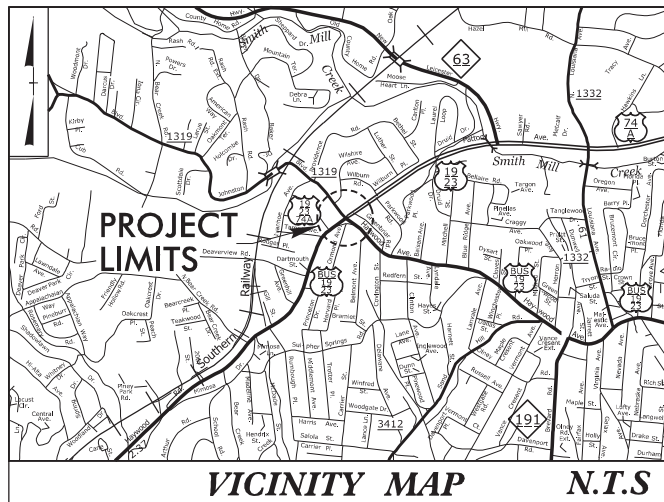


See Sheet 1A For Index of Sheets



STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**BUNCOMBE COUNTY**

**LOCATION: US-19/23/74A (PATTON AVE.) AT  
US-19/BUS 19/BUS 23 (HAYWOOD RD.)**

**TYPE OF WORK: INSTALLATION OF PEDESTRIAN SIGNALS,  
SIDEWALKS, RAMPS, AND HIGH VISIBILITY CROSSWALKS**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5813E	1	
STATE PROJ. NO.	P.A. PROJ. NO.	DESCRIPTION	
48958.1.6	0019062	PE	
48958.3.6	0019062	CONST	



**TIP PROJECT: W-5813E**

**CONTRACT: DM00330**



**INCOMPLETE PLANS**  
DO NOT USE FOR R/W ACQUISITION  
**DOCUMENT NOT CONSIDERED FINAL**  
UNLESS ALL SIGNATURES COMPLETED

**GRAPHIC SCALES**



EFF. 01-16-2018  
REV.

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, 2018 are applicable to this project and by reference hereby are considered a part of these plans:

- STD. NO. TITLE
- DIVISION 6 - ASPHALT PAVEMENTS
- 654.01 Pavement Repairs - For Superpave Mix Types
- DIVISION 8 - INCIDENTALS
- 846.01 Concrete Curb, Gutter and Curb & Gutter
- 848.05 Curb Ramp - Proposed Curb and Gutter
- 848.06 Curb Ramp - Existing Curb and Gutter
- DIVISION 12 - PAVEMENT MARKINGS, MARKERS, AND DELINEATION
- 1205.01 Pavement Markings - Line Types and Offsets
- 1205.04 Pavement Markings - Intersections
- 1205.07 Pavement Markings - Pedestrian Crosswalks
- DIVISION 17 - SIGNALS AND TRAFFIC MANAGEMENT
- 1705.01 Signal Heads - Standard Signal Face Clearances
- 1705.02 Signal Heads - Pedestrian Assemblies - Steel Pole Mounting
- 1705.04 Signal Heads - Pedestrian Pushbutton Placement
- 1715.01 Underground Conduit - Trenching

Prepared in the Office of:  
**DIVISION OF HIGHWAYS**  
55 Orange St., Asheville NC, 28801

**2018 STANDARD SPECIFICATIONS**

**RIGHT OF WAY DATE:**

**MIKE CLARK**  
PROJECT ENGINEER

**LETTING DATE:**  
JUNE 21, 2023

**WILLIAM CHASE CARVER, P.E.**  
PROJECT DESIGN ENGINEER

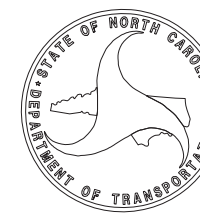
**INDEX OF SHEETS**

**SHEET NUMBER**

- 1
- 1B
- 2A THRU 2D
- 4
- SIG 1.0 THRU SIG 1.1

**SHEET**

- TITLE SHEET
- CONVENTIONAL SYMBOLS
- CURB RAMP DETAILS
- PLAN SHEET
- SIGNALS PLANS



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

Note: Not to Scale

## BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin (EIP)	○
Computed Property Corner	×
Existing Concrete Monument (ECM)	□
Parcel/Sequence Number	(123)
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	WLB
Proposed Wetland Boundary	WLB
Existing Endangered Animal Boundary	EAB
Existing Endangered Plant Boundary	EPB
Existing Historic Property Boundary	HPB
Known Contamination Area: Soil	⊗-s-⊗-s-
Potential Contamination Area: Soil	⊗-s-⊗-s-
Known Contamination Area: Water	⊗-w-⊗-w-
Potential Contamination Area: Water	⊗-w-⊗-w-
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	JS
Buffer Zone 1	BZ 1
Buffer Zone 2	BZ 2
Flow Arrow	←
Disappearing Stream	→
Spring	○
Wetland	⊞
Proposed Lateral, Tail, Head Ditch	-----
False Sump	⊞

## RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○
Switch	□
RR Abandoned	-----
RR Dismantled	-----

## RIGHT OF WAY & PROJECT CONTROL:

Primary Horiz Control Point	○
Primary Horiz and Vert Control Point	⬢
Secondary Horiz and Vert Control Point	⬢
Vertical Benchmark	⊕
Existing Right of Way Monument	△
Proposed Right of Way Monument (Rebar and Cap)	▲
Proposed Right of Way Monument (Concrete)	⬢
Existing Permanent Easement Monument	◇
Proposed Permanent Easement Monument (Rebar and Cap)	⬢
Existing C/A Monument	▲
Proposed C/A Monument (Rebar and Cap)	▲
Proposed C/A Monument (Concrete)	⬢
Existing Right of Way Line	-----
Proposed Right of Way Line	-----
Existing Control of Access Line	-----
Proposed Control of Access Line	-----
Proposed ROW and CA Line	-----
Existing Easement Line	-----
Proposed Temporary Construction Easement	E
Proposed Temporary Drainage Easement	TDE
Proposed Permanent Drainage Easement	PDE
Proposed Permanent Drainage/Utility Easement	DUE
Proposed Permanent Utility Easement	PUE
Proposed Temporary Utility Easement	TUE
Proposed Aerial Utility Easement	AUE

## ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	C
Proposed Slope Stakes Fill	F
Proposed Curb Ramp	CR
Existing Metal Guardrail	T
Proposed Guardrail	T
Existing Cable Guiderail	□
Proposed Cable Guiderail	□
Equality Symbol	⊕
Pavement Removal	⊞
VEGETATION:	
Single Tree	⊗
Single Shrub	⊗
Hedge	⊞

Woods Line	-----
Orchard	⊗
Vineyard	⊞

## EXISTING STRUCTURES:

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

## UTILITIES:

\* SUE - Subsurface Utility Engineering  
LOS - Level of Service - A,B,C or D (Accuracy)

POWER:	
Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	⊙
Power Line Tower	⊞
Power Transformer	⊞
U/G Power Cable Hand Hole	⊞
H-Frame Pole	●
U/G Power Line Test Hole (SUE - LOS A)*	⊗
U/G Power Line (SUE - LOS B)*	P
U/G Power Line (SUE - LOS C)*	P
U/G Power Line (SUE - LOS D)*	P

## TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊙
Telephone Pedestal	⊞
Telephone Cell Tower	⊞
U/G Telephone Cable Hand Hole	⊞
U/G Telephone Test Hole (SUE - LOS A)*	⊗
U/G Telephone Cable (SUE - LOS B)*	T
U/G Telephone Cable (SUE - LOS C)*	T
U/G Telephone Cable (SUE - LOS D)*	T
U/G Telephone Conduit (SUE - LOS B)*	TC
U/G Telephone Conduit (SUE - LOS C)*	TC
U/G Telephone Conduit (SUE - LOS D)*	TC
U/G Fiber Optics Cable (SUE - LOS B)*	T FO
U/G Fiber Optics Cable (SUE - LOS C)*	T FO
U/G Fiber Optics Cable (SUE - LOS D)*	T FO

## WATER:

Water Manhole	⊙
Water Meter	⊙
Water Valve	⊗
Water Hydrant	⊕
U/G Water Line Test Hole (SUE - LOS A)*	⊗
U/G Water Line (SUE - LOS B)*	-----
U/G Water Line (SUE - LOS C)*	-----
U/G Water Line (SUE - LOS D)*	-----
Above Ground Water Line	A/G Water
TV:	
TV Pedestal	⊞
TV Tower	⊗
U/G TV Cable Hand Hole	⊞
U/G TV Test Hole (SUE - LOS A)*	⊗
U/G TV Cable (SUE - LOS B)*	TV
U/G TV Cable (SUE - LOS C)*	TV
U/G TV Cable (SUE - LOS D)*	TV
U/G Fiber Optic Cable (SUE - LOS B)*	TV FO
U/G Fiber Optic Cable (SUE - LOS C)*	TV FO
U/G Fiber Optic Cable (SUE - LOS D)*	TV FO

## GAS:

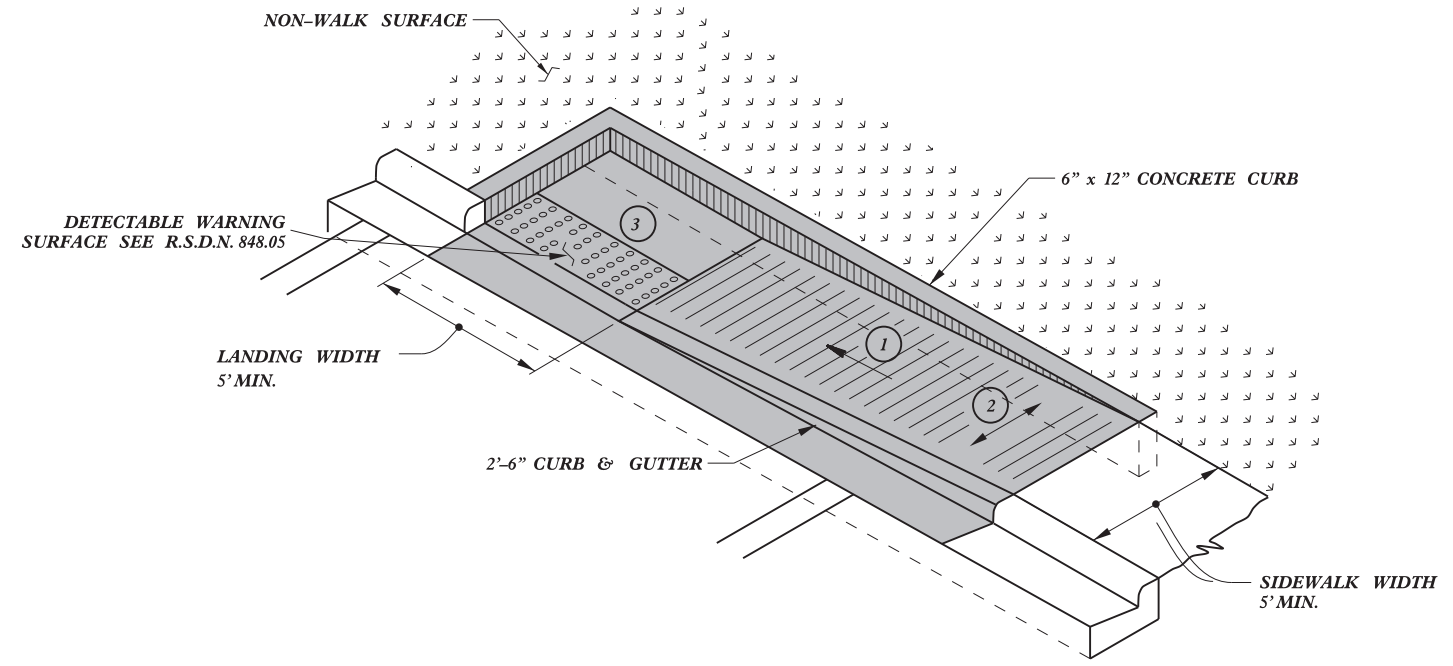
Gas Valve	◇
Gas Meter	⊕
U/G Gas Line Test Hole (SUE - LOS A)*	⊗
U/G Gas Line (SUE - LOS B)*	G
U/G Gas Line (SUE - LOS C)*	G
U/G Gas Line (SUE - LOS D)*	G
Above Ground Gas Line	A/G Gas

## SANITARY SEWER:

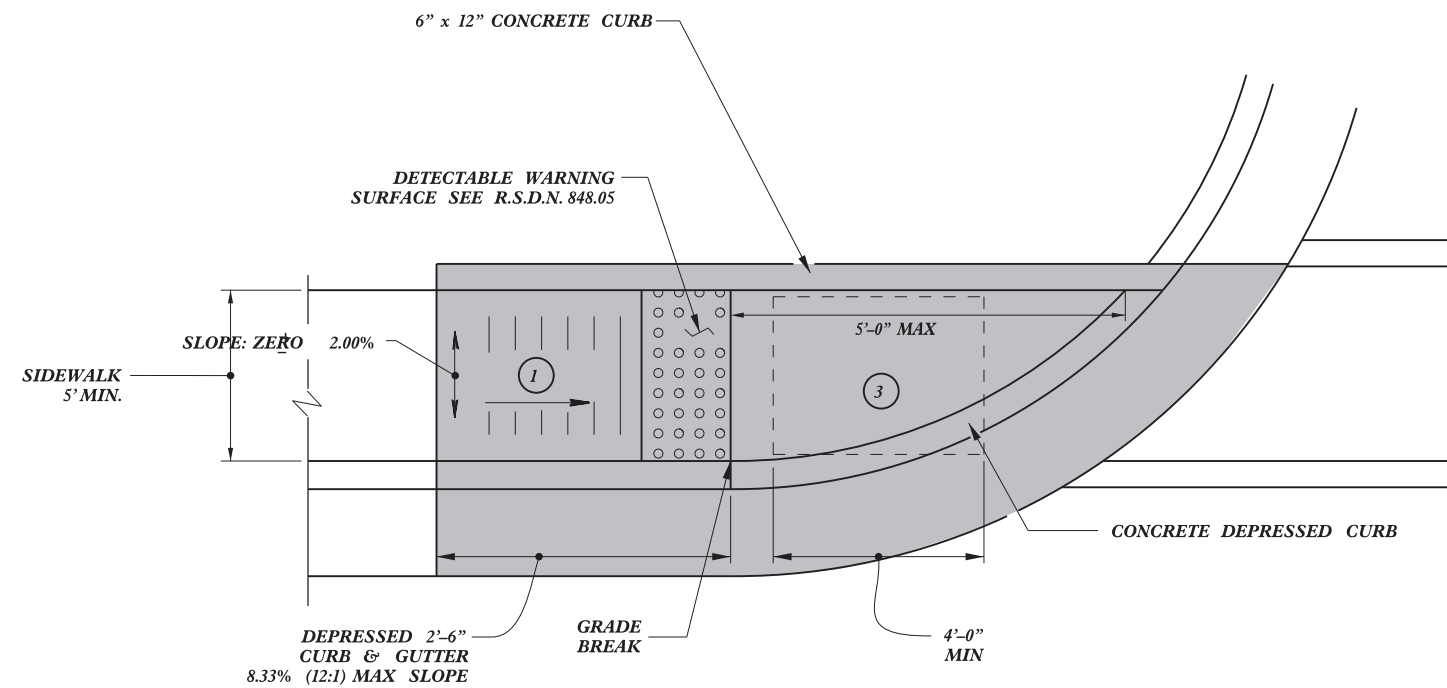
Sanitary Sewer Manhole	⊙
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	SS
Above Ground Sanitary Sewer	A/G Sanitary Sewer
SS Force Main Line Test Hole (SUE - LOS A)*	⊗
SS Force Main Line (SUE - LOS B)*	FSS
SS Force Main Line (SUE - LOS C)*	FSS
SS Force Main Line (SUE - LOS D)*	FSS

## MISCELLANEOUS:

Utility Pole	●
Utility Pole with Base	⊞
Utility Located Object	○
Utility Traffic Signal Box	⊞
Utility Unknown U/G Line (SUE - LOS B)*	UTL
U/G Tank; Water, Gas, Oil	⊞
Underground Storage Tank, Approx. Loc.	UST
A/G Tank; Water, Gas, Oil	⊞
Geoenvironmental Boring	⊞
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.



**TYPE 1A**



**TYPE 1**

- 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.

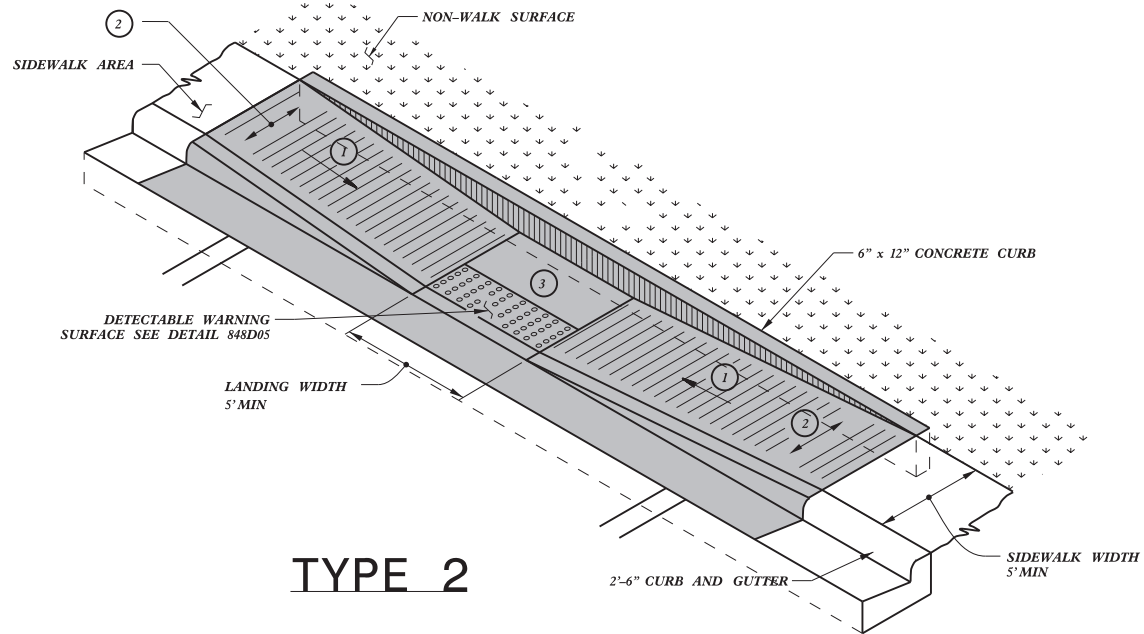
PAY LIMITS FOR CURB RAMP

<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>	
Office 919-707-6950	FAX 919-250-4119
<b>CURB RAMPS</b>	
Directional Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY: _____	DATE: _____
CHECKED BY: _____	DATE: _____
FILE SPEC: sstds/2012CurbRamp/CurbRampDetails.dwg	

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

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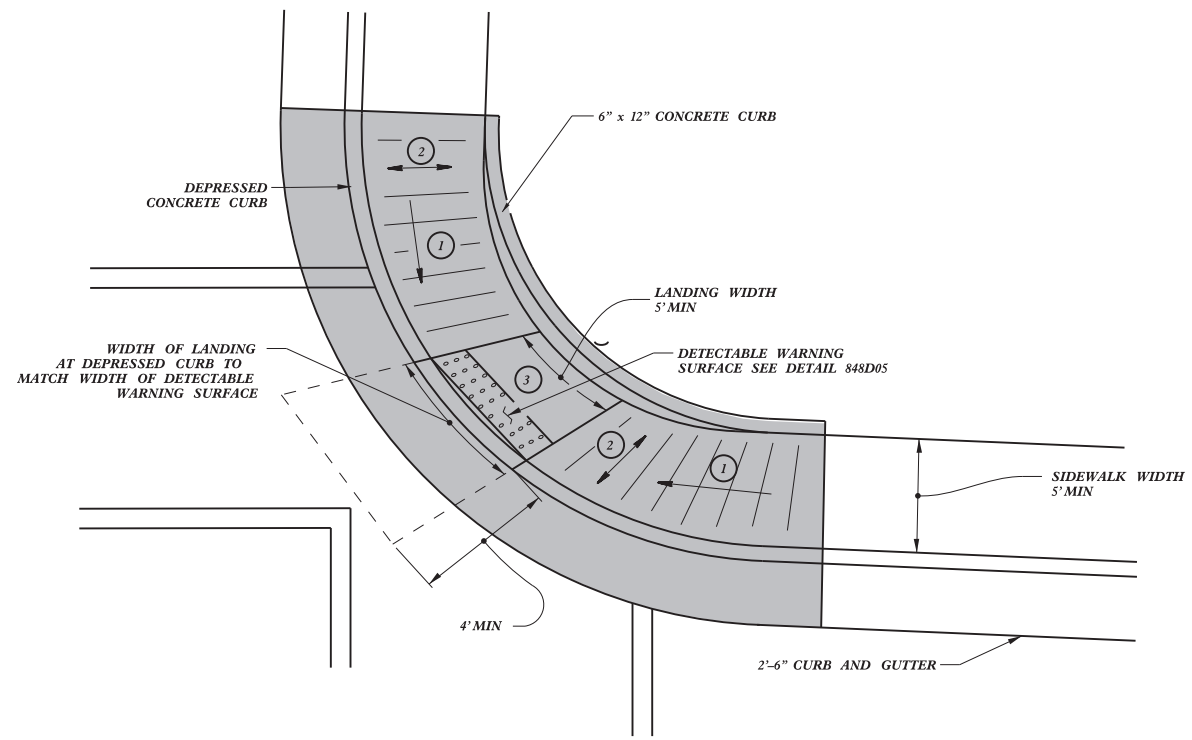
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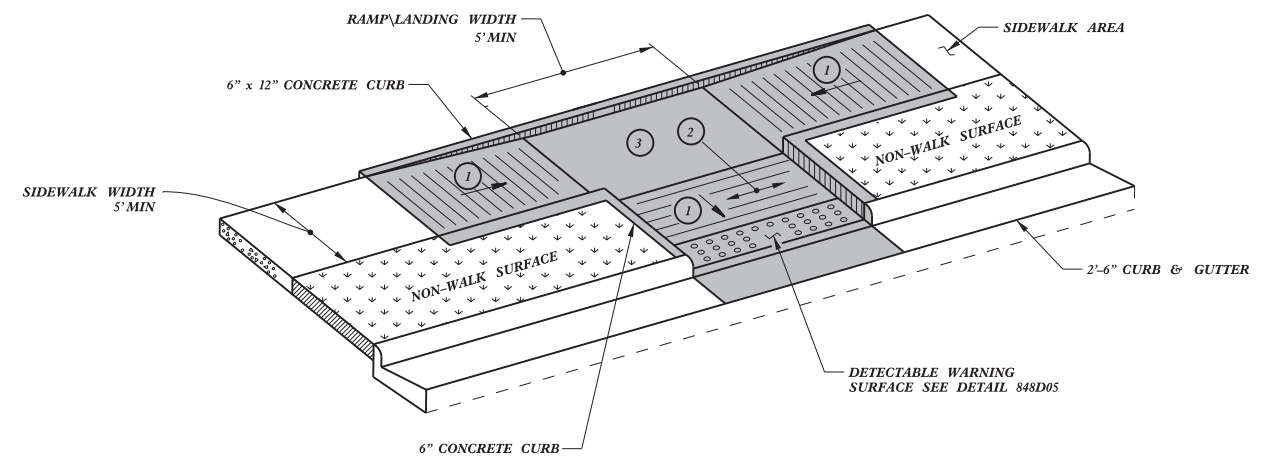
**TYPE 2**

 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. SLOPE TO DRAIN TO CURB.



**TYPE 2A**



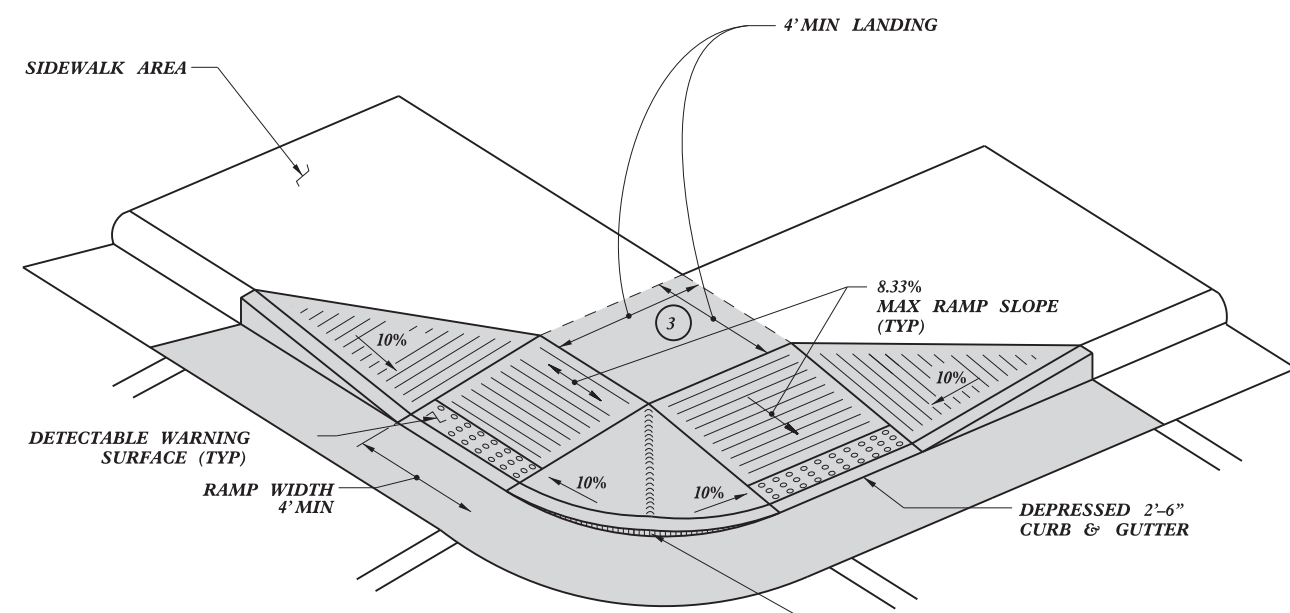
**TYPE 3**

<b>CONTRACT STANDARDS AND DEVELOPMENT UNIT</b>	
Office 919-707-6950	FAX 919-250-4119
<b>CURB RAMPS</b>	
Parallel Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: sstds/2012CurbRamp/CurbRampDetails.dwg	

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

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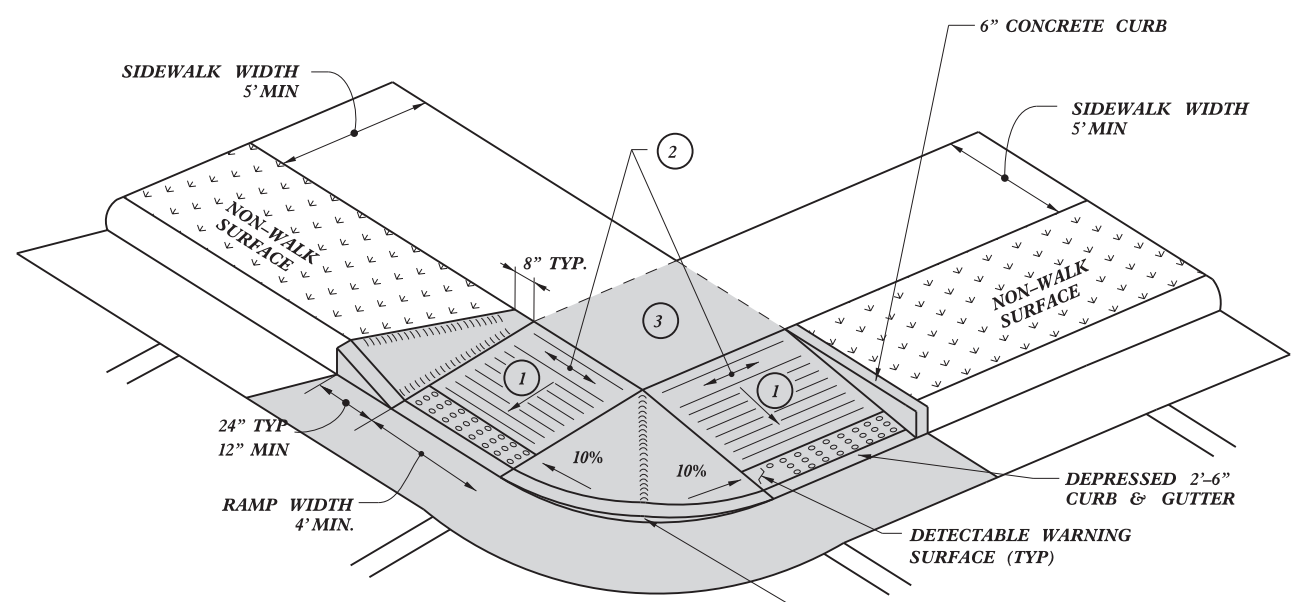
5/14/99



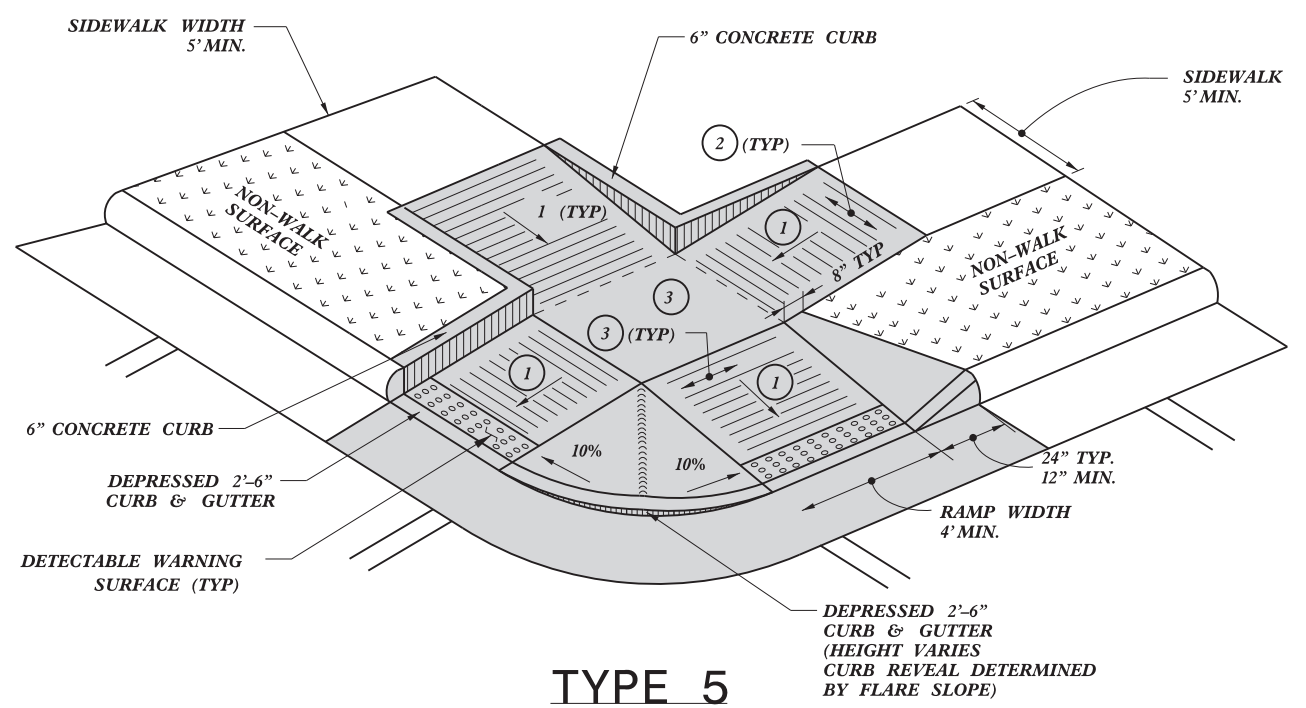
**TYPE 4**



**TYPE 5**



**TYPE 4A**



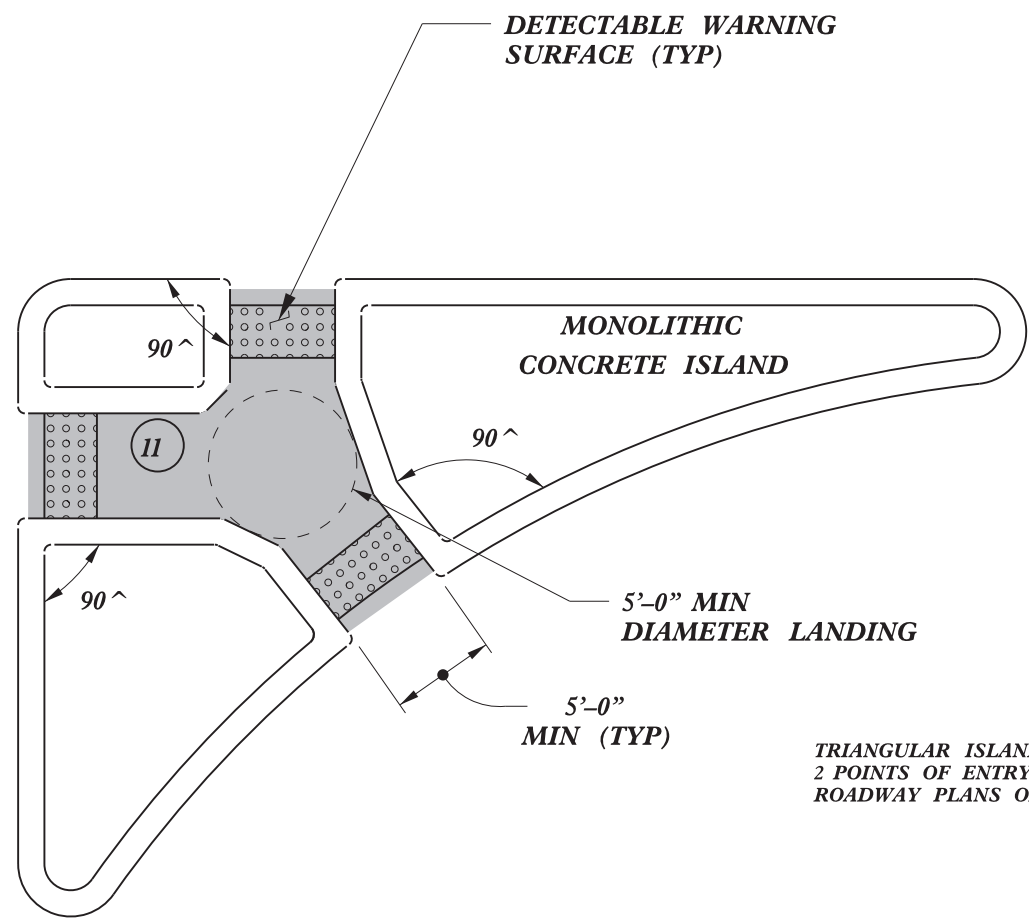
- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

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

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

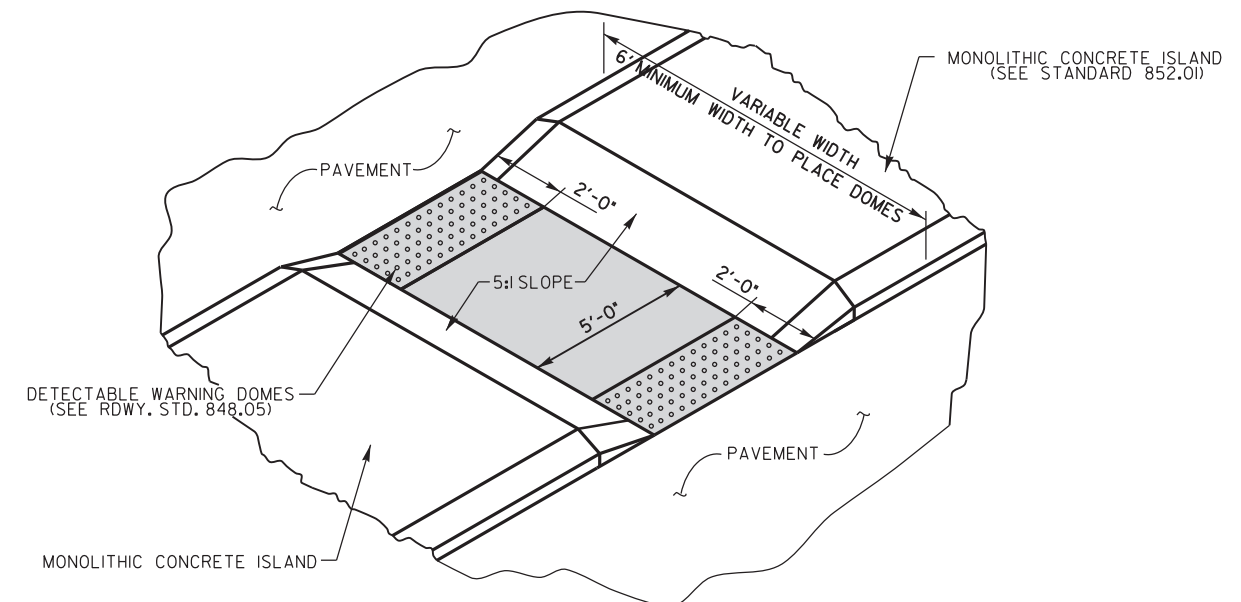
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 PAY LIMITS FOR 1 CURB RAMP

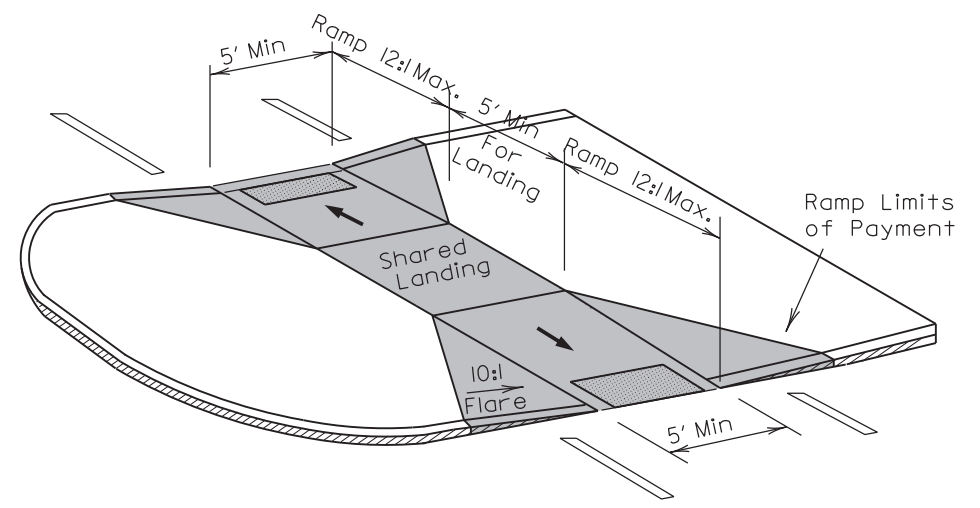


TRIANGULAR ISLANDS MAY BE CONSTRUCTED WITH ONLY 2 POINTS OF ENTRY AND EXIT AS SHOWN IN THE ROADWAY PLANS OR AS DIRECTED BY THE ENGINEER.

**TRIANGULAR ISLAND WITH CUT THROUGH**



**MEDIAN ISLAND WITH CUT THROUGH**



**MEDIAN ISLAND CURB RAMPS**

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

5/14/99  
C:\P\2012\STDS\2012CurbRamp\CurbRampDetails.dwg

PROJECT REFERENCE NO.	SHEET NO.
W-5813E	4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>DOCUMENT NOT CONSIDERED FINAL</b> UNLESS ALL SIGNATURES COMPLETED	



**QUANTITIES**

1693000000-E	ASPH PLT MIX PVMT REPAIR	7 TON
2535000000-E	8" x 6" CURB	20 LF
2605000000-N	CONC CURB RAMPS	4 EA
2613000000-N	REMOVE & REPLACE CURB RAMPS	10 EA
2655000000-E	5" MONOLITHIC CONCRETE ISLAND (KEYED IN)	8 SY
2738000000-E	REMOVAL OF CONCRETE ISLAND	15 SY
4457000000-N	TEMPORARY TRAFFIC CONTROL	1 LS
4685000000-E	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)	15 LF
4850000000-E	REMOVAL OF PAVEMENT MARKING LINES (4")	150 LF
4860000000-E	REMOVAL OF PAVEMENT MARKING LINES (8")	45 LF
4870000000-E	REMOVAL OF PAVEMENT MARKING LINES (24")	160 LF
4891000000-E	THERMOPLASTIC PAVEMENT MARKING LINES (24", 90 MILS)	1100 LF
6117500000-N	CONCRETE WASHOUT STRUCTURE	1 EA

**FINAL PAVEMENT MARKING SCHEDULE**

PAVEMENT MARKINGS	
THERMOPLASTICS (24", 90 MILS)	
T2	WHITE STOP
T3	WHITE CROSSWALK LINE



REVISIONS

30-MAY-2023 13:46  
 S:\000\Projects\AT 011713301761\Engineering\W-5813E\Roadway\Pro\W-5813E\_addc\_pah.dgn  
 8/17/99

6 Phase Fully Actuated Asheville Signal System

PHASING DIAGRAM

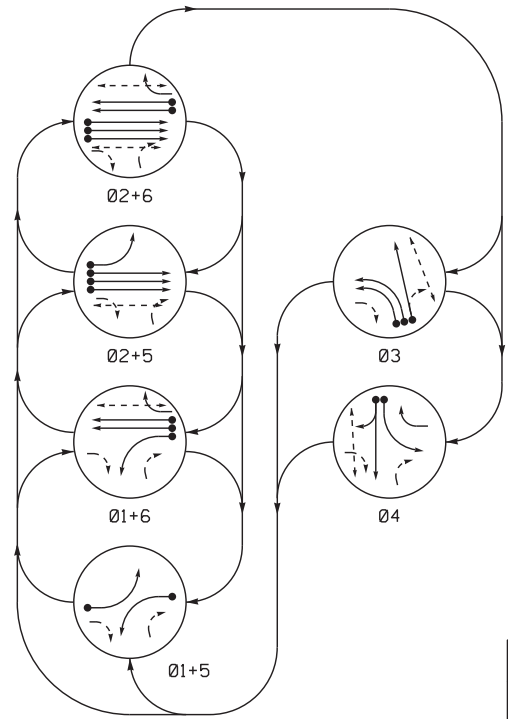
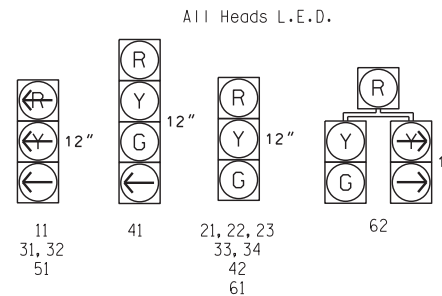


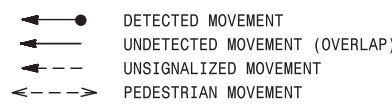
TABLE OF OPERATION

SIGNAL FACE	PHASE						F
	01+5	01+6	02+5	02+6	03	04	
11	←	←	←	←	←	←	←
21,22,23	R	R	G	G	R	R	Y
31,32	←	←	←	←	←	←	←
33,34	R	R	R	R	G	R	R
41	R	R	R	R	R	G	R
42	R	R	R	R	R	G	R
51	←	←	←	←	←	←	←
61	R	G	R	G	R	R	Y
62	R	G	R	G	R	R	Y
P21,P22	DW	DW	W	W	DW	DW	DRK
P31,P32	DW	DW	DW	DW	W	W	DRK
P41,P42	DW	DW	DW	DW	DW	W	DRK
P61,P62	DW	W	DW	W	DW	DW	DRK

SIGNAL FACE I.D.

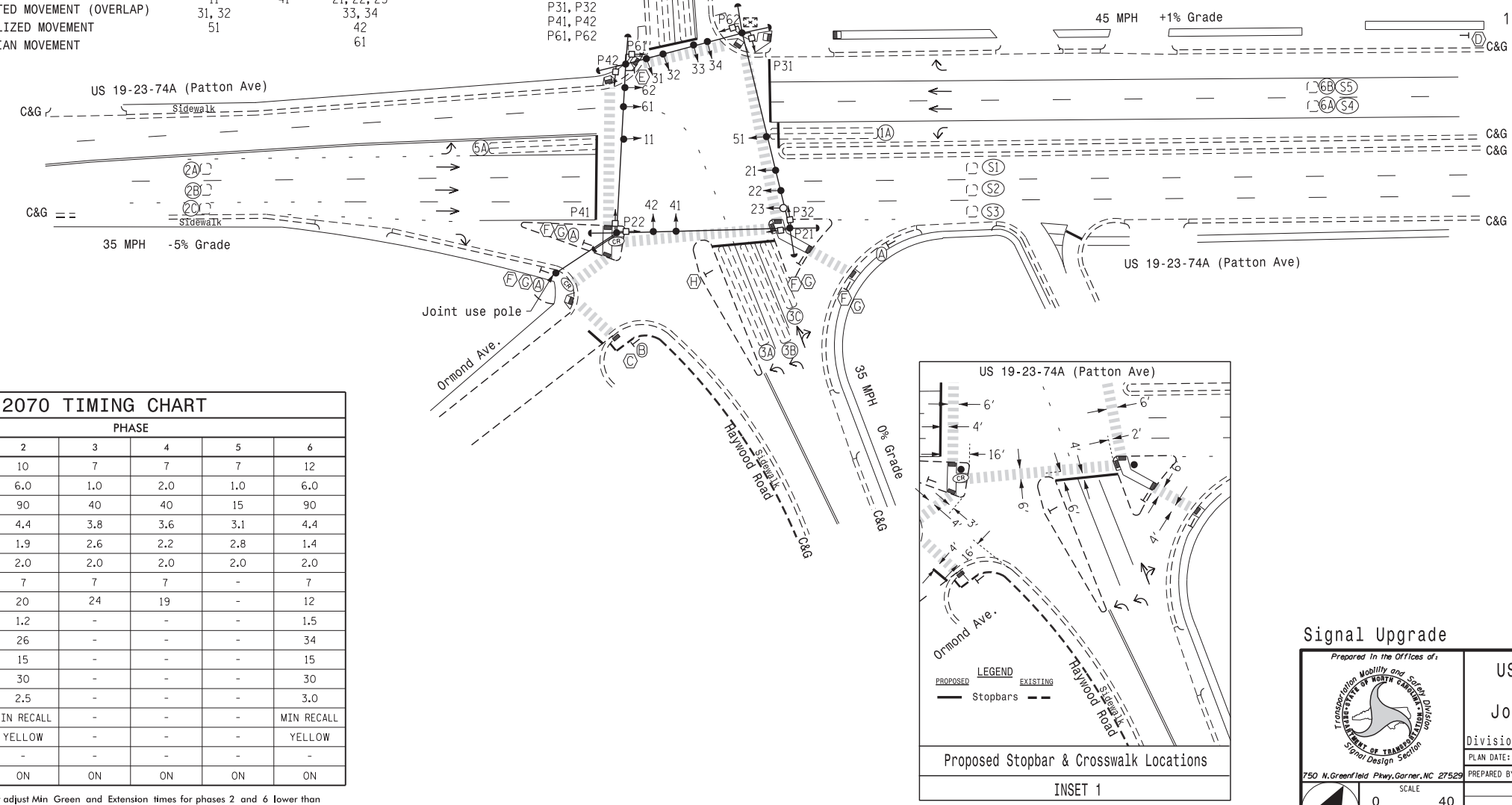
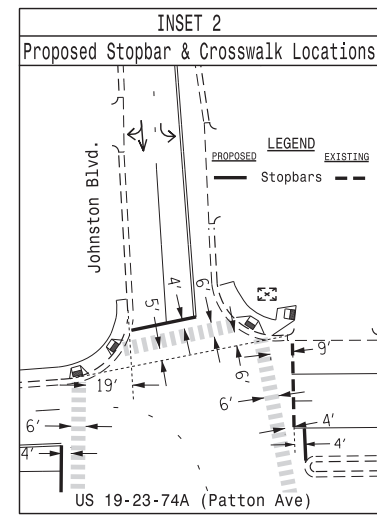


PHASING DIAGRAM DETECTION LEGEND



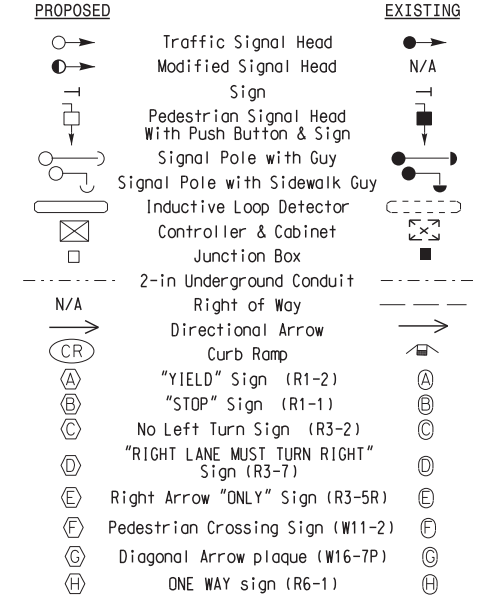
OASIS 2070 LOOP & DETECTOR INSTALLATION

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING							
					PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X60	+5	2-4-2	-	1	Y	Y	-	-	-	-	-
2A	6X6	215	6	-	2	Y	Y	-	-	-	-	-
2B	6X6	215	6	-	2	Y	Y	-	-	-	-	-
2C	6X6	215	6	-	2	Y	Y	-	-	-	-	-
3A	6X60	0	2-4-2	-	3	Y	Y	-	-	-	-	-
3B	6X60	0	2-4-2	-	3	Y	Y	-	-	-	-	-
3C	6X40	0	2-4-2	-	3	Y	Y	-	-	-	-	-
4A	6X60	+5	2-4-2	-	4	Y	Y	-	-	3	-	-
4B	6X60	+5	2-4-2	-	4	Y	Y	-	-	10	-	-
5A	6X60	+5	2-4-2	-	5	Y	Y	-	-	3	-	-
6A/S4	6X6	300	4	-	6	Y	Y	-	-	-	Y	-
6B/S5	6X6	300	4	-	6	Y	Y	-	-	-	Y	-
S1	6X6	+200	4	-	-	-	-	-	-	-	-	Y
S2	6X6	+200	4	-	-	-	-	-	-	-	-	Y
S3	6X6	+200	4	-	-	-	-	-	-	-	-	Y



- NOTES**
- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
  - Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
  - Phase 1 and/or phase 5 may be lagged.
  - The order of phase 3 and phase 4 may be reversed.
  - Reposition existing signal heads numbered 21 and 22.
  - Set all detector units to presence mode.
  - In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
  - Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
  - Program pedestrian heads to countdown the flashing "Don't Walk" time only.
  - Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

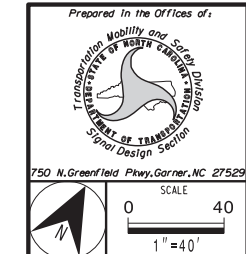


OASIS 2070 TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green 1 *	7	10	7	7	7	12
Extension 1 *	1.0	6.0	1.0	2.0	1.0	6.0
Max Green 1 *	15	90	40	40	15	90
Yellow Clearance	3.0	4.4	3.8	3.6	3.1	4.4
Red Clearance	2.8	1.9	2.6	2.2	2.8	1.4
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	7	7	7	-	7
Don't Walk 1	-	20	24	19	-	12
Seconds Per Actuation *	-	1.2	-	-	-	1.5
Max Variable Initial *	-	26	-	-	-	34
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	30	-	-	-	30
Minimum Gap	-	2.5	-	-	-	3.0
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW
Dual Entry	-	-	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON	ON	ON

\* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

Signal Upgrade



US 19-23-74A (Patton Ave) at Johnston Blvd / Haywood Rd

Division 13 Buncombe County Asheville

PLAN DATE: August 2021 REVIEWED BY: T. J. Williams

PREPARED BY: EM Minshew REVIEWED BY:

REVISIONS: INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER J. Williams 024393

8/6/2021

SIG. INVENTORY NO. 13-0214

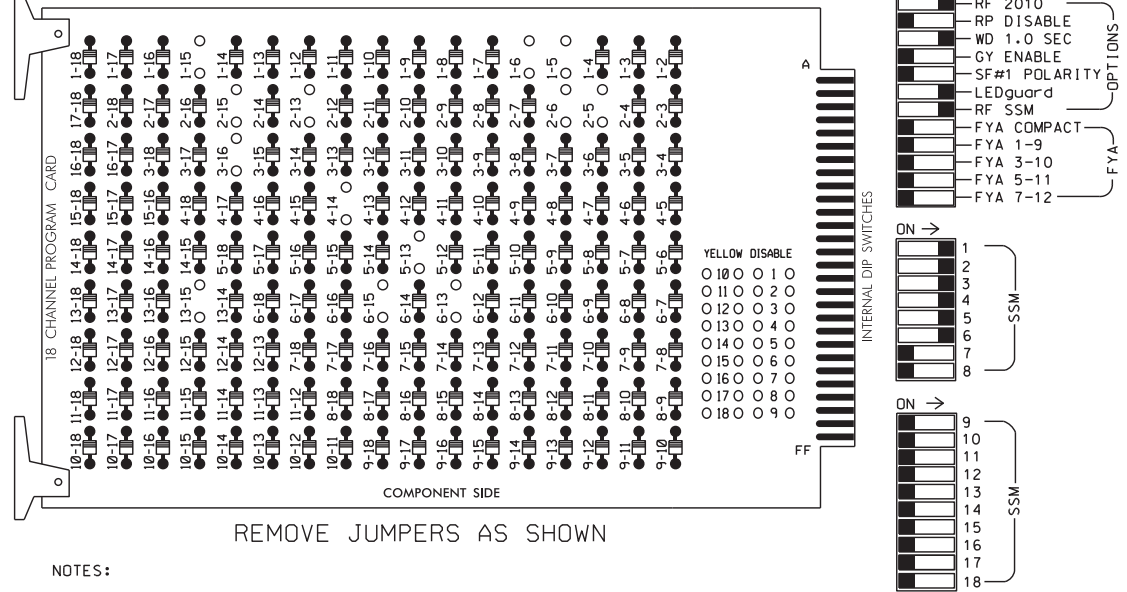
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### EDI MODEL 2018ECLIP-NC CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-5, 1-6, 1-15, 2-5, 2-6, 2-13, 2-15, 3-16, 4-14, 5-13, 6-13, 6-15 and 13-15.



REMOVE JUMPERS AS SHOWN

NOTES:

- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
- Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
- Ensure that Red Enable is active at all times during normal operation.
- Integrate monitor with Ethernet network in cabinet.

■ = DENOTES POSITION OF SWITCH

### NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the Signal Plans.
- Enable Simultaneous Gap-Out for all Phases.
- Program phases 2 and 6 for Variable Initial and Gap Reduction.
- Program phases 2 and 6 for Startup In Green.
- Program phases 2, 3, 4, and 6 for Startup Ped Call.
- Program phases 2 and 6 for Yellow Flash.
- The cabinet and controller are part of the Asheville Signal System.

### EQUIPMENT INFORMATION

CONTROLLER.....2070E  
 CABINET.....332 W/ AUX  
 SOFTWARE.....ECONOLITE OASIS  
 CABINET MOUNT.....BASE  
 OUTPUT FILE POSITIONS...18 WITH AUX. OUTPUT FILE  
 LOAD SWITCHES USED.....S1,S2,S3,S4,S5,S6,S7,S8,S9,S12  
 PHASES USED.....1,2,2 PED,3,3 PED,4,4 PED,5,6,6 PED  
 OVERLAPS.....NONE

### SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	3 PED	OLA	OLB	SPARE	OLC	OLD	SPARE
SIGNAL HEAD NO.	11	21, 22, 23	P21, P22	31,32	33,34	41	42	62	P41, P42	51	61,62	P61, P62	NU	NU	NU	NU	NU	NU
RED		128		116	101	101					134							
YELLOW		129		117	102	102					135							
GREEN		130		118	103	103					136							
RED ARROW	125			116							131							
YELLOW ARROW	126			117				102		132								
GREEN ARROW	127			118				103		133								
Hand			113						104			119				110		
Walking Person			115						106			121				112		

NU = Not Used

### PED 3 PROGRAMMING DETAIL

(program controller as shown below)

#### CHANGING OUTPUT ASSIGNMENTS

- FROM MAIN MENU SELECT '6' (OUTPUTS), THEN '1' (OUTPUT ASSIGNMENTS)
- ENTER 17 (PHASE 8 DW) FOR OUTPUT ASSIGNMENT #.
- SCROLL DOWN TO 'PEDESTRIAN PHASE' AND ENTER 'Y' REGARDLESS OF DEFAULT PROGRAMMING
- ENTER '3' FOR 'SELECT PEDESTRIAN PHASE'. NO CHANGE NEEDED FOR 'SELECT COLOR'
- BACKUP TO 'OUTPUT ASSIGNMENTS AND SETTINGS MENU:' BY PRESSING THE 'ESC' BUTTON ON KEYBOARD.
- SELECT '1' (OUTPUT ASSIGNMENTS)
- ENTER 18 (PHASE 8 W) FOR OUTPUT ASSIGNMENT #.
- REPEAT STEPS # 3 AND # 4.

#### CHANGING INPUT ASSIGNMENTS

- FROM MAIN MENU SELECT '7' (DETECTORS), THEN '2' (PEDESTRIAN DETECTOR ASSIGNMENTS)
- CYCLE TO PED DETECTOR #8 BY REPEATEDLY DEPRESSING '+' KEY
- MODIFY PHASE ASSIGNED TO PED DETECTOR # 8 FROM PHASE 8 TO PHASE 3

PROGRAMMING COMPLETE

### INPUT FILE POSITION LAYOUT

(front view)

FILE	U	1	2	3	4	5	6	7	8	9	10	11	12	13	14
FILE "I"	U	∅ 1	∅ 2	∅ 2	∅ 3	∅ 3	∅ 4	S	SYS. DET. S1	S	S	∅ 2 PED	∅ 6 PED	FS	
		1A	2A	2C	3A	3B	4A	∅ 4	SYS. DET. S2	∅ 4 PED	∅ 3 PED	DC ISOLATOR	DC ISOLATOR	DC ISOLATOR	
FILE "J"	U	∅ 5	∅ 6/SYS	∅ 6/SYS	∅ 6/SYS	∅ 6/SYS	∅ 6/SYS	∅ 6/SYS	SYS. DET. S3	S	S	S	S	S	S
		5A	6A/S4	6B/S5	6B/S5	6B/S5	6B/S5	6B/S5	NOT USED	∅ 6/SYS	∅ 6/SYS	∅ 6/SYS	∅ 6/SYS	∅ 6/SYS	∅ 6/SYS

EX.: 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE  
 ST = STOP TIME

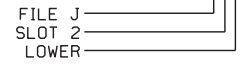
### INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A	TB2-1,2	I1U	56	18	1	1	Y	Y			
2A	TB2-5,6	I2U	39	1	2	2	Y	Y			
2B	TB2-7,8	I2L	43	5	12	2	Y	Y			
2C	TB2-9,10	I3U	63	25	32	2	Y	Y			
3A	TB4-5,6	I5U	58	20	3	3	Y	Y			
3B	TB4-9,10	I6U	41	3	4	3	Y	Y			
3C	TB4-11,12	I6L	45	7	14	3	Y	Y			
4A	TB6-1,2	I7U	65	27	34	4	Y	Y			3
4B	TB6-3,4	I7L	78	40	44	4	Y	Y			10
5A	TB3-1,2	J1U	55	17	5	5	Y	Y			3
6A/S4	TB3-5,6	J2U	40	2	6	6/SYS	Y	Y			
6B/S5	TB3-7,8	J2L	44	6	16	6/SYS	Y	Y			
* S1	TB6-9,10	I9U	60	22	11	SYS					
* S2	TB6-11,12	I9L	62	24	13	SYS					
* S3	TB7-9,10	J9U	59	21	15	SYS					
PED PUSH BUTTONS											
P21,P22	TB8-4,6	I12U	67	29		PED 2	2	PED			
P31,P32	TB8-8,9	I13L	70	32		PED 8	3	PED			
P41,P42	TB8-5,6	I12L	69	31		PED 4	4	PED			
P61,P62	TB8-7,9	I13U	68	30		PED 6	6	PED			

NOTE:  
 INSTALL DC ISOLATORS IN INPUT FILE SLOTS 112 AND 113.

\* SYSTEM DETECTOR ONLY. REMOVE THE VEHICLE PHASE ASSIGNED TO THIS DETECTOR IN THE DEFAULT PROGRAMMING.

#### INPUT FILE POSITION LEGEND: J2L



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 13-0214  
 DESIGNED: August 2021  
 SEALED: 8/6/2021  
 REVISED:

### COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

Electrical Detail

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared In the Offices of:  
 Transportation Mobility and Safety Solutions  
 STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 Signal Management Section  
 750 N. Greenfield Pkwy, Garner, NC 27529

US 19-23-74A (Patton Ave) at Johnston Blvd/Haywood Rd

Division 13 Buncombe County Asheville

PLAN DATE: July 2021 REVIEWED BY: T. Joyce

PREPARED BY: C. Strickland REVIEWED BY:

REVISIONS INIT. DATE

Seal: SEAL NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 031001 ENGINEER TODD JOYCE

8/9/2021

SIG. INVENTORY NO. 13-0214

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