

5/14/99

PROJECT REFERENCE NO. <i>R-4413</i>	SHEET NO. <i>1-A</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 0903 GREGORY E. BRIDEN <i>6-6-07</i>	HYDRAULICS ENGINEER

GENERAL NOTES

THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

2006 ROADWAY STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated July 18, 2006 are applicable to this project and by reference hereby are considered a part of these plans:

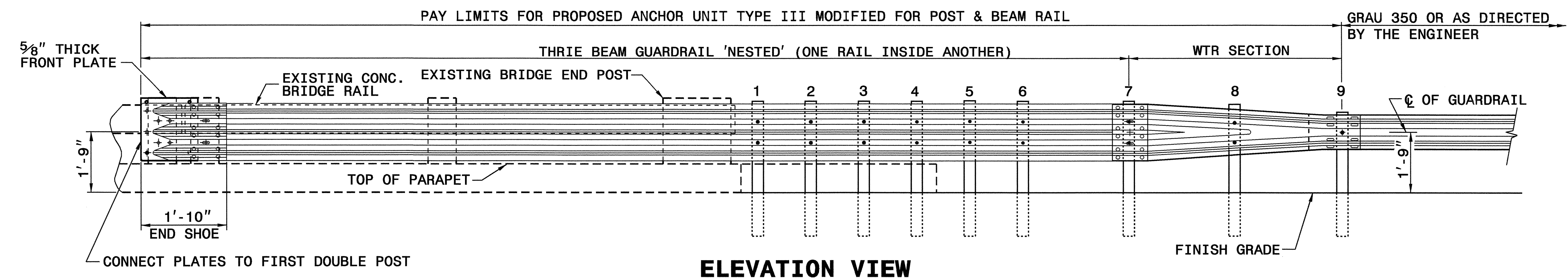
STD. NO.	TITLE
DIVISION 8 - INCIDENTALS	
857.01	Precast Reinforced Concrete Barrier - 41" Single Faced
862.01	Guardrail Placement
862.02	Guardrail Installation
862.03	Structure Anchor Units
862.04	Anchoring End of Guardrail - B-77 and B-83 Anchor Units

EFF. 07-18-06
REV. 01-02-07

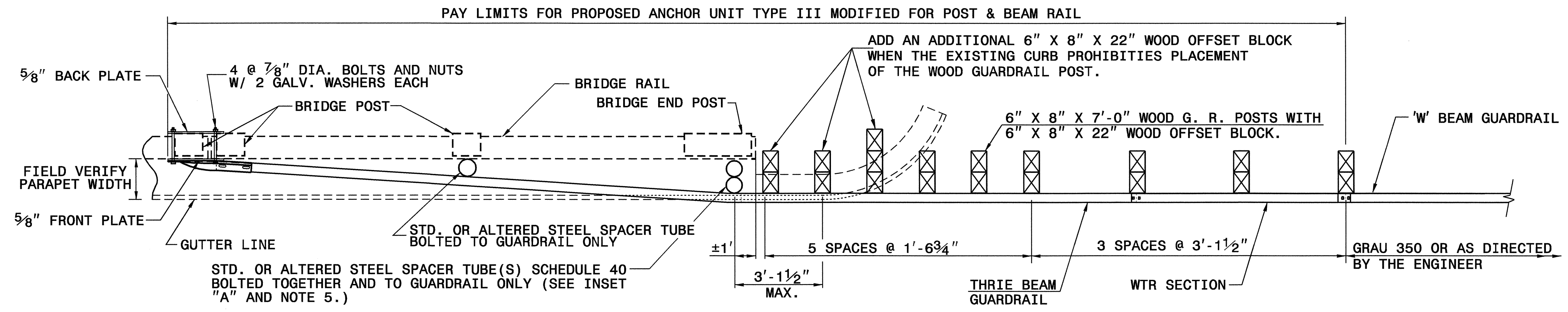
INDEX OF SHEETS

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<i>1-A</i>	<i>INDEX OF SHEETS, GENERAL NOTES AND LIST OF STANDARD DRAWINGS</i>
<i>2 & 2-A</i>	<i>DETAIL OF TYPE III MODIFIED GUARDRAIL ANCHOR UNIT</i>
<i>2-B THRU 2-AB</i>	<i>DETAILS OF GUARDRAIL PLACEMENT AND VICINITY MAPS</i>
<i>3</i>	<i>SUMMARY OF QUANTITIES</i>
<i>3-A THRU 3-D</i>	<i>GUARDRAIL SUMMARY SHEETS</i>
<i>TCP-1 THRU TCP-10</i>	<i>TRAFFIC CONTROL PLANS</i>

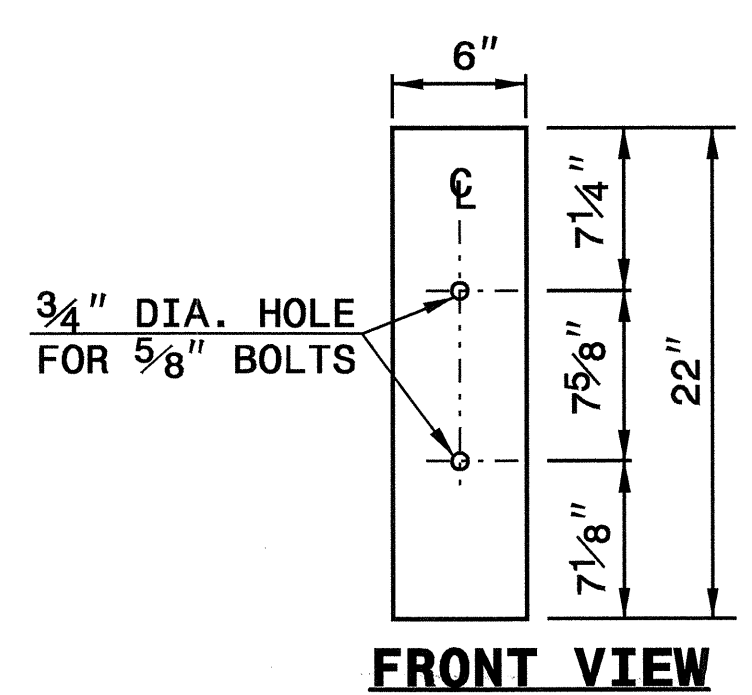
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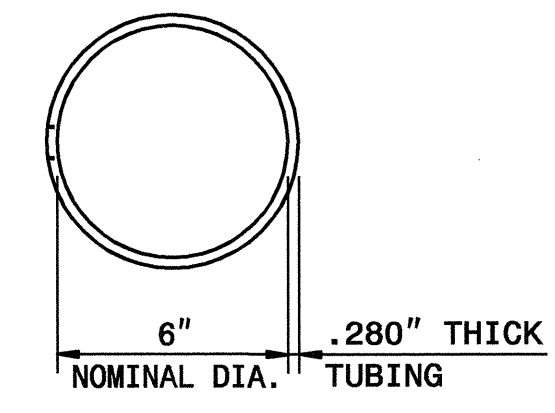
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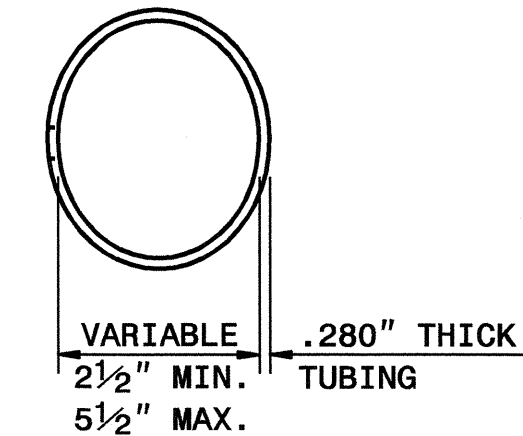
PLAN VIEW



FRONT VIEW

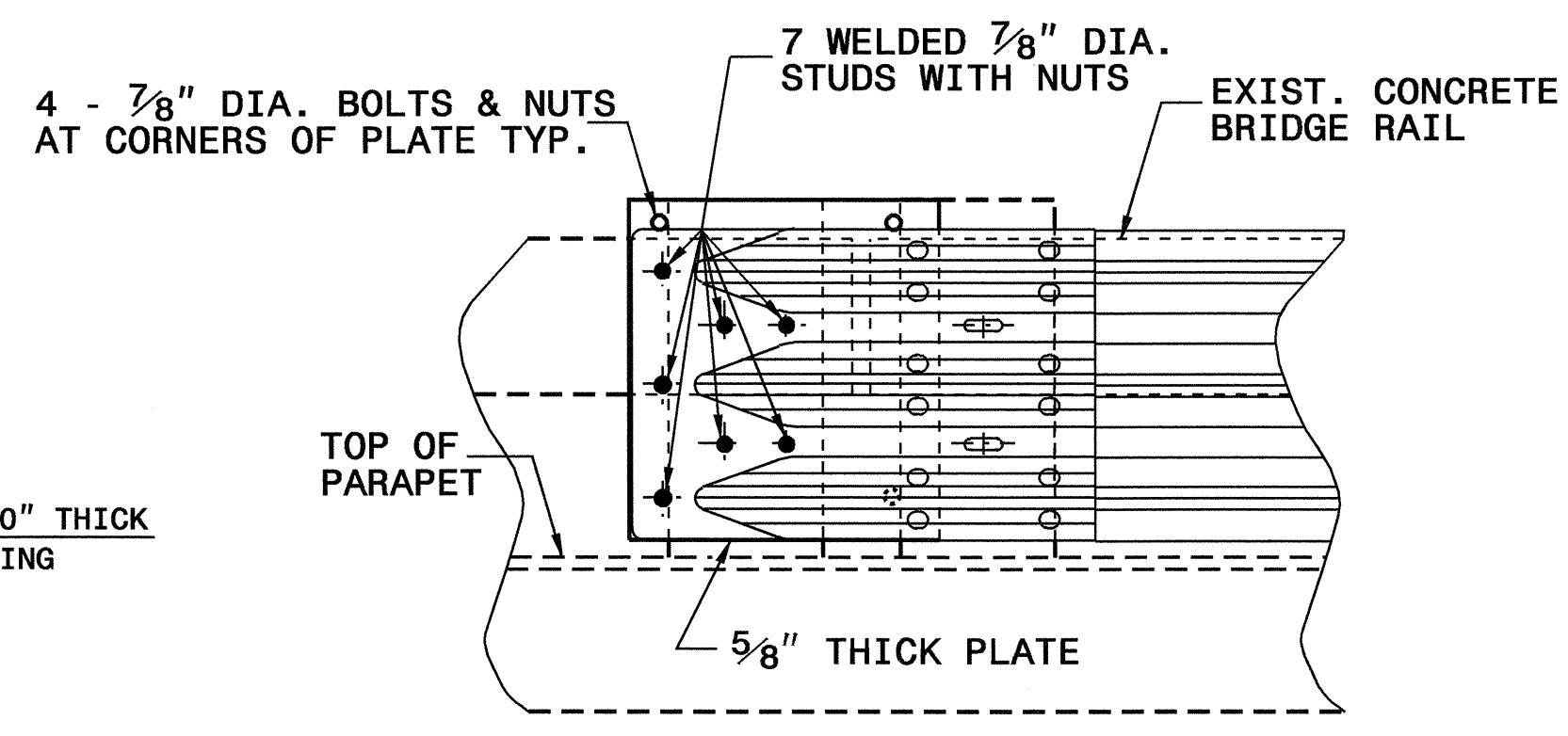


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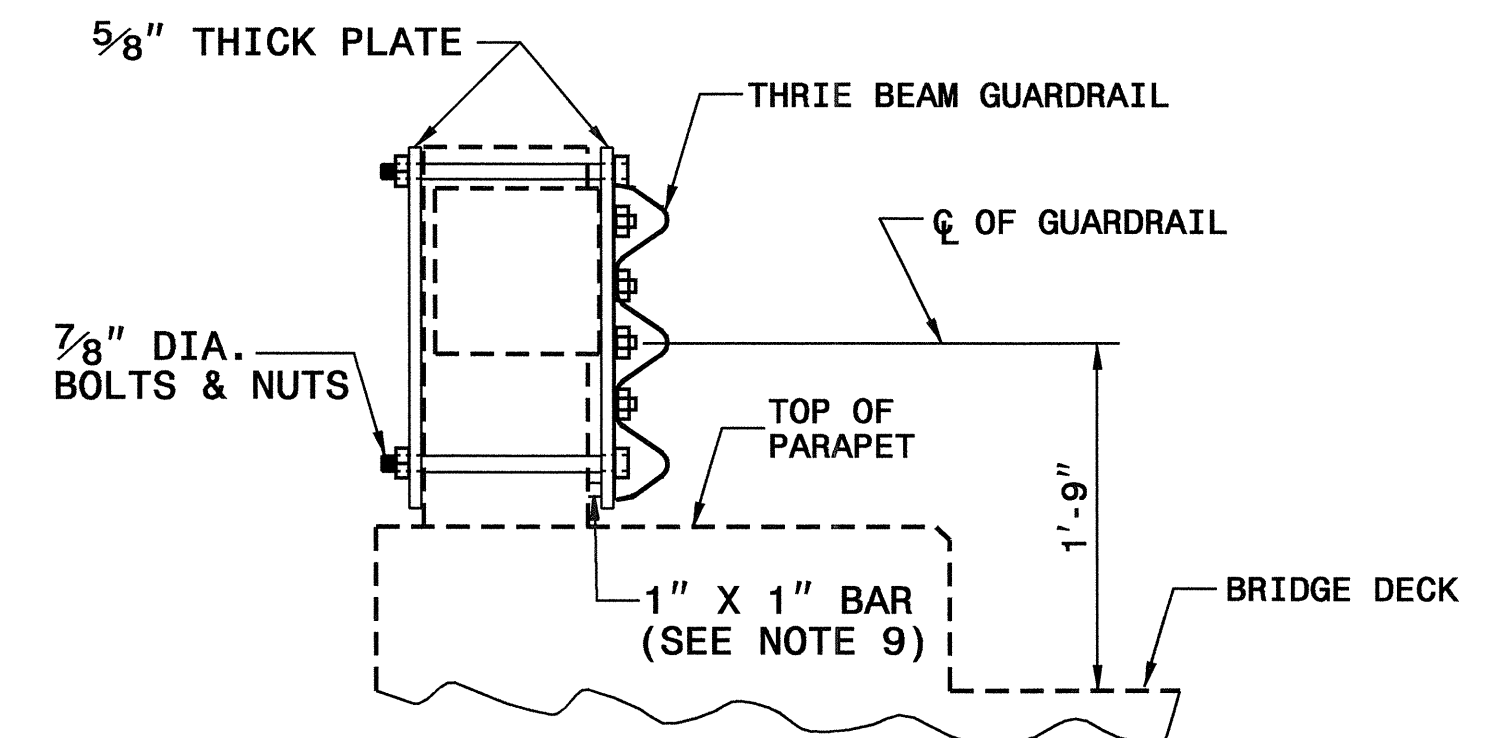


**PLAN VIEW
INSET "A"**

STEEL SPACER TUBE

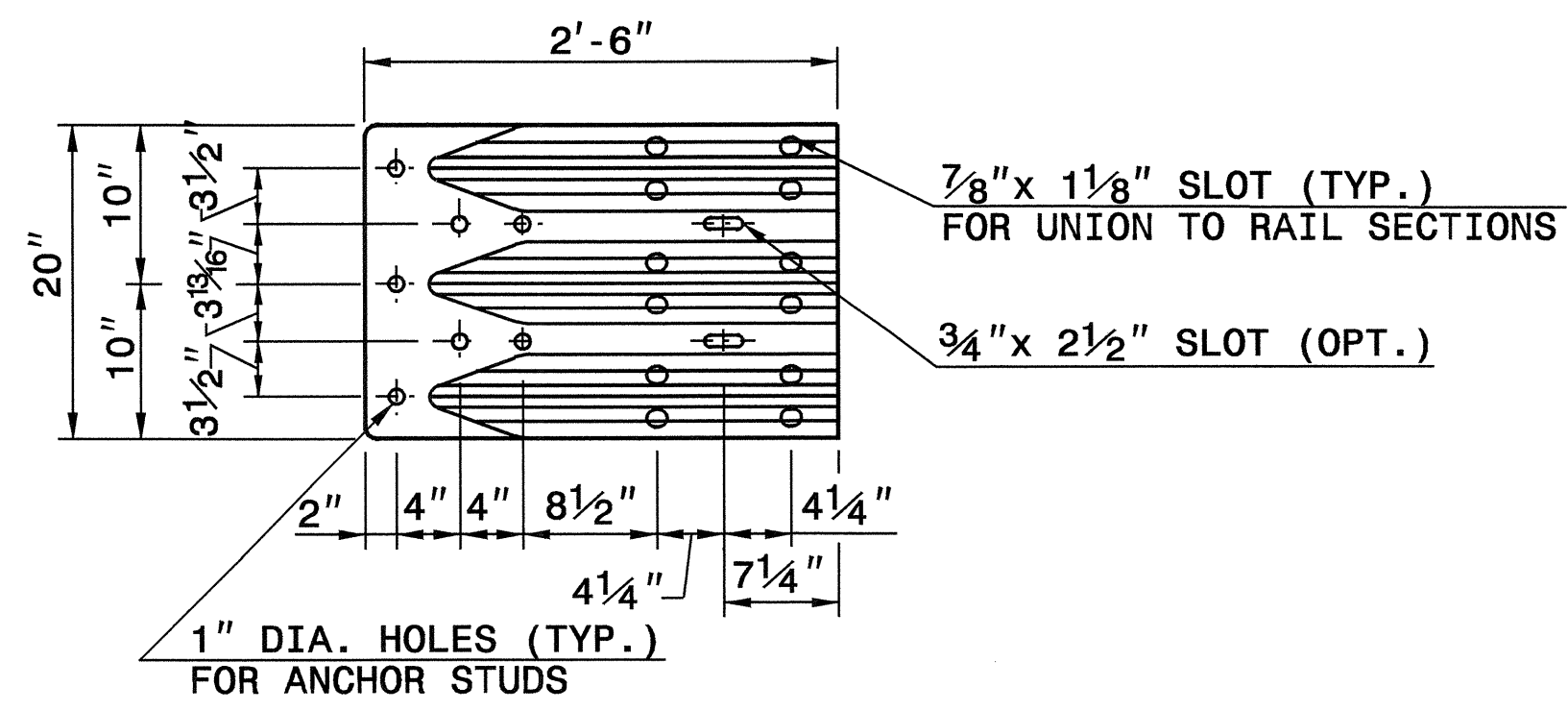


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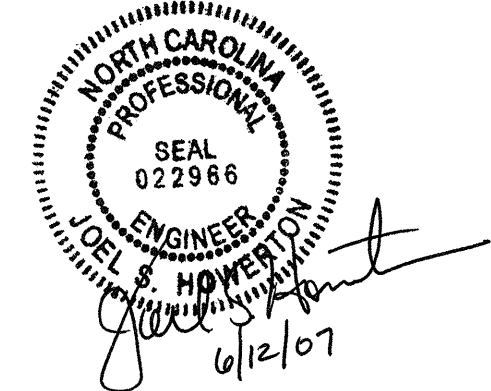
SECTION VIEW

**GUARDRAIL ATTACHMENT
TO BRIDGE POST**



END SHOE

- GENERAL NOTES:**
1. USE NUTS, BOLTS, AND WASHERS CONFORMING TO THE REQUIREMENTS OF A.S.T.M. A-307 AND GALVANIZED IN ACCORDANCE WITH SECTION 1076 OF STAND. SPECS.
 2. TAP NUTS FOR THE 7/8" DIA. STUDS AND BOLTS AFTER GALVANIZING SEE A.S.T.M. A-563.
 3. USE PLATES AND TUBES CONFORMING TO THE REQUIREMENTS OF A.S.T.M. A-36 AND GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH SECTION 1076 OF STAND. SPECS.
 4. ADDITIONAL FIELD HOLES MAY BE DRILLED IN STEEL RAIL AS DIRECTED BY THE ENGINEER.
 5. INSTALL FACE OF GUARDRAIL AS NEAR AS POSSIBLE TO PLUMB WITH THE PARAPET FACE AT BRIDGE END POST SPACER TUBE LOCATION BY USING STANDARD OR ALTERED SPACER TUBES OR A COMBINATION THEREOF OR AS DIRECTED BY THE ENGINEER. FOR VERY SMALL PARAPET WIDTHS, GUARDRAIL MAY BE INSTALLED AGAINST BRIDGE RAIL WITHOUT SPACER TUBES.
 6. DO NOT DRILL BRIDGE RAIL IN ORDER TO INSTALL GUARDRAIL ANCHOR UNIT.
 7. USE THIS DETAIL ONLY FOR BRIGES WITH POST AND BEAM TYPE RAIL.
 8. ATTACH 1" X 1" BAR AND THREADED STUDS TO PLATE WITH 1/4" WELDS ALL AROUND.
 9. 1" X 1" BAR MAY NOT BE NEEDED ON BRIDGE RAILS WHERE FACE OF RAIL DOES NOT PROJECT BEYOND FACE OF POST.
 10. PROVIDE SHOP DRAWINGS OF THE PLATES TO THE ENGINEER FOR APPROVAL BEFORE FABRICATING THE PLATES.
 11. LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW.
 12. SEE ROADWAY STANDARD DRAWING 862.03 SHEET 4 FOR ADDITIONAL INFORMATION ON THE TYPE III ANCHOR UNIT

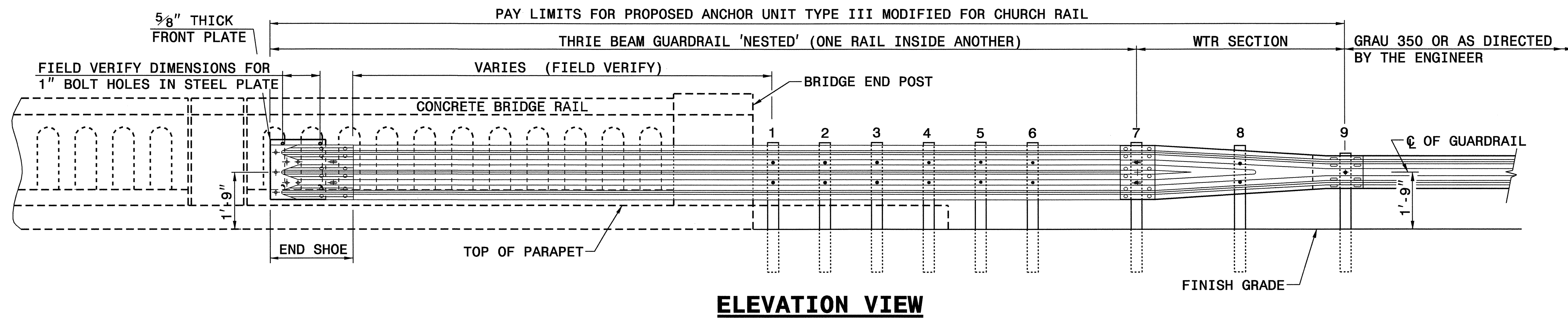


**PROJECT SERVICES UNIT
STANDARDS AND SPECIAL DESIGN**
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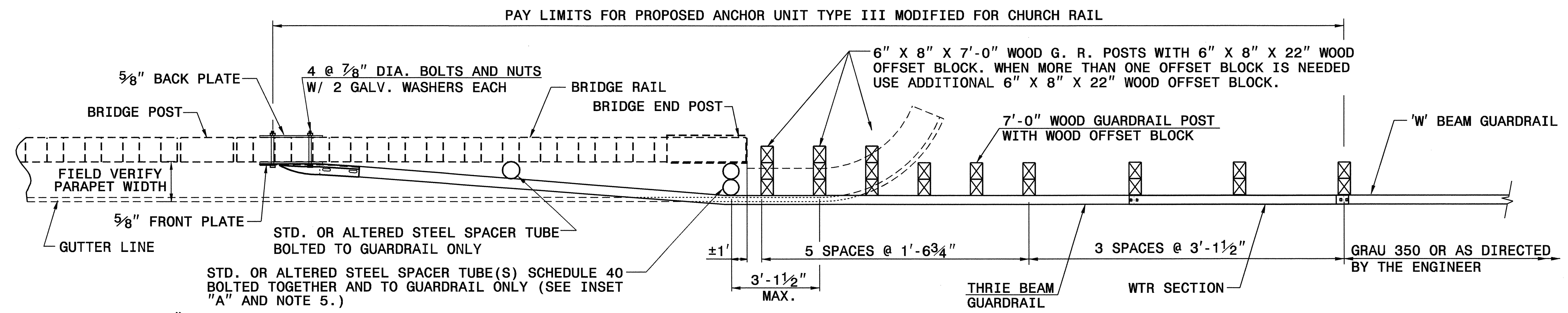
**GUARDRAIL ANCHOR UNIT
TYPE III MODIFIED
FOR POST & BEAM RAIL**

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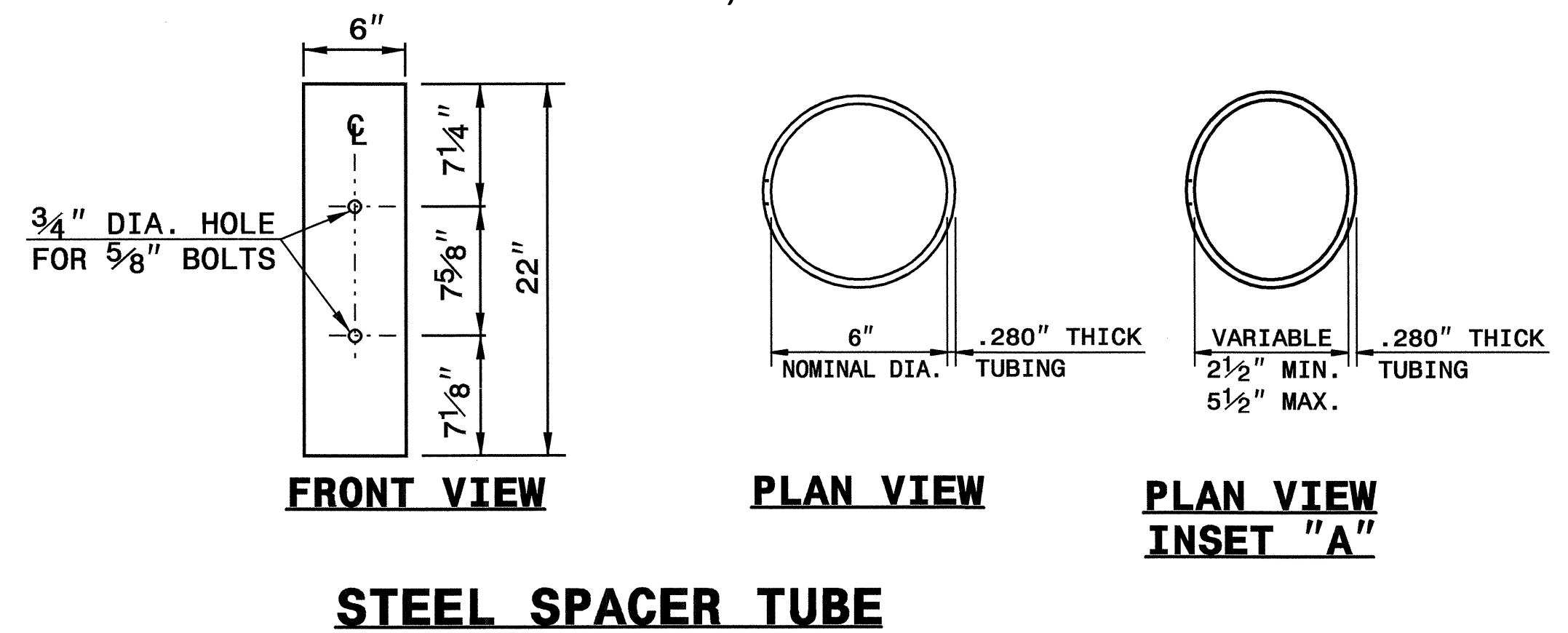
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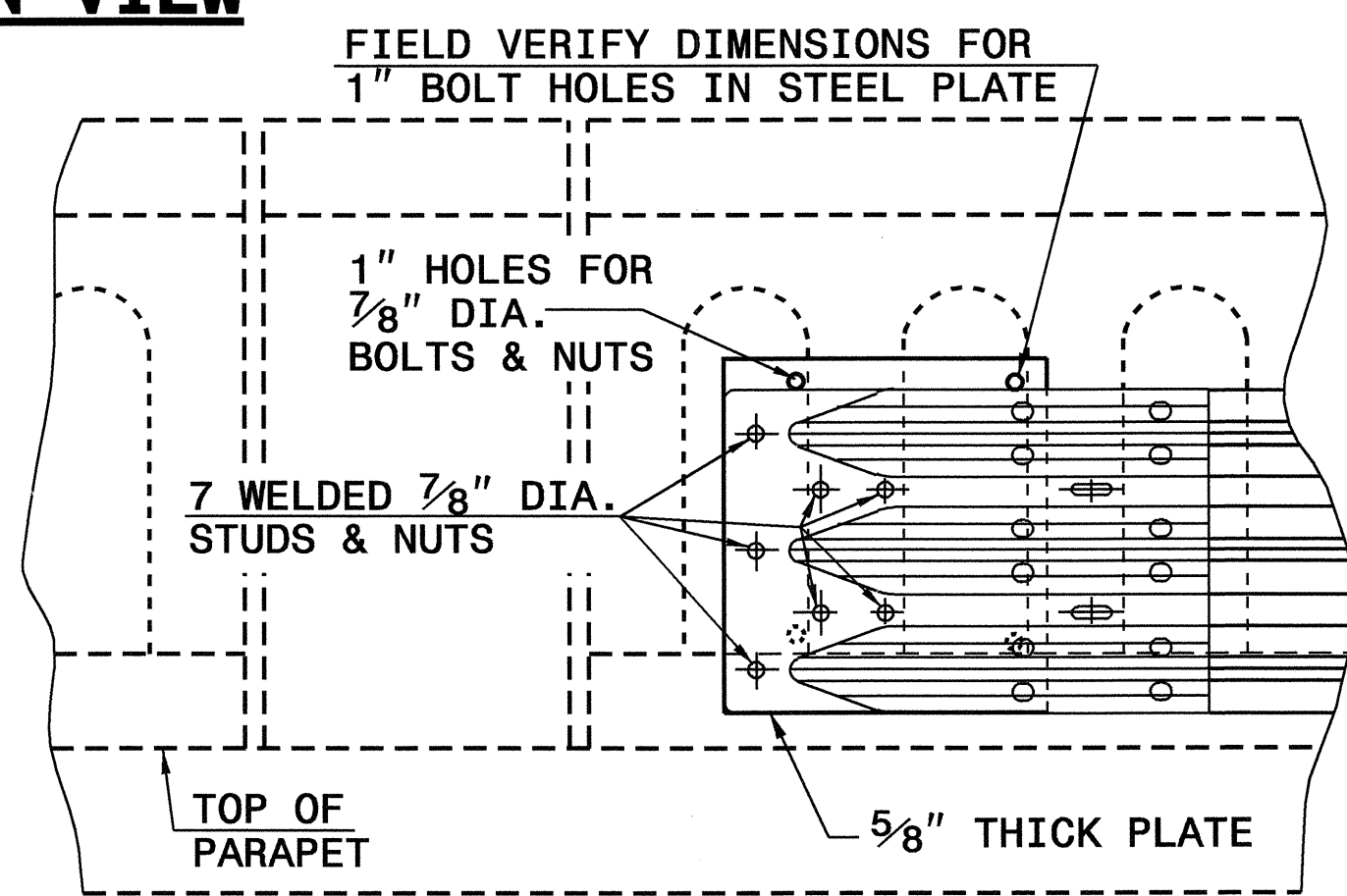
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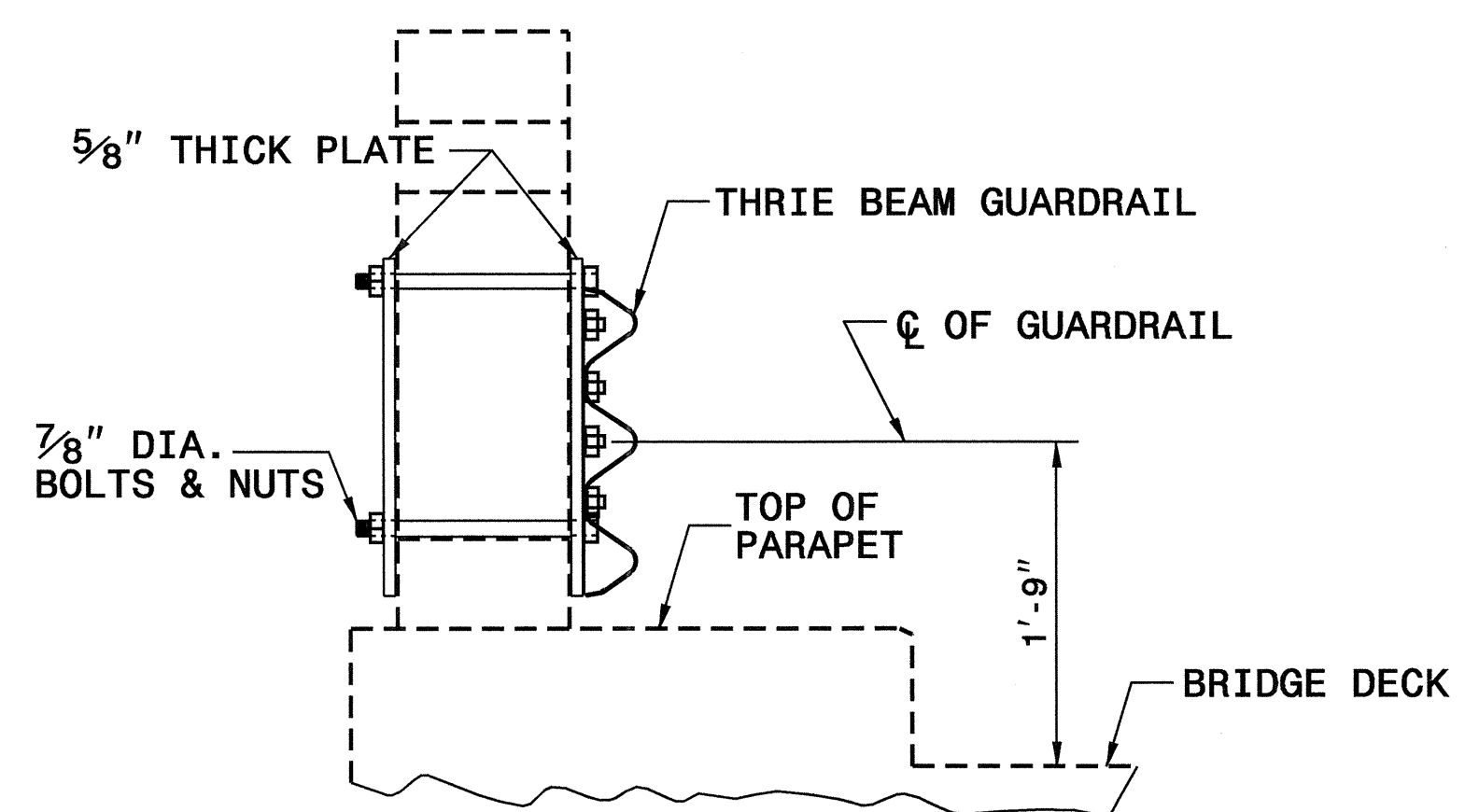
PLAN VIEW



STEEL SPACER TUBE

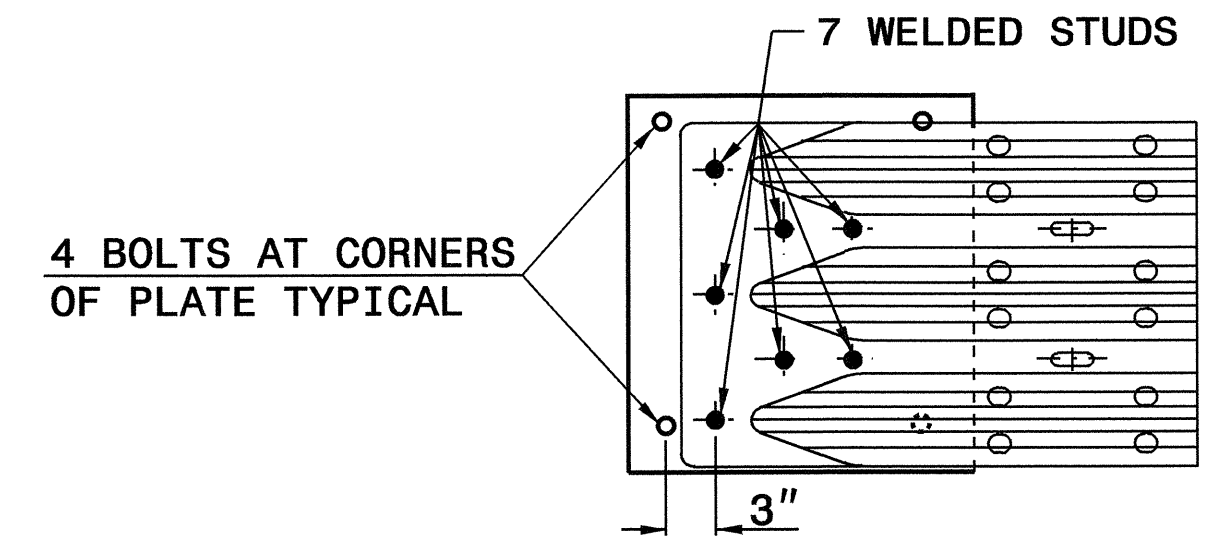


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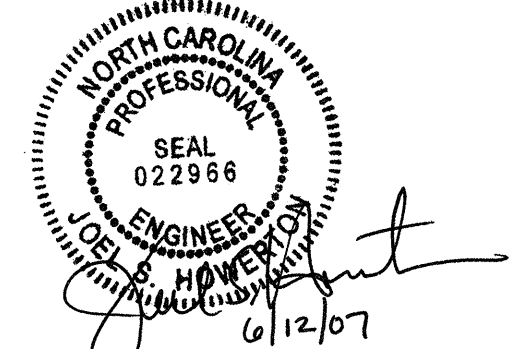


SECTION VIEW

GUARDRAIL ATTACHMENT TO BRIDGE POST



- GENERAL NOTES:**
1. USE NUTS, BOLTS, AND WASHERS CONFORMING TO THE REQUIREMENTS OF A.S.T.M. A-307 AND GALVANIZED IN ACCORDANCE WITH SECTION 1076 OF STAND. SPECS.
 2. TAP NUTS FOR THE 7/8" DIA. STUDS AND BOLTS AFTER GALVANIZING SEE A.S.T.M. A-563.
 3. USE PLATES AND TUBES CONFORMING TO THE REQUIREMENTS OF A.S.T.M. A-36 AND GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH SECTION 1076 OF STAND. SPECS.
 4. ADDITIONAL FIELD HOLES MAY BE DRILLED IN STEEL RAIL AS DIRECTED BY THE ENGINEER.
 5. INSTALL FACE OF GUARDRAIL AS NEAR AS POSSIBLE TO PLUMB WITH THE PARAPET FACE AT BRIDGE END POST SPACER TUBE LOCATION BY USING STANDARD OR ALTERED SPACER TUBES OR A COMBINATION THEREOF OR AS DIRECTED BY THE ENGINEER. FOR VERY SMALL PARAPET WIDTHS, GUARDRAIL MAY BE INSTALLED AGAINST BRIDGE RAIL WITHOUT SPACER TUBES.
 6. DO NOT DRILL BRIDGE RAIL IN ORDER TO INSTALL GUARDRAIL ANCHOR UNIT.
 7. ATTACH THREADED STUDS TO PLATE WITH 1/4" WELDS ALL AROUND.
 8. PROVIDE SHOP DRAWINGS OF THE PLATES TO THE ENGINEER FOR APPROVAL BEFORE FABRICATING THE PLATES.
 9. LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW.
 10. SEE 2002 ROADWAY STANDARD DRAWING 862.03 SHEET 4 FOR ADDITIONAL INFORMATION ON THE TYPE III ANCHOR UNIT.



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**GUARDRAIL ANCHOR UNIT
TYPE III MODIFIED
FOR CHURCH RAIL**

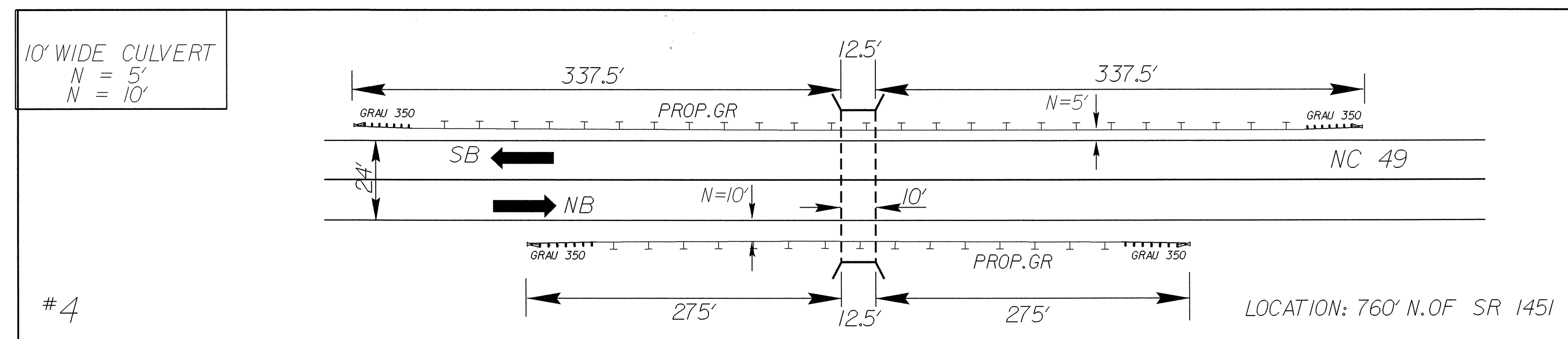
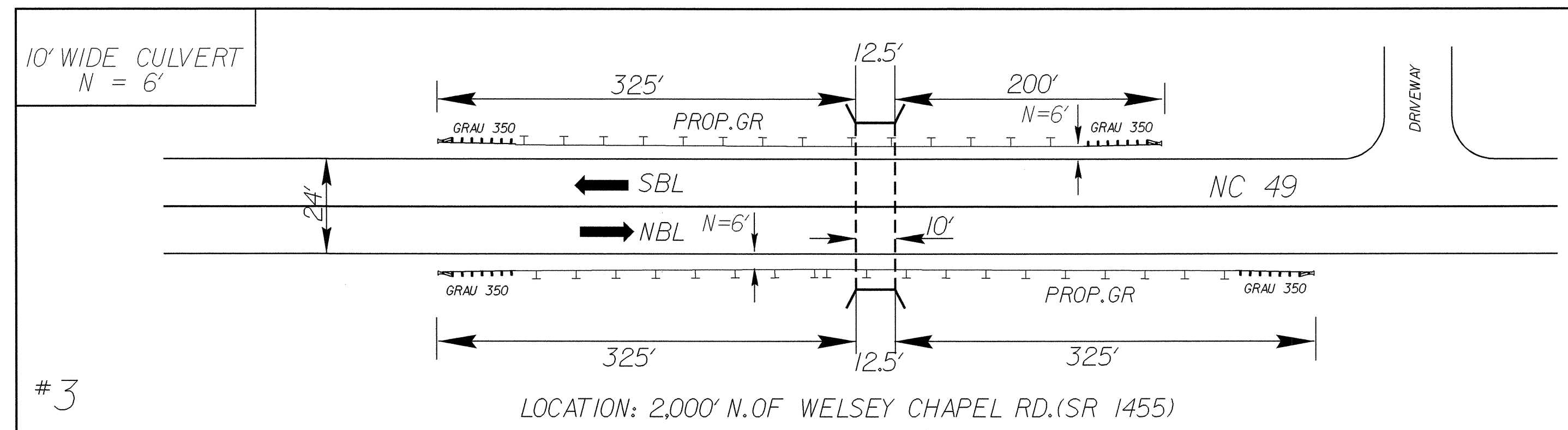
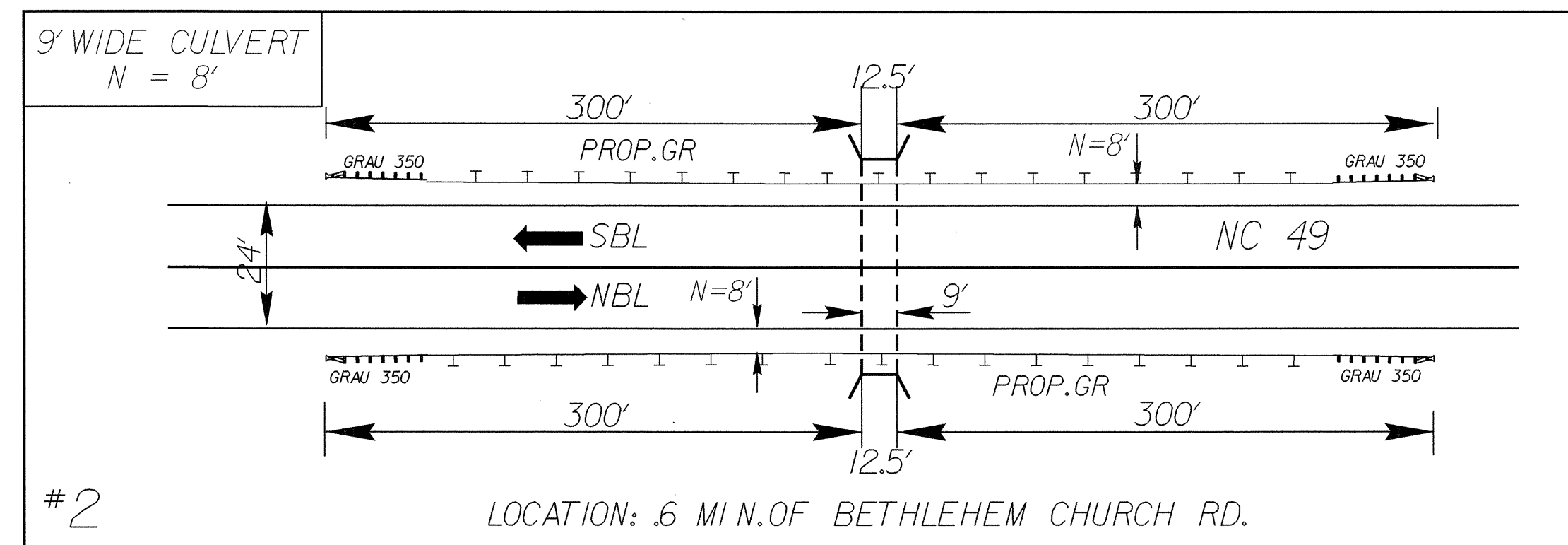
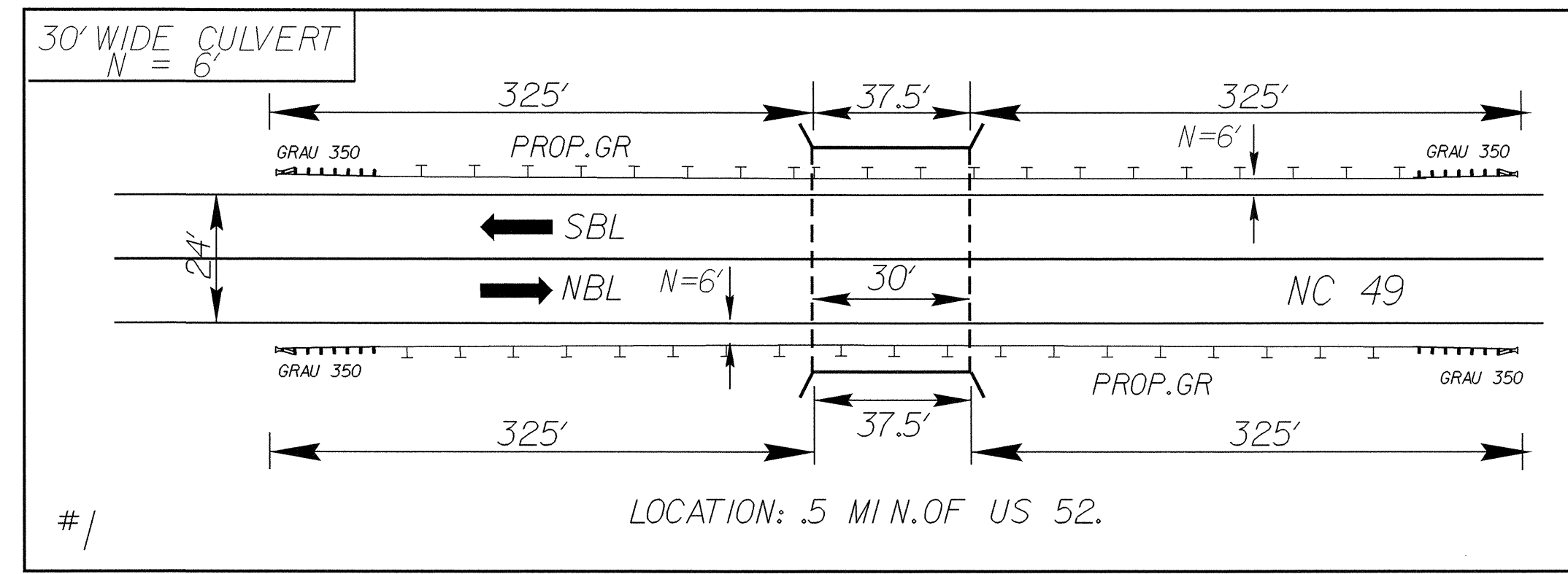
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SEE SHEET 2-X FOR VICINITY MAP

PROJECT REFERENCE NO. R-4413	SHEET NO. 2-B
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SPAL 18903 GREGORY E. BREW 6-6-07	

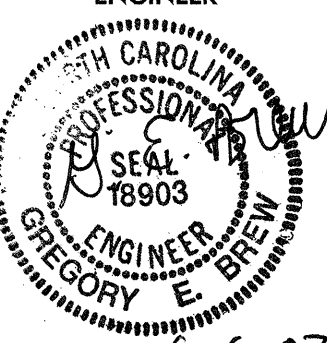


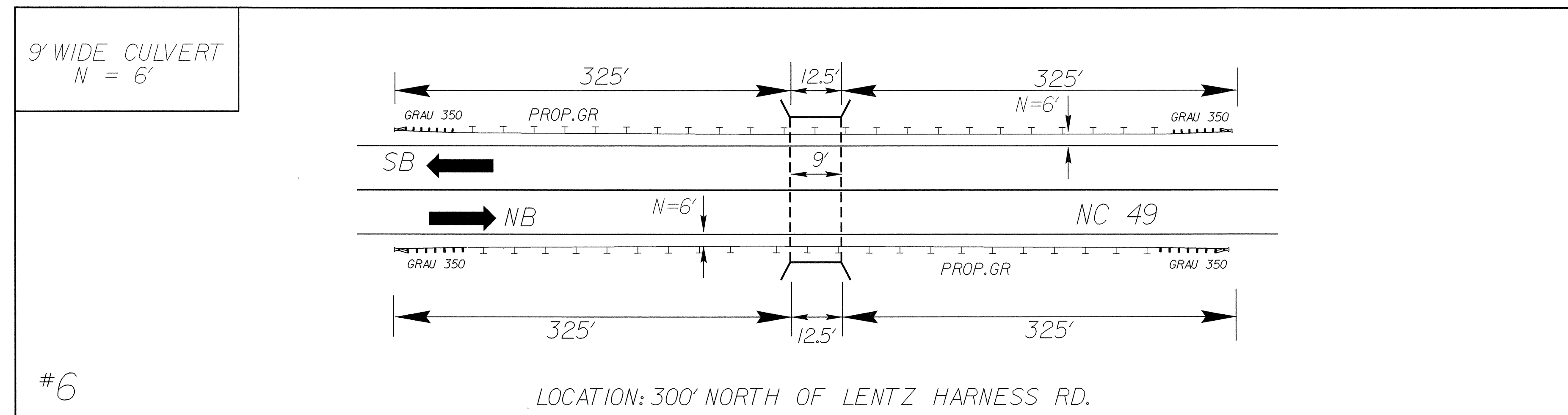
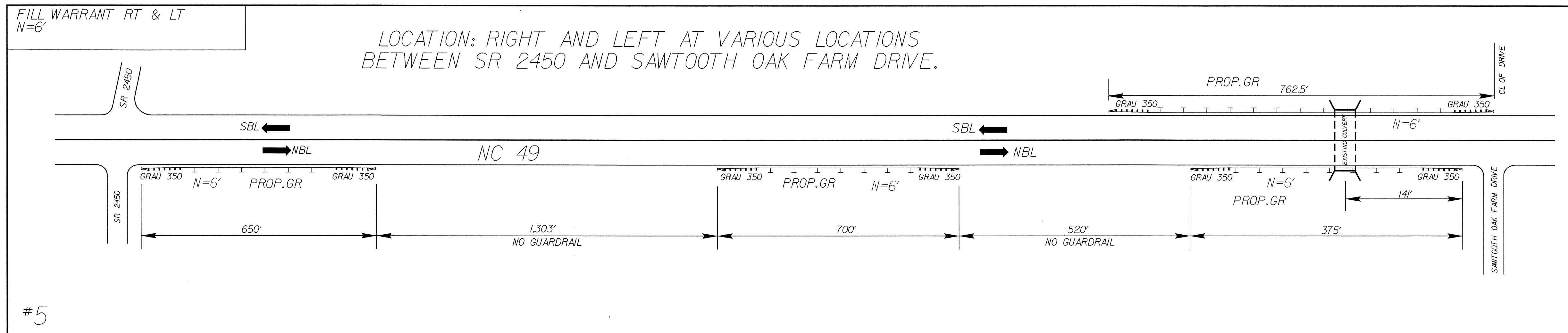
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SEE SHEET 2-X FOR VICINITY MAP

PROJECT REFERENCE NO. R-4413	SHEET NO. 2-C
RAW SHEET NO.	
ROADWAY DESIGN ENGINEER	
	
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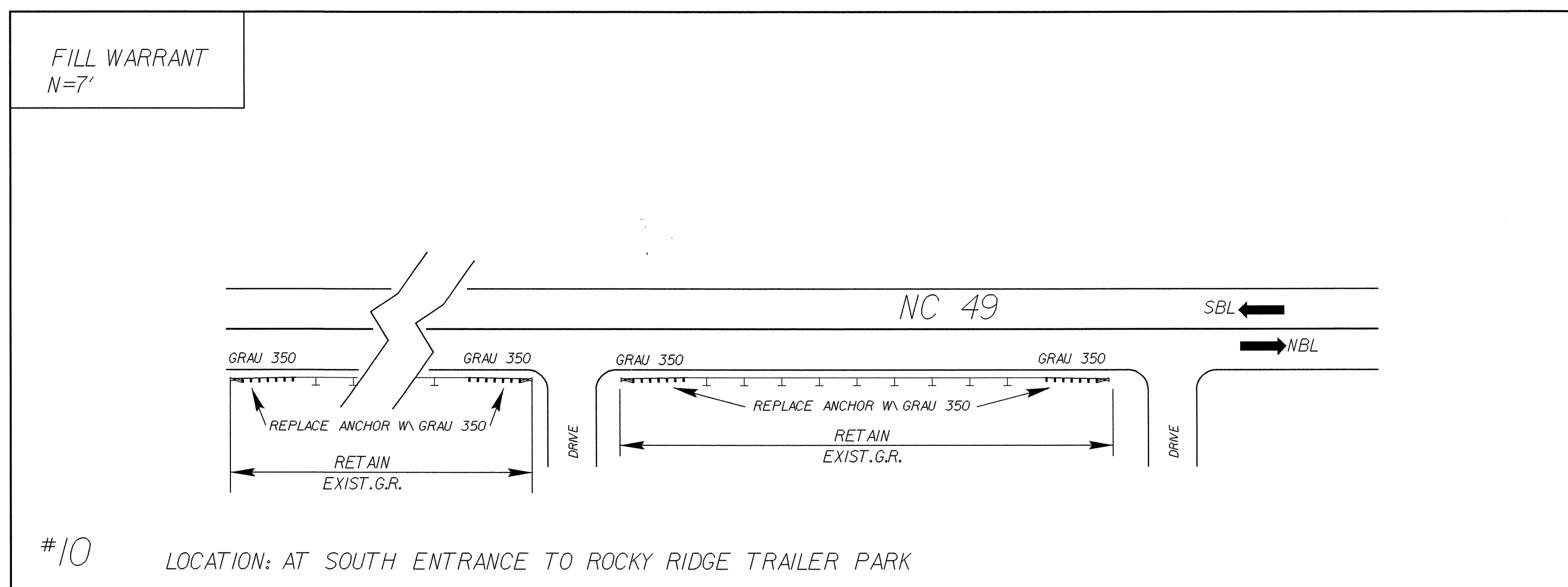
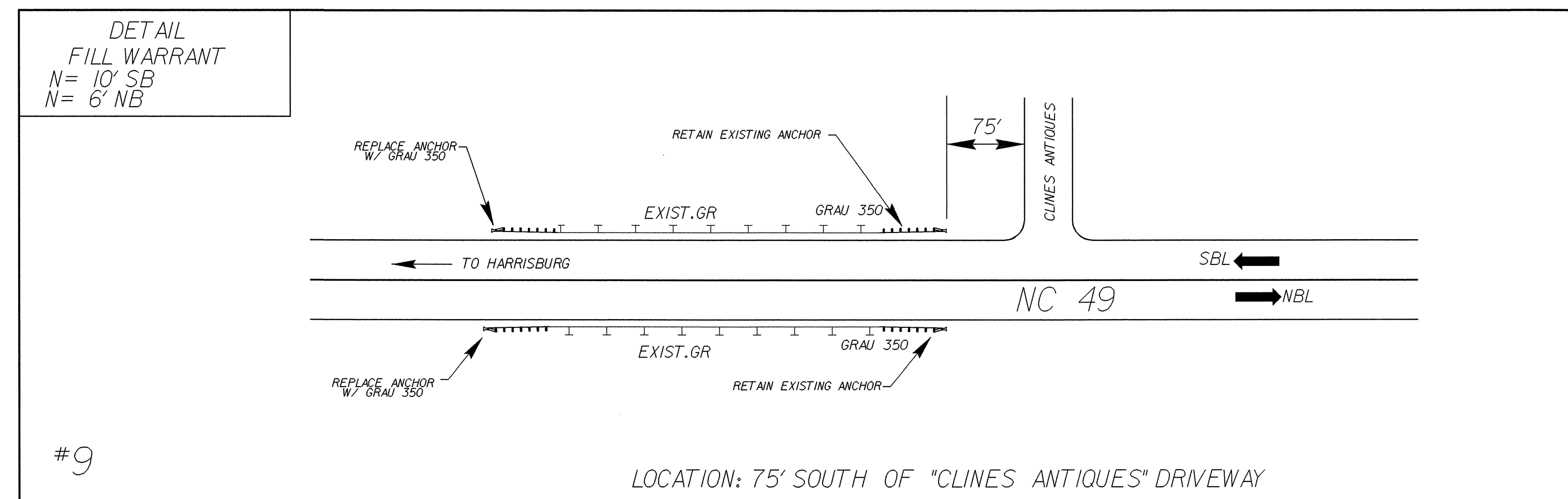
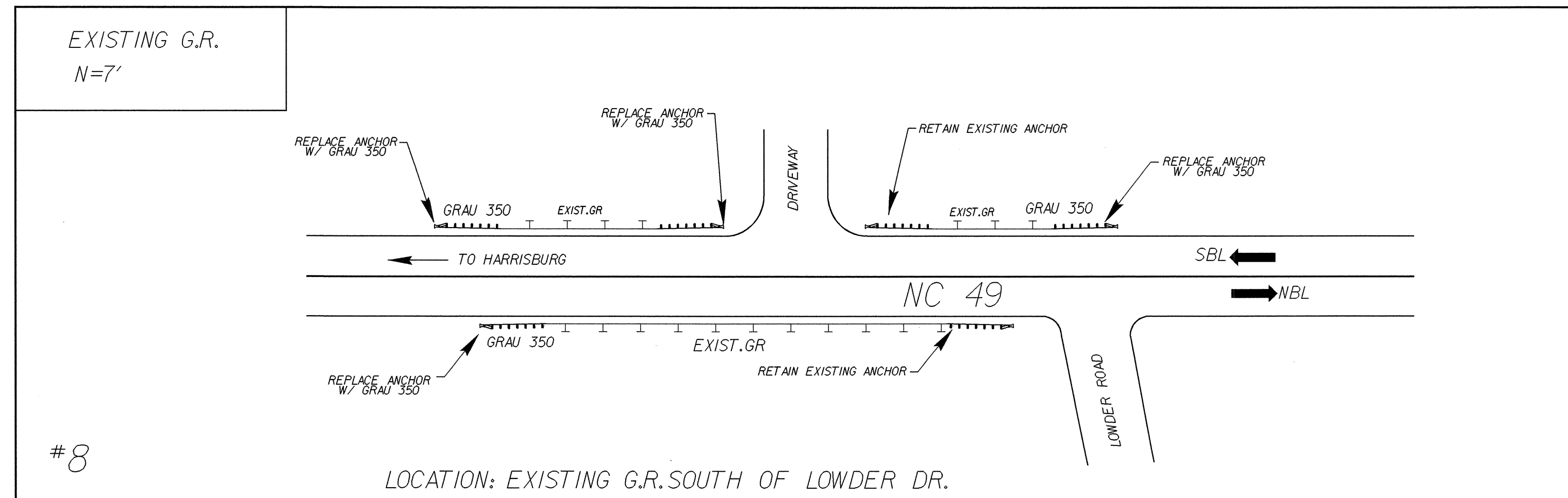
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SEE SHEET 2-X FOR VICINITY MAP

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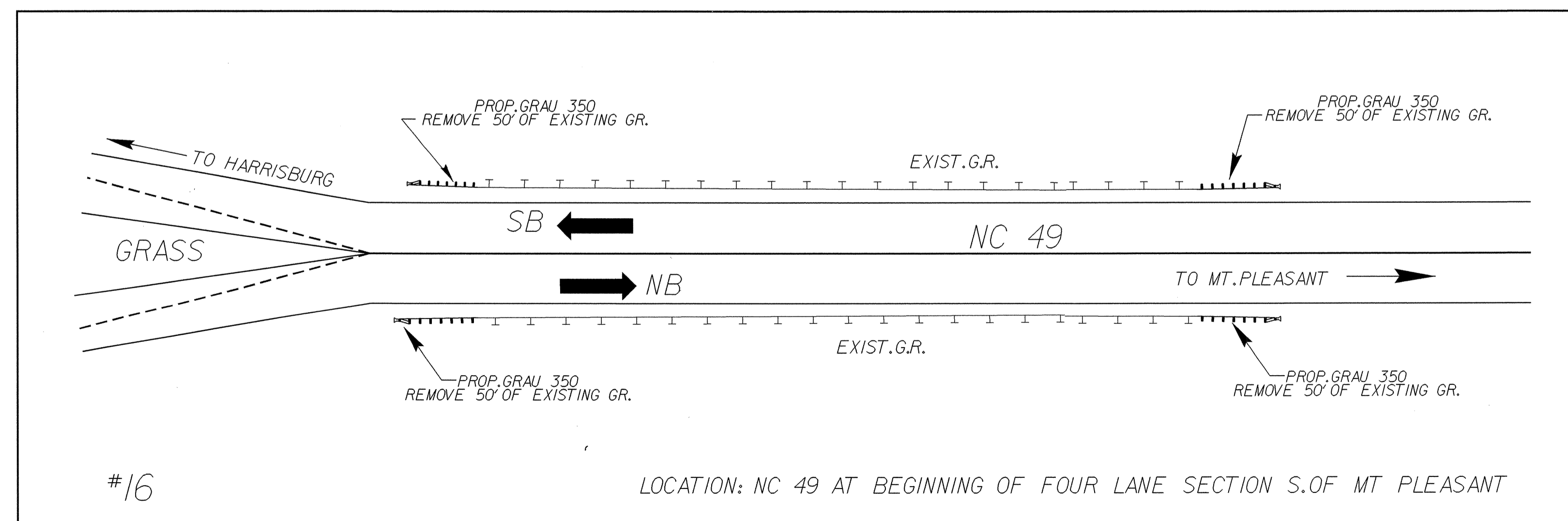
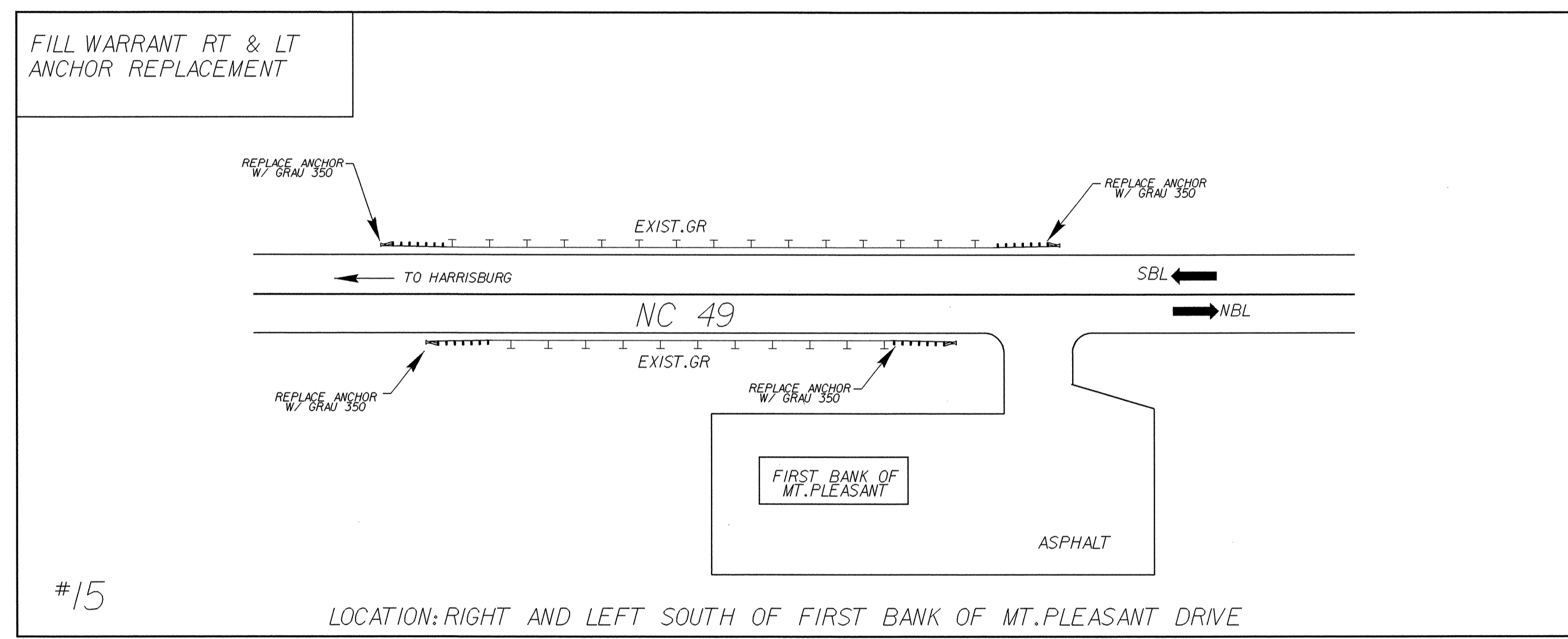
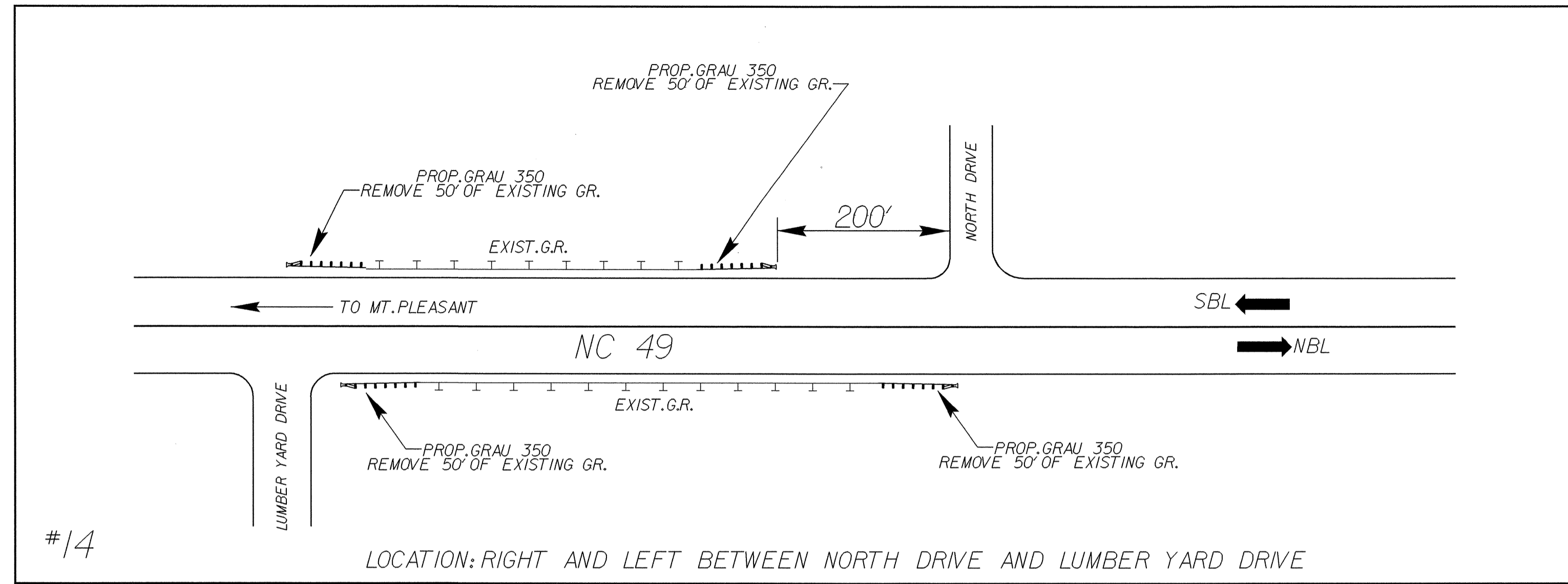
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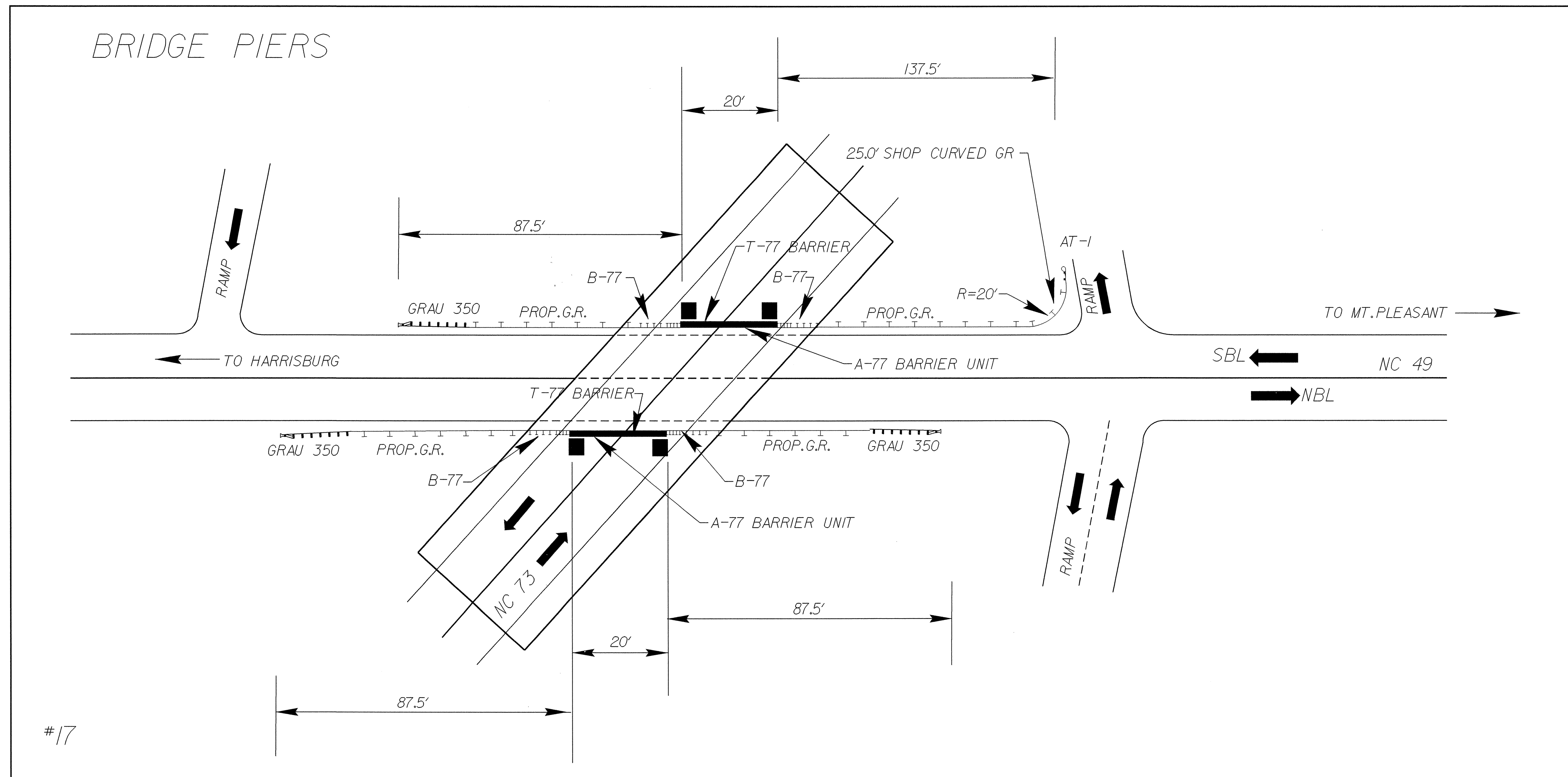
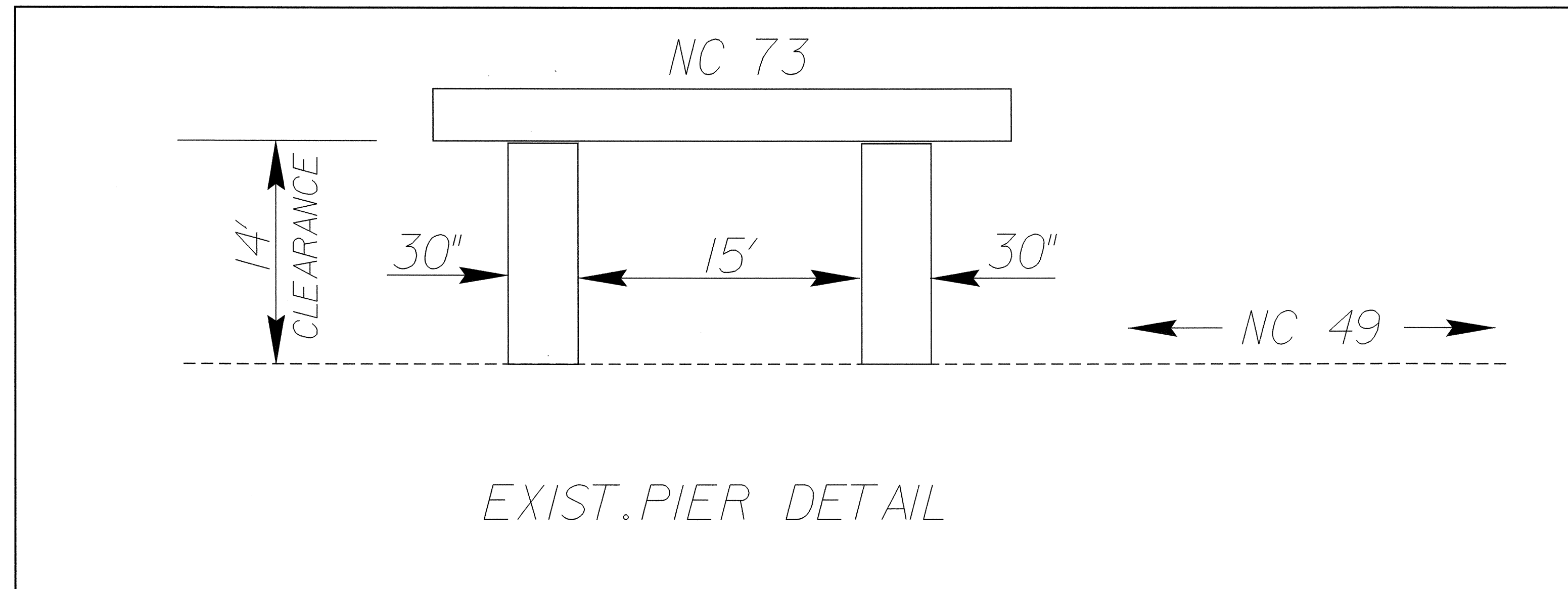
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SEE SHEET 2-X FOR VICINITY MAP

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ROADWAY DESIGN ENGINEER	



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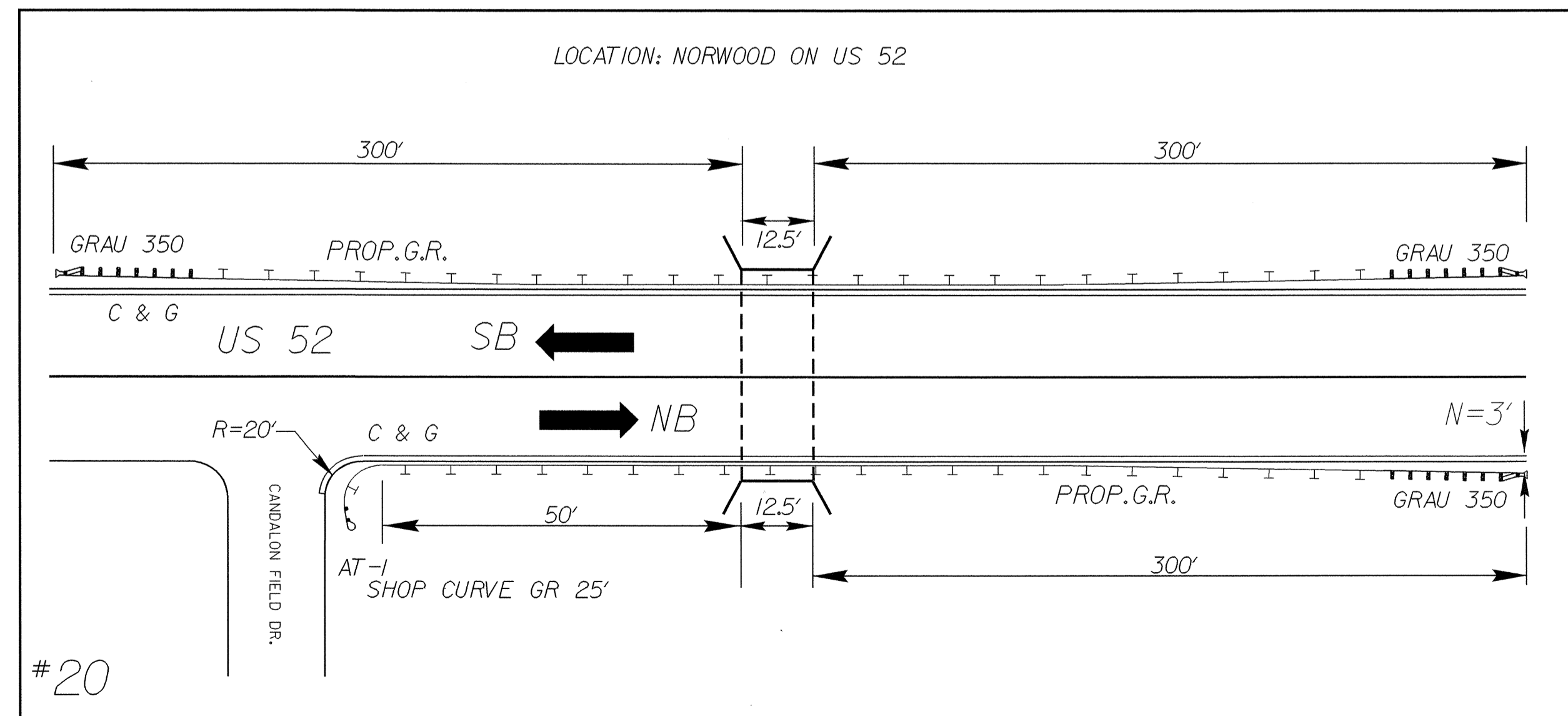
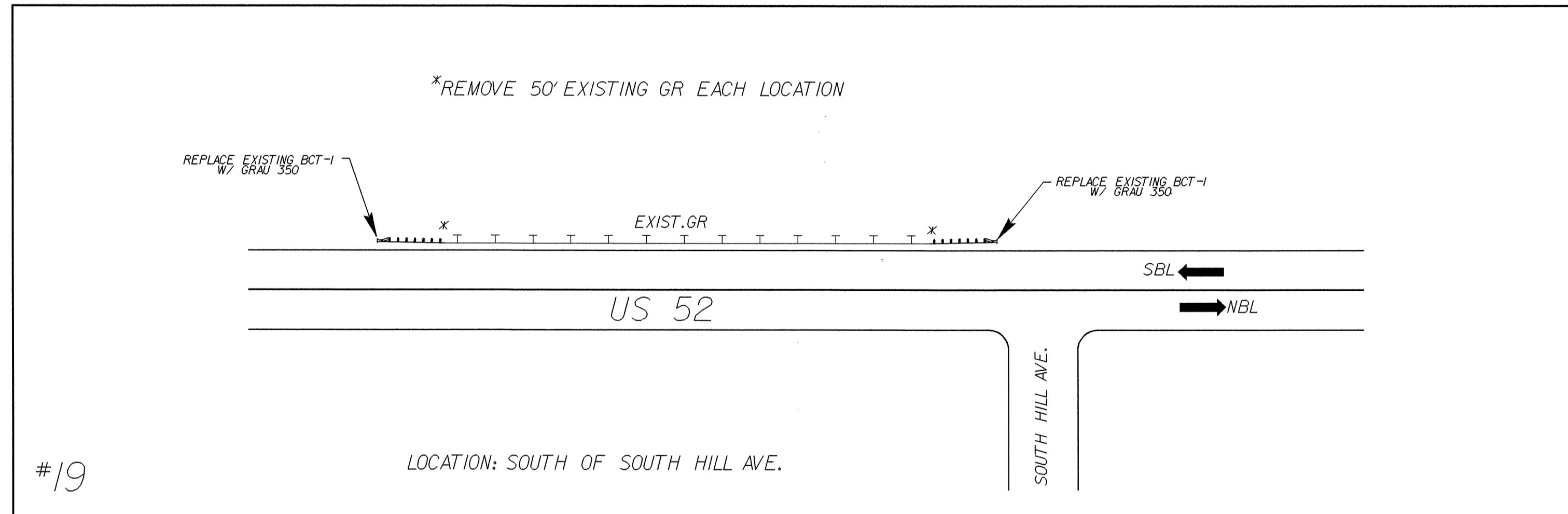
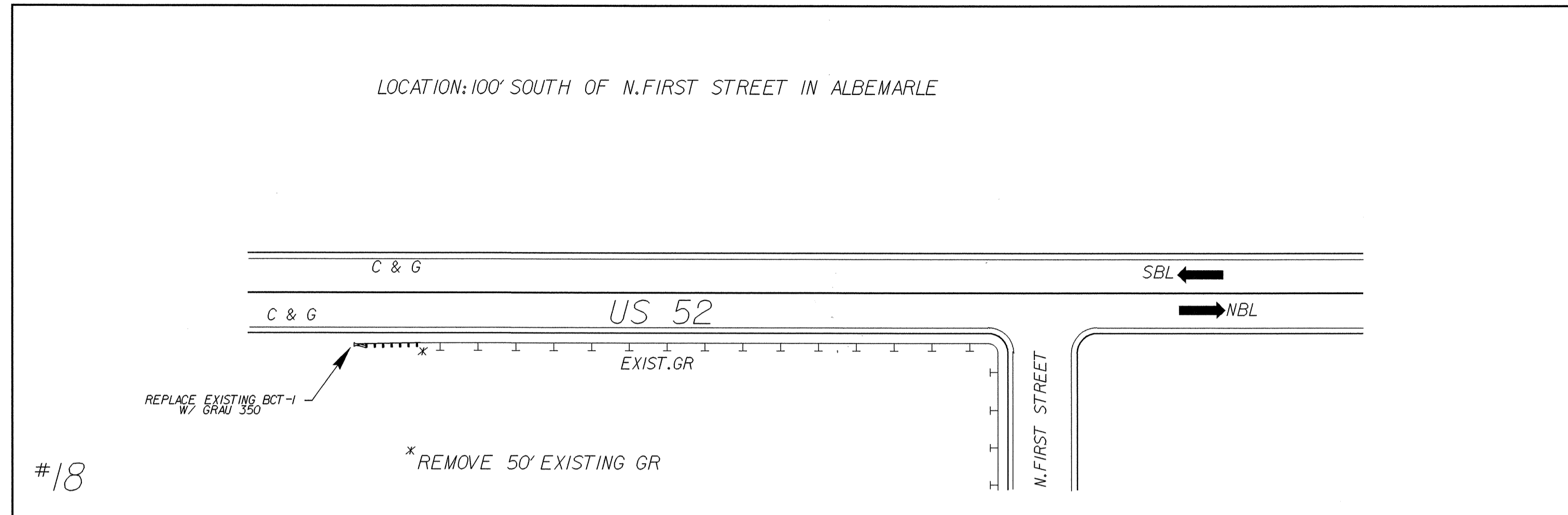
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SEE SHEET 2-X FOR VICINITY MAP
SEE SHEET 2-Y FOR VICINITY MAP

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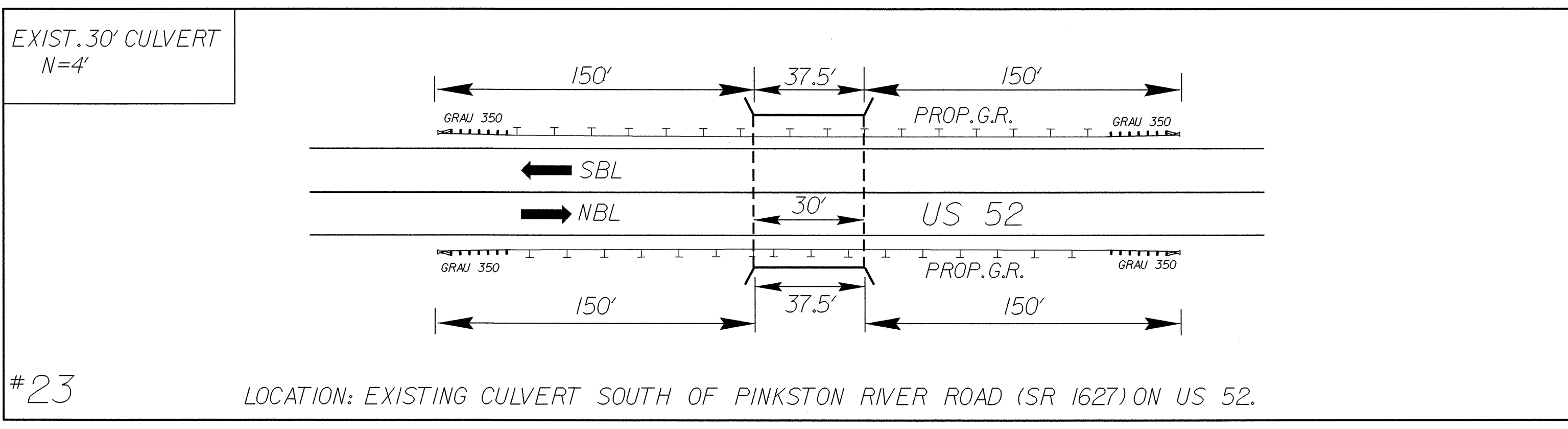
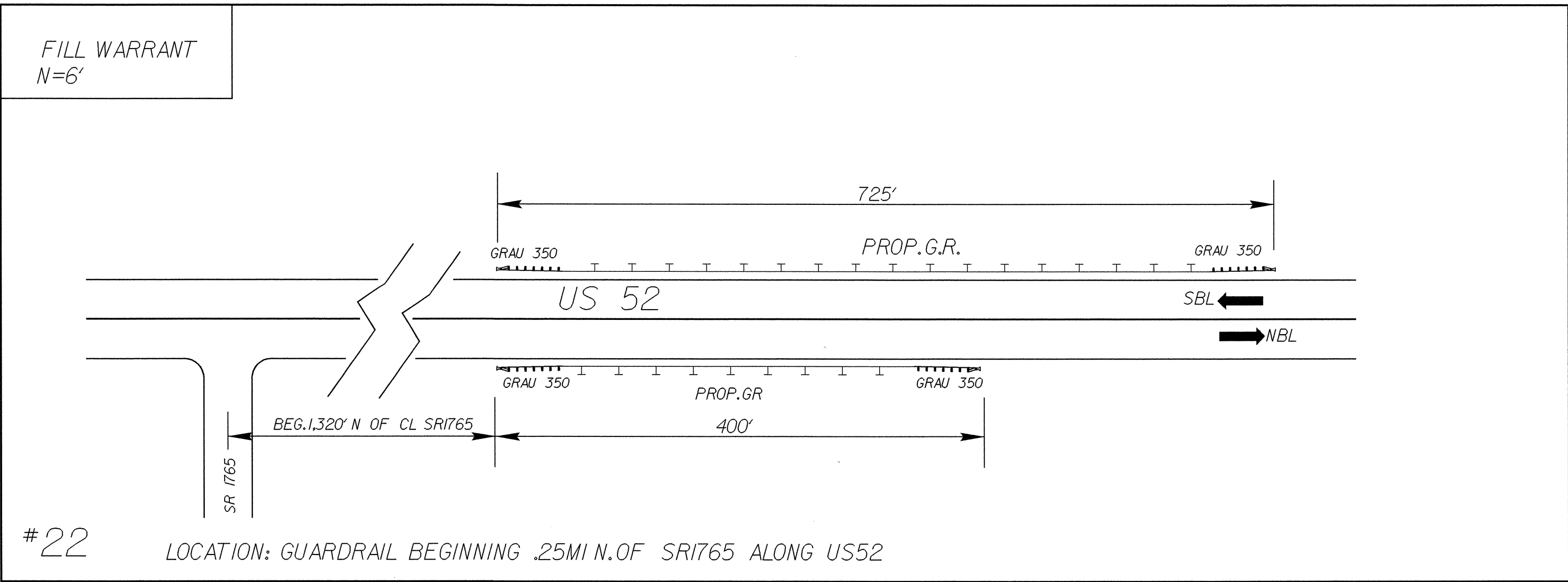
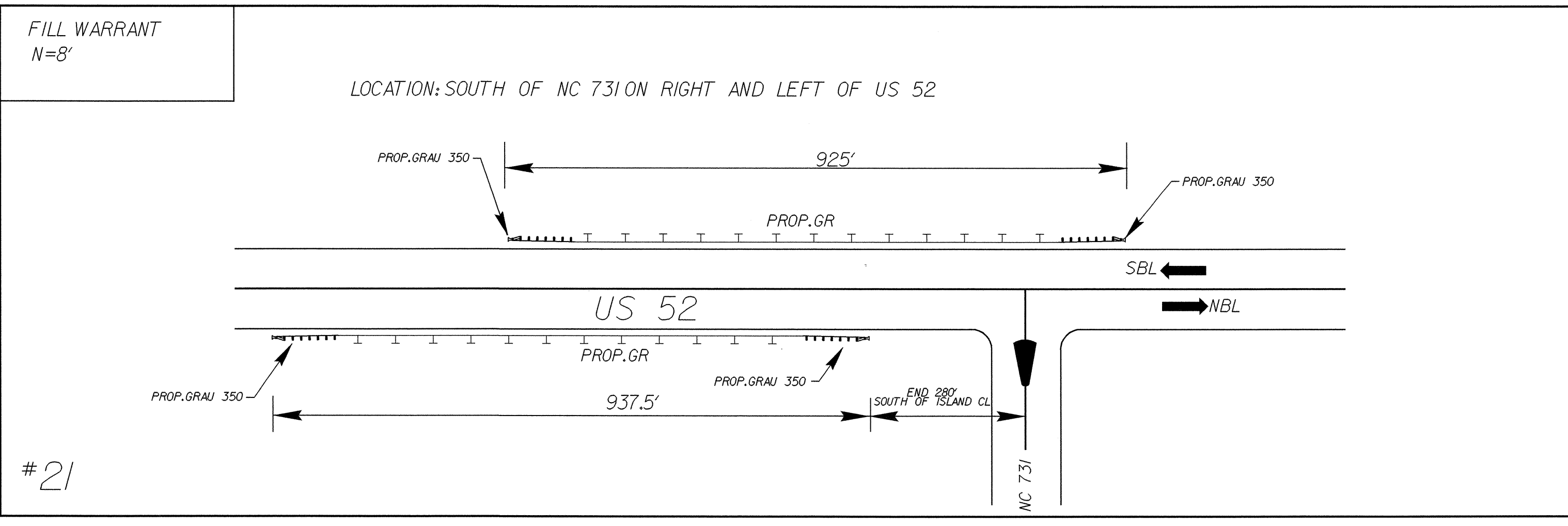


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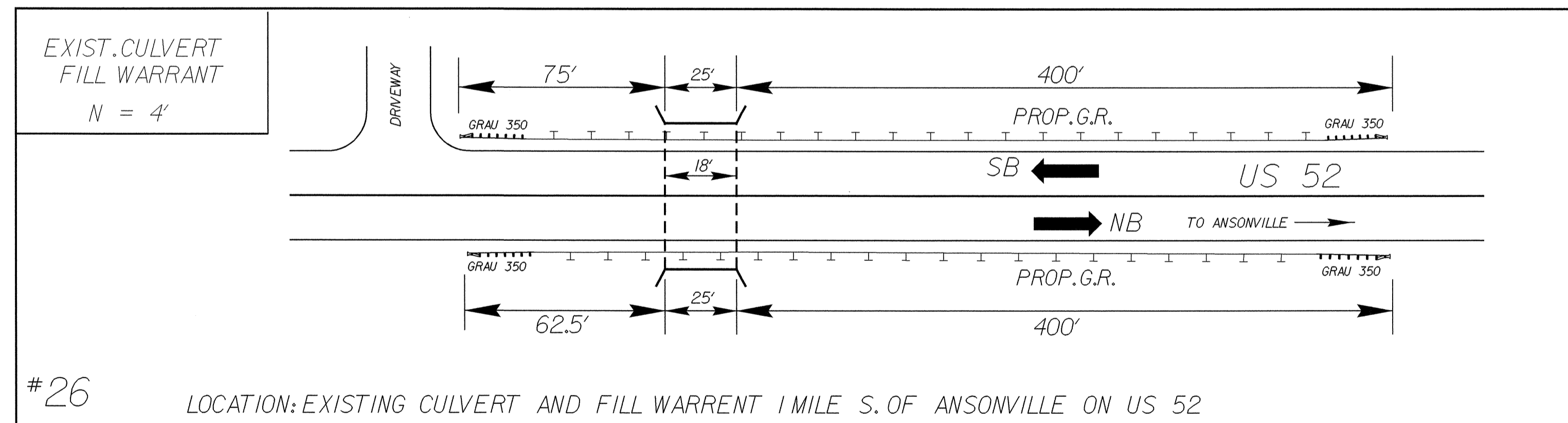
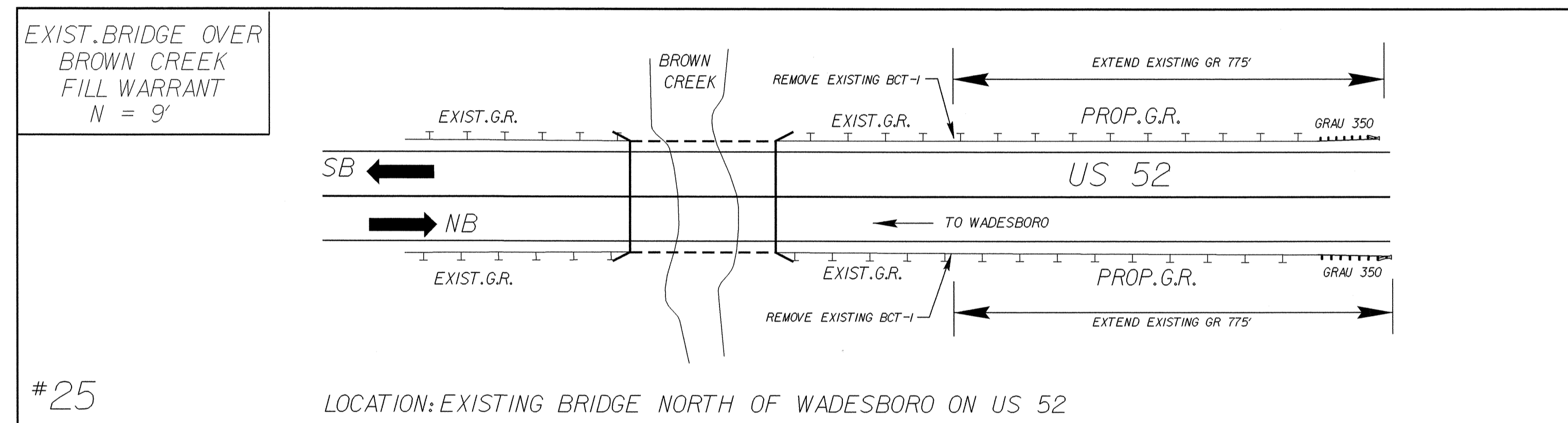
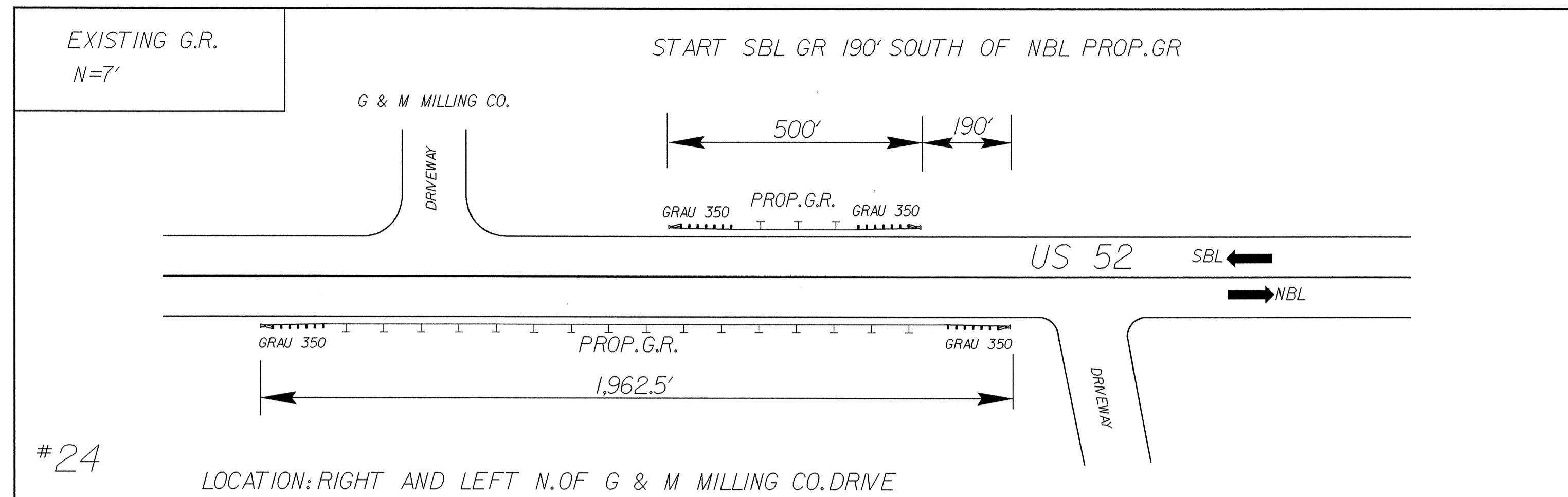


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SEE SHEET 2-Y FOR VICINITY MAP


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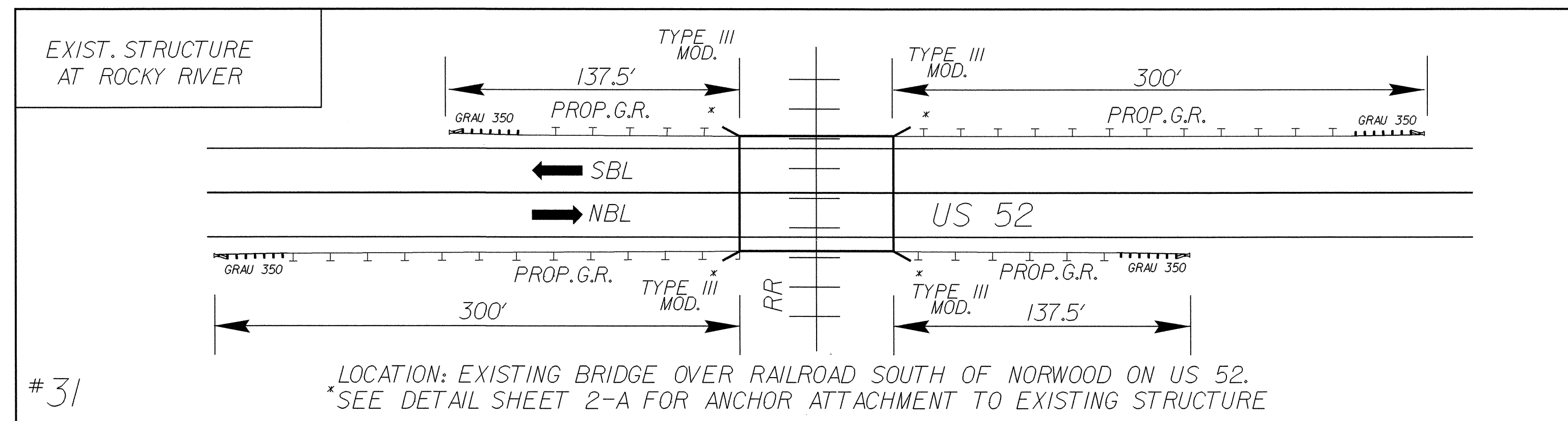
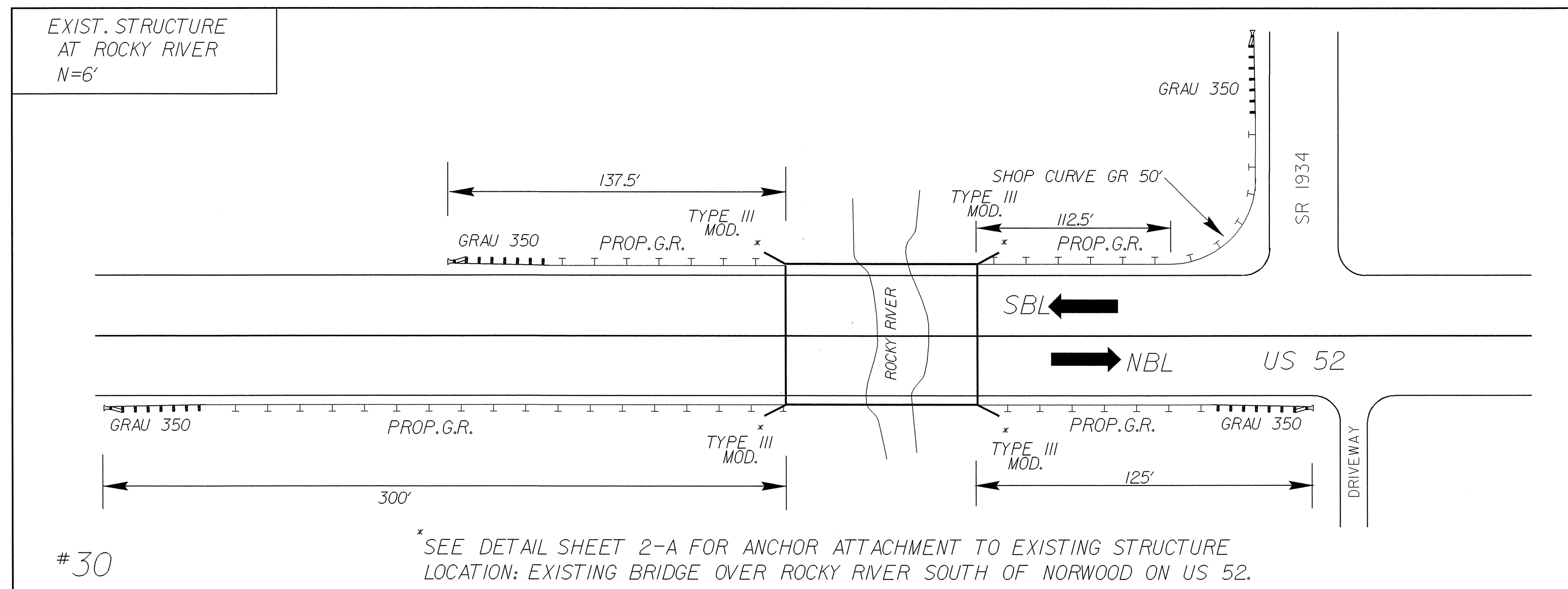


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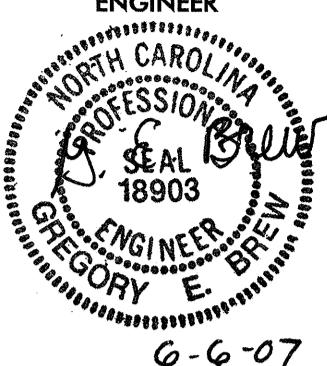


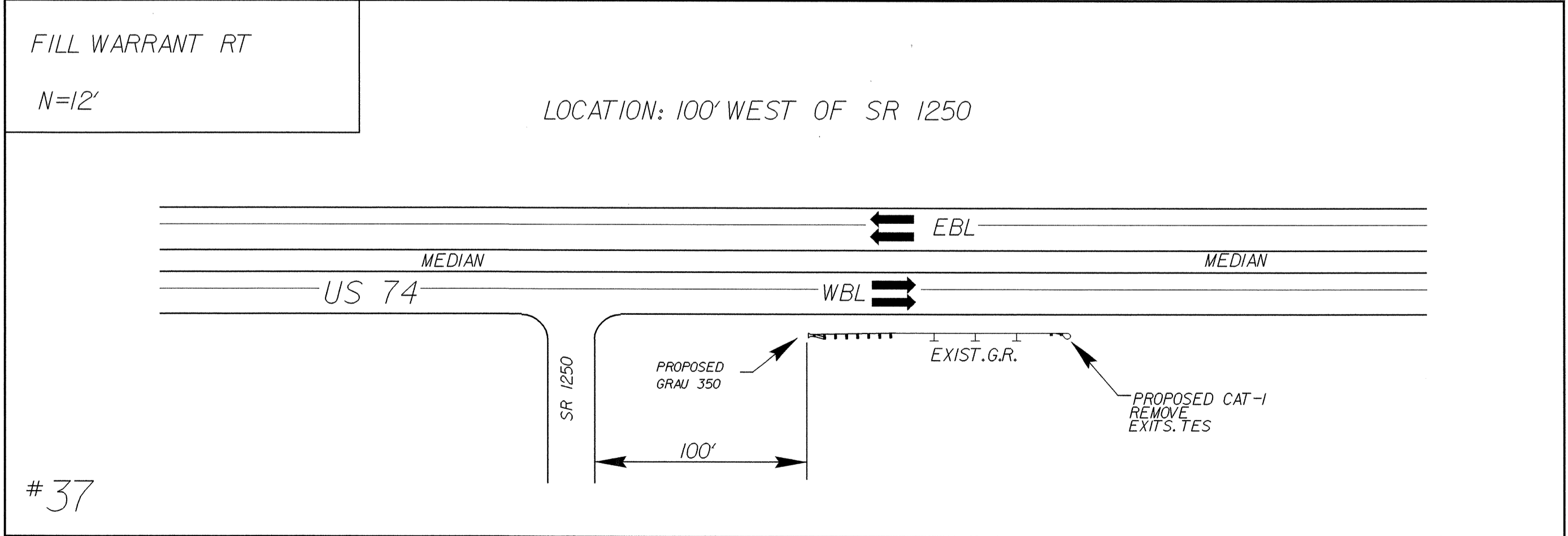
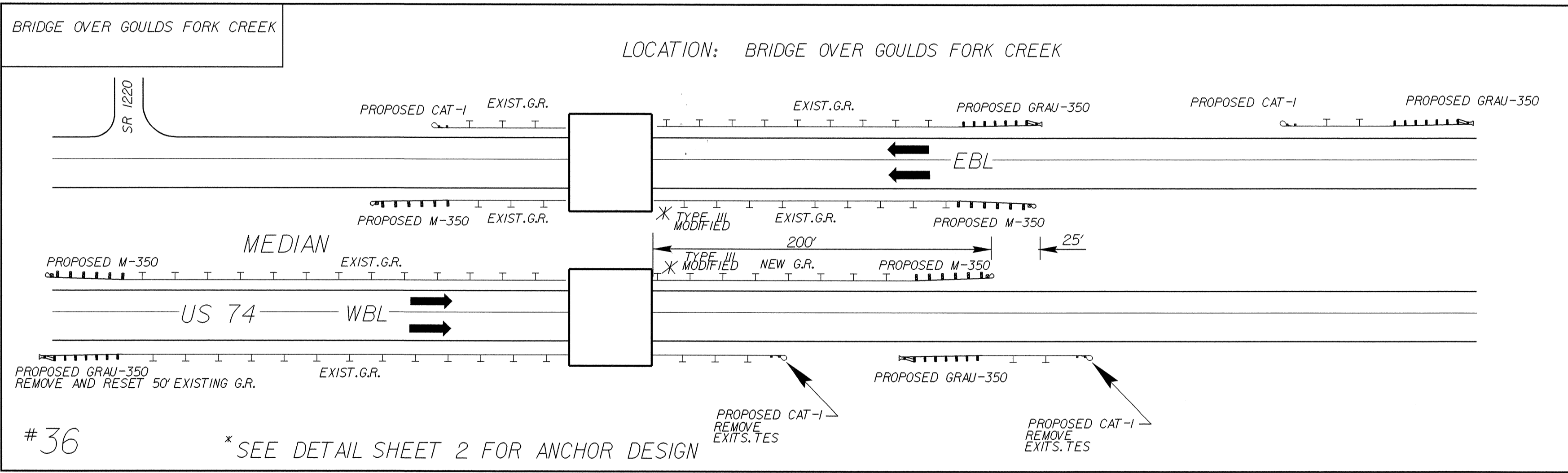
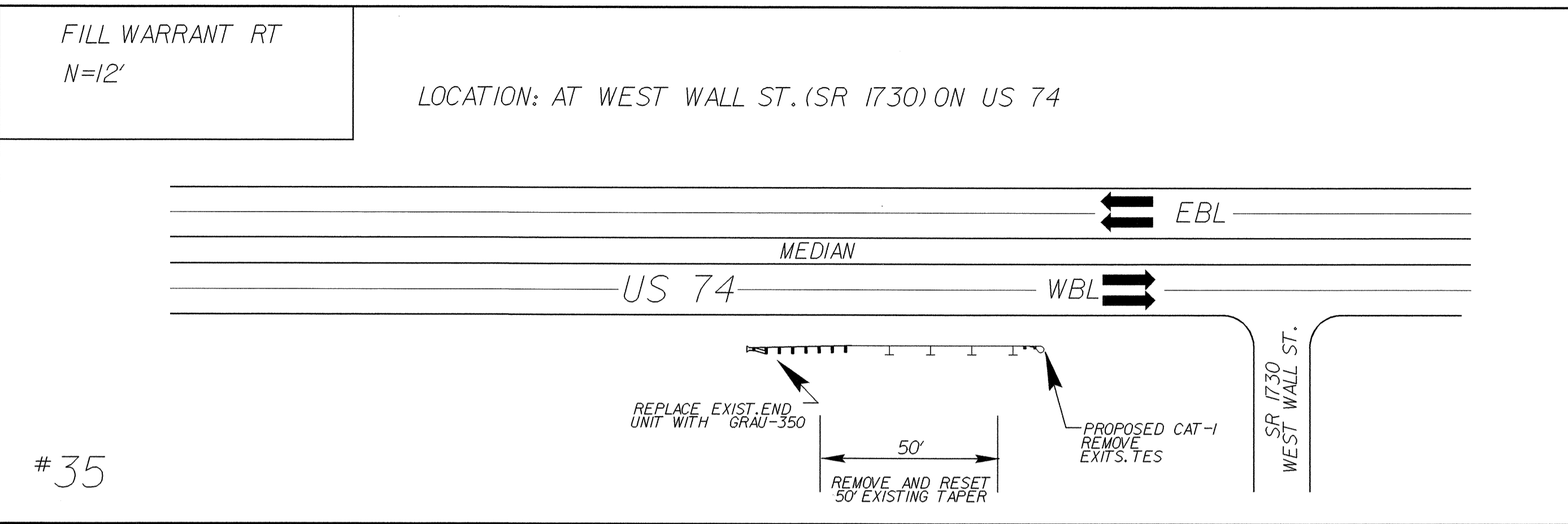
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SEE SHEET 2-Z FOR VICINITY MAP

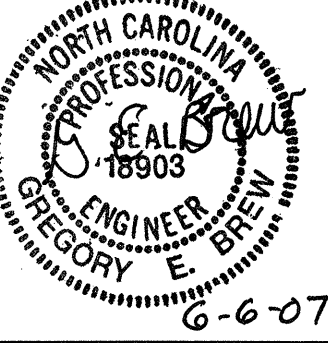
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ROADWAY DESIGN ENGINEER 	

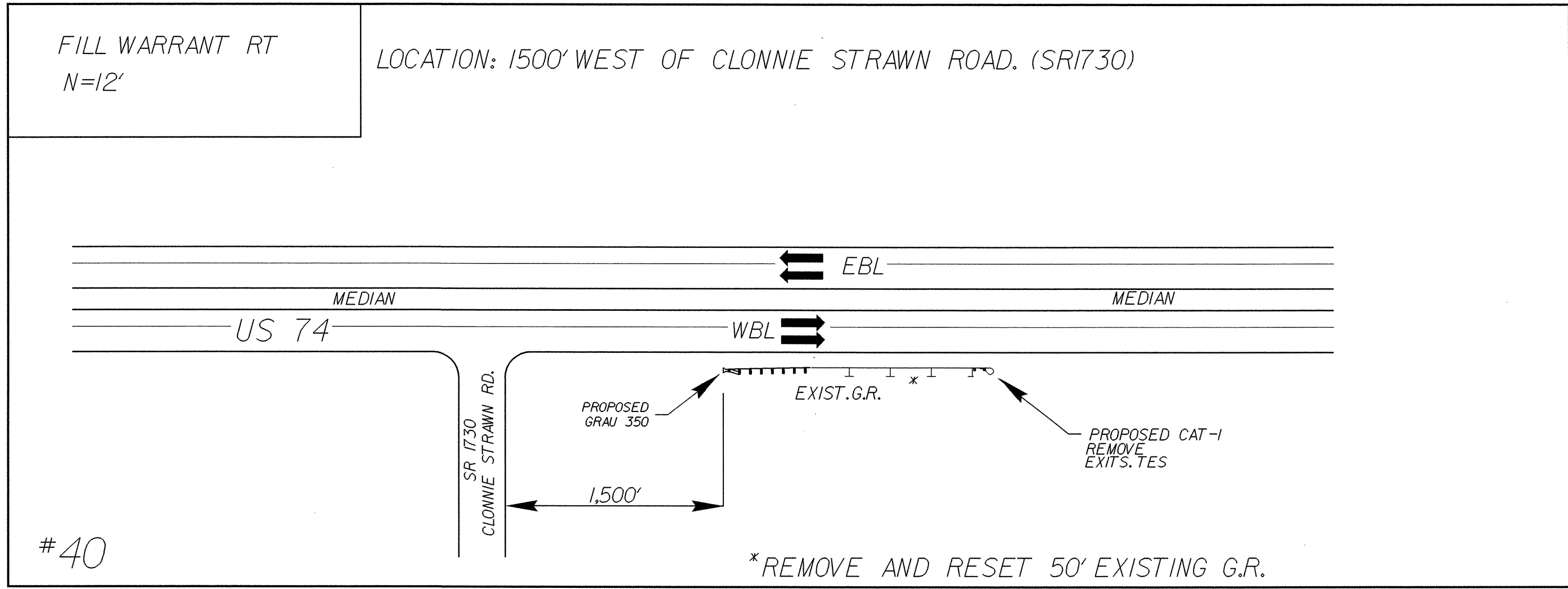
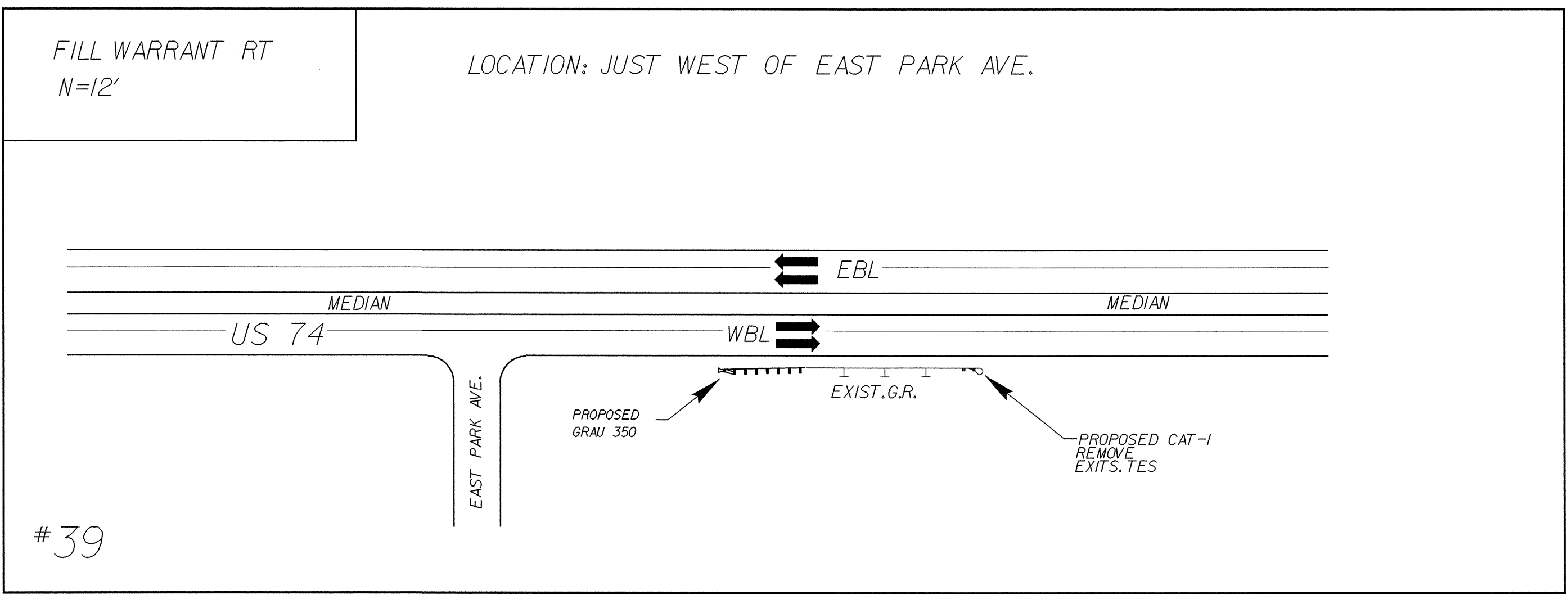
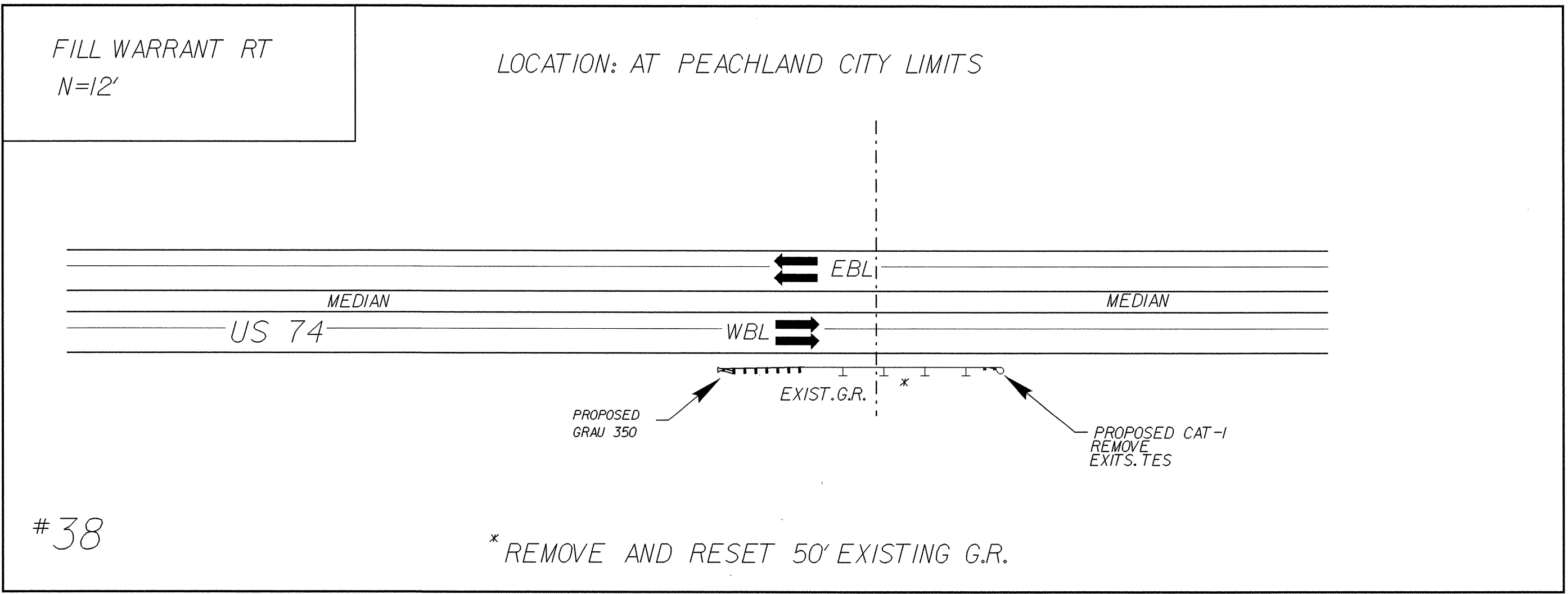


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ROADWAY DESIGN ENGINEER	
 GREGORY E. BIEW 6-6-07	

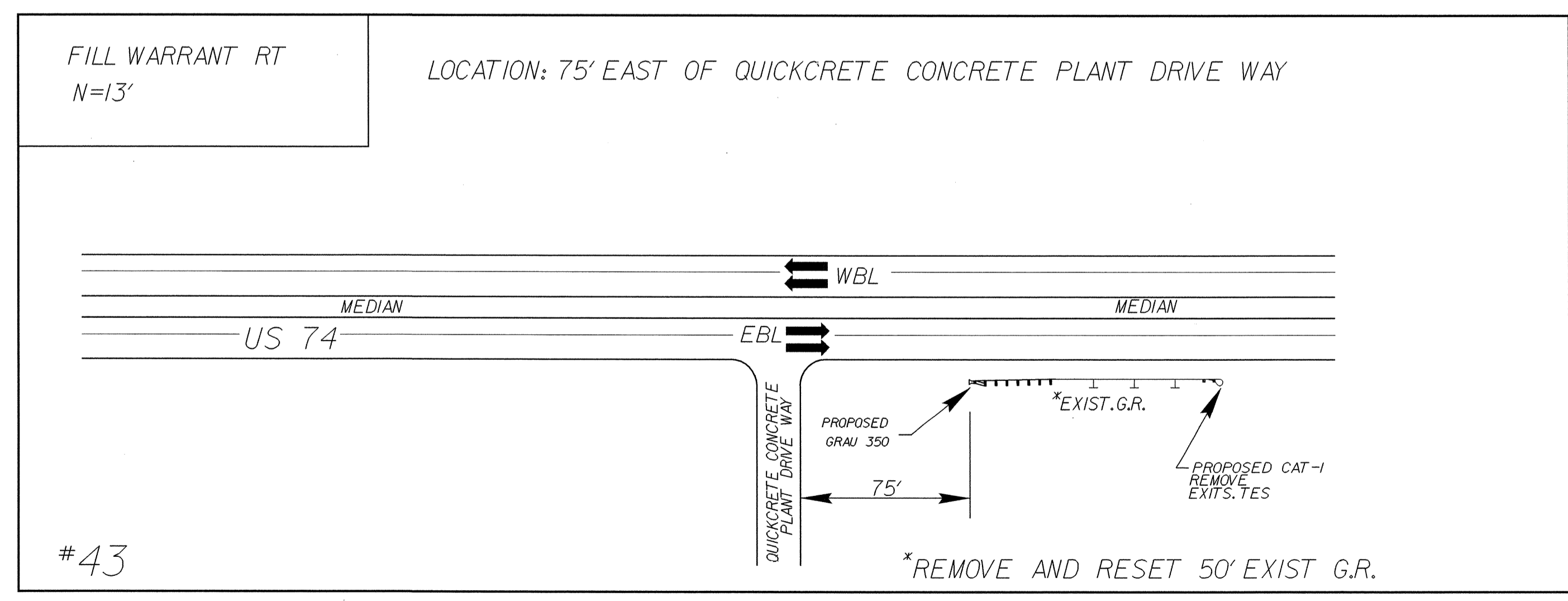
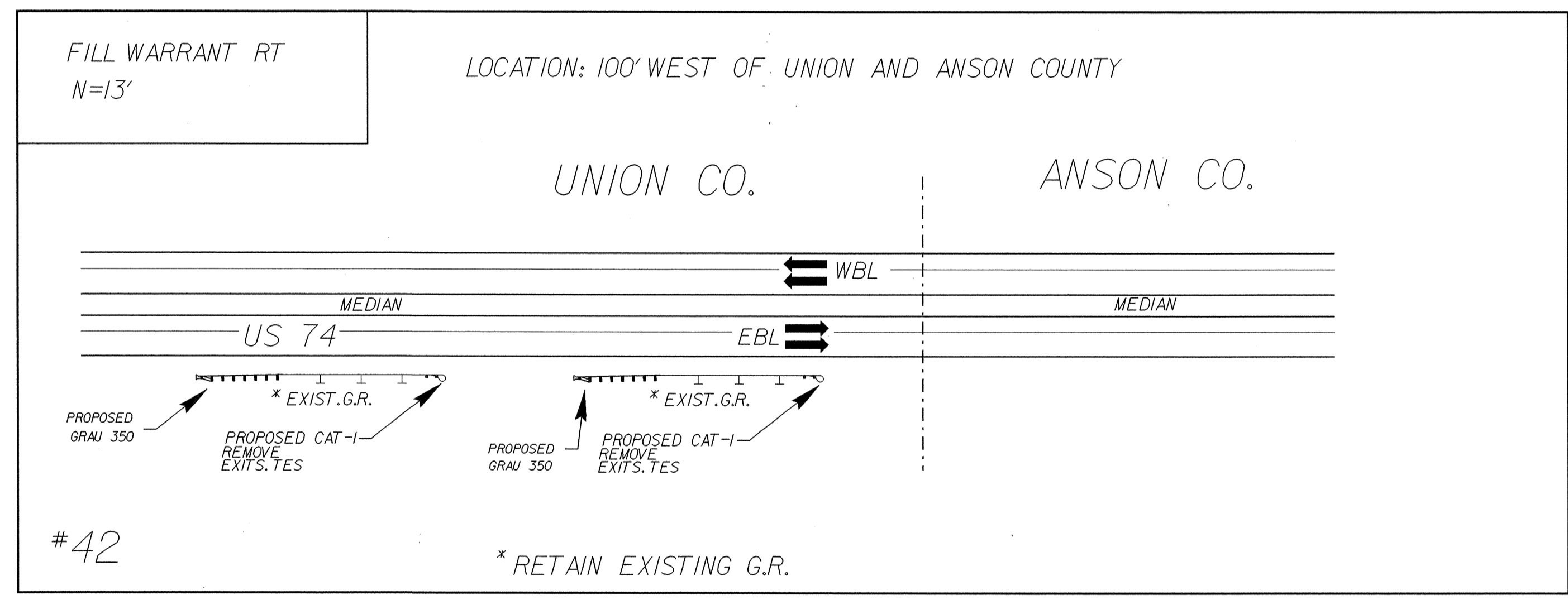
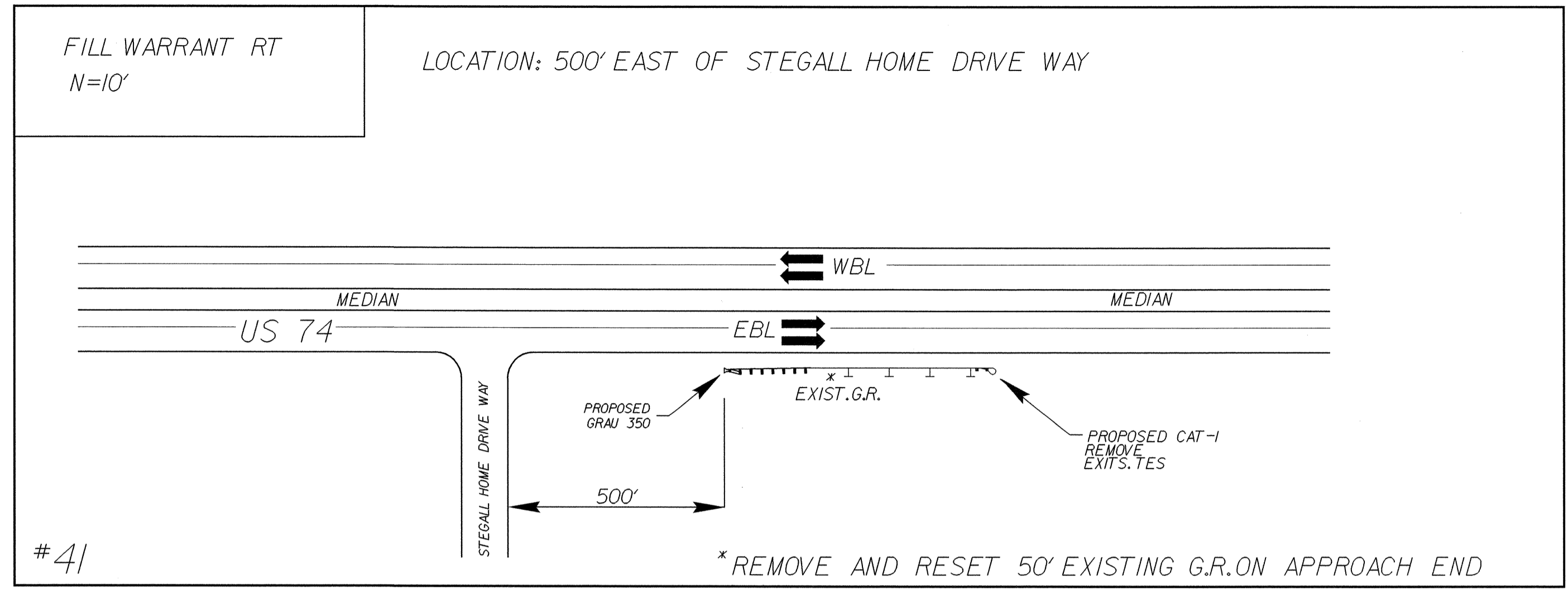


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RW SHEET NO.	
ROADWAY DESIGN ENGINEER	

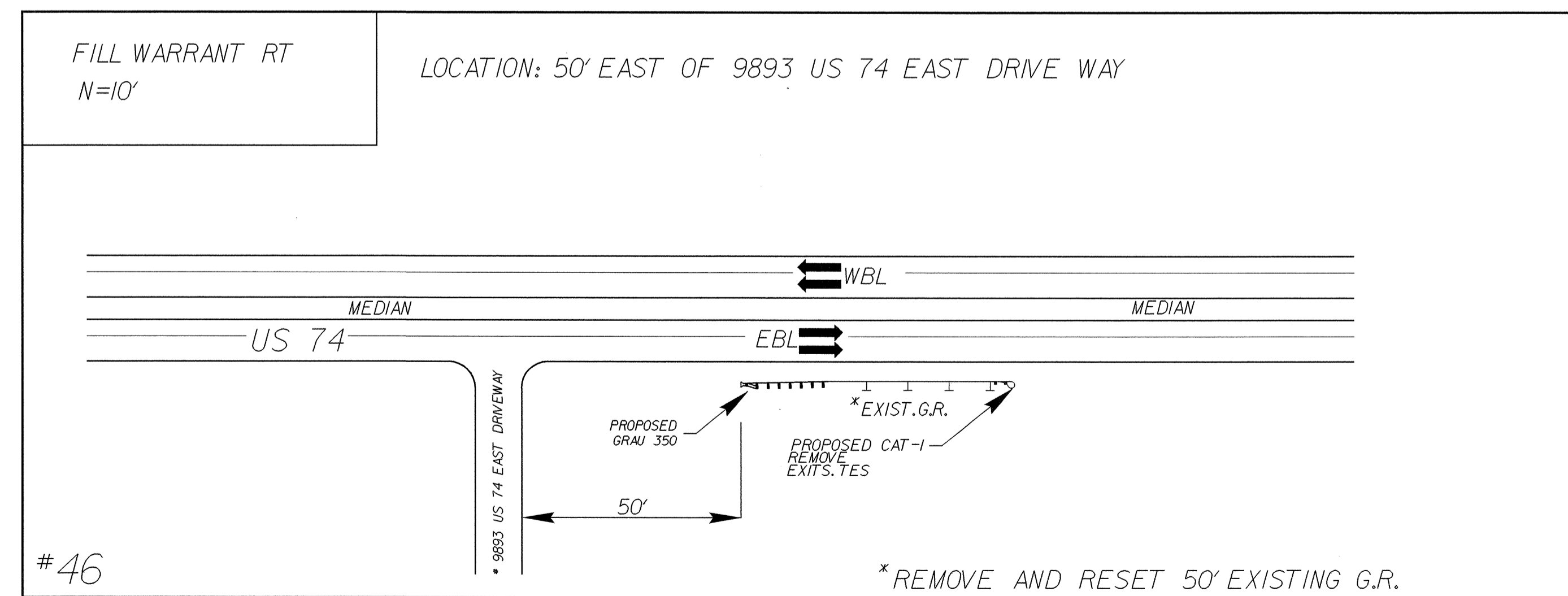
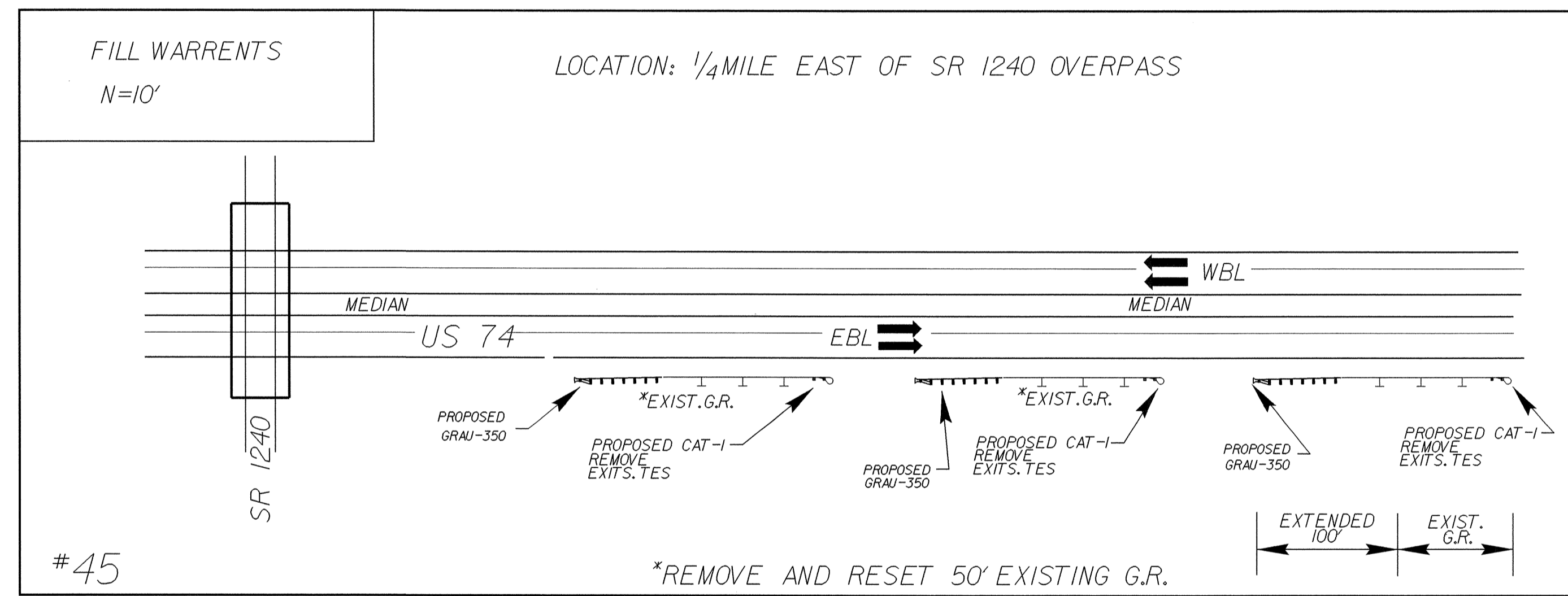
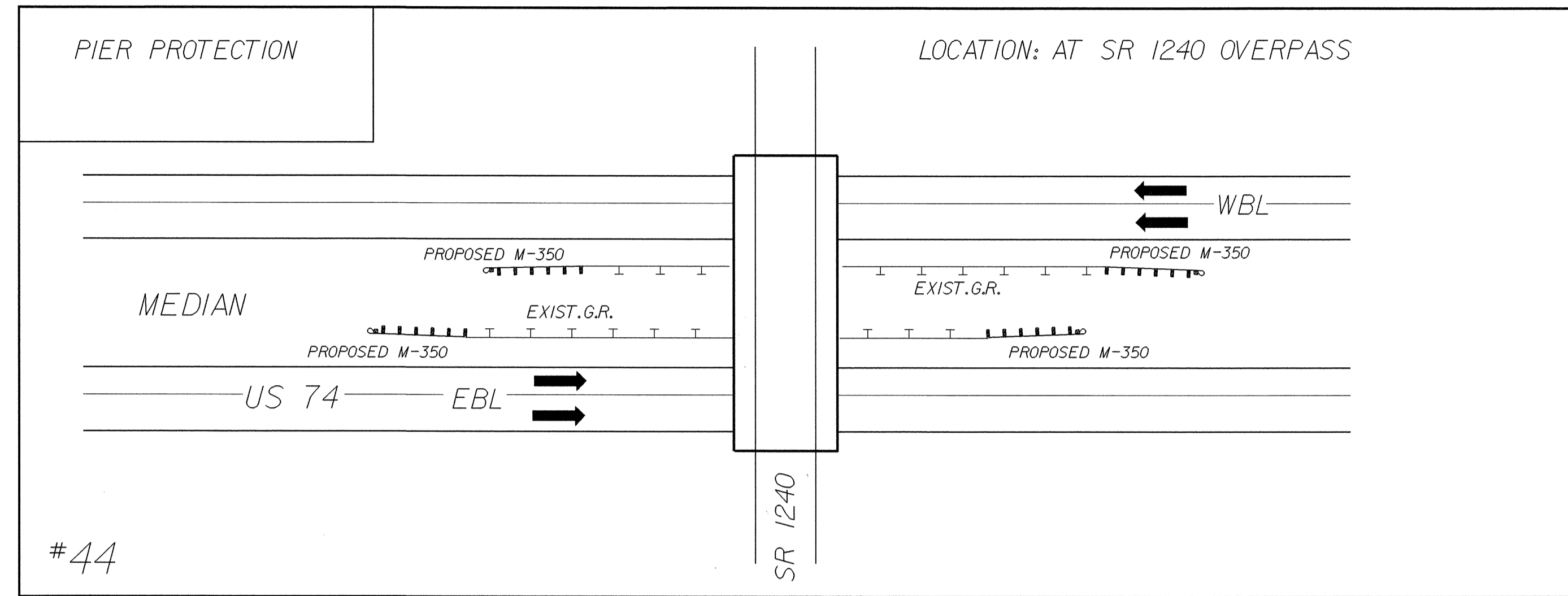


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PROJECT REFERENCE NO. R-4413	SHEET NO. 2-0
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ROADWAY DESIGN ENGINEER	

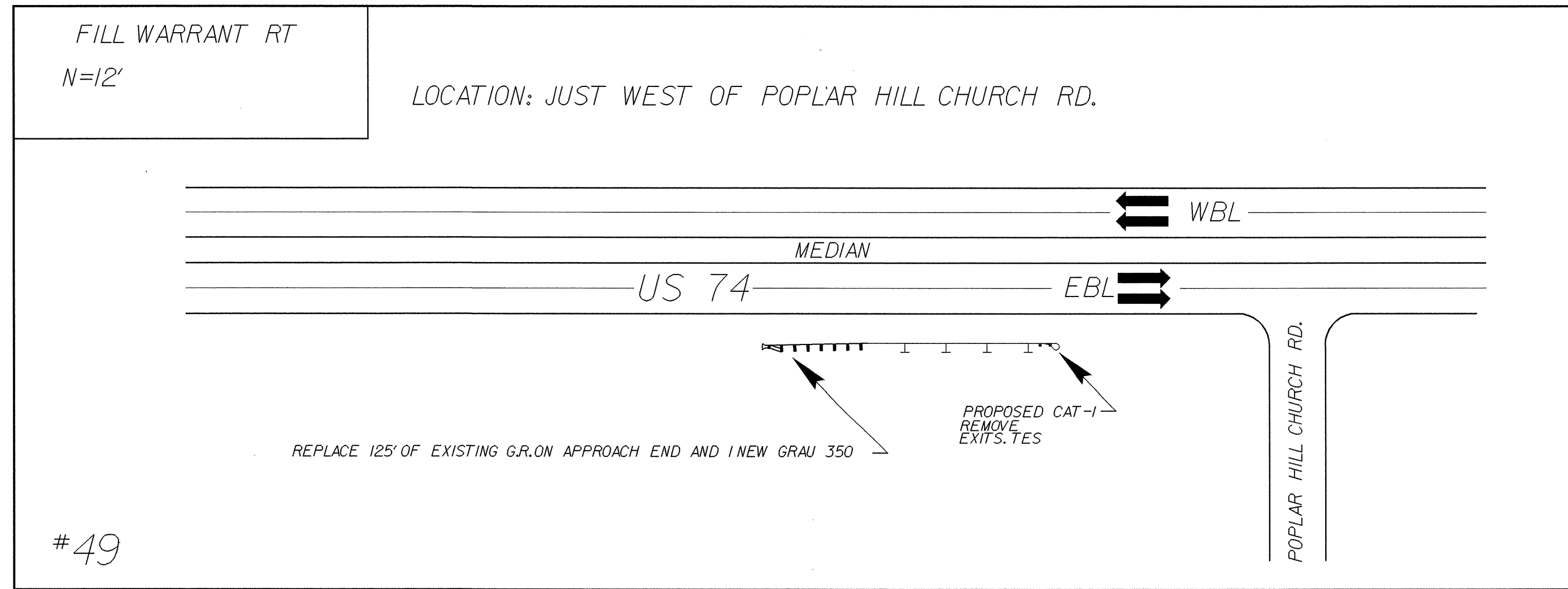
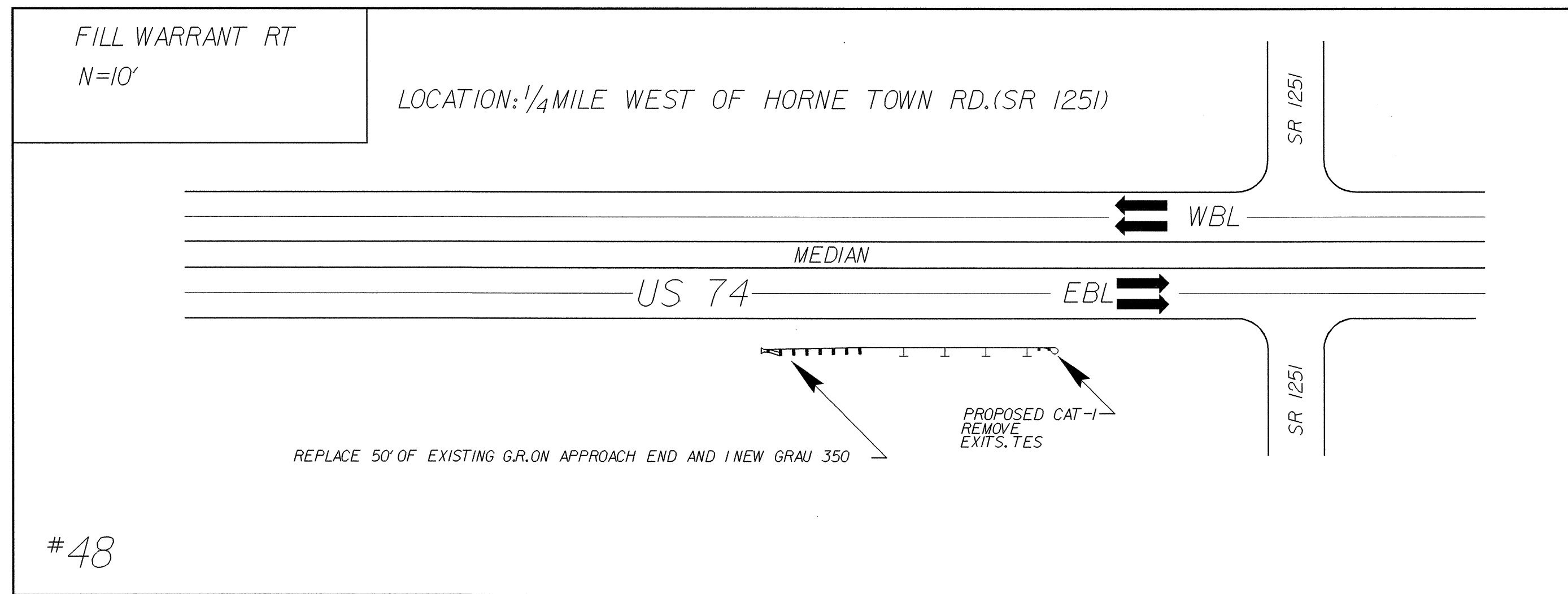
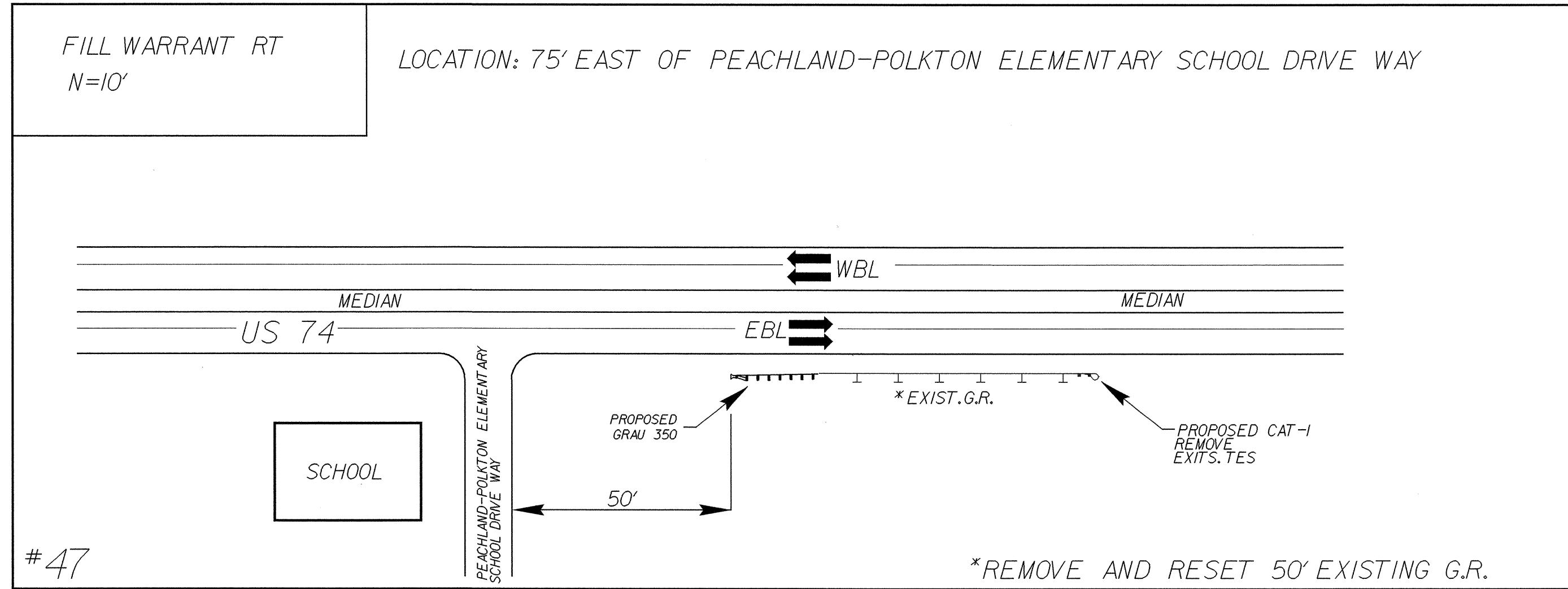


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RW SHEET NO.	
ROADWAY DESIGN ENGINEER	
	
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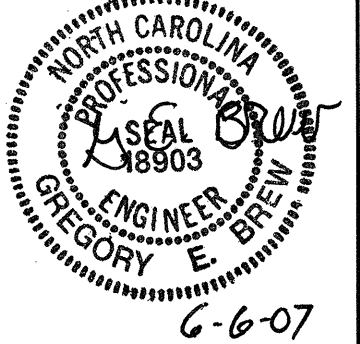


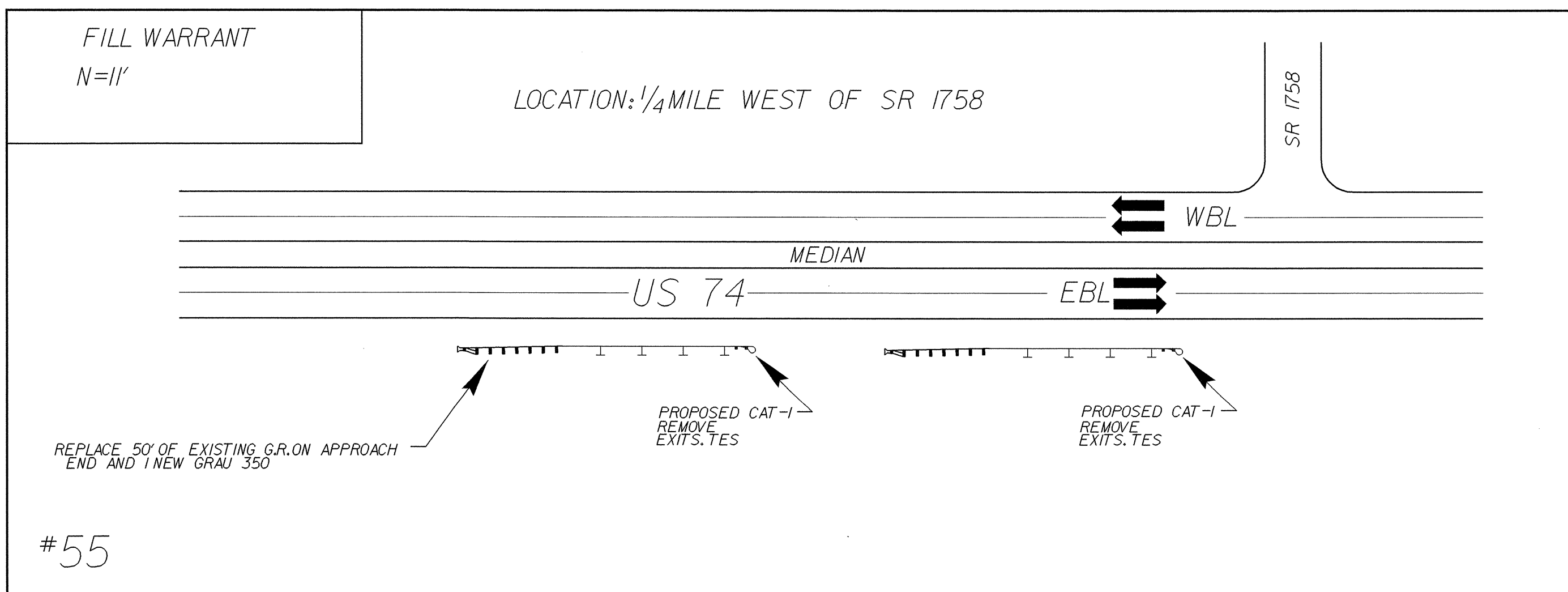
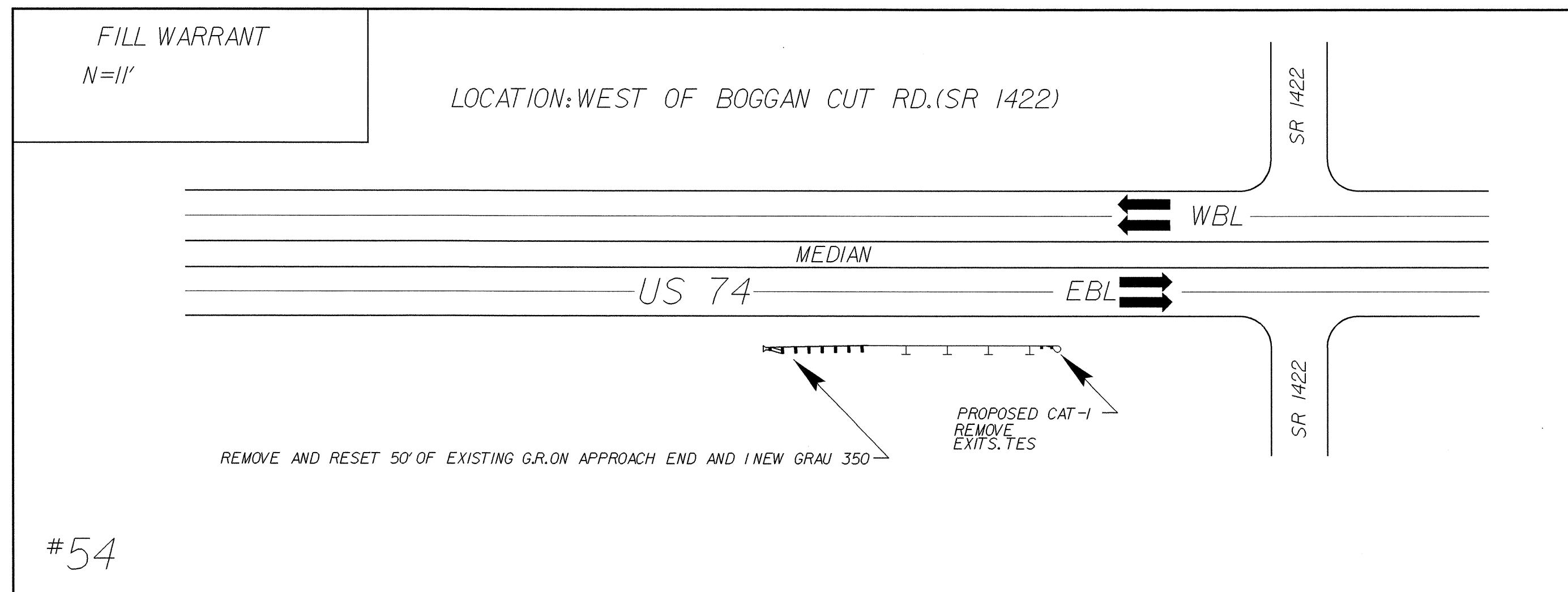
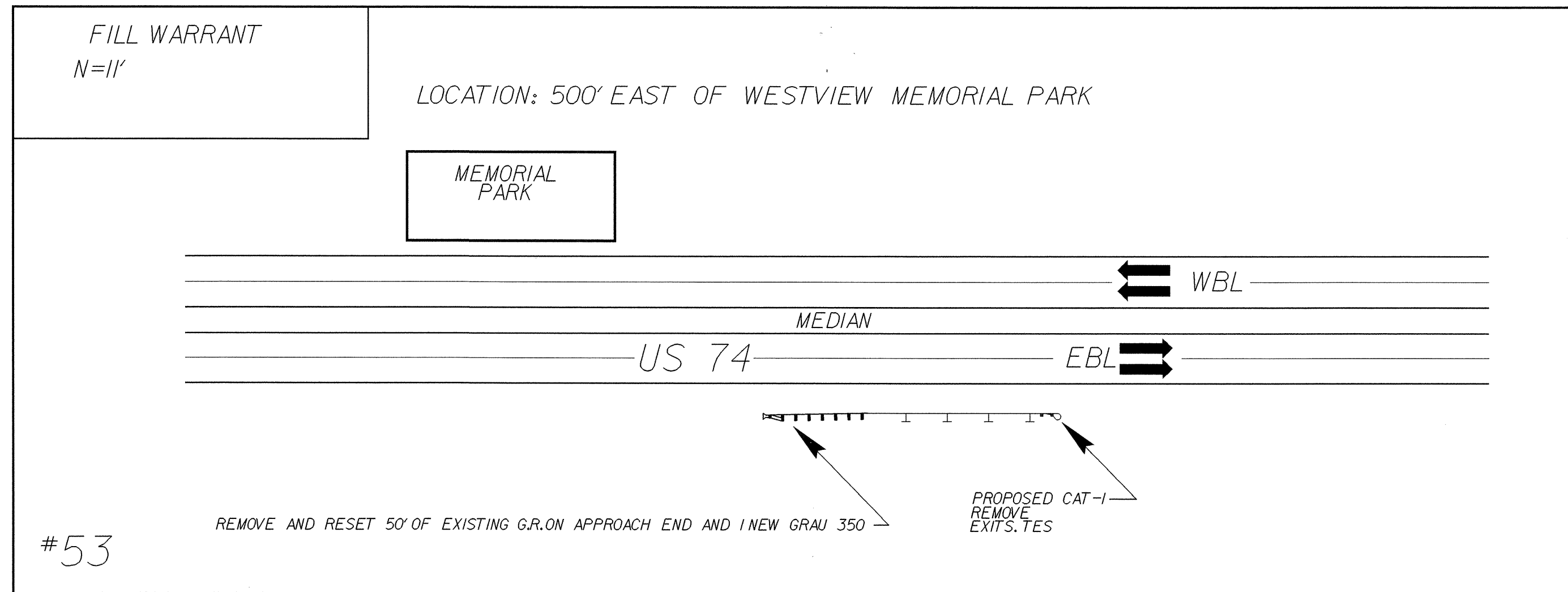
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SEE SHEET 2-AA FOR VICINITY MAP
 SEE SHEET 2-AB FOR VICINITY MAP

PROJECT REFERENCE NO. R-4413	SHEET NO. 2-T
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	
	



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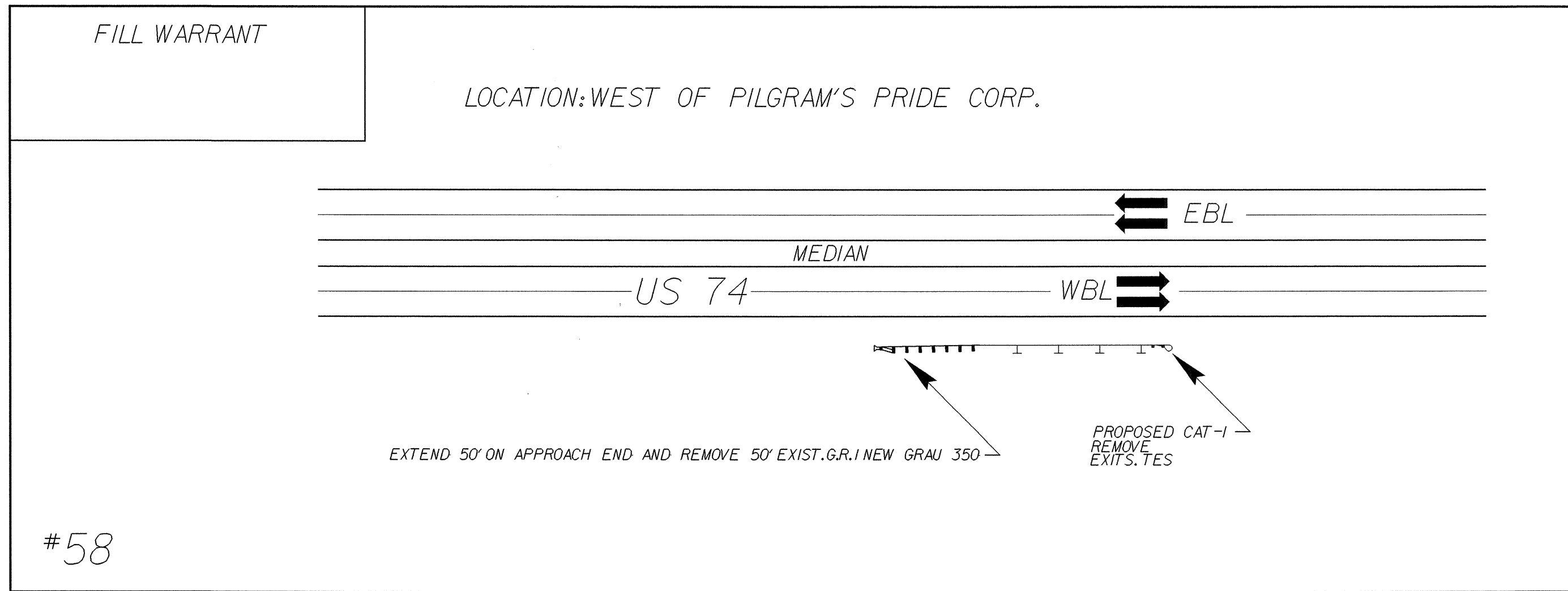
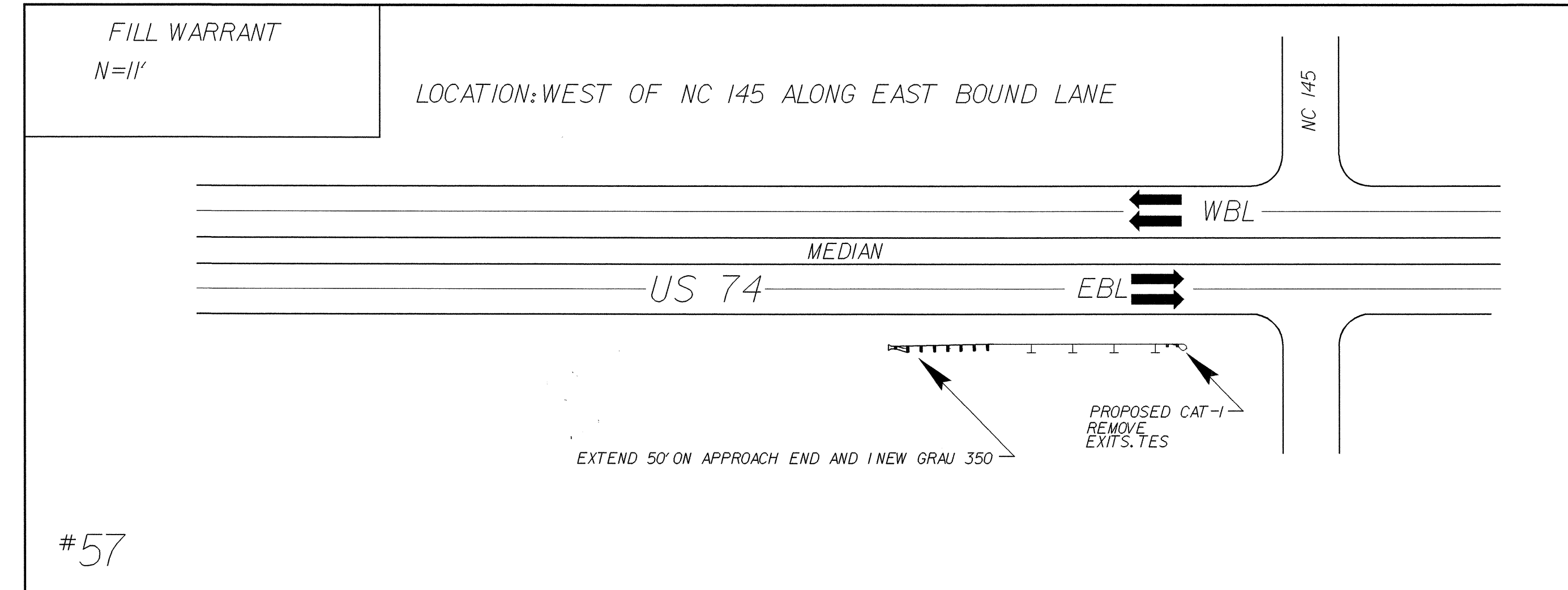
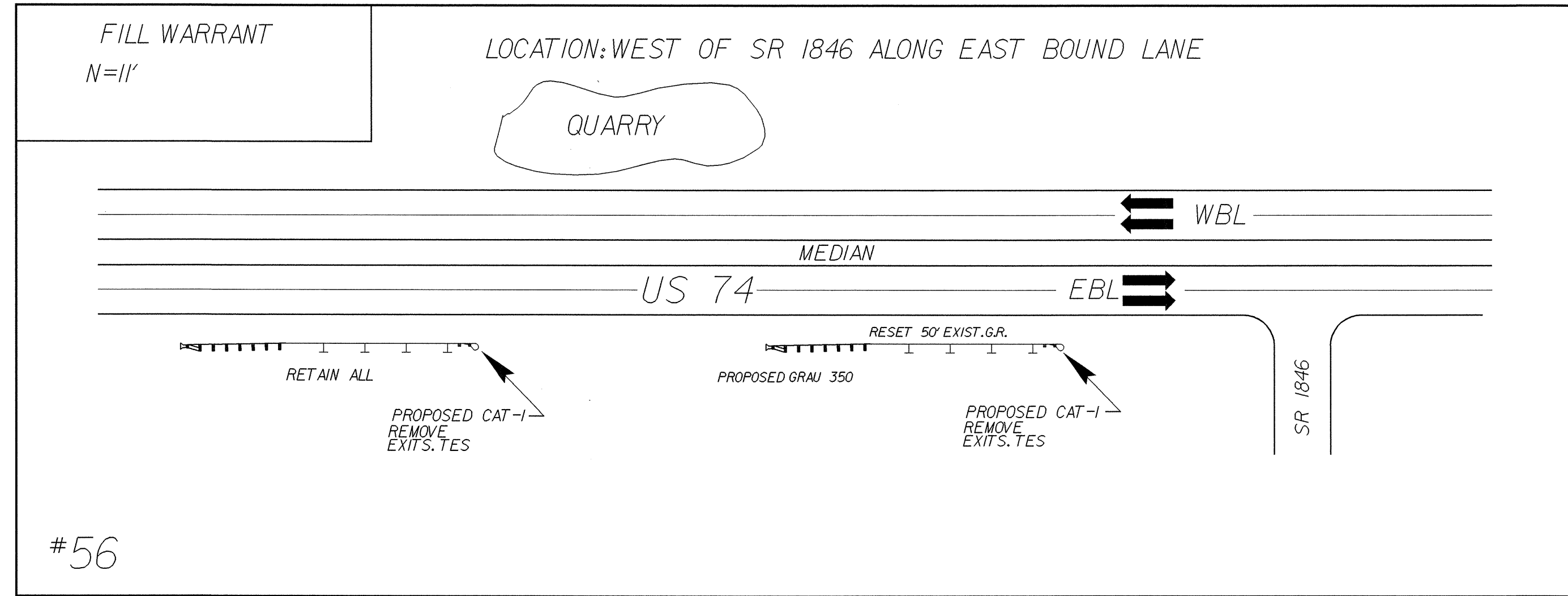
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SEE SHEET 2-AB FOR VICINITY MAP

PROJECT REFERENCE NO. R-4413	SHEET NO. 2-U
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	



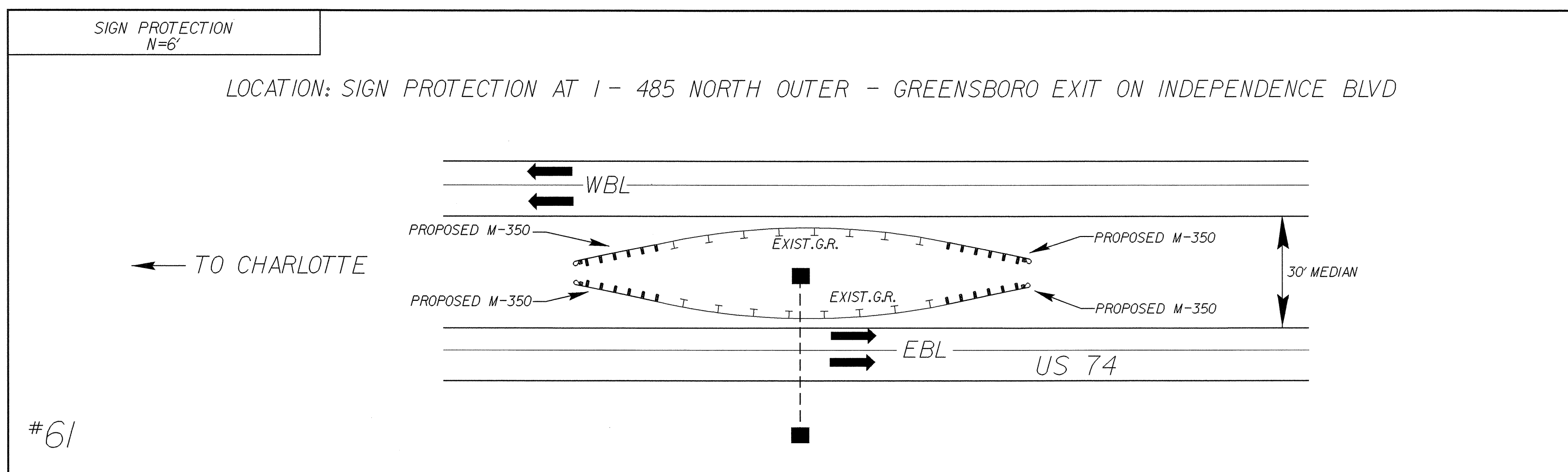
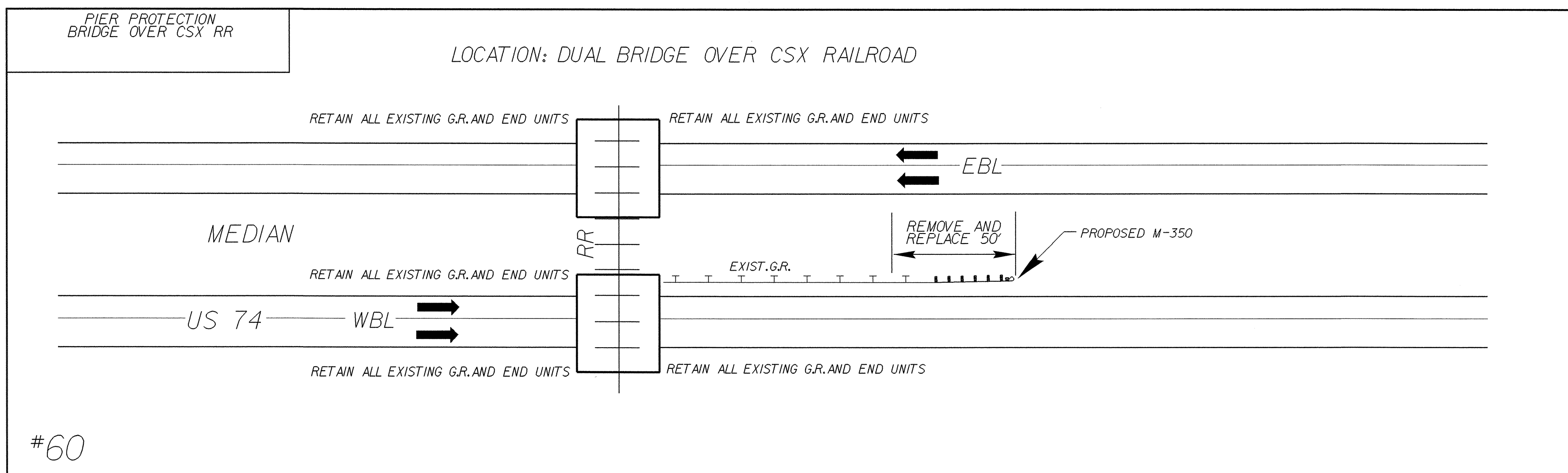
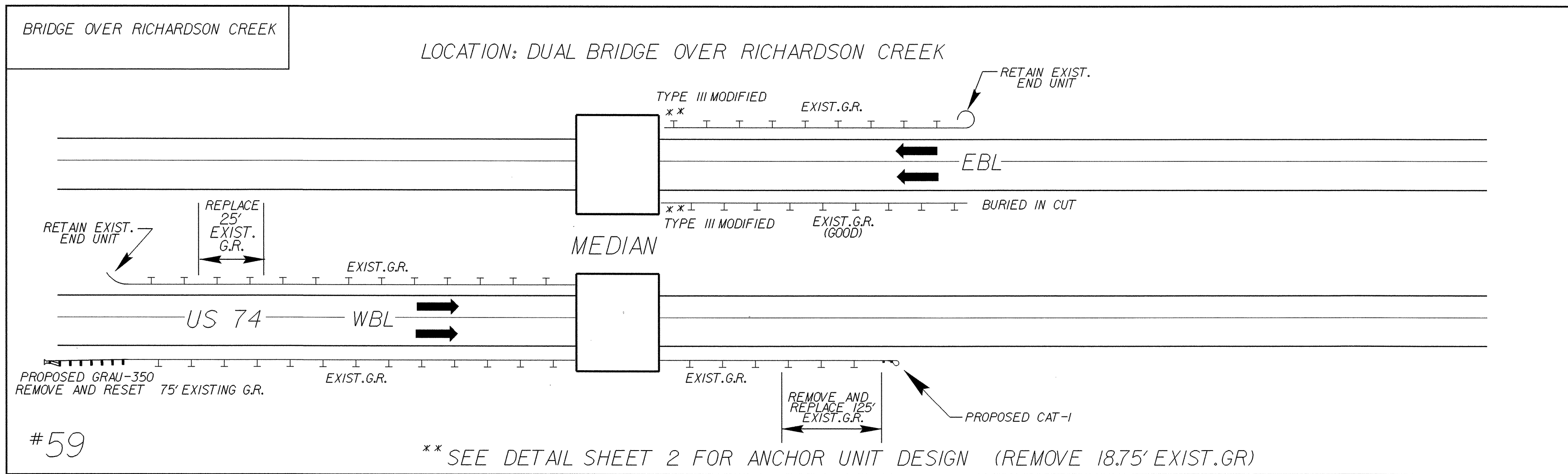
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SEE SHEET 2-AB FOR VICINITY MAP

PROJECT REFERENCE NO. R-4413	SHEET NO. 2-V
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	

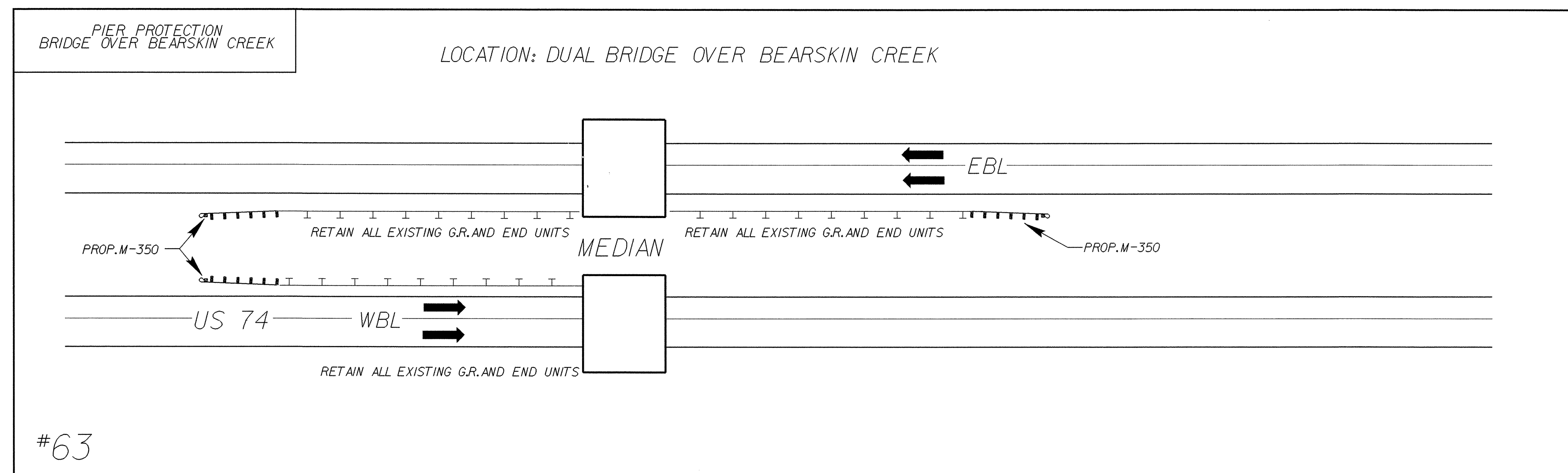
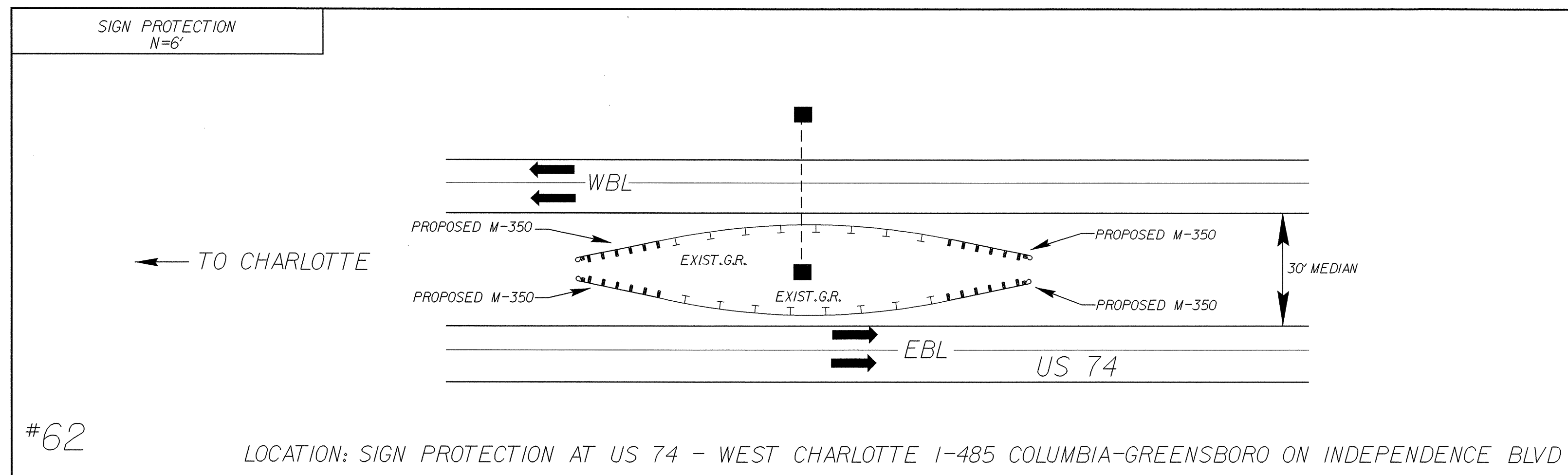


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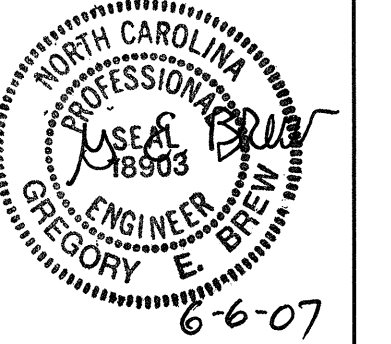
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RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL 18903 GREGORY E. BRUNN 6-6-07	

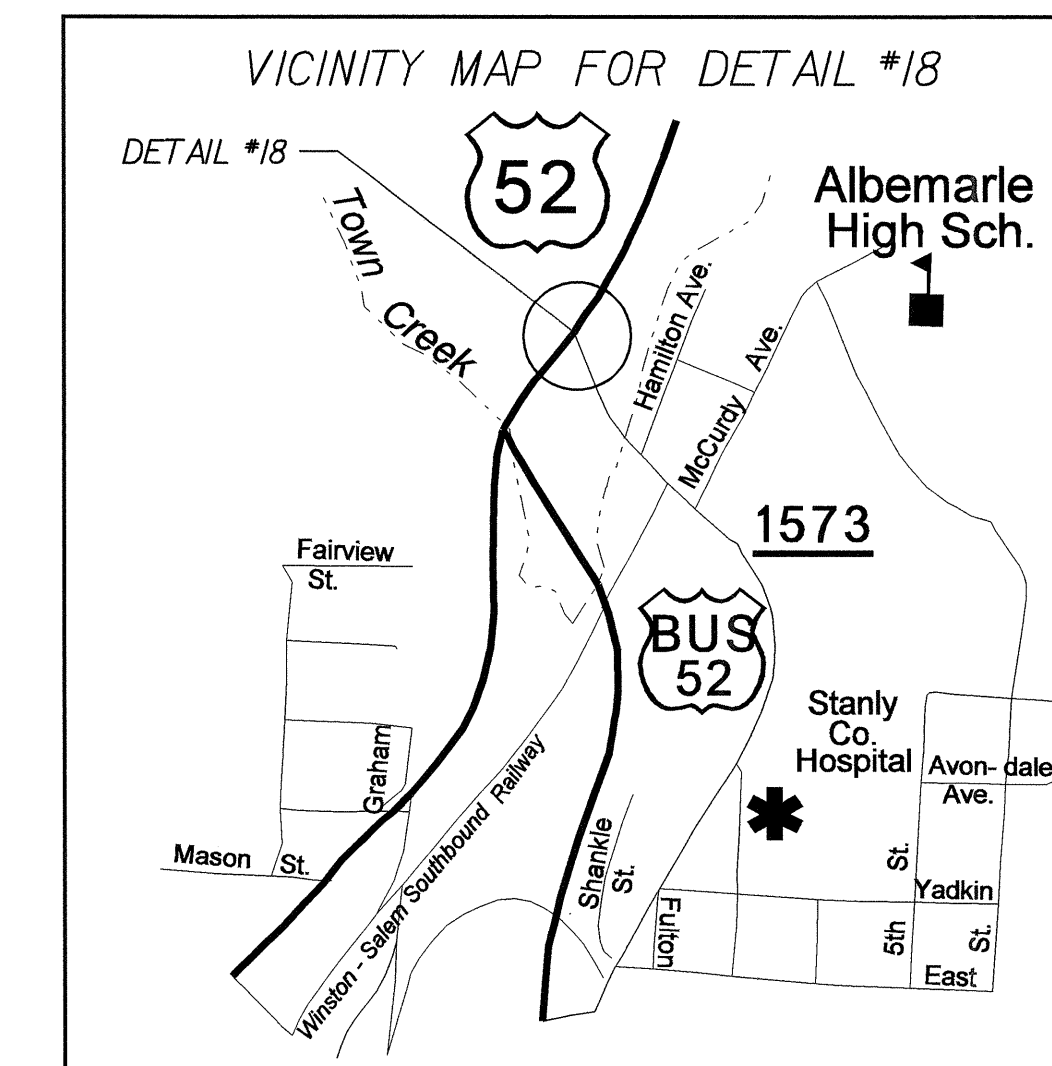
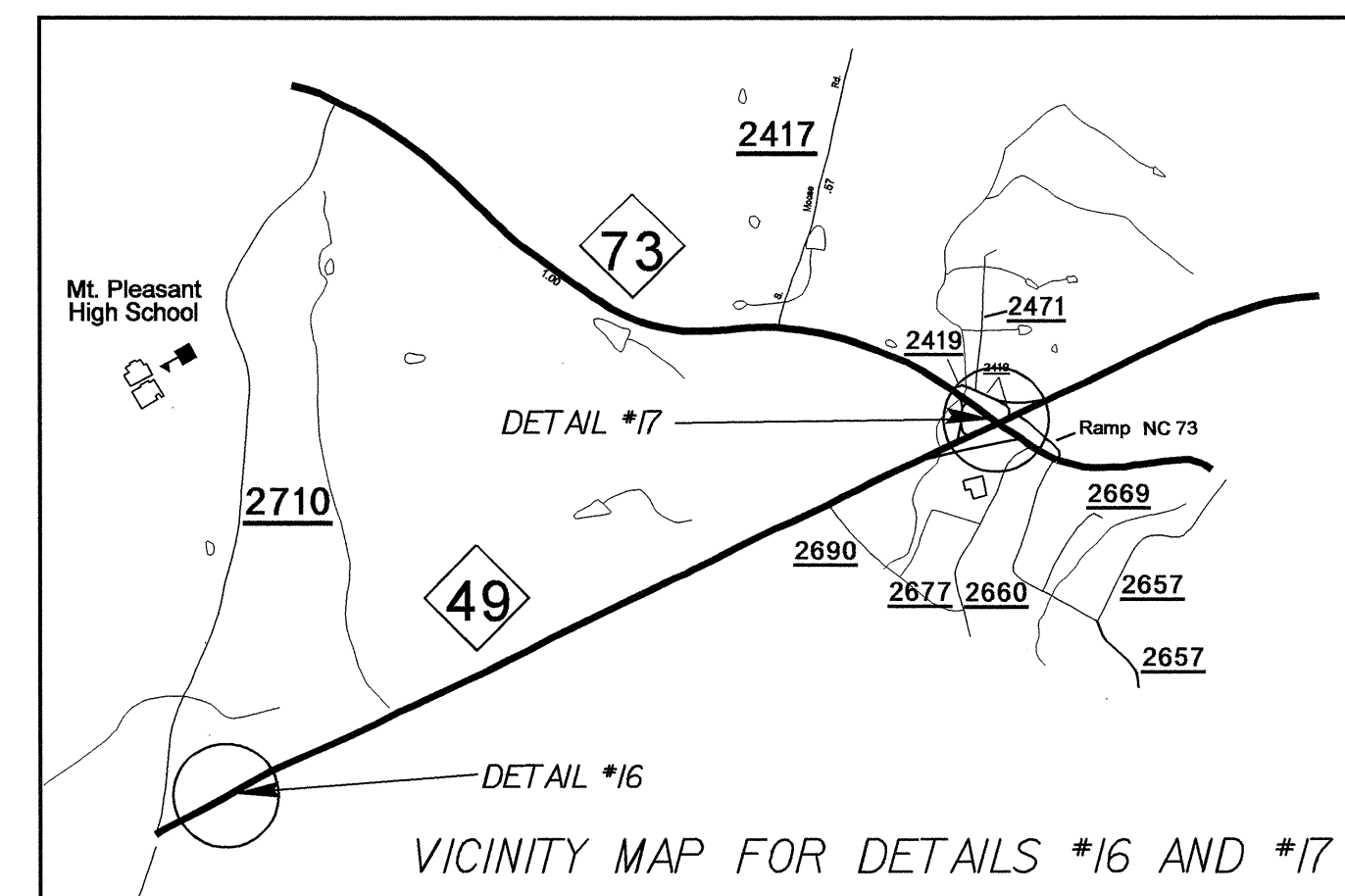
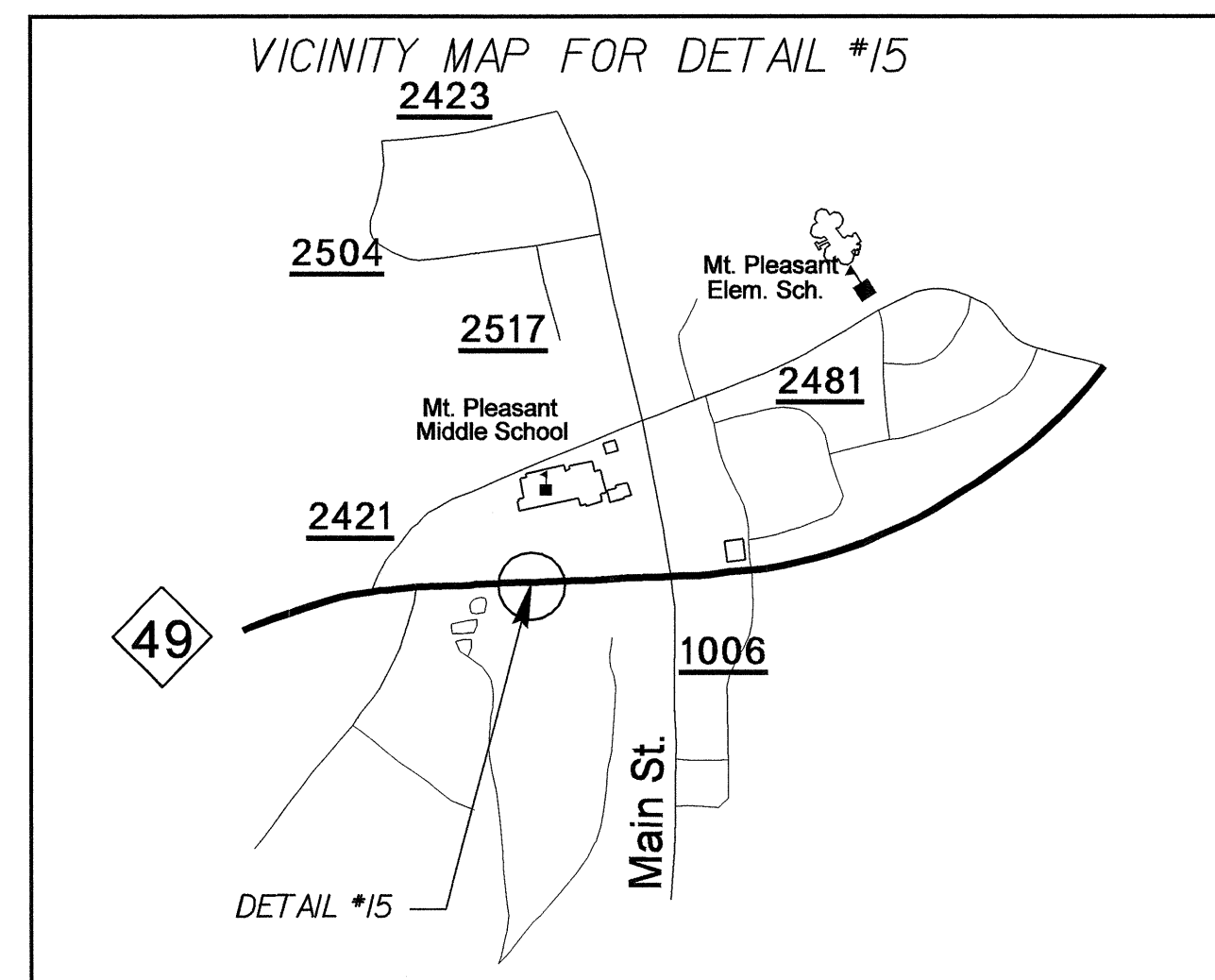
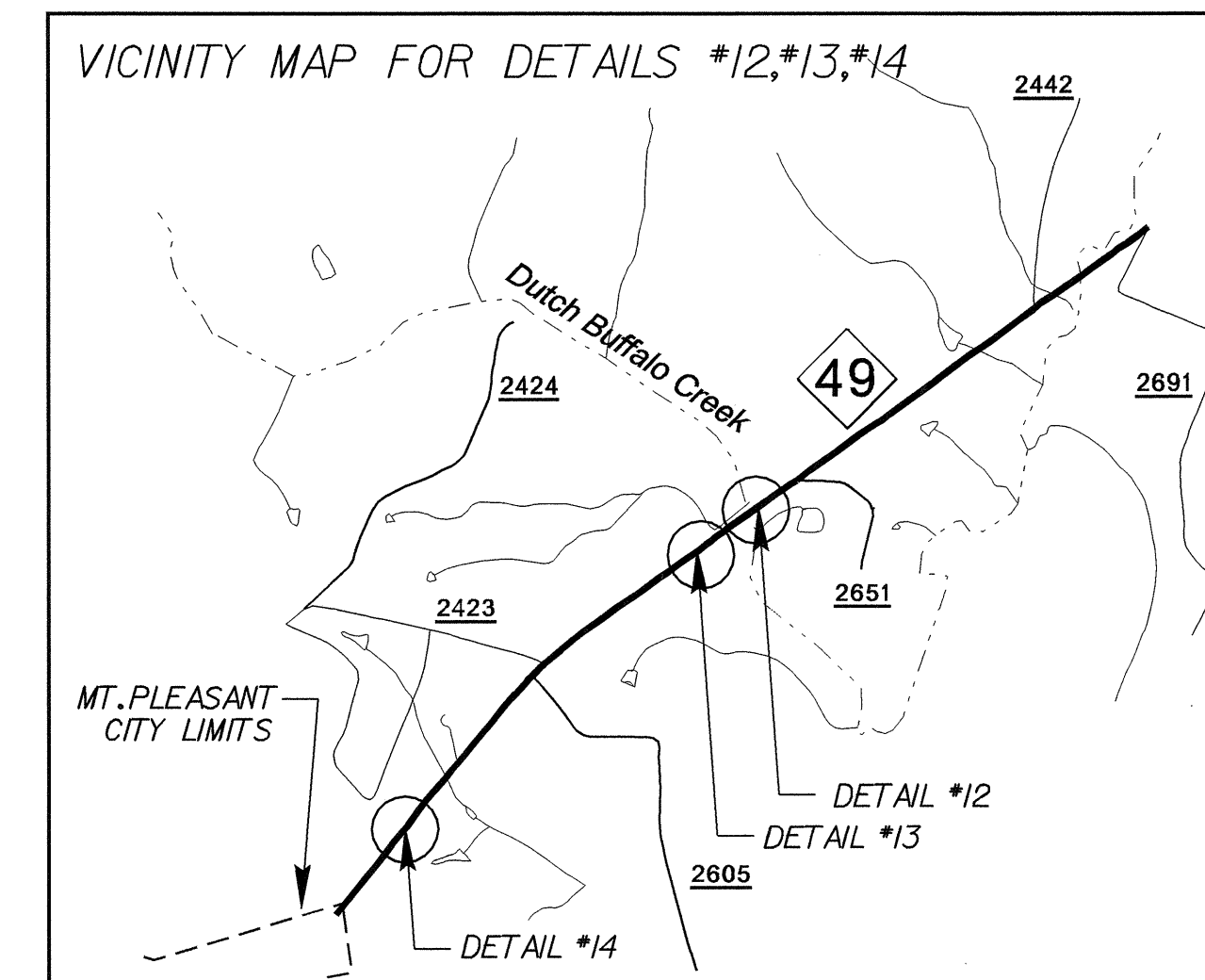
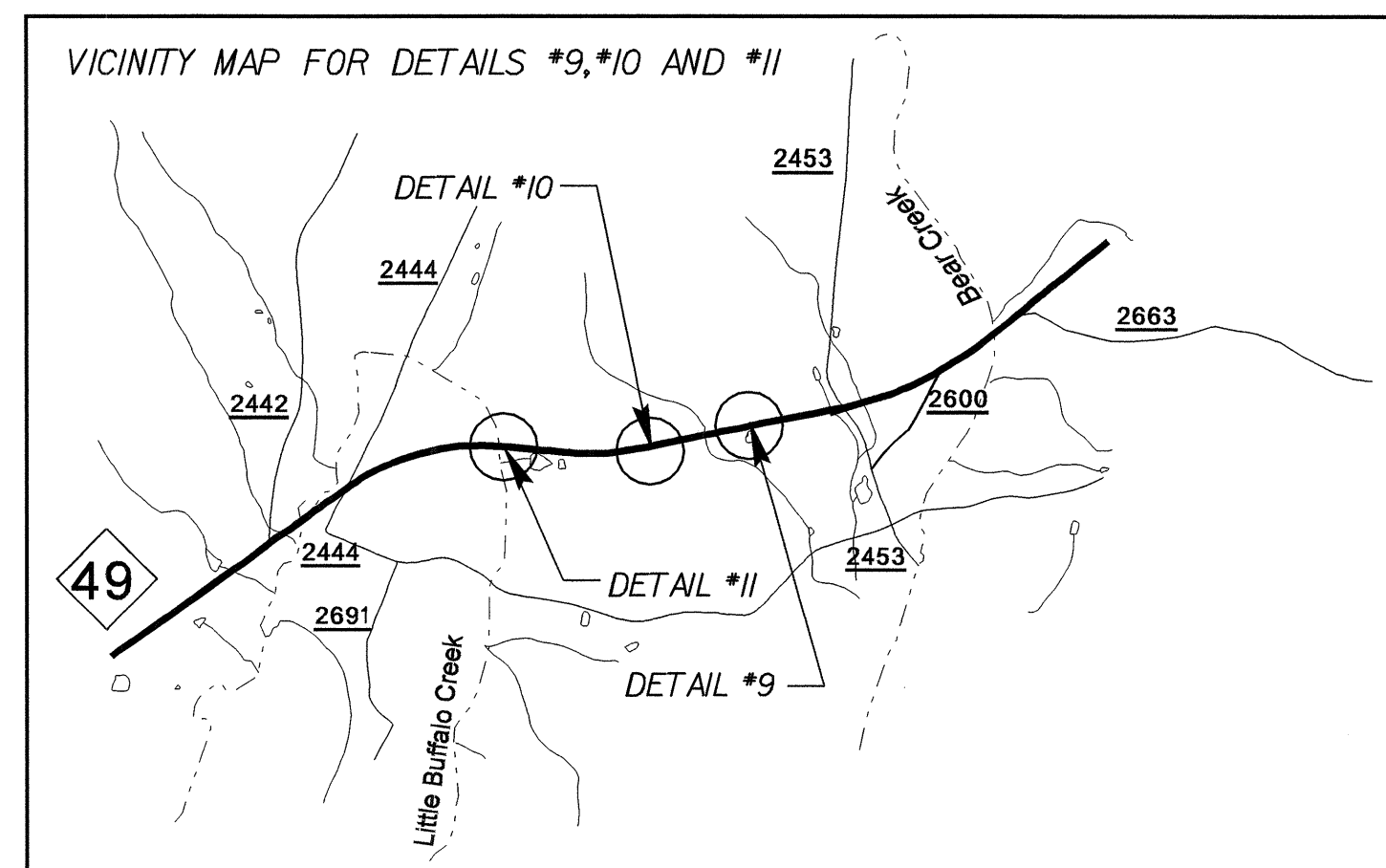
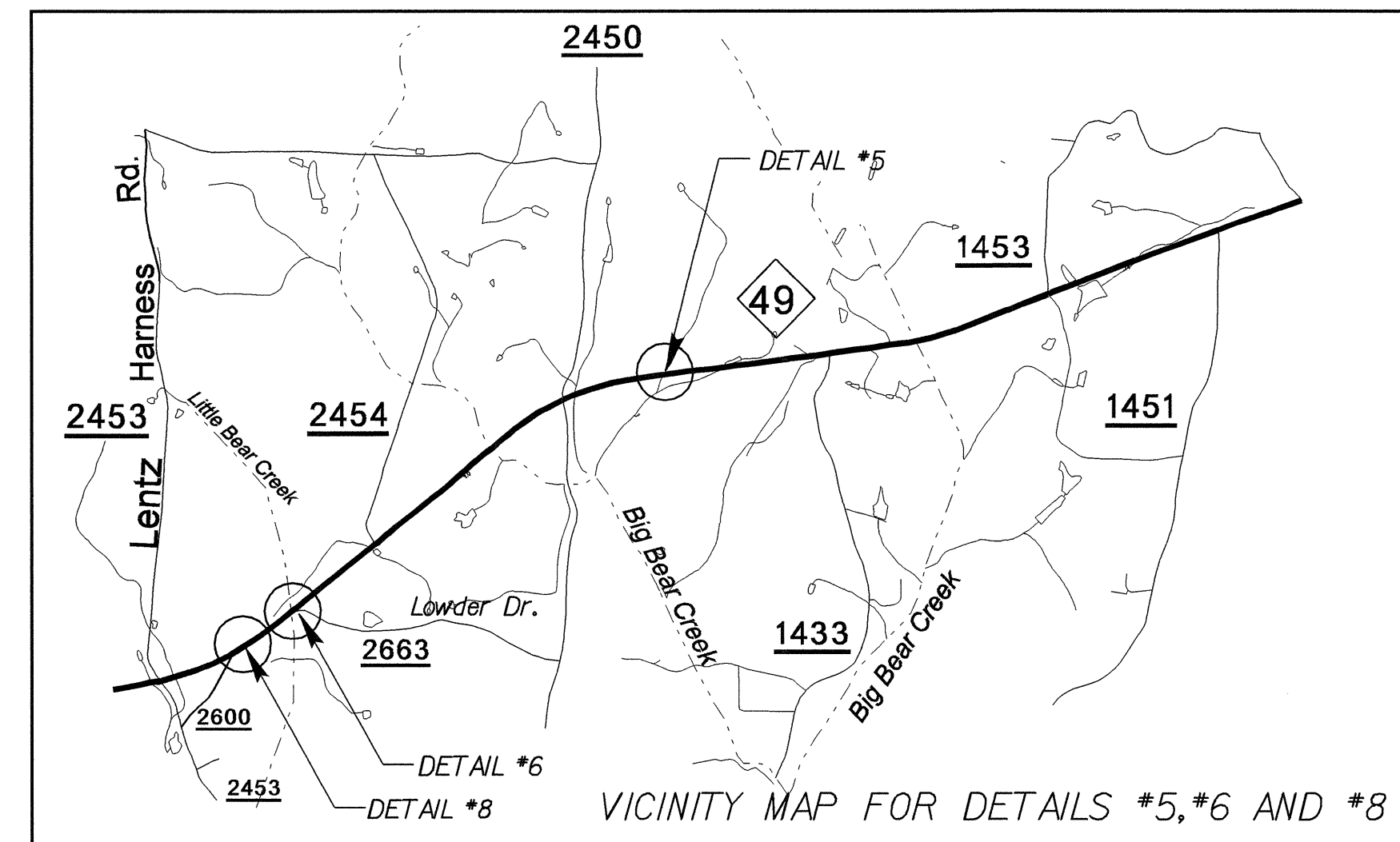
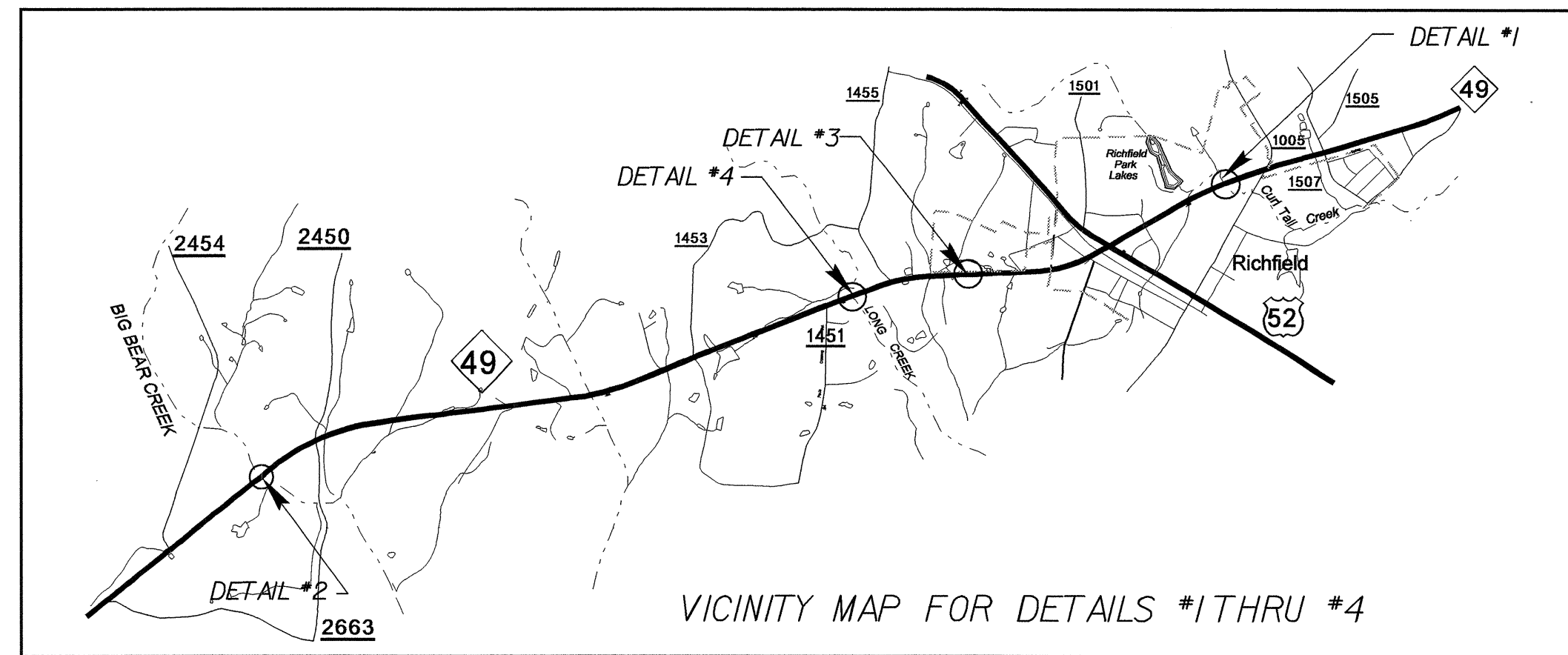


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PROJECT REFERENCE NO. R-4413	SHEET NO. 2-X
RW SHEET NO. ---	
ROADWAY DESIGN ENGINEER	
	
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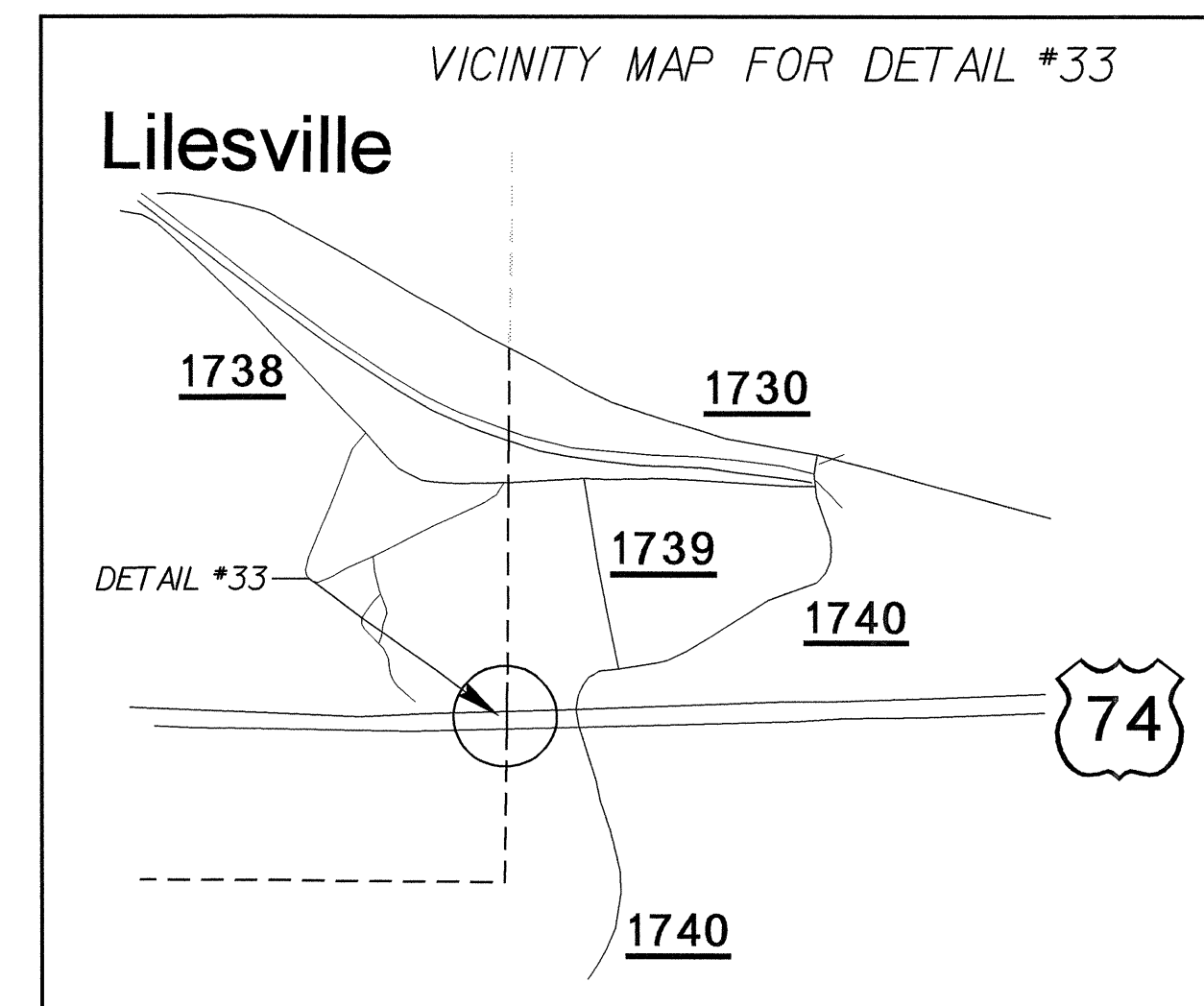
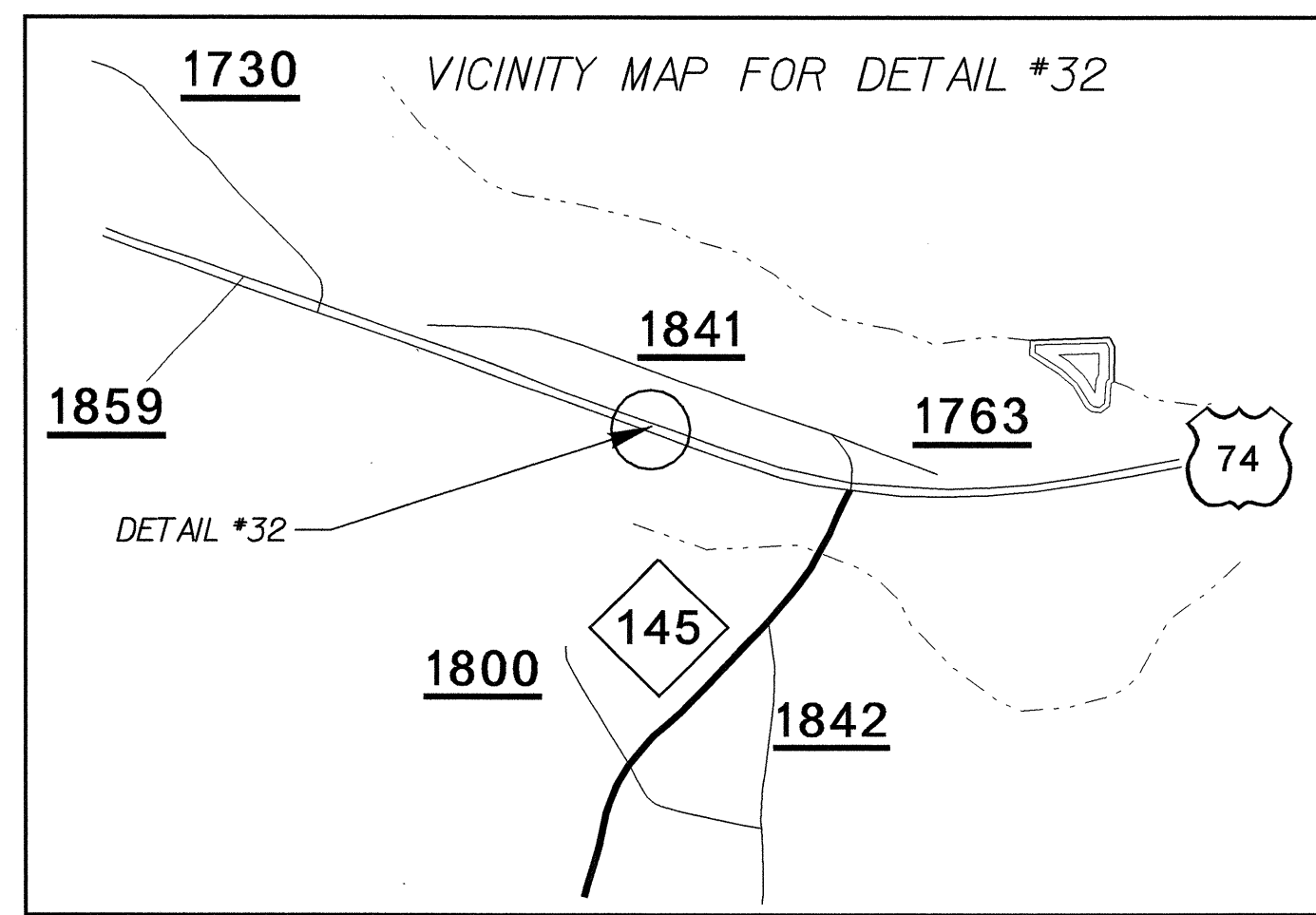
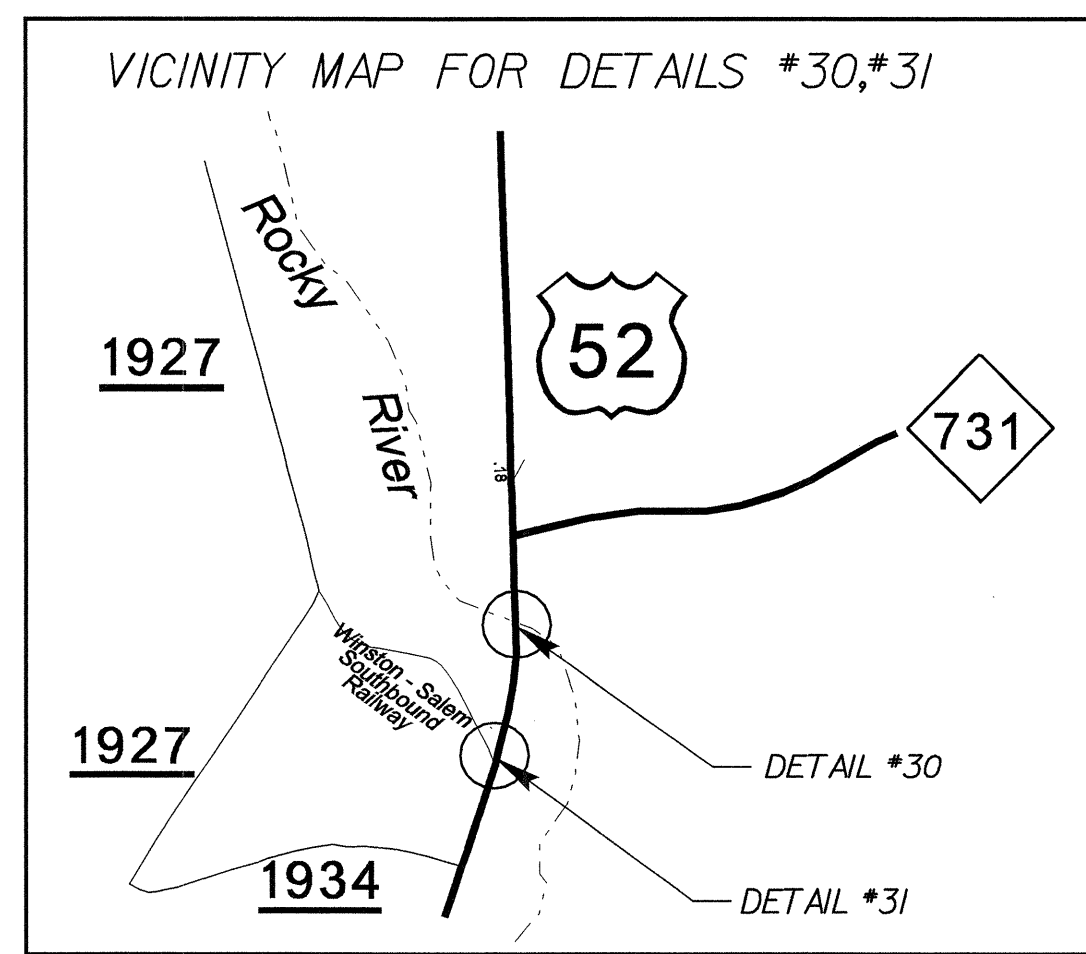
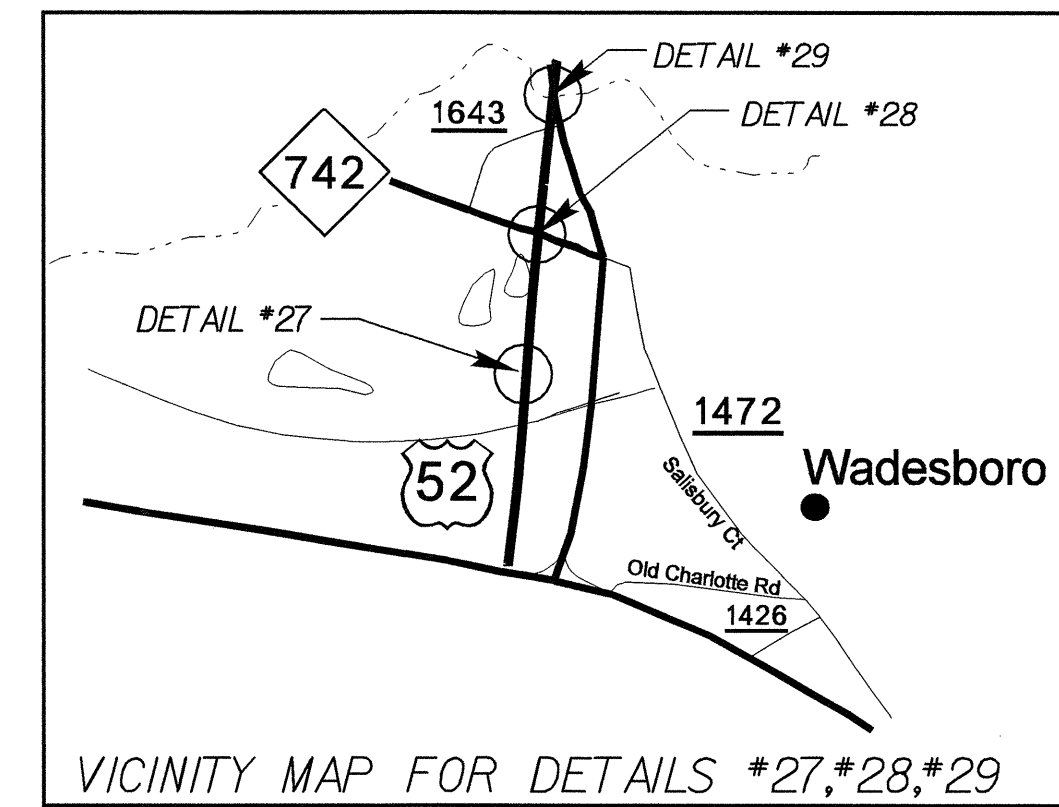
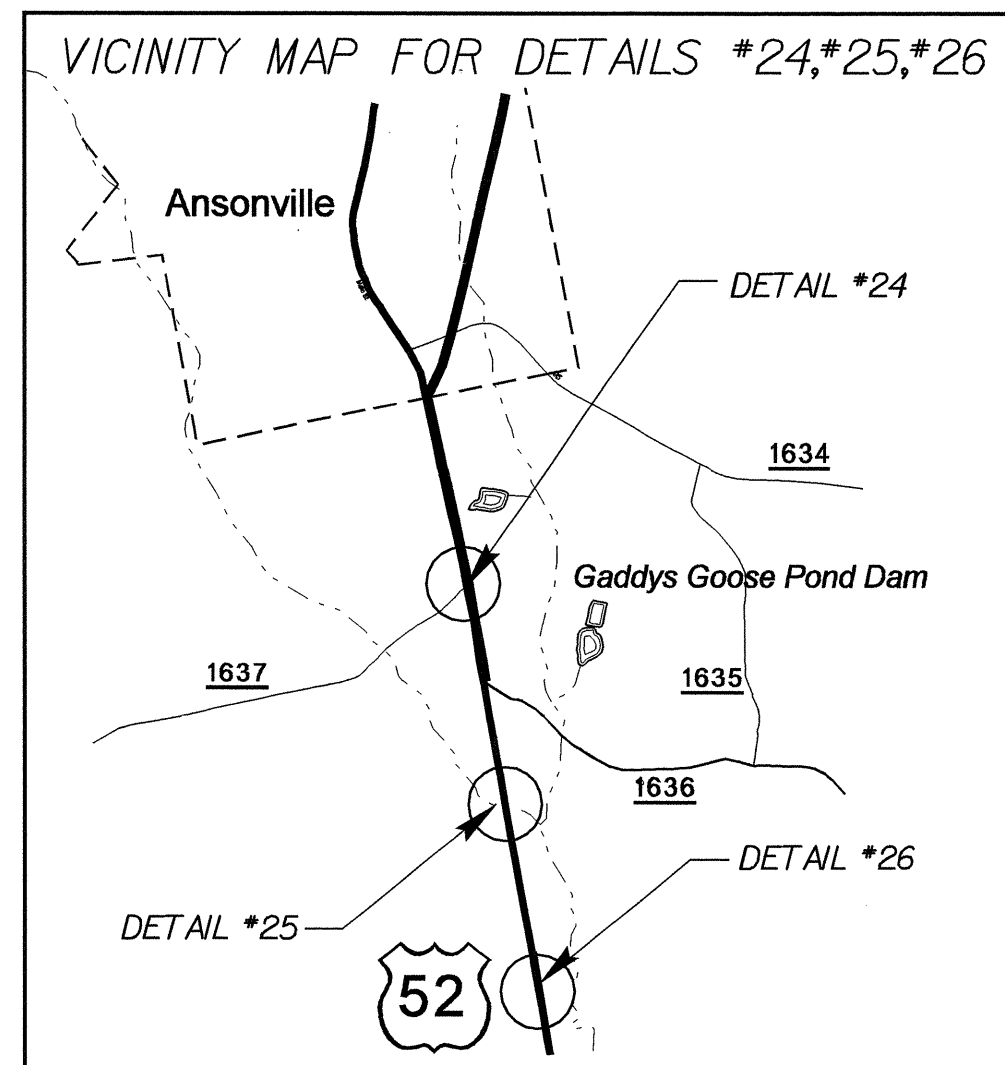
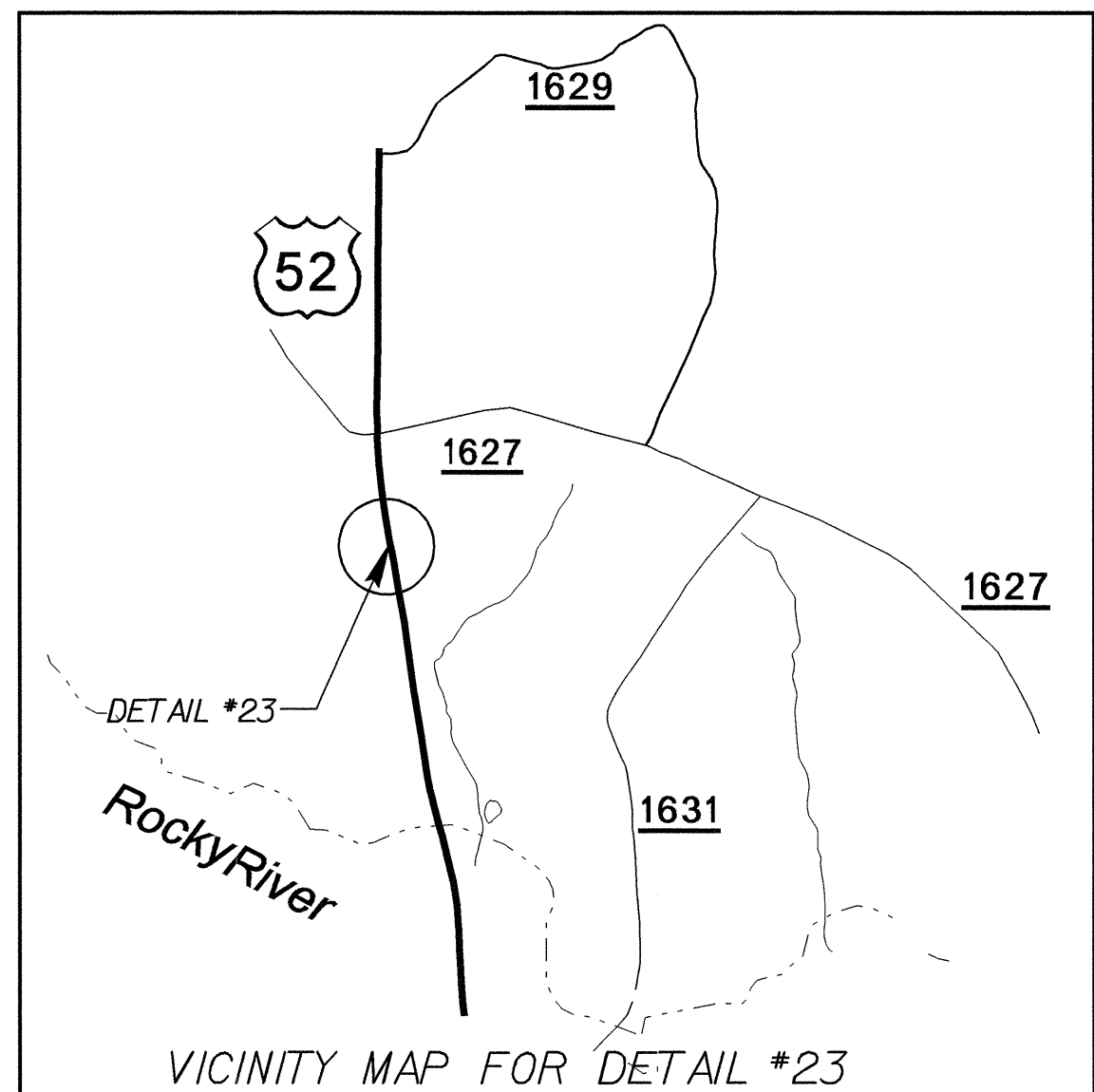
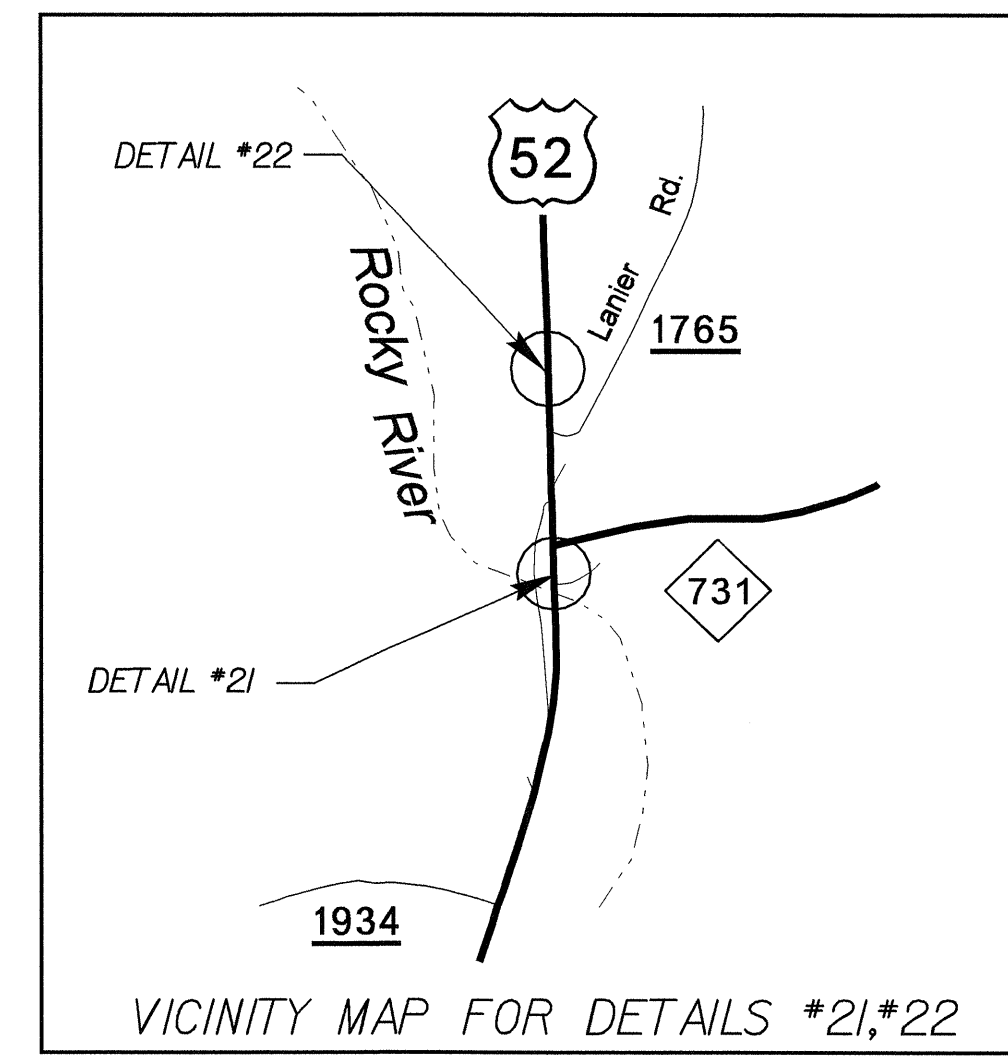
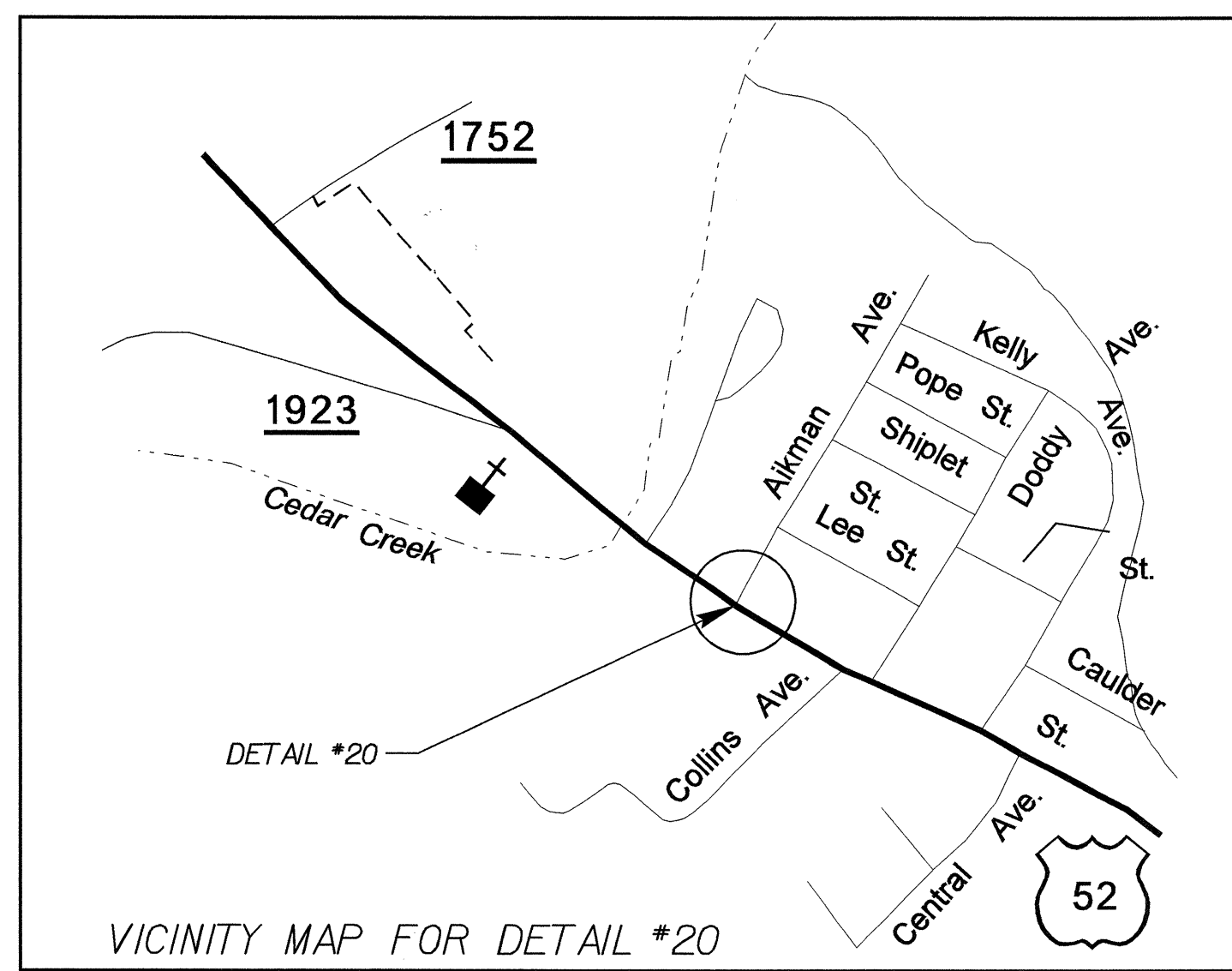
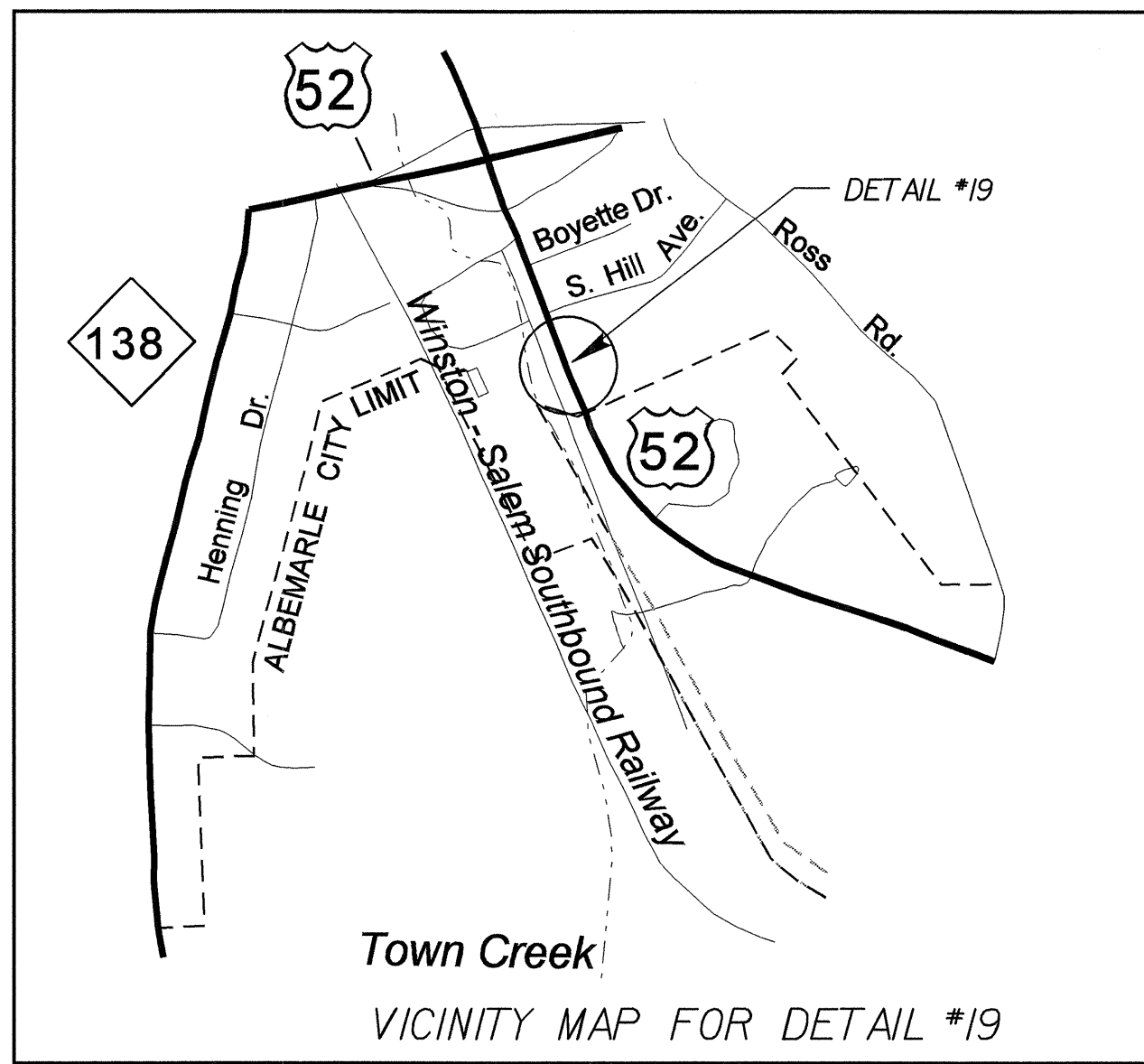


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PROJECT REFERENCE NO. R-4413	SHEET NO. 2-Y
RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL ENGINEER 18903 GREGORY E. BREWSTER 6-6-07	

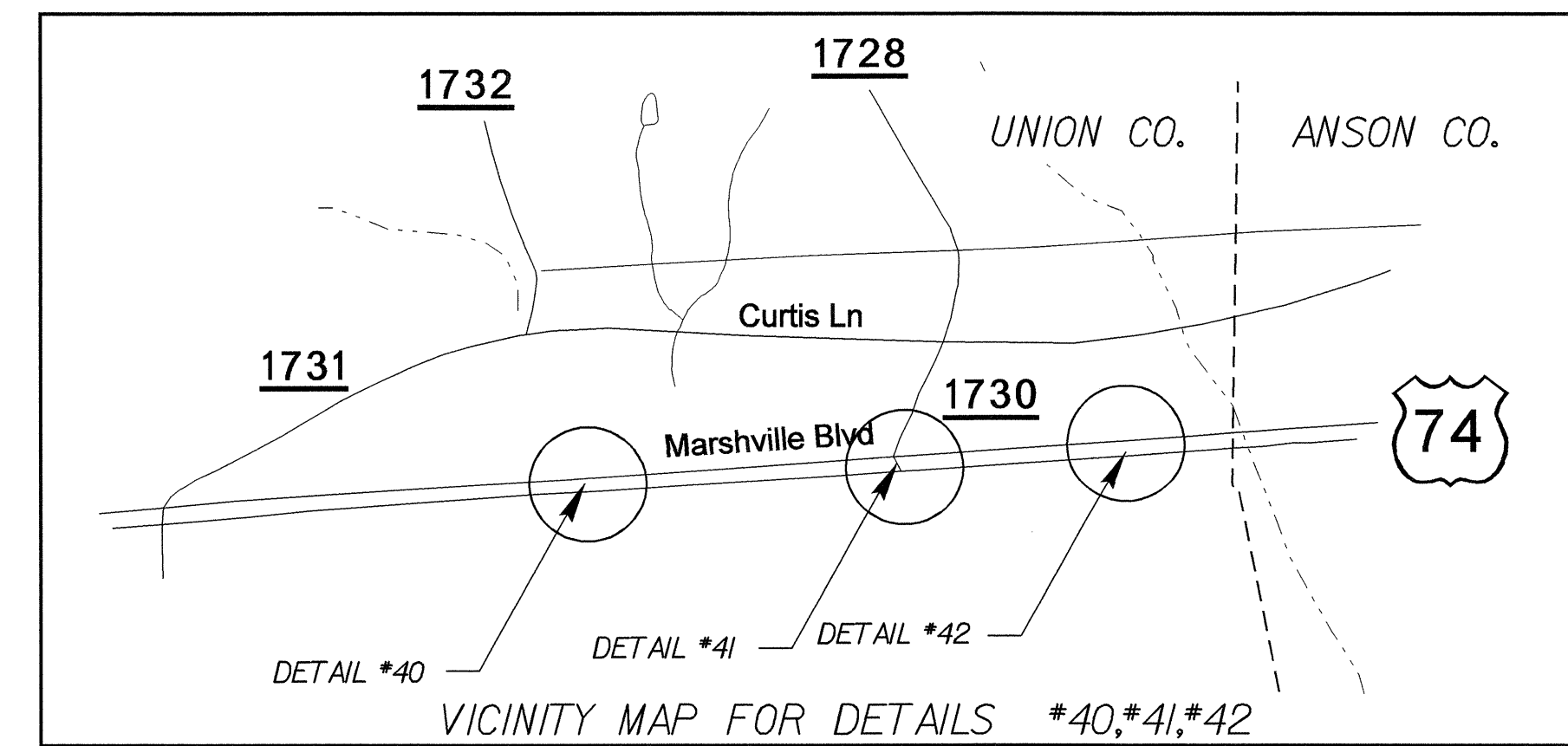
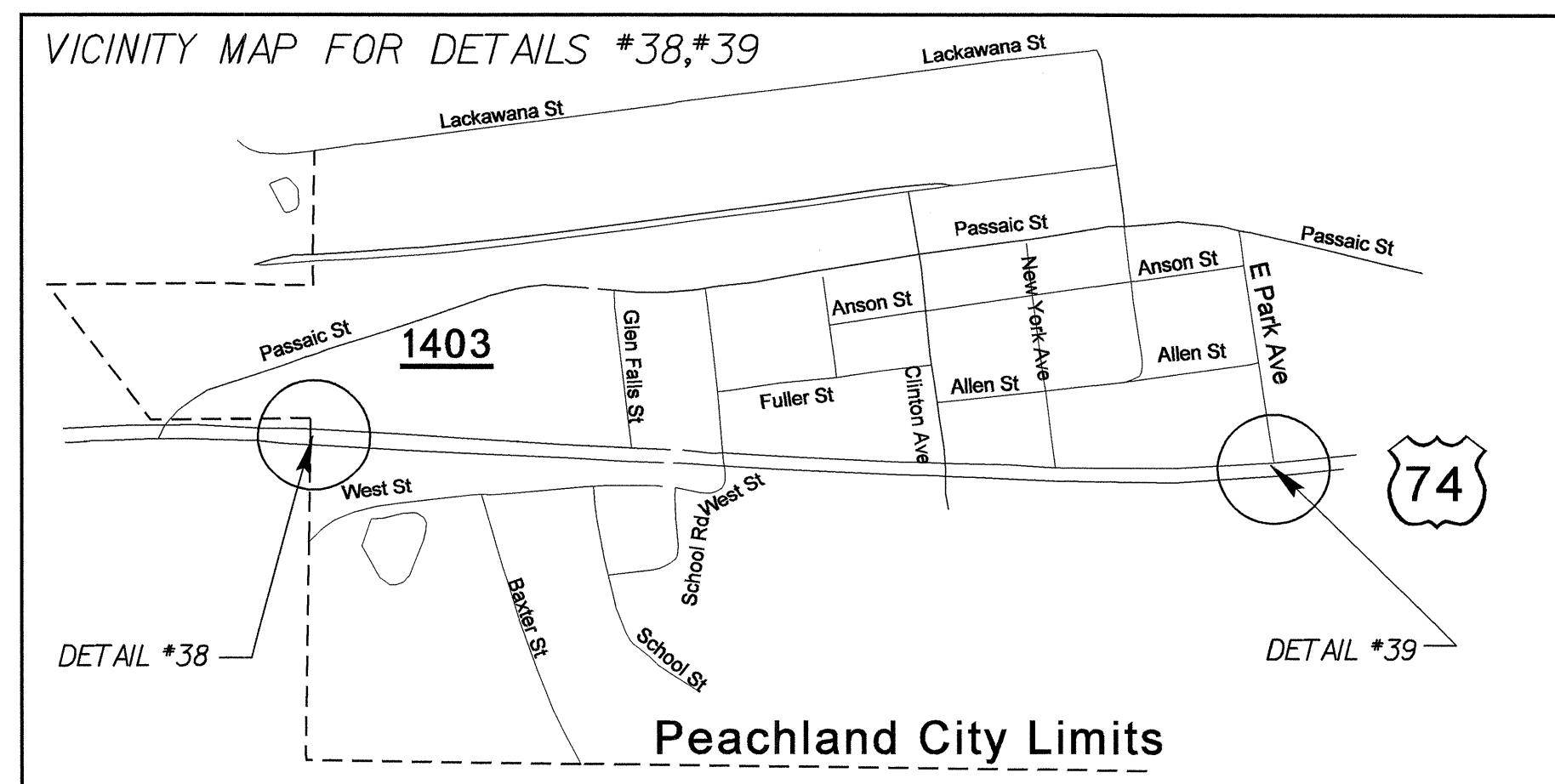
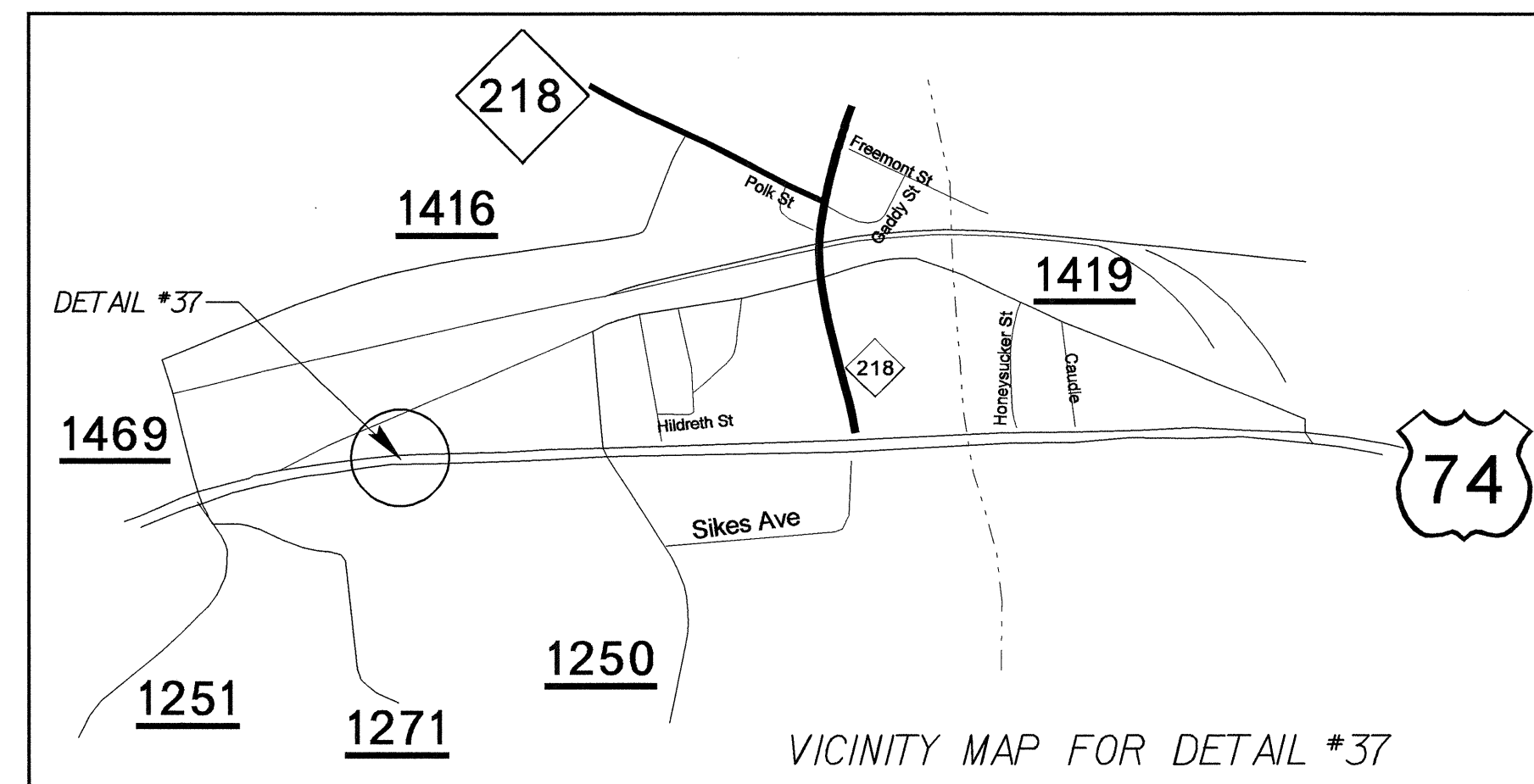
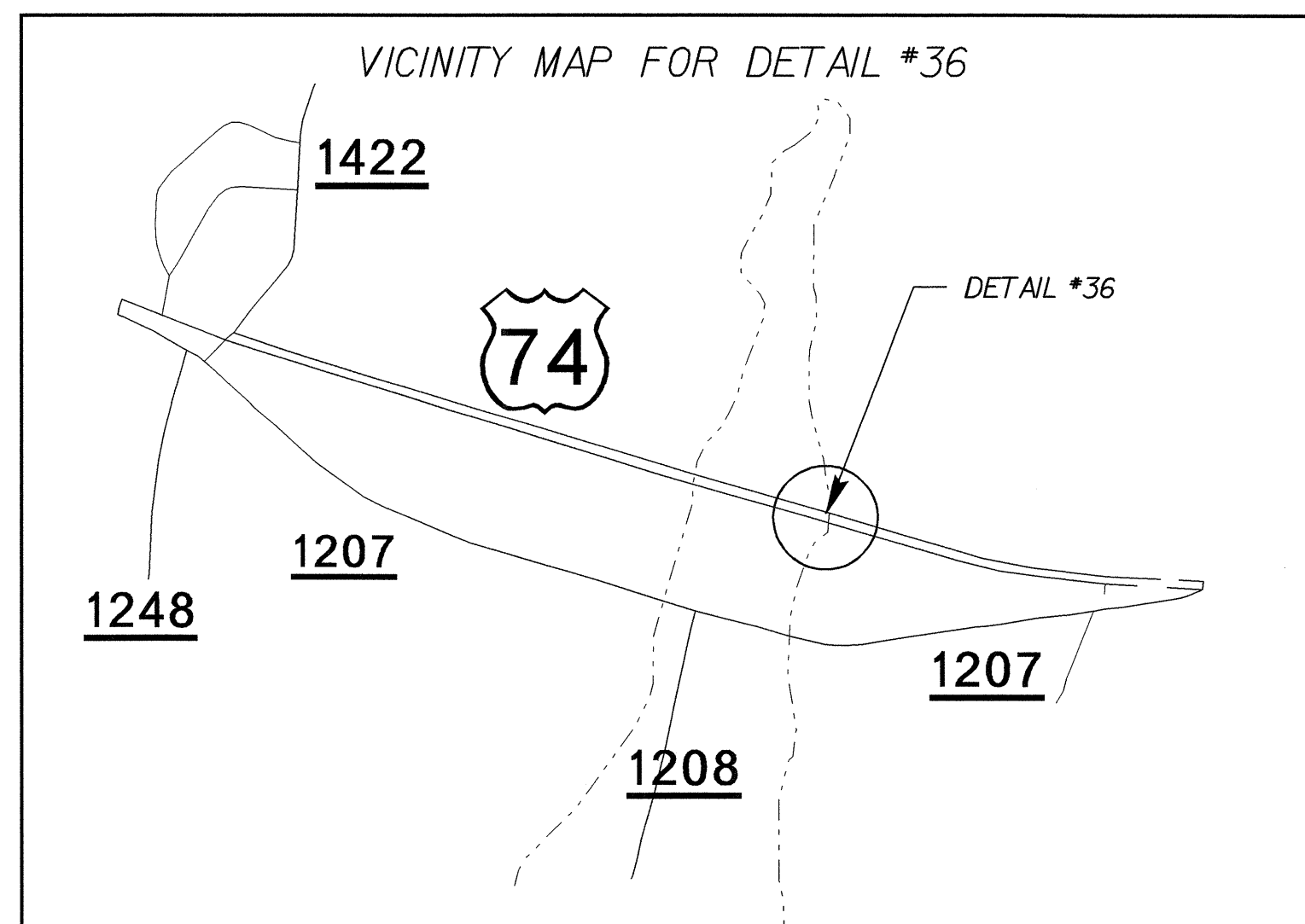
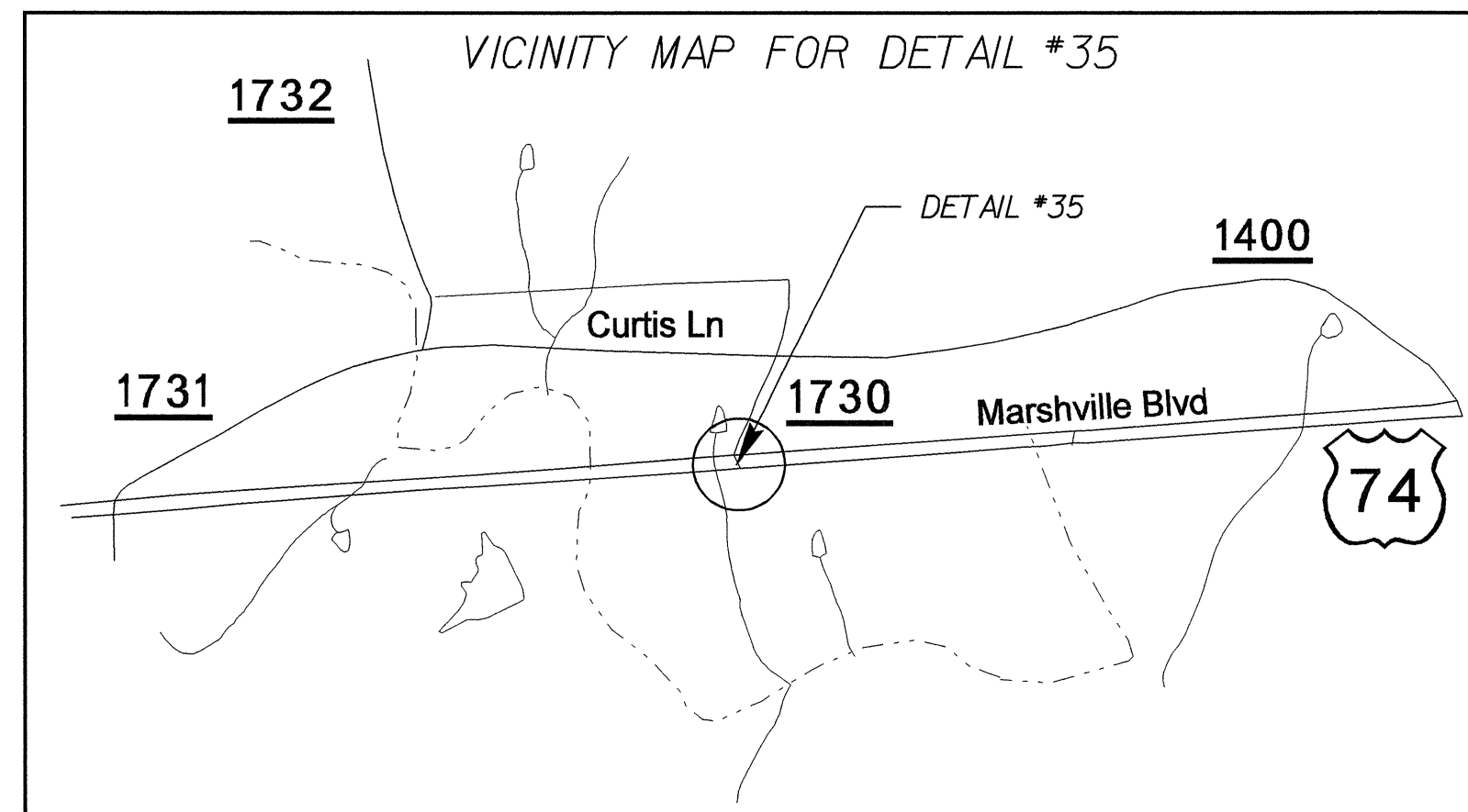
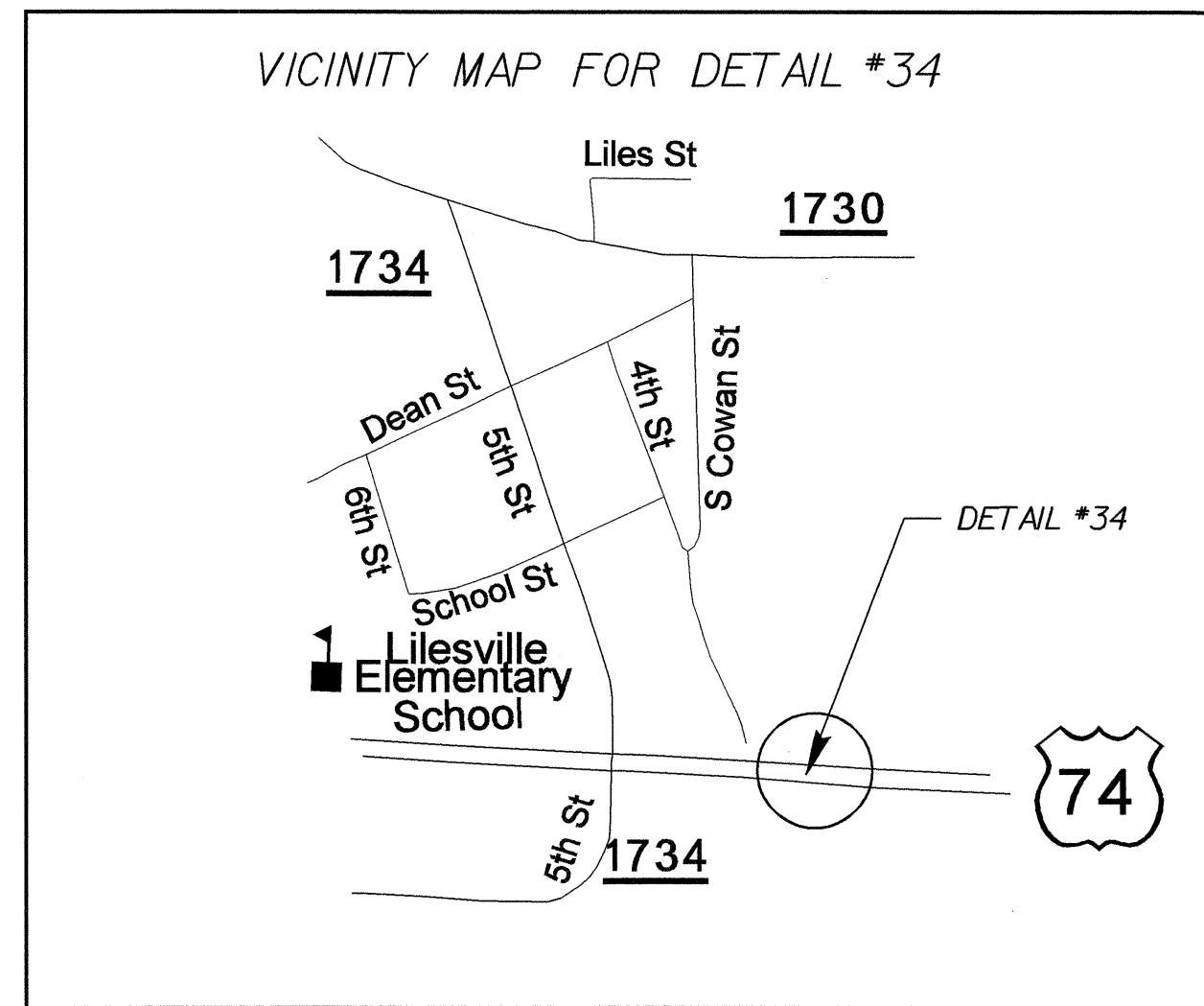


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PROJECT REFERENCE NO. R-4413	SHEET NO. 2-Z
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	



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COMPUTED BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

PROJECT REFERENCE NO. R-4413
 SHEET NO. 3-A

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.
 TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
 FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.
 W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
 G = GATING IMPACT ATTENUATOR TYPE 350
 NG = NON-GATING IMPACT ATTENUATOR TYPE 350

GUARDRAIL SUMMARY

SURVEY LINE	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOULDER WIDTH	FLARE LENGTH		W		ANCHORS							A-77 BARRIER UNIT (LF)	T-77 BARRIER UNIT (LF)	REMOVE AND RESET EXIST. GUARDRAIL	REMOVE EXIST. GUARDRAIL	REMARKS													
		STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	GRAU 350	B-77	M-350	CAT-1	AT-1	G.R. ANCHOR UNIT TYPE III MOD. SHEET 2.2A																			
NC 49	DETAIL 1	SBL	687.5'			CULVERT WALL	CULVERT WALL	6'		50'	50'	7'	7'	2																			EXISTING CULVERT LOCATED .5MI NORTH OF US 52 ON NC49 & 1,800' N OF SR1433				
	DETAIL 1	NBL	687.5'			CULVERT WALL	CULVERT WALL	6'		50'	50'	7'	7'	2																							
NC 49	DETAIL 2	SBL	612.5'			CULVERT WALL	CULVERT WALL	8'		50'	50'	9'	9'	2																				EXISTING CULVERT LOCATED .6MI NORTH OF BETHLEHEM CHURCH ROAD			
	DETAIL 2	NBL	612.5'			CULVERT WALL	CULVERT WALL	8'		50'	50'	9'	9'	2																							
NC 49	DETAIL 3	SBL	537.5'			CULVERT WALL	CULVERT WALL	6'		50'	50'	7'	7'	2																				EXISTING CULVERT LOCATED 2000' NORTH OF WESLEY CHAPEL RD (SR 1455)			
	DETAIL 3	NBL	662.5'			CULVERT WALL	CULVERT WALL	6'		50'	50'	7'	7'	2																							
NC 49	DETAIL 4	SBL	687.5'			CULVERT WALL	CULVERT WALL	5'		50'	50'	6'	6'	2																				EXISTING CULVERT LOCATED 760' N. OF (SR 1451)			
	DETAIL 4	NBL	562.5'			CULVERT WALL	CULVERT WALL	10'		50'	50'	11'	11'	2																							
NC 49	DETAIL 5	NBL	650.0'			FILL	FILL	6'		50'	50'	7'	7'	2																				RIGHT AND LEFT AT VARIOUS LOCATIONS BETWEEN SR 2450 AND SAWTOOTH OAK FARM DRIVE			
	DETAIL 5	NBL	700.0'			FILL	FILL	6'		50'	50'	7'	7'	2																							
	DETAIL 5	NBL	375.0'			FILL	FILL	6'		50'	50'	7'	7'	2																							
	DETAIL 5	SBL	762.5'			FILL	FILL	6'		50'	50'	7'	7'	2																							
NC 49	DETAIL 6	SBL	662.5'			CULVERT WALL	CULVERT WALL	6'		50'	50'	7'	7'	2																				EXISTING CULVERT LOCATED 300' NORTH OF LENTZ HARNESS RD			
	DETAIL 6	NBL	662.5'			CULVERT WALL	CULVERT WALL	6'		50'	50'	7'	7'	2																							
NC 49	DETAIL 7 (VOID)																																				
NC 49	DETAIL 8	NBL				FILL	FILL	7'				8'		1																				50'	EXISTING GUARDRAIL IN VICINITY OF LOWDER RD		
	DETAIL 8	SBL				FILL	FILL	7'				8'		1																				50'	EXISTING GUARDRAIL IN VICINITY OF LOWDER RD		
	DETAIL 8	SBL				FILL	FILL	7'				8'		1																				50'	EXISTING GUARDRAIL IN VICINITY OF LOWDER RD		
	DETAIL 8	SBL				FILL	FILL	7'				8'		1																				50'	EXISTING GUARDRAIL IN VICINITY OF LOWDER RD		
NC 49	DETAIL 9	SBL				FILL	FILL	10'					11'	1																				50'	EXISTING GUARDRAIL IN VICINITY OF CLINES ANTIQUES		
	DETAIL 9	NBL				FILL	FILL	6'				7'		1																				50'	EXISTING GUARDRAIL IN VICINITY OF CLINES ANTIQUES		
NC 49	DETAIL 10	NBL				FILL	FILL	7'				8'		1																				50'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350		
	DETAIL 10	NBL				FILL	FILL	7'				8'		1																				50'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350		
	DETAIL 10	NBL				FILL	FILL	7'				8'		1																				50'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350		
	DETAIL 10	NBL				FILL	FILL	7'				8'		1																				50'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350		
NC 49	DETAIL 11	SBL				BRIDGE WARRANT	BRIDGE WARRANT	6'				50'		7'	1																			50'	RETAIN ALL EXISTING GR NBL NC49		
	DETAIL 11	SBL				BRIDGE WARRANT	BRIDGE WARRANT	6'																										18.75'	STRUCTURE ANCHOR UNIT		
	DETAIL 11	SBL				BRIDGE WARRANT	BRIDGE WARRANT	6'																										18.75'	STRUCTURE ANCHOR UNIT		
	DETAIL 11	SBL				BRIDGE WARRANT	BRIDGE WARRANT	6'		50'		7'		1																					50'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350	
	DETAIL 11	SBL				BRIDGE WARRANT	BRIDGE WARRANT	6'		50'	50'	7'	7'	2																					100'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350	
	DETAIL 11	NBL				BRIDGE WARRANT	BRIDGE WARRANT	6'		50'		7'		1																					50'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350	
	DETAIL 11	NBL				BRIDGE WARRANT	BRIDGE WARRANT	6'																											18.75'	STRUCTURE ANCHOR UNIT	
	DETAIL 11	NBL				BRIDGE WARRANT	BRIDGE WARRANT	6'																											18.75'	STRUCTURE ANCHOR UNIT	
	DETAIL 11	NBL				BRIDGE WARRANT	BRIDGE WARRANT	6'																											50'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350	
NC 49	DETAIL 12	SBL				BRIDGE WARRANT	BRIDGE WARRANT	6'				50'		7'	1																				50'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350	
	DETAIL 12	SBL				BRIDGE WARRANT	BRIDGE WARRANT	6'																											18.75'	STRUCTURE ANCHOR UNIT	
	DETAIL 12	SBL				BRIDGE WARRANT	BRIDGE WARRANT	6'																											18.75'	STRUCTURE ANCHOR UNIT	
	DETAIL 12	SBL				BRIDGE WARRANT	BRIDGE WARRANT	6'		50'	50'	7'	7'	1																						50'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350
	DETAIL 12	NBL				BRIDGE WARRANT	BRIDGE WARRANT	6'		50'		7'		1																						50'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350
	DETAIL 12	NBL				BRIDGE WARRANT	BRIDGE WARRANT	6'																												18.75'	STRUCTURE ANCHOR UNIT
	DETAIL 12	NBL				BRIDGE WARRANT	BRIDGE WARRANT	6'																												18.75'	STRUCTURE ANCHOR UNIT
	DETAIL 12	NBL				BRIDGE WARRANT	BRIDGE WARRANT	6'		50'	50'	7'	7'	1																						50'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350
	DETAIL 12	NBL				BRIDGE WARRANT	BRIDGE WARRANT	6'		50'	50'	7'	7'	2																						100'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350
NC 49	DETAIL 13	NBL	662.5'			FILL	FILL	6'		50'	50'	7'	7'	2																						NC 49 NEAR CONC. DR. AT #9305	
	DETAIL 13	SBL	437.5'			FILL	FILL	4'		50'	50'	5'	5'	2																							
NC 49	DETAIL 14	NBL				FILL	FILL			50'	50'			2																					100'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350	
	DETAIL 14	SBL				FILL	FILL			50'	50'			2																					100'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350	
NC 49	DETAIL 15	NBL				FILL	FILL			50'	50'			2																					100'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350	
	DETAIL 15	SBL				FILL	FILL			50'	50'			2																					100'	REPLACE EXIST. ANCHOR UNIT WITH GRAU-350	
NC 49	DETAIL 16	NBL				FILL	FILL			50'	50'			2																					100'	NC 49 NEAR FIRST BANK OF MT. PLEASANT	
	DETAIL 16	SBL				FILL	FILL			50'	50'			2																							

COMPUTED BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS

PROJECT REFERENCE NO. R-4413
 SHEET NO. 3-B

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.
 TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
 FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.
 W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
 G = GATING IMPACT ATTENUATOR TYPE 350
 NG = NON-GATING IMPACT ATTENUATOR TYPE 350

GUARDRAIL SUMMARY

SURVEY LINE	DETAIL	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOULDER WIDTH	FLARE LENGTH		W		ANCHORS							A-77 BARRIER UNIT (LF)	T-77 BARRIER UNIT (LF)	REMOVE AND RESET EXIST. GUARDRAIL	REMOVE EXIST. GUARDRAIL	REMARKS	
			STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	GRAU 350	B-77	M-350	CAT-1	AT-1	G. ANCHOR UNIT TYPE IF MOD. SHEET 2.2A							
US 52	DETAIL 18	NBL				FILL	FILL			50'															50'	100' S. OF N. FIRST STREET IN ALBEMARLE REMOVE 50' EXISTING GR
US 52	DETAIL 19	SBL				FILL	FILL			50'	50'														100'	SOUTH OF SOUTH HILL AVE. REMOVE 50' EXISTING GR FROM EACH LOCATION
US 52	DETAIL 20	SBL	612.5'			CULVERT WALL	CULVERT WALL	3'		50'	50'															SBL IN NORWOOD NEAR CANDALON FIELD DR.
	DETAIL 20	NBL		25'		CULVERT WALL	CULVERT WALL	3'		50'	50'															NBL IN NORWOOD NEAR CANDALON FIELD DR.
	DETAIL 20	NBL	362.5'			CULVERT WALL	CULVERT WALL	3'		50'	50'															NBL IN NORWOOD NEAR CANDALON FIELD DR.
US 52	DETAIL 21	SBL	925'			FILL	FILL	8'		50'	50'	9'	9'													SBL SOUTH OF NC 731 ON RIGHT AND LEFT OF US 52
	DETAIL 21	NBL	937.5'			FILL	FILL	8'		50'	50'	9'	9'													NBL SOUTH OF NC 731 ON RIGHT AND LEFT OF US 52
US 52	DETAIL 22	SBL	725'			FILL	FILL	6'		50'	50'	7'	7'													GUARDRAIL BEGINNING .25 MI N. OF SR 1765 ALONG US 52
	DETAIL 22	NBL	400'			FILL	FILL	6'		50'	50'	7'	7'													GUARDRAIL BEGINNING .25 MI N. OF SR 1765 ALONG US 52
US 52	DETAIL 23	SBL	337.5'			CULVERT WALL	CULVERT WALL	4'		50'	50'															EXISTING CULVERT SOUTH OF PINKSTON RIVER ROAD (SR 1627) ON US 52
	DETAIL 23	NBL	337.5'			CULVERT WALL	CULVERT WALL	4'		50'	50'															EXISTING CULVERT SOUTH OF PINKSTON RIVER ROAD (SR 1627) ON US 52
US 52	DETAIL 24	SBL	500'			FILL	FILL	7'		50'	50'	8'	8'													RIGHT AND LEFT NORTH OF G. AND M. MILLING CO. DRIVE
	DETAIL 24	NBL	1,962.5'			FILL	FILL	7'		50'	50'	8'	8'													RIGHT AND LEFT NORTH OF G. AND M. MILLING CO. DRIVE
US 52	DETAIL 25	SBL	775'			FILL	FILL	9'		50'		10'														REMOVE EXISTING BCT-1, EXTEND EXIST. GR 775' ON SBL
	DETAIL 25	NBL	775'			FILL	FILL	9'			50'		10'													REMOVE EXISTING BCT-1, EXTEND EXIST. GR 775' ON SBL
US 52	DETAIL 26	SBL	500'			CULVERT WALL	CULVERT WALL	4'		50'	50'	5'	5'													EXISTING CULVERT AND FILL WARRANT 1 MILE S. OF ANSONVILLE ON US 52
	DETAIL 26	NBL	487.5'			CULVERT WALL	CULVERT WALL	4'		50'	50'	5'	5'													EXISTING CULVERT AND FILL WARRANT 1 MILE S. OF ANSONVILLE ON US 52
US 52	DETAIL 27	NBL								50'	50'															RETAIN EXISTING GR. REPLACE DAMAGED BCT-1 WITH GRAU 350. NBL NORTH OF WADESBORO ON US52 N. OF ALBEMARLE RD.
US 52	DETAIL 28	NBL	337.5'			CULVERT WALL	CULVERT WALL	4'		50'	50'															EXISTING CULVERT OVER GRINDSTONE CREEK ON US 52 N. OF WADESBORO.
	DETAIL 28	SBL	337.5'			CULVERT WALL	CULVERT WALL	4'		50'	50'															EXISTING CULVERT OVER GRINDSTONE CREEK ON US 52 N. OF WADESBORO.
US 52	DETAIL 29	SBL	137.5'			BRIDGE WARRANT	BRIDGE WARRANT	6'		50'	50'															EXISTING BRIDGE OVER BUFFALO CREEK SOUTH OF NORWOOD ON US 52
	DETAIL 29	SBL	300'			BRIDGE WARRANT	BRIDGE WARRANT	6'		50'		7'														EXISTING BRIDGE OVER BUFFALO CREEK SOUTH OF NORWOOD ON US 52
	DETAIL 29	NBL	300'			BRIDGE WARRANT	BRIDGE WARRANT	6'		50'		7'														EXISTING BRIDGE OVER BUFFALO CREEK SOUTH OF NORWOOD ON US 52
	DETAIL 29	NBL	137.5'			BRIDGE WARRANT	BRIDGE WARRANT	6'			50'		7'													EXISTING BRIDGE OVER BUFFALO CREEK SOUTH OF NORWOOD ON US 52
US 52	DETAIL 30	SBL	162.5'	50'		BRIDGE WARRANT	BRIDGE WARRANT			50'																EXISTING BRIDGE OVER ROCKY RIVER SOUTH OF NORWOOD ON US 52
	DETAIL 30	SBL	137.5'			BRIDGE WARRANT	BRIDGE WARRANT				50'															EXISTING BRIDGE OVER ROCKY RIVER SOUTH OF NORWOOD ON US 52
	DETAIL 30	NBL	300'			BRIDGE WARRANT	BRIDGE WARRANT			50'																EXISTING BRIDGE OVER ROCKY RIVER SOUTH OF NORWOOD ON US 52
	DETAIL 30	NBL	125'			BRIDGE WARRANT	BRIDGE WARRANT				50'															EXISTING BRIDGE OVER ROCKY RIVER SOUTH OF NORWOOD ON US 52
US 52	DETAIL 31	SBL	137.5'			BRIDGE WARRANT	BRIDGE WARRANT				50'															EXISTING BRIDGE OVER RR SOUTH OF NORWOOD ON US 52
	DETAIL 31	SBL	300'			BRIDGE WARRANT	BRIDGE WARRANT			50'																EXISTING BRIDGE OVER RR SOUTH OF NORWOOD ON US 52
	DETAIL 31	NBL	300'			BRIDGE WARRANT	BRIDGE WARRANT			50'																EXISTING BRIDGE OVER RR SOUTH OF NORWOOD ON US 52
	DETAIL 31	NBL	137.5'			BRIDGE WARRANT	BRIDGE WARRANT				50'															EXISTING BRIDGE OVER RR SOUTH OF NORWOOD ON US 52

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