

GENERAL NOTES

CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES OF THE ACTUAL STARTING DATE OF CONSTRUCTION. UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND THE CONTRACTOR SHALL COORDINATE WITH EACH COMPANY TO DETERMINE ACTUAL LOCATION IN THE FIELD AND WHICH UTILITY MUST BE ADJUSTED. CONTRACTOR IS TO USE DUE CAUTION IN WORKING OVER AND AROUND ALL UTILITY LINES. BREAKS IN ANY UTILITY LINE DUE TO THE CONTRACTOR'S CARELESSNESS ARE TO BE REPLACED AT HIS EXPENSE WITHOUT COST TO THE OWNER.

SOUNDING AND TEST BORING DATA SHOWN ON PLANS WERE ACCUMULATED FOR DESIGNING AND ESTIMATING PURPOSES. THEIR APPEARANCE ON THE PLAN DOES NOT CONSTITUTE A GUARANTEE THAT CONDITIONS OTHER THAN THOSE INDICATED WILL NOT BE ENCOUNTERED.

ANY INCONVENIENCE INCURRED BY THE CONTRACTOR DUE TO ARCHAEOLOGICAL WORK SHALL BE CONSIDERED INCIDENTAL TO CLASS 10 EXCAVATION, ROADWAY AND BORROW.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE WASTE AREAS OR DISPOSAL SITES FOR MATERIAL WHICH IS NOT DESIRABLE TO BE INCORPORATED IN THE WORK INVOLVED ON THIS PROJECT NO PAYMENT FOR OVERHAUL WILL BE ALLOWED FOR MATERIAL HAULED TO THESE SITES.

CONTRACTOR TO BLOCK TERRACES CUT BY EXCAVATION OR BORROW. COST TO BE INCLUDED IN AND CONSIDERED INCIDENTAL TO OTHER WORK ON THE PROJECT.

ALL EXISTING CULVERT PIPE TO BE REMOVED AND SALVAGED SHALL BE NEATLY STOCKPILED WITHIN 300' OF THE SITE AND LOADED BY CONTRACTOR ON COUNTY TRUCK AT THE COUNTY'S CONVENIENCE, AS DIRECTED BY THE COUNTY ENGINEER.

ESTIMATE REFERENCE INFORMATION

DATA LISTED BELOW IS FOR INFORMATIONAL PURPOSES ONLY AND SHALL NOT CONSTITUTE A BASIS FOR ANY EXTRA WORK ORDER.

INCLUDES EXCAVATION	REQUIRED FOR THE COMPLETE
	GRANULAR BACKFILL. REFER TO
DETOIL ON SHEET 4.	

COARSE AGGREGATE SHALL BE CLASS 2 DURABILITY. THIS ITEM INCLUDES 206.7 CU. YDS. OF CLASS "D" STRUCTURAL CONCRETE (203.) CU. YDS. FOR SUPERSTRUCTURE, 2.60 CU. YDS. FOR WINGS AND 1.0 CU. YD. FOR TEMPORARY PAVING BLOCKS), AND 22.2 CU. YDS. OF CLASS "C" STRUCTURAL CONCRETE FOR ABUTMENTS. COST OF FURNISHING AND PLACING 4 FLOOR DRAINS TO BE INCIDENTAL TO THIS ITEM.

SHALL BE 16 GA. RIVETED PIPE WITH 2' COUPLING BANDS. 4. & 5.

> BID ITEM INCLUDES 208 CU. YDS. FOR RIP RAP EXCAVATION UNDER BRIDGE. USE 6,283 CU. YDS. OF THE CLASS 10 CHANNEL EXCAVATION FOR ROADWAY FILL. ENGINEER IS TO DETERMINE SUITABILITY OF MATERIAL. TYPE "A" COMPACTION SHALL BE REQUIRED. OVERHAUL IS INCIDENTAL. THE REMAINDER OF THE CLASS 10 CHANNEL EXCAVATION SHALL BE WASTED OR USED TO CONSTRUCT BLOCKS OR DIKES ACROSS THE OLD CHANNEL AS DIRECTED BY THE ENGINEER. SEE CHANNEL CROSS SECTIONS AND SHEET 3 FOR OTHER DETAILS. TYPE "A" COMPACTION WILL NOT BE REQUIRED FOR CHANNEL BLOCKS OR DIKES.

TYPE "A" COMPACTION SHALL BE REQUIRED. OVERHAUL IS INCIDENTAL TO BID PRICE FOR CLASS 10 EXCAVATION, ROADWAY AND BORROW.

9.,10. & 11. SEE TABULATION THIS SHEET.

7.

INCLUDES REMOVAL OF EXISTING BRIDGE AT STA. 93+62. 19. SEE NOTE ON SHEET 3.

APPROXIMATELY 670 SQ. YDS. OF ENGINEERING FABRIC IS 20. TO BE INCIDENTAL TO THIS ITEM. ENGINEERING FABRIC SHALL BE IN ACCORD WITH ARTICLE 4,196.01C OF THE STANDARD SPECIFICATIONS. ENGINEERING FABRIC IS TO BE AN APPROVED BRAND PER I.M. 491.14.

INCLUDES THE EXCAVATION NECESSARY FOR THE SUBDRAIN 22. INSTALLATION AND THE COST OF FURNISHING AND PLACING 15 CU. YDS. OF POROUS BACKFILL.

GRAVEL SHALL MEET THE REQUIREMENTS OF CLASS C GRAVEL 24. IN ACCORDANCE WITH ARTICLE 4120.03. PRICE BID TO INCLUDE THE SPREADING OF GRAVEL ON ROAD SURFACE.

ON ALL BORROW BEYOND 33' RIGHT-OF-WAY, SALVAGE 8" OF 25. TOPSOIL AND RESPREAD AFTER GRADING IS COMPLETED.

> ALL ADVANCE WARNING SIGNS, TYPE III BARRICADES AND OTHER TRAFFIC CONTROL DEVICES FOR THIS PROJECT SHALL BE LOCATED AT THE BEGINNING AND END OF THE PROJECT AND WHERE THE ROAD FOR CONSTRUCTION INTERSECTS OTHER PUBLIC ROADS AND SHALL INCLUDE ALL OTHER BARRICADES WARNING SIGNS NECESSARY TO PROTECT CONTRACTOR'S WORK AND EQUIPMENT AND FOR THE PROVIDING FOR THE SAFETY OF THE TRAVELING PUBLIC. ALL SIGNS, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", 1978.

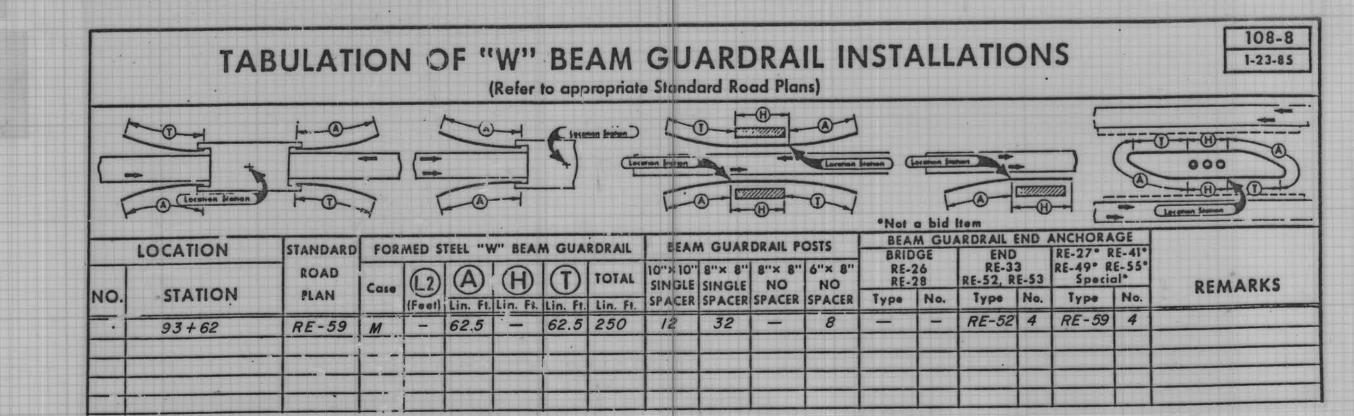
THE LUMP SUM BID PRICE FOR TRAFFIC CONTROL SHALL INCLUDE THE COST FOR FURNISHING, PLACING, MAINTENANCE AND REMOVAL.

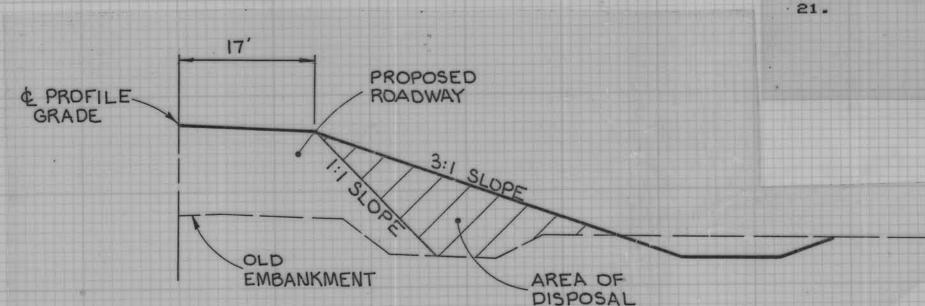
SHALL BE IN ACCORDANCE WITH STD. RE-47 & RE-48A. 2 27. LEFT DM-3L AND 2 RIGHT DM-3R TYPE 3 OBJECT MARKERS REQUIRED.

SHALL BE IN ACCORDANCE WITH STD. RE-7 & RE-48A. 8 28. TYPE 2 TRIPLE YELLOW OBJECT MARKERS (0M2-3YV) REQUIRED. INCLUDES 4 YELLOW GUARDRAIL MARKERS.

THIS ITEM INCLUDES THE FOLLOWING BARS: 385.0 LIN. FT. OF #2 BARS; 3,184.8 LIN. FT. OF #4 BARS; 10,029.9 LIN. FT. OF #5 BARS; 2,591.0 LIN. FT. OF #6 BARS; 403.7 LIN. FT. OF #7 BARS; 3,910.4 LIN. FT. OF #8 BARS; 3,826.8 LIN. FT. OF #9 BARS; AND 2,203.5 LIN. FT. OF #10 BARS.

ESTIMATED QUANTITIES									
NO.	ITEM	UNIT	SUPERSTR.	ABUTMENTS	PIERS	TOTAL			
1.	BACKFILL, GRANULAR	CU. YDS.		74		74			
2.									
з.	CONCRETE, STRUCTURAL	CU. YDS.	206.7	22.2		228.9			
4.	CULVERT, CORR. METAL ENTRANCE PIPE, 18 IN. DIA.	LIN. FT.				104			
5.	CULVERT, CORR. METAL ENTRANCE PIPE, 24 IN. DIA.	LIN. FT.				86			
6.	EXCAVATION, CLASS 10 CHANNEL	CU. YDS.				8,649			
7.	EXCAVATION, CLASS 10 ROADWAY & BORROW	CU. YDS.				10,516			
8.	EXCAVATION, CLASS 20	CU. YDS.		68		68			
9.	GUARDRAIL, END ANCHORAGES, BEAM RE-52	NO.				4			
10.	GUARDRAIL, FORMED STEEL BEAM	LIN. FT.				250			
11.	GUARDRAIL, POSTS, BEAM	NO.				52			
12.	MOBILIZATION	LUMP SUM				LUMP SUM			
13.	PILING, STEEL BEARING HP10×42 FURNISH	LIN. FT.		5 @ 40' 5 @ 45'		425			
14.	PILING, STEEL BEARING HP10x42 DRIVE	LIN. FT.		5 @ 40' 5 @ 45'		425			
15.	PILING, STEEL BEARING HP12x53 FURNISH	LIN. FT.		5 6 45	16 @ 60'	960			
16.	PILING, STEEL BEARING HP12x53 DRIVE	LIN. FT.			16 @ 60'	960			
17.	PILING, STEEL BEARING HP12x53 ENCASE	LIN. FT.			307.6	307.6			
18.	RAIL, CONCRETE BARRIER	LIN. FT.	222			555			
19.	REMOVAL OF EXISTING STRUCTURES	LUMP SUM				LUMP SUM			
20.	REVETMENT, CLASS"E" RIP RAP	TONS				595			
21.	STEEL, REINFORCING EPOXY COATED	LBS.	47,352	2,974		50,326			
22.	SUBDRAIN, AS PER PLAN	LIN. FT.				96			
23.	SUBDRAIN OUTLET, CORR. METAL PIPE 6 IN. DIA.	NO.				2			
24.	SURFACING, GRANULAR, CLASS C GRAVEL ON ROAD	TONS				266			
25.	TOPSOIL, STRIP, SALVAGE & RESPREAD	CU. YDS.				696			
26.	TRAFFIC CONTROL	LUMP SUM				LUMP SUI			
27.	OBJECT MARKER, TYPE 3	NO.				4			
28.	OBJECT MARKER, TRIPLE YELLOW	NO.			THE REAL PROPERTY.	8			





DISPOSAL OF UNSUITABLE MATERIAL AND/OR CLASS 10 CHANNEL EXCAVATION AND CLASS 20 2 21 EXCAVATION

GENE

APPD. BY SAS

M°KEOWN

AND

ASSOCIATES

REVISIONS

INC.

H. CONSULTING ENGINEERS

31115

JAN., 1987

PROJ. NO. ___

AND DRAWN BY ____TKK

LAND SURVEYORS

OFFICES

COUNCIL BLUFFS DATE

1-8-88 NEW J30C-87 STD. USED

RED OAK ESTIMATED QUANTITIES, ESTIMATE REFERENCE

DENISON

2/14

CRAWFORD COUNTY, IOWA

DESIGN NO. 5287

CRAWFORD COUNTY PROJ. NO. FM-24(14)-55-24

INFORMATION & GENERAL NOTES

