

2/20/2020

1/28/2020

rdmzmon

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TRAFFIC DATA

CURRENT ADT (2012) = 4,900  
PROJECTED ADT (2040) = 8,000  
DESIGN SPEED = 30 MPH

DESIGN DATA

DESIGNED IN ACCORDANCE WITH 2017 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

HL-93 LIVE LOAD  
BARREL SPAN = 16'-0"  
BARREL RISE = 10'-0"  
BARREL LENGTH = 72'-0"  
EST. MIN. FILL DEPTH (A) = 3'-0 3/4"  
EST. MAX. FILL DEPTH (B) = 3'-6 1/4"  
SKEW ANGLE = 0°

MATERIAL DESIGN PROPERTIES:  
PRECAST REINFORCED CONCRETE:  
f'c = 5 KSI CONCRETE  
fy = 65 KSI WELDED WIRE REINFORCEMENT  
fy = 60 KSI REINFORCEMENT BARS

HL-93 LRFR  
BRIDGE OPERATING RATING FACTOR RF = 1.3

LIST OF SHEETS

NO.	DESCRIPTION
E1	GENERAL PLAN & ELEVATION
E2	QUANTITIES
E3	PRECAST CONCRETE BARREL DETAILS
E4	PRECAST CONCRETE END SECTION
E5	PRECAST CONCRETE END SECTION
E6	ORNAMENTAL METAL RAILING DETAILS
E7	BRIDGE SURVEY PLAN AND PROFILE
E8	BRIDGE SURVEY SOIL BORINGS

CONSTRUCTION NOTES

JEFFERSON PARKWAY AND TH-246 WILL BE CLOSED TO TRAFFIC THROUGHOUT CONSTRUCTION. TRAFFIC WILL BE DETOURED TO WOODLEY ST (TH-246) AND TH-3.

THE 2018 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

ALL EXPOSED CONCRETE EDGES SHALL BE FORMED WITH A 1/2" OR 3/4" CHAMFER UNLESS OTHERWISE NOTED.

CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPEC. 2411 AND 2412, EXCEPT AS NOTED.

REFER TO REMAINDER OF GRADING PLAN FOR STRUCTURE EXCAVATION AND BACKFILL. SPEC. 2451.

THE BAR SIZES SHOWN IN THIS PLAN ARE IN U.S. CUSTOMARY DESIGNATIONS.

SEE SPECIAL PROVISIONS FOR ALL XXXX.GXX PAY ITEMS FOR ADDITIONAL REQUIREMENTS.

APPROVED: *David E. Borge*  
DATE: 1-29-20  
CITY OF NORTHFIELD

MINNESOTA  
DEPARTMENT OF TRANSPORTATION

BRIDGE NO. 66J83

T.H. 246 & JEFFERSON PARKWAY ROUNDABOUT PEDESTRIAN UNDERPASS BOX CULVERT ON THE MILL TOWNS STATE TRAIL

16x10 BOX CULVERT

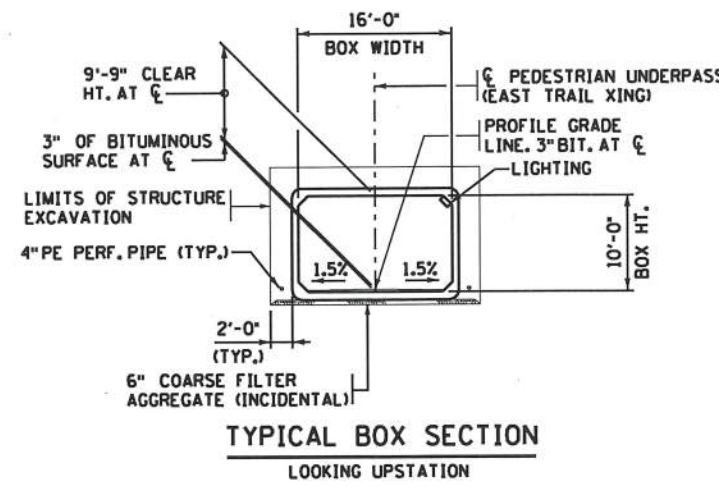
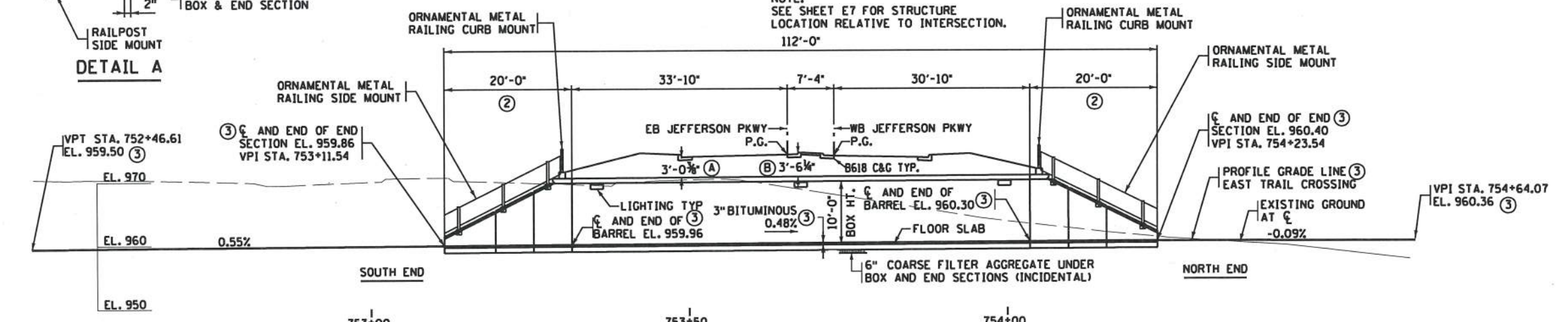
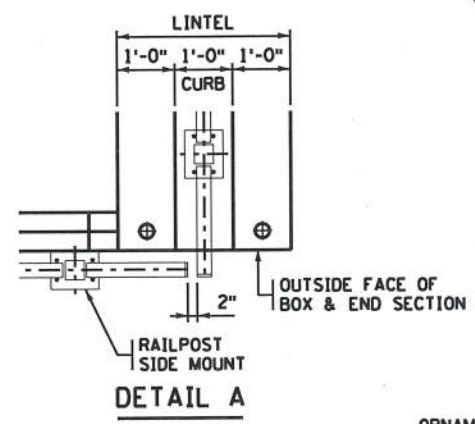
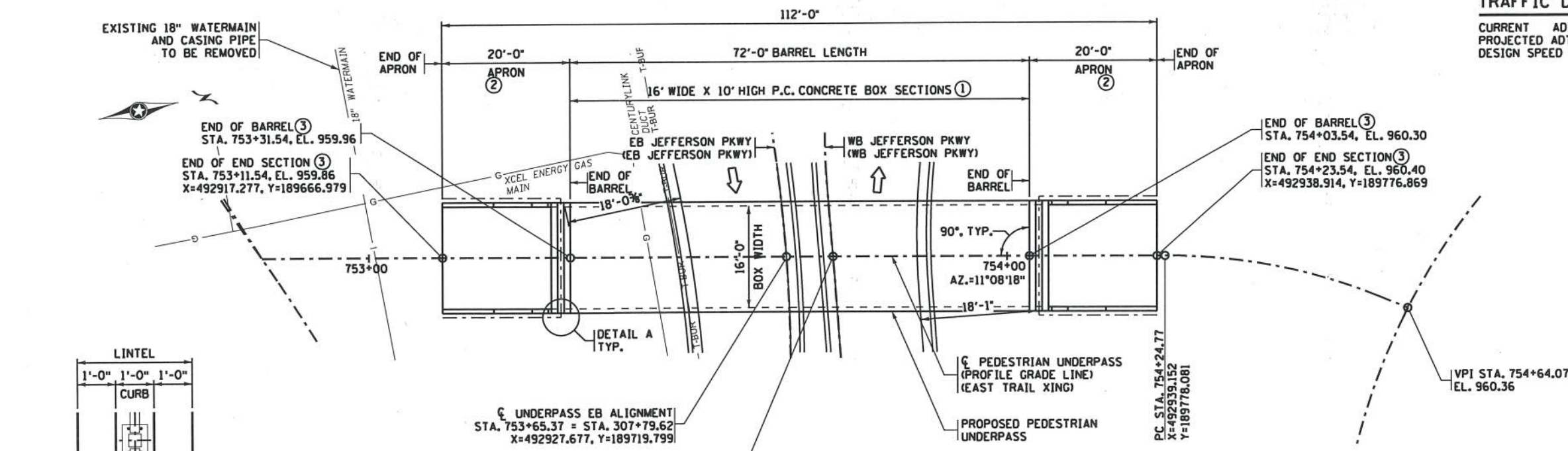
GENERAL PLAN AND ELEVATION

IDENTIFICATION NO. 513

SEC. 7 TWP. 111 N. R. 19 W.  
CITY OF NORTHFIELD RICE COUNTY

APPROVED: *Kevin W. ...*  
DATE: 1/31/2020  
STATE BRIDGE ENGINEER

E1 OF E8 BRIDGE NO. 66J83



- GENERAL SECTION
- SCALE: 0 10 20
- (1) CONTRACTOR MAY PROVIDE BOX SECTION LENGTHS OF 4', 5' OR 6', BUT NEEDS TO MAINTAIN OVERALL LENGTH.
  - (2) PRECAST END SECTIONS TYPE III.
  - (3) TOP OF BITUMINOUS SURFACE AT (3) OF BOX.

UTILITY NOTES

UTILITIES SHOWN IN THESE STRUCTURE PLANS ARE FOR REFERENCE ONLY. MANY OF THESE UG UTILITIES WILL BE RELOCATED. FOR A COMPLETE LAYOUT OF THE EXISTING AND PROPOSED UTILITIES, SEE THE TRAIL PLANS.

FOR SURFACE DRAINAGE AND PERF. PIPE CONNECTION, SEE THE TRAIL PLANS.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF C1/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA".

EXISTING UTILITY LABEL = INDICATES EXISTING UTILITIES

STATE PROJECT NO. SP 6614-29, T.H. 246, SAP 149-117-009

DESIGN TEAM	NO.	BY	DATE	REVISIONS
DRAWN BY: RD				
DESIGNER: WB				
CHECKED BY: JJ				



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CERTIFIED BY: *Jeffrey A. Johnson*  
LICENSED PROFESSIONAL ENGINEER  
DATE: 1-28-2020  
NAME: JEFFREY A. JOHNSON  
LIC. NO. 17280

NORTHFIELD,  
MINNESOTA

EAST TRAIL CROSSING  
PEDESTRIAN UNDERPASS  
BOX CULVERT PLAN

SEH  
FILE NO.  
NFIEL  
150976