TIP PROJECT: B-3480

CONTRACT:

12/5/2011
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odynskrg

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
B-3480	TCP-1

STV/ Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208
NC License Number F-0991

PLAN FOR PROPOSED TRAFFIC CONTROL, MARKING & DELINEATION

JACKSON COUNTY

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - 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
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.06	WARNING SIGNS FOR BLASTING ZONES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES- TYPE III
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION-REFLECTIVE END TREATMENT
1165.01	TRUCK MOUNTED IMPACT ATTENUATOR-DELINEATION
1170.01	POSITIVE PROTECTION-PORTABLE CONCRETE BARRIER
1180.01	SKINNY DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO LANE & MULTI LANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.12	PAVEMENT MARKINGS - BRIDGES
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS - TEMPORARY AND PERMANENT
1261.01	GUARDRAIL AND BARRIER DELINEATOR SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATOR TYPES
1262.01	GUARDRAIL END DELINEATION
1264.01	OBJECT MARKERS
1264.02	PLACEMENT OF OBJECT MARKERS
1267.01	FLEXIBLE DELINEATOR INSTALLATION
1267.02	FLEXIBLE DELINEATOR SPACING

INDEX OF SHEETS

TEMP. PAVEMENT MARKINGS

SYMBOL	DESCRIPTION	PAVEMENT MARKINGS	BREAKDOWN	TOTAL QUANTITY
PA	WHITE EDGELINE	PAINT (4")	4,256 (LF)	TOTAL 4,256' (4")
PI	YELLOW DOUBLE CENTERLINE	PAINT (4")	4,160 (LF)	TOTAL 4,160' (4")
P4	WHITE STOPBAR	PAINT (24")	62 (LF)	TOTAL 62' (24")
RA	WHITE EDGELINE	COLD APPLIED (4") TYPE 4	460 (LF)	TOTAL 460' (4")
RI	YELLOW DOUBLE CENTERLINE	COLD APPLIED (4") TYPE 4	460 (LF)	TOTAL 460' (4")

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- NORTH ARROW
- PROPOSED PVMT. ---------- EXIST. PVMT.
- WORK AREA
- TEMPORARY PAVEMENT

TRAFFIC CONTROL DEVICES

- TYPE I BARRICADE
- TYPE II BARRICADE
- TYPE III BARRICADE
- CONE
- DRUM
- SKINNY DRUM
- FLASHING ARROW PANEL (TYPE C)
- STATIONARY SIGN
- PORTABLE SIGN
- STATIONARY OR PORTABLE SIGN
- CRASH CUSHION
- CHANGEABLE MESSAGE SIGN
- TRUCK MOUNTED IMPACT ATTENUATOR (TMIA)
- POLICE
- FLAGGER

PAVEMENT MARKINGS

- CRYSTAL/CRYSTAL PAVEMENT MARKER
- YELLOW/YELLOW PAVEMENT MARKER
- CRYSTAL/RED PAVEMENT MARKER
- PAVEMENT MARKING SYMBOLS

PLAN REVIEWED BY: N.C.D.O.T. TRAFFIC CONTROL, MARKING & DELINEATION SECTION

J. STUART BOURNE, P.E. — *TRAFFIC CONTROL ENGINEER*
J. STEVE KITE, P.E. — *TRAFFIC CONTROL PROJECT ENGINEER*
DAVID BISSETTE, P.E. — *TRAFFIC CONTROL PROJ. DESIGN ENGINEER*
STEVE MILLER, P.E. — *TRAFFIC CONTROL DESIGN ENGINEER/ TECHNICIAN*

APPROVED: _____
DATE: _____

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 032699 ENGINEER JOSEPH A. FREEMAN
12-6-11

PLAN PREPARED FOR N.C.D.O.T. BY: STV/RALPH WHITEHEAD ASSOCIATES

JOSEPH A. FREEMAN, PE — *PROJECT ENGINEER*
RICHARD ODYNSKI, PE — *DESIGN ENGINEER*
MAAMOON ABDELAZIZ — *DESIGN TECHNICIAN*

PROJ. REFERENCE NO.	SHEET NO.
B-3480	TCP-2

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GENERAL 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:

ROAD NAME	DAY AND TIME RESTRICTIONS
NC 107 (-L-)	MONDAY THRU FRIDAY 7:00 AM TO 8:30 AM
	MONDAY THRU FRIDAY 4:00 PM TO 6:00 PM
SHOOK COVE RD (-Y-)	MONDAY THRU FRIDAY 7:00 AM TO 8:30 AM
	MONDAY THRU FRIDAY 4:00 PM TO 6:00 PM

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

ROAD NAME

NC 107 (-L-)
SHOOK COVE RD (-Y-)

HOLIDAY

1. FOR ANY UNEXPECTED OCCURENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 7:00 AM DECEMBER 31ST TO 8:30 AM JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY SUNDAY, OR MONDAY THEN UNTIL 8:30 AM THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 7:00 AM THURSDAY AND 8:30 AM MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 7:00 AM FRIDAY AND 8:30 AM TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 7:00 AM THE DAY BEFORE INDEPENDENCE DAY AND 8:30 AM THE DAY AFTER INDEPENDENCE DAY.

   IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 7:00 AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 8:30 AM THE TUESDAY AFTER INDEPENDENCE DAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 7:00 AM FRIDAY AND 8:30 AM TUESDAY.
7. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 7:00 AM TUESDAY AND 8:30 AM MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 7:00 AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 8:30 AM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
9. FOR WEEKENDS DURING THE MONTH OF OCTOBER

C) DO NOT STOP TRAFFIC AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS	DURATION AND OPERATION
NC 107 (-L-)	MONDAY THRU FRIDAY 7:00 AM TO 8:30 AM	20 MINS. FOR BLASTING,
	MONDAY THRU FRIDAY 4:00 PM TO 6:00 PM	GIRDERS, OR DELIVERIES
SHOOK COVE RD (-Y-)	MONDAY THRU FRIDAY 7:00 AM TO 8:30 AM	20 MINS. FOR BLASTING,
	MONDAY THRU FRIDAY 4:00 PM TO 6:00 PM	GIRDERS, OR DELIVERIES

D) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE HAULING OPERATION IS PROTECTED BY BARRIER OR GUARDRAIL OR AS DIRECTED BY THE ENGINEER.

LANE AND SHOULDER CLOSURE REQUIREMENTS

E) 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.

F) 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.

G) 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. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

PROJECT NOTES

H) 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.

I) 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

J) 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.

K) 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) IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

TRAFFIC PATTERN ALTERATIONS

L) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

M) 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.

N) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

O) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) AND/OR "BUMP" SIGNS (W8-1) 350 ft. IN ADVANCE OF THE UNEVEN AREA, OR AS DIRECTED BY THE ENGINEER.

TRAFFIC BARRIER

P) INSTALL TEMPORARY BARRIER ACCORDING TO THE TRAFFIC CONTROL PLANS A MAXIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING WORK IN ANY LOCATION. ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION, PROCEED IN A CONTINUOUS MANNER TO COMPLETE THE PROPOSED WORK IN THAT LOCATION UNLESS OTHERWISE STATED IN THE TRAFFIC CONTROL PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE.

ONCE TEMPORARY BARRIER IS INSTALLED AT ANY LOCATION AND NO WORK IS PERFORMED BEHIND THE TEMPORARY BARRIER FOR A PERIOD LONGER THAN TWO (2) MONTHS, REMOVE/RESET TEMPORARY BARRIER AT NO COST TO THE DEPARTMENT UNLESS OTHERWISE STATED IN THE TRAFFIC CONTROL PLANS, TEMPORARY BARRIER IS PROTECTING A HAZARD, OR AS DIRECTED BY THE ENGINEER.

INSTALL TEMPORARY BARRIER WITH THE TRAFFIC FLOW, BEGINNING WITH THE UPSTREAM SIDE OF TRAFFIC. REMOVE TEMPORARY BARRIER AGAINST THE TRAFFIC FLOW, BEGINNING WITH THE DOWNSTREAM SIDE OF TRAFFIC.

INSTALL AND SPACE DRUMS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH) TO CLOSE OR KEEP THE SECTION OF THE ROADWAY CLOSED UNTIL THE TEMPORARY BARRIER CAN BE PLACED OR AFTER THE TEMPORARY BARRIER IS REMOVED.

Q) PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER AT ALL TIMES DURING THE INSTALLATION AND REMOVAL OF THE BARRIER BY EITHER A TRUCK MOUNTED IMPACT ATTENUATOR (MAXIMUM 72 HOURS) OR A TEMPORARY CRASH CUSHION.

PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION.

TRAFFIC CONTROL DEVICES

R) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1800 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.

S) PLACE TYPE III BARRICADES, WITH "ROAD CLOSED" SIGN R11-2 ATTACHED, OF SUFFICIENT LENGTH TO CLOSE ENTIRE ROADWAY.

T) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PAVEMENT MARKINGS AND MARKERS

U) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ALL ROADS	PAINT	RAISED
BRIDGE DECK	COLD APPLIED (4") TYPE 4	RAISED

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

W) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

X) REMOVE / REPLACE ANY CONFLICTING / DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

LOCAL NOTES

1) INSTALL SIGNS BEFORE INSTALLING THE BARRICADES WHEN CLOSING THE ROADWAY TO TRAFFIC. REMOVE BARRICADES BEFORE REMOVING THE SIGNS WHEN OPENING THE ROADWAY TO TRAFFIC.
2) MAINTAIN DRIVEWAY ACCESSES WITHIN PROJECT LIMITS.
3) REAPPLY PAVEMENT MARKINGS UP TO 100' BEYOND CONSTRUCTION LIMITS IF NEEDED TO REPAIR DAMAGE AND / OR TRACKING FROM CONSTRUCTION.
4) CONTRACTOR SHALL MAINTAIN EXISTING GUARDRAIL UNTIL WARRANTS NO LONGER EXIST.

APPROVED:_____ DATE:_____

SEAL 032599 NORTH CAROLINA PROFESSIONAL SEAL ENGINEER JOSEPH A. FREEMAN 12-6-11

PROJECT NOTES

SCALE:	NONE
DATE:	12/06/11
DWG. BY:	RAO
DESIGN BY:	RAO
REVIEWED BY:	JAF

REVISIONS

CADD FILE

12/5/2011
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PROJ. REFERENCE NO.	SHEET NO.
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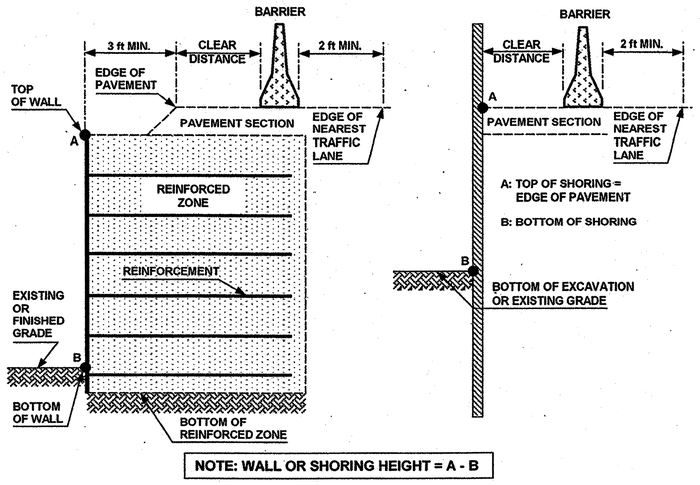

FIGURE A

NOTES

1- REFER TO THE TRAFFIC CONTROL PLANS FOR SHORING LOCATIONS AND SOIL PARAMETERS.

2- REFER TO THE "TEMPORARY SHORING" PROJECT SPECIAL PROVISION FOR MORE INFORMATION ABOUT TEMPORARY SHORING, MEASUREMENT AND PAYMENT.

3- PROVIDE PORTABLE CONCRETE BARRIER TO PROTECT TEMPORARY SHORING IF SHORING IS LOCATED WITHIN THE CLEAR ZONE AS DEFINED IN THE AASHTO ROADSIDE DESIGN GUIDE. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE. (CONTACT NCDOT PAVEMENT MANAGEMENT UNIT FOR APPLICABLE PAVEMENT DESIGN).

4- BASED ON THE CLEAR DISTANCE, OFFSET, DESIGN SPEED AND PAVEMENT TYPE, CHOOSE AN UNANCHORED PCB, ANCHORED PCB OR AN OREGON BARRIER FROM THE TABLE SHOWN IN FIGURE B. FOR TRAFFIC LANES AND PORTABLE CONCRETE BARRIER LOCATED ABOVE AND BEHIND TEMPORARY SHORING, THE FOLLOWING ARE DEFINED AS:

CLEAR DISTANCE - HORIZONTAL DISTANCE FROM THE BACK FACE OF THE BARRIER TO THE EDGE OF PAVEMENT FOR TEMPORARY MSE WALL OR TO THE FACE OF NON-ANCHORED TEMPORARY SHORING AS SHOWN IN FIGURE A.

OFFSET - HORIZONTAL DISTANCE FROM THE FRONT FACE OF THE BARRIER TO CENTERLINE OF THE FURTHEST TRAFFIC LANE AS SHOWN IN FIGURE B FOR 3 TRAFFIC LANES.

5- AT THE CONTRACTOR'S OPTION OR IF THE MINIMUM REQUIRED CLEAR DISTANCE IS NOT AVAILABLE, SET AN UNANCHORED PCB AGAINST THE TRAFFIC SIDE OF THE SHORING AND DESIGN SHORING FOR TRAFFIC IMPACT OR USE THE "SURCHARGE CASE WITH TRAFFIC IMPACT" FOR THE STANDARD TEMPORARY SHORING. DO NOT PLACE BARRIER DIRECTLY ON ANY SURFACE OTHER THAN ASPHALT OR CONCRETE. (CONTACT NCDOT PAVEMENT MANAGEMENT UNIT FOR APPLICABLE PAVEMENT DESIGN).

6- USE NCDOT PORTABLE CONCRETE BARRIER (PCB) IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1170.01 AND SECTION 1170 OF THE STANDARD SPECIFICATIONS.

7- USE OREGON TALL F-SHAPE CONCRETE BARRIER IN ACCORDANCE WITH DETAIL DRAWING AND SPECIAL PROVISION OBTAINED FROM: WORK ZONE TRAFFIC CONTROL UNIT WEB PAGE.

8- UNLESS NOTED OTHERWISE ON THE PLANS, SET PORTABLE CONCRETE BARRIER WITH A MINIMUM DISTANCE OF 2 FT BETWEEN THE FRONT FACE OF THE BARRIER AND THE EDGE OF THE NEAREST TRAFFIC LANE AS SHOWN IN FIGURE A.

9- FOR PORTABLE CONCRETE BARRIER ABOVE AND BEHIND TEMPORARY MSE WALLS, PROVIDE A MINIMUM DISTANCE OF 3 FT BETWEEN THE EDGE OF PAVEMENT AND THE WALL FACE AS SHOWN IN FIGURE A. IF THESE MINIMUM REQUIRED DISTANCES ARE NOT AVAILABLE, CONTACT THE ENGINEER.

10- TABLE SHOWN IN FIGURE B IS BASED ON NCDOT RESEARCH PROJECT NO. 2005-010 WITH VEHICLE TYPE USED FOR NCHRP 350 CRASH TESTS. BARRIER DEFLECTIONS AND RESULTING MINIMUM REQUIRED CLEAR DISTANCES MIGHT VARY SIGNIFICANTLY FOR LARGER HEAVIER VEHICLES, RUNS OF BARRIER LESS THAN 200' IN LENGTH AND WET OR DRY PAVEMENT.

MINIMUM REQUIRED CLEAR DISTANCE, inches

Barrier Type	Pavement Type	Offset * ft	Design Speed, mph					
			<30	31-40	41-50	51-60	61-70	71-80
Unanchored PCB	Asphalt	<8	24	26	29	32	36	40
		8-14	26	28	31	35	38	42
		14-20	27	29	34	36	39	43
		20-26	28	31	35	38	40	44
		26-32	29	32	36	39	42	45
		32-38	30	34	38	41	43	46
		38-44	31	34	41	43	45	48
		44-50	31	35	41	43	46	49
		50-56	32	36	42	44	47	50
		>56	32	36	42	45	47	51
	Concrete	<8	17	18	21	22	25	26
		8-14	19	20	23	25	26	29
		14-20	22	22	24	26	28	31
		20-26	23	24	26	27	30	34
		26-32	24	25	27	28	32	35
		32-38	24	26	27	30	33	36
		38-44	25	26	28	30	34	37
		44-50	26	26	28	32	35	37
		50-56	26	26	28	32	35	38
		>56	26	27	29	32	36	38
Anchored PCB or Oregon Barrier	Asphalt	All Offsets	24 for All Design Speeds					
Anchored PCB or Oregon Barrier	Concrete (including bridge approach slabs)	All Offsets	12 for All Design Speeds					

*** See Figure Below**

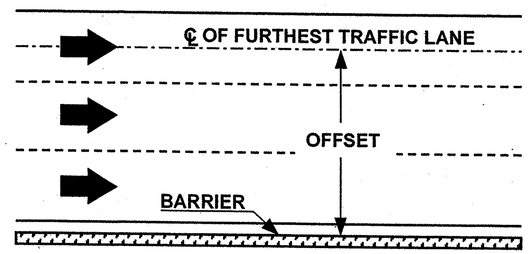

FIGURE B

APPROVED: _____ DATE: _____

SEAL 028380 ENGINEER JOSEPH ISHAK

PORTABLE CONCRETE BARRIER AT TEMPORARY SHORING LOCATIONS

SCALE:	NONE
DATE:	3/07
DWG. BY:	JI
DESIGN BY:	JI
REVIEWED BY:	JI

REVISIONS
12/08
CADD FILE

See 12/2008

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PROJ. REFERENCE NO.	SHEET NO.
B-3480	TCP-2B

TEMPORARY SHORING DATA

TEMPORARY SHORING NO. 1

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 16+84±, 9.5 FT RIGHT OF -L-, TO STATION 17+09±, 9.5 FT RIGHT OF -L-.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 16+84±, 9.5 FT RIGHT OF -L-, TO STATION 17+09±, 9.5 FT RIGHT OF -L-. SEE STANDARD DRAWING NO. 1801.01 STANDARD TEMPORARY SHORING.

DESIGN TEMPORARY SHORING FROM STATION 16+84±, 9.5 FT RIGHT OF -L-, TO STATION 17+09±, 9.5 FT RIGHT OF -L-. FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:
UNIT WEIGHT, γ = 120 PCF
FRICTION ANGLE, ϕ = 30 DEGREES
COHESION, c = 0 PSF
GROUNDWATER ELEVATION = 2135.9 FT.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF THE TEMPORARY SHORING FROM STATION 16+84±, 9.5 FT RIGHT OF -L-, TO STATION 17+09±, 9.5 FT RIGHT OF -L-. THE INFORMATION PROVIDED FOR DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

TEMPORARY SHORING NO. 2

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 18+82±, 9.5 FT RIGHT OF -L-, TO STATION 19+07±, 9.5 FT RIGHT OF -L-.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION 18+82±, 9.5 FT RIGHT OF -L-, TO STATION 19+07±, 9.5 FT RIGHT OF -L-. SEE STANDARD DRAWING NO. 1801.01 STANDARD TEMPORARY SHORING.

DESIGN TEMPORARY SHORING FROM STATION 18+82+/-, 9.5 FT RIGHT OF -L-, TO STATION 19+07+/-, 9.5 FT RIGHT OF -L-. FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:
UNIT WEIGHT, γ = 120 PCF
FRICTION ANGLE, ϕ = 30 DEGREES
COHESION, c = 0 PSF
GROUNDWATER ELEVATION = 2136.4 FT.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF THE TEMPORARY SHORING FROM STATION 18+82±, 9.5 FT RIGHT OF -L-, TO STATION 19+07±, 9.5 FT RIGHT OF -L-. THE INFORMATION PROVIDED FOR DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

TEMPORARY SHORING NO. 3

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 16+84±, 9.0 FT RIGHT OF -L-, TO STATION 17+09±, 9.0 FT RIGHT OF -L-. SEE STANDARD DRAWING NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

DESIGN TEMPORARY SHORING FROM STATION 16+84±, 9.0 FT RIGHT OF -L-, TO STATION 17+09±, 9.0 FT RIGHT OF -L-. FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:
UNIT WEIGHT, γ = 120 PCF
FRICTION ANGLE, ϕ = 30 DEGREES
COHESION, c = 0 PSF
GROUNDWATER ELEVATION = 2135.9 FT.

WHEN BACKFILL FOR RETAINING BRIDGE APPROACH FILLS OVERLAPS WITH THE REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL OR BACKFILL MATERIAL REQUIRED FOR BRIDGE APPROACH FILLS, WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY WALLS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF THE TEMPORARY SHORING FROM STATION 16+84±, 9.0 FT RIGHT OF -L-, TO STATION 17+09±, 9.0 FT RIGHT OF -L-. THE INFORMATION PROVIDED FOR DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

TEMPORARY SHORING NO. 4

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

AT THE CONTRACTOR'S OPTION, USE A STANDARD TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 18+82±, 9.0 FT RIGHT OF -L-, TO STATION 19+07±, 9.0 FT RIGHT OF -L-. SEE STANDARD DRAWING NO. 1801.02 FOR STANDARD TEMPORARY WALLS.

DESIGN TEMPORARY SHORING FROM STATION 18+82±, 9.0 FT RIGHT OF -L-, TO STATION 19+07±, 9.0 FT RIGHT OF -L-. FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:
UNIT WEIGHT, γ = 120 PCF
FRICTION ANGLE, ϕ = 30 DEGREES
COHESION, c = 0 PSF
GROUNDWATER ELEVATION = 2136.4 FT.

WHEN BACKFILL FOR RETAINING BRIDGE APPROACH FILLS OVERLAPS WITH THE REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL OR BACKFILL MATERIAL REQUIRED FOR BRIDGE APPROACH FILLS, WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY WALLS.

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF THE TEMPORARY SHORING FROM STATION 18+82±, 9.0 FT RIGHT OF -L-, TO STATION 19+07±, 9.0 FT RIGHT OF -L-. THE INFORMATION PROVIDED FOR DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

TEMPORARY SHORING NO. 5

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

DO NOT USE A TEMPORARY WALL FOR TEMPORARY SHORING FROM STATION 11+82±, 6.0 FT LEFT OF -L-, TO STATION 13+15±, 6.0 FT LEFT OF -L-.

DESIGN TEMPORARY SHORING FROM STATION 11+82+/-, 6.0 FT LEFT OF -L-, TO STATION 13+15±, 6.0 FT LEFT OF -L-. FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:
UNIT WEIGHT, γ = 120 PCF
FRICTION ANGLE, ϕ = 30 DEGREES
COHESION, c = 0 PSF
GROUNDWATER ELEVATION = 2135 FT.

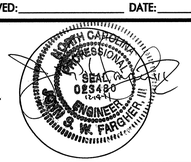
LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF THE TEMPORARY SHORING FROM STATION 11+82±, 6.0 FT LEFT OF -L-, TO STATION 13+15±, 6.0 FT LEFT OF -L-. THE INFORMATION PROVIDED FOR DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

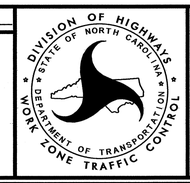
DRIVEN PILING FOR TEMPORARY SHORING FROM STATION 11+82±, 6.0 FT LEFT OF -L-, TO STATION 13+15±, 6.0 FT LEFT OF -L- MAY NOT PENETRATE BELOW ELEVATION 2110.0 FT DUE TO OBSTRUCTIONS, VERY DENSE OR HARD SOIL, BOULDERS OR WEATHERED OR HARD ROCK.

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING OR TEMPORARY SHORING FROM STATION 11+82±, 6.0 FT LEFT OF -L-, TO STATION 13+15±, 6.0 FT LEFT OF -L-. SEE STANDARD DRAWING NO. 1801.01 FOR STANDARD TEMPORARY SHORING.

APPROVED:_____ DATE:_____

SEAL





TEMPORARY SHORING DATA

PROJ. REFERENCE NO.	SHEET NO.
B-3480	TCP-3

STV/Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208
NC License Number F-0991

CONSTRUCTION PHASING

PHASE I

STEP 1: INSTALL WORK ZONE ADVANCE WARNING SIGNS ON ALL ROADWAYS WITHIN THE PROJECT LIMITS IN ACCORDANCE WITH ROADWAY STANDARD DRAWING 1101.01, SHEET 3 OF 3.

STEP 2: WHILE MAINTAINING VEHICULAR AND PEDESTRIAN TRAFFIC ON THE EXISTING ROADWAY AND USING ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 15 AS NEEDED, PERFORM THE FOLLOWING AS SHOWN ON TCP-4:

BEGIN CONSTRUCTION OF THE CROSS DRAINAGE SYSTEMS, MAINTAINING DRAINAGE BETWEEN THE PROPOSED AND EXISTING SYSTEM.

CONSTRUCT PROPOSED WIDENING RT OF -L- FROM STA. 11+50 TO 16+00 & TEMPORARY PAVEMENT FROM STA. 11+17 TO 11+50, UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. STOP TRAFFIC AS NECESSARY FOR BLASTING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING 1101.06. USE WEDGING AS NECESSARY TO MAINTAIN TIE WITH EXISTING ROADWAY.

INSTALL TEMPORARY SHORING LOCATIONS #1 & #3 FROM -L STA. 16+84 TO 17+09 (9.5′ RT) AND (9.0′ RT) RESPECTIVELY & #2 & #4 FROM -L- STA. 18+82 TO 19+07 (9.5′ RT) AND (9.0′ RT) RESPECTIVELY AND CONSTRUCT LEFT SIDE OF PROPOSED BRIDGE.

BEGIN WEDGING AND WIDENING OF -Y- STA 10+69 TO 15+50 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

BEGIN CONSTRUCTION OF PROPOSED WIDENING LT OF -L- STA 15+00 TO 17+06 AND FROM STA 18+86 TO 24+50 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE IN A MANNER THAT MAINTAINS DRAINAGE AND AVOIDS PONDING.

STEP 3: USING ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 15 AS NEEDED, INSTALL TEMPORARY PAVEMENT MARKINGS, DRUMS, AND SIGNAGE AS SHOWN ON TCP-5. SHIFT TRAFFIC ONTO THE PROPOSED TEMPORARY ALIGNMENT.

INSTALL PORTABLE CONCRETE BARRIER LEFT OF -L- FROM STA 11+50 TO 15+00.

STEP 4: INSTALL TEMPORARY SHORING LOCATION #5 FROM -L- STA 11+82 TO 13+15 (6.0′ LT). CONSTRUCT THE PROPOSED WIDENING LEFT OF -L- FROM STA. 11+50 TO 15+00 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE. USE WEDGING IF NECESSARY TO MAINTAIN TIE TO EXISTING ROADWAY.

COMPLETE BRIDGE LEFT OF -L-, INSTALL PORTABLE CONCRETE BARRIER FROM STA 16+81 TO 19+90 RIGHT OF -L- AS SHOWN ON TCP-4.

STEP 5: USING ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 15 AS NEEDED, PERFORM THE FOLLOWING IN A CONTINOUS MANNER:

REMOVE SOUTHWEST PORTION OF THE EXISTING GUARDRAIL FROM -L- STA. 15+00 TO 17+00. (SEE LOCAL NOTE #4)

COMPLETE THE PROPOSED WIDENING LEFT OF -L- FROM STA 11+50 TO 24+50 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

REMOVE PORTABLE CONCRETE BARRIER LEFT OF -L- FROM STA 11+50 TO 15+00 AND PLACE TEMPORARY MARKINGS AND MARKERS AS SHOWN ON TCP-6.

INSTALL ROAD NARROWS SIGNS AS SHOWN ON TCP-6 AND SHIFT VEHICULAR TRAFFIC TO A ONE-LANE, TWO-WAY PATTERN ON THE LEFT SIDE OF THE NEWLY CONSTRUCTED ROADWAY AND BRIDGE.

MOVE DRUMS AND BARRICADES TO THE LOCATIONS SHOWN ON TCP-6.

INSTALL TEMPORARY GUARDRAIL AS SHOWN ON TCP-6, RETURNING TRAFFIC TO A TWO-LANE, TWO-WAY PATTERN ON THE LEFT SIDE OF -L- BY THE END OF THE WORK DAY.

SHIFT PEDESTRIAN TRAFFIC TO THE FOUR-FOOT WIDE PORTION OF THE NEWLY CONSTRUCTED BRIDGE AS SHOWN ON TCP-6.

PHASE II

STEP 1: WHILE MAINTAINING TRAFFIC ON THE TEMPORARY ALIGNMENT AND USING ROADWAY STANDARD DRAWING 1101.02 SHEET 1 OF 9 AND FLAGGERS AS NEEDED, PERFORM THE FOLLOWING AS SHOWN ON TCP-6.

REMOVE THE EXISTING BRIDGE & TEMPORARY SHORING LOCATION #1 & #2

CONSTRUCT THE RIGHT SIDE OF THE PROPOSED BRIDGE. ONCE THIS PORTION OF THE BRIDGE IS COMPLETED REMOVE THE PORTABLE CONCRETE BARRIER AND TEMPORARY GUARDRAIL. INSTALL PERMANENT GUARDRAIL AS SHOWN ON THE ROADWAY PLANS.

COMPLETE CONSTRUCTION OF THE CROSS DRAINAGE SYSTEMS.

CONSTRUCT RIGHT SIDE OF -L- UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE FROM 16+00 TO 24+50. USE WEDGING AS NECESSARY TO MAINTAIN TRAFFIC.

COMPLETE CONSTRUCTION OF THE WEDGING AND WIDENING OF -Y- FROM STA 10+00 TO 15+50 UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE.

STEP 2: PLACE FINAL LAYER OF SURFACE LAYER ON -L- AND -Y-. STATE FORCES WILL PLACE FINAL PAVEMENT MARKINGS ON -L- AND -Y-.

STEP 3: REMOVE ALL ADVANCE WARNING SIGNS AND TRAFFIC CONTROL DEVICES, PLACING TRAFFIC IN THE FINAL PATTERN.

12/6/2011
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odynskra

APPROVED:_____ DATE:_____

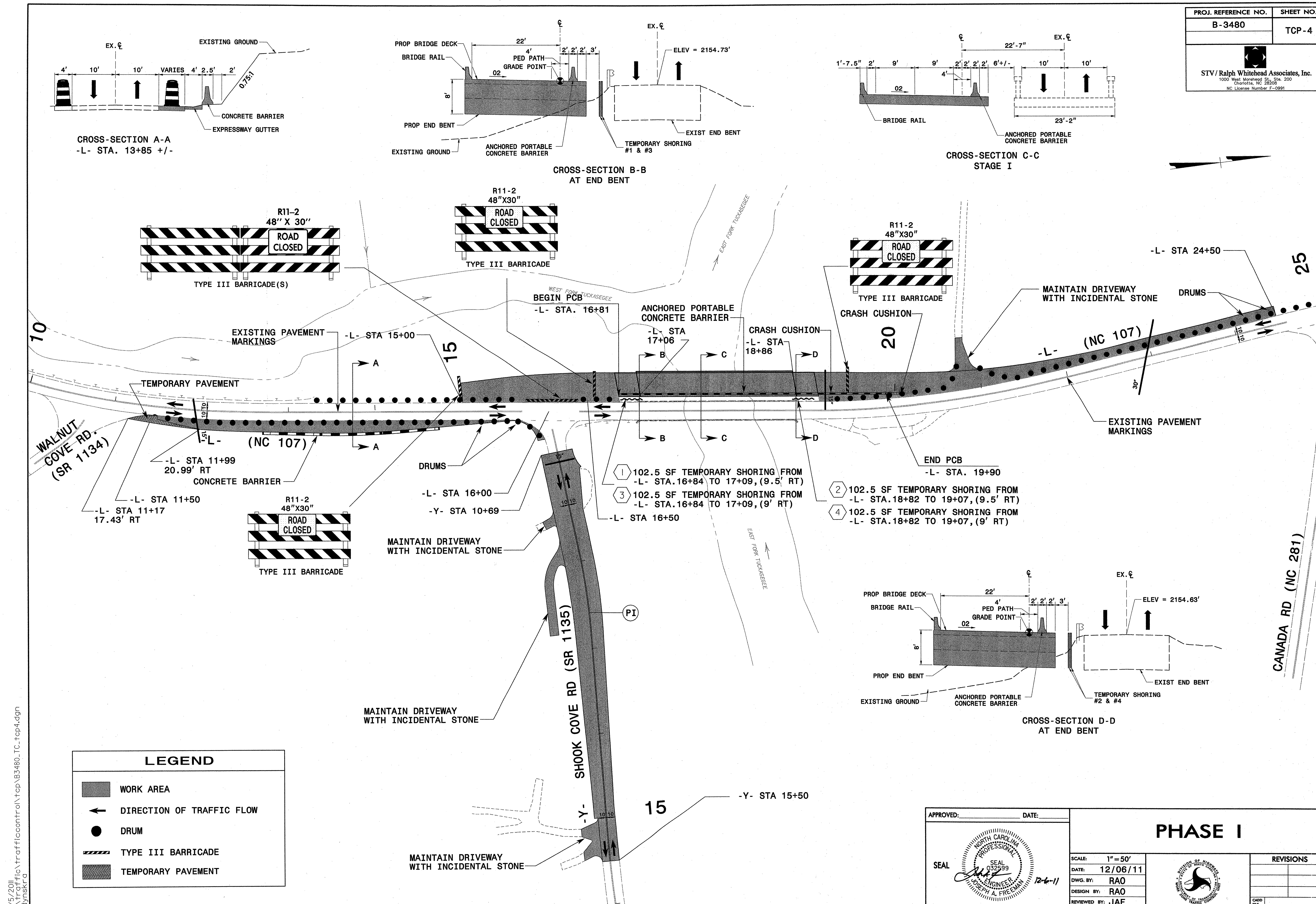
SEAL

NORTH CAROLINA PROFESSIONAL SEAL 032599 ENGINEER JOSEPH A. FREEMAN 12-6-11

CONSTRUCTION PHASING

SCALE:	NONE
DATE:	12/06/11
DWG. BY:	RAO
DESIGN BY:	RAO
REVIEWED BY:	JAF

REVISIONS	
CADD FILE	


PROJ. REFERENCE NO. B-3480
SHEET NO. TCP-4
STV / Ralph Whitehead Associates, Inc.
1000 West Morehead St., Ste. 200
Charlotte, NC 28208
NC License Number F-0991
EX. ℄
EXISTING GROUND
4' 10' 10' VARIES 4' 2.5' 2'
0.75:1
CONCRETE BARRIER
EXPRESSWAY GUTTER
CROSS-SECTION A-A
-L- STA. 13+85 +/-
℄
EX. ℄
PROP BRIDGE DECK
BRIDGE RAIL
22'
4'
PED PATH
GRADE POINT
2' 2' 2' 3'
ELEV = 2154.73'
02
8'
PROP END BENT
EXISTING GROUND
ANCHORED PORTABLE CONCRETE BARRIER
TEMPORARY SHORING #1 & #3
EXIST END BENT
CROSS-SECTION B-B
AT END BENT
22'-7"
1'-7.5" 2' 9' 9' 2' 2' 2' 2' 6'+/- 10' 10'
4'
23'-2"
BRIDGE RAIL
ANCHORED PORTABLE CONCRETE BARRIER
CROSS-SECTION C-C
STAGE I
R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE(S)
R11-2
48"X30"
ROAD CLOSED
TYPE III BARRICADE
R11-2
48"X30"
ROAD CLOSED
TYPE III BARRICADE
EAST FORK TUCKASEGEE
WEST FORK TUCKASEGEE
BEGIN PCB
-L- STA. 16+81
ANCHORED PORTABLE CONCRETE BARRIER
-L- STA 17+06
CRASH CUSHION
-L- STA 18+86
CRASH CUSHION
-L- STA 24+50
MAINTAIN DRIVEWAY WITH INCIDENTAL STONE
DRUMS
EXISTING PAVEMENT MARKINGS
-L- STA 15+00
10
15
20
25
TEMPORARY PAVEMENT
-L- (NC 107)
WALNUT COVE RD. (SR 1134)
-L- STA 11+99
20.99' RT
CONCRETE BARRIER
-L- STA 11+50
-L- STA 11+17
17.43' RT
DRUMS
-L- STA 16+00
-Y- STA 10+69
-L- STA 16+50
A
B
C
D
EXISTING PAVEMENT MARKINGS
END PCB
-L- STA. 19+90
1 102.5 SF TEMPORARY SHORING FROM -L- STA.16+84 TO 17+09,(9.5' RT)
3 102.5 SF TEMPORARY SHORING FROM -L- STA.16+84 TO 17+09,(9' RT)
2 102.5 SF TEMPORARY SHORING FROM -L- STA.18+82 TO 19+07,(9.5' RT)
4 102.5 SF TEMPORARY SHORING FROM -L- STA.18+82 TO 19+07,(9' RT)
R11-2
48"X30"
ROAD CLOSED
TYPE III BARRICADE
MAINTAIN DRIVEWAY WITH INCIDENTAL STONE
MAINTAIN DRIVEWAY WITH INCIDENTAL STONE
MAINTAIN DRIVEWAY WITH INCIDENTAL STONE
SHOOK COVE RD (SR 1135)
-Y-
PI
-Y- STA 15+50
CANADA RD (NC 281)
30"
℄
EX. ℄
PROP BRIDGE DECK
BRIDGE RAIL
22'
4'
PED PATH
GRADE POINT
2' 2' 2' 3'
ELEV = 2154.63'
02
8'
PROP END BENT
EXISTING GROUND
ANCHORED PORTABLE CONCRETE BARRIER
TEMPORARY SHORING #2 & #4
EXIST END BENT
CROSS-SECTION D-D
AT END BENT
LEGEND
WORK AREA
DIRECTION OF TRAFFIC FLOW
DRUM
TYPE III BARRICADE
TEMPORARY PAVEMENT
APPROVED: DATE:
SEAL
NORTH CAROLINA PROFESSIONAL SEAL 032599 ENGINEER JOSEPH A. FREEMAN
12-6-11
PHASE I
SCALE: 1"=50'
DATE: 12/06/11
DWG. BY: RAO
DESIGN BY: RAO
REVIEWED BY: JAF
REVISIONS
CADD FILE
12/5/2011
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odynskra

PROJ. REFERENCE NO.	SHEET NO.
B-3480	TCP-5

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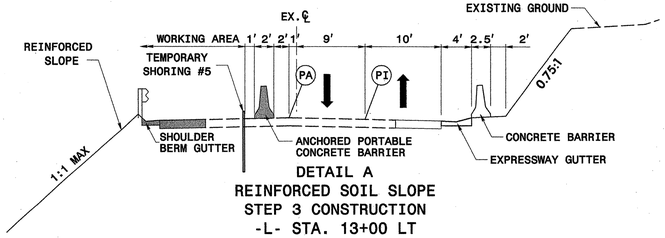
NC License Number F-0991



DETAIL A
REINFORCED SOIL SLOPE
STEP 3 CONSTRUCTION
-L- STA. 13+00 LT

R11-2
48" X 30"
ROAD CLOSED
TYPE III BARRICADE(S)

R11-2
48"X30"
ROAD CLOSED
TYPE III BARRICADE

R11-2
48"X30"
ROAD CLOSED
TYPE III BARRICADE

WEST FORK TUCKASEGEE

EAST FORK TUCKASEGEE

BEGIN PCB
-L- STA. 11+50

100'

ANCHORED PORTABLE CONCRETE BARRIER

(5) 1662.5 SF TEMPORARY SHORING FROM -L- STA.11+82 TO 13+15,(6' LT)

END PCB
-L- STA. 15+00

BEGIN PCB
-L- STA. 16+81

-L- STA. 15+68

ANCHORED PORTABLE CONCRETE BARRIER

-L- (NC 107)

10

15

20

-L-
STA. 10+00

WALNUT COVE RD. (SR-1134)

P4

CRASH CUSHION

TEMPORARY RELOCATION OF STOP BAR AND SIGN

CONCRETE BARRIER

PA

PI

CRASH CUSHION

DRUMS

R11-2
48"X30"
ROAD CLOSED
TYPE III BARRICADE

(1) 102.5 SF TEMPORARY SHORING FROM -L- STA.16+84 TO 17+09,(9.5' RT)

(3) 102.5 SF TEMPORARY SHORING FROM -L- STA.16+84 TO 17+09,(9' RT)

(2) 102.5 SF TEMPORARY SHORING FROM -L- STA.18+82 TO 19+07,(9.5' RT)

(4) 102.5 SF TEMPORARY SHORING FROM -L- STA.18+82 TO 19+07,(9' RT)

END PCB
-L- STA. 19+90

-L- (NC 107)

SHOOK COVE RD (SR-1135)

-Y-

PA

PI

EAST FORK TUCKASEGEE

LEGEND

- WORK AREA
- DIRECTION OF TRAFFIC FLOW
- DRUM
- TYPE III BARRICADE

15

APPROVED:_____ DATE:_____

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 032599 ENGINEER JOSEPH A. FREEMAN

12-6-11

PHASE I

SCALE:	1"=50'
DATE:	12/06/11
DWG. BY:	RAO
DESIGN BY:	RAO
REVIEWED BY:	JAF

REVISIONS

CADD FILE

12/5/2011
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cdynskra

PROJ. REFERENCE NO.	SHEET NO.
B-3480	TCP-6

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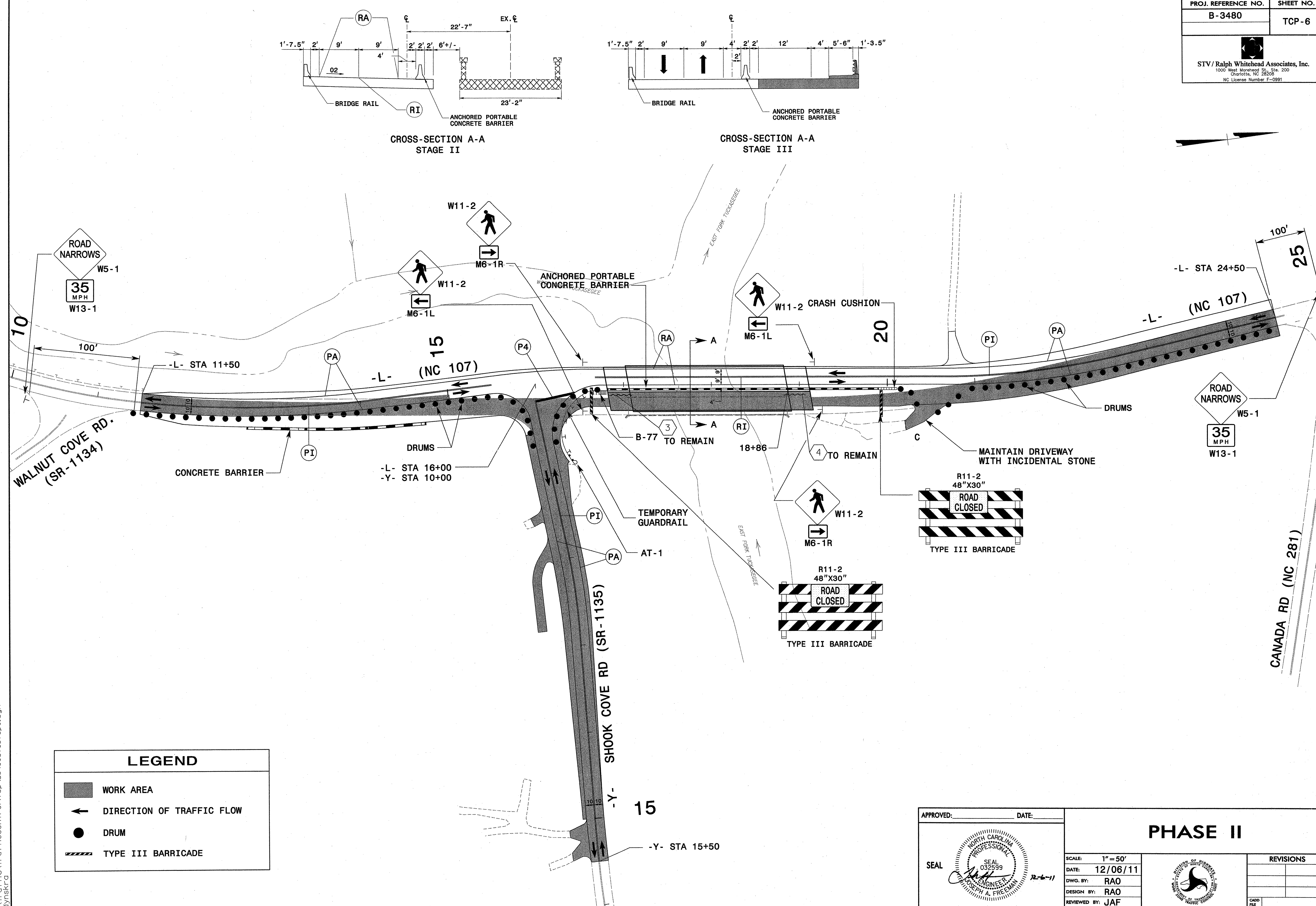
1000 West Morehead St., Ste. 200
Charlotte, NC 28208
NC License Number F-0991



LEGEND

- WORK AREA
- DIRECTION OF TRAFFIC FLOW
- DRUM
- TYPE III BARRICADE

12/5/2011
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odynskra

APPROVED:________ DATE:________

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 032599 JOSEPH A. FREEMAN 12-6-11

PHASE II

SCALE:	1" = 50'
DATE:	12/06/11
DWG. BY:	RAO
DESIGN BY:	RAO
REVIEWED BY:	JAF

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION WORK ZONE TRAFFIC CONTROL UNIT

REVISIONS

CADD FILE