

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

F.A.U. ROUTE 8998 (C.H. 17 - SEMINARY ROAD)
SECTION 13-00125-02-BR
PROJECT NO. BRS-0119(077)
SEMINARY ROAD BRIDGE REHABILITATION
MADISON COUNTY

C-98-323-14

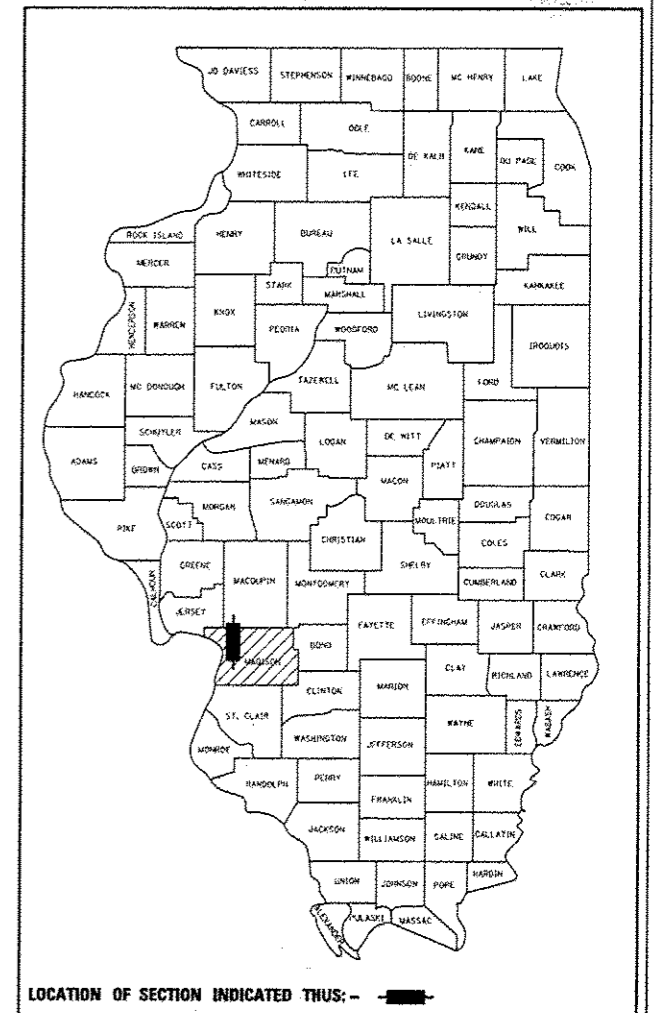
F.A.U. RTE. 8998	SECTION 13-00125-02-BR	COUNTY MADISON	TOTAL SHEETS 42	SHEET NO. 1
FEDERAL AID PROJECT ILLINOIS		CONTRACT NO. 97608		

INDEX OF SHEETS

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IDOT STANDARDS

000001-06	631031-13
001001-02	635001-01
001006	635006-03
280001-07	635011-02
420001-08	701311-03
420401-11	701321-14
482006-03	701326-04
515001-03	701901-04
606201-02	704001-07
630001-10	780001-05
630301-06	



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED 8-19-15 DATE
Maha Hills
MADISON COUNTY ENGINEER

PASSED 8-27-15 DATE
acting [Signature]
DISTRICT 8 ENGINEER OF LOCAL ROADS & STREETS

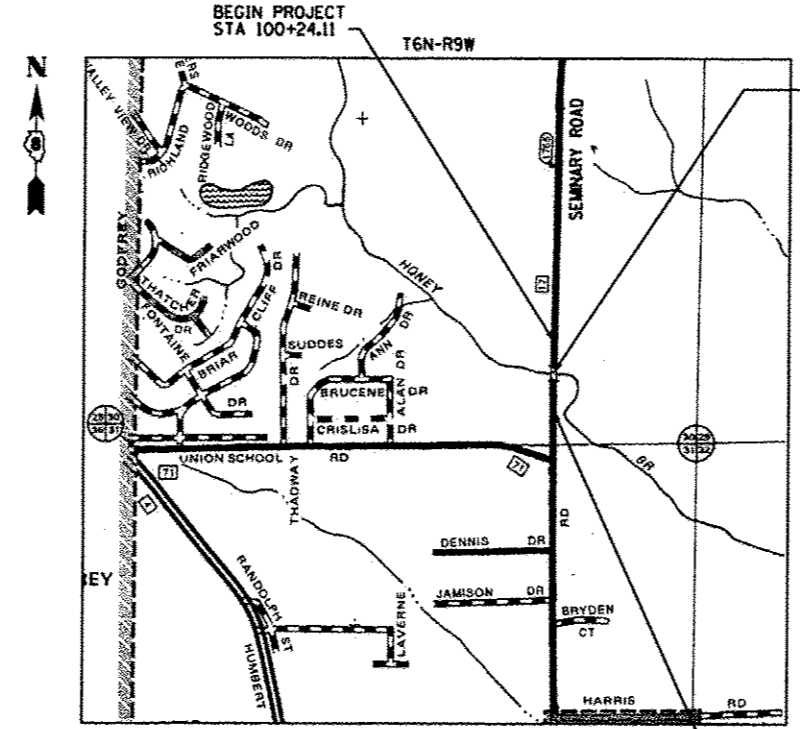
RELEASING FOR BID BASED ON LIMITED REVIEW
8-27-15 DATE
[Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER

SIGNATURE: *[Signature]*
DATE SIGNED: 8-18-15
LICENSE EXPIRATION DATE: 11-30-15
SEAL APPLIES TO SHEETS 1 THRU 18 AND SHEETS 39 THRU 42

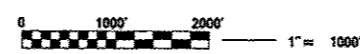


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ST. LOUIS, MO 63102 (314) 436-5500

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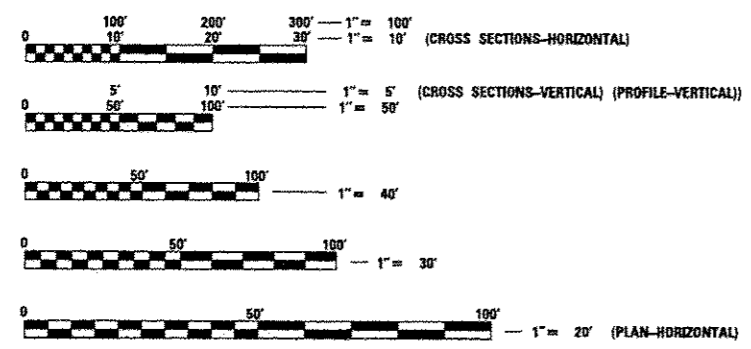


LOCATION MAP



GROSS LENGTH = 640.89 FT. = 0.121 MILE
NET LENGTH = 640.89 FT. = 0.121 MILE
CONSTRUCTION YEAR ADT (2015) = 5,916
DESIGN YEAR ADT (2035) = 8,791
DESIGN SPEED / POSTED SPEED = 50 MPH / 45 MPH
FUNCTIONAL CLASSIFICATION = MINOR ARTERIAL (URBAN)

STRUCTURE DESCRIPTION 060-3229
REMOVE EXISTING THREE-SPAN SEMINARY ROAD BRIDGE SUPERSTRUCTURE AND REPLACE WITH GALVANIZED STEEL WIDE FLANGE GIRDERS AND COMPOSITE DECK. EXISTING BRIDGE SUBSTRUCTURE TO BE USED-IN-PLACE AND ABUTMENTS CONVERTED TO SEMI-INTEGRAL. (CARRYING SEMINARY ROAD OVER HONEY BRANCH BK-BK ABUT = 110'-10"



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

GENERAL NOTES

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS AND RECORDS. THEIR LOCATIONS MUST BE CONSIDERED TO BE APPROXIMATE ONLY. IT IS POSSIBLE THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS NOT PRESENTLY KNOWN OR SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THEIR EXISTENCE AND EXACT LOCATION AND TO AVOID DAMAGE THERETO. ILLINOIS LAW REQUIRES A MINIMUM 48-HOUR NOTICE TO ALL UTILITY COMPANIES BEFORE DIGGING. FIELD LOCATIONS OF UNDERGROUND FACILITIES MAY BE OBTAINED BY CALLING THE J.U.L.I.E. SYSTEM AT 800-892-0123 AND PROVIDING 48 HOURS ADVANCE NOTICE. NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT LIMITS ARE LISTED BELOW.
2. ANY FACILITIES OR APPURTENANCES WHICH ARE THE PROPERTY OF ANY PUBLIC UTILITY LOCATED WITHIN THE LIMITS OF CONSTRUCTION SHALL BE RELOCATED OR ADJUSTED BY THEIR RESPECTIVE OWNERS. THE CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE OWNERS OF ANY SUCH FACILITY IN THEIR REMOVAL AND REARRANGEMENT OPERATIONS IN ORDER THAT THESE OPERATIONS AND THE CONSTRUCTION OF THIS PROJECT MAY PROGRESS IN A REASONABLE MANNER.
3. THE FOLLOWING UTILITY COMPANIES MAY HAVE FACILITIES LOCATED WITHIN THE PROJECT LIMITS WHICH MAY REQUIRE ADJUSTMENT, RELOCATION OR REMOVAL. ALL ARE MEMBERS OF J.U.L.I.E., UNLESS NOTED OTHERWISE.

FOSTERBURG WATER DISTRICT (WATER)
3216 MAIN STREET
ALTON, IL 62002
PHONE: (618) 259-0935

AT&T (TELEPHONE / COMMUNICATIONS)
160 WEST DIVISION
MARYVILLE, IL 62062
PHONE: (618) 346-6426

AMEREN IP (GAS AND ELECTRIC)
2600 NORTH CENTER STREET
P.O. BOX 378, MC Q-10
MARYVILLE, IL 62062-0378
PHONE: (618) 346-1228

4. THE ABOVE INFORMATION REPRESENTS THE BEST INFORMATION AVAILABLE TO THE LOCAL AGENCY AND IS ONLY INCLUDED FOR THE CONVENIENCE OF THE BIDDER. IT IS UNDERSTOOD AND AGREED THAT THE CONTRACTOR HAS TAKEN THE FOREGOING INTO CONSIDERATION IN PREPARING HIS/HER BID, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ANY DELAYS OR INCONVENIENCE CAUSED BY THE SAME.
5. THE STATE PLANE COORDINATE SYSTEM HAS BEEN USED FOR THE HORIZONTAL CONTROL.
6. ALL ELEVATIONS SHOWN ON THE PLANS ARE BASED ON U.S.G.S. MEAN SEA LEVEL DATUM.
7. ANY REFERENCE WITHIN THESE PLANS TO A STANDARD SHALL BE INTERPRETED TO MEAN THE EDITION INDICATED BY THE SUB-NUMBER LISTED ON THE COVER SHEET.
8. THE CONTRACTOR SHALL COORDINATE WITH THE PROPERTY OWNERS OF THE EXISTING FIELD ENTRANCES AND SHALL PROVIDE ACCESS TO THEM AS REQUIRED.
9. FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

SEEDING FERTILIZER RATIO (NIT:PHOS:POT)	90:90:90 LBS./AC.
AGRICULTURAL GROUND LIMESTONE	2.00 TONS/AC.
MULCH	2.00 TONS/AC.
TEMPORARY EROSION CONTROL SEEDING	100 LBS./ACRE
ALL AGGREGATE	2.05 TONS/CU.YD.
BITUMINOUS MATERIAL (PRIME COAT)	0.05 POUND/SQ. FT.
HOT MIX ASPHALT	112 LBS./SQ. YD./IN.
10. ONLY THOSE TREES APPROVED FOR REMOVAL BY THE ENGINEER SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES, PLANTS, AND WETLANDS FROM DAMAGE. ALL TREES AND STUMPS INDICATED BY THE ENGINEER FOR REMOVAL SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.
11. ONLY PRECOATED GALVANIZED CORRUGATED STEEL PIPE WILL BE ALLOWED FOR CLASS C PIPES.
12. ALL TIE BARS AND REINFORCEMENT BARS USED ON THIS PROJECT SHALL BE EPOXY COATED.
13. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO ORDERING MATERIALS AND COMMENCING CONSTRUCTION.
14. THE CONTRACTOR SHALL CONFINE ALL OPERATIONS TO THE CONSTRUCTION LIMITS LINE SHOWN ON THE PLANS. ANY AREA DISTURBED BEYOND THESE LIMITS SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
15. THE CONTRACTOR SHALL FERTILIZE, SEED AND MULCH ALL EARTH SURFACES DISTURBED BY CONSTRUCTION. FERTILIZER, SEEDING, AND MULCH WITHIN THE CONSTRUCTION LIMITS WILL BE PAID FOR AS PROVIDED IN THE CONTRACT. FERTILIZER, SEEDING AND MULCH OUTSIDE THESE LIMITS WILL NOT BE MEASURED FOR PAYMENT. SEE THE SEEDING SCHEDULE FOR ESTIMATED PLAN QUANTITIES.
16. THE FOLLOWING ITEMS AND APPROXIMATE QUANTITIES ARE INCLUDED IN THE SUMMARY OF QUANTITIES IN ORDER TO ESTABLISH A UNIT COST FOR WORK WHICH MAY BE REQUIRED TO CONSTRUCT THIS PROJECT. THE ACTUAL QUANTITY OF EACH ITEM SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ENGINEER'S FIELD OFFICE, TYPE B 6 CAL MO

COMMITMENTS

1. THE CONTRACTOR SHALL BE REQUIRED TO IMPLEMENT THE EROSION CONTROL PLAN INCLUDED IN THESE PLANS AND SPECIFIED HEREIN.

FILE NAME =	USER NAME = Jack Blakemore	DESIGNED - JWB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES AND COMMITMENTS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
L:\Modis\County\144810380\Draw\CADD_S	Sheets\02_General Notes and Commitments.dgn	DRAWN - AJK	REVISED -			8998	13-00125-02-BR	MADISON	42	2	
Default	PLOT SCALE = 100.0000' / 1" =	CHECKED - ARS	REVISED -			SCALE: N/A SHEET 1 OF 1 SHEETS STA. N/A TO STA. N/A					
	PLOT DATE = 8/17/2015	DATE - 8/17/2015	REVISED -			ILLINOIS FED. AID PROJECT CONTRACT NO. 97608					

SUMMARY OF QUANTITIES

CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
20200100	EARTH EXCAVATION	CU YD	335
20800150	TRENCH BACKFILL	CU YD	9
25000200	SEEDING, CLASS 2	ACRE	0.25
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	17
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	17
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	17
25100115	MULCH, METHOD 2	ACRE	0.5
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	19
28000305	TEMPORARY DITCH CHECKS	FOOT	30
28000400	PERIMETER EROSION BARRIER	FOOT	1255
28000500	INLET AND PIPE PROTECTION	EACH	2
31100500	SUBBASE GRANULAR MATERIAL, TYPE A 6"	SQ YD	1036
40200100	AGGREGATE SURFACE COURSE, TYPE A	TON	38
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	307

* SPEICAL PROVISION

** SPECIALTY ITEM

SUMMARY OF QUANTITIES

CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	108
40600985	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	160
40600990	TEMPORARY RAMP	SQ YD	27
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	108
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	54
44000100	PAVEMENT REMOVAL	SQ YD	193
44000400	GUTTER REMOVAL	FOOT	567
44004250	PAVED SHOULDER REMOVAL	SQ YD	865
48101600	AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	139
* 48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	840
* 50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1
50102400	CONCRETE REMOVAL	CU YD	19.2
50104400	CONCRETE HEADWALL REMOVAL	EACH	1
50105220	PIPE CULVERT REMOVAL	FOOT	34

FILE NAME : L:\MadisonCounty\144010300\Draw\CADD_Sheets\023-025_Summary of Quantities.dgn	USER NAME : Jack Blakemore	DESIGNED - JWB	REVISED -
Default	PLOT SCALE = 100.0000' / 1"v	DRAWN - AJK	REVISED -
	PLOT DATE = 8/17/2015	CHECKED - ARG	REVISED -
		DATE - 8/17/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N/A SHEET 1 OF 3 SHEETS STA. N/A TO STA. N/A

F.A.U. RTE. 8998	SECTION 13-00125-02-BR	COUNTY MADISON	TOTAL SHEETS 42	SHEET NO. 3
CONTRACT NO. 97608				ILLINOIS FED. AID PROJECT

SUMMARY OF QUANTITIES

CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
50200100	STRUCTURE EXCAVATION	CU YD	204
50300100	FLOOR DRAINS	EACH	8
50300225	CONCRETE STRUCTURES	CU YD	25.0
50300255	CONCRETE SUPERSTRUCTURE	CU YD	283.4
50300300	PROTECTIVE COAT	SO YD	235
* 50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1
50500505	STUD SHEAR CONNECTORS	EACH	3864
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	70450
50800515	BAR SPLICERS	EACH	562
51500100	NAME PLATES	EACH	1
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	24
52100520	ANCHOR BOLTS, 1"	EACH	64
54248510	CONCRETE COLLAR	CU YD	0.4
542C0223	PIPE CULVERTS, CLASS C, TYPE 1, 18"	FOOT	67

* SPEICAL PROVISION

** SPECIALTY ITEM

SUMMARY OF QUANTITIES

CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
58100200	WATERPROOFING MEMBRANE SYSTEM	SO YD	486
59100100	GEOCOMPOSITE WALL DRAIN	SO YD	60
60600095	CLASS SI CONCRETE (OUTLET)	CU YD	25.2
** 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	3
** 63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	3
** 63200310	GUARDRAIL REMOVAL	FOOT	232
* ** 64300320	IMPACT ATTENUATORS (FULLY REDIRECTIVE, RESETTABLE), TEST LEVEL 3	EACH	1
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	6
67100100	MOBILIZATION	L SUM	1
* 70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1
* 70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1
** 70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
70106700	TEMPORARY RUMBLE STRIPS	EACH	6
70300100	SHORT TERM PAVEMENT MARKING	FOOT	152

SUMMARY OF QUANTITIES

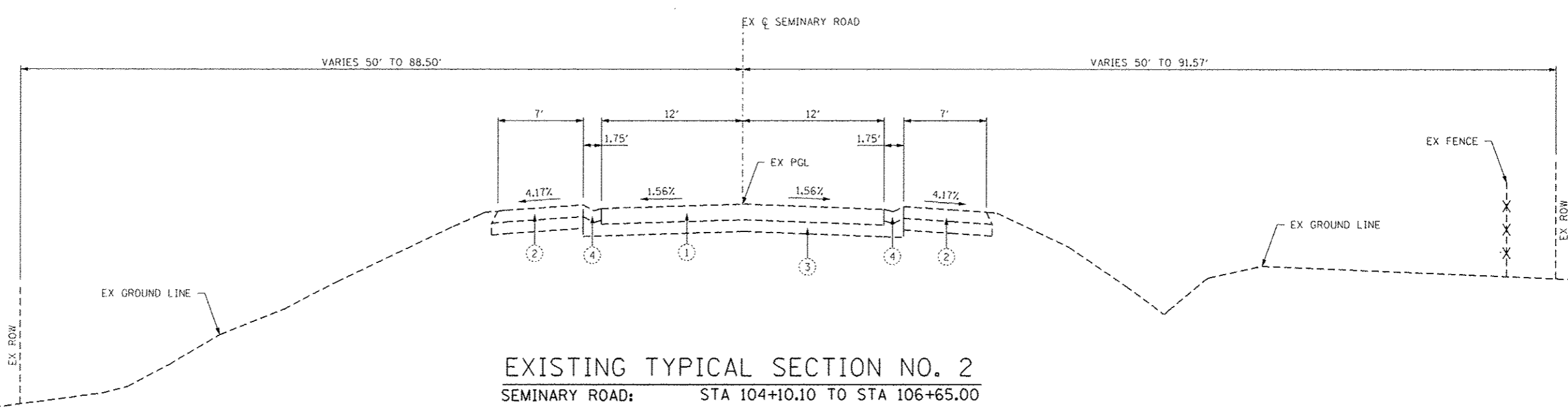
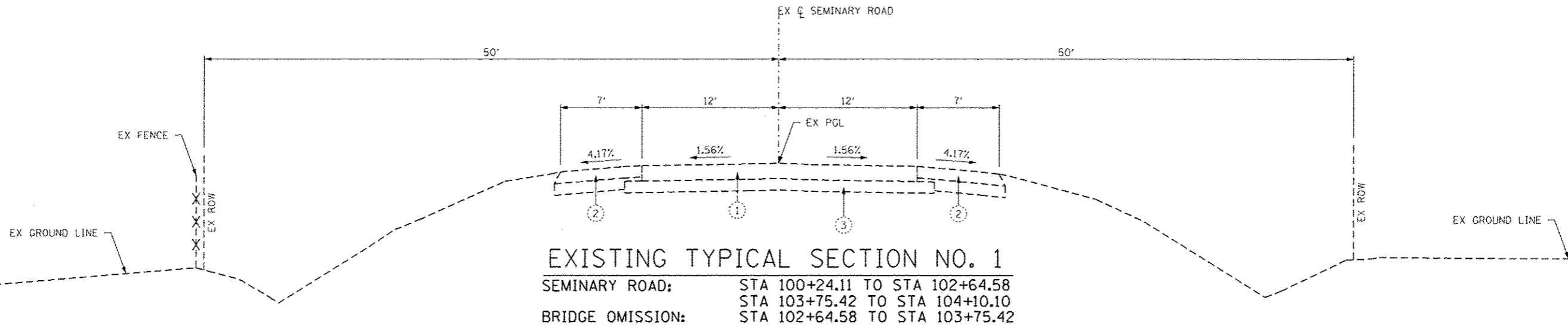
CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2506
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	886
70400100	TEMPORARY CONCRETE BARRIER	FOOT	545
70400200	RELOCATED TEMPORARY CONCRETE BARRIER	FOOT	545
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2
** 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2506
** 78200410	GUARDRAIL MARKER, TYPE A	EACH	5
** 78200520	BARRIER WALL MARKERS, TYPE B	EACH	6
** 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
78300100	PAVEMENT MARKING REMOVAL	SQ FT	474
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	12
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	174
Z0073002	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	94

* SPEICAL PROVISION

** SPECIALTY ITEM

SUMMARY OF QUANTITIES

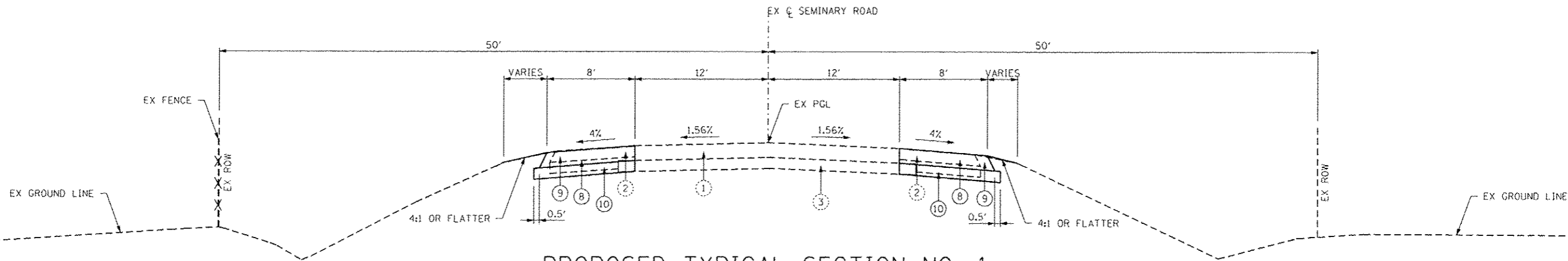
CODE NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	116
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	24



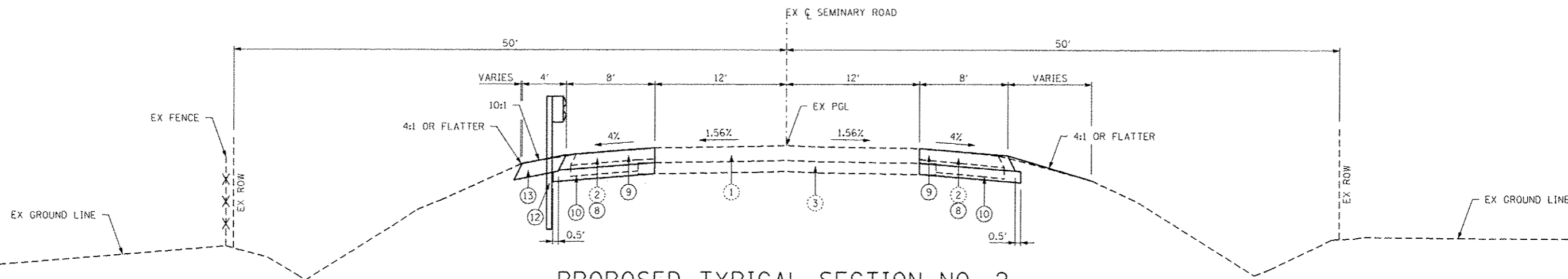
LEGEND

- ① EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, 8"
- ② EXISTING BITUMINOUS SHOULDERS, 6" (BAM)
- ③ EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 6"
- ④ EXISTING CONCRETE GUTTER, TYPE B
- ⑤ EXISTING STEEL PLATE BEAM GUARDRAIL
- ⑥ EXISTING PAVED DITCH
- ⑦ PROPOSED CUTTER REMOVAL
- ⑧ PROPOSED PAVED SHOULDER REMOVAL
- ⑨ PROPOSED HOT-MIX ASPHALT SHOULDERS, 8"
- ⑩ PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE A, 6"
- ⑪ PROPOSED BITUMINOUS MATERIALS (PRIME COAT)
- ⑫ PROPOSED TRAFFIC BARRIER TERMINAL
- ⑬ PROPOSED AGGREGATE SHOULDERS, TYPE B, 8"
- ⑭ PROPOSED PORTLAND CEMENT CONCRETE SURFACE REMOVAL-BUTT JOINT
- ⑮ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70
- ⑯ PROPOSED CLASS SI CONCRETE (OUTLET)
- ⑰ PROPOSED AGGREGATE SURFACE COURSE, TYPE A, 6"
- ⑱ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT

FILE NAME :	USER NAME = Jack Blakemore	DESIGNED -- JWb	REVISED --	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
L:\Madison\County\1440\0300\Draw\CAD\05_Sheets\005-010_Typical Sections.dgn	DRAWN -- AJK	REVISD --	REVISD --					8998	13-00125-02-BR	MADISON	42	6
Default	PLOT SCALE = 10.0000 1/ in.	CHECKED -- JWb	REVISD --		SCALE: 1" = 5'			SHEET 1 OF 5 SHEETS		STA. N/A TO STA. N/A	CONTRACT NO. 97608	
	PLOT DATE = 8/17/2010	DATE -- 8/17/2015	REVISD --		ILLINOIS FED. AID PROJECT							



PROPOSED TYPICAL SECTION NO. 1
 SEMINARY ROAD: STA 100+24.11 TO STA 101+67.44

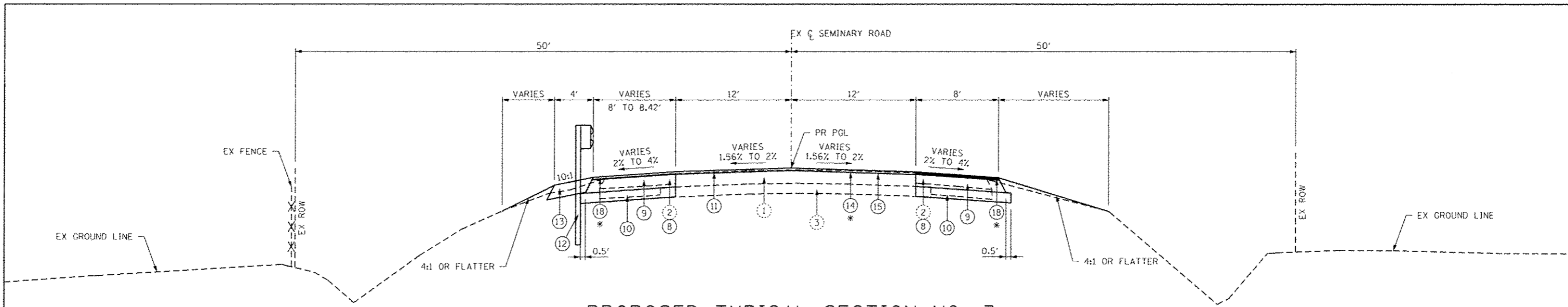


PROPOSED TYPICAL SECTION NO. 2
 SEMINARY ROAD: STA 101+67.44 TO STA 101+89.58

LEGEND

- | | | |
|---|---|--|
| ① EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, 8" | ⑦ PROPOSED GUTTER REMOVAL | ⑬ PROPOSED AGGREGATE SHOULDERS, TYPE B, 8" |
| ② EXISTING BITUMINOUS SHOULDERS, 6" (BAM) | ⑧ PROPOSED PAVED SHOULDER REMOVAL | ⑭ PROPOSED PORTLAND CEMENT CONCRETE SURFACE REMOVAL-BUTT JOINT |
| ③ EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 6" | ⑨ PROPOSED HOT-MIX ASPHALT SHOULDERS, 8" | ⑮ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 |
| ④ EXISTING CONCRETE GUTTER, TYPE B | ⑩ PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE A, 6" | ⑯ PROPOSED CLASS SI CONCRETE (OUTLET) |
| ⑤ EXISTING STEEL PLATE BEAM GUARDRAIL | ⑪ PROPOSED BITUMINOUS MATERIALS (PRIME COAT) | ⑰ PROPOSED AGGREGATE SURFACE COURSE, TYPE A, 6" |
| ⑥ EXISTING PAVED DITCH | ⑫ PROPOSED TRAFFIC BARRIER TERMINAL | ⑱ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT |

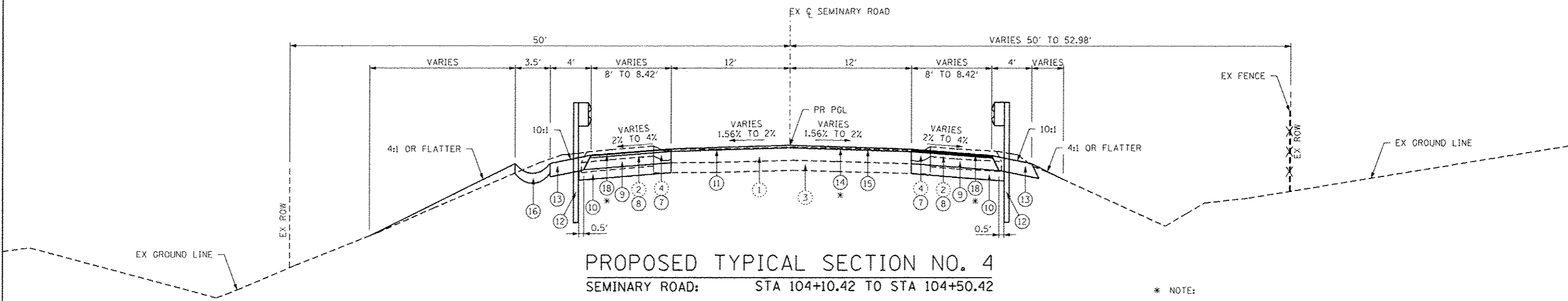
FILE NAME =	USER NAME = Jack Blankenship	DESIGNED - JWB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS	F.A.U. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Li:\MadisonCounty\144010322\10-no\CADD\Sheet\026-01R_Typical Sections.dgn	DRAWN - AJK	REVISED -	8998			13-00125-02-DR	MADISON	42	7	
Default	PLOT SCALE = 1/8" = 1'	CHECKED - JWB	REVISED -			CONTRACT NO. 97608				
	PLOT DATE = 8/17/2015	DATE - 8/17/2015	REVISED -			ILLINOIS FED. AID PROJECT				
						SCALE: 1" = 5'	SHEET 2 OF 5 SHEETS	STA. N/A TO STA. N/A		



PROPOSED TYPICAL SECTION NO. 3

SEMINARY ROAD:	STA 101+89.58 TO STA 102+29.58
BRIDGE APPROACH PAVEMENT CONNECTOR OMISSION:	STA 102+29.58 TO STA 102+35.58
BRIDGE APPROACH PAVEMENT OMISSION:	STA 104+04.42 TO STA 104+10.42
BRIDGE OMISSION:	STA 102+35.58 TO STA 102+64.58 STA 103+75.42 TO STA 104+04.24 STA 102+64.58 TO STA 103+75.42

* NOTE:
PROPOSED PORTLAND CEMENT CONCRETE SURFACE REMOVAL-BUTT JOINT AND PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT ARE FROM STA 101+89.58 TO STA 102+19.58.



PROPOSED TYPICAL SECTION NO. 4

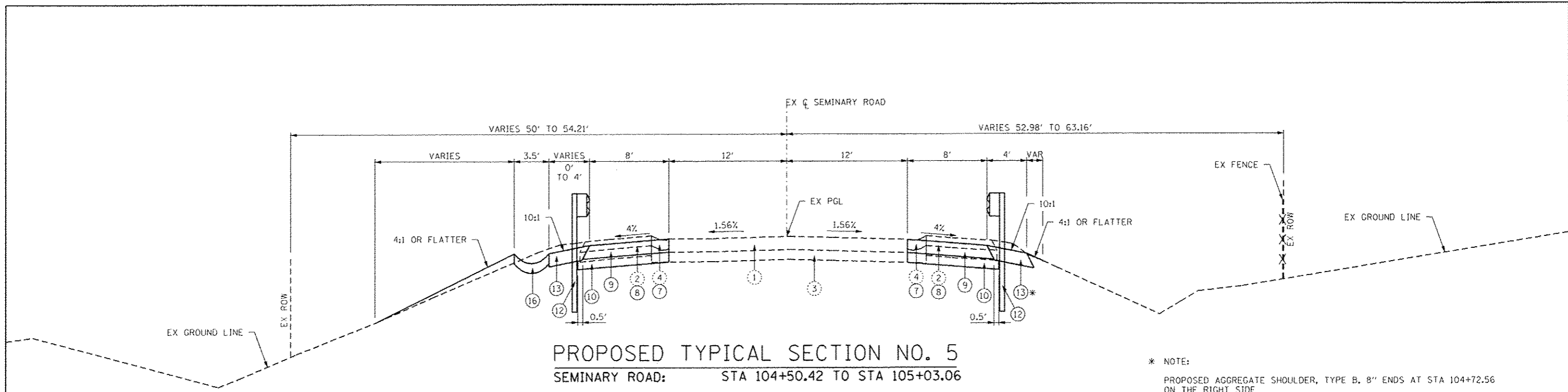
SEMINARY ROAD: STA 104+10.42 TO STA 104+50.42

* NOTE:
PROPOSED PORTLAND CEMENT CONCRETE SURFACE REMOVAL-BUTT JOINT AND PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT ARE FROM STA 104+20.42 TO STA 104+50.42

MIXTURE REQUIREMENTS

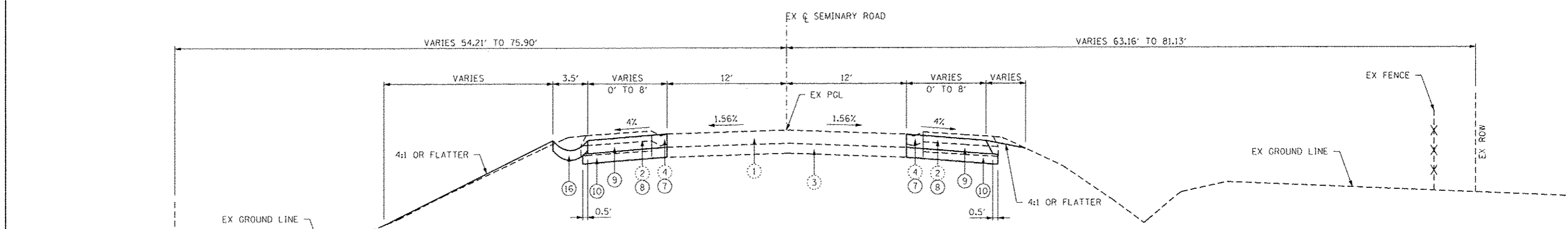
MISTURE USE	SURFACE
AC/PG	PG 64-22
RAP % (MAX)	10%
DESIGN AIR VOIDS	4.0% @ Ndes = 70
MIX COMPOSITION (GRADATION MIXTURE)	IL-9.5 OR IL-12.5
FRICTION AGG.	MIXTURE D
MIXTURE WEIGHT	112 LB/SQ YD/IN

- LEGEND**
- | | | |
|---|---|--|
| ① EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, 8" | ⑦ PROPOSED GUTTER REMOVAL | ⑬ PROPOSED AGGREGATE SHOULDERS, TYPE B, 8" |
| ② EXISTING BITUMINOUS SHOULDERS, 6" (BAM) | ⑧ PROPOSED PAVED SHOULDER REMOVAL | ⑭ PROPOSED PORTLAND CEMENT CONCRETE SURFACE REMOVAL-BUTT JOINT |
| ③ EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 6" | ⑨ PROPOSED HOT-MIX ASPHALT SHOULDERS, 8" | ⑮ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 |
| ④ EXISTING CONCRETE GUTTER, TYPE B | ⑩ PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE A, 6" | ⑯ PROPOSED CLASS 51 CONCRETE (OUTLET) |
| ⑤ EXISTING STEEL PLATE BEAM GUARDRAIL | ⑪ PROPOSED BITUMINOUS MATERIALS (PRIME COAT) | ⑰ PROPOSED AGGREGATE SURFACE COURSE, TYPE A, 6" |
| ⑥ EXISTING PAVED DITCH | ⑫ PROPOSED TRAFFIC BARRIER TERMINAL | ⑱ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT |



PROPOSED TYPICAL SECTION NO. 5
 SEMINARY ROAD: STA 104+50.42 TO STA 105+03.06

* NOTE:
 PROPOSED AGGREGATE SHOULDER, TYPE B, 8" ENDS AT STA 104+72.56 ON THE RIGHT SIDE



PROPOSED TYPICAL SECTION NO. 6
 SEMINARY ROAD: STA 105+03.06 TO STA 106+11.00

LEGEND

- ① EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, 8"
- ② EXISTING BITUMINOUS SHOULDERS, 6" (BAM)
- ③ EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A, 6"
- ④ EXISTING CONCRETE GUTTER, TYPE B
- ⑤ EXISTING STEEL PLATE BEAM GUARDRAIL
- ⑥ EXISTING PAVED DITCH
- ⑦ PROPOSED GUTTER REMOVAL
- ⑧ PROPOSED PAVED SHOULDER REMOVAL
- ⑨ PROPOSED HOT-MIX ASPHALT SHOULDERS, 8"
- ⑩ PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE A, 6"
- ⑪ PROPOSED BITUMINOUS MATERIALS (PRIME COAT)
- ⑫ PROPOSED TRAFFIC BARRIER TERMINAL
- ⑬ PROPOSED AGGREGATE SHOULDERS, TYPE B, 8"
- ⑭ PROPOSED PORTLAND CEMENT CONCRETE SURFACE REMOVAL-BUTT JOINT
- ⑮ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70
- ⑯ PROPOSED CLASS SI CONCRETE (OUTLET)
- ⑰ PROPOSED AGGREGATE SURFACE COURSE, TYPE A, 6"
- ⑱ PROPOSED HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT

EARTHWORK SCHEDULE				
LOCATION	EARTH EXCAVATION	EMBANKMENT	* EXCAVATION TO BE USED AS EMBANKMENT (ADJUSTED FOR SHRINKAGE) 25%	** EARTHWORK BALANCE EXCESS (+) SHORTAGE (-)
	(CU YD)	(CU YD)	(CU YD)	(CU YD)
SEMINARY ROAD:				
STA 100+24.11 TO STA 106+65.00	335	99	251	+152
TOTALS	335	99	251	+152

ASSUMED SHRINKAGE FACTOR OF 25%

* EARTH EXCAVATION TO BE USED AS EMBANKMENT = EARTH EXCAVATION x 0.75

** EARTHWORK BALANCE = [EMBANKMENT - (EARTH EXCAVATION x 0.75)]

SEEDING SCHEDULE					
LOCATION	SEEDING CLASS 2	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	MULCH METHOD 2
	(ACRE)	(POUND)	(POUND)	(POUND)	(ACRE)
SEMINARY ROAD:					
STA 100+30.58 LT TO STA 102+66.03 LT	0.035	3.2	3.2	3.2	0.035
STA 100+33.03 RT TO STA 102+15.00 RT	0.032	2.8	2.8	2.8	0.032
STA 102+35.00 RT TO STA 102+69.02 RT	0.019	1.7	1.7	1.7	0.019
STA 103+74.04 RT TO STA 104+91.00 RT	0.019	1.7	1.7	1.7	0.019
STA 103+74.12 LT TO STA 104+17.07 LT	0.010	0.9	0.9	0.9	0.010
STA 103+94.54 LT TO STA 106+65.00 LT	0.058	5.2	5.2	5.2	0.058
STA 105+11.00 RT TO STA 106+01.27 RT	0.011	1.0	1.0	1.0	0.011
STA 105+91.65 RT TO STA 106+65.00 RT	0.005	0.4	0.4	0.4	0.005
TOTALS	0.25	17	17	17	0.25

TEMPORARY EROSION CONTROL SCHEDULE					
LOCATION	PERIMETER EROSION BARRIER	INLET AND PIPE PROTECTION	TEMPORARY DITCH CHECK	TEMPORARY EROSION CONTROL SEEDING	MULCH METHOD 2
	(FOOT)	(EACH)	(FOOT)	(POUND)	(ACRE)
SEMINARY ROAD:					
STA 100+30.58 LT TO STA 102+66.03 LT				3.5	0.035
STA 100+30.58 LT TO STA 102+68.91 LT	263.3				
STA 100+33.03 RT TO STA 102+15.00 RT	214.3			3.2	0.032
STA 102+00.69 RT		1			
STA 101+35.00 RT TO STA 102+69.00 RT	65.7			1.9	0.019
STA 101+35.00 RT TO STA 102+69.02 RT			15		
STA 102+70.00 LT			15		
STA 103+70.74 RT TO STA 104+91.00 RT	143.1				
STA 103+70.77 LT TO STA 104+17.07 LT	79.9			1.9	0.019
STA 103+74.04 RT TO STA 104+91.00 RT				1.0	0.010
STA 103+74.12 LT TO STA 104+17.07 LT				5.8	0.058
STA 103+94.54 LT TO STA 106+65.00 LT	287.6				
STA 103+94.54 LT TO STA 106+69.00 LT	115.9			1.1	0.011
STA 105+11.00 RT TO STA 106+01.27 RT		1			
STA 105+17.81 RT				0.5	0.005
STA 105+91.65 RT TO STA 106+65.00 RT	85.0				
STA 105+91.65 RT TO STA 106+69.00 RT					
TOTALS	1255	2	30	19	0.25

PAVEMENT AND SHOULDER SCHEDULE								
LOCATION	SUB-BASE GRANULAR MATERIAL, TYPE A, 6"	AGGREGATE SURFACE COURSE, TYPE A	HOT-MIX ASPHALT SURFACE COURSE MIX "D", N70	BITUMINOUS MATERIALS (PRIME COAT)	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	AGGREGATE SHOULDERS, TYPE B, 8"	HOT-MIX ASPHALT SHOULDERS, 8"	TEMPORARY RAMP
	(SQ YD)	(TON)	(TON)	(POUND)	(SQ YD)	(SQ YD)	(SQ YD)	(SQ YD)
SEMINARY ROAD:								
STA 100+24.11 RT TO STA 102+29.58 RT	205.9						179.6	
STA 100+24.36 LT TO STA 102+29.58 LT	207.5						181.1	
STA 101+67.44 LT TO STA 102+65.58 LT						43.6		13.3
STA 101+89.58 TO STA 101+94.58			18.7	92.5				
STA 101+89.58 TO STA 102+35.58							32.0	
STA 102+29.58 RT TO STA 102+65.58 RT	36.7							
STA 102+29.58 TO STA 102+32.58	13.8							
STA 102+29.58 TO STA 102+35.58					26.9			
STA 103+74.42 RT TO STA 104+10.42 RT	37.2						32.6	
STA 103+74.42 LT TO STA 105+03.06 LT						52.0		
STA 103+74.42 RT TO STA 104+72.58 RT						43.8		
STA 104+04.42 TO STA 104+10.42					27.2			
STA 104+04.42 TO STA 104+50.42			18.8	93.1				
STA 104+07.42 TO STA 104+10.42	13.9							
STA 104+10.42 RT TO STA 106+11.00 RT							175.2	
STA 104+10.42 RT TO STA 106+65.00 RT	259.5							
STA 104+10.42 LT TO STA 106+11.00 LT								175.5
STA 104+10.42 LT TO STA 106+65.00 LT	261.3							
STA 104+45.42 TO STA 104+50.42								13.4
STA 106+05.71 LT TO STA 106+65.00 LT							31.6	
STA 106+06.53 RT TO STA 106+65.00 RT							31.9	
FIELD ENTRANCES:								
STA 102+25.00 RT		23.7						
STA 105+01.00 RT		14.1						
TOTALS	1036	38	37	186	54	139	840	27

REMOVAL SCHEDULE								
LOCATION	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	PAVEMENT REMOVAL	GUTTER REMOVAL	PAVED SHOULDER REMOVAL	CONCRETE HEADWALL REMOVAL	PIPE CULVERT REMOVAL	GUARDRAIL REMOVAL
	(SQ YD)	(SQ YD)	(SQ YD)	(FOOT)	(SQ YD)	(EACH)	(FOOT)	(FOOT)
SEMINARY ROAD:								
STA 100+24.36 LT TO STA 102+65.58					189.0			
STA 100+24.39 RT TO STA 102+65.58					187.2			
STA 101+89.58 TO STA 102+19.58		80.1						
STA 101+89.58 LT TO STA 102+19.58 LT	27.3							
STA 101+89.58 RT TO STA 102+19.58 RT	26.7							
STA 102+07.98 RT TO STA 102+42.44 RT							34.5	
STA 102+16.10 LT TO STA 102+79.89 LT								63.8
STA 102+29.58 TO STA 102+65.58			96.1					
STA 102+29.58 RT TO STA 102+65.58 RT					32.0			
STA 102+40.39 RT TO STA 102+80.09 RT								39.7
STA 102+68.17, 43.18' RT						1		
STA 103+60.18 RT TO STA 104+24.97 RT								64.8
STA 103+60.48 LT TO STA 104+24.48 LT								64.0
STA 103+74.42 RT TO STA 104+10.42 RT			96.5		32.6			
STA 103+74.42 TO STA 104+10.42								
STA 103+74.42 RT TO STA 104+10.12 RT					26.8			
STA 103+74.42 LT TO STA 104+10.05 LT					26.2			
STA 103+93.04 LT TO STA 106+65.00 LT					290.8			
STA 103+98.81 RT TO STA 106+65.00 RT					276.2			
STA 104+07.38 LT TO STA 106+65.00 LT							187.1	
STA 104+08.54 RT TO STA 106+65.00 RT							184.4	
STA 104+20.42 TO STA 102+50.42		80.2						
STA 104+20.42 LT TO STA 102+50.42 LT	27.7							
STA 104+20.42 RT TO STA 102+50.42 RT	26.7							
TOTALS	108	160	193	587	865	1	34	232

WORK ZONE TRAFFIC CONTROL AND PROTECTION SCHEDULE										
LOCATION	TEMPORARY RUMBLE STRIPS	* TEMPORARY PAVEMENT MARKING - LINE 4"	* TEMPORARY PAVEMENT MARKING - LINE 24"	* WORK ZONE PAVEMENT MARKING REMOVAL	TEMPORARY CONCRETE BARRIER	RELOCATED TEMPORARY CONCRETE BARRIER	PINNING TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	PAVEMENT MARKING REMOVAL
	(EACH)	(FOOT)	(FOOT)	(SQ FT)	(FOOT)	(FOOT)	(EACH)	(EACH)	(EACH)	(SQ FT)
SEMINARY ROAD (STAGE 1):										
STA 81+80.00 RT	1									
STA 86+80.00 RT	1									
STA 91+80.00 RT	1									
STA 98+80.00 RT			12.0							
STA 98+81.00 TO STA 101+30.07										68.5
STA 99+41.00 LT TO STA 107+44.60 LT		805.5								
STA 99+41.00 LT TO STA 102+29.58 RT				96.5						
STA 100+48.13 LT								1		
STA 100+48.13 LT TO STA 105+91.80 LT					544.6		12			
STA 100+52.06 RT TO STA 105+87.38 RT		535.9								178.4
STA 100+52.06 RT TP STA 102+29.58 RT				59.2						
STA 104+10.42 RT TO STA 105+87.38 RT				59.1						
STA 104+10.42 RT TO STA 107+44.60 LT				111.7						
STA 104+99.34 TO STA 107+41.65										110.2
STA 105+91.80 LT								1		
STA 107+60.00 LT			12.1							
STA 114+60 LT	1									
STA 119+60 LT	1									
STA 124+60 LT	1									
SEMINARY ROAD (STAGE 2):										
STA 98+80.00 RT				24.0						
STA 99+08.62 RT TO STA 106+99.00 RT		792.1		264.0						
STA 100+53.89 LT TO STA 102+29.58 LT										58.6
STA 100+53.89 LT TO STA 105+86.63 LT		533.3		177.8						
STA 100+48.13 RT								1		
STA 100+48.13 RT TO STA 105+91.80 RT					544.6	12				
STA 104+10.42 LT TO STA 105+86.63 LT										58.7
STA 105+91.80 RT									1	
STA 107+60.00 LT				24.3						
TOTALS	6	* 2667	* 24	* 817	545	545	24	2	2	474

* QUANTITY FOR INFORMATION ONLY. IN ACCORDANCE WITH ARTICLE 703.07 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, WHEN TEMPORARY PAVEMENT MARKING IS SHOWN ON A STANDARD (SEE 701321), THE COST OF THE TEMPORARY PAVEMENT MARKING (INCLUDING REMOVAL) WILL BE INCLUDED IN THE COST OF THE STANDARD AND WILL NOT BE PAID FOR SEPERATELY.

CONCRETE OUTLET SCHEDULE			
LOCATION	LENGTH E - F	CLASS SI CONCRETE (OUTLET)	PROTECTIVE COAT
	(FT)	(CU YD)	(SQ YD)
SEMINARY ROAD:			
STA 103+92.82 LT TO STA 106+65.00 LT	227.5	19.4	110.4
STA 105+89.58 RT TO STA 106+65.00 RT	26.7	5.8	32.3
TOTALS		25.2	143

PAVEMENT MARKING SCHEDULE				
LOCATION	PAINT PAVEMENT MARKING - LINE 4"	SHORT TERM PAVEMENT MARKING	TEMPORARY PAVEMENT MARKING - LINE 4"	WORK ZONE PAVEMENT MARKING REMOVAL
	(FOOT)	(FOOT)	(FOOT)	(SQ FT)
SEMINARY ROAD:				
STA 98+81.00 LT TO STA 107+59.00 LT	878.0	36	878.0	304.7
STA 98+81.00 TO STA 107+59.00	750.0	80	750.0	276.7
STA 98+81.00 RT TO STA 107+59.00 RT	878.0	36	878.0	304.7
TOTALS	2506	152	2506	886

PIPE CULVERT SCHEDULE											
LOCATION	UPSTREAM STATION	UPSTREAM OFFSET	UPSTREAM INVERT	DOWNSTREAM STATION	DOWNSTREAM OFFSET	DOWNSTREAM INVERT	GRADE	PIPE CULVERTS, CLASS C, TYPE 1 18"	TRENCH BACKFILL	CONCRETE COLLAR	REINFORCEMENT BARS, EPOXY COATED
							(FT/FT)	(FOOT)	(CU YD)	(CU YD)	(POUND)
SEMINARY ROAD:	102+00.69	42.18' RT	469.19	102+67.68	43.17' RT	468.38	0.0121	67	9.3	0.4	30
TOTALS								67	9	0.4	30

NOTE:

ALL STATIONS, OFFSETS AND ELEVATIONS GIVEN AT THE FLOWLINE INVERT AT THE END OF THE PIPE.

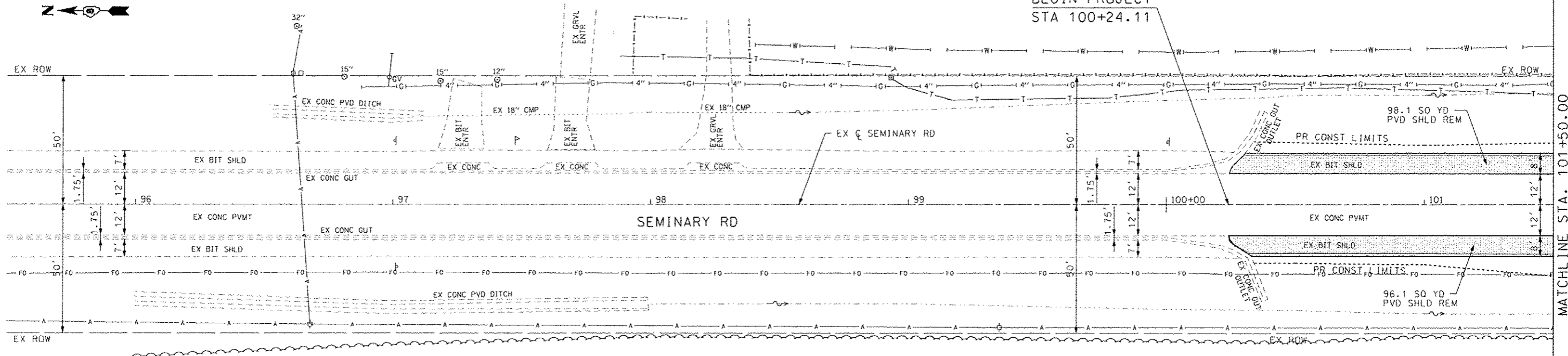
GUARDRAIL AND MARKER SCHEDULE						
LOCATION	TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL, (TANGENT)	TRAFFIC BARRIER TERMINAL, TYPE 6	IMPACT ATTENUATORS (FULLY, REDIRECTIVE, RESETTABLE), TEST LEVEL 3	TERMINAL MARKER - DIRECT APPLIED	GUARDRAIL MARKERS, TYPE A	BARRIER WALL MARKERS, TYPE B
	(EACH)	(EACH)	(EACH)	(EACH)	(EACH)	(EACH)
SEMINARY ROAD:						
STA 101+70.94 LT TO STA 102+68.68 LT	1	1		1	2	
STA 102+35.58 RT TO STA 102+65.58 RT			1	1		
STA 102+65.58 RT TO STA 103+71.32 RT						4
STA 102+68.68 LT TO STA 103+71.32 LT						2
STA 103+71.32 LT TO STA 104+69.06 LT	1	1		1	1	
STA 103+71.32 RT TO STA 104+69.06 RT	1	1		1	2	
TOTALS	3	3	1	4	5	6



ABRON A. & BERNICE L. GRANDIA

BEGIN PROJECT
STA 100+24.11

DATE	
BY	
PLANNED	
DESIGNED	
CHECKED	
IN CHARGE	
DATE	
BY	
PLANNED	
DESIGNED	
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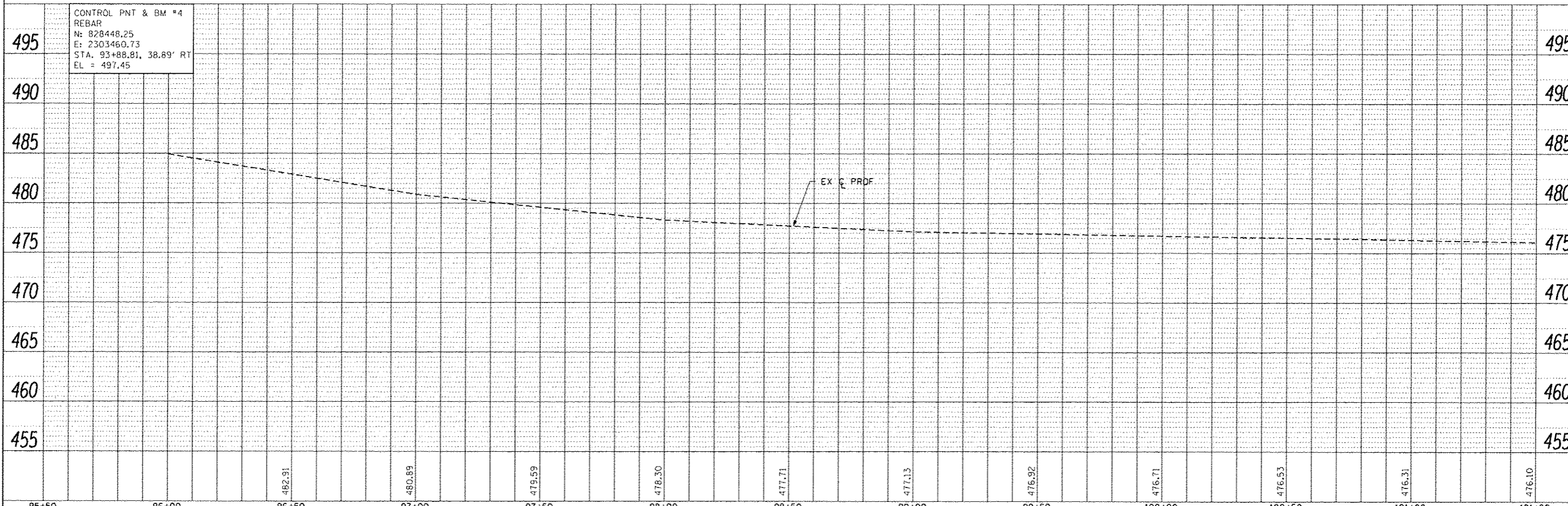
LEGEND

PAVED SHOULDER REMOVAL

CULTIVATED FIELD

GLENN F. & MARIAN R. HESS

DATE	
BY	
PLANNED	
DESIGNED	
CHECKED	
IN CHARGE	
DATE	
BY	
PLANNED	
DESIGNED	
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DATE	
BY	
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE SHEET

SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. 95+50.00 TO STA. 101+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-BR	MADISON	42	13
CONTRACT NO. 97608			ILLINOIS FED. AID PROJECT	

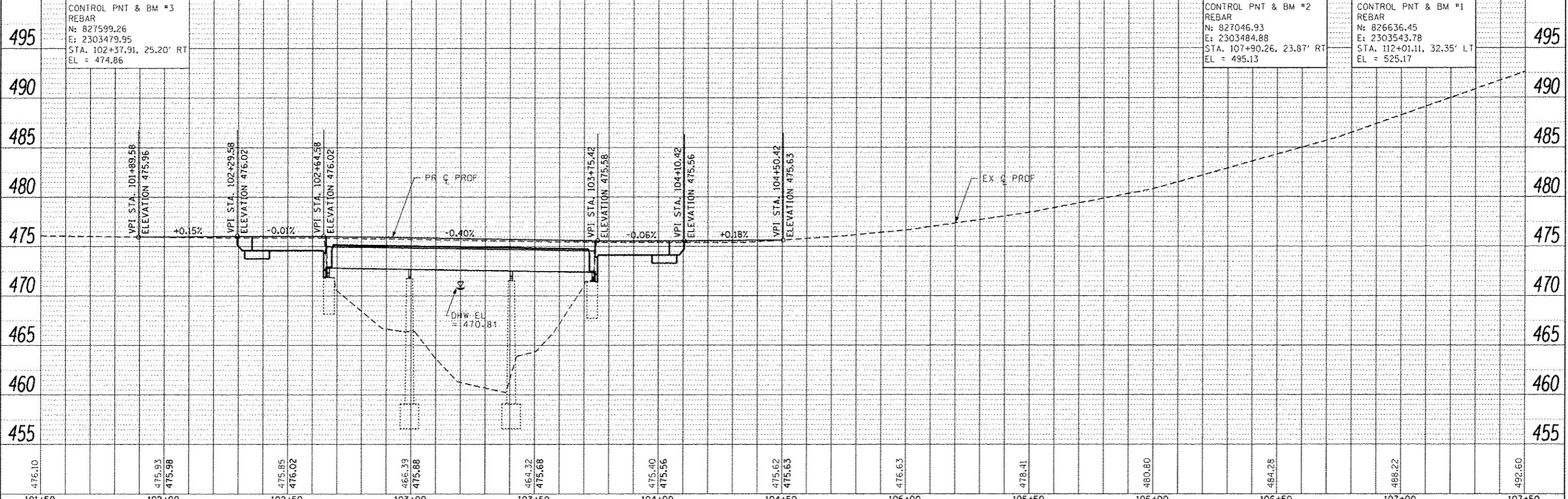
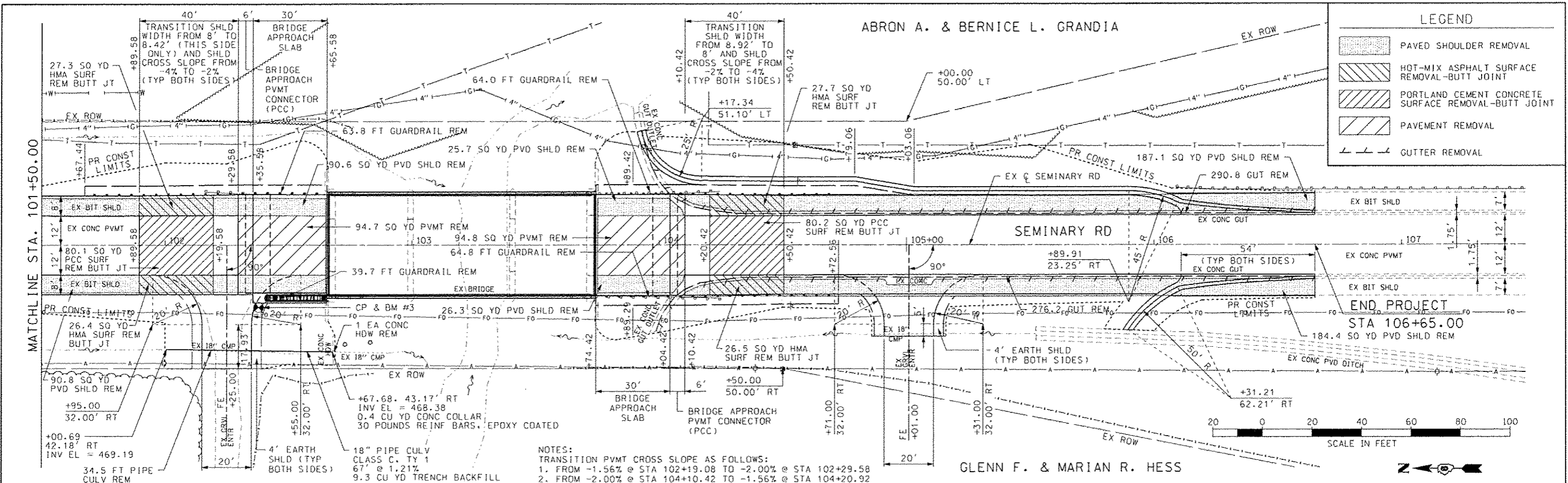
ABRON A. & BERNICE L. GRANDIA

LEGEND

PAVED SHOULDER REMOVAL
 HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT
 PORTLAND CEMENT CONCRETE SURFACE REMOVAL-BUTT JOINT
 PAVEMENT REMOVAL
 GUTTER REMOVAL

DATE	
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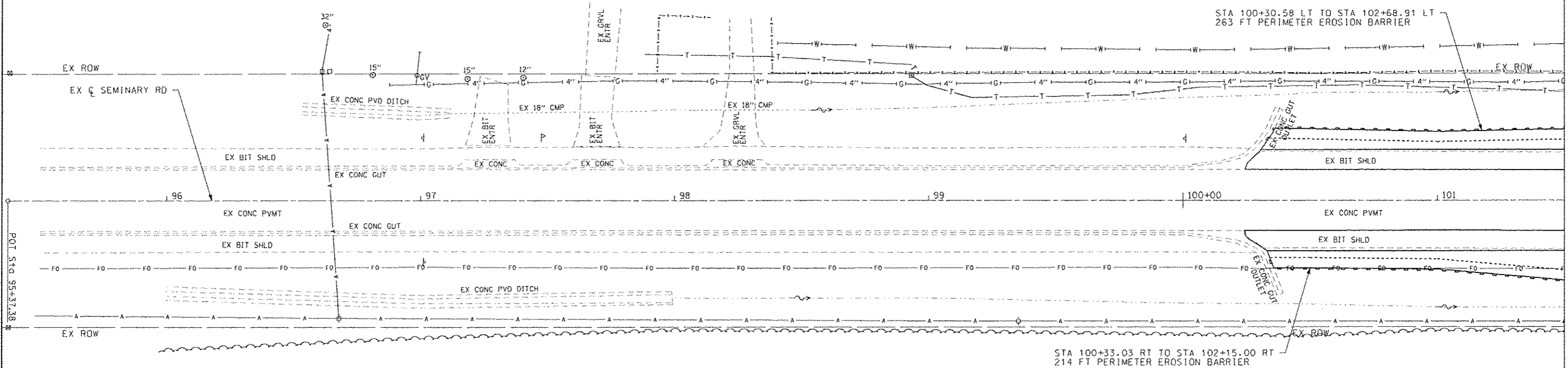
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE SHEET



SCALE IN FEET

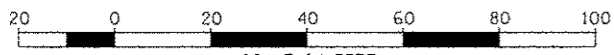


STA 100+30.58 LT TO STA 102+68.91 LT
263 FT PERIMETER EROSION BARRIER

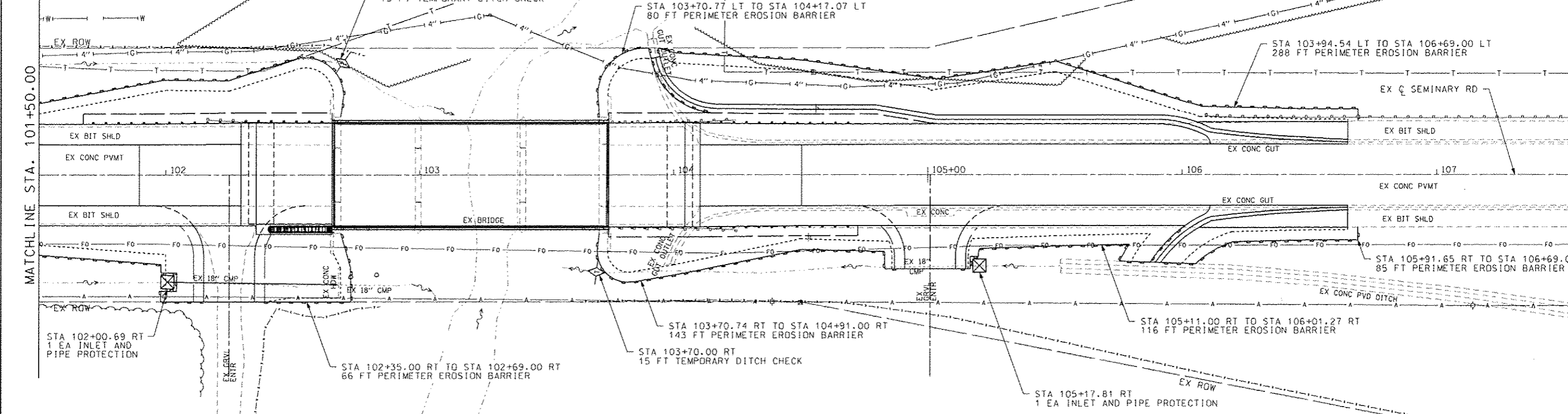
STA 100+33.03 RT TO STA 102+15.00 RT
214 FT PERIMETER EROSION BARRIER

EROSION CONTROL LEGEND

- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION



SCALE IN FEET



STA 102+70.00 LT
15 FT TEMPORARY DITCH CHECK

STA 103+70.77 LT TO STA 104+17.07 LT
80 FT PERIMETER EROSION BARRIER

STA 103+94.54 LT TO STA 106+69.00 LT
288 FT PERIMETER EROSION BARRIER

MATCHLINE STA. 101+50.00

STA 102+00.69 RT
1 EA INLET AND PIPE PROTECTION

STA 102+35.00 RT TO STA 102+69.00 RT
66 FT PERIMETER EROSION BARRIER

STA 103+70.00 RT
15 FT TEMPORARY DITCH CHECK

STA 103+70.74 RT TO STA 104+91.00 RT
143 FT PERIMETER EROSION BARRIER

STA 105+11.00 RT TO STA 106+01.27 RT
116 FT PERIMETER EROSION BARRIER

STA 105+17.81 RT
1 EA INLET AND PIPE PROTECTION

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

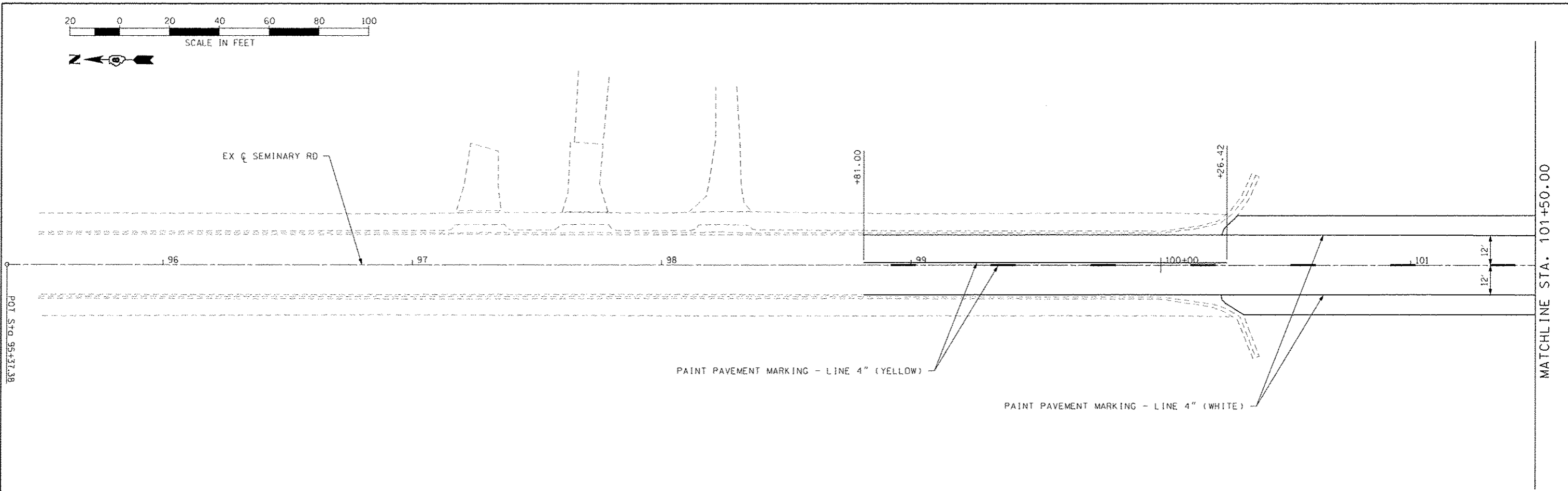
EROSION AND SEDIMENT CONTROL DETAILS

SCALE: 1"=20' SHEET 2 OF 2 SHEETS STA. 96+37.38 TO STA. 107+65.00

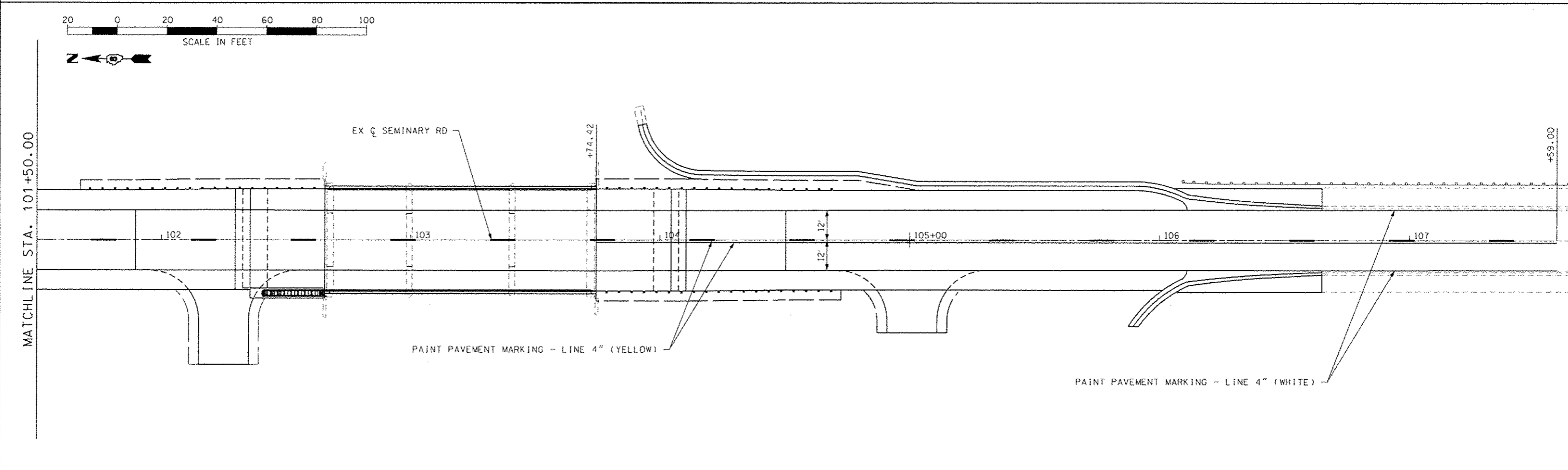
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ILLINOIS FED. AID PROJECT			CONTRACT NO. 97608	



SCALE IN FEET



SCALE IN FEET



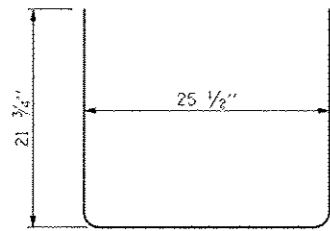
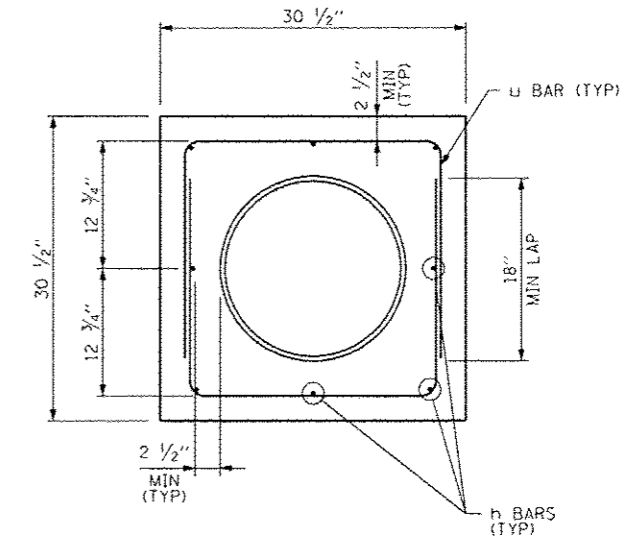
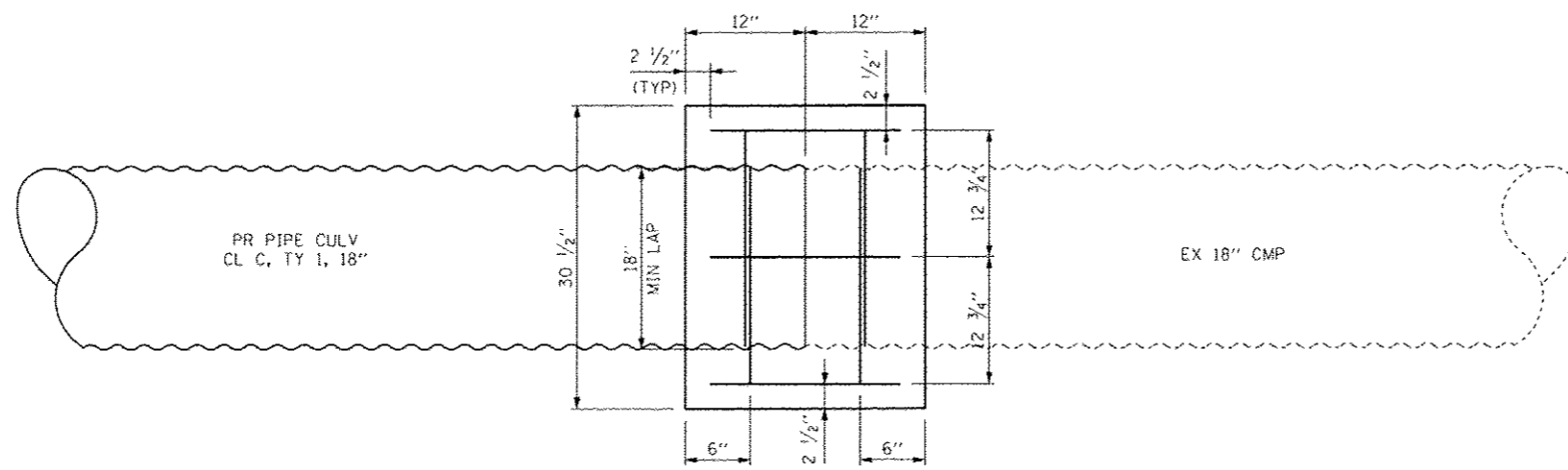
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

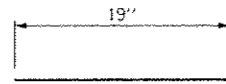
PAVEMENT MARKING DETAILS

SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 96+37.38 TO STA. 107+65.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-BR	MADISON	42	17
CONTRACT NO. 97608				
ILLINOIS FED. AID PROJECT				



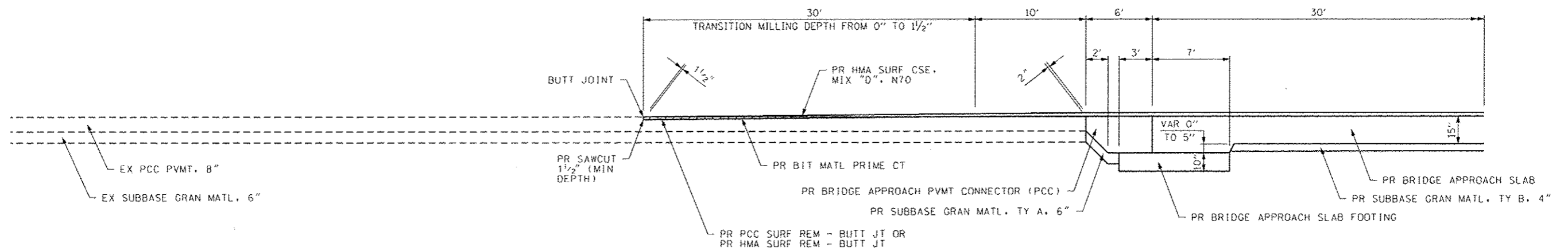
(#4) u BAR



(#4) h BAR

CONCRETE COLLAR DETAIL
NOT TO SCALE

BILL OF MATERIAL					
STATION	OFFSET	h BAR (NO.)	u BAR (NO.)	CONCRETE COLLAR (CU YD)	REINFORCEMENT BARS, EPOXY COATED (POUND)
102+67.68	43.17' RT	8	4	0.4	30



BUTT JOINT DETAIL
NOT TO SCALE

FILE NAME =	USER NAME = Jack Blakemore	DESIGNED = JWB	REVISED =
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Default	PLOT DATE = 8/17/2015	DATE = 8/17/2015	REVISED =

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS

SCALE: N/A SHEET 1 OF 1 SHEETS STA. N/A TO STA. N/A

F.A.U. RITE: 8998	SECTION 13-00125-02-BR	COUNTY MADISON	TOTAL SHEETS 42	SHEET NO. 18
CONTRACT NO. 97608				
ILLINOIS FED. AID PROJECT				

Benchmark: Rebar set at N: 827046.93, E: 2303484.88 - Sta. 107+90.26, 23.87' Rt. - Elev. 495.13
 Rebar set at N: 827599.26, E: 2303479.95 - Sta. 102+37.91, 25.20' Rt. - Elev. 474.86

Existing Structure: S.N. 060-3229 built in 1980 over Honey Branch Creek at Sta. 103+20.00. Structure consists of a three-span steel WF bridge on pile supported abutments with a back-to-back abutment dimension of 110'-10" and a 40'-0" roadway width. The contractor shall remove the existing superstructure and replace with galvanized steel WF beams and composite deck. Existing bridge substructure to be used-in-place and abutments converted to semi-integral. Traffic to be maintained using stage construction as shown.

Salvage: None

LOADING HL-93
 New Construction

DESIGN SPECIFICATIONS

New Construction:
 2012 AASHTO LRFD Bridge Design Specifications 6th Edition
 With 2013 Interim Revisions

DESIGN STRESSES

FIELD UNITS (New Construction)

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 Grade 50)

FIELD UNITS (Existing Construction)

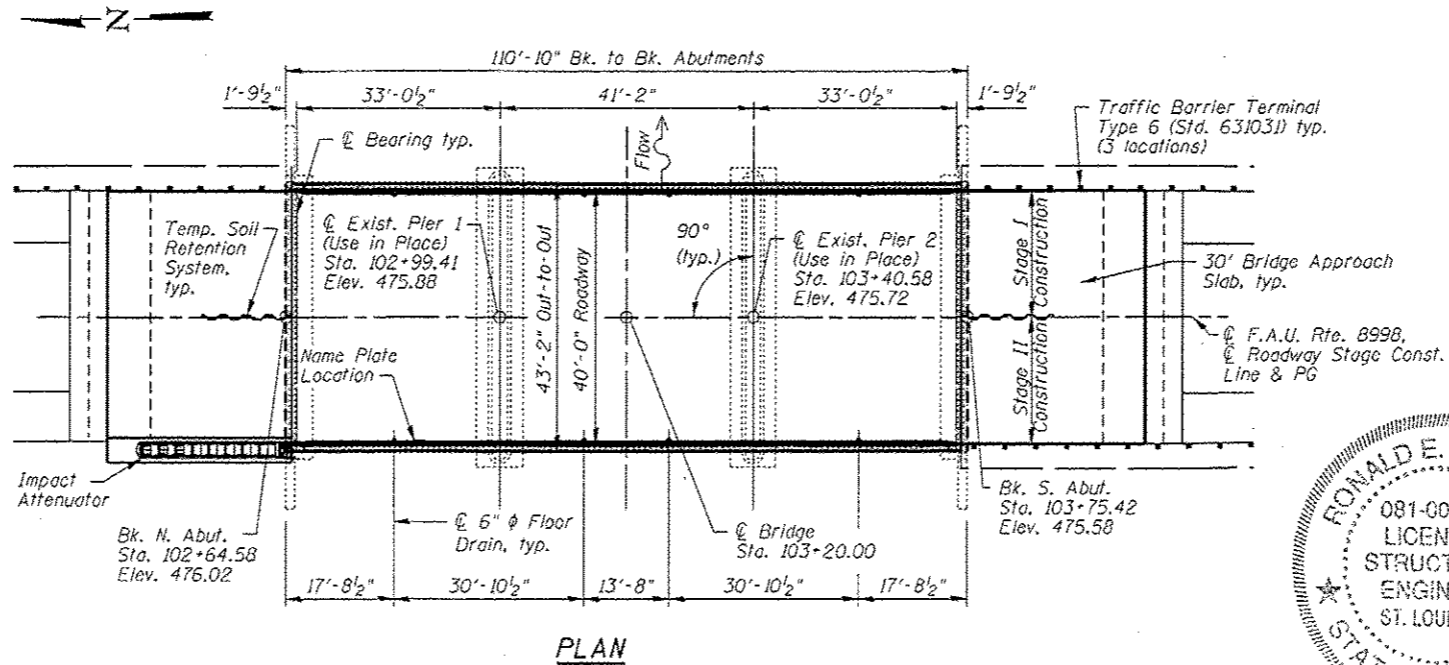
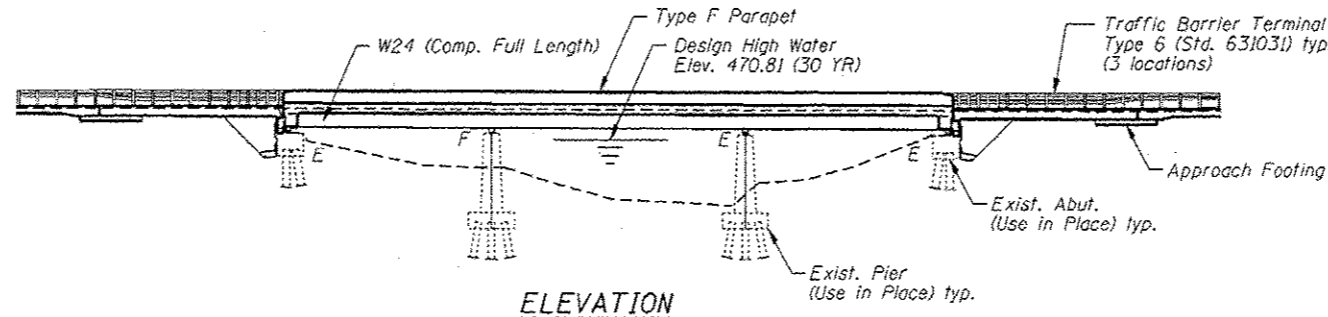
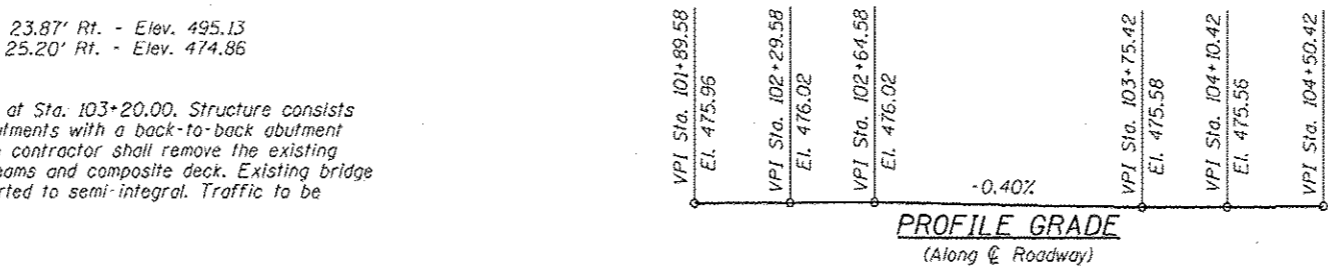
$f'_c = 2,500$ psi
 $f_y = 40,000$ psi (Reinforcement)

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Horizontal Bedrock Acceleration Coefficient (A) = 0.078g
 Site Coefficient (S) = 1.0

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevations (ft.)				
N. Abut.	Pier 1	Pier 2	S. Abut.	
468.2	456.6	456.6	467.7	



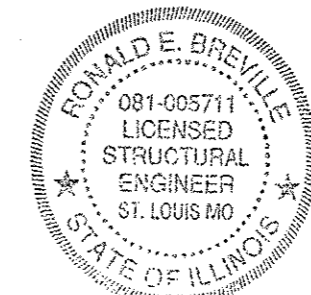
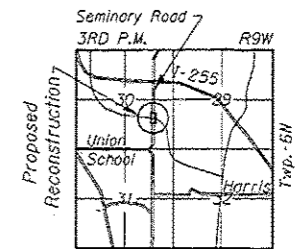
WATERWAY INFORMATION

Drainage Area = 4.8 Sq Mi Low Grade Elev. = 475.56 @ STA 104+10.42

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater EL	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	30	1670	393	393	470.35	0.46	0.46	470.81	470.81
Base	100	2600	502	502	471.51	0.55	0.55	472.06	472.06
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	3570	556	560	472.99	1.19	1.17	474.18	474.16

INDEX OF SHEETS

Sheet No.	Description
1	General Plan and Elevation
2	General Data
3	Stage Construction Details
4	Temporary Concrete Barrier For Stage Construction
5-7	Deck Elevations
8-9	Top of Approach Slab Elevations
10	Superstructure Details
11	Parapet Details
12	Semi-Integral Abutment Diaphragm Details
13-15	Bridge Approach Slab Details
16	Framing Plan
17-18	Bearing Details
19	Bar Splicer Assembly and Mechanical Splicer Details
20	Canilever Forming Brackets for Superstructures



Ronald E. Breville
 23 SEPT. 2015
 EXP. 30 NOV. 2016

GENERAL PLAN & ELEVATION
SEMINARY ROAD OVER
HONEY BRANCH
F.A.U. RTE. 8998 - SEC. 13-00125-02-BR
MADISON COUNTY
STATION 103+20.00
STRUCTURE NO. 060-3229

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO LRFD Bridge Design Specifications".

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 20 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-BR	MADISON	42	19

CONTRACT NO. 97608
 ILLINOIS FED. AID PROJECT



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PLOT DATE = #DATE#	DRAWN = DWL	REVISED =
	DATE = #DATE#	REVISED =

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Bituminous Materials (Prime Coat)	Ton	121	-	121
Hot-Mix Asphalt Surface Course, Mix "D", N70	Ton	71	-	71
Removal of Existing Superstructures	Each	1	-	1
Concrete Removal	Cu. Yd.	-	19.2	19.2
Structure Excavation	Cu. Yd.	-	204	204
Floor Drains	Each	8	-	8
Concrete Structures	Cu. Yd.	-	25.0	25.0
Concrete Superstructure	Cu. Yd.	283.4	-	283.4
Protective Coat	Sq. Yd.	92	-	92
Furnishing and Erecting Structural Steel	L. Sum	1	-	1
Stud Shear Connectors	Each	3864	-	3864
Reinforcement Bars, Epoxy Coated	Pound	66,000	4,420	70,420
Bar Splicers	Each	482	80	562
Name Plates	Each	1	-	1
Elastomeric Bearing Assembly, Type I	Each	24	-	24
Anchor Bolts, 1"	Each	64	-	64
Waterproofing Membrane System	Sq. Yd.	486	-	486
Geocomposite Wall Drain	Sq. Yd.	-	60	60
Structural Repair of Concrete (Depth equal to or less than 5 inches)	Sq. Ft.	-	12	12
Pipe Underdrains for Structures 4"	Foot	-	174	174
Temporary Soil Retention System	Sq. Ft.	-	94	94
Granular Backfill for Structures	Cu. Yd.	-	116	116

GENERAL NOTES

Fasteners shall be ASTM A325 Type I, mechanically galvanized bolts. Bolts $\frac{7}{8}$ in. ϕ , holes $\frac{15}{16}$ in. ϕ , unless otherwise noted.

Calculated weight of Structural Steel =
 AASHTO M270 Grade 50 = 69,880 pounds
 AASHTO M270 Grade 36 = 15,140 pounds

No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

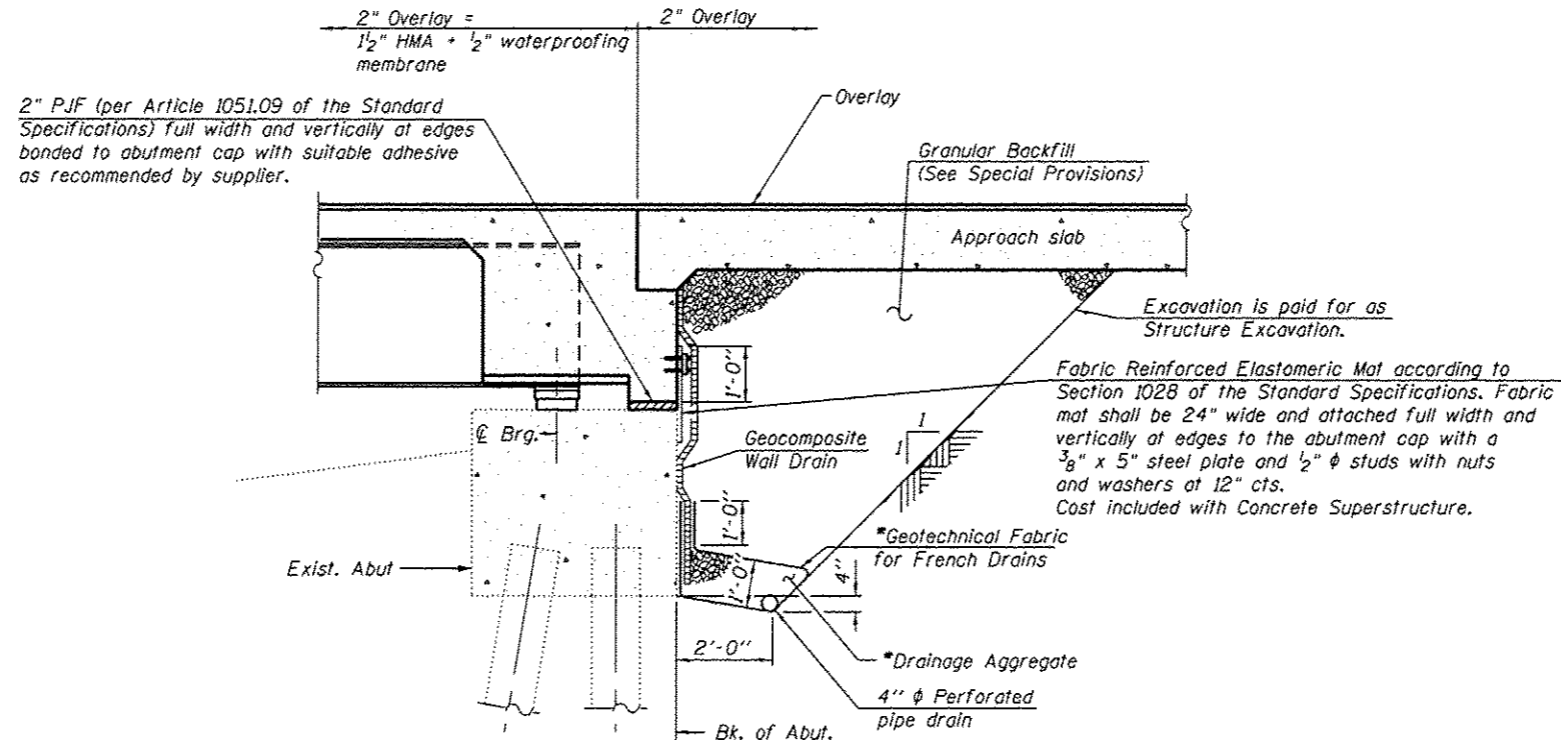
Protective coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

All structural steel shall be galvanized in accordance with the special provisions.

The contractor shall submit a demolition plan to the Engineer for approval, including the proposed methods of demolition and the location(s) and type(s) of equipment to be used, for the removal of the existing superstructure. The demolition plan shall include an assessment of the structure condition and an evaluation of the capacity and stability of the structure during demolition and shall be sealed by an Illinois Licensed Structural Engineer.

The existing bridge plans are available from Madison County Highway Department.



SECTION THRU SEMI-INTEGRAL ABUTMENT

(Horiz. dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structures. (See Special Provisions).

Notes:

All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend 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).

For modifications to the existing abutment see sheet 12 of 20 for details.

TRIBUTARY TO WOOD RIVER
 RE-BUILT 20__ BY
 MADISON COUNTY HIGHWAY DEPT.
 SEC. 13-00125-02-BR
 F.A.U. RT. 8998 STATION 103+20.00
 STR. NO. 060-3229 LOADING HL-93

NAME PLATE

See Std. 515001

Existing Name Plate shall be cleaned and relocated next to the new Name Plate. Cost included with Name Plates.



CREATED BY: CANTOR, MURPHY & TULLY, INC.
 ONE NATIONAL CENTER, SUITE 1000
 ST. LOUIS, MO 63102-1000

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 PLOT DATE : 8/18/2015

DESIGNED - JDJ/DWL
 CHECKED - REB
 DRAWN - DWL
 DATE - 8/18/2015

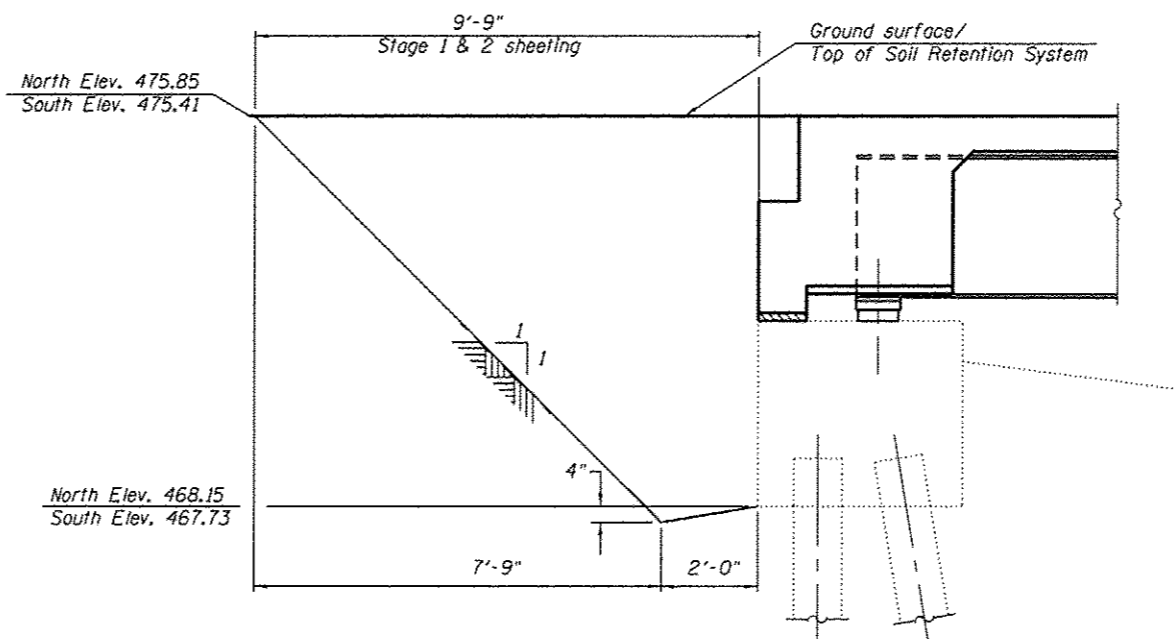
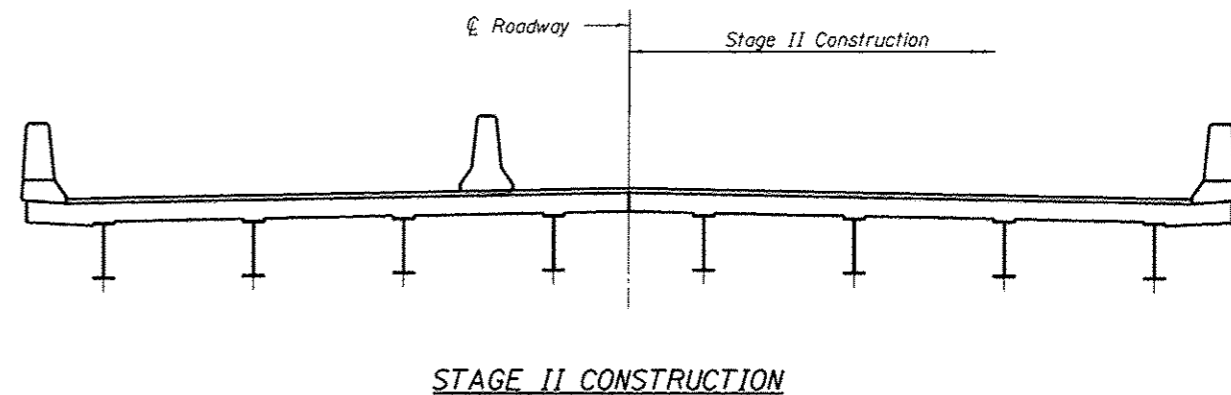
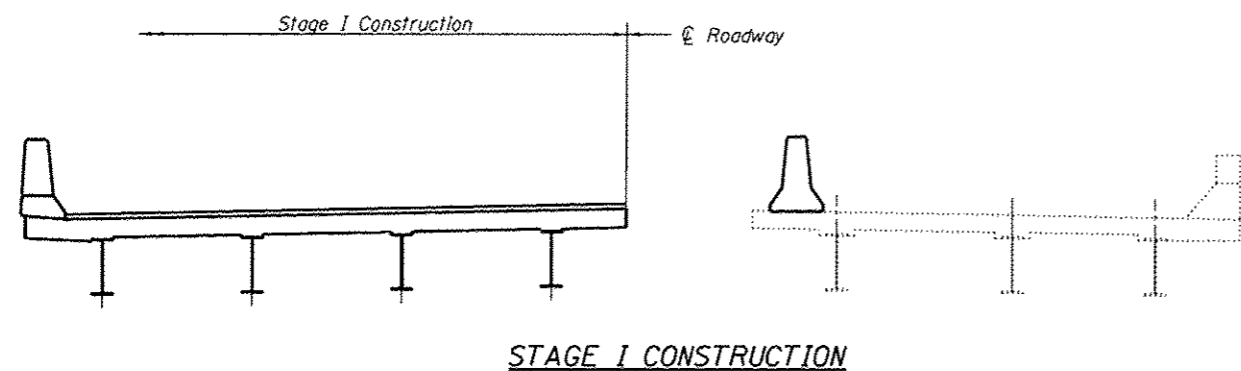
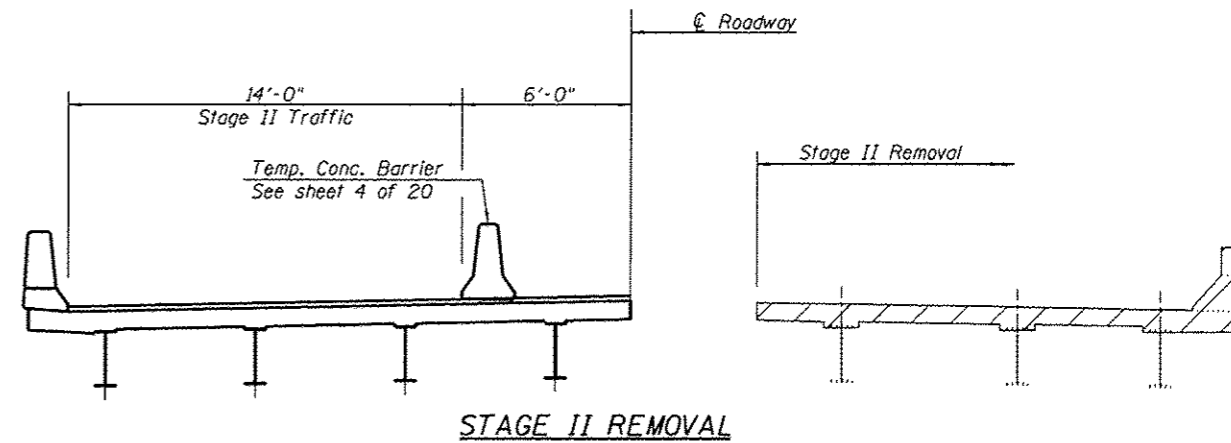
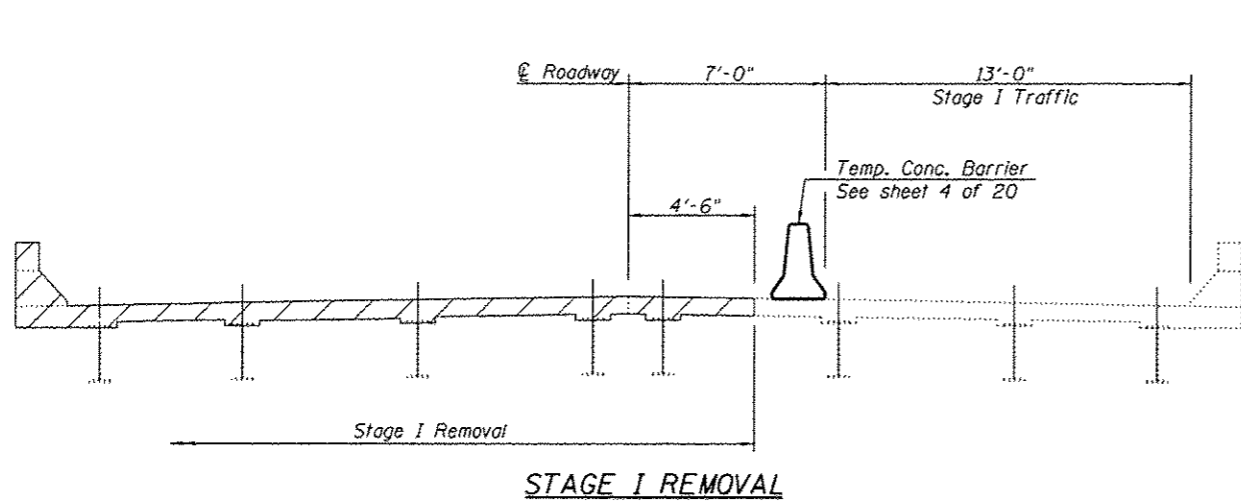
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL DATA
 STRUCTURE NO. 060-3229

SHEET NO. 2 OF 20 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-BR	MADISON	42	20
				CONTRACT NO. 97608
ILLINOIS FED. AID PROJECT				



Notes:
 All staging cross sections are looking south.
 For quantity of Temporary Concrete Barrier, see roadway plans.
 Hatched area indicates Removal of Existing Structures.



CRAWFORD, MERRITT & TILLY, INC.
 ONE NEWBOLD DRIVE, SUITE 200
 ST. LOUIS, MO 63103-1500

FILE NAME :
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 CAD00_Sheets\Bridges\
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 PLOT DATE : 8/18/2015

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 CHECKED - REB
 DRAWN - DWL
 DATE - 8/18/2015

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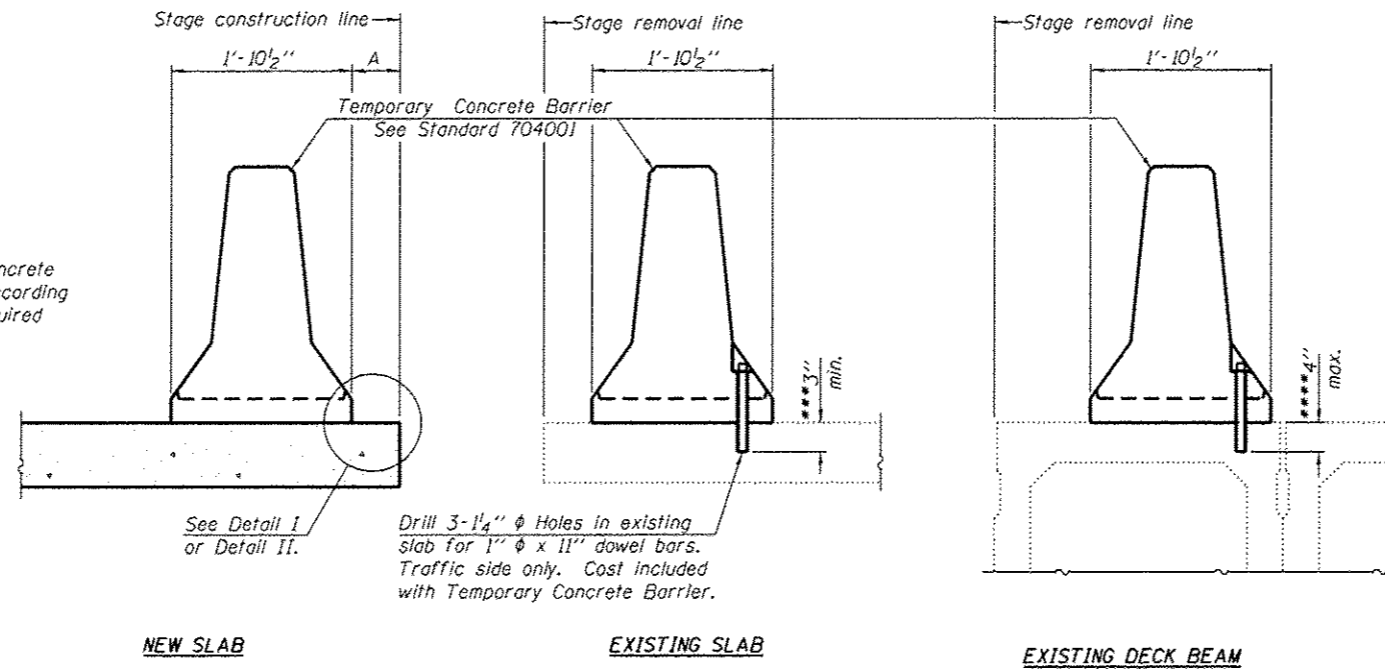
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
 STRUCTURE NO. 060-3229

SHEET NO. 3 OF 20 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-BR	MADISON	42	21
				CONTRACT NO. 97608
ILLINOIS FED. AID PROJECT				

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

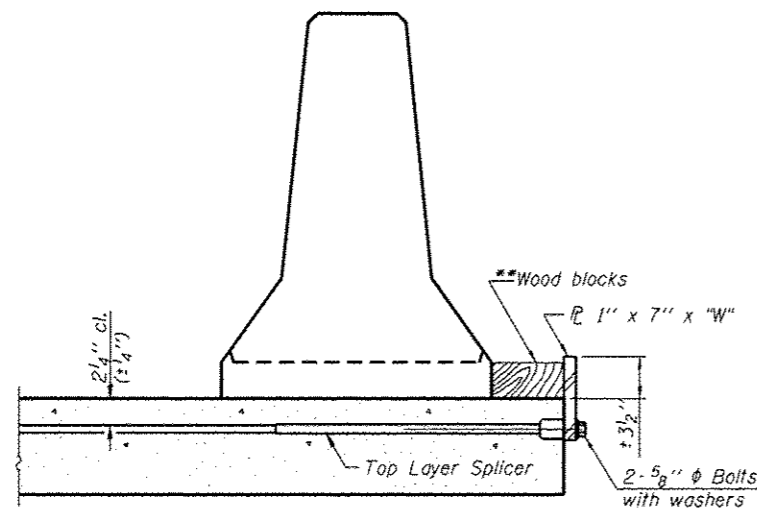
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel \bar{L} to the top layer of couplers with 2- $\frac{5}{8}$ " ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel \bar{L} to the concrete slab or concrete wearing surface with 2- $\frac{5}{8}$ " ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

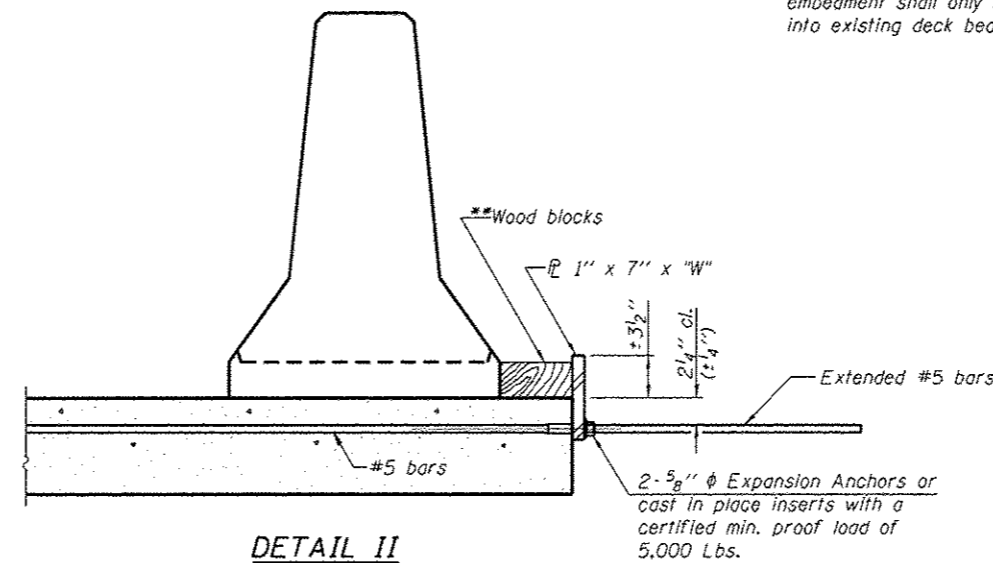
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

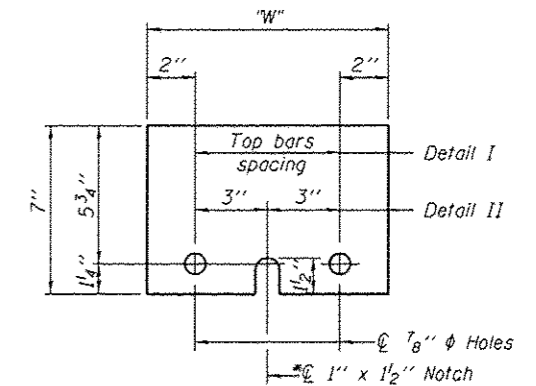
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER \bar{L} 1" x 7" x "W"

* Required only with Detail II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"



CRAWFORD, HURPIT & TELL, INC.
CONCRETE DIVISION
271 LINDSEY AVE. SUITE 200
ST. LOUIS, MO 63105-1346 314-456-2500

FILE NAME : L:\Madison_Co\1448\23\Draw\CAD\Sheets\B-bridge\06B3229-02-TEMPORARY_BARRIER.dgn

USER NAME : Jash Jolliff
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DESIGNED - JDJ/DWL
CHECKED - REB
DRAWN - DWL
DATE - 8/18/2015

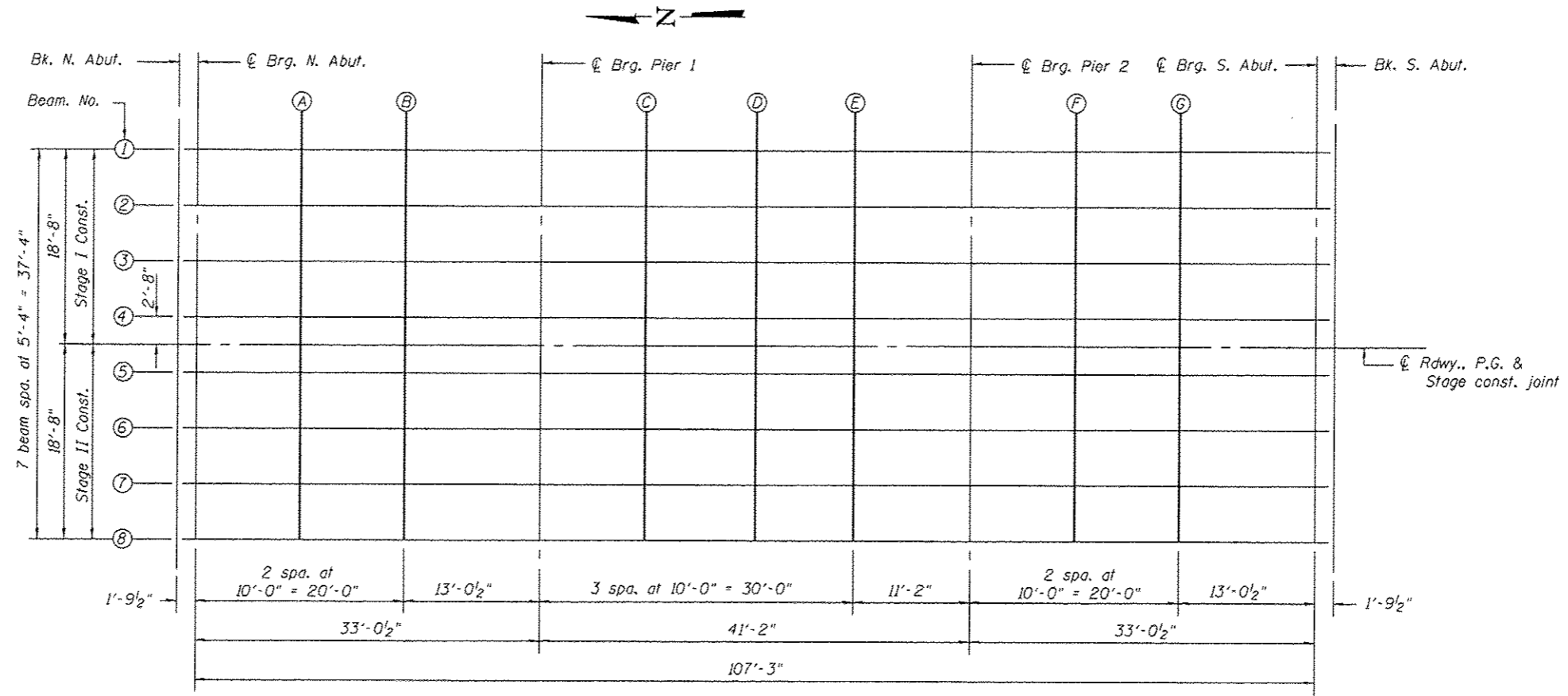
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 060-3229**

SHEET NO. 4 OF 20 SHEETS

F.A.U. RTE. 8998	SECTION 13-00125-02-BR	COUNTY MADISON	TOTAL SHEETS 42	SHEET NO. 22
CONTRACT NO. 97608			[ILLINOIS] FED. AID PROJECT	



PLAN

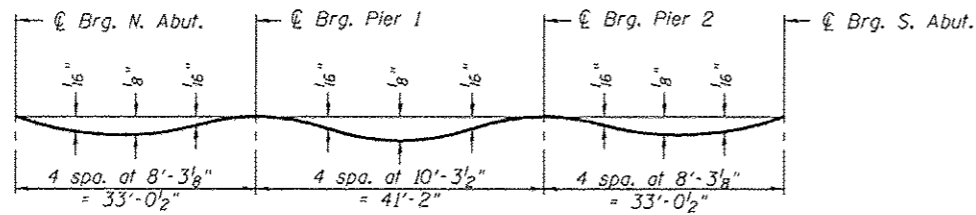
CMT
 CONSULTING
 CHARFORD MURPHY & TILLY, INC.
 ONE MIDLAND DRIVE, SUITE 300
 ST. LOUIS, MO 63107 (314) 432-8500

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 DESIGNED = JDJ/DWL
 CHECKED = REB
 DRAWN = DWL
 PLOT DATE = 8/18/2015
 REVISIONS:
 REVISION NO. DATE BY
 1 8/18/2015 JDJ

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DECK ELEVATIONS I
 STRUCTURE NO. 060-3229
 SHEET NO. 5 OF 20 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-BR	MADISON	42	23
CONTRACT NO. 97608			ILLINOIS FED. AID PROJECT	

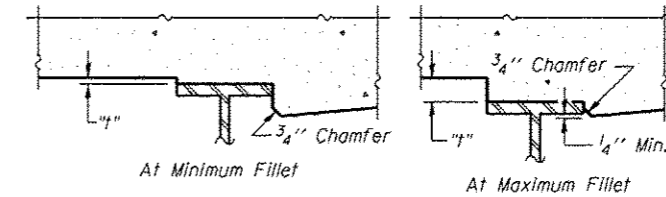


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete and proposed overlay.)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown in the following tables.



To determine "f": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on the plans. These elevations subtracted from the "Theoretical Grade Elevations Adjusted For Dead Load Deflection" shown in the following tables, minus slab thickness, equals the fillet heights "f" above top flange of beams.

FILLET HEIGHTS

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations		Theoretical Grade Elevations Adjusted For Dead Load Deflection	
			Top Conc.	Top Asphalt	Top Conc.	Top Asphalt
Bk. N. Abut.	102+64.58	-18.67	475.48	475.65	475.48	475.65
CL. Brg. N. Abut.	102+66.37	-18.67	475.47	475.64	475.47	475.64
A	102+76.37	-18.67	475.43	475.60	475.44	475.61
B	102+86.37	-18.67	475.39	475.56	475.40	475.57
CL. Brg. Pier 1	102+99.41	-18.67	475.34	475.51	475.34	475.51
C	103+09.41	-18.67	475.30	475.47	475.31	475.47
D	103+19.41	-18.67	475.26	475.43	475.27	475.44
E	103+29.41	-18.67	475.22	475.39	475.23	475.39
CL. Brg. Pier 2	103+40.58	-18.67	475.18	475.34	475.18	475.34
F	103+50.58	-18.67	475.14	475.31	475.14	475.31
G	103+60.58	-18.67	475.10	475.27	475.10	475.27
CL. Brg. S. Abut.	103+73.63	-18.67	475.05	475.21	475.05	475.21
Bk. S. Abut.	103+75.42	-18.67	475.04	475.21	475.04	475.21

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations		Theoretical Grade Elevations Adjusted For Dead Load Deflection	
			Top Conc.	Top Asphalt	Top Conc.	Top Asphalt
Bk. N. Abut.	102+64.58	-13.33	475.59	475.75	475.59	475.75
CL. Brg. N. Abut.	102+66.37	-13.33	475.58	475.75	475.58	475.75
A	102+76.37	-13.33	475.54	475.71	475.55	475.71
B	102+86.37	-13.33	475.50	475.67	475.51	475.67
CL. Brg. Pier 1	102+99.41	-13.33	475.45	475.62	475.45	475.62
C	103+09.41	-13.33	475.41	475.58	475.41	475.58
D	103+19.41	-13.33	475.37	475.54	475.38	475.55
E	103+29.41	-13.33	475.33	475.50	475.33	475.50
CL. Brg. Pier 2	103+40.58	-13.33	475.28	475.45	475.28	475.45
F	103+50.58	-13.33	475.25	475.41	475.25	475.42
G	103+60.58	-13.33	475.21	475.37	475.21	475.38
CL. Brg. S. Abut.	103+73.63	-13.33	475.15	475.32	475.15	475.32
Bk. S. Abut.	103+75.42	-13.33	475.15	475.31	475.15	475.31

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations		Theoretical Grade Elevations Adjusted For Dead Load Deflection	
			Top Conc.	Top Asphalt	Top Conc.	Top Asphalt
Bk. N. Abut.	102+64.58	-8.00	475.69	475.86	475.69	475.86
CL. Brg. N. Abut.	102+66.37	-8.00	475.69	475.85	475.69	475.85
A	102+76.37	-8.00	475.65	475.81	475.65	475.82
B	102+86.37	-8.00	475.61	475.77	475.61	475.78
CL. Brg. Pier 1	102+99.41	-8.00	475.56	475.72	475.56	475.72
C	103+09.41	-8.00	475.52	475.68	475.52	475.69
D	103+19.41	-8.00	475.48	475.64	475.49	475.65
E	103+29.41	-8.00	475.44	475.60	475.44	475.61
CL. Brg. Pier 2	103+40.58	-8.00	475.39	475.56	475.39	475.56
F	103+50.58	-8.00	475.35	475.52	475.36	475.52
G	103+60.58	-8.00	475.31	475.48	475.32	475.48
CL. Brg. S. Abut.	103+73.63	-8.00	475.26	475.43	475.26	475.43
Bk. S. Abut.	103+75.42	-8.00	475.25	475.42	475.25	475.42



CRAWFORD, MURPHY & TULLY, INC.
 1750 S. WASHINGTON ST., SUITE 100
 ST. LOUIS, MO 63102-1500

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 PLOT DATE : 8/18/2015

DESIGNED - JDJ/DWL
 CHECKED - REB
 DRAWN - DWL
 DATE - 8/18/2015

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DECK ELEVATIONS II
 STRUCTURE NO. 060-3229

SHEET NO. 6 OF 20 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-BR	MADISON	42	24

CONTRACT NO. 9760B

ILLINOIS FED. AID PROJECT

EAST EDGE OF SHOULDER

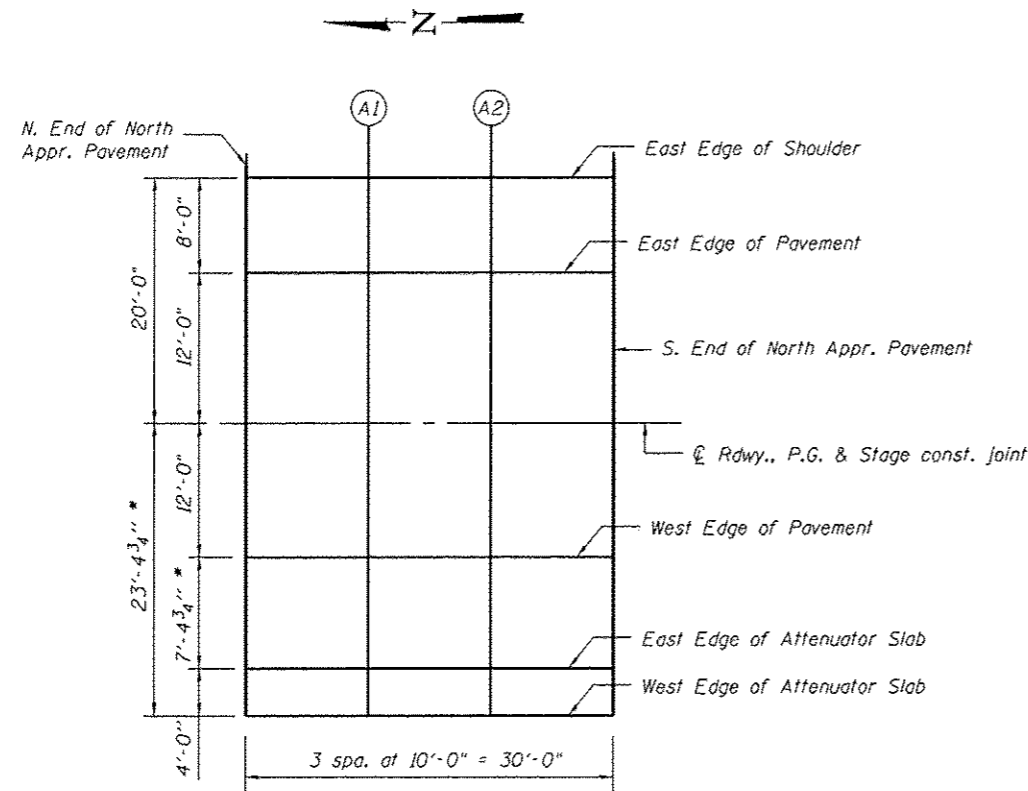
Location	Station	Offset	Theoretical Grade Elevations	
			Top Conc.	Top Asphalt
N. End North Appr. Pav't.	102+35.58	-20.00	475.45	475.62
A1	102+45.58	-20.00	475.45	475.62
A2	102+55.58	-20.00	475.45	475.62
S. End North Appr. Pav't	102+65.58	-20.00	475.45	475.62

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	
			Top Conc.	Top Asphalt
N. End North Appr. Pav't.	102+35.58	-12.00	475.61	475.78
A1	102+45.58	-12.00	475.61	475.78
A2	102+55.58	-12.00	475.61	475.78
S. End North Appr. Pav't	102+65.58	-12.00	475.61	475.78

☉ ROADWAY, PROFILE GRADE & STAGE CONST. JT.

Location	Station	Offset	Theoretical Grade Elevations	
			Top Conc.	Top Asphalt
N. End North Appr. Pav't.	102+35.58	0.00	475.85	476.02
A1	102+45.58	0.00	475.85	476.02
A2	102+55.58	0.00	475.85	476.02
S. End North Appr. Pav't	102+65.58	0.00	475.85	476.02



PLAN
North Approach

* Dimension may vary per Impact Attenuator manufacturer's recommendations.

WEST EDGE OF PAVEMENT

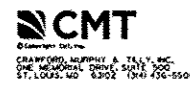
Location	Station	Offset	Theoretical Grade Elevations	
			Top Conc.	Top Asphalt
N. End North Appr. Pav't.	102+35.58	12.00	475.61	475.78
A1	102+45.58	12.00	475.61	475.78
A2	102+55.58	12.00	475.61	475.78
S. End North Appr. Pav't	102+65.58	12.00	475.61	475.78

EAST EDGE OF ATTENUATOR SLAB

Location	Station	Offset	Theoretical Grade Elevations	
			Top Conc.	Top Asphalt
N. End North Appr. Pav't.	102+35.58	19.40	475.63	-
A1	102+45.58	19.40	475.63	-
A2	102+55.58	19.40	475.63	-
S. End North Appr. Pav't	102+65.58	19.40	475.63	-

WEST EDGE OF ATTENUATOR SLAB

Location	Station	Offset	Theoretical Grade Elevations	
			Top Conc.	Top Asphalt
N. End North Appr. Pav't.	102+35.58	23.40	475.55	-
A1	102+45.58	23.40	475.55	-
A2	102+55.58	23.40	475.55	-
S. End North Appr. Pav't	102+65.58	23.40	475.55	-



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 PLOT SCALE : 0:2.0000 1" = 30'
 PLOT DATE : 8/18/2015

DESIGNED - JDJ/DWL
 CHECKED - REB
 DRAWN - DWL
 DATE - 8/18/2015

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF NORTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 060-3229

SHEET NO. 8 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-BR	MADISON	42	26
CONTRACT NO. 97608				

ILLINOIS FED. AID PROJECT

EAST EDGE OF SHOULDER

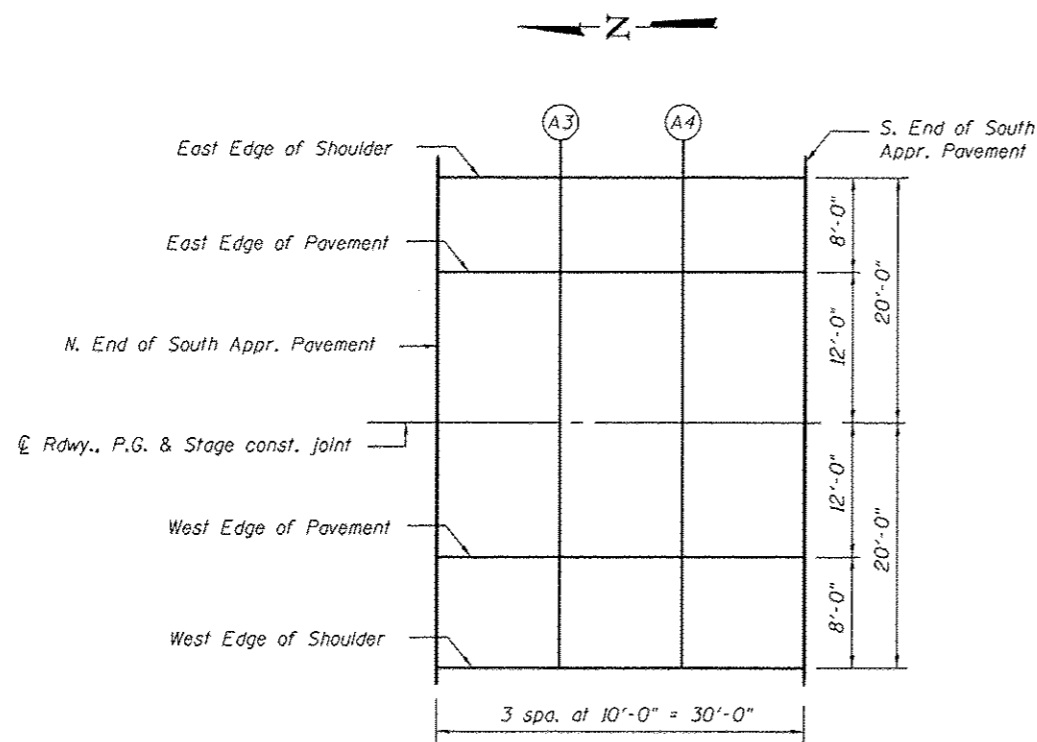
Location	Station	Offset	Theoretical Grade Elevations	
			Top Conc.	Top Asphalt
N. End South Appr. Pav't.	103+74.42	-20.00	475.01	475.18
A3	103+84.42	-20.00	475.01	475.17
A4	103+94.42	-20.00	475.00	475.17
S. End South Appr. Pav't	104+04.42	-20.00	474.99	475.16

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	
			Top Conc.	Top Asphalt
N. End South Appr. Pav't.	103+74.42	-12.00	475.17	475.34
A3	103+84.42	-12.00	475.17	475.33
A4	103+94.42	-12.00	475.16	475.33
S. End South Appr. Pav't	104+04.42	-12.00	475.15	475.32

☉ ROADWAY, PROFILE GRADE & STAGE CONST. JT.

Location	Station	Offset	Theoretical Grade Elevations	
			Top Conc.	Top Asphalt
N. End South Appr. Pav't.	103+74.42	0.00	475.41	475.58
A3	103+84.42	0.00	475.41	475.57
A4	104+94.42	0.00	475.40	475.57
S. End South Appr. Pav't	104+04.42	0.00	475.39	475.56



PLAN
South Approach

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	
			Top Conc.	Top Asphalt
N. End South Appr. Pav't.	103+74.42	12.00	475.17	475.34
A3	103+84.42	12.00	475.17	475.33
A4	103+94.42	12.00	475.16	475.33
S. End South Appr. Pav't	104+04.42	12.00	475.15	475.32

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	
			Top Conc.	Top Asphalt
N. End South Appr. Pav't.	103+74.42	20.00	475.01	475.18
A3	103+84.42	20.00	475.01	475.17
A4	103+94.42	20.00	475.00	475.17
S. End South Appr. Pav't	104+04.42	20.00	474.99	475.16



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ONE WASHINGTON CENTER, SUITE 1200
ST. LOUIS, MO 63102-1500

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PLOT DATE = 8/18/2015

DESIGNED - JDJ/DWL
CHECKED - REB
DRAWN - DWL
DATE - 8/18/2015

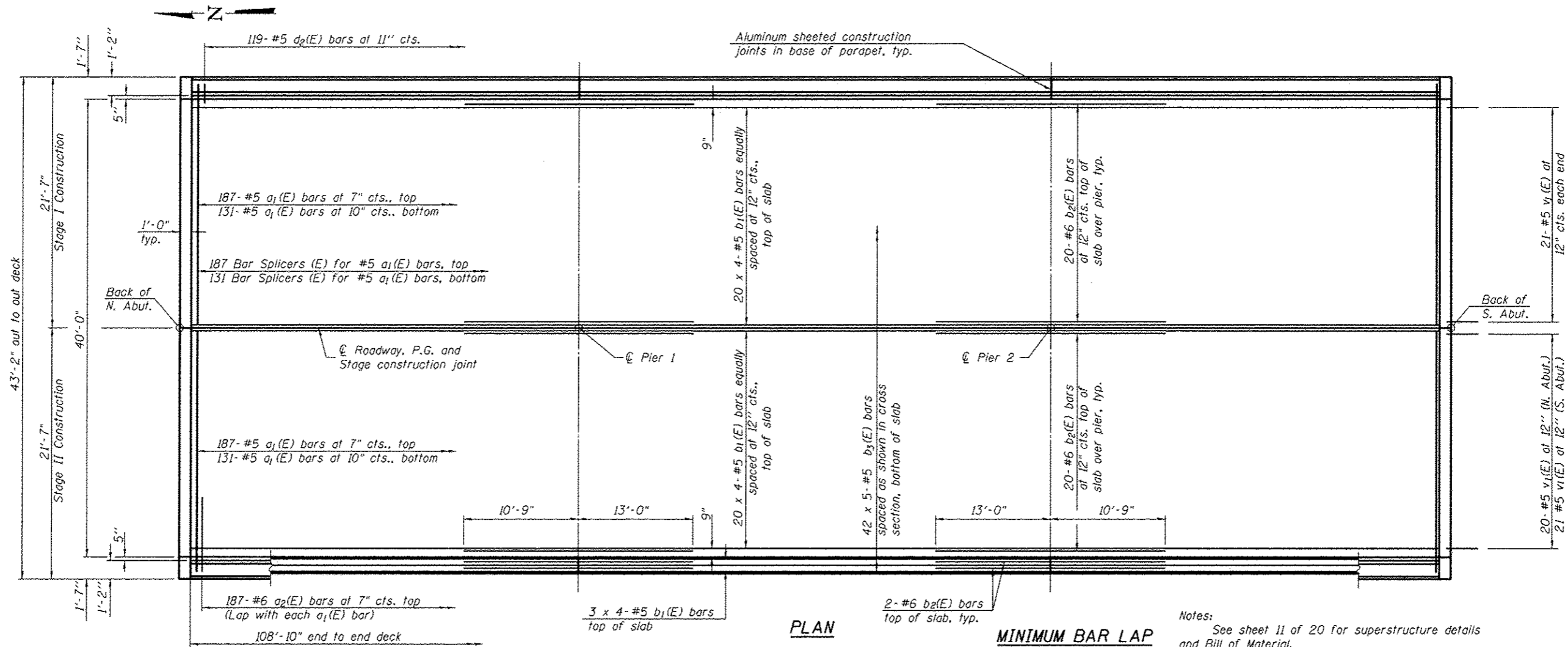
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SOUTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 060-3229

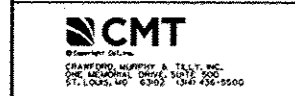
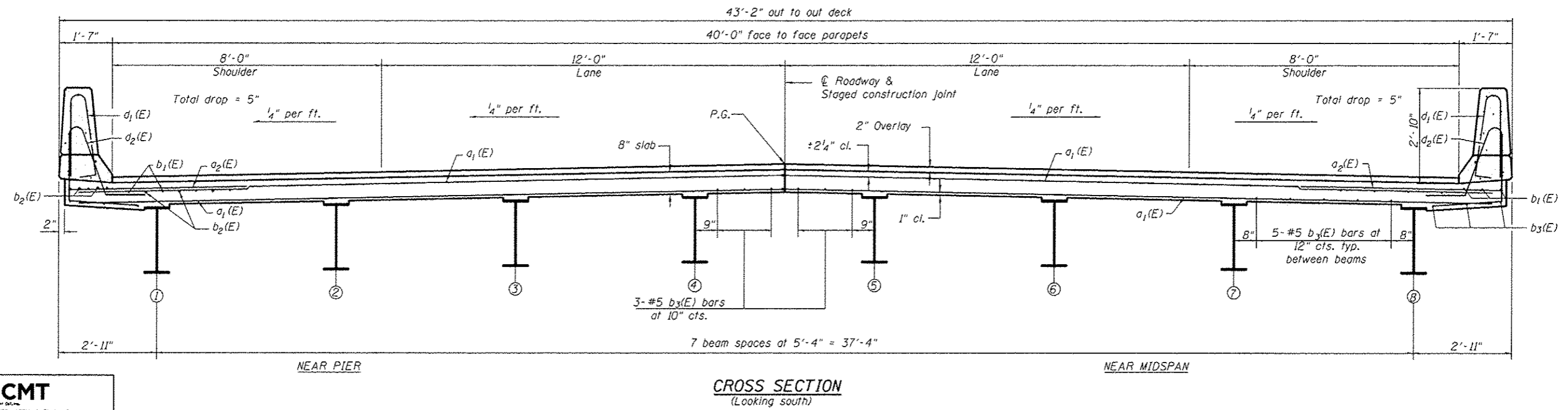
SHEET NO. 9 OF 20 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-BR	MADISON	42	27
CONTRACT NO. 97608			ILLINOIS FED. AID PROJECT	



MINIMUM BAR LAP
#5 bar = 2'-7"

Notes:
See sheet 11 of 20 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3- #5 etc. indicates 20 lines of bars with 3 lengths per line.
See sheet 11 of 20 for parapet reinforcement.

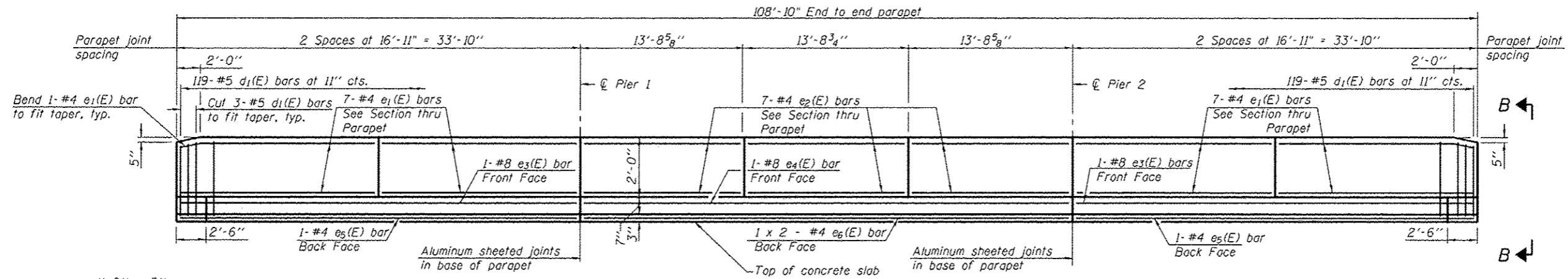


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		DRAWN - DWL	REVISIONS -
		DATE - 8/18/2015	REVISIONS -

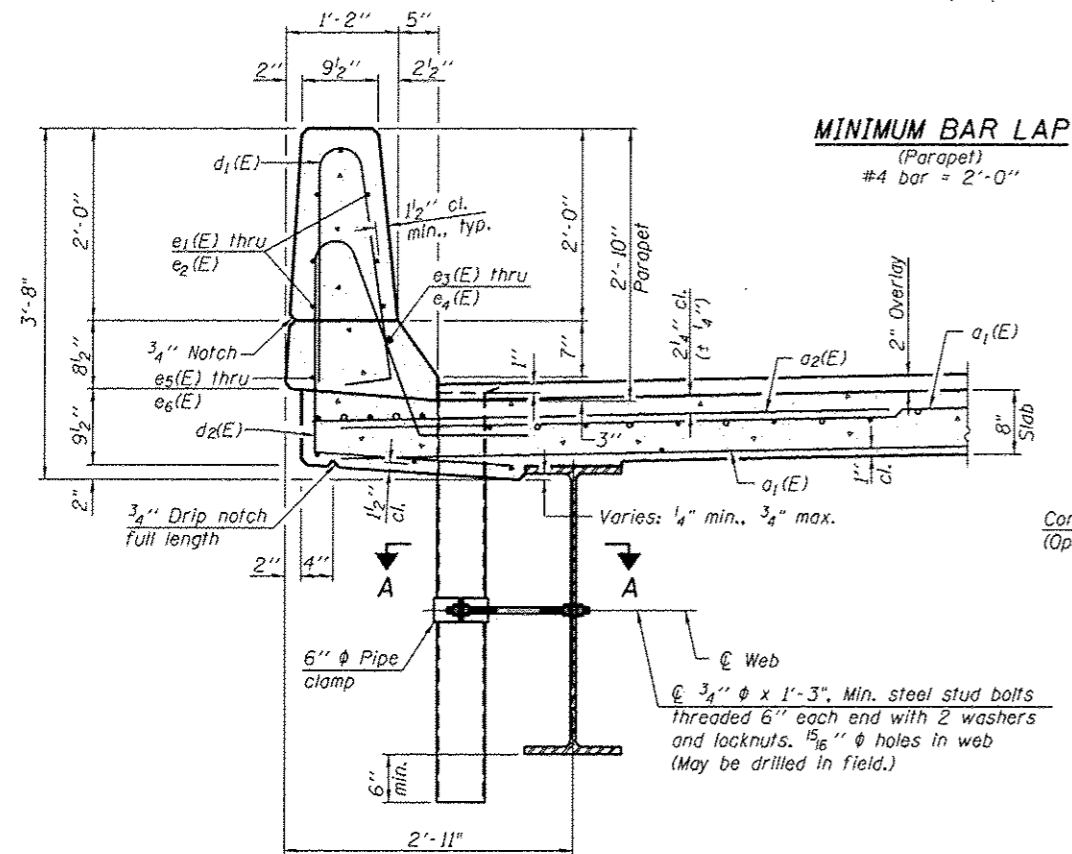
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 060-3229
SHEET NO. 10 OF 20 SHEETS

F.A.U. RTE. 6998	SECTION 13-00125-02-BR	COUNTY MADISON	TOTAL SHEETS 42	SHEET NO. 28
CONTRACT NO. 97608				
ILLINOIS FED. AID PROJECT				



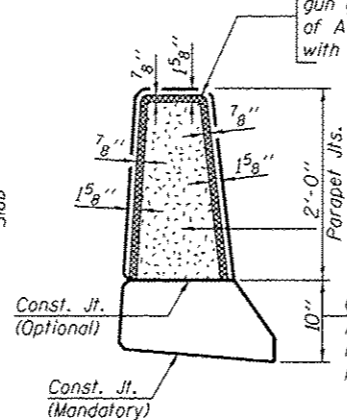
INSIDE ELEVATION OF PARAPET



SECTION THRU PARAPET

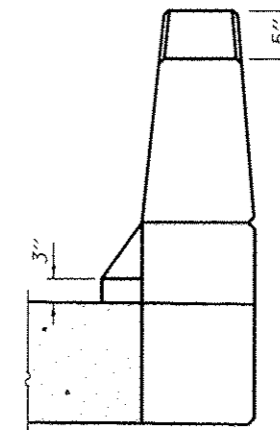
MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-0"

Non-staining gray one component non-sag elastomeric gun grade polyurethane sealant meeting the requirements of ASTM C-920, Type S, Grade NS, Class 25, use T with a 5/8" backer rod.



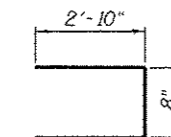
PARAPET JOINT DETAILS

Notes:
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
Galvanize clamping device according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.

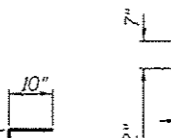


VIEW B-B

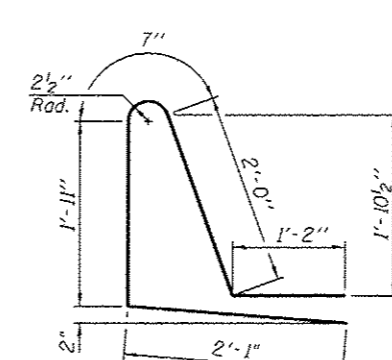
BAR u1(E)



BAR s1(E)



BAR d1(E)



BAR d2(E)

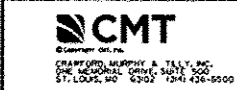
BAR v1(E)

BAR s2(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a1(E)	636	#5	21'-3"	—
a2(E)	374	#6	6'-6"	—
b1(E)	184	#5	29'-3"	—
b2(E)	88	#6	23'-9"	—
b3(E)	210	#5	24'-0"	—
d1(E)	238	#5	5'-7"	┘
d2(E)	238	#5	7'-9"	┘
e1(E)	56	#4	16'-7"	—
e2(E)	42	#4	13'-4"	—
e3(E)	4	#8	33'-6"	—
e4(E)	2	#8	40'-10"	—
e5(E)	4	#4	33'-6"	—
e6(E)	4	#4	21'-6"	—
m1(E)	36	#6	5'-0"	—
m2(E)	24	#6	2'-5"	—
m3(E)	32	#5	4'-0"	—
m4(E)	32	#6	21'-3"	—
s1(E)	96	#5	6'-4"	┘
s2(E)	84	#5	7'-6"	┘
v1(E)	83	#5	3'-1"	┘
u1(E)	88	#4	2'-9"	┘
Reinforcement Bars, Epoxy Coated		Pound		40,020
Concrete Superstructure		Cu. Yds.		166.2

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.



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DESIGNED - JDJ/DWL
CHECKED - REB
DRAWN - DWL
DATE - 8/18/2015

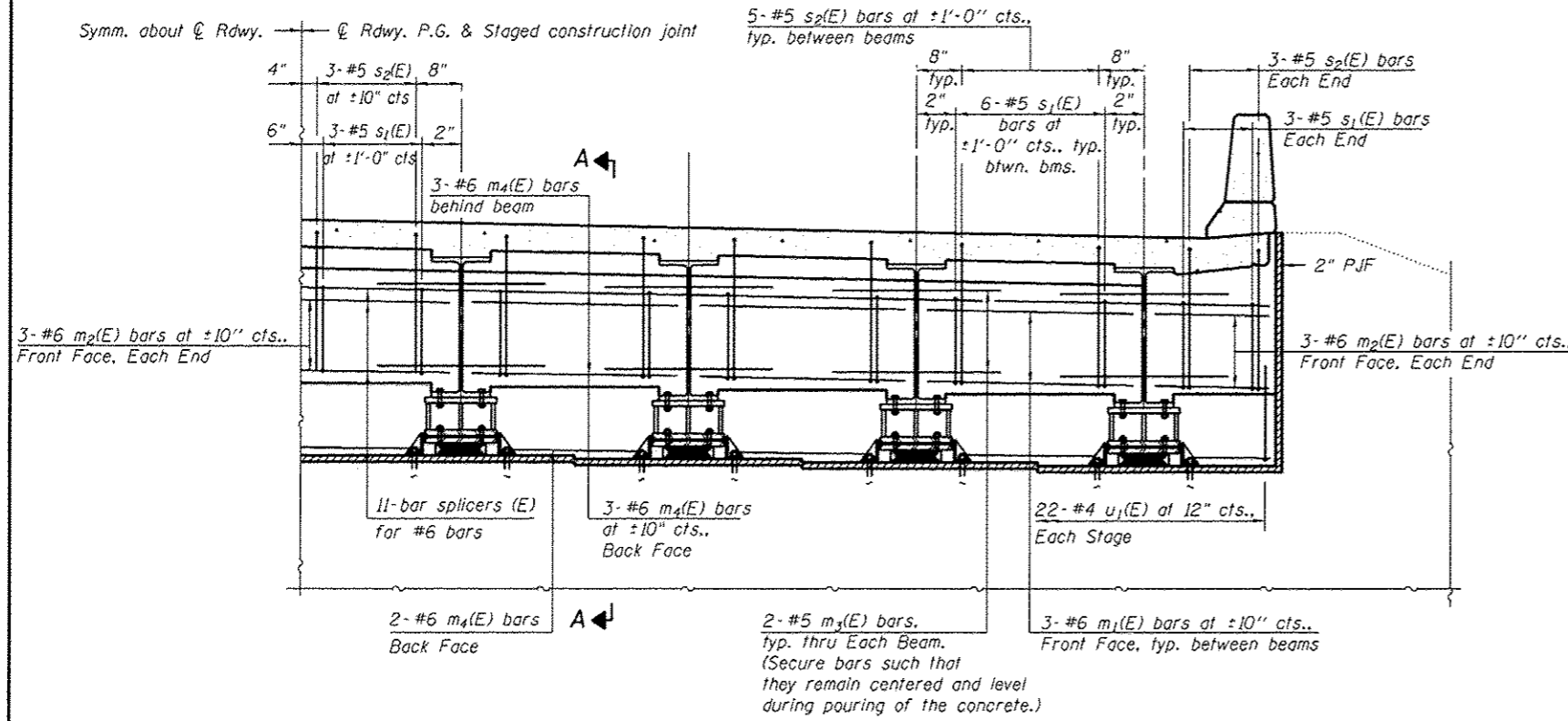
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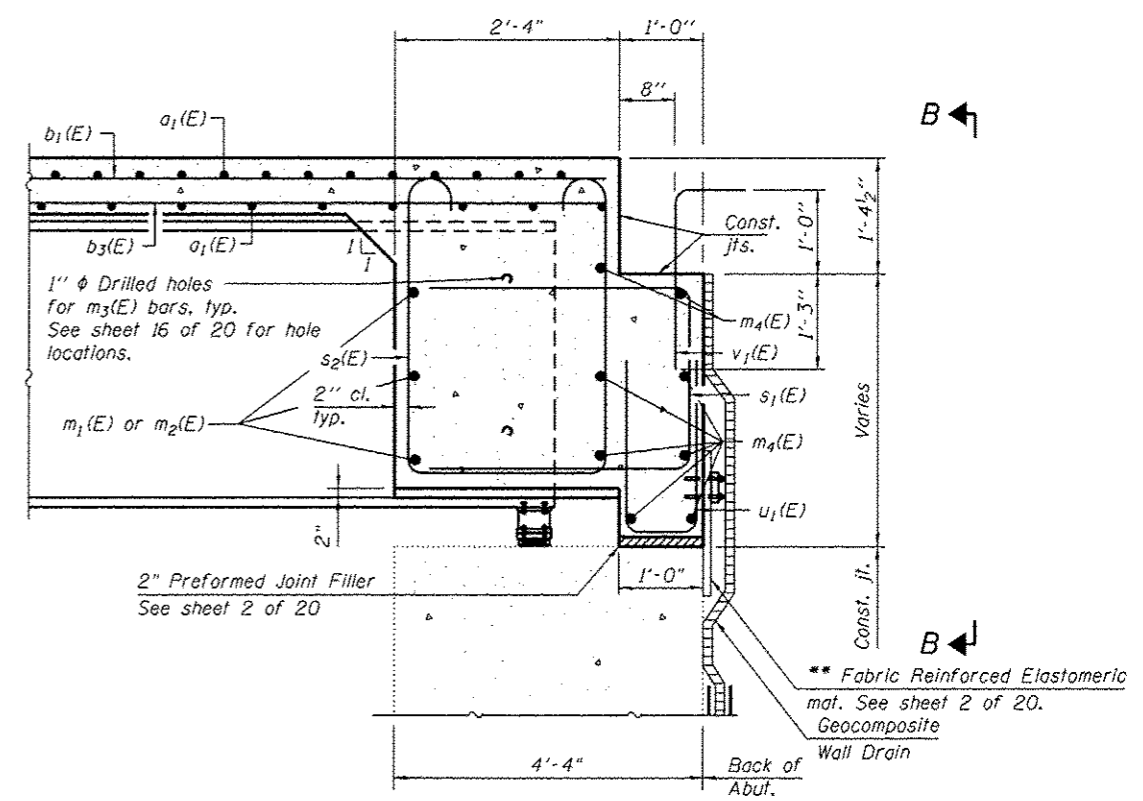
PARAPET DETAILS
STRUCTURE NO. 060-3229

SHEET NO. 11 OF 20 SHEETS

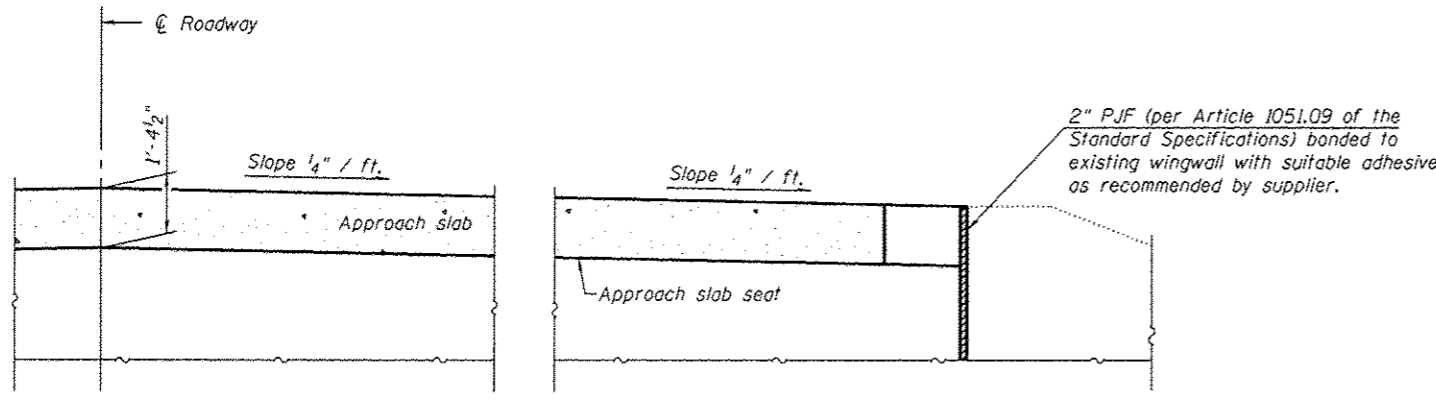
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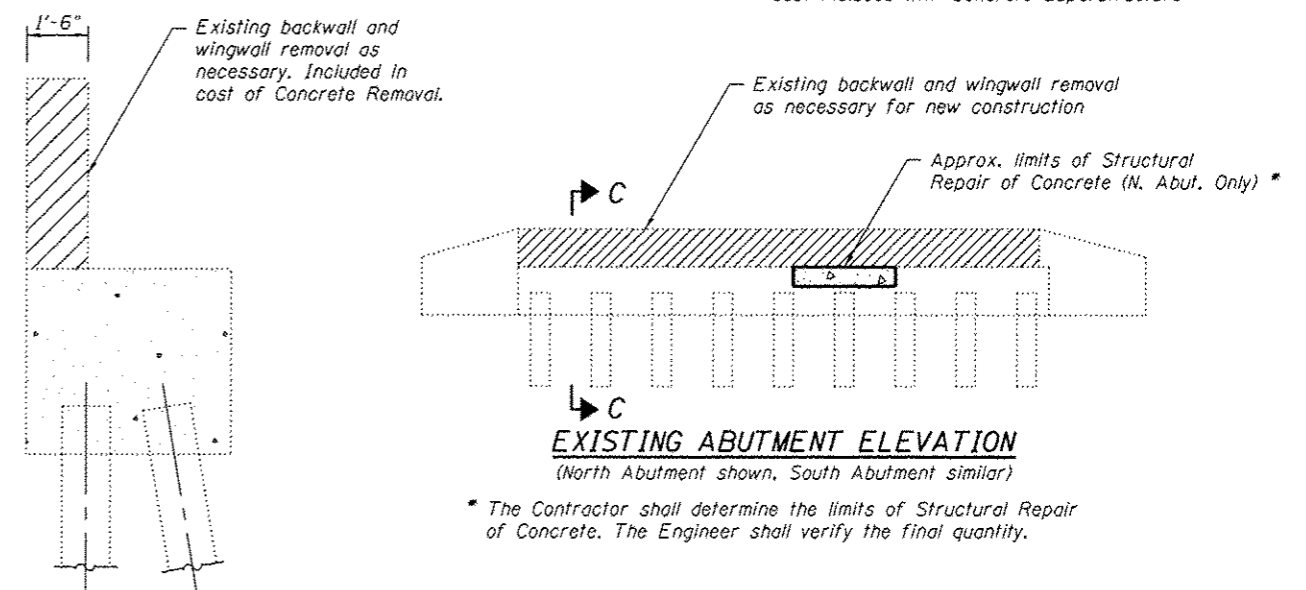
DIAPHRAGM ELEVATION AT ABUTMENT
(Half of diaphragm shown, other half similar)



SECTION A-A



SECTION B-B

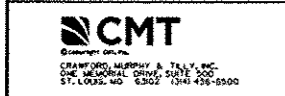


EXISTING ABUTMENT ELEVATION
(North Abutment shown, South Abutment similar)

* The Contractor shall determine the limits of Structural Repair of Concrete. The Engineer shall verify the final quantity.

** Cost included with Concrete Superstructure

Notes:
Reinforcement bars in diaphragm are billed with superstructure on sheet 11 of 20.
Concrete in diaphragm is included with Concrete Superstructure on sheet 11 of 20.
For details of bars s1(E), s2(E), u1(E) and v1(E) see sheet 11 of 20.
For bearing details see sheet 17 of 20.



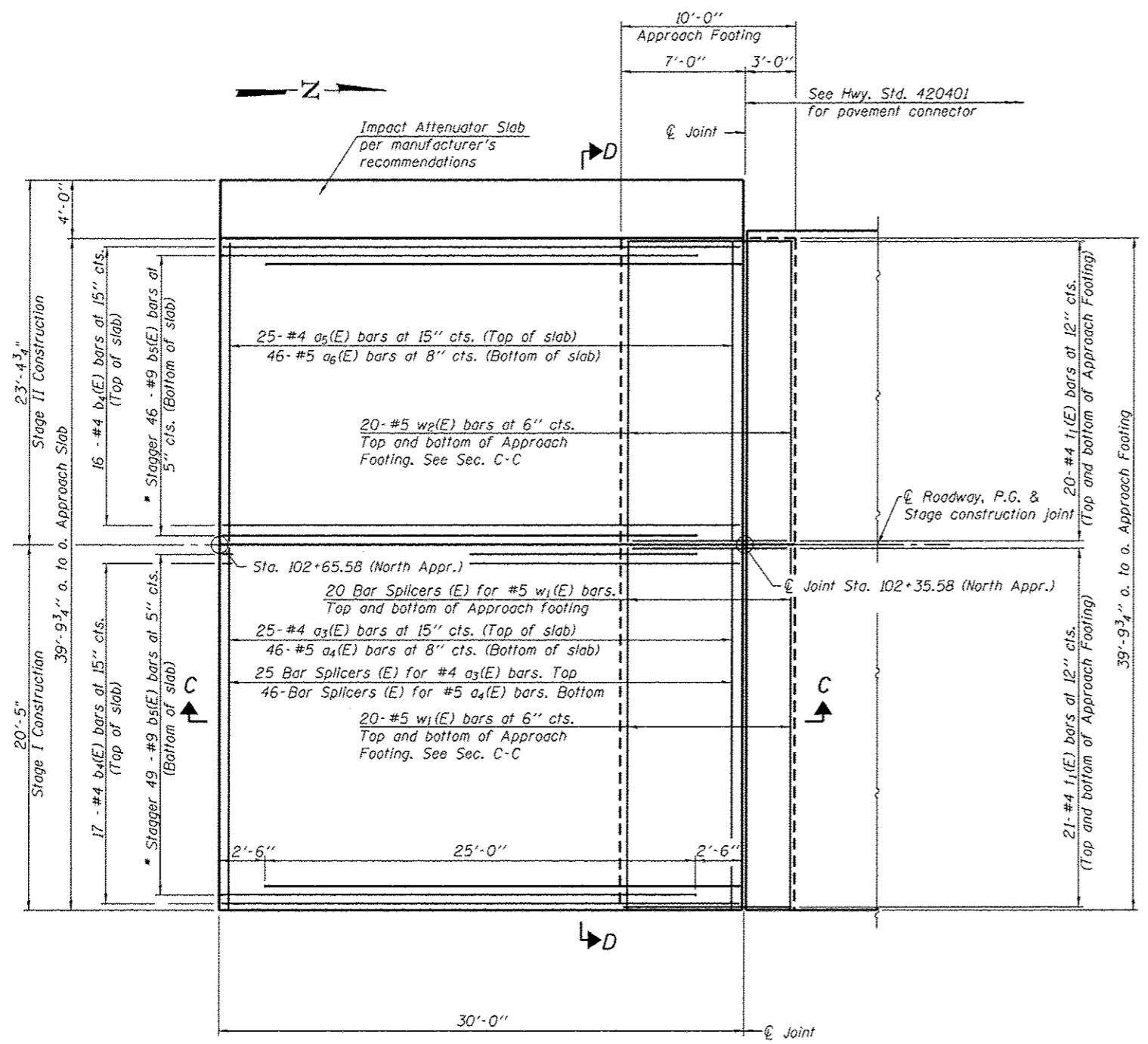
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		DRAWN - DWL	REVISED -
		DATE - 8/18/2015	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS
STRUCTURE NO. 060-3229

SHEET NO. 12 OF 20 SHEETS

F.A.U. RTE. 8998	SECTION 13-00125-02-BR	COUNTY MADISON	TOTAL SHEETS 42	SHEET NO. 30
CONTRACT NO. 97608				
ILLINOIS FED. AID PROJECT				



PLAN

* Tilt #9 b₅(E) bars as required to maintain clearance.

Note:
 Approach slab concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 See sheet 16 of 20 for Section C-C and Section D-D.
 a₃(E) and a₄(E) bar spacings measured along \varnothing Rdwy.

**NORTH APPROACH
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a ₃ (E)	25	#4	20'-1"	—
a ₄ (E)	46	#5	20'-1"	—
a ₅ (E)	25	#4	19'-0"	—
a ₆ (E)	46	#5	19'-0"	—
b ₄ (E)	33	#4	29'-8"	—
b ₅ (E)	95	#9	29'-9"	—
t ₁ (E)	82	#4	9'-8"	—
w ₁ (E)	40	#5	20'-1"	—
w ₂ (E)	40	#5	19'-0"	—
Concrete Superstructure			Cu. Yd.	57.9
Concrete Structures			Cu. Yd.	12.3
Reinforcement Bars, Epoxy Coated			Pound	14,990



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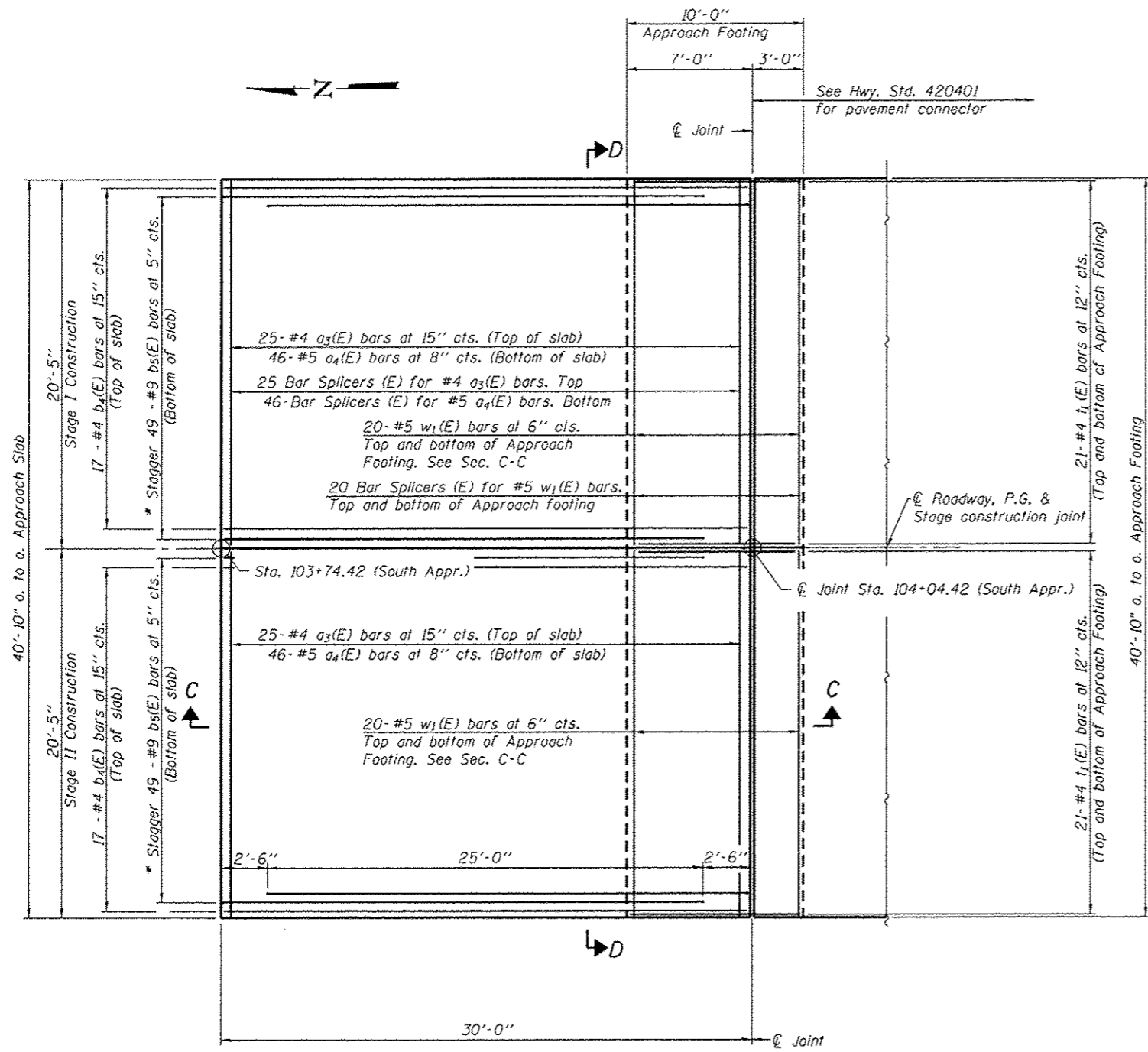
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	DATE - 8/18/2015	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**NORTH BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 060-3229**

SHEET NO. 13 OF 20 SHEETS

F.A.J. RTE. 8998	SECTION 13-00125-02-BR	COUNTY MADISON	TOTAL SHEETS 42	SHEET NO. 31
				CONTRACT NO. 97608
ILLINOIS FED. AID PROJECT				



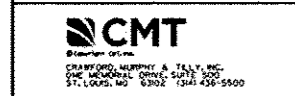
PLAN

* Till #9 bs(E) bars as required to maintain clearance.

Note:
 Approach slab concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 See sheet 16 of 20 for Section C-C and Section D-D.
 a₃(E) and a₄(E) bar spacings measured along $\text{\textcircled{C}}$ Rdwy.

**SOUTH APPROACH
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a ₃ (E)	50	#4	20'-1"	—
a ₄ (E)	92	#5	20'-1"	—
b ₄ (E)	34	#4	29'-8"	—
b ₅ (E)	98	#9	29'-9"	—
i ₁ (E)	84	#4	9'-8"	—
w ₁ (E)	80	#5	20'-1"	—
Concrete Superstructure			Cu. Yd.	59.3
Concrete Structures			Cu. Yd.	12.7
Reinforcement Bars, Epoxy Coated			Pound	15,410



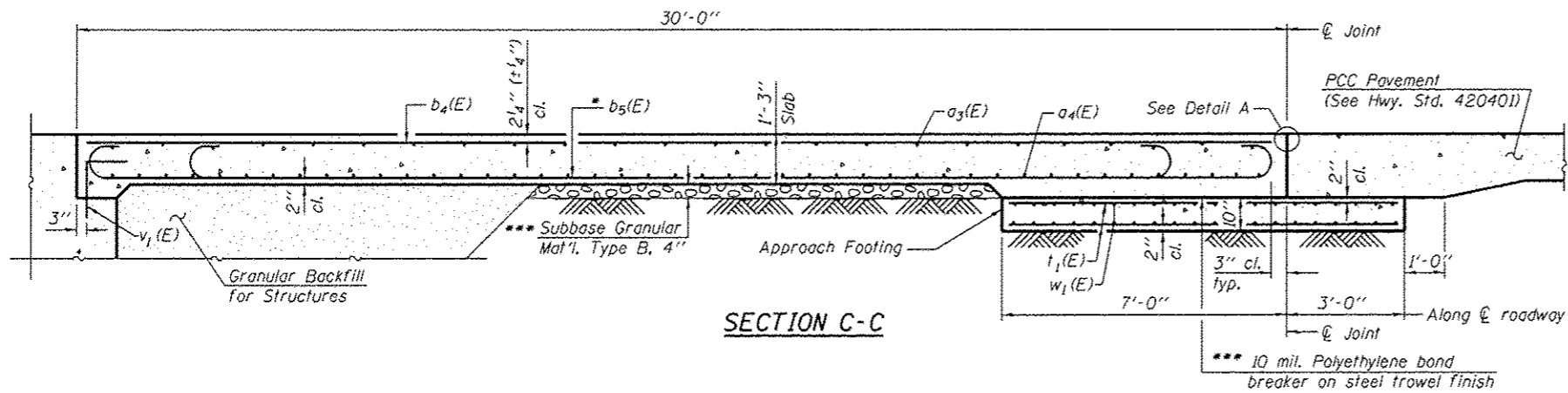
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

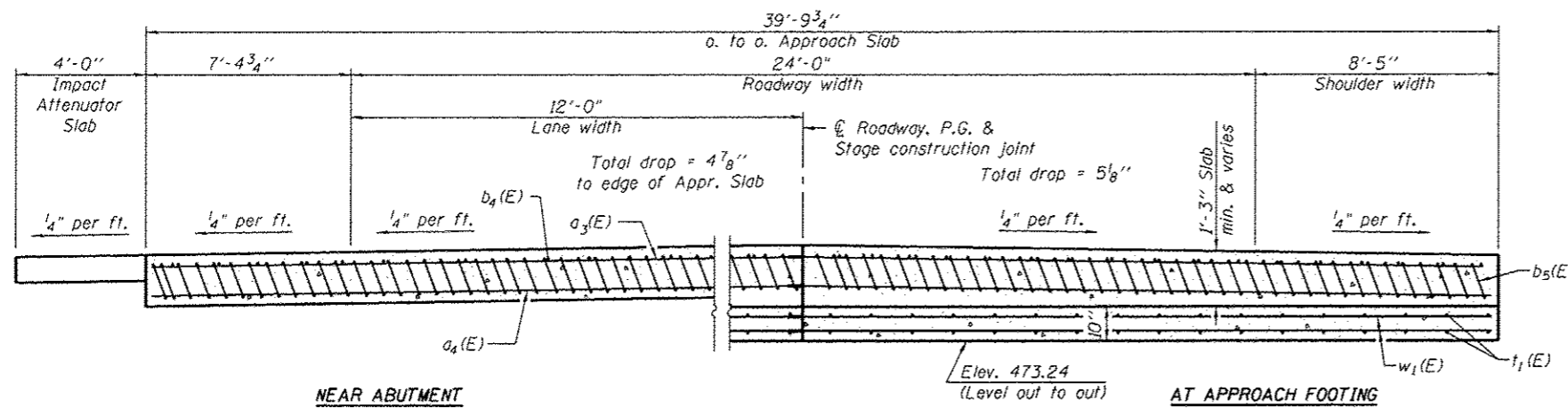
**SOUTH BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 060-3229**

SHEET NO. 14 OF 20 SHEETS

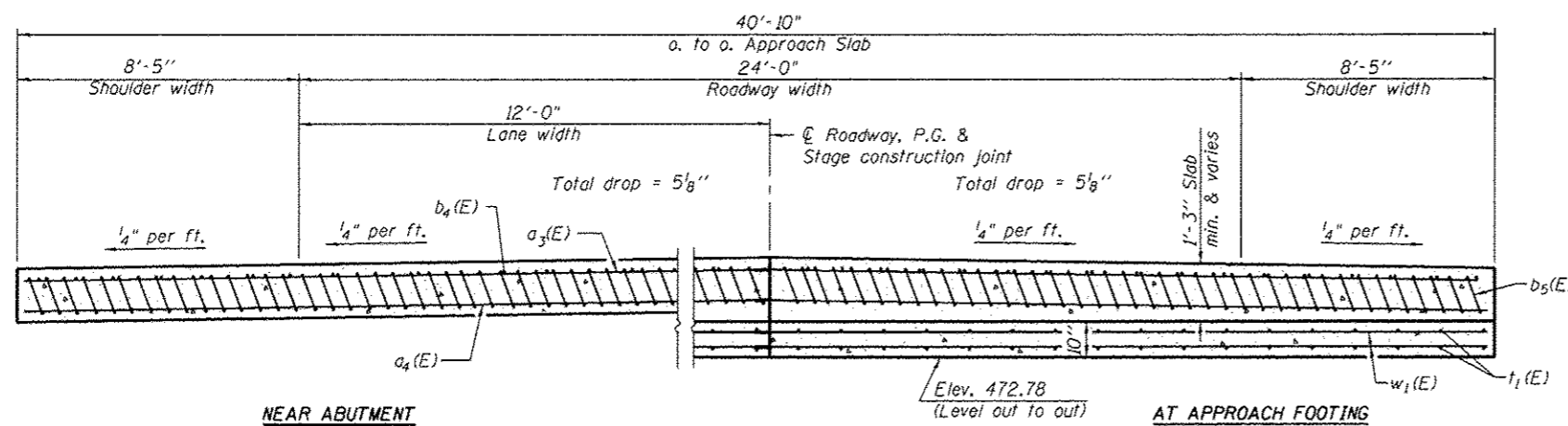
F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-BR	MADISON	42	32
				CONTRACT NO. 97608
[ILLINOIS] FED. AID PROJECT				



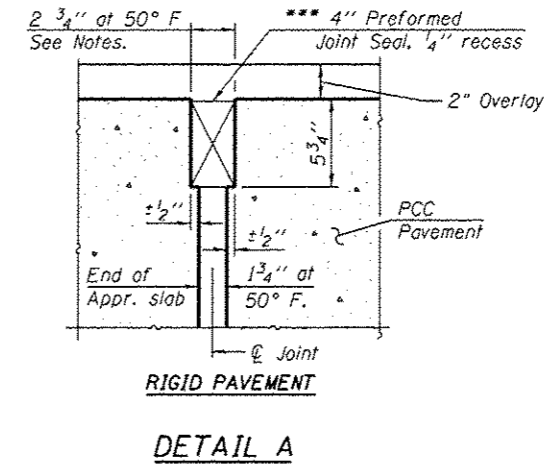
Notes:
 For $v_1(E)$ bar details, see sheet 11 of 20.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 For bar splicer details, see sheet 19 of 20.
 Cast of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 20.
 The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1'2" for installation purposes.
 Overlay not shown on this sheet for clarity.



SECTION D-D - NORTH APPR. SLAB
 (See Plan for dimensions not shown)

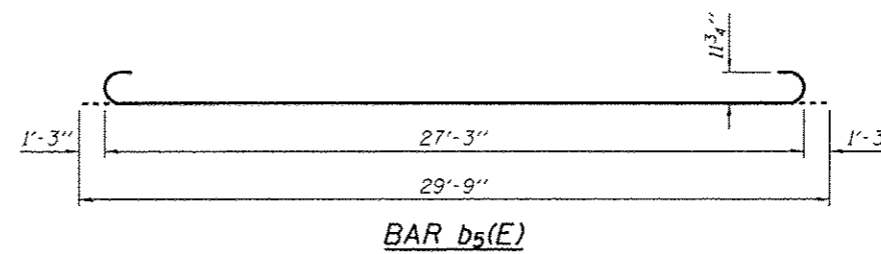
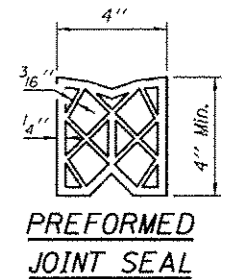


SECTION D-D - SOUTH APPR. SLAB
 (See Plan for dimensions not shown)



RIGID PAVEMENT
 DETAIL A

* Tilt #9 $b_5(E)$ bars as required to maintain clearance.
 *** Cost included with Concrete Superstructure.



BAR $b_5(E)$



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 ONE NATIONAL CENTER DRIVE
 ST. LOUIS, MO 63102-1340 314-436-2900

FILE NAME : L:\Madison_Co\1440183\0-ov\CA00_Sheets\Bridges\0603229-015-APPROACH_SLAB_DETAILS.dgn
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 PLOT SCALE : 8:2.0000 1" = 16'
 PLOT DATE : 8/18/2015

DESIGNED - JDJ/DWL
 CHECKED - REB
 DRAWN - DWL
 DATE - 8/18/2015

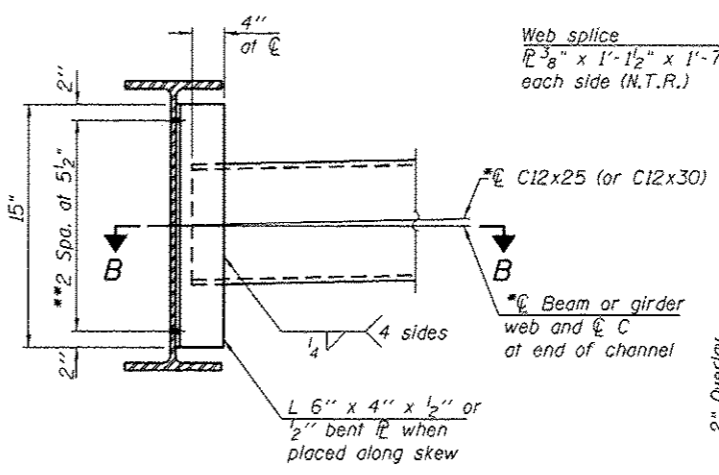
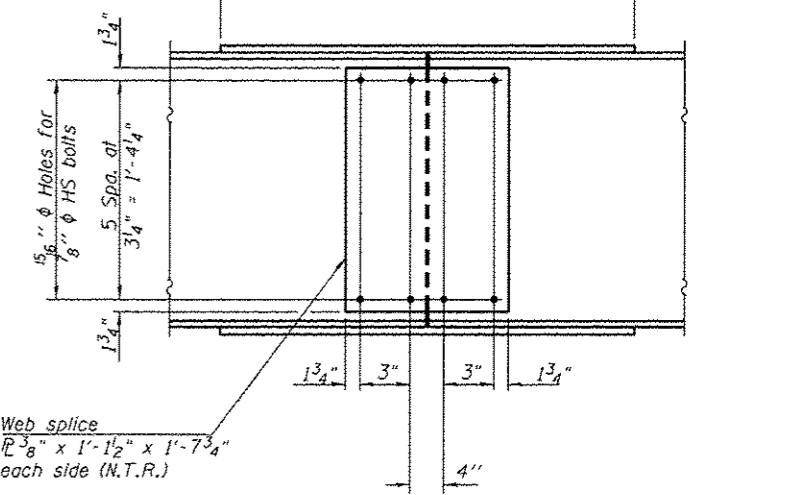
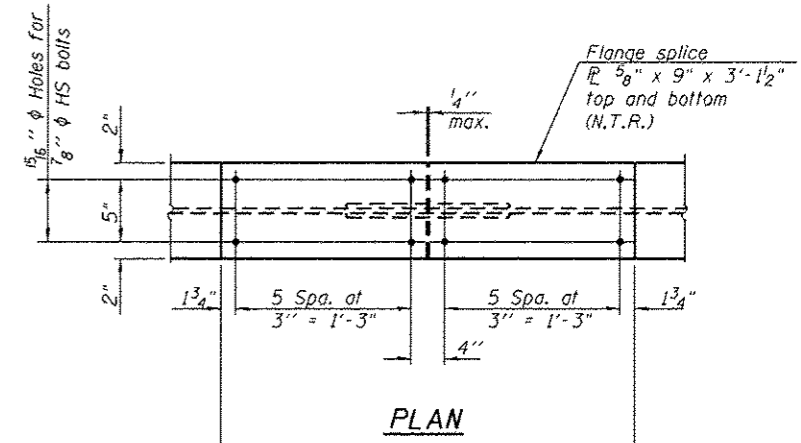
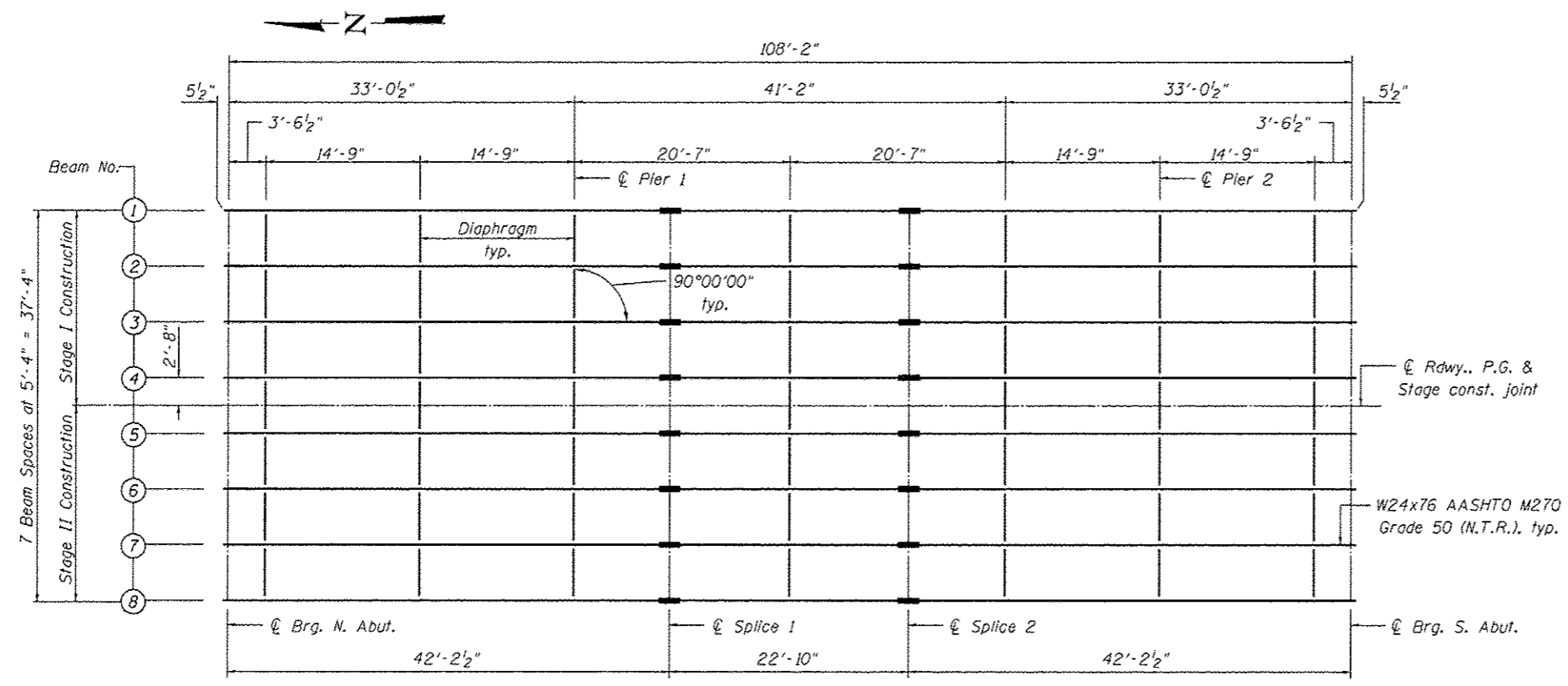
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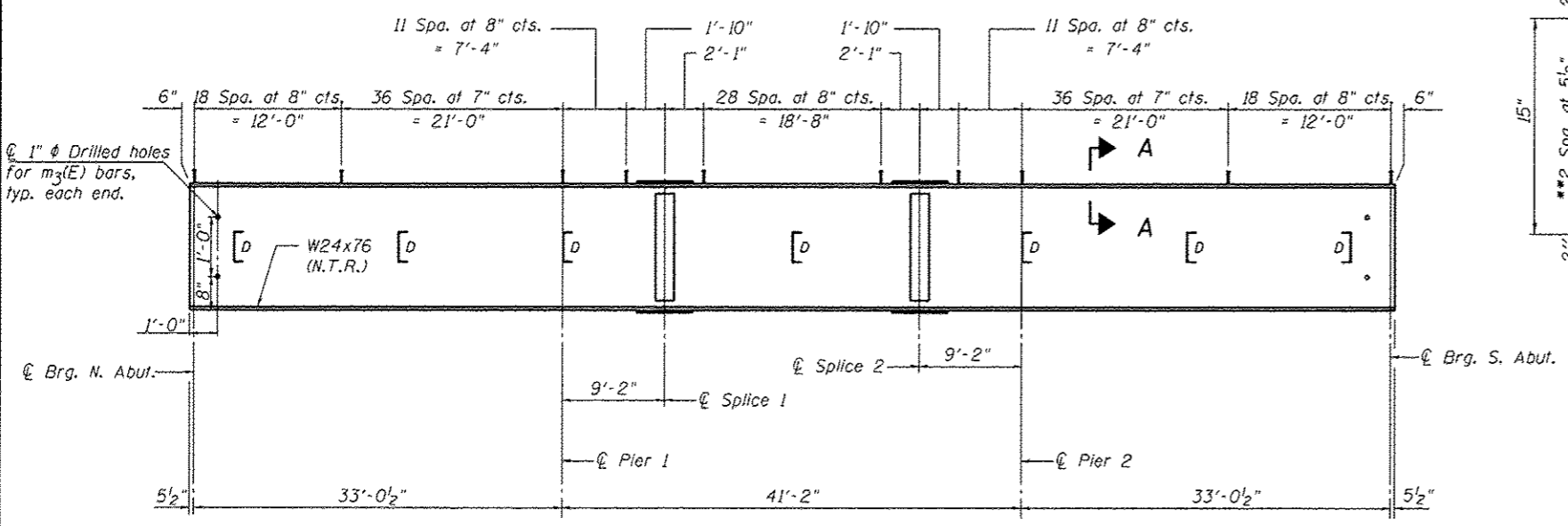
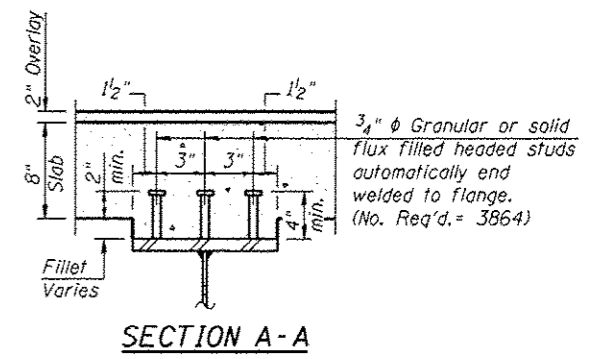
BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 060-3229

SHEET NO. 15 OF 20 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-BR	MADISON	42	33
CONTRACT NO. 97608			[ILLINOIS] FED. AID PROJECT	

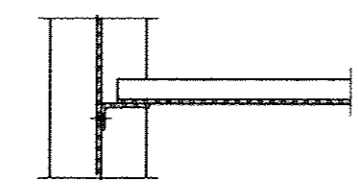


ELEVATION
SPLICE DETAIL
(16 Required)



INTERIOR DIAPHRAGM

Notes:
Two hardened washers required for each set of oversized holes.
Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Department.
3/4" ϕ HS bolts, 15/16" ϕ holes



SECTION B-B

Notes:
All stringers and splice plates shall be AASHTO M270, Grade 50 steel (N.T.R.).
Load carrying components designed "N.T.R." shall conform to the supplemental requirements for notch toughness (Zone 2).
All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

BEAM ELEVATION

TOP OF BEAM ELEVATIONS FOR FABRICATION ONLY

Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6	Beam 7	Beam 8
☉ Brg. N. Abut.	474.76	474.87	474.98	475.08	475.08	474.98	474.87	474.76
☉ Pier 1	474.59	474.70	474.80	474.91	474.91	474.80	474.70	474.59
☉ Splice 1	474.54	474.65	474.76	474.86	474.86	474.76	474.65	474.54
☉ Splice 2	474.45	474.56	474.67	474.77	474.77	474.67	474.56	474.45
☉ Pier 2	474.43	474.53	474.64	474.75	474.75	474.64	474.53	474.43
☉ Brg. S. Abut.	474.34	474.44	474.55	474.66	474.66	474.55	474.44	474.34



FILE NAME : L:\Madison_Co\1448183\Draw\ CADD_Sheets\Bridg\ 0603229-016-FRAMING.dgn

USER NAME : Josh Jolliff
DESIGNED - JDJ/DWL
CHECKED - REB
DRAWN - DWL
DATE - 8/18/2015

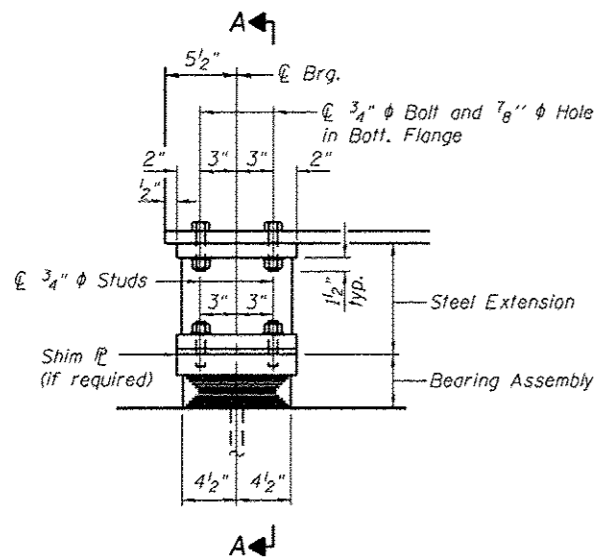
REVISED -
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REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

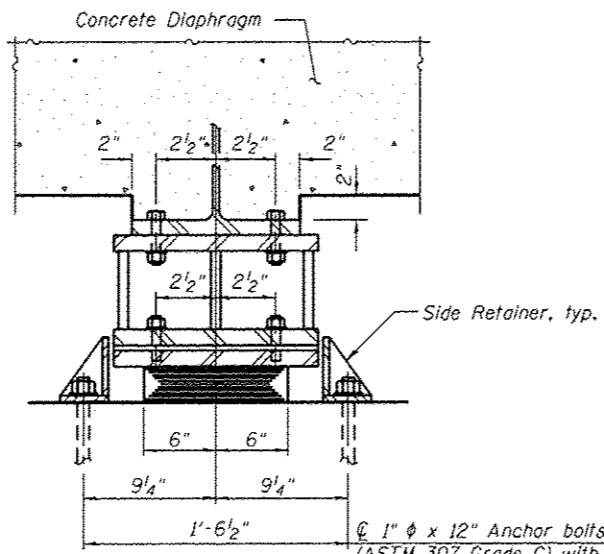
FRAMING PLAN
STRUCTURE NO. 060-3229

SHEET NO. 16 OF 20 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-BR	MADISON	42	34
CONTRACT NO. 97608			ILLINOIS FED. AID PROJECT	

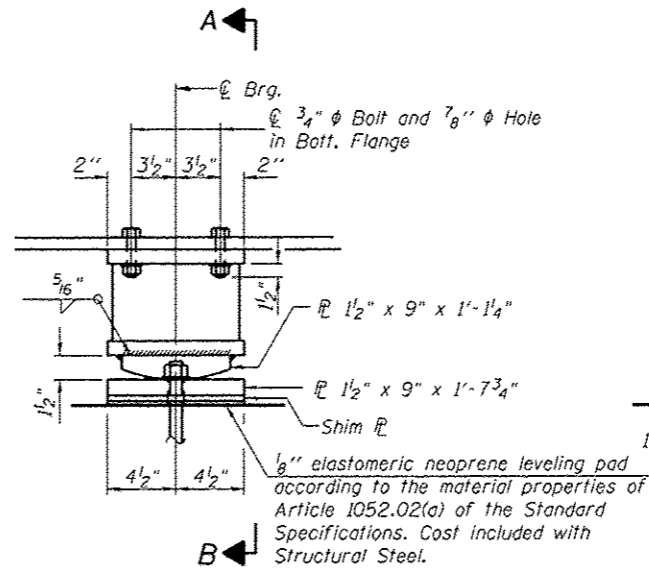


ELEVATION AT ABUT.

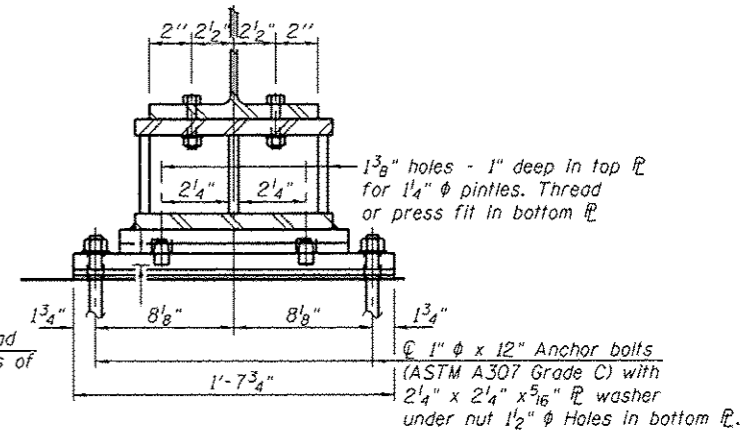


SECTION A-A

ϕ 1" ϕ x 12" Anchor bolts (ASTM 307 Grade C) with 2 1/4" x 2 1/4" x 5/16" ϕ washer under nut



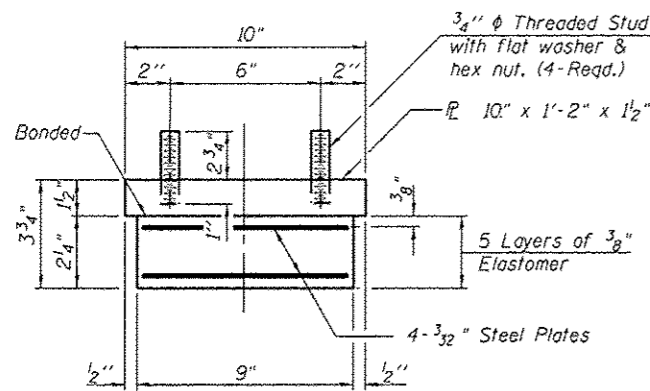
ELEVATION AT PIER



SECTION B-B

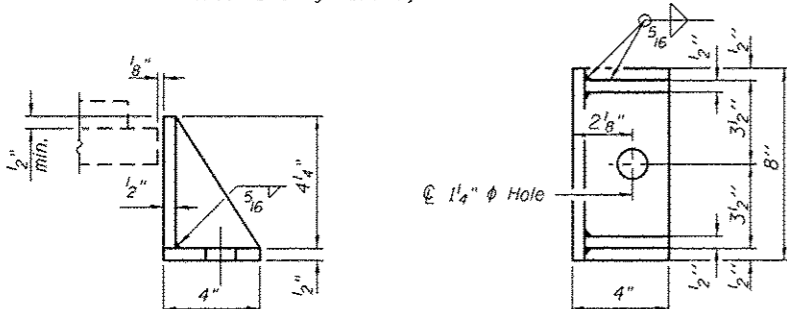
TYPE I ELASTOMERIC EXP. BRG. AT ABUTMENTS

FIXED BEARING AT PIER 1



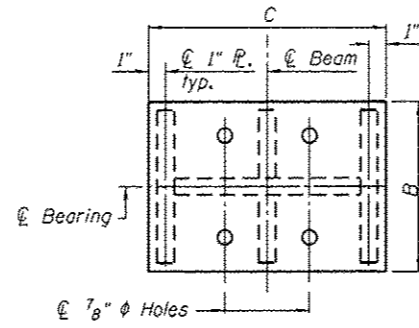
BEARING ASSEMBLY

Note:
 Shim plates shall not be placed under Bearing Assembly.

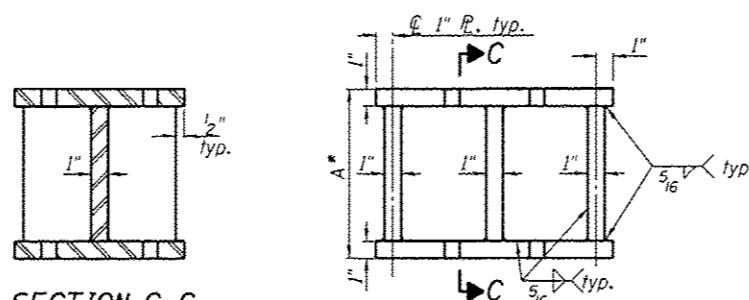


SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PLAN STEEL EXTENSION



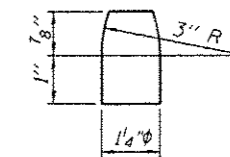
SECTION C-C

ELEVATION STEEL EXTENSION

STEEL EXTENSION DETAILS

Location	Beam	A*	B	C
N. Abut.	Beam 1 & 8	9 3/4"	10"	1'-2"
	Beam 2 & 7	11"		
	Beam 3 & 6	9 3/4"		
	Beam 4 & 5	11"		
Pier 1	Beam 1 & 8	9 1/8"	1'-0"	11"
	Beam 2 & 7	11 1/8"		
	Beam 3 & 6	9 1/8"		
	Beam 4 & 5	11 1/8"		
Pier 2	Beam 1 & 8	9"	11"	1'-4"
	Beam 2 & 7	10 3/8"		
	Beam 3 & 6	9 5/8"		
	Beam 4 & 5	10 3/8"		
S. Abut.	Beam 1 & 8	9 5/8"	10"	1'-2"
	Beam 2 & 7	10 5/8"		
	Beam 3 & 6	9 5/8"		
	Beam 4 & 5	10 5/8"		

* Prior to ordering any material, the contractor shall verify in the field all bearing height and shim thickness dimensions.



PINTLE

Notes:
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts at fixed bearings shall be installed in holes drilled after the supported member is in place.
 Anchor bolts for side retainers may be installed in holes drilled before or after members are in place.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
 For details of bearings at Pier 2, see sheet 18 of 20.
 Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
 All (embedded and separate) bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 as applicable.
 Remove existing bearings and burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolt smooth and seal with epoxy. Cost is incidental to "Removal of Existing Superstructure".

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	16
Anchor Bolts, 1"	Each	24



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 ONE NATIONAL CENTER BUILDING
 ST. LOUIS, MO 63101-2500

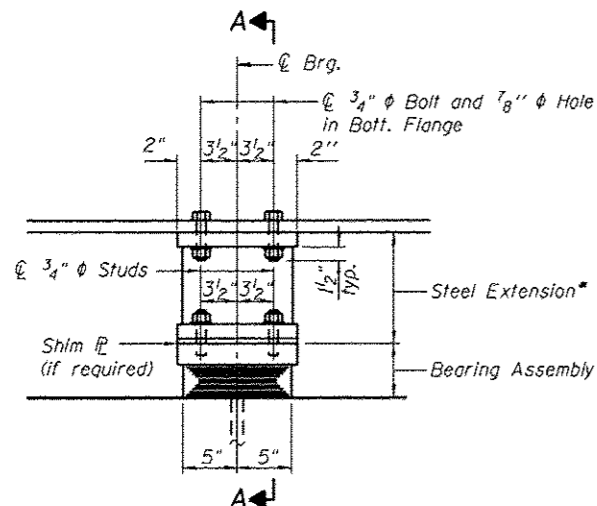
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PLOT SCALE : @2.0000 1" = 10'	DRAWN - DWL	DATE - 8/18/2015	
PLOT DATE : 8/18/2015			

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BEARING DETAILS I
 STRUCTURE NO. 060-3229

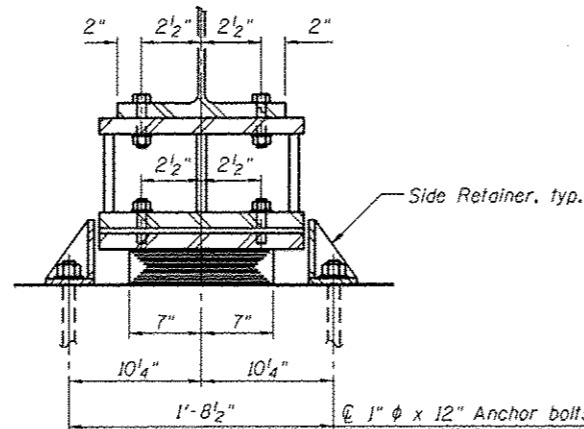
SHEET NO. 17 OF 20 SHEETS

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-BR	MADISON	42	35
				CONTRACT NO. 97608
[ILLINOIS] FED. AID PROJECT				



ELEVATION AT PIER

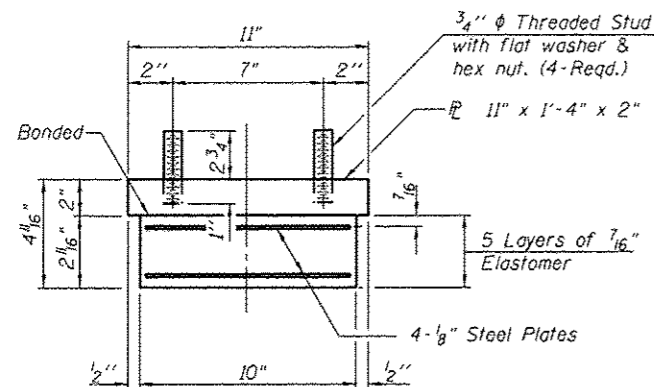
*For steel extension details, see sheet 17 of 20.



SECTION A-A

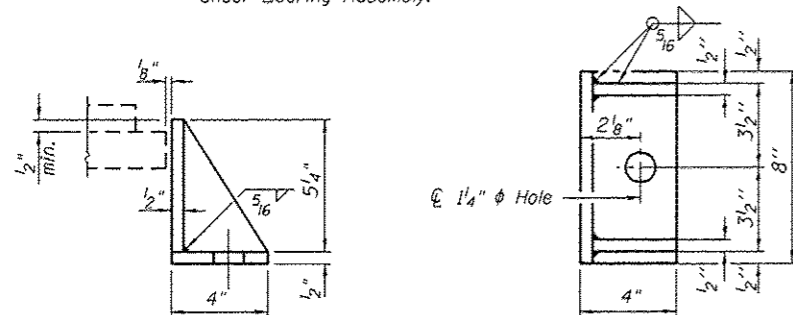
1" x 8 1/2" Anchor bolts (ASTM A307 Grade C) with 2 1/4" x 2 1/4" x 5/16" washer under nut

TYPE I ELASTOMERIC EXP. BRG. AT PIER 2



BEARING ASSEMBLY

Note: Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

INTERIOR GIRDER MOMENT TABLE			
	0.4 Sp. 1 or 0.6 Sp. 3	Pier	0.5 Sp. 2
I_s	(in ⁴) 2100	2100	2100
$I_c(n)$	(in ⁴) 6866	6866	6866
$I_c(3n)$	(in ⁴) 5065	5065	5065
$I_c(cr)$	(in ⁴) -	3333	-
S_s	(in ³) 176	176	176
$S_c(n)$	(in ³) 288	288	288
$S_c(3n)$	(in ³) 258	258	258
$S_c(cr)$	(in ³) -	220	-
DC1	(k/ft.) 0.659	0.659	0.659
MDC1	(k) 51	-94	49
DC2	(k/ft.) 0.113	0.113	0.113
MDC2	(k) 8	-16	8
DW	(k/ft.) 0.125	0.125	0.125
M _{DW}	(k) 9	-17	9
$M_k + IM$	(k) 240	-234	239
M_u (Strength I)	(k) 507	-573	502
$\phi_r M_n$	(k) 1503	799	1505
f_s DC1	(ksi) 3.48	6.41	3.34
f_s DC2	(ksi) 0.37	0.74	0.37
f_s DW	(ksi) 0.42	0.79	0.42
f_s (k + IM)	(ksi) 10.00	9.75	9.96
f_s (Service II)	(ksi) 17.27	20.62	17.08
0.95 R _n F	(ksi) 47.50	47.50	47.50
f_s (Total)(Strength I)	(ksi) -	-	-
$\phi_r F_n$	(ksi) -	-	-
V _r	(k) 14.07	15.10	12.35

INTERIOR GIRDER REACTION TABLE		
	Abut.	Pier
R _{DC1}	(k) 9.1	27.8
R _{DC2}	(k) 1.4	4.7
R _{DW}	(k) 1.5	5.2
R _{k + IM}	(k) 44.3	69.7
R _{Total}	(k) 56.3	107.4

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts for side retainers may be installed in holes drilled before or after members are in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

All (embedded and separate) bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 as applicable.

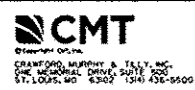
Remove existing bearings and burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolt smooth and seal with epoxy. Cost is incidental to "Removal of Existing Superstructure".

- I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in⁴ and in³).
- $I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in⁴ and in³).
- $I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in⁴ and in³).
- $I_c(cr), S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in⁴ and in³).
- DC1: Un-factored non-composite dead load (kips/ft.).
- MDC1: Un-factored moment due to non-composite dead load (kip-ft.).
- DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
- MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- DW: Un-factored long-term composite (superimposed wearing surface only) dead load (kips/ft.).
- M_{DW}: Un-factored moment due to long-term composite (superimposed wearing surface only) dead load (kip-ft.).
- $M_k + IM$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
- M_u (Strength I): Factored design moment (kip-ft.).
- $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_k + IM$
- $\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).
- f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
- M_{DC1} / S_{nc}
- f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
- $M_{DC2} / S_c(3n)$ or $M_{DC2} / S_c(cr)$ as applicable.
- f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite wearing surface loads as calculated below (ksi).
- $M_{DW} / S_c(3n)$ or $M_{DW} / S_c(cr)$ as applicable.
- f_s (k + IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
- $M_k + IM / S_c(n)$ or $M_{DW} / S_c(cr)$ as applicable.
- f_s (Service II): Sum of stresses as computed below (ksi).
- $f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_s (k + IM)$
- 0.95 R_n F_y: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).
- f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
- $1.25 (f_{sDC1} + f_{sDC2}) + 1.5 f_{sDW} + 1.75 f_s (k + IM)$
- $\phi_r F_n$: Non-compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).
- V_r: Maximum factored shear range in span computed according to Article 6.10.10.

Note: M_k and R_k include the effects of centrifugal force and superelevation.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	8
Anchor Bolts, 1"	Each	16



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 PLOT DATE: 8/18/2015

DESIGNED: JDJ/DWL
 CHECKED: REB
 DRAWN: DWL
 DATE: 8/18/2015

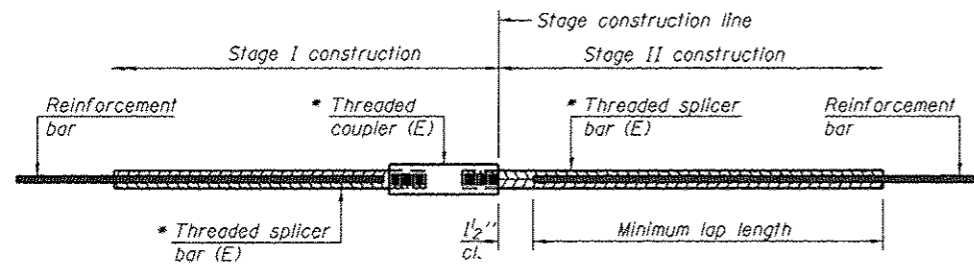
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BEARING DETAILS II
 STRUCTURE NO. 060-3229

SHEET NO. 18 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
899B	13-00125-02-BR	MADISON	42	36
				CONTRACT NO. 9760B
ILLINOIS FED. AID PROJECT				



STANDARD BAR SPLICER ASSEMBLY

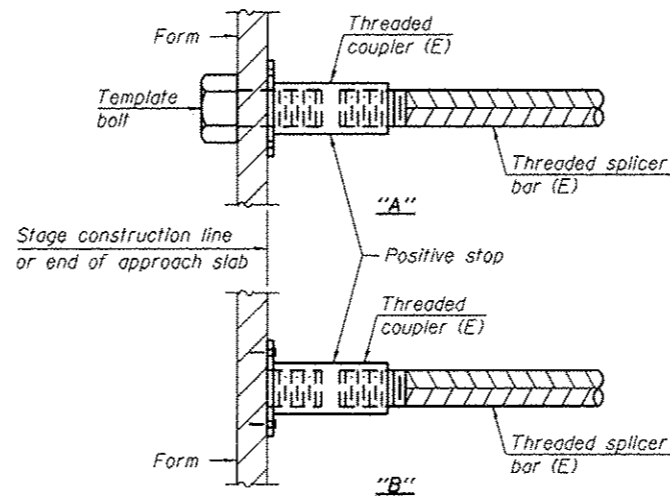
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1/2" + thread length

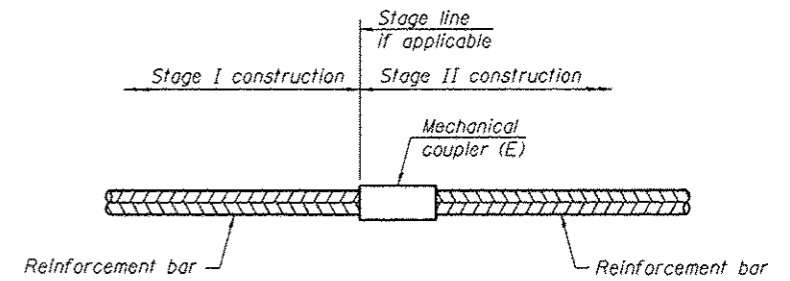
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Deck	#5	318	Table 3
N. Appr. Slab	#4	25	Table 4
N. Appr. Slab	#5	46	Table 3
S. Appr. Slab	#4	25	Table 4
S. Appr. Slab	#5	46	Table 3
N. Footing	#6	40	Table 3
S. Footing	#6	40	Table 3
N. Diaphragm	#6	11	Table 4
S. Diaphragm	#6	11	Table 4



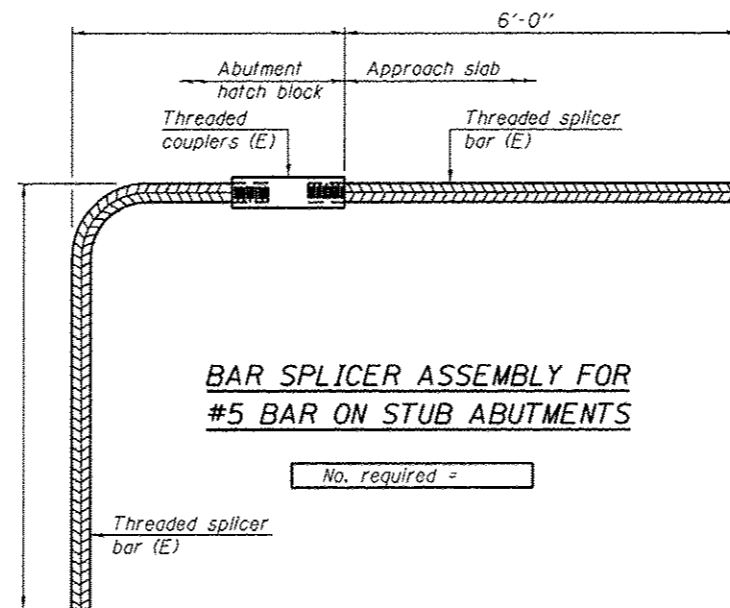
INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt.
 "B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.



CRAWFORD MURPHY & TILLY, INC.
 THE NATIONAL CENTER FOR
 ST. LOUIS, MO 63103 314-456-5600

FILE NAME =
 L:\Madison_Co\1448183\Draw\
 CAD00_Sheets\Bridges\
 0603229-019-BAR_SPLICER_ASSEM_DET.dgn

USER NAME = Josh Joliff

DESIGNED - JDJ/DWL
 CHECKED - REB
 DRAWN - DWL

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

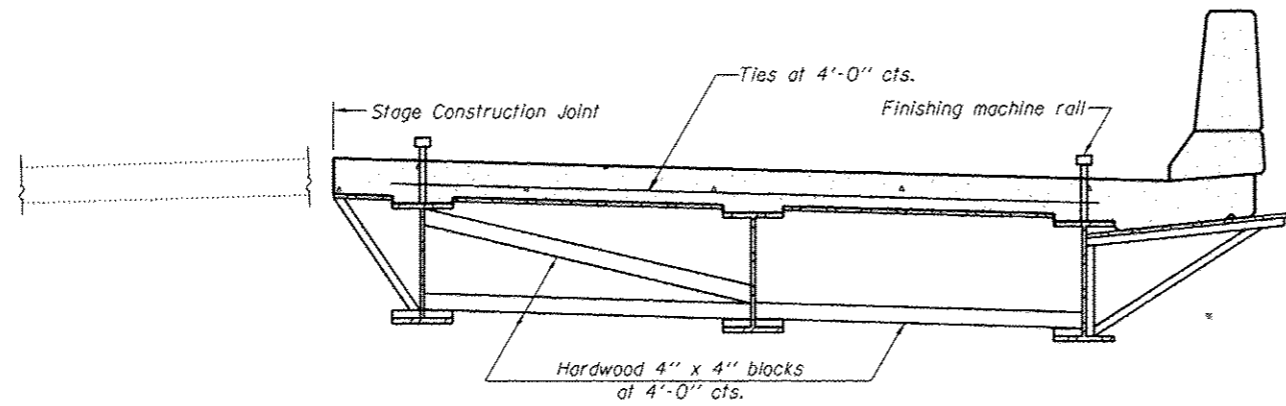
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO. 060-3229

SHEET NO. 19 OF 20 SHEETS

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
B998	13-00125-02-BR	MADISON	42	37

CONTRACT NO. 97608

ILLINOIS FED. AID PROJECT



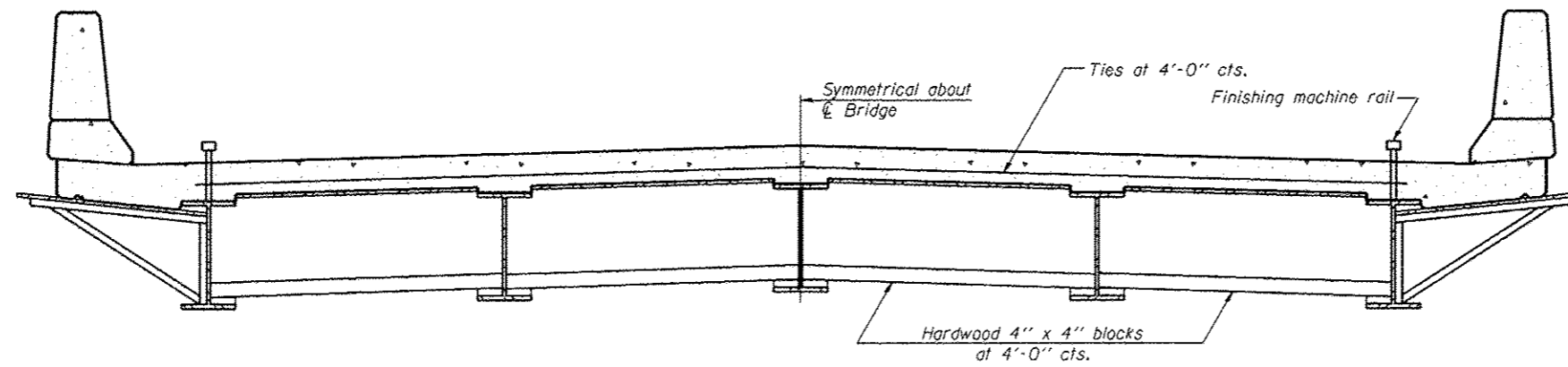
**FORM BRACES FOR
STAGE CONSTRUCTION**

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.

The finishing machine rails shall be placed on the top flange of the exterior beams.

The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.

For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.



**FORM BRACES FOR
STANDARD CONSTRUCTION**



CRAWFORD, MURPHY & TULLY, INC.
ONE NATIONAL CENTER, SUITE 500
ST. LOUIS, MO 63102-1314 314-436-4500

FILE NAME =
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CADD_Sheets\Bridge\
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DESIGNED - JDJ/DWL
CHECKED - REB
DRAWN - DWL
DATE - 8/18/2015

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CANTILEVER FORMING BRACKETS FOR SUPERSTRUCTURES
WITH W27 BEAMS AND SMALLER, STRUCTURE NO. 060-3229**

SHEET NO. 20 OF 20 SHEETS

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-BR	MADISON	42	38
			CONTRACT NO. 97608	

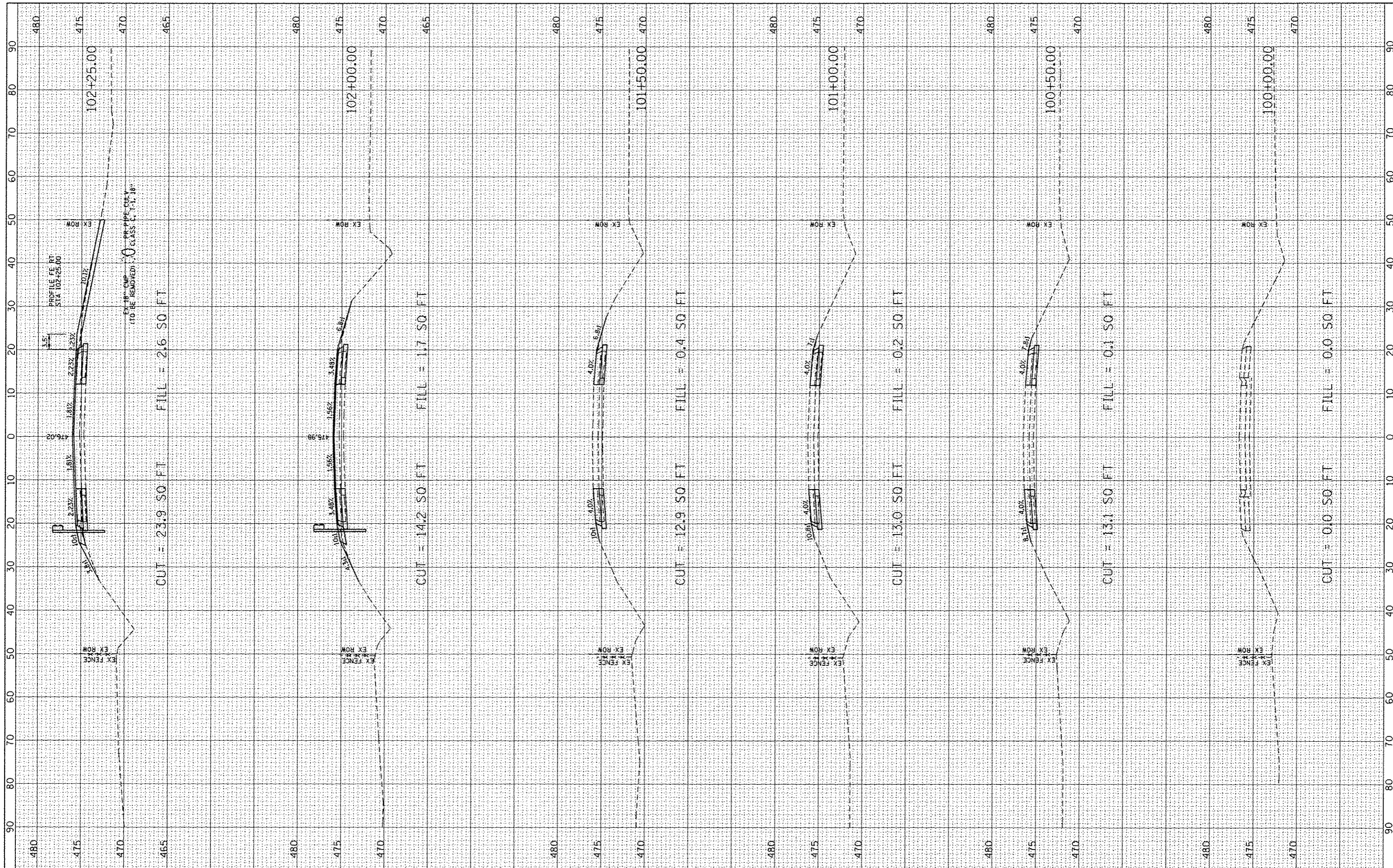
ILLINOIS FED. AID PROJECT

FINAL SURVEY
 CHECKED
 NOTED
 TEMPLATE
 NOTE BOOK
 AREAS
 NO.

BY _____ DATE _____

ORIGINAL SURVEY
 CHECKED
 PLOTTED
 TEMPLATE
 NOTE BOOK
 AREAS
 NO.

BY _____ DATE _____



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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

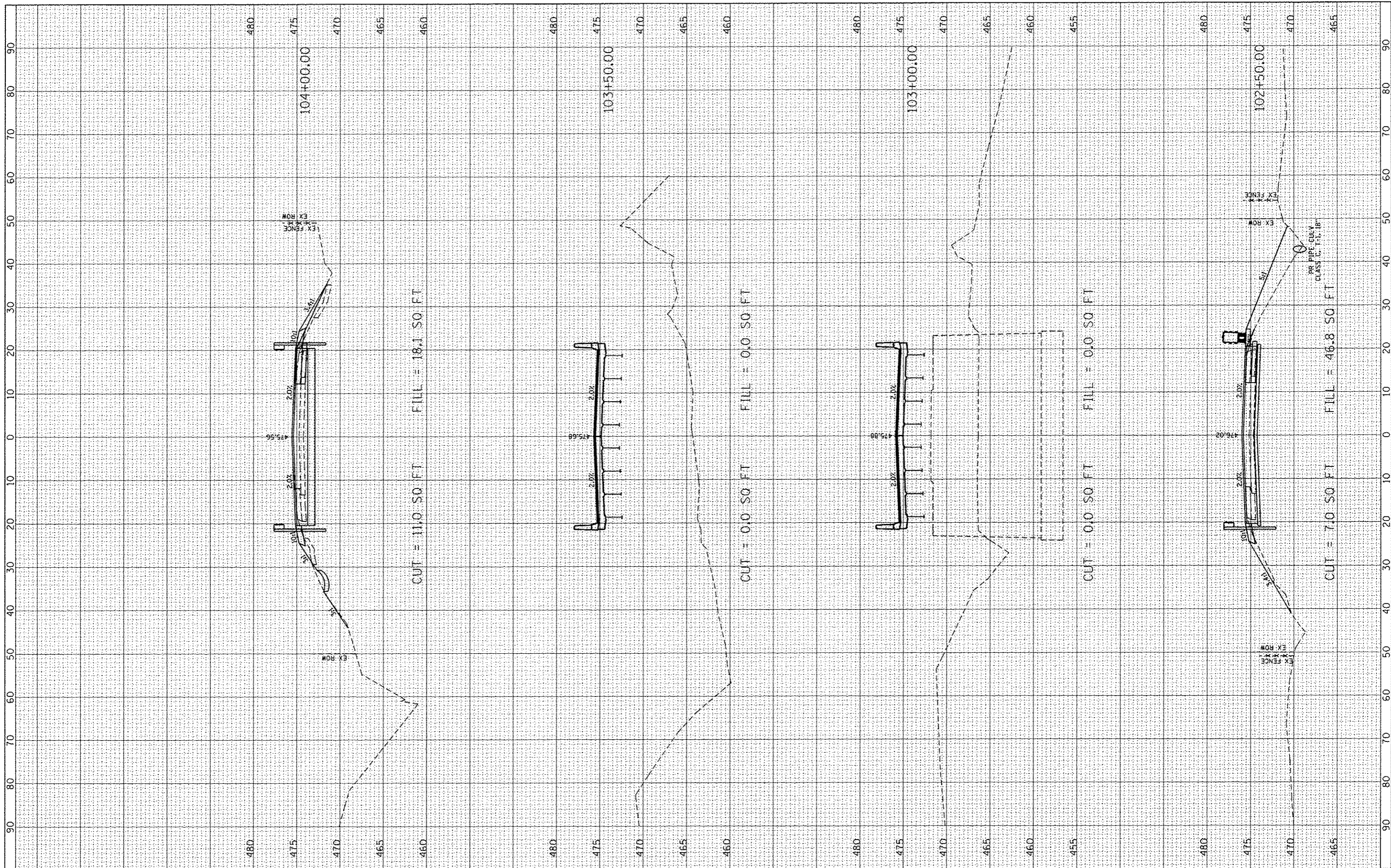
**CROSS SECTION
 SEMINARY ROAD**

SCALE: 1/4" = 1' - 0" / 1" = 5' SHEET 1 OF 4 SHEETS STA. 100+00.00 TO STA. 102+00.00

F.A.U. RTE. 8998	SECTION 13-00125-02-BR	COUNTY MADISON	TOTAL SHEETS 42	SHEET NO. 39
				CONTRACT NO. 97608
ILLINOIS FED. AID PROJECT				

FINL	SURVEYED	DATE
SOFTY	PLOTTED	BY
NOTE BOOK	TEMPLATE	
NO.	AREAS CHECKED	

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



FILE NAME =
 L:\MadisonCounty\144816380\Draw\CADD_Sheets\03-042_Cross_Sections.dgn

USER NAME = Jack Blakemore
 DESIGNED - JWB
 DRAWN - A.JK
 CHECKED - ARS
 DATE - 8/17/2015

REVISIONS:
 REVISION NO. | DESCRIPTION
 1 |
 2 |
 3 |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

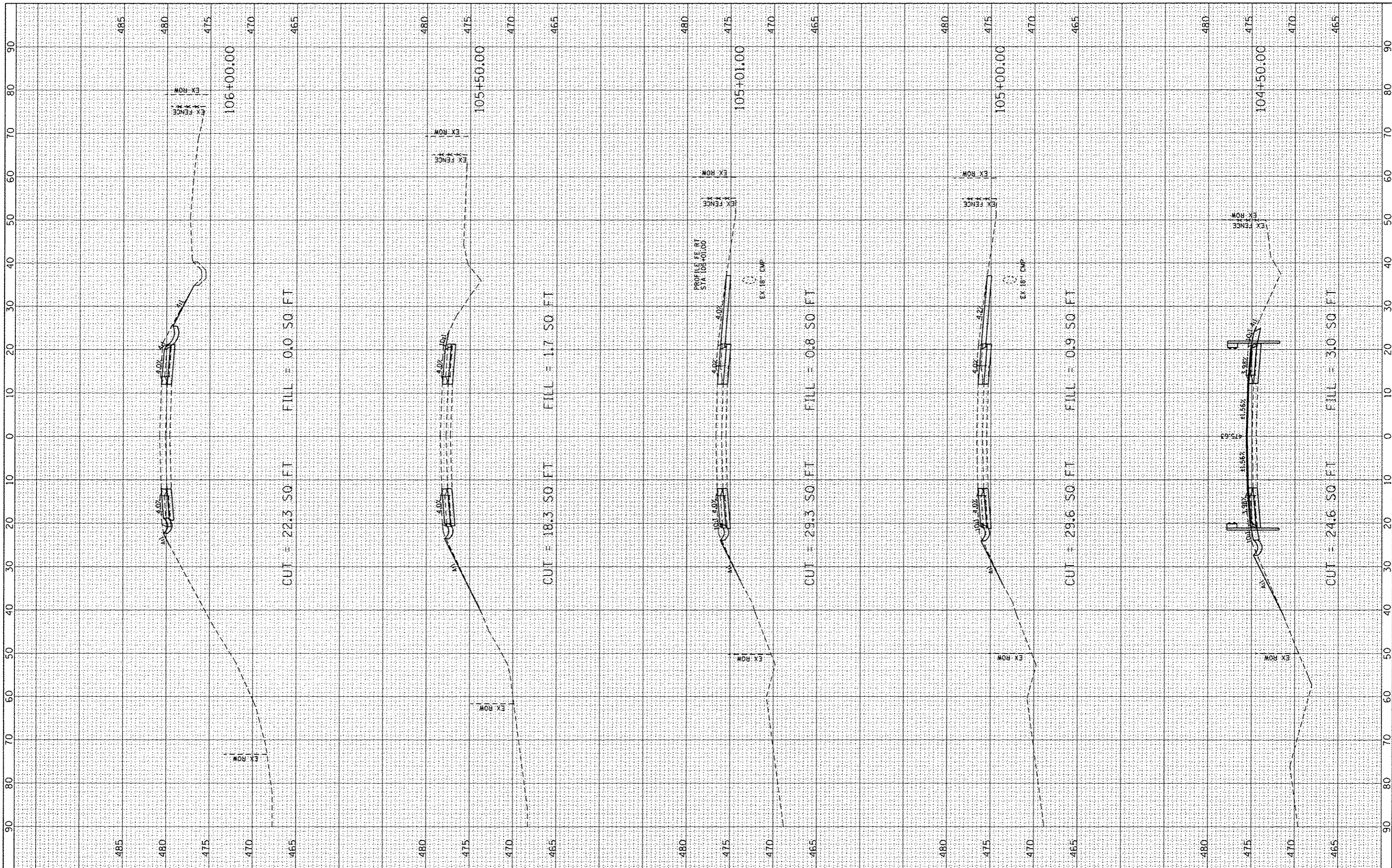
SCALE: 1" = 10'
 SHEET 2 OF 4 SHEETS
 STA. 102+50.00 TO STA. 104+00.00

**CROSS SECTIONS
 SEMINARY ROAD**

F.A.U. R.I.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-BR	MADISON	42	40
CONTRACT NO. 97608			ILLINOIS FED. AID PROJECT	

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
AREAS	TEMPLATE		
AREAS	AREAS		
AREAS	AREAS		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
AREAS	TEMPLATE		
AREAS	AREAS		
AREAS	AREAS		



FILE NAME =
 L:\MadisonCounty\144810328\Draw\CADD_Sheets\03-042_Cross_Sections.dgn

USER NAME = Jack Blakemore
 DESIGNED - JWB
 DRAWN - AJK
 CHECKED - ARS
 DATE - 8/17/2015

REVISIONS
 REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

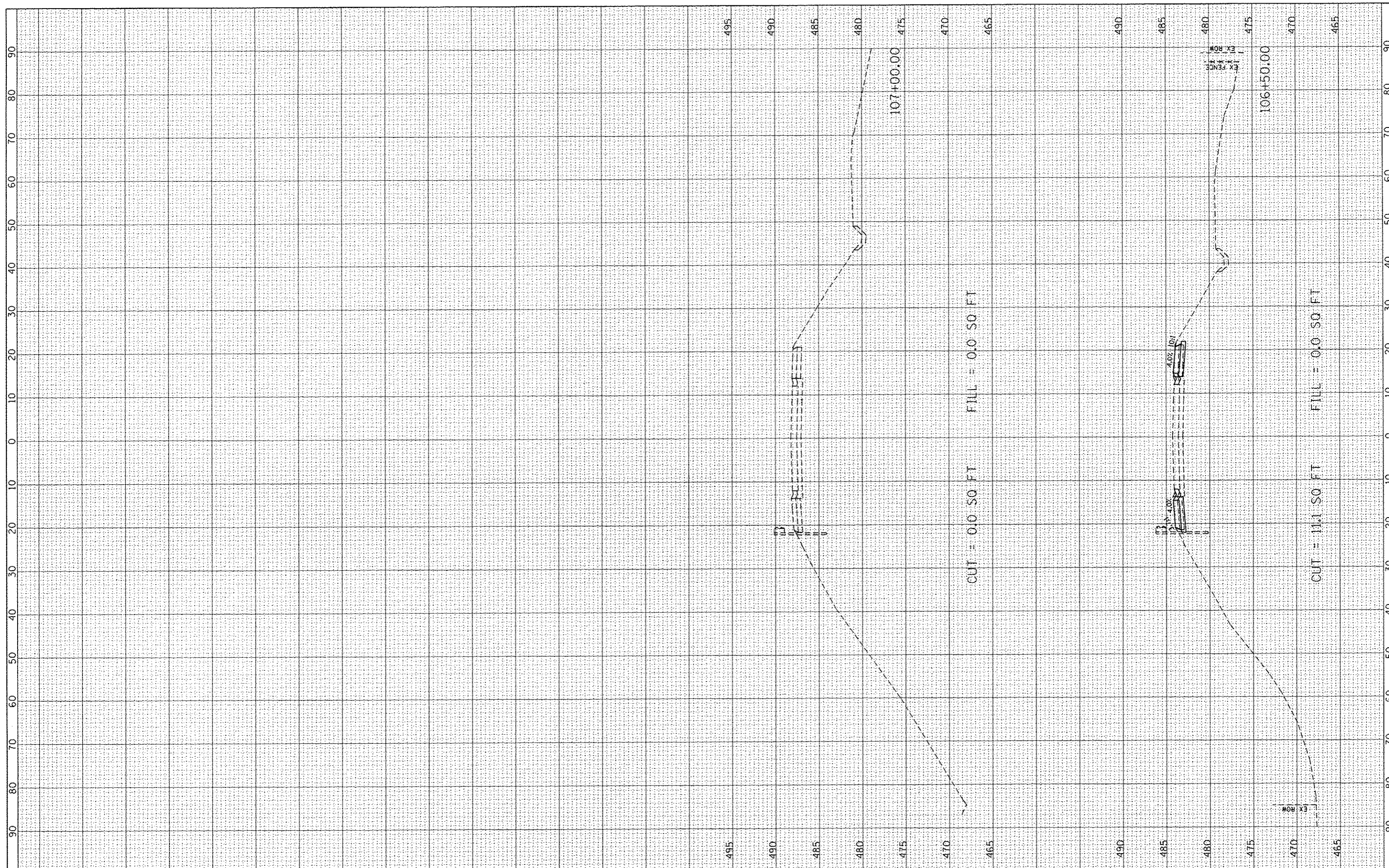
**CROSS SECTIONS
 SEMINARY ROAD**

SCALE: 1/4" = 1' V, 1" = 10' H SHEET 3 OF 4 SHEETS STA. 104+50.00 TO STA. 106+00.00

F.A.J. R.T.E. 8998	SECTION 13-00125-02-BR	COUNTY MADISON	TOTAL SHEETS 42	SHEET NO. 41
CONTRACT NO. 97608			ILLINOIS FED. AID PROJECT	

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

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



FILE NAME =	USER NAME = Jack Blakamore	DESIGNED -	JWB	REVISED -	
L:\MadisonCounty\144818320\Draw\CADD_Sheets\R3	842_Cross_Sections.dgn	DRAWN -	AJK	REVISED -	
Default	PLOT SCALE = 28.8000' / in.	CHECKED -	ARS	REVISED -	
	PLOT DATE = 8/17/2015	DATE -	8/17/2015	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
SEMINARY ROAD**

SCALE: $\frac{1"}{40'}$ SHEET 4 OF 4 SHEETS STA. 106+50.00 TO STA. 107+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
8998	13-00125-02-8R	MADISON	42	42
CONTRACT NO. 97608			ILLINOIS FED. AID PROJECT	