FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	IOWA	F 38(9)			

STATE OF IOWA

STATE HIGHWAY COMMISSION

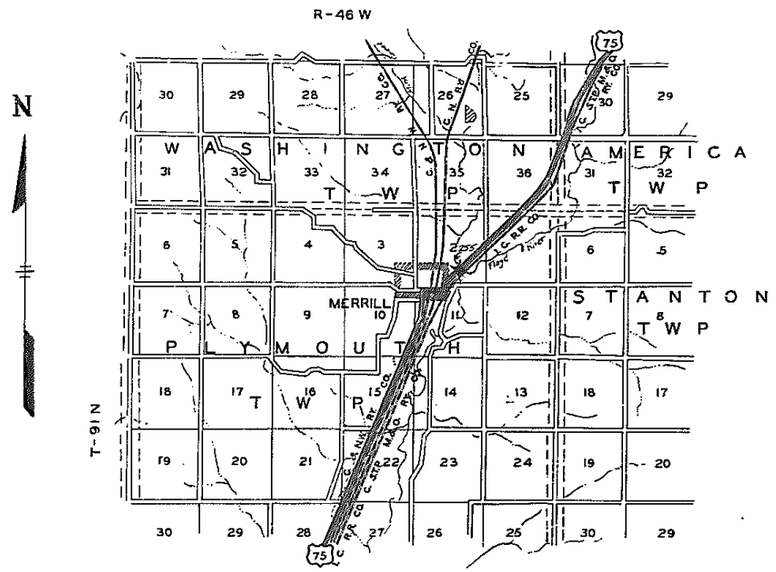
DESIGN FOR

240' X 52' I-BEAM BRIDGE

PRIMARY ROAD SYSTEM PROJECT NO. F. 38 (9)

PLYMOUTH COUNTY

NOVEMBER 1955



LAYOUT

SCALE 1 INCH = 1 MILE

IN LETTING OF DEC. 13, 1955

Design No. 255 Station 655+20
Section 2 Plymouth TWP

240' X 52' CONT. I-BEAM BR.

ESTIMATE OF QUANTITIES

ITEM	QUANTITY
Structural Steel	409,300 lbs.
Reinforcing Steel	116,167 lbs.
Concrete	624.0 c.y.
Untreated Piles (90 @ 30') =	2,700 L.F.
Class 20 Excavation	155 c.y.
Class 21 Excavation	246 c.y.
Class 10 Excavation	1,850 c.y.
Treated Piles (50 @ 40') =	2,000 L.F.
Class 24 Excavation	1,420 c.y.

Specifications.

Design - A.A.S.H.O. Series of 1953.

Construction - I.S.H.C. Series of 1952.

Mileage Summary

Bridge at Sta. 655+20 = 243'4" = 0.046 Mi.

APPROVED:

[redacted]

CHIEF ENGINEER DATE

IOWA HIGHWAY COMMISSION

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

APPROVED:

[redacted]

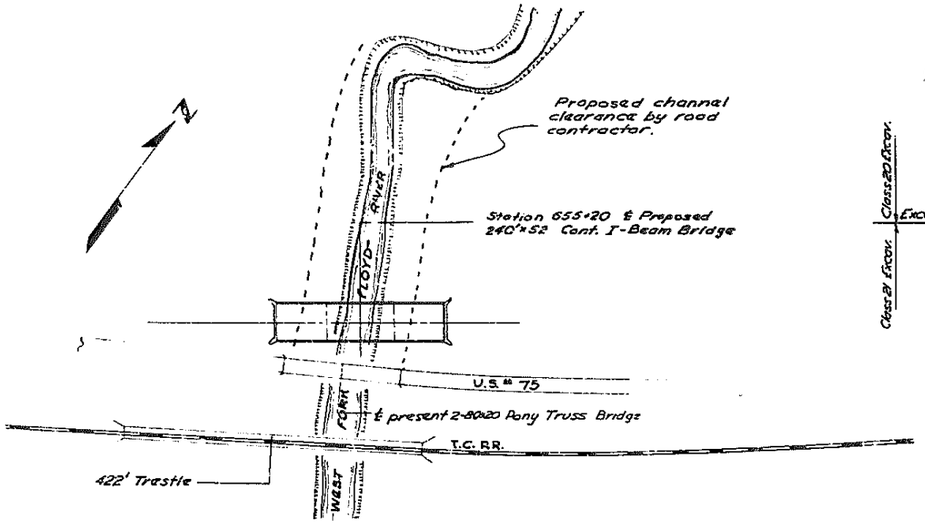
DISTRICT ENGINEER DATE

Dec 13

DESIGN NO. 255 PLYMOUTH COUNTY PROJECT NO. F-38(9) FILE NO. 16852

Checked Quant. RM 11/7/55 Office Copy

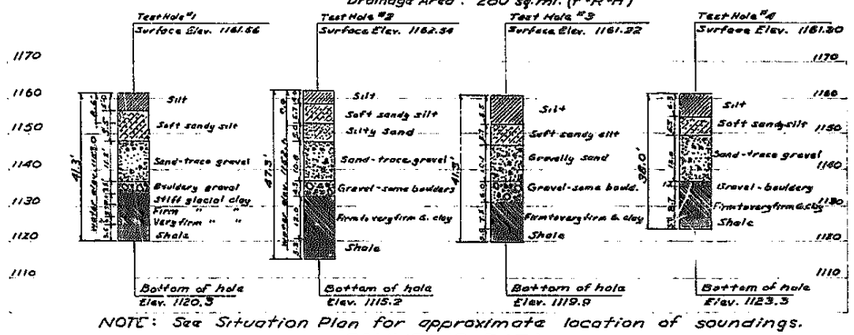
SAB



GENERAL PLAN

Scale: 1"= 100'

Drainage Area : 280 sq.mi. (F-R-H)



NOTE: See Situation Plan for approximate location of soundings.

SOUNDING DATA

Scale 1"=20'

GENERAL NOTES:

This bridge is designed for H-20-44 loading with an allowance of 19 pounds per square foot of roadway for future wearing surface and with modifications listed on sheet 5

The present 2-80×20 Pony Truss Bridge (FHC Design №121 Plymouth) is to be removed by others.

The bridge contractor is to clear channel 40 feet each side of roadway ℄ as shown by the shaded areas in the Situation Plan and ℄ Section.

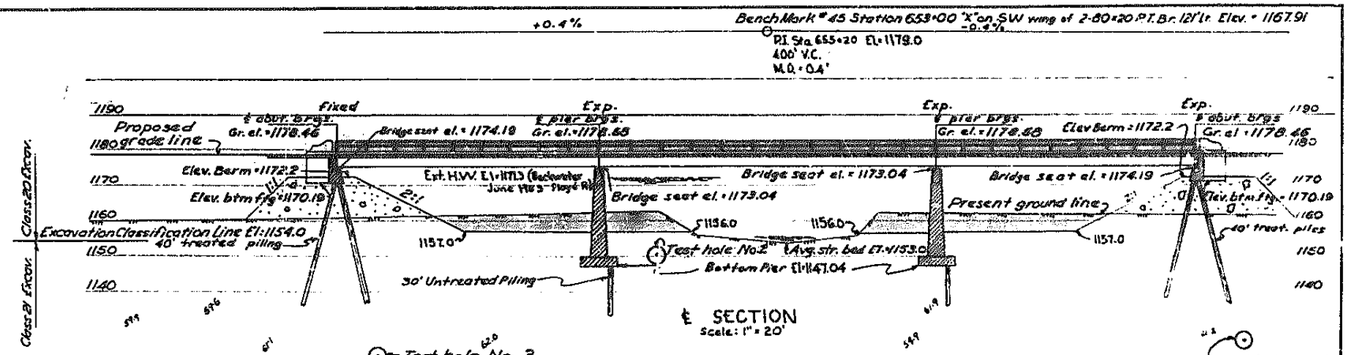
The bridge contractor is to build berms to elevations and shapes shown before abutment pile are driven. Suitable material from Class 10 channel excavation (about 1480 cy.) may be used for constructing the berms. Additional material required for berms is listed as Class 21 Excavation (about 1420 cy.). Approach fills are not a part of this estimate.

Red lines on tracing or faint lines on print indicate present structure.

SPECIFICATIONS:

Design: AASHO Series of 1953 with modifications listed on sheet 5

Construction: Standard Specifications of the Iowa State Highway Commission, Series of 1952 plus current Special Provisions.



TOTAL ESTIMATED QUANTITIES

PART	SUPER	2 ABUT.	2 PIERS	TOTAL
Structural Steel	409,300			409,300#
Reinforcing Steel	86,719	7262	22,192	116,167 lb.
Concrete	361.2	99.6	163.2	624.0 c.y.
Untreated Piles			50@30'	2700 L.F.
Class 20 Excavation		70	85	155 c.y.
Class 21 Excavation			246	246 c.y.
Class 10 Excavation				1850 c.y.
Treated Piles		50@40'		2000 L.F.
Class 24 Excavation				1420 c.y.

LOCATION:
Section 2
Plymouth Twp.
T91N R46W
Plymouth Co.
Over West Fork Floyd R.
On U.S. № 75

1/16

Design for
240'-52' CONTINUOUS I-BEAM BRIDGE
73'-3 End Spans — 93'-6 Center Span
Concrete Floor & Substructure — Steel Rail

SITUATION & GENERAL PLANS

Station 655+20 — Project F-38(9)

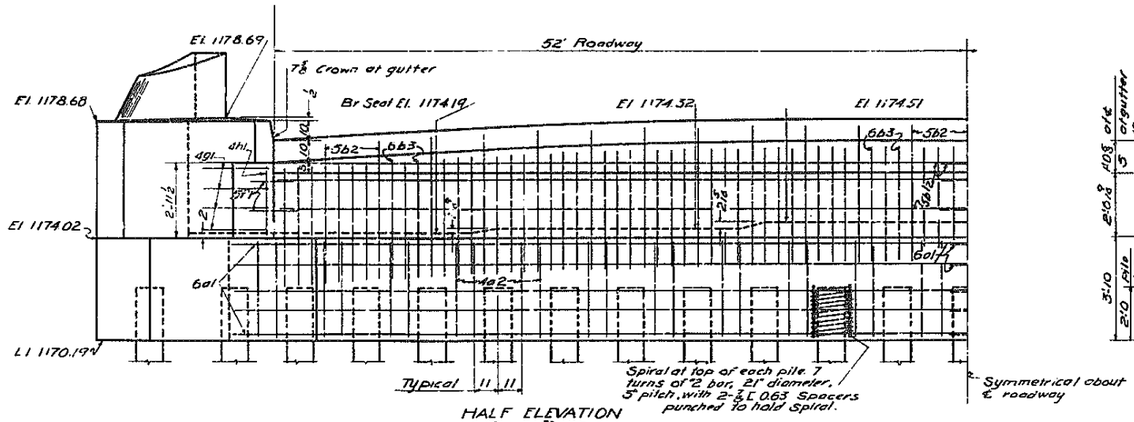
PLYMOUTH COUNTY

Iowa State Highway Commission
July 1955 — Sheet 1 of 6

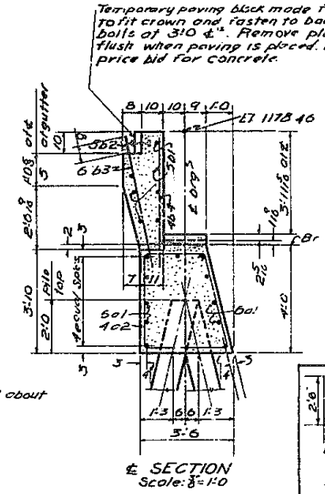
Design No. 255 — Plymouth County — File No. 18652

Traced by: G.E.B. Checked by: [illegible]

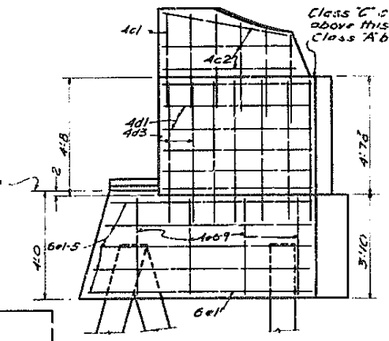
Bench Mark *45-Sta 653+00, (x) on S.W. wing 2-80x20 PT bridge. El 1167.91, 121' left



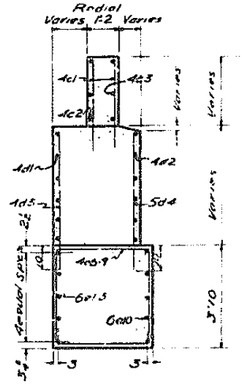
HALF ELEVATION
Scale: ⅜" = 1:0



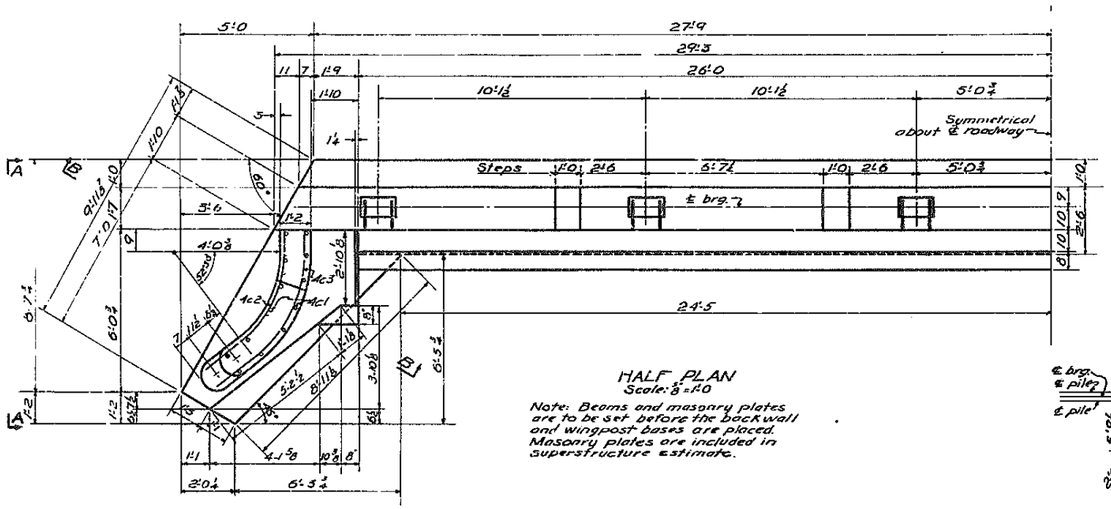
℄ SECTION
Scale: ⅜" = 1:0



VIEW A-A
Scale ⅜" = 1:0

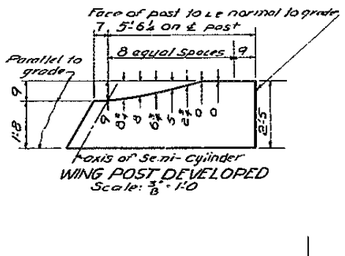


SECTION B-B
Scale ⅜" = 1:0

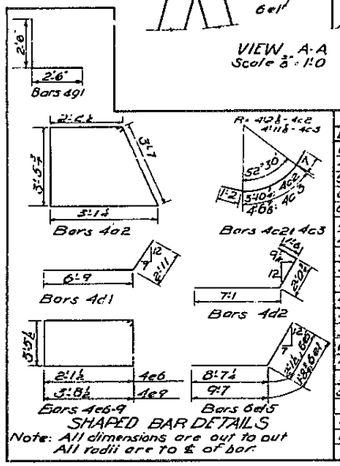


HALF PLAN
Scale: ⅜" = 1:0

Note: Beams and masonry plates are to be set before the backwall and wingpost bases are placed. Masonry plates are included in superstructure estimate.



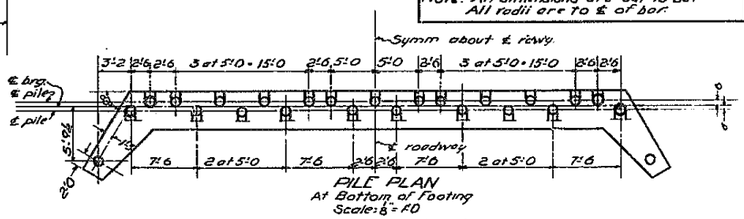
WING POST DEVELOPED
Scale: ⅜" = 1:0



SHAPED BAR DETAILS
Note: All dimensions are out to out
All radii are to ℄ of bar.

REINFORCING STEEL-ONE ABUT.

Bar	Location	Shape	No	Ln	Wt.
6a1	Bridge Seat, horizontal		22	40'-5"	938
4a2	" - hoops		44	10'-11"	380
5b1	Backwall, horizontal		14	26'-6	386
5b2	" , vertical, back face		25	5'-7	146
6b3	Backwall, Vertical, back face		79	4'-9	556
4b4	" " front face		25	5'-3	88
4c1	Wing post, vertical		26	3'-1	54
4c2	" - , horizontal, front face		6	5'-7	23
4c3	" - " , horizontal, back face		6	6'-4	25
4d1	Wing post base, horizontal, f.f.		12	9'-8	78
4d2	" - " , horizontal, b.f.		12	10'-7	86
4d3	Wing post base, Vertical, f.f.		14	5'-4	56
5d4	" - " , vertical		20	5'-7	116
6e1.5	Wing footing, horizontal, f.f.		10	Var.	164
4e6.9	Wing footing hoops		8	Var.	72
6e10	Wing footing horizontal, b.f.		10	11'-3	169
5f1	Backwall dowels		14	3'-0	44
	Pile Spirol complete		25		225
4g1	Wing Post base, horizontal, b.f.		8	5'-0	27
4h1	" - " , Vertical b.f.		2	2'-6	4
	Total				3631 lbs



PILE PLAN
At Bottom of Footing
Scale: ⅛" = 1'-0

25 creosoted piles required for each abutment. Dimensions shown are at bottom of footing. Batter piles 1:4 as shown except wing piles, which are to be vertical.

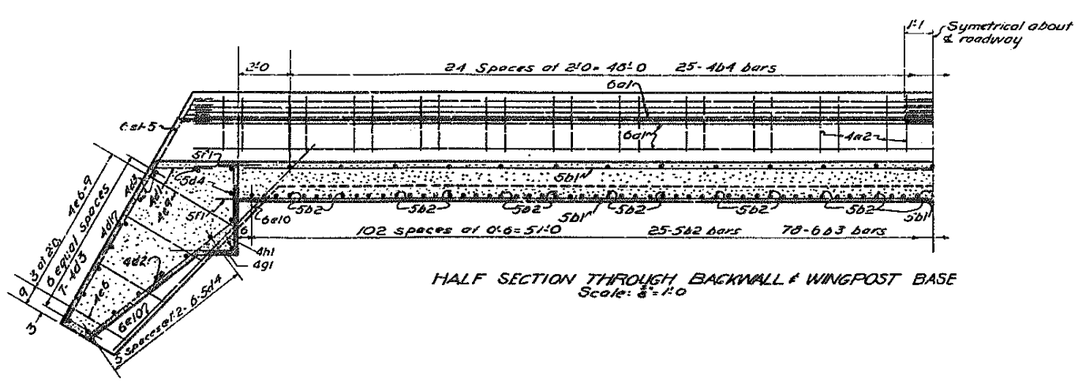
CONCRETE PLACEMENT QUANT.

Item	W. abut.	℄ gdr.
Footing	31.1 C.Y.	31.1 C.Y.
Wing post bases	7.8 C.Y.	7.8 C.Y.
Wing posts (class 'C')	1.2 C.Y.	1.2 C.Y.
Backwall	9.7 C.Y.	9.7 C.Y.
Total	49.8 C.Y.	49.8 C.Y.

ESTIMATED QUANTITIES — ℄ ABUTS.

Concrete	99.6 C.Y.
Reinforcing Steel	7262 lb.
Creosoted Wood piles; 50 @ 40'	2000 L.F.
Excavation class 20	70 C.Y.

LOCATION.
Section 2
Plymouth township
T90N R46W
Plymouth County



HALF SECTION THROUGH BACKWALL & WINGPOST BASE
Scale: ⅜" = 1:0

ABUTMENT NOTES

All exposed corners of 90° or less, except vertical corners of wing posts to be Filleted with a 3" dressed and beveled strip. Minimum distance from face of concrete to ℄ of outside reinforcing bar is to be 2" unless otherwise shown or noted.

All abutment piles are to be Treated Timber Foundation piles driven to full penetration, if practicable, but to at least 20 ton bearing capacity.

SPECIFICATIONS

Design: AASHO, 1953 Series
Construction: Iowa Highway Commission Standard Specifications, Series 1952, plus current Special provisions.

2/6

Design for
240 x 52 CONTINUOUS I-BEAM BRIDGE
73'-3 End Spans 93'-0 Center Span
Concrete Floor & Substructure Steel Rail

ABUTMENT DETAILS

Station 655+20.00 Project No. FJ8 (3)

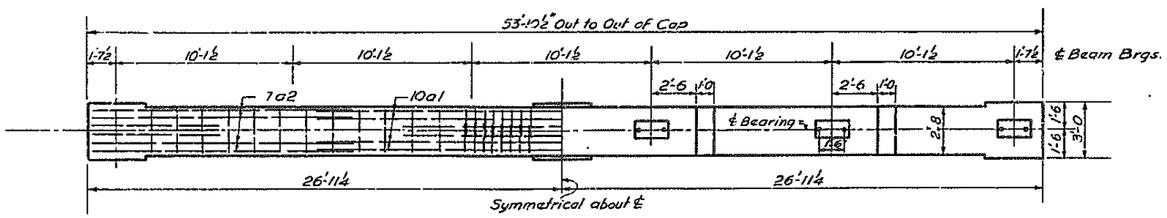
PLYMOUTH COUNTY

Iowa State Highway Commission
July 1955 Sheet 2 of 6

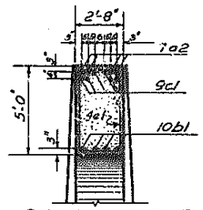
Design No 255 Plymouth County File No. 16652

Designed: by E.N. Checked by [illegible] Traced by E.N.

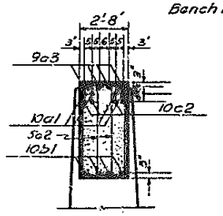
Bench Mark: #15 - Sta 653+00 - 121'-Lt.-(x) on SW wing of 2-80'-20' Pony Truss Br. Elev. = 1167.91



PLAN OF CAP
Scale ¼"-1'-0"



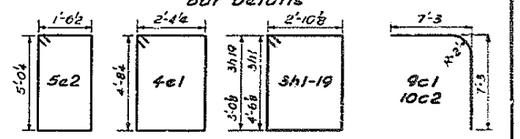
SECTION B-B
Scale ½"-1'-0



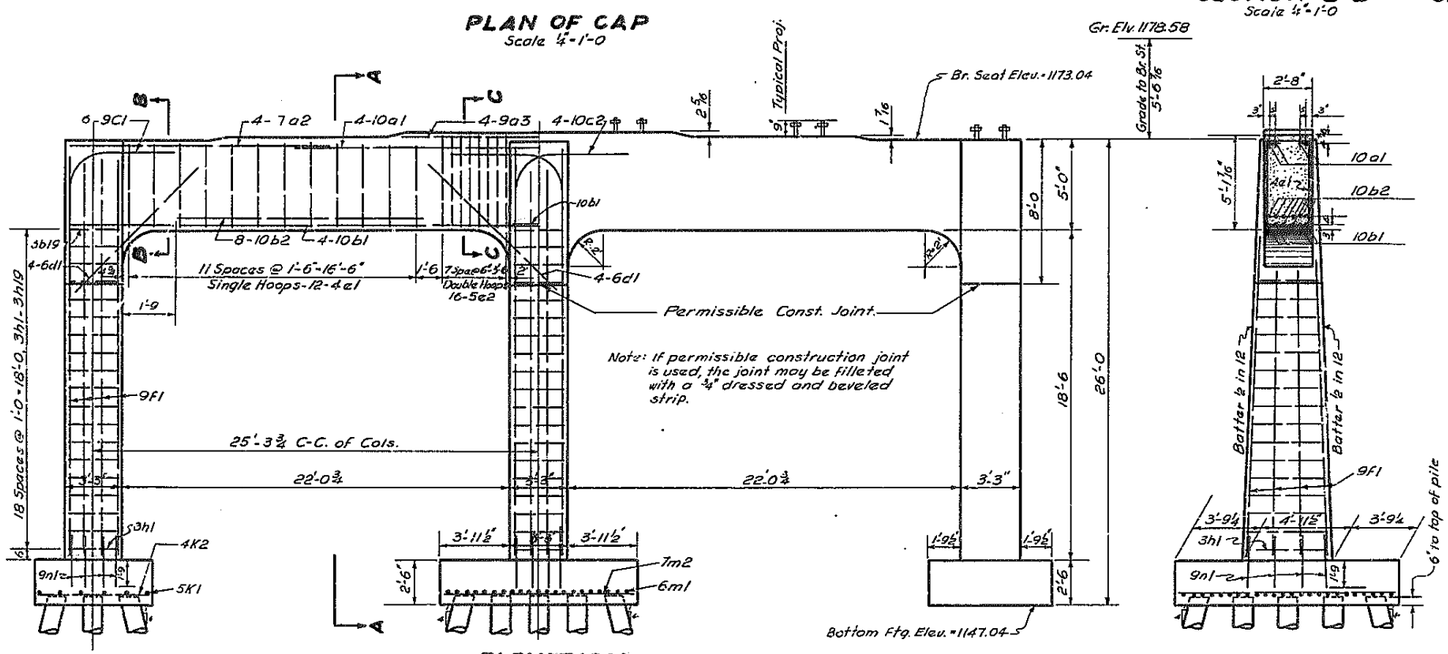
SECTION C-C
Scale ½"-1'-0

BILL OF REINFORCING-ONE PIER					
Mark	Location	Shape	No.	Length	Weight
10a1	Beam Longit. Top	—	4	27'-6"	473
7a2	" " "	—	8	15'-1"	246
9a3	" " "	—	4	16'-0	218
10b1	" " Bottom	—	8	28'-6	981
10b2	" " "	—	16	18'-7	1279
9c1	Beam Corner	⌐	12	13'-8	558
10c2	Beam Corner	⌐	8	13'-8	471
6d1	Beam Fillets	—	16	10'-0"	240
4e1	Beam Hoops	□	24	14'-7	334
5e2	" "	□	32	13'-10	462
9f1	Column Vertical	—	36	23'-0	2815
3h1-19	Column Hoops	□	57	Varies	298
5K1	Footing Longitudinal	—	24	9'-6	238
4K2	" Transverse	—	52	6'-4	220
6m1	" Longitudinal	—	42	12'-0	757
7m2	" Transverse	—	48	10'-8	1047
9n1	Column Dowels	—	36	3'-9	452
Total					11,096 Lbs

Bar Details



All dimensions are out to out, radius is to ℄ bar



ELEVATION
Scale ¼"-1'-0"

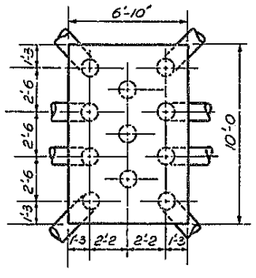
SECTION A-A
Scale ¼"-1'-0"

Pier Notes:

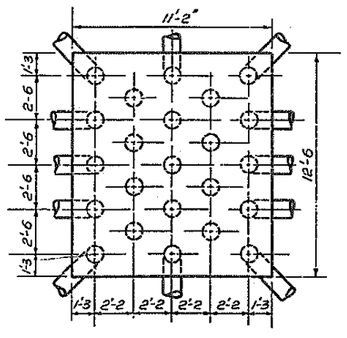
All concrete to be Class 'A'.
All exposed corners of 90° or sharper are to be filleted with a ¾" dressed beveled strip.
Wood piles are to be driven to full penetration if practicable, but to at least a 20 ton bearing value.
Anchor bolt holes for rockers are to be drilled before steel is erected. Anchor bolts are to be set and grouted after steel is erected. After rockers are set, tighten nuts on anchor bolts "finger tight" then slack off ¼ and spot weld nuts to anchor bolts. Weight of anchor bolts is included in superstruct steel estimate.
Minimum edge distance from face of concrete to ℄ of nearest reinforcing bar is to be 2" unless noted otherwise.

CONCRETE PLACEMENT QUANT. - ONE PIER	
Location	
Above Const. Joint	32.5 C.Y.
Below Const. Joint	24.2 C.Y.
Footings	24.9 C.Y.
Total	81.6 C.Y.

ESTIMATED QUANTITIES - TWO PIERS	
Concrete	163.2 C.Y.
Reinforcing Steel	22,192 Lbs.
Untreated Piles 90@30'	2700 L. Ft.
Class '20' Excavation	85 C.Y.
Class '21' Excavation	246 C.Y.



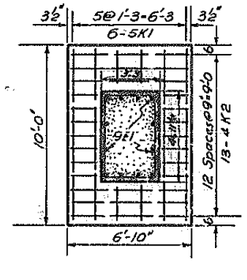
Exterior Footings



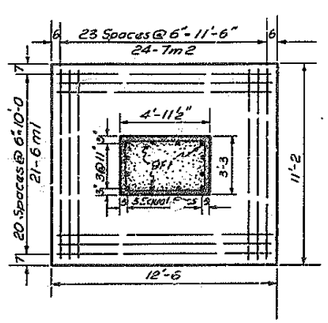
Interior Footing

PILE LAYOUT
Scale ¼"-1'-0"

Note: Pile dimensions shown are at bottom of footing. Batter pile 1:4 in the direction indicated. 45-30 ft. long untreated piles required for each pier.



Exterior Footings



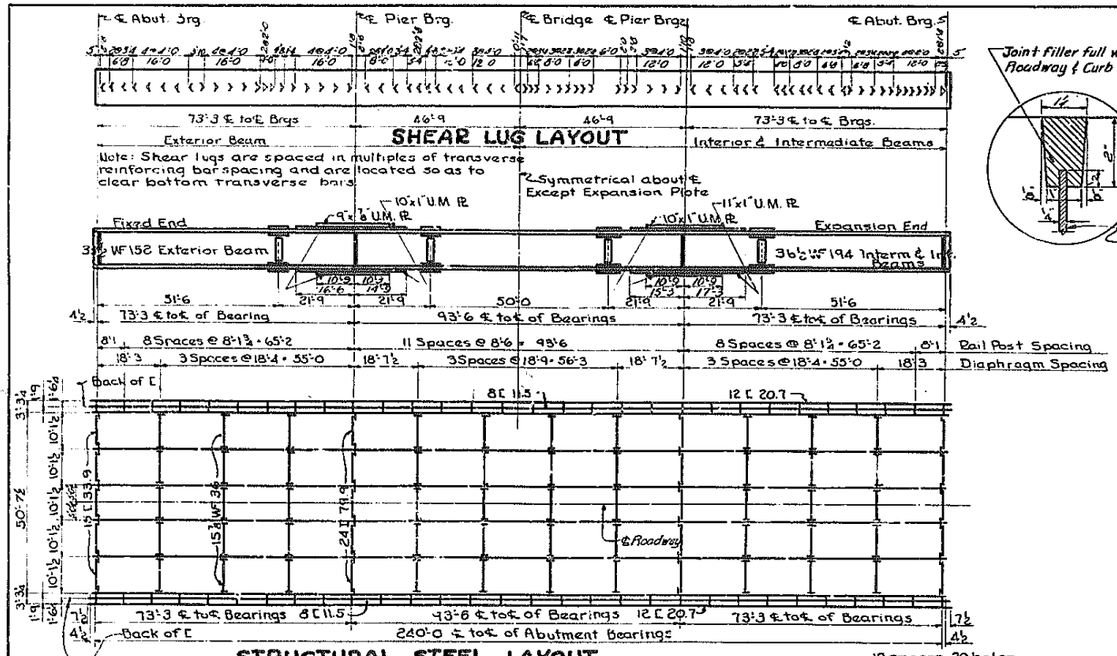
Exterior Footings Interior Footing

REINFORCING STEEL
Scale ¼"-1'-0"

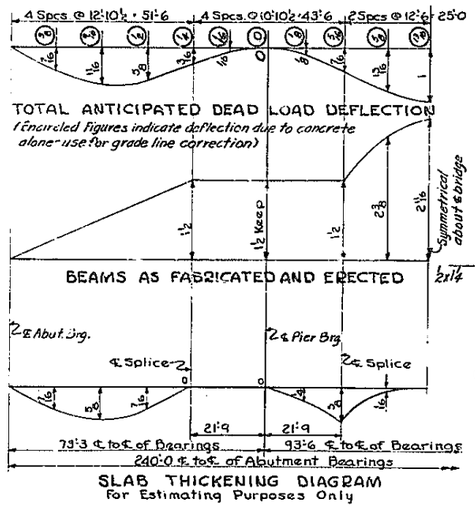
Design For
240'×52' CONTINUOUS I-BEAM BRIDGE
73'-3 End Spans 93'-6 Center Span
Concrete Floor & Substructure Steel Rail
PIER DETAILS
Station 655+20.00 Project F-38 (3)
PLYMOUTH COUNTY
Iowa State Highway Commission
August 1955 Sheet 3 of 6

Location:
Over West Fork Floyd River
Section 2
Plymouth Twp.
Plymouth County

Design 255 | Plymouth County | File No. 16652
Designed by: MWW | Traced by: A.F. | Checked by: J.S.H.



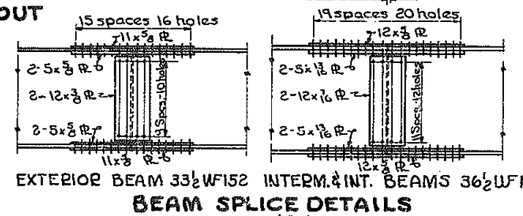
STRUCTURAL STEEL LAYOUT
Scale: 1" = 20'-0



TOTAL ANTICIPATED DEAD LOAD DEFLECTION
(Encircled figures indicate deflection due to concrete alone - use for grade line correction)

BEAMS AS FABRICATED AND ERECTED

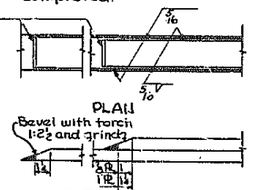
SLAB THICKENING DIAGRAM
For Estimating Purposes Only



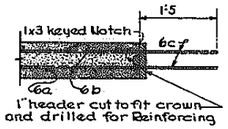
EXTERIOR BEAM 33½ WF152 INTERM. & INT. BEAMS 36½ WF194

BEAM SPLICE DETAILS
Scale: ½" = 1'-0

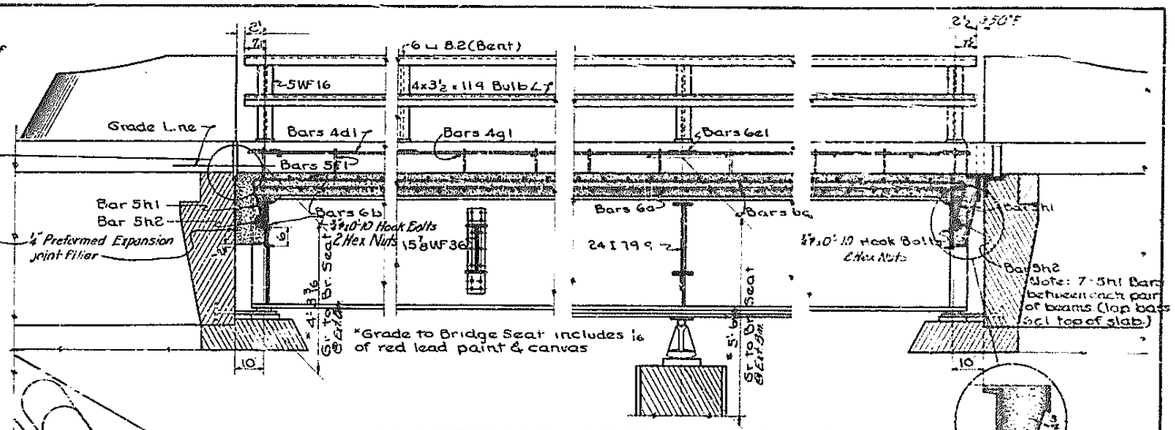
Note: Splice points are to be supported by falsework or other approved means, as directed by the Engineer, and adjusted as closely as possible to the dimensions shown on the diagram "BEAMS AS FABRICATED AND ERECTED" before bolting is completed.



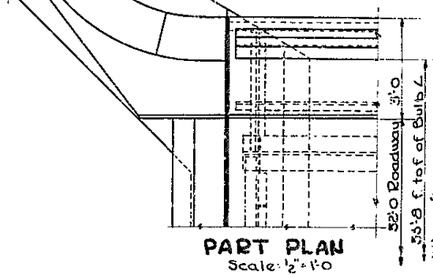
COVER PLATE DETAIL



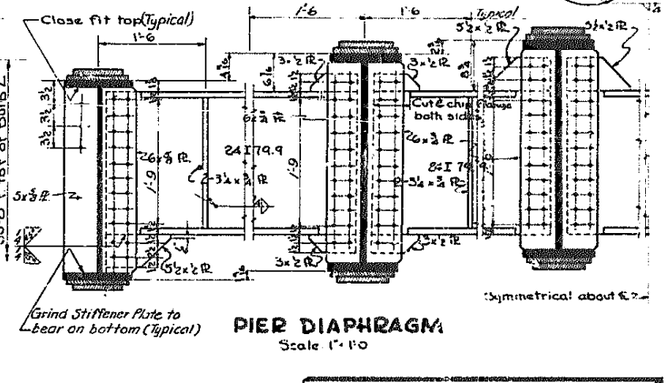
CONSTRUCTION JOINT DETAIL



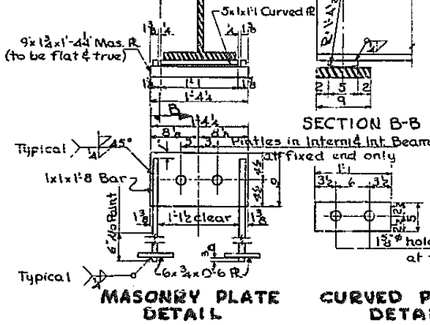
LONGITUDINAL SECTION NEAR CURB
Scale: ½" = 1'-0



PART PLAN
Scale: ½" = 1'-0

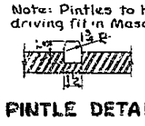


PIER DIAPHRAGM
Scale: 1" = 1'-0



MASONRY PLATE DETAIL

CURVED PLATE DETAIL



PINTLE DETAIL

ABUTMENT BEARING DETAILS
Scale: 1" = 1'-0

ROCKER & EXPANSION PLATE SETTING

West Abut. (Fixed) Temperature at time of setting	West Pier	East Pier	Exp Plate
50°F	0	0	2"
90°F	¼"	½"	1¼"
10°F	-¼"	-½"	2¾"

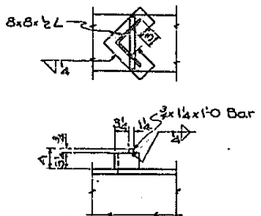
Note: Rockers are to be set vertical at 50° F. For temp below 50°F. shift M'ary R. away from fixed end. At temp. above 50°F. shift M'ary R. toward fixed end. Settings for other temps are proportional to those shown for 40° change.

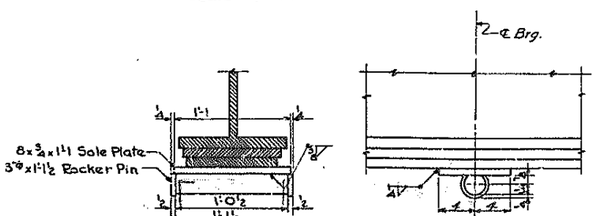
MAXIMUM MOMENTS AND REACTIONS

Moments in Ft. Kips — Reactions in Kips

Item	Positive Moments End Span Ext.*	Interm.*	Int.*	Positive Moments Center Span Ext.*	Interm.*	Int.*	Negative Moments Pier Ext.	Interm.	Int.	Abutment Reaction Ext.*	Interm.*	Int.*	Pier Reaction Ext.	Interm.	Int.
Dead Load #1	261	408	378	216	339	313	705	1,104	1,021	21.2	33.3	30.8	79.9	125.1	115.7
Dead Load #2	155	45	74	165	48	79	305	89	146	11.6	3.4	5.5	40.1	11.7	19.2
Roadway Live Load	361	577	577	389	622	622	450	719	719	27.3	47.9	47.9	51.3	90.2	90.2
Impact	91	145	145	89	142	142	108	173	173	6.9	12.1	12.1	12.3	21.6	21.6
Normal - Total							1569	2085	2059	67.0	96.7	96.3	183.5	248.6	246.7

Note: Reactions and Moments shown are for Normal Live Load. Positive Moments due to Dead Load #2, Live Load and Impact are resisted by composite action of beam and slab. Shear Lugs are used to insure this composite action. * Double at 20-44 Governs





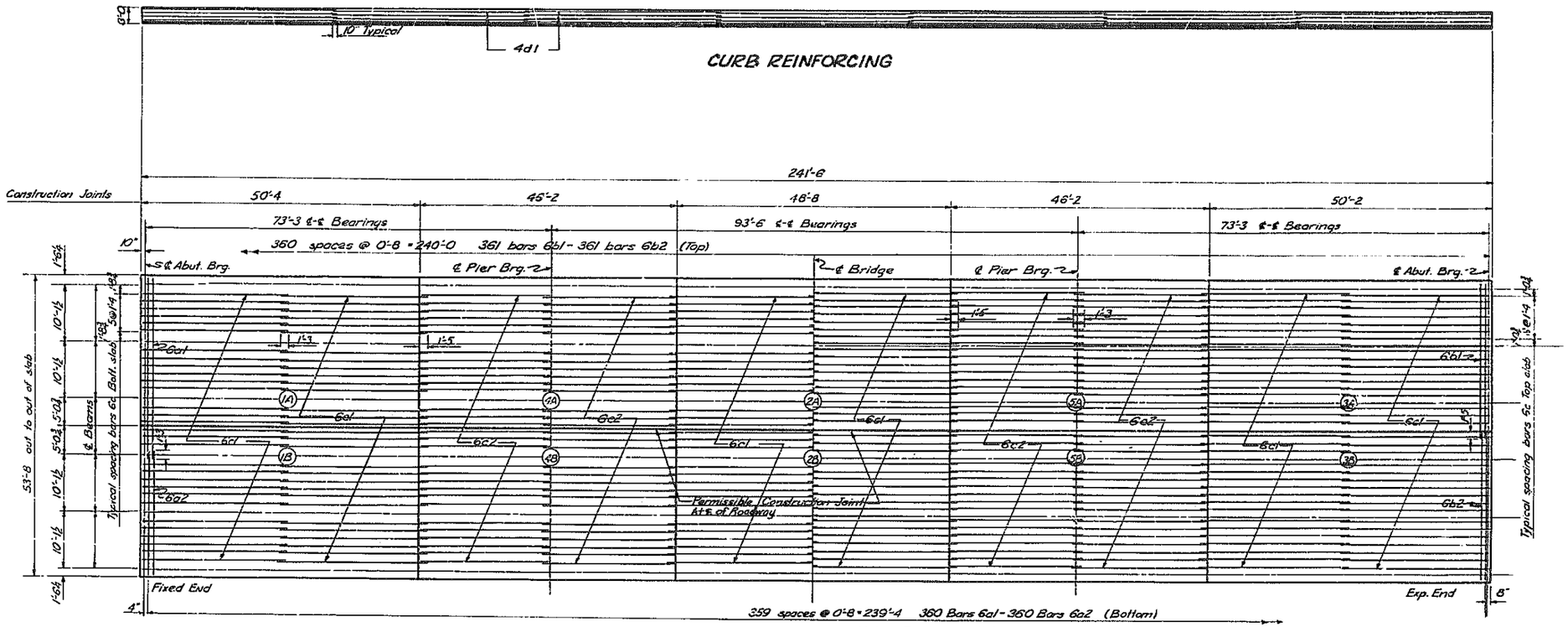
Note: For details of Rocker R-3, Mas. R. M.P-3, & Anchor Bolts see Standard V10-7 dated September 1957. Nuts on anchors are to be finger tightened, slackened off ¼ and spot welded to anchor bolt.

PIER BEARING DETAILS
Scale: 1½" = 1'-0

LOCATION:
Over West Fork Floyd River
On U.S. #75
Section 2
Plymouth Twp
Plymouth County

Design for
240'x32' CONTINUOUS I-BEAM BRIDGE
93'-6 Center Span — 73'-3 End Spans
Concrete Floor & Substructure ----- Steel Rail
SUPERSTRUCTURE DETAILS
Sta. 655+20.00 — Proj No. F-48 (9)
PLYMOUTH COUNTY
Iowa State Highway Commission
July 1955 — Sheet 4 of 6
Design No. 255 — Plymouth Co. — File No. 16652
Designed by: R.E.K. — Traced by: D.H. — Checked by: J.E.B.

CURB REINFORCING



Note: Roadway shall be placed in sections and in sequence indicated by encircled figures. Interval between placing sections shall preferably not exceed 24 hours. Curbs may be placed in one continuous operation or may be placed in sections as indicated. Curb sections may be placed in any sequence.

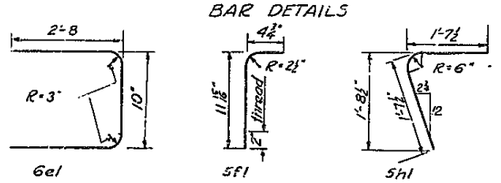
PLAN OF REINFORCING

Scale: 1/2" = 1'-0

SUPERSTRUCTURE REINFORCING STEEL

Mark	Location	Shape	Size	No.	Length	Weight
6a1	Slab Transverse Bottom	——	3/4	360	32'-4	17483
6a2	" " "	——	3/4	360	22'-3	12031
6b1	" " Top	——	3/4	361	28'-1	15227
6b2	" " "	——	3/4	361	26'-6	14369
6c1	Slab Longit. Top & Bottom	——	3/4	390	26'-5	15474
6c2	" " " "	——	3/4	260	23'-7	9208
4d1	Curb Longitudinal	——	1/2	56	35'-2	1315
6e1	Post Anchors	⊏	3/4	60	5'-10	526
5f1	Curb Anchors	⊏	5/8	242	1'-1	273
4g1	Curb Transverse	——	1/2	232	2'-8	413
5h1	End diaphragm	◿	5/8	70	3'-0	219
5h2	" " Longit.	——	5/8	10	9'-9	102
	Inserts for 5f1			242	@.3#ea.	73
					Total	86,713

BAR DETAILS



Note: All dimensions are out to out. Radii are to ℄ bar. Length of bar is measured along ℄ bar.

SUPERSTRUCTURE GENERAL NOTES:

This bridge is designed for H-20-44 loading plus 19 lbs. per sq. ft. of roadway for future wearing surface, with the following modifications:

1. Except for the floor slab, this structure is designed so that an increase in the live load and impact of 100% will not increase the total stress to more than 150% of the specification stress.
2. Cover plates are extended to a point where the fiber stress does not exceed 12,600 p.s.i. or 80% of the specification stress, whichever is less. The floor slab as shown includes ½" wearing surface.

Beam splices are to be sub-punched or sub-drilled 11/16" and shop reamed 12/16" assembled. Ream after inspection and matchmark.

Field connections may be riveted or bolted except as shown or noted. If beam splices are bolted, "High Tensile Strength" bolts will be required. All rivets and bolts ¾" except as noted.

Bearing surfaces of all sole plates shall be perpendicular to beam webs.

Masonry plates to be flat and true and are to be set in specif. paint and canvass.

Welding procedures and materials welded shall comply with 1947 Specifications of the American Welding Society except that where base metal over 1" in thickness is to be welded, Stipulation (3) of paragraph 105 b shall be changed to read "The steel shall conform to the latest revision of ASTM Specs. A-373-54 T.

Splice points are to be supported by falsework or other approved means, as directed by the engineer, and adjusted as closely as possible to the dimensions shown on the diagram "BEAMS AS FABRICATED AND ERECTED" before riveting or bolting is completed.

Shop coat of paint to be omitted on tops of top flanges of beams and on other steel surfaces in contact with concrete. Parts inaccessable after erection are to be given three coats of paint in the shop

Specifications: Design: A.A.S.H.O., dated 1953 with modifications as noted above.
Construction: Iowa State Highway Commission Standards, dated 1952, plus current special provisions.

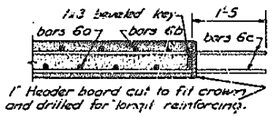
CONCRETE PLACEMENT QUANTITIES

Sections 1A & 1B	36.0 c.y. ea	72.0 c.y.
Sections 2A & 2B	32.9 c.y. ea	65.8 c.y.
Sections 3A & 3B	35.5 c.y. ea	71.0 c.y.
Sections 4A & 4B, 5A & 5B	30.6 c.y. ea	122.4 c.y.
Two Curbs		30.0 c.y.
Total		361.2 c.y.

ESTIMATED QUANTITIES

Concrete	361.2 c.y.
Reinforcing Steel	86,713 lbs.
Structural Steel	409,300 lbs

Location:
Over West Fork
Floyd River
On U.S. No. 75
Section 2
Plymouth Twp.
Plymouth Co.



1" Header board cut to fit crown and drilled for longit. reinforcing.

TRANSVERSE CONSTRUCTION JOINT DETAIL
Scale: 1" = 1'-0

5/16

Design for
24.0'x52' CONTINUOUS I-BEAM BRIDGE
93'-6 Center Span 73'-3 End Spans
Concete floor and Substructure - Steel Rail

SUPERSTRUCTURE DETAILS

Station 655+20.00 Proj F-38 (9)

PLYMOUTH COUNTY

Iowa State Highway Commission
July 1955 Sheet 5 of 6

Des 255 Plymouth County File No. 16652

Designed by: R.E.K. Traced by: TMB Checked by: JEB

NOTE: Top and bottom transverse slab bars are to be supported by individual bar chairs over the beams and two rows of chairs between each pair of beams spaced at not more than 3'-0 centers longitudinally. Bottom transverse bars are parallel to and 1½" clear above bottom of slab. Top transverse bars are parallel to and 1½" nominal but not less than 1" clear to top of slab.

Bars 5f1 threaded for insert
bars 6e1 (one at each post)
bars 4g1
bars 4d1
4 between each pair of posts (Typ)
Insert
Bar Chairs
bars 6a
bars 6b
Typical 6c Spacing
Typ
(Typ) Along Diaphragm
NOTE: Contractor to furnish and install as shown, approved cast or M.I. concrete inserts 2½" in length. 242 inserts required. Inserts listed as reinf. steel.
Permissible Constr. Joint formed by 1" header & 1"x3" beveled key.
CROWN ORDINATES
2-1x4's beveled for key
½"x2' bolts @ 2'-0 c's to hold inserts. Key and bolts considered erection equipment.
Keyed Notch
Indicates nominal dimension
Symmetrical about ℄ Roadway except for bar splices and ℄ construction joint

SECTION A-A

HALF CROSS SECTION NEAR ABUTMENT

Scale: ½"=1'-0

Detail B
NOTE: Rail and curb to parallel grade.
Bulb L 4x3½x11.9
welded plates (W.I.)
bars 6e1
bars 4d1
Pt. "C" Web Pl.
Pt. "B"
Drain Hole
NOTE: Brackets to be made up of plates as shown and welded at all contact surfaces with ¼" C.W.
Bottom of post and bracket (Nom. for post)

NOTE: Provide 200-4x⅜x0'-5 Shims at Pt. "A" and 120-6½x6x0'-5 at Pt. "B" for rail alignment. Provide 200-2½x⅜x0'-5 additional Shims at Pt. "C" for slab thickening
Bent Pl. 4½x½x0'-5
DETAIL B

8 C 11.5
Pt. "C" Shim Plates
Grind top 1½" of post to 4½" wide to take 6 C 8.2 (Bent)
ABUTMENT & PIER BRACKETS

Top of Curb
Tar Paper
Pc 14 WF 38
℄ Bearings
Normal to Pl.
*Includes 2-6¾x⅛ Shims (Furnish four shims)
SECTION C-C

RAILING & BRACKET DETAILS

Scale: 1"=1'-0

POST & RAIL CONNECTION

Open Joint at Rail Splice
Bolts
Open Joint at Rail Splice

HALF INTERMEDIATE CROSS SECTION

52'-0 Roadway
19 spaces @ 2'-6⅜ = 48'-1⅛
20 spaces @ 2'-6⅜ = 50'-7½
Plug Weld
Tar Paper under Pl.
NOTE: If permissible splice detail is used these anchor bars are to be omitted between Int Bms & replaced with anchor bars spaced as shown on "Permissible Splice Detail"
Symmetrical about ℄ except splice plates
℄ Bearing
Symmetrical about ℄ Roadway

EXPANSION PLATE DETAIL

Scale: 1"=1'-0

Anchors Symmetrical about ℄ Roadway
This side of splice only
℄ Interior Beam
PART PLAN

This side of splice only
PART ELEVATION

PERMISSIBLE SPLICE DETAILS FOR EXPANSION PLATE

Batt Flg Only
Batt Flg. Only
EXTERIOR BEAM

INTERMEDIATE AND INTERIOR BEAMS

LOCATION:
Over West Fork Floyd River
On U.S. N° 75
Section 2
Plymouth Township
Plymouth County

DRAIN DETAILS

Scale: 1"=1'-0

Wt. of each drain - 13 lbs 12 required
See "Situation Plan" for location.
1" depression at drain
1'x¼'x0'-6 bar (Welded to drain)

INTERMEDIATE BRACKETS

Bent Pl. 8x⅜
1x⅜x0'-5 bar Weld to ⅜" Pl.
1x⅜x0'-8 bar Weld to ⅜" Pl.
1'-3x⅜ Pl. cut to fit crown
*Includes 2-6¾x⅛ Shims (Furnish four shims)
SECTION D-D

2-1x⅜x1'-6 bars
3x⅜x0'-7 Pl.
Shop bend to fit crown
Anchor 1x⅜x0'-5
Anchor 1x⅜x1'-0
SECTION B-B

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240'x52' CONTINUOUS I-BEAM BRIDGE
93'-6 Center Span 73'-3 End Spans
Concrete Floor & Substructure - Steel Rail
SUPERSTRUCTURE DETAILS
Station 655+20.00 Project N° F-38(9)
PLYMOUTH COUNTY
Iowa State Highway Commission
July 1955 Sheet 6 of 6

Design N° 255 Plymouth County File N° 16652
Designed by: R.E.K. Traced by: R.D.Rewinsky Checked by: [illegible]