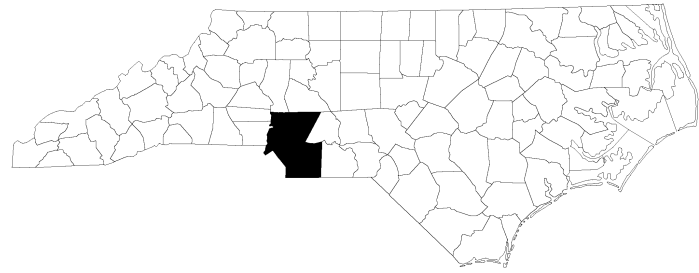


09/08/19

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5790JG	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
44920.3.15	TAP-00SS(061)	CONST	



DIVISIONWIDE

GROUP A-2

LOCATION: MECKLENBURG & UNION COUNTY
TYPE OF WORK: CURB RAMP INSTALLATIONS



TIP PROJECT: R-5790JG

CONTRACT: DJ00448

1/2/2020
\\NR-5790JG-TSH-A.dgn
User: mtolouino

Prepared in the Office of:
DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh NC, 27610

2018 STANDARD SPECIFICATIONS

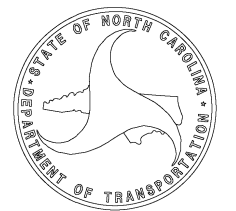
RIGHT OF WAY DATE:

-

LETTING DATE:
December 7, 2022

TERRY W. BURLESON
PROJECT ENGINEER

RAMEY KEMP & ASSOCIATES
PROJECT DESIGN ENGINEER



SUMMARY OF QUANTITIES - DIVISION 10 OVER 5000 GROUP A-2
 COUNTY: MECKLENBURG & UNION

TIP Project: R-5790JG
 WBS: 44920.3.15

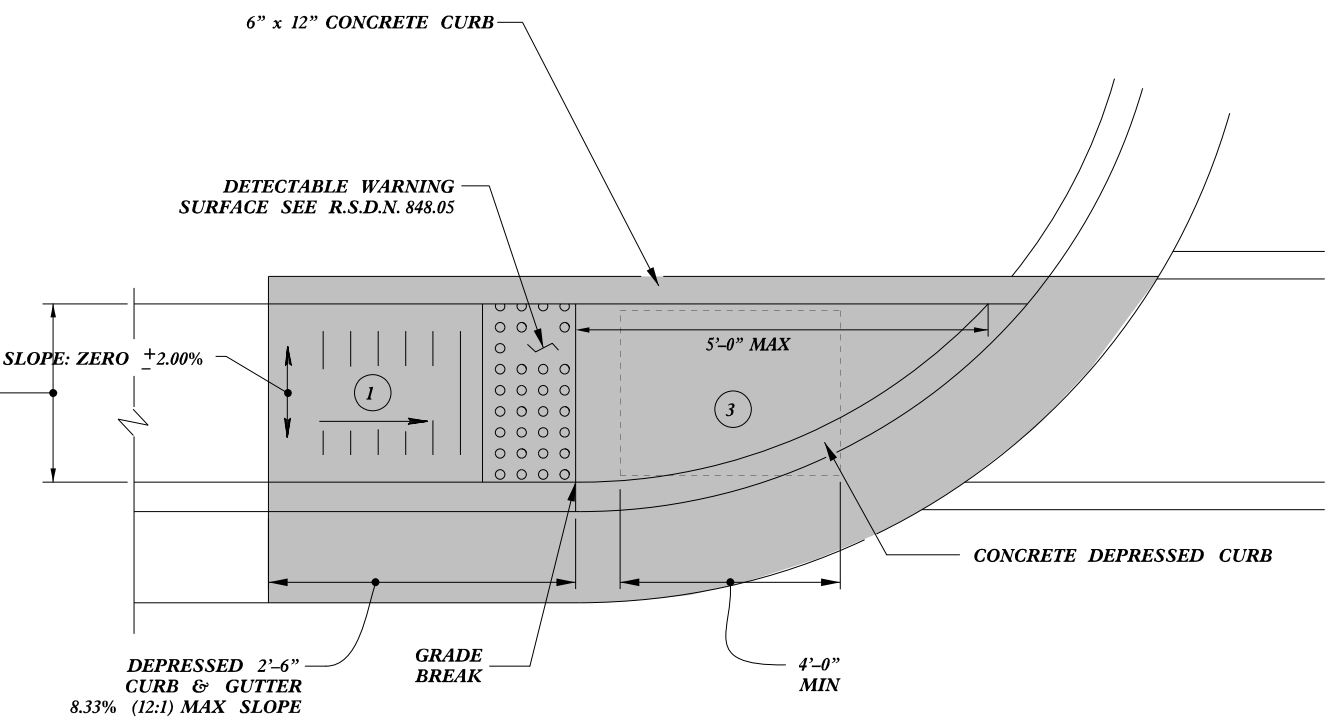
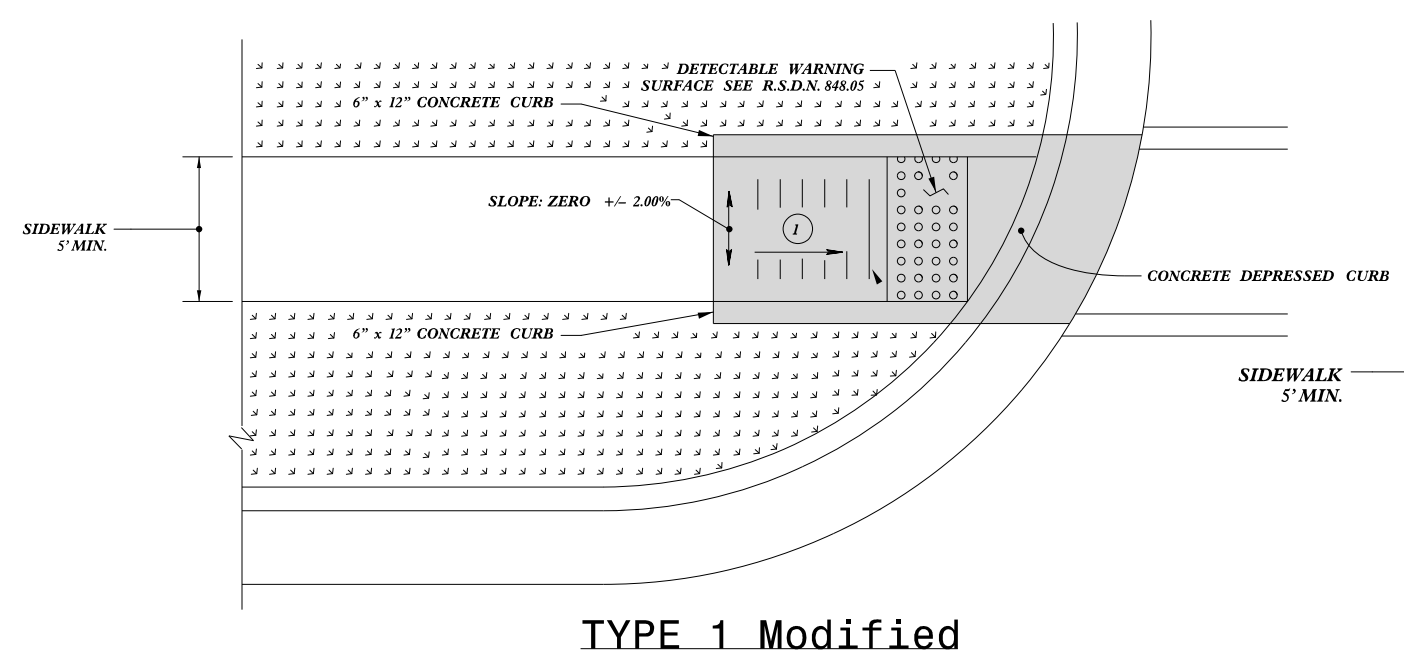
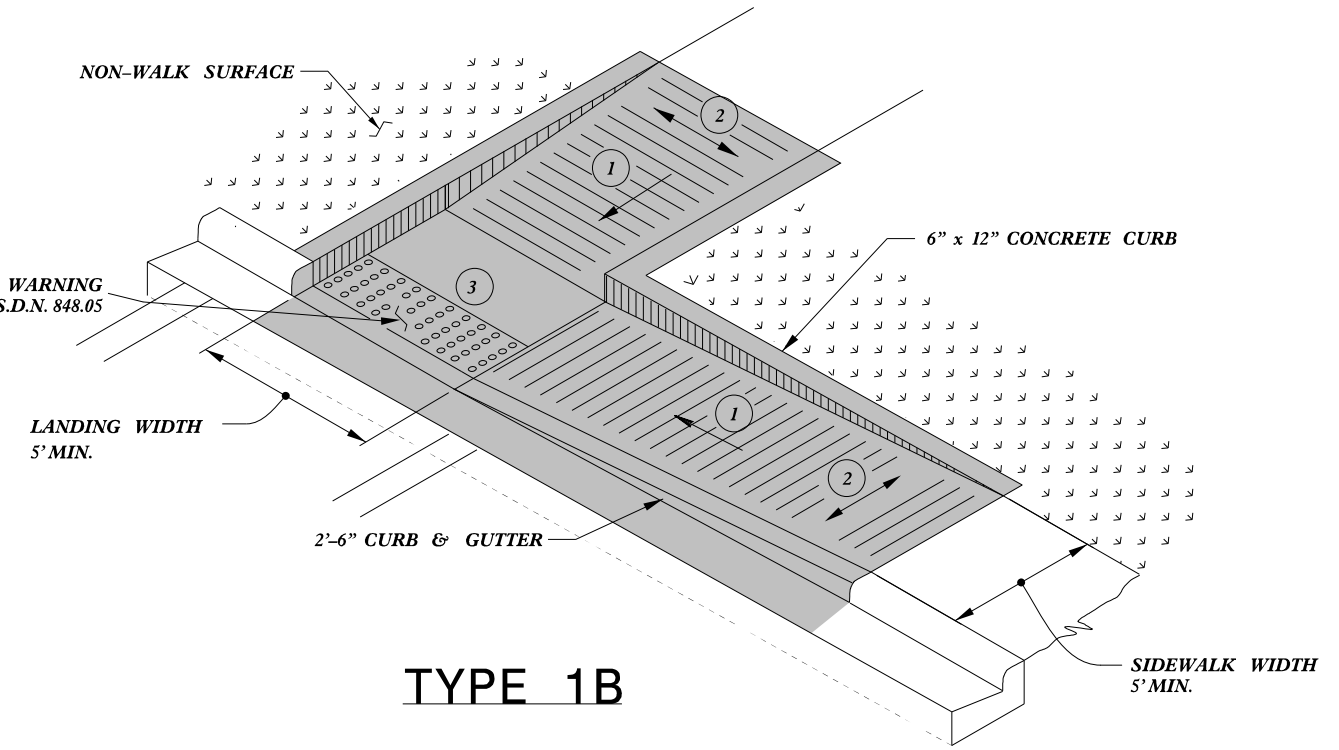
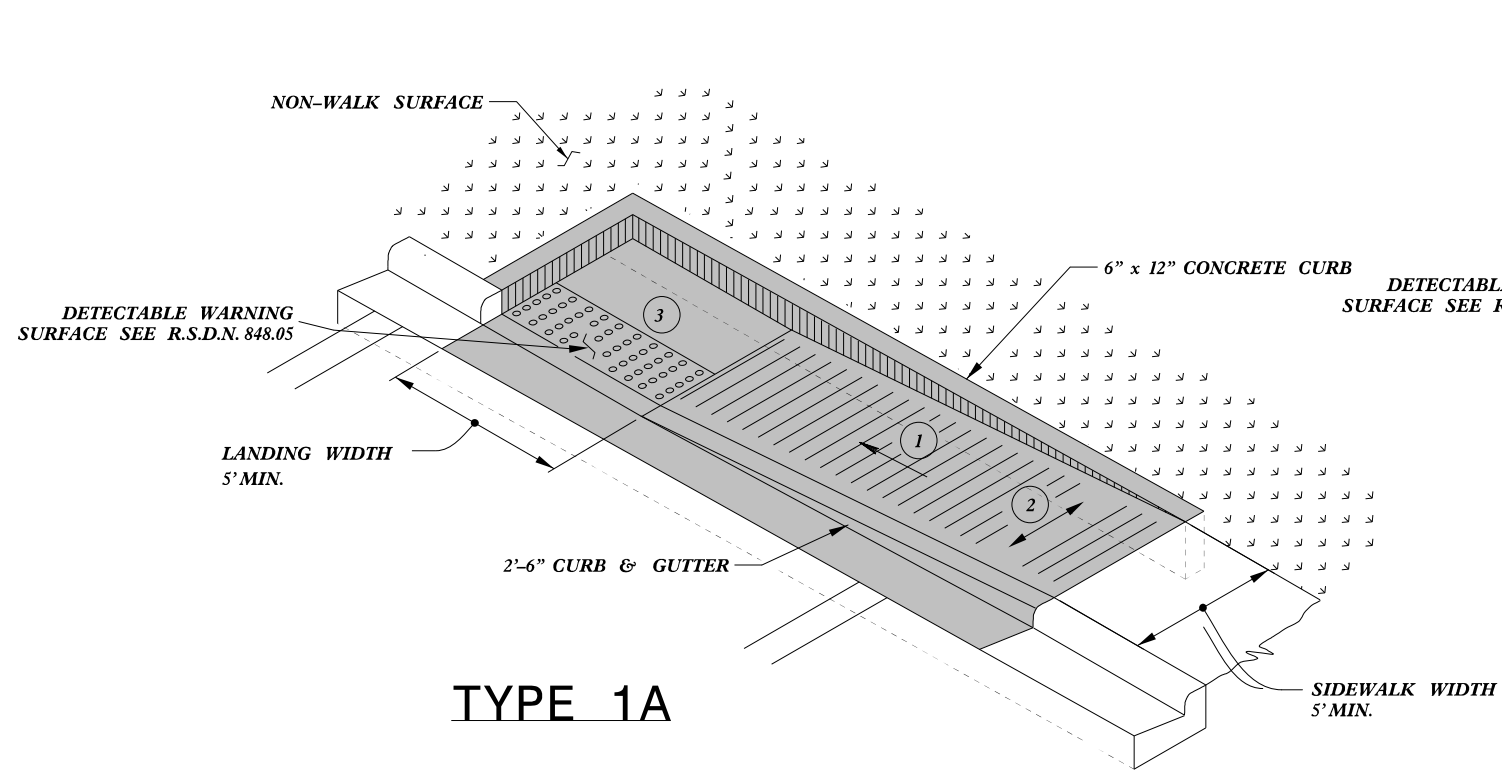
Ramp ID	Map Number	Inset Number	Route 1	Route 2	2549000000-E	2591000000-E	2845000000-N	2830000000-N	7648000000-N	5888000000-E	Dome Style/Color	2600000000-N	2613000000-N	2605000000-N	Ramp Type
					2'-6" Concrete Curb & Gutter	4" Concrete Sidewalk	Adjust Valve / Meter	Adjust Manhole	Relocate Sign	Adjust Utility Box		Retrofit Existing Curb Ramps	Remove & Replace Curb	Concrete Curb Ramps	
					LF	SY	EA	EA	EA	EA		EA	EA	EA	
357	1-13	70	Southcrest Ln	Aden Creek Way							Black		1		Type 1 Modified
356	1-13	71	St Emilion Pl	Bergerac Ct							Black		1		Type 1 Modified
348	1-13	72	Strathmoor Dr	Olde Mill Stream Ct							Black		1		Type 1 Modified
344	1-13	73	Providence Rd	Strathmoor Dr							Black		1		Type 3 Modified
345	1-13	73	Providence Rd	Strathmoor Dr							Black		1		Type 3 Modified
346	1-13	73	Providence Rd	Strathmoor Dr							Black		1		Type 3 Modified
347	1-13	73	Providence Rd	Strathmoor Dr							Black		1		Type 3 Modified
355	1-13	74	Hawick Manor Ln	Ridge Stone Ct			1				Black		1		Type 3 Modified
354	1-13	75	Stone Forest Dr	Ridge Stone Ct							Black		1		Type 1 Modified
351	1-13	76	Bannock Dr	Balenie Trace Ln							Black		1		Type 3 Modified
350	1-13	77	Bannock Dr	Hawick Manor Ln							Black		1		Type 3 Modified
358	1-14	69	Lancaster Hwy	Southcrest Ln							Black		1		Standard 848.06
349	1-14	78	Glenfinnan Dr	Bannock Dr							Black		1		Type 1 Modified
353	1-14	79	Stone Forest Dr	Eastgrove Dr							Black		1		Type 1 Modified
352	1-14	80	Bridle Trace Ln	Stone Forest Dr							Black		1		Type 3 Modified
342	1-15	81	Marvin Rd	Dixie Hills Dr							Black		1		Type 3 Modified
343	1-15	81	Marvin Rd	Dixie Hills Dr							Black		1		Standard 848.06
333	1-15	83	Marvin Rd	Kings Crown Way							Black		1		Standard 848.06
334	1-15	83	Marvin Rd	Kings Crown Way							Black	1			Retrofit
332	1-15	84	Marvin Rd	Donnington Dr							Black		1		Type 3 Modified
312	1-15	86	Old Ardrey Kell Rd	Allyson Park Dr			1				Black		1		Type 3 Modified
313	1-15	86	Old Ardrey Kell Rd	Allyson Park Dr							Black		1		Type 3 Modified
310	1-15	87	Old Ardrey Kell Rd	Honeynut Dr							Black		1		Type 3 Modified
311	1-15	87	Old Ardrey Kell Rd	Honeynut Dr							Black		1		Type 3 Modified
308	1-15	88	Old Ardrey Kell Rd	Arvind Oaks Ct							Black		1		Type 3 Modified
309	1-15	88	Old Ardrey Kell Rd	Arvind Oaks Ct							Black		1		Type 1 Modified
292	1-16	92	Marvin Rd	Southampton Commons Dr							Black		1		Type 3 Modified
293	1-16	92	Marvin Rd	Southampton Commons Dr							Black		1		Type 3 Modified
294	1-16	92	Marvin Rd	Southampton Commons Dr							Black		1		Type 3 Modified
295	1-16	92	Marvin Rd	Southampton Commons Dr							Black	1			Retrofit
296	1-16	92	Marvin Rd	Southampton Commons Dr							Black		1		Standard 848.06
297	1-16	92	Marvin Rd	Southampton Commons Dr							Black		1		Standard 848.06
288	1-16	93	Marvin Rd	Wade Ardrey Rd							Black		1		Standard 848.06
289	1-16	93	Marvin Rd	Wade Ardrey Rd							Black		1		Standard 848.06
290	1-16	93	Marvin Rd	Wade Ardrey Rd							Black		1		Standard 848.06
291	1-16	93	Marvin Rd	Wade Ardrey Rd							Black		1		Standard 848.06
2508	1-16	93	Marvin Rd	Wade Ardrey Rd							Black		1		Standard 848.06
284	1-16	94	Wade Ardrey Rd	Commons Crossing Dr							Black	1			Retrofit
286	1-16	94	Wade Ardrey Rd	Commons Crossing Dr							Black		1		Standard 848.06
320	1-17	95	Elm Ln	Regal Cinema Driveway							Black		1		Type 2B
316	1-17	97	Elm Ln	Robinson Forest Dr							Black		1		Standard 848.06
315	1-17	98	Elm Ln	Windsor Ridge Dr							Black		1		Type 1 Modified
282	1-17	99	Community House Rd	Tamarron Dr							Black		1		Type 2A
280	1-17	100	Ardrey Kell Rd	Carson Whitley Ave							Black		1		Type 4B
281	1-17	100	Ardrey Kell Rd	Carson Whitley Ave							Black	1			Retrofit

Ramp ID	Map Number	Inset Number	Route 1	Route 2	254900000-E	259100000-E	284500000-N	283000000-N	764800000-N	588800000-E	Dome Style/Color	260000000-N	261300000-N	260500000-N	Ramp Type
					2'-6" Concrete Curb & Gutter	4" Concrete Sidewalk	Adjust Valve / Meter	Adjust Manhole	Relocate Sign	Adjust Utility Box		Retrofit Existing Curb Ramps	Remove & Replace Curb	Concrete Curb Ramps	
					LF	SY	EA	EA	EA	EA		EA	EA	EA	
274	1-17	101	Ardrey Kell Rd	First Citizens Bank Driveway							Black		1		Standard 848.06
275	1-17	101	Ardrey Kell Rd	First Citizens Bank Driveway							Black		1		Standard 848.06
276	1-17	101	Ardrey Kell Rd	Blakeney Preserve Dr							Black	1			Retrofit
277	1-17	101	Ardrey Kell Rd	Blakeney Preserve Dr							Black	1			Retrofit
278	1-17	101	Ardrey Kell Rd	Blakeney Preserve Dr		3					Black		1		Type 3 Modified
279	1-17	101	Ardrey Kell Rd	Blakeney Preserve Dr							Black	1			Retrofit
273	1-17	102	Ardrey Kell Rd	Target Driveway							Black		1		Type 3 Modified
272	1-18	103	Rea Rd	Ardrey Kell Rd							Black	1			Retrofit
267	1-18	104	Tom Short Rd	Haddonfield Pl							Black		1		Type 3 Modified
268	1-18	104	Tom Short Rd	Haddonfield Pl							Black		1		Type 3 Modified
270	1-18	105	Tom Short Rd	Polo Ridge Elementary Driveway							Black		1		Type 1 Modified
271	1-18	105	Tom Short Rd	Polo Ridge Elementary Driveway							Black		1		Type 1 Modified
66	2-01	1	Providence Rd (NC 16)	Woodmont Dr							Black		1		Type 3 Modified
2455	2-01	1	Providence Rd (NC 16)	Woodmont Dr							Black		1		Type 3 Modified
67	2-01	3	New Town Rd	Hickory Ridge Dr							Black		1		Type 3 Modified
68	2-01	3	New Town Rd	Hickory Ridge Dr							Black		1		Type 3 Modified
72	2-01	4	Marvin Rd	Firethorne Club Dr							Black		1		Type 1 Modified
469	3-01	1	North Polk St	Perimeter Center South Driveway							Black		1		Type 1
470	3-01	1	North Polk St	Perimeter Center South Driveway							Black		1		Type 1
468	3-01	2	North Polk St	Miller St							Black		1		Type 1
465	3-01	3	North Polk St	Commerce Dr							Black		1		Type 1
466	3-01	3	North Polk St	Commerce Dr							Black		1		Type 1
463	3-01	4	Main St (NC 51)	Franklin St							Black	1			Retrofit
464	3-01	4	Main St (NC 51)	Franklin St							Black		1		Type 1
461	3-01	5	Main St (NC 51)	Reid Ln							Black	1			Retrofit
462	3-01	5	Main St (NC 51)	Reid Ln							Black		1		Type 1
458	3-01	6	Main St (NC 51)	Dover St							Black	1			Retrofit
451	3-01	8	Main St (NC 51)	Oakley Ave							Black		1		Type 1 Modified
452	3-01	8	Main St (NC 51)	Oakley Ave							Black		1		Type 1 Modified
448	3-02	9	Main St (NC 51)	El Veracruz Rest. Vacant Driveway							Black		1		Type 1 Modified
443	3-02	10	Main St (NC 51)	South Polk St							Black		1		Type 1 Modified
434	3-02	11	Pineville Matthews Rd (NC 51)	7-Eleven Driveway							Black		1		Type 1
435	3-02	11	Pineville Matthews Rd (NC 51)	7-Eleven Driveway							Black		1		Type 1
432	3-02	12	Pineville Matthews Rd (NC 51)	Burger King Driveway							Black		1		Type 1
433	3-02	12	Pineville Matthews Rd (NC 51)	Burger King Driveway							Black		1		Type 1
455	3-02	14	North Polk St	College St		3					Black		1		Type 1
427	3-03	15	Sam Meeks Rd	Sabal Park Dr							Black		1		Type 1 Modified
428	3-03	15	Sam Meeks Rd	Sabal Park Dr							Black		1		Type 1 Modified
425	3-03	16	Sam Meeks Rd	Sabal Park Dr							Black		1		Type 1 Modified
426	3-03	16	Sam Meeks Rd	Sabal Park Dr							Black		1		Type 1 Modified
423	3-03	17	Sam Meeks Rd	Habitat Restore Driveway							Black		1		Type 1 Modified
424	3-03	17	Sam Meeks Rd	Habitat Restore Driveway							Black		1		Type 1 Modified
418	3-03	18	Lancaster Hwy	Lanier Scrub Car Wash Driveway							Black	1			Retrofit
419	3-03	18	Lancaster Hwy	Lanier Scrub Car Wash Driveway			1				Black		1		Type 1 Modified
420	3-03	18	Lancaster Hwy	Lanier Scrub Car Wash Driveway							Black		1		Type 3 Modified
421	3-03	18	Lancaster Hwy	Lanier Scrub Car Wash Driveway							Black		1		Type 3 Modified
422	3-03	19	Carolina Pkwy	Park Rd							Black		1		Standard 848.06
2549	3-03	19	Carolina Pkwy	Park Rd							Black		1		Type 3 Modified
414	3-03	21	Lancaster Hwy	BJ's Shopping							Black	1			Retrofit
415	3-03	21	Lancaster Hwy	BJ's Shopping							Black		1		Type 1 Modified
416	3-03	21	Lancaster Hwy	BJ's Shopping							Black		1		Type 1 Modified
412	3-03	22	Lancaster Hwy	Pine Acres Ave							Black	1			Retrofit
413	3-03	22	Lancaster Hwy	Pine Acres Ave							Black		1		Standard 848.06
28	4-01	2	W South Main St (NC 75)	Galley Plaza Driveway							Black		1		Type 1 Modified
29	4-01	2	W South Main St (NC 75)	Galley Plaza Driveway							Black		1		Type 1 Modified
27	4-01	3	W South Main St (NC 75)	Rehobeth Rd							Black		1		Type 1 Modified
26	4-01	4	Howie Mine Rd	North Providence St		8					Black	1			Retrofit
2261	4-01	4	Howie Mine Rd	North Providence St							Black		1		Type 2A
2262	4-01	4	Howie Mine Rd	North Providence St							Black		1		Type 1 Modified
22	4-01	5	South Providence Street	McCain Street							Black		1		Type 1A
2259	4-01	5	South Providence Street	McCain Street							Black		1		Type 1A

Ramp ID	Map Number	Inset Number	Route 1	Route 2	2549000000-E	2591000000-E	2845000000-N	2830000000-N	7648000000-N	5888000000-E	Dome Style/Color	2600000000-N	2613000000-N	2605000000-N	Ramp Type
					2'-6" Concrete Curb & Gutter	4" Concrete Sidewalk	Adjust Valve / Meter	Adjust Manhole	Relocate Sign	Adjust Utility Box		Retrofit Existing Curb Ramps	Remove & Replace Curb	Concrete Curb Ramps	
					LF	SY	EA	EA	EA	EA		EA	EA	EA	
20	4-01	6	Old Providence Rd	Waxhaw Elementary School Drive							Black	1			Retrofit
21	4-01	6	Old Providence Rd	Waxhaw Elementary School Drive		3					Black		1		Type 2
21A	4-01	6	Old Providence Rd	Waxhaw Elementary School Drive							Black	1			Retrofit
21B	4-01	6	Old Providence Rd	Waxhaw Elementary School Drive							Black	1			Retrofit
21C	4-01	6	Old Providence Rd	Waxhaw Elementary School Drive							Black		1		Type 2B
18A			Old Providence Rd	Essaw Rd							Black	1			Retrofit
18B			Old Providence Rd	Essaw Rd							Black	1			Retrofit
18	4-01	7	Old Providence Rd	Waxhaw Elementary School Drive							Black		1		Type 1 Modified
19	4-01	7	Old Providence Rd	Waxhaw Elementary School Drive							Black	1			Retrofit
34	4-01	8	N Broome St (NC 16)	Blythe Mill Rd							Black		1		Type 2B
35	4-01	8	N Broome St (NC 16)	Blythe Mill Rd							Black		1		Type 2B
36	4-02	9	N Broome St (NC 16)	Post Office Driveway							Black		1		Type 2
37	4-02	9	N Broome St (NC 16)	Post Office Driveway							Black		1		Type 2B
2264	4-02	9	N Broome St (NC 16)	Post Office Driveway							Black		1		Standard 848.06
39	4-02	10	N Broome St (NC 16)	Waxhaw Pkwy							Black	1			Retrofit
40	4-02	10	N Broome St (NC 16)	Waxhaw Pkwy							Black		1		Type 2B
2266	4-02	10	N Broome St (NC 16)	Waxhaw Pkwy							Black	1			Retrofit
2267	4-02	10	N Broome St (NC 16)	Waxhaw Pkwy							Black	1			Retrofit
41	4-02	11	Providence Rd (NC 16)	Waxhaw Town Hall Driveway							Brick	1			Retrofit
42	4-02	11	Providence Rd (NC 16)	Old Hickory Shopping Center Driveway							Black		1		Type 2B
2268	4-02	11	Providence Rd (NC 16)	Waxhaw Town Hall Driveway							Brick		1		Type 1 Modified
2270	4-02	11	Providence Rd (NC 16)	Old Hickory Shopping Center Driveway							Black		1		Type 2B
43	4-02	12	Providence Rd (NC 16)	Alma Blvd							Black		1		Standard 848.06
44	4-02	12	Providence Rd (NC 16)	Alma Blvd							Black		1		Standard 848.06
45	4-02	12	Providence Rd (NC 16)	Strip Mall Driveway							Black		1		Type 1 Modified
46	4-02	12	Providence Rd (NC 16)	Strip Mall Driveway							Black	1			Retrofit
47	4-02	13	Providence Rd (NC 16)	Waxhaw Police Dept. Driveway							Black	1			Retrofit
2451	4-02	13	Providence Rd (NC 16)	Waxhaw Police Dept. Driveway							Black		1		Standard 848.06
50	4-02	15	Waxhaw Marvin Rd	Exbury Gardens Dr							Black		1		Type 1 Modified
48	4-02	16	Waxhaw Marvin Rd	Prescott Glen Pkwy							Black		1		Type 3 Modified
49	4-02	16	Waxhaw Marvin Rd	Prescott Glen Pkwy							Black		1		Type 3 Modified
56	4-03	17	Providence Rd (NC 16)	Coltsgate Rd							Black		1		Type 3 Modified
57	4-03	17	Providence Rd (NC 16)	Coltsgate Rd							Black		1		Type 3 Modified
58	4-03	17	Providence Rd (NC 16)	Calistoga Ln			1				Black		1		Type 3 Modified
59	4-03	17	Providence Rd (NC 16)	Calistoga Ln							Black		1		Type 3 Modified
60	4-03	18	Providence Rd (NC 16)	Cutters Spring Dr							Black		1		Standard 848.06
61	4-03	18	Providence Rd (NC 16)	Cutters Spring Dr							Black		1		Standard 848.06
62	4-03	18	Providence Rd (NC 16)	Brisbin Dr							Black	1			Retrofit
63	4-03	18	Providence Rd (NC 16)	Brisbin Dr							Black		1		Type 2A Modified
52	4-03	20	Gray Byrum Rd	Arsdale Rd					1		Black			1	Type 2A Modified
53	4-03	20	Gray Byrum Rd	Arsdale Rd					1		Black			1	Type 2A Modified
107	5-01	1	Tom Short Rd	Carisbrooke Dr							Black	1			Retrofit
108	5-01	1	Tom Short Rd	Carisbrooke Dr							Black		1		Standard 848.06
2446	5-01	1	Tom Short Rd	Carisbrooke Dr							Black		1		Type 3
2447	5-01	1	Tom Short Rd	Carisbrooke Dr							Black	1			Retrofit
2448	5-01	1	Tom Short Rd	Carisbrooke Dr							Black		1		Type 2B
2449	5-01	1	Tom Short Rd	Carisbrooke Dr							Black		1		Type 2B
2604	5-01	1	Tom Short Rd	Carisbrooke Dr							Black	1			Retrofit
105	5-01	2	Tom Short Rd	Somerset Dr							Black		1		Type 3 Modified
106	5-01	2	Tom Short Rd	Somerset Dr							Black		1		Type 3 Modified
100	5-01	4	Tom Short Rd	Longview Club Dr			1				Black		1		Type 2B
101	5-01	4	Tom Short Rd	Longview Club Dr							Black		1		Type 2B
102	5-01	4	Tom Short Rd	Longview Club Dr							Black		1		Type 2B
103	5-01	4	Tom Short Rd	Longview Club Dr							Black		1		Type 2B
97	5-02	5	Providence Rd (NC 16)	Shell Gas Station Driveway							Black		1		Type 1
98	5-02	5	Providence Rd (NC 16)	Shell Gas Station Driveway							Black		1		Type 1
TOTALS:					0	17	5	2	2	1	-	31	129	2	
					2549000000-E	2591000000-E	2845000000-N	2830000000-N	7648000000-N	5888000000-E		2600000000-N	2613000000-N	2605000000-N	
					2'-6" Concrete Curb & Gutter LF	4" Concrete Sidewalk SY	Adjust Valve / Meter EA	Adjust Manhole EA	Relocate Sign EA	Adjust Utility Box EA		Retrofit Existing Curb Ramps EA	Remove & Replace Curb Ramps EA	Concrete Curb Ramps EA	

Incidental Quantities	
2549000000-E	1220000000-E
2'-6" Concrete Curb & Gutter LF	Incidental Stone TON
750	10

NOTES: INCIDENTAL QUANTITIES SHALL BE USED AS DIRECTED BY THE ENGINEER. TOKEN QUANTITIES WILL BE ADDED FOR RESET EXISTING GRANITE CURB AND AGGREGATE BASE COURSE IN CASE GRANITE CURBING IS ENCOUNTERED.



- 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.



PAY LIMITS FOR 1 CURB RAMP

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



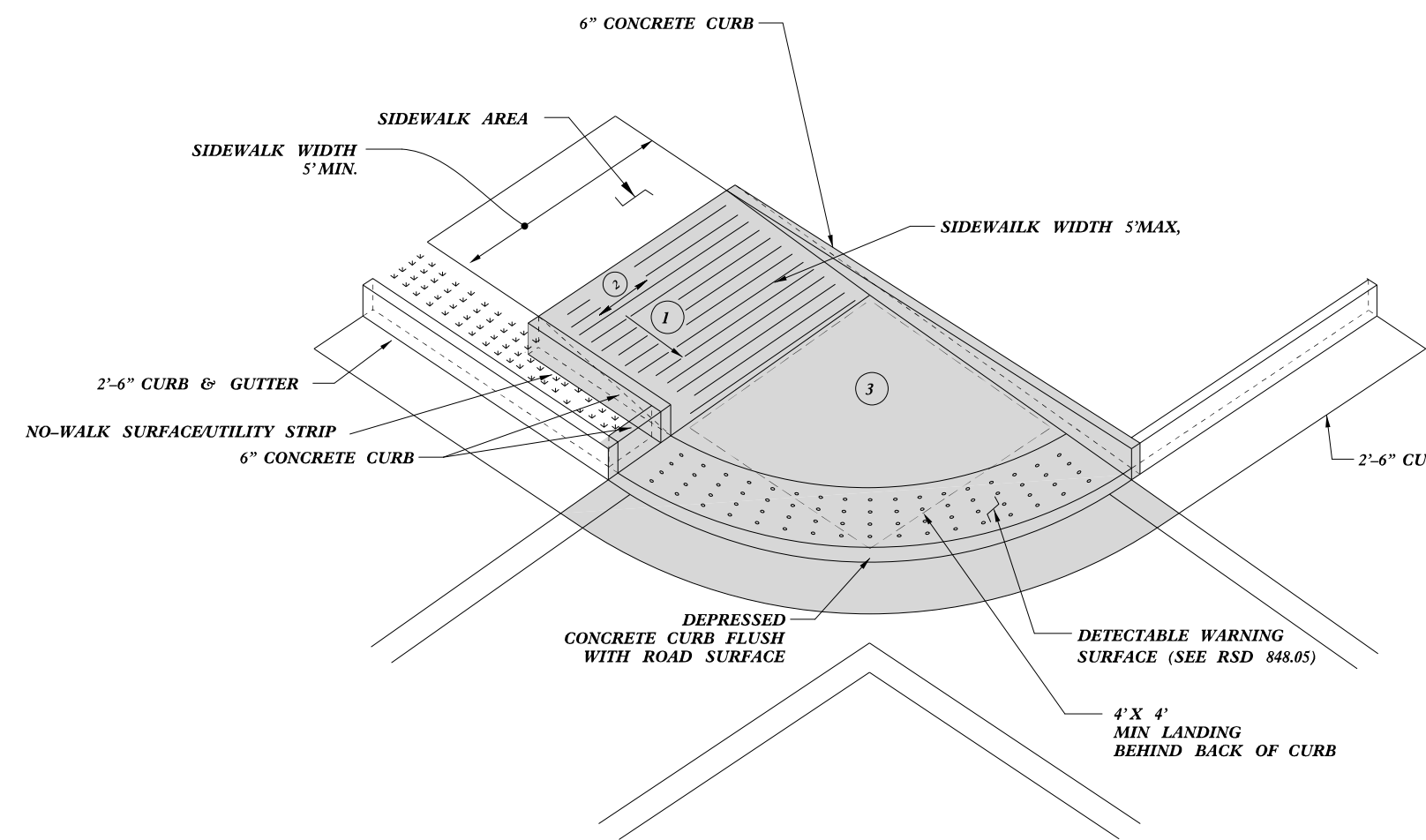
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

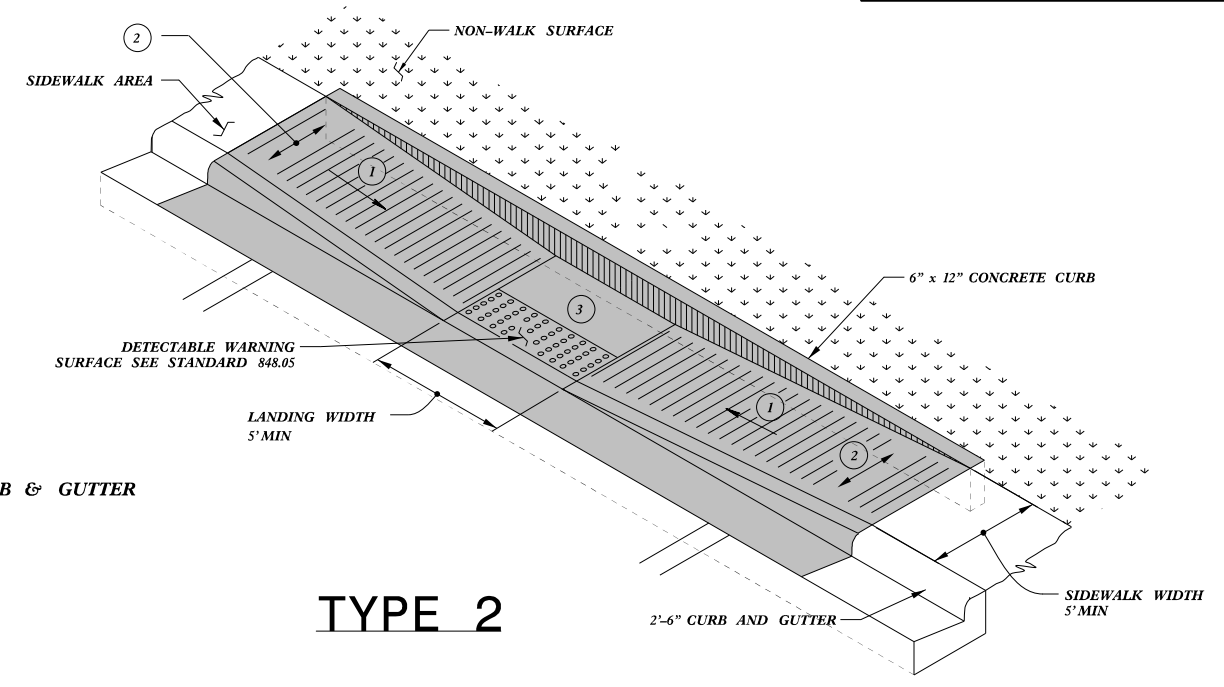
CURB RAMPS
Directional Ramps

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
 MODIFIED BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____
 FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn

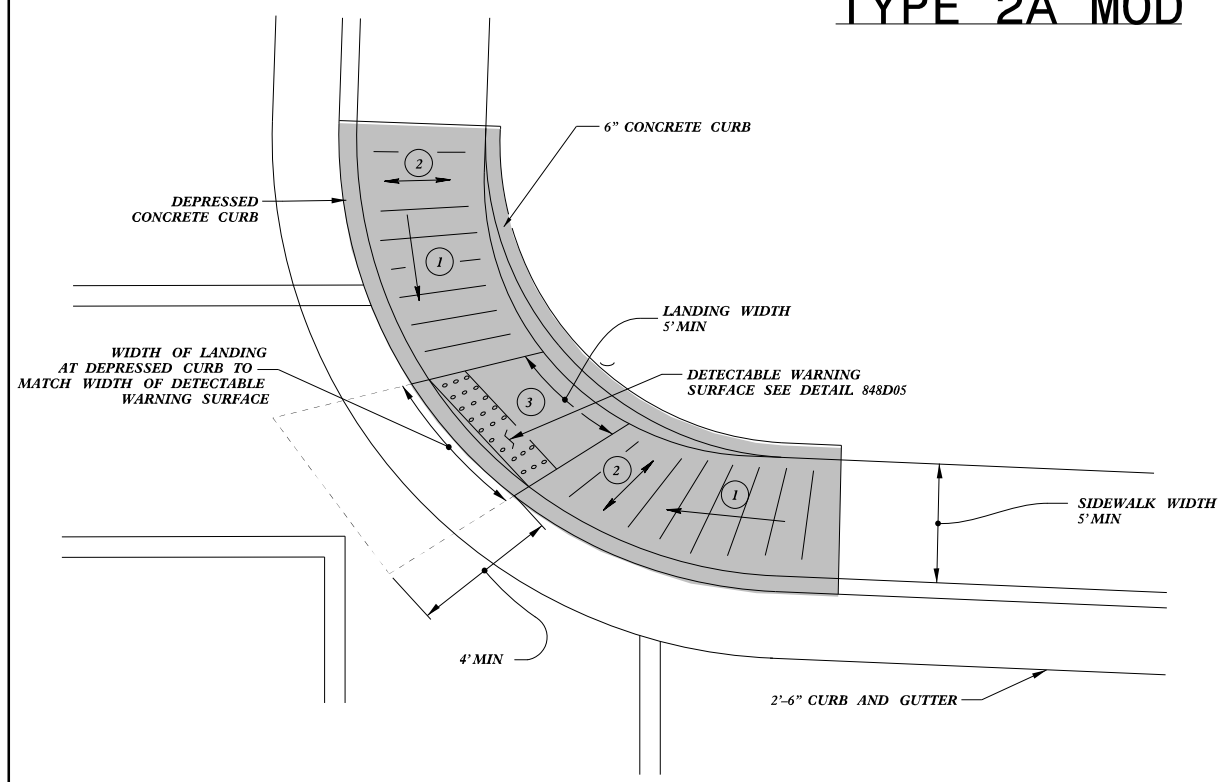
SYSTEMS DESIGN & CONSTRUCTION



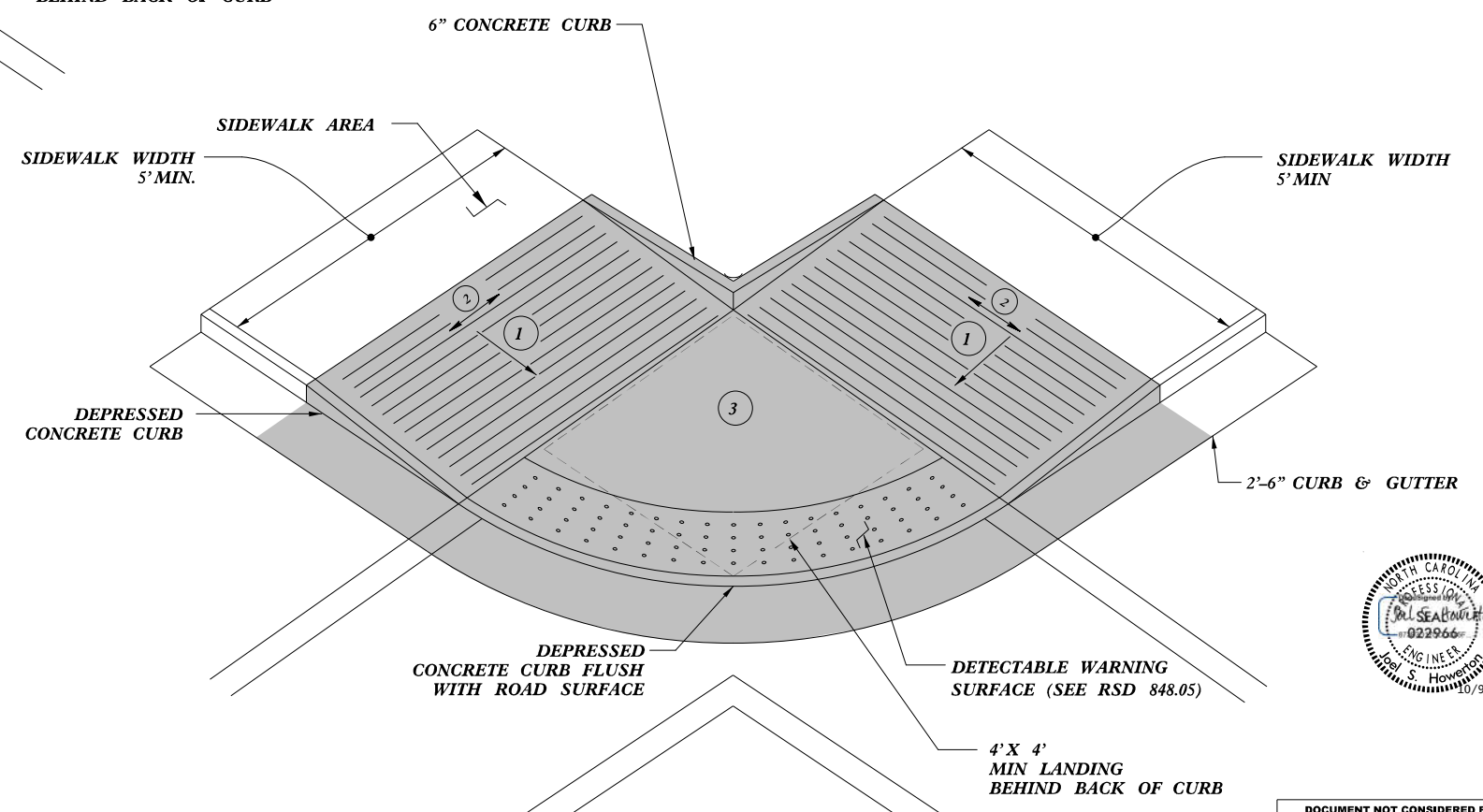
TYPE 2A MOD



TYPE 2



TYPE 2B



TYPE 2A

- 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.

PAY LIMITS FOR 1 CURB RAMP

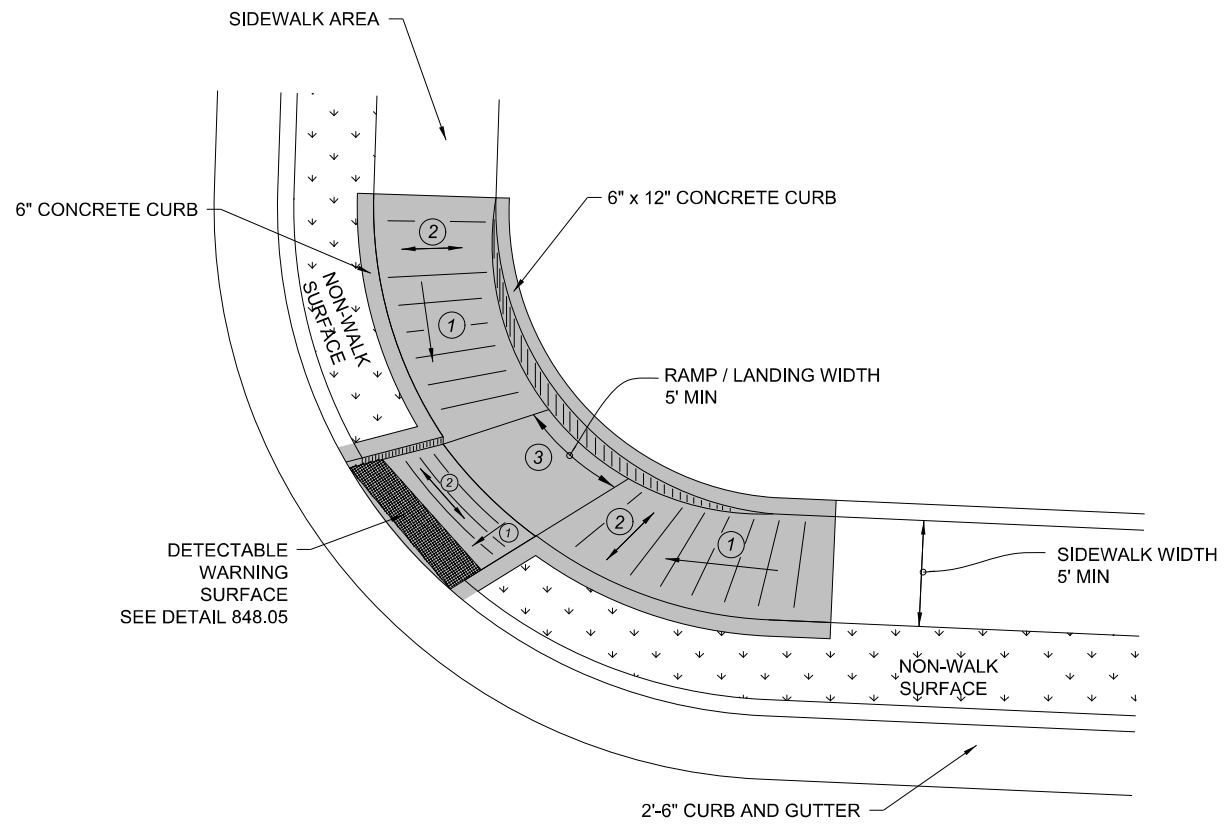


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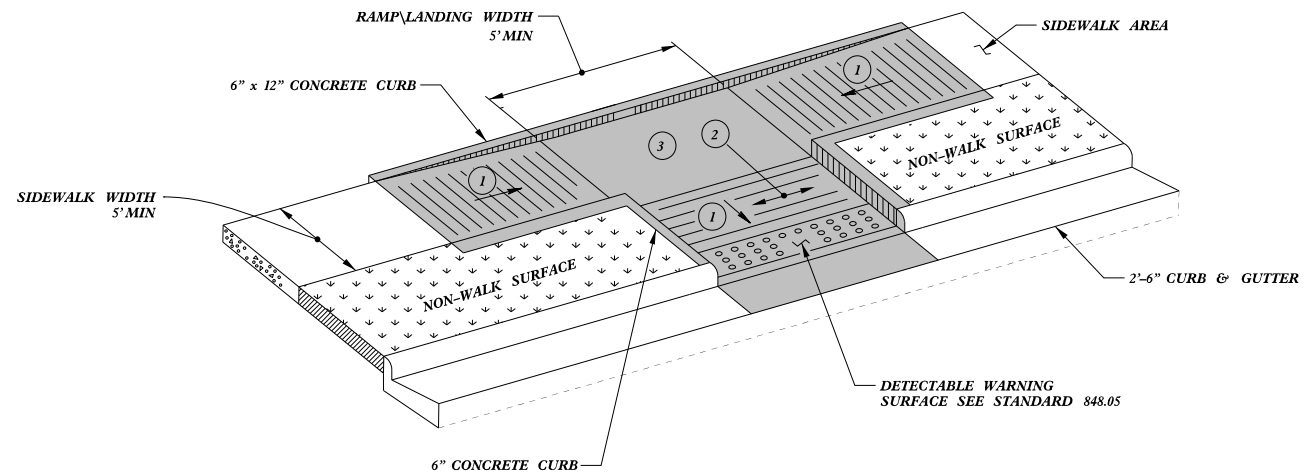
CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn	

5/14/99 SYSTEMS ENGINEERING

PAY LIMITS FOR 1 CURB RAMP



**TYPE 3 MODIFIED
INSTALLATION IN A RADIUS**



TYPE 3

- 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.



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT

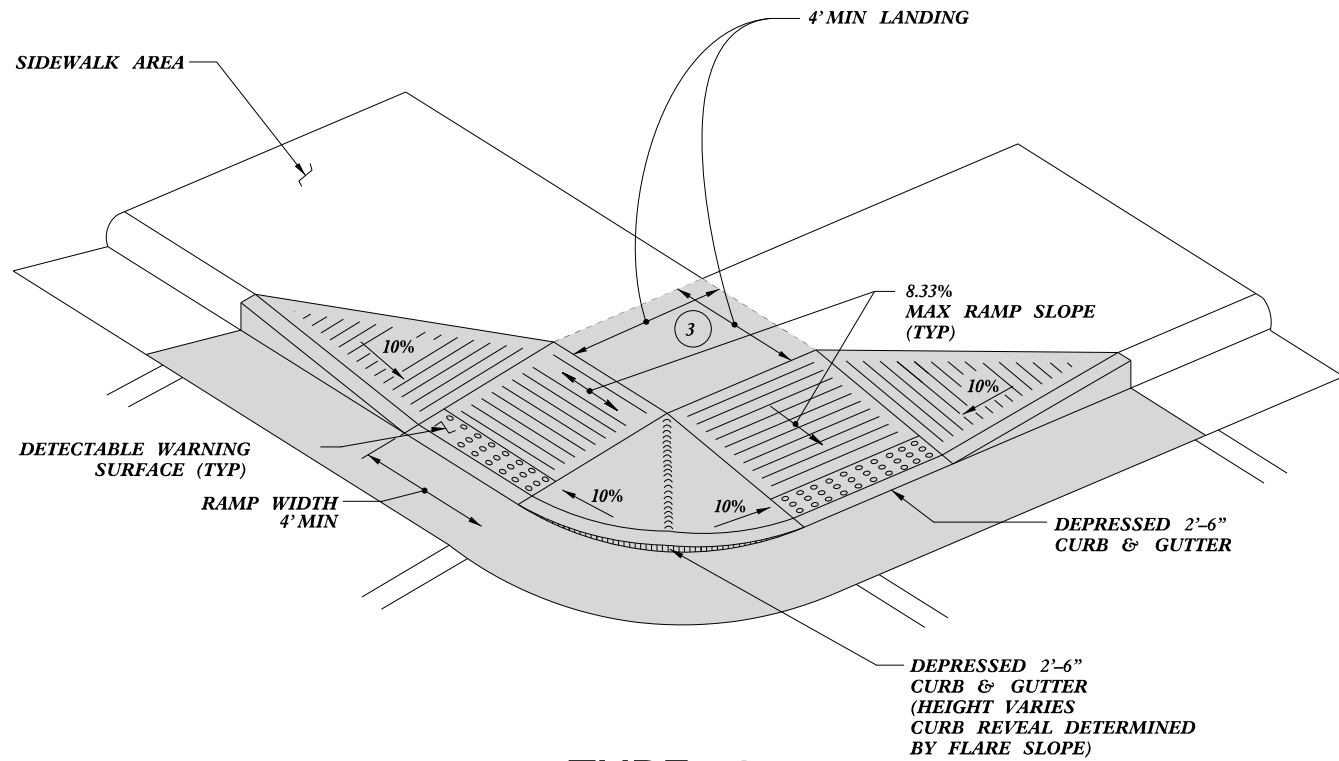
Office 919-707-6950 FAX 919-250-4119

CURB RAMPS

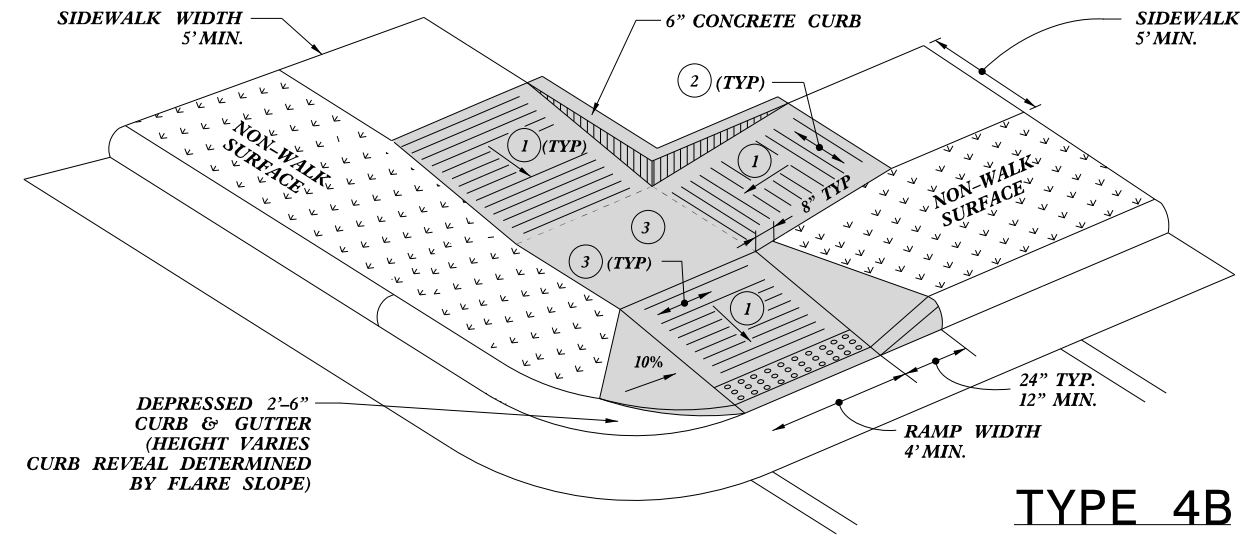
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 CHECKED BY: _____ DATE: _____
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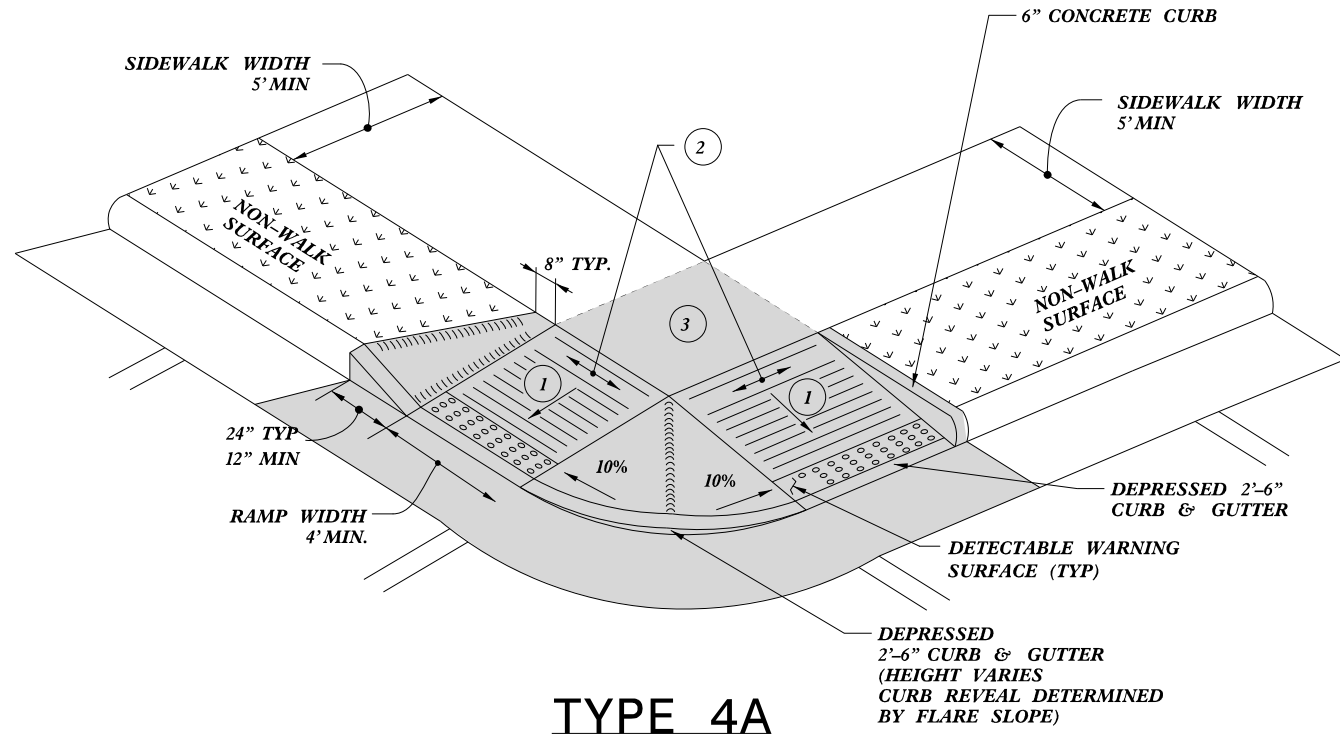
PAY LIMITS FOR 1 OR 2 CURB RAMPS
(CALCULATE BASED ON NUMBER OF SETS
OF TRUNCATED DOMES)



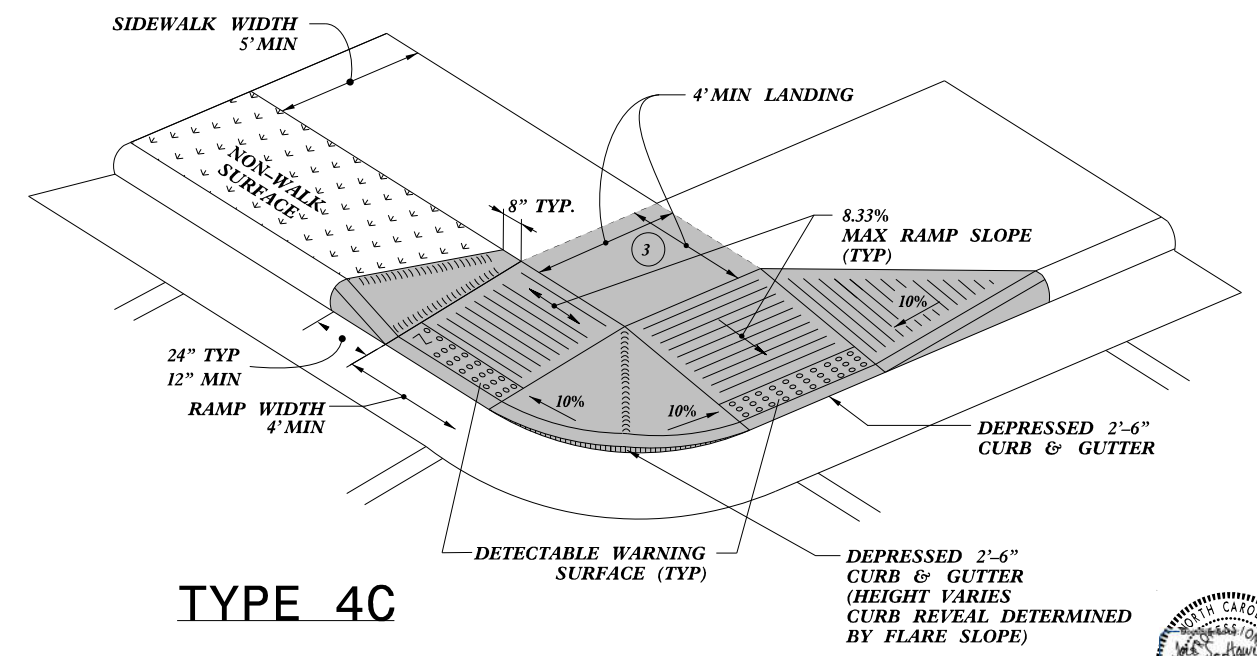
TYPE 4



TYPE 4B



TYPE 4A



TYPE 4C

- 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.



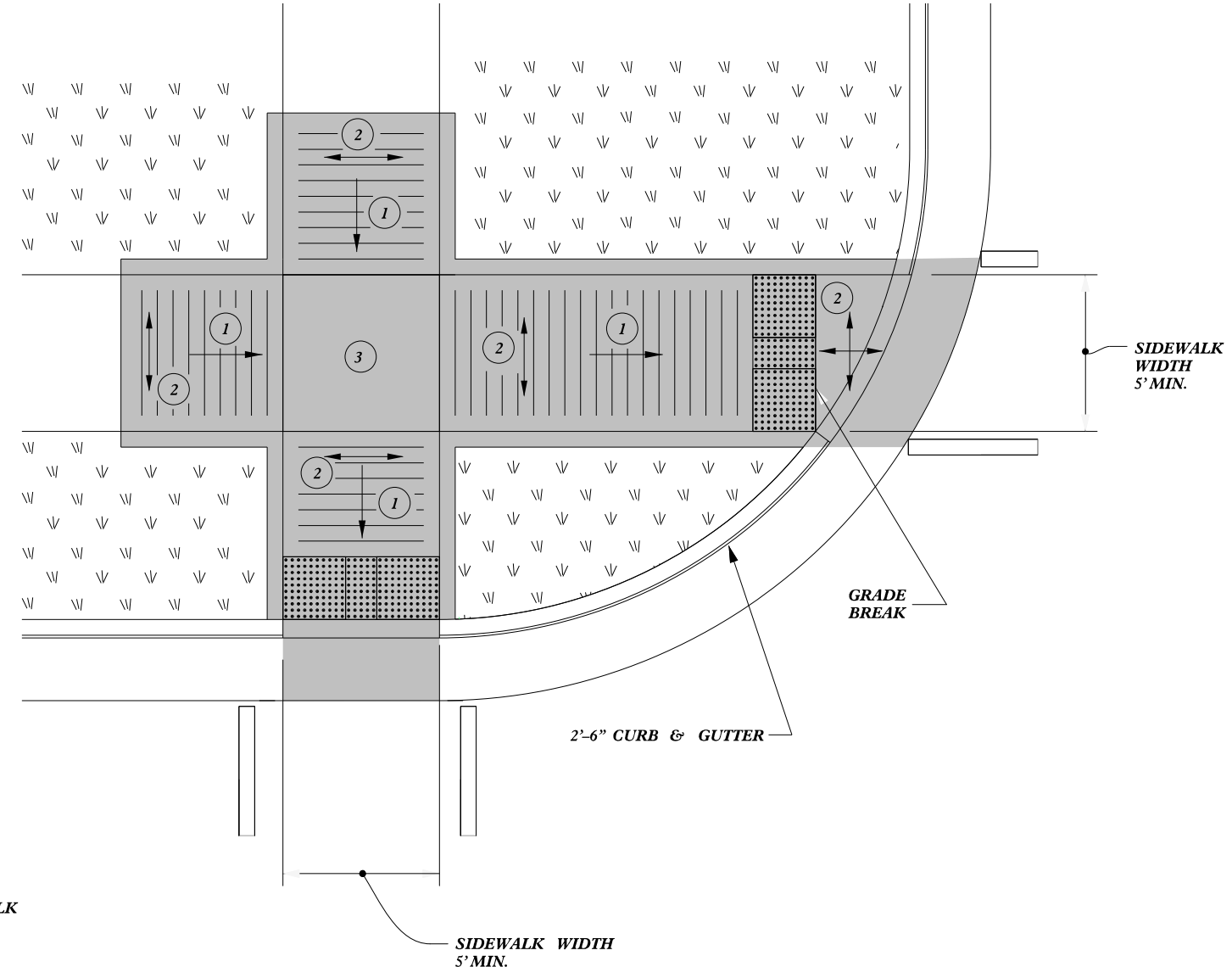
10/9/2019

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn	

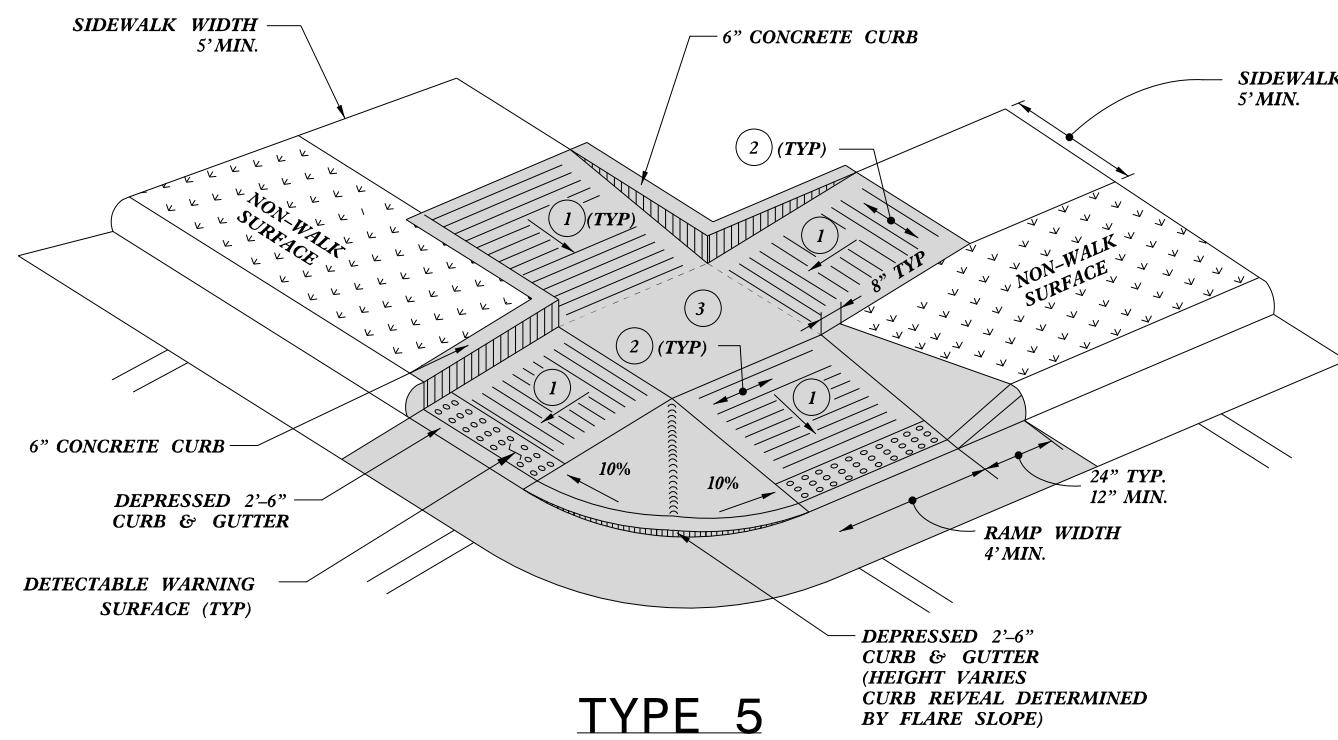
REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

SYSTEM GENERATED FROM THE PROJECT INFORMATION SYSTEM

**PAY LIMITS FOR 1 OR 2 CURB RAMPS
(CALCULATE BASED ON NUMBER OF SETS
OF TRUNCATED DOMES)**



TYPE 5A



TYPE 5

- 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.



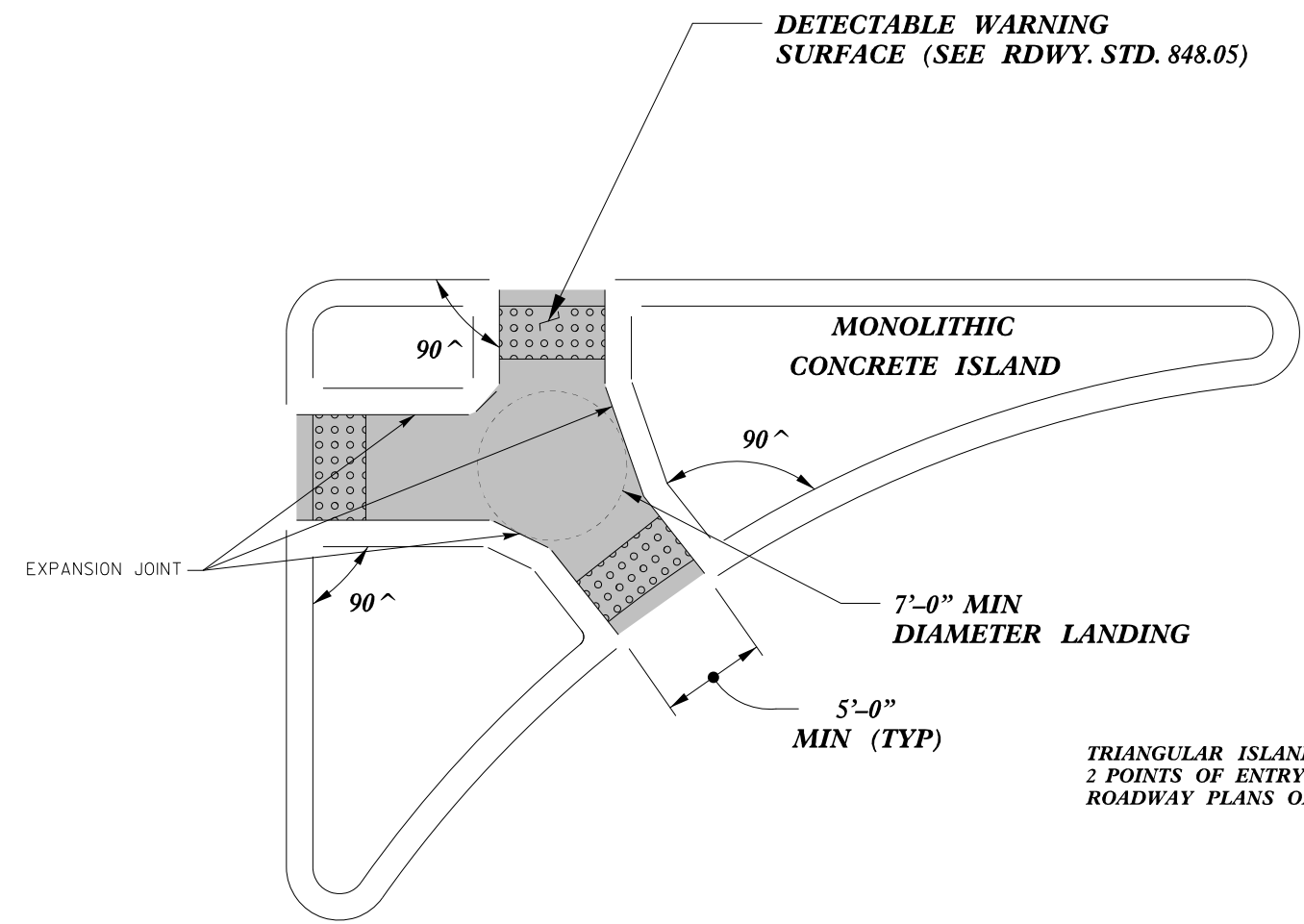
10/9/2019

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn	

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

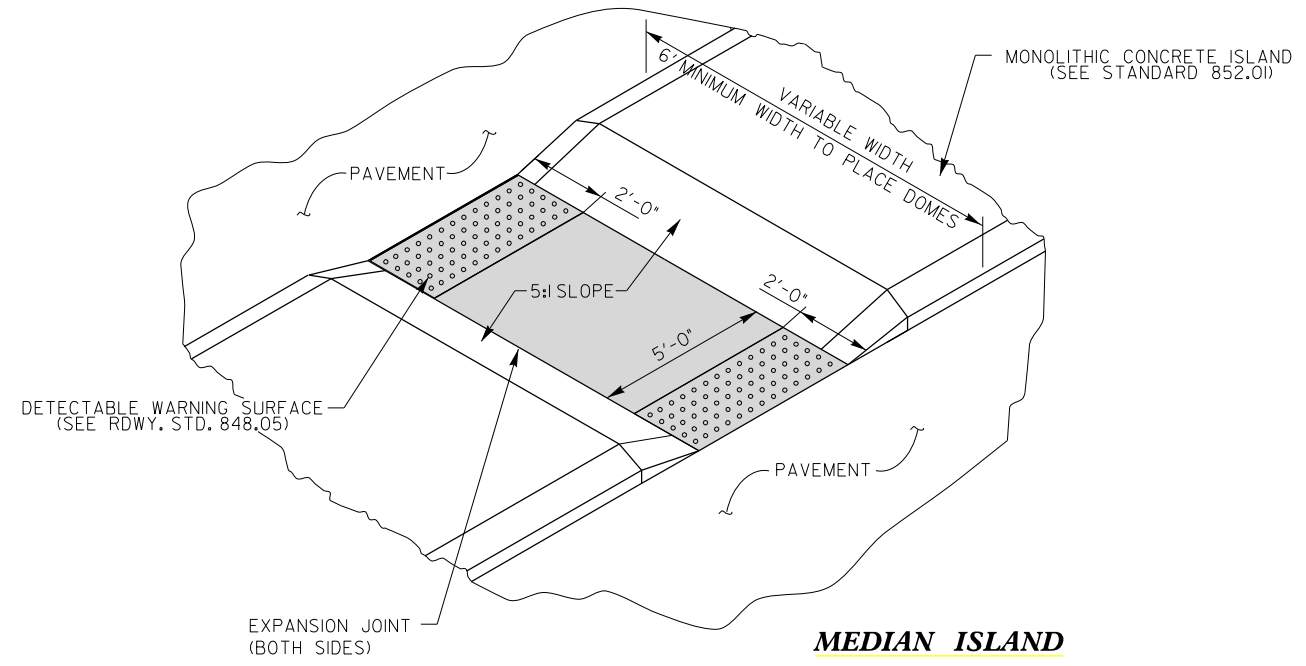
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DO NOT SCALE \$\$\$\$\$\$
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PAY LIMITS FOR 2 OR 3 CURB RAMPS
(CALCULATE BASED ON NUMBER OF
SETS OF TRUNCATED DOMES)

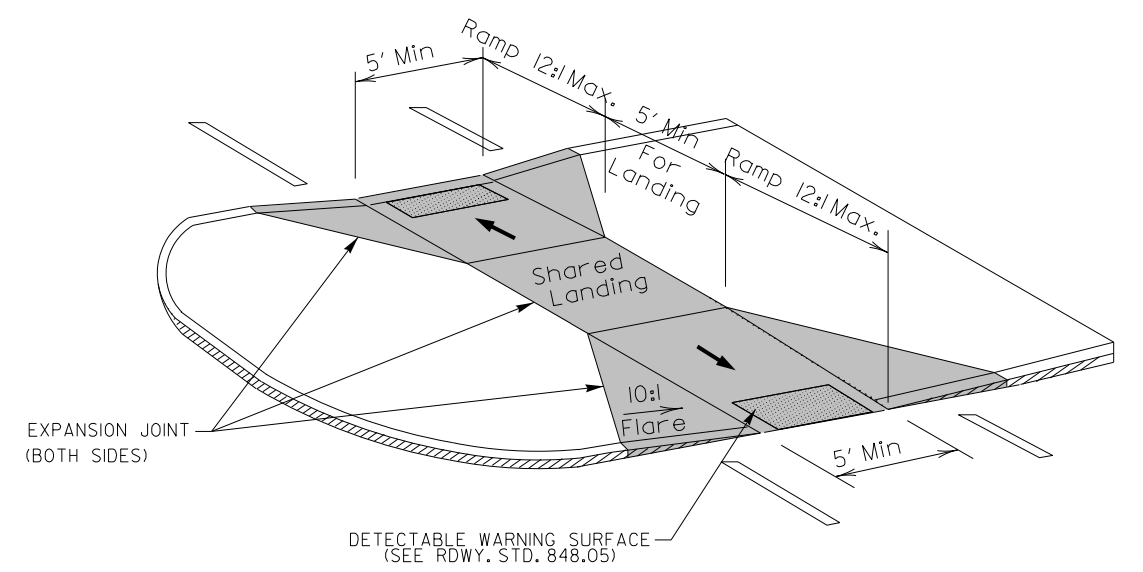


TRIANGULAR ISLANDS MAY BE CONSTRUCTED WITH ONLY
2 POINTS OF ENTRY AND EXIT AS SHOWN IN THE
ROADWAY PLANS OR AS DIRECTED BY THE ENGINEER.

**TRIANGULAR ISLAND
WITH CUT THROUGH
TYPE 6**



**MEDIAN ISLAND
WITH CUT THROUGH
TYPE 7**



**MEDIAN ISLAND
CURB RAMPS
TYPE 8**

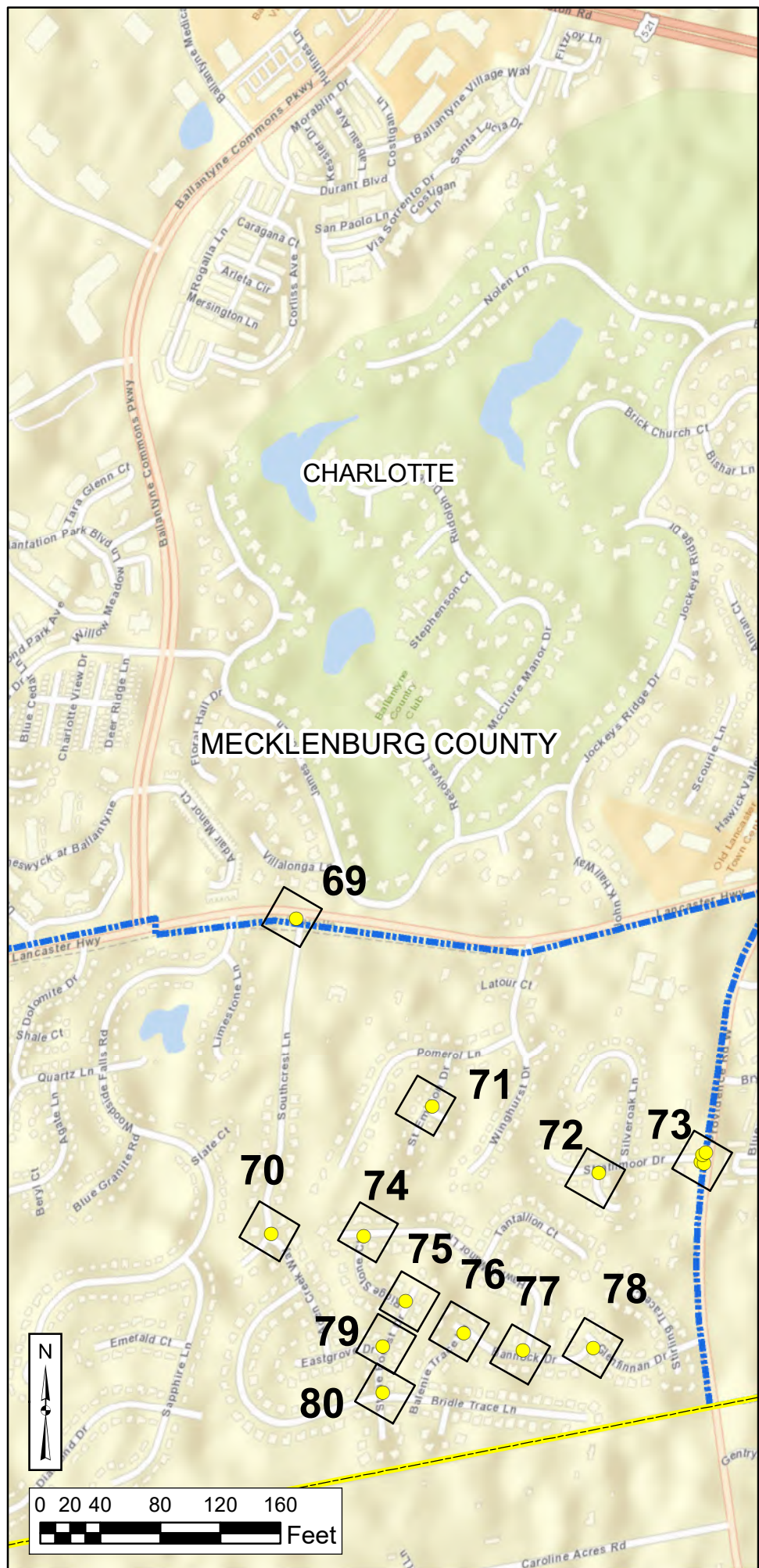
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Median or Turn Lane Islands	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: stds/2012CurbRamp/CurbRampDetails.dgn	



10/9/2019

5/14/99
SYSTEMS ENGINEERING
DESIGN
DRAWING
NO. 022966
DATE: 10/9/2019



LEGEND

- MISSING
- NOT COMPLIANT
- MUNICIPAL BOUNDARY
- NCHPO HISTORIC PROPERTY OR DISTRICT

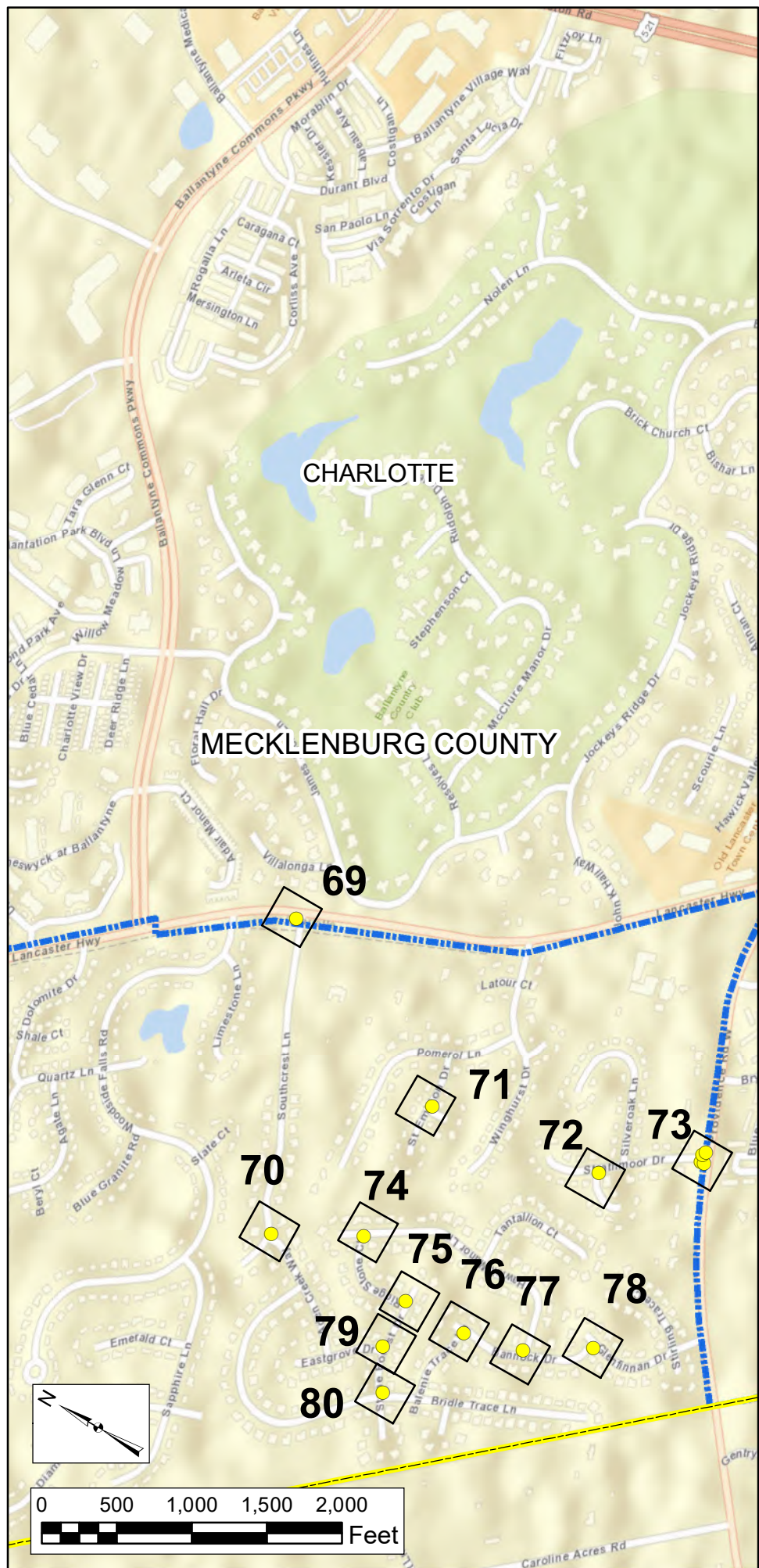
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

RAMEY KEMP & ASSOCIATES, INC

DIVISION 10 INTERSECTION ADA IMPROVEMENTS
CABARRUS, MECKLENBURG, AND UNION COUNTIES
STIP PROJECT R-5790JG
GROUP A

MAP 1-13




LEGEND

ADA RAMP IMPROVEMENT LOCATION

- MISSING
- NOT COMPLIANT
- MUNICIPAL BOUNDARY
- NCHPO HISTORIC PROPERTY OR DISTRICT

0 50 100 150 Ft

N

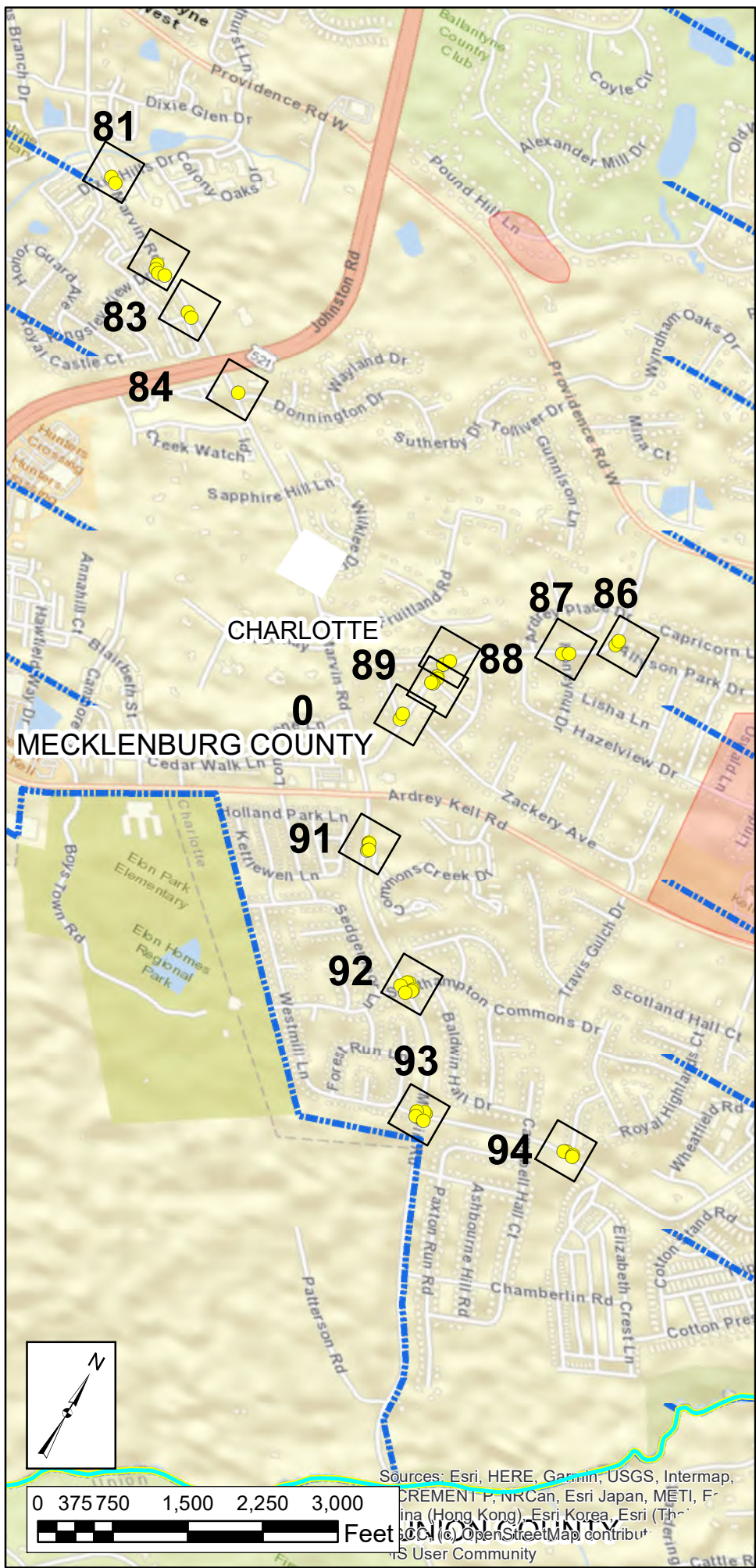
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

RAMEY KEMP & ASSOCIATES, INC

DIVISION 10 INTERSECTION
ADA IMPROVEMENTS
CABARRUS, MECKLENBURG, AND UNION
COUNTIES
STIP PROJECT R-5790JG
GROUP A

MAP 1-14



LEGEND

ADA RAMP IMPROVEMENT LOCATION

- MISSING (Red dot)
- NOT COMPLIANT (Yellow dot)

MUNICIPAL BOUNDARY (Blue dashed line)

NCHPO HISTORIC PROPERTY OR DISTRICT (Pink shaded area)

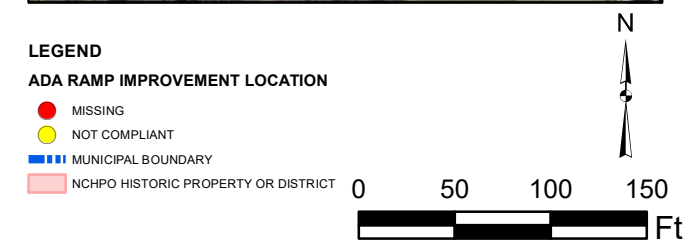
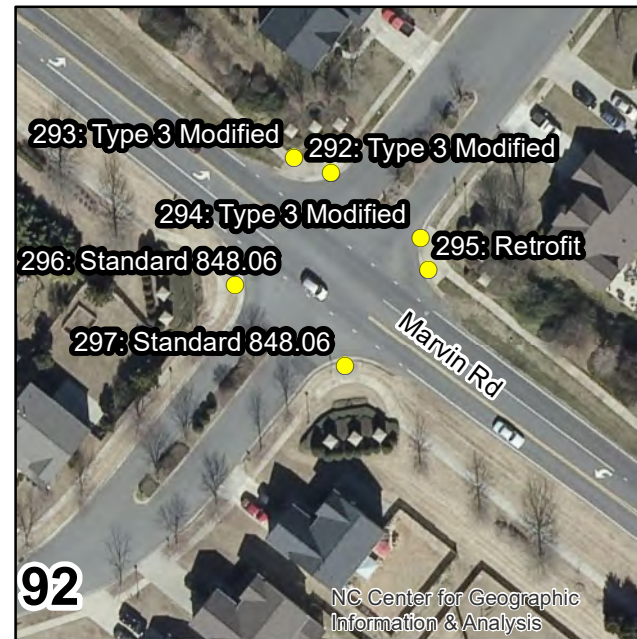
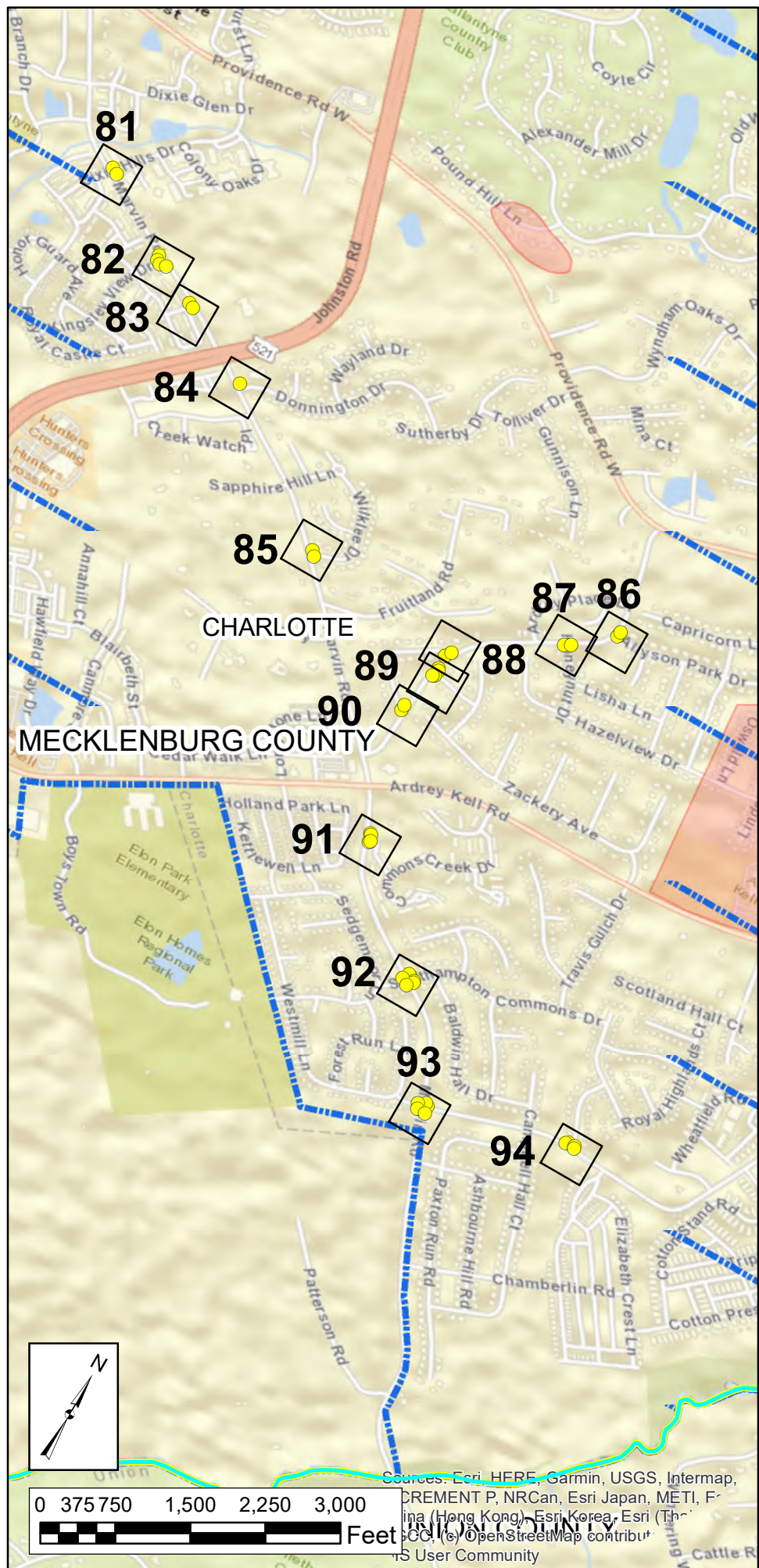
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

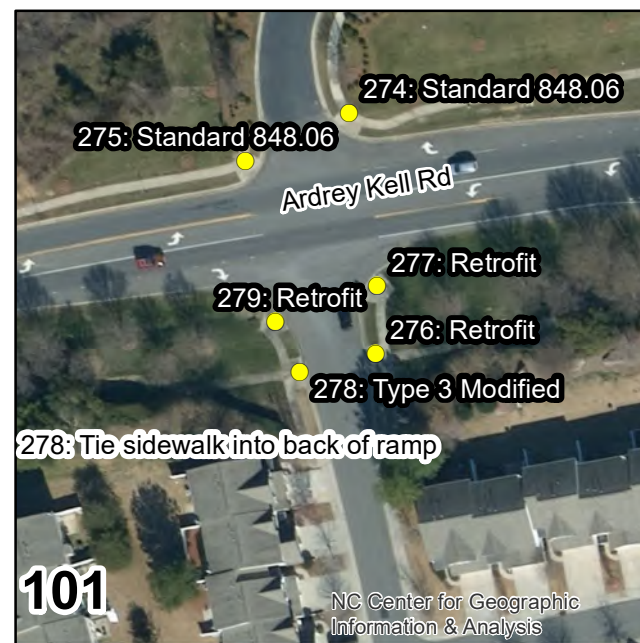
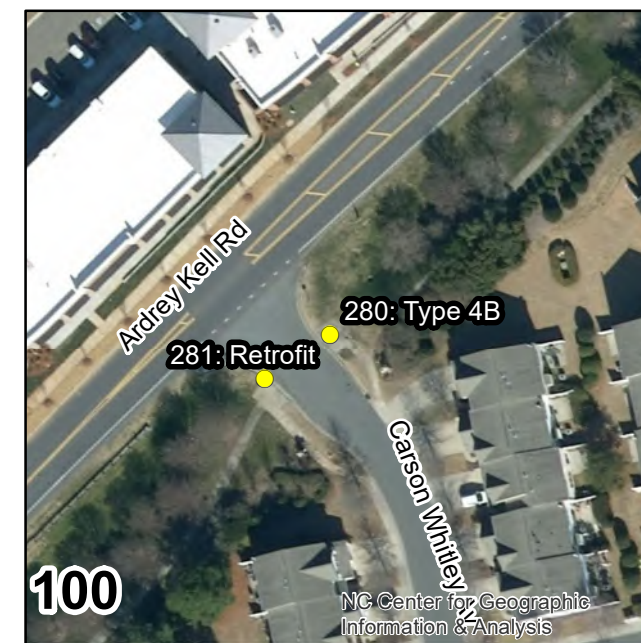
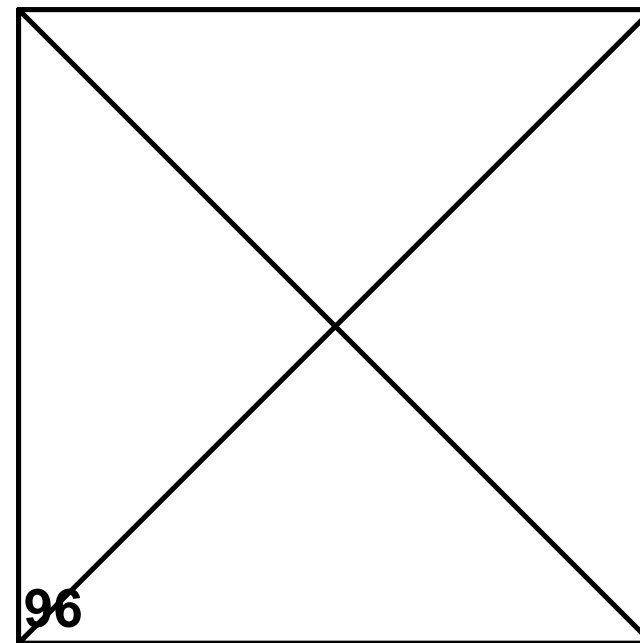
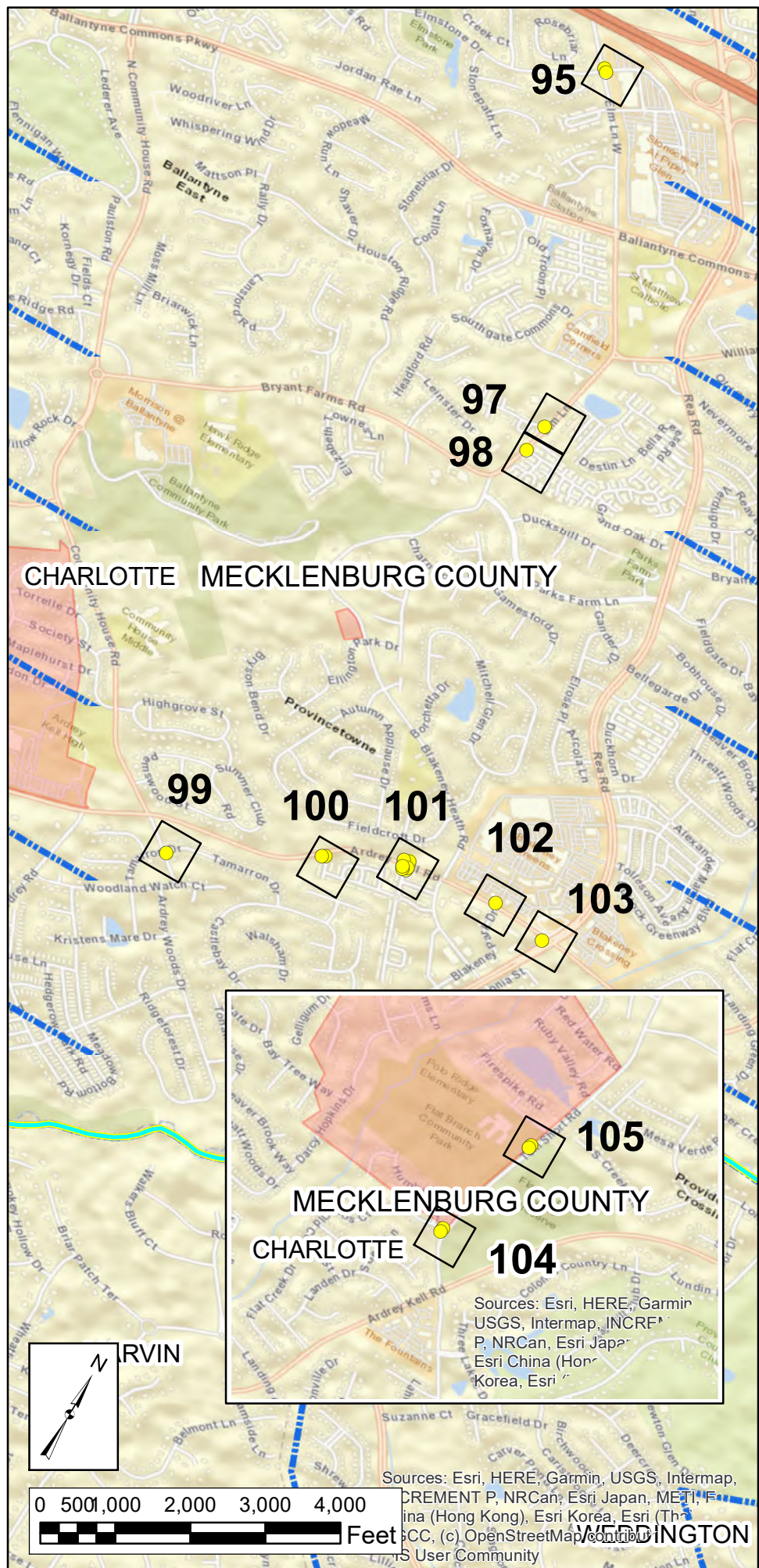
RAMEY KEMP & ASSOCIATES, INC

DIVISION 10 INTERSECTION ADA IMPROVEMENTS
CABARRUS, MECKLENBURG, AND UNION COUNTIES
STIP PROJECT R-5790JG
GROUP A

MAP 1-15



 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RAMEY KEMP & ASSOCIATES, INC
 DIVISION 10 INTERSECTION
 ADA IMPROVEMENTS
 CABARRUS, MECKLENBURG, AND UNION
 COUNTIES
 STIP PROJECT R-5790JG
 GROUP A
 MAP 1-16



LEGEND

ADA RAMP IMPROVEMENT LOCATION

- MISSING
- NOT COMPLIANT
- MUNICIPAL BOUNDARY
- NCHPO HISTORIC PROPERTY OR DISTRICT

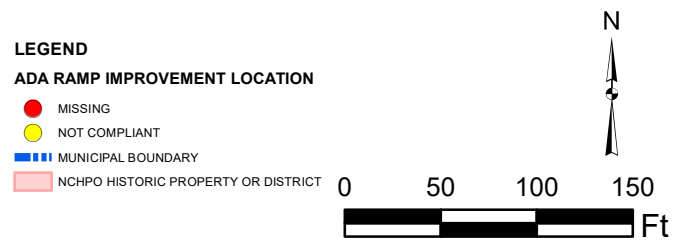
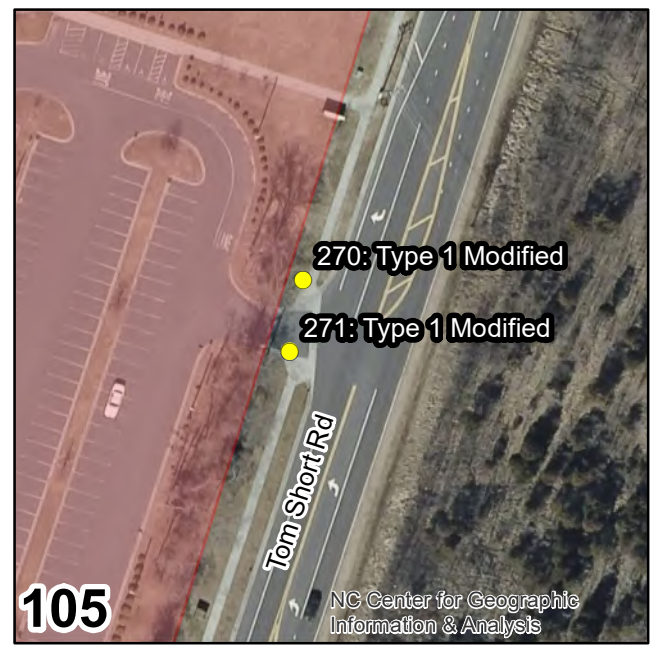
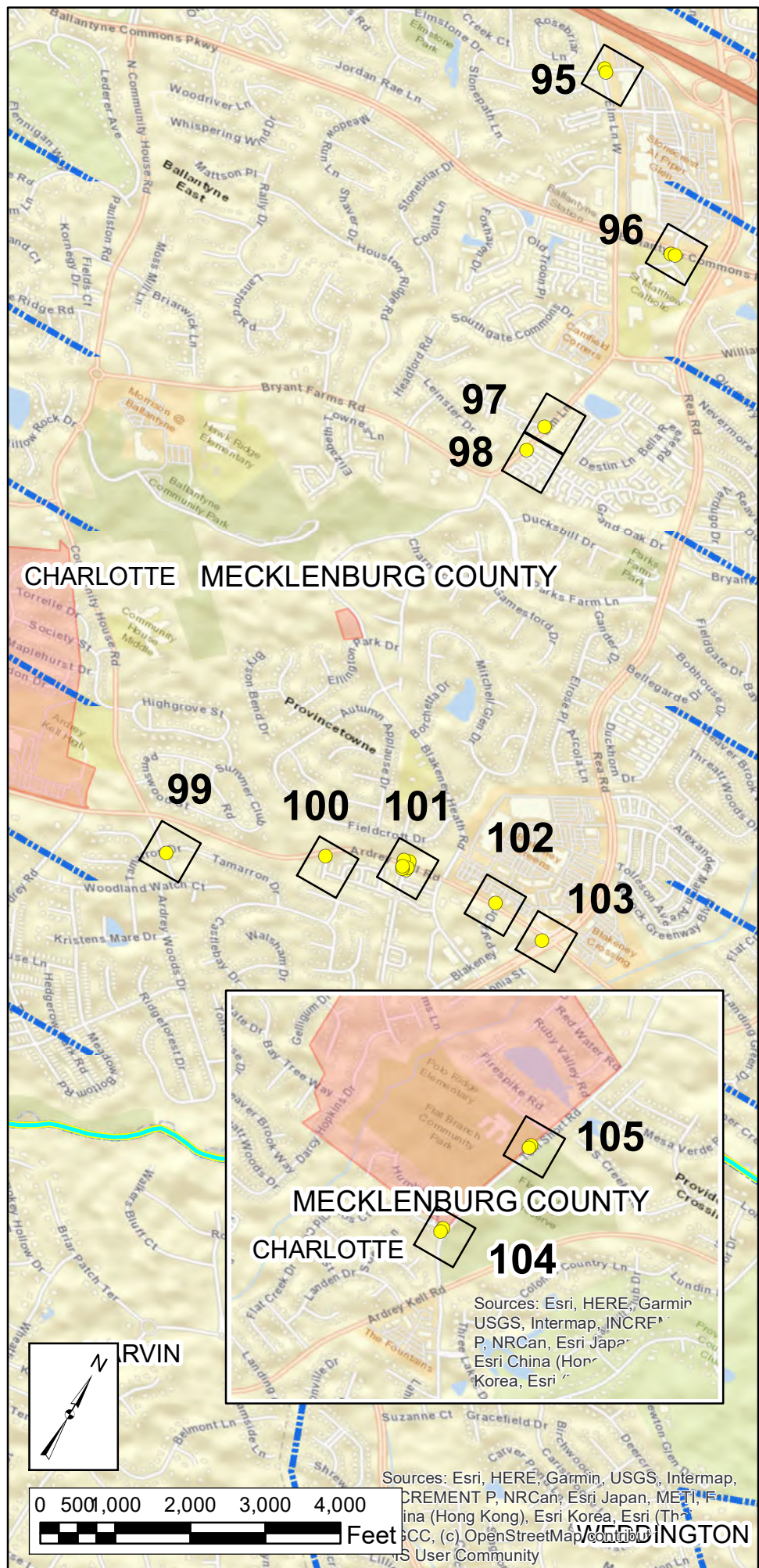
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DIVISION OF HIGHWAYS

RAMEY KEMP & ASSOCIATES, INC

DIVISION 10 INTERSECTION ADA IMPROVEMENTS
CABARRUS, MECKLENBURG, AND UNION COUNTIES
STIP PROJECT R-5790JG
GROUP A

MAP 1-17



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS

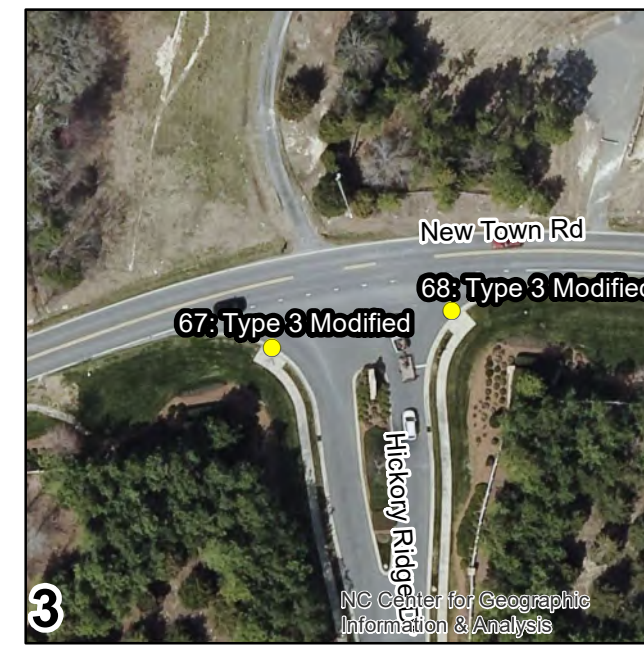
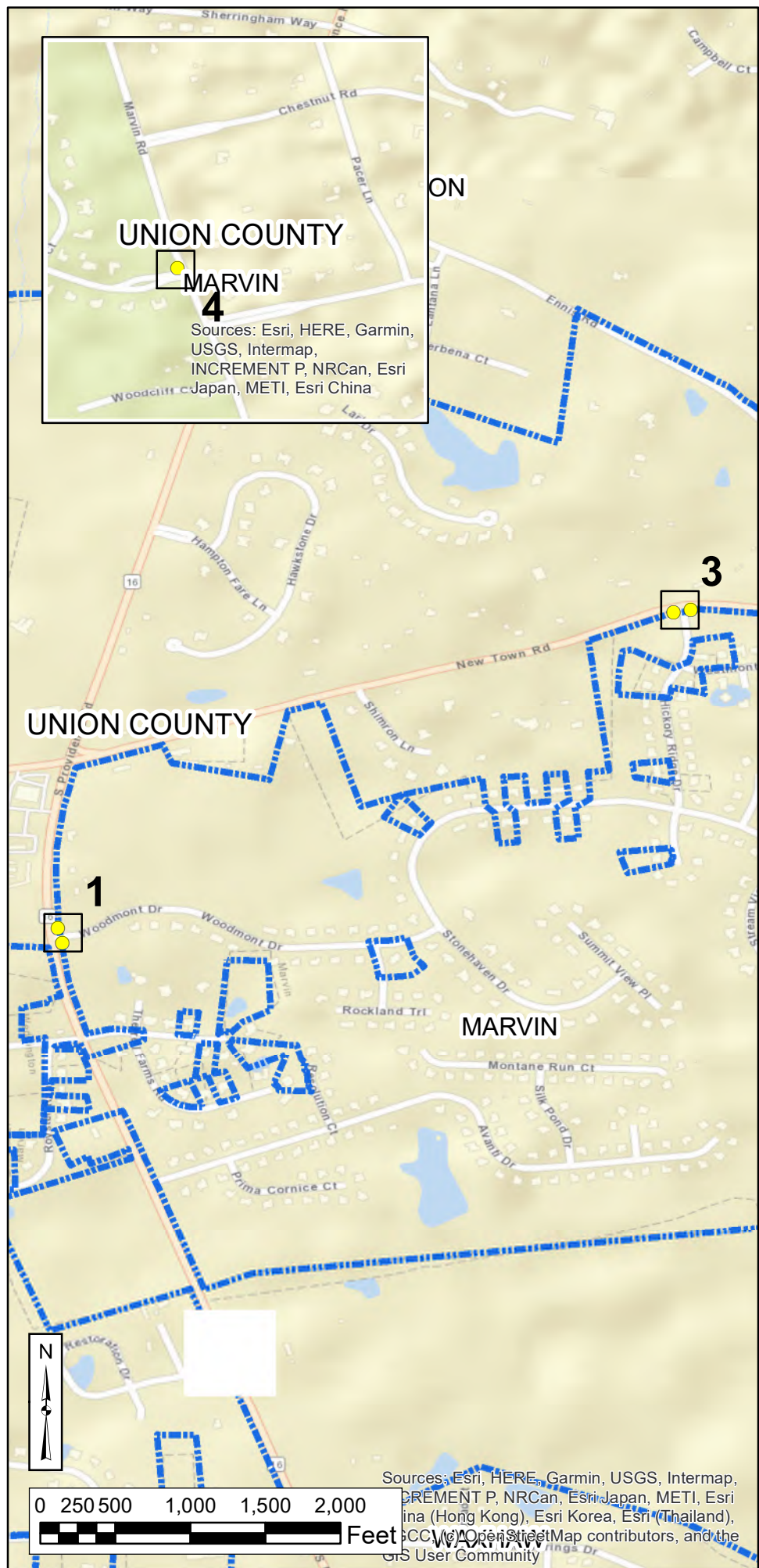
RAMEY KEMP & ASSOCIATES, INC

DIVISION 10 INTERSECTION ADA IMPROVEMENTS

CABARRUS, MECKLENBURG, AND UNION COUNTIES

STIP PROJECT R-5790JG GROUP A

MAP 1-18



LEGEND

ADA RAMP IMPROVEMENT LOCATION

- MISSING
- NOT COMPLIANT
- MUNICIPAL BOUNDARY
- NCHPO HISTORIC PROPERTY OR DISTRICT

0 50 100 150
Ft

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

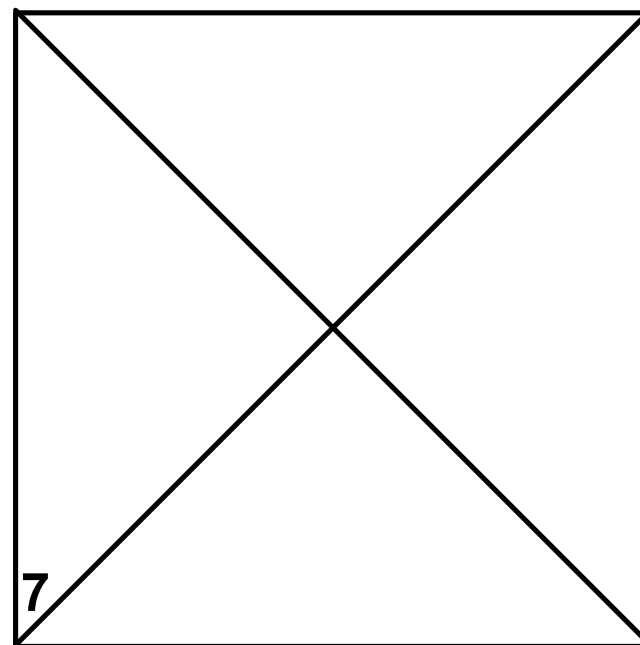
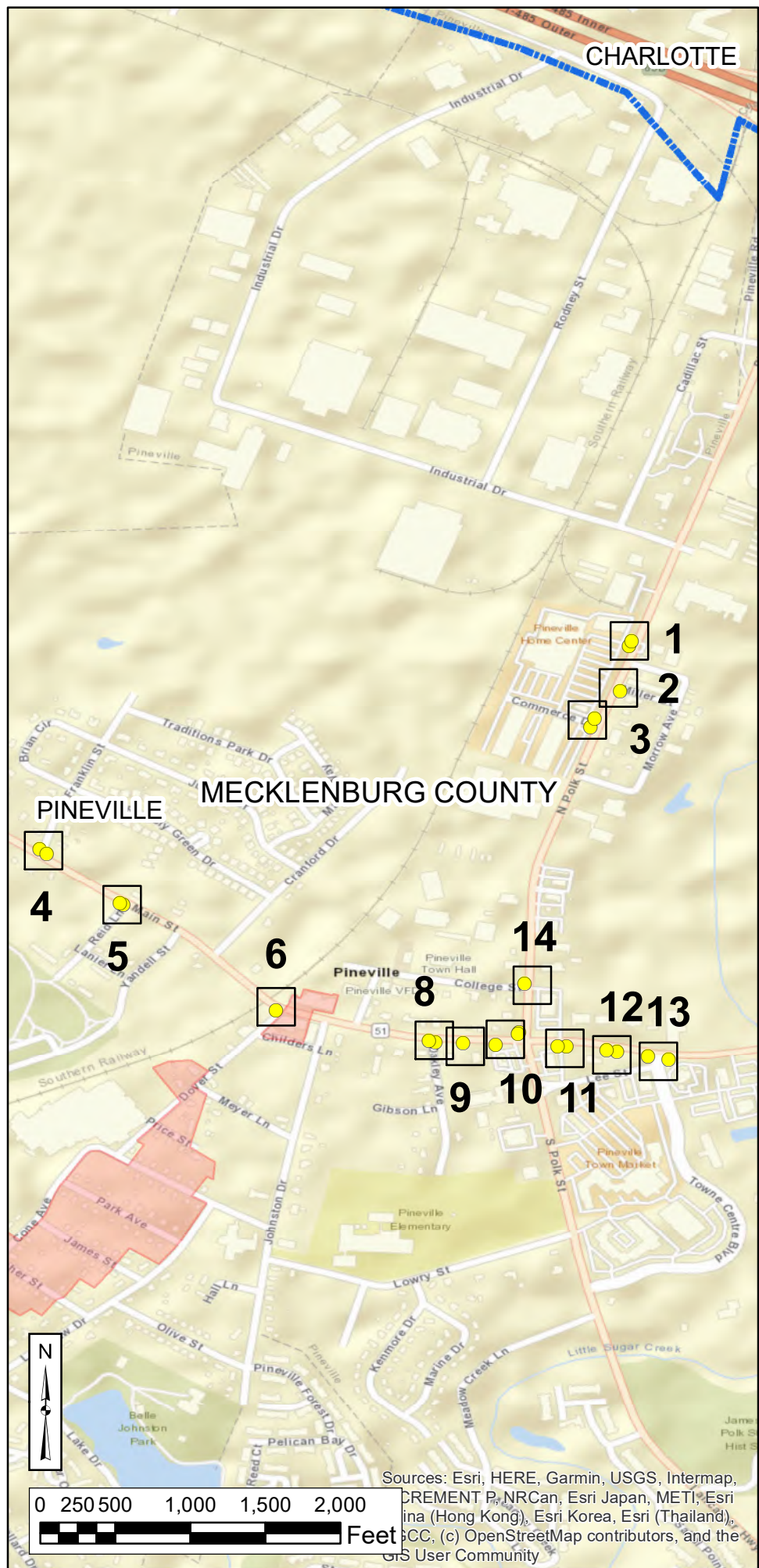
RAMEY KEMP & ASSOCIATES, INC

DIVISION 10 INTERSECTION ADA IMPROVEMENTS

CABARRUS, MECKLENBURG, AND UNION COUNTIES

STIP PROJECT R-5790JG GROUP A

MAP 2-1



LEGEND

ADA RAMP IMPROVEMENT LOCATION

- MISSING (Red dot)
- NOT COMPLIANT (Yellow dot)
- MUNICIPAL BOUNDARY (Blue dashed line)
- NCHPO HISTORIC PROPERTY OR DISTRICT (Pink shaded area)

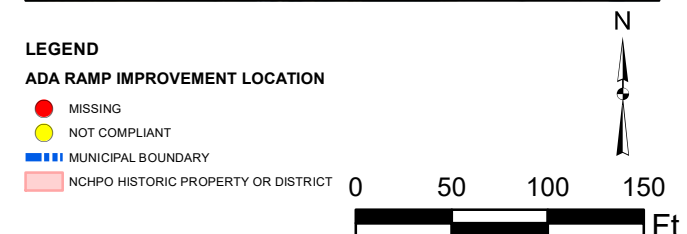
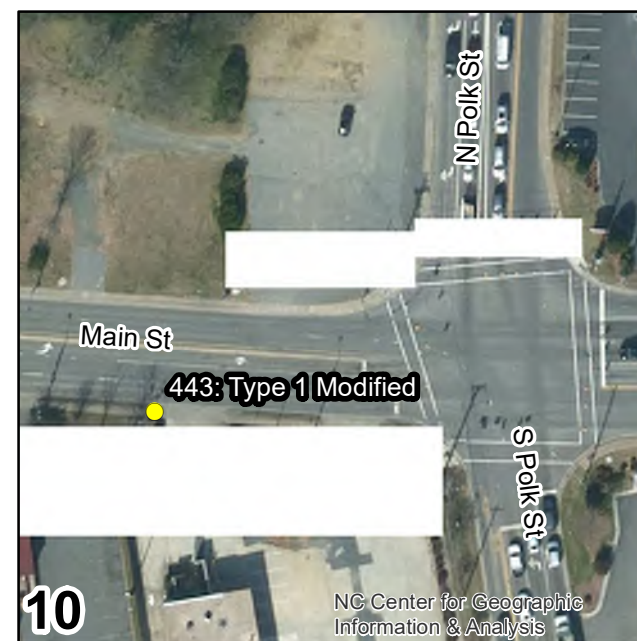
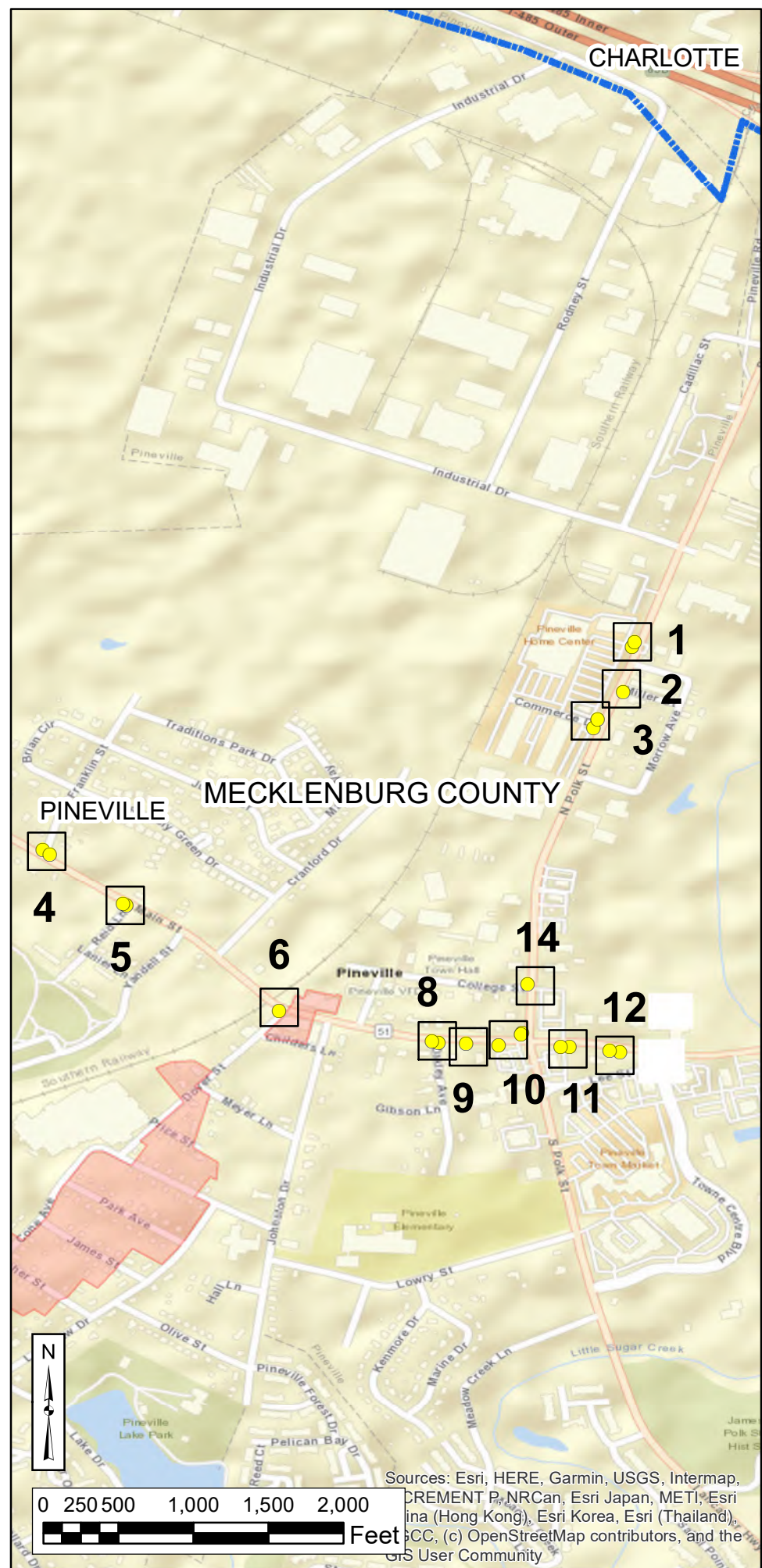
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DIVISION OF HIGHWAYS

RAMEY KEMP & ASSOCIATES, INC

DIVISION 10 INTERSECTION ADA IMPROVEMENTS
CABARRUS, MECKLENBURG, AND UNION COUNTIES
STIP PROJECT R-5790JG
GROUP A

MAP 3-1



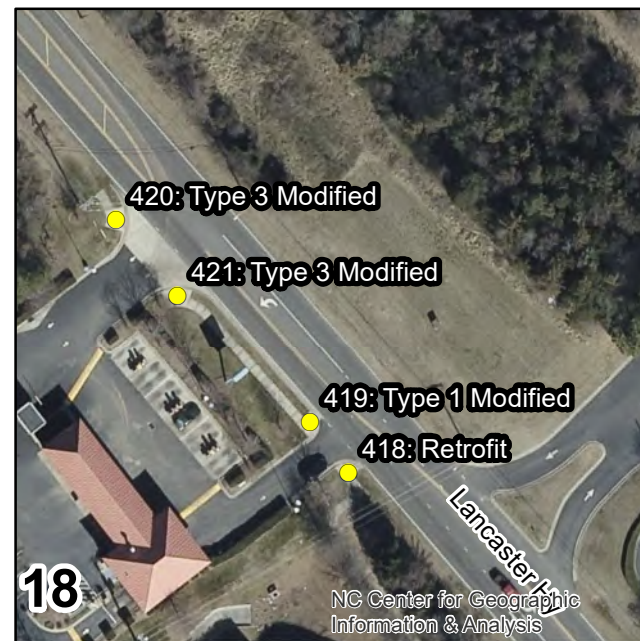
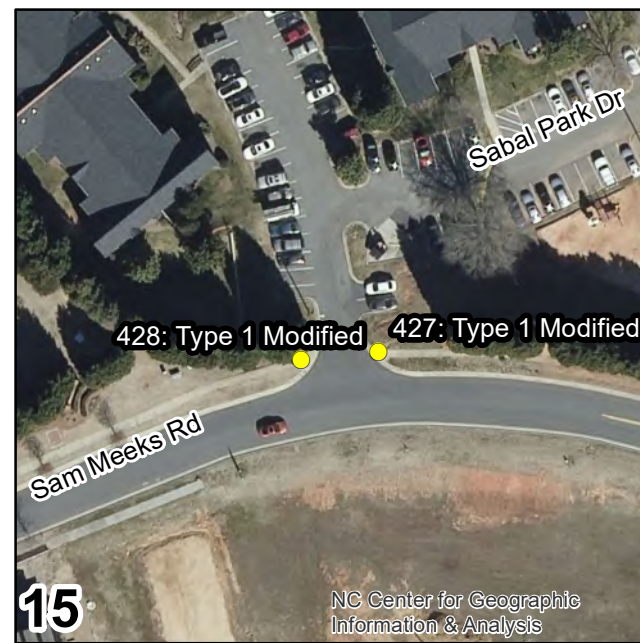
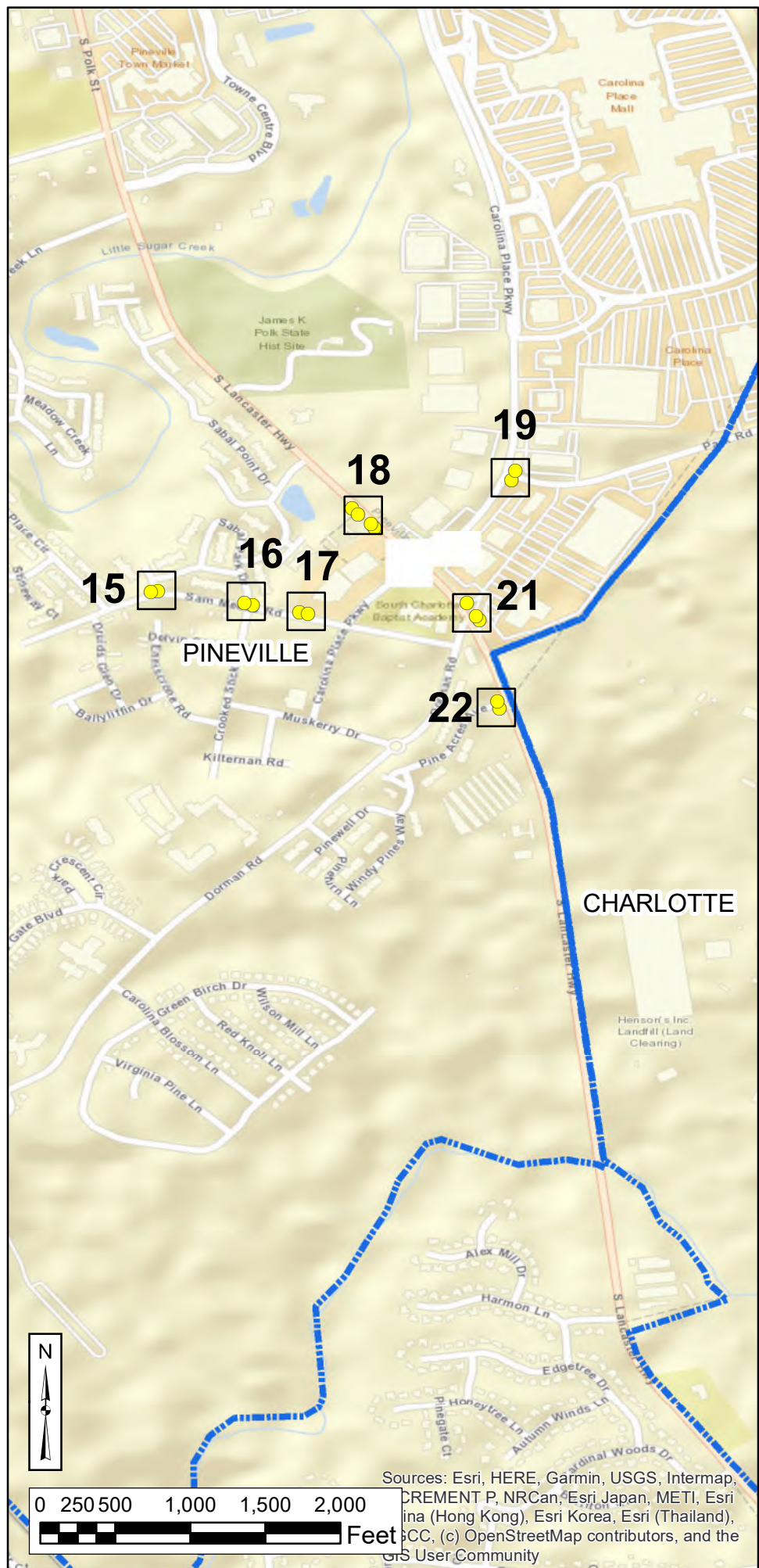
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

RAMEY KEMP & ASSOCIATES, INC

DIVISION 10 INTERSECTION
ADA IMPROVEMENTS
CABARRUS, MECKLENBURG, AND UNION
COUNTIES
STIP PROJECT R-5790JG
GROUP A

MAP 3-2



LEGEND

ADA RAMP IMPROVEMENT LOCATION

- MISSING
- NOT COMPLIANT
- - - MUNICIPAL BOUNDARY
- NCHPO HISTORIC PROPERTY OR DISTRICT

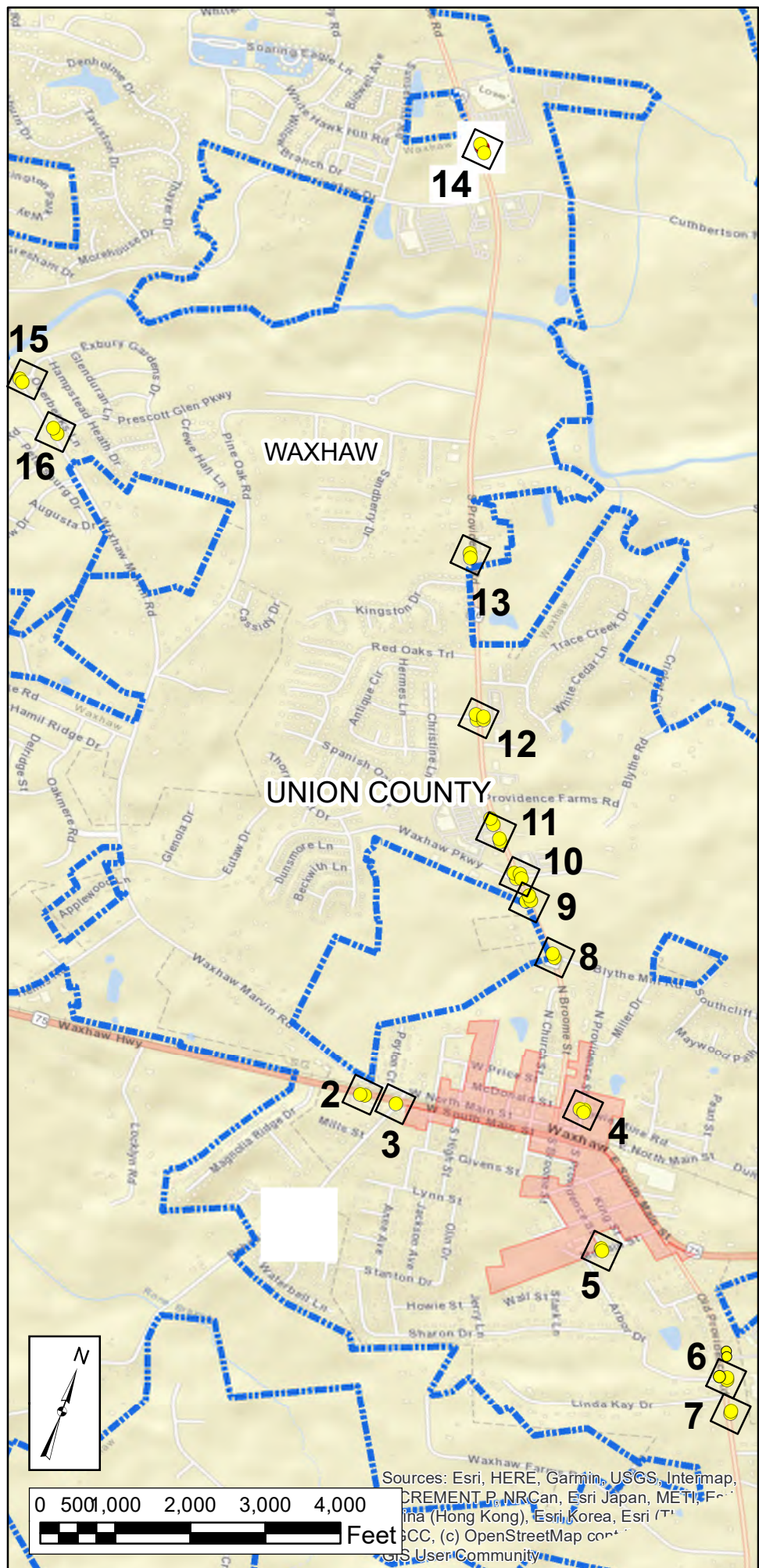
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

RAMEY KEMP & ASSOCIATES, INC

DIVISION 10 INTERSECTION ADA IMPROVEMENTS
CABARRUS, MECKLENBURG, AND UNION COUNTIES
STIP PROJECT R-5790JG
GROUP A

MAP 3-3



LEGEND

ADA RAMP IMPROVEMENT LOCATION

- MISSING (Red dot)
- NOT COMPLIANT (Yellow dot)
- MUNICIPAL BOUNDARY (Blue dashed line)
- NCHPO HISTORIC PROPERTY OR DISTRICT (Pink shaded area)

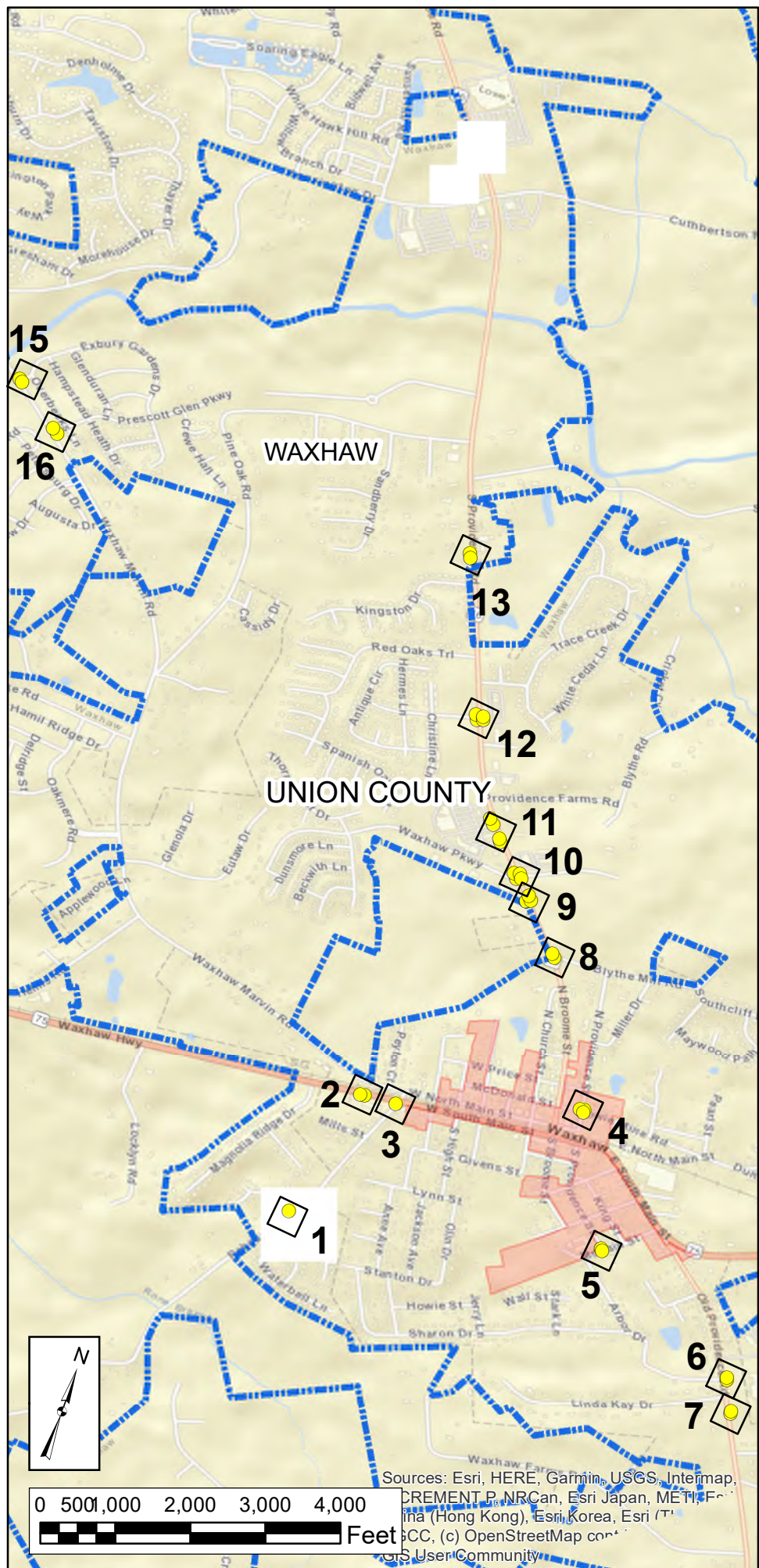
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

RAMEY KEMP & ASSOCIATES, INC

DIVISION 10 INTERSECTION
ADA IMPROVEMENTS
CABARRUS, MECKLENBURG, AND UNION
COUNTIES
STIP PROJECT R-5790JG
GROUP A

MAP 4-1



LEGEND

ADA RAMP IMPROVEMENT LOCATION

- MISSING (Red dot)
- NOT COMPLIANT (Yellow dot)
- MUNICIPAL BOUNDARY (Blue dashed line)
- NCHPO HISTORIC PROPERTY OR DISTRICT (Pink shaded area)

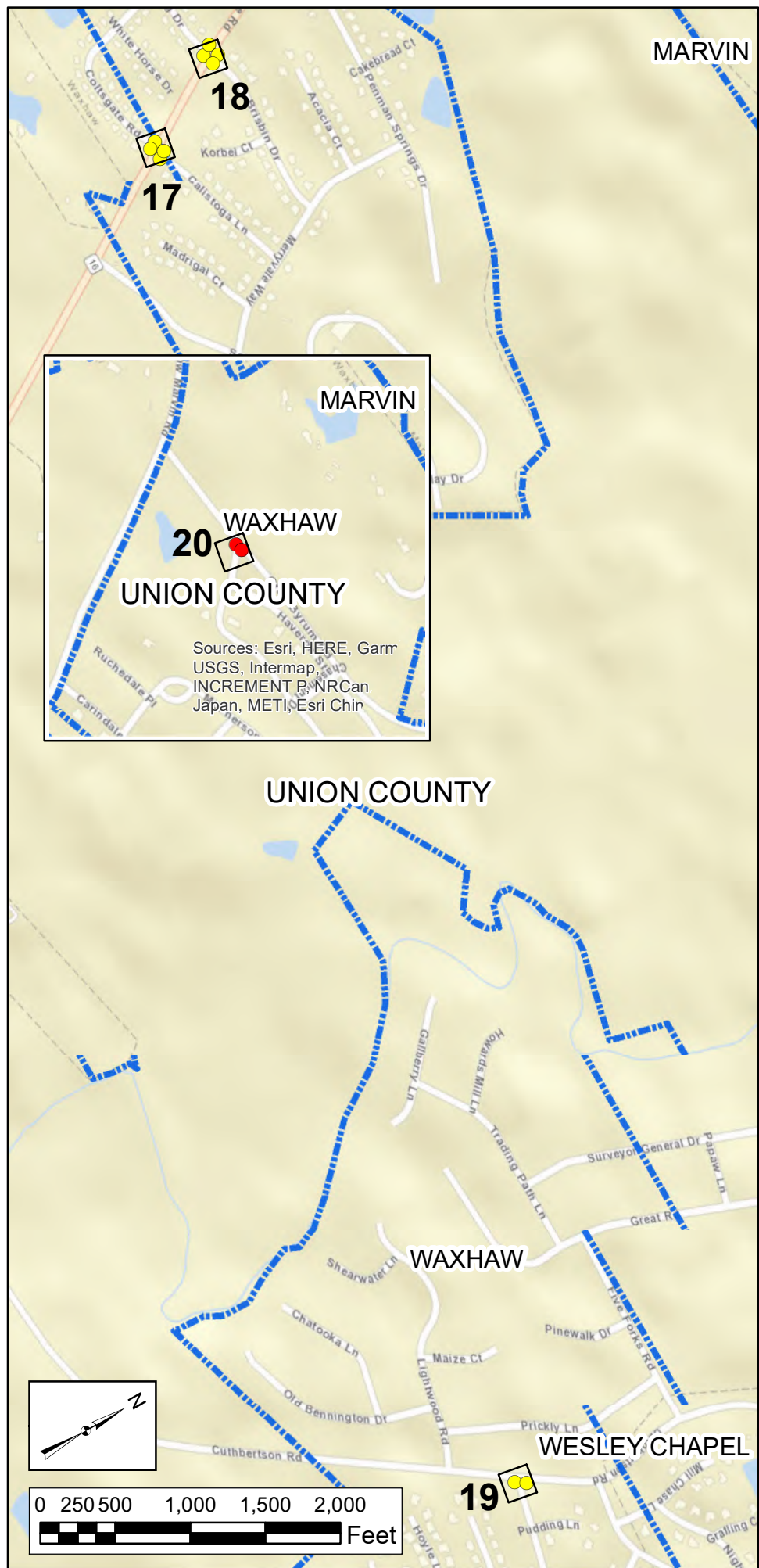
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

RAMEY KEMP & ASSOCIATES, INC

DIVISION 10 INTERSECTION ADA IMPROVEMENTS
CABARRUS, MECKLENBURG, AND UNION COUNTIES
STIP PROJECT R-5790JG
GROUP A

MAP 4-2



LEGEND

ADA RAMP IMPROVEMENT LOCATION

- MISSING
- NOT COMPLIANT
- ▬ MUNICIPAL BOUNDARY
- ▭ NCHPO HISTORIC PROPERTY OR DISTRICT

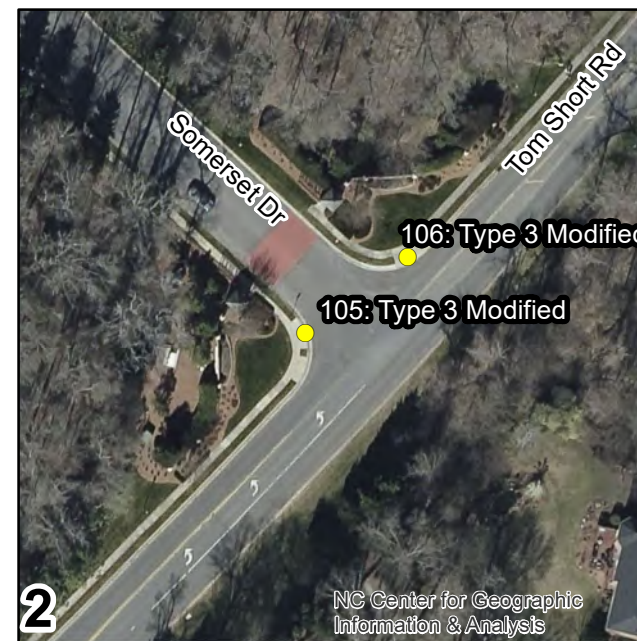
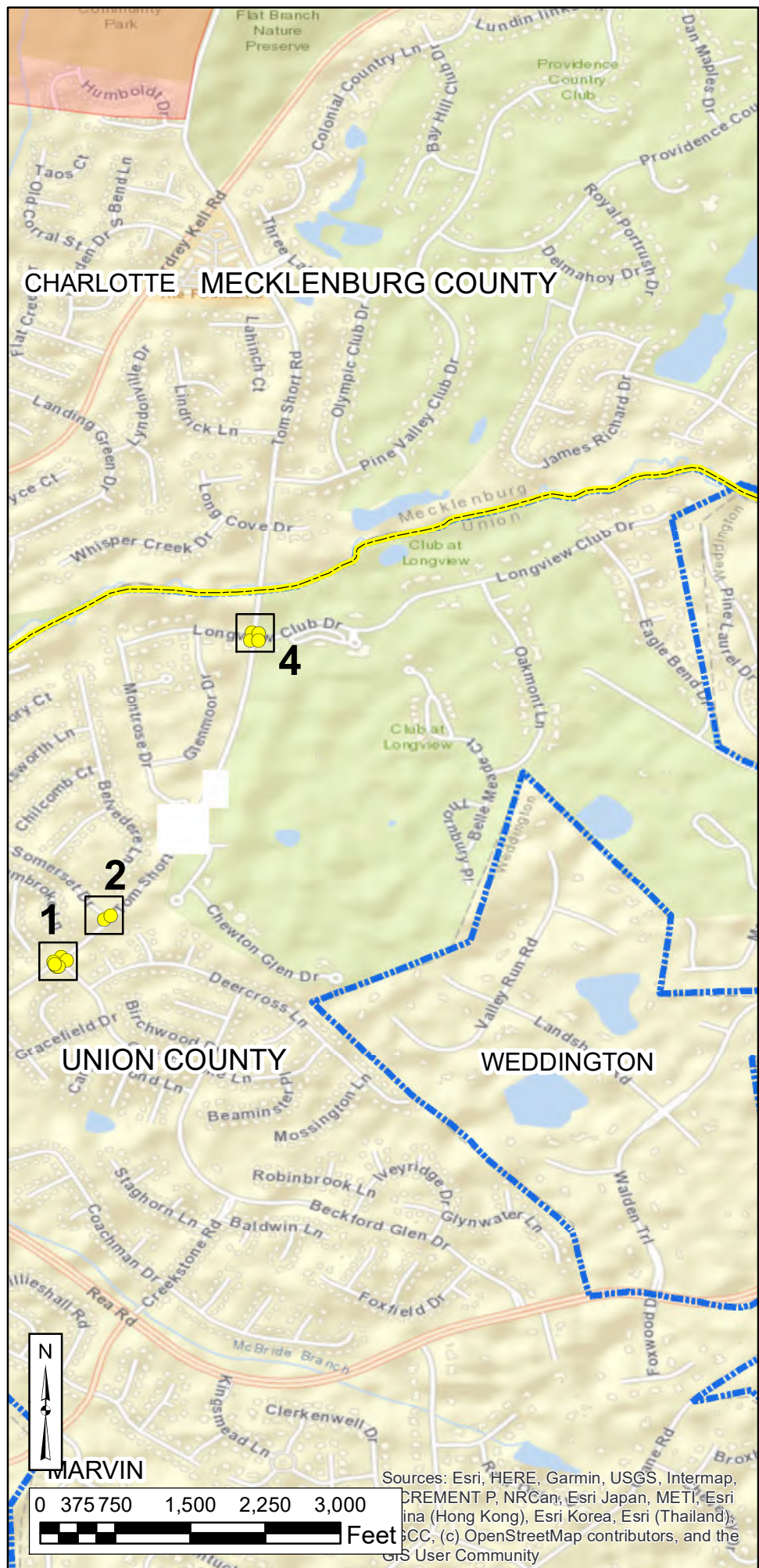
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

RAMEY KEMP & ASSOCIATES, INC

DIVISION 10 INTERSECTION
ADA IMPROVEMENTS
CABARRUS, MECKLENBURG, AND UNION
COUNTIES
STIP PROJECT R-5790JG
GROUP A

MAP 4-3




LEGEND

ADA RAMP IMPROVEMENT LOCATION

- MISSING
- NOT COMPLIANT
- ▬ MUNICIPAL BOUNDARY
- ▭ NCHPO HISTORIC PROPERTY OR DISTRICT

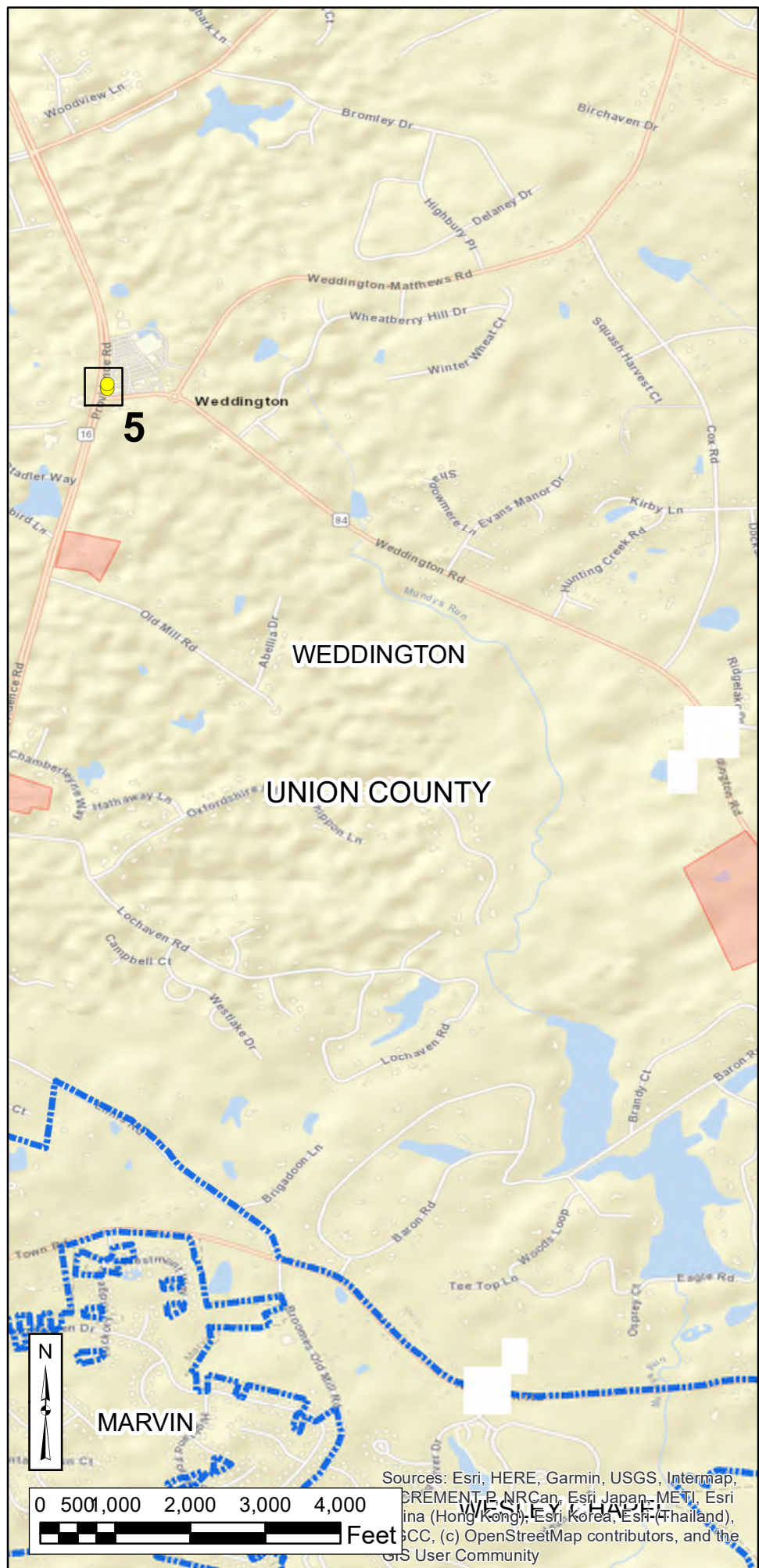
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 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

RAMEY KEMP & ASSOCIATES, INC

DIVISION 10 INTERSECTION
ADA IMPROVEMENTS
CABARRUS, MECKLENBURG, AND UNION
COUNTIES
STIP PROJECT R-5790JG
GROUP A

MAP 5-1



LEGEND

ADA RAMP IMPROVEMENT LOCATION

- MISSING
- NOT COMPLIANT
- ▬ MUNICIPAL BOUNDARY
- ▭ NCHPO HISTORIC PROPERTY OR DISTRICT

0 50 100 150
Ft

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

RAMEY KEMP & ASSOCIATES, INC

DIVISION 10 INTERSECTION
ADA IMPROVEMENTS
CABARRUS, MECKLENBURG, AND UNION
COUNTIES
STIP PROJECT R-5790JG
GROUP A

MAP 5-2