





# PROJECT NOTES

## GENERAL NOTES

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.

ADAPT THE TRAFFIC CONTROL PLANS, WHEN DIRECTED BY THE ENGINEER, TO MEET FIELD CONDITIONS TO PROVIDE SAFE AND EFFICIENT TRAFFIC MOVEMENT. CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS AND ROADWAY DETAILS ARE NOT ATTAINABLE, OR RESULT IN DUPLICATE, OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING OR REMOVAL OF DEVICES.

**TIME RESTRICTIONS**

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

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>
W. CATAWBA AVENUE (-L-)	6:00 A.M. TO 7:00 P.M. MON-FRI
ALL -Y- LINES	6:00 A.M. TO 7:00 P.M. MON-FRI

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

<u>ROAD NAME</u>
W. CATAWBA AVENUE (-L-)
ALL -Y- LINES

**HOLIDAY**

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

IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY, THEN BETWEEN THE HOURS OF 7:00 P.M. THE THURSDAY BEFORE INDEPENDENCE DAY AND 6:00 A.M. THE TUESDAY AFTER INDEPENDENCE DAY.

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

C) DO NOT STOP TRAFFIC FOR MORE THAN 20 MINUTES AS FOLLOWS:

<u>ROAD NAME</u>	<u>OPERATION</u>
W. CATAWBA AVE. (-L-)	ANY OPERATION
ALL -Y- LINES	ANY OPERATION

D) DO NOT CONDUCT ANY HAULING OPERATIONS AGAINST THE FLOW OF TRAFFIC OF AN OPEN TRAVELWAY UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR OTHERWISE 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 5m OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING TCP-22 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 1.5m 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.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 3m 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.

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 4.2m ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

J) DO NOT INSTALL MORE THAN ONE LANE CLOSURE, IN ANY ONE DIRECTION, ON W. CATAWBA AVE. (-L-).

**PAVEMENT EDGE DROP OFF REQUIREMENTS**

K) 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 50mm ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 75mm 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.

L) DO NOT EXCEED A DIFFERENCE OF 50mm IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 40mm. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AREA.

**TRAFFIC PATTERN ALTERATIONS**

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

**SIGNING**

N) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 12m 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 DEPARTMENT.

O) PROVIDE PERMANENT SIGNING.

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

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

**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.

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 ONE (1) MONTH, 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.

**TRAFFIC CONTROL DEVICES**

S) SPACE CHANNELIZING DEVICES IN WORK AREAS EQUAL IN METERS TO 2/3rds THE POSTED SPEED LIMIT (MPH), EXCEPT 3m ON-CENTER IN RADII, AND 1m OFF THE EDGE OF AN OPEN TRAVELWAY, WHEN LANE CLOSURES ARE NOT IN EFFECT. WHEN SKINNY DRUMS ARE ALLOWED, REFER TO SECTION 1180 OF STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES OR AS SHOWN IN THE PLANS.

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

U) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 150m CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

**PAVEMENT MARKINGS AND MARKERS**

V) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
W. CATAWBA AVE. (-L-)	THERMO	PERMANENT RAISED
JETTON ROAD (-Y23A-)	THERMO	PERMANENT RAISED
SEFTON PARK RD. (-Y23B-)	THERMO	PERMANENT RAISED
OLD JETTON RD. (-Y24-)	THERMO	PERMANENT RAISED
BETHEL CHURCH RD. (-Y25A-)	THERMO	PERMANENT RAISED
(-Y25B-)	THERMO	PERMANENT RAISED
HENDERSON RD. (-Y26-)	THERMO	PERMANENT RAISED
KNOX RD. (-Y28-)	THERMO	PERMANENT RAISED
ONE NORMAN BLVD. (-Y29-)	THERMO	PERMANENT RAISED
TORRENCE CHAPEL RD. (-Y30A-)	THERMO	PERMANENT RAISED
LIVERPOOL PKWY. (-Y30B-)	THERMO	PERMANENT RAISED

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

ROAD NAME	MARKING	MARKER
W. CATAWBA AVE. (-L-)	PAINT	N/A
ALL -Y- LINES	PAINT	N/A

X) 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.

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

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

**TEMPORARY / FINAL SIGNALS**

AA) NOTIFY THE ENGINEER TWO (2) MONTHS BEFORE A TRAFFIC SIGNAL INSTALLATION BY OTHERS IS REQUIRED.

BB) SHIFT AND REVISE ALL SIGNAL HEADS AS SHOWN ON THE SIGNAL PLANS.

**MISCELLANEOUS**

CC) 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 "PAVEMENT ENDS" SIGNS (W8-3) IN ADVANCE OF THE UNEVEN AREAS. USE DRUMS TO DELINEATE THE EDGE OF ROADWAY ALONG UNPAVED AREAS.

## LOCAL NOTES

- ALL TOWN OF CORNELIUS ALTERNATE ROUTE SIGNS SHALL BE MAINTAINED THROUGHOUT ALL PHASES WITHIN THE PROJECT LIMITS.
- ALL DRIVEWAYS THAT ARE DAMAGED FROM DRAINAGE PIPE CONSTRUCTION SHALL BE REPAIRED WITHIN 72 HOURS, INCLUDING ASPHALT LAYER, AS DIRECTED BY THE ENGINEER.
- MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE PROJECT LIMITS SUCH THAT WATER DOES NOT POND ON EXISTING TRAVEL LANES. WATER FILLED BARRIER SHALL BE TL-3 BARRIER TO INSURE DRAINAGE RUNOFF FROM EXISTING TRAVEL LANES.
- CONSTRUCT THE PROPOSED ROADWAY IN A MANNER TO MINIMIZE THE DURATION OF DRIVEWAYS BEING BLOCKED BY WATER FILLED BARRIER.

APPROVED: *David L. Langford* DATE: 8/20/07



### PROJECT NOTES

SCALE: NONE		REVISIONS
DATE: 08-20-07		
DWG. BY: SBC		
DESIGN BY: SBC		
REVIEWED BY: CLL		

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# PHASING



PROJ. REFERENCE NO.	SHEET NO.
R-2555A	TCP-3

## PHASE I

- STEP 1. INSTALL ALL WORK ZONE ADVANCE WARNING SIGNS ON WEST CATAWBA AVE. (SR 2697), JETTON RD. (SR 2151), OLD JETTON RD., BETHEL CHURCH RD. (SR 2189), HENDERSON RD. (SR 2307), KUNKLEMAN DR., KNOX RD. (SR 2159), ONE NORMAN BLVD., TORRENCE CHAPEL RD. (SR 2195), LIVERPOOL PARKWAY, AND ALL THRU ROADS TO SEFTON PARK RD.. IF WORK IS NOT PURSUED WITHIN THREE DAYS OF SIGN INSTALLATION, THE SIGNS SHALL BE COVERED OR REMOVED IN A METHOD APPROVED BY THE ENGINEER ACCORDING TO STANDARD SPECS SECTION 1110. ADVANCE WARNING SIGNS SHALL BE INSTALLED WHEN CONSTRUCTION IS WITHIN 12 METERS OF EXISTING TRAVEL LANE, (SEE TCP-21). MAINTAIN ALL TOWN OF CORNELIUS ALTERNATE ROUTE SIGNS.
- STEP 2. USING RSD NO. 1101.02(SHTS 1 AND 2 OF 7), CONSTRUCT DRAINAGE AS SHOWN ON TCP-5.
- STEP 3. USING RSD NO. 1101.02(SHTS 1 AND 2 OF 7), CONSTRUCT 2m ASPHALT WIDENING AS FOLLOWS (SEE TCP-6):  
STA. 48+63+/- -L- TO STA. 61+35+/- -L-
- STEP 4. USING RSD NO. 1101.02(SHTS 1 AND 2 OF 7), REMOVE EXISTING CONCRETE ISLAND AND PATCH WITH ASPHALT AS FOLLOWS (SEE TCP-7):  
STA. 46+71+/- -L- TO STA. 47+91+/- -L-
- STEP 5. USING RSD NO. 1101.02(SHTS 1 AND 2 OF 7), REMOVE EXISTING PAVEMENT MARKINGS AND PLACE TEMPORARY (PAINT) PAVEMENT MARKINGS AND MARKERS AS FOLLOWS (SEE TCP-8 THRU TCP-13):  
STA. 46+71+/- -L- TO STA. 64+91+/- -L-  
STA. 10+80+/- -Y23A- TO STA. 11+49+/- -Y23A-  
STA. 10+09+/- -Y23B- TO STA. 10+43+/- -Y23B-  
STA. 10+20+/- -Y24- TO STA. 10+82+/- -Y24-  
STA. 13+20+/- -Y25A- TO STA. 14+44+/- -Y25A-  
STA. 10+04+/- -Y25B- TO STA. 10+34+/- -Y25B-  
STA. 10+40+/- -Y27- TO STA. 10+70+/- -Y27-  
STA. 14+80+/- -Y28- TO STA. 15+39+/- -Y28-  
STA. 10+07+/- -Y29- TO STA. 10+27+/- -Y29-  
STA. 10+85+/- -Y30A- TO STA. 11+48+/- -Y30A-  
STA. 10+07+/- -Y30B- TO STA. 10+37+/- -Y30B-
- STEP 6. USING RSD NO. 1101.02(SHTS 1 AND 2 OF 7), PLACE WATER FILLED BARRIER (WFB TL-3) AS FOLLOWS (SEE TCP-8 THRU TCP-13):  
STA. 46+82+/- -L- TO STA. 47+89+/- -L-  
STA. 48+22+/- -L- TO STA. 49+15+/- -L-  
STA. 49+47+/- -L- TO STA. 50+23+/- -L-  
STA. 50+56+/- -L- TO STA. 51+28+/- -L-  
STA. 51+56+/- -L- TO STA. 51+89+/- -L-  
STA. 52+18+/- -L- TO STA. 52+87+/- -L-  
STA. 53+73+/- -L- TO STA. 54+41+/- -L-  
STA. 54+74+/- -L- TO STA. 55+24+/- -L-  
STA. 55+59+/- -L- TO STA. 56+52+/- -L-  
STA. 56+80+/- -L- TO STA. 57+62+/- -L-  
STA. 57+91+/- -L- TO STA. 58+31+/- -L-  
STA. 58+77+/- -L- TO STA. 59+55+/- -L-  
STA. 59+86+/- -L- TO STA. 60+77+/- -L-  
STA. 61+29+/- -L- TO STA. 61+95+/- -L-  
STA. 62+36+/- -L- TO STA. 62+97+/- -L-  
STA. 63+45+/- -L- TO STA. 64+33+/- -L-
- STEP 7. MODIFY TEMPORARY SIGNALS ACCORDING TO SIGNAL PLANS AS FOLLOWS:  
INTX W. CATAWBA AVE./JETTON RD. (10-1059T1)  
INTX W. CATAWBA AVE./BETHEL CHURCH RD. (10-1079T1)  
INTX W. CATAWBA AVE./ONE NORMAN BLVD. (10-1828T1)  
INTX W. CATAWBA AVE./TORRENCE CHAPEL RD. (10-0939T1)

- STEP 8. USING FLAGGERS, RSD NO. 1101.02(SHT 1 OF 7) AND/OR TCP-22, CONSTRUCT CURB AND GUTTER, WIDEN UP TO EXISTING EDGE OF PAVEMENT OR EDGE OF 2m WIDENING ELEVATIONS, -Y-LINE MEDIANS, AND DRAINAGE AS FOLLOWS (SEE TCP-8 THRU TCP-13):  
STA. 46+63+/- -L- TO STA. 64+91+/- -L-  
STA. 10+80+/- -Y23A- TO STA. 11+42+/- -Y23A-  
STA. 10+10+/- -Y23B- TO STA. 10+30+/- -Y23B-  
STA. 10+30+/- -Y24- TO STA. 10+78+/- -Y24-  
STA. 13+30+/- -Y25A- TO STA. 14+44+/- -Y25A-  
STA. 10+08+/- -Y25B- TO STA. 10+34+/- -Y25B-  
STA. 11+27+/- -Y26- TO STA. 11+54+/- -Y26-  
STA. 10+50+/- -Y27- TO STA. 10+70+/- -Y27-  
STA. 14+80+/- -Y28- TO STA. 15+39+/- -Y28-  
STA. 10+07+/- -Y29- TO STA. 10+27+/- -Y29-  
STA. 10+85+/- -Y30A- TO STA. 11+48+/- -Y30A-  
STA. 10+07+/- -Y30B- TO STA. 10+37+/- -Y30B-
- STEP 9. USING RSD NO. 1101.02(SHTS 1 AND 2 OF 7), REMOVE WATER FILLED BARRIER AS FOLLOWS (SEE TCP-8 AND TCP-9):  
STA. 46+82+/- -L- TO STA. 47+89+/- -L-  
STA. 48+22+/- -L- TO STA. 49+15+/- -L-  
STA. 49+47+/- -L- TO STA. 50+23+/- -L-  
PERFORM 55mm MILLING OPERATION AND PAVE BASE COURSE AS FOLLOWS (SEE TCP-7):  
STA. 48+10+/- -L- TO STA. 49+70+/- -L-  
REPLACE TEMPORARY PAVEMENT MARKINGS THAT WERE OBLITERATED IN MILLING OPERATION AS FOLLOWS (SEE TCP-8 AND TCP-9):  
STA. 48+10+/- -L- TO STA. 49+70+/- -L-

## PHASE II

- STEP 1. USING RSD NO. 1101.02(SHTS 1 AND 2 OF 7), REMOVE ALL REMAINING WATER FILLED BARRIER PLACED IN PHASE I. PAVE AND WEDGE UP TO BUT NOT INCLUDING THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS (SEE TCP-15 THRU TCP-20):  
STA. 46+63+/- -L- TO STA. 64+91+/- -L-  
STA. 10+80+/- -Y23A- TO STA. 11+42+/- -Y23A-  
STA. 10+10+/- -Y23B- TO STA. 10+30+/- -Y23B-  
STA. 10+30+/- -Y24- TO STA. 10+78+/- -Y24-  
STA. 13+30+/- -Y25A- TO STA. 14+39+/- -Y25A-  
STA. 10+10+/- -Y25B- TO STA. 10+34+/- -Y25B-  
STA. 11+00+/- -Y26- TO STA. 11+45+/- -Y26-  
STA. 10+50+/- -Y27- TO STA. 10+65+/- -Y27-  
STA. 14+80+/- -Y28- TO STA. 15+30+/- -Y28-  
STA. 10+09+/- -Y29- TO STA. 10+27+/- -Y29-  
STA. 11+10+/- -Y30A- TO STA. 11+45+/- -Y30A-  
STA. 10+10+/- -Y30B- TO STA. 10+37+/- -Y30B-
- STEP 2. USING RSD NO. 1101.02(SHTS 1 AND 2 OF 7), PLACE TEMPORARY (PAINT) PAVEMENT MARKINGS AND MARKINGS AS FOLLOWS (SEE TCP-15 THRU TCP-20):  
STA. 46+63+/- -L- TO STA. 64+91+/- -L-  
STA. 10+80+/- -Y23A- TO STA. 11+42+/- -Y23A-  
STA. 10+10+/- -Y23B- TO STA. 10+30+/- -Y23B-  
STA. 10+30+/- -Y24- TO STA. 10+78+/- -Y24-  
STA. 13+30+/- -Y25A- TO STA. 14+39+/- -Y25A-  
STA. 10+10+/- -Y25B- TO STA. 10+34+/- -Y25B-  
STA. 11+00+/- -Y26- TO STA. 11+45+/- -Y26-  
STA. 14+80+/- -Y28- TO STA. 15+30+/- -Y28-  
STA. 10+09+/- -Y29- TO STA. 10+27+/- -Y29-  
STA. 11+10+/- -Y30A- TO STA. 11+45+/- -Y30A-  
STA. 10+10+/- -Y30B- TO STA. 10+37+/- -Y30B-
- STEP 3. USING FLAGGERS, PLACE TRAFFIC CONTROL DEVICES AND SHIFT TRAFFIC TO TEMPORARY TRAFFIC PATTERN AS SHOWN ON TCP-15 THRU TCP-20.

- STEP 4. MODIFY TEMPORARY SIGNALS ACCORDING TO SIGNAL PLANS AS FOLLOWS:  
INTX W. CATAWBA AVE./JETTON RD. (10-1059T2)  
INTX W. CATAWBA AVE./BETHEL CHURCH RD. (10-1079T2)  
INTX W. CATAWBA AVE./ONE NORMAN BLVD. (10-1828T2)  
INTX W. CATAWBA AVE./TORRENCE CHAPEL RD. (10-0939T2)
- STEP 5. USING FLAGGERS, CONSTRUCT -L- LINE MEDIANS, COMPLETE DRAINAGE, AND WEDGE/PAVE UP TO BUT NOT INCLUDING THE FINAL SURFACE COURSE AS SHOWN ON TCP-15 THRU TCP-20.

## PHASE III

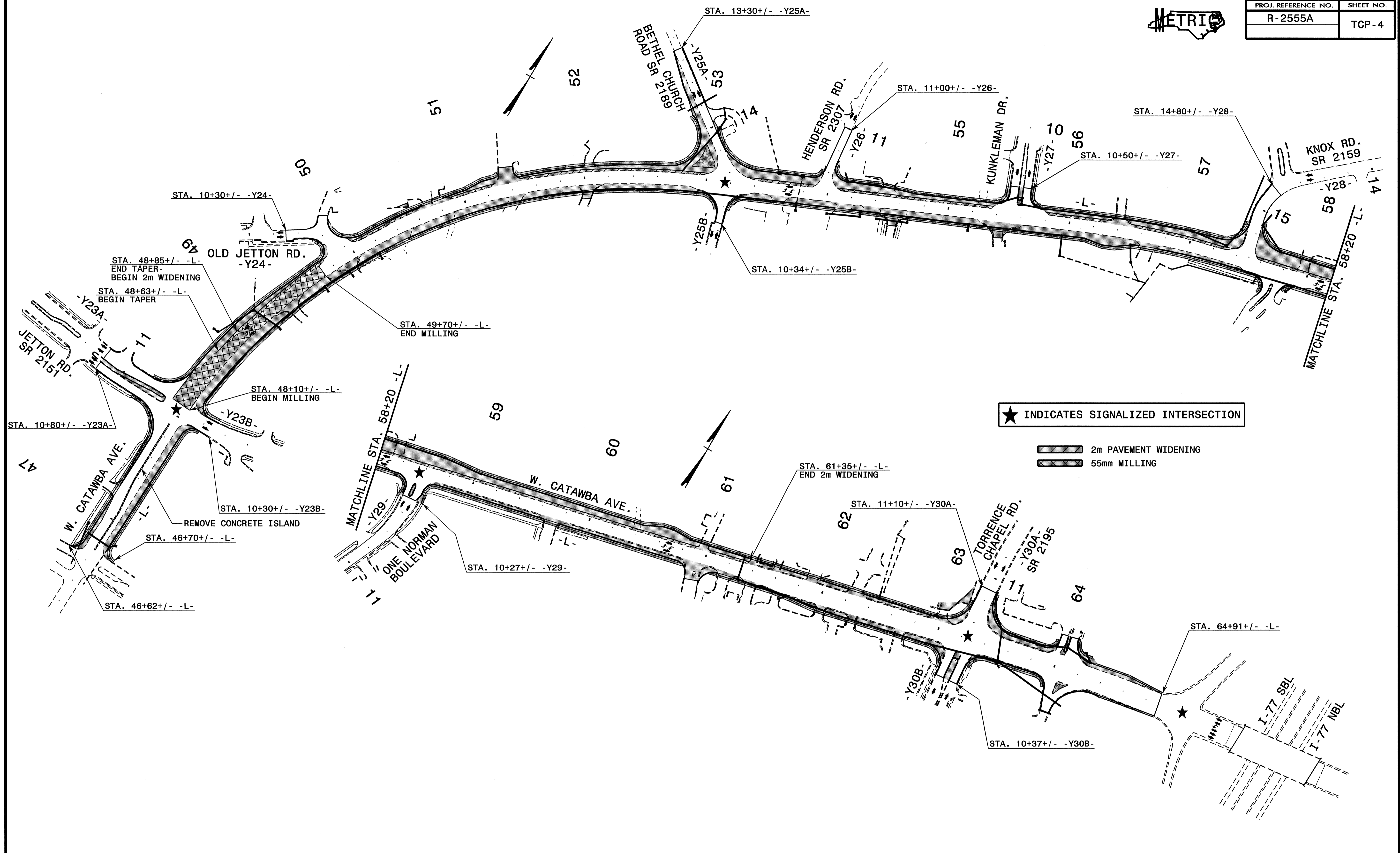
- STEP 1. USING RSD NO. 1101.02 (SHTS 1 AND 3 OF 7), PLACE THE FINAL LAYER OF SURFACE COURSE AS FOLLOWS (SEE TCP-15 THRU TCP-20):  
STA. 46+63+/- -L- TO STA. 64+91+/- -L-  
STA. 10+80+/- -Y23A- TO STA. 11+42+/- -Y23A-  
STA. 10+10+/- -Y23B- TO STA. 10+30+/- -Y23B-  
STA. 10+30+/- -Y24- TO STA. 10+78+/- -Y24-  
STA. 13+30+/- -Y25A- TO STA. 14+39+/- -Y25A-  
STA. 10+10+/- -Y25B- TO STA. 10+34+/- -Y25B-  
STA. 11+00+/- -Y26- TO STA. 11+45+/- -Y26-  
STA. 10+50+/- -Y27- TO STA. 10+65+/- -Y27-  
STA. 14+80+/- -Y28- TO STA. 15+30+/- -Y28-  
STA. 10+09+/- -Y29- TO STA. 10+27+/- -Y29-  
STA. 11+10+/- -Y30A- TO STA. 11+45+/- -Y30A-  
STA. 10+10+/- -Y30B- TO STA. 10+37+/- -Y30B-
- STEP 2. USING RSD NO. 1101.02 (SHTS 1 AND 3 OF 7), PLACE FINAL (THERMO) PAVEMENT MARKINGS AND MARKERS AS FOLLOWS (SEE PM-2 THRU PM-7):  
STA. 46+72+/- -L- TO STA. 64+91+/- -L-  
STA. 10+80+/- -Y23A- TO STA. 11+42+/- -Y23A-  
STA. 10+12+/- -Y23B- TO STA. 10+30+/- -Y23B-  
STA. 10+30+/- -Y24- TO STA. 10+78+/- -Y24-  
STA. 13+30+/- -Y25A- TO STA. 14+34+/- -Y25A-  
STA. 10+10+/- -Y25B- TO STA. 10+34+/- -Y25B-  
STA. 11+00+/- -Y26- TO STA. 11+43+/- -Y26-  
STA. 14+80+/- -Y28- TO STA. 15+25+/- -Y28-  
STA. 10+10+/- -Y29- TO STA. 10+27+/- -Y29-  
STA. 11+10+/- -Y30A- TO STA. 11+38+/- -Y30A-  
STA. 10+14+/- -Y30B- TO STA. 10+37+/- -Y30B-
- STEP 3. ACTIVATE FINAL SIGNALS ACCORDING TO SIGNAL PLANS AS FOLLOWS:  
INTX W. CATAWBA AVE./JETTON RD. (10-1059)  
INTX W. CATAWBA AVE./BETHEL CHURCH RD. (10-1079)  
INTX W. CATAWBA AVE./ONE NORMAN BLVD. (10-1828)  
INTX W. CATAWBA AVE./TORRENCE CHAPEL RD. (10-0939)
- STEP 4. USING FLAGGERS, REMOVE ALL TRAFFIC CONTROL DEVICES AND SHIFT TRAFFIC TO A 2-WAY, 4-LANE TRAFFIC PATTERN.

14-AUG-2007 09:05  
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 scottis AT WZ122469

APPROVED: <i>Qad L. L...</i> DATE: 8/14/07	<b>PHASING</b>	
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	DATE: 03-23-07	
	DWG. BY: SBC	
	DESIGN BY: SBC	
	REVIEWED BY: CLL	



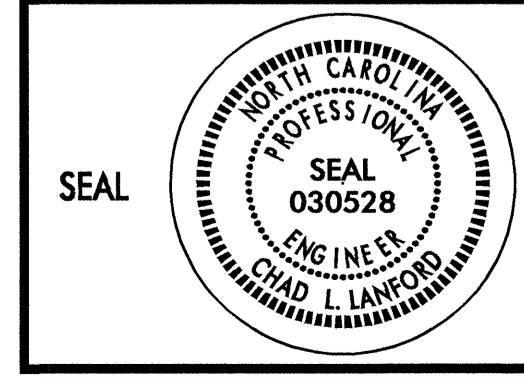
PROJ. REFERENCE NO.	SHEET NO.
R-2555A	TCP-4



★ INDICATES SIGNALIZED INTERSECTION

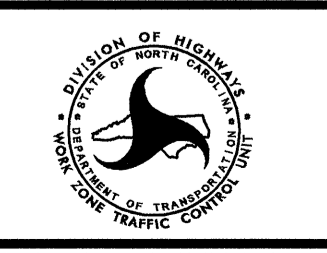
2m PAVEMENT WIDENING  
 55mm MILLING

APPROVED: *Chad L. Lanford* DATE: 8/14/07



**PHASE I OVERVIEW**

SCALE: 1:1500  
 DATE: 03-26-07  
 DWG. BY: SBC  
 DESIGN BY: SBC  
 REVIEWED BY: CLL

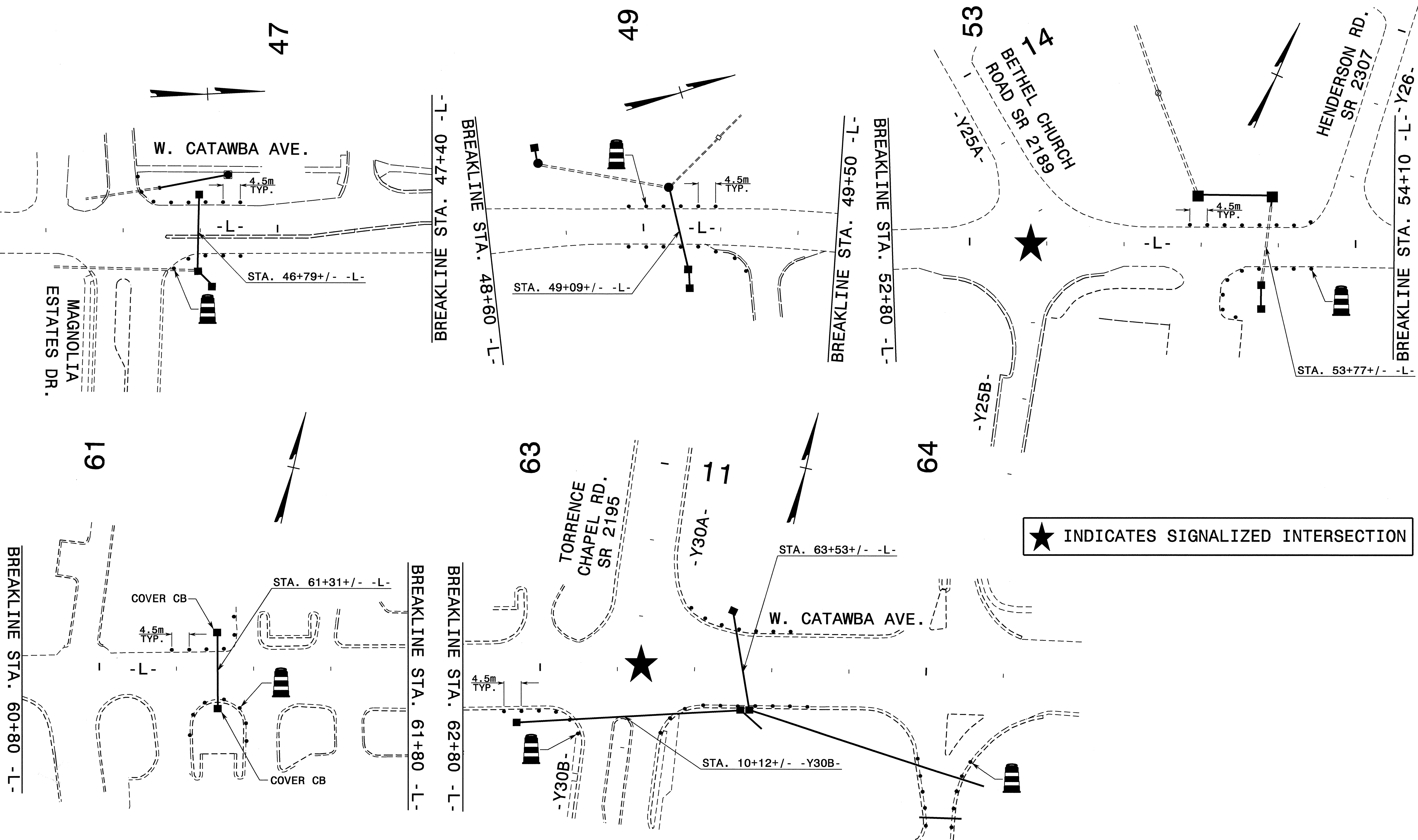


REVISIONS	

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PROJ. REFERENCE NO. R-2555A	SHEET NO. TCP-5
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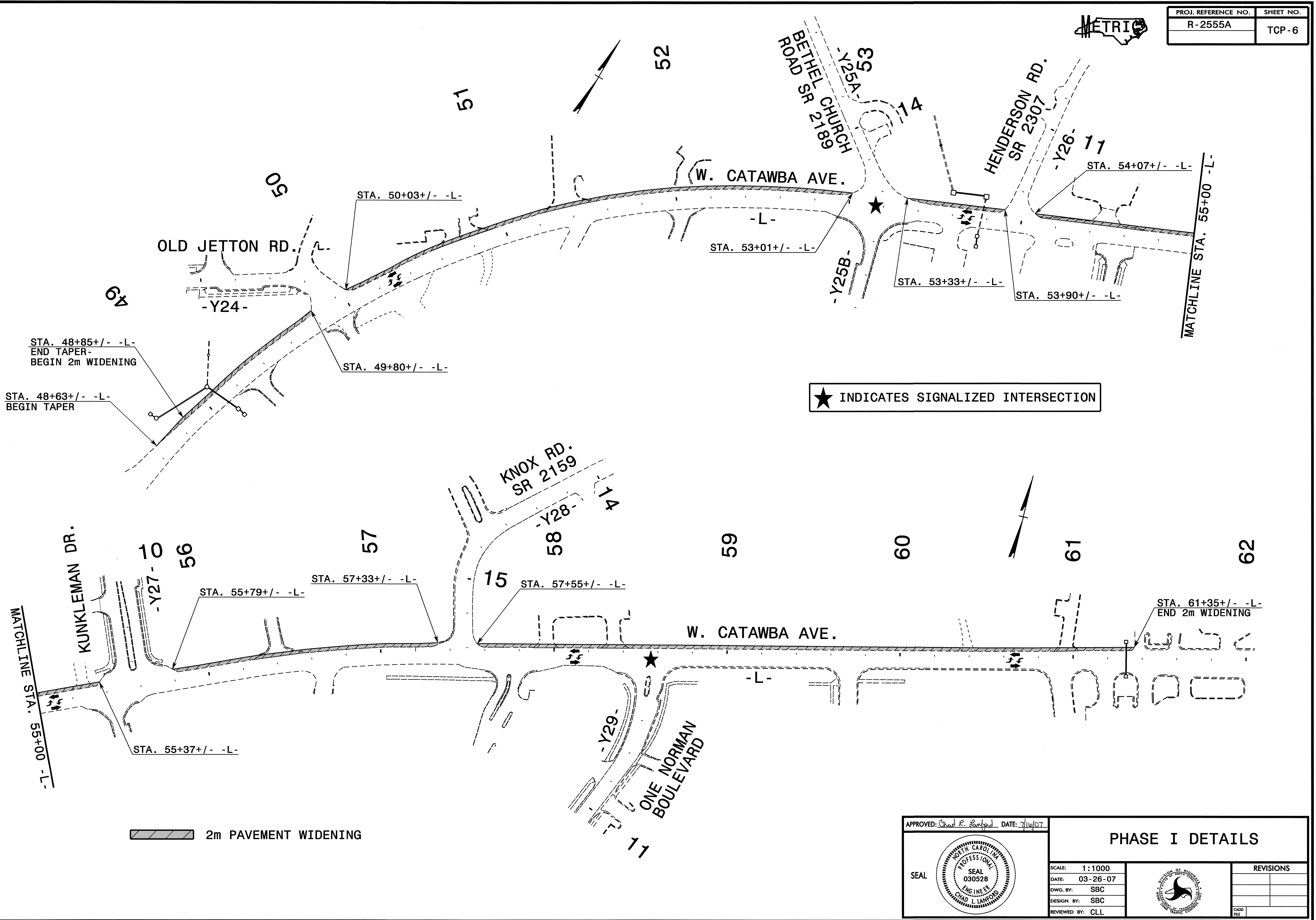
★ INDICATES SIGNALIZED INTERSECTION

16-JUL-2007 07:33  
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 scoats AT WZTC2469

APPROVED: <i>Chad L. Lanford</i> DATE: 7/16/07 	<b>PHASE I DETAILS</b>									
	SCALE: 1:500 DATE: 03-26-07 DWG. BY: SBC DESIGN BY: SBC REVIEWED BY: CLJ	<table border="1"> <thead> <tr> <th colspan="2">REVISIONS</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS						
REVISIONS										



PROJ. REFERENCE NO.	SHEET NO.
R-2555A	TCP-6



★ INDICATES SIGNALIZED INTERSECTION

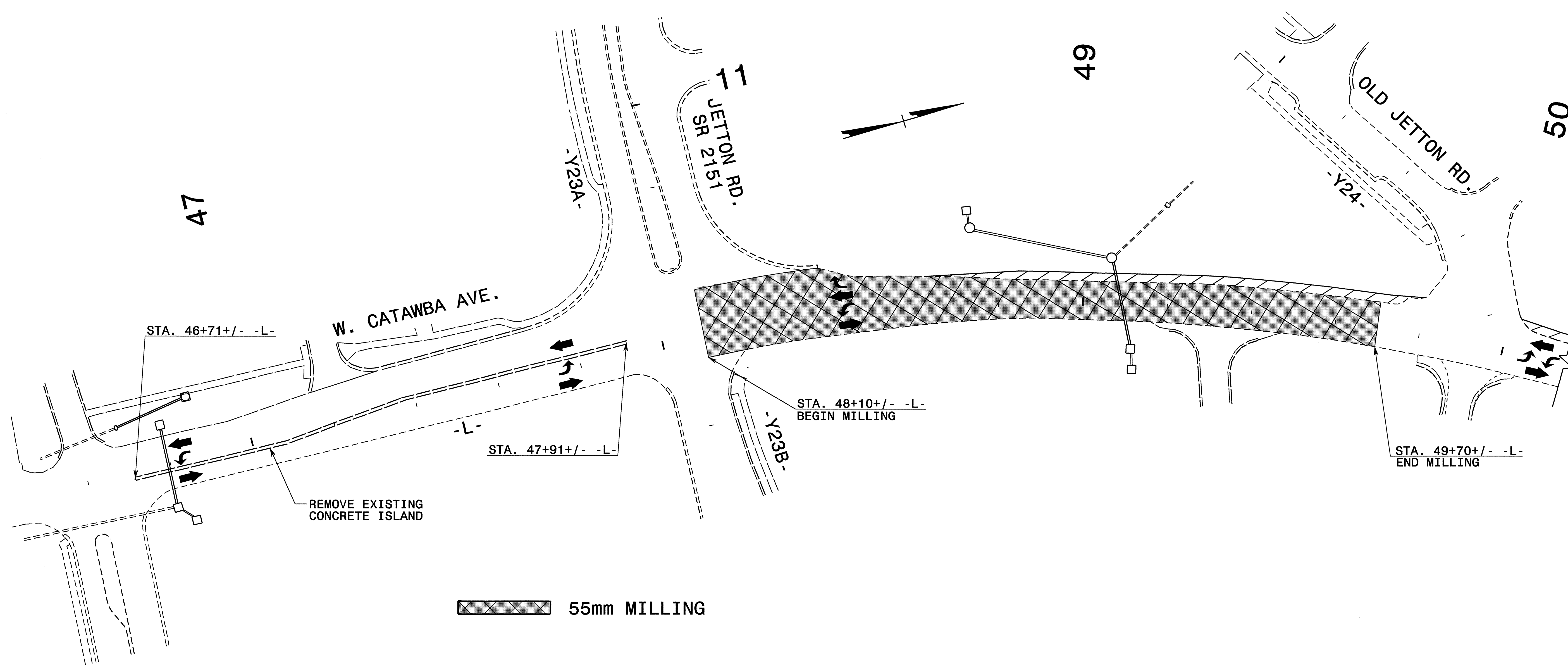
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APPROVED:  DATE: 7/16/07		<b>PHASE I DETAILS</b>									
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DATE: 03-26-07											
DESIGN BY: SBC											
REVIEWED BY: CLL											



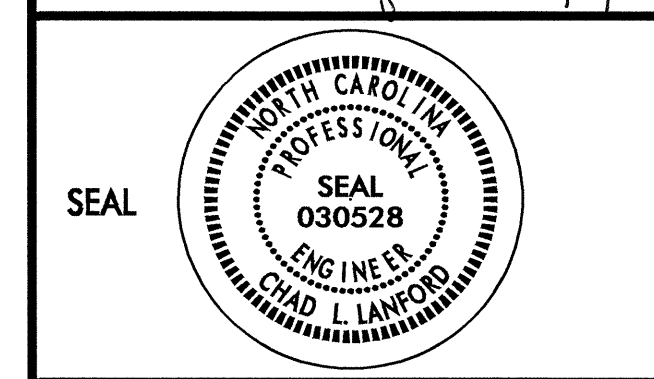
PROJ. REFERENCE NO.	SHEET NO.
R-2555A	TCP-7



 55mm MILLING

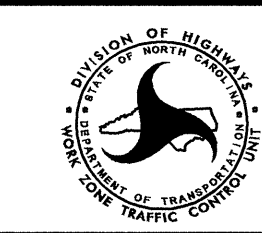
14-AUG-2007 09:06  
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 s0cd1s - AT - MZTC224189

APPROVED: *David R. Lanford* DATE: 8/14/07



**PHASE I DETAILS**

SCALE: 1:500  
 DATE: 03-26-07  
 DWG. BY: SBC  
 DESIGN BY: SBC  
 REVIEWED BY: CLL

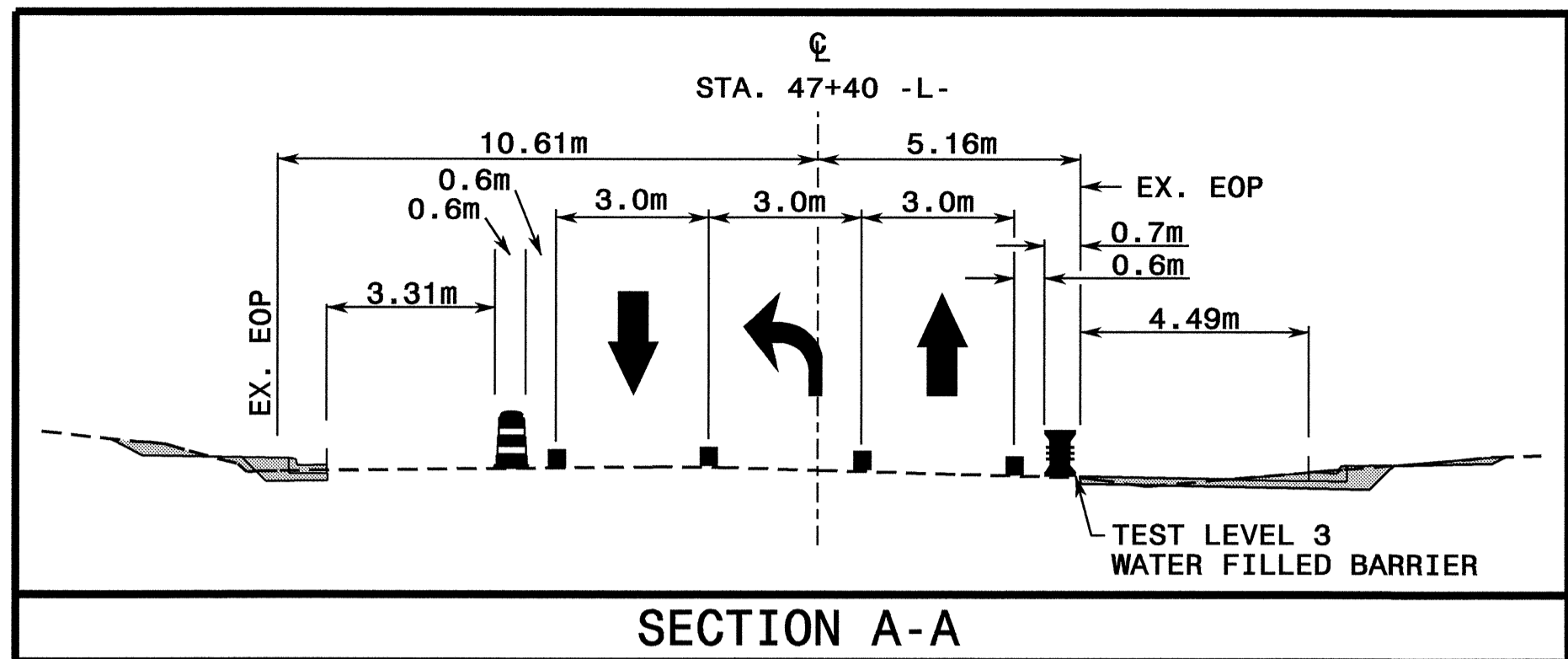


REVISIONS	

CADD FILE



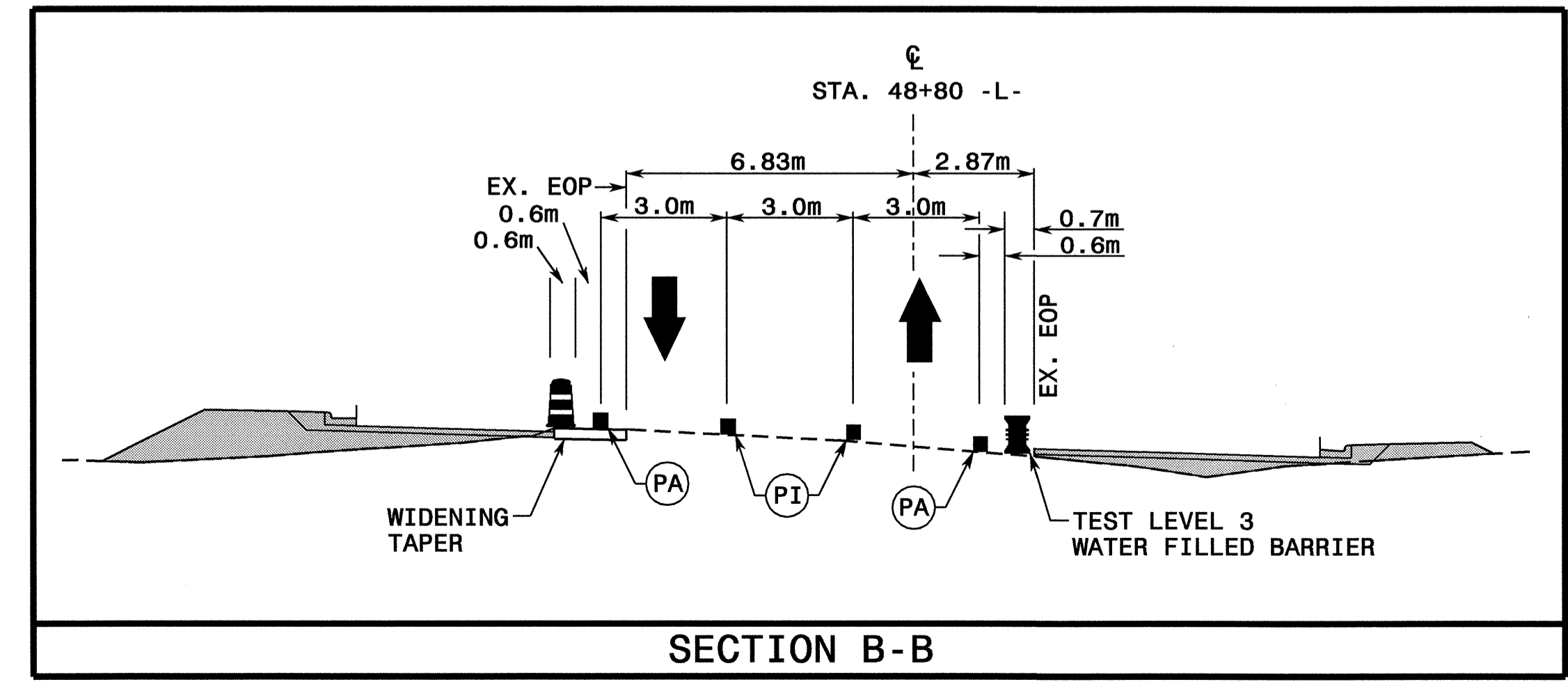
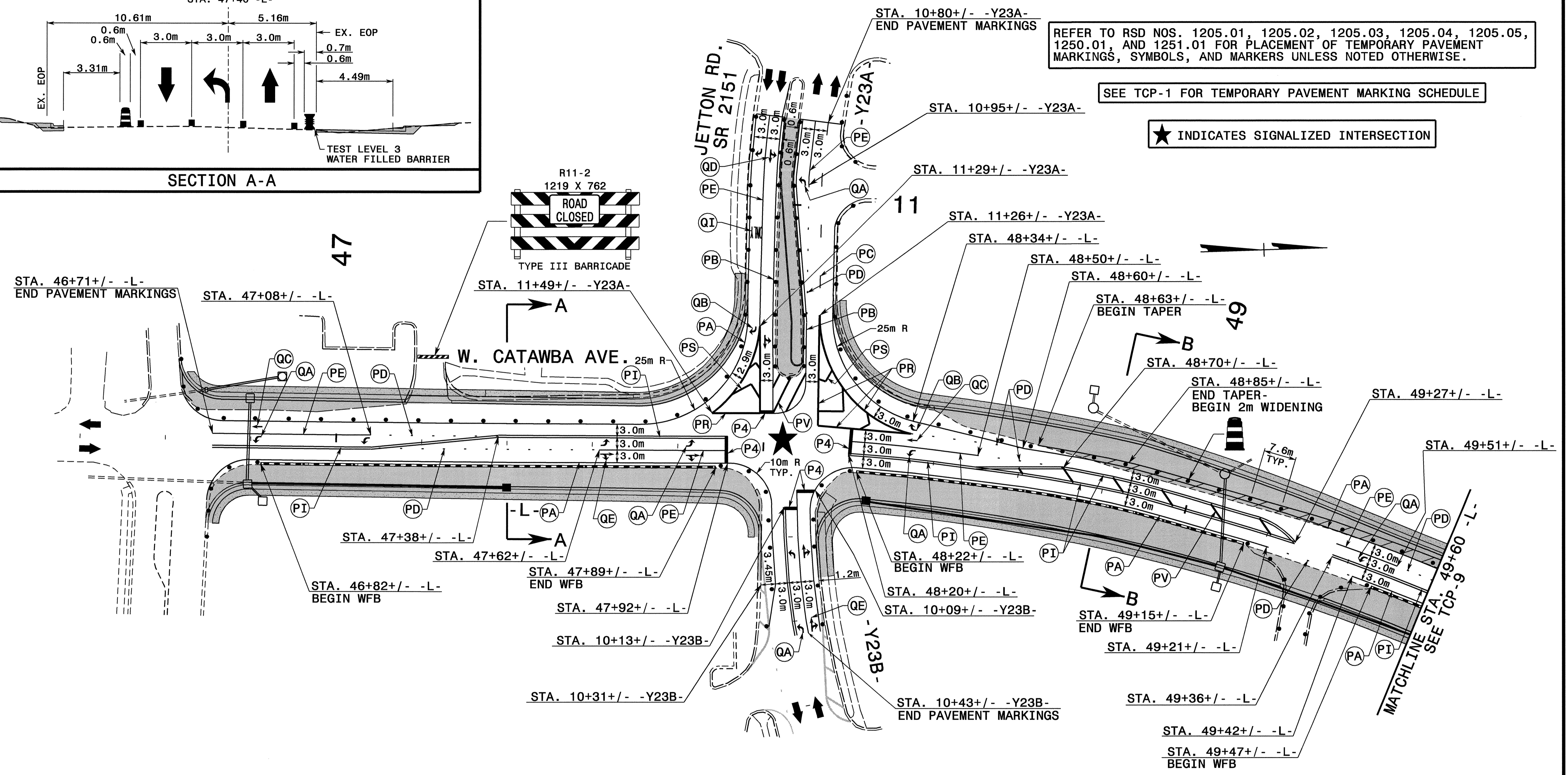
PROJ. REFERENCE NO.	SHEET NO.
R-2555A	TCP-8



REFER TO RSD NOS. 1205.01, 1205.02, 1205.03, 1205.04, 1205.05, 1250.01, AND 1251.01 FOR PLACEMENT OF TEMPORARY PAVEMENT MARKINGS, SYMBOLS, AND MARKERS UNLESS NOTED OTHERWISE.

SEE TCP-1 FOR TEMPORARY PAVEMENT MARKING SCHEDULE

★ INDICATES SIGNALIZED INTERSECTION



16-JUL-2007 07:34 \\dot\dfs\corp\1\Pro\IP\Projects-R\2555A\Traffic\Traffic\tr\affico\tr\top\R2555A\_TC.phl\_tcp08.dgn scods AT WZ1222469

APPROVED: <i>Chad L. Lanford</i> DATE: 7/16/07	<b>PHASE I DETAILS</b>							
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	DATE: 03-26-07							
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REVISIONS								







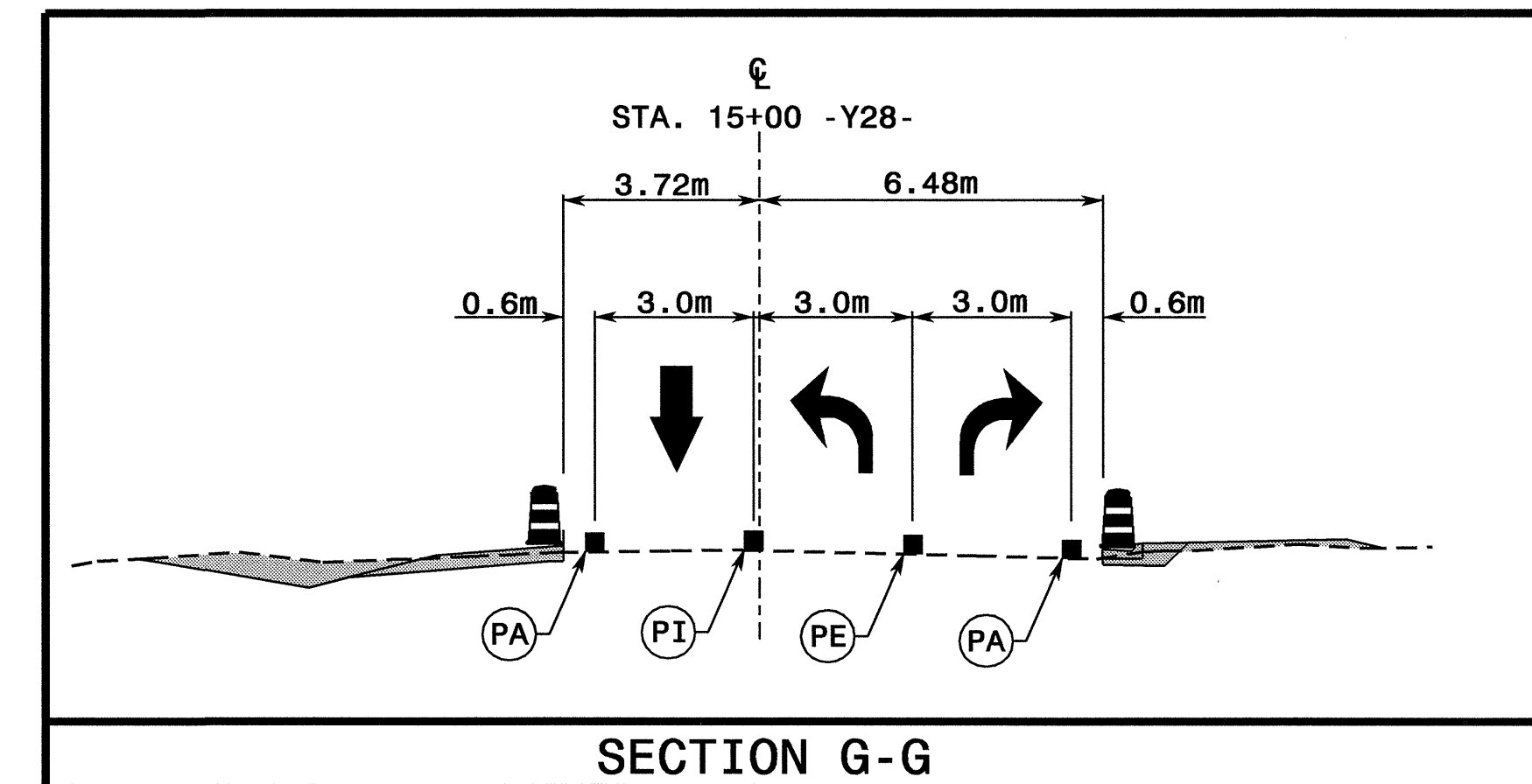
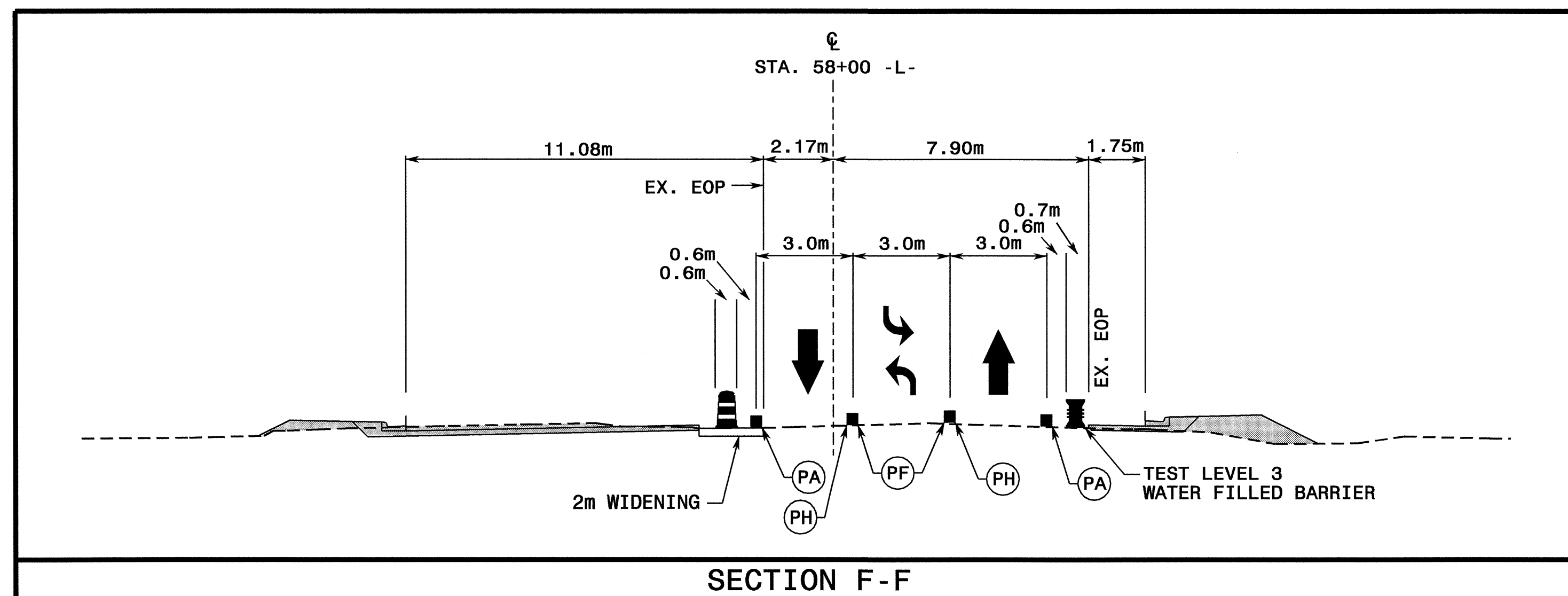
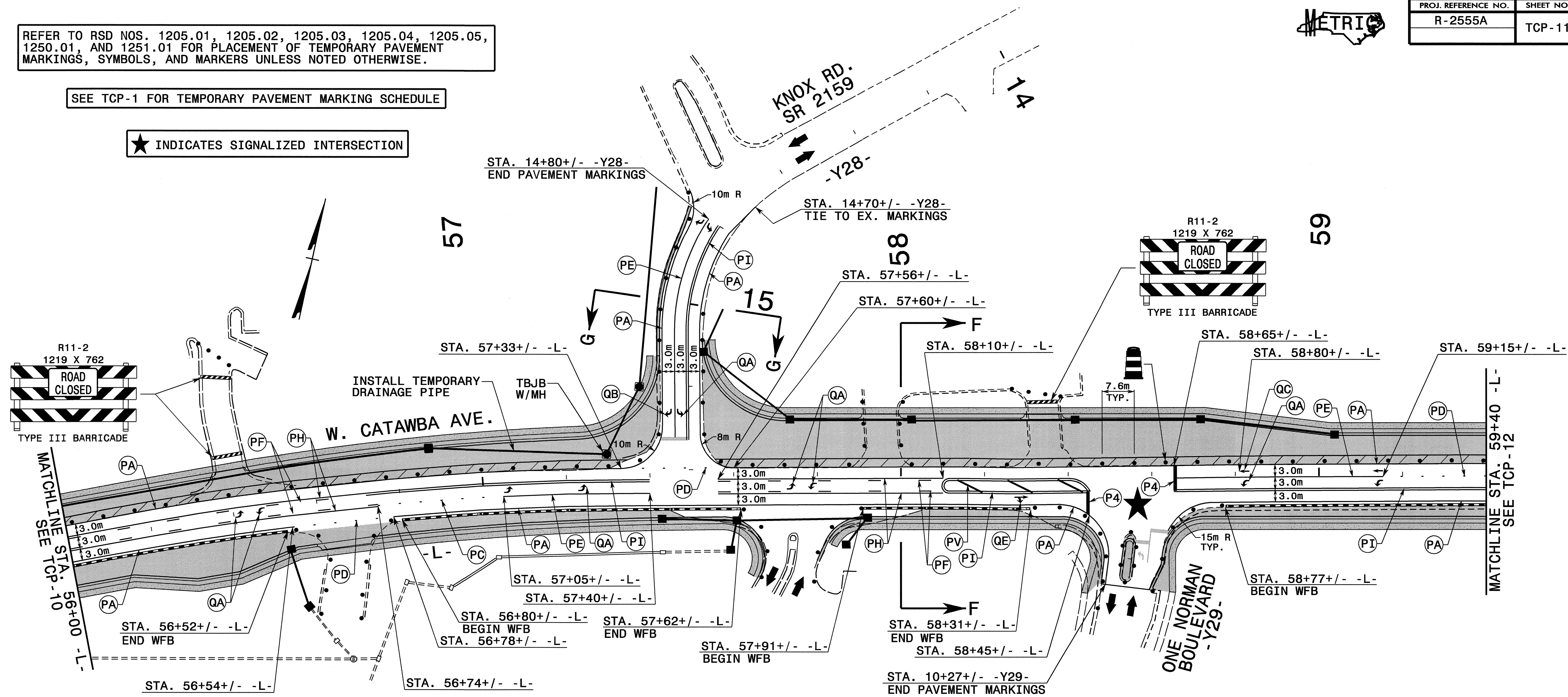


PROJ. REFERENCE NO. R-2555A	SHEET NO. TCP-11
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REFER TO RSD NOS. 1205.01, 1205.02, 1205.03, 1205.04, 1205.05, 1250.01, AND 1251.01 FOR PLACEMENT OF TEMPORARY PAVEMENT MARKINGS, SYMBOLS, AND MARKERS UNLESS NOTED OTHERWISE.

SEE TCP-1 FOR TEMPORARY PAVEMENT MARKING SCHEDULE

★ INDICATES SIGNALIZED INTERSECTION



APPROVED: *Clayton L. Lanford* DATE: 7/16/07

**PHASE I DETAILS**

SCALE: 1:500  
 DATE: 03-26-07  
 DWG. BY: SBC  
 DESIGN BY: SBC  
 REVIEWED BY: CLL

SEAL:

REVISIONS

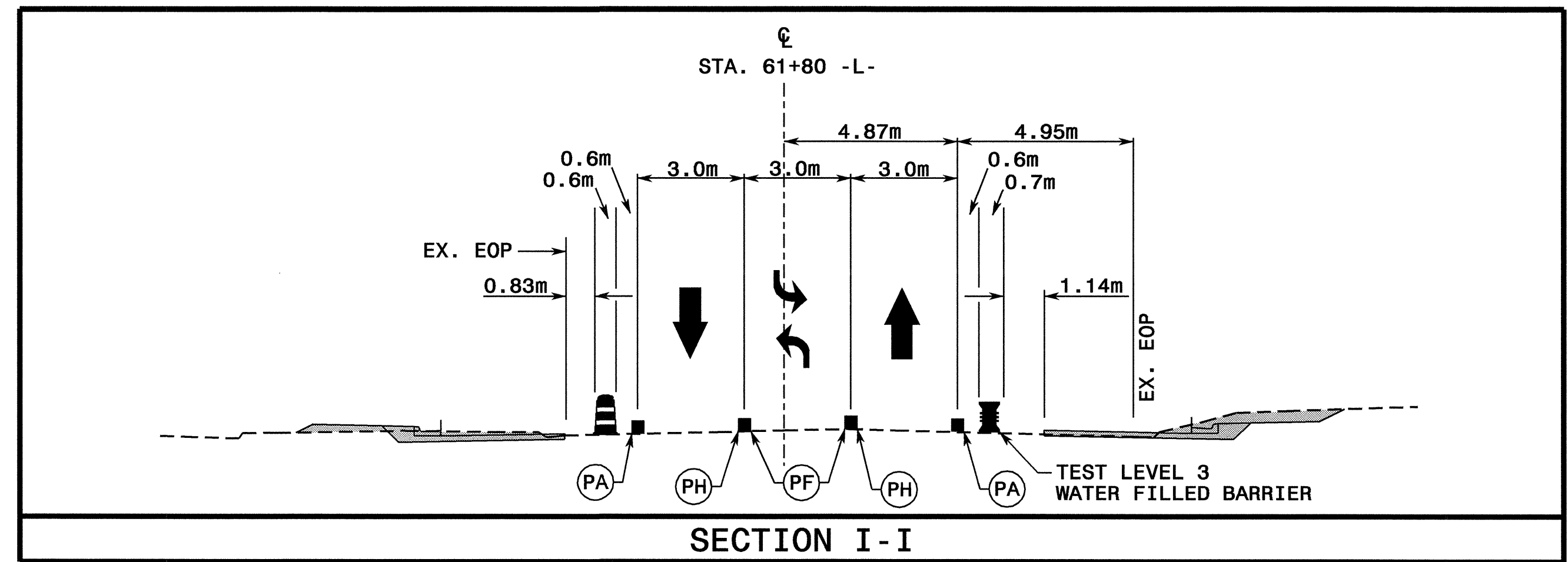
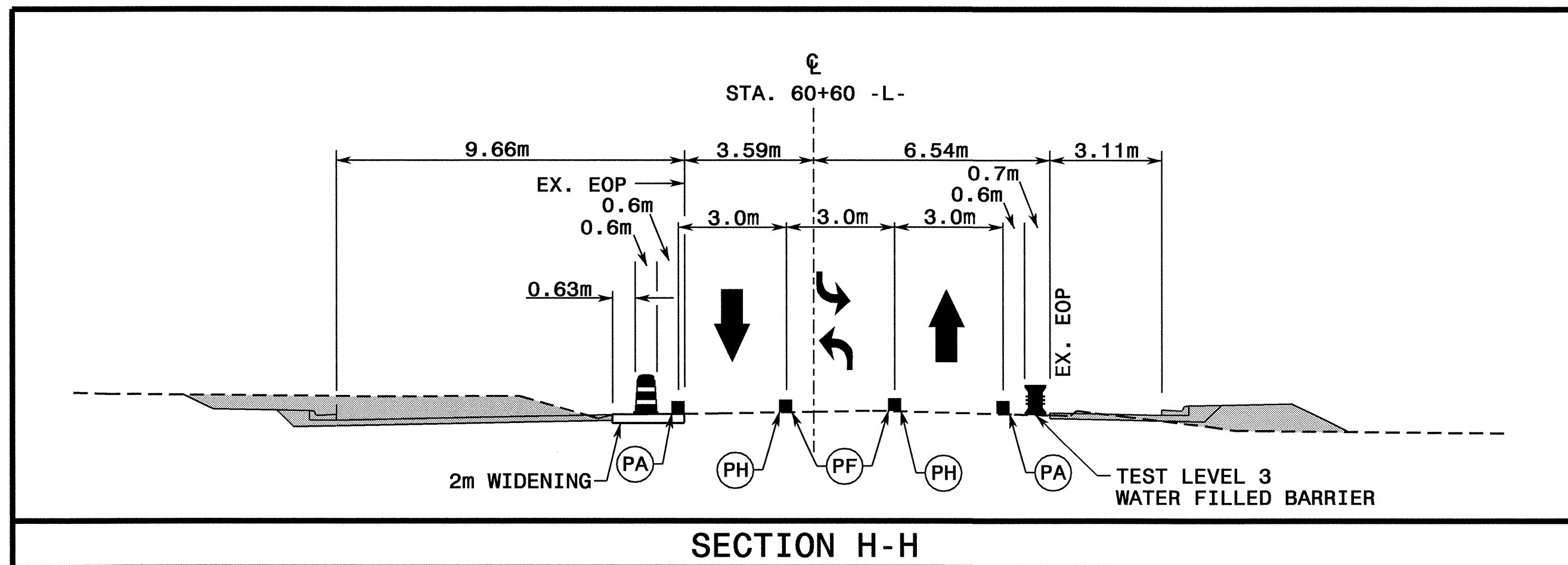
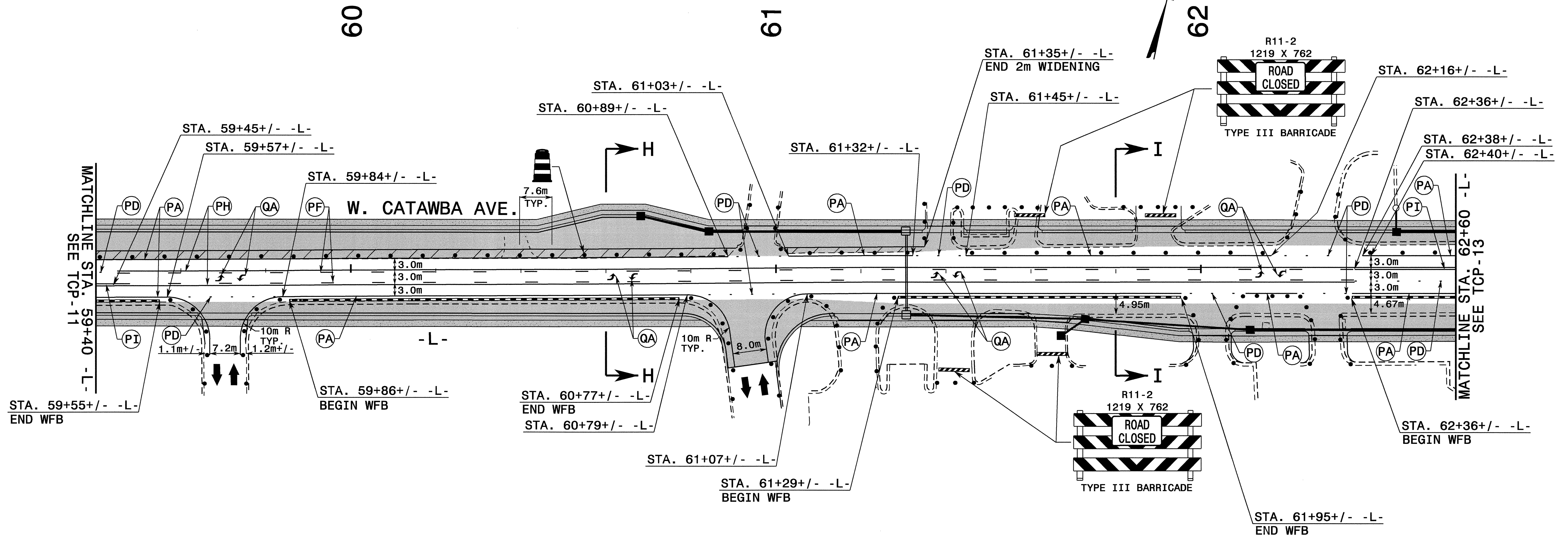
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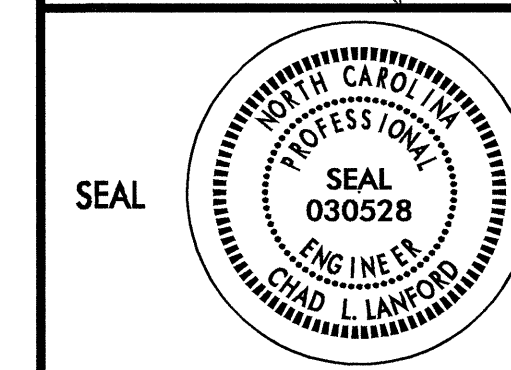
PROJ. REFERENCE NO.	SHEET NO.
R-2555A	TCP-12

REFER TO RSD NOS. 1205.01, 1205.02, 1205.03, 1205.04, 1205.05, 1250.01, AND 1251.01 FOR PLACEMENT OF TEMPORARY PAVEMENT MARKINGS, SYMBOLS, AND MARKERS UNLESS NOTED OTHERWISE.

SEE TCP-1 FOR TEMPORARY PAVEMENT MARKING SCHEDULE

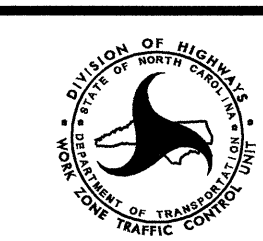


APPROVED: *Chad L. Lampard* DATE: 7/10/07



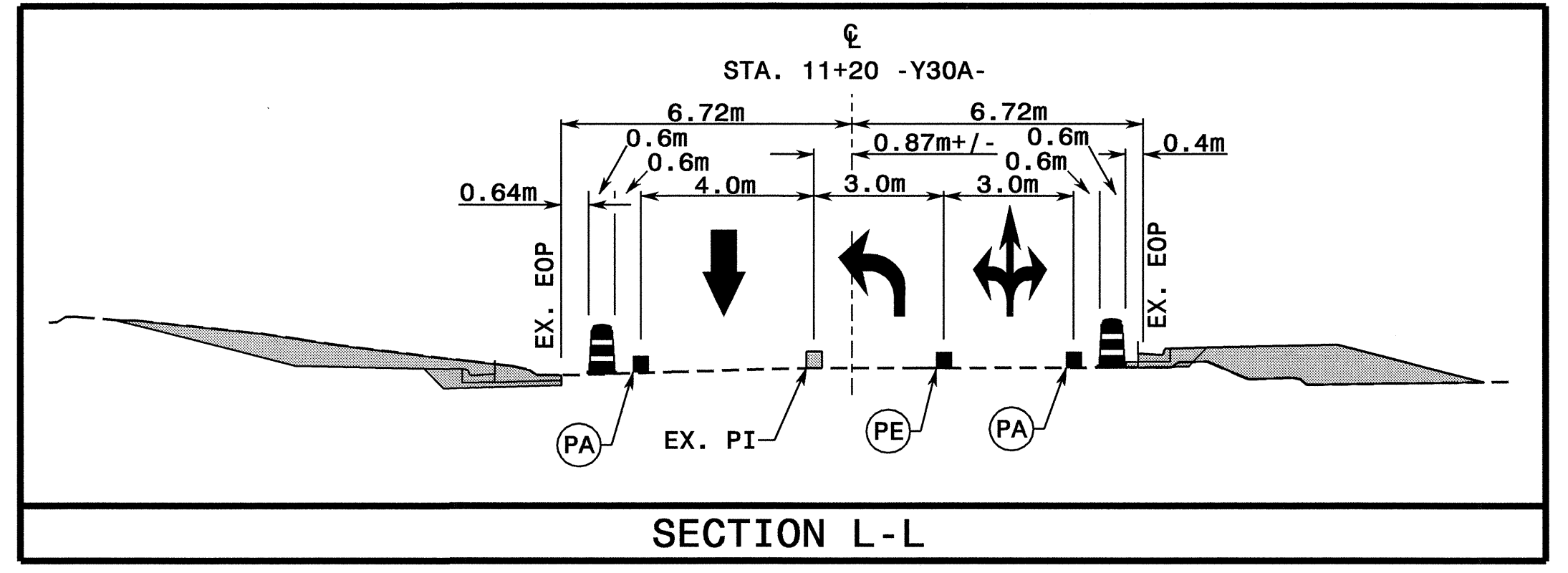
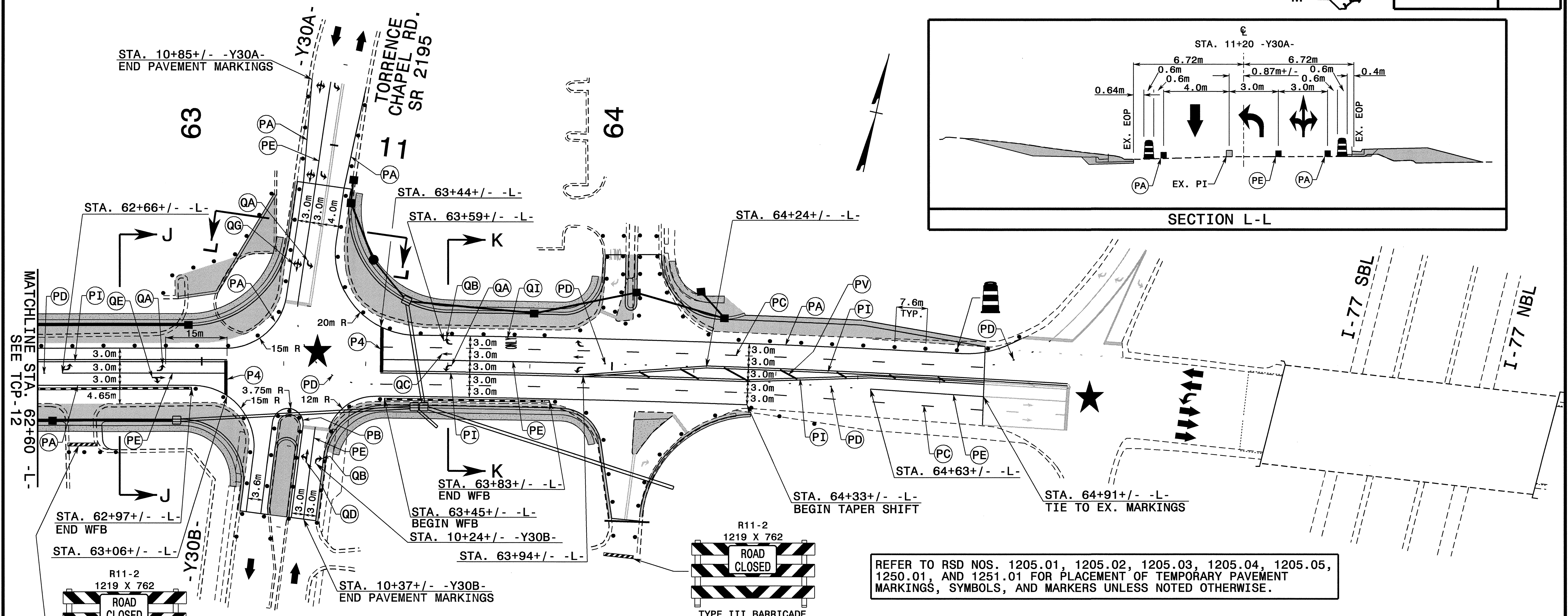
PHASE I DETAILS

SCALE: 1:500  
DATE: 03-26-07  
DWG. BY: SBC  
DESIGN BY: SBC  
REVIEWED BY: CLL



REVISIONS	

16-JUL-2007 07:36 P:\Projects\Projects-R\2555A\TrafficControl\top\2555A\_TC\_phl\_tcp12.dgn

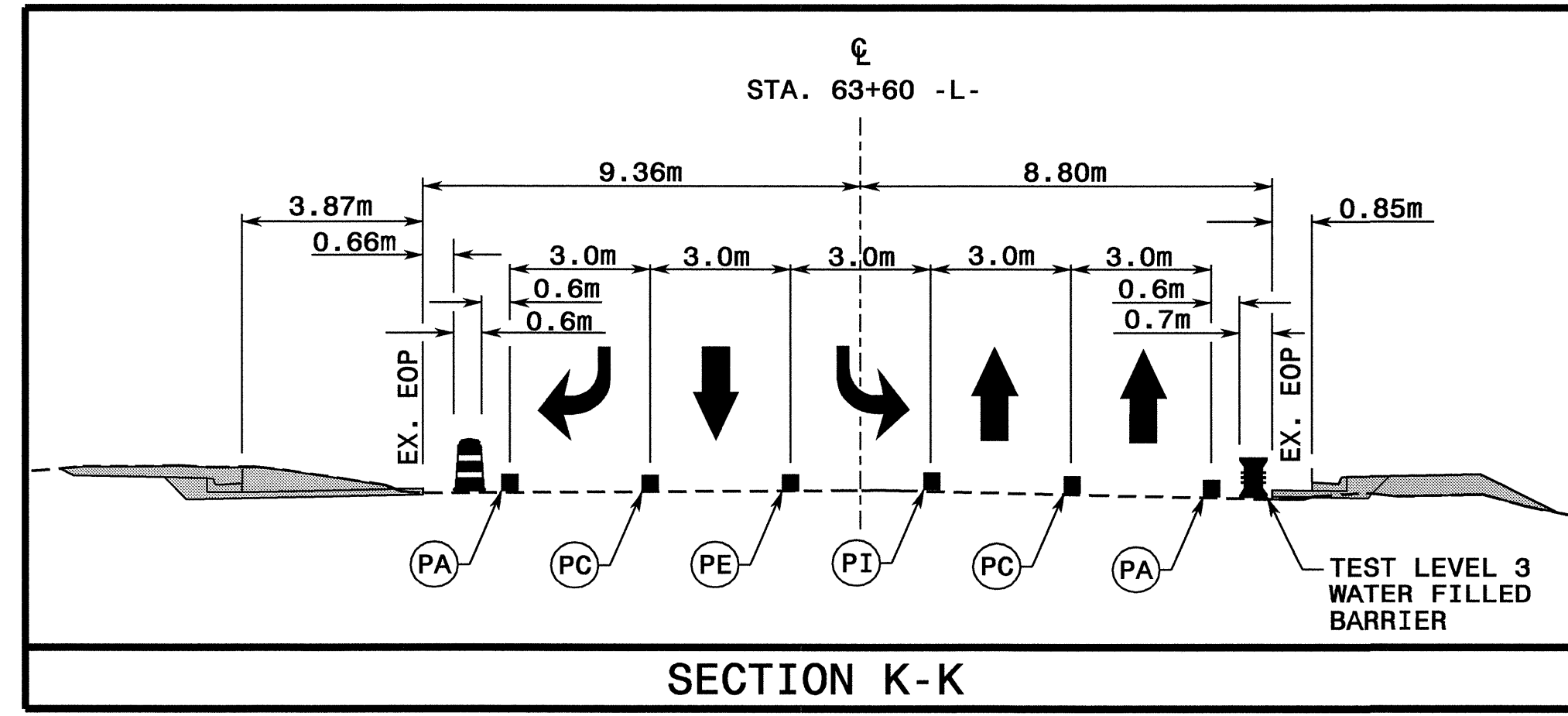
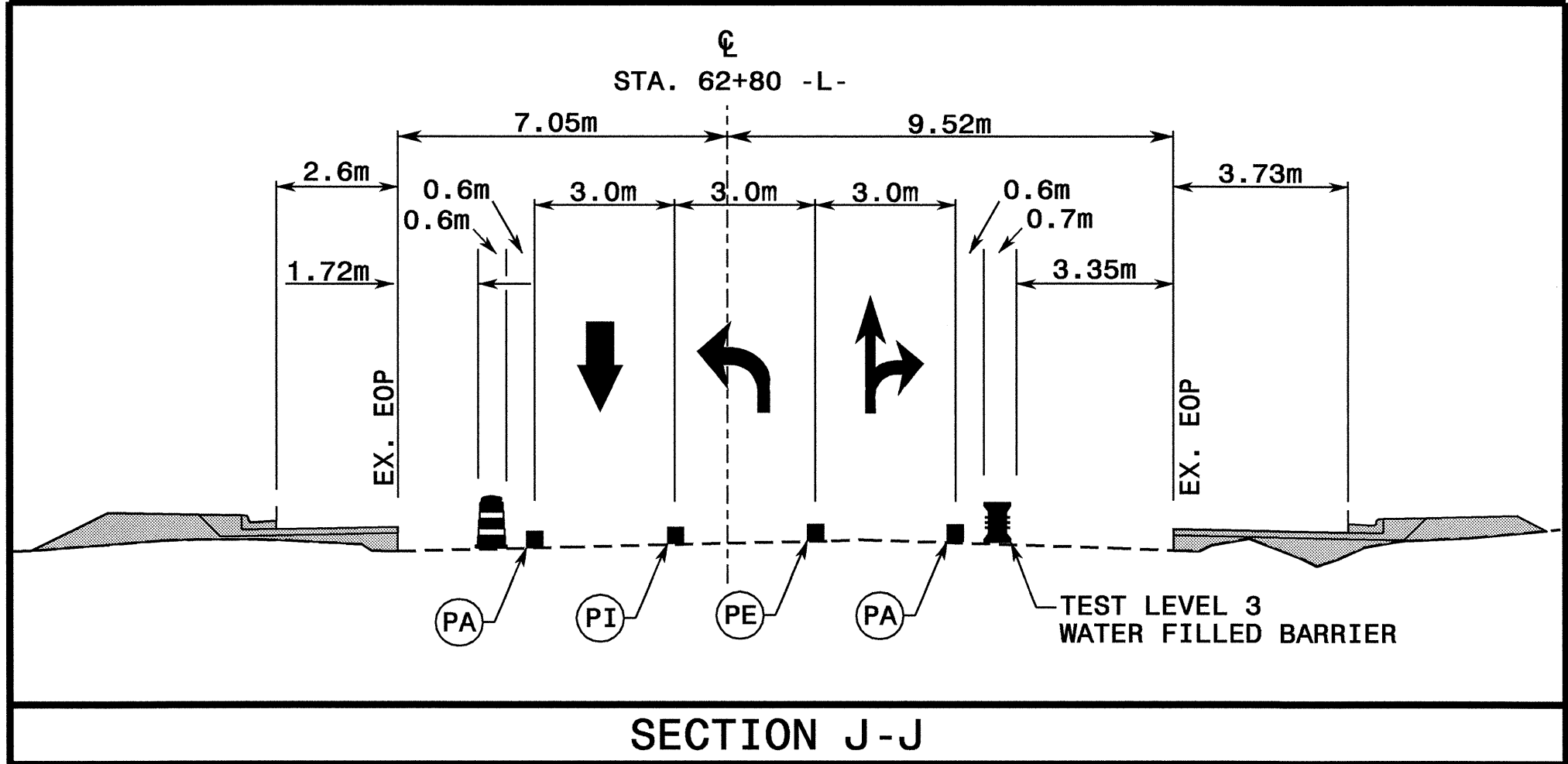


MATCHLINE STA. 62+60 -L-  
SEE TCP-12

REFER TO RSD NOS. 1205.01, 1205.02, 1205.03, 1205.04, 1205.05, 1250.01, AND 1251.01 FOR PLACEMENT OF TEMPORARY PAVEMENT MARKINGS, SYMBOLS, AND MARKERS UNLESS NOTED OTHERWISE.

★ INDICATES SIGNALIZED INTERSECTION

SEE TCP-1 FOR TEMPORARY PAVEMENT MARKING SCHEDULE

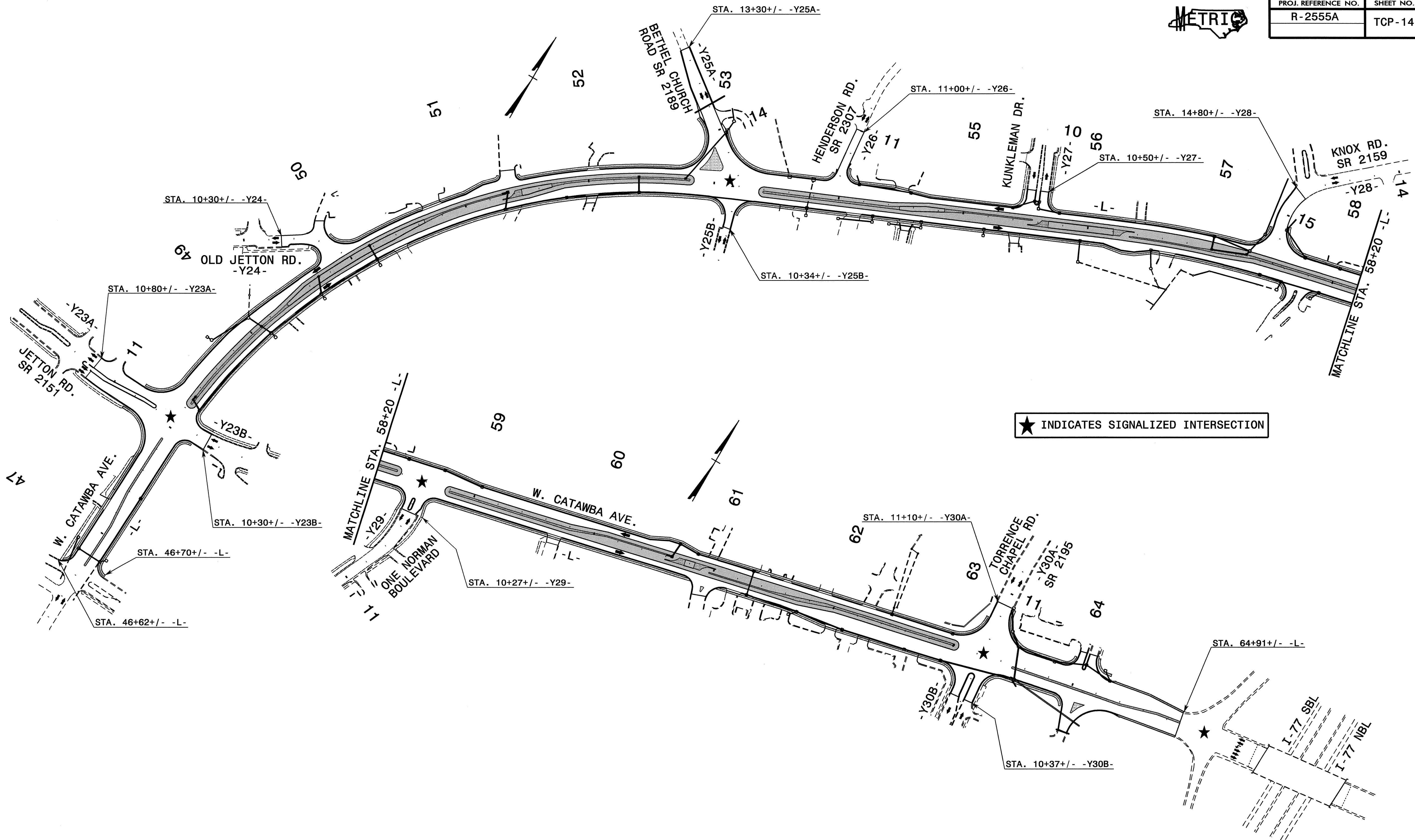


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scodrs AT WZTC24169

APPROVED: <i>Chad R. Lanford</i> DATE: 7/16/07	<b>PHASE I DETAILS</b>										
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	DATE: 03-26-07										
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CADD FILE											



PROJ. REFERENCE NO.	SHEET NO.
R-2555A	TCP-14



★ INDICATES SIGNALIZED INTERSECTION

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 scdats AT WZ1222469

APPROVED: <i>Chad L. Langford</i> DATE: 7/16/07	<b>PHASE II OVERVIEW</b>	
SCALE: 1:1500		REVISIONS
DATE: 03-26-07		
DWG. BY: SBC		
DESIGN BY: SBC		
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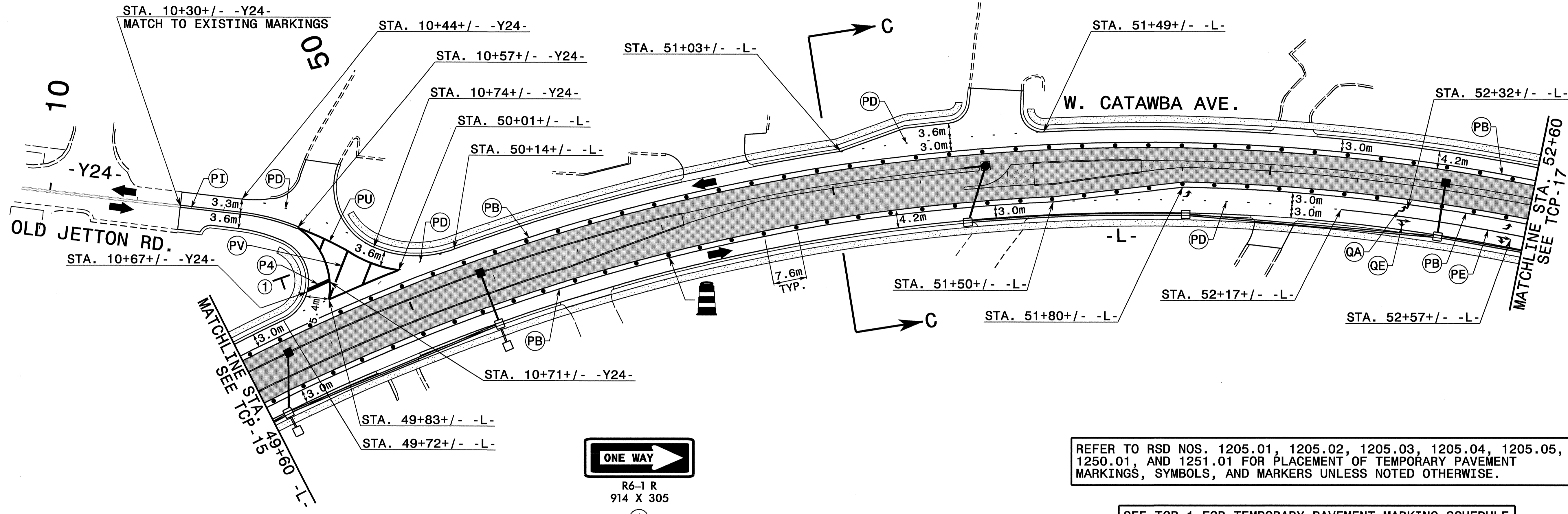




PROJ. REFERENCE NO. R-2555A	SHEET NO. TCP-16
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52

51

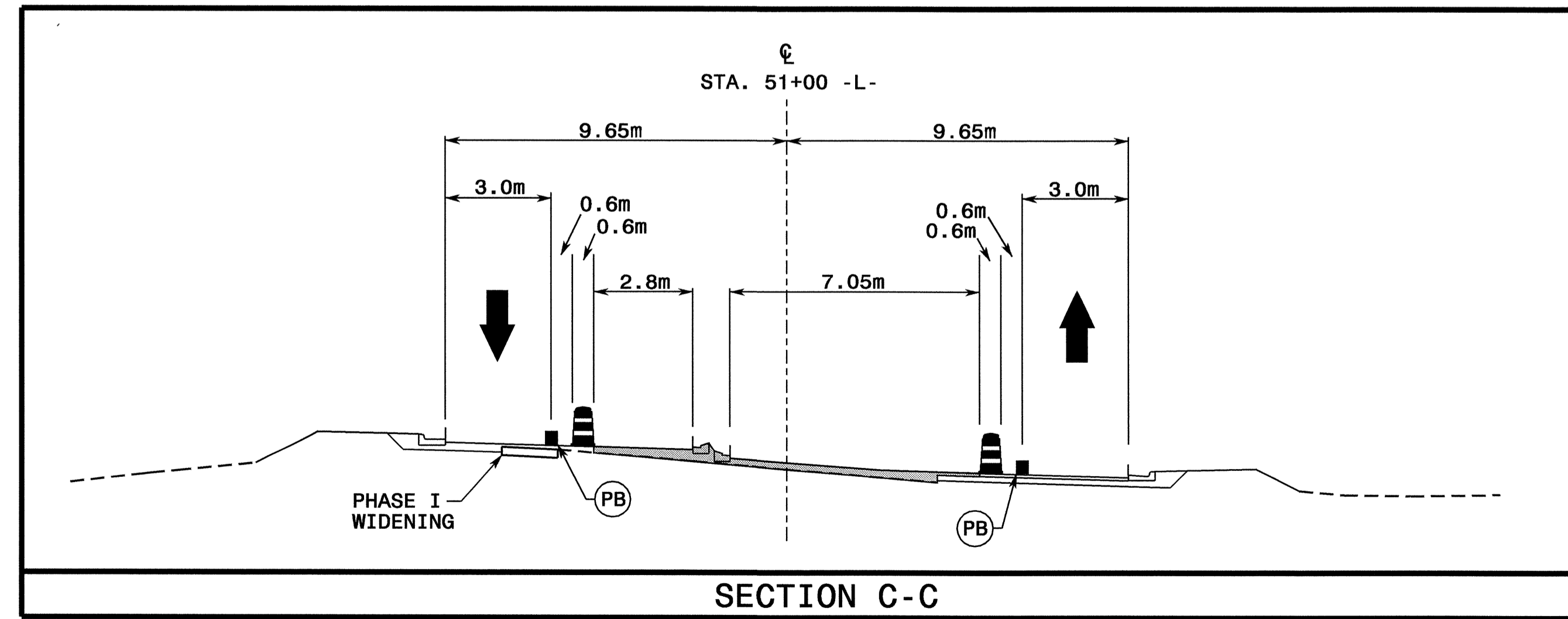


R6-1 R  
914 X 305

①

REFER TO RSD NOS. 1205.01, 1205.02, 1205.03, 1205.04, 1205.05, 1250.01, AND 1251.01 FOR PLACEMENT OF TEMPORARY PAVEMENT MARKINGS, SYMBOLS, AND MARKERS UNLESS NOTED OTHERWISE.

SEE TCP-1 FOR TEMPORARY PAVEMENT MARKING SCHEDULE

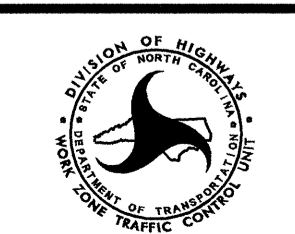


APPROVED: *Clad L. Lanford* DATE: 7/16/07



PHASE II DETAILS

SCALE: 1:500  
DATE: 03-26-07  
DWG. BY: SBC  
DESIGN BY: SBC  
REVIEWED BY: CLL



REVISIONS	

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SBC AT WZTC22469



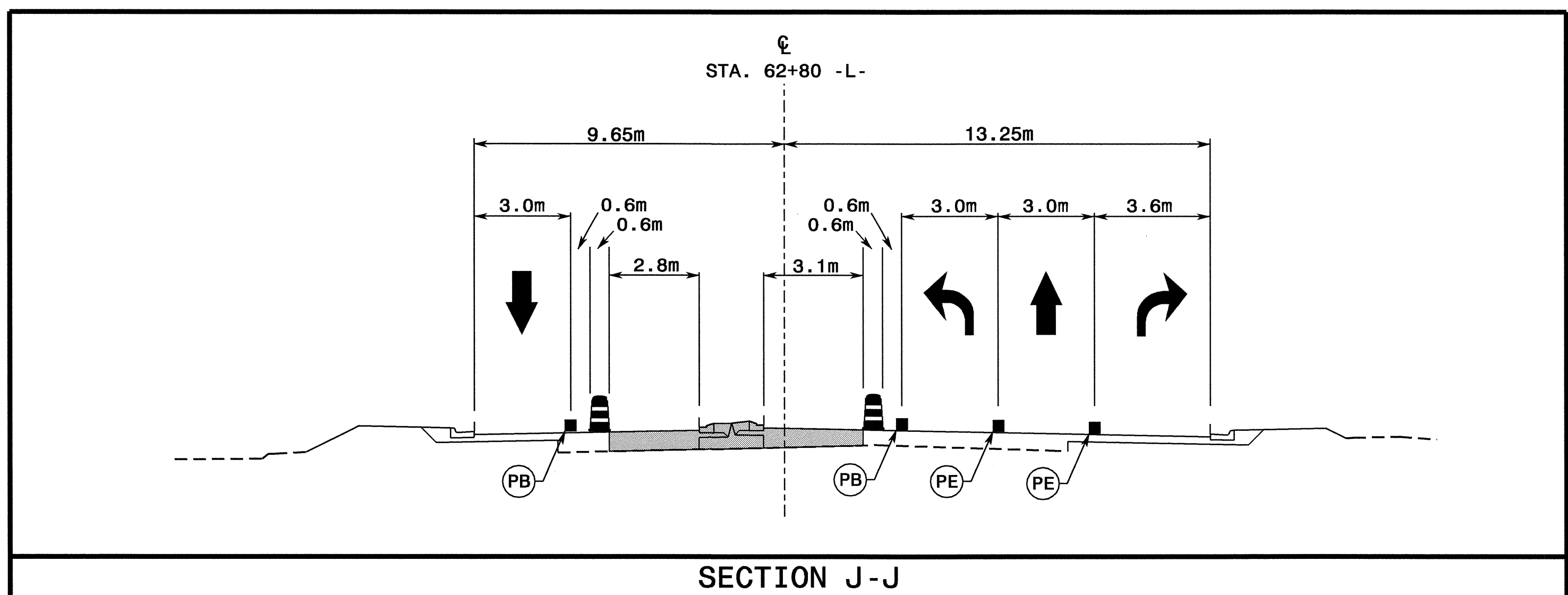
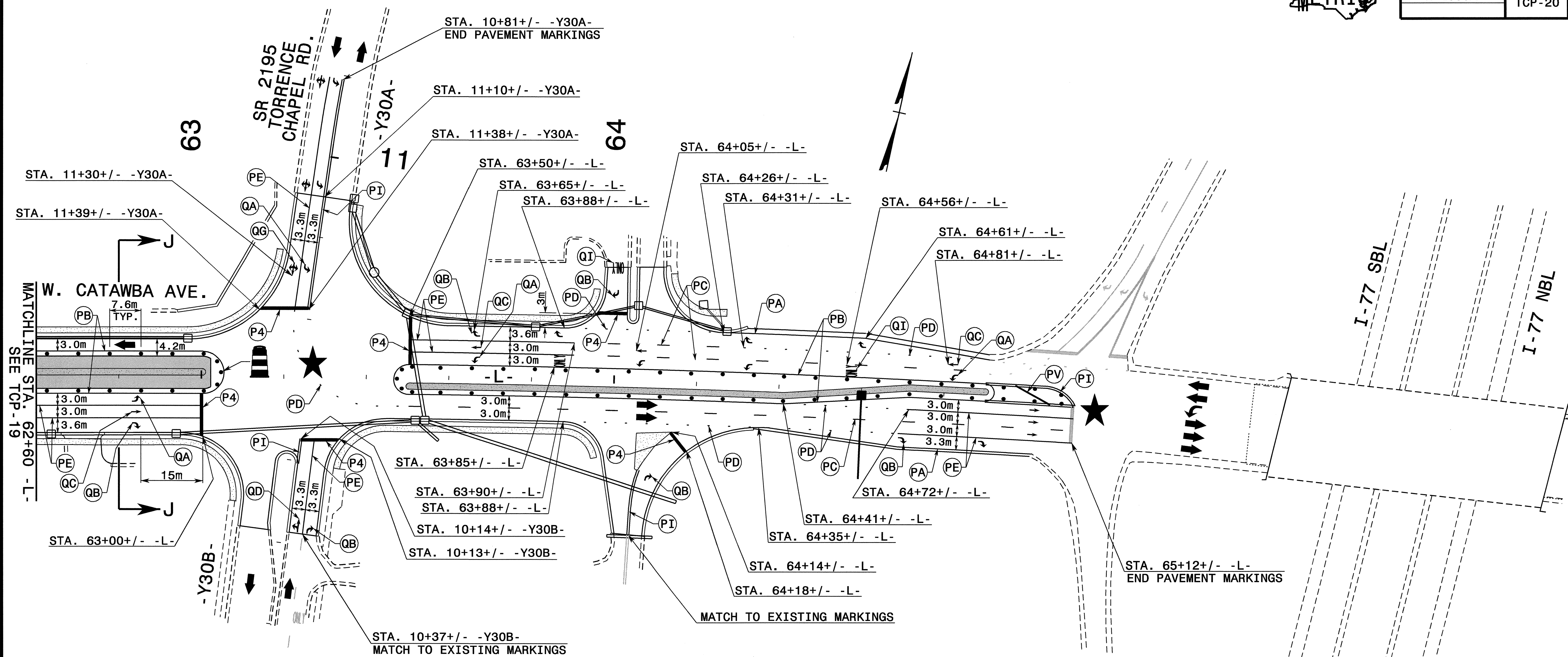








PROJ. REFERENCE NO.	SHEET NO.
R-2555A	TCP-20

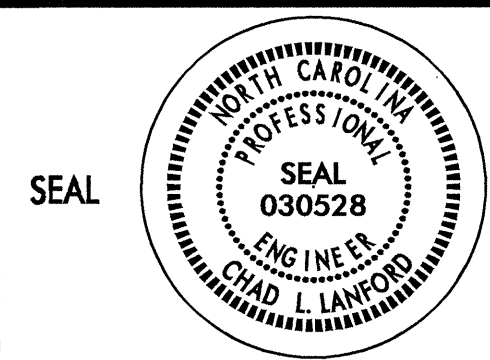


REFER TO RSD NOS. 1205.01, 1205.02, 1205.03, 1205.04, 1205.05, 1250.01, AND 1251.01 FOR PLACEMENT OF TEMPORARY PAVEMENT MARKINGS, SYMBOLS, AND MARKERS UNLESS NOTED OTHERWISE.

★ INDICATES SIGNALIZED INTERSECTION

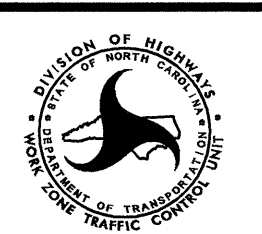
SEE TCP-1 FOR TEMPORARY PAVEMENT MARKING SCHEDULE

APPROVED: *Clayton L. Lanford* DATE: 7/16/07



PHASE II DETAILS

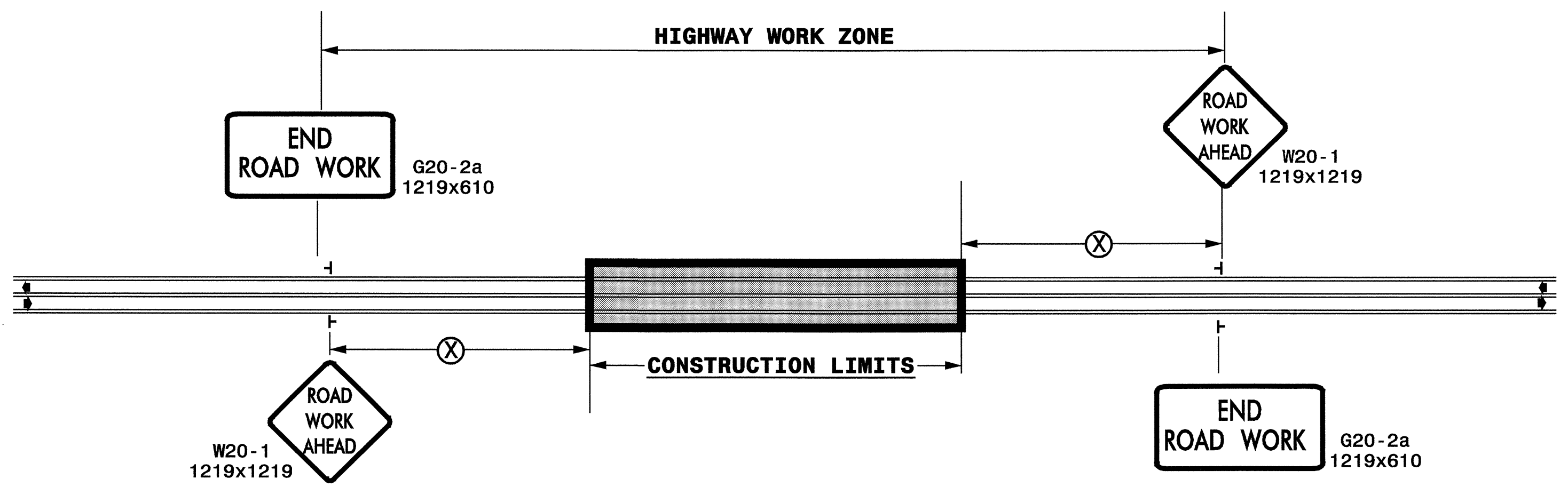
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REVIEWED BY: CLL



REVISIONS	

16-JUL-2007 07:39  
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SBC AT MLC22469

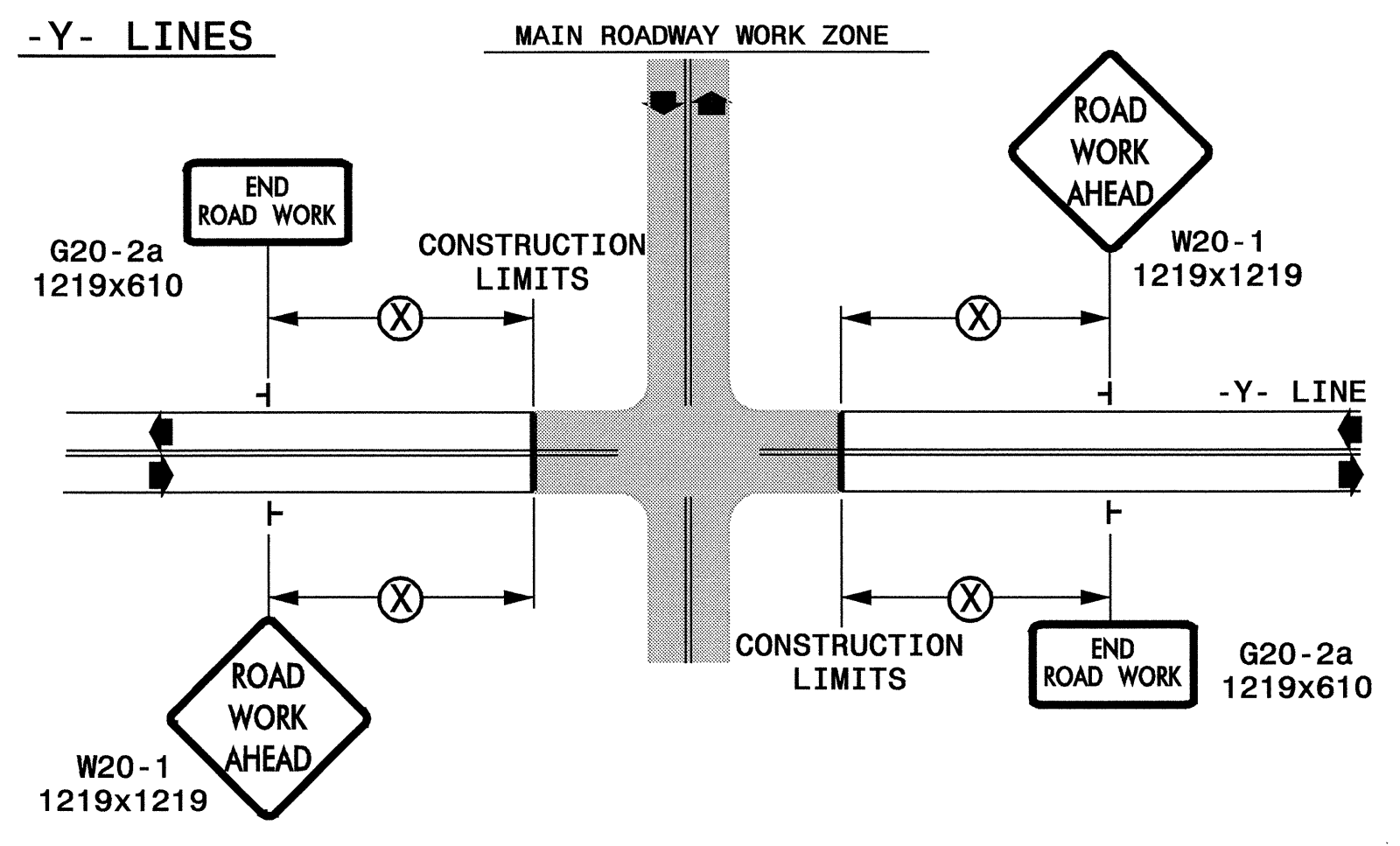
**TWO-WAY UNDIVIDED \*\* (L-LINES)**



POSTED SPEED LIMIT (M.P.H.)	RECOMMENDED MINIMUM SIGN SPACING
≤ 50	152m
≥ 55	305m

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

**ROADWAYS INTERSECTING ALONG 2 WAY UNDIVIDED WORK ZONE (Y-LINES)**



DETAIL DRAWING FOR  
TWO-WAY UNDIVIDED  
WORK ZONE WARNING SIGNS

**GENERAL NOTES**

- USE FLUORESCENT ORANGE SHEETING (TYPE VII OR HIGHER) ON ALL ADVANCED WORK ZONE SIGNS.
- DO NOT INSTALL ADVANCE WARNING SIGNS MORE THAN 3 DAYS PRIOR TO BEGINNING OF WORK.
- SIGNS SHOWN ARE REQUIRED FOR WORK ZONES THAT WILL REMAIN IN EFFECT OVERNIGHT. FOR SHORT-TERM DAILY MAINTENANCE TYPE OPERATIONS, THIS SIGNING APPLICATION IS OPTIONAL; MAY USE ONLY APPLICABLE ROADWAY STANDARD DRAWINGS INSTEAD. HOWEVER, IF THIS SIGNING APPLICATION IS USED, SIGNS MAY BE PORTABLE MOUNTED.
- ALL SIGN SPACING DIMENSIONS ARE APPROXIMATE, FIELD ADJUST AS NECESSARY OR AS DIRECTED.
- USE 1.4Kg STEEL U-CHANNEL POST OR 90mm X 90mm WOOD POST FOR ALL WORK ZONE SIGNS. 1.4Kg STEEL U-CHANNEL POSTS MUST MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 1094-1(B), MAY BE GALVANIZED STEEL, OR MAY BE PAINTED GREEN BY THE POST MANUFACTURER. SQUARE STEEL TUBING POSTS HAVING EQUIVALENT STRENGTH OF THE 1.4Kg STEEL U-CHANNEL POST ARE ALSO ACCEPTABLE FOR USE. ERECT SIGNS PER ROADWAY STANDARD DRAWING 1110.01. PAYMENT FOR WOOD POSTS, 1.4Kg STEEL U-CHANNEL AND SQUARE STEEL TUBING POSTS WITH SIGNS WILL BE MADE ACCORDING TO STANDARD SPECIFICATION "WORK ZONE SIGNS" SECTION 1110.
- WHEN NECESSARY, USE SPLICING IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1110.01. REMOVE ENTIRE POST WHEN REMOVING SIGNS WITH SPLICED POSTS.
- DO NOT BACK BRACE SIGN SUPPORTS.
- \*\* TWO-WAY UNDIVIDED ADVANCE WARNING SIGN CONFIGURATION MAY BE USED ON URBAN MULTI-LANE FACILITIES WHERE CONDITIONS LIMIT THE USE OF DUAL MOUNTED SIGNS AS DETERMINED BY THE ENGINEER.

**LEGEND**

┆	STATIONARY SIGN
◀	DIRECTION OF TRAFFIC FLOW

SHEET 1 OF 1

APPROVED: <i>David P. Sanford</i> DATE: 7/16/07	DETAIL DRAWING FOR TWO-WAY UNDIVIDED AND URBAN FREEWAYS ADVANCED WORK ZONE WARNING SIGNS	
	SCALE: NONE	REVISIONS
	DATE: 7-98	10/01
	DESIGN BY:	10-98 03/04
	REVIEWED BY:	01/01 11/04

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PROJ. REFERENCE NO. R-2555A	SHEET NO. TCP-22
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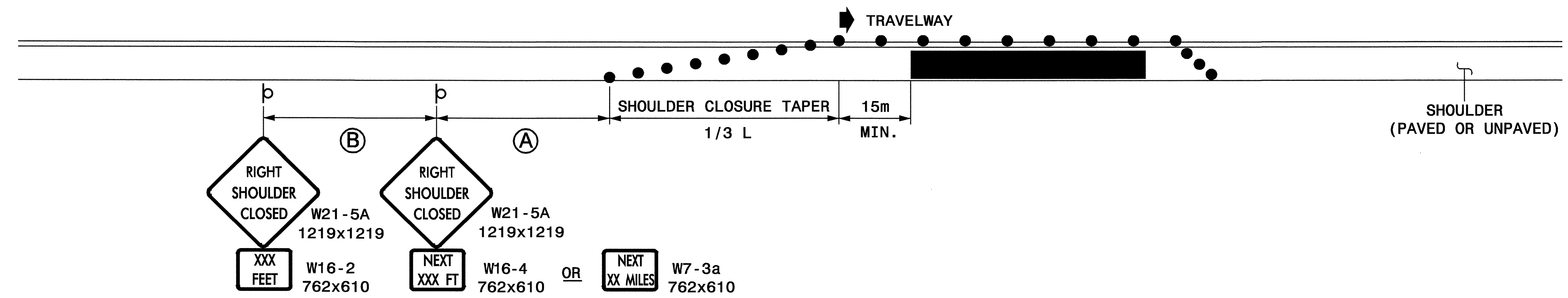
STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

1-05

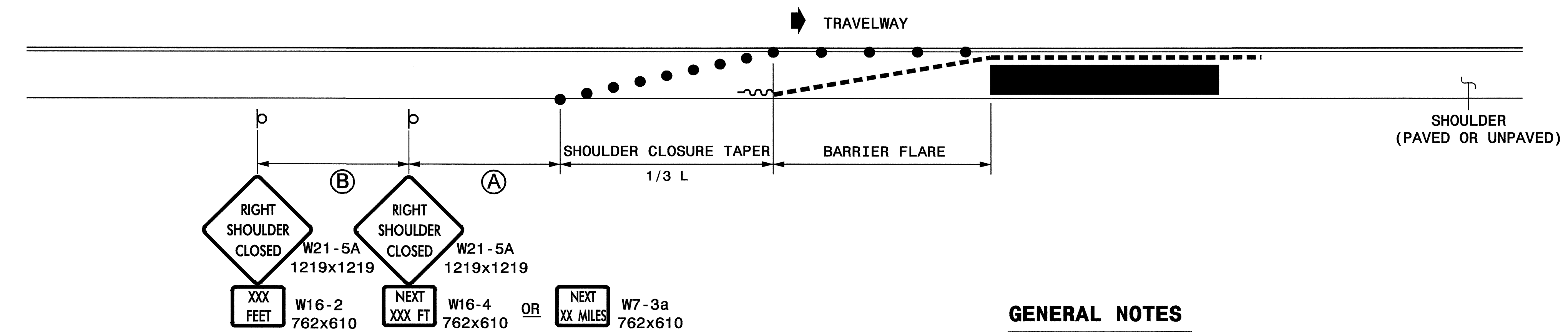
METRIC STANDARD DRAWING FOR  
**TEMPORARY SHOULDER CLOSURES**

SHEET 1 OF 1  
**1101D04**

**SHOULDER CLOSURES UTILIZING DRUMS**



**SHOULDER CLOSURES UTILIZING TEMPORARY BARRIER**



**GENERAL NOTES**

- PLACE SHOULDER CLOSURE SIGNS ON THE SAME SIDE AS THE SHOULDER THAT IS CLOSED.
- PLACE DRUMS IN THE SHOULDER TAPER AT THE MAXIMUM SPACING EQUAL IN METERS TO 1/3rd THE POSTED SPEED LIMIT (mph). THE MAXIMUM SPACING OF DRUMS ALONG THE WORK AREA AND BARRIER FLARE IS EQUAL IN METERS TO 2/3rds THE POSTED SPEED LIMIT (mph).
- FLARE THE APPROACH END OF PORTABLE CONCRETE BARRIER BEYOND THE SHOULDER AND USE A CRASH CUSHION FOR PROTECTION IF THE EXPOSED END OF THE BARRIER IS WITHIN THE "CLEAR ZONE".
- USE STATIONARY SIGNS FOR LONG TERM OPERATIONS (LONGER THAN 3 DAYS).
- REFER TO STD. 1101.11 SHEETS 1, 3, & 4, FOR "L" DISTANCE, BARRIER FLARE RATES, AND SIGN SPACING.

**LEGEND**

- ~ TEMPORARY CRASH CUSHION
- - - PORTABLE CONCRETE BARRIER
- DRUM
- ⊆ STATIONARY OR PORTABLE SIGN
- ➔ DIRECTION OF TRAFFIC FLOW

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

1-05

METRIC STANDARD DRAWING FOR  
**TEMPORARY SHOULDER CLOSURES**

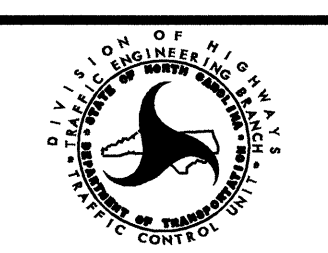
SHEET 1 OF 1  
**1101D04**

APPROVED: *Chad L. Lannors* DATE: 7/16/07



**REPLACEMENT DETAIL FOR  
RSD 1101.04**

SCALE: NONE  
DATE:  
DWG. BY:  
DESIGN BY:  
REVIEWED BY:



REVISIONS	

16-JUL-2007 07:40  
\\dot\dfs\scott\p\proj\1101D04\Traffic\TrafficControl\top\1101D04\1101D04.dgn  
scott AT WZ1C24169

STATE OF  
NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

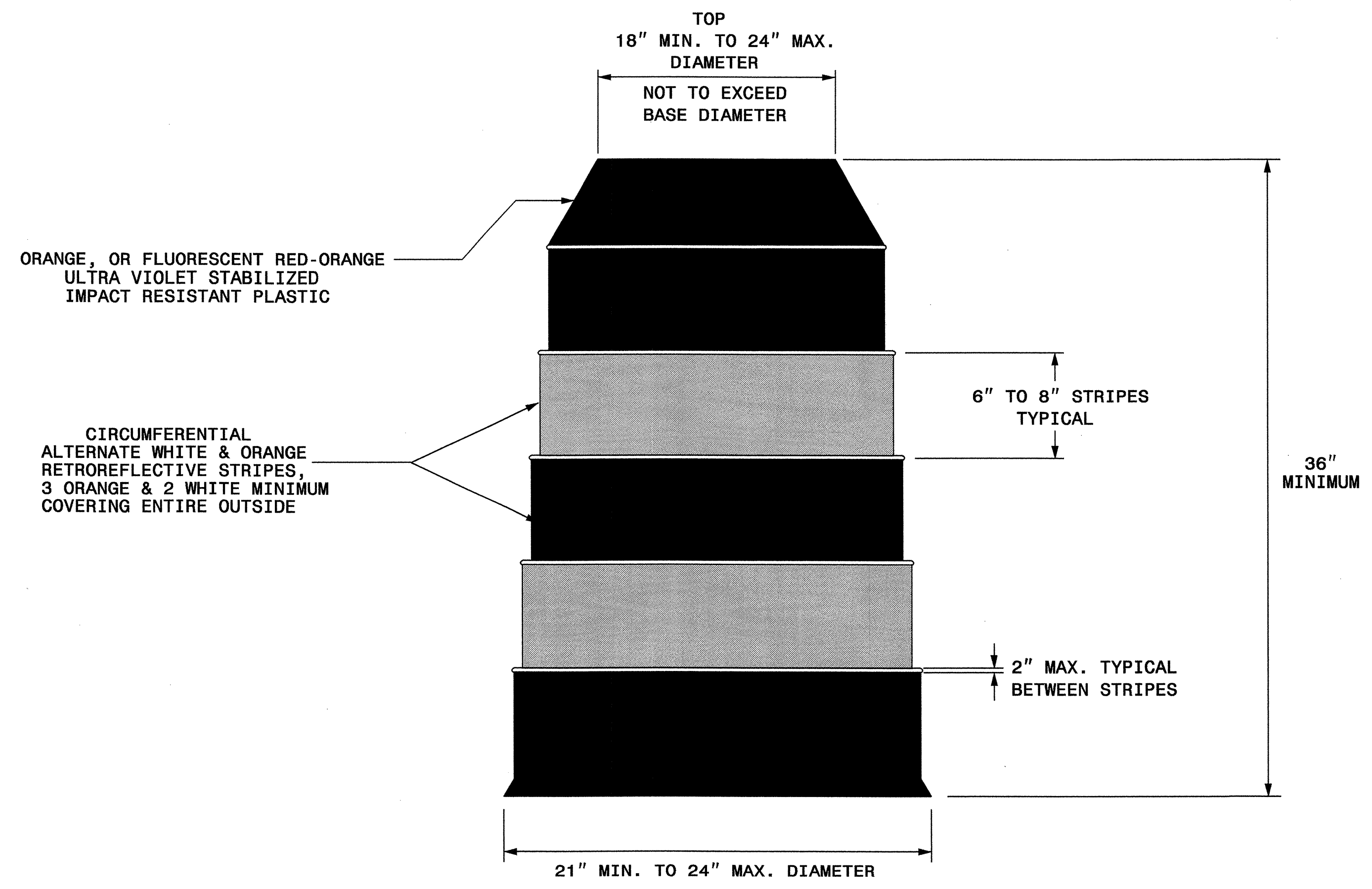
ENGLISH STANDARD DRAWING FOR  
**DRUMS**

SHEET 1 OF 1  
**1130D01**

STATE OF  
NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ENGLISH STANDARD DRAWING FOR  
**DRUMS**

SHEET 1 OF 1  
**1130D01**



**GENERAL NOTES**

- BALLASTING SHALL BE ACHIEVED BY THE SAND BAG, TIRE-SIDEWALL BALLAST, OR PREFORMED WEIGHTED BASE BALLASTING METHODS. DO NOT PLACE BALLAST ON TOP OF THE DRUM.
- IF NECESSARY PLACE THE NAME OF THE AGENCY, CONTRACTOR, OR SUPPLIER ON NON-RETROREFLECTIVE DRUM SURFACES. SHOW THE LETTERS AND NUMBERS USING A NON-RETROREFLECTIVE COLOR AND NOT OVER 2" IN HEIGHT.

APPROVED: <i>MMM</i> DATE: 9/2/05		REPLACEMENT DETAIL FOR RSD 1130.01						
SCALE:	NONE							
DATE:	4 / 02							
DWG. BY:	MMM							
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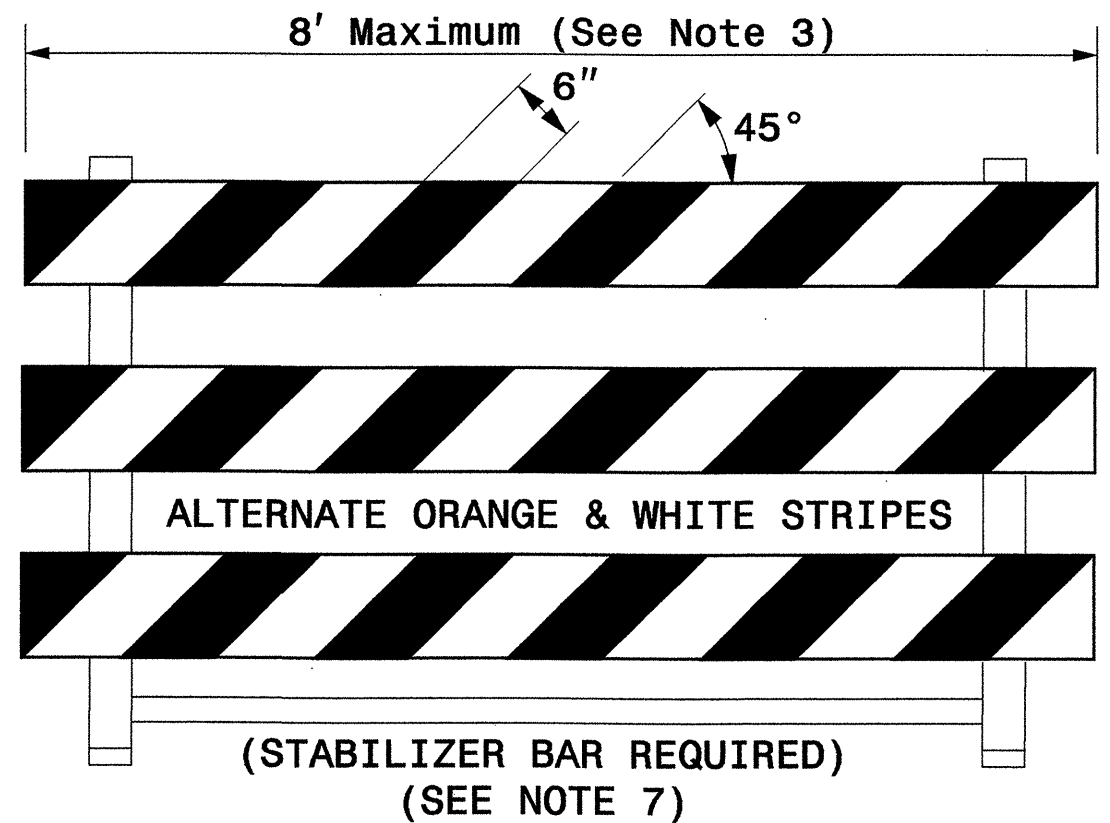
STATE OF NORTH CAROLINA  
 DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.

1-05

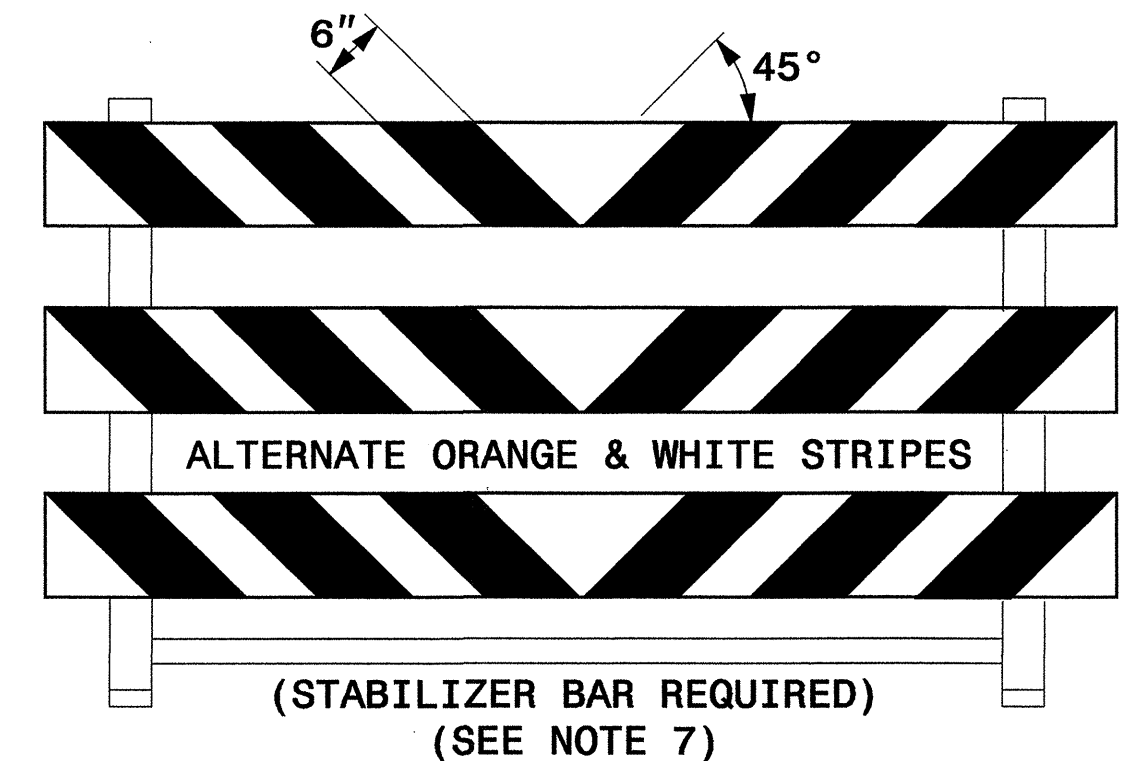
ENGLISH STANDARD DRAWING FOR  
**BARRICADES**  
 TYPE-III

SHEET 1 OF 1  
**1145D01**

**TYPE III BARRICADE**



**TYPE III BARRICADE**  
END-OF-ROADWAY APPLICATIONS



STATE OF NORTH CAROLINA  
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1-05

ENGLISH STANDARD DRAWING FOR  
**BARRICADES**  
 TYPE-III

SHEET 1 OF 1  
**1145D01**

**GENERAL NOTES**

- 1) HORIZONTAL RAILS FOR TYPE-III BARRICADES MAY BE HOLLOW/CORRUGATED EXTRUDED RIGID POLYOLEFIN, HIGH DENSITY POLYETHYLENE, OR OTHER NCDOT APPROVED RAILS. BARRICADE RAILS OF FRANGIBLE PLASTICS SUCH AS PVC MAY NOT BE USED. IF APPROVED PLASTIC TYPE RAILS ARE USED, THEY MUST BE FLAME TREATED BY THE MANUFACTURER SO THAT REFLECTIVE SHEETING MAY ADHERE PROPERLY.
- 2) BARRICADES AND BARRICADE RAILS ARE APPROVED AS A SINGLE UNIT.
- 3) BARRICADE SHALL BE LIMITED TO A MAXIMUM LENGTH OF 8 FT UNLESS NCHRP 350 CRASH TESTED AND NCDOT APPROVED.
- 4) ONLY NCDOT APPROVED COMPOSITE AND ROLL-UP SIGNS MAY BE MOUNTED ON THE BARRICADE.
- 5) SIGNS MOUNTED ON BARRICADES SHOULD NOT COVER MORE THAN 50 PERCENT OF THE TOP TWO RAILS OR 33 PERCENT OF THE TOTAL AREA OF THE THREE RAILS.
- 6) USE TYPE VII, VIII OR IX SHEETING ON BOTH SIDES OF THE RAILS.
- 7) BARRICADE MUST BE NCHRP 350 AND NCDOT APPROVED WITH STABILIZER BAR OR ADEQUATE LATERAL BRACING.
- 8) ASSEMBLY OF THE GENERIC BARRICADES MUST BE SELF CERTIFIED BY THE ASSEMBLER.
- 9) BARRICADES USED TO CLOSE A ROADWAY SHALL EXTEND ACROSS THE ENTIRE ROADWAY. WHERE LOCAL TRAFFIC MUST BE MAINTAINED, THEY MAY BE PLACED IN A STAGGERED PATTERN.
- 10) STRIPES ON WORK ZONE BARRICADE RAILS SHALL BE ALTERNATE ORANGE AND WHITE RETROREFLECTIVE STRIPES, SLOPED DOWNWARD TOWARDS THE SIDE WHICH TRAFFIC IS TO PASS OR TURN IN DETOURING. WHERE NO TURNS ARE INTENDED, THE STRIPES SHOULD SLOPE DOWNWARD TOWARD THE CENTER OF THE BARRICADE OR BARRICADES. USE RED AND WHITE STRIPES FOR PERMANENT BARRICADES.
- 11) SEE APPROVED PRODUCTS LIST FOR MANUFACTURERS OF APPROVED BARRICADES.
- 12) PLACE MANUFACTURER'S NAME AND FEDERAL HIGHWAY ADMINISTRATION'S NCHRP 350 APPROVAL LETTER NUMBER ON BARRICADE.
- 13) USE SANDBAGS PLACED ON THE LOWER PART OF THE FRAME FOR BALLASTING. DO NOT PLACE SANDBAGS ON TOP OF A STRIPED RAIL. DO NOT BALLAST BARRICADES BY HEAVY OBJECTS SUCH AS ROCKS, CHUNKS OF CONCRETE OR OTHER ITEMS THAT WOULD CAUSE DAMAGE IF THE BARRICADE IS STRUCK BY A VEHICLE.

APPROVED: *MMM* DATE: *5/16/05*

**REPLACEMENT DETAIL FOR  
RSD 1145.01**

SCALE: NONE		REVISIONS
DATE: 11/04		
DWG. BY: MMM		
DESIGN BY: MMM		
REVIEWED BY: MMM		