

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 846: IL 53 (BALTIMORE ST.)
OVER FORKED CREEK
SECTION: 4 B-2-BR
CONCRETE OVERLAY,
BRIDGE AND BRIDGE APPROACH REPAIRS
WILL COUNTY
C-91-704-10

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
846	4 B-2-BR	WILL	26	1
ILLINOIS CONTRACT NO. 60L50				

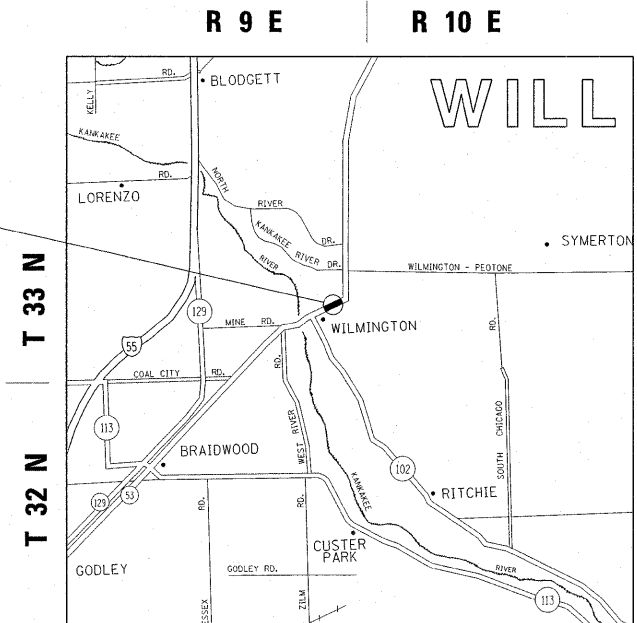
*26+2=28

FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT IS LOCATED IN
THE CITY OF WILMINGTON



LOCATION OF IMPROVEMENT
SN 099-0091



WILMINGTON TOWNSHIP

NET & GROSS LENGTH OF IMPROVEMENT = 196.5 FT.

TRAFFIC DATA
2009 ADT = 8100
POSTED SPEED LIMIT - 35 mph

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

PROJECT ENGINEER: ROBERT BORO (847) 705-4178
PROJECT MANAGER: ISSAM RAYYAN

CONTRACT NO. 60L50

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED FEBRUARY 18 20 11

Diane M. O'Keefe DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 4 20 11
Scott E. Stitt, P.E. acting ENGINEER OF DESIGN AND ENVIRONMENT

March 4 20 11
Christine M. Reed DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

Rev.

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26	ARTERIAL ROAD INFORMATION SIGN

STATE STANDARDS

STANDARD NO.	DESCRIPTION
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701321-11	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701901-01	TRAFFIC CONTROL DEVICES
704001-04	TEMPORARY CONCRETE BARRIER
421001-02	
420001-07	

GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE & GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE CITY OF WILMINGTON.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT

ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCES, ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS & CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION & ORDERING OF MATERIAL.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

THE ENGINEER SHALL CONTACT LAWRENCE HILL, AREA TRAFFIC FIELD TECHNICIAN AT (847) 846-2165 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM THE BUREAU OF MAINTENANCE BRIDGE INSPECTORS.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

CONCRETE SUPERSTRUCTURE SHALL HAVE A SEVEN DAY MINIMUM CURE.

FILE NAME =	USER NAME = midjjo	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS STATE STANDARDS, GENERAL NOTES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw_work\pwidot\midjjo\0256471\0170410-shr-plen.dgn	DRAWN -	REVISED -	846			4 B-2-BR	WILL	26	2	
PLOT SCALE = 50,0000 / IN.	CHECKED -	REVISED -	CONTRACT NO. 60L50							
PLOT DATE = 2/18/2011	DATE -	REVISED -	[ILLINOIS] FED. AID PROJECT							
					SCALE: NONE	SHEET NO. OF SHEETS STA. TO STA.				

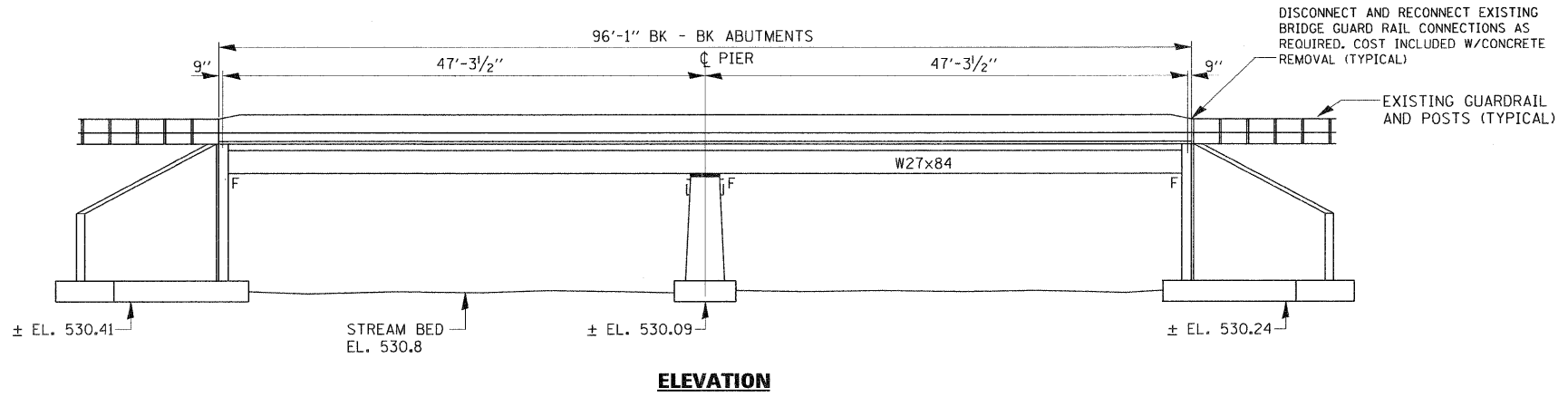
Rev.

SUMMARY OF QUANTITIES				URBAN 100% STATE CONSTRUCTION TYPE CODE: 0014					SUMMARY OF QUANTITIES				URBAN 100% STATE CONSTRUCTION TYPE CODE: 0014				
CODE NO	ITEM	UNIT	TOTAL QUANTITIES						CODE NO	ITEM	UNIT	TOTAL QUANTITIES					
				0014									0014				
40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	0.03	0.03					Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SO FT	62	62				
40600300	AGGREGATE (PRIME COAT)	TON	0.14	0.14					Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SO YD	1	1				
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	24	24					Z0030240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	1	1				
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	8	8					Z0030255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	1	1				
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	266	266					Z0030340	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 2	EACH	1	1				
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	107	107					Z0030322	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	1	1				
44004250	PAVED SHOULDER REMOVAL	SQ YD	178	178					Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	410	410				
44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	15	15					X0325114	ADJUSTING DRAINAGE SCUPPERS, TYPE A	EACH	2	2				
50102400	CONCRETE REMOVAL	CU YD	9.8	9.8													
50300255	CONCRETE SUPERSTRUCTURE	CU YD	21.8	21.8													
50300300	PROTECTIVE COAT	SQ YD	467	467													
50300260	BRIDGE DECK GROOVING	SQ YD	413	413													
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	3680	3680													
50800515	BAR SPLICERS	EACH	112	112													
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6													
67100100	MOBILIZATION	L SUM	1	1													
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	805	805													
70400100	TEMPORARY CONCRETE BARRIER	FOOT	275	275													
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	275	275													
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	1184	1184													
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	6	6													
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	9	9													
* 78200530	BARRIER WALL MARKERS, TYPE C	EACH	13	13													
78300100	PAVEMENT MARKING REMOVAL	SQ FT	250	250													
X0326276	TEMPORARY LIGHTING FOR SINGLE LANE STAGING	L SUM	1	1													
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1													
X7030030	WET REFLECTIVE TEMPORARY TAPE TYPE III, 4 INCH	FOOT	2200	2200													
X7030055	WET REFLECTIVE TEMPORARY TAPE TYPE III, 24 INCH	FOOT	36	36													
X8900005	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	1	1													
Z0004552	APPROACH SLAB REMOVAL	SO YD	266	266													
Z0006014	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2 INCHES	SO YD	410	410													

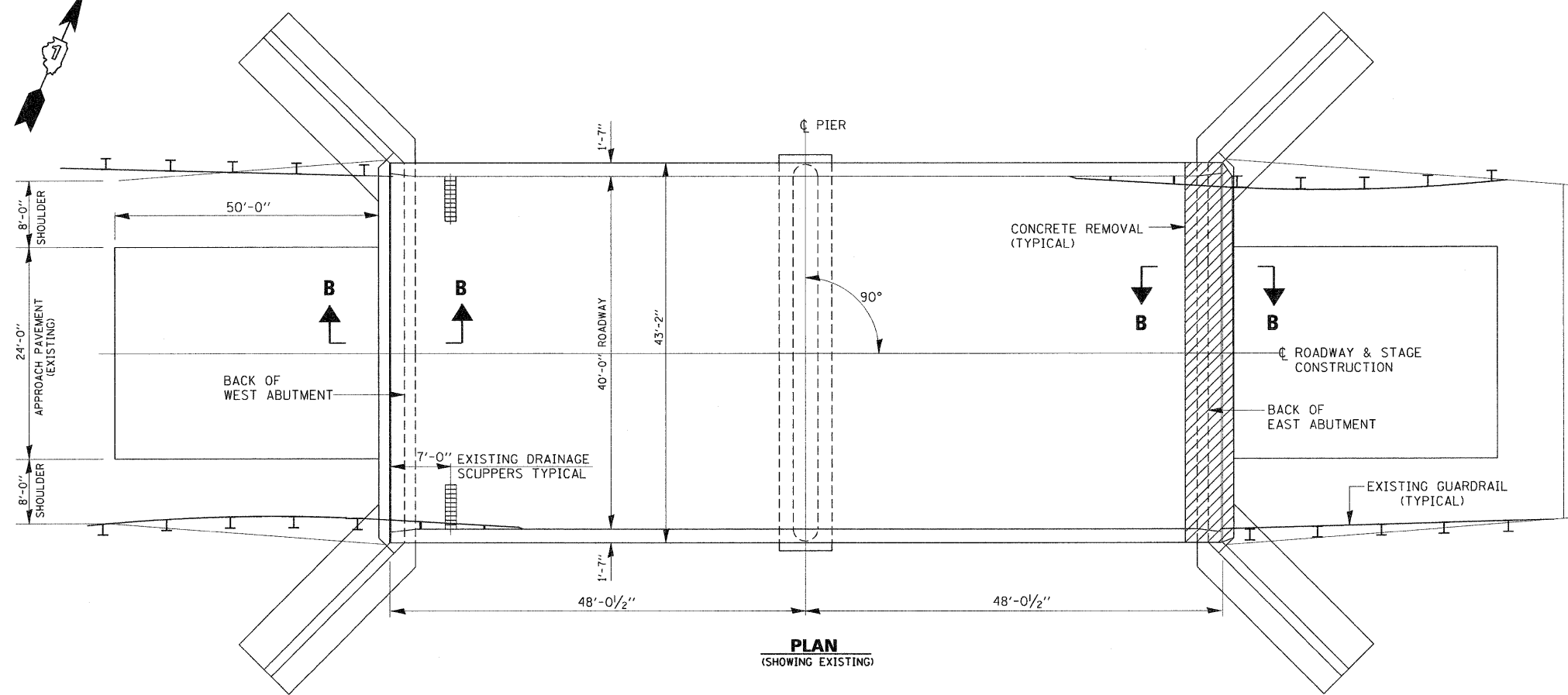
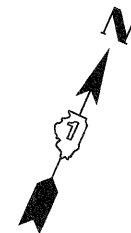
*Specialty Items

FILE NAME =	USER NAME = mlcyjo	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pw_wor\kpw\idofmlcyjo\0256471\DI0410-stf-plandp		DRAWN -	REVISED -			846	4 B-2-BR	WILL	26	3	
PLOT SCALE = 50,0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 60L50					
PLOT DATE = 2/18/2011		DATE -	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT		

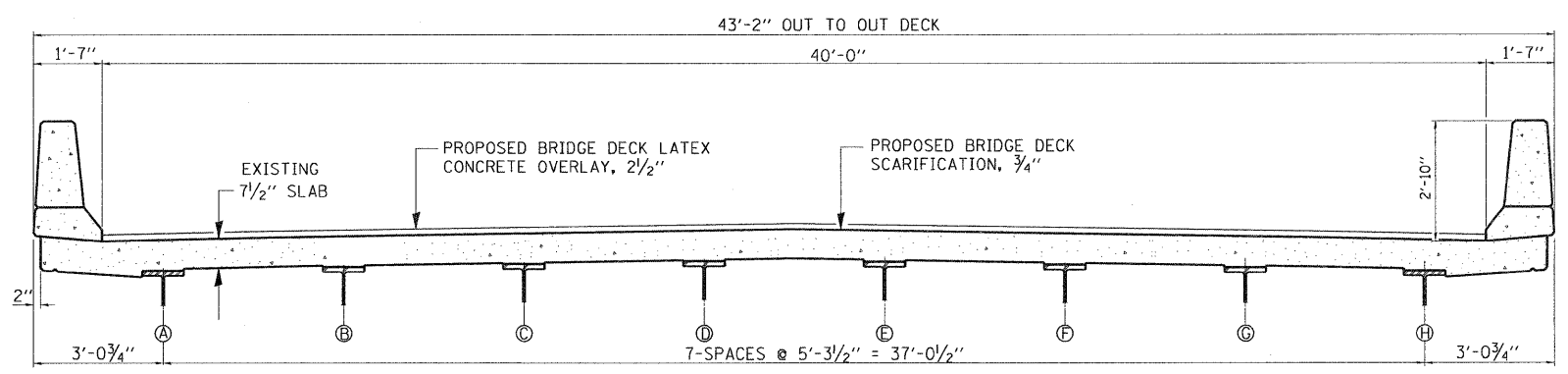
Rev.



ELEVATION



PLAN
(SHOWING EXISTING)



CROSS SECTION
(LOOKING WEST)

GENERAL NOTES:

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 ADJUSTMENT 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 BASED AT THE UNIT PRICE BID FOR THE WORK.

ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO CLASSIFICATION M-270 GR. 36, UNLESS OTHERWISE NOTED.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

EXISTING REINFORCEMENT BARS EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY REINFORCEMENT BARS THAT ARE DAMAGED DURING CONCRETE REMOVAL SHALL BE REPLACED WITH AN APPROVED BAR SPLICER OR ANCHORAGE SYSTEM. COST INCLUDED WITH CONCRETE REMOVAL.

AREA OF DECK REPAIRS SHOWN ARE ESTIMATED. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON AS-BUILT PLANS.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706 Gr 60.. SEE SPECIAL PROVISIONS.

PRIOR TO POURING THE NEW CONCRETE DECK, ALL HEAVY OR LOOSE RUST, LOOSE MILL SCALE, AND OTHER LOOSE OR POTENTIALLY DETRIMENTAL FOREIGN MATERIAL SHALL BE REMOVED FROM THE SURFACES IN CONTACT WITH CONCRETE. TIGHTLY ADHERED PAINT MAY REMAIN UNLESS OTHERWISE NOTED. REMOVAL SHALL BE ACCOMPLISHED BY METHODS THAT WILL NOT DAMAGE THE STEEL AND THE COST WILL BE INCLUDED IN THE PAY ITEM COVERING REMOVAL OF THE EXISTING CONCRETE.

NO IN-STREAM WORK ALLOWED.

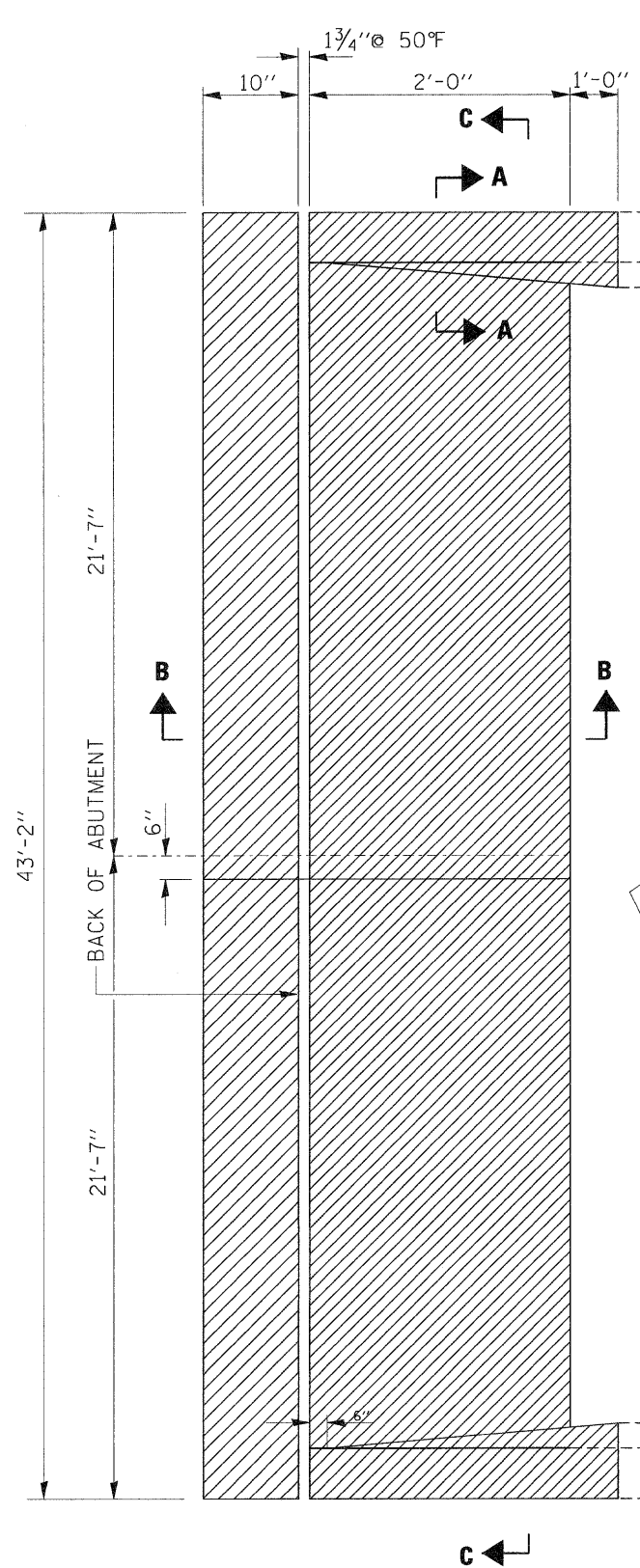
FIELD CUTS OF PROPOSED REINFORCEMENT BARS TO FIT FIELD CONDITIONS SHALL BE INCLUDED IN THE COST OF REINFORCEMENT BARS EPOXY COATED.

TOTAL BILL OF MATERIALS

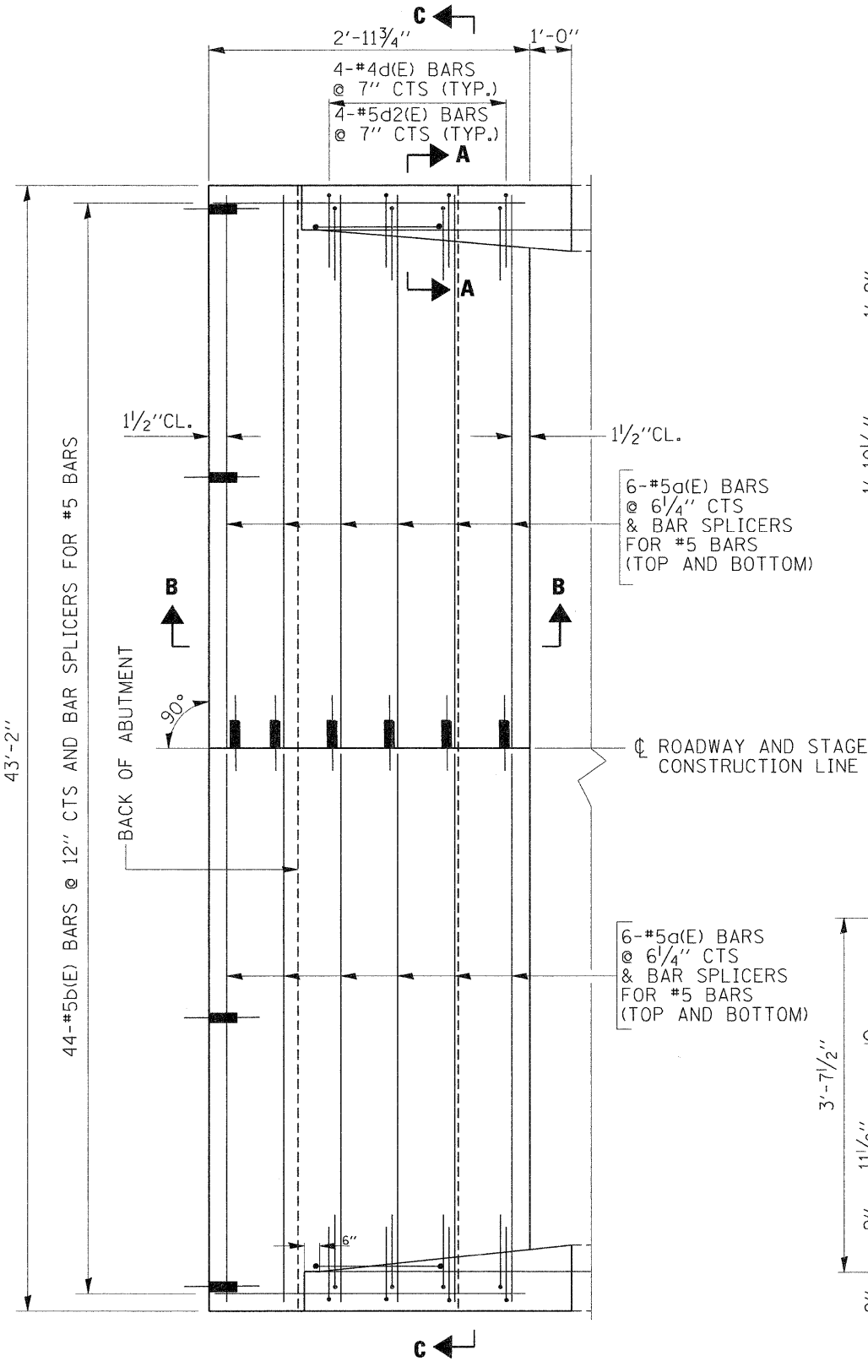
ITEM	UNIT	QUANTITY
REINFORCEMENT BARS (EPOXY COATED)	POUND	3680
CONCRETE SUPERSTRUCTURE	CU. YD.	21.8
CONCRETE REMOVAL	CU. YD.	9.8
BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2"	SQ. YD.	410
BRIDGE DECK SCARIFICATION, 3/4"	SQ. YD.	410
STRUCTURAL REPAIR OF CONCRETE (DEPTH < 5")	SQ. FT.	62
BRIDGE DECK GROOVING	SQ. YD.	413
DECK SLAB REPAIR (FULL DEPTH TYPE II)	SQ. YD.	1
BAR SPLICERS	EACH	112
ADJUSTING DRAINAGE SCUPPER, TYPE A	EACH	2
PROTECTIVE COAT	SQ. YD.	94



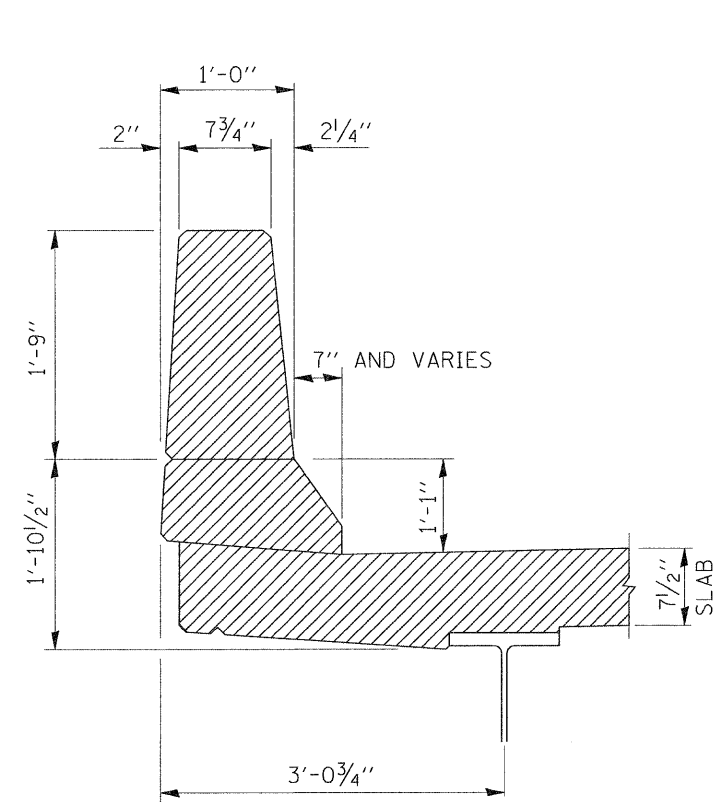
David Carl Puze 3/16/11
Expires 11/30/2012



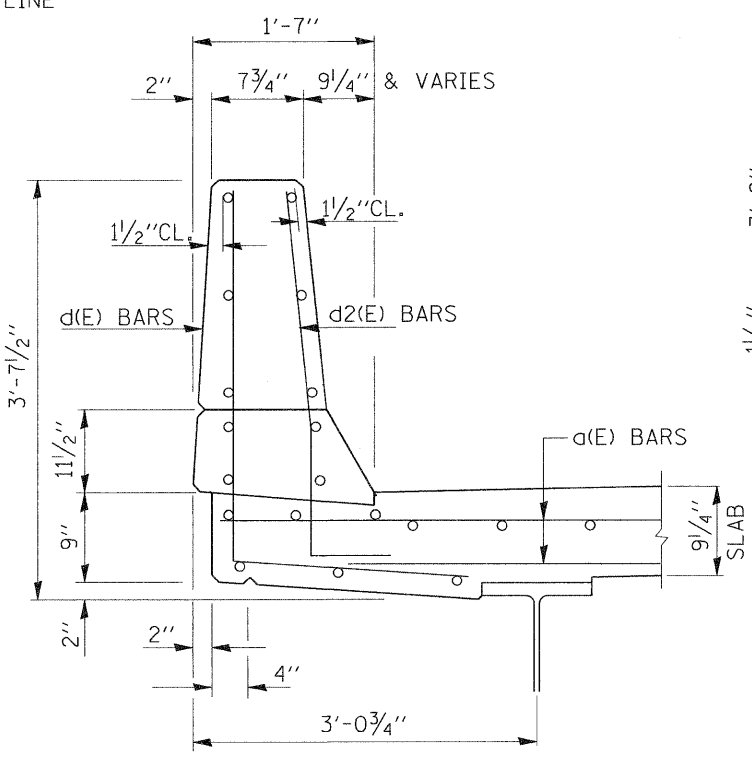
**EXPANSION JOINT PLAN
AT EAST AND WEST ABUTMENT**
(CONCRETE REMOVAL)



**CONCRETE REPLACEMENT PLAN
AT EAST AND WEST
INTEGRAL ABUTMENT**

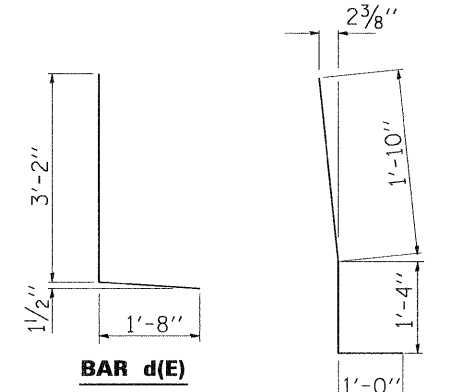


**SECTION A-A
(EXISTING)**

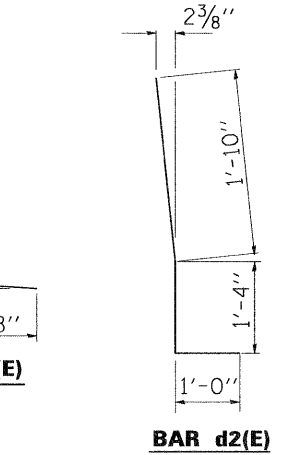


**SECTION A-A
(PROPOSED)**

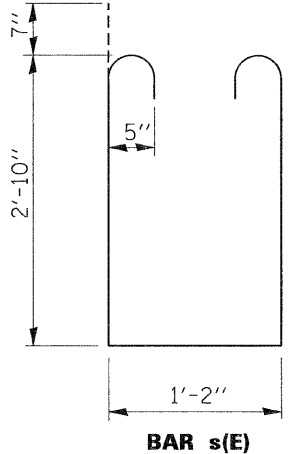
BILL OF MATERIALS				
BAR	NO.	SIZE	LENGTH	SHARE
d(E)	48	#5	23'-7"	—
b(E)	88	#5	2'-8"	—
d(E)	16	#4	4'-10"	L
d2(E)	16	#5	4'-2"	L
m(E)	32	#6	7'-4"	—
m1(E)	8	#6	23'-6"	—
m2(E)	8	#6	21'-2"	—
v(E)	164	#5	3'-5"	—
v1(E)	82	#5	2'-1"	—
s(E)	82	#4	8'-0"	□
x(E)	4	#5	3'-0"	—
REINFORCEMENT BARS (EPOXY COATED)			POUND	3680
CONCRETE REMOVAL			CU.YD	9.8
CONCRETE SUPERSTRUCTURE			CU.YD	21.8
BAR SPLICERS			EACH	112



BAR d(E)



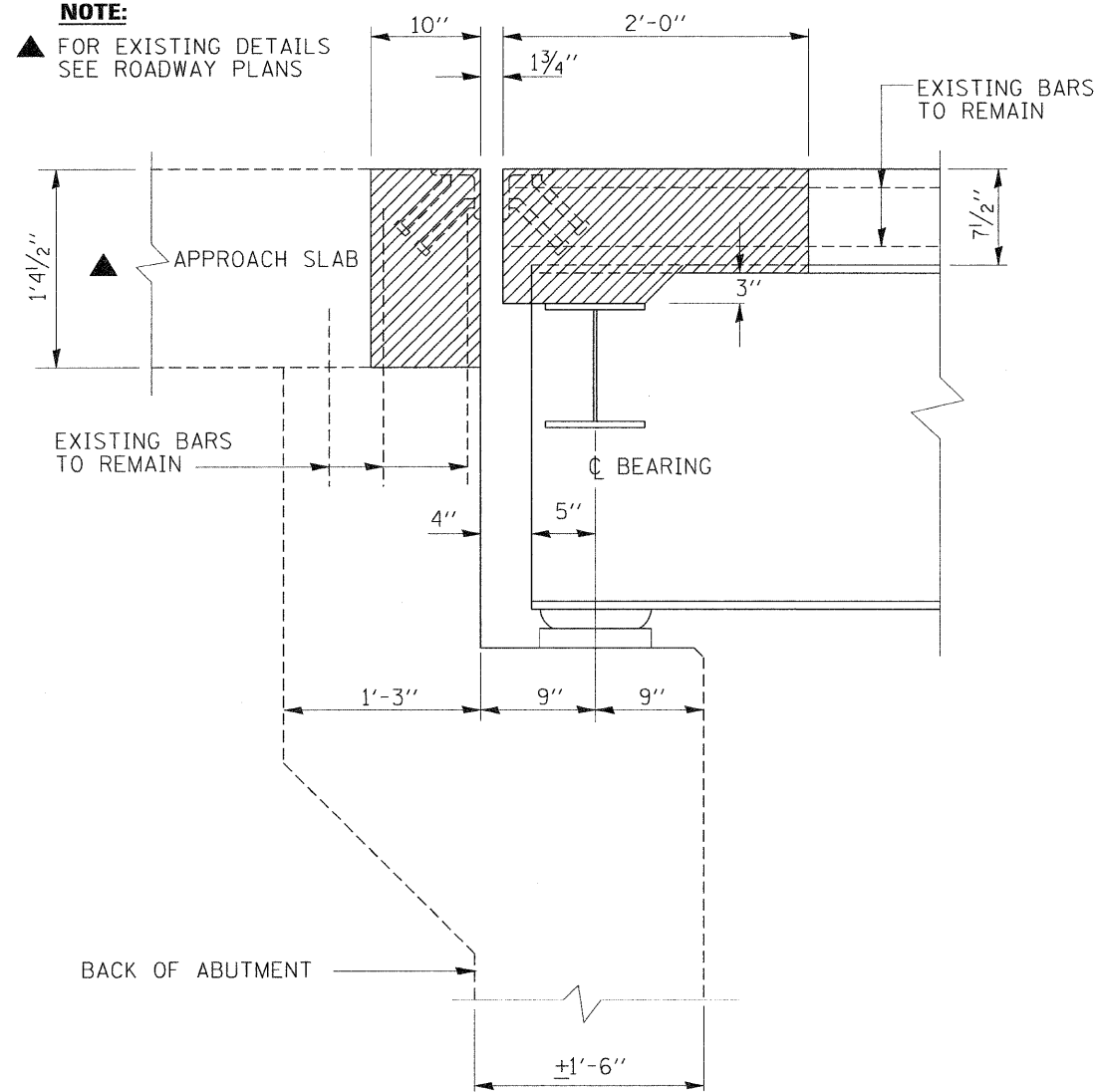
BAR d2(E)



BAR s(E)

NOTE:

▲ FOR EXISTING DETAILS SEE ROADWAY PLANS

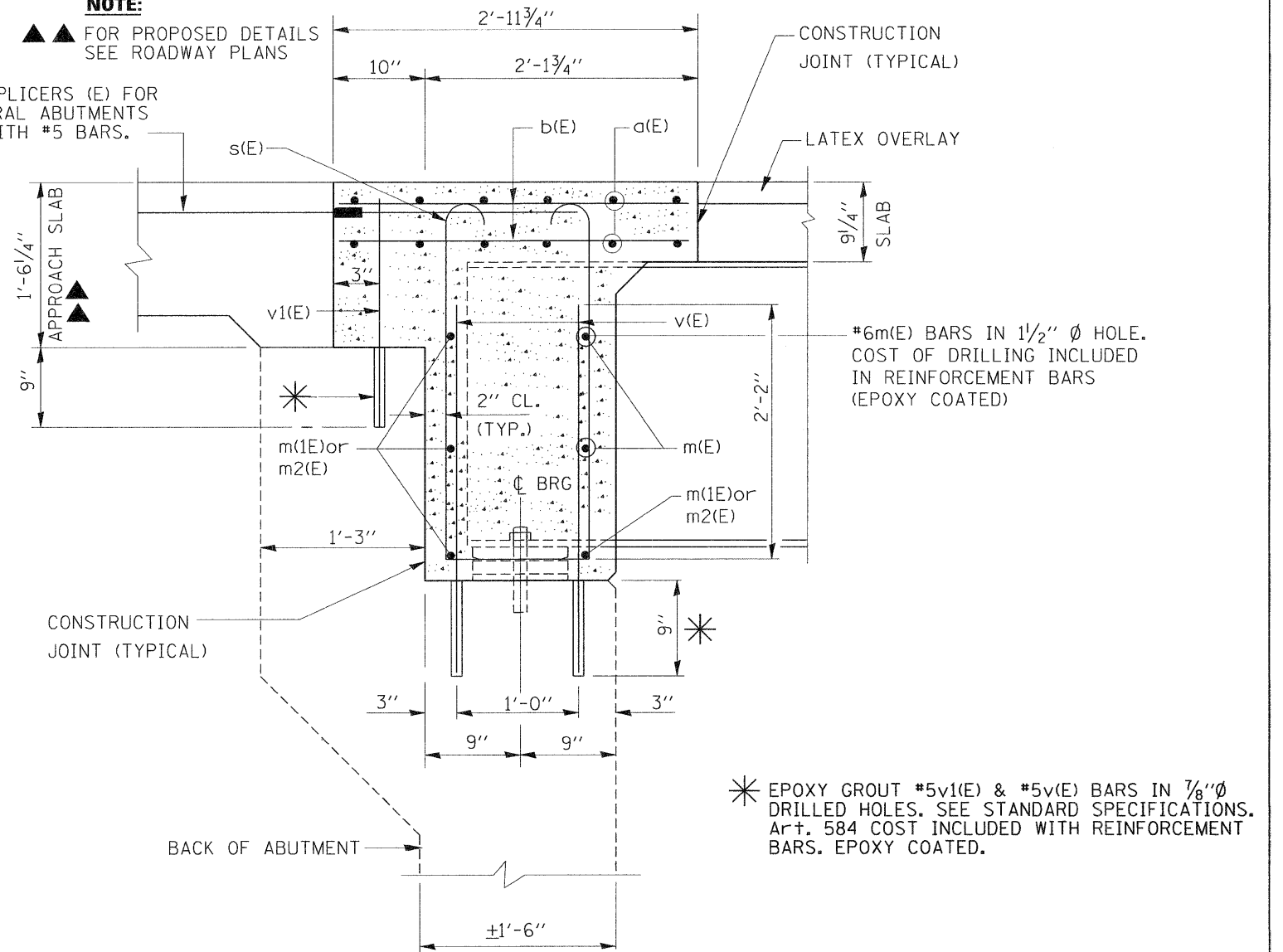


EXISTING SECTION B-B
(HATCHED AREA INDICATES REMOVAL)

NOTE:

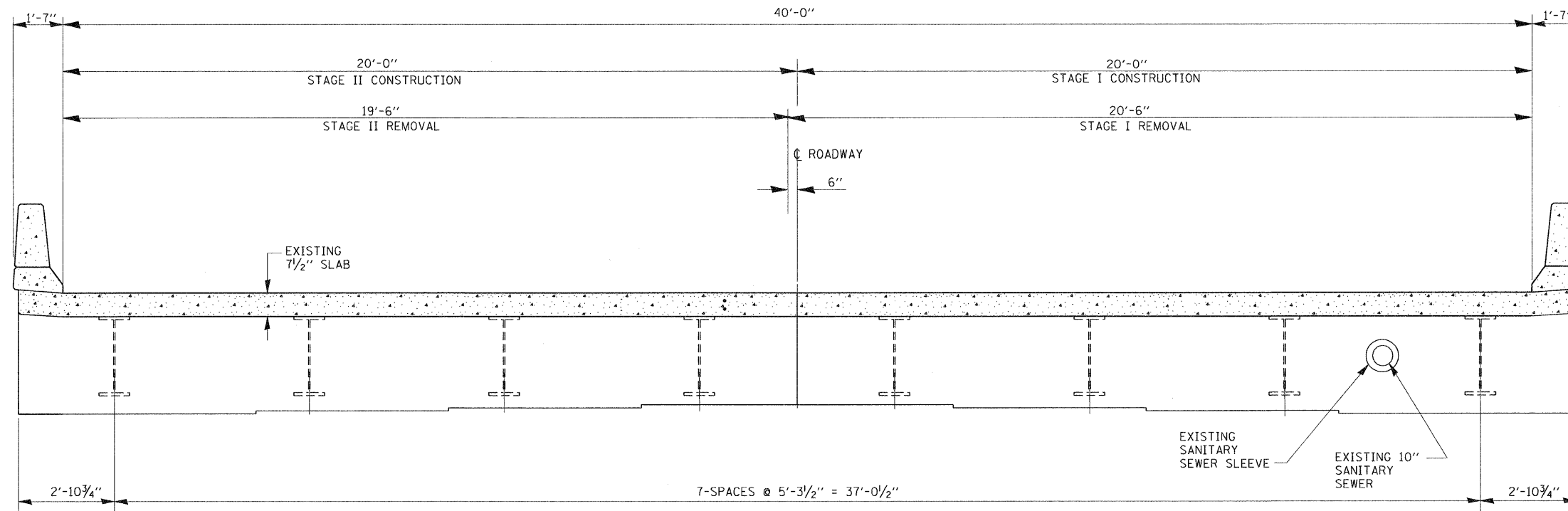
▲▲ FOR PROPOSED DETAILS SEE ROADWAY PLANS

BAR SPLICERS (E) FOR INTEGRAL ABUTMENTS LAP WITH #5 BARS.

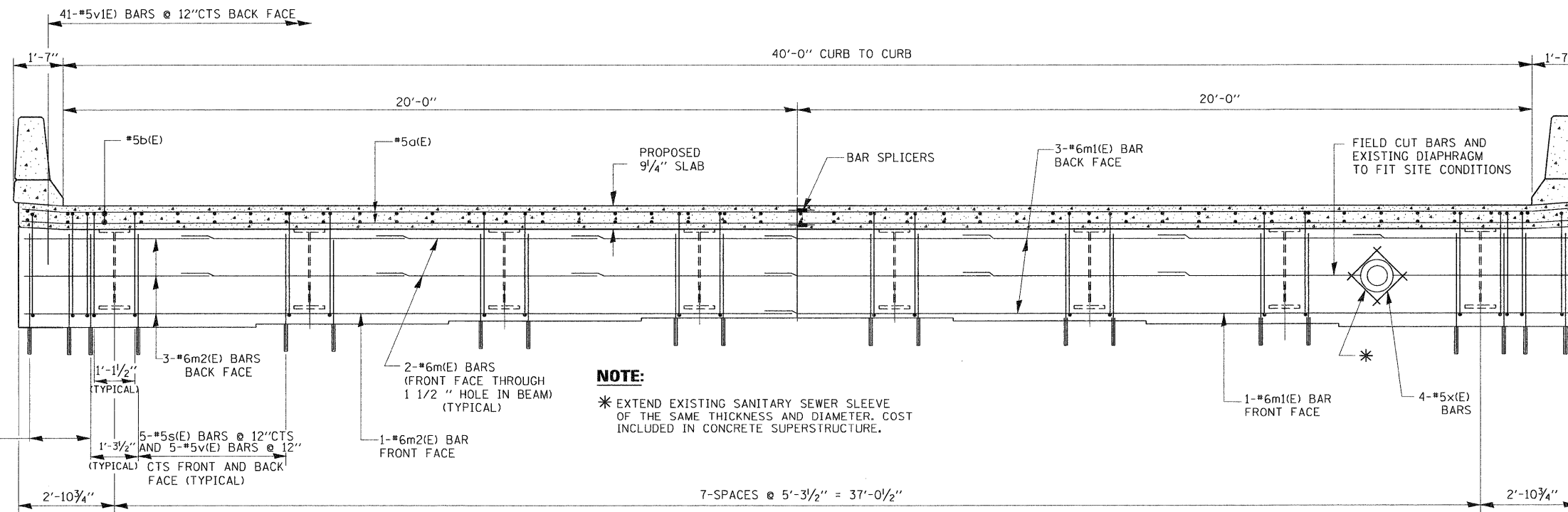


PROPOSED SECTION B-B

FILE NAME =	USER NAME = midyjo	DESIGNED - MVT	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 53 (BALTIMORE STREET) OVER FORKED CREEK INTEGRAL ABUTMENTS S.N. 099-0091				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ce:\pwwork\pwwork\midyjo\0101671\099-0091.dgn	PLOT SCALE = 50.0000' / IN.	DRAWN - MVT	REVISED -		846	4 B-2-BR	WILL	26	6				
PLOT DATE = 3/16/2011	DATE - 3/8/11	CHECKED - RTB	REVISED -		CONTRACT NO. 60L50				ILLINOIS FED. AID PROJECT				
		DATE - 3/8/11	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.				



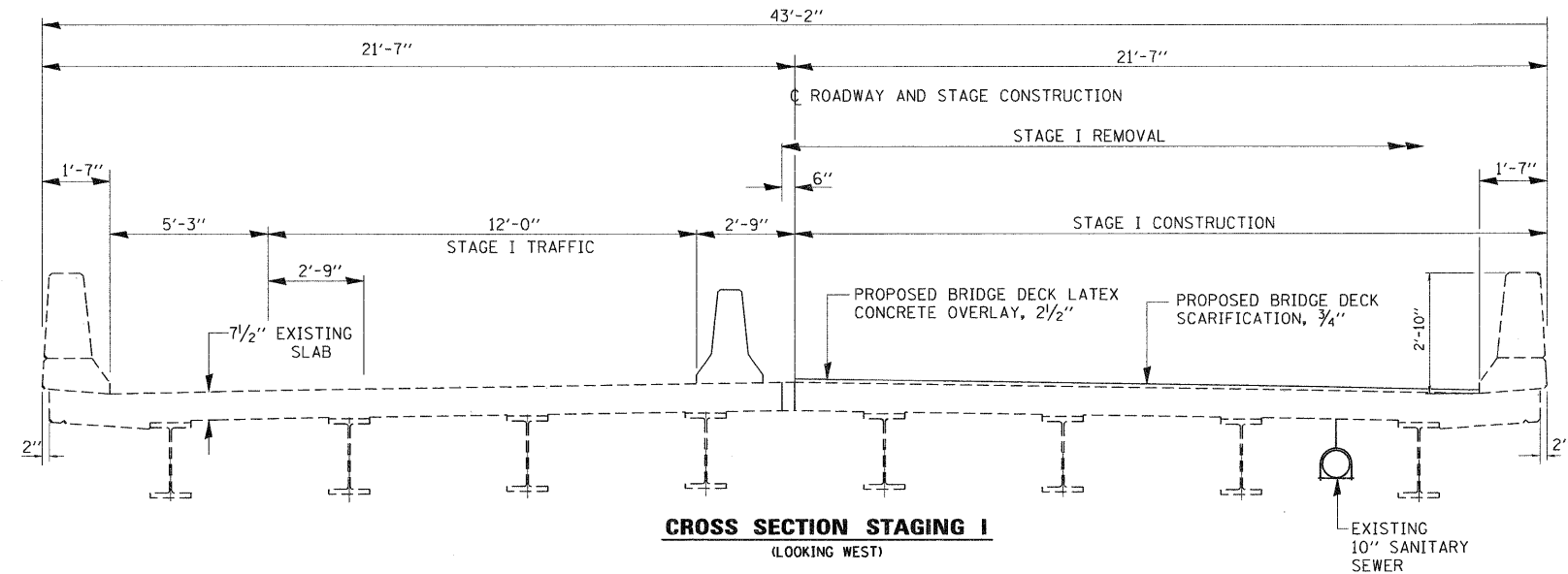
**EXISTING SECTION C-C
WEST ABUTMENT SHOWN
(LOOKING WEST)**



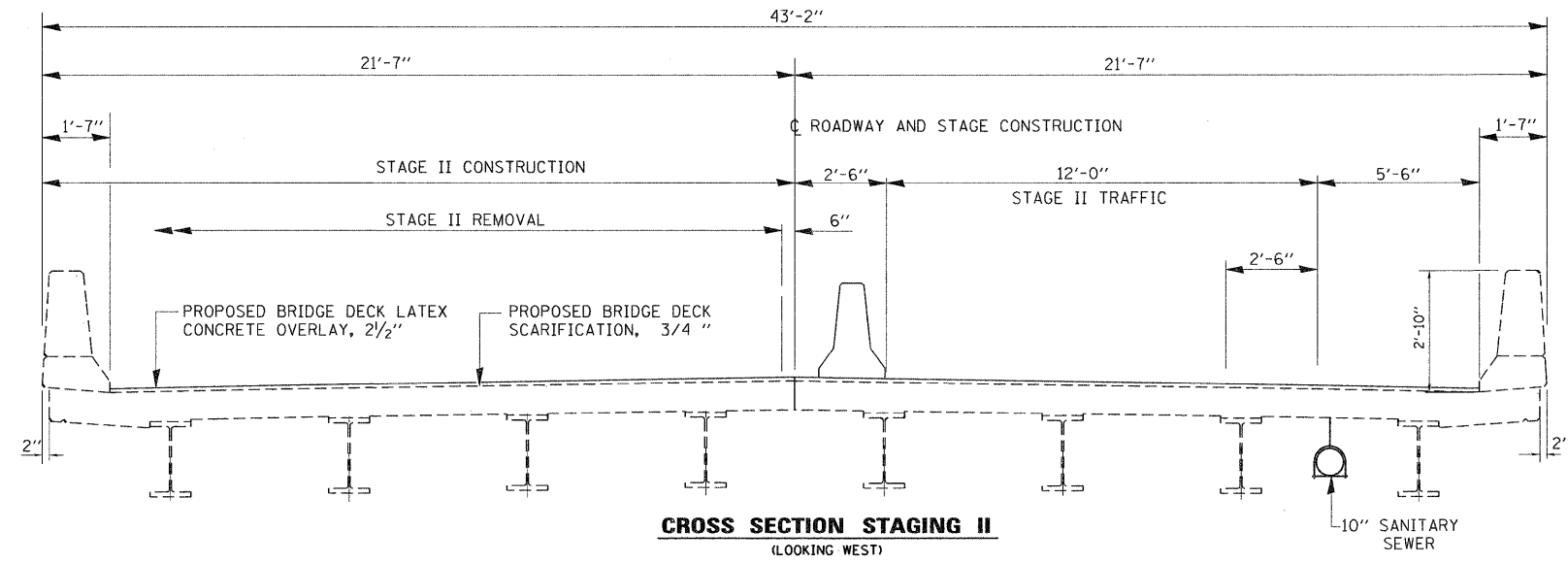
NOTE:
* EXTEND EXISTING SANITARY SEWER SLEEVE OF THE SAME THICKNESS AND DIAMETER, COST INCLUDED IN CONCRETE SUPERSTRUCTURE.

BAR LAP TABLE	
SIZE	LENGTH
#5	1' - 8"
#6	2' - 0"

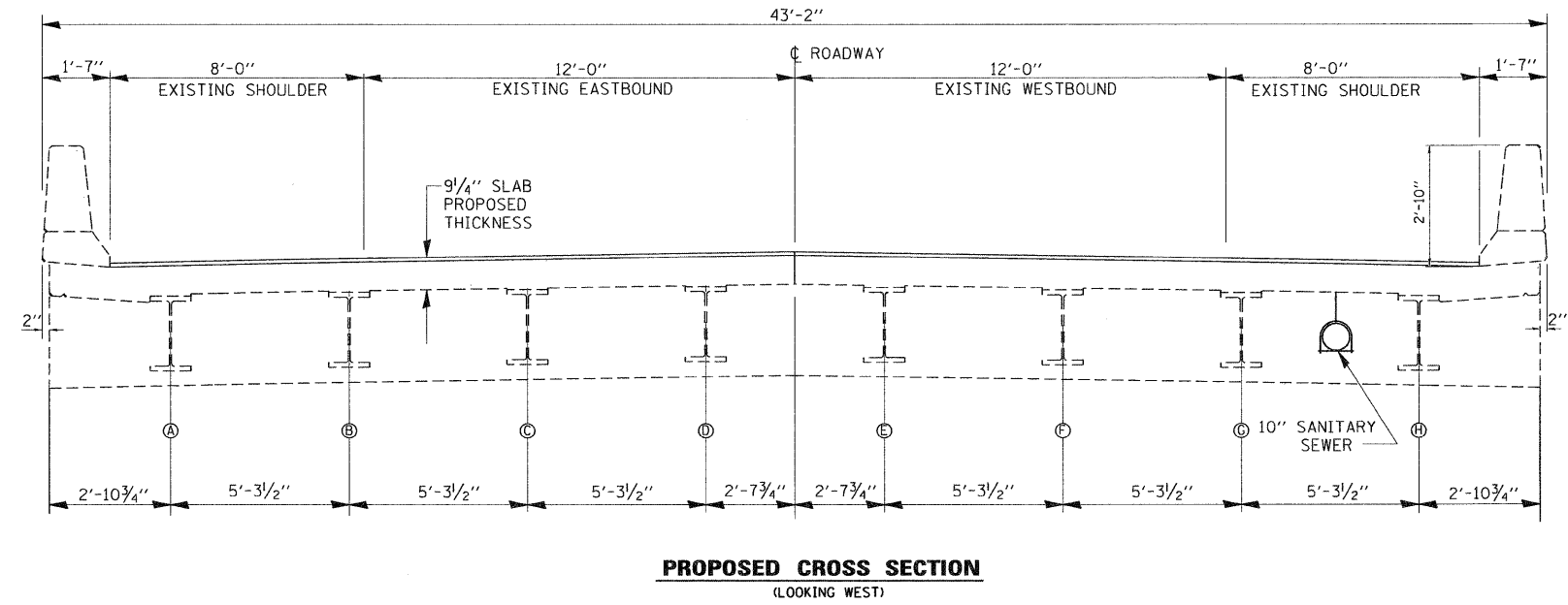
**SECTION C-C
(PROPOSED)**



CROSS SECTION STAGING I
(LOOKING WEST)

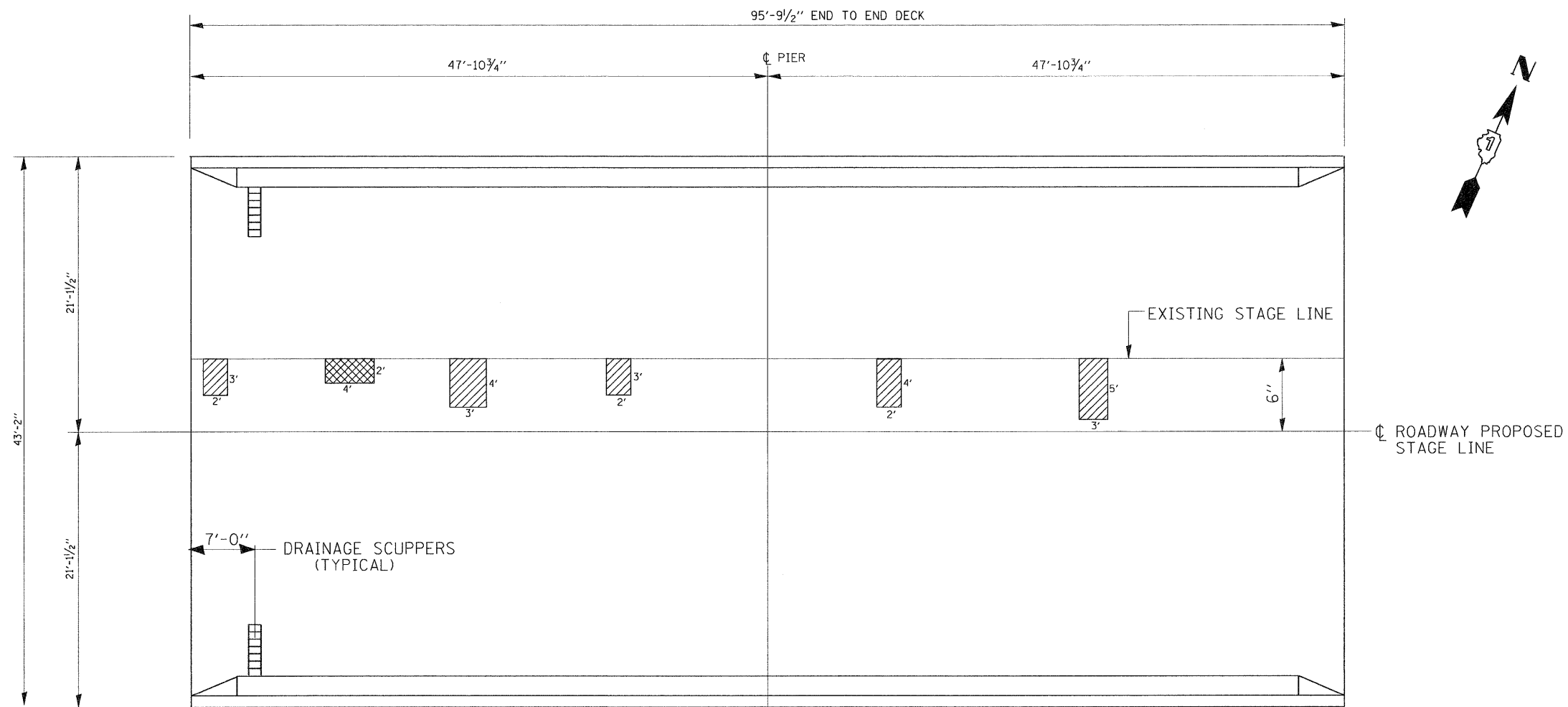


CROSS SECTION STAGING II
(LOOKING WEST)

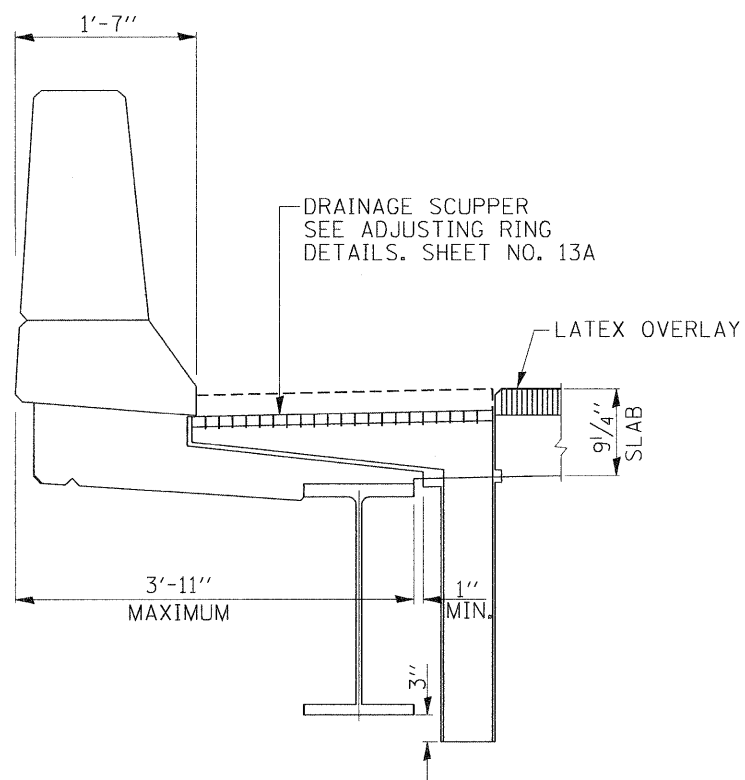


PROPOSED CROSS SECTION
(LOOKING WEST)

FILE NAME =	USER NAME = midyjo	DESIGNED - MVT	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 53 (BALTIMORE STREET) OVER FORKED CREEK CROSS SECTION AND STAGING DETAILS S.N. 099-0091	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw_work\pawidot\midyjo\d0101671\099-0091.dgn	DRAWN - MVT	REVISED -	846			4 B-2-BR	WILL	26	8	
PLOT SCALE = 50,0000' / IN.	CHECKED - RTB	REVISED -	CONTRACT NO. 60L50							
PLOT DATE = 3/16/2011	DATE - 3/8/11	REVISED -	ILLINOIS FED. AID PROJECT							
				SCALE:	SHEET NO. OF SHEETS STA. TO STA.					



DECK PLAN



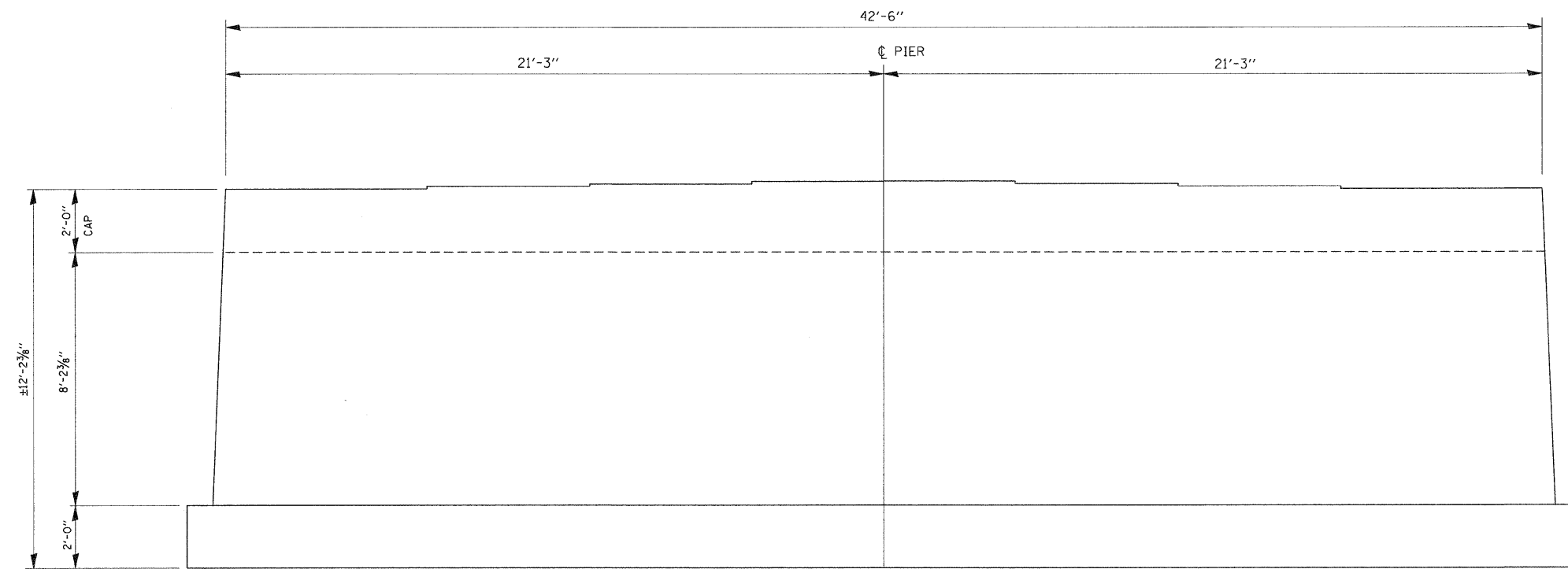
SCUPPER DETAIL

BILL OF MATERIALS

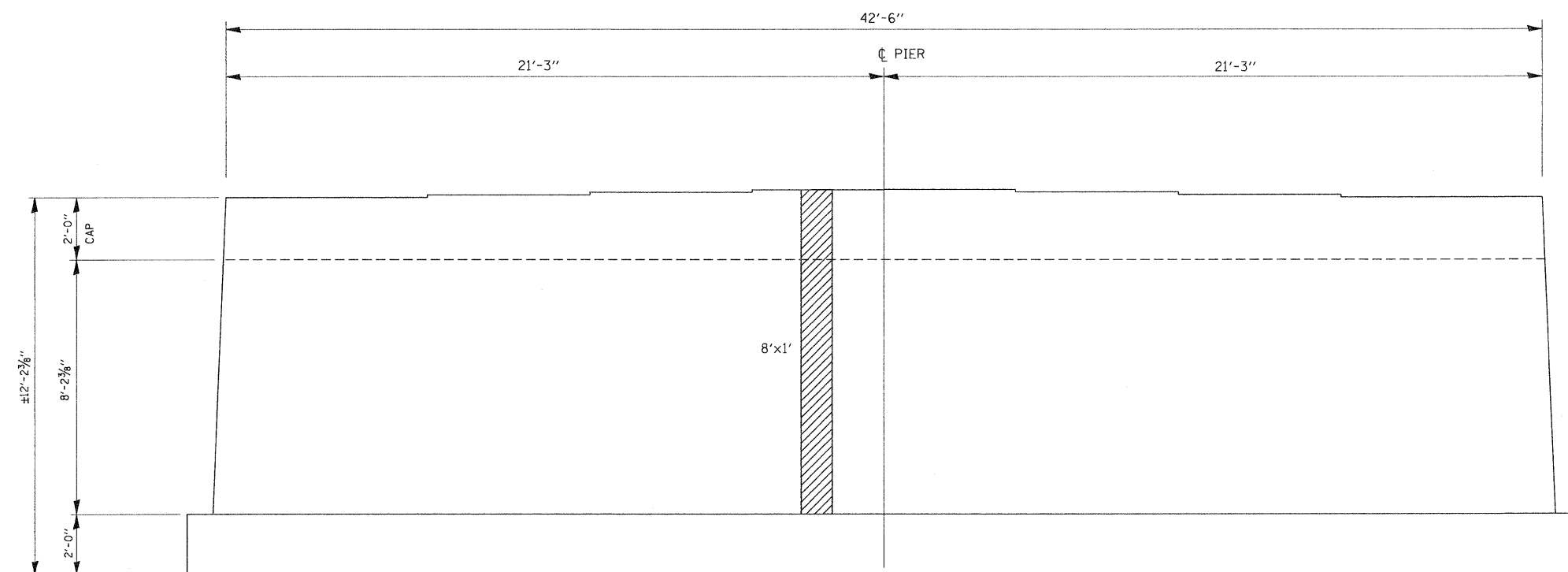
ITEM	UNIT	QUANTITY
DECK SLAB REPAIR (FULL DEPTH)	SQ.YD.	1
ADJUSTING DRAINAGE SCUPPER, TYPE A	EACH	2

LEGEND:

- DECK SLAB REPAIR (PARTIAL DEPTH) 6.0 SQ.YD (FOR INFORMATION ONLY)
- DECK SLAB REPAIR (FULL DEPTH)



**ELEVATION
WEST FACE**



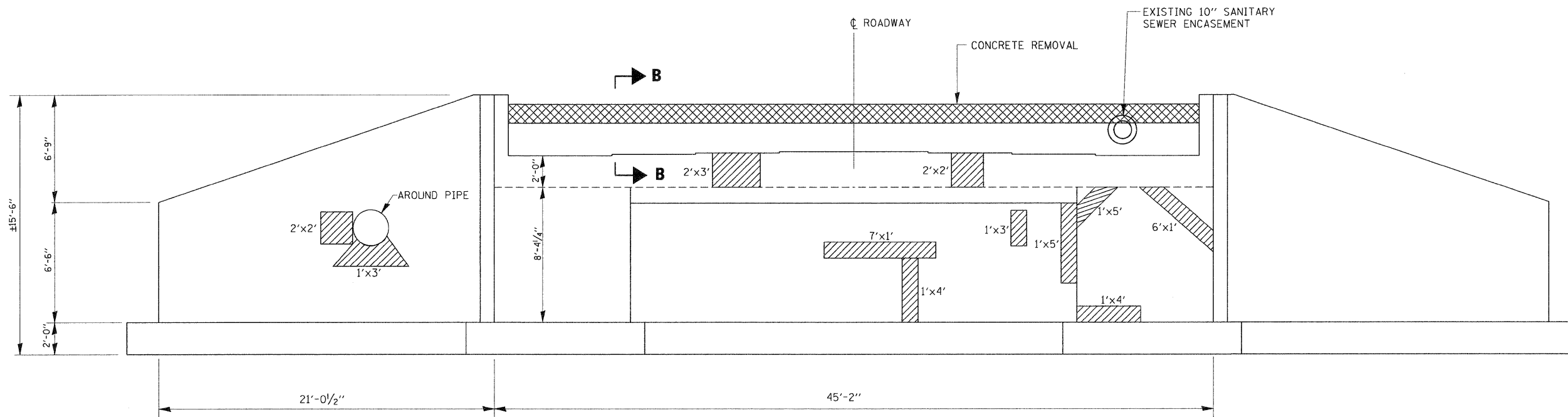
**ELEVATION
EAST FACE**

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE < 5"	SQ.FT.	8

LEGEND:

 STRUCTURAL REPAIR OF CONCRETE < 5"



WEST ABUTMENT

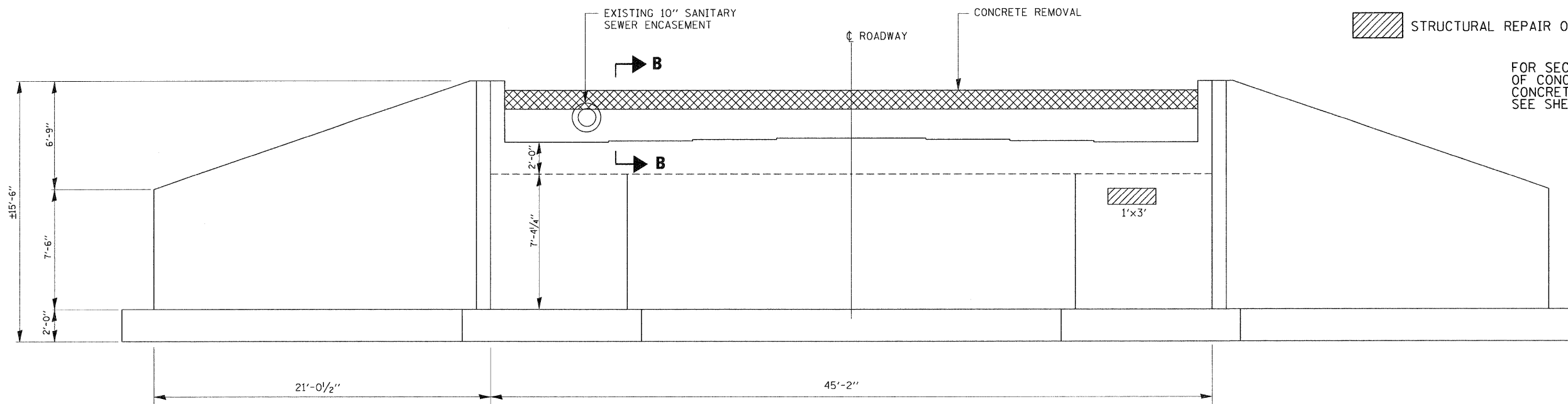
BILL OF MATERIALS

ITEM	UNIT	QUANTITY
STRUCTURAL REPAIR OF CONCRETE < 5"	SQ.FT.	50

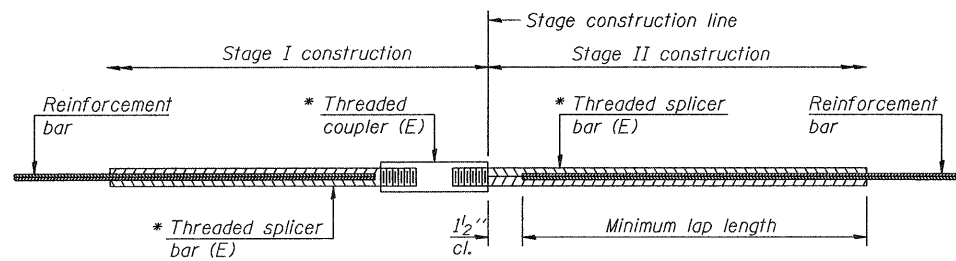
LEGEND:

STRUCTURAL REPAIR OF CONCRETE < 5"

FOR SECTION B-B QUANTITY OF CONCRETE REMOVAL AND CONCRETE SUPERSTRUCTURE SEE SHEET NO.5



EAST ABUTMENT



STANDARD BAR SPLICER ASSEMBLY

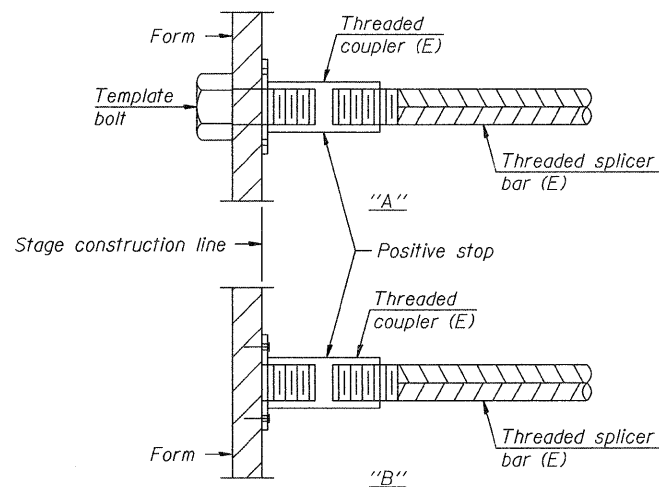
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

- 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, Top bar lap, Class B

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

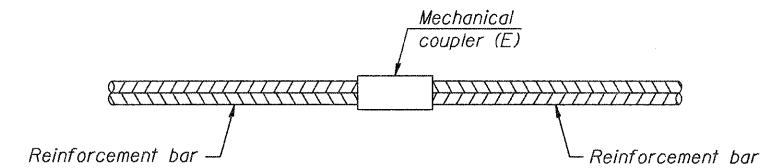
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
DECK	#5	24	



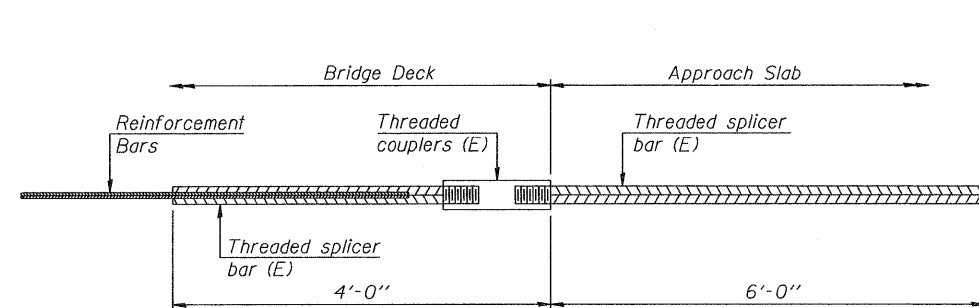
INSTALLATION AND SETTING METHODS

- "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.



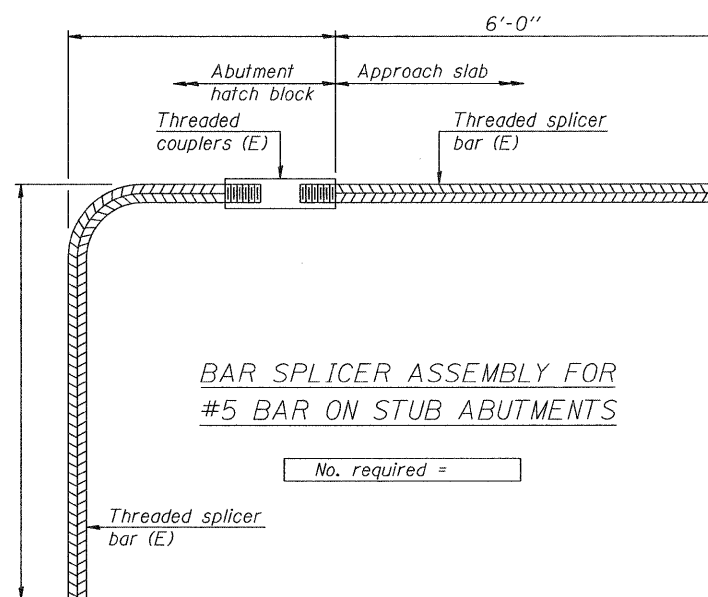
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required = 88



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

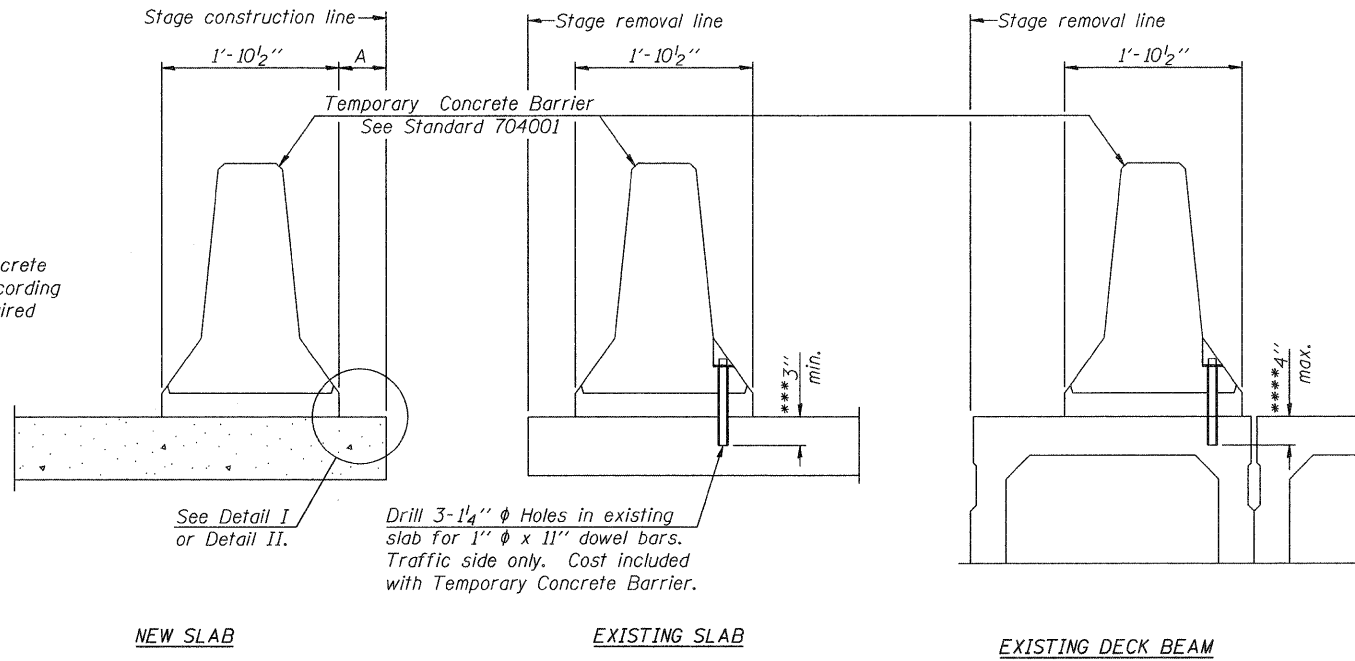
NOTES

- 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 special provision for Mechanical Splicers.
- See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 7-1-10

FILE NAME =	USER NAME = mjdjjo	DESIGNED - MVT	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS S.N. 099-0091	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\pwwork\mjdjjo\101671\099-0091.dgn	PLOT SCALE = 50.0000' / IN.	DRAWN - MVT	REVISED -			846	4 B-2-BR	WILL	26	12	
	PLOT DATE = 3/16/2011	CHECKED - RTB	REVISED -			CONTRACT NO. 60L50					
		DATE - 3/8/11	REVISED -			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".



Drill 3-1/4" ϕ Holes in existing slab for 1" ϕ x 11" dowel bars. Traffic side only. Cost included with Temporary Concrete Barrier.

SECTIONS THRU SLAB OR DECK BEAM

NOTES

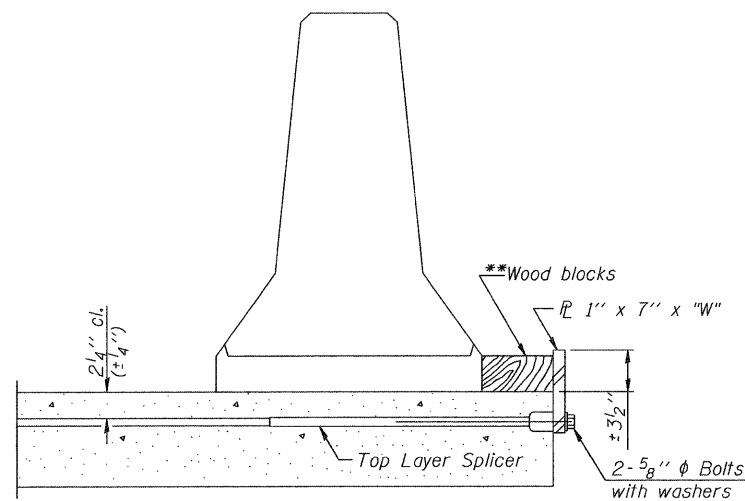
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel \bar{L} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

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 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

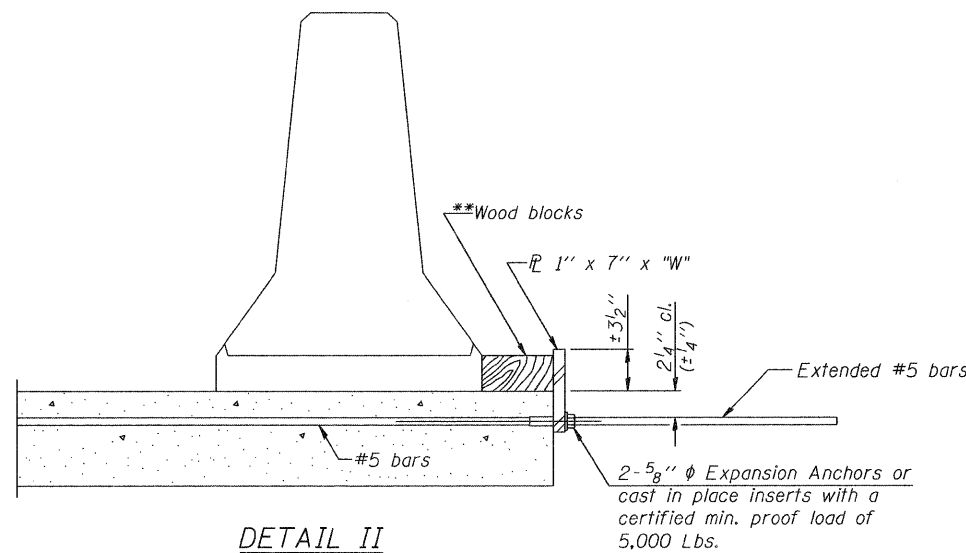
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** 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.



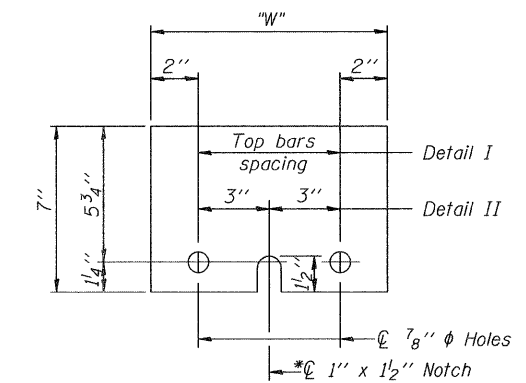
DETAIL I



DETAIL II

** 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"

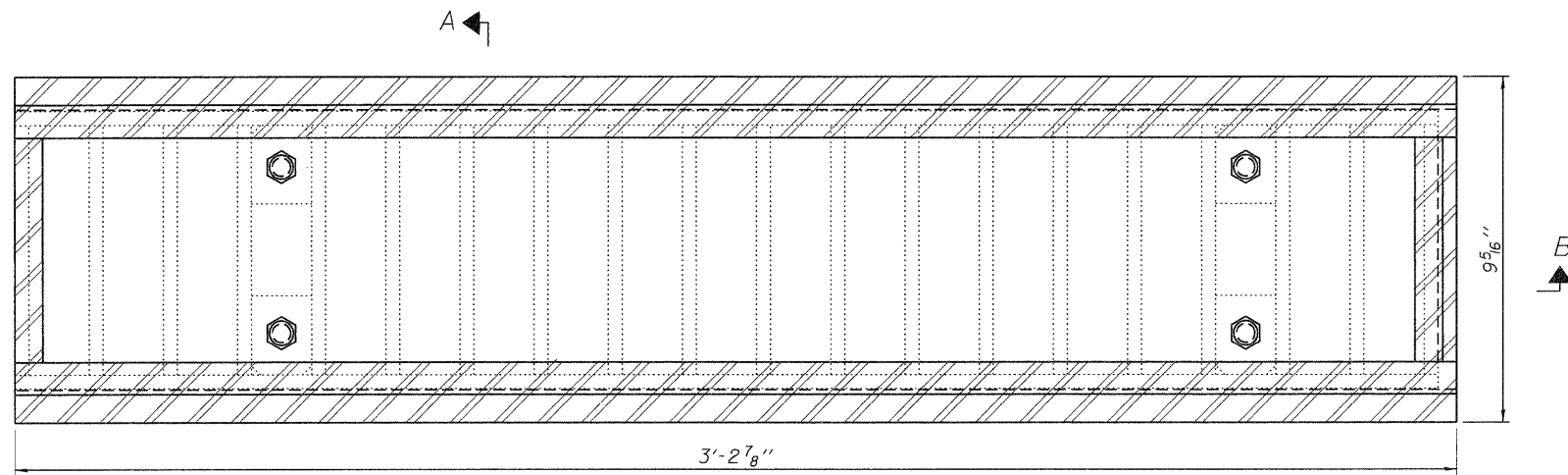


STEEL RETAINER \bar{L} 1" x 7" x "W"

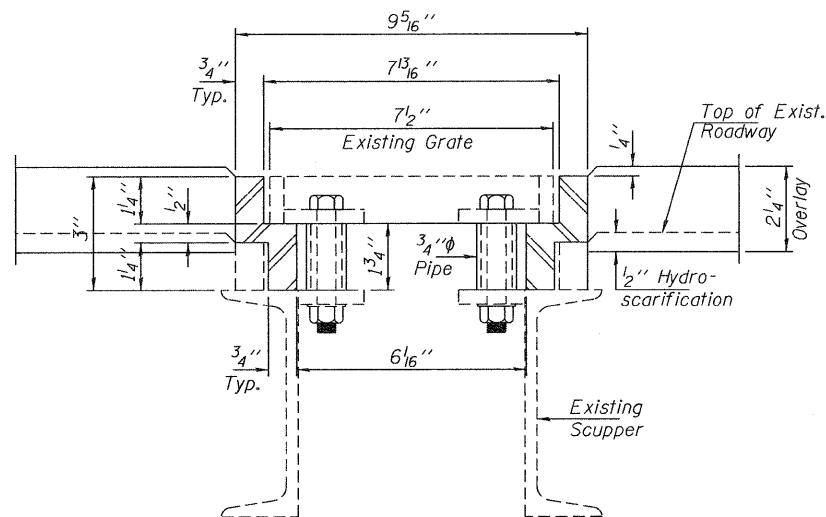
* Required only with Detail II

R-27 7-1-10

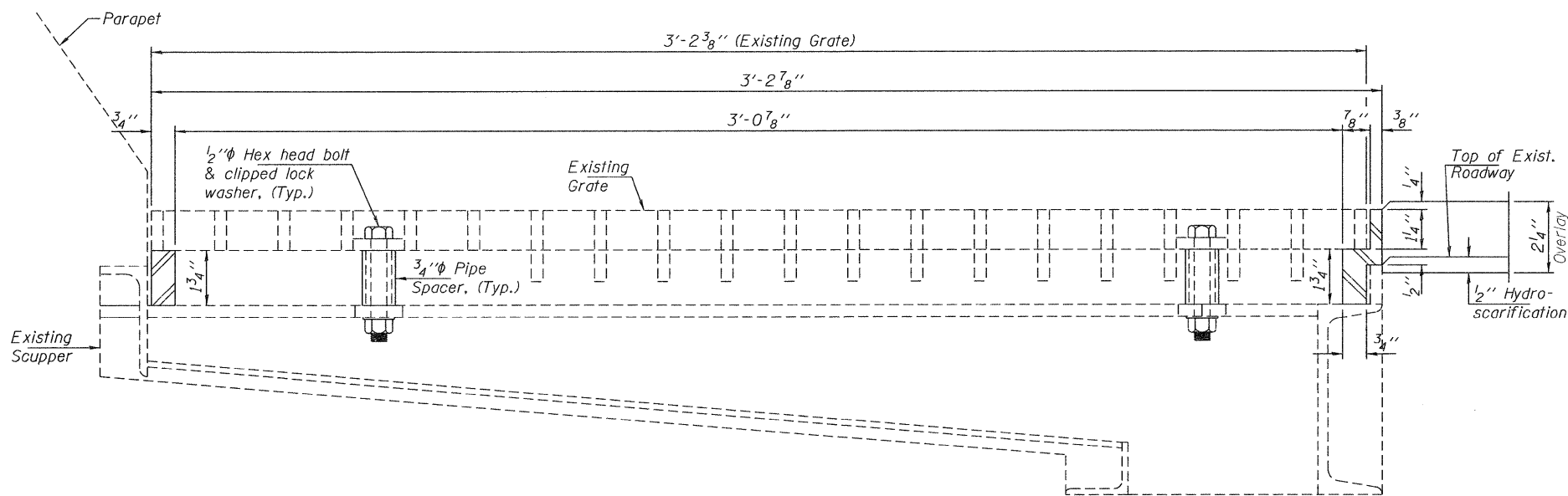
FILE NAME =	USER NAME = midyja	DESIGNED - MVT	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	IL 53 (BALTIMORE STREET) OVER FORKED CREEK TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION S.N. 099-0091	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
es:\pwwork\pwwork\midyja\10101671\099-0091.dgn	DRAWN - MVT	REVISED -	846			4 B-2-BR	WILL	26	13	
PLOT SCALE = 50.0000' / IN.	CHECKED - RTB	REVISED -	CONTRACT NO. 60L50							
PLOT DATE = 3/16/2011	DATE - 3/8/11	REVISED -	ILLINOIS FED. AID PROJECT							
				SCALE:	SHEET NO. OF SHEETS STA.	TO STA.				



PLAN



SECTION A-A



SECTION B-B

- Adjusting Scupper Ring

NOTES

See sheet 9 of 26 for scupper locations.
 All structural steel shall be AASHTO M270 Grade 36. The adjusting scupper ring and 3/4" φ pipe sleeve spacers shall be galvanized.
 Bolts shall be 1/2" φ AASHTO M164 Type 1, mechanically galvanized.
 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 based at the unit price bid for the work.
 Shop plans for proposed adjusting scupper ring shall be submitted for approval prior to fabrication.
 Contractor shall ensure that no damage is done to existing grates to be reused. Cost of all labor and materials necessary to remove existing grates, clean existing scuppers, install adjusting scupper rings and reinstalling grates is included in the cost per unit each for Adjusting Drainage Scupper, Type A.

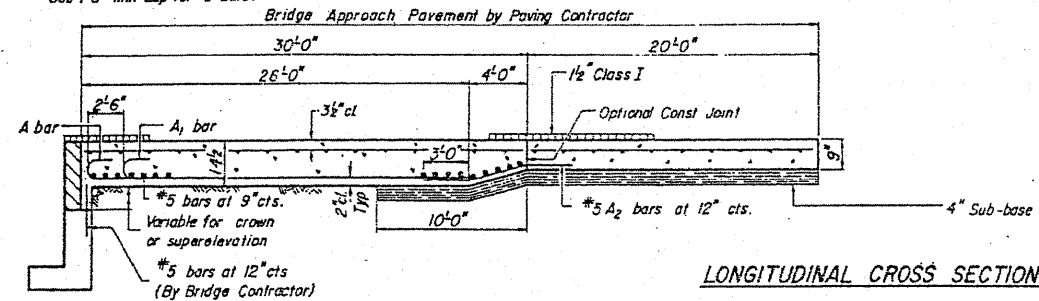
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Adjusting Drainage Scupper, Type A	Each	2

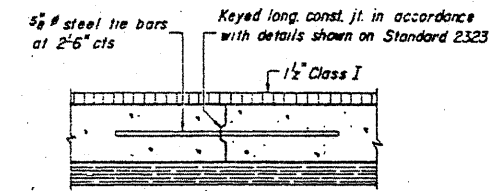
BA-0 7-1-10

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ADJUSTING DRAINAGE SCUPPER, TYPE A DETAIL				F.A.P. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\midyja\20101671\099-001.dgn		DRAWN -	REVISED -		846	4 B-2-BR	WILL	26	13A				
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -		S.N. 099-0091				CONTRACT NO. 60L50				
PLOT DATE = 3/16/2011		DATE -	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

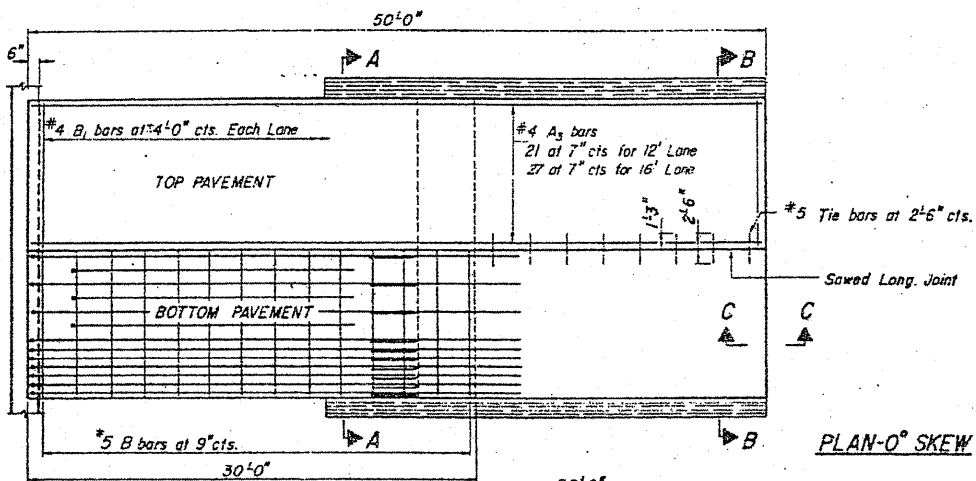
Note: Tilt hook of #9 bars for min. 3 1/2" cl. Use 1'-4" Min. Lap for #4 bars.
Use #6" Min Lap for #5 bars.



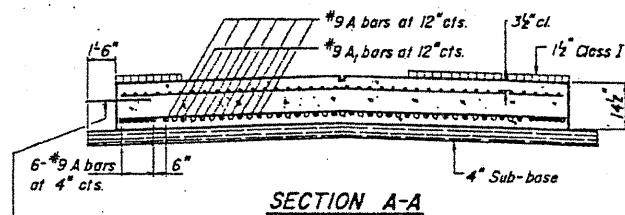
Note: The 4" sub-base shall be of the same material as under adjacent pavement.



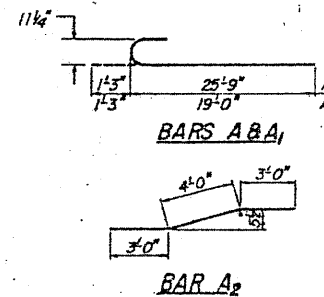
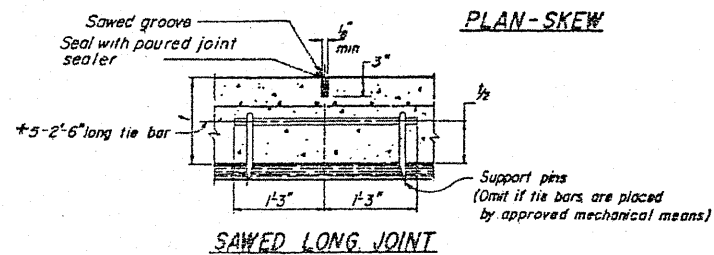
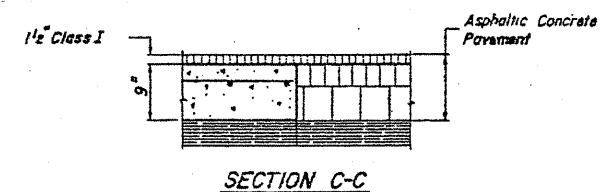
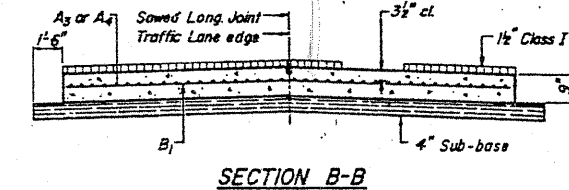
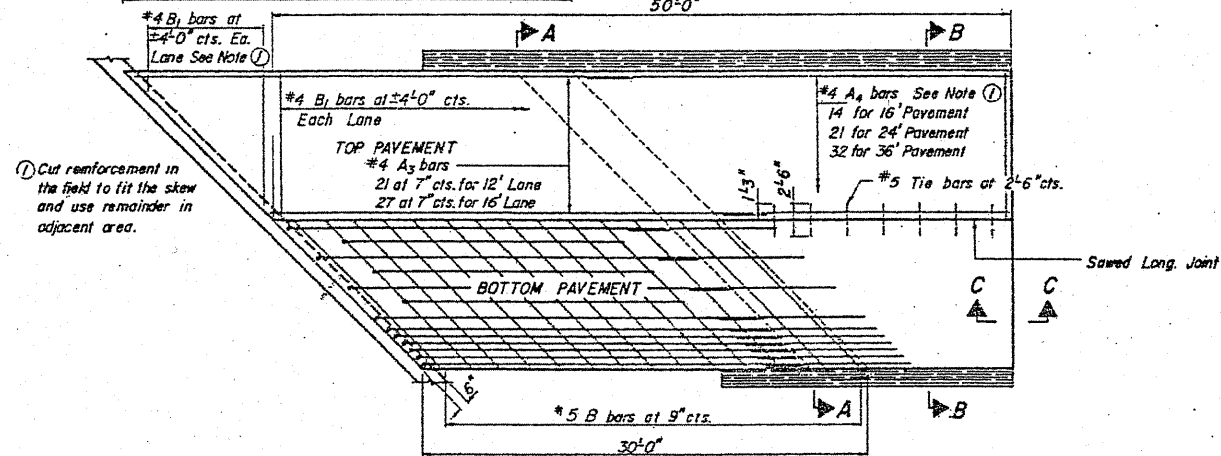
As approved by the Engineer, the contractor may elect to reduce the widths by use of the Optional Longitudinal Construction Joint shown. Joint shall be located at the edge of Traffic Lane.



Note: The cost of tie bars, sub-base and bituminous prime shall be included in the cost of Bridge Approach Pavement.



Note: When the road plans show curb and gutter, gutter or bridge approach shoulder pavement adjacent to approach slabs, place 1/2" steel tie bars at 2'-6" centers in accordance with the details for Bulkhead Longitudinal Construction Joint shown on Standard 2323. Cost of the tie bars will be included in the contract unit price for the adjacent item. Transitions for curb and gutter shall be as shown on the plans.



FOR INFORMATION ONLY

FILE NAME =	USER NAME = mdyjo	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE APPROACH PAVEMENT STANDARD 2360-2	F.A.P. RTE. 846	SECTION 4 B-2-BR	COUNTY WILL	TOTAL SHEETS 26	SHEET NO. 14		
Plot Scale = 1/8" = 1'-0"	Plot Date = 2/17/2011	DRAWN -	REVISED -			SCALE:	SHEET NO. 1 OF 2 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT			
		CHECKED -	REVISED -									
		DATE -	REVISED -									

QUANTITIES FOR 50-FOOT APPROACH SLAB

Skew Angle	Bottom Reinforcement			Top Reinforcement				Total Weight bars-lbs.
	#5 B bars	A		#4 A ₃ bars	#4 A ₄ bars			
	No.	Length	A ₁ A ₂	B ₁	No.	Length	No.	Length

Skew Angle	Bottom Reinforcement			Top Reinforcement				Total Weight bars-lbs.
	#5 B bars	A		#4 A ₃ bars	#4 A ₄ bars			
	No.	Length	A ₁ A ₂	B ₁	No.	Length	No.	Length

Skew Angle	Bottom Reinforcement			Top Reinforcement				Total Weight bars-lbs.
	#5 B bars	A		#4 A ₃ bars	#4 A ₄ bars			
	No.	Length	A ₁ A ₂	B ₁	No.	Length	No.	Length

16-FOOT WIDTH PAVEMENT

Skew Angle	Bottom Reinforcement	Top Reinforcement	Total Weight
0°	40 15'-6"	54 25'-6" — —	4910
5°	40 15'-7"	54 25'-4" 14 3'-11"	4950
10°	40 15'-9"	54 25'-0" 14 5'-2"	4950
15°	40 16'-1"	54 24'-9" 14 6'-5"	4970
20°	40 16'-6"	54 24'-5" 14 7'-9"	4990
25°	40 17'-1"	54 24'-0" 14 9'-2"	5010
30°	40 17'-11"	54 23'-8" 14 10'-9"	5050
35°	40 18'-11"	54 23'-3" 14 12'-6"	5090
40°	40 20'-3"	54 22'-9" 14 14'-5"	5150
45°	40 21'-11"	54 22'-2" 14 16'-8"	5220
50°	40 24'-1"	54 21'-6" 14 19'-4"	5310
55°	40 27'-0"	54 20'-8" 14 22'-8"	5430
60°	40 31'-0"	54 19'-8" 14 26'-11"	5600

24-#9 A bars 27'-0"
11-#9 A₁ bars 20'-3"
24-#5 A₂ bars 10'-0"
13-#4 B₁ bars 15'-6"
Bridge Approach Pavement 89 Sq Yds.
Bit. Conc. Surface Course, Class I 8 Tons

24-FOOT WIDTH PAVEMENT

Skew Angle	Bottom Reinforcement	Top Reinforcement	Total Weight
0°	40 23'-6"	84 25'-6" — —	7190
5°	40 23'-7"	84 25'-2" 21 4'-9"	7240
10°	40 23'-10"	84 24'-8" 21 6'-11"	7250
15°	40 24'-4"	84 24'-0" 21 9'-1"	7270
20°	40 25'-0"	84 23'-6" 21 11'-5"	7300
25°	40 25'-11"	84 22'-10" 21 13'-10"	7340
30°	40 27'-2"	84 22'-3" 21 16'-6"	7390
35°	40 28'-8"	84 21'-6" 21 19'-6"	7450
40°	40 30'-8"	84 20'-8" 21 22'-10"	7540
45°	40 33'-3"	84 19'-8" 21 26'-8"	7640
50°	80 19'-1"	42 35'-3" 21 31'-3"	7800
55°	80 21'-4"	42 32'-6" 21 36'-11"	7990
60°			

32-#9 A bars 27'-0"
19-#9 A₁ bars 20'-3"
32-#5 A₂ bars 10'-0"
26-#4 B₁ bars 11'-6"
Bridge Approach Pavement 133 Sq Yds.
Bit. Conc. Surface Course, Class I 11 Tons

36-FOOT WIDTH PAVEMENT

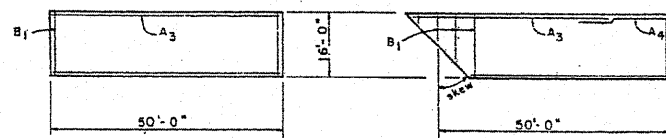
Skew Angle	Bottom Reinforcement	Top Reinforcement	Total Weight
0°	40 35'-6"	126 25'-6" — —	10560
5°	40 35'-8"	126 24'-11" 32 5'-10"	10640
10°	40 36'-0"	126 24'-1" 32 9'-0"	10650
15°	80 19'-4"	126 23'-3" 32 12'-4"	10770
20°	80 19'-10"	126 22'-5" 32 15'-9"	10810
25°	80 20'-7"	126 21'-6" 32 19'-6"	10880
30°	80 21'-6"	126 20'-6" 32 23'-6"	10950
35°	80 22'-8"	126 19'-4" 32 27'-10"	11050
40°	80 24'-2"	63 34'-6" 32 32'-10"	11100
45°			
50°			
55°			
60°			

44-#9 A bars 27'-0"
31-#9 A₁ bars 20'-3"
44-#5 A₂ bars 10'-0"
39-#4 B₁ bars 11'-6"
Bridge Approach Pavement 200 Sq Yds.
Bit. Conc. Surface Course Class I 17 Tons

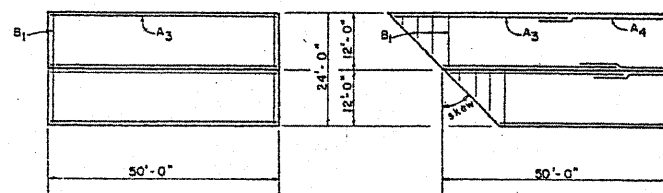
* Requires greater than 50 foot Approach Slab

* Requires greater than 50 foot Approach Slab

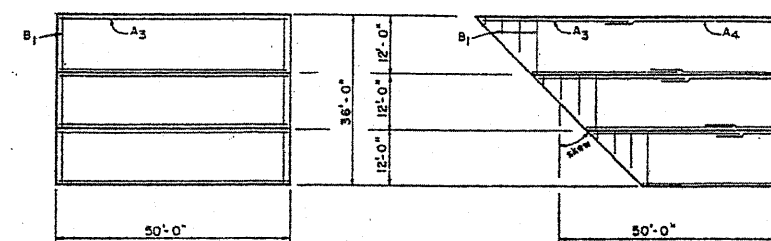
TOP OF SLAB BAR ARRANGEMENT



TOP OF SLAB BAR ARRANGEMENT

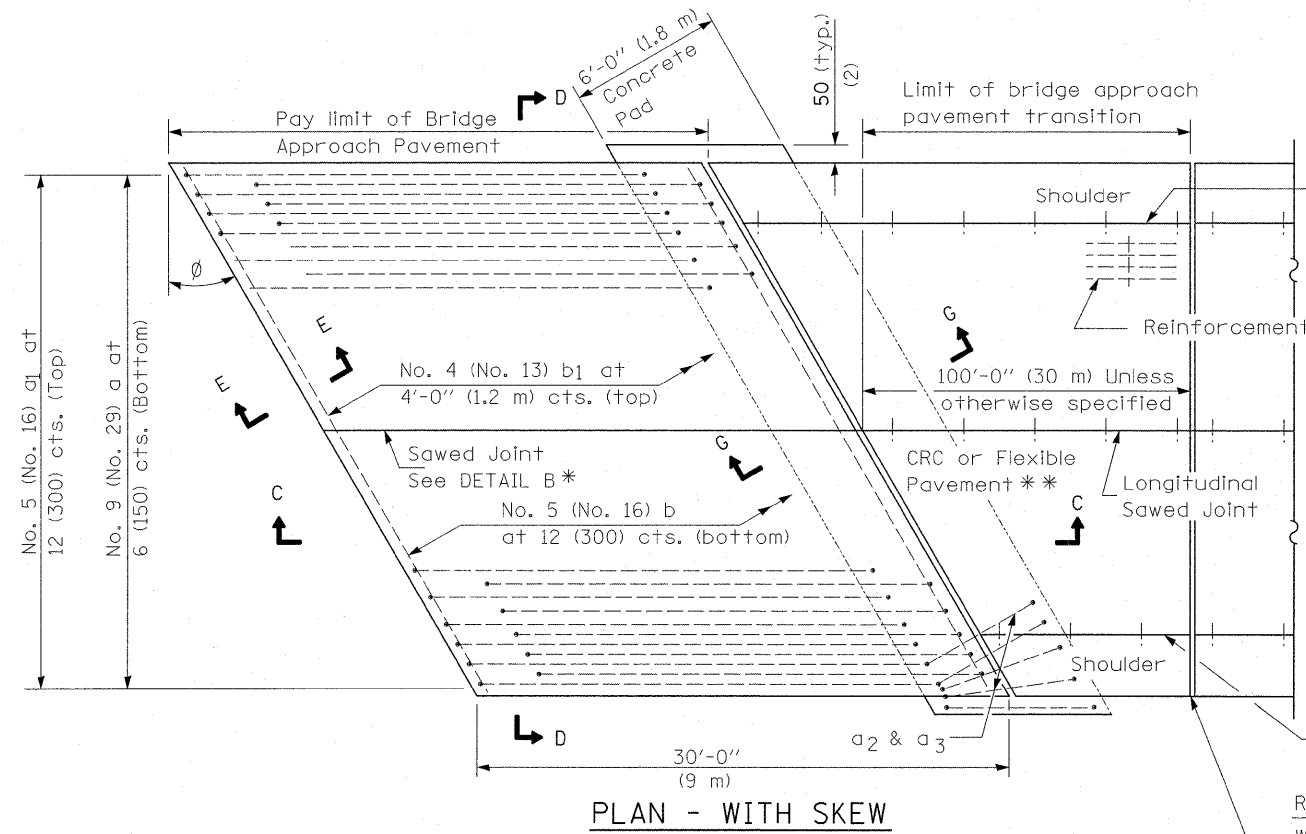


TOP OF SLAB BAR ARRANGEMENT

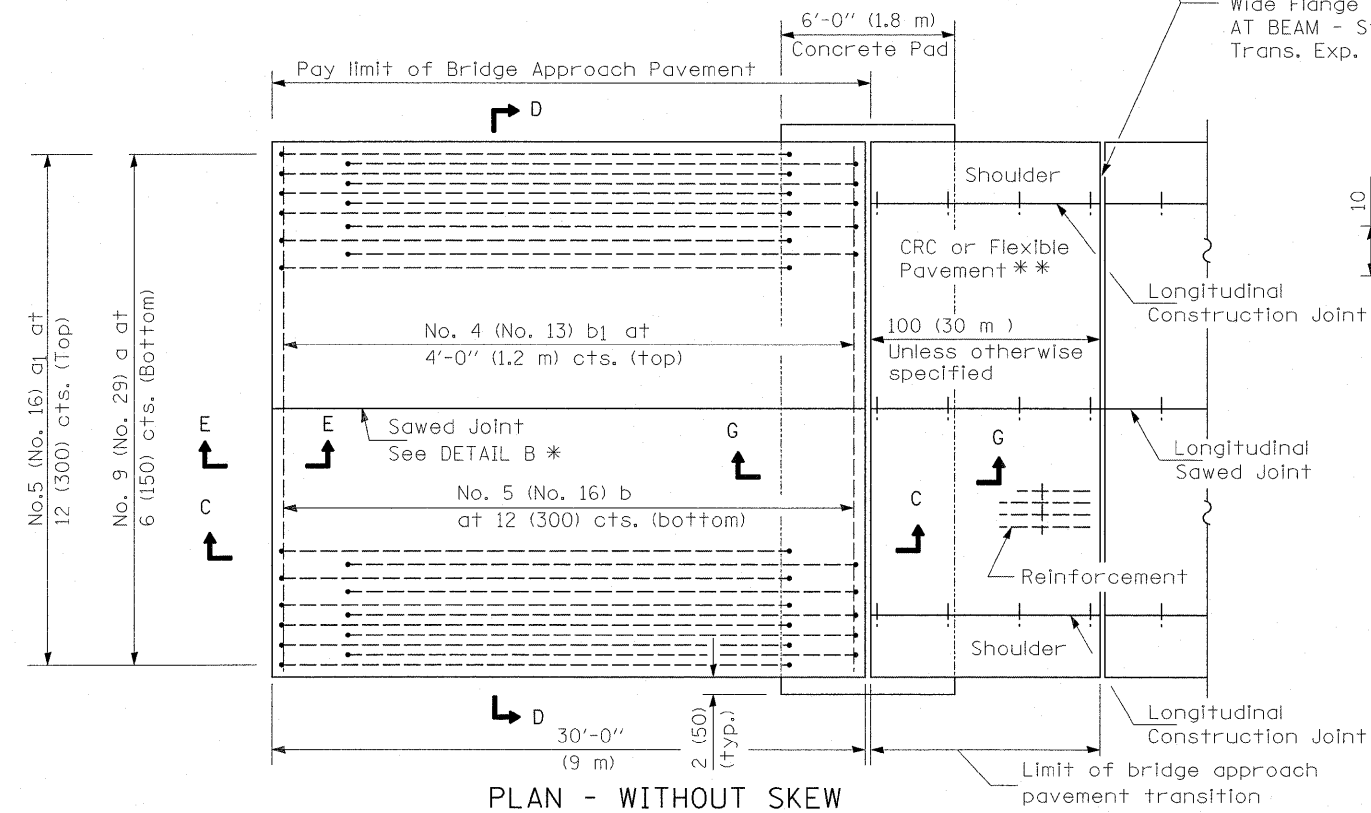


FOR INFORMATION ONLY

FILE NAME =	USER NAME = mdjje	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING BRIDGE APPROACH PAVEMENT STANDARD 2360-2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ca\pwwork\pwwork\mdjje\08256471\017041	-sht-plan.dgn	DRAWN -	REVISED -			846	4 B-2-BR	WILL	26	15	
	PLOT SCALE = 1/8" = 1'-0"	CHECKED -	REVISED -			CONTRACT NO. 60L50					
	PLOT DATE = 2/17/2011	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					



PLAN - WITH SKEW



PLAN - WITHOUT SKEW

* Saw ϕ or lane edge if poured two or more lane widths at a time.
 ** Omit Reinforcement, tie bars and Long. sawed Jt. for Flexible Pavement.

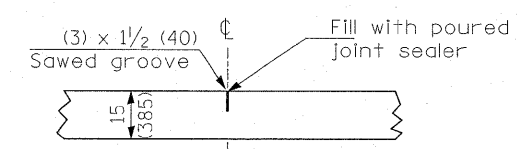
NEW CONSTRUCTION

Longitudinal Construction Joint

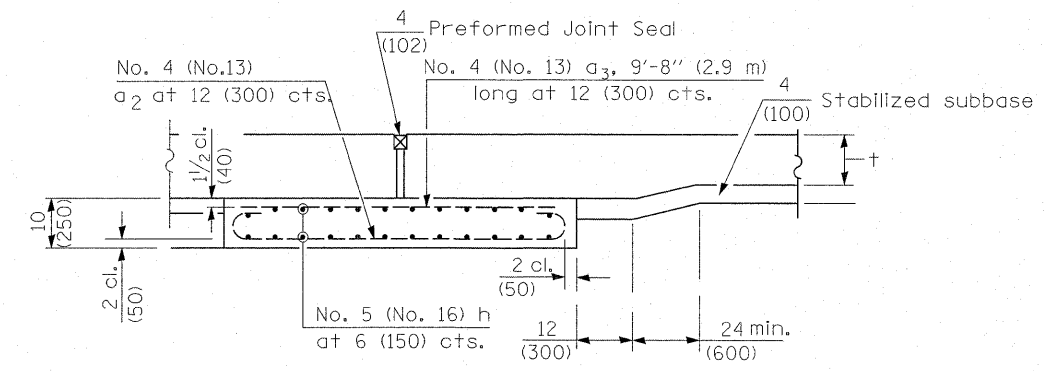
Longitudinal Construction Joint

Rigid Pavement only:

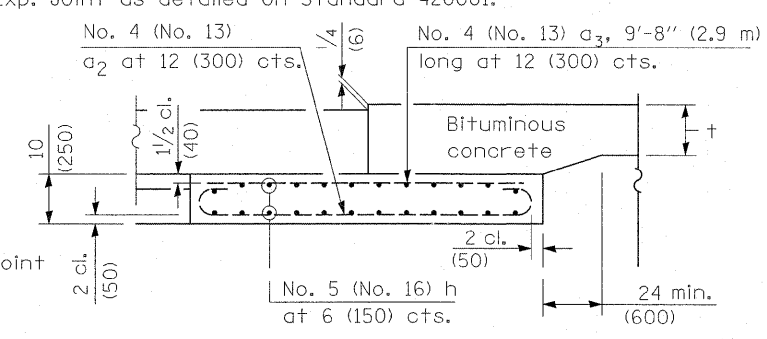
Wide Flange Beam Terminal Joint (See DETAIL AT BEAM - Standard 421101 or 421106) or 2 (50) Trans. Exp. Joint as detailed on Standard 420001.



DETAIL B*
(Reinforcement Not Shown)



SECTION G-G - RIGID PAVEMENT
(Showing reinforcement)

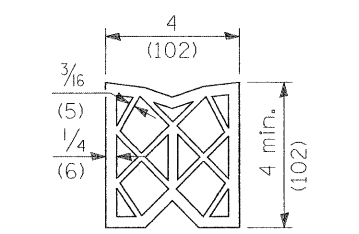
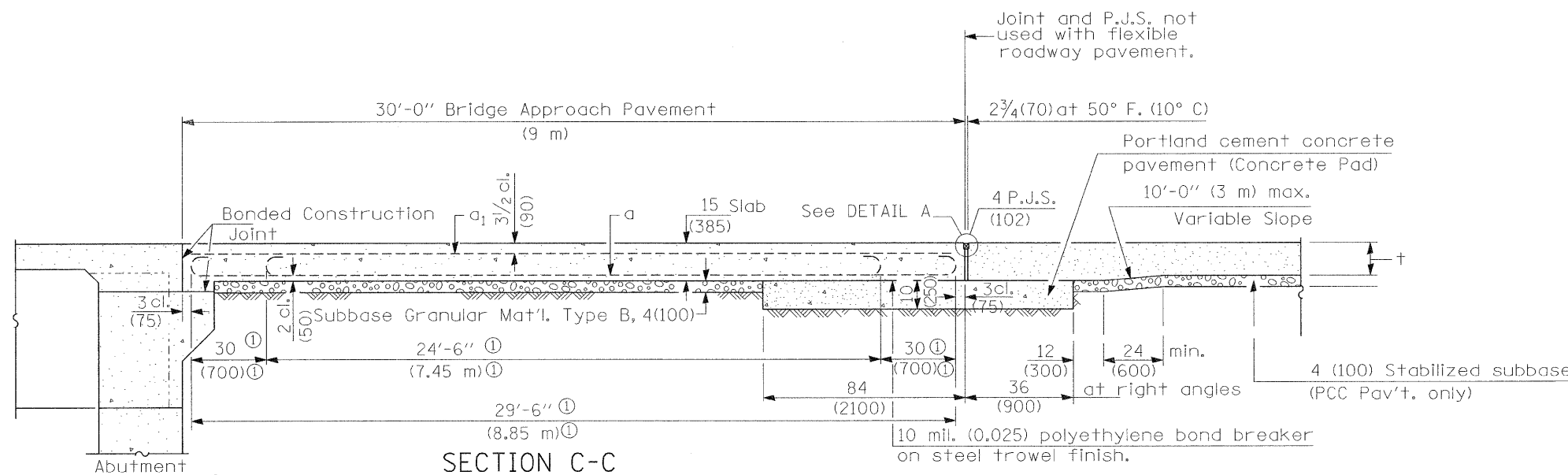


SECTION G-G - FLEXIBLE PAVEMENT
(Showing reinforcement)

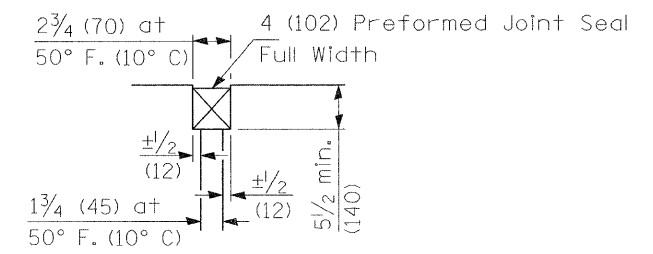
GENERAL NOTES

THICKNESS-"t"=Thickness of Pavement.
 See Standard 421001 for reinforcement details not shown.
 See Standard 420001 for joint details not shown.
 All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH PAVEMENT	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ct:\pw\work\pavedot\midyja\d0256471\D17041	p-shr-plan.dgn	DRAWN -	REVISED -			846	4 B-2-BR	WILL	26	16	
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -			CONTRACT NO. 60L50					
PLOT DATE = 2/18/2011		DATE -	REVISED -			SCALE:	SHEET NO. 1 OF 2 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT	

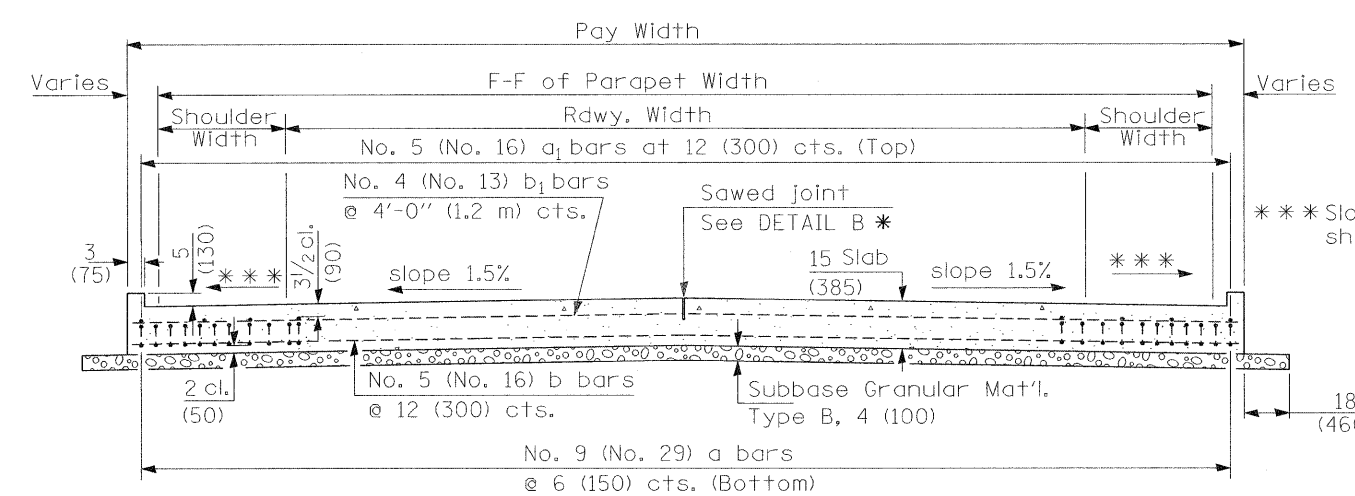


PREFORMED JOINT SEAL



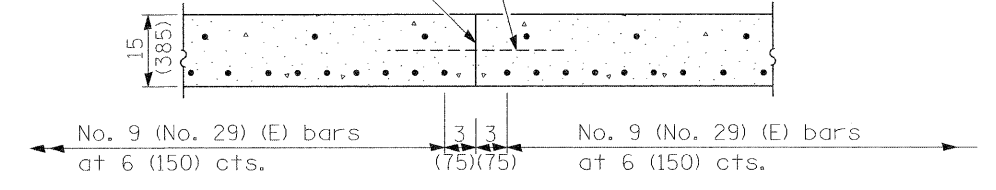
DETAIL A

SECTION C-C
 ① Stagger No. 9 (No. 29) a bars as shown on plan - full width



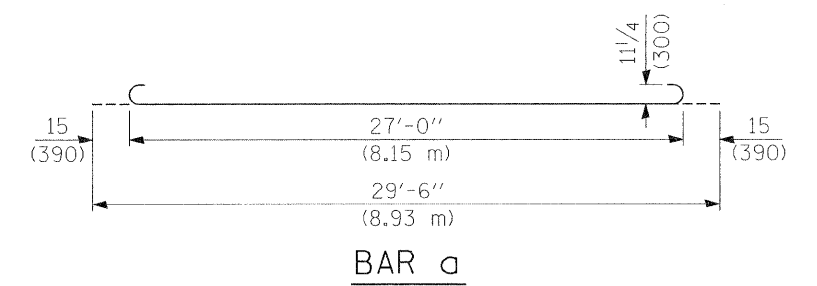
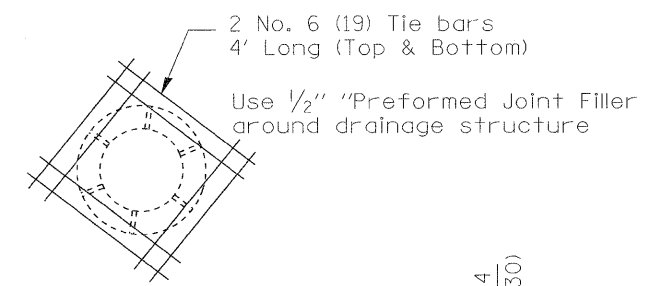
SECTION D-D
 (See Plan for Dimensions not shown)

Longitudinal Construction Joint in accordance with details shown on Standard 420001.

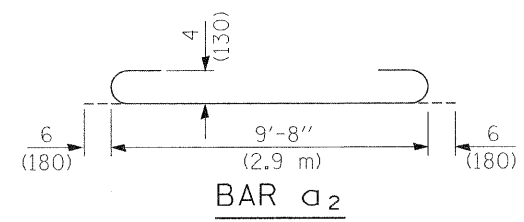


OPTIONAL LONGITUDINAL CONSTRUCTION JOINT

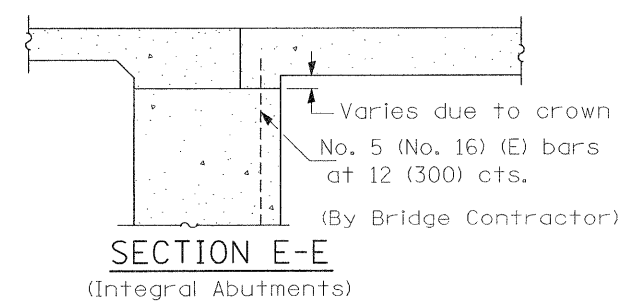
As approved by the Engineer, the Contractor may elect to reduce the widths of pour by use of the Optional Longitudinal Construction Joint shown. Joints shall be located at the edge of a traffic lane.



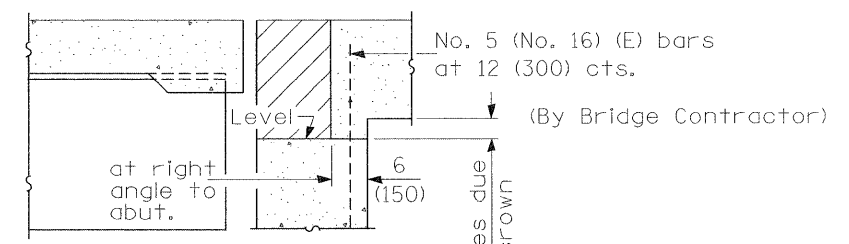
BAR a



BAR a₂



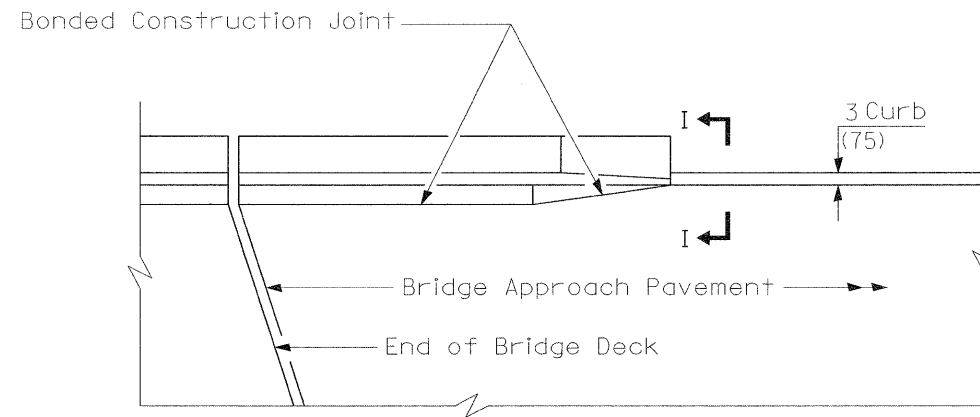
SECTION E-E
 (Integral Abutments)



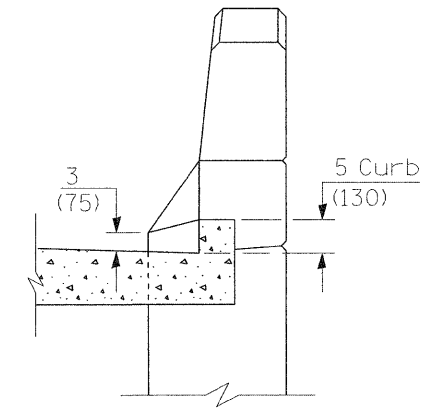
SECTION E-E
 (Jointed Abutments)

DESIGN STRESSES
 f_y = 60,000 p.s.i. (400 MPa)
 f'c = 3,500 p.s.i. (24 MPa)
 n = 8.5

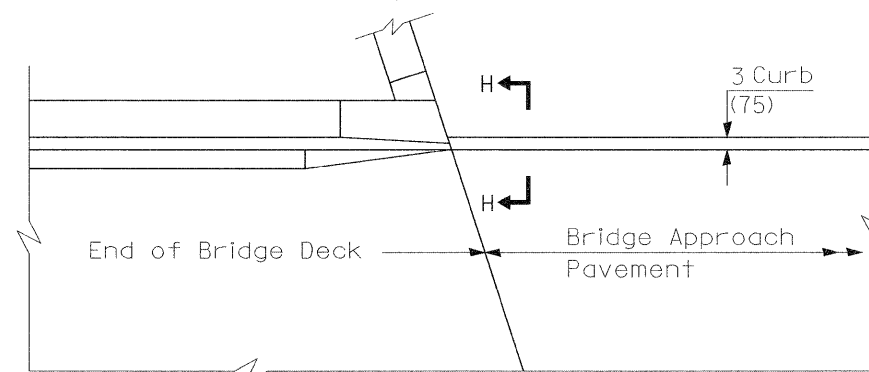
FILE NAME =	USER NAME = msdjje	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH PAVEMENT			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 3/16/2011	DATE -	REVISED -	ILLINOIS FED. AID PROJECT									
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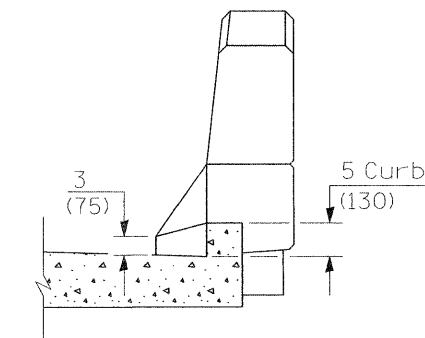
PARAPET TO CURB TRANSITION
PILE BENT ABUTMENT



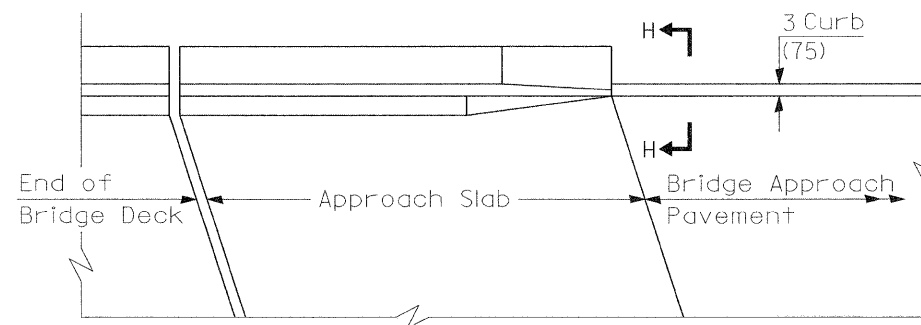
SECTION I - I



PARAPET TO CURB TRANSITION
INTEGRAL ABUTMENT



SECTION H - H



PARAPET TO CURB TRANSITION
VAULTED ABUTMENT

FILE NAME =	USER NAME = midyjo	DESIGNED -	REVISED -
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PLOT DATE = 3/16/2011		DATE -	REVISED -

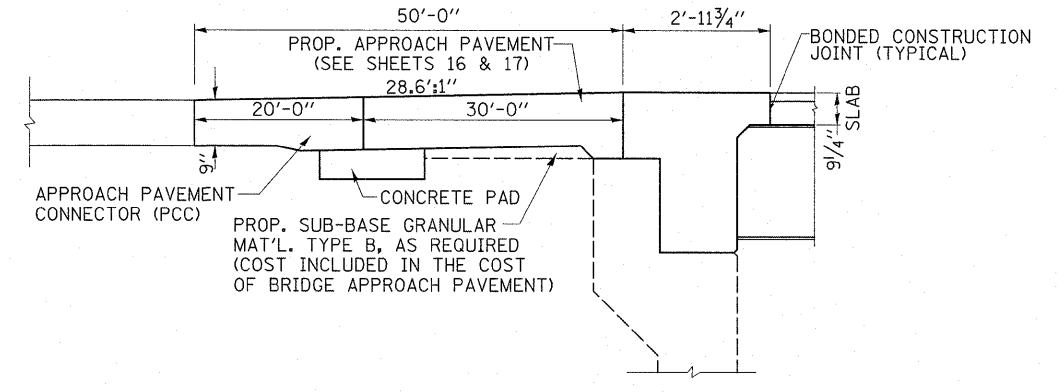
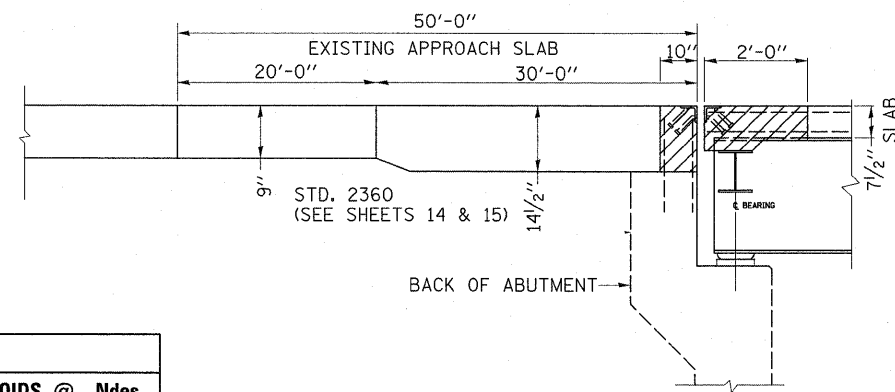
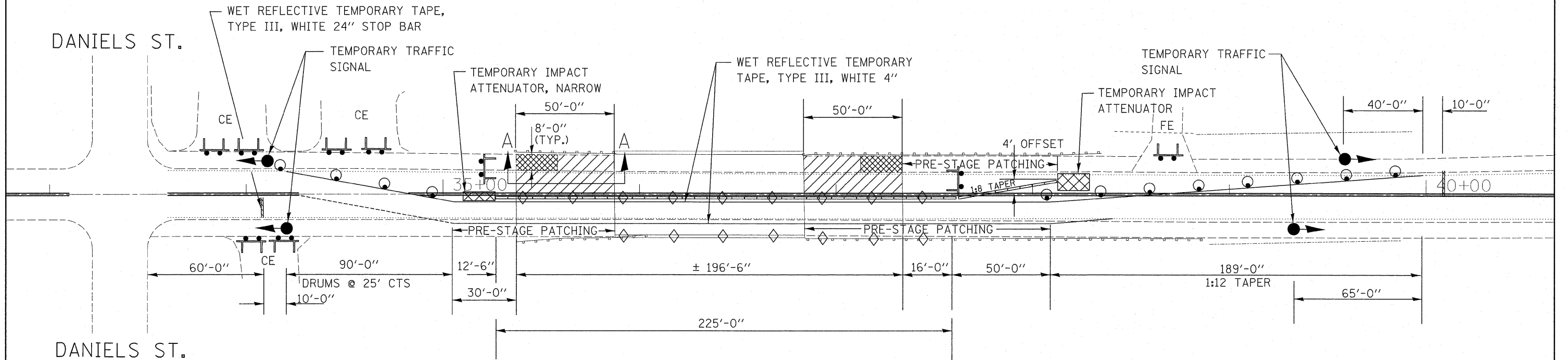
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH PAVEMENT

SCALE: SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
846	4 B-2-BR	WILL	26	17A
CONTRACT NO. 60L50				
ILLINOIS FED. AID PROJECT				

IL. ROUTE 53



HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @ Ndes
HOT-MIX ASPHALT SHOULDER	
TOP 2"	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50, (IL 9.5 mm)	4% @ 50 GYR.
BOTTOM 6"	
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50 (2 LIFTS)	4% @ 50 GYR.

- THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURES IS 112 LBS/SQ.YD./IN

- THE AC TYPE FOR POLYMERIZED HMA MIXES SHALL BE SBS/SBR PG 70 -22 AND FOR NON-POLYMERIZED HMA THE AC TYPE SHALL BE PG 64 -22 UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

EXISTING SECTION A-A
(HATCHED AREA INDICATES REMOVAL)

PROPOSED SECTION A-A

LEGEND

- TYPE III BARRICADE
- TEMPORARY CONCRETE BARRIER
- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
- 8" PAVED SHOULDER REMOVAL
8" HMA SHOULDER
- APPROACH PAVEMENT

NOTE:

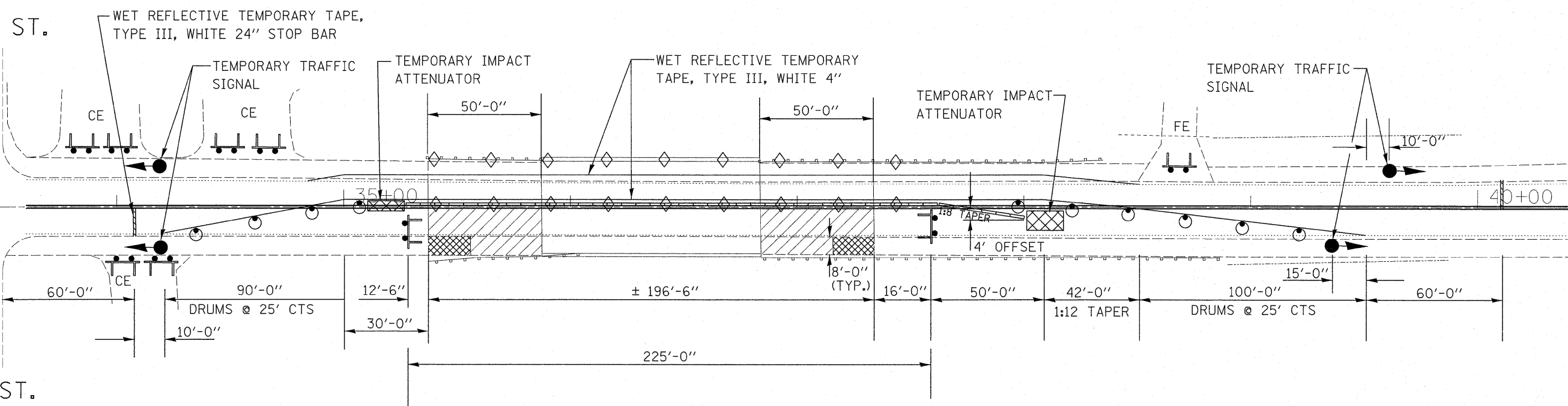
- BARRIER WALL/ GUARDRAIL MARKERS AT 25' CTS SEE STANDARDS 704001 & 635011
- TYPE III BARRICADES TO BE PLACED WHEN NO WORK IS BEING PERFORMED
- ADVANCE WARNING SIGNS & TRAFFIC CONTROL ON IL 53 SHALL BE ACCORDING TO STANDARD 701321 EXCEPT AS SHOWN. COST INCLUDED WITH "TRAFFIC CONTROL AND PROTECTION (SPECIAL)".

IL. ROUTE 53








DANIELS ST.

DANIELS ST.



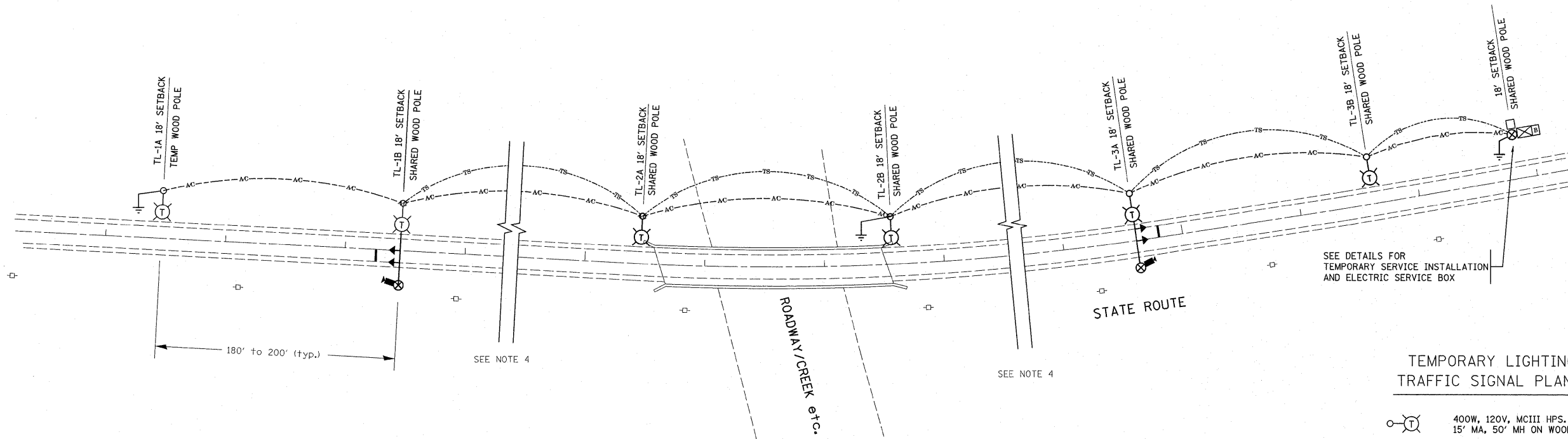
LEGEND

-  TYPE III BARRICADE
-  TEMPORARY CONCRETE BARRIER
-  DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
-  8" PAVED SHOULDER REMOVAL
8" HMA SHOULDER
-  APPROACH PAVEMENT

NOTE:

- BARRIER WALL/ GUARDRAIL MARKERS AT 25' CTS SEE STANDARDS 704001 & 635011
- TYPE III BARRICADES TO BE PLACED WHEN NO WORK IS BEING PERFORMED
- ADVANCE WARNING SIGNS & TRAFFIC CONTROL ON IL 53 SHALL BE ACCORDING TO STANDARD 701321 EXCEPT AS SHOWN. COST INCLUDED WITH "TRAFFIC CONTROL AND PROTECTION (SPECIAL)".

FILE NAME =	USER NAME = midyja	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE II TRAFFIC CONTROL AND RESURFACING				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pw_work\pzd\dot\midyja\d0256471\017041	p-shit-plan.dgn	DRAWN -	REVISED -		846	4 B-2-BR	WILL	26	19				
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PLOT DATE = 2/18/2011	DATE -	REVISED -	REVISED -		ILLINOIS FED. AID PROJECT								
				SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.				



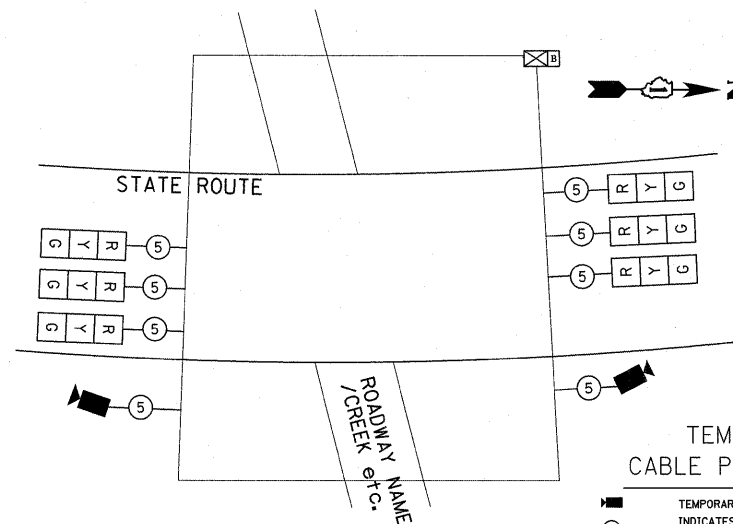
TYPICAL LAYOUT FOR TEMPORARY LIGHTING AND TRAFFIC SIGNALS
NOT TO SCALE

GENERAL NOTES:

- CONTACT TO THE ELECTRIC UTILITY SHALL BE INITIATED BEFORE THE PRECONSTRUCTION MEETING, AND DOCUMENTATION OF CONTACT SHALL BE PRESENTED AT THAT MEETING. NO PLACEMENT OF POLES WILL BE ALLOWED WITHOUT EVIDENCE OF A SIGNED AGREEMENT WITH THE ELECTRIC UTILITY, FURNISHED TO THE ENGINEER.
- UNLESS OTHERWISE INDICATED, AND EXCEPT AS OTHERWISE NOTED, THIS STANDARDIZED LAYOUT SHALL APPLY FOR BRIDGES NOT EXCEEDING A 250-FOOT SPAN. FOR BRIDGE SPANS IN EXCESS OF 250 FEET, THE POLES IMMEDIATELY ADJACENT TO THE BRIDGE SHALL BE 100-FOOT POLES (90-FOOT MOUNTING HEIGHT), WITH 750-WATT TYPE III HIGH PRESSURE SODIUM HIGH-MAST LUMINAIRES AS APPROVED BY THE ENGINEER.
- THE LAYOUT OF THE TEMPORARY EQUIPMENT WILL VARY BASED ON FIELD CONDITIONS, STAGING, UTILITY IMPACTS, AND THE ELECTRIC SERVICE LOCATION AS COORDINATED WITH THE ELECTRIC UTILITY. THE CONTRACTOR SHALL SUBMIT A PLAN INDICATING THE SETTING OF POLES, TRAFFIC SIGNALS, AND COMBINED SERVICE. THIS PLAN MUST BE APPROVED BY THE ENGINEER BEFORE ANY POLES ARE PLACED.
- THE ELECTRIC SERVICE SHALL BE 240/120V. WHERE 240V SERVICE IS NOT AVAILABLE, THE CONTRACTOR MAY SUBMIT A PROPOSAL FOR 120V SERVICE. DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURTENANCES SHALL BE APPROPRIATELY RATED AND INCLUDED REGARDLESS OF THE SERVICE VOLTAGE APPLIED.
- THE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATION SHALL SHARE ANY COMMON ELEMENTS SUCH AS WOOD POLES, ELECTRICAL SERVICE, ELECTRIC SERVICE BOX, CABLE, ETC. THE CONTRACTOR SHALL COORDINATE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATIONS.
- THE LIGHT POLE SETBACK FROM THE EDGE OF TRAVEL PAVEMENT SHALL BE 18 FT. UNLESS THE LIGHT POLE IS BEHIND GUARDRAIL, THE LIGHT POLES INSTALLED BEHIND THE GUARDRAIL OR BARRIER WALL SHOULD HAVE AT LEAST 8 FT. SETBACK FROM THE BACK OF THE SHOULDER AND OR AS DIRECTED BY THE ENGINEER.
- EACH LIGHTING UNIT SHALL BE CONTROLLED BY A PHOTO CELL MOUNTED ON EACH LUMINAIRE WITH THE LIGHTING CIRCUIT FED FROM THE TEMPORARY SERVICE DISCONNECT BOX. OTHER MEANS OF LUMINAIRE CONTROL CAN BE CONSIDERED IF APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY APPLIED WATERPROOF SEALANT OR AN APPROVED UL LISTED AERIAL TAP DEVICE.
- ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ENGINEER.

TEMPORARY LIGHTING AND TRAFFIC SIGNAL PLAN LEGEND

- 400W, 120V, MCIII HPS. WITH PHOTO CELL 15' MA, 50' MH ON WOOD POLE, CLASS 4
- 3-1/C#2, AERIAL CABLE WITH MESSENGER WIRE UNLESS OTHERWISE NOTED
- TL-1A TEMPORARY LIGHTING UNIT NUMBER - ONE CIRCUIT A
- GROUND ROD 5/8" DIA. x 10'
- COMBINATION LIGHTING AND TRAFFIC POLE MOUNTED ELECTRICAL SERVICE BOX
- TEMPORARY WOOD POLE - NOMINAL 60 FT., CLASS 4
- TEMPORARY LED TRAFFIC SIGNAL HEAD, NUMBER OF SECTION AND DISPLAY AS REQUIRED.
- TEMPORARY TRAFFIC SIGNAL SPAN WIRE, NUMBER OF CONDUCTORS AS REQUIRED.
- TEMPORARY TRAFFIC CONTROLLER WITH UPS AND BOTTOM PLATE MOUNTED TO WOOD POLE
- TEMPORARY VIDEO DETECTOR



TEMPORARY CABLE PLAN LEGEND

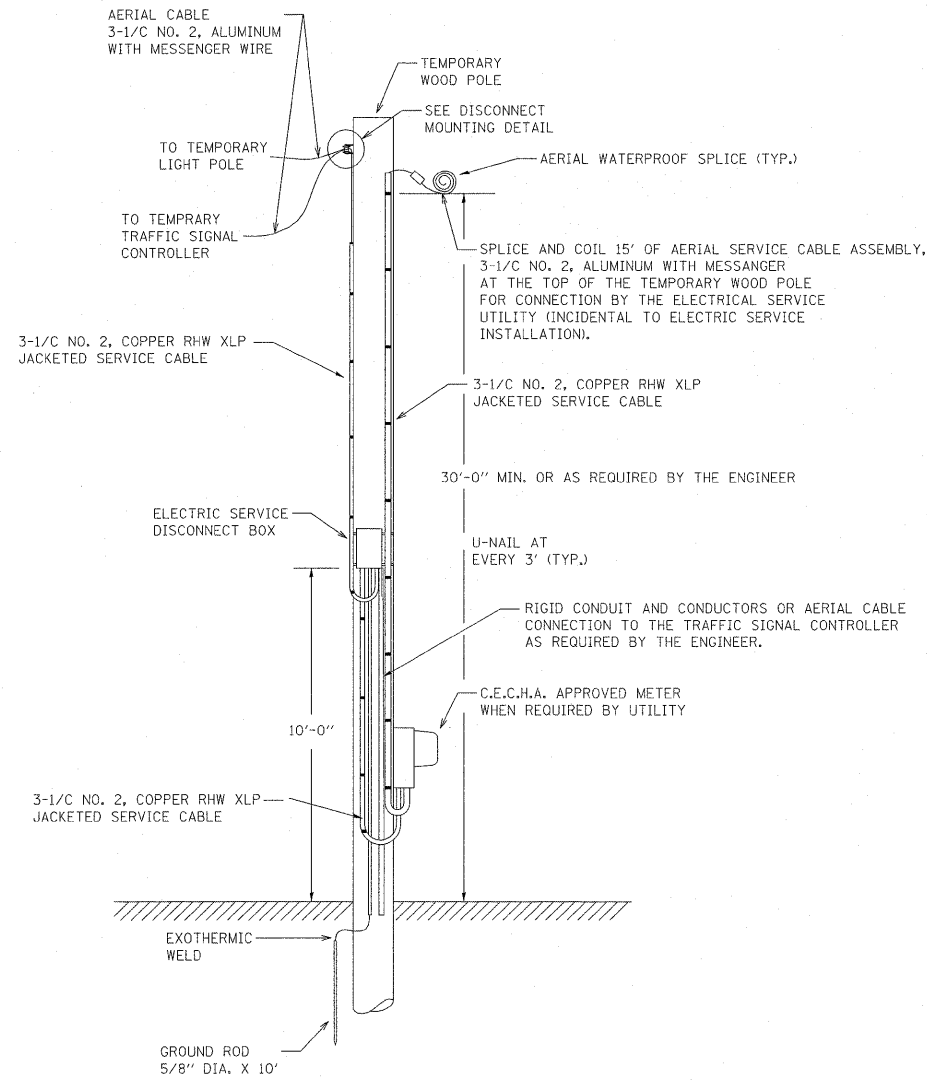
- TEMPORARY VIDEO DETECTOR
- INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION, 12" (300 mm)

TEMPORARY PHASE DESIGNATION DIAGRAM LEGEND

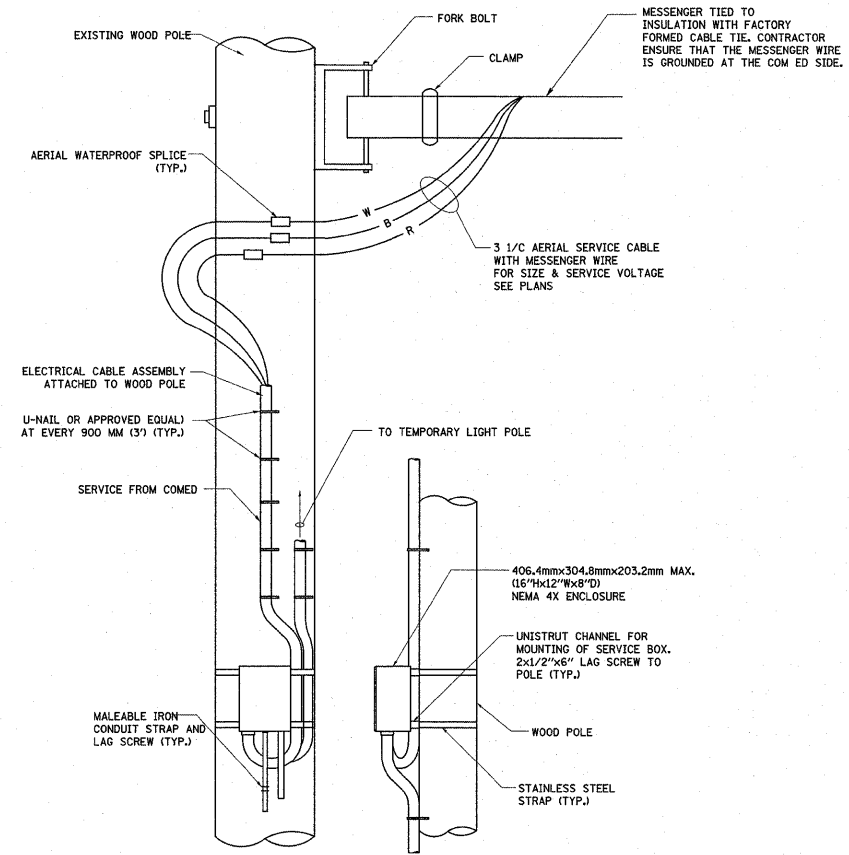
- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE

TEMPORARY PHASE DESIGNATION DIAGRAM (TYPICAL)
NOT TO SCALE

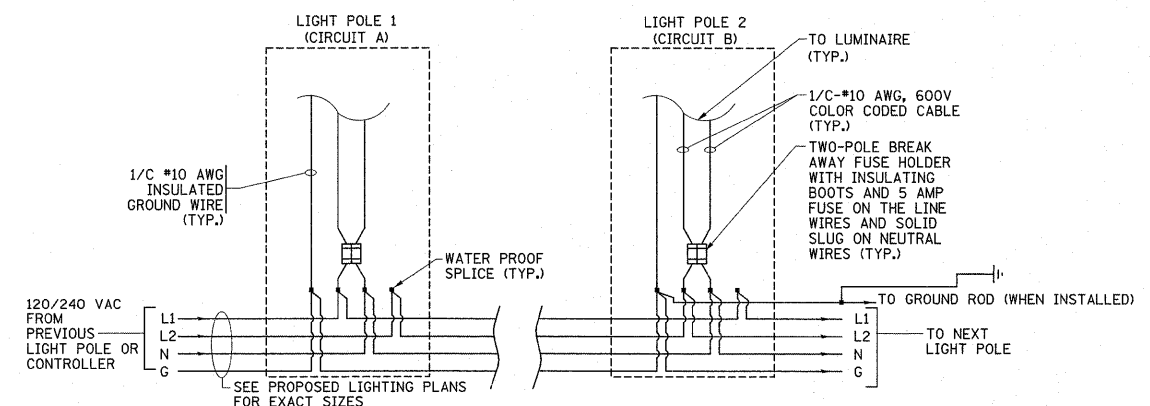
FILE NAME =	USER NAME = midyja	DESIGNED - MP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING			F.A.P. RTE. 846	SECTION 4 B-2-BR	COUNTY WILL	TOTAL SHEETS 26	SHEET NO. 20
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	PLOT DATE = 2/18/2011	CHECKED -	REVISED -									
		DATE - 01/14/10	REVISED -									
											FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	



TEMPORARY SERVICE INSTALLATION DETAIL
NOT TO SCALE



DISCONNECT MOUNTING DETAIL
NOT TO SCALE



LIGHT POLE WIRING DETAIL
NOT TO SCALE

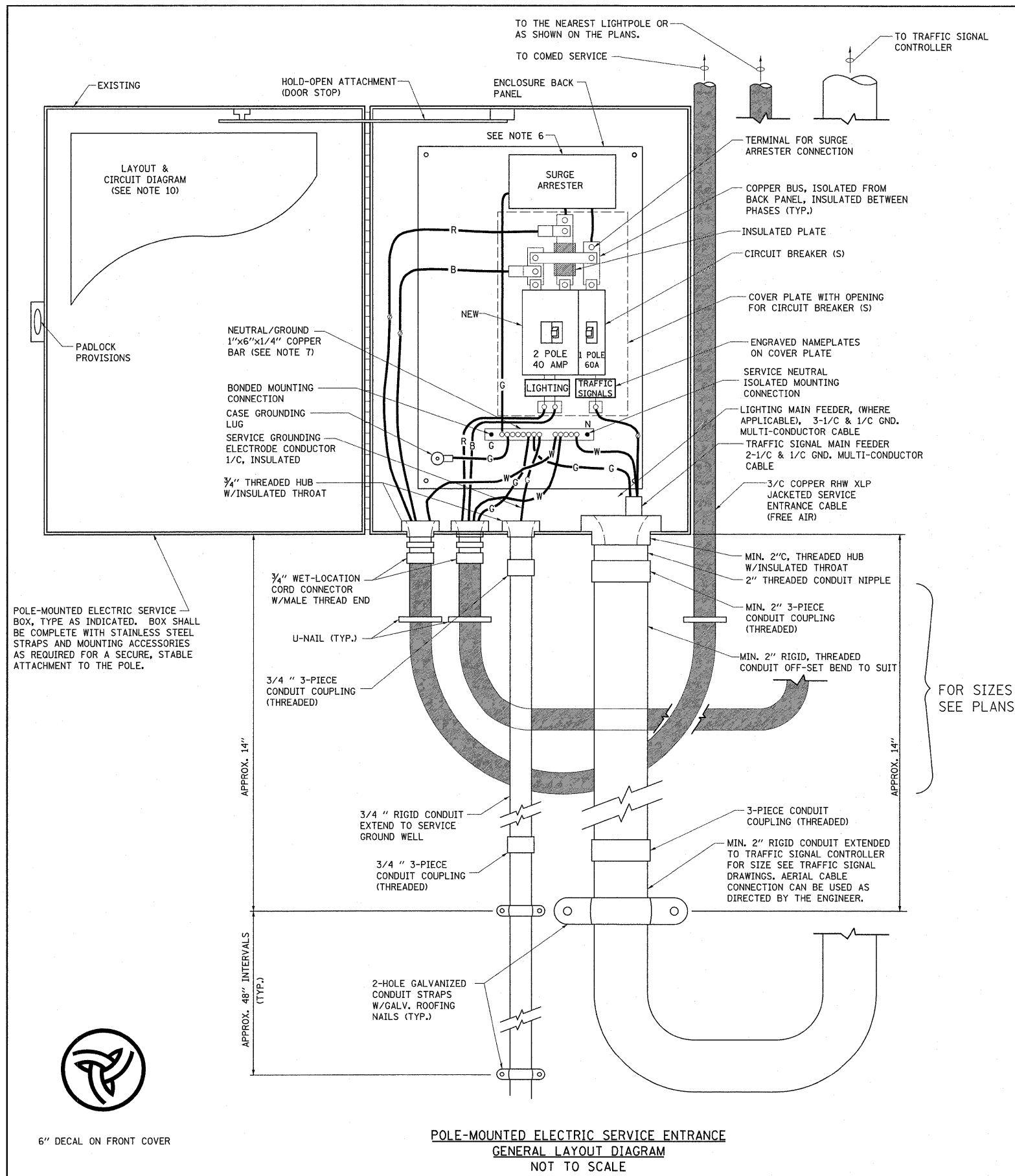
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PLOT DATE = 2/18/2011		DATE - 01/14/10	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY LIGHTING AND TRAFFIC SIGNALS
FOR SINGLE LANE STAGING**

F.A.P. RTE. 846	SECTION 4 B-2-BR	COUNTY WILL	TOTAL SHEETS 26	SHEET NO. 21
BE-805		CONTRACT NO. 60L50		
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				

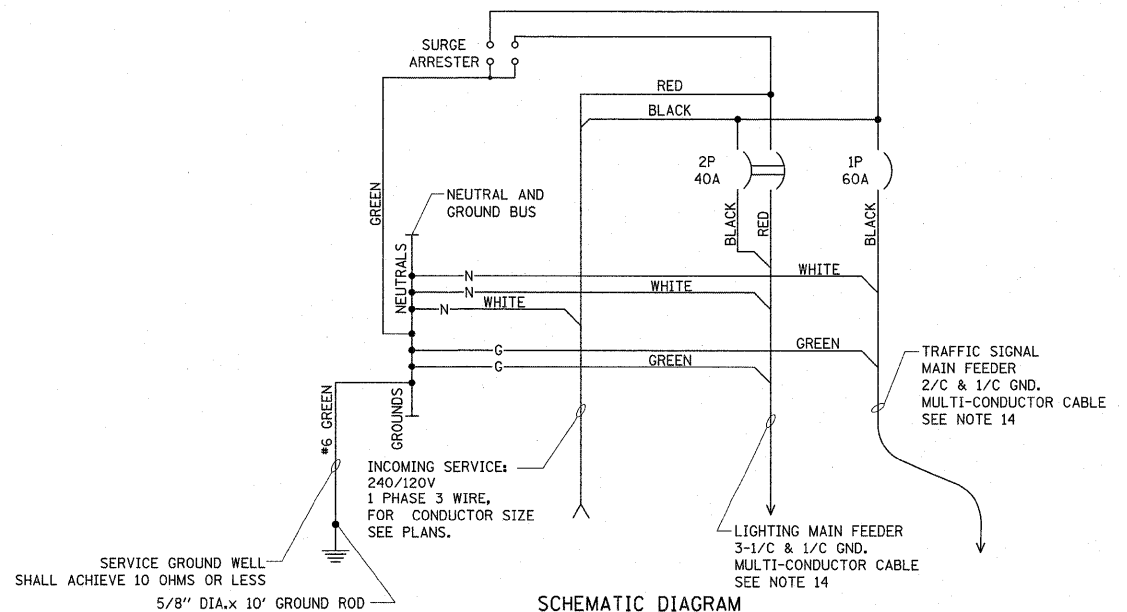
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**POLE-MOUNTED ELECTRIC SERVICE ENTRANCE
GENERAL LAYOUT DIAGRAM
NOT TO SCALE**

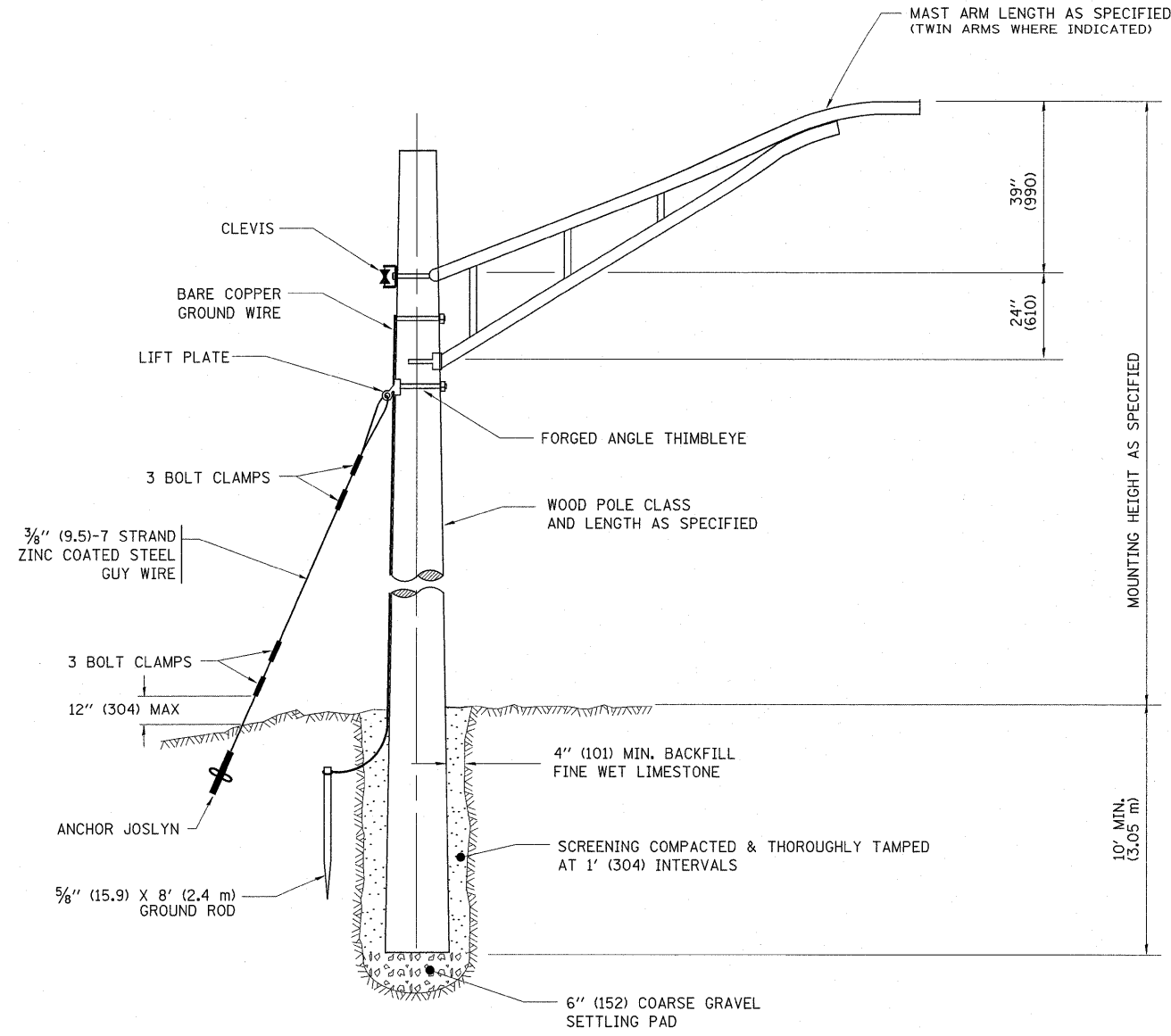
NOTES:

- ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED OR DESIGNATED BY THE ENGINEER, AND SERVICE DROP CABLE SHALL BE COMPATIBLE WITH THE SERVICE ACCORDINGLY. SOME INSTALLATIONS MAY CALL FOR SERVICE ENTRANCE EQUIPMENT SUITABLE FOR 3-WIRE SERVICE EVEN THOUGH INITIALLY WIRED FOR 2-WIRE SERVICE.
- THE POLE-MOUNTED ELECTRIC SERVICE BOX SHALL BE CONFIGURED AND FULLY EQUIPPED FOR 240/120V 3W SERVICE, COMPLETE WITH LIGHTING MAIN BREAKER AND TRAFFIC SIGNALS MAIN BREAKER AS REQUIRED.
- THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LISTED AS SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT.
- THE ELECTRIC SERVICE EQUIPMENT ENCLOSURE SHALL BE NEMA 4X STAINLESS STEEL, NOMINALLY 12"W X 16"H X 8"D, WITH A PIANO-HINGED DOOR, STEEL BACK PANEL, FAST-ACTING STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS AND DOOR STOP, HOFFMAN CATALOG NO. A-16H1208SS6LP/A-16 P12/A-DSTOPK/C-PMK12, OR APPROVED EQUAL.
- CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/TAG-OUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.
- THE SURGE PROTECTOR SHALL BE SUITABLE FOR THE SERVICE VOLTAGE SINGLE PHASE 60HZ AC, WITH A SURGE ENERGY CAPABILITY OF 2160 JOULES OR BETTER AT 8/20 MICRO-SECONDS, RATED -40 TO 60 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER CMOV230L065XST OR APPROVED EQUAL.
- BUS BARS, CONNECTORS, AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED, AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS, OR THE ASSEMBLY SHALL BE A MANUFACTURED SPECIALTY PANELBOARD, CUTLER-HAMMER PRL2A OR APPROVED EQUAL.
- THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE. THE SERVICE NEUTRAL AND SERVICE GROUNDING ELECTRODE CONDUCTOR SHALL BE TERMINATED ADJACENT TO EACH OTHER AT THE DIVIDE BETWEEN THE SECTIONS AND WIRING SHALL BE TERMINATED ONLY UPON THE APPROPRIATE SECTION.
- THE WIRING TERMINALS, INCLUDING THE GROUND/NEUTRAL BAR SHALL BE ARRANGED TO PROVIDE ADEQUATE ROOM FOR PERFORMING FIELD TERMINATIONS.
- A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE MECHANICALLY SECURED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.
- A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN BREAKER.
- LUGS AND CONNECTORS SHALL BE RATED FOR 75 C CONDUCTOR.
- THE EXACT MOUNTING HEIGHT OF THE BOX SHALL BE FIELD DETERMINED TO AVOID OBSTRUCTIONS AND PUBLIC ACCESS. TYPICAL HEIGHT SHALL BE APPROXIMATELY 10 FEET ABOVE GRADE.

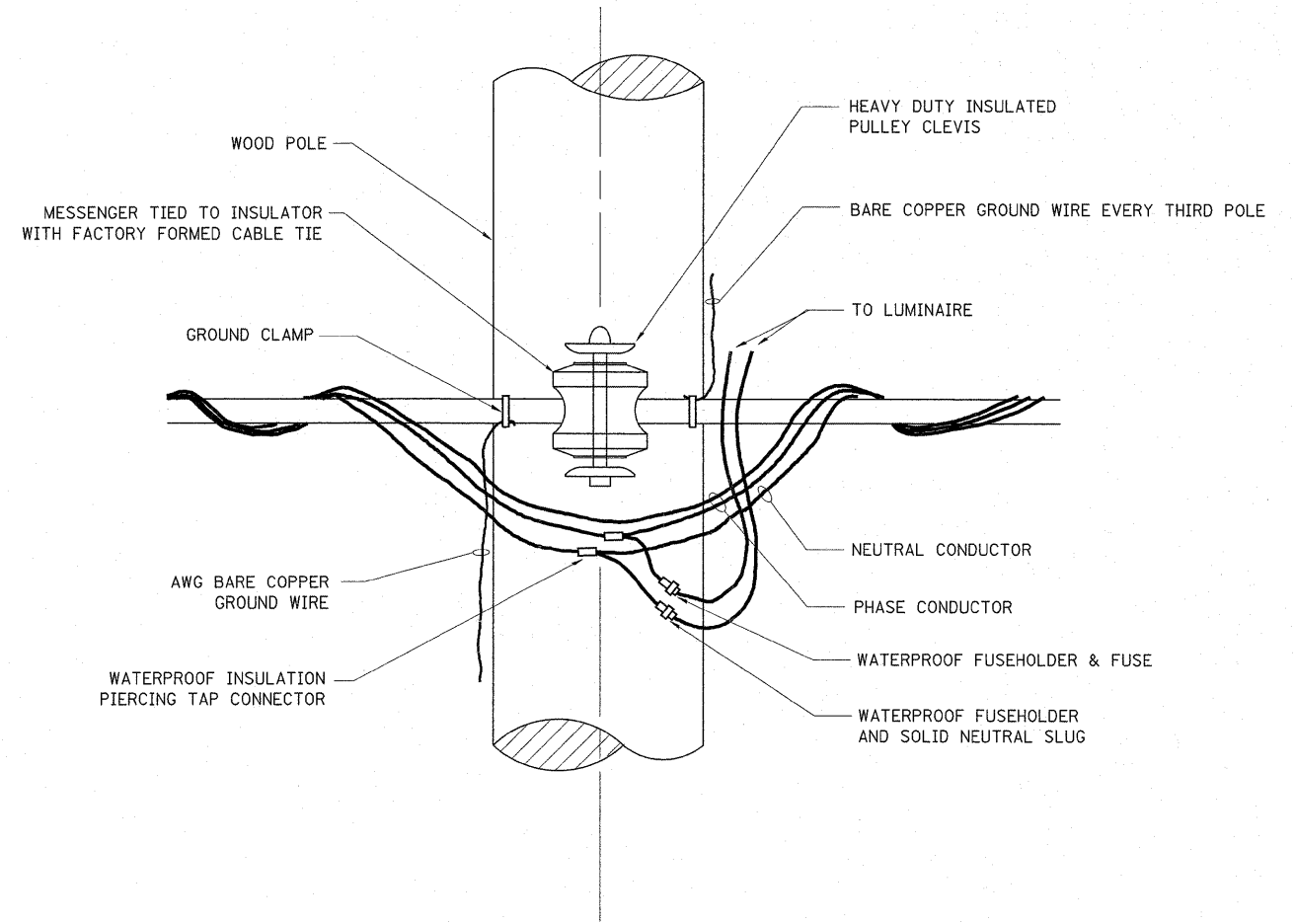


SCHEMATIC DIAGRAM

FILE NAME =	USER NAME = mjdjjs	DESIGNED - MP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING			F.A.P. RTE. 846	SECTION 4 B-2-BR	COUNTY WILL	TOTAL SHEETS 26	SHEET NO. 22
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		CHECKED -	REVISED -		CONTRACT NO. 60L50							
		DATE - 01/14/10	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							



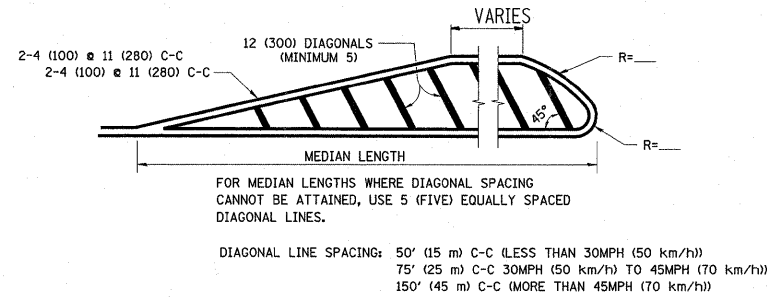
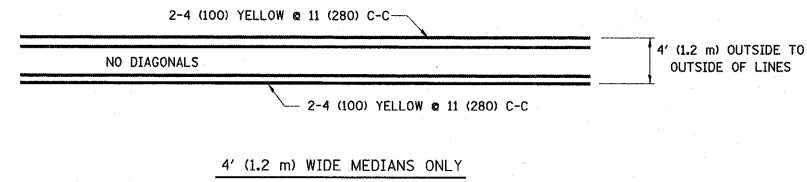
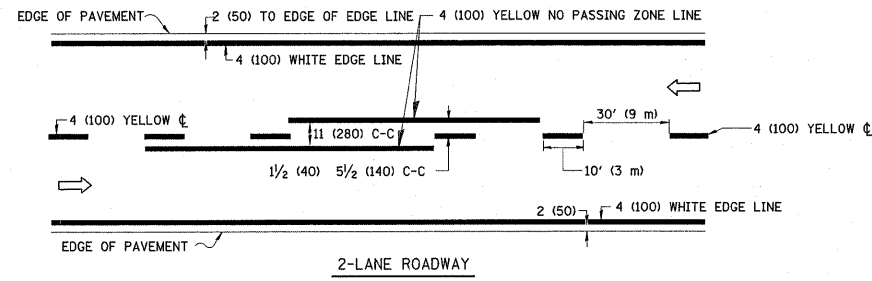
TEMPORARY LIGHT POLE DETAIL



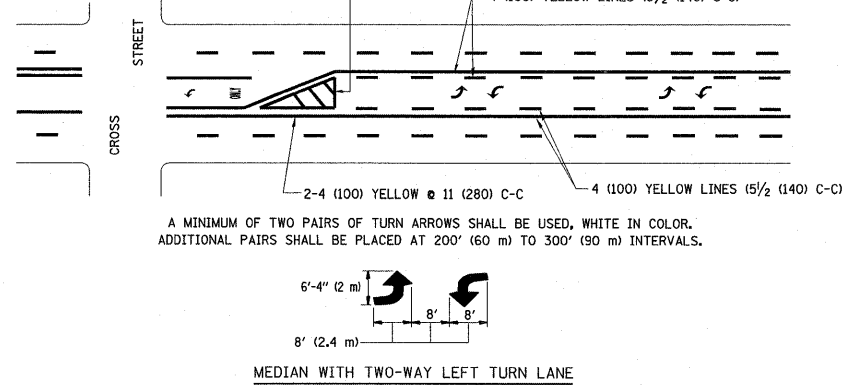
TEMPORARY LIGHT POLE ATTACHMENT DETAIL

NOTES:
 1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED

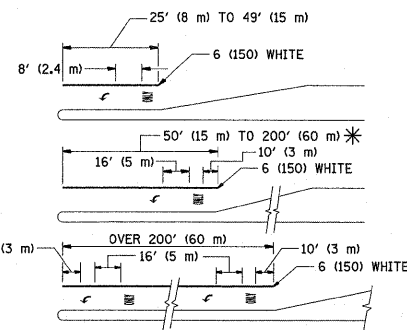
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PLOT DATE = 2/18/2011		DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



MEDIANS OVER 4' (1.2 m) WIDE



TYPICAL PAINTED MEDIAN MARKING

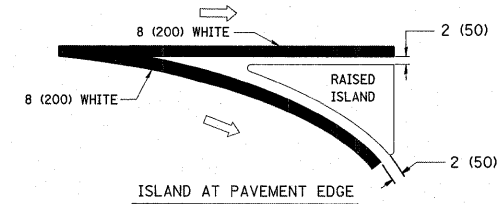
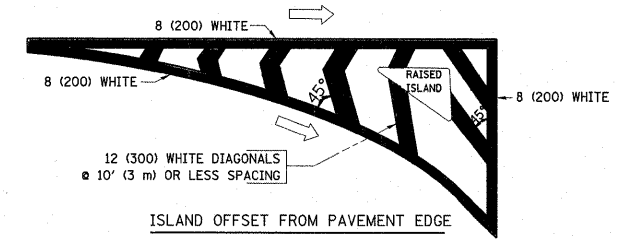


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

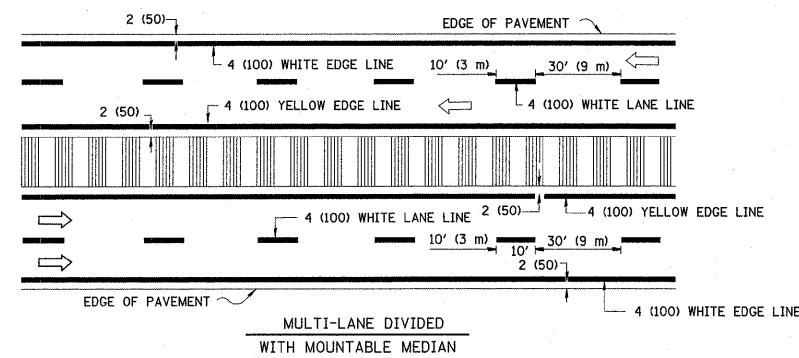
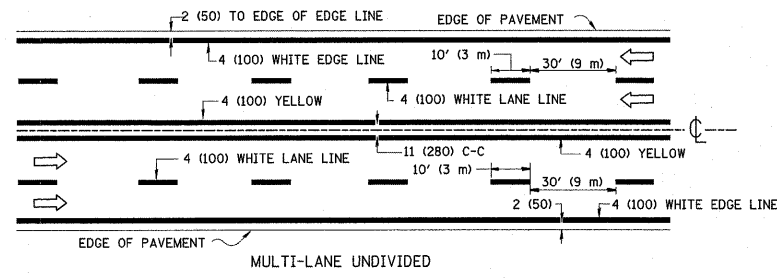


TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION	4 (100)	SOLID	YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES FOR BOTH DIRECTIONS	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
	8' (2.4m) LEFT ARROW		WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

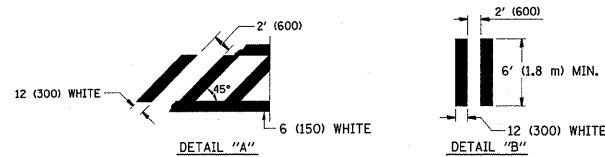
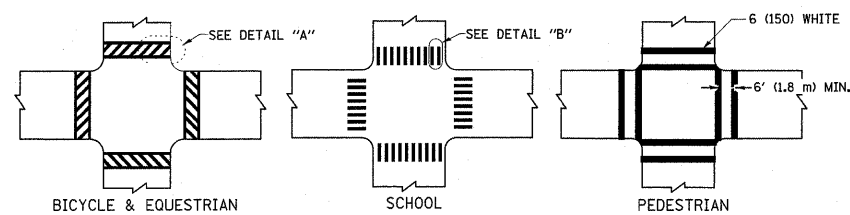
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

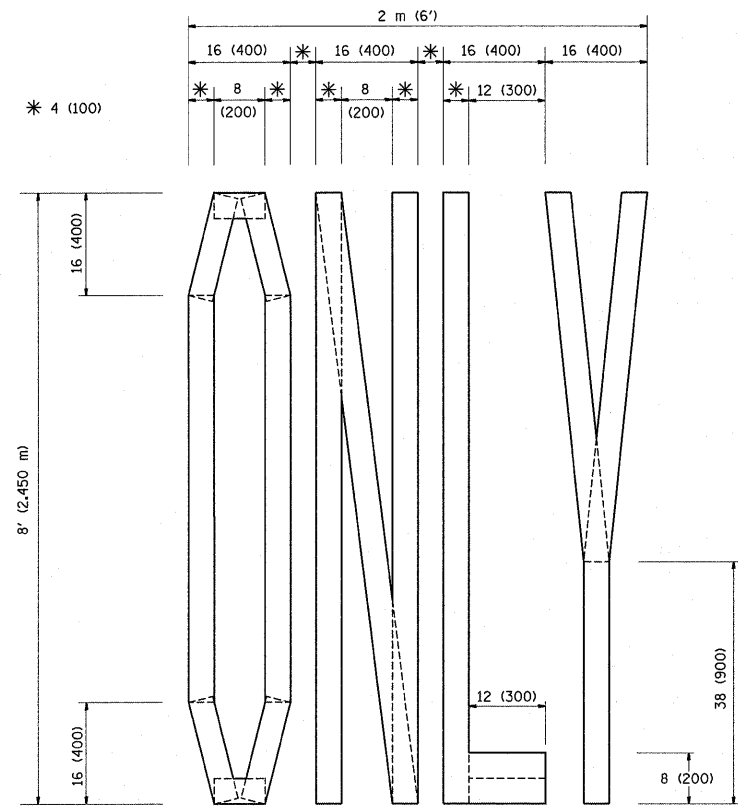


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

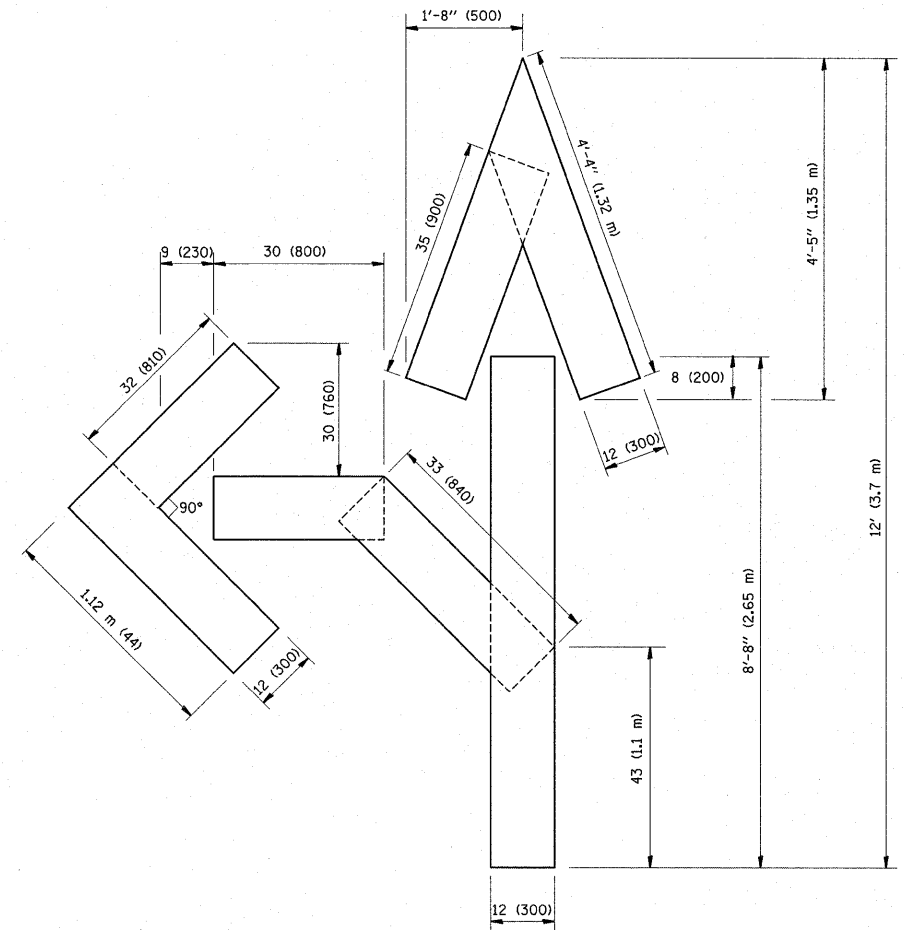
TYPICAL LANE AND EDGE LINE MARKING



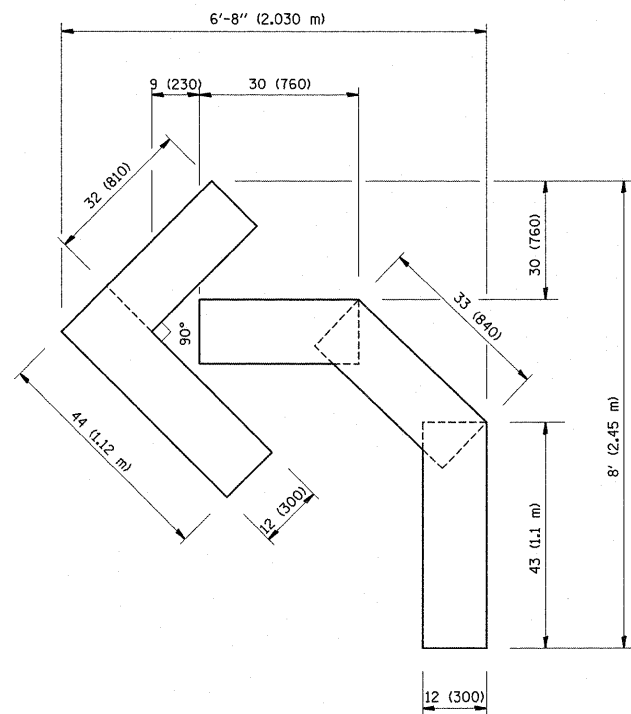
TYPICAL CROSSWALK MARKING



QUANTITY
 4 (100) LINE = 64.1 ft. (19.7 m)
 21.1 sq. ft. (1.97 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.3 m)
 27.5 sq. ft. (2.53 sq. m)



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.39 sq. m)

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

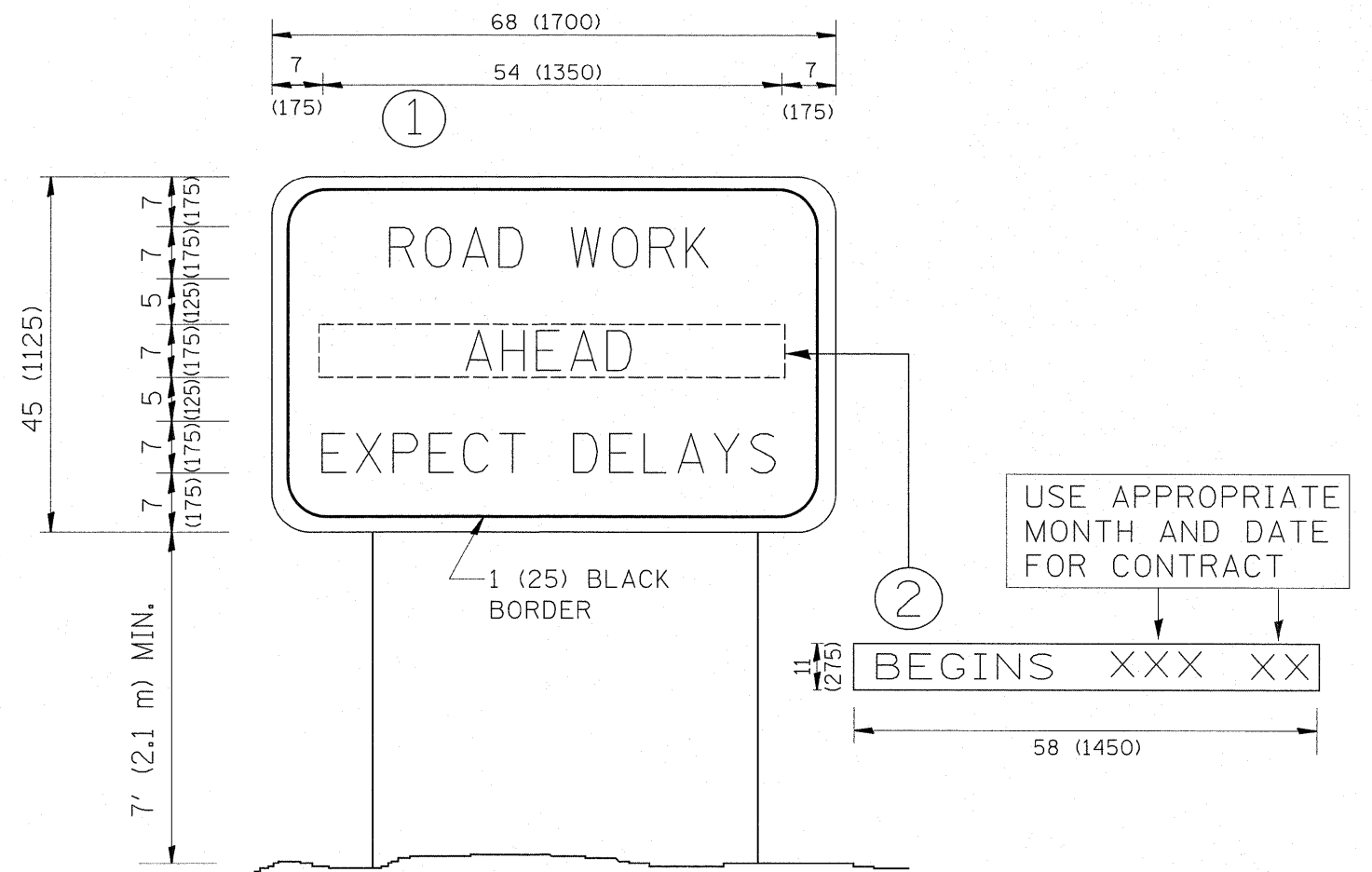
FILE NAME =	USER NAME = msdjja	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
es\pw_work\pwrtdot\msdjja\dl0256471\dlst5.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97
PLOT SCALE = 50.0000' / IN.		CHECKED -	REVISED -T. RAMMACHER 03-02-98
PLOT DATE = 2/18/2011		DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
846	4 B-2-BR	WILL	26	25
TC-16			CONTRACT NO. 60L50	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = mdyja	DESIGNED -	REVISED - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN			F.A.P. RTE. 846	SECTION 4 B-2-BR	COUNTY WILL	TOTAL SHEETS 26	SHEET NO. 26
os\pw_work\pwsdot\mdyja\d0256471\DistS	Edgn	DRAWN -	REVISED - R. MIRS 12-11-97		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	TC-22		CONTRACT NO. 60L50	
		PLOT SCALE = 50.0000' / IN.	CHECKED -		REVISED - T. RAMMACHER 02-02-99	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT						
		PLOT DATE = 2/18/2011	DATE -		REVISED - C. JUCIUS 01-31-07							