

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
304	21-4	JERSEY/CALHOUN	14	1
		ILLINOIS	CONTRACT NO. 76E55	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 304 (IL 100)
SECTION 21-4

**BRUSSELS FERRY DOCKS
JERSEY & CALHOUN COUNTIES**

C-98-015-11

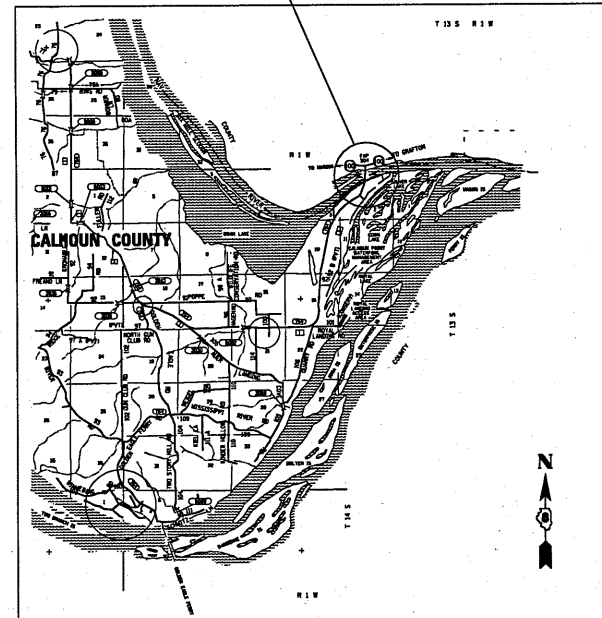
FOR INDEX OF SHEETS, SEE SHEET NO. 2

D-98-016-11

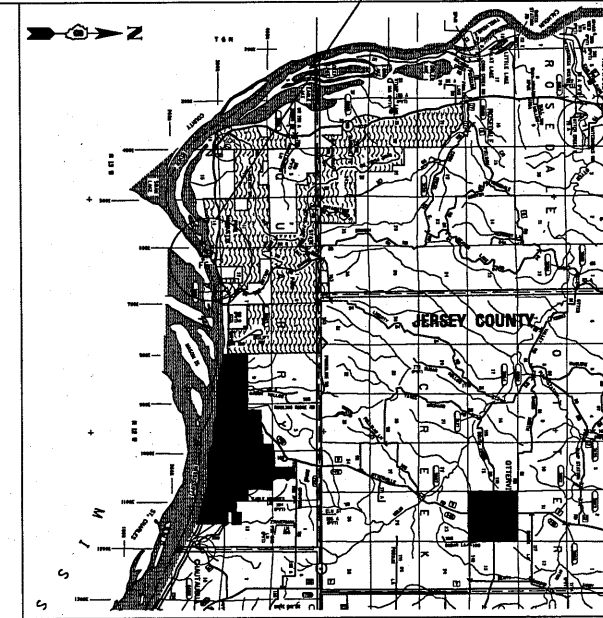


LOCATION OF SECTION INDICATED THIS: - [rectangle] -

PROJECT LOCATION
BRUSSELS FERRY
CALHOUN COUNTY SIDE

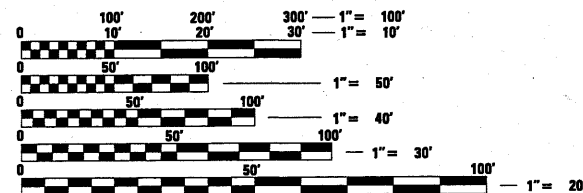


PROJECT LOCATION
BRUSSELS FERRY
JERSEY COUNTY SIDE



NOT TO SCALE

NET LENGTH = 850 FT. = 0.16 MILE



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: TIM PADGETT (618) 346-3325
PROJECT MANAGER: LIZ BURNSIDE (618) 346-3196

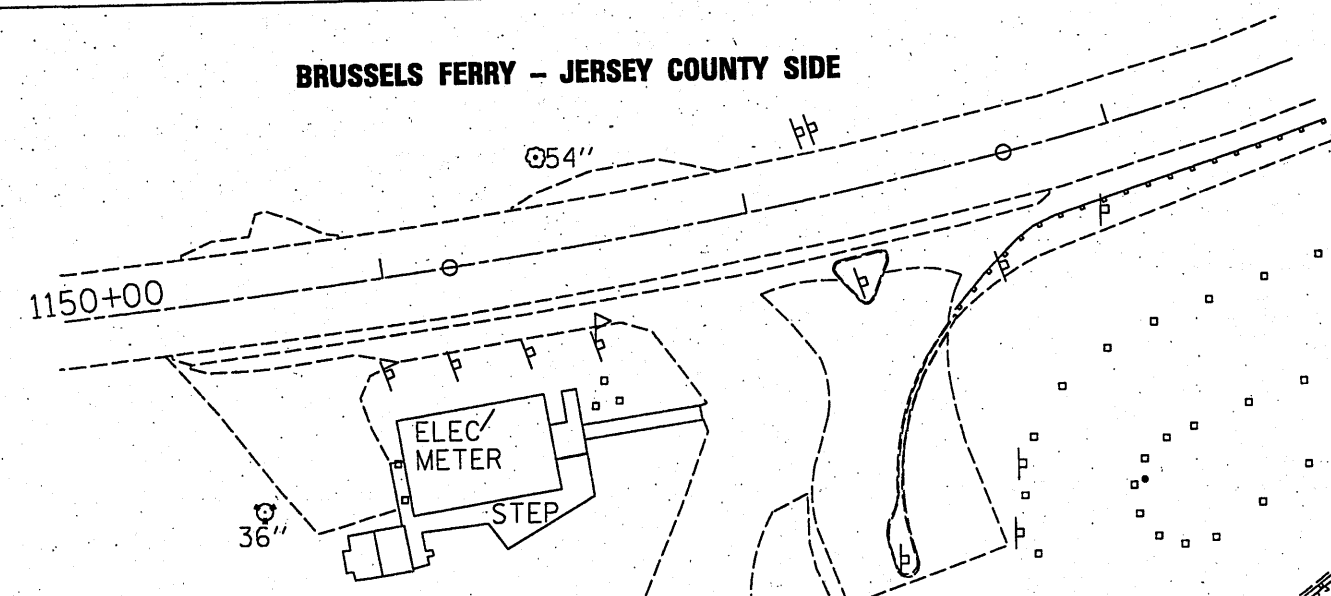
CONTRACT NO. 76E55

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED October 27 20 10
Mar C James
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
Dec 10 20 10
Scott E. Stitt, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT
Dec 10 20 10
Christine M. Reeder
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

BRUSSELS FERRY - JERSEY COUNTY SIDE



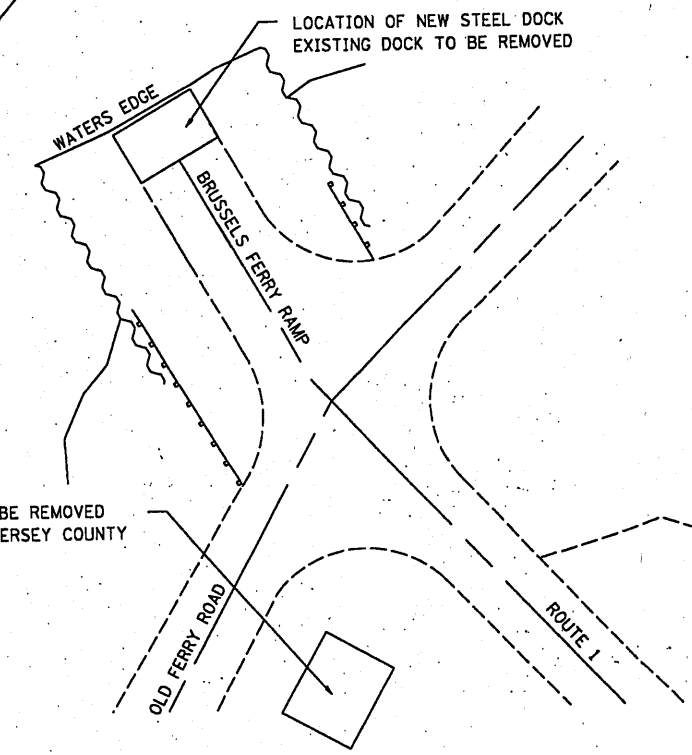
MOORINGS - LOCATION TO BE DETERMINED BY FERRY WORKERS (SEE DETAIL)

- STONE DUMPED RIPRAP, CLASS A3 - 287 SQYD
- CONTROLLED LOW-STRENGTH MATERIAL - 24 CUYD
- REMOVE EXISTING RIPRAP - 287 SQYD
- EXISTING LIGHT POLE FOUNDATION NOT TO BE DISTURBED
- EXISTING SURVEY MARKER NOT TO BE DISTURBED
- LOCATION OF NEW STEEL DOCK RELOCATE EXISTING TO THE CALHOUN COUNTY SIDE

WATERS EDGE

EXISTING SPARE DOCK AND MISCELLANEOUS SCRAP METAL TO BE REMOVED

BRUSSELS FERRY - CALHOUN COUNTY SIDE

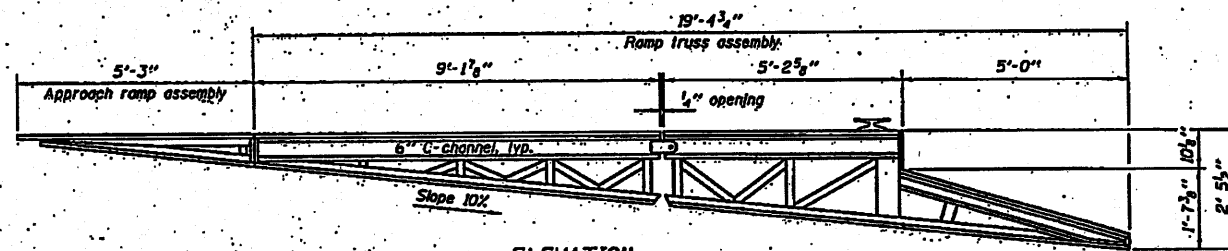


LOCATION OF NEW STEEL DOCK
EXISTING DOCK TO BE REMOVED

EXISTING SPARE DOCK TO BE REMOVED AND REPLACED WITH THE JERSEY COUNTY SIDE DOCK

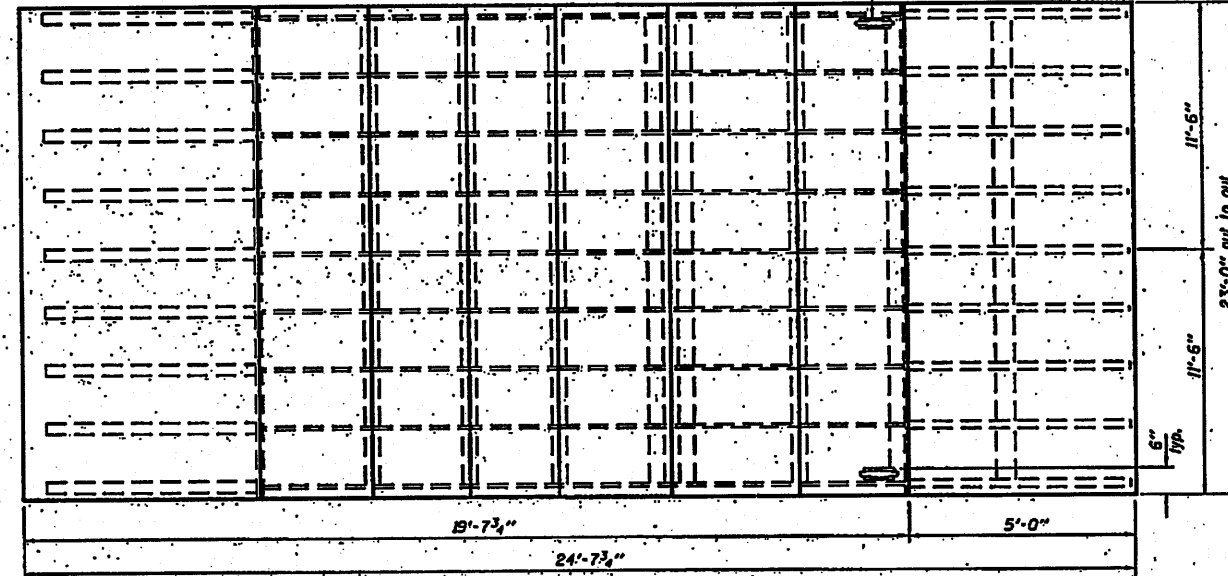


FILE NAME = c:\pvt\work\p\dot\burnsdeem\08232630\076e55-ah-1-plan.dgn	USER NAME = burnsideam	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN SHEET	F.A.P. RTE. 304	SECTION 21-4	COUNTY JERSEY/CALHOUN 14	TOTAL SHEETS 3	SHEET NO. 3
	PLOT SCALE = 1/8" = 1' / 31.	CHECKED -	REVISED -			SCALE: _____ SHEET NO. _____ OF _____ SHEETS STA. _____ TO STA. _____	ILLINOIS FED. AID PROJECT	CONTRACT NO. 76E55		
	PLOT DATE = 10/26/2010	DATE -	REVISED -							

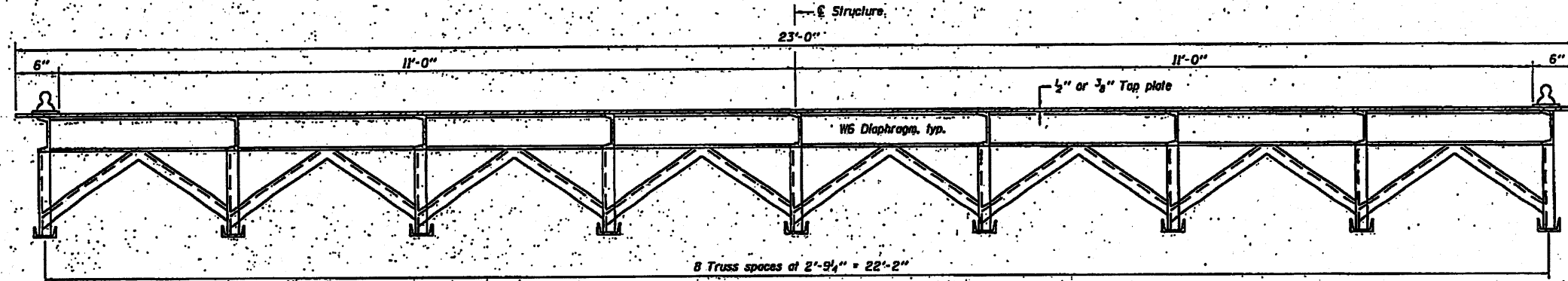


ELEVATION

18" Steel cast keel, typ. ea. side
(Subject to the approval of the Engineer).
Cost included in the cost of Steel Dock.



PLAN



CROSS SECTION

GENERAL NOTES

Calculated weight of Structural Steel for each steel dock = 11,650 lbs. (A 270, Grade 50).
Calculated weight of Structural Steel for each steel dock = 10,670 lbs. (A 270, Grade 36).
Field welding of construction accessories will not be permitted to the structure.
The Contractor shall review the geometry of component members based on anticipated cutting and assembly methods. Minor deviations from contract details shall be noted on the shop drawings submitted for the Engineer's approval, but will not justify additional compensation. Significant proposed changes (member sizes, joint configuration, etc.) must be accepted by the Engineer before shop drawing submission.
All structural steel deck plates 1 thru 18 shall be AASHTO M 270, Grade 50. All other structural steels shall be AASHTO M 270, Grade 36.
The organic zinc/epoxy/urethane paint system shall be used, with oil coats shop applied, unless otherwise noted. The color of the final finish coat shall be Yellow, Munsell No. 5Y 8/4. See Special Provisions for "Cleaning and Painting New Metal Structures".

TOTAL BILL OF MATERIAL

Item	Unit	Total
Steel Docks	Each	2

**STEEL DOCK
(BRUSSELS FERRY)
F.A.P. RTE. 304 (IL 100)
SECTION 21-4
JERSEY COUNTY**

EXPIRES 11-30-2012

DESIGNED -
CHECKED -
DRAWN - K.T. BLOND
CHECKED -

EXAMINED -
PASSED -

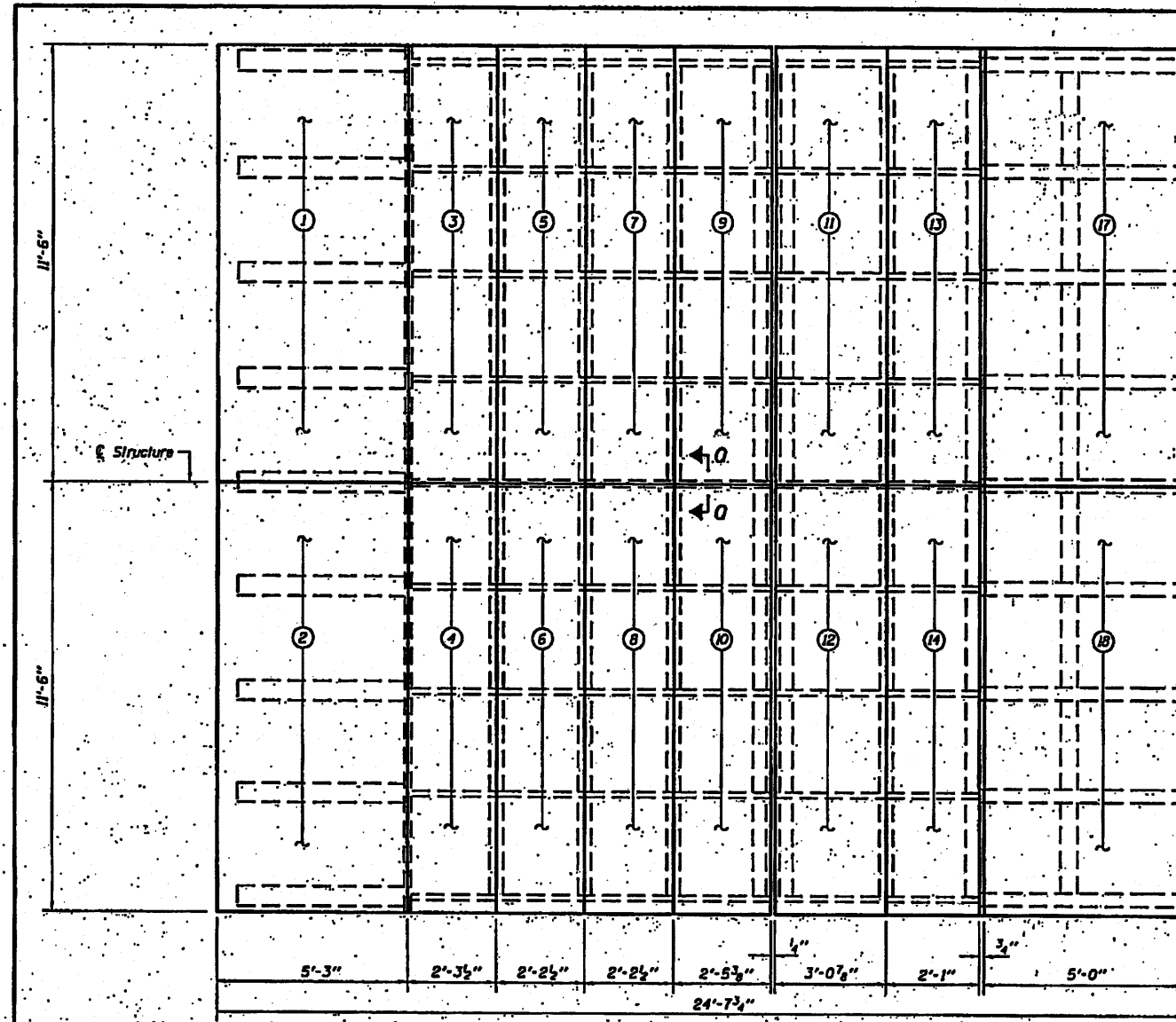
DATE - NOV 22 2010

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL DOCK
(BRUSSELS FERRY)
SHEET NO. 1 OF 11 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
304	21-4	JERSEY	14	4

CONTRACT NO. 76E55
ILLINOIS FED. AID PROJECT



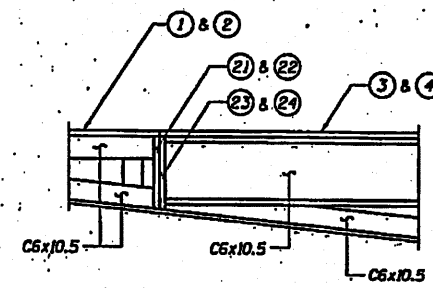
PLAN

(Shows the outside edge of the top plates)
 Dimensions shown do not include the 3/8" gap between plates 3 thru 10 and 11 thru 14.
 There is no gap between plates 1 & 3 and 2 & 4.

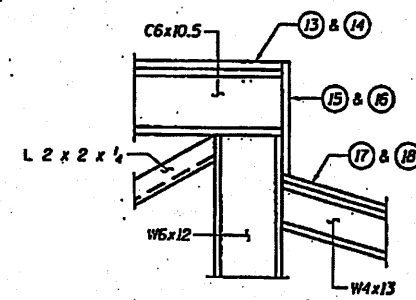
Notes: Diamond plating shall be used for all areas subjected to vehicular traffic.
 See sheet 3 of 11 for plate dimensions.
 See sheet 8 of 11 for the location of Details A, B, & C.
 See sheet 10 of 11 for Section A-D.

**PLATE ASSEMBLY
 BILL OF MATERIALS
 FOR ONE LOADING DOCK**

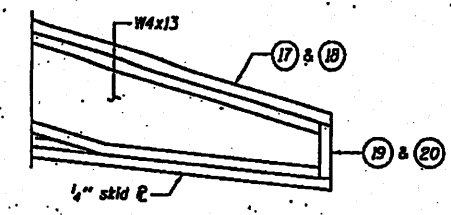
Plate No.	Description	Estimated weight (lb.)
1	Plate - Top 3/8" steel P	942
2		942
3		408
4		408
5		390
6		390
7		390
8		390
9		436
10		436
11	Plate - Top 3/8" steel P	731
12		731
13		495
14		495
15	Plate - Bump 3/4" steel P	303
16		303
17	Plate - Apron rub 3/4" steel P	1880
18		1880
19	Plate - Front 3/4" steel P	71
20		71
21	Plate - Front 3/8" steel P	117
22		117
23	Plate - Rear 3/8" steel P	120
24		120
25	Plate - Skid 1/2" steel P	23
26		47
27		52
Total weight of plate assembly		13,670



DETAIL A



DETAIL B



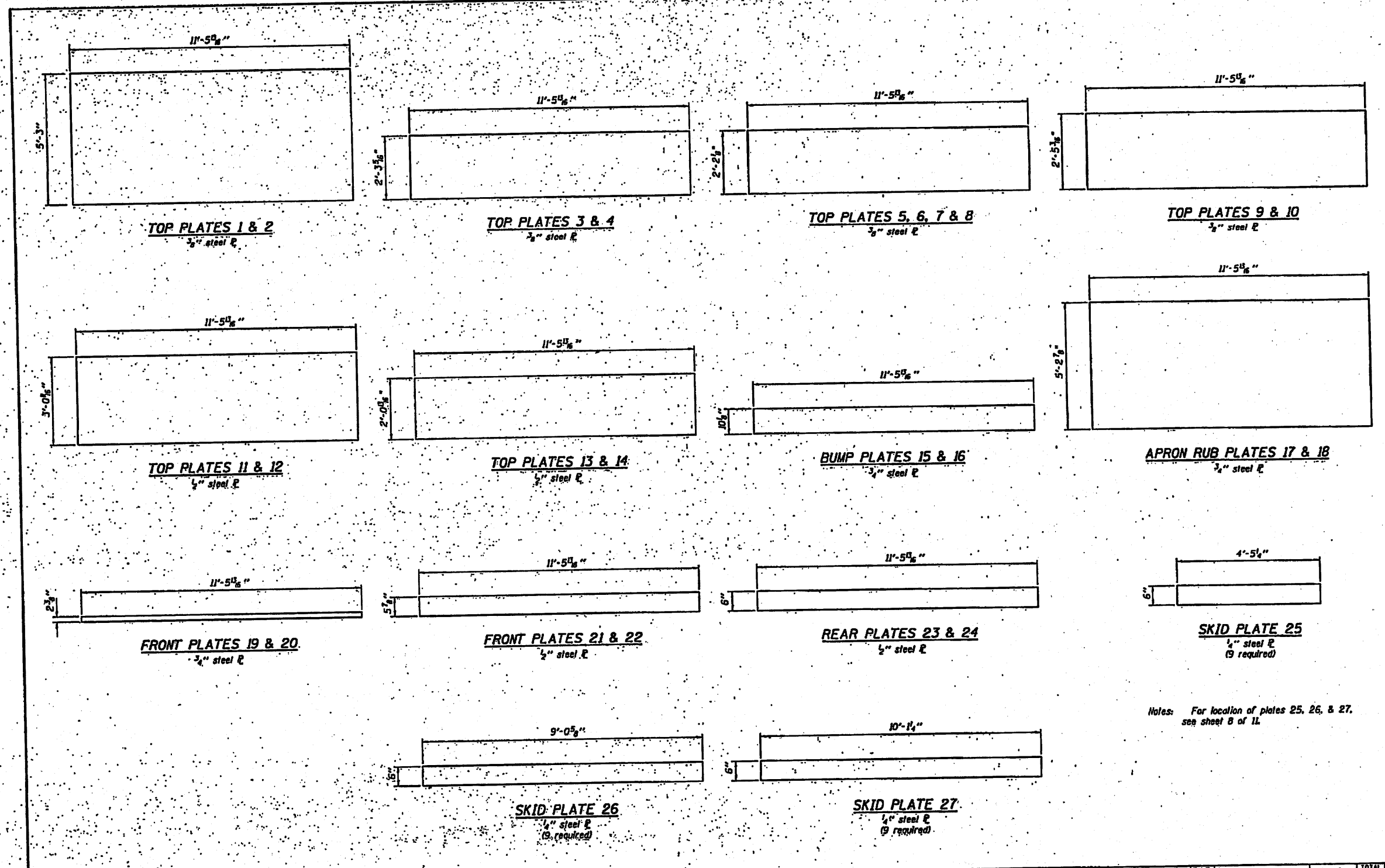
DETAIL C

DESIGNED - RAY MANCHI	EXAMINED - <i>Thomas J. ...</i>	DATE -
CHECKED - CLYD M. EVOY	PASSED - <i>Robert ...</i>	
DRAWN - H.T. DUONG		
CHECKED - G.R.A. / C.M.E.		

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PLATE ASSEMBLY
 (BRUSSELS FERRY)
 SHEET NO. 2 OF 11 SHEETS

F.A.P. NTE. 304	SECTION 21-4	COUNTY JERSEY	TOTAL SHEETS 11	SHEET NO. 2
CONTRACT NO. 7655			ILLINOIS STATE HIGHWAY PROJECT	



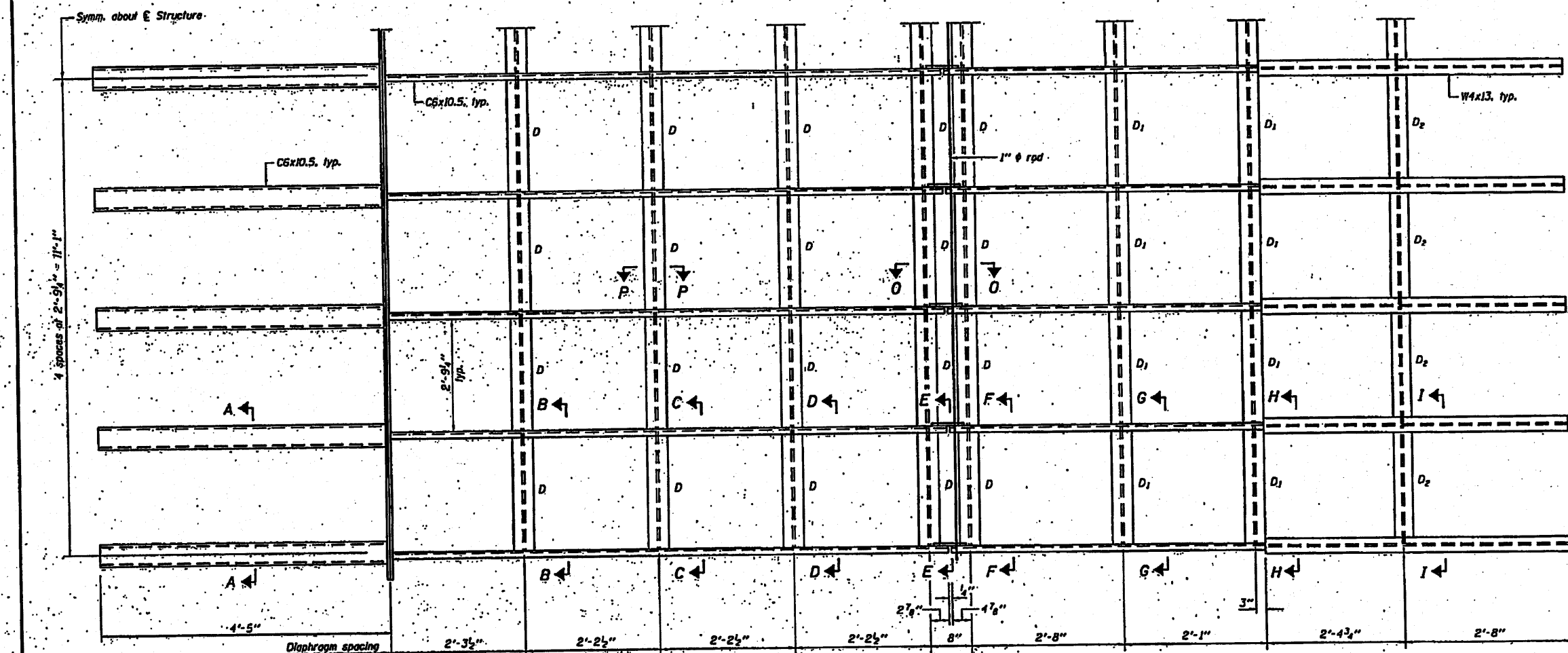
Notes: For location of plates 25, 26, & 27, see sheet B of 11.

DESIGNED - RAY AMANCHI	EXAMINED - <i>Thomas J. Jones, Ill. EIT</i>	DATE -
CHECKED - CURT M. EVOY	DESIGNED BY - <i>Robert R. Robinson</i>	
DRAWN - W.T. DURIG	PASSED - <i>Robert R. Robinson</i>	
CHECKED - G.R.A. / C.M.E.	ENGINEER OF BRIDGES AND STRUCTURES	

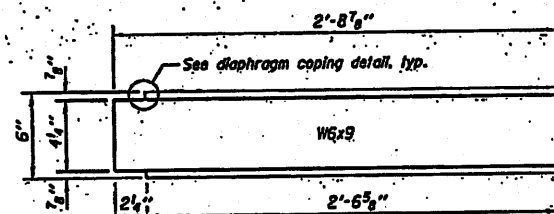
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLATE DETAILS
(BRUSSELS FERRY)
SHEET NO. 3 OF 11 SHEETS

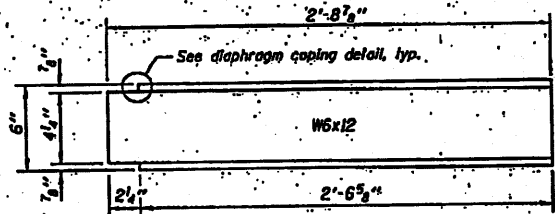
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
304	21-4	JERSEY	11	3
CONTRACT NO. 76E55			ILLINOIS STATE PROJECT	



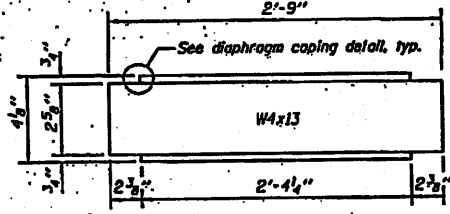
FRAMING PLAN
(Showing top of framing plan)



DIAPHRAGM D
(10 required)



DIAPHRAGM D1
(16 required)



DIAPHRAGM D2
(8 required)

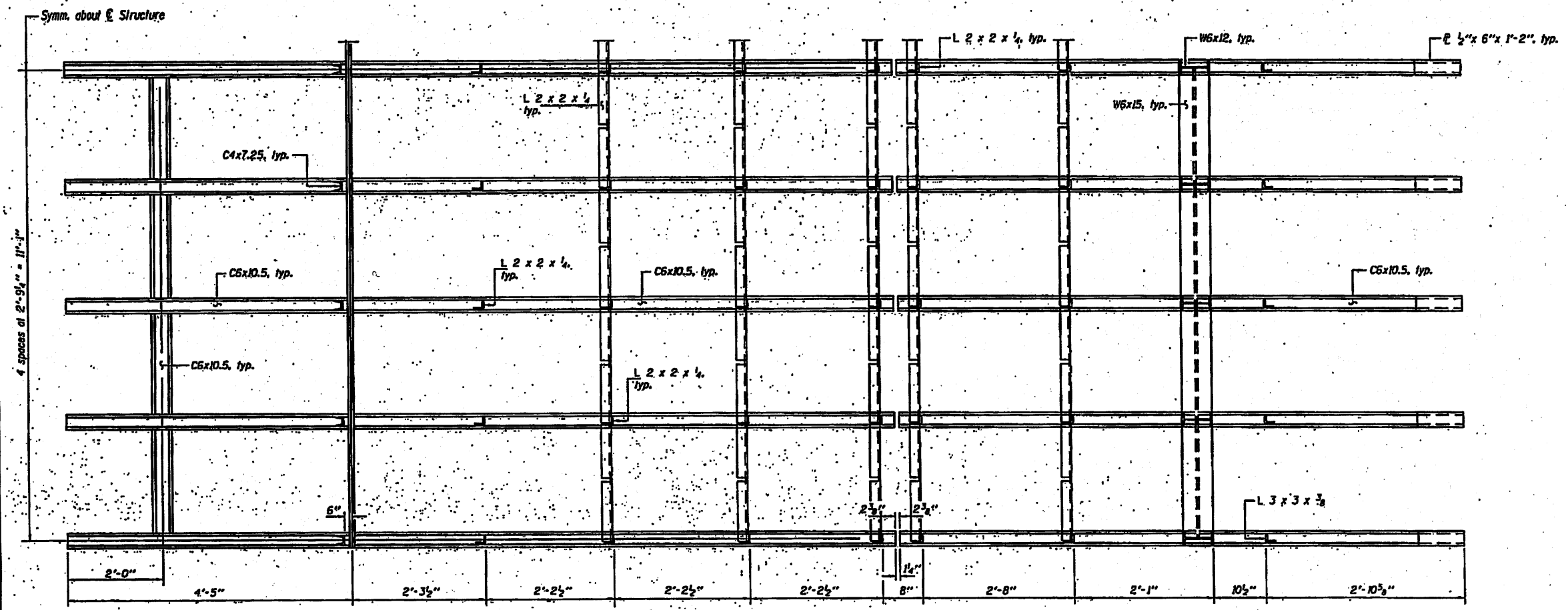
Notes: See sheets 6 & 7 of 11 for Sections A-A thru I-I.
See sheet 10 of 11 for Section O-O and Section P-P.
See sheet 11 of 11 for diaphragm coping detail.

DESIGNED - RAY AHANKE	EXAMINED - <i>Thomas J. Demalle</i>	DATE =
CHECKED - CURT M. ENBY	PASSED - <i>Robert E. Anderson</i>	
DRAWN - R.T. BUSH	ENGINEER OF BRIDGES AND STRUCTURES	
CHECKED - G.L.A. / C.A.E.		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

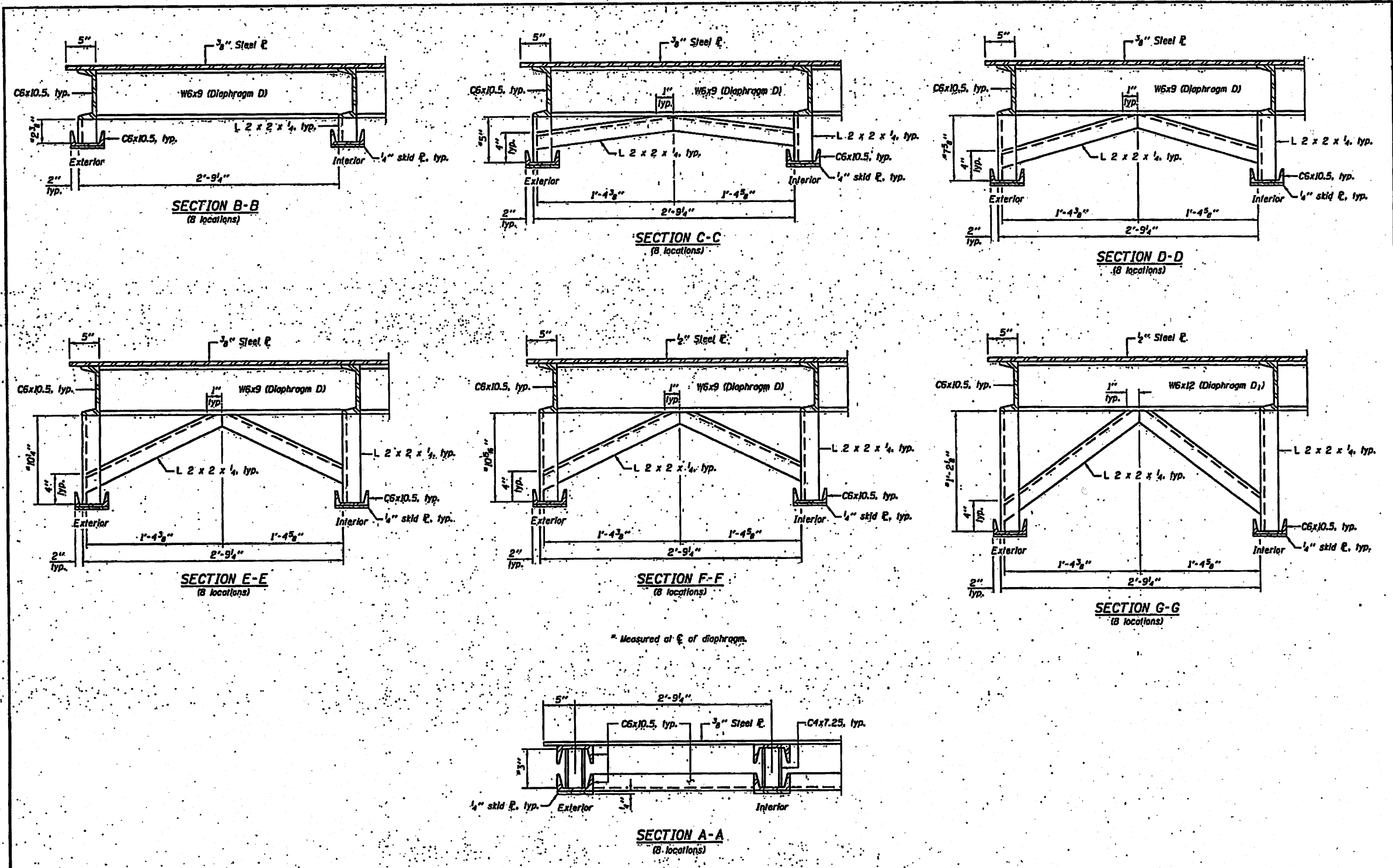
STRUCTURAL STEEL
(BRUSSELS FERRY)
SHEET NO. 4 OF 11 SHEETS

F.A.P. RATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
304	21-4	JERSEY	11	4
			CONTRACT NO. T6255	
ILLINOIS FED. AID PROJECT				



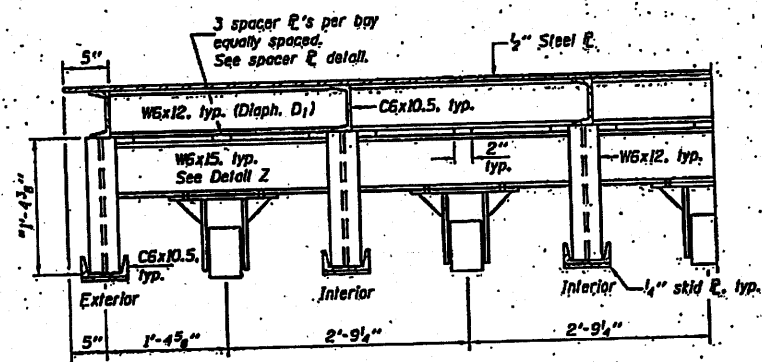
PLAN
(Showing bottom of framing plan)

DESIGNED - RAY AMACHI	EXAMINED - <i>Thomas J. Duggan III</i>	DATE -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN (BRUSSELS FERRY)	SHEET NO. 5 OF 11 SHEETS	APP. NO. 304	SECTION 21-4	COUNTY JERSEY	TOTAL SHEETS 14	SHEET NO. 5
CHECKED - CURT M. EVOY	PASSED - <i>Robert E. Anderson</i>					CONTRACT NO. 76E55				
DRAWN - H.T. OLING						ILLINOIS/IDA PROJECT				
CHECKED - C.R.A. / C.M.E.										



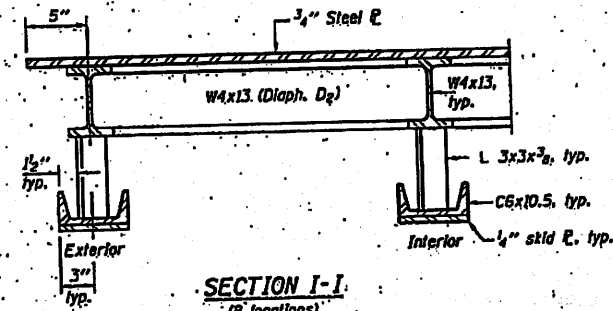
* Measured at ϕ of diaphragm.

DESIGNED - RAY ANARCH	EXAMINED - <i>Thomas J. Dwyer</i>	DATE -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS FRAME DETAILS (BRUSSELS FERRY)	P.A.P. RTE. 304	SECTION 21-4	COUNTY JERSEY	TOTAL SHEETS 11	SHEET NO. 11		
CHECKED - CLAY M. EVOY	PASSED - <i>Robert W. Perkins</i>				SHEET NO. 6 OF 11 SHEETS		CONTRACT NO. T6E55				
DRAWN - J.L.T. QUOND					ILLINOIS FED. AID PROJECT						
CHECKED - G.R.A. / C.M.E.											

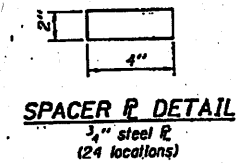


SECTION H-H

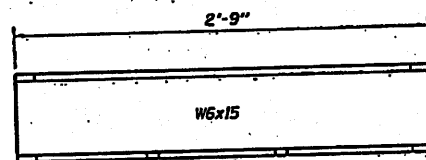
* Measured at E of diaphragm.



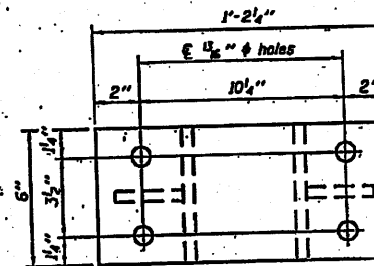
SECTION I-I
(8 locations)



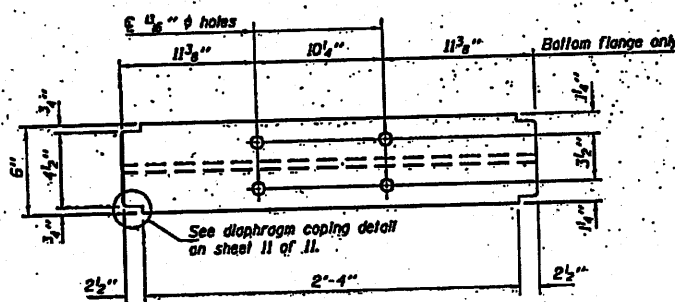
SPACER P DETAIL
3/4\"/>



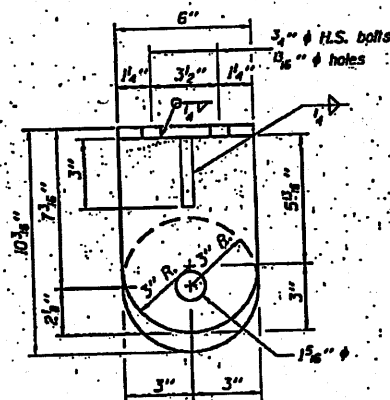
ELEVATION



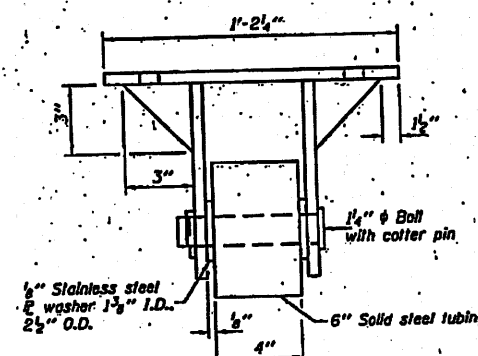
PLAN



DETAIL Z
(8 locations)



END VIEW



ELEVATION

ROLLER BRACKET ASSEMBLY

(B required)
(All plates are 1/2\"/>

Notes: All plates for the roller bracket shall be galvanized.

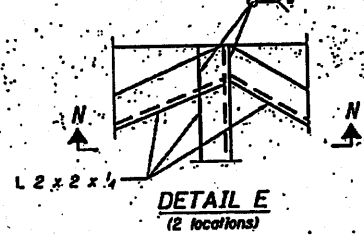
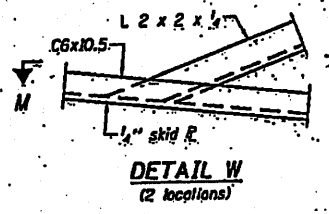
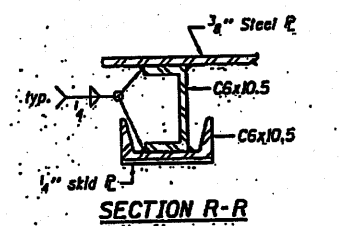
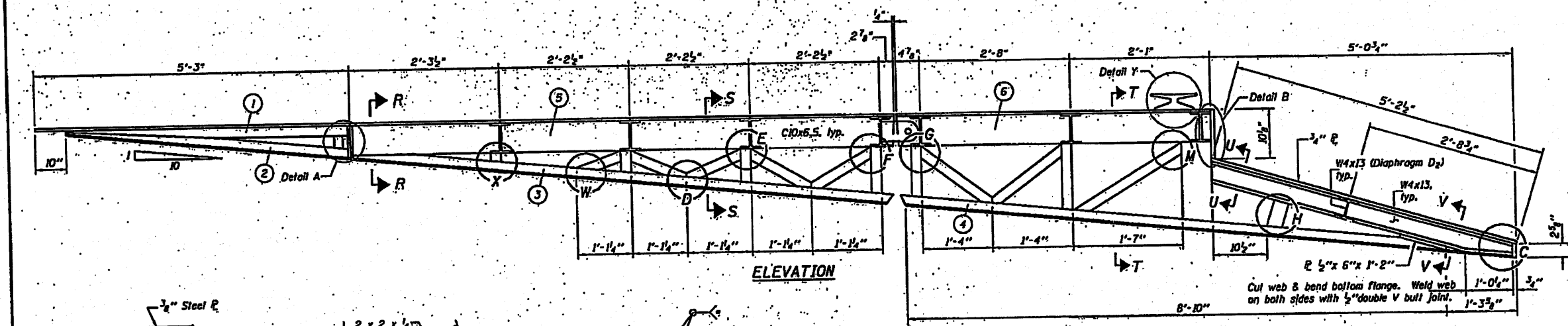
DESIGNED - RAY ANANICH
CHECKED - CLYD M. EVOY
DRAWN - H.T. BUDING
CHECKED - G.R.A. / C.M.E.

EXAMINED - *Thomas J. ...*
PASSED - *Robert ...*

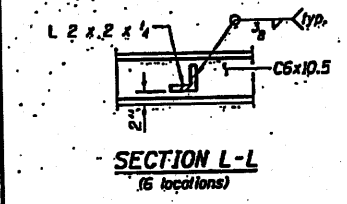
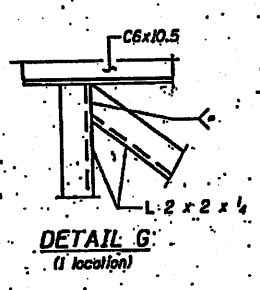
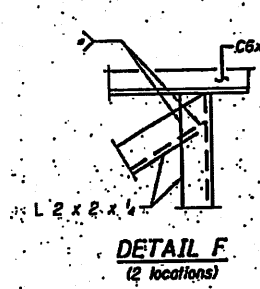
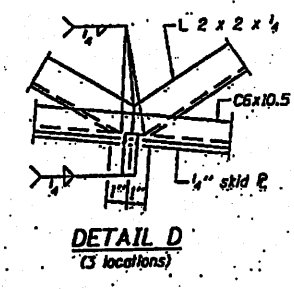
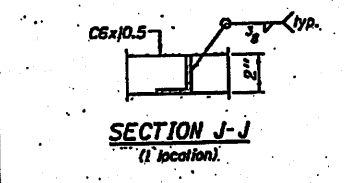
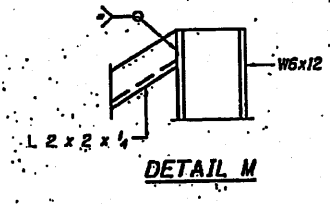
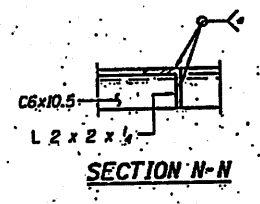
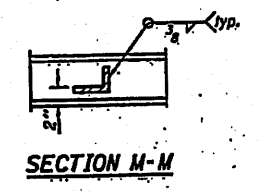
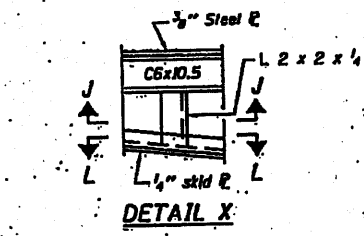
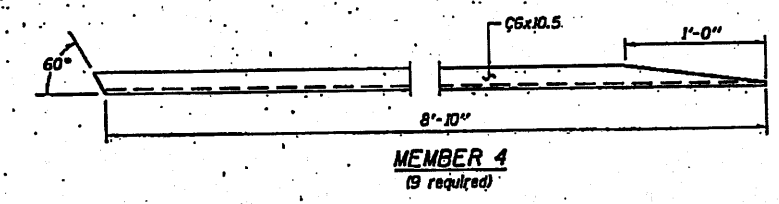
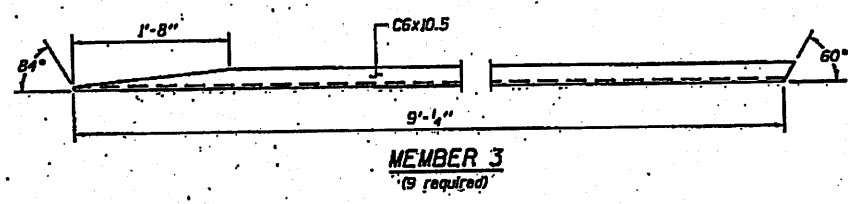
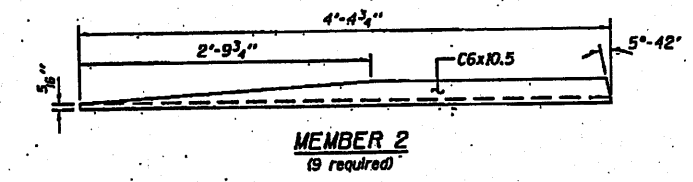
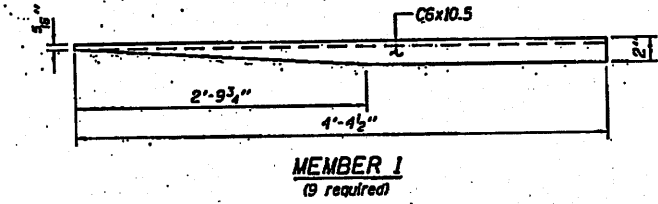
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS FRAME DETAILS
(BRUSSELS FERRY)
SHEET NO. 7 OF 11 SHEETS

F.A.P. RTE. 304	SECTION 21-4	COUNTY JERSEY	TOTAL SHEETS 11	SHEET NO. 7
			CONTRACT NO. 76E55	

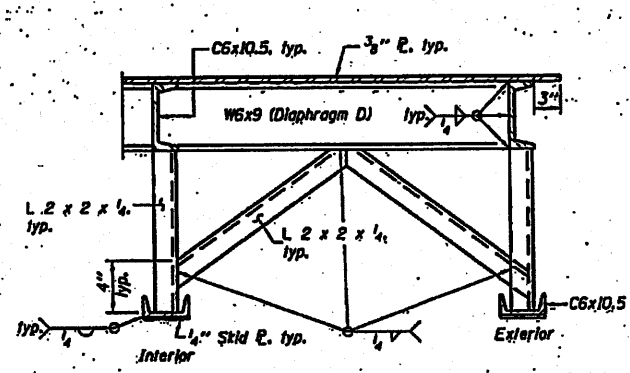


* Weld is to be a 1/4" fillet, or 1/4" grooved as required.

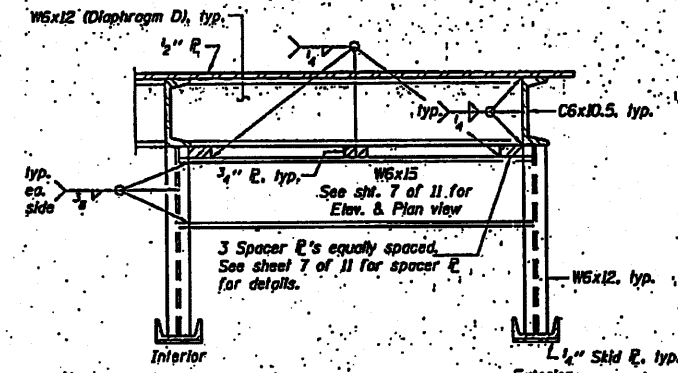


Notes: See sheet 9 of 11 for Sections S-S, T-T, U-U, V-V and Details C, H & Y.
See sheet 10 of 11 for members 5 and 6.

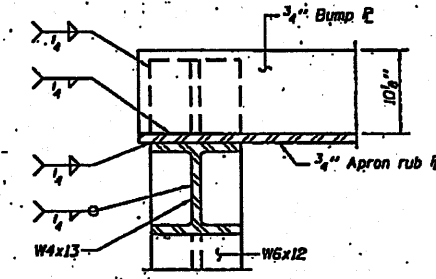
DESIGNED - RAY BRANCH	EXAMINED - <i>Thomas J. Donnell</i>	DATE -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURAL STEEL MEMBERS (BRUSSELS FERRY)	SHEET NO. 8 OF 11 SHEETS	F.P. 304	SECTION 21-4	COUNTY JERSEY	TOTAL SHEETS	SHEET NO.
CHECKED - CURT M. EVDY	DRAWN - R.T. DUNN	PASSED - <i>Ralph W. Adams</i>							11	8
CHECKED - G.R.A. / C.M.E.										
CONTRACT NO. 7655										



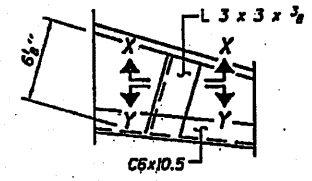
SECTION S-S
Typical welding diagram of each diaphragm and diaphragm bracing.



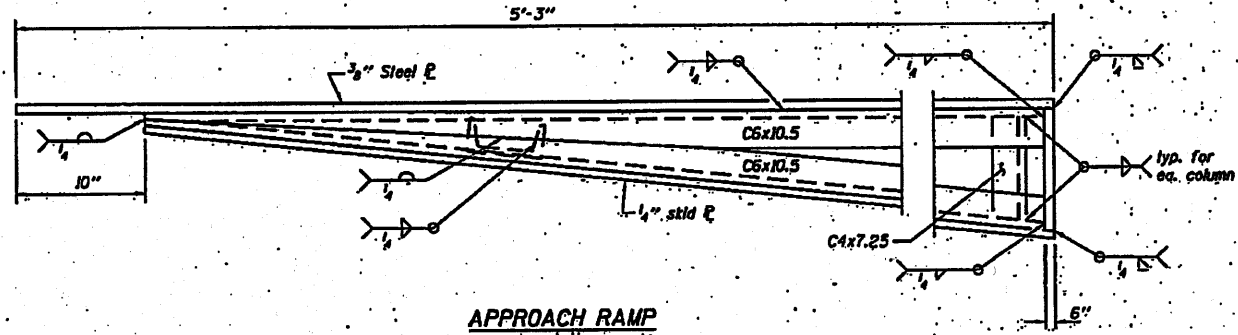
SECTION T-T
Typical welding diagram at each end diaphragm. Roller bracket detail not shown for clarity.



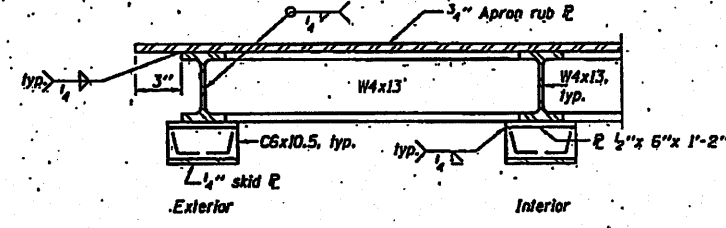
SECTION U-U



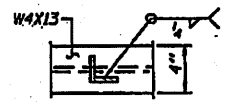
DETAIL H



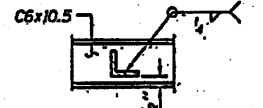
APPROACH RAMP



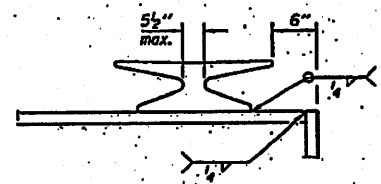
SECTION V-V
(8 locations)



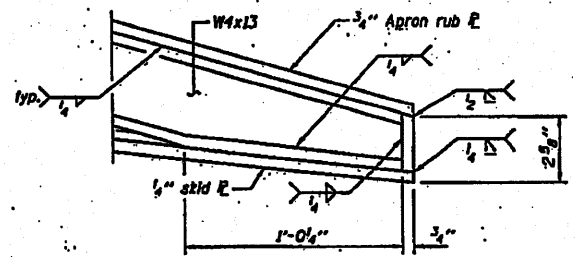
SECTION X-X



SECTION Y-Y



DETAIL Y



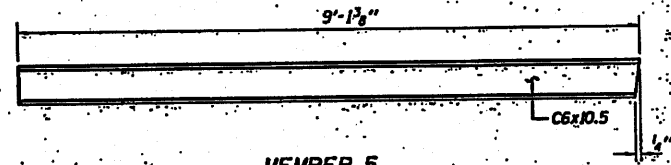
DETAIL C
(Showing welds)

DESIGNED - RAY ANACHE	EXAMINED - <i>Thomas J. ...</i>	DATE -
CHECKED - CURT M. EVDY	PASSED - <i>Ralph ...</i>	
DRAWN - H.T. BUGH		
CHECKED - C.R.A. / C.M.E.		

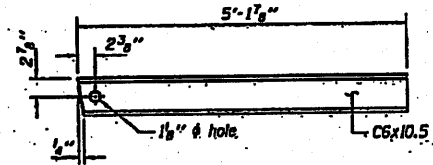
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WELD DETAILS
(BRUSSELS FERRY)

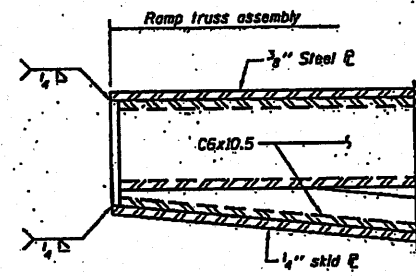
F.A.P. NO. 304	SECTION 21-4	COUNTY JERSEY	TOTAL SHEET NO. 17
			CONTRACT NO. 7655
ILLINOIS FERRIS AIR PROJECT			



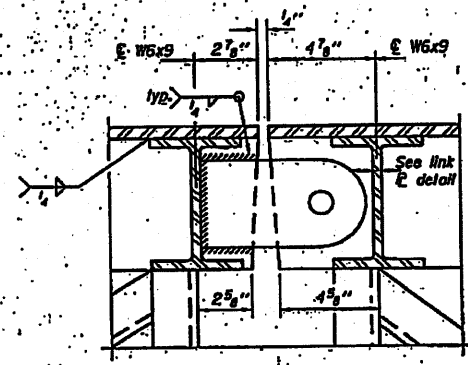
MEMBER 5
(9 required)



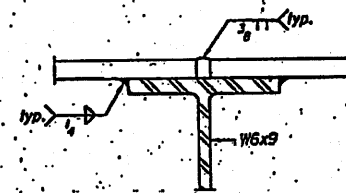
MEMBER 6
(9 required)



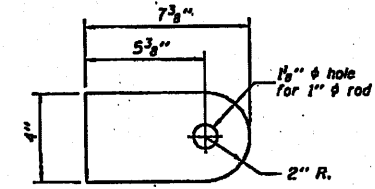
DETAIL A
(Showing welds)



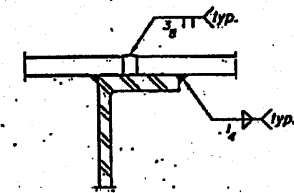
SECTION 0-0



SECTION P-P
(C6 not shown for clarity)



LINK PLATE DETAIL
1/2\"/>



SECTION 0-0

Notes: See sheet 2 of 11 for location of Section 0-0.
See sheet 4 of 11 for location of Sections 0-0 & P-P.

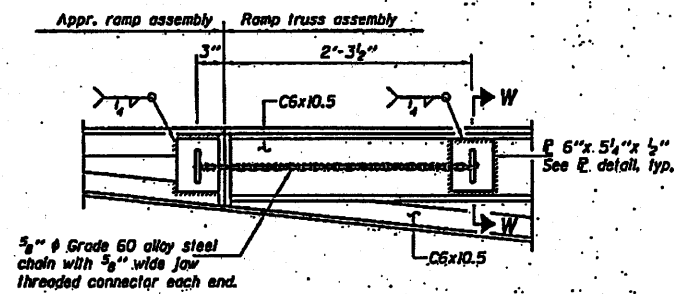
DESIGNED - RAY ANACHE	EXAMINED - <i>Thomas J. Donnell</i>	DATE -
CHECKED - CURT M. EVOY	ENGINEER OF BRIDGE DESIGN	
DRAWN - T.L. DUBINS	PASSED - <i>Robert E. Robinson</i>	
CHECKED - G.R.A. / C.M.E.	ENGINEER OF BRIDGES AND STRUCTURES	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

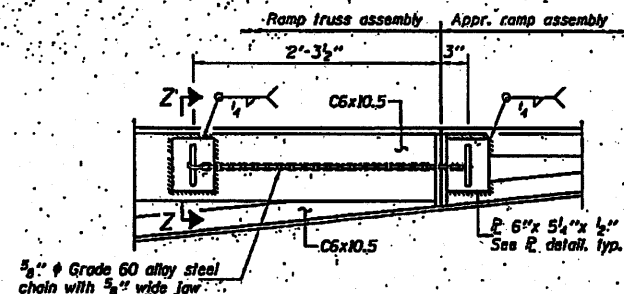
WELD DETAILS
(BRUSSELS FERRY)

SHEET NO. 10 OF 11 SHEETS

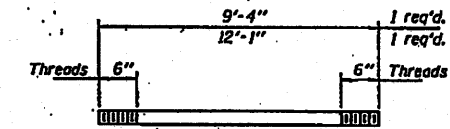
F.A.P. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
304	21-4	JERSEY	14	13
CONTRACT NO. 76E55			ILLINOIS FED. AID PROJECT	



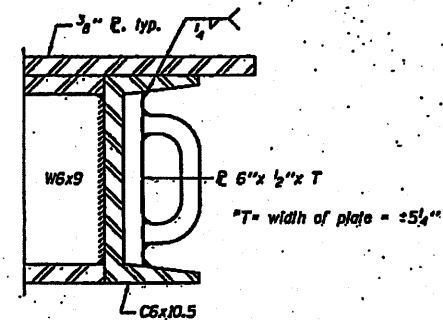
TIE DETAIL
(1 location)



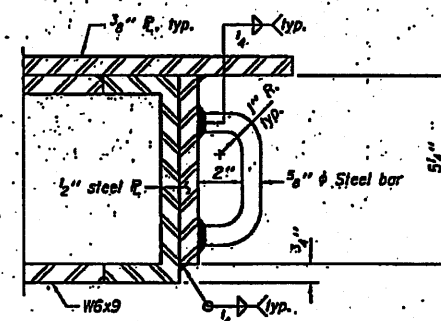
TIE DETAIL
(1 location)



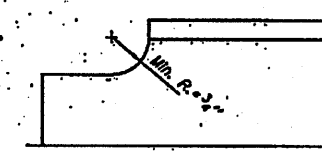
1" THREADED CONNECTION ROD
ASTM A 307 with hex nuts, washers & collar pin



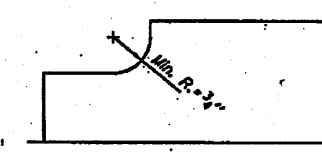
SECTION W-W
See Section B-B for dimensions
*Grind width of plate to fit inside C6x10.5



SECTION Z-Z



COPING DETAIL
FOR DIAPHRAGMS D, D₁, & D₂
Do not gouge web when cutting flange.



COPING DETAIL
FOR W6X15
Do not gouge web when cutting flange.

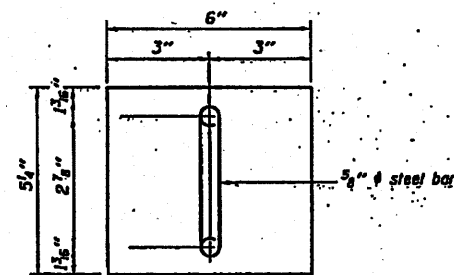


PLATE DETAIL AT SECTION W-W
5/8" plate (if required)

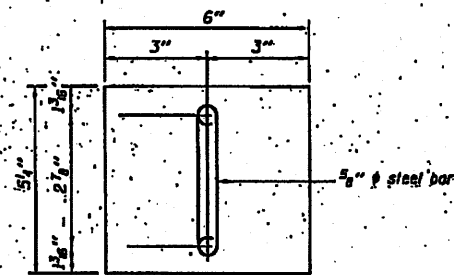


PLATE DETAIL AT SECTION Z-Z
5/8" plate (Plates are typ. of approach ramp assembly) (3 required)

DESIGNED - RAY AMARCHI	EXAMINED - <i>Thomas J. D'Amico</i>	DATE -
CHECKED - CURT M. EVOY	DESIGNED BY BRIDGE DESIGN	
DRAWN - H.T. QUINN	PASSED - <i>Robert W. Adams</i>	
CHECKED - C.A. / C.M.E.	ENGINEER OF BRIDGES AND STRUCTURES	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HINGE & TIE DETAILS
(BRUSSELS FERRY)

SHEET NO. 11 OF 11 SHEETS

SECTION	COUNTY	TOTAL SHEETS
21-4	JERSEY	11
CONTRACT NO. 76E55		
ILLINOIS FED. AID PROJECT		