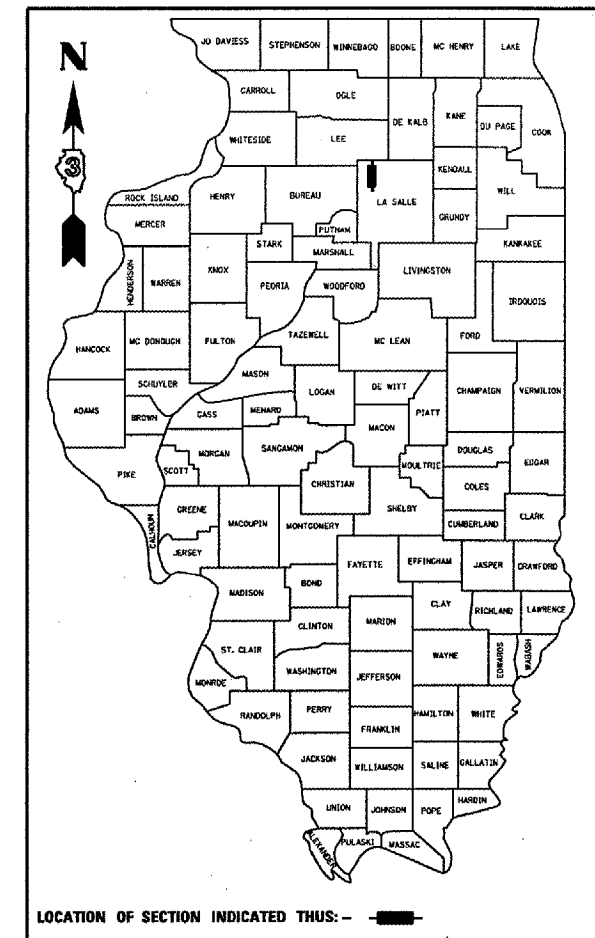


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	1

D-93-002-06



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAI ROUTE 412 (I-39)
SECTION (50-8VB)I

LASALLE COUNTY
C-93-097-05
BRIDGE REPAIR

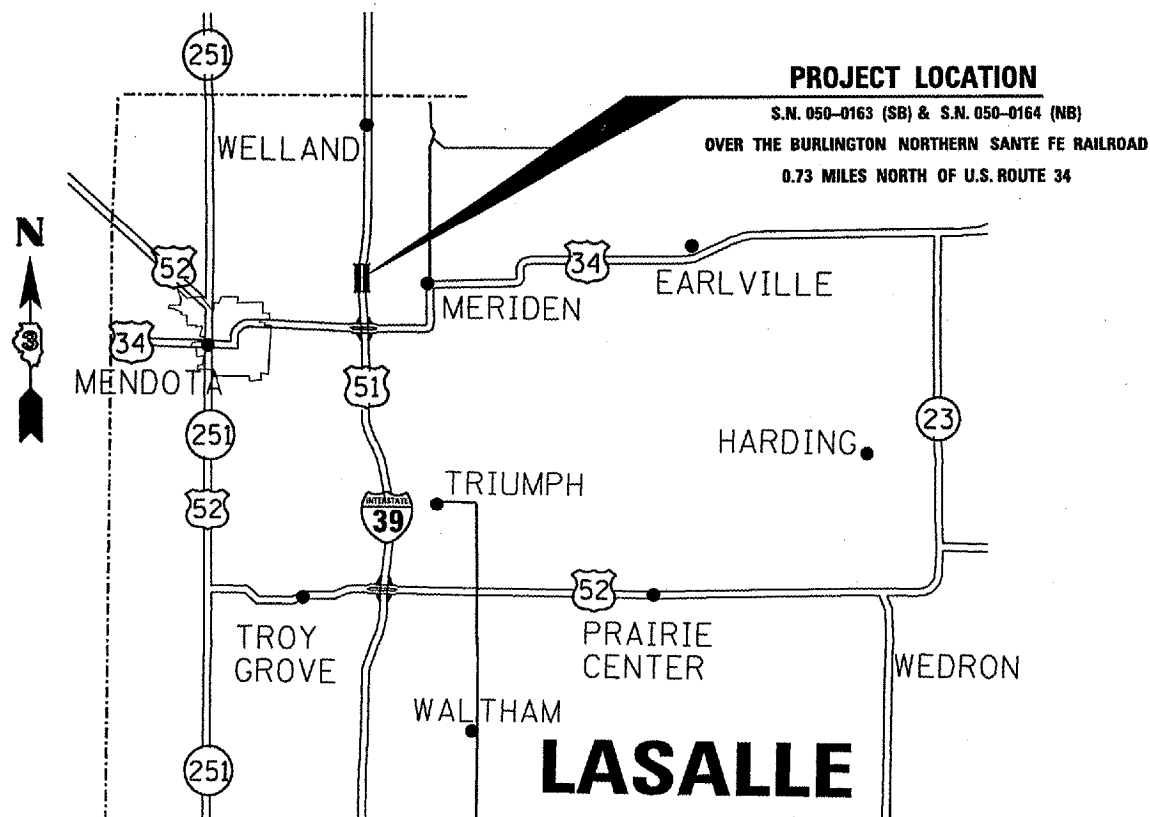
- INDEX OF SHEETS
1. COVER SHEET
 2. GENERAL NOTES
 - 3 - 4. SUMMARY OF QUANTITIES
 - 5 - 7. SHCEDULES
 8. GENERAL PLAN AND ELEVATION
 9. PRE-STAGING CONSTRUCTION
 10. STAGE CONSTRUCTION DETAILS
 11. REMOVAL DETAILS - APPROACH SLABS
 12. TEMPORARY SHEET PILE DETAILS
 13. REMOVAL DETAILS - ABUTMENTS
 14. GENERAL PLAN CONSTRUCTION DETAILS
 - 15 - 16. CONSTRUCTION DETAILS - DECK
 17. CONSTRUCTION DETAILS-ABUTMENTS SHOWING DIMENSIONS
 18. CONSTRUCTION DETAILS-ABUTMENTS SHOWING REINFORCEMENT
 - 19 - 20. BRIDGE APPROACH PAVEMENT DETAILS
 21. BAR SPLICER ASSEMBLY DETAILS
 22. STRIP SEAL EXPANSION JOINT ASSEMBLY
 23. PIPE DRAIN DETAILS
 24. P.P.C. IBEAM REPAIR
 25. FORMED CONCRETE REPAIR DETAILS
 26. DECK DRAIN DETAILS
 27. TRAFFIC CONTROL AND PROTECTION - STANDARD 701402 (SPECIAL)
 28. STAGING & TRAFFIC CONTROL - STAGE I
 29. STAGING & TRAFFIC CONTROL - STAGE II
 30. TEMPORARY CONCRETE BARRIER
 31. TYPICAL PAVEMENT MARKING

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

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

DISTRICT 3 NO. (815) 434-6131

PROJECT ENGINEER: TOM HUFNAGEL (815) 434-8418
UNIT CHIEF: RON WOODSHANK (815) 434-8419



LOCATION MAP
NOT TO SCALE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 8/31 20 05
[Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

October 14, 20 05
[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

October 14, 20 05
[Signature]
DEPUTY DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	2
FED. ROAD DIST. NO. - ILLINOIS				

GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD AND TO MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT BID FOR THE WORK.

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

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN Article 107.31

OF THE STANDARD SPECIFICATIONS. THE "JULIE" NUMBER IS 1-800-892-0123. A MINIMUM OF FORTY-EIGHT (48) ADVANCE NOTICE IS REQUIRED.

THE COST OF ANY SAW CUTS MADE TO COMPLETE THE WORK AS DESCRIBED IN PLAN DETAILS, UNLESS OTHERWISE NOTED SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED WITH THE VARIOUS PAY REMOVAL PAY ITEMS INVOLVED.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

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

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

THE EXISTING SHOULDERS ARE LOW. IN THE EVENT THAT CONSTRUCTION OPERATIONS RESULT IN A DROP OFF GREATER THAN 3" BETWEEN THE EDGE OF PAVEMENT OR EDGE OF SHOULDER WITHIN 3' OF THE EDGE OF PAVEMENT AND THE EARTH OR AGGREGATE SHOULDERS, THEN THE DROP OFF SHALL BE PROTECTED ACCORDING TO ARTICLE 701.04(b)(1) OF THE STANDARD SPECIFICATIONS. THIS WORK WILL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICES FOR TRAFFIC CONTROL.

ALL NEW REINFORCEMENT BARS SHALL BE "EPOXY COATED" EXCEPT AS SHOWN.

EXPANSION JOINT PLATES AND ATTACHED BARS SHALL BE SHOP PAINTED WITH THE INORGANIC ZINC RICH PRIMER PER AASHTO M300, TYPE 1.

ALL STRUCTURAL STEEL SHALL BE AASHTO M 270 GRADE 50 EXCEPT EXPANSION JOINT PLATES AND ATTACHED BARS WHICH SHALL BE AASHTO M 270 GRADE 36.

JOINT OPENINGS SHALL BE ADJUSTED ACCORDING TO ARTICLE 503.10(c) OF THE STANDARD SPECIFICATIONS WHEN THE DECK IS POURED AT AN AMBIENT TEMPERATURE OTHER 50° F.

EXISTING REINFORCEMENT BARS EXTENDING INTO 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.

STANDARDS

- 000001-04 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 420001-06 PAVEMENT JOINTS
- 631026-02 TRAFFIC BARRIER TERMINAL, TYPE 5 & 5A
- 631031-05 TRAFFIC BARRIER TERMINAL, TYPE 6
- 701101-01 OFF-ROAD OPERATIONS MULTILANE, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
- 701106-01 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 4.5 m (15') AWAY
- 701400-02 APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
- 701426-02 LANE CLOSURE, MULTILANE INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≥ 45 MPH
- 702001-05 TRAFFIC CONTROL DEVICES
- 704001-02 TEMPORARY CONCRETE BARRIER

	SUPERPAVE SURFACE
PG GRADE	PG64-22
MAX % RAP ALLOWABLE	15%
DESIGN AIR VOIDS	4.0% @ N50
MIXTURE COMPOSITION	IL 12.5 OR IL 9.5
FRICTION AGGREGATE	MIXTURE C
PLANT CONTROL LIMITS	CLASS I
DENSITY CONTROL METHOD	SATISFACTION OF THE ENGINEER

••IF RAP OPTION IS SELECTED, THE ASPHALT CEMENT GRADE MAY NEED TO BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.

DATE: 8/30/2005

PREPARED BY: Steve A. Huber
DISTRICT OPERATIONS ENGINEER

EXAMINED BY: Hubert K. Joz
DISTRICT CONSTRUCTION ENGINEER

Steven B. Andrews
ACTING DISTRICT STUDIES & PLANS ENGINEER

Kenneth R. Long
DISTRICT MATERIALS ENGINEER

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL NOTES
F.A.I. 412 OVER BNSF RAILROAD
SECTION (50-8VB)I
LASALLE COUNTY
STA. 758+10

JULY 1, 2005 C:\PROJECTS\CHM\IN06\CM318\DETAILS.DGN

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	3
FED. ROAD DIST. NO. - ILLINOIS				

SUMMARY OF QUANTITIES

CONSTRUCTION TYPE CODE:

SFTY-2A

CODE NO.	ITEM	UNIT	100% STATE TOTAL QUANTITY
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	134
40600990	TEMPORARY RAMP	SQ YD	168
42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ YD	540
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	144
44000700	APPROACH SLAB REMOVAL	SQ YD	408
44001430	BITUMINOUS SHOULDER REMOVAL	SQ YD	136
50102400	CONCRETE REMOVAL	CU YD	82
50200100	STRUCTURE EXCAVATION	CU YD	134
50301245	FORMED CONCRETE REPAIR (DEPTH EQUAL TO OR LESS THAN 5")	SQ FT	26
50300255	CONCRETE SUPERSTRUCTURE	CU YD	82
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	14772
51205200	TEMPORARY SHEET PILING	SQ FT	648
60100925	PIPE DRAINS 8"	FOOT	180
63300575	REMOVE AND RE-ERECT RAIL ELEMENT OF EXISTING GUARDRAIL	FOOT	200
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6
67100100	MOBILIZATION	L SUM	1

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
 F.A.I. 412 OVER BNSF RAILROAD
 SECTION (50-8VB)I
 LASALLE COUNTY
 STA. 758 + 10
 DATE 06/01/2005
 DRAWN BY RLW

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	150-8VB1	LASALLE	31	4
FED. ROAD DIST. NO. , ILLINOIS				

SUMMARY OF QUANTITIES

CONSTRUCTION TYPE CODE: SFTY-2A

CODE NO.	ITEM	UNIT	100% STATE TOTAL QUANTITY
70101605	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL)	EACH	2
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	10320
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	3406
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1200
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1100
* 78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	10320
* 78005130	EPOXY PAVEMENT MARKING - LINE 6"	FOOT	1420
78300100	PAVEMENT MARKING REMOVAL	SQ FT	3406
XX005128	STRIP SEAL EXPANSION JOINT ASSEMBLY	FOOT	168
X0300136	BRIDGE APPROACH SHOULDER REMOVAL	SQ YD	132
X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	15
Z0002600	BAR SPLICERS	EACH	532
Z0015700	DECK DRAIN REPLACEMENT	EACH	4
● Z0030250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
● Z0030350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1

●SFTY-3N * SPECIALTY ITEMS

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES
 F.A.I. 412 OVER BNSF RAILROAD
 SECTION (50-8VB1)
 LASALLE COUNTY
 STA. 758+10

DATE 06/01/2005

DRAWN BY R.L.W

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	5
FED. ROAD DIST. NO. - ILLINOIS				

STRUCTURE EXCAVATION			
NORTHBOUND STRUCTURE			
STAGE I	NORTH ABUT	CU YD	18.4
	SOUTH ABUT	CU YD	18.4
STAGE II	NORTH ABUT	CU YD	15.1
	SOUTH ABUT	CU YD	15.1
SOUTHBOUND STRUCTURE			
STAGE I	NORTH ABUT	CU YD	18.4
	SOUTH ABUT	CU YD	18.4
STAGE II	NORTH ABUT	CU YD	15.1
	SOUTH ABUT	CU YD	15.1
TOTAL		CU YD	134

BRIDGE APPROACH SHOULDER REMOVAL			
STAGE I			
NORTHBOUND STRUCTURE	NORTH ABUT	12	SQ YD
	SOUTH ABUT	12	SQ YD
SOUTHBOUND STRUCTURE	NORTH ABUT	21	SQ YD
	SOUTH ABUT	21	SQ YD
SUBTOTAL		66	SQ YD
STAGE II			
NORTHBOUND STRUCTURE	NORTH ABUT	12	SQ YD
	SOUTH ABUT	12	SQ YD
SOUTHBOUND STRUCTURE	NORTH ABUT	21	SQ YD
	SOUTH ABUT	21	SQ YD
SUBTOTAL		66	SQ YD
TOTAL		132	SQ YD

APPROACH SLAB REMOVAL			
STAGE I			
NORTHBOUND STRUCTURE	NORTH ABUT	68	SQ YD
	SOUTH ABUT	68	SQ YD
SOUTHBOUND STRUCTURE	NORTH ABUT	34	SQ YD
	SOUTH ABUT	34	SQ YD
SUBTOTAL		204	SQ YD
STAGE II			
NORTHBOUND STRUCTURE	NORTH ABUT	68	SQ YD
	SOUTH ABUT	68	SQ YD
SOUTHBOUND STRUCTURE	NORTH ABUT	34	SQ YD
	SOUTH ABUT	34	SQ YD
SUBTOTAL		204	SQ YD
TOTAL		408	SQ YD

CONCRETE REMOVAL			
STAGE I			
NORTHBOUND STRUCTURE	NORTH ABUT	11	CU YD
	SOUTH ABUT	11	CU YD
SOUTHBOUND STRUCTURE	NORTH ABUT	11	CU YD
	SOUTH ABUT	11	CU YD
SUBTOTAL		44	CU YD
STAGE II			
NORTHBOUND STRUCTURE	NORTH ABUT	9.5	CU YD
	SOUTH ABUT	9.5	CU YD
SOUTHBOUND STRUCTURE	NORTH ABUT	9.5	CU YD
	SOUTH ABUT	9.5	CU YD
SUBTOTAL		38	CU YD
TOTAL		82	CU YD

BITUMINOUS SHOULDER REMOVAL			
STAGE I			
NORTHBOUND STRUCTURE	NORTH ABUT	13	SQ YD
	SOUTH ABUT	13	SQ YD
SOUTHBOUND STRUCTURE	NORTH ABUT	21	SQ YD
	SOUTH ABUT	21	SQ YD
SUBTOTAL		68	SQ YD
STAGE II			
NORTHBOUND STRUCTURE	NORTH ABUT	13	SQ YD
	SOUTH ABUT	13	SQ YD
SOUTHBOUND STRUCTURE	NORTH ABUT	21	SQ YD
	SOUTH ABUT	21	SQ YD
SUBTOTAL		68	SQ YD
TOTAL		136	SQ YD

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULES

F.A.I. 412 OVER BNSF RAILROAD
SECTION (50-8VB)I
LASALLE COUNTY
STA. 758+10

DATE 06/01/2005 DRAWN BY RLW

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	6
FED. ROAD DIST. NO. ILLINOIS				

BRIDGE APPROACH PAVEMENT (SPECIAL)			
STAGE I			
NORTHBOUND	NORTH ABUT	67.5	SQ YD
STRUCTURE	SOUTH ABUT	67.5	SQ YD
SOUTHBOUND	NORTH ABUT	67.5	SQ YD
STRUCTURE	SOUTH ABUT	67.5	SQ YD
SUBTOTAL		270	SQ YD
STAGE II			
NORTHBOUND	NORTH ABUT	67.5	SQ YD
STRUCTURE	SOUTH ABUT	67.5	SQ YD
SOUTHBOUND	NORTH ABUT	67.5	SQ YD
STRUCTURE	SOUTH ABUT	67.5	SQ YD
SUBTOTAL		270	SQ YD
TOTAL		540	SQ YD

CONCRETE SUPERSTRUCTURE			
STAGE I			
NORTHBOUND	NORTH ABUT	10.25	CU YD
STRUCTURE	SOUTH ABUT	10.25	CU YD
SOUTHBOUND	NORTH ABUT	10.25	CU YD
STRUCTURE	SOUTH ABUT	10.25	CU YD
SUBTOTAL		41	CU YD
STAGE II			
NORTHBOUND	NORTH ABUT	10.25	CU YD
STRUCTURE	SOUTH ABUT	10.25	CU YD
SOUTHBOUND	NORTH ABUT	10.25	CU YD
STRUCTURE	SOUTH ABUT	10.25	CU YD
SUBTOTAL		41	CU YD
TOTAL		82	CU YD

BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)			
STAGE I			
NORTHBOUND	NORTH ABUT	18	SQ YD
STRUCTURE	SOUTH ABUT	18	SQ YD
SOUTHBOUND	NORTH ABUT	18	SQ YD
STRUCTURE	SOUTH ABUT	18	SQ YD
SUBTOTAL		72	SQ YD
STAGE II			
NORTHBOUND	NORTH ABUT	18	SQ YD
STRUCTURE	SOUTH ABUT	18	SQ YD
SOUTHBOUND	NORTH ABUT	18	SQ YD
STRUCTURE	SOUTH ABUT	18	SQ YD
SUBTOTAL		72	SQ YD
TOTAL		144	SQ YD

STRIP SEAL EXPANSION JOINT ASSEMBLY			
STAGE I			
NORTHBOUND	NORTH ABUT	21	FEET
STRUCTURE	SOUTH ABUT	21	FEET
SOUTHBOUND	NORTH ABUT	21	FEET
STRUCTURE	SOUTH ABUT	21	FEET
SUBTOTAL		84	FEET
STAGE II			
NORTHBOUND	NORTH ABUT	21	FEET
STRUCTURE	SOUTH ABUT	21	FEET
SOUTHBOUND	NORTH ABUT	21	FEET
STRUCTURE	SOUTH ABUT	21	FEET
SUBTOTAL		84	FEET
TOTAL		168	FEET

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULES
F.A.I. 412 OVER BNSF RAILROAD
SECTION (50-8VB)I
LASALLE COUNTY
STA. 758 + 10

DATE 06/01/2005 DRAWN BY RLW

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	150-8VB)I	LASALLE	31	7
FED. ROAD DIST. NO.		ILLINOIS		

TEMPORARY PAVEMENT MARKING LINE 4"		
STAGE I		
NORTHBOUND STRUCTURE	2840	FEET
SOUTHBOUND STRUCTURE	2840	FEET
SUBTOTAL	5680	FEET
STAGE II		
NORTHBOUND STRUCTURE	2320	FEET
SOUTHBOUND STRUCTURE	2320	FEET
SUBTOTAL	4640	FEET
TOTAL	10320	FEET

TEMPORARY CONCRETE BARRIER		
STAGE I		
NORTHBOUND STRUCTURE	600	FEET
SOUTHBOUND STRUCTURE	600	FEET
SUBTOTAL	1200	FEET

WORK ZONE PAVEMENT MARKING REMOVAL		
STAGE I		
NORTHBOUND STRUCTURE	937	SQ FT
SOUTHBOUND STRUCTURE	937	SQ FT
SUBTOTAL	1874	SQ FT
STAGE II		
NORTHBOUND STRUCTURE	766	SQ FT
SOUTHBOUND STRUCTURE	766	SQ FT
SUBTOTAL	1531	SQ FT
TOTAL	3406	SQ FT

RELOCATE TEMPORARY CONCRETE BARRIER		
STAGE II		
NORTHBOUND STRUCTURE	550	FEET
SOUTHBOUND STRUCTURE	550	FEET
SUBTOTAL	1100	FEET

EPOXY PAVEMENT MARKING LINE 4"		
STAGE II		
NORTHBOUND STRUCTURE	5160	FEET
SOUTHBOUND STRUCTURE	5160	FEET
SUBTOTAL	10320	FEET

PAVEMENT MARKING REMOVAL		
STAGE I		
NORTHBOUND STRUCTURE	937	SQ FT
SOUTHBOUND STRUCTURE	937	SQ FT
SUBTOTAL	1874	SQ FT
STAGE II		
NORTHBOUND STRUCTURE	766	SQ FT
SOUTHBOUND STRUCTURE	766	SQ FT
SUBTOTAL	1531	SQ FT
TOTAL	3406	SQ FT

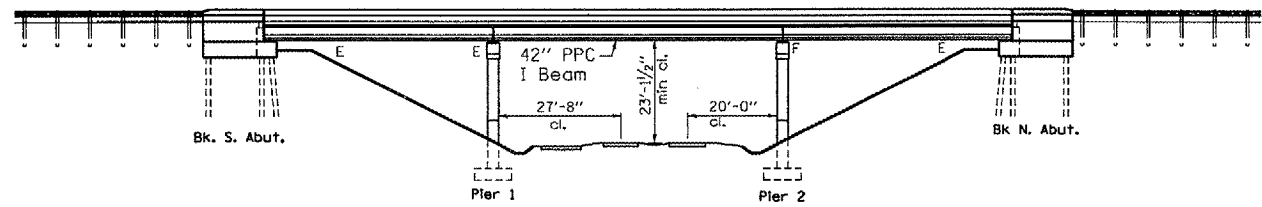
EPOXY PAVEMENT MARKING LINE 6"		
STAGE II		
NORTHBOUND STRUCTURE	710	FEET
SOUTHBOUND STRUCTURE	710	FEET
SUBTOTAL	1420	FEET

JULY 1, 2005
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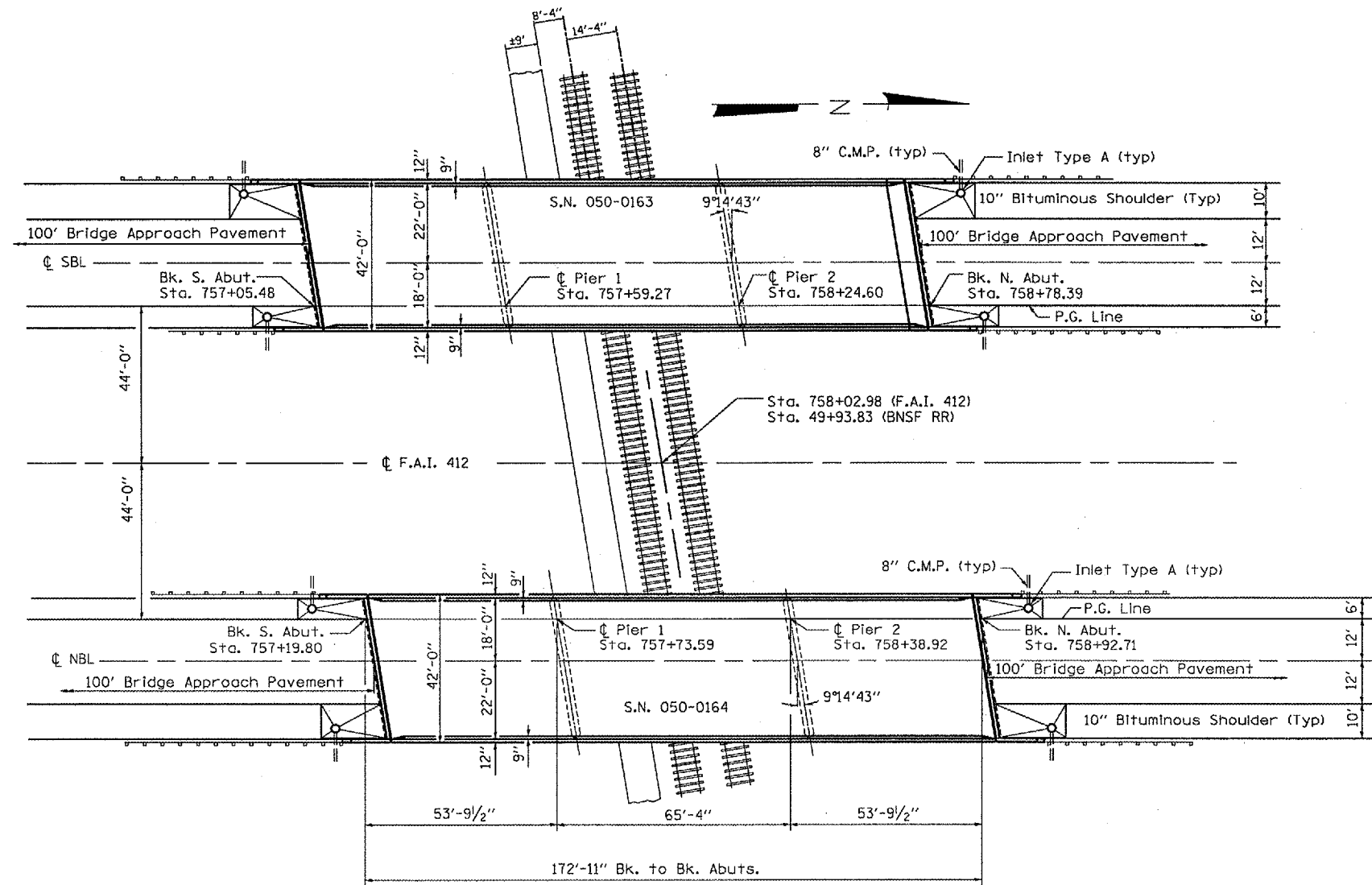
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULES
F.A.I. 412 OVER BNSF RAILROAD
SECTION (50-8VB)I
LASALLE COUNTY
STA. 758 + 10
DATE 06/01/2005
DRAWN BY RLW

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	8
FED. ROAD DIST. NO. - ILLINOIS				



ELEVATION



PLAN

GENERAL NOTES

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Fasteners shall be high strength bolts (AASHTO M 164, Type 3), unless otherwise noted.

The roadway expansion plates shall be flame cut as provided in Article 505.04(k) of the Standard Specifications.

All structural steel shall be AASHTO M 270 Grade 50 except expansion joint plates and attached bars which shall be AASHTO M 270 Grade 36.

Roadway expansion guards shall be assembled in the proper position with the ends in place and shall be left assembled for shop inspection.

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322 Grade 60.

The Contractor shall use extreme care during concrete removal so as not to damage the existing PPC I Beams. Any damage shall be repaired at the Contractor's expense.

**EXISTING DESIGN STRESSES
(FOR INFORMATION ONLY)**

FIELD UNITS

- fc=1200psi. Deck Slab
- fc=1400psi. Curb, Parapet & Substructure
- ts=20,000psi. Reinforcing
- vc=56psi. Ftgs.
- n=10

PRECAST PRESTRESSED UNITS

- f'c=5000psi.
- fci=4000psi.
- f's=270,000psi. 1/2" Ø Strands
- f'si=189,000psi. 1/2" + Ø Strands

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

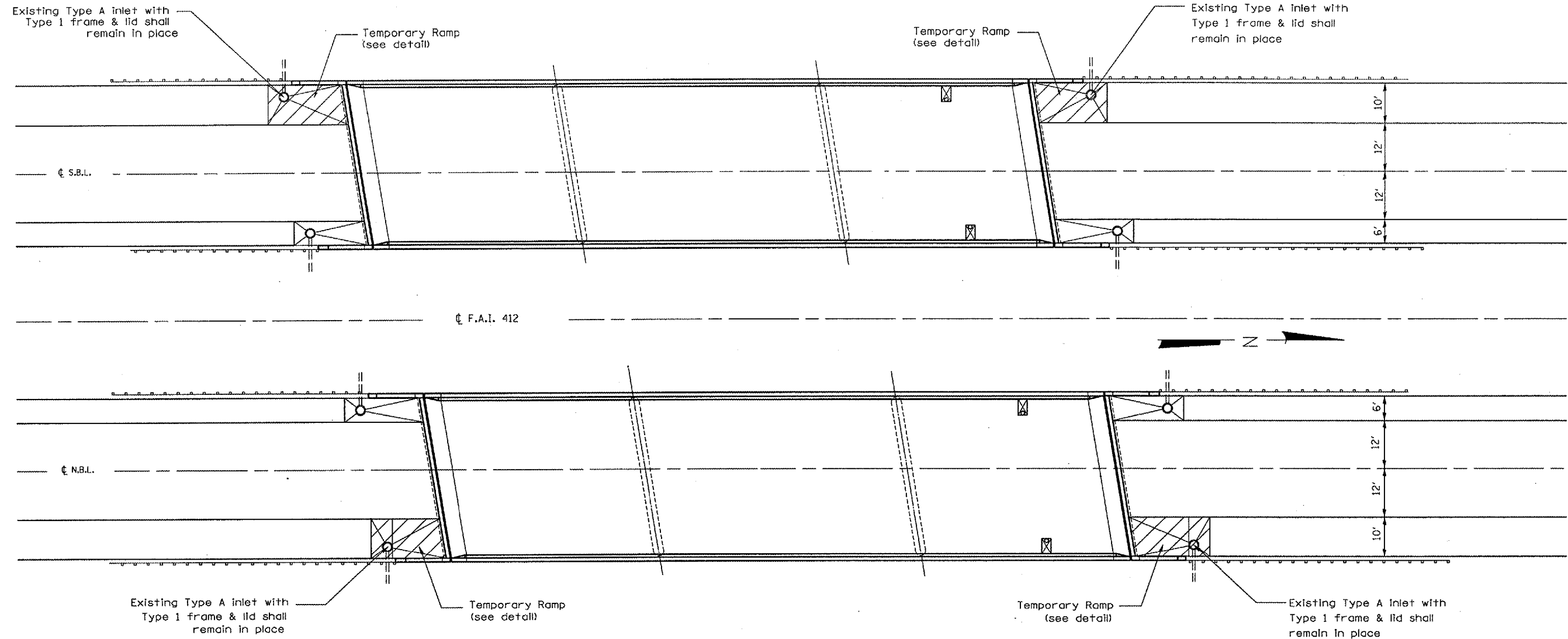
GENERAL PLAN & ELEVATION

F.A.I. 412 OVER BNSF RAILROAD
SECTION (50-8VB)I
LASALLE COUNTY
STA. 758 +10

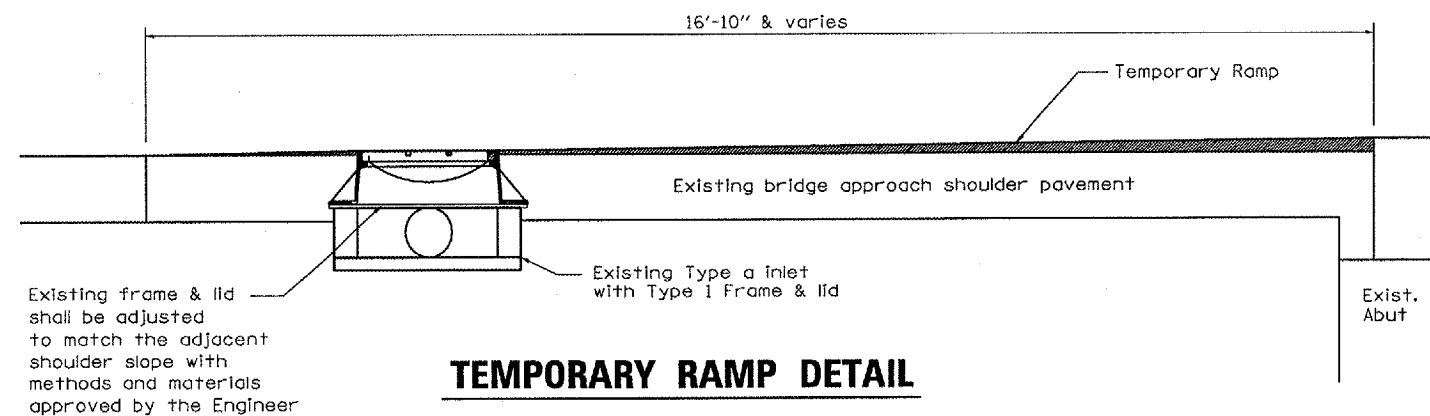
DATE 06/01/2005 DRAWN BY RLW

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	9
FED. ROAD DIST. NO. - ILLINOIS				



PLAN



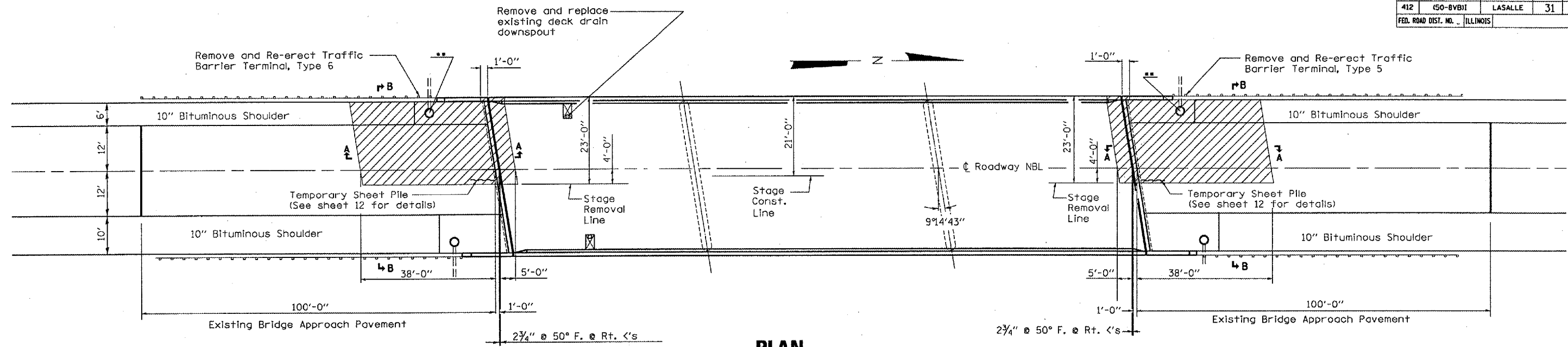
TEMPORARY RAMP DETAIL

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PRE-STAGING CONSTRUCTION
 F.A.I. 412 OVER BNSF RAILROAD
 SECTION (50-8VB)I
 LASALLE COUNTY
 STA. 758 + 10
 DATE 06/01/2005
 DRAWN BY RLW

JULY 1, 2005
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	50-8VB1	LASALLE	31	10
FED. ROAD DIST. NO. ILLINOIS				



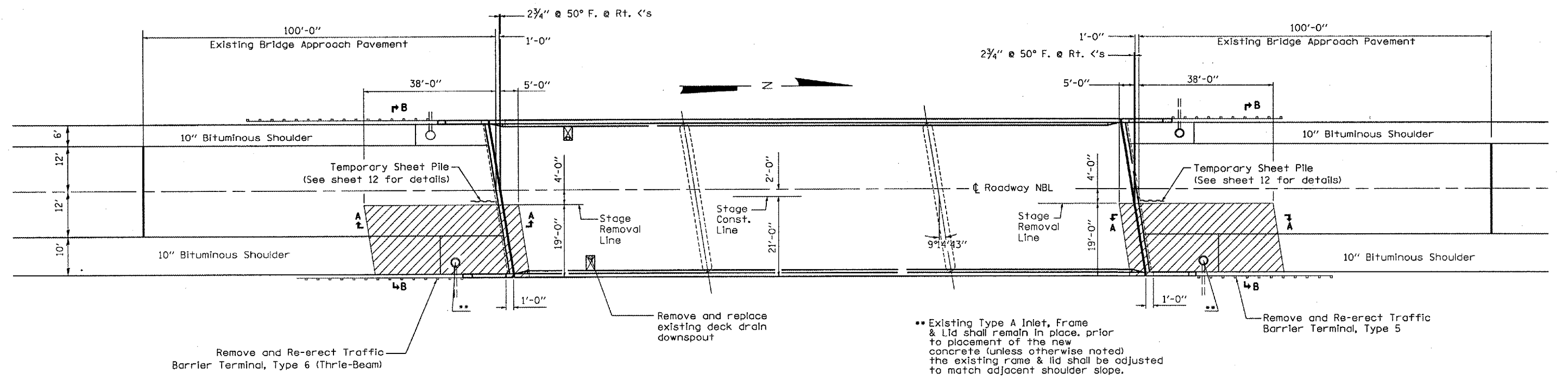
PLAN

STAGE I

NORTHBOUND STRUCTURE SHOWN
SOUTHBOUND STRUCTURE SIMILAR

** Existing Type A Inlet, Frame & Lid shall remain in place, prior to placement of the new concrete (unless otherwise noted) the existing frame & lid shall be adjusted to match adjacent shoulder slope.

REMOVAL AREA



PLAN

STAGE II

NORTHBOUND STRUCTURE SHOWN
SOUTHBOUND STRUCTURE SIMILAR

** Existing Type A Inlet, Frame & Lid shall remain in place, prior to placement of the new concrete (unless otherwise noted) the existing frame & lid shall be adjusted to match adjacent shoulder slope.

REMOVAL AREA

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS

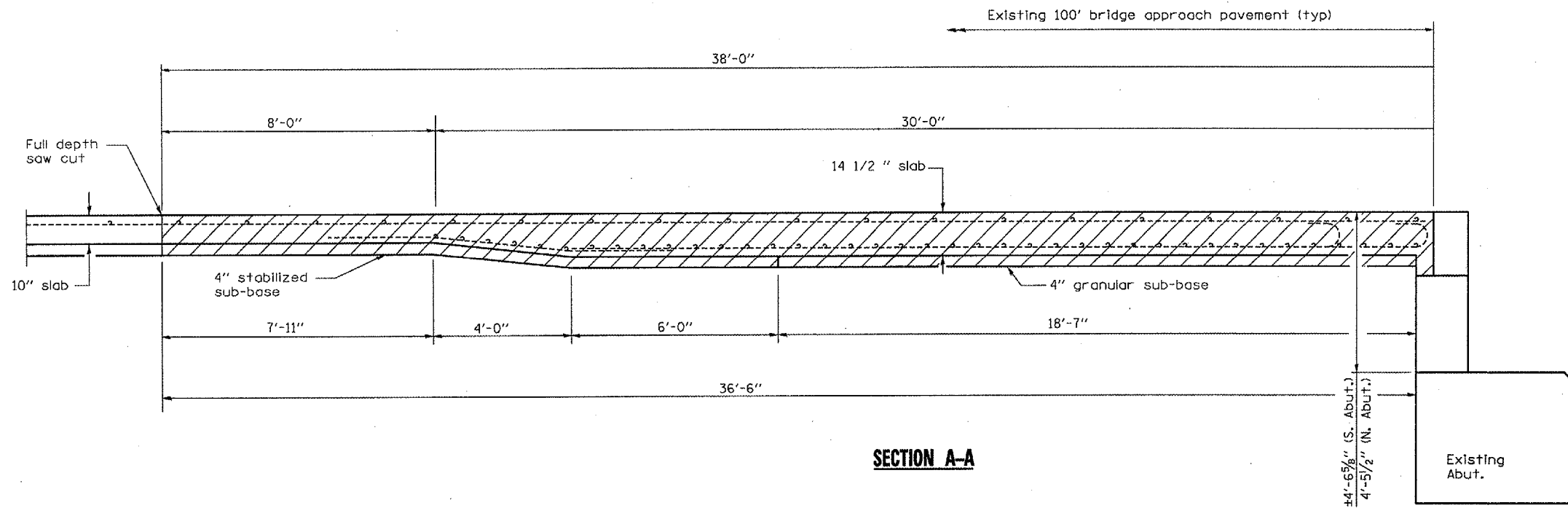
F.A.I. 412 OVER BNSF RAILROAD
SECTION (50-8VB1)
LASALLE COUNTY
STA. 758 + 10

DATE 06/01/2005

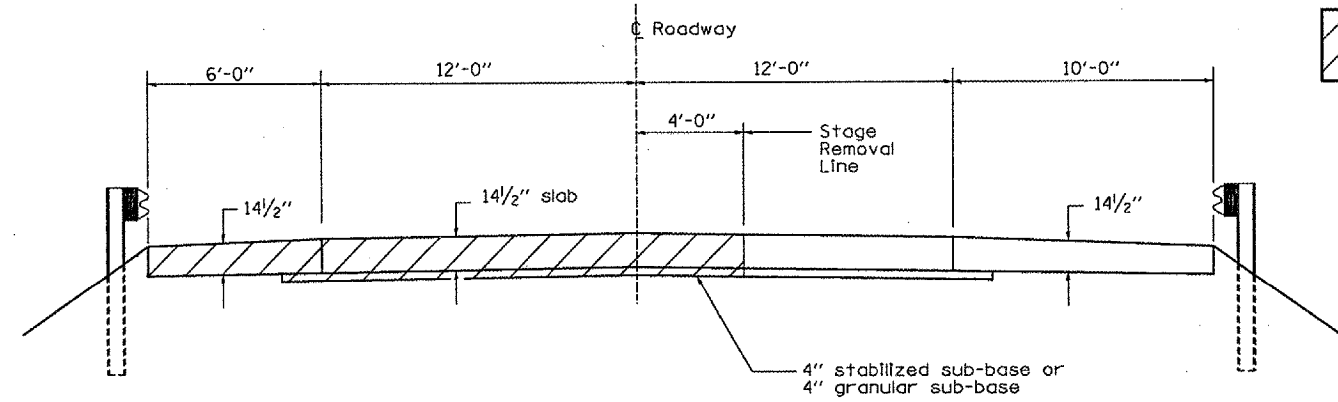
DRAWN BY RLV

JULY 1, 2005
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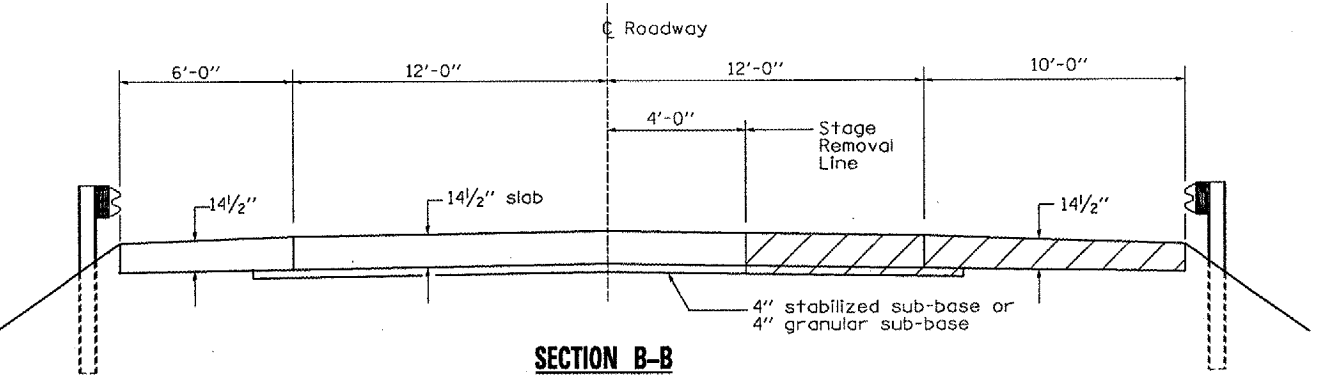
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	11
FED. ROAD DIST. NO.		ILLINOIS		



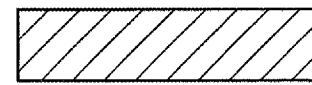
SECTION A-A



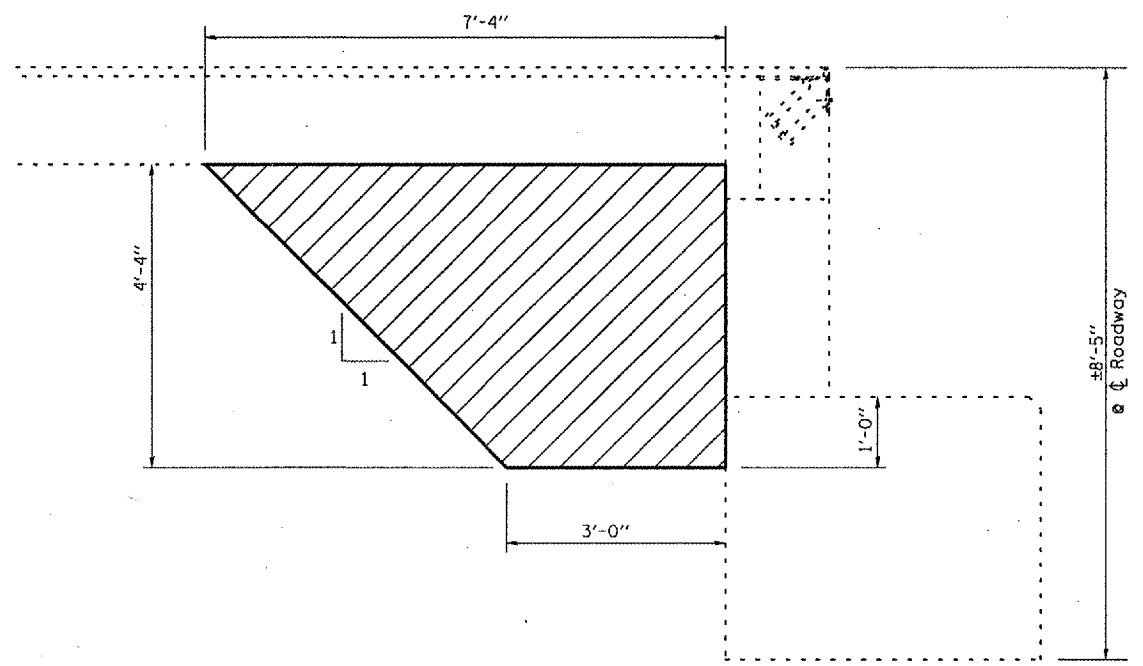
**SECTION B-B
STAGE I**



**SECTION B-B
STAGE II**



REMOVAL LIMITS



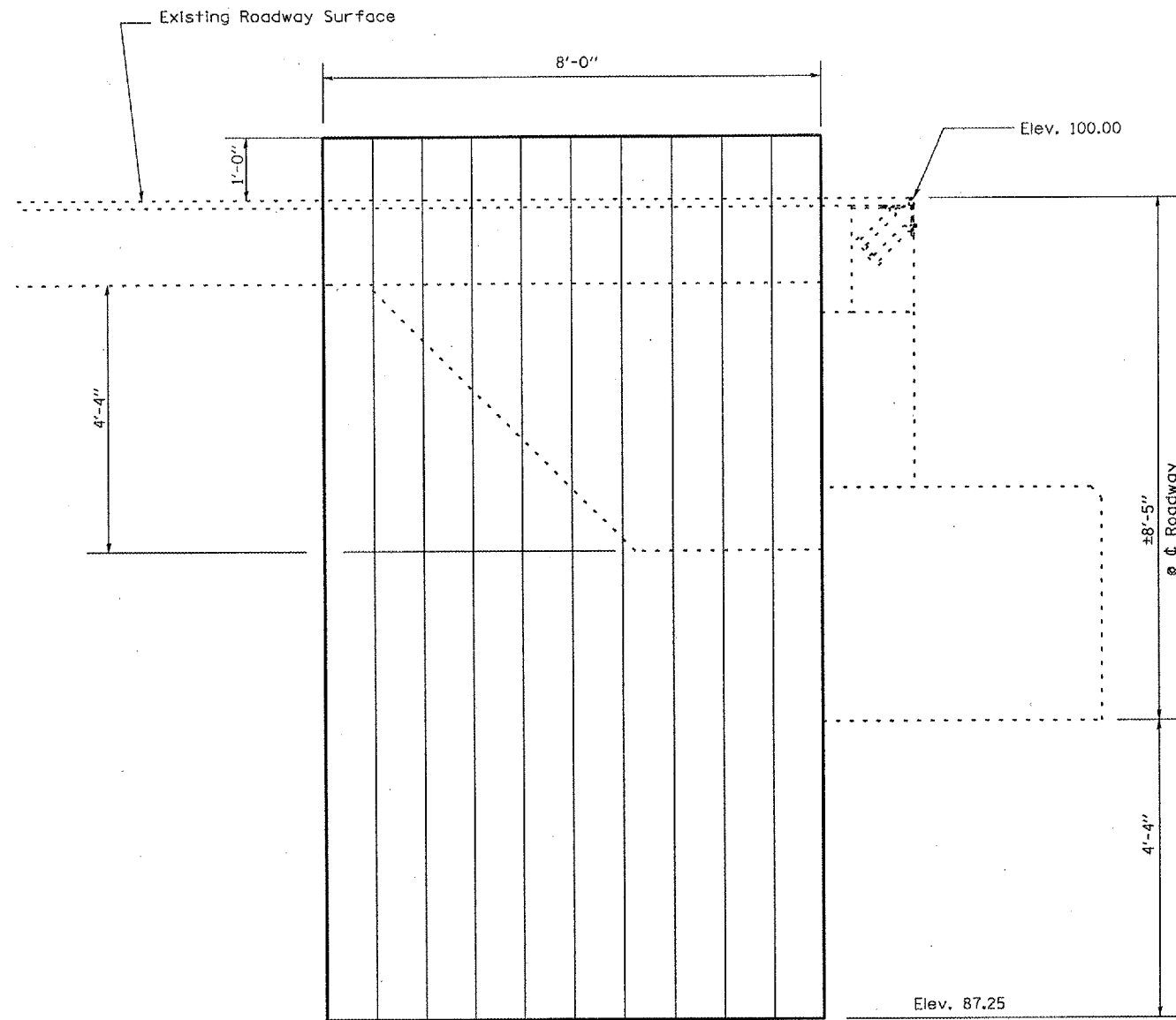
STRUCTURE EXCAVATION DETAILS

REVISIONS	
NAME	DATE

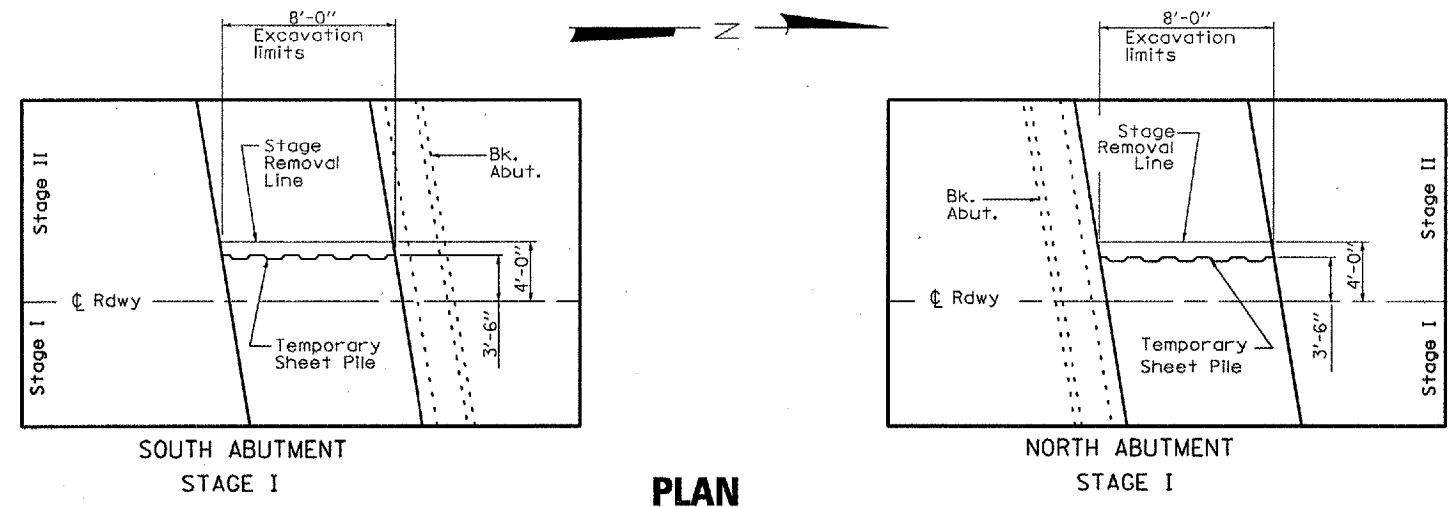
ILLINOIS DEPARTMENT OF TRANSPORTATION
REMOVAL DETAILS - APPROACH SLABS
 F.A.I. 412 OVER BNSF RAILROAD
 SECTION (50-8VB)I
 LASALLE COUNTY
 STA. 758 + 10
 DATE 06/01/2005
 DRAWN BY RLV

JULY 1, 2005
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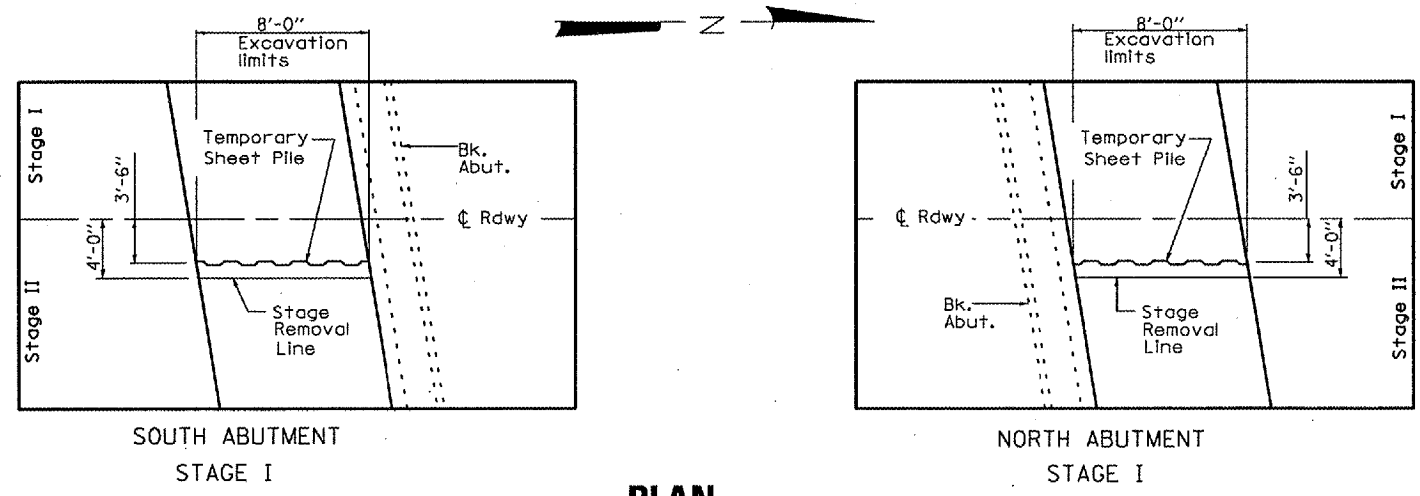
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	12
FED. ROAD DIST. NO.		ILLINOIS		



ELEVATION



**PLAN
S.N. 050-0163 (SB)**



**PLAN
S.N. 050-0164 (NB)**

BILL OF MATERIALS

Item	Unit	Total
Temporary Sheet Piling	Sq Ft	110

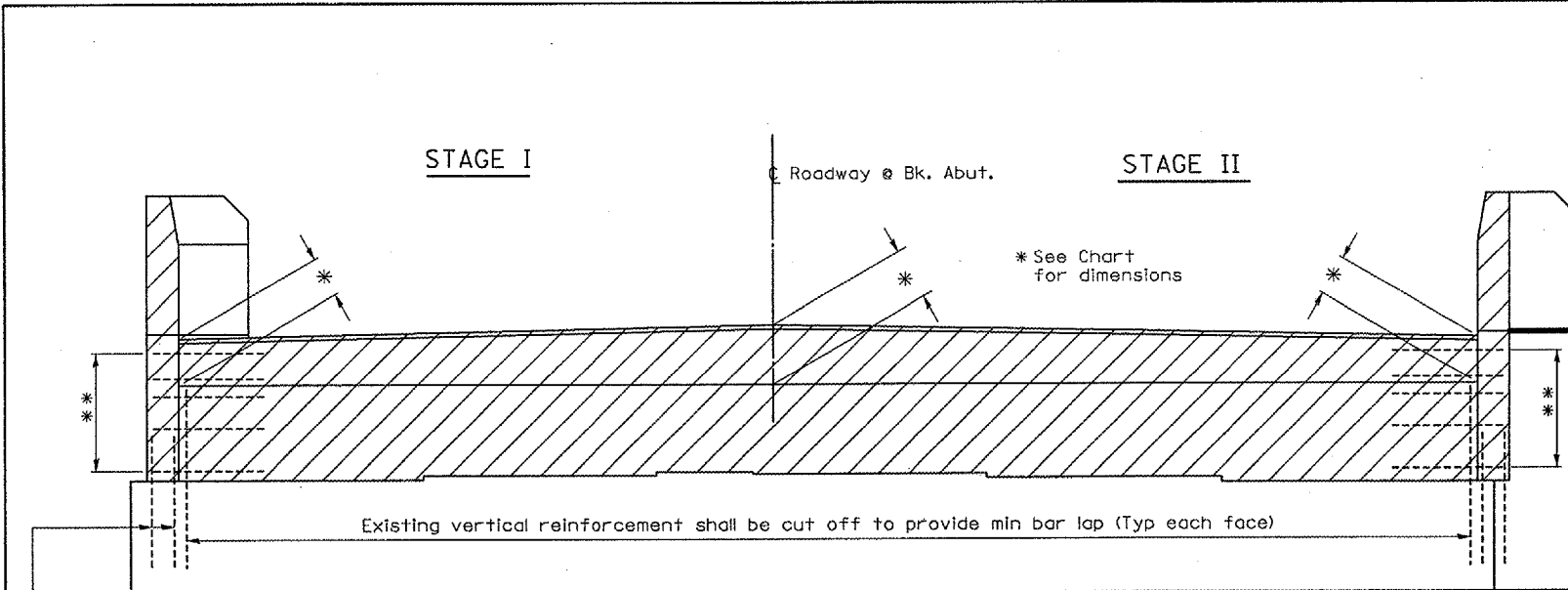
Pipe Drain table is shown for "ONE" Abutment only

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY SHEET PILE DETAILS
 F.A.I. 412 OVER BNSF RAILROAD
 SECTION (50-8VB)I
 LASALLE COUNTY
 STA. 758 + 10
 DATE 06/01/2005
 DRAWN BY RLW

JULY 1, 2005
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	13
FED. ROAD DIST. NO. - ILLINOIS				



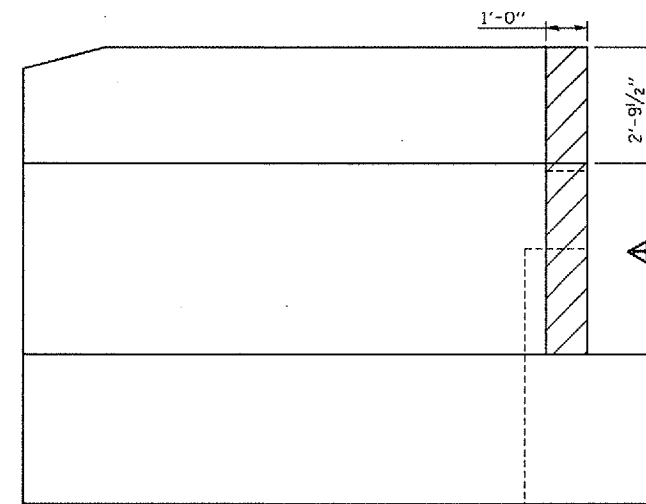
Existing reinforcement shall be cleaned, straightened and incorporated into the new concrete (typ each end)

** Existing reinforcement to be saved, cleaned and incorporated into the new concrete

ELEVATION TYPICAL

* SOUTHBOUND STRUCTURE			
	EAST END	CL	WEST END
S. ABUT.	1.54'	1.86'	1.46'
N. ABUT.	1.52'	1.84'	1.46'
NORTHBOUND STRUCTURE			
	EAST END	CL	WEST END
S. ABUT.	1.46'	1.85'	1.54'
N. ABUT.	1.46'	1.86'	1.56'

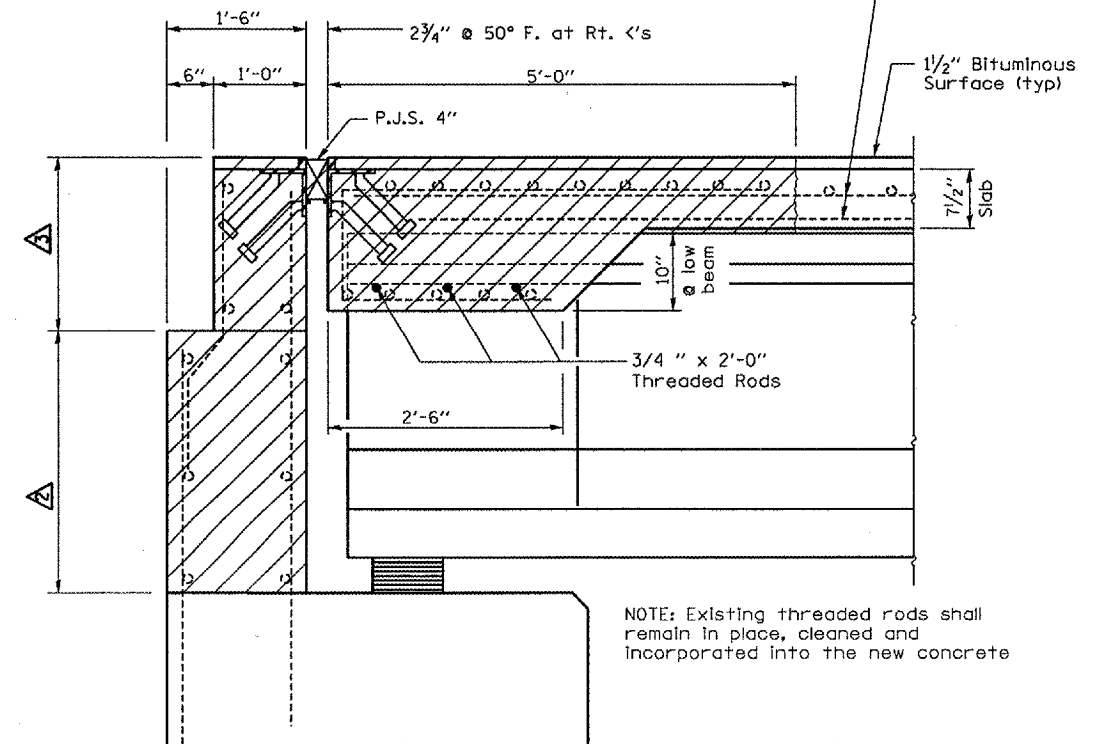
Distances are measured from top of bituminous surface



WING ELEVATION TYPICAL

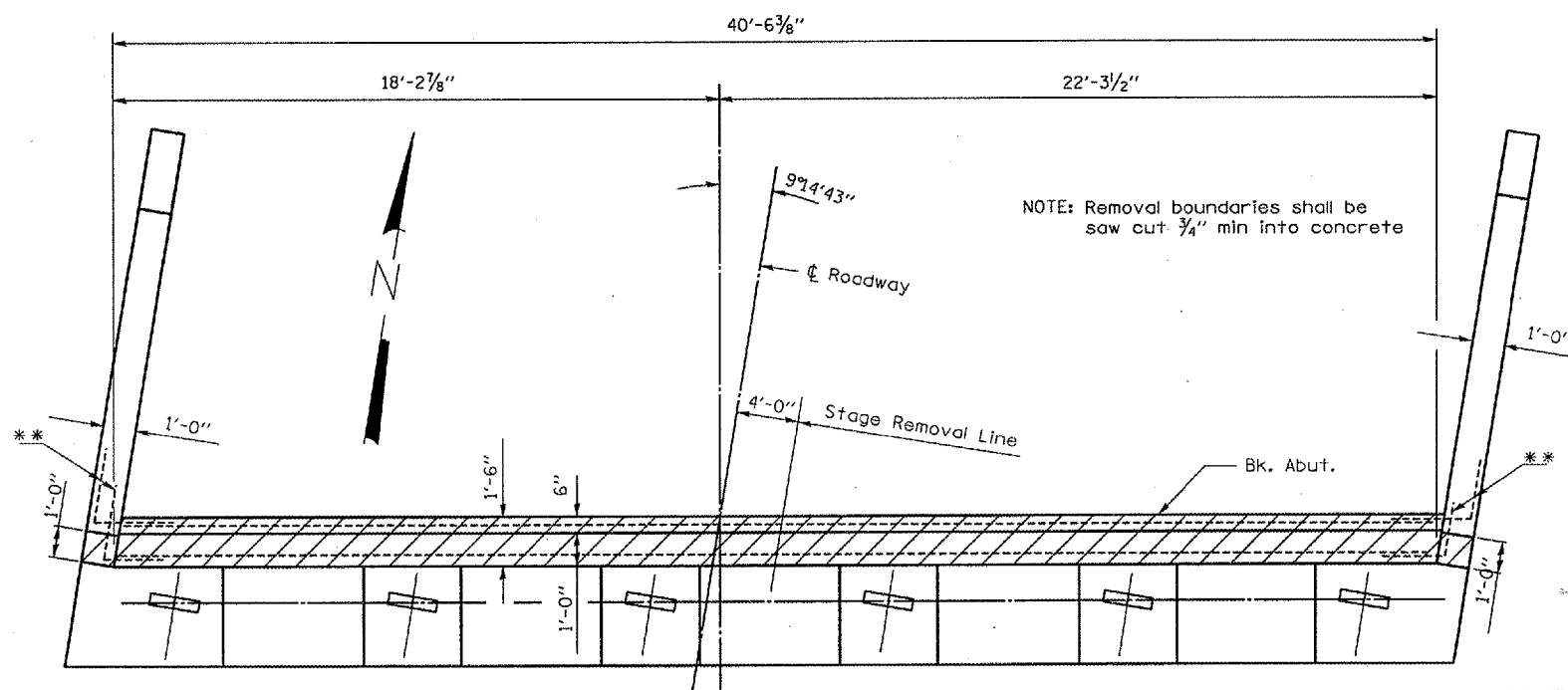
▲ SB STRUCTURE			
	EAST WING	WEST WING	
S. ABUT.	4'-7 1/2"	4'-7 3/8"	
N. ABUT.	4'-6 1/8"	4'-6 3/8"	
▲ NB STRUCTURE			
	EAST WING	WEST WING	
S. ABUT.	4'-7 1/2"	4'-7 3/8"	
N. ABUT.	4'-6 1/4"	4'-6 3/8"	

Existing reinforcement to be cut off to provide min bar lap



ABUTMENT SECTION TYPICAL

NOTE: Existing threaded rods shall remain in place, cleaned and incorporated into the new concrete



PLAN TYPICAL

NORTHBOUND LANE-NORTH ABUTMENT SHOWN

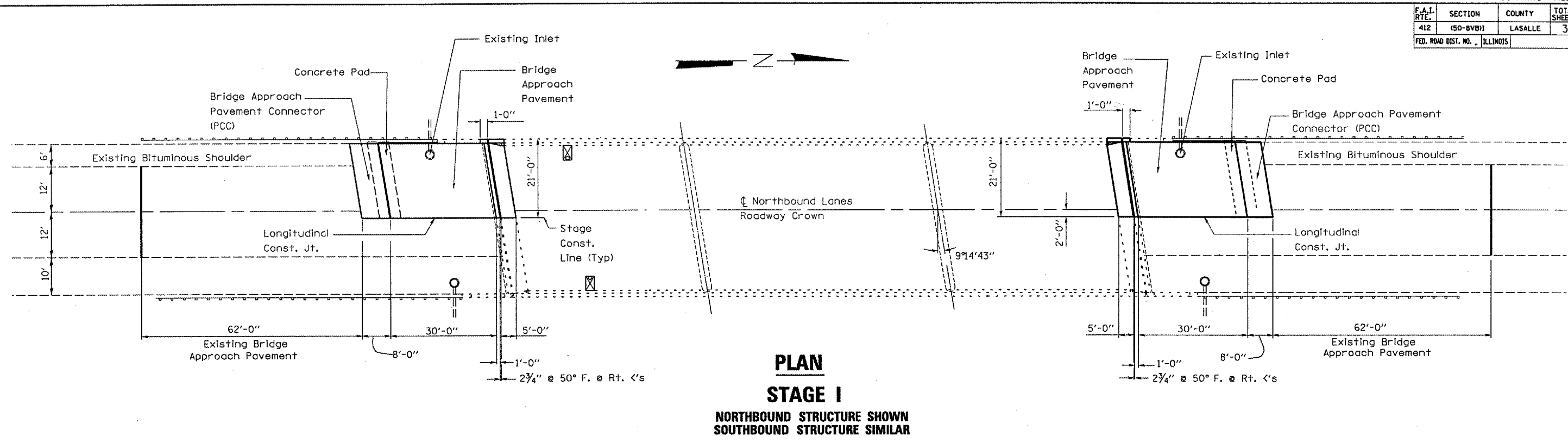
LOCATION	VARIES	VARIES
S.A. S.B. LANE	2'-9 7/8" TO 3'-1 7/8"	1'-4" TO 1'-8 3/4"
S.A. N.B. LANE	2'-9 7/8" TO 3'-1 7/8"	1'-4" TO 1'-8 7/8"
N.A. N.B. LANE	2'-8 3/4" TO 3'-0 3/4"	1'-4" TO 1'-8 3/4"
N.A. S.B. LANE	2'-9" TO 3'-0 7/8"	1'-4" TO 1'-8 1/2"

REVISIONS	
NAME	DATE

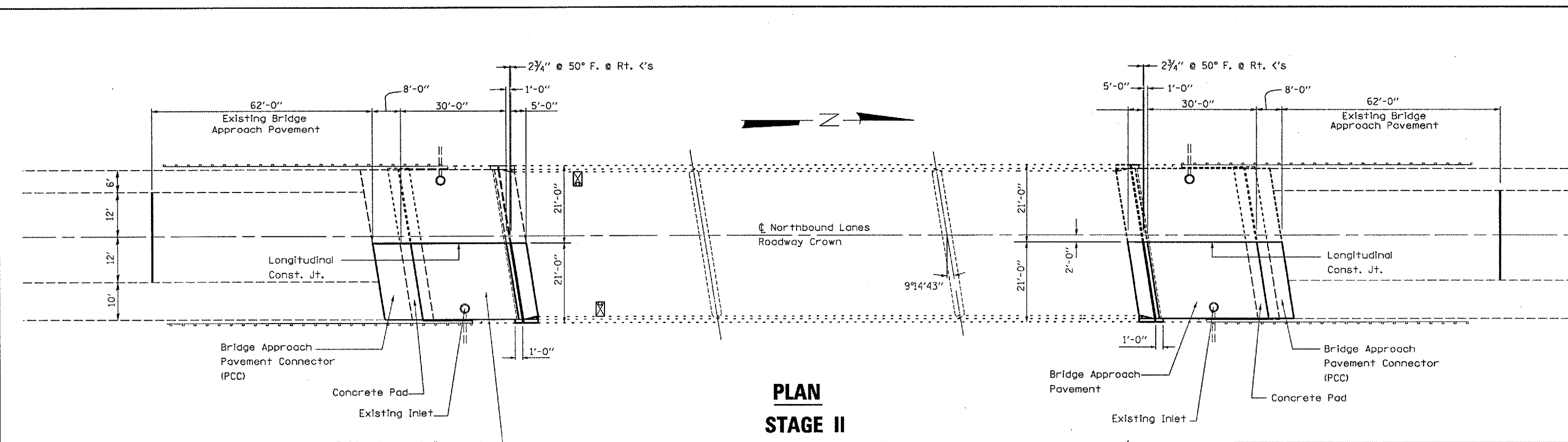
ILLINOIS DEPARTMENT OF TRANSPORTATION
REMOVAL DETAILS - ABUTMENTS
 F.A.I. 412 OVER BNSF RAILROAD
 SECTION (50-8VB)I
 LASALLE COUNTY
 STA. 758 + 10

JULY 1, 2005 C:\PROJECTS\DMA\IN06\CM318\DETAILS.DGN

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	14
FED. ROAD DIST. NO.		ILLINOIS		



**PLAN
STAGE I**
NORTHBOUND STRUCTURE SHOWN
SOUTHBOUND STRUCTURE SIMILAR



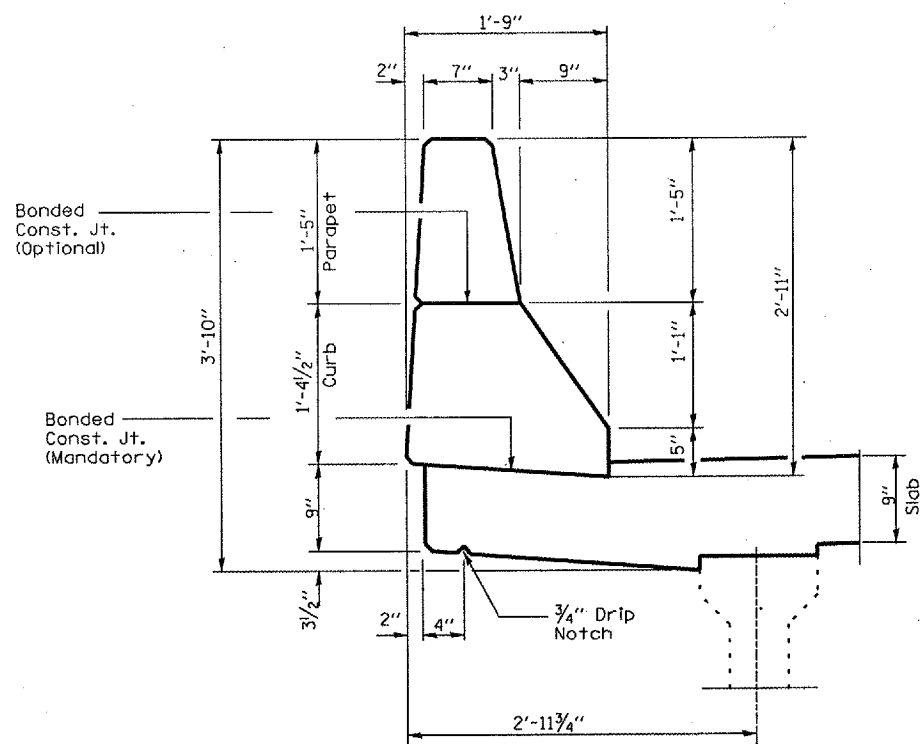
**PLAN
STAGE II**
NORTHBOUND STRUCTURE SHOWN
SOUTHBOUND STRUCTURE SIMILAR

JULY 1, 2005
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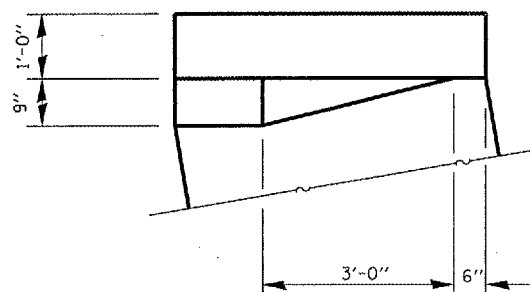
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN CONSTRUCTION DETAILS
F.A.I. 412 OVER BNSF RAILROAD
SECTION (50-8VB)I
LASALLE COUNTY
STA. 758 + 10
DATE 06/01/2005
DRAWN BY RLW

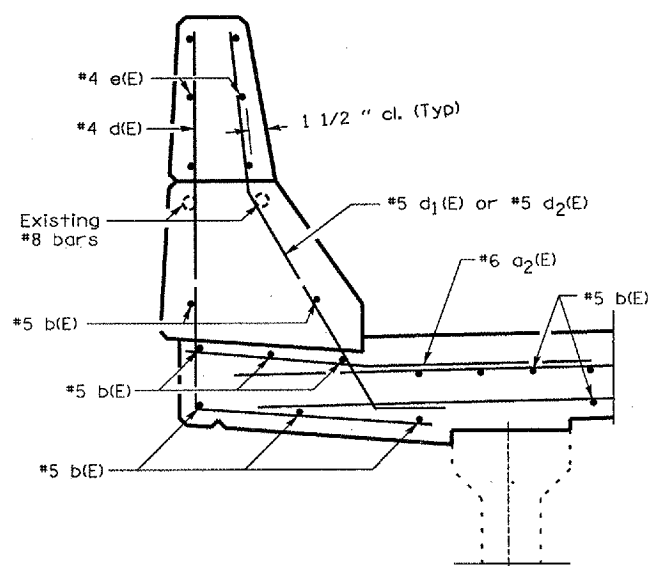
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	16
FED. ROAD DIST. NO. ILLINOIS				



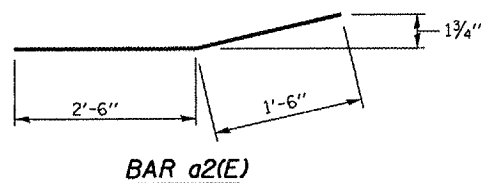
PARAPET SECTION
DIMENSIONS



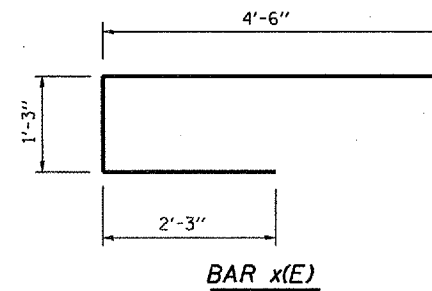
CORNER DETAIL



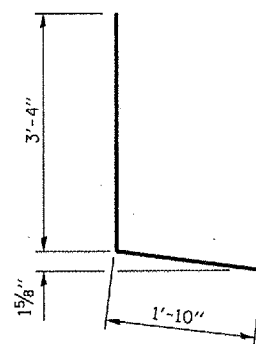
PARAPET SECTION
REINFORCEMENT



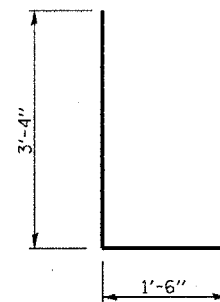
BAR a2(E)



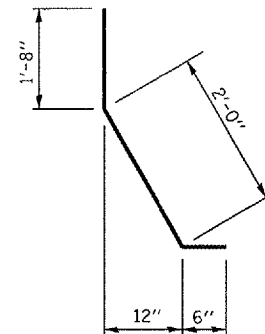
BAR x(E)



BAR d(E)



BAR d2(E)



BAR d1(E)

SUPERSTRUCTURE
REINFORCEMENT TABLE

BAR	NO.	SIZE	LENGTH	SHAPE
a(E)	12	#7	20'-0"	—
a1(E)	16	#6	20'-0"	—
a2(E)	8	#6	4'-0"	—
a3(E)	20	#6	6'-5"	—
a4(E)	10	#6	3'-1"	—
b(E)	96	#5	4'-9"	—
d(E)	10	#4	5'-2"	—
d1(E)	2	#5	4'-2"	—
d2(E)	8	#5	4'-10"	—
e(E)	12	#4	4'-9"	—
x(E)	64	#6	8'-0"	—
Reinforcement Bars			Pounds	2625
Epoxy Coated				

Reinforcement table is shown for "ONE" Abutment only

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION DETAILS - DECK
F.A.I. 412 OVER BNSF RAILROAD
SECTION (50-8VB)I
LASALLE COUNTY
STA. 758 + 10

DATE 06/01/2005

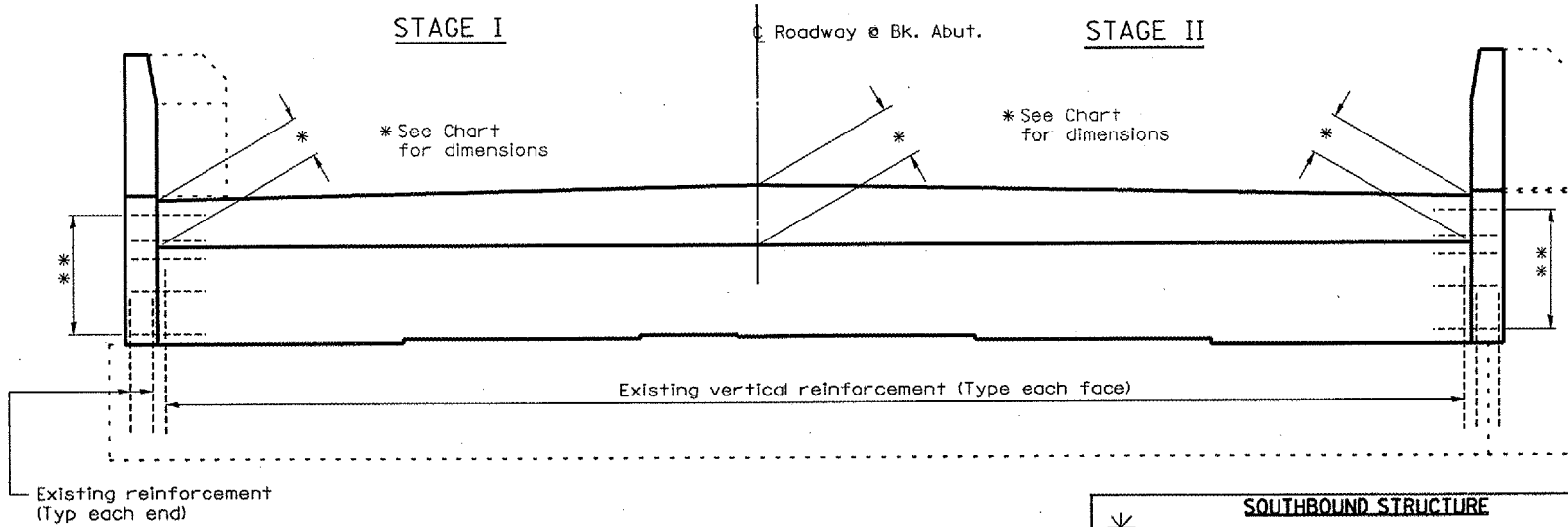
DRAWN BY RLW

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)1	LASALLE	31	17
FED. ROAD DIST. NO. ILLINOIS				

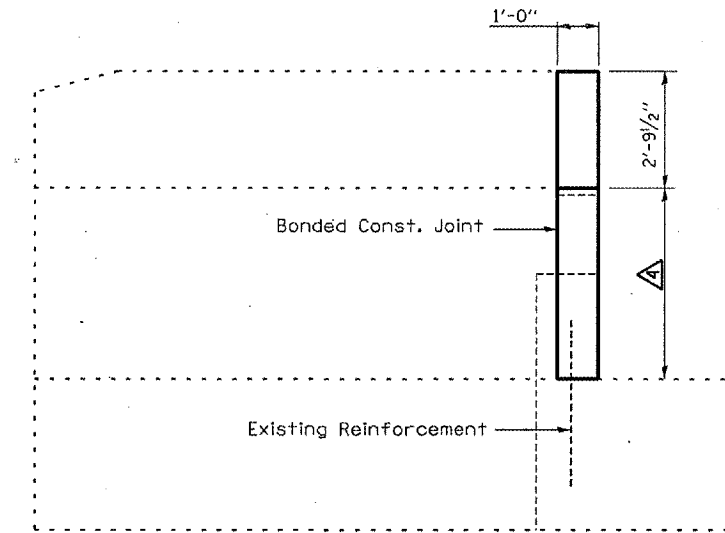
** Existing reinforcement to be saved, cleaned and incorporated into the new concrete

** Existing reinforcement to be saved, cleaned and incorporated into the new concrete



**ELEVATION
TYPICAL**

* SOUTHBOUND STRUCTURE			
	EAST END	CL	WEST END
S. ABUT.	1.54'	1.86'	1.46'
N. ABUT.	1.52'	1.84'	1.46'
* NORTHBOUND STRUCTURE			
	EAST END	CL	WEST END
S. ABUT.	1.46'	1.85'	1.54'
N. ABUT.	1.46'	1.86'	1.56'

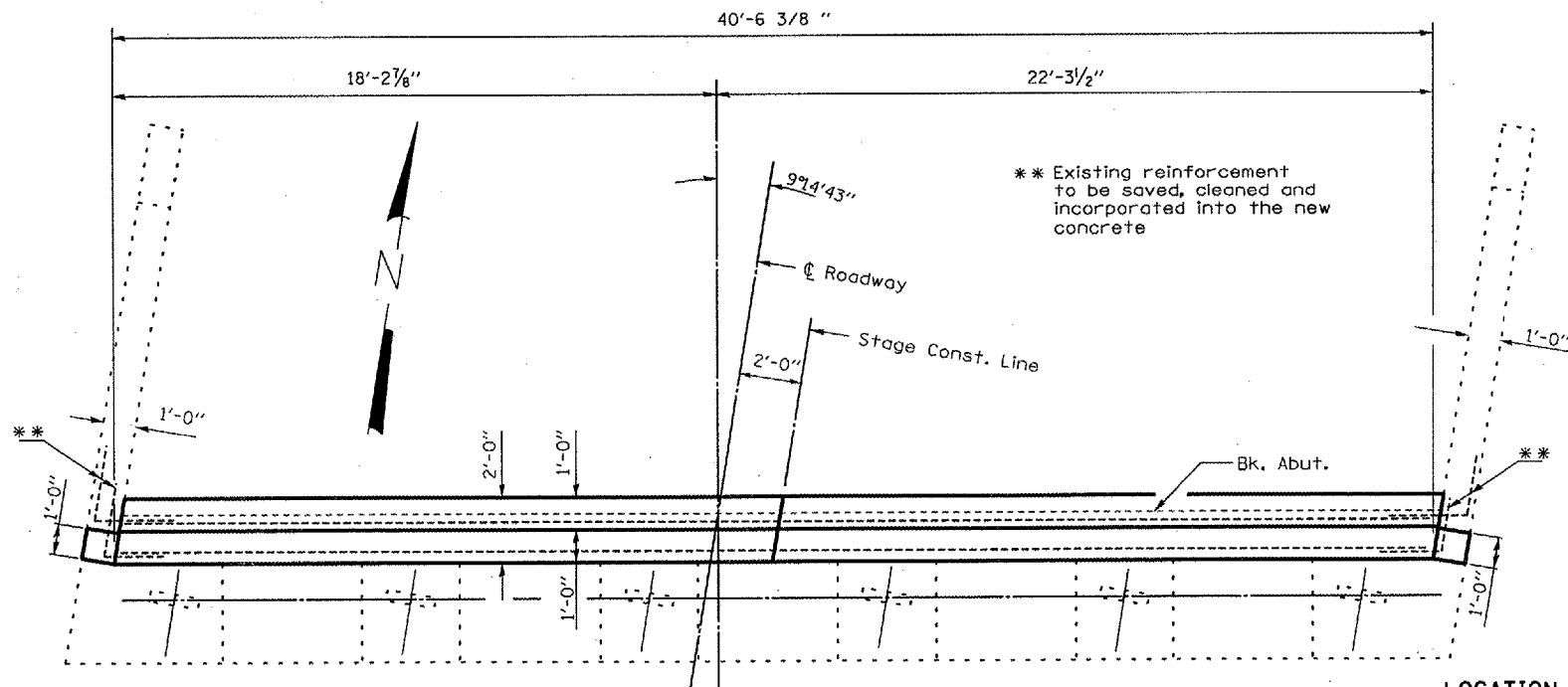


**WING ELEVATION
TYPICAL**

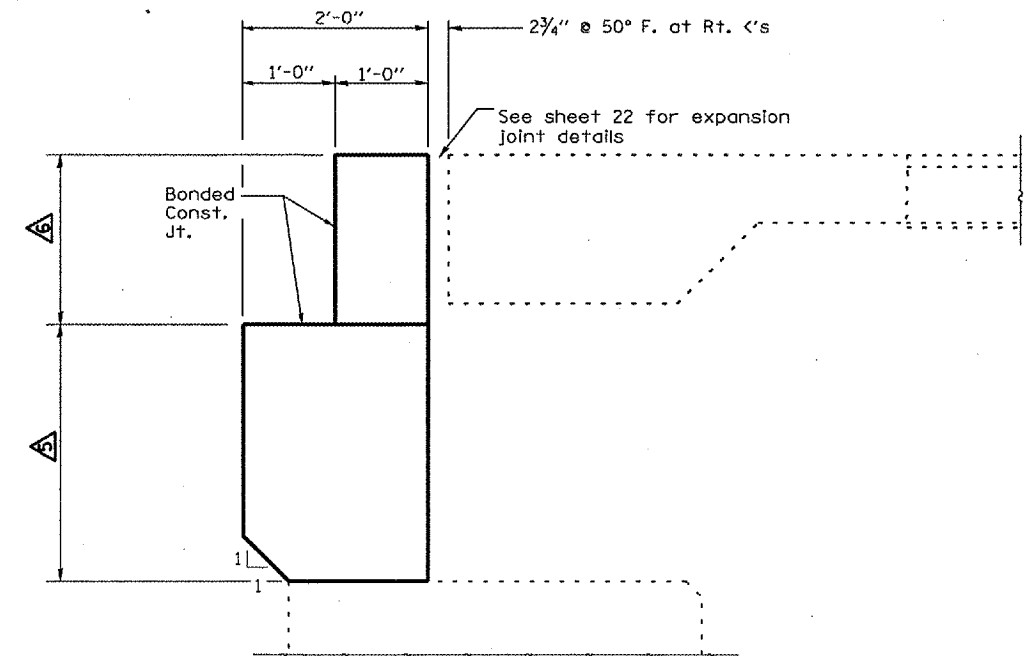
4 SB STRUCTURE		
	EAST WING	WEST WING
S. ABUT.	4'-7 1/2"	4'-7 3/8"
N. ABUT.	4'-6 1/8"	4'-6 3/8"

4 NB STRUCTURE		
	EAST WING	WEST WING
S. ABUT.	4'-7 1/2"	4'-7 3/8"
N. ABUT.	4'-6 1/4"	4'-6 3/8"

** Existing reinforcement to be saved, cleaned and incorporated into the new concrete



**PLAN
TYPICAL**
NORTHBOUND LANE-NORTH ABUTMENT SHOWN



**ABUTMENT SECTION
TYPICAL**

LOCATION	VARIES	VARIES
S.A. S.B. LANE	2'-11 3/8" TO 3'-3 3/8"	1'-5 1/2" TO 1'-10 1/4"
S.A. N.B. LANE	2'-11 3/8" TO 3'-3 3/8"	1'-5 1/2" TO 1'-10 3/8"
N.A. N.B. LANE	2'-10 1/4" TO 3'-2 1/4"	1'-5 1/2" TO 1'-10 1/4"
N.A. S.B. LANE	2'-10 1/2" TO 3'-2 3/8"	1'-5 1/2" TO 1'-10"

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**CONSTRUCTION DETAILS - ABUTMENTS
 SHOWING DIMENSION**
 F.A.I. 412 OVER BNSF RAILROAD
 SECTION (50-8VB)1
 LASALLE COUNTY
 STA. 758 + 10

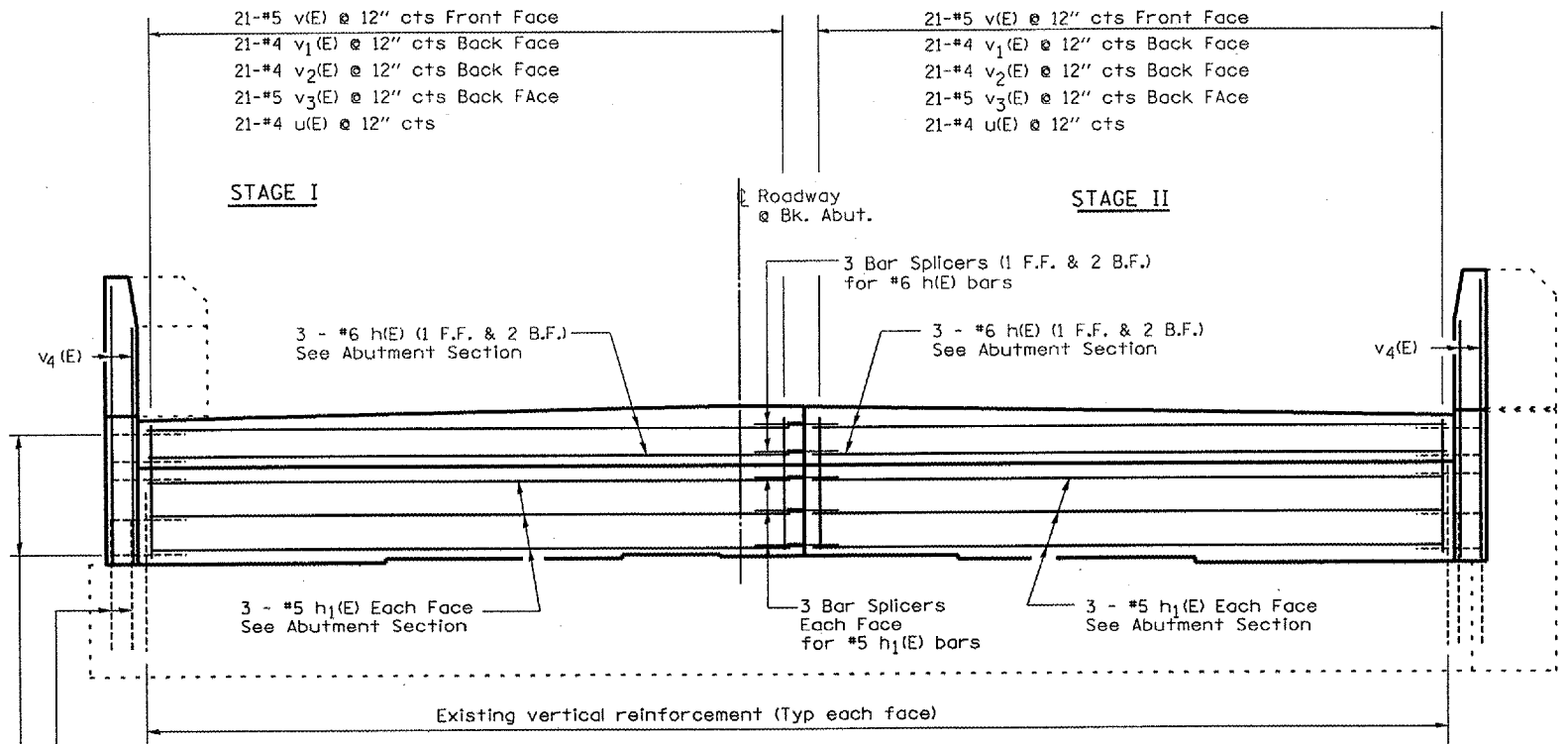
JULY 1, 2005 C:\PROJECTS\DMA\IN06\CM318\DETAILS.DGN

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	18
FED. ROAD DIST. NO.		ILLINOIS		

ABUTMENT REINFORCEMENT TABLE

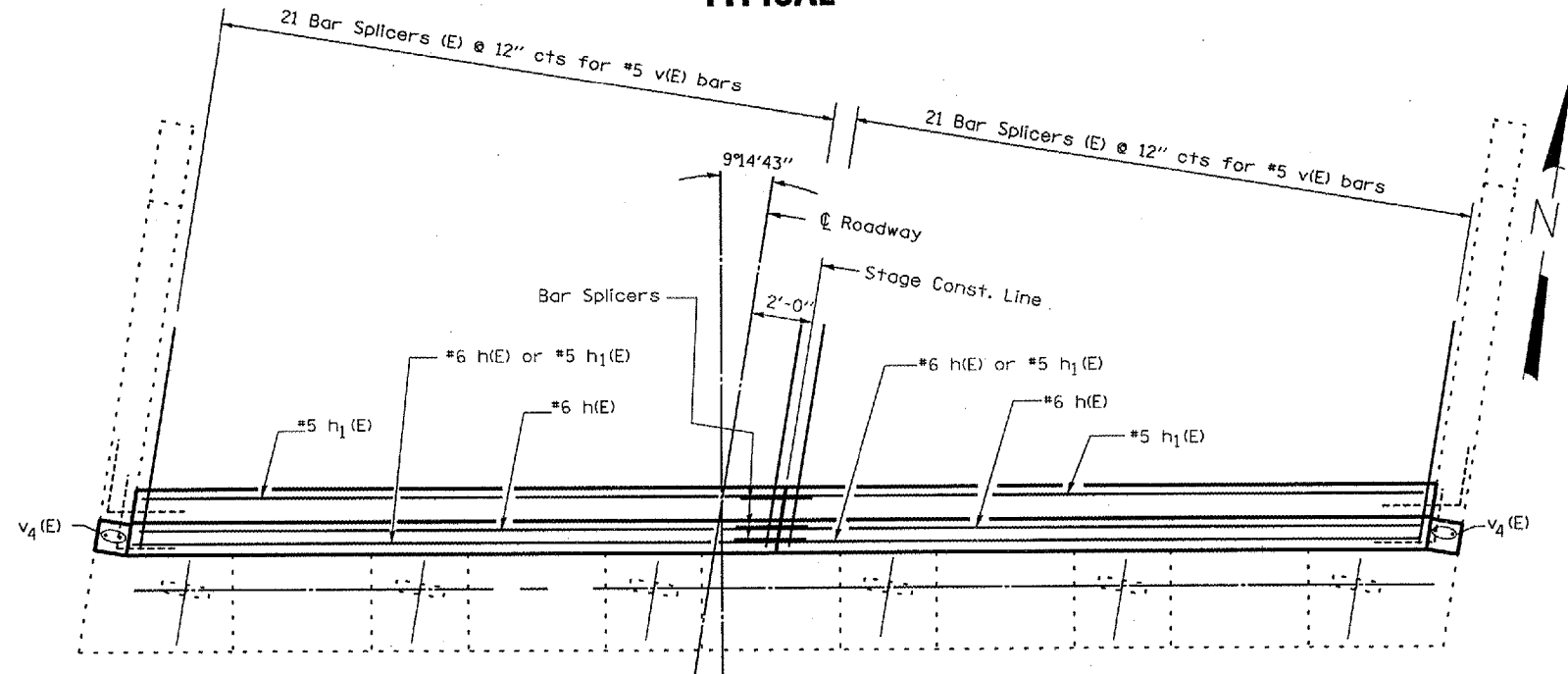
BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	6	#6	20'-0"	—
h1(E)	12	#5	20'-0"	—
u(E)	42	#4	5'-11"	⌊
v(E)	42	#5	3'-9"	—
v1(E)	42	#4	4'-1"	—
v2(E)	42	#4	3'-8"	—
v3(E)	42	#5	3'-2"	—
v4(E)	4	#6	7'-0"	—
REINFORCEMENT BARS			Pounds	1068
EPOXY COATED				

Reinforcement table is shown for "ONE" Abutment only



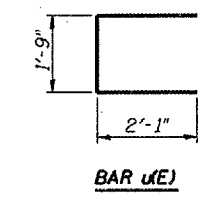
ELEVATION TYPICAL

NOTE: Existing concrete adjacent to new concrete shall be a Bonded Construction Joint

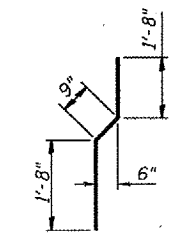


PLAN TYPICAL

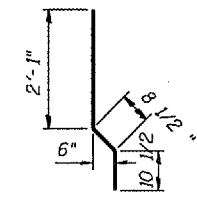
NORTHBOUND LANE-NORTH ABUTMENT SHOWN



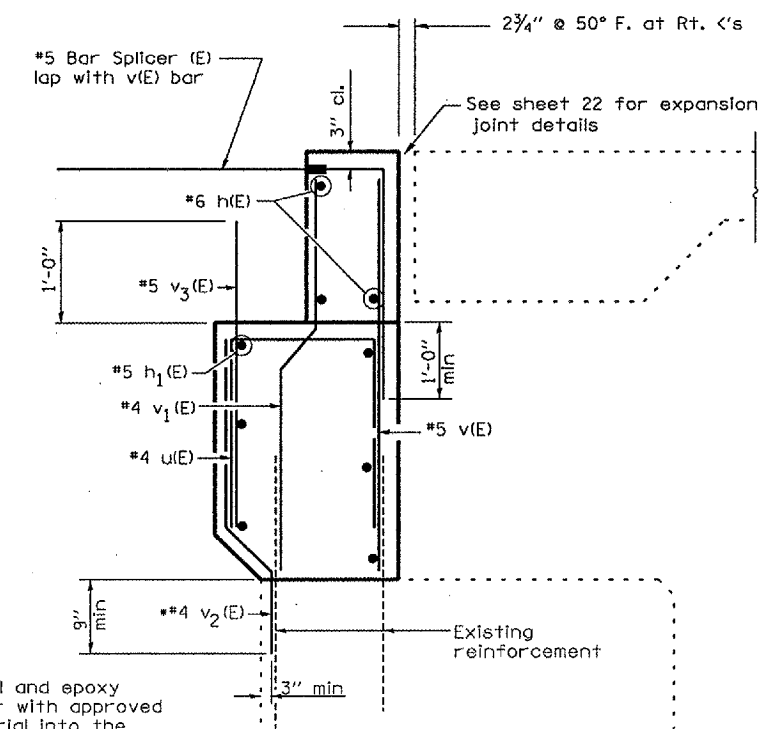
BAR u(E)



BAR v1(E)



BAR v2(E)



ABUTMENT SECTION TYPICAL SHOWING REINFORCEMENT

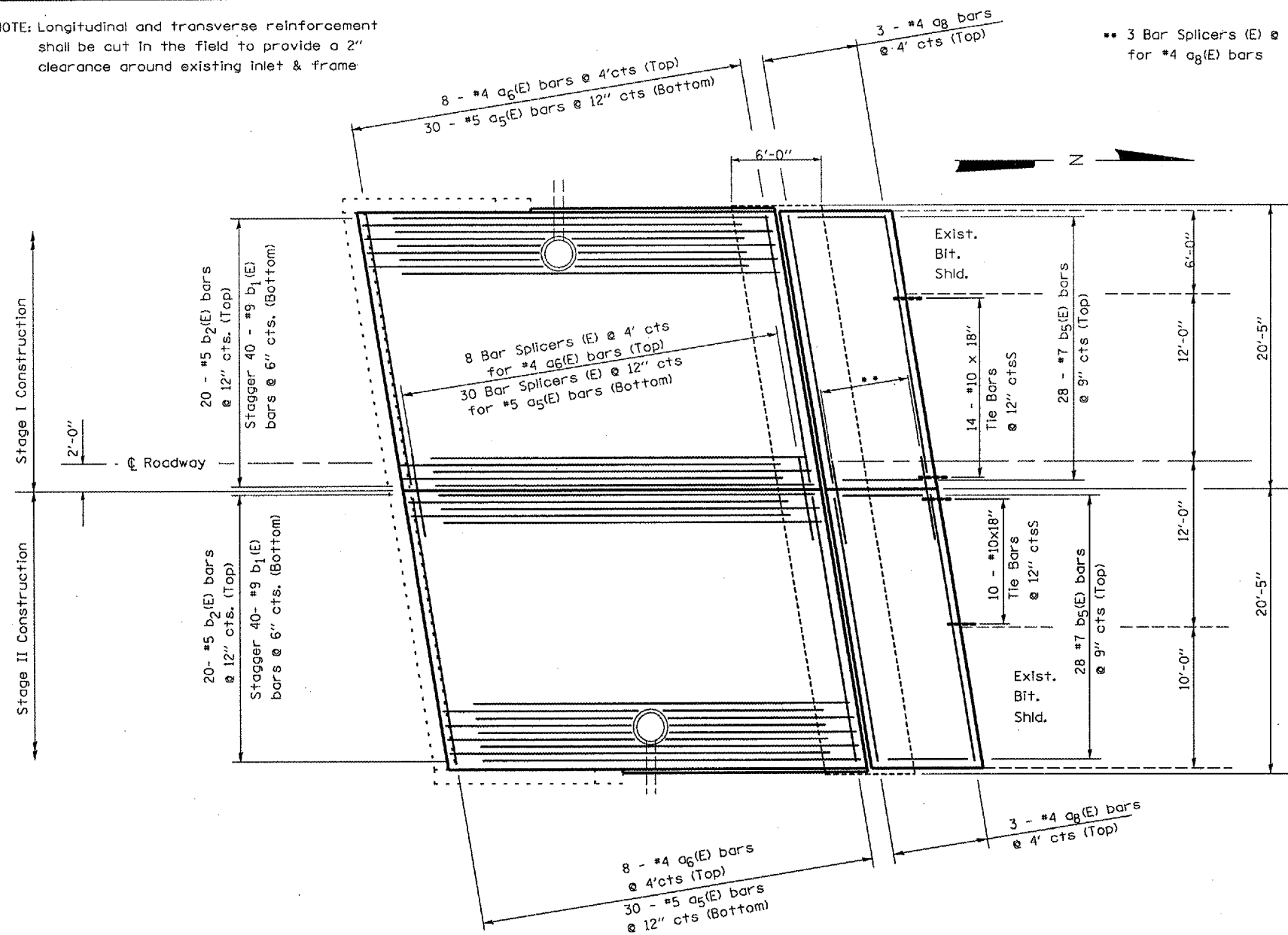
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CONSTRUCTION DETAILS - ABUTMENTS SHOWING REINFORCEMENT
 F.A.I. 412 OVER BNSF RAILROAD
 SECTION (50-8VB)I
 LASALLE COUNTY
 STA. 758 + 10
 DATE 06/01/2005 DRAWN BY RLW

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	19
FED. ROAD DIST. NO.		ILLINOIS		

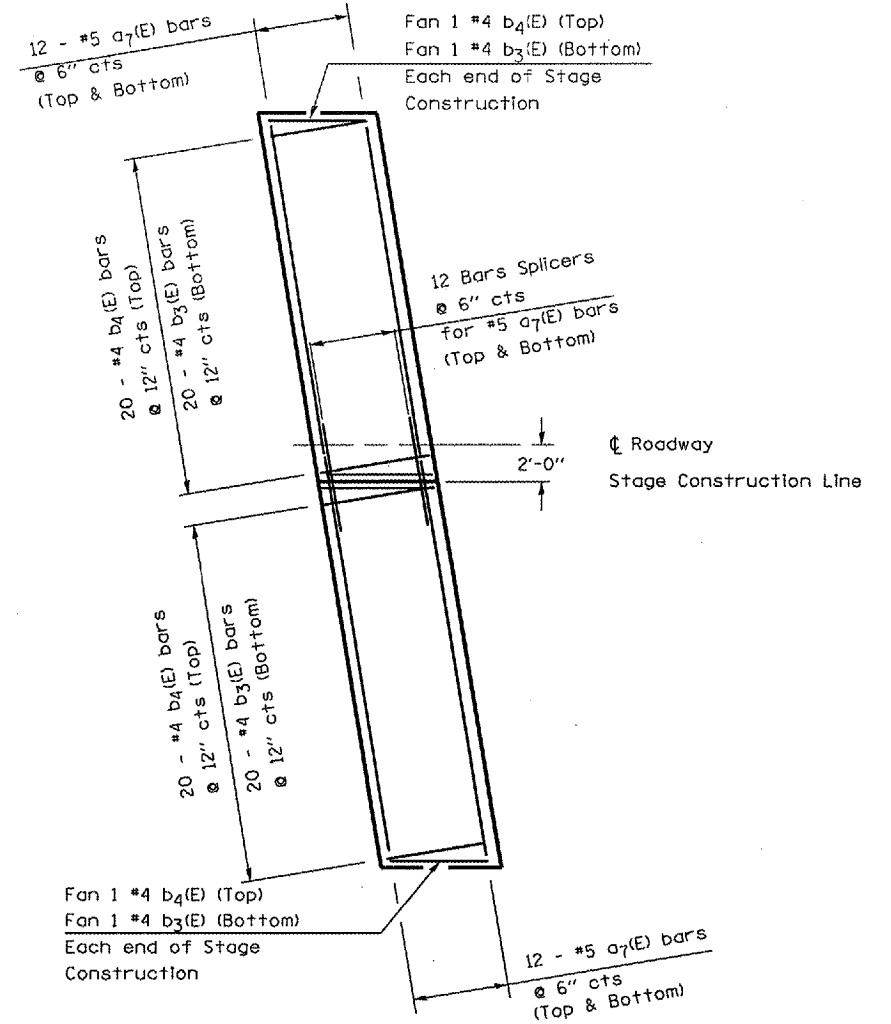
NOTE: Longitudinal and transverse reinforcement shall be cut in the field to provide a 2" clearance around existing inlet & frame



PLAN

BRIDGE APPROACH PAVEMENT

NORTHBOUND LANE-NORTH APPROACH SHOWN



PLAN

CONCRETE PAD

BRIDGE APPROACH PAVEMENT REINFORCEMENT TABLE

BAR	NO.	SIZE	LENGTH	SHAPE
a5(E)	60	#5	20'-0"	—
a6(E)	16	#4	20'-0"	—
b1(E)	80	#9	29'-6"	⌋
b2(E)	40	#5	29'-6"	—
REINFORCEMENT BARS, EPOXY COATED			Pounds	10720

CONCRETE PAD REINFORCEMENT TABLE

BAR	NO.	SIZE	LENGTH	SHAPE
a7(E)	48	#5	20'-4"	—
b3(E)	44	#4	6'-8"	⌋
b4(E)	44	#4	5'-8"	—
REINFORCEMENT BARS EPOXY COATED			Pounds	1380

BRIDGE APPROACH PAVEMENT CONNECTOR (PCC) REINFORCEMENT TABLE

BAR	NO.	SIZE	LENGTH	SHAPE
a8	6	#4	20'-0"	—
b5	56	#7	7'-8"	—
REINFORCEMENT BARS EPOXY COATED			Pounds	958
TIE BARS			Each	24

NOTE: Reinforcement tables as shown are for "INFORMATION ONLY" the cost of the reinforcement bars and tie bars shall not be paid for separately but shall be included with the Pay Item for "Bridge Approach Pavement" and "Bridge Approach Pavement Connector (PCC) as outlined in Article 420.03 of the Standard Specifications

Reinforcement quantities reflects "ONE" Approach Slab only

REVISIONS	
NAME	DATE

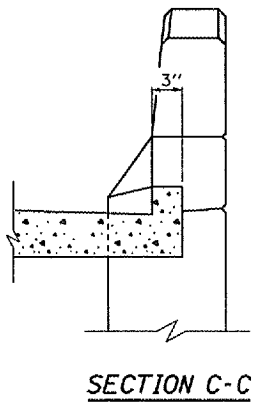
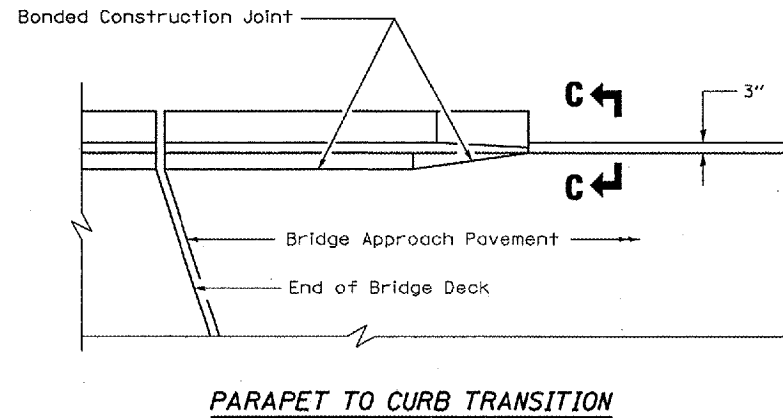
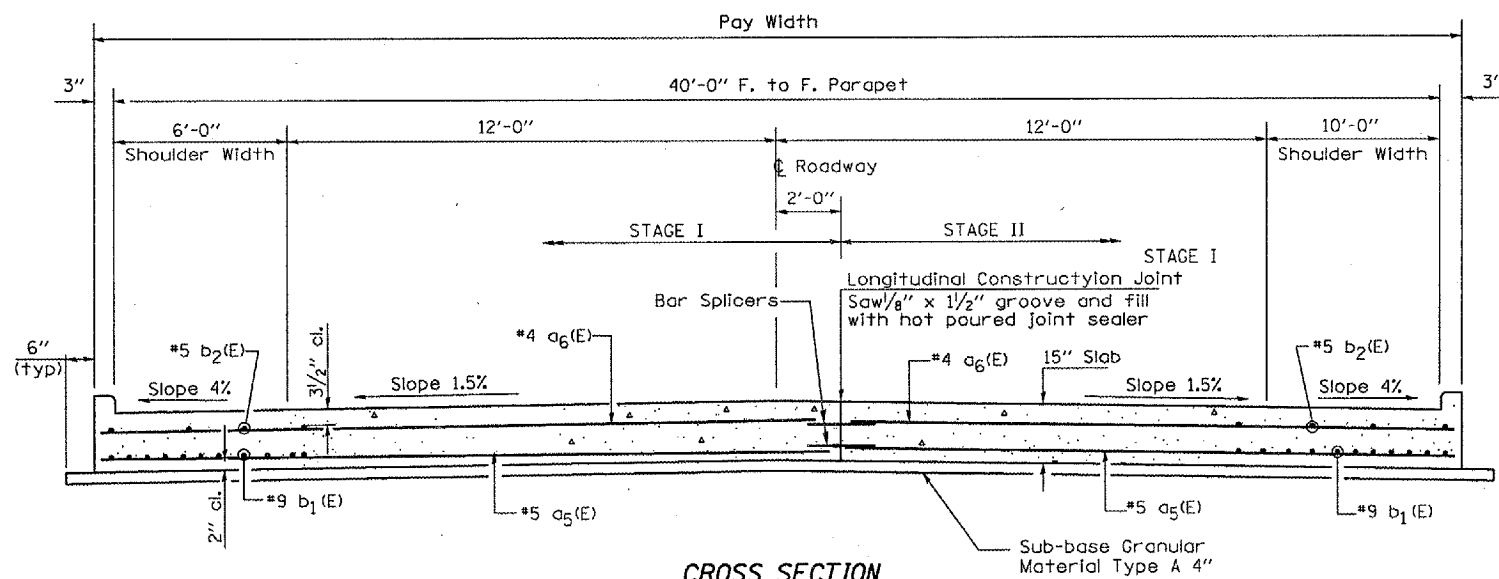
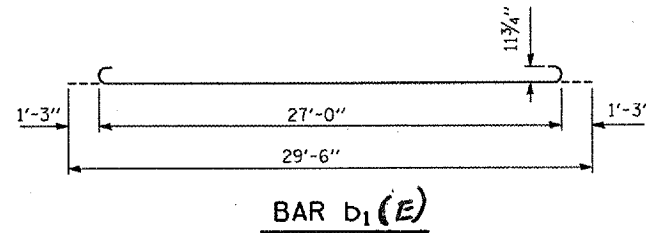
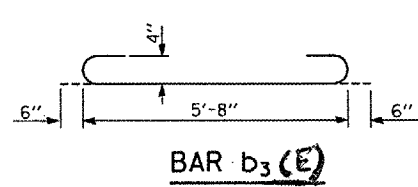
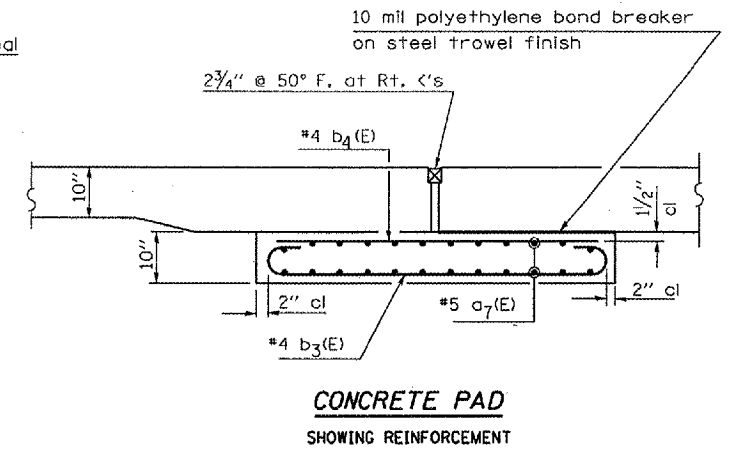
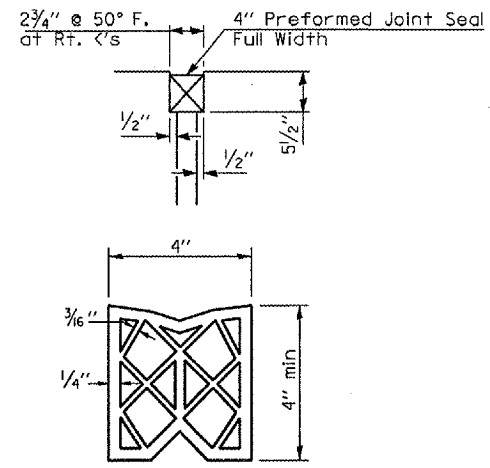
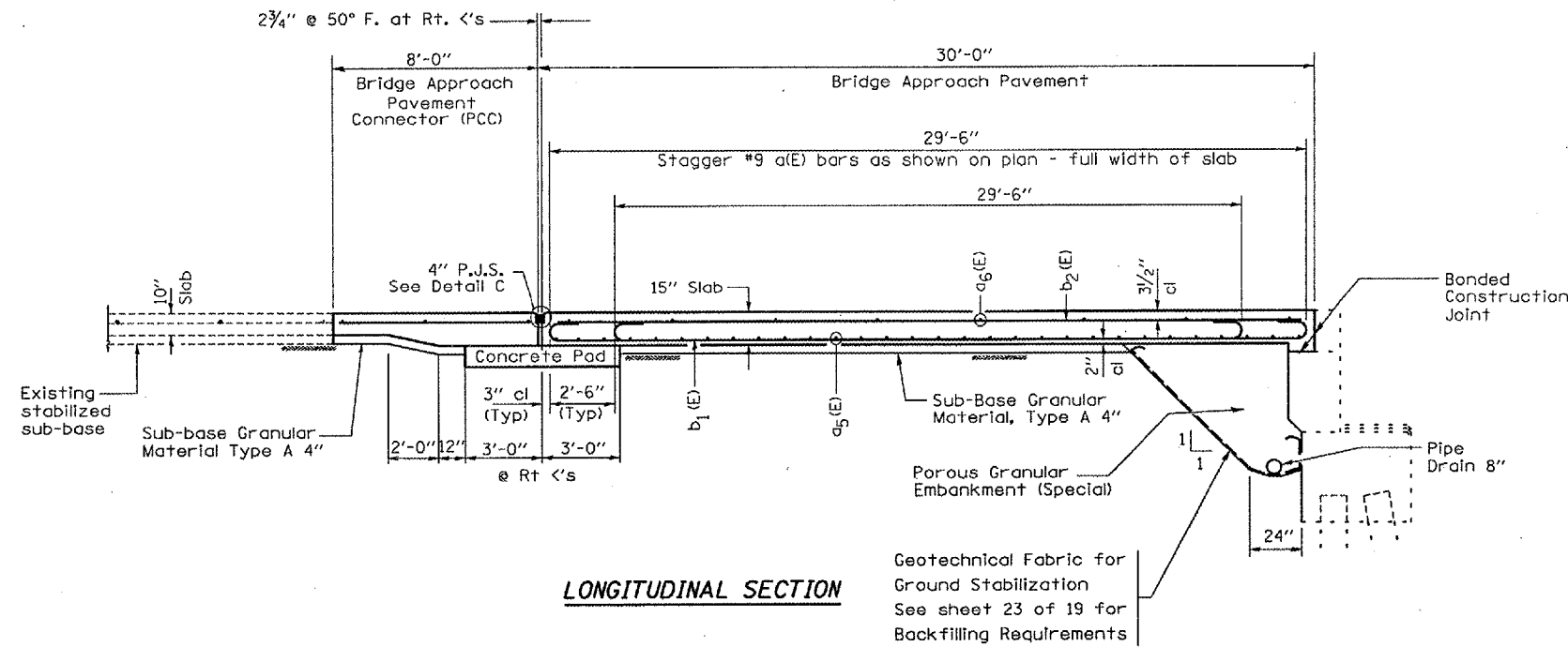
ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE APPROACH PAVEMENT DETAILS
 F.A.I. 412 OVER BNSF RAILROAD
 SECTION (50-8VB)I
 LASALLE COUNTY
 STA. 758+10

DATE 06/01/2005

DRAWN BY RLW

NOTE: Reinforcement bars or Bar Splicers designated (E) shall be Epoxy Coated

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	20
FED. ROAD DIST. NO. - ILLINOIS				



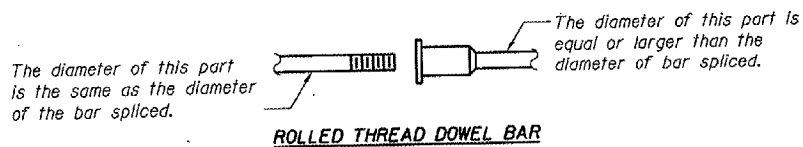
LOOKING NORTH ON NORTHBOUND STRUCTURE
LOOKING SOUTH ON SOUTHBOUND STRUCTURE
See Plan for Dimensions not shown
All reinforcement bars shall be Epoxy Coated

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE APPROACH PAVEMENT DETAILS
F.A.I. 412 OVER BNSF RAILROAD
SECTION (50-8VB)I
LASALLE COUNTY
STA. 758 + 10
DATE 06/01/2005
DRAWN BY RLW

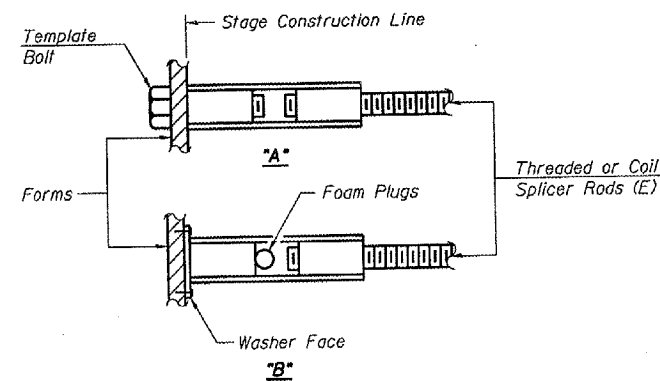
JULY 1, 2005
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	21
FED. ROAD DIST. NO. - ILLINOIS				



BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



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.

NOTES

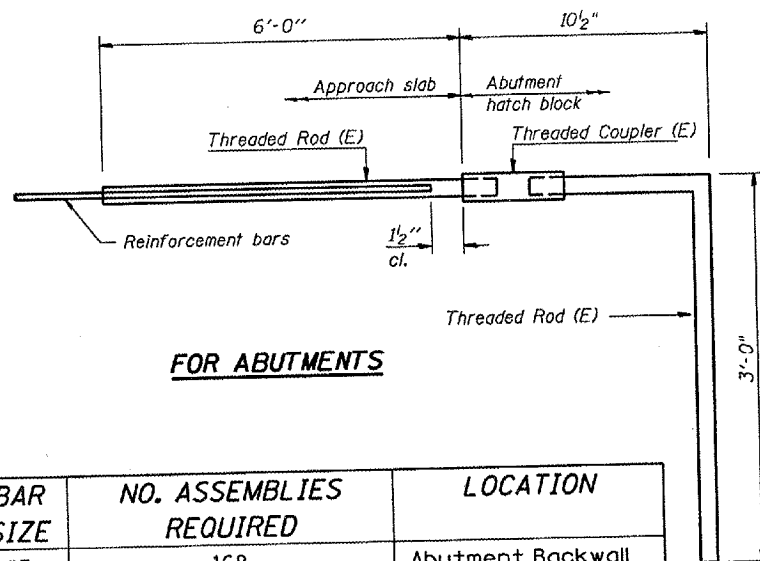
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
 Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity = $1.25 \times f_y \times A_t$
 (Tension in kips)
- ② Minimum *Pull-out Strength = $1.25 \times f_{s_{allow}} \times A_t$
 (Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

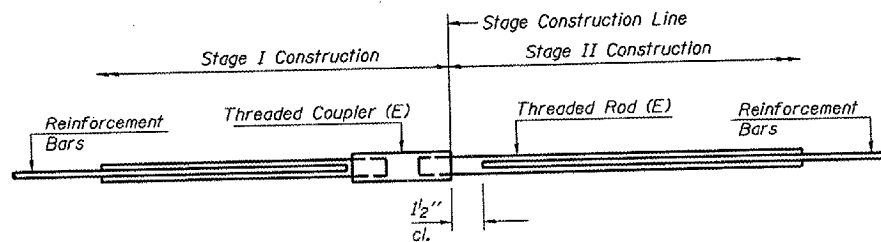
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



FOR ABUTMENTS

BAR SIZE	NO. ASSEMBLIES REQUIRED	LOCATION
#5	168	Abutment Backwall



STANDARD

BAR SIZE	NO. ASSEMBLIES REQUIRED	LOCATION
#4	32	Approach Pavement (Top)
#4	12	Approach Pavement Connector (Top)
#5	24	Back Wall
#5	120	Approach Pavement (Bottom)
#5	96	Concrete Pad (Top & Bottom)
#6	12	Abutment Backwall
#6	24	Deck (Top & Bottom)
#6	20	Deck (Bottom Haunch)
#7	24	Deck (Top)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BAR SPLICERS ASSEMBLY DETAILS
 F.A.I. 412 OVER BNSF RAILROAD
 SECTION (50-8VB)I
 LASALLE COUNTY
 STA. 758+10

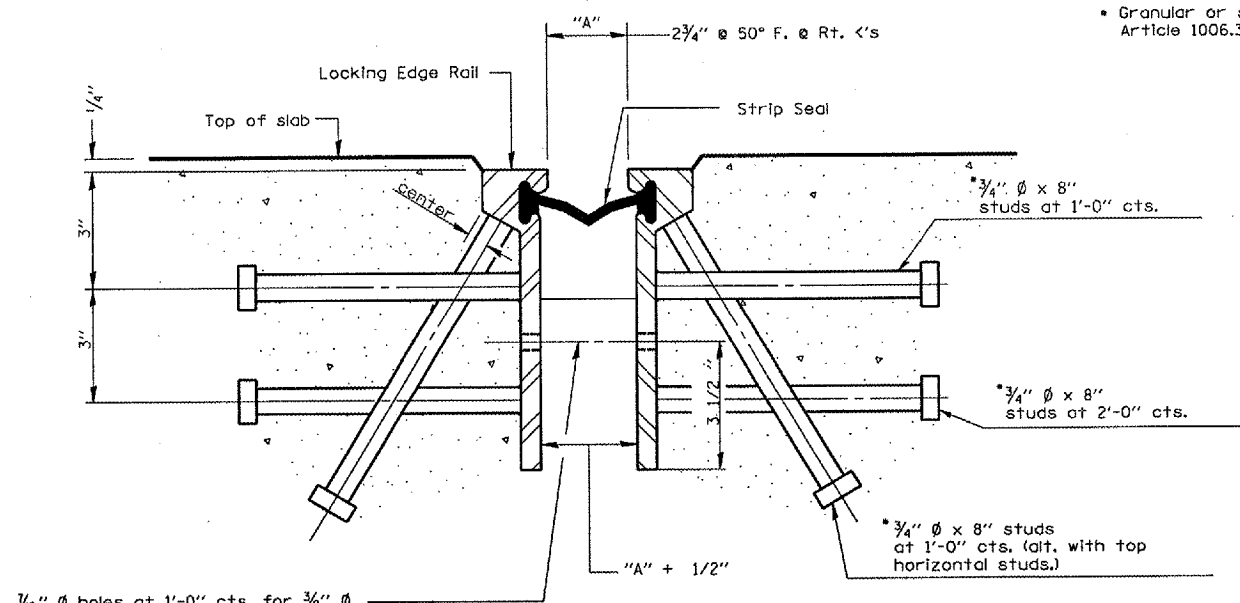
DATE 06/01/2005

DRAWN BY RLV

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BSD-1 9-01-03

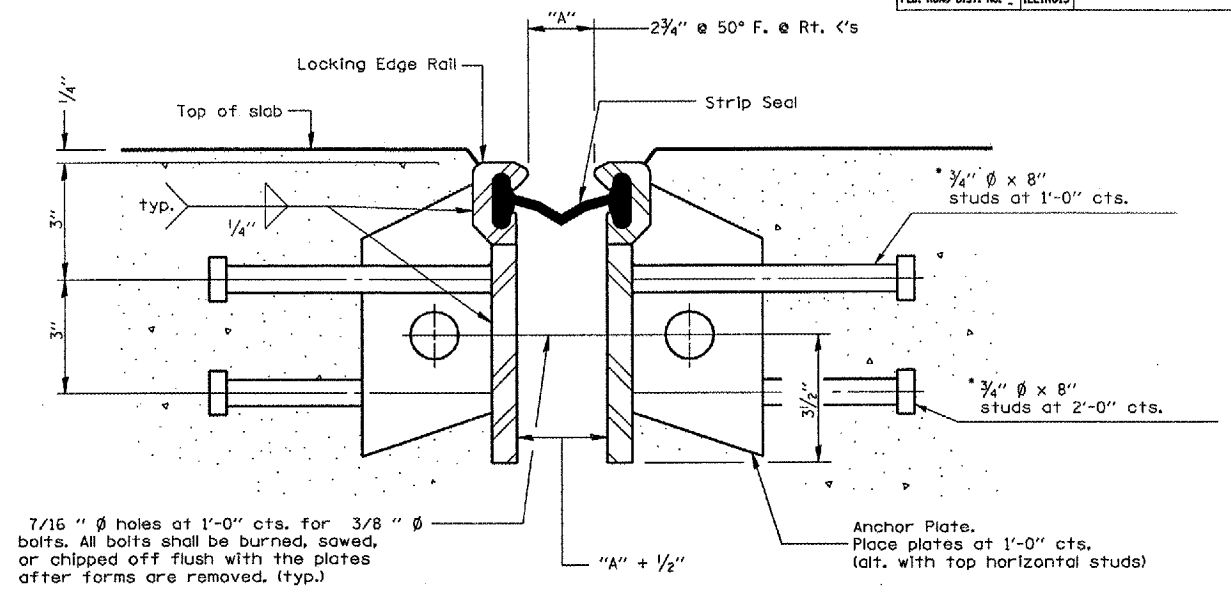
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	50-8VB11	LASALLE	31	22
FED. ROAD DIST. NO. _____		ILLINOIS		



1/8" ϕ holes at 1'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed. (typ.)

SECTION THRU ROLLED RAIL EXP. JOINT

(856 Studs Required)

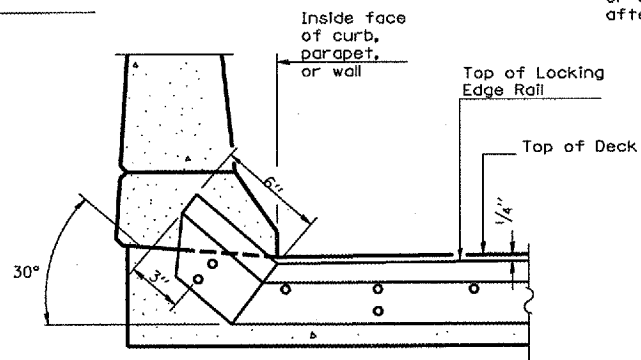


7/16" ϕ holes at 1'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed. (typ.)

Anchor Plate. Place plates at 1'-0" cts. (alt. with top horizontal studs)

SECTION THRU WELDED RAIL EXP. JOINT

(512 Studs Required)
(344 Anchor Plates Required)



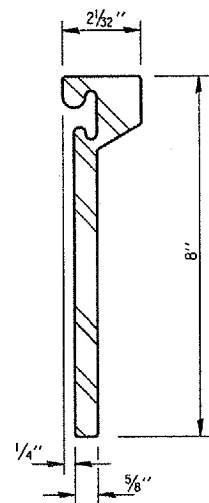
AT PARAPET

GENERAL NOTES

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails.

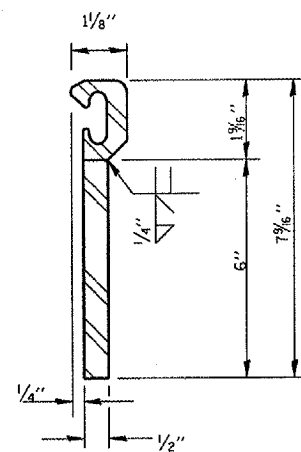
The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed.

Locking Edge Rails may be spliced at slope discontinuities and stage construction joints. The manufacturer's recommended installation methods shall be followed.

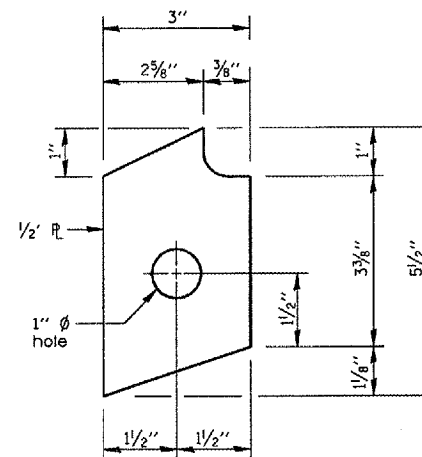


ROLLED (EXTRUDED) RAIL

LOCKING EDGE RAILS



WELDED RAIL



ANCHOR

(for welded rail)

BILL OF MATERIALS

Item	Unit	Total
Strip Seal Expansion Joint Assembly	FEET	43

Strip Seal Expansion Joint Assembly table is shown for ONE" Abutment only

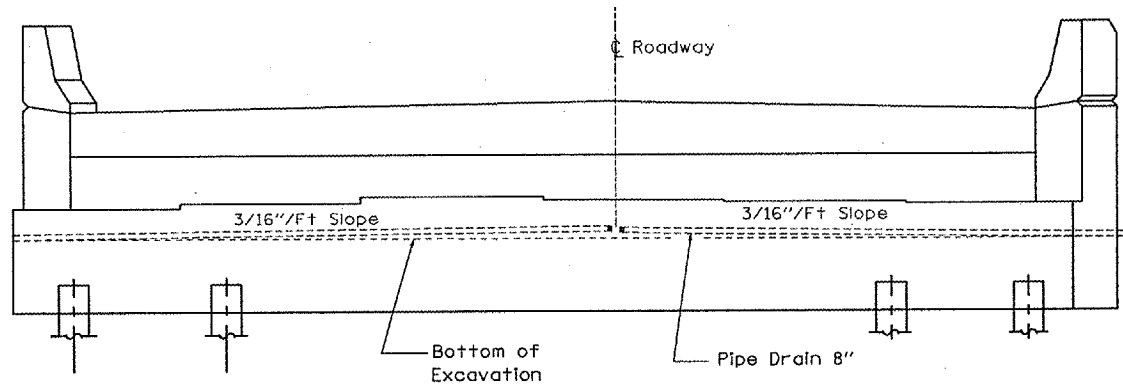
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STRIP SEAL EXPANSION JOINT ASSEMBLY
F.A.I. 412 OVER BNSF RAILROAD
SECTION (50-8VB)1
LASALLE COUNTY
STA. 758 + 10

DATE 06/01/2005

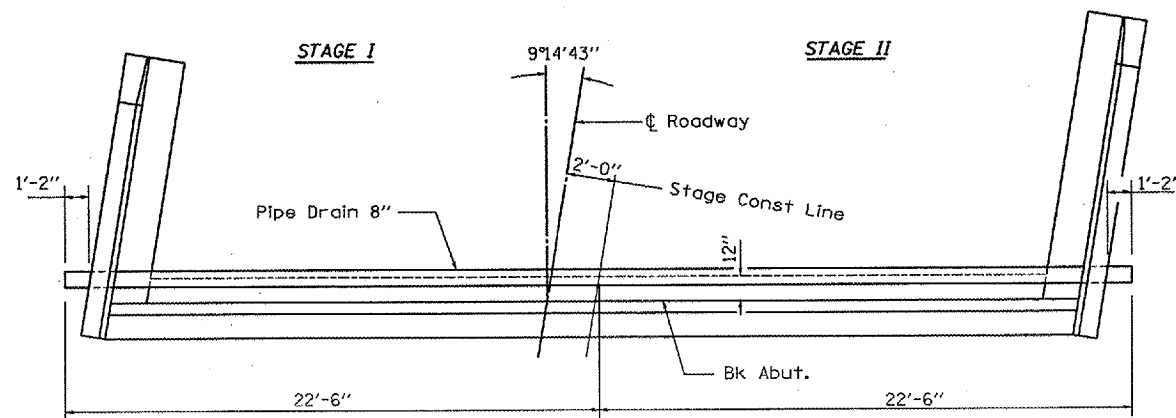
DRAWN BY RLW

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	23
FED. ROAD DIST. NO. - ILLINOIS				



ELEVATION

NOTE: The 8" pipe drain at the \odot Roadway shall be capped or sealed with approved materials as directed by the Engineer



PLAN
NORTHBOUND LANE-NORTH ABUTMENT SHOWN

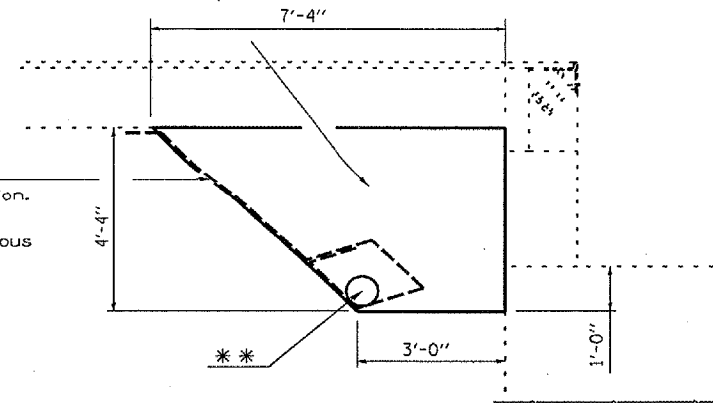
BILL OF MATERIALS

Item	Unit	Total
PIPE DRAINS 8"	FEET	45

Pipe Drain table is shown for "ONE" Abutment only

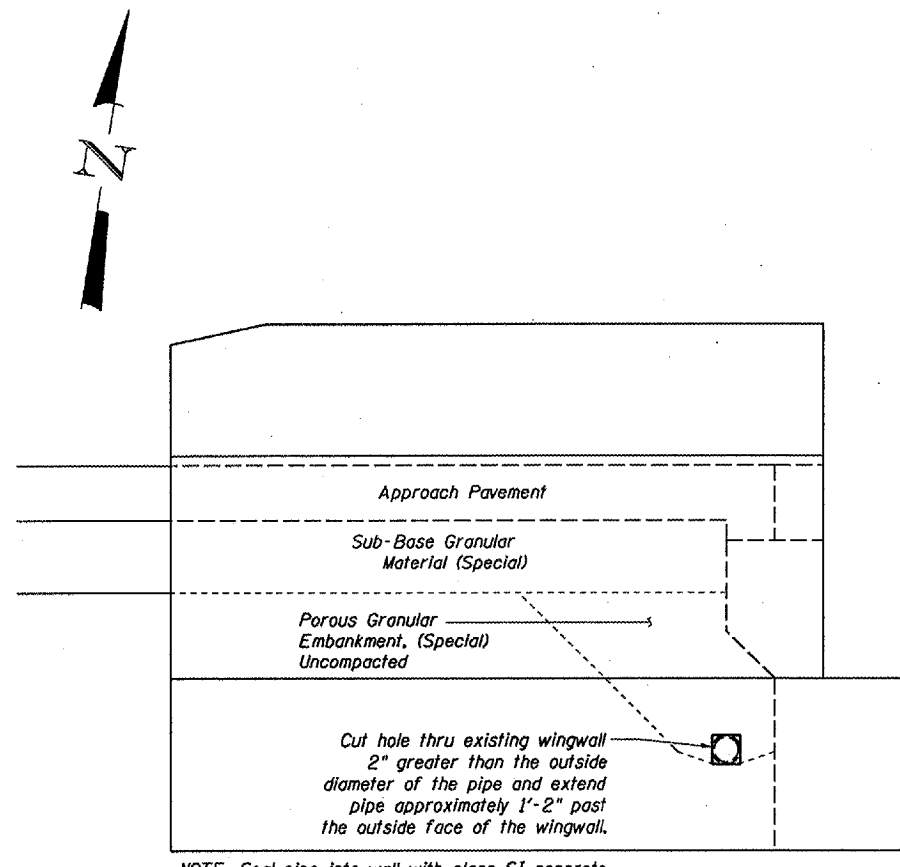
Backfill with uncompacted porous granular embankment meeting the requirements of the Special Provision for "Porous Granular Embankment, Special provided elsewhere in the plans. Limits shall be as shown on plan details.

Geotechnical fabric for ground stabilization. Cost shall be included with the cost of Porous Granular Embankment (Special).



SECTION

** A 8" \varnothing perforated pipe shall be situated at the bottom of an approximate 2'x2' area of porous granular embankment. The 2'x2' area shall be wrapped completely in geotechnical fabric for ground stabilization. Extend pipe parallel with the abutment until intersecting with the wing walls.



NOTE: Seal pipe into wall with class SI concrete
Cost Included with Pipe Underdrain

ELEVATION

REVISIONS	
NAME	DATE

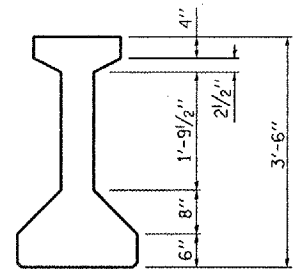
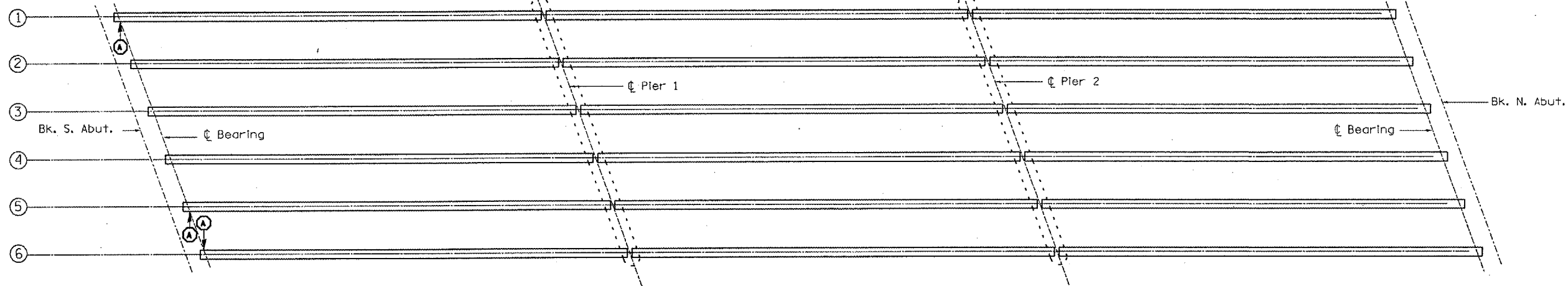
ILLINOIS DEPARTMENT OF TRANSPORTATION
PIPE DRAIN DETAILS
F.A.I. 412 OVER BNSF RAILROAD
SECTION (50-8VB)I
LASALLE COUNTY
STA. 758+10

DATE 06/01/2005

DRAWN BY RLW

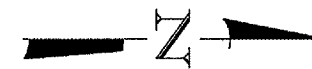
JULY 1, 2005
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	24
FED. ROAD DIST. NO. ILLINOIS				

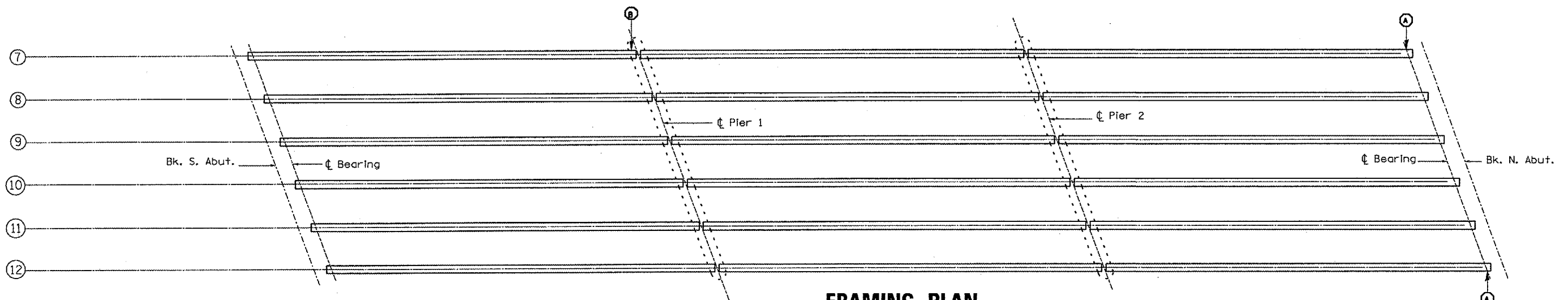


I BEAM

**FRAMING PLAN
S.N. 050-0163 (SB)**



 POLYMER MODIFIED PORTLAND CEMENT MORTAR



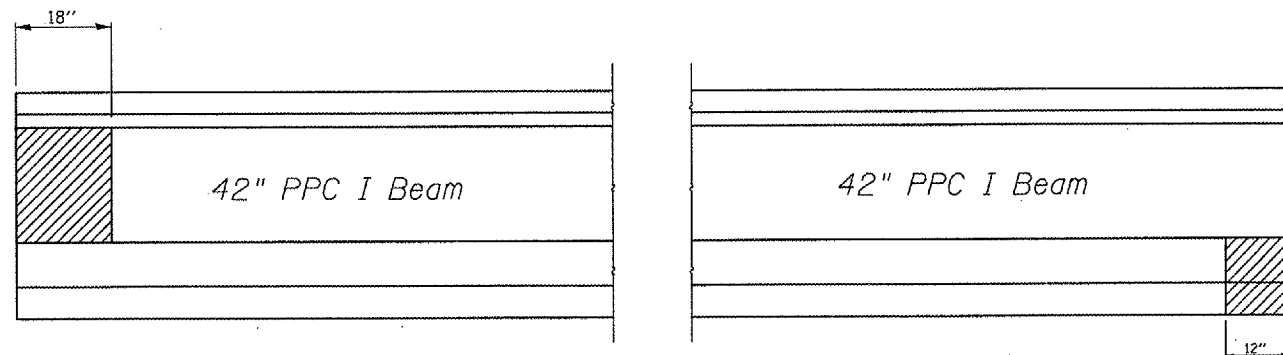
**FRAMING PLAN
S.N. 050-0164 (NB)**

S.N. 050-0163 (SB)

Item	Unit	Total
Polymer Modified Portland Cement Mortar	Sq. Ft.	8

S.N. 050-0164 (NB)

Item	Unit	Total
Polymer Modified Portland Cement Mortar	Sq. Ft.	7



REVISIONS	
NAME	DATE

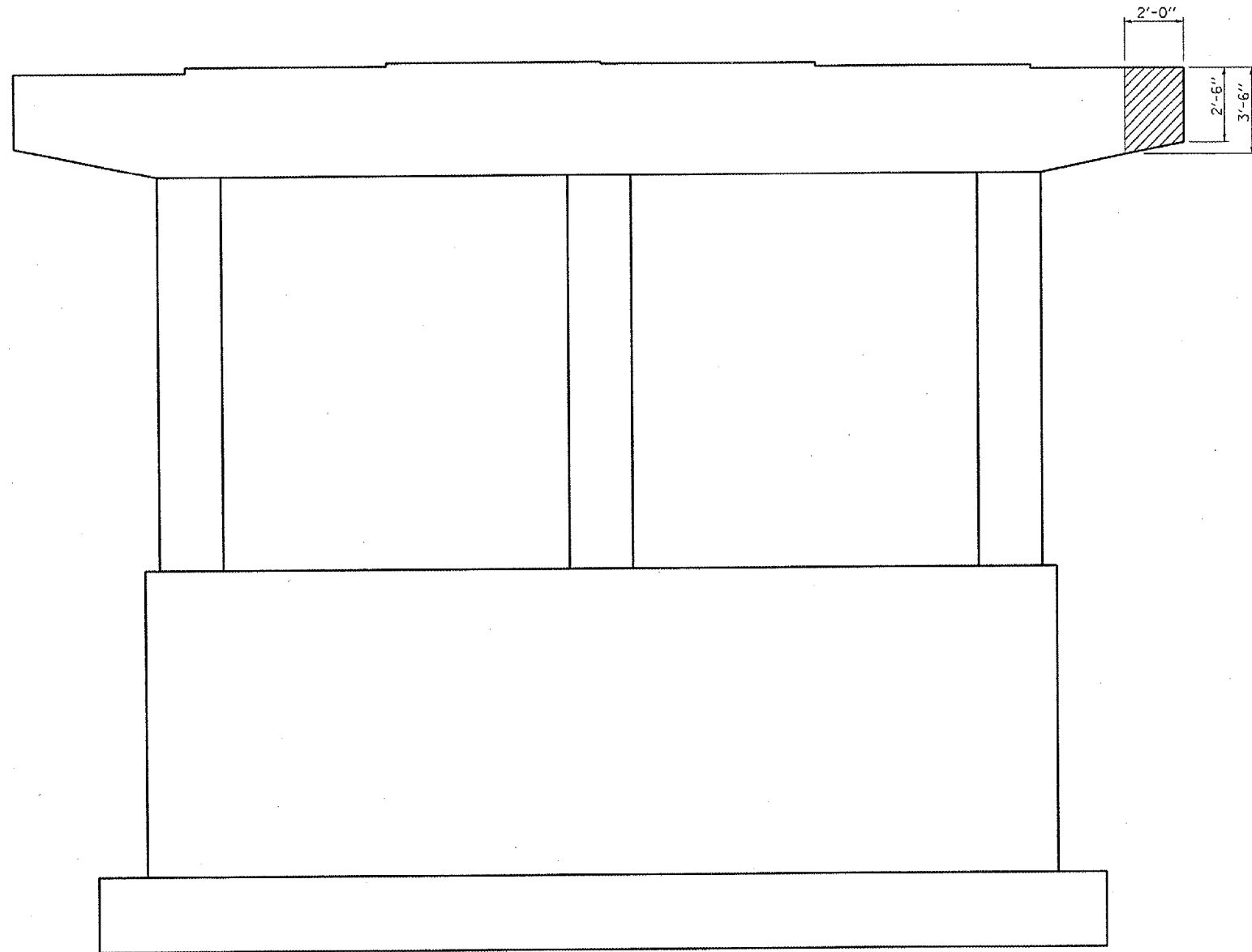
ILLINOIS DEPARTMENT OF TRANSPORTATION
P.P.C. I BEAM REPAIR
F.A.I. 412 OVER BNSF RAILROAD
SECTION (50-8VB)I
LASALLE COUNTY
STA. 758+10

DATE 06/01/2005

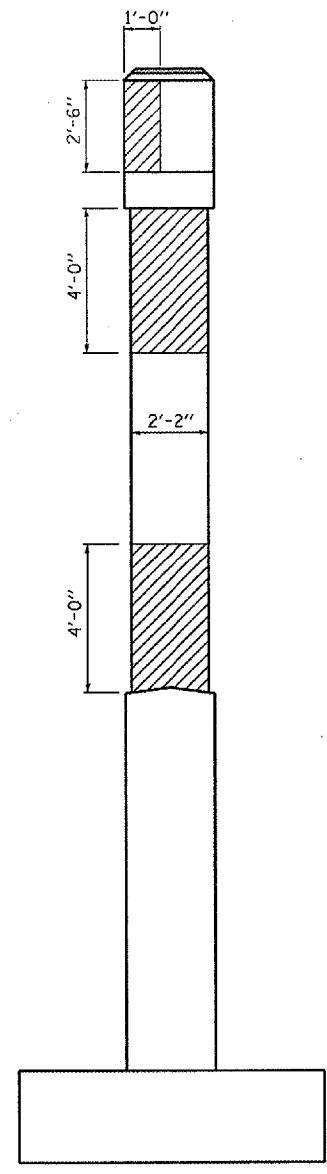
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	150-8VB1	LASALLE	31	25
FED. ROAD DIST. NO. - ILLINOIS				



**SOUTH PIER (PIER 1) – SOUTH FACE
LOOKING NORTH**



EAST END

S.N. 050-0163 (SB)

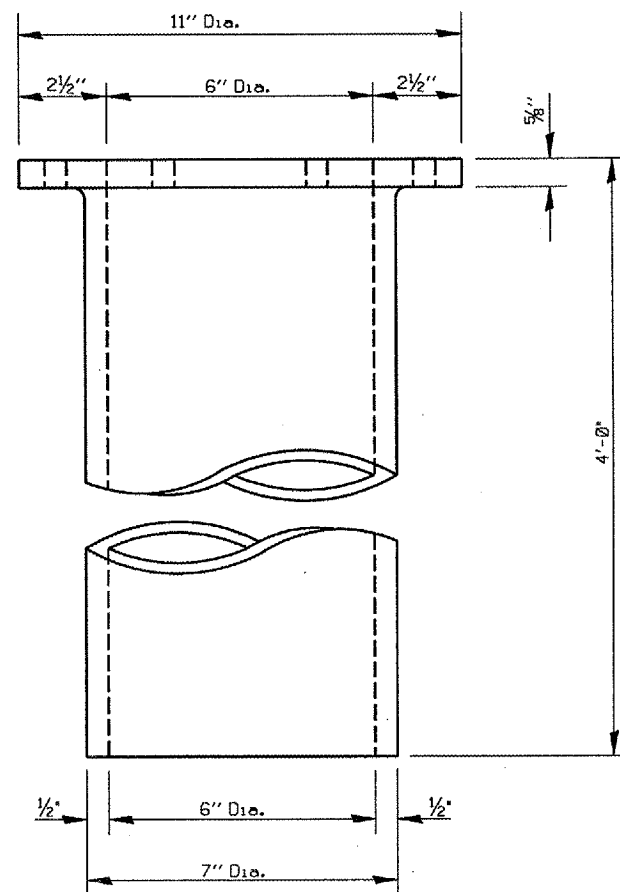
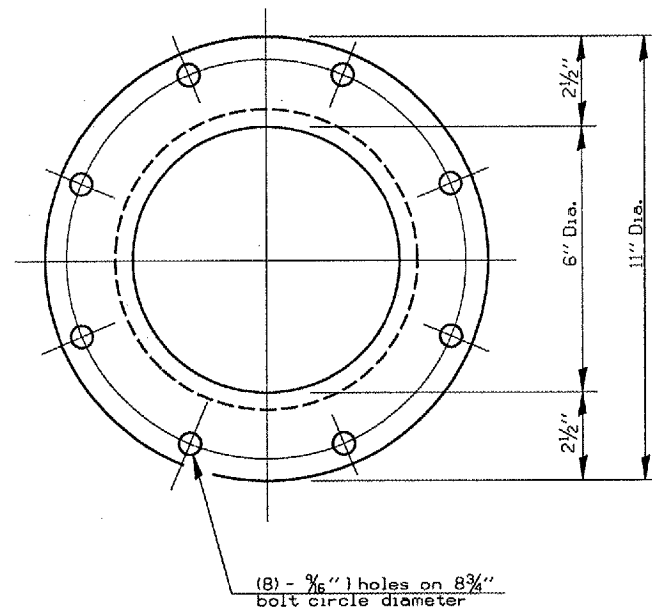
Item	Unit	Total
Formed Concrete Repair ≤ 5"	Sq. Ft.	26

REVISIONS	
NAME	DATE

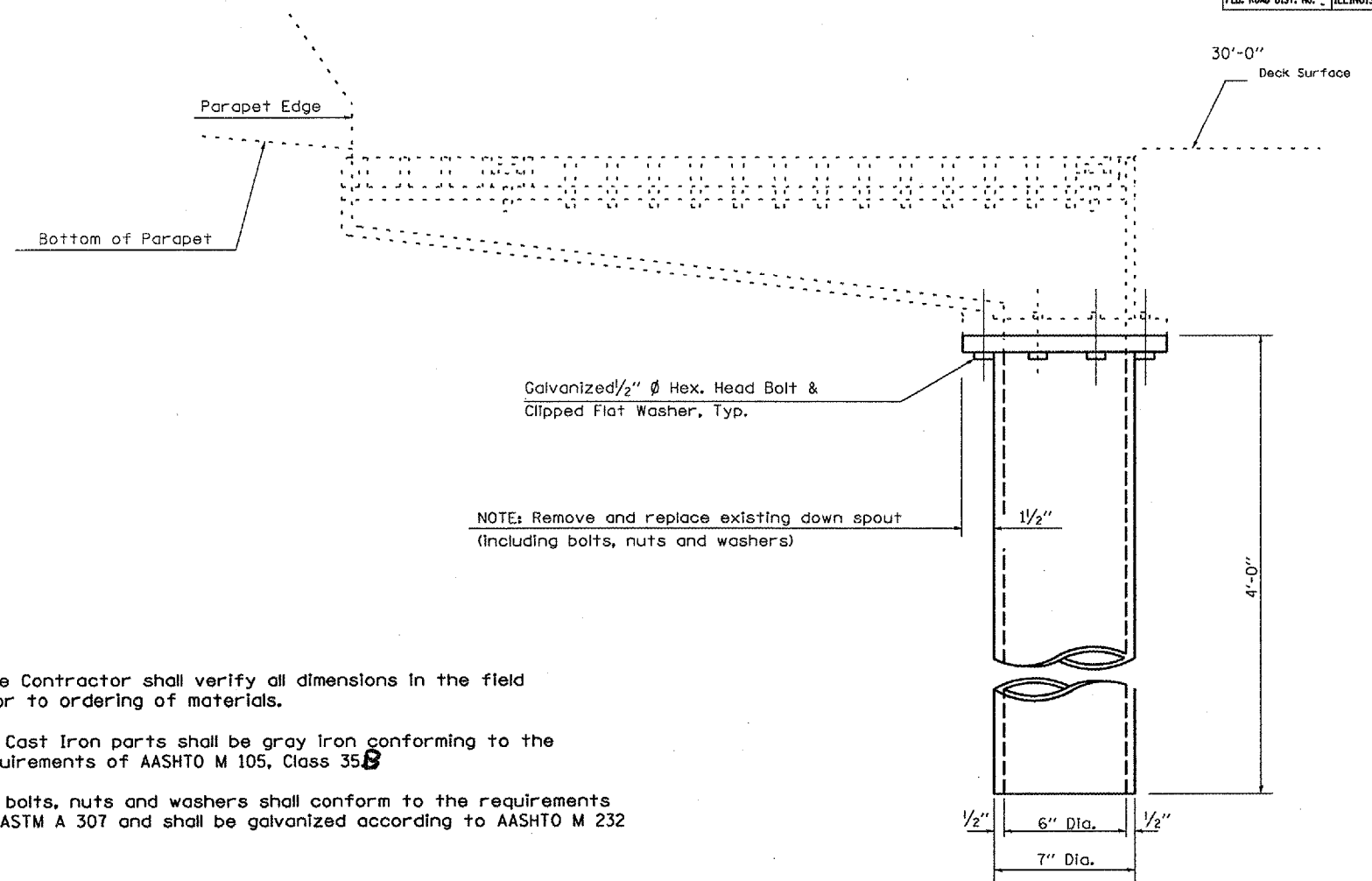
ILLINOIS DEPARTMENT OF TRANSPORTATION
FORMED CONCRETE REPAIR DETAILS
S.N. 050-0163 (SB) – SOUTH PIER
 F.A.I. 412 OVER BNSF RAILROAD
 SECTION (50-8VB)I
 LASALLE COUNTY
 STA. 758 + 10

JULY 1, 2005
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	26
FED. ROAD DIST. NO. .		ILLINOIS		



DOWNSPOUT



DRAINAGE SCUPPER

NOTES: The Contractor shall verify all dimensions in the field prior to ordering of materials.

All Cast Iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B

All bolts, nuts and washers shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232

S.N. 050-0163 (SB)

Item	Unit	Total
Deck Drain Replacement	Each	2

S.N. 050-0164 (NB)

Item	Unit	Total
Deck Drain Replacement	Each	2

REVISIONS	
NAME	DATE

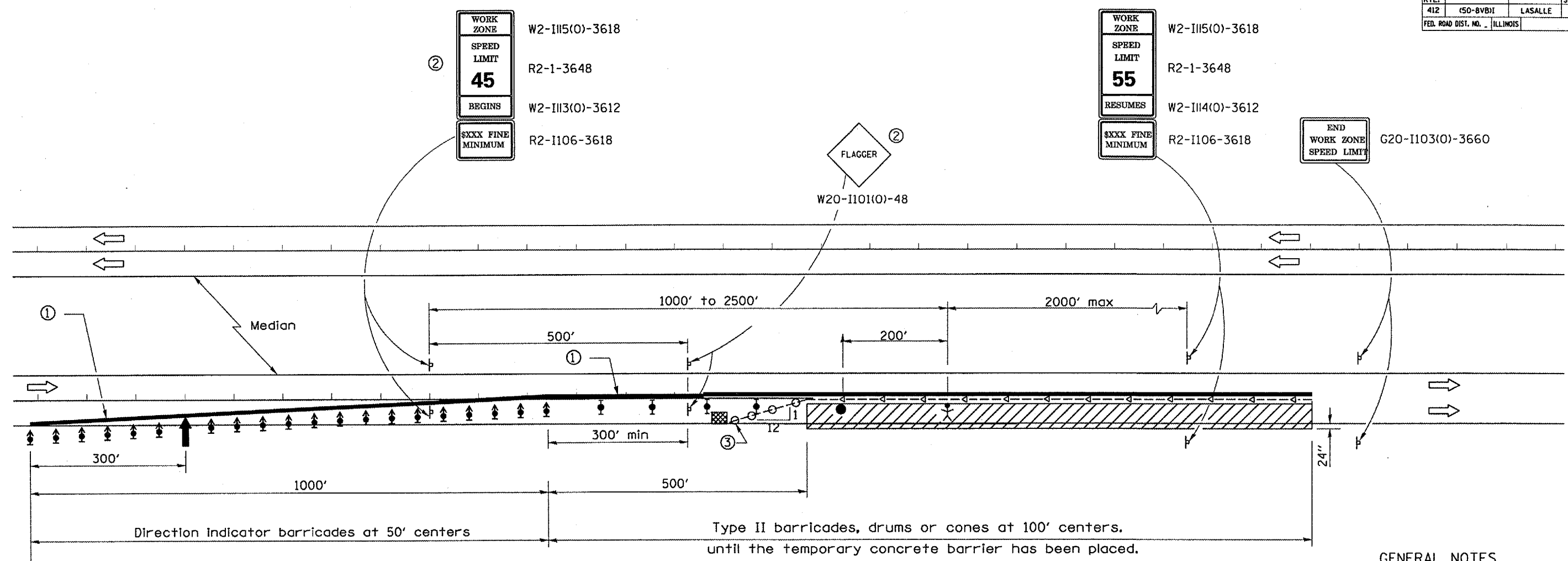
ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK DRAIN DETAILS
 F.A.I. 412 OVER BNSF RAILROAD
 SECTION (50-8VB)I
 LASALLE COUNTY
 STA. 758 + 10

DATE 06/01/2005

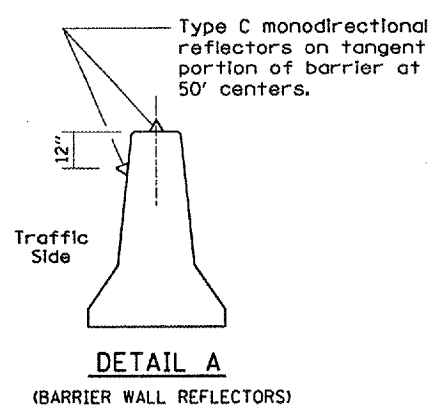
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	27
FED. ROAD DIST. NO. ILLINOIS				



See Standard 701400 for approach Start of lane closure taper



SYMBOLS

- ↑ Arrow board
- ▨ Work area
- ⊙ Worker
- ⊥ Sign
- ⬆ Direction Indicator barricade with steady burn monodirectional light
- ⬇ Type II barricade, drum, or vertical barricade with steady burn monodirectional light
- Flagger with traffic control sign
- Temporary concrete barrier
- ◁ Type C Monodirectional reflector
- Vertical panel with steady burn monodirectional light.
- ▣ Impact attenuator

- ① ReflectORIZED temporary pavement marking tape shall be placed throughout the taper and along-side the temporary concrete barrier. The edge line shall be white for right lane closure and yellow for left lane closures. Temporary raised reflectORIZED pavement markers at 25' centers shall be used to supplement the pavement marking tape.
- ② Type II barricades, drums or cones shall be used alongside the tangent portion of the work zone to provide protection during the installation of the temporary concrete barrier. Work Zone speed limit signs and FLAGGER signs shall be covered after the temporary concrete barrier is in place and uncovered when the temporary concrete barrier is removed and replaced with Type II barricades, drums or cones to maintain the lane closure. The additional drums, Type II barricades or cones, required shall be included in the cost of Traffic Control and Protection, Standard 701402 (Special).
- ③ Vertical panels at 25' centers with steady burning monodirectional lights.

GENERAL NOTES

This Standard is used where at any time any vehicle, equipment, workers or their activities will encroach on the lane adjacent to the shoulder, or on the shoulder within 24" of the edge of pavement whenever temporary concrete barrier is warranted.

This Standard must always be used in combination with Standard 701400.

This Standard also applies when work is being performed in the left lane. Under these conditions, the set up would be a mirror image to what is shown.

A check barricade shall be placed in the middle of the closed lane and at the shoulder at 1000' centers.

The cost of materials, equipment and labor to utilize this traffic control and protection as shown will be paid for at the contract unit bid price for TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL) and no further compensation will be allowed.

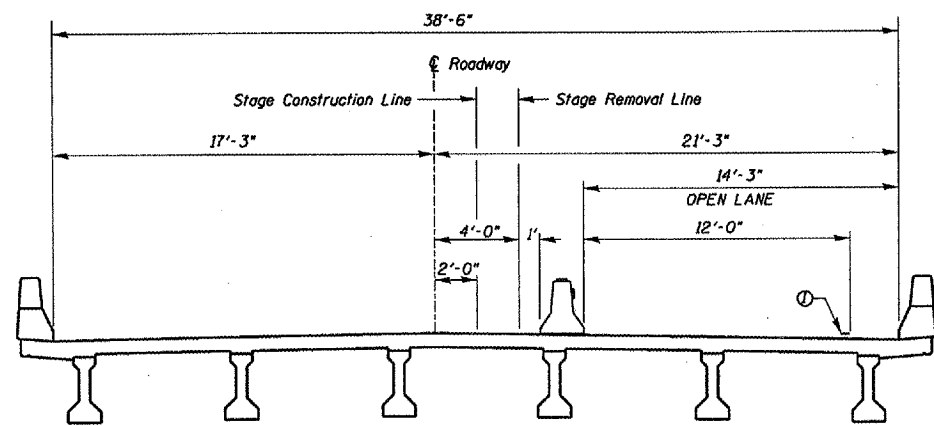
Temporary concrete barrier shall be paid for according to Section 704 of the Standard Specifications.

REVISIONS	
NAME	DATE

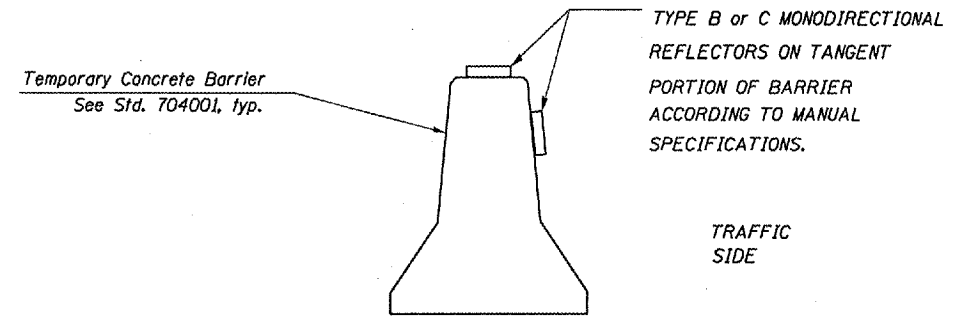
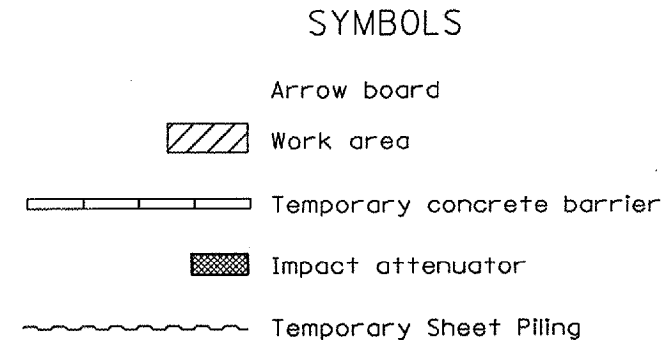
ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL & PROTECTION
STANDARD 701402 (SPECIAL)
 F.A.I. 412 OVER BNSF RAILROAD
 SECTION (50-8VB)I
 LASALLE COUNTY
 STA. 758+10
 DATE 06/01/2005 DRAWN BY RLW

JULY 1, 2005 C:\PROJECTS\DMA\106\CM318\DETAILS.DGN

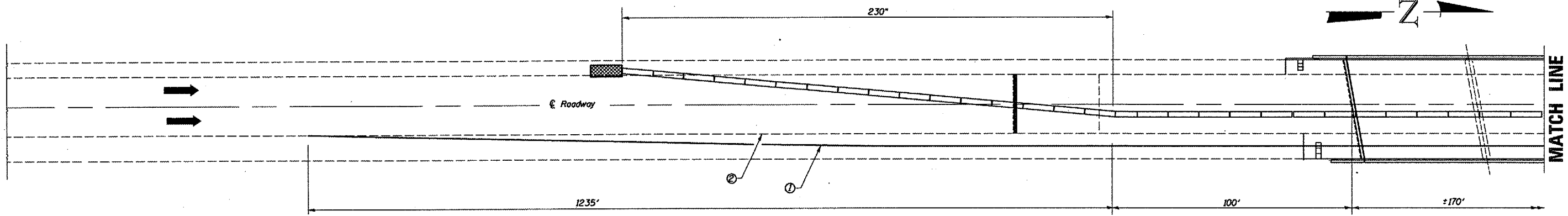
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	28
FED. ROAD DIST. NO. ILLINOIS				



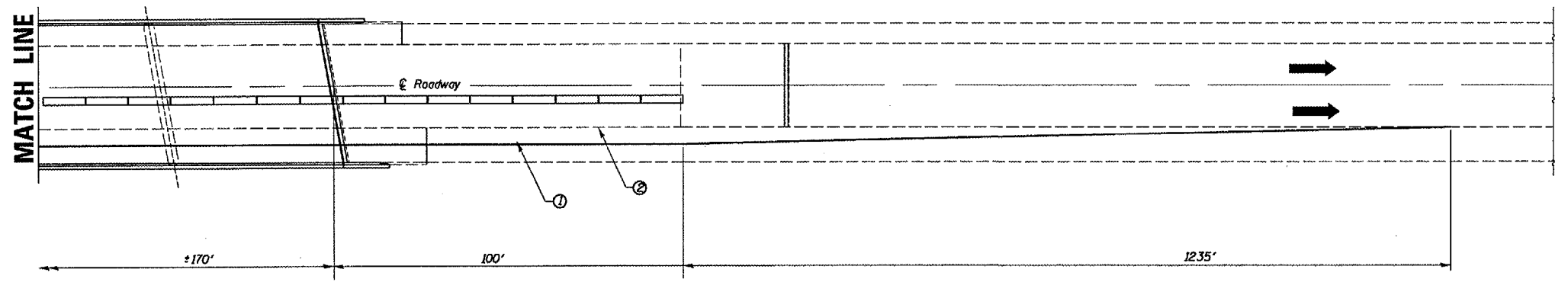
CROSS SECTION
LOOKING IN DIRECTION OF TRAFFIC



TEMPORARY CONCRETE BARRIER



PLAN VIEW
NORTHBOUND LANE SHOWN
SOUTHBOUND LANE SIMILAR



PLAN VIEW
NORTHBOUND LANE SHOWN
SOUTHBOUND LANE SIMILAR

GENERAL NOTES

This Detail is used where at any time any vehicle, equipment, workers or their activities will encroach on the lane adjacent to the shoulder, or on the shoulder within 24" of the edge of pavement.

This Detail must always be used in combination with Standard 701402 (Special)

Monodirection reflectors as shown on the temporary concrete barrier shall not be paid for separately but shall be included with the cost of the temporary concrete barrier

① Reflectorized temporary pavement marking tape shall be placed throughout the work area as shown. The edge line shall be white for right lane closure and yellow for left lane closures.

② Pavement Marking Removal

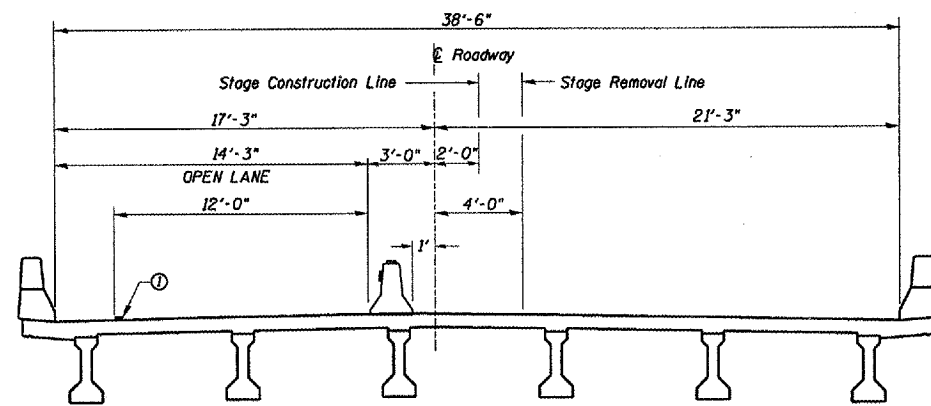
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STAGING & TRAFFIC CONTROL
STAGE I
F.A.I. 412 OVER BNSF RAILROAD
SECTION (50-8VB)I
LASALLE COUNTY
STA. 758 + 10
DATE 06/01/2005 DRAWN BY RLW

WORK THIS DETAIL WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701402 (SPECIAL)

JULY 1, 2005
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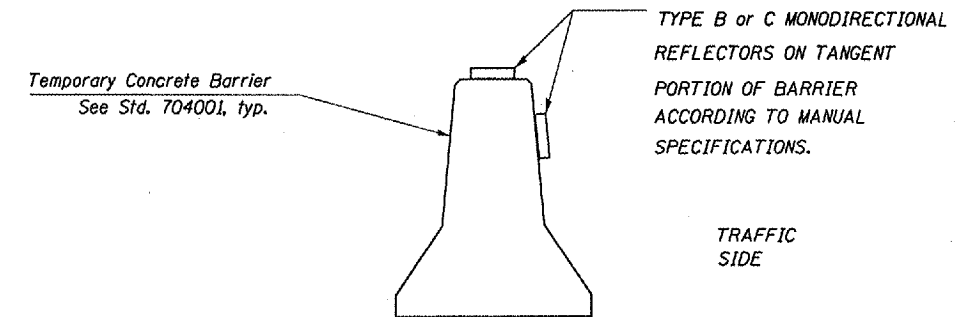
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	29
FED. ROAD DIST. NO. - ILLINOIS				



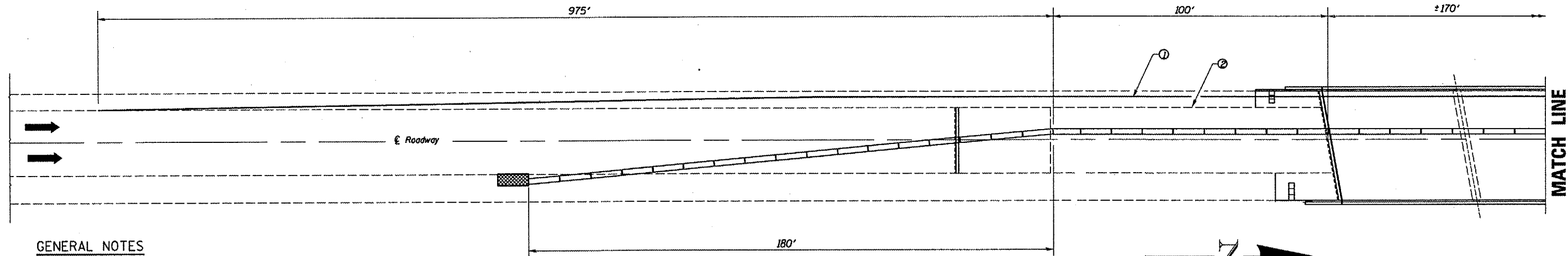
CROSS SECTION
LOOKING IN DIRECTION OF TRAFFIC

SYMBOLS

- Arrow board
- Work area
- Temporary concrete barrier
- Impact attenuator
- Temporary Sheet Piling



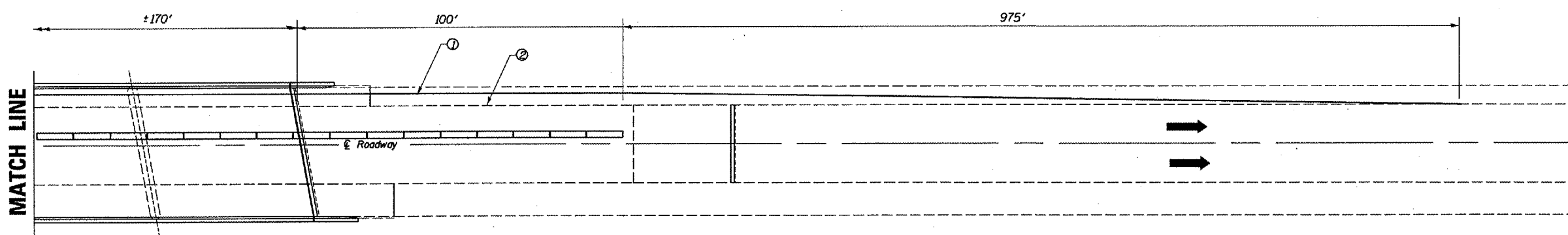
TEMPORARY CONCRETE BARRIER



PLAN VIEW
NORTHBOUND LANE SHOWN
SOUTHBOUND LANE SIMILAR

GENERAL NOTES

- This Detail is used where at any time any vehicle, equipment, workers or their activities will encroach on the lane adjacent to the shoulder, or on the shoulder within 24" of the edge of pavement.
- This Detail must always be used in combination with Standard 701402 (Special)
- Monodirection reflectors as shown on the temporary concrete barrier shall not be paid for separately but shall be included with the cost of the temporary concrete barrier
- ① ReflectORIZED temporary pavement marking tape shall be placed throughout the work area as shown. The edge line shall be white for right lane closure and yellow for left lane closures.
- ② Pavement Marking Removal



PLAN VIEW
NORTHBOUND LANE SHOWN
SOUTHBOUND LANE SIMILAR

WORK THIS DETAIL WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701402 (SPECIAL)

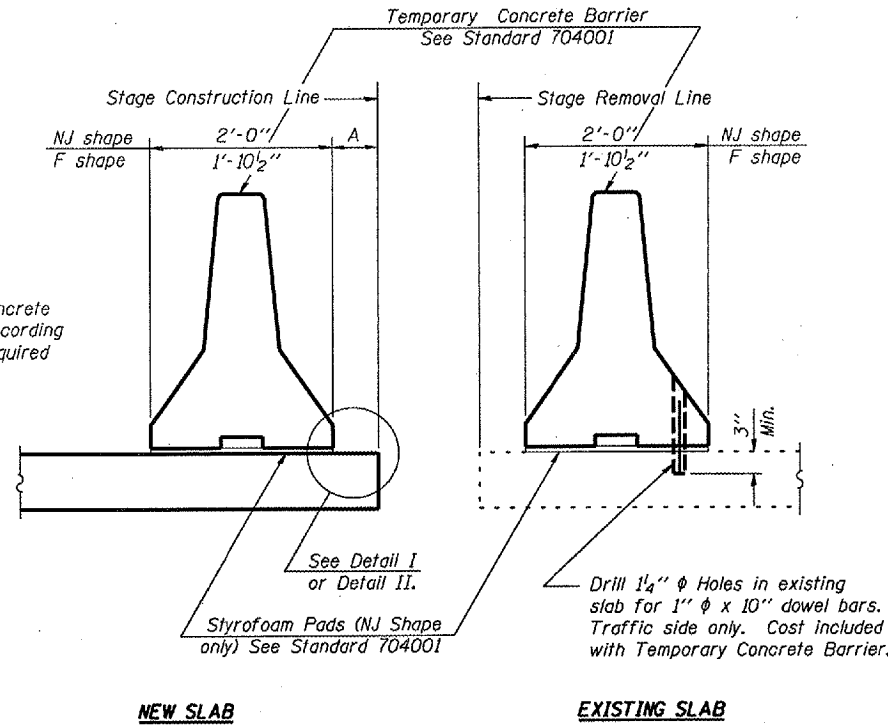
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STAGING & TRAFFIC CONTROL
STAGE II
F.A.I. 412 OVER BNSF RAILROAD
SECTION (50-8VB)I
LASALLE COUNTY
STA. 758+10
DATE 06/01/2005
DRAWN BY RLW

JULY 1, 2005
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	30
FED. ROAD DIST. NO. - ILLINOIS				

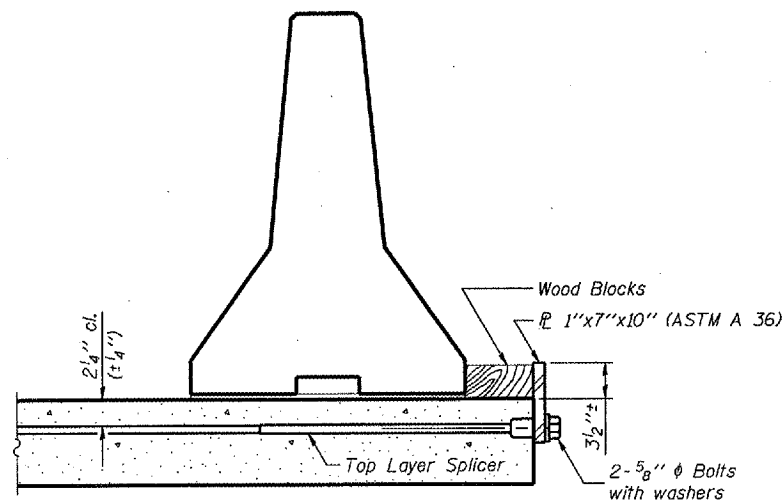
When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB

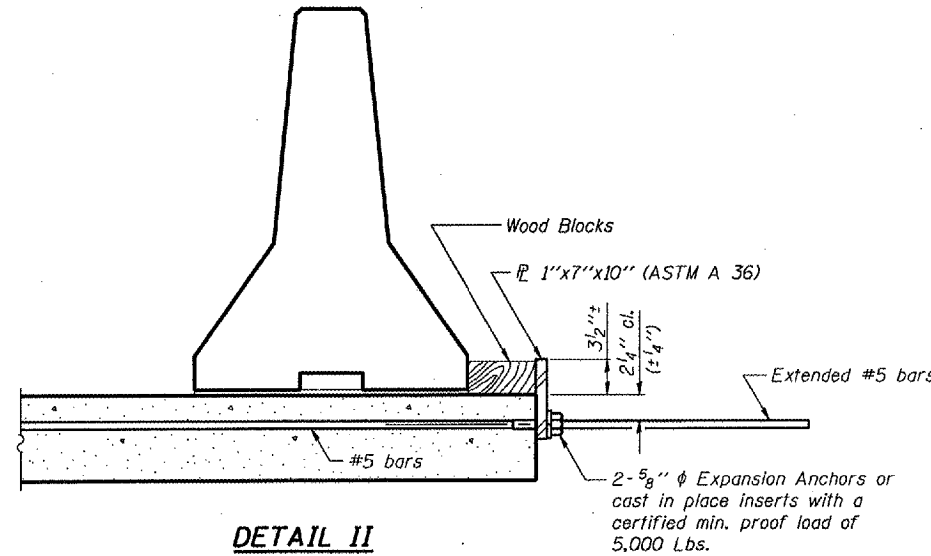
NOTES

- Detail I - With Bar Splicer or Couplers:
Connect one (1) 1"x7"x10" steel P to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.
 - Detail II - With Extended Reinforcement Bars:
Connect one (1) 1"x7"x10" steel P to the concrete slab with 2-5/8" φ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate C of each barrier panel.
- Cost of anchorage is included with Temporary Concrete Barrier.



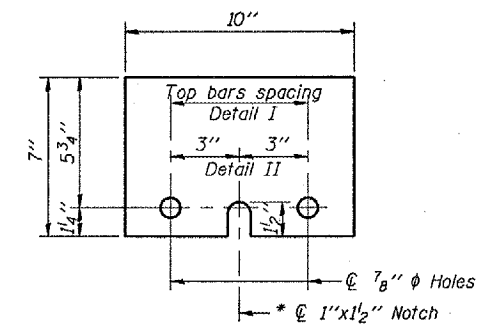
DETAIL I

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.



DETAIL II

The 1"x7"x10" 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.



P 1"x7"x10"

* Required only with Detail II

JULY 1, 2005
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R-27 9-01-03

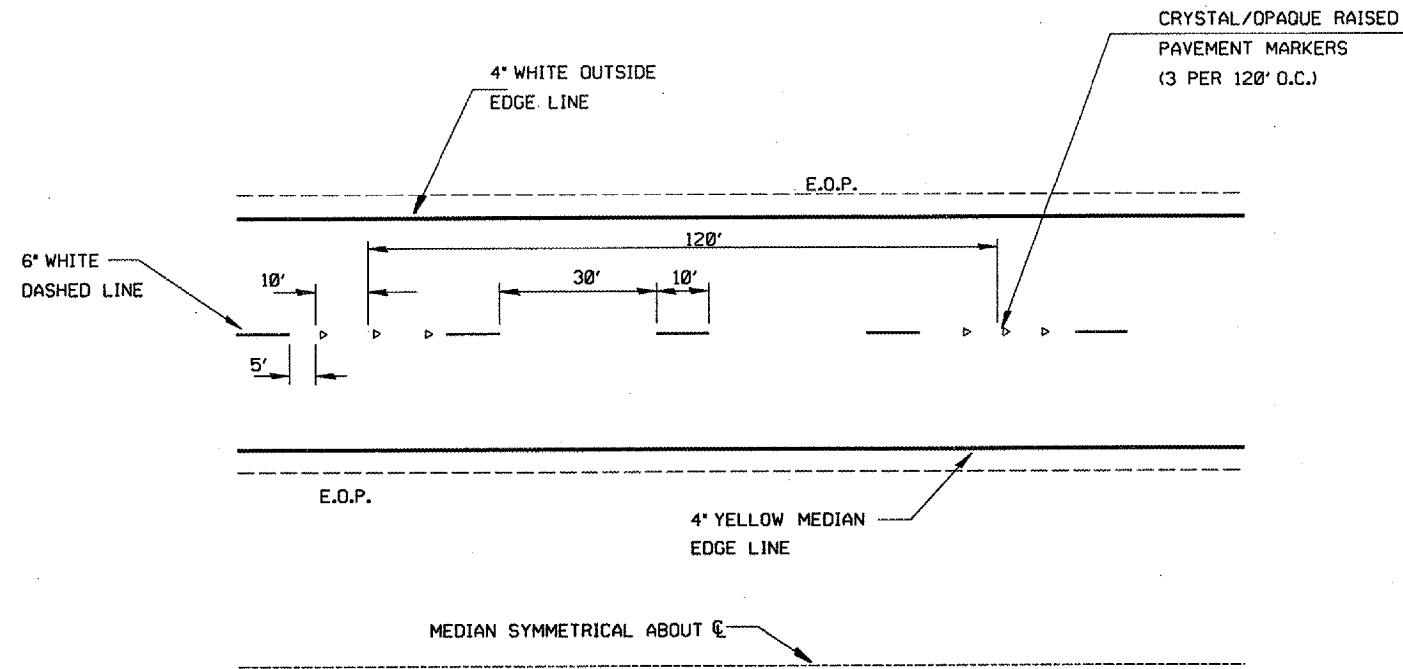
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TEMPORARY CONCRETE BARRIER
 FOR STAGE CONSTRUCTION**
 F.A.I. 412 OVER BNSF RAILROAD
 SECTION (50-8VB)I
 LASALLE COUNTY
 STA. 758+10

DATE 06/01/2005

DRAWN BY RLW

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
412	(50-8VB)I	LASALLE	31	31
FED. ROAD DIST. NO. ,		ILLINOIS		



TYPICAL PAVEMENT MARKINGS

JULY 1, 2005
C:\PROJECTS\CMA\ING\CM318\DETAILS.DGN

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TYPICAL PAVEMENT MARKING
 F.A.I. 412 OVER BNSF RAILROAD
 SECTION (50-8VB)I
 LASALLE COUNTY
 STA. 758 + 10

DATE 06/01/2005 DRAWN BY RLW