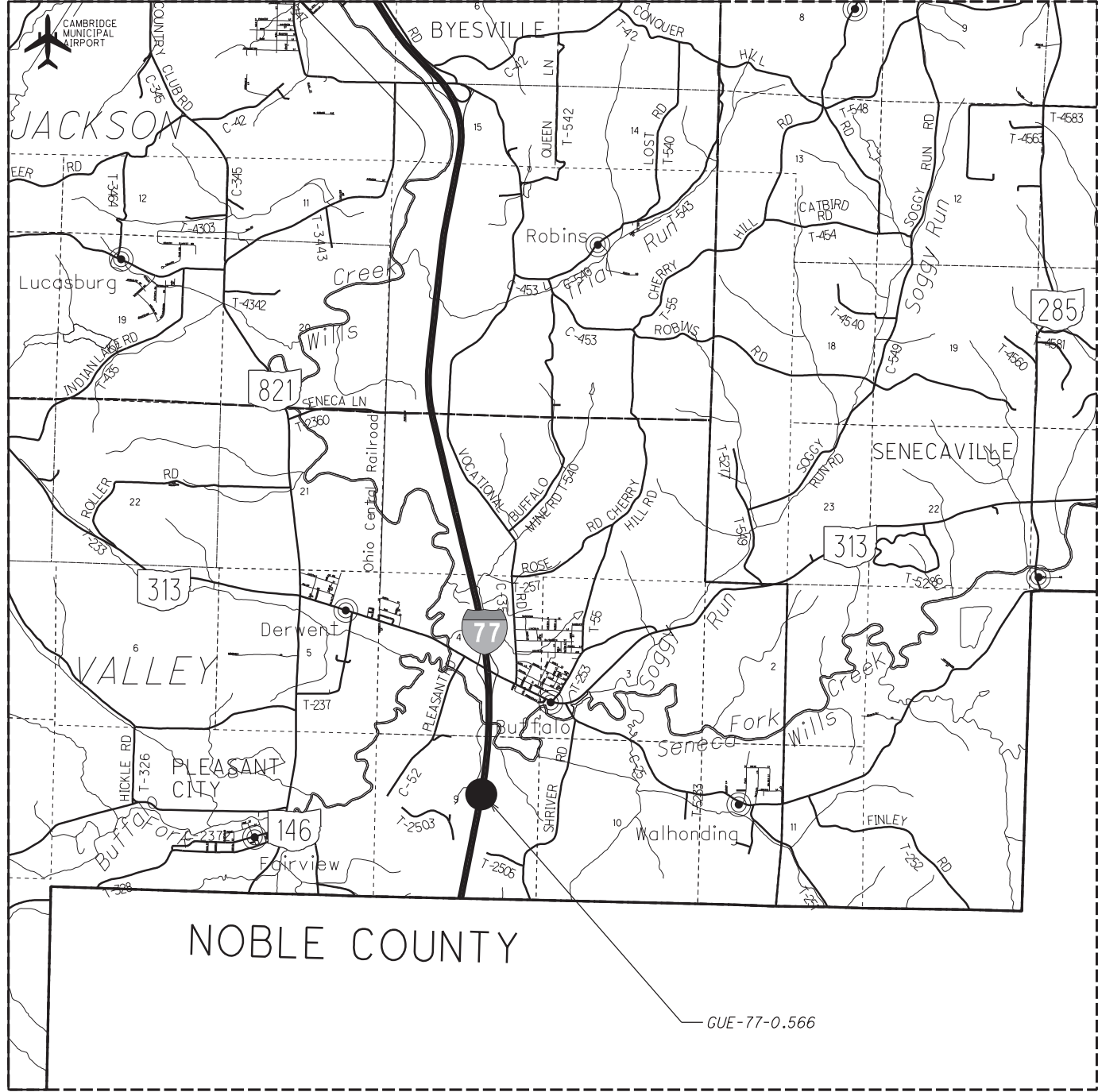
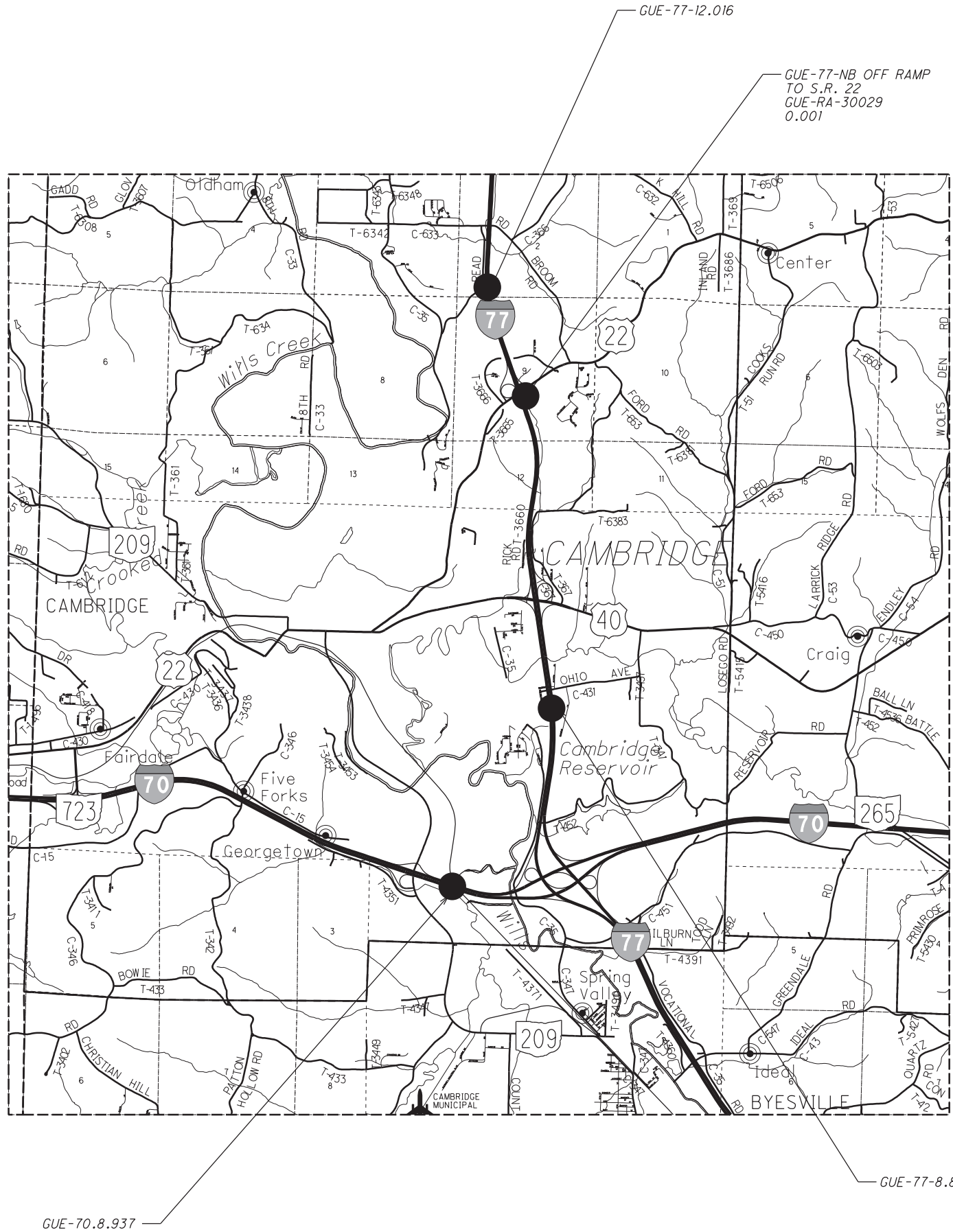


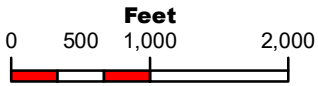
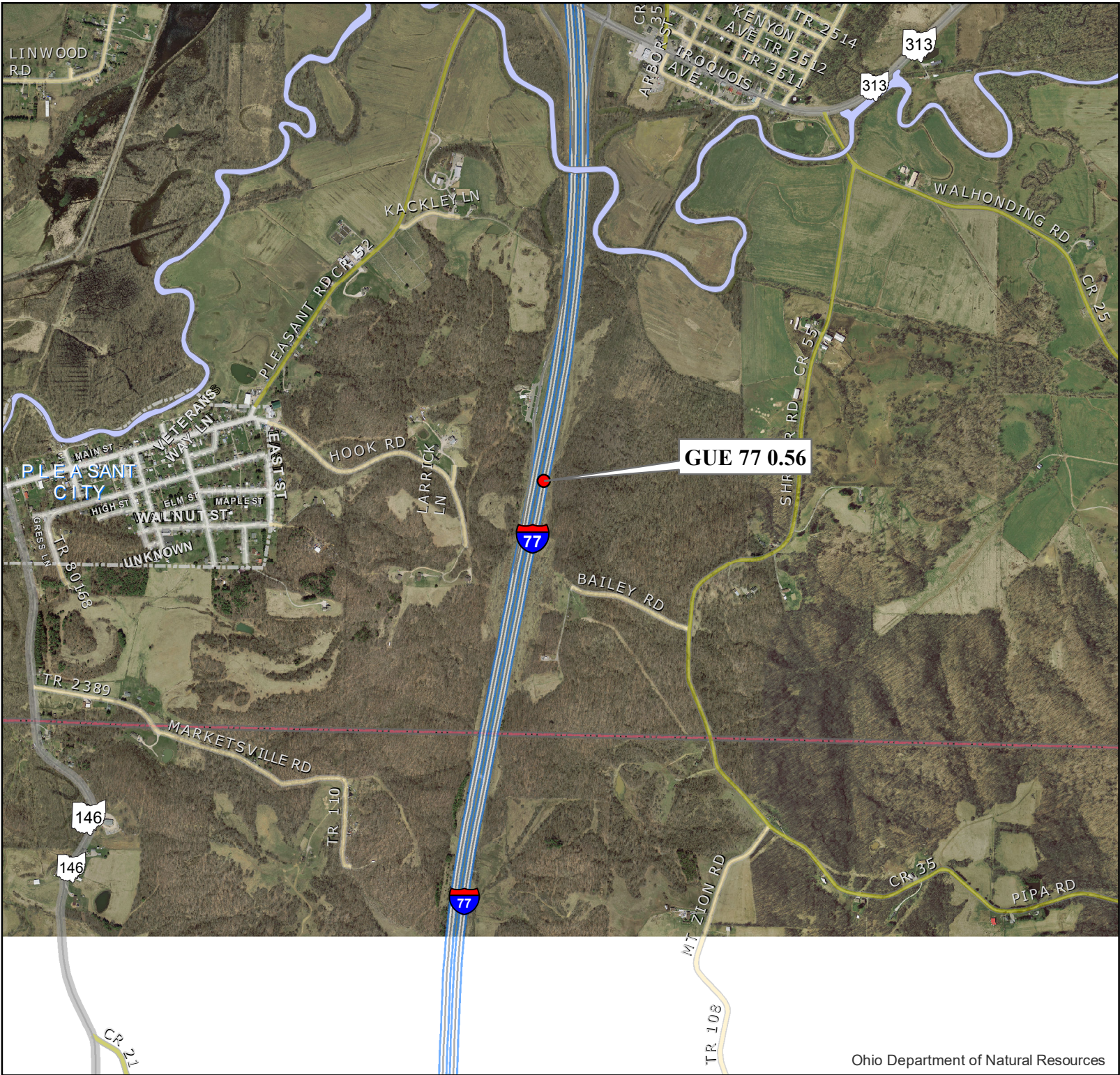
Project Description

GUR IR 70/77 CUL FY 2021 PID – 98212

The proposed project involves the repair of five culverts in Guernsey County at the following locations: IR 70 – SLM 8.93, IR 77 – SLM 0.52, IR 77 – SLM 8.89, IR 77 – SLM 12.01, and IR 77 North bound off ramp to US 22. The scope of work includes applying structural spray liners for all locations. This project will not require any roadway closures and work will be completed in the right of way. The project is due to be constructed in the spring of 2021.

Questions concerning this project can be directed to Brian Tatman at (740)323-5191 or brian.tatman@dot.ohio.gov, or Nicole Hafer-Lipstreu at (740)323-5103 or nicole.haferlipstreu@dot.ohio.gov in the ODOT District 5 Planning Department.

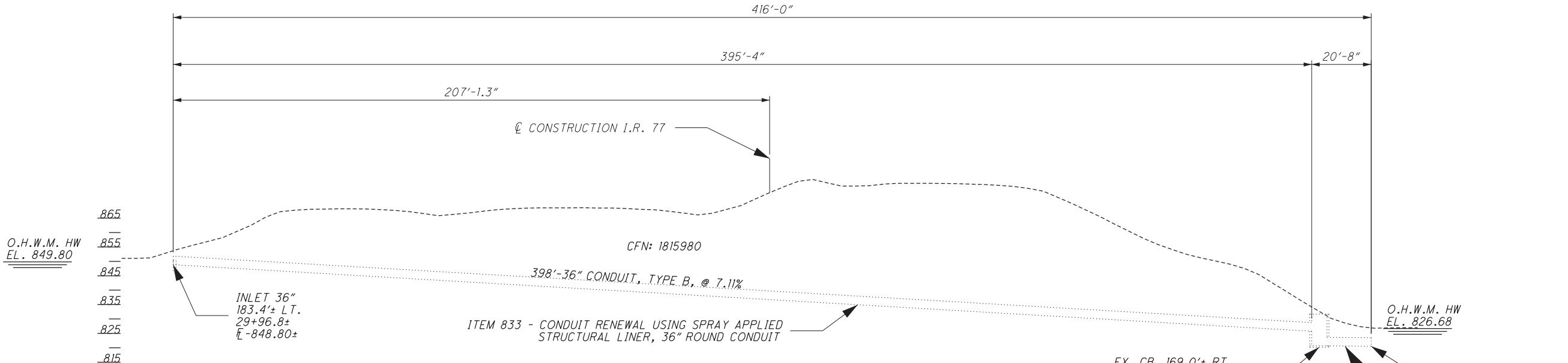
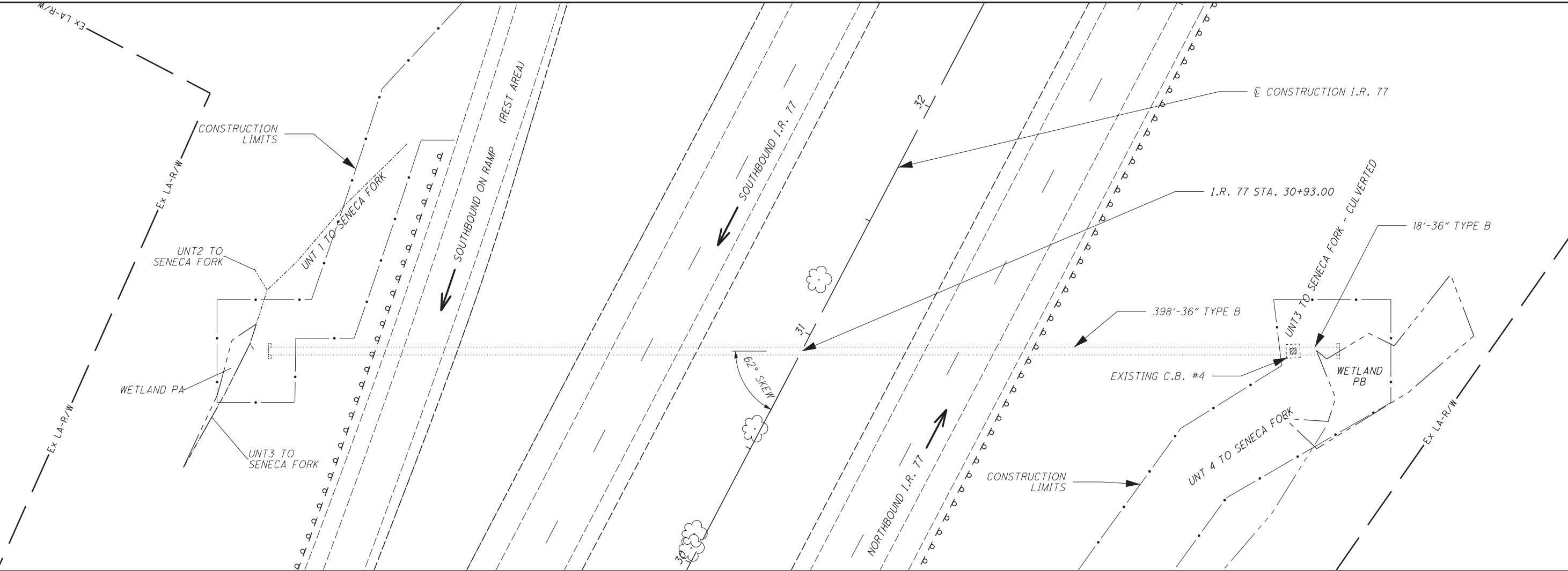




**DO5-CUL-FY2020
PID 98212**

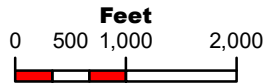
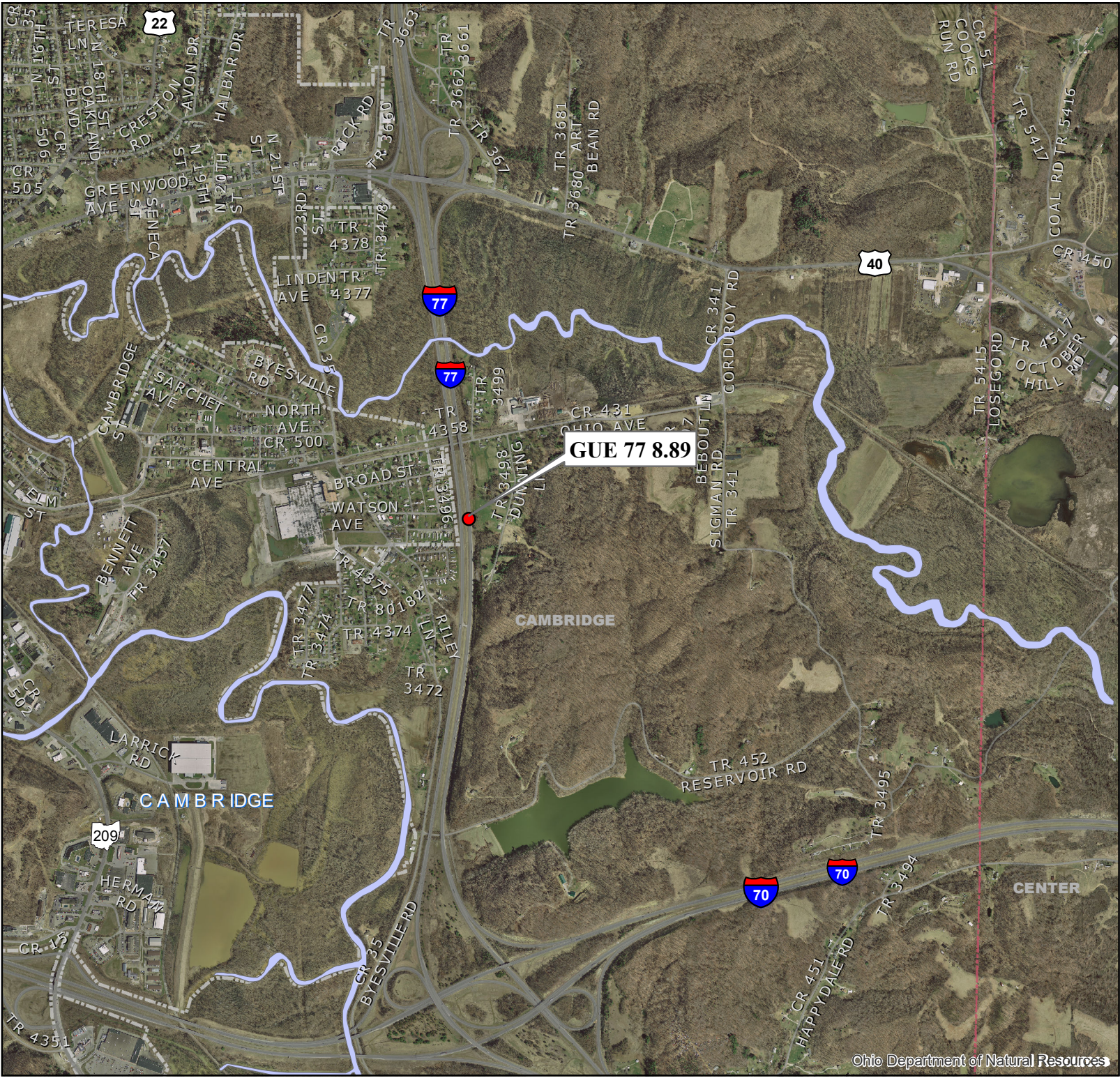
OSIP 2013
Aerial Imagery

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QUANTITIES	
ITEM 659 SEEDING AND MULCHING, CLASS 2 (BY COMPUTER)	1250 SQ. YDS.
ITEM 659 COMMERCIAL FERTILIZER	1250 ÷ 7410 = 0.17 SQ. YDS.
ITEM 659 LIME	1250 ÷ 4840 = 0.26 SQ. YDS.
ITEM 659 WATER	1250 X 0.0054 = 6.8 MGAL
ITEM 833 CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, 36" ROUND PIPE	416.0 FT.

QUANTITIES CARRIED TO THE SUB SUMMARY



**DO5-CUL-FY2020
PID 98212**

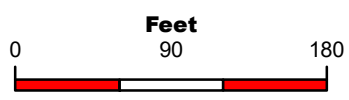
OSIP 2013
Aerial Imagery



○

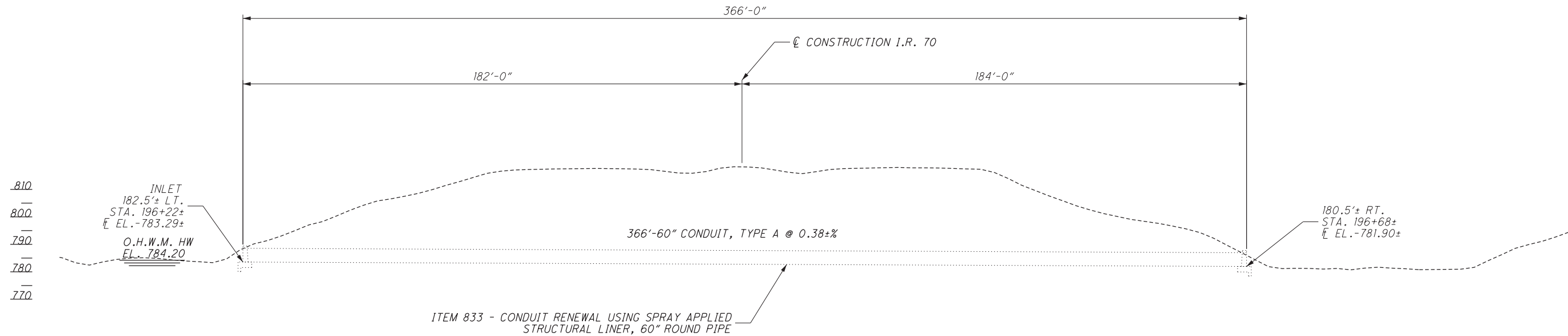
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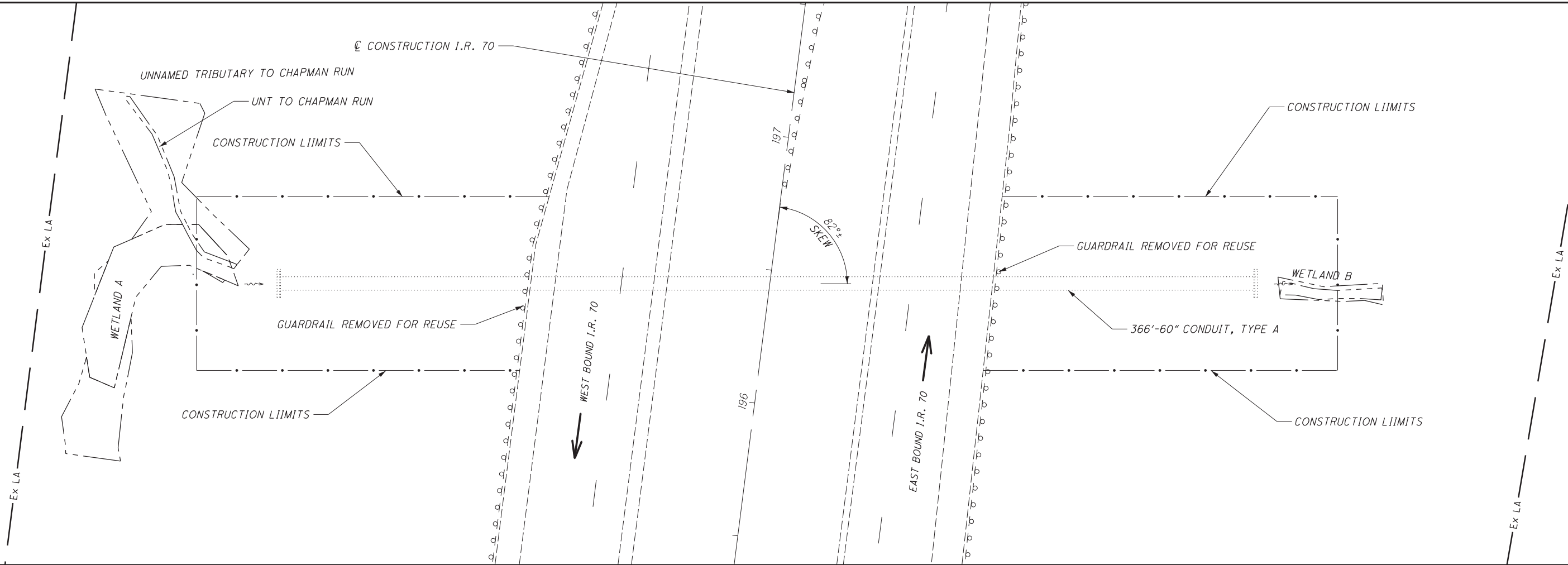
**DO5-CUL-FY2020
PID 98212**

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QUANTITIES	
ITEM 202 GUARDRAIL REMOVED FOR REUSE	50.0 FT.
ITEM 606 GUARDRAIL REBUILT, TYPE 5	50.0 FT.
ITEM 622 PORTABLE BARRIER, 32"	80.0 FT.
ITEM 659 SEEDING AND MULCHING, CLASS 2 (BY COMPUTER)	1000 SQ. YDS.
ITEM 659 COMMERCIAL FERTILIZER	1000 ÷ 7410 = 0.14 SQ. YDS.
ITEM 659 LIME	1000 ÷ 4840 = 0.21 SQ. YDS.
ITEM 659 WATER	1000 X 0.0054 = 5.4 MGAL
ITEM 833 CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, 60" ROUND PIPE	366.0 FT.

QUANTITIES CARRIED TO THE SUB SUMMARY



CALCULATED
RJC

CHECKED
HAG

CULVERT DETAILS

CFN: 1875902

GUE-70-8.937

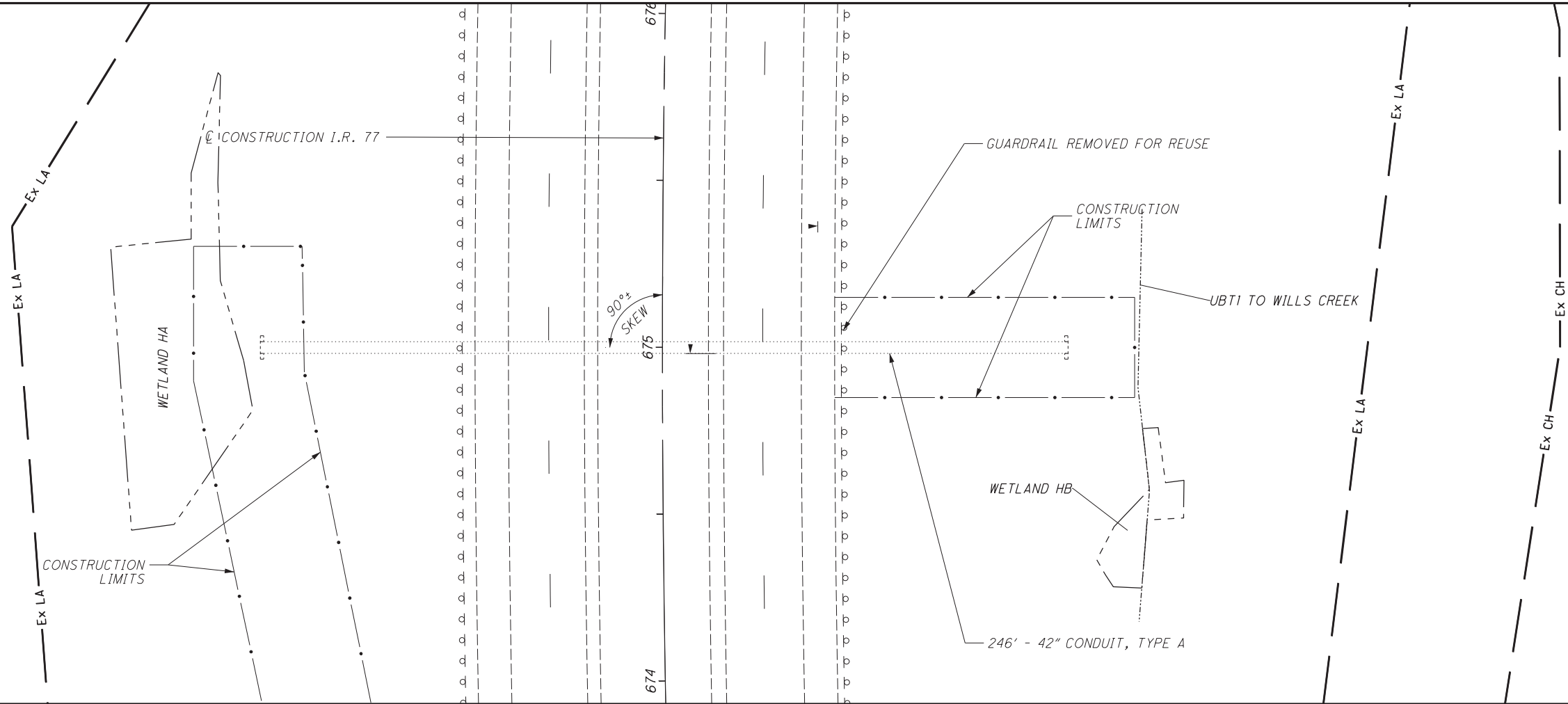
GUE-70/77-

CUL FY 2021

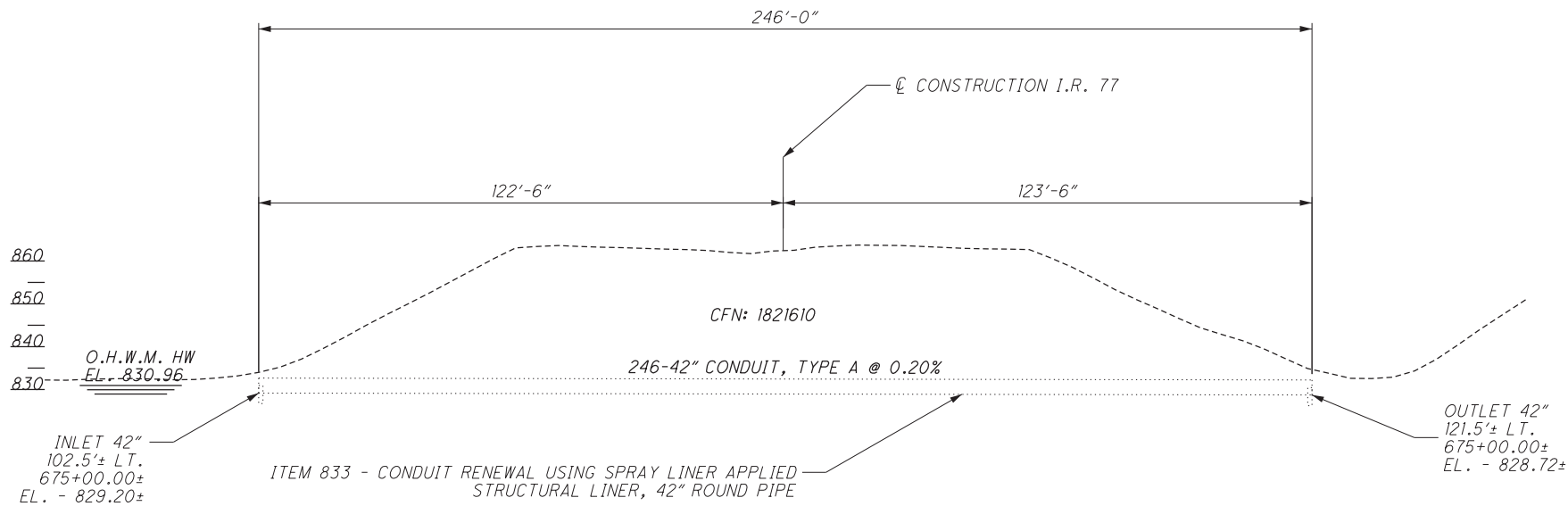
13

21

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P.I. St
 $\Delta = 22^\circ$
 $Dc = 1^\circ$
 $R = 5,72$
 $T = 1,116$
 $L = 2,20$
 $E = 107.7$
 $C = 2,191$
 $C.B. = N$



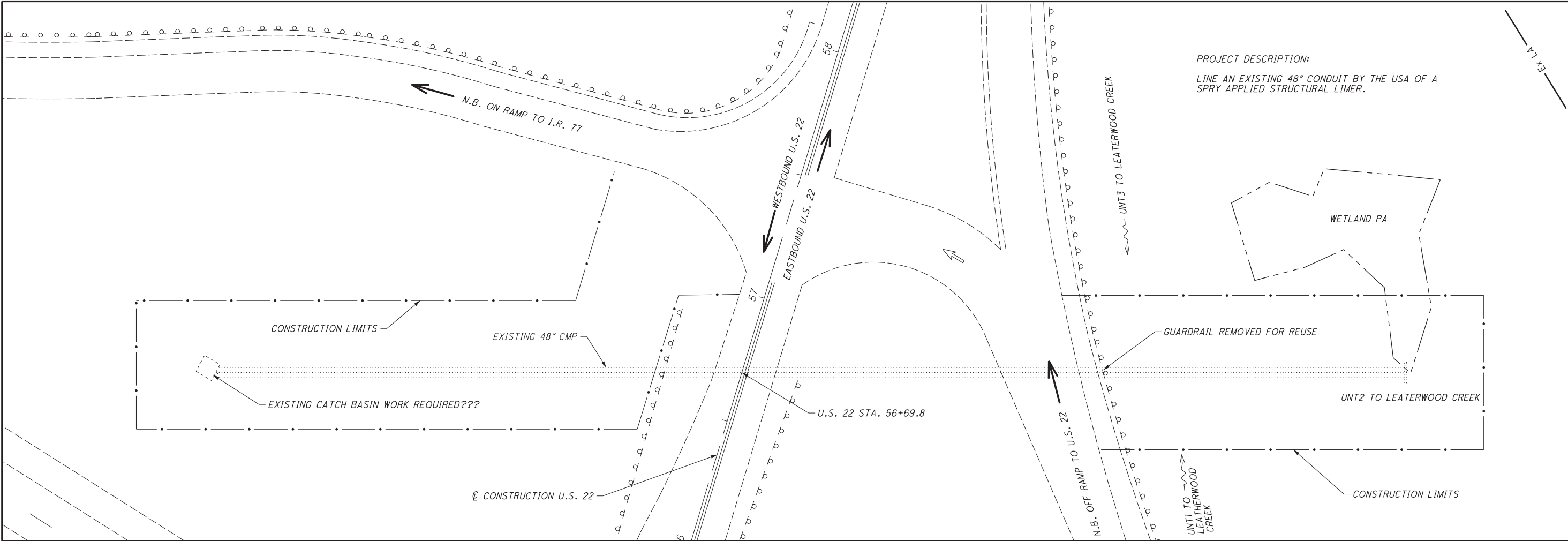
QUANTITIES	
ITEM 202 GUARDRAIL REMOVED FOR REUSE	25.0 FT.
ITEM 606 GUARDRAIL REBUILT, TYPE 5	25.0 FT.
ITEM 622 PORTABLE BARRIER, 32"	40.0 FT.
ITEM 659 SEEDING AND MULCHING, CLASS 2 (BY COMPTER)	900 SQ. YDS.
ITEM 659 COMMERCIAL FERTILIZER	900 ÷ 7410 = 0.12 SQ. YDS.
ITEM 659 LIME	900 ÷ 4840 = 0.19 SQ. YDS.
ITEM 659 WATER	900 X 0.0054 = 4.9 MGAL
ITEM 833 CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, 42" ROUND PIPE	246.0 FT.

QUANTITIES CARRIED TO THE GENERAL SUMMARY

CULVERT DETAILS CFN: 1821610
GUE-77-12.016

GUE-70/77-
CUL FY 2021

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PROJECT DESCRIPTION:
LINE AN EXISTING 48" CONDUIT BY THE USE OF A
SPRY APPLIED STRUCTURAL LINER.

CALCULATED
RJC

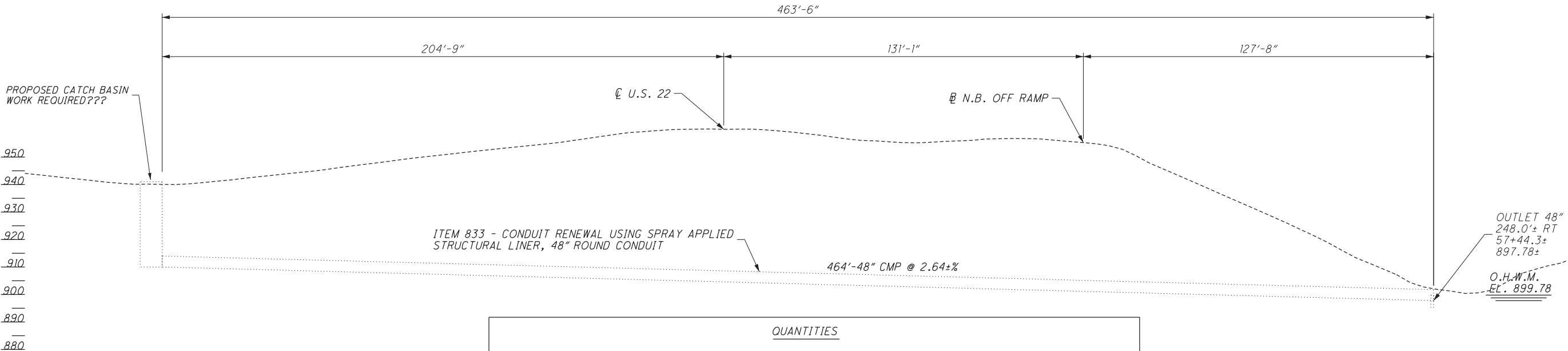
CHECKED
HAG

0 20 40

HORIZONTAL
SCALE IN FEET

EX-1A

CULVERT DETAILS CFN: 1821609
GUE 77 N.B. OFF RAMP TO U.S. 22



QUANTITIES	
ITEM 202 GUARDRAIL REMOVED FOR REUSE	25.0 FT.
ITEM 606 GUARDRAIL REBUILT, TYPE 5	25.0 FT.
ITEM 622 PORTABLE BARRIER, 32"	40.0 FT.
ITEM 659 SEEDING AND MULCHING, CLASS 2 (BY COMPUTER)	1000 SQ. YDS.
ITEM 659 COMMERCIAL FERTILIZER	650 ÷ 7410 = 0.10 SQ. YDS.
ITEM 659 LIME	650 ÷ 4840 = 0.13 SQ. YDS.
ITEM 659 WATER	650 X 0.0054 = 3.5 MGAL
ITEM 833 CONDUIT RENEWAL USING SPRAY APPLIED STRUCTURAL LINER, 48" ROUND PIPE	464.0 FT.

QUANTITIES CARRIED TO THE SUB SUMMARY

GUE-70/ 77 -
CUL FY 2021