

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STATE PROJECT REFERENCE NO.	SHEET NO.
R-5215	TCP-1

**PLAN FOR PROPOSED
TRAFFIC CONTROL, MARKING & DELINEATION
GASTON 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 JULY 2006 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
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
1130.01	DRUMS
1145.01	BARRICADES
1150.01	FLAGGING DEVICES
1205.01	PAVEMENT MARKINGS - LINE TYPES AND 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
1205.07	PAVEMENT MARKINGS - PEDESTRIAN CROSSWALKS
1205.08	PAVEMENT MARKINGS - SYMBOLS AND WORD MESSAGES
1205.09	PAVEMENT MARKINGS - PAINTED ISLANDS
1205.10	PAVEMENT MARKINGS - SCHOOL AREAS
1205.12	PAVEMENT MARKINGS - BRIDGES
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TCP-4 TO TCP-7	PHASE I
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TCP-12	PHASE III

WORK ZONE PAVEMENT MARKING SCHEDULE

PAVEMENT MARKING LINES

PA - PAINT (4" WHITE, 2X)	EDGE LINE
PD - PAINT (4" WHITE, 2X)	4" x 2' MINISKIP
PE - PAINT (4" WHITE, 2X)	SOLID LANE LINE
PI - PAINT (4" YELLOW, 2X)	DOUBLE CENTER LINE
PV - PAINT (8" YELLOW, 2X)	DIAGONAL
P4 - PAINT (24" WHITE, 2X)	STOP BAR

LEGEND

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

TIP PROJECT: R-5215

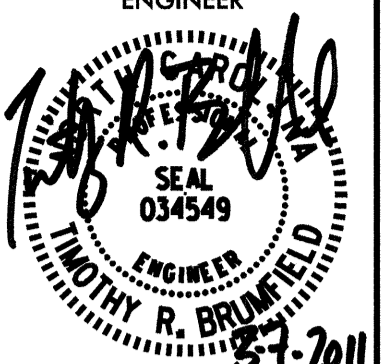

APPROVED: _____ DATE: _____	PLAN PREPARED BY: Kimley-Horn and Associates, Inc.
	T. BRUMFIELD, P.E. PROJECT ENGINEER T. BRUMFIELD, P.E. DESIGN ENGINEER G. DOBBS DESIGN TECHNICIAN

GENERAL NOTES

- A) THE CONTRACTOR SHALL BE REQUIRED TO FURNISH, INSTALL, RELOCATE, AND MAINTAIN ALL TRAFFIC CONTROL DEVICES, SIGNS, BARRICADES, WARNING AND/OR CHANNELIZING DEVICES FOR WORK SITES AND DETOUR ROUTES AS SHOWN IN TRAFFIC CONTROL PLANS UNLESS OTHERWISE SPECIFIED WITHIN THE TRAFFIC CONTROL PLANS. THE LOCATION AND POSITIONING OF THESE BARRICADES, SIGNS, ETC. SHALL BE APPROVED BY THE ENGINEER.
- B) THE CONTRACTOR SHALL CONTACT THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION TWO WEEKS PRIOR TO BEGINNING ANY WORK THAT WILL REQUIRE THE PLACEMENT OF SIGNS OR OTHER TRAFFIC CONTROL DEVICES BY THE CITY. CONTACT MUST BE IN WRITING TO THE MANAGER, TRANSPORTATION ENGINEERING DIVISION, WITH CURRENT TELEPHONE CONTACT. PRIOR TO REVISING TRAFFIC LANES WHICH REQUIRE SIGNAL REVISIONS, THE CONTRACTOR SHALL NOTIFY THE NCDOT IMPLEMENTATION SECTION MANAGER A MINIMUM OF 30 CALENDAR DAYS IN ADVANCE. THE TRAFFIC LANES SHALL NOT BE SHIFTED UNTIL THE REQUIRED SIGNAL REVISION / SHIFT IS COMPLETE AND READY FOR ACTIVATION.
- C) THE CONTRACTOR SHALL MARK ALL HAZARDS WITHIN THE LIMITS OF THE PROJECT WITH WELL-MAINTAINED SIGNS, BARRICADES, WARNING AND/OR CHANNELIZING DEVICES. ON CONNECTING ROADS, ALL BARRICADES, SIGNS, WARNING, AND/OR CHANNELIZING DEVICES SHALL BE MOVED, SUPPLEMENTED, CHANGED, OR REMOVED AS REQUIRED DURING THE PROGRESS OF CONSTRUCTION AS APPROVED BY THE ENGINEER.
- D) THE CONTRACTOR SHALL MAINTAIN TWO WAY TRAFFIC ON ALL PORTIONS OF THIS PROJECT, UNLESS OTHERWISE SPECIFIED HEREIN, AND WILL BE REQUIRED TO PROVIDE PROPERTY OWNERS AND TENANTS ACCESS TO THEIR PROPERTY THROUGHOUT THE PROJECT, INCLUDING INGRESS AND EGRESS FOR BUSINESSES.
- E) TRAFFIC CONTROL PLANS (TCP) FOR THIS PROJECT CONSIST OF SEVERAL TYPICAL DRAWINGS AND STANDARDS SHOWING TRAFFIC CONTROL DEVICES TO BE USED WHERE VARIOUS TYPES OF CONSTRUCTION ACTIVITIES ARE OCCURRING ON THE PROJECT. THESE DRAWINGS ARE FOR TYPICAL SITUATIONS AND SHOULD BE ADAPTED TO THE ACTUAL FIELD CONDITIONS. UNFORESEEN FIELD SITUATIONS, MAY PREVENT THE ADAPTION OF THE PRESCRIBED TYPICAL DRAWING OR STANDARD EXACTLY AS SHOWN. THE CONTRACTOR, AT THE DIRECTION OF THE ENGINEER, SHALL MOVE, SUPPLEMENT, CHANGE, AND/OR REMOVE THE TRAFFIC CONTROL DEVICES ASSOCIATED WITH THESE TYPICAL DRAWINGS AND/OR STANDARD DRAWINGS TO ENSURE THAT THE MOTORIST CAN PASS THROUGH THE CONSTRUCTION AREA IN A SAFE AND EFFICIENT MANNER.
- F) CONSTRUCTION PHASING MAY DICTATE THAT TWO OR MORE TYPICAL DRAWINGS OR STANDARDS BE USED IN ONE AREA OF CONSTRUCTION. CHANNELIZING DEVICES ASSOCIATED WITH THESE TYPICALS SHALL BE MOVED, SUPPLEMENTED, CHANGED, OR REMOVED AS REQUIRED BY THE CONSTRUCTION PHASING OF THE PLANS. THE LOCATION AND POSITIONING OF THESE DEVICES SHALL BE APPROVED BY THE ENGINEER TO ENSURE THAT THE MOTORIST DOES NOT RECEIVE FALSE INFORMATION WHEN TWO OR MORE TYPICALS AND/OR ROADWAY STANDARD DRAWINGS OVERLAP.
- G) TEMPORARY OPERATIONAL SIGNS ARE GENERALLY MOUNTED ON PORTABLE SUPPORTS. THESE ARE NORMALLY USED FOR SHORT-TERM OPERATIONS TO WARN AND GUIDE TRAFFIC THROUGH OR AROUND CONSTRUCTION AREAS WITHIN A CONSTRUCTION ZONE. OPERATIONAL SIGNS SHALL BE INSTALLED PRIOR TO THE START OF OPERATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. SIGNS SHALL BE MAINTAINED IN PROPER POSITION AND KEPT CLEAN AND LEGIBLE AT ALL TIMES. INSTALL SAND BAG BALLAST, OR OTHER APPROVED DEVICES TO PREVENT MOVEMENT OF SIGNS BY WIND OR PASSING VEHICLES AS NEEDED, SIGNS SHALL BE REMOVED WHEN NOT APPLICABLE. THE BOTTOM OF THE SIGN SHALL BE A MINIMUM OF 1 FOOT ABOVE THE PAVEMENT SURFACE.
- H) WORK ON THE PROJECT OR ANY SEPARATE ACTIVITY THEREIN SHALL NOT START UNTIL ALL OF THE REQUIRED SIGNS, BARRICADES, WARNING, AND/OR CHANNELIZING DEVICES ARE INSTALLED AND APPROVED BY THE ENGINEER.
- I) ANY EXISTING PAVEMENT MARKINGS DETERMINED BY THE ENGINEER TO BE MISLEADING OR IN CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR PRIOR TO PROCEEDING WITH ANY CONSTRUCTION ACTIVITY.
- J) ALL TEMPORARY PAVEMENT MARKINGS APPLIED BY THE CONTRACTOR SHALL BE IN PAINT OTHERWISE SPECIFIED ON THE PLANS OR IN THE SPECIAL PROVISIONS.
- K) THE CONTRACTOR MUST HAVE A MINIMUM OF TWO FLAGGERS PRESENT DURING ALL PERIODS OF CONSTRUCTION ACTIVITY TO ASSIST IN THE MOVEMENT OF TRAFFIC THROUGH THE WORK AREA. ADDITIONAL FLAGGERS MAY BE REQUIRED AS DIRECTED BY THE ENGINEER OR NCDOT. ALL FLAGGERS UTILIZED ON PROJECT MUST BE CERTIFIED.
- L) FLAGGERS' ATTIRE SHALL INCLUDE A FLUORESCENT ORANGE VEST, SHIRT, OR JACKET WORN AS THE OUTER LAYER OF CLOTHING. THE FLAGGER SHALL BE EQUIPPED WITH A STOP/SLOW PADDLE (SEE MUTCD, PART IV, SECTION 6F-2, PAGE 6F-1).
- M) RED FLAGS WILL BE ACCEPTABLE IN LIEU OF THE PADDLE IN EMERGENCY SITUATIONS ONLY. FLAGGERS, PROPERLY EQUIPPED AND INSTRUCTED, WILL BE PROVIDED BY THE CONTRACTORS AND STATIONED AT THE LOCATIONS SPECIFIED OR AS DIRECTED BY THE ENGINEER. A FLUORESCENT ORANGE CAP MAY BE REQUIRED.
- N) NOTIFY THE ENGINEER TWENTY ONE (21) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

PROJECT NOTES

- 1) PROJECT NOTES ARE NOT INTENDED TO BE USED AS GENERAL NOTES FOR THE PROJECT. THEY ARE TO BE USED AT SPECIFIC LOCATIONS AS REQUIRED BY THE DETAILS OF THE TRAFFIC CONTROL PLANS.
- 2) TRAFFIC CONTROL DEVICES SHALL BE LOCATED NO CLOSER THAN 5 FT. TO A TRENCH AT EXISTING GRADE, MEASURED FROM THE SIDE FACING TRAFFIC.
- 3) MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES SHALL BE 50 FT. IN TANGENT AREAS, 25 FT. IN TAPERS AND IN RADII ON WILKINSON BOULEVARD AND 40 FT. IN TANGENT AREAS, 20 FT. IN TAPERS AND IN RADII ON LAKEWOOD DRIVE UNLESS OTHERWISE INDICATED ON THE PLANS.
- 4) WHEN USING TYPE III BARRICADES WITH SIGN R11-2 ATTACHED, BARRICADES SHALL BE OF SUFFICIENT LENGTH TO CLOSE ROADWAY.
- 5) CONTRACTOR SHOULD BE AWARE THAT WHEN THE CONSTRUCTION AREA IS IN OR NEAR A VERTICAL CREST OR HORIZONTAL CURVE, THE WORK AREA SHALL BE EXTENDED SO THAT LANE CLOSURE BEGINS IN ADVANCE OF THE CURVE AND MINIMUM STOPPING SIGHT DISTANCE IS MET.
- 6) POLICE OFFICERS MAY BE REQUIRED TO CONTROL TRAFFIC DURING CONSTRUCTION HOURS AS DIRECTED BY THE ENGINEER.
- 7) WHEN TRAFFIC PROCEEDS THROUGH OR ADJACENT TO CONSTRUCTION ACTIVITY OR A WORK ZONE, FLAGGER(S) AND FLAGGER SYMBOL SIGN(S) (W20-7) SHALL BE USED AS DIRECTED BY THE ENGINEER TO SLOW AND/OR STOP TRAFFIC AND DIRECT IT THROUGH THE WORK AREA. SIGN W20-7A SHALL NOT BE DISPLAYED EXCEPT WHEN FLAGGER IS PRESENT.
- 8) THE CONTRACTOR SHALL MAINTAIN A SMOOTH TRANSITION FROM EXISTING PAVEMENT TO PROPOSED PAVING OPERATION.
- 9) CONTRACTOR SHALL SUPPLY AND INSTALL ALL TEMPORARY PAVEMENT MARKINGS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- 10) THE CONTRACTOR SHALL FOLLOW THE PHASING AS DESCRIBED HEREIN. THE CONTRACTOR SHALL COMPLETE THE REQUIREMENTS OF EACH CONSTRUCTION PHASE IN SEQUENCE. WHEN A CONSTRUCTION PHASE IS DIVIDED INTO STEPS, THE CONTRACTOR SHALL COMPLETE THE REQUIREMENTS OF EACH STEP IN SEQUENCE. (EXAMPLE: THE REQUIREMENTS OF PHASE I SHALL BE COMPLETED BEFORE PROCEEDING TO PHASE II; THE REQUIREMENTS OF STEP 1 OF PHASE I SHALL BE COMPLETED BEFORE PROCEEDING TO STEP 2 OF PHASE I). ALL WORK DESCRIBED IN THE PROJECT PHASING SHALL BE PERFORMED BY THE CONTRACTOR, EXCEPT WHERE IT IS SPECIFIED FOR CERTAIN WORK TO BE PERFORMED BY OTHERS.
- 11) THE CONTRACTOR SHALL NOT BE ALLOWED TO STOP TRAFFIC FOR MORE THAN 5 MINUTES AT A TIME IN ANY ONE DIRECTION.
- 12) 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.
- FOR FURTHER DETAIL, SEE DETAIL A FOUND ON SHEET TCP-3
- 13) 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.
- 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.
- 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.
- WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.
- 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.
- 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.
- 14) FLAGGER(S) AND FLAGGER AHEAD SYMBOL SIGN(S) (W20-7) MAY BE REQUIRED TO DIRECT TRAFFIC THROUGH CONSTRUCTION ZONE DURING PAVEMENT DEMOLITION AND/OR CONSTRUCTION ACTIVITIES.
- 15) THE CONTRACTOR SHALL REMOVE ANY CONFLICTING PAVEMENT MARKINGS.
- 16) THE CONTRACTOR SHALL REPLACE ANY EXISTING PAVEMENT MARKINGS WHICH HAVE BEEN OBLITERATED BY CONSTRUCTION ACTIVITIES AT THE END OF EACH DAY'S OPERATIONS.
- 17) CONTRACTOR SHALL NOT WORK ON BOTH SIDES OF THE ROADWAY SIMULTANEOUSLY WITHIN THE SAME AREA.
- 18) INGRESS AND EGRESS SHALL BE MAINTAINED TO ALL BUSINESSES AND DWELLINGS AFFECTED BY THE PROJECT. SPECIAL ATTENTION SHALL BE PAID TO FIRE HYDRANTS.
- 19) ALL TRAVEL LANES SHALL REMAIN OPEN DURING PERIODS OF CONSTRUCTION INACTIVITY, UNLESS OTHERWISE INSTRUCTED BY ENGINEER.
- 20) DURING THE HOURS OF 6:00 AM-9:00 AM AND 4:30 PM-6:30 PM MONDAY THRU FRIDAY, CONSTRUCTION OR MAINTENANCE WORK WHICH INVOLVES CLOSURE OF A TRAVEL LANE WILL NOT BE ALLOWED ON THOROUGHFARE STREETS EXCEPT FOR EMERGENCY SITUATIONS OR WITH APPROVAL FROM NCDOT.

PROJECT REFERENCE NO. R-5215	SHEET NO. TCP-2
ROADWAY DESIGN ENGINEER 	 Kimley-Horn and Associates, Inc. © 2011 NC LICENSE #F-0102 4651 CHARLOTTE PARK DRIVE SUITE 300 CHARLOTTE, NC 28207-1911

PHASE I

PHASE I SUMMARY: CONSTRUCT THE PROPOSED LAKEWOOD ROAD FROM STA 101+00 +/- TO 121+00 +/- (-L-) INCLUDING THE ROUNDABOUT, THE EXTENSION OF ARMSTRONG ROAD (-Y2-) AND THE NEW SCHOOL DRIVEWAY #2 (-Y2-). CONSTRUCT SCHOOL DRIVEWAY #1 (-Y3-) AND ITS RIGHT TURN LANE. CONSTRUCT THE ADDITIONAL STORAGE FOR THE LEFT TURN LANE FOR WILKINSON BLVD (-Y1-) FROM STA 212+00 +/- TO 219+00 +/- (-Y1-). (SEE TCP-4 THROUGH TCP-7)

STEP-1--INSTALL ADVANCE WARNING SIGNS (SEE RSD 1101.02 AND 1101.04)

STEP 2--INSTALL EROSION CONTROL IN ACCORDANCE WITH THE EROSION CONTROL PLAN.

NOTE: STEPS 3 AND 4 MAY BE PERFORMED CONCURRENTLY

STEP 3--CONSTRUCT LAKEWOOD RD (-L-), PROPOSED ROUNDABOUT, ARMSTRONG RD (-Y2-) EXTENSION, AND SCHOOL DRIVEWAYS 1 (-Y3-) AND 2 (-Y2-) AS FOLLOWS:

- MAINTAIN TRAFFIC ON EXISTING LAKEWOOD RD (-L-).
- FOR REALIGNED LAKEWOOD RD (-L-), ARMSTRONG RD (-Y2-) AND SCHOOL DRIVEWAYS 1 (-Y3-) AND 2 (-Y2-) PERFORM GRADING, CONSTRUCT CLOSED DRAINAGE SYSTEM AS SHOWN ON PLANS (SEE SHEETS TCP-4 TO TCP-6), CONSTRUCT ROADSIDE DITCHES, CONSTRUCT FULL-DEPTH PAVEMENT UP TO, BUT NOT INCLUDING, THE SURFACE COURSE, CONSTRUCT CURB AND GUTTER AND DRIVEWAYS AS SHOWN ON PLANS (SEE SHEETS TCP-4 TO TCP-6) AND SET CATCH BASINS TO THE CURB AND GUTTER, AND CONSTRUCT SIDEWALK.
- TO CONNECT TO EXISTING LAKEWOOD RD, USE FLAGGER CONTROL (SEE RSD 1101.02). SAWCUT 1' FROM EXISTING PAVEMENT AT STA 101+00 +/- RT TO 105+00 +/- LT, AT STA 114+50 +/- LT TO STA 115+50 +/- LT AND STA 119+75 +/- LT TO 121+00 +/- RT. SEE DETAIL A (THIS SHEET) FOR THE CONNECTION OF THE PROPOSED ROADWAY TO THE EXISTING ROADWAY.
- GRADE DITCH ALONG RIGHT SIDE OF EXISTING LAKEWOOD RD FROM STA 106+25 +/- TO 107+75 +/- (-L-) TO TIE TO PROPOSED PIPE OPENING 0514 (SEE SHEET TCP-4). WHEN GRADING WITHIN 5' OF THE TRAVELWAY, USE FLAGGER CONTROL (SEE RSD 1101.02).

STEP 4--CONSTRUCT MEDIAN ON WILKINSON BLVD (-Y1-) AS FOLLOWS:

- CLOSE ONE THRU LANE IN EACH DIRECTION ADJACENT TO THE MEDIAN WITH MERGING TAPERS (SEE RSD 1101.02 SHEET 3 AND TCP-6 AND TCP-7). REVISE EXISTING SIGNAL PER SIGNAL PLAN FOR CURRENT CONSTRUCTION STAGE.
- SAWCUT 1' FROM EXISTING PAVEMENT ALONG EXISTING MEDIAN TO BE REMOVED, STA 212+25 +/- TO STA 219+00 +/- (-Y1-). REMOVE PAVEMENT, CURB AND EXISTING CONCRETE MEDIAN TOP.
- MILL ADJACENT LANE TO LIMITS SHOWN ON PLAN (SEE SHEETS TCP-6 AND TCP-7), CONSTRUCT FULL-DEPTH PAVEMENT AND CONSTRUCT INLAY WITHIN MILLING LIMITS. CONSTRUCT PROPOSED MONOLITHIC ISLAND AS SHOWN ON THE PLAN.
- SAWCUT 1' FROM EXISTING PAVEMENT AROUND MEDIAN NOSE AT STA 211+00 +/- (SEE SHEET TCP-6). REMOVE PAVEMENT, CURB AND CONCRETE TOP AS SHOWN ON PLAN. MILL ADJACENT LANES TO LIMITS AS SHOWN ON PLAN. CONSTRUCT FULL-DEPTH PAVEMENT, INLAY WITHIN MILLING LIMITS AND RECONSTRUCT CONCRETE MEDIAN NOSE.
- UPON COMPLETION OF MEDIAN CONSTRUCTION, REMOVE LANE CLOSURES AND SHIFT TRAFFIC BACK TO ORIGINAL PATTERNS.

PHASE II

PHASE II SUMMARY : SHIFT TRAFFIC ONTO THE REALIGNED LAKEWOOD ROAD (-L-) AND CLOSE EXISTING LAKEWOOD ROAD (-L-) FROM INTERSECTION WITH ARMSTRONG RD (-Y2-) TO STA 120+00 +/--. CONSTRUCT PROPOSED SOUTHBOUND LANES AND MEDIAN FROM STA 120+00 +/- TO INTERSECTION WITH WILKINSON BLVD. CONSTRUCT PROPOSED HAMMERHEAD TURNAROUND ON EXISTING LAKEWOOD RD AND RE-GRADE DRIVEWAYS. CONSTRUCT RIGHT EDGE OF PAVEMENT ON EXISTING LAKEWOOD RD AT INTERSECTION WITH ARMSTRONG RD. (-Y2-). CONSTRUCT LEFT EDGE OF PAVEMENT ARMSTRONG RD (-Y2-) FROM STA 302+00 +/- TO STA 303+00 +/--. CONSTRUCT PROPOSED SOUTHBOUND LANES ON LAKEWOOD RD (-L-) STA 101+00 +/- TO 105+00 +/--. CONSTRUCT PROPOSED RIGHT TURN LANE ON WILKINSON BLVD FROM STA 207+00 +/- TO INTERSECTION WITH LAKEWOOD RD. (SEE TCP-8 THROUGH TCP-11)

AT THE CONCLUSION OF PHASE II, SHIFT TRAFFIC TO ITS FINAL PATTERN.

NOTE: WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK OF STEP 1 IN A SINGLE WORK PERIOD.

NOTE: ADJUST TRAFFIC CONTROL DEVICES AS NECESSARY

NOTE: ENSURE CONSTRUCTION OF EASTBOUND RIGHT-TURN LANE ON WILKINSON BLVD. DOES NOT IMPACT PROPOSED SIGNAL CONTROLLER, CONDUIT, ETC.

STEP-1--SHIFT TRAFFIC TO THE PHASE PATTERN AS FOLLOWS:

- AWAY FROM TRAFFIC, PLACE TEMPORARY PAINT PAVEMENT MARKINGS FROM STA 104+50 +/- (-L-) OF LAKEWOOD RD TO STA 120+00 +/- (-L-) (SEE SHEET TCP-8 TO TCP-10)
- USING FLAGGERS AND/OR POLICE, PLACE TEMPORARY PAINT PAVEMENT MARKINGS FROM STA 101+00 +/- (-L-) TO STA 104+50 +/- (-L-) AND FROM LAKEWOOD RD (-L-) STA 120+00 +/- TO THE INTERSECTION WITH WILKINSON BLVD (-Y1-) (SEE SHEETS TCP-8 AND TCP-10)
- USING FLAGGERS AND/OR POLICE, WEDGE/ RESURFACE AS NEEDED FOR SMOOTH TRANSITION AT STA 103+00 +/- (-L-), STA 303+00 +/- (-Y2-) AND STA 120+00 +/- (-L-). UPON COMPLETION OF WEDGING AND RESURFACING, PLACE TEMPORARY PAINT PAVEMENT MARKINGS.
- USING FLAGGERS, REMOVE EXISTING STRIPING.

NOTE: STEPS 2, 3 AND 4 MAY BE PERFORMED CONCURRENTLY

STEP-2--CONSTRUCT REMAINING LAKEWOOD RD (-L-) FROM STA 101+00 +/- TO 107+50 +/- AS FOLLOWS:

- CONSTRUCT CURB AND GUTTER, DRIVEWAY AND CLOSED DRAINAGE SYSTEM FROM STA 102+25 +/- TO STA 104+50 +/- (-L-) LT. WHEN WORKING WITHIN 5' OF TRAVELWAY, USE FLAGGER CONTROL (SEE RSD 1101.02 AND SHEET TCP-8).
- CONSTRUCT REMAINDER OF CROSS PIPE ON LAKEWOOD RD (-L-) STA 103+05 +/- PLACED DURING PHASE I CONSTRUCTION. UTILIZING FLAGGER CONTROL MAINTAIN ONE LANE OF TRAFFIC AT ALL TIMES (SEE RSD 1101.02 AND TCP-8).
- CONSTRUCT CROSS PIPE ON LAKE DR (-Y3-) STA 402+36 +/--. UTILIZING FLAGGER CONTROL MAINTAIN ONE LANE OF TRAFFIC AT ALL TIMES (SEE RSD 1101.02 AND SHEET TCP-8).
- UTILIZING BARRELS AND BARRICADES, CLOSE OFF EXISTING LAKEWOOD RD FROM STA 104+00 +/- TO STA 105+50 +/- (SEE SHEET TCP-8).
- WITHIN LIMITS DEFINED ON PLAN, OBLITERATE EXISTING PAVEMENT, GRADE AREA TO DRAIN AND GRASS (SEE SHEET TCP-8).
- CONSTRUCT HAMMERHEAD CUL-DE-SAC, CROSS PIPE 0515, RIP RAP APRON AND DRIVEWAY CONNECTION AS SHOWN ON PLAN (SEE SHEET TCP-8)

STEP-3--CONSTRUCT INTERSECTION OF ARMSTRONG RD (-Y2-) AND EXISTING LAKEWOOD RD AS FOLLOWS:

- CONSTRUCT REMAINING CURB AND GUTTER, GRADE SHOULDER AND CONSTRUCT REMAINING DITCH FROM STA 302+00 +/- TO STA 303+25 +/- (-Y2-). (SEE SHEET TCP-9)
- CONSTRUCT REMAINING CURB AND GUTTER, SIDEWALK AND GRADE SHOULDER ON SOUTHEAST CORNER OF INTERSECTION AT STA 302+75 +/- (-Y2-). (SEE SHEET TCP-9)

STEP-4--CONSTRUCT SOUTHWEST QUADRANT OF INTERSECTION OF WILKINSON BLVD (-Y1-) AND LAKEWOOD RD (-L-) AS FOLLOWS:

- CLOSE EASTBOUND OUTSIDE THRU LANE WITH MERGING TAPER (SEE RSD 1101.02 SHEET 3 AND TCP-10). REVISE EXISTING SIGNAL PER SIGNAL PLAN FOR CURRENT CONSTRUCTION STAGE.

PHASE II CONT'D:

- FROM STA 119+20 (-L-) TO STA 206+80 (-Y1-), PERFORM GRADING, CONSTRUCT CLOSED DRAINAGE SYSTEM AS SHOWN ON PLANS (SEE SHEET TCP-9), CONSTRUCT REMAINING ROADSIDE DITCH, CONSTRUCT FULL-DEPTH PAVEMENT UP TO, BUT NOT INCLUDING, THE SURFACE COURSE, CONSTRUCT CURB AND GUTTER AS SHOWN ON PLANS (SEE SHEET TCP-10) AND SET CATCH BASINS TO THE CURB AND GUTTER, CONSTRUCT GUARDRAIL AND CONSTRUCT SIDEWALK (SEE SHEETS TCP-9 TO TCP-10).
- ENSURE THAT ALL GRADING AND PIPE INSTALLATION IS COMPLETED PRIOR TO INSTALLING THE PROPOSED SIGNAL CONTROLLER IN ITS FINAL LOCATION.
- UPON COMPLETION OF CONSTRUCTION ALONG WILKINSON BLVD (-Y1-), REMOVE LANE CLOSURE AND SHIFT TRAFFIC BACK TO ORIGINAL PATTERN.

PHASE III

PHASE III SUMMARY : SHIFT TRAFFIC ON LAKEWOOD ROAD FROM STA 120+00 TO STA 124+80 (-L-). SAWCUT AND REMOVE EXISTING PAVEMENT. CONSTRUCT FULL DEPTH PAVEMENT (SEE TCP-12)

NOTE: WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK OF STEP 1 IN A SINGLE WORK PERIOD.

NOTE: CONTRACTOR TO MAINTAIN AT LEAST ONE DRIVEWAY ACCESS TO BANK PARKING LOT AT ALL TIMES.

STEP-1--USING FLAGGERS AND LANE CLOSURES SHIFT PROPOSED LAKEWOOD ROAD -L- TRAFFIC. SAWCUT AND REMOVE EXISTING PAVEMENT AT APPROXIMATE STA 121+50 TO 123+75 RT. AND CONSTRUCT FULL DEPTH PAVEMENT.

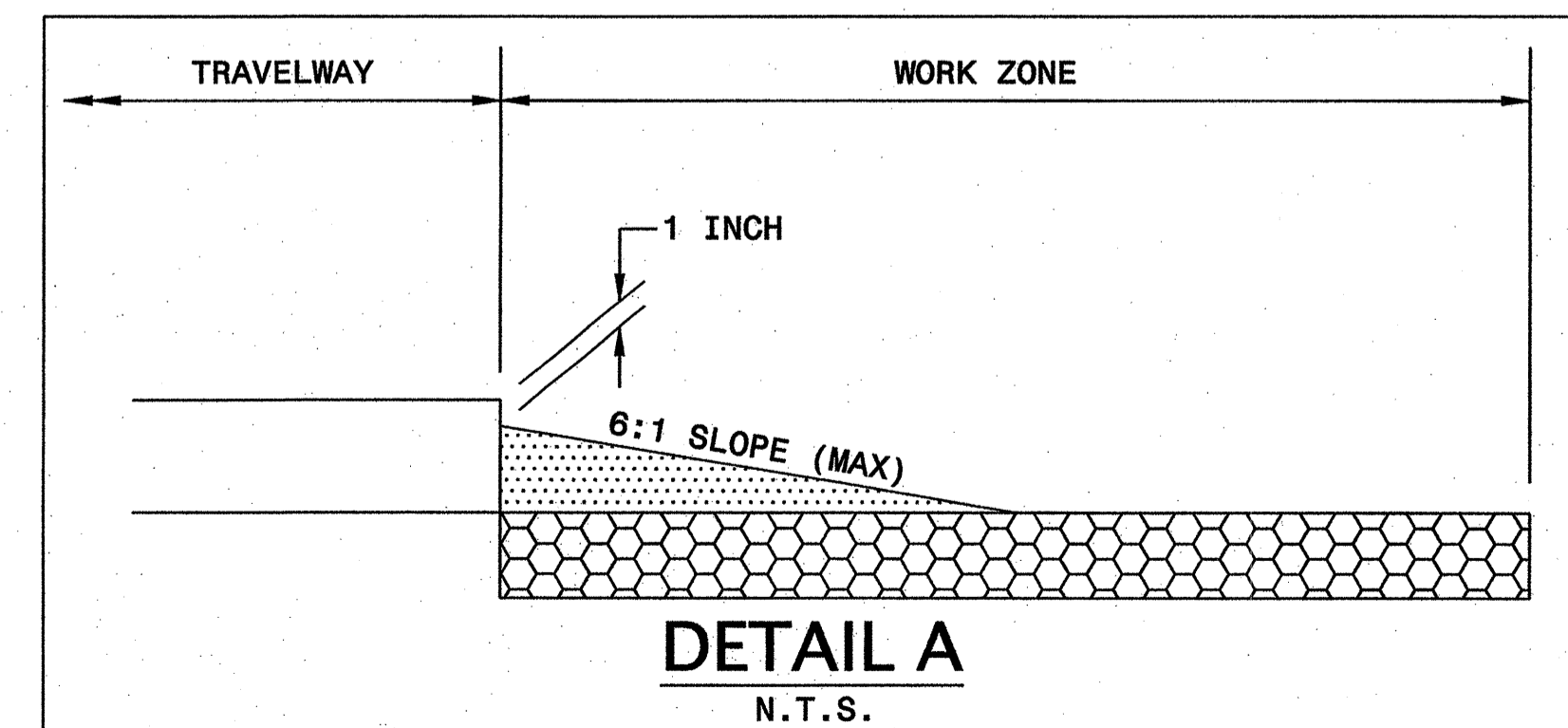
PHASE IV

PHASE IV SUMMARY : PLACE SURFACE COURSE OF ASPHALT, PLACE FINAL PAVEMENT MARKINGS AND SIGNS

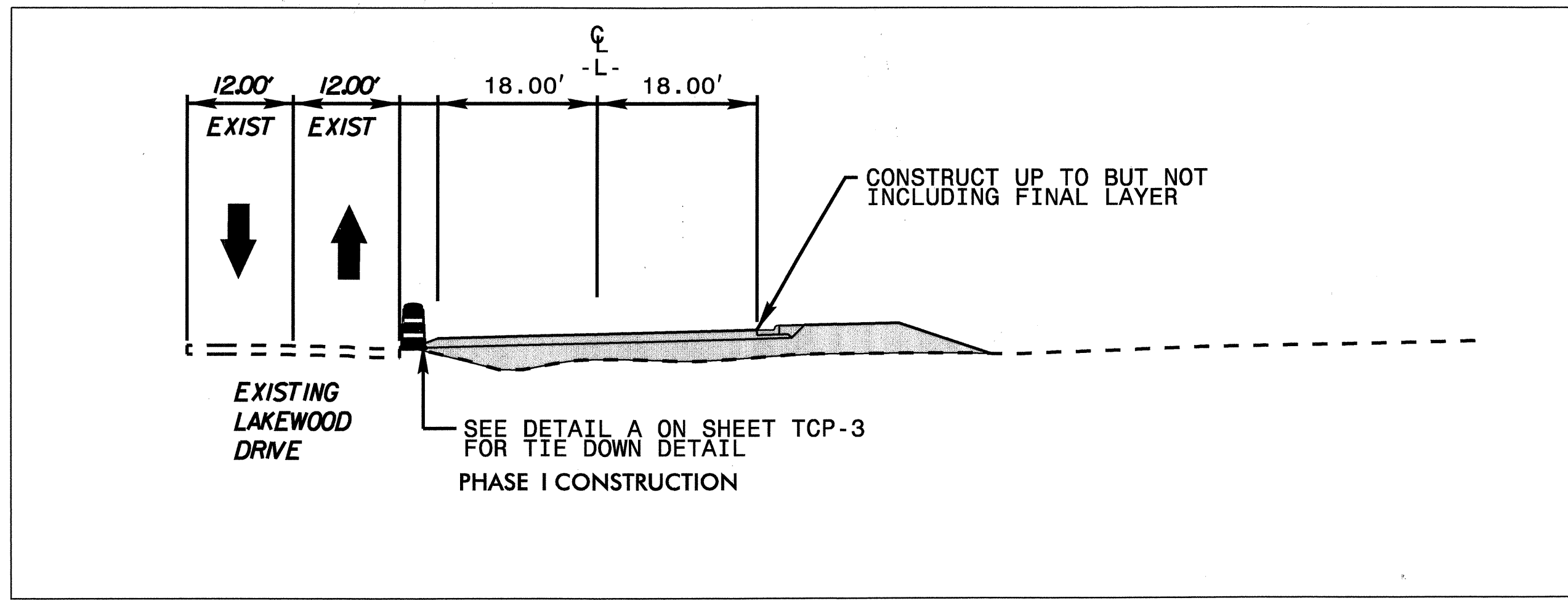
NOTE: WORK IN A CONTINUOUS MANNER TO COMPLETE THE WORK OF STEP 1 IN A SINGLE WORK PERIOD.

STEP-1--USING FLAGGERS AND LANE CLOSURES PLACE SURFACE COURSE AND FINAL PAVEMENT MARKINGS IN THE FINAL PATTERN (SEE PM-1 THROUGH PM-4) AND INSTALL SIGNAGE THROUGHOUT THE PROJECT AND OPEN THE FINAL PATTERN.

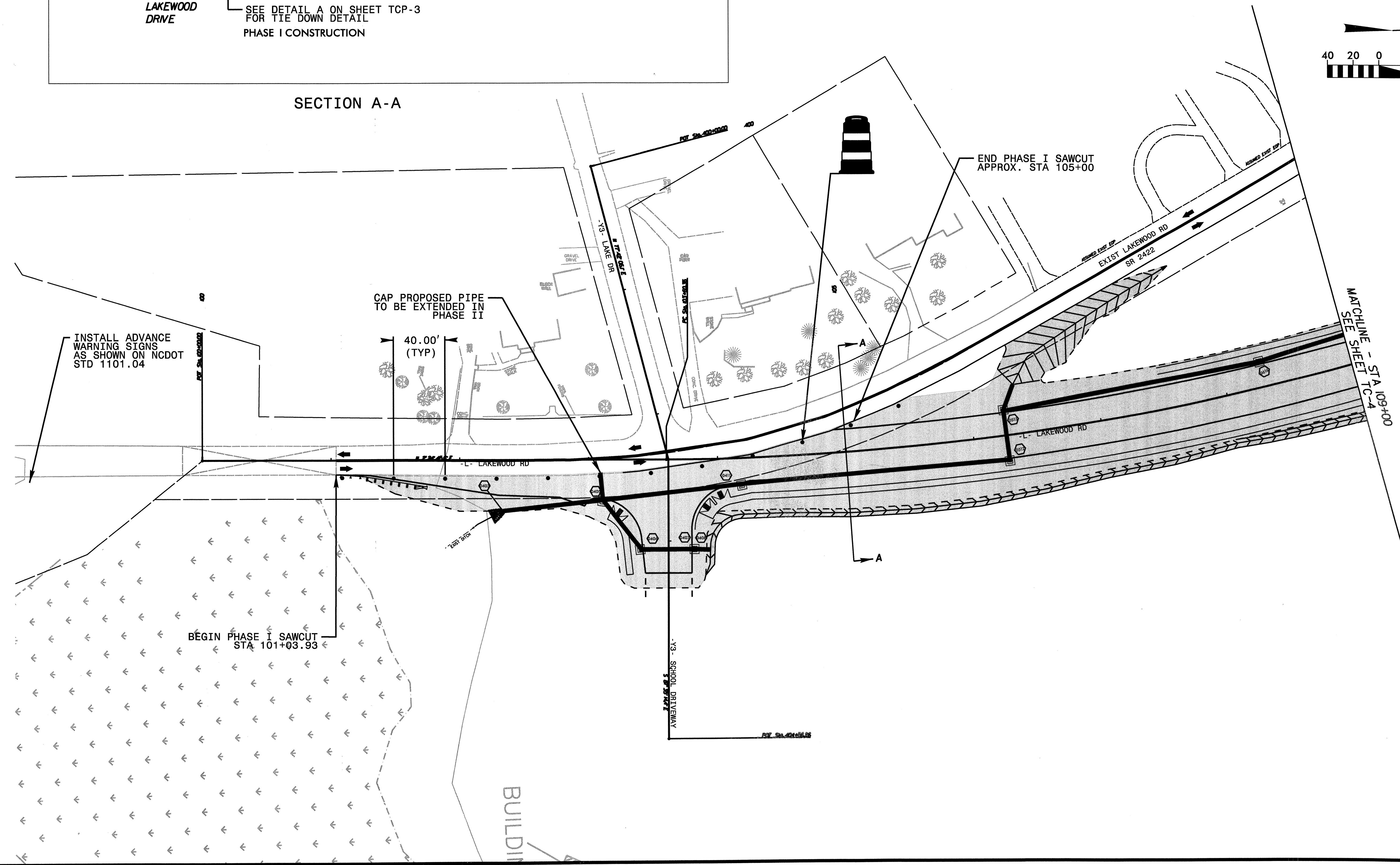
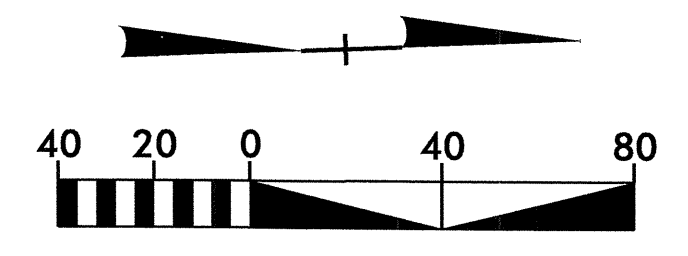
STEP 2--REMOVE ALL TRAFFIC CONTROL DEVICES



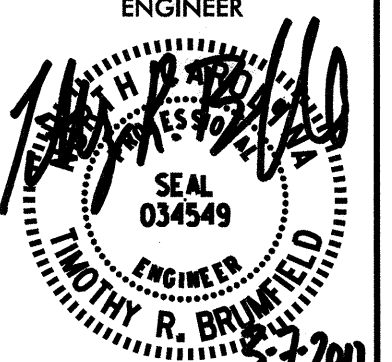

PROJECT REFERENCE NO. R-5215	SHEET NO. TCP-3
ROADWAY DESIGN ENGINEER Kimley-Horn and Associates, Inc. © 2011 NC LICENSE #F-0102 4651 CHARLOTTE PARK DRIVE SUITE 300 CHARLOTTE, NC 28207-1911	

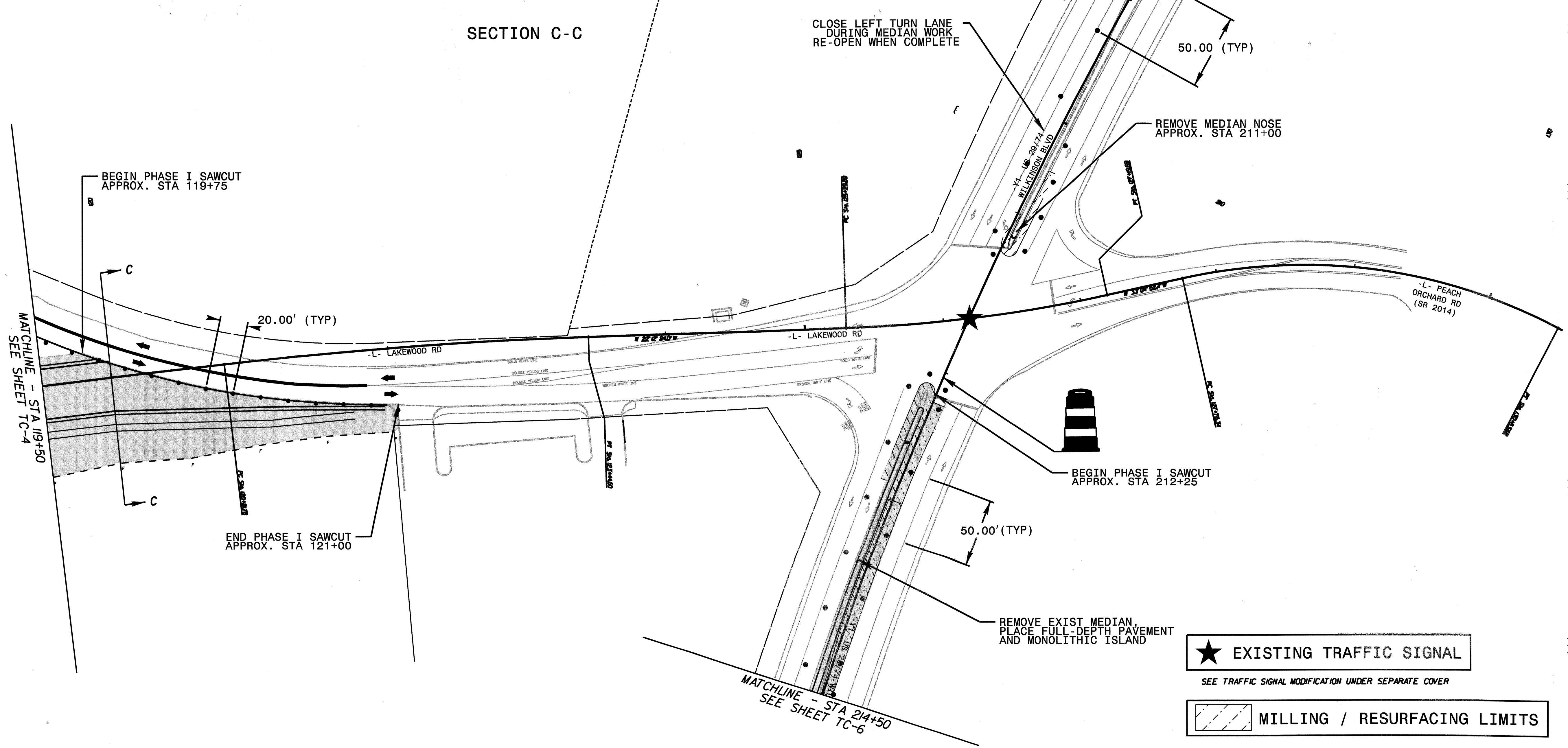
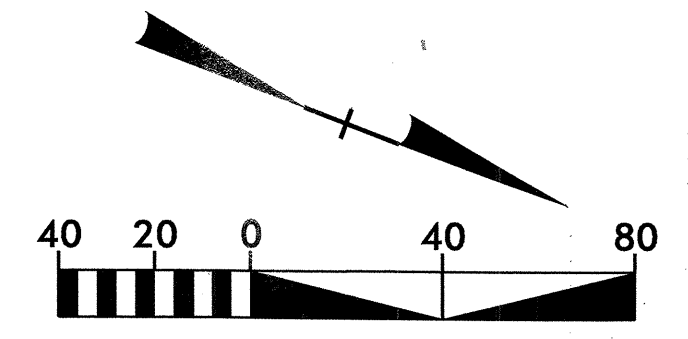
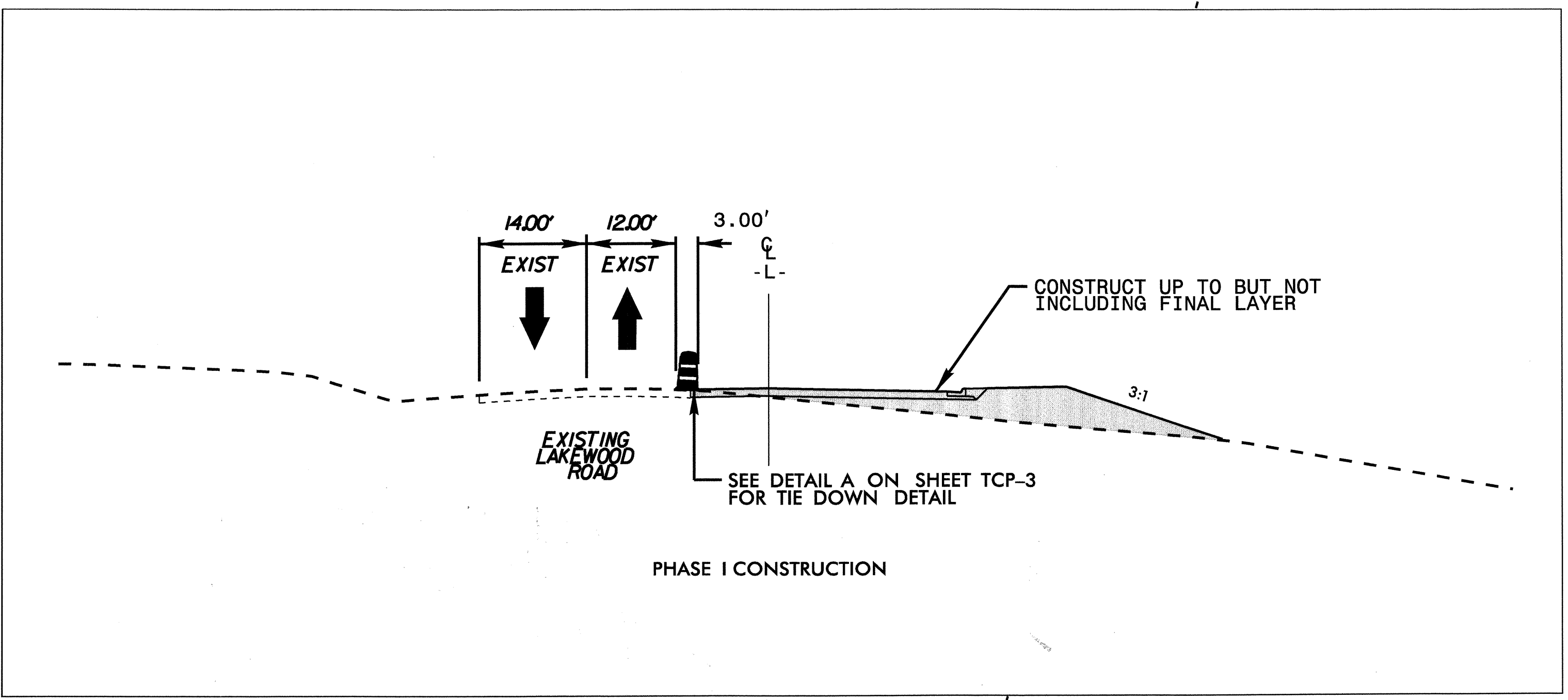


SECTION A-A



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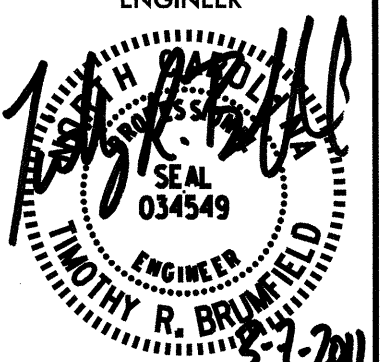
PROJECT REFERENCE NO. R-5215	SHEET NO. TCP-6
ROADWAY DESIGN ENGINEER 	 Kimley-Horn and Associates, Inc. © 2011 NC LICENSE #F-0102 4651 CHARLOTTE PARK DRIVE SUITE 300 CHARLOTTE, NC 28207-1911



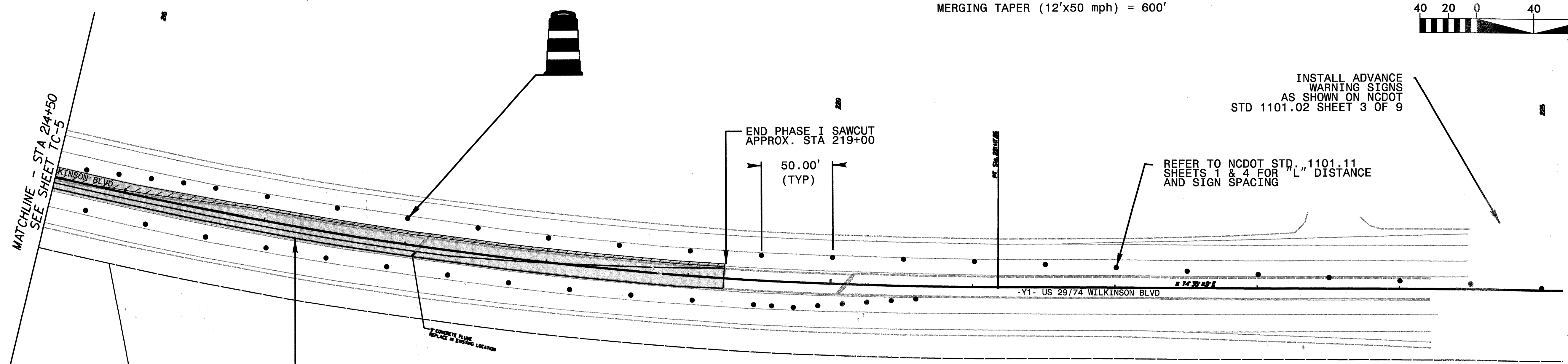
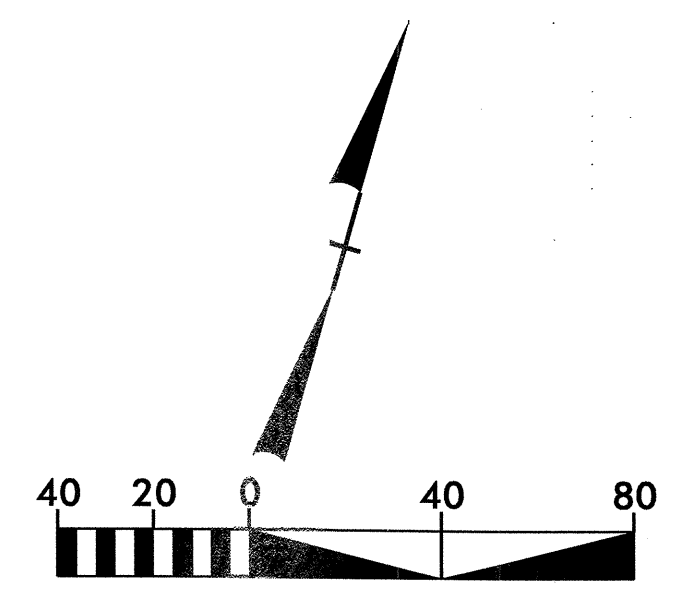
★ EXISTING TRAFFIC SIGNAL
SEE TRAFFIC SIGNAL MODIFICATION UNDER SEPARATE COVER

 MILLING / RESURFACING LIMITS

557003-RD12-TRAF-PHI-03.dgn
1/20/2011

PROJECT REFERENCE NO. R-5215	SHEET NO. TCP-7
ROADWAY DESIGN ENGINEER	
	Kimley-Horn and Associates, Inc. © 2011 NC LICENSE #F-0102 4651 CHARLOTTE PARK DRIVE SUITE 300 CHARLOTTE, NC 28207-1911

POSTED SPEED = 50 mph
 WIDTH OF OFFSET (LATERAL DISTANCE = 12")
 MERGING TAPER (12'x50 mph) = 600'



INSTALL ADVANCE WARNING SIGNS AS SHOWN ON NCDOT STD 1101.02 SHEET 3 OF 9

END PHASE I SAWCUT APPROX. STA 219+00

50.00' (TYP)

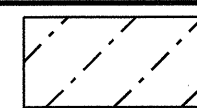
REFER TO NCDOT STD 1101.11 SHEETS 1 & 4 FOR "L" DISTANCE AND SIGN SPACING

-Y1- US 29/74 WILKINSON BLVD

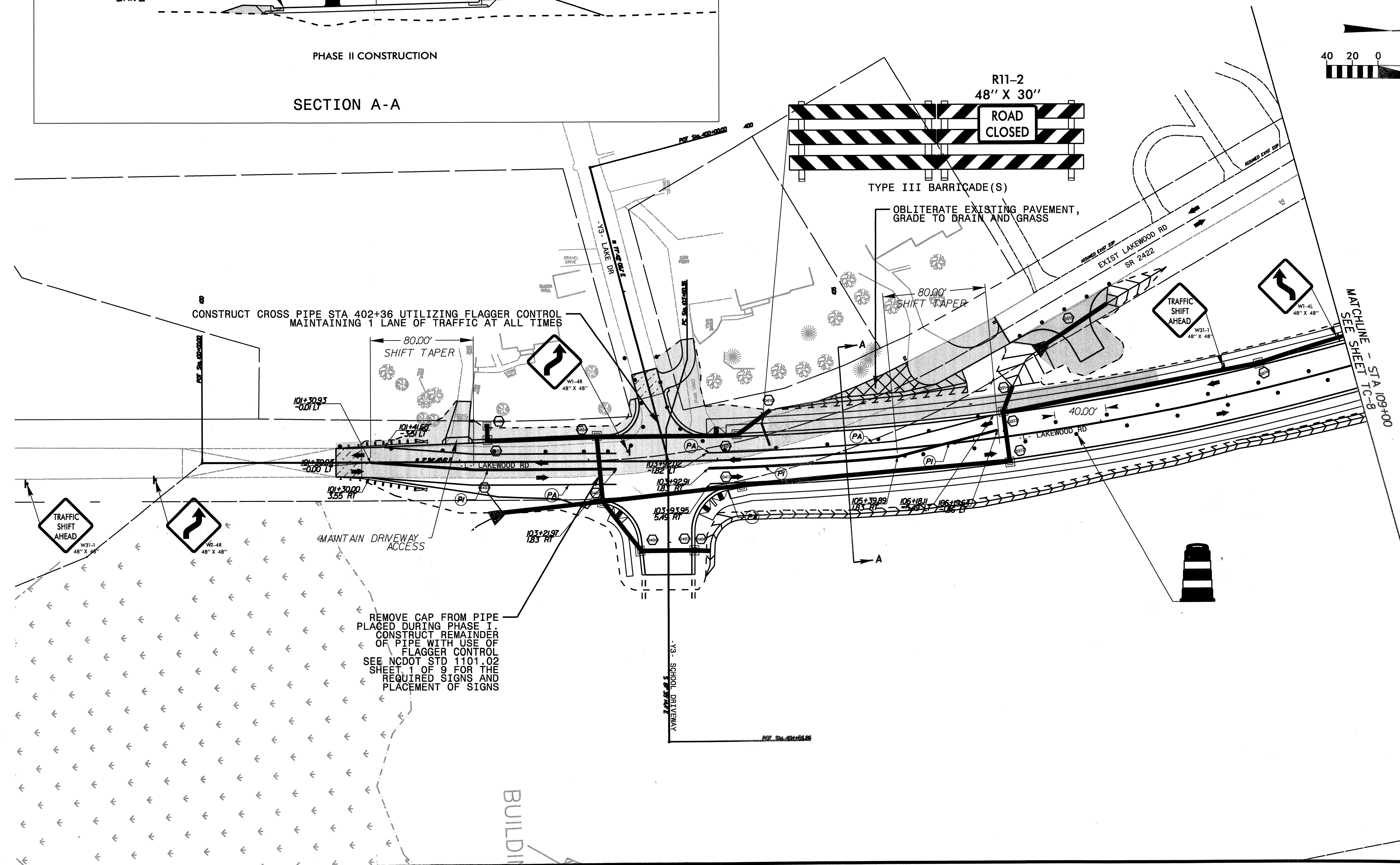
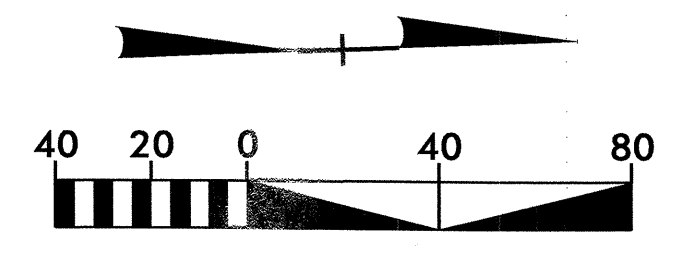
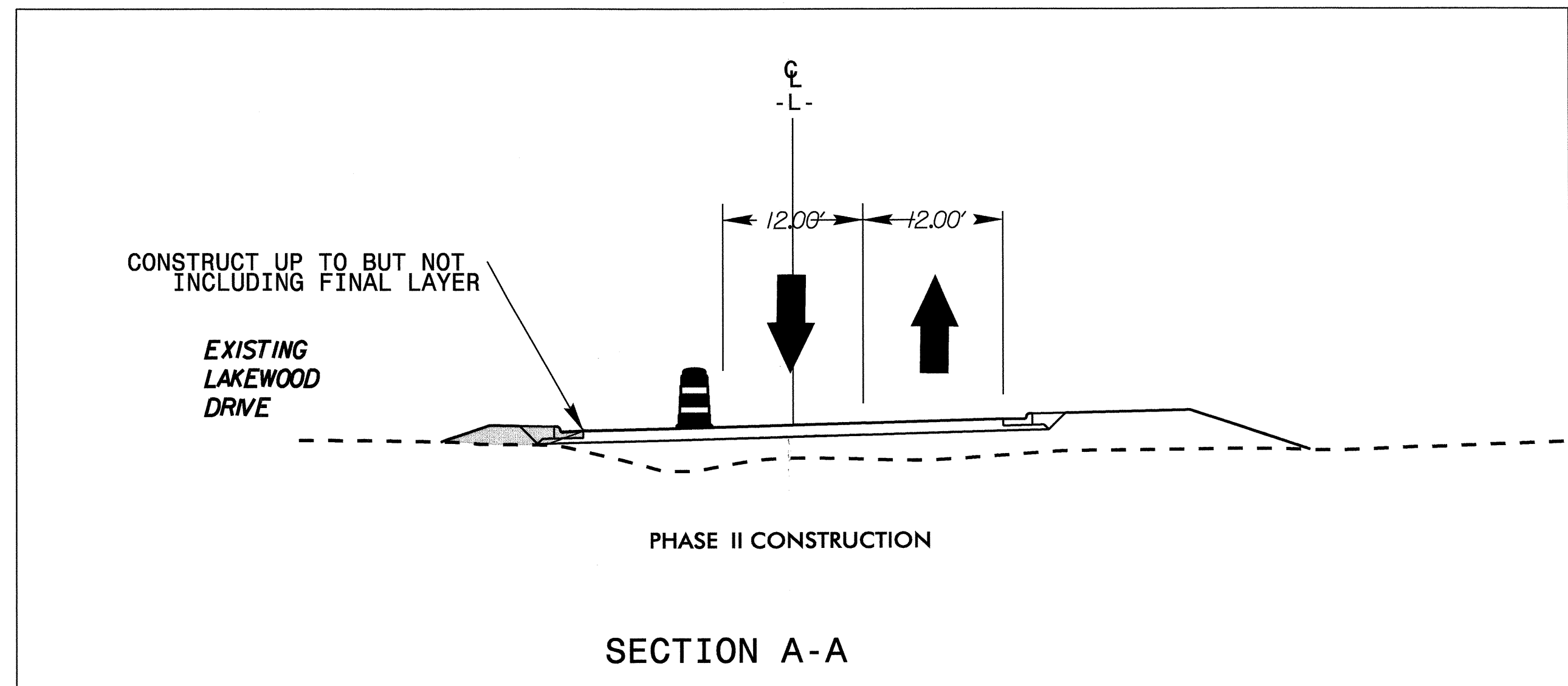
REMOVE EXIST MEDIAN, PLACE FULL-DEPTH PAVEMENT AND MONOLITHIC ISLAND

MATCHLINE - STA 214+50 SEE SHEET TC-5

CONCRETE FLARE REPLACE IN EXISTING LOCATION

 MILLING / RESURFACING LIMITS

557003-RD12-TRAF-PH1-04.dgn
1/20/2011

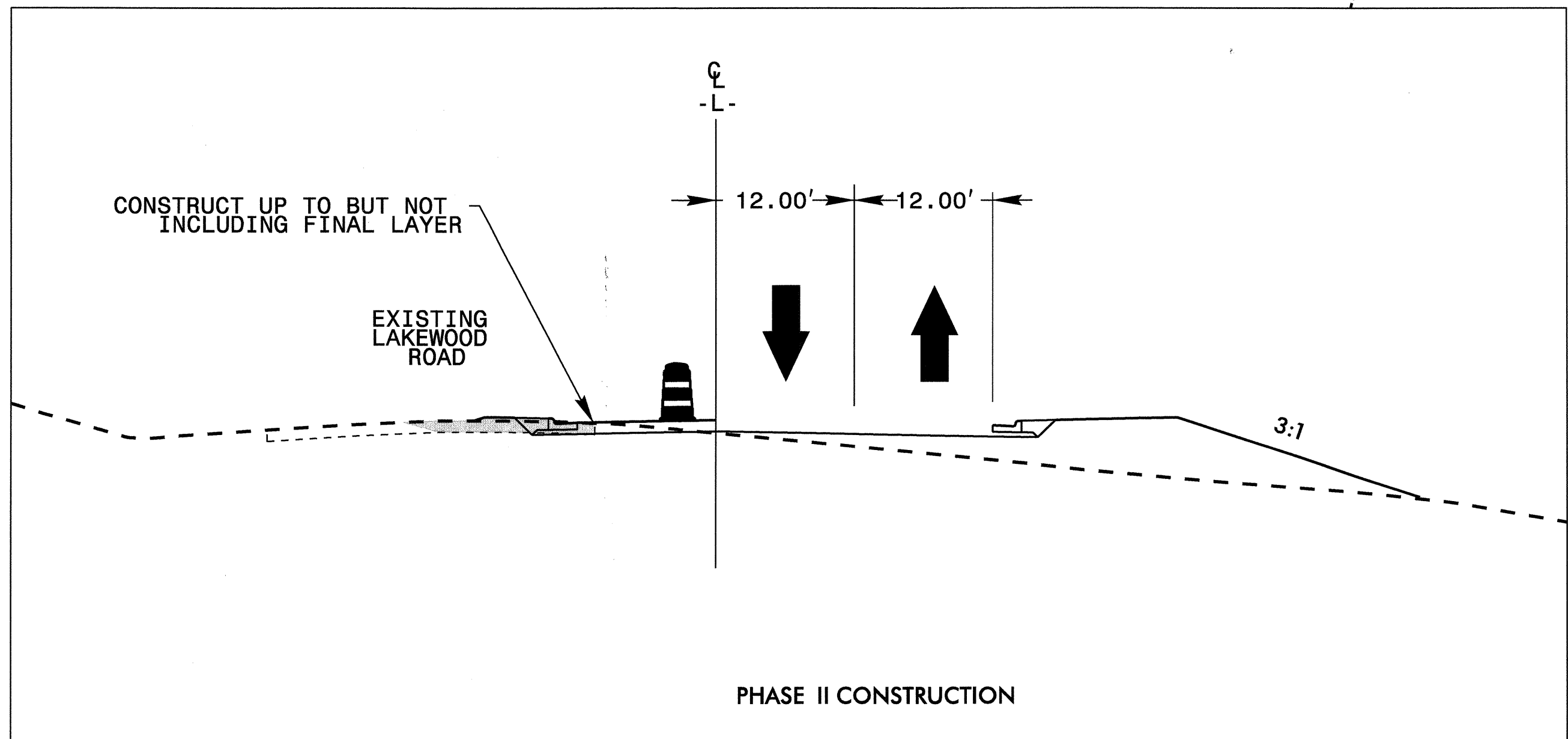


557003-RD12-TRAF-PH2-01.dgn
3/4/2011

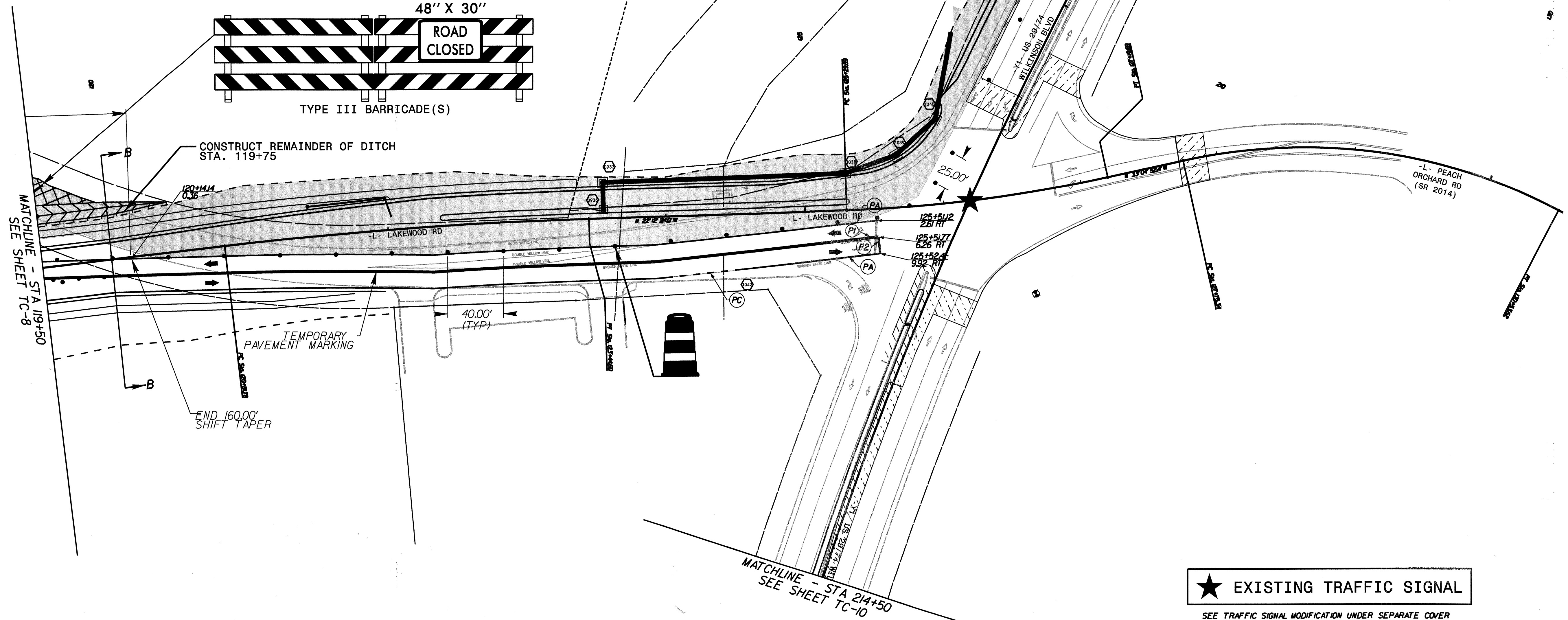
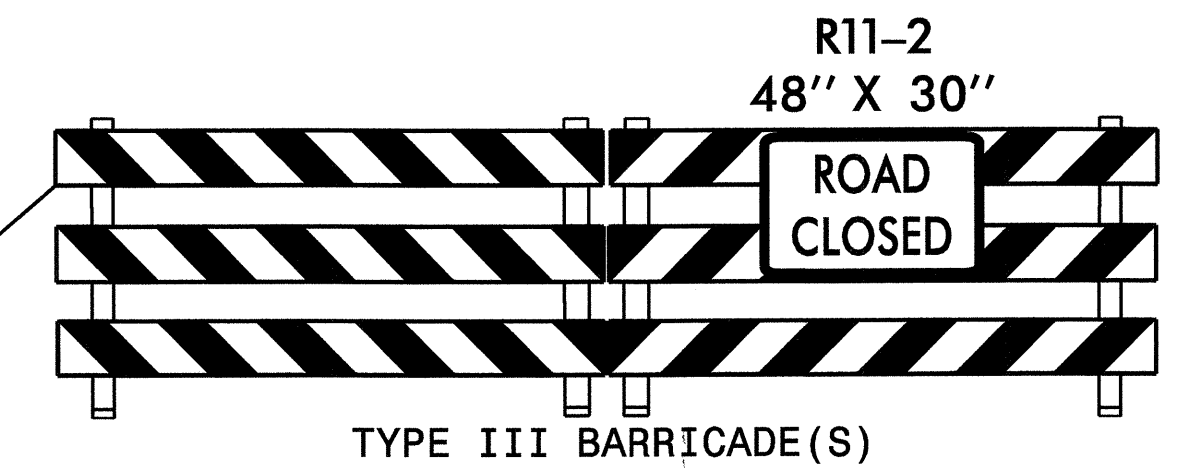
INSTALL ADVANCE WARNING SIGNS AS SHOWN ON NCDOT STD 1101.02 SHEET 3 OF 9

REFER TO NCDOT STD. 1101.11 SHEETS 1 & 4 FOR "L" DISTANCE AND SIGN SPACING

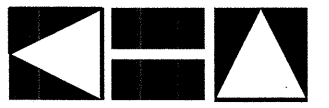
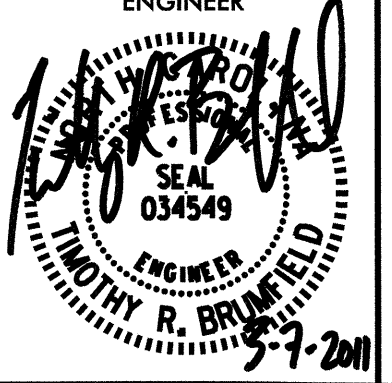
POSTED SPEED = 50 mph
WIDTH OF OFFSET (LATERAL DISTANCE = 12")
MERGING TAPER (12'x50 mph) = 600'

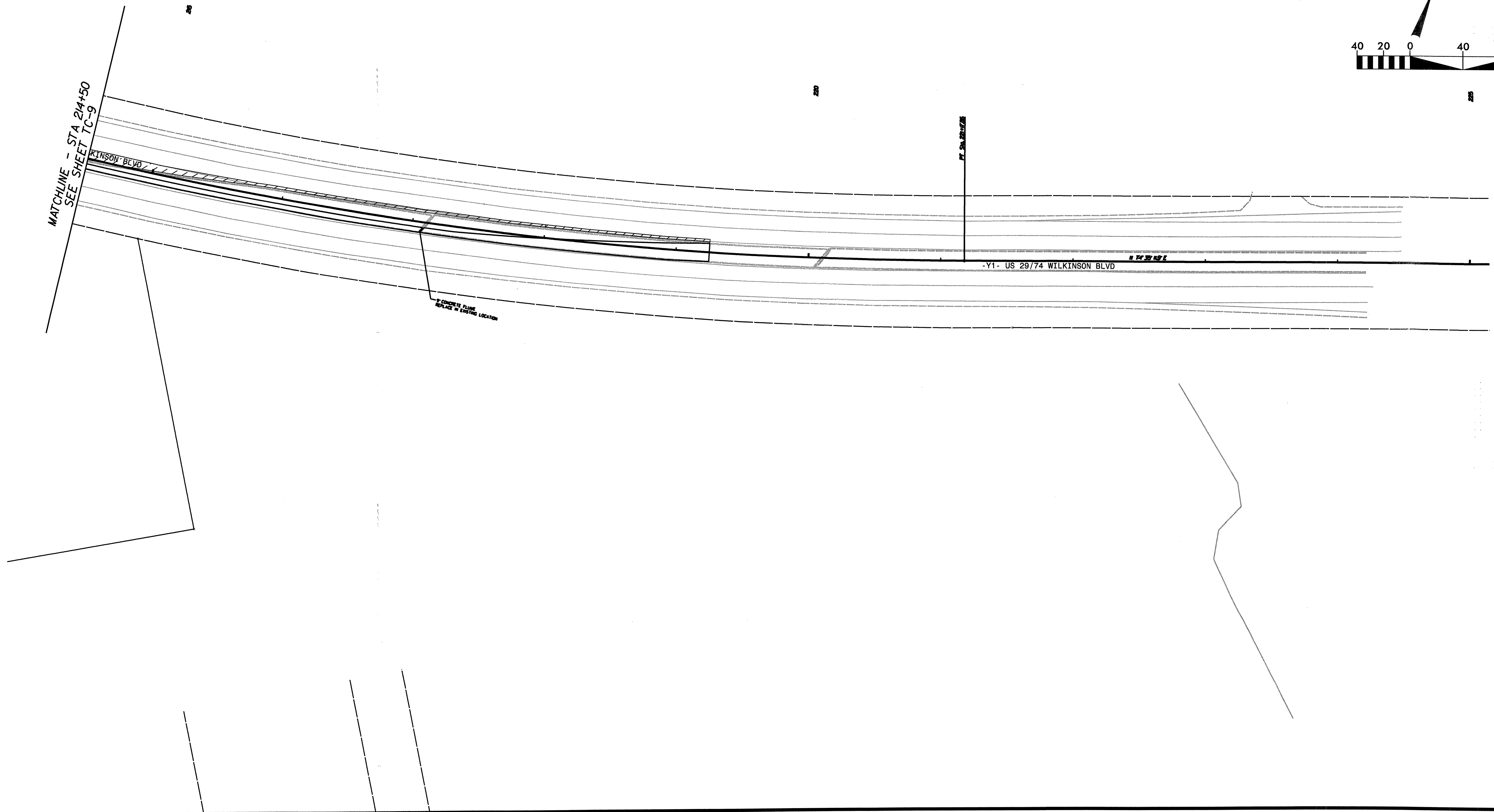
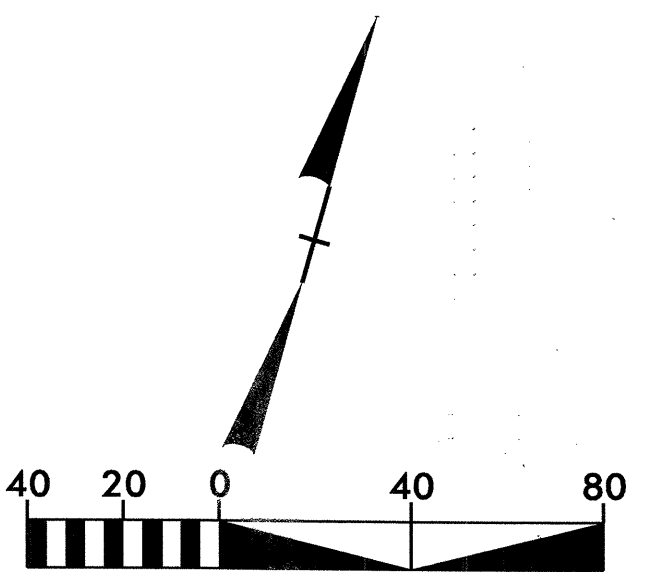


SECTION B-B

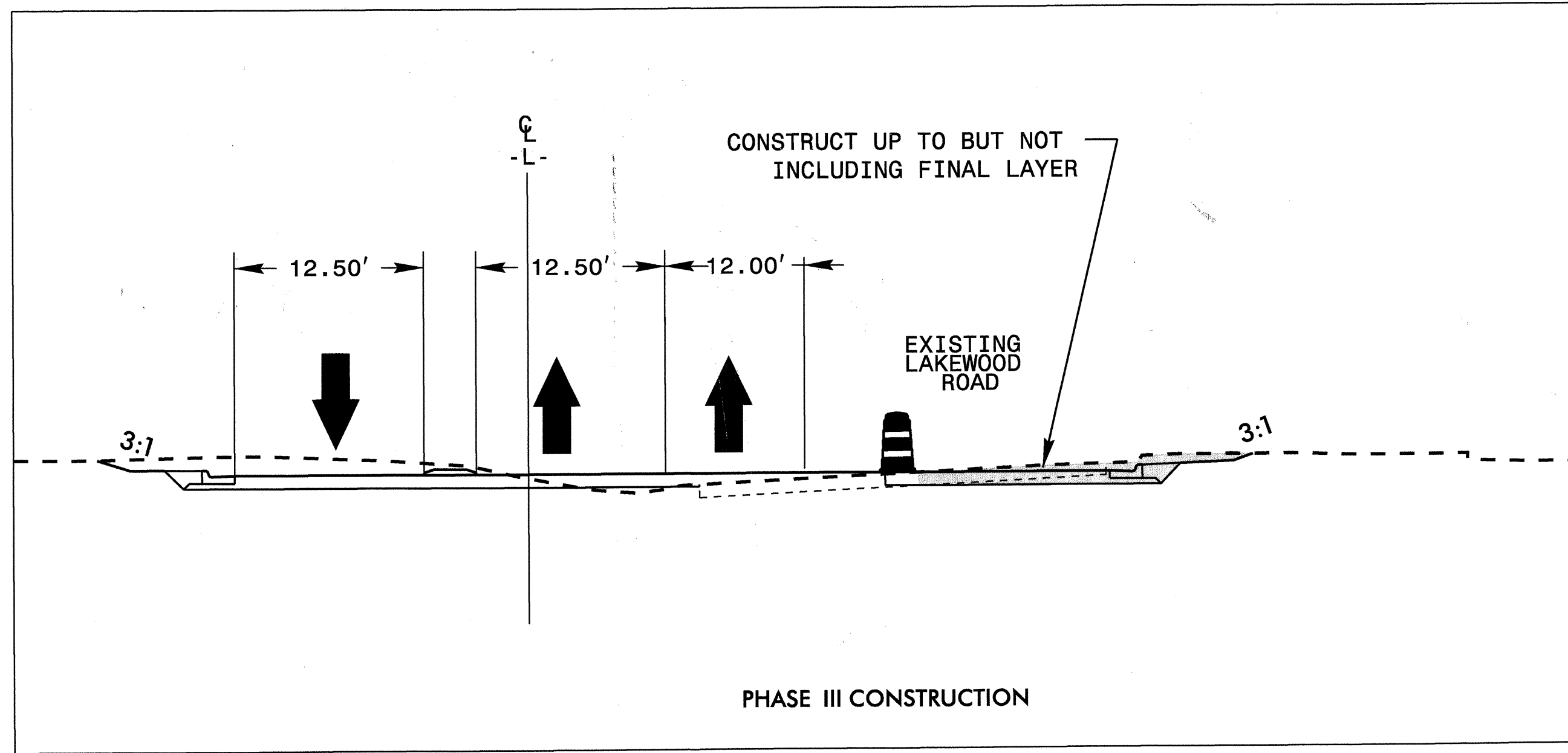


★ EXISTING TRAFFIC SIGNAL
SEE TRAFFIC SIGNAL MODIFICATION UNDER SEPARATE COVER

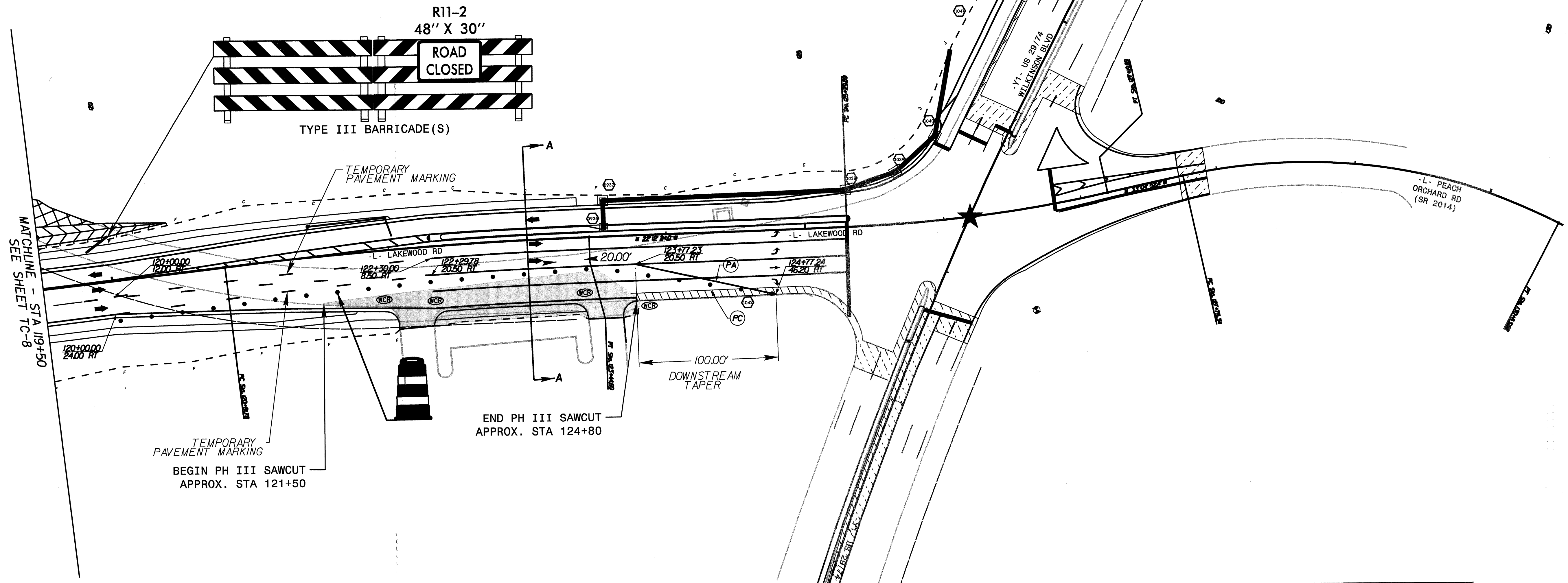
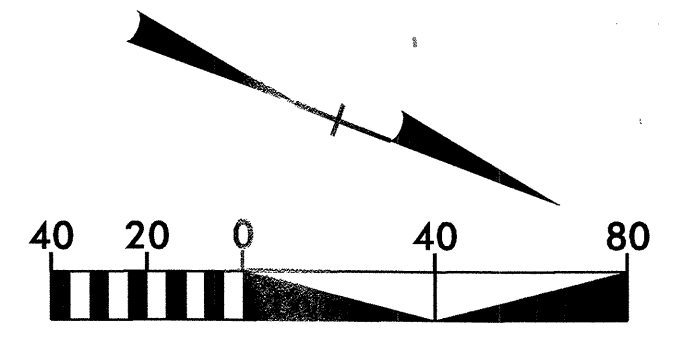
PROJECT REFERENCE NO. R-5215	SHEET NO. TCP-II
ROADWAY DESIGN ENGINEER	
	Kimley-Horn and Associates, Inc. © 2011 NC LICENSE #F-0102 4651 CHARLOTTE PARK DRIVE SUITE 300 CHARLOTTE, NC 28207-1911



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SECTION A-A



★ EXISTING TRAFFIC SIGNAL
 SEE TRAFFIC SIGNAL MODIFICATION UNDER SEPARATE COVER

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1/20/2011