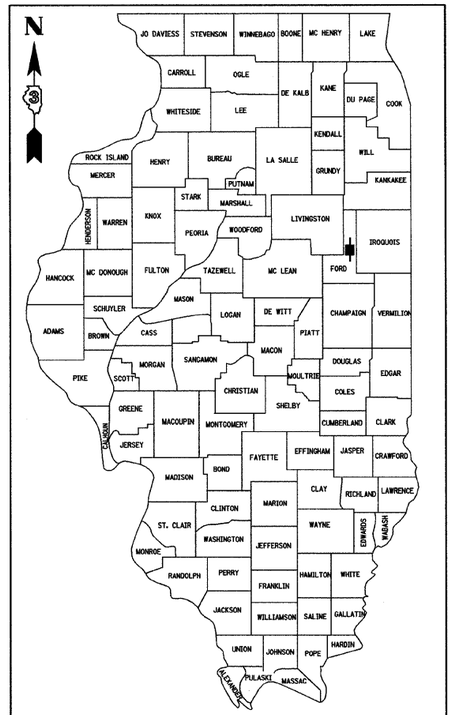
C - 93 - ~~096~~ 026 - 07 - 04

STRUCTURE REPLACEMENT AT A DRAINAGE DITCH TRIBUTARY TO THE NORTH FORK OF THE VERMILLION RIVER

R. 9 E., 3rd P.M.



LOCATION MAP
NOT TO SCALE



LOCATION OF SECTION INDICATED THUS: -■-

FUNCTION CLASSIFICATION	**RURAL MINOR ARTERIAL**
DESIGN SPEED	**55 MPH**
POSTED SPEED	**55 MPH**
ADT	**800 (2007); 900 (2017)**
P.V.	**76.6%**
S.U.	**12.7%**
M.U.	**10.7%**

0 — 50' — 100' — 1" = 20' PLAN/PROFILE HORIZ. & EROSION CONTROL PLAN

0 — 10' — 20' — 30' — 1" = 10' CROSS SECTIONS - HORIZONTAL

0 — 5' — 10' — 1" = 5' CROSS SECTIONS & PLAN/PROFILE - VERTICAL

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.

MICROFILMED _____
REEL NUMBER _____
AWARDED _____
RESIDENT ENGINEER _____
AS BUILT CHANGES WERE MADE
ON THE FOLLOWING SHEETS _____

JULIE 1-800-892-0123

DISTRICT 3 NO. (815) 434-6131

PROJECT ENGINEER: DAN DRAPER
UNIT CHIEF: PAT BRABOY
TOWNSHIP: BRENTON

CONTRACT NO. ~~66455~~ 66698

Foth & Van Dyke
consultants - engineers - scientists
1610 BROADMOOR DR.
CHAMPAIGN, ILLINOIS 61821
P: 217-352-4169
F: 217-352-0085
DPR DESIGN FIRM REG. NO.: 184-003283

GROSS LENGTH = 586.00 FT. = 0.111 MI.
NET LENGTH = 586.00 FT. = 0.111 MI.

MICHAEL J. BRYANT 44543 LICENSED PROFESSIONAL ENGINEER CHAMPAIGN ILLINOIS

5/26/06
MICHAEL J. BRYANT, P.E., S.E. **DATE**
IL. LICENSED PROFESSIONAL ENGINEER
ILLINOIS NO. 44543 EXPIRES NOVEMBER 30, 2007
IL. LICENSED STRUCTURAL ENGINEER
ILLINOIS NO. 5324 EXPIRES NOVEMBER 30, 2006

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED _____ **20** _____

_____
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

_____ **20** _____

_____
ENGINEER OF DESIGN AND ENVIRONMENT

_____ **20** _____

_____
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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CONTRACT NO. 66698

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR-1	FORD	92	70
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS / CU YD
BITUMINOUS MAT PRIME COAT	0.08 0.375	GAL / SQ YD OR GAL / SQ YD
HMA RESURFACING	112	LBS / SQ YD / IN
TEMPORARY DITCH CHECKS	5	TONS AGGREGATE

MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

EASTERN ILLINI ELECTRIC
VERIZON NORTH, INC

STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-04	TEMPORARY EROSION CONTROL SYSTEMS
420401-06	BRIDGE APPROACH PAVEMENT
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
482011-03	HMA SHOULDER STRIPS/SHOULDERS WITH RS OR WIDENING & RS PROJECTS
515001-02	NAME PLATE FOR BRIDGES
542301-01	PRECAST REINFORCED CONCRETE FLARED END SECTION
542401	METAL END SECTION FOR PIPE CULVERTS
601101	CONCRETE HEADWALL FOR PIPE DRAINS
609006-03	BRIDGE APPROACH PAVEMENT (DRAIN DETAIL)
630001-07	STEEL PLATE BEAM GUARDRAIL
630201-05	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-04	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-06	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
701001-01	OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 4.5 m (15') AWAY
701006-02	OFF-ROAD OPERATIONS 2L, 2W, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701011-01	OFF-ROAD MOVING OPERATIONS 2L, 2W, DAY ONLY
701201-02	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS P 45 MPH
701301-02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-01	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS P 45 MPH
701901	TRAFFIC CONTROL DEVICES
780001-01	TYPICAL PAVEMENT MARKINGS

COMMITMENTS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 798 (IL 115)
SEC 107 BR-1, FORD COUNTY

GENERAL NOTES AND STANDARDS LIST

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

FVD/DA JOB NO. 308.29

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REFERENCE = REF

CONTRACT NO. 66698

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR-1	FORD	92	71
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

BILL OF MATERIALS

CONSTRUCTION CODE TYPE: X020-2A

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
20200100	EARTH EXCAVATION	CU YD	275
20300100	CHANNEL EXCAVATION	CU YD	390
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	70.8
28200200	FILTER FABRIC	SQ YD	543
25000300	SEEDING, CLASS 3	SQ YD	0.5
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	45
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	45
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	45
25100630	EROSION CONTROL BLANKET	SQ YD	2420
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	150
28000300	TEMPORARY DITCH CHECKS	EACH	9
28100107	STONE RIPRAP, CLASS A4	SQ YD	543
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	27
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	288
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	320
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	194
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	44
44000100	PAVEMENT REMOVAL	SQ YD	301
48101200	AGGREGATE SHOULDERS, TYPE B	TON	18
48203021	HOT-MIX ASPHALT SHOULDERS, 6"	SQ YD	546
50100600	REMOVAL OF EXISTING STRUCTURES NO. 4	EACH	1
50105200	REMOVE EXISTING CULVERTS	EACH	1
50200100	STRUCTURE EXCAVATION	CU YD	120
50300100	FLOOR DRAINS	EACH	8
50300225	CONCRETE STRUCTURES	CU YD	73.8
50300255	CONCRETE SUPERSTRUCTURE	CU YD	162.8
50300260	BRIDGE DECK GROOVING	SQ YD	252
50300300	PROTECTIVE COAT	SQ YD	540
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	32910

BILL OF MATERIALS (CONTINUED)

CONSTRUCTION CODE TYPE: X020-2A

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
51201400	FURNISHING STEEL PILES HP10X42	FOOT	766
51202305	DRIVING PILES	FOOT	766
51203400	TEST PILE STEEL HP10X42	EACH	2
51500100	NAME PLATES	EACH	1
54200220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	4
54213447	END SECTIONS 12"	EACH	2
54213450	END SECTIONS 15"	EACH	42
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	44
60100945	PIPE DRAINS 12"	FOOT	36
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	110
60900140	TYPE B INLET BOX, STANDARD 609006	EACH	4
• 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT	525
• 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4
• 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4
63200310	GUARDRAIL REMOVAL	FOOT	490
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6
67100100	MOBILIZATION	L SUM	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1
70101835	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 22	L SUM	1
• 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1172
• 78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	160
• 78200410	GUARDRAIL MARKERS, TYPE A	EACH	10
• 78200420	GUARDRAIL MARKERS, TYPE B	EACH	2
• 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	56
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	146
X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1
X7011005	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	L SUM	1
XX006675	FIELD TILE REPLACEMENT	FOOT	30

• SPECIALITY ITEM

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 798 (IL RTE 115)
SEC 107 BR-1, FORD COUNTY

BILL OF MATERIALS

SCALE: VERT. HORIZ.
DRAWN BY
DATE
CHECKED BY

Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

FVD JOB NO. 308.29

PLOT DATE = Aug 25, 2008 - 8:26:08 AM
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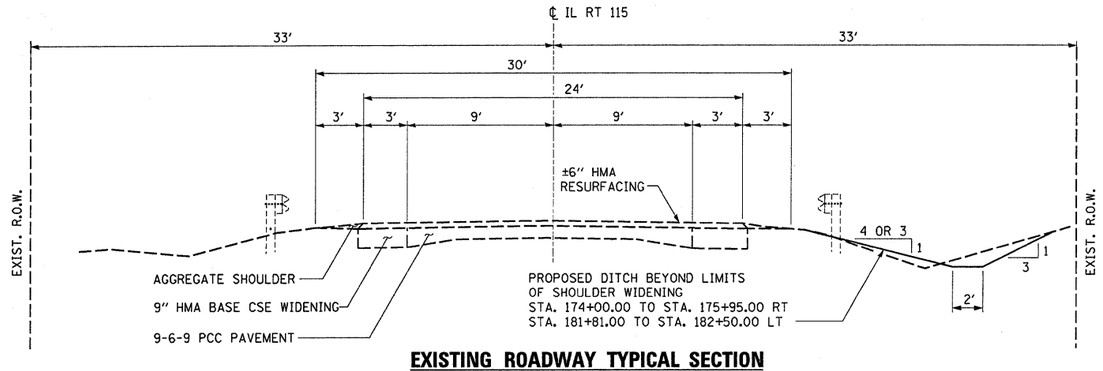
REFERENCE = REF

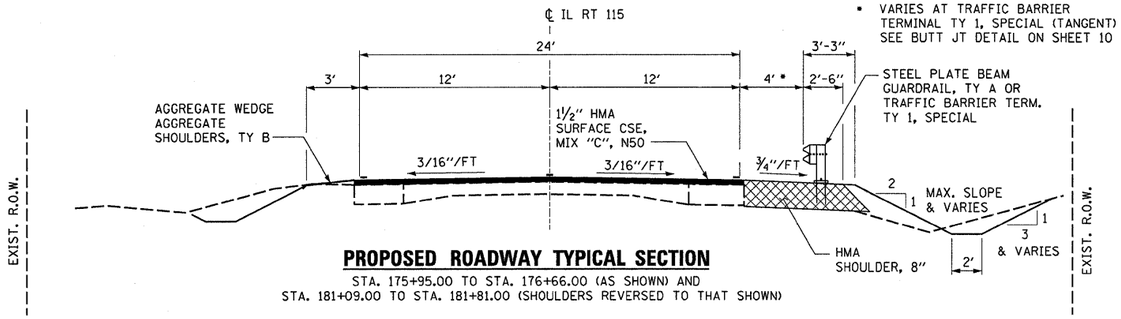
CONTRACT NO. 66698

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR-1	FORD	92	72
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



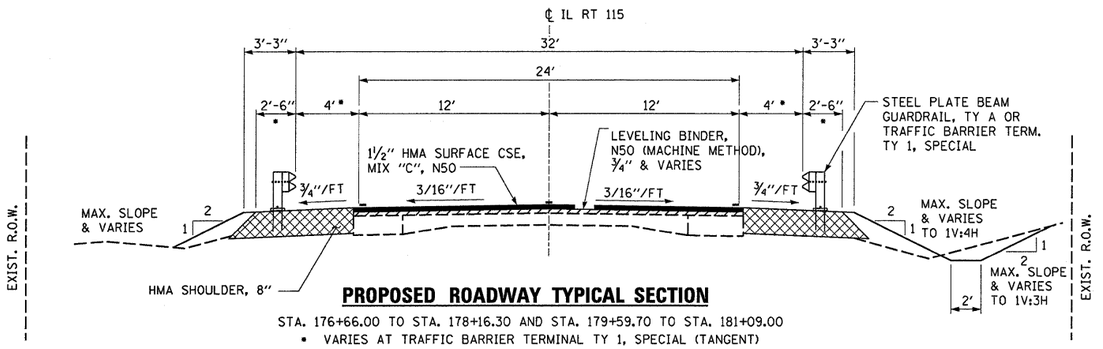
EXISTING ROADWAY TYPICAL SECTION

STA. 174+00 TO STA. 178+73 AND STA. 179+03 TO STA. 182+50



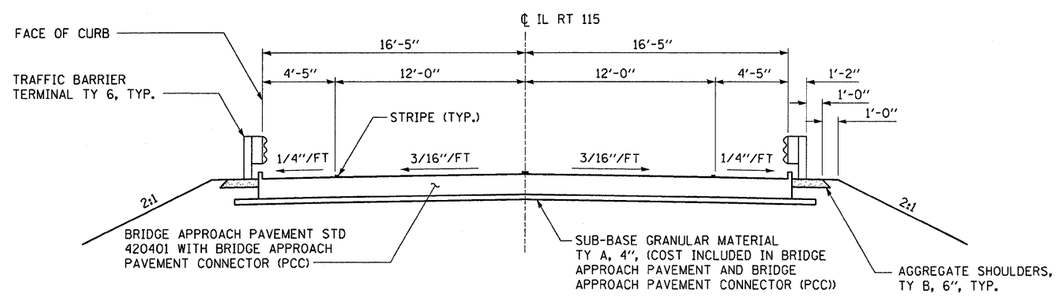
PROPOSED ROADWAY TYPICAL SECTION

STA. 175+95.00 TO STA. 176+66.00 (AS SHOWN) AND
STA. 181+09.00 TO STA. 181+81.00 (SHOULDERS REVERSED TO THAT SHOWN)



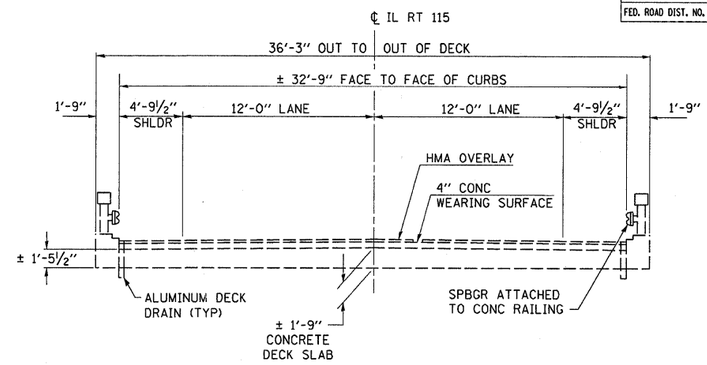
PROPOSED ROADWAY TYPICAL SECTION

STA. 176+66.00 TO STA. 178+16.30 AND STA. 179+59.70 TO STA. 181+09.00
• VARIES AT TRAFFIC BARRIER TERMINAL TY 1, SPECIAL (TANGENT)



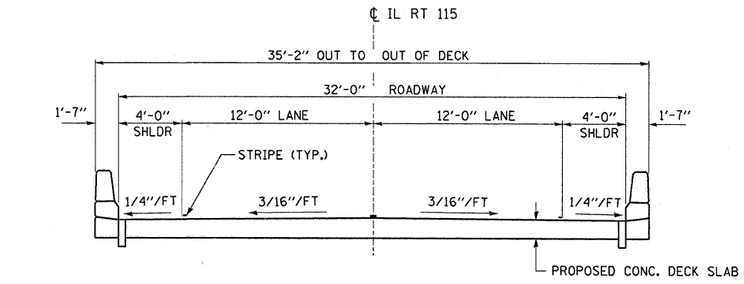
PROPOSED TYPICAL SECTION – BRIDGE APPROACH PAVEMENT

STA. 178+16.30 TO STA. 178+52.55 AND STA.179+23.45 TO STA. 179+59.70



EXISTING BRIDGE CROSS SECTION

STA. 178+73 TO STA. 179+03



PROPOSED BRIDGE CROSS SECTION

STA. 178+52.55 TO STA. 179+23.45

HMA MIXTURE REQUIREMENTS

	HMA LEVEL BINDER	HMA SURFACE	HMA SHOULDERS
PG GRADE	PG64-22	PG64-22	PG58-22
MAX % RAP ALLOWABLE ••	25%	15%	50%
DESIGN AIR VOIDS	4.0% @ 50	4.0% @ N50	3.0% @ N50
MIXTURE COMPOSITION	IL 9.5	IL 12.5 or IL 9.5	IL 19.0
FRICTION AGGREGATE		MIXTURE C	
DENSITY TEST METHOD	SATISFACTION OF THE ENGINEER	NUCLEAR / CORES	•

• MATERIAL SHALL BE COMPACTED TO 93.0 - 97.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY, EXCEPT THAT WHEN PLACED AS FIRST LIFT ON AN UNIMPROVED SUBGRADE THE MINIMUM PERCENT COMPACTION SHALL BE 92.0 PERCENT. THE MAXIMUM THEORETICAL DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE AS SPECIFIED IN THE QC/QA SPECIFICATION.

•• IF RAP OPTION IS DIFFERENT THAN LISTED ABOVE, THE PG GRADE MAY BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 798 (IL RTE 115)
SEC 107 BR-1, FORD COUNTY

TYPICAL SECTIONS

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

PLOT DATE = Aug 25, 2008 - 8:25:16 AM
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PLOT SCALE = 52.5412 ' / IN.
REFERENCE = REF

Prepared by: FOTH & VAN DYKE ASSOCIATES, INC. CHAMPAIGN & PEORIA, ILLINOIS

FVD JOB NO. 308.29

CONTRACT NO. 66698

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR-1	FORD	92	73
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EARTHWORK SCHEDULE

LOCATION	PAY ITEM EARTH EXCAVATION (CU YD)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (CU YD)	PAY ITEM STRUCTURE EXCAVATION (CU YD)	STRUCTURE EXCAVATION MATERIAL ADJUSTED FOR SHRINKAGE (CU YD)	PAY ITEM CHANNEL EXCAVATION (SUITABLE FOR FILL) (CU YD)	CHANNEL EXCAVATION (SUITABLE ADJUSTED FOR SHRINKAGE) (CU YD)	PAY ITEM CHANNEL EXCAVATION (NOT SUITABLE FOR FILL) (CU YD)	EMBANKMENT (NOT A PAY ITEM) (CU YD)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU YD)	PAY ITEM POROUS GRANULAR EMBANKMENT (SPECIAL) (CU YD)
NW CORNER CUTS AND FILLS	74	55						82	-27	
SW CORNER CUTS AND FILLS	73	55						40	15	
NE CORNER CUTS AND FILLS	47	35						42	-7	
SE CORNER CUTS AND FILLS	81	60						81	-21	
STRUCTURE EXCAVATION			120	90					90	
CHANNEL EXCAVATION					369	277	21		277	
POROUS GRANULAR EMBANKMENT										70.8
TOTAL	275	205	120	90	369	277	21	245	327	70.8

NOTE:
SHRINKAGE FACTOR = 0.75 FOR EARTH EXCAVATION & STRUCTURE EXCAVATION.

UNSUITABLE MATERIAL FROM CHANNEL EXCAVATION IS BETWEEN ABUTMENTS OF EXIST. STRUCTURE AND PROJECTED U.S. & D.S.

DRAINAGE STRUCTURE SCHEDULE

LOCATION STATION	TO	STATION	STONE RIPRAP CLASS A4 (SQ YD)	PIPE CULVERTS CLASS D, TY 1 15" (FOOT)	END SECTIONS 12" (EACH)	END SECTIONS 15" (EACH)	PIPE DRAIN 12" (FOOT)	TY B INLET STD 609006 (EACH)	FILTER FABRIC (SQ YD)
178+31 LT			4		1		9	1	4
178+47 RT			4		1		9	1	4
179+29 LT			4		1		9	1	4
179+45 RT			4		1		9	1	4
174+77.4, 23.3' RT		175+23.4, 24.3' RT		42		2			
BRIDGE (178+88)			527						527
TOTAL			543	42	4	2	36	4	543

GUARDRAIL SCHEDULE

LOCATION STATION	TO	STATION	STEEL PLATE BEAM GUARDRAIL TYPE A (FOOT)	TRAFFIC BARRIER TERM TY 6 (EACH)	TRAFFIC BARRIER TERM TY 1 SPECIAL (TANGENT) (EACH)	GUARDRAIL REMOVAL (FOOT)	GUARDRAIL MARKERS, TYPE A (EACH)	GUARDRAIL MARKERS, TYPE B (EACH)	TERMINAL MARKER - DIRECT APPLIED (EACH)
176+54.56		178+29.56 RT	175						
177+26.75		178+14.25 LT	87.5						
179+46.44		181+21.44 LT	175						
179+61.75		180+49.25 RT	87.5						
178+14.25		178+44.90 LT		1					
178+29.56		178+60.21 RT		1					
179+15.79		179+46.44 LT		1					
179+31.10		179+61.75 RT		1					
176+76.75		177+26.75 LT			1				1
176+04.56		176+54.56 RT			1				1
180+49.25		180+99.25 RT			1				1
181+21.44		181+71.44 LT			1				1
177+76		180+55 LT				245			
177+22		180+01 RT				245			
176+54 RT							1		
177+34 RT							1		
178+14 RT							1		
178+94 RT								1	
179+74 RT							1		
180+54 RT							1		
177+22 LT							1		
178+02 LT							1		
178+82 LT								1	
179+62 LT							1		
180+42 LT							1		
181+22 LT							1		
TOTAL			525	4	4	490	10	2	4

NOTE: COST OF REMOVAL OF EXISTING GUARDRAIL ATTACHED TO STRUCTURE, TO FIRST POST PAST BRIDGE, IS INCLUDED IN COST OF "REMOVAL OF EXISTING STRUCTURES"

FIELD TILE REPLACEMENT SCHEDULE

LOCATION STATION	FIELD TILE REPLACEMENT (FOOT)
UNSPECIFIED	10
UNSPECIFIED	10
UNSPECIFIED	10
TOTAL	30

PIPE CULVERT REMOVAL SCHEDULE

LOCATION STATION	REMOVE EXISTING CULVERTS (EACH)
176+78	1
TOTAL	1

SEEDING AND EROSION CONTROL SCHEDULE

LOCATION STATION	TO	STATION	SEEDING CLASS 3 (ACRE)	NITROGEN FERTILIZER NUTRIENTS (POUND)	PHOSPHORUS FERTILIZER NUTRIENTS (POUND)	POTASSIUM FERTILIZER NUTRIENTS (POUND)	EROSION CONTROL BLANKET (SQ YD)	TEMP EROSION CONTROL SEEDING (3 APPLICATIONS) (POUND)	TEMPORARY DITCH CHECKS (EACH)
175+95		178+41 LT	0.1	9	9	9	484	30	
174+00		178+61 RT	0.15	13.5	13.5	13.5	726	45	
179+15		182+50 LT	0.15	13.5	13.5	13.5	726	45	
179+35		181+50 RT	0.1	9	9	9	484	30	
175+78 RT									1
178+40 LT									1
177+00 RT									1
177+50 LT									1
178+52 RT									1
179+10 LT									1
179+50 RT									1
180+00 RT									1
180+50 LT									1
TOTAL			0.5	45	45	45	2420	150	9

APPLICATION RATE FOR FERTILIZERS = 90 LBS/ACRE

PAVEMENT MARKING SCHEDULE

LOCATION STATION	TO	STATION	PAINT PAVEMENT MARKING-LINE 4" WHITE (FOOT)	PAINT PAVEMENT MARKING-LINE 6" YELLOW SKIP DASH (FOOT)
175+95		181+81	1172	160
SUBTOTAL				
TOTAL			1172	160

PAVEMENT SCHEDULE

LOCATION STATION	TO	STATION	AGGREGATE SURFACE COURSE TYPE B (TON)	BITUMINOUS MATERIALS (PR CT) (GALLON)	HMA SURFACE REMOVAL BUTT JOINT (SQ YD)	PAVEMENT REMOVAL (SQ YD)	AGGREGATE SHOULDERS TYPE B (TON)	HMA SHOULDERS 8" (SQ YD)	HMA SURFACE CSE MIX "C", N50 (TON)	LEVELING BINDER (MACHINE METHOD), N50 (TON)
175+00 RT			27							
175+95		178+16.30		144					50	
179+59.70		181+81		144					50	
175+95		176+55			160					
181+21		181+81			160					
178+16.30		178+72.80				150.5				
179+03.20		179+59.70				150.5				
178+16.30		178+52.55					6			
179+23.45		179+59.70					6			
175+95 LT		176+66 LT					3			
181+09 RT		181+81 RT					3			
175+95 RT		178+24± RT						167		
176+66 LT		178+08.5± LT						106		
179+52± LT		181+81 LT						106		
179+67.5± RT		181+09 RT						167		
176+70		178+16.30								17
179+59.70		181+06								17
TOTAL			27	288	320	301	18	546	100	34

APPLICATION RATES FOR PRIME COAT = 0.08 GAL/SQ YD ON PAVEMENTS & 0.375 GAL/SQ YD ON AGGREGATE

BRIDGE APPROACH PAVEMENT SCHEDULE

LOCATION STATION	TO	STATION	BRIDGE APPROACH PAVEMENT (SQ YD)	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC) (SQ YD)	PROTECTIVE COAT (SQ YD)
178+22.55		178+52.55	97		114
179+23.45		179+53.45	97		114
178+16.30		178+22.30		22	
179+53.70		179+59.70		22	
TOTAL			194	44	228

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 798 (IL RTE 115)
SEC 107 BR-1, FORD COUNTY

SCHEDULE OF QUANTITIES

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

FVD JOB NO. 308.29

PLOT DATE = Aug 25, 2008 - 09:24:49 AM
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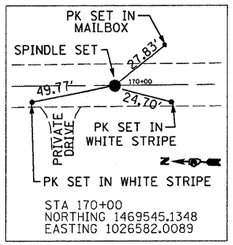
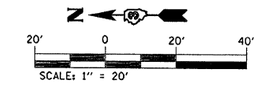
PLOT SCALE = 52.5412 ' / IN.
REFERENCE = REF

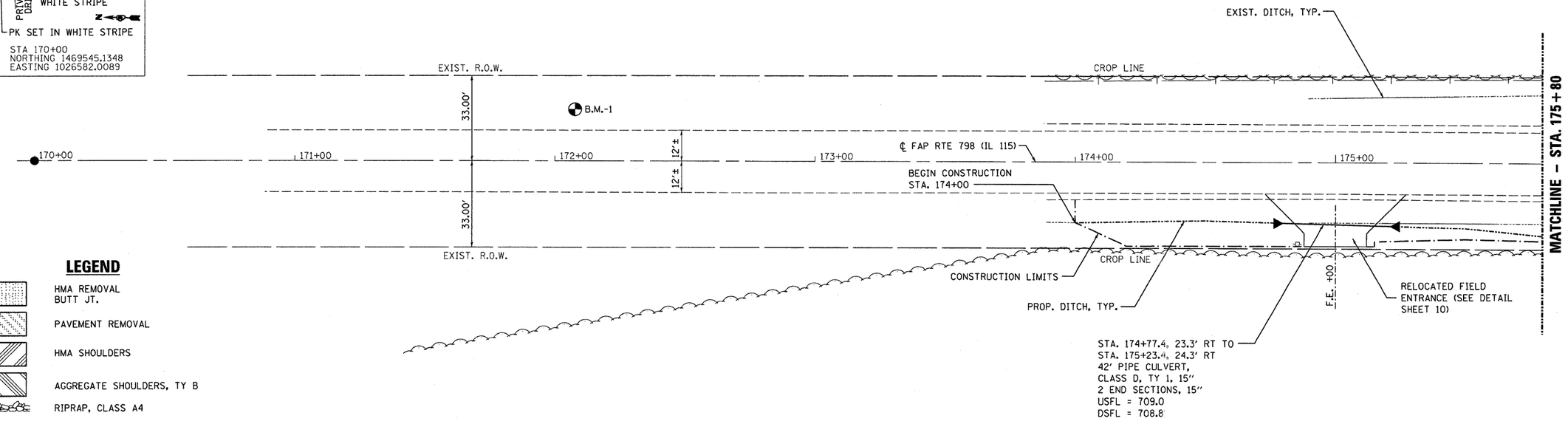
CONTRACT NO. 66698

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR-1	FORD	92	74
STA. 170+00		TO STA. 175+80		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CENTERLINE TIE







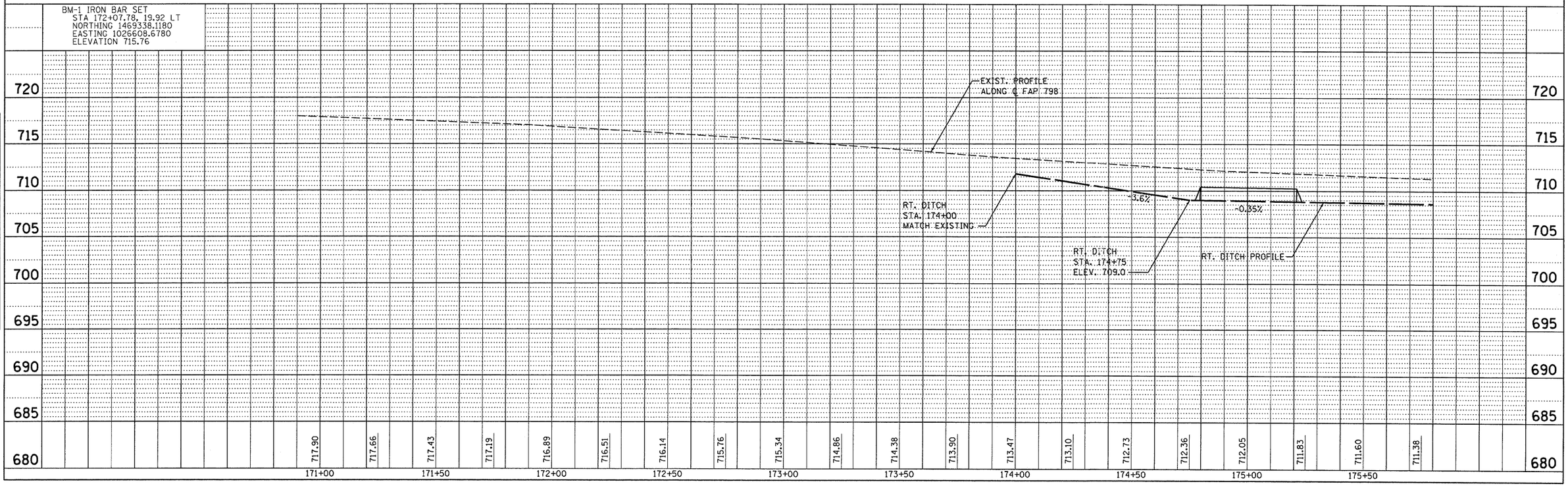
LEGEND

- HMA REMOVAL BUTT JT.
- PAVEMENT REMOVAL
- HMA SHOULDERS
- AGGREGATE SHOULDERS, TY B
- RIPRAP, CLASS A4

PLAN
NOTE BOOK
NO.
SURVEYED
DRAWN
ALIGNMENT CHECKED
R.O.W. MAY BE CHECKED
PLAT FILE NAME
BY
DATE

PROFILE
NOTE BOOK
NO.
SURVEYED
DRAWN
GRADES CHECKED
S.M. NOTED
STRUCTURE NOTATNS CHKD
BY
DATE

BM-1 IRON BAR SET
STA 172+07.78, 19.92 LT
NORTHING 1469338.1180
EASTING 1026608.6780
ELEVATION 715.76



Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

FVD JOB NO. 308.29 **FAP 798 (IL 115) PLAN & PROFILE STA. 170+00 TO STA. 175+80**

CONTRACT NO. 66698

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR-1	FORD	92	75
STA. 175+80	TO STA. 182+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SCALE: 1" = 20'

MATCHLINE – STA. 175+80

MATCHLINE – STA. 182+00

TRANSITION STREAM CHANNEL TO EXIST. STREAM CHANNEL AT R.O.W., TYP.

TRAF BARRIER TERMINAL TY 6, TYP 4 QUADRANTS

GUARDRAIL REMOVAL TYP. ALL QUADRANTS

SPBGR, TY A

EXIST. DITCH, TYP.

TRAF BARRIER TERMINAL TY 1 , SPEC. (TANGENT)

+66.00

+76.75

CROP LINE

+10.70 SAWCUT

TYB

POT Sta 178+88.00

℄ EXISTING STRUCTURE NO. 027-0040 ℄ STA. 178+88 SINGLE SPAN SLAB BRIDGE

℄ PROPOSED STRUCTURE NO. 027-0095 ℄ STA. 178+88 2 SPAN SLAB BRIDGE 25°00'00" SKEW

BK OF PROP. S. ABUT. STA. 179+24.00

+54.11 SAWCUT

STA. 179+59.70 END OF BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)

SPBGR, TY A

TRAF BARRIER TERMINAL TY 1 , SPEC. (TANGENT)

+71.44

+81.00 BUTT JT.

CROP LINE

EXIST. R.O.W.

B.M.-2

℄ FAP RTE 798 (IL 115)

12"±

12"±

176+00

177+00

178+00

179+00

180+00

181+00

25°

33.00'

33.00'

GRAVEL

EXIST. R.O.W.

+95.00 BUTT JT.

+04.56

CROP LINE

TRAF BARRIER TERMINAL TY 1 , SPEC. (TANGENT)

REMOVE EXIST. 15" CMP CULVERT

F.E. +78

REMOVE AND RELOCATE FIELD ENTRANCE TO STA 175+00

PROP. DITCH, TYP.

SPBGR, TY A

STA. 178+16.30 END OF BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)

BRIDGE APPROACH PVMT STANDARD (420401) WITH BRIDGE APPROACH PAVEMENT DRAINS, TYP.

BK OF PROP. N. ABUT. STA. 178+52.00

+21.89 SAWCUT

TOP OF BANT TRANSITION, TYP.

TYB

+65.30 SAWCUT

TYB

℄ DRAINAGE DITCH

TOP OF BANK (TYP.)

TOE OF SLOPE

SPBGR, TY A

TRAF BARRIER TERMINAL TY 1 , SPEC. (TANGENT)

+99.25

+09.00

CROP LINE

CONSTRUCTION LIMITS

LEGEND

- HMA REMOVAL BUTT JT.
- PAVEMENT REMOVAL
- HMA SHOULDERS
- AGGREGATE SHOULDERS, TY B
- RIPRAP, CLASS A4

PLAN
SURVEYED
DRAWN
ALIGNMENT CHECKED
GRADES CHECKED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE

BM-2 IRON BAR SET
STA 178+37.62, 19.16 LT
NORTHING 1468708.5780
EASTING 1026628.4310
ELEVATION 709.69

720
715
710
705
700
695
690
685
680

STA. 175+95.00 MATCH EX. EL. 711.23 BEGIN IMPROVEMENTS BEGIN BUTT JOINT

PROP. PROFILE ALONG ℄ FAP 798

END BUTT JOINT STA. 176+85.00 ELEVATION 711.05

131.30'
2 1/4" OVERLAY OF EXISTING PROFILE

STA. 178+16.30 ELEVATION 711.01

BK OF N. ABUT. STA. 178+52.00

HWE (50 YR) 708.12

BK OF S. ABUT. STA. 179+24.00

STA. 179+59.70 ELEVATION 711.02

131.30'
2 1/4" OVERLAY OF EXISTING PROFILE

BEGIN BUTT JOINT STA. 180+91.00 ELEVATION 710.98

STA. 181+81.00 MATCH P.V.I. EL. 710.76 END IMPROVEMENTS END BUTT JOINT

+0.01%

-0.35%

-0.5%

+0.01%

0.6%

0.35%

LT. DITCH STA. 176+00 MATCH EXISTING

LT. DITCH STA. 176+50 ELEV. 708.0

STA. 178+16.30 END OF BRIDGE APPROACH PAVEMENT CONNECTOR

LIMITS OF POROUS GRANULAR EMBANKMENT (SPECIAL) (SEE STRUCTURAL PLANS)

LT. DITCH STA 178+41 ELEV. 707.0

RT. DITCH STA 178+66 ELEV. 707.6

EXISTING STRUCTURE

STREAMBED EL. 698.20

RT. DITCH STA 179+34 ELEV. 706.8

LT. DITCH STA 179+14 ELEV. 706.9

STA. 179+59.70 END OF BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)

EXIST. PROFILE ALONG ℄ FAP 798

RT. DITCH STA. 181+50 MATCH EXISTING

711.21 711.22 | 711.11 711.17 | 711.01 711.12 | 710.92 711.07 | 710.86 711.05 | 710.85 711.04 | 710.84 711.03 | 710.83 711.02 | 710.81 711.00 | 710.80 711.01 | 710.78 711.01 | 710.76 711.01 | 710.76 711.02 | 710.79 711.02 | 710.81 711.02 | 710.84 711.03 | 710.84 711.03 | 710.83 711.02 | 710.82 711.01 | 710.81 711.00 | 710.79 710.96 | 710.78 710.90 | 710.78 710.84 | 710.77 710.78 | 710.76

176+00 176+50 177+00 177+50 178+00 178+50 179+00 179+50 180+00 180+50 181+00 181+50 182+00

PROFILE
SURVEYED
DRAWN
CHECKED
NOTE BOOK
NO.
BY
DATE

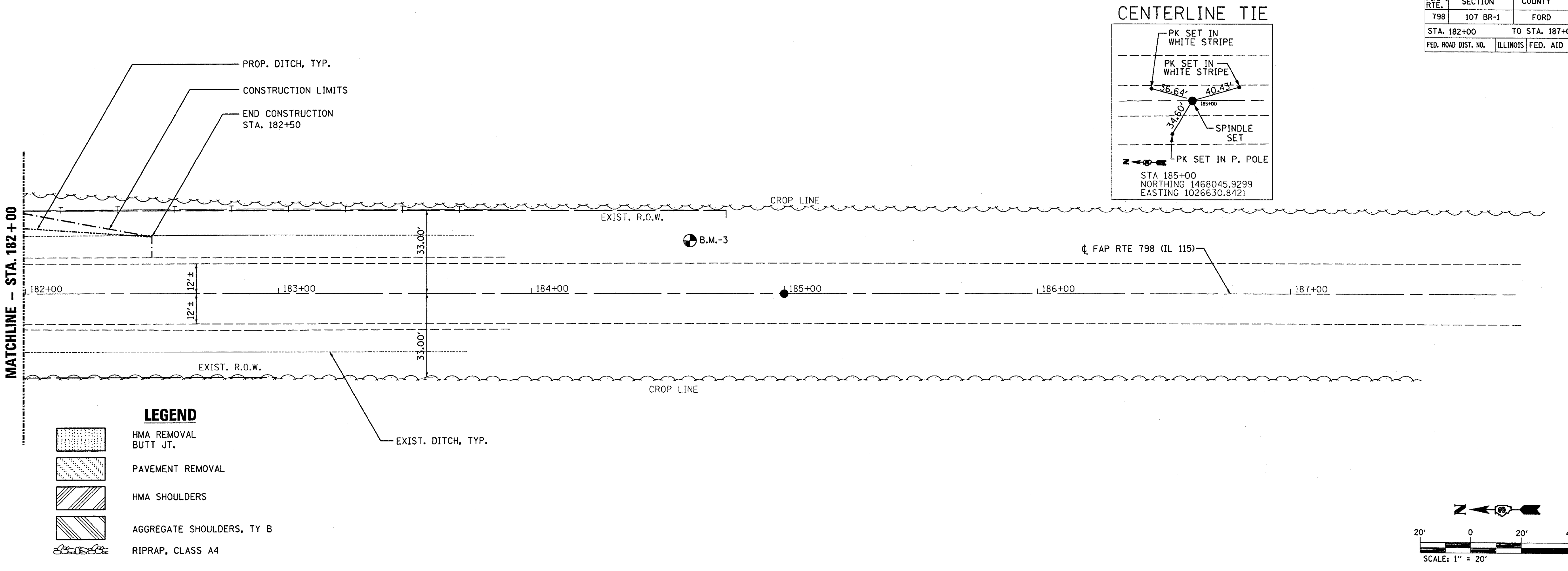
Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

FVD JOB NO. 308.29

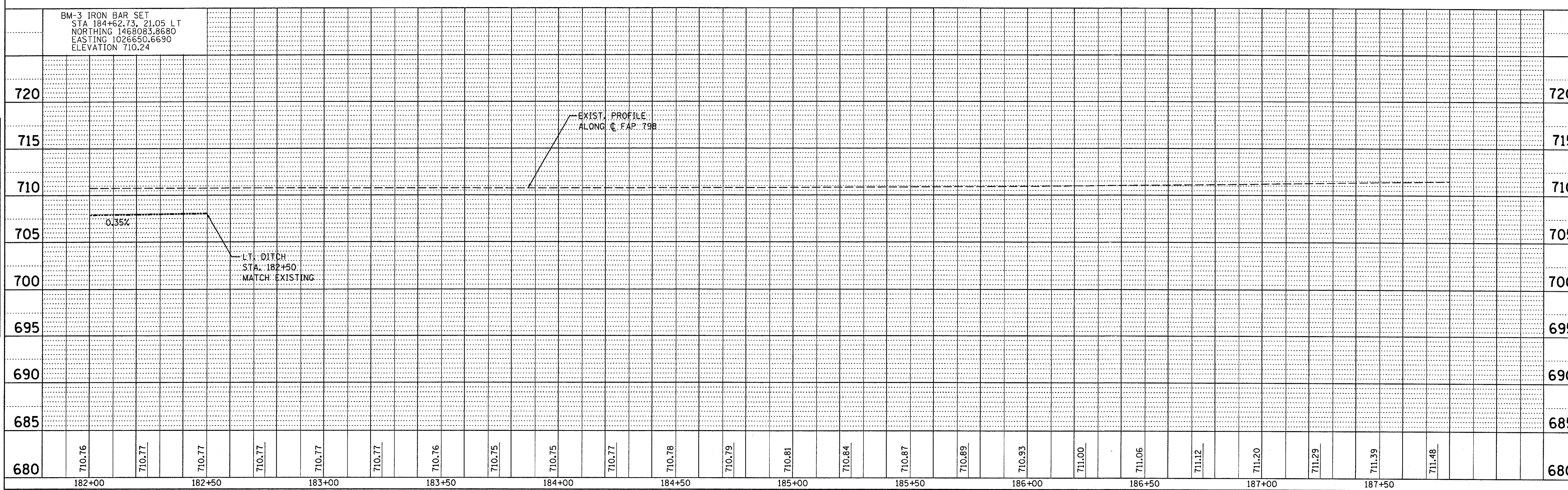
FAP 798 (IL 115) PLAN & PROFILE STA. 175+80 TO STA. 182+00

CONTRACT NO. 66698

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR-1	FORD	92	76
STA. 182+00	TO STA. 187+00			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



MATCHLINE – STA. 182+00
PROP. DITCH, TYP.
CONSTRUCTION LIMITS
END CONSTRUCTION STA. 182+50
CROP LINE
EXIST. R.O.W.
B.M.-3
℄ FAP RTE 798 (IL 115)
33.00'
12'±
182+00
183+00
184+00
185+00
186+00
187+00
EXIST. DITCH, TYP.
CENTERLINE TIE
PK SET IN WHITE STRIPE
PK SET IN WHITE STRIPE
36.64'
40.43'
34.60'
SPINDLE SET
PK SET IN P. POLE
STA 185+00
NORTHING 1468045.9299
EASTING 1026630.8421
LEGEND
HMA REMOVAL BUTT JT.
PAVEMENT REMOVAL
HMA SHOULDERS
AGGREGATE SHOULDERS, TY B
RIPRAP, CLASS A4
20' 0 20' 40'
SCALE: 1" = 20'



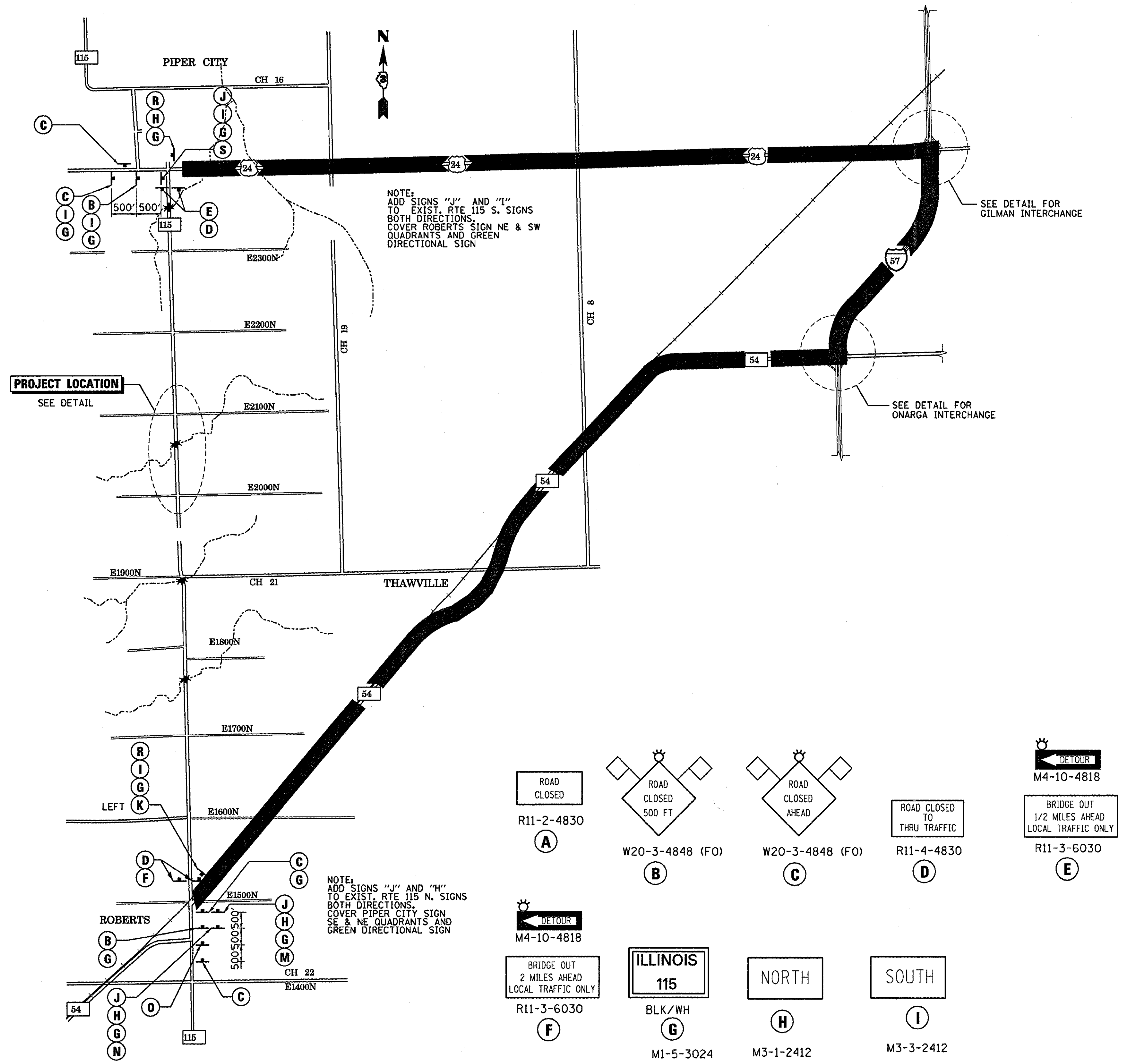
BM-3 IRON BAR SET
STA 184+62.73, 21.05 LT
NORTHING 1468083.8680
EASTING 1026650.6690
ELEVATION 710.24
720
715
710
705
700
695
690
685
680
EXIST. PROFILE ALONG ℄ FAP 798
0.35%
LT. DITCH STA. 182+50 MATCH EXISTING
710.76
710.77
710.77
710.77
710.77
710.77
710.76
710.75
710.75
710.77
710.78
710.79
710.81
710.84
710.87
710.89
710.93
711.00
711.06
711.12
711.20
711.29
711.39
711.48
182+00
182+50
183+00
183+50
184+00
184+50
185+00
185+50
186+00
186+50
187+00
187+50

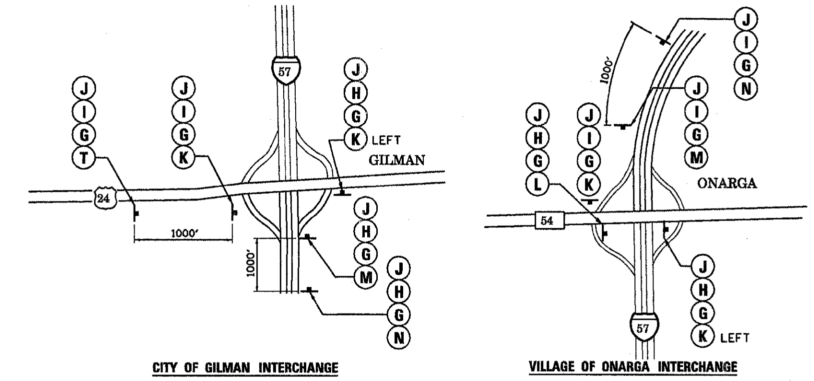
PLAN — NOTE BOOK NO. — SURVEYED — PLOTTED — ALIGNMENT CHECKED — RT. OF WAY CHECKED — CADD FILE NAME — BY — DATE

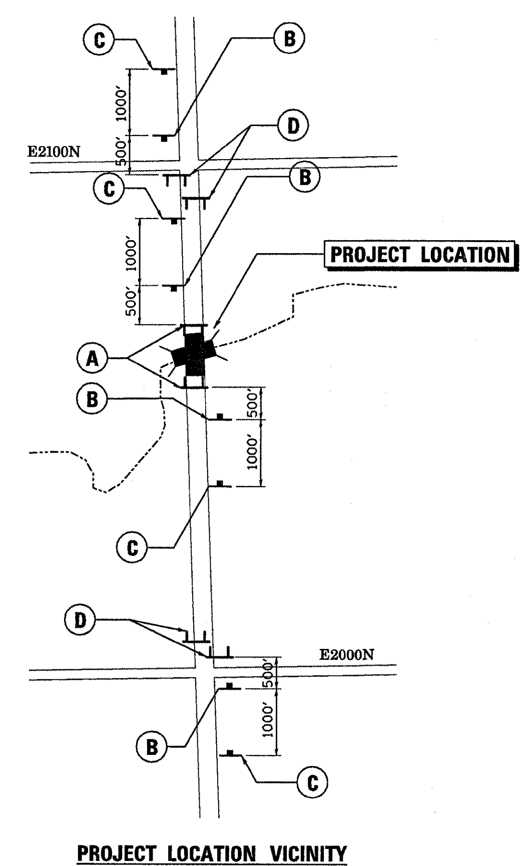
PROFILE — NOTE BOOK NO. — SURVEYED — PLOTTED — GRADES CHECKED — B.M. NOTED — STRUCTURE NOTATIONS CHKD — BY — DATE

CONTRACT NO. 66698

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR-1	KANKAKEE	92	77
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

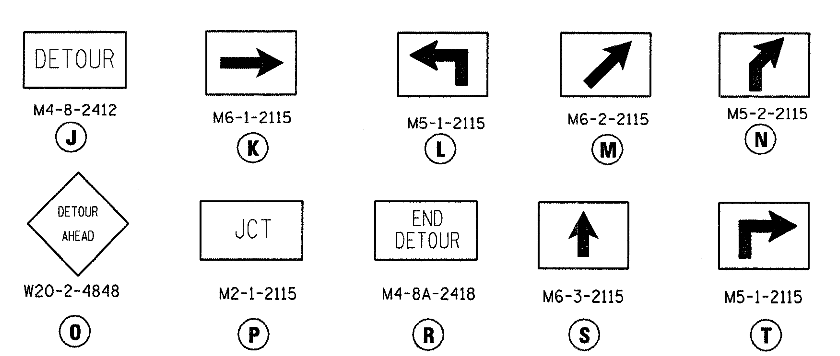






LEGEND

- TYPE III BARRICADES CONFORMING TO STD. 702001 "ROAD CLOSED TO ALL TRAFFIC" WITH 2 FLASHING LIGHTS PER BARRICADE
- TYPE III BARRICADES CONFORMING TO STD. 702001 "ROAD CLOSED TO THRU TRAFFIC" WITH 2 FLASHING LIGHTS PER BARRICADE
- SIGNS ON PERMANENT SUPPORTS
- FLASHING LIGHT ABOVE SIGN
- 18"x18" ORANGE FLAG
- DETOUR ROUTE



GENERAL NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR.
2. ALL SIGNS NOT ATTACHED TO BARRICADES SHALL BE POST MOUNTED, UNLESS OTHERWISE NOTED.
3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
4. SEE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAP ROUTE 798 (IL RTE 115)
SEC 107 BR-1, FORD COUNTY

DETOUR PLAN

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

FVD JOB NO. 308.29

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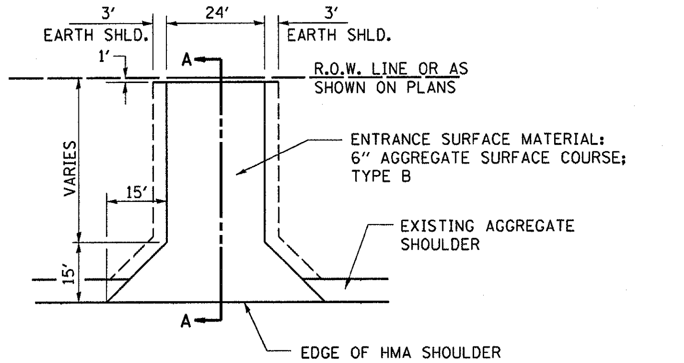
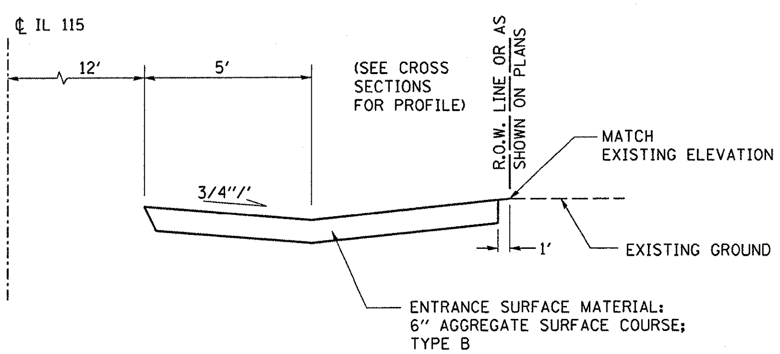
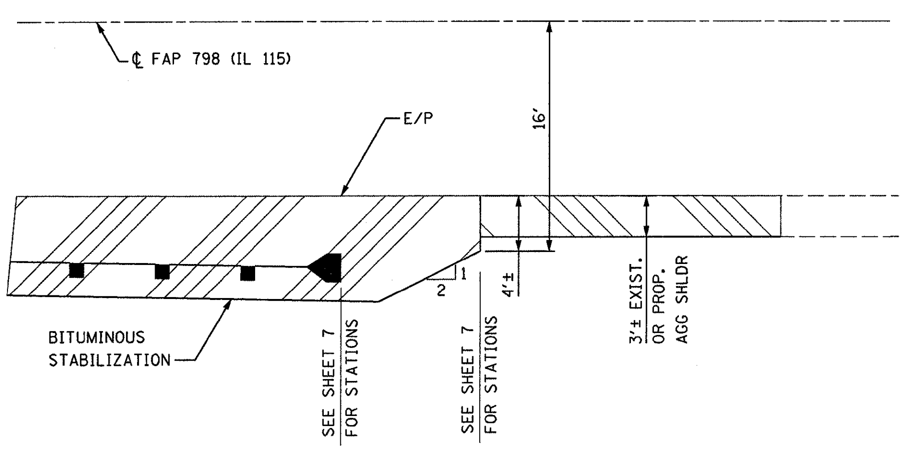


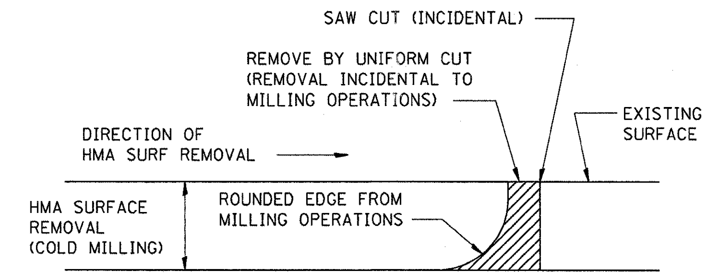


SECTION A-A

FIELD ENTRANCE DETAIL
STA. 175+00 RT

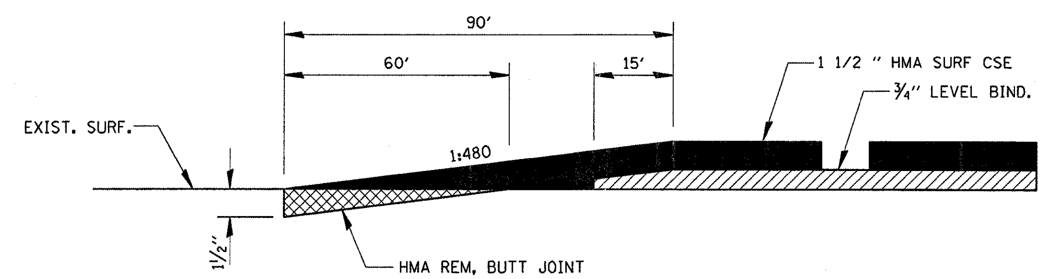


HMA SHOULDER STUB DETAIL AT GUARDRAIL TERMINATION
MODIFIED STANDARD 630201

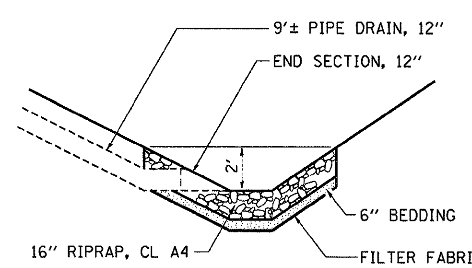


NOTE: WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL

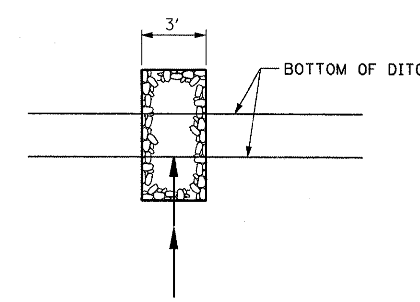
HMA DETAIL AT BUTT JOINTS



BUTT JOINT DETAIL



SECTION



PLAN

RIPRAP DETAIL AT BRIDGE APPROACH DRAIN OUTLET
(REFER TO STD. 609006)
STA. 178+31, 28' LT, ℄ ELEV. 707.1
STA. 178+47, 28' RT, ℄ ELEV. 707.7
STA. 179+29, 28' LT, ℄ ELEV. 706.9
STA. 179+45, 28' RT, ℄ ELEV. 706.9
(ADJUST STATIONS AS NEEDED TO MISS GUARDRAIL TERMINAL POST)

REVISIONS	
NAME	DATE

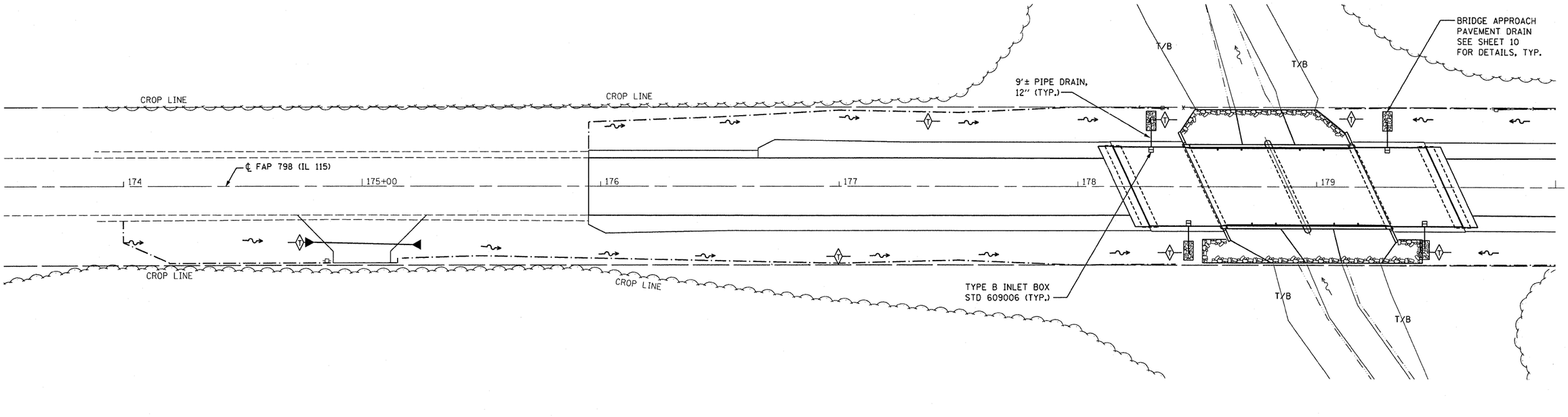
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 798 (IL RTE 115)
SEC 107 BR-1, FORD COUNTY

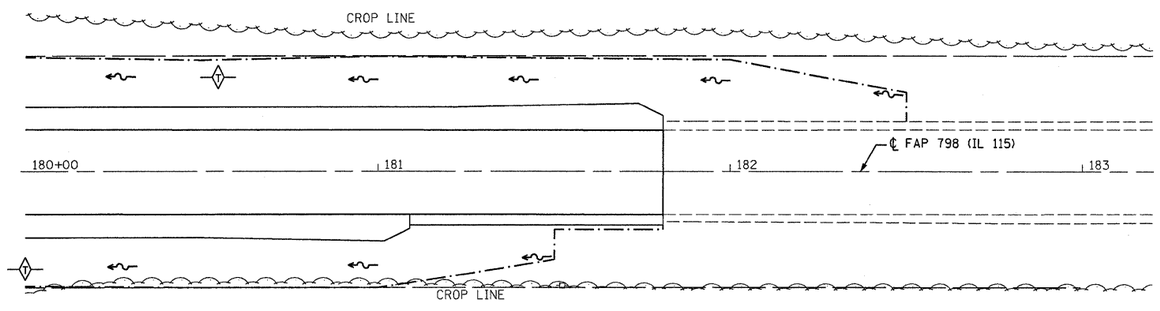
MISCELLANEOUS DETAILS

SCALE: VERT. HORIZ.
DATE
DRAWN BY
CHECKED BY

CONTRACT NO. 66698

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR-1	FORD	92	79
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





LEGEND

- CONSTRUCTION LIMITS
- TEMPORARY DITCH CHECK
- PROPOSED DITCH
- RIPRAP, CLASS A4

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAP ROUTE 798 (IL RTE 115)

SEC 107 BR-1, FORD COUNTY

EROSION & SEDIMENT CONTROL

SCALE: VERT. HORIZ.

DATE

DRAWN BY

CHECKED BY

Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

FVD JOB NO. 308.29

PLOT DATE = Aug 25, 2008 - 09:28:23 AM
FILE NAME = c:\pw_work\PWIDOT\CARPENTERRJ\d0308721\I-Erosion.dgn
PLOT SCALE = 211.765 ' / IN.
REFERENCE = REF

Bench Mark #2:
Iron Bar Set. Sta. 178+37.62, 19.16' Lt.
Elevation = 709.69

Existing Structure: S.N. 027-0040, Built in 1929 as a ±30' Single Span R.C. Slab Bridge 36'-3" Wide (Out to Out) With Closed Concrete Abutments Supported on Untreated Timber Piles.
Bridge Shall be Closed to Traffic During Reconstruction.

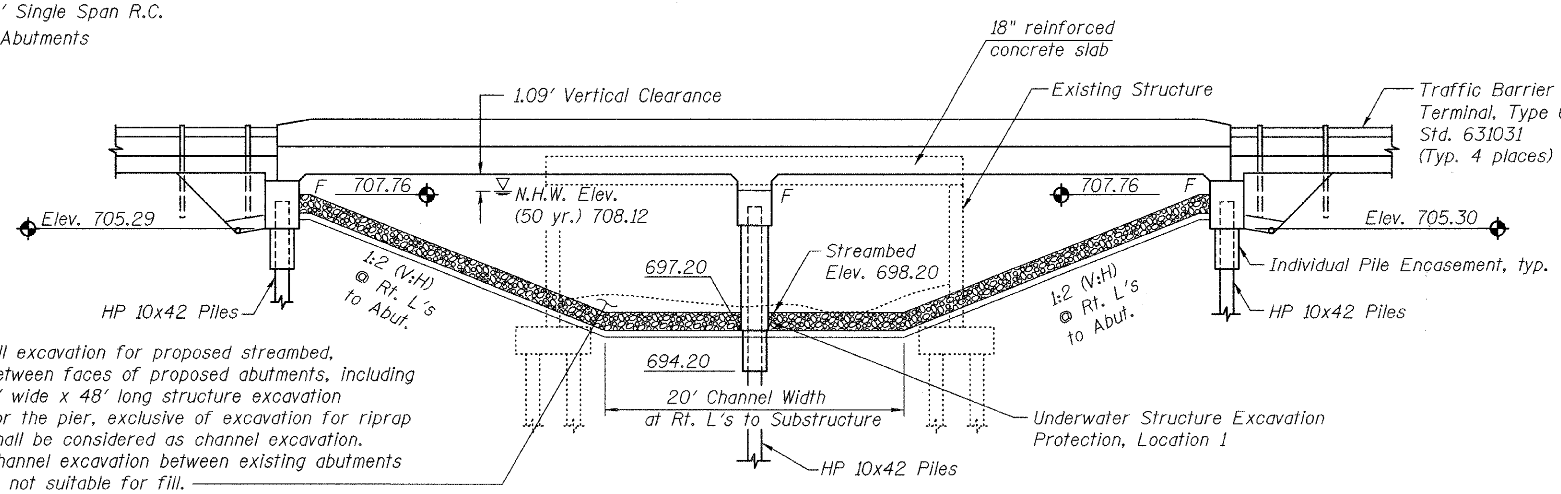
No Salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

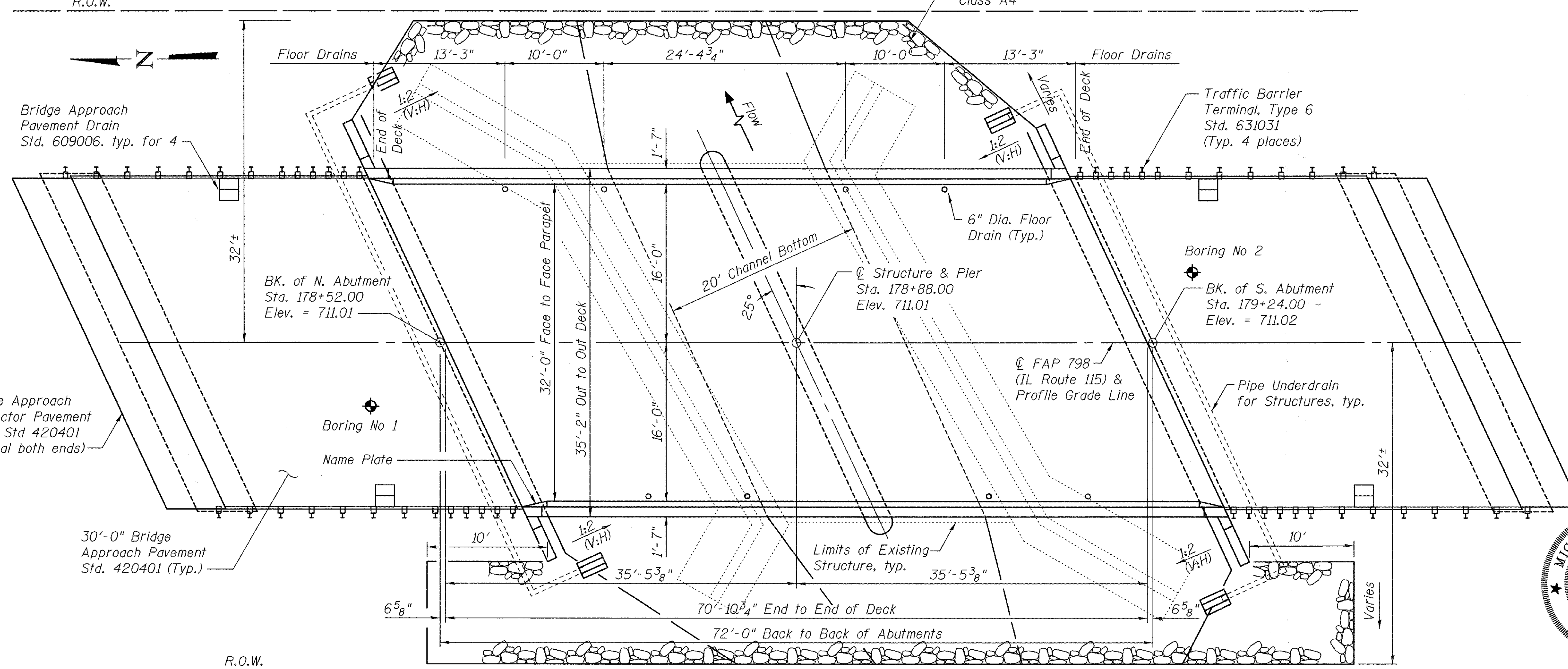
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 798	107 BR-1	FORD	92	80
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
8 SHEETS

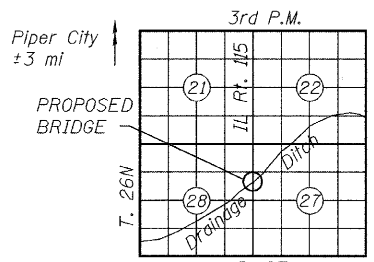
Contract # 66698



ELEVATION



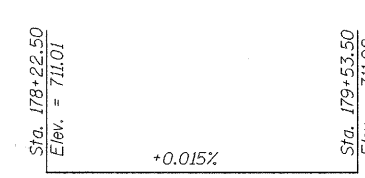
PLAN



LOCATION SKETCH

WATERWAY INFORMATION

Drainage Area = 6.2 mi²	Low Grade Elev. 710.76 ft. @ Sta. 182+00								
	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	896	185	280	706.63	0.24	0.06	706.87	706.69
Design	50	1,353	219	356	708.12	0.58	0.14	708.70	708.26
Base	100	1,543	222	372	708.40	1.13	0.19	709.53	708.59
Max. Calc.	500	1,988	222	389	708.68	1.99	0.33	710.67	709.01



PROFILE GRADE
(along ℄ roadway)

INDEX OF SHEETS

STATION 178+88.00
BUILT 20-- BY
STATE OF ILLINOIS
FAP RTE 798 SEC 107 BR-1
LOADING HS20-44
STR. NO. 027-0095

LETTERING FOR NAME PLATE

Locate Name Plate at Northwest Corner of Bridge (See Std. 515001)

DESIGN SPECIFICATIONS

2002 AASHTO

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.045 g
Site Coefficient (S) = 1.2

DESIGN STRESSES

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

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (TJO)
ENGINEER OF BRIDGES AND STRUCTURES

MICHAEL J. BRYANT 081-005324 LICENSED STRUCTURAL ENGINEER OF CHAMPAIGN ILLINOIS

5/24/06

MICHAEL J. BRYANT, P.E., S.E. DATE
IL. LICENSED STRUCTURAL ENGINEER
ILLINOIS NO. 5324 EXPIRES NOVEMBER 30, 2006

DESIGNED	MAJ/MSJ
CHECKED	MJB
DRAWN	MSJ
CHECKED	WCC

GENERAL PLAN & ELEVATION
IL RTE 115 OVER DRAINAGE DITCH
TRIBUTARY TO NORTH VERMILLION RIVER
FAP RTE 798 SECTION 107 BR-1
FORD COUNTY
STATION 178+88.00
S.N. 027-0095

Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

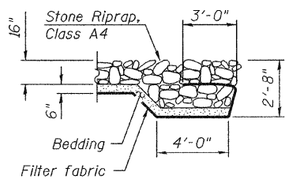
FVD/DA Job 308.29

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

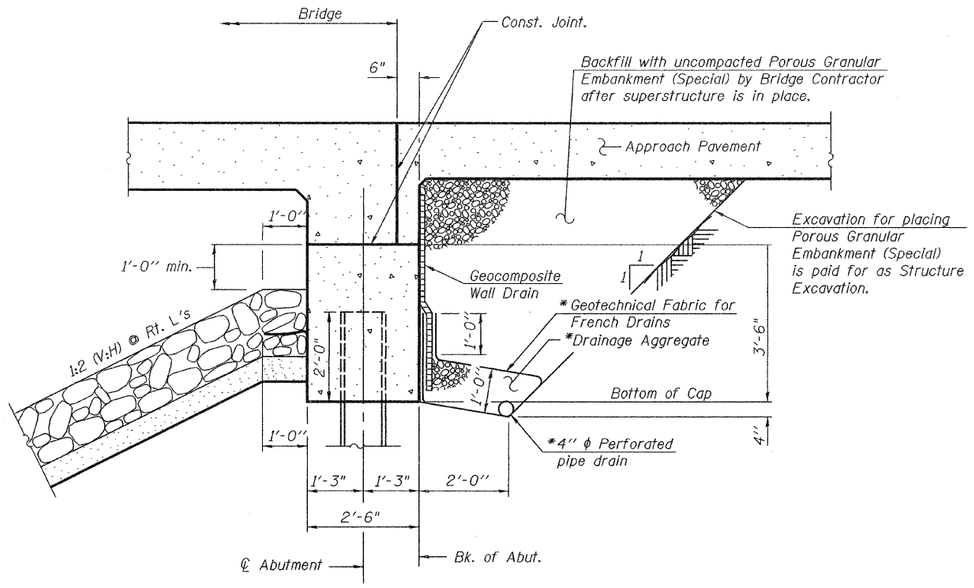
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 798	107 BR-1	FORD	92	81
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 2
8 SHEETS

Contract # 66698



RIPRAP FLANK DETAIL

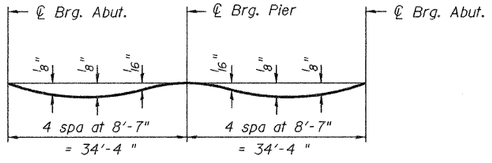


SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. @ Rt. L's)
(Reinforcement not shown)

* Included in the cost of Pipe Underdrains for Structures, 4".

Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend 12" beyond the end of the wingwall, turn 90°, and extend with non-perforated drain pipe until intersecting with the side slopes. The pipes shall drain into concrete headwalls *. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
2. Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
3. The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection. Forms for deck slab shall be removed prior to placement of bridge approach pavement.
4. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
5. All Construction joints shall be bonded.
6. Excavation behind existing abutment walls shall be done before removing the existing superstructure.
7. Slipforming of parapets is not allowed.
8. The steel H piles shall be according to AASHTO M270 grade 50.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	
Structure Excavation	Cu. Yd.		0	120	120
Driving Piles	Foot		260	506	766
Floor Drains	Each	8			8
Channel Excavation	Cu. Yd.			390	390
Porous Granular Embankment (Special)	Cu. Yd.			70.8	70.8
Concrete Structures	Cu. Yd.		45.5	28.3	73.8
Concrete Superstructure	Cu. Yd.	162.8			162.8
Bridge Deck Grooving	Sq. Yd.	252			252
Stone Riprap, Class A4	Sq. Yd.		527		527
Reinforcement Bars, Epoxy Coated	Pound	26690	2320	3900	32910
Furnishing Steel Piles HP 10x42	Foot		260	506	766
Test Pile Steel HP 10x42	Each		1	1	2
Filter Fabric	Sq. Yd.		527		527
Name Plates	Each	1			1
Removal of Existing Structures No. 4	Each	1			1
Protective Coat	Sq. Yd.	312			312
Geocomposite Wall Drains	Sq. Yd.			44	44
Pipe Underdrains for Structures, 4"	Foot			110	110
Underwater Structure Excavaton Protection, Location 1	Each		1		1

DESIGNED	MAJ/MSJ
CHECKED	MJB
DRAWN	MSJ
CHECKED	WCC

GENERAL NOTES, DETAILS AND BILL OF MATERIALS
IL RTE 115 OVER DRAINAGE DITCH TRIBUTARY TO NORTH VERMILLION RIVER
FAP RTE 798 SECTION 107 BR-1
FORD COUNTY
STATION 178+88.00
S.N. 027-0095

Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

FVD/DA Job 308.29

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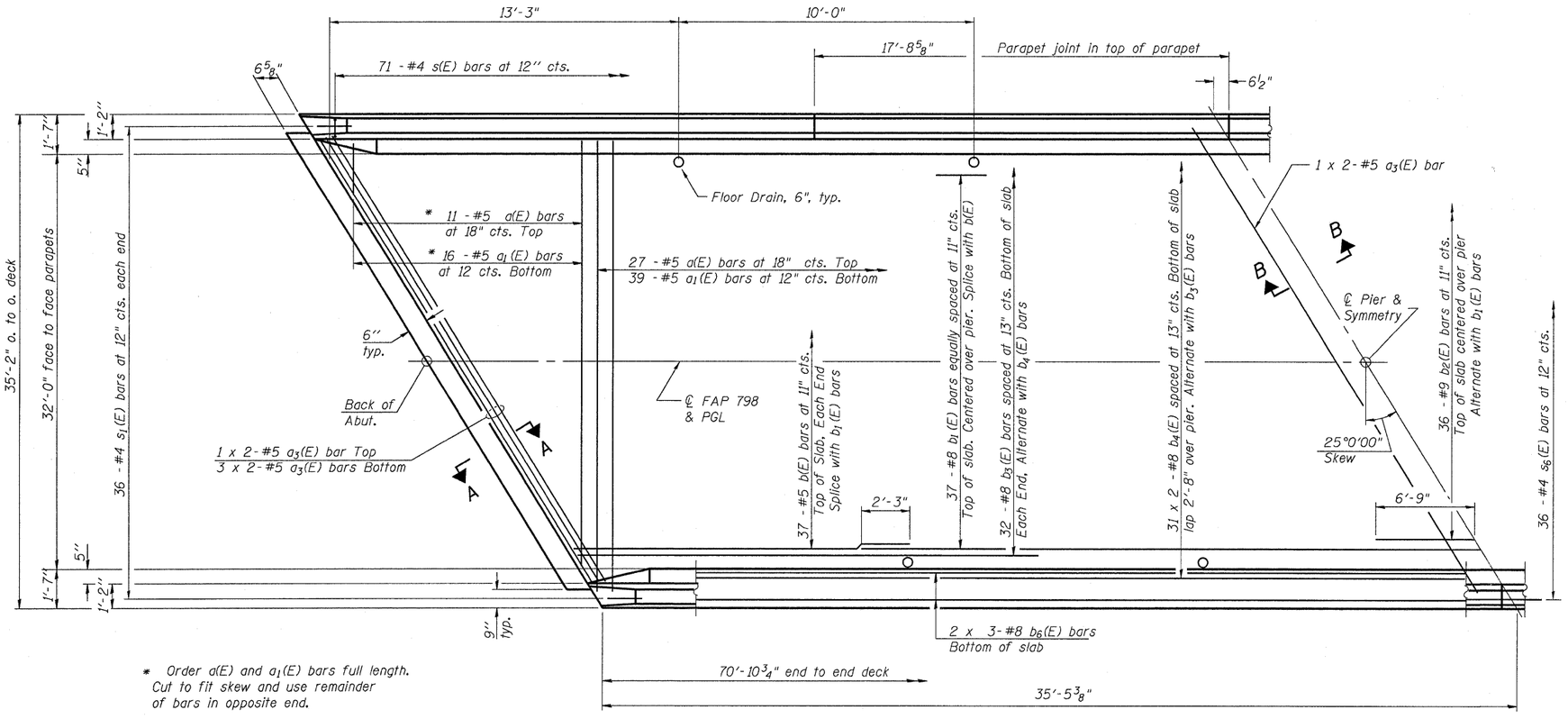
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 798	107 BR-1	FORD	92	82
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

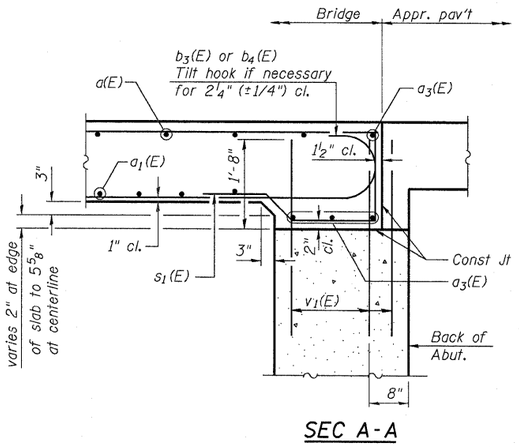
SHEET NO. 3 8 SHEETS

Contract # 66698

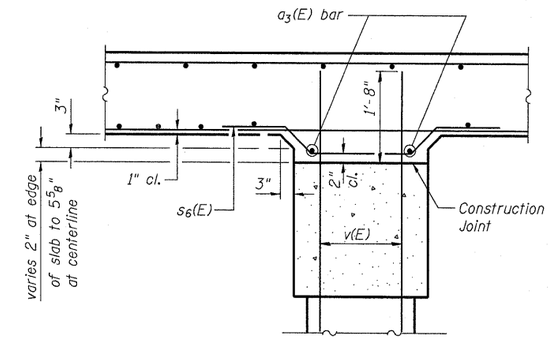


* Order d(E) and a_1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

HALF PLAN



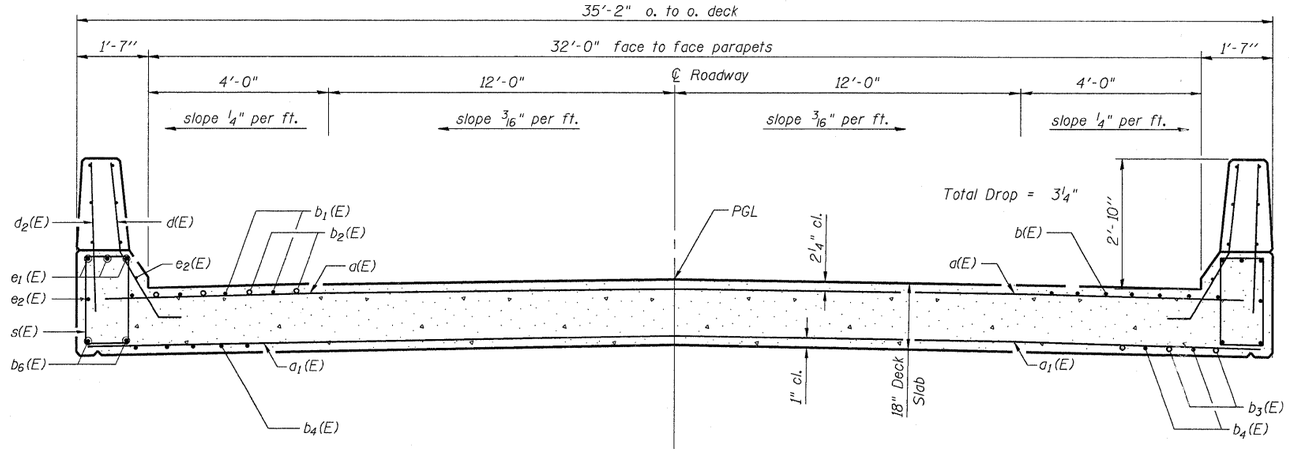
SEC A-A



SEC B-B

MINIMUM LAP LENGTHS	
Bar Size	Length
#5	2'-3"
#8	2'-8"

Notes:
See Sheet 4 of 8 for superstructure details and Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 20 x 3 - #5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet 4 of 8 for parapet reinforcement.



NEAR PIER — NEAR MIDSPAN

CROSS SECTION
(Looking North)

DESIGNED	MAJ
CHECKED	MJB
DRAWN	MSJ
CHECKED	WCC

SUPERSTRUCTURE - DECK
IL RTE 115 OVER DRAINAGE DITCH TRIBUTARY TO NORTH VERMILLION RIVER
FAP RTE 798 SECTION 107 BR-1
FORD COUNTY
STATION 178+88.00
S.N. 027-0095

Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

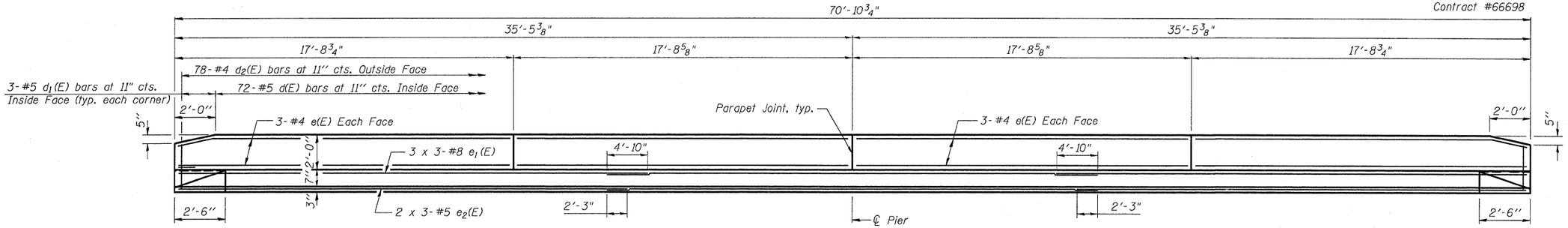
FVD/DA Job 308.29

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

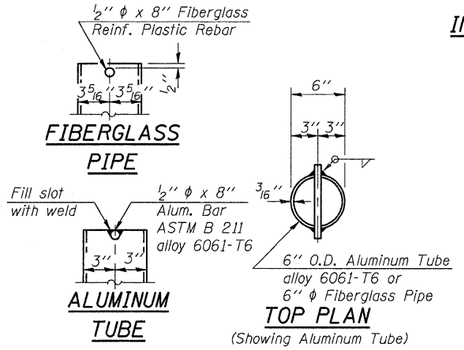
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 798	107 BR-1	FORD	92	83
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

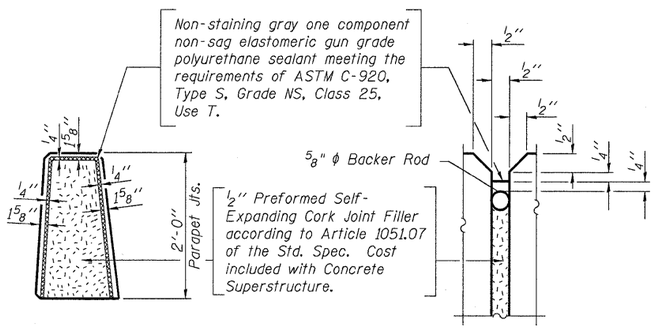
SHEET NO. 4
8 SHEETS

Contract #66698

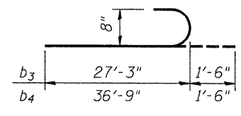


INSIDE ELEVATION OF PARAPET

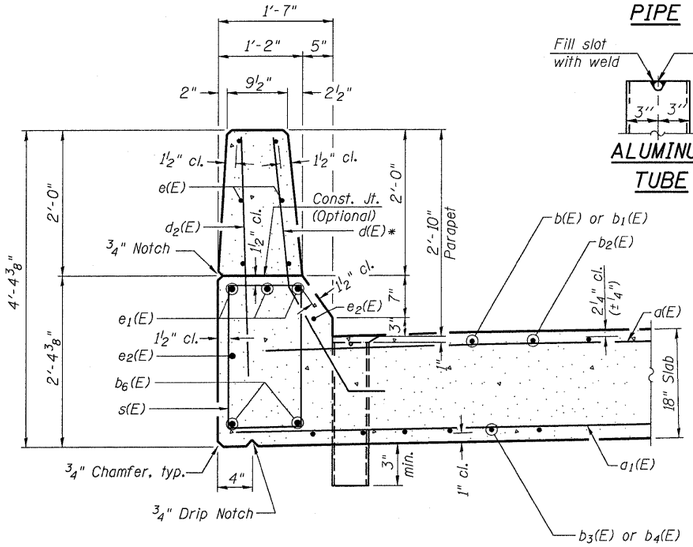




MINIMUM LAP LENGTHS	
Bar Size	Length
#5	2'-3"
#8	4'-10"



BAR b_3 & b_4 (E)

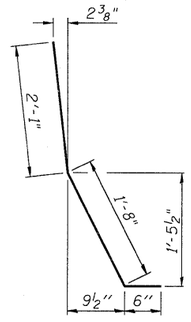


SECTION THRU PARAPET

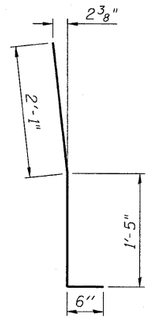
* $d_1(E)$ at Ends of Parapets

PARAPET JOINT DETAILS

Notes:
The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Steel Structures Painting Council's Spec. SSPC-SP1 prior to painting.
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.



BAR d(E)

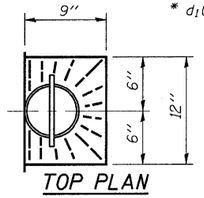


BAR d_1(E)

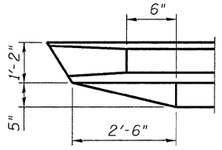
SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	38	#5	34'-0"	
d_1(E)	55	#5	34'-9"	
d_3(E)	20	#5	20'-6"	
b(E)	74	#5	21'-6"	
b_1(E)	37	#8	32'-6"	
b_2(E)	36	#9	13'-6"	
b_3(E)	64	#8	28'-9"	
b_4(E)	62	#8	38'-3"	
b_6(E)	12	#8	25'-3"	
d(E)	144	#5	4'-3"	
d_1(E)	12	#5	4'-0"	
d_2(E)	156	#4	3'-6"	
e(E)	48	#4	17'-3"	
e_1(E)	18	#8	26'-9"	
e_2(E)	12	#5	25'-3"	
s(E)	142	#4	6'-9"	
s_1(E)	72	#4	6'-3"	
s_6(E)	36	#4	8'-2"	
Reinforcement Bars, Epoxy Coated		Pound	26690	
Concrete Superstructure		Cu. Yds.	162.8	

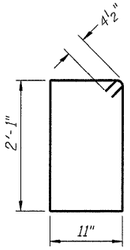
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 2 x 3-#5 etc. indicates 2 lines of bars with 3 lengths per line.



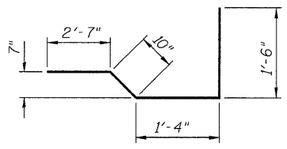
TOP PLAN



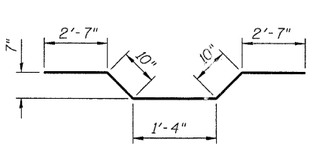
PARAPET TRANSITION
Typ. for outside parapets at abutments



BAR s(E)



BAR s_1(E)



BAR s_6(E)

DESIGNED	MAJ
CHECKED	MJB
DRAWN	MSJ
CHECKED	WCC

SUPERSTRUCTURE - DETAILS
IL RTE 115 OVER DRAINAGE DITCH TRIBUTARY TO NORTH VERMILLION RIVER
FAP RTE 798 SECTION 107 BR-1
FORD COUNTY
STATION 178+88.00
S.N. 027-0095

Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

FVD/DA Job 308.29

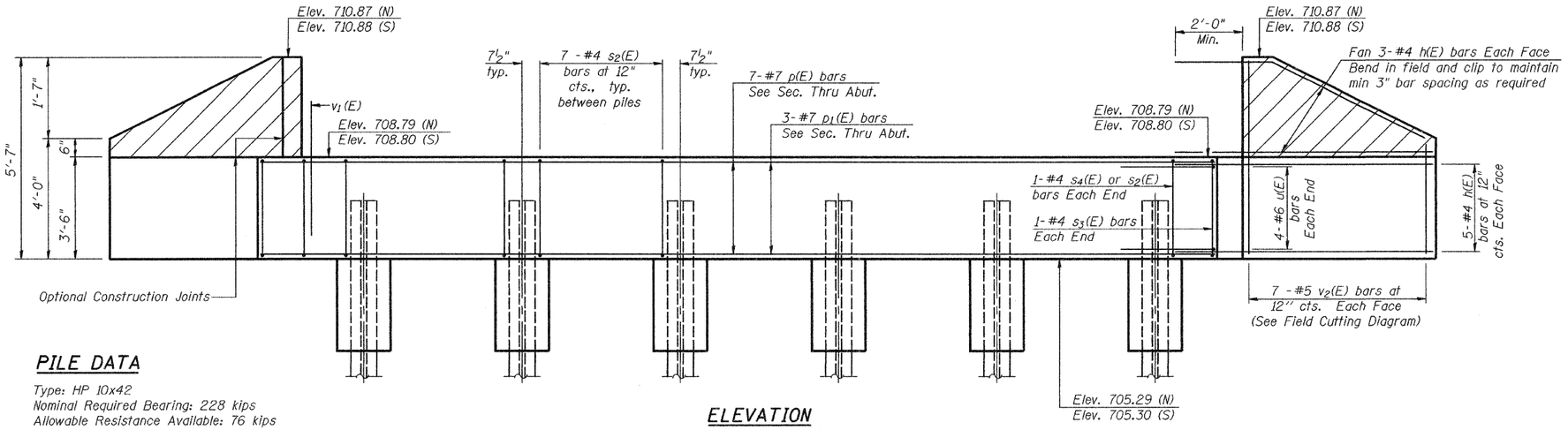
Notes: Reinforcement bars designated (E) shall be epoxy coated.
Hatched area to be poured after superstructure is in place

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 798	107 BR-1	FORD	92	84
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 5
8 SHEETS

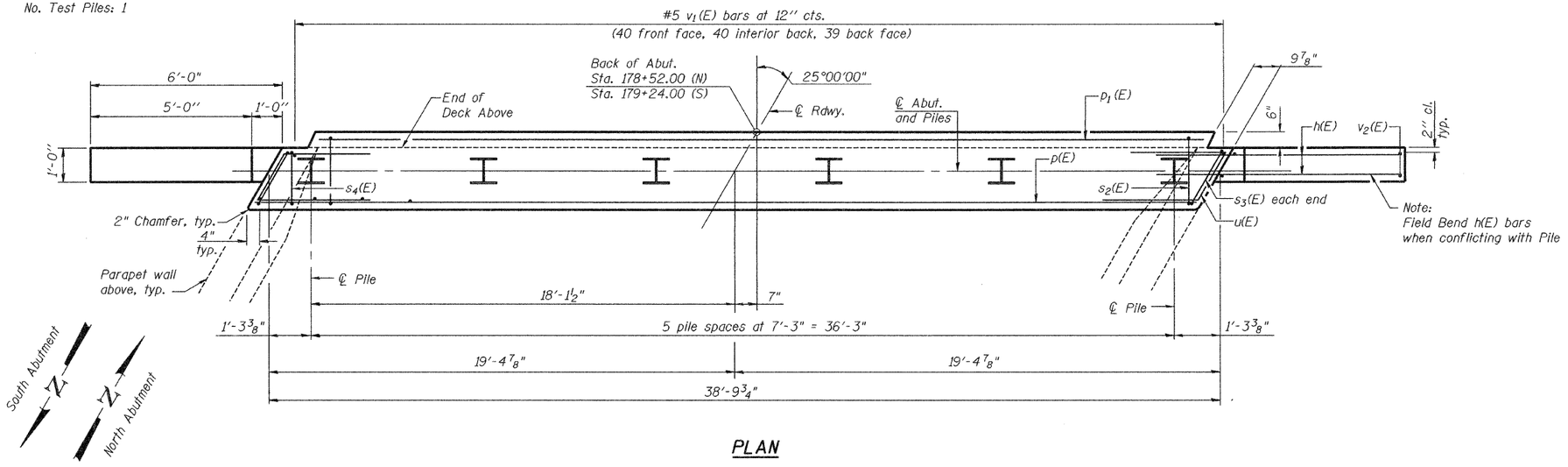
Contract # 66698



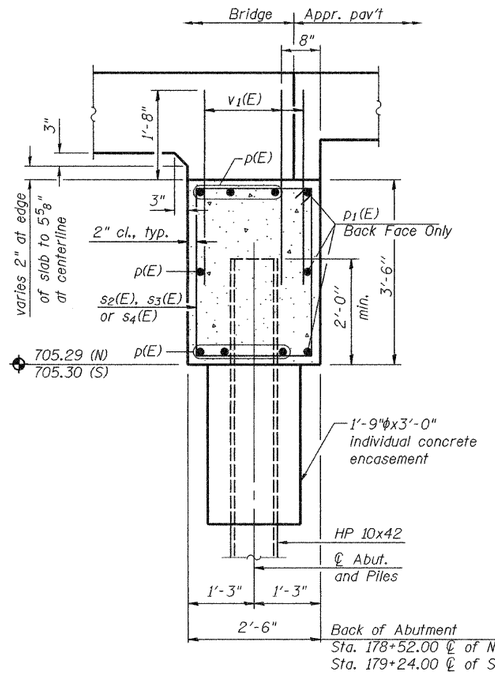
ELEVATION
(Looking at Front)

PILE DATA

Type: HP 10x42
Nominal Required Bearing: 228 kips
Allowable Resistance Available: 76 kips
Est. Length: 46 feet
No. Production Piles: 11
No. Test Piles: 1



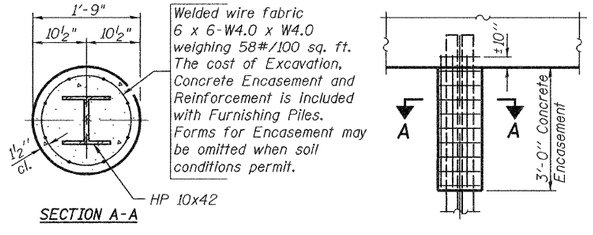
PLAN



SEC. THRU ABUT.

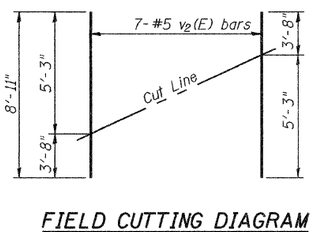
BILL OF MATERIAL (2 ABUTS)

Bar	No.	Size	Length	Shape
h(E)	64	#4	8'-3"	
p(E)	14	#7	38'-5"	
p1(E)	6	#7	36'-10"	
s2(E)	72	#4	11'-5"	
s3(E)	4	#4	10'-9"	
s4(E)	2	#4	10'-5"	
u(E)	16	#6	9'-9"	
v1(E)	238	#5	3'-8"	
v2(E)	28	#5	8'-11"	
Concrete Structures			Cu. Yd.	28.3
Reinforcement Bars, Epoxy Coated			Pound	3900
Structure Exc. (N)			Cu. Yd.	60
Structure Exc. (S)			Cu. Yd.	60
Furnishing Steel Piles HP 10x42			Foot	506
Driving Piles			Foot	506
Test Piles Steel HP 10x42			Each	1



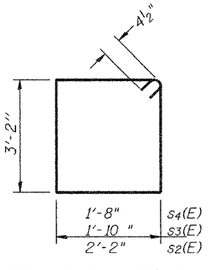
SECTION A-A

PILE ENCASEMENT DETAIL

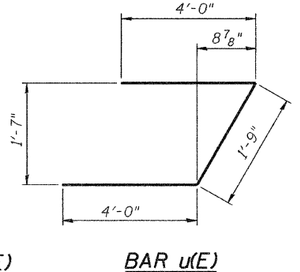


FIELD CUTTING DIAGRAM

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



BARS s2(E), s3(E) & s4(E)



BAR u(E)

DESIGNED	MSJ
CHECKED	MJB
DRAWN	MSJ
CHECKED	WCC

AI-R

SUBSTRUCTURE - ABUTMENTS
IL RTE 115 OVER DRAINAGE DITCH TRIBUTARY TO NORTH VERMILLION RIVER
FAP RTE 798 SECTION 107 BR-1
FORD COUNTY
STATION 178+88.00
S.N. 027-0095

Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

FVD/DA Job 308.29

C:\027-0095\12-19-Bridge.dgn 10/05/2006 3:55:47 PM

Notes: Reinforcement bars designated (E) shall be epoxy coated.
All Edges shall have standard 2" Chamfers

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 798	107 BR-1	FORD	92	85
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

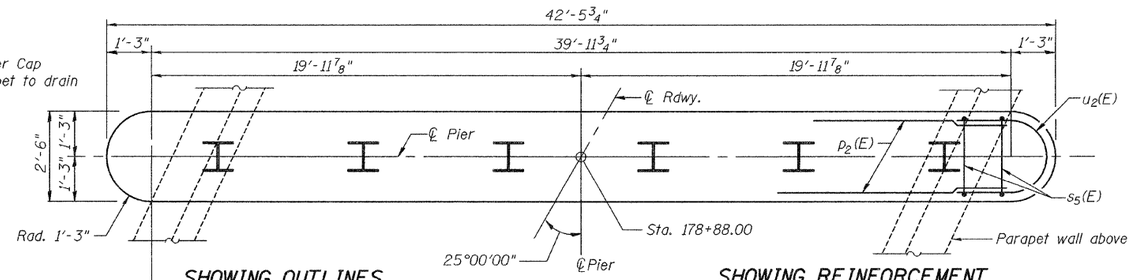
SHEET NO. 6
8 SHEETS

Contract # 66698

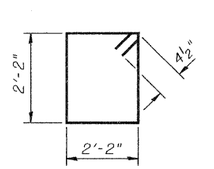
PILE DATA

Type: HP 10x42
Nominal Required Bearing: 396 kips
Allowable Resistance Available: 132 kips
Est. Length: 52 feet
No. Production Piles: 5
No. Test Piles: 1

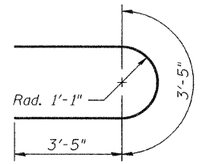
Note:
Slope top of Pier Cap outside of parapet to drain



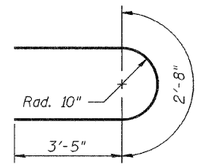
SHOWING OUTLINES — TOP PLAN — SHOWING REINFORCEMENT



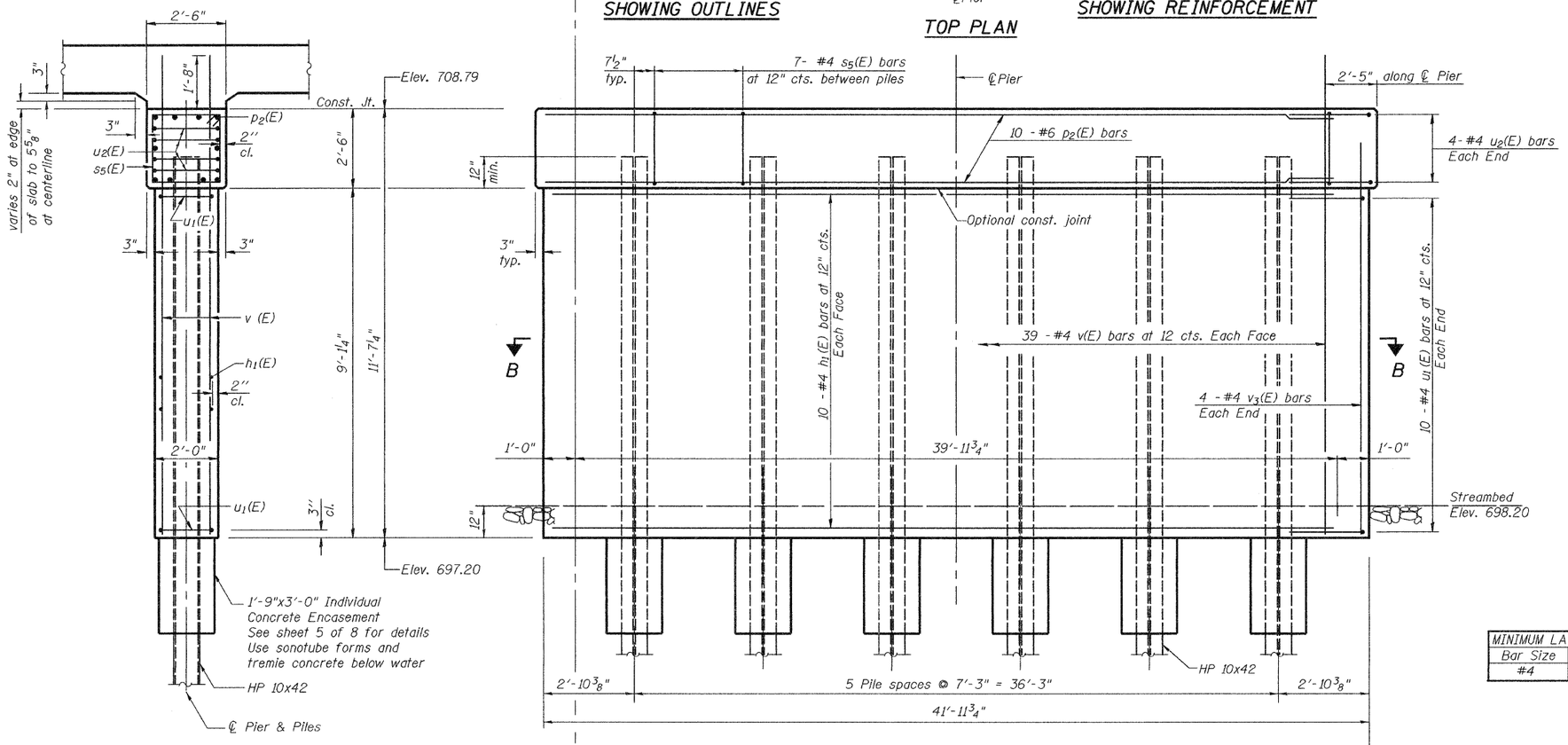
BAR s_5(E)



BARS u_2(E)



BARS u_1(E)



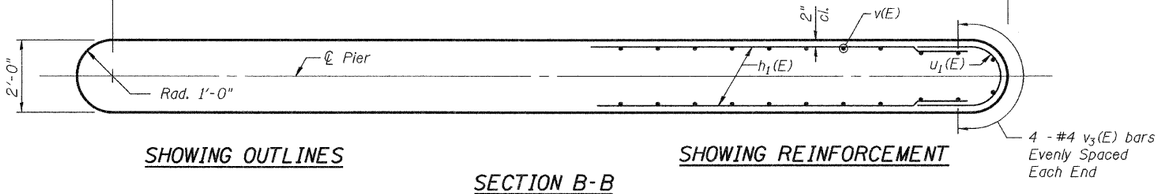
END VIEW — ELEVATION (Looking North)

MINIMUM LAP LENGTHS	
Bar Size	Length
#4	2'-0"

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_1(E)	20	#4	40'-0"	——
p_2(E)	10	#6	40'-0"	——
s_5(E)	39	#4	9'-5"	□
u_1(E)	20	#4	9'-6"	⊃
u_2(E)	8	#4	10'-3"	⊃
v(E)	78	#4	13'-3"	——
v_3(E)	8	#4	11'-3"	——
Concrete Structures			Cu. Yd.	45.5
Reinforcement Bars, Epoxy Coated			Pound	2320
Furnishing Steel Piles HP 10x42			Foot	260
Driving Piles			Foot	260
Test Pile Steel HP 10x42			Each	1

Reinforcement Bars designated (E) shall be epoxy coated.



SHOWING OUTLINES — SHOWING REINFORCEMENT

SECTION B-B

DESIGNED	MSJ
CHECKED	MJB
DRAWN	MSJ
CHECKED	WCC

SUPERSTRUCTURE - PIER
IL RTE 115 OVER DRAINAGE DITCH TRIBUTARY TO NORTH VERMILLION RIVER
FAP RTE 798 SECTION 107 BR-1
FORD COUNTY
STATION 178+88.00
S.N. 027-0095

Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

FVD/DA Job 308.29

C:\027-0095\12-19-bridge.dgn 10/06/2008 3:56:03 PM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 798	107 BR-1	FORD	92	86
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 7
8 SHEETS

Contract # 66698

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 10/21/04

ROUTE IL 115 DESCRIPTION Over Drainage Ditch 3.4 mile South of US 24 LOGGED BY Larry Meyers

SECTION 107BR-1 LOCATION NE 1/4, SEC. 28, TWP. 26N, RNG. 9E

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 027-0040
Station 178+89

BORING NO. 1 N. Abut
Station 178+45
Offset 6.50ft Rt
Ground Surface Elev. 710.75 ft

Surface Water Elev. 699.41 ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion 687.8 ft ▽
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Augured Bituminous, Concrete and Black Silty Clay.				
	708.25			
Very Stiff Black Silty Clay Fill.		3		
		3	2.0	33.2
		4	P	
	705.75 –5			
Medium Gray Silty Clay Loam.		2		
		3	1.4	19.0
		3	B	
		3		
		2	1.0	26.2
		3	P	
	–10			
	700.25	2	0.8	26.6
Soft Brown Silty Clay/Silt.		1	P	
		2	0.3	30.1
	698.25		P	
Hard Gray Silty Clay Loam Till.		4		
		7	4.7	15.6
		8	S	
	–15			
		4		
		5	4.0	15.5
		8	B	
		4		
	–20			
Hard Gray Silty Clay Loam Till. (continued)		5		
		8	5.6	16.0
		12	S	
	688.75			
Hard Gray Silty Clay Till.	▽	4		
		7	4.9	19.2
		12	B	
	–25			
		3		
		6	4.0	20.2
		9	B	
	682.75			
Very Stiff Gray Clay Till.		4		
		6	3.1	22.6
		11	B	
	–30			
		3		
		6	2.2	26.0
		11	B	
	672.75			
Stiff Gray Clay with Silt Pockets at 41.5'.				
	–40			

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

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 10/21/04

ROUTE IL 115 DESCRIPTION Over Drainage Ditch 3.4 mile South of US 24 LOGGED BY Larry Meyers

SECTION 107BR-1 LOCATION NE 1/4, SEC. 28, TWP. 26N, RNG. 9E

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 027-0040
Station 178+89

BORING NO. 1 N. Abut
Station 178+45
Offset 6.50ft Rt
Ground Surface Elev. 710.75 ft

Surface Water Elev. 699.41 ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion 687.8 ft ▽
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Stiff Gray Clay with Silt Pockets at 41.5'. (continued)		2		
		4	1.6	26.4
	668.75	7	B	
Stiff Gray Sandy Clay Loam Till with Pockets (Layers) of Silt and Sand.				
	–45			
		10		
		4	1.0	25.6
		2	P	
	662.75			
Very Dense Gray Find Sand/Coarse Gravel, some Loamy Areas.				
	–50			
		24		12.7
		36		
	–55			
		20		
		32		10.2
	654.25	33		
End of Boring				
	–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, from 137 (Rev. 8–99)

DESIGNED	--
CHECKED	MJB
DRAWN	MSJ
CHECKED	WCC

SOIL BORINGS
IL RTE 115 OVER DRAINAGE DITCH TRIBUTARY TO NORTH VERMILLION RIVER
FAP RTE 798 SECTION 107 BR-1
FORD COUNTY
STATION 178+88.00
S.N. 027-0095

Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

FVD/DA Job 308.29

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 798	107 BR-1	FORD	92	87
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 8
8 SHEETS

Contract # 66698

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 10/25/04

ROUTE IL 115 DESCRIPTION Over Drainage Ditch 3.4 mile South of US 24 LOGGED BY Larry Meyers

SECTION 107BR-1 LOCATION NE 1/4, SEC. 28, TWP. 26N, RNG. 9E

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 027-0040
Station 178+89

BORING NO. 2 S. Abut
Station 179+28
Offset 7.00ft Lt
Ground Surface Elev. 710.68 ft

Surface Water Elev. 699.41 ft
Stream Bed Elev. ____ ft

Groundwater Elev.:
First Encounter ____ ft
Upon Completion ____ ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Augured Bituminous, Concrete and Black Silty Clay.			
708.18			
Stiff Black Silty Clay.	2		
	3	1.0	37.3
	3	P	
-5			
705.18	2		
Stiff Brown/Gray Silty Clay (Loess).	2		
	3	1.5	23.8
		P	
	1		
	1	1.0	28.4
	2	P	
701.18			
-10 Hard Brown Silty Clay Loam Till.	2		
	5	4.5	17.4
	10	B	
698.68			
Hard Gray Silty Clay Loam Till.	6		
	9	8.9	13.9
	11	S	
-15			
	6		
	10	6.9	14.2
	11	S	
	5		
	8	5.8	15.1
	11	B	
-20			
Hard Gray Silty Clay Loam Till. (continued)	4		
	6	5.1	18.6
	8	B	
688.68			
Very Stiff Gray Silty Clay Till.	4		
	5	3.3	22.0
	7	B	
-25			
	4		
	5	3.1	20.5
	7	B	
682.68			
Stiff Gray Clay Till.			
-30	3		
	4	1.8	26.6
	5	B	
676.68			
Medium Gray Silty Clay with Silt and Clay Layers.			
-35	1		
	1		24.9
	2		
672.68			
Medium Gray Fine Sand and Silt.			
-40			

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

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 2 of 2

Date 10/25/04

ROUTE IL 115 DESCRIPTION Over Drainage Ditch 3.4 mile South of US 24 LOGGED BY Larry Meyers

SECTION 107BR-1 LOCATION NE 1/4, SEC. 28, TWP. 26N, RNG. 9E

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 027-0040
Station 178+89

BORING NO. 2 S. Abut
Station 179+28
Offset 7.00ft Lt
Ground Surface Elev. 710.68 ft

Surface Water Elev. 699.41 ft
Stream Bed Elev. ____ ft

Groundwater Elev.:
First Encounter ____ ft
Upon Completion ____ ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Medium Gray Fine Sand and Silt. (continued)	WH		
	6		25.1
	12		
-45			
	3		
	10		17.7
	10		
662.68			
Medium Gray Fine Sand/Medium Gravel with some Sandy Loam Layers. Washed at 50'.			
-50	13		
	31		17.6*
	37		
657.68			
Hard Brown Sandy Clay Loam Till. Washed at 55'.			
-55	32		
	37	12.4	8.8*
	58	S	
654.18			
End of Boring			
-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, from 137 (Rev. 8-99)

DESIGNED	--
CHECKED	MJB
DRAWN	MSJ
CHECKED	WCC

SOIL BORINGS
IL RTE 115 OVER DRAINAGE DITCH
TRIBUTARY TO NORTH VERMILLION RIVER
FAP RTE 798 SECTION 107 BR-1
FORD COUNTY
STATION 178+88.00
S.N. 027-0095

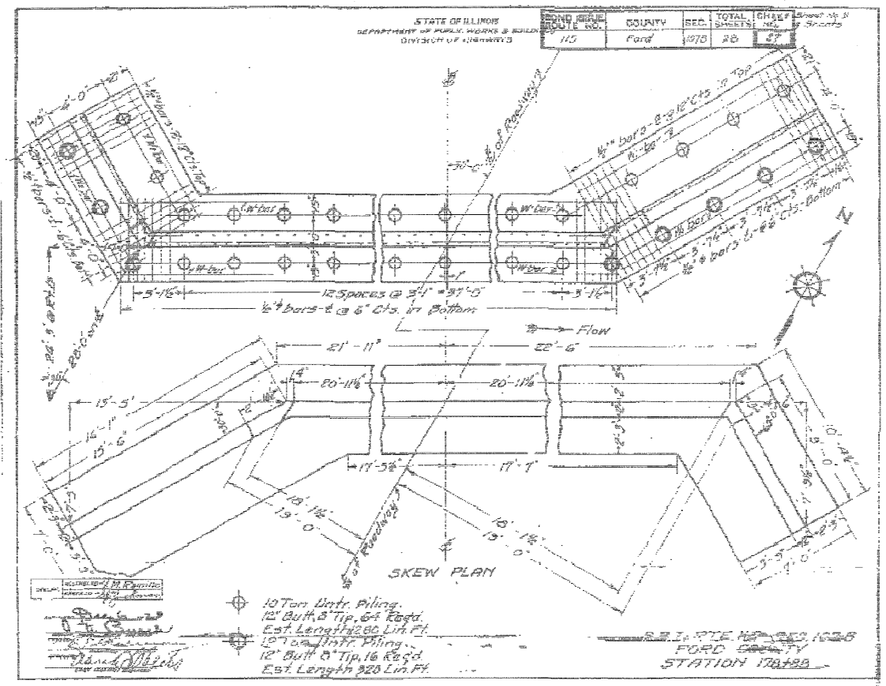
Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

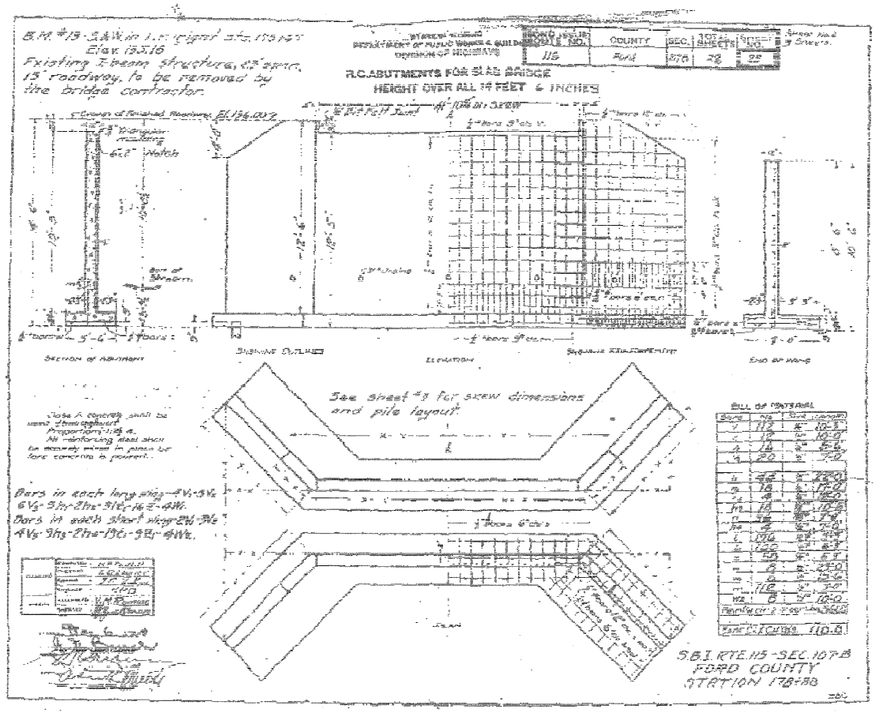
FVD/DA Job 308.29

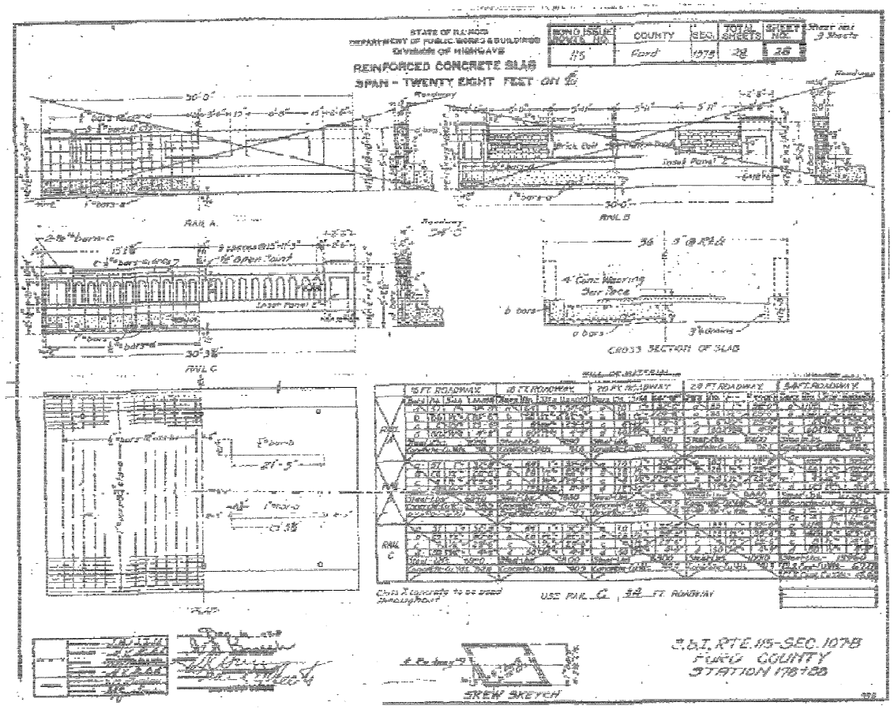
CONTRACT NO. 66698

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107-BR1	FORD	92	88
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FOR INFORMATION ONLY







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REFERENCE = REF

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAP ROUTE 798 (IL RTE 115)
SEC 107 BR-1, FORD COUNTY

EXISTING STRUCTURE PLANS

SCALE: VERT.
HORIZ.
DATE
DRAWN BY
CHECKED BY

Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

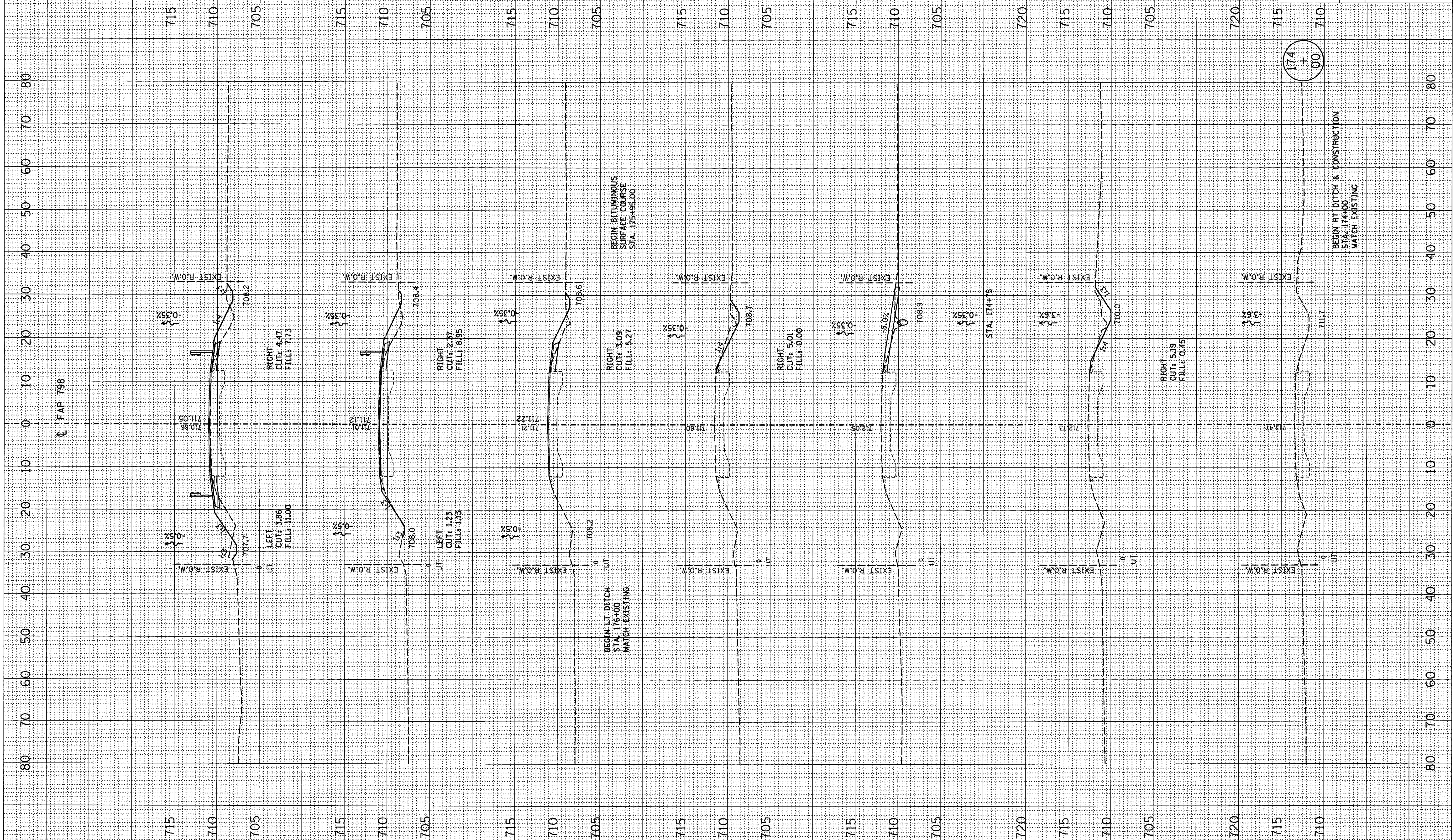
FVD JOB NO. 308.29

CONTRACT NO. 66455

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR-1	FORD	92	89

STA. 174+00 TO STA. 177+00

FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT



Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

FAP 798 (IL 115) CROSS SECTIONS STA. 174+00 TO STA. 177+00

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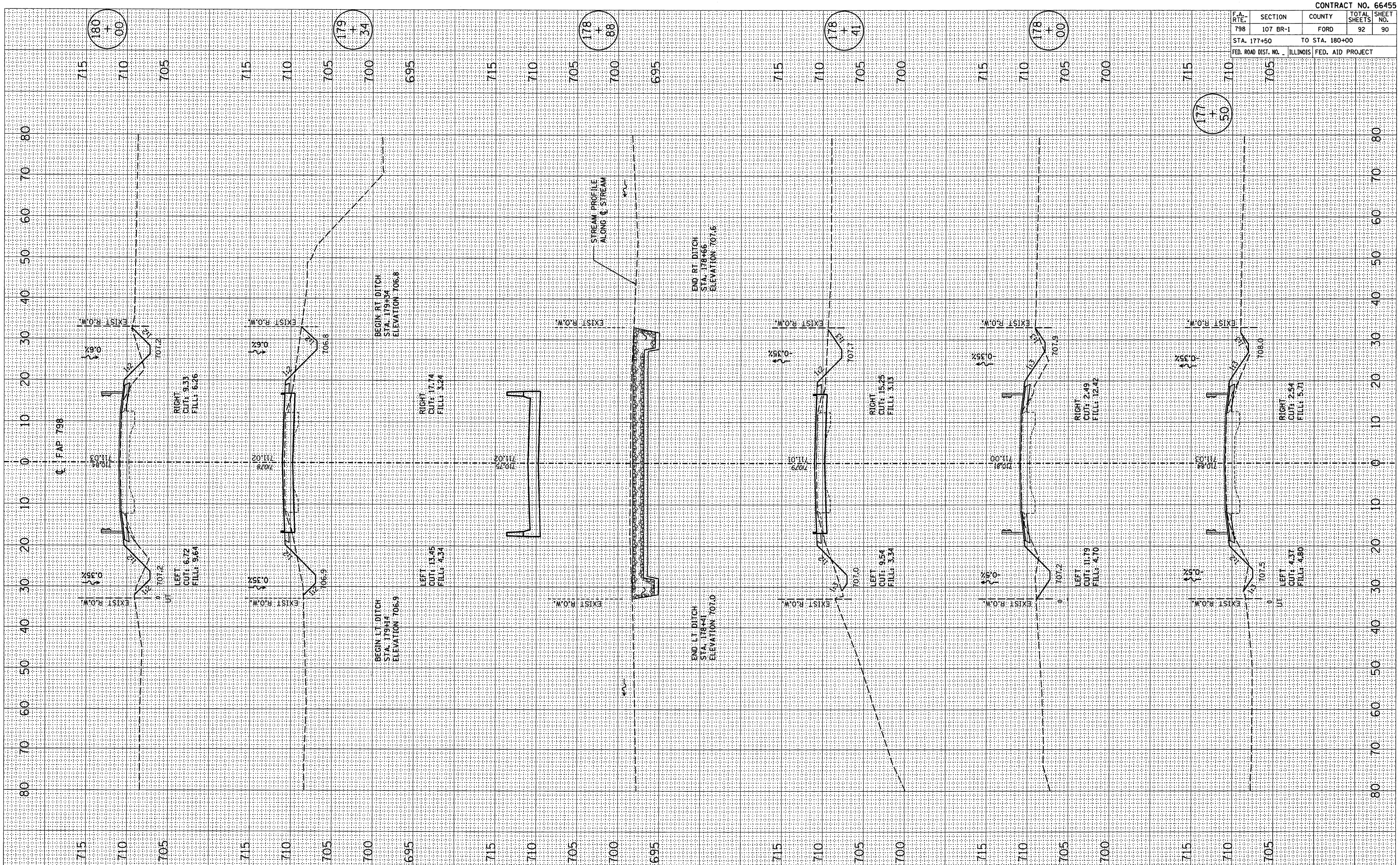
PLOT SCALE = 10.0882 ' / IN.
REFERENCE = #REF#

CONTRACT NO. 66455

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR-1	FORD	92	90
STA. 177+50	TO STA. 180+00			
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		



180+00
179+34
178+88
178+41
178+00
177+50
℄ FAP 798
EXIST R.O.W.
STREAM PROFILE ALONG ℄ STREAM
BEGIN RT DITCH STA. 179+34 ELEVATION 706.8
BEGIN LT DITCH STA. 179+34 ELEVATION 706.9
END RT DITCH STA. 178+66 ELEVATION 707.6
END LT DITCH STA. 178+41 ELEVATION 707.0
RIGHT CUT: 9.33 FILL: 6.26
LEFT CUT: 6.72 FILL: 9.64
RIGHT CUT: 17.74 FILL: 3.24
LEFT CUT: 13.45 FILL: 4.34
RIGHT CUT: 15.25 FILL: 3.13
LEFT CUT: 9.54 FILL: 3.34
RIGHT CUT: 2.49 FILL: 12.42
LEFT CUT: 11.79 FILL: 4.70
RIGHT CUT: 2.54 FILL: 5.71
LEFT CUT: 4.37 FILL: 4.80

Prepared by: FOTH & VAN DYKE ASSOCIATES, INC.

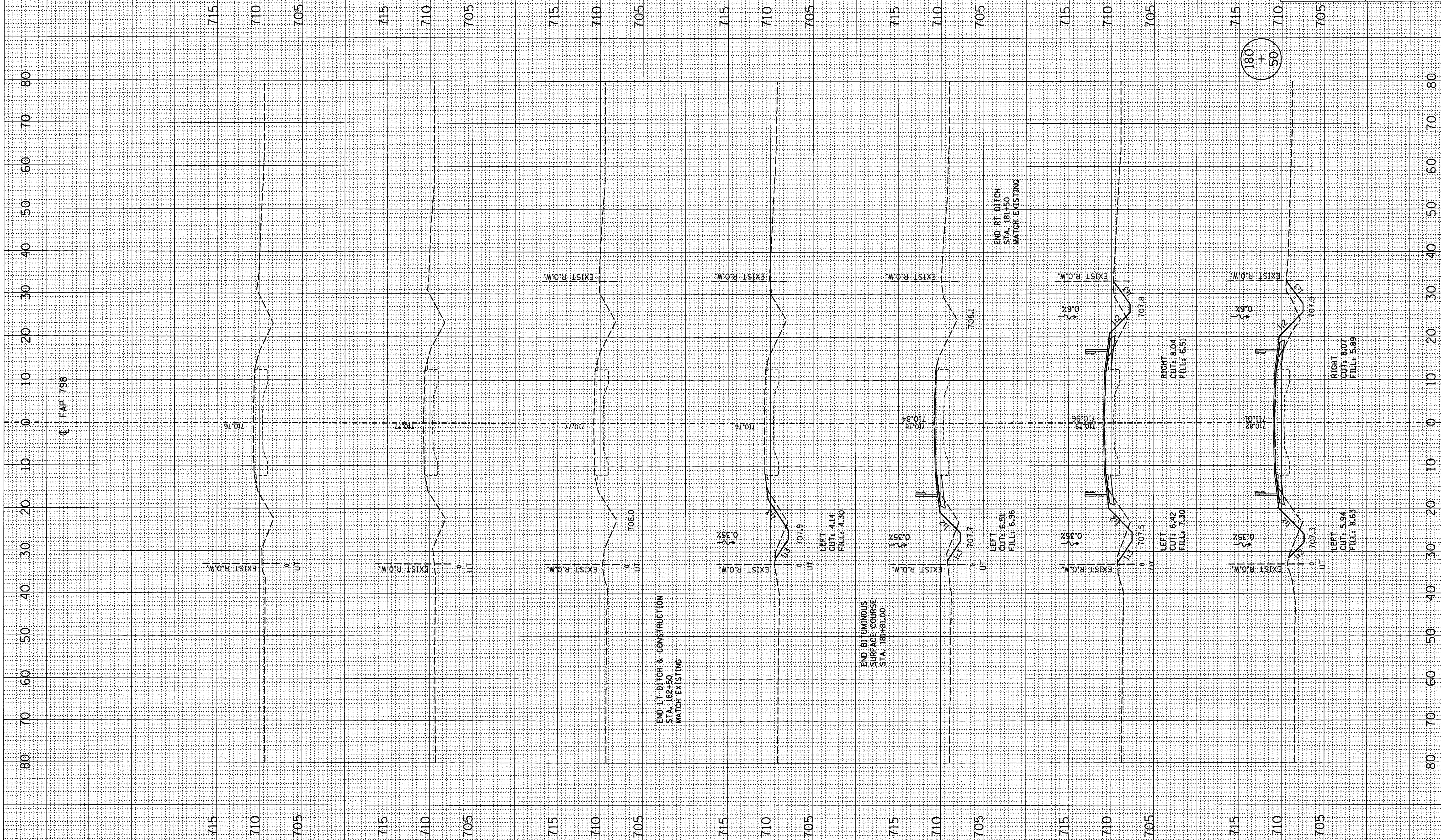
FAP 798 (IL 115) CROSS SECTIONS STA. 177+50 TO STA. 180+00

CONTRACT NO. 66455

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR-1	FORD	92	91

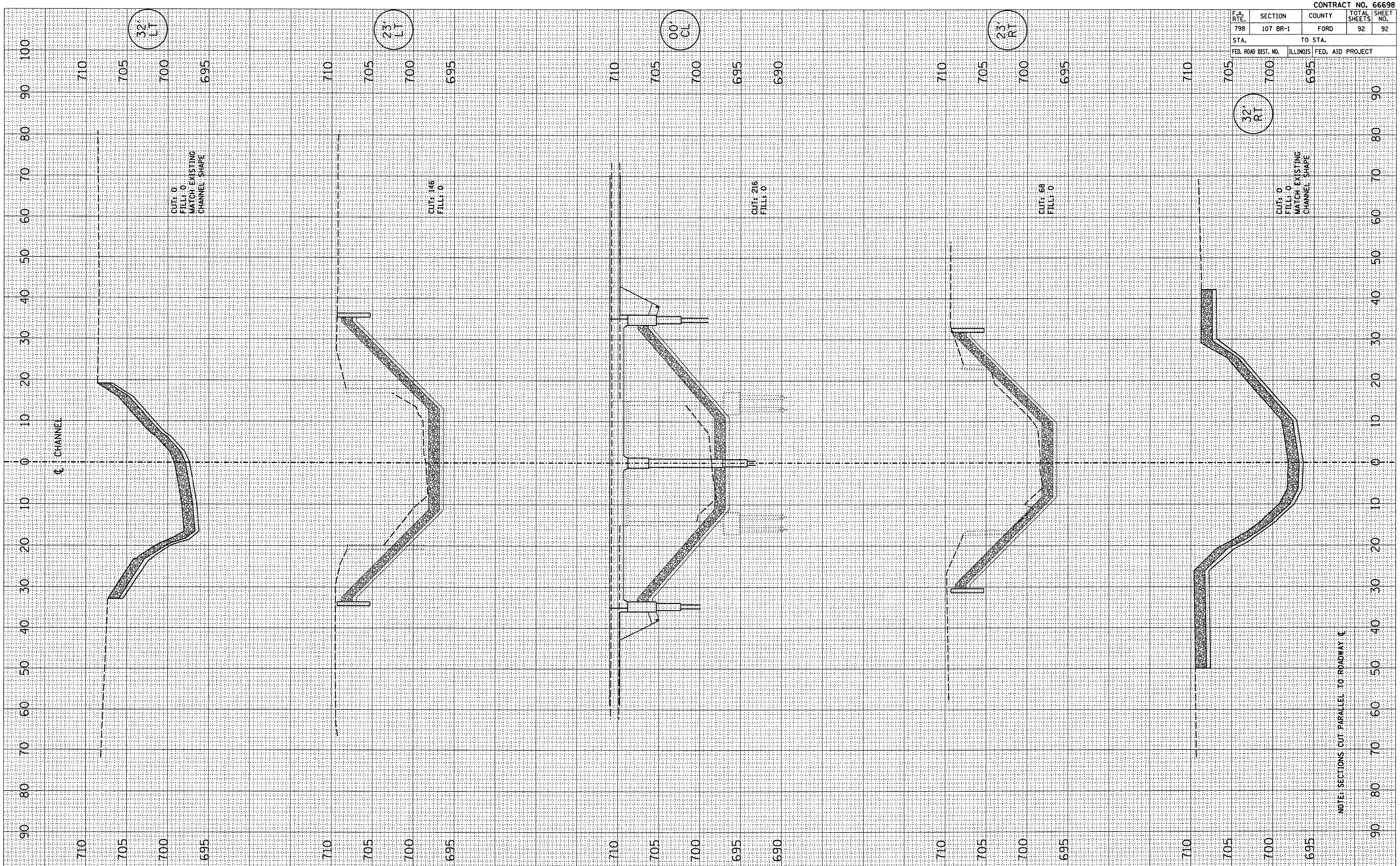
STA. 180+50 TO STA. 183+50

FED. ROAD DIST. NO. _ ILLINOIS FED. AID PROJECT



CONTRACT NO. 66698

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
798	107 BR-1	FORD	92	92
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



FAP 798 (IL 115) DRAINAGE DITCH CHANNEL CROSS SECTIONS