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PROJECT REFERENCE NO.	SHEET NO.
U-3609A	TCP-1

CITY OF GOLDSBORO

PLAN FOR PROPOSED TRAFFIC CONTROL, MARKING & DELINEATION

WAYNE COUNTY

TIP PROJECT: U-3609A BERKELEY BLVD WIDENING

K:\RAL_Roadway\0II746003 (Berkeley Blvd\Plan\TCP\0II746003_tcp_1.dgn

1/17/2013

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
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.01	STATIONARY WORK ZONE SIGNS
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW PANELS
1130.01	DRUMS
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1160.01	TEMPORARY CRASH CUSHION
1170.01	PORTABLE CONCRETE BARRIER
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1205.04	PAVEMENT MARKINGS - INTERSECTIONS
1205.05	PAVEMENT MARKINGS - TURN LANES
1205.06	PAVEMENT MARKINGS - THRU LANE DROPS
1205.08	PAVEMENT MARKINGS - ARROW SYMBOLS, WORD SYMBOLS, Etc
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1250.01	PAVEMENT MARKER SPACING
1251.01	RAISED PAVEMENT MARKERS - (PERMANENT AND TEMPORARY)

INDEX OF SHEETS

TEMPORARY PAVEMENT MARKING SCHEDULE

PAVEMENT MARKING LINES

PA - PAINT (4" WHITE, 2X)	EDGELINE
PB - PAINT (4" YELLOW, 2X)	EDGELINE
PC - PAINT (4" WHITE, 2X)	4" X 10' SKIP
PD - PAINT (4" WHITE, 2X)	4" x 2' MINISKIP
PE - PAINT (4" WHITE, 2X)	SOLID LANE LINE
PF - PAINT (4" YELLOW, 2X)	4" X 10' SKIP
PG - PAINT (4" YELLOW, 2X)	4" x 2' MINISKIP
PH - PAINT (4" YELLOW, 2X)	SINGLE CENTER LINE
PI - PAINT (4" YELLOW, 2X)	DOUBLE CENTER LINE
PV - PAINT (8" YELLOW, 2X)	DIAGONAL
P2 - PAINT (24" WHITE, 2X)	STOP BAR

PAVEMENT MARKING SYMBOLS

QA - PAINT 2X (LEFT TURN ARROW)
QC - PAINT 2X (STRAIGHT ARROW)

LEGEND

GENERAL

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

TRAFFIC CONTROL DEVICES

- I TYPE I BARRICADE
- II 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

SHEET 1 OF 11

APPROVED: _____

DATE: _____

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 18151 ENGINEER CHARLES A. NUCKOLS
1/21/13

PLAN PREPARED BY:

Kimley-Horn and Associates, Inc.

CHUCK NUCKOLS *PROJECT ENGINEER*
JASON PACE *DESIGN ENGINEER*
DAVID SHINBARA *DESIGN TECHNICIAN*

PROJ. REFERENCE NO.	SHEET NO.
U-3609A	TCP-2

Kimley-Horn and Associates, Inc.
P.O. BOX 33068
RALEIGH, N.C. 27636-3068

GENERAL NOTES

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

A) THE DETAIL DRAWINGS, STANDARD DETAIL DRAWINGS, AND ROADWAY STANDARD DRAWINGS MAY REQUIRE MODIFICATIONS TO FIT FIELD CONDITIONS, SUCH AS WHEN PHYSICAL DIMENSIONS ARE NOT ATTAINABLE, OR WHEN MORE THAN ONE DRAWING IS APPLIED SIMULTANEOUSLY RESULTING IN DUPLICATE SIGNING, OR UNDESIRED OVERLAPPING OF DEVICES. WHEN THESE SITUATIONS ARISE, THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER SHALL BE RESPONSIBLE FOR ADAPTING THE TRAFFIC CONTROL PLAN TO FIELD CONDITIONS TO PROVIDE SAFE AND EFFICIENT TRAFFIC MOVEMENT. MODIFICATIONS MAY INCLUDE; MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES.

TIME RESTRICTIONS

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

ROAD NAME	DAY AND TIME RESTRICTIONS
1.BERKELEY BLVD.	MONDAY THRU FRIDAY 6:00 A.M. - 9:00 A.M. AND 4:00 PM - 7:00 PM
2.NEW HOPE RD.	MONDAY THRU FRIDAY 6:00 A.M. - 9:00 A.M. AND 4:00 PM - 7:00 PM
3.ROYALL AVE.	MONDAY THRU FRIDAY 6:00 A.M. - 9:00 A.M. AND 4:00 PM - 7:00 PM

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

ROAD NAME	DAY AND TIME RESTRICTIONS
1. BERKELEY BLVD.	ANYTIME
2. NEW HOPE RD.	ANYTIME
3. ROYALL AVE.	ANYTIME

HOLIDAY

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

   IF INDEPENDENCE DAY IS ON A SATURDAY OR SUNDAY, THEN BETWEEN THE HOURS OF 6:00 A.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 P.M. THE TUESDAY AFTER INDEPENDENCE DAY.
6. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 A.M. FRIDAY TO 7:00 P.M. TUESDAY.
7. FOR THANKSGIVING, BETWEEN THE HOURS OF 6:00 A.M. TUESDAY TO 7:00 P.M. MONDAY.
8. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 A.M. THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 P.M. THE FOLLOWING MONDAY AFTER THE WEEK OF CHRISTMAS.

LANE & SHOULDER CLOSURE

D) 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.

E) 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.

F) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

G) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION.

PROJECT NOTES

LANE AND SHOULDER CLOSURE REQUIREMENTS

H) 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.

I) 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.

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 A DROP-OFF AS FOLLOWS:

   BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

   BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE CITY.

K) DO NOT EXCEED A DIFFERENCE OF 1.5 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 500 FT IN ADVANCE.

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 100 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

   WHEN NO WORK IS BEING CONDUCTED FOR A PERIOD LONGER THAN ONE WEEK, REMOVE OR COVER ALL ADVANCE WORK ZONE WARNING SIGNS, AS DIRECTED BY THE ENGINEER, AT NO COST TO THE CITY.

N) THE CONTRACTOR WILL BE RESPONSIBLE FOR PERMANENT SIGNING.

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

P) INSTALL BLACK ON ORANGE "DIP" SIGNS (W8-2) 500 FT IN ADVANCE OF THE UNEVEN AREA.

Q) INSTALL BLACK ON ORANGE "BUMP" SIGNS (W8-1) 500 FT IN ADVANCE OF THE UNEVEN AREA.

TRAFFIC BARRIER

R) 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.

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

T) 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 TRAFFIC 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.

U) 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.

V) 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.

W) 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.

X) PROTECT THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER FROM ONCOMING TRAFFIC AT ALL TIMES BY A TEMPORARY CRASH CUSHION UNLESS THE APPROACH END OF MOVABLE/PORTABLE CONCRETE BARRIER IS OFFSET FROM ONCOMING TRAFFIC AS FOLLOWS OR AS SHOWN IN THE PLANS:

POSTED SPEED LIMIT	MINIMUM OFFSET
40 OR LESS	15 FT
45 - 50	20 FT

TRAFFIC CONTROL DEVICES

Y) SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER THAN TWICE THE POSTED SPEED LIMIT (MPH), EXCEPT 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT.

Z) PLACE SETS OF THREE DRUMS PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FOOT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC. THESE DRUMS SHALL BE IN ADDITION TO CHANNELIZING DEVICES.

PAVEMENT MARKINGS AND MARKERS

AA) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS SHOWN IN THE PAVEMENT MARKING PLAN.

BB) 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.

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

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

EE) TRACE THE EDGE OF PROPOSED MONOLITHIC ISLANDS WITH THE PROPER COLOR PAVEMENT MARKING PRIOR TO INSTALLATION OF A PROPOSED MONOLITHIC ISLAND.

MISCELLANEOUS

FF) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND /OR INTERSECTIONS AS DIRECTED BY THE ENGINEER.

GG) IN THE EVENT A TIE-IN CANNOT BE MADE IN ONE DAYS TIME, BRING THE TIE-IN AREA TO AN APPROPRIATE ROADWAY ELEVATION, AS DETERMINED BY THE ENGINEER. PLACE BLACK ON ORANGE "LOOSE GRAVEL" SIGNS (W8-7) AND BLACK ON ORANGE "PAVEMENT ENDS" SIGNS (W8-3) 500 FT AND 1000 FT RESPECTIVELY IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

HH) PLACE DELINEATION DEVICES TO DELINEATE PROPOSED ISLANDS BEFORE INSTALLATION

II) MAINTAIN ACCESS TO ALL RESIDENCES AND BUSINESSES AT ALL TIMES WITHIN THE PROJECT LIMIT.

JJ) COORDINATE CLOSELY WITH SEYMOUR JOHNSON AIR FORCE BASE ABOUT ANY EVENTS AT THE BASE THAT MAY IMPACT PROPOSED BERKELEY BOULEVARD CONSTRUCTION PHASING.

APPROVED:_____ DATE:_____

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 18151 ENGINEER CHARLES A. NUCKOLS II
11/1/13

SCALE:		REVISIONS	
DATE:	09-26-11		
DWG. BY:	DAS		
DESIGN BY:	JJP		
REVIEWED BY:	CAN	CADD FILE:	

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1/17/2013

PROJ. REFERENCE NO.	SHEET NO.
U-3609A	TCP–3

Kimley-Horn and Associates, Inc.
P.O. BOX 33068
RALEIGH, N.C. 27636-3068

PHASING

PHASE I

STEP 1) PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, IN ACCORDANCE WITH NCDOT STANDARD DRAWING 1101.01, THE CONTRACTOR SHALL INSTALL WORK ZONE ADVANCE WARNING SIGNS AS SHOWN ON SHEET TCP-11.

WHILE MAINTAINING EXISTING TRAFFIC ON BERKELEY BOULEVARD AND ACCESS TO ALL INTERSECTING ROADWAYS AND DRIVEWAYS, USING NCDOT ROADWAY STANDARD DRAWING NO. 1101.02 FOR TEMPORARY LANE CLOSURES, THE CONTRACTOR SHALL:

STEP 2) CONSTRUCT TEMPORARY SIGNAL AT BERKELEY BOULEVARD AND ROYALL AVENUE.
CONSTRUCT TEMPORARY SIGNAL AT BERKELEY BOULEVARD AND NEW HOPE ROAD.

STEP 3) IN ACCORDANCE WITH NCDOT STANDARD DRAWINGS NO. 1205.01,02, 04,05,06,08, & 09, REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS FROM -L- STA 22+75 TO -L- STA 38+50 AS SHOWN ON SHEETS TCP 4-6. SHIFT EXISTING TRAFFIC TO NEW TRAFFIC PATTERN.

STEP 4) IN ACCORDANCE WITH NCDOT STANDARD DRAWINGS NO. 1261.01 AND 1261.02, INSTALL WATER-FILLED BARRIER FROM -L- STA 33+02 (35' LT) TO -L- STA 35+15 (8.5' LT) AS SHOWN ON SHEET TCP-5.

STEP 5) INSTALL TEMPORARY SHORING NO. 1 FROM -L- STA 33+50 (2' RT) TO-L- STA (2' RT)33+80 AS SHOWN ON SHEET TCP-5.

STEP 6) USING REQUIRED EROSION CONTROL MEASURES, CONSTRUCT THE NORTHERN PORTION OF THE PROPOSED BOX CULVERT AT -L- STA 33+65 AS SHOWN ON SHEET TCP-5 AND FOLLOWING THE CONSTRUCTION SEQUENCE SHOWN ON SHEET EC-12.

STEP 7) INSTALL TEMPORARY SHORING NO. 2 FROM -L- STA 33+50 (2' LT) TO -L- STA 33+80 (2' LT) AS SHOWN ON SHEET TCP-5.

CONSTRUCT PROPOSED BERKELEY BOULEVARD WIDENING SUCH AS DRAINAGE ITEMS, CONCRETE CURB AND GUTTER, AND PAVEMENT UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE PAVEMENT FROM -L- STA 14+67 TO -L- STA 18+32, -L- STA 32+98 TO -L- STA 71+20 AS SHOWN ON SHEETS TCP 4-7.

PHASE II

WHILE MAINTAINING EXISTING TRAFFIC ON BERKELEY BOULEVARD AND ACCESS TO ALL INTERSECTING ROADWAYS AND DRIVEWAYS, USING NCDOT ROADWAY STANDARD DRAWING NO. 1101.02 FOR TEMPORARY LANE CLOSURES, THE CONTRACTOR SHALL:

STEP 1) CONSTRUCT FINAL SIGNAL AT BERKELEY BOULEVARD AND ROYALL AVENUE.

STEP 2) IN ACCORDANCE WITH NCDOT STANDARD DRAWINGS NO. 1205.01,02, 04,05,06,08, & 09, REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL TEMPORARY PAVEMENT MARKINGS FROM -L- STA 20+00 TO -L- STA 39+50 AS SHOWN ON SHEETS TCP 8, 9, AND 10. SHIFT EXISTING BERKELEY BOULEVARD TRAFFIC TO NEW TRAFFIC PATTERN.

STEP 3) IN ACCORDANCE WITH NCDOT STANDARD DRAWINGS NO. 1261.01 AND 1261.02, INSTALL WATER-FILLED BARRIER ON BERKELEY BOULEVARD FROM -L- STA 33+08 (30' RT) TO -L- STA 36+25 (12.5' RT) AS SHOWN ON SHEET TCP-9.

PHASE II (CONT'D)

STEP 4) USING REQUIRED EROSION CONTROL MEASURES, BEGIN CONSTRUCTION ON THE SOUTHERN PORTION OF PROPOSED BOX CULVERT AT -L- STA 33+65 AS SHOWN ON SHEET TCP-9 AND FOLLOWING THE CONSTRUCTION SEQUENCE SHOWN ON SHEET EC-12.

STEP 5) CONSTRUCT PROPOSED BERKELEY BOULEVARD WIDENING SUCH AS DRAINAGE ITEMS, CONCRETE CURB AND GUTTER, AND PAVEMENT UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE PAVEMENT FROM -L- STA 33+08 TO -L STA 34+22.

COMPLETE CONSTRUCTION ON THE SOUTHERN PORTION OF THE PROPOSED BOX CULVERT AT -L- STA 33+65 AS SHOWN ON SHEET TCP-9.

PHASE III

WHILE MAINTAINING EXISTING TRAFFIC ON BERKELEY BOULEVARD AND ACCESS TO ALL INTERSECTING ROADWAYS AND DRIVEWAYS, USING NCDOT ROADWAY STANDARD DRAWING NO. 1101.02 FOR TEMPORARY LANE CLOSURES, THE CONTRACTOR SHALL:

STEP 1) PLACE FINAL LAYER OF SURFACE COURSE PAVEMENT ON BERKELEY BOULEVARD WIDENING FROM -L- STA 14+67 TO -L- STA 18+32, AND -L- STA 32+98 TO -L- STA 71+20

MILL AND RESURFACE EXISTING PAVEMENT ON BERKELEY BOULEVARD FROM -L- STA 27+50 TO -L- STA 67+33.97 AND FROM -L- STA 67+75.23 TO -L- STA 71+75.00.

CONSTRUCT FINAL SIGNAL AT BERKELEY BOULEVARD AND NEW HOPE ROAD.

STEP 2) IN ACCORDANCE WITH NCDOT STANDARD DRAWINGS NO. 1205.01,02, 04,05,06,08,09, & 1250.01, PLACE PERMANENT PAVEMENT MARKINGS AND MARKERS ON BERKELEY BOULEVARD AS SHOWN ON SHEETS PM-1 THRU PM-4.

ACTIVATE ALL FINAL SIGNALS AND PLACE TRAFFIC IN FINAL TRAFFIC PATTERN.

UPON COMPLETION OF ALL CONSTRUCTION OPERATIONS, REMOVE ALL TRAFFIC CONTROL DEVICES AND TEMPORARY SIGNING.

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1/17/2013

APPROVED:_____ DATE:_____

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 18151 CHARLES A. NUCKOLS, II 1/21/13

SCALE:	1" = 50'	REVISIONS	
DATE:	09-26-11		
DWG. BY:	DAS		
DESIGN BY:	JJP		
REVIEWED BY:	CAN	CADD FILE	

PROJ. REFERENCE NO.	SHEET NO.
U-3609A	TCP-4

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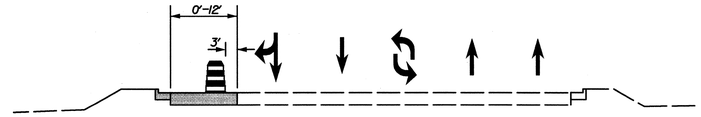
P.O. BOX 33068
RALEIGH, N.C. 27636-3068



TYPICAL SECTION A-A

NAD 83/95

10

15

20

ROYALL AVE

-L- STA 14+67

-L- STA 18+32

PARKWAY DR -Y1-L

A

A

BERKELEY BLVD -L-

TEMP

-L- STA 22+75

QC

-L- STA 15+50

MESSAGE NO. 1	MESSAGE NO. 2
LEFT LANE CLOSED	MERGE RIGHT

CHANGEABLE MESSAGE SIGN

RETAIN EXISTING DELINEATORS

LEFT LANE CLOSED AHEAD
W20-5 L
48" X 48"

W4-2L
48" X 48"

-L- STA 21+75

-L- STA 23+75

MATCH LINE -L- STA 24+00 (SHEET TCP-5)

ATLANTIC AND EAST CAROLINA R.

E. MILLER RD

NEW CONSTRUCTION

SHEET 4 OF 11

APPROVED:_____ DATE:_____

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 18151 ENGINEER CHARLES A. NUCKOLS 2/21/13

TRAFFIC CONTROL PLAN PHASE I

		REVISIONS	
SCALE:	1" = 50'		
DATE:	09-26-11		
DWG. BY:	DAS		
DESIGN BY:	JJP		
REVIEWED BY:	CAN	CADD FILE	

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PROJ. REFERENCE NO.	SHEET NO.
U-3609A	TCP-5

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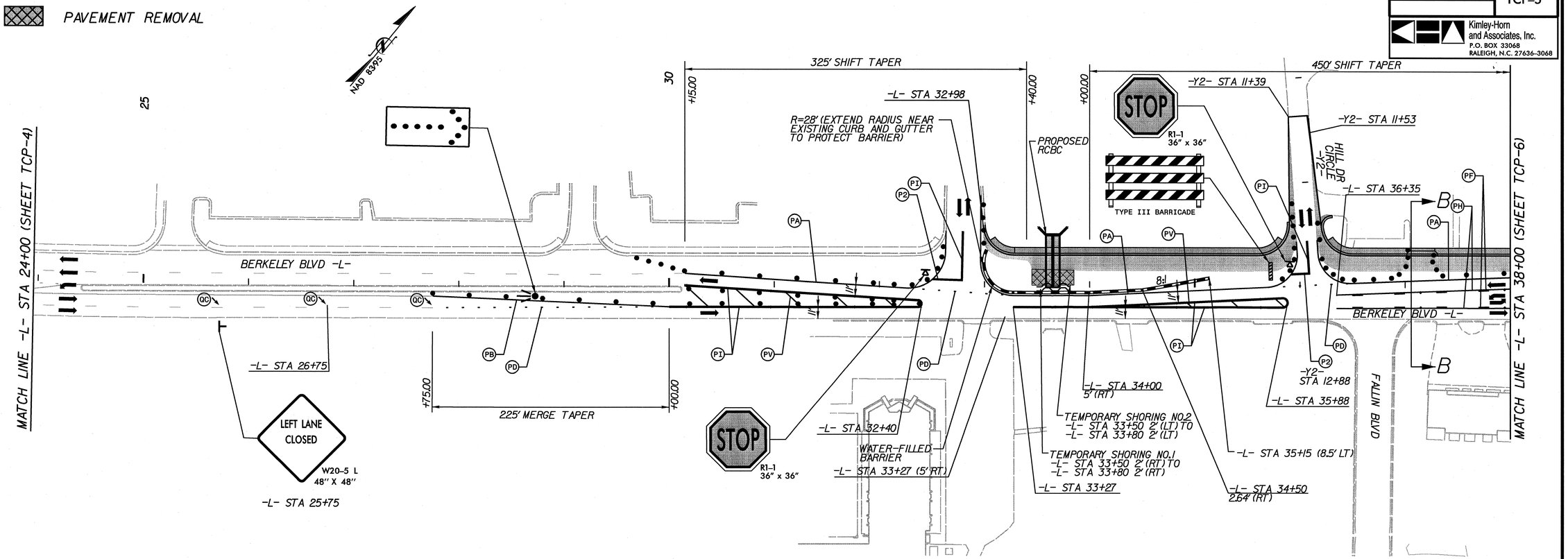
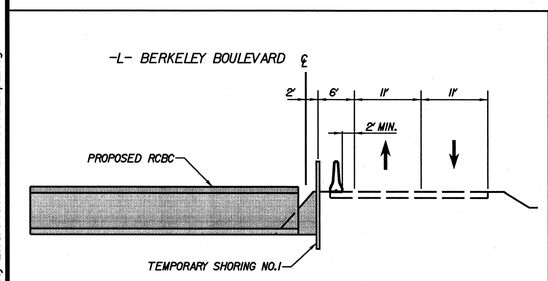
P.O. BOX 33068
RALEIGH, N.C. 27636-3068

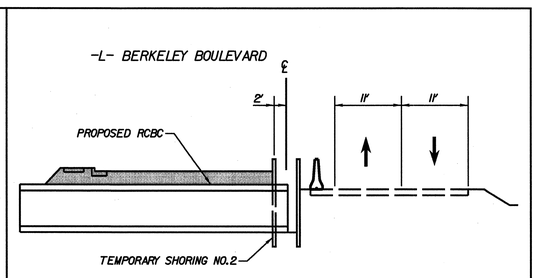
NEW CONSTRUCTION

PAVEMENT REMOVAL

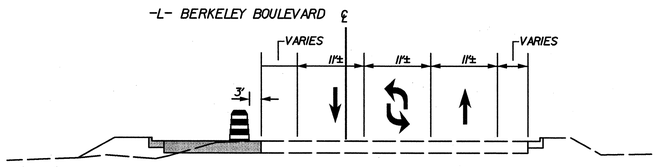




PHASE 1 - STEPS 3-6
CULVERT SECTION
STA 33+65



PHASE 1 - STEP 7
CULVERT SECTION
STA 33+65



TYPICAL SECTION B-B

TEMPORARY SHORING NOTES

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 -L- 33+50 (2' RT) TO -L- 33+80 (2' RT)

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION -L- 33+50 (2' RT) TO -L- 33+80 (2' RT).

DESIGN TEMPORARY SHORING FROM STATION -L- 33+50 (2' RT) TO -L- 33+80 (2' RT) FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:
UNIT WEIGHT = 120 PCF
FRICTION ANGLE = 30 DEGREES
COHESION = 0 PSF

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF THE TEMPORARY SHORING FROM STATION -L- 33+50 (2' RT) TO -L- 33+80 (2' RT). 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 -L- 33+50 (2' LT) TO -L- 33+80 (2' LT)

AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING FOR TEMPORARY SHORING FROM STATION -L- 33+50 (2' LT) TO -L- 33+80 (2' LT).

DESIGN TEMPORARY SHORING FROM STATION -L- 33+50 (2' LT) TO -L- 33+80 (2' LT) FOR THE FOLLOWING ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION:
UNIT WEIGHT = 120 PCF
FRICTION ANGLE = 30 DEGREES
COHESION = 0 PSF

LIMITED SUBSURFACE INFORMATION IS AVAILABLE IN THE VICINITY OF THE TEMPORARY SHORING FROM STATION -L- 33+50 (2' LT) TO -L- 33+80 (2' LT). THE INFORMATION PROVIDED FOR DESIGN WAS ASSUMED AND MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

SHEET 5 OF 11

APPROVED:_____ DATE:_____

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 18151 ENGINEER CHARLES A. MUCKOS, II
2/21/13

TRAFFIC CONTROL PLAN PHASE 1

SCALE:	1" = 50'	REVISIONS	
DATE:	06-01-11		
DWG. BY:	DAS		
DESIGN BY:	JJP		
REVIEWED BY:	CAN	CADD FILE:	

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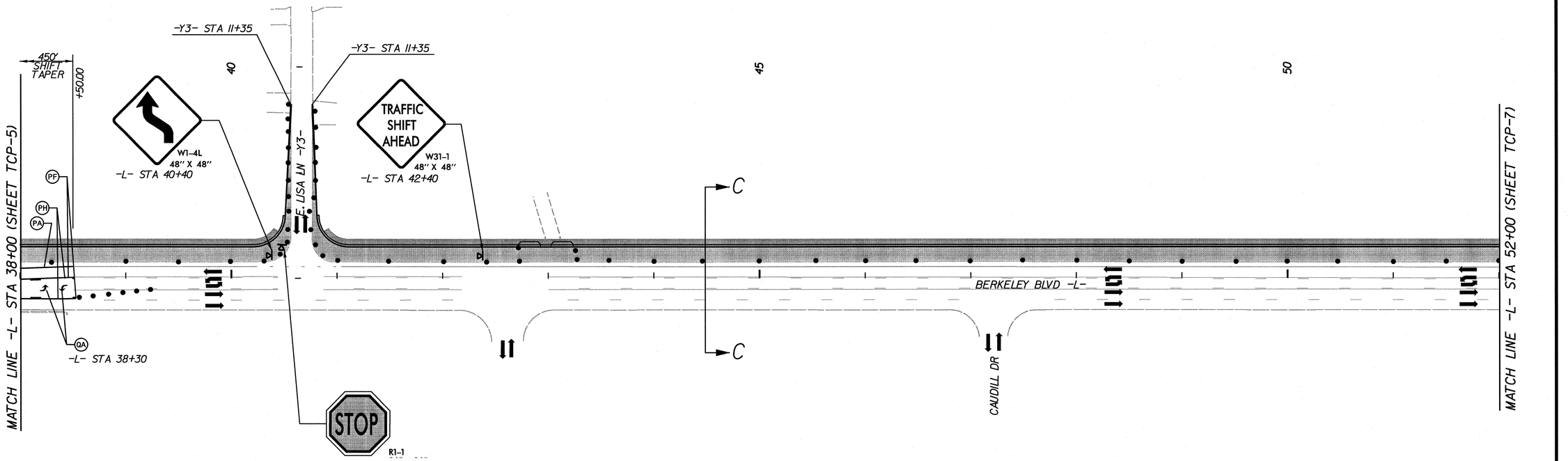
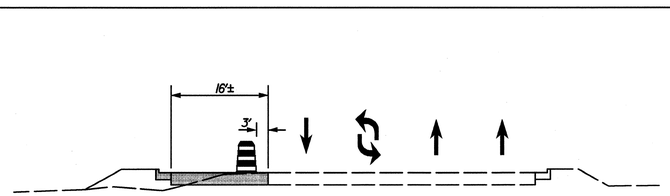
2/26/2013

PROJ. REFERENCE NO.	SHEET NO.
U-3609A	TCP-6

Kimley-Horn and Associates, Inc.
P.O. BOX 33068
RALEIGH, N.C. 27636-3068

NAD 83/95





NEW CONSTRUCTION

SHEET 6 OF 11

APPROVED:_____ DATE:_____

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 18151 ENGINEER CHARLES A. NUCKOLS, II 2/21/13

TRAFFIC CONTROL PLAN PHASE I

		REVISIONS	
SCALE:	1" = 50'		
DATE:	09-26-11		
DWG. BY:	DAS		
DESIGN BY:	JJP		
REVIEWED BY:	CAN	CADD FILE:	

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PROJ. REFERENCE NO.	SHEET NO.
U-3609A	TCP-7

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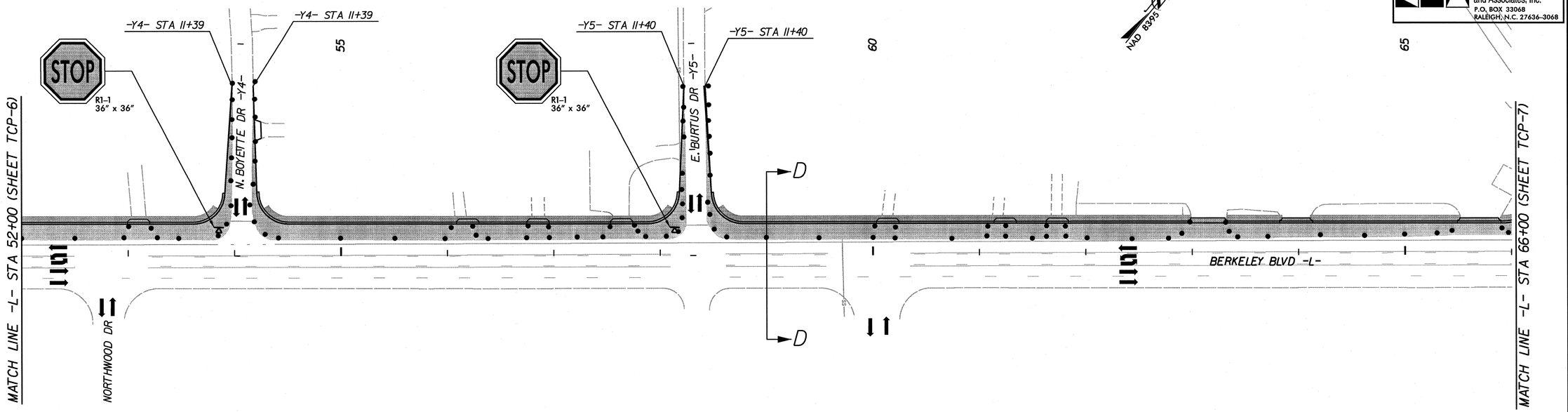

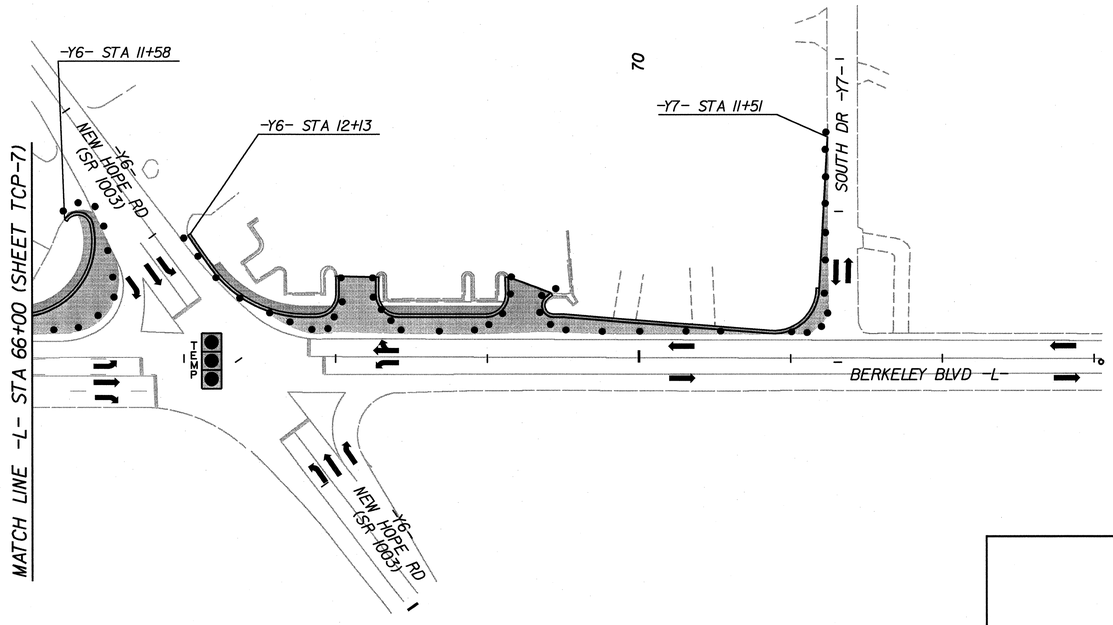

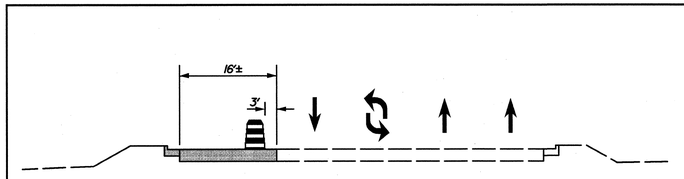

TYPICAL SECTION D-D

NEW CONSTRUCTION

SHEET 7 OF 11

APPROVED: _____ DATE: _____

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 18151 ENGINEER CHARLES A. NUCKOLS, II
2/21/13

TRAFFIC CONTROL PLAN PHASE I

		REVISIONS	
SCALE:	1" = 50'		
DATE:	09-26-11		
DWG. BY:	DAS		
DESIGN BY:	JJP		
REVIEWED BY:	CAN	CADD FILE:	

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PROJ. REFERENCE NO.	SHEET NO.
U-3609A	TCP-8

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P.O. BOX 33068
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NAD 83/95

10

15

20

ROYALL AVE

PARKWAY DR -Y1-

BERKELEY BLVD -L-

E.MILLER RD

-L- STA 15+50

MESSAGE NO. 1	MESSAGE NO. 2
RIGHT LANE CLOSED	MERGE LEFT

CHANGEABLE MESSAGE SIGN

-L- STA 19+90

-L- STA 22+90

RIGHT LANE CLOSED AHEAD
W20-5 R
48" X 48"

W4-2R
48" X 48"

-L- STA 21+90

-L- STA 23+90

MATCH LINE -L- STA 24+00 (SHEET TCP-9AB)

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2/21/2013

SHEET 8 OF 11

APPROVED:_____ DATE:_____

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 18151 ENGINEER CHARLES A. NUCKOLS, II
2/21/13

TRAFFIC CONTROL PLAN PHASE II

		REVISIONS	
SCALE:	1" = 50'		
DATE:	09-26-11		
DWG. BY:	DAS		
DESIGN BY:	JJP		
REVIEWED BY:	CAN	CADD FILE:	

PROJ. REFERENCE NO.	SHEET NO.
U-3609A	TCP-9

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NAD 83/93

MATCH LINE -L- STA 24+00 (SHEET TCP-8)

MATCH LINE -L- STA 38+00 (SHEET TCP-10)

BERKELEY BLVD -L-

-L- STA 26+90

320' SHIFT TAPER

+15.00

+35.00

R=28' (EXTEND RADIUS NEAR EXISTING CURB AND GUTTER TO -L- STA 33+07 TO CREATE BARRIER FLARE)

180' SHIFT TAPER

+50.00

+30.00

-L- STA 36+32

HILL DRIVE CIRCLE -L-

STOP

R1-1
36" x 36"

RIGHT LANE CLOSED

W20-5 R
48" X 48"

-L- STA 25+90

TRAFFIC SHIFT AHEAD

W31-1
48" X 48"

-L- STA 25+00

W1-4L
48" X 48"

+90.00

+15.00

225' MERGE TAPER

-L- STA 32+40

-L- STA 33+35 (5' LT)

WATER-FILLED BARRIER

TEMPORARY SHORING NO.2

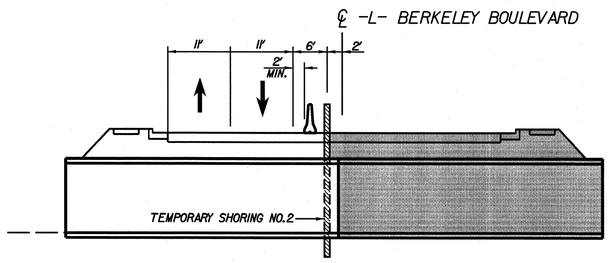
PROPOSED RCBC

-L- STA 35+65

-L- STA 36+25 (12.5' RT)

PAVEMENT REMOVAL

NEW CONSTRUCTION



PHASE I
CULVERT SECTION
STA. 33+65

APPROVED: _____ DATE: _____

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 18151 ENGINEER CHARLES A. NUCKOLS, II
2/21/13

SHEET 9 OF 11

TRAFFIC CONTROL PLAN PHASE II

		REVISIONS	
SCALE:	1" = 50'		
DATE:	06-01-11		
DWG. BY:	DAS		
DESIGN BY:	JJP		
REVIEWED BY:	CAN	CADD FILE:	

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2/21/2013

PROJ. REFERENCE NO.	SHEET NO.
U-3609A	TCP-10

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NAD 83/93

40 45 50

MATCH LINE -L- STA 38+00 (SHEET TCP-9AB)

E. LISA LN -Y3-

+35.00

-L- STA 38+30

-L- STA 40+35

-L- STA 40+90

-L- STA 41+55

-L- STA 42+20

-L- STA 43+00

-L- STA 45+15

665' SHIFT TAPER

+00.00

200'

200'

+00.00

+00.00

W1-4L
48" X 48"

TRAFFIC SHIFT AHEAD

W31-1
48" X 48"

WHILE MAINTAINING ACCESS TO ALL INTERSECTING ROADS AND DRIVEWAYS, CONTINUE PLACEMENT OF DRUMS 3' OFF OF EXISTING EDGE LINE ON WEST SIDE OF BERKELEY BLVD FROM -L- STA 52+00 TO -L- STA 71+25 FOR THE DURATION OF PHASE II TRAFFIC PATTERN

BERKELEY BLVD -L-

CAUDILL DR

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2/21/2013

SHEET 10 OF 11

APPROVED:_____ DATE:_____

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 18151 ENGINEER CHARLES A. NUCKOLS II

2/21/13

TRAFFIC CONTROL PLAN PHASE II

		REVISIONS	
SCALE:	1" = 50'		
DATE:	09-26-11		
DWG. BY:	DAS		
DESIGN BY:	JJP		
REVIEWED BY:	CAN	CADD FILE:	

PROJ. REFERENCE NO.	SHEET NO.
U-3609A	TCP-11

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ADVANCE WARNING SIGNS

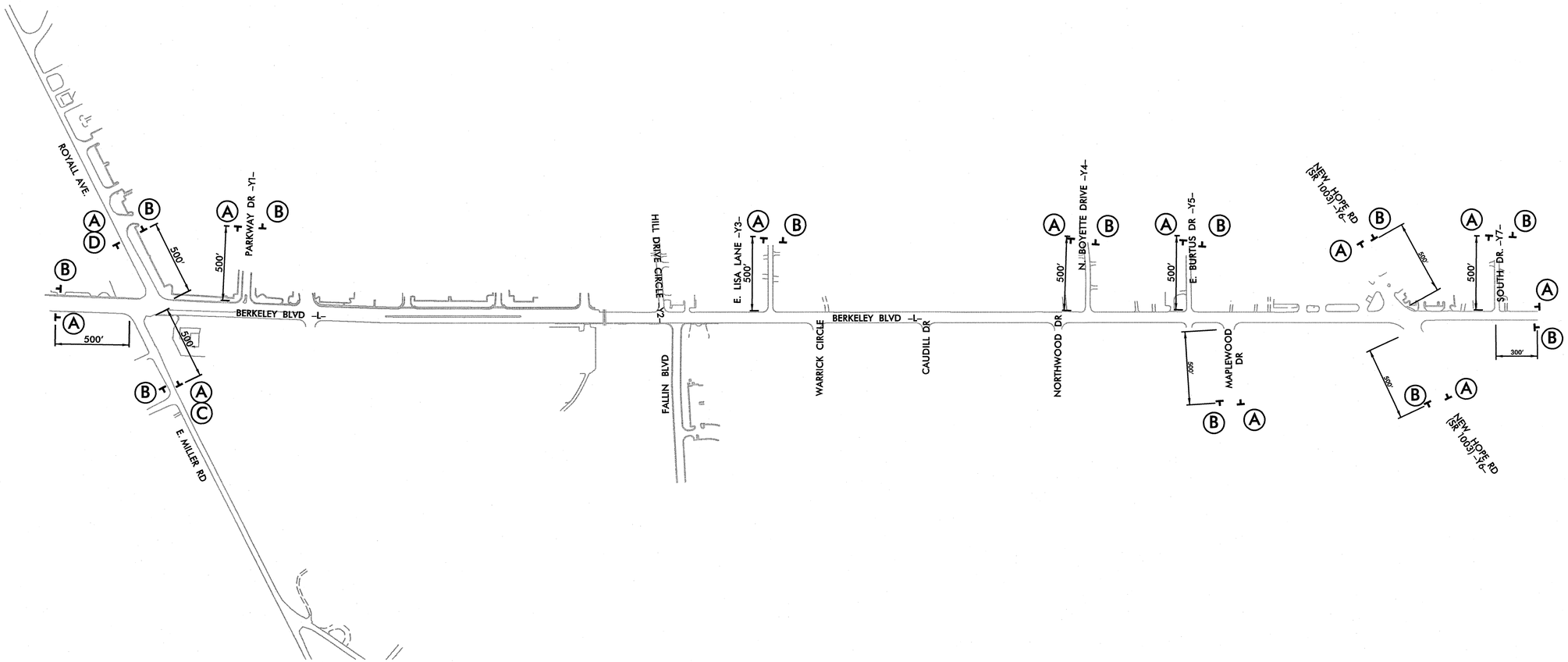
(A) ROAD WORK AHEAD — W21-4, 48" X 48"

(B) END ROAD WORK — G20-2 A, 48" X 24"

(C) M5-1R, 21" X 15" — * INSTALL SIGN (C) BELOW SIGN (A)

(D) M5-1L, 21" X 15" — * INSTALL SIGN (D) BELOW SIGN (A)

NAD 83/95



SHEET 11 OF 11

APPROVED:_____ DATE:_____

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 18151 ENGINEER CHARLES A. NUCKOLS III
2/21/13

ADVANCE WARNING SIGNS

		REVISIONS	
SCALE:	NTS		
DATE:	09-26-11		
DWG. BY:	DAS		
DESIGN BY:	JJP		
REVIEWED BY:	CAN	CADD FILE:	

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