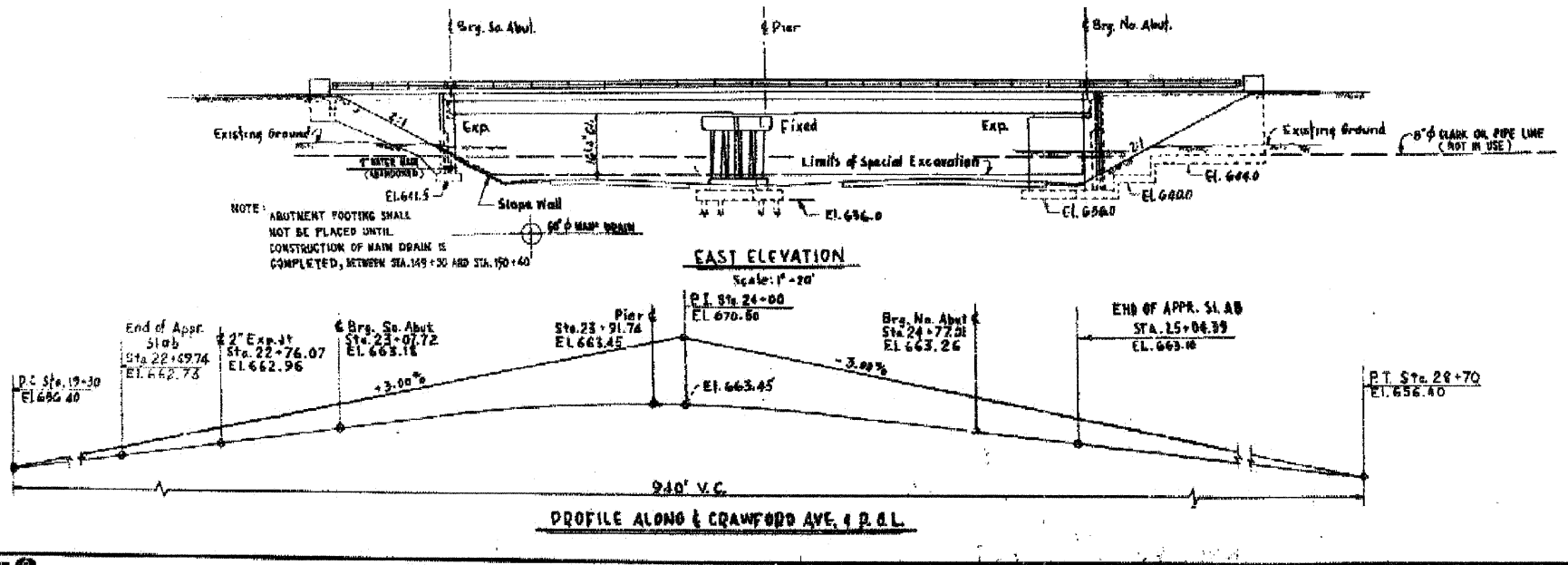


**CURVE DATA**

CA = 32'-36'-00"	CC = 24'-25'-18"
CS = 175'-00"	CD = 4'-30'-00"
TS = 459'-54"	LC = 541'-89"
ES = 54'-18"	R = 1273'-57"
OS = 3'-54'-18"	S = 0.00%
AS = 174'-96"	
YC = 4.073'	

**BENCH MARK 230-167<sup>th</sup> ST. & CRAWFORD AVE**  
 A STANDARD COUNTY BENCH MARK 44.7' SOUTH  
 AND 30' EAST OF SURVEY MARKER AT CENTER  
 OF INTERSECTION OF 167<sup>th</sup> ST. & CRAWFORD  
 C.G.N.A. EL. 666.956

**PLAN**  
 Scale: 1" = 20'



**EAST ELEVATION**  
 Scale: 1" = 20'

- DESIGN DATA**
- LOADING:**  
 Live Load MS20-44  
 Future Load 3" of Bituminous Wearing Surface
- SPECIFICATIONS:**  
 DESIGN A.A.S.H.O. Specifications for Highway Bridges, 1961 and as amended to date.  
 CONSTRUCTION & MATERIALS Standard Specifications for Road and Bridge Construction of the State of Illinois, 1956  
 Supplemental Specifications, 1966  
 WELDING A.W.S. STANDARD SPECIFICATIONS for Welded Highway and Railway Bridges, 1963 and Addenda of March, 1965.
- ALLOWABLE STRESSES:**
- |  |               |
|--|---------------|
| $f_s$ Structural Steel (A.S.T.M.-A36)                  | 20,000 p.s.i. |
| $f_c$ Flexural Compressive Stress of Concrete          | 1,400 p.s.i.  |
| $f_s$ Reinforcement Bars                               | 20,000 p.s.i. |
| $f_c$ Compressive Stress of Concrete at Earth Pressure | 1,000 p.s.i.  |
| Equivalent Fluid Pressure                              | 40 p.s.f.     |
| $n$  | 10            |

**SUPERSTRUCTURE:**  
 All girders are designed as 2-span continuous plate girders with Composite action in the positive moment areas.  
 Maximum live load deflection = 1/1200.  
 Shear connectors shall be automatically welded studs.

**FOUNDATION:**  
 Abutments are supported on Spread Footings. Maximum allowable soil pressure = 4000 p.s.f.  
 Pier and Pile Cap For abutment are supported on R Bearing Piles. Piles are BHP36. Bearing capacity of piles: For Pier - 37 tons, For South Pile Cap for abutment - 35 tons.

**GENERAL NOTES:**  
 Class "X" Concrete shall be used throughout. The concrete deck slab shall be placed in one continuous operation from expansion joint to expansion joint. Four the slab full width with horizontal joints and a 1 inch wide joint sealant between the slab and the curbs and bonded construction joints as shown. Finishing of the deck slab shall be as specified in the Article 51.19 of the Standard Specifications.

After concrete is cured, finished and the surfaces are clean and dry, the exposed surfaces of the deck slab, approach slabs, curbs, sidewalks and parapet walls shall be given a protective coat. See Supplemental Specifications Article 52.1a1.

Permanent forms will not be permitted in forming concrete deck slabs. All concrete shall be chemically 3/4" unless otherwise shown or noted on plans.

Handrail Parapet Wall Concrete shall be free from chert, flint, limonite, lignite, and soft sandstone.

Exposed surfaces of the abutment walls and retaining walls shall be given a rubbed finish in accordance with Article 52.13 of the Standard Specifications.

The part of the Abutments and Retaining Walls that are in contact with earth or embankment material shall be covered with waterproofing in accordance with Article 51.21 of the Standard Specifications.

The cost of rubbed finish, waterproofing, rubber waterproofing and the bituminous precasted fibre joint fillers shall be included in the contract unit bid price for Class "X" Concrete.

The Contractor shall adequately support, brace and protect bituminous precasted fibre joint filler during construction, so that it does not become torn and distorted. The Contractor's method of supporting, bracing and protecting the bituminous precasted fibre joint filler shall be approved by the Engineer. The rubber waterproofing shall be spliced as recommended by the manufacturer.

For "Bridge Seat Sealant" see Special Provisions.

**STRUCTURAL STEEL:**  
 All structural steel shall conform to the requirements of A.S.T.M.-A36 except as otherwise shown or noted.

Welding shall be in accordance with current Specifications for Welded Highway and Railway Bridges of the American Welding Society and as noted on the Plans and in the Special Provisions.

The Bridge Seats shall be constructed to the exact Elevations shown. If bush hammering or grinding is necessary this work shall be done at no additional cost to the County.

**REINFORCEMENT BARS:**  
 All reinforcement bars shall conform to A.S.T.M. A 305-50F as amended to date and shall comply with A.S.T.M. A15-50T Specification. Reinforcement Bars shall be delivered, tagged and bundled in conformance with Supplemental Specifications. Top of Beam Reinforcement bars shall be spaced by Shop Detailer to Clear anchor bolts. Reinforcement Bars shall comply with Article 59 of the State Standard Specifications.

**TRAFFIC:**  
 Traffic Classification 1210 T

FOR ENGINEER'S FIELD OFFICE AND ENGINEER'S FIELD LABORATORY SEE SPECIAL PROVISION.

**REVISIONS**

DATE	BY	DESCRIPTION
11-1-67	T.A.	ADD NOTE FOR ENGINEER'S FIELD OFFICE AND LABORATORY
2-1-68	M.P.	ADD NOTE ABOUT MAIN DRAIN

**DEPARTMENT OF HIGHWAYS**  
 COOK COUNTY, ILLINOIS

GENERAL PLAN  
 CRAWFORD AVE GRADE SEPARATION  
 OVER  
 DAN RYAN EXPRESSWAY - WEST LEG

PROJECT NO. 1112-IB  
 SCALE: 1" = 20'  
 SHEET NO. 57 OF 63



USER NAME = Zaayarb  
 PLOT SCALE = N/A  
 PLOT DATE = 8/5/2011

DESIGNED - TWO	REVISED -
CHECKED - BHS	REVISED -
DRAWN - TWO	REVISED -
CHECKED - GSP	REVISED -

**STATE OF ILLINOIS**  
 DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS (1 OF 6)  
 STRUCTURE NO. 016-1015  
 SHEET NO. S31 OF 36 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	1112-IB	COOK	75	58
FED. ROAD DIST. NO. 1				ILLINOIS FED. AID PROJECT