FOR INDEX OF SHEETS
SEE SHEET 7

RTE	SE
FA-412	50-5HB
F.H.W.A. REG. 4	ILLINOIS

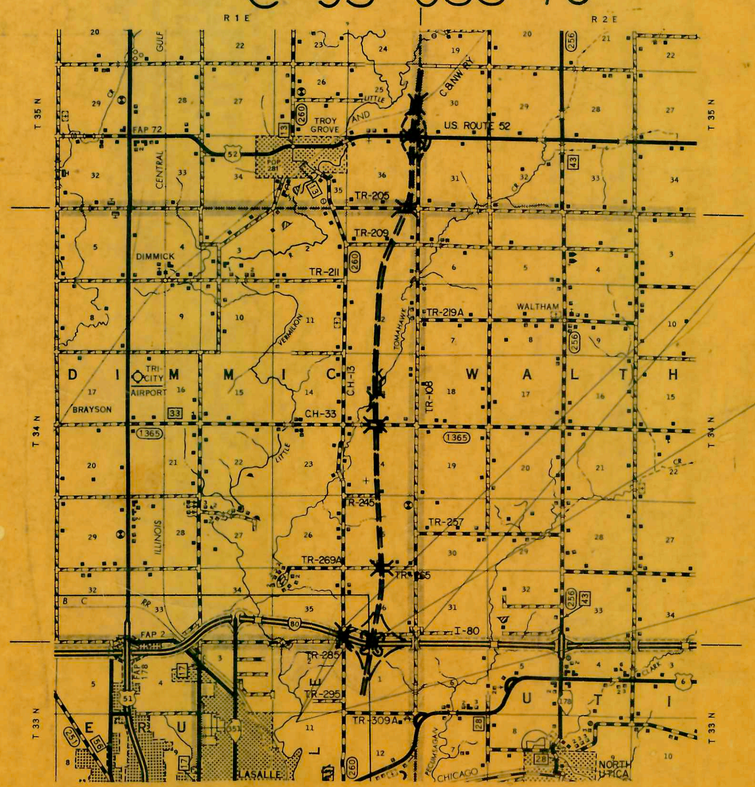
STATE JOB NO. P 93

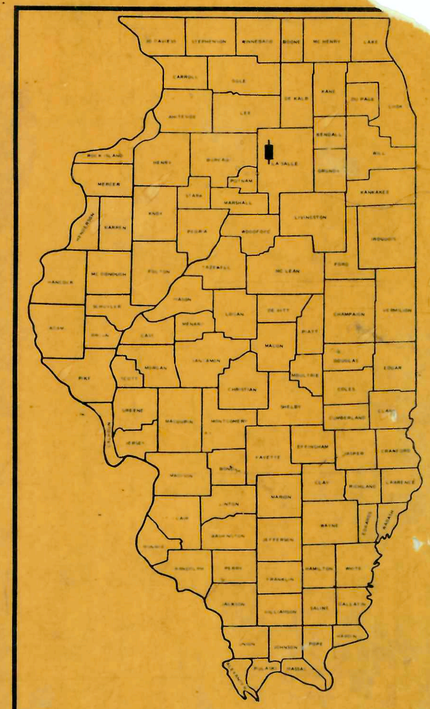
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

SCALES
PLAN 0 50 100 150 200 FEET
PROFILE HOR. 0 50 100 150 200 FEET
PROFILE VERT. 0 5 10 15 20 FEET (HOR)
CROSS-SECTIONS 0 5 10 FEET (VERT)

F.A. ROUTE 412 SEC. 50-5HB & 50-2HB-3(R), 2RS
LASALLE COUNTY
PROJECT EBRF-412-4(18)
C-93-033-76





LOCATION OF SECTION INDICATED THUS —

LIMITS OF I-80 RESURFACING
STA. 729+20.32 TO STA. 790+70

PROJECT EBRF-412
SECTION 50-5HB
STA. 1027+21.17 TO STA. 1029+75.17 (S.B. LANES)
STA. 1027+29.91 TO STA. 1029+83.91 (N.B. LANES)
STRUCTURE LENGTH = 254.00'
STA. 1028+55.04

SECTION 50-2 HB-3 (R)
STA. 14+50 TO STA. 21+50

STRUCTURE 50-2 HB-3(R)
STA. 18+08.38
OMISSION FROM PAVING - 265.44'
STA. 16+83.41 TO STA. 19+39.85

SECTION 50-5 HB AND 50-2 HB-3(R) INCLUDES:

STRUCTURE 50-5HB:
TWIN TWO SPAN SEPARATION STRUCTURES CARRYING F.A.-412 OVER I-80 AT STA. 1028+55.04 (F.A.-412) CONSISTING OF 54" PRECAST PRESTRESSED CONCRETE I-BEAMS AND REINFORCED CONCRETE DECKS ON REINFORCED CONCRETE PIERS, VAULTED ABUTMENTS AND PILE APPROACH BENTS, SPANS AT 105'-6" AND 100'-6" EACH.

STRUCTURE 50-2 HB-3(R):
A TWO SPAN SEPARATION STRUCTURE CARRYING C.H.-13 OVER I-80 AT STA. 737+35.23 (I-80) CONSISTING OF 42" WELDED PLATE GIRDERS AND REINFORCED CONCRETE DECK ON CONCRETE PIER, VAULTED ABUTMENTS, AND PILE APPROACH BENTS, TWO SPANS AT 99'-6" AND 106'-0". ALSO INCLUDED ARE THE GRADING, PAVING, AND PARTIAL REMOVAL OF THE I-80 DETOUR AND CROSSOVERS, THE CONSTRUCTION OF THE RAMP AND LOOP TERMINALS ADJACENT TO I-80 AND THE RESURFACING OF I-80. ALSO THE REMOVAL OF THE EXISTING C.H.-13 STRUCTURE, THE RESURFACING OR RECONSTRUCTION OF C.H.-13 AND A PORTION OF THE INFIELD GRADING AS SHOWN ON THE PLANS.

F.A.I.-39
RACK #5
INDEX #14

DESIGN		DESIGNATION	
F.A.-412	= 11,200 (95)	TRUNK	(CRPCC-20)
C.H.-13	= 680 (95)	COLLECTOR	(B-20)

LAYOUT
SCALE: 0 0.5 1 1.5 2 MILES

TOTAL LENGTH OF SECTION 50-5HB, 50-2HB-3(R), 2RS =	7103.68	FEET	= 1.345 MILES
NET LENGTH OF SECTION 50-5HB, 50-2HB-3(R), 2RS =	7103.68	FEET	= 1.345 MILES
TOTAL LENGTH OF PROJECT EBRF-412-4(18) =	254.00	FEET	= 0.048 MILES
NET LENGTH OF PROJECT EBRF-412-4(18) =	254.00	FEET	= 0.048 MILES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
SUBMITTED 2/26 19 76 — DISTRICT ENGINEER
EXAMINED March 29 19 76 — ENGINEER OF PLANS AND CONTRACTS
PASSED March 29 19 76 — ENGINEER OF DESIGN
APPROVED March 29 19 76 — DIRECTOR OF HIGHWAYS

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
DIVISION ADMINISTRATOR DATE

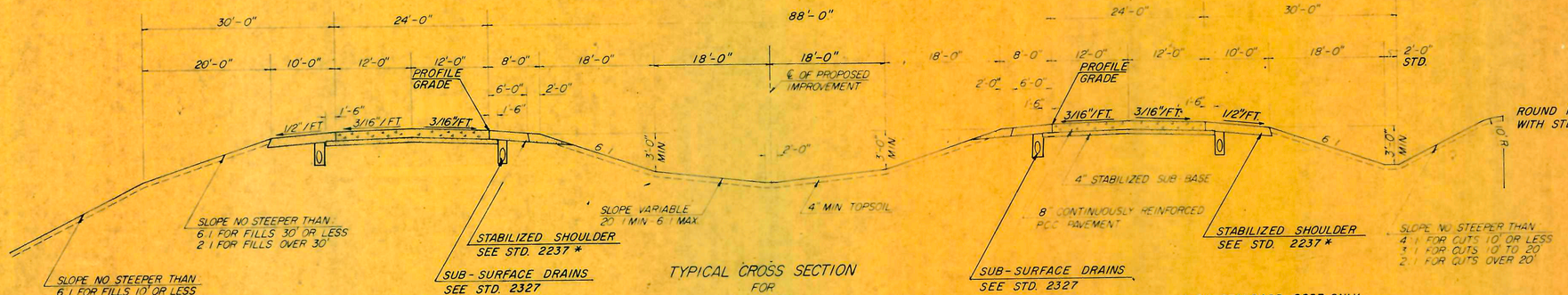
REGISTERED STRUCTURAL ENGINEER — JOHN W. CLARK 81-3859 — STATE OF ILLINOIS

WILLIAM M. CAZLER 23068 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

CONTRACT NO. 82178

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5HB & 50-2HB-3(R)	LaSALLE	156	2
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



TYPICAL CROSS SECTION
FOR
F.A.-412

* ON STANDARD 2237, ONLY THE DETAILS FOR B.A.M. STABILIZATION SHALL APPLY

F.A.-412
STRUCTURAL DESIGN DATA OF PAVEMENT

STRUCTURAL DESIGN TRAFFIC
YEAR =
P.C. =
S.U. =
M.U. =

MINIMUM SOIL SUPPORT
I.B.R. =

PERCENT OF S.D.T. IN DESIGN LANE
U_P =
U_S =
U_M =

TRAFFIC FACTOR
RIGID =

PORTLAND CEMENT CONCRETE PAVEMENT
FOR DETAIL OF PAVEMENT SEE STANDARD 2224

GENERAL NOTES
THE PAVEMENT CROWN SHALL BE REMOVED FOR ALL SUPERELEVATED PAVEMENTS WITHIN THE LIMITS OF THE SUPERELEVATION TRANSITION SHOWN ON THE PLANS.

SOUTHBOUND LANES				
STA. 997+45.00	TO	STA.	1026+19.98	
STA. 1030+73.98	TO	STA.	1214+55.71	
STA. 1217+90.42	TO	STA.	1228+65.17	

LIMITS OF BRIDGE APPROACH PAVEMENTS

~~SEE SHEET NO.~~		~~FOR DETAILS~~	
STA. 1026+19.98	TO	STA.	1030+73.98 (STR. 50-5HB)
STA. 1214+55.71	TO	STA.	1217+90.42 (STR. 50-5B)

NORTHBOUND LANES			
STA. 997+45.00	TO	STA.	1026+31.10
STA. 1030+85.10	TO	STA.	1214+96.70
STA. 1218+30.81	TO	STA.	1228+65.17

LIMITS OF BRIDGE APPROACH PAVEMENTS

~~SEE SHEET NO.~~		~~FOR DETAILS~~	
STA. 1026+31.10	TO	STA.	1030+85.10
STA. 1214+96.70	TO	STA.	1218+30.81

NOTE: THE SHOULDER DESIGN SHOWN ON THE TYPICAL SECTIONS REFLECT ALTERNATE A, FOR ALTERNATE B, SEE STANDARD 2237.

~~THE NOMINAL THICKNESSES FOR SUB-BASE GRANULAR MATERIAL, BASE AND SURFACE COURSES ARE SHOWN ON THE TYPICAL SECTIONS, STANDARDS, SCHEDULES OR SPECIAL DETAILS. THE CONSTRUCTED THICKNESS OF THE ABOVE ITEMS SHALL NOT BE LESS THAN 90 PERCENT OF THE NOMINAL THICKNESS AT ANY LOCATION.~~

State of Illinois
Department of Transportation
District Three

Reviewed By: _____ District Engineer of Design

Date: _____

Examined By: _____ District Engineer of Construction

_____ District Engineer of Maintenance

_____ District Engineer of Materials

_____ District Engineer of Traffic

FOR INFORMATION ONLY

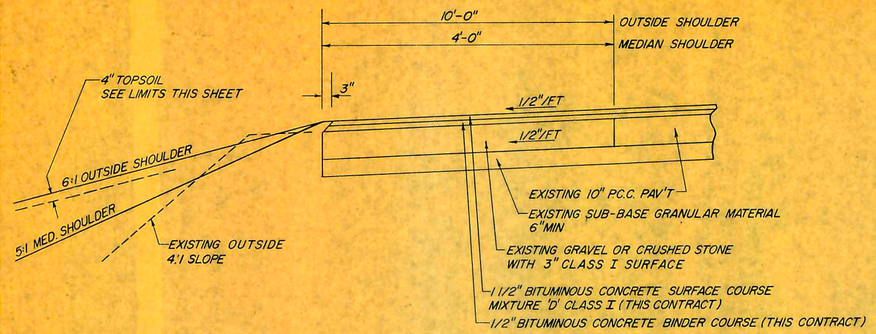
0 10 20 30 FEET HORIZONTAL
0 5 10 15 FEET VERTICAL

TYPICAL SECTION - F.A. - 412

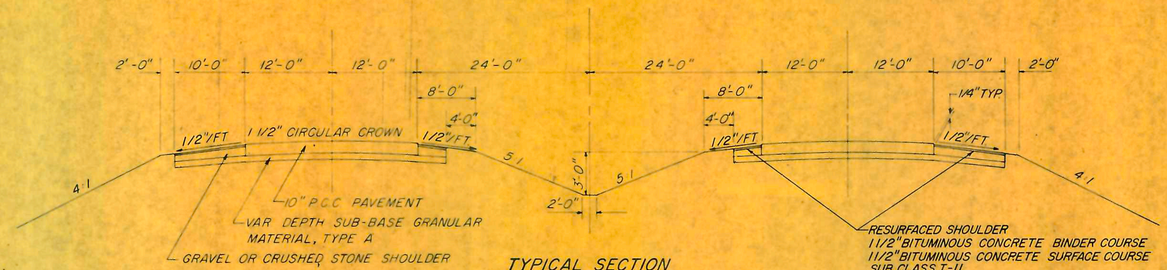
REVISIONS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAWN BY DATE: HH 10-75
		CHECKED BY DATE: MP 10-75
	F.A.-412 SECTION 50-5HB & 50-2HB-3(R)	PROJECT NO.
	LaSALLE COUNTY	
	HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS DECATUR, ILLINOIS	SHEET NO. 2

MASTER

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.-412	50-5HB & 50-2HB-3(R)	LaSALLE	156	3
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

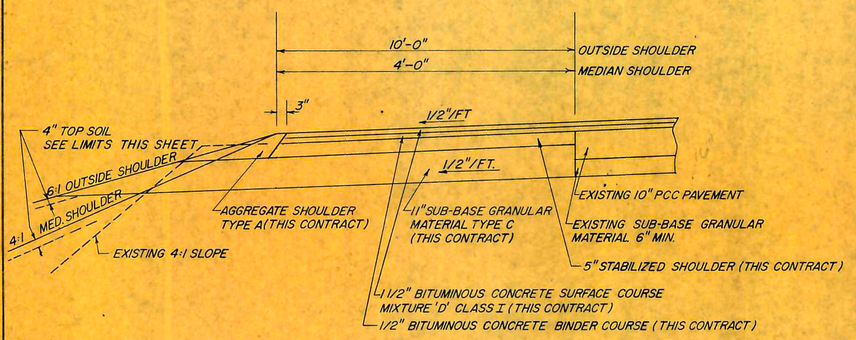


TYPICAL SECTION
FOR
SHOULDER RESURFACING

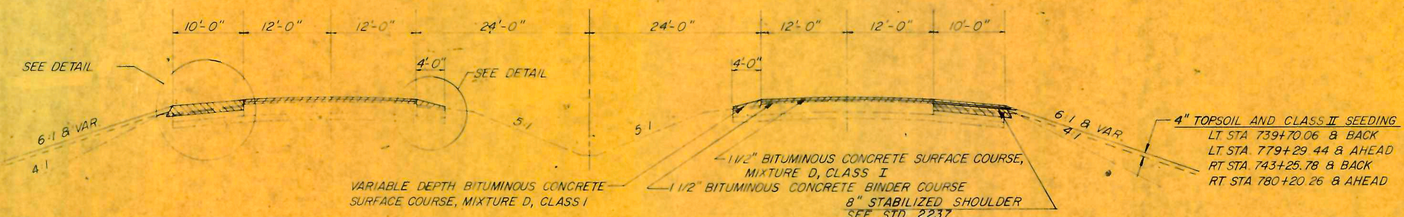


TYPICAL SECTION
FOR
EXISTING F.A.I.-80

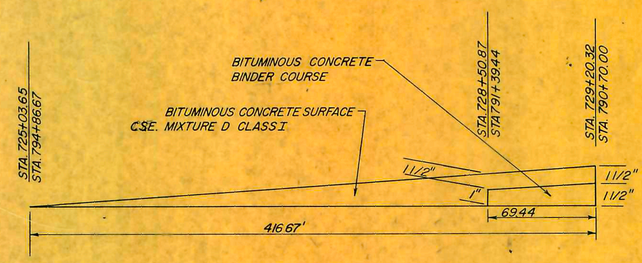
STANDARD 2237
ONLY THE DETAILS FOR B.A.M.
STABILIZATION SHALL APPLY.



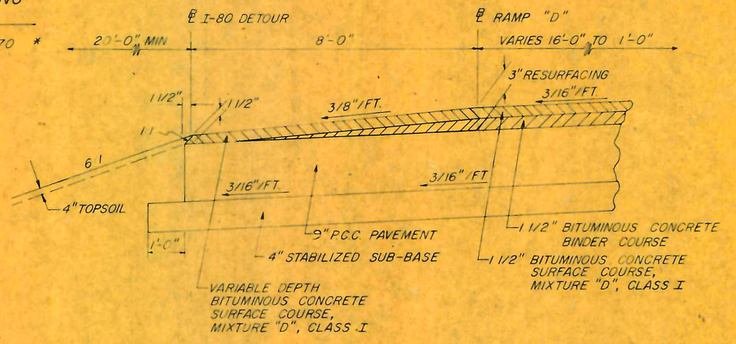
TYPICAL SECTION
FOR
SHOULDER REPLACEMENT



TYPICAL SECTION
FOR
PROPOSED RESURFACING
OF F.A.I.-80
STA. 729+20 TO STA. 790+70 *

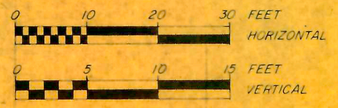


FEATHERING DETAIL - I-80 RESURFACING

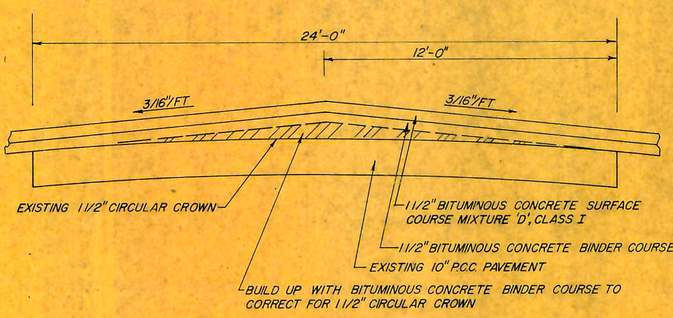


RAMP "D" STA. 256+60.08 TO STA. 250+00.00 =
I-80 STA. 780+29.72 TO STA. 786+88.45

I-80 DETOUR STA. 55+84.43 TO STA. 62+44.51
NOT TO SCALE



I-80 RESURFACING CROWN CORRECTION



* THE THICKNESS OF THE BITUMINOUS AT THE ENDS OF THE RESURFACING SHALL BE DIMINISHED UNIFORMLY TO A FEATHERED EDGE AT A RATE OF 0.03 FT. PER 50 FT. SEE ARTICLE 406.19 OF THE STANDARD SPECIFICATIONS.
STA. 725+03.65 TO STA. 729+20.32 AND
STA. 790+70 TO STA. 794+86.67

TYPICAL CROSS SECTION - I-80

REVISIONS		
NO.	DATE	INITIALS
1		
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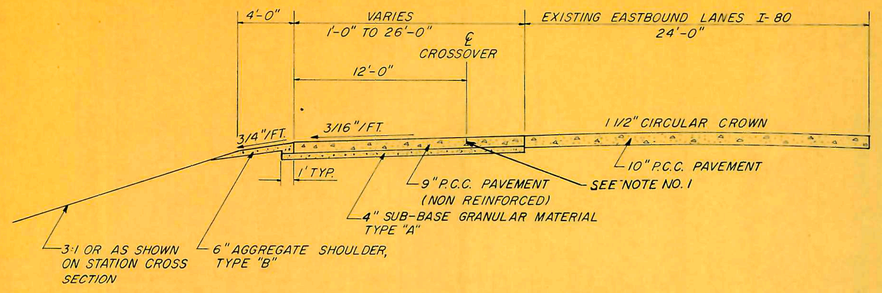
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.-412 SECTION 50-5 HB & 50-2 HB-3(R)
LaSALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY	DATE
H H	10-75
CHECKED BY	DATE
M P	11-75
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	3

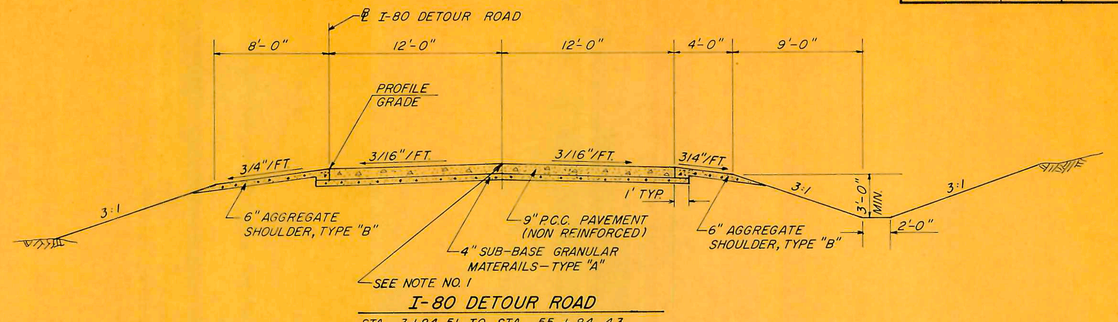
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5HB 50-2HB-3(R)	LASALLE	156	4
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



I-80 MEDIAN CROSSOVERS

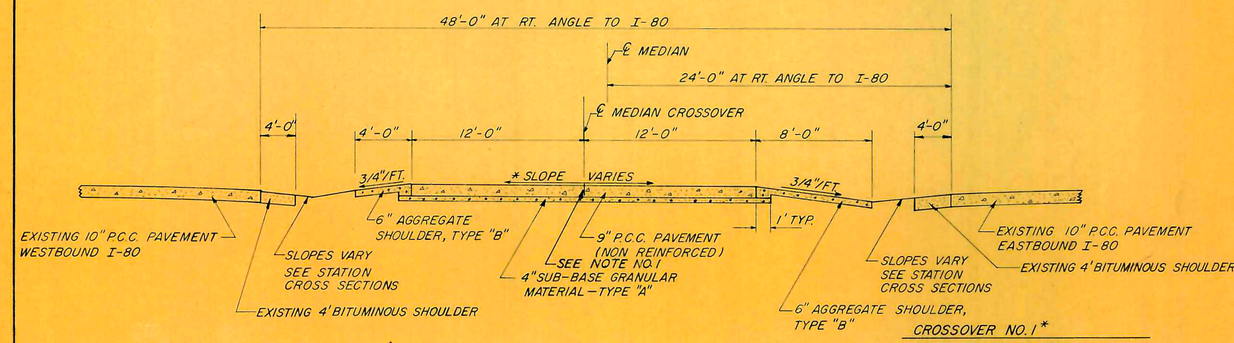
STA. 2+58.06 TO STA. 8+87.94
STA. 50+87.41 TO STA. 56+97.27

NOTE NO 1.: SAWED LONG JOINT (OMIT TIE BARS)



I-80 DETOUR ROAD

STA. 3+84.51 TO STA. 55+84.43



I-80 MEDIAN CROSSOVERS

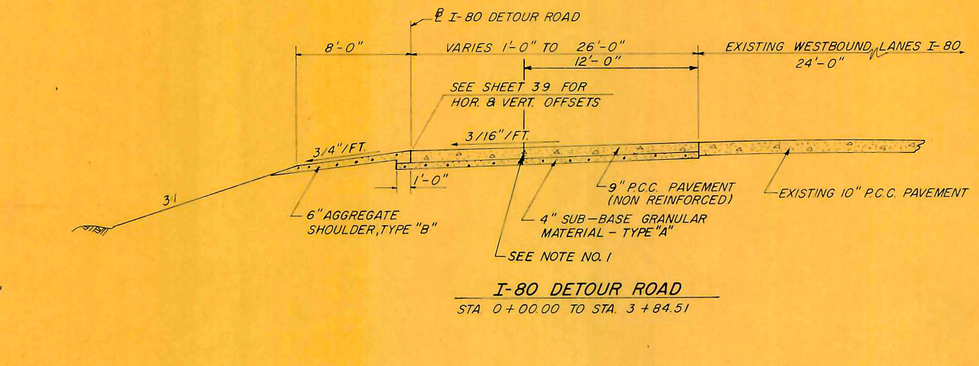
STA. 8+87.94 TO STA. 11+12.06
STA. 48+63.52 TO STA. 50+87.41

CROSSOVER NO. 1*

STA. 8+87.94 TO STA. 11+12.06
SLOPE VARIES 3/16"/FT. DOWN LT. TO 3/16"/FT. DOWN RT.

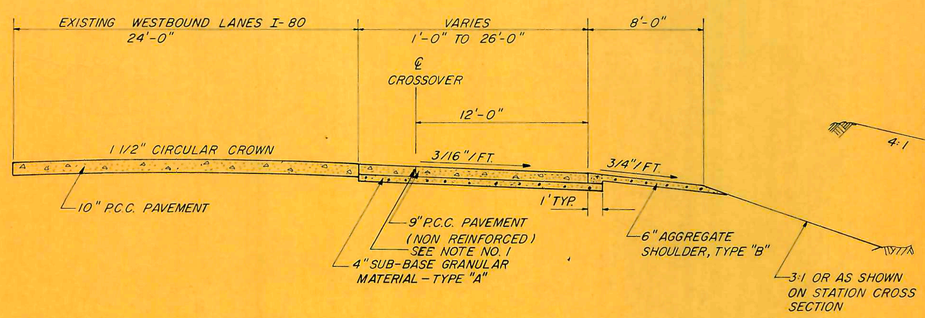
CROSSOVER NO. 2*

STA. 48+63.52 TO STA. 50+87.41
SLOPE VARIES 3/16"/FT. DOWN RT. TO 3/16"/FT. DOWN LT.



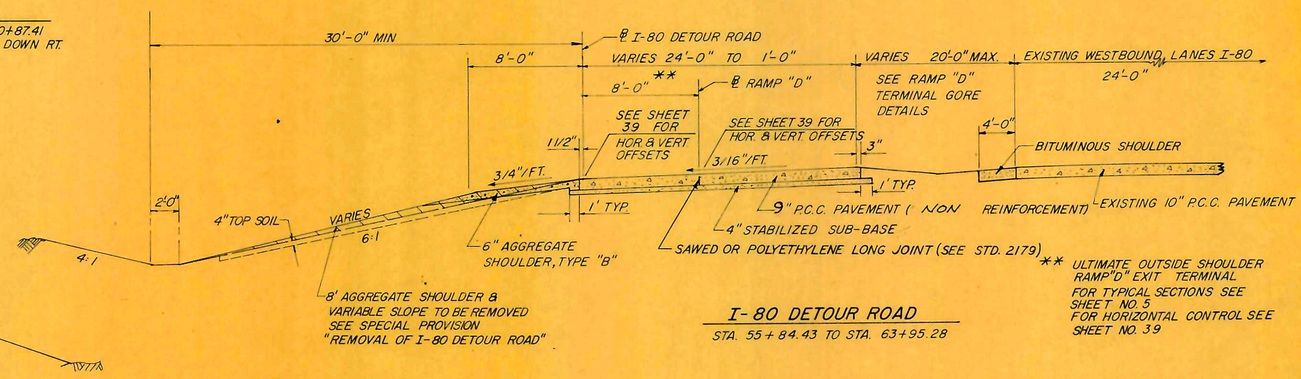
I-80 DETOUR ROAD

STA 0+00.00 TO STA. 3+84.51



I-80 MEDIAN CROSSOVERS

STA. 11+12.06 TO STA. 17+41.94
STA. 42+30.14 TO STA. 48+63.52

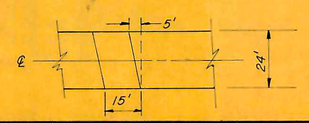


I-80 DETOUR ROAD

STA. 55+84.43 TO STA. 63+95.28

** ULTIMATE OUTSIDE SHOULDER RAMP "D" EXIT TERMINAL FOR TYPICAL SECTIONS SEE SHEET NO. 5 FOR HORIZONTAL CONTROL SEE SHEET NO. 39

NOTE:
THE I-80 DETOUR ROAD AND THE MEDIAN CROSSOVER SHALL CONSIST OF 9" P.C.C. PAVEMENT (NON-REINFORCED) CONSTRUCTED IN THE FOLLOWING MANNER:
(1) TIE BARS WILL NOT BE REQUIRED
(2) FIFTEEN FEET SPACING ON CONTRACTION JOINTS
(3) SKEWED JOINTS PER DETAIL BELOW



TYPICAL SECTIONS I-80 DETOUR & MEDIAN CROSSOVERS

REVISIONS		
No.	DATE	INITIALS
1		
2		
3		
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.-412
LaSALLE

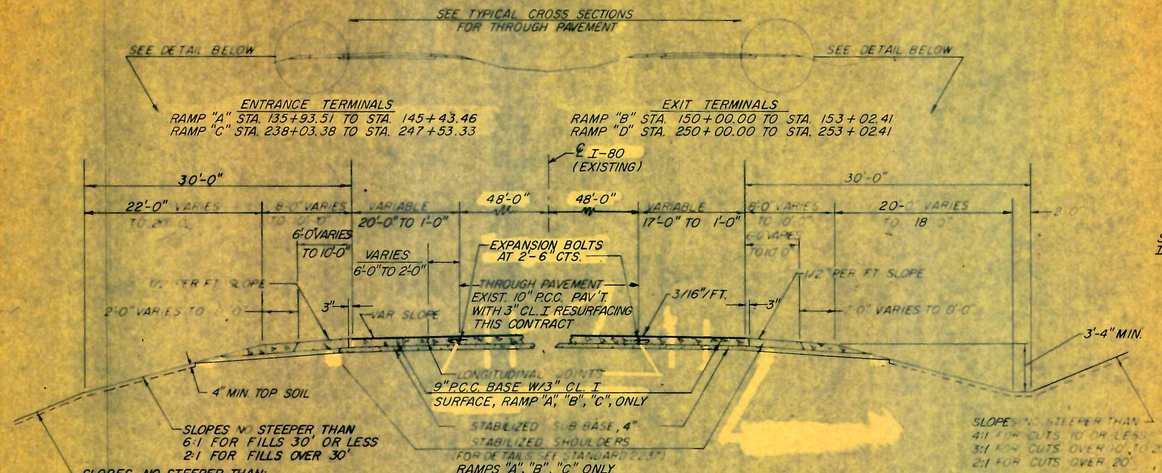
SECTION 50-5HB
50-2HB-3(R)
COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE: HH 11-75
CHECKED BY DATE: JMcC 12-75
BOOK NUMBER
PROJECT NO.
SHEET NO. 4

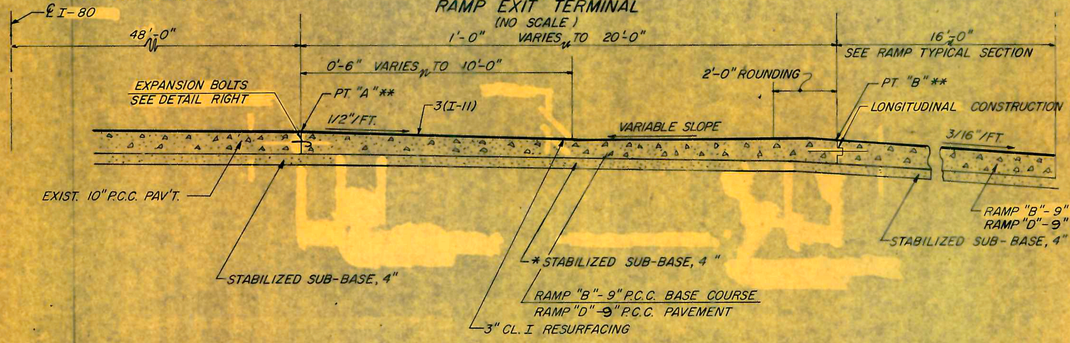
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.-412	50-5HB 50-2HB-3(R)	LaSALLE	156	5
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

TYPICAL CROSS SECTION FOR RAMP TERMINALS I-80



FOR TYPICAL PAVEMENT SECTION RAMP "D" SEE I-80 TYPICAL SECTIONS

TYPICAL CROSS SECTION FOR RAMP EXIT TERMINAL (NO SCALE)



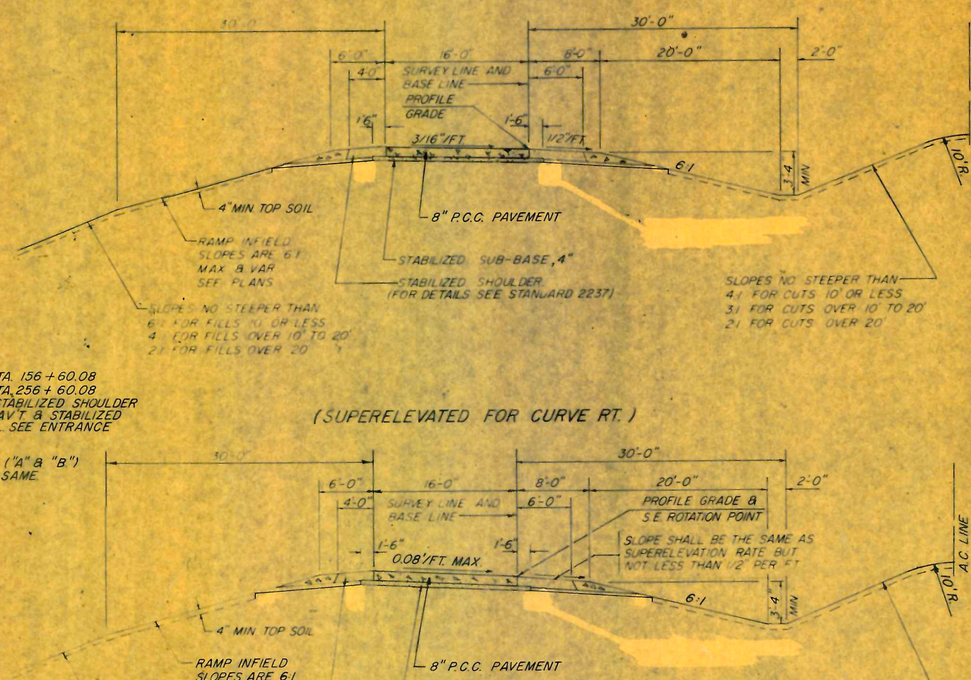
RAMP "B"
STA. 153+02.41 TO STA. 156+60.08

RAMP "D"
STA. 253+02.41 TO STA. 256+60.08

* RAMP "B" STA. 154+02.55 TO STA. 156+60.08
RAMP "D" STA. 254+02.55 TO STA. 256+60.08
MEDIAN MATERIAL CONSIST OF STABILIZED SHOULDER MATERIAL IN LIEU OF CONC. PAV'T & STABILIZED SUB-BASE AS SHOWN ON DETAIL SEE ENTRANCE TERMINAL SECTION THIS SHEET.

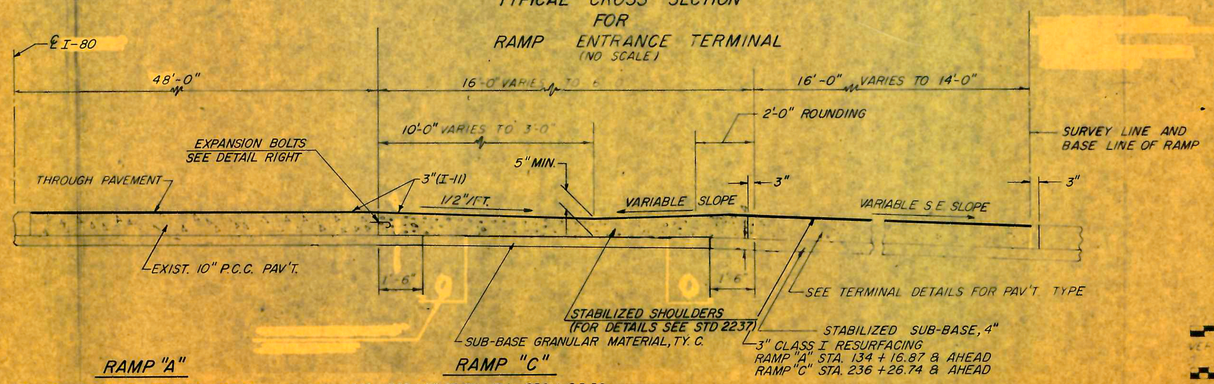
** ELEVATION OF PAV'T. EDGES ("A" & "B") WITHIN STATION LIMITS ARE THE SAME.

TYPICAL CROSS SECTION FOR RAMPS & LOOPS



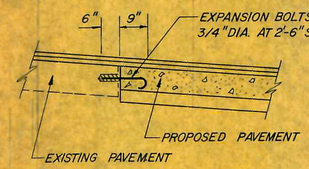
(SUPERELEVATED FOR CURVE RT.)

TYPICAL CROSS SECTION FOR RAMP ENTRANCE TERMINAL (NO SCALE)



RAMP "A"
STA. 133+85.85 TO STA. 135+93.51

RAMP "C"
STA. 235+95.72 TO STA. 238+03.38



DETAIL OF EXPANSION BOLTS

NOTE: SEE SHEET NO. 4 FOR DETAILS OF SUBGRADE REPLACEMENT, LOOP "A" STA. 1+50 TO 2+21.39

NOTE THE SHOULDER DESIGN SHOWN ON THE TYPICAL SECTIONS REFLECT ALTERNATE B, SEE STANDARD 2237

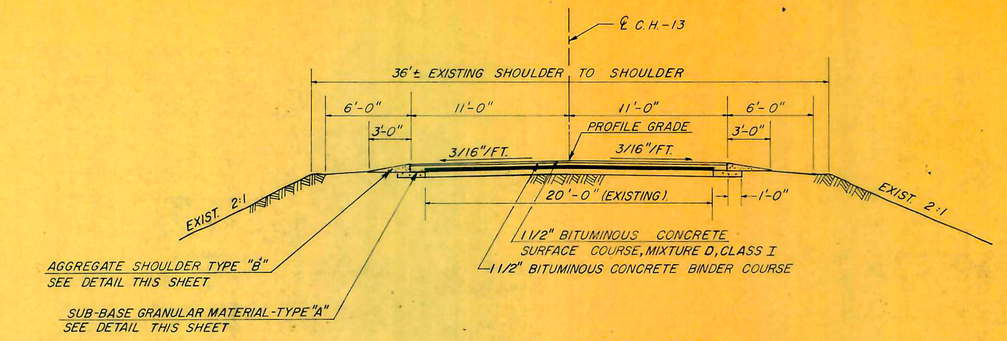
VERTICAL SCALE 1" = 4'
HORIZONTAL SCALE 1" = 8'

I-80 RAMP TERMINALS

TYPICAL SECTIONS FOR RAMPS & LOOPS

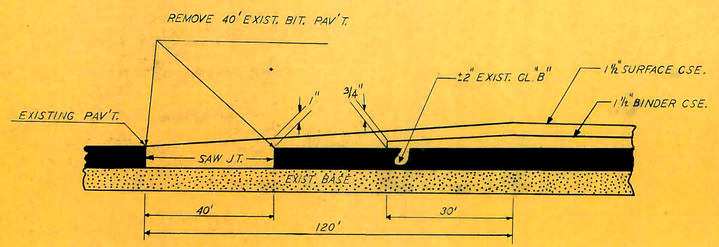
REVISIONS	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAWN BY DATE
		CHECKED BY DATE J.M.E.C. 7-75
	FA-412 SECTION 50-5HB & 50-2HB-3(R)	BOOK NUMBER
	LaSALLE COUNTY	PROJECT NO.
	HOMER L. CHASTAIN & ASSOCIATES CONSULTING ENGINEERS DECATUR, ILLINOIS	SHEET NO. 5

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5HB & 50-2 HB-3(R)	LaSALLE	156	6
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



TYPICAL CROSS SECTION
WIDENING AND RESURFACING
C. H. - 13

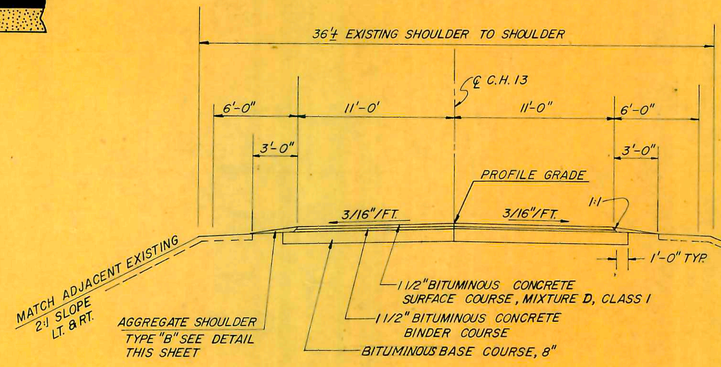
STA. 14+50 TO STA. 16+50 ±



C.H.- 13
TAPER SECTION

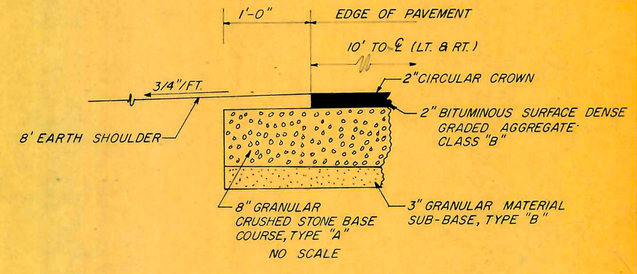
STA. 14+50 TO STA. 15+70
STA. 20+30 TO STA. 21+50

BRIDGE LIMITS
STA. 16+83.41 TO STA. 19+39.85



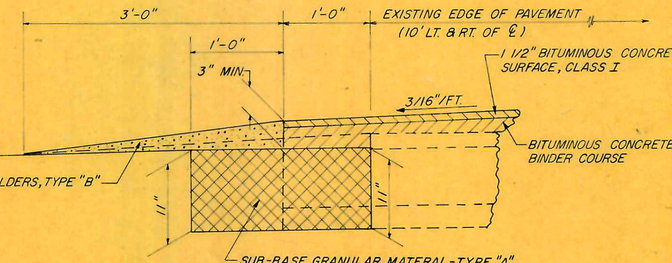
TYPICAL CROSS SECTION
NEW CONSTRUCTION
C.H-13

STA 16+50± TO STA. 16+83.41
STA 19+39.85 TO STA. 21+50



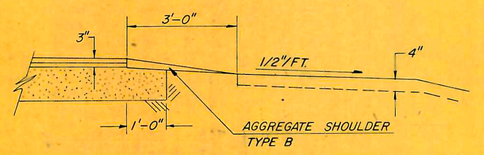
NO SCALE

EXISTING C.H. - 13
FOR INFORMATION ONLY



NOTE: EXACT LIMITS OF RESURFACING AND NEW CONSTRUCTION TO BE DETERMINED BY THE ENGINEER, SEE SPECIAL PROVISIONS

PAVEMENT WIDENING & RESURFACING (LT. & RT.)
NO SCALE



DETAIL FOR AGGREGATE SHOULDERS, TYPE B
NEW CONSTRUCTION ONLY
NO SCALE

0 5 10 15 FEET
HORIZONTAL & VERTICAL

CH-13
DESIGN SPEED = 50 (M.P.H.)
A.D.T = 586 (1976)

TYPICAL SECTION C. H. - 13

REVISIONS		
NO.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STATE OF ILLINOIS
DEPARTMEIT OF TRANSPORTATION
F.A. - 412 SECTION 50-5HB & 50-2 HB-3(R)
LaSALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE: H.H. 9-75
CHECKED BY DATE: JMcC 10-75
BOOK NUMBER
PROJECT NO.
SHEET NO. 6

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5HB & 50-2HB-3 (R)	LaSALLE	156	7
FED. ROAD DIST. NO.	ILLINOIS	PROJECT 2600		

INDEX OF SHEETS

1. COVER SHEET
2.-6. TYPICAL CROSS SECTIONS
7. INDEX OF SHEETS AND GENERAL NOTES
8.-9. SUMMARY OF QUANTITIES
10.-12. SCHEDULE OF QUANTITIES (INCL. SHEET 10A)
13. CONSTRUCTION STAGING PLAN
14.-15. PLAN AND PROFILE: F.A.-412, STA. 997+45 - 1050+00
16.-17. PLAN AND PROFILE: I-80
18.-19. PLAN AND PROFILE: I-80 DETOUR
20. PLAN OF I-80 MEDIAN CROSSOVERS
21. PLAN AND PROFILE: C.H.-13
22. PLAN AND PROFILE: RAMP "A"
23. PLAN AND PROFILE: LOOP "A"
24. PLAN AND PROFILE: RAMP "B"
25. PLAN AND PROFILE: LOOP "B"
26. PLAN AND PROFILE: RAMP "C"
27. PLAN AND PROFILE: LOOP "C"
28. PLAN AND PROFILE: RAMP "D"
29. PLAN AND PROFILE: LOOP "D"
30. GENERAL LAYOUT - GRID COORDINATES
31. GENERAL LAYOUT AND CURVE DATA
32. INTERCHANGE TIES
33. GENERAL LAYOUT - R.O.W. AND DRAINAGE
34.-37. INFIELD GRADING PLAN
38. RAMP TERMINAL DETAILS, I-80
39. OFFSET TABLES FOR RAMP TERMINALS
40. LOOP TERMINAL DETAILS - I-80
41. I-80 DETOUR TERMINALS
41A.-41D. TEMPORARY LIGHTING STANDARDS
42. DETAILS
43. SPECIAL RC BOX EXTENSION: LT. & RT. 740+47 (I-80)
44.-67A. BRIDGE PLANS: STRUCTURE 50-5HB
68,68A,B,69,69A,B,70,70A,71,71A,72,72A BRIDGE PLANS: STRUCTURE 50-2HB-3(R)
73. TRAFFIC CONTROL AND PROTECTION - I-80 CROSSOVERS
74. TRAFFIC CONTROL AND PROTECTION - I-80 DETOUR
75.-85. STATION CROSS SECTIONS: F.A.-412
86.-104. STATION CROSS SECTIONS: I-80
105.-115. STATION CROSS SECTIONS: I-80 DETOUR
116.-118. STATION CROSS SECTIONS: C.H.-13
119.-124. STATION CROSS SECTIONS: RAMP A
125.-128. STATION CROSS SECTIONS: LOOP A
129.-130. STATION CROSS SECTIONS: INFIELD A-1
131.-134. STATION CROSS SECTIONS: INFIELD A-3
135. STATION CROSS SECTIONS: RAMP B
136.-138. STATION CROSS SECTIONS: LOOP B
139.-142. STATION CROSS SECTIONS: INFIELD B-2
143.-144. STATION CROSS SECTIONS: RAMP C
145.-147. STATION CROSS SECTIONS: LOOP C
148.-152. STATION CROSS SECTIONS: INFIELD C-2
153.-155. STATION CROSS SECTIONS: RAMP D
156.- STATION CROSS SECTIONS: LOOP D

STANDARDS:

1683-3 INLET, TYPE A
1686-3 SYMBOLS AND ABBREVIATIONS
1766-7 LONGITUDINAL METAL JOINT
1976 REINFORCED CONC. HEADWALLS FOR 15" TO 36"
2113-1 NAME PLATE FOR BRIDGES
2115-6 PAVEMENT FABRIC, TYPE A AND TYPE B
2116-1 PATCHING DETAILS (PCC)
2169-5 WOVEN WIRE FENCE
2179-7 24' P.C.C. PAVEMENT
2203-9 P.C.C. BASE CRSE. W/BIT. CONC. BINDER AND SURFACE COURSES
2213-4 FRAME AND LID, TYPE 1
2228-2 METAL END SECTION FOR PIPE CULVERTS
2230-10 STEEL PLATE BEAM GUARDRAIL ... SHT'S 1 & 2
2231-3 TYPICAL APPLICATION OF STEEL PLATE BEAM GUARD RAIL

STANDARDS: (continued)

2237-8 SHOULDER DETAILS
2249-3 INLET BOX FOR 6:1 SIDE SLOPE
2250-1 MEDIAN INLET FOR 24" R.C.P.
2253-4 MEDIAN GUARD RAIL AT STRUCTURE FOR DUAL HWY.
2258-2 PAVED DITCH, TYPE A
2262-2 REINF. CONC. PIPE ELBOW AND PRECAST REINF. CONC. FLARED END SECTION
2263-3 REINFORCED CONCRETE PIPE TEE
2298-4 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2299-6 DESIGN OF TRAFFIC CONTROL DEVICES
2300-1 FLAGMAN TRAFFIC CONTROL SIGN
2301-3 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE I)
2303-4 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE III)
2315-4 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE XV)
2316-4 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE XVI)
2323-3 PAVEMENT JOINTS
2324-2 BRIDGE APPROACH SHOULDER PAVEMENT
BLR-14-1 P.C.C. PAVEMENT (NONREINFORCED)
2302-3 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE II)
2305-3 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE V)
2306-4 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE VI)
2307-4 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE VII)
2314-3 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE XIV)

GENERAL NOTES

1. ELEVATIONS ARE BASED ON U.S.G.S. SEA LEVEL DATUM OF 1929.
2. ALL TREES, BRUSH, AND SHRUBS WITHIN THE CONSTRUCTION LIMITS WILL BE REMOVED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS" AND SPECIAL PROVISIONS. ALL TREES BETWEEN THE CONSTRUCTION LIMITS AND THE RIGHT OF WAY WILL BE PRESERVED UNLESS DESIGNATED TO BE REMOVED BY THE ENGINEER.
3. WHERE SECTION OR SUB-SECTION MARKERS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED AGENT, OR LAND SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.
4. TOP SOIL 4" THICK SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE TYPICAL CROSS SECTIONS, STATION CROSS SECTIONS AND ON ANY ADDITIONAL LOCATIONS SPECIFIED BY THE ENGINEER. TOP SOIL SHALL BE OBTAINED FROM WITHIN THE STATE RIGHT OF WAY AS DIRECTED BY THE ENGINEER. SEE SPECIAL PROVISIONS.
5. A 3' WIDE STRIP OF EXCELSIOR BLANKET SHALL BE PLACED ON EACH SIDE OF CULVERT HEADWALLS, END SECTIONS, AND SLOPEWALLS AS SHOWN ON THE SPECIAL DETAILS AND AS DIRECTED BY THE ENGINEER. SEE SPECIAL PROVISIONS.
6. ALL AREAS SHOWN ON THE PLANS SHALL BE SEEDED, FERTILIZED AND MULCHED AS DIRECTED BY THE ENGINEER. ALL SIDE SLOPES WITH 3:1 SLOPE OR STEEPER SHALL BE SEEDED WITH CLASS III SEEDING. ALL OTHER AREAS SHALL BE SEEDED WITH CLASS II SEEDING. FOR THE PURPOSE OF THIS CONTRACT, SPRING SEEDING IS DEFINED AS THAT PERFORMED BETWEEN DECEMBER 31ST TO JULY 1ST. FALL SEEDING IS DEFINED AS THAT PERFORMED BETWEEN JULY 1ST AND DECEMBER 31ST. SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET OR IN UNTILLABLE CONDITION.

INDEX OF SHEETS & GENERAL NOTES

REVISIONS		
No.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FA.-412 SECTION 50-5HB & 50-2HB-3(R)
LaSALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY / DATE	MH 1-76
CHECKED BY / DATE	MP 1-76
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	7

FA-412		LaSALLE	156	7A

INDEX OF SHEETS

1. COVER SHEET
2.-6. TYPICAL CROSS SECTIONS
7. INDEX OF SHEETS AND GENERAL NOTES
8.-9, 8A SUMMARY OF QUANTITIES
10.-12. SCHEDULE OF QUANTITIES (INCL. SHEET 10A)
13. CONSTRUCTION STAGING PLAN
14.-15. PLAN AND PROFILE: F.A.-412, STA. 997+45 - 1050+00
16.-17. PLAN AND PROFILE: I-80
18.-19. PLAN AND PROFILE: I-80 DETOUR
20. PLAN OF I-80 MEDIAN CROSSOVERS
21. PLAN AND PROFILE: C.H.-13
22. PLAN AND PROFILE: RAMP "A"
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24. PLAN AND PROFILE: RAMP "B"
25. PLAN AND PROFILE: LOOP "B"
26. PLAN AND PROFILE: RAMP "C"
27. PLAN AND PROFILE: LOOP "C"
28. PLAN AND PROFILE: RAMP "D"
29. PLAN AND PROFILE: LOOP "D"
30. GENERAL LAYOUT - GRID COORDINATES
31. GENERAL LAYOUT AND CURVE DATA
32. INTERCHANGE TIES
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BRIDGE PLANS: STRUCTURE 50-2HB-3(R)
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75.-85. STATION CROSS SECTIONS: F.A.-412
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131.-134. STATION CROSS SECTIONS: INFIELD A-3
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139.-142. STATION CROSS SECTIONS: INFIELD B-2
143.-144. STATION CROSS SECTIONS: RAMP C
145.-147. STATION CROSS SECTIONS: LOOP C
148.-152. STATION CROSS SECTIONS: INFIELD C-2
153.-155. STATION CROSS SECTIONS: RAMP D
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1005-3 INLET, TYPE A
1006-3 SYMBOLS AND ABBREVIATIONS
1706-7 LONGITUDINAL METAL JOINT
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* Includes sheets 44A, 67A

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Rev 12-2-76 D.D.

INDEX OF SHEETS & GENERAL NOTES

REVISIONS	STATE OF ILLINOIS	DESIGNED BY	DATE
	DEPARTMENT OF TRANSPORTATION	101	1-76
		DRAWN BY	DATE
	FA-412 SECTION 50-5HB & 50-2HB-3(R)	SUP	1-76
	LaSALLE COUNTY	SHEET QUANTITIES	
	NORMER L. CHRISTAIN & ASSOCIATES CONSULTING ENGINEERS DECATUR, ILLINOIS	PROJECT NO.	
		SHEET NO.	7

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	50-5HBB, 50-2HB-3 (R)	LaSALLE	156	8
FED. ROAD DIST. NO.	ILLINOIS	PROJECT 2600		

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	50-5HB 1027+29.91 TO 1029+83.91 (N.B. LANES)	50-2HB-3(R) 14+50 TO 21+50		50-2RS 729+20.32 TO 790+70	ESTIMATED APPLICATION RATE
				CONSTRUCTION TYPE CODE				
				X281	X271	6203	6706	
201006	HEDGE REMOVAL	UNIT	19				19	100 LIN.FT./UNIT
*202001	EARTH EXCAVATION	CU YD	286,180	6,075		1,166	278,939	
210001	TRENCH BACKFILL	CU YD	8			8		
*211005	SAND BACKFILL	CU YD	937	735	202			
213001	SUB-BASE GRANULAR MATERIAL, TYPE A	TON	4,485			56	4,429	2.05 TON/CU.YD.
*213007	SUB-BASE GRANULAR MATERIAL, TYPE C	TON	4,761				4,761	2.05 TON/CU.YD.
*213012	STABILIZED SUB-BASE 4"	SQ YD	10,971				10,971	
215001	AGGREGATE SHOULDERS, TYPE A	TON	1,168				1,168	2.05 TON/CU.YD.
215004	AGGREGATE SHOULDERS, TYPE B	TON	4,030			24	4,006	2.05 TON/CU.YD.
X21504	STABILIZED SHOULDERS (VARIABLE DEPTH)	SQ YD	7,543				7,543	
*X21602	TOP SOIL PLACEMENT	SQ YD	8,757				8,757	
*X30106	BITUMINOUS BASE COURSE, 8"	SQ YD	650			650		
304005	PORTLAND CEMENT CONCRETE BASE COURSE, 9"	SQ YD	8,183				8,183	
406001	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	4,482			67	4,415	0.375 GAL/S.Y.AGG 0.075 GAL/S.Y.BIT. & CONC.
406007	BITUMINOUS CONCRETE BINDER COURSE	TON	5,055			86	4,969	112#/IN./SQ.YD.
								112#/IN./SQ.YD.
*X40615	BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I	TON	4,878			92	4,786	108#/IN./SQ.YD.
408004	PORTLAND CEMENT CONCRETE PAVEMENT 9"	SQ YD	19,555				19,555	
*501001	REMOVAL OF EXISTING STRUCTURES	EACH	1		1			
501022	CONCRETE REMOVAL	CU YD	16.7		16.7			
501030	EXPANSION BOLTS 3/4 INCH x 15 INCH	EACH	2,090				2,090	
X50201	STRUCTURE EXCAVATION	CU YD	657	289	368			
503004	PROTECTIVE COAT	SQ YD	191		191			
504003	CLASS X CONCRETE	CU YD	2,201.5	1,670	505.1		26.4	
X50502	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I-BEAM 54"	LIN FT	3,726	3,726				
507001	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	9,930	9,930				
507025	STUD SHEAR CONNECTORS	EACH	1,740		1,740			
507030	FURNISHING AND ERECTING STRUCTURAL STEEL	L. SUM	1		1			
508005	ALUMINUM RAILING	LIN FT	1,517	1,008	509			
*511025	PIPE CULVERTS, TYPE 1 15"	LIN FT	90				90	
*511029	PIPE CULVERTS, TYPE 1 30"	LIN FT	62				62	
*511045	PIPE CULVERTS, TYPE 1 (RCCP) 12"	LIN FT	232				232	
*511049	PIPE CULVERTS, TYPE 1 (RCCP) 24"	LIN FT	140				140	
*511066	PIPE CULVERTS, TYPE 1 BCCSCP 12"	LIN FT	74				74	
*511A03	PIPE CULVERTS, TYPE 1, 18" (TEMPORARY)	LIN FT	72				72	
*511A08	PIPE CULVERTS, TYPE 1, 42" (TEMPORARY)	LIN FT	60				60	
X51153	END SECTIONS, 12"	EACH	2				2	
X51157	END SECTIONS, 24"	EACH	2				2	
511925	REINFORCED CONCRETE PIPE TEE, 24" PIPE WITH 24" RISER	EACH	2				2	
512001	REINFORCEMENT BARS	POUND	404,680	301,860	97,910		4,910	
X51301	FURNISHING STEEL PILES HP 8x36	LIN FT	867		867			
X51302	FURNISHING STEEL PILES HP 10x42	LIN FT	5,088	5,088				

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	50-5HB 1027+29.91 TO 1029+83.91 (N.B. LANES)	50-2HB-3(R) 14+50 TO 21+50		50-2RS 729+20.32 TO 790+70	ESTIMATED APPLICATION RATE
				CONSTRUCTION TYPE CODE				
				X281	X271	6203	6706	
513021	FURNISHING CONCRETE PILES	LIN FT	1,580	1,580				
513026	DRIVING STEEL PILES	LIN FT	5,955	5,088	867			
513027	DRIVING CONCRETE PILES	LIN FT	1,580	1,580				
513041	TEST PILE, CONCRETE	EACH	1	1				
X51310	TEST PILE, STEEL HP 8x36	EACH	1		1			
X51311	TEST PILE, STEEL HP 10x42	EACH	1	1				
514001	NAME PLATES	EACH	3	2	1			
603005	STORM SEWERS, TYPE 1 12"	LIN FT	60				60	
607005	PIPE DRAINS 12"	LIN FT	108				108	
X612B1	INLET BOX STANDARD 2249	EACH	1				1	
612146	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID(24" DEPTH)	EACH	9				5	
612436	MEDIAN INLET (2250)	EACH	1				1	
614051	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	1				1	
616229	PAVED DITCH, TYPE A-12	LIN FT	55				33	
*617001	PAVEMENT REMOVAL	SQ YD	9,477				9,477	
618001	SLOPE WALL 4 INCH	SQ YD	2,383	2,125	258			
*620025	PAVEMENT REMOVAL AND PORTLAND CEMENT CONCRETE REPLACEMENT, TYPE I, 10 INCH	SQ YD	16				16	
*620026	PAVEMENT REMOVAL AND PORTLAND CEMENT CONCRETE REPLACEMENT, TYPE II, 10 INCH	SQ YD	30				30	
*620027	PAVEMENT REMOVAL AND PORTLAND CEMENT CONCRETE REPLACEMENT, TYPE III, 10 INCH	SQ YD	59				59	
*628001	STEEL PLATE BEAM GUARD RAIL, SINGLE RAIL	LIN FT	775				775	
*628002	STEEL PLATE BEAM GUARD RAIL, DOUBLE RAIL	LIN FT	50				50	
*X62801	TERMINAL SECTION, SINGLE RAIL	EACH	7			2	5	
628014	REMOVAL AND REINSTALLATION OF EXISTING STEEL PLATE BEAM GUARD RAIL	LIN FT	1188			1013	175	
630001	WOVEN WIRE FENCE, 4'	LIN FT	17,054	17,054				
633003	STEEL PLATE BEAM GUARD RAIL REMOVAL	LIN FT	350				350	
*642002	SEEDING, CLASS II	ACRE	12.8				12.8	
*642003	SEEDING, CLASS III	ACRE	1.3			1.3		
642004	NITROGEN FERTILIZER NUTRIENT	POUND	1,128			104	1,024	80#/ACRE
642005	PHOSPHORUS FERTILIZER NUTRIENT	POUND	2,256			208	2,048	160#/ACRE
642006	POTASSIUM FERTILIZER NUTRIENT	POUND	1,128			104	1,024	80#/ACRE
643001	MULCH	TON	28.2			2.6	25.6	2 TON/ACRE
643004	EXCELSIOR BLANKET	SQ YD	856			434	422	
643005	EMULSIFIED ASPHALT	GALLON	2,820			260	2,560	100 GAL/TON MULCH
*646001	ENGINEER'S FIELD OFFICE, TYPE A	EACH	1				1	
*646003	ENGINEER'S FIELD LABORATORY	EACH	1				1	
X64701	PAVEMENT MARKING TAPE	LIN FT	56,984				56,984	
*X04941	WATERPROOFING MEMBRANE SYSTEM	SQ YD	931		931			
X05257	BALES IN PLACE (E-1)	EACH	108				108	
x210227	EXPLORATION TRENCH 52 IN. DEPTH	LIN.FT.	6000	6000				
x603002	STORM SEWER T-1 6"	LIN.FT.	200	200				
x603003	STORM SEWER T-1 8"	LIN.FT.	200	200				
x603004	STORM SEWER T-1 10"	LIN.FT.	200	200				

x-ITEMS INCLUDED TO ESTABLISH A UNIT BID PRICE

SUMMARY OF QUANTITIES

REVISIONS		
No.	DATE	INITIALS
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.-412 SECTION 50-5HB & 50-2HB-3(R)

LaSALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY / DATE	M.H. 1-76
CHECKED BY / DATE	M.P. 1-76
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	8

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	50-5HB 1027+29.91 TO 1029+83.91 (N.B. LANES)	50-2HB-3(R) 14+50 TO 21+80		50-2RS 729+20.32 TO 790+70	ESTIMATED APPLICATION RATE
				CONSTRUCTION TYPE CODE				
				X281	X271	6203	6706	
251008	HEDGE REMOVAL	UNIT	19				19	100 LIN.FT./UNIT
*202001	EARTH EXCAVATION	CU YD	286,180	6,075		1,166	278,939	
210001	TRENCH BACKFILL	CU YD	8				8	
*211005	SAND BACKFILL	CU YD	937	735	202			
213001	SUB-BASE GRANULAR MATERIAL, TYPE A	TON	4,685			56	4,629	2.05 TON/CU.YD.
*213007	SUB-BASE GRANULAR MATERIAL, TYPE C	TON	4,761				4,761	2.05 TON/CU.YD.
*213012	STABILIZED SUB-BASE 4"	SQ YD	10,971				10,971	
215001	AGGREGATE SHOULDERS, TYPE A	TON	1,168				1,168	2.05 TON/CU.YD.
215004	AGGREGATE SHOULDERS, TYPE B	TON	4,030			24	4,006	2.05 TON/CU.YD.
X21586	STABILIZED SHOULDERS (VARIABLE DEPTH)	SQ YD	7,543				7,543	
*X21602	TOP SOIL PLACEMENT	SQ YD	8,757				8,757	
*230105	BITUMINOUS BASE COURSE, 8"	SQ YD	650			650		
304005	PORTLAND CEMENT CONCRETE BASE COURSE, 9"	SQ YD	8,183				8,183	
408001	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	4,482			67	4,415	0.375 GAL/S.Y. AGG
408007	BITUMINOUS CONCRETE BINDER COURSE	TON	5,055			86	4,969	0.075 GAL/S.Y. BIT. CONC. 112#/IN./SQ.YD.
*X40615	BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I	TON	4,878			92	4,786	112#/IN./SQ.YD. 108#/IN./SQ.YD.
408004	PORTLAND CEMENT CONCRETE PAVEMENT 9"	SQ YD	19,655				19,655	
*501001	REMOVAL OF EXISTING STRUCTURES	EACH	1		1			
501022	CONCRETE REMOVAL	CU YD	16.7		16.7			
501030	EXPANSION BOLTS 3/4 INCH x 15 INCH	EACH	2,090				2,090	
X50201	STRUCTURE EXCAVATION	CU YD	657	289	368			
503004	PROTECTIVE COAT	SQ YD	191		191			
504005	CLASS X CONCRETE	CU YD	2194.6	1663.1	505.1		26.4	
X50502	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I-BEAM 54"	LIN FT	3,726	3,726				
507001	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	9,930	9,930				
507025	STUD SHEAR CONNECTORS	EACH	1,740		1,740			
507030	FURNISHING AND ERECTING STRUCTURAL STEEL	L. SUM	1		1			
508005	ALUMINUM RAILING	LIN FT	1,517	1,008	509			
*511025	PIPE CULVERTS, TYPE 1 18"	LIN FT	90				90	
*511029	PIPE CULVERTS, TYPE 1 30"	LIN FT	62				62	
*511045	PIPE CULVERTS, TYPE 1 (RCCP) 12"	LIN FT	282				282	
*511049	PIPE CULVERTS, TYPE 1 (RCCP) 24"	LIN FT	140				140	
*511086	PIPE CULVERTS, TYPE 1 (CCSCP 12"	LIN FT	74				74	
*511403	PIPE CULVERTS, TYPE 1, 18" (TEMPORARY)	LIN FT	72				72	
*511408	PIPE CULVERTS, TYPE 1, 42" (TEMPORARY)	LIN FT	60				60	
X51183	END SECTIONS, 12"	EACH	2				2	
X51187	END SECTIONS, 24"	EACH	2				2	
511685	REINFORCED CONCRETE PIPE TEE, 24" PIPE WITH 24" RISER	EACH	2				2	
512001	REINFORCEMENT BARS	POUND	406,680	301,860	52,910		4,910	
X51301	FURNISHING STEEL PILES HP 8x36	LIN FT	867		867			
X51302	FURNISHING STEEL PILES HP 10x42	LIN FT	6102	6102				

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	50-5HB 1027+29.91 TO 1029+83.91 (N.B. LANES)	50-2HB-3(R) 14+50 TO 21+80		50-2RS 729+20.32 TO 790+70	ESTIMATED APPLICATION RATE
				CONSTRUCTION TYPE CODE				
				X281	X271	6203	6706	
513021	FURNISHING CONCRETE PILES	LIN FT	1,580	1,580				
513026	DRIVING STEEL PILES	LIN FT	5,955	5,088	867			
513027	DRIVING CONCRETE PILES	LIN FT	1,580	1,580				
513041	TEST PILE, CONCRETE	EACH	1	1				
X51310	TEST PILE, STEEL HP 8x36	EACH	1		1			
X51311	TEST PILE, STEEL HP 10x42	EACH	2	2				
514001	NAME PLATES	EACH	3	2	1			
603005	STORM SEWERS, TYPE 1 12"	LIN FT	60				60	
607005	PIPE DRAINS 12"	LIN FT	108				108	
X61281	INLET BOX STANDARD 2249	EACH	1				1	
612146	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID(24" DEPTH)	EACH	9				4	5
612436	MEDIAN INLET (2250)	EACH	1					1
614051	FRAMES AND LIDS, TYPE 1, OPEN LID	EACH	1					1
616229	PAVED DITCH, TYPE A-12	LIN FT	55				22	33
*617001	PAVEMENT REMOVAL	SQ YD	9,477					9,477
618001	SLOPE WALL 4 INCH	SQ YD	2,383	2,125	258			
*620025	PAVEMENT REMOVAL AND PORTLAND CEMENT CONCRETE REPLACEMENT, TYPE I, 10 INCH	SQ YD	16					16
*620026	PAVEMENT REMOVAL AND PORTLAND CEMENT CONCRETE REPLACEMENT, TYPE II, 10 INCH	SQ YD	30					30
*620027	PAVEMENT REMOVAL AND PORTLAND CEMENT CONCRETE REPLACEMENT, TYPE III, 10 INCH	SQ YD	59					59
*628001	STEEL PLATE BEAM GUARD RAIL, SINGLE RAIL	LIN FT	775					775
*628002	STEEL PLATE BEAM GUARD RAIL, DOUBLE RAIL	LIN FT	90					90
*X62801	TERMINAL SECTION, SINGLE RAIL	EACH	7				2	5
628014	REMOVAL AND REINSTALLATION OF EXISTING STEEL PLATE BEAM GUARD RAIL	LIN FT	1188				1013	175
630001	WOVEN WIRE FENCE, 4'	LIN FT	17,054	17,054				350
633003	STEEL PLATE BEAM GUARD RAIL REMOVAL	LIN FT	350					12.8
*642002	SEEDING, CLASS II	ACRE	12.8					
*642003	SEEDING, CLASS III	ACRE	1.3				1.3	
642004	NITROGEN FERTILIZER NUTRIENT	POUND	1,128				104	1,024 80#/ACRE
642005	PHOSPHORUS FERTILIZER NUTRIENT	POUND	2,256				208	2,048 160#/ACRE
642006	POTASSIUM FERTILIZER NUTRIENT	POUND	1,128				104	1,024 80#/ACRE
643001	MULCH	TON	88.2				2.6	23.6 2 TON/ACRE
643004	EXCELSIOR BLANKET	SQ YD	856				434	422
*43008	EMULSIFIED ASPHALT	GALLON	2,626				260	2,366 100 GAL/TON MULCH
*648001	ENGINEER'S FIELD OFFICE, TYPE A	EACH	1					1
*648003	ENGINEER'S FIELD LABORATORY	EACH	1					1
X56701	PAVEMENT MARKING TAPE	LIN FT	98,984					98,984
*X64941	WATERPROOFING MEMBRANE SYSTEM	SQ YD	951			951		
*X65057	BALES IN PLACE (E-1)	EACH	108					108
*X70227	EXPLORATION TRENCH, 52 IN. DEPTH	LIN.FT.	6000	6000				
*603002	STORM SEWER T-1 6"	LIN.FT.	200	200				
*603003	STORM SEWER T-1 8"	LIN.FT.	200	200				
*603004	STORM SEWER T-1 10"	LIN.FT.	200	200				

*-ITEMS INCLUDED TO ESTABLISH A UNIT BID PRICE

F.A.RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		LaSALLE	56	8 A

SUMMARY OF QUANTITIES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.-RTE — SECTION 50-5HB & 50-2HB-3(R)

LaSALLE COUNTY

HONNER L. CHARTAIN & ASSOCIATES
CONSULTING ENGINEERS
OGLESBY, ILLINOIS

REVISIONS

Rev. 12-2-76 Cl X Conc. From 2201.5 to 2194.6 cu yds.,

Furn Stl Piles HP10X42 from 5088 to 6102 Lin. Ft., Test Pile HP10X42 from 1 to 2 Ea D.D.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	50-5HB & 50-2HB-3 (R)	LaSALLE	156	9
FED. ROAD DIST. NO.	ILLINOIS	PROJECT 2600		

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	50-5HB 1027+29.91 TO 1029+83.91 (N.B. LANES)	50-2HB-3(R) 14+50 TO 21+50		50-2RS 729+20.32 TO 790+70	ESTIMATED APPLICATION RATE
				CONSTRUCTION TYPE CODE				
				X281	X271	6203	6706	
* X05258	AGGREGATE FOR EROSION CONTROL (E-2)	TON	36				36	
* X05392	EARTH EXCAVATION FOR EROSION CONTROL (E-3)	CU YD	40				40	
* X05391	AGGREGATE FOR TEMPORARY CROSSING (E-4)	TON	285				285	
* XZ1187	PREFORMED JOINT SEALER 4"	LIN FT	298	221	77			
* XZ1010	PORTLAND CEMENT CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT	SQ YD	29			29		
* X05741	TRAFFIC CONTROL AND PROTECTION, I-80 DETOUR	L. SUM	1				1	
* X05742	TRAFFIC CONTROL AND PROTECTION, MEDIAN CROSSOVERS	L. SUM	1				1	
* XZ1013	TRAFFIC CONTROL AND PROTECTION, STANDARD 2316 (SPECIAL)	L. SUM	1				1	
* XZ1088	TRAFFIC CONTROL AND PROTECTION, STANDARD 2315	L. SUM	1				1	
** XZ1100	TRAINEES	HOUR	3,000					
* L05769	TEMPORARY LIGHTING STANDARDS	EACH	35				35	
607002	PIPE DRAINS 6"	LIN. FT.	200	200				
607003	PIPE DRAINS 8"	LIN. FT.	200	200				
607004	PIPE DRAINS 10"	LIN. FT.	200	200				

* SEE SPEC. PROVS.

** CONST. TYPE CODE Y080

SUMMARY OF QUANTITIES

REVISIONS		
No.	DATE	INITIALS
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.-412 SECTION 50-5HB & 50-2HB-3(R)

LaSALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY	DATE
M.H.	1-76
CHECKED BY	DATE
M.P.	1-76
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	9

DURKIN & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5 HB & 50-2 HB-3 (R)	LA SALLE	156	10
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

BRIDGE ,CULVERT AND STORM SEWER SCHEDULE

	STATION NO.	TYPE	STANDARD AND DESIGN NUMBER	EXCELSIOR BLANKET	CLASS X CONCRETE CU. YDS. HEADWALL	CLASS X CONCRETE CU. YDS.	REINFORCEMENT BARS LBS.	PIPE CULVERTS: TYPE 1 (RCCP) 12"	24"	TY. 1 (BCCSCP) 12"	TY. 1. TEMP. 18"	42"	TY. 1 15"	30"	END SECTIONS 12"	24"	RC PIPE TEE 12"Ø-12"Ø	STORM SEWER TYPE 1 12"	TRENCH BACK-FILL	PIPE DRAIN 12"	INLET BOX 2249	2250	MANHOLE 4-1 CL	INLET A-1-P 24"Ø	FM & LD 1-P	PAVED DITCH A-12
I-80																										
Lt.	739+20	1 (RCCP)	SP FT HDWL 1683, 2213, 2258	18		0.1		46																1		11
RT.	739+80	1 (RCCP)	1683, 2213, 2262	32				58							1									1		
AR.	740+47	RC. Box Ext.	Special	8.2		25.9	4910																			
Rt	750+03	1 (RCCP)	2262						12							1										
Rt	763+50	1 (RCCP)	2262, 2263, 2250						96							1						1	1			
–	760+96.98	STRUCTURE	50-5 HB			1670.0	301, 860																			
Lt.	765+30	1 (RCCP)	SPFT. HDWL 1683, 2213, 2258			0.1		52																1		11
Rt.	781+00	1 (RCCP)	2249, 2263, 2213						32								1				1				1	
Lt.	782+70	1 (RCCP)	SP FT. HDWL 1683, 2213, 2258	18		0.1		46																1		11
Rt	786+50 to 790+25	DITCH LINING		375																						
	LOOP "C"																									
AR	51+95	P-1 (RCCP)	1683, 2213					30																1		
Rt	51+95	P-1 (BCCSCP)	2228							74					1											
	CH-13																									
Rt.	16+71	PIPE DRAIN	SP FT HDWL 1683, 2213	18		0.1														52				1		11
AR.	16+71 to 16+80	SS-1	1683, 2213															30	4.0					1		
–	18+08.38	STRUCTURE	50-2 HB-3 (R)	81		505.1	97,910																			
AR.	19+43 to 19+52	SS-1	1683, 2213															30	4.0					1		
Lt.	19+52	PIPE DRAIN	SP FT HDWL 1683, 2213	18		0.1														56				1		11
Rt.	18+90 to 21+50	DITCH LINING		173.3																						
Lt.	19+35 to 21+50	DITCH LINING		143.3																						
	I-80 DETOUR ROAD																									
AR	6+60	P-1 (Temp)									72															
AR	18+00	P-1 (Temp)											60													
AR	49+50	P-1												62												
	I-80 CROSSOVER																									
AR	730±	P-1												90												
TOTALS				856.0	—	2201.5	404,680	232	140		74	72		72	60	90	62	2	2		1		60	8.0	108	1	1	1	9	1	55

BRIDGE, CULVERT AND STORM SEWER SCHEDULE

REVISIONS		
No.	DATE	INITIALS
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
FA.-412 SECTION 50-5HB & 50-2HB-3(R)
LA SALLE COUNTY
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY: DATE
CHECKED BY: DATE
BOOK NUMBER
PROJECT NO.
SHEET NO. 10

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5HB 50-2HB-3(R)	LASALLE	156	10A
FED. ROAD DIST. NO.		ILLINOIS	PROJECT	

PORTLAND CEMENT CONCRETE QUANTITIES

CODE	304005		408004	
LOCATION	P.C.C. BASE COURSE, 9" SQ.YDS.		P.C.C. PAVEMENT 9" SQ.YDS.	
CROSSOVER #1			1,821	
CROSSOVER #2			1,820	
I-80 DETOUR STA. 0+00 TO STA. 55+84.43			14,246	
RAMP "D"			1668	
I-80 TERMINALS	8,183			
TOTALS	8,183		19,555	

PAVEMENT REMOVAL (617001)

STATION & LOCATION	PAVEMENT TYPE	AREA SQ.YDS.
I-80 DETOUR STA. 0+00 TO STA. 24+00	9" P.C.C. PAV'T. (NONREINFORCED)	5,752
MEDIAN CROSSOVER #1 STA.2+58.06 TO STA.17+41.94	9" P.C.C. PAV'T. (NONREINFORCED)	1,821
MEDIAN CROSSOVER #2 STA.42+30.14 TO STA.56+97.27	9" P.C.C. PAV'T. (NONREINFORCED)	1,820
I-80 DETOUR STA:62+44 TO STA.63+95.28	9" P.C.C. PAV'T. (NON REINFORCED)	84
TOTAL		9,477

BITUMINOUS QUANTITIES

CODE	406001	406007		
LOCATION	PRIME COAT GAL.	BIT. CONC. BINDER CRSE. TON	BIT. CONC. SURF. CRSE. MIX D, CL. I TON	BIT. CONC. SURF. CRSE. MIX D, CL. I TON
COUNTY HIGHWAY 13	67	86	92	
INTERSTATE 80 (INCL. TERMINALS)	4415	4969		4786
TOTALS	4482	5055	92	4786

STABILIZED QUANTITIES

CODE	213012		
LOCATION	STABILIZED SUB-BASE 4" SQ.YD.	STABILIZED SHOULDERS SQ.YD.	BIT. BASE CRSE. 8" SQ.YD.
COUNTY HIGHWAY 13			650
INTERSTATE 80	10,971	7543	
TOTALS	10,971	7543	650

Var Depth 724+20 740+20

SUMMARY OF EXPANSION BOLTS - 3/4" X 15" (501030)

LOCATION	STATION TO STATION (I-80)	EACH
RAMP A	729+20.32 TO 738+70.36	380
RAMP B	735+66.77 TO 739+68.76	161
RAMP C	781+19.96 TO 790+70.00	380
RAMP D	782+86.46 TO 786+88.45	161
LOOPS A-D	753+00.00 TO 765+21.94	489
LOOPS B-C	756+60.17 TO 768+97.00	495
BOX CULVERT EXTENSION STA. 740+47		24
TOTAL		2,090

AGGREGATE QUANTITIES

CODE	213001	213007	215001	215004
	SUB-BASE GRANULAR MATERIAL TYPE A	SUB-BASE GRANULAR MATERIAL TYPE C	AGGREGATE SHOULDERS TYPE A	AGGREGATE SHOULDERS TYPE B
LOCATION	TON	TON	TON	TON
MEDIAN CROSSOVER #1	457			434
MEDIAN CROSSOVER #2	458			436
I-80 DETOUR	3,514			3,136
COUNTY HIGHWAY 13	56			24
INTERSTATE 80		4761	1168	
LOOP "A" (SUB-GRADE REPLACEMENT)				
TOTALS	4485	4761	1168	4,030

STEEL PLATE BEAM GUARD RAIL REMOVAL (633003)

I-80				
LT. STA. 725+38	TO 726+38	=	100	LIN.FT
RT. STA. 736+67	TO 737+42	=	75	LIN.FT
LT. STA. 737+28	TO 738+03	=	75	LIN.FT.
RT. STA. 789+74	TO 790+74	=	100	LIN.FT.
TOTAL		=	350	LIN.FT.

STEEL PLATE BEAM GUARD RAIL, SINGLE RAIL (628001)

I-80				
LT. STA. 725+00	TO 726+25	=	125.0	LIN.FT.
RT. STA. 759+10	TO 761+97.5	=	287.5	LIN.FT.
LT. STA. 759+77.5	TO 762+65	=	287.5	LIN.FT.
RT. STA. 790+00	TO 790+75	=	75.0	LIN.FT.
TOTAL		=	775	LIN.FT.

STEEL PLATE BEAM GUARD RAIL, DOUBLE RAIL (628002)

I-80				
RT. STA. 758+85	TO 759+10	=	25	LIN.FT.
LT. STA. 762+65	TO 762+90	=	25	LIN.FT.
TOTAL		=	50	LIN.FT.

TERMINAL SECTION, SINGLE RAIL (X62801)

I-80				
LT. STA. 724+75	TO 725+00	=	1	EACH
RT. STA. 726+25	TO 726+50	=	1	EACH
LT. STA. 759+52.5	TO 759+77.5	=	1	EACH
RT. STA. 762+65	TO 762+90	=	1	EACH
RT. STA. 789+75	TO 790+00	=	1	EACH
C.H.-13				
LT. STA. 23+96	TO 24+21	=	1	EACH
RT. STA. 22+71.5	TO 22+96.5	=	1	EACH
TOTAL		=	7	EACH

REMOVAL AND REINSTALLATION OF EXISTING STEEL PLATE BEAM GUARD RAIL (628014)

I-80				
LT. STA. 724+75	TO 726+50	=	175	LIN. FT.
C. H. 13				
LT. STA. 15+93	TO 16+93	=	100	LIN. FT.
RT. STA. 15+81	TO 16+81	=	100	LIN. FT.
LT. STA. 19+36	TO 23+74	=	438	LIN. FT.
RT. STA. 19+25	TO 23+00	=	375	LIN. FT.
TOTAL		=	1188	LIN. FT.

SCHEDULE OF QUANTITIES

REVISIONS		
No.	DATE	INITIALS
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.-412 SECTION 50-5 HB & 50-2 HB-3(R)
LASALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY	DATE
M.H.	1/76
CHECKED BY	DATE
W.M.C.	1/76
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	10A

CUSHING & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5HB & 50-2HB-3(R)	LA SALLE	156	11
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

EARTHWORK SUMMARY

	LOCATION	THEORETICAL CUT CU.YDS. (1)	THEORETICAL FILL CU.YDS. (2)	TOP SOIL SOURCES IN CUT CU.YDS. (3)	TOP SOIL SOURCES IN FILL CU.YDS. (4)	TOP SOIL REQUIRED IN CUT CU.YDS. (5)	TOP SOIL REQUIRED IN FILL CU.YDS. (6)	ADJUSTED CUT CU.YDS. (7)	ADJUSTED FILL CU.YDS. (8)	EXCESS EXCAVATION CU.YDS. (9)	ADDITIONAL EXCAVATION REQUIRED CU.YDS. (10)	TOP SOIL PLACEMENT SQ.YDS. (11)	MATERIALS SOURCE REFERENCE
SOUTH OF I-80	I-80 729+20.32 - 790+70	4,912	8,330	0	0	380	388	5,292	7,942	0	4,776	6,912	(1) (11)
	F.A.-412 1021+90 -1027+80	0	107,326	0	0	0	0	0	107,326	0	136,059	0	(4) (8) (9) (10)
	RAMP "B" 157+60.08- 160+00	0	130	0	0	0	0	0	130	0	165	0	(12)
	RAMP "C" 234+00 - 237+03.38	941	301	0	0	0	0	941	301	559(1)	0	0	
	LOOP "B" 25+00 - 28+51 44+60 - 46+67.75	11	28,183	0	0	0	0	11	28,183	0	35,717	0	(2) (10) (11)
	LOOP "C" 50+00 - 53+00 70+30 - 73+81.95	26	26,019	0	0	0	0	26	26,019	0	32,959	0	(11)
	INFIELD "B-2" 1023+35 -1026+71	0	3,856	0	0	0	0	0	3,856	0	4,888	0	(11) (12)
	INFIELD "C-2" 1023+60 -1017+20	0	1,525	0	0	0	0	0	1,525	0	1,933	0	(11)
	C.H.-13 CONE	583	0	0	0	0	0	583	0	583 (2)			
	SUB-TOTAL (SOUTH - I-80)	6,473	175,670	0	0	380	388	6,853	175,282	1,142	216,497	6,912	
NORTH OF I-80	I-80 729+20.32 - 779+29.44	18,463	3,149	0	0	0	0	18,463	3,149	14,471 (3)	0	0	
	DETOUR CONSTRUCTION 0+00 - 790+70	59,650	7,784	0	0	0	0	59,650	7,784	49,782 (4)	0	0	
	DETOUR REMOVAL 0+00 - 24+00	4,148	12,479	0	0	0	0	4,148	12,479	0	11,672	0	(12)
	DETOUR REMOVAL 780+00 - 790+70	352	124	0	0	115	90	467	34	424 (5)	0	1,845	
	CROSSOVER #1 CONSTRUCTION 720+68 - 735+50	457	519	0	0	0	0	457	519	0	201	0	(3) (13)
	CROSSOVER #1 REMOVAL 720+68 - 735+50	588	207	0	0	0	0	588	207	326 (6)	0	0	
	CROSSOVER #2 CONSTRUCTION 764+44.28 - 779+09.17	403	589	0	0	0	0	403	589	0	344	0	(3)
	CROSSOVER #2 REMOVAL 764+44.28 - 779+09.17	881	186	0	0	0	0	881	186	645 (7)	0	0	
	RAMP "A" 107+60.08 - 134+93.51	36,308	228	0	0	0	0	36,308	228	36,019 (8)	0	0	
	LOOP "A" 0+00 - 8+70(BK) 13+50 - 19+45	26,686	244	0	0	0	0	26,686	244	26,377 (9)	0	0	
	INFIELD "A-1" 1036+41 -1042+77	40,760	0	0	0	0	0	40,760	0	40,760 (10)	0	0	
	INFIELD "A-3" 744+95 - 753+04	57,519	0	0	0	0	0	57,519	0	57,519 (11)	0	0	
	RAMP "D" 257+60.08 - 267+46	26,054	0	0	0	0	0	26,054	0	26,054 (12)	0	0	
	LOOP "D" 95+50 - 97+01.57	285	84	0	0	0	0	285	84	179 (14)	0	0	
	F.A.-412 1029+13 -1051+85	6,075	24,959	0	0	0	0	6,075	24,959	0	25,566	0	(3) (5) (6) (7) (12) (13) (14)
	C.H.-13 CONE	583	0	0	0	0	0	583	0	583 (13)	0	0	
	SUB-TOTAL (NORTH I-80)	279,212	50,552	0	0	115	90	279,327	50,462	253,139	37,784	1,845	
	JOB TOTAL	285,685	226,222	0	0	495	478	286,180	225,744	254,281	254,281	8,757	

	CU.YDS.	LOCATION OF EXCESS EXCAVATION	LOCATION OF PLACEMENT
(1)	559	RAMP "C"	I-80 (SOUTH)
(2)	583	C.H.-13 (SOUTH CONE)	LOOP "B"
(3)	75	I-80 (NORTH)	CROSSOVER #1 CONSTRUCTION
	344	I-80 (NORTH)	CROSSOVER #2 CONSTRUCTION
	14,052	I-80 (NORTH)	F.A.-412 (NORTH)
(4)	49,782	DETOUR CONSTRUCTION	F.A.-412 (SOUTH)
(5)	424	DETOUR REMOVAL	F.A.-412 (NORTH)
(6)	326	CROSSOVER #1 REMOVAL	F.A.-412 (NORTH)
(7)	645	CROSSOVER #2 REMOVAL	F.A.-412 (NORTH)
(8)	36,019	RAMP "A"	F.A.-412 (SOUTH)
(9)	26,377	LOOP "A"	F.A.-412 (SOUTH)
(10)	23,881	INFIELD A-1	F.A.-412 (SOUTH)
	16,879	INFIELD A-1	LOOP "B"
(11)	18,255	INFIELD A-3	LOOP "B"
	4,217	INFIELD A-3	I-80 (SOUTH)
	32,959	INFIELD A-3	LOOP "C"
	1,933	INFIELD A-3	INFIELD "C-2"
	155	INFIELD A-3	INFIELD "B-2"
(12)	4,733	RAMP "D"	INFIELD "B-2"
	165	RAMP "D"	RAMP "B"
	9,483	RAMP "D"	F.A-412 (NORTH)
	11,673	RAMP "D"	DETOUR REMOVAL
(13)	126	C.H.-13 (NORTH CONE)	CROSSOVER #1 CONSTRUCTION
	457	C.H.-13 (NORTH CONE)	F.A.-412 (NORTH)
(14)	179	LOOP "D"	F.A.-412 (NORTH)

COLUMN 7 = 1 - 3 + 5
COLUMN 8 = 2 + 4 - 6
COLUMN 9 OR 10 = (8 x SHRINKAGE FACTOR) - 7
COLUMN 11 = (5 + 6) x 9 SQ.YD./CU.YD.

SHRINKAGE FACTOR = 1.2677%

NOTE: THE PAVEMENT REMOVED FROM THE I-80 DETOUR AND CROSSOVERS SHALL BE PLACED IN THE F.A.-412 EMBANKMENT AREA AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID FOR AS PAYMENT REMOVAL AND IS THEREFOR NOT INCLUDED IN THE EARTHWORK SUMMARY ON THIS SHEET. (SEE SPECIAL PROVISIONS FOR DETOUR AND CROSSOVER PAVEMENT REMOVAL).

HEDGE REMOVAL (201006)

F.A.-412 325' RT. STA. 1030+15 TO 230' RT. STA. 1040+00 = 990 LIN.FT.
F.A.-412 450' RT. STA. 1019+80 TO 375' RT. STA. 1027+50 = 800 LIN.FT.

SEEDING	642002 SEEDING CLASS II	642003 SEEDING CLASS III
LOCATION	ACRE	ACRE
I-80 (MEDIAN) STA. 720+00 - 739+00 & STA. 759+00 - 780+00	1.7 1.9	
I-80 (RT) STA. 729+20.32 - 735+66.77	0.7	
RAMP B (RT) STA. 150+00.00 - 156+60.08	0.7	
I-80 (RT) STA. 780+20.26 - 790+70.00	1.2	
I-80 (LT) STA. 723+64.10 - 739+70.06	2.3	
I-80 (LT) STA. 780+00.00 - 787+00.00	1.3	
I-80 (LT) STA. 787+00.00 - 790+70.00	0.5	
CO.HWY.13(RT) STA. 10+00.00 - I-80 A.C. LINE	1.4	0.9
(RT) I-80 A.C. LINE - 21+50	0.9	0.2
(LT) STA. 16+50 - I-80 A.C. LINE	0.1	
(LT) I-80 A.C. LINE - 21+50	0.1	0.2
TOTAL	12.8	1.3
NITROGEN FERTILIZER NUTRIENTS (642004)	1,128 LBS.	
PHOSPHORUS FERTILIZER NUTRIENTS (642005)	2,256 LBS.	
POTASSIUM FERTILIZER NUTRIENTS (642006)	1,128 LBS.	
MULCH (643001)	28.2 TON	
EMULSIFIED ASPHALT (643005)	2820 GALLON	

WOVEN WIRE FENCE, 4' (630001)

STATION	TO	STATION	LIN.FT.
LT. 996+28.91 (F.A.-412)	RT. 737+94.00 (I-80)		= 4312.23
RT. 996+56.43 (F.A.-412)	RT. 786+00.00 (I-80)		= 4517.28
LT. 737+15.00 (I-80)	LT. 1056+23.52 (F.A.-412)		= 3750.83
LT. 787+00.00 (I-80)	RT. 1056+54.81 (F.A.-412)		= 3978.81
* LT. 728+04.54 (I-80)	LT. 733+00.00 (I-80)		= 495.46
	TOTAL		17,054

* REPLACEMENT OF EXISTING FENCE REMOVED FOR THE I-80 DETOUR ROAD.

SCHEDULE OF QUANTITIES

REVISIONS		
No.	DATE	INITIALS
1		
2		
3		
4		
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8		
9		
10		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
F.A.- 412 SECTION 50-5HB & 50-2HB-3(R)
LA SALLE COUNTY
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE M.H. 1-76
CHECKED BY DATE M.P. 1-76
BOOK NUMBER
PROJECT NO.
SHEET NO. 11

CUMMINS & COMPANY

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA - 412	50-5HBS 50-2HB-3(R)	LaSALLE	156	12
FED. AID DIST. NO.	ILLINOIS	PROJECT		

PRINCIPAL AREA OF EXCAVATION

X-1
X-2
X-3
X-4

PRINCIPAL AREA OF EMBANKMENT

(SEE SPECIAL PROVISIONS)
EARTHWORK

ANNE V LANNEN, HEIRS OF
JOHN F LANNEN, ET AL
WILLIAM & KATHERINE REMENIH
WALTER BRANNAN
HELEN K WEILAND, ESTATE OF
RALPH & LENA DERANGO
CARLO DERANGO
FRANK DERANGO, JR
FRANK & MARGARET DERANGO
NORMAN A SMALL
ROBERT & CATHERINE PEZANOSKI

℄ RAMP "A"
℄ RAMP "B"
℄ RAMP "C"
℄ RAMP "D"
℄ LOOP "A"
℄ LOOP "B"
℄ LOOP "C"
℄ LOOP "D"
℄ I-80 DETOUR
I-80
FA-412

12" PIPE CULVERT
5'X2' R C BOX CULVERT EXT
TEMPORARY CONSTRUCTION EASEMENT
36" PIPE CULVERT
54" PIPE CULVERT
24" PIPE CULVERT EXT
6" STORM SEWER
2" PIPE DRAINS
30" PIPE CULVERT
42" PIPE CULVERT
7'X4' R C BOX CULVERT
8" STORM SEWER
12" STORM SEWER
48" PIPE CULVERT
PERMANENT EASEMENT
EXISTING PERMANENT EASEMENT

GENERAL LAYOUT — EARTHWORK

REVISIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

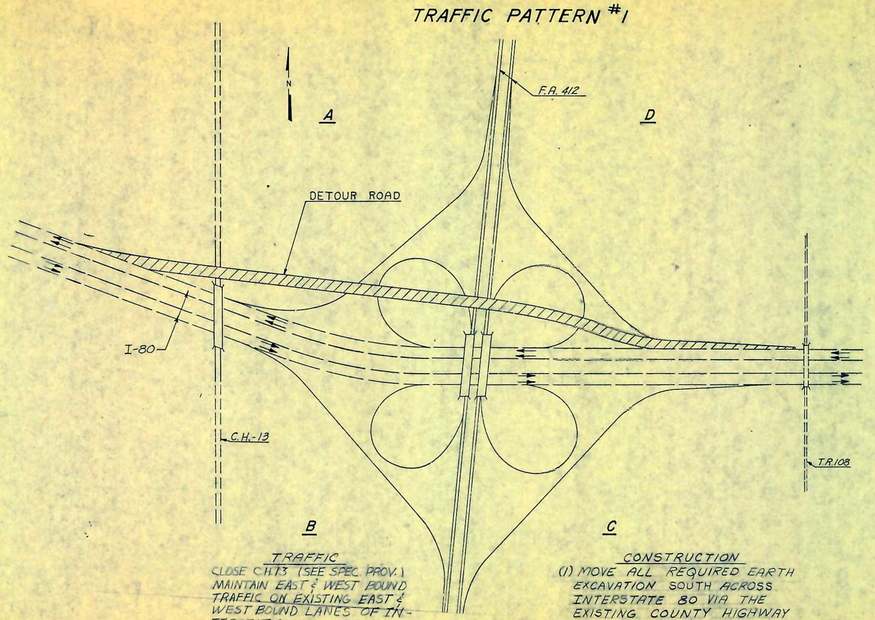
FA - 412 SEC 5C - 5HBS 50-2HB-3(R)
LaSALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE H.H. 11-75
CHECKED BY DATE MWP 12-75
BOOK NUMBER
PROJECT NO
SHEET NO 12

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.412	50-5HB 50-2HB-3(B)	LASALLE	156	13
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

TRAFFIC PATTERN #1



B

TRAFFIC

CLOSE C.H.13 (SEE SPEC. PROV.) MAINTAIN EAST & WEST BOUND TRAFFIC ON EXISTING EAST & WEST BOUND LANES OF INTERSTATE 80.

C

CONSTRUCTION

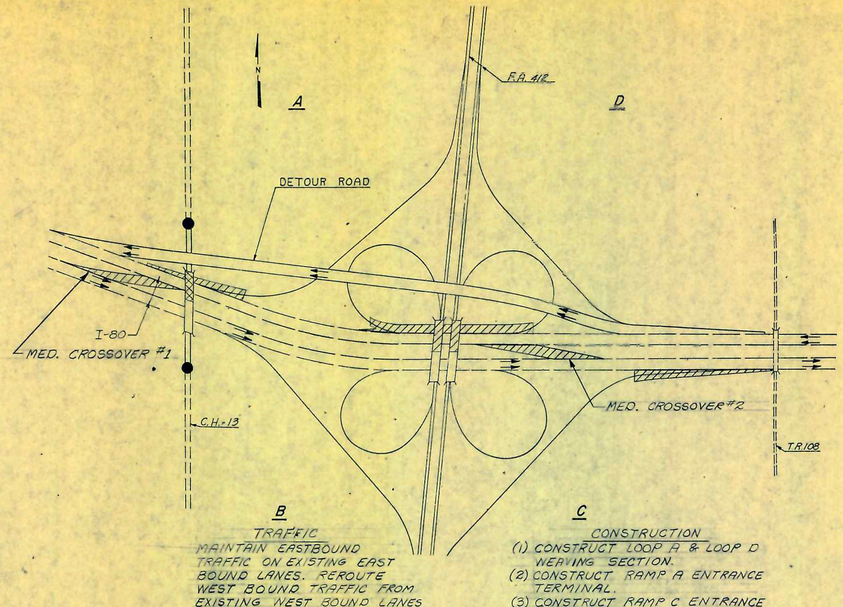
(1) MOVE ALL REQUIRED EARTH EXCAVATION SOUTH ACROSS INTERSTATE 80 VIA THE EXISTING COUNTY HIGHWAY 13 STRUCTURE.

(2) BUILD INTERSTATE 80 DETOUR COMPLETE.

NOTE #1

FOR TRAFFIC CONTROL FOR I-80 DETOUR & MEDIAN X-OVERS SEE SHEETS 73 & 74, ALSO STD. 2316 MOD. (FOA STD. 2316 MOD. SEE SPEC. PROV.)

TRAFFIC PATTERN #2



B

TRAFFIC

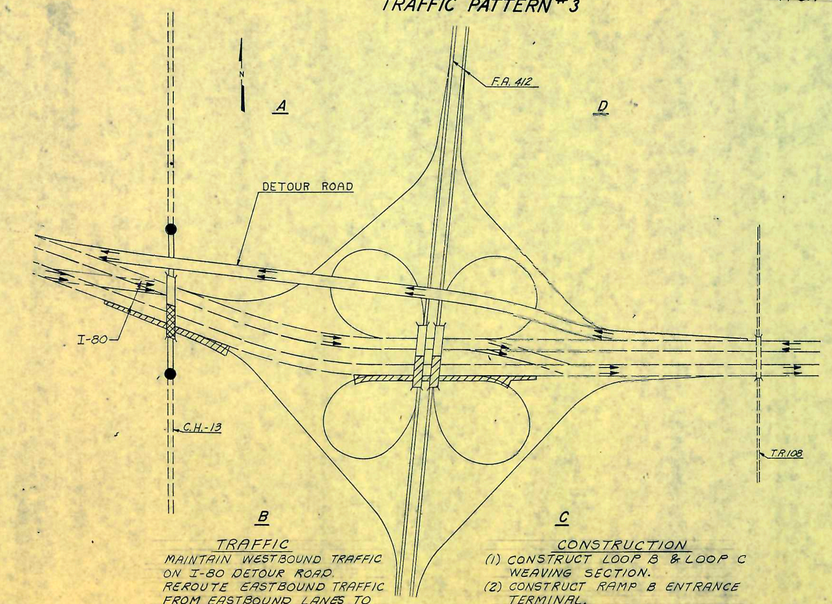
MAINTAIN EASTBOUND TRAFFIC ON EXISTING EAST BOUND LANES. REROUTE WEST BOUND TRAFFIC FROM EXISTING WEST BOUND LANES TO NEW DETOUR ROAD. CLOSE COUNTY HIGHWAY 13. NOTE #1

C

CONSTRUCTION

(1) CONSTRUCT LOOP A & LOOP D WEAVING SECTION.
(2) CONSTRUCT RAMP A ENTRANCE TERMINAL.
(3) CONSTRUCT RAMP C ENTRANCE TERMINAL.
(4) REMOVE NORTH HALF OF COUNTY HIGHWAY 13 STRUCTURE
(5) CONSTRUCT NORTH ABUTMENTS OF F.A. 412 TWIN STRUCTURE & C.H 13 STRUCTURE
(6) CONSTRUCT MEDIAN CROSSOVERS #1 & 2
(7) SET STRUCTURAL STEEL NORTH ½ C.H. 13 STRUCTURE
(8) SET CONCRETE BEAMS NORTH ½ F.A 412 STRUCTURES
(9) FORM DECKS NORTH ½ C.H. 13 & FA 412 STRUCTURES
(10) FINISH STRUCTURES (POURING DECK)

TRAFFIC PATTERN #3



B

TRAFFIC

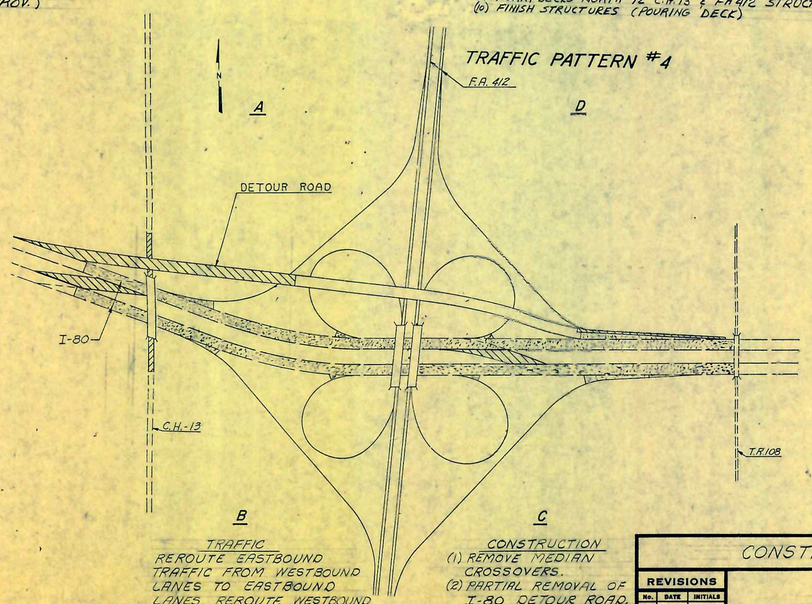
MAINTAIN WESTBOUND TRAFFIC ON I-80 DETOUR ROAD. REROUTE EASTBOUND TRAFFIC FROM EASTBOUND LANES TO WESTBOUND LANES VIA THE TWO MEDIAN CROSSOVERS. NOTE #1

C

CONSTRUCTION

(1) CONSTRUCT LOOP B & LOOP C WEAVING SECTION.
(2) CONSTRUCT RAMP B ENTRANCE TERMINAL.
(3) REMOVE SOUTH HALF OF COUNTY HIGHWAY 13 STRUCTURE
(4) CONSTRUCT SOUTH ABUTMENTS OF F.A. 412 TWIN STRUCTURE & C.H. 13
(5) SET STRUCTURAL STEEL SOUTH ½ C.H.13
(6) SET CONCRETE BEAMS SOUTH ½ FA 412
(7) FORM DECKS ON CH 13 & FA 412 STRUCTURES

TRAFFIC PATTERN #4



B

TRAFFIC

REROUTE EASTBOUND TRAFFIC FROM WESTBOUND LANES TO EASTBOUND LANES. REROUTE WESTBOUND TRAFFIC FROM I-80 DETOUR ROAD TO WESTBOUND LANES.

C

CONSTRUCTION

(1) REMOVE MEDIAN CROSSOVERS.
(2) PARTIAL REMOVAL OF I-80 DETOUR ROAD.
(3) GRADE & SURFACE AND OPEN TO TRAFFIC COUNTY HIGHWAY 13
(4) RESURFACING OF INTERSTATE 80.

LEGEND

- CONSTRUCTION
- REMOVAL
- CONSTRUCTION & REMOVAL
- RESURFACING
- ROAD CLOSURE

CONSTRUCTION TRAFFIC PATTERN

REVISIONS		
No.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STATE OF ILLINOIS
DEPT. OF TRANSPORTATION

F.A. 412 — SEC. 50-5HB & SEC. 50-2HB-3(B)
LASALLE — COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE	T.J.E 1-76
CHECKED BY DATE	W.C. 1-76
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	13

CUSHING & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA -412	50-5HB & 50-2HB-3(R)	LaSALLE	156	14
STA. 997+45.00	TO STA. 1020+00			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

FA -412

SEC. 1, T. 33 N., R. 1 E., 3RD. P.M.

I. Pin Above Ground
Set Punched Iron Pin
57.50'
℄ FA-412
24.40'
Set Punched Iron Pin
P.O.T. STA. 996+48.75

I. Pin Above Ground
Set Punched Iron Pin
31.52'
℄ FA-412
29.56'
Set Punched Iron Pin
P.O.T. STA. 1016+44.13

BEGIN PROJECT
SEC. 50-5 STA. 997+45.00

996+28.91
150' LT.

996+42.67 P.L.

P.O.T. STA. 996+48.75

84°45'28"

STATION EQUATION
STA. 997+46.79 (F.A. 412)
STA. 195+20.58 (RAMP "B")

996+56.43
150' RT.

STATION EQUATION
STA. 1000+05.99 (F.A. 412)
STA. 200+00.00 (RAMP "C")

P-1 (R.C.C.P.)
STA. 1001+00
36" X 178'
U.S.F.L. 87' RT. ELEV. 657.90
D.S.F.L. 91' LT. ELEV. 657.40
D.A. = 8 AC., Q_{50} = 22 cfs, Q_{100} = 31 cfs

INLET BOX STD. 2248 - 2 EACH

P-1 (R.C.C.P.)
STA. 1007+45
12" X 50'
U.S.F.L. 72' LT. ELEV. 661.30
D.S.F.L. 122' LT. ELEV. 659.10

INLETS, TYPE A, TYPE I FRAME OPEN LID (24" DEPTH) - 1 EACH
GRATE ELEV. 663.90

6" FIELD TILE REPD. LOC.

1003+62 P.L.

STORM SEWERS, TYPE 2
STA. 1002+30
6" X 365'

ANNE V. LANNEN, HEIRS OF

P-1
24" X 10'
U.S.F.L. ELEV. 658.60
D.S.F.L. ELEV. 658.40

INLET BOX STD. 2357 - 1 EACH
STA. 1001+35
MED. ELEV. 658.75

SPEC. FIELD TILE HDWL.
SEE SHEET 42

6" FIELD TILE REPD. LOC.

STATION EQUATION
STA. 1007+96.53 (F.A. 412) =
STA. 184+70.63 (RAMP "B")

P.T. STA. 184+70.63

1006+00
150' LT.

1006+00
150' RT.

P.C. STA. 207+60.08

SPEC. FIELD TILE HDWL.
SEE SHEET 42

STATION EQUATION
STA. 1007+65.00 (F.A. 412) =
STA. 207+60.08 (RAMP "C")

P-1 (R.C.C.P.)
STA. 1004+20
12" X 48'
U.S.F.L. 72' RT. ELEV. 660.60
D.S.F.L. 120' RT. ELEV. 659.00

INLETS, TYPE A, TYPE I FRAME OPEN LID (24" DEPTH) - 1 EACH
GRATE ELEV. 663.20

1/4 SECTION LINE PL

6" FIELD TILE REPD. LOC.

P.C. STA. 179+38.26

TO BE ABANDONED WITHIN R.O.W. (SEE SPECIAL PROVISIONS)

1010+50
235' LT.

℄ RAMP "B"

CURVE #31

95°20'31"

90.00'

N. 5°-26'-04.5" E

109.28'

CURVE #35

℄ RAMP "C"

90°

1011+33.06
336.15' RT.

MARY LANNEN, ET AL

P.T. STA. 212+17.11

SPEC. FIELD TILE HDWL.
SEE SHEET NO. 42

1016+40.16 P.L.

P.O.T. STA. 1016+44.13

95°14'32"

℄ F.A.-412

P-2 (R.C.C.P.)
STA. 1014+00
24" X 116' *
U.S.F.L. 3' LT. ELEV. 661.50
D.S.F.L. 117' LT. ELEV. 661.20
* INCLUDES 2' RISER

END SECTIONS, 24" - 1 EACH

R.C. PIPE TEE 24" P - 24" R - 1 EACH
WITH PLUG

MED. INLET (2250) - 1 EACH
MED. ELEV. 666.61

℄ LOOP "B"

℄ LOOP "C"

WILLIAM & KATHERINE REMENIH
P.L.

1/4 SECTION LINE
P.L.

PERMANENT SURVEY MARKERS, TYPE 2
P.O.T. STA. 1004+00 ℄ F.A. -412 - 1 EACH

LEGEND

- PERMANENT SURVEY MARKER
- WOVEN WIRE FENCE
- WOVEN WIRE GATE
- DITCH CHECK
- SPECIAL FIELD TILE HEADWALL
- EROSION CONTROL METHOD
- DRAINAGE ARROW
- EXISTING FIELD TILE
- EXISTING FIELD TILE TO BE ABANDONED
- 660.0 PROPOSED STORM SEWER
- ELEVATION OF EXISTING SWALE
- PROPOSED LEFT DITCH
- PROPOSED MEDIAN DITCH
- PROPOSED RIGHT DITCH

PLAN
SURVEYED:
PLOTTED:
NOTE BOOK
ALIGNMENT CHECKED:
No. OF MAPS CREATED:
BY: LBW / VEA
DATE: 8-22

SEC. 1, T. 33 N., R. 1 E., 3RD. P.M.

B.M. "2": PK. NAIL IN 18" DEAD TREE AT FENCE INTERSECTION. 650' RT. STA. 997+10, ELEV. 657.30

B.M. "3": PK. NAIL IN 36" FORKED ELM TREE 225' EAST OF N-S FENCE. 800' RT. STA. 1003+80, ELEV. 667.13

B.M. "4": PK. NAIL IN 72" FORKED ELM TREE 150' EAST OF N-S FENCE. 600' RT. STA. 1017+00, ELEV. 653.72

FOR INFORMATION ONLY

PROFILE GRADE RAMP "B"

PROFILE GRADE RAMP "C"

P.V.I. STA. 1011+00
ELEV. = 664.88
L.V.C. = 400'

+1.94%

+0.20%

PROFILE GRADE ALONG MEDIAN EDGE OF PAV'T.

EXISTING GROUND ALONG ℄ FA.-412

Q_{50} H.W.E. = 660.0
Q_{100} H.W.E. = 660.5

B=2.00

-0.27%

-0.25%

TEMP. MED. DITCH +0.21%

LT. DITCH +0.20%

RT. DITCH +0.23%

LT. DITCH +0.31%

+.85 MED. 659.50
+.85 LT. 659.34
+.85 RT. 659.04

+.75 MED. 659.30
LT. 657.40
RT. 657.90

LT. 658.00

+.65 RT. 659.84
+.96 LT. 659.24

PROFILE
SURVEYED:
PLOTTED:
NOTE BOOK
GRADES CHECKED:
No. OF MAPS CREATED:
STRUCTURE NOTATIONS CHECKED:
BY: CAW / LJW / MJH
DATE: 7-22 / 8-22

690 680 670 660 650

990 1 2 3 4 995 6 7 8 9 1000 1 2 3 4 1005 6 7 8 9 1010 1 2 3 4 1015 6 7 8 9 1020

HOMER L. CHASTAIN & ASSOCIATES, CONSULTING ENGINEERS — DECATUR, ILLINOIS

PLATE 1 PLAN-PROFILE B P R STANDARD
EUGENE DIETZGEN CO. CHICAGO NEW YORK

F.A. -412

Printed in U.S.A. On ARKWRIGHT Tracing Cloth

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA -412	50-5HB & 50-2HB-3(R)	LaSALLE	156	15
STA. 1020+00	TO STA. 1050+00			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

FA. -412

SEC. 1, T. 33N., R.1E., 3RD. P.M.

SEC. 36, T. 34N., R.1E., 3RD. P.M.

WILLIAM & KATHERINE REMENIH

CARLO DERANGO

STATE OF ILLINOIS

WALTER BRANNAN

NORMAN A. SMALL

I Pin Above Ground
Set Punched Iron Pin
℄ FA-412
℄ I-80
Set Punched Iron Pin

Conc. Face Med. Drain
I Pin Above Ground
Set Punched Iron Pin
℄ FA-412
℄ Med. I-80 & FA-412
I. Pin Buried 8"

I Pin Above Ground
℄ FA-412
Conc. N.℄ B.C. in 8" Hedgetree

STATION EQUATION
STA. 1025+48.63 (FA. 412)
STA. 25+00.00 (LOOP "B")

P.C.C. STA 29+90.92

P.C. STA 25+00.00

STRUCTURE 50-5HB

P.O.T. STA. 1027+56.60

P.C. STA 0+00.00

STATION EQUATION
P.O.T. STA. 1028+55.04 (FA-412)
P.O.T. STA. 760+96.98 (I-80)

P.O.T. STA. 1027+56.60

P.T. STA. 73+81.95

STATION EQUATION
STA 1025+66.20 (FA. 412)
STA. 73+81.95 (LOOP "C")

P.C. STA 50+00

P.C.C. STA. 69+06.88

℄ LOOP "C"

P.L. 1/4 SEC. LINE

P.O.T. STA. 1028+55.04 (FA-412)= P.O.T. STA. 1030+12.62

P.C.C. STA 19+08.42

STATION EQUATION
STA. 1031+43.40 (F.A. 412)
STA. 24+06.83 (LOOP "A")

P.T. STA 24+06.83

STATION EQUATION
P.O.T. STA. 1028+55.04 (FA-412)
P.O.T. STA. 760+96.98 (I-80)

P.O.T. STA. 1030+12.62

℄ I-80 DETOUR

STATION EQUATION
STA. 1031+63.37 (FA. 412)=
STA. 75+00.00 (LOOP "D")

BRIDGE APPROACH SHOULDER PAVEMENT
SEE SHEET 23 & 29

P.C.C. STA 80+13.47

℄ LOOP "D"

P.T. STA. 97+01.57

℄ LOOP "A"

P-2 (R.C.C.P.)
STA. 1043+50
24"X 126' (INCLUDES 15' RISER)
U.S.F.L. 3' LT. ELEV. 651.20
D.S.F.L. 129' LT. ELEV. 650.90

END SECTIONS, 24"-1 EACH

R.C. PIPE TEE, 24"P-24"R-1 EACH
WITH PLUG

MED. INLET: (2250)-1 EACH
MED. ELEV. 655.80

P.O.T. STA. 1042+56.52

PIPE CULVERT
SEE SHEET 22

PIPE CULVERT

1045+00
265' LT.

℄ RAMP "A"

STATION EQUATION
STA. 1047+17.47 (FA. 412)
STA. 107+60.00 (RAMP "A")

P.C. STA 107+60.08

1051+00
175' LT.

6" FIELD TILE
REPD. LOC.

6" FIELD TILE
REPD. LOC.

PIPE CULVERT
SEE NOTE BELOW

1050+00
165' RT.

PT STA 283+76.49

STATION EQUATION
STA. 1049+15.45 (F.A. 412)
STA. 283+76.49 (RAMP "D")

1047+00
225' RT.

STORM SEWERS, TYPE 3
STA. 1047+25
6" X 650'

1044+78.80
347.10' RT.

P.C. STA 278+35.36

℄ RAMP "D"

STRUCTURE 50-5HB
TWIN TWO SPAN SEPARATION STRUCTURES CARRYING F.A.-412 OVER I-80 AT STATION 1028+55.04 (F.A.-412) CONSISTING OF TWO SPAN CONTINUOUS PRESTRESSED CONCRETE I-BEAMS AND CONCRETE DECK ON CONCRETE PIERS, VAULTED ABUTMENTS, AND PILE APPROACH BENTS, 2 SPANS AT 105'-6" AND 100'-6" EACH.

PERMANENT SURVEY MARKERS, TYPE 2
P.O.T. STA. 1026+00 ℄ F.A.-412 - 1 EACH
P.O.T. STA. 1032+00 ℄ F.A.-412 - 1 EACH
TOTAL 2 EACH

PROFILE GRADE
LOOP "B"
PROFILE GRADE
LOOP "C"

P.V.I. STA. 1028+50
ELEV. =698.83
L.V.C. =1800'

B.M.# 5: P.K. NAIL IN PP SOUTH OF FRONTAGE RD. 400' LT. STA. 1029+20 (F.A.-412) ELEV. 670.20

B.M.# 5A-1 CONC. NAIL IN FENCE POST 400' LT STA. 1042+30 E LEV. 654.34

B.M.# 5A-2, 60 COMMON NAIL IN 3 RD PP WEST OF HEDGE ROW & ON SOUTH SIDE OF FRONTAGE ROAD 109' LT. STA 759+94 (I-80) ELEV. 662.94

P-1 (R.C.C.P.)
STA. 1049+65
12"X 26'
U.S.F.L. 172' RT. ELEV. 644.10
U.S.F.L. 98' RT. ELEV. 642.00

INLETS, TYPE A, TYPE 1 FRAME OPEN LID (24" DEPTH) - 1 EACH
GRATE ELEV. 646.70
CONCRETE COLLAR
SEE SHEET

P-1 (R.C.C.S.P.)
STA. 1049+65
12"X58' *
U.S.F.L. 98' RT. ELEV. 642.00
U.S.F.L. 156' RT. ELEV. 632.50
*INCLUDES 2-10° BENDS.
SPEC. FIELD TILE HDWL
SEE SHEET 40

PROFILE GRADE ALONG MEDIAN EDGE OF PAV'T.

PROFILE GRADE
RAMP "A"

PROFILE GRADE
RAMP "D"

PROFILE GRADE
LOOP "A"
EXISTING GROUND
ALONG ℄ F.A.-412

℄ DETOUR

EMBANKMENT (REMOVED DETOUR PAVEMENT) SEE SPECIAL PROVISIONS

STRUCTURE 50-5HB

MED. DITCH +1.21%
PAVING OMISSION
STA. 1027+21.17 TO 1029+75.17 (S.B. LANES)
STA. 1027+29.91 TO 1029+83.91 (N.B. LANES)

MED. DITCH -1.75%

MED. DITCH -3.23%

MED. DITCH +1.40%

LT. DITCH -4.40%

RT. DITCH -0.22%

LT. DITCH -0.31%

+1.94%

-2.46%

EARTHWORK INCLUDED IN SEC. 50-5HB & 50-2HB-3(R)

NOTES SHOWN IN THIS MANNER PERTAIN TO SEC. 50-5HB & 50-2HB-3(R)

EARTH EXCAVATION = 0 CU. YDS.
EMBANKMENT = 107,326 CU. YDS.*
*OBTAIN: 49,782 CU. YDS. FROM DETOUR CONST.
36,019 CU. YDS. FROM RAMP "A"
26,377 CU. YDS. FROM LOOP "A"
23,881 CU. YDS. FROM INFIELD "A-1"

EARTH EXCAVATION = 6,075 CU. YDS.
EMBANKMENT = 24,959 CU. YDS.*
*OBTAIN: 14,052 CU. YDS. FROM I-80 (NORTH)
424 CU. YDS. FROM DETOUR REMOVAL
326 CU. YDS. FROM CROSSOVER #1 REMOVAL
645 CU. YDS. FROM CROSSOVER #2 REMOVAL
9,483 CU. YDS. FROM RAMP "D"
457 CU. YDS. FROM C.H. -13 (NORTH)
179 CU. YDS. FROM LOOP "D"

PLAN NOTE BOOK No. 1

SURVEYED. PLOTTED. GRADES CHECKED. R.O.W. STAKED. R.O.W. CHECKED. STRUCTURE NOTATIONS CHECKED.

DATE 7-7-72 | BY LAW, CAWLI, TTT, S. W.

Printed in U.S.A. On ARKWRIGHT Tracing Cloth

HOMER L. CHASTAIN & ASSOCIATES, CONSULTING ENGINEERS — DECATUR, ILLINOIS

PLATE 1 PLAN-PROFILE B P R STANDARD
EUGENE DIETZGEN CO. CHICAGO NEW YORK

F.A.-412

Printed in U.S.A. On ARKWRIGHT Tracing Cloth

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5 HB, 50-2 HB-3(R)	LASALLE	156	16
STA. 730+00		TO STA. 760+00		
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SEC. 35, T. 34N., R.1.E., 3RD P.M.

SEC. 36, T. 34N., R.1.E., 3RD P.M.
WALTER BRANNAN

SEC. 2, T. 33N., R.1.E., 3RD P.M.

SEC. 1, T. 33N., R.1.E., 3RD P.M.
WILLIAM & KATHERINE REMENIH

728 + 04.54
125' LT.

STATION EQUATION
STA. 729+20.32 (I-80) =
STA. 145+43.46 (RAMP "A")

TEMP. CONST. EASEMENT
735+52.04
300.02' LT.

PIPE CULVERT (EXISTING)
SEE SHEET 20

PIPE CULVERT
SEE SHEET 22

S 70° 07' 39.5" E

70° 10' 08"

℄ MEDIAN CROSSOVER #1
SEE SHEET 20

EXISTING R.O.W.

STATION EQUATION
STA. 735+66.77 (I-80) =
STA. 150+00.00 (RAMP "B")

STATION EQUATION
P.O.T. STA. 737+35.23 (I+80) =
P.O.T. STA. 18+08.38 (C.H.-13)

BEGIN I-80 RESURFACING
STA. 729+20.32

REMOVE EXISTING GUARD RAIL LEFT & RIGHT
STR. 50-2HB-3(R)

N 0° 12' 02.2" E

739+36.50
293.10' RT.
14+64.38
89.90' RT.

740+16.38
264.29' RT.
14+64.32
175' RT.

SEC. 35, T. 34N., R.1.E.
SEC. 2, T. 33N., R.1.E.

P-1 (R.C.C.P.)
STA. 739+80
12" X 58'
U.S.F.L. 52' RT. ELEV. 639.50
D.S.F.L. 110' RT. ELEV. 636.00

INLETS, TYPE A, TYPE 1 FRAME, OPEN LID (24" DEPTH) - 1 EACH
GRATE ELEV. 642.10

END SECTIONS, 12" - 1 EACH

ILL. BELL TEL. CO. BURIED CABLE

℄ CH-13

R.C. BOX CULVERT (EXTENSION)
LT. STA. 740+47
5' X 2' X 28'-0"
U.S.F.L. 106'-9" LT. ELEV. 637.50
D.S.F.L. 78' 9" LT. ELEV. 636.90
FOR DETAILS SEE SHEET 43

TEMP. CONST. EASEMENT

1033 + 10.78
1447.59 LT.

746 + 27.48
533.87 LT.

745 + 53.44
448.66 LT.

STATION EQUATION
STA. 739+70.06 (I-80) =
STA 134+93.51 (RAMP "A")

P.C. STA 127+55.48

PT. STA 134+93.51

743 + 48.42
280' LT.

741 + 00
16' LT.

BM # 5A-3

℄ RAMP "A"

P.C. STA. 743+48.42
742+31.54
150' RT.
742+87.34
68.88' RT.

P.C. STA 157+60.80

STATION EQUATION
STA. 743+25.78 (I-80) =
STA. 157+60.80 (RAMP "B")

℄ RAMP "B"

TEMP. CONST. EASEMENT

R.C. BOX CULVERT (EXTENSION)
RT. STA. 740+47
5' X 2' X 33'-9"
U.S.F.L. 74'-9" RT. ELEV. 635.40
D.S.F.L. 108'-6" RT. ELEV. 635.00
FOR DETAILS SEE SHEET 43

PT. STA 161+79.43
746 + 52.12
297.30 RT.

EXISTING CURVE DATA (CURVE #3)
P.I. STA. 750 + 25.56
Δ = 80° 06' 20"
D = 1° 30' 00"
T = 677.15'
S.E. = 0.017 ft/ft (REMOVE CROWN)
R = 3,819.72'
L = 1,340.37'
E = 59.56'

℄ I-80 DETOUR ROAD

PIPE CULVERT
SEE SHEET NO. 22

P-1 (R.C.C.P.)
RT. 750+03
24" X 12' (EXTENSION)
U.S.F.L. 68' RT. ELEV. 646.70
D.S.F.L. 80' RT. ELEV. 646.50

END SECTIONS, 24" - 1 EACH

NOTE: EXISTING INLET TO BE REMOVED

EXISTING 5'X2'X35'-6" BOX CULVERT TO BE REMOVED (SEE SPECIAL PROVISION)

MAGS CABLE IN TRENCH 24" DEEP IN MEDIAN 5' 6" ± FROM EDGE OF W.B.L. SEE SPEC. PROV.

P.I. STA 750 + 25.56

CURVE #27

CURVE #55

CURVE #25

CURVE #13

CURVE #30

P.C.C. STA. 6+40.04

EXISTING R.O.W.

℄ LOOP "A"

℄ I-80

PROPOSED MEDIAN GUARD RAIL SEE QUANTITY SCHEDULES FOR LOCATION

EXISTING CULVERT TO BE ABANDONED, REMOVE INLETS AND PLUG AS DIRECTED BY THE ENGINEER. SEE SPECIAL PROVISIONS.

PT. STA. 24+06.83

STATION EQUATION
STA. 758+88.63 (I-80) =
STA. 0+00.00 (LOOP "A")

P.C. STA. 0+00.00

88.00'

℄ FA-412

SEC. 36 T. 34N., R.1.E.
SEC. 1 T. 33N., R.1.E.

BM # 5A-2

PIPE DRAINS SEE SHEET 23

61.84'

STR. 50-5HB

N 89° 46' 00.5" E

84° 19' 56"

68.00'

℄ LOOP "B"

PT. STA 46+67.75

STATION EQUATION
STA. 756+60.30 (I-80) =
STA. 46+67.75 (LOOP "B")

PT. STA 756 + 88.79

STATION EQUATION
STA. 760+96.98 (I-80) =
STA. 1028+55.04 (FA. 412)

N 5° 28' 04.5" E

BM # 5A-3, 60 COMMON NAIL IN FIRST PP EAST OF COUNTY HIGHWAY TO TROY GROVE ON THE NORTH SIDE OF I-80 FRONTAGE ROAD, 155' LT. STA. 739+59 (I-80) ELEV. 641.64

BM # 5A-2, 60 COMMON NAIL IN 3RD PP WEST OF HEDGE ROW & ON SOUTH SIDE OF FRONTAGE ROAD 109' LT., STA. 759+94 (I-80) ELEV. 662.94

NOTES SHOWN IN THIS MANNER PERTAIN TO SECTION 50-5

HYDRAULIC DATA
Culv. Ext. 740+47
D.A. = 33 Acres
Q for 50 yr. = 66 c.f.s.
Q for 100 yr. = 91 c.f.s.
Head Q for 50 yr. = 2.6
Head Q for 100 yr. = 4.8

AREAS TO BE SEEDED BY SEC. 50-5HB & 50-2HB-3(R) (ALSO SEE SHTS. 17, 18, 21)

STRUCTURE 50-5HB

STRUCTURE 50-2 HB3 (R)

PROFILE OF EXISTING PAVEMENT ALONG ℄ W.B. LANE (I-80)

PROFILE GRADE RAMP "A"

PROFILE GRADE RAMP "B"

PROFILE ALONG EXISTING MEDIAN DITCH (I-80)

PROFILE GRADE LOOP "B"

PROFILE GRADE LOOP "A"

MED. DITCH ± 1.80%

MED. 657.86

MED. 663.20

RT. DITCH + 0.18%

LT. DITCH - 0.30%

+ 20.32 RT. 635.80

+ 20.32

RT. 636.67

+ 75 LT. 638.37

+ 70 LT. 637.78

10 STA 790 + 70

EARTH EXCAVATION = 23,755 CU. YDS. *
TOP SOIL PLACEMENT = 6,912 SQ. YDS.
EMBANKMENT = 11,091 CU. YDS. **

* I-80 (NORTH)
75 CU. YDS. TO CROSSOVER #1 CONST.
344 CU. YDS. TO CROSSOVER #2 CONST.
14,052 CU. YDS. TO F.A.-412 (NORTH)

** I-80 (SOUTH)
OBTAIN 559 CU. YDS. FROM RAMP "C"
OBTAIN 4,217 CU. YDS. FROM INFIELD "A-3"

| | | |

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA - 412	50-5 HB 50-2 HB 3(R)	LaSALLE	156	17
STA. 760+00	TO STA. 790+00			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SEC. 36, T.34N., R.1E., 3RD. P.M.

WALTER BRANNAN

NORMAN A. SMALL

P-1 (R.C.C.P.)
STA. 765+30
12' X 52'
U.S.F.L. 52' LT. ELEV. 667.30
D.S.F.L. 100' LT. ELEV. 664.50

INLETS, TYPE A, TYPE I FRAME, OPEN LID (24" DEPTH) - 1 EACH
GRATE ELEV. 669.90

EXISTING CURVE DATA (CURVE #14)
P.I. STA. 773+64.73
Δ = 0°-32'-40" R = 114,591.56'
D = 0°-03'-00" L = 1,088.89'
T = 544.45' E = 1.29'
S.E. = NONE
P.T. STA. 784+31.49

P-1 (R.C.C.P.)
STA. 782+70
12' X 46'
U.S.F.L. 52' LT. ELEV. 655.30
D.S.F.L. 98' LT. ELEV. 654.60

INLETS, TYPE A, TYPE I FRAME, OPEN LID (24" DEPTH) - 1 EACH
GRATE ELEV. 657.90

SPEC. FIELD TILE HDWL. SEE SHEET 42

PC STA. 75+00.00

STATION EQUATION
STA. 765+21.90 (I-80) =
STA. 97+01.57 (LOOP "D")

SPEC. FIELD TILE HDWL. SEE SHEET 42

PIPE DRAINS SEE SHEET 29

PCC. STA. 93+36.67

PT. STA. 97+01.57

PIPE CULVERT SEE SHEET 28

STATION EQUATION
STA. 779+29.44 (I-80) =
STA. 257+60.08 (RAMP "D")

STATION EQUATION
STA. 786+88.45 (I-80)
STA. 250+00.00 (RAMP "D")

STATION EQUATION
STA. 790+87.13 (I-80) =
STA. 626+98.89 (T.R.-108)

TYPE III BARRICADE SEE SPECIAL PROVISIONS

I-80

B.M. #6

SEC. 36, T.34N., R.1E.
SEC. 31, T.34N., R.2E.

SEC. 31, T.34N., R.2E.
SEC. 6, T.33N., R.2E.

SEC. 1, T.33N., R.1E.
SEC. 6, T.33N., R.2E.

℄ LOOP "D"

℄ I-80 DETOUR RD.

℄ RAMP "D"

EXISTING R.O.W.

℄ I-80

P.C. STA. 257+60.08

A.C.

WW

E-1

STA. 788+39.51

B.M. #5

SEC. 36, T.34N., R.1E.
SEC. 1, T.33N., R.1E.

B.M. #5A-2

84°-19'-56"

STR. 50-5HB

N. 89°-46'-00.5" E.

PIPE CULVERT SEE SHEET 27

S. 89°-41'-19.5" E.

CURVE #14

CURVE #16

CURVE #19

CURVE #21

CURVE #36

CURVE #65

CURVE #70

P.C. STA. 50+00.00

STATION EQUATION
STA. 763+08.37 (I-80)
STA. 50+00.00 (LOOP "C")

STATION EQUATION
P.O.T. STA. 760+96.98 (I-80) =
P.O.T. STA. 1028+55.04 (F.A.-412)

PROPOSED MEDIAN GUARD RAIL SEE QUANTITY SCHEDULES FOR LOCATIONS.

P-1 (R.C.C.P.)
STA. 763+50
24' X 96'
U.S.F.L. 3' RT. ELEV. 661.90
D.S.F.L. 99' RT. ELEV. 661.00

END SECTIONS, 24" - 1 EACH

R.C. PIPE TEE 24"-P, 24"-R - 1 EA. WITH PLUG

MED. INLET (2250) - 1 EA.
MED. ELEV. 665.00

NOTE: THE EXISTING PAVEMENT SHALL BE REMOVED AND REPLACED ACCORDING TO STANDARD 2116 (SEE SPECIAL PROVISIONS)

P.C. STA. 768+20.28

P.C.C. STA. 56+13.84

EXISTING 24" PIPE TO BE ABANDONED. REMOVE EXISTING INLETS (3) AND PLUG AS DIRECTED BY THE ENGINEER. SEE SPECIAL PROVISIONS.

℄ MEDIAN CROSSOVER #2 SEE SHEET 20

EXISTING R.O.W.

P.I. STA. 773+64.73

P.T. STA. 779+09.17

℄ RAMP "C"

777+00 240' RT.

777+65.52 252.61' RT.

777+6545 219.64' RT.

775+36.93 378.41' RT.

P.C. STA. 230+84.50

STATION EQUATION
STA. 780+20.26 (I-80)
STA. 237+03.38 (RAMP "C")

MAGS CABLE IN TRENCH 2.4" DEEP IN MEDIAN 5'-6" FROM EDGE OF WBL SEE SPEC. PROV.

P.T. STA. 237+03.38

P-1 (R.C.C.P.)
RT. STA. 781+00
24" X 32" (EXTENSION)*
U.S.F.L. 54" RT. ELEV. 656.70
D.S.F.L. 84" RT. ELEV. 656.13
*INCLUDES 2' RISER

INLET BOX STD. 2249 - 1 EACH

FRAMES AND LIDS, TYPE I, OPEN LID - 1 EACH
51" RT. GRATE ELEV. 662.90

R.C. PIPE TEE 24"-P, 24"-R - 1 EACH

781+00 115' RT.
781+00 148' RT.

PERMANENT EASEMENT

786+00 148' RT.
786+00 115' RT.

EXISTING 33' EASEMENT
ILL. POWER CO
BURIED GAS LINE 8" (HIGH PRESSURE)

℄ T.R.-108

END I-80 RESURFACEING
STA. 790+70.00

EXISTING GUARD RAIL TO BE REMOVED AND REPLACED SEE QUANTITY SCHEDULE FOR STA. LIMITS.

STATION EQUATION
STA. 790+70.00 (I-80)
STA. 247+53.33 (RAMP "C")

200'± CHAIN LINK FENCE TO BE MOVED TO A.C. LINE (INC. TO W.W. FENCE

WILLIAM & KATHERINE REMENIH

CARLO DERANGO

FRANK & MARGARET DERANGO

SEC. 1, T.33N., R.1E., 3RD. P.M.

B.M. # 5A-2 60 COMMON NAIL IN 3RD P.P. WEST OF HEDGE ROW & ON SOUTH SIDE OF FRONTAGE ROAD 109' LT., STA. 759+94 (I-80) ELEV. 662.94

B.M. #5 P.K. NAIL IN P.P. SOUTH SIDE OF FRONTAGE RD. 106' LT. STA. 772+01 ELEV. 670.20

B.M. # 6 P.K. NAIL IN CORNER POST N.W. CORNER OF INTERSECTION FRONTAGE ROAD & T.R.-108 660' LT. STA. 790+20 (I-80) ELEV. 642.74

NOTES SHOWN IN THIS MANNER PERTAIN TO SECTION 50-5

AREAS TO BE SEEDED BY SEC. 50-5NB & 50-2HB-3(R) (ALSO SEE SHTS 16,18,21)

STRUCTURE 50-5HB

PROFILE GRADE LOOP "C"

PROFILE GRADE LOOP "D"

PROFILE ALONG EXISTING MEDIAN DITCH (I-80)

PROFILE GRADE RAMP "D"

PROFILE GRADE RAMP "C"

PROFILE OF EXISTING PAVEMENT ALONG ℄ W.B. LANE (I-80)

MED. DITCH +1.20%

MED. DITCH -0.40%

MED. DITCH +0.53%

MED. DITCH -0.45%

LT. DITCH -0.25%

RT. DITCH -1.94%

RT. DITCH -2.46% (EXCELSIOR BLANKET LINING)

MED. 663.80

MED. 665.60

+50 MED. 665.60

MED. 667.40

MED. 669.00

MED. 667.20

+29 LT. 657.91

+20 RT. 657.68

+00 LT. 657.49

RT. 644.50

RT. 637.12

TO STA. 729+20.32

FOR EARTHWORK SEE SHEET 16

670 660 650 640

760 1 2 3 4 765 6 7 8 9 770 1 2 3 4 775 6 7 8 9 780 1 2 3 4 785 6 7 8 9 790

PLAN — SURVEYED: 10-26; DRAWN: L.E.B.; TRACED: L.A.W.; NOTE BOOK: No. F-4; ALIGNMENT CHECKED: L.E.; GRADE CHECKED: L.E.; R. W. CHECKED: L.E.; DIRECTIVE DEVIATIONS CHECKED: L.E.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5HB & 50-2HB-3(R)	LaSALLE	156	18
STA. 0+00	TO STA. 31+00			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT 2600		

SEC. 35, T34N., R1E., 3RD. P.M.

SEC. 36, T. 34N., R1.E., 3RD. P.M.

WALTER BRANNAN

I-80 DETOUR ROAD

CURVE DATA D-1
P.I. STA. 3+30.90
Δ = 13° 12' 40"
D = 2°00' 00"
T = 330.90
R = 2,864.79
L = 638.89
E = 19.05
SE = 0.015 FT.
SE REMOVED STA. 6+00.00 TO STA. 7+15.00

FOR DETOUR ENTRANCE TERMINAL DETAIL SEE SHEET # 41

REMOVE AND RE-ERECT EXISTING GUARD RAIL
SEE SCHEDULE OF QUANTITIES FOR STATION LIMITS

ILLINOIS BELL TELEPHONE CO. BURIED CABLE

PIPE CULVERT
SEE SHEET 22

EXISTING ACCESS ROAD TO BE REMOVED AND EXISTING RIGHT-OF-WAY SITE GRADED A MINIMUM OF 100 FEET NORTH OF THE DETOUR ROAD EDGE OF PAVEMENT AS DIRECTED BY ENGINEER. (SEE SPECIAL PROVISIONS)

P-1 (TEMPORARY)
STA. 18+00
42' X 60'
USFL 22' LT. ELEV 643.50
DSFL 44' RT. ELEV 643.00

STA 12 + 96.77 = STA 20 + 94.19 (CH-13)

℄ CH-13

TEMPORARY CONST. EASEMENT

P.C. STA. 0+00.00 = P.O.T. STA. 723+64.10 (48.00 LT.)

P.T. STA. 6+58.89 = P.O.T. STA. 730+17.19 (123.44' RT.)

728+04.54 125' LT

735+52.04 300.02' LT

738+19.98 36.71' LT

TEMPORARY CONST. EASEMENT

℄ I-80 DETOUR ROAD

P.O.T. STA. 20+26.12 = P.C. STA. 743+48.42 (435.13 LT.)

746+27.48 533.87' LT

℄ RAMP "A"

℄ LOOP "A"

CURVE # 60

CURVE # 33

EXISTING R.O.W.

96° 39' 8"

S 83° 8' 19.5" E

736+00 125 LT

738+55 265' LT

739+15 190 LT

740+05 160' LT

741+00 160' LT

743+48.42 280 LT

745+53.44 448.66' LT

PIPE CULVERT
SEE SHEET 22

P.I. STA. 3+30.90 = P.O.T. STA. 726+95.00 (48.00' LT.)

STA. 145+43.46 (RAMP 'A') = STA. 729+20.32 (49.00' LT.)

BEGIN MEDIAN SEEDING
STA. 720+00

℄ I-80

S 70° 07' 39.5" E

735

70° 10' 08"

EXISTING INLET TO BE TEMPORARILY SEALED. INLET TO BE PROTECTED AND OPENED UPON REMOVAL OF MEDIAN CROSSOVERS AS DIRECTED BY THE ENGINEER.

PIPE CULVERT
SEE SHEET 20

℄ MEDIAN CROSSOVER #1
SEE SHEET 20

MAGS CABLE IN TRENCH
24"± DEEP IN MEDIAN
5 6"± FROM EDGE OF W.B.L.
SEE SPEC. PROV.

STATION EQUATION
P.O.T. STA. 737+35.23 (I-80) =
P.O.T. STA. 18+08.38 (C.H.-13)

STRUCTURE 50-2HB-3(R)

P-1 (TEMPORARY)
STA. 6+60
18' X 72'
USFL 46' RT. ELEV 636.80
DSFL 26' LT. ELEV 636.00

PIPE CULVERT
SEE SHEET 16

P.C. STA. 743+48.42

BOX CULVERT EXT.
SEE SHEET 16

B.M. # 5A-3

B.M. # 5A-2

B.M. # 5A-3, 60 COMMON NAIL IN FIRST PP EAST OF COUNTY HIGHWAY TO TROY GROVE ON THE NORTH SIDE OF I-80 FRONTAGE ROAD, 155' LT. STA. 739+59 (I-80) ELEV. 641.64

AREAS TO BE SEEDED BY SEC 50-5 HB & 50-2HB-3 (R) (ALSO SEE SHT'S. 16, 17, 21)

NOTES SHOWN IN THIS MANNER PERTAIN TO SECTION 50-5

B.M. # 5A-2, 60 COMMON NAIL IN 3RD PP WEST OF HEDGE ROW & ON SOUTH SIDE OF FRONTAGE ROAD 109' LT., STA. 759+94 (I-80) ELEV. 662.94

EXISTING GROUND ALONG ℄ I-80 DETOUR ROAD

℄ CH-13

P.V.I. STA. 5+00
ELEV. = 638.46
L.V.C. = 250'

P.V.I. STA. 9+50
ELEV. = 649.98
L.V.C. = 500'

P.V.I. STA. 18+50
ELEV. = 648.18
L.V.C. = 300'

P.V.I. STA. 29+00
ELEV. = 658.47
L.V.C. = 350'

0.00%
-2.56%
0.20%
10.98%
+3.88%

LT. DITCH +0.98%
LT. DITCH +3.38%
LT. DITCH +0.42%
LT. DITCH -0.46%
LT. DITCH +1.12%

LT. 631.51
LT. 636.00
RT. 639.50
LT. 644.10
LT. 645.78
LT. 643.48
LT. 649.08

+71.09 638.46
+75 PVC. 638.46
638.76 (638.46)
PVT. 639.51 (638.96)
+60 LT. 636.00
+60 RT. 635.80
641.26 (641.02)
+25 PVT. 641.66
PVC. 643.58
645.86 (646.14)
647.80 (648.70)
+50 PVT. 648.26 (648.96)
648.78 (649.88)
649.40 (649.68)
PVT. 649.48
649.28
649.08
648.88
PVC. 648.48
648.48 (648.28)
+80 PVT. 648.62 (648.18)
648.87 (648.67)
PVT. 649.65
650.63
651.61
649.08
652.59
653.57
654.55
655.53
656.51
+25 PVC. 656.76
657.72 (657.49)
PVT. 659.74 (658.47)
662.58 (662.35)
+75 PVT. RC. 665.26
666.21 (666.23)

FOR EARTHWORK SEE SHEET 19

TO STA. 790+70 (I-80)

670
660
650

0 1 2 3 4 5 6 7 8 9 10 1 2 3 4 15 6 7 8 9 20 1 2 3 4 25 6 7 8 9 30 1

DATE	BY	NOTE BOOK	No.
8-75	RAC	SURVEYED, PLOTTED, ALIGNMENT CHECKED, R.O.W. STAKED	
9-75	RAC	GRADES CHECKED, B.M.'s NOTED, STRUCTURE LOCATIONS CHECKED	

PLAN

DATE	BY	NOTE BOOK	No.
8-75	RAC	SURVEYED, PLOTTED, ALIGNMENT CHECKED, R.O.W. STAKED	
9-75	RAC	GRADES CHECKED, B.M.'s NOTED, STRUCTURE LOCATIONS CHECKED	

PROFILE

Printed in U.S.A. On IMPERIAL Training Cloth

HOMER L. CHASTAIN & ASSOCIATES, CONSULTING ENGINEERS — DECATUR, ILLINOIS PLATE 1 PLAN-PROFILE B P R STANDARD EUGENE DIETZGEN CO. CHICAGO-NEW YORK

Printed in U.S.A. On IMPERIAL Training Cloth

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA - 412	50-5HB 50-2HB-3(R)	LaSALLE	156	19
STA. 31+00	TO STA. 55+84.34			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

I-80 DETOUR ROAD

SEC. 36, T. 34N., R. 1E., 3RD. P.M.

WALTER BRANNAN

NORMAN A. SMALL

℄ LOOP A

℄ LOOP "D"

CURVE #27

CURVE #19

11.5°-26'-04.5"E

1035

STA. 36+53.82 =
STA. 1033+02.28

P.C. STA. 38+34.84

P.I. STA. 41+20.00 =
388.82' LT. STA. 766+03.92

℄ I-80 DETOUR

P.T. STA. 44+03.29

S 83°-18'-19.5"E.

91°-15'-36"

CURVE D-2

S 71°-56'-11.5"E

P.C. STA. 45+88.58

CURVE D-3

℄ FA-412

PIPE DRAINS
SEE SHEET 29

EXISTING R.O.W.

SEC. 36, T34N., R.1E.
SEC. 1, T.33N., R.1E.

CURVE #21

BM#5A-2

STRUCTURE 50-5HB

PIPE CULVERT
SEE SHEET 17

EXISTING 24" PIPE TO
BE ABANDONED
SEE SHEET 16

P.C. STA. 768+20.28

CURVE #4

P.I. STA. 773+64.73

℄ MEDIAN CROSSOVER NO. 2
P-1
STA. 49+50
30"x62'
U.S.F.L. 42' RT. ELEV. 662.30
D.S.F.L. 20' LT. ELEV. 661.60

BM#5

A.C.

774+2679
448.30' LT.

P.T. STA. 53+24.32

P.I. STA. 49+58.49 =
126.48' LT. STA. 774+01.18

777+00
240' LT.

FOR DETOUR TERMINAL
DETAILS SEE SHEET 41

CURVE #37

℄ RAMP "D"

STA. 257+60.08 RAMP "D"
89.28' LT. STA. 779+29.44

782+00
160' LT.

S 89°-41'-19.5" E

P.T. STA. 779+09.17

PIPE CULVERT EXT.
SEE SHEET 17

STA. 55+84.43 =
8.00' LT. STA. 256+60.08 =
91.97' LT. STA. 780+29.72

STA. 256+60.08 =
83.98' LT. STA. 780+29.30

S 86°-39'-04.5"E.

PIPE CULVERT
SEE SHEET 17

STA. 63+95.28 =
49' LT. STA. 788+39.43

MATCH LINE

MATCH LINE

STA. 250+00.00 RAMP "D" =
STA. 786+88.45 (49.00 LT.)

EXISTING ACCESS ROAD TO BE REMOVED AND EXISTING RIGHT-OF-WAY SITE GRADED FROM THE CONSTRUCTION LIMITS OF THE DETOUR ROAD TO LEFT OF STATION 787+00 (I-80)

CURVE DATA D-2

P.I. STA. 41+20.00
Δ = 11°-22'-08" R = 2864.79
D = 2°-00'-00" L = 568.44
T = 285.16 E = 14.16
SE 0.05 1/FT.
SE ATTAINED STA. 37+20 TO STA. 38+95
SE REMOVED STA. 43+20 TO STA. 44+95

CURVE DATA D-3

P.I. STA. 49+58.49
Δ = 14°-42'-53" R = 2864.79
D = 2°-00'-00" L = 735.74
T = 369.90 E = 23.78
SE 0.05 1/FT.
SE ATTAINED STA. 44+95 TO STA. 46+30
SE REMOVED STA. 52+65 TO STA. 54+40 (24' AT 3/16"/FT.)

SEC. 1, T. 33N., R.1E., 3RD. PM.

B. M. # 5A-2 60 COMMON NAIL IN 3RD P.P. WEST OF HEDGE ROW & ON SOUTH SIDE OF FRONTAGE ROAD 109' LT., STA. 759+94 (I-80) ELEV. 662.94

B.M. #5 P.K. NAIL IN P.P. SOUTH SIDE OF FRONTAGE RD. 106' LT. STA. 772+01 ELEV. 670.20

NOTES SHOWN IN THIS MANNER PERTAIN TO SECTION 50-5

P.V.I. STA. 36+50
ELEV. = 687.57
L.V.C. = 1150'

+3.88%

-2.38%

EXISTING GROUND ALONG ℄ I-80 DETOUR ROAD

P.V.I. STA. 46+00
ELEV. = 664.96
L.V.C. = 400'

+0.30%

P.V.I. STA. 53+00
ELEV. = 667.07
L.V.C. = 400'

-1.72%

RT. DITCH -0.81%
LT. DITCH -0.31%

RT. DITCH +0.38%
LT. DITCH -2.00%

LT. DITCH -0.39%

LT 662.06
RT. 663.51

+60 LT. 661.60
+80 RT. 662.30

+50 LT. 659.60

+85 LT. 667.90

670
660
650

*49,782 CU.YDS. TO FA-412(SOUTH)

*424 CU.YDS. TO FA-412(NORTH)

DETOUR CONSTRUCTION

STA. 0+00 TO STA. 790+70
EARTH EXCAVATION = 59,650 CU.YDS.*
EMBANKMENT = 7,784 CU.YDS.

TO STA. 0+00

DETOUR REMOVAL

STA. 0+00 TO STA. 24+00
EARTH EXCAVATION = 4148 CU.YDS.
EMBANKMENT = 12,479 CU.YDS.**

**11,672 CU.YDS. FROM RAMP "D"

FOR EARTHWORK ONLY

STATION EQUATION
STA. 54+84.43 BK. =
STA. 779+29.44 AHD

DETOUR REMOVAL

STA. 780+00 TO STA. 790+70
EARTH EXCAVATION = 467 CU.YDS.*
TOP SOIL PLACEMENT = 7845 SQ.YDS.
EMBANKMENT = 34 CU.YDS.

790+70

666.21 (666.23) | 670.8 683.68 (670.11) | 670.5 672.61 (673.39) | 672.3 675.00 (677.87) | 677.0 676.83 (681.75) | 676.2 678.13 (685.63) | 150 P.V.I. 678.57 (687.57) | 672.8 678.88 (686.38) | 672.9 679.08 (684.00) | 674.8 678.75 (681.62) | 676.5 677.86 (679.24) | 677.2 676.43 (676.86) | 675.9 674.46 (674.48) | +25 P.V.I. 673.89 | 674.3 672.10 | 672.5 P.V.C. 669.72 | 670.7 667.67 (667.34) | 669.5 P.V.I. 665.56 | 669.5 P.V.I. 666.30 (664.96) | 671.8 665.59 (665.26) | 671.8 665.86 | 672.9 666.17 | 671.9 P.V.C. 666.47 | 670.8 666.52 (666.77) | 668.2 P.V.I. 668.06 (667.07) | 668.0 665.10 (665.35) | P.V.T. 663.63 | +84.43 662.18

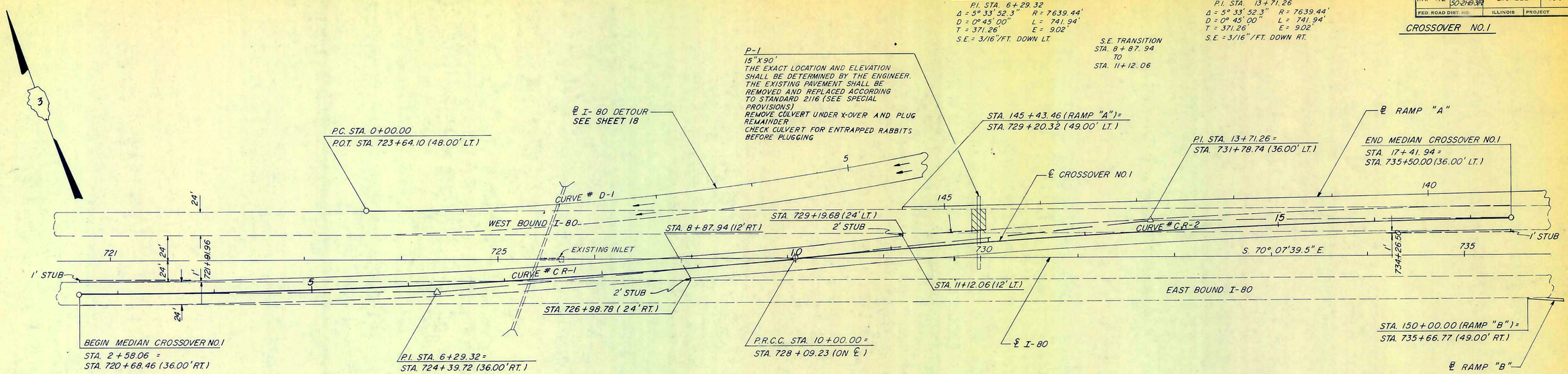
31 2 3 4 35 6 7 8 9 40 1 2 3 4 45 6 7 8 9 50 1 2 3 4 55

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PLAN NOTE BOOK No. — SURVEYED, PLOTTED, ALIGNMENT CHECKED, R.O.W. CHECKED, DRAWN, CHECKED, L.M.'s NOTED, (FIELD BOOK NOTATIONS CHECKED) — DATE 8-75 — BY SHZ

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.-412	50-5HB 50-2HB-3R	LaSALLE	156	20
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

CROSSOVER NO.1



I-80 STATION	HOR.* OFFSET	VERT.* OFFSET
720+68.46	1.00	- 0.02
721+00	1.00	- 0.02
722+00	1.13	- 0.02
723+00	3.52	- 0.06
724+00	7.21	- 0.11
725+00	12.22	- 0.19
726+00	18.54	- 0.29
726+98.78	26.09	- 0.41

EARTHWORK FOR CROSSOVER #1

CONSTRUCTION

EARTH EXCAVATION = 457 CU. YDS.
EMBANKMENT = 519 CU. YDS. ++

++ 75 CU. YDS. FROM I-80 NORTH
126 CU. YDS. FROM C.H.-13 NORTH CONE

REMOVAL

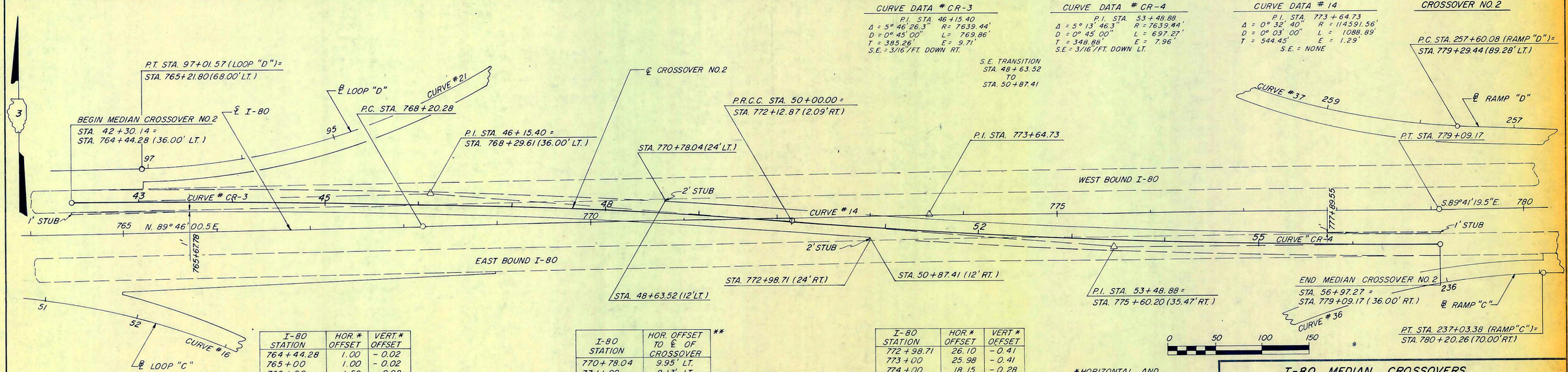
EARTH EXCAVATION = 588 CU. YDS. *
EMBANKMENT = 207 CU. YDS.

*326 CU. YDS. TO FA-412 (NORTH)

I-80 STATION	HOR. OFFSET TO ℄ OF CROSSOVER **
726+98.78	9.95' RT.
727+00	9.85' RT.
728+00	0.89' RT.
728+09.23	ON ℄
729+00	8.30' LT.
729+19.68	9.95' LT.

I-80 STATION	HOR.* OFFSET	VERT.* OFFSET
729+19.68	26.09	- 0.41
730+00	19.86	- 0.31
731+00	13.29	- 0.21
732+00	8.03	- 0.13
733+00	4.10	- 0.06
734+00	1.52	- 0.02
735+00	1.00	- 0.02
735+50.00	1.00	- 0.02

CROSSOVER NO.2



I-80 STATION	HOR.* OFFSET	VERT.* OFFSET
764+44.28	1.00	- 0.02
765+00	1.00	- 0.02
766+00	1.59	- 0.02
767+00	4.29	- 0.07
768+00	8.30	- 0.13
768+20.28	9.27	- 0.14
769+00	13.61	- 0.21
770+00	20.12	- 0.31
770+78.04	26.09	- 0.41

I-80 STATION	HOR. OFFSET TO ℄ OF CROSSOVER **
770+78.04	9.95' LT.
771+00	8.13' LT.
772+00	0.84' RT.
772+12.87	2.09' RT.
772+98.71	9.95' RT.

EARTHWORK FOR CROSSOVER # 2

CONSTRUCTION

EARTH EXCAVATION = 403 CU. YDS.
EMBANKMENT = 589 CU. YDS. ***
*** 344 CU. YDS. FROM I-80 NORTH

REMOVAL

EARTH EXCAVATION = 881 CU. YDS. *
EMBANKMENT = 186 CU. YDS.

*645 CU. YDS. TO FA-412 (NORTH)

I-80 STATION	HOR.* OFFSET	VERT.* OFFSET
772+98.71	26.10	- 0.41
773+00	25.98	- 0.41
774+00	18.15	- 0.28
775+00	11.71	- 0.18
776+00	6.68	- 0.10
777+00	3.06	- 0.05
778+00	1.00	- 0.02
779+00	1.00	- 0.02
779+09.17	1.00	- 0.02

*HORIZONTAL AND VERTICAL OFFSETS REFERENCED TO EDGE OF EXISTING I-80 PAVEMENT.

** HORIZONTAL OFFSET REFERENCE TO ℄ I-80

I-80 MEDIAN CROSSOVERS

REVISIONS		
No.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FA- 412 SECTION 50-5HB 50-2HB-3R
LaSALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE	HH 11-75
CHECKED BY DATE	JMcC 12-75
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	20

CUSHING & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.-412	50-5HB & 50-2HB-3 (R)	LaSALLE	156	21
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

COUNTY HIGHWAY 13

SEC. 2, T. 33 N., R. I. E., 3RD. P.M.

SEC. 35, T. 34 N., R. I. E., 3RD. P.M.

P.K. Nail ℄ C.H.-13
N. ℄ B.C. In Fen. Post
℄ C.H.-13
N. ℄ B.C. In Fen. Post
P.O.T. STA. 6+16.66

1" Iron Rod W. "X"
℄ C.H.-13
Conc. Witness Post
P.O.T. STA. 14+99.65
(SECTION CORNER)

P.K. Nail ℄ C.H.-13
℄ C.H.-13
B.C. In P.P.
B.C. In Hedge Fen. Post
P.O.T. STA. 27+28.82

BEGIN CONSTRUCTION
C.H.-13
STA. 14+50.00

END CONSTRUCTION
C.H.-13
STA. 21+50

REMOVE AND REPLACE EXISTING GUARD RAIL
SEE SCHEDULE OF QUANTITIES FOR STATION LIMITS

TYPE III BARRICADE
STA. 10+00
SEE SPECIAL PROVISIONS

STRUCTURE 50-2HB-3(R)

P.O.T. STA. 6+16.66

SEC. 2, T. 33 N., R. I. E.
SEC. 1, T. 33 N., R. I. E.

SEC. 2, T. 33 N., R. I. E.
SEC. 35, T. 34 N., R. I. E.

S 70° 01' 38.5" E

736+00
125.0' LT.

735+92.04
300.02' LT.

TYPE III BARRICADE
2 EACH
SEE SPECIAL PROVISIONS

83' 20.48"
N 0° 02' 28.5" E

EXIST. R.O.W.

℄ I-80

℄ I-80 DETOUR ROAD

TEMPORARY CONSTRUCTION EASEMENT

ILLINOIS BELL TELEPHONE
CO. BURIED CABLE

BM #5A-4

P.O.T. STA. 27+28.82

EXIST. 20' BIT. PAV'T.

SEC. 35, T. 34 N., R. I. E.
SEC. 36, T. 34 N., R. I. E.

TYPE III BARRICADE
STA. 24+00
SEE SPECIAL PROVISIONS

10+00
53.91' RT.

℄ C.H.-13

10+00
150' RT.

739+36.50
293.1' RT.

14+64.38
89.90' RT.

SHOULDER DRAIN
SEE NOTES BELOW-LEFT

EXIST. R.O.W.

738+19.98
362.75' LT.

PIPE CULVERT
SEE SHEET NO. 22

STATION EQUATION
P.O.T. STA. 18+08.38 (C.H.-13)
P.O.T. STA. 737+35.23 (I-80)

STA. 20+94.19 (C.H.-13) =
STA. 12+96.77 (I-80 DETOUR)

EXISTING ACCESS ROAD TO BE REMOVED
SEE SHEET NO. 16

STRUCTURE 50-2HB-3(R)
A TWO SPAN SEPARATION STRUCTURE CARRYING C.H.-13 OVER I-80 AT STA. 737+35.23 (I-80) CONSISTING OF 42" WELDED PLATE GIRDERS AND REINFORCED CONCRETE DECK ON CONCRETE PIER, VAULTED ABUTMENTS, AND PILE APPROACH BENTS, TWO SPANS AT 99'-6" AND 106'-0".

TEMPORARY CONST. EASEMENT

SECTION CORNER P.O.T. STA. 14+99.65
TO BE REESTABLISHED BY THE ENGINEER UPON PAVING COMPLETION OF C.H. 13

PIPE CULVERT
SEE SHEET NO. 16

740+16.58
264.29' RT.

14+64.32
175' RT.

EXIST. R.O.W.

℄ RAMP 'B'

742+31.54
150' RT.

742+87.34
166.88' RT.

SEC. 1, T. 33 N., R. I. E.
SEC. 36, T. 34 N., R. I. E.

WILLIAM & KATHERINE REMENITH

BOX CULVERT EXTENSION
SEE SHEET NO. 16

741+00
160' LT.

WALTER BRANNAN
P.T. STA. 734+93.51

TEMPORARY CONSTRUCTION EASEMENT

℄ RAMP 'A'

SEC. 1, T. 33 N. R. I. E. 3RD. P.M.

SEC. 36, T. 34 N., R. I. E., 3RD. P.M.

BM. 5A-3 - #60 COMMON NAIL IN FIRST PP EAST OF COUNTY HIGHWAY 13, TROY GROVE ROAD (NORTH SIDE OF I-80 FRONTAGE ROAD), 155' LT. STA. 739+59 ELEV. 641.64

BM. 5A-4-3/8" LAG BOLT IN TRANSFORMER POLE NORTH OF I-80 OVERPASS ON WEST SIDE OF CH-13 32' LT. STA. 26+39 ELEV. 659.20.

PIPE DRAINS
STA. 16+71
12"x32' *
USFL 16' RT. ELEV. 658.60
USFL 63' RT. ELEV. 638.80
* INCLUDES A 20° BEND

SPECIAL FIELD TILE HEADWALL
SEE SHEET NO. 42

INLETS, TYPE A, TYPE I FRAME, OPEN LID (24" DEPTH) - 1 EACH
15' RT. STA. 16+71
GRATE ELEV. 661.20

STORM SEWER, TYPE 1
14' LT. STA. 16+80 TO
14' RT. STA. 16+71
12"x30'
USFL 14' LT ELEV. 658.80
DSFL 14' RT. ELEV. 658.60

INLETS, TYPE A, TYPE I FRAME, OPEN LID (24" DEPTH) - 1 EACH
15' LT. STA. 16+80
GRATE ELEV. 661.40

PIPE DRAINS
STA. 19+52
12"x56' *
USFL 16' LT ELEV. 659.80
DSFL 56' LT. ELEV. 638.70
* INCLUDES A 20° BEND

SPECIAL FIELD TILE HEADWALL
SEE SHEET NO. 42

INLETS, TYPE A, TYPE I FRAME, OPEN LID (24" DEPTH) - 1 EACH
15' LT. STA. 19+52
GRATE ELEV. 662.40

STORM SEWER, TYPE 1
14' RT. STA. 19+43.30
14' LT. STA. 19+52
12"x30'
USFL 14' RT. ELEV. 659.90
DSFL 14' LT. ELEV. 659.80

INLETS, TYPE A, TYPE I FRAME, OPEN LID (24" DEPTH) - 1 EACH
15' RT. STA. 19+43
GRATE ELEV. 652.30

P.V.I. STA. 18+00
ELEV. = 667.63
LVC = 700'

· AREAS TO BE SEEDED BY SEC. 50-5 HB & 50-2 HB-3(R) (ALSO SEE SHT'S 16, 17 & 18)

PAVING OMISSION
STA. 16+83.41 TO 19+39.85

PROFILE OF EXISTING PAVEMENT ALONG ℄ C.H.-13

+3.00%

-2.00%

50-2 HB-3(R)

EXISTING SLOPEWALL

℄ I-80 DETOUR ROAD EARTHWORK INCLUDED IN I-80 DETOUR ROAD QUANTITIES

RT. DITCH +3.97% (EXCELSIOR BLANKET LINING)

LT. DITCH +4.85% (EXCELSIOR BLANKET LINING)

EARTH EXCAVATION = 1166 CU. YDS. *
EMBANKMENT = 0 CU. YDS.

* 583 CU. YDS. TO LOOP "B"
* 126 CU. YDS. TO CROSSOVER # 1 CONSTRUCTION
* 457 CU. YDS. TO FA-412 (NORTH)

+90 RT 638.87
+35 LT 637.50
LT 645.50
RT. 646.70

+90 RVC 637.13

647.34	647.06	649.91	652.63	655.46	658.54 (658.63)	661.42	660.83 (661.63)	661.89	662.40 (664.63)	663.47	663.25 (666.63)	662.95	663.40 (665.63)	662.41	662.83 (663.63)	662.31	661.54 (661.63)	+50 RVC 660.63	659.60	658.21	656.85	655.50	654.10	652.70	651.29	649.85	648.41	646.91	645.38
10	1	2	3	4	15	6	7	8	9	20	1	2	3	4	25	6	7	8	9	30									

670 660 650 640

HOMER L. CHASTAIN & ASSOCIATES, CONSULTING ENGINEERS — DECATUR, ILLINOIS

PLATE 1 PLAN-PROFILE B P R STANDARD
EUGENE DIETZGEN CO. CHICAGO NEW YORK

COUNTY HIGHWAY 13

Printed in U.S.A. On IMPERIAL Tracing Cloth

PLAN NOTE BOOK No. 1-68
SURVEYED: DRAWN: V.E.B. 9-72
PLOTTED: CHECKED: V.E.B. 9-72
ALIGNMENT CHECKED: R.E.M. 10-72
GRADES CHECKED: R.E.M. 10-72
STRUCTURE NOTATIONS CHECKED:

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA - 412	50-5HB& 50-2HB-3(R)	LaSALLE	156	22
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SEC. 36, T. 34N., R. IE., 3RD. P.M.

NORMAN A. SMALL

WALTER BRANNAN

WILLIAM & KATHERINE REMENIH

RAMP "A"

6" STORM SEWER
SEE SHEET 15

PIPE CULVERT
SEE SHEET 15

6" FIELD TILE
REPD. LOC.

℄ FA-412

N 5°-26'-09" E

P.I. STA. 110+75.75

P.T. STA. 113+58.78

CURVE DATA (CURVE # 32)
P.I. STA. 110+75.75
Δ = 44°54'08"
D = 7°30'00"
T = 315.67'
R = 763.94'
L = 598.70'
E = 62.65'
S.E. = 0.08 /\
S.E. ATTAINED STA. 106+60.08
TO STA. 108+10.08
S.E. REMOVED STA. 112+95
TO STA. 114+85

CURVE # 32

1045+00
265' LT.

1042+46.45
410.62' LT.

P-2 (R.C.C.P.)
STA. 112+00
42"X 84"
U.S.F.L. 53' LT. ELEV. 648.80
D.S.F.L. 31' RT. ELEV. 648.30
D.A. = 24 AC., Q_{50} = 49 cfs, Q_{100} = 68 cfs

END SECTIONS, 42"-2 EACH

STATION EQUATION
P.C. STA. 107+60.08 = 109.28' LT.
STA. 1047+17.47 (F.A. 412)

STATION EQUATION
STA. 106+60.08 = 103.98' LT.
STA. 1048+17.33 (F.A. 412)

B.M. 5-A1

3750.83 LIN F.T.
WOVEN WIRE FENCE

℄ LOOP "A"

CURVE # 55

℄ I-80 DETOUR RD.

S. 53°-22'-27.8" W.

CURVE DATA (CURVE # 33)
P.I. STA. 131+56.15
Δ = 55°21'08"
D = 7°30.00'
T = 400.67'
R = 763.94'
L = 738.03'
E = 98.70'
S.E. = 0.08 /\
S.E. ATTAINED STA. 126+25
TO STA. 128+20
S.E. REMOVED STA. 133+97.51
TO 1.2 S.E. = 0.04 /\ AT STA. 134+93.51

P.I. STA. 131+56.15

P.C. STA. 127+55.48

CURVE # 33

746+27.48
533.87' LT.

745+53.44
448.66' LT.

1033+10.78
1447.59' LT.

TEMPORARY CONST. EASEMENT

P-1 (R.C.C.P.)
STA. 131+50
36"X 62"
U.S.F.L. 47' LT. ELEV. 638.50
D.S.F.L. 15' RT. ELEV. 638.20
D.A. = 9 AC., Q_{50} = 39 cfs, Q_{100} = 55 cfs

INLET BOX STD. 2248-2 EACH

END SECTIONS, 36"-1 EACH

R.C. BOX CULVERT EXTENSION
SEE SHEET 16

743+49.42
280' LT.

741+00
160' LT.

STATION EQUATION
P.T. STA. 134+93.51 = 70.00' LT.
STA. 739+70.06 (I-80)

STATION EQUATION
STA. 135+93.51 = 68.00' LT.
STA. 738+70.08 (I-80)

BM.* 5A-3

CURVE # 13

P.C. STA. 743+48.42

P-1 (R.C.C.P.)
STA. 739+20
12'X 46'
U.S.F.L. 52' LT. ELEV. 639.50
D.S.F.L. 98' LT. ELEV. 638.40

INLETS, TYPE A, TYPE 1 FRAME, OPEN LID (24" DEPTH) - 1 EACH
GRATE ELEV. 642.10

SPEC. FIELD TILE HDWL.
SEE SHEET 42

SEC. 1 T.33N.-R.1E.
SEC. 36 T.34N.-R.1E.

S 70°-07'-39.5" E

℄ I-80

℄ CH-13

N 40°-02'-28.5" E

BM.* 5A1 - CONC. NAIL IN FENCE POST
400' LT. STA. 1042+30 (F.A.-412)
ELEV. 654.34

BM.* 5-A3-60 COMMON NAIL IN FIRST PP EAST OF C.H. 13 AND NORTH OF I-80 FRONTAGE RD.
155' LT STA. 739+59 (I-80)
ELEV 641.64

NOTES SHOWN IN THIS MANNER PERTAIN TO SECTION 50-5HB & 50-2HB-3(R)

PROFILE GRADE
F.A.-412

PROFILE GRADE LINE
℄ RAMP "A"

PROFILE GRADE
LOOP "A"

EXISTING GROUND ALONG
℄ RAMP "A"

EXISTING I-80
(OUTSIDE E.P.)

℄ DETOUR ROAD

P.I. STA. 101+35.08
ELEV. 652.04
L.V.C. 150'

P.I. STA. 120+00
ELEV. 665.81
L.V.C. 600'

P.I. STA. 132+00
ELEV. 642.29
L.V.C. 400'

+2.45%

+1.09%

-1.96%

-0.18%

Q_{50} H.W.E. = 652.1
Q_{100} H.W.E. = 653.2

Q_{50} H.W.E. = 641.9
Q_{100} H.W.E. = 642.3

RT. DITCH +2.55%

RT. DITCH +1.68%

INCLUDED IN SEC. 50-5HB & 50-2HB-3(R)

INCLUDED IN SEC. 50-5HB & 50-2HB-3(R)

RT. DITCH -2.25%

RT. DITCH -0.32%

RT. DITCH +0.30%

*59,900 CU. YDS. TO FA-412 (SOUTH)
35,134 CU. YDS. TO LOOP "B"
4,217 CU. YDS. TO I-80 (SOUTH)
32,959 CU. YDS. TO LOOP "C"
1,933 CU. YDS. TO INFIELD "C-2"
155 CU. YDS. TO INFIELD "B-2"

EARTH EXCAVATION = 134,587 CU. YDS. ① *
EMBANKMENT = 228 CU. YDS.

① INCLUDES: 40,760 CU. YDS. FROM INFIELD "A-1"
57,519 CU. YDS. FROM INFIELD "A-3"

+60 RT. 648.89

RT. 648.30

+50 RT. 651.24

+60 RT. 641.41

+50 RT. 638.30

RT. 637.50

+94 RT. 637.78

+93.51 641.76

STA.	P.V.I.	P.V.C.	P.V.T.
+60.08	650.20		
640.4			
651.11 (651.18)			
+35.08	P.V.I. 651.78 (652.04)		
+60 RT. 641.89			
652.75 (652.75)			
+0.08	P.V.T. 652.86		
653.84			
654.92			
656.01			
657.10			
658.19			
659.28			
660.37			
661.46			
		P.V.C. 662.52	
663.38 (663.63)			
663.70 (664.72)			
	P.V.I. 663.52 (663.81)		
662.83 (663.85)			
661.84 (662.89)			
	P.V.T. 659.98		
657.97			
656.01			
654.05			
652.09			
650.13			
648.17			
		P.V.C. 646.21	
644.17 (644.25)			
	P.V.I. 642.18 (642.29)		
642.33 (642.1)			
	P.V.T. 641.93		

7	8	9	110	1	2	3	4	115	6	7	8	9	120	1	2	3	4	125	6	7	8	9	130	1	2	3	4
670	660	650	640	630																							

SURVEYED
PLOTTED
GRADES CHECKED
ALIGNMENT CHECKED
ET. OF MAT CHECKED
STRUCTURE NOTATIONS CHECKED

PLAN
NOTE BOOK
No.

DATE: 7-74 | 6-74 | 11-74 | 2-75 | 2-75

Printed in U.S.A. On IMPERIAL Tracing Cloth

HOMER L. CHASTAIN & ASSOCIATES, CONSULTING ENGINEERS — DECATUR, ILLINOIS

PLATE 1 PLAN-PROFILE B.P.R. STANDARD
EUGENE DIETZGEN CO. CHICAGO, NEW YORK

Printed in U.S.A. On IMPERIAL Tracing Cloth

RAMP "A"

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-5HB & 50-2HB-3(R)	LaSALLE	156	23
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

LOOP "A"

SEC. 36, T.34N., R.IE., 3RD. P.M.

CURVE DATA (CURVE # 25)
P.I. STA. 3+40.15
Δ = 48°00'11"
D = 7°30.00"
T = 340.15'
R = 763.94'
L = 640.04'
E = 72.31'
S.E. = 0.08 1/1
S.E. ATTAINED STA. 1+85.39
(1/2 S.E. = 0.04 1/1) TO STA. 2+81.39

CURVE DATA (CURVE # 27)
P.I. STA. 21+66.86
Δ = 37°22.51"
D = 7°30.00"
T = 258.44'
R = 763.94'
L = 498.41'
E = 42.53'
S.E. = 0.08 1/1
S.E. REMOVED STA. 22+86.83
TO 1/2 S.E. = 0.04 1/1 AT STA. 24+06.83

CURVE DATA (CURVE # 55)
Δ = 190°15'23"
D = 15°00'00"
R = 381.97'
L = 1268.38'
S.E. = 0.08 1/1

PIPE DRAINS
STA. 1029+68 (25° RT. FWD.)
12" X 64'*
U.S.F.L. 90' LT. ELEV. 684.30
D.S.F.L. 145' LT. ELEV. 663.00
* INCLUDES 2-15° BENDS & 2-2' CONNECTORS

END SECTIONS, 12"-1 EACH

INLETS, TYPE A, TYPE I FRAME, OPEN LID (30" DEPTH)-2 EACH
89' LT. STA. 1029+68 & 1029+72
GRATE ELEV. 687.40

STORM SEWERS, TYPE I
88' LT. STA. 1029+72 TO
42' LT. STA. 1029+76
12" X 46'
U.S.F.L. 42' LT. ELEV. 685.10
D.S.F.L. 88' LT. ELEV. 684.30

INLETS, TYPE A, TYPE I FRAME, OPEN LID (24" DEPTH)-2 EACH
41' LT. STA. 1029+76 & 1029+80
GRATE ELEV. 687.70

STATION EQUATION
STA. 1028+55.04 (F.A. 412)
STA. 760+96.98 (I-80)

STATION EQUATION
P.C. STA. 0+00.00 = 61.84' LT.
STA. 758+88.63 (I-80)

STATION EQUATION
PT. STA. 24+06.83 = 88.00' LT.
STA. 1031+43.40 (F.A. 412)

P-4 (RCCP)
STA. 17+00
30" X 194'
U.S.F.L. 85' RT. ELEV. 650.80
D.S.F.L. 109' LT. ELEV. 650.30
DA = 14 AC., Q_{50} = 24 cfs, Q_{100} = 34 cfs

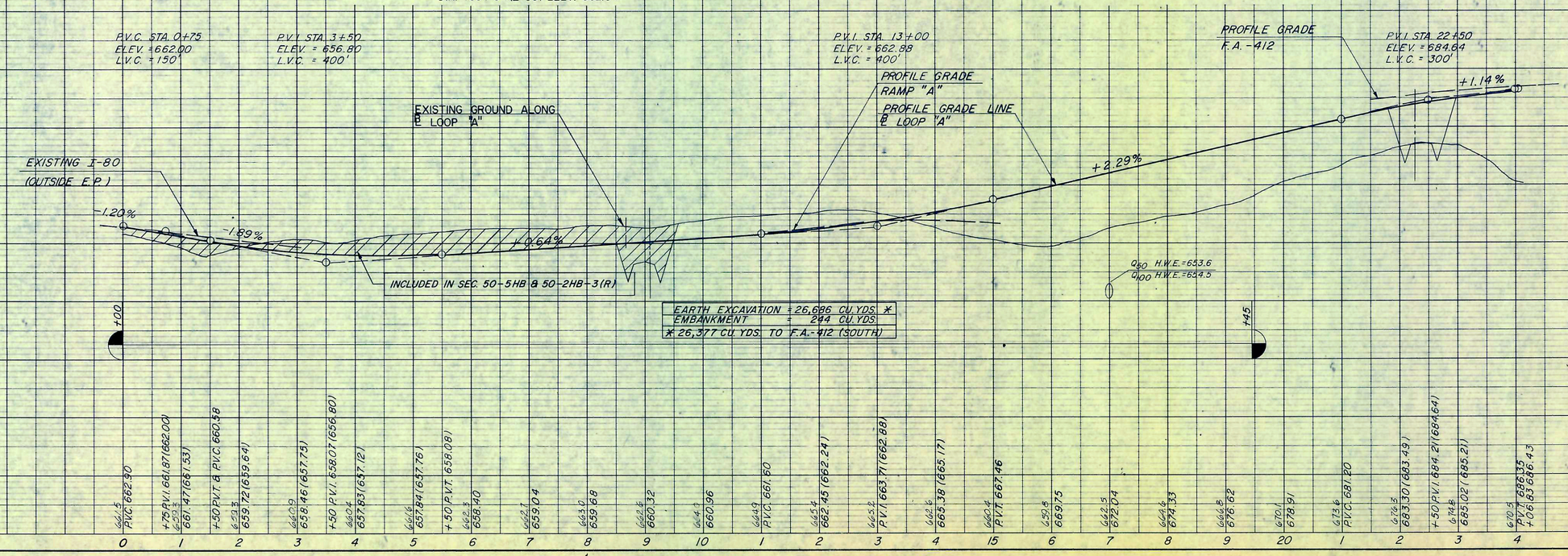
END SECTIONS, 30"-2 EACH

NOTES SHOWN IN THIS MANNER PERTAIN TO SECTION 50-5 HB & 50-2 HB-3(R)

P.C.C. STA. 6+40.04
P.I. STA. 3+40.15
P.T. STA. 756+88.79
P.C.C. STA. 19+08.42
P.I. STA. 21+66.86
℄ LOOP "B"
℄ I-80 DETOUR
℄ LOOP "A"
℄ RAMP "A"
℄ I-80
℄ F.A. 412
CURVE #13
CURVE #25
CURVE #55
CURVE #27
EXISTING R.O.W.
A.C.
R. 650.8
R. 650.3
N. 89°46'00.5" E
N 5°-26'-045" E
84°19'56"
BM 5A-2
1030
1035
760
755
WALTER BRANNAN

B.M. # 5A-2 60 COMMON NAIL IN 3RD. P.P. WEST OF HEDGE ROW & ON SOUTH SIDE OF FRONTAGE ROAD 109' LT. STA. 759+94 (I-80) ELEV. 662.94

B.M. # 5A-1 CONC. NAIL IN FENCE POST 400' LT. STA. 1042+30 (F.A.-412) ELEV. 654.34



EARTH EXCAVATION = 26,686 CU. YDS. *
EMBANKMENT 294 CU. YDS.
* 26,377 CU. YDS. TO F.A.-412 (SOUTH)

HOMER L. CHASTAIN & ASSOCIATES, CONSULTING ENGINEERS — DECATUR, ILLINOIS

PLATE 1 PLAN-PROFILE B.P.R. STANDARD

LOOP "A"

Printed in U.S.A. On IMPERIAL Tracing Cloth

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. - 412	50-5HBB, 50-2HB-3(R)	LaSALLE	156	24
STA. 156+60.08		TO STA. 184+70.63		
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SEC. 1, T. 33N., R. 1E., 3RD P.M.

WALTER BRANNAN

℄ I-80

CURVE #3

EXISTING R.O.W.

P.C. STA. 743+48.42

S 70°-07'-39.5" E.

CURVE DATA (CURVE #30)
P.I. STA. 159+75.18
Δ = 31°27'05"
D = 7°30'00"
T = 215.10'
R = 763.94'
L = 419.35'
E = 29.71'
S.E. = 0.08 V/I
S.E. ATTAINED STA. 156+60.08
TO STA. 158+10.08
S.E. REMOVED STA. 161+15
TO STA. 163+10.00

PIPE CULVERT
SEE SHEET 25

℄ LOOP "B"

CURVE #60

P.I. STA. 159+75.18

P.T. STA. 161+79.43

S 35°-38'-19.7" E.

CURVE #30

A.C.

4312.23 LIN. FT.
WOVEN WIRE FENCE

P-1 (R.C.C.P.)
STA. 163+00
54" X 78"
U.S.F.L. 47' LT. ELEV. 638.30
D.S.F.L. 31' RT. ELEV. 638.00
D.A. = 36 AC., Q_{50} = 96 cfs, Q_{100} = 132 cfs

END SECTIONS, 54" - 2 EACH

742+87.34
166.88' RT.

742+31.54
150' RT.

746+52.12
297.30' RT.

STATION EQUATION
P.C. STA. 157+60.08 = 89.28' RT.
STA. 743+25.78 (I-80)

STATION EQUATION
STA. 156+60.08 = 83.98' RT.
STA. 742+25.92 (I-80)

SEC. 36, T. 34N., R. 1E.
SEC. 1, T. 33N., R. 1E.

P.L. EXISTING R.O.W.

℄ C.H.-13

TEMPORARY CONSTRUCTION EASEMENT

WILLIAM & KATHERINE REMENIH

1015+64.30
622.36' LT.

CURVE DATA (CURVE #31)
P.I. STA. 182+15.77
Δ = 39°55'39"
D = 7°30'00"
T = 277.51'
R = 763.94'
L = 532.37'
E = 48.84'
S.E. = 0.08 V/I
S.E. ATTAINED STA. 178+10
TO STA. 180+00
S.E. REMOVED STA. 183+74.63
TO 1/2 S.E. = 0.04 V/I AT STA. 184+70.63

PIPE CULVERT
SEE SHEET 14

RAMP "B"

N. 5°-26'-04.5" E.

P.C. STA. 179+38.26

P.I. STA. 182+15.77

CURVE #31

6" FIELD TILE
REPD. LOC.

1010+50
235' LT.

℄ F.A.-412

6" FIELD TILE
REPD. LOC.

PIPE CULVERT
SEE SHEET 14

STATION EQUATION
P.T. STA. 184+70.63 = 90.00' LT.
STA. 1007+96.55 (F.A. 412)

STATION EQUATION
STA. 185+70.63 = 88.00' LT.
STA. 1006+96.55 (F.A. 412)

1006+00
150' LT.

MARY LANNEN, et al

1/4 SEC. LINE

SEC. 1, T. 33N., R. 1E., 3RD P.M.

BM # 5-A3-60 COMMON NAIL IN FIRST P.P. EAST OF C.H. 13 & NORTH OF FRONTAGE ROAD 155' LT. STA. 739.59 (I-80) ELEV. 641.64

BM # 4 PK. NAIL IN 72" FORKED ELM TREE 150' EAST OF N.-S. FENCE 600' RT. STA. 1017+00 (F.A.-412) ELEV. 653.72

P.V.I. STA. 157+35.08
ELEV. 644.44
L.V.C. = 150'

P.V.I. STA. 160+50
ELEV. 642.71
L.V.C. = 400'

P.V.I. STA. 181+00
ELEV. 664.62
L.V.C. = 400'

EXISTING GROUND ALONG ℄ RAMP "B"

PROFILE GRADE LINE ℄ RAMP "B"

PROFILE GRADE LOOP "B"

PROFILE GRADE F.A.-412

EXISTING I-80 (OUTSIDE E.P.)

INCLUDED IN SECTION 50-5 HB & 50-2 HB-3 (R)

+0.83%

-0.55%

+1.069%

-0.27%

RT. DITCH - 0.20%

RT. DITCH + 2.09%

RT. DITCH + 1.31%

RT. DITCH + 0.20%

Q_{50} H.W.E. = 642.6
Q_{100} H.W.E. = 644.2

+60.08

+0.00

SEE NOTE RIGHT

EARTH EXCAVATION = 0 CU. YDS.
EMBANKMENT = 130 CU. YDS. X
X OBTAIN 165 CU. YDS. FROM RAMP "D"

AT 637.80

AT 638.00

AT 647.15

AT 655.32

+60.08 P.V.C. 643.82
+80.0 644.08 (644.15)
+35.08 P.V.I. 644.18 (644.44)
+80.0 644.08 (644.08)
+10.08 P.V.T. 644.03
+50 P.V.C. 643.81
+80.0 643.58 (643.53)
+50 P.V.I. 643.44 (642.98)
+50 P.V.I. 643.52 (642.71)
+80.0 643.70 (643.24)
+80.0 644.36 (644.31)
+50 P.V.T. 644.65
+80.0 645.38
+80.0 646.45
+80.0 647.52
+80.0 648.59
+80.0 649.66
+80.0 650.72
+80.0 651.79
+80.0 652.86
+51.1 653.93
+45.10 655.00
+45.54 656.07
+51.18 657.14
+44.14 658.21
+44.40 659.27
+44.23 660.34
+44.85 661.41
+44.85 P.V.C. 662.48
+32.18 663.38 (663.55)
+32.16 P.V.I. 663.94 (664.62)
+44.83 664.18 (664.35)
+44.23 P.V.T. 664.08
+44.85 663.81
+70.63 663.62
+71 (AT 659.24)

PLAN
SURVEYED
NOTE BOOK
No.
DRAWN H.L.C. 7-72
TRACED S.P.M. 11-72
CHECKED H.L.C. 6-73
S.P.M. 6-73
H.L.C.
STRUCTURE NOTATIONS CHECKED

PROFILE
SURVEYED
PLOTTED
DRAWN H.L.C. 7-72
TRACED S.P.M. 11-72
CHECKED H.L.C. 6-73
S.P.M. 6-73
H.L.C.
NOTE BOOK
No.
STRUCTURE NOTATIONS CHECKED

HOMER L. CHASTAIN & ASSOCIATES, CONSULTING ENGINEERS — DECATUR, ILLINOIS

PLATE 1 PLAN-PROFILE B.P.R. STANDARD
EUGENE DIETZGEN CO. CHICAGO NEW YORK

Printed in U.S.A. On IMPERIAL Trading Cloth

RAMP "B"

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 412	50-5HB(B) 50-2HB-3(R)	LaSALLE	156	25
STA. 25+00.00	TO STA. 46+67.75			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

LOOP "B"

CURVE DATA (CURVE #22)
P.I. STA. 27+54.27
Δ = 36°49'09"
D = 7°30.00'
T = 254.03'
R = 763.94'
L = 490.92'
E = 41.20'
S.E. = 0.08 1/1
S.E. ATTAINED STA. 26+85.39
(1/2 S.E. = 0.04 1/1) TO STA. 27+81.39

CURVE DATA (CURVE #24)
P.I. STA. 45+10.35
Δ = 23°57'59"
D = 7°30.00'
T = 162.15'
R = 763.94'
L = 319.55'
E = 17.02'
S.E. = 0.08 1/1
S.E. REMOVED STA. 45+47.75
TO 1/2 S.E. = 0.04 1/1 AT STA. 46+67.75

CURVE DATA (CURVE #60)
Δ = 203°35'30"
D = 15°00'00"
R = 381.97'
L = 1357.28'
S.E. = 0.08 1/1

SEC. 1, T. 33N., R. 1E., 3RD. P.M.

℄ RAMP "B"

A.C.

℄ LOOP "B"

CURVE #60

P-1 (R.C.C.P.)
STA. 40+00
36" X 80'
U.S.F.L. 31' RT. ELEV. 644.80
D.S.F.L. 49' LT. ELEV. 644.50
DA = 14 A.C., Q_{50} = 43 cfs, Q_{100} = 60 cfs

END SECTIONS, 36" - 2 EACH

P.C.C. STA. 43+48.20

P.I. STA. 45+10.35

P.C.C. STA. 29+90.92

P.I. STA. 27+54.27

CURVE #22

CURVE #24

EXISTING R.O.W.

CURVE #13

SEC. 36, T. 34N., R. 1E.
SEC. 1, T. 33N., R. 1E.

℄ LOOP "A"

P.T. STA. 756+88.79

℄ I-80

STATION EQUATION
P.T. STA. 46+67.75 = 68.00' RT.
STA. 756+60.30 (I-80)

STATION EQUATION
P.C. STA. 25+00.00 = 81.93' LT.
STA. 1028+48.63 (F.A. 412)

STATION EQUATION
STA. 1028+55.04 (F.A. 412) =
STA. 760+96.98 (I-80)

B.M. #5A-2

N 89° 46' 00.5" E

84°-19'-56"

N 5°-26'-04.5" E

℄ F.A. 412

MARY LANNEN, et al

WILLIAM & KATHERINE REMENIH

SEC. 1, T. 33N., R. 1E., 3RD. P.M.

NOTES SHOWN IN THIS MANNER PERTAIN TO SECTION 50-5HB & 50-2HB-3(R)

B.M. #4 P.K. NAIL IN 72" FORKED ELM TREE
150' EAST OF N-S FENCE
600' RT. STA. 1017+00 (F.A.-412)
ELEV. 653.72

B.M. # 5A-2 60 COMMON NAIL IN 3RD. P.P. WEST OF HEDGE ROW & ON SOUTH SIDE OF FRONTAGE ROAD 109' LT. STA. 759+94 (I-80)
ELEV. 662.94

PROFILE GRADE
F.A. - 412
P.V.I. STA. 25+75
ELEV. = 687.95
L.V.C. = 150'
-0.48%

P.V.I. STA. 28+00
ELEV. = 684.58
L.V.C. = 300'
=1.50%

P.V.I. STA. 37+50
ELEV. = 647.31
L.V.C. = 700'

EXISTING GROUND ALONG ℄ LOOP "B"

PROFILE GRADE RAMP "B"

PROFILE GRADE LINE ℄ LOOP "B"

-3.86%

Q_{50} H.W.E. = 648.4
Q_{100} H.W.E. = 649.5

+1.324%

EXISTING I-80 (OUTSIDE E.P.)

INCLUDED IN SEC. 50-5HB & 50-2HB-3(R)

INCLUDED IN SEC. 50-5HB & 50-2HB-3(R)

EARTH EXCAVATION = 11 CU. YDS.
EMBANKMENT = 32,039 CU. YDS. *(1)

* OBTAIN 583 CU. YDS. FROM C.H.-13 (SOUTH CONE)
* OBTAIN 16,879 CU. YDS. FROM INFIELD A-1
* OBTAIN 2,410 CU. YDS. FROM INFIELD A-3
OBTAIN 4,739 CU. YDS. FROM RAMP D
(1) INCLUDES 9,856 CU. YDS. IN INFIELD B-2

+00 +51 160 +67.75

680 670 660 650

25 6 7 8 9 30 1 2 3 4 35 6 7 8 9 40 1 2 3 4 45 6

655.8	655.4	655.7	655.9	656.5	656.5	656.9	657.7	657.7	657.9	658.5	658.8	658.8	658.4	658.5	656.5	657.7	657.3	656.1	655.0	655.3	653.3	651.9	651.0	649.4	649.4	646.6	644.3	643.1	642.4	640.5	639.5
PVC 688.31	+75 P.V.I. 687.76 (687.95)	687.49 (687.58)	+50 P.V.T. & P.V.C. 686.83	685.98 (686.08)	P.V.I. 683.70 (684.58)	680.82 (680.72)	+50 P.V.T. 678.79	676.86	673.00	668.74	665.28	P.V.C. 661.42	657.93 (657.56)	655.18 (653.70)	653.71 (649.84)	+50 P.V.I. 652.50 (647.31)	651.90 (648.57)	651.38 (649.90)	651.39 (651.22)	P.V.T. 652.84	653.87	655.19	656.51	657.84	659.16	660.06

NOTE BOOK
No.
PLOTTED
SURVEYED
PLANS CHECKED
A.C. PAVEMENT CHECKED
R.C. OF WAY CHECKED
PLAN
BY H.L.C. 7-55 M.J. 7-55 M.J. 7-55
DATE 7-55 7-55 7-55
PROFILE
STRUCTURE ROTATIONS CHECKED
B.M.'s NOTED

HOMER L. CHASTAIN & ASSOCIATES, CONSULTING ENGINEERS — DECATUR, ILLINOIS

PLATE 1 PLAN-PROFILE B.P.R. STANDARD
EUGENE DIETZGEN CO. CHICAGO - NEW YORK

LOOP "B"

Printed in U.S.A. On IMPERIAL Tracing Cloth
Printed in U.S.A. On IMPERIAL Tracing Cloth

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.-412	50-5HBB 50-2HB-3(R)	LaSALLE	156	26
STA. 206+60.08		TO STA. 237+03.38		
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

RAMP "C"

PLAN — SURVEYED: 12-2-68; DRAWN: 1-20-69; NOTE BOOK: ALIGNMENT CHECKED: RT. OF WAY CHECKED: No.

PROFILE — SURVEYED: 12-2-68; PLOTTED: 1-20-69; GRADES CHECKED: R.W.C.; STRUCTURE NOTATIONS CHECKED: S.P.No.3

SEC. 1, T. 33N., R. 1E., 3RD P.M.

WILLIAM & KATHERINE REMENIH

MARY LANNEN, et al

RALPH & LENA DERANGO

CARLO DERANGO

FRANK & MARGARET DERANGO

SEC. 36, T. 34N., R. 1E.

SEC. 1, T. 33N., R. 1E.

EXISTING R.O.W.

℄ F.A.-412

℄ LOOP "C"

℄ RAMP "C"

℄ I-80

CURVE #35

P.I. STA. 209+95.66

P.T. STA. 212+17.11

N 5°-26'-04.5" E

CURVE DATA (CURVE #35)
P.I. STA. 209+95.66
Δ = 34°16'36"
D = 7°30'00"
T = 235.58'
R = 763.94'
L = 457.03'
E = 35.50'
S.E. = 0.08 1/1
S.E. ATTAINED STA. 206+60.08
TO STA. 208+10.08
S.E. REMOVED STA 211+55
TO STA. 213+45

CURVE #36

P.C. STA. 230+84.50

P.I. STA. 234+12.05

N 42°-44'-57.3" E

CURVE DATA (CURVE #36)
P.I. STA. 234+12.05
Δ = 46°24'58"
D = 7°30'00"
T = 327.55
R = 763.94'
L = 618.88'
E = 67.26'
S.E. = 0.08 1/1
S.E. ATTAINED STA. 229+55
TO STA. 231+50
S.E. REMOVED STA. 236+07.38
TO 1/2 S.E. 0.04 1/1 AT STA. 237+03.38

CURVE #65

180°

775 FT.

P.I. STA. 779+09.17

780 S 89°-41'-19.5" E

1009+00 200' RT.

1011+33.06 336.15 RT.

6" FIELD TILE REPD. LOC.

FIELD TILE OUTLET HEADWALL
SEE SHEET 42

STATION EQUATION
P.C. STA. 207+60.08 = 109.28' RT.
STA. 1007+65.00 (F.A. 412)

STATION EQUATION
STA. 206+60.08 = 103.98' RT.
STA. 1006+65.14 (F.A. 412)

SEC. LINE

1/4 SEC. LINE

P-3 (R.C.C.P.)
STA. 220+10 (30° LT. FWD.)
48' X 162'
STD. 1998 (1 HDWL.) SEE SHEET
U.S.F.L. 94' LT. ELEV. 644.30
D.S.F.L. 68' RT. ELEV. 644.00
D.A. = 34 AC., Q_{50} = 75 cfs, Q_{100} = 103 cfs

CATCH BASINS, TYPE B, TYPE 7 GRATE
85' LT. STA. 220+65
GRATE ELEV. 650.80
INVERT ELEV. 644.30
(SEE SPECIAL PROVISIONS)

P-3 (R.C.C.P.)
STA. 64+15.61 (3° RT. FWD.)
36" X 132"
U.S.F.L. 43' RT. ELEV. 649.50
D.S.F.L. 69' LT. ELEV. 644.30
D.A. = 14 AC., Q_{50} = 44 cfs, Q_{100} = 61 cfs

END SECTIONS, 36" - 1 EACH

4517.28 LIN FT. WOVEN WIRE FENCE

775+36.93 378.41 RT.

777+00 240' RT.

777+65.52 252.61' RT.

777+65.45 219.64' RT.

PERMANENT EASEMENT

EXISTING 33' EASEMENT

STATION EQUATION
P.T. STA. 237+03.38 = 70.00' RT.
STA. 780+20.26 (I-80)

781+00 148' RT.

781+00 115' RT.

STATION EQUATION
STA. 238+03.38 = 68.00' RT.
STA. 781+20.24 (I-80)

PIPE CULVERT
SEE SHEET 17

B.M.# 4 PK NAIL IN 72" FORKED ELM TREE
150' EAST OF N.S. FENCE
STA. 1017+00, 600' RT. (F.A.-412)
ELEV. 653.72

B.M.# 5 PK. NAIL IN POWER POLE
SOUTH SIDE OF FRONTAGE RD.
STA. 772+01, 106' LT. (I-80)
ELEV. 670.20

NOTES SHOWN IN THIS MANNER PERTAIN TO SECTION 50-5HB & 50-2HB-3(R)

PROFILE GRADE F.A.-412

PROFILE GRADE LOOP "C"

PROFILE GRADE LINE ℄ RAMP "C"

EXISTING GROUND ALONG ℄ RAMP "C"

EXISTING I-80 (OUTSIDE E.P.)

P.V.I. STA. 207+35.08
ELEV. 663.91
L.V.C. = 150'

P.V.I. STA. 212+50
ELEV. 657.89
L.V.C. = 400'

P.V.I. STA. 235+00
ELEV. 665.09
L.V.C. = 400'

+0.20%

-1.17%

+0.32%

-1.55%

RT. DITCH -1.18%

RT. DITCH -0.50%

RT. DITCH -2.92% (EXCELSIOR BLANKET LINING)

RT. DITCH +0.51% (EXCELSIOR BLANKET LINING)

RT. DITCH +2.39% (EXCELSIOR BLANKET LINING)

RT. DITCH +0.50%

RT. DITCH +0.70%

INCLUDED IN SEC. 50-5 HB & 50-2 HB-3(R)

D_{50} H.W.E. = 648.4
D_{100} H.W.E. = 649.2

EARTH EXCAVATION 941 CU. YDS.*
EMBANKMENT 301 CU. YDS.
*559 CU. YDS. TO I-80 (SOUTH)

+60.08 P.V.C. 663.76
663.77 (663.84)
+35.08 P.V.I. 663.65 (663.91)
663.15 (661.15)
+10.08 P.V.T. 663.03
661.98
660.81
+50.00 P.V.C. 661.23
659.69 (659.64)
660.89 (658.47)
+50.00 P.V.I. 658.23 (657.89)
658.47 (658.05)
659.42 (656.37)
+50.00 P.V.T. 658.53
658.69
659.01
659.83
659.65
659.97
660.29
660.61
660.93
661.25
661.57
661.89
662.21
662.53
662.86
663.17
663.49
663.81
664.13
664.45
P.V.C. 664.45
664.54 (664.77)
P.V.I. 664.16 (665.09)
663.71 (663.54)
+03.38 P.V.T. 657.66
+03.38 662.83

+50 RT. 656.26'
RT. 653.31'
RT. 651.31'
+50 RT. 644.00'
RT. 644.00'
RT. 645.02'
RT. 656.98'
+00 RT. 660.98'
+03 RT. 657.66'

7 8 9 210 1 2 3 4 25 6 7 8 9 220 1 2 3 4 225 6 7 8 9 230 1 2 3 4 235 6 7

670 660 650 640

HOMER L. CHASTAIN & ASSOCIATES, CONSULTING ENGINEERS — DECATUR, ILLINOIS

PLATE 1 PLAN-PROFILE B.P.R. STANDARD
EUGENE DIETZGEN CO., CHICAGO, NEW YORK

Printed in U.S.A. On IMPERIAL Tracing Cloth

RAMP "C"

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 412	50-5HB & 50-2HB-3(R)	LaSALLE	156	27
STA. 50+00.00	TO STA. 73+81.95			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

LOOP "C"

MARY LANNEN, et al

SEC. 1, T. 33N., R. 1E., 3RD. P.M.

WILLIAM & KATHERINE REMENIH

RALPH & LENA DERANGO

CARLO DERANGO

SEC. 1, T. 33N., R. 1E., 3RD. P.M.

N 5°26'04.5" E

84°19'56"

N 69°46'00.5" E

CURVE DATA (CURVE #16)
P.I. STA. 53+24.57
Δ = 46°02'16"
D = 7°30'00"
T = 324.57'
R = 763.94'
L = 613.84'
E = 66.09'
S.E. = 0.08 ft
S.E. ATTAINED STA. 51+85.39 (1/2 S.E. = 0.04 ft.) TO STA. 52+81.39

CURVE DATA (CURVE #18)
P.I. STA. 71+52.38
Δ = 35°37.48"
D = 7°30'00"
T = 245.50'
R = 763.94'
L = 475.07'
E = 32.49'
S.E. = 0.08 ft
S.E. REMOVED STA. 72+85.95 TO 1/2 S.E. = 0.04 ft. AT STA. 73+81.95

CURVE DATA (CURVE #65)
Δ = 193°57'25"
D = 15°00'00"
R = 381.97'
L = 1293.04'
S.E. = 0.08 ft

P.I. STA. 71+52.38

CURVE #18

P.C.C. STA. 69+06.88

℄ F.A. 412

℄ LOOP "C"

℄ RAMP "C"

℄ I-80

℄ LOOP "D"

℄ MEDIAN CROSSOVER

P.C. STA. 768+20.28

P.I. STA. 53+24.57

CURVE #16

CURVE #14

CURVE #65

1/4 SECTION LINE

A.C.

PIPE CULVERT

PIPE CULVERT
SEE SHEET 26

EXISTING R.O.W.

EXISTING R.O.W.

PIPE DRAINS
SEE SHEET 29

STATION EQUATION
P.T. STA. 73+81.95 = 88.00' RT.
STA. 1025+66.20 (F.A. 412)

STATION EQUATION
STA. 1028+55.04 (F.A. 412) =
STA. 760+96.98 (I-80)

STATION EQUATION
P.C. STA. 50+00.00 = 61.78' RT.
STA. 763+08.37 (I-80)

P-1 (R.C.C.P.)
STA. 51+95
12" X 30'
U.S.F.L. 21' LT. ELEV. 667.00
D.S.F.L. 9' RT. ELEV. 664.80

INLET, TYPE A, TYPE 1 FRAME, OPEN LID (24" DEPTH) - 1 EACH
GRATE ELEV. 669.60

CONCRETE COLLAR

P-1 (B.C.C.S.C.P.)
STA. 51+95'
12" X 74
U.S.F.L. 9' RT. ELEV. 664.80
D.S.F.L. 83' RT. ELEV. 655.00
P.C.C. STA. 56+13.84'

END SECTIONS, 12" - 1 EACH

B.M. #4 P.K. NAIL IN 72" FORKED ELM TREE
150' EAST OF N-S FENCE
600' RT. STA. 1017+00 (F.A.-412)
ELEV. 653.72

B.M. #5 P.K. NAIL IN P.P. SOUTH OF
FRONTAGE RD. 400' LT. STA. 1029+20 (F.A.-412)
ELEV. 670.20

NOTES SHOWN IN THIS MANNER PERTAIN TO SEC. 50-5 HB & 50-2HB-3(R)

PROFILE GRADE
F.A. - 412
P.V.I. STA. 72+25
ELEV. = 687.06
L.V.C. = 300'

P.V.I. STA. 50+75
ELEV. = 668.58
L.V.C. = 150'

P.V.I. STA. 53+50
ELEV. = 669.16
L.V.C. = 400'

P.V.I. STA. 63+50
ELEV. = 652.07
L.V.C. = 1200'

EXISTING I-80 (OUTSIDE E.P.)

EXISTING GROUND ALONG ℄ LOOP "C"

PROFILE GRADE LINE ℄ LOOP "C"

PROFILE GRADE RAMP "C"

+0.96%
+0.21%
-1.70%
+4.00%
+0.60%

INCLUDED IN SEC. 50-5 HB & 50-2HB-3(R)

INCLUDED IN SEC. 50-5HB & 50-2HB-3(R)

50 YR. H.W.E. = 652.8
100 YR. H.W.E. = 654.0

EARTHWORK INCLUDED IN QUANTITYS SHOWN ON RIGHT

EARTH EXCAVATION = 26 CU. YDS.
EMBANKMENT = 27,554 CU. YDS. *
*OBTAIN 34,892 FROM INFIELD "A-3" ①

① INCLUDES 1525 CU. YDS. WITHIN INFIELD "C-2"

	50	1	2	3	4	55	6	7	8	9	60	1	2	3	4	65	6	7	8	9	70	1	2	3
	670 P.C. 667.86	+75 P.V.I. 668.44 (668.58) 670.3	668.57 (668.63)	+50 P.V.T. & P.V.C. 668.79	665.8	668.78 (668.84)	669.4	668.51 (669.05)	+50 P.V.I. 668.20 (668.16)	667.0	667.71 (667.31)	669.4	666.54 (666.80)	+50 P.V.T. 665.74	663.5	664.99	660.0	663.18	+50 P.V.C. 662.32	659.4	661.53 (661.47)	655.0	660.30 (659.76)	651.1	659.54 (658.05)	653.3	659.25 (656.34)	653.4	659.45 (654.63)	659	660.12 (652.32)	+50 P.V.I. 660.63 (652.07)	649.4	661.27 (654.01)	649.8	662.39 (658.07)	649.8	664.88 (662.07)	653.1	667.56 (666.07)	654.9	670.60 (670.06)	657.0	674.12 (674.06)	+50 P.V.T. 676.06	658.4	678.06	+75 P.V.C. 681.06	659.0	682.02 (682.06)	658.3	685.17 (686.06)	+25 P.V.I. 685.73 (687.06)	658.5	687.19 (687.51)	+75 P.V.T. 687.96	+91.95	688.00

HOMER L. CHASTAIN & ASSOCIATES, CONSULTING ENGINEERS — DECATUR, ILLINOIS

PLATE 1 PLAN-PROFILE B P R STANDARD
EUGENE DIETZGEN CO., CHICAGO, NEW YORK.

LOOP "C"

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PLAN — NOTE BOOK No. —
SURVEYED — BY — DATE
PLOTTED — BY — DATE
GRADES CHECKED — BY — DATE
ALIGNMENT CHECKED — BY — DATE
RT. OF WAY CHECKED — BY — DATE
B. M.'s NOTED — BY — DATE
STRUCTURE LOCATIONS CHECKED — BY — DATE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.-412	30-5HB & 50 2HB-3(R)	LaSALLE	156	28
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SEC. 36, T.34N., R.IE., 3RD P.M.

WALTER BRANNAN

RAMP "D"

CURVE DATA (CURVE #37)
P.I. STA. 261+19.20
Δ = 50°21'20"
D = 7°30'00"
T = 359.12'
R = 763.94'
L = 671.41'
E = 80.20'
S.E. = 0.08 1/'
S.E. ATTAINED STA. 256+60.08
TO STA. 258+10.08
S.E. REMOVED STA. 263+65.00
TO STA. 265+80.00

CURVE DATA (CURVE #38)
P.I. STA. 281+17.83
Δ = 40°35'04"
D = 7°30.00'
T = 282.47'
R = 763.94'
L = 541.12'
E = 50.55'
S.E. = 0.08 1/'
S.E. ATTAINED STA. 277+05.00
TO STA. 279+00'
S.E. REMOVED STA. 282+80.49
TO 1/2 S.E. = 0.04 1/' AT STA. 283+76.49

SEC. LI. 37 N. R.IE.
SEC. LI. 34 N. R.IE.

B.M. #5

℄ I-80 DETOUR ROAD

℄ LOOP "D"

℄ I-80

P.T. STA. 264+31.49

P.I. STA. 261+19.20

P.C. STA. 278+35.36

P.I. STA. 281+17.83

SEC. LINE

CURVE #14

CURVE #37

CURVE #38

P.T. STA. 779+09.17

EXISTING R.O.W.

EXISTING R.O.W.

A.C.

A.C.

A.C.

A.C.

S 89°41' 19.5" E

780'

774+26.79 (I-80)
448.30' LT.

1034+31.11 (F.A.-412)
1281.55' RT.

777+00
240' LT.

782+00
160' LT.

1044+78.80
347.10' RT.

1047+00
225' RT.

1050+00
165' RT.

3978.81 LIN. FT.
WOVEN WIRE FENCE

P-2 (RCCP)
STA. 261+00
24' x 70'
USFL 47' LT. ELEV. 659.50
DSFL 23' RT. ELEV. 659.00
DA = 7 AC., Q_{50} = 19 cfs., Q_{100} = 27 cfs.

END SECTIONS, 24"-1 EACH

INLET BOX STD. 2249-1 EACH

P-2 (RCCP)
STA. 270+00
36' x 194' - STD. 2051-05 36-2
(1 HOWL LT. SKEWED 15°)
USFL 150' LT. ELEV. 655.50
DSFL 44' RT. ELEV. 655.00
DA = 14 AC., Q_{50} = 41 cfs., Q_{100} = 57 cfs.

END SECTIONS, 36"-1 EACH

P-3 (RCCP)
STA. 278+00
30' x 158'
USFL 96' LT. ELEV. 643.60
DSFL 62' RT. ELEV. 643.00
DA. = 9 AC., Q_{50} = 44 cfs., Q_{100} = 63 cfs.

END SECTIONS, 36"-2 EACH

6" STORM SEWER
SEE SHEET 15

6" FIELD TILE
REPD. LOC.

PIPE CULVERT
SEE SHEET 15

℄ F.A.-412

1050 N 5° 26' 04.5" E

STATION EQUATION
P.C. STA. 257+60.08 = 89.28' LT.
STA. 779+29.44 (I-80)

STATION EQUATION
STA. 256+60.08 = 83.98' LT.
STA. 780+29.30 (I-80)

STATION EQUATION
P.T. STA. 283+76.49 = 90.00' RT.
STA. 1049+15.45 (F.A. 412)

STATION EQUATION
STA. 284+76.49 = 88.00' RT.
STA. 1050+15.43 (F.A. 412)

NORMAN A. SMALL

SEC. 36, T.34N., R.IE., 3RD P.M.

B.M. #5 PK. NAIL IN PP.
SOUTH SIDE OF FRONTAGE RD.
106' LT. STA. 772+01 (I-80)
ELEV. 670.20

B.M. #6 PK. NAIL IN CORNER POST
N.W. CORNER OF INTERSECTION
FRONTAGE ROAD & TR.-108
660' LT. STA. 790+20 (I-80)
ELEV. 642.74

NOTES SHOWN IN THIS MANNER PERTAIN TO SECTION 50-5HB & 50-2HB-3(R)

PVI STA. 257+35.08
ELEV. 663.59
L.V.C. 150'

PVI STA. 265+00
ELEV. 666.27
L.V.C. 400

PVI STA. 276+00
ELEV. 663.41
L.V.C. 600'

EXISTING GROUND ALONG ℄ RAMP "D"

PROFILE GRADE LOOP "D"

PROFILE GRADE LINE ℄ RAMP "D"

PROFILE GRADE F.A.-412

EXISTING I-80 (OUTSIDE E.P.)

+1.72%

-0.35%

-0.26%

-2.067%

Q_{50} H.W.E. = 662.0
Q_{100} H.W.E. = 663.1

Q_{50} H.W.E. = 659.1
Q_{100} H.W.E. = 660.2

Q_{50} H.W.E. = 647.3
Q_{100} H.W.E. = 648.6

RT. DITCH +0.32%

RT. DITCH +1.32%

RT. DITCH -0.36%

INCLUDED IN SEC. 50-5HB AND 50-2HB-3(R)

RT. DITCH -1.70% (EXCELSIOR BLANKET LINING)

RT. DITCH -2.08% (EXCELSIOR BLANKET LINING)

+60.08 RT 665.19

RT. 659.00

RT. 661.63

+46 +50 RT. 660.00

RT. 647.70

RT. 643.00

RT. 631.00

EARTH EXCAVATION = 26,054 CU. YDS. *
EMBANKMENT = 0 CU. YDS.
* 4,733 CU. YDS. TO INFIELD "B-2"
* 165 CU. YDS. TO RAMP "B"
* 9,483 CU. YDS. TO F.A.-412 (NORTH)
* 11,673 CU. YDS. TO I-80 DETOUR REMOVAL

+60.00 PVI 662.36
+61.00 662.51
662.92 (662.99)
+35.08 PVI 663.33 (663.59)
663.82 (663.82)
+10.08 PVI 663.85
663.73
664.17
664.23
664.52
664.70
664.87
664.95
665.22
665.32
PVI 665.57
665.72
663.84 (665.92)
665.82
PVI 665.97 (666.27)
665.92
663.93 (666.01)
665.75
PVI 665.76
665.67
665.69
665.72
665.23
665.73
664.97
665.71
664.71
664.92
664.87
664.51
PVI 664.19
664.55
663.78 (663.93)
664.29
663.07 (663.67)
664.32
PVI 662.05 (663.41)
662.53
660.74 (660.94)
664.99
659.13 (659.28)
664.75
PVI 657.21
664.58
655.14
664.78
653.08
664.74
650.01
653.85
648.94
+76.49 647.36 +76.49 PVI 647.36 +76.49 RT. 631.00

7 8 9 260 1 2 3 4 265 6 7 8 9 270 1 2 3 4 275 6 7 8 9 280 1 2 3 4

670 660 650 640

HOMER L. CHASTAIN & ASSOCIATES, CONSULTING ENGINEERS — DECATUR, ILLINOIS

PLATE 1 PLAN-PROFILE B.P.R. STANDARD
EUGENE DIETZGEN CO. CHICAGO NEW YORK

Printed in U.S.A. On IMPERIAL Tracing Cloth

RAMP "D"

PLAN
SURVEYED: H.L.C.
PLOTTED: J.M.E.C.
NOTE BOOK: AS COMMENT CHECKED. BY OFFICE MAT. CHECKED.
No.

PROFILE
SURVEYED: H.L.C. 11-26
PLOTTED: J.M.E.C. 1-28
NOTE BOOK: GRADES CHECKED. S. B. m. 2
No. S. WALL LOCATIONS CHECKED. m. 2

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-5HB & 50-2HB-3(R)	LaSALLE	156	29
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

LOOP "D"

CURVE DATA (CURVE #19)
P.I. STA. 77+66.86
Δ = 36°30'36"
D = 7°30'00"
T = 266.86'
R = 763.94'
L = 513.47'
E = 45.27'
S.E. = 0.08%
S.E. ATTAINED STA. 76+85.39
(1/2 S.E. = 0.04%) TO STA. 77+81.39

CURVE DATA (CURVE # 21)
P.I. STA. 95+22.67
Δ = 27°32'05"
D = 7°30'00"
T = 186.00'
R = 763.94'
L = 368.91'
E = 22.32
S.E. = 0.08%
S.E. REMOVED STA. 96+05.57
TO 1/2 S.E. = 0.04 % AT STA. 97+01.57

CURVE DATA (CURVE # 70)
Δ = 198°28'47"
D = 15°00'00"
R = 381.97'
L = 1323.20'
S.E. = 0.08%

STORM SEWER, TYPE I
87' RT. STA. 1029+95 TO
42' RT. STA. 1029+93
12"X 46'
U.S.F.L. 42' RT. ELEV. 685.10
D.S.F.L. 87' RT. ELEV. 684.70

INLETS, TYPE A, TYPE I FRAME, OPEN LID (24" DEPTH)
41' RT. STA. 1029+89 & 1029+93
GRATE ELEV. 687.70

PIPE DRAINS
STA. 1029+95 (15° LT. FWD.)
12"X 60"*
U.S.F.L. 89' RT. ELEV. 684.70
D.S.F.L. 142' RT. ELEV. 666.00
*INCLUDES 2-15° BENDS & 2-2' CONNECTORS

END SECTIONS, 12"- 1 EACH

INLETS, TYPE A, TYPE I FRAME OPEN LID (24" DEPTH)
88' RT. STA. 1029+89 & 1029+93
GRATE ELEV. 687.30

SEC. 36, T. 34 N., R. IE., 3RD. P.M.
WALTER BRANNAN

STATION EQUATION
STA. 1028+55.04 (F.A. 412) =
STA. 760+96.98 (I-80)

STATION EQUATION
P.C. STA. 75+00.00 = 91.92' RT.
STA. 1031+63.37 (F.A. 412)

STATION EQUATION
P.T. STA. 97+01.57 = 68.00' LT.
STA. 765+21.80 (I-80)

P.I. STA. 77+66.86
P.C.C. STA. 80+13.47
P.I. STA. 95+22.67
P.C.C. STA. 93+36.67
PIPE CULVERT, SEE SHEET 17
PIPE CULVERT, SEE SHEET 28
I-80 DETOUR
LOOP "C"
LOOP "D"
RAMP "D"
CURVE #19
CURVE #21
CURVE #70
CURVE P-2
1/4 SEC. LINE
P.L.
F.A. 412
I-80
N 5°26'04.5" E
64°19'56"
N 89°46'00" E
SEC. 36, T. 34 N., R. IE.
A.C.
NORMAN A. SMALL

B.M. #5 P.K. NAIL IN P.P. SOUTH OF FRONTAGE RD. 400' LT. STA. 1029+20 (F.A.-412) ELEV. 670.20

B.M. #5A-2 60 COMMON NAIL IN 3RD. P.P. WEST OF HEDGE ROW & ON SOUTH SIDE OF FRONTAGE RD. 109' LT. STA. 759+94 (I-80) ELEV. 662.94

NOTES SHOWN IN THIS MANNER PERTAIN TO SECTION 50-5HB & 50-2HB-3(R)

PROFILE GRADE F.A.-412
P.V.I. STA. 75+75 ELEV. = 685.85 L.V.C. = 150'
P.V.I. STA. 87+00 ELEV. = 662.68 L.V.C. = 400'
P.V.I. STA. 95+50 ELEV. = 669.87 L.V.C. = 300'
-1.03%
-2.06%
+0.846%
-0.45%
℄ DETOUR ROAD
PROFILE GRADE LINE ℄ LOOP "D"
PROFILE GRADE RAMP "D"
EXISTING GROUND ALONG ℄ LOOP "D"
EXISTING I-80 (OUTSIDE E.P.)
060 H.W.E. = 659.1
000 H.W.E. = 660.2

EARTH EXCAVATION = 285 CU. YDS.*
EMBANKMENT = 84 CU. YDS.
*179 CU. YDS. TO FA-412 (NORTH)

	75	6	7	8	9	80	1	2	3	4	85	6	7	8	9	90	1	2	3	4	95	6	7
	672.8 PVC 686.22	+75 P.V.I. 685.66 (685.95) 672.5 685.35 (685.34)	+50 P.V.T. 684.31 671.8 683.28	671.9 681.22	672.4 679.16	672.9 677.10	673.4 675.04	673.9 672.98	674.5 670.92	674.1 668.86	674.1 PVC. 666.80	674.3 665.10 (664.74)	674.1 P.V.T. 664.13 (662.68)	674.9 663.83 (663.51)	674.9 P.V.T. 664.37	674.7 665.22	674.8 666.06	674.4 666.91	674.4 667.76	674.0 PVC. 668.60	673.8 669.23 (669.45)	+50 P.V.I. 669.38 (669.87) 673.0 669.43 (669.65)	+01.57 P.V.T. 669.20 +01.57 669.19

B.M. #5 P.K. NAIL IN P.P. SOUTH OF FRONTAGE RD. 400' LT. STA. 1029+20 (F.A.-412) ELEV. 670.20

B.M. #5A-2 60 COMMON NAIL IN 3RD. P.P. WEST OF HEDGE ROW & ON SOUTH SIDE OF FRONTAGE RD. 109' LT. STA. 759+94 (I-80) ELEV. 662.94

HOMER L. CHASTAIN & ASSOCIATES, CONSULTING ENGINEERS — DECATUR, ILLINOIS

PLATE 1 PLAN-PROFILE B.P.R STANDARD
EUGENE DIETZGEN CO. CHICAGO · NEW YORK

LOOP "D"

Printed in U.S.A. On IMPERIAL Tracing Cloth

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5HB & 50-2HB-3 (R)	LaSALLE	156	30
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

POINT NO.	COORDINATES NORTH	COORDINATES EAST	DESCRIPTION
1.	1713268.14	299036.38	P.C. STA. 743+48.42 (CURVE NO.13)
2.	1713037.92	299673.18	P.I. STA. 750+25.56 (CURVE NO.13)
3.	1713040.63	300350.33	P.T. STA. 756+88.79 (CURVE NO.13)
4.	1713042.26	300758.52	P.O.T. STA.760+96.98=P.O.T. STA.1028+55.04
5.	1713045.16	301481.82	P.C. STA. 768+20.28 (CURVE NO.14)
6	1713047.34	302026.26	P.I. STA. 773+64.73 (CURVE NO.14)
7	1713044.34	302570.70	P.T. STA. 779+09.17 (CURVE NO.14)
8	1715658.44	300938.28	P.O.T. STA.100+00.00
9	1715005.57	300840.99	P.O.T. STA.106+60.08
10	1714906.66	300826.25	P.C. STA. 107+60.08 (CURVE NO.32)
11	1714594.44	300779.72	P.I. STA. 110+75.75 (CURVE NO.32
12	1714406.13	300526.36	P.T. STA. 113+58.78 (CURVE NO.32)
13	1713572.96	299405.38	P.C. STA. 127+55.48 (CURVE NO.33)
14	1713333.94	299083.81	P.I. STA. 131+56.15 (CURVE NO.33
15	1713462.61	298704.35	P.T. STA. 134+93.51 (CURVE NO.33)
16	1713494.72	298609.65	P.O.T. STA.135+93.51
17	1713789.76	297710.01	P.O.T. STA.145+43.46
18	1713103.26	300549.92	P.C. STA. 0+00.00 (CURVE NO.25)
19	1713098.59	300209.80	P.I. STA. 3+40.15 (CURVE NO.25)
20	1713348.24	299978.76	P.C.C. STA. 6+40.04 (CURVE NO.25)
21	1713607.69	300259.09	RADIUS POINT CURVE (CURVE NO.55)
22	1713813.07	300581.15	P.C.C. STA.19+08.42 (CURVE NO.27)
23	1713595.18	300720.11	P.I. STA. 21+66.86 (CURVE NO.27)
24	1713337.66	300698.25	P.T. STA. 24+06.83 (CURVE NO.27)
25	1713487.81	298284.63	P.O.T. STA.150+00.00
26	1713230.81	298892.63	P.O.T. STA.156+60.08
27	1713191.88	298984.74	P.C. STA. 157+60.08 (CURVE NO.30)
28	1713108.13	299182.87	P.I. STA. 159+75.8 (CURVE NO 30)
29	1712933.30	299308.19	P.T. STA. 161+79.43 (CURVE NO.30)

POINT NO.	COORDINATES NORTH	COORDINATES EAST	DESCRIPTION
59	1713089.05	303350.24	P.O.T. STA. 250+00.00
60	1713127.66	302691.29	P.O.T. STA. 256+60.08
61	1713133.50	302591.46	P.C. STA. 257+60.08 (CURVE NO. 37)
62	1713154.51	302232.95	P.I. STA. 261+19.20 (CURVE NO. 37)
63	1713443.96	302020.39	P.T. STA. 264+31.49 (CURVE NO. 37)
64	1714575.51	301189.44	P.C. STA. 278+35.36 (CURVE NO. 38)
65	1714803.18	301022.25	P.I. STA. 281+17.83 (CURVE NO. 38)
66	1715084.86	301043.39	P.T. STA. 283+76.49 (CURVE NO. 38)
67	1715184.58	301050.87	P.O.T. STA. 284+76.49
68	1716131.87	301121.98	P.O.T STA 294+26.44
69	1713341.44	300869.29	P.C. STA. 75+00.00 (CURVE NO. 19)
70	1713607.34	300891.88	P.T. STA. 77+66.86 (CURVE NO. 19)
71	1713801.34	301075.12	P.C.C. STA. 80+13.47 (CURVE NO. 19)
72	1713539.06	301352.81	RADIUS POINT (CURVE NO. 70)
73	1713202.28	301533.04	P.C.C. STA. 93+36.67 (CURVE NO. 21)
74	1713114.52	301369.05	P.I. STA. 95+22.67 (CURVE NO. 21)
75	1713111.96	301183.07	P.T. STA. 97+01.57 (CURVE NO. 21)

POINT NO.	COORDINATES NORTH	COORDINATES EAST	DESCRIPTION
30	1711503.82	300332.92	P.C. STA. 179+38.26 (CURVE NO. 31)
31	1711278.28	300494.60	P.I. STA. 182+15.77 (CURVE NO. 31)
32	1711001.55	300473.83	P.T. STA. 184+70.63 (CURVE NO. 31)
33	1710901.83	300466.34	P.O.T. STA. 185+70.63
34	1709954.55	300395.24	P.O.T. STA. 195+20.58
35	1712745.00	300647.92	P.C. STA. 25+00.00 (CURVE NO. 22)
36	1712491.64	300626.41	P.I. STA. 27+54.27 (CURVE NO. 22)
37	1712301.71	300457.35	P.C.C. STA.29+90.92 (CURVE NO. 22)
38	1712555.67	300172.03	RADIUS POINT (CURVE NO. 60)
39	1712902.60	300012.20	P.C.C. STA.43+48.20 (CURVE NO. 24)
40	1712970.44	300159.47	P.I. STA. 45+10.35 (CURVE NO. 24)
41	1712972.62	300321.61	P.T. STA. 46+67.75
42	1710199.50	300557.18	P.O.T. STA. 200+00.00
43	1710852.37	300654.48	P.O.T. STA. 206+60.08
44	1710951.28	300669.22	P.C. STA. 207+60.08 (CURVE NO. 35)
45	1711184.29	300703.94	P.I. STA. 209+95.66 (CURVE NO. 35)
46	1711357.27	300863.86	P.T. STA. 212+17.11 (CURVE NO. 35)
47	1712728.47	302131.52	P.C. STA. 230+84.50 (CURVE NO. 36)
48	1712968.99	302353.88	P.I. STA. 234+12.05 (CURVE NO. 36)
49	1712973.73	302681.40	P.T. STA. 237+03.38 (CURVE NO. 36)
50	1712975.18	302781.39	P.O.T. STA. 238+03.38
51	1712988.96	303731.24	P.O.T. STA. 247+53.33
52	1712981.33	300970.15	P.C. STA. 50+00.00 (CURVE NO. 16)
53	1712985.69	301294.69	P.I. STA. 53+24.57 (CURVE NO. 16)
54	1712755.11	301523.12	P.C.C. STA. 56+13.84 (CURVE NO. 16)
55	1712486.28	301251.77	RADIUS POINT (CURVE NO. 65)
56	1712290.84	300923.58	P.C.C. STA. 69+06.88 (CURVE NO. 18)
57	1712501.77	300797.97	P.I. STA. 71+52.38 (CURVE NO. 18)
58	1712746.38	300818.75	P.T. STA. 73+81.95 (CURVE NO. 18)

GENERAL LAYOUT - GRID COORDINATES

REVISIONS

NO.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

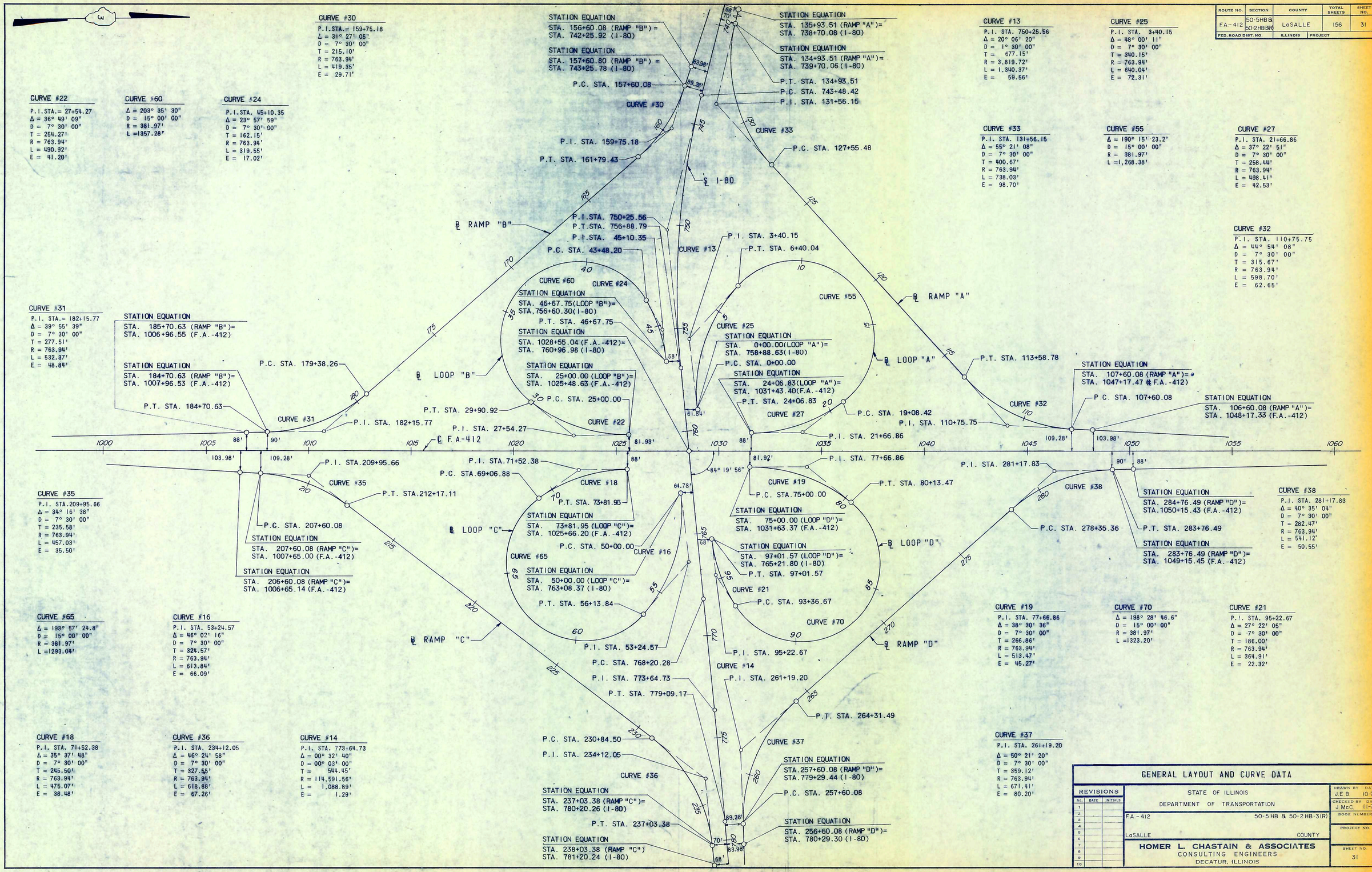
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.-412 SEC. 50-5 HB & 50-2 HB-3 (R)

LaSALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY / DATE	J.E.B. 10-74
CHECKED BY / DATE	M.P. 10-75
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	30



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5HB & 50-2HB-3(R)	LaSALLE	156	31
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

GENERAL LAYOUT AND CURVE DATA

REVISIONS		
No.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FA-412 — 50-5HB & 50-2HB-3(R)

LaSALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY — DATE	J.E.B. 10-74
CHECKED BY — DATE	J.McC. 11-75
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	31

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5HBA 50-2HB-3(R)	LaSALLE	156	32
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

3

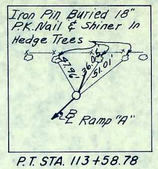
RAMP "A"



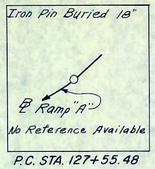
P.C. STA. 107+60.08



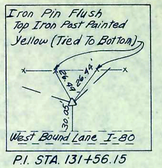
P.I. STA. 110+75.75



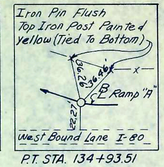
P.T. STA. 113+58.78



P.C. STA. 127+55.48

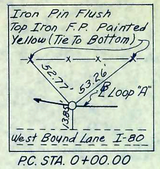


P.I. STA. 131+56.15

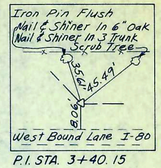


P.T. STA. 134+93.51

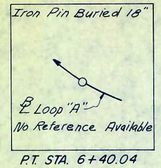
LOOP "A"



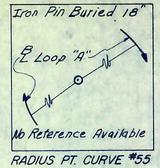
P.C. STA. 0+00.00



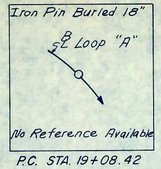
P.I. STA. 3+40.15



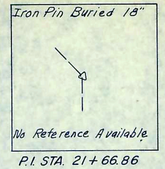
P.T. STA. 6+40.04



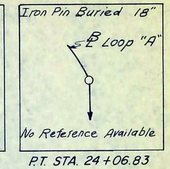
RADIUS PT. CURVE #55



P.C. STA. 19+08.42

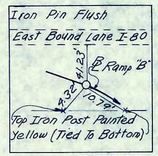


P.I. STA. 21+66.86

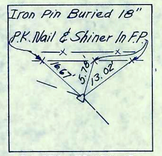


P.T. STA. 24+06.83

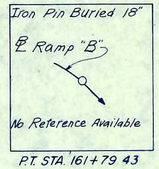
RAMP "B"



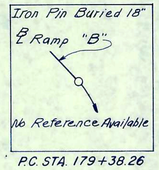
P.C. STA. 157+60.08



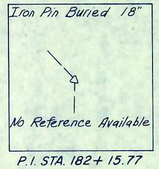
P.I. STA. 159+75.18



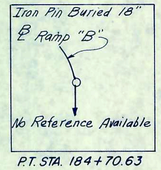
P.T. STA. 161+79.43



P.C. STA. 179+38.26

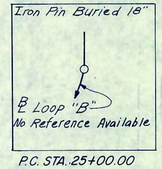


P.I. STA. 182+15.77

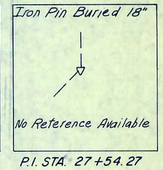


P.T. STA. 184+70.63

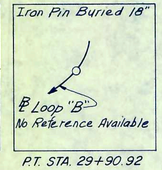
LOOP "B"



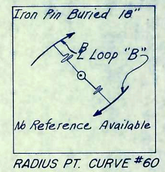
P.C. STA. 25+00.00



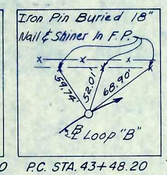
P.I. STA. 27+54.27



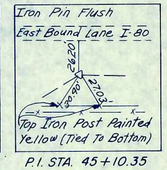
P.T. STA. 29+90.92



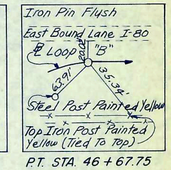
RADIUS PT. CURVE #60



P.C. STA. 43+48.20

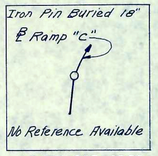


P.I. STA. 45+10.35



P.T. STA. 46+67.75

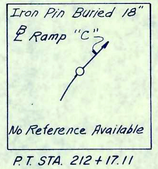
RAMP "C"



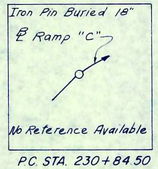
P.C. STA. 207+60.08



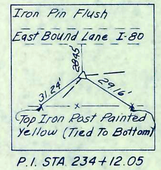
P.I. STA. 209+95.66



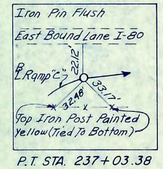
P.T. STA. 212+17.11



P.C. STA. 230+84.50

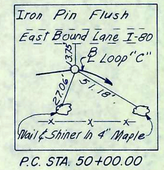


P.I. STA. 234+12.05

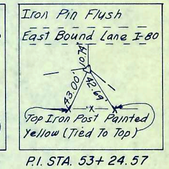


P.T. STA. 237+03.38

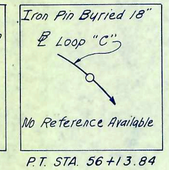
LOOP "C"



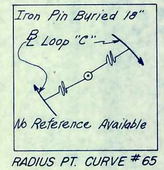
P.C. STA. 50+00.00



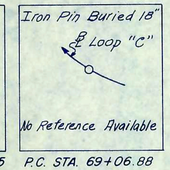
P.I. STA. 53+24.57



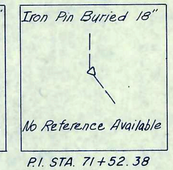
P.T. STA. 56+13.84



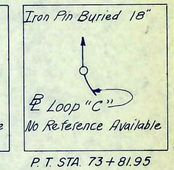
RADIUS PT. CURVE #65



P.C. STA. 69+06.88

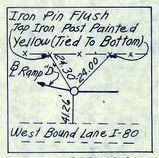


P.I. STA. 71+52.38

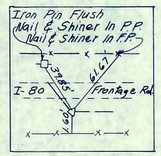


P.T. STA. 73+81.95

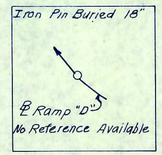
RAMP "D"



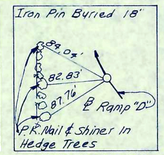
P.C. STA. 257+60.08



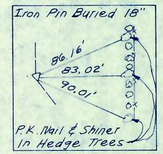
P.I. STA. 261+19.20



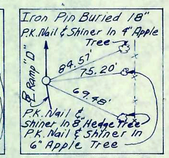
P.T. STA. 264+31.49



P.C. STA. 278+35.36

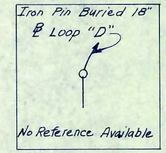


P.I. STA. 281+17.83

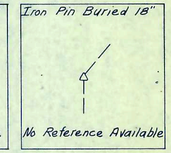


P.T. STA. 283+76.49

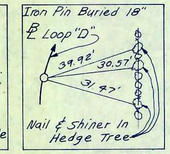
LOOP "D"



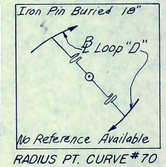
P.C. STA. 75+00.00



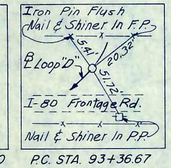
P.I. STA. 77+66.86



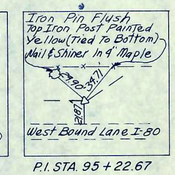
P.T. STA. 80+13.47



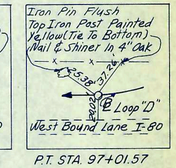
RADIUS PT. CURVE #70



P.C. STA. 93+36.67

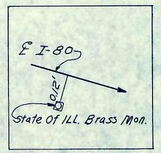


P.I. STA. 95+22.67

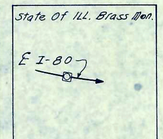


P.T. STA. 97+01.57

I-80



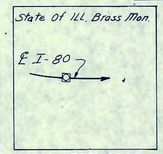
P.O.T. STA. 739+99.80
N. 1,713,386.67
E. 297,708.52



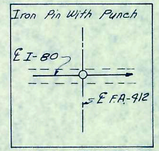
P.O.T. STA. 743+49.34
N. 1,713,267.83
E. 299,037.24



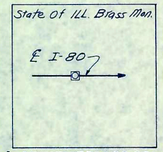
P.O.C. STA. 750+19.85
N. 1,713,096.39
E. 299,684.58



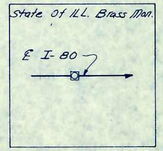
P.O.T. STA. 756+88.75
N. 1,713,040.63
E. 300,350.29



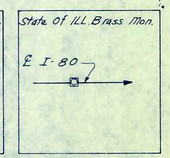
P.O.T. STA. 760+96.98
P.O.T. STA. 1028+55.04
N. 1,713,042.26
E. 300,758.52



P.C. STA. 768+20.28
N. 1,713,045.16
E. 301,481.82



P.O.T. STA. 779+08.83
N. 1,713,045.16
E. 302,570.36



P.O.T. STA. 785+00.03
N. 1,713,041.09
E. 303,161.55

NOTE:
FOR INTERCHANGE COORDINATES SEE SHEET NO.

INTERCHANGE TIES

REVISIONS		
NO.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FA-412 SEC. 50-5HB & 50-2HB-3(R)
LaSALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE	JEB 12-74
CHECKED BY DATE	JMcC 12-74
BOOK NUMBER	
PROJECT NO.	
SHEET NO	32

Rev. 3-76

RUSHING & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA - 412	50-5HB& 50-2HB-3(R)	LaSALLE	156	33
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

ANNE V. LANNEN, HEIRS OF

JOHN F. LANNEN, ET AL.

WILLIAM & KATHERINE REMENIH

WALTER BRANNAN

HELEN K. WEILAND, ESTATE OF

RALPH & LENA DERANGO

CARLO DERANGO

FRANK DERANGO, JR.

FRANK & MARGARET DERANGO

NORMAN A. SMALL

ROBERT & CATHERINE PEZANOSKI

INLET EL. 642.1 — 12" PIPE CULVERT — EL. 638.0 — 5'X2' R.C. BOX CULVERT EXT. — EL. 637.5 — 741+00, 160' LT. — TEMPORARY CONSTRUCTION EASEMENT — EL. 638.2 — 36" PIPE CULVERT — EL. 638.5 — 743+48.42, 280' LT. — 1033+10.78, 1447.59' LT. — 745+53.44, 448.66' LT. — 746+27.48, 533.87' LT.

EL. 636.0 — EL. 635.0 — 12" PIPE CULVERT — 5'X2' R.C. BOX CULVERT EXT. — 742+31.54, 150' RT. — 742+87.34, 166.88' RT. — 746+52.12, 297.30' RT.

54" PIPE CULVERT — EL. 638.0 — EL. 638.3

℄ RAMP "B" — A.C. — EL. 646.5 — 24" PIPE CULVERT EXT. — 36" PIPE CULVERT — EL. 644.5 — EL. 644.8 — 754+21.64, 1216.50' RT. — 1015+81.66, 637.50' LT. — 1015+64.30, 622.36' LT.

℄ RAMP "A" — A.C.

℄ LOOP "B" — ℄ LOOP "A" — ℄ I-80 DETOUR

EL. 650.3 — EL. 650.8 — 30" PIPE CULVERT — EL. 648.3 — EL. 648.8 — 1042+46.45, 410.62' LT. — 1045+00, 26.5' LT. — 42" PIPE CULVERT — 6" STORM SEWER — 12" PIPE CULVERT — 7'X4' R.C. BOX CULVERT — 8" STORM SEWER — 1056+23.52, 175' LT. — 1059+00, 175' LT. — 1051+00, 175' LT.

36" PIPE CULVERT — 6" STORM SEWER — 12" PIPE CULVERT — 1010+50, 235' LT. — 996+28.91, 150' LT. — 1002+96.59, 150' LT. — 1006+00, 150' LT. — EL. 659.1 — EL. 661.2 — EL. 657.4 — INLET EL. 663.9 — INLET EL. 663.2 — A.C.

EL. 661.2 — 24" PIPE CULVERT — INLET EL. 666.6 — 84°-19'-56" — 12" PIPE DRAINS — EL. 663.0 — FA-412 — 24" PIPE CULVERT — EL. 650.9 — EL. 648.8 — EL. 640.3 — INLET EL. 645.0 — A.C. — EL. 629.9 — EL. 632.7

1000 — 1005 — 1010 — 1015 — 1020 — 1025 — 1030 — 1035 — 1040 — 1045 — 1050 — 1055 — 1060

N 5° 26'-04.5" E — N 5° 26'-04.5" E — N 5° 26'-04.5" E

INLET EL. 658.8 — EL. 657.9 — A.C. — EL. 659.0 — 996+56.43, 150' RT. — 1003+24.64, 150' RT. — 1006+00, 150' RT. — 1009+00, 200' RT. — 12" PIPE CULVERT — 1011+33.06, 336.15' RT. — 1013+34.99, 490.05' RT.

24" PIPE CULVERT — EL. 661.00 — EL. 663.00 — I-80 — ℄ LOOP "C" — ℄ LOOP "D" — EL. 655.0 — 12" PIPE CULVERT — EL. 664.5 — 12" PIPE CULVERT — INLET EL. 669.9 — INLET EL. 669.6 — 1/4 SEC. LINE

INLET EL. 650.8 — 36" PIPE CULVERT — EL. 649.5 — EL. 644.0 — 767+57.14, 1214.84' RT. — 1017+11.33, 776.90' RT. — 48" PIPE CULVERT — 24" PIPE CULVERT EXT. — ℄ RAMP "C" — A.C.

EL. 655.6 — 36" PIPE CULVERT — A.C. — EL. 655.0 — ℄ RAMP "D" — 30" PIPE CULVERT — EL. 661.6 — 1034+31.11, 1281.55' RT. — 774+26.79, 448.30' LT. — EL. 659.5 — 24" PIPE CULVERT — EL. 659.0 — 777+00, 240' LT. — EL. 6623

777+00, 240' RT. — 777+65.45, 219.64' RT. — 777+65.52, 252.61' RT. — PERMANENT EASEMENT — EXISTING PERMANENT EASEMENT — 24" PIPE CULVERT EXT. — EL. 656.1 — INLET EL. 662.9

EL. 666.0 — EL. 632.5 — 1047+00, 225' RT. — EL. 643.6 — EL. 643.0 — 1044+78.80, 347.10' RT. — 36" PIPE CULVERT — 12" PIPE CULVERT — INLET EL. 646.7 — INLET EL. 655.8 — A.C. — EL. 630.4 — 1054+00, 165' RT. — 1050+00, 165' RT. — 12" STORM SEWER — 1056+00, 150' RT. — 1056+54.81, 150' RT. — 24" PIPE CULVERT — INLET EL. 640.8

P.L. — 1/4 SEC. LINE — P.L. — 1/4 SEC. LINE — P.L. — 1/4 SEC. LINE — P.L. — P.L. — P.L. — P.L. — P.L. — P.L.

SEC. 36, T.34N., R.1E. — SEC. 1, T.33N., R.1E.

GENERAL LAYOUT — R.O.W. & DRAINAGE

REVISIONS		
NO.	DATE	INITIALS
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.- 412 — SEC. 50-5HB& 50-2HB-3(R)

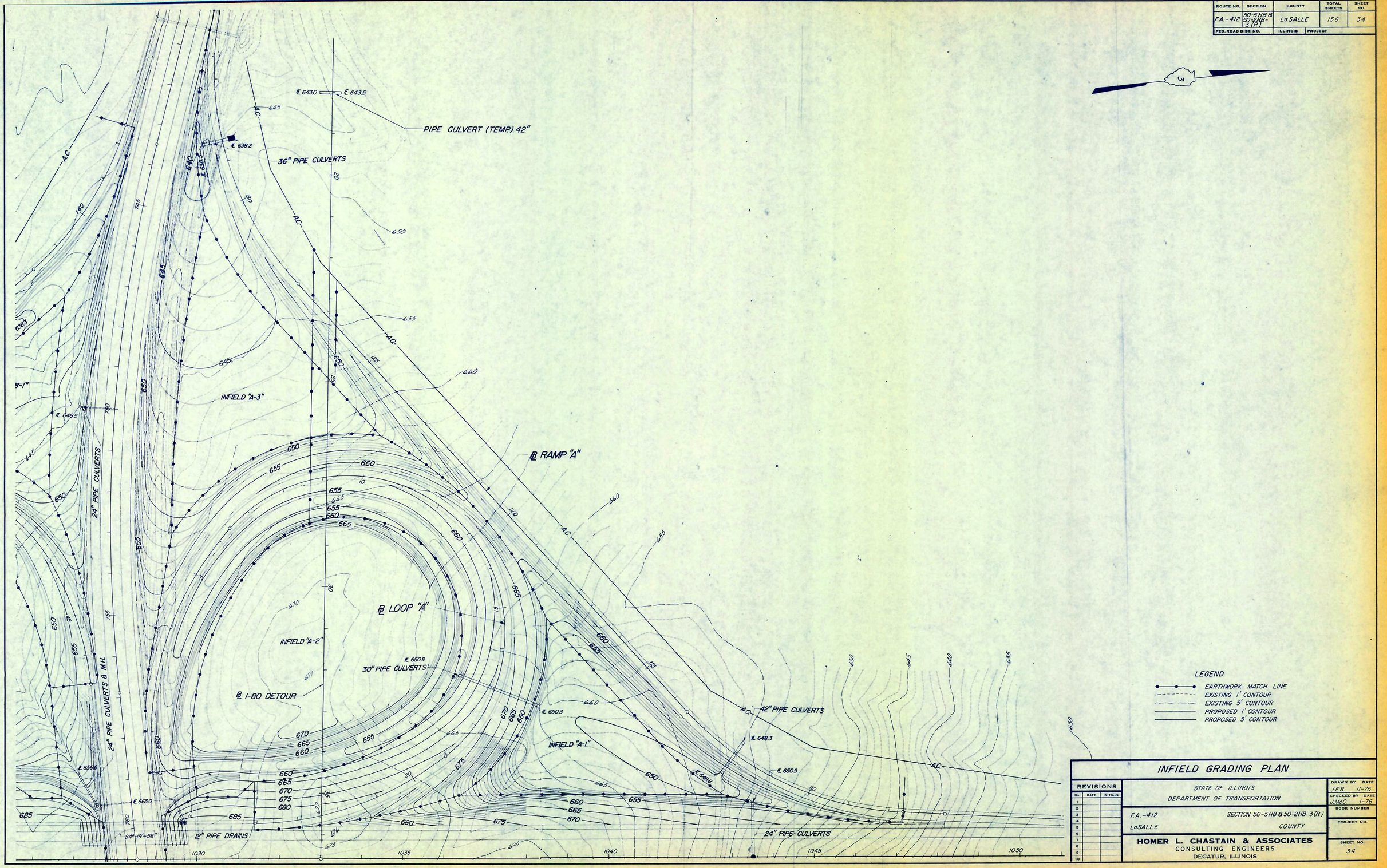
LaSALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY — DATE	H.H. 11-75
CHECKED BY — DATE	MWP 12-75
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	33

CUSHING COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.-412	50-5HB & 50-2HB-3(R)	LaSALLE	156	34
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



INFIELD GRADING PLAN

REVISIONS		
NO.	DATE	INITIALS
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.-412 SECTION 50-5HB & 50-2HB-3(R)

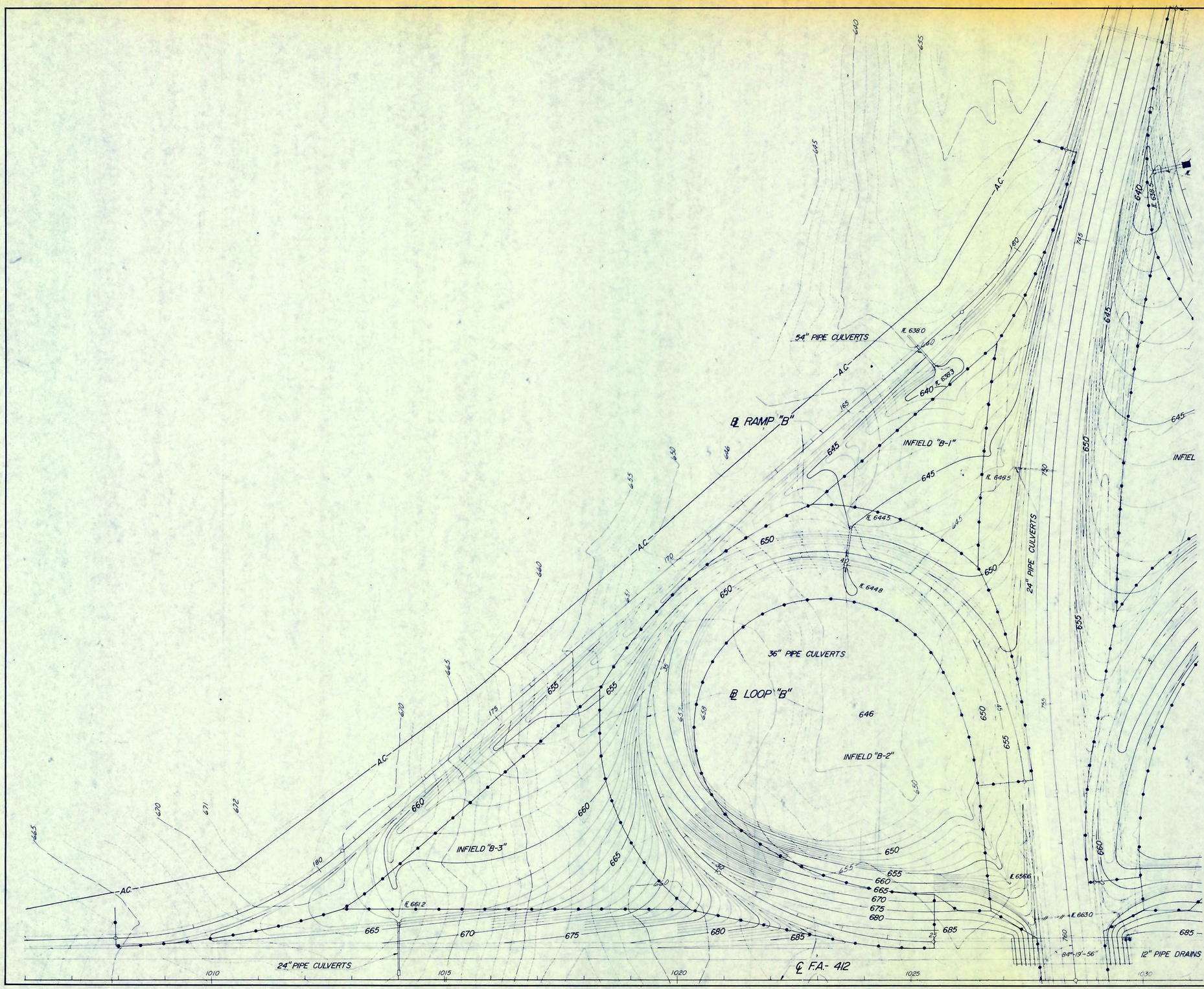
LaSALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE	J.E.B. 11-75
CHECKED BY DATE	J.McC. 1-76
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	34

HAND, CHRISTIANS & ENGINEERING CORPORATION, INC. 736 S. CLINTON AVENUE - DECATUR, ILL.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A-412	50-5HB & 50-2 HB-3 (R)	LaSALLE	156	35
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



LEGEND

- EARTHWORK MATCH LINE
- EXISTING 1' CONTOUR
- EXISTING 5' CONTOUR
- PROPOSED 1' CONTOUR
- PROPOSED 5' CONTOUR

INFIELD GRADING PLAN

REVISIONS		
NO.	DATE	INITIALS
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

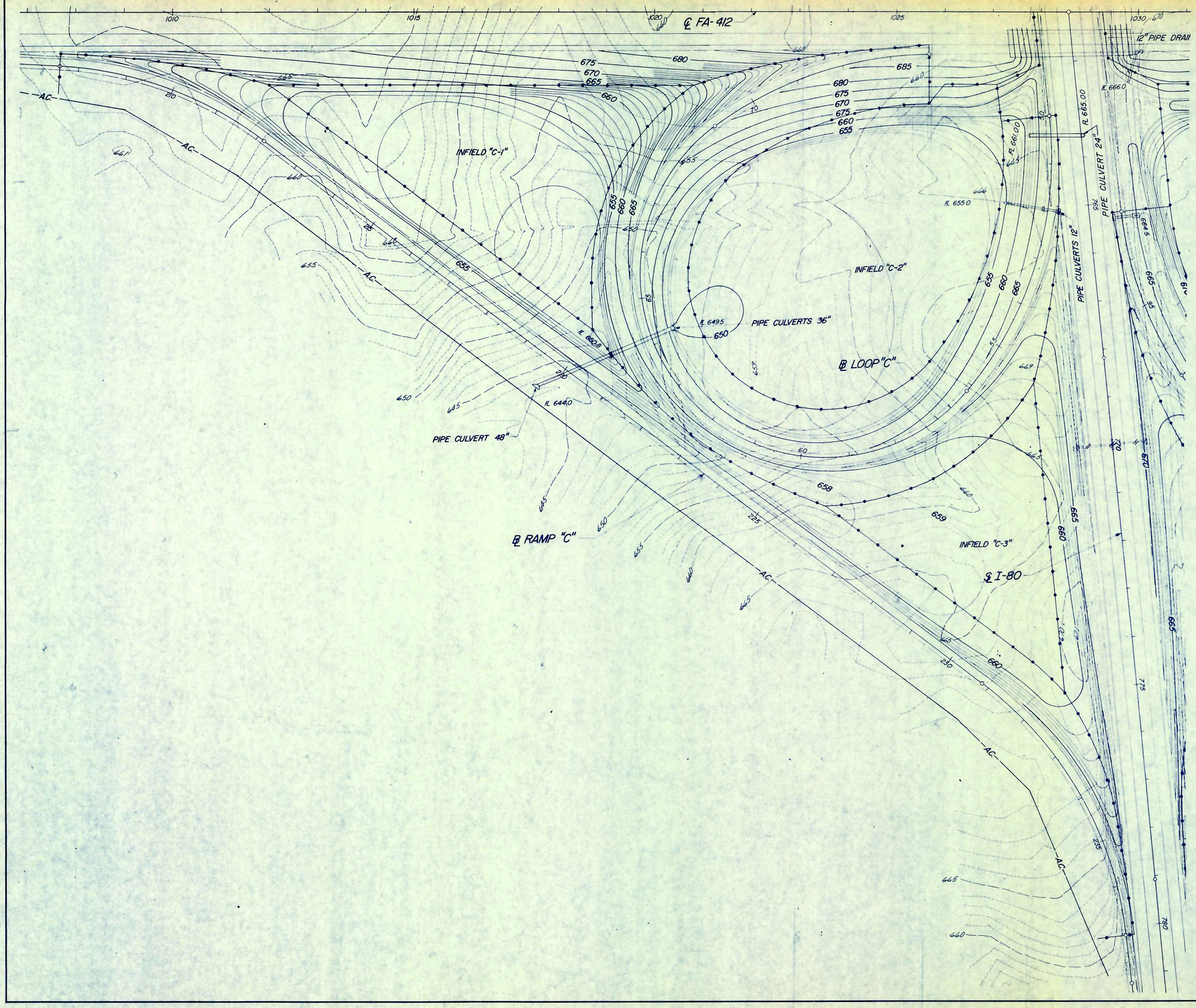
F.A - 412 SECTION 50-5HB & 50-2 HB-3(R)
LaSALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE	J.E.B. 11-75
CHECKED BY DATE	J.McC. 1-76
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	35

HAGIS ENGINEERING & Professional Surveying, Inc. 754 E. CERRO GORDO - DECATUR, ILL.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5HB & 50-2HB-3 (R)	LaSALLE	156	36
FED. ROAD DIST. NO.		ILLINOIS	PROJECT	





LEGEND

- EARTHWORK MATCH LINE
- EXISTING 1' CONTOUR
- EXISTING 5' CONTOUR
- PROPOSED 1' CONTOUR
- PROPOSED 5' CONTOUR

INFIELD GRADING PLAN

REVISIONS		
No.	DATE	INITIALS
1		
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FA-412 SECTION 50-5HB & 50-2HB-3(R)

LaSALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE	J.E.B. 11-75
CHECKED BY DATE	J.McC. 1-76
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	36

MACO REPRODUCTIONS &
PRINTING SPECIALISTS, INC.
For L. Chastain Decatur - Decatur, Ill.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5HB & 50-2HB-3(R)	LaSALLE	156	37
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

12" PIPE DRAINS

℄ I-80 DETOUR

℄ LOOP "D"

℄ LOOP "C"

℄ RAMP "D"

℄ I-80

INFIELD "C-2"

INFIELD "C-3"

INFIELD "D-1"

INFIELD "D-2"

INFIELD "D-3"

PIPE CULVERTS 12"

PIPE CULVERTS 36"

CULVERTS 36"

PIPE CULVERT (TEMP.) 30"

PIPE CULVERTS 24"

AC

℄ 6660

℄ 6550

℄ 6556

℄ 6599.3

℄ 6683

℄ 6690

℄ 6436

℄ 6430

LEGEND

- EARTHWORK MATCH LINE
- EXISTING 1' CONTOUR
- EXISTING 5' CONTOUR
- PROPOSED 1' CONTOUR
- PROPOSED 5' CONTOUR

INFIELD GRADING PLAN

REVISIONS		
NO.	DATE	INITIALS
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FA-412 SECTION 50-5HB-&50-2HB-3(R)

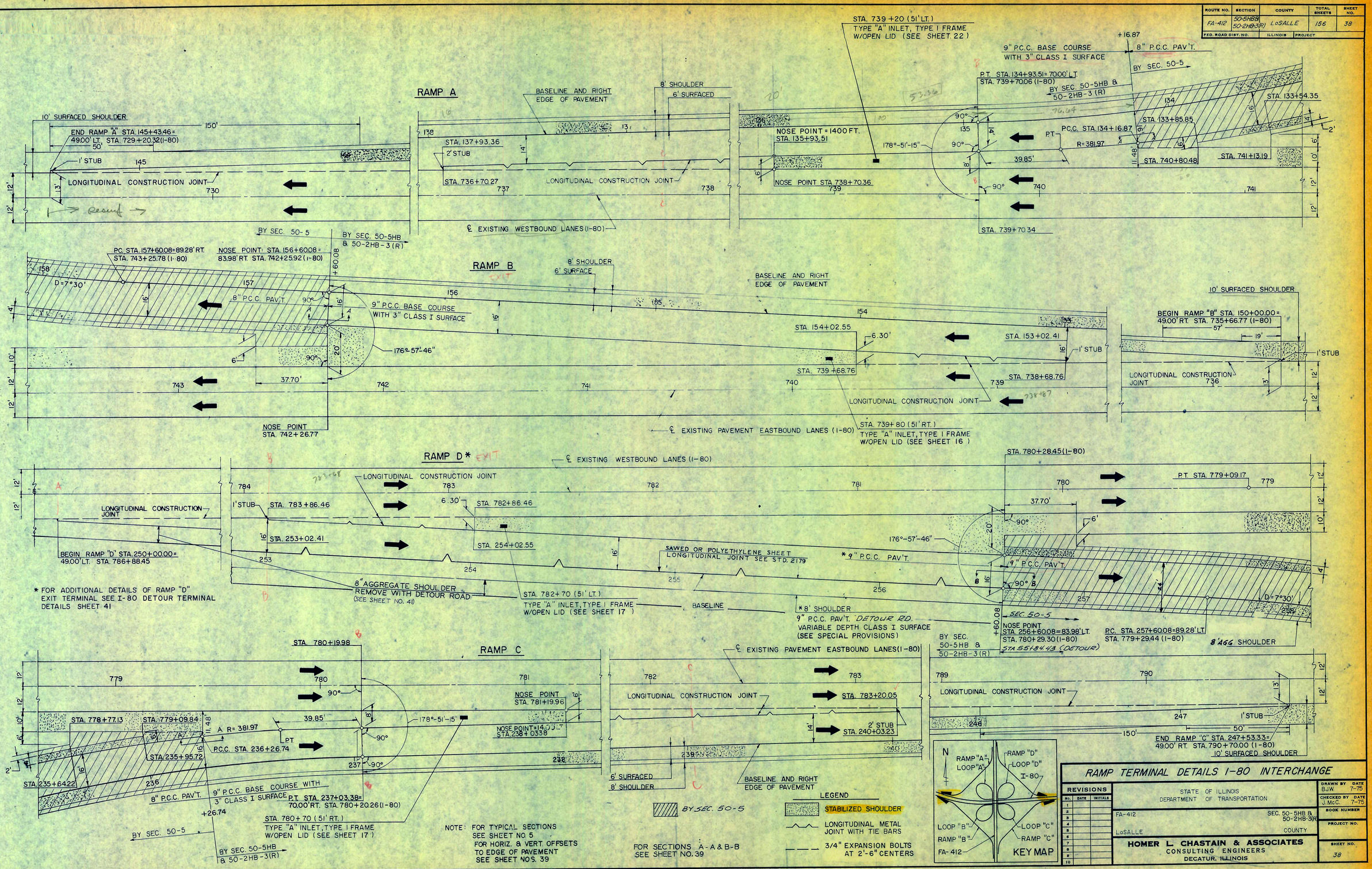
LaSALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE	JEB 1-75
CHECKED BY DATE	JMcC. 1-76
BOOK NUMBER	
PROJECT NO	
SHEET NO.	37

MACO REPRODUCTIONS, INC.
DECATUR, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5HBB 50-2HB-3(R)	LaSALLE	156	38
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



RAMP TERMINAL DETAILS I-80 INTERCHANGE

REVISIONS		
NO.	DATE	INITIALS
1		
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FA-412 — SEC. 50-5HB & 50-2HB-3(R)
LaSALLE — COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY / DATE	BJW 7-75
CHECKED BY / DATE	J. McC. 7-75
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	38

CUSHING & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.-412	50-5HB & 50-2HB,3(R)	LA SALLE	156	39
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

RAMP "A" EXIT TERMINAL FROM F.A. -412
HORIZONTAL & VERTICAL OFFSETS

F.A.-412 STA.	HORIZONTAL	VERTICAL
1048+17.33	35.98	-0.25
+25	35.57	-0.25
+50	34.25	-0.25
+75	32.92	-0.25
1059+00	31.59	-0.25
+25	30.27	-0.25
+50	28.94	-0.25
+75	27.61	-0.25
1050+00	26.29	-0.25
+25	24.96	-0.25
+50	23.63	-0.25
+75	22.31	-0.25
1051+00	20.98	-0.25
+25	19.65	-0.25
+50	18.33	-0.25
+75	17.00	-0.25
1052+00	15.67	-0.23
+25	14.35	-0.21
+50	13.02	-0.19
+75	11.69	-0.17
1053+00	10.37	-0.15
+25	9.04	-0.13
+50	7.71	-0.11
+75	6.39	-0.09
1054+00	5.06	-0.07
+25	3.73	-0.05
+50	2.41	-0.03
+75	1.08	-0.01
1054+76.48	1.00	-0.01

RAMP "B" EXIT TERMINAL FROM I-80
HORIZONTAL & VERTICAL OFFSETS

I-80 STATION	HORIZONTAL	VERTICAL
735+66.77	1.00	-0.01
+75	1.44	-0.02
736+00	2.77	-0.04
+25	4.09	-0.06
+50	5.42	-0.08
+75	6.75	-0.10
737+00	8.07	-0.12
+25	9.40	-0.14
+50	10.73	-0.16
+75	12.05	-0.18
738+00	13.38	-0.20
+25	14.71	-0.22
+50	16.03	-0.24
+75	17.36	-0.25
739+00	18.69	-0.25
+25	20.01	-0.25
+50	21.34	-0.25
+75	22.67	-0.25
740+00	23.99	-0.25
+25	25.32	-0.25
+50	26.65	-0.25
+75	27.97	-0.25
741+00	29.30	-0.25
+25	30.63	-0.25
+50	31.95	-0.25
+75	33.28	-0.25
742+00	34.61	-0.25
+25	35.93	-0.25
742+25.92	35.98	-0.25

RAMP "C" EXIT TERMINAL FROM F.A.-412
HORIZONTAL & VERTICAL OFFSETS

F.A.-412 STA.	HORIZONTAL	VERTICAL
1000+05.99	1.00	-0.01
+25	2.01	-0.03
+50	3.34	-0.05
+75	4.66	-0.07
1001+00	5.99	-0.09
+25	7.32	-0.11
+50	8.64	-0.13
+75	9.97	-0.15
1002+00	11.30	-0.17
+25	12.62	-0.19
+50	13.95	-0.21
+75	15.28	-0.23
1003+00	16.60	-0.25
+25	17.93	-0.25
+50	19.26	-0.25
+75	20.58	-0.25
1004+00	21.91	-0.25
+25	23.24	-0.25
+50	24.56	-0.25
+75	25.89	-0.25
1005+00	27.22	-0.25
+25	28.54	-0.25
+50	29.87	-0.25
+75	31.20	-0.25
1006+00	32.52	-0.25
+25	33.85	-0.25
+50	35.18	-0.25
1006+65.14	35.98	-0.25

RAMP "D" EXIT TERMINAL FROM I-80
HORIZONTAL & VERTICAL OFFSETS

I-80 STATION	HORIZONTAL	VERTICAL
780+29.30	35.98	-0.25
+50	34.88	-0.25
+75	33.55	-0.25
781+00	32.23	-0.25
+25	30.90	-0.25
+50	29.57	-0.25
+75	28.25	-0.25
782+00	26.92	-0.25
+25	25.59	-0.25
+50	24.27	-0.25
+75	22.94	-0.25
783+00	21.61	-0.25
+25	20.29	-0.25
+50	18.96	-0.25
+75	17.63	-0.25
784+00	16.31	-0.24
+25	14.98	-0.22
+50	13.65	-0.20
+75	12.33	-0.18
785+00	11.00	-0.16
+25	9.67	-0.14
+50	8.35	-0.12
+75	7.02	-0.10
786+00	5.69	-0.08
+25	4.37	-0.06
+50	3.04	-0.04
+75	1.71	-0.02
786+88.45	1.00	-0.01

I-80 DETOUR EXIT TERMINAL FROM I-80
HORIZONTAL & VERTICAL OFFSETS

STATION	HORIZONTAL	VERTICAL
780+29.72	43.97	-0.38
+50	42.89	-0.38
+75	41.57	-0.38
781+00	40.24	-0.38
+25	38.91	-0.38
+50	37.59	-0.38
+75	36.26	-0.38
782+00	34.93	-0.38
+25	33.61	-0.38
+50	32.28	-0.38
+75	30.95	-0.38
783+00	29.63	-0.38
+25	28.30	-0.38
+50	26.97	-0.38
+75	25.65	-0.38
784+00	24.32	-0.38
+25	23.00	-0.36
+50	21.67	-0.34
+75	20.34	-0.32
785+00	19.02	-0.30
+25	17.69	-0.28
+50	16.36	-0.26
+75	15.04	-0.24
786+00	13.71	-0.21
+25	12.38	-0.19
+50	11.06	-0.17
+75	9.73	-0.15
787+00	8.40	-0.13
+25	7.08	-0.11
+50	5.75	-0.09
+75	4.42	-0.07
788+00	3.10	-0.05
+25	1.77	-0.03
788+39.51	1.00	-0.02

RAMP "A" ENTRANCE TERMINAL TO I-80
HORIZONTAL & VERTICAL OFFSETS

I-80 STATION	HORIZONTAL	VERTICAL
729+20.32	1.00	-0.02
+25	1.09	-0.02
+50	1.59	-0.03
+75	2.09	-0.04
730+00	2.59	-0.05
+25	3.09	-0.06
+50	3.59	-0.07
+75	4.09	-0.08
731+00	4.59	-0.09
+25	5.09	-0.10
+50	5.59	-0.11
+75	6.09	-0.13
732+00	6.59	-0.14
+25	7.10	-0.15
+50	7.60	-0.16
+75	8.10	-0.17
733+00	8.60	-0.18
+25	9.10	-0.19
+50	9.60	-0.20
+75	10.10	-0.21
734+00	10.60	-0.22
+25	11.10	-0.23
+50	11.60	-0.24
+75	12.10	-0.25
735+00	12.60	-0.26
+25	13.10	-0.27
+50	13.60	-0.28
+75	14.10	-0.29
736+00	14.60	-0.30
+25	15.10	-0.31
+50	15.60	-0.33
+75	16.10	-0.36
737+00	16.60	-0.38
+25	17.10	-0.40
+50	17.60	-0.43
+75	18.10	-0.48
738+00	18.60	-0.51
+25	19.10	-0.55
+50	19.60	-0.58
+75	20.10	-0.62
739+00	20.60	-0.65
+25	21.10	-0.69
+50	21.60	-0.72
739+70.06	22.00	-0.75

RAMP "B" ENTRANCE TERMINAL TO F.A.-412
HORIZONTAL & VERTICAL OFFSETS

F.A.-412 STA.	HORIZONTAL	VERTICAL
997+46.79	1.00	-0.02
+50	1.06	-0.02
+75	1.56	-0.03
998+00	2.06	-0.04
+25	2.56	-0.05
+50	3.06	-0.06
+75	3.56	-0.07
999+00	4.06	-0.08
+25	4.56	-0.09
+50	5.06	-0.10
+75	5.56	-0.11
1000+00	6.06	-0.12
+25	6.56	-0.13
+50	7.06	-0.14
+75	7.56	-0.15
1001+00	8.06	-0.16
+25	8.56	-0.18
+50	9.06	-0.19
+75	9.56	-0.20
1002+00	10.06	-0.21
+25	10.56	-0.22
+50	11.06	-0.23
+75	11.56	-0.24
1003+00	12.06	-0.25
+25	12.56	-0.26
+50	13.06	-0.27
+75	13.56	-0.28
1004+00	14.06	-0.29
+25	14.56	-0.30
+50	15.07	-0.32
+75	15.57	-0.34
1005+00	16.07	-0.36
+25	16.57	-0.38
+50	17.07	-0.42
+75	17.57	-0.44
1006+00	18.07	-0.48
+25	18.57	-0.51
+50	19.07	-0.55
+75	19.57	-0.58
1007+00	20.07	-0.62
+25	20.57	-0.65
+50	21.07	-0.69
+75	21.57	-0.72
1007+96.53	22.00	-0.75

RAMP "C" ENTRANCE TERMINAL TO I-80
HORIZONTAL & VERTICAL OFFSETS

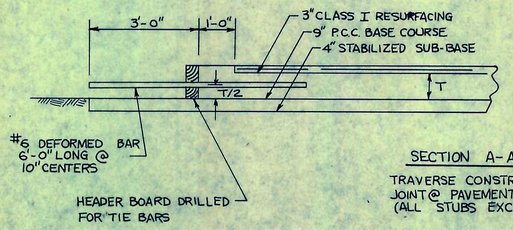
I-80 STATION	HORIZONTAL	VERTICAL
780+20.26	22.00	-0.75
+25	21.90	-0.74
+50	21.40	-0.71
+75	20.90	-0.68
781+00	20.40	-0.65
+25	19.90	-0.61
+50	19.40	-0.58
+75	18.90	-0.55
782+00	18.40	-0.52
+25	17.90	-0.49
+50	17.40	-0.46
+75	16.90	-0.44
783+00	16.40	-0.40
+25	15.90	-0.39
+50	15.40	-0.38
+75	14.90	-0.36
784+00	14.40	-0.34
+25	13.90	-0.33
+50	13.40	-0.31
+75	12.90	-0.30
785+00	12.40	-0.29
+25	11.90	-0.28
+50	11.40	-0.26
+75	10.90	-0.25
786+00	10.40	-0.24
+25	9.90	-0.23
+50	9.40	-0.22
+75	8.90	-0.21
787+00	8.40	-0.19
+25	7.90	-0.18
+50	7.40	-0.17
+75	6.90	-0.16
788+00	6.40	-0.15
+25	5.90	-0.14
+50	5.40	-0.12
+75	4.90	-0.11
789+00	4.40	-0.10
+25	3.90	-0.09
+50	3.40	-0.08
+75	2.90	-0.07
790+00	2.40	-0.05
+25	1.90	-0.04
+50	1.40	-0.03
790+70.00	1.00	-0.02

RAMP "D" ENTRANCE TERMINAL TO F.A.-412
HORIZONTAL & VERTICAL OFFSETS

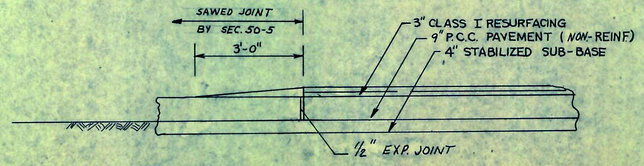
F.A.-412 STA.	HORIZONTAL	VERTICAL
1049+15.45	22.00	-0.75
+25	21.81	-0.74
+50	21.31	-0.70
+75	20.81	-0.66
1050+00	20.30	-0.63
+25	19.80	-0.59
+50	19.30	-0.56
+75	18.80	-0.52
1051+00	18.30	-0.49
+25	17.80	-0.45
+50	17.30	-0.41
+75	16.80	-0.39
1052+00	16.30	-0.36
+25	15.80	-0.34
+50	15.30	-0.32
+75	14.80	-0.30
1053+00	14.30	-0.29
+25	13.80	-0.28
+50	13.30	-0.27
+75	12.80	-0.26
1054+00	12.30	-0.25
+25	11.80	-0.24
+50	11.30	-0.23
+75	10.80	-0.22
1055+00	10.20	-0.21
+25	9.80	0.20
+50	9.30	-0.19
+75	8.80	-0.18
1056+00	8.30	-0.17
+25	7.80	-0.16
+50	7.30	-0.15
+75	6.80	-0.14
1057+00	6.30	-0.13
+25	5.80	-0.12
+50	5.30	-0.11
+75	4.80	-0.10
1058+00	4.30	-0.09
+25	3.80	-0.08
+50	3.30	-0.07
+75	2.80	-0.06
1059+00	2.30	-0.05
+25	1.80	-0.04
+50	1.30	-0.03
1059+65.19	1.00	-0.02

I-80 DETOUR ENTRANCE TERMINAL TO I-80
HORIZONTAL & VERTICAL OFFSETS

I-80 STA.	HORIZONTAL	VERTICAL
723+64.10	1.00	-0.01
+75	1.00	-0.01
724+00	1.00	-0.01
+25	1.00	-0.01
+50	1.29	-0.02
+75	2.15	-0.03
725+00	3.23	-0.05
+25	4.52	-0.07
+50	6.04	-0.09
+75	7.77	-0.12
726+00	9.73	-0.15
+25	11.90	-0.19
+50	14.30	-0.22
+75	16.92	-0.26
727+00	19.76	-0.31
+25	22.82	-0.35
727+34.15	24.00	-0.38



SECTION A-A
TRAVERSE CONSTRUCTION
JOINT @ PAVEMENT STUB
(ALL STUBS EXCEPT RAMP "D")



SECTION B-B
TRAVERSE CONSTRUCTION
JOINT @ PAVEMENT STUB
(RAMP "D" ONLY)

OFFSET TABLES FOR RAMP TERMINALS

REVISIONS		
No.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.-412 SEC. 50-5HB & 50-2HB-3(R)
LaSalle COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

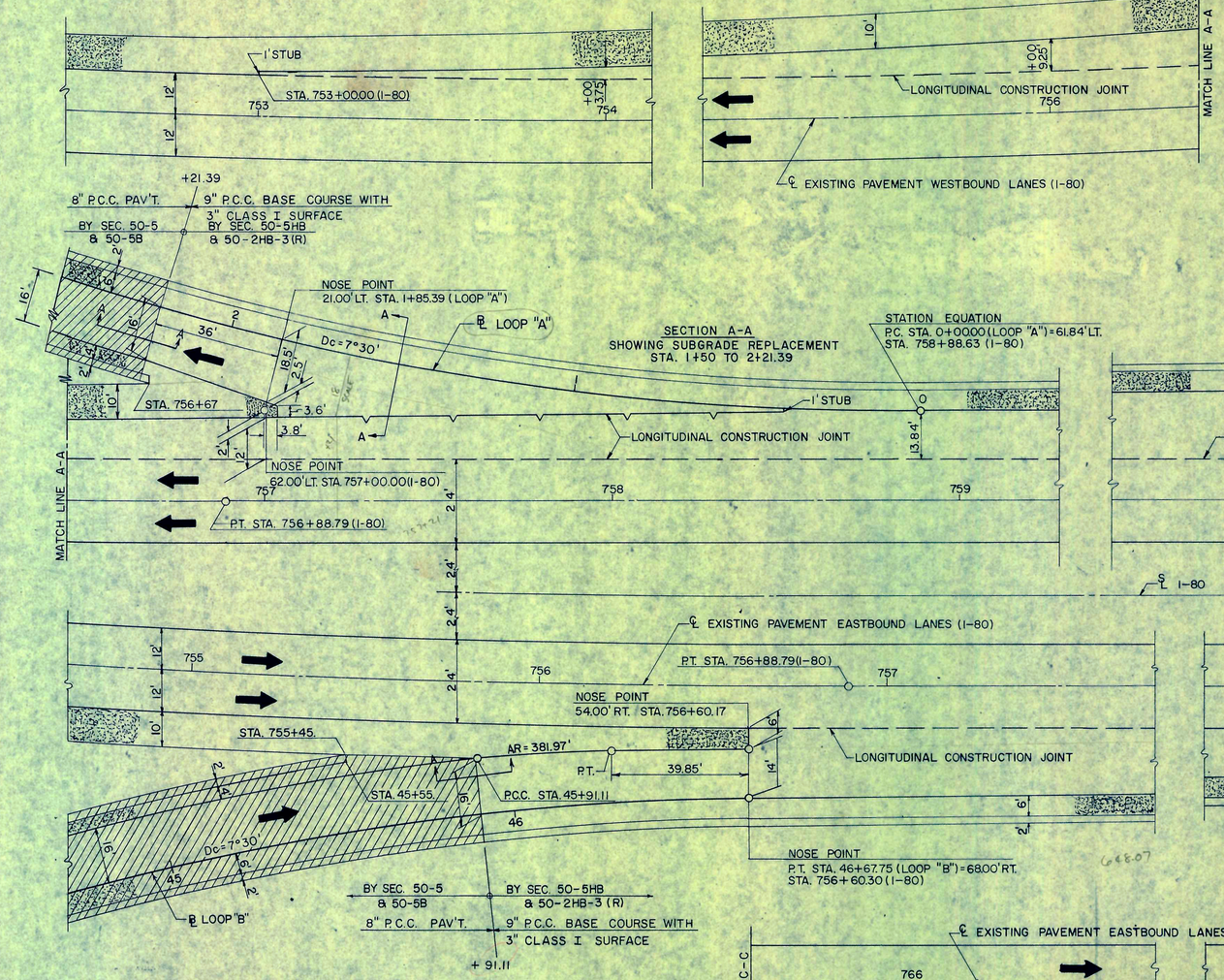
DRAWN BY DATE	MH 11-75
CHECKED BY DATE	JMcC 12-75
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	39

CUMMINS & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-5HB & 502HB-3(R)	LaSALLE	156	40
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

LOOP "A" EXIT AND LOOP "D" ENTRANCE TERMINALS AT I-80
HORIZONTAL & VERTICAL OFFSETS

I-80 STATION	HORIZONTAL	VERTICAL	I-80 STATION	HORIZONTAL	VERTICAL
758+88.63	13.84	-0.29	762+25	17.11	-0.36
759+00	13.95	-0.29	+50	17.36	-0.36
+25	14.19	-0.30	+75	17.60	-0.37
+50	14.44	-0.30	763+00	17.84	-0.37
+75	14.68	-0.31	+25	18.08	-0.38
760+00	14.92	-0.31	+50	18.33	-0.38
+25	15.17	-0.32	+75	18.57	-0.39
+50	15.41	-0.32	764+00	18.81	-0.39
+75	15.65	-0.33	+21.80	19.03	-0.40
761+00	15.90	-0.33	+25	19.06	-0.40
+25	16.14	-0.34	+50	19.30	-0.47
+50	16.38	-0.34	+75	19.54	-0.54
+75	16.63	-0.35	765+00	19.79	-0.61
762+00	16.87	-0.35	765+21.80	20.00	-0.68



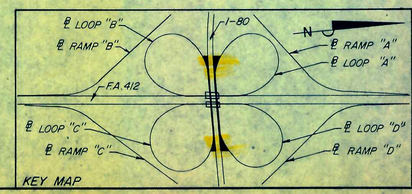
LOOP "C" EXIT AND LOOP "B" ENTRANCE TERMINALS AT I-80
HORIZONTAL & VERTICAL OFFSETS

I-80 STATION	HORIZONTAL	VERTICAL	I-80 STATION	HORIZONTAL	VERTICAL
756+60.30	20.00	-0.68	760+00	16.74	-0.35
+75	19.86	-0.64	+25	16.50	-0.34
757+00	19.62	-0.56	+50	16.26	-0.34
+25	19.38	-0.50	+75	16.02	-0.33
+50	19.14	-0.42	761+00	15.78	-0.33
+60.30	19.04	-0.40	+25	15.54	-0.32
+75	18.90	-0.39	+50	15.30	-0.32
758+00	18.66	-0.39	+75	15.06	-0.31
+25	18.42	-0.38	762+00	15.82	-0.31
+50	18.18	-0.38	+25	14.58	-0.30
+75	17.94	-0.37	+50	14.34	-0.30
759+00	17.70	-0.37	+75	14.10	-0.29
+25	17.46	-0.36	763+00	13.86	-0.29
+50	17.22	-0.36	763+08.37	13.78	-0.29
+75	16.98	-0.35			

NOTE: FOR TYPICAL SECTIONS SEE SHEET NOS. 5

FOR HORIZ. & VERT. OFFSETS TO EDGE OF PAVEMENT SEE SHEET NOS. 39

FOR SECTION A-A & B-B SEE SHEET NO. 39



LOOP TERMINAL DETAILS I-80 INTERCHANGE

REVISIONS		
No.	DATE	INITIALS
1		
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

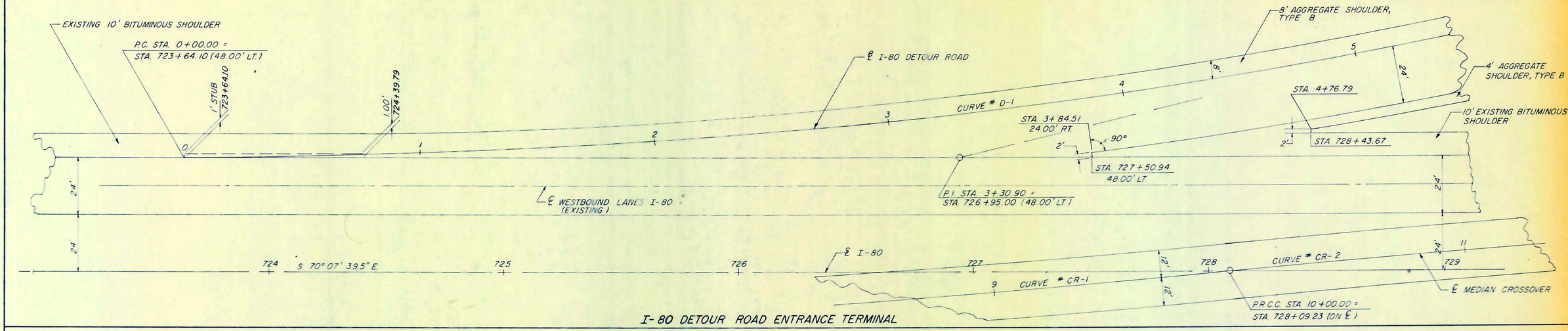
F.A. 412 SEC. 50-5HB & 50-2HB-3(R)

LaSALLE COUNTY

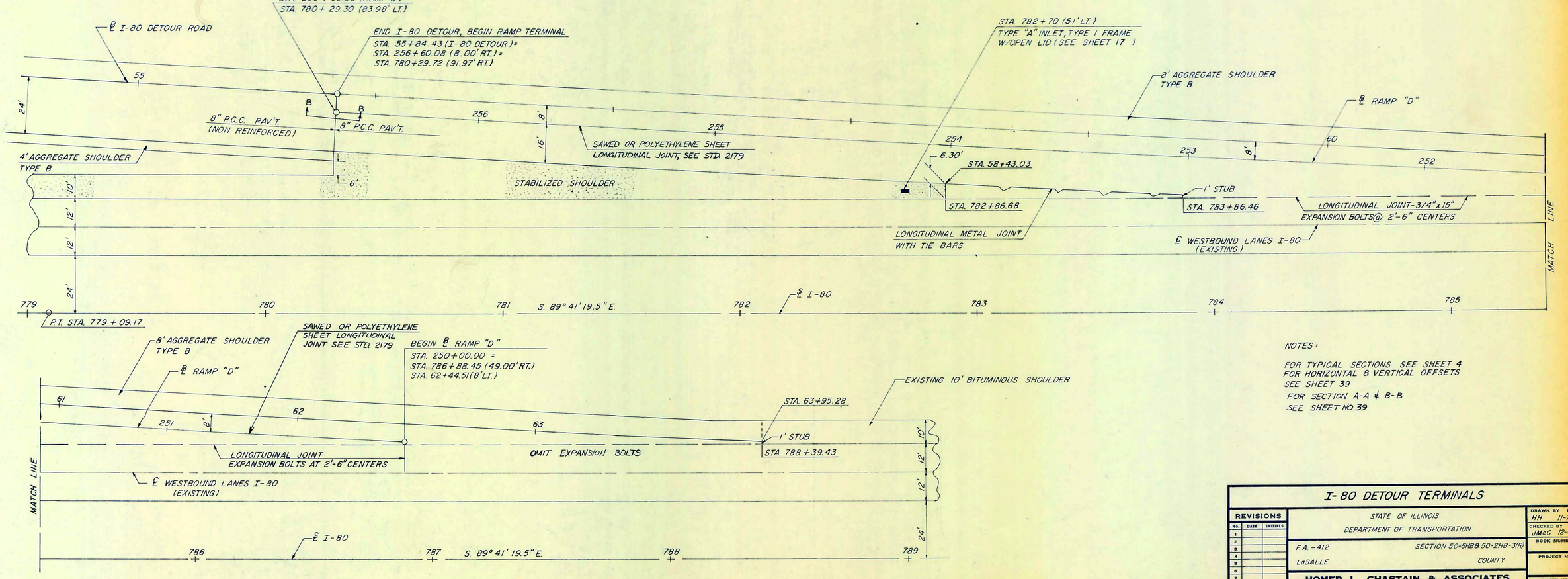
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY / DATE	BJW 7-75
CHECKED BY / DATE	JMcC 7-75
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	40

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-5HBB 50-2HB-3(R)	LaSALLE	156	41
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



I-80 DETOUR ROAD ENTRANCE TERMINAL



I-80 DETOUR ROAD EXIT TERMINAL

NOTES:

FOR TYPICAL SECTIONS SEE SHEET 4
FOR HORIZONTAL & VERTICAL OFFSETS SEE SHEET 39
FOR SECTION A-A & B-B SEE SHEET NO. 39

I-80 DETOUR TERMINALS

REVISIONS		
No.	DATE	INITIALS
1		
2		
3		
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5		
6		
7		
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. - 412 SECTION 50-5HBB 50-2HB-3(R)
LaSALLE COUNTY

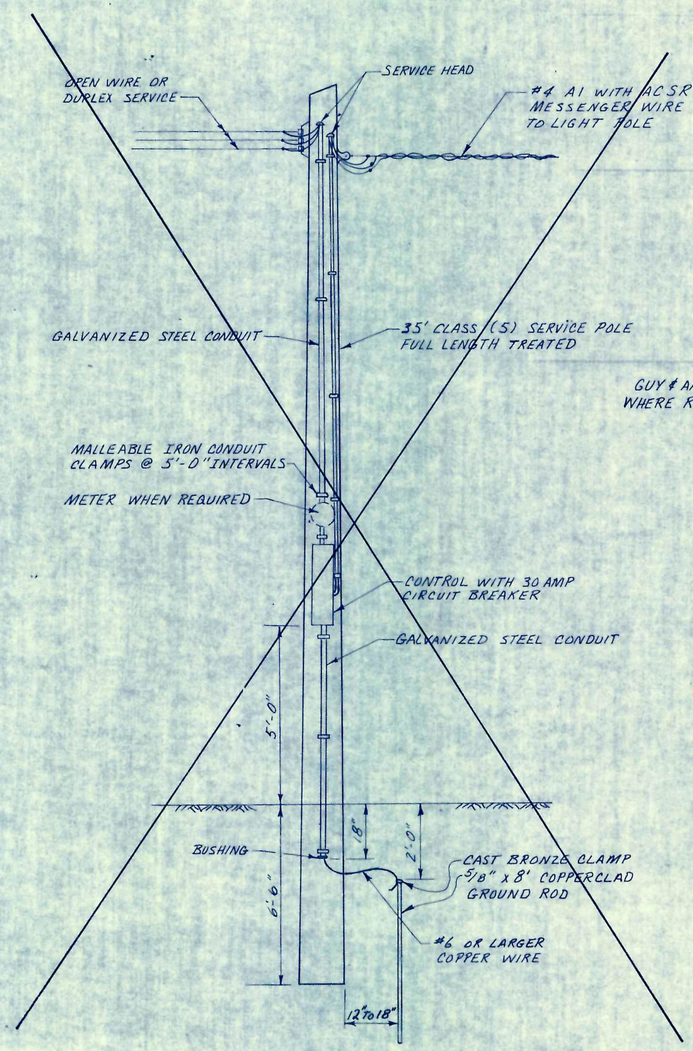
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE	HH 11-75
CHECKED BY DATE	JMcC 12-75
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	41

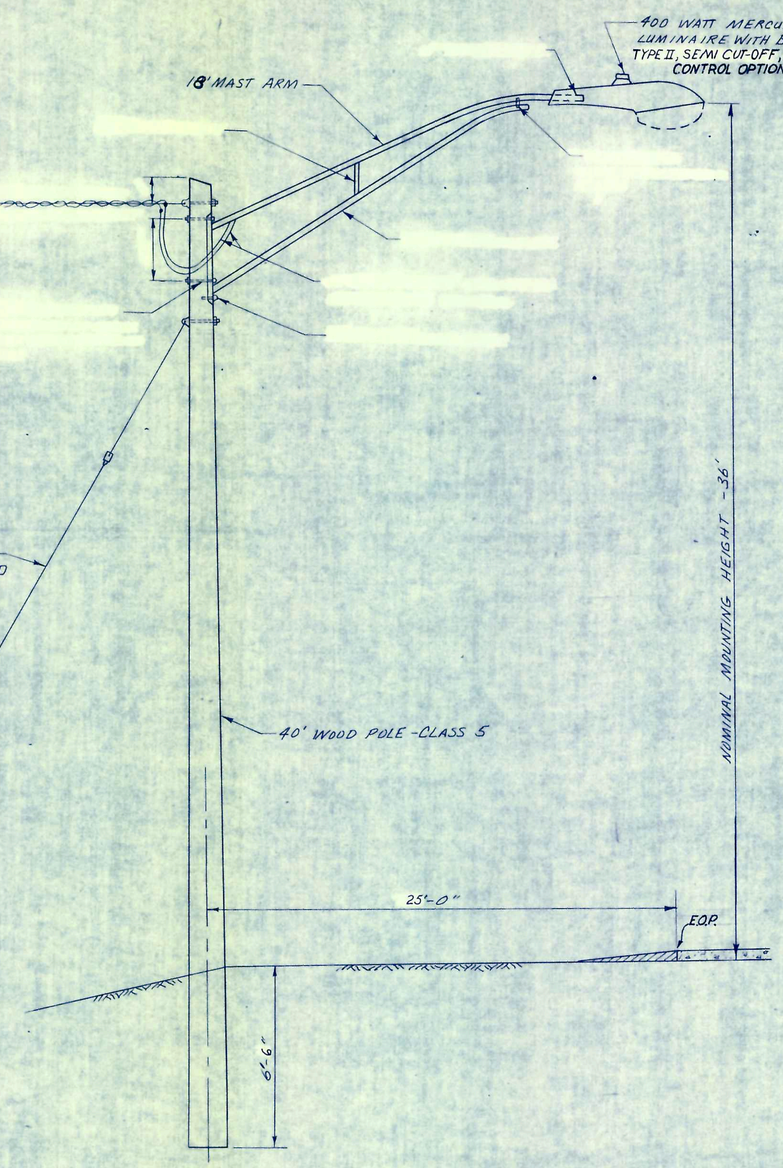
CUBMINS & COMPANY

FAI ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
412	50-16HB, 211-3(C), 225	LA SALLE	156	41A
FHWA REGION 5	ILLINOIS	PROJECT		

TEMPORARY LIGHT STANDARD



SERVICE POLE
LOCATE ADJACENT TO R.O.W. LINE



WOOD POLE
(CLASS 5)

TEMPORARY LIGHTING

SEC 50(GR&I) 51(3-3(R), 2RS) 412 LA SALLE 156 418

PAY CODE	PAY ITEM ITEM	UNIT	QUANTITY
	TEMPORARY LIGHTING STANDARDS	EACH	35

3

P.T. STA 6+38.89

MATCH LINE

1+50 3+30 5+10 6+90 7+96 9+96 11+96 13+96 15+96 17+96

P.I. STA 3+30.90
=℄ STA 726+93.00 (48'LT)

A/C & R.O.W.

P.C. STA 0+00 DETOUR
=℄ STA 723+64.10 (48'LT)

0+30 3+96 5+96 MATCH LINE

720 725 730 735 740 745 750 755 760 765 770 775 780 785 790

P.C. STA 38+34.35

P.I. STA 41+20.

P.T. STA 44+03.29

38+00 40+00 42+00 44+00 46+00 48+00 49+00 50+00 52+00 54+00 56+00 58+00 60+00 62+00 64+00

43+00 45+00 47+00 51+00 53+00 55+00 56+95

P.I. STA 49+58.79

P.C. STA 45+88.68

P.T. STA 53+24.32

RAMP 'D' STA 250+00
=℄ STA 786+88.95 (42'LT)

STA 55+89.34 DETOUR
=℄ STA 780+29.72 (9.19'RT)
=RAMP 'D' STA 256+60.06 (18'LT)

LIGHT NUMBER	STATION (DETOUR OR CROSSOVER)		LIGHT NUMBER	STATION (DETOUR OR CROSSOVER)
1	64+00		23	17+96
2	62+00		24	15+96
3	60+00	WEST CROSSOVER	25	13+96
4	58+00		26	11+96
5	56+00		27	9+96
6	54+00		28	7+96
7	52+00		29	5+96
8	50+00		30	3+96
9	48+00			
10	46+00		31	6+90
11	44+00		32	5+10
12	42+00		33	3+30
13	40+00	DETOUR	34	1+50
14	38+00		35	0+30
15	56+95			
16	55+00			
17	53+00			
18	51+00			
19	49+00			
20	47+00			
21	45+00			
22	43+00			

EAST CROSSOVER

F.A.P. 412 & F.A.I. 80
INTERCHANGE

TEMPORARY LIGHTING

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-5HB, 2HB-3(A), 2B5	LaSALLE	156	41C
STA 0+00		TO STA 31+00		
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT 2600	

I-80 DETOUR ROAD
TEMPORARY LIGHTING

SEC. 35, T34N., R1E., 3RD. P.M.

SEC. 36, T34N., R1E., 3RD. P.M.

WALTER BRANNAN

CURVE DATA D-1
PI STA 3+30.90
Δ = 13° 10'-40" R = 2,864.79
D = 2°00'-00" L = 658.89
T = 330.90 E = 19.05
SE 0.015 1/FT
SE REMOVED STA. 6+00.00 TO STA. 7+75.00

MATCH LINE

P.C. STA. 0+00.00 = POT. STA. 723+64.10 (48.00 LT)

PI STA 3+30.90 = POT STA 726+95.00 (48.00' LT)

PT STA 6+58.89 = POT. STA. 730+17.19 (123.44' RT.)

STA 12+96.77 = STA 20+94.19 (CH-13)

℄ CH-13

TEMPORARY CONST. EASEMENT

℄ I-80 DETOUR ROAD

℄ I-80

CURVE D-1

EXISTING R.O.W.

728+04.54 125' LT

736+00 125' LT

735+52.04 300.02 LT

738+19.98 362.75 LT

738+55 265' LT

739+15 190' LT

740+05 160' LT

741+00 160' LT

743+48.42 280' LT

745+53.44 448.66' LT

746+27.48 533.97' LT

℄ RAMP "A"

POT. STA. 20+26.12 = P.C. STA. 743+48.42 (435.13 LT')

CURVE #60

℄ LOOP "A"

CURVE #33

PIPE CULVERT SEE SHEET

STA 145+43.46 (RAMP 'A') = STA. 729+20.32 (49.00 LT)

℄ MEDIAN CROSSOVER SEE SHEET

P-1 (TEMPORARY) 18" X 37'0" SEE SHEET

STATION EQUATION
POT. STA 737+35.23 (I-80) = POT. STA 18+08.38 (CH-13)

STRUCTURE 50-2HB-3(R)

℄ RAMP "B"

PIPE CULVERT EXT SEE SHEET

P.C. STA 743+48.42

S 70° 07' 39.5" E

S 83° 18' 19.5" E

70° 10'-08"

96° 39'-12"

BM.=5A-3, 60 COMMON NAIL IN FIRST PP EAST OF COUNTY HIGHWAY TO TROY GROVE ON THE NORTH SIDE OF I-80 FRONTAGE ROAD, 155' LT. STA. 739+59 (I-80) ELEV. 641.64

BM.=5A-2, 60 COMMON NAIL IN 3RD PP WEST OF HEDGE ROW & ON SOUTH SIDE OF FRONTAGE ROAD 109' LT, STA. 759+94 (I-80) ELEV. 662.94

NOTES SHOWN IN THIS MANNER PERTAIN TO SECTION 50-5

PLAN

PROFILE

EXISTING GROUND ALONG ℄ I-80 DETOUR ROAD

℄ CH-13

PV.I. STA. 5+00
ELEV. = 638.46
L.V.C. = 250

PV.I. STA. 91.50
ELEV. = 649.98
L.V.C. = 500

PV.I. STA. 18+50
ELEV. = 648.18
L.V.C. = 300

PV.I. STA. 29+00
ELEV. = 658.47
L.V.C. = 350

0.00%

-2.56%

-0.20%

+0.98%

+3.88%

LT. DITCH +0.98%

LT. DITCH +3.38%

LT. DITCH +0.42%

LT. DITCH -0.46%

LT. DITCH +1.12%

| | | |

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA - 412	50(GSB, 2HB-3AR, 2BS	LaSALLE	156	41D
STA. 31+00		TO STA. 55+84.34		
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

SEC. 36, T. 34N., R. I E., 3RD. PM.

I-80 DETOUR ROAD

TEMPORARY LIGHTING

WALTER BRANNAN

NORMAN A. SMALL

℄ LOOP A

℄ LOOP "D"

CURVE #7

CURVE #19

CURVE #21

CURVE #4

CURVE #37

N 5°-26'-04.5" E

1035

1030

STA. 36+53.82 =
STA. 1033+02.28

PC STA. 38+34.84

P.I. STA. 41+20.00

℄ I-80 DETOUR

PT STA. 44+03.29

PC STA 45+88.58

CURVE D-2

CURVE D-3

S 83°-18'-19.5" E

91°-15'-36"

17°-56'-11.5" E

℄ FA-412

EXISTING R.O.W.

PIPE DRAINS
SEE SHEET

SEC. 36, T.34N., R.I.E.
SEC. 1, T.33N., R.I.E.

BM #5A-2

STRUCTURE 50-5HB

PIPE CULVERT
SEE SHEET

℄ MEDIAN CROSSOVER

PC STA. 769+20.29

P.I. STA. 773+64.0

P.T. STA. 779+09.17

PIPE CULVERT EXT.
SEE SHEET

774+26.79
448.30' LT

777+00
240' LT.

P.I. STA 49+58.49

P.T. STA 53+24.32

782+00
160' LT

STA 257+60.08 RAMP "D"
89.28' LT. STA. 779+29.44

STA. 250+00.00 RAMP "D" =
STA 786+89.45 (49.00 LT.)

℄ RAMP "D"

S 89°-41'-19.5" E

S 86°-39'-04.5" E

STA. 55+84.34 =
8.00' LT. STA. 256+60.08 =
91.97' LT. STA. 780+29.72

STA. 256+60.08 =
83.98' LT. STA. 780+29.30

PIPE CULVERT
SEE SHEET

℄ RAMP "D"

TYPE OF CONTROL TO BE AT THE OPTION OF THE CONTRACTOR.

ALL DOWNGUYS SHALL BE 30' FROM E.O.P. OR FEED WILL BE PLACED IN TRENCH 24" BELOW GRADE. (TYPICAL)

POLE SETBACK = 25' FROM E.O.P.
MAST ARM = 18'
LUMINARE TYPE II, MEDIUM DISTRIBUTION, SEMI CUTOFF

CURVE DATA D-2

P.I. STA. 41+20.00
Δ = 11°-22'-08" R = 2864.79
D = 2°-00'-00" L = 568.44
T = 285.16 E = 14.16
SE 0.05 I/FT
SE ATTAINED STA. 37+20 TO STA. 38+95
SE REMOVED STA. 43+20 TO STA. 44+95

CURVE DATA D-3

P.I. STA. 49+58.49
Δ = 14°-42'-53" R = 2864.79
D = 2°-00'-00" L = 735.74
T = 369.90 E = 23.78
SE 0.05 I/FT
SE ATTAINED STA. 44+95 TO STA. 46+70
SE REMOVED STA. 52+65 TO STA. 54+40

B.M. # 5A-2 60 COMMON NAIL IN 3RD P.P. WEST OF HEDGE ROW & ON SOUTH SIDE OF FRONTAGE ROAD 109' LT, STA. 759+94 (I-80) ELEV. 662.94

B.M. #5 P.K. NAIL IN P.P. SOUTH SIDE OF FRONTAGE RD. 106' LT STA. 772+01 ELEV. 670.20

SEC. 1, T. 33N., R.I.E., 3RD. PM.

NOTES SHOWN IN THIS MANNER PERTAIN TO SECTION 50-5

PROFILE

EXISTING GROUND ALONG ℄ I-80 DETOUR ROAD

P.V.I. STA. 36+50
ELEV. = 687.57
L.V.C. = 1150

+3.88%

-2.38%

P.V.I. STA. 46+00
ELEV. = 664.96
L.V.C. = 400

+0.30.1%

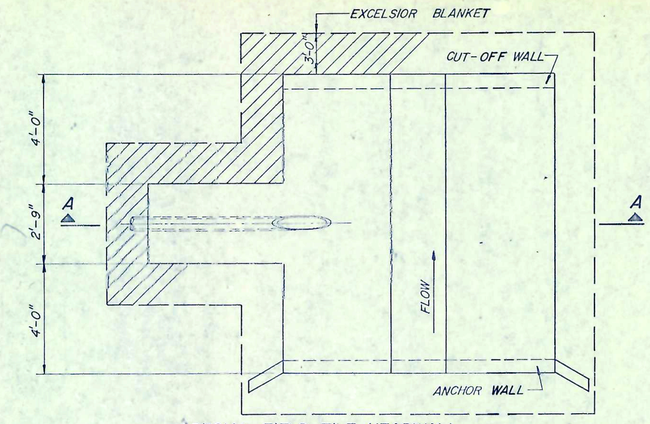
P.V.I. STA. 53+00
ELEV. = 667.07
L.V.C. = 400

-1.72%

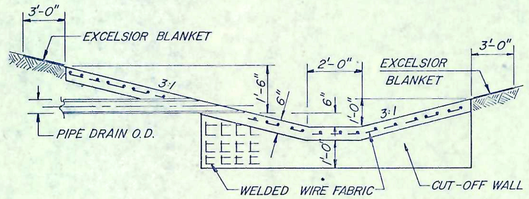
670
660
650

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.-412	50-5HB 50-2HB-3(R)	LaSALLE	156	42
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



SPECIAL FIELD TILE HEADWALL



SECTION A-A

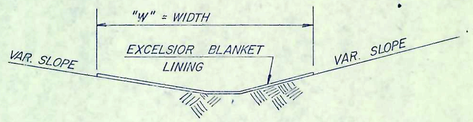
NOTES:
THE COST OF FURNISHING AND INSTALLING THE SPECIAL FIELD TILE HEADWALL WILL BE PAID FOR PER CU. YD. AS "CLASS X CONCRETE" AND PER LIN. FT. FOR "PAVED DITCH TYPE A-12".

"CLASS X CONCRETE " = 0.1 CUBIC YARD
"PAVED DITCH TYPE A-12" = 11 LIN. FT.
EXCELSIOR BLANKET = 18 SQUARE YARDS.

PAVED DITCH SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 2258 EXCEPT AS NOTED.

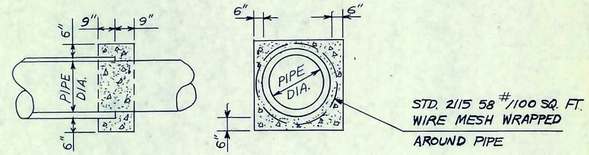
WELDED WIRE FABRIC SHALL BE 6"x6" MESH, #4 GAGE, WEIGHING 58 LBS. PER 100 SQUARE FEET.

A 12' SECTION OF THE EXISTING FIELD TILE SHALL BE REMOVED AND REPLACED AT THE OUTLET LOCATION. THE MATERIAL FOR PIPE DRAINS SHALL BE EITHER CORRUGATED STEEL OR ALUMINUM ALLOY PIPE.



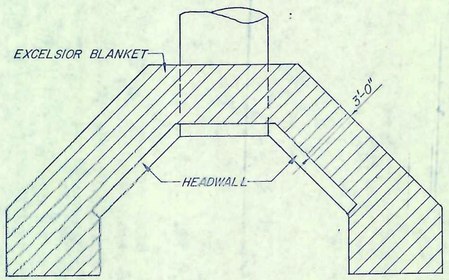
EXCELSIOR BLANKET LINING FOR DITCHES

LOCATION	"W"
I-80	
RT. STA. 786+50 - 790+25	= 9'
CH-13	
LT. STA. 19+35 - 21+50	= 6'
RT. STA. 18+90 - 21+50	= 6'

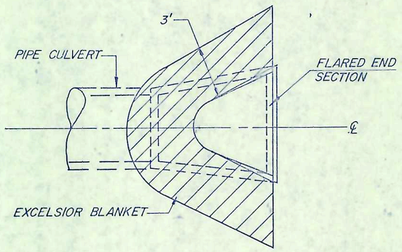


CONCRETE COLLAR FOR CONNECTIONS OF PIPE CULVERTS

THE COST OF THE WIRE MESH AND CLASS X CONCRETE SHALL BE CONSIDERED AS INCIDENTAL TO PIPE CULVERTS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.



EXCELSIOR BLANKET LINING AROUND HEADWALLS



EXCELSIOR BLANKET LINING AROUND END SECTION

DETAILS

REVISIONS		
NO.	DATE	INITIALS
1		
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

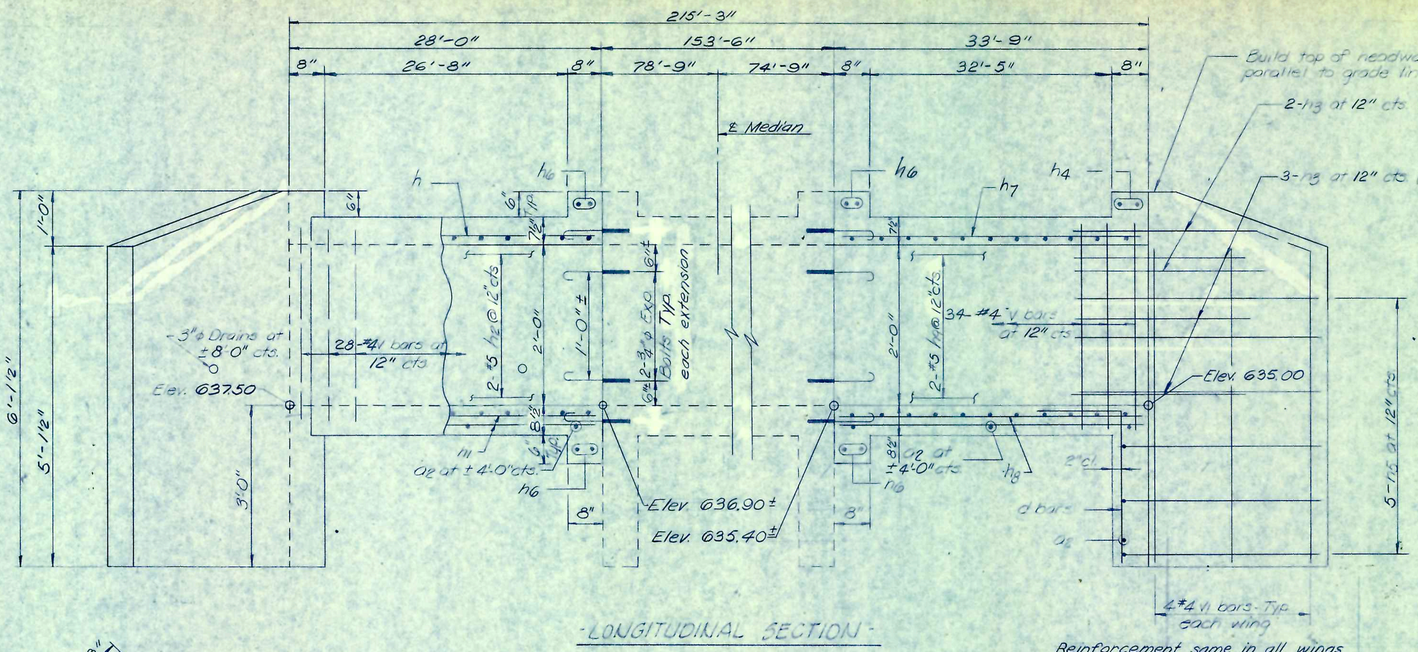
F.A.-412 SEC. 50-5HB & 50-2HB-3 (R)
LaSALLE COUNTY

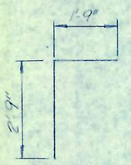
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE	S.P.Mc. 1-76
CHECKED BY DATE	M.W.P. 1-76
BOOK NUMBER	
PROJECT NO.	
SHEET NO.	42

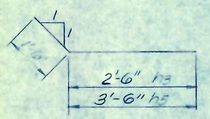
CUBBINS & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	SEC 50-5HB & 50-2HB-3(R)	LASALLE	156	43
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

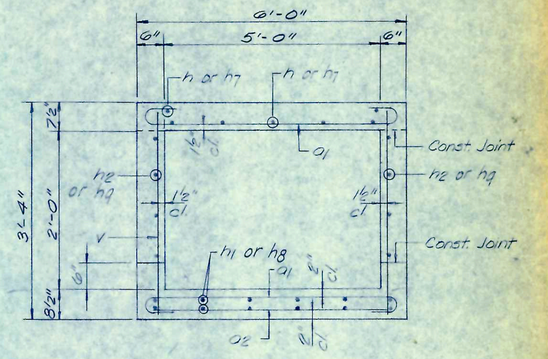




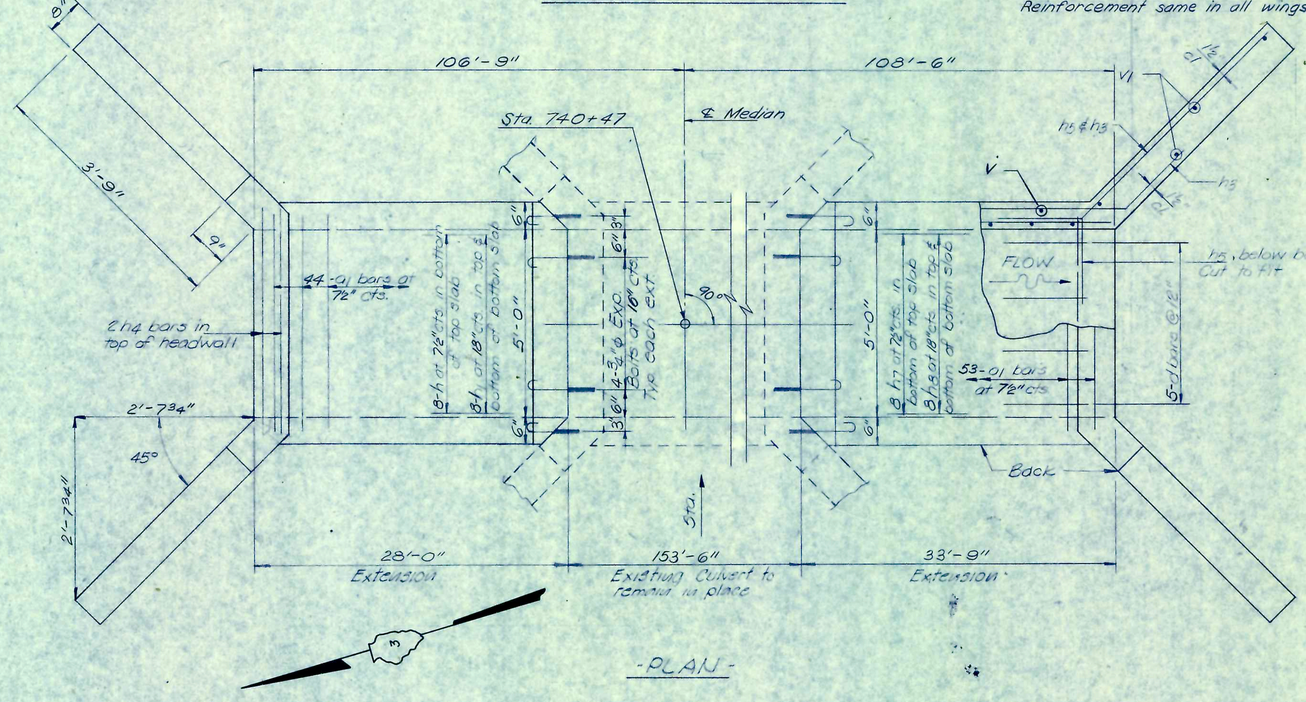
BAR d



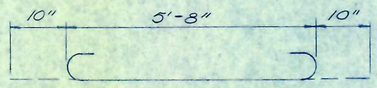
BARS h3 & h5



TYPICAL SECTION THRU BARREL



-PLAN-



BAR 01

GENERAL NOTES

Class "X" Concrete shall be used throughout.
At least six feet of Barrel shall be poured monolithically with wingwalls.
Exposed edges shall be beveled ¾".
For backfilling & Embankments see Std. Spec's.
Tilt hook of "01" bars, if necessary, to obtain 1½" min. clearance of top of hook.
The top of culvert, the backs of the sidewalls above the lower construction joint and the backs of the wings shall be waterproofed in accordance with Art 503.11 of the Std Specs.
All bars shall be lapped 24 diameters unless otherwise specified.
Expansion bolts shall consist of self drilling expansion shields and ¾"ø hooked bolts. Hooked bolts shall extend a minimum of 9" into new concrete.

BILL OF MATERIAL

BAR	No.	SIZE	LENGTH
01	194	#7	7'-4"
02	18	#4	5'-3"
d	10	#4	4'-6"
h	10	#5	27'-6"
h1	8	#5	27'-6"
h2	4	#5	27'-6"
h3	20	#4	4'-0"
h4	4	#6	5'-4"
h5	20	#4	5'-0"
h6	8	#6	5'-0"
h7	10	#5	33'-3"
h8	8	#5	33'-3"
hg	4	#5	33'-3"
V	128	#4	2'-11"
V1	16	#4	5'-0"
Class X Concrete		Cu Yd.	25.9
Reinforcement Bars		Lbs.	4910
¾" ø Exp. Bolts		Each	24

fs = 20,000 p.s.i.
fc = 1400 p.s.i. Barrel
fc = 1200 p.s.i. Wings
V = 90 p.s.i.
n = 10

LOADING HS-20-44

BOX CULVERT EXTENSIONS-STA. 740+47

REVISIONS		
NO.	DATE	INITIALS
1		
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
FA 412 SEC. 50-5HB & 50-2HB-3(R)
LASALLE COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

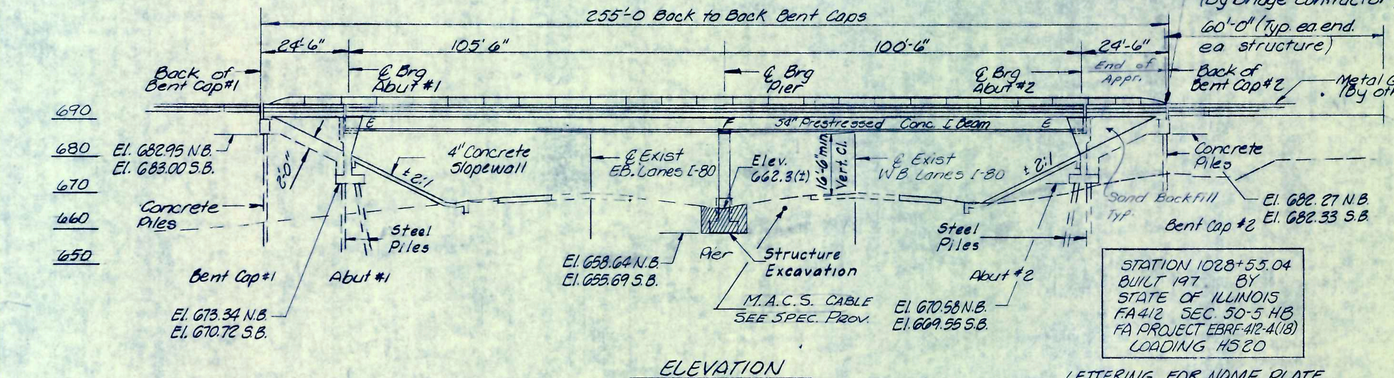
DRAWN BY DATE M.S.F. 12-75
CHECKED BY DATE G.S.H. 12-75
BOOK NUMBER
PROJECT NO. 2600
SHEET NO. 43

FUSHING & COMPANY

B.M.#5 PK Nail in P.P.
South of Frontage Rd
400' Lt. Sta. 1028+20
Elev. 670.30

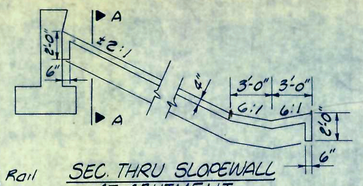
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-5HB	LaSalle	156	44
FED. ROAD DIST. NO.		ILLINOIS PROJECT		

Sheet No. 1 of 25 Sheets



ELEVATION

LETTERING FOR NAME PLATE
(See Std. 2113)



SEC. THRU SLOPEWALL AT ABUTMENT

DESIGN LOADING

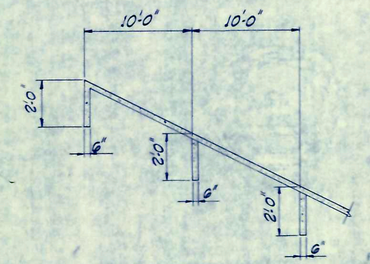
Live Load HS 20-44
AASHTO 1973 & Interim Specifications
Dead load includes 25 lbs/sq ft of roadway for future wearing surface.

DESIGN STRESSES

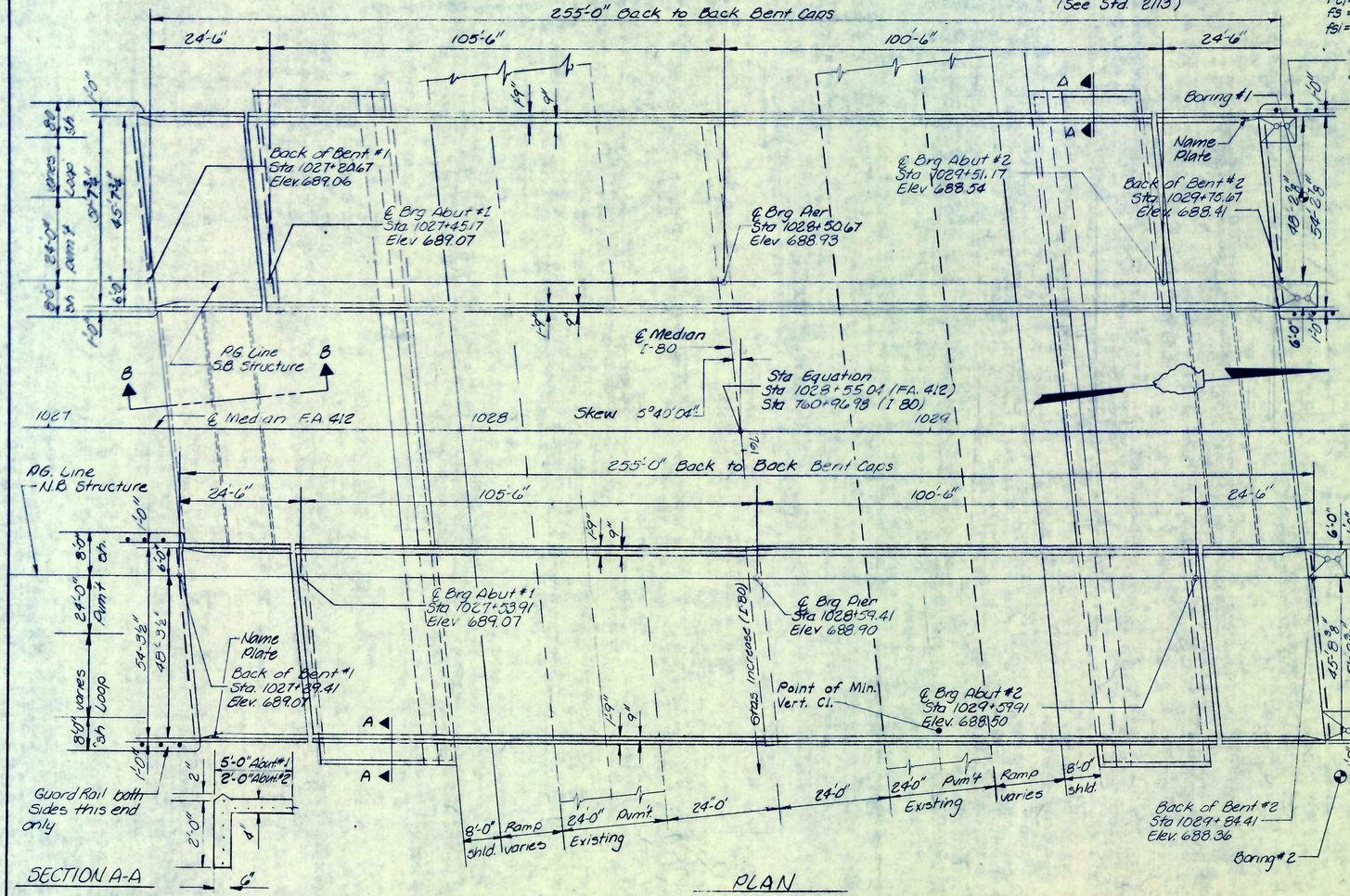
f'_c = 1400 psi Curb & Parapet
f'_c = 1200 psi Superstructure Slab (Spans 2 & 3)
f_s = 20,000 psi Superstructure, except as noted.
f'_c = 3500 psi Substructure & Abut. Slab
f_y = 40,000 psi Substructure & Abut. Slab
n = 10 (Field units)
f'_c = 6000 psi
f'_{ci} = 5000 psi
f_s = 270,000 psi } Prestressed Precast Units
f_{si} = 189,000 psi

GENERAL NOTES

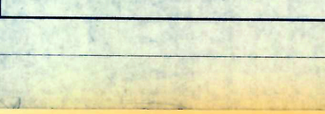
1. All reinforcement bars shall be lapped 24 diameters unless otherwise shown.
2. All structural steel shall be shop painted with two coats of basic lead silico chromate paint.
3. Slope wall shall be reinforced with welded wire fabric 6" x 6" mesh, weighing 58# per 100 sq.ft.
4. The Contractor shall drive one concrete test pile at Approach Bent No. 1, North Bound, and one steel test pile at Abutment No. 2, South Bound; each in a permanent location as directed by the Engineer before ordering the remainder of the piles.
5. Concrete piles at abutments shall be driven in holes precored through the embankment in accordance with Article 513.09(c) of the Standard Specifications.
6. The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
7. The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.
8. Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.
9. For Boring Logs see Special Provisions.



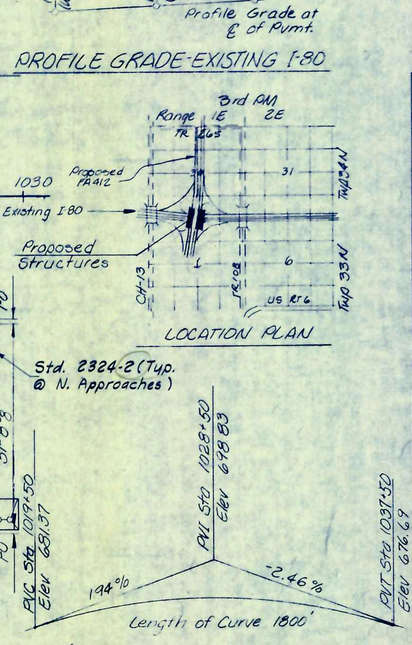
SEC. B-B



PLAN



SECTION A-A



PROFILE GRADE - FA 412
(Along Median Edge of Pavement)

LOCATION PLAN

Std. 2324-2 (Typ. @ N. Approaches)

PROFILE GRADE - EXISTING I-80

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPERSTR	SUBSTR	TOTAL
Sand Backfill	Cu. Yds.	——	735	735
Structure Excavation	Cu. Yds.	——	289	289
Class X Concrete	Cu. Yds.	973.3	696.7	1,670.
Precast Prestressed Conc. I Bm. (54")	Lin. Ft.	3,726	——	3,726
Structural Steel	Lbs.	9,570	360	9,930
Aluminum Railing	Lin. Ft.	1,008	——	1,008
Reinforcement Bars	Lbs.	219,160	82,700	301,860
Steel Piles HP10x42	Lin. Ft.	——	5,088	5,088
Concrete Piles	Lin. Ft.	——	1,580	1,580
Test Piles, Steel HP10x42	Ea.	——	1	1
Test Piles, Concrete	Ea.	——	1	1
Name Plates	Ea.	2	——	2
Slope Wall 4"	Sq. Yds.	——	2,125	2,125
Preformed Joint Sealer 4"	Lin. Ft.	221	——	221
* Bit. Conc. Surf. Crse., Mix D, Cl. I	Tons	235	——	235
* Protective Coat	Sq. Yds.	377	——	377
* Waterproofing Membrane Systems	Sq. Yds.	2,913	——	2,913
* To be included in Sec. 50-5				

GENERAL PLAN AND ELEVATION

REVISIONS		
No.	DATE	INITIALS
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STATE OF ILLINOIS
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
FA. 412 OVER I-80
FA. 412 SEC. 50-5 HB-PROJ EBRF-412-4(18)
STA. 1028+55.04 (FA 412) LASALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY JWW DATE 2-75
CHECKED BY JWC DATE
BOOK NUMBER
PROJECT NO. 2601-2
SHEET NO.

REGISTERED STRUCTURAL ENGINEER JOHN W. CLARK 81-3659 STATE OF ILLINOIS

APPROVED FOR STRUCTURAL ADEQUACY ONLY
Carl E. Thompson Jr.
Engineer of Bridges & Structures

CUSHING & COMPANY

BM #5 PK Nail in RR
South of Frontage Rd
400' Lt Sta 1029+20
Elev. 670.30

Sheet No. 1
of 25 Sheets

FAP RTE	SECTION	COUNTY	SHEET NO.	TOTAL SHTS.
413	(2)-1-R	LaSalle	1	66A

CONTRACT NO.	DISTRICT	COUNTY	SHEET NO.	TOTAL SHTS.

ELEVATION

255'-0" Back to Back Bent Caps

24'-6" | 105'-6" | 100'-6" | 24'-6"

Back of Bent Cap #1 | ℄ Brg Abut #1 | ℄ Brg Pier | ℄ Brg Abut #2 | End of Appr. | Back of Bent Cap #2

690
680 El. 680.45 N.B. El. 680.05 S.B.
670
660
650

Concrete Piles | 4" Concrete Slopewall | ℄ Exist EB Lanes I-80 | Elev. 662.8(±) | ℄ Exist WB Lanes I-80 | Concrete Piles

Steel Piles | Pier | Piles on N.B. & Pier only | Structure Excavation | Steel Piles | Sand Backfill Typ. | El. 686.27 N.B. El. 686.33 S.B.

Bent Cap #1 | Abut #1 | El. 658.64 N.B. El. 658.44 S.B. | M.A.C.S. CABLE SEE SPEC. PROV. | El. 670.58 N.B. El. 669.95 S.B. | Bent Cap #2 | Abut #2

El. 673.36 N.B. El. 670.76 S.B.

STATION 1028+55.04
BUILT IN 1977 BY
STATE OF ILLINOIS
FAI-413 SEC. 30-3 H,B
FA PROJECT ESR-413(2)
LOADING H S 20

LETTERING FOR NAME PLATE (See Std. 2113)

SEC. THRU SLOPEWALL AT ABUTMENT

DESIGN LOADING

Live Load H S 20-44
AASHTO 1973 & Interim Specifications
Dead load includes 25 lbs/sq.ft. of roadway for future wearing surface.

DESIGN STRESSES

f_c' = 4000 psi	Curb & Parapet
f_c' = 1200 psi	Superstructure Slab (Spans 1 & 3)
f_s = 20,000 psi	Superstructure, decks as noted.
f_c' = 3500 psi	Substructure & Abut. Slab
f_y = 40,000 psi	Substructure & Abut. Slab
n = 10 (Field Units)	
f_c' = 6000 psi	Prestressed Precast Units
f_{ci} = 3600 psi	
f_{ti} = 570 psi	
f_{cs} = 1,800 psi	
f_{ts} = 1,140 psi	

GENERAL NOTES

1. All reinforcement bars shall be lapped 24 diameters unless otherwise shown.
2. All structural steel shall be shop painted with two coats of basic lead silico chromate paint.
3. Slope wall shall be reinforced with welded wire fabric 6" x 6" mesh, weighing 58 lbs per 100 sq.ft.
4. The Contractor shall drive one concrete test pile at Approach Bent No. 1, North Bound, and one steel test pile at Abutment No. 2, South Bound; each in a permanent location as directed by the Engineer before ordering the remainder of the piles.
5. Concrete piles at abutments shall be driven in holes precored through the embankment in accordance with Article 513.06(c) of the Standard Specifications.
6. The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
7. The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.
8. Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.
9. For Boring Logs see Special Provisions.
10. The Contractor shall drive one steel test pile at Pier, S.B. in a permanent location.

PROFILE GRADE-EXISTING I-80

Profile Grade of ℄ of Pvmt.

LOCATION PLAN

Std. 2326-2 (Typ. N. Approaches)

PROFILE GRADE - FA 413

(Along Median Edge of Pavement)

SECTION A-A

PLAN

Guard Rail both Sides this end only

Boring #1 | Boring #2

℄ Brg Abut #1 Sta 1027+33.91 Elev. 689.07

℄ Brg Abut #2 Sta 1029+55.04 Elev. 688.90

Point of Min. Vert. Cl.

℄ Brg Abut #2 Sta 1029+39.91 Elev. 688.90

℄ Brg Pier Sta 1028+39.67 Elev. 688.93

℄ Brg Abut #1 Sta 1027+24.17 Elev. 688.34

Back of Bent #1 Sta 1027+26.67 Elev. 689.06

Back of Bent #2 Sta 1029+70.67 Elev. 688.41

℄ Brg Abut #1 Sta 1027+45.17 Elev. 689.07

Name Plate

℄ Median I-80

Sta Equation Sta 1028+55.04 (FA 413) Sta 760+96.98 (I-80)

Skew 3°40'08"

PG Line SB Structure

PG Line NB Structure

℄ Median FA 413

255'-0" Back to Back Bent Caps

1027 | 1028 | 1029

Back of Bent #1 Sta 1027+26.67 Elev. 689.06

Back of Bent #2 Sta 1029+70.67 Elev. 688.41

Name Plate

Guard Rail both Sides this end only

Ramp 1 | Ramp 2 | Ramp 3 | Ramp 4

Existing | Varies

SEC. B-B

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPERSTR	SUBSTR	TOTAL
Sand Backfill	Cu. Yds.	——	735	735
Structure Excavation	Cu. Yds.	——	289	289
Class X Concrete	Cu. Yds.	973.3	689.8	1663.1
Precast Prestressed Conc. I Bm. (54")	Lin. Ft.	3,786	——	3,786
Structural Steel	Lbs.	9,510	360	9,870
Aluminum Railing	Lin. Ft.	1,008	——	1,008
Reinforcement Bars	Lbs.	219,160	82,700	301,860
Steel Piles HP10x42	Lin. Ft.	——	1670C	6702
Concrete Piles	Lin. Ft.	——	1,380	1,380
Test Piles, Steel HP10x42	Ea.	——	2	2
Test Piles, Concrete	Ea.	——	1	1
Name Plates	Ea.	2	——	2
Slope Wall 4"	Sq. Yds.	——	2,125	2,125
Preformed Joint Sealer 4"	Lin. Ft.	221	——	221
⊕ Bit. Conc. Surf. Crse., Mix D, Cl. I	Tons	235	——	235
⊕ Protective Coat	Sq. Yds.	317	——	317
⊕ Waterproofing Membrane Systems	Sq. Yds.	2,843	——	2,843
⊕ To be included in Sec. 50-3				

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

GENERAL PLAN AND ELEVATION

STATE OF ILLINOIS
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS

REVISIONS	STRUCTURE NO.
	060-2

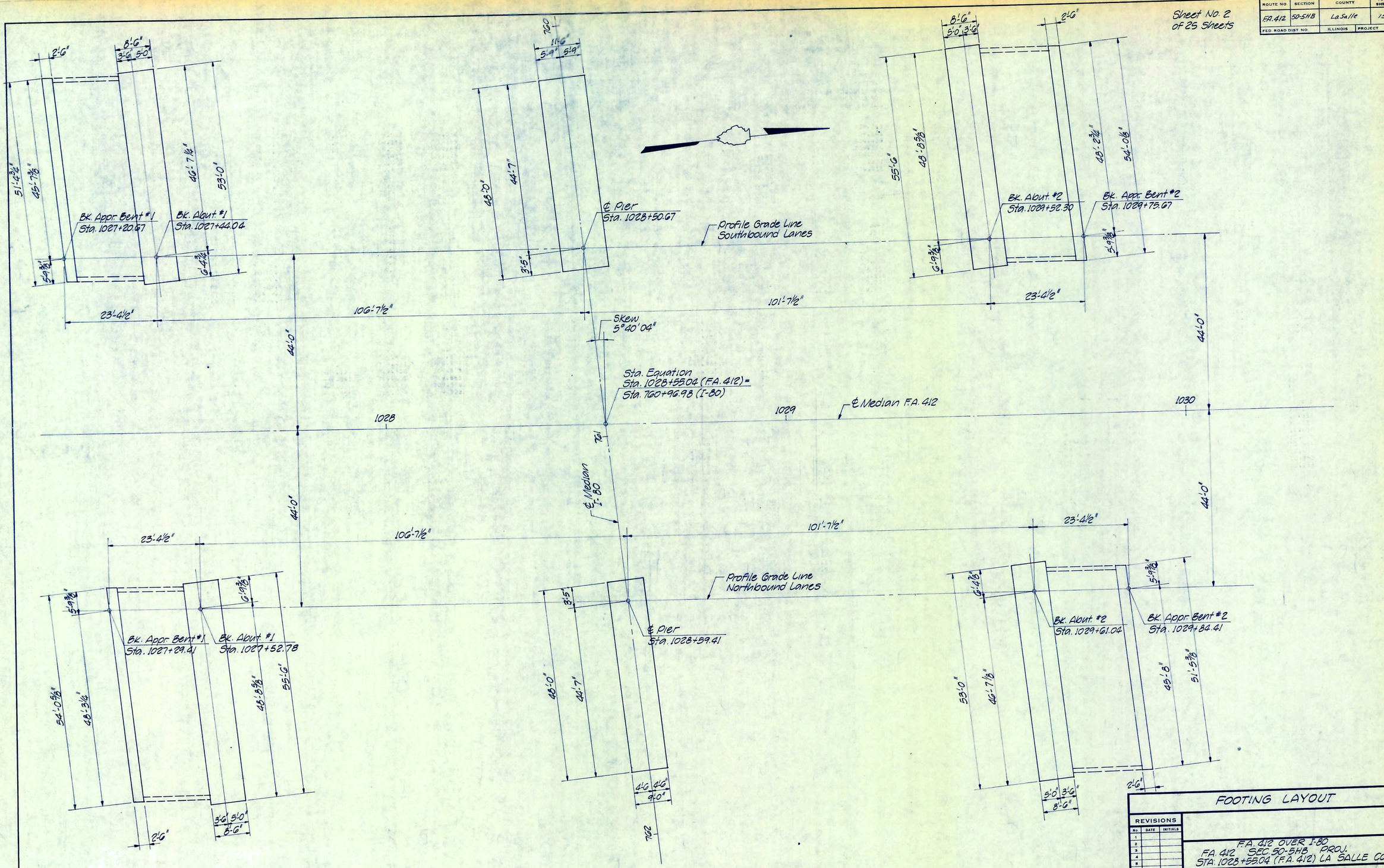
FAI-413 SEC. 30-3 H,B (FAU 1394-AR-A)
STA. APPROACH (PARALLEL) LASALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

Rev. 12-2-76 Cl. X Conc. from 1670 to 1663.1 cu yds.; Test Piles from 1 to 2 Ea.; Stl. Piles HP10X42 from 5088 to 6102 Lin. Ft. D.D.

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 412	50-5HB	La Salle	156	45
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

Sheet No. 2 of 25 Sheets



FOOTING LAYOUT

REVISIONS		
No.	DATE	INITIALS
1		
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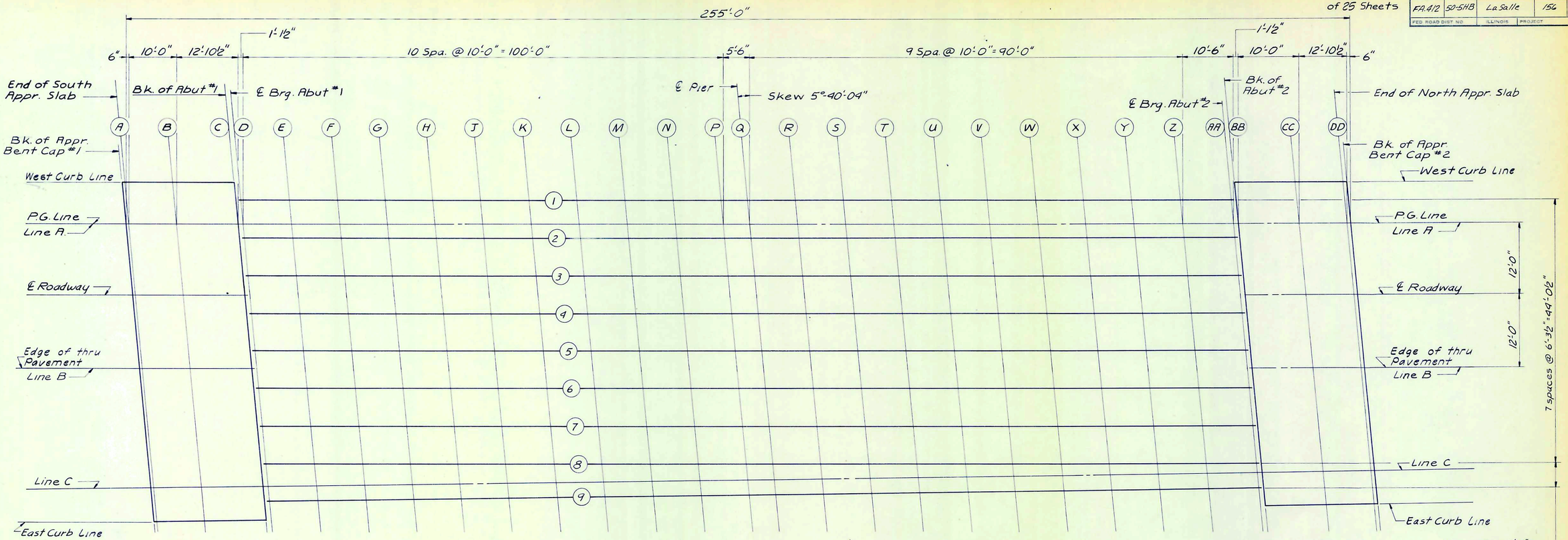
F.A. 412 OVER I-80
FA. 412 SEC 50-5HB PROJ.
STA. 1028+59.04 (F.A. 412) LA SALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE	JLH 5-75
CHECKED BY DATE	MPS 6-75
BOOK NUMBER	
PROJECT NO.	2601-2
SHEET NO.	

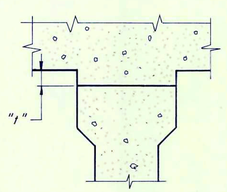
Sheet 3 of 25 Sheets

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.412	50-5HB	La Salle	156	46
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



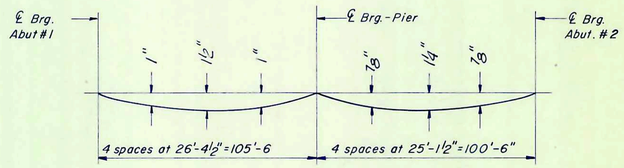
SPAN 1 SPAN 2 SPAN 3 SPAN 4

PLAN



FILLET HEIGHTS

To determine "f": After all precast prestessed beams have been erected, elevations of the top flanges of the beam shall be taken at intervals shown above. These elevations subtracted algebraically from the "Elevations Adjusted for Dead Load Deflections" shown on sheet 4 , minus slab thickness, equals the fillet heights "f" above the top of the beam.



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)

NOTE: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheet 4

TOP OF SLAB ELEVATIONS N.B. LANES

REVISIONS		
NO.	DATE	INITIALS
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F.A. 412 OVER I-80
F.A. 412 SEC. 50-5 HB PROJ.
STA. 1028+55.04 (F.A. 412) LASALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY: R.J.H. 4-75
CHECKED BY: MPS 6-75
BOOK NUMBER:
PROJECT NO.: 2601-2
SHEET NO.:

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-5HB	LaSalle	156	47
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

LINE	BEAM OR GIRDER	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
A	W CURB	102729.389	-38.750	688.832	688.832
End of South Appr. Slab	LINE A	102729.910	-44.000	688.941	688.941
	CL ROW	102731.101	-56.000	689.128	689.128
	LINE B	102732.292	-68.000	688.942	688.942
	LINE C	102734.305	-88.286	688.520	688.520
	E CURB	102734.628	-91.536	688.452	688.452
B	W CURB	102739.389	-38.750	688.834	688.834
	LINE A	102739.910	-44.000	688.943	688.943
	CL ROW	102741.101	-56.000	689.130	689.130
	LINE B	102742.292	-68.000	688.943	688.943
	LINE C	102744.295	-88.184	688.523	688.523
	E CURB	102744.618	-91.434	688.455	688.455
C	W CURB	102752.256	-38.750	688.833	688.833
Back of Abut #1	LINE A	102752.777	-44.000	688.942	688.942
	CL ROW	102753.968	-56.000	689.129	689.129
	LINE B	102755.159	-68.000	688.942	688.942
	LINE C	102757.149	-88.053	688.523	688.523
	E CURB	102757.472	-91.303	688.455	688.455
D	BM 1	102753.513	-40.000	688.859	688.859
℄ Brg. Abut #1	LINE A	102753.910	-44.000	688.942	688.942
	BM 2	102754.137	-46.292	688.978	688.978
	BM 3	102754.762	-52.583	689.076	689.076
	BM 4	102755.386	-58.875	689.084	689.084
	BM 5	102756.011	-65.167	688.986	688.986
	BM 6	102756.635	-71.458	688.869	688.869
	BM 7	102757.260	-77.750	688.738	688.738
	BM 8	102757.884	-84.042	688.606	688.606
	LINE C	102758.282	-88.050	688.522	688.522
	BM 9	102758.480	-90.050	688.480	688.480
E	BM 1	102763.513	-40.000	688.855	688.890
	LINE A	102763.910	-44.000	688.938	688.973
	BM 2	102764.137	-46.292	688.974	689.008
	BM 3	102764.762	-52.583	689.072	689.106
	BM 4	102765.386	-58.875	689.080	689.114
	BM 5	102766.011	-65.167	688.981	689.015
	BM 6	102766.635	-71.458	688.865	688.899
	BM 7	102767.260	-77.750	688.733	688.767
	BM 8	102767.884	-84.042	688.601	688.636
	LINE C	102768.272	-87.948	688.520	688.554
	BM 9	102768.470	-89.948	688.478	688.512
F	BM 1	102773.513	-40.000	688.849	688.918
	LINE A	102773.910	-44.000	688.932	689.001
	BM 2	102774.137	-46.292	688.968	689.037
	BM 3	102774.762	-52.583	689.065	689.134
	BM 4	102775.386	-58.875	689.073	689.142
	BM 5	102776.011	-65.167	688.981	689.044
	BM 6	102776.635	-71.458	688.858	688.927
	BM 7	102777.260	-77.750	688.726	688.795
	BM 8	102777.884	-84.042	688.594	688.663
	LINE C	102778.261	-87.845	688.515	688.583
	BM 9	102778.460	-89.845	688.473	688.541
G	BM 1	102783.513	-40.000	688.841	688.937
	LINE A	102783.910	-44.000	688.923	689.019
	BM 2	102784.137	-46.292	688.959	689.055
	BM 3	102784.762	-52.583	689.056	689.152
	BM 4	102785.386	-58.875	689.064	689.160
	BM 5	102786.011	-65.167	688.965	689.061
	BM 6	102786.635	-71.458	688.849	688.944
	BM 7	102787.260	-77.750	688.717	688.813
	BM 8	102787.884	-84.042	688.585	688.681
	LINE C	102788.231	-87.743	688.507	688.603
	BM 9	102788.450	-89.743	688.465	688.561
H	BM 1	102793.513	-40.000	688.830	688.940
	LINE A	102793.910	-44.000	688.912	689.022
	BM 2	102794.137	-46.292	688.948	689.058
	BM 3	102794.762	-52.583	689.045	689.155
	BM 4	102795.386	-58.875	689.053	689.163
	BM 5	102796.011	-65.167	688.954	689.064
	BM 6	102796.635	-71.458	688.837	688.947
	BM 7	102797.260	-77.750	688.705	688.815
	BM 8	102797.884	-84.042	688.573	688.682
	LINE C	102798.241	-87.640	688.497	688.607
	BM 9	102798.440	-89.640	688.455	688.565
J	BM 1	102803.513	-40.000	688.816	688.940
	LINE A	102803.910	-44.000	688.899	689.023
	BM 2	102804.137	-46.292	688.934	689.058
	BM 3	102804.762	-52.583	689.031	689.155
	BM 4	102805.386	-58.875	689.039	689.163
	BM 5	102806.011	-65.167	688.940	689.064
	BM 6	102806.635	-71.458	688.823	688.946
	BM 7	102807.260	-77.750	688.690	688.814
	BM 8	102807.884	-84.042	688.558	688.682
	LINE C	102808.231	-87.538	688.485	688.608
	BM 9	102808.429	-89.538	688.443	688.566

LINE	BEAM OR GIRDER	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
K	BM 1	102813.513	-40.000	688.800	688.918
	LINE A	102813.910	-44.000	688.883	689.000
	BM 2	102814.137	-46.292	688.918	689.036
	BM 3	102814.762	-52.583	689.015	689.133
	BM 4	102815.386	-58.875	689.023	689.140
	BM 5	102816.011	-65.167	688.923	689.041
	BM 6	102816.635	-71.458	688.806	688.923
	BM 7	102817.260	-77.750	688.674	688.791
	BM 8	102817.884	-84.042	688.541	688.659
	LINE C	102818.221	-87.435	688.470	688.587
	BM 9	102818.419	-89.435	688.428	688.545
L	BM 1	102823.513	-40.000	688.782	688.886
	LINE A	102823.910	-44.000	688.865	688.968
	BM 2	102824.137	-46.292	688.900	689.003
	BM 3	102824.762	-52.583	688.997	689.100
	BM 4	102825.386	-58.875	689.004	689.107
	BM 5	102826.011	-65.167	688.904	689.008
	BM 6	102826.635	-71.458	688.787	688.891
	BM 7	102827.260	-77.750	688.654	688.758
	BM 8	102827.884	-84.042	688.522	688.625
	LINE C	102828.210	-87.333	688.452	688.556
	BM 9	102828.409	-89.333	688.410	688.514
M	BM 1	102833.513	-40.000	688.761	688.849
	LINE A	102833.910	-44.000	688.844	688.932
	BM 2	102834.137	-46.292	688.879	688.967
	BM 3	102834.762	-52.583	688.976	689.063
	BM 4	102835.386	-58.875	688.983	689.070
	BM 5	102836.011	-65.167	688.883	688.971
	BM 6	102836.635	-71.458	688.765	688.853
	BM 7	102837.260	-77.750	688.633	688.721
	BM 8	102837.884	-84.042	688.500	688.588
	LINE C	102838.200	-87.230	688.433	688.521
	BM 9	102838.399	-89.230	688.391	688.479
N	BM 1	102843.513	-40.000	688.738	688.792
	LINE A	102843.910	-44.000	688.820	688.874
	BM 2	102844.137	-46.292	688.856	688.909
	BM 3	102844.762	-52.583	688.952	689.005
	BM 4	102845.386	-58.875	688.959	689.012
	BM 5	102846.011	-65.167	688.859	688.913
	BM 6	102846.635	-71.458	688.741	688.795
	BM 7	102847.260	-77.750	688.609	688.662
	BM 8	102847.884	-84.042	688.476	688.529
	LINE C	102848.190	-87.127	688.411	688.464
	BM 9	102848.389	-89.127	688.368	688.422
P	BM 1	102853.513	-40.000	688.713	688.731
	LINE A	102853.910	-44.000	688.795	688.814
	BM 2	102854.137	-46.292	688.830	688.849
	BM 3	102854.762	-52.583	688.926	688.945
	BM 4	102855.386	-58.875	688.933	688.952
	BM 5	102856.011	-65.167	688.833	688.852
	BM 6	102856.635	-71.458	688.715	688.734
	BM 7	102857.260	-77.750	688.582	688.601
	BM 8	102857.884	-84.042	688.449	688.468
	LINE C	102858.180	-87.025	688.386	688.405
	BM 9	102858.378	-89.025	688.344	688.363
Q	BM 1	102859.013	-40.000	688.697	688.697
℄ of Pier	LINE A	102859.410	-44.000	688.779	688.779
	BM 2	102859.637	-46.292	688.815	688.815
	BM 3	102860.262	-52.583	688.911	688.911
	BM 4	102860.886	-58.875	688.917	688.917
	BM 5	102861.511	-65.167	688.818	688.818
	BM 6	102862.135	-71.458	688.699	688.699
	BM 7	102862.760	-77.750	688.566	688.566
	BM 8	102863.384	-84.042	688.433	688.433
	LINE C	102863.674	-86.968	688.371	688.371
	BM 9	102863.873	-88.968	688.329	688.329
R	BM 1	102869.013	-40.000	688.668	688.698
	LINE A	102869.410	-44.000	688.750	688.780
	BM 2	102869.637	-46.292	688.785	688.815
	BM 3	102870.262	-52.583	688.881	688.911
	BM 4	102870.886	-58.875	688.886	688.917
	BM 5	102871.511	-65.167	688.788	688.817
	BM 6	102872.135	-71.458	688.669	688.699
	BM 7	102872.760	-77.750	688.536	688.566
	BM 8	102873.384	-84.042	688.403	688.433
	LINE C	102873.664	-86.866	688.343	688.373
	BM 9	102873.863	-88.866	688.301	688.330
S	BM 1	102879.013	-40.000	688.636	688.696
	LINE A	102879.410	-44.000	688.718	688.777
	BM 2	102879.637	-46.292	688.753	688.812
	BM 3	102880.262	-52.583	688.849	688.908
	BM 4	102880.886	-58.875	688.855	688.915
	BM 5	102881.511	-65.167	688.755	688.815
	BM 6	102882.135	-71.458	688.637	688.696
	BM 7	102882.760	-77.750	688.503	688.563
	BM 8	102883.384	-84.042	688.370	688.429
	LINE C	102883.654	-86.763	688.312	688.372
	BM 9	102883.852	-88.763	688.270	688.329

LINE	BEAM OR GIRDER	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
T	BM 1	102889.013	-40.000	688.602	688.682
	LINE A	102889.410	-44.000	688.684	688.764
	BM 2	102889.637	-46.292	688.718	688.799
	BM 3	102890.262	-52.583	688.814	688.895
	BM 4	102890.886	-58.875	688.820	688.901
	BM 5	102891.511	-65.167	688.720	688.801
	BM 6	102892.135	-71.458	688.602	688.682
	BM 7	102892.760	-77.750	688.468	688.549
	BM 8	102893.384	-84.042	688.334	688.415
	LINE C	102893.644	-86.661	688.279	688.359
	BM 9	102893.842	-88.661	688.236	688.317
U	BM 1	102899.013	-40.000	688.565	688.658
	LINE A	102899.410	-44.000	688.647	688.739
	BM 2	102899.637	-46.292	688.682	688.774
	BM 3	102900.262	-52.583	688.777	688.870
	BM 4	102900.886	-58.875	688.783	688.876
	BM 5	102901.511	-65.167	688.683	688.775
	BM 6	102902.135	-71.458	688.564	688.657
	BM 7	102902.760	-77.750	688.430	688.523
	BM 8	102903.384	-84.042	688.297	688.389
	LINE C	102903.634	-86.558	688.243	688.336
	BM 9	102903.832	-88.558	688.201	688.293
V	BM 1	102909.013	-40.000	688.526	688.630
	LINE A	102909.410	-44.000	688.607	688.712
	BM 2	102909.637	-46.292	688.642	688.747
	BM 3	102910.262	-52.583	688.738	688.842
	BM 4	102910.886	-58.875	688.744	688.848
	BM 5	102911.511	-65.167	688.643	688.748
	BM 6	102912.135	-71.458	688.524	688.629
	BM 7	102912.760	-77.750	688.390	688.495
	BM 8	102913.384	-84.042	688.256	688.361
	LINE C	102913.623	-86.455	688.205	688.310
	BM 9	102913.822	-88.455	688.162	688.267
W	BM 1	102919.013	-40.000	688.484	688.577
	LINE A	102919.410	-44.000	688.566	688.659
	BM 2	102919.637	-46.292	688.600	688.694
	BM 3	102920.262	-52.583	688.696	688.789
	BM 4	102920.886	-58.875	688.701	688.795
	BM 5	102921.511	-65.167	688.601	688.694
	BM 6	102922.135	-71.458	688.482	688.575
	BM 7	102922.760	-77.750	688.348	688.441
	BM 8	102923.384	-84.042	688.214	688.307
	LINE C	102923.613	-86.353	688.164	688.258
	BM 9	102923.812	-88.353	688.122	688.215
X	BM 1	102929.013	-40.000	688.440	688.521
	LINE A	102929.410	-44.000	688.521	688.603
	BM 2	102929.637	-46.292	688.556	688.637
	BM 3	102930.262	-52.583	688.651	688.733
	BM 4	102930.886	-58.875	688.657	688.738
	BM 5	102931.511	-65.167	688.556	688.637
	BM 6	102932.135	-71.458	688.437	688.518
	BM 7	102932.760	-77.750	688.303	688.384
	BM 8	102933.384	-84.042	688.168	688.250
	LINE C	102933.603	-86.250	688.121	688.203
	BM 9	102933.802	-88.250	688.079	688.160
Y	BM 1	102939.013	-40.000	688.394	688.455
	LINE A	102939.410	-44.000	688.475	688.536
	BM 2	102939.637	-46.292	688.509	688.570
	BM 3	102940.262	-52.583	688.604	688.665
	BM 4	102940.886	-58.875	688.610	688.671
	BM 5	102941.511	-65.167	688.509	688.570
	BM 6	102942.135	-71.458	688.390	688.451
	BM 7	102942.760	-77.750	688.255	688.316
	BM 8	102943.384	-84.042	688.121	688.182
	LINE C	102943.593	-86.147	688.076	688.137
	BM 9	102943.791	-88.147	688.033	688.094
Z	BM 1	102949.013	-40.000	688.345	688.376
	LINE A	102949.410	-44.000	688.426	688.457
	BM 2	102949.637	-46.292	688.460	688.492
	BM 3	102950.262	-52.583	688.555	688.586
	BM 4	102950.886	-58.875	688.560	688.592
	BM 5	102951.511	-65.167	688.459	688.491
	BM 6	102952.135	-71.458	688.340	688.371
	BM 7	102952.760	-77.750	688.205	688.237
	BM 8	102953.384	-84.042	688.071	688.102
	LINE C	102953.583	-86.045	688.028	688.060
	BM 9	102953.781	-88.045	687.985	688.017

LINE	BEAM OR GIRDER	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
AA	BM 1	102959.513	-40.000	688.290	688.290
℄ Brg Abut #2	LINE A	102959.910	-44.000	688.372	688.372
	BM 2	102960.137	-46.292	688.406	688.406
	BM 3	102960.762	-52.583	688.501	688.501
	BM 4	102961.386	-58.875	688.506	688.506
	BM 5	102962.011	-65.167	688.405	688.405
	BM 6	102962.635	-71.458	688.285	688.285
	BM 7	102963.260	-77.750	688.150	688.150
	BM 8	102963.884	-84.042	688.016	688.016
	LINE C	102964.072	-85.937	687.975	687.975
	BM 9	102964.270	-87.937	687.932	687.932
BB	W CURB	102960.517	-38.750	688.259	688.259
Back of Abut #2	LINE A	102961.038	-44.000	688.366	688.366
	CL ROW	102962.229	-56.000	688.546	688.546
	LINE B	102963.420	-68.000	688.353	688.353
	LINE C	102965.200	-85.935	687.970	687.970
	E CURB	102965.522	-89.185	687.900	687.900
CC	W CURB	102970.517	-38.750	688.205	688.205
	LINE A	102971.038	-44.000	688.311	688.311
	CL ROW	102972.229	-56.000	688.492	688.492
	LINE B	102973.420	-68.000	688.298	688.298
	LINE C	102975.190	-85.833	687.916	687.916
	E CURB	102975.512	-89.083	687.847	687.847
DD	W CURB	102983.384	-38.750	688.132	688.132
End of North Appr. Slab	LINE A	102983.905	-44.000	688.238	688.238
	CL ROW	102985.096	-56.000	688.418	688.418
	LINE B	102986.287	-68.000	688.224	688.224
	LINE C	102988.044	-85.702	687.844	687.844
	E CURB	102988.366	-88.952	687.775	687.775

Note: Elevations are to top of concrete slab

TOP OF SLAB ELEVATIONS N.B. LANE

REVISIONS		
NO.	DATE	INITIALS
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DRAWN BY DATE JWN 6-75
CHECKED BY DATE MPS 6-75
BOOK NUMBER

F.A. 412 OVER I-80
F.A. 412 SEC. 50-5 HB. PROJ.
STA. 1028+55.04 (F.A. 412) LASALLE CO.

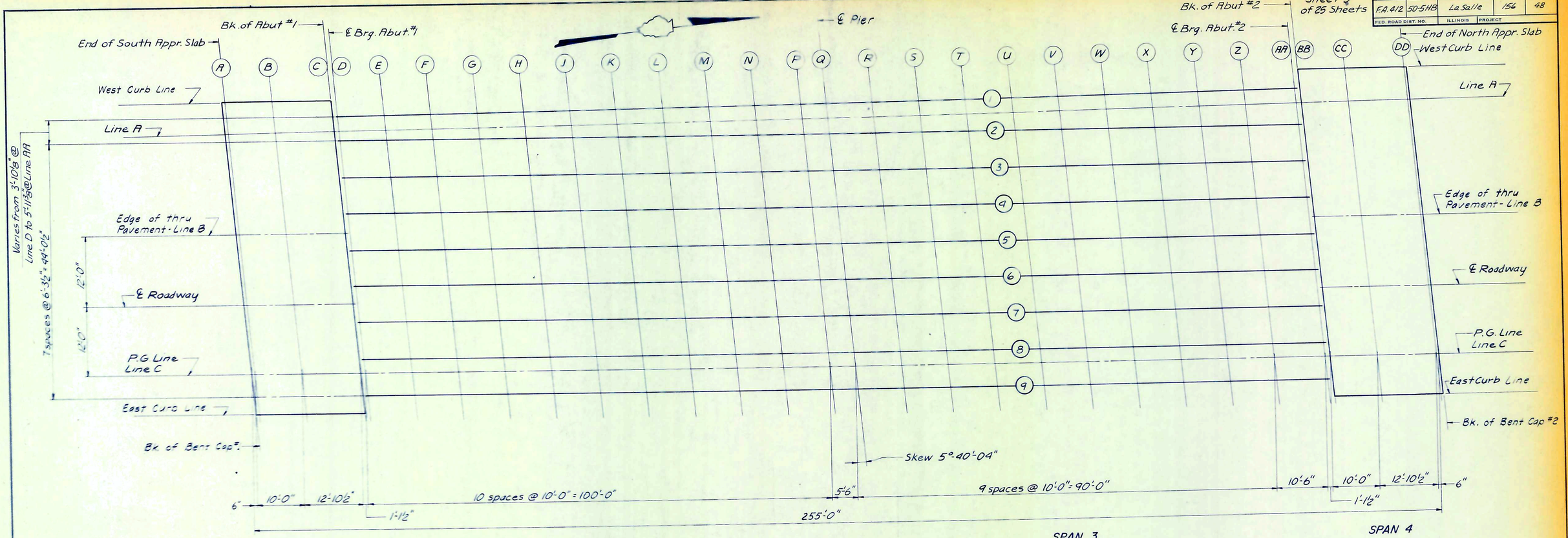
PROJECT NO. 2601-2

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

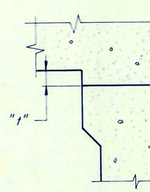
SHEET NO.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-5HB	La Salle	156	48
FED. ROAD DIST. NO.		ILLINOIS	PROJECT	

Sheet 5 of 25 Sheets

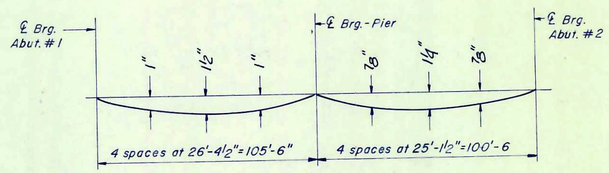


PLAN



FILLET HEIGHTS

To determine "t" = After all precast prestessed beams have been erected, elevations of the top flanges of the beam shall be taken at intervals shown above. These elevations subtracted algebraically from the "Elevations Adjusted for Dead Load Deflections" shown on sheet 6, minus slab thickness, equals the fillet heights "t" above the top of the beam.



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)

NOTE: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load defections as shown on sheet 6

TOP OF SLAB ELEVATIONS S.B. LANES

REVISIONS		
NO.	DATE	INITIALS
1		
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DRAWN BY DATE RJH 4-75
CHECKED BY DATE MPS 6-75
BOOK NUMBER
PROJECT NO. 2601-2
SHEET NO.

F.A. 412 OVER I-80
F.A. 412 SEC. 50-5 HB PROJ.
STA. 1028+55.04 (F.A. 412) LASALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

CUSHING COMPANY

Sheet No. 6 of 25 Sheets

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.412	50-5HB	LaSalle	156	49
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

LINE	BEAM OR GIRDER	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
A	W CURB	102716.715	88.893	688.499	688.499
End of South Appr. Slab	LINE A	102717.037	85.643	688.567	688.567
	LINE B	102718.788	68.000	688.936	688.936
	CL ROW	102719.979	56.000	689.123	689.123
	LINE C	102721.170	44.000	688.937	688.937
	E CURB	102721.691	38.750	688.828	688.828
B	W CURB	102726.704	88.995	688.502	688.502
	LINE A	102727.027	85.745	688.570	688.570
	LINE B	102728.788	68.000	688.941	688.941
	CL ROW	102729.979	56.000	689.128	689.128
	LINE C	102731.170	44.000	688.941	688.941
	E CURB	102731.691	38.750	688.832	688.832
C	W CURB	102739.558	89.126	688.503	688.503
Back of Abut #1	LINE A	102739.881	85.876	688.571	688.571
	LINE B	102741.655	68.000	688.943	688.943
	CL ROW	102742.846	56.000	689.130	689.130
	LINE C	102744.037	44.000	688.943	688.943
	E CURB	102744.558	38.750	688.834	688.834
D	BM 1	102740.815	87.879	688.529	688.529
℄ of Brg Abut #1	LINE A	102741.014	85.879	688.571	688.571
	BM 2	102741.196	84.042	688.609	688.609
	BM 3	102741.821	77.750	688.740	688.740
	BM 4	102742.445	71.458	688.871	688.871
	BM 5	102743.069	65.167	688.987	688.987
	BM 6	102743.694	58.875	689.085	689.085
	BM 7	102744.318	52.583	689.077	689.077
	BM 8	102744.943	46.292	688.979	688.979
	LINE C	102745.170	44.000	688.943	688.943
	BM 9	102745.567	40.000	688.860	688.860
E	BM 1	102750.805	87.981	688.526	688.561
	LINE A	102751.004	85.981	688.568	688.602
	BM 2	102751.196	84.042	688.608	688.643
	BM 3	102751.821	77.750	688.739	688.774
	BM 4	102752.445	71.458	688.870	688.905
	BM 5	102753.069	65.167	688.986	689.021
	BM 6	102753.694	58.875	689.084	689.119
	BM 7	102754.318	52.583	689.076	689.110
	BM 8	102754.943	46.292	688.977	689.012
	LINE C	102755.170	44.000	688.942	688.976
	BM 9	102755.567	40.000	688.858	688.893
F	BM 1	102760.795	88.084	688.521	688.590
	LINE A	102760.993	86.084	688.563	688.632
	BM 2	102761.196	84.042	688.605	688.674
	BM 3	102761.821	77.750	688.736	688.805
	BM 4	102762.445	71.458	688.867	688.936
	BM 5	102763.069	65.167	688.983	689.052
	BM 6	102763.694	58.875	689.081	689.149
	BM 7	102764.318	52.583	689.072	689.141
	BM 8	102764.943	46.292	688.973	689.042
	LINE C	102765.170	44.000	688.938	689.007
	BM 9	102765.567	40.000	688.854	688.923
G	BM 1	102770.785	88.187	688.514	688.610
	LINE A	102770.983	86.187	688.555	688.651
	BM 2	102771.196	84.042	688.600	688.696
	BM 3	102771.821	77.750	688.730	688.826
	BM 4	102772.445	71.458	688.861	688.957
	BM 5	102773.069	65.167	688.977	689.073
	BM 6	102773.694	58.875	689.074	689.170
	BM 7	102774.318	52.583	689.066	689.161
	BM 8	102774.943	46.292	688.967	689.063
	LINE C	102775.170	44.000	688.931	689.027
	BM 9	102775.567	40.000	688.848	688.944
H	BM 1	102780.774	88.290	688.504	688.614
	LINE A	102780.973	86.290	688.545	688.655
	BM 2	102781.196	84.042	688.592	688.702
	BM 3	102781.821	77.750	688.722	688.832
	BM 4	102782.445	71.458	688.853	688.963
	BM 5	102783.069	65.167	688.968	689.078
	BM 6	102783.694	58.875	689.066	689.176
	BM 7	102784.318	52.583	689.057	689.167
	BM 8	102784.943	46.292	688.958	689.068
	LINE C	102785.170	44.000	688.922	689.032
	BM 9	102785.567	40.000	688.839	688.948
J	BM 1	102790.764	88.393	688.491	688.615
	LINE A	102790.963	86.393	688.533	688.656
	BM 2	102791.196	84.042	688.581	688.705
	BM 3	102791.821	77.750	688.712	688.836
	BM 4	102792.445	71.458	688.842	688.966
	BM 5	102793.069	65.167	688.958	689.081
	BM 6	102793.694	58.875	689.055	689.179
	BM 7	102794.318	52.583	689.046	689.169
	BM 8	102794.943	46.292	688.947	689.071
	LINE C	102795.170	44.000	688.911	689.035
	BM 9	102795.567	40.000	688.827	688.951
K	BM 1	102800.754	88.496	688.476	688.594
	LINE A	102800.953	86.496	688.518	688.635
	BM 2	102801.196	84.042	688.569	688.686
	BM 3	102801.821	77.750	688.699	688.816
	BM 4	102802.445	71.458	688.829	688.946
	BM 5	102803.069	65.167	688.944	689.062
	BM 6	102803.694	58.875	689.041	689.159
	BM 7	102804.318	52.583	689.032	689.150
	BM 8	102804.943	46.292	688.933	689.051
	LINE C	102805.170	44.000	688.897	689.014
	BM 9	102805.567	40.000	688.813	688.931
L	BM 1	102810.744	88.599	688.459	688.563
	LINE A	102810.942	86.599	688.500	688.604
	BM 2	102811.196	84.042	688.553	688.657
	BM 3	102811.821	77.750	688.688	688.787
	BM 4	102812.445	71.458	688.813	688.917
	BM 5	102813.069	65.167	688.929	689.032
	BM 6	102813.694	58.875	689.025	689.129
	BM 7	102814.318	52.583	689.016	689.120
	BM 8	102814.943	46.292	688.917	689.020
	LINE C	102815.170	44.000	688.821	688.984
	BM 9	102815.567	40.000	688.797	688.900
M	BM 1	102820.734	88.702	688.439	688.528
	LINE A	102820.932	86.702	688.481	688.569
	BM 2	102821.196	84.042	688.536	688.623
	BM 3	102821.821	77.750	688.665	688.753
	BM 4	102822.445	71.458	688.795	688.883
	BM 5	102823.069	65.167	688.910	688.998
	BM 6	102823.694	58.875	689.007	689.095
	BM 7	102824.318	52.583	688.997	689.085
	BM 8	102824.943	46.292	688.893	688.986
	LINE C	102825.170	44.000	688.862	688.950
	BM 9	102825.567	40.000	688.778	688.866
N	BM 1	102830.723	88.805	688.417	688.471
	LINE A	102830.922	86.805	688.458	688.512
	BM 2	102831.196	84.042	688.515	688.569
	BM 3	102831.821	77.750	688.645	688.699
	BM 4	102832.445	71.458	688.775	688.828
	BM 5	102833.069	65.167	688.890	688.943
	BM 6	102833.694	58.875	688.986	689.040
	BM 7	102834.318	52.583	688.977	689.030
	BM 8	102834.943	46.292	688.877	688.931
	LINE C	102835.170	44.000	688.841	688.894
	BM 9	102835.567	40.000	688.757	688.810
P	BM 1	102840.713	88.907	688.393	688.412
	LINE A	102840.912	86.907	688.434	688.453
	BM 2	102841.196	84.042	688.493	688.512
	BM 3	102841.821	77.750	688.622	688.641
	BM 4	102842.445	71.458	688.752	688.771
	BM 5	102843.069	65.167	688.867	688.886
	BM 6	102843.694	58.875	688.963	688.982
	BM 7	102844.318	52.583	688.953	688.972
	BM 8	102844.943	46.292	688.854	688.873
	LINE C	102845.170	44.000	688.817	688.836
	BM 9	102845.567	40.000	688.733	688.752
Q ℄ of Pier	BM 1	102846.208	88.964	688.378	688.378
	LINE A	102846.406	86.964	688.419	688.419
	BM 2	102846.696	84.042	688.479	688.479
	BM 3	102847.321	77.750	688.609	688.609
	BM 4	102847.945	71.458	688.738	688.738
	BM 5	102848.569	65.167	688.853	688.853
	BM 6	102849.194	58.875	688.949	688.949
	BM 7	102849.818	52.583	688.939	688.939
	BM 8	102850.443	46.292	688.840	688.840
	LINE C	102850.670	44.000	688.803	688.803
	BM 9	102851.067	40.000	688.719	688.719
R	BM 1	102856.197	89.067	688.350	688.379
	LINE A	102856.396	87.067	688.391	688.420
	BM 2	102856.696	84.042	688.453	688.483
	BM 3	102857.321	77.750	688.582	688.612
	BM 4	102857.945	71.458	688.712	688.741
	BM 5	102858.569	65.167	688.826	688.856
	BM 6	102859.194	58.875	688.922	688.952
	BM 7	102859.818	52.583	688.912	688.942
	BM 8	102860.443	46.292	688.812	688.842
	LINE C	102860.670	44.000	688.776	688.806
	BM 9	102861.067	40.000	688.692	688.721
S	BM 1	102866.187	89.170	688.319	688.378
	LINE A	102866.386	87.170	688.360	688.419
	BM 2	102866.696	84.042	688.424	688.483
	BM 3	102867.321	77.750	688.553	688.613
	BM 4	102867.945	71.458	688.682	688.742
	BM 5	102868.569	65.167	688.797	688.856
	BM 6	102869.194	58.875	688.893	688.952
	BM 7	102869.818	52.583	688.882	688.942
	BM 8	102870.443	46.292	688.782	688.842
	LINE C	102870.670	44.000	688.746	688.806
	BM 9	102871.067	40.000	688.662	688.721
T	BM 1	102876.177	89.273	688.285	688.366
	LINE A	102876.375	87.273	688.326	688.407
	BM 2	102876.696	84.042	688.393	688.473
	BM 3	102877.321	77.750	688.522	688.602
	BM 4	102877.945	71.458	688.651	688.731
	BM 5	102878.569	65.167	688.765	688.845
	BM 6	102879.194	58.875	688.861	688.941
	BM 7	102879.818	52.583	688.850	688.931
	BM 8	102880.443	46.292	688.750	688.831
	LINE C	102880.670	44.000	688.714	688.794
	BM 9	102881.067	40.000	688.629	688.710
U	BM 1	102886.167	89.376	688.250	688.342
	LINE A	102886.365	87.376	688.291	688.383
	BM 2	102886.696	84.042	688.359	688.452
	BM 3	102887.321	77.750	688.488	688.580
	BM 4	102887.945	71.458	688.617	688.709
	BM 5	102888.569	65.167	688.731	688.823
	BM 6	102889.194	58.875	688.827	688.919
	BM 7	102889.818	52.583	688.816	688.908
	BM 8	102890.443	46.292	688.716	688.808
	LINE C	102890.670	44.000	688.679	688.772
	BM 9	102891.067	40.000	688.594	688.687
V	BM 1	102896.156	89.479	688.211	688.316
	LINE A	102896.355	87.479	688.252	688.357
	BM 2	102896.696	84.042	688.323	688.427
	BM 3	102897.321	77.750	688.451	688.556
	BM 4	102897.945	71.458	688.580	688.685
	BM 5	102898.569	65.167	688.694	688.799
	BM 6	102899.194	58.875	688.790	688.894
	BM 7	102899.818	52.583	688.779	688.884
	BM 8	102900.443	46.292	688.678	688.783
	LINE C	102900.670	44.000	688.642	688.746
	BM 9	102901.067	40.000	688.557	688.662
W	BM 1	102906.146	89.582	688.171	688.264
	LINE A	102906.345	87.582	688.212	688.305
	BM 2	102906.696	84.042	688.284	688.377
	BM 3	102907.321	77.750	688.413	688.506
	BM 4	102907.945	71.458	688.541	688.634
	BM 5	102908.569	65.167	688.655	688.748
	BM 6	102909.194	58.875	688.750	688.844
	BM 7	102909.818	52.583	688.739	688.833
	BM 8	102910.443	46.292	688.639	688.732
	LINE C	102910.670	44.000	688.602	688.695
	BM 9	102911.067	40.000	688.517	688.611
X	BM 1	102916.136	89.684	688.128	688.209
	LINE A	102916.335	87.684	688.169	688.250
	BM 2	102916.696	84.042	688.243	688.324
	BM 3	102917.321	77.750	688.371	688.453
	BM 4	102917.945	71.458	688.500	688.581
	BM 5	102918.569	65.167	688.613	688.695
	BM 6	102919.194	58.875	688.709	688.790
	BM 7	102919.818	52.583	688.698	688.779
	BM 8	102920.443	46.292	688.597	688.678
	LINE C	102920.670	44.000	688.560	688.641
	BM 9	102921.067	40.000	688.475	688.557
Y	BM 1	102926.126	89.787	688.082	688.144
	LINE A	102926.324	87.787	688.123	688.184
	BM 2	102926.696	84.042	688.199	688.260
	BM 3	102927.321	77.750	688.328	688.389
	BM 4	102927.945	71.458	688.456	688.517
	BM 5	102928.569	65.167	688.569	688.630
	BM 6	102929.194	58.875	688.665	688.726
	BM 7	102929.818	52.583	688.653	688.714
	BM 8	102930.443	46.292	688.552	688.613
	LINE C	102930.670	44.000	688.516	688.577
	BM 9	102931.067	40.000	688.431	688.492
Z	BM 1	102936.116	89.890	688.034	688.066
	LINE A	102936.314	87.890	688.075	688.107
	BM 2	102936.696	84.042	688.154	688.185
	BM 3	102937.321	77.750	688.282	688.313
	BM 4	102937.945	71.458	688.410	688.441
	BM 5	102938.569	65.167	688.523	688.554
	BM 6	102939.194	58.875	688.618	688.649
	BM 7	102939.818	52.583	688.607	688.638
	BM 8	102940.443	46.292	688.506	688.537
	LINE C	102940.670	44.000	688.469	688.500
	BM 9	102941.067	40.000	688.384	688.415
AA ℄ of Brg Abut #2	BM 1	102946.605	89.998	687.981	687.981
	LINE A	102946.803	87.998	688.022	688.022
	BM 2	102947.196	84.042	688.103	688.103
	BM 3	102947.821	77.750	688.231	688.231
	BM 4	102948.445	71.458	688.359	688.359
	BM 5	102949.069	65.167	688.472	688.472
	BM 6	102949.694	58.875	688.567	688.567
	BM 7	102950.318	52.583	688.555	688.555
	BM 8	102950.943	46.292	688.454	688.454
	LINE C	102951.170	44.000	688.417	688.417
	BM 9	102951.567	40.000	688.332	688.332
BB Back of Abut #2	W CURB	102947.609	91.251	687.950	687.950
	LINE A	102947.931	88.001	688.016	688.016
	LINE B	102949.916	68.000	688.423	688.423
	CL ROW	102951.107	56.000	688.604	688.604
	LINE C	102952.298	44.000	688.411	688.411
	E CURB	102952.819	38.750	688.299	688.299
CC	W CURB	102957.598	91.353	687.897	687.897
	LINE A	102957.921	88.103	687.963	687.963
	LINE B	102959.916	68.000	688.372	688.372
	CL ROW	102961.107	56.000	688.552	688.552
	LINE C	102962.298	44.000	688.359	688.359
	E CURB	102962.819	38.750	688.247	688.247
DD End of North Appr. Slab	W CURB	102970.452	91.484	687.825	687.825
	LINE A	102970.775	88.234	687.891	687.891
	LINE B	102972.783	68.000	688.302	688.302
	CL ROW	102973.974	56.000	688.482	688.482
	LINE C	102975.165	44.000	688.288	688.288
	E CURB	102975.686	38.750	688.176	688.176

Note: Elevations are to top of concrete slab

TOP OF SLAB ELEVATIONS S.B. LANE

REVISIONS		
NO	DATE	INITIALS
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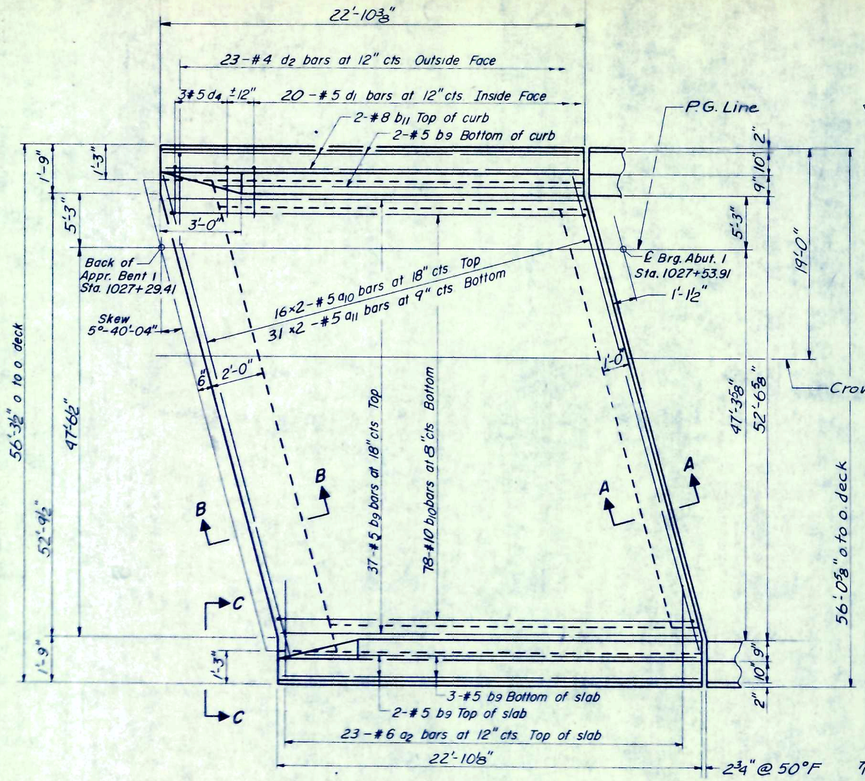
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CHECKED BY DATE: MPB 6-75
BOOK NUMBER:
PROJECT NO: 2601-2
SHEET NO:

F.A. 412 OVER I-80
F.A. 412 SEC. 50-5 HB PROJECT
STA. 1028+55.04 (F.A. 412) LA SALLE CO.

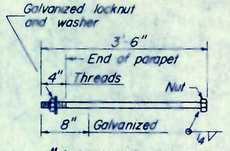
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-5HB	LaSalle	156	50
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

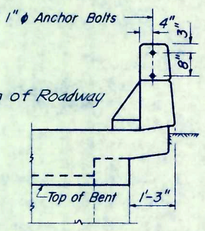
Sheet No. 7 of 25 Sheets



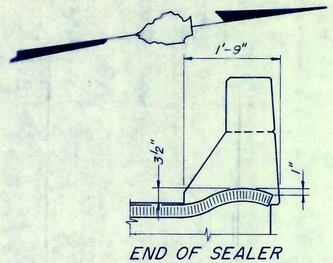
PLAN



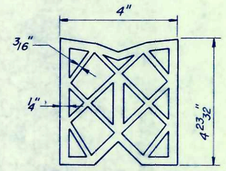
1"ϕ ANCHOR BOLT
(Cost Incidental)



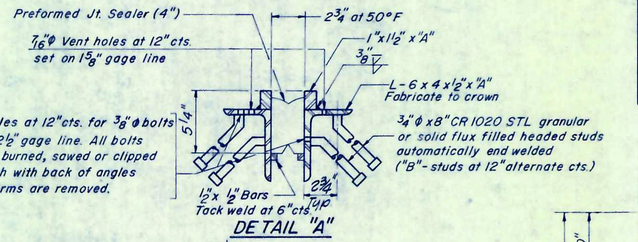
VIEW C-C



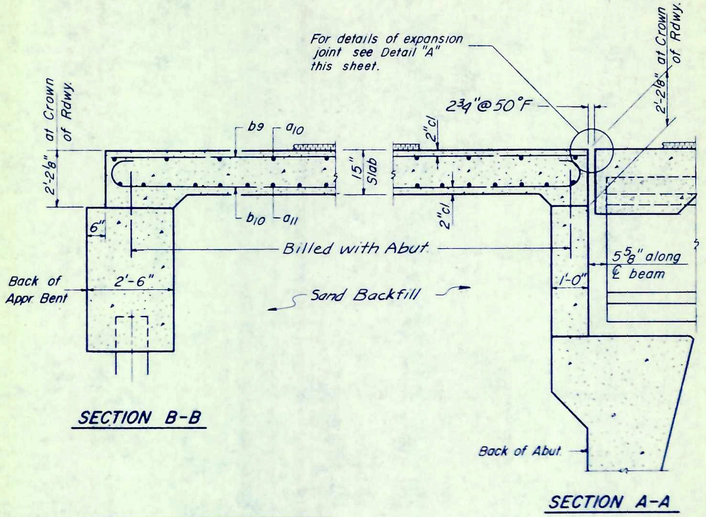
END OF SEALER TREATMENT



PREFORMED JOINT SEALER (4")



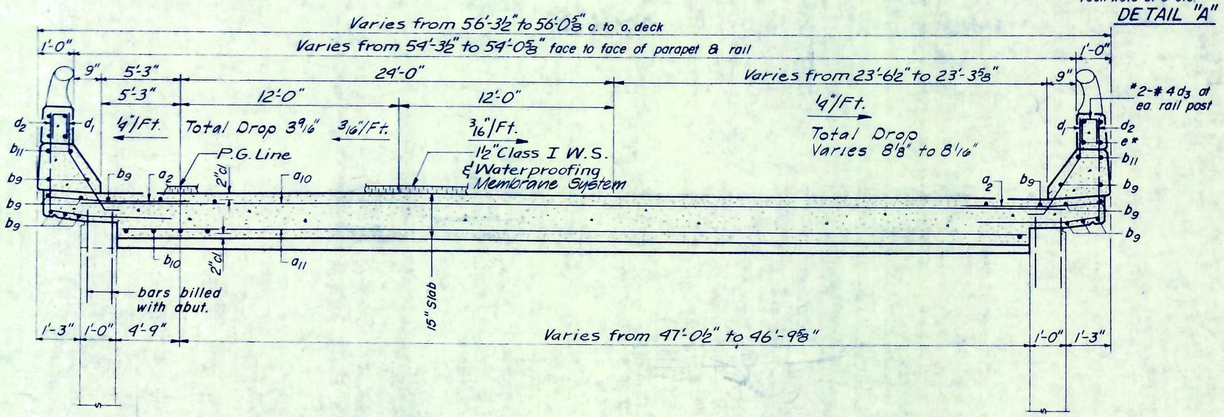
DETAIL "A"



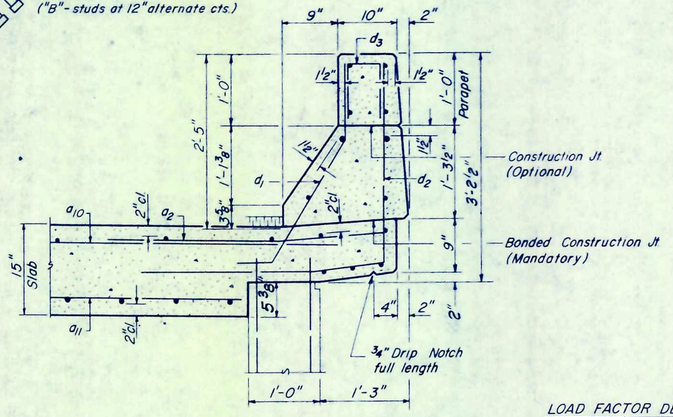
SECTION A-A

SECTION B-B

LOCATION	"A"	"B"
Abut. #1 N.B.	52'-9¼"	53
Abut. #2 N.B.	50'-7¾"	51
Abut. #1 S.B.	50'-7"	51
Abut. #2 S.B.	52'-8⅝"	53



CROSS SECTION
LOOKING NORTH



CURB SECTION

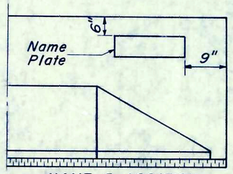
LOAD FACTOR DESIGN

fc'=3500 psi
fy=40,000 psi

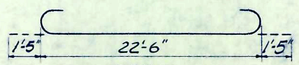
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2	46	#6	4'-0"	—
a10	32	#5	27'-6"	—
a11	62	#5	26'-9"	—
b9	51	#5	22'-6"	—
b10	78	#10	25'-4"	⊂
b11	4	#8	22'-6"	—
d1	90	#5	3'-7"	⌋
d2	96	#4	6'-0"	⌊
d4	6	#5	4'-2"	⌋
Reinforcement Bars			Lbs	13,200
Class X Concrete			Cu Yds	64.7

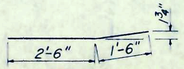
*Parapet Reinforcement and Class X Concrete are billed on sheet #11



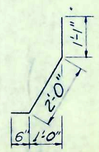
NAME & LOCATION
(East Parapet South End only)



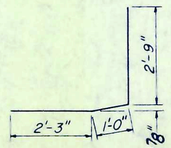
BAR b_{10}



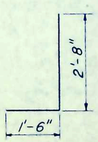
BAR a_2



BAR d_1



BAR d_2



BAR d_4

SAS-R (≦30°)
8-1-73

SUPERSTRUCTURE - SPAN 1 N.B. LANES

REVISIONS		
NO.	DATE	INITIALS
1		
2		
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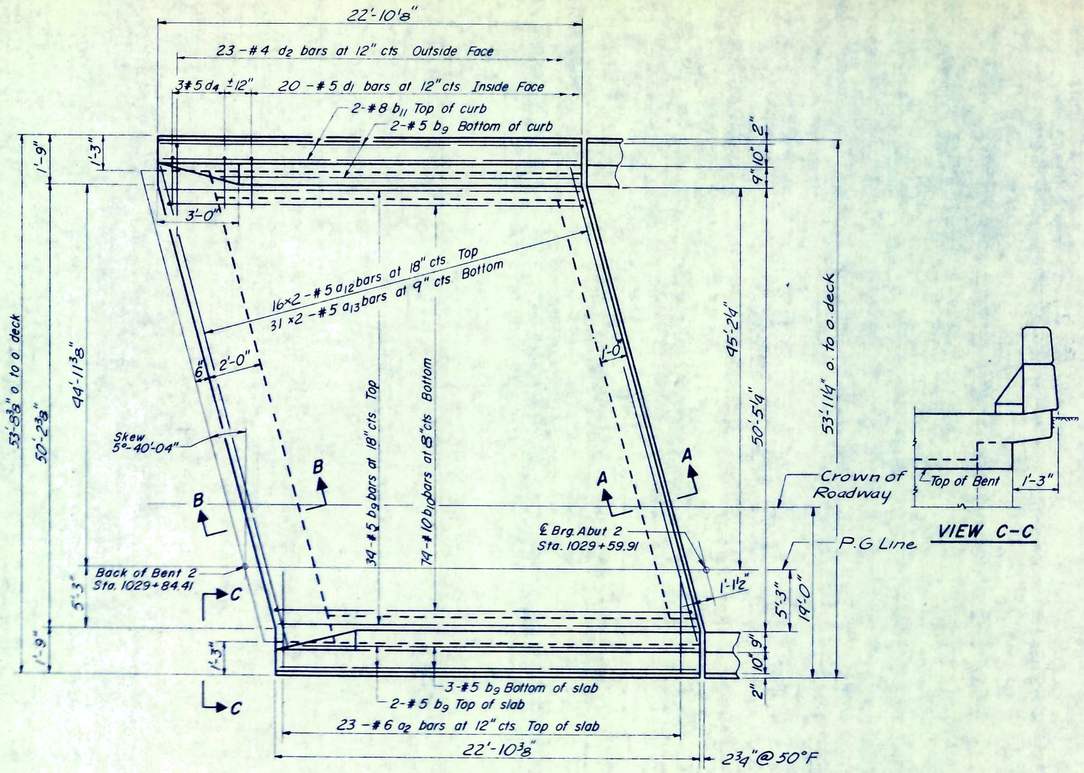
F.A. 412 OVER I-80
F.A. 412 SEC 50-5 H B PROJ.
STA. 1028+55.09 (F.A. 412) LASALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE R.J.H. 4-75
CHECKED BY DATE W.F.S. 6-75
BOOK NUMBER
PROJECT NO. 2601-2
SHEET NO. 9

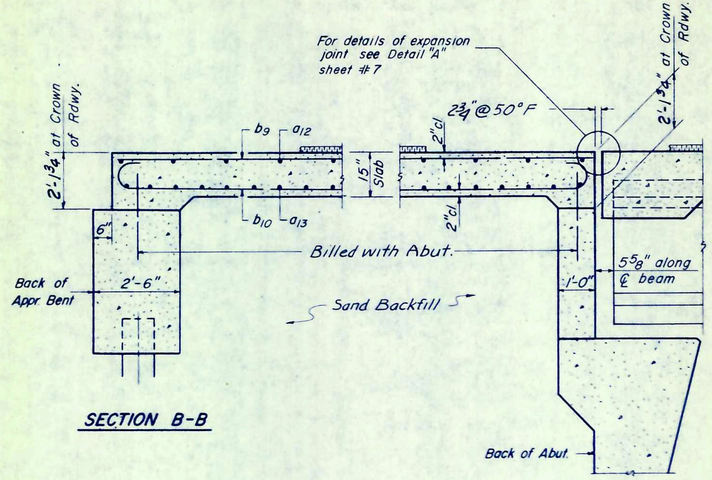
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	50-5HB	La Salle	156	51
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

Sheet No. 8 of 25 Sheets



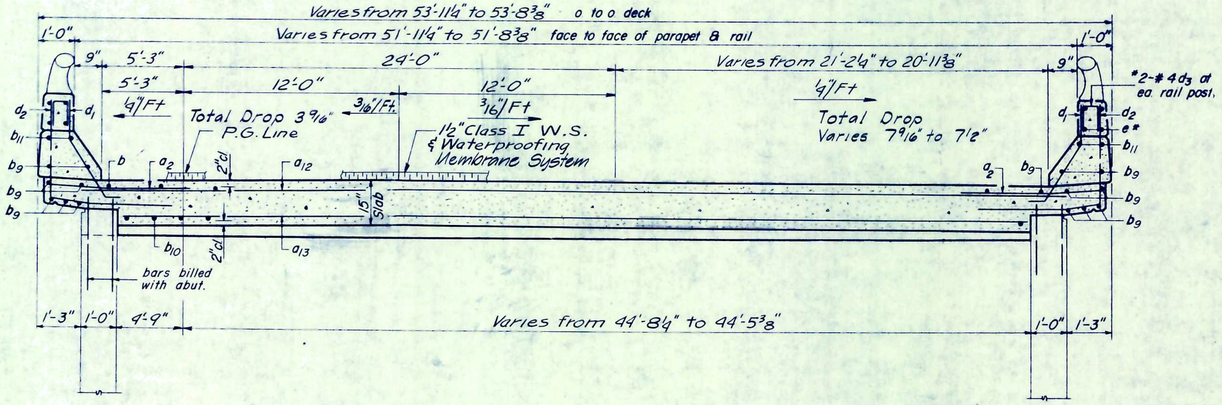
PLAN

VIEW C-C

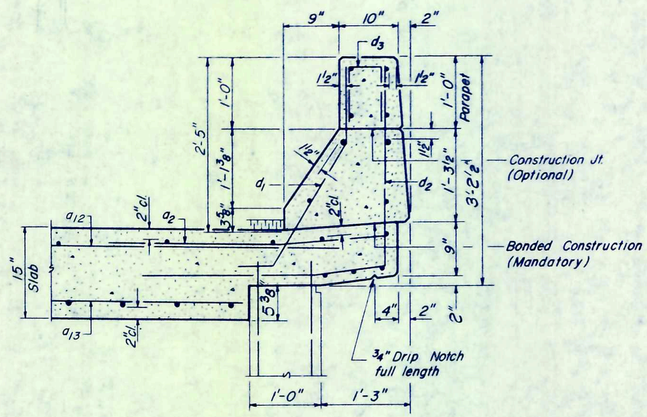


SECTION B-B

SECTION A-A



CROSS SECTION
LOOKING NORTH



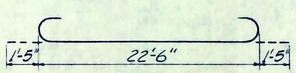
CURB SECTION

BILL OF MATERIAL

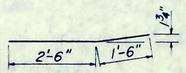
Bar	No.	Size	Length	Shape
a_2	46	#6	4'-0"	—
a_{12}	32	#5	26'-8"	—
a_{13}	62	#5	25'-0"	—
b_9	48	#5	22'-6"	—
b_{10}	74	#10	25'-4"	⊂
b_{11}	4	#8	22'-6"	—
d_1	40	#5	3'-7"	⌡
d_2	46	#4	6'-0"	⌡
d_4	6	#5	4'-2"	⌡
Reinforcement Bars			Lbs.	18,580
Class X Concrete			Cu Yds.	61.8

*Parapet Reinforcement and Class X Concrete are billed on sheet #11

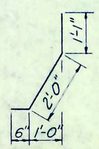
LOAD FACTOR DESIGN
f'_c = 3500 psi
f_y = 40,000 psi



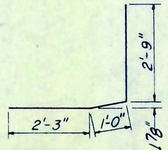
BAR b_{10}



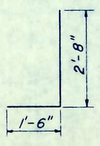
BAR a_2



BAR d_1



BAR d_2



BAR d_4

SAS-R (≦30°) 8-1-73

SUPERSTRUCTURE - SPAN 4 N.B. LANES

REVISIONS		
No.	DATE	INITIALS
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DRAWN BY RJH 4-75
CHECKED BY MBS 6-75
BOOK NUMBER
PROJECT NO 2601-2
SHEET NO

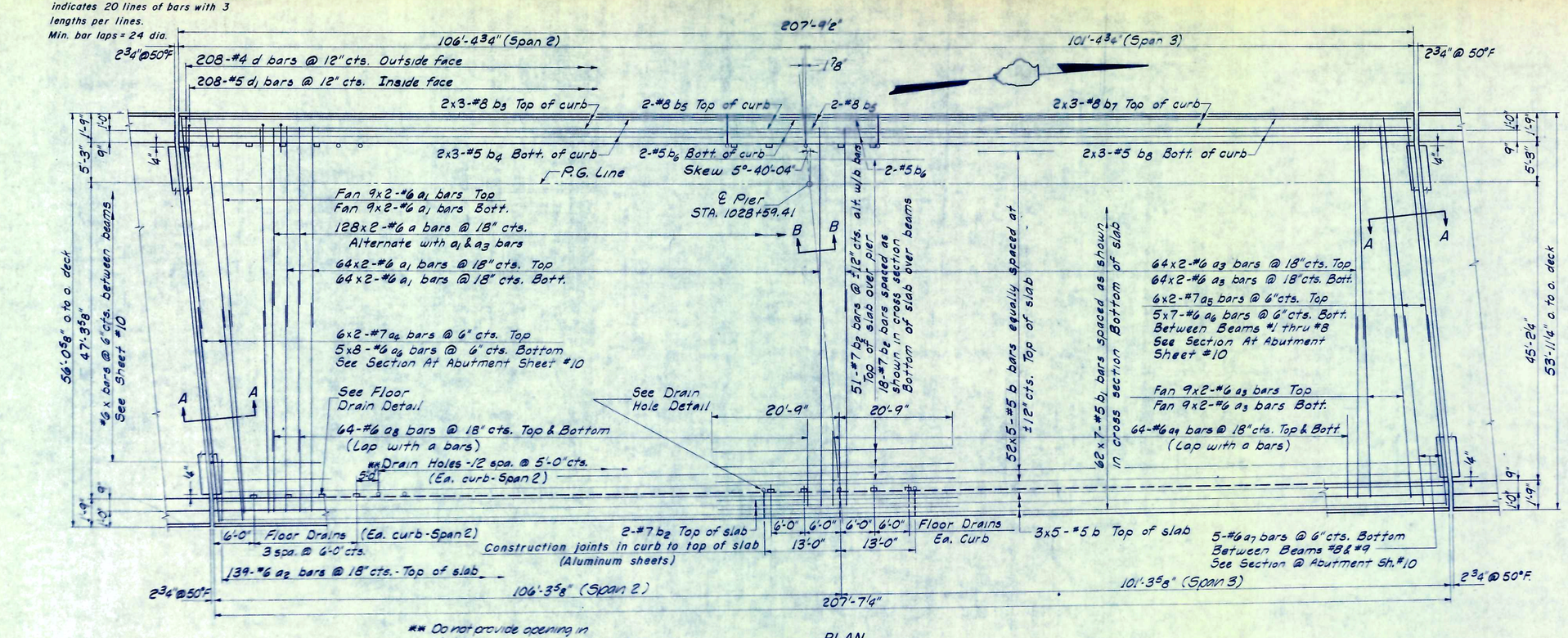
F.A. 412 OVER I-80
F.A. 412 SEC. 50-5 HB PROJ.
STA. 1028+55.04 (F.A. 412) LASALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

Note Bars indicated thus 20 x 3 -#5 etc. indicates 20 lines of bars with 3 lengths per lines.
Min. bar laps = 24 dia.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	50-5HB	LaSalle	156	52
FED. ROAD DIST NO.	ILLINOIS	PROJECT		

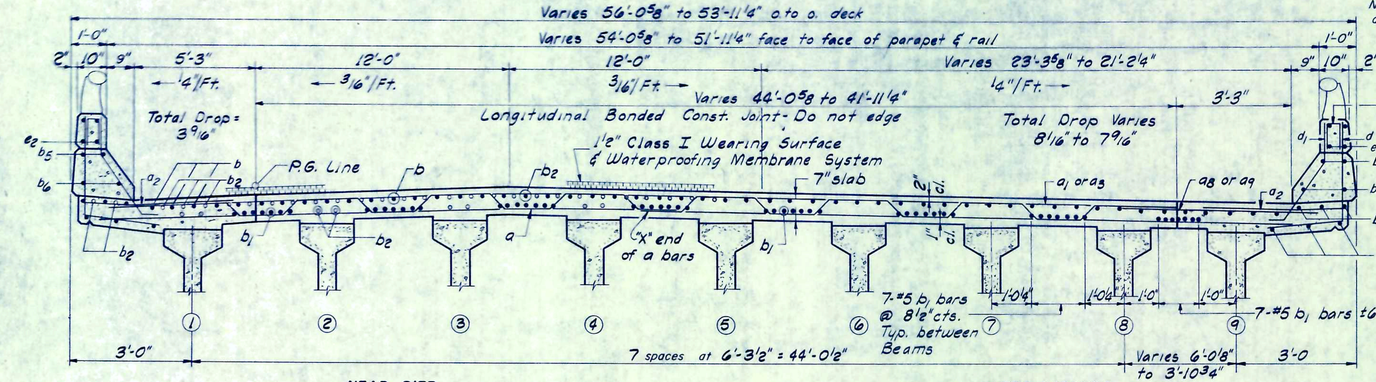
Sheet No. 9 of 25 sheets



** Do not provide opening in Waterproofing Membrane System

PLAN

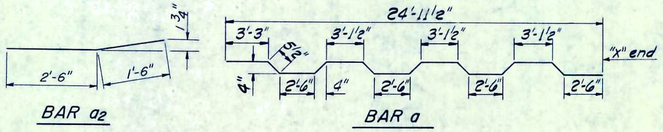
For SEC. A-A & SEC. B-B see sht. 10

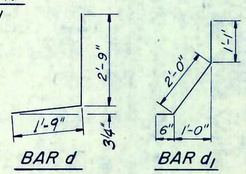


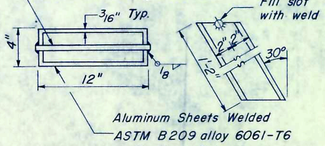
NEAR PIER

CROSS SECTION
LOOKING NORTH

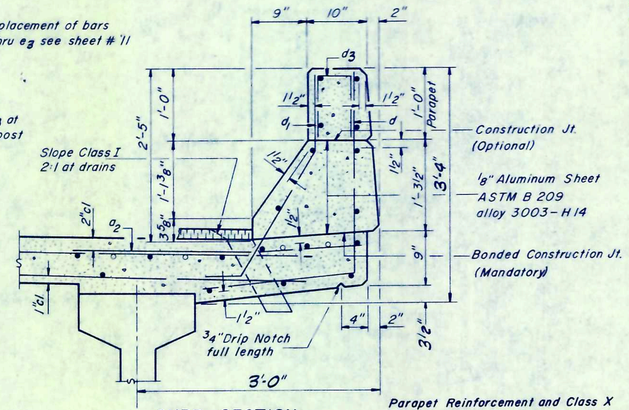
NEAR MIDSPAN





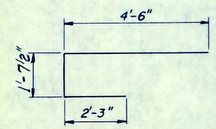


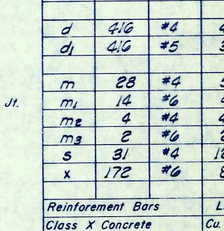
FLOOR DRAIN



CURB SECTION

Cost of Aluminum Sheets shall be incidental to Class X Concrete





Do not provide opening in Waterproofing Membrane at aluminum sheeted curb joints. Do provide opening through membrane at expansion joints and other dammed low points.

DRAIN HOLES

Parapet Reinforcement and Class X Concrete are billed on sheet # 11

For placement and details of bars m, m1, m2, m3, s and x sheet # 10

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	a	256	#6	25'-0"	
	a1	292	#6	27'-9"	
	a2	278	#6	4'-0"	
	a3	292	#6	27'-3"	
	a4	12	#7	28'-0"	
	a5	12	#7	27'-0"	
	a6	75	#6	5'-4"	
	a7	5	#6	3'-2"	
	a8	128	#6	8'-0"	
	a9	128	#6	7'-0"	
*	b	290	#5	43'-0"	
*	b1	434	#5	30'-9"	
*	b2	73	#7	41'-6"	
	b3	12	#8	32'-4"	
	b4	12	#5	31'-11"	
	b5	8	#8	12'-9"	
	b6	8	#5	12'-9"	
	b7	12	#8	30'-9"	
	b8	12	#5	30'-2"	
	d	416	#4	4'-6"	⌋
	d1	416	#5	3'-7"	⌋
	m	28	#4	5'-6"	
	m1	14	#6	4'-2"	
	m2	4	#4	4'-3"	
	m3	2	#6	2'-9"	
	s	31	#4	12'-10"	⊔
	x	172	#6	8'-5"	⊏
	Reinforcement Bars		Lbs.	82,330	
	Class X Concrete		Cu. Yds.	342.0	

*Longitudinal Reinforcement in deck (bars b, b1 & b2) shall be Grade 60

SUPERSTRUCTURE SPANS 2 & 3 - N.B. LANES

REVISIONS		
No	DATE	INITIALS
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DRAWN BY TJE DATE 5-75
CHECKED BY WJS DATE 6-75
BOOK NUMBER
PROJECT NO 2601-2
SHEET NO

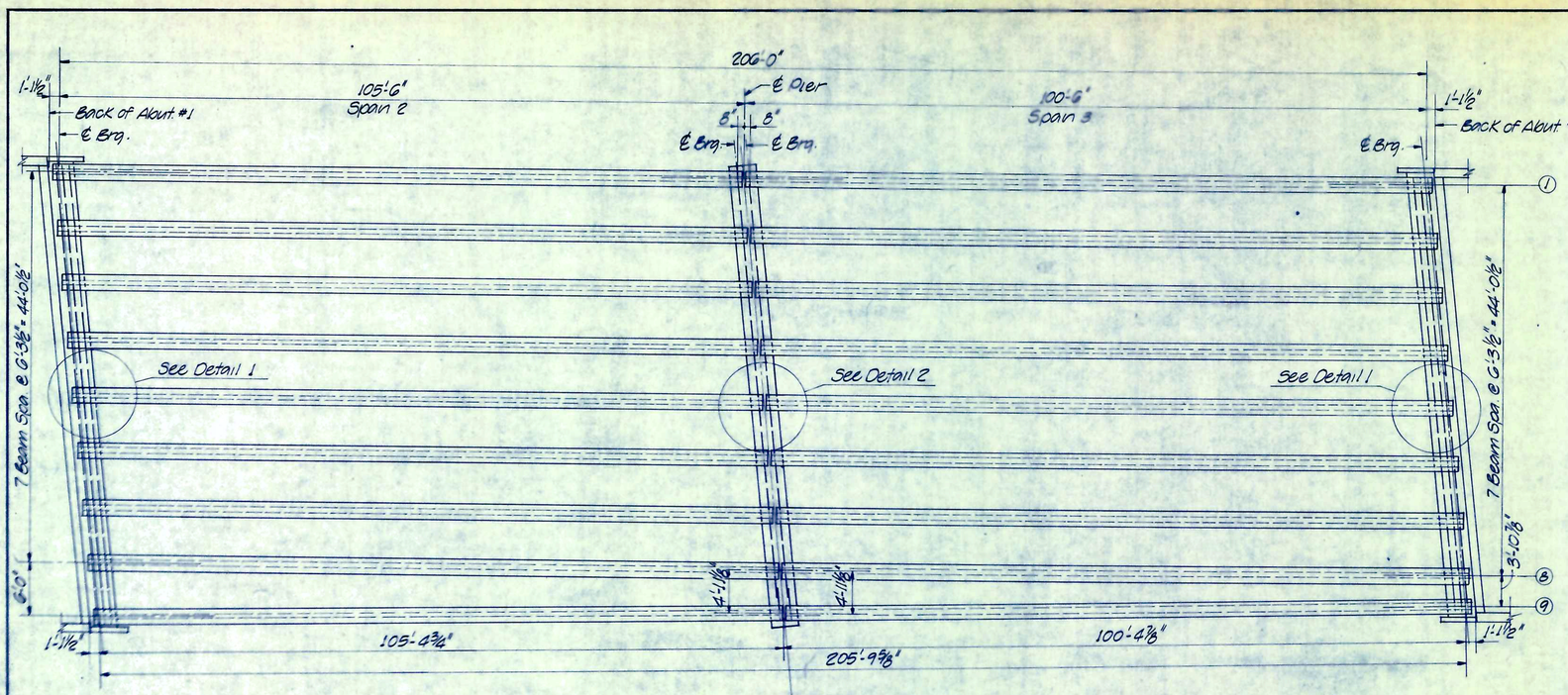
F.A. 412 OVER I-80
F.A. 412 SEC. 50-5HB PROJ.
STA. 1028+55.04 (F.A. 412) LA SALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

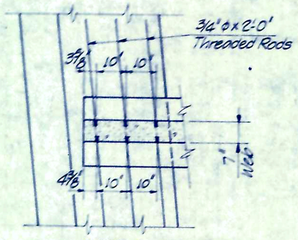
CUSHING & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	50-5HB	LaSalle	156	53
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

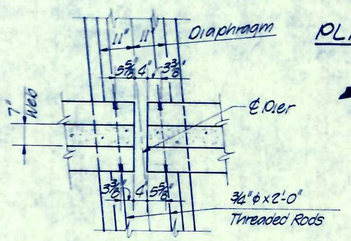
Sheet No. 10 of 25 Sheets



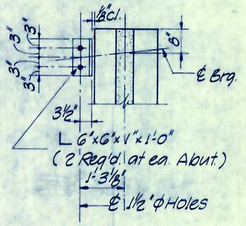
PLAN



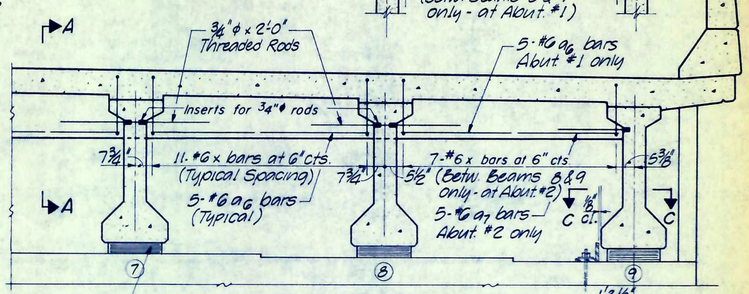
DETAIL 1



DETAIL 2

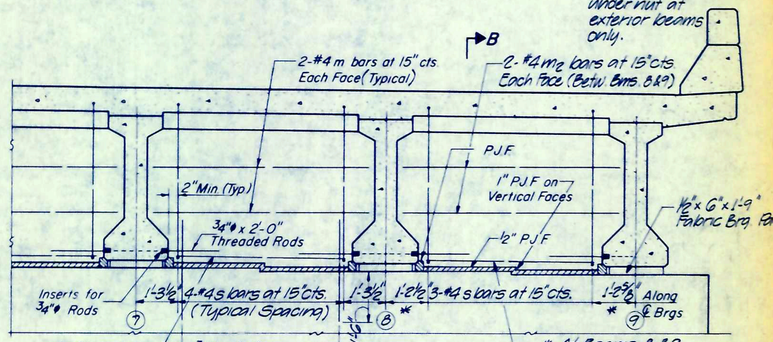


SECTION C-C

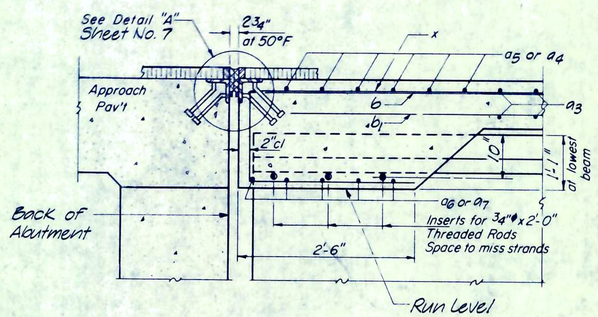


DIAPHRAGM AT ABUTMENT #2
(LOOKING NORTH)

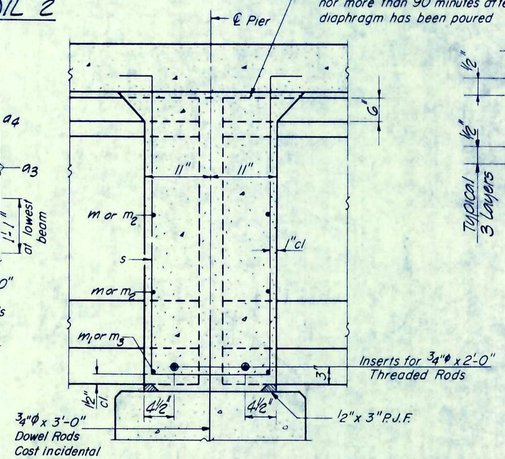
2-1"ø x 12' Anchor Bolts with 2½" x 2½" x ½" washers under nut at exterior beams only.



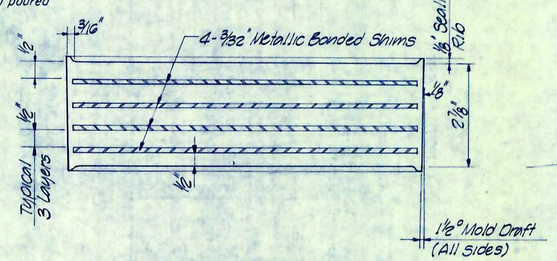
DIAPHRAGM AT PIER
(LOOKING NORTH)



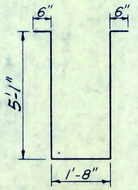
SECTION A-A
AT ABUTMENT
(at Rt Ls)



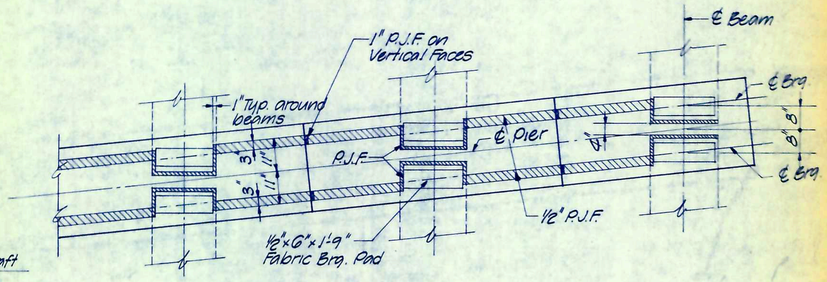
SECTION B-B
AT PIER
(Fixed)
(at Rt Ls)



ELASTOMERIC BEARING
(2⅞" x 9" x 1'-6")



BAR s



PLAN AT PIER

NOTE: Reinforcement bars shown on this sheet are included in Bill of Material on Sheet #9

BEAM LAYOUT & DETAILS-N.B. LANES

REVISIONS		
No.	DATE	INITIALS
1		
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DRAWN BY JCH DATE 4-75
CHECKED BY MRS DATE 6/75
BOOK NUMBER

F.A. 412 OVER I-80
F.A. 412 SEC. 50-5HB PROJ.
STA. 1028+55.04 (F.A. 412) LA SALLE CO.

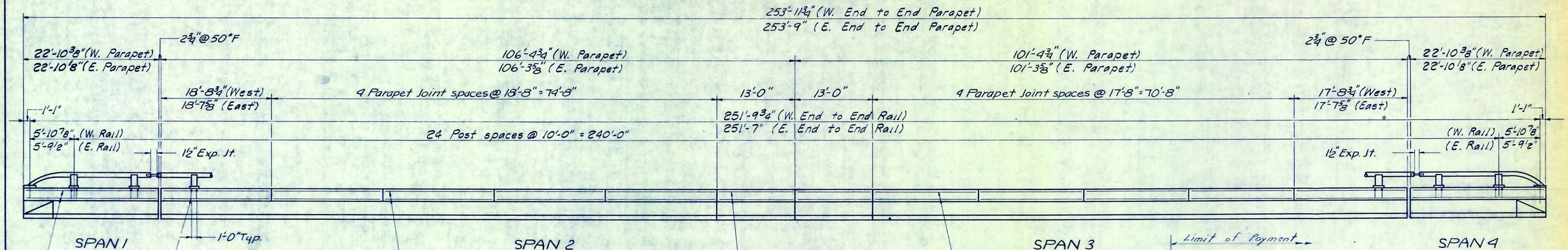
PROJECT NO. 2601-2
SHEET NO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

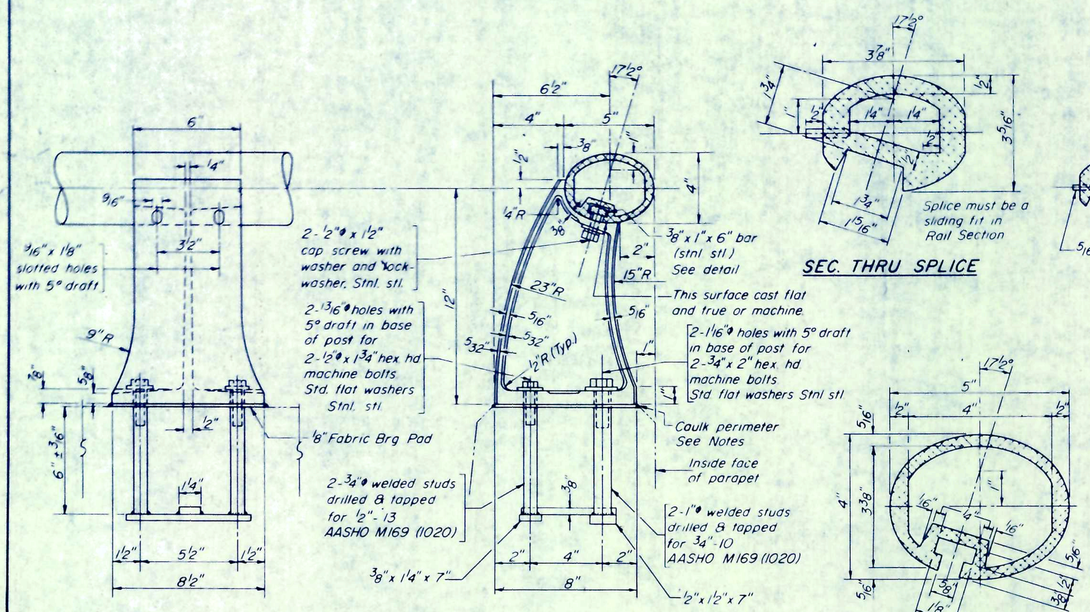
PI-2J 1-15-73

Sheet Nº 11 of 25 Sheets

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.412	50-5HB	LaSalle	156	54
FED. ROAD DIST. NO.		ILLINOIS	PROJECT	

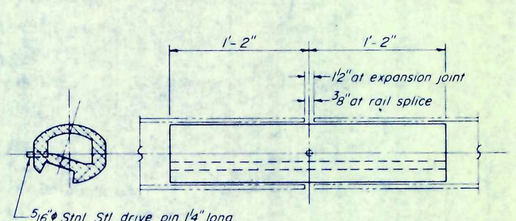


ELEVATION

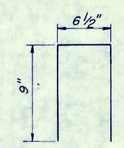


RAIL POST DETAILS

SEC. THRU SPLICE

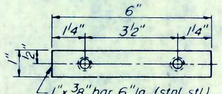


RAIL SPLICE

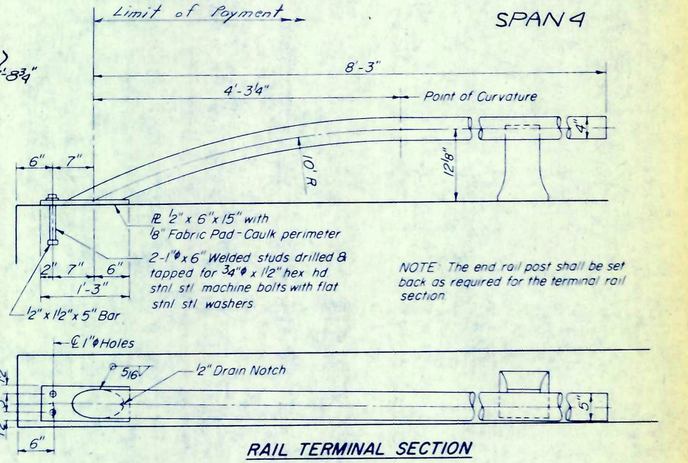


BAR d_3

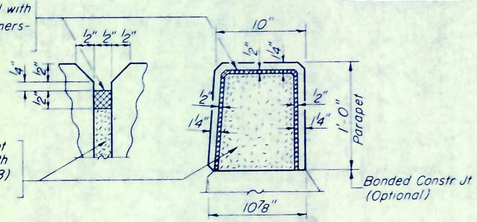
SEC. THRU ELLIPTICAL RAIL SECTION



CLAMP BAR



RAIL TERMINAL SECTION



PARAPET JOINT DETAIL

Two component non-staining gray sealing compound with polysulfide liquid polymers- gun grade with primer.

½" Preformed Cork Joint Filler (In accordance with Articles 715.07 or 715.08) Cost incidental

PARAPETS & RAILS BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d_3	100	#4	2'-1"	⊓
e	16	#4	22'-6"	—
e_1	90	#4	13'-9"	—
e_2	16	#4	12'-3"	—
e_3	90	#4	17'-9"	—
Reinforcement Bars		Lbs	1470	
Class X Concrete		Cu Yds	16.2	
Aluminum Railing		Lin Ft	504	

NOTES:

Stainless steel machine bolts or cap screws shall be in accordance with Article 710.37(a) of the standard specifications except Grade B8 or B8M may be furnished.

All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts

All joints in rail shall be spliced per detail.

Provide 1 - ⅛" and 2 - 1/16" Aluminum Shims for 25% of the Posts Rail element shall be parallel to Grade - high spots shall be ground and low spots shimmed.

Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers, gun grade with primer. Fabric Bearing Pad shall have same dimensions as base of post.

Aluminum alloy rail shall conform to ASTM B221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches

ALUMINUM RAILING N.B. LANES

REVISIONS		
No.	DATE	INITIALS
1		
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F.A. 412 OVER I-80
F.A. 412 SEC. 50-5 HB PROJ.
STA. 1028+55.04 (F.A. 412) LASALLE CO.

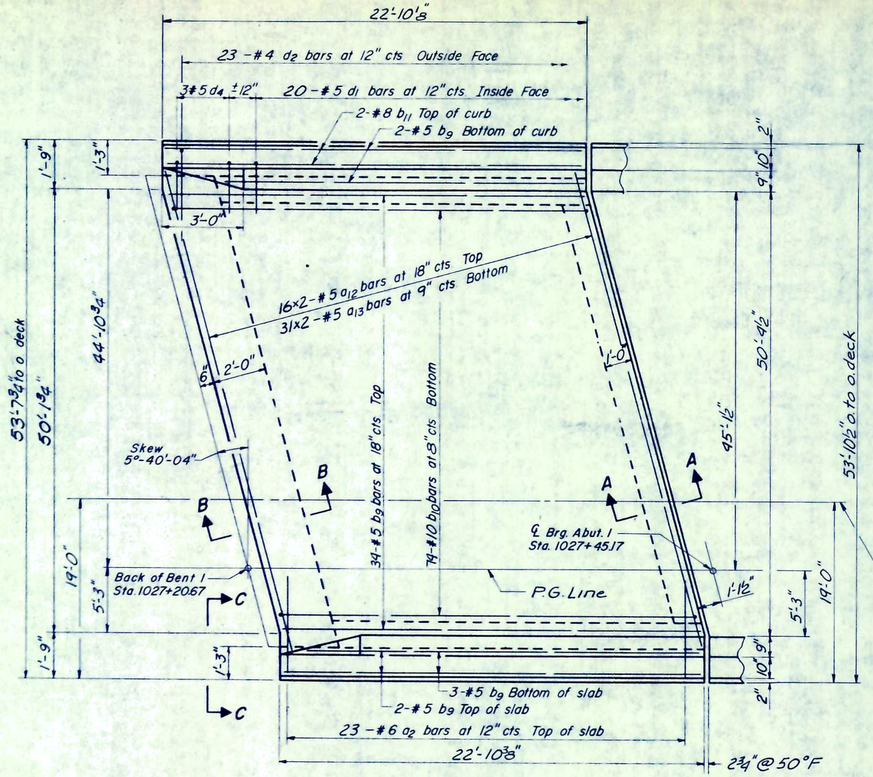
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY RJH 5-75
CHECKED BY VHC 6-75
BOOK NUMBER
PROJECT NO. 2601-2
SHEET NO.

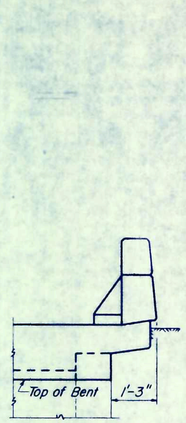
R-17 4-15-73

CUSHING & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.412	50-5HB	La Salle	156	55
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

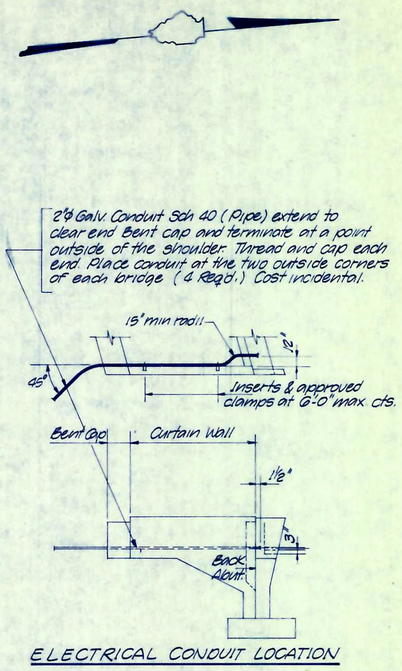


PLAN

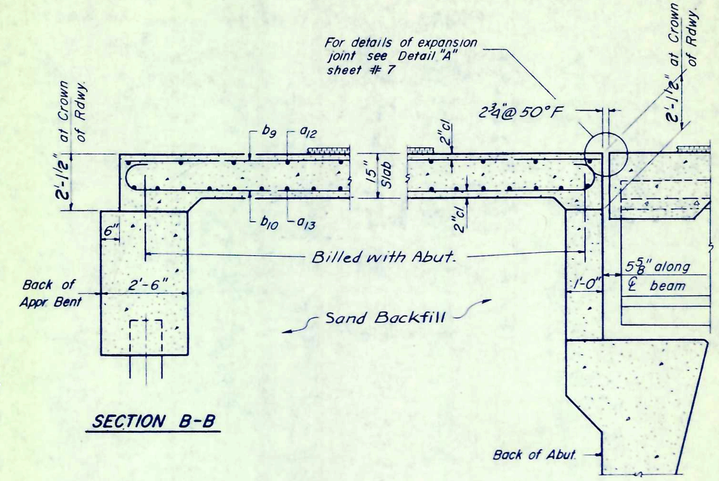


VIEW C-C

Crown of Roadway

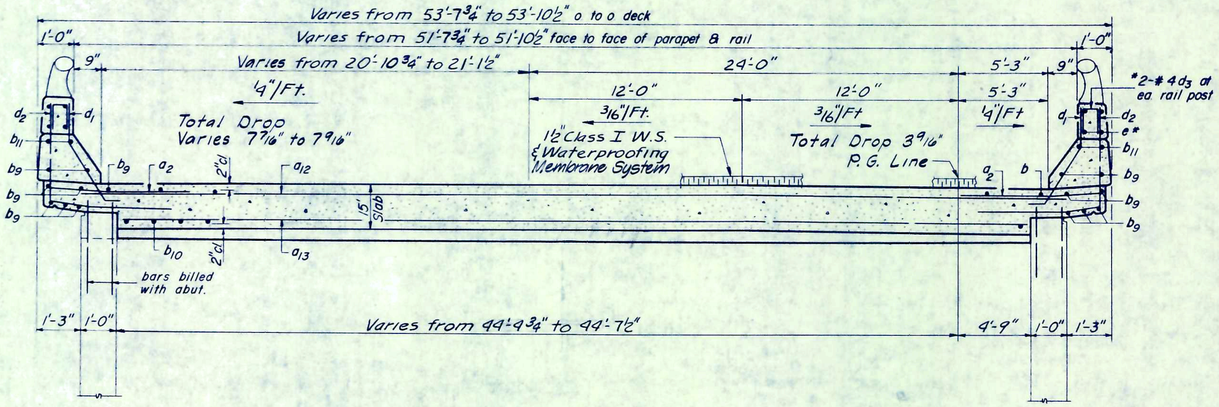


ELECTRICAL CONDUIT LOCATION

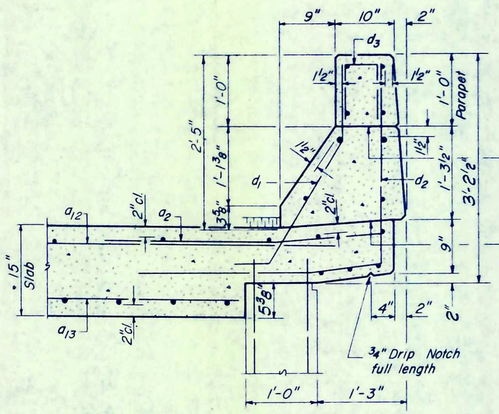


SECTION B-B

SECTION A-A



CROSS SECTION
LOOKING NORTH



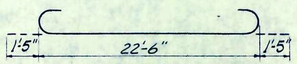
CURB SECTION

LOAD FACTOR DESIGN
fc' = 3500 psi
fy = 40,000 psi

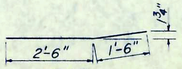
BILL OF MATERIAL

Bar	No	Size	Length	Shape
a_2	46	#6	4'-0"	—
a_{12}	32	#5	26'-8"	—
a_{13}	62	#5	25'-0"	—
b_9	48	#5	22'-6"	—
b_{10}	74	#10	25'-4"	⊂
b_{11}	4	#8	22'-6"	—
d_1	40	#5	3'-7"	⌋
d_2	46	#4	6'-0"	⌋
d_4	6	#5	4'-2"	⌋
Reinforcement Bars			Lbs.	12580
Class X Concrete			Cu Yds	61.8

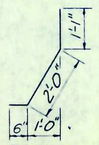
*Parapet Reinforcement and Class X Concrete are billed on sheet #16



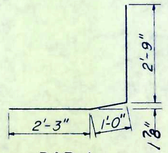
BAR b_{10}



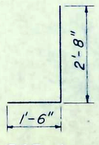
BAR a_2



BAR d_1



BAR d_2



BAR d_4

SUPERSTRUCTURE - SPAN 1 S.B. LANES

REVISIONS		
Nº	DATE	INITIALS
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DRAWN BY RJH DATE 4-75
CHECKED BY MPS DATE 6-75
BOOK NUMBER
PROJECT NO 2601-2
SHEET NO

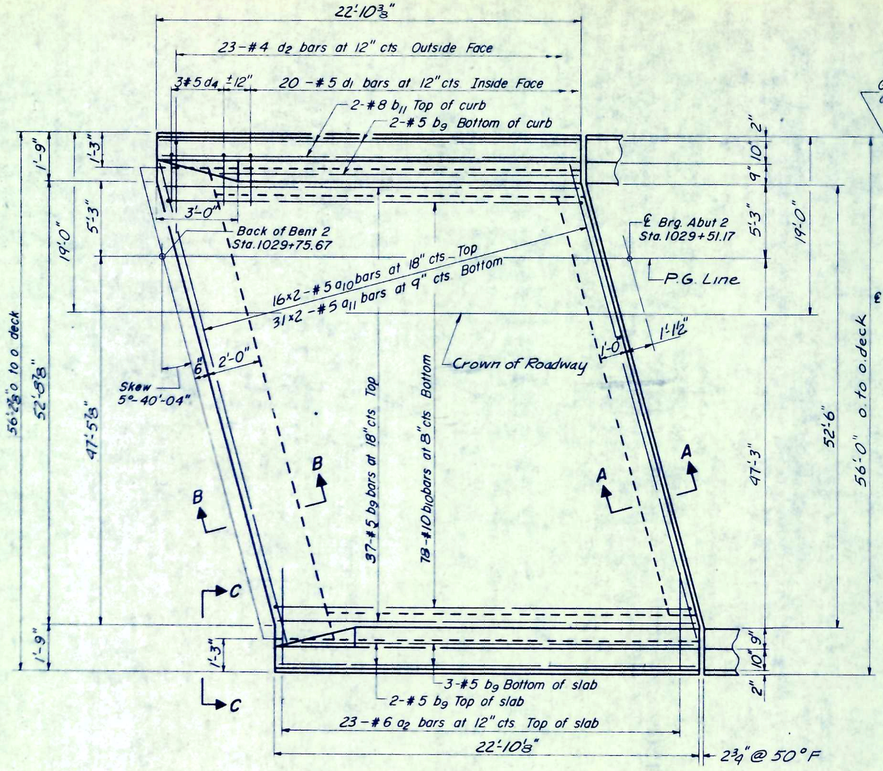
F.A. 412 OVER I-80
F.A. 412 SEC. 50-5 HB PROJ.
STA. 1028+55.09 (F.A. 912) LASALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

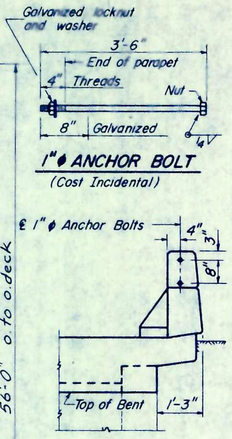
SAS-R (≦30°) 8-1-73

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-5HB	LaSalle	156	56
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

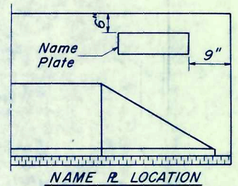
Sheet No. 13 of 25 sheets



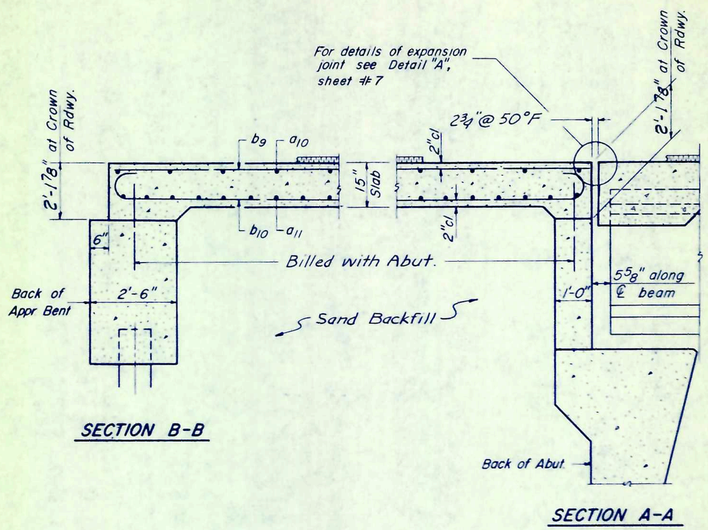
PLAN



VIEW C-C

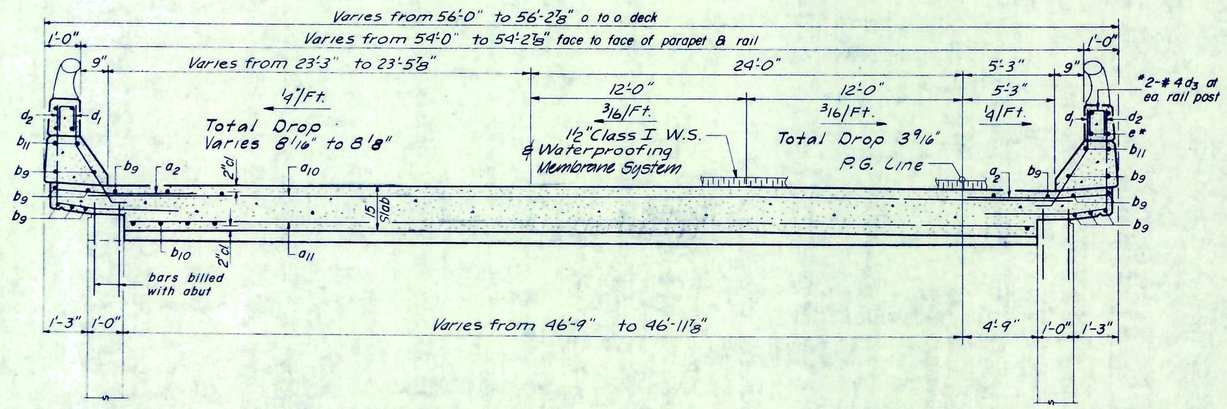


NAME PL LOCATION
(West Parapet North End only)

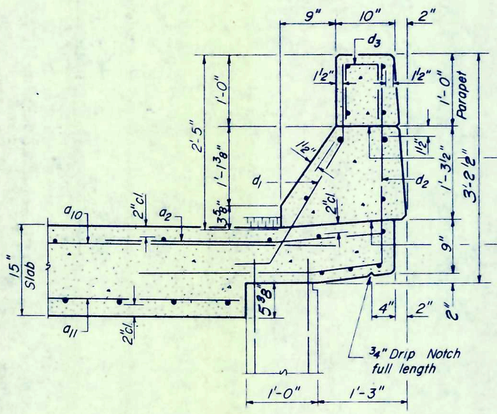


SECTION B-B

SECTION A-A



CROSS SECTION
LOOKING NORTH



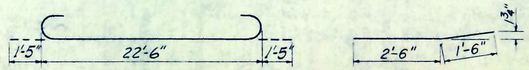
CURB SECTION

LOAD FACTOR DESIGN
f'_c = 3500 psi
f_y = 40,000 psi

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_2	46	#6	4'-0"	—
a_{10}	32	#5	27'-6"	—
a_{11}	62	#5	26'-4"	—
b_9	51	#5	22'-6"	—
b_{10}	78	#10	25'-4"	⊂
b_{11}	4	#8	22'-6"	—
d_1	40	#5	3'-7"	⌐
d_2	46	#4	6'-0"	⌐
d_4	6	#5	4'-2"	⌐
Reinforcement Bars			Lbs.	13,200
Class X Concrete			Cu Yds.	64.6

*Parapet Reinforcement and Class X Concrete are billed on sheet #16

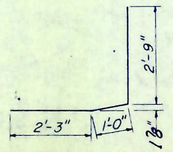


BAR b_{10}

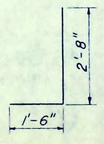
BAR a_2



BAR d_1



BAR d_2



BAR d_4

SUPERSTRUCTURE - SPAN 4 S.B. LANES

REVISIONS		
NO.	DATE	INITIALS
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DRAWN BY DATE: R.J.H 5-75
CHECKED BY DATE: M.P.S 6-75
BOOK NUMBER:

F.A. 412 OVER I-80
F.A. 412 SEC. 50-5 HB PROJ.
STA. 1028+55.04 (F.A. 412) LASALLE CO.

PROJECT NO. 2601-2
SHEET NO.

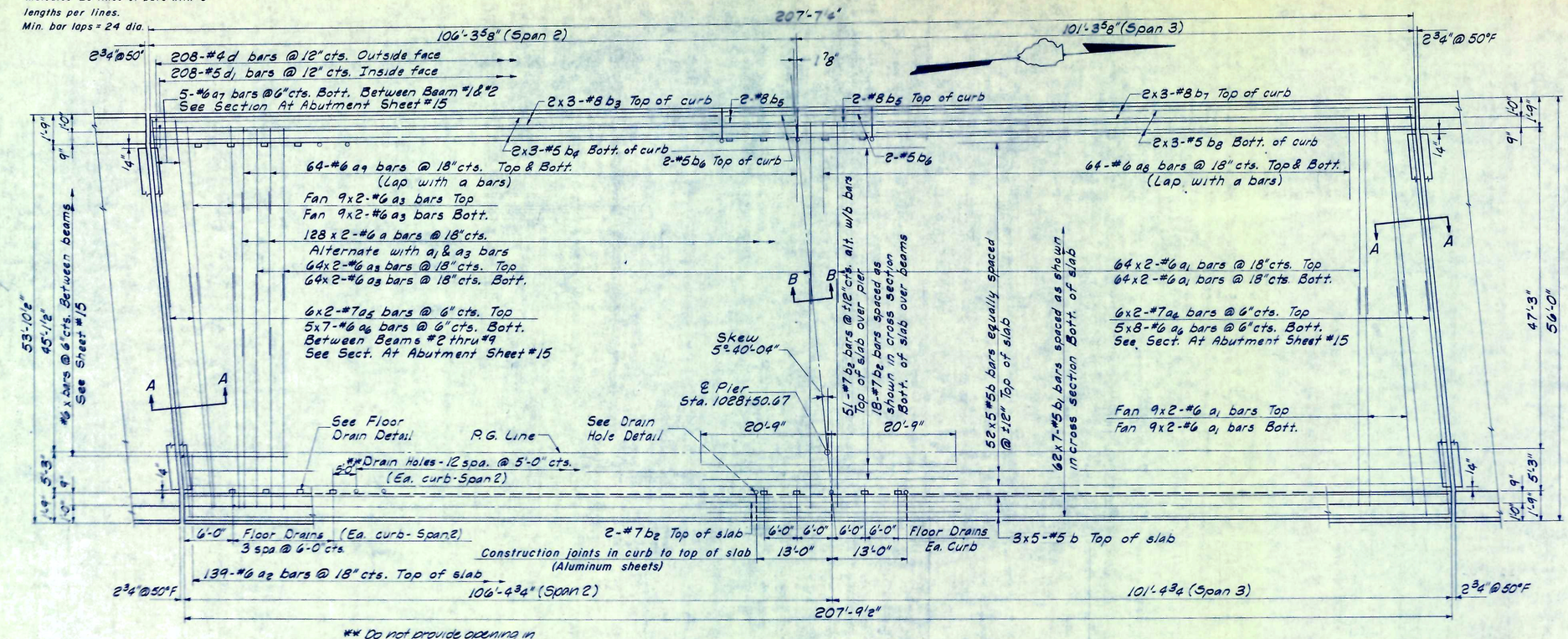
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

SAS-R (≦30°) 8-1-73

Note Bars indicated thus 20 x 3 -#5 etc. indicates 20 lines of bars with 3 lengths per lines.
Min. bar laps = 24 dia.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	50-5HB	LaSalle	156	57
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

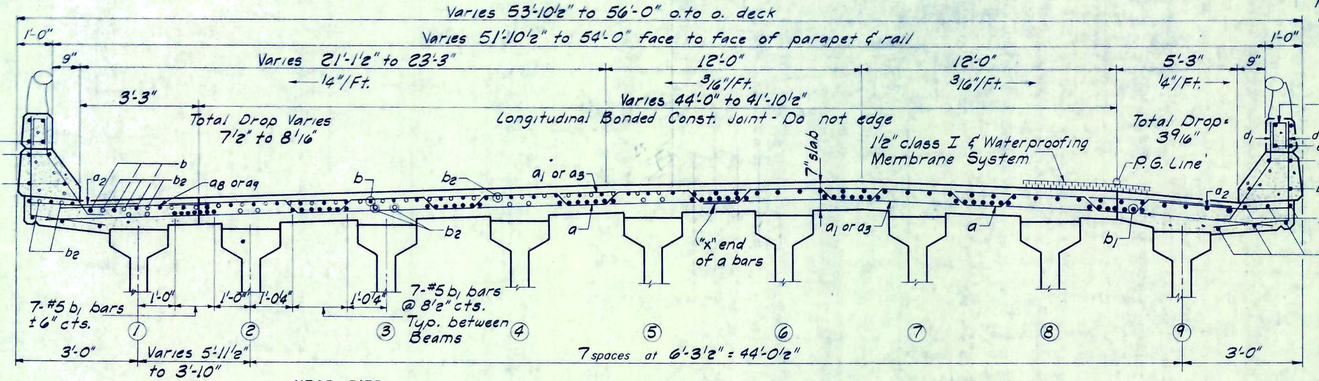
Sheet No. 14 of 25 sheets



** Do not provide opening in Waterproofing Membrane System

PLAN

For SEC. A-A & SEC. B-B see sht 15

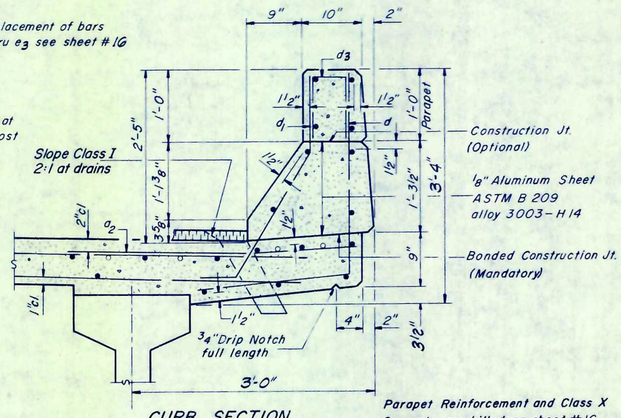


NEAR PIER — NEAR MIDSPAN

CROSS SECTION

LOOKING NORTH

Note For placement of bars dg & e1 thru e3 see sheet #16

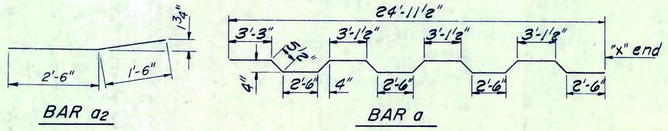


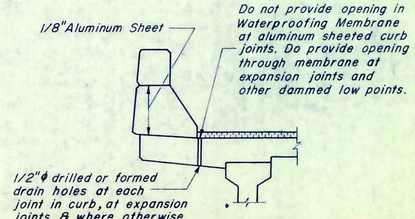
CURB SECTION

Cost of Aluminum Sheets shall be incidental to Class X Concrete

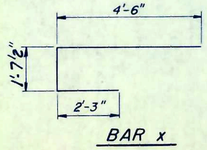
Parapet Reinforcement and Class X Concrete are billed on sheet #16

For placement and details of bars m, m1, m2, m3, s and x see sheet #15

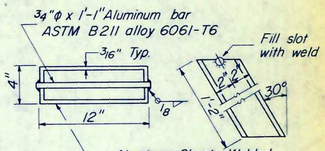




DRAIN HOLES



BAR x



FLOOR DRAIN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	256	#6	25'-0"	
a1	292	#6	27'-9"	
a2	278	#6	6'-0"	
a3	292	#6	27'-3"	
a4	12	#7	28'-0"	
a5	12	#7	27'-0"	
a6	75	#6	5'-6"	
a7	5	#6	3'-2"	
a8	128	#6	8'-0"	
a9	128	#6	7'-0"	
* b	290	#5	43'-0"	
* b1	434	#5	30'-9"	
* b2	73	#7	41'-6"	
b3	12	#8	32'-4"	
b4	12	#5	31'-11"	
b5	8	#8	12'-9"	
b6	8	#5	12'-9"	
b7	12	#8	30'-9"	
b8	12	#5	30'-2"	
d	416	#4	4'-6"	
d1	416	#5	3'-7"	
m	28	#4	5'-6"	
m1	14	#6	4'-2"	
m2	4	#4	4'-3"	
m3	2	#6	2'-9"	
s	31	#4	12'-10"	
x	172	#6	8'-5"	
Reinforcement Bars		Lbs.	82,330	
Class X Concrete		Cu. Yds.	342.0	

* Longitudinal Reinforcement in deck (bars b, b1 & b2) shall be Grade 60

SUPERSTRUCTURE SPANS 2 & 3 - S.B. LANES

REVISIONS		
NO.	DATE	INITIALS
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DRAWN BY T.J.E. DATE 5-75
CHECKED BY WPS DATE 5-75
BOOK NUMBER
PROJECT NO. 2601-2
SHEET NO.

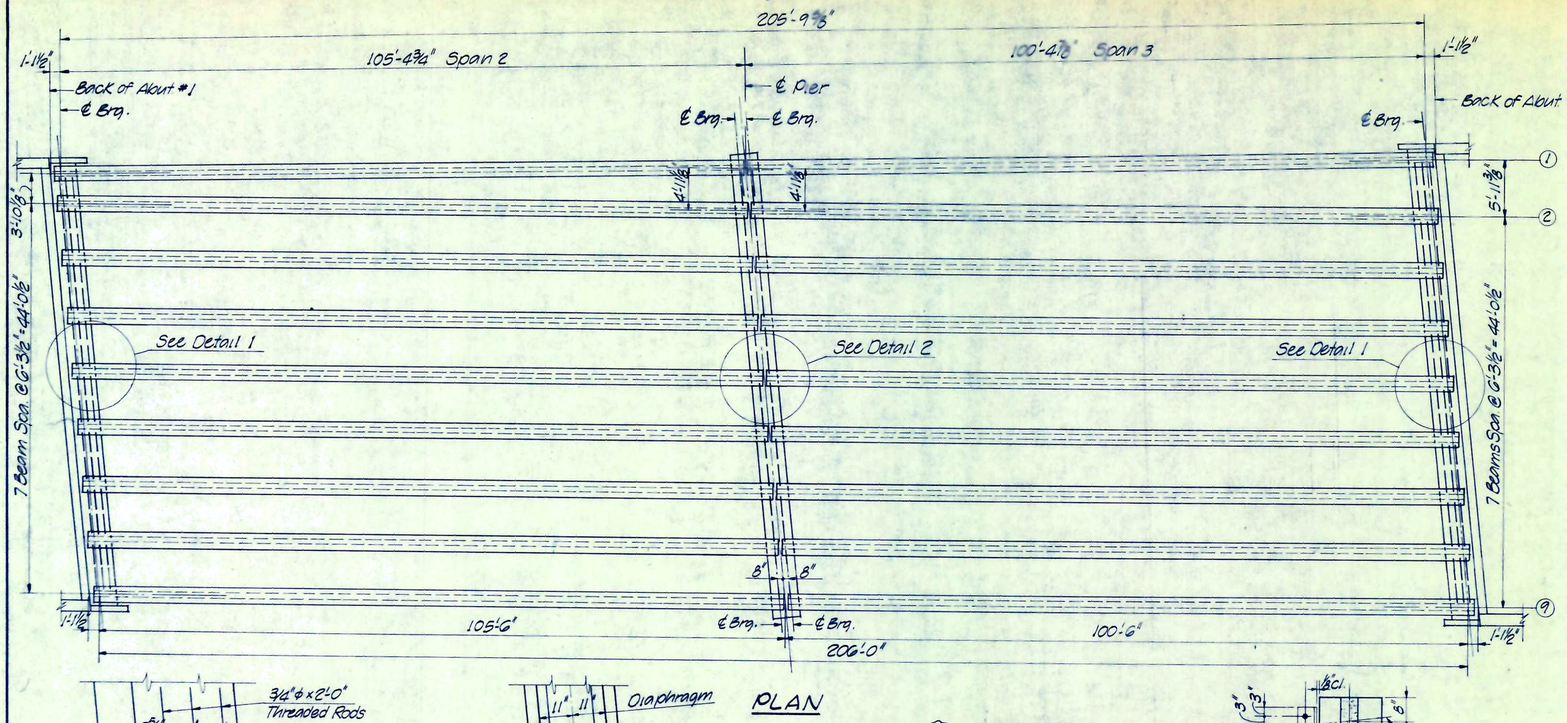
F.A. 412 OVER I-80
F.A. 412 SEC. 50-5HB PROJ.
STA. 1028+55.04 (F.A. 412) LASALLE CO.

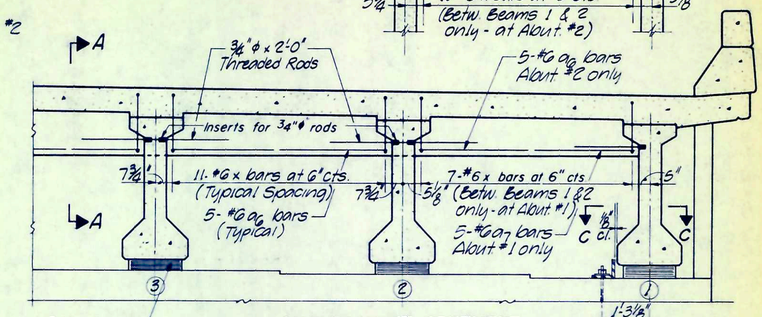
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

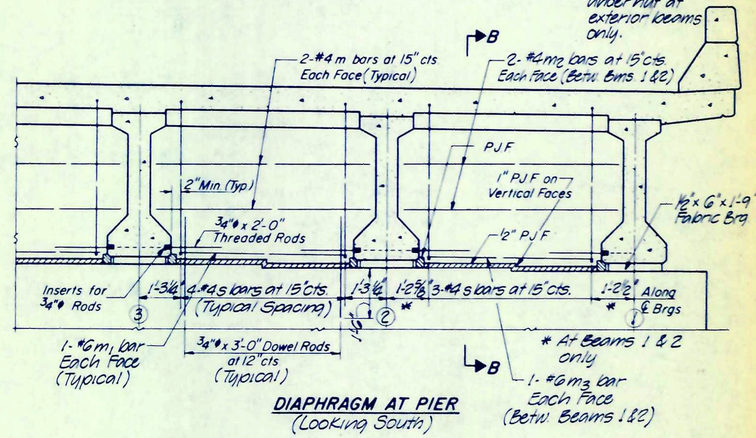
CUMMINS & COMPANY

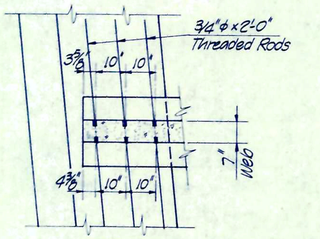
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	50-5HB	LaSalle	156	53
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

Sheet No. 15 of 25 Sheets

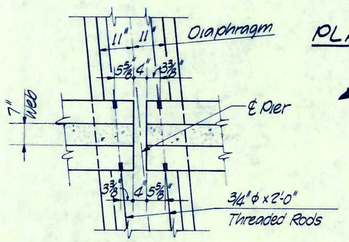






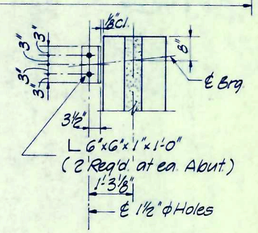


DETAIL 1

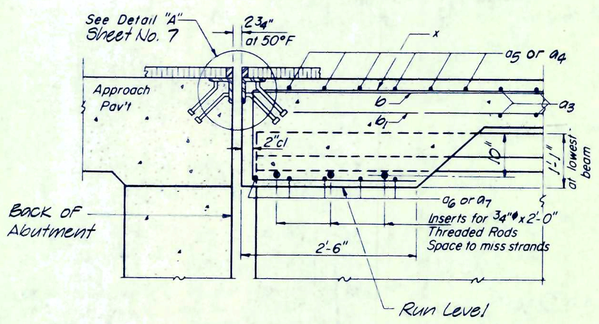


DETAIL 2

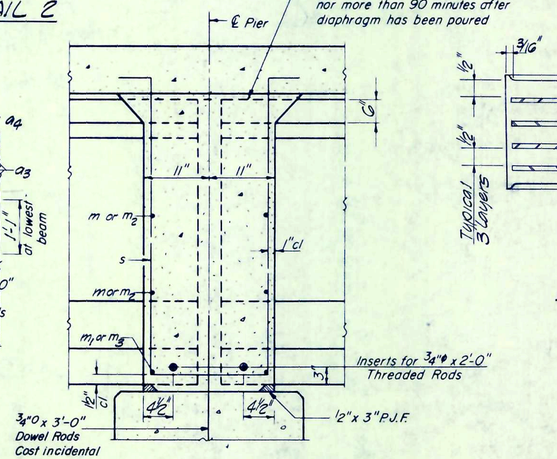
PLAN



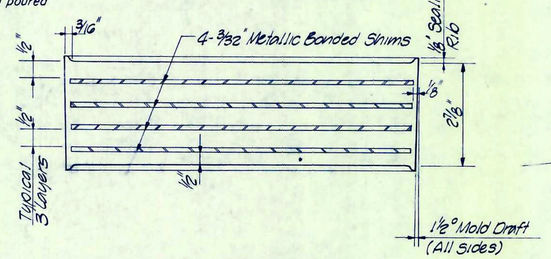
SECTION C-C



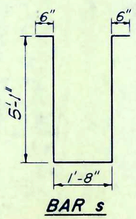
SECTION A-A AT ABUTMENT
(at Rt Ls)



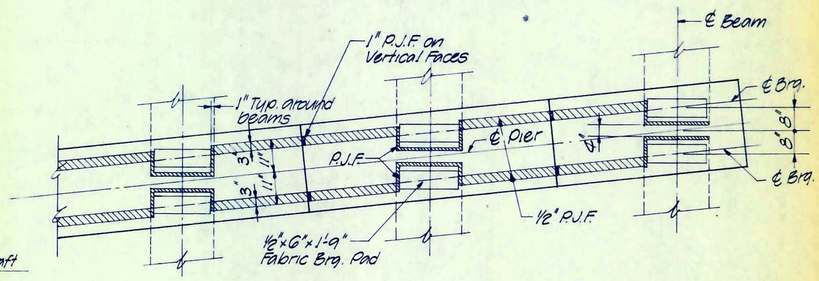
SECTION B-B AT PIER
(Fixed)
(at Rt Ls)



ELASTOMERIC BEARING
(2⅞" x 9" x 1'-6")



BAR s



PLAN AT PIER

NOTE: Reinforcement bars shown on this sheet are included in Bill of Material on Sheet #14

BEAM LAYOUT & DETAILS - S.B. LANES

REVISIONS		
No.	DATE	INITIALS
1		
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F.A. 412 OVER I-80
FA. 412 SEC. 50-5HB PROJ.
STA. 1028+55.04 (FA. 412) LA SALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

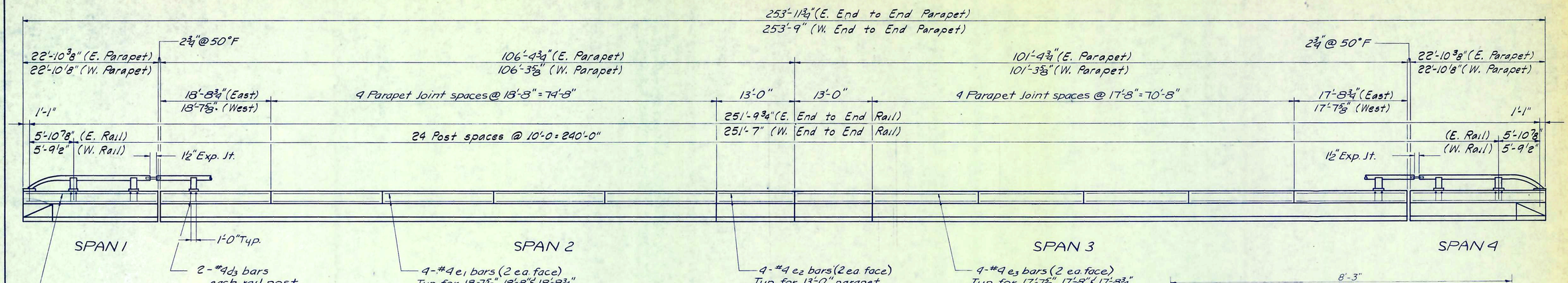
DRAWN BY / DATE	JLH 4-75
CHECKED BY / DATE	MLB 4/75
BOOK NUMBER	
PROJECT NO.	2601-2
SHEET NO.	

PI-2J 1-15-73

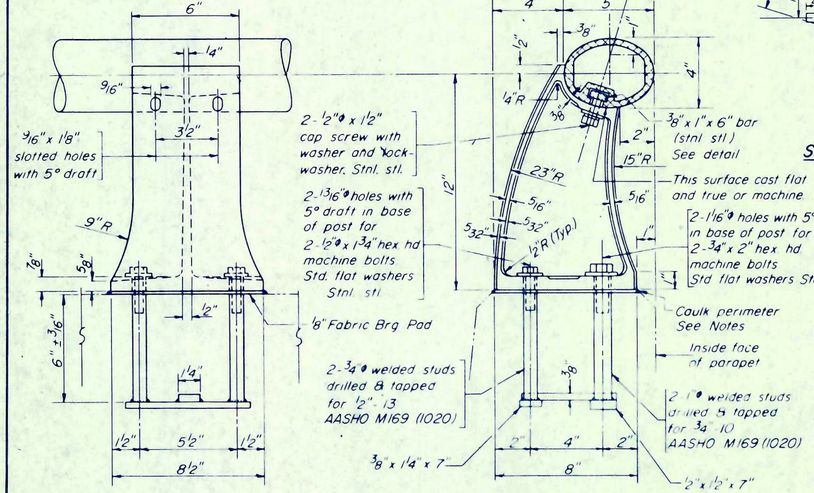
CUMMINS & COMPANY

Sheet No 16 of 25 Sheets

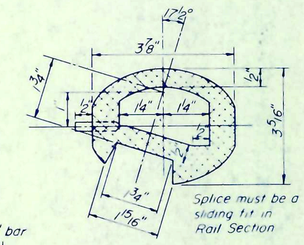
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	50-5HB	LaSalle	150	59
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



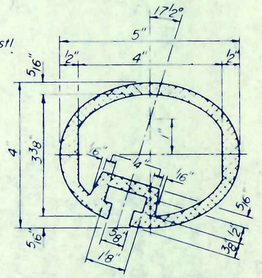
ELEVATION



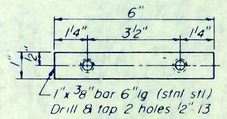
RAIL POST DETAILS



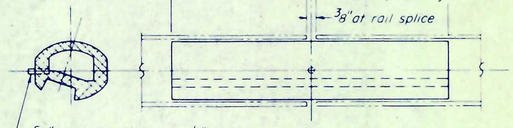
SEC. THRU SPLICE



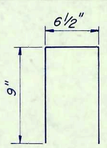
SEC. THRU ELLIPTICAL RAIL SECTION



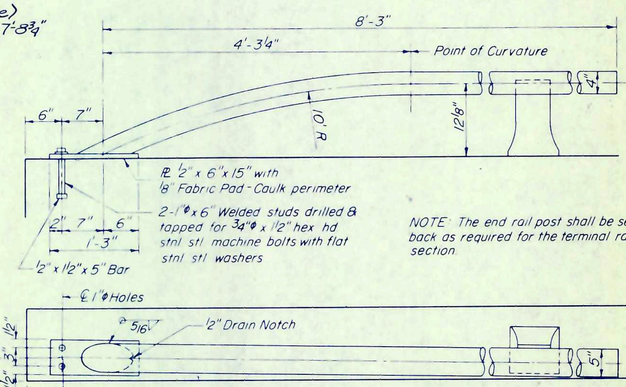
CLAMP BAR

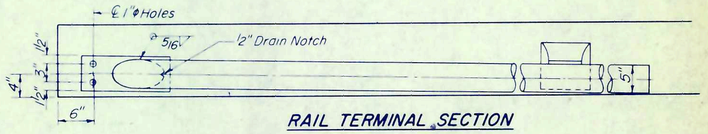


RAIL SPLICE

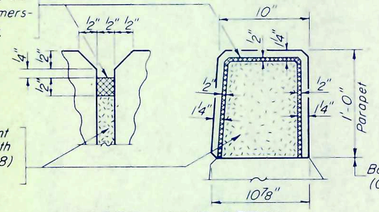


BAR d_3





RAIL TERMINAL SECTION



PARAPET JOINT DETAIL

NOTES:

Stainless steel machine bolts or cap screws shall be in accordance with Article 710.37(a) of the standard specifications except Grade B8 or B8M may be furnished.

All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.

All joints in rail shall be spliced per detail.

Provide 1 - 1/8" and 2 - 1/16" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade - high spots shall be ground and low spots shimmed.

Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers, gun grade with primer. Fabric Bearing Pad shall have same dimensions as base of post.

Aluminum alloy rail shall conform to ASTM B221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches.

PARAPETS & RAILS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d_3	100	#4	2'-1"	⊓
e	16	#4	22'-6"	—
e_1	90	#4	18'-9"	—
e_2	16	#4	12'-8"	—
e_3	90	#4	17'-9"	—
Reinforcement Bars		Lbs	1470	
Class X Concrete		Cu Yds	16.2	
Aluminum Railing		Lin Ft	504	

ALUMINUM RAILING S.B. LANES

REVISIONS		
No	DATE	INITIALS
1		
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DRAWN BY DATE R.J.H 5-75
CHECKED BY DATE JWC 6-75
BOOK NUMBER
PROJECT NO. 2601-2
SHEET NO.

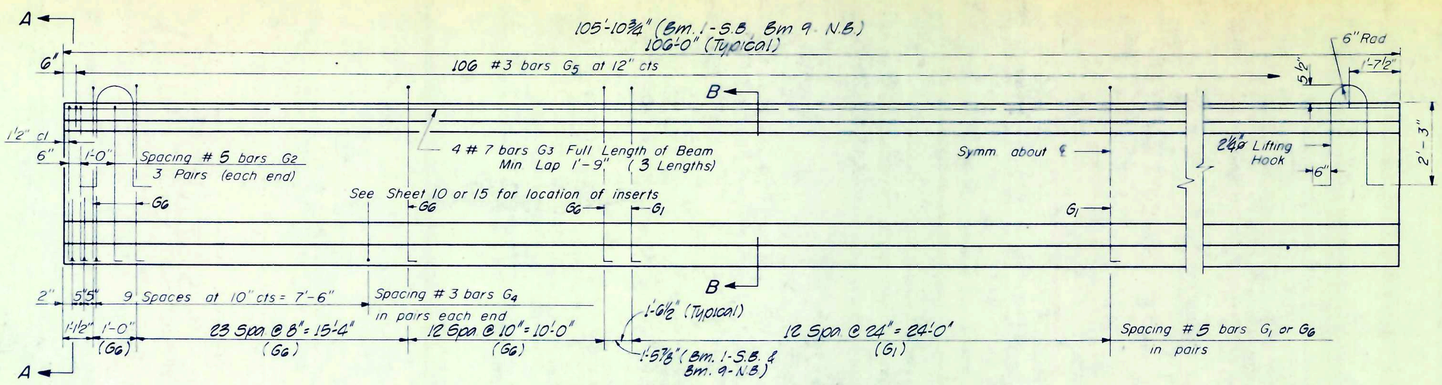
F.A. 412 OVER I-80
F.A. 412 SEC. 50-5 HB PROJ.
STA. 1025+55.09 (F.A. 912) LASALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

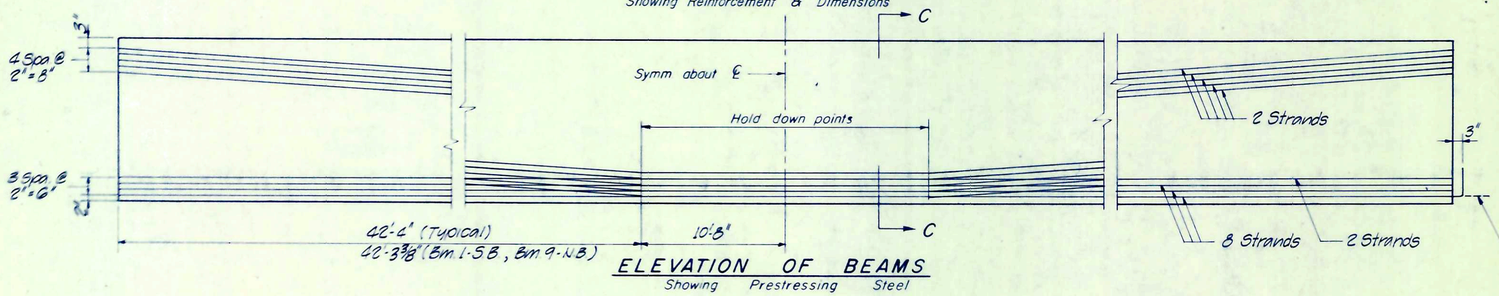
R-17 4-15-73

CUSHING & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.412	50-5HB	LaSalle	156	40
FED. ROAD DIST. NO.		ILLINOIS	PROJECT	

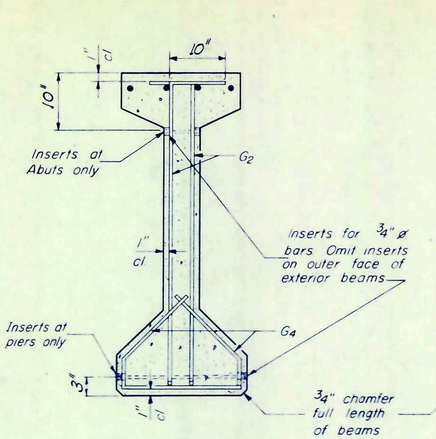


ELEVATION OF BEAMS
Showing Reinforcement & Dimensions

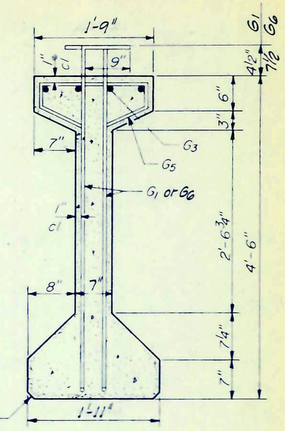


ELEVATION OF BEAMS
Showing Prestressing Steel

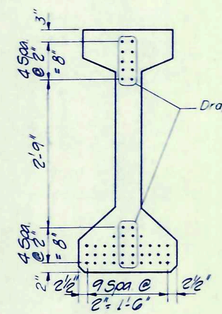
Cut 8 Strands in bottom row with 12" projection & Shop bend (Pier End Only)



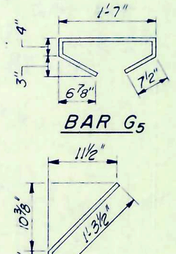
SECTION A-A



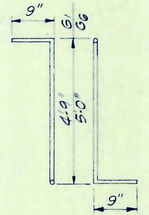
SECTION B-B



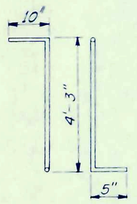
SECTION C-C



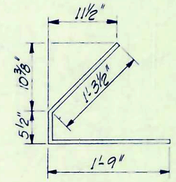
BAR G5



BAR G1 or G6



BAR G2



BAR G4

*BAR LIST

Bar	No.	Size	Length	Shape
G1	50	#5	6'-3"	⌐
G2	12	#5	5'-6"	⌐
G3	12	#7	36'-6"	—
G4	48	#3	3'-6"	∠
G5	106	#3	3'-6"	▭
G6	128	#5	6'-6"	⌐

* For one beam only

SPAN 2 - TWO STRUCTURES
BILL OF MATERIAL

Item	Unit	Total
Furnishing & Erecting Precast Prestressed Concrete I-Beams, 54"	Lin Ft	1908

NOTES

All inserts and threaded rods for inserts, reinforcing and Prestressing Steel, and other items which are cast into the Precast Concrete I-Beams shall be included in the contract unit price per lineal foot of "Furnishing And Erecting Precast Prestressted Concrete I-Beams, 54 in"

Prestressing Steel shall have a nominal diameter of 1/2"

Inserts for 3/4" ø threaded rods are to be two strut, coil type for interior I-Beams and single coil, flared loop type for exterior I-Beams

Steel for lifting hooks shall be non-deformed bars fy = 40,000 psi.

BEAM DETAILS - SPAN 2 - N.B. & S.B. LANES

REVISIONS		
No.	DATE	INITIALS
1		
2		
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DRAWN BY JLH DATE 5-75
CHECKED BY MRS DATE 6-75
BOOK NUMBER
PROJECT NO 2601-2
SHEET NO

F.A. 412 OVER I-80
F.A. 412 SEC. 50-5HB PROJ.
STA. 1028+55.04 (F.A. 412) LA SALLE CO

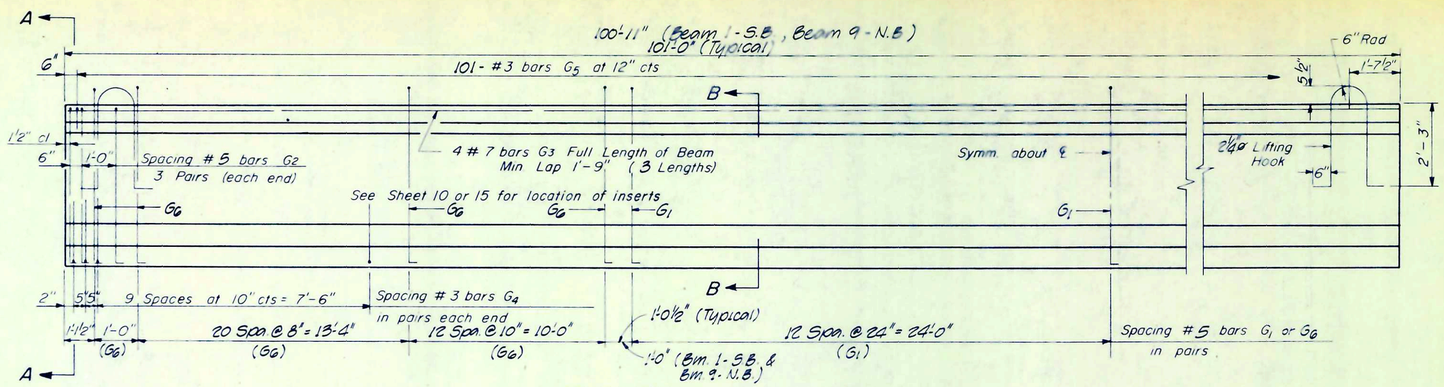
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

PI-4-54

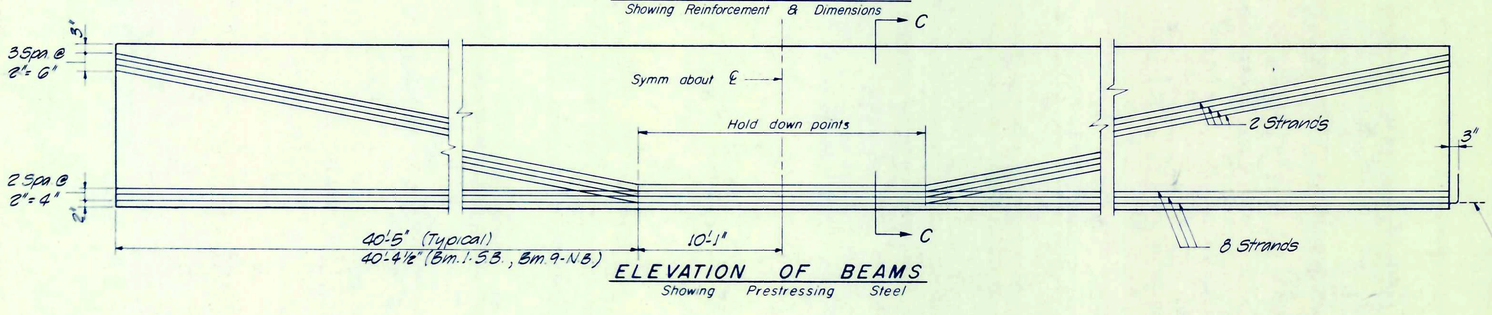
9-15-72

Sheet No. 18 of 25 Sheets

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 4/2	50-5HB	LaSalle	156	61
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

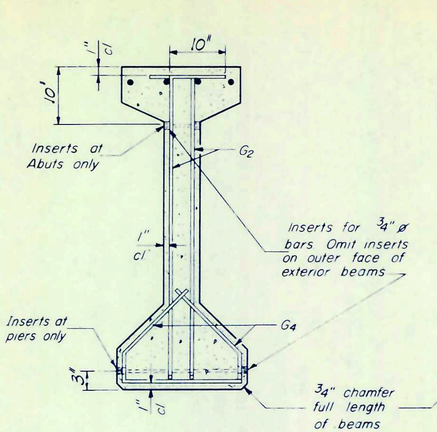


ELEVATION OF BEAMS
Showing Reinforcement & Dimensions

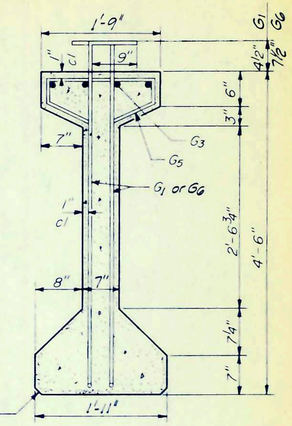


ELEVATION OF BEAMS
Showing Prestressing Steel

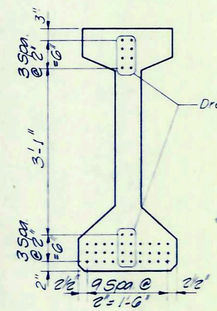
Cut 8 Strands in bottom row with 12" projection & Shop bend (Pier End Only)



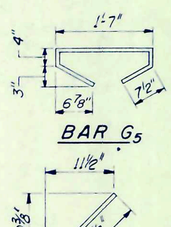
SECTION A-A



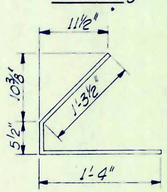
SECTION B-B



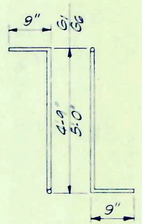
SECTION C-C



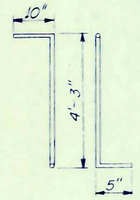
BAR G5



BAR G4



BAR G1 or G6



BAR G2

*BAR LIST

Bar	No	Size	Length	Shape
G1	50	#5	6'-3"	⌐L
G2	12	#5	5'-6"	⌐L
G3	12	#7	32'-0"	——
G4	68	#3	3'-6"	L
G5	101	#3	3'-6"	⊃
G6	130	#5	6'-6"	⌐L

* For one beam only

SPAN 3 - TWO STRUCTURES
BILL OF MATERIAL

Item	Unit	Total
Furnishing & Erecting Precast Prestressed Concrete I-Beams, 54"	Lin Ft	1818

NOTES

All inserts and threaded rods for inserts, reinforcing and Prestressing Steel, and other items which are cast into the Precast Concrete I-Beams shall be included in the contract unit price per lineal foot of "Furnishing And Erecting Precast Prestressed Concrete I-Beams, 54 in"

Prestressing Steel shall have a nominal diameter of ½"

Inserts for ¾" ø threaded rods are to be two strut, coil type for interior I-Beams and single coil, flared loop type for exterior I-Beams

Steel for lifting hooks shall be non-deformed bars fy = 40,000 psi.

BEAM DETAILS - SPAN 3 - N.B. & S.B. LANES

REVISIONS		
NO	DATE	INITIALS
1		
2		
3		
4		
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10		

DRAWN BY JLH DATE 5-75
CHECKED BY MRS DATE 6/75
BOOK NUMBER
PROJECT NO 2601-2
SHEET NO.

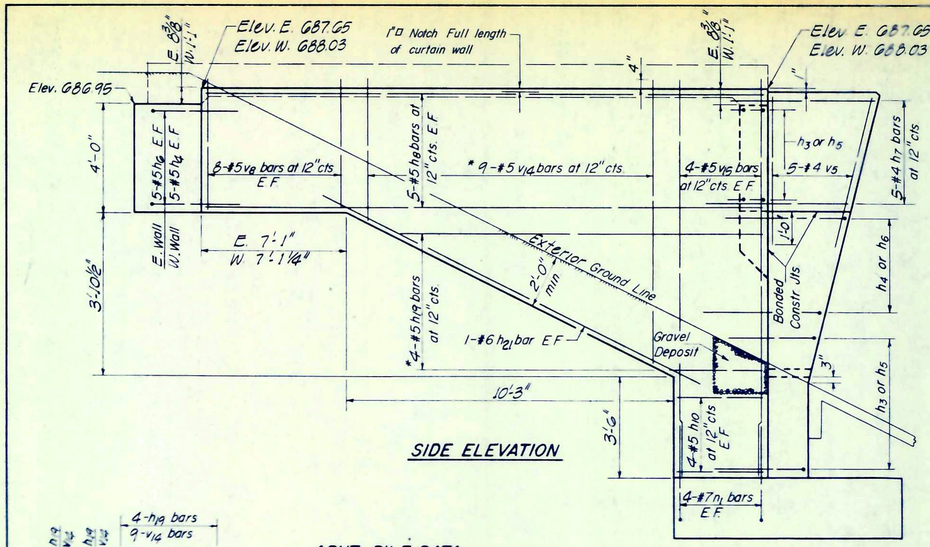
F.A. 4/2 OVER I-80
F.A. 4/2 SEC. 50-5HB PROJ.
STA. 1028+55.04 (F.A. 4/2) LA SALLE CO

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

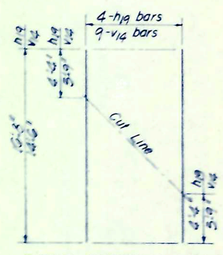
PI-4-54 9-15-72

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-5HB	LaSalle	156	62
FED. ROAD DIST. NO.		ILLINOIS	PROJECT	

Sheet No. 19 of 25 Sheets



SIDE ELEVATION



FIELD CUTTING DIAGRAM

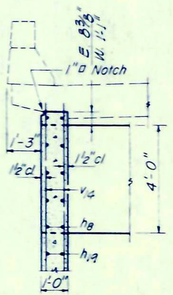
*Order h19 & v16 bars full length. Cut to fit as shown and use remainder of bars in other face

ABUT.-PILE DATA

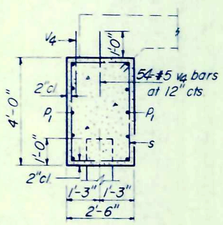
Type - HP10x42
Capacity - Drive to refusal
Est Length - 51 Feet
No Reqd - 24

APPR. BENT-PILE DATA

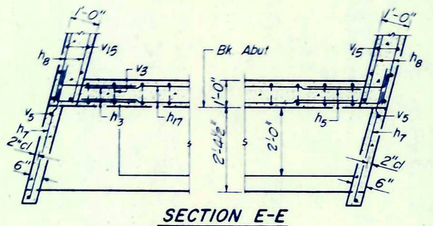
Type - Concrete
Capacity - 25 Ton
Est Length - 52 Feet
No Reqd - 8+1 Test Pile



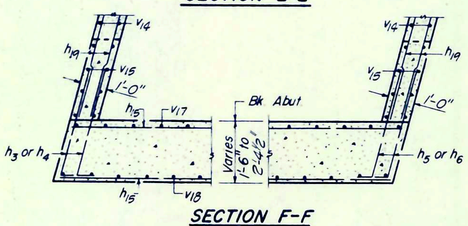
SECTION C-C



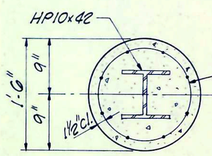
SECTION B-B



SECTION E-E

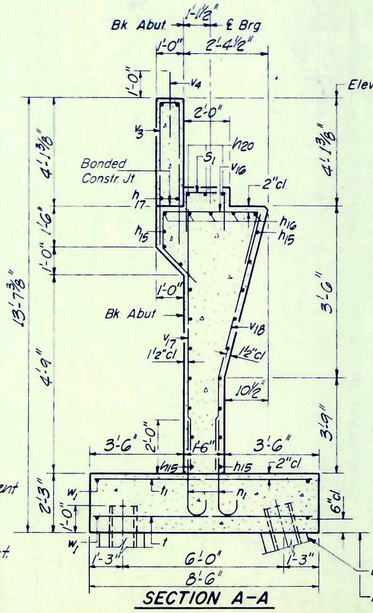


SECTION F-F

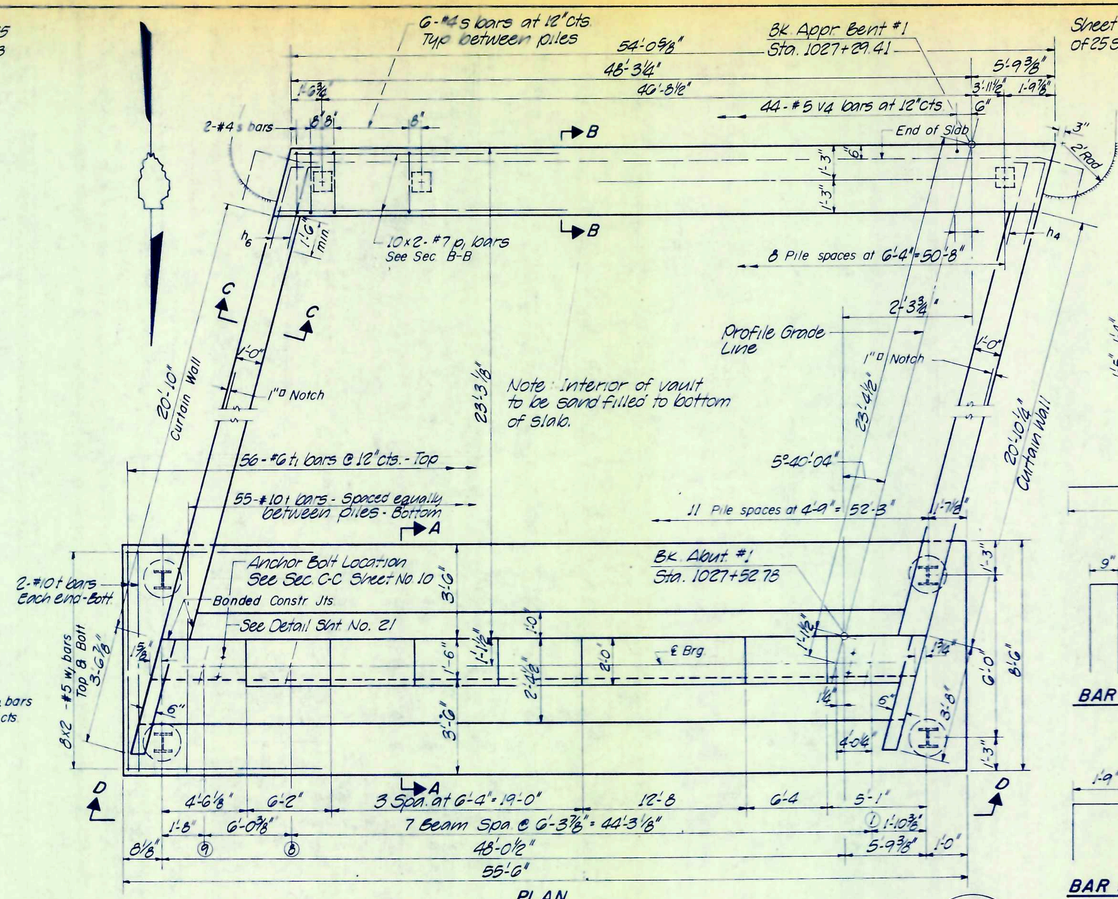


Welded wire fabric 6"x6" mesh #4 wire weighing 58 #/100 sq. Ft.
The cost of Class X Concrete Encasement and Reinforcement is incidental to the cost of furnishing piles.
Forms for encasement may be omitted when soil conditions will permit.

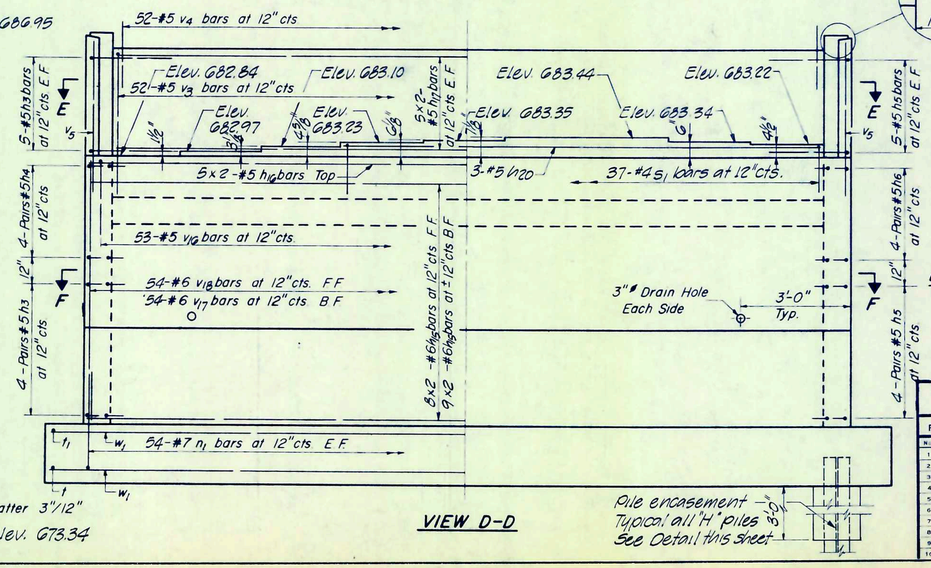
CONCRETE ENCASEMENT DETAIL



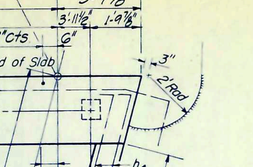
SECTION A-A



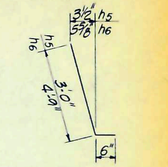
PLAN



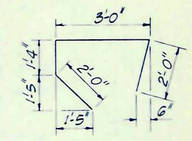
VIEW D-D



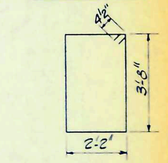
BARS h_3 & h_4



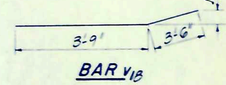
BARS h_5 & h_6



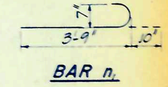
BAR v_{16}



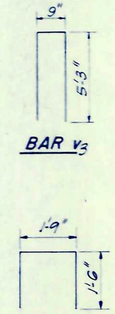
BAR s



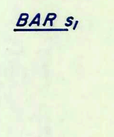
BAR v_{18}



BAR n.



BAR v_3



BAR s_1

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h_3	18	#5	3'-6"	L
h_4	18	#5	5'-3"	L
h_5	18	#5	3'-6"	L
h_6	18	#5	5'-3"	L
h_7	10	#4	5'-0"	—
h_8	20	#5	20'-6"	—
h_{10}	16	#5	3'-3"	—
h_{15}	34	#6	27'-6"	—
h_{16}	10	#5	27'-6"	—
h_{17}	10	#5	26'-6"	—
h_{19}	8	#5	10'-8"	—
h_{20}	3	#5	36'-3"	—
h_{21}	4	#6	14'-0"	—
n_1	184	#7	4'-7"	⊃
P_1	20	#7	28'-0"	—
s	52	#4	12'-5"	□
s_1	37	#4	4'-9"	□
t	59	#10	8'-3"	—
t_1	56	#6	8'-3"	—
v_3	52	#5	11'-3"	⊓
v_4	150	#5	2'-6"	—
v_5	10	#4	6'-0"	—
v_6	32	#5	5'-3"	—
v_{14}	18	#5	14'-6"	—
v_{15}	16	#5	12'-9"	—
v_{16}	53	#5	8'-4"	⊓
v_{17}	54	#6	7'-1"	—
v_{18}	54	#6	7'-3"	—
w_1	32	#5	28'-3"	—

Reinforcement Bars	Lbs	13,060
Class X Concrete	Cu. Yds.	168.9
Steel Piles HP10x42	Lin. Ft.	1224
Concrete Piles	Lin. Ft.	416
Test Piles, Concrete	Each	1

Note: For Electrical Conduit Location detail see Sheet No. 12.

LOAD FACTOR DESIGN
f'_c = 3500 psi
f_y = 40,000 psi

VAF-R 3-25-74

ABUTMENT #1 - N.B. LANES

REVISIONS		
NO.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

DRAWN BY JCH DATE 4-75
CHECKED BY MPS DATE 6-75
BOOK NUMBER

F.A. 412 OVER I-80
F.A. 412 SEC. 50-5HB PROJ.
STA. 1028+55.04 (F.A. 412) LA SALLE CO.

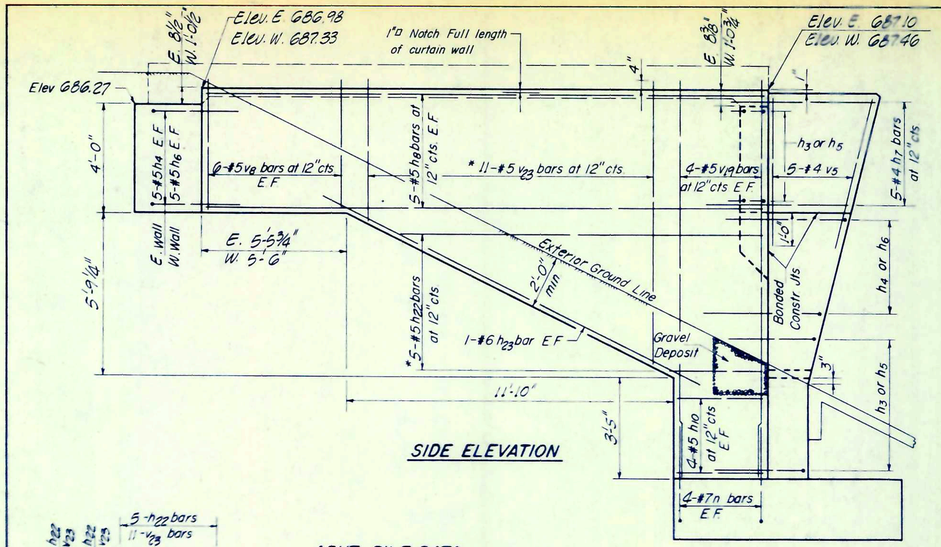
PROJECT NO. 2601-2
SHEET NO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

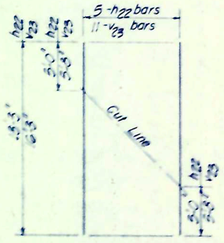
CLEMONS & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.412	50-5HB	LaSalle	156	63
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

Sheet No. 20 of 25 Sheets



SIDE ELEVATION



FIELD CUTTING DIAGRAM

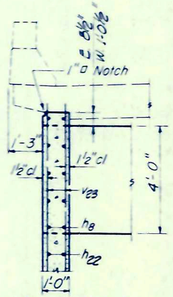
*Order h22 & v23 bars full length Cut to fit as shown and use remainder of bars in other face

ABUT-PILE DATA

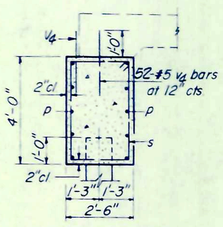
Type - HP10X42
Capacity - Drive to refusal
Est Length - 61 Feet
No Reqd - 22

APPR. BENT-PILE DATA

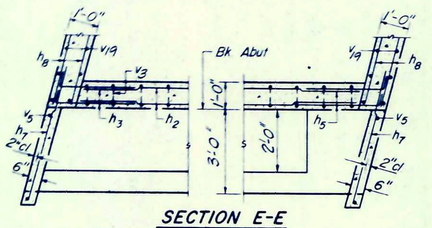
Type - Concrete
Capacity - 23 Tons
Est Length - 38 Feet
No Reqd - 5



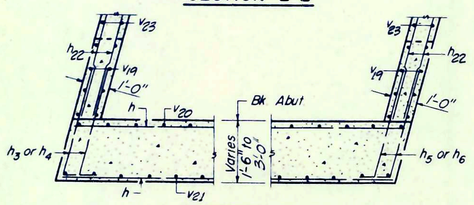
SECTION C-C



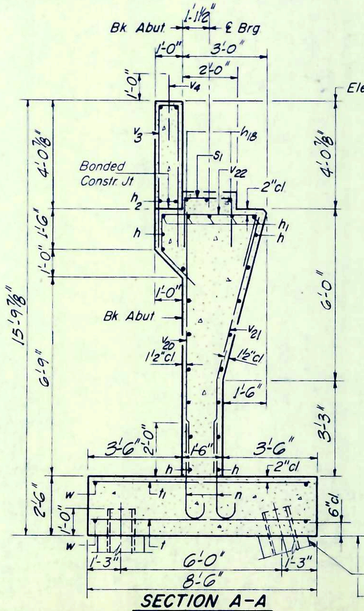
SECTION B-B



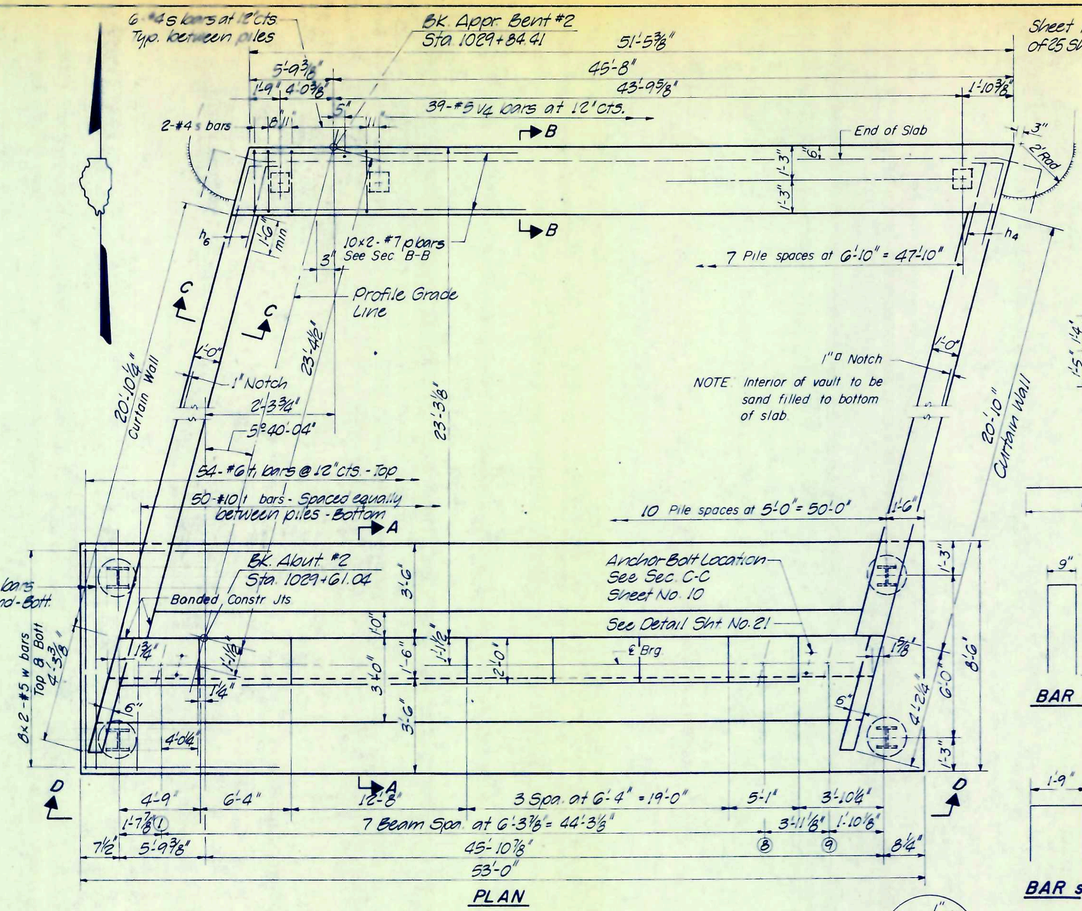
SECTION E-E



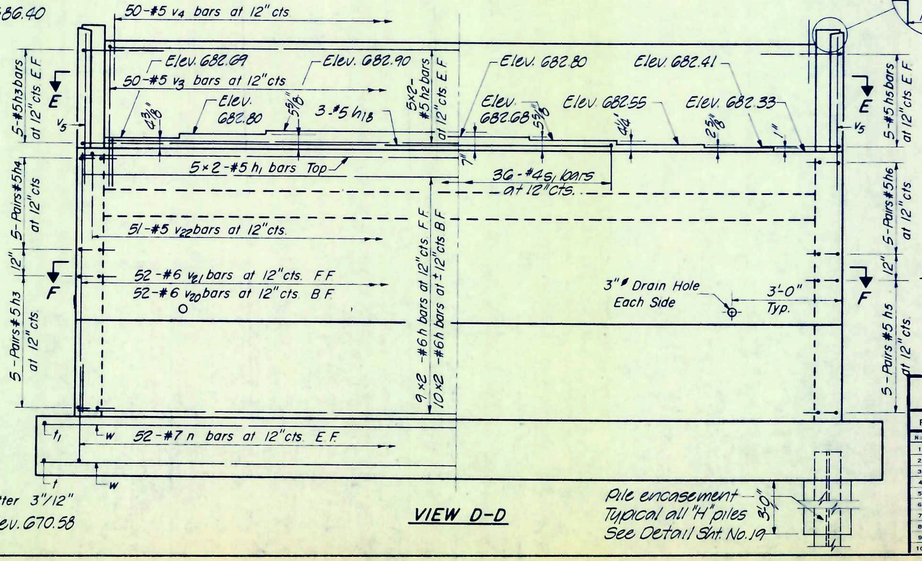
SECTION F-F



SECTION A-A

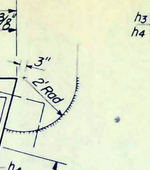


PLAN

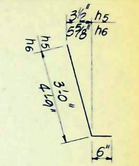


VIEW D-D

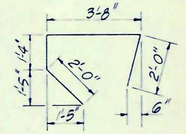
Pile encasement Typical all "H" piles See Detail Sht No. 19



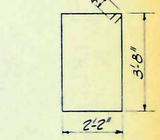
BARS h_3 & h_4



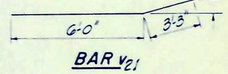
BARS h_5 & h_6



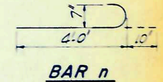
BAR v_{22}



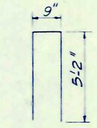
BAR s



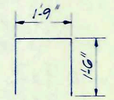
BAR v_{21}



BAR n



BAR v_3



BAR s_1

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	38	#6	20'-6"	
h1	10	#5	20'-6"	
h2	20	#5	25'-3"	
h3	20	#5	3'-6"	L
h4	20	#5	5'-3"	L
h5	20	#5	3'-6"	L
h6	20	#5	5'-3"	L
h7	10	#4	5'-6"	
h8	20	#5	20'-6"	
h10	16	#5	3'-3"	
h18	3	#5	35'-6"	
h22	10	#5	18'-3"	
h23	6	#6	16'-3"	
n	120	#7	41'0"	
p	20	#7	20'-6"	
s	46	#4	12'-5"	
s1	36	#4	4'-9"	
t	54	#10	8'-3"	
t1	54	#6	8'-3"	
v3	30	#5	11'-3"	
v4	141	#5	2'-6"	
v5	10	#4	6'-0"	
v8	24	#5	5'-3"	
v19	16	#5	14'-6"	
v20	52	#6	9'-1"	
v21	52	#6	9'-3"	
v22	51	#5	9'-0"	
v23	22	#5	16'-3"	
w	32	#5	27'-0"	
Reinforcement Bars		Lbs.	13,500	
Class X Concrete		Cu Yds	122.4	
Steel Piles HP10X42		Lin. Ft.	1342	
Concrete Piles		Lin. Ft.	304	

Note: For Electrical Conduit Location detail see Sheet No. 12.

LOAD FACTOR DESIGN

f'_c = 3500 psi
f_y = 40,000 psi

VAF-R 3-25-74

ABUTMENT #2 - N.B. LANES

REVISIONS		
No.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

DRAWN BY JLH DATE 5-75
CHECKED BY MPS DATE 6-75
BOOK NUMBER

F.A. 412 OVER I-80
F.A. 412 SEC. 50-5HB PROJ.
STA. 1028+55.04 (F.A. 412) LA SALLE CO.

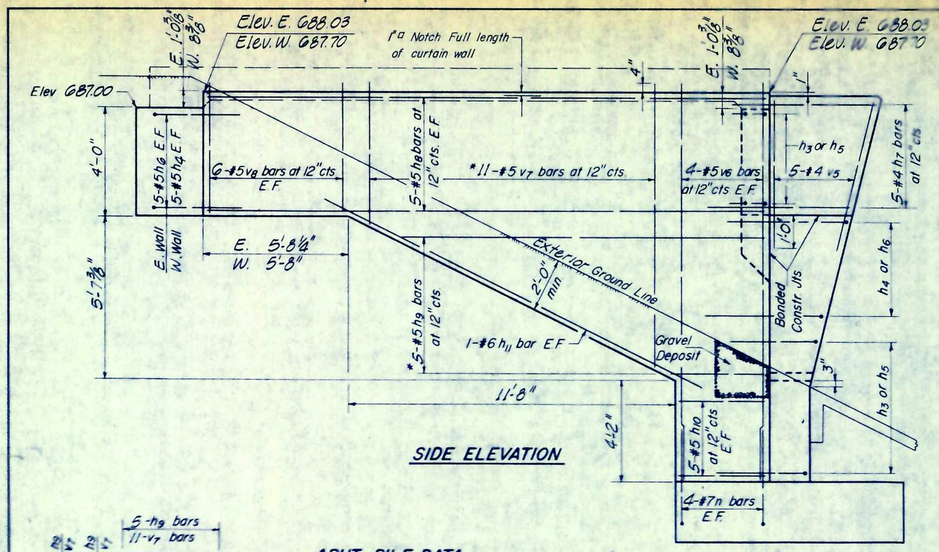
PROJECT NO. 2601-2
SHEET NO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

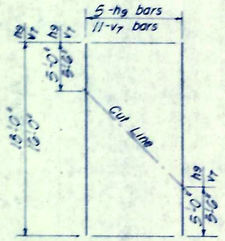
CUSHING & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.412	50-5HB	LaSalle	156	64
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

Sheet No. 21 of 25 Sheets



SIDE ELEVATION

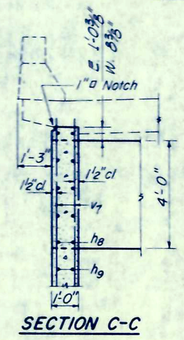


FIELD CUTTING DIAGRAM

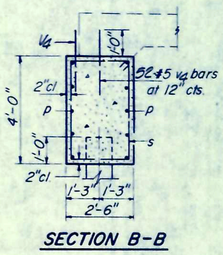
*Order h_9 & v_7 bars full length. Cut to fit as shown and use remainder of bars in other face

ABUT.-PILE DATA
Type -HP10x42
Capacity -Drive to refusal
Est Length-54 Feet
No Reqd -22

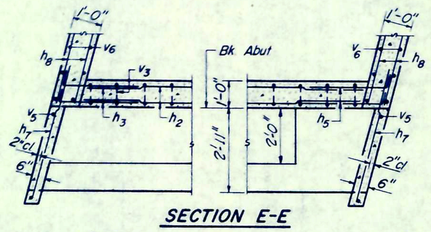
APPR. BENT-PILE DATA
Type -Concrete
Capacity -88 Ton
Est Length-58 Feet
No Reqd -8



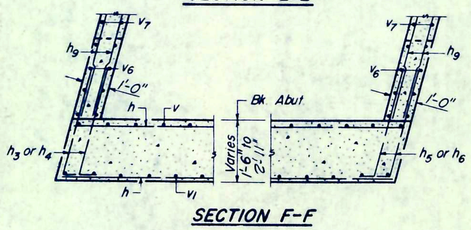
SECTION C-C



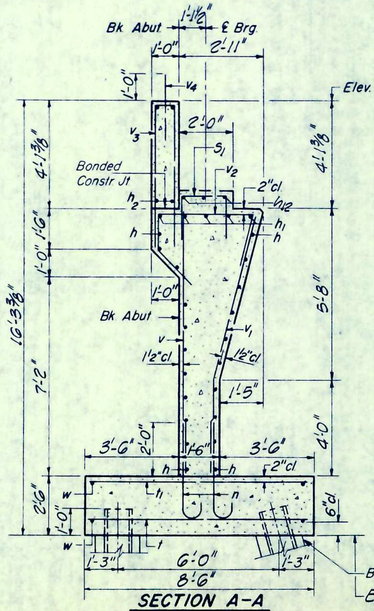
SECTION B-B



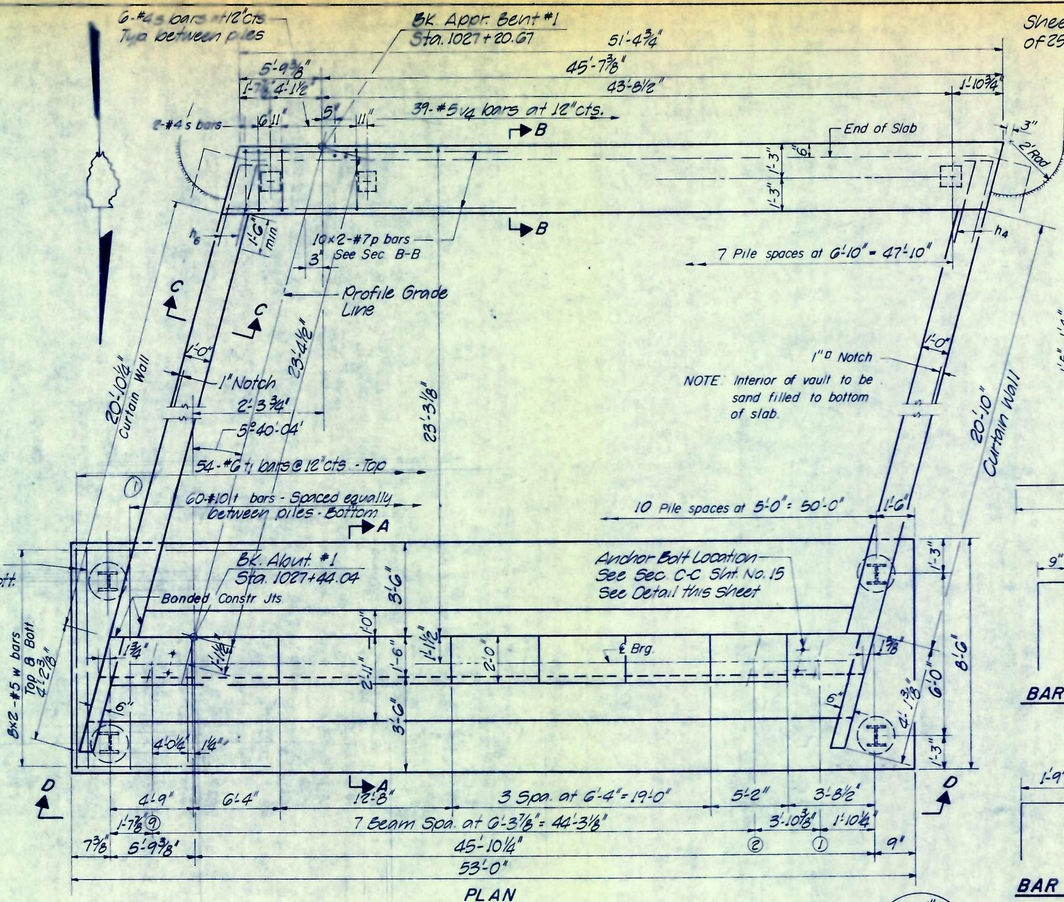
SECTION E-E



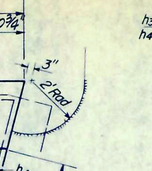
SECTION F-F



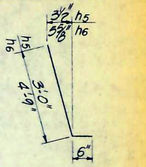
SECTION A-A



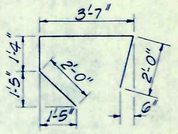
PLAN



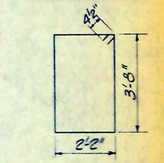
BARS h_3 & h_4



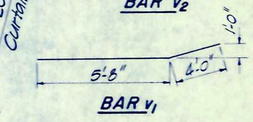
BARS h_5 & h_6



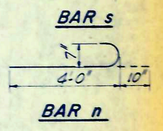
BAR v_2



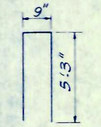
BAR s



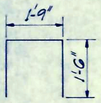
BAR v_1



BAR n



BAR v_3

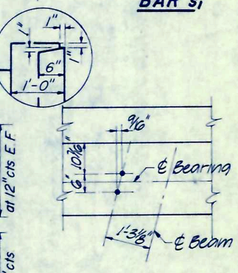


BAR s_1

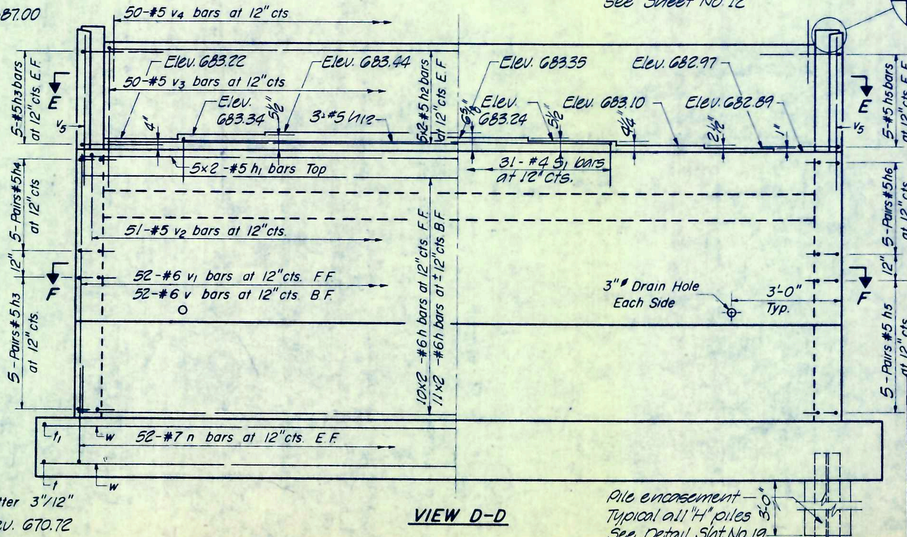
BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	42	#6	26'-6"	
h_1	10	#5	26'-6"	
h_2	20	#5	25'-3"	
h_3	20	#5	3'-6"	L
h_4	20	#5	5'-3"	L
h_5	20	#5	3'-6"	L
h_6	20	#5	5'-3"	L
h_7	10	#4	5'-6"	
h_8	20	#5	20'-6"	
h_9	10	#5	18'-0"	
h_{10}	20	#5	3'-3"	
h_{11}	4	#6	16'-0"	
h_{12}	3	#5	30'-0"	
n	120	#7	4'-10"	U
p	20	#7	26'-6"	
s	46	#4	12'-5"	BC
s_1	31	#4	4'-9"	
t	64	#10	8'-3"	
t_1	54	#6	8'-3"	
v	52	#6	9'-6"	
v_1	52	#6	9'-8"	
v_2	51	#5	8'-11"	
v_3	50	#5	11'-3"	
v_4	141	#5	2'-6"	
v_5	10	#4	6'-0"	
v_6	16	#5	15'-2"	
v_7	22	#5	16'-0"	
v_8	24	#5	5'-3"	
w	32	#5	27'-0"	

	Lbs.	
Reinforcement Bars	14,060	
Class X Concrete	Cu Yds.	122.5
Steel Piles HP10x42	118	1188
Concrete Piles	404	404



TYPICAL ANCHOR BOLT DETAIL



VIEW D-D

LOAD FACTOR DESIGN
f'_c = 3500 psi
f_y = 40,000 psi

ABUTMENT #1 - S.B. LANES

REVISIONS		
NO.	DATE	INITIALS
1		
2		
3		
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F.A. 412 OVER I-80
F.A. 412 SEC. 50-5HB PROJ.
STA. 1028+55.04 (F.A. 412) LA SALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

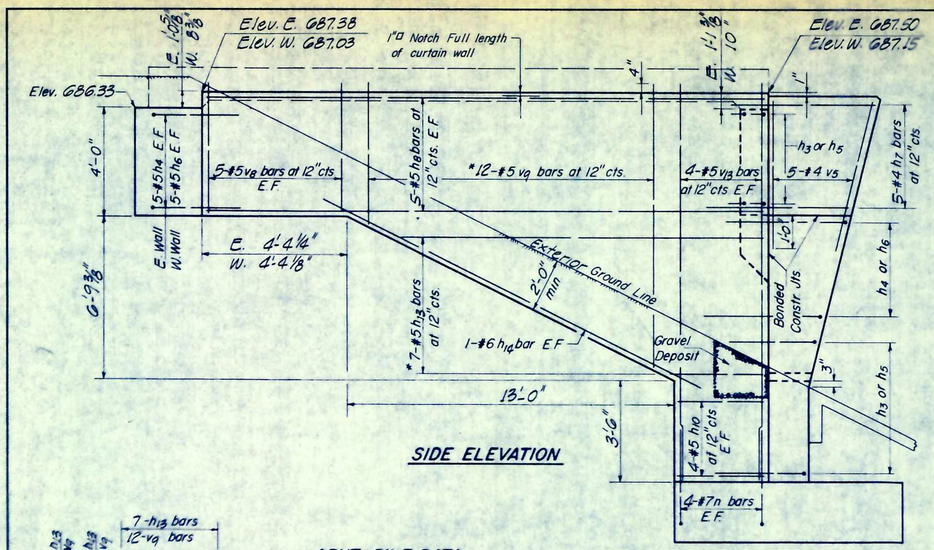
DRAWN BY	DATE JLH 4-75
TRACED BY	DATE MPS 6-75
BOOK NUMBER	
PROJECT NO.	2601-2
SHEET NO.	

VAF-R 3-25-74

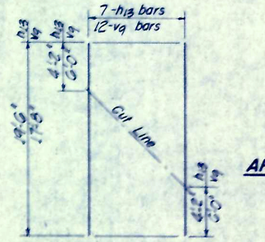
CUSHING COMPANY

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	50-5HB	LaSalle	156	65
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

Sheet No. 22 of 25 Sheets



SIDE ELEVATION



FIELD CUTTING DIAGRAM

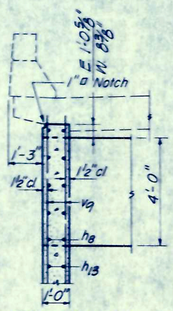
*Order h13 & v9 bars full length. Cut to fit as shown and use remainder of bars in other face.

ABUT.-PILE DATA

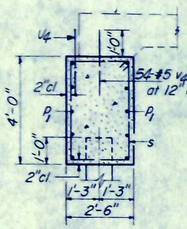
Type -HP10x42
Capacity -Drive to refusal
Est Length -58 Feet
No Reqd -23+1 Test Pile

APPR. BENT - PILE DATA

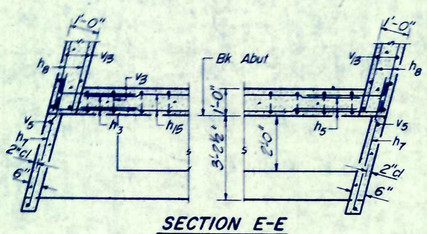
Type -Concrete
Capacity -25 Ton
Est Length -44'
No Reqd -9



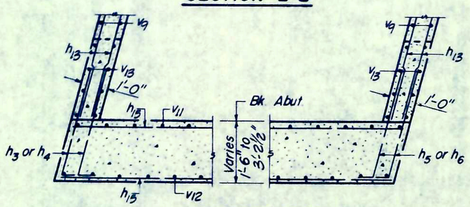
SECTION C-C



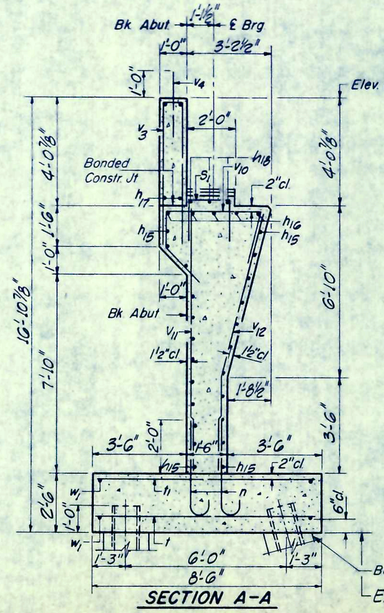
SECTION B-B



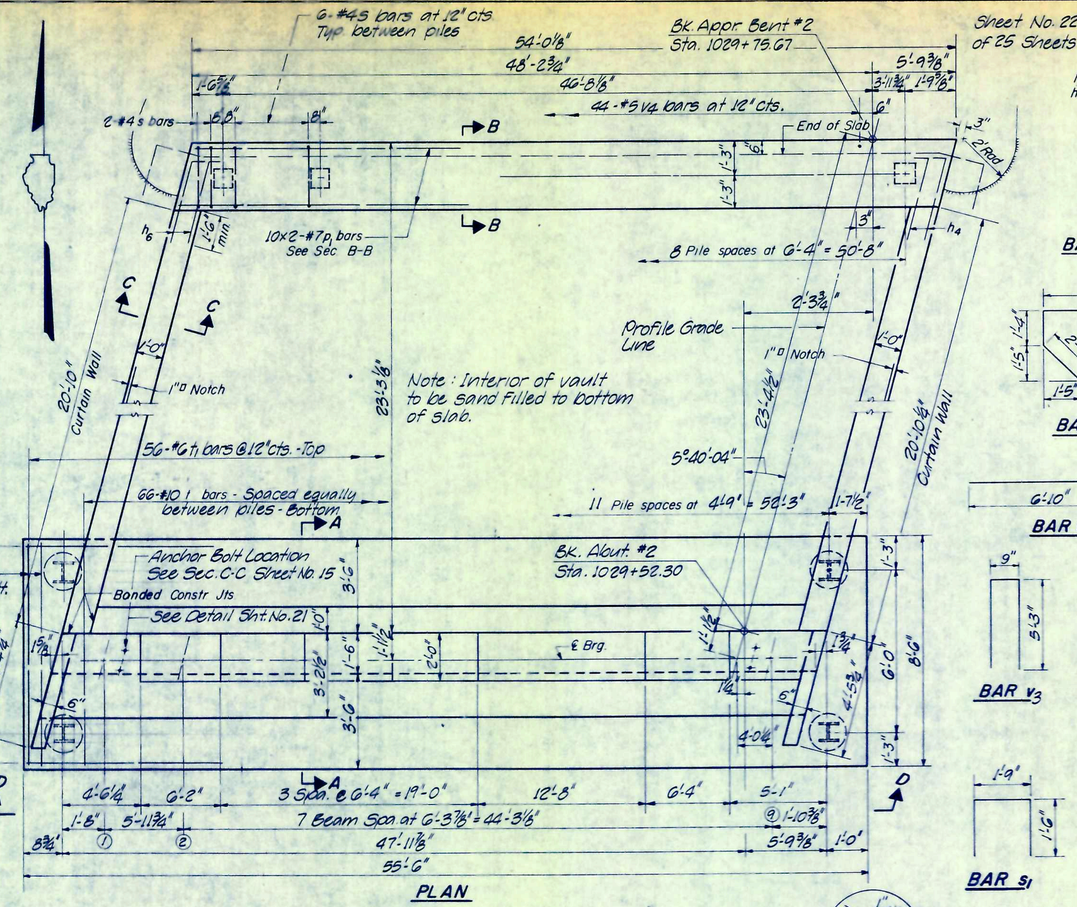
SECTION E-E



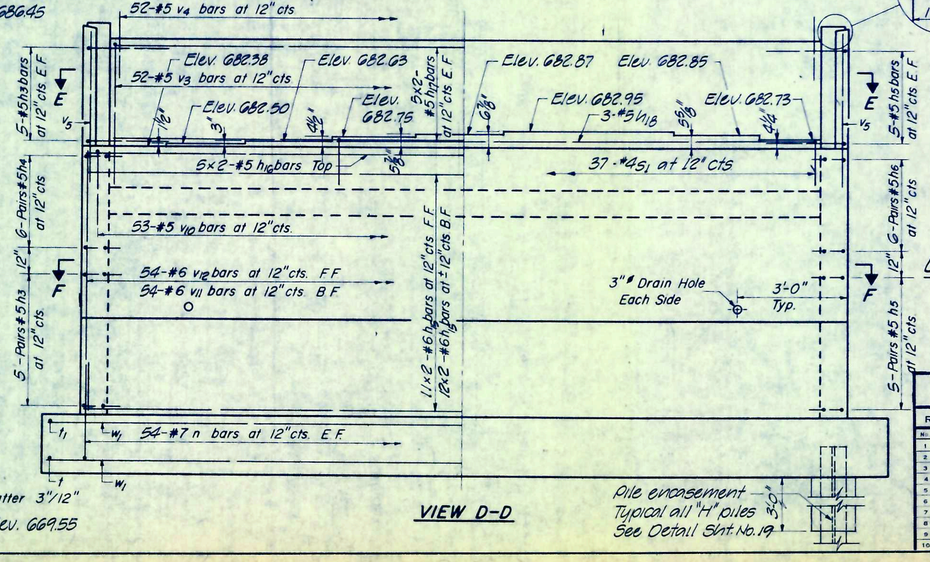
SECTION F-F



SECTION A-A



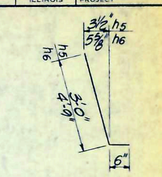
PLAN



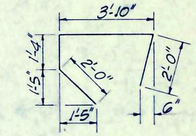
VIEW D-D

Pile encasement Typical all "H" piles See Detail Sht. No. 19

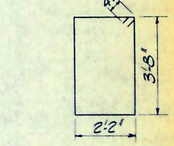
BARS h3 & h4



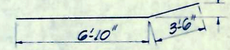
BARS h5 & h6



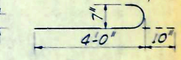
BAR v10



BAR s



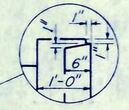
BAR v12



BAR n

BAR v3

BAR s1



Note: For Electrical Conduit Location detail see Sheet No. 12

LOAD FACTOR DESIGN

f'c = 3500 psi
fy = 40,000 psi

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h3	20	#5	3'-6"	L
h4	22	#5	5'-3"	L
h5	20	#5	3'-6"	L
h6	22	#5	5'-3"	L
h7	10	#4	3'-6"	—
h8	20	#5	20'-6"	—
h10	16	#5	3'-3"	—
h13	14	#5	19'-6"	—
h14	4	#6	17'-5"	—
h15	46	#6	27'-6"	—
h16	10	#5	27'-6"	—
h17	20	#5	20'-6"	—
h18	3	#5	36'-6"	—
n	124	#7	4'-10"	—
p1	20	#7	28'-0"	—
s	52	#4	12'-5"	—
s1	37	#4	4'-9"	—
t	70	#10	8'-3"	—
t1	56	#6	8'-3"	—
v3	32	#5	11'-3"	—
v4	150	#5	2'-6"	—
v5	10	#4	6'-0"	—
v8	20	#5	5'-3"	—
v9	24	#5	17'-5"	—
v10	53	#5	9'-2"	—
v11	54	#6	10'-2"	—
v12	54	#6	10'-6"	—
v13	16	#5	15'-10"	—
w1	32	#5	28'-3"	—

Reinforcement Bars	Lbs	15,220
Class X Concrete	Cu Yds.	130.5
Steel Piles HP10x42	Lin. Ft.	1334
Concrete Piles	Lin. Ft.	396
Test Piles, Steel	Each	1

ABUTMENT #2 - S.B. LANES

REVISIONS		
NO.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

DRAWN BY JCH DATE 4-75
CHECKED BY MPS DATE 6-75
BOOK NUMBER
PROJECT NO 2601-2
SHEET NO

F.A. 412 OVER I-80
F.A. 412 SEC. 50-5HB PROJ.
STA. 1028+55.04 (F.A. 412) LA SALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

VAF-R 3-25-74

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	50-5HB	LaSalle	156	66
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

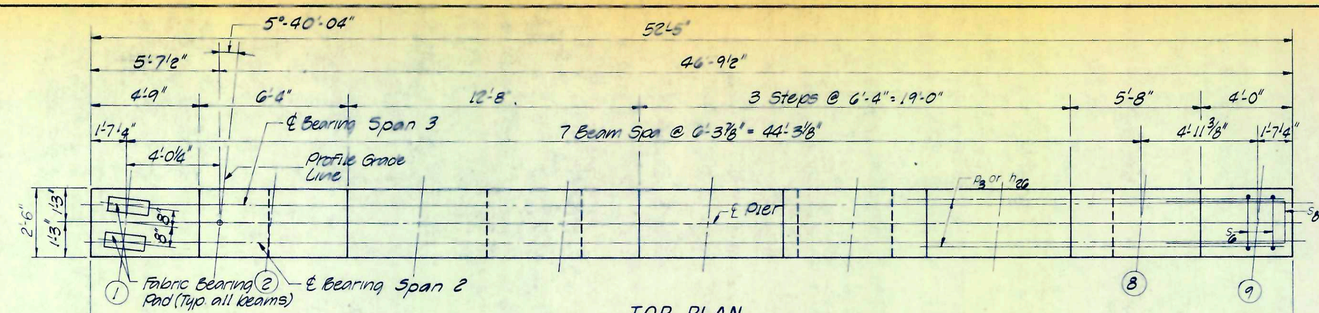
Sheet No. 23 of 25 Sheets

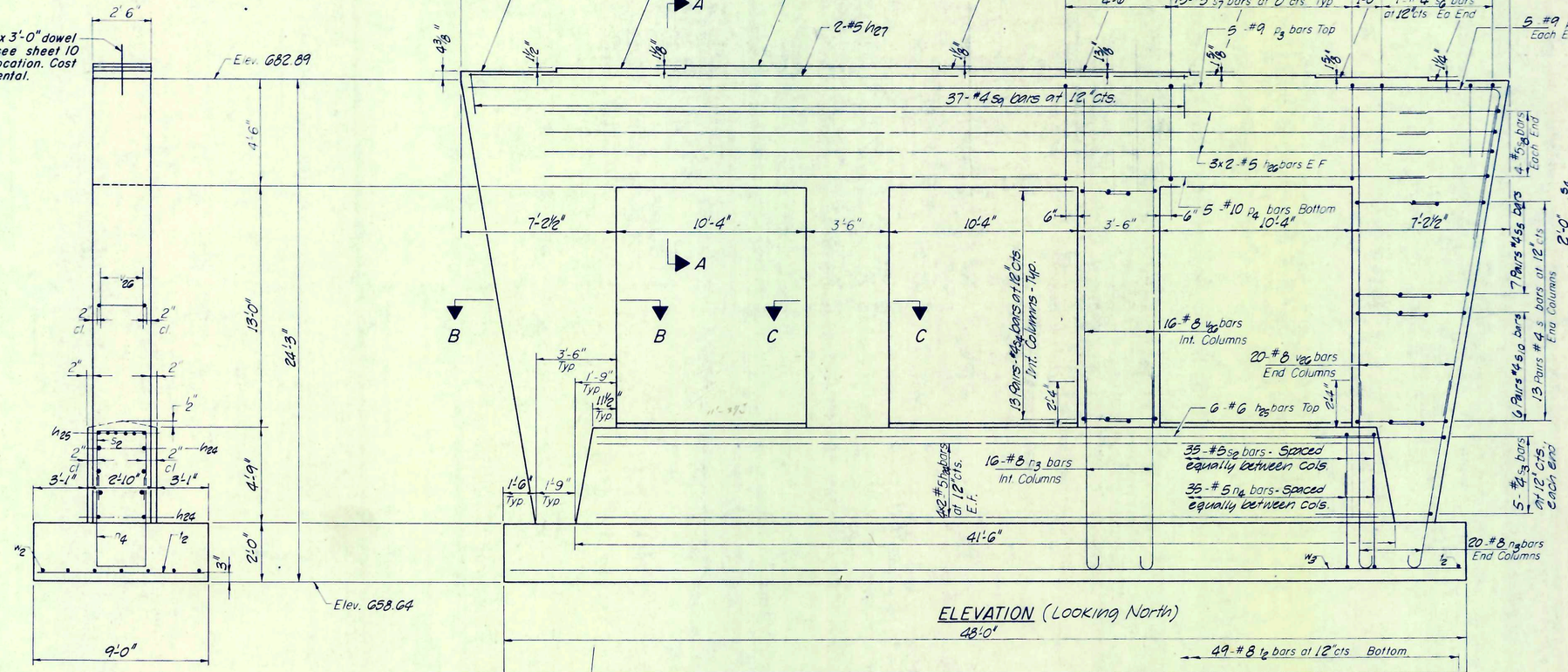
NOTES

Space reinforcement in cap to miss dowel rods.
All edges shall have standard ¾ chamfers except as noted.
Pour steps monolithically with cap.

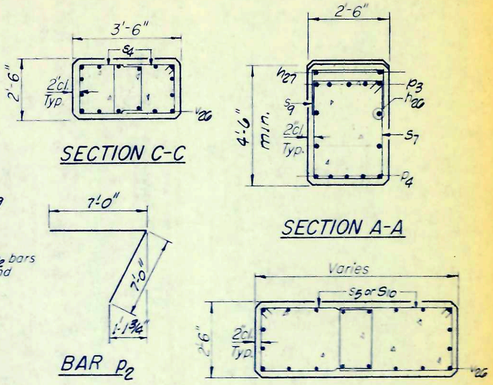
LOAD FACTOR DESIGN

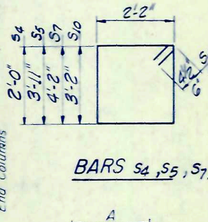
f'_c = 3500 psi
f_y = 40,000 psi

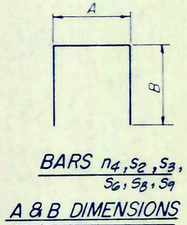




Max. Soil Pressure = 6.5 K/sf

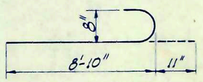






A & B DIMENSIONS

Bar	A	B
n_4	2'-6"	4'-8"
s_2	2'-6"	2'-10
s_3	2'-2"	4'-6"
s_6	2'-2"	3'-6"
s_8	2'-0"	5'-0"
s_9	2'-2"	1'-6"



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
n_{24}	16	#5	20'-4"	
h_{25}	6	#6	39'-7"	
h_{26}	12	#5	23'-5"	
h_{27}	2	#5	36'-0"	
n_3	72	#8	9'-9"	
n_4	35	#5	11'-10"	
p_2	10	#9	14'-0"	
p_3	5	#9	44'-0"	
p_4	5	#10	44'-0"	
s_2	35	#5	8'-2"	
s_3	10	#4	11'-2"	
s_4	32	#4	9'-1"	
s_5	28	#4	12'-11"	
s_6	14	#4	9'-2"	
s_7	45	#5	13'-8"	
s_8	8	#5	12'-0"	
s_9	37	#4	5'-2"	
s_{10}	24	#4	11'-5"	
t_2	49	#8	8'-8"	
v_{26}	72	#8	16'-6"	
w_3	20	#5	25'-0"	
Class X Concrete		Cu. Yds.	99.2	
Reinforcement Bars		Lbs.	12,430	

PIER - N.B. LANES

REVISIONS		
No.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

DRAWN BY JLH 6-75
CHECKED BY MPB 6-75
BOOK NUMBER
PROJECT NO. 2601-2
SHEET NO.

F.A. 412 OVER I-80
F.A. 412 SEC. 50-5HB PROJ.
STA. 1028+55.04 (F.A. 412) LA SALLE CO.

HOMER L CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

CURRING & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA412	50-5HB	LaSalle	156	67
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

Sheet No. 24 of 25Sheets

NOTES

Space reinforcement in cap to miss dowel rods.

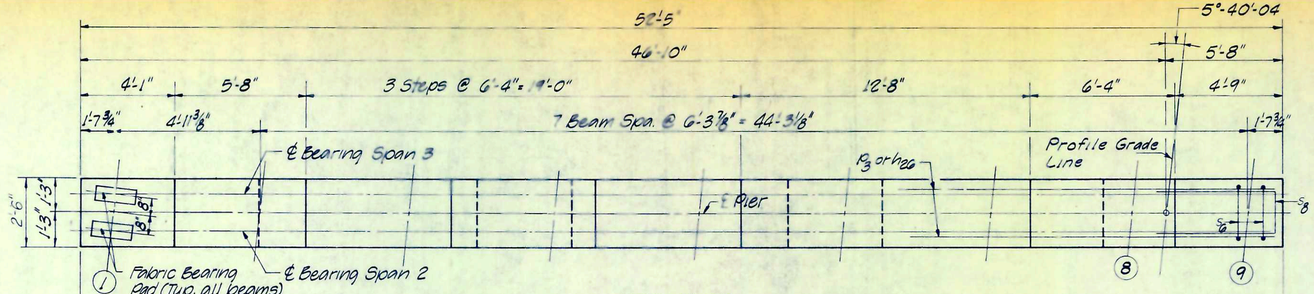
All edges shall have standard $\frac{3}{4}$ chamfers except as noted.

Pour steps monolithically with cap.

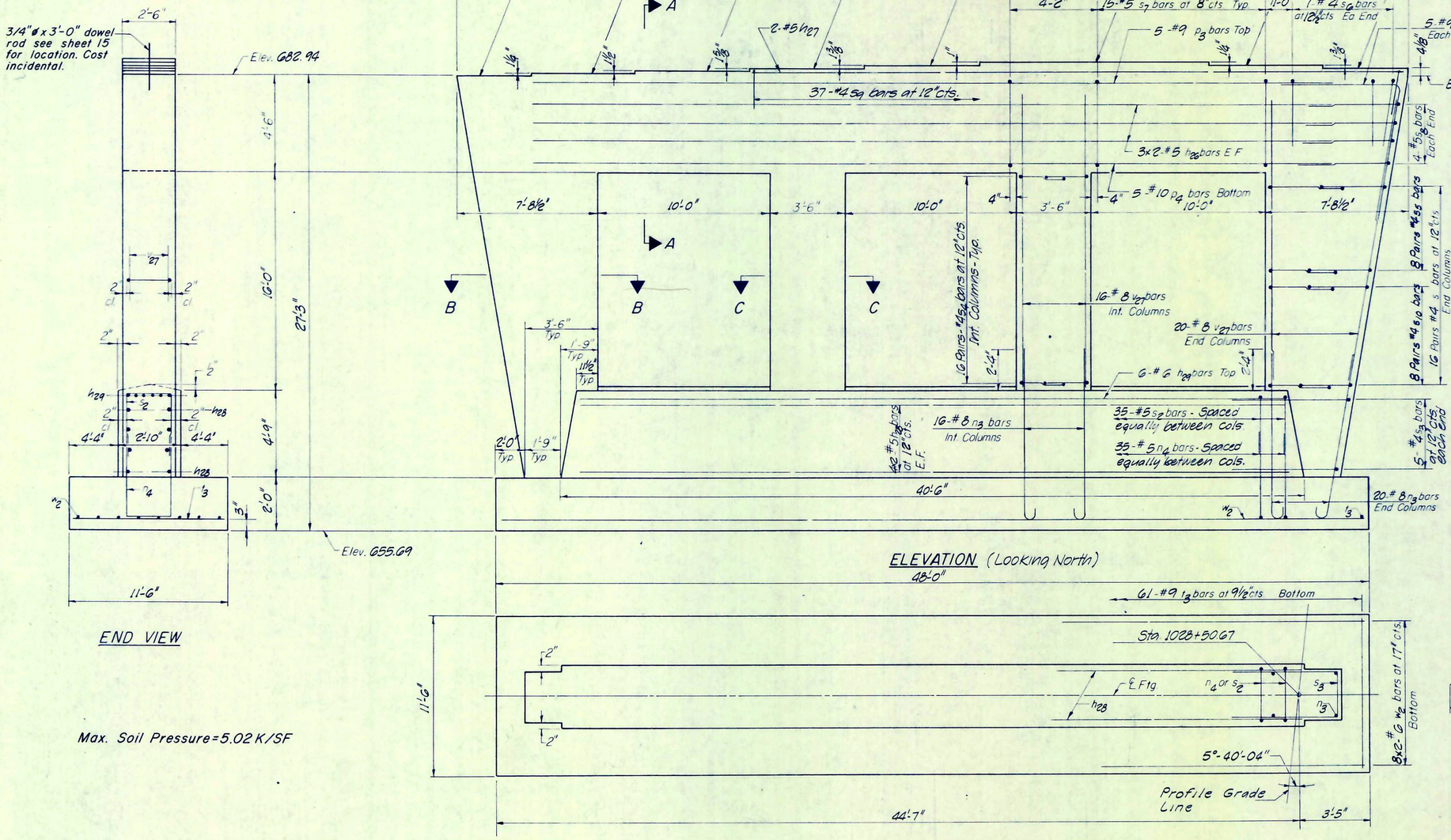
LOAD FACTOR DESIGN

f'_c = 3500 psi

f_y = 40,000 psi



TOP PLAN

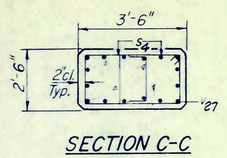


END VIEW

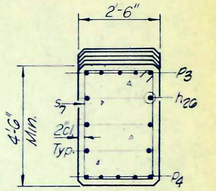
Max. Soil Pressure = 5.02 K/SF

ELEVATION (Looking North)

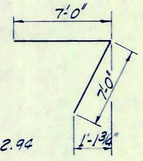
FOOTING PLAN



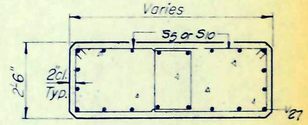
SECTION C-C



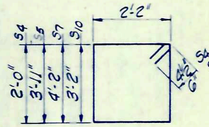
SECTION A-A



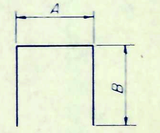
BAR P_2



SECTION B-B



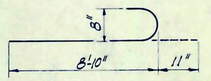
BARS s_4, s_5, s_7, s_{10}



BARS $n_4, s_2, s_3, s_6, s_8, s_9$

A & B DIMENSIONS

Bar	A	B
n_4	2'-6"	4'-8"
s_2	2'-6"	2'-10"
s_3	2'-2"	4'-6"
s_6	2'-2"	3'-6"
s_8	2'-0"	5'-0"
s_9	2'-2"	11'-6"



BAR n_3

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
n_{26}	12	#5	23'-3"	
h_{27}	2	#5	35'-0"	
h_{28}	16	#5	20'-0"	
h_{29}	6	#6	38'-7"	
n_3	72	#8	9'-9"	
n_4	35	#5	11'-10"	
P_2	10	#9	14'-0"	
P_3	5	#9	44'-0"	
P_4	5	#10	44'-0"	
s_2	35	#5	8'-2"	
s_3	10	#4	11'-2"	
s_4	64	#4	9'-1"	
s_5	32	#4	12'-11"	
s_6	16	#4	9'-2"	
s_7	45	#5	13'-8"	
s_8	8	#5	12'-0"	
s_9	37	#4	5'-2"	
s_{10}	32	#4	11'-5"	
t_3	61	#9	11'-2"	
v_{27}	72	#8	19'-6"	
w_2	16	#6	25'-0"	
Class X Concrete		Cu. Yds.	113.2	
Reinforcement Bars		Lbs.	14,430	

SEE REVISED DESIGN NEXT PAGE

REVISIONS		
No.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PIER - S.B. LANES

DRAWN BY DATE: JLH 6-75

CHECKED BY DATE: MPS 6-75

BOOK NUMBER

PROJECT NO. 2601-2

SHEET NO.

F.A. 412 OVER I-80
F.A. 412 SEC. 50-5HB PROJ.
STA. 1028+55.04 (F.A. 412) LA SALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

CURRING & COMPANY

NOTES

Coarse reinforcement in cap to match dowel rods.

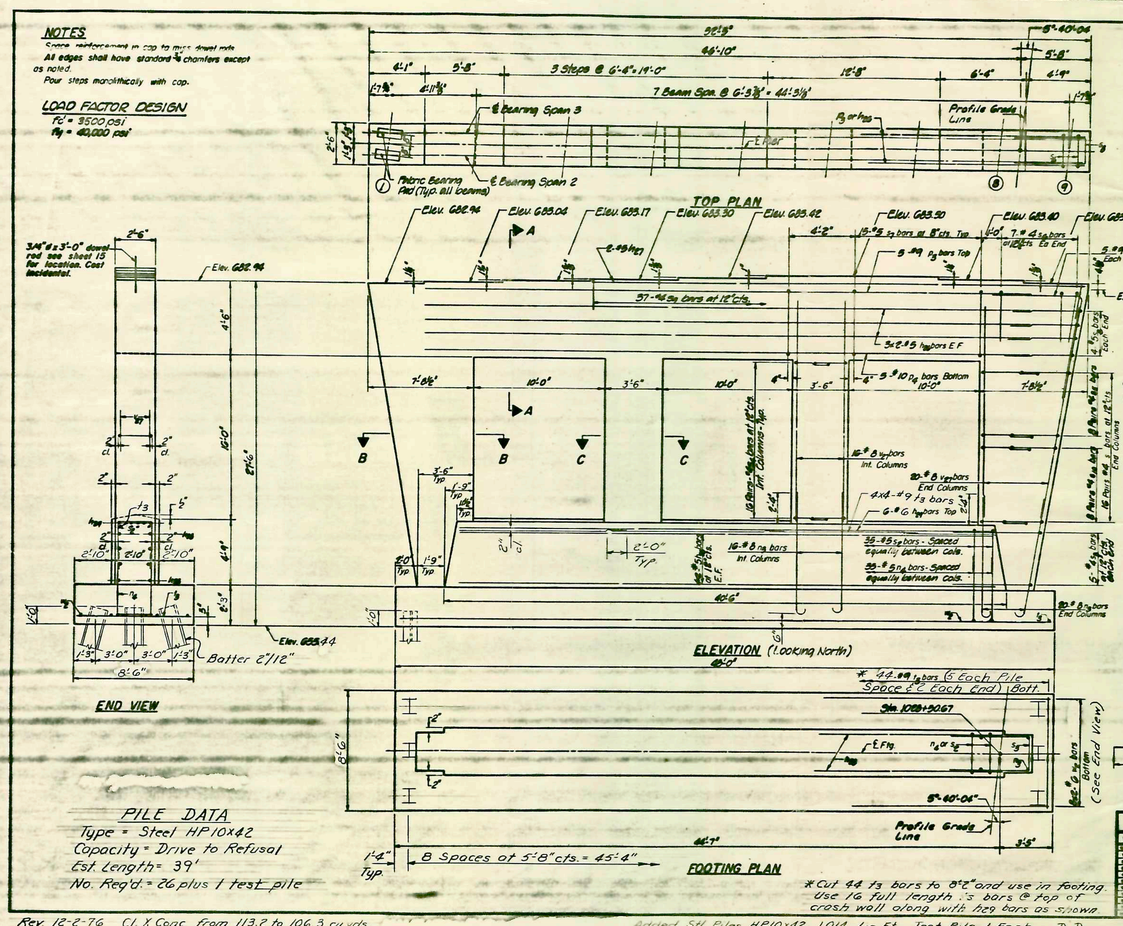
All edges shall have standard ¾" chamfers except as noted.

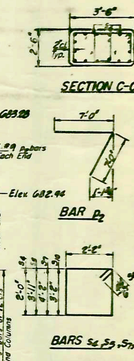
Pour steps monolithically with cap.

LOAD FACTOR DESIGN

f'_c = 3500 psi

f_y = 40,000 psi





BILL OF MATERIAL

Bar	No.	Size	Length	Shape
P1	72	#8	42'-8"	
P2	35	#5	11'-10"	
P3	10	#9	140'-0"	
P4	3	#8	44'-7"	
P5	5	#10	44'-0"	
S1	55	#5	8'-5"	
S2	10	#6	11'-6"	
S3	64	#4	9'-1"	
S4	32	#6	12'-11"	
S5	18	#4	9'-1"	
S6	49	#5	15'-5"	
S7	8	#5	12'-0"	
S8	37	#6	5'-2"	
S9	32	#4	11'-9"	
P6	60	#8	1'-1 1/2"	
P7	72	#8	19'-6"	
P8	16	#6	85'-0"	
Class X Concrete			Cu Yds.	106.3
Reinforcement Bars			Lbs.	18430
Steel Piles HP10X42			L.F.	1014
Test Pile (Steel)			Ea.	1

Bar	A	B
P1	5'-6"	5'-6"
P2	2'-6"	2'-6"
P3	2'-6"	2'-6"
P4	2'-6"	2'-6"
P5	2'-6"	2'-6"
P6	2'-6"	2'-6"
P7	2'-6"	2'-6"
P8	2'-6"	2'-6"
P9	2'-6"	2'-6"
P10	2'-6"	2'-6"
P11	2'-6"	2'-6"

PIER - S.B. LANES

REVISIONS

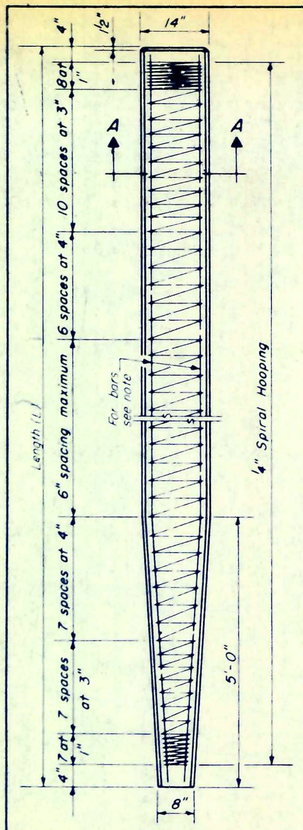
FA RTE 882 (IR) Sec. 82-1-R
STATE OF ILLINOIS DEPT. OF TRANSPORTATION
HOMER L. CHRISTNER & ASSOCIATES CONSULTING ENGINEERS SPRINGFIELD, ILLINOIS

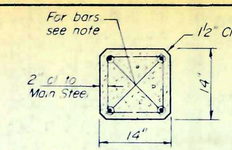
Sheet No. 24 of 25 Sheets
Contract No. 82-1-R
Job No. 82-1-R
Structure No. 82042

Rev. 12-2-76 Cl. X Conc. from 113.2 to 106.3 cu yds., Added 54 Piles HP10x42, 1,014 Lin. Ft., Test Pile 1 Each D.D.

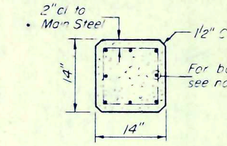
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-5HB	LaSalle	156	68
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

SHEET NO. 25
25 SHEETS





SECTION A-A
FOR PILES UNDER 45' LONG



SECTION A-A
FOR PILES 45' OR MORE

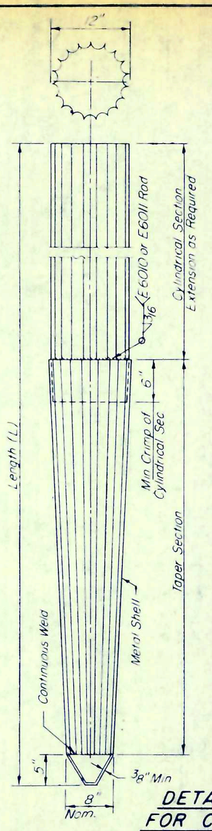


TIP

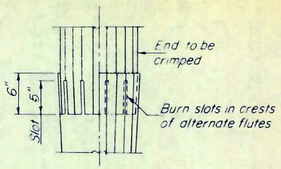
Note For 14" Piles 45' long or more use 8-#8 bars 4 for the full length and 4 to the point of bevel. For 14" Piles under 45' long use 4-#9 bars full length.

Handling: For Pile lengths up to 45', use two slings placed at a distance of 0.21 L from each end. For Piles longer than 45', use three slings placed at a distance of 0.12 L from each end and at mid point of pile.

DETAIL OF PRECAST CONCRETE PILES

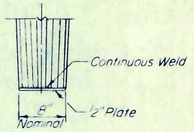


DETAIL OF TAPERED METAL SHELLS FOR CAST IN PLACE CONCRETE PILES



FIELD CRIMP DETAIL

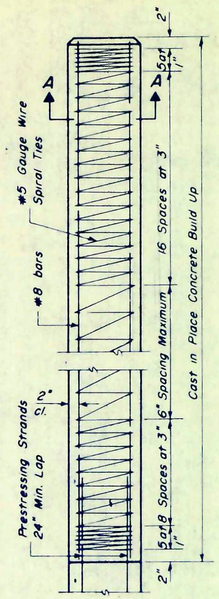
Note 6" Crimp shall either be supplied on the cylindrical section or made in the field as detailed.



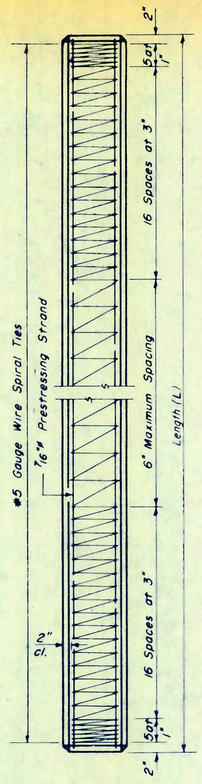
OPTIONAL FLAT END

ALLOWABLE TAPER SECTIONS
10' Length - Taper 1" in 2'-6"
17' Length - Taper 1" in 4'-0"
25' Length - Taper 1" in 7'-0"
30' Length - Taper 1" in 7'-0"

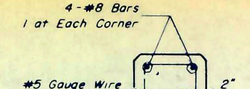
NOTE:
The thickness of the shell shall be 0.1793 inches with a tolerance of 5%.



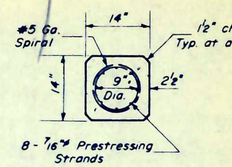
PILE BUILD UP



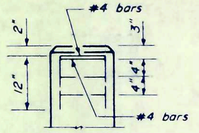
PILE PLAN



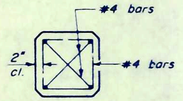
SECTION A-A



SECTION THRU PILE



ELEVATION
(End Reinforcement)



PLAN
(End Reinforcement)

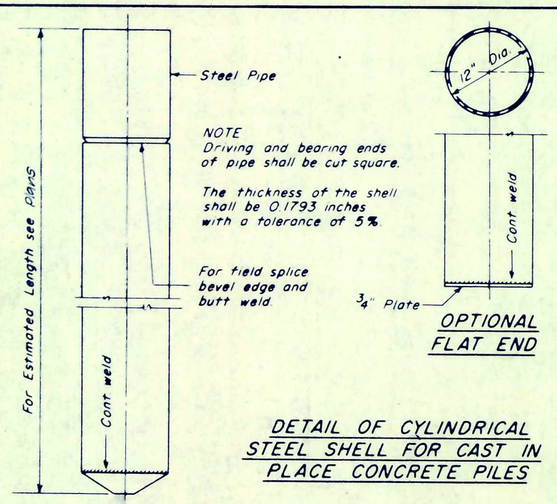
DESIGN STRESSES
f'c = 5,000 psi.
f'ci = 4,000 psi.
f's = 268,000 psi. (31,000 lbs.)
f'si = 188,000 psi. (21,700 lbs.)

NOTES

Prestressing steel shall be non-galvanized extra high strength stress-relieved 7-wire strand. The nominal diameter shall be 7/16" and the minimum nominal cross-sectional area shall be 0.1155 square inch.

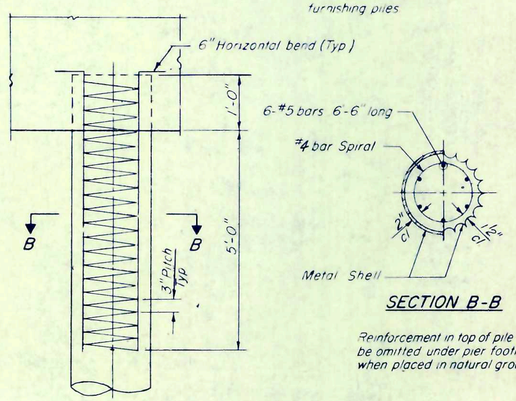
For Pile lengths up to 65', use two slings placed at a distance of 0.21 L * from each end. For Piles longer than 65', use three slings placed at a distance of 0.12 L * from each end and at mid-point of pile. * L = Over all length of pile to be handled.

PRECAST PRESTRESSED CONCRETE PILE



OPTIONAL FLAT END

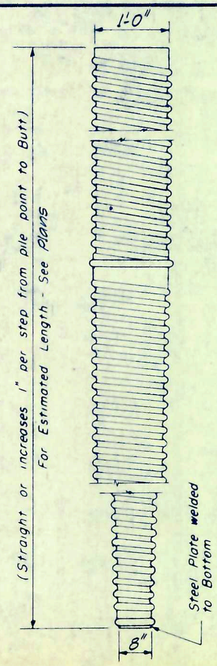
DETAIL OF CYLINDRICAL STEEL SHELL FOR CAST IN PLACE CONCRETE PILES



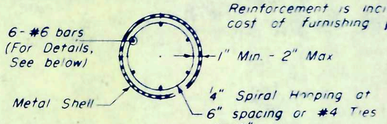
SECTION B-B

Reinforcement in top of pile shall be omitted under pier footings when placed in natural ground

DETAIL OF REINFORCEMENT FOR METAL SHELLS

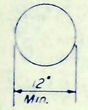


PILE REINFORCEMENT



SECTION A-A

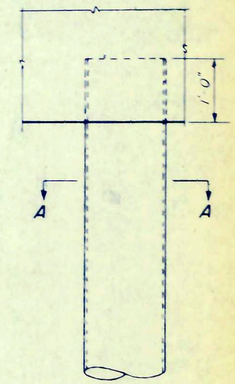
At least 10% of the length of pile shall have a Butt diameter equal to or greater than 12"
Gauges are furnished to suit soil conditions (16 Gauge avg. min.)



BUTT



POINT
(Applies only to Step Taper type pile)



DETAIL OF MANDREL DRIVEN STRAIGHT OR STEP-TAPER PILES FOR CAST IN PLACE CONCRETE PILES

4-15-74

PILE DETAILS

REVISIONS		
No.	DATE	INITIALS
1		
2		
3		
4		
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10		

F.A. 412 OVER I-80
F.A. 412 SEC. 50-5HB PROJ.
STA. 1028+55.04 (F.A. 412) LA SALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

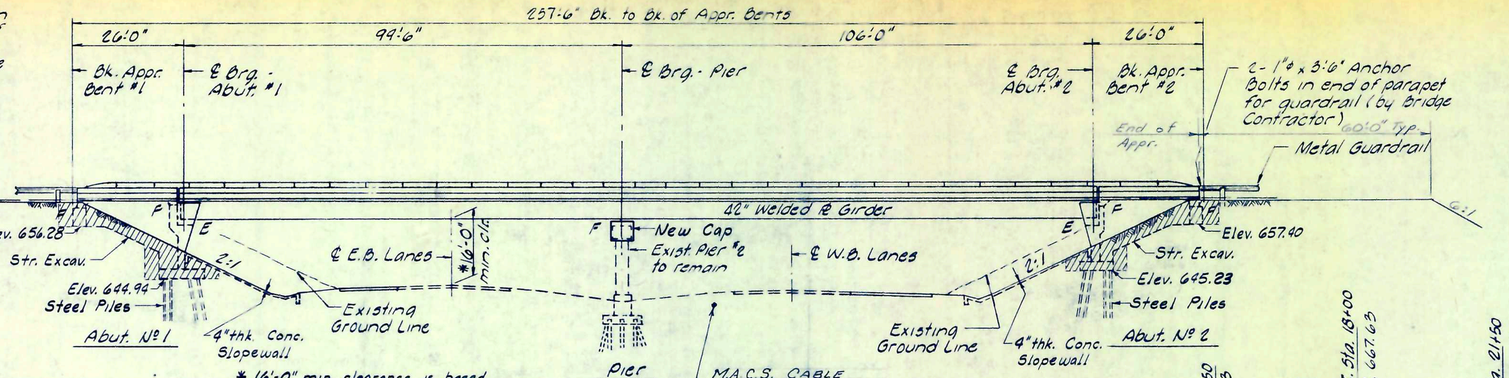
DRAWN BY DATE	T.J.E. 6-75
CHECKED BY DATE	JWC 6-75
BOOK NUMBER	
PROJECT NO.	2601-2
SHEET NO.	

Sheet No 1 of 12 Sheets

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	50-2HB-3(R)	LaSalle	156	68
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

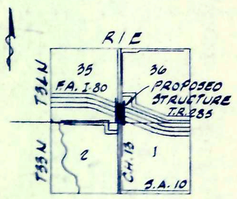
Bench Mark:
B.M. "SA-3-60 Common nail in first RR east of County highway to Troy Grove on the north side of I-80 frontage road, 155' Lt. of Sta. 739+59 Elev. 641.64

Existing Structure to be removed except for center pier which is to remain. P.P. Conc. Beams shall be salvaged and become property of the State

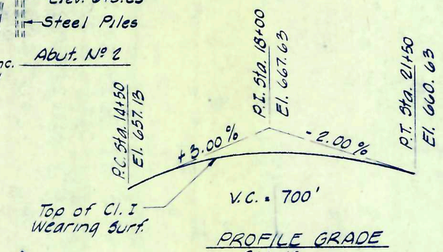


ELEVATION

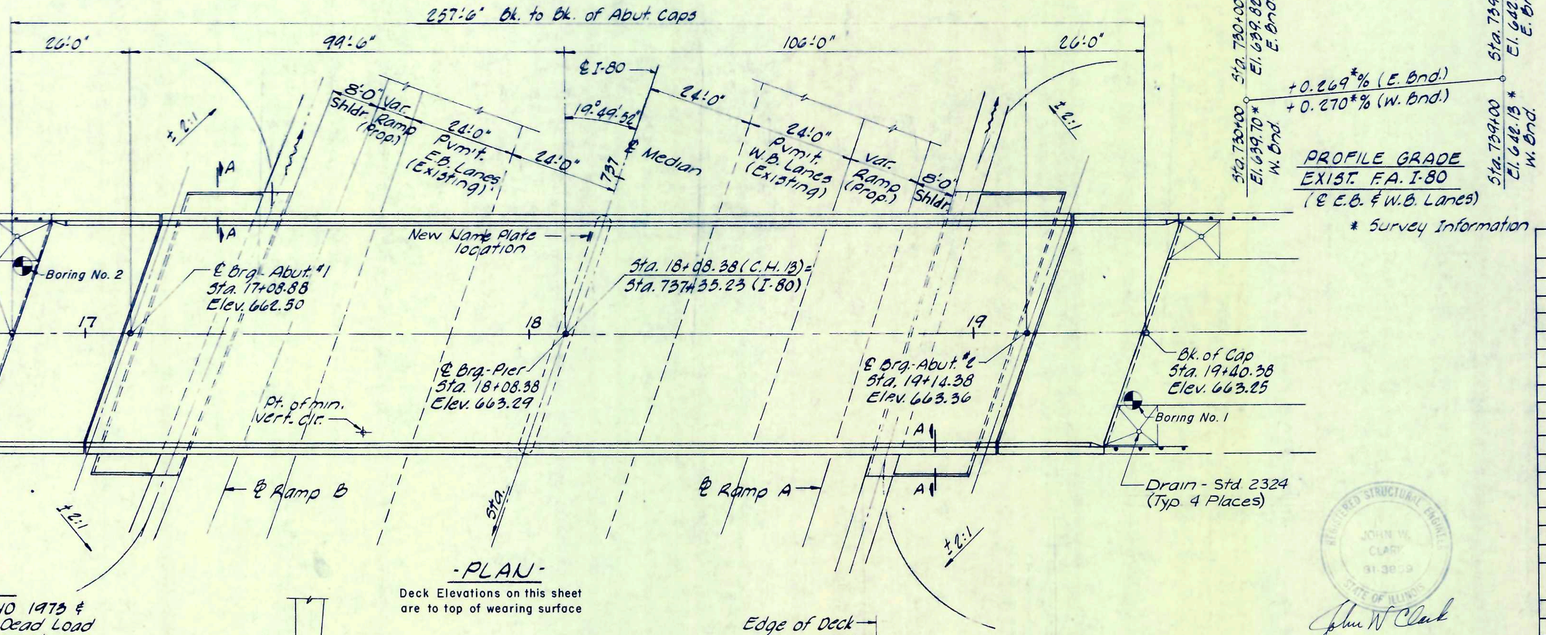
* 16'-0" min clearance is based on proposed 3" Cl. I resurfacing of I-80. The proposed 3" Cl. I resurfacing shall be removed prior to a second resurfacing.



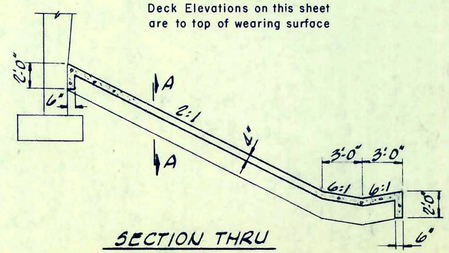
BRIDGE LOCATION



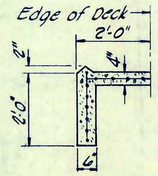
PROFILE GRADE
C.H. 13
(℄ Rdwy.)



-PLAN-
Deck Elevations on this sheet are to top of wearing surface



SECTION THRU SLOPEWALL



SECTION A-A

PROFILE GRADE
EXIST. F.A. I-80
(℄ E.B. & W.B. Lanes)
* Survey Information

GENERAL NOTES

1. It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.
2. All reinforcement bars shall be lapped 24 diameters unless otherwise shown.
3. Fasteners shall be high strength bolts. Bolts 3/4" ø; open holes 13/16" ø, unless otherwise noted.
4. Calculated weight of Structural Steel = 125,730 LBS. M183
   113,410 LBS. M222
5. The basic lead silico chromate paint system shall be used for shop and field painting of Structural Steel.
6. Field welding of construction accessories will not be permitted to the bottom flange of girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.
7. Anchor bolts shall be set before bolting diaphragms over supports.
8. Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58 lbs. per 100 sq.ft.
9. The Contractor shall drive one (1) Steel HP 8x36 Test Pile in a permanent location at Abutment No.2 as directed by the Engineer before ordering the remainder of piles.
10. The concrete rail section above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.
11. Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.
12. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of ±1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/8" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.
13. For Soil Boring Data see Special Provisions.
14. Existing Name Plate shall be salvaged, cleaned and relocated as shown on Sheet 12. Cost of work is incidental.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPERSTR.	SUBSTR.	TOTAL
Sand Backfill	Cu. Yds.	——	202	202
Removal of Existing Structure	Each	——	——	1
Concrete Removal	Cu. Yds.	——	16.7	16.7
Structure Excavation	Cu. Yds.	——	368	368
Class X. Concrete	Cu. Yds.	313.3	191.8	505.1
Structural Steel	L. S.	1	——	1
Stud Shear Connectors	Each	1,740	——	1,740
Aluminum Railing	Lin. Ft.	509	——	509
Reinforcement Bars	Lbs.	75,700	22,210	97,910
Steel Piles HP8x36	Lin. Ft.	——	867	867
Test Piles HP8x36	Each	——	1	1
Name Plates	Each	——	1	1
Slope Wall 4"	Sq. Yds.	——	258	258
Preformed Joint Sealer 4"	Lin. Ft.	76.5	——	76.5
Bituminous Concrete Suface Course, Mixture D, Class I	Tons	75	——	75
Protective Coat	Sq. Yds.	191	——	191
Waterproofing Membrane System	Sq. Yds.	931	——	931
To be included in Sec. 50-5				

DESIGN LOADING

Live Load H S 20-44 AASTHO 1973 & 1974 Interim Specifications. Dead Load includes 25 lbs./sq. ft. of roadway for future wearing surface.

DESIGN STRESSES

fc = 1400 p.s.i. Substructure, Curb & Parapet
fc = 1200 p.s.i. Superstructure Slab

fs = 20,000 p.s.i. Reinforcing Steel
fs = 20,000 & 27,000 p.s.i. Structural Steel
n = 10

LIVE LOAD DEFLECTION

L/1200 for Composite Construction

STATION 18+08.38
BUILT 197 BY
STATE OF ILLINOIS
F.A. 412 SEC. 50-2HB-3R
F.A. PROJECT EBRF-412-4(18)
LOADING H S 20

LETTERING FOR NAME PLATE
(See Std. 2113)
(Curve to fit column)

JOHN W. CLARK 31-30-73 STATE OF ILLINOIS
John W Clark

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

REVISIONS		
No.	DATE	INITIALS
1		
2		
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GENERAL PLAN AND ELEVATION

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

C.H. 13 OVER F.A. I-80
F.A.P. 4/6 SEC. 50-2 HB-3(R) PROJ.
STA. 18+08.38 (C.H. 13) LASALLE CO.

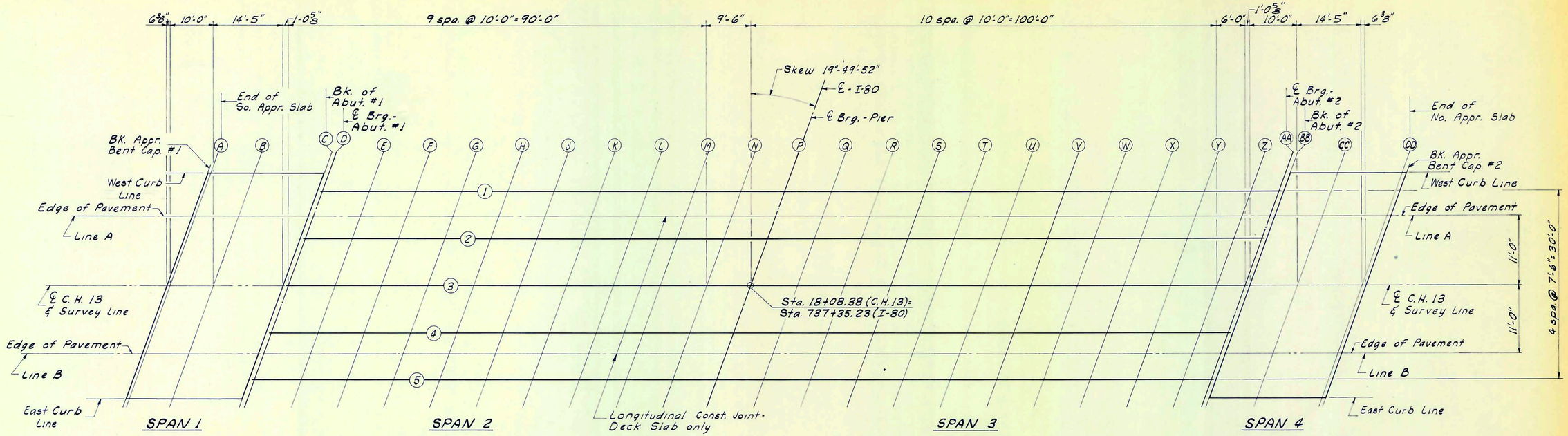
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY RFS DATE 10/74
CHECKED BY R.O.B. DATE 5-75
BOOK NUMBER
PROJECT NO. 2601-1
SHEET NO.

Rev. Reinf. Bars Sub from 22,110# to 22,210#, Total from 97,810# to 97,910# 3-17-76 A.H.

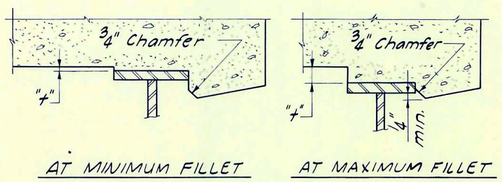
Sheet No. 2
of 12 Sheets

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	50-2HB-3(R)	LaSalle	156	68A
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



-PLAN-

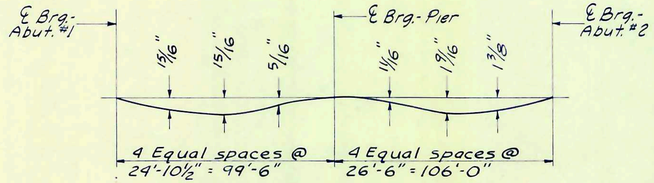
See Structural Framing Plan (sh. #7) for transverse Spacing of Girders



AT MINIMUM FILLET AT MAXIMUM FILLET

FILLET HEIGHTS

To determine "t" After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the "Elevation Adjusted for Dead Load Deflection" shown on sheet #3 minus slab thickness, equals the fillet heights "t" above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only)

NOTE: The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown on sheet #3

TOP OF SLAB ELEVATIONS

REVISIONS		
No.	DATE	INITIALS
1		
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7		
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9		
10		

DRAWN BY DATE: T.J.E 2-75
CHECKED BY DATE: J.W.C 5-75
BOOK NUMBER:
PROJECT NO: 2601-1
SHEET NO:

C.H. 13 OVER F.A.I-80
F.A.P. 412 SEC. 50-2 HB-3(R) PROJ.
Sta. 18+08.38 (C.H. 13) LASALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.R. 12	50-2HB-3(R)	LaSalle	156	688
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

SPAN 1&2

LINE	BEAM OR GIRDER	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
A	W CURB	1689.270	16.250	661.857	661.857
(End of	LINE A	1687.377	11.000	661.942	661.942
Appr. Slab)	CL	1683.410	0.000	662.062	662.062
	LINE B	1679.443	-11.000	661.836	661.836
	E CURB	1677.550	-16.250	661.701	661.701
B	W CURB	1699.270	16.250	661.983	661.983
	LINE A	1697.377	11.000	662.069	662.069
	CL	1693.410	0.000	662.191	662.191
	LINE B	1689.443	-11.000	661.969	661.969
	E CURB	1687.550	-16.250	661.835	661.835
C	W CURB	1713.687	16.250	662.151	662.151
(Bk Abut #1)	LINE A	1711.794	11.000	662.239	662.239
	CL	1707.827	0.000	662.366	662.366
	LINE B	1703.860	-11.000	662.147	662.147
	E CURB	1701.966	-16.250	662.015	662.015
D	G-1	1714.290	15.000	662.184	662.184
(℄ Brg.	LINE A	1712.847	11.000	662.251	662.251
Abut. 1)	G-2	1711.585	7.500	662.291	662.291
	G-3	1708.880	0.000	662.378	662.378
	G-4	1706.175	-7.500	662.229	662.229
	LINE B	1704.913	-11.000	662.160	662.160
	G-5	1703.470	-15.000	662.059	662.059
E	G-1	1724.290	15.000	662.292	662.329
	LINE A	1722.847	11.000	662.360	662.398
	G-2	1721.585	7.500	662.401	662.439
	G-3	1718.880	0.000	662.489	662.527
	G-4	1716.175	-7.500	662.343	662.381
	LINE B	1714.913	-11.000	662.274	662.312
	G-5	1713.470	-15.000	662.175	662.213
F	G-1	1734.290	15.000	662.392	662.460
	LINE A	1732.847	11.000	662.461	662.530
	G-2	1731.585	7.500	662.503	662.572
	G-3	1728.880	0.000	662.594	662.662
	G-4	1726.175	-7.500	662.449	662.517
	LINE B	1724.913	-11.000	662.381	662.450
	G-5	1723.470	-15.000	662.283	662.351
G	G-1	1744.290	15.000	662.485	662.572
	LINE A	1742.847	11.000	662.556	662.642
	G-2	1741.585	7.500	662.599	662.685
	G-3	1738.880	0.000	662.691	662.777
	G-4	1736.175	-7.500	662.548	662.634
	LINE B	1734.913	-11.000	662.481	662.568
	G-5	1733.470	-15.000	662.384	662.470
H	G-1	1754.290	15.000	662.572	662.661
	LINE A	1752.847	11.000	662.643	662.733
	G-2	1751.585	7.500	662.687	662.777
	G-3	1748.880	0.000	662.781	662.871
	G-4	1746.175	-7.500	662.640	662.730
	LINE B	1744.913	-11.000	662.574	662.664
	G-5	1743.470	-15.000	662.478	662.568
J	G-1	1764.290	15.000	662.651	662.730
	LINE A	1762.847	11.000	662.723	662.803
	G-2	1761.585	7.500	662.768	662.848
	G-3	1758.880	0.000	662.864	662.944
	G-4	1756.175	-7.500	662.725	662.805
	LINE B	1754.913	-11.000	662.660	662.740
	G-5	1753.470	-15.000	662.565	662.644
K	G-1	1774.290	15.000	662.723	662.782
	LINE A	1772.847	11.000	662.796	662.855
	G-2	1771.585	7.500	662.842	662.901
	G-3	1768.880	0.000	662.940	662.999
	G-4	1766.175	-7.500	662.803	662.862
	LINE B	1764.913	-11.000	662.739	662.798
	G-5	1763.470	-15.000	662.644	662.704

SPAN 2&3

LINE	BEAM OR GIRDER	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
L	G-1	1784.290	15.000	662.787	662.823
	LINE A	1782.847	11.000	662.862	662.898
	G-2	1781.585	7.500	662.909	662.944
	G-3	1778.880	0.000	663.008	663.044
	G-4	1776.175	-7.500	662.873	662.909
	LINE B	1774.913	-11.000	662.810	662.846
	G-5	1773.470	-15.000	662.717	662.753
M	G-1	1794.290	15.000	662.845	662.861
	LINE A	1792.847	11.000	662.920	662.936
	G-2	1791.585	7.500	662.968	662.984
	G-3	1788.880	0.000	663.070	663.086
	G-4	1786.175	-7.500	662.937	662.953
	LINE B	1784.913	-11.000	662.874	662.890
	G-5	1783.470	-15.000	662.782	662.798
N	G-1	1804.290	15.000	662.896	662.898
	LINE A	1802.847	11.000	662.972	662.974
	G-2	1801.585	7.500	663.021	663.023
	G-3	1798.880	0.000	663.124	663.127
	G-4	1796.175	-7.500	662.993	662.995
	LINE B	1794.913	-11.000	662.932	662.934
	G-5	1793.470	-15.000	662.841	662.843
P	G-1	1813.790	15.000	662.937	662.987
(℄ Pier)	LINE A	1812.347	11.000	663.014	663.014
	G-2	1811.085	7.500	663.064	663.064
	G-3	1808.380	0.000	663.169	663.169
	G-4	1805.675	-7.500	663.040	663.040
	LINE B	1804.413	-11.000	662.979	662.979
	G-5	1802.970	-15.000	662.889	662.889
Q	G-1	1823.790	15.000	662.974	662.987
	LINE A	1822.347	11.000	663.052	663.065
	G-2	1821.085	7.500	663.102	663.115
	G-3	1818.380	0.000	663.210	663.223
	G-4	1815.675	-7.500	663.082	663.095
	LINE B	1814.413	-11.000	663.023	663.036
	G-5	1812.970	-15.000	662.934	662.947
R	G-1	1833.790	15.000	663.003	663.040
	LINE A	1832.347	11.000	663.082	663.119
	G-2	1831.085	7.500	663.134	663.171
	G-3	1828.380	0.000	663.243	663.280
	G-4	1825.675	-7.500	663.118	663.155
	LINE B	1824.413	-11.000	663.059	663.096
	G-5	1822.970	-15.000	662.971	663.008
S	G-1	1843.790	15.000	663.025	663.092
	LINE A	1842.347	11.000	663.106	663.172
	G-2	1841.085	7.500	663.158	663.225
	G-3	1838.380	0.000	663.269	663.336
	G-4	1835.675	-7.500	663.146	663.212
	LINE B	1834.413	-11.000	663.088	663.154
	G-5	1832.970	-15.000	663.001	663.068
T	G-1	1853.790	15.000	663.040	663.138
	LINE A	1852.347	11.000	663.122	663.219
	G-2	1851.085	7.500	663.175	663.272
	G-3	1848.380	0.000	663.288	663.386
	G-4	1845.675	-7.500	663.167	663.264
	LINE B	1844.413	-11.000	663.110	663.207
	G-5	1842.970	-15.000	663.024	663.121
U	G-1	1863.790	15.000	663.048	663.171
	LINE A	1862.347	11.000	663.131	663.253
	G-2	1861.085	7.500	663.185	663.307
	G-3	1858.380	0.000	663.300	663.423
	G-4	1855.675	-7.500	663.180	663.303
	LINE B	1854.413	-11.000	663.124	663.247
	G-5	1852.970	-15.000	663.039	663.162
V	G-1	1873.790	15.000	663.049	663.185
	LINE A	1872.347	11.000	663.133	663.268
	G-2	1871.085	7.500	663.188	663.323
	G-3	1868.380	0.000	663.305	663.440
	G-4	1865.675	-7.500	663.187	663.322
	LINE B	1864.413	-11.000	663.132	663.267
	G-5	1862.970	-15.000	663.048	663.183

SPAN 3&4

LINE	BEAM OR GIRDER	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
W	G-1	1883.790	15.000	663.043	663.176
	LINE A	1882.347	11.000	663.128	663.260
	G-2	1881.085	7.500	663.183	663.316
	G-3	1878.380	0.000	663.302	663.435
	G-4	1875.675	-7.500	663.187	663.319
	LINE B	1874.413	-11.000	663.132	663.265
	G-5	1872.970	-15.000	663.049	663.182
X	G-1	1893.790	15.000	663.030	663.143
	LINE A	1892.347	11.000	663.115	663.228
	G-2	1891.085	7.500	663.172	663.285
	G-3	1888.380	0.000	663.293	663.406
	G-4	1885.675	-7.500	663.179	663.292
	LINE B	1884.413	-11.000	663.126	663.239
	G-5	1882.970	-15.000	663.044	663.157
Y	G-1	1903.790	15.000	663.009	663.087
	LINE A	1902.347	11.000	663.096	663.174
	G-2	1901.085	7.500	663.153	663.231
	G-3	1898.380	0.000	663.276	663.354
	G-4	1895.675	-7.500	663.164	663.242
	LINE B	1894.413	-11.000	663.112	663.190
	G-5	1892.970	-15.000	663.031	663.109
Z	G-1	1913.790	15.000	662.981	663.012
	LINE A	1912.347	11.000	663.069	663.100
	G-2	1911.085	7.500	663.127	663.158
	G-3	1908.380	0.000	663.252	663.283
	G-4	1905.675	-7.500	663.142	663.173
	LINE B	1904.413	-11.000	663.091	663.122
	G-5	1902.970	-15.000	663.011	663.042
AA	G-1	1919.790	15.000	662.961	662.961
(℄ Brg.	LINE A	1918.347	11.000	663.050	663.050
Abut 2)	G-2	1917.085	7.500	663.109	663.109
	G-3	1914.380	0.000	663.235	663.235
	G-4	1911.675	-7.500	663.126	663.126
	LINE B	1910.413	-11.000	663.075	663.075
	G-5	1908.970	-15.000	662.996	662.996
BB	W CURB	1921.291	16.250	662.930	662.930
(Bk Abut #2)	LINE A	1919.398	11.000	663.046	663.046
	CL	1915.431	0.000	663.231	663.231
	LINE B	1911.464	-11.000	663.072	663.072
	E CURB	1909.570	-16.250	662.968	662.968
CC	W CURB	1931.291	16.250	662.890	662.890
	LINE A	1929.398	11.000	663.007	663.007
	CL	1925.431	0.000	663.195	663.195
	LINE B	1921.464	-11.000	663.038	663.038
	E CURB	1919.570	-16.250	662.936	662.936
DD	W CURB	1945.708	16.250	662.819	662.819
(End of	LINE A	1943.814	11.000	662.938	662.938
Appr. Slab)	CL	1939.847	0.000	663.131	663.131
	LINE B	1935.881	-11.000	662.978	662.978
	E CURB	1933.987	-16.250	662.878	662.878

Note: Deck elevations are to top of 8" concrete slab

TOP OF SLAB ELEVATIONS

REVISIONS		
NO.	DATE	INITIALS
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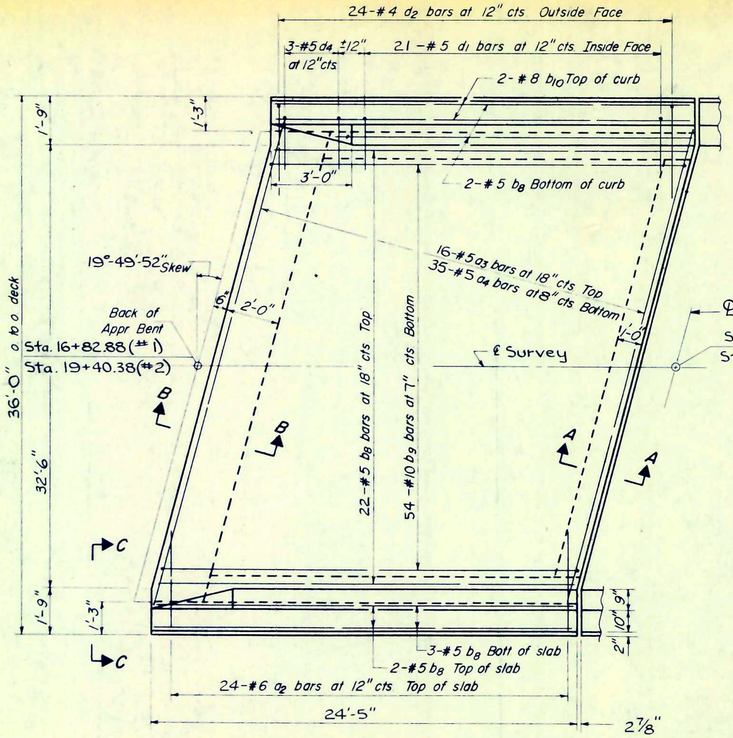
DRAWN BY DATE: R.J.H. 9-75
CHECKED BY DATE: J.W.C. 5-75
BOOK NUMBER:

C.H. 13 OVER F.A.I. 80
F.A.P. 412 SEC. 50-2HB-3(R) PROJ.
STA. 18+08.38 (C.H. 13) LASALLE CO.

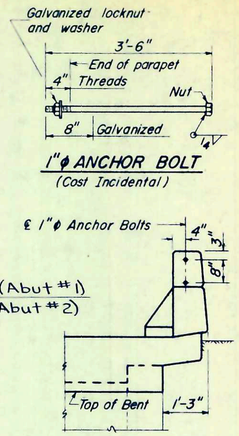
PROJECT NO: 2601-1
SHEET NO:

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

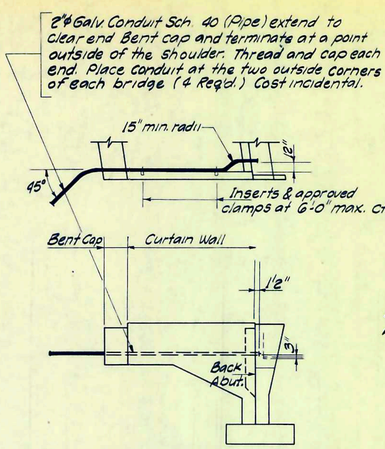
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A 412	50-2H8-3(R)	LaSalle	156	69
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



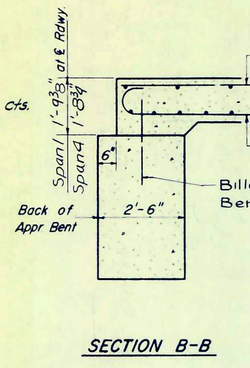
PLAN



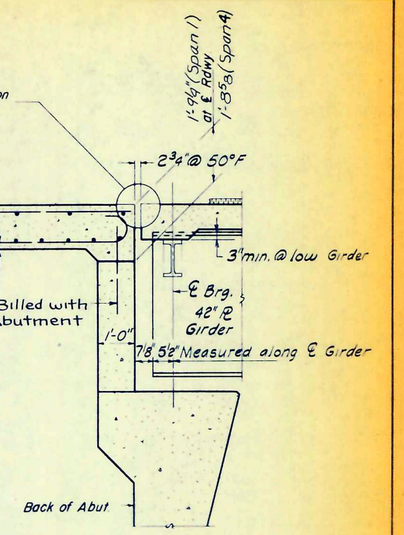
VIEW C-C



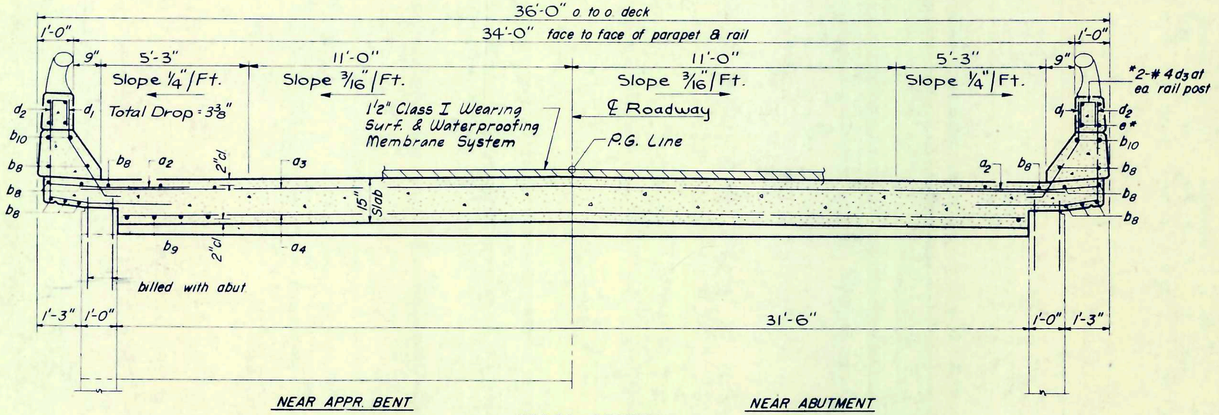
ELECTRICAL CONDUIT LOCATION



SECTION B-B

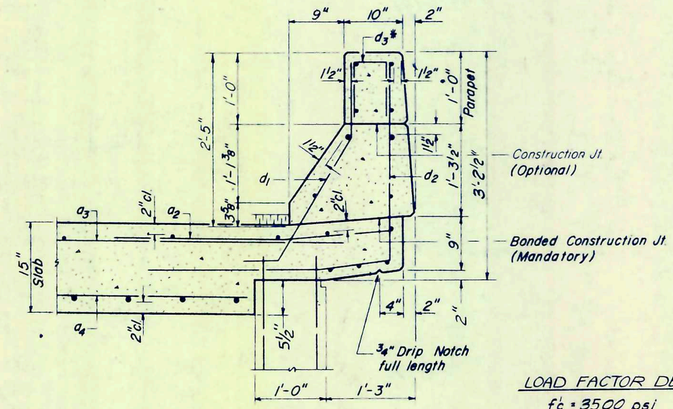


SECTION A-A



NEAR APPR. BENT — NEAR ABUTMENT

CROSS SECTION



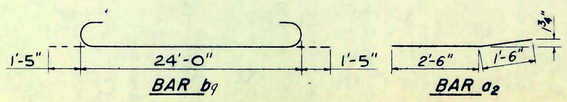
CURB SECTION

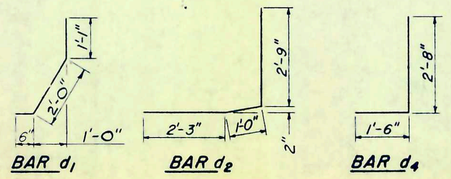
LOAD FACTOR DESIGN
f'_c = 3500 psi
f_y = 40000 psi

TWO APPR. SLABS
BILL OF MATERIAL

Bar	No	Size	Length	Shape
a_2	96	#6	4'-0"	—
a_3	32	#5	36'-0"	—
a_4	70	#5	33'-0"	—
b_8	72	#5	24'-0"	—
b_9	108	#10	26'-10"	C
b_{10}	8	#8	24'-0"	—
d_1	84	#5	3'-7"	J
d_2	96	#4	6'-0"	L
d_4	12	#5	4'-2"	L
Reinforcement Bars			Lbs	19,720
Class X Concrete			Cu.Yds.	87.8

*Parapet Reinforcement and Class X Concrete are billed on sheet #6





SAS-L (≦30°) 8-1-73

SUPERSTRUCTURE - SPANS 1 & 4

REVISIONS		
No.	DATE	INITIALS
1		
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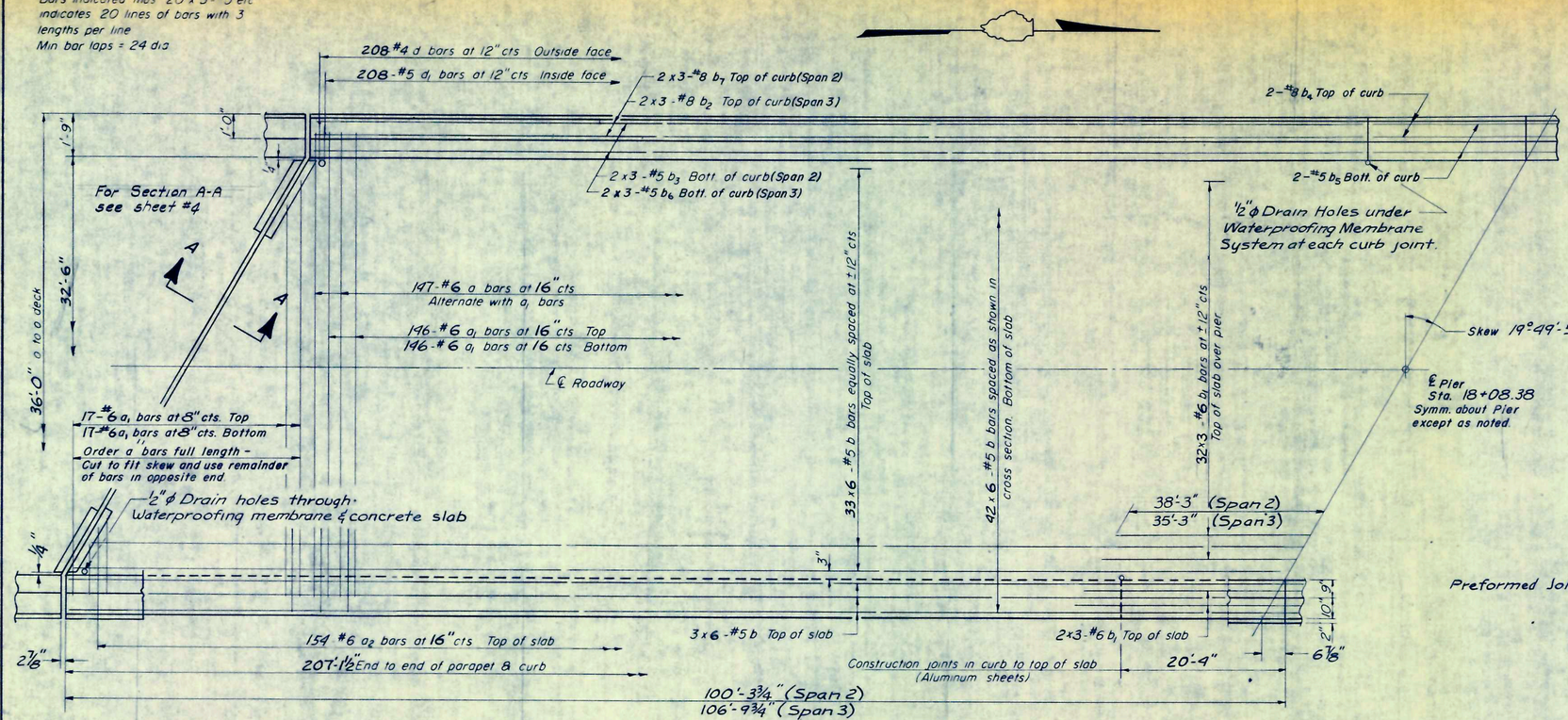
DRAWN BY DATE: RJH 4-75
CHECKED BY DATE: J.W.C. 5-75
BOOK NUMBER:
PROJECT NO.: 2601-1
SHEET NO.:

C.H. 13 OVER F.A. I-80
F.A.P. 412 SEC. 50-2 H B-3(R) PROJ.
STA. 18+08.38 (C.H. 13) LASALLE CO.

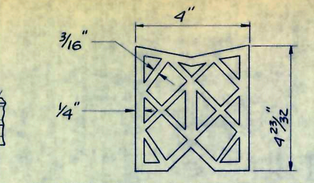
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	59-6HB-3(R)	LaSalle	156	69A
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

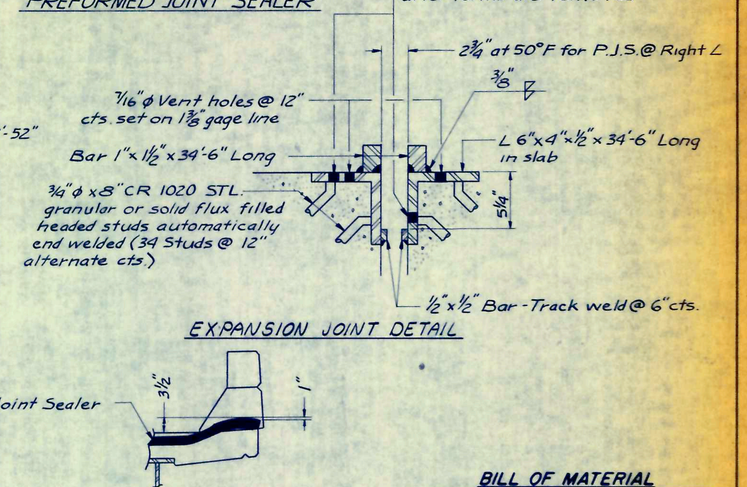
NOTE
Bars indicated thus 20 x 3 -#5 etc indicates 20 lines of bars with 3 lengths per line
Min bar laps = 24 dia



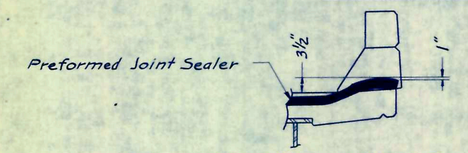
HALF PLAN



PREFORMED JOINT SEALER



EXPANSION JOINT DETAIL

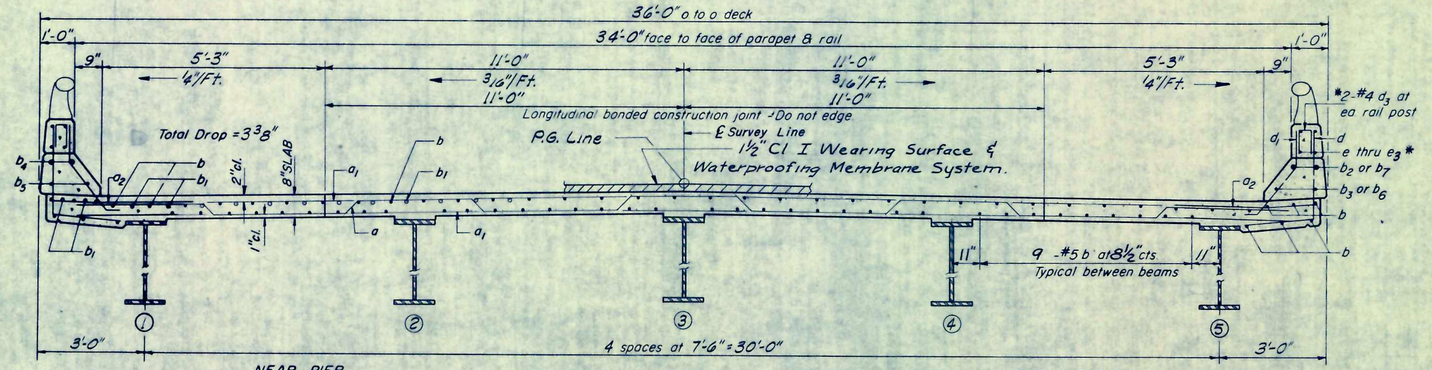


TYPICAL END OF SEALER TREATMENT

BILL OF MATERIAL

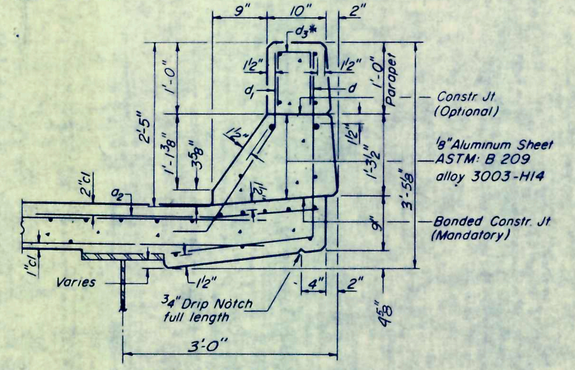
Bar	No	Size	Length	Shape
a	197	#6	35'-5"	
a1	326	#6	34'-0"	
a2	308	#6	4'-0"	
b	486	#5	35'-6"	
b1	108	#6	25'-8"	
b2	12	#8	30'-3"	
b3	12	#5	27'-6"	
b4	8	#8	20'-0"	
b5	8	#5	20'-0"	
b6	12	#5	29'-6"	
b7	12	#8	28'-0"	
d	416	#4	4'-8"	⌋
d1	416	#5	3'-7"	⌋
Reinforcement Bars			Lbs.	54,500
Class X Concrete			Cu. Yds.	209.1

NOTE: For placement of bars d_3 and e thru e_3 see sheet #6



NEAR PIER — NEAR MIDSPAN

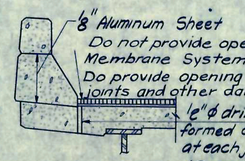
CROSS SECTION



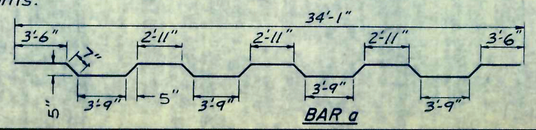
CURB SECTION

Cost of Aluminum Sheets shall be incidental to Class X Concrete.

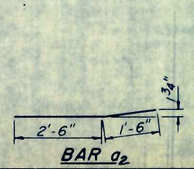
*Parapet Reinforcement and Class X Concrete are billed on sheet #6



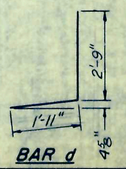
SECTION AT CURB JOINT



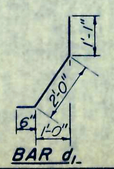
BAR a



BAR a2



BAR d



BAR d1

SUPERSTRUCTURE - SPANS 2 & 3

REVISIONS		
No.	DATE	INITIALS
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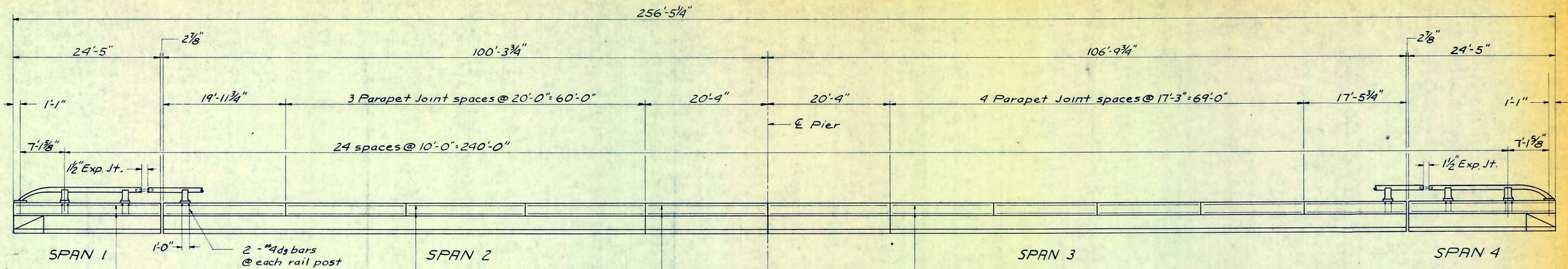
DRAWN BY DATE	R.H. 4-75
CHECKED BY DATE	R.C.A. 5-75
BOOK NUMBER	
PROJECT NO.	2601-1
SHEET NO.	

C.H. 13 OVER F.A. I-80
F.A.P. 412 SEC. 59-2HB-3(R) PROJ.
STA. 18+08.38 (C.H. 13) LASALLE CO.

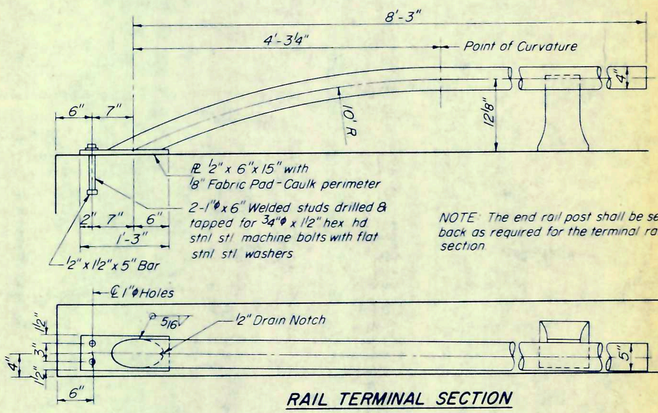
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
F.A.P. 412	50-2HB-3(R)	LaSalle	156	69B
FED ROAD DIST NO 7	ILLINOIS	FED AID PROJECT		

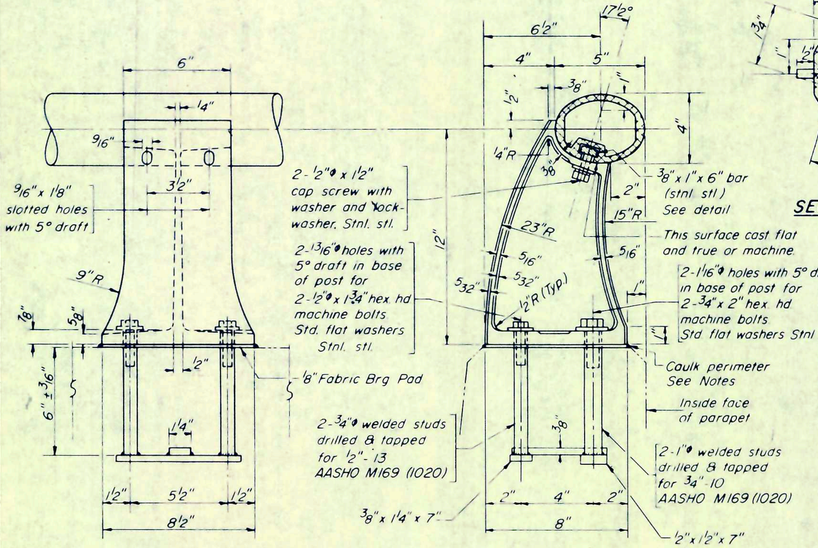
SHEET NO. 6
12 SHEETS



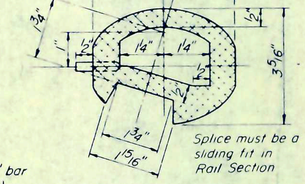
ELEVATION



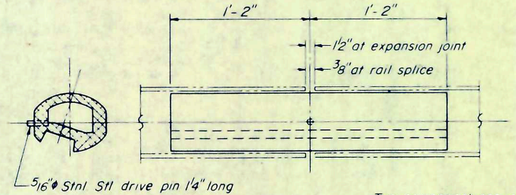
RAIL TERMINAL SECTION



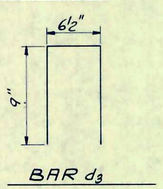
RAIL POST DETAILS



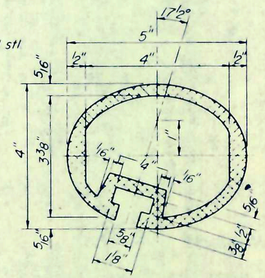
SEC. THRU SPLICE



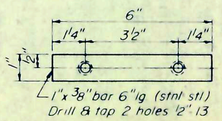
RAIL SPLICE



BAR d_3



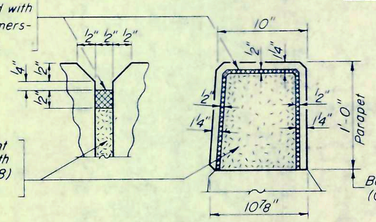
SEC. THRU ELLIPTICAL RAIL SECTION



CLAMP BAR

Two component non-staining gray sealing compound with polysulfide liquid polymers- gun grade with primer.

½" Preformed Cork Joint Filler (In accordance with Articles 715.07 or 715.08) Cost incidental



PARAPET JOINT DETAIL

NOTES:

Stainless steel machine bolts or cap screws shall be in accordance with Article 710.37 (a) of the standard specifications except Grade B8 or B8M maybe furnished.

All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.

All joints in rail shall be spliced per detail.

Provide 1 - ⅛" and 2 - 1/16" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade - high spots shall be ground and low spots shimmed.

Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers, gun grade with primer. Fabric Bearing Pad shall have same dimensions as base of post.

Aluminum alloy rail shall conform to ASTM B 221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches.

PARAPETS & RAILS BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d_3	100	#4	2'-1"	
e	16	#4	24'-0"	
e_1	32	#4	19'-8"	
e_2	16	#4	20'-0"	
e_3	40	#4	17'-0"	
Reinforcement Bars			Lbs	1480
Class X Concrete			Cu Yds	16.4
Aluminum Railing			Lin. Ft	509

ALUMINUM RAILING

REVISIONS		
No.	DATE	INITIALS
1		
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DRAWN BY R.J.H. 4-75
CHECKED BY R.E.B. 5-75
BOOK NUMBER
PROJECT NO. 2601-1
SHEET NO.

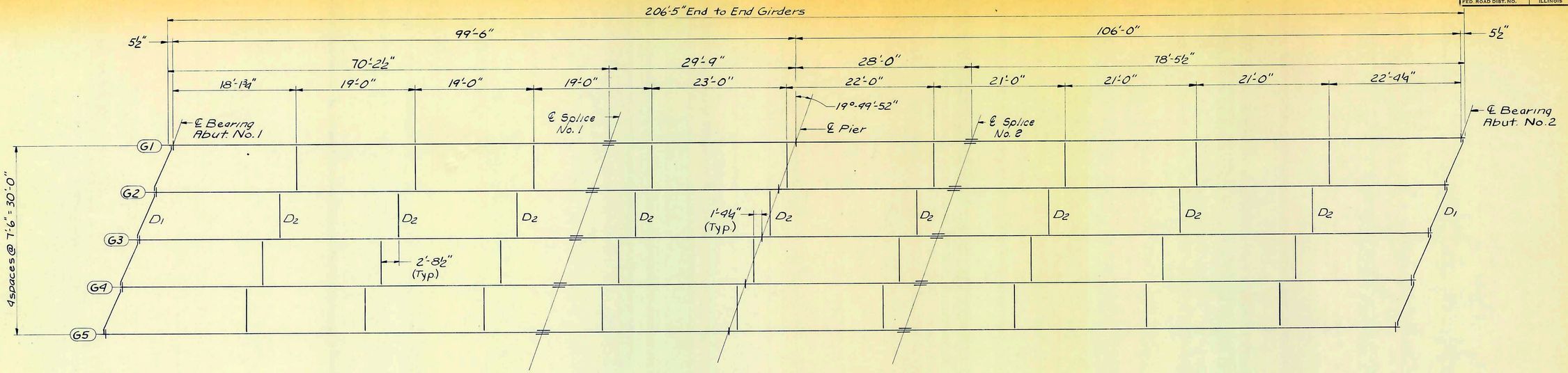
C.H. 13 OVER F.A. I-80
F.A.P. 412 SEC. 50-2 HB-3(R) PROJ
STA. 18+08.38 (C.H. 13) LASALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

R-17 4-15-73

Sheet No 7 of 12 Sheets

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-2HB-3(R)	LaSalle	156	70
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



SPAN 2

FRAMING PLAN

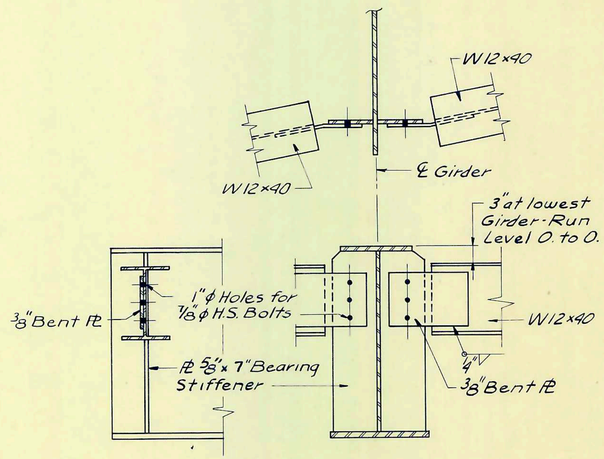
All end diaphragms to be W12×40 (D1)
All interior diaphragms to be W16×36 (D2)

SPAN 3

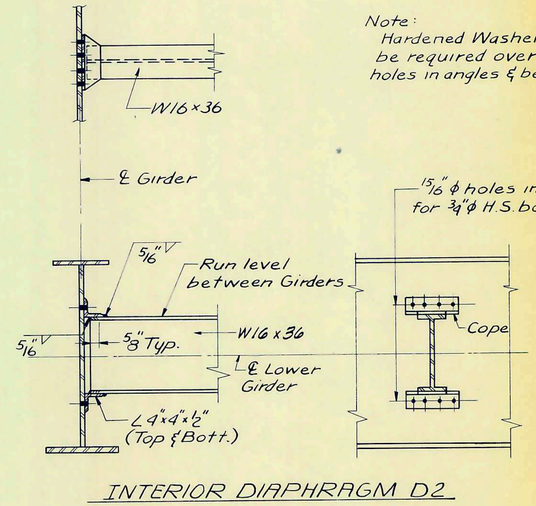
TOP OF WEB ELEVATIONS*

Girder / Location	1	2	3	4	5
℄ Brg. Abut 1	661.91	661.52	661.61	661.46	661.29
℄ Splice 1	661.91	662.03	662.13	661.99	661.89
℄ Pier	662.09	662.17	662.27	662.14	661.99
℄ Splice 2	662.17	662.30	662.41	662.29	662.19
℄ Brg. Abut 2	662.19	662.39	662.46	662.36	662.22

* For Fabrication only



END DIAPHRAGM - D1



INTERIOR DIAPHRAGM D2

Note:
Hardened Washers shall be required over 15/16" ϕ holes in angles & bent Pl's

STRUCTURAL STEEL

REVISIONS		
No.	DATE	INITIALS
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C.H. 13 OVER F.A. I-80
F.A.P. 912 SEC. 50-2HB-3(R) PROJ.
STA. 18+03.38 (C.H. 13) LASALLE CO.

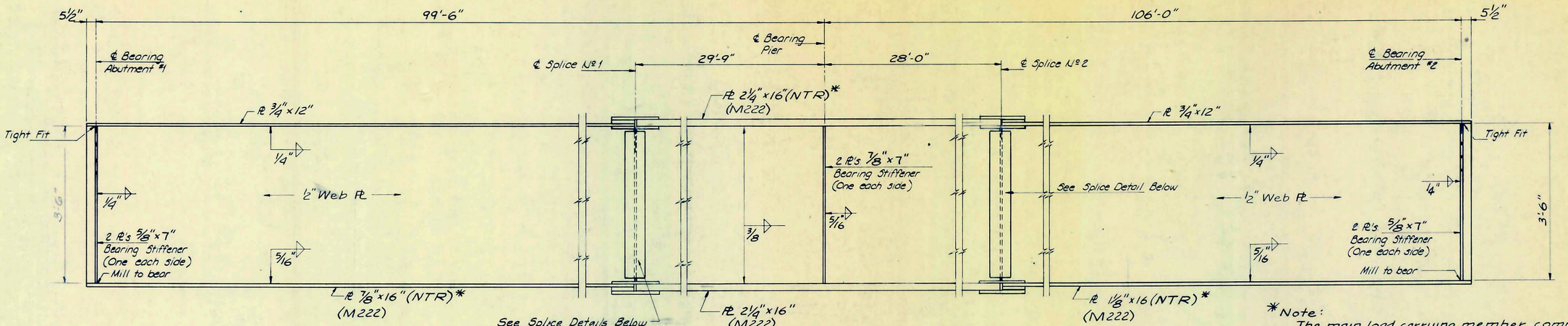
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE: RJH 9-15
CHECKED BY DATE: R.D.B. 9-15
BOOK NUMBER:
PROJECT NO.: 2601-1
SHEET NO.:

CUMMINS & COMPANY

Sheet № 8
of 12 Sheets

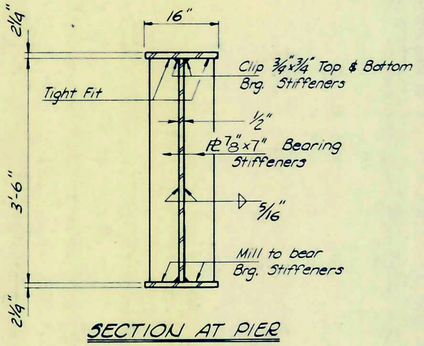
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
F.A 612	50-2HB-3(R)	LaSalle	156	70A
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



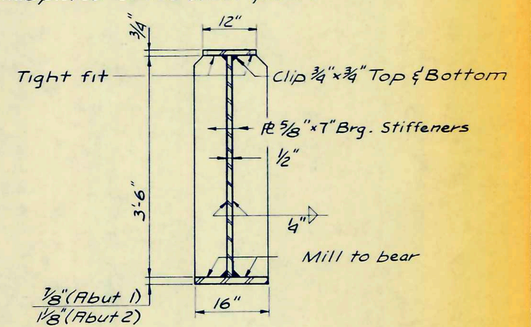
GIRDER ELEVATION

All structural steel shall be AASHTO M183 unless otherwise noted.

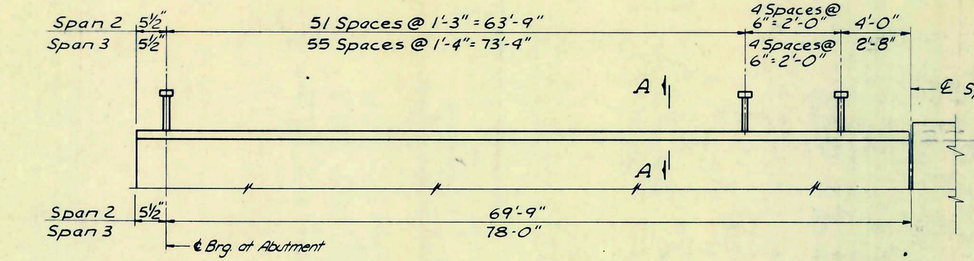
*Note:
The main load carrying member componets subject to the Supplemental Requirements for Notch Toughness are the flanges, as designated "NTR" on Elev. View along with the webs and all splice plates of the steel girders



SECTION AT PIER

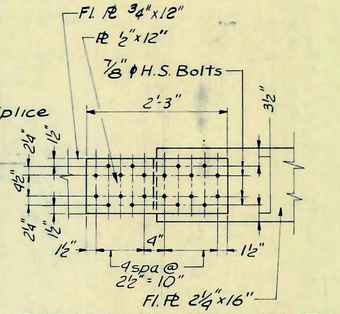


TYPICAL GIRDER SECTION AT ABUTMENT



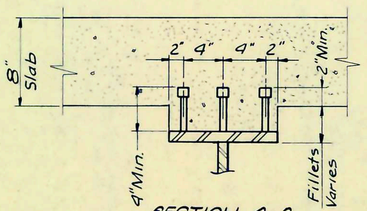
SHEAR CONNECTOR ELEVATION

(398 stud shear connectors reqd. eo girder)



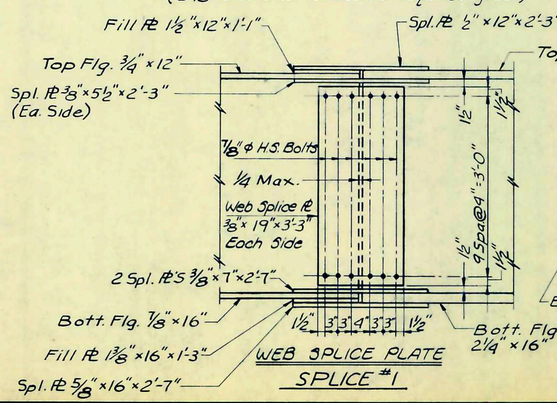
TOP FLANGE SPLICE PLATE

SPLICE 1 & SPLICE 2



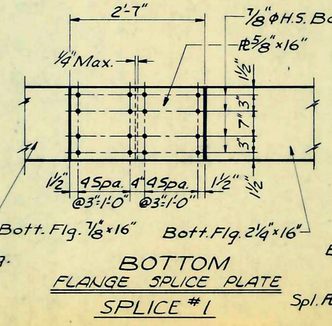
SECTION A-A

¾" ϕ x 4" CR 1020 steel, granular or solid, flux-filled, headed studs. Automatically end welded 1740 studs required.



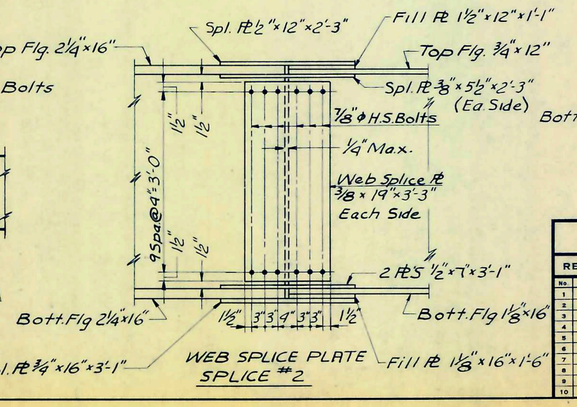
WEB SPLICE PLATE

SPLICE #1



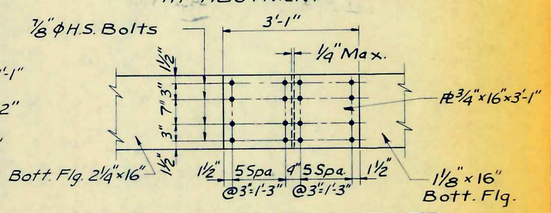
BOTTOM FLANGE SPLICE PLATE

SPLICE #1



WEB SPLICE PLATE

SPLICE #2



BOTTOM FLANGE SPLICE PLATE

SPLICE #2

STRUCTURAL STEEL

REVISIONS		
No.	DATE	INITIALS
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STATE OF ILLINOIS
DEPT. OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

C.H. 13 OVER F.A. I-80
F.A.P. 412 SEC. 50-2HB-3(R) PROJ.
STA. 18+08.38 (C.H. 13) LA SALLE CO.

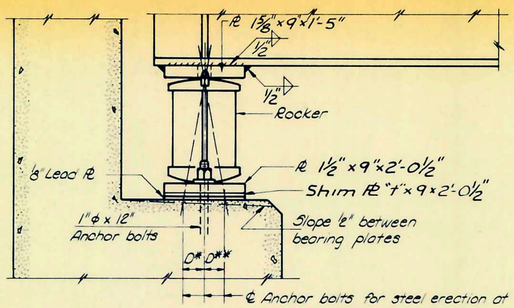
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CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE	RJH 4-75
CHECKED BY DATE	RJH 5-75
BOOK NUMBER	
PROJECT NO.	2601-1
SHEET NO.	

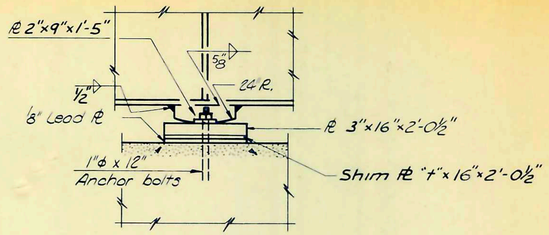
CUMMINS A COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	50-2HB-3(R)	LaSalle	156	71
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

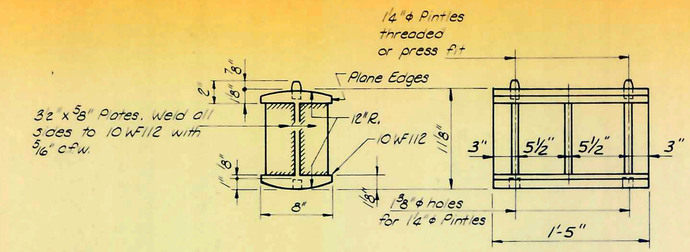
Sheet 12 9 of 12 Sheets



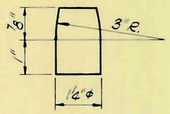
ELEVATION



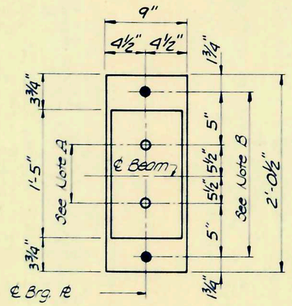
ELEVATION



ROCKER



PINTLE



PLAN

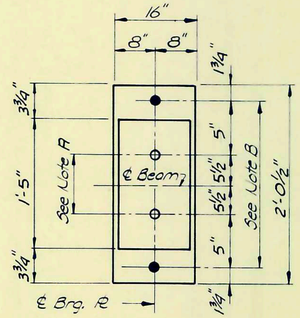
AT ABUTMENT

NOTE A

1 3/8"ϕ holes - 1" deep in top ℄ for pintles. Thread or press fit pintles into bottom ℄.

NOTE B

1/2"ϕ holes for 1"ϕ anchor bolts 2 1/2"x2 1/2"x 5/16" ℄ washers under nut.



PLAN

AT. PIER

NOTES ON SETTING OF ANCHOR BOLTS AT EXPANSION BEARINGS

a) D* (Side of brg. away from fixed brg.)
D* = 8" per each 100° of expansion for every 15° below the normal temperature of 50° F.

D** (Side of brg toward fixed brg.)
D** = 8' per each 100' of expansion for every 15° above the normal temperature of 50° F.

b) After beams have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

MOMENT TABLE - Composite 2 Span
(Composite in Positive Moment areas only)

INTERIOR GIRDER MOMENT TABLE			
	.04 Span 1	Pier	.6 Span 2
Is (in.⁴)	13370	38362	14771
Ic (in.⁴)	35470	———	40779
Icn (in.⁴)	25847	———	29135
Ss (in.³)	688	1650	818
Sb (in.³)	960	———	1135
Sbn (in.³)	880	———	1041
℄ (K/I)	.951	1.150	.966
M℄ ('K)	462	1741	637
fs℄ (ksi)	8	13	9
S℄ (K/I)	0.45	0.45	0.45
Ms℄ ('k)	295	657	367
fs℄ (ksi)	4	5	4
M℄ ('k)	818	827	915
MImp ('k)	183	182	198
Total ('k)	1001	1009	1113
fs℄ +Imp (ksi)	13	7	12
fs Total (ksi)	25	25	25
VR (k)	56.3	———	56.7

REACTION TABLE

INTERIOR GIRDER REACTION TABLE			
	ABUTMENT	PIER	ABUTMENT
R℄ (k)	97	201	54
R℄ (k)	48	78	48
Imp. (k)	11	17	11
R TOTAL (k)	106	296	112

Is and Ss are the moment of inertia and section modulus of the steel section.
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing fs.
Icn & Sbn are the moment of inertia and Section modulus of the Composite Section used in Computing fs for n=30
VR is the maximum ℄ + Impact shear range

SHIM PLATE THICKNESS (t)

	GIRDER NO. 1	2	3	4	5
ABUT. 1	———	———	———	———	———
PIER	5/8"	———	———	———	———
ABUT. 2	———	———	———	———	3/8"

BEARING DETAILS

REVISIONS		
NO.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STATE OF ILLINOIS
DEPT. OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

C.H. 13 OVER F.A. I-80
F.A.P. 412 SEC. 50-2 HB-3 (R) PROJ.
STA. 18+08.38 (C.H. 13) LASALLE CO.

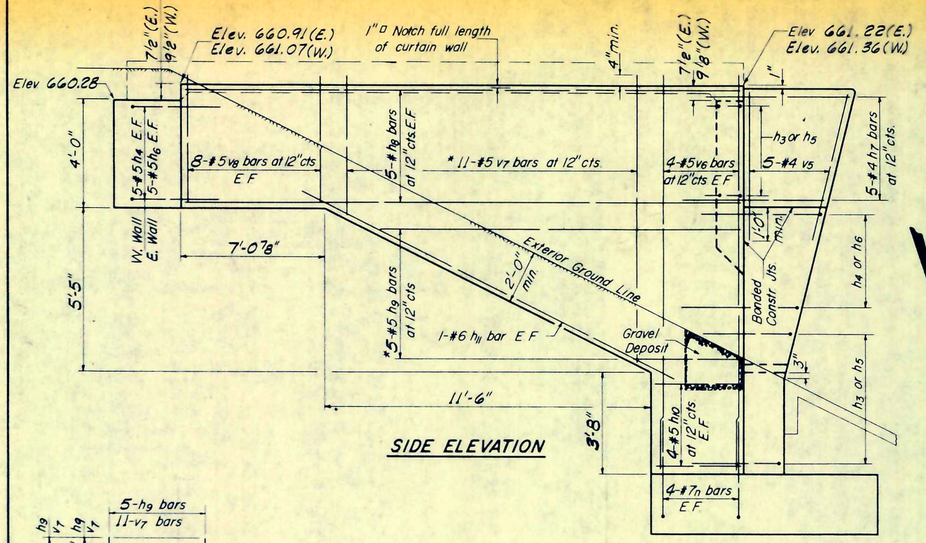
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE: R.J.H. 4-75
CHECKED BY DATE: R.D.B. 5-75
BOOK NUMBER:
PROJECT NO.: 2601-1
SHEET NO.:

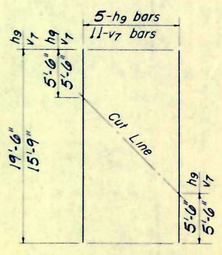
CUBHIN & COMPANY

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 412	50-2HB-3(R)	La Salle	156	71A
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 10
12 SHEETS



SIDE ELEVATION

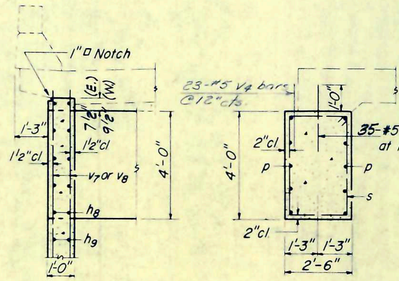


FIELD CUTTING DIAGRAM

*Order h_9 & v_7 bars full length. Cut to fit as shown and use remainder of bars in other face.

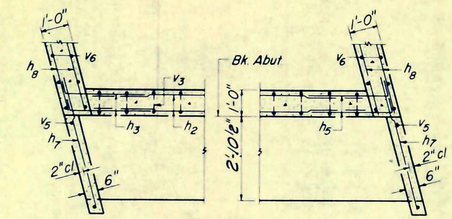
ABUT.-PILE DATA
Type - Steel HP8 x 36
Capacity-Drive to Refusal
Est Length - 27'
No Reqd - 16

APPR. BENT
Max. Soil Pressure 2.2 ksf

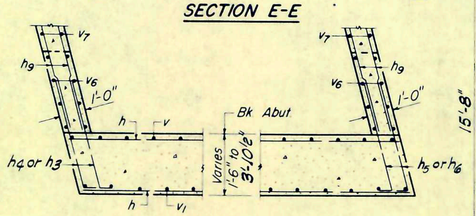


SECTION C-C

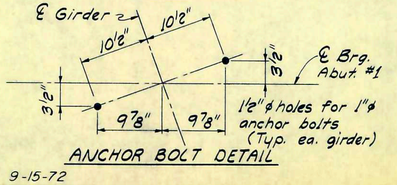
SECTION B-B



SECTION E-E

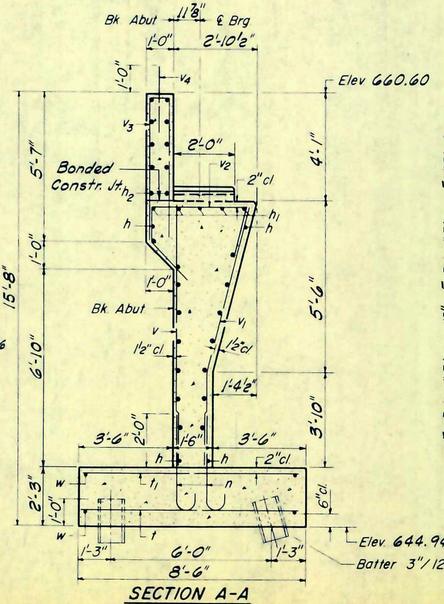


SECTION F-F

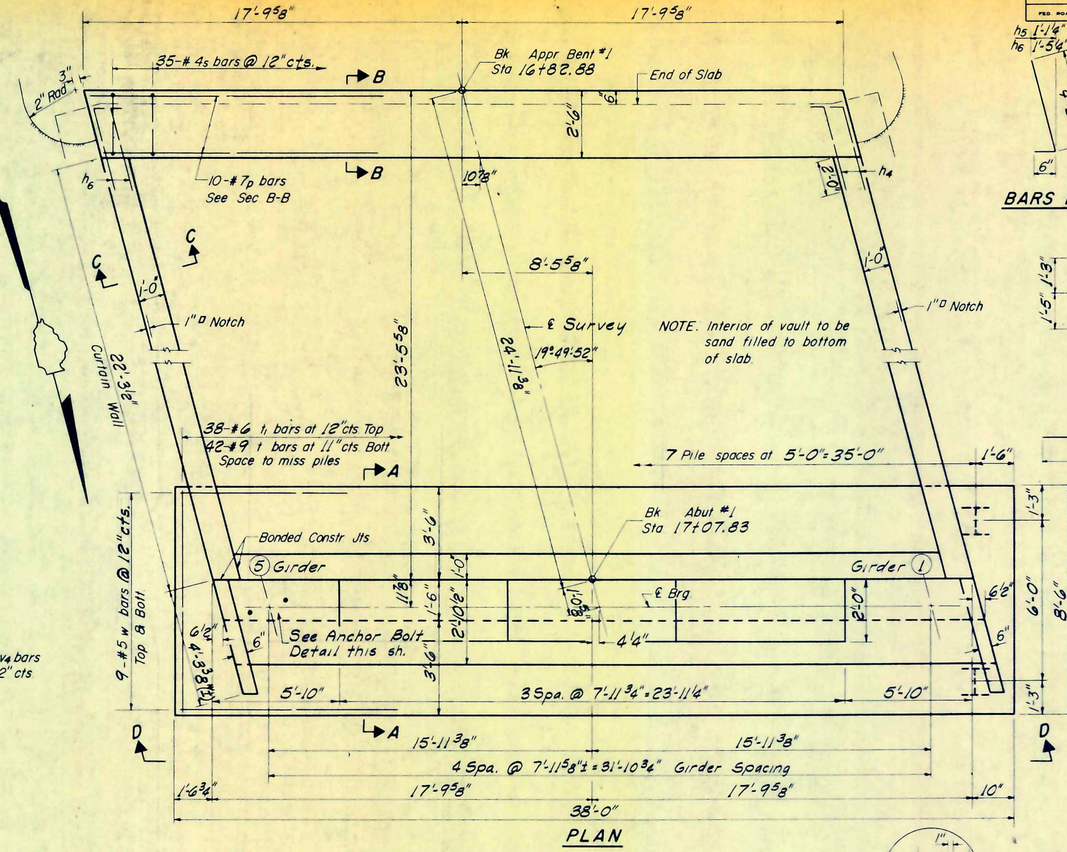


1½"ϕ holes for 1"ϕ anchor bolts (Typ. ea. girder)

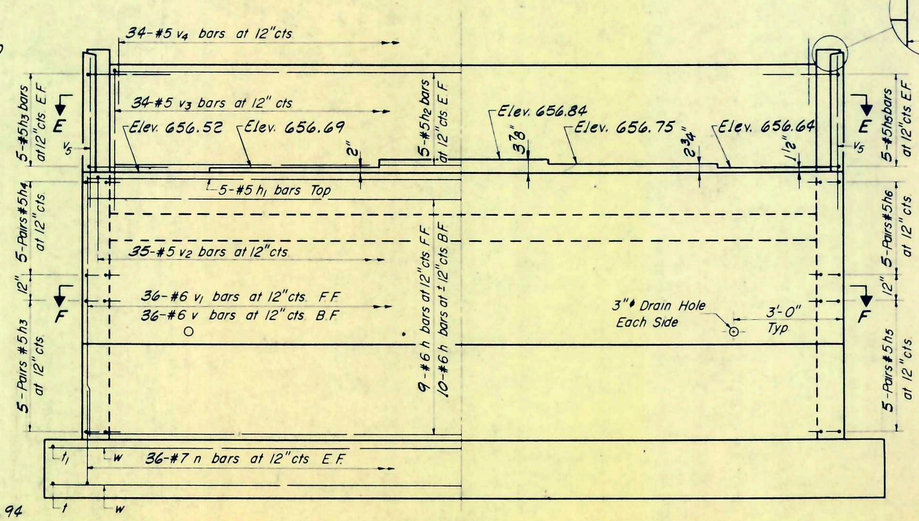
ANCHOR BOLT DETAIL



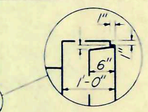
SECTION A-A



PLAN

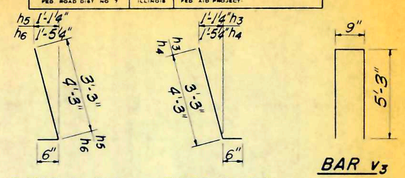


VIEW D-D

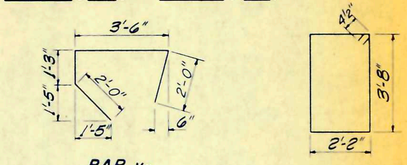


Note: For Electrical Conduit Location see sheet #4

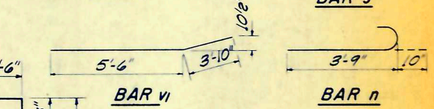
LOAD FACTOR DESIGN
f'_c = 3.5 ksi
f_y = 40 ksi



BARS h_5 & h_6 BARS h_3 & h_4 BAR v_3



BAR v_2 BAR s



BAR vi BAR n

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	19	#6	35'-3"	—
h_1	5	#5	35'-3"	—
h_2	10	#5	33'-3"	—
h_3	20	#5	3'-9"	⌞
h_4	20	#5	4'-9"	⌞
h_5	20	#5	3'-9"	⌞
h_6	20	#5	4'-9"	⌞
h_7	10	#4	5'-3"	—
h_8	20	#5	22'-0"	—
h_9	10	#5	19'-6"	—
h_{10}	16	#5	3'-0"	—
h_{11}	4	#6	15'-6"	—
n	88	#7	4'-7"	⊃
p	10	#7	35'-0"	—
s	35	#4	12'-5"	□
t	42	#9	8'-0"	—
t_1	38	#6	8'-0"	—
v	36	#6	9'-0"	—
v_1	36	#6	9'-4"	—
v_2	35	#5	8'-9"	⊏
v_3	34	#5	11'-3"	⊓
v_4	92	#5	2'-3"	—
v_5	10	#4	6'-0"	—
v_6	16	#5	14'-6"	—
v_7	22	#5	15'-9"	—
v_8	32	#5	5'-0"	—
w	18	#5	37'-6"	—

Reinforcement Bars	Lbs	9630
Class X Concrete	Cu Yds	84.9
Steel Piles HP8x36	Lin. Ft.	432

ABUTMENT NO. 1

REVISIONS		
No.	DATE	INITIALS
1		
2		
3		
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DRAWN BY DATE T.J.E. 4-75
CHECKED BY DATE R.O.B. 5-75
BOOK NUMBER
PROJECT NO. 2601-1
SHEET NO.

C.H. 13 OVER F.A. I-80
F.A.P. 412 SEC. 50-2 HB-3(R) PROJ.
STA. 18+08.38 (C.H. 13) LASALLE CO.

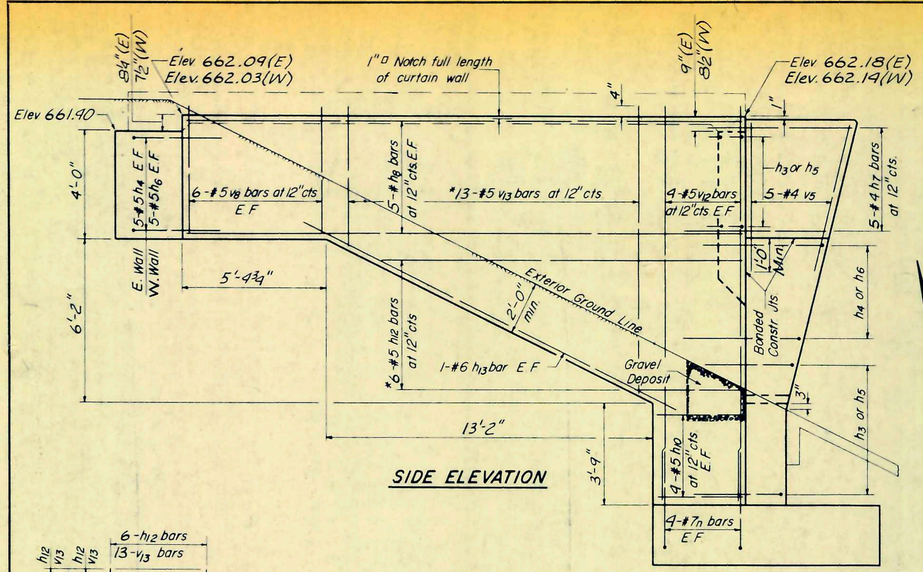
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

VAF-L 9-15-72

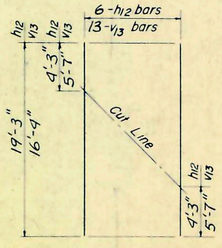
Rev. Reinf. Bars from 9580# to 9630# 3-17-76 A.H.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 412	50-2HB-3(R)	LaSalle	156	72
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 11
12 SHEETS



SIDE ELEVATION

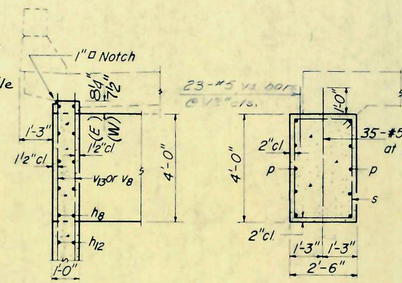


FIELD CUTTING DIAGRAM

*Order h12 & v13 bars full length. Cut to fit as shown and use remainder of bars in other face.

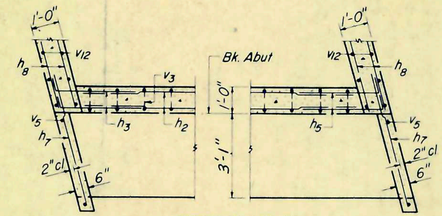
ABUT-PILE DATA
Type: Steel HP8x36
Capacity Drive to refusal
Est Length 29'
No Reqd 15 Plus 1 test Pile

APPR. BENT
Max. Soil Pressure 2.2ksf

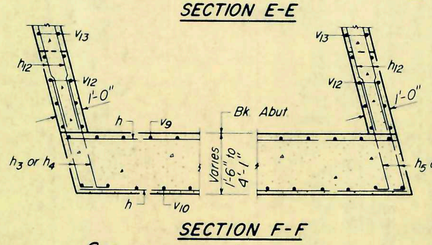


SECTION C-C

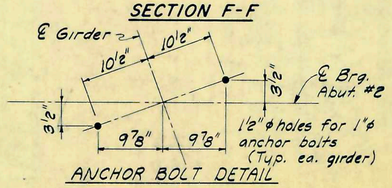
SECTION B-B



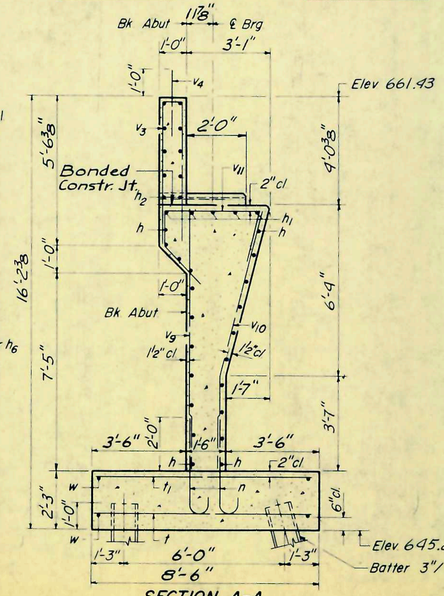
SECTION E-E



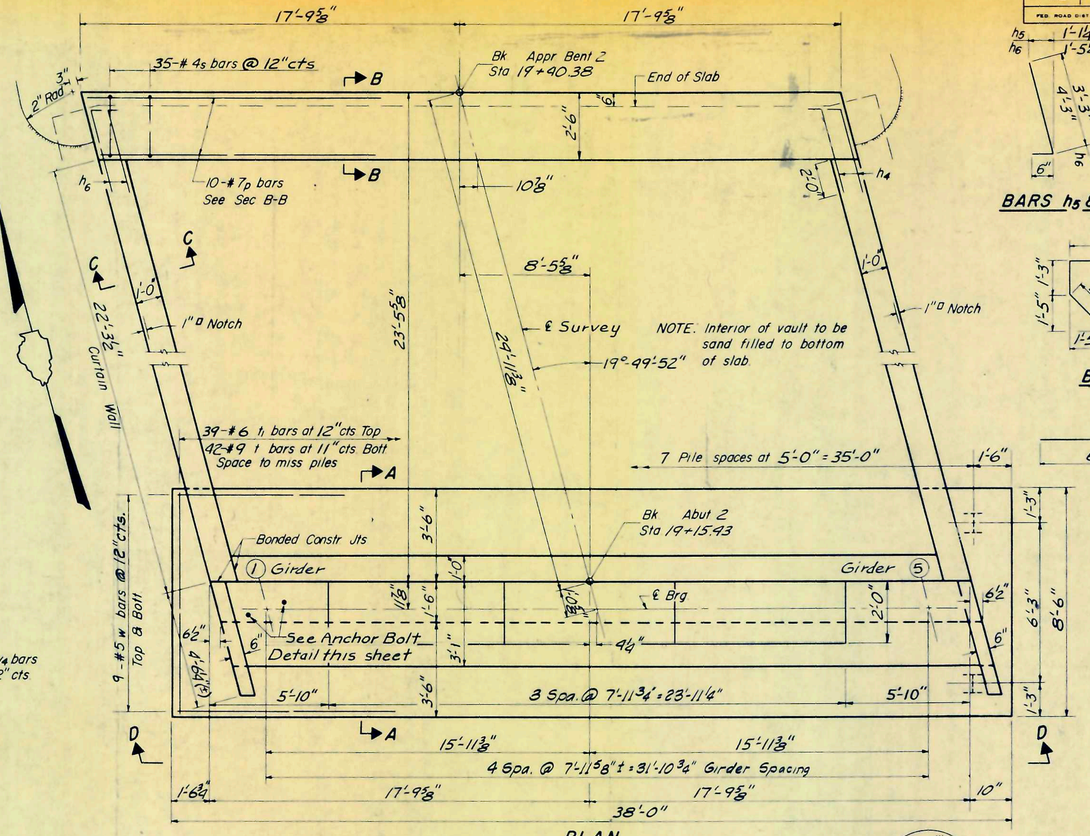
SECTION F-F



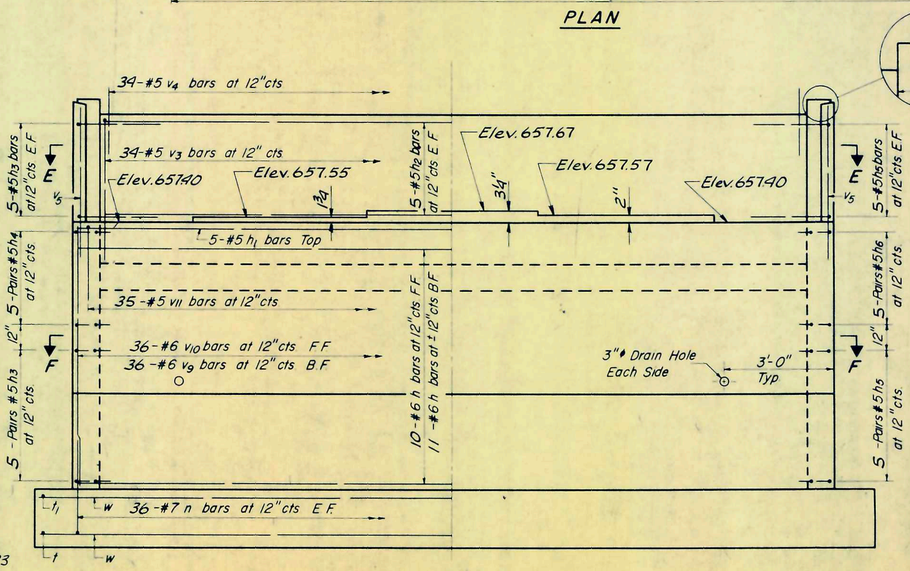
ANCHOR BOLT DETAIL



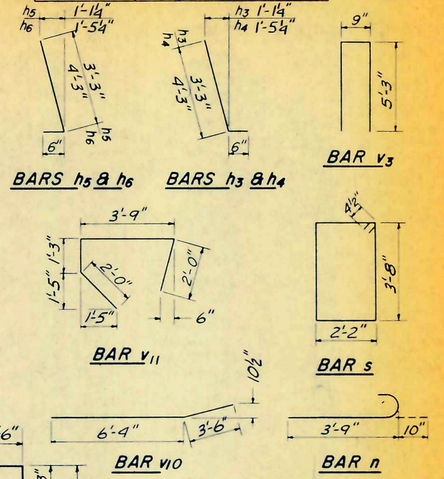
SECTION A-A



PLAN



VIEW D-D



BARS h5 & h6

BARS h3 & h4

BAR v3

BAR v11

BAR s

BAR v10

BAR n

Note: For Electrical Conduit Location see sheet #4

LOAD FACTOR DESIGN
f'_c = 3.5 ksi
f_y = 40 ksi

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	21	#6	35'-3"	—
h1	5	#5	35'-3"	—
h2	10	#5	33'-3"	—
h3	20	#5	3'-9"	⌐
h4	20	#5	4'-9"	⌐
h5	20	#5	3'-9"	⌐
h6	20	#5	4'-9"	⌐
h7	10	#4	5'-3"	—
h8	20	#5	22'-0"	—
h10	16	#5	3'-0"	—
h12	12	#5	19'-3"	—
h13	9	#6	17'-0"	—
n	88	#7	4'-7"	⌐
p	10	#7	35'-0"	—
s	35	#4	12'-5"	□
t	42	#9	8'-0"	—
t1	39	#6	8'-0"	—
v3	39	#5	11'-3"	⊓
v4	92	#5	2'-3"	—
v5	10	#4	6'-0"	—
v8	24	#5	5'-0"	—
v9	36	#6	9'-9"	—
v10	36	#6	9'-10"	⌐
v11	35	#5	9'-0"	⊓
v12	16	#5	15'-0"	—
v13	26	#5	16'-9"	—
w	18	#5	37'-6"	—

Reinforcement Bars	Lbs	9890
Class X Concrete	Cu Yds	88.2
Steel Piles HP8x36	Lin. Ft.	435
Test Piles Steel	EA.	1

ABUTMENT NO. 2

REVISIONS		
No.	DATE	INITIALS
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

C.H. 13 OVER F.A.I-80
F.A.P. 412 SEC. 50-2 HB-3(R) PROJ.
STA. 18+08.38 (C.H. 13) LASALLE CO.

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY RJH DATE 4-75
CHECKED BY BOB DATE 5-75
BOOK NUMBER
PROJECT NO. 2601-1
SHEET NO.

VAF-L 9-15-72

Rev. Reinf. Bars from 9840# to 9890# 3-17-76 A.H.

Sheet No. 12 of 12 Sheets

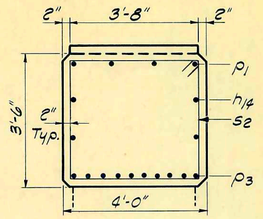
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-2 HB-3(R)	LaSalle	156	72A
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

NOTES

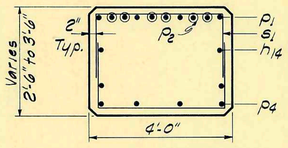
Space reinforcement in cap to miss anchor bolts.

All edges shall have standard 3/4" chamfers except as noted.

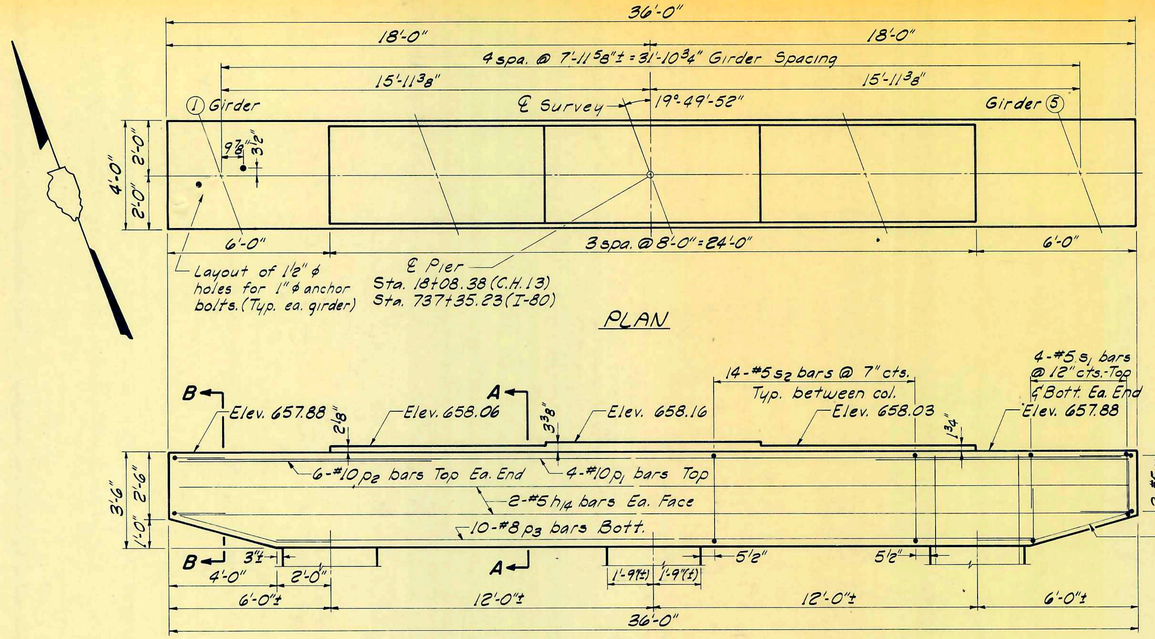
Pour steps monolithically with cap.

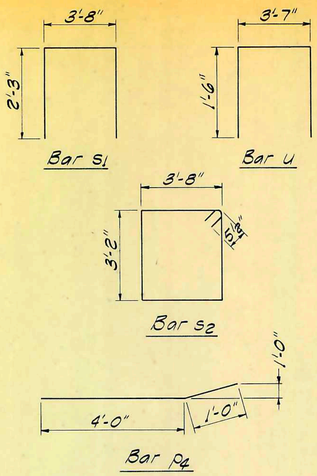


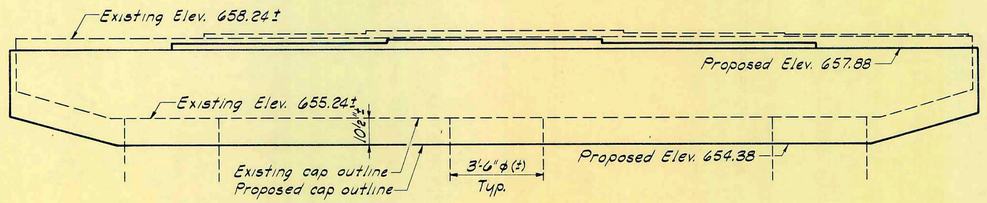
SEC. A-A



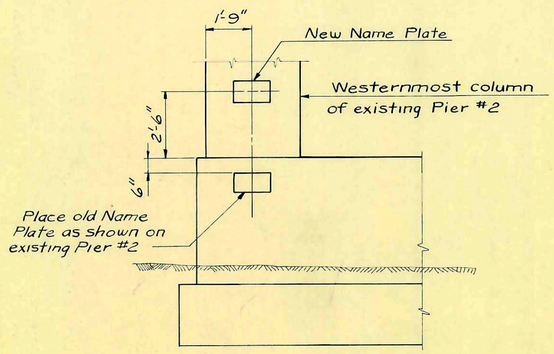
SEC. B-B







ELEVATION
(Existing & Proposed Pier Cap)



NAME PLATE LOCATION

NOTE:

All concrete in existing pier shall be removed above Elev. 654.38. Existing column reinforcement shall not be removed but cleaned, straightened, and placed in the new cap.

Cost of cleaning, straightening reinforcement is incidental to Concrete Removal.

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h_{14}	4	#5	35'-6"	——
p_1	4	#10	35'-6"	——
p_2	12	#10	10'-6"	——
p_3	10	#8	28'-0"	——
p_4	8	#5	5'-0"	——
s_1	16	#5	8'-2"	☐
s_2	28	#5	14'-7"	☐
u	6	#5	6'-7"	☐
Class X Concrete		Cu. Yds.	18.7	
Reinforcement Bars		Lbs.	2,690	
Concrete Removal		Cu. Yds.	16.7	

PIER

REVISIONS		
No.	DATE	INITIALS
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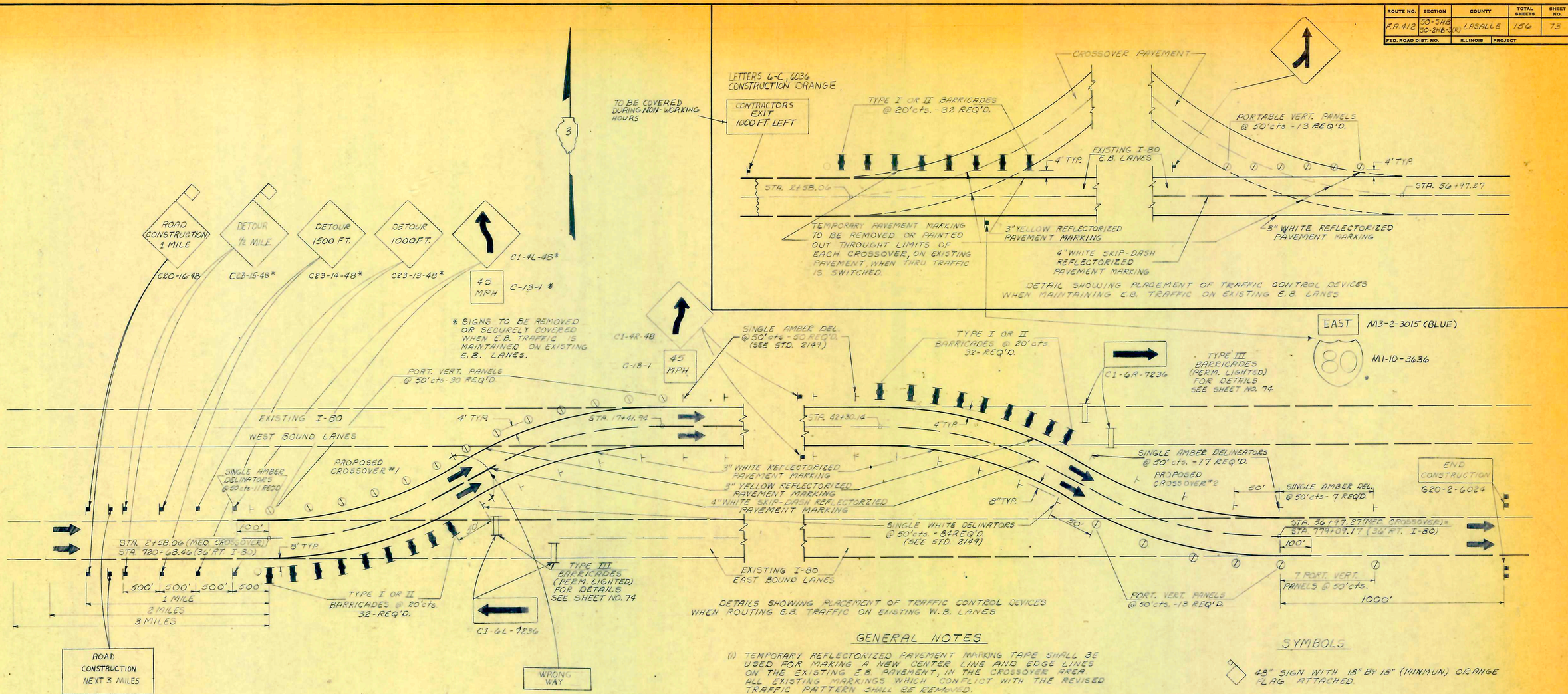
C.H. 13 OVER F.A.I-80
F.A.P. 412 SEC. 50-2 HB-3(R) PROJ.
STA. 18+08.38 (C.H. 13) LASALLE CO.

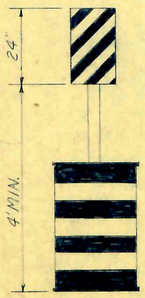
HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY / DATE	T.J.E. 4-75
CHECKED BY / DATE	R.O.P. 4-75
BOOK NUMBER	
PROJECT NO.	2601-1
SHEET NO.	

CUMMING & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-5HB 50-2HB-3(R)	LASALLE	156	73
FED. ROAD DIST. NO.		ILLINOIS	PROJECT	





PORTABLE VERTICAL PANEL

GENERAL NOTES

(1) TEMPORARY REFLECTORIZED PAVEMENT MARKING TAPE SHALL BE USED FOR MAKING A NEW CENTER LINE AND EDGE LINES ON THE EXISTING E.B. PAVEMENT, IN THE CROSSOVER AREA ALL EXISTING MARKINGS WHICH CONFLICT WITH THE REVISED TRAFFIC PATTERN SHALL BE REMOVED.

THIS WILL BE REQUIRED EACH TIME TRAFFIC IS SWITCHED FROM E.B. TO W.B. AND W.B. TO E.B. LANES. ON THE PAVED MEDIAN CROSSOVER AND W.B. PAVEMENT EITHER TEMPORARY REFLECTORIZED PAVEMENT MARKING TAPE OR REFLECTORIZED PAINTED PAVEMENT MARKING SHALL BE USED FOR EDGE LINES AND CENTER LINE.

(2) THE DISTRICT ENGINEER MAY REQUIRE STEEL DRUMS, EITHER 55 GAL. OR 30 GAL., TO BE USED TO SUPPLEMENT THE BARRICADES.

(3) ALL SIGNS SHALL BE POST MOUNTED.

(4) HIGH INTENSITY MONODIRECTIONAL FLASHING LIGHTS SHALL BE USED AT ALL TIMES ON EACH APPROACH IN ADVANCE OF THE WORK AREA AND INSTALLED ABOVE ALL SIGNS.

(5) LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.

(6) ALL WARNING SIGNS SHALL HAVE MINIMUM DIMENSIONS OF 48 IN. BY 48 IN. AND HAVE BLACK LEGEND AND BORDER ON AN ORANGE HIGH INTENSITY TYPE A REFLECTORIZED BACKGROUND MEETING THE REQUIREMENTS OF SECTION 720B OF THE STANDARD SPECIFICATION FOR TRAFFIC CONTROL ITEMS.

(7) ALL LIGHTS ON TYPE I OR II BARRICADES SHALL BE STEADY BURNING MONODIRECTIONAL, BUT WILL NOT BE REQUIRED FOR DAY OPERATION.

(8) FORM BT-725 IS REQUIRED.

(9) NO VEHICLES, EQUIPMENT, MEN AND THEIR ACTIVITIES WILL BE PERMITTED WITHIN 15 FT. OF THE EDGE OF ANY THROUGH TRAFFIC LANES.

SYMBOLS

- 48" SIGN WITH 18" BY 18" (MINMUN) ORANGE FLAG ATTACHED
- POST MOUNTED SIGN
- TYPE I OR II BARRICADE WITH STEADY BURNING LIGHT.
- DELINEATORS, SINGLE WHITE OR AMBER (STD. 2149)
- DRUM (55 OR 30 GALLON) SEE STD. 2299
- PORTABLE VERTICAL PANEL
- TYPE III BARRICADE (PERMANENTLY LIGHTED, SEE SHEET NO. 74 FOR DETAILS)

TRAFFIC CONTROL & PROTECTION - I-80 MED. CROSSOVERS

REVISIONS		
No.	DATE	INITIALS
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STATE OF ILLINOIS
DEPT. OF TRANSPORTATION

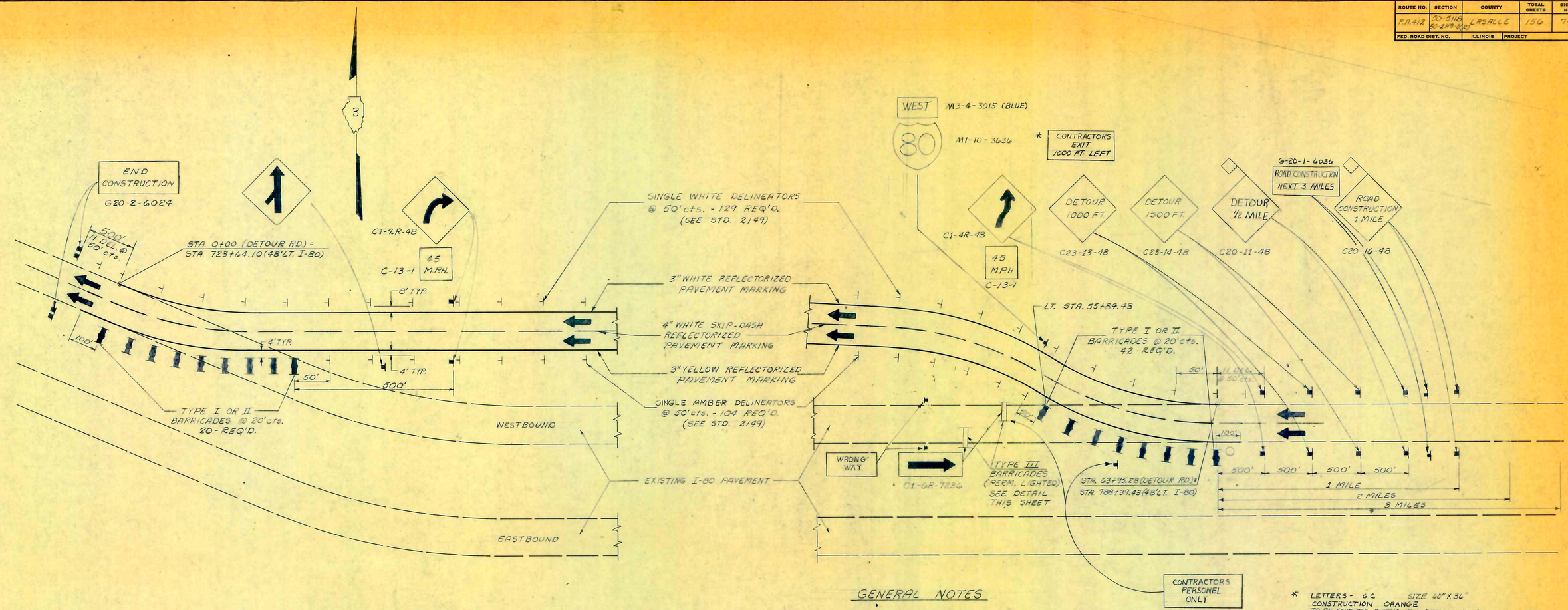
F.A. 412 — SEC. 50-5HB & 50-2HB-3(R)
LASALLE — COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

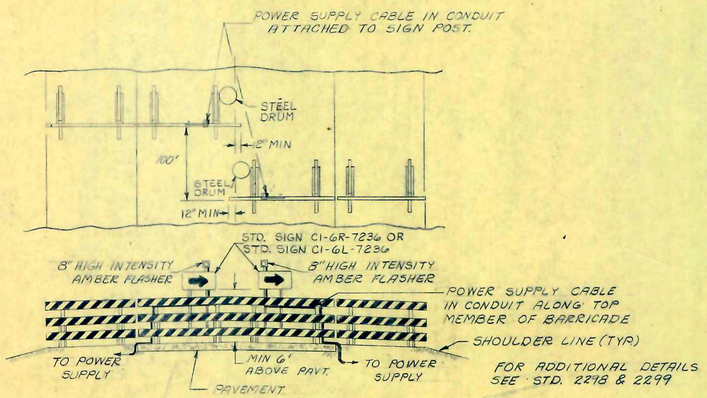
DRAWN BY DATE TJE 1-76
CHECKED BY DATE W.O. 1-76
BOOK NUMBER
PROJECT NO.
SHEET NO. 73

CUSHING & COMPANY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.412	80-5HB 60-2HB-3(R)	LASALLE	156	74
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		



* LETTERS - 6C SIZE 60" X 36" CONSTRUCTION ORANGE TO BE COVERED DURING NON-WORKING HOURS



DETAIL OF PERMANENTLY LIGHTED TYPE III BARRICADE

GENERAL NOTES

(1) TEMPORARY REFLECTORIZED PAVEMENENT MARKING TAPE SHALL BE USED FOR MAKING A NEW CENTER LINE AND EDGE LINES ON THE EXISTING PAVEMENT. ALL EXISTING MARKINGS WHICH CONFLICT WITH THE REVISED TRAFFIC PATTERN SHALL BE REMOVED. ON THE PAVED DETOUR ROAD EITHER TEMPORARY REFLECTORIZED PAVEMENT MARKING TAPE OR REFLECTORIZED PAINTED PAVEMENT MARKING SHALL BE USED.

(2) THE DISTRICT ENGINEER MAY REQUIRE STEEL DRUMS, EITHER 55 GAL. OR 30 GAL., TO BE USED TO SUPPLEMENT THE BARRICADES.

(3) ALL SIGNS SHALL BE POST MOUNTED.

(4) HIGH INTENSITY MONODIRECTIONAL FLASHING LIGHTS SHALL BE USED AT ALL TIMES ON EACH APPROACH IN ADVANCE OF THE WORK AREA AND INSTALLED ABOVE ALL SIGNS.

(5) LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.

(6) ALL WARNING SIGNS SHALL HAVE MINIMUM DIMENSIONS OF 48IN. BY 48 IN. AND HAVE BLACK LEGEND AND BORDER ON AN ORANGE HIGH INTENSITY TYPE A REFLECTORIZED BACKGROUND MEETING REQUIREMENTS OF SECTION T602 OF THE STANDARD SPECIFICATION FOR TRAFFIC CONTROL ITEMS.

(7) ALL LIGHTS ON TYPE I OR II BARRICADES SHALL BE STEADY BURNING MONODIRECTIONAL, BUT WILL NOT BE REQUIRED FOR DAY OPERATION.

(8) FORM BT-725 IS REQUIRED.

(9) NO VEHICLES, EQUIPMENT, MEN AND THEIR ACTIVITIES WILL BE PERMITTED WITHIN 15FT. OF THE EDGE OF ANY THROUGH TRAFFIC LANE.

SYMBOLS

- 48" SIGN WITH 18" BY 18" (MINIMUM) ORANGE FLAG ATTACHED.
- POST MOUNTED SIGN
- TYPE I OR II BARRICADE WITH STEADY BURNING LIGHT.
- DELINEATORS, SINGLE WHITE OR AMBER (STD. 2149)
- DRUM (55 OR 30 GALLON) SEE STD. 2299
- TYPE III BARRICADE (PERMANENTLY LIGHTED) SEE DETAIL ON THIS SHEET

TRAFFIC CONTROL & PROTECTION - I-80 DETOUR ROAD

REVISIONS		
No.	DATE	INITIALS
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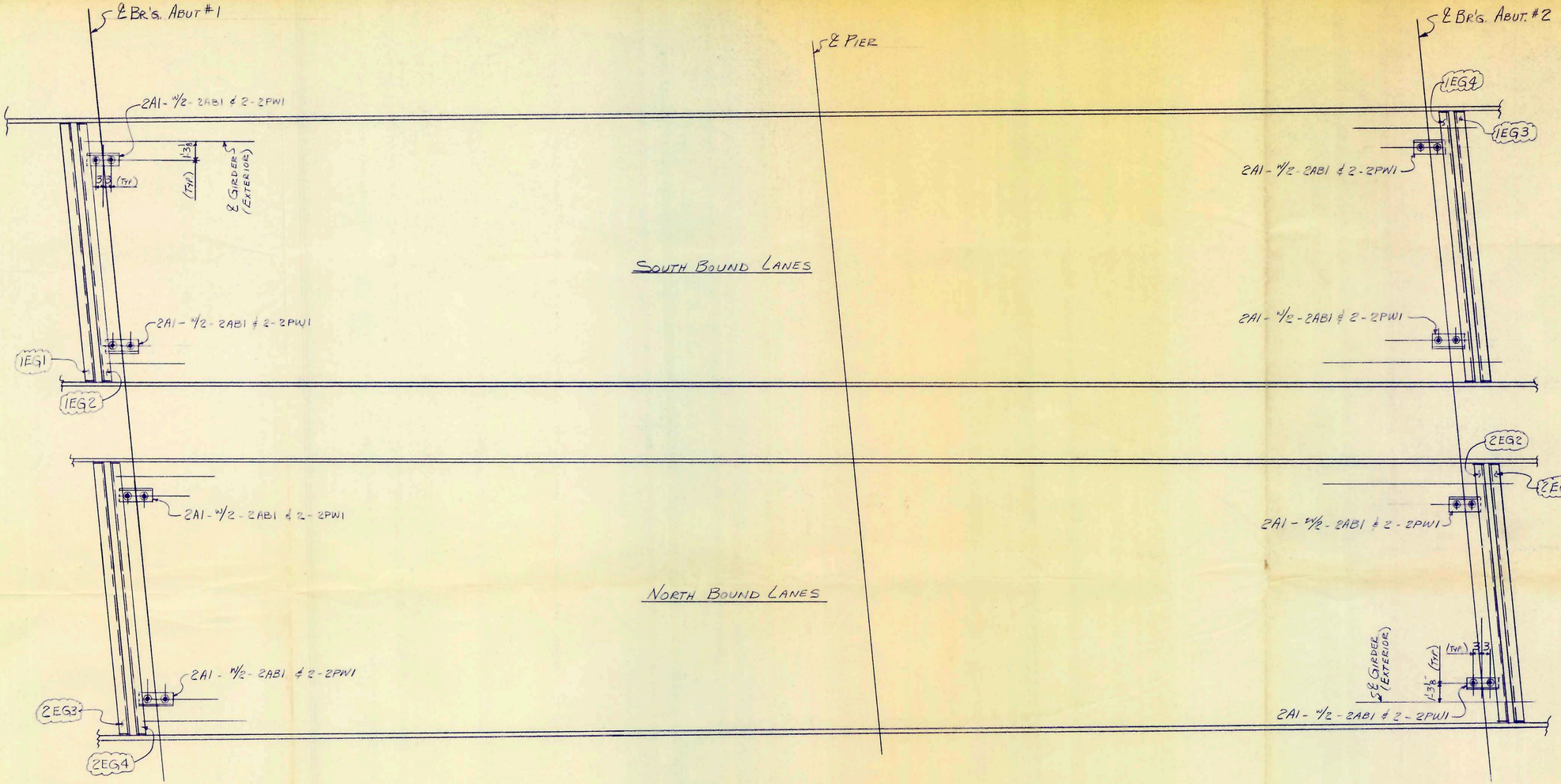
STATE OF ILLINOIS
DEPT. OF TRANSPORTATION

F.A. 412 — SEC. 80-3HB & 60-2HB-3(R)
LASALLE — COUNTY

HOMER L. CHASTAIN & ASSOCIATES
CONSULTING ENGINEERS
DECATUR, ILLINOIS

DRAWN BY DATE T. E. 1-76
CHECKED BY DATE W.C. 1-76
BOOK NUMBER
PROJECT NO.
SHEET NO. 74

CUMMINS & COMPANY



Erection Plan

APPROVED
For Main Dimensions and Materials Only
JUL 27 1976
Engineer of Bridge & Traffic Structures

PRI[illegible]
JUL 15 1976
HARTWIG MFG. CORP.

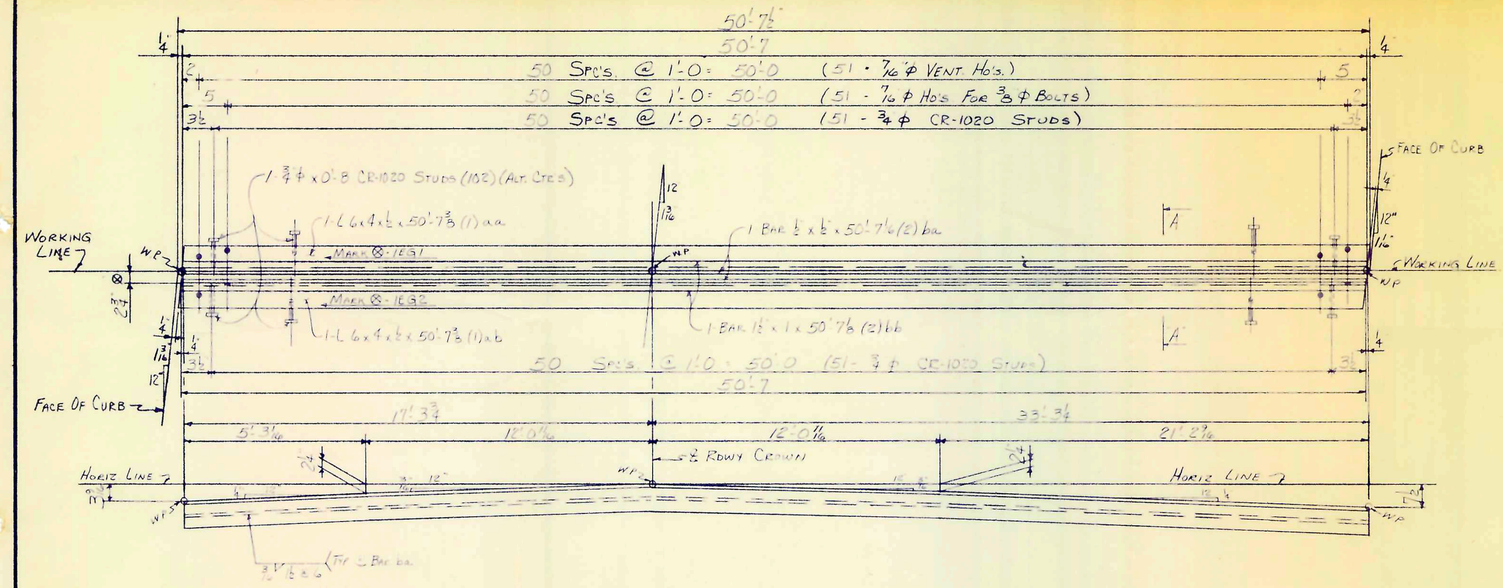
REVISIONS			
NO.	DATE	MADE BY	REMARKS

DRAWN BY L.W.G. DATE 5-14-76
CHECKED BY T.T DATE 6-11-76
APPROVAL
OPEN HOLES UNLESS NOTED
SHOP PAINT
TYPE OF FASTENING

CUSTOMER SHAPPERT ENG.
LOCATION LA SALLE COUNTY
STRUCTURE FA RT. 412 Sec. 50-5HB
PROJECT EBRF-412-4 (18)
DETAILS OF Erection Plan
SPECIFICATIONS BY I.H.C.

HARTWIG
MANUFACTURING CORP.
WAUSAU, WISCONSIN

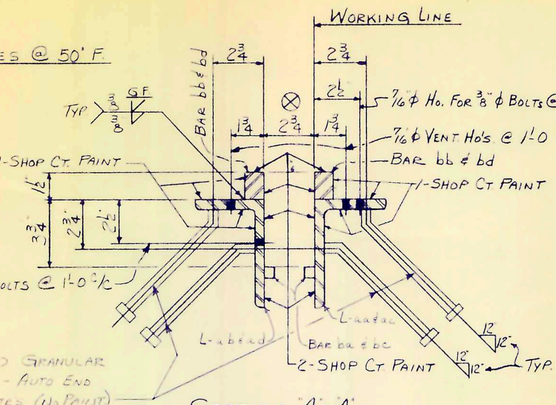
SHEET NO. E1
CONTRACT NO. 3375



1 - EXPANSION GUARD - IEG1 (@ ABUT #1 - SB)

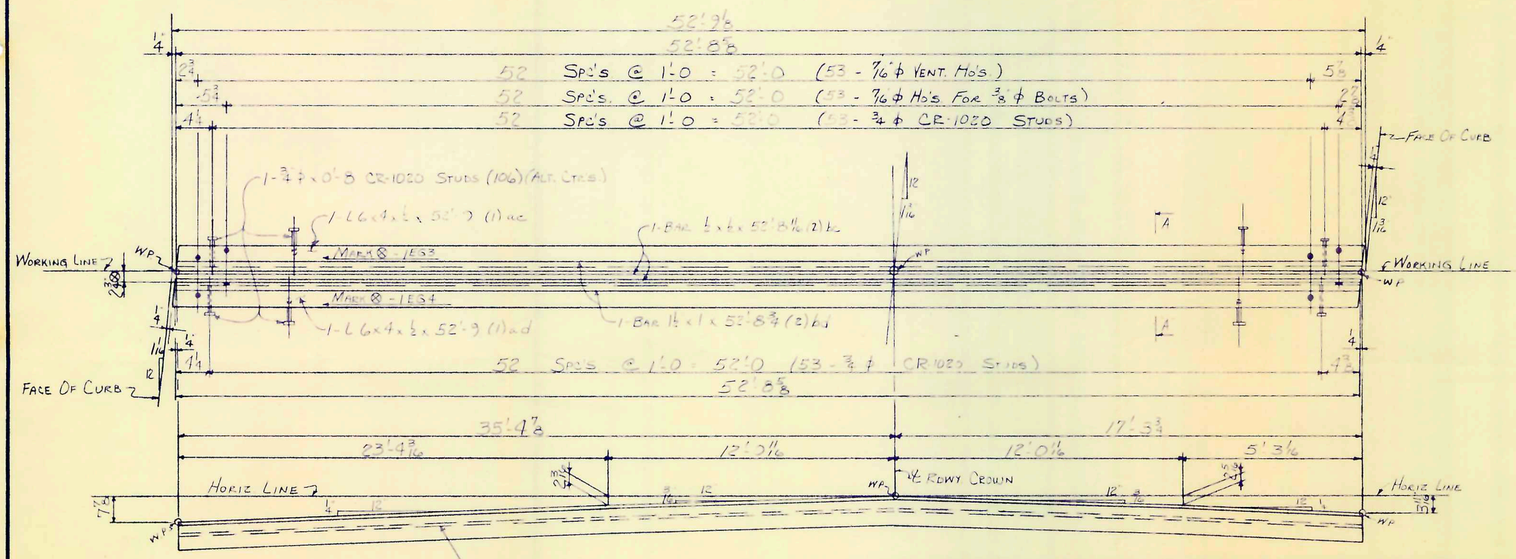
1 - do. do. - IEG2 (@ ABUT #2 - SB)

⊗ - DENOTES @ 50° F



1-3/4 ϕ x 0'-8 CR-1020 GRANULAR HEADED STL STUDS - AUTO END WELDED 1'-0 ALT. CTRS (NO PAINT)

SECTION "A"-"A"



1 - EXPANSION GUARD - IEG3 (@ ABUT #2 - SB)

1 - do. do. - IEG4 (@ ABUT #1 - SB)

APPROVED
For Main Dimensions and Materials Only
JUL 27 1976
Engineer of Bridge & Traffic Structures

PRINTED
JUL 15 1976
HARTWIG MFG. CORP.

GEN. NOTES:
1) ALL MATL. TO BE ASTM MIN. (ASTM A36)
(CHEM. STRUCT. & PHYS. TESTING - IS NOT REQ'D)
2) ALL MATL. TO BE SANDBLASTED TO A NEAR WHITE PER SPEC - SP 10-63T

REVISIONS			
NO	DATE	MADE BY	REMARKS

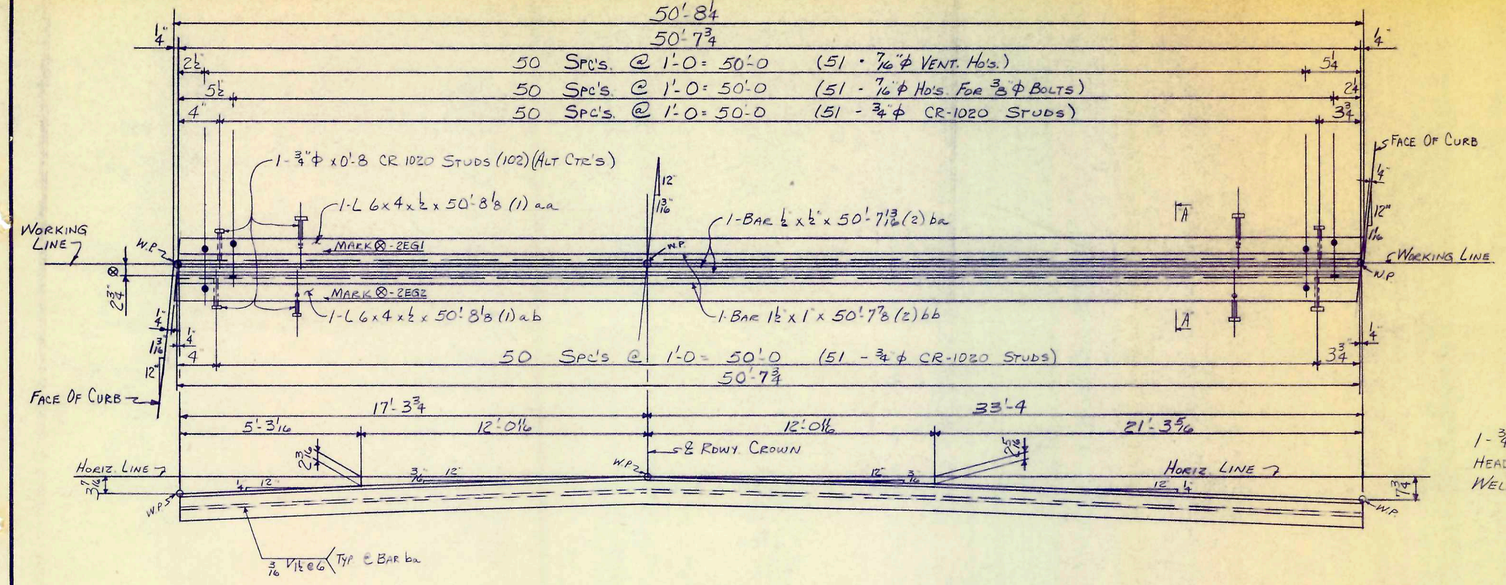
DRAWN BY L.W.G. DATE 6-3-76
CHECKED BY T.T. DATE 6-11-76
APPROVAL
OPEN HOLES As Shown UNLESS NOTED
SHOP PAINT 1-CT BASIC LEAD SILICO CHROMATE
TYPE OF FASTENING As Shown

CUSTOMER SHAPPERT ENG.
LOCATION LA SALLE COUNTY
STRUCTURE FA RT 412 SEC. 50-5HB
PROJECT EBRF-412-4(18)
DETAILS OF EXP. GUARDS (SOUTH BOUND)
SPECIFICATIONS BY I.H.C.

HARTWIG MANUFACTURING CORP.
WAUSAU, WISCONSIN

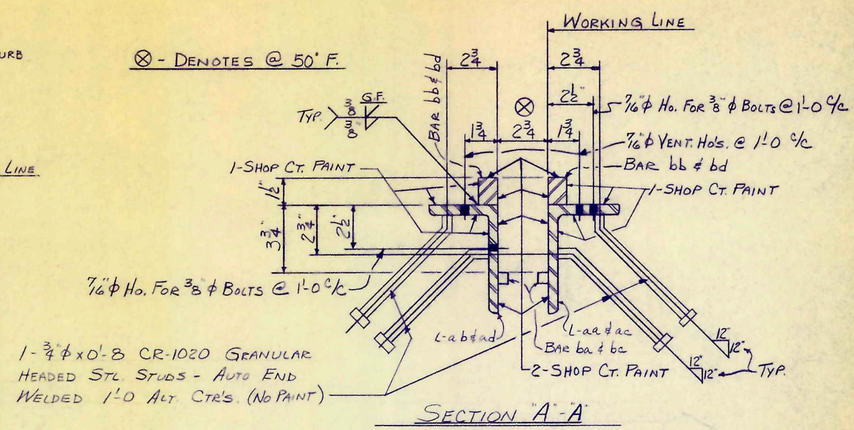
SHEET NO. 1
CONTRACT NO. 3375

STONE 880-250 1M 11-73

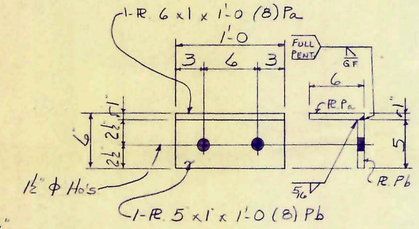


1 ~ Expansion Guard ~ 2EG1 (@ Abut #2 - N B)

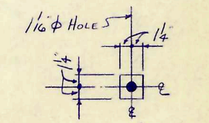
1 ~ do. do. ~ 2EG2 (@ Abut #2 - N B)



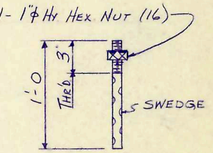
Section "A"-"A"



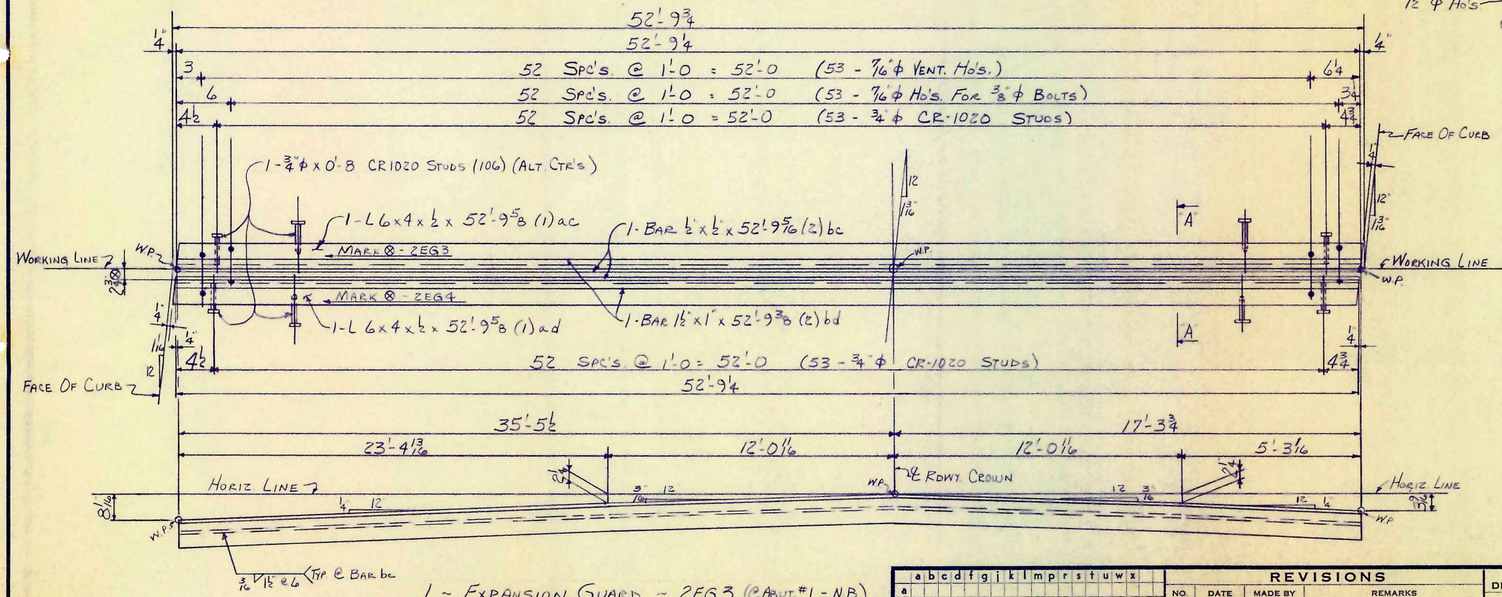
8 ~ Angles - 2A1
(2 - Shop Cts. of Paint)



16 ~ Pl. Washers - 2PW1
(2 - Shop Cts. of Paint)



16 ~ Anch. Bolts - 2AB1
(No Paint)



1 ~ Expansion Guard ~ 2EG3 (@ Abut #1 - N B)

1 ~ do. do. ~ 2EG4 (@ Abut #1 - N B)

Gen. Notes:
1) For Notes See Sht #1.

APPROVED
For Main Dimensions and Materials Only
JUL 27 1976
Engineer of Bridges & Highways

PRINTED
Typing Instructions
HARTWIG MFG. CORP.

a	b	c	d	f	g	j	k	l	m	p	r	s	t	u	w	x
a																
b																
c																
p																
s.t.																
r																
z																

REVISIONS

NO.	DATE	MADE BY	REMARKS

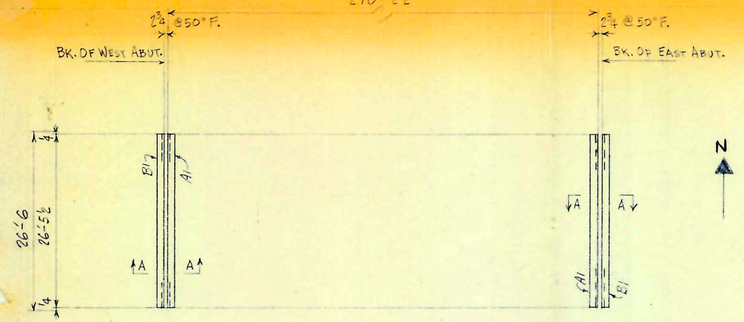
DRAWN BY L.W.G. DATE 6-4-76
CHECKED BY T.T. DATE 6-11-76
APPROVAL
OPEN HOLES As Shown UNLESS NOTED
SHOP PAINT 1-Ct. Basic Lead Silico Chromate
TYPE OF FASTENING As Shown

CUSTOMER Shappert Eng.
LOCATION LaSalle County
STRUCTURE FA. RT. 412 Sec. 50-5HB
PROJECT EBRF-412-4(18)
DETAILS OF Exp. Guards (N.B) & Clips, Angles & Bolts & Pl. Wshrs
SPECIFICATIONS BY I.H.C.

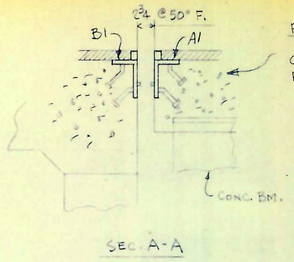
HARTWIG
MANUFACTURING CORP.
WAUSAU, WISCONSIN

SHEET NO.	CONTRACT NO.
2	3375

210'-2½

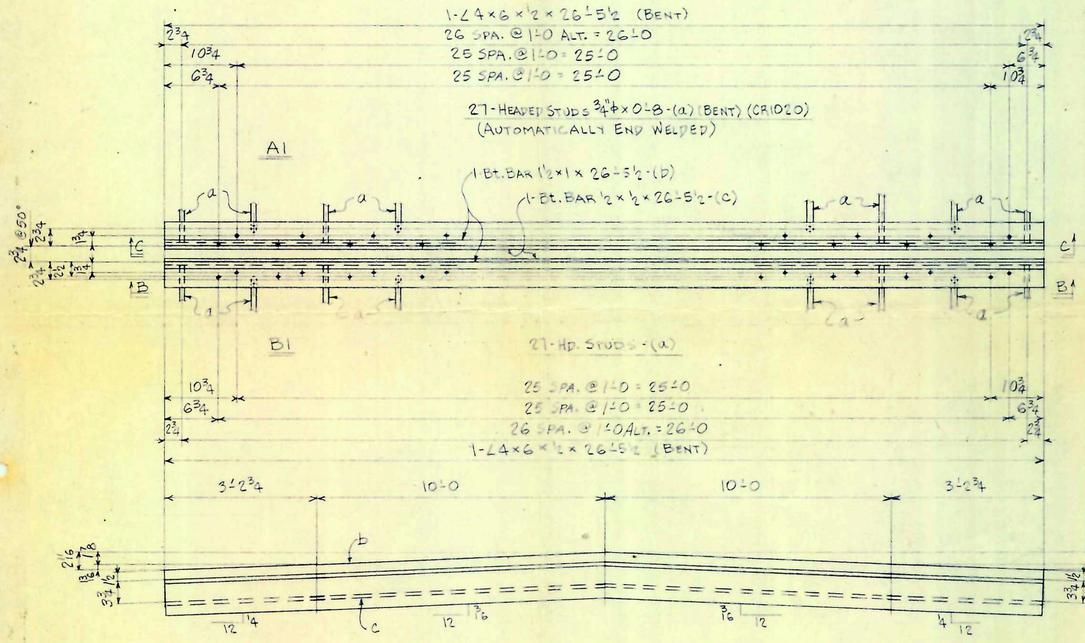


ERECTION PLAN

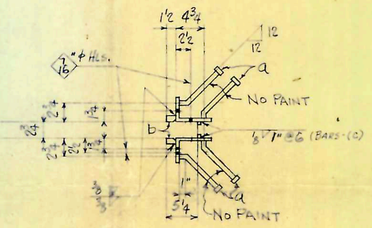


SEC. A-A

FIELD NOTE
ALL BOLTS SHALL BE BURNED, SAWED OR CLIPPED OFF FLUSH WITH BACK OF L'S AFTER FORMS ARE REMOVED.



SEC. B-B (As Shown)
SEC. C-C (OPP. HAND)



2 — EXPANSION ANGLES — A1
2 — Do — B1

APPROVED
For Main Dimensions and Materials Only
DEC 2 3 1976
Engineer of Bridge & Traffic Structures

GENERAL NOTES

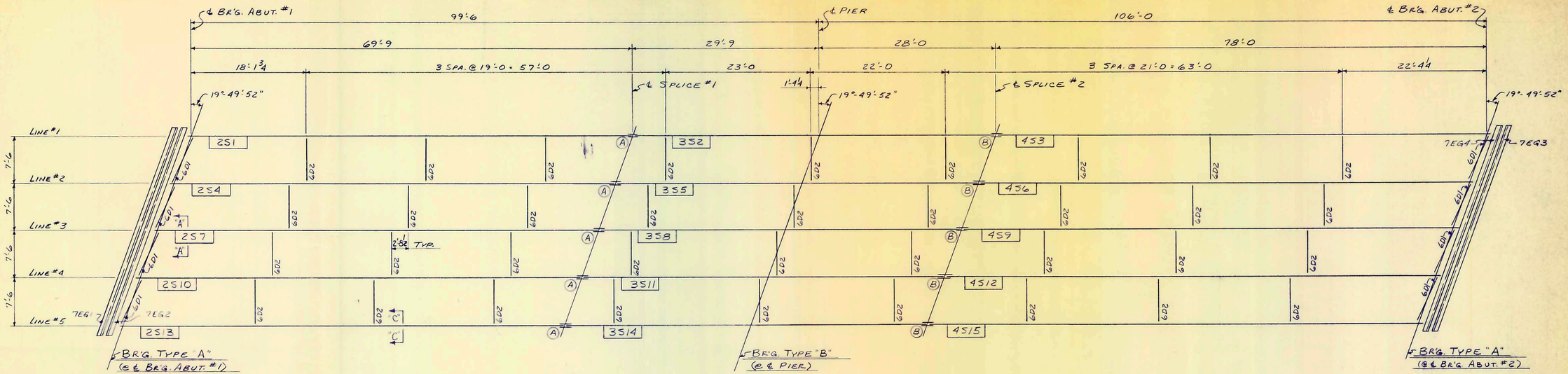
INSPECTION — STATE OF ILL. DEPT. OF HIGHWAYS
MATERIAL — AASHTO-M183 (ASTM-A36) U.N.
WELDING — TO BE AS SHOWN AND IN ACCORDANCE WITH D2.0-69 SPECS OF A.W.S. FOR WELDED HIGHWAY AND RAILWAY BRIDGES AND THE SPECIAL PROVISIONS.
CLEANING — ALL SURFACES TO BE BLAST-CLEANED TO A NEAR WHITE METAL. (SSPC-SP10)
PAINT — 2 SHOP COATS OF BASIC LEAD SILICO CHROMATE.

TR-CSS BRIDGE OVER FA-412
SEC. 50-5HB-1 PROJ. EBRF-412-4(16)
LA SALLE COUNTY STATE OF ILLINOIS DEPT. OF HWYS.

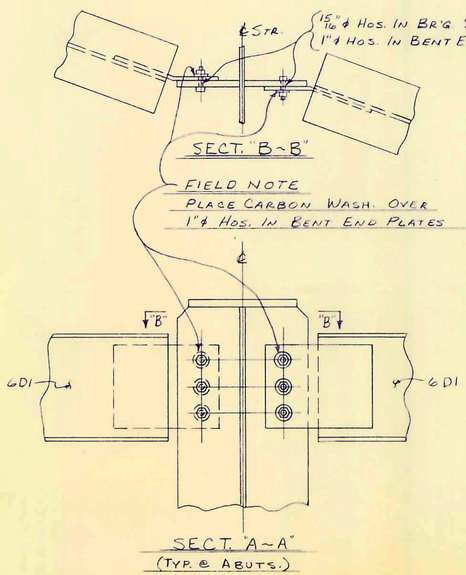
SCALE: N.T.S.	APPROVED BY: OCT 20, 1976	DRAWN BY RCV
DATE: 9-16-76	CARL E THUNMAN JR	REVISED

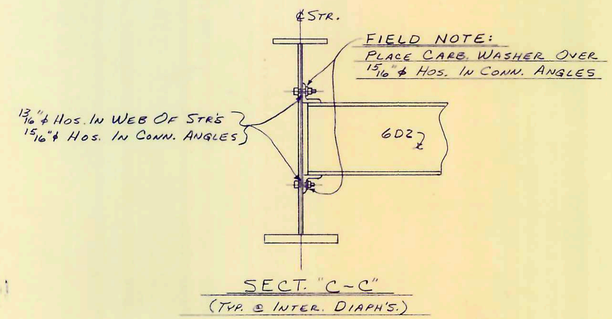
COMMERCIAL FABRICATORS
7301 W. 16TH AVE. BRIDGEVIEW ILL.

DRAWING NUMBER 1



ERECTION PLAN → N





APPROVED
For Main Dimensions and Materials Only
OCT 13 1976
Engineer of Bridges & Traffic Structures

PRINTED
SEP 25 1976
HARTWIG MFG. CORP.

	a	b	c	d	f	g	j	k	l	m	p	r	s	t	u	w	x
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b																	
c																	
p																	
s.t.																	
r																	
z																	

REVISIONS

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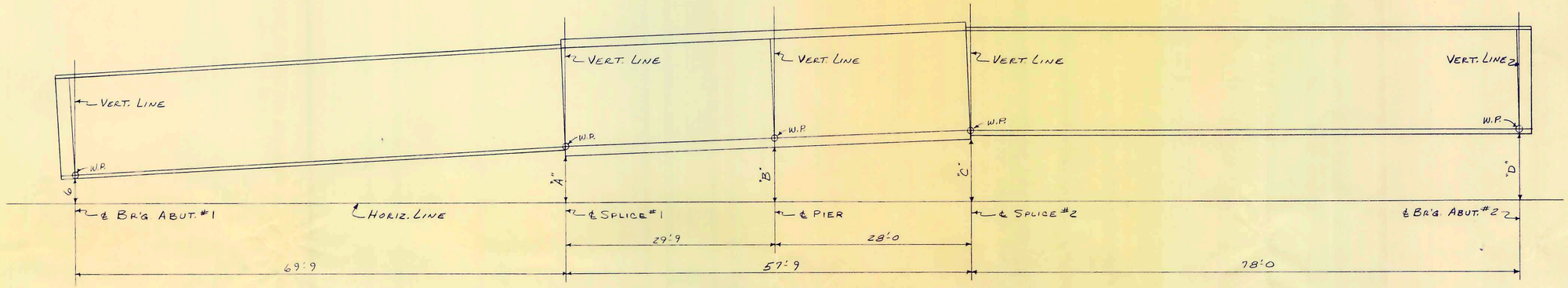
DRAWN BY G.M. DATE 5-24-76
CHECKED BY T.T. DATE 8-9-76
APPROVAL
OPEN HOLES UNLESS NOTED
SHOP PAINT
TYPE OF FASTENING

CUSTOMER SHAPPERT ENG.
LOCATION LASALLE COUNTY
STRUCTURE SECT. 50-2HB-3 (R)
PROJECT F.A. 412 EBRF-412-4(18)
DETAILS OF ERECTION PLAN
SPECIFICATIONS BY I.H.C.

HARTWIG
MANUFACTURING CORP.
WAUSAU, WISCONSIN

SHEET NO. E-1
CONTRACT NO. 3374

STONE BRO-250 1M-11-75



DIMENSIONS & BLOCKING DIAGRAM FOR SHOP ASSEMBLY

LINE No.	"A"	"B"	"C"	"D"
1	10 5/8	1'-0 3/16	1'-1 3/4	1'-3 1/8
2	10 3/4	1'-0 3/8	1'-1 15/16	1'-3 9/16
3	10 7/8	1'-0 9/16	1'-2 1/4	1'-4
4	11	1'-0 13/16	1'-2 5/8	1'-4 9/16
5	11 1/4	1'-1 1/16	1'-2 7/8	1'-4 15/16

SHOP NOTES FOR SHOP ASSEMBLY

1) BLOCKING FOR SHOP ASSEMBLY IS GIVEN FROM THE BOTT. OF THE BOTT. FLG.
2. AT FIELD SPLICES DIMENSIONS ARE GIVEN TO THE THICKEST FLG.

APPROVED
For Main Dimensions and Materials Only
OCT 13 1976
Engineer of Bridge & Traffic Structures

PRINTED
SEP 25 1976
HARTWIG MFG CORP.

	a	b	c	d	f	g	j	k	l	m	p	r	s	t	u	w	x
a																	
b																	
c																	
p																	
s.t.																	
r																	
z																	

REVISIONS

NO.	DATE	MADE BY	REMARKS

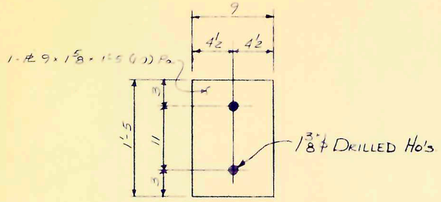
DRAWN BY G.M. DATE 5-24-76
CHECKED BY T.T DATE 8-9-76
APPROVAL
OPEN HOLES UNLESS NOTED
SHOP PAINT
TYPE OF FASTENING

CUSTOMER SHAPPERT ENG.
LOCATION LA SALLE COUNTY
STRUCTURE SECT. 50-2HB-3(R)
PROJECT F.A. 912 EBRF-412-4(18)
DETAILS OF BLOCKING DIAGRAM
SPECIFICATIONS BY I.H.C.

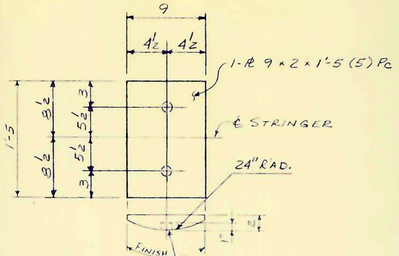
HARTWIG
MANUFACTURING CORP.
WAUSAU, WISCONSIN

SHEET NO. E-2
CONTRACT NO. 3374

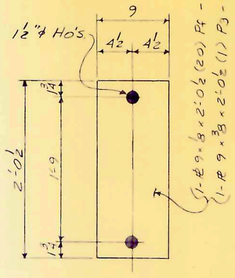
STONE 850-250 1M-1-73



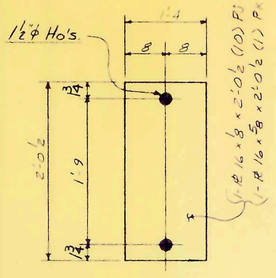
10 ~ TOP BR'G. PLTS ~ 1TB1



5 ~ ROCKERS ~ 1R2

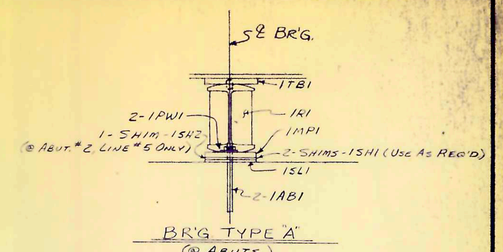


20 ~ SHIMS ~ 1SH1
1 ~ do. ~ 1SH2

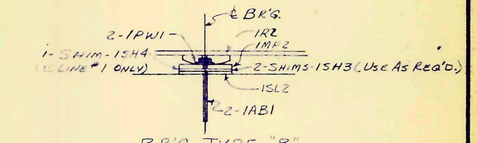


10 - SHIMS ~ 1SH3
1 - do. ~ 1SH4

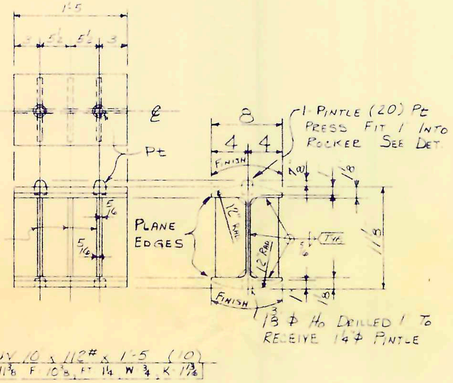
NOTE:
SHIMS 1SH1 & 1SH3 TO BE USED FOR BRIDGE SEAT ADJUSTMENT - USE AS REQ'D.



BR'G TYPE "A"
(@ ABUTS.)

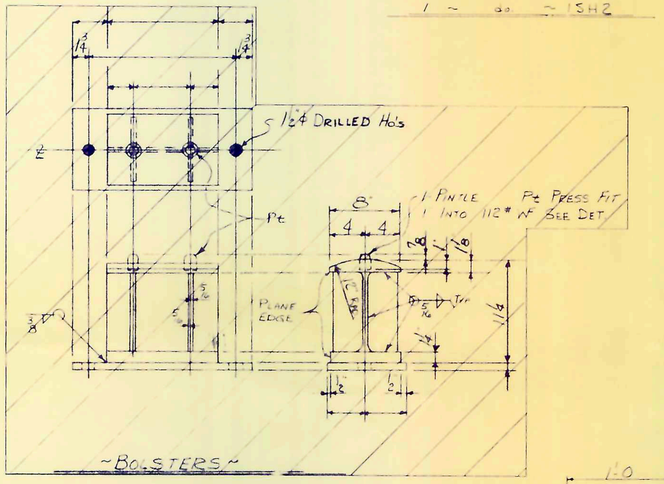


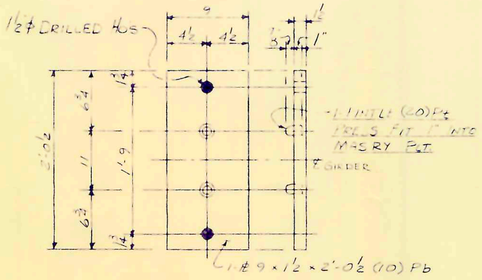
BR'G. TYPE "B"
(@ PIER)



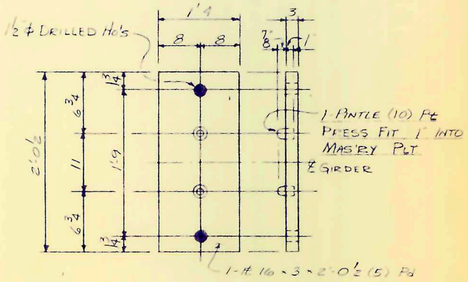
1½	10	x 112#	x 1'-5	(10)
D 11⅞	F 10⅜	FT 1¼	W ¾	K 1⅞

10 ~ ROCKERS ~ 1R1

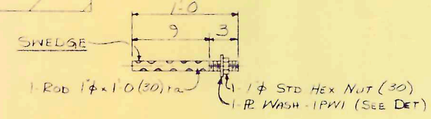




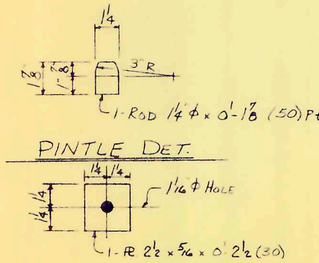
10 ~ MASRY PLTS ~ 1MP1



5 ~ MASRY PLT ~ 1MP2



30 ~ ANCH BLTS ~ 1AB1
(NO PAINT)



30 ~ PLATE WASHER ~ 1PW1

SHOP PAINT NOTE FOR BR'GS.
ALL SURFACES OF ROCKERS, BOLSTERS, MASRY PLTS, BEARING PLTS, SHIMS, AND THE MILLED ENDS OF MEMBERS SHALL BE GIVEN ONE COAT OF SHOP PAINT AND ONE COAT OF (FIRST FIELD COAT) MAROON BASIC LEAD SILICO CHROMATE.

NOTES:

1 - ALL PLT. CUTS TO BE MACH. OR MACH. FLAME CUTS.
2 - NO PAINT ON MATR'L INBEDDED IN CONCRETE.
3 - ALL MATR'L TO BE SANDBLASTED TO A NEAR WHITE PER SPEC - SP 10 - 63T.
4 - ALL MATR'L. SHOWN TO BE FABRICATED & SET IN ACCORDANCE WITH SECT 507 OF THE 1973 ILL. STD. SPEC'S.
5 - ALL BR'G. PLTS. SHALL BE TRUE - SMOOTH & FREE FROM WARP.
6 - WELDING SHALL CONFORM TO CURRENT SPECIFICATIONS FOR WELDED HWY. & RR BRIDGES OF THE A.W.S.
7 - MATCH MARK ALL SPLICES AND STRINGERS.
8 - ALL FLANGES, WEBS, FLANGE & WEB SPLICE PLTS SHALL CONFORM TO AASHTO M183 AND SHALL MEET THE FOLLOWING LONGIT. CHARPY V-NOTCH TEST 15 FT. LBS. @ 40° F. AS NOTED ON DRAWINGS.
9 - ALL MATR'L. FOR BR'GS., STIFF'S., END DIAPHRAGMS, INTER. DIAPH'S. AND EXPANSION SHOES SHALL BE AASHTO M183 (A.STM. A 36) (LONGIT. CHARPY V-NOTCH TESTING IS NOT REQ'D.)
10 - ALL FLANGES SHALL CONFORM TO AASHTO M222 AND SHALL MEET THE FOLLOWING LONGIT. CHARPY V-NOTCH TEST: 15 FT. LBS. @ 40° F - FOR 1⅛" & 1⅜" FLGS. 20 FT. LBS. @ 40° F - FOR 1½" & 1¾" FLGS. AS NOTED ON DRG'S.

APPROVED
For High Structures Only
OCT. 1 - 1973
Bureau of Design & Environment

PRINTED
SEP 25 1976
HARTWIG MFG CORP.

a b c d f g j k l m p r s t u w x
a
b
c
p
s.t.
r
x

NO	DATE	MADE BY	REMARKS

REVISIONS

DRAWN BY G.M.	DATE 5-24-76
CHECKED BY T.T.	DATE 9-1-76
APPROVAL	
OPEN HOLES AS SHOWN UNLESS NOTED	
SHOP PAINT SEE NOTE	
TYPE OF FASTENING AS SHOWN	

CUSTOMER	SHAPPERT ENG.
LOCATION	LA SALLE COUNTY
STRUCTURE	SECT. 50-2HPB-3 (L)
PROJECT	FA 412 (FEEP 412-A)(2)
DETAILS OF	BR'GS
SPECIFICATIONS BY	I.H.C.

HARTWIG
MANUFACTURING CORP.
WAUSAU, WISCONSIN

SHEET NO.	CONTRACT NO.
1	3374

STONE 880-250 1M-11-73

70'-2½

69'-9

℄ BR'G. ABUT. #1

℄ SPLICE #1 FOR DET. SEE SHT. #5

18'-1¾ | 19'-0 | 19'-0 | 13'-7¼

E.A.

18'-1¾ | 37'-1¾ | 56'-1¾

1-℔ 12 x ¾ x 70'-2½ (1) Pa (M-183)

NO PAINT TOP FLG.

1-℔ 12 x 1½ x 1'-1 (1) TACK WELD ALONG SIDES, FOR DET. SEE SHT. #5

MARK ⊗ SOUTH

(S.A.)

BAR-ba F.S.
BAR-bb N.S.

W.P.

1-℔-1TB1 (1) FOR DET. SEE SHT. #1

1-℔ 16 x ⅞ x 70'-2⅜ (1) Pb (M222) (WITH CHARPY V-NOTCH TEST REQ'D.)

1-℔ 42 x ½ x 70'-2½ (1) Pc (M183) (WITH CHARPY V-NOTCH TEST REQ'D.)

15/16" ℄ DRILLED HOS.

1-℔ 16 x 1⅜ x 1'-3 (1) TACK WELD ALONG SIDES, FOR DET. SEE SHT. #5

9 SPA @ 0'-4" = 3'-0

3'-6

TIGHT FIT NO WELD

MILL TO BEAR NO WELD

1-BAR 7 x ⅝ x 3'-6 (1) bb (CLIP INSIDE CORS ¾" x ¾")

1-BAR 7 x ⅝ x 3'-6 (1) bb (CLIP INSIDE CORS ¾" x ¾")

END VIEW

1 ~ STRINGER ~ 251 (LINE #1)

70'-2½

69'-9

℄ BR'G. ABUT. #1

℄ SPLICE #1 FOR DET. SEE SHT. #5

18'-1¾ | 2'-8½ | 16'-3½ | 2'-8½ | 16'-3½ | 2'-8½ | 10'-10¾

E.A.

18'-1¾ | 20'-0¼ | 37'-1¾ | 39'-10¼ | 56'-1¾ | 58'-10¼

1-℔ - Pa (3) (M-183)

NO PAINT TOP FLG.

1-℔ 12 x 1½ x 1'-1 (3) TACK WELD ALONG SIDES, FOR DET. SEE SHT. #5

MARK ⊗ SOUTH

(S.A.)

BAR-bb N.S. & F.S.

W.P.

1-℔-1TB1 (3) FOR DET. SEE SHT. #1

1-℔ - Pb (3) (M222) (WITH CHARPY V-NOTCH TEST REQ'D.)

1-℔ - Pc (3) (M-183) (WITH CHARPY V-NOTCH TEST REQ'D.)

15/16" ℄ DRILLED HOS.

1-℔ 16 x 1⅜ x 1'-3 (3) TACK WELD ALONG SIDES, FOR DET. SEE SHT. #5

9 SPA @ 0'-4" = 3'-0

3'-6

TIGHT FIT NO WELD

MILL TO BEAR NO WELD

1-BAR-bb (6) (CLIP INSIDE CORS 4"x4")

END VIEW

1 ~ STRINGER ~ 254 (LINE #2)

1 ~ STRINGER ~ 257 (LINE #3)

1 ~ STRINGER ~ 2510 (LINE #4)

70'-2½

69'-9

℄ BR'G. ABUT. #1

℄ SPLICE #1 FOR DET. SEE SHT. #5

20'-10¼ | 19'-0 | 19'-0 | 10'-10¾

E.A.

20'-10¼ | 39'-10¼ | 58'-10¼

1-℔ - Pa (1) (M-183)

NO PAINT TOP FLG.

1-℔ 12 x 1½ x 1'-1 (1) TACK WELD ALONG SIDES, FOR DET. SEE SHT. #5

MARK ⊗ SOUTH

(S.A.)

BAR-ba N.S.
BAR-bb F.S.

W.P.

1-℔-1TB1 (1) FOR DET. SEE SHT. #1

1-℔ - Pb (1) (M222) (WITH CHARPY V-NOTCH TEST REQ'D.)

1-℔ - Pc (1) (M183) (WITH CHARPY V-NOTCH TEST REQ'D.)

15/16" ℄ DRILLED HOS.

1-℔ 16 x 1⅜ x 1'-3 (1) TACK WELD ALONG SIDES, FOR DET. SEE SHT. #5

9 SPA @ 0'-4" = 3'-0

3'-6

TIGHT FIT NO WELD

MILL TO BEAR NO WELD

1-BAR-ba (1) (CLIP INSIDE CORS ¾" x ¾")

1-BAR-bb (1) (CLIP INSIDE CORS ¾" x ¾")

END VIEW

1 ~ STRINGER ~ 2513 (LINE #5)

4 @ 2½"=0'-10 (STAGGERED)

℄ STR

SECT. A-A

4 @ 3"=1'-0

℄ STR

SECT. "B-B"

GEN. NOTES:

1.) FOR NOTES SEE SHT. #1

APPR. OCT

PRINTED SEP 25 1976 HARTWIG MFG. CORP.

REVISIONS			
NO	DATE	MADE BY	REMARKS

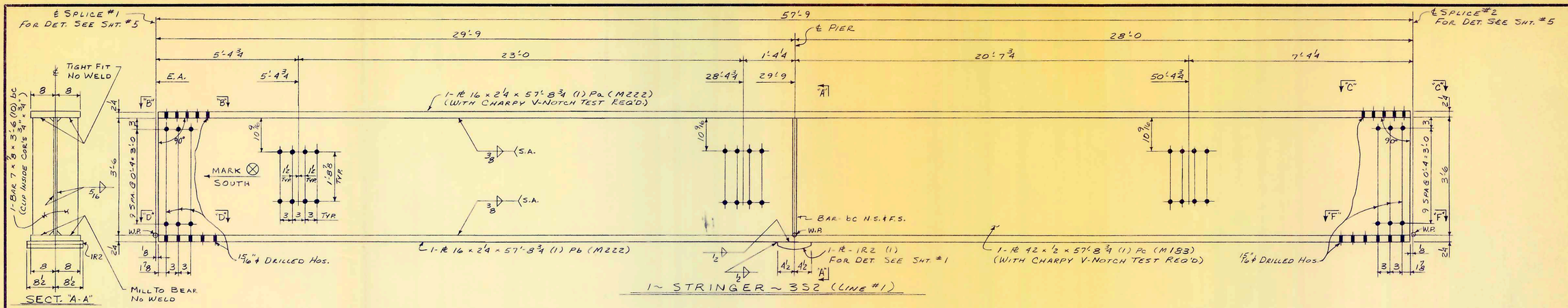
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CHECKED BY T.T. DATE 8-9-76
APPROVAL
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SHOP PAINT 1-CT. BASIC LEAD (SILICO CHROMATE)
TYPE OF FASTENING AS SHOWN

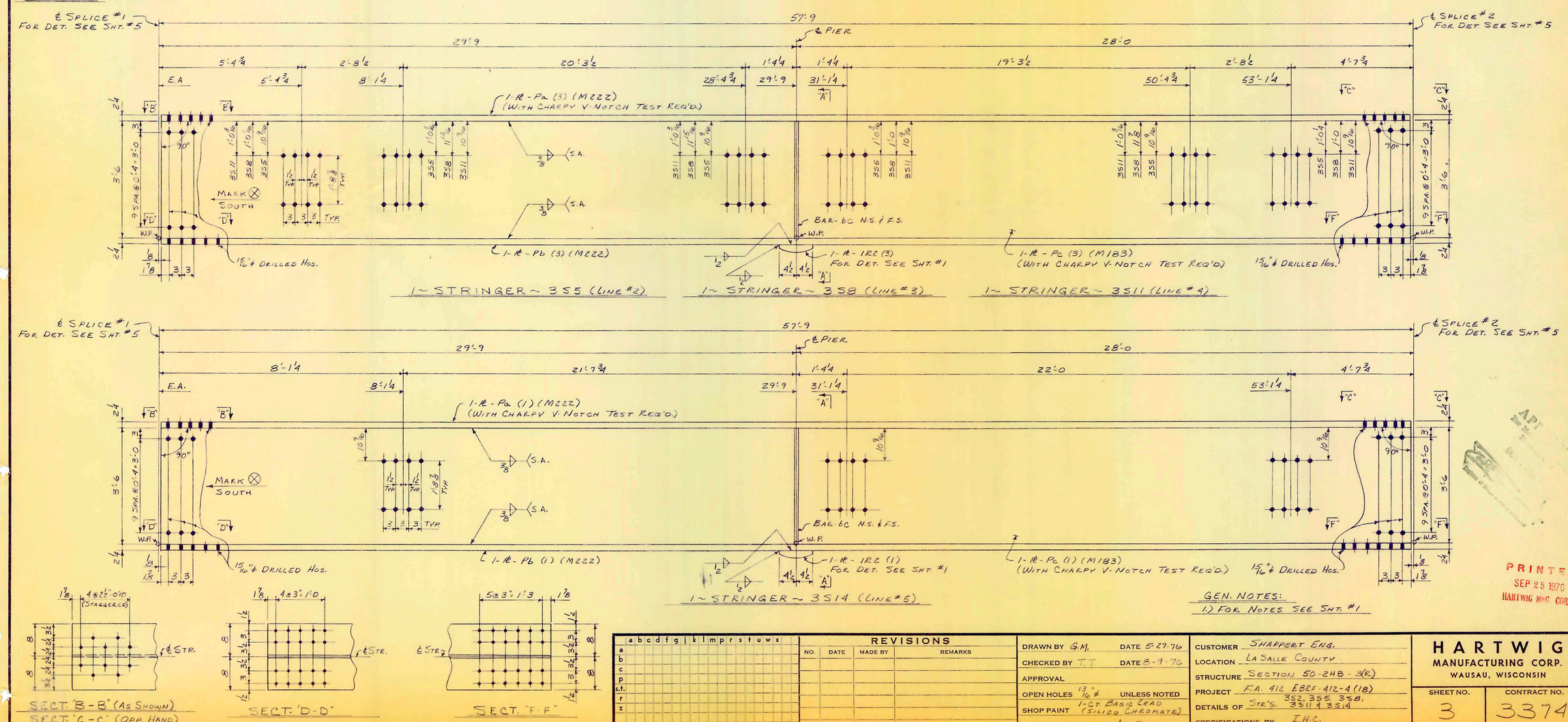
CUSTOMER SHAPPERT ENG.
LOCATION LA SALLE COUNTY
STRUCTURE SECTION 50-2HB-3(R)
PROJECT F.A. 412 EBRF-412-4(18)
DETAILS OF STE'S 251, 254, 257, 2510 & 2513
SPECIFICATIONS BY I.H.C.

HARTWIG
MANUFACTURING CORP.
WAUSAU, WISCONSIN

SHEET NO.	CONTRACT NO.
2	3374

STONE 880-280 1M-11-75





GEN. NOTES:
1.) FOR NOTES SEE SHT. #1

REVISIONS			
NO.	DATE	MADE BY	REMARKS

DRAWN BY G.M.	DATE 5-27-76
CHECKED BY T.T	DATE 8-9-76
APPROVAL	
OPEN HOLES 13/16" ℄ UNLESS NOTED	
SHOP PAINT 1-Ct. BASIC LEAD (SILICO CHROMATE)	
TYPE OF FASTENING AS SHOWN	

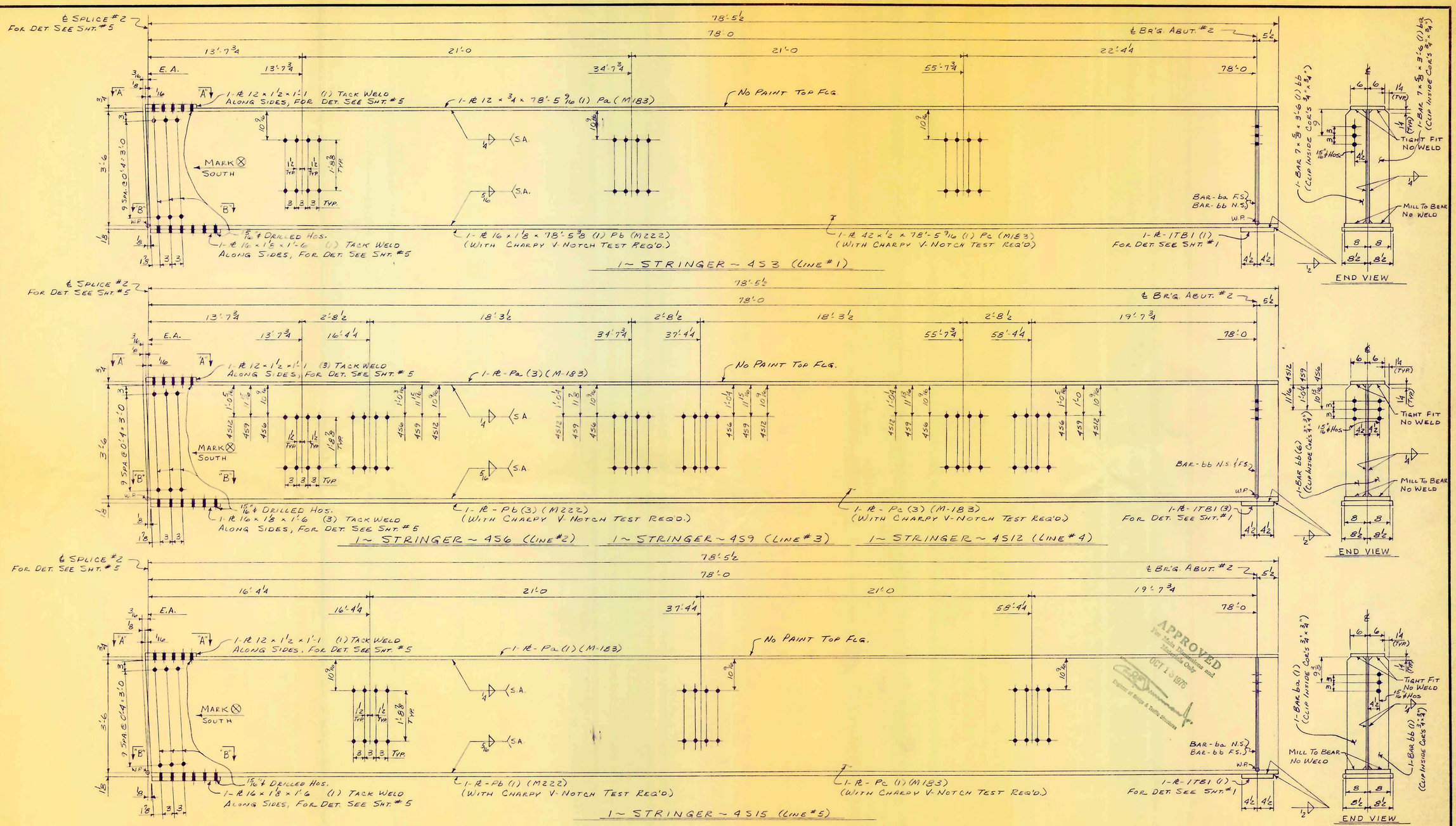
CUSTOMER	SHAPPERT ENG.
LOCATION	LA SALLE COUNTY
STRUCTURE	SECTION 50-2HB - 3(R)
PROJECT	F.A. 412 EBEE-412-4(18)
DETAILS OF	STR'S. 352, 355, 358, 3511 & 3514
SPECIFICATIONS BY	I.H.C.

HARTWIG
MANUFACTURING CORP.
WAUSAU, WISCONSIN

SHEET NO.	CONTRACT NO.
3	3374

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SEP 25 1976
HARTWIG MFG. CORP.

STONE RBC-250 IM 11-73



GEN. NOTES:
1.) FOR NOTES SEE SHT. #1

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REVISIONS			
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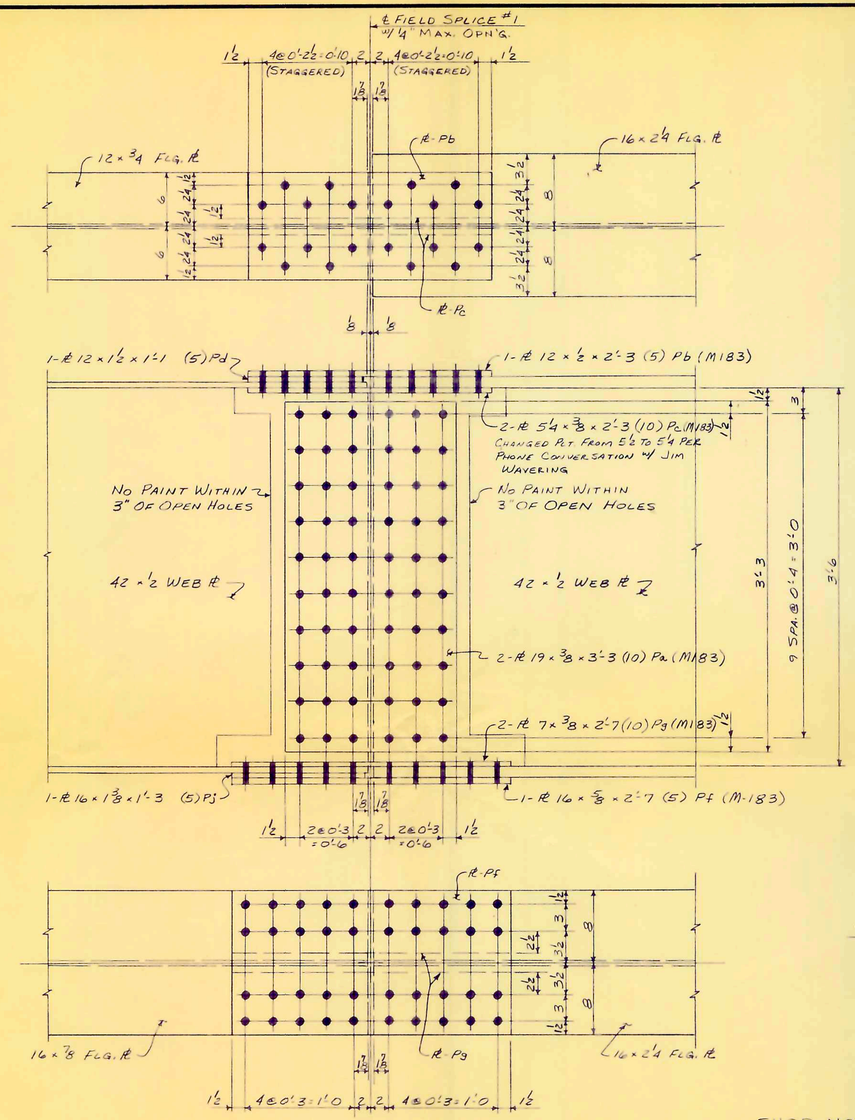
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CHECKED BY T.T. DATE 8-9-76
APPROVAL
OPEN HOLES 13/16ϕ UNLESS NOTED
SHOP PAINT 1-CT. BASIC LEAD (SILICO CHROMATE)
TYPE OF FASTENING AS SHOWN

CUSTOMER SHAPPERT ENG.
LOCATION LA SALLE COUNTY
STRUCTURE SECTION 50-2HB-3(R)
PROJECT FA 412 EBRF-412-4(18)
DETAILS OF STR'S 453, 456, 459 4512 & 4515
SPECIFICATIONS BY I.H.C.

HARTWIG
MANUFACTURING CORP.
WAUSAU, WISCONSIN

SHEET NO.	CONTRACT NO.
4	3374

STONE 880-250 (M-11-73

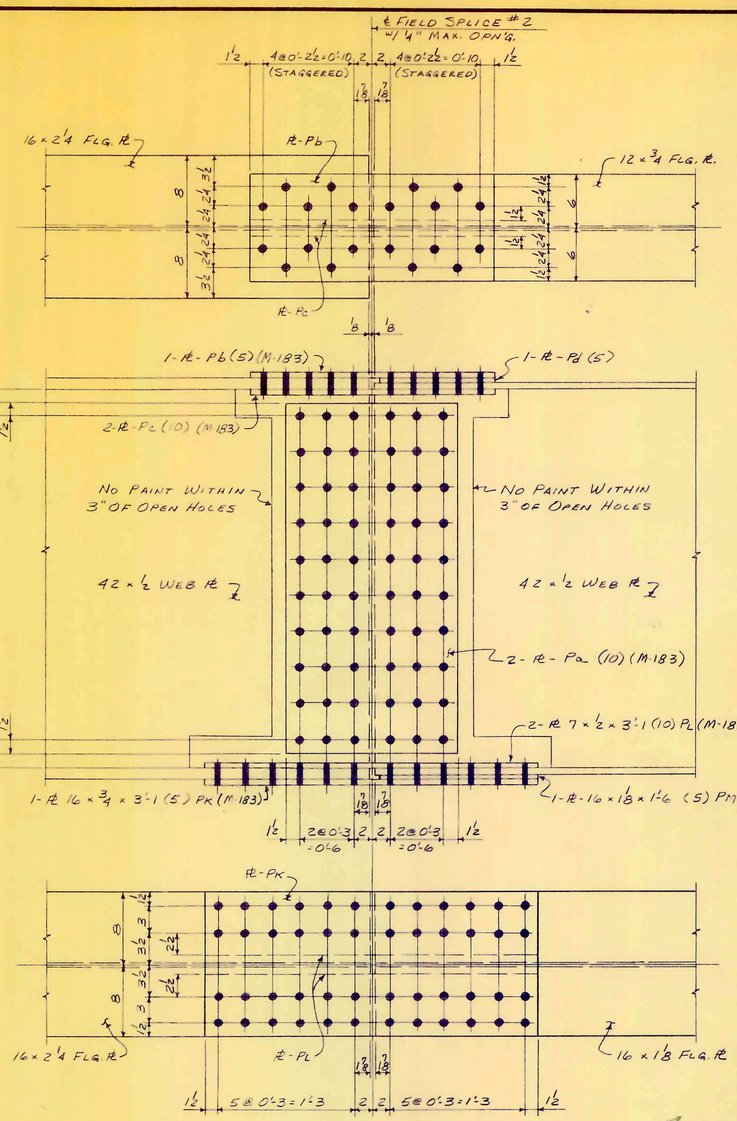


SPLICE TYPE "A" (5 REQ'D.) @ SPLICE #1
(LINES #1 THRU #5)

FIELD BOLTS FOR SPLICE "A"
100 - ⅞"ϕ × 0'-4½ LG. HD. H.S.B. W/NUT (TOP FLG)
200 - ⅞"ϕ × 0'-4¾ LG. HD. H.S.B. W/NUT (BOTT FLG)
300 - ⅞"ϕ × 0'-2¾ LG HD H.S.B. W/NUT (WEB)
600 - ⅞ϕ CARB WASHER

SHOP MATR'L. NOTE:
ALL SPLICE MATR'L MARKED M183 SHALL HAVE CHARPY V-NOTCH TEST

SHOP NOTES FOR SPLICES:
1.) THE EDGES OF SPLICE PLTS. THAT ARE FLAME CUT SHALL HAVE EDGES ROUNDED TO 1/16" RADIUS BY GRINDING.
2.) SPLICE HOS. SHALL BE DRILLED FROM SOLID TO 15/16"ϕ IN FLANGES & IN WEB AFTER ALL STRINGERS HAVE BEEN ASSEMBLED TO PROPER ELEVATION.
3.) SHOP ASSEMBLY TO BE CHECKED BY STATE INSPECTOR PRIOR TO DRILLING.
4.) ALL FIL PLTS. TO BE TACK WELDED TO STR'S. ALONG SIDES.
5.) MATCH MARK SPLICE PLTS. PRIOR TO DRILLING & BOLT PLTS. IN PLACE FOR SHIPMENT.



SPLICE TYPE "B" (5 REQ'D.) @ SPLICE #2
(LINES #1 THRU #5)

FIELD BOLTS FOR SPLICE "B"
100 - ⅞"ϕ × 0'-4½ LG. HD. H.S.B. W/NUT (TOP FLG.)
240 - ⅞"ϕ × 0'-5 LG. HD. H.S.B. W/NUT (BOTT. FLG.)
300 - ⅞"ϕ × 0'-2¾ LG HD. H.S.B. W/NUT (WEB)
640 - ⅞"ϕ CARB. WASHER

GEN. NOTES:
1.) FOR NOTES SEE SHT. #1

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Chief, Bridge & Traffic Structures

PRINTED
SEP 25 1976
HARTWIG MFG CORP.

REVISIONS			
NO.	DATE	MADE BY	REMARKS

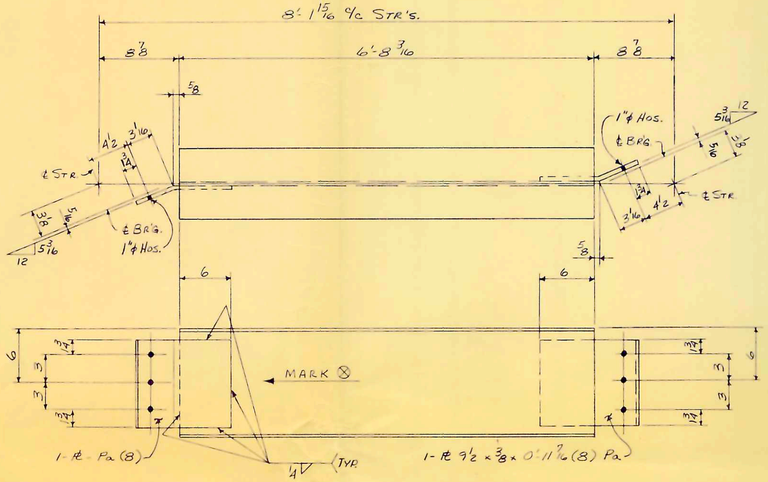
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CHECKED BY TT DATE 8-9-76
APPROVAL
OPEN HOLES 15/16"ϕ UNLESS NOTED
SHOP PAINT 1-Ct. BASIC LEAD (SILICO CHROMATE)
TYPE OF FASTENING AS SHOWN

CUSTOMER SHAPPERT ENG.
LOCATION LA SALLE COUNTY
STRUCTURE SECTION 50-2HB-3(R)
PROJECT F.A. 412 EERF-412-4(18)
DETAILS OF Splices
SPECIFICATIONS BY I. H. C.

HARTWIG
MANUFACTURING CORP.
WAUSAU, WISCONSIN

SHEET NO.	CONTRACT NO.
5	3374

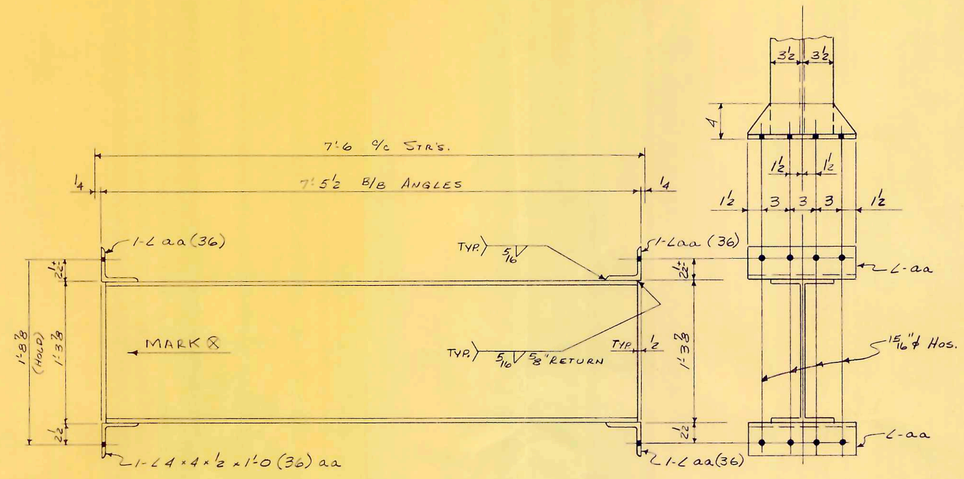
STONE 8-80-250 1M-11-75



1 - W 12" x 40# x 6'-8 3/16 (8)
D=12", F=8", Ft=1/2", W=5/16", K=1 1/4"

8 ~ END DIAPHRAGMS ~ 6D1

48 - 1/2"ϕ x 0'-2 1/2" H.S.B. W/NUT
48 - 7/8"ϕ CARB. WASHER



1 - W 16" x 36# x 7'-4 1/2 (36)
D=15 7/8", F=7", Ft=7/16", W=5/16", K=1 1/16"

36 ~ INTERMEDIATE DIAPHRAGMS ~ 6D2

576 - 3/4"ϕ x 0'-2 1/4 H.S.B. W/NUT
576 - 3/4"ϕ CARB. WASHER

APPROVED
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OCT 1 - 1976
Department of Bridge & Traffic Structures

GEN. NOTES.
1.) FOR NOTES SEE SHT. #1

PRINTED
SEP 25 1976
HARTWIG MFG. CORP.

REVISIONS			
NO	DATE	MADE BY	REMARKS

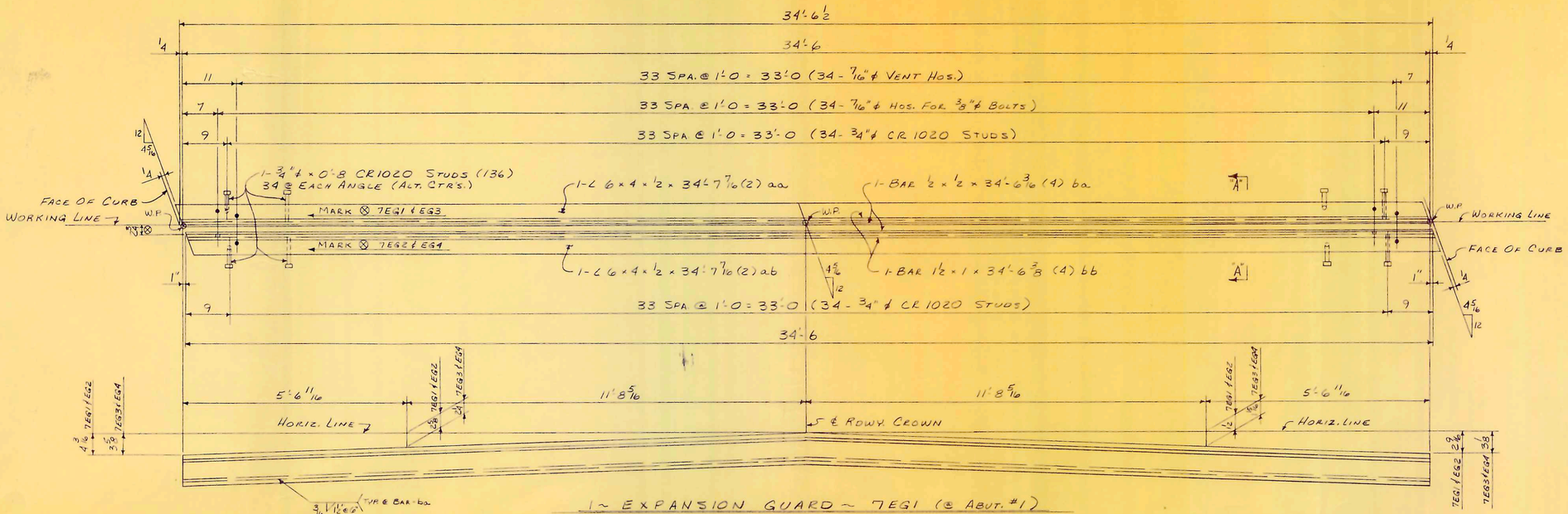
DRAWN BY G.M.	DATE 6-4-76
CHECKED BY T.T.	DATE 8-9-76
APPROVAL	
OPEN HOLES AS SHOWN UNLESS NOTED	
SHOP PAINT 1 CT. BASIC LEAD (SILICO CHROMATE)	
TYPE OF FASTENING AS SHOWN	

CUSTOMER SHAFFERT ENG.	
LOCATION LA SALLE COUNTY	
STRUCTURE SECTION 50-2HB-3(R)	
PROJECT F.A. 412 EBRF-412-4(12)	
DETAILS OF DIAPHRAGMS	
SPECIFICATIONS BY I.H.C.	

HARTWIG
MANUFACTURING CORP.
WAUSAU, WISCONSIN

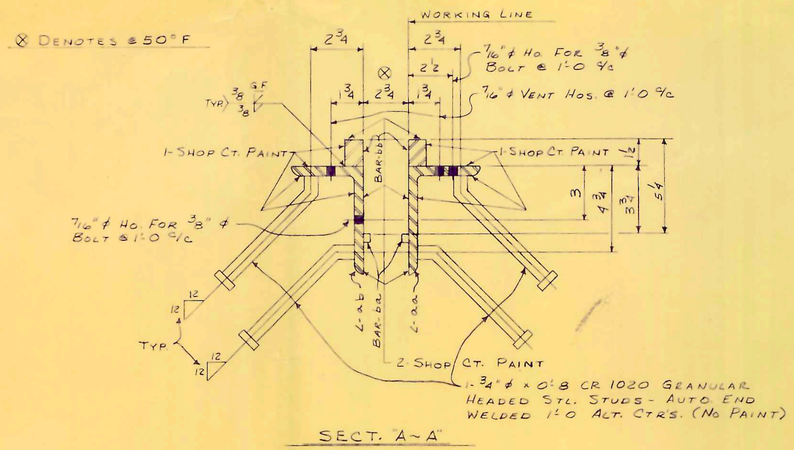
SHEET NO.	CONTRACT NO.
6	3374

STONE 880-250 (M-11-73)



1 ~	EXPANSION GUARD	~	7EG1 (@ ABUT. #1)
1 ~	do.	~	7EG2 (@ ABUT. #1)
1 ~	do.	~	7EG3 (@ ABUT. #2)
1 ~	do.	~	7EG4 (@ ABUT. #2)

⊗ DENOTES @ 50° F



SECT. "A~A"

APPROVED
For Mfrs. Dimensions and Materials Only
OCT 15 1976
Engineer of Bridge & Traffic Structures

GEN NOTES:
1.) FOR NOTES SEE SHT. #1

PRINTED
SEP 25 1976
HARTWIG MFG. CORP.

REVISIONS			
NO	DATE	MADE BY	REMARKS

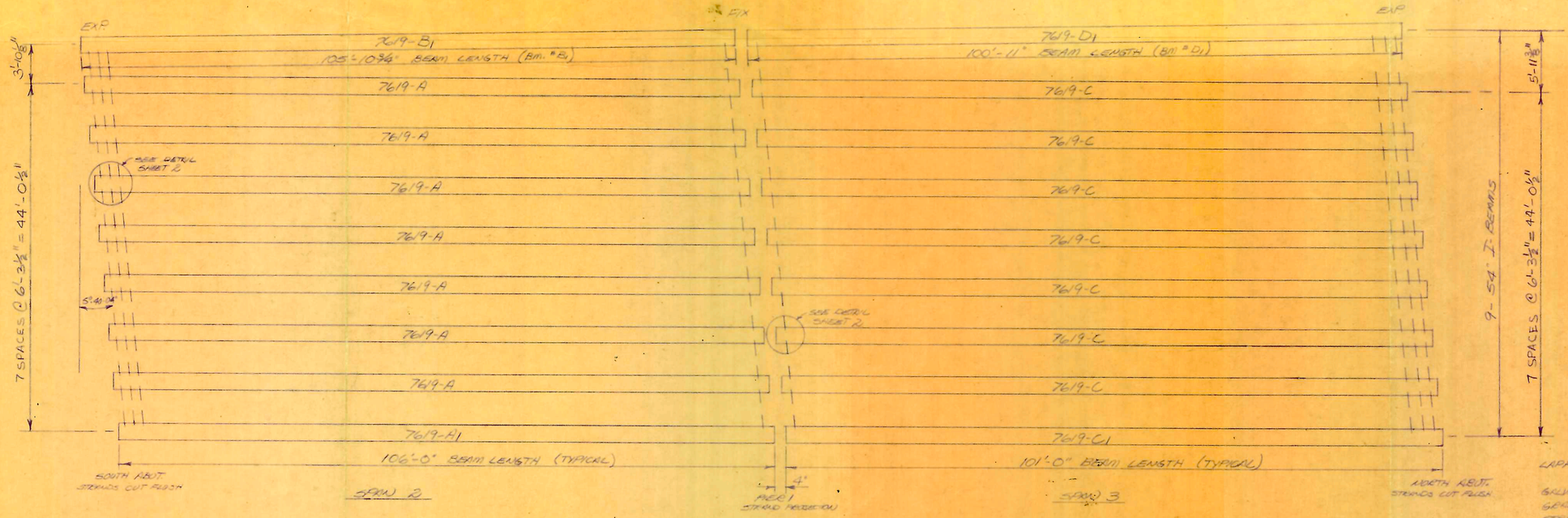
a b c d f g j k l m p r s t u w x
a
b
c
p
s.t.
r
z

DRAWN BY G.M. DATE 6-4-76
CHECKED BY T T DATE 8-9-76
APPROVAL
OPEN HOLES As Shown UNLESS NOTED
SHOP PAINT 1 Ct. Basic Lead (Silico Chromate)
TYPE OF FASTENING As Shown

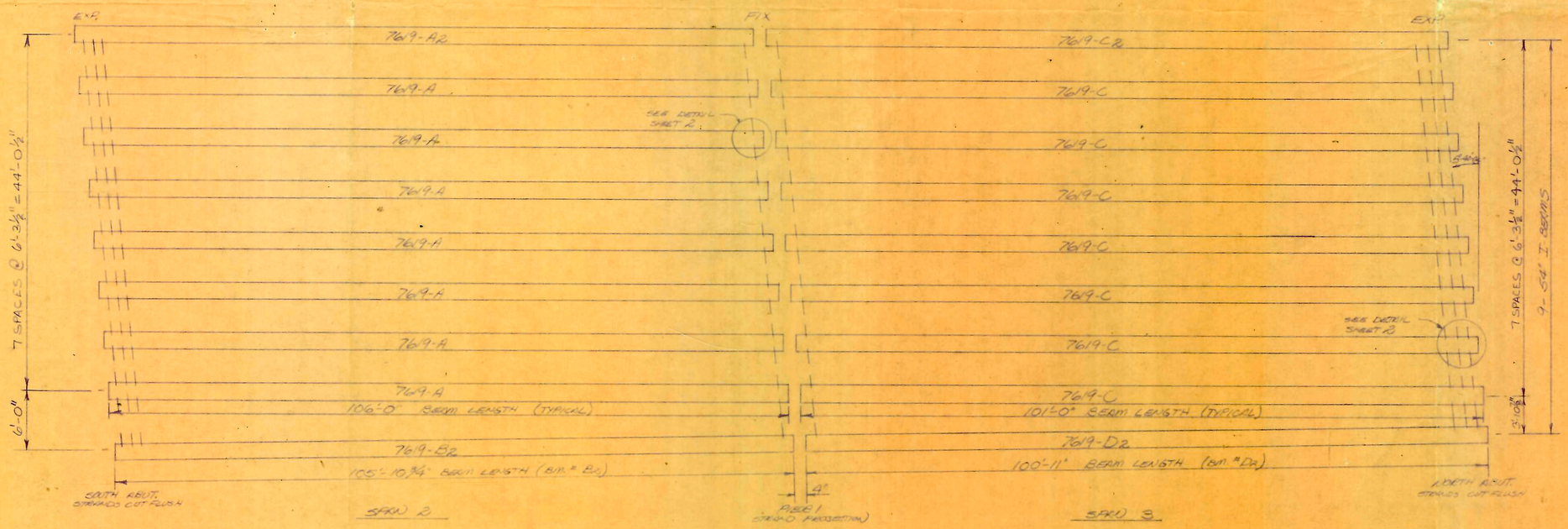
CUSTOMER Sharpert Eng.
LOCATION La Salle County
STRUCTURE Section 50-2HB-3(R)
PROJECT F.A. 412 EBRF-412-4(18)
DETAILS OF Expansion Guards
SPECIFICATIONS BY I. H. C.

HARTWIG
MANUFACTURING CORP.
WAUSAU, WISCONSIN

SHEET NO. 7
CONTRACT NO. 3374



FRAMING PLAN SOUTH BOUND LANE



FRAMING PLAN NORTH BOUND LANE

GENERAL NOTES

ALL REINFORCEMENT BARS SHALL BE LAPPED 24 DIAMETERS UNLESS OTHERWISE LISTED.

PRESTRESS STEEL SHALL BE UNCOATED, HIGH STRENGTH A.S.T.M. A-416, GRADE 270K STRESS RELIEVED 7 WIRE STRAND. SEE TYPICAL SECTION FOR STRESSING INFORMATION.

LIFTING LOOPS SHALL BE 7/16" OR ½" DIAMETER STRANDS TIED AND SHAPED TO FORM LOOP. SEE LIFT LOOP DETAIL.

STRANDS AT END OF FINISHED BEAM SHALL BE TRIMMED FLUSH UNLESS OTHERWISE SHOWN. THE STRAND PATTERN MUST ENSURE THAT COVER OF ASPHALT REQUIRED AT END OF BEAMS TO BE BUCKSAW ARE NOT TO BE PAINTED.

ALL ¾" ø COIL THREADED INSERTS TO BE EITHER TWO STRUT DOUBLE END OR ¾" ø FLARED COIL LOOP TYPE.

THE TOP SURFACE SHALL BE FINISHED IN ACCORDANCE WITH ART. 505.06 PART 5 OF THE STANDARD SPECIFICATIONS.

~~IF SHIMS, DIMENSIONS OF LIFTING DEVICES, BEARING PADS, INSERT RECESSES OR OTHER EMBEDDED ITEMS CANNOT BE SATISFACTORILY ATTAINED DUE TO CONFLICT OF STRUCTURAL STEEL FROM THE DEPTH OF THE ABOVE, SUCH MAY BE ADJUSTED TO PROVIDE ACCEPTABLE PLACEMENT.~~

DESIGN STRESSES

PRESTRESSED CONCRETE UNITS

f'_c = 6,000 P.S.I. (28 DAY)

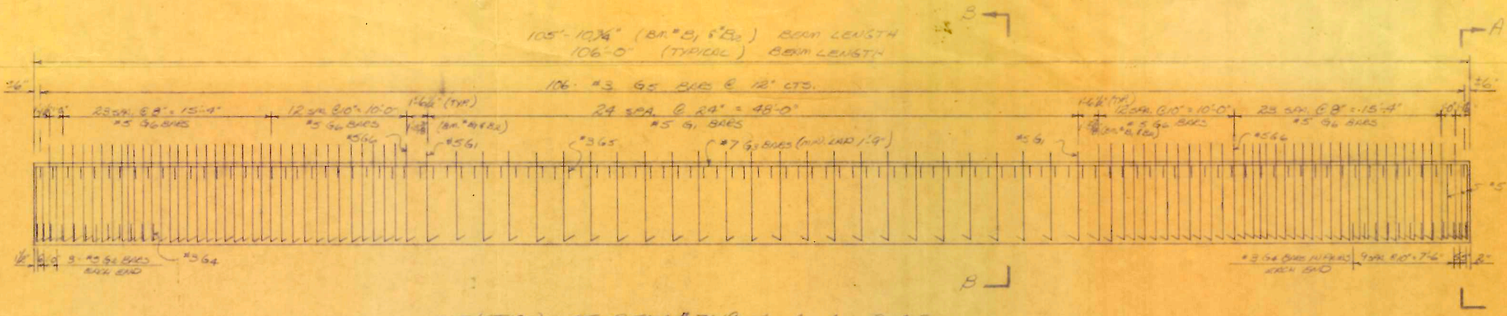
f'_{ci} = 5,000 P.S.I. (RELEASE)

LOADING HS 20-44

APPROVED
For Main Dimensions and Materials Only
AUG 19 1976
Engineer of Bridge & Traffic Structures

PRESTRESS ENGINEERING CORP. BLUESTONE, ILLINOIS 61818			
DRAWN BY [illegible]	CHECKED BY	APPROVED BY	SCALE
DATE 4/25/76	DATE	DATE	REVISED
PRES. STRUCTURES OVER I-80 F.A.RT. 412 SECTION 80-5 HB LASALLE COUNTY			
JOB SHEPPERD ENGINEERING PLANNING & MANAGEMENT BOLINGBROOK, ILL. 60439			DRAWING NO. 9 of 9

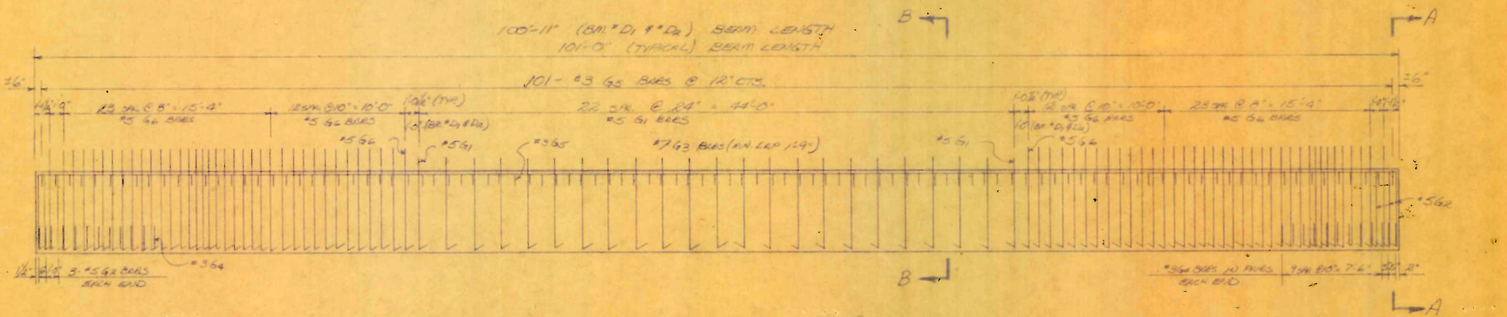
VAL PROOF-816M



ELEVATION OF BEAM #7619-A, A_1, A_2, B_1 & B_2

SHOWING REINFORCEMENT & DIMENSIONS

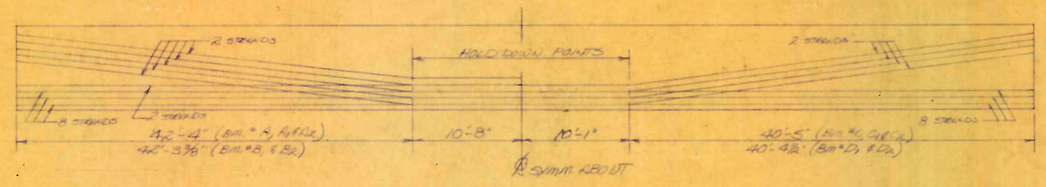
14 REQ'D. "A
1 REQ'D. "A_1
1 REQ'D. "A_2
1 REQ'D. "B_1
1 REQ'D. "B_2



ELEVATION OF BEAM #7619-C, C_1, C_2, D_1 & D_2

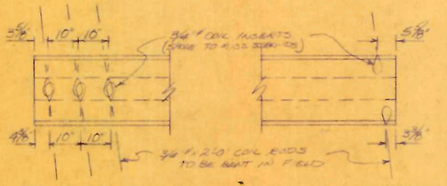
SHOWING REINFORCEMENT & DIMENSIONS

14 REQ'D. "C
1 REQ'D. "C_1
1 REQ'D. "C_2
1 REQ'D. "D_1
1 REQ'D. "D_2



ELEVATION OF BEAM #7619-A, A_1, A_2, B_1, B_2, C, C_1, C_2, D_1 & D_2

SHOWING PRESTRESSING STEEL



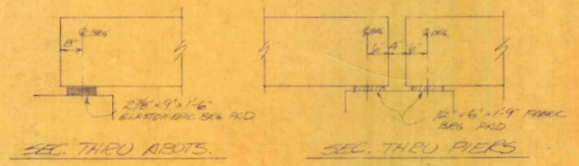
TOP INSERTS AT ABUTS.

BOTTOM INSERTS AT PIERS.

INSERT LOCATIONS

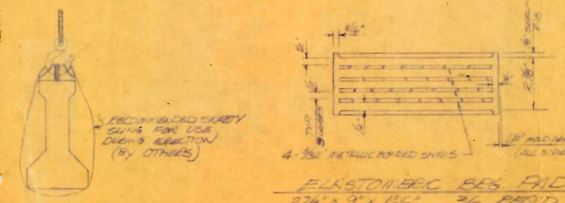
SEE ALSO TYPICAL SECTION

256 EACH ¾" ϕ COIL INSERTS
256 EACH ¾" ϕ x 2'-0" COIL RODS



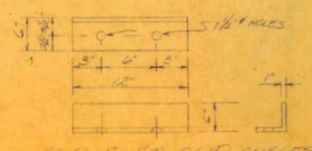
SEC. THRU ABUTS.

SEC. THRU PIERS

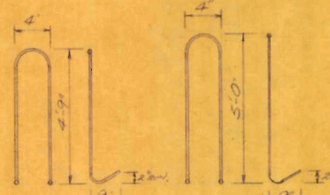


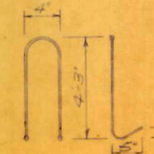
ELASTOMERIC BRG. PAD

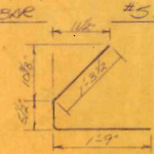
2¾" x 9" x 1'-6" 36 REQ'D.

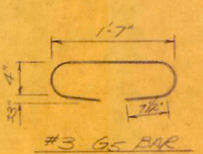


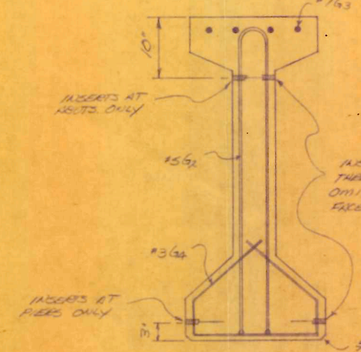
8 REQ'D.



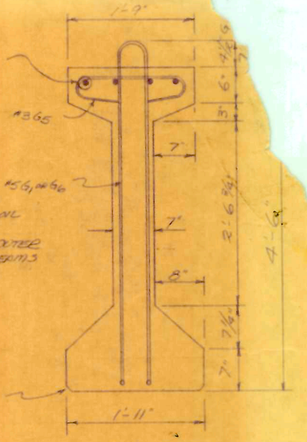




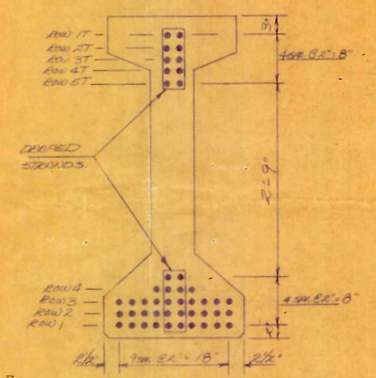




SECTION A-A



SECTION B-B



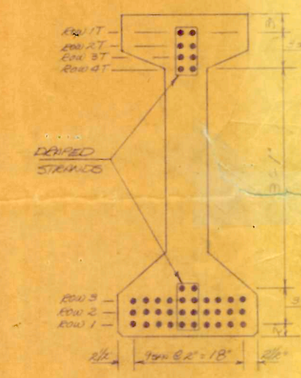
BEAM # A, A_1, A_2, B_1 & B_2

DESIGN STRAND PATTERN

AT END OF BEAM

36 - ½" ϕ STRANDS GRADE 270K

ROW 1 - 8 STR.
ROW 2 - 8 STR.
ROW 3 - 8 STR.
ROW 4 - 2 STR.
ROW 1T - 2 STR.
ROW 2T - 2 STR.
ROW 3T - 2 STR.
ROW 4T - 2 STR.
STRANDS STRESSED TO 29.3K



BEAM # C, C_1, C_2, D, D_1 & D_2

DESIGN STRAND PATTERN

AT END OF BEAM

32 - ½" ϕ STRANDS GRADE 270K

ROW 1 - 8 STR.
ROW 2 - 8 STR.
ROW 3 - 8 STR.
ROW 1T - 2 STR.
ROW 2T - 2 STR.
ROW 3T - 2 STR.
ROW 4T - 2 STR.
STRANDS STRESSED TO 29.3K

BAR LIST (BM. # A, A_1, A_2, B_1 & B_2)

BAR	NO. PER BEAM	SIZE	LENGTH	SHAPE	TOTAL REQ'D.
G1	25	#5	11'-4"	N.E.	450
G2	6	#5	9'-8"	N.E.	108
G3	12	#7	36'-6"	STR.	216
G4	48	#3	3'-6"	⊏	864
G5	106	#3	3'-6"	⊐	1908
G6	74	#5	11'-10"	N.E.	1332

BAR LIST (BM. # C, C_1, C_2, D, D_1 & D_2)

BAR	NO. PER BEAM	SIZE	LENGTH	SHAPE	TOTAL REQ'D.
G1	23	#5	11'-4"	N.E.	414
G2	6	#5	9'-8"	N.E.	108
G3	12	#7	34'-10"	STR.	216
G4	48	#3	3'-6"	⊏	864
G5	101	#3	3'-6"	⊐	1818
G6	74	#5	11'-10"	N.E.	1332

APPROVED
For Main Dimensions and Materials Only
AUG 19 19/6
Engineer of Bridge & Traffic Structures

PRESTRESS ENGINEERING CORP.
BLACKSTONE, ILLINOIS 61313

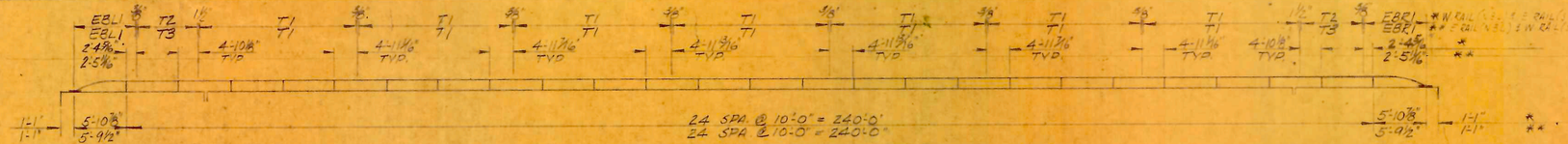
DRAWN BY	CHECKED BY	APPROVED BY	SCALE
LLA			
DATE 6/25/76	DATE	DATE	REVISED

54" I BEAM DETAILS
FAI ROUTE 80 SECTION 50-5HB
LASALLE COUNTY

JOB SHOWING RESTRICTIONS BUILT & MAINTAINED BY OWNER, ALL SPANS

DRAWING NO. 2 OF 3

VAL PROOF-816M

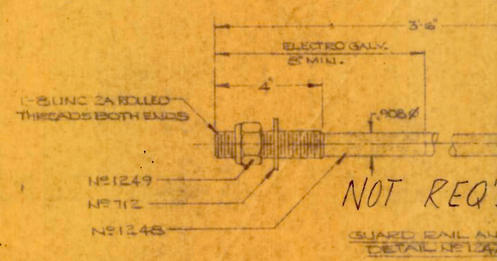


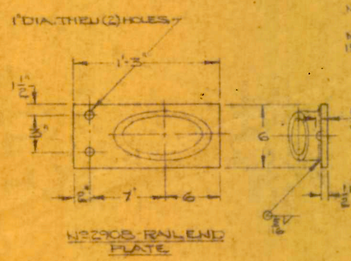
INT. ELEVATION OF W. RAIL - N.B.L. & S.B.L.
INT. ELEVATION OF E. RAIL - N.B.L. & S.B.L.

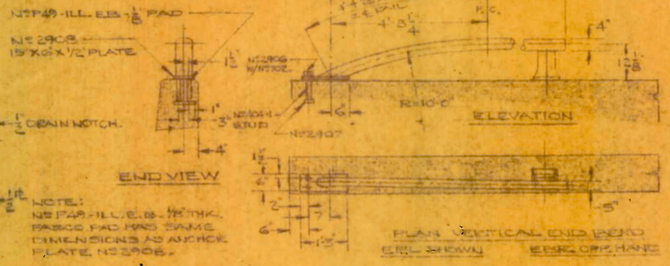
QTY.	ITEM	ASTM	BILL OF MATERIAL MATERIAL & DESCRIPTION
100	1261	—	POST-ALUM.-A444-T4 PERM. MOLD
100	403	—	ANCHOR ASSEMBLY-EMBED (1 PER POST)
100	402-1	A108	¾"X1¼"X¾" ANCHOR BAR-STL.-1020 (1) EACH POST
100	402-2	A108	1¼"X1¾"X7" ANCHOR BAR-STL.-1020 (1) EACH POST
100	402-3	A108	¾"X1¼"X7" ANCHOR BAR-STL.-1020 (1) EACH POST
200	403-4	A108	¾" NOM. DIA. ANCHOR STUD-STL.-1020 (2) EACH POST
200	404-1	A108	1" NOM. DIA. ANCHOR STUD-STL.-1020 (1) EACH POST
200	761*	A193	¾"-10 UNC X 5½" LG. HEX. HEAD CAP SCREW, S.S. (2) EACH POST
200	705	A240	1⅞" O.D. X ¾" I.D. X ⅛" THK. WASHER-S.S. TYPE 304 (2) EACH POST
400	703	A240	1¼" O.D. X ⅞" I.D. X 1/16" THK. WASHER-S.S. TYPE 304 (2) EACH POST
200	704*	A193	½"-13 UNC X 1¾" LG. HEX. HD. CAP SCREW S.S. (2) EACH POST
100	4256	A674	CURB/RAIL STRIP-STL.-TYPE 3502 (1) EACH POST
200	756	A240	½" S.S. HELICAL SPRING LOCK WASHER-S.S. TYPE 304 (2) EACH POST
200	705	A240	1¼" O.D. X ⅝" I.D. X 1/16" THK. WASHER-S.S. TYPE 304 (2) EACH POST
200	707*	A193	⅝"-18 UNF X 2½" LG. HEX. HD. CAP SCREW-S.S. SR. BOLT (2) EACH POST
100	1124	A276	5/8" DIA. X 1¼" LG. PIN-S.S. TYPE 302 (1) EACH SPLICE
100	5161-1	6209	¼" THICK ALUM. SHIM-9904-T4 (100% OF POSTS)
50	5161	6209	⅛" THICK ALUMINUM SHIM-9904-T4 (50% OF POSTS)
NONE	6252	—	CAST END PLUG-ALUM.-A356
100	6241	—	⅜" X 7½" X 6½" FABRICATED PLATE-SA47-32510 GR. (1) EACH POST
40	6257	6221	SPLICE-ALUM.-6061-T6
NONE	1247	—	ANCHOR BOLT ASSEMBLY, GUARD RAIL TO WINGWALL
NONE	1249	—	T-BOLT LOCKNUT-STL. (1) EACH ANCHOR
NONE	712	A307	½" I.D. X ⅞" O.D. X 7/16" THK. WASHER-STL. (1) EACH ANCHOR
NONE	1248	A36	1" NOM. DIA. X 4½" LG. STUD-STL. (1) EACH ANCHOR STUD
NONE	714	A307	T-BOLT, STD. PIN, HEX. NUT-STL. GR. A (1) EACH ANCHOR STUD
8	2915	—	ANCHOR ASSEMBLY (1 PER END RAIL)
16	2906*	A93	¾"-10 UNC X 1½" LG. HEX. HD. CAP SCREW-S.S. (2) EACH END RAIL
8	2907	A108	½" X 1½" X 8" ANCHOR BAR-STL.-1020 (1) EACH END RAIL
16	404-1	A108	1" NOM. DIA. ANCHOR STUD-STL.-ALLOY 1020 (1) EACH END RAIL
16	702	A240	⅞" O.D. X ½" I.D. X 3/32" THK. WASHER-S.S. TYPE 304 (1) EACH END RAIL
8	2908	B221	15" X 8" X ½" THK. RAIL END PLATE-ALUM.-6061-T6 (1) EACH END RAIL
8	PAD-ILL.	—	15" X 6" X ⅛" THK. PAD-SA47-32510 GR. (1) EACH END RAIL

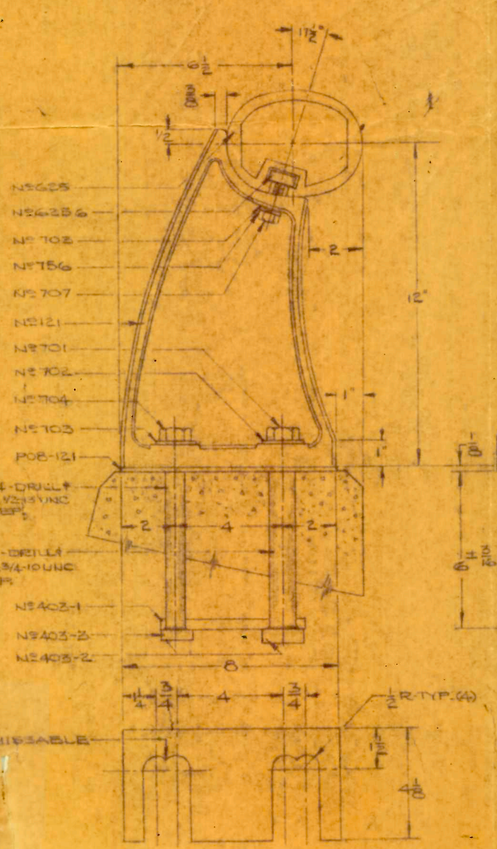
ALL 6255 B221 ALUM. RAIL SECT. DENOTED BY 'T' - 6061-T6

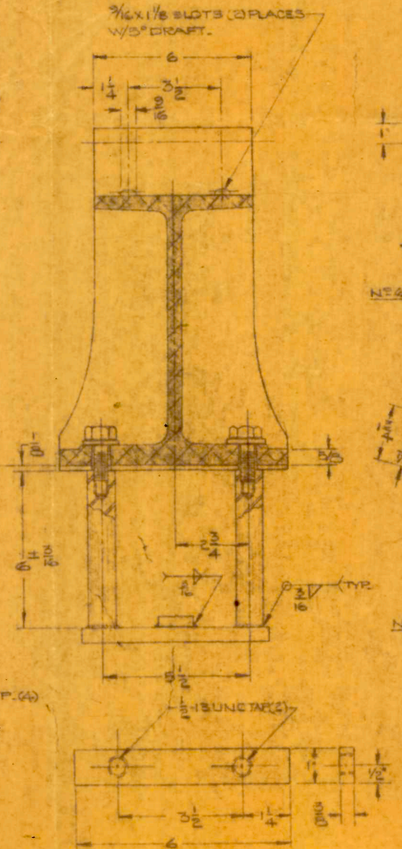
QTY.	ITEM	LENGTH	QTY.	ITEM	LENGTH	QTY.	ITEM	LENGTH
4	EBL1	8'-3"						
4	EBR1	8'-3"						
2*	T1	30'-0"						
2	T2	12'-4⅜"						
4	T3	12'-3½"						

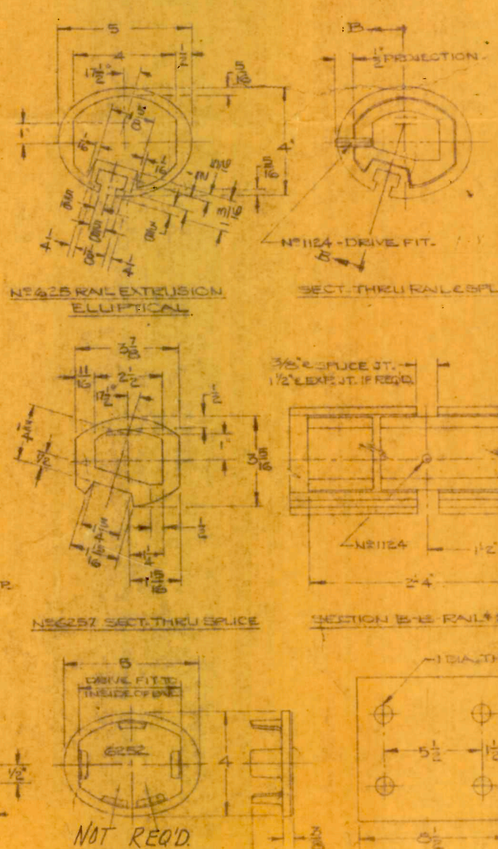


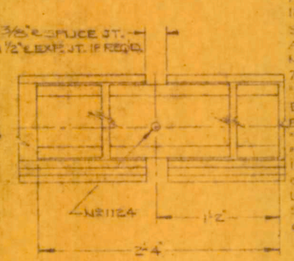


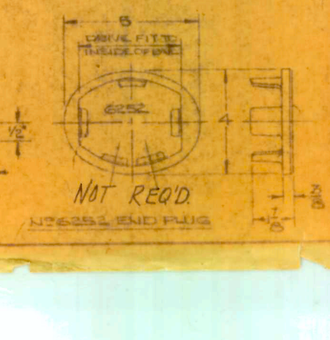


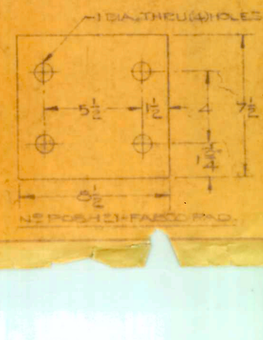












NOTES:
ALL POSTS SHALL BE NORMAL TO GRADE.
RAILS SHALL BE SUPPLIED IN MODULAR LENGTHS OF 20 FT. EXCEPT AT END OF BRIDGE OR OVER OPEN JOINTS IN BRIDGE DECK WHERE THE RAIL SHALL BE ATTACHED TO A MINIMUM OF TWO POSTS PROVIDE (1) ⅛" & (2) 1/16" ALUMINUM SHIMS FOR 50% OF POSTS.
ALL JOINTS IN RAILING MUST BE SPLICED PER DETAIL.
ALL PART NO'S ON THIS SHEET USED FOR MANUFACTURING PURPOSES ONLY.
*STAINLESS STEEL MACH. BOLTS OR CAP SCREWS SHALL HAVE A MINIMUM TENSILE STRENGTH OF 100,000 P.S.I.
STAINLESS STEEL FLAT WASHERS AND LOCKWASHERS SHALL HAVE A MINIMUM TENSILE STRENGTH OF 75,000 P.S.I.
"EB" DENOTES END RAIL WITH VERTICAL END, DRAIN HOLE & WELDED TO RAIL END PLATE №2908.
"EBL1" IS SHOWN IN DETAIL ABOVE.
"EBR1" IS OPPOSITE HAND.
IF THE RAIL IS ON A HORIZONTAL CURVE OF 2,500 FT. RADIUS OR LESS THE MODULAR LENGTHS MAY BE REDUCED BUT SHALL BE ATTACHED TO A MINIMUM OF TWO POSTS.
REF.: ILL. STD. DRWG. "E17 REV. 4/15/73

APPROVED
For Main Dimensions and Materials Only
DEC 2,3 1976
Engineer of Bridge & Traffic Structures

ILLINOIS STD. E-17A 1,006.79 LIN. FT.
LOCATION: F.A. 412 OVER I-80, (N.B. & S.B. LANES)
CONTRACTOR: SHAPPERT ENGINEERING CO.
DISTRIBUTOR:
P.O. NO. 18154
STATION: 1028+55.04 (F.A.412) SEC. 50-5HB

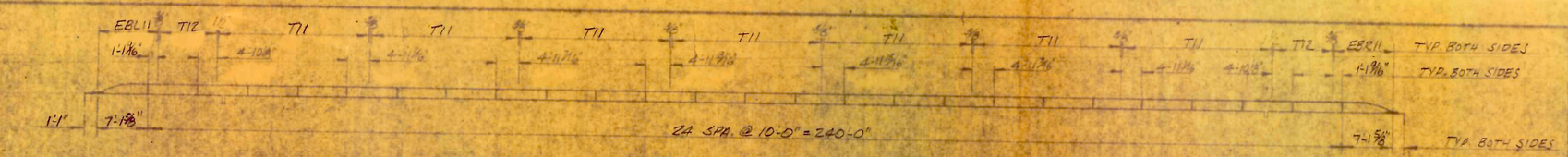
DATE	DRAWN BY
11/3/76	JL
11-3-76	J&K

REVISIONS

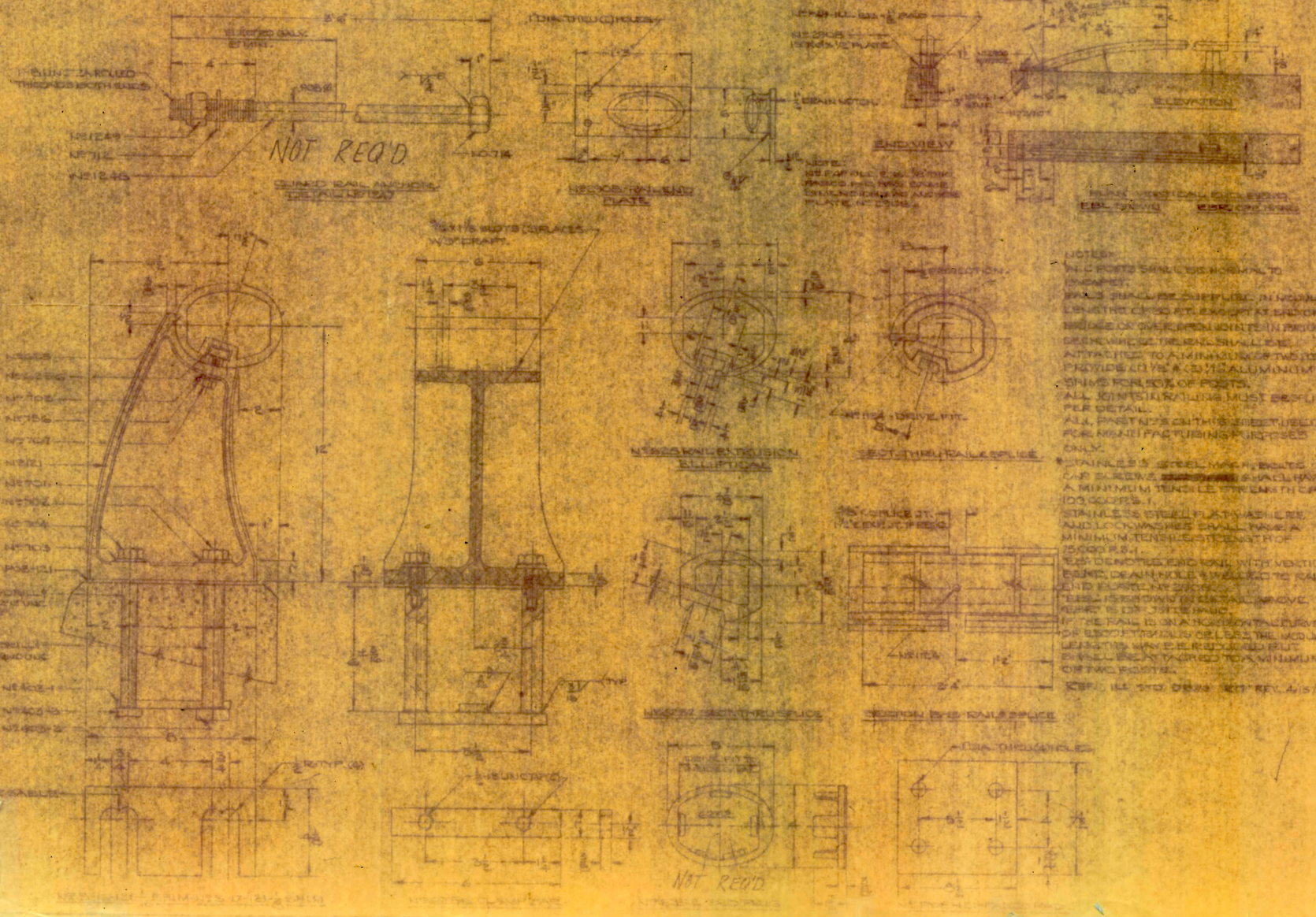
ALUMINUM BRIDGE RAILING - ILLINOIS R17A
LASALLE CO., ILL PROJ. UBRF-412-4(18)

National Aluminum Subsidiary of National Steel Corporation
EXTRUSION DIVISION - CENTRAL

ILLINOIS 9142 SHT. 1 OF 3



TYP. INT. ELEVATION OF RAIL - 2 REQ'D



QTY.	ITEM	ASTM	DESCRIPTION
50	121		
50			
50			
50			
50			
100			
100			
100			
100			
100			
100			
50			
100			
100			
100			
50			
50			
25			
NONE			
50			
20			
NONE			
NONE			
NONE			
NONE			
NONE			
4			
8			
4			
8			
8			
4			
4			
ALL			ALUM. RAIL POSTS (NOTED BY ITEM)

QTY.	ITEM	LENGTH
2	E8L11	8'-3"
2	E8R11	8'-3"
14	T11	30'-0"
4	T12	13'-7⅝"

NOTES:
ALL POSTS SHALL BE NORMAL TO GRADE.
ALL SPLICE SLEEVES, INCLUDING LENGTHS OF 30 FT. EXCEPT AT ENDS OF BRIDGE OR OVER EXPANSION JOINTS IN PAVEMENT, SHALL BE ATTACHED TO A MINIMUM OF TWO POSTS.
PROVIDE 0.75" Ø CU. TO ALUMINUM SHIMS FOR 50% OF POSTS.
ALL JOINTS IN RAILING MUST BE SPLICED PER DETAIL.
ALL PASTNPS ON THIS SHEET USED FOR MANUFACTURING PURPOSES ONLY.
STAINLESS STEEL MACHINE BOLTS OR CAP SCREWS SHALL HAVE A MINIMUM TENSILE STRENGTH OF 100,000 P.S.I.
STAINLESS STEEL FLAT WASHERS AND LOCKWASHERS SHALL HAVE A MINIMUM TENSILE STRENGTH OF 75,000 P.S.I.
"EA" DENOTES END RAIL WITH VERTICAL RAIL DRAIN HOLE & WELDED TO RAIL END PLATE ON SHOP.
"ES" SHOWN ON DETAIL ABOVE SLOPE IS OF JOINT PAD.
IF THE RAIL IS ON A HORIZONTAL CURVE OR SECOND TANGENT OF LESS THAN 100' LENGTH, MAY BE REQUIRED BUT SHALL BE ATTACHED TO A MINIMUM OF TWO POSTS.

REF.: ILL. STD. 606001 (07) REV. 4/15/13

APPROVED
For Main Dimensions and Materials Only
DEC 2,3 1976
Engineer of Bridge & Traffic Structures

ILLINOIS STD. R-17A 506.54 LIN. FT.

LOCATION	C.H.13 OVER F.A.I-80
CONTRACTOR	SHAPPERT ENGINEERING CO.
DISTRIBUTOR	
STATION	1028+56.04 (F.A.412)
P.O. NO.	13154
SEC.	50-2H8-8(R)

11/3/76	JK	ALUMINUM BRIDGE RAILING, ILLINOIS STA.
11-5-76	JAK	LASALLE CO., ILL. PROJ. UBRF-412-4(18)
REVISIONS		

National Aluminum Specialty Manufacturing

ILLINOIS 9142 2 3

APPROVED
For Main Dimensioning and Materials Only
DEC 2[illegible] 1976
Engineer of Bridges & Traffic Structures

VIEWS OF TEST SPECIMENS AS CAST FOR TEST PURPOSES

NOTES:

RADIOGRAPHIC AND TORQUE TEST SHALL BE TAKEN IN AREAS DESIGNATED AS SHOWN. ALL GATING AND RISERS SHALL BE REMOVED BY FLAME CUTTING AND GRINDING SO THAT CASTING SURFACE IS NOT DISTURBED. ALL CASTINGS SHALL BE 100% ULTRASONIC INSPECTED.

TECHNIQUE AND STANDARDS FOR RADIOGRAPHIC AND ULTRASONIC INSPECTION OF CASTINGS WHICH ARE COMMERCIALLY AVAILABLE, PRODUCTION OF CASTINGS WITH ACCEPTABLE FOUNDRY PRACTICE, AND USEFUL DEFECT LIMITS IN ACCEPTABLE FOUNDRY TECHNIQUE ARE ESTABLISHED FOR PRODUCTION LOTS OF CASTINGS IN ACCORDANCE WITH SPECIAL BASIC RADIOGRAPHIC ACCEPTANCE LEVELS FOR CRITICAL AREAS SHALL BE BASED ON A.S.T.M. DESIGNATION E155 - LATEST REVISION. RADIOGRAPHS FOR INSPECTION OF ALUMINUM AND MAGNESIUM CASTINGS SHALL BE AS SHOWN IN THIS SPECIFICATION. FOR CRITICAL AREAS TO NOT REQUIRE PRODUCTION X-RAY INSPECTION

RADIOGRAPHIC ACCEPTANCE STANDARDS

	SEVERITY LEVEL
GAS HOLES	[illegible]
GAS POROSITY (ROUND)	[illegible]
GAS POROSITY (ELONGATED)	[illegible]
SHRINKAGE CAVITY	[illegible]
SHRINKAGE SPONGE	[illegible]
FOREIGN MATERIAL (LESS DENSE)	[illegible]
FOREIGN MATERIAL (MORE DENSE)	[illegible]

NOTE: (1) FREEDOM OF CHECKS OR MORE DEFECTS GREATER THAN INDICATED BY THE ABOVE ACCEPTANCE STANDARDS SHALL BE CAUSE FOR THE REJECTION OF THE CASTING.
(2) FREEDOM OF DEFECTS EQUAL TO BUT NOT GREATER THAN SHOWN IN THE ACCEPTANCE STANDARDS SHALL BE LIMITED TO A TOTAL OF TWO EACH OF ALL TYPES OF THREE OR ANY ONE TYPE.

CHEMICAL COMPOSITION

Cu	Fe	Si	Mn	Ni	Zn	Ti	OTHERS EACH	OTHERS TOTAL
[illegible]								

NOTE: ALL VALUES ARE MAXIMUM UNLESS SHOWN AS A RANGE.

MINIMUM MECHANICAL PROPERTIES OF TEST BARS MACHINED EITHER VERTICALLY OR HORIZONTALLY, FROM THE HIGHLY STRESSED AREAS OF THE POST (SUCH AS THE JUNCTION OF THE RISE AND TENSION FLANGE), SHALL BE AS FOLLOWS:

MECHANICAL PROPERTIES-CASTING TENSION FLANGE

ULTIMATE TENSILE STRENGTH (PSI)	20,000
ELONGATION (% IN 2 INCHES GAGE)	2.0

ONE CASTING PER EACH 1000 POUNDS OF TRIMMED CASTINGS SHALL BE X-RAY INSPECTED IN DESIGNATED AREAS TO ACCEPTANCE STANDARDS ABOVE.
TEST BARS FOR MECHANICAL TESTS SHALL BE TAKEN FROM CASTING USED FOR X-RAY TEST.

MATERIAL: CASTALUM ALLOY 444.0 A.S.T.M. B108-CA116-T6

LOCATION: SEE SHTS. 1 & 2.
CONTRACTOR: SHAFFERT ENGINEERING CO. P.O. NO. 13154
DISTRIBUTOR:
STATION: SEE SHTS. 1 & 2. SEC. 50-5HB & 50-2HB-3(R)

DATE	BY	REVISIONS
11/3/76	JC	ALUMINUM BRIDGE RAILING

LASALLE CO., ILL. PROJ. UBRF-412-4(18)

National Standard

9/42
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T-34 + 45-I