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	OF SHEFTS	SHEET NO.
INDEX	OF SHEETS	TMP-1
• TITLE SHE LIST OF A AND LEGEN TRANSPORT STRATEGIE	TITLE EET, VICINITY MAP, AND INDEX OF SHEETS APPLICABLE ROADWAY STANDARD DRAWINGS, D ATION OPERATIONS PLAN: (MANAGEMENT S, GENERAL NOTES, AND LOCAL NOTES) AND PHASING AREA A	
	DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED APPROVED: DATE:	TIP PROJECT: R-5849

ROADWAY STANDARD DRAWI

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

TITLE STD. NO. WORK ZONE ADVANCE WARNING SIGNS 1101.01 1101.02 TEMPORARY LANE CLOSURES TEMPORARY ROAD CLOSURES 1101.03 TEMPORARY SHOULDER CLOSURES 1101.04 1101.05 WORK ZONE VEHICLE ACCESSES TRAFFIC CONTROL DESIGN TABLES 1101.11 1110.01 STATIONARY WORK ZONE SIGNS 1110.02 PORTABLE WORK ZONE SIGNS 1130.01 DRUM CONES 1135.01 BARRICADES 1145.01 1150.01 FLAGGING DEVICES 1180.01 SKINNY-DRUM 1205.01 PAVEMENT MARKINGS - LINE TYPES AND OFFSETS 1205.02 PAVEMENT MARKINGS - TWO-LANE AND MULTI-LANE 1205.04 PAVEMENT MARKINGS - INTERSECTIONS 1205.05 PAVEMENT MARKINGS - TURN LANES 1205.08 PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGE 1205.09 PAVEMENT MARKINGS - PAINTED ISLANDS PAVEMENT MARKINGS - RAILROAD CROSSINGS 1205.11 1250.01 RAISED PAVEMENT MARKERS - INSTALLATION SPACE 1251.01 RAISED PAVEMENT MARKERS - PERMANENT AND TEMP

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INGS	LEGENL
AWINGS" - [GH, N.C.,	<u>GENERAL</u>
E HEREBY	DIRECTION OF TRAFFIC FLOW
	DIRECTION OF PEDESTRIAN TRAFFIC FLOW
	EXIST. PVMT.
	PROPOSED PVMT.
	TEMP. SHORING (LOCATION PURPOSES ONLY)
	WORK AREA
	REMOVAL
	USER DEFINED (IF NEEDED)
ROADWAYS ES	USER DEFINED (IF NEEDED)
LO	SIGNALS
ING PORARY	EXISTING PROPOSED OF TEMPORARY
	PAVEMENT MARKINGS
	EXISTING LINES
	TEMPORARY LINES
	TEMPORARY PAVEMENT MARKING
	SYMBOL DESCRIPTION
	PAVEMENT MARKINGS
	PAINT(12")
	PV YELLOW DIAGONAL
	PAINT(24")
	P2 WHITE STOPBAR
	PAINT(4")
	PA WHITE EDGELINE PD 3 FT 9 FT./SP WHITE MINISKIP PE WHITE SOLID LANE LINE
	PF 10 FT. YELLOW SKIP
	PH YELLOW SINGLE CENTER PI YELLOW DOUBLE CENTER
	PAINTMARKING SYMBOLS
	QA LEFT TURN ARROW QB RIGHT TURN ARROW
	DATE:
	FDGP
	SEAL 11/14/2017
	DOCUMENT NOT CONSIDERE UNLESS ALL SIGNATURES CO
)	

TRAFFIC CONTROL DEVICES

	BARRICADE (TYPE III)			
	CONE			
	DRUM 🔘 SKINNY DRUM 🎯 TUBULAR MARKER			
~~~	TEMPORARY CRASH CUSHION			
$\rightarrow$	FLASHING ARROW BOARD			
	FLAGGER			
	LAW ENFORCEMENT			
	TRUCK MOUNTED ATTENUATOR (TMA)			
	CHANGEABLE MESSAGE SIGN			
TEMPORARY SIGNING				

PROJ. REFERENCE NO. SHEET NO.

TGS ENGINEERS 804–C N. LAFAYETTE ST SHELBY, NC 28150 PH (704) 476–0003 CORP. LICENSE NO.: C–0275

R-5849

IGS

TMP-1A

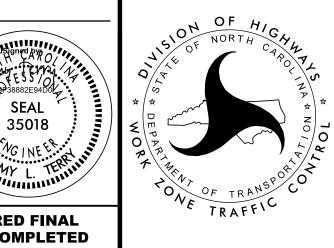
- PORTABLE SIGN
- STATIONARY SIGN
- **b** STATIONARY OR PORTABLE SIGN

## PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

## PAVEMENT MARKING SYMBOLS

PAVEMENT MARKING SYMBOLS



#### ROADWAY STANDARD DRAWINGS & LEGEND

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

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A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME DAY AND TIME RESTRICTIONS

WASHBURN SWITCH RD -L-CUSTOMER FIRST DR -Y1-MON THRU FRI 6:00 AM TO 9:00AM & 4:00 PM TO 7:00 PM & 4:00 PM TO 9:00AM & 4:00 PM TO 7:00 PM

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

ROAD NAME

WASHBURN SWITCH RD -L-

HOLIDAY

- 1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFF VOLUMES, AS DIRECTED BY THE ENGINEER.
- 2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 4:00 P.M. DECEMBER 31st TO 9:00 A.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 4:00 P.M. THURSDAY AND 9:00 A.M. MONDAY.
- 4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 4:00 P.M. FRIDAY TO 9:00 A.M. TUESDAY.
- 5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 4:00 P.M. THE DAY BEFORE INDEPENDENCE DAY AND 9:00 A.M. THE DAY AFTER INDEPENDENCE DAY.

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 4:00 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 9:00 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.

- 6. FOR LABOR DAY, BETWEEN THE HOURS OF 4:00 P.M. FRIDAY AND 9:00 A.M. TUESDAY.
- 7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 4:00 P.M. TUESDAY TO 9:00 A.M. MONDAY.
- 8. FOR CHRISTMAS, BETWEEN THE HOURS OF 4:00 P.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 9:00 A.M. THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.

LANE AND SHOULDER CLOSURE REQUIREMENTS

- C) 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.
- D) 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. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

## **GENERAL NOTES**

	E)	WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER		PAVEMEN		
		ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING F STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECT BARRIER OR GUARDRAIL.		P)	INS ON	
		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 ROADWA			RO/ WAS CUS	
		STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECT BARRIER OR GUARDRAIL.	ED BY	Q)	INS	
	F)	WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDI THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND	NG TO DIRECTED	R)	PL/ PL/ API	
	G)	EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE. DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN	OPEN	S)	TII LII	
		TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROWITH GUARDRAIL OR BARRIER.	TECTED	T)	REI MAI	
	PAV	EMENT EDGE DROP OFF REQUIREMENTS		MISC	CELL	
	H)	BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXIS PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:		U)	IN TII THI ANI	
		BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.			100 T0	
		BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.				
FIC		BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.	IE		UN	
6	I)	) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 100 FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.			UN TW	
	TRA	FFIC PATTERN ALTERATIONS				
	J)	NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO A TRAFFIC PATTERN ALTERATION.	NY		TH	
	SIG	NING			ARI ( - `	
	K)	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.			TEI ARI RD WII	
	L)	ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING A TRAFFIC PATTERN.	NY		FL/ WOI INI	
	M)	INSTALL BLACK ON ORANGE ''DIP'' SIGNS (W8-2) AND/OR "BUMP" SIG (W8-1) 100 FT IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED ENGINEER.				
C	TRA	TRAFFIC CONTROL DEVICES				
	N)	WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVI AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT ( 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN T REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SE 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDIT REQUIREMENTS.	MPH) EXCEPT, RAVELWAY. CTIONS			
	0)	PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.	APPROVED:		111/1ª	
			SEAI	L (		

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NT MARKINGS AND MARKERS

NSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS

DAD NAME	MARKING	MARKER
SHBURN SWITCH RD -L-	PAINT	NONE
JSTOMER FIRST DR -Y1-	PAINT	NONE

STALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE.

ACE ONE APPLICATION OF PAINT FOR TEMPORARY TRAFFIC PATTERNS. ACE A SECOND APPLICATION OF PAINT SIX (6) MONTHS AFTER THE INITIAL PPLICATION AND EVERY SIX MONTHS AS DIRECTED BY THE ENGINEER.

IE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING

EMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND ARKERS BY THE END OF EACH DAY'S OPERATION.

ANEOUS

N THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAY'S TIME, BRING THE IE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION AS DETERMINED BY HE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) ND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 100 FT AND DO FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS D DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

## LOCAL NOTES

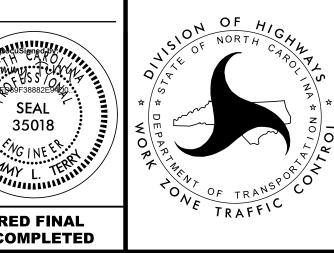
ILESS OTHERWISE NOTED PROVIDE ACCESS TO ALL DRIVES AT ALL TIMES.

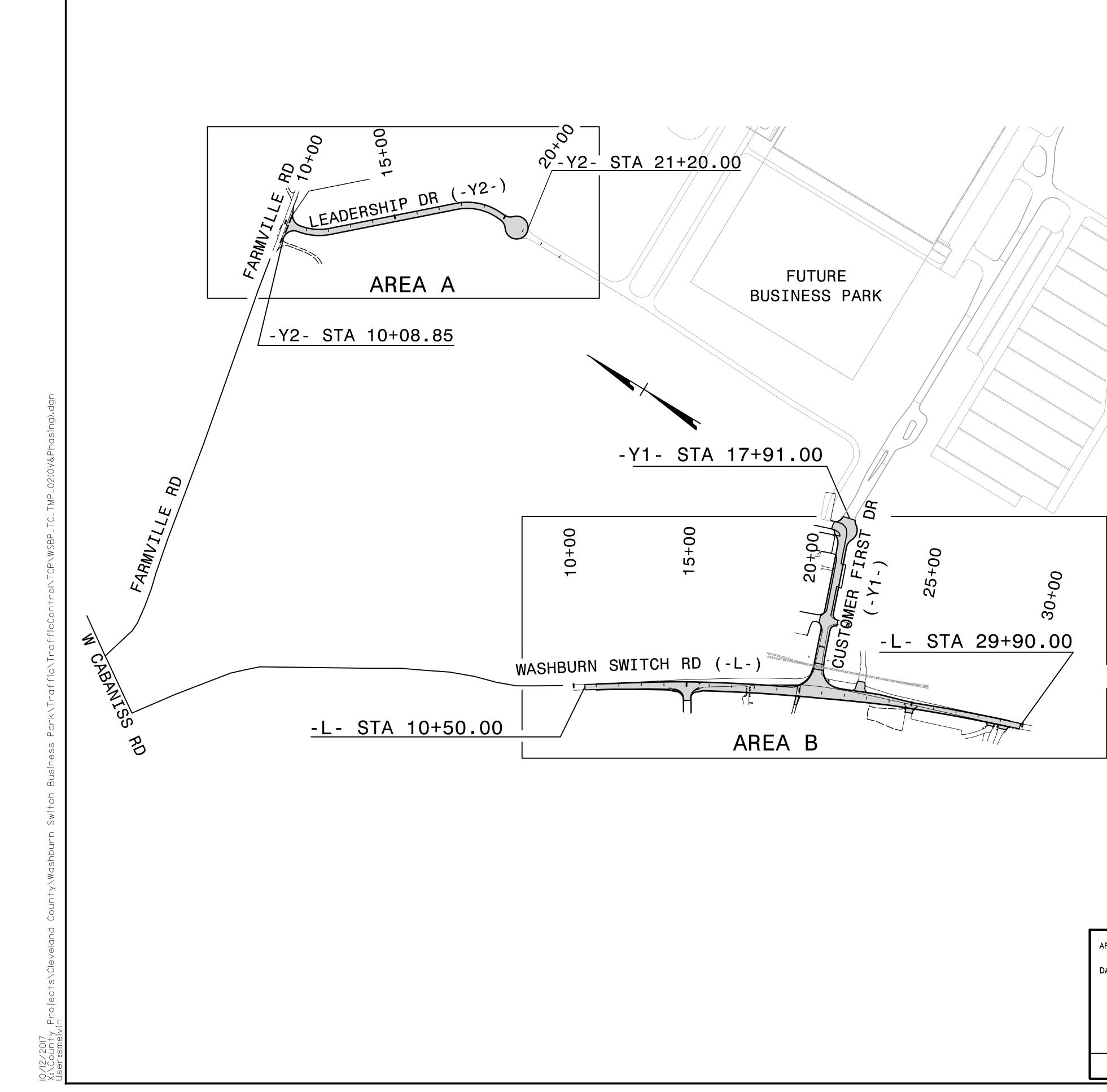
NLESS OTHERWISE NOTED TWO WAY THROUGH TRAFFIC SHALL BE MAINTAINED ON VO 11 FT (MIN) LANES AT ALL TIMES WHILE FLAGGERS ARE NOT AT WORK.

## MANAGEMENT STRATEGIES

HIS PROJECT CONSIST OF TWO WORK ZONE AREAS: REA A - CONSTRUCTION OF THE PROPOSED LEADERSHIP DR -Y2-) WILL BE CONSTRUCTED USING ROAD CLOSURES AND EMPORARY LANE CLOSURES ON FARMVILLE RD AS NEEDED. REA B - CONSTRUCTION OF TURN LANES ON WASHBURN SWITCH O (-L-) AND CONSTRUCTION OF CUSTOMER FIRST DR (-Y1-) ILL BE CONSTRUCTED USING TEMPORARY ROAD CLOSURES AND _AGGERS.

ORK IN BOTH AREAS CAN BE DONE CONCURRENTLY AND ARE NDEPENDENT FROM EACH OTHER.





AREA A AREA B

SEE TMP-2

UNLESS OTHERWISE NOTED TWO WAY THROUGH TRAFFIC SHALL BE MAINTAINED ON TWO 11 FT (MIN) LANES AT ALL TIMES WHILE FLAGGERS ARE NOT AT WORK.

PHASE I

STEP 1:

INSTALL ALL ADVANCES WORK ZONE WARNING SIGNS IN ACCORDANCE WITH NCDOT RDY STD DRAWING 1101.01 (SHT 3 OF 3).

PHASE I Area A

STEP 2:

WITHOUT DISTRURBING ANY EXISTING TRAFFIC, GRADE, PLACE ALL DRAINAGE STRUCTURES, AND PLACE THE AGGREGATE BASE COURSE LAYER OF -Y2- FROM STA. 10+08.85 TO 21+20.00. SEE TMP-3

NOTE: THE CITY OF SHELBY WILL INSTALL WATER AND GAS LINES ONCE ROUGH GRADING, DRAINAGE, AND ABC IS PLACED. THE CONTRACTOR IS TO GIVE THE CITY 30 DAYS NOTICE PRIOR OF COMPLETION OF THIS STEP.

STEP 3:

PLACE CURB AND GUTTER AND CONSTRUCT LEADERSHIP DR (-Y2-) UP TO AND INCLUDING THE FINAL LAYER OF SURFACE COURSE FROM -Y2- STA. 10+08.05 TO STA. 21+20.00. SEE TMP-3

STEP 4:

PHASE I Area B

STEP 2:

WITHOUT DISTURBING ANY EXISTING TRAFFIC CONSTRUCT THE FOLLOWING: 1.GRADE WASHBURN SWITCH RD FROM L- STA. 10+50.00 TO STA. 29+90.00 RT AS SHOWN ON PLANS 2.START PROPOSED WATER LINE CONSTRUCTION ADJACENT TO WASHBURN SWITCH RD SEE TMP-4 AND NCDOT RDY STD DRAWING 1101.04

STEP 3:

USING TEMPORARY LANE CLOSURES AND FLAGGERS AS NEEDED CONSTRUCT WASHBURN SWITCH RD (-L-) FROM STA. 10+50.00 TO STA. 29+90.00 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. REMOVE EXISTING PAVEMENT AS SHOWN ON PLANS. SEE TMP-4 AND NCDOT RDY STD DRAWING 1101.02 (SHEET 1 OF 14)

USING TEMPORARY LANE CLOSURES AND FLAGGERS AS NEEDED CONSTRUCT CUSTOMER FIRST DR (-Y1-) FROM STA. 10+32.16 TO STA. 17+91.00 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. PLACE CURB AND GUTTER. SEE TMP-4 AND NCDOT RDY STD DRAWING 1101.02 (SHEET 1 OF 14)

NOTE: COORDINATE WITH RAIL FORCES ABOUT CONSTRUCTION OF THE RAIL CROSSING AND RELOCATION OF RAIL SIGNALS AT CLEARWATER DR.

PLACE TEMPORARY PAVEMENT MARKINGS IN FINAL PATTERN AS SHOWN ON PLAN. SEE TMP-4, NCDOT RDY STD DRAWING 1101.02 (SHEET 1 OF 14) AND PAVEMENT MARKING PLANS.

STEP 4: USING TEMPORARY LANE CLOSURES AND FLAGGERS AS NEEDED PLACE THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS: -L- STA. 10+50.00 TO STA. 29+90.00 -Y1- STA. 10+32.16 TO STA. 17+91.00

SEE TMP-2 AND NCDOT RDY STD DRAWING 1101.02 (SHEET 1 OF 14)

STEP 5:

USING TEMPORARY LANE CLOSURES AND FLAGGERS AS NEEDED PLACE FINAL PAVEMENT MARKINGS AS SHOWN ON PAVEMENT MARKING PLANS: -L- STA. 10+50.00 TO STA. 29+90.00 -Y1- STA. 10+32.16 TO STA. 17+91.00 SEE PAVEMENT MARKING PLANS AND NCDOT RDY STD DRAWING 1101.02 (SHEET 1 OF 14)

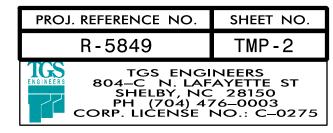
STEP 6: (ALL AREAS) REMOVE ALL TRAFFIC CONTROL DEVICES.

APPROVED: DATE: SEAL 11/14/2017 **DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED** 

## **PHASING**

THIS PROJECT CONSIST OF TWO WORK ZONE AREAS:

CONSTRUCTION OF THE PROPOSED LEADERSHIP RD (-Y2-) CONNECTING FARMVILLE RD TO THE PROPOSED INDUSTRIAL PARK



CONSTRUCTION OF TURN LANES ON WASHBURN SWITCH RD (-L-) AND CONSTRUCTION OF CUSTOMER FIRST DR (-Y1-)FROM WASHBURN SWITCH RD TO THE PROPOSED INDUSTRIAL PARK.

WORK IN BOTH AREAS CAN BE DONE CONCURRENTLY AND ARE INDEPENDENT FROM EACH OTHER.

UNLESS OTHERWISE NOTED PROVIDE ACCESS TO ALL DRIVES AT ALL TIMES.

PLACE FINAL PAVEMENT MARKINGS AS SHOWN ON PAVEMENT MARKING PLANS.



# OVERVIEW AND PHASING

