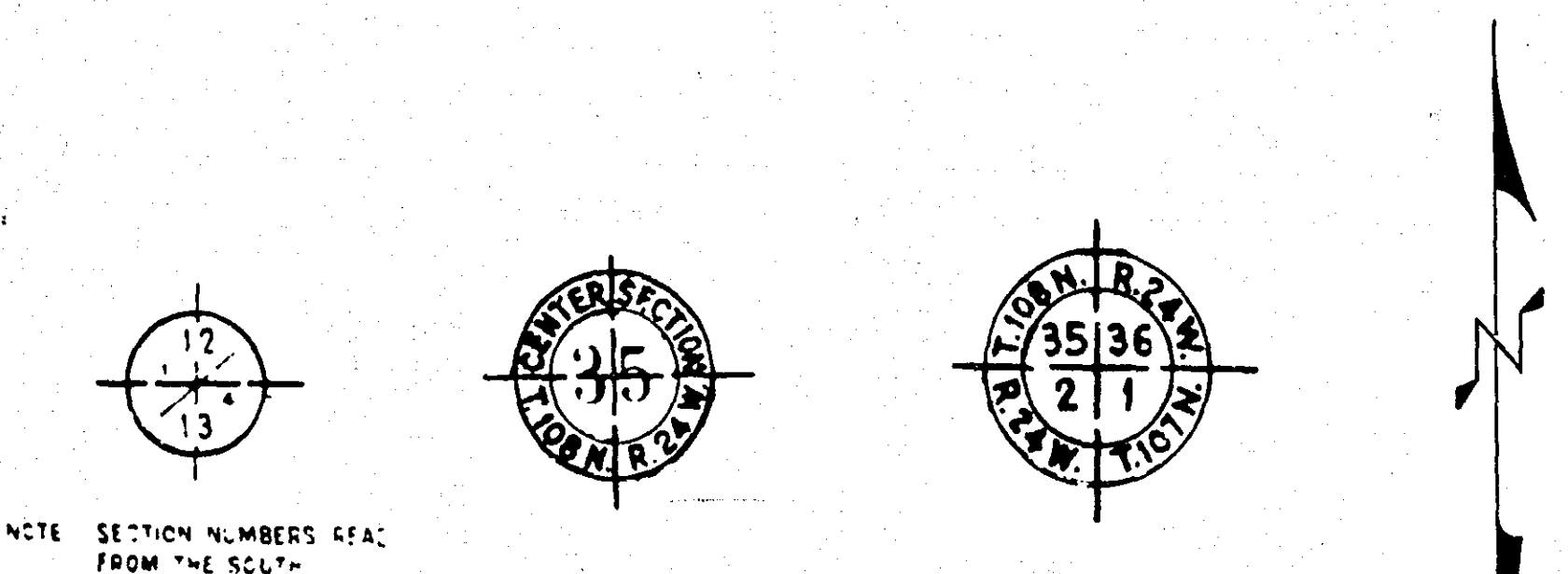


PLANS SYMBOLS

STATE LINE		SPRINGS	
COUNTY LINE		MARSH	
TOWNSHIP OR RANGE LINE		TIMBER	(TIMBER)
SECTION LINE		ORCHARD	
QUARTER LINE		BRUSH	
SIXTEENTH LINE		NURSERY	
RIGHT-OF-WAY LINE		CATCH BASIN	C.B.
PRESENT RIGHT-OF-WAY LINE		FIRE HYDRANT	
CONTROL OF ACCESS LINE		CATTLE GUARD	
PROPERTY LINE (Except Land Lines)		OVERPASS (Highway Over)	
VACATED PLATTED PROPERTY		UNDERPASS (Highway Under)	
CORPORATE OR CITY LIMITS		BRIDGE	
TRUNK HIGHWAY CENTER LINE		BUILDING (One Story Frame)	
RETAINING WALL		F FRAME C CONCRETE	
RAILROAD		S STONE T TILE	
RAILROAD RIGHT-OF-WAY LINE		B BRICK ST STUCCO	
RIVER OR CREEK		IRON PIPE OR ROD	
DRY RUN		MONUMENT (STONE, CONCRETE, OR METAL)	
DRAINAGE DITCH		WOODEN HUB	
DRAIN TILE		GRAVEL PIT	
CULVERT		SAND PIT	
DROP INLET		BORROW PIT	
GUARD RAIL		ROCK QUARRY	
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			

UTILITIES SYMBOLS

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



PIT DATA

PIT NO.	Located in
	Dead Haul
PIT NO.	Located in
	Dead Haul

SPECIFICATIONS REFERENCE

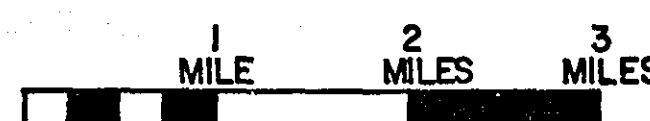
THE 1978 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" SHALL GOVERN.

S.P. 62-645-01

GROSS LENGTH	47.0 FEET	0.009 MILES
BRIDGE LENGTH	47.0 FEET	0.009 MILES
EXCEPTIONS LENGTH	0 FEET	0 MILES
NET LENGTH	47.0 FEET	0.009 MILES

DESIGN	9 TON
CURRENT A.D.T. (1982)	4,675
20 YR. PROJECTED A.D.T. (2002)	7,000
DESIGN SPEED	40 M.P.H.

END S.A.P. 62-645-02
STA. 96 + 20.00
BRIDGE NO. 62540 S.P. 62-645-01
BEGIN STA. 93 + 54.50 TO END STA. 94 + 01.50
BEGIN S.A.P. 62-645-02
STA. 91 + 60.00



MINNESOTA DEPARTMENT OF TRANSPORTATION RAMSEY COUNTY

DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION PLANS FOR: GRADING, AGGREGATE BASE, BITUMINOUS SURFACING, AND REHABILITATION OF BRIDGE NO. 62540 (LONG LAKE ROAD OVER RICE CREEK)

COUNTY STATE AID HIGHWAY 45 (LONG LAKE ROAD)

FROM: 150' NORTH OF MOUNDS AVE.
TO: 600' NORTH IN THE CITY OF NEW BRIGHTON

S.A.P. 62-645-02

FROM: A POINT 819.8 FEET WEST OF AND 921.4 FEET SOUTH OF THE EAST QUARTER CORNER OF SECTION 18, T30, R23.
TO: A POINT 717.4 FEET WEST OF AND 483.2 FEET SOUTH OF THE EAST QUARTER CORNER OF SECTION 18, T30, R23.

GROSS LENGTH	460.0 FEET	0.087 MILES
BRIDGE LENGTH	47.0 FEET	0.009 MILES
EXCEPTIONS LENGTH	47.0 FEET	0.009 MILES
NET LENGTH	413.0 FEET	0.078 MILES

INDEX

SHEET NO.	DESCRIPTION
1 OF 7	TITLE SHEET
2 OF 7	STATEMENT OF ESTIMATED QUANTITIES
3 OF 7	DETAILS
4 OF 7	GUARD RAIL DETAILS (NOT MICROFILMED)
5 OF 7	PLAN AND PROFILE
6-7 OF 7	CROSS SECTIONS
1 OF 19	BRIDGE NO. 62540

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.

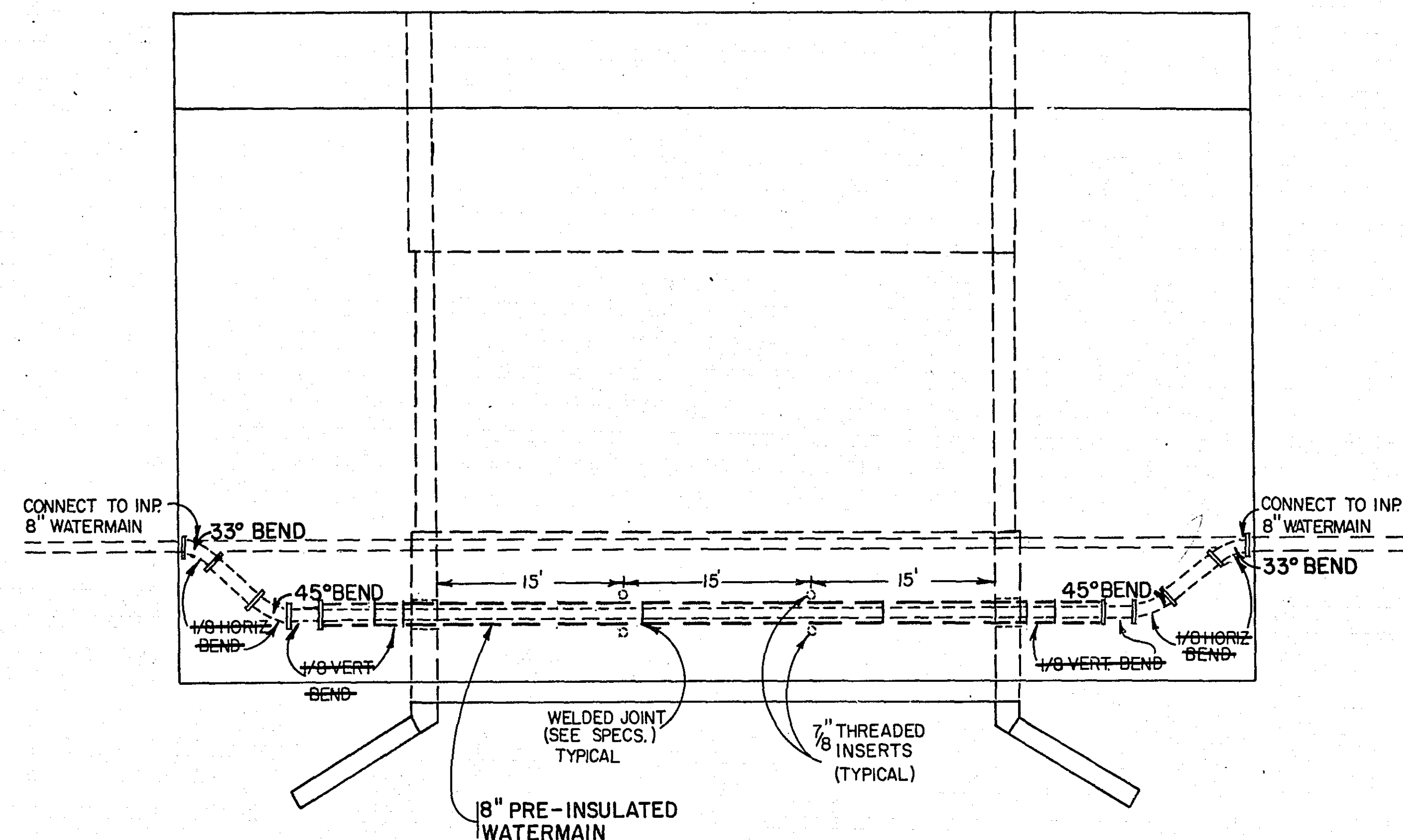
Date 5/27/82 Reg. No. 8976

RECOMMENDED FOR APPROVAL	County Engineer	DATE 6-16-82
APPROVED	Chairman of the Ramsey County Board	DATE 7/26/82
APPROVED	Mayor, City of New Brighton	DATE 6/23/82

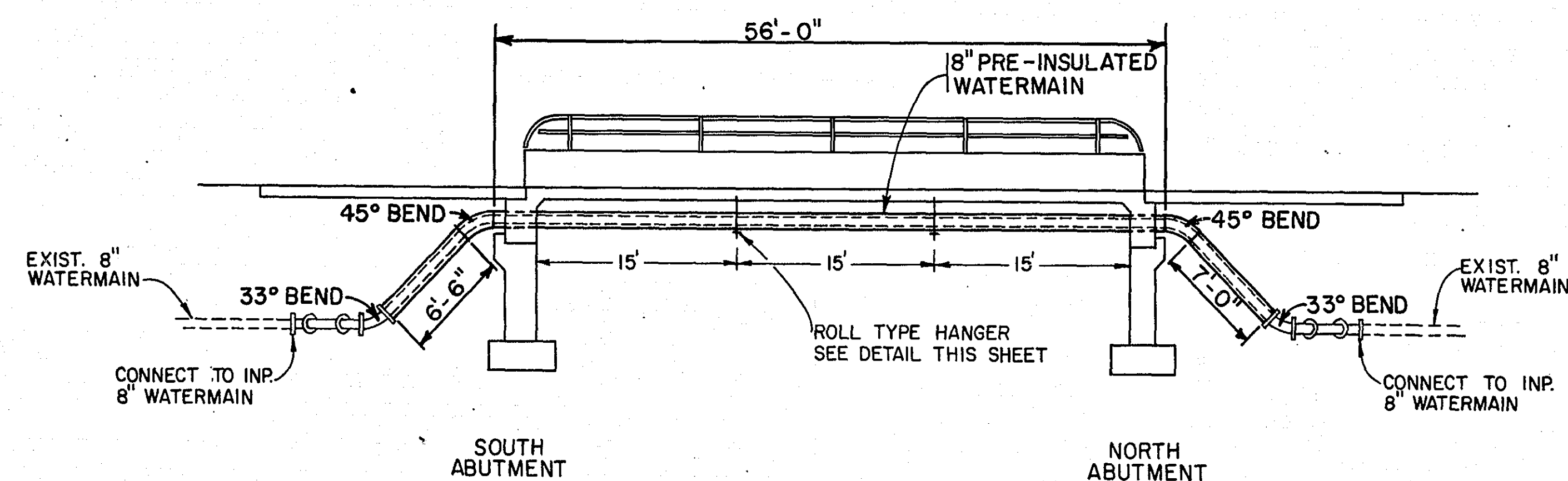
MINNESOTA DEPARTMENT OF TRANSPORTATION		
RECOMMENDED FOR APPROVAL	<u>Robert O. Ottavil</u> STATE AID PLANS ENGINEER	DATE <u>7-18-84</u>
RECOMMENDED FOR APPROVAL	<u>Eric M. ...</u> DISTRICT STATE AID ENGINEER	DATE <u>7/19/82</u>
APPROVED	<u>Arthur M. ...</u> STATE AID ENGINEER	DATE <u>4/18/84</u>



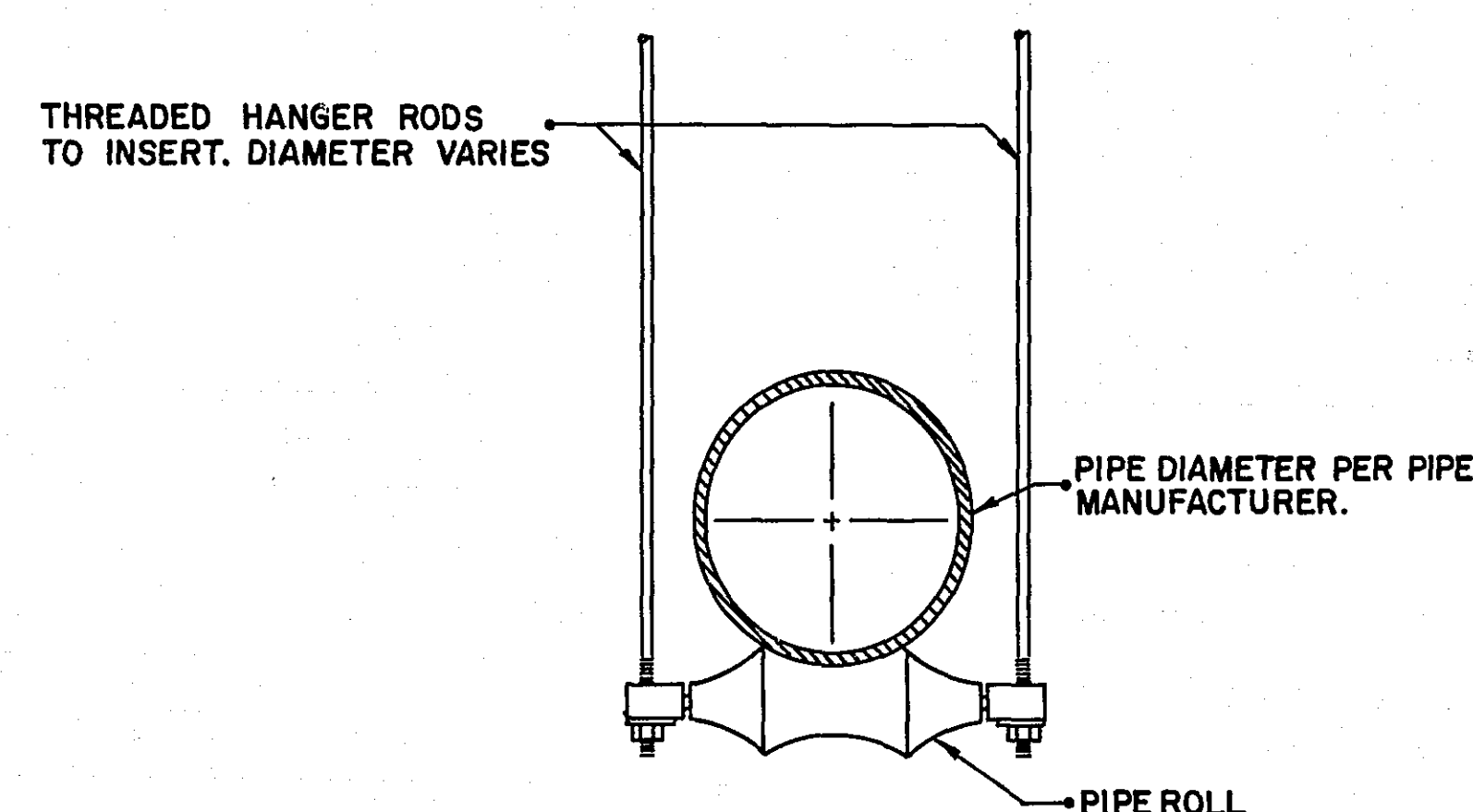
SHORT - ELLIOTT - HENDRICKSON, INC.
Saint Paul, Minnesota • Chippewa Falls, Wisconsin



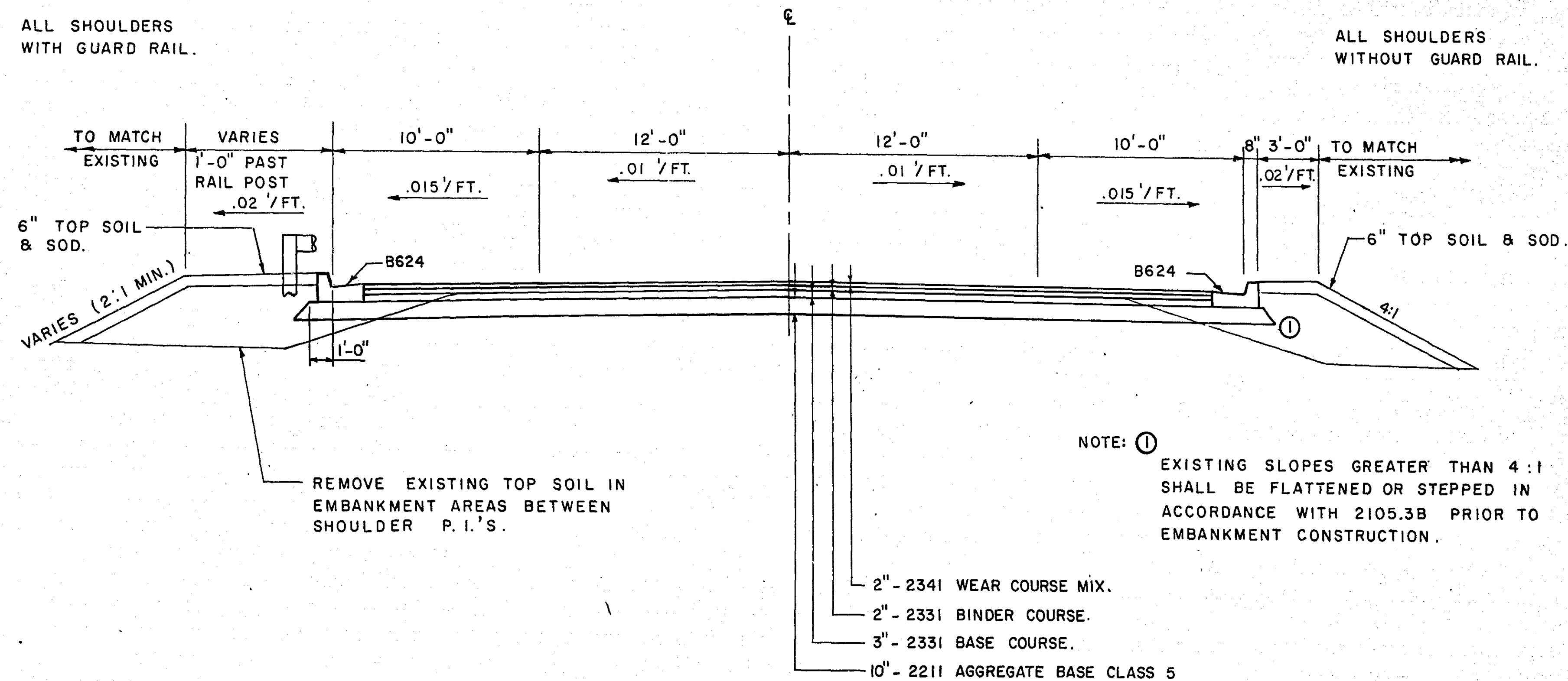
PLAN
(WATERMAIN)



ELEVATION
(WATERMAIN)

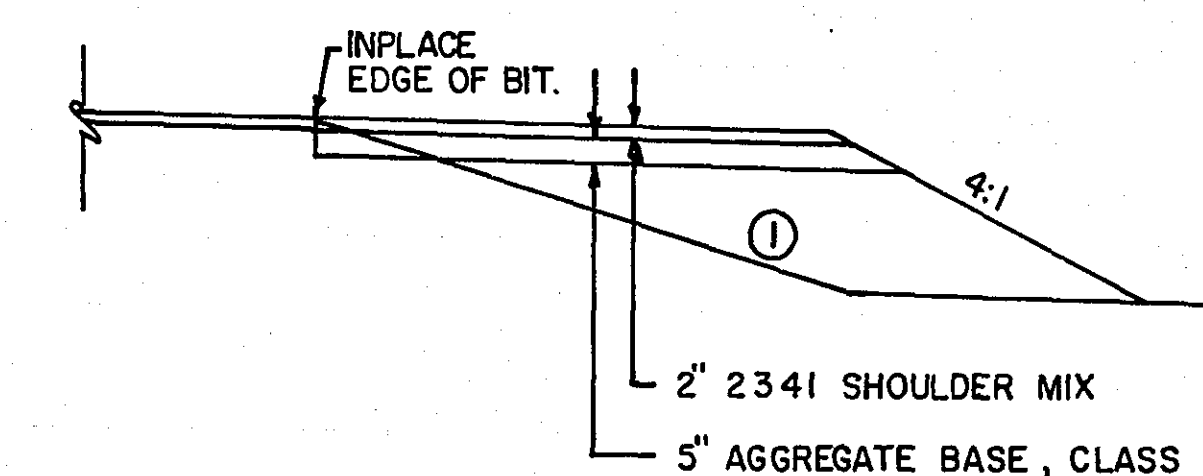


DETAIL
ADJUSTABLE STEEL YOKE
PIPE ROLL



TYPICAL SECTION

NOTE: TYPICAL SECTION FOR BITUMINOUS SHOULDER TAPERS, WITHOUT CURB, AS SHOWN BELOW. SEE PLAN SHEET NO. 5 FOR WIDTH AND LOCATION.



BITUMINOUS SHOULDER

ASBUILT PLAN
CONFORMING TO
CONST. RECORDS

DONE BY:
DATE:

SURVEY:	SCALE:	NO.	DATE	REVISIONS	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 _____ Reg. No. _____
DESIGN:					
DRAWN:					



SHORT - ELLIOTT - HENDRICKSON, INC.
Saint Paul, Minnesota • Chippewa Falls, Wisconsin

RAMSEY COUNTY

DETAILS

S.A.P. 62-645-02

FILE NO.:
78063
DATE:
3-10-82

3
7

27-108

STATION-ELEVATION

Q

EXCAVATION
SUB TOTALS
CU.
Yds.EMBANKMENT
SUB TOTALS
CU.
Yds.

STATION-ELEVATION

Q

Fed. Proj. No.

EXCAVATION
SUB TOTALS
CU.
Yds.EMBANKMENT
SUB TOTALS
CU.
Yds.

R/W

R/W

NO. EDGE, ROCK DR. LT.

91+97 875.07

R/W

R/W

NO. EDGE, CONC. DR. LT.

92+76 874.19

SO. EDGE, ROCK DR. LT.

91+83 875.27

SO. EDGE, CONC. DR. LT.

92+64 874.29

91+75 875.47

92+58 874.37

91+50 876.07

92+30 874.57

Q 20' BIT. DR. RT.

91+13 876.77

92+07 874.97

LONG LAKE ROAD
STA. 91+13 TO 92+76

5' VERT.

5' HORIZ.

State Proj. No. SAP 62-645-02

Sheet No. 6 of 7 Sheets

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STATION-ELEVATION

STATION-ELEVATION

Fed. Proj. No.

R/W

EXCAVATION
SUB TOTALSCU.
Yds.EMBANKMENT
SUB TOTALSCU.
Yds.

R/W

R/W

EXCAVATION
SUB TOTALSCU.
Yds.EMBANKMENT
SUB TOTALS

R/W

94+15 873.53

96+25 879.18

EARTHWORK BALANCE
537 C.Y. EXC. 324 C.Y. EMB.
(INCLUDES 80% TOPSOIL) 30% SHRINKAGE FACTOR
USED.

END EXISTING BRIDGE

94+02 873.53

C 10' DIRT DR. RT.

95+90 877.58

BEGIN EXISTING BRIDGE

93+54 873.69

C 24' BIT. DR. RT.

95+44 875.88

93+39 973.69

95+00 874.83

93+00 874.09

94+50 873.93

LONG LAKE ROAD
STA. 93+00 TO 96+25

5' VERT.
5' HORIZ.

State Proj. No. S.A.P. 62-645-02

Sheet No. 7 of 7 Sheets

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STATION-ELEVATION

STATION-ELEVATION

Fed. Proj. No.

EXCAVATION
SUB TOTALS CU. Yds. EMBANKMENT
SUB TOTALS CU. Yds. R/W

EXCAVATION
SUB TOTALS CU. Yds. EMBANKMENT
SUB TOTALS CU. Yds. R/W

EARTHWORK BALANCE
537 C.Y. EXC. 324 C.Y. EMB.
(INCLUDES 80% TOPSOIL) 30% SHRINKAGE FACTOR USED.

R/W

R/W

94+15 873.53

96+25 879.18

END EXISTING BRIDGE

94+02 873.53

10' DIRT DR. RT.

95+90 877.58

BEGIN EXISTING BRIDGE

93+54 873.69

24' BIT. DR. RT.

95+44 875.88

93+39 973.69

95+00 874.83

93+00 874.09

94+50 873.93

LONG LAKE ROAD
STA. 93+00 TO 96+25

5' VERT.

5' HORIZ.

State Proj. No. S.A.P. 62-645-02

Sheet No. 7 of 7 Sheets

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PROPORTIONAL CROSS SECTION OPEN DOTTED