

**This electronic collection of documents is provided
for the convenience of the user
and is Not a Certified Document –**

**The documents contained herein were originally issued
and sealed by the individuals whose names and license
numbers appear on each page, on the dates appearing
with their signature on that page.**

**This file or an individual page
shall not be considered a certified document.**

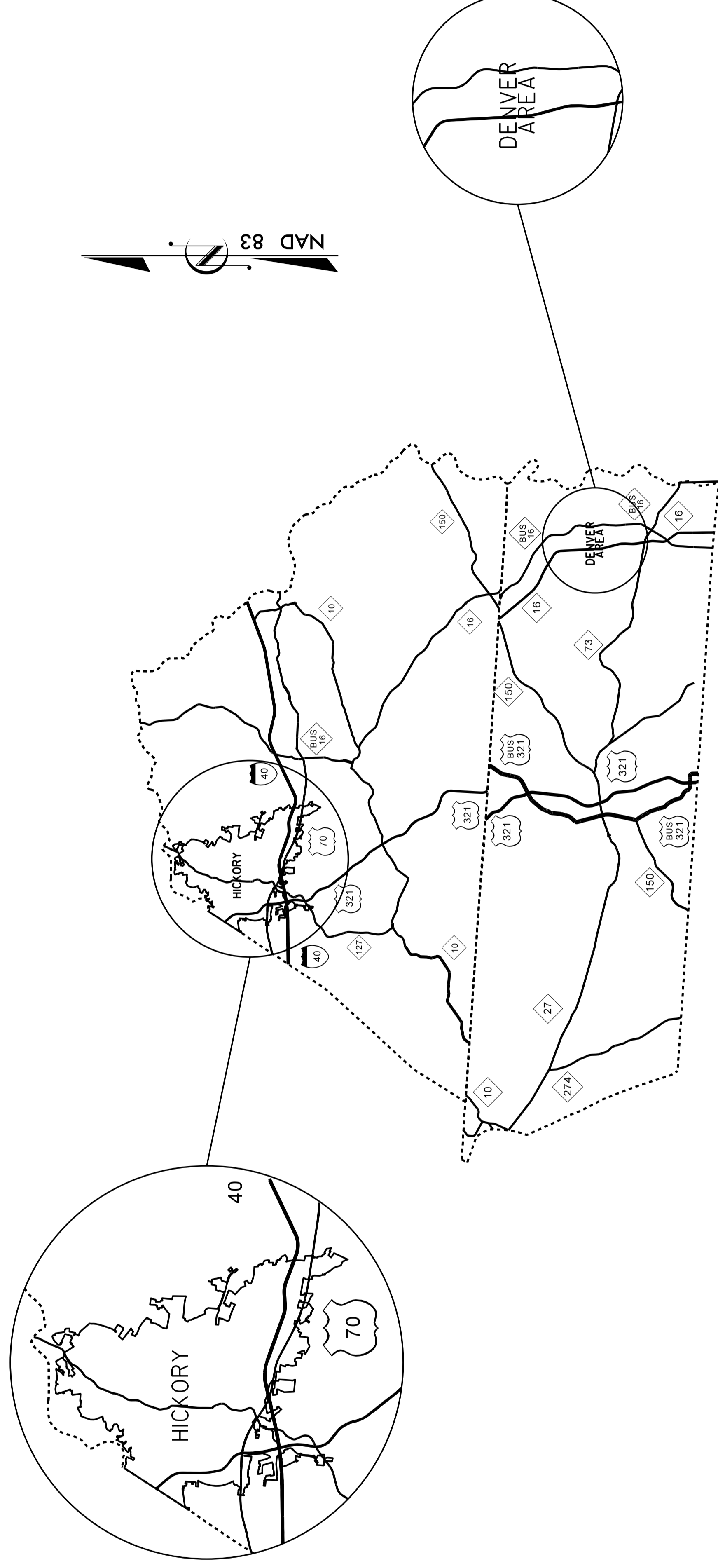
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5792AB & AG	1	20
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
44922.1.7	TAP-1229(033)	PE	
44922.3.7	TAP-1229(027)	CONST. CAT. > 5,000	
44922.3.11	TAP-1229(028)	CONST. LINC. > 5,000	

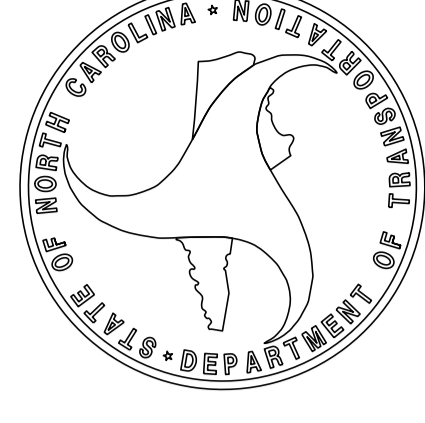
CATAWBA AND LINCOLN COUNTIES

LOCATION: *VARIOUS THROUGHTOUT: HICKORY AND DENVER AREA*

TYPE OF WORK: *UPGRADE EXISTING CURB RAMPS TO CURRENT STANDARDS*



CONTRACT: DL00190 TIP PROJECT: R-5792AB & AG



Prepared in the Office of:
DIVISION OF HIGHWAYS
1710 E. Marion St., Shelby, NC 28150

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
N/A

TRAVIS R. JORDAN, PE
PROJECT ENGINEER

LETTING DATE:
OCT. 23, 2018

JEFFERY KANIPE
PROJECT DESIGN ENGINEER

2018 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2012 are applicable to this project and by reference hereby are considered a part of these plans:

STD. NO.	TITLE
DIVISION 8 - INCIDENTALS	
848.01	Concrete Curb, Gutter and Curb & Gutter
848.05	Concrete Sidewalk
848.05	Curb Ramp - Proposed Curb & Gutter
848.06	Curb Ramp - Existing Curb & Gutter

GENERAL NOTES:

2018 SPECIFICATIONS

CURB RAMPS

CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS. CONSTRUCT ALL CURB RAMPS ACCORDANCE WITH STD 848.05, 848.06, & SPECIAL DETAILS.

INDEX OF SHEETS

SHEET NUMBER	SHEET
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, AND STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
2C-1 THRU 2C-3	SPECIAL DETAILS
4 THRU 20	PLAN AND SUMMARY OF QUANTITIES
TMP-1 THRU TMP-1B	TRAFFIC MANAGEMENT PLANS

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS
CONVENTIONAL PLAN SHEET SYMBOLS

RAILROADS: *Note: Not to Scale* *S.U.E. = *Subsurface Utility Engineering*

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin
- Computed Property Corner
- Property Monument
- Parcel/Sequence Number
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary
- Proposed Wetland Boundary
- Existing Endangered Animal Boundary
- Existing Endangered Plant Boundary
- Existing Historic Property Boundary
- Known Contamination Area: Soil
- Potential Contamination Area: Soil
- Known Contamination Area: Water
- Potential Contamination Area: Water
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign
- Well
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam
- HYDROLOGY:**
- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream
- Buffer Zone 1
- Buffer Zone 2
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch
- False Sump

- Hedge
- Woods Line
- Orchard
- Vineyard

EXISTING STRUCTURES:

- MAJOR:
Bridge, Tunnel or Box Culvert
- Bridge Wing Wall, Head Wall and End Wall
- MINOR:
Head and End Wall
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB
- Paved Ditch Gutter
- Storm Sewer Manhole
- Storm Sewer

UTILITIES:

- POWER:
Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole
- Power Line Tower
- Power Transformer
- UG Power Cable Hand Hole
- H-Frame Pole
- UG Power Line LOS B (S.U.E.*)
- UG Power Line LOS C (S.U.E.*)
- UG Power Line LOS D (S.U.E.*)

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole
- Telephone Pedestal
- Telephone Cell Tower
- UG Telephone Cable Hand Hole
- UG Telephone Cable LOS B (S.U.E.*)
- UG Telephone Cable LOS C (S.U.E.*)
- UG Telephone Cable LOS D (S.U.E.*)
- UG Telephone Conduit LOS B (S.U.E.*)
- UG Telephone Conduit LOS C (S.U.E.*)
- UG Telephone Conduit LOS D (S.U.E.*)
- UG Fiber Optics Cable LOS B (S.U.E.*)
- UG Fiber Optics Cable LOS C (S.U.E.*)
- UG Fiber Optics Cable LOS D (S.U.E.*)

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut
- Proposed Slope Stakes Fill
- Proposed Curb Ramp
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal
- VEGETATION:**
- Single Tree
- Single Shrub

WATER:

- Water Manhole
- Water Meter
- Water Valve
- Water Hydrant
- UG Water Line LOS B (S.U.E.*)
- UG Water Line LOS C (S.U.E.*)
- UG Water Line LOS D (S.U.E.*)
- Above Ground Water Line

TV:

- TV Pedestal
- TV Tower
- UG TV Cable Hand Hole
- UG TV Cable LOS B (S.U.E.*)
- UG TV Cable LOS C (S.U.E.*)
- UG TV Cable LOS D (S.U.E.*)
- UG Fiber Optic Cable LOS B (S.U.E.*)
- UG Fiber Optic Cable LOS C (S.U.E.*)
- UG Fiber Optic Cable LOS D (S.U.E.*)

GAS:

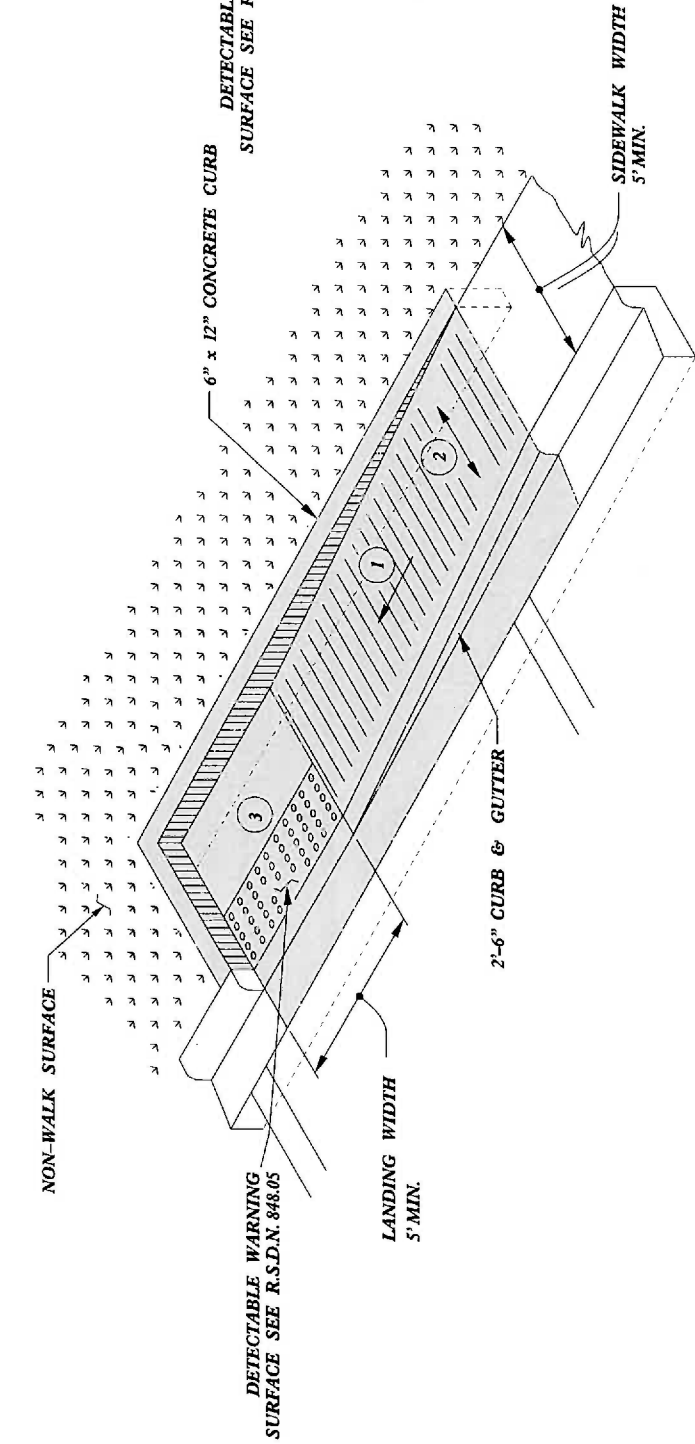
- Gas Valve
- Gas Meter
- UG Gas Line LOS B (S.U.E.*)
- UG Gas Line LOS C (S.U.E.*)
- UG Gas Line LOS D (S.U.E.*)
- Above Ground Gas Line

SANITARY SEWER:

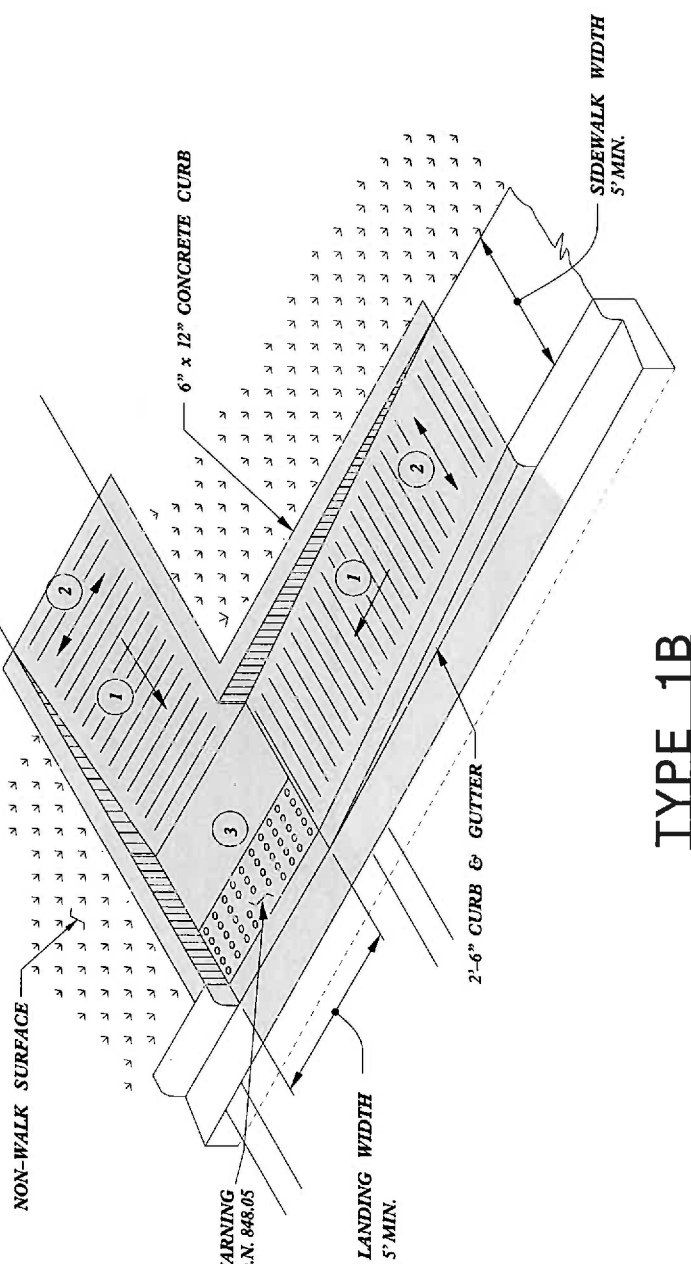
- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- UG Sanitary Sewer Line
- Above Ground Sanitary Sewer
- SS Forced Main Line LOS B (S.U.E.*)
- SS Forced Main Line LOS C (S.U.E.*)
- SS Forced Main Line LOS D (S.U.E.*)

MISCELLANEOUS:

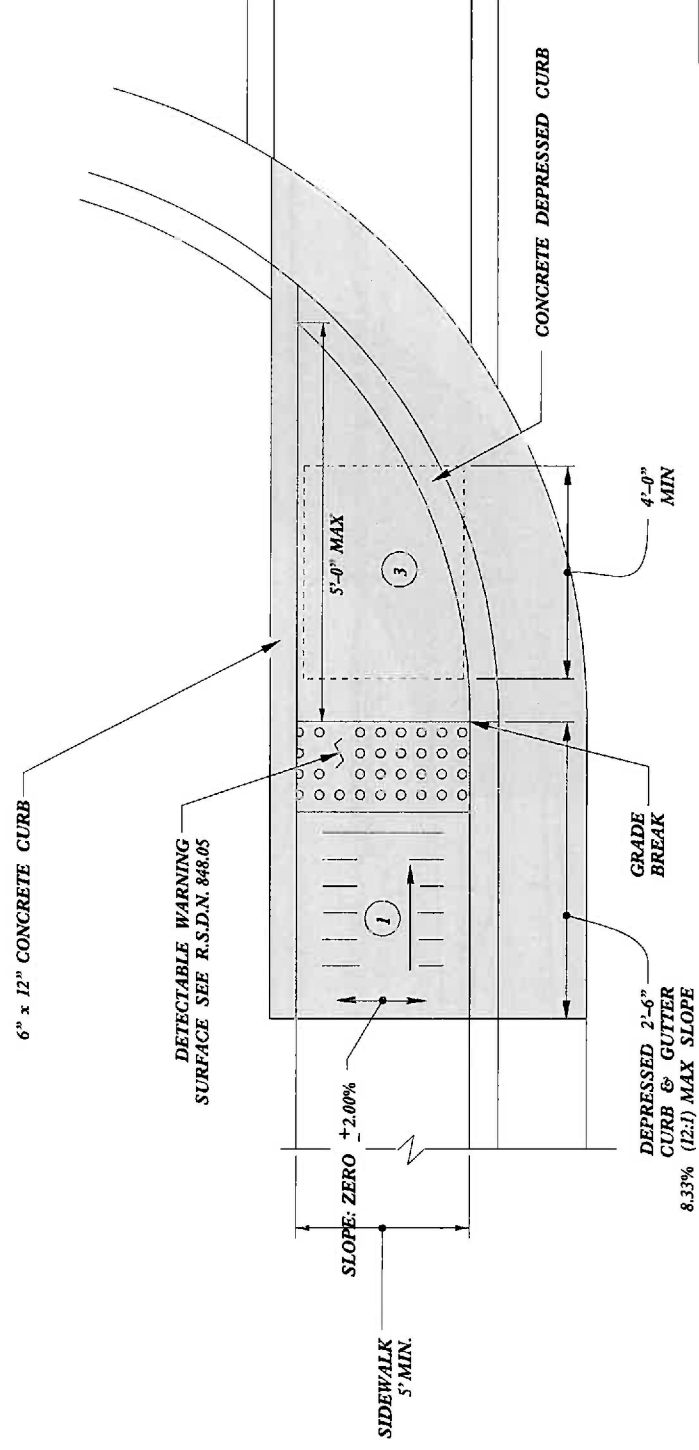
- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box
- Utility Unknown U/G Line LOS B (S.U.E.*)
- UG Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc.
- AG Tank; Water, Gas, Oil
- Geoenvironmental Boring
- UG Test Hole LOS A (S.U.E.*)
- Abandoned According to Utility Records
- End of Information
- E.O.I.



TYPE 1A



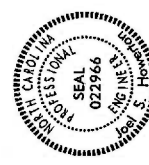
TYPE 1B



TYPE 1

PAY LIMITS FOR 1 CURB RAMP

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.



Designed by:
J. L. Howerton, P.E.
8/29/2018

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

CURB RAMPS
Directional Ramps

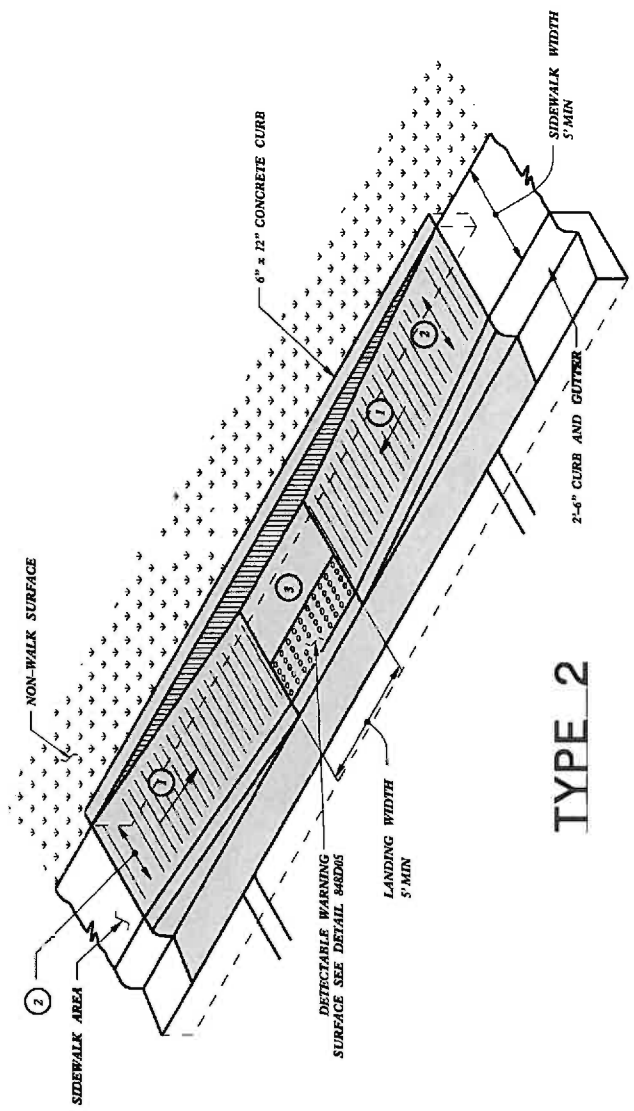
ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC: stds/2012CurRamp/CurRampDetail.s.dgn

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

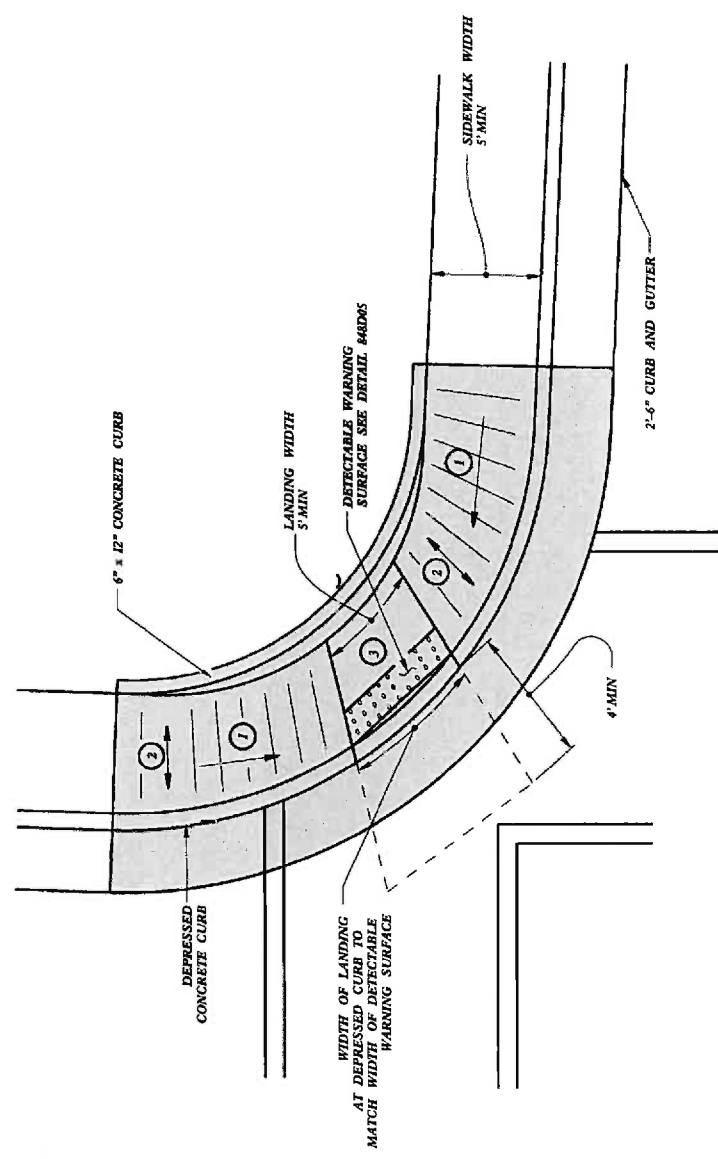
PAY LIMITS FOR CURB RAMP



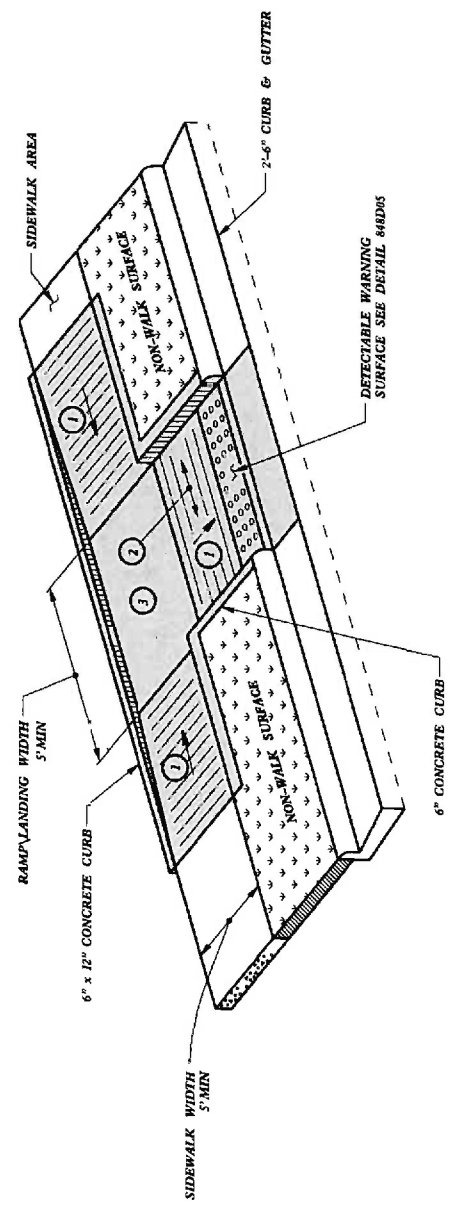
- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS.



TYPE 2



TYPE 2A



TYPE 2B

CONTRACT STANDARDS AND DEVELOPMENT UNIT
 Office 919-707-6950 FAX 919-250-4119

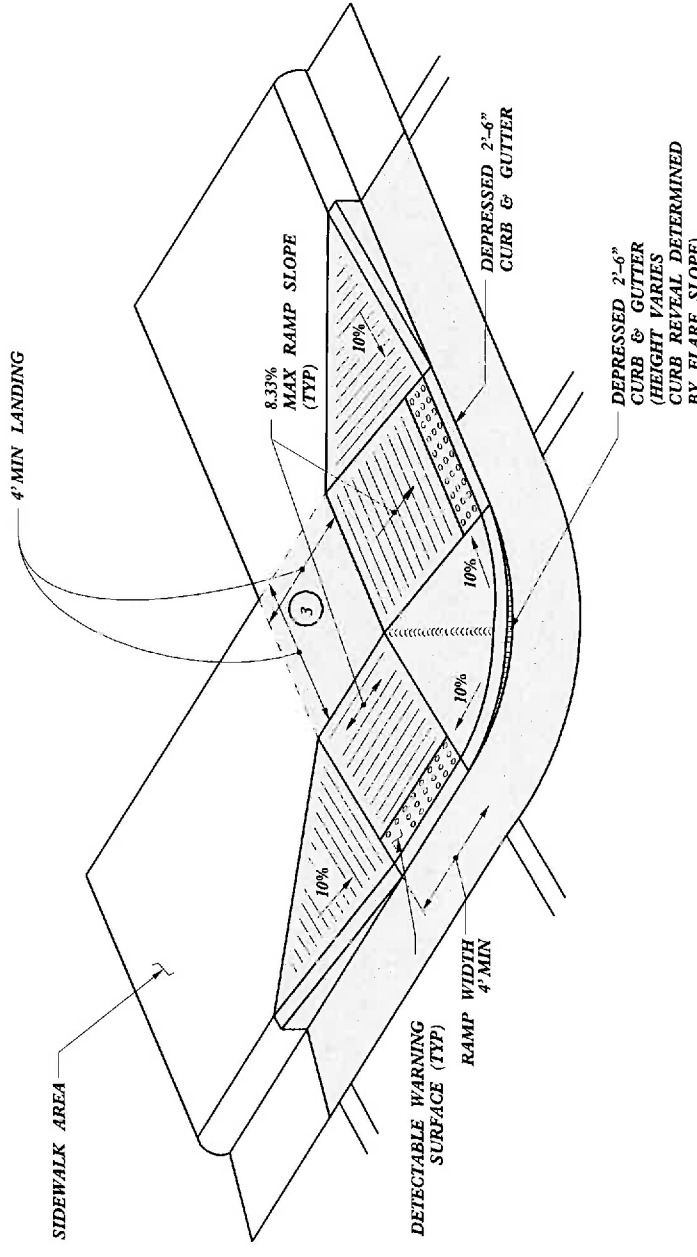
CURB RAMPS
 Parallel Ramps

ORIGINAL BY: J.L.S. - HOWERTON DATE: 7/7/11
 MODIFIED BY: DATE:
 CHECKED BY: DATE:
 FILE SPEC: stds\2012CurbRamp\CurbRampDetails.dwg

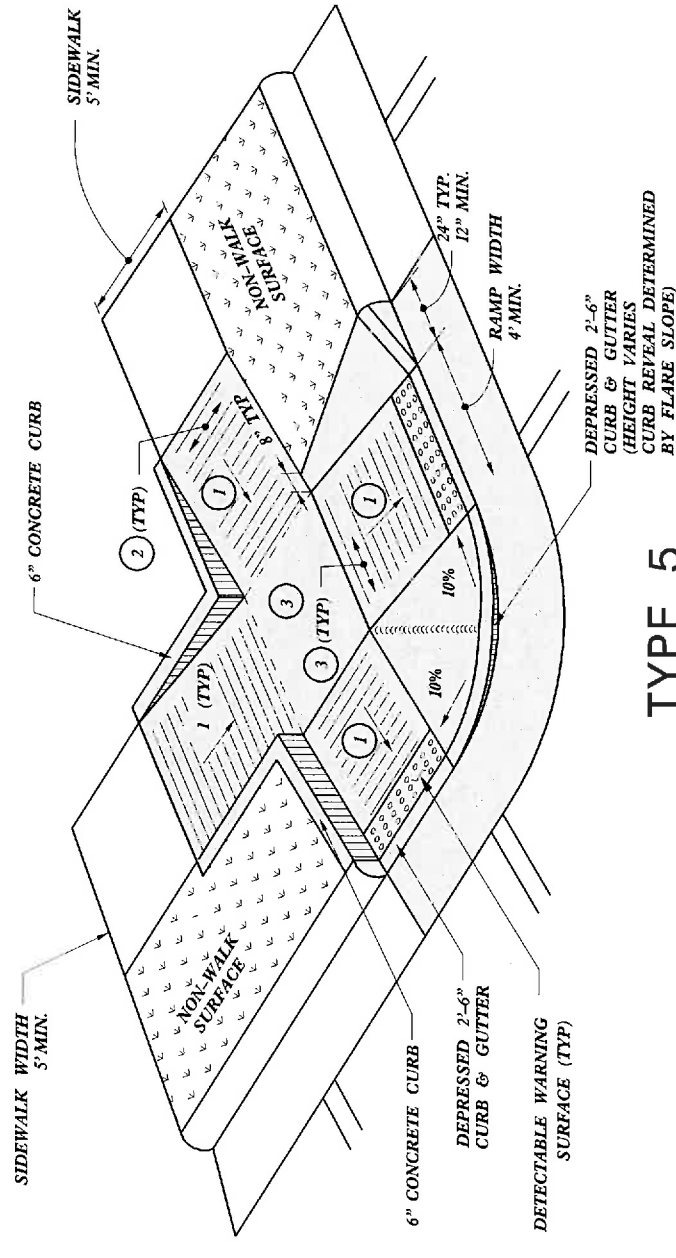
REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

22-Mar-2012 15:07
 J:\Projects\2012\Standard Drawings\2012 Standard Drawings\Howerton\Special Details\Curb Ramp Special Details\Curb Ramp Details.dwg
 5/14/99

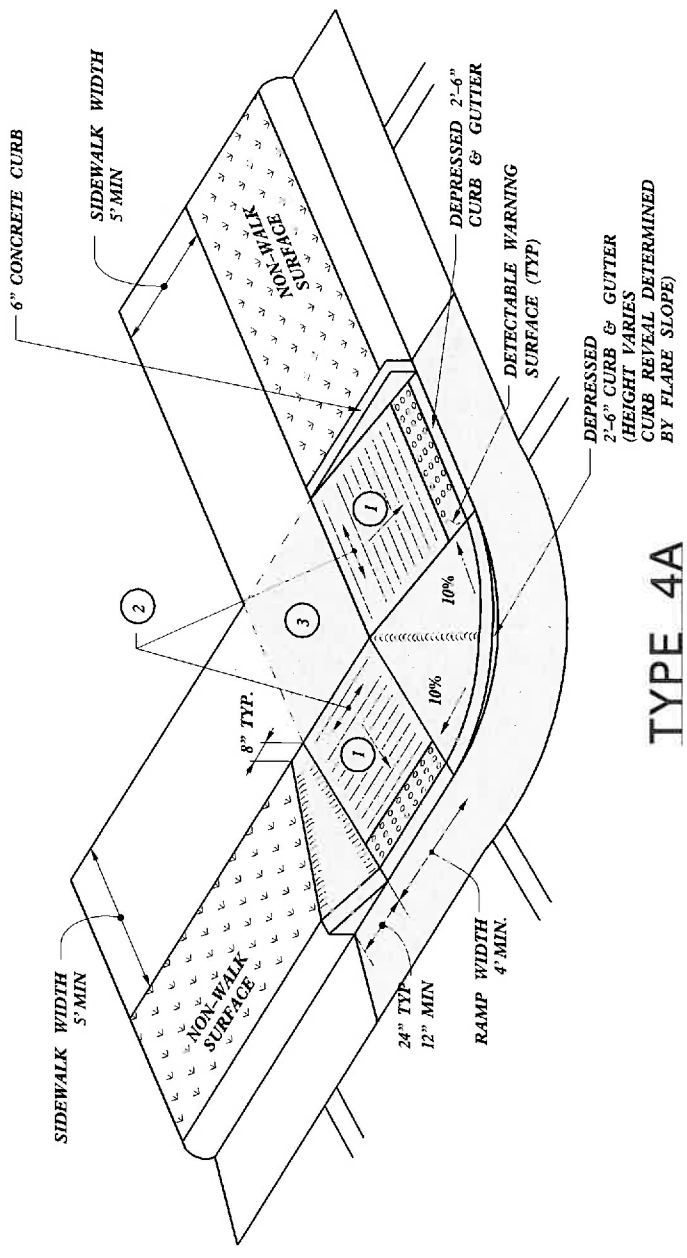
PAY LIMITS FOR CURB RAMP



TYPE 4



TYPE 5



TYPE 4A

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMP REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

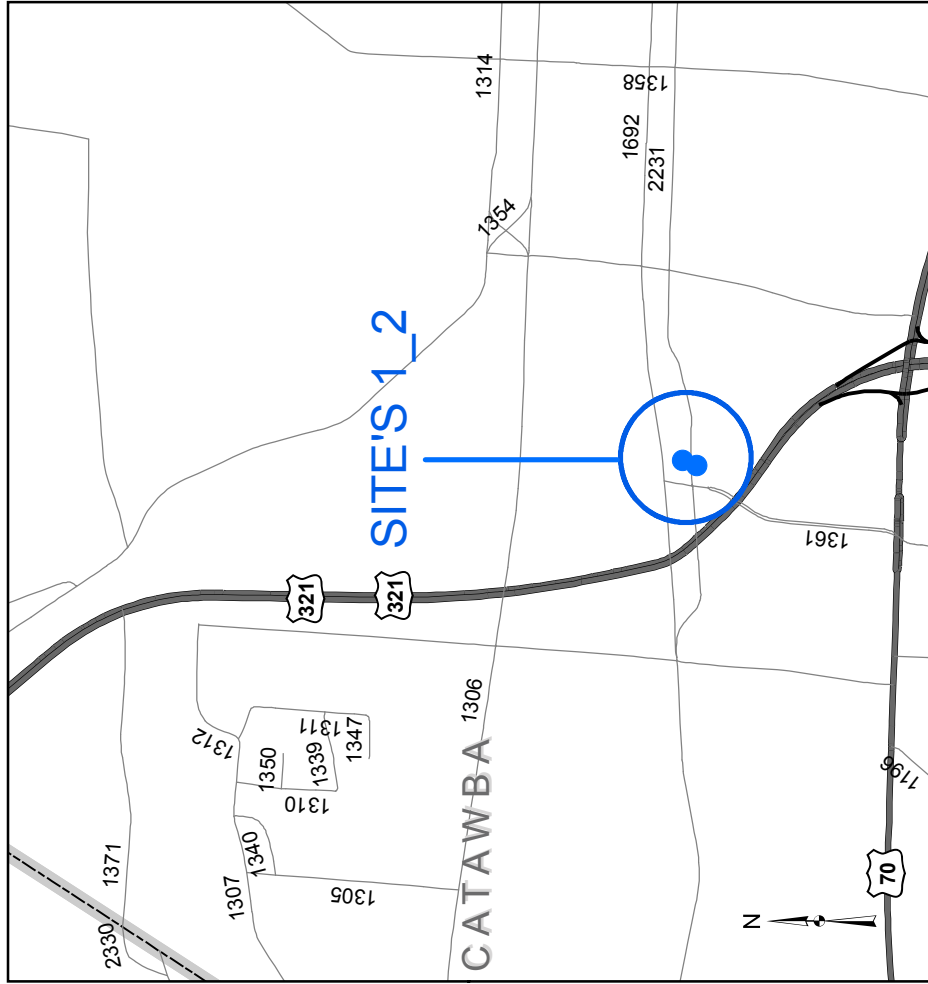
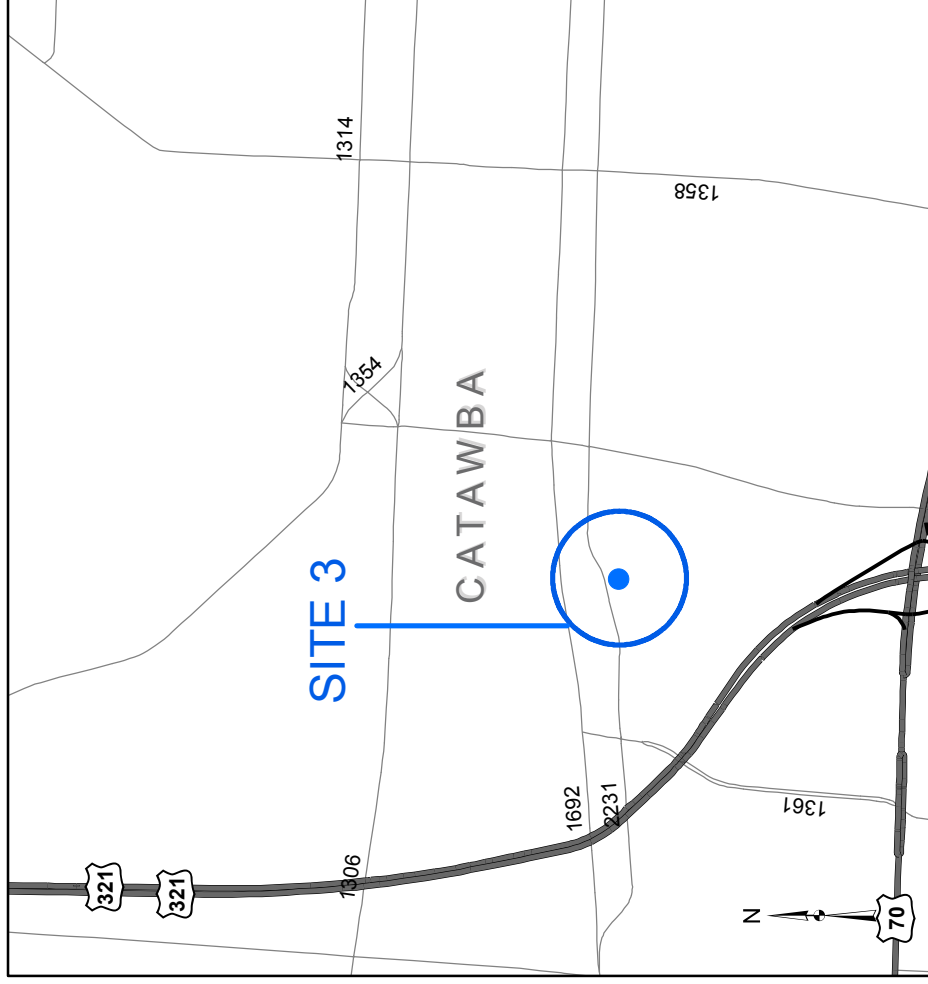
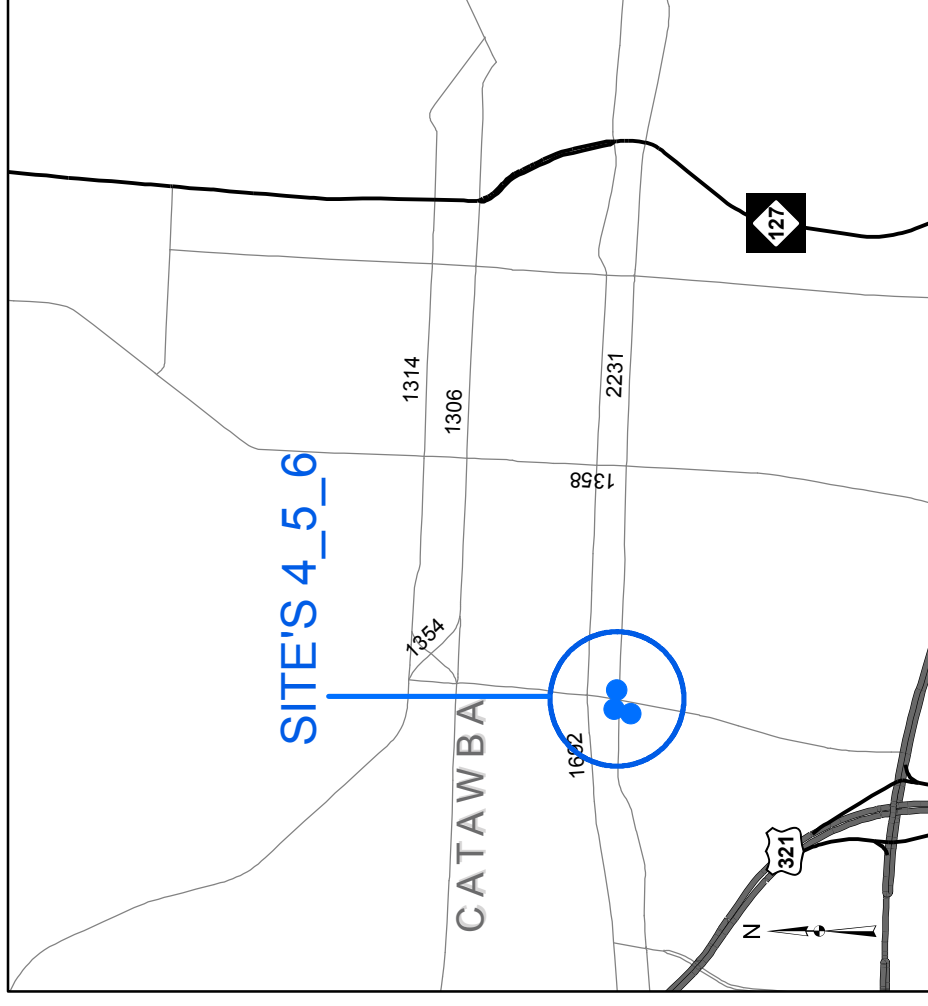
CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

CURB RAMPS
Shared Landing

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE: SEC_Stdgs\2012\curbRamp\CurbRampDetails.dwg

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

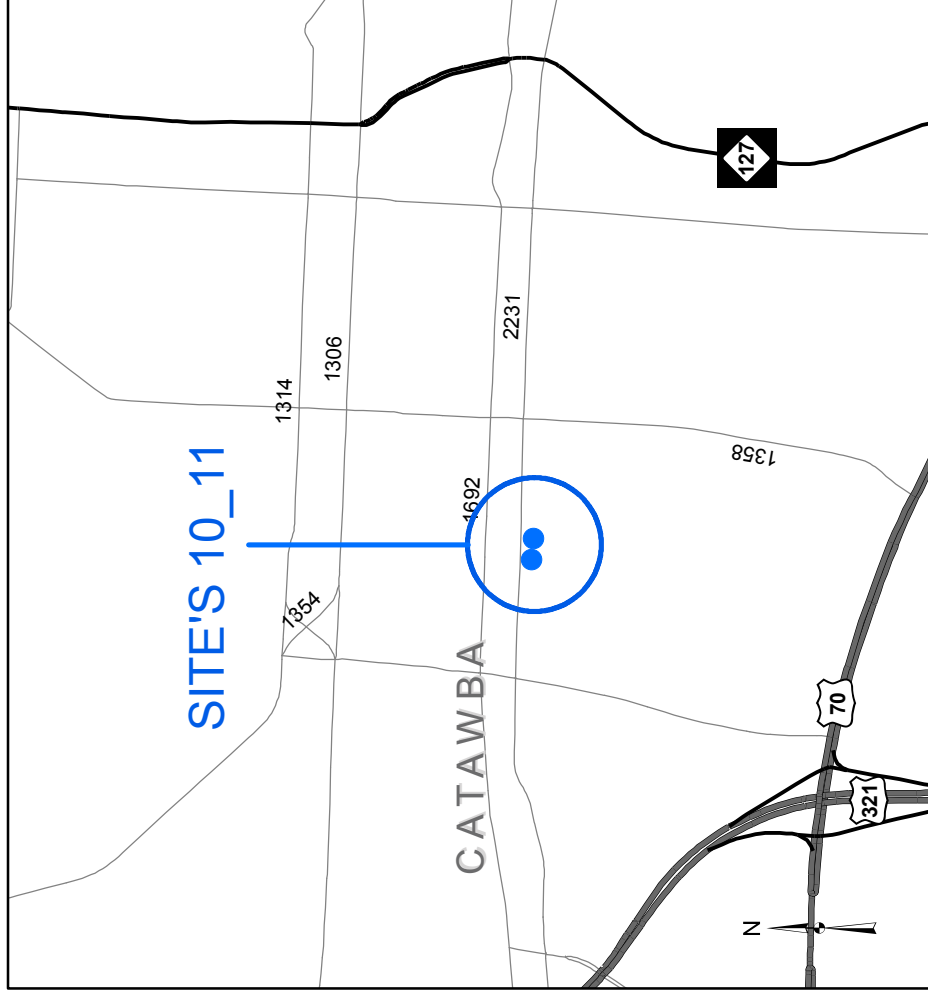
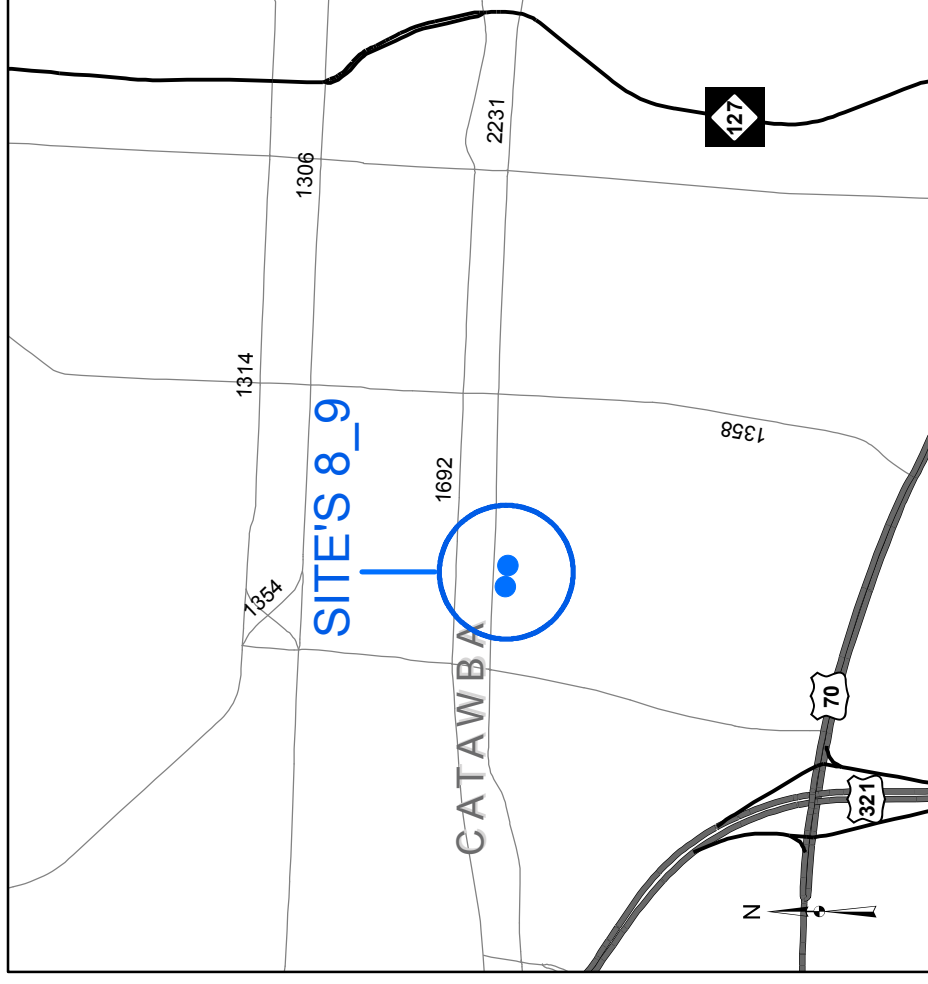
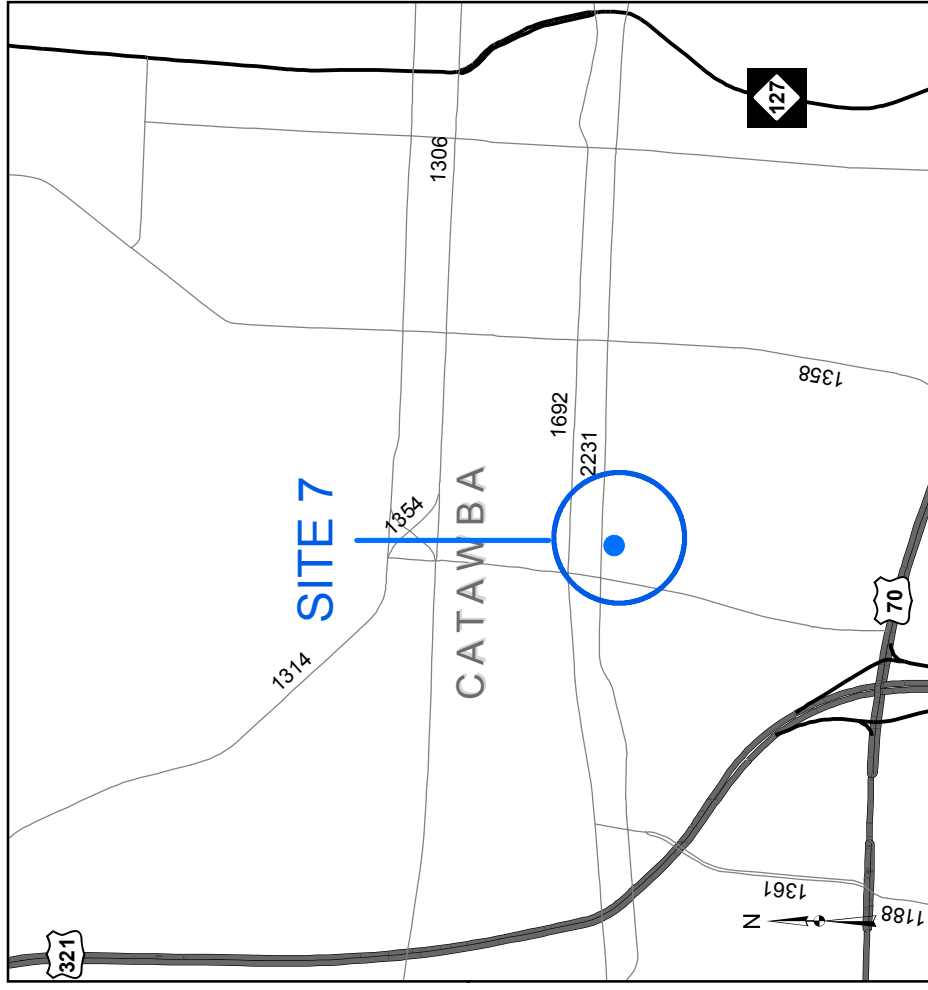
5/14/99
15:08
MAR-2012
15:08
C:\Users\jsh\Documents\Standard Drawings\2012 Standard Drawings\2012 Curb Ramp Special Details\Curb Ramp Details.dwg
15:08
2/15/2012
15:08
C:\Users\jsh\Documents\Standard Drawings\2012 Standard Drawings\2012 Curb Ramp Special Details\Curb Ramp Details.dwg



SR 2231 (2nd Ave. SW) @ 9th Street SW

SR 2231 (2nd Ave. SW) @ 11th Street SW

SR 2231 (2nd Ave. SW) @ 12th Street SW



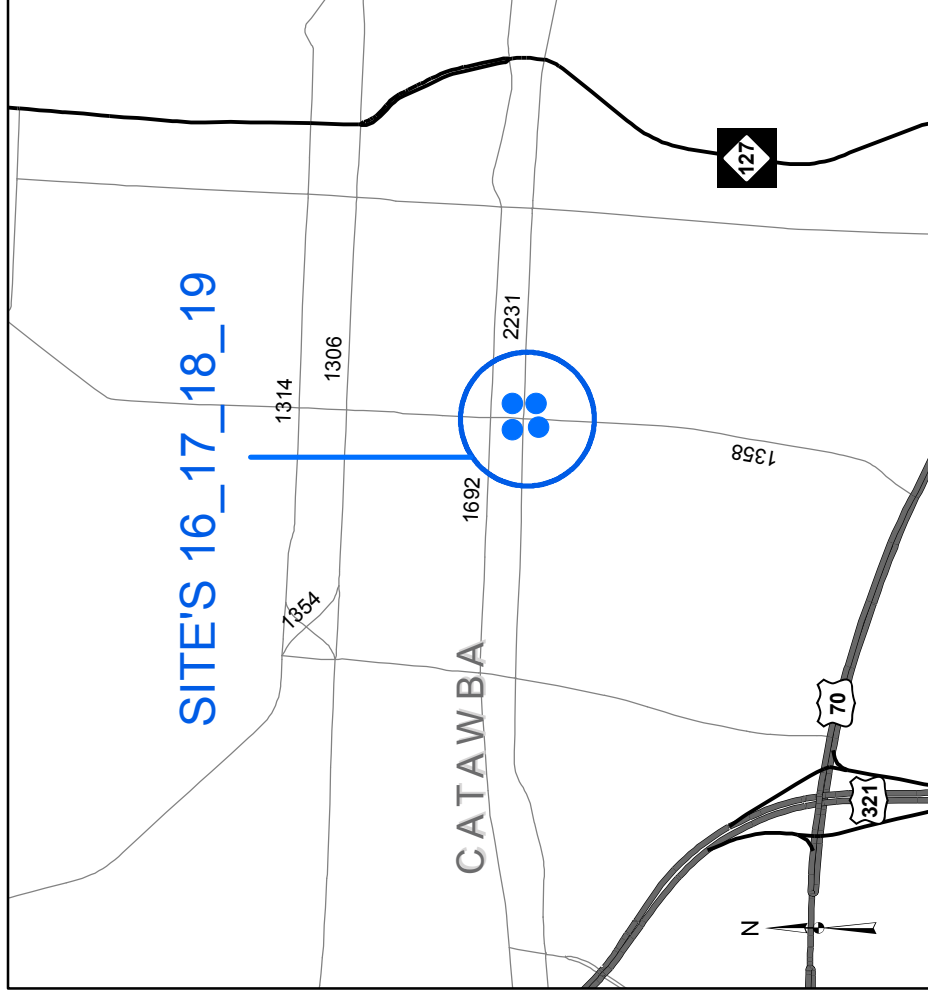
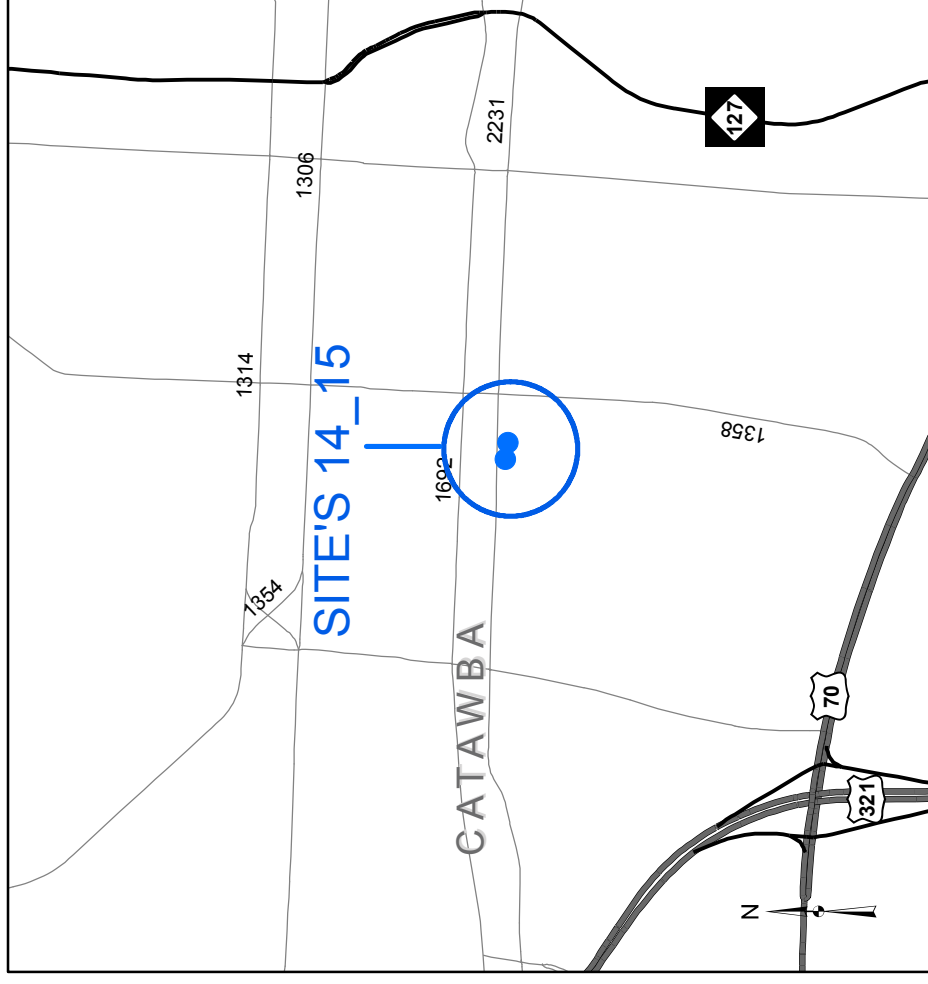
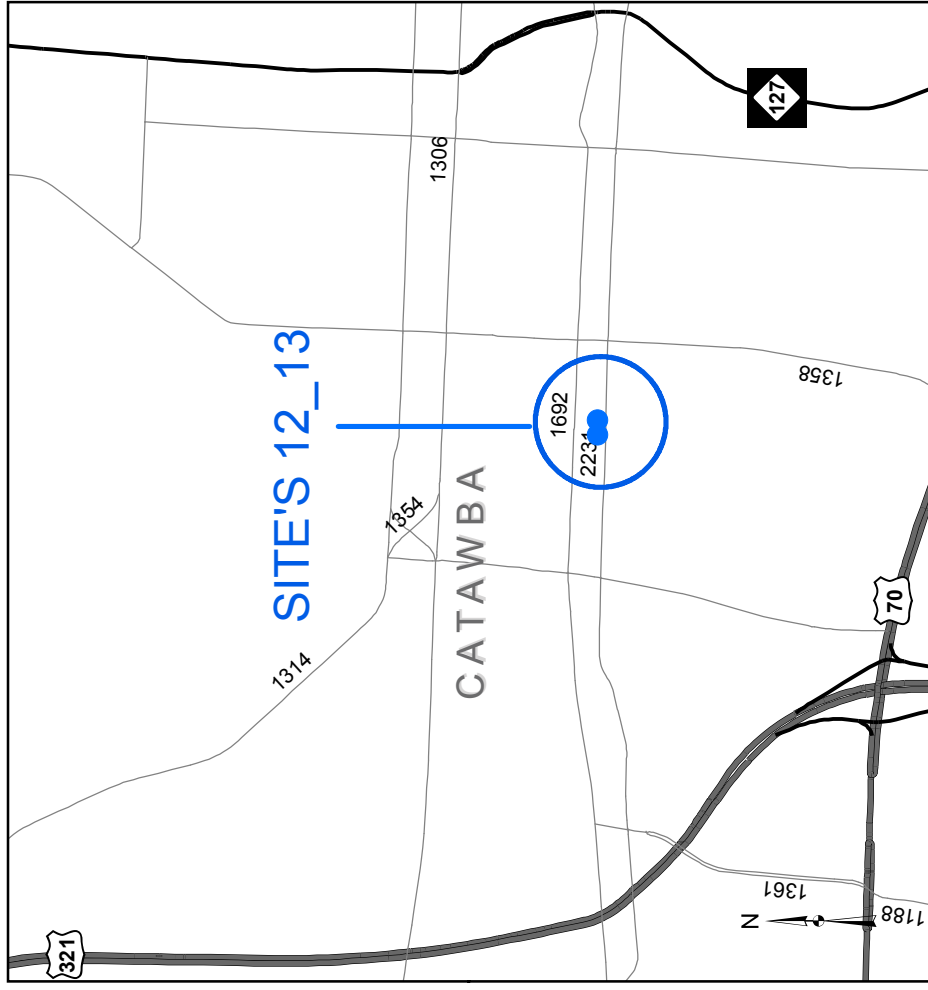
SR 2231 (2nd Ave. SW) @ 8th Street SW



SR 2231 (2nd Ave. SW) @ 7th Street SW



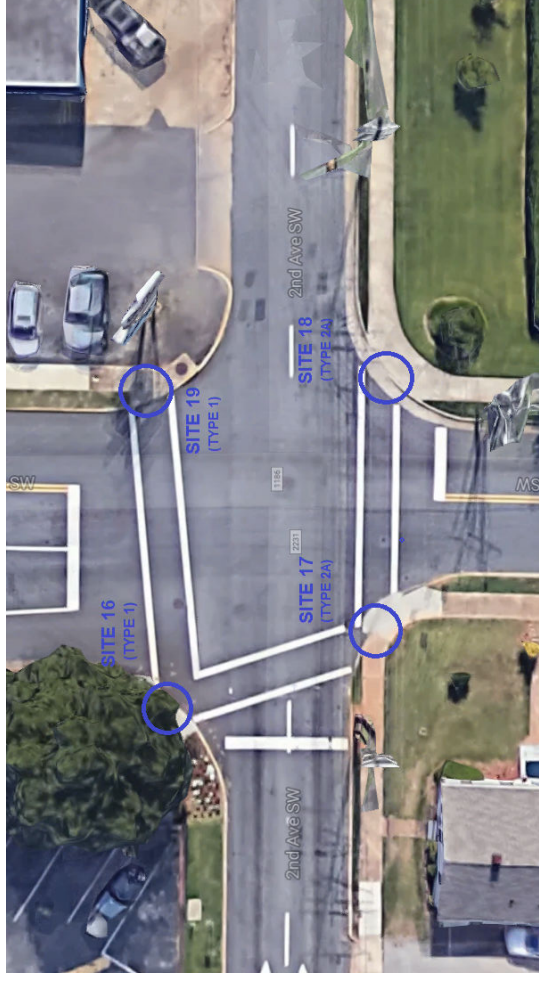
SR 2231 (2nd Ave. SW) @ 6th Street SW



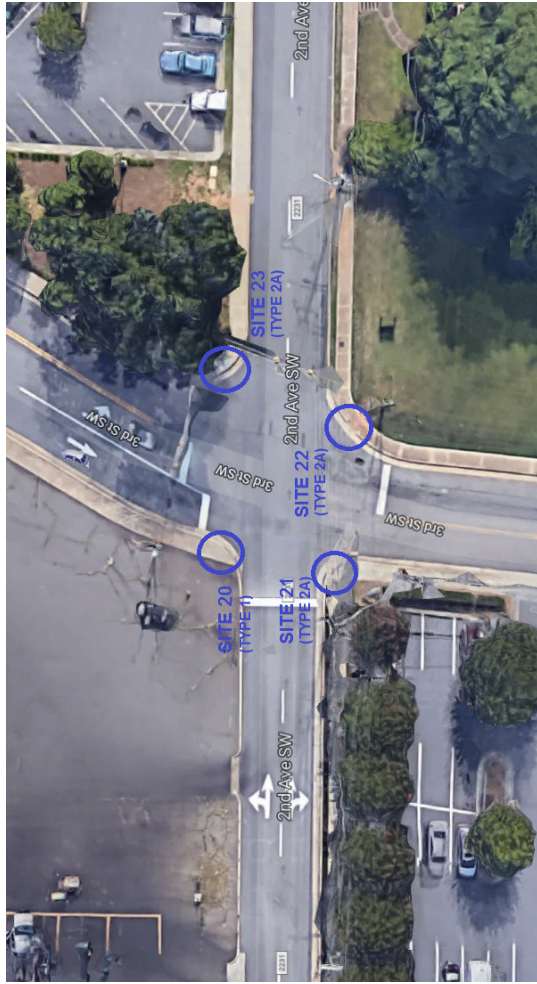
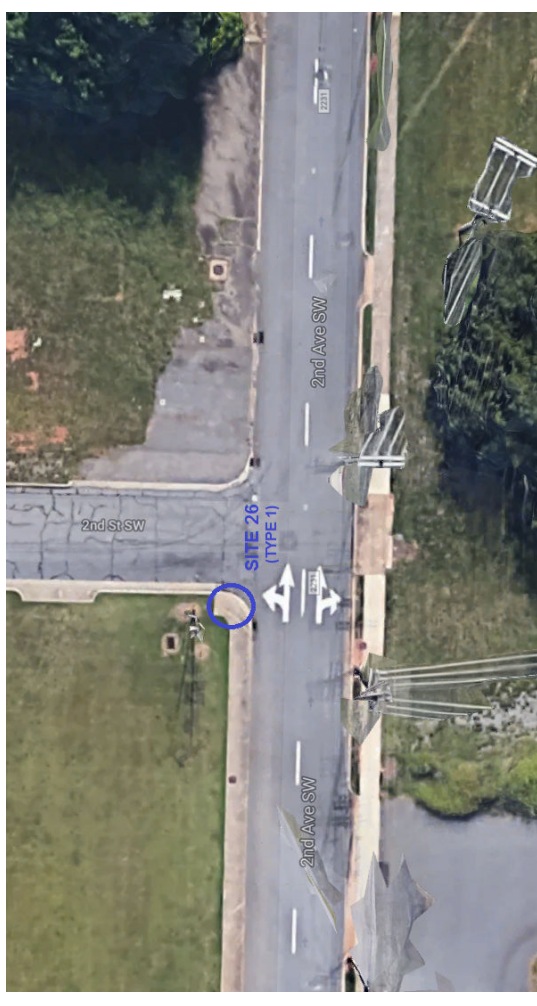
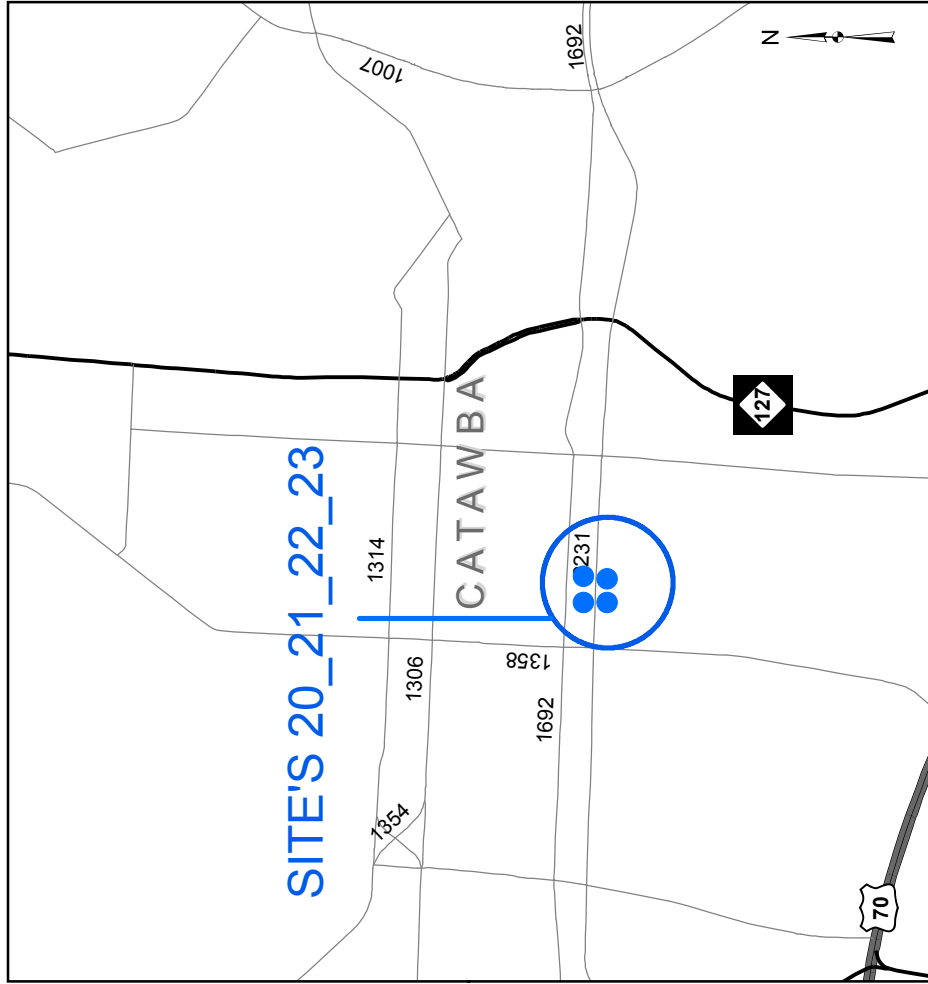
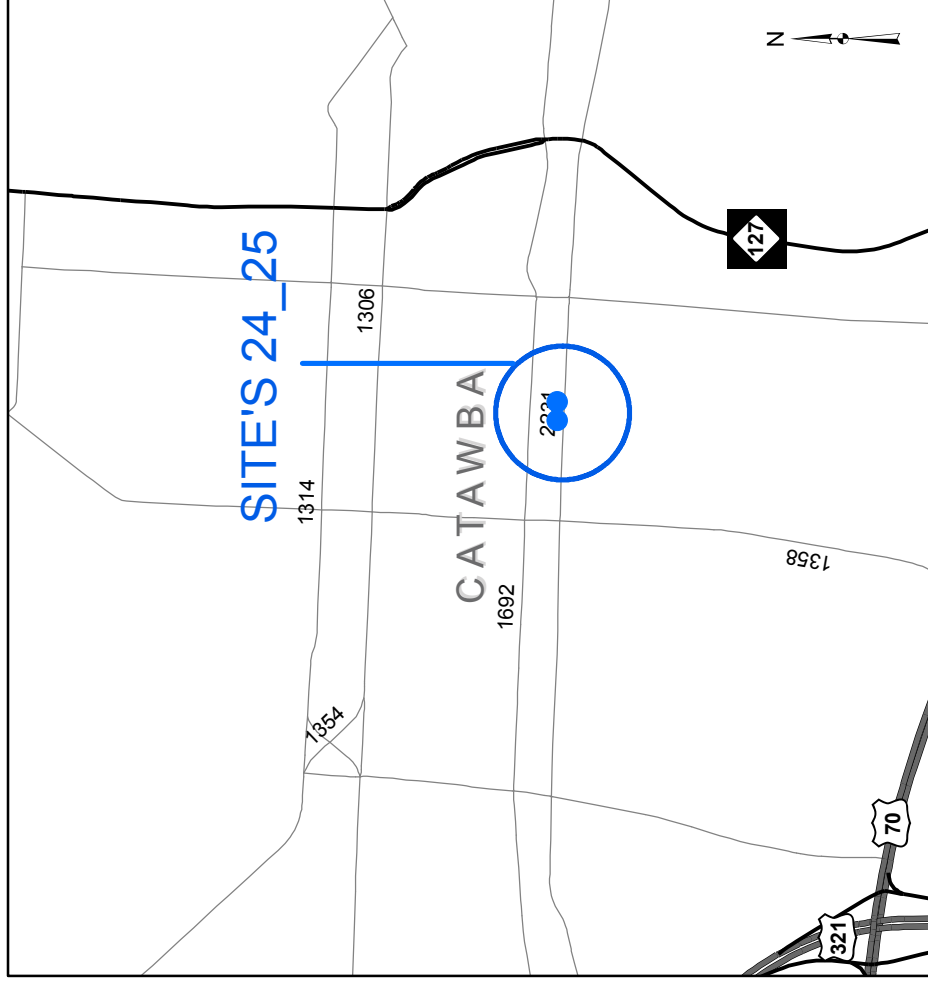
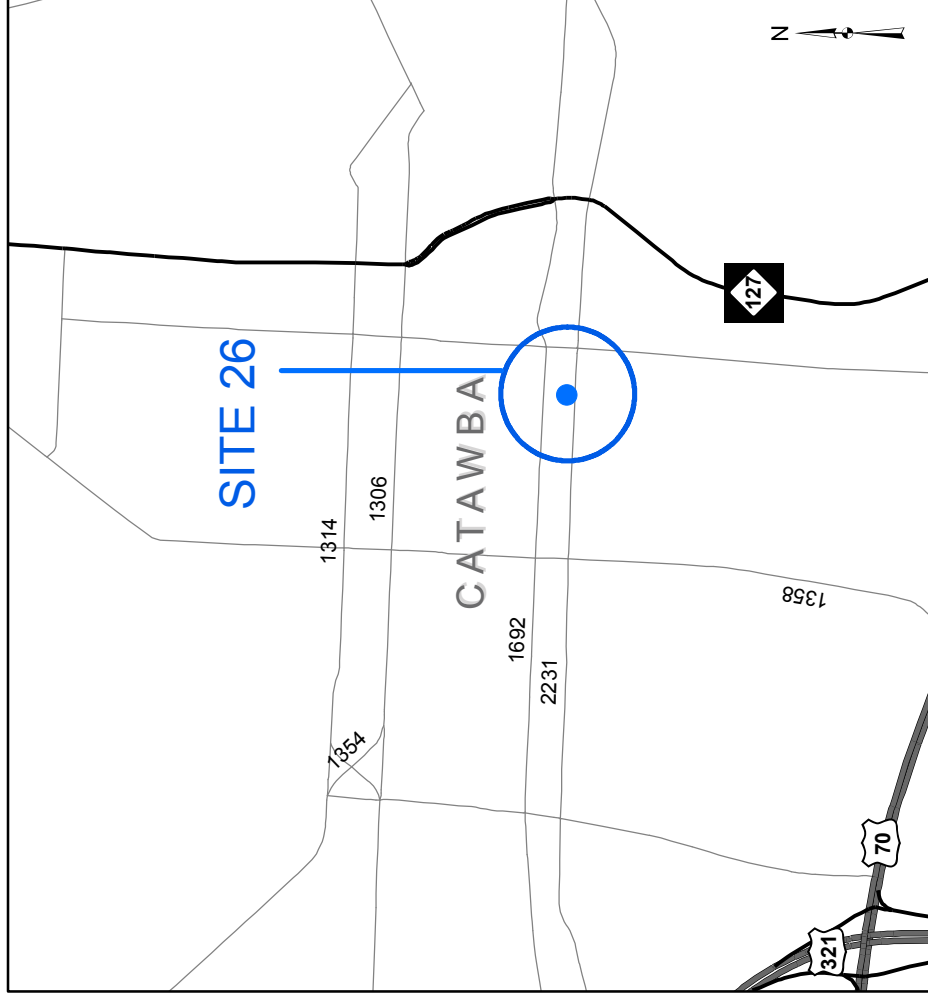
SR 2231 (2nd Ave. SW) @ 5th Street SW



SR 2231 (2nd Ave. SW) @ 4th Street Place SW



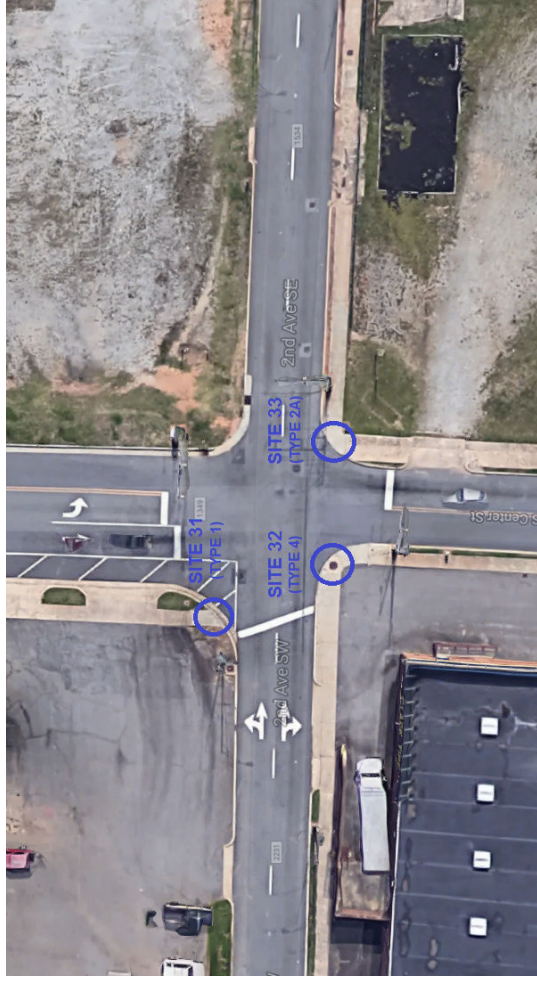
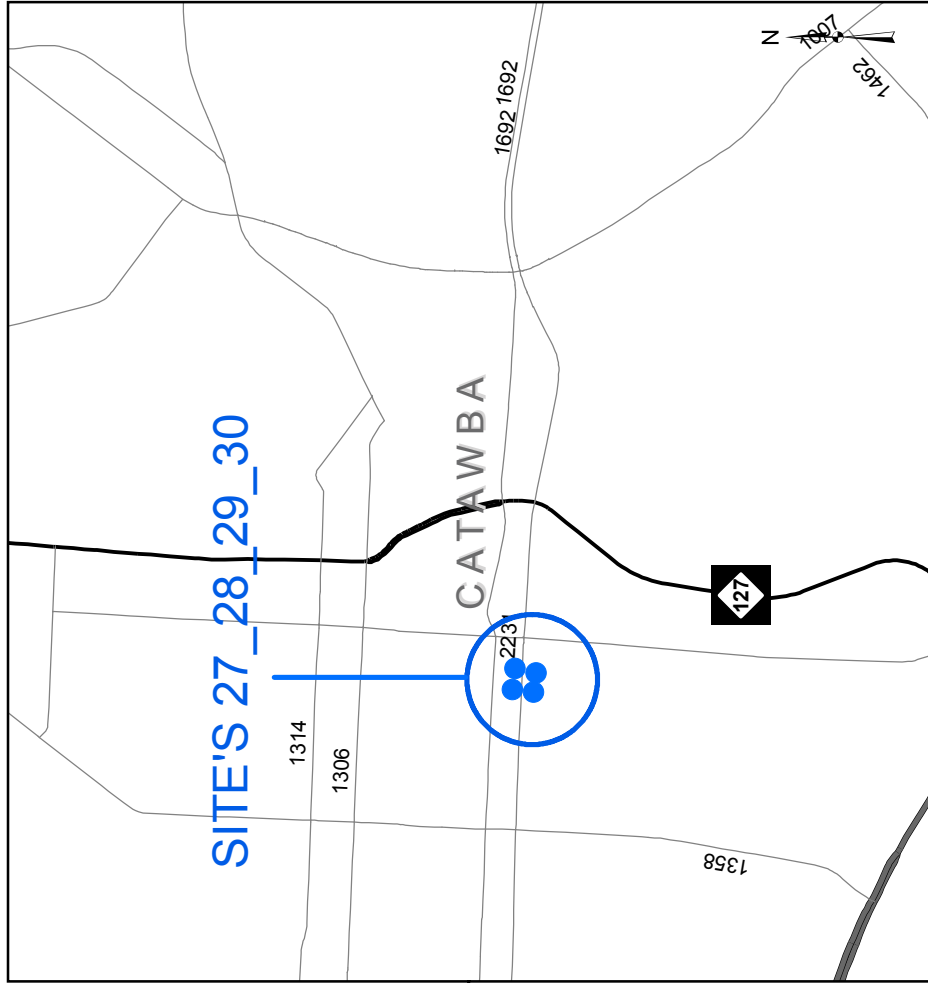
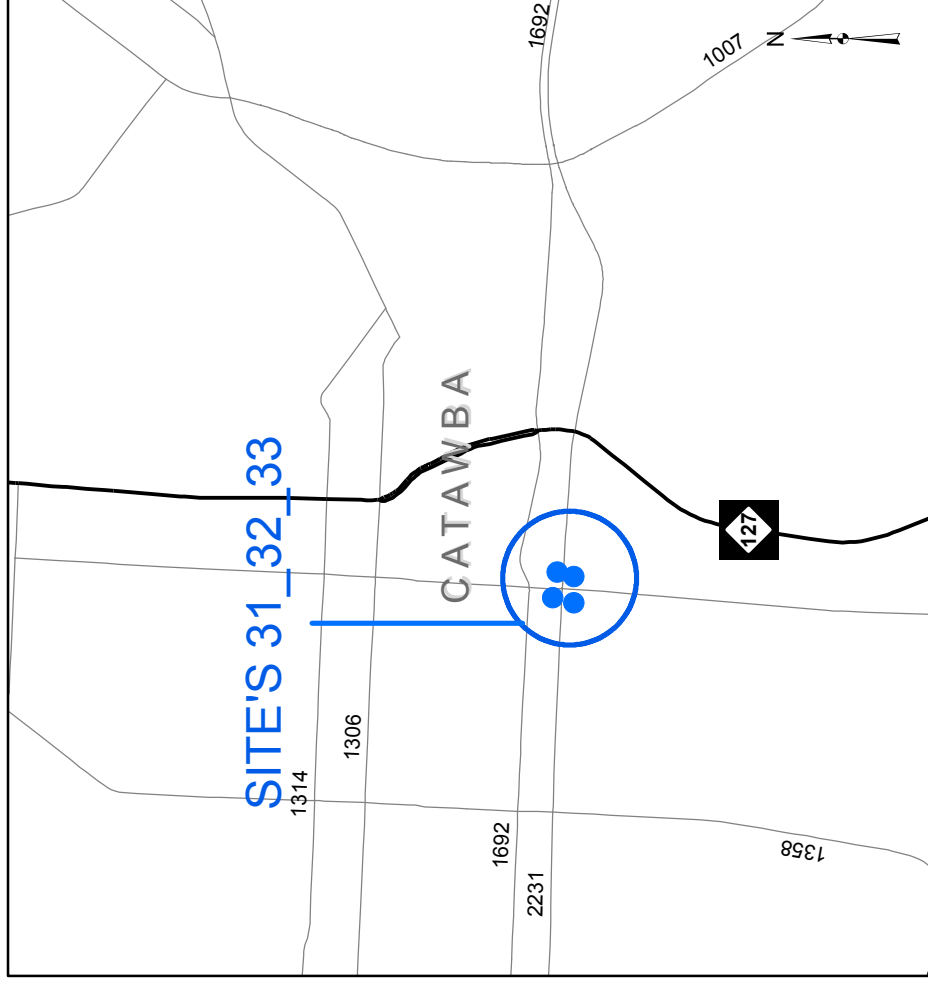
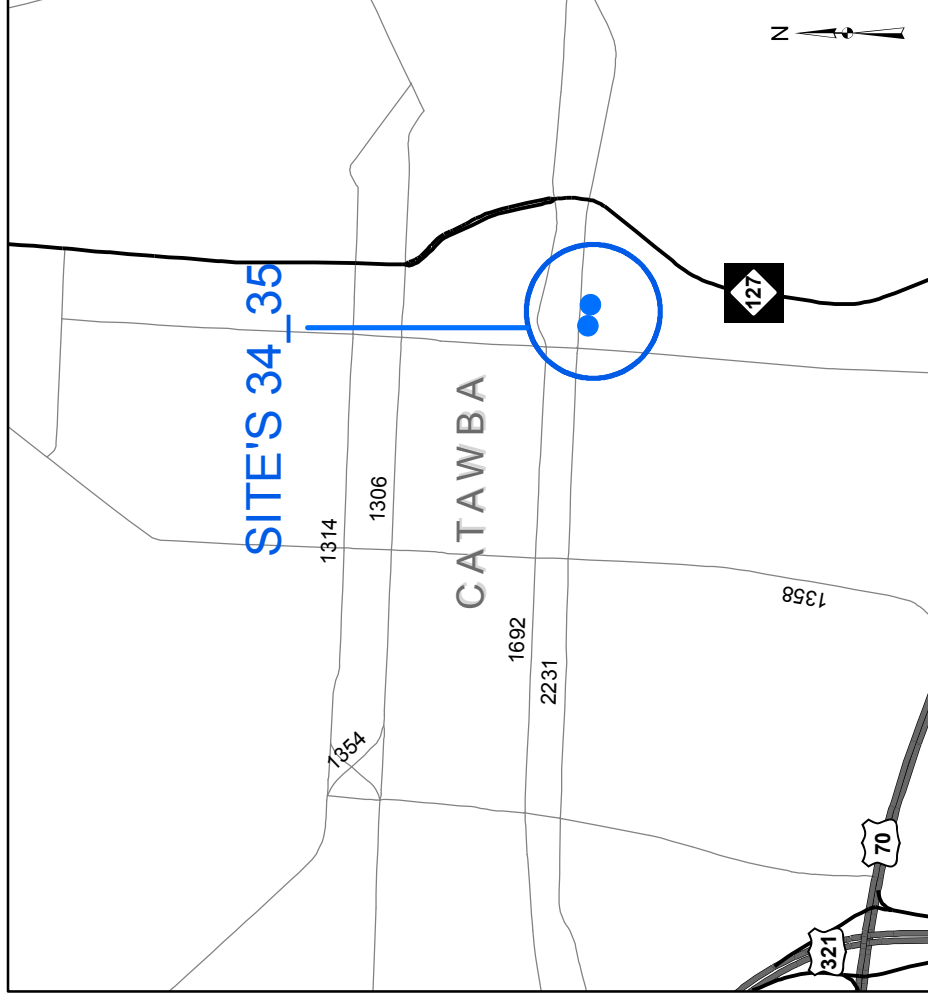
SR 2231 (2nd Ave. SW) @ 4th Street SW



SR 2231 (2nd Ave. SW) @ 2nd Street SW

SR 2231 (2nd Ave. SW) @ Greenway Exit

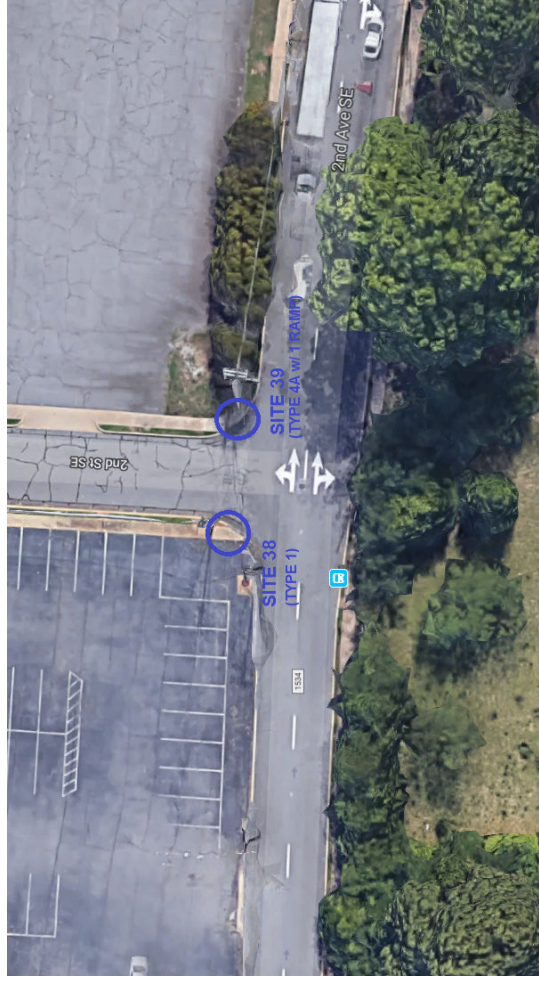
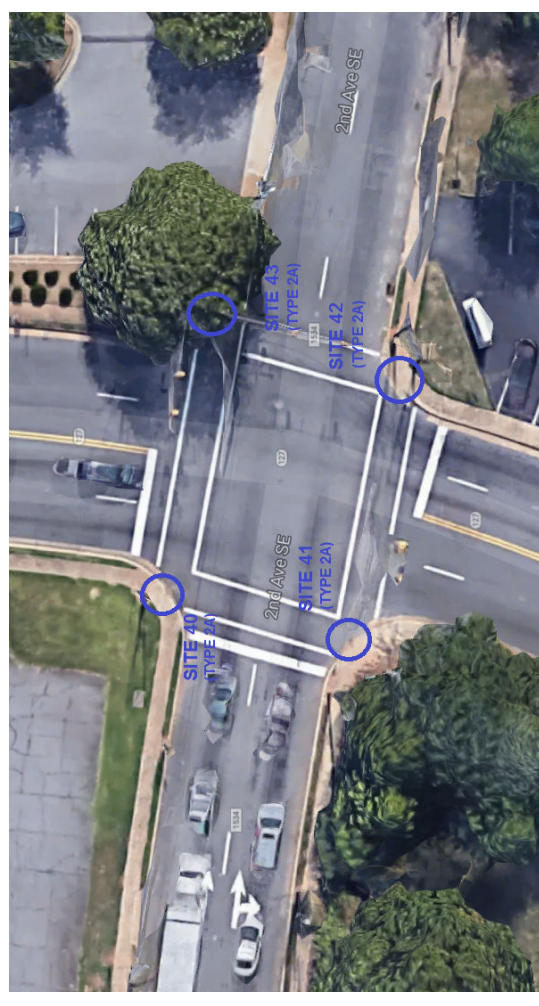
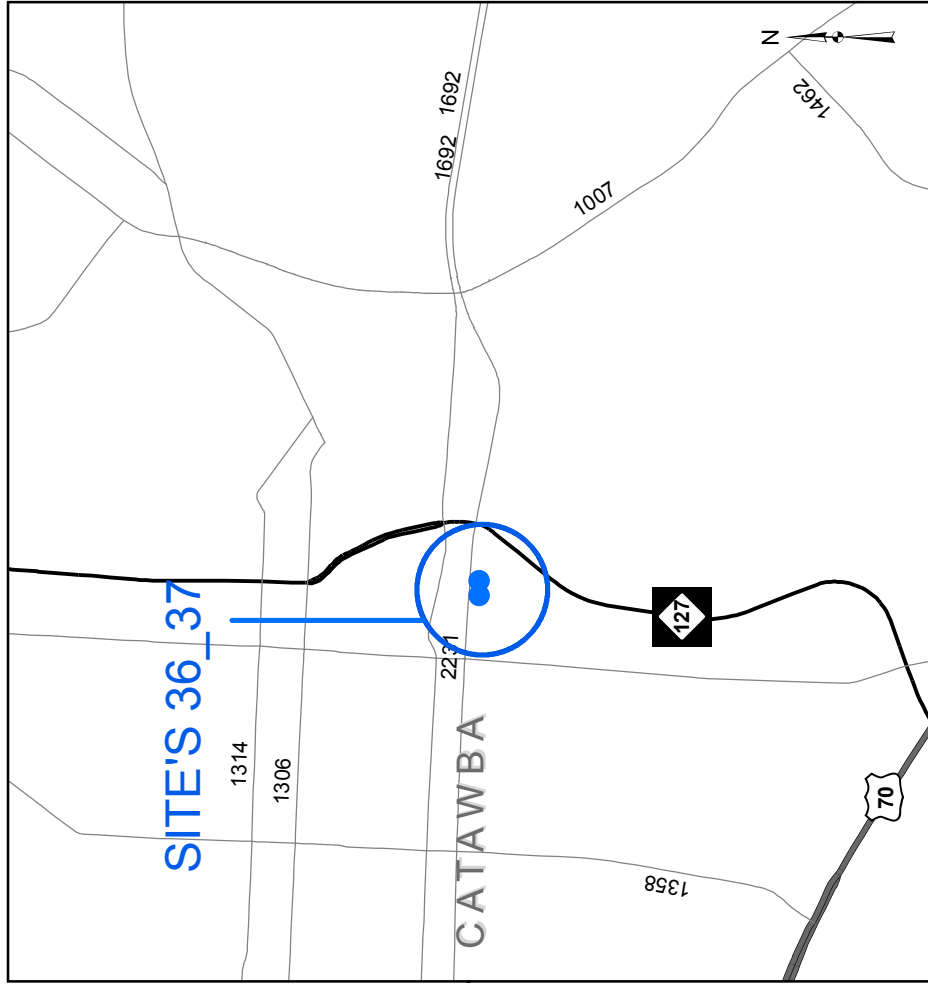
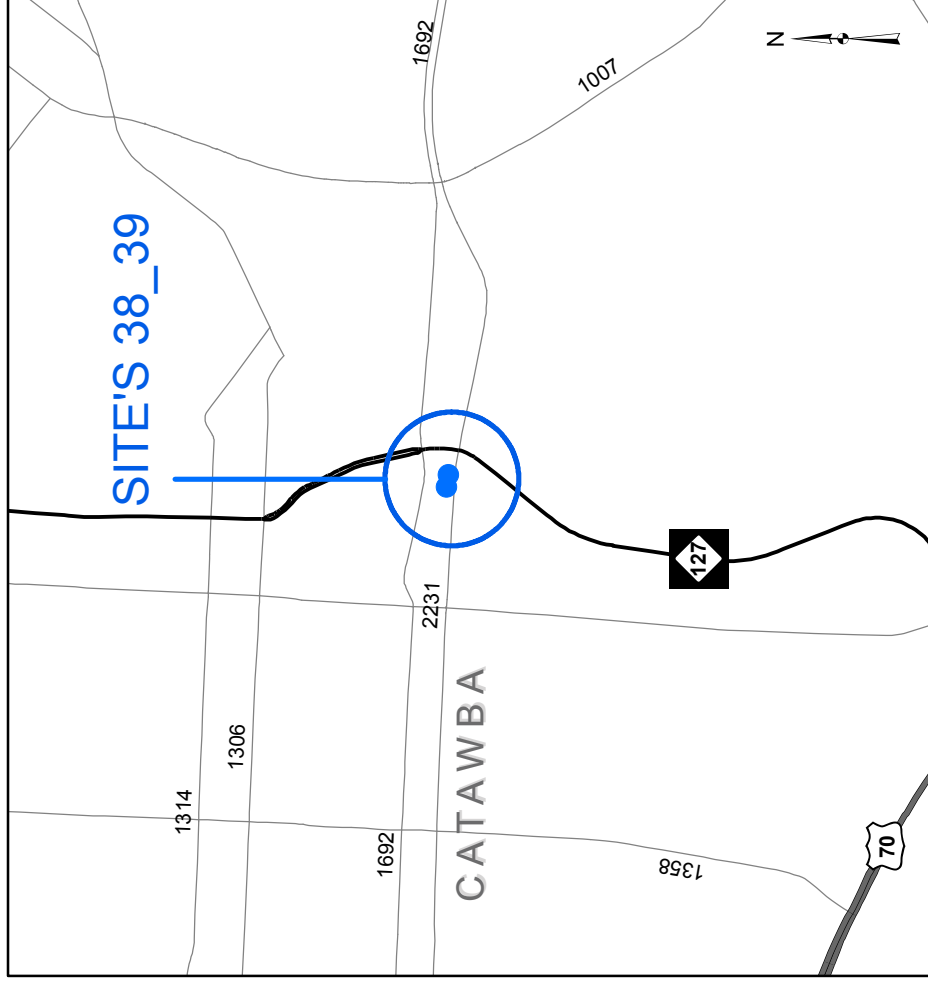
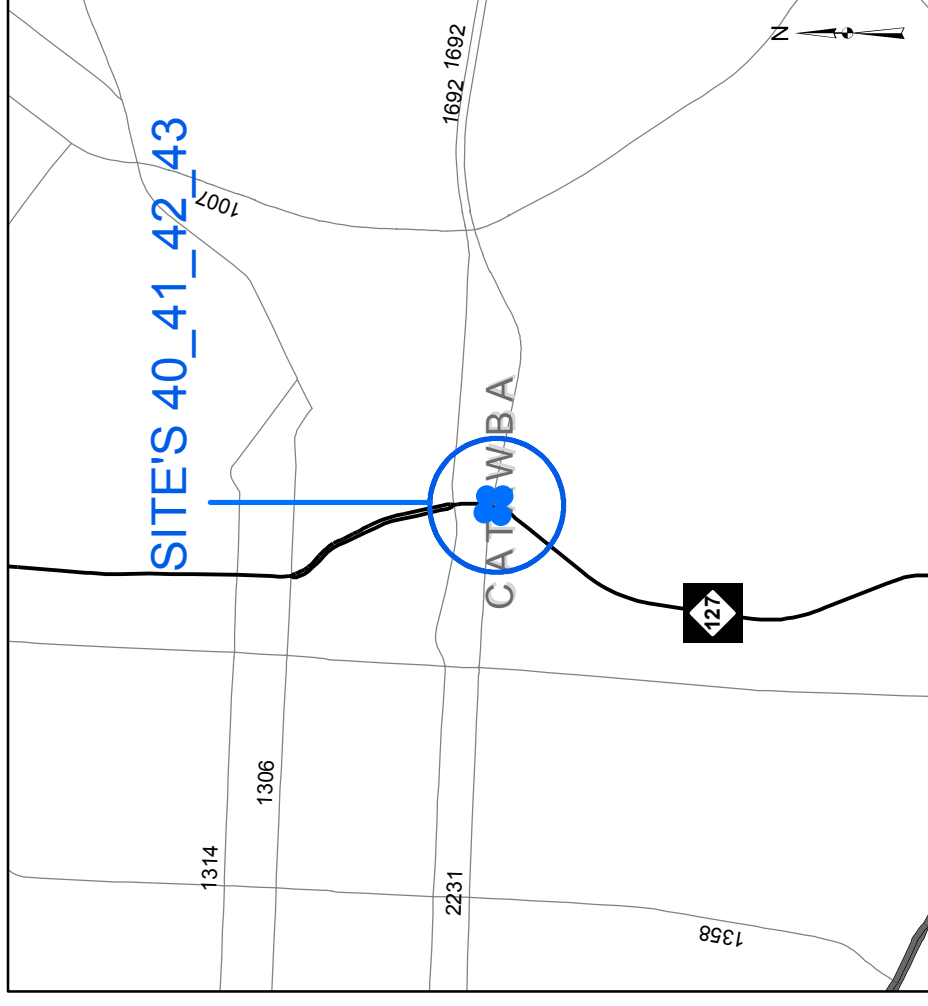
SR 2231 (2nd Ave. SW) @ 3rd Street SW



SR 2231 (2nd Ave. SW) @ 1st Street SE

SR 2231 (2nd Ave. SW) @ Center Street

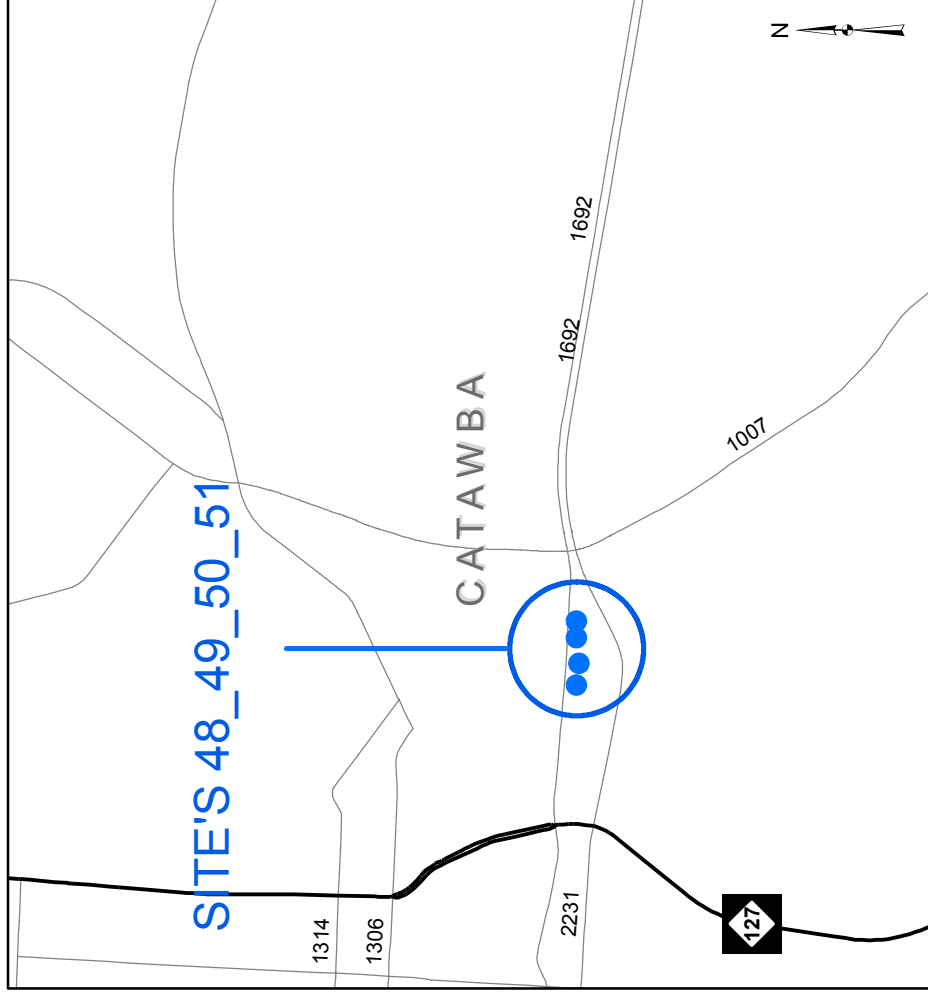
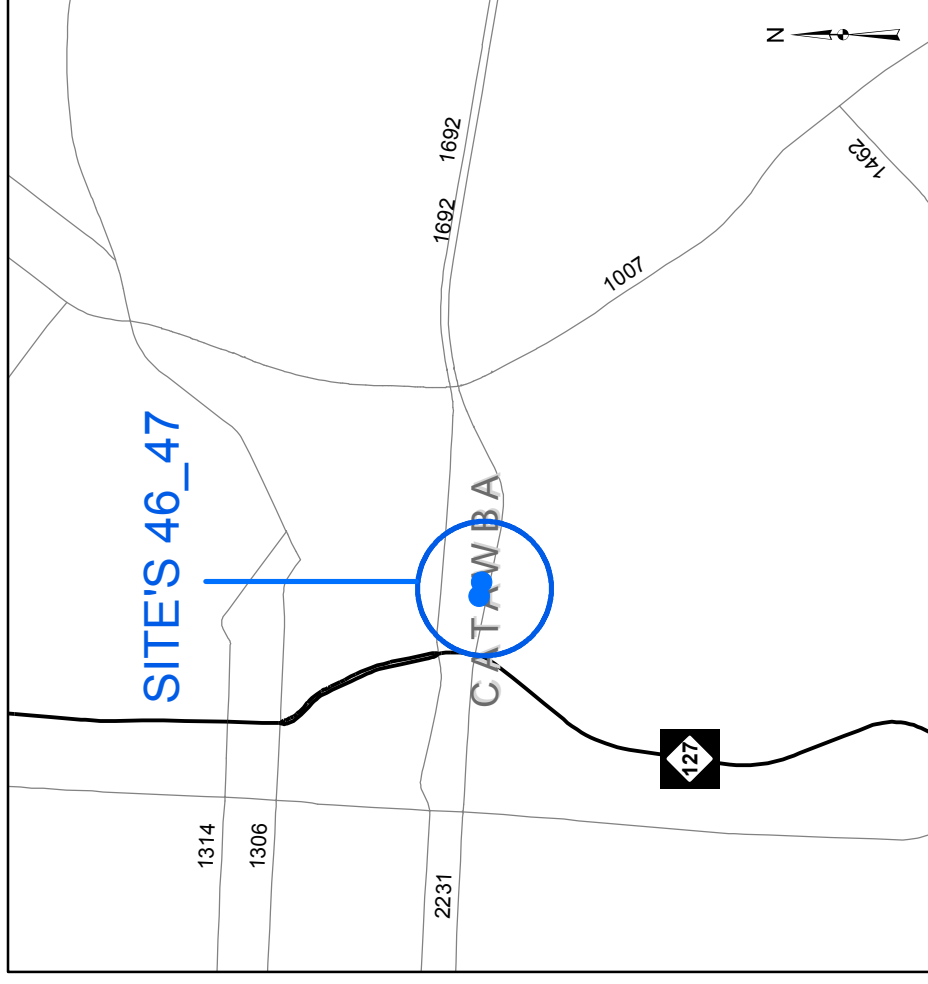
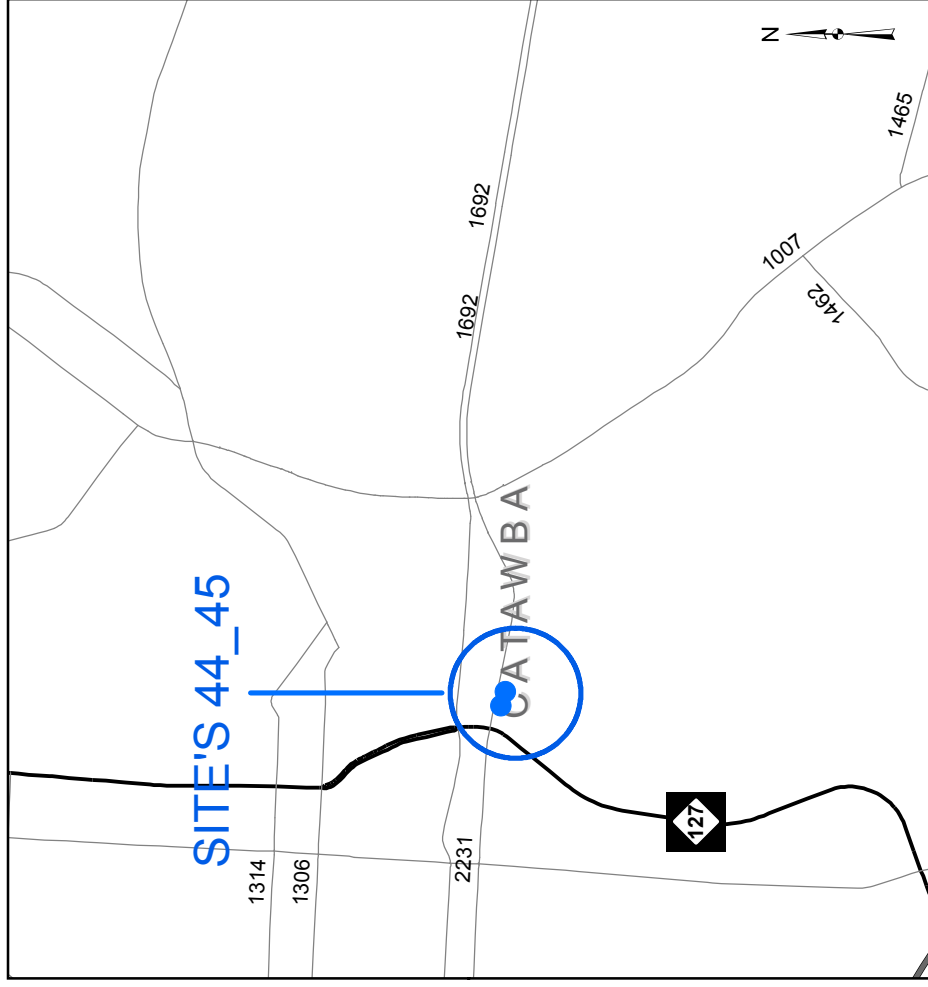
SR 2231 (2nd Ave. SW) @ 1st Street SW



SR 1534 (2nd Ave. SE) @ NC 127

SR 2231 (2nd Ave. SE) @ 2nd Street Place

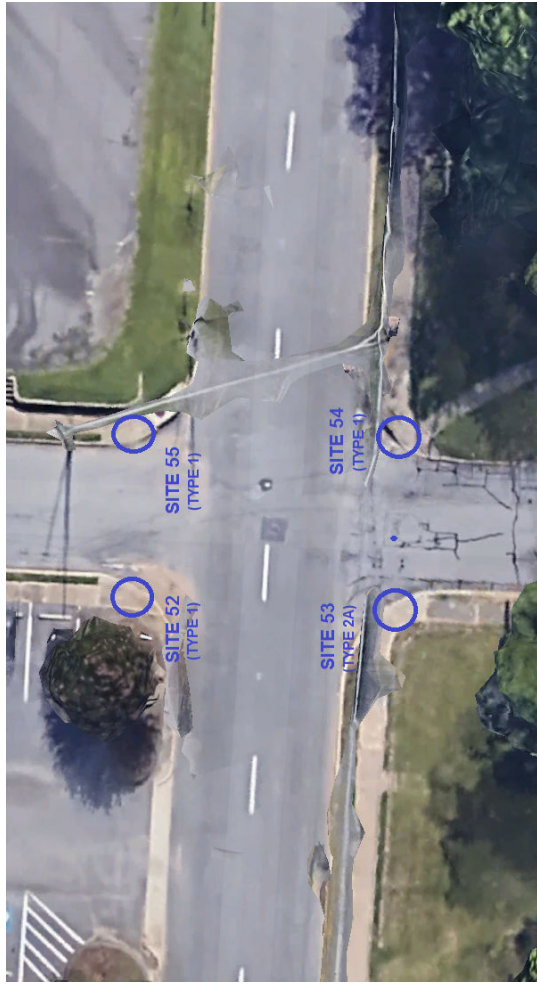
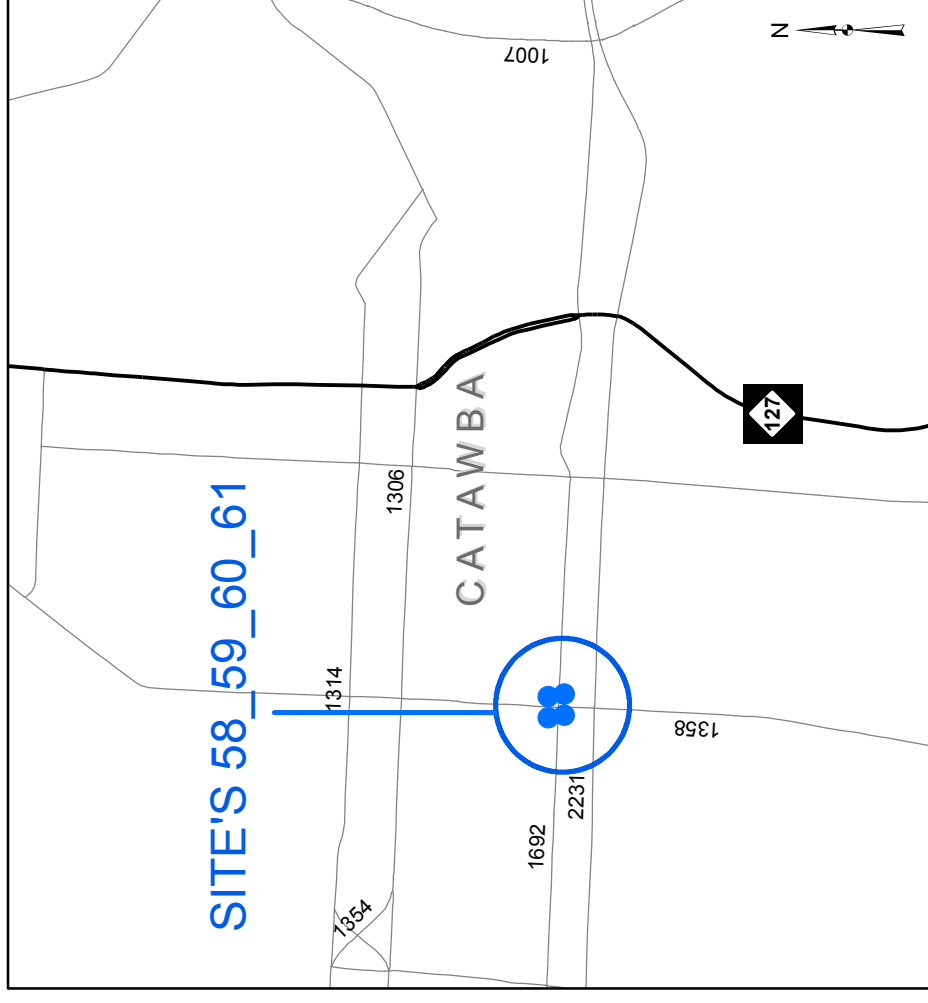
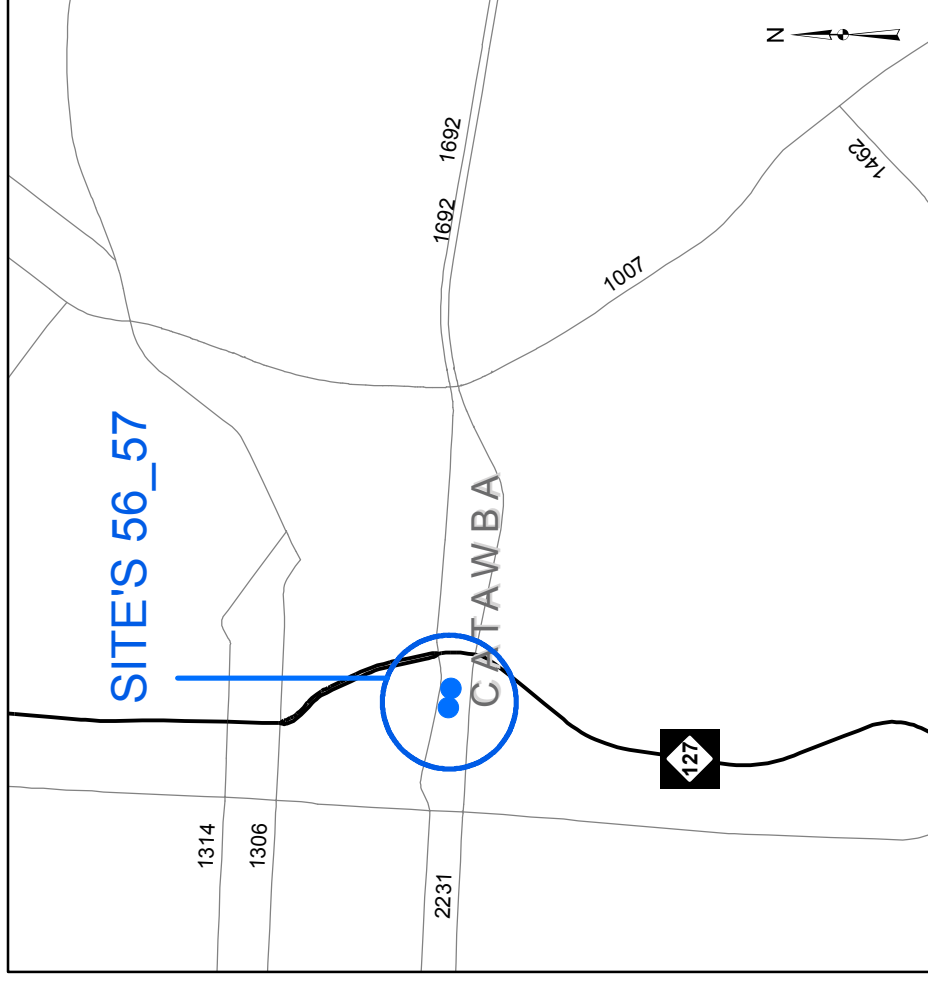
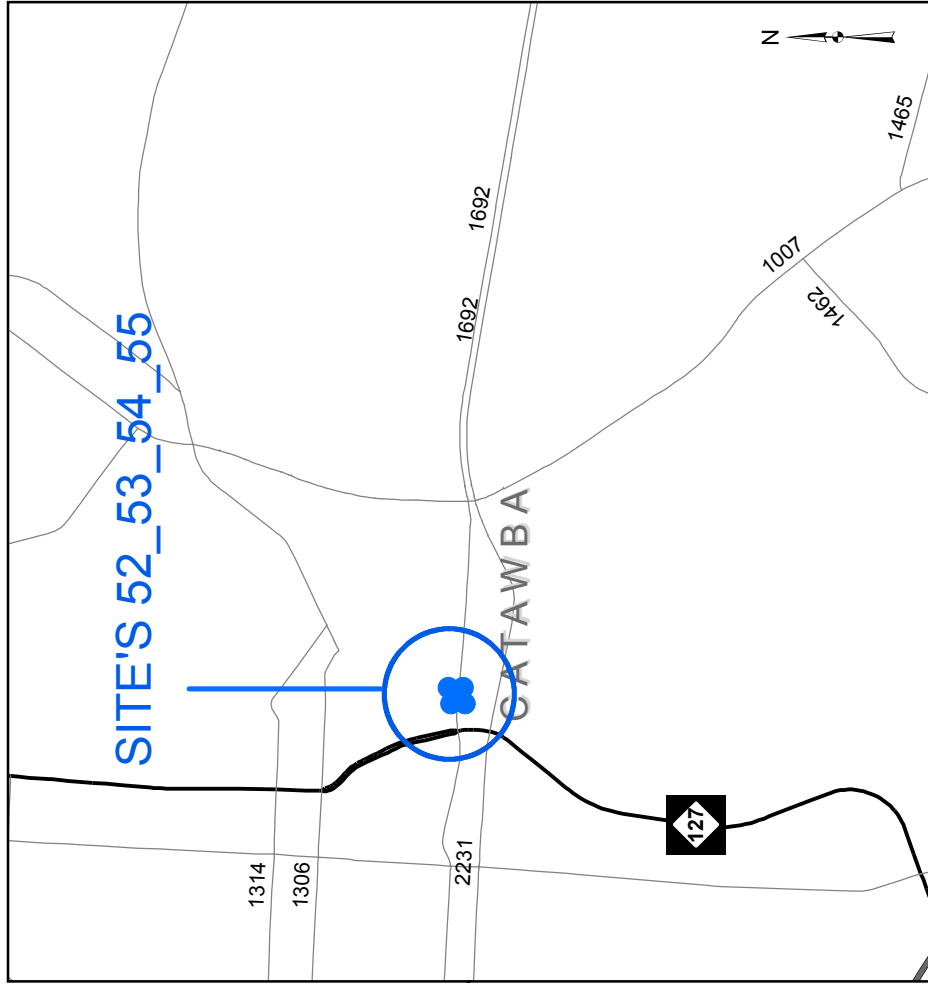
SR 2231 (2nd Ave. SW) @ 2nd Street SE



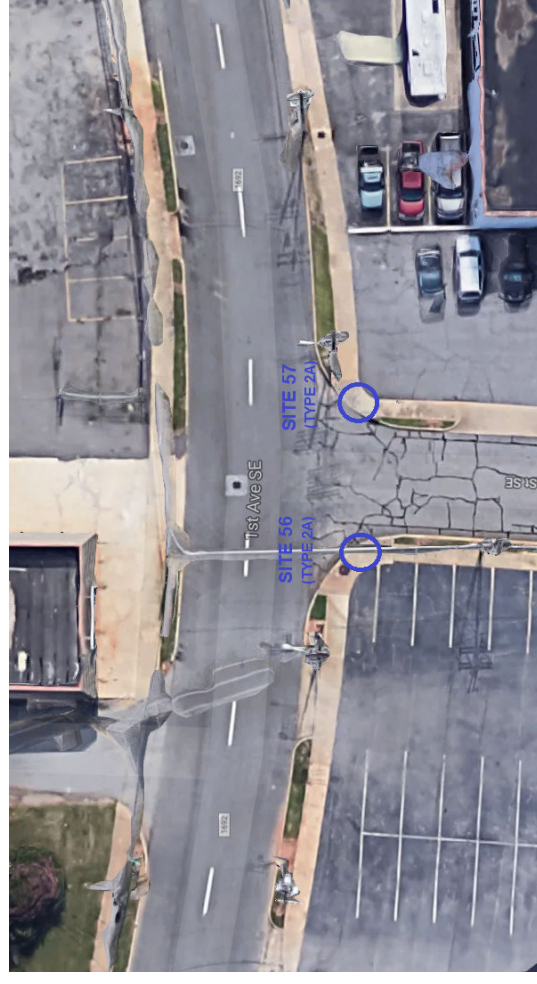
SR 1534 (2nd Ave. SE) @ 3rd Street SE

SR 1534 (2nd Ave. SE) @ 4th Street SE

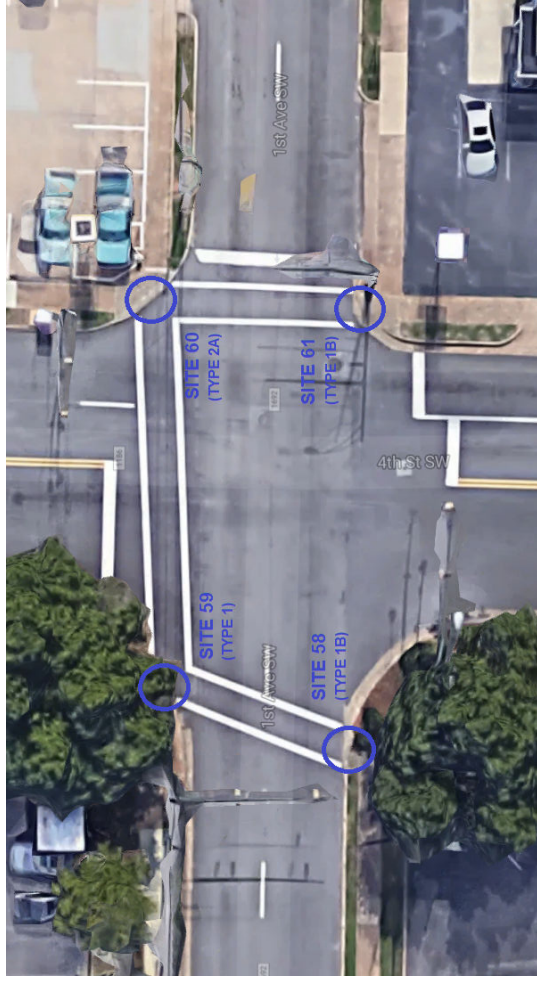
SR 1692 (1st Ave. SE) @ 5th Street Court & 5th Street SE



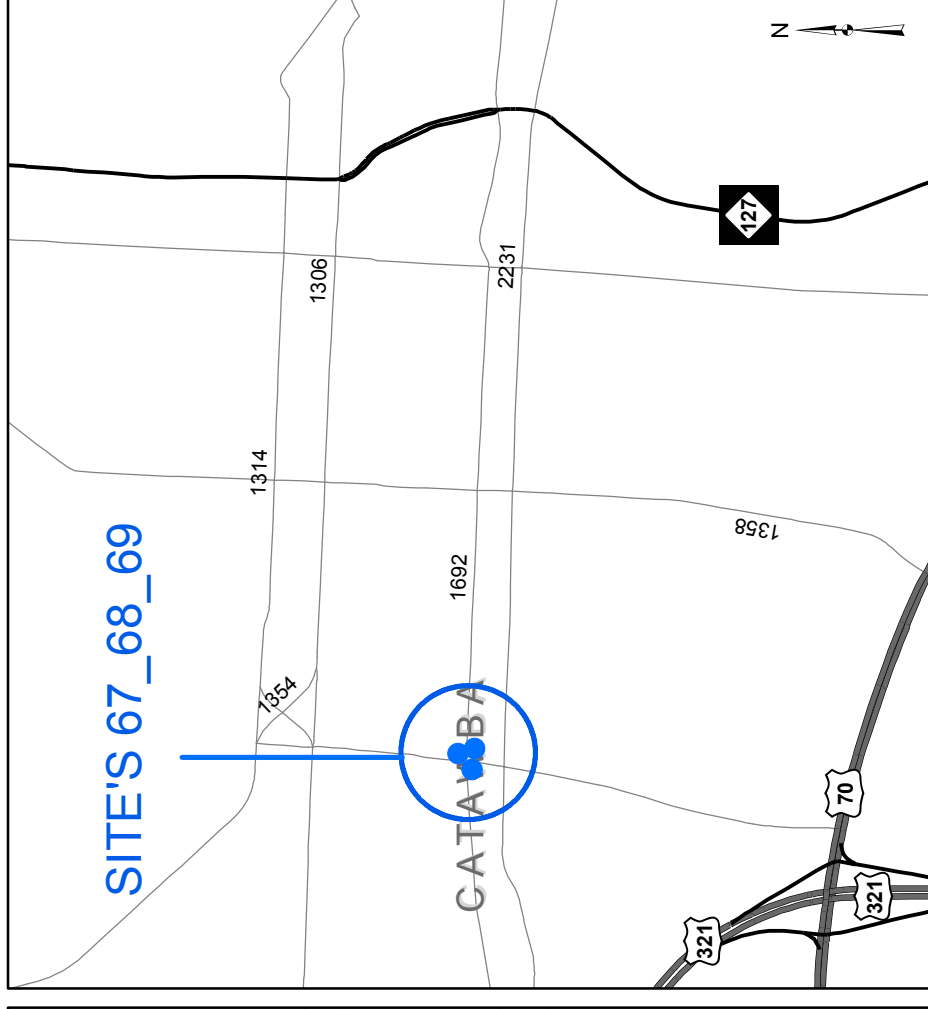
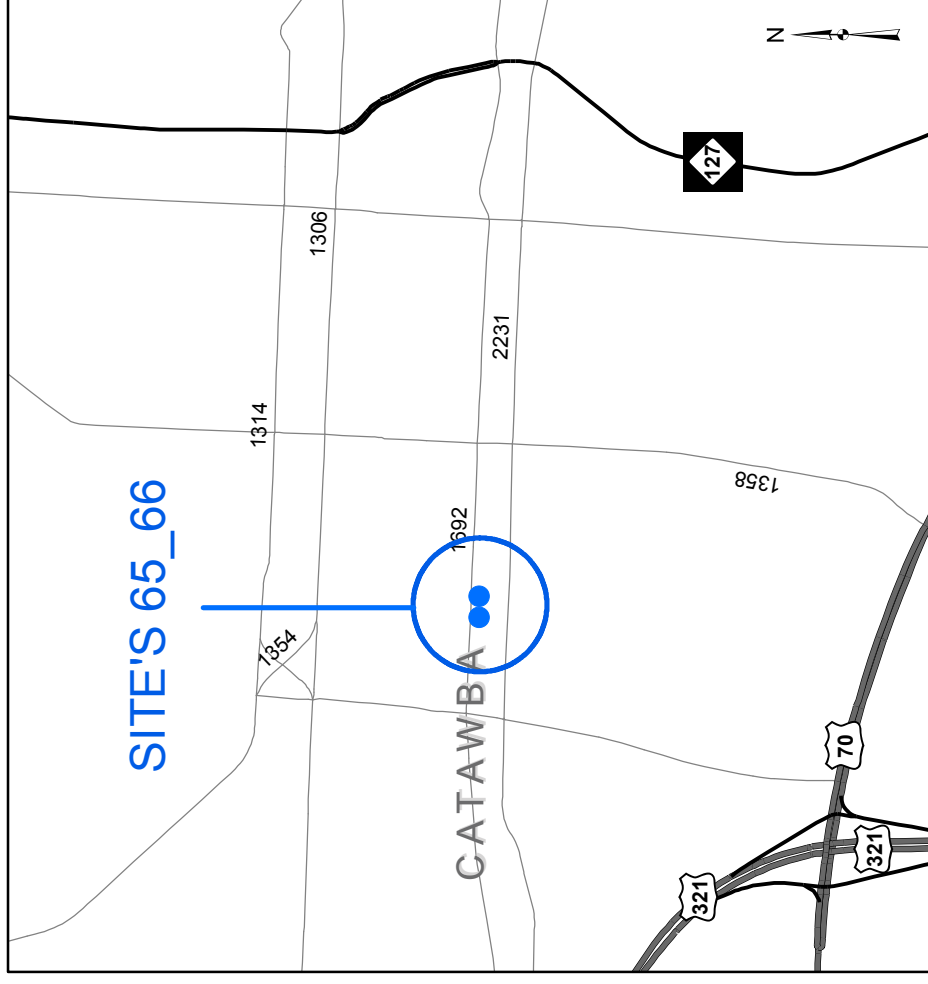
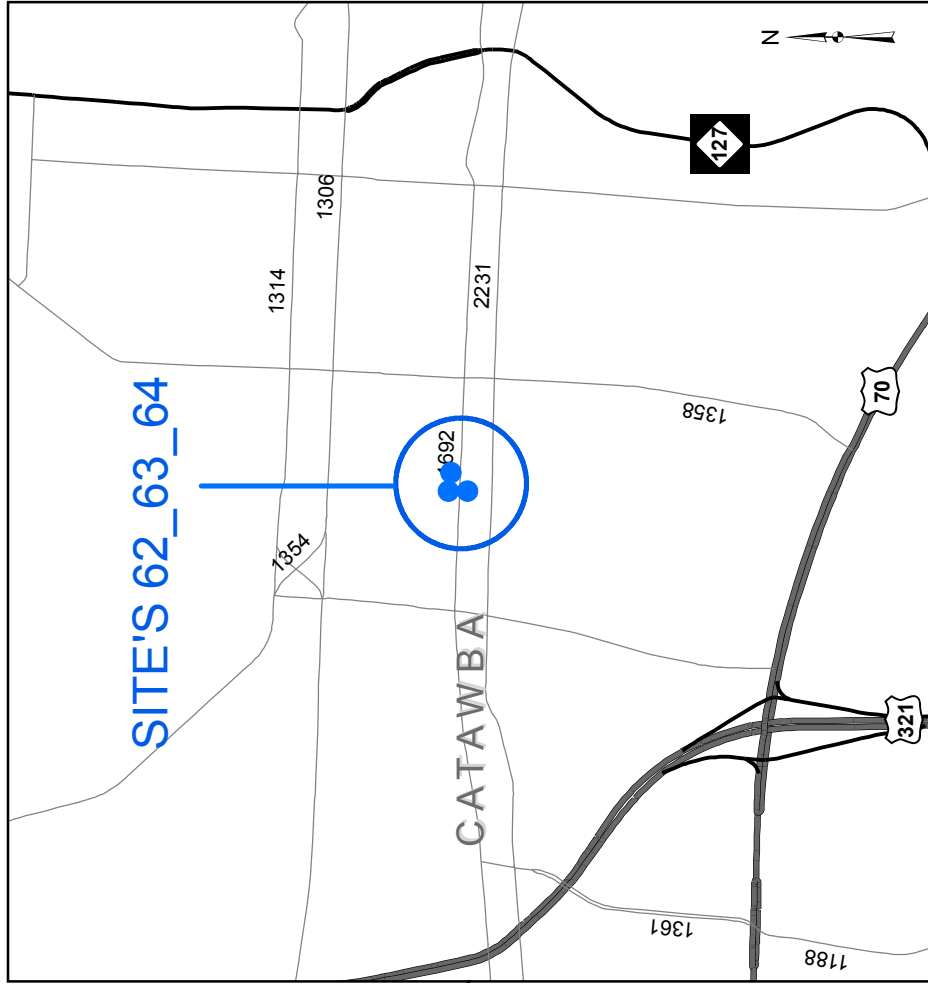
SR 1692 (1st Ave. SE) @ 4th Street SE



SR 1692 (1st Ave. SE) @ 2nd Street SE



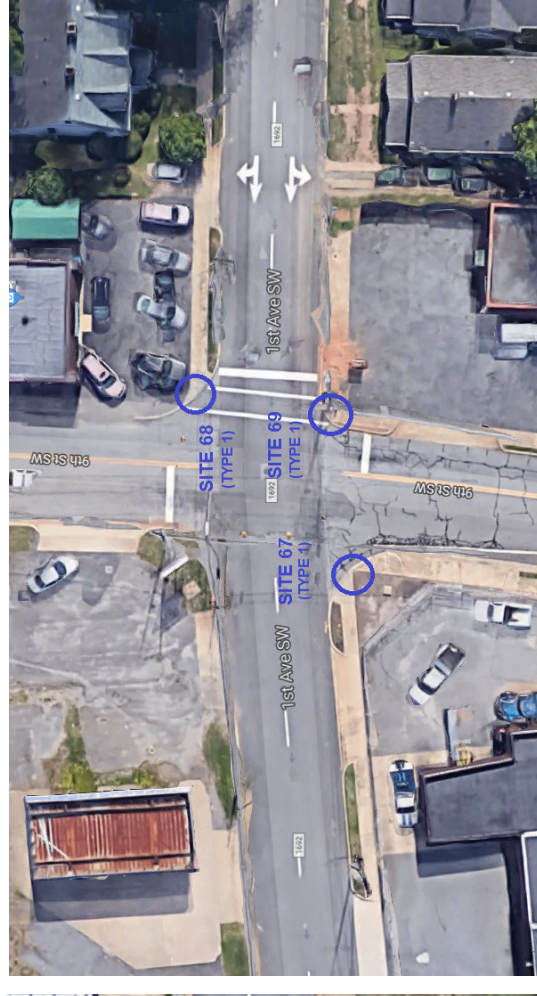
SR 1692 (1st Ave. SW) @ 4th Street SW



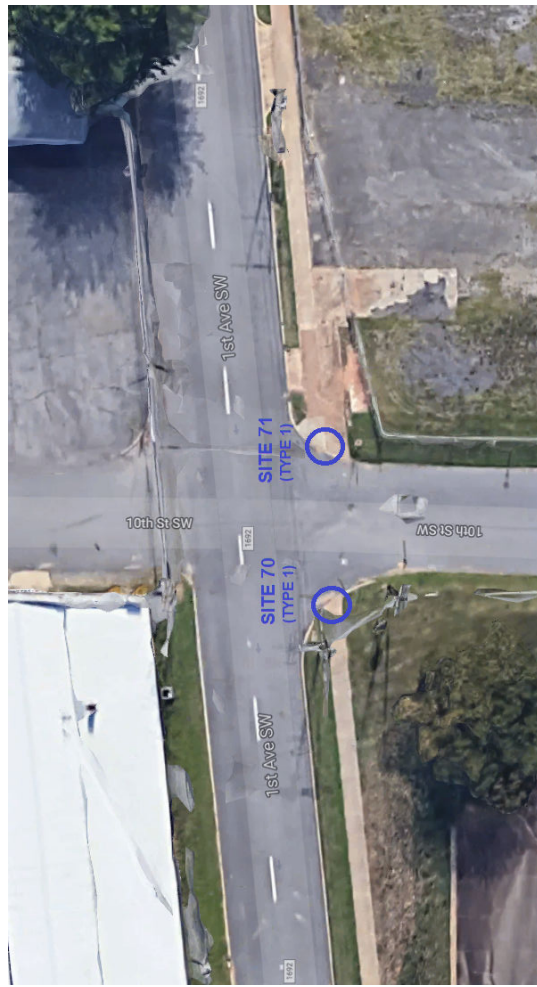
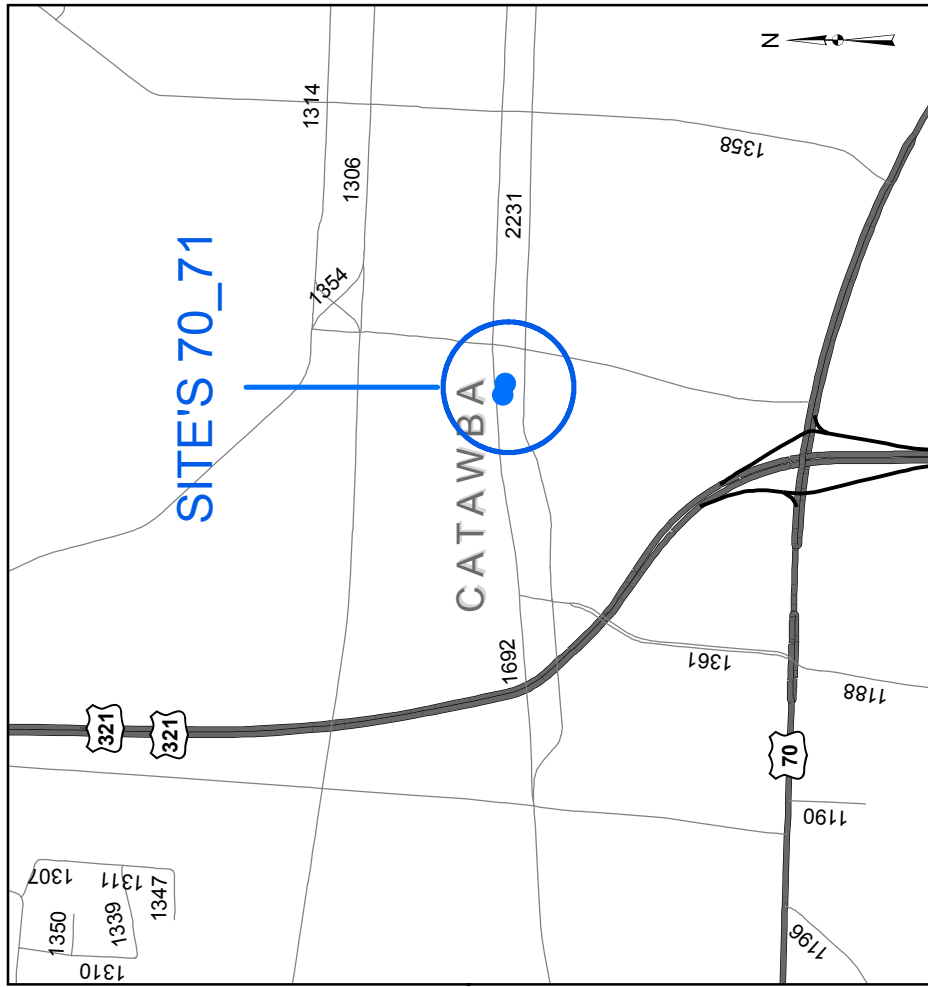
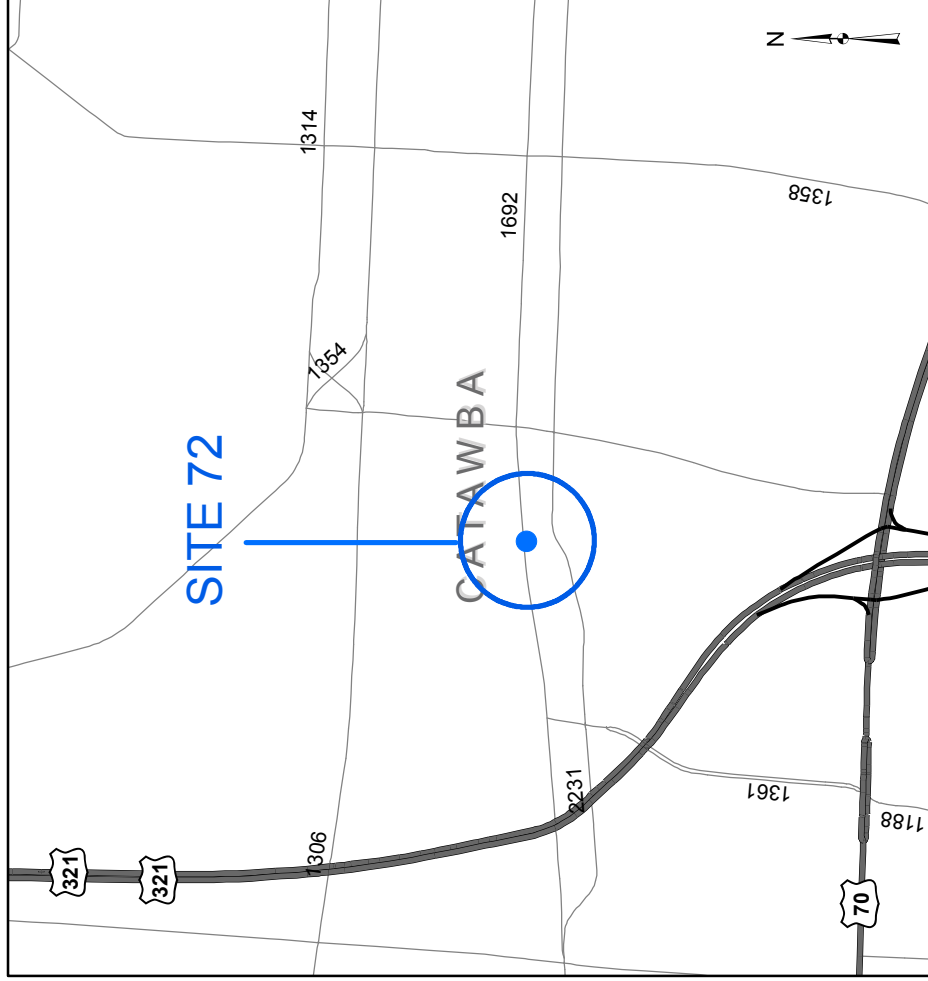
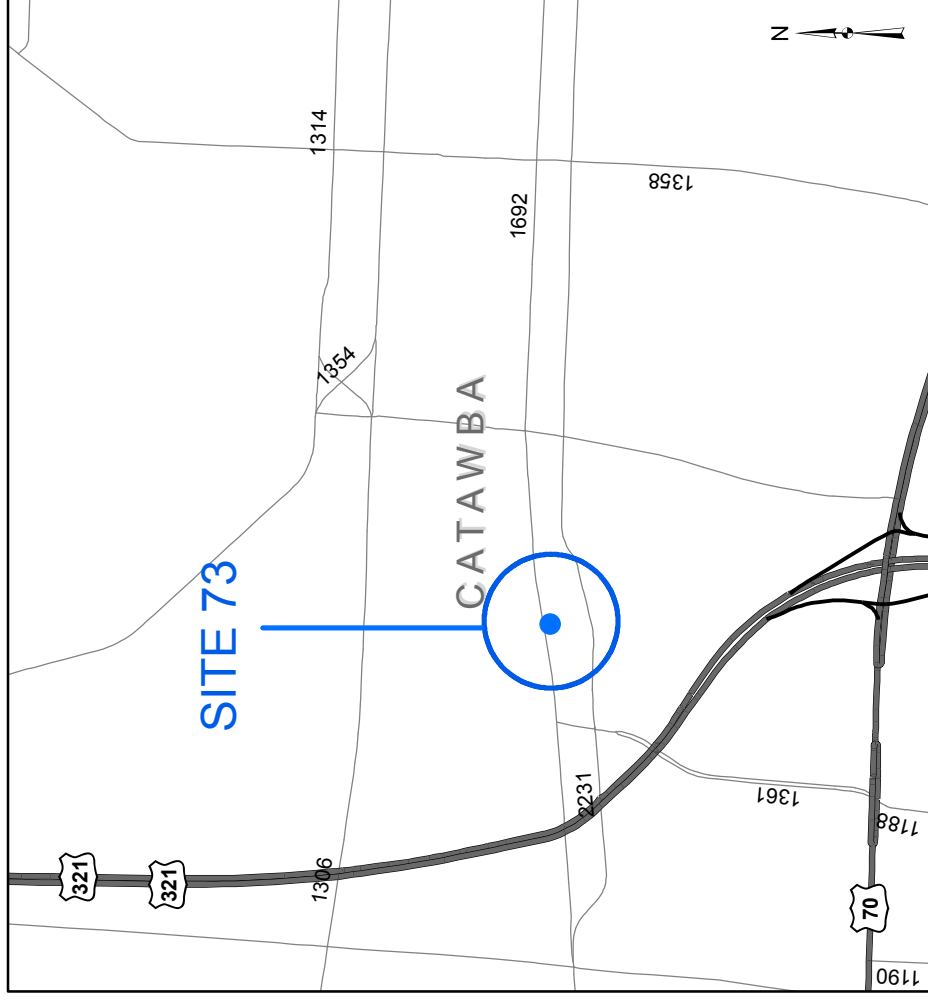
SR 1692 (1st Ave. SW) @ 6th Street SW



SR 1692 (1st Ave. SW) @ 7th Street SW



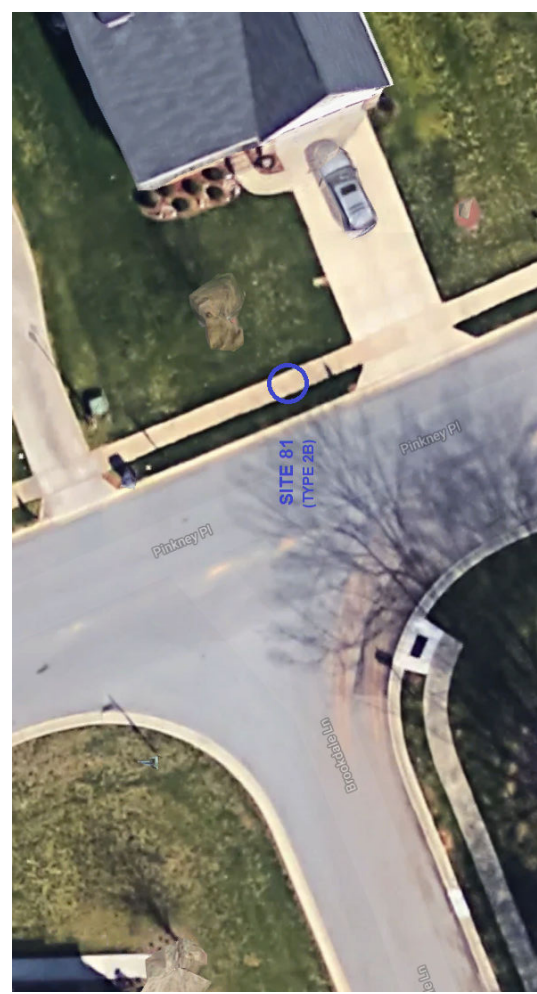
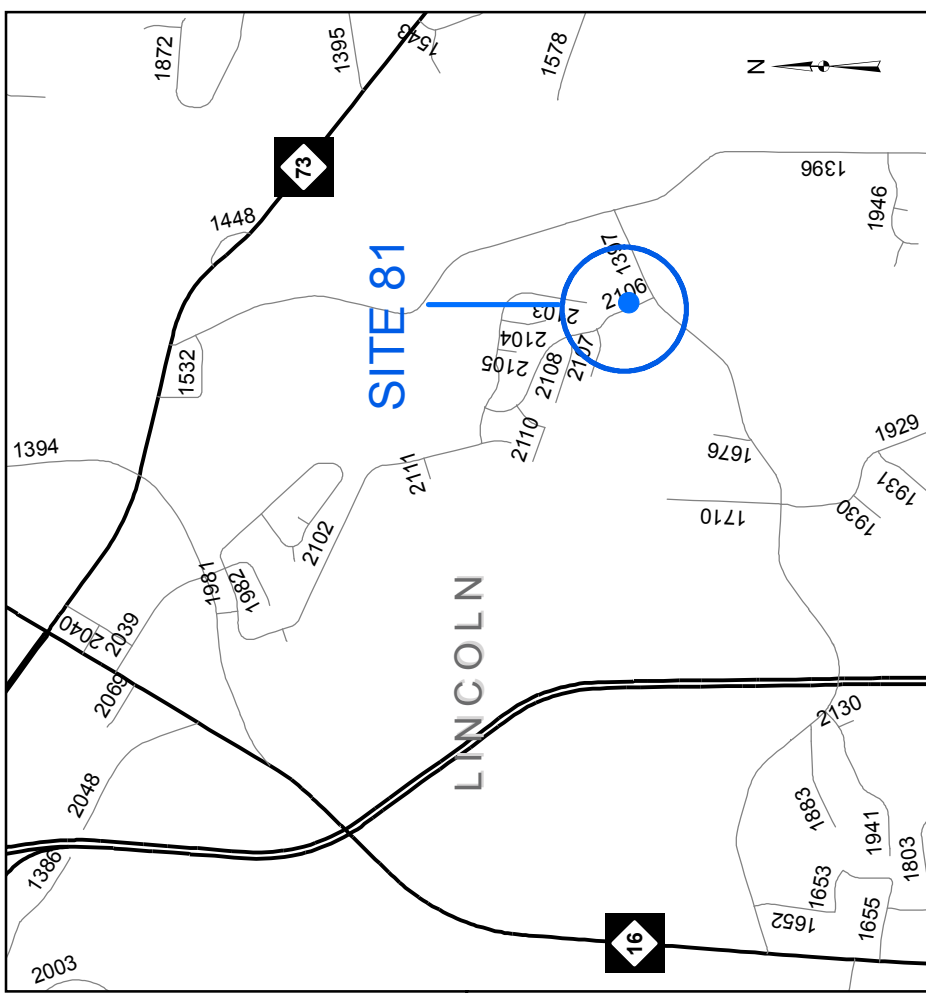
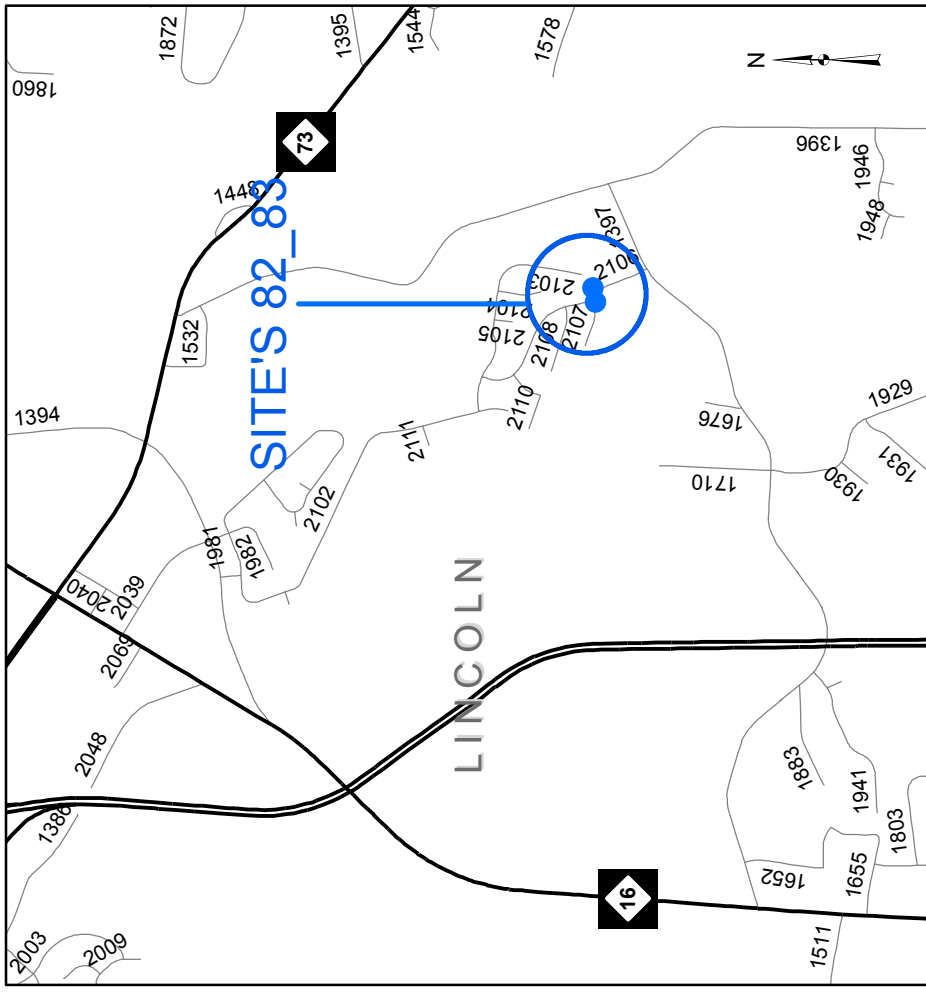
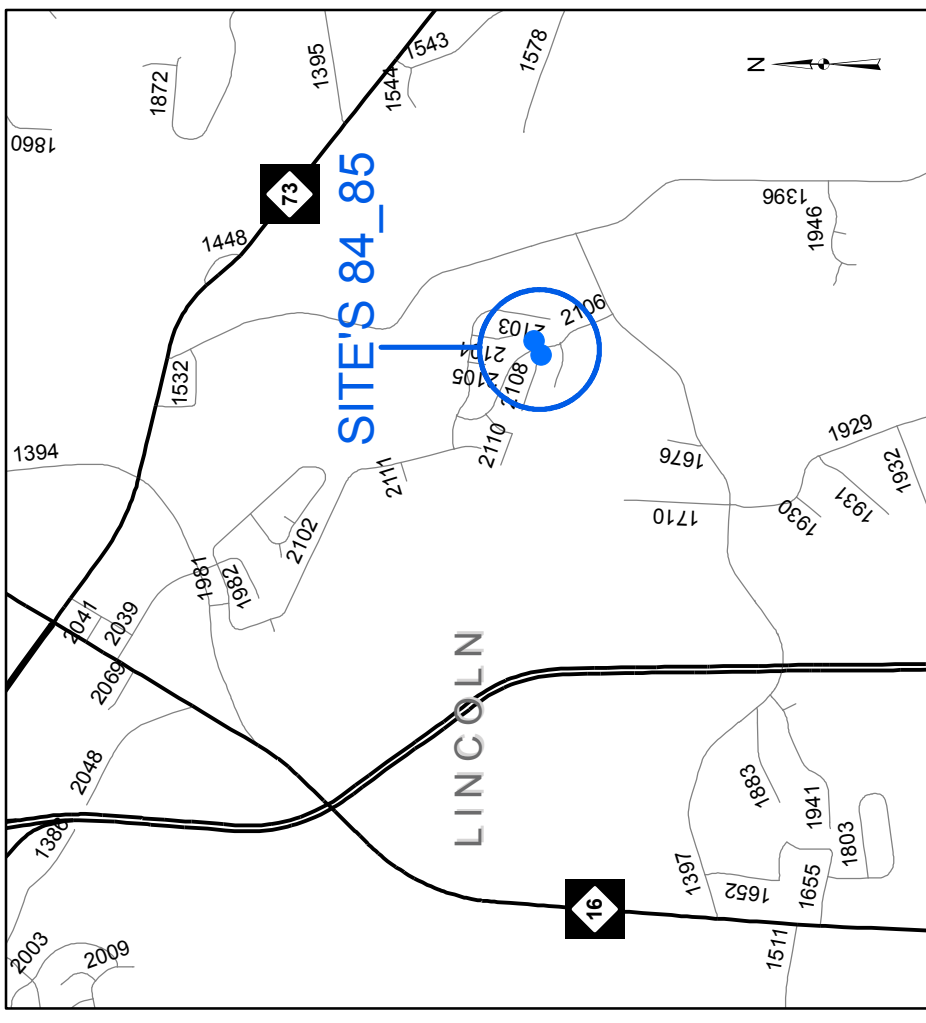
SR 1692 (1st Ave. SW) @ 9th Street SW



SR 1692 (1st Ave. SW) @ 11th Street Place SW

SR 1692 (1st Ave. SW) @ 11th Street SW

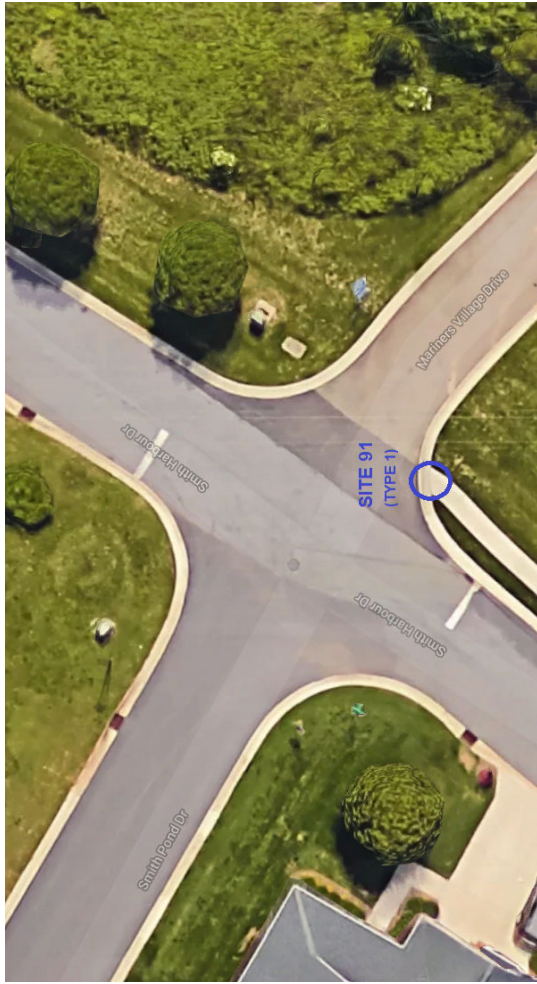
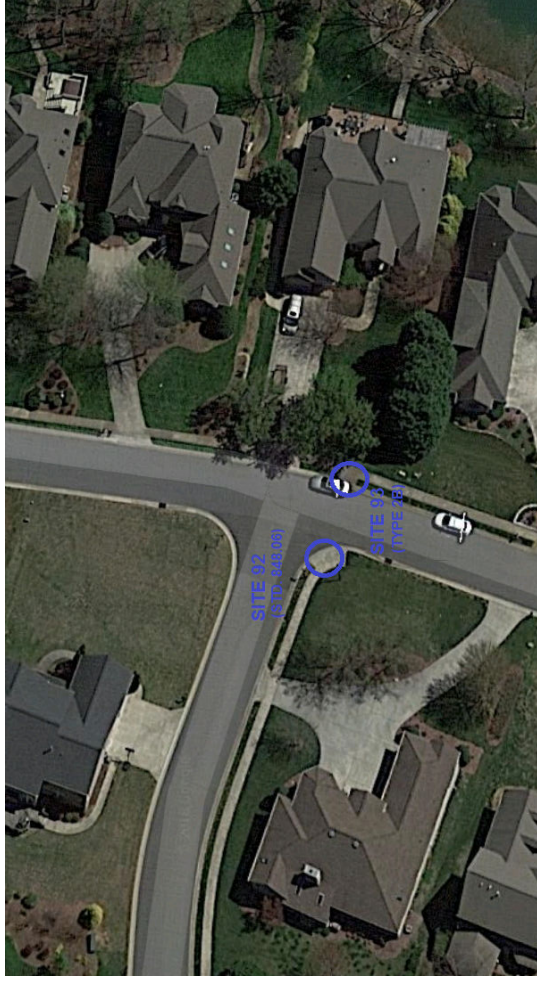
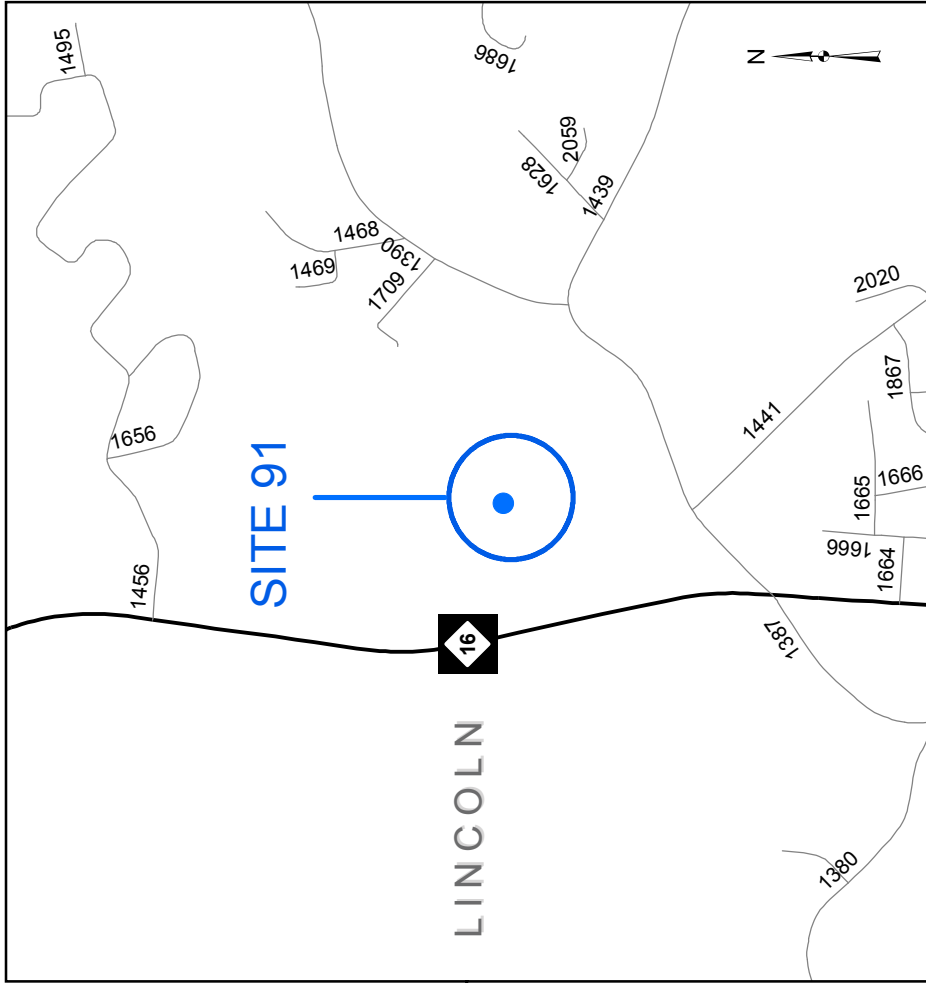
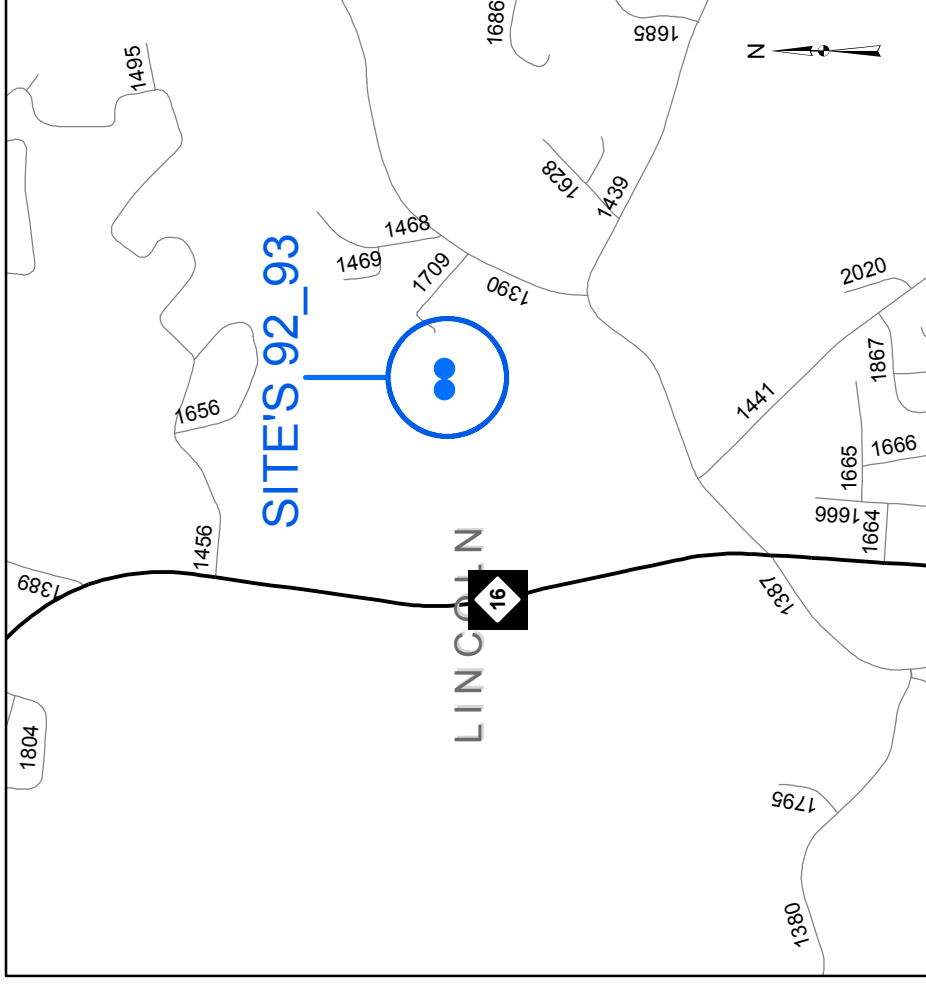
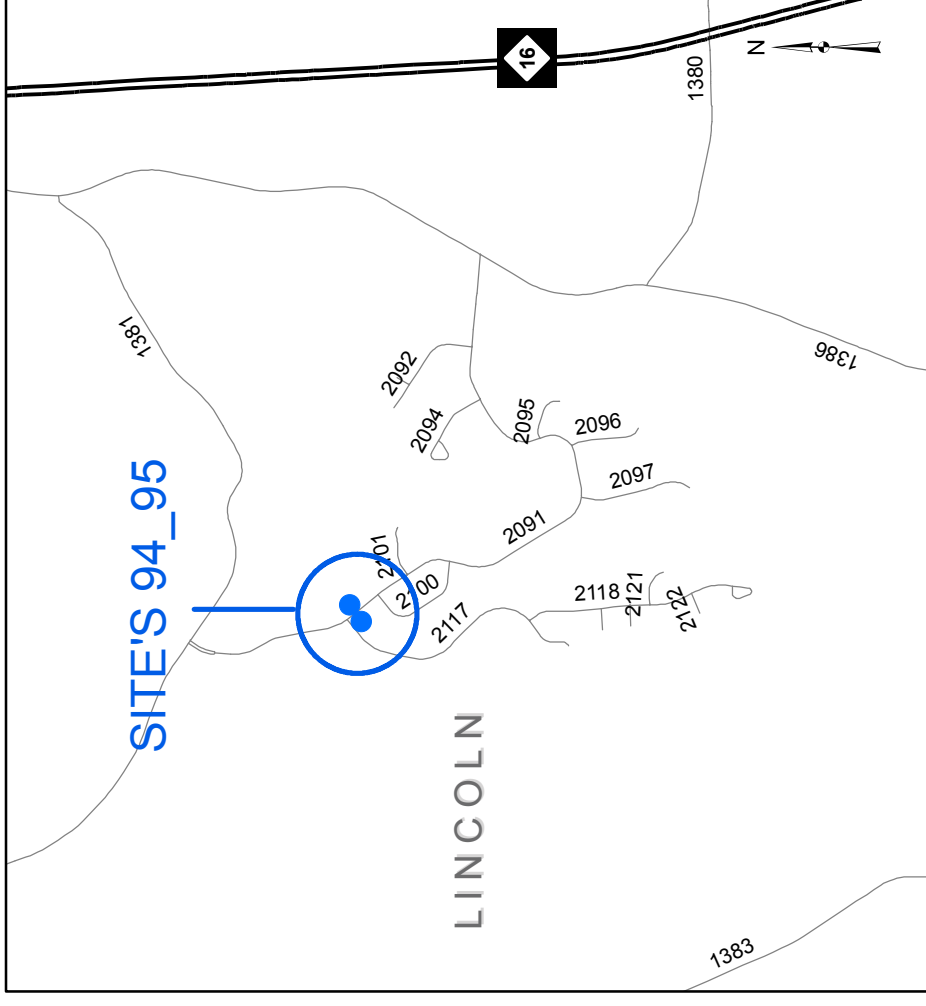
SR 1692 (1st Ave. SW) @ 10th Street SW



SR 2106 (Pinkney Place) @ SR 2108 (Common Oak Drive)

SR 2106 (Pinkney Place) @ SR 2107 (Turkey Trot Drive)

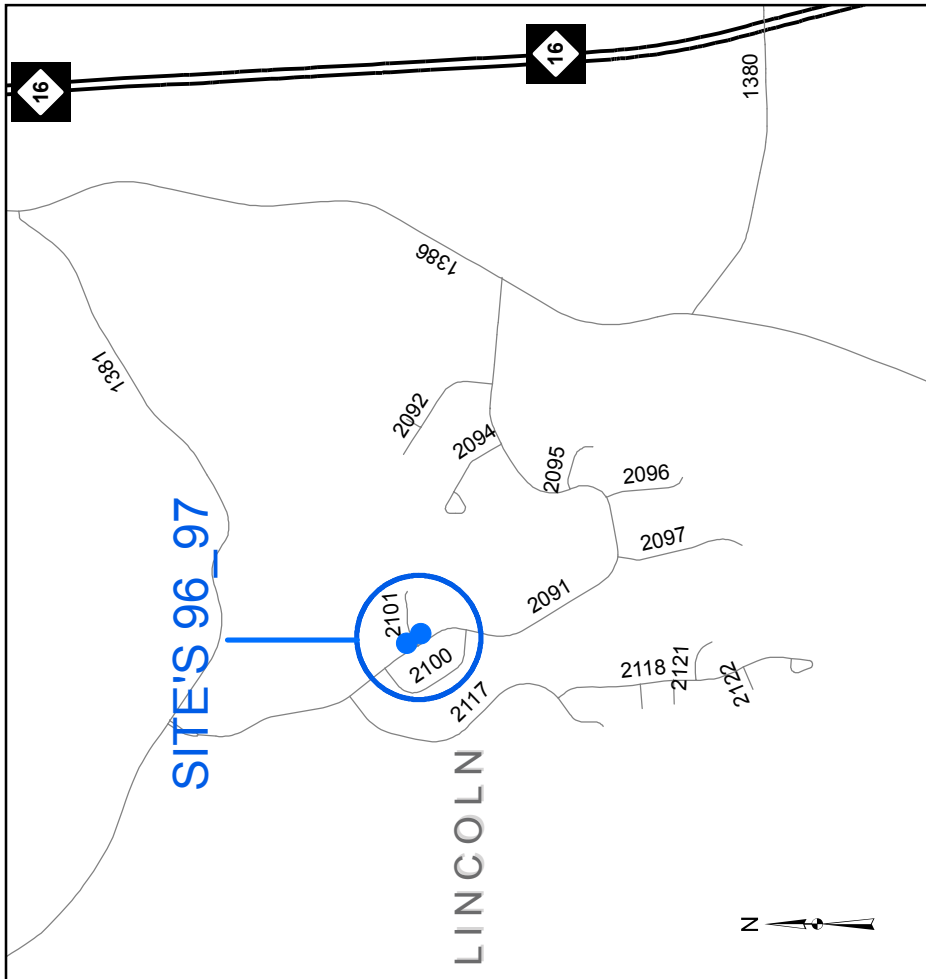
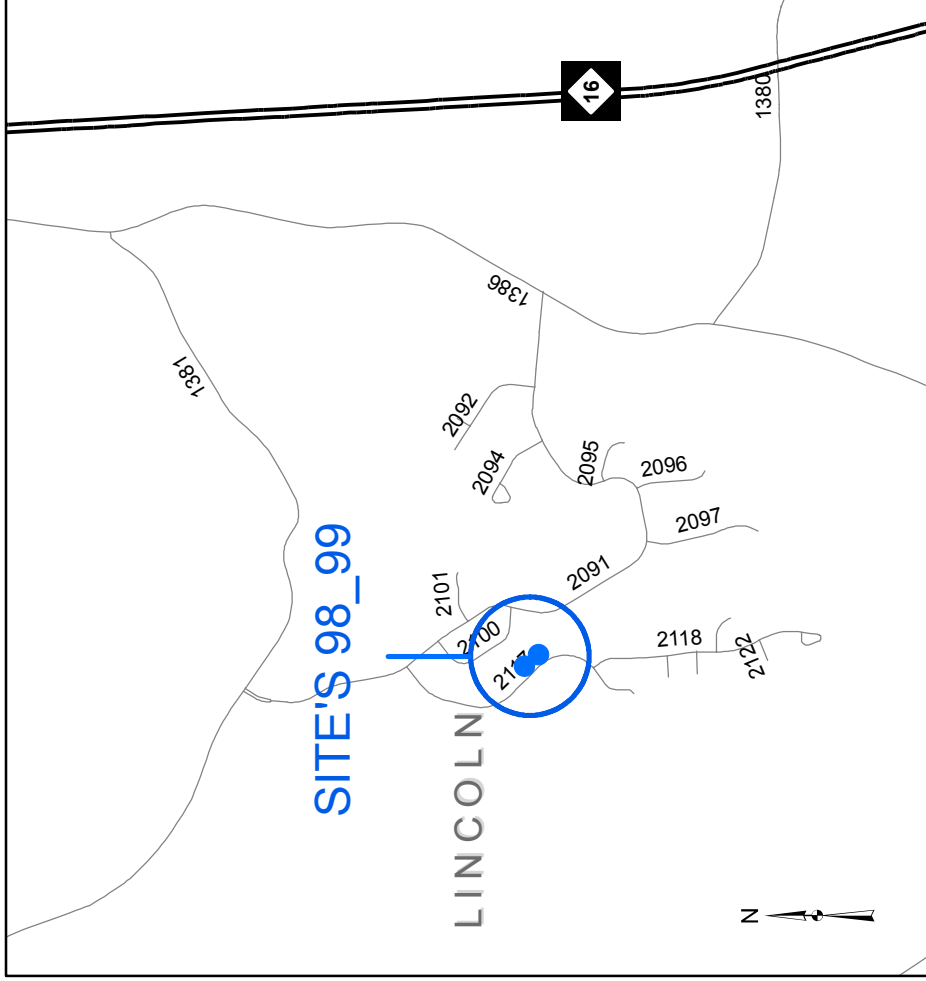
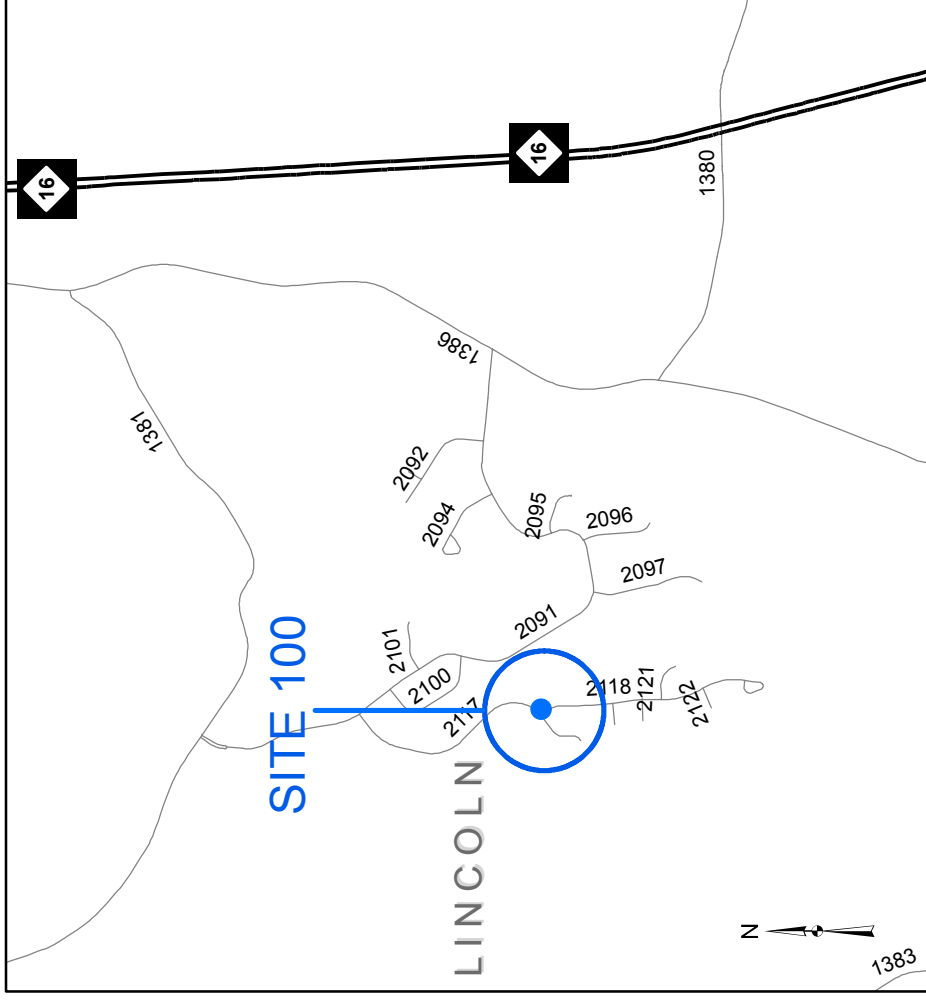
SR 2106 (Pinkney Place) @ SR 2106 (Brookdale Lane)



SR 2091 (Verdict Ridge Drive) @ SR 2117 (Withers Drive)

SR 2140 (Smith Harbor Drive) @ SR 2141 (Green Point Court)

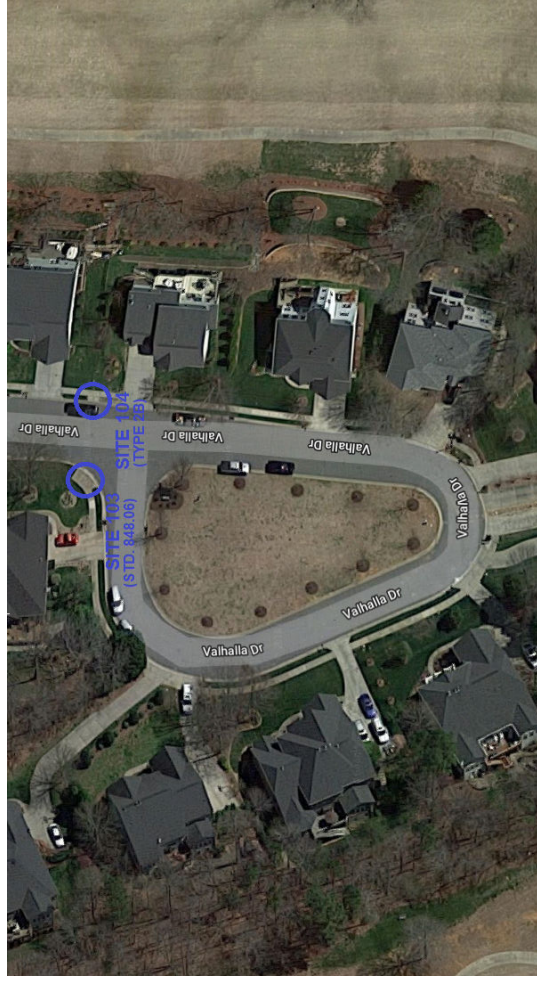
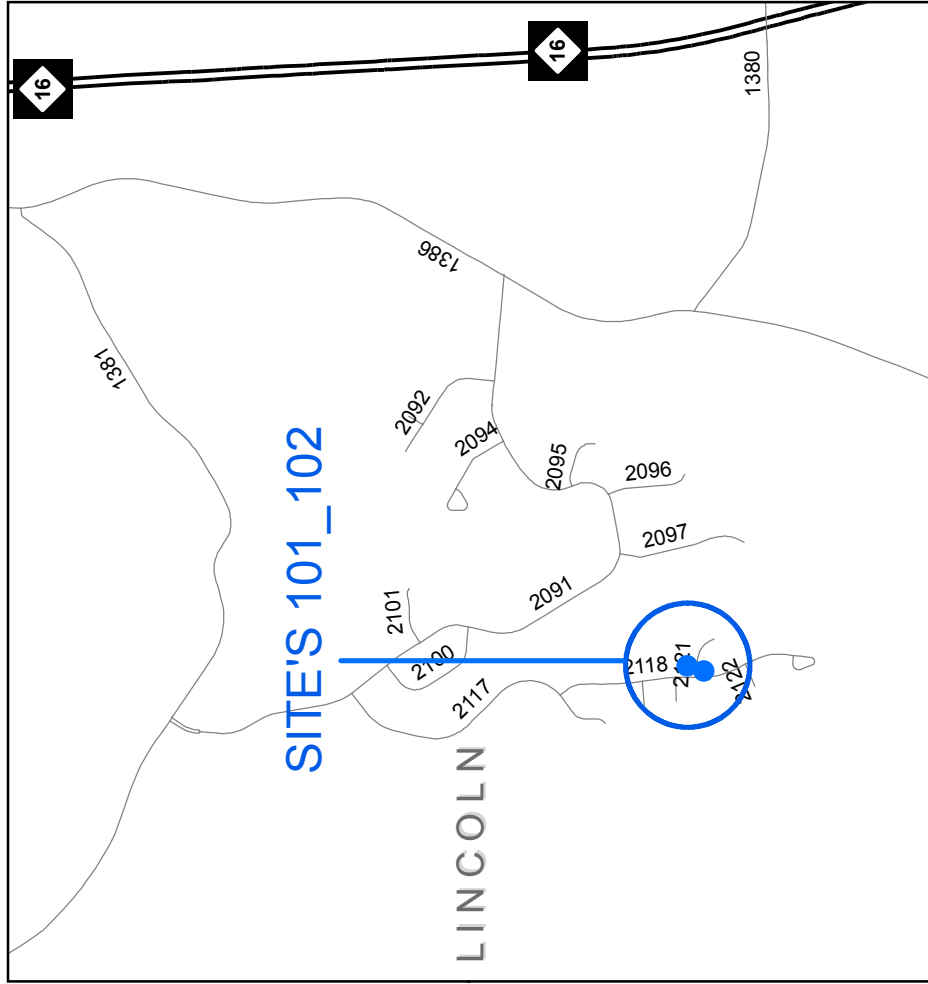
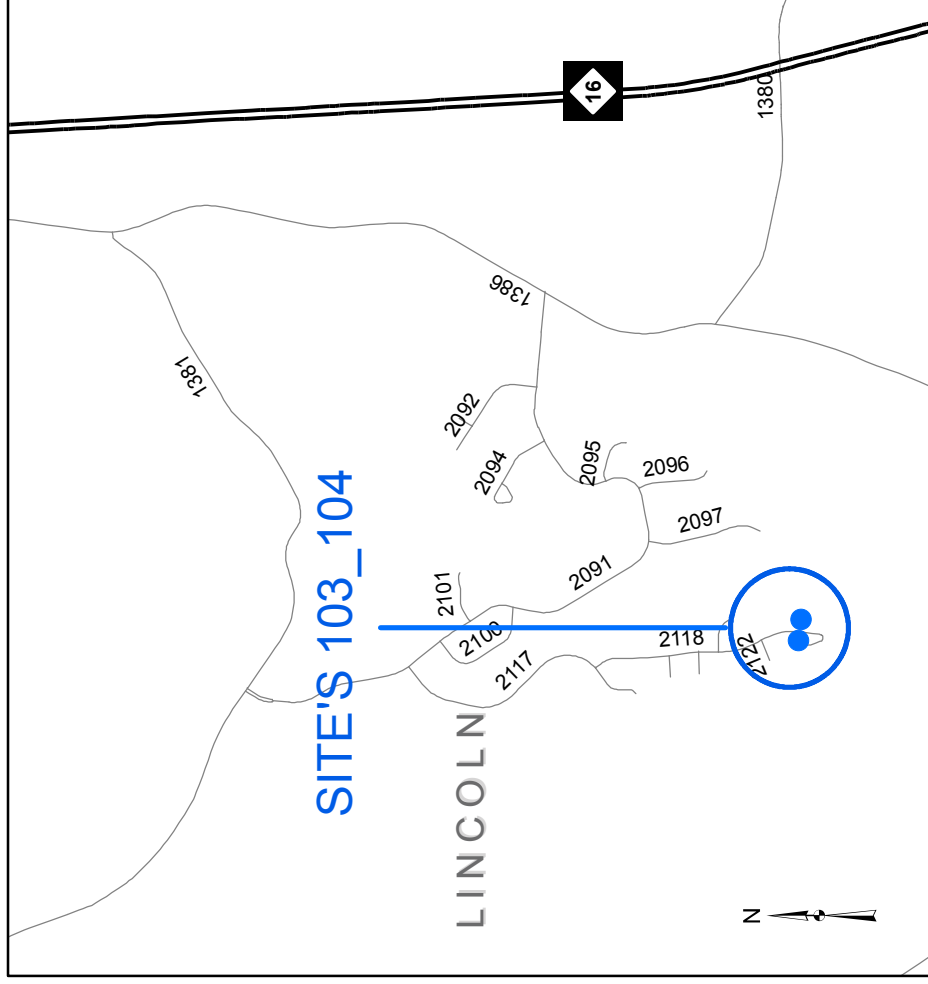
SR 2140 (Smith Harbor Drive) @ SR 2145 (Smith Pond Drive)



SR 2117 (Withers Drive) @ SR 2118 (Valhalla Drive)

SR 2117 (Withers Drive) @ Berkshire Court

SR 2091 (Verdict Ridge Drive) @ SR 2101 (Woodside Court)



SR 2118 (Valhalla Drive) @ SR 2118 (Valhalla Drive)

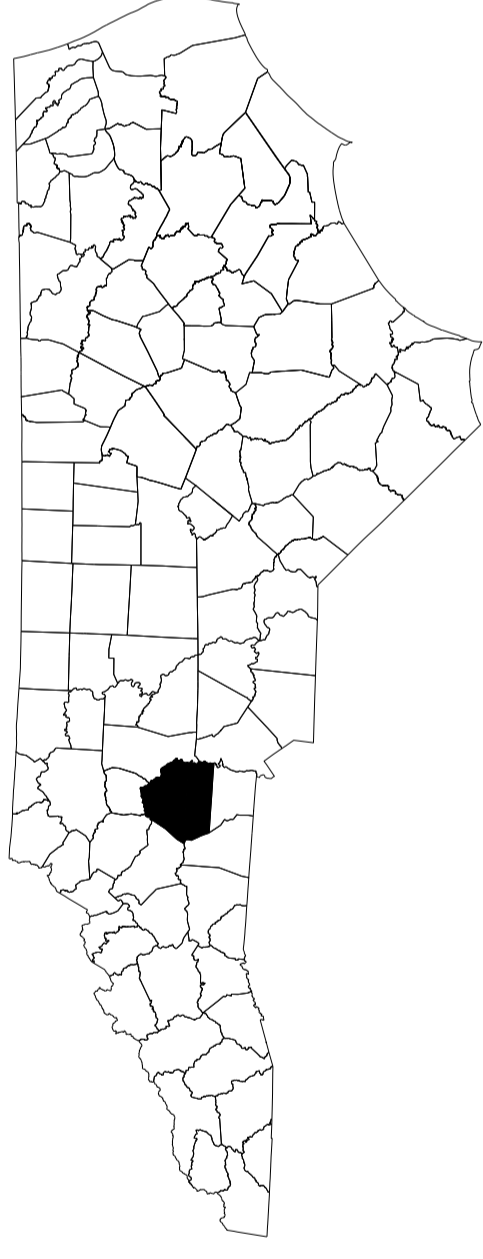
SR 2118 (Valhalla Drive) @ SR 2121 (Willow Brook Court)

SUMMARY OF QUANTITIES

R-5792AB & AG												
20												
Proj. #												
Sheet												
Sheet #	Division	County	Municipality	Under 5k Populatio n? (Y/N)	WBS No.	Major Route	Minor Route	Curb Ramps (EA)	Retrofit Existing Concrete Curb Ramp (EA)	Remove and Replace Existing Curb Ramp (EA)	Site #	Comments
4	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	12th Street SW			2	1_2	(2) Type 1
4	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	11th Street SW			1	3	(1) Type 2A
4	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	9th Street SW			3	4_5_6	(3) Type 1
5	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	8th Street SW			1	7	(1) Type 1
5	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	7th Street SW			2	8_9	(1) Type 1B, (1) Type 4A w/ 1 Ramp
5	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	6th Street SW			2	10_11	(1) Type 1, (1) Type 4A w/ 1 Ramp
6	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	5th Street SW			2	12_13	(2) Type 1
6	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	4th Street Place SW			2	14_15	(2) Type 1
6	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	4th Street SW			4	16_17_18_19	(2) Type 1, (2) Type 2A
7	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	3rd Street SW			4	20_21_22_23	(1) Type 1, (3) Type 2A
7	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	Greenway Exit			2	24_25	(2) Type 1
7	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	2nd Street SW			1	26	(1) Type 1
8	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	1st Street SW			4	27_28_29_30	(1) Type 1, (3) Type 2A
8	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	Center Street			4	31_32_33	(1) Type 1, (1) Type 2A, (1) Type 4
8	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	1st Street SE			2	34_35	(2) Type 1B
9	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	2nd Street SE			2	36_37	(2) Type 4A w/ 1 Ramp
9	12	Catawba	Hickory	N	44922.3.7	SR 2231 (2nd Ave. SW)	2nd Street Place			2	38_39	(1) Type 1, (1) Type 4A w/ 1 Ramp
9	12	Catawba	Hickory	N	44922.3.7	SR 1534 (2nd Ave. SE)	NC 127			4	40_41_42_43	(4) Type 2A
10	12	Catawba	Hickory	N	44922.3.7	SR 1534 (2nd Ave. SE)	3rd Street SE			2	44_45	(2) Type 2A
10	12	Catawba	Hickory	N	44922.3.7	SR 1534 (2nd Ave. SE)	4th Street SE			2	46_47	(1) Type 1, (1) Type 2A
10	12	Catawba	Hickory	N	44922.3.7	SR 1692 (1st Ave. SE)	5th Street Court			2	48_49	(2) Type 1
10	12	Catawba	Hickory	N	44922.3.7	SR 1692 (1st Ave. SE)	5th Street SE			2	50_51	(2) Type 1
11	12	Catawba	Hickory	N	44922.3.7	SR 1692 (1st Ave. SE)	4th Street SE			4	52_53_54_55	(3) Type 1, (1) Type 2A
11	12	Catawba	Hickory	N	44922.3.7	SR 1692 (1st Ave. SE)	2nd Street SE			2	56_57	(2) Type 2A
11	12	Catawba	Hickory	N	44922.3.7	SR 1692 (1st Ave. SW)	4th Street SW			4	58_59_60_61	(1) Type 1, (2) Type 1B, (1) Type 2A
12	12	Catawba	Hickory	N	44922.3.7	SR 1692 (1st Ave. SW)	6th Street SW			3	62_63_64	(1) Type 1, (1) Type 1B, (1) Type 2A
12	12	Catawba	Hickory	N	44922.3.7	SR 1692 (1st Ave. SW)	7th Street SW			2	65_66	(2) Type 1B
12	12	Catawba	Hickory	N	44922.3.7	SR 1692 (1st Ave. SW)	9th Street SW			3	67_68_69	(3) Type 1
13	12	Catawba	Hickory	N	44922.3.7	SR 1692 (1st Ave. SW)	10th Street SW			2	70_71	(2) Type 1
13	12	Catawba	Hickory	N	44922.3.7	SR 1692 (1st Ave. SW)	11th Street SW			1	72	(1) Type 1
13	12	Catawba	Hickory	N	44922.3.7	SR 1692 (1st Ave. SW)	11th Street Place SW			1	73	(1) Type 1
14	12	Catawba	Hickory	N	44922.3.7	SR 1692 (1st Ave. SW)	12th Street SW			2	74_75	(1) Type 1, (1) Type 2A
14	12	Catawba	Hickory	N	44922.3.7	SR 1692 (1st Ave. SW)	13th Street SW			2	76_77	(1) Type 1, (1) Type 2A
14	12	Catawba	Hickory	N	44922.3.7	SR 1692 (1st Ave. SW)	14th Street SW			3	78_79_80	(1) Type 1, (2) Type 2A
15	12	Lincoln	Lincolnton	N	44922.3.11	SR 2106 (Pinkney Place)	SR 2106 (Brookedale Lane)			1	81	(1) Type 2B
15	12	Lincoln	Lincolnton	N	44922.3.11	SR 2106 (Pinkney Place)	SR 2107 (Turkey Trot Drive)			2	82_83	(1) STD. 848.06, (1) Type 2B
15	12	Lincoln	Lincolnton	N	44922.3.11	SR 2106 (Pinkney Place)	SR 2108 (Common Oak Drive)			2	84_85	(1) STD. 848.06, (1) Type 2B
16	12	Lincoln	Lincolnton	N	44922.3.11	SR 2106 (Pinkney Place)	SR 2109 (Brookedale Lane)			2	86_87	(1) STD. 848.06, (1) Type 2B
16	12	Lincoln	Lincolnton	N	44922.3.11	SR 2106 (Pinkney Place)	SR 2103 (Woodcrest Drive)			1	88	(1) STD. 848.06
16	12	Lincoln	Lincolnton	N	44922.3.11	SR 2103 (Woodcrest Drive)	SR 2104 (Cederwood Court)			2	89_90	(1) STD. 848.06, (1) Type 2B
17	12	Lincoln	Lincolnton	N	44922.3.11	SR 2140 (Smith Harbor Drive)	SR 2145 (Smith Pond Drive)			1	91	(1) Type 1
17	12	Lincoln	Lincolnton	N	44922.3.11	SR 2140 (Smith Harbor Drive)	SR 2141 (Green Point Court)			2	92_93	(1) STD. 848.06, (1) Type 2B
17	12	Lincoln	Lincolnton	N	44922.3.11	SR 2091 (Verdict Ridge Drive)	SR 2117 (Withers Drive)			2	94_95	(1) STD. 848.06, (1) Type 2B
18	12	Lincoln	Lincolnton	N	44922.3.11	SR 2091 (Verdict Ridge Drive)	SR 2101 (Woodside Court)			2	96_97	(2) STD. 848.06
18	12	Lincoln	Lincolnton	N	44922.3.11	SR 2117 (Withers Drive)	Berkshire Court			2	98_99	(2) STD. 848.06
18	12	Lincoln	Lincolnton	N	44922.3.11	SR 2117 (Withers Drive)	SR 2118 (Valhalla Drive)			1	100	(1) STD. 848.06
19	12	Lincoln	Lincolnton	N	44922.3.11	SR 2118 (Valhalla Drive)	SR 2121 (Willow Brook Court)			2	101_102	(2) STD. 848.06
19	12	Lincoln	Lincolnton	N	44922.3.11	SR 2118 (Valhalla Drive)	SR 2118 (Valhalla Drive)			2	103_104	(1) STD. 848.06, (1) Type 2B
								0	0	105	104	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN
CATAWBA & LINCOLN COUNTIES



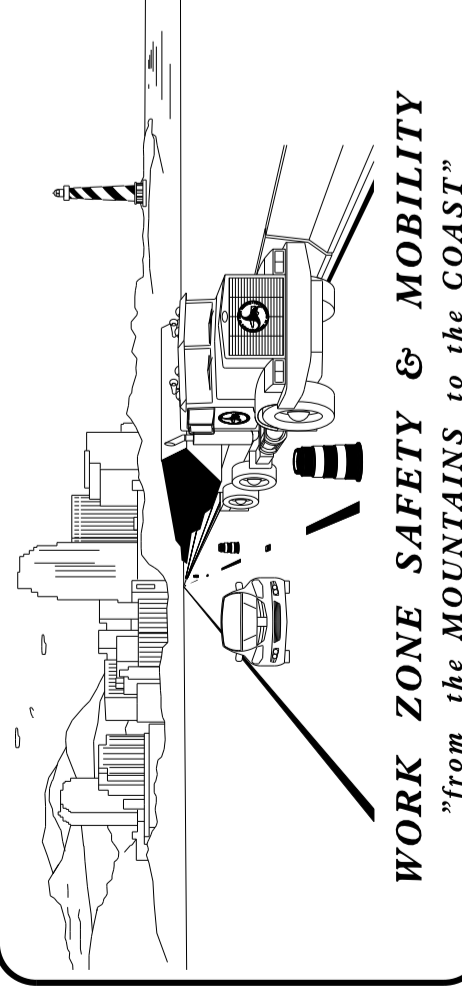
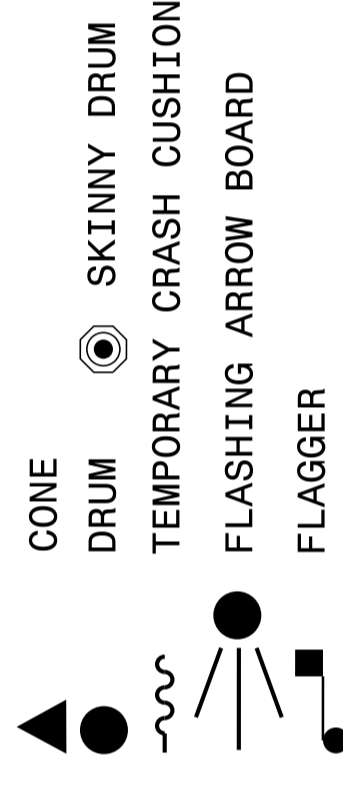
ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1150.01	FLAGGING DEVICES
1180.01	SKINNY-DRUM

LEGEND

TRAFFIC CONTROL DEVICES



INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, LEGEND AND INDEX OF SHEETS
TMP-1B	TRANSPORTATION OPERATIONS PLAN: (MANAGEMENT STRATEGIES, GENERAL NOTES, AND LOCAL NOTES)

TIP PROJECT:

R-5792AB & AG

SHEET NO.
TMP-1

GENERAL NOTES / LOCAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:	<u>DAY AND TIME RESTRICTIONS</u>
<u>ROAD NAME</u>	
1. ANY US OR NC ROUTE	MONDAY - FRIDAY: 7:00 A.M. - 9:00 A.M. 4:00 P.M. - 6:00 P.M.

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

ROAD NAME
ANY ROAD

HOLIDAY

1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 9:00 A.M. DECEMBER 31st TO 4:00 P.M. JANUARY 2ND, IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 9:00 A.M. THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 9:00 A.M. THURSDAY AND 4:00 P.M. MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 9:00 A.M. FRIDAY TO 4:00 P.M. TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 9:00 A.M. THE DAY BEFORE INDEPENDENCE DAY AND 4:00 P.M. THE DAY AFTER INDEPENDENCE DAY.
IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 9:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 4:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 9:00 A.M. FRIDAY AND 4:00 P.M. TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 9:00 A.M. TUESDAY TO 4:00 P.M. MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 9:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 4:00 P.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- B) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.
- C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
- D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.
- F) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

PAVEMENT EDGE DROP OFF REQUIREMENTS

- G) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:
BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.
BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.
BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.
- H) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.



**TRANSPORTATION
OPERATIONS
PLAN**