MINNESOTA DEPARTMENT OF TRANSPORTATION

THE COUNTY OF OLMSTED

CONSTRUCTION PLAN FOR BRIDGE NO. L6210 REPLACEMENT.

LOCATED ON CR 126 **BETWEEN** CSAH 3 **AND** CSAH 15 **(GEOGRAPHIC DESCRIPTION)**

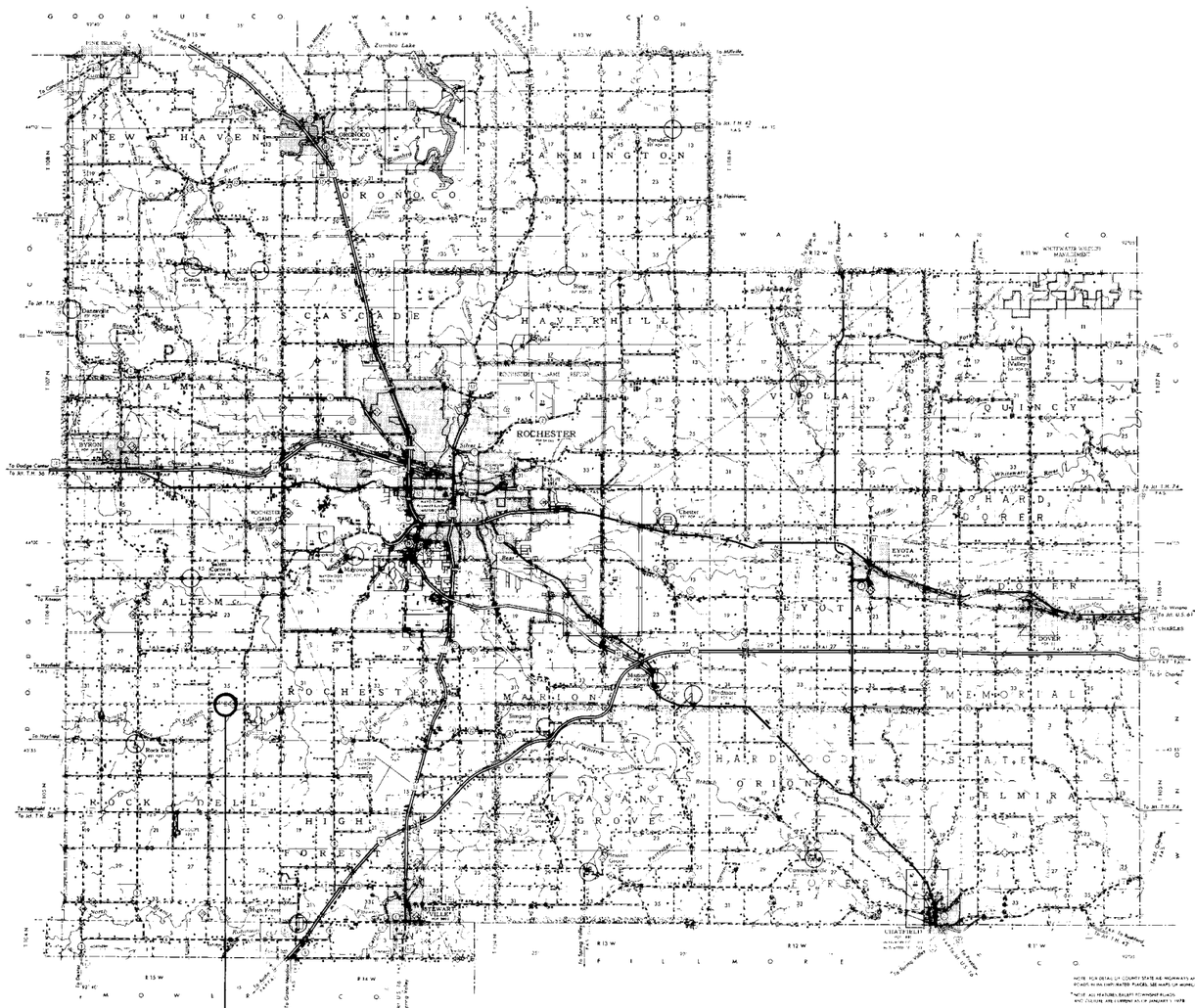
FROM 2565.25' E. OF N.W. COR. SEC. 2 T105N R15W **TO** 2593.25'E. OF N.W. COR. SEC. 2 T105N R15W **(LEGAL DESCRIPTION)**

STATE PROJ. NO. .....

GROSS LENGTH	FEET		MILES
BRIDGES-LENGTH	FEET		MILES
EXCEPTIONS-LENGTH	FEET		MILES
NET LENGTH	FEET		MILES

STATE PROJ. NO. SAP 55-598-18

GROSS LENGTH	28.00	FEET 0.005	MILES
BRIDGES-LENGTH		FEET	MILES
EXCEPTIONS-LENGTH		FEET	MILES
NET LENGTH	28.00	FEET 0.005	MILES



BEGIN: SAP 55-598-18 STA. 181+11.0 | END: SAP 55-598-18 STA. 181+39.0

PLANS SYMBOLS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT OF WAY LINE
PRESENT RIGHT OF WAY LINE
CONTROL OF ACCESS LINE
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT OF WAY LINE
RIVER OR CREEK (NAME)
DRY RUN
DRAINAGE DITCH (SIZE)
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
MEANDER CORNER
SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY
CATCH BASIN C.B.
FIRE HYDRANT
CATTLE GUARD
OVERPASS (Highway Over)
UNDERPASS (Highway Under)
BRIDGE
BUILDING (One Story Frame)
F FRAME C CONCRETE
S STONE T TILE
B BRICK ST STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE, OR METAL)
WOODEN HUB
GRAVEL PIT (G)
SAND PIT (S)
BORROW PIT (B)
ROCK QUARRY (Q)
SLOPE EASEMENT SE

UTILITIES SYMBOLS

POWER POLE LINE
TELEPHONE OR TELEGRAPH POLE LINE
JOINT TELEPHONE AND POWER ON POWER POLES
ON TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
PEDESTAL (TELEPHONE CABLE TERMINAL)
GAS MAIN
WATER MAIN
CONDUIT
TELEPHONE CABLE IN CONDUIT
ELECTRIC CABLE IN CONDUIT
TELEPHONE MANHOLE
ELECTRIC MANHOLE
BURIED TELEPHONE CABLE
BURIED ELECTRIC CABLE
AERIAL TELEPHONE CABLE
SEWER, (SANITARY OR STORM)
SEWER MANHOLE

SCALES

PLAN 0 100'
PROFILE 0 100' HOR 0 10' VER
INDEX MAP 0 2 MILES
GENERAL LAYOUT

STATE AID TITLE SHEET (197 ALBINSON 7/PLS 09-85)

MINN. PROJ. NO. .....

SPECIFICATIONS REFERENCE

The 1978 Edition of the Minnesota Department of Transportation "Standard Specifications For Highway Construction" Shall Govern.

INDEX

SHEET NO. 1 TITLE SHEET
" " 2 ESTIMATE OF QUANTITIES & TYPICAL SECTION
" " 3 &4 BRIDGE SHEETS

DESIGN DESIGNATION

R .....
ADT (Current Year) = 61
ADT (Future Year) = 98
DHV (Design Hr. Vol.) = ...
D (Directional Distr.) = ... %
T (Heavy Commercial) = ... %
SOIL FACTOR 130

ΣN18(20) .....
Design Speed 50 MPH
Based on Stopping Sight Distance
Height of eye 3.75 Height of object 0.5
Design Speed not achieved at:
STA. TO STA. MPH
STA. TO STA. MPH
STA. TO STA. MPH

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE 3/31/80 REG. NO. 10219 ENGR. J K Colon

COUNTY OLMSTED

Recommended for Approval 3-31 1980
DISTRICT STATE AID ENGINEER

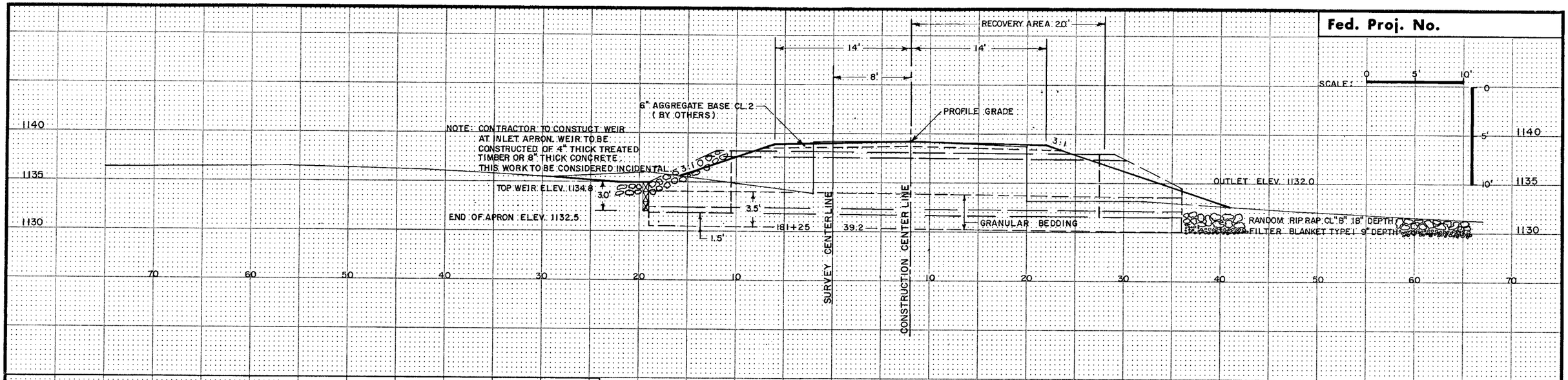
Recommended for Approval Dilbert D. Olfeldt 8-13 1980
STATE AID PLANS AND SPECS ENGINEER

Approved ..... 19..
STATE AID ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
DIVISION ADMINISTRATOR DATE

STATE AID PROJ. NO. SAP 55-598-18
STATE PROJ. NO. ..... **SHEET NO.** 1 **OF** 4 **SHEETS**

Fed. Proj. No.



ESTIMATED QUANTITIES

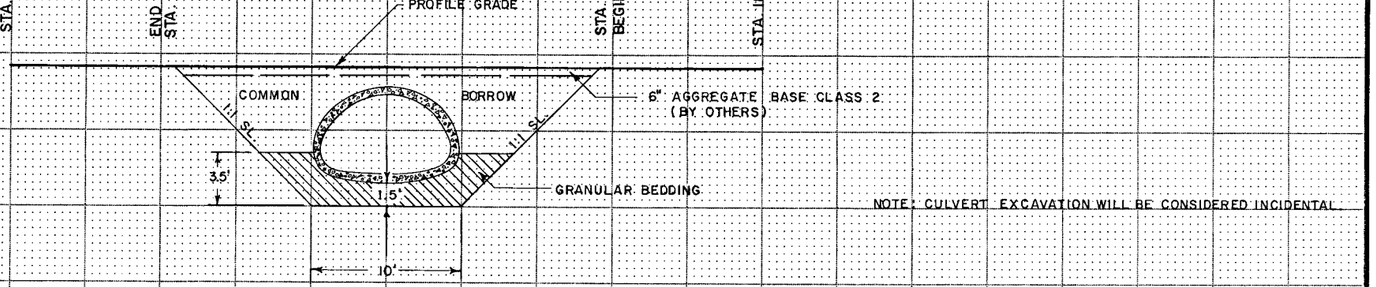
SPECIFICATION NO.	ITEM	UNIT	NON PARTICIPATING	PARTICIPATING	TOTAL ESTIMATED QUANTITIES	
2021.501	MOBILIZATION	LUMP SUM		1	1	
2105.523	COMMON BORROW (LV)	CU. YD.		200	200	
2442.501	REMOVE OLD BRIDGE	LUMP SUM	1		1	
2451.507	GRANULAR BEDDING (C.V.)	CU. YD		63	63	(P)
2501.521	102" SPAN RCP-ARCH CULV. CLASS II A	LIN. FT.		38	38	
2501.525	102" SPAN RCP-APRONS	EACH		2	2	
2511.501	RANDOM RIP RAP CLASS "B"	C.U. YD.		57	57	
2511.504	FILTER BLANKET, TYPE I	C.U. YD.		26	26	

(P) PLAN QUANTITY.

STANDARD PLATES

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION SHALL APPLY ON THIS PROJECT.

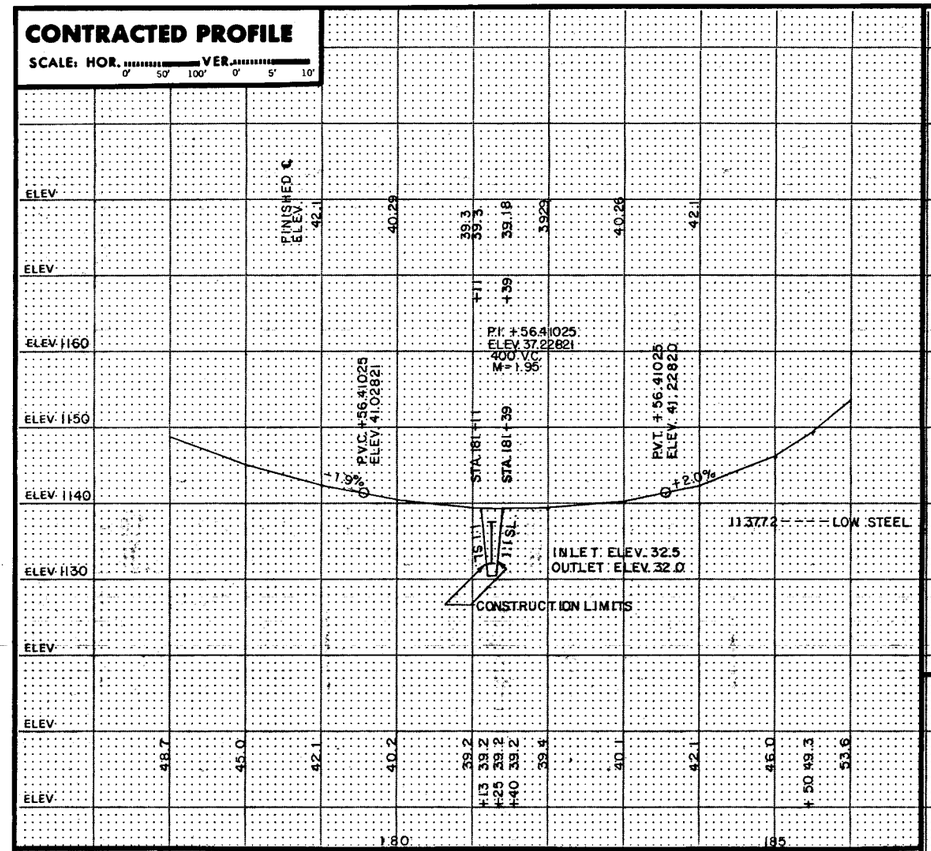
PLATE NO.	DESCRIPTION
0003 A	SPECIFICATION REFERENCE TO STANDARD PLATES.
3014 H	REINFORCED CONCRETE PIPE - ARCH DETAIL.
3110 D	CONCRETE APRON FOR REINFORCED CONCRETE PIPE-ARCH
3133 A	RIP-RAP AT RCP OUTLETS
3145 A	CONCRETE PIPE JOINT TIES, EYE BOLT TIE
8000 G	STANDARD BARRICADES.
3007 A	SHEAR REINFORCEMENT FOR PRECAST DRAINAGE STRUCTURES.



NOTE: CULVERT EXCAVATION WILL BE CONSIDERED INCIDENTAL.

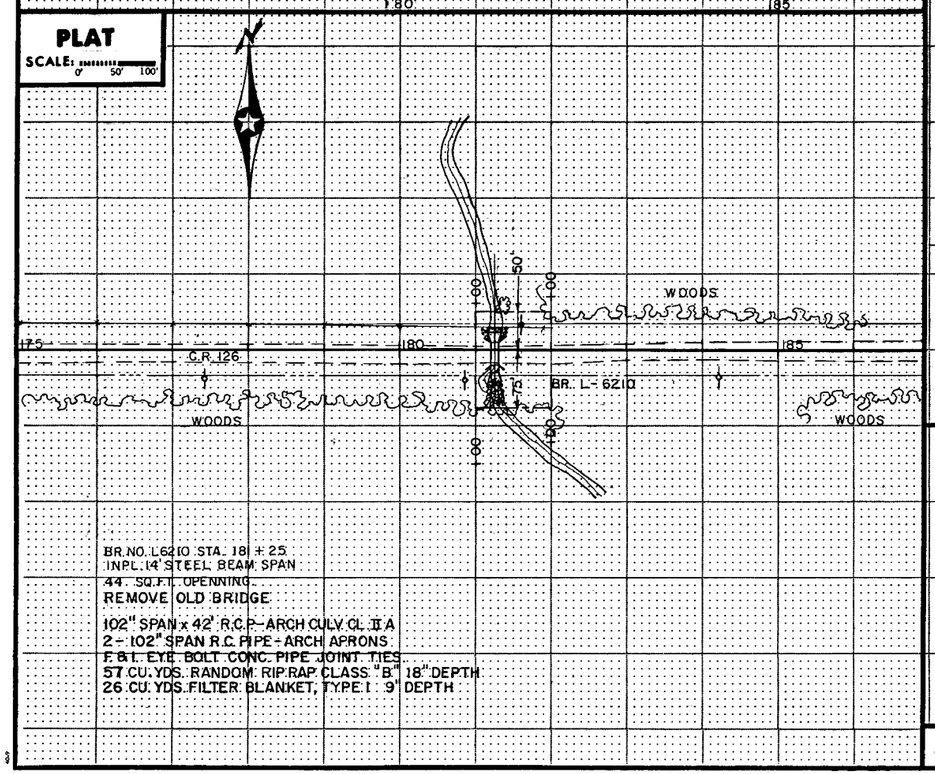
CONTRACTED PROFILE

SCALE: HOR. 0' 50' 100' VER. 0' 5' 10'



PLAT

SCALE: 0' 50' 100'



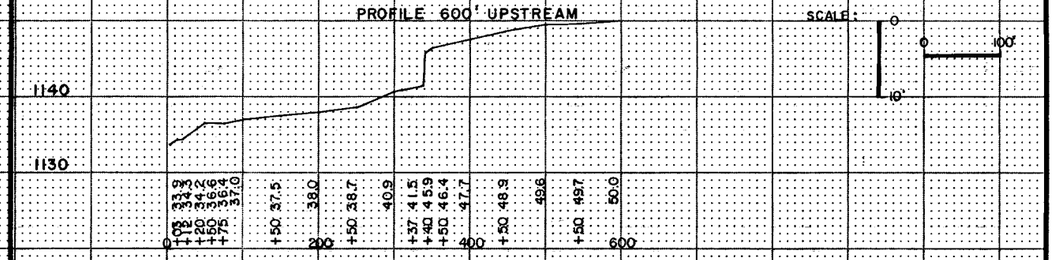
BR. NO. L6210 STA. 181 + 25
INPL. 14' STEEL BEAM SPAN
44 SQ. FT. OPENNING
REMOVE OLD BRIDGE

102" SPAN x 42' R.C.P.-ARCH CULV. CL. II A
2 - 102" SPAN R.C. PIPE - ARCH APRONS
F & T. EYE BOLT CONC. PIPE JOINT TIES
57 CU. YDS. RANDOM RIP RAP CLASS "B" 18" DEPTH
26 CU. YDS. FILTER BLANKET, TYPE I 9" DEPTH

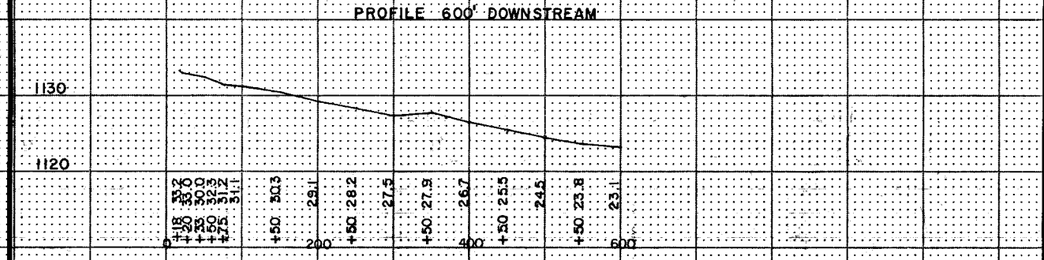
TYPICAL SECTIONS & PERTINENT DATA

SCALES AS SHOWN

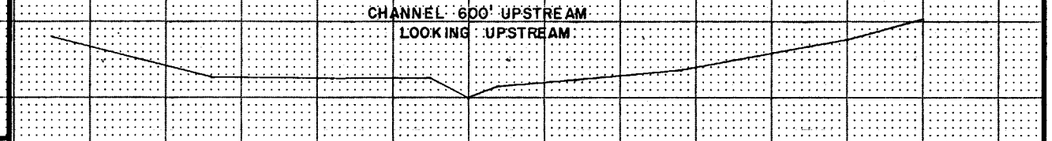
PROFILE 600' UPSTREAM



PROFILE 600' DOWNSTREAM

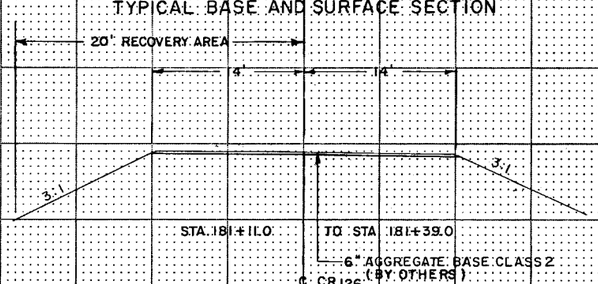


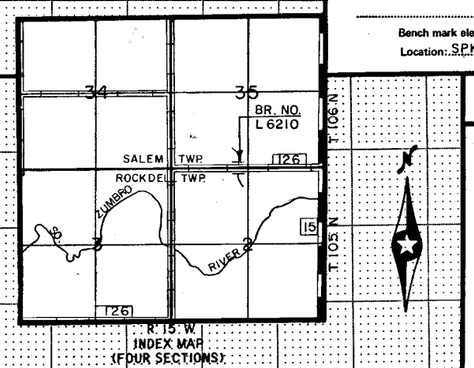
CHANNEL 600' UPSTREAM
LOOKING UPSTREAM



CHANNEL 600' DOWNSTREAM
LOOKING DOWNSTREAM

TYPICAL BASE AND SURFACE SECTION





Fed. Proj. No.

LOCATION ENGINEER'S OBSERVATIONS AT BRIDGE SITE

1. Special Features: Waterfalls, dams, floods, ice, debris, sliding banks, recreational boating.

2. Other bridges or culverts over the same stream (particularly structures which carry high water without overflow of roadway) :Given location, type, length, height above high water, cross-sectional area etc.

3. Apparent highwater elevation..... Obtained from.....

4. Other data: Approx. velocity of water at time of survey.....

HYDRAULIC ENGINEERS RECOMMENDATION

DATE 1-22-80

Stream or ditch designation DRY RUN
Drainage area 0.365 SQ. MILE
Max. flood on record UNKNOWN Design flood (50 yr. freq.) 290 C.F.S.
Max. observed highwater elevation ..... Design highwater elevation 1138.3
Design mean velocity through structure 13 F.P.S.
Low superstructure at or above elevation 1137.7
Flowline elevation 1132.5 Skew angle NONE
Waterway area req'd. below elevation ..... = ... Sq. Ft. at Rt. angles to channel

In the interest of flood plain zoning the regional flood (100 yr. freq.) is 348 C.F.S. at stage 2.9' and mean velocity of 13.5 F.P.S. with ..... Ft. swellhead. The above recommendation will provide a structure of adequate waterway to pass the regional flood within criteria established by the Dept. of Natural Resources.

FOUNDATION ENGINEERS RECOMMENDATION

DATE .....

Bridge survey sheets made from: SURVEY CONDUCTED BY OLMSTED COUNTY HIGHWAY DEPARTMENT.

Bench mark elevation 1137.41 (M.S.L. 1929 Adj.)
Location: SPK. IN P. POLE RT. STA. 180+80

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS

BRIDGE SURVEY

AT MILE POINT 3.4 ON C.R. 126 (T.H., C.S.A.H., C.R. etc.)
PROPOSED BRIDGE LOCATED 3.5 MILES N.E. OF ROCK DELL
SEC. 35 TWP. 106N R. 15 W
TOWNSHIP SALEM COUNTY OLMSTED
BRIDGE NO. L 6210

Area No. | Job No. C.R. 126 OLMSTED COUNTY | State Proj. No. SAP 55-598-18 CR. 126 | Sheet No. 3 of 4 Sheets

TELEDYNE POST IMAGE SURVEY 16C-2 9/76

Fed. Proj. No.

SCALE : 0' 10' 0 10'

CONSTRUCT TIMBER OR CONCRETE WEIR
SEE PLAN SHEET NO. 2 FOR DETAIL.

RANDOM RIP RAP 18" DEPTH
CLASS "B"

50'

33'

SURVEY CENTERLINE

8'

CONSTRUCTION CENTERLINE

+25

180

CENTER LINE C.R. 126

181

182

33'

33'

75'

PLAN

RANDOM RIP RAP
18" DEPTH

FILTER BLANKET
TYPE I
9" DEPTH

BEGIN SAP 55-598-18
STA 180+11.0

END SAP 55-598-18
STA 181+39.0

1:1

H

1:1

ELEV. 1132.5 INLET ELEV.
ELEV. 1132.0 OUTLET ELEV.

1150

1140

1130

← PROFILE
20' LEFT
20' RIGHT

ELEVATION

40.2

39.2 39.2 39.2 39.2 39.4

+13 +25 +60

180 181 182

BORINGS SHOWN [ ] TAKEN WITH
STD 140 LB HAMMER
30 INCH DROP
2 INCH O.D. SAMPLER

BRIDGE SURVEY PLAN AND PROFILE	DES:	DR:	APPROVED:	Bridge No.
	CHK:	CHK:		
State Proj. No. SAP55-598-18 C.R. 126	Sheet No. 4 of 4 Sheets			L6210

OLMSTED COUNTY