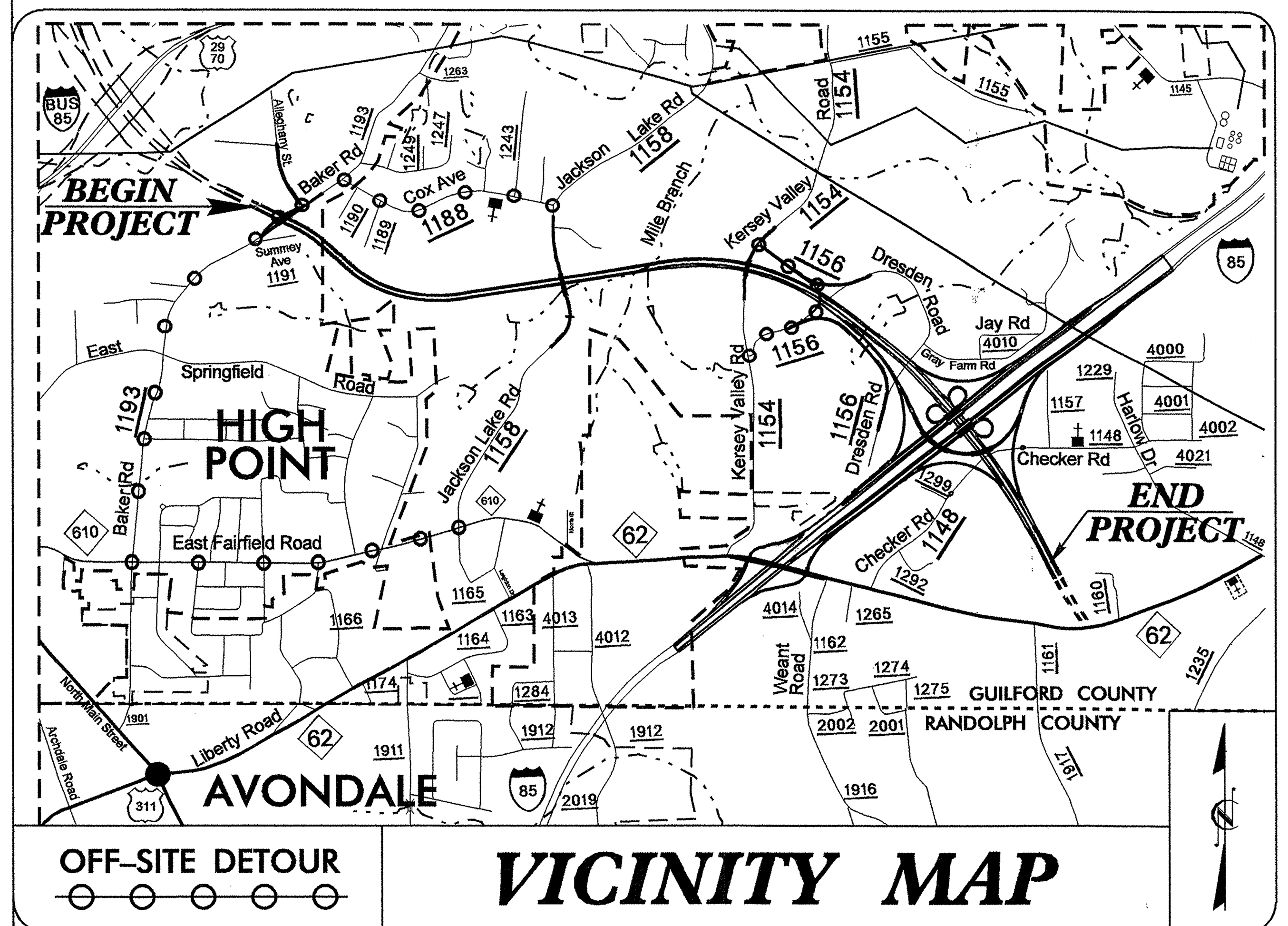
9/09/99

TIP: R-0609IA

CONTRACT: C201275

See Sheet 1-A For Index of Sheets



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

GUILFORD COUNTY

LOCATION: US 311 HIGH POINT EAST BELTWAY FROM US 29-70 TO I-85 NORTH OF ARCHDALE

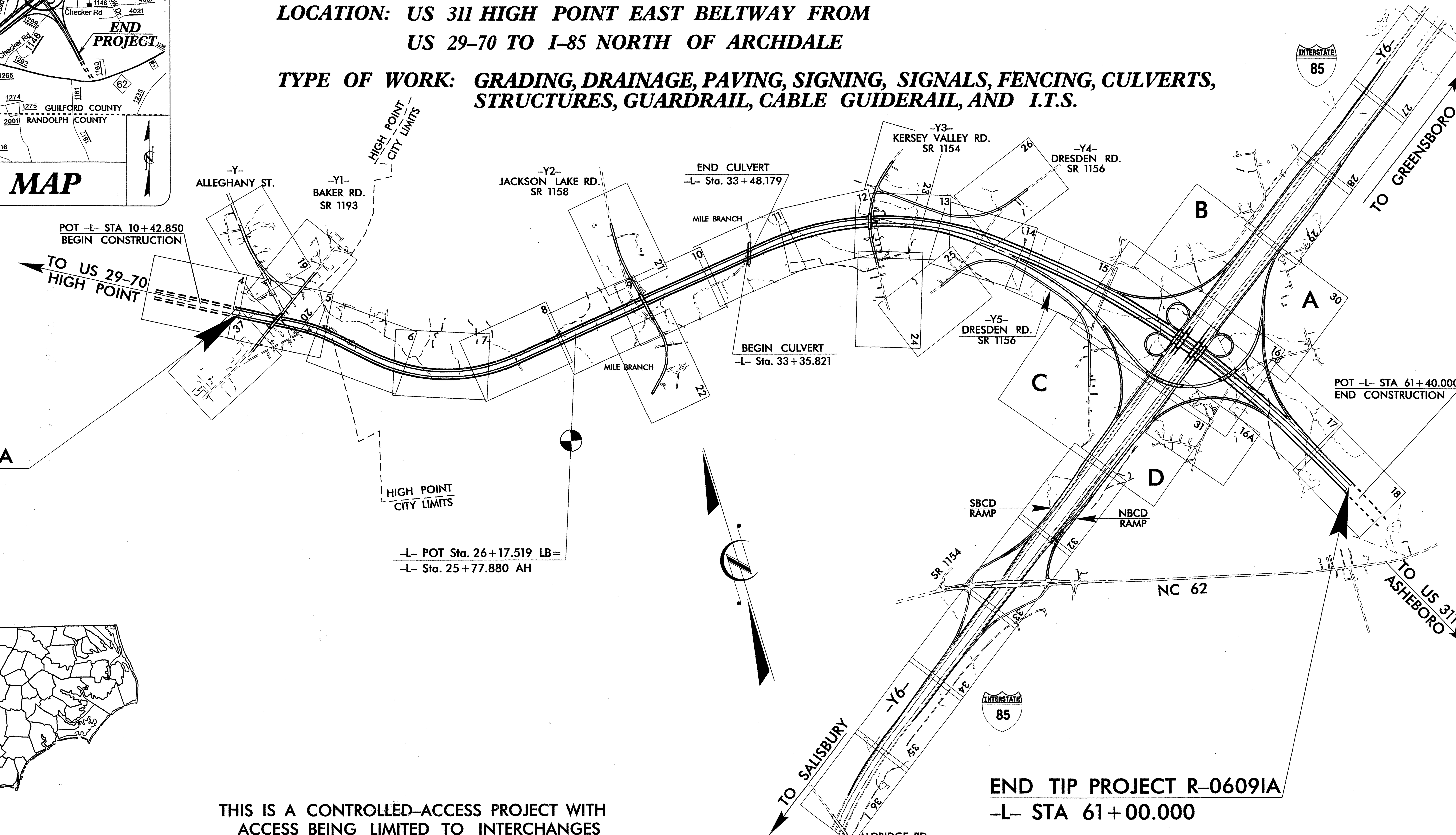
TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNING, SIGNALS, FENCING, CULVERTS, STRUCTURES, GUARDRAIL, CABLE GUIDERAIL, AND I.T.S.

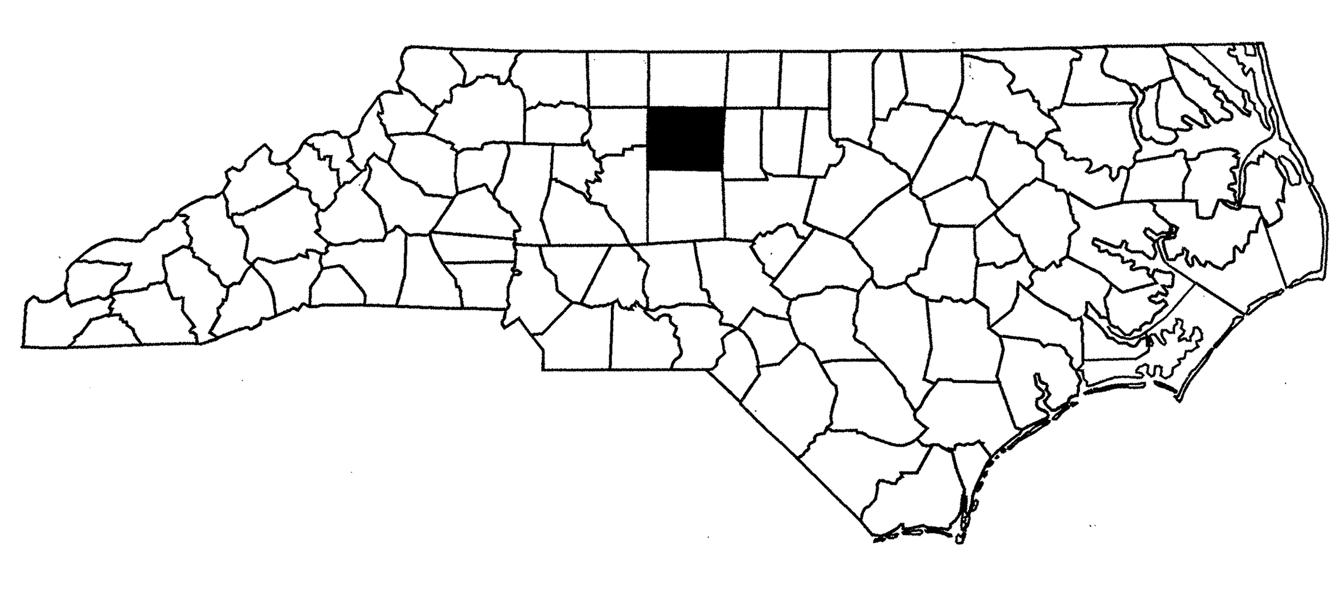
METRIC

ALL DIMENSIONS IN THESE PLANS ARE IN METERS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-0609IA	1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
34345.1.1	MAF-F-119-1(1)	PE
34345.2.7	STP-NHF-119-1(11)	ROW & UTILITIES
34345.3.15	STP-NHF-119-1(15)	CONSTRUCTION





THIS IS A CONTROLLED-ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES

PART 3 OF 3

06-JUN-2006 09:52
$$$$USERNAME$$$$

T.I.P.: R-0609IA

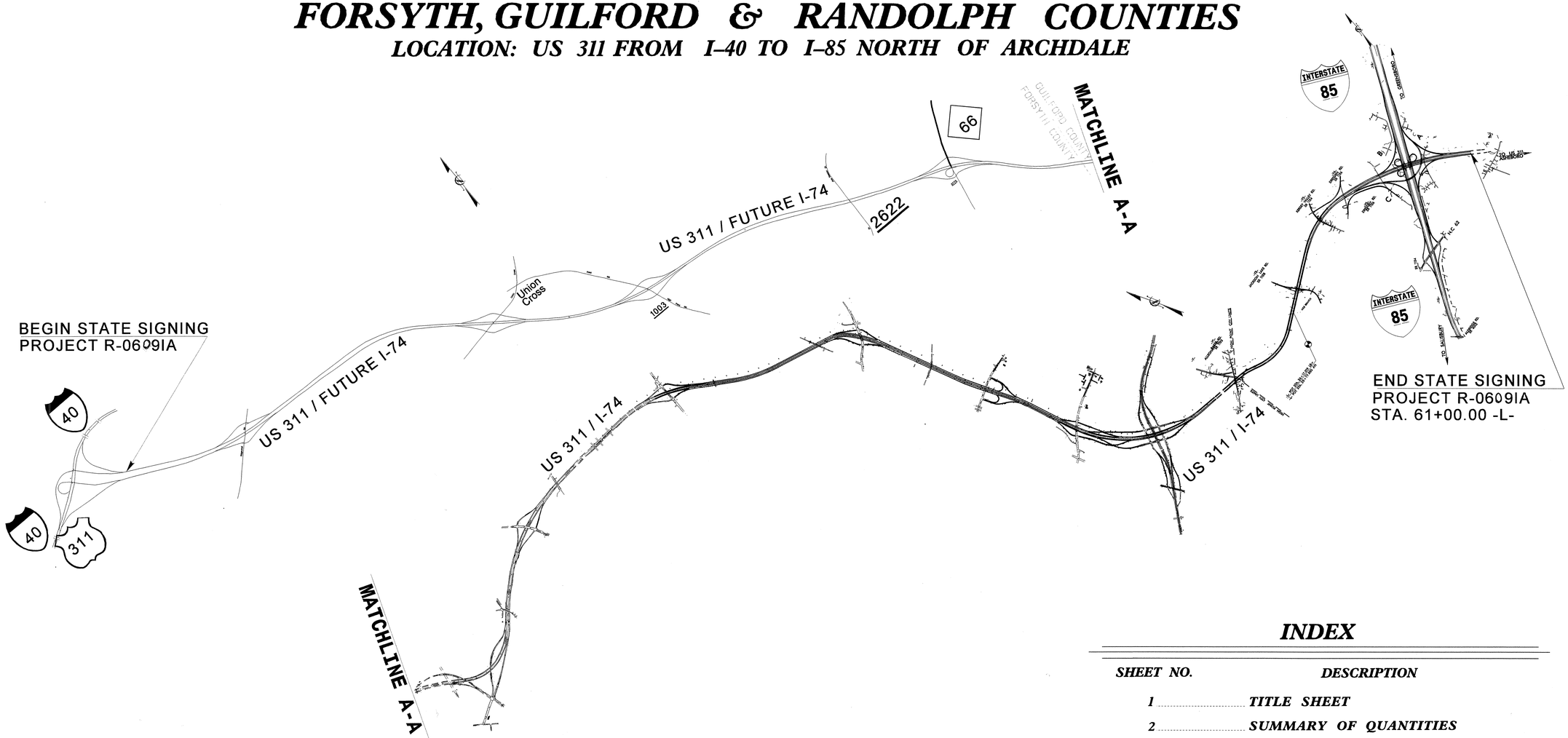
CONTRACT: C201275

TIP NO.	SHEET NO.
R-0609IA	SIGN-1

METRIC

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

SIGNING PLANS
FORSYTH, GUILFORD & RANDOLPH COUNTIES
LOCATION: US 311 FROM I-40 TO I-85 NORTH OF ARCHDALE



INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SUMMARY OF QUANTITIES
3	NOTES
4–30	OVERHEAD SIGN ASSEMBLIES
31 and 32	LIGHTING SHEETS
33–37	SUPPORT INFORMATION and applicable ROADWAY STANDARD DRAWINGS
38	E SHEETS
39–41	F and Milemarker SHEETS
42–84	SIGN ROADWAY SHEETS

PLAN PREPARED BY: N.C.D.O.T. SIGNING SECTION

RON KING, P.E. — SIGNING ENGINEER

AYMAN ALQUDWAH, P.E. — SIGNING PROJECT ENGINEER

KELVIN JORDAN — SIGNING PROJECT DESIGN ENGINEER

GEORGE TERLIZZI — SIGNING DESIGNER

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AYMAN I. ALQUDWAH

METRIC

TIP NO.	SHEET NO.
R-0609IA	SIGN-2

11/1/06

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER

SIGNS
SUMMARY OF QUANTITIES

ITEM NO. DESC. NO.	SECT. NO.	ITEM DESCRIPTION	QUANTITY	UNIT
0001000000	800	MOBILIZATION		L.S.
4025000000	901	CONTRACTOR FURNISHED, TYPE A SIGN		S.M.
4025000000	901	CONTRACTOR FURNISHED, TYPE B SIGN		S.M.
4025000000	901	CONTRACTOR FURNISHED, TYPE D SIGN		S.M.
4025000000	901	CONTRACTOR FURNISHED, TYPE E SIGN		S.M.
4025000000	901	CONTRACTOR FURNISHED, TYPE F SIGN		S.M.
4025000000	901	CONTRACTOR FURNISHED, OVERLAYS SIGN		S.M.
4025000000	901	CONTRACTOR FURNISHED, MILEMARKER SIGN		S.M.
4048000000	902	REINFORCED CONCRETE SIGN FOOTINGS	34	C.M.
4054000000	902	PLAIN CONCRETE SIGN FOOTINGS		C.M.
4056000000	902	OVERHEAD FOOTING		EA.
4060000000	903	SUPPORTS, BREAKAWAY STEEL BEAM	10939	KG.
4066000000	903	SUPPORTS, SIMPLE STEEL BEAM	3536	KG.
4072000000	903	SUPPORTS, 4.5-KG STEEL U-CHANNEL	1721	L.M.
4078000000	903	SUPPORTS, 3.0-KG STEEL U-CHANNEL	42	EA.
4079000000	903	SUPPORTS, BARRIER (SMALL)		EA.
4080000000	903	SUPPORTS, BARRIER (LARGE)		EA.
4081000000	903	SUPPORTS, OVERHEAD STRUCTURE " "		L.S.
4081000000	903	SUPPORTS, OVERHEAD STRUCTURE " "		L.S.
4082000000	903	SUPPORTS, WOOD		L.M.
4109000000	904	SIGN ERECTION, TYPE A (OVERHEAD)	8	EA.
4109000000	904	SIGN ERECTION, TYPE B (OVERHEAD)		EA.
4110000000	904	SIGN ERECTION, TYPE A (GROUND MOUNTED)	53	EA.
4110000000	904	SIGN ERECTION, TYPE B (GROUND MOUNTED)	18	EA.
4096000000	904	SIGN ERECTION, TYPE D	20	EA.
4102000000	904	SIGN ERECTION, TYPE E	100	EA.
4108000000	904	SIGN ERECTION, TYPE F	89	EA.
4114000000	904	SIGN ERECTION, MILEMARKERS	42	EA.
4115000000	904	SIGN ERECTION, OVERLAY (OVERHEAD)	32	EA.
4116000000	904	SIGN ERECTION, OVERLAY (GROUND MOUNTED)	29	EA.
4116200000	904	SIGN ERECTION, REPOSITION OVERHEAD		EA.
4116300000	904	SIGN ERECTION, LOGO TO PANEL		EA.
4116400000	904	SIGN ERECTION, LOGO TRAILBLAZER		EA.
4116500000	904	SIGN ERECTION, WALKWAY		L.M.
4126000000	905	SIGN LIGHTING SYSTEM " "		L.S.
4126000000	905	SIGN LIGHTING SYSTEM " "		L.S.
4126000000	905	SIGN LIGHTING SYSTEM " "		L.S.
4126000000	905	SIGN LIGHTING SYSTEM " "		L.S.
4126000000	905	SIGN LIGHTING SYSTEM " "		L.S.
4129000000	906	RELOCATE SIGN, TYPE A (OVERHEAD)		EA.
4129000000	906	RELOCATE SIGN, TYPE B(OVERHEAD)		EA.
4129000000	906	RELOCATE SIGN, TYPE A (GROUND MOUNTED)	4	EA.
4129000000	906	RELOCATE SIGN, TYPE B (GROUND MOUNTED)		EA.
4129000000	906	RELOCATE SIGN, TYPE D		EA.
4129000000	906	RELOCATE SIGN, TYPE E		EA.
4129000000	906	RELOCATE SIGN, TYPE F		EA.
4129000000	906	RELOCATE SIGN, MILEMARKERS		EA.
4129200000	906	RELOCATE SUPPORT, OVERHEAD SIGN SYSTEM		EA.
4129300000	906	RELOCATE SUPPORT, STEEL BEAM		EA.
4129400000	906	RELOCATE LIGHTING SYSTEM		EA.

ITEM NO. DESC. NO.	SECT. NO.	ITEM DESCRIPTION	QUANTITY	UNIT
4129500000	906	RELOCATE SUPPORT, WOOD		EA.
4138000000	907	DISPOSAL OF SUPPORT, STEEL BEAM		EA.
4141000000	907	DISPOSAL OF SUPPORT, WOOD		EA.
4143000000	907	DISPOSAL OF SUPPORT, OVERHEAD STRUCTURE		EA.
4149000000	907	DISPOSAL OF SIGN SYSTEM, OVERHEAD		EA.
4152000000	907	DISPOSAL OF SIGN SYSTEM, STEEL BEAM	40	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	97	EA.
4158000000	907	DISPOSAL OF SIGN SYSTEM, WOOD	2	EA.
4192000000	907	DISPOSAL OF SUPPORT, U-CHANNEL		EA.
4234000000	907	DISPOSAL OF SIGN, A OR B (OVERHEAD)	9	EA.
4236000000	907	DISPOSAL OF SIGN, A OR B (GROUND MOUNTED)		EA.
4238000000	907	DISPOSAL OF SIGN, D, E OR F		EA.
4238500000	907	DISPOSAL OF SIGN, MILEMARKERS		EA.
4241000000	907	DISPOSAL OF SIGN, OVERLAY (OVERHEAD)		EA.
4242000000	907	DISPOSAL OF SIGN, OVERLAY (GROUND MOUNTED)		EA.
4251000000	907	DISPOSAL OF LIGHTING SYSTEM		EA.
4258000000	907	DISPOSAL OF LIGHTING FIXTURES		EA.
4263000000	907	DISPOSAL OF WALKWAY		EA.
4132000000	907	STOCKPILE SUPPORT, STEEL BEAM		EA.
4140000000	907	STOCKPILE SUPPORT, WOOD		EA.
4142000000	907	STOCKPILE SUPPORT, OVERHEAD STRUCTURE		EA.
4148000000	907	STOCKPILE SIGN SYSTEM, OVERHEAD		EA.
4151000000	907	STOCKPILE SIGN SYSTEM, STEEL BEAM		EA.
4154000000	907	STOCKPILE SIGN SYSTEM, U-CHANNEL		EA.
4157000000	907	STOCKPILE SIGN SYSTEM, WOOD		EA.
4186000000	907	STOCKPILE SUPPORT, U-CHANNEL		EA.
4228000000	907	STOCKPILE SIGN, A OR B (OVERHEAD)		EA.
4235000000	907	STOCKPILE SIGN, A OR B (GROUND MOUNTED)		EA.
4237000000	907	STOCKPILE SIGN, D, E OR F		EA.
4237500000	907	STOCKPILE SIGN, MILEMARKERS		EA.
4250000000	907	STOCKPILE LIGHTING SYSTEM		EA.
4252000000	907	STOCKPILE LIGHTING FIXTURES		EA.
4262000000	907	STOCKPILE WALKWAY		EA.
4277000000	908	TEMPORARY SIGN, TYPE A		S.M.
4277000000	908	TEMPORARY SIGN, TYPE B		S.M.
4277000000	908	TEMPORARY SIGN, TYPE D		S.M.
4277000000	908	TEMPORARY SIGN, TYPE E		S.M.
4277000000	908	TEMPORARY SIGN, TYPE F		S.M.
4278000000	908	TEMPORARY RELOCATE SIGN, TYPE A		EA.
4278000000	908	TEMPORARY RELOCATE SIGN, TYPE B		EA.
4278000000	908	TEMPORARY RELOCATE SIGN, TYPE D		EA.
4278000000	908	TEMPORARY RELOCATE SIGN, TYPE E		EA.
4278000000	908	TEMPORARY RELOCATE SIGN, TYPE F		EA.
4279000000	908	TEMPORARY RELOCATE SIGN SUPPORT, STEEL BEAM		EA.
4083200000	SP	OVERHEAD DYNAMIC MESSAGE SIGN ASSEMBLY DMS-1 AT 420M BEYOND MM119	1	L.S.
4083200000	SP	OVERHEAD DYNAMIC MESSAGE SIGN ASSEMBLY DMS-2 AT 20M BEYOND MM109	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 1609M from 6+70 (Y6)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 6+70 (Y6)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 17+20 (Y6)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 22+80 (Y6)	1	L.S.

ITEM NO. DESC. NO.	SECT. NO.	ITEM DESCRIPTION	QUANTITY	UNIT
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 27+80 (Y6)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 36+20 (Y6)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 50+20 (Y6)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 66+20 (Y6)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 95+00 (Y6)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 79+20 (Y6)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 55+00 (Y6)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 42+00 (Y6)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 39+20 (Y6)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 31+00 (Y6)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 26+50 (Y6)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 58+40 (L)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 53+10 (L)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 41+80 (L)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 26+00 (L)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 8+43 (L)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 3+54 RAMP B	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 11+00 (L)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 27+00 (L)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 43+00 (L)	1	L.S.
4082200000	SP	OVERHEAD SIGN ASSEMBLY AT STA 15+28 RAMP C	1	L.S.
4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA 17+20 (Y6)	1	L.S.
4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA 22+80 (Y6)	1	L.S.
4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA 27+80 (Y6)	1	L.S.
4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA 36+20 (Y6)	1	L.S.
4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA 42+00 (Y6)	1	L.S.
4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA 39+20 (Y6	1	L.S.
4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA 31+00 (Y6)	1	L.S.
4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA 26+50 (Y6)	1	L.S.
4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA 58+40 (L)	1	L.S.
4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA 53+10 (L)	1	L.S.
4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA 43+00 (L)	1	L.S.
4127500000	SP	LRS LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA 15+28 RAMP C	1	L.S.
4128000000	SP	STATIC LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA ********		L.S.
4128000000	SP	STATIC LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLY AT STA ********		L.S.
4355000000	SP	INTEGRATION INTO EXISTING DMS SYSTEM		L.S.
4355100000	SP	DYNAMIC MESSAGE SIGN SYSTEM "DMS-#"		L.S.
4355100000	SP	DYNAMIC MESSAGE SIGN SYSTEM "DMS-#"		L.S.
4355200000	SP	DMS SYSTEM SERVER COMPUTER		L.S.
4355210000	SP	DMS SYSTEM CLIENT COMPUTER		EA.
4355220000	SP	DMS SYSTEM LAPTOP COMPUTER		EA.
4355230000	SP	DMS SYSTEM CONTROL SOFWARE		EA.
4355300000	SP	DYNAMIC MESSAGE SIGN MAINTENANCE TRAINING		EA.
4355310000	SP	DYNAMIC MEESAGE SIGN SYSTEM DESIGN APPROVAL TESTS		EA.
4355320000	SP	DYNAMIC MESSAGE SIGN SYSTEM OPERATIONAL FACTORY TESTS		EA.
4355330000	SP	DYNAMIC MESSAGE SIGN SYSTEM OPERATIONAL FIELD TESTS		L.S.
4355340000	SP	DYNAMIC MESSAGE SIGN BENCH TEST UNIT		L.S.
4355350000	SP	DYNAMIC MESSAGE SIGN SYSTEM NTCIP TESTS		L.S.
4365000000	SP	OVERHEAD FOOTINGS	1001	C.M.
S	SP	SUPPORTS, OVERHEAD STRUCTURE " "		L.S.

ROADWAY STANDARD DRAWINGS
APPLICABLE TO THESE SIGNING PLANS

901.10	901.60	904.20
901.20	901.70	904.40
901.50	904.10	904.50

TIP NO.	SHEET NO.
R-0609IA	SIGN-3

METRIC

Pay Item Notes:

1	DISPOSAL OF SIGN SYSTEM, STEEL BEAM
2	DISPOSAL OF SIGN SYSTEM, U-CHANNEL
3	DISPOSAL OF SIGN SYSTEM, WOOD
4	DISPOSAL OF SIGN, A OR B (OVERHEAD)
5	SIGN ERECTION, TYPE A (OVERHEAD)
6	SIGN ERECTION, OVERLAY (OVERHEAD)
7	SIGN ERECTION, OVERLAY (GROUND MOUNTED)
8	RELOCATE SIGN, TYPE A (GROUND MOUNTED)

General Notes:

. SIGNS FURNISHED BY STATE

. ALL TYPE 'D' SIGNS SHALL BE MOUNTED ON TW0 U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS.

. IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.

. SIGNING PLANS DO NOT INCLUDE TEMPORARY CONSTRUCTION SIGNING OR PAVEMENT MARKINGS. SEE TRAFFIC CONTROL PLANS.

. WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER

. ALL EXISTING SIGNS ON "U" CHANNEL POST WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS.

. WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.

. THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE TYPE III REFLECTIVE SHEETING.

· THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT TO THE N.C.D.O.T. FOR APPROVAL, DETAIL DRAWINGS OF LUMINAIRE RETRIEVAL SYSTEM MOUNTING ON OHS ASSEMBLY.

· THE CONTRACTOR SHALL USE LUMINAIRE RETRIEVAL SYSTEM ON ALL DESIGNATED OVERHEAD STRUCTURES AS SHOWN ON PLANS. WALKWAY AND HANDRAIL IS NOT REQUIRED.

· INSTALLATION OF LUMINAIRE RETRIEVAL SYSTEM SHALL ALLOW LUMINAIRE MAINTENACE FROM THE SHOULDER WITHOUT THE NEED FOR LANE CLOSURE. THE DRIVE HANDLE OF THE LUMINAIRE RETRIEVAL SYSTEM SHALL BE LOCATED A MINIMUM OF 0.92M (3 ') FROM THE RIGHT EDGE OF THE SHOULDER AWAY FROM THE ROADWAY TRAFFIC.

.THE CONTRACTOR SHALL ENSURE THAT COORDINATION IS ESTABLISHED BETWEEN THE OHS ASSEMBLY AND LUMINAIRE RETRIEVAL SYSTEM FABRICATORS SO THAT A FULLY FUNCTIONAL SIGN AND LIGHTING SYSTEM IS INSTALLED. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY OHS ASSEMBLY AND LUMINAIRE RETRIEVAL SYSTEM INCOMPATIBILITIES, OR INSTALLATION OF A LIGHTING SYSTEM NOT FUNCTIONING TO ITS INTENDED PURPOSE.

DO NOT BEGIN FABRICATION FOR TYPES A & B SIGNS MOUNTED ON OVERHEAD STRUCTURES OR STEEL SUPPORTS UNTIL "S" DIMENSIONS HAVE BEEN FIELD VERIFIED.

SEE ROADWAY PLANS FOR GUARD/GUIDE RAIL DETAILS.

Project Notes:

1	ALL PROPOSED TYPE A & B SIGNS TO REPLACE EXISTING SIGNS SHALL BE PLACED 3 METERS BEHIND EXISTING SIGNS.
2	THE CONTRACTOR NEEDS TO CONTACT THE DIVISION LOGO COORDINATOR PRIOR TO RELOCATION TO ADD AN "A" TO EXIT 113.

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AYMAN A. ALQUDWAH

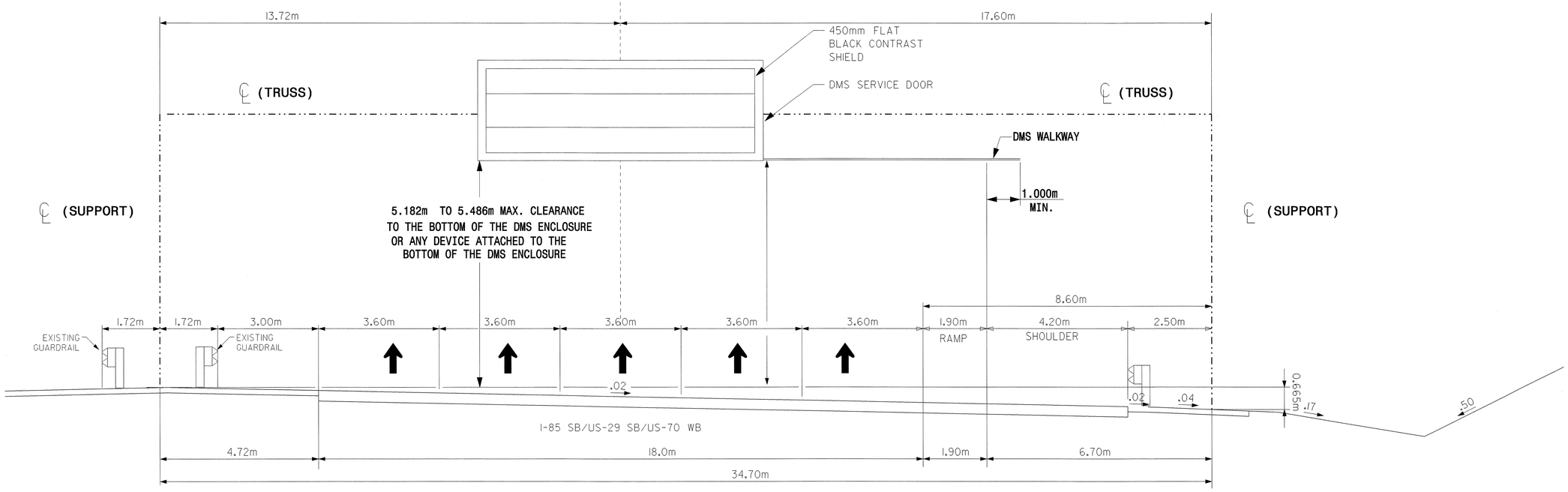
6/12/06

NOTES

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006		
SIGNING DESIGN ENG	G. TERLIZZI	DIVISION OF HIGHWAYS	
SIGNING PROJECT DGN ENG	K. JORDAN	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT ENG	A. ALQUDWAH		

TIP NO.	SHEET NO.
R-0609IA	SIGN-4

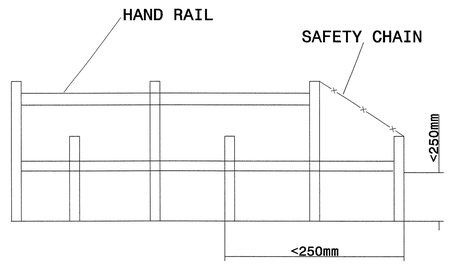
ESTIMATED DIMENSION : 8.5m X 3.0m
MAXIMUM DEADLOAD OF 2360 KG.
MAX.DESIGN WINDLOAD PRESSURE ON
SIGN OF 145 KILOGRAMS/SQUARE METER.



DMS 1

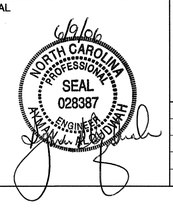
NOTES:

1. MAINTANCE WALKWAYS SHALL BE PROVIDED ON THE DMS STRUCTURE.
2. THE BOTTOM EDGE OF ALL SIGNS IN EACH ASSEMBLY SHALL BE LOCATED ON A HORIZONTAL PLANE.
3. DMS ATTACHMENT HEIGHT TO STRUCTURE IS VARIABLE. ATTACHMENT METHOD SHALL BE PROVIDED BY THE CONTRACTOR.
4. THE ACTUAL DIMENSIONS AND WEIGHT OF THE CHANGEABLE MESSAGE SIGN WILL BE PROVIDED BY DMS FABRICATOR. SUCH DIMENSIONS WILL BE USED TO COMPLETE THE DESIGN OF THE OVERHEAD STRUCTURE.
5. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS AND GROUND SLOPES AT THE FOOTINGS, PER THE LATEST N.C. D.O.T. STANDARD SPECIFICATION FOR ROADS AND STRUCTURES.
6. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
7. SAFETY HANDRAILS SHALL BE INSTALL ON BOTH SIDES OF THE MAINTANCE WALKWAY.



WALKWAY TYPICAL

SEAL



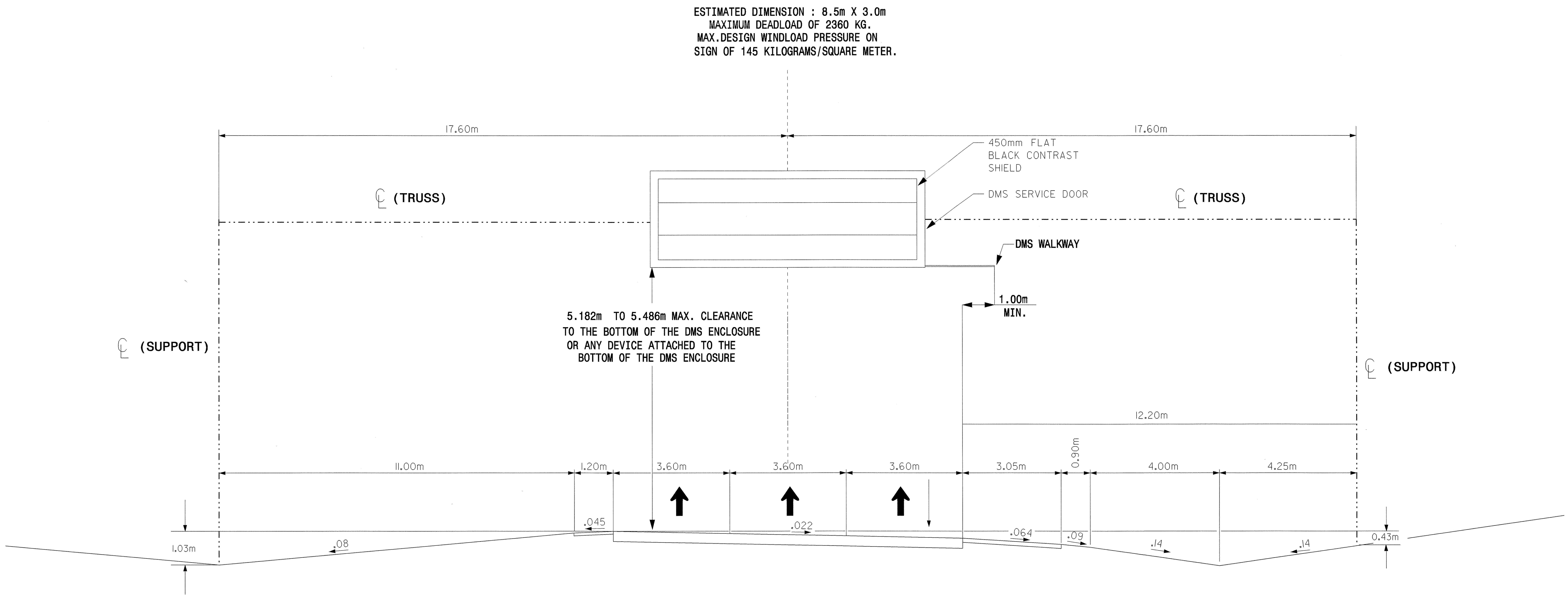
DMS-1
I-85 SOUTHBOUND
420M BEYOND M.M. #119

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

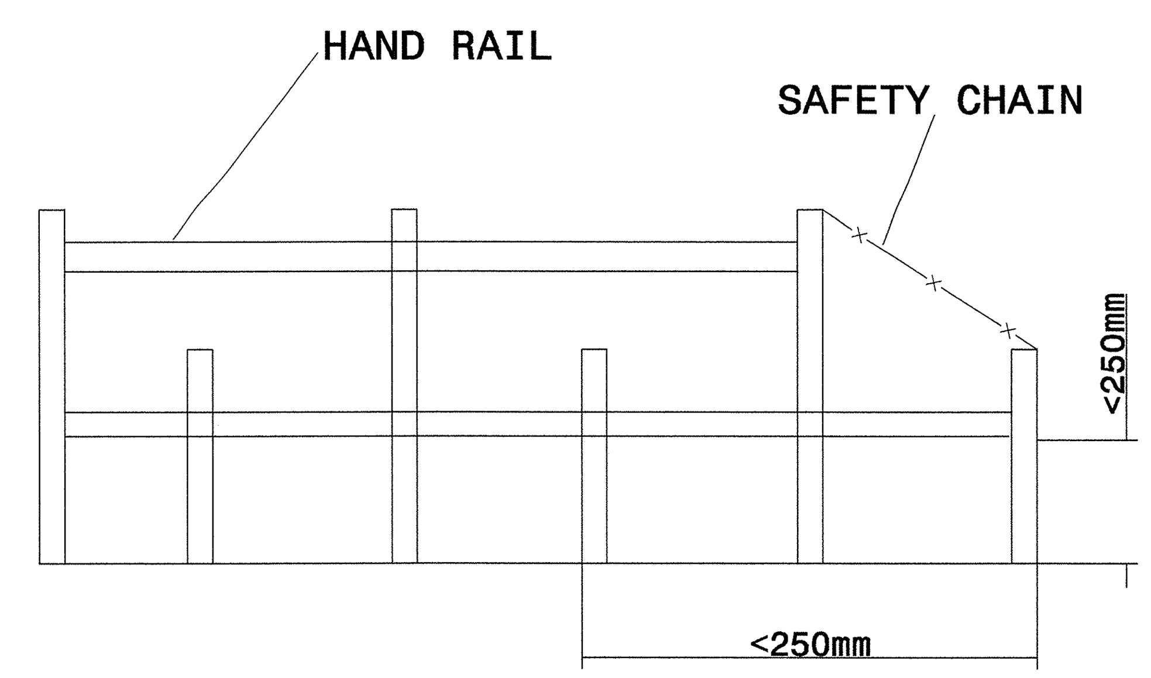
REVISIONS	

TIP NO.	SHEET NO.
R-0609IA	SIGN-4A



NOTES:

1. MAINTANCE WALKWAYS SHALL BE PROVIDED ON THE DMS STRUCTURE.
2. THE BOTTOM EDGE OF ALL SIGNS IN EACH ASSEMBLY SHALL BE LOCATED ON A HORIZONTAL PLANE.
3. DMS ATTACHMENT HEIGHT TO STRUCTURE IS VARIABLE. ATTACHMENT METHOD SHALL BE PROVIDED BY THE CONTRACTOR.
4. THE ACTUAL DIMENSIONS AND WEIGHT OF THE CHANGEABLE MESSAGE SIGN WILL BE PROVIDED BY DMS FABRICATOR. SUCH DIMENSIONS WILL BE USED TO COMPLETE THE DESIGN OF THE OVERHEAD STRUCTURE.
5. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS AND GROUND SLOPES AT THE FOOTINGS, PER THE LATEST N.C. D.O.T. STANDARD SPECIFICATION FOR ROADS AND STRUCTURES.
6. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
7. SAFETY HANDRAILS SHALL BE INSTALL ON BOTH SIDES OF THE MAINTANCE WALKWAY.



WALKWAY TYPICAL

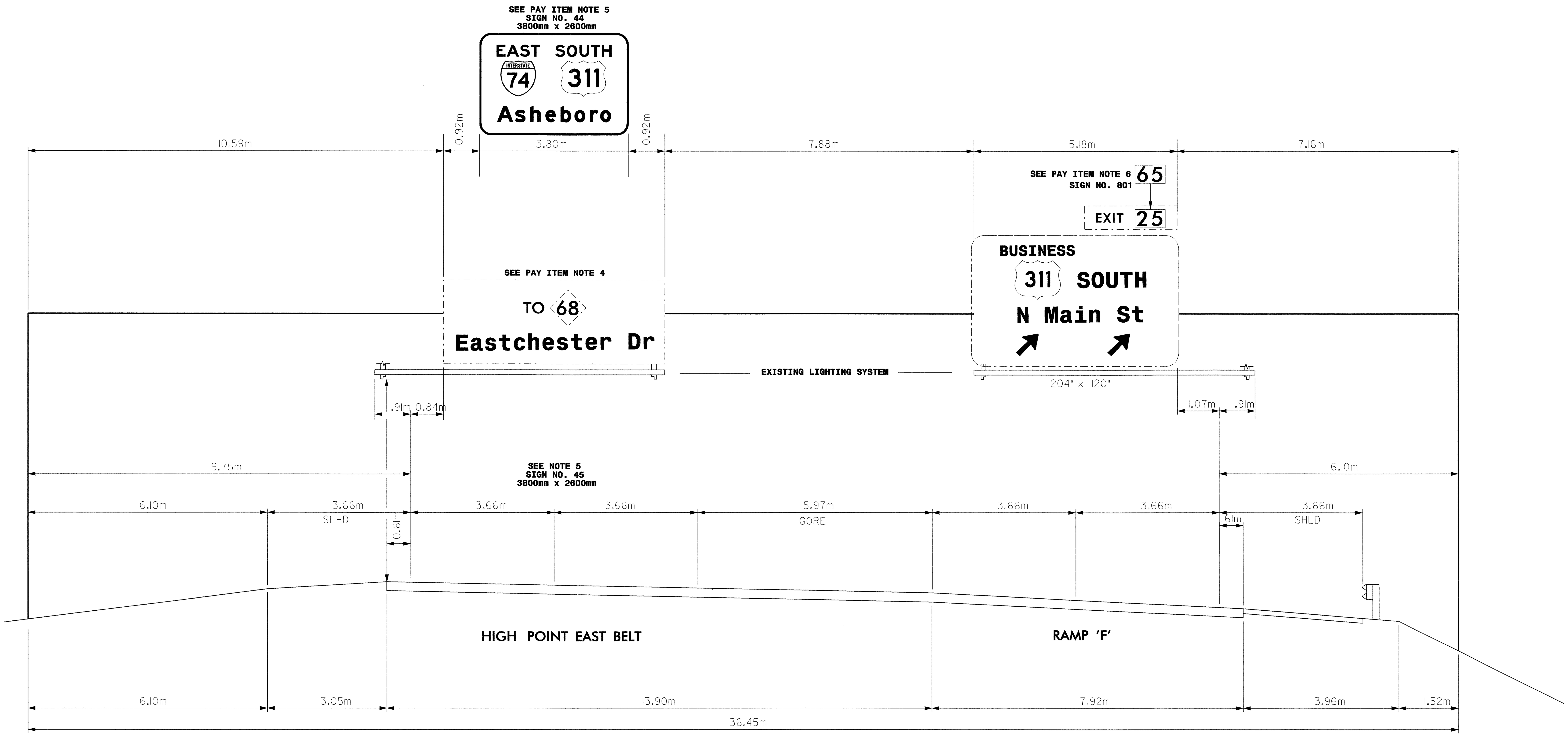
SEAL — NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028387 LYMAN L. ALQUDWAH — 6/9/06

DMS-2
I-85 NORTHBOUND
20 m BACK OF M.M. #109

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION
DATE	APRIL 2006	DIVISION OF HIGHWAYS
SIGNING DESIGN ENG	S. JOHNS	TRAFFIC ENGINEERING BRANCH
SIGNING PROJECT DGN ENG	K. JORDAN	
SIGNING PROJECT ENG	A. ALQUDWAH	

REVISIONS

TIP NO.	SHEET NO.
R-0609IA	SIGN-5A



NOTES:

1. THE BOTTOM EDGE OF ALL SIGNS IN EACH ASSEMBLY SHOULD BE LOCATED ON A HORIZONTAL PLANE.
2. DASH LINE DEPICTS THE CENTERLINE OF THE OVERHEAD SIGN SUPPORTS AND TRUSS.

SEAL

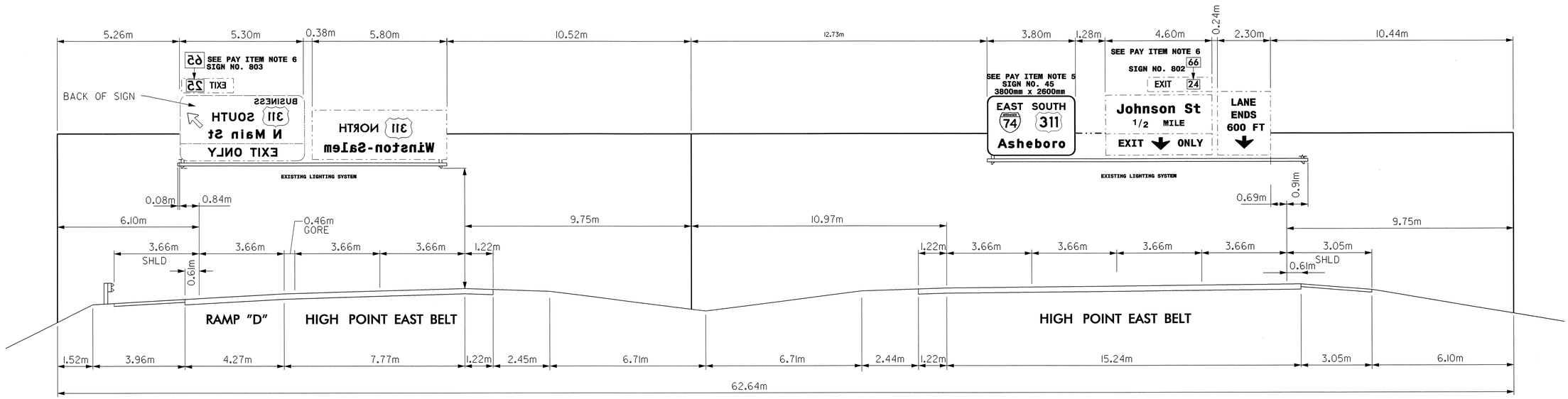
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER A. ALQUDWAH

I-74 EB /US 311 SB
EXISTING OVERHEAD SIGN ASSEMBLY "AA"

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION
DATE	FEB 2006	DIVISION OF HIGHWAYS
SIGNING DESIGN ENG	M. TRACEY	TRAFFIC ENGINEERING BRANCH
SIGNING PROJECT DGN ENG	K. JORDAN	
SIGNING PROJECT ENG	A. ALQUDWAH	

REVISIONS

TIP NO.	SHEET NO.
R-0609IA	SIGN-5B



NOTES:

1. THE BOTTOM EDGE OF ALL SIGNS IN EACH ASSEMBLY SHOULD BE LOCATED ON A HORIZONTAL PLANE.
2. DASH LINE DEPICTS THE CENTERLINE OF THE OVERHEAD SIGN SUPPORTS AND TRUSS.

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER — 6/9/06

I-74 WB /US 311 NB
EXISTING OVERHEAD SIGN ASSEMBLY "BB"

SCALE	1:1000
DATE	FEB 2006
SIGNING DESIGN ENG	M. TRACEY
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

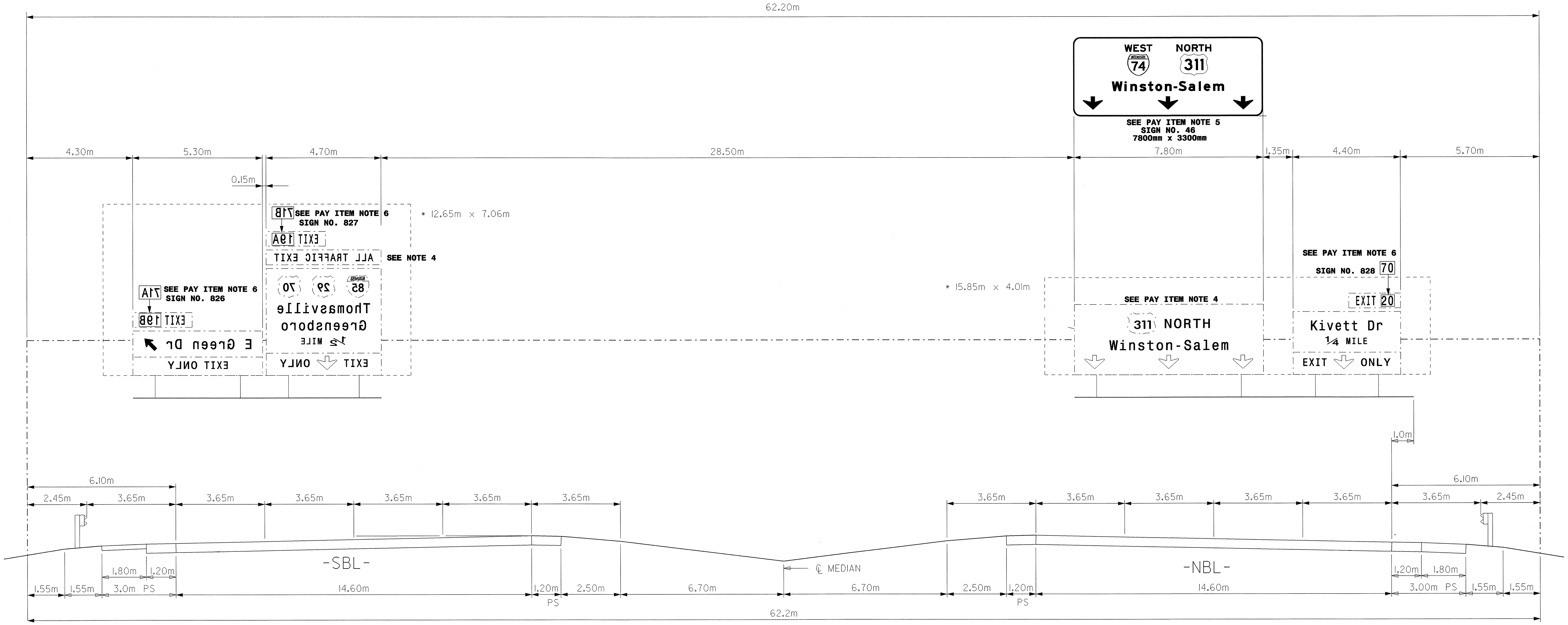
N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

TECC221658 6/7/2006 existing oh sign assem mtracey TECC-Oce34bond

TIP NO.	SHEET NO.
R-0609IA	SIGN-5C

METRIC



NOTES:

1. THE BOTTOM EDGE OF ALL SIGNS IN EACH ASSEMBLY SHOULD BE LOCATED ON A HORIZONTAL PLANE.
2. DASH LINE DEPICTS THE CENTERLINE OF THE OVERHEAD SIGN SUPPORTS AND TRUSS.

SEAL

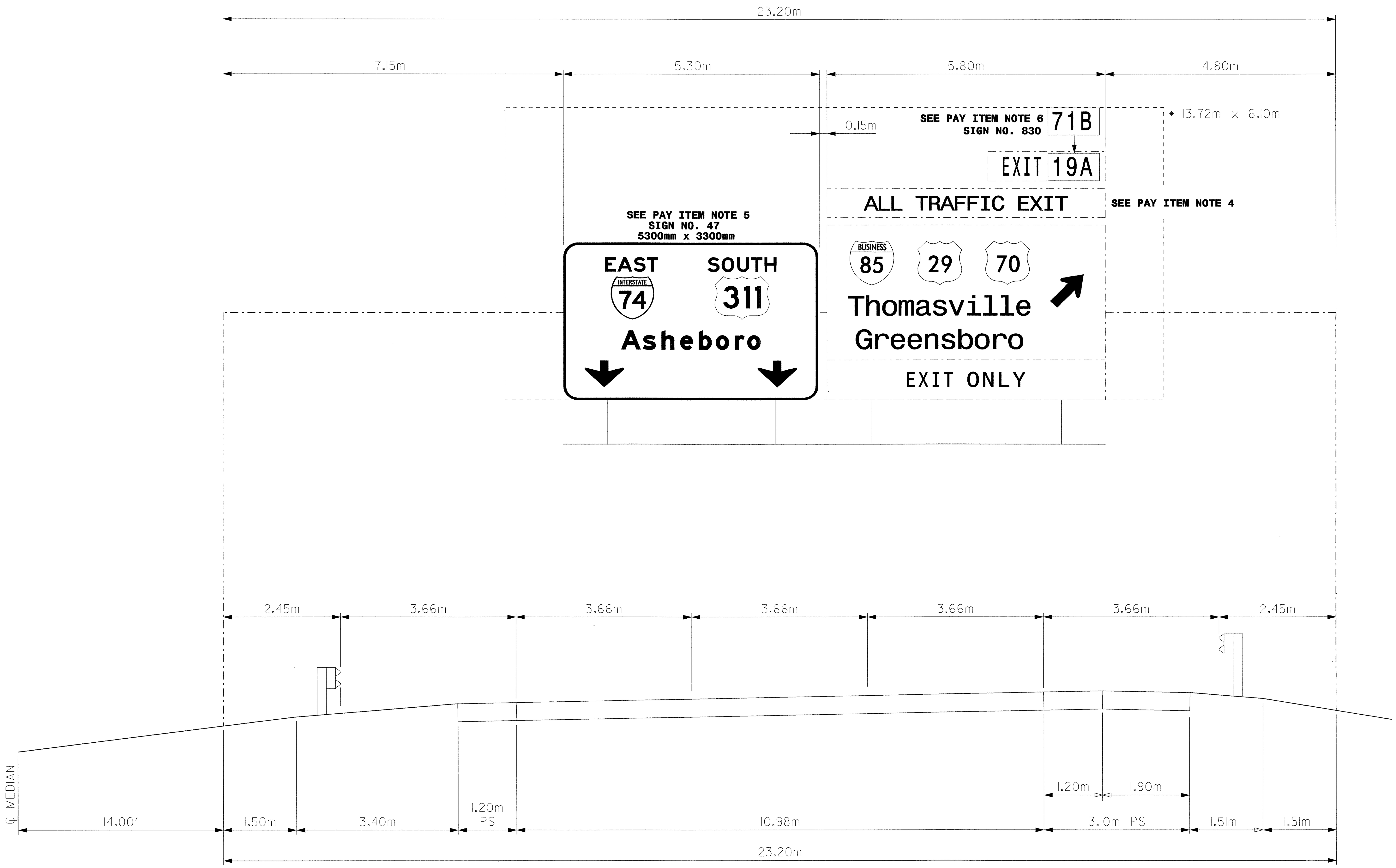
6/9/06

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AYMAN ALQUDWAH

I-74 WB /US 311 NB
EXISTING OVERHEAD SIGN ASSEMBLY "CC"

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION
DATE	FEB 2006	DIVISION OF HIGHWAYS
SIGNING DESIGN ENG	M. TRACEY	TRAFFIC ENGINEERING BRANCH
SIGNING PROJECT DGN ENG	K. JORDAN	
SIGNING PROJECT ENG	A. ALQUDWAH	

REVISIONS



NOTES:

1. THE BOTTOM EDGE OF ALL SIGNS IN EACH ASSEMBLY SHOULD BE LOCATED ON A HORIZONTAL PLANE.
2. DASH LINE DEPICTS THE CENTERLINE OF THE OVERHEAD SIGN SUPPORTS AND TRUSS.

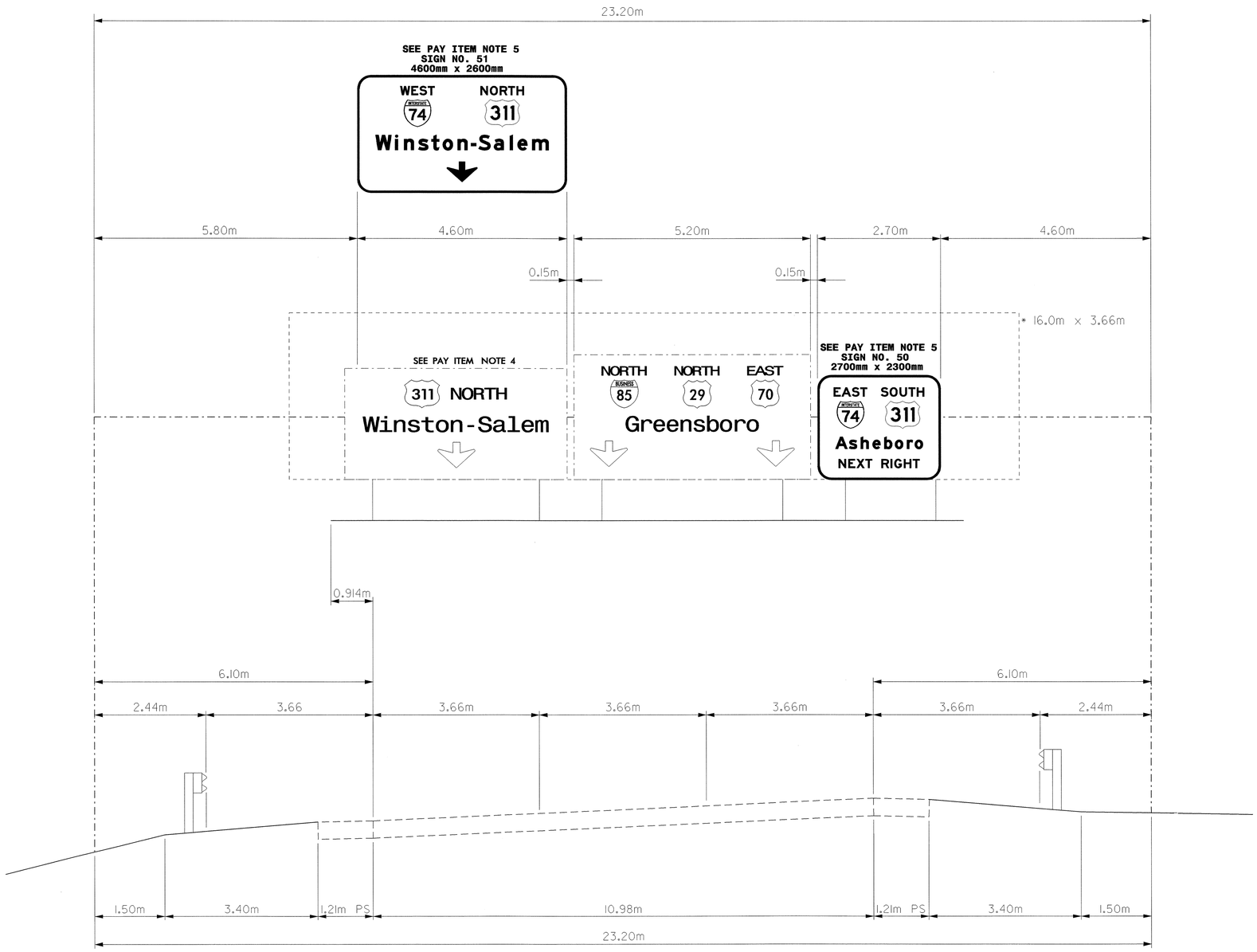
SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028387 ANAN ALQUDWAH 6/9/06

I-74 EB /US 311 SB
EXISTING OVERHEAD SIGN ASSEMBLY "DD"

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	M. TRACEY	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-5E



NOTES:

1. THE BOTTOM EDGE OF ALL SIGNS IN EACH ASSEMBLY SHOULD BE LOCATED ON A HORIZONTAL PLANE.
2. DASH LINE DEPICTS THE CENTERLINE OF THE OVERHEAD SIGN SUPPORTS AND TRUSS.

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER A. ALQUDWAH

I-85 BUS NB /US 29 NB/US 70 EB
EXISTING OVERHEAD SIGN ASSEMBLY "EE"

SCALE	1:1000
DATE	FEB 2006
SIGNING DESIGN ENG	M. TRACEY
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

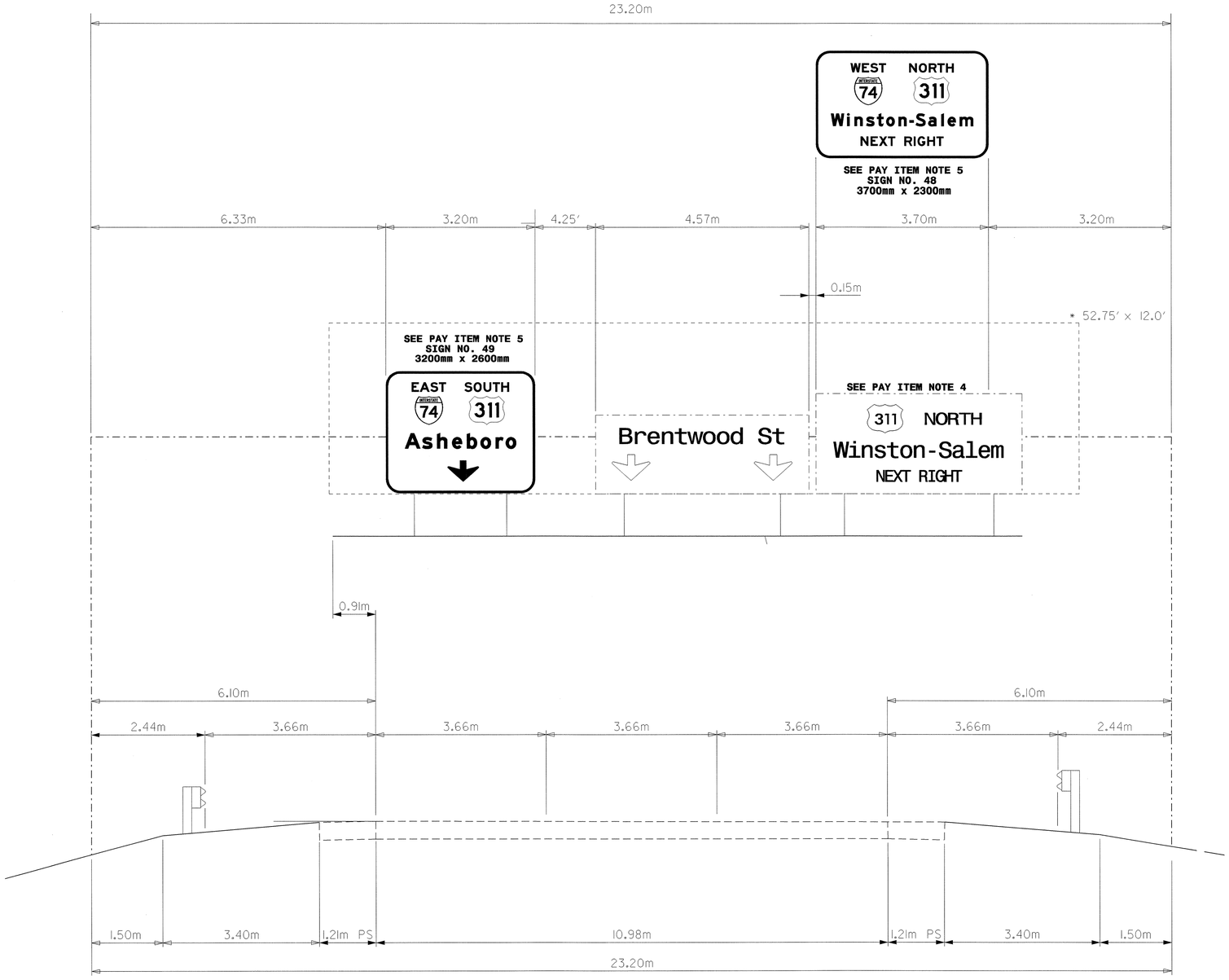
N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

#FILE#
#DGN#

TECC221658 6/7/2006 existing oh sign assem mtracey TECC-Oce34bond

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-5F



NOTES:

1. THE BOTTOM EDGE OF ALL SIGNS IN EACH ASSEMBLY SHOULD BE LOCATED ON A HORIZONTAL PLANE.
2. DASH LINE DEPICTS THE CENTERLINE OF THE OVERHEAD SIGN SUPPORTS AND TRUSS.

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ANWAR J. ALQUDWAH

I-85 BUS SB /US 29 SB/US 70 WB
EXISTING OVERHEAD SIGN ASSEMBLY "FF"

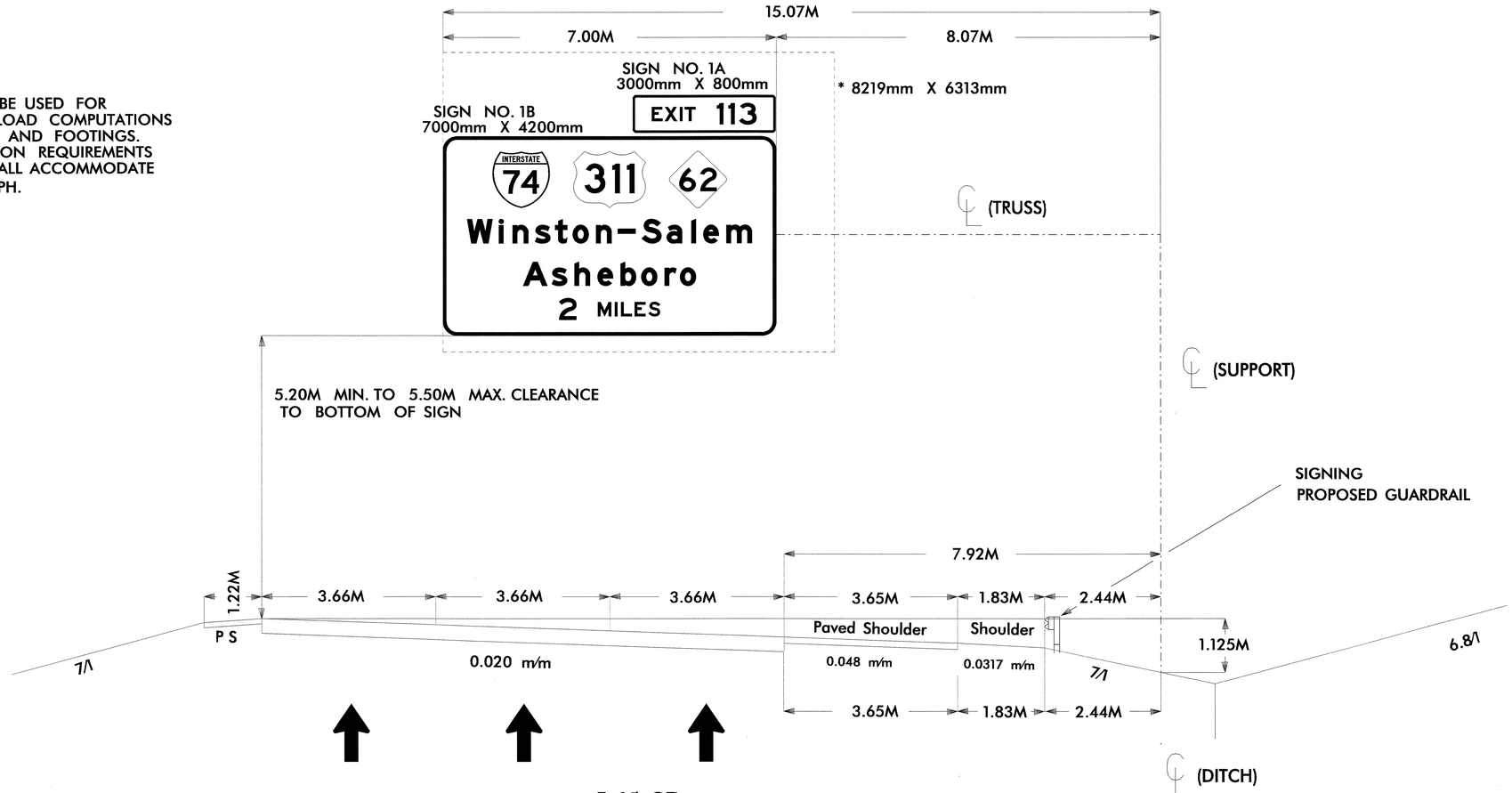
SCALE	1:1000
DATE	FEB 2006
SIGNING DESIGN ENG	M. TRACEY
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

TIP NO.	SHEET NO.
R-0609IA	SIGN-6

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.



I–85 SB
OVERHEAD SIGN ASSEMBLY "A"
(1609 METERS FROM STA. 6+70 (–Y6–))

NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

SEAL

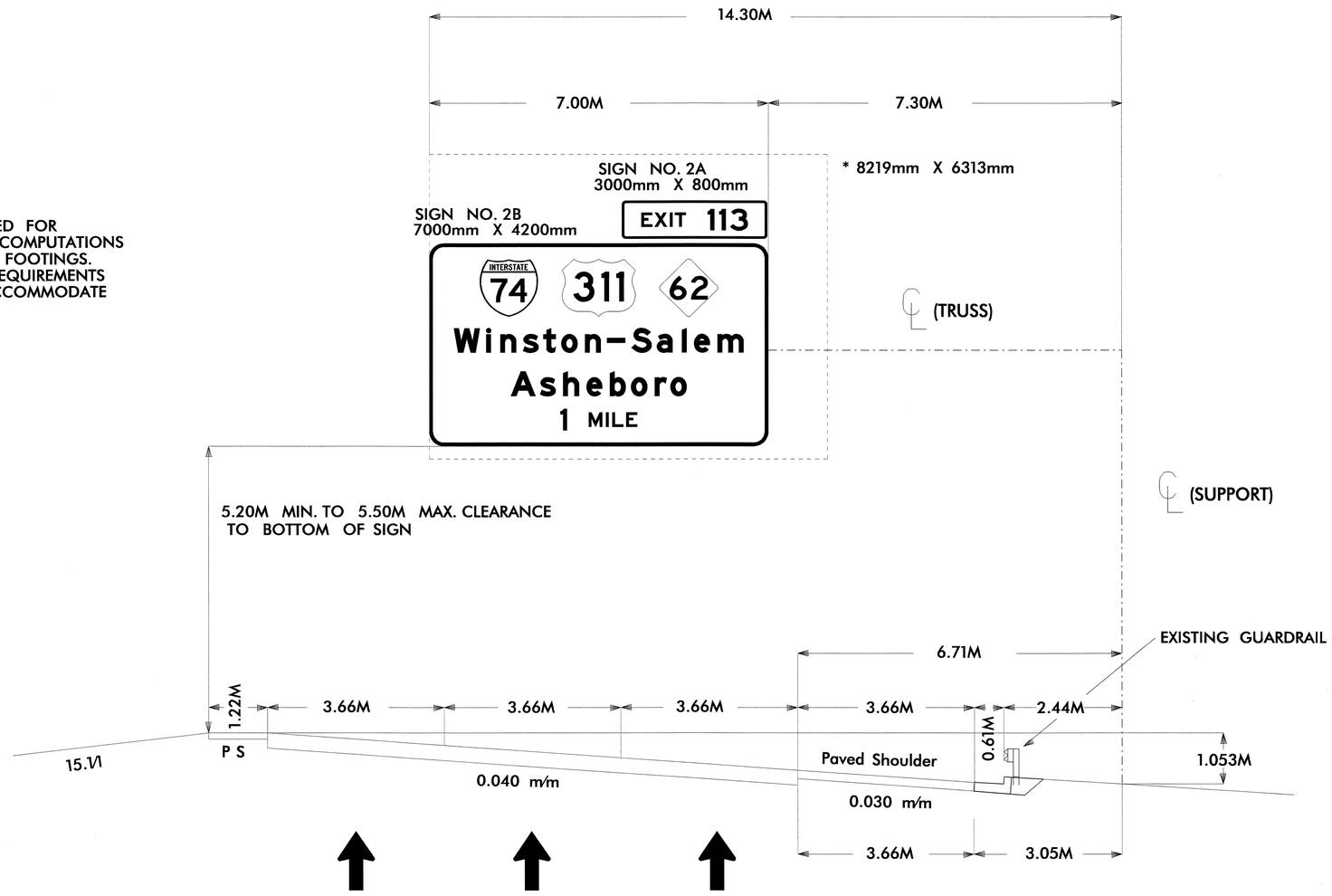
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ALQUDWAH

I–85 SB
OVERHEAD SIGN ASSEMBLY "A"
(1609 METERS FROM STA. 6+70 (–Y6–))

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	G. TERLIZZI	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-7

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.



I–85 SB
OVERHEAD SIGN ASSEMBLY "B"
@ STA. 6+70 (–Y6–)

NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

SEAL

6/16/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AWAD N. J. ALQUDWAH

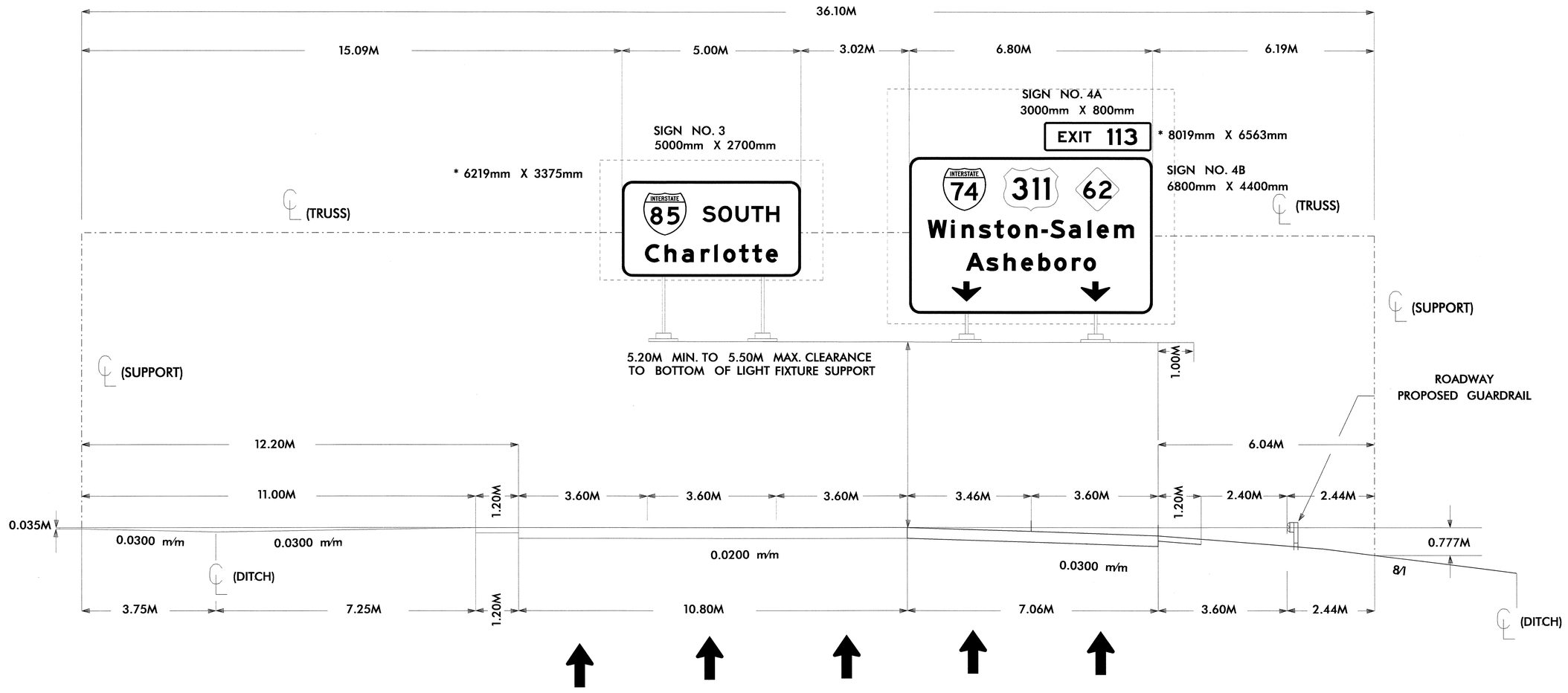
I–85 SB
OVERHEAD SIGN ASSEMBLY "B"
@ STA. 6+70 (–Y6–)

SCALE	1:1000
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

TIP NO.	SHEET NO.
R-0609IA	SIGN-8



NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS, LUMINAIRE RETRIEVAL SYSTEM AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–85 SB
OVERHEAD SIGN ASSEMBLY "C"
@ STA. 17+20 (–Y6–)

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

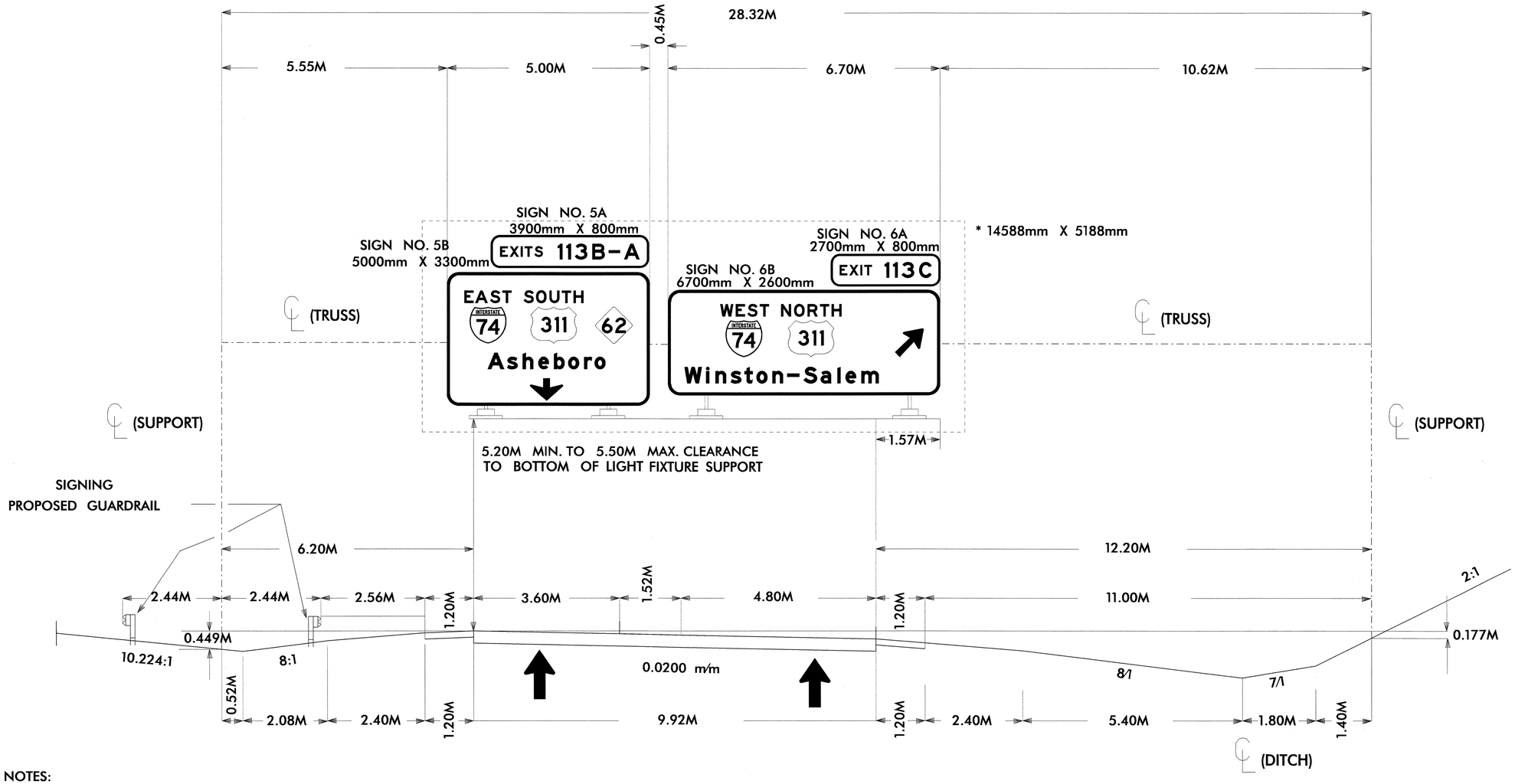
SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AYMAN ALQUDWAH

I–85 SB
OVERHEAD SIGN ASSEMBLY "C"
@ STA. 17+20 (–Y6–)

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	G. TERLIZZI	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DSN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-9



NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
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5. SIGN HANGERS, LUMINAIRE RETRIEVAL SYSTEM AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–85 SB
OVERHEAD SIGN ASSEMBLY "D"
@ STA. 22+80 (–Y6–)

✳THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

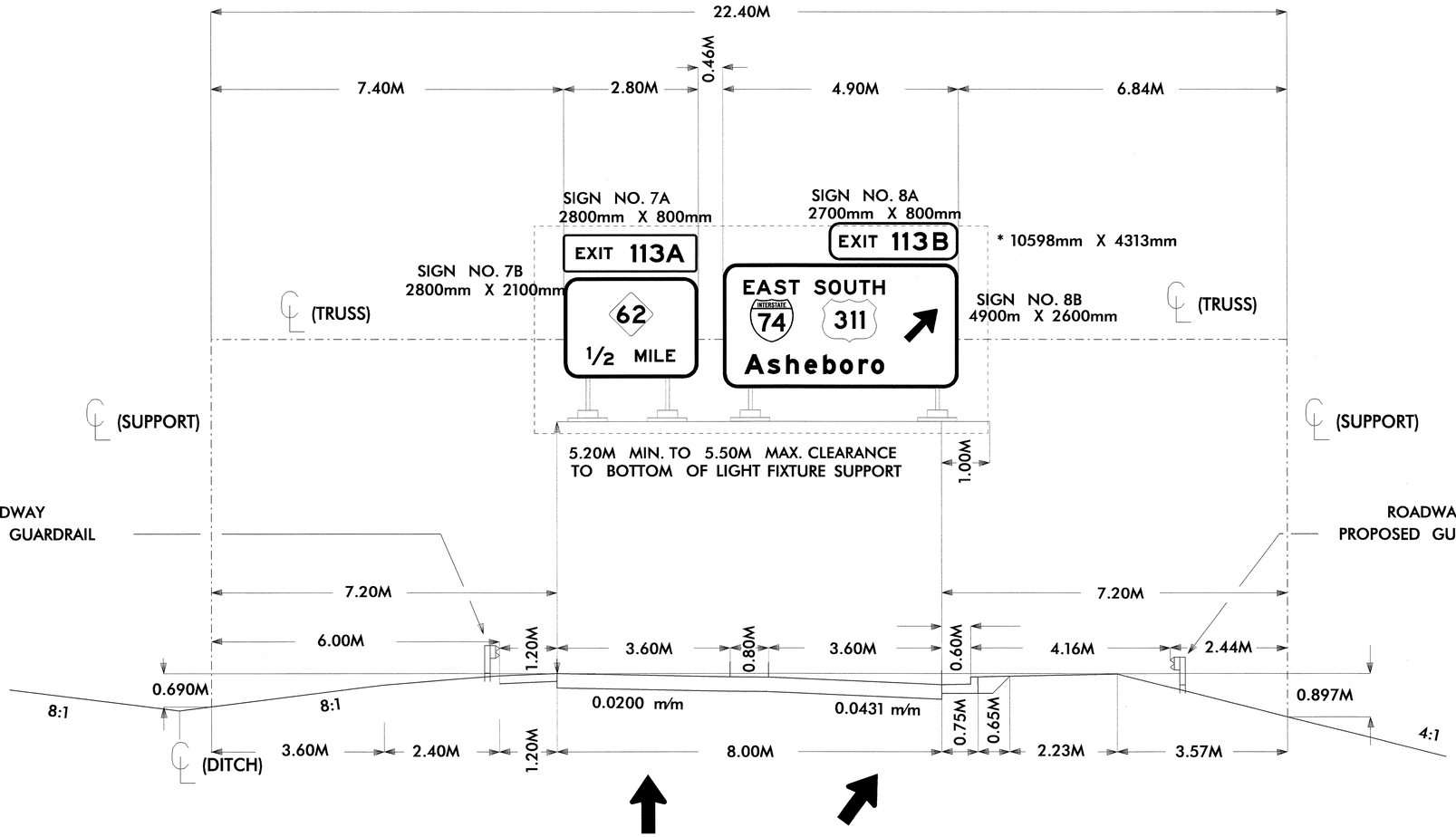
SEAL

6/9/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER
AYMAN A. ALQUDWAH

I–85 SB
OVERHEAD SIGN ASSEMBLY "D"
@ STA. 22+80 (–Y6–)

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006		
SIGNING DESIGN ENG	G. TERLIZZI	DIVISION OF HIGHWAYS	
SIGNING PROJECT DGN ENG	K. JORDAN	TRAFFIC ENGINEERING	
SIGNING PROJECT ENG	A. ALQUDWAH	BRANCH	

TIP NO.	SHEET NO.
R-0609IA	SIGN-10



NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
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5. SIGN HANGERS, LUMINAIRE RETRIEVAL SYSTEM AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–85 SB
OVERHEAD SIGN ASSEMBLY "E"
@ STA. 27+80 (–Y6–)

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

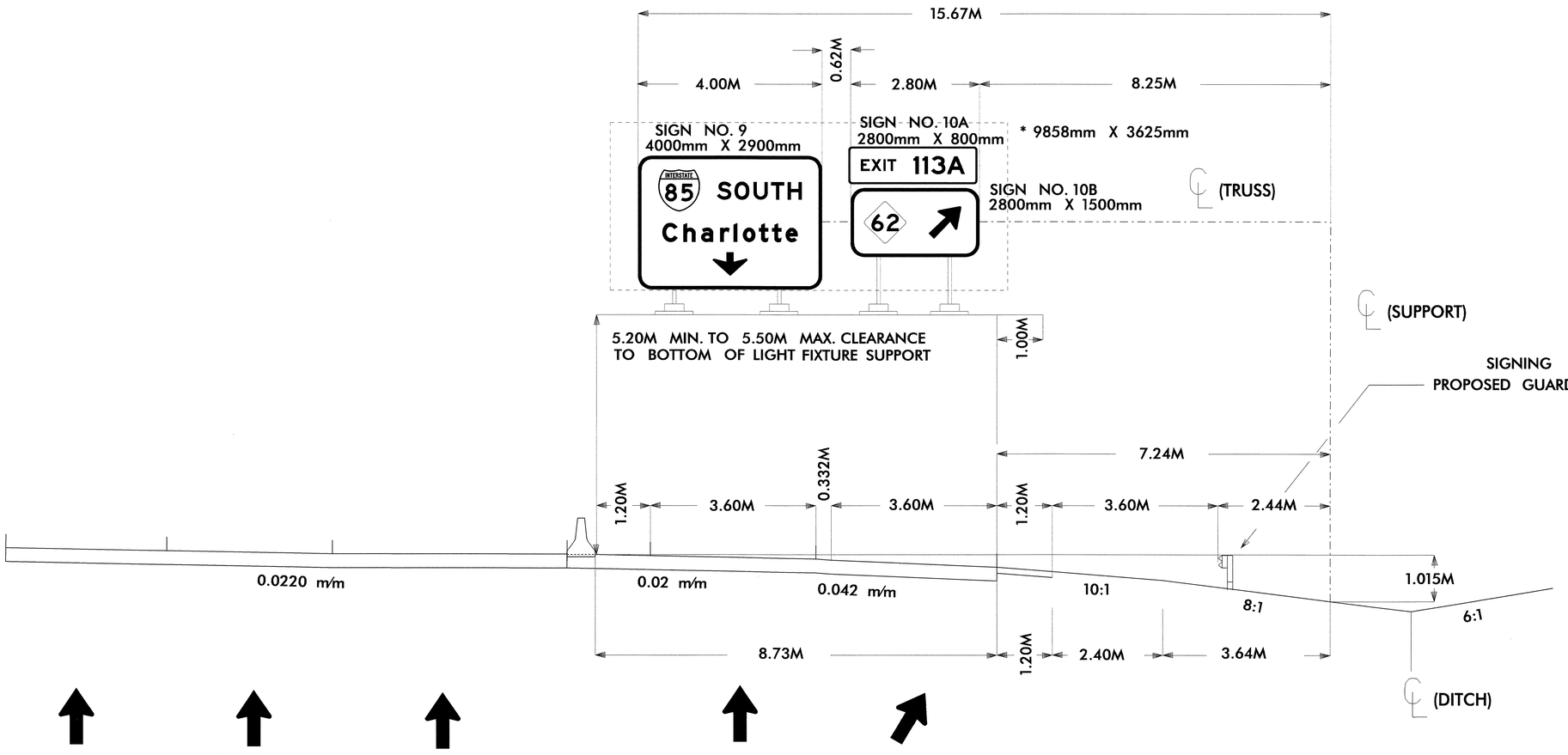
SEAL

6/9/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER
JOHN ALQUDWAH

I–85 SB
OVERHEAD SIGN ASSEMBLY "E"
@ STA. 27+80 (–Y6–)

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006		
SIGNING DESIGN ENG	G. TERLIZZI	DIVISION OF HIGHWAYS	
SIGNING PROJECT DGN ENG	K. JORDAN	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT ENG	A. ALQUDWAH		

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-11



I–85 SB
OVERHEAD SIGN ASSEMBLY "F"
@ STA. 36+20 (–Y6–)

NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS, LUMINAIRE RETRIEVAL SYSTEM AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

SEAL

6/9/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ANWAR ALQUDWAH

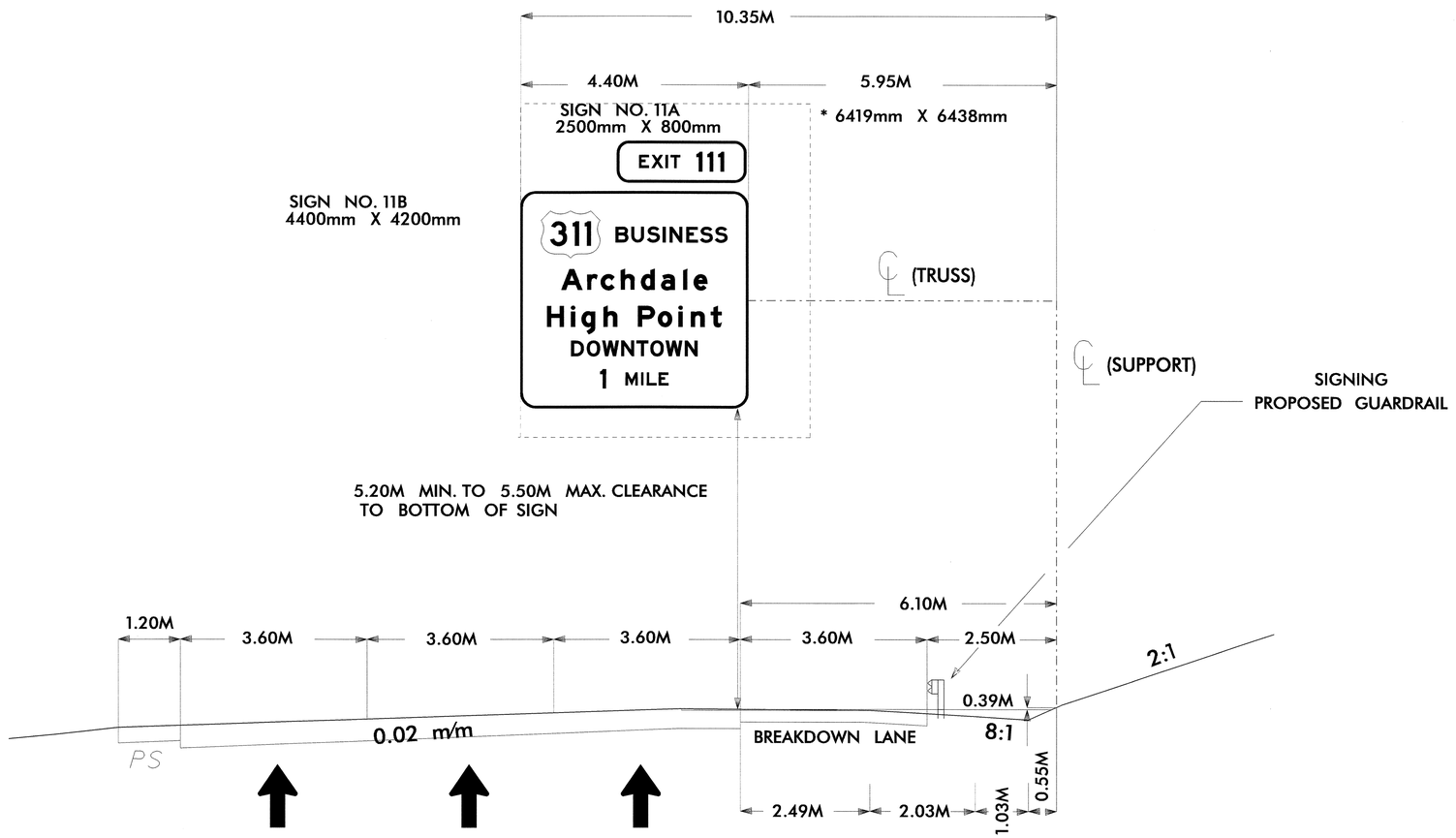
I–85 SB
OVERHEAD SIGN ASSEMBLY "F"
@ STA. 36+20 (–Y6–)

SCALE	1:1000
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-12



NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
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5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–85 SB
OVERHEAD SIGN ASSEMBLY "G"
@ STA. 50+20 (–Y6–)

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

SEAL

6/9/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ANWAR ALQUDWAH

I–85 SB
OVERHEAD SIGN ASSEMBLY "G"
@ STA. 50+20 (–Y6–)

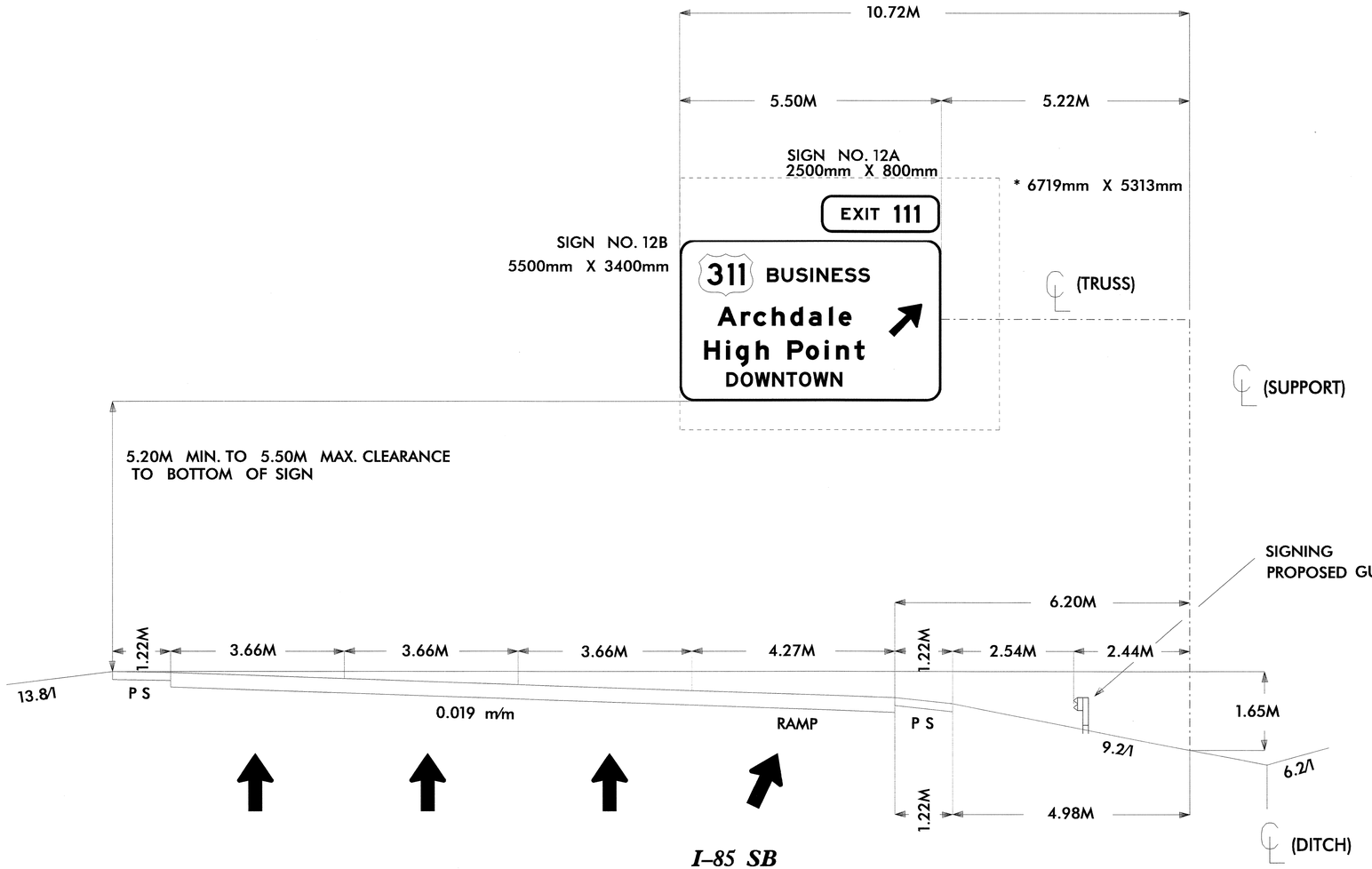
SCALE	1:1000
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

TECC221636 6/9/2006 r-0609ia_sgn_OH xsection85 gterlizzi TECC-Oce34bond

TIP NO.	SHEET NO.
R-0609IA	SIGN-13



I–85 SB
OVERHEAD SIGN ASSEMBLY "H"
@ STA. 66+20

NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

SEAL

6/9/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER
ALQUDWAH

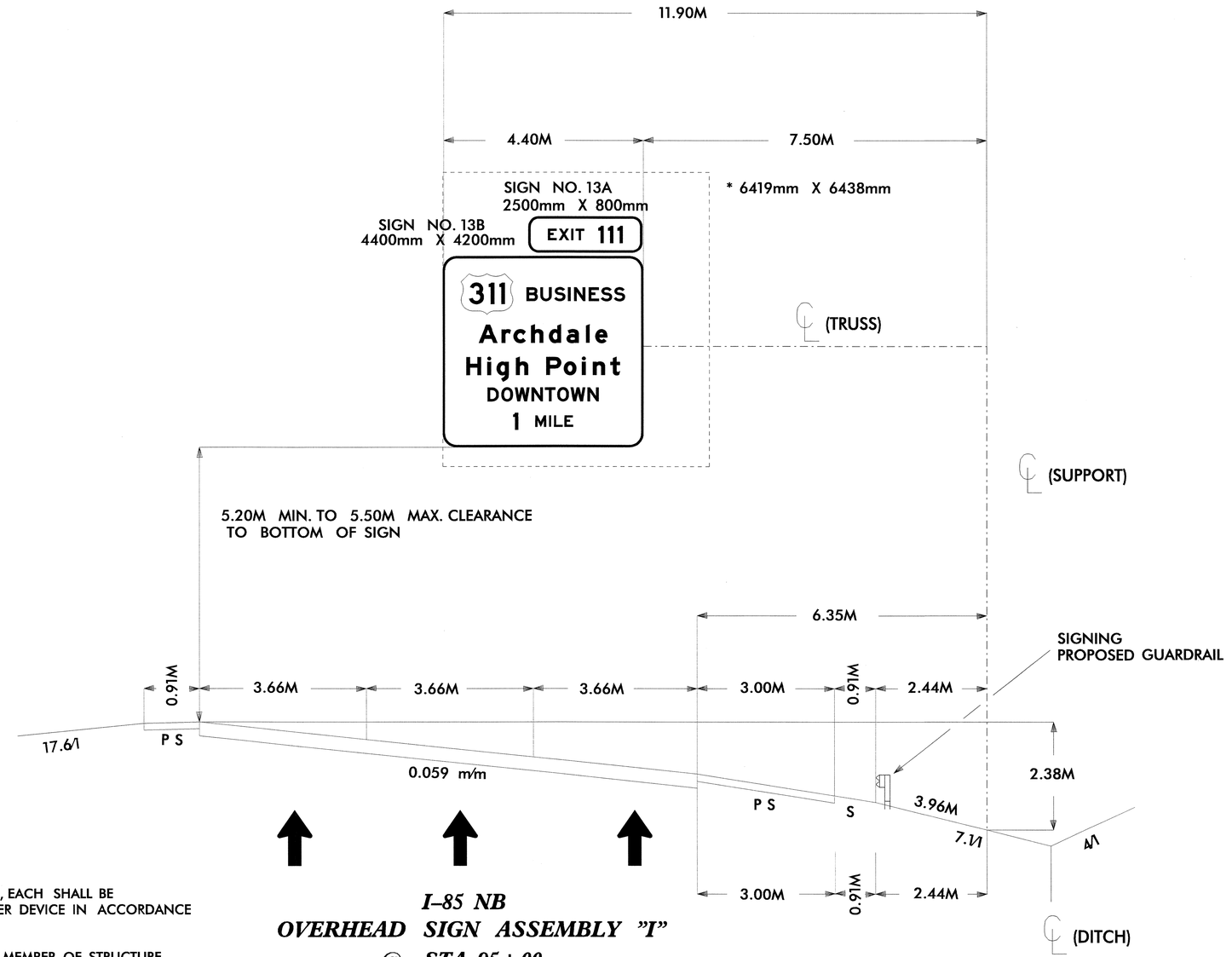
I–85 SB
OVERHEAD SIGN ASSEMBLY "H"
@ STA. 66+20

SCALE	1:1000
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-14



I–85 NB
OVERHEAD SIGN ASSEMBLY "I"
@ STA. 95+00

NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
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4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

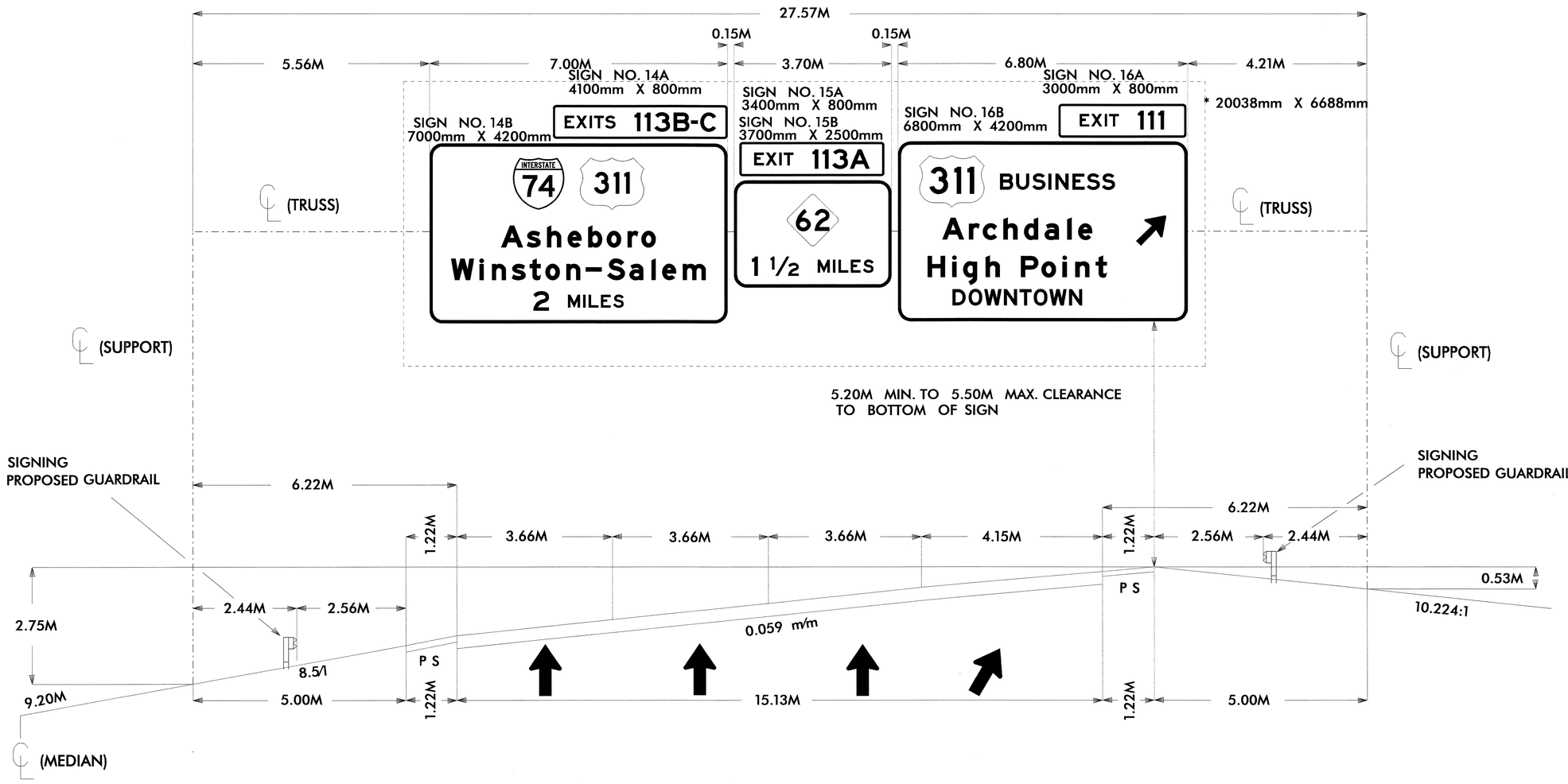
SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ANWAR L. ALQUDWAH

I–85 NB
OVERHEAD SIGN ASSEMBLY "I"
@ STA. 95+00

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006		
SIGNING DESIGN ENG	G. TERLIZZI	DIVISION OF HIGHWAYS	
SIGNING PROJECT DGN ENG	K. JORDAN	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT ENG	A. ALQUDWAH		

TIP NO.	SHEET NO.
R-0609IA	SIGN-15



NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–85 NB
OVERHEAD SIGN ASSEMBLY "J"
@ STA. 79+20

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER A. ALQUDWAH

I–85 NB
OVERHEAD SIGN ASSEMBLY "J"
@ STA. 79+20

SCALE	1:1000
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

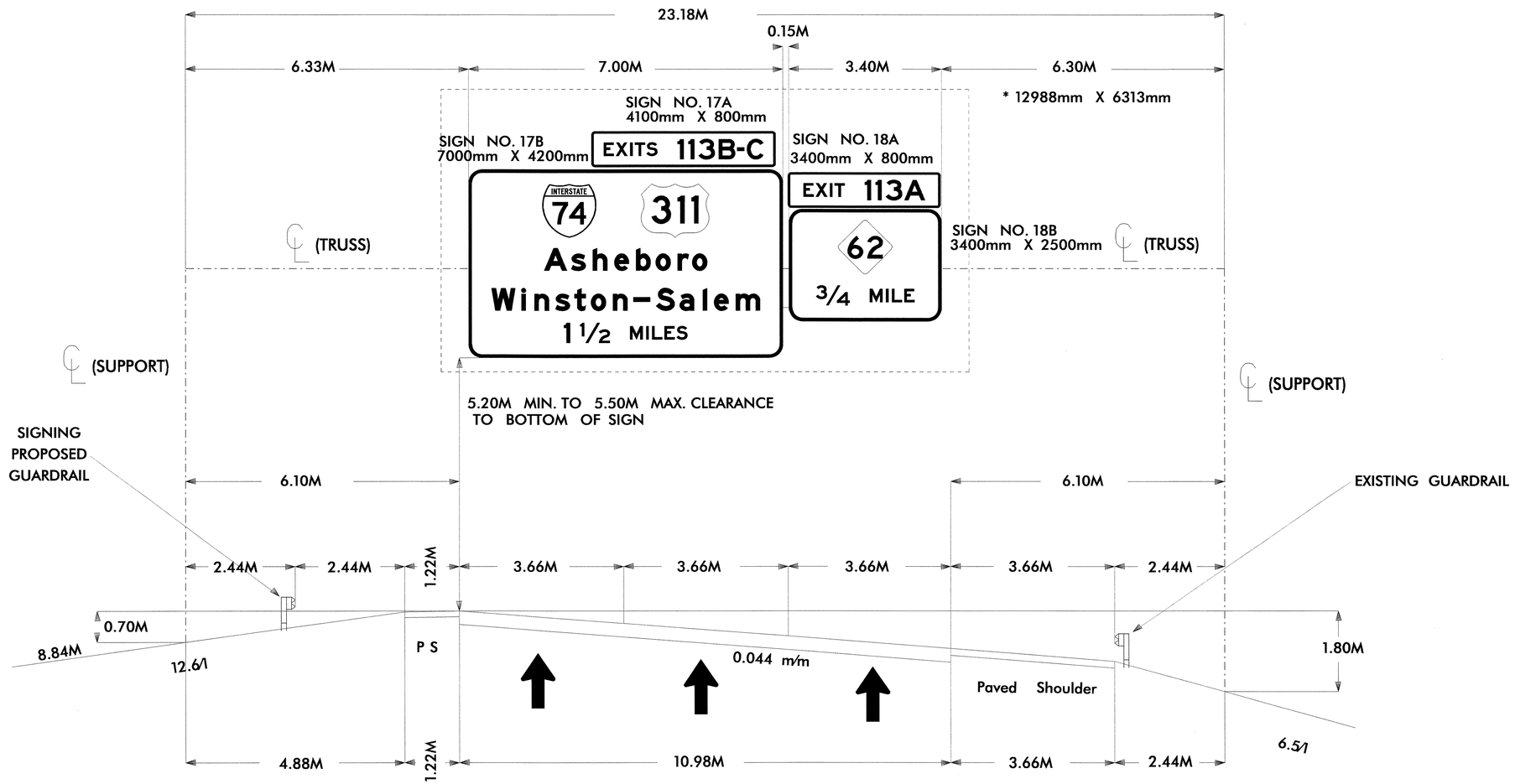
N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

#FILE# #USER#

TECC221636 6/9/2006 r-0609ia_sgn_OH xsection85 gterlizzi TECC-Oce34bond

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-16



NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–85 NB
OVERHEAD SIGN ASSEMBLY "K"
@ STA. 55+00
(10M FROM EXISTING GROUND MOUNTED SIGN)

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ANWAR ALQUDWAH 6/19/06

I–85 NB
OVERHEAD SIGN ASSEMBLY "K"
@ STA. 55+00

SCALE	1:1000
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

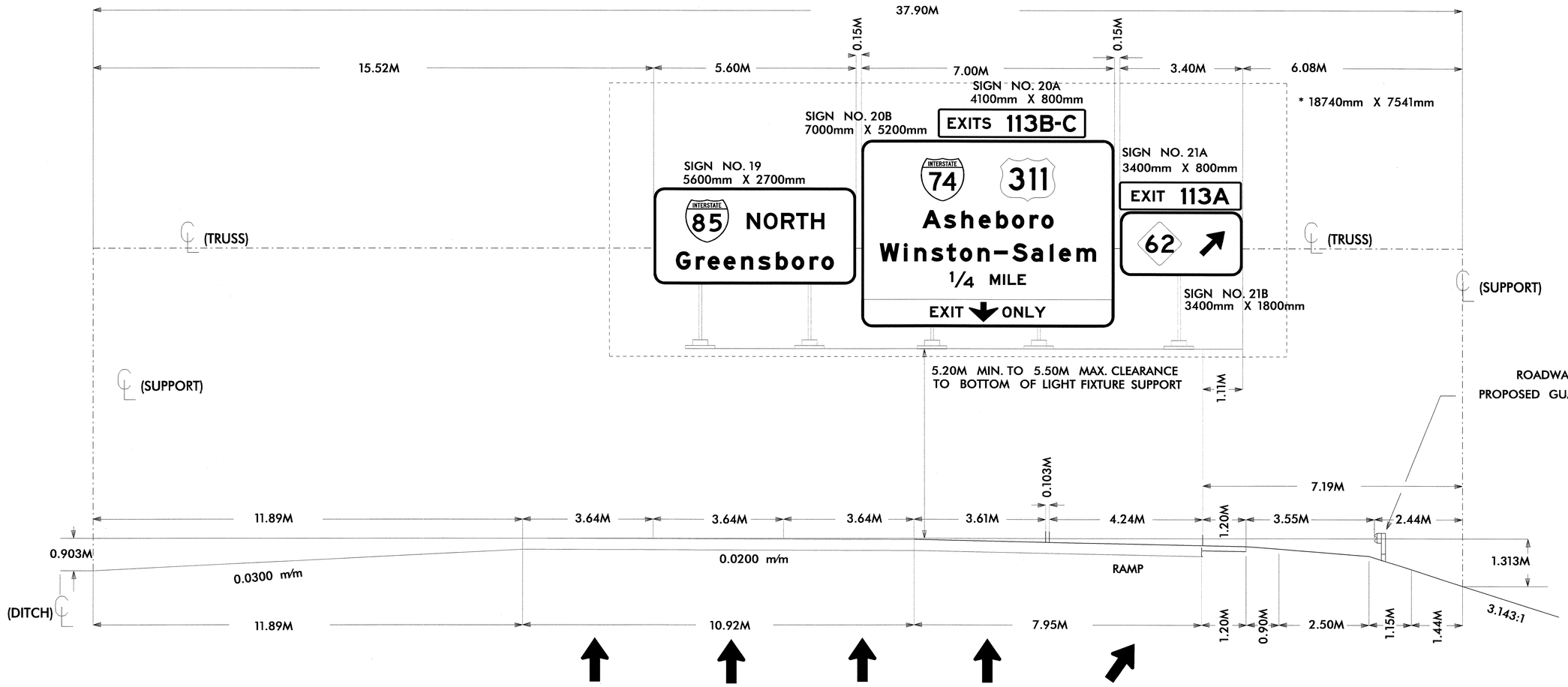
N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

FILE# 0609IA_SIGN16

TECC221636 6/9/2006 r-0609ia_sgn_OH xsection85 gterlizzi TECC-Oce34bond

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-17



I–85 NB
OVERHEAD SIGN ASSEMBLY "L"
@ STA. 42+00 (–Y6–)

NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS, LUMINAIRE RETRIEVAL SYSTEM AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

SEAL

6/9/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER
AYMAN M. ALQUDWAH

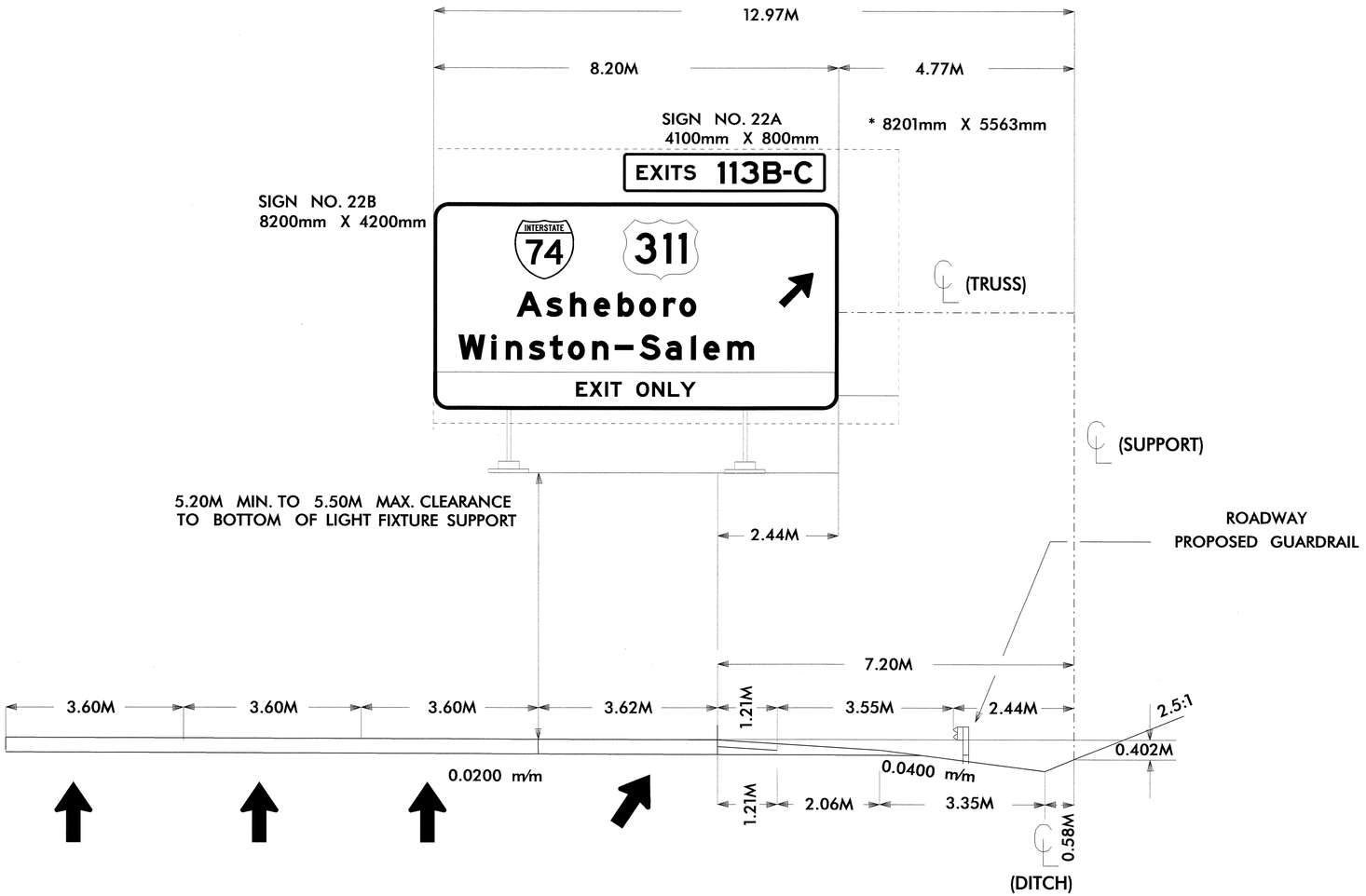
I–85 NB
OVERHEAD SIGN ASSEMBLY "L"
@ STA. 42+00 (–Y6–)

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	G. TERLIZZI	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

#FILE# #USER#

TECC221636 6/9/2006 r-0609ia_sgn_OH xsection85 gterlizzi TECC-Oce34bond

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-18



NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS, LUMINAIRE RETRIEVAL SYSTEM AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–85 NB
OVERHEAD SIGN ASSEMBLY "M"
@ STA. 39+20 (–Y6–)

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

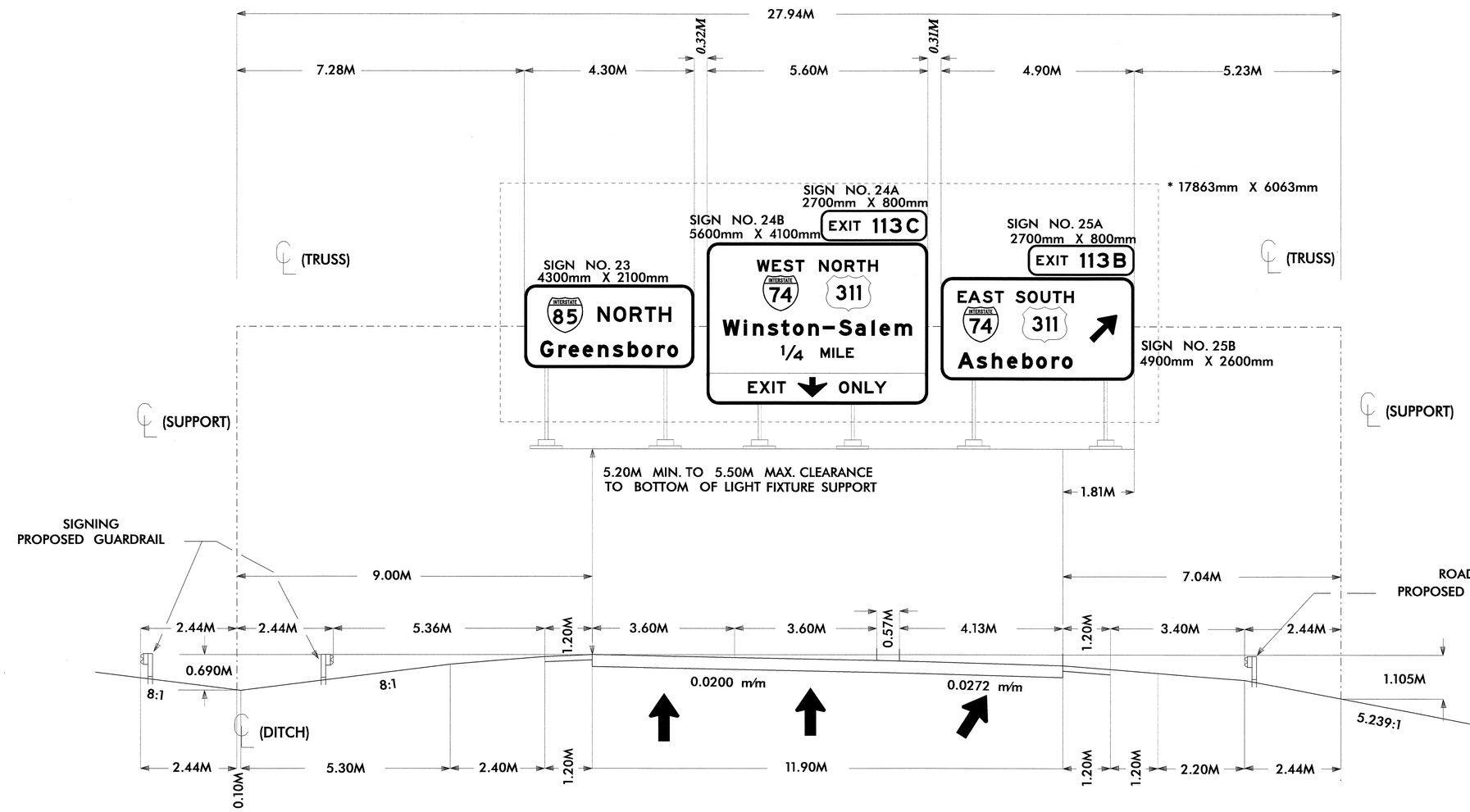
SEAL

6/9/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AYMAN L. ALQUDWAH

I–85 NB
OVERHEAD SIGN ASSEMBLY "M"
@ STA. 39+20 (–Y6–)

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	G. TERLIZZI	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

TIP NO.	SHEET NO.
R-0609IA	SIGN-19



NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS, LUMINAIRE RETRIEVAL SYSTEM AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I-85 NB
OVERHEAD SIGN ASSEMBLY "N"
@ STA. 31+00 (-Y6-)

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

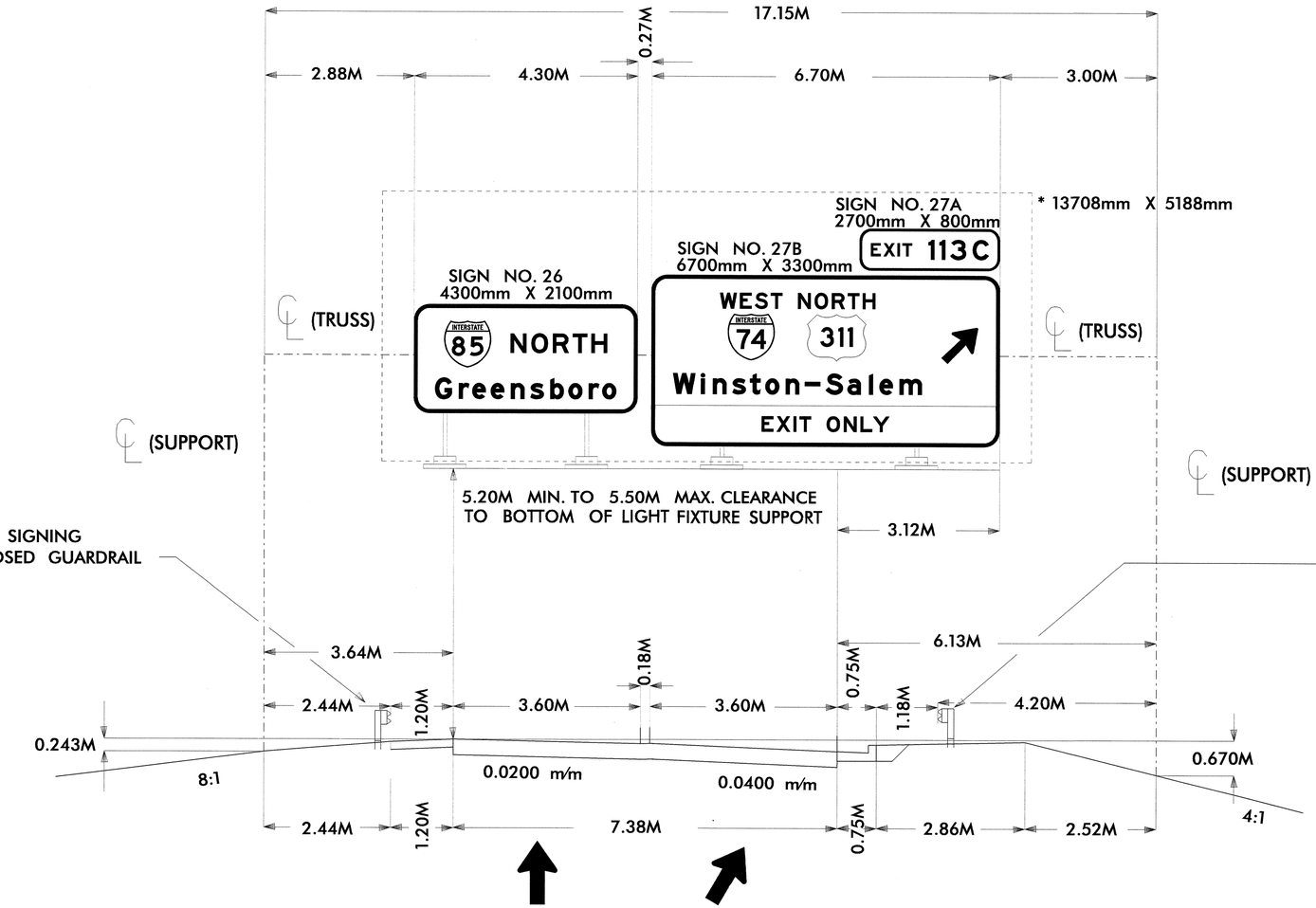
SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AYMAN I. ALQUDWAH

I-85 NB
OVERHEAD SIGN ASSEMBLY "N"
@ STA. 31+00 (-Y6-)

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006		
SIGNING DESIGN ENG	G. TERLIZZI	DIVISION OF HIGHWAYS	
SIGNING PROJECT DGN ENG	K. JORDAN	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT ENG	A. ALQUDWAH		

TIP NO.	SHEET NO.
R-0609IA	SIGN-20



NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS, LUMINAIRE RETRIEVAL SYSTEM AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–85 NB
OVERHEAD SIGN ASSEMBLY "O"
@ STA. 26+50 (–Y6–)

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AYMAN I. ALQUDWAH

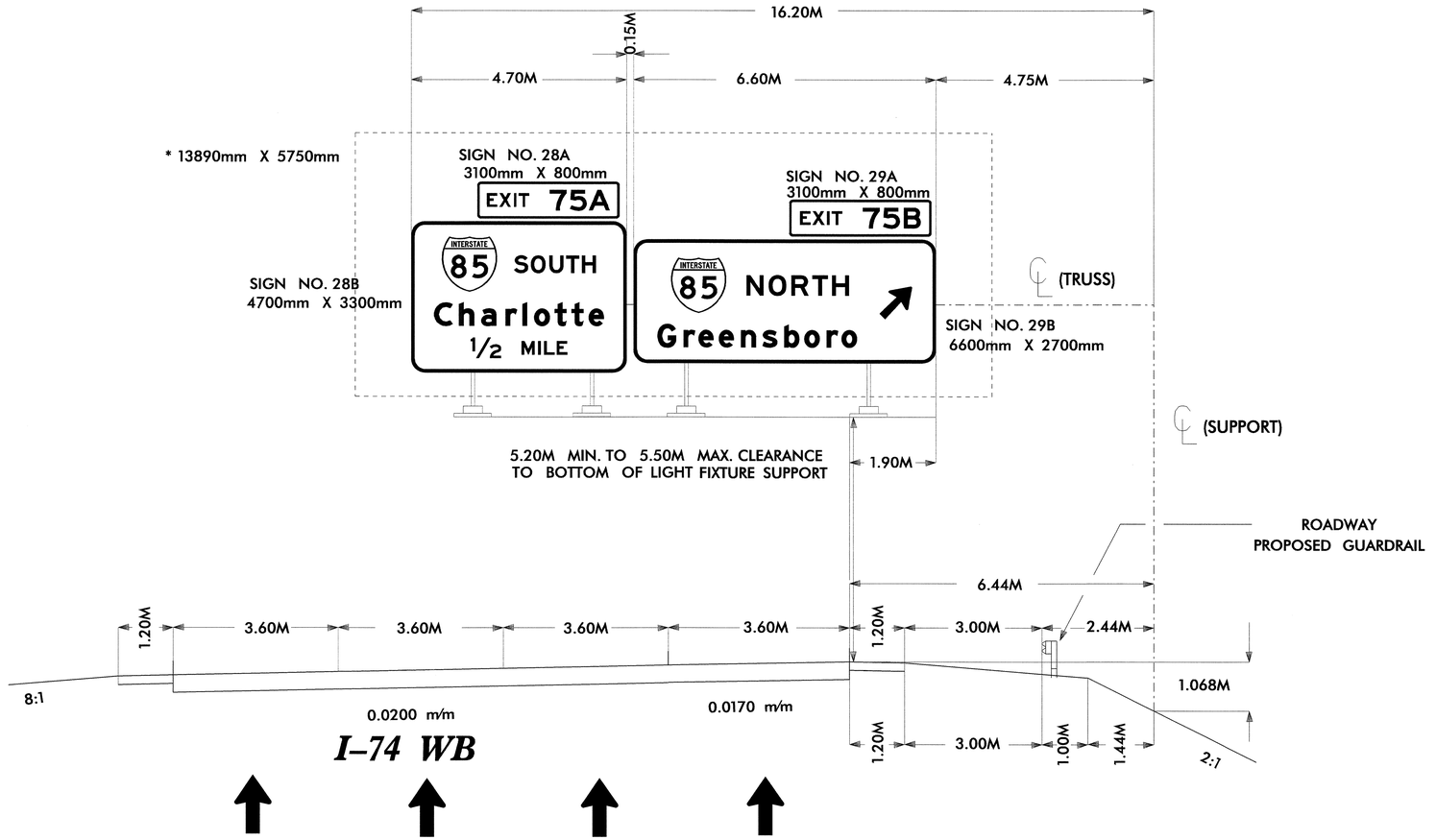
I–85 NB
OVERHEAD SIGN ASSEMBLY "O"
@ STA. 26+50 (–Y6–)

SCALE	1:1000
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-21



NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS, LUMINAIRE RETRIEVAL SYSTEM AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–74 WB /US 311 NB
OVERHEAD SIGN ASSEMBLY "P"
@ STA. 58+40 (–L–)

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

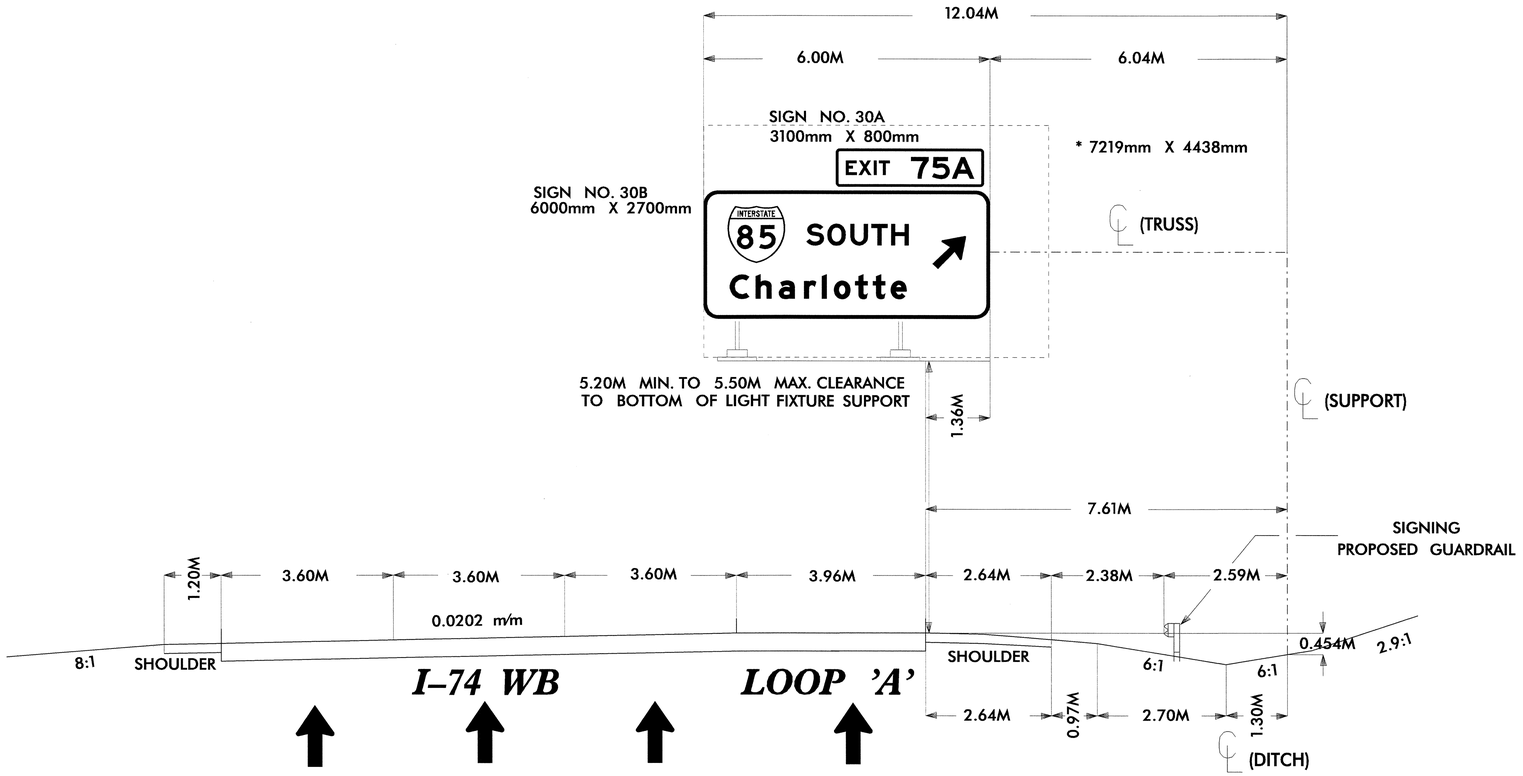
SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ANWAR A. ALQUDWAH

I–74 WB /US 311 NB
OVERHEAD SIGN ASSEMBLY "P"
@ STA. 58+40 (–L–)

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	G. TERLIZZI	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-22



NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS, LUMINAIRE RETRIEVAL SYSTEM AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–74 WB /US 311 NB
OVERHEAD SIGN ASSEMBLY 'Q'
@ STA. 53+10 (–L–)

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

SEAL

6/7/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ANWAR M. ALQUDWAH

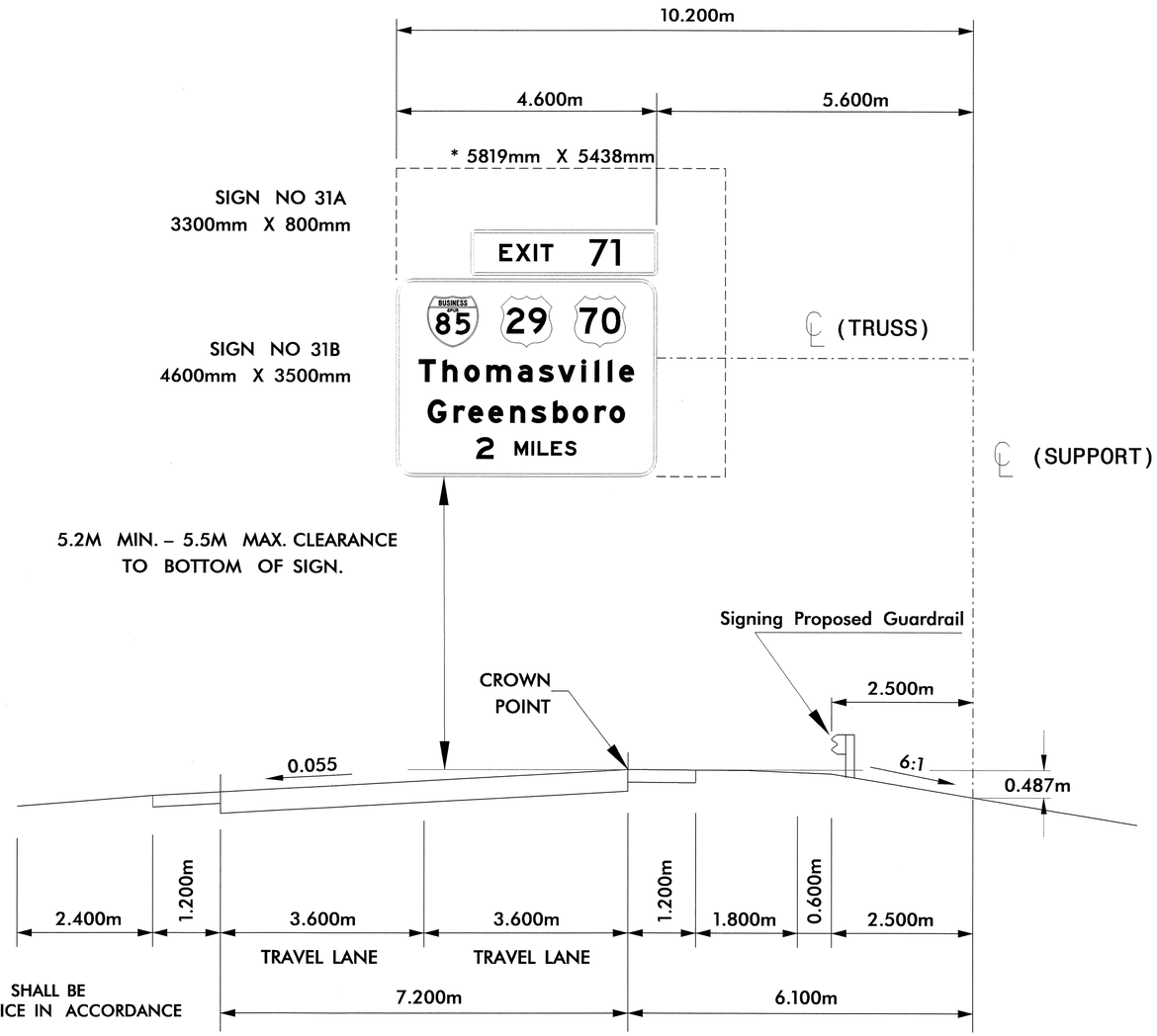
I–74 WB /US 311 NB
OVERHEAD SIGN ASSEMBLY 'Q'
@ STA. 53+10 (–L–)

SCALE	1:1000
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

METRIC	TIP NO.	SHEET NO.
	R-0609IB	SIGN-23



✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
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3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–74 WB /US 311 NB
OVERHEAD SIGN ASSEMBLY "R"
@ STA. 41+80 (–L–)

SEAL

6/16/2006
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ALQUDWAH
ALQUDWAH

I–74 WB /US 311 NB
OVERHEAD SIGN ASSEMBLY "R"
@ STA. 41+80 (–L–)

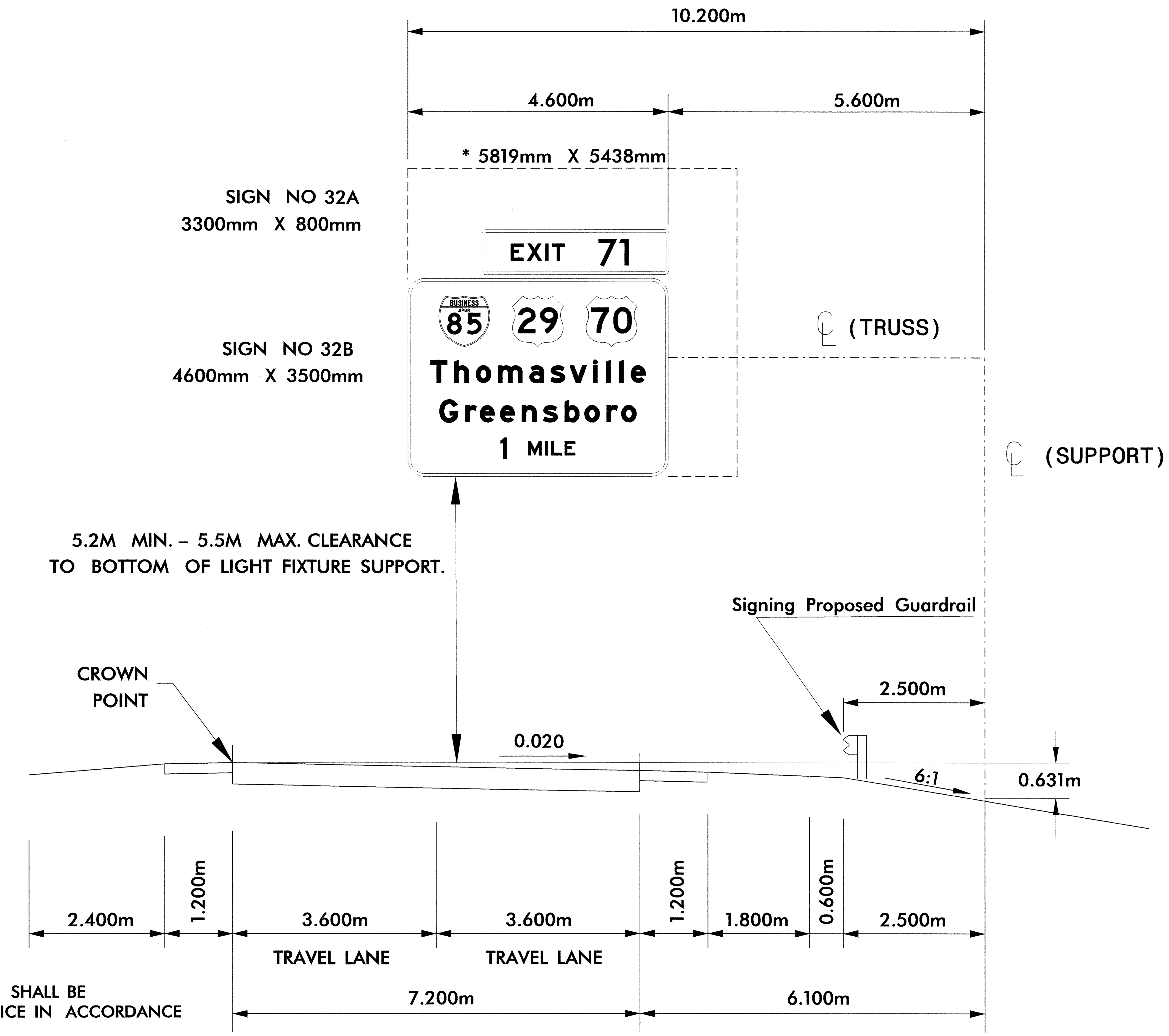
SCALE	1:1000
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

#FILE# #USER#

TECC221636 6/16/2006 business gterlizzi TECC-Oce34bond



✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I-74 WB /US 311 NB
OVERHEAD SIGN ASSEMBLY "S"
@ STA. 26+00 (-L-)

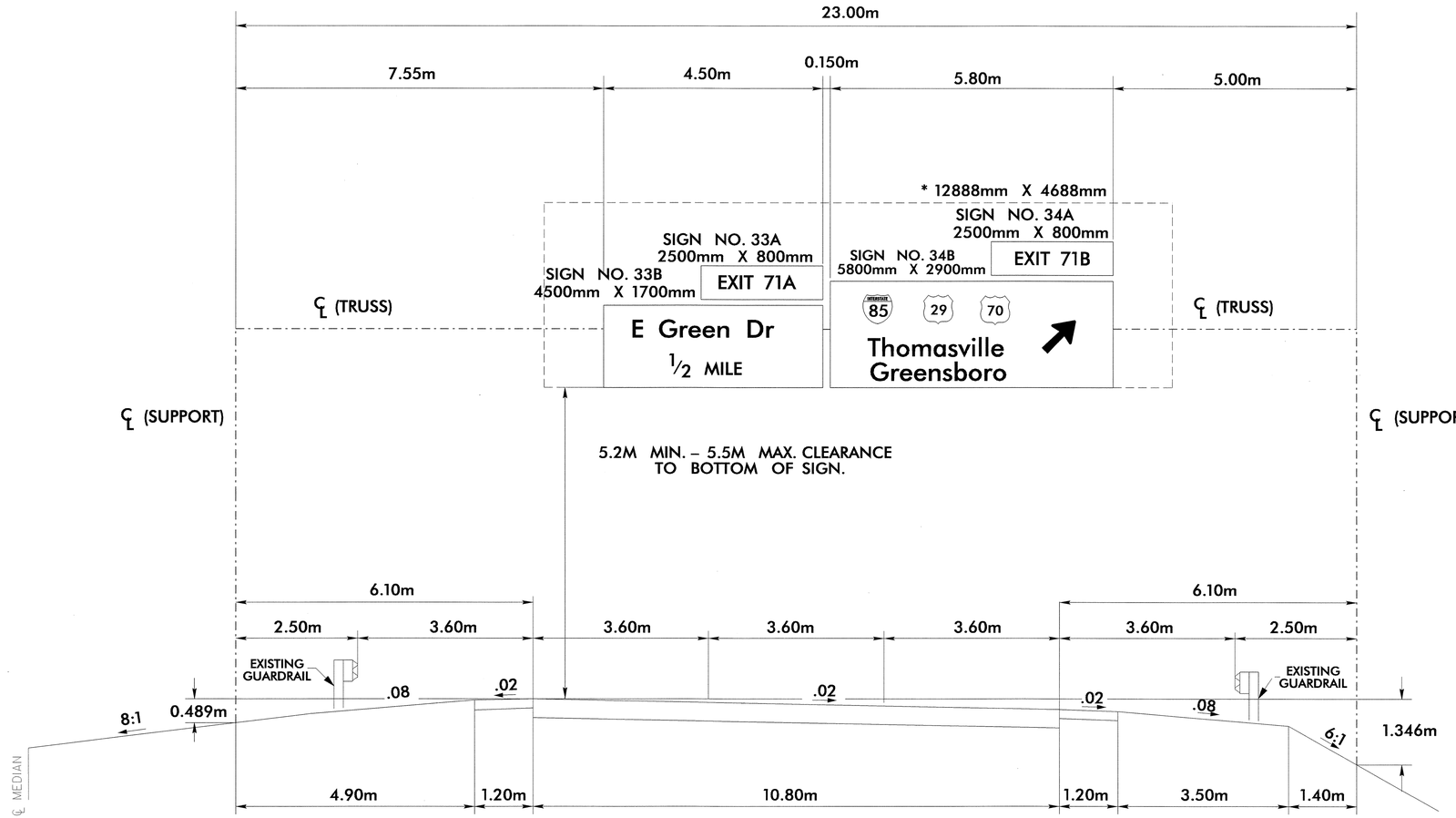
SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AYMAN K. ALQUDWAH

I-74 WB /US 311 NB
OVERHEAD SIGN ASSEMBLY "S"
@ STA. 26+00 (-L-)

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	G. TERLIZZI	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

TIP NO.	SHEET NO.
R-0609IA	SIGN-25



NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
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5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–74 WB /US 311 NB
OVERHEAD SIGN ASSEMBLY "T"
@ STA. 3+54 RAMP B

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

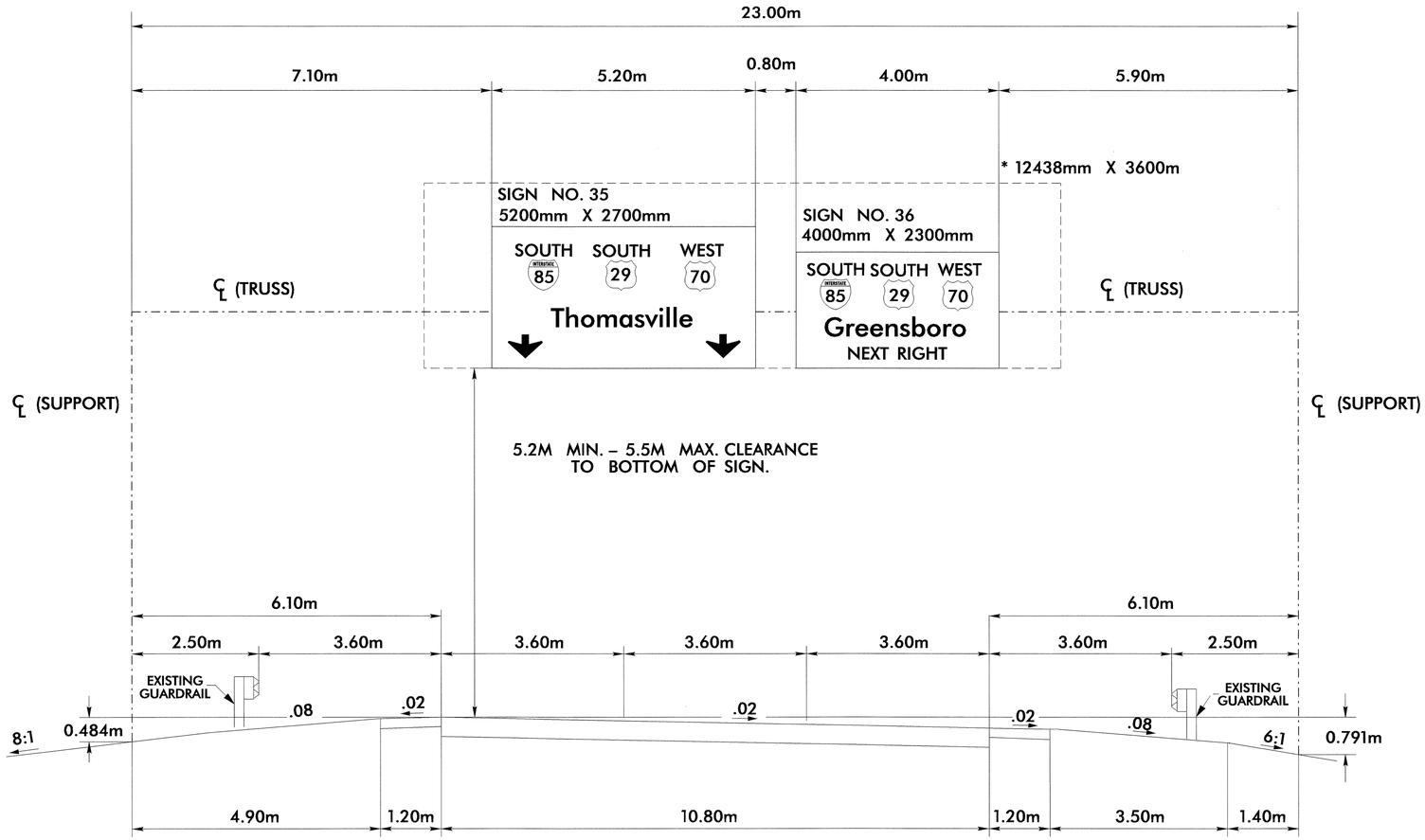
SEAL

6/9/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AMAN J. ALQUDWAH

I–74 WB /US 311 NB
OVERHEAD SIGN ASSEMBLY "T"
@ STA. 3+54 RAMP B

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006		
SIGNING DESIGN ENG	G. TERLIZZI	DIVISION OF HIGHWAYS	
SIGNING PROJECT DGN ENG	K. JORDAN	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT ENG	A. ALQUDWAH		

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-26



NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–74 WB /US 311 NB
OVERHEAD SIGN ASSEMBLY "U"
@ STA. 8+43 (–L–)

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

SEAL

6/9/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AYMAN I. ALQUDWAH

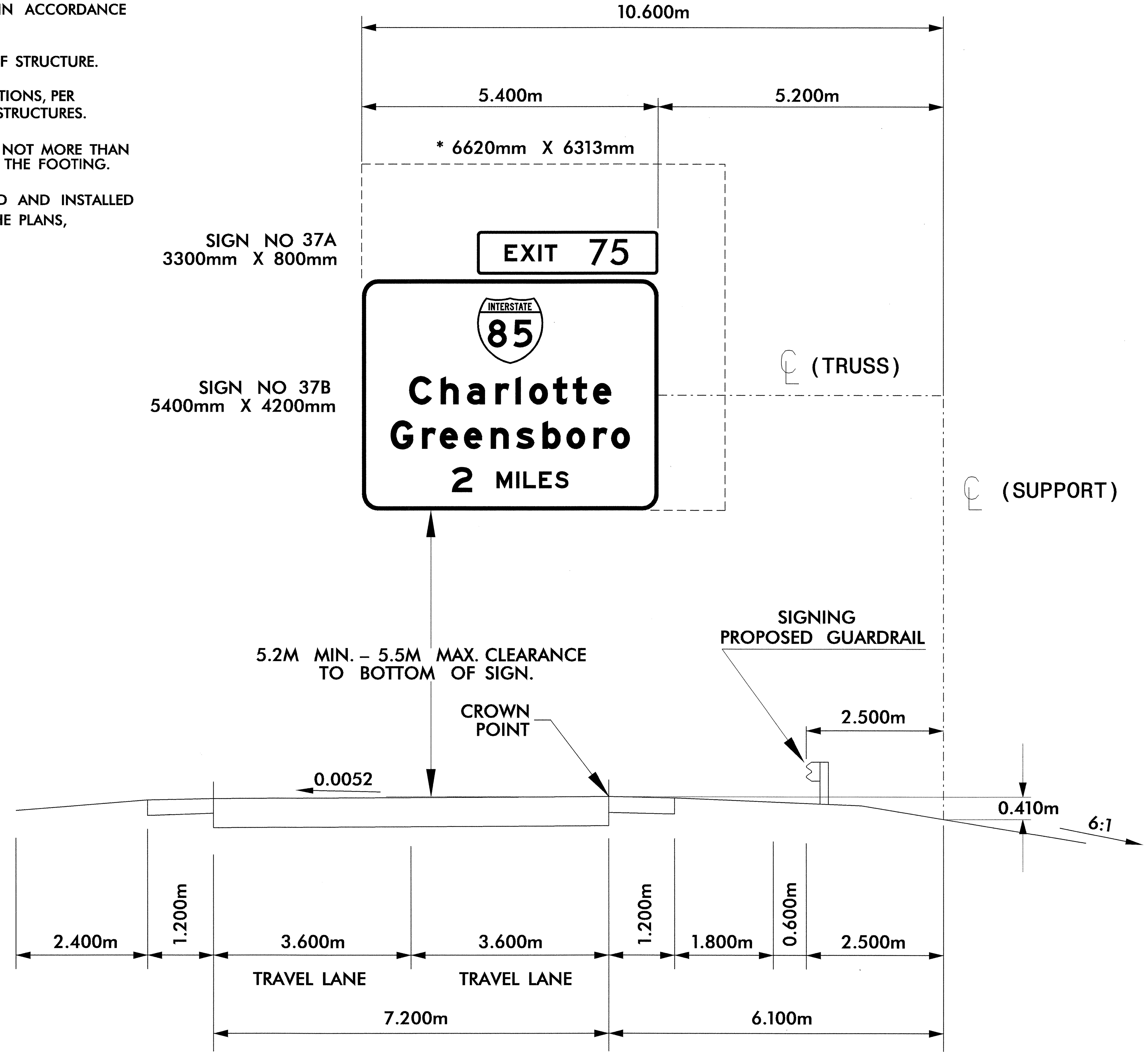
I–74 WB /US 311 NB
OVERHEAD SIGN ASSEMBLY "U"
@ STA. 8+43 (–L–)

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006		
SIGNING DESIGN ENG	G. TERLIZZI	DIVISION OF HIGHWAYS	
SIGNING PROJECT DGN ENG	K. JORDAN	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT ENG	A. ALQUDWAH		

NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

* THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.



I-74 EB /US 311 SB
OVERHEAD SIGN ASSEMBLY "V"
@ STA. 11+00 (-L-)

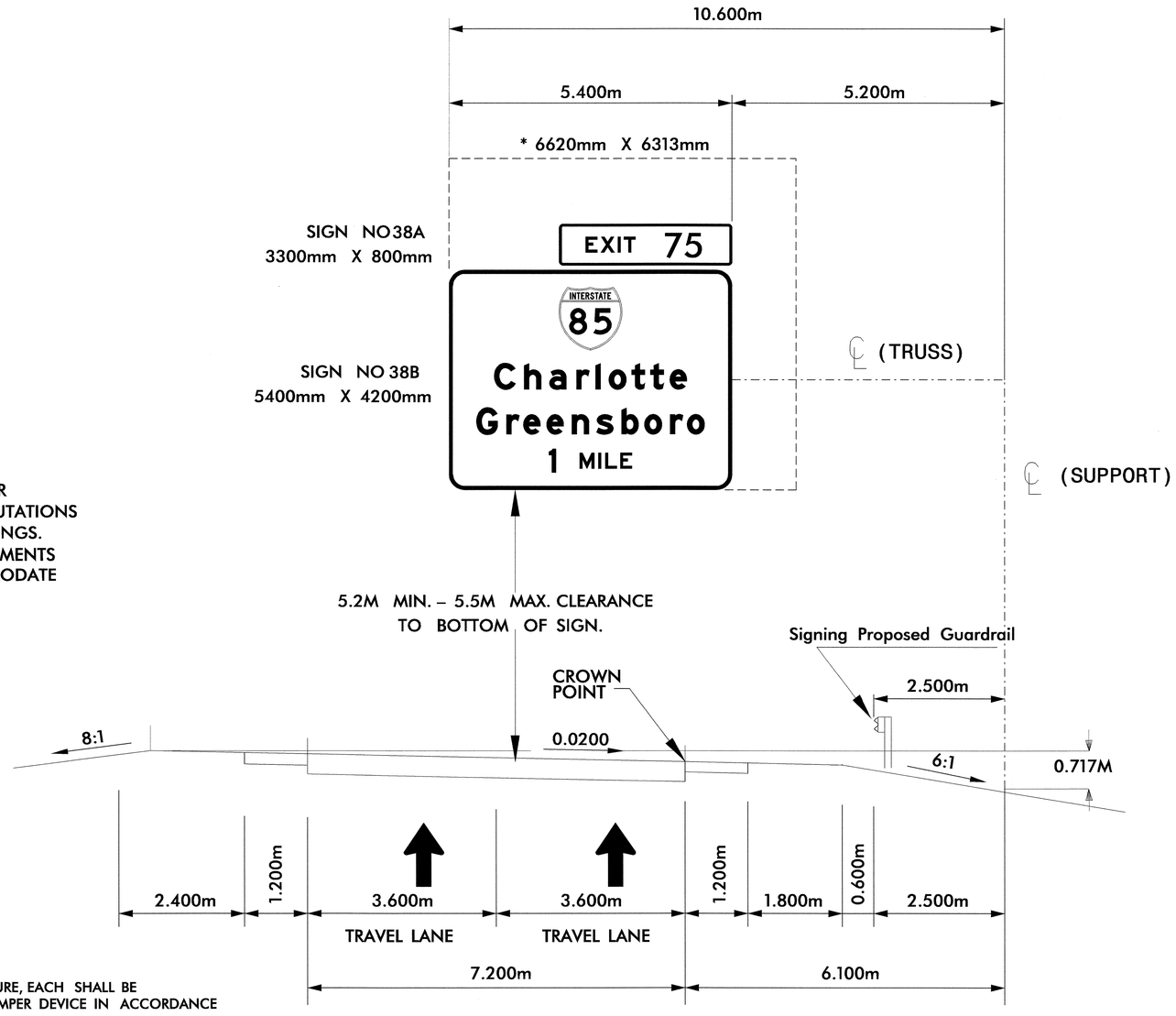
SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER — 6/9/06

I-74 EB /US 311 SB
OVERHEAD SIGN ASSEMBLY "V"
@ STA. 11+00 (-L-)

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	G. TERLIZZI	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-28



✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–74 EB /US 311 SB
OVERHEAD SIGN ASSEMBLY "W"
@ STA. 27+00 (–L–)

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AHMAD N. ALQUDWAH

I–74 EB /US 311 SB
OVERHEAD SIGN ASSEMBLY "W"
@ STA. 27+00 (–L–)

SCALE	1:1000
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

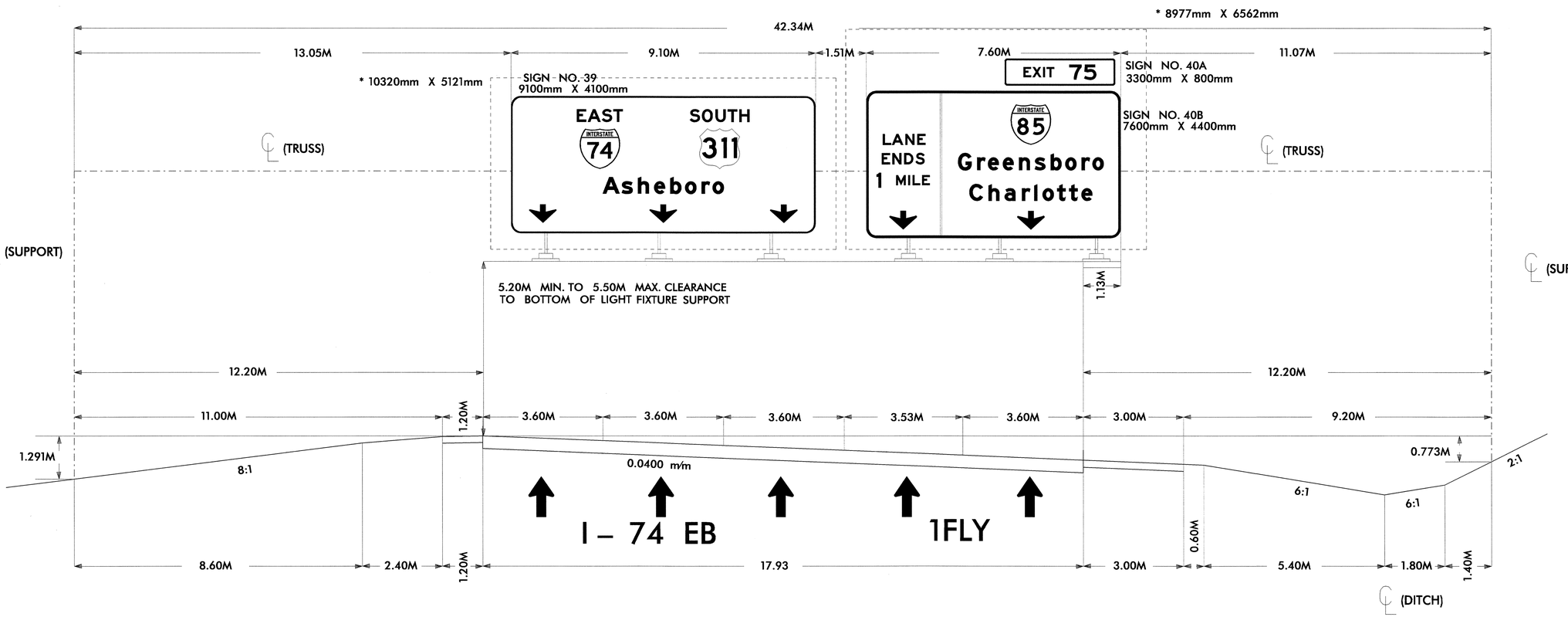
N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

#FILE# #USER# #TIME#

TECC221636 6/9/2006 r-0609ia_sgn_OH I-74 Sign W gterlizzi TECC-Oce34bond

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-29



NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS, LUMINAIRE RETRIEVAL SYSTEM AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–74 EB /US 311 SB
OVERHEAD SIGN ASSEMBLY 'X'
@ STA. 43+00 (–L–)

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

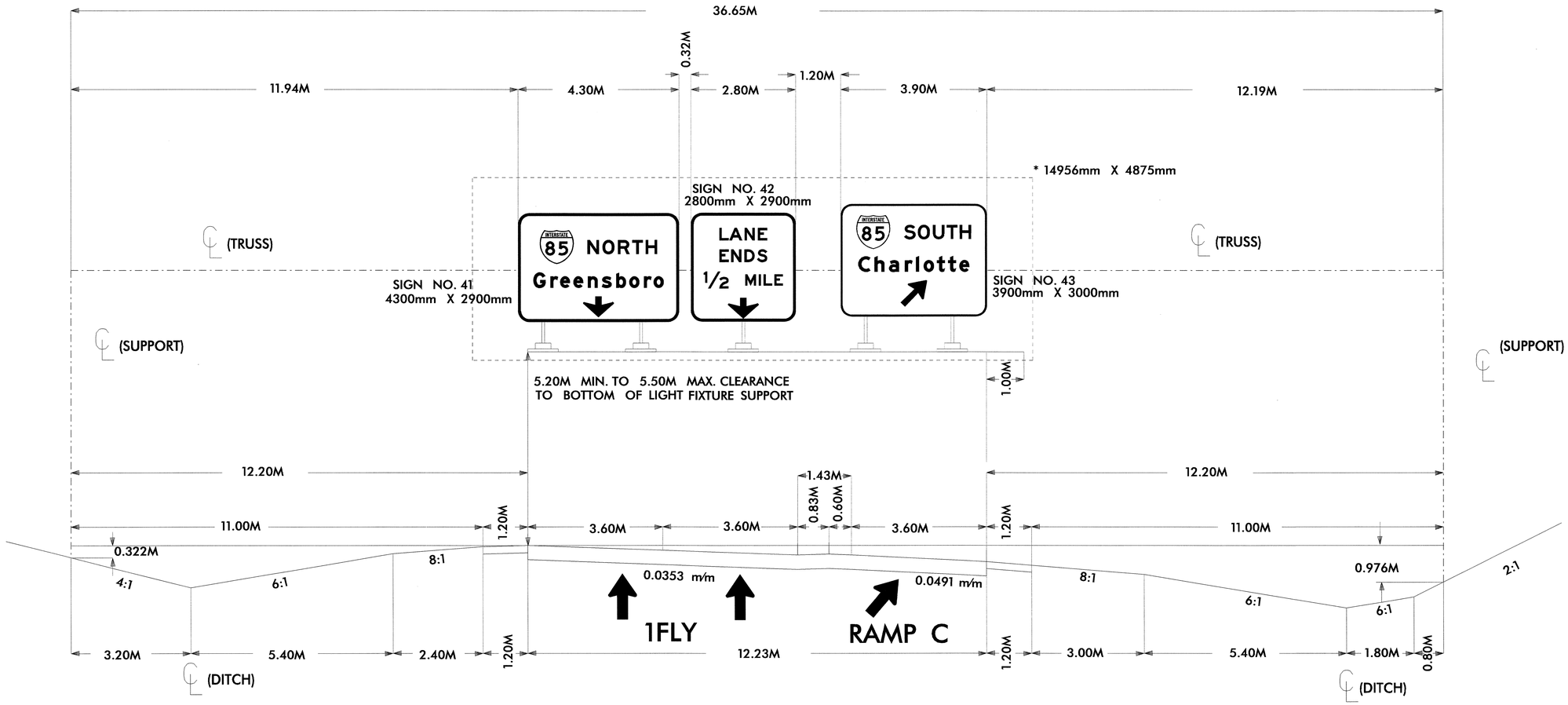
SEAL

6/9/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ANWAN A. ALQUDWAH

I–74 EB /US 311 SB
OVERHEAD SIGN ASSEMBLY 'X'
@ STA. 43+00 (–L–)

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	G. TERLIZZI	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-30



NOTES:

1. IF THE CONTRACTOR BIDS ALUMIMUM SIGN STRUCTURE, EACH SHALL BE PROVIDED WITH AN APPROVED HIGHWAY TRUSS DAMPER DEVICE IN ACCORDANCE WITH AASHTO SPECIFICATIONS.
2. MOUNT SIGNS VERTICALLY CENTERED ON HORIZONTAL MEMBER OF STRUCTURE.
3. FIELD VERIFICATION SHALL BE REQUIRED FOR ALL FOOTING ELEVATIONS, PER THE LATEST NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
4. THE TOP OF THE FOOTING SHALL EXTEND AT LEAST 152mm AND NOT MORE THAN 610mm ABOVE THE HIGHEST POINT OF THE GROUND SURFACE AT THE FOOTING.
5. SIGN HANGERS, LUMINAIRE RETRIEVAL SYSTEM AND ATTACHMENT HARDWARE SHALL BE PROVIDED AND INSTALLED ON THE ASSEMBLY TO ACCOMMODATE ALL SIGNS SHOWN IN THE PLANS, INCLUDING THOSE DESIGNATED AS "FUTURE".

I–74 EB /US 311 SB
OVERHEAD SIGN ASSEMBLY 'Y'
@ STA. 15+28.4070 RAMP C

✳ THESE DIMENSIONS SHALL BE USED FOR WIND LOAD AND DEAD LOAD COMPUTATIONS IN DESIGN OF STRUCTURE AND FOOTINGS. DESIGN AND CONSTRUCTION REQUIREMENTS FOR SIGN STRUCTURES SHALL ACCOMMODATE WIND VELOCITY OF 145 KPH.

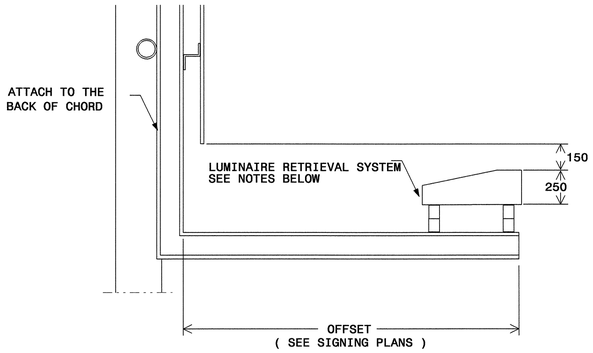
SEAL

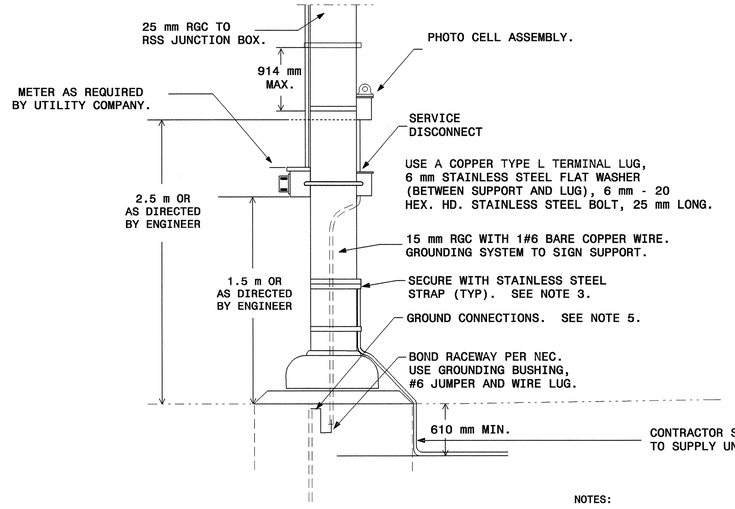
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AWAN M ALQUDWAH

I–74 EB /US 311 SB
OVERHEAD SIGN ASSEMBLY "Y"
@ STA. 15+28.4070 RAMP C

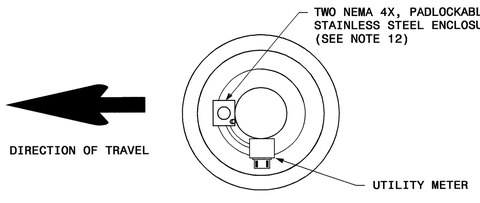
SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	G. TERLIZZI	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

TIP NO.	SHEET NO.
R-0609IA	SIGN-31





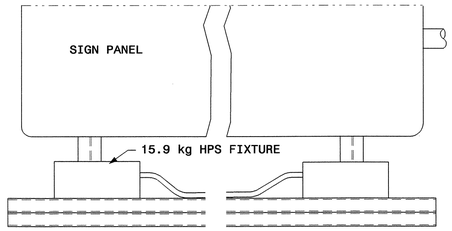
VIEW B-B



VIEW A-A

NOTES:

1. THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT TO THE N.C.D.O.T. FOR APPROVAL, DETAIL DRAWINGS OF LUMINAIRE RETRIEVAL SYSTEM MOUNTING ON OHS ASSEMBLY.
2. CAULK ALL ENDS OF CONDUIT UNDERGROUND WITH A CAULKING COMPOUND APPROVED BY THE ENGINEER.
3. STRAPS SHALL BE STAINLESS STEEL MATERIAL UNLESS OTHERWISE SPECIFIED.
4. ALL JUNCTION BOXES AND CONDULETS SHALL BE WATER TIGHT.
5. ALL GROUNDING ELECTRODES SHALL BE 3M LONG AND 16 mm IN DIAMETER COPPER CLAD STEEL RODS DRIVEN A MINIMUM DEPTH OF 915 mm INTO UNDISTURBED EARTH.
6. TEST GROUNDING SYSTEM USING AN APPROVED METHOD. SYSTEM SHOULD MEASURE LESS THAN TWENTY (20) OHMS. IF THE RESISTANCE MEASUREMENT IS GREATER THAN 20 OHMS, ADDITIONAL GROUND RODS SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER TO FULFILL THIS REQUIREMENT.
7. ALL UNDERGROUND BONDING OF GROUNDING ELECTRODES AND CONDUCTORS SHALL BE BY AN EXOTHERMIC WELDING PROCESS (CADWELD OR EQUIVALENT).
8. ALL ASSEMBLIES AND COMPONENTS SHALL BE UL APPROVED. INSTALLATION SHALL MEET NEC REQUIREMENTS AND ALL APPROVED STATE AND LOCAL CODES.
9. THE CONTRACTOR SHALL USE LUMINAIRE RETRIEVAL SYSTEM ON DESIGNATED OVERHEAD STRUCTURES. WALKWAY AND HANDRAIL IS NOT REQUIRED.
10. INSTALLATION OF LUMINAIRE RETRIEVAL SYSTEM SHALL ALLOW LUMINAIRE MAINTENANCE FROM THE SHOULDER WITHOUT THE NEED FOR LANE CLOSURE. THE DRIVE HANDLE OF THE LUMINAIRE RETRIEVAL SYSTEM SHALL BE LOCATED A MINIMUM OF 0.92M (3 ') FROM THE RIGHT EDGE OF THE SHOULDER AWAY FROM THE ROADWAY TRAFFIC.
11. THE CONTRACTOR SHALL ENSURE THAT COORDINATION IS ESTABLISHED BETWEEN THE OHS ASSEMBLY AND LUMINAIRE RETRIEVAL SYSTEM FABRICATORS SO THAT A FULLY FUNCTIONAL SIGN AND LIGHTING SYSTEM IS INSTALLED. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY OHS ASSEMBLY AND LUMINAIRE RETRIEVAL SYSTEM INCOMPATIBILITIES, OR INSTALLATION OF A LIGHTING SYSTEM NOT FUNCTIONING TO ITS INTENDED PURPOSE.
12. THE LIGHTING EQUIPMENT SERVICE DISCONNECT SHALL BE PLACED IN A LOCATION THAT ALLOWS SAFE WORKING SPACE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC).



IMPORTANT:

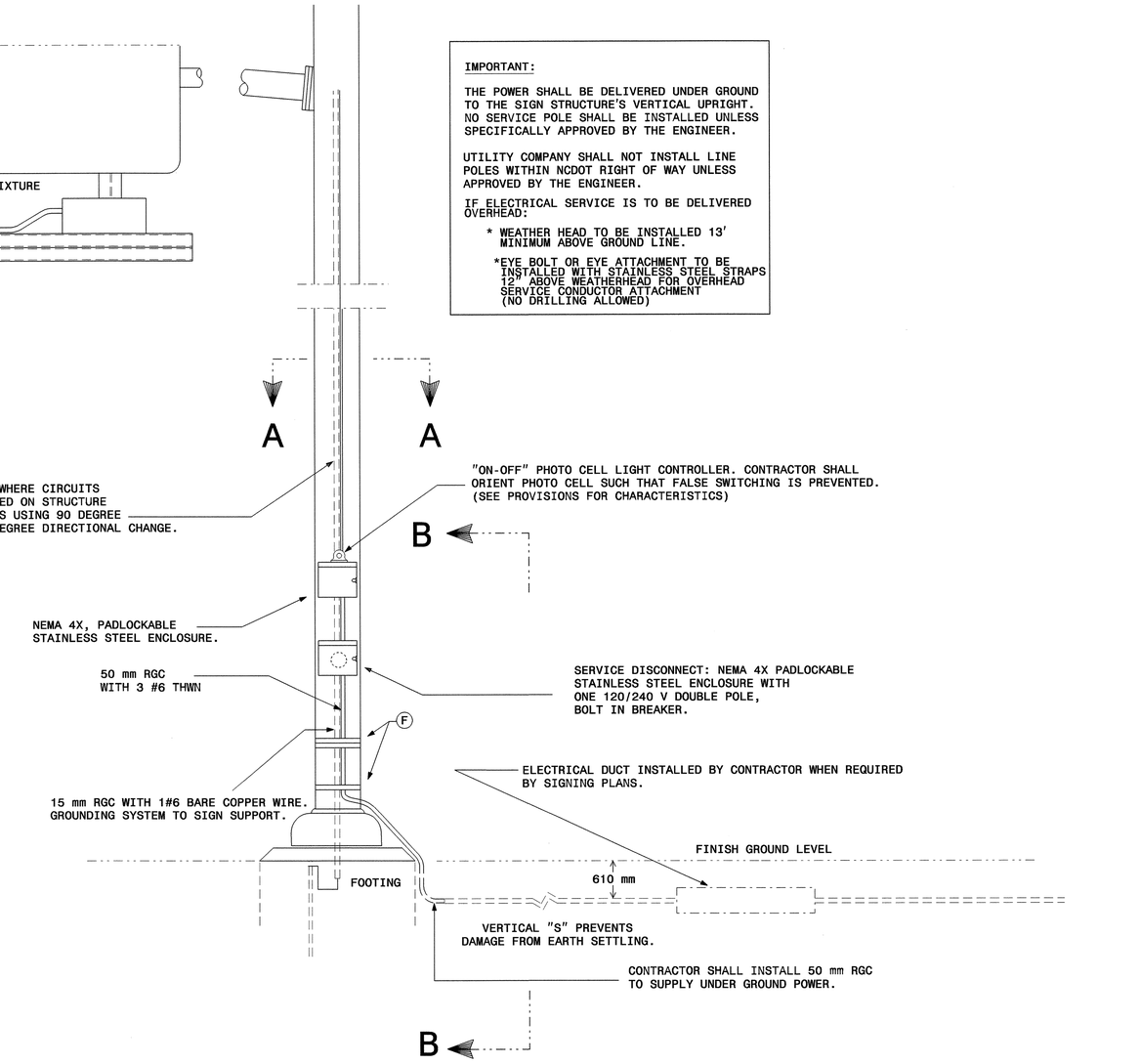
THE POWER SHALL BE DELIVERED UNDER GROUND TO THE SIGN STRUCTURE'S VERTICAL UPRIGHT. NO SERVICE POLE SHALL BE INSTALLED UNLESS SPECIFICALLY APPROVED BY THE ENGINEER.

UTILITY COMPANY SHALL NOT INSTALL LINE POLES WITHIN NCDOT RIGHT OF WAY UNLESS APPROVED BY THE ENGINEER.

IF ELECTRICAL SERVICE IS TO BE DELIVERED OVERHEAD:

* WEATHER HEAD TO BE INSTALLED 13' MINIMUM ABOVE GROUND LINE.

*EYE BOLT OR EYE ATTACHMENT TO BE INSTALLED WITH STAINLESS STEEL STRAPS 12" ABOVE WEATHERHEAD FOR OVERHEAD SERVICE CONDUCTOR ATTACHMENT (NO DRILLING ALLOWED)



LEGEND

- (A) 20 mm STANDARD LB CONDULET.
- (B) 20 mm LIQUID TIGHT FLEXIBLE METALLIC CONDUIT.
- (C) 115 mm X 115 mm X 100 mm RSS JUNCTION CONDULET.
- (D) 20 mm WATERPROOF ADAPTER.
- (E) 20 mm RGC
- (F) STAINLESS STEEL STRAPS.

SEAL

6/9/06

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ANWAR L. ALQUDWAH

LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLIES WITH LUMITRAK

(SHEET 1 OF 2)

SCALE	NONE
DATE	08-04-03
SIGNING TECHNICIAN	
SIGNING ELECTRICAL ENG	C. SWINDELL
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

TIP NO.	SHEET NO.
R-0609IA	SIGN-32

HIGH PRESSURE SODIUM LIGHTING SYSTEM

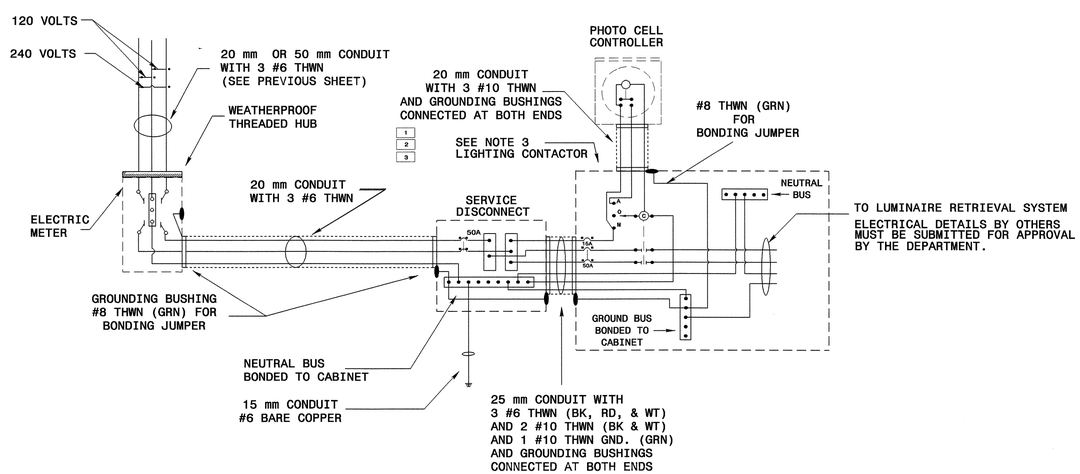
O.H. ASS'Y NO.	SIGN LOCATION "Z"								SIGN LOCATION "Y"							SIGN LOCATION "X"							SIGN LOCATION "W"							MAXIMUM TOTAL WATTAGE	AMPERAGE
	SIGN NO.	QTY. & WATT OF FIXTURES	TYPE	OFFSET (M)	B (M)	C (M)	D (M)	SIGN NO.	QTY. & WATT OF FIXTURES	TYPE	OFFSET (M)	E (M)	C (M)	D (M)	SIGN NO.	QTY. & WATT OF FIXTURES	TYPE	OFFSET (M)	F (M)	C (M)	D (M)	SIGN NO.	QTY. & WATT OF FIXTURES	TYPE	OFFSET (M)	G (M)	C (M)	D (M)		
C	4B	2/150	VF/GE	2.53	6.19	1.5	3.8	3	2/150	VF/GE	2.63	3.02	1.00	3															7680	8
D	5B	2/150	VF/GE	2.43	10.62	1.5	3.7	6B	2/150	VF/GE	2.43	.45	1.5	2															7680	8
E	8B	2/150	VF/GE	2.33	6.84	1	2.9	7B	1/150	VF/GE	2.33	.46	1.4	0															5760	6
F	10B	1/150	VF/GE	2.53	8.25	1.4	0	9	2/150	VF/GE	2.53	.62	1.00	2.00															5760	6
L	21B	2/150	VF/GE	2.73	6.08	1	1.4	20B	2/150	VF/GE	2.73	.15	2	3	19	2/150	VF/GE	2.73	.15	1	3.6								11520	12
M	22B	3/150	VF/GE	2.43	4.77	2	2.1																						5760	5
N	25B	2/150	VF/GE	2.78	5.23	1.50	1.90	24B	2/150	VF/GE	2.78	.32	1.60	2.40	23	2/150	VF/GE	2.78	.32	1.15	2								11520	12
O	27B	2/150	VF/GE	2.43	3	2	2.7	26	2/150	VF/GE	2.43	.3	1	2.3															7680	8
P	29B	2/150	VF/GE	2.53	5.95	1	3.4	28B	2/150	VF/GE	2.53	.15	1	2.7															7680	8
Q	30B	2/150	VF/GE	2.13	6.04	1.5	3																						3840	4
X	41B	2/150	VF/GE	2.43	13.66	.925	2.45	40	1/150	VF/GE	2.43	1.58	1.40	0	39	2/150	VF/GE	2.33	1.45	1.25	3								9600	10
Y	44B	2/150	VF/GE	2.73	11.7	1.5	2	43	1/150	VF/GE	2.73	.6	1.4	0	42B	2/150	VF/GE	2.33	.3	1.1	2.1								9600	10

NOTES:

1. NAMEPLATE SHALL READ (1) "MAIN", (2) "LIGHTS", (3) "CONTROL".
2. CAULK ALL ENDS OF CONDUIT UNDERGROUND WITH A CAULKING COMPOUND APPROVED BY THE ENGINEER.
3. LABEL THREE POSITION SELECTOR SWITCH "MANUAL", "OFF", AND "AUTO".
4. STRAPS SHALL BE STAINLESS STEEL MATERIAL UNLESS OTHERWISE SPECIFIED.
5. THE CONTRACTOR SHALL USE G.E. VERSA FLOOD II OR AN APPROVED EQUIVALENT FIXTURE. THE CONTRACTOR MAY REQUEST APPROVAL TO USE A FIXTURE THAT IS EQUAL TO OR EXCEEDS SPECIFICATIONS FOR THE G.E. FIXTURE. THE POINT-TO-POINT LIGHTING ANALYSIS WILL BE REQUIRED PRIOR TO THE APPROVAL OF A FIXTURE OTHER THAN THE ONE SPECIFIED. SEE N.C.D.O.T. STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
6. THE CONTRACTOR SHALL VERIFY THE LENGTH OF UNDERGROUND RUN ("H" DISTANCE) AND RE CALCULATE WIRE SIZE (UF WIRE) ACCORDING TO THE NEC (NOT MORE THAN 3% VOLTAGE DROP) FOR EACH OVERHEAD LIGHTING SYSTEM. THESE MEASUREMENTS AND WIRE SIZES SHALL BE SUBMITTED WITH THE CATALOG CUTS FOR APPROVAL.
7. THE CONTRACTOR SHALL USE LUMINAIRE RETRIEVAL SYSTEM ON DESIGNATED OVERHEAD STRUCTURES. WALKWAY AND HANDRAIL IS NOT REQUIRED.
8. ALL UNDERGROUND DUCT SHALL BE INSTALLED BY THE CONTRACTOR USING MINIMUM 50MM DIAMETER RIDGED GALVANIZED STEEL OR RIDGED PVC HEAVY WALL CONDUIT.
9. TEST SYSTEM GROUNDING USING AN APPROVED METHOD. SYSTEM SHOULD MEASURE LESS THAN TWENTY (20) OHMS.
10. ALL ASSEMBLIES AND COMPONENTS SHALL BE UL APPROVED. INSTALLATION SHALL MEET NEC REQUIREMENTS AND ALL APPLICABLE LOCAL AND STATE CODES.
11. EACH SIGN SHALL HAVE ITS OWN CIRCUIT. MAX. 1920 WATTS PER CIRCUIT. LOAD MUST BE DISTRIBUTED EQUALLY BETWEEN THE TWO 120 VOLTS CIRCUITS. MAX. LOAD FOR BOTH 120 VOLTS CIRCUITS IS 7680 WATTS.
12. THE POSITION OF THE CIRCUIT NO. AND BREAKER NO. IS NOT THE SAME IN THE PANEL.
13. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH ONLY THE APPROPRIATE NUMBER OF BREAKERS AND WIRE THAT IS REQUIRED IN ACCORDANCE WITH THE NUMBER OF CIRCUITS LISTED FOR A GIVEN LIGHTING SYSTEM.
14. POWER IS TO BE INSTALLED ON THE RIGHT UNLESS OTHERWISE DIRECTED.

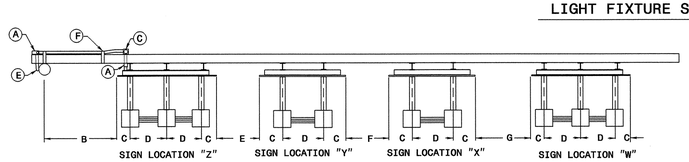
LEGEND

- (A) 20 mm STANDARD LB CONDULET.
- (B) 20 mm LIQUID TIGHT FLEXIBLE METALLIC CONDUIT.
- (C) 115 mm X 115 mm X 100 mm RSS-1 JUNCTION CONDULET.
- (D) 20 mm WATERPROOF ADAPTER.
- (E) 20 mm RIGID GALVANIZED CONDUIT.
- (F) STAINLESS STEEL STRAPS.

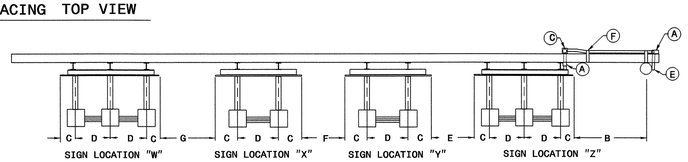


WIRING SCHEMATIC

LIGHT FIXTURE SPACING TOP VIEW



POWER SUPPLIED TO THE LEFT SIDE OF STRUCTURE



POWER SUPPLIED TO THE RIGHT SIDE OF STRUCTURE

SEAL

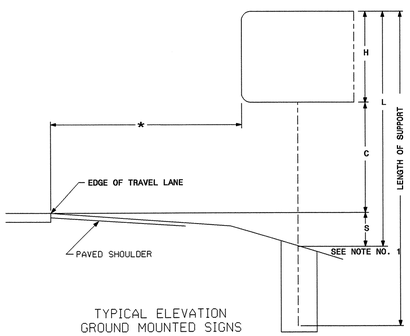
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AYMAN ALQUDWAH

LIGHTING SYSTEM FOR OVERHEAD SIGN ASSEMBLIES WITH LUMITRAK (SHEET 2 OF 2)

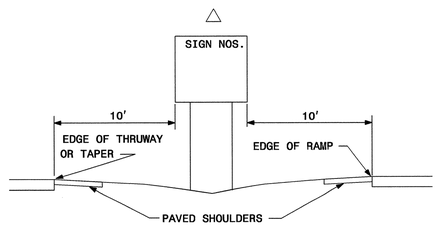
SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	08-04-03	DIVISION OF HIGHWAYS	
SIGNING TECHNICIAN		TRAFFIC ENGINEERING BRANCH	
SIGNING ELECTRICAL ENG	C. SWINDELL		
SIGNING PROJECT ENG	A. ALQUDWAH		

TIP NO.	SHEET NO.
R-0609IA	SIGN-33

SIGN NO.	SIGN TYPE	SIGN SIZE (mm) w x h	ROADWAY STATION	NO. OF SUP.	BEAM SECTION	SUPPORT TYPE BA or S	ATTACH METHOD	MOUNTING METHOD	HORIZ. CLR.* (m)	LENGTH (m) SNS HT H	MTG HT C	EMBED-MENT	LEFT SUPPORT (m) S	L	TOTAL LENGTH	CENTER SUPPORT (m) S	L	TOTAL LENGTH	RIGHT SUPPORT (m) S	L	TOTAL LENGTH	FOOTING DIAMETER (m)	FOOTING DEPTH (m)	B/A SUPPORT WEIGHTS (kg)	SIMPLE SUPPORT WEIGHTS (lbs.)	REINF. FTGS. (c.m.)	FIELD VERIFIED SEE NOTE 2 (mm/dd/yy)
101A	B	2800 X 800																									
101B	A	5100 X 1700	SEE SIGN-42	3	W6x12	S	1-R	N/A	9.14	1.70	2.13	1.676	1.68	5.51	7.19	2.26	6.09	7.77	2.87	6.70	8.38	0.4572	1.8288	0.00	416.80	0.9007	
102A	B	2800 X 800																									
102B	A	5100 X 2100	SEE SIGN-43	2	W8x18	S	1-R	N/A	9.14	2.10	2.13	1.829	0.88	5.11	6.94	0.00	0.00	0.00	2.19	6.42	8.25	0.6096	1.9812	0.00	407.02	1.1565	
103A	B	2800 X 800																									
103B	A	5100 X 2100	SEE SIGN-43	2	W6x16	BA	1-R	N/A	9.14	2.10	2.13	1.829	0.91	5.14	6.97	0.00	0.00	0.00	0.58	4.81	6.64	0.4572	1.9812	367.22	0.00	0.6505	
104A	B	2800 X 800																									
104B	A	5700 X 1700	SEE SIGN-44	3	W6x16	S	1-R	N/A	9.14	1.70	2.13	1.829	1.10	4.93	6.76	2.23	6.06	7.89	3.35	7.18	9.01	0.4572	1.9812	0.00	563.46	0.9758	
105A	B	2800 X 800																									
105B	A	5700 X 2100	SEE SIGN-44	3	W6x12	BA	1-R	N/A	9.14	2.10	2.13	1.524	0.88	5.11	6.64	0.58	4.81	6.34	0.30	4.53	6.06	0.4572	1.6764	393.14	0.00	0.8257	
106A	B	2800 X 800																									
106B	A	5100 X 1700	SEE SIGN-44	2	W8x18	S	1-R	N/A	9.14	1.70	2.13	1.829	0.94	4.77	6.60	0.00	0.00	0.00	2.80	6.63	8.46	0.6096	1.9812	0.00	403.54	1.1565	
107A	B	2800 X 800																									
107B	A	5300 X 1700	SEE SIGN-45	2	W6x12	BA	1-R	N/A	9.14	1.70	2.16	1.676	0.12	3.98	5.66	0.00	0.00	0.00	-0.03	3.83	5.51	0.4572	1.8288	234.97	0.00	0.6005	
108A	B	2800 X 800																									
108B	A	5300 X 2100	SEE SIGN-45	2	W8x18	BA	1-R	N/A	9.14	2.10	2.13	1.981	2.10	6.33	8.31	0.00	0.00	0.00	3.08	7.31	9.29	0.6096	2.1336	535.39	0.00	1.2454	
109A	B	2800 X 800																									
109B	A	5700 X 2100	SEE SIGN-45	3	W6x12	S	1-R	N/A	9.14	2.10	2.13	1.676	0.64	4.87	6.55	1.01	5.24	6.92	1.25	5.48	7.16	0.4572	1.8288	0.00	368.41	0.9007	
110A	B	2800 X 800																									
110B	A	5700 X 1700	SEE SIGN-45	3	W6x12	BA	1-R	N/A	9.14	1.70	4.20	1.676	-0.10	5.80	7.48	-2.07	3.83	5.51	-1.34	4.56	6.24	0.4572	1.8288	396.66	0.00	0.9007	
111A	B	2800 X 800																									
111B	A	5300 X 2100	SEE SIGN-46	2	W8x18	S	1-R	N/A	9.14	2.10	2.13	1.829	0.70	4.93	6.76	0.00	0.00	0.00	2.26	6.49	8.32	0.6096	1.9812	0.00	404.08	1.1565	
112A	B	2800 X 800																									
112B	A	4700 X 2700	SEE SIGN-47	2	W8x21	S	1-R	N/A	9.14	2.70	2.13	1.981	1.46	6.29	8.27	0.00	0.00	0.00	2.83	7.66	9.64	0.6096	2.1336	0.00	560.01	1.2454	
113A	B	2800 X 800																									
113B	A	4700 X 3000	SEE SIGN-47	2	W8x18	BA	1-R	N/A	9.14	3.00	2.13	1.981	0.76	5.89	7.87	0.00	0.00	0.00	1.40	6.53	8.51	0.6096	2.1336	502.71	0.00	1.2454	
114A	B	2800 X 800																									
114B	A	5300 X 1700	SEE SIGN-47	2	W8x18	S	1-R	N/A	9.14	1.70	2.13	1.829	1.34	5.17	7.00	0.00	0.00	0.00	2.74	6.57	8.40	0.6096	1.9812	0.00	412.65	1.1565	
115A	B	2800 X 800																									
115B	A	4700 X 3000	SEE SIGN-48	2	W8x21	BA	1-R	N/A	9.14	3.00	2.13	1.981	1.43	6.56	8.54	0.00	0.00	0.00	2.16	7.29	9.27	0.6096	2.1336	623.31	0.00	1.2454	
116A	B	2800 X 800																									
116B	A	4700 X 2700	SEE SIGN-48	2	W6x16	BA	1-R	N/A	9.14	2.70	2.43	1.981	0.36	5.49	7.47	0.00	0.00	0.00	-0.30	4.83	6.81	0.4572	2.1336	383.29	0.00	0.7006	
117A	B	2500 X 800																									
117B	A	4300 X 2100	SEE SIGN-64	2	W6x12	BA	1-R	N/A	9.14	2.10	2.13	1.676	0.58	4.81	6.49	0.00	0.00	0.00	0.30	4.53	6.21	0.4572	1.8288	262.30	0.00	0.6005	
118A	B	2500 X 800																									
118B	A	4300 X 1700	SEE SIGN-64	2	W6x16	BA	1-R	N/A	9.14	1.70	2.13	1.829	2.34	6.17	8.00	0.00	0.00	0.00	2.03	5.86	7.69	0.4572	1.9812	416.75	0.00	0.6505	
119	A	4800 X 3200	SEE SIGN-69	2	W8x18	BA	N/A	N/A	9.14	3.20	2.13	1.829	0.68	6.01	7.84	0.00	0.00	0.00	1.96	7.29	9.12	0.6096	1.9812	518.12	0.00	1.1565	
120	A	4800 X 3500	SEE SIGN-69	2	W8x21	BA	N/A	N/A	9.14	3.50	2.13	1.981	1.42	7.05	9.03	0.00	0.00	0.00	2.58	8.21	10.19	0.6096	2.1336	667.37	0.00	1.2454	
121	A	4800 X 3500	SEE SIGN-69	2	W8x21	BA	N/A	N/A	9.14	3.50	2.13	1.981	1.82	7.45	9.43	0.00	0.00	0.00	2.58	8.21	10.19	0.6096	2.1336	679.87	0.00	1.2454	
122	A	4800 X 3200	SEE SIGN-69	2	W8x18	BA	N/A	N/A	9.14	3.20	2.13	1.829	1.52	6.85	8.68	0.00	0.00	0.00	1.69	7.02	8.85	0.6096	1.9812	533.39	0.00	1.1565	
123	A	2000 X 1900	SEE SIGN-49	2	S4x7.7	BA	N/A	N/A	9.14	1.90	2.13	1.219	0.76	4.80	6.01	0.00	0.00	0.00	0.84	4.87	6.09	0.3048	1.3716	157.11	0.00	0.2002	



TYPICAL ELEVATION
GROUND MOUNTED SIGNS



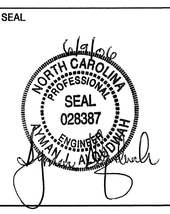
NOTES

1. DIMENSION "S" REPRESENTS AN INCREASE (+), OR A DECREASE (-) IN POLE LENGTH, RELATIVE TO THE ELEVATION OF THE EDGE OF PAVEMENT.

2. FIELD VERIFICATIONS SHALL BE REQUIRED FOR ALL SUPPORTS, SEE (*) ARTICLE 903-3. FABRICATORS SHALL BE AISC CERTIFIED IN CATEGORY 1, SEE (*) ARTICLE 1072-1. (*) = N.C.D.O.T. STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES

3. PLAN LOCATIONS FOR EXISTING UTILITIES ARE BASED ON THE BEST AVAILABLE INFORMATION AND, THEREFORE MAY NOT BE PRECISELY ACCURATE. THEREFORE, IT IS INCUMBENT UPON THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF UTILITIES BEFORE BEGINNING WORK IN A LOCATION.

SEAL



TYPE "A" AND TYPE "B" GROUND MOUNTED SIGNS

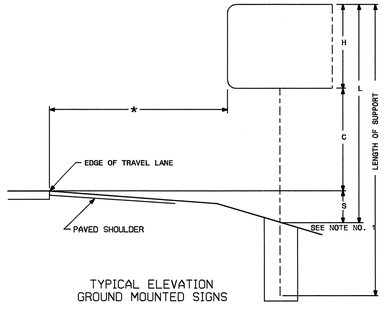
SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	MAY 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	G. TERLIZZI	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

#FILES #SHEETS

TECC221636 6/8/2006 supports gterlizzi TECC-Oce34bond

TIP NO.	SHEET NO.
R-0609IA	SIGN-33A

SIGN NO.	SIGN TYPE	SIGN SIZE (mm) w x h	ROADWAY STATION	NO. OF SUP.	BEAM SECTION	SUPPORT TYPE BA or S	ATTACH METHOD	MOUNTING METHOD	HORIZ. CLR.* (m)	LENGTH (m) SNS HT H	MTG HT C	EMBEDMENT	LEFT SUPPORT (m) S	L	TOTAL LENGTH	CENTER SUPPORT (m) S	L	TOTAL LENGTH	RIGHT SUPPORT (m) S	L	TOTAL LENGTH	FOOTING DIAMETER (m)	FOOTING DEPTH (m)	B/A SUPPORT WEIGHTS (kg)	SIMPLE SUPPORT WEIGHTS (lbs.)	REINF. FTGS. (c.m.)	FIELD VERIFIED SEE NOTE 2 (mm/dd/yy)
101A	B	2800 X 800																									
101B	A	5100 X 1700	SEE SIGN-42	3	W6x12	S	1-R	N/A	9.14	1.70	2.13	1.676	1.68	5.51	7.19	2.26	6.09	7.77	2.87	6.70	8.38	0.4572	1.8288	0.00	416.80	0.9007	
102A	B	2800 X 800																									
102B	A	5100 X 2100	SEE SIGN-43	2	W8x18	S	1-R	N/A	9.14	2.10	2.13	1.829	0.88	5.11	6.94	0.00	0.00	0.00	2.19	6.42	8.25	0.6096	1.9812	0.00	407.02	1.1565	
103A	B	2800 X 800																									
103B	A	5100 X 2100	SEE SIGN-43	2	W6x16	BA	1-R	N/A	9.14	2.10	2.13	1.829	0.91	5.14	6.97	0.00	0.00	0.00	0.58	4.81	6.64	0.4572	1.9812	367.22	0.00	0.6505	
104A	B	2800 X 800																									
104B	A	5700 X 1700	SEE SIGN-44	3	W6x16	S	1-R	N/A	9.14	1.70	2.13	1.829	1.10	4.93	6.76	2.23	6.06	7.89	3.35	7.18	9.01	0.4572	1.9812	0.00	563.46	0.9758	
105A	B	2800 X 800																									
105B	A	5700 X 2100	SEE SIGN-44	3	W6x12	BA	1-R	N/A	9.14	2.10	2.13	1.524	0.88	5.11	6.64	0.58	4.81	6.34	0.30	4.53	6.06	0.4572	1.6764	393.14	0.00	0.8257	
106A	B	2800 X 800																									
106B	A	5100 X 1700	SEE SIGN-44	2	W8x18	S	1-R	N/A	9.14	1.70	2.13	1.829	0.94	4.77	6.60	0.00	0.00	0.00	2.80	6.63	8.46	0.6096	1.9812	0.00	403.54	1.1565	
107A	B	2800 X 800																									
107B	A	5300 X 1700	SEE SIGN-45	2	W6x12	BA	1-R	N/A	9.14	1.70	2.16	1.676	0.12	3.98	5.66	0.00	0.00	0.00	-0.03	3.83	5.51	0.4572	1.8288	234.97	0.00	0.6005	
108A	B	2800 X 800																									
108B	A	5300 X 2100	SEE SIGN-45	2	W8x18	BA	1-R	N/A	9.14	2.10	2.13	1.981	2.10	6.33	8.31	0.00	0.00	0.00	3.08	7.31	9.29	0.6096	2.1336	535.39	0.00	1.2454	
109A	B	2800 X 800																									
109B	A	5700 X 2100	SEE SIGN-45	3	W6x12	S	1-R	N/A	9.14	2.10	2.13	1.676	0.64	4.87	6.55	1.01	5.24	6.92	1.25	5.48	7.16	0.4572	1.8288	0.00	368.41	0.9007	
110A	B	2800 X 800																									
110B	A	5700 X 1700	SEE SIGN-45	3	W6x12	BA	1-R	N/A	9.14	1.70	4.20	1.676	-0.10	5.80	7.48	-2.07	3.83	5.51	-1.34	4.56	6.24	0.4572	1.8288	396.66	0.00	0.9007	
111A	B	2800 X 800																									
111B	A	5300 X 2100	SEE SIGN-46	2	W8x18	S	1-R	N/A	9.14	2.10	2.13	1.829	0.70	4.93	6.76	0.00	0.00	0.00	2.26	6.49	8.32	0.6096	1.9812	0.00	404.08	1.1565	
112A	B	2800 X 800																									
112B	A	4700 X 2700	SEE SIGN-47	2	W8x21	S	1-R	N/A	9.14	2.70	2.13	1.981	1.46	6.29	8.27	0.00	0.00	0.00	2.83	7.66	9.64	0.6096	2.1336	0.00	560.01	1.2454	
113A	B	2800 X 800																									
113B	A	4700 X 3000	SEE SIGN-47	2	W8x18	BA	1-R	N/A	9.14	3.00	2.13	1.981	0.76	5.89	7.87	0.00	0.00	0.00	1.40	6.53	8.51	0.6096	2.1336	502.71	0.00	1.2454	
114A	B	2800 X 800																									
114B	A	5300 X 1700	SEE SIGN-47	2	W8x18	S	1-R	N/A	9.14	1.70	2.13	1.829	1.34	5.17	7.00	0.00	0.00	0.00	2.74	6.57	8.40	0.6096	1.9812	0.00	412.65	1.1565	
115A	B	2800 X 800																									
115B	A	4700 X 3000	SEE SIGN-48	2	W8x21	BA	1-R	N/A	9.14	3.00	2.13	1.981	1.43	6.56	8.54	0.00	0.00	0.00	2.16	7.29	9.27	0.6096	2.1336	623.31	0.00	1.2454	
116A	B	2800 X 800																									
116B	A	4700 X 2700	SEE SIGN-48	2	W6x16	BA	1-R	N/A	9.14	2.70	2.43	1.981	0.36	5.49	7.47	0.00	0.00	0.00	-0.30	4.83	6.81	0.4572	2.1336	383.29	0.00	0.7006	
117A	B	2500 X 800																									
117B	A	4300 X 2100	SEE SIGN-64	2	W6x12	BA	1-R	N/A	9.14	2.10	2.13	1.676	0.58	4.81	6.49	0.00	0.00	0.00	0.30	4.53	6.21	0.4572	1.8288	262.30	0.00	0.6005	
118A	B	2500 X 800																									
118B	A	4300 X 1700	SEE SIGN-64	2	W6x16	BA	1-R	N/A	9.14	1.70	2.13	1.829	2.34	6.17	8.00	0.00	0.00	0.00	2.03	5.86	7.69	0.4572	1.9812	416.75	0.00	0.6505	
119	A	4800 X 3200	SEE SIGN-69	2	W8x18	BA	N/A	N/A	9.14	3.20	2.13	1.829	0.68	6.01	7.84	0.00	0.00	0.00	1.96	7.29	9.12	0.6096	1.9812	518.12	0.00	1.1565	
120	A	4800 X 3500	SEE SIGN-69	2	W8x21	BA	N/A	N/A	9.14	3.50	2.13	1.981	1.42	7.05	9.03	0.00	0.00	0.00	2.58	8.21	10.19	0.6096	2.1336	667.37	0.00	1.2454	



TYPICAL ELEVATION
GROUND MOUNTED SIGNS

NOTES

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2. FIELD VERIFICATIONS SHALL BE REQUIRED FOR ALL SUPPORTS, SEE (*) ARTICLE 903-3. FABRICATORS SHALL BE AISC CERTIFIED IN CATEGORY 1, SEE (*) ARTICLE 1072-1. (*) = N.C.D.O.T. STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES

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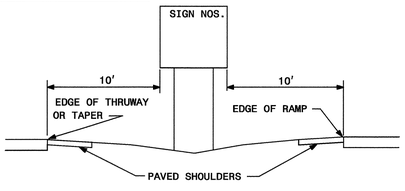
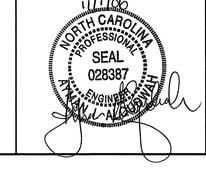


SEAL



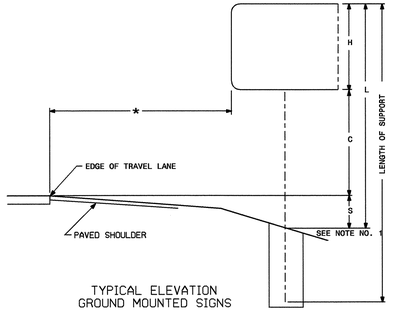
SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	MAY 2006		
SIGNING DESIGN ENG	G. TERLIZZI	DIVISION OF HIGHWAYS	
SIGNING PROJECT DGN ENG	K. JORDAN	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT ENG	A. ALQUDWAH		

FILE STATE

TECC221636 11/1/2006 supports gterlizzi TECC-Oce34bond

TIP NO.	SHEET NO.
R-0609IA	SIGN-33B

121	A	4800 X 3500	SEE SIGN-69	2	W8x21	BA	N/A	N/A	9.14	3.50	2.13	1.981	1.82	7.45	9.43	0.00	0.00	0.00	2.58	8.21	10.19	0.6096	2.1336	679.87	0.00	1.2454
122	A	4800 X 3200	SEE SIGN-69	2	W8x18	BA	N/A	N/A	9.14	3.20	2.13	1.829	1.52	6.85	8.68	0.00	0.00	0.00	1.69	7.02	8.85	0.6096	1.9812	533.39	0.00	1.1565
123	A	2000 X 1900	SEE SIGN-49	2	S4x7.7	BA	N/A	N/A	9.14	1.90	2.13	1.219	0.76	4.80	6.01	0.00	0.00	0.00	0.84	4.87	6.09	0.3048	1.3716	157.11	0.00	0.2002
124	A	4100 X 1900	SEE SIGN-42	2	W6x9	BA	N/A	N/A	9.75	1.90	2.13	1.372	0.45	4.49	5.86	0.00	0.00	0.00	0.36	4.39	5.77	0.4572	1.524	184.31	0.00	0.5004
125	A	4100 X 1900	SEE SIGN-43	2	W6x9	BA	N/A	N/A	6.09	1.90	2.13	1.372	0.61	4.64	6.01	0.00	0.00	0.00	0.91	4.95	6.32	0.4572	1.524	193.81	0.00	0.5004
126	A	4100 X 1900	SEE SIGN-45	2	W6x9	BA	N/A	N/A	8.23	1.90	2.13	1.372	0.67	4.71	6.08	0.00	0.00	0.00	0.61	4.64	6.02	0.4572	1.524	190.59	0.00	0.5004
127	A	4100 X 1900	SEE SIGN-46	2	W6x9	BA	N/A	N/A	10.36	1.90	2.13	1.372	0.62	4.65	6.03	0.00	0.00	0.00	0.55	4.58	5.96	0.4572	1.524	189.09	0.00	0.5004
128	A	4100 X 1900	SEE SIGN-47	2	W6x9	BA	N/A	N/A	6.09	1.90	2.13	1.372	0.55	4.58	5.96	0.00	0.00	0.00	0.50	4.53	5.91	0.4572	1.524	187.48	0.00	0.5004
129	A	4100 X 1900	SEE SIGN-45	2	W6x9	BA	N/A	N/A	10.97	1.90	2.13	1.372	0.62	4.65	6.03	0.00	0.00	0.00	0.54	4.57	5.95	0.4572	1.524	188.96	0.00	0.5004
130	A	4100 X 1900	SEE SIGN-44	2	W6x9	BA	N/A	N/A	9.75	1.90	2.13	1.372	0.67	4.70	6.08	0.00	0.00	0.00	0.62	4.65	6.03	0.4572	1.524	190.70	0.00	0.5004
131	A	4100 X 1900	SEE SIGN-43	2	W6x9	BA	N/A	N/A	10.06	1.90	2.13	1.372	0.60	4.63	6.01	0.00	0.00	0.00	0.55	4.58	5.96	0.4572	1.524	188.82	0.00	0.5004
201	A	2000 X 1500	SEE SIGN-42	2	S3x5.7	BA	N/A	N/A	3.05	1.50	2.13	0	0.13	3.76	3.76	0.00	0.00	0.00	0.13	3.76	3.76	0.4572	1.0668	63.85	0.00	0.3503
202	A	2000 X 1500	SEE SIGN-43	2	S3x5.7	BA	N/A	N/A	3.05	1.50	2.13	0	0.14	3.77	3.77	0.00	0.00	0.00	0.14	3.77	3.77	0.4572	1.0668	64.02	0.00	0.3503
203	A	2000 X 1500	SEE SIGN-43	2	S3x5.7	BA	N/A	N/A	3.05	1.50	2.13	0	0.19	3.82	3.82	0.00	0.00	0.00	0.19	3.82	3.82	0.4572	1.0668	64.87	0.00	0.3503
204	A	2000 X 1500	SEE SIGN-44	2	S3x5.7	BA	N/A	N/A	3.05	1.50	2.13	0	0.13	3.76	3.76	0.00	0.00	0.00	0.13	3.76	3.76	0.4572	1.0668	63.85	0.00	0.3503
205	A	2000 X 1500	SEE SIGN-45	2	S3x5.7	BA	N/A	N/A	3.05	1.50	2.13	0	0.11	3.74	3.74	0.00	0.00	0.00	0.11	3.74	3.74	0.4572	1.0668	63.51	0.00	0.3503
206	A	2000 X 1500	SEE SIGN-46	2	S3x5.7	BA	N/A	N/A	3.05	1.50	2.13	0	0.16	3.79	3.79	0.00	0.00	0.00	0.16	3.79	3.79	0.4572	1.0668	64.36	0.00	0.3503
207	A	2000 X 1500	SEE SIGN-46	2	S3x5.7	BA	N/A	N/A	3.05	1.50	2.13	0	0.12	3.75	3.75	0.00	0.00	0.00	0.12	3.75	3.75	0.4572	1.0668	63.68	0.00	0.3503
208	A	2000 X 1500	SEE SIGN-48	2	S3x5.7	BA	N/A	N/A	3.05	1.50	2.13	0	0.10	3.73	3.73	0.00	0.00	0.00	0.10	3.73	3.73	0.4572	1.0668	63.34	0.00	0.3503
209	A	2000 X 1500	SEE SIGN-48	2	S3x5.7	BA	N/A	N/A	3.05	1.50	2.13	0	0.10	3.73	3.73	0.00	0.00	0.00	0.10	3.73	3.73	0.4572	1.0668	63.34	0.00	0.3503



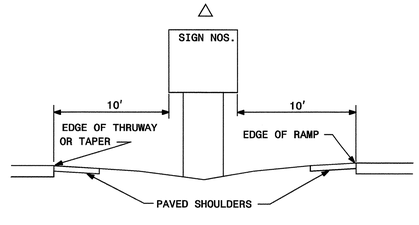
TYPICAL ELEVATION
GROUND MOUNTED SIGNS

NOTES

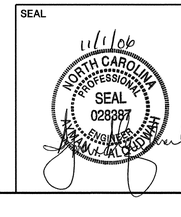
1. DIMENSION "S" REPRESENTS AN INCREASE (+), OR A DECREASE (-) IN POLE LENGTH, RELATIVE TO THE ELEVATION OF THE EDGE OF PAVEMENT.

2. FIELD VERIFICATIONS SHALL BE REQUIRED FOR ALL SUPPORTS, SEE (*) ARTICLE 903-3. FABRICATORS SHALL BE AISC CERTIFIED IN CATEGORY 1, SEE (*) ARTICLE 1072-1. (*) = N.C.D.O.T. STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES

3. PLAN LOCATIONS FOR EXISTING UTILITIES ARE BASED ON THE BEST AVAILABLE INFORMATION AND, THEREFORE MAY NOT BE PRECISELY ACCURATE. THEREFORE, IT IS INCUMBENT UPON THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF UTILITIES BEFORE BEGINNING WORK IN A LOCATION.



SEAL



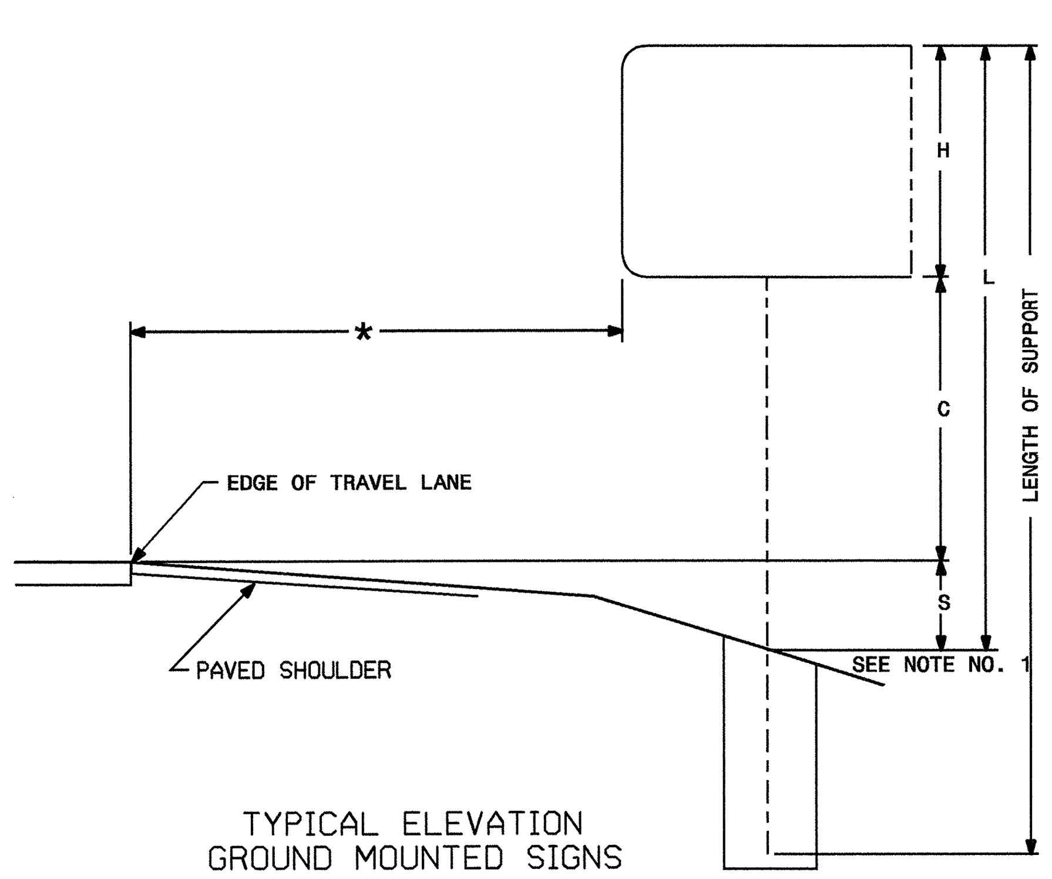
SCALE	1:1000
DATE	MAY 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

TIP NO.	SHEET NO.
R-0609IA	SIGN-33C

210	A	2500 X 1500	SEE SIGN-63	2	S3x5.7	BA	N/A	N/A	9.14	1.50	2.13	1.067	0.09	3.72	4.79	0.00	0.00	0.00	0.09	3.72	4.79	0.3048	1.2192	97.39	0.00	0.1779
211	A	2500 X 1500	SEE SIGN-65	2	S3x5.7	BA	N/A	N/A	9.14	1.50	2.13	1.067	0.19	3.82	4.89	0.00	0.00	0.00	0.19	3.82	4.89	0.3048	1.2192	99.08	0.00	0.1779
212	A	2500 X 1500	44+85 (L)	2	S3x5.7	BA	N/A	N/A	9.14	1.50	2.13	1.067	0.19	3.82	4.89	0.00	0.00	0.00	0.19	3.82	4.89	0.3048	1.2192	99.08	0.00	0.1779
213	A	2500 X 1500	23+85 (Y6)	2	S3x5.7	BA	N/A	N/A	9.14	1.50	2.13	1.067	0.10	3.73	4.80	0.00	0.00	0.00	0.10	3.73	4.80	0.3048	1.2192	97.56	0.00	0.1779
214	A	2500 X 1500	51+10 (L)	2	S3x5.7	BA	N/A	N/A	9.14	1.50	2.13	1.067	0.12	3.75	4.82	0.00	0.00	0.00	0.12	3.75	4.82	0.3048	1.2192	97.90	0.00	0.1779
215	A	2500 X 1500	28+10 (Y6)	2	S3x5.7	BA	N/A	N/A	9.14	1.50	2.13	1.067	0.13	3.76	4.83	0.00	0.00	0.00	0.13	3.76	4.83	0.3048	1.2192	98.07	0.00	0.1779
216	A	2500 X 1500	30+13 (Y6)	2	S3x5.7	BA	N/A	N/A	9.14	1.50	2.13	1.067	0.10	3.73	4.80	0.00	0.00	0.00	0.10	3.73	4.80	0.3048	1.2192	97.56	0.00	0.1779
217	A	2500 X 1500	26+00 (Y6)	2	S3x5.7	BA	N/A	N/A	9.14	1.50	2.13	1.067	0.10	3.73	4.80	0.00	0.00	0.00	0.10	3.73	4.80	0.3048	1.2192	97.56	0.00	0.1779
218	A	1800 X 1500	11+20 RAMP C	2	S3x5.7	BA	N/A	N/A	9.14	1.50	2.13	1.067	0.12	3.75	4.82	0.00	0.00	0.00	0.12	3.75	4.82	0.3048	1.2192	97.90	0.00	0.1779
219	A	2500 X 1500	57+20 (L)	2	S3x5.7	BA	N/A	N/A	9.14	1.50	2.13	1.067	0.11	3.74	4.81	0.00	0.00	0.00	0.11	3.74	4.81	0.3048	1.2192	97.73	0.00	0.1779
220	A	2500 X 1500	37+30 (Y6)	2	S3x5.7	BA	N/A	N/A	9.14	1.50	2.13	1.067	0.12	3.75	4.82	0.00	0.00	0.00	0.13	3.76	4.83	0.3048	1.2192	97.98	0.00	0.1779
221	A	2500 X 1500	40+80 (Y6)	2	S3x5.7	BA	N/A	N/A	9.14	1.50	2.13	1.067	0.14	3.77	4.84	0.00	0.00	0.00	0.13	3.76	4.83	0.3048	1.2192	98.15	0.00	0.1779
222	A	2200 X 1500	18+20 (Y6)	2	S3x5.7	BA	N/A	N/A	9.14	1.50	2.13	1.067	0.14	3.77	4.84	0.00	0.00	0.00	0.14	3.77	4.84	0.3048	1.2192	98.23	0.00	0.1779
901	A	4600 X 3100	800' from MM	2	W6x16	BA	N/A	N/A	9.14	3.10	2.68	1.829	-0.55	5.23	7.06	0.00	0.00	0.00	-0.14	5.64	7.47	0.4572	1.9812	388.98	0.00	0.6505
902	A	4600 X 1900	31+50 (Y6)	2	W6x9	BA	N/A	N/A	9.14	1.90	2.13	1.524	0.56	4.59	6.12	0.00	0.00	0.00	0.89	4.92	6.45	0.4572	1.6764	196.92	0.00	0.5504
903	A	3900 X 1200	31+07 (Y6)	2	S4x7.7	BA	N/A	N/A	9.14	1.20	2.13	1.372	0.86	4.19	5.57	0.00	0.00	0.00	1.03	4.36	5.74	0.3048	1.524	147.91	0.00	0.2224
904	A	2300 X 1900	26+55 (Y6)	2	S4x7.7	BA	N/A	N/A	9.14	1.90	2.13	1.372	1.02	5.05	6.43	0.00	0.00	0.00	1.46	5.49	6.87	0.3048	1.524	170.71	0.00	0.2224
																								TOTAL 10938.87	TOTAL 3535.97	TOTAL 33.4323
																				USE:				10939	3536	34



TYPICAL ELEVATION
GROUND MOUNTED SIGNS

NOTES

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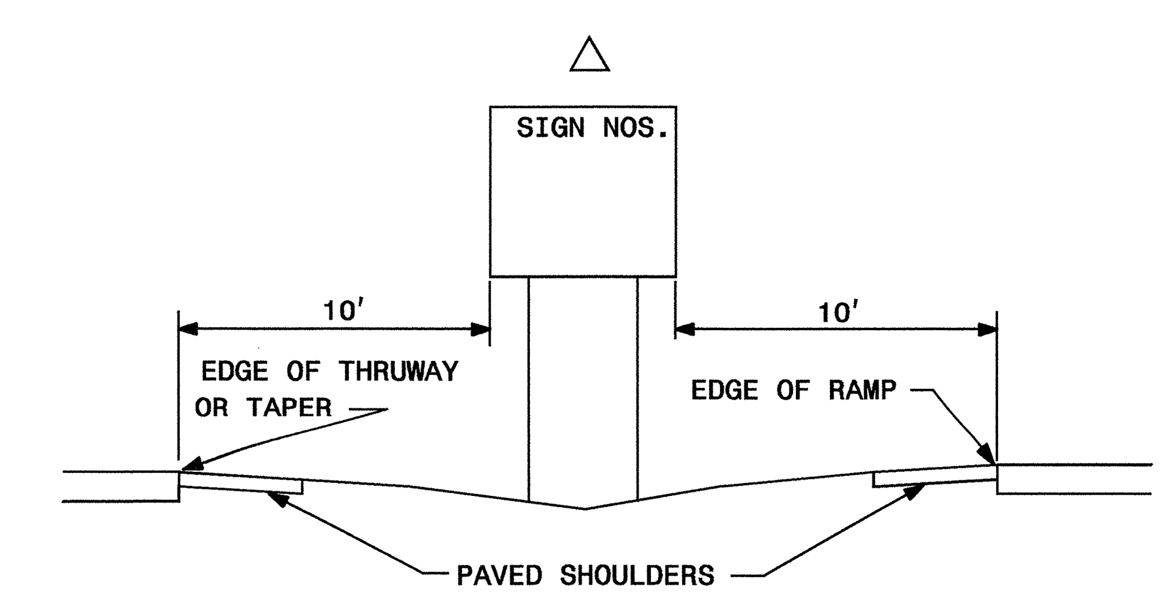


SEAL

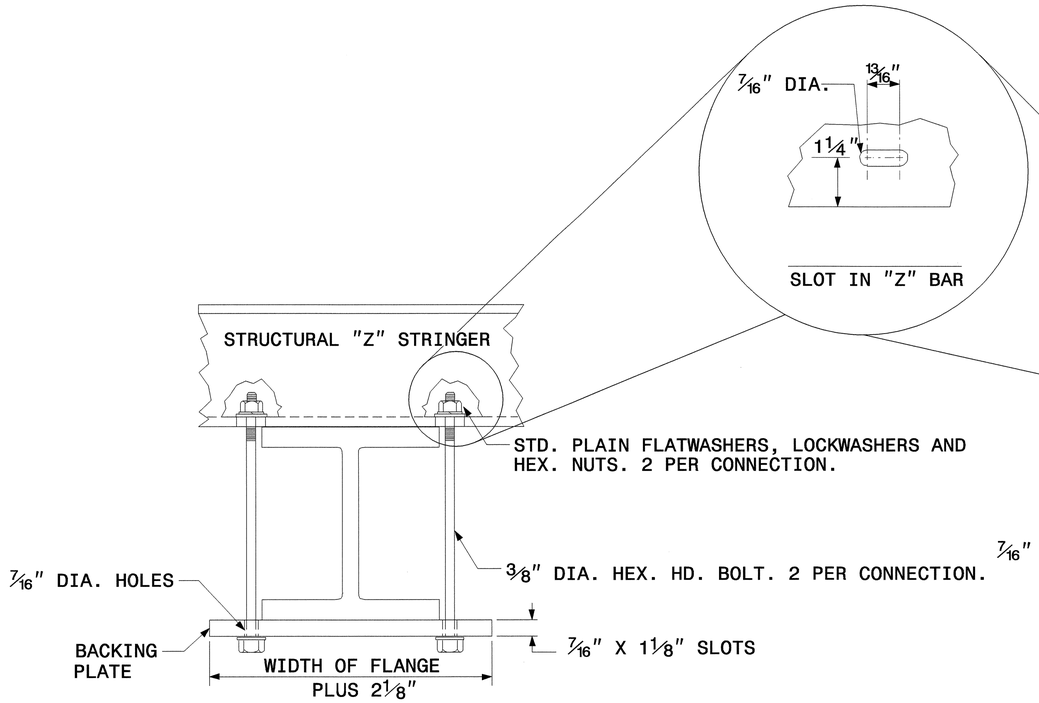
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028387 A. ALQUDWAH 11/1/06

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION
DATE	MAY 2006	DIVISION OF HIGHWAYS
SIGNING DESIGN ENG	G. TERLIZZI	TRAFFIC ENGINEERING BRANCH
SIGNING PROJECT DGN ENG	K. JORDAN	
SIGNING PROJECT ENG	A. ALQUDWAH	

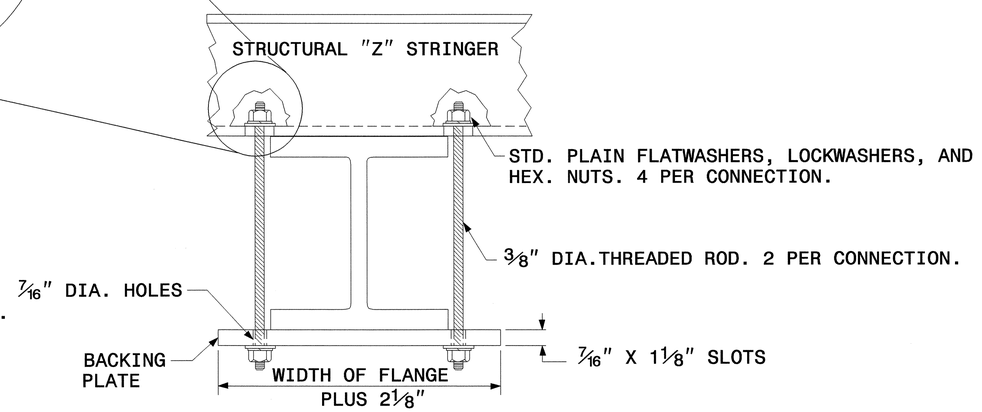
REVISIONS

TECC221636 11/1/2006 supports gterlizzi TECC-Oce34bond

TIP NO.	SHEET NO.
R-0609IA	SIGN-34

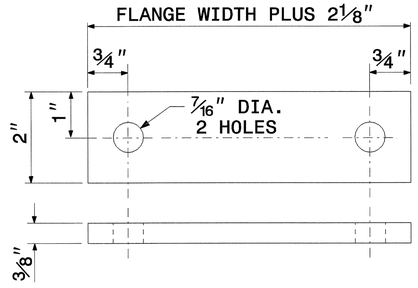


SUPPORT MOUNTING DETAIL



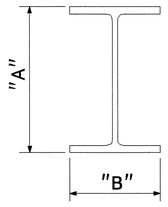
ALTERNATIVE SUPPORT MOUNTING DETAIL

BACKING PLATE DETAIL



1. THE SUPPORT MOUNTING DETAIL SHOWS A "W" OR "S" BEAM. THIS DETAIL IS ALSO USED FOR MOUNTING SIGNS TO WOOD OR SQUARE TUBE SUPPORTS.
2. USE GALVANIZED STEEL FOR BACKING PLATES AND MOUNTING BOLTS IN ACCORDANCE WITH ASTM A123.
3. SEE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES FOR TYPE OF MATERIAL TO BE USED FOR SIGN HANGER ASSEMBLIES AND SUPPORTS.
4. USE GALVANIZED STEEL FOR MOUNTING BOTS AND THREADED RODS IN COMPLIANCE WITH ASTM A307 AND ASTM A153.

SIGN SUPPORTS SECTION DIMENSIONS



SECTION	A	B
S3 X 5.7	3"	2 3/8"
S4 X 7.7	4"	2 5/8"
W6 X 9	6"	4"
W6 X 12	6"	4"
W6 X 16	6 1/4"	4"
W8 X 18	8 1/8"	5 1/4"
W8 X 21	8 1/4"	5 1/4"
W10 X 22	10 1/8"	5 3/4"
W10 X 26	10 3/8"	5 3/4"
W12 X 26	12 1/4"	6 1/2"
W14 X 30	13 7/8"	6 3/4"
W16 X 31	15 7/8"	5 1/2"
W18 X 35	17 3/4"	6"
W18 X 40	17 7/8"	6"
W21 X 44	20 5/8"	6 1/2"

SEAL

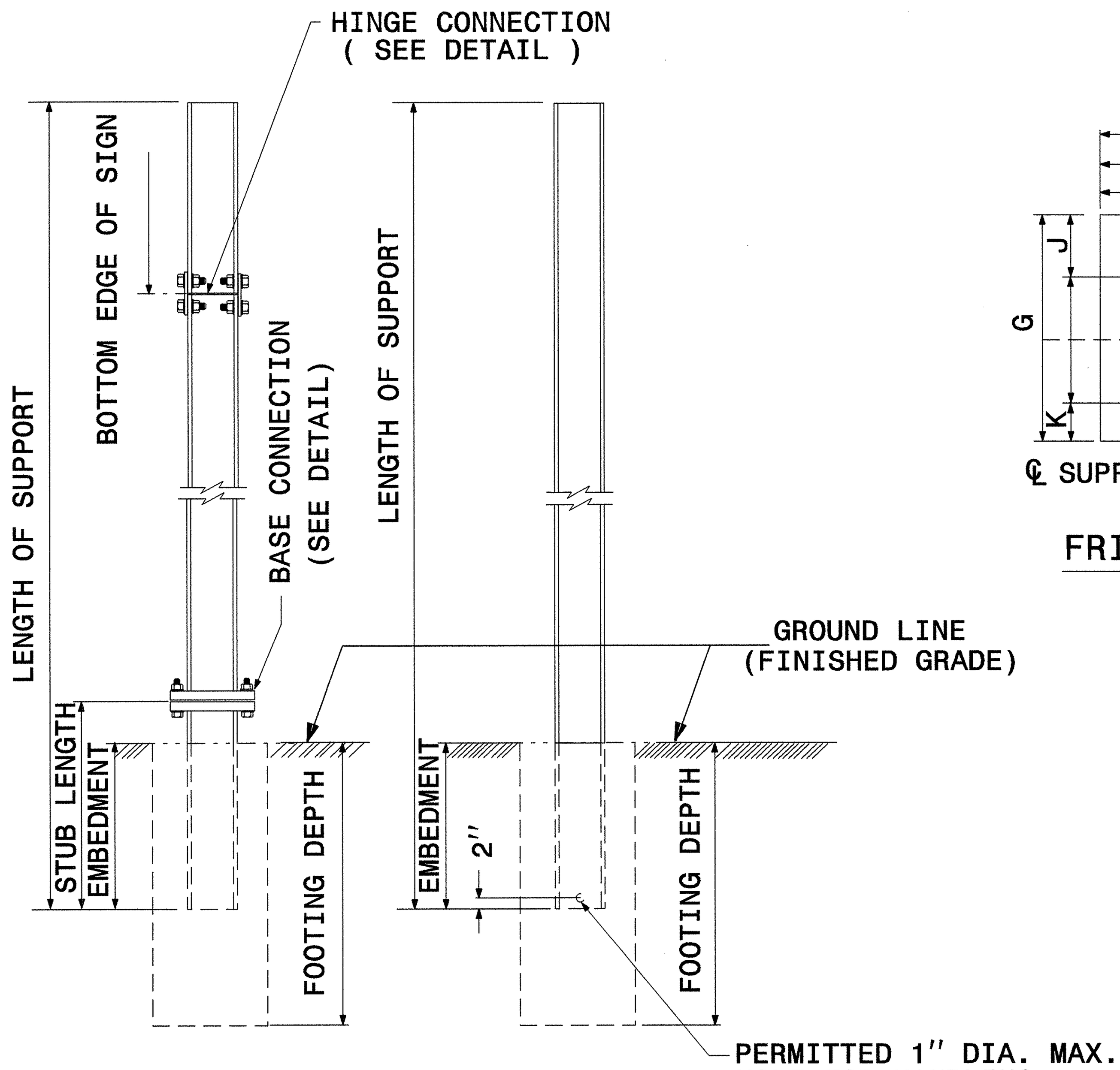
NORTH CAROLINA PROFESSIONAL SEAL 022959 ENGINEER RONALD W. KIRKS

6/9/06

SIGN MOUNTING DETAILS

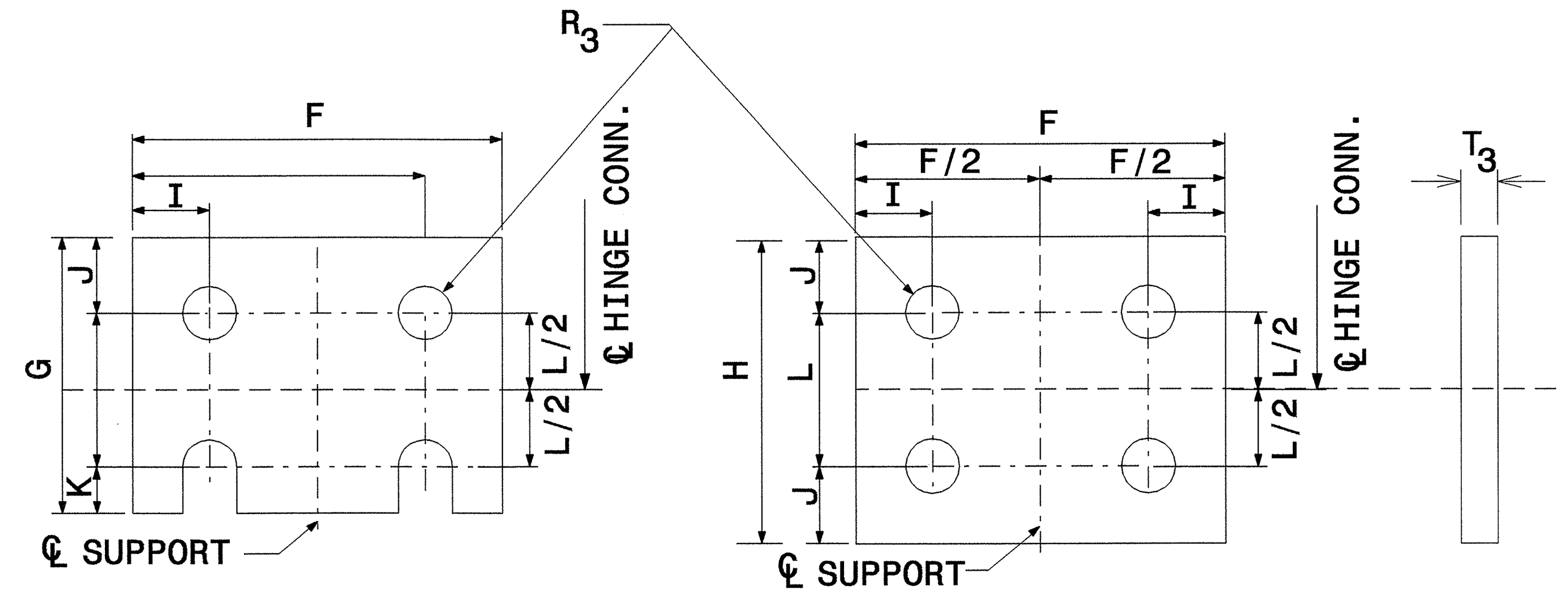
SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	MAY 2006		
SIGNING DESIGN ENG	G. TERLIZZI	DIVISION OF HIGHWAYS	
SIGNING PROJECT DGN ENG	K. JORDAN	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT ENG	A. ALQUDWAH		

TIP NO.	SHEET NO.
R-0609IA	SIGN-35



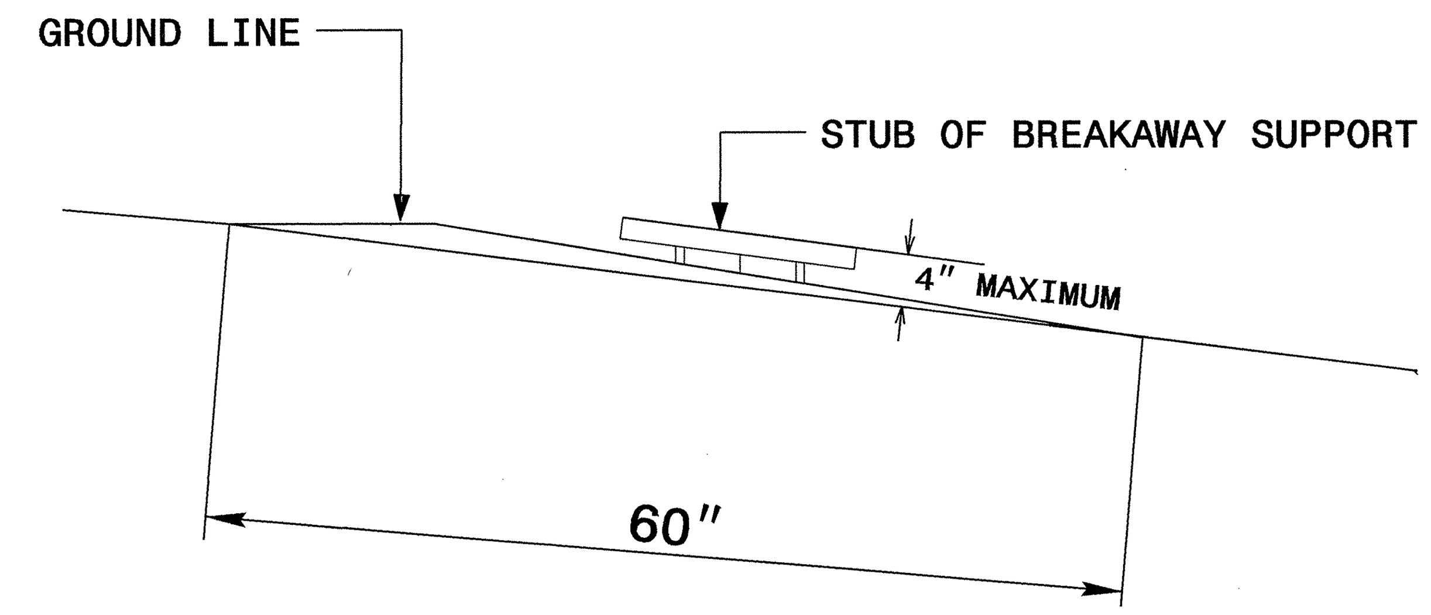
TYPICAL BREAK-AWAY SUPPORT

TYPICAL SIMPLE SUPPORT

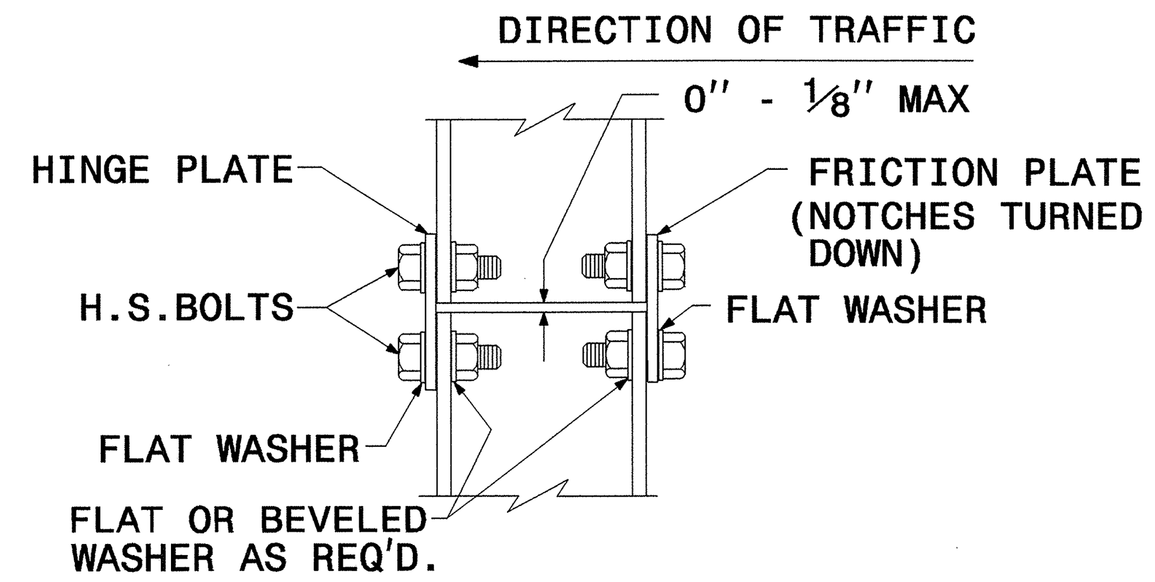


FRICTION ℙ DETAIL

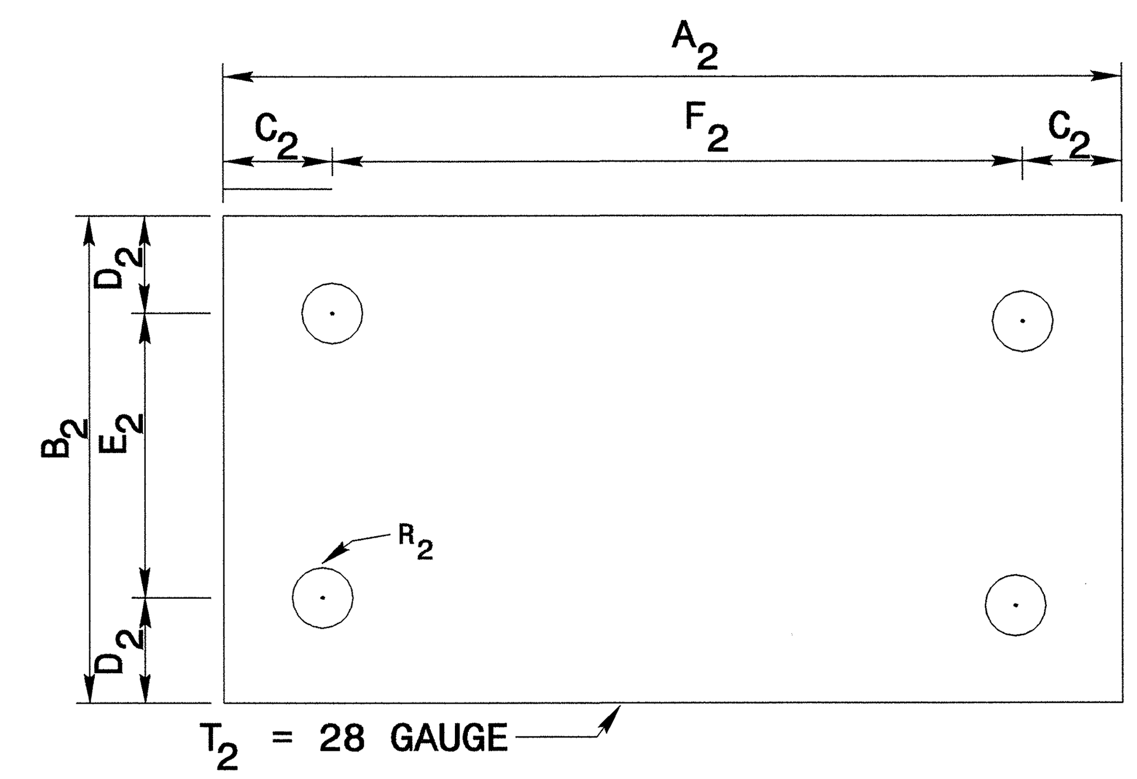
HINGE ℙ DETAIL



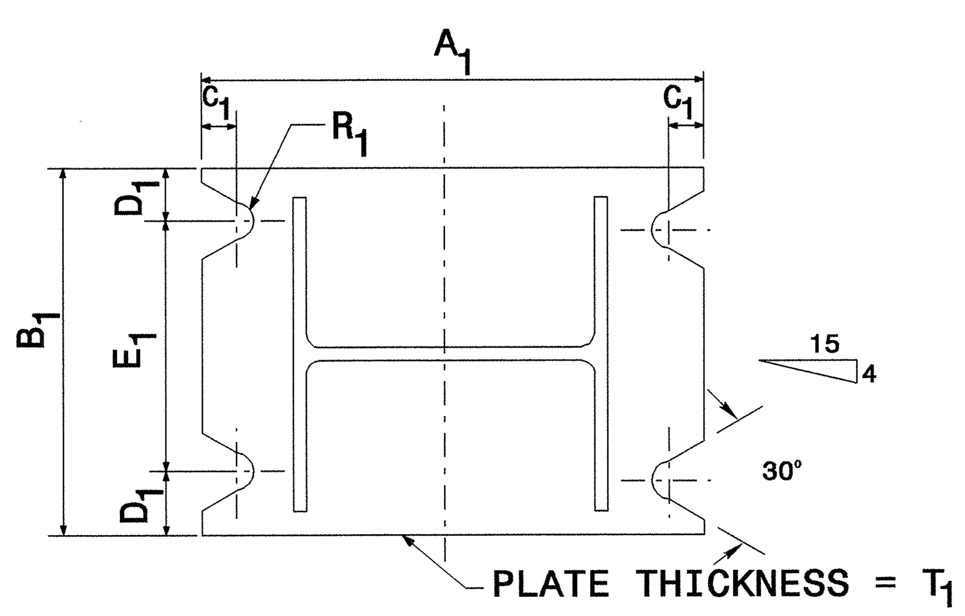
STUB HEIGHT REQUIREMENTS



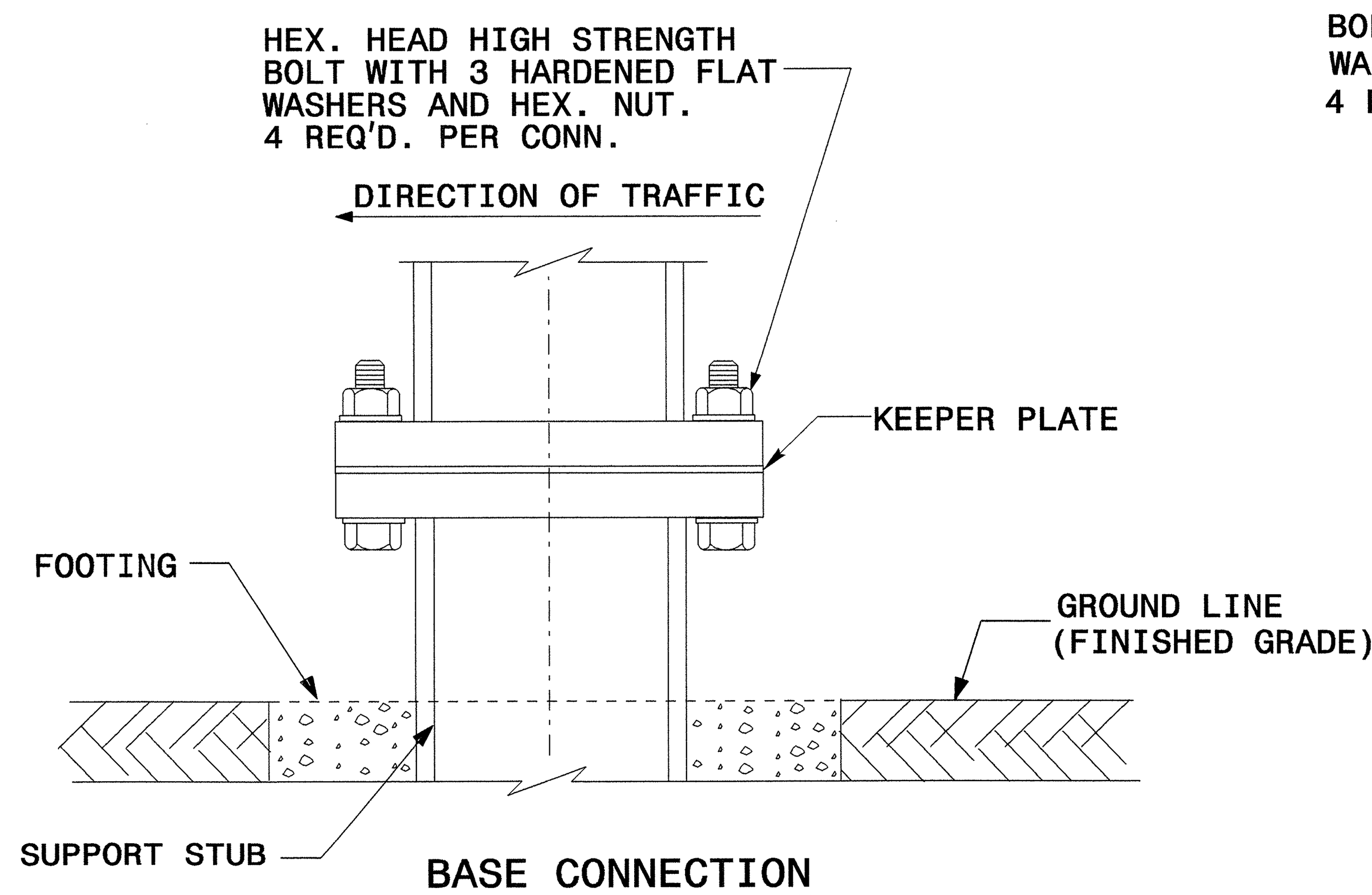
HINGE CONNECTION



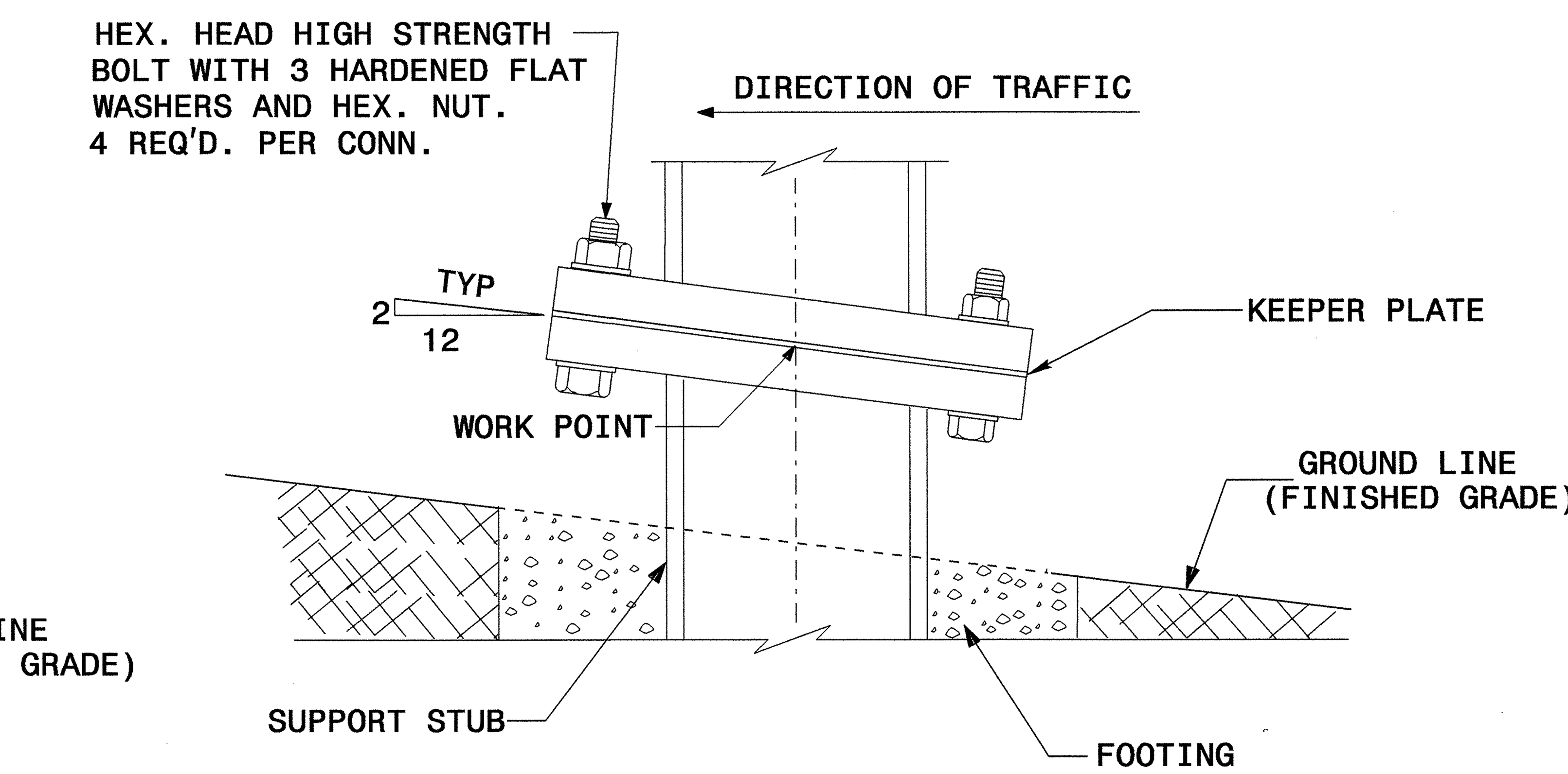
KEEPER PLATE



SLIP BASE PLATE



BASE CONNECTION



BASE CONNECTION

* SEE NOTE 14

SEE SHEET SIGN-7 FOR DIMENSIONS.
SEE SHEET SIGN-8 FOR NOTES.

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 022959 RONALD W. KING 6/9/06

GROUND MOUNTED SIGN SUPPORT

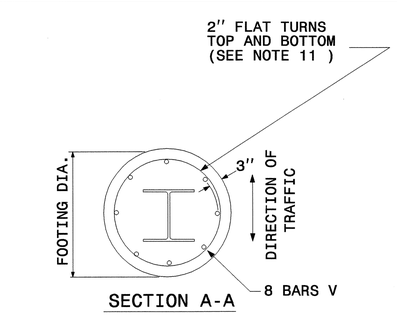
SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	MAY 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	G. TERLIZZI	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

TIP NO.	SHEET NO.
R-0609IA	SIGN-36

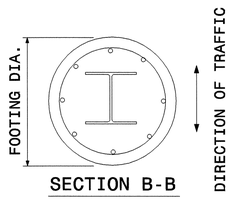
	SLIP BASE PLATE DATA								KEEPER PLATE DATA							HINGE CONNECTION DATA										BREAK AWAY SUPPORT WEIGHT CONSTANT LBS.
BEAM SHAPE	BOLT SIZE	A_1	B_1	C_1	D_1	E_1	T_1	R_1	A_2	B_2	C_2	D_2	E_2	R_2	T_2	BOLT SIZE	F	G	H	I	J	K	L	R_3	T_3	
S3X5.7	½"DIA.X3½"	7"	4"	1"	¾"	2½"	1"	9/32"	7"	4"	1"	¾"	2½"	9/16"	28 GAUGE	½"DIA.X1¼"	2¼"	3½"	4"	½"	1"	½"	2"	9/16"	3/8"	18
S4X7.7	½"DIA.X3½"	8"	4"	1"	¾"	2½"	1"	9/32"	8"	4"	1"	¾"	2½"	9/16"	28 GAUGE	½"DIA.X1¼"	2⅝"	3½"	4"	½"	1"	½"	2"	9/16"	3/8"	20
W6X9	½"DIA.X3½"	10"	5"	1"	¾"	3½"	1"	9/32"	10"	5"	1"	¾"	3½"	9/16"	28 GAUGE	½"DIA.X1¼"	4"	3½"	4"	¾"	1"	½"	2"	9/16"	3/8"	32
W6X12	¾"DIA.X4¼"	10"	5"	1¼"	⅞"	3¼"	1¼"	11/32"	10"	5"	1¼"	⅞"	3¼"	11/16"	28 GAUGE	¾"DIA.X2¼"	4"	4"	4½"	¾"	1⅛"	⅝"	2¼"	11/16"	3/8"	39
W6X16	¾"DIA.X4¼"	10"	6"	1¼"	⅞"	4¼"	1¼"	11/32"	10"	6"	1¼"	⅞"	4¼"	11/16"	28 GAUGE	¾"DIA.X2½"	4"	4"	4½"	¾"	1⅛"	⅝"	2¼"	11/16"	½"	47
W8X18	¾"DIA.X4¾"	12½"	6"	1¼"	⅞"	4¼"	1½"	11/32"	12½"	6"	1¼"	⅞"	4¼"	11/16"	28 GAUGE	¾"DIA.X2½"	5¼"	4"	4½"	1"	1⅛"	⅝"	2¼"	11/16"	½"	70
W8X21	¾"DIA.X4¾"	12½"	6"	1½"	1"	4"	1½"	13/32"	12½"	6"	1½"	1"	4"	13/16"	28 GAUGE	¾"DIA.X2¾"	5¼"	6"	7"	1"	1¾"	¾"	3½"	13/16"	½"	73
W10X22	¾"DIA.X4¾"	16"	8"	1½"	1"	6"	1½"	13/32"	16"	8"	1½"	1"	6"	13/16"	28 GAUGE	¾"DIA.X2¾"	5¾"	6"	7"	1"	1¾"	¾"	3½"	13/16"	½"	119
W10X26	¾"DIA.X5¼"	16"	8"	1½"	1"	6"	1¾"	13/32"	16"	8"	1½"	1"	6"	13/16"	28 GAUGE	¾"DIA.X2¾"	5¾"	6"	7"	1"	1¾"	¾"	3½"	13/16"	5/8"	140
W12X26	¾"DIA.X5¼"	18"	9"	1½"	1"	7"	1¾"	13/32"	18"	9"	1½"	1"	7"	13/16"	28 GAUGE	¾"DIA.X2¾"	6½"	6"	7"	1"	1¾"	¾"	3½"	13/16"	5/8"	176
W14X30	1"DIA.X5½"	18"	9"	2"	1½"	6"	1¾"	17/32"	18"	9"	2"	1½"	6"	1 1/16"	28 GAUGE	1"DIA.X3"	6¾"	7"	8"	1¼"	2"	1"	4"	1 1/16"	5/8"	178
W16X31	1"DIA.X5½"	21"	9"	2"	1½"	6"	1¾"	17/32"	21"	9"	2"	1½"	6"	1 1/16"	28 GAUGE	1"DIA.X3¼"	5½"	7"	8"	1¼"	2"	1"	4"	1 1/16"	¾"	205
W18X35	1"DIA.X5½"	22"	9"	2"	1½"	6"	1¾"	17/32"	22"	9"	2"	1½"	6"	1 1/16"	28 GAUGE	1"DIA.X3¼"	6"	7"	8"	1¼"	2"	1"	4"	1 1/16"	¾"	216
W18X40	1"DIA.X6¼"	23"	9"	2"	1½"	6"	2"	17/32"	23"	9"	2"	1½"	6"	1 1/16"	28 GAUGE	1"DIA.X3¾"	6"	7"	8"	1¼"	2"	1"	4"	1 1/16"	⅞"	257
W21X44	1"DIA.X6¼"	25"	9"	2"	1½"	6"	2"	17/32"	25"	9"	2"	1½"	6"	1 1/16"	28 GAUGE	1"DIA.X3¾"	6½"	7"	8"	1¼"	2"	1"	4"	1 1/16"	⅞"	279

FOUNDATION DATA *		
FOOTING DIAMETER	REINFORCEMENT	SPIRAL BAR
1'	8 # 4 BARS	#3 BAR, 3" PITCH
1' 6"	8 # 6 BARS	#3 BAR, 3" PITCH
2'	8 # 7 BARS	#3 BAR, 3" PITCH
2' 6"	8 # 9 BARS	#3 BAR, 3" PITCH
3'	8 # 11 BARS	#3 BAR, 3" PITCH
3' 6"	8 # 12 BARS	#3 BAR, 3" PITCH
4'	8 # 14 BARS	#3 BAR, 3" PITCH

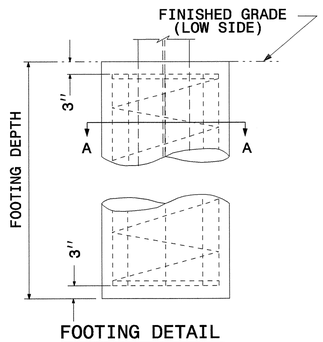
* FOUNDATION DIMENSIONS ARE SHOWN IN PLANS



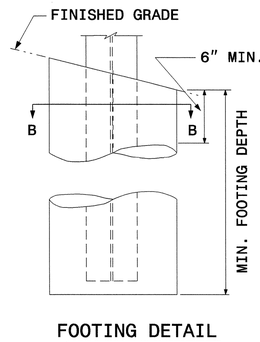
SECTION A-A



SECTION B-B



FOOTING DETAIL



FOOTING DETAIL

SEE SHEET SIGN-8 FOR NOTES.

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022959 ENGINEER RONALD W. KING 4/4/06

GROUND MOUNTED SIGN SUPPORT

SCALE	1:1000
DATE	MAY 2006
SIGNING DESIGN ENG	G. TERLIZZA
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

#FILE# #USER#

TIP NO.	SHEET NO.
R-0609IA	SIGN-37

NOTES:

1. DESIGN CONFORMS WITH THE SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS - A.A.S.H.T.O.
2. USE MATERIALS, FABRICATE AND ERECT SIGNS AND SUPPORTS THAT CONFORM TO THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
3. USE HIGH STRENGTH BOLTS, NUTS AND WASHERS THAT CONFORM TO A.S.T.M. A-325 AND THAT ARE GALVANIZED IN ACCORDANCE WITH A.S.T.M. A-153.
4. USE BACKING PLATES, SLIP BASE PLATES, FRICTION PLATES, AND HINGE PLATES THAT CONFORM TO A.S.T.M. A-36 AND THAT ARE GALVANIZED IN ACCORDANCE WITH A.S.T.M. A-123 PRIOR TO GALVANIZING, GRIND SMOOTH ANY METAL PROJECTION BEYOND THE PLATE FACE. KEEPER PLATES AHALL BE MANUFACTURED FROM 28 GAUGE SHEET STEEL THAT CONFORMS TO A.S.T.M. A-36 AND IS GALVAVIZED IN ACCORDANCE WITH A.S.T.M. A-123
5. ASSEMBLE HINGE CONNECTIONS IN THE SHOP. SHOP TIGHTEN BOLTS BY USE OF EITHER A CALIBRATED POWER WRENCH OR A MANUAL TORQUE WRENCH. TIGHTEN EACH HINGE CONNECTION BOLT TO 1/3 PAST SNUG.
6. BASE PLATES DETAILS ARE FOR INSTALLATIONS ON THE RIGHT SHOULDER AND IN GORE AREAS.
7. ASSEMBLE UPPER SUPPORT TO STUB AS SHOWN IN DETAIL. SLIP BASE PLATES SHALL BE FILLET WELDED ONTO POSTS ALL AROUND THE STRUCTURAL SHAPE SO AS TO INSURE NO LOSS OF STRENGTH. ASSEMBLE IN EITHER SHOP OR FIELD. 28 GAUGE KEEPER PLATE IS PLACED BETWEEN SLIP BASE PLATES TO PREVENT BOLT SLIPPING. TIGHTEN BOLTS TO THE FOLLOWING PRESCRIBED TORQUE:

BOLT DIAMETER	TORQUE (LB. FT.)
1/2"	9
5/8"	22
3/8"	37
1"	48

COMPLETELY ASSEMBLE B/A POSTS PRIOR TO ERECTION. B/A POST TO BE SET IN ONE PIECE. AFTER SUPPORT HAS BEEN ERECTED AND THE CONCRETE FOOTINGS HAS CURED AT LEAST 48 HRS., CLEAN CONCRETE FROM BASE CONNECTION BOLTS THEN LOOSEN AND RETIGHTEN EACH BOLT IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. DO NOT OVERTIGHTEN. BURR ALL BOLT THREADS OF BASE CONNECTIONS TO PREVENT LOOSENING.

8. USE REINFORCED FOOTINGS WITH DIMENSIONS AS SHOWN IN PLANS. WHERE SOLID ROCK IS ENCOUNTERED, THE ENGINEER DIRECTS WHETHER TO PLACE THE FOOTING AT THE PRESCRIBED DEPTH OR EXTEND IT AT LEAST TWO FEET INTO THE ROCK. CONSTRUCT ALL FOOTINGS OF CLASS A CONCRETE.
9. FORM TOP 6" OF FOOTINGS. ENGINEER APPROVES THE METHOD USED.
10. THE FINAL FLAT TURN OF SPIRAL OR HOOPS NO. 3 OR LARGER PLACED 3" FROM TOP AND BOTTOM OF FOOTING MAY BE WELDED TO VERTICAL REINFORCING BARS. NO OTHER WELDING WILL BE PERMITTED.
11. ELIMINATE HINGE CONNECTION FOR ALL SINGLE SUPPORT SIGNS.
12. DETAIL IS FOR ONE DIRECTION BREAKAWAY. WHEN PLANS REQUIRE A TWO DIRECTION BREAKAWAY, TWO FRICTION PLATES SHALL BE USED IN LIEU OF ONE FRICTION PLATE AND ONE HINGE PLATE.
13. SHAPE THE TOPS OF THE FOOTINGS TO CONFORM WITH FINISHED GROUND ELEVATIONS SUCH THAT WATER WILL NOT COLLECT AGAINST THE SUPPORTS.
14. IF THE GROUNDWATER IS ENCOUNTERED AT AN DEPTH SHALLOWER THAN 7 FEET, THE SIGN FOUNDATION MUST BE REDESIGNED BASED UPON THE ACTUAL FIELD CONDITIONS. THE FOUNDATION DESIGN DOES NOT APPLY TO VERY SOFT OR LOOSE SOIL, MUCK, WEATHERED ROCK, OR HARD ROCK.

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 022959 ENGINEER RONALD W. KING 6/9/06

GROUND MOUNTED SIGN SUPPORT

SCALE	1:1000	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	MAY 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	G. TERLIZZA	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

401 QUANTITY REQ'D 4
SPEED LIMIT 70
1219 X 1524
R2-1
TWO "U" POSTS PER SIGN

402 QUANTITY REQ'D 2
SPEED LIMIT 65
1219 X 1524
R2-1
TWO "U" POSTS PER SIGN

406 QUANTITY REQ'D 11
1219 X 1219
W4-1 (R)
TWO "U" POSTS PER SIGN

407 QUANTITY REQ'D 1
1219 X 1219
W4-1 (L)
TWO "U" POSTS PER SIGN

408 QUANTITY REQ'D 5
STOP
762 X 762
R1-1
ONE "U" POST PER SIGN

409 QUANTITY REQ'D 4
STOP
914 X 914
R1-1
ONE "U" POST PER SIGN

410 QUANTITY REQ'D 8
WRONG WAY
914 X 610
R5-1a
ONE "U" POST PER SIGN

411 QUANTITY REQ'D 4
DO NOT ENTER
762 X 762
R5-1
ONE "U" POST PER SIGN

413 QUANTITY REQ'D 3
ONE WAY
1372 X 457
R6-1 (R)
TWO "U" POSTS PER SIGN

414 QUANTITY REQ'D 3
ONE WAY
1372 X 457
R6-1 (L)
TWO "U" POSTS PER SIGN

415 QUANTITY REQ'D 10
914 X 1219
R4-7
TWO "U" POSTS PER SIGN

416 QUANTITY REQ'D 2
610 X 762
R4-7
ONE "U" POST PER SIGN

418 QUANTITY REQ'D 3
EXIT 50 M.P.H.
1219 X 1524
W13-2
TWO "U" POSTS PER SIGN

422 QUANTITY REQ'D 1
1219 X 1219
W4-3(R)
TWO "U" POSTS PER SIGN

430 QUANTITY REQ'D 2
RIGHT LANE ENDS 1500 FT
1219 X 1219
W19-10(R)
TWO "U" POSTS PER SIGN

433 QUANTITY REQ'D 2
RIGHT LANE ENDS
1219 X 1219
W9-2(R)
TWO "U" POSTS PER SIGN

435 QUANTITY REQ'D 4
1219 X 1219
W4-2(R)
TWO "U" POSTS PER SIGN

438 QUANTITY REQ'D 4
914 X 914
W3-3
ONE "U" POST PER SIGN

443 QUANTITY REQ'D 3
914 X 914
W1-2L
ONE "U" POST PER SIGN

444 QUANTITY REQ'D 3
914 X 914
W1-2R
ONE "U" POST PER SIGN

451 QUANTITY REQ'D 3
RAMP 25 M.P.H.
1219 X 1524
W13-3
TWO "U" POSTS PER SIGN

462 QUANTITY REQ'D 4
35 M.P.H.
610 X 610
W13-1
MOUNT BELOW SIGN 438 IN 4 INSTALLATIONS

463 QUANTITY REQ'D 2
RIGHT LANE ENDS AHEAD
1219 X 1219
W19-10(R)
TWO "U" POSTS PER SIGN

464 QUANTITY REQ'D 2
RIGHT LANE ENDS 3/4 MILE
1219 X 1219
W19-10(R)
TWO "U" POSTS PER SIGN

465 QUANTITY REQ'D 2
REDUCE SPEED AHEAD
24 X 30
R2-5a
ONE "U" POST PER SIGN

466 QUANTITY REQ'D 2
SPEED LIMIT 60
1219 X 1524
R2-1
TWO "U" POSTS PER SIGN

467 QUANTITY REQ'D 1
EXIT 55 M.P.H.
1219 X 1524
W13-2
TWO "U" POSTS PER SIGN

468 QUANTITY REQ'D 2
RAMP 50 M.P.H.
1219 X 1524
W13-3
TWO "U" POSTS PER SIGN

NOTE: THIS DRAWING IS DIMENSIONED IN MILIMETERS UNLESS OTHERWISE DEPICTED WITHIN THE DRAWING.

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER

TYPE "E" SIGNS

501 510 521

NUMBERS: 501,510,521 NOT USED

507 516 523 529

EAST / WEST — 2 - 600mm x 300mm
FUTURE 74 / FUTURE 74 — 2 - 600mm x 600mm
SOUTH / NORTH — 2 - 600mm x 300mm
311 / 311 — 2 - 600mm x 600mm
↑ / → — 2 - 525mm x 375mm

TWO "U" POSTS PER SIGN

533 541 548 559 567

EAST — 1 - 600mm x 300mm
INTERSTATE 74 — 1 - 600mm x 600mm
← — 1 - 525mm x 375mm

ONE "U" POST PER SIGN

540

EAST / WEST — 2 - 600mm x 300mm
INTERSTATE 74 / INTERSTATE 74 — 2 - 600mm x 600mm
↰ / → — 2 - 525mm x 375mm

TWO "U" POSTS PER SIGN

502 509 511 518 524

NUMBERS: 502,509,511,518,524
NOT USED

508 517 519

EAST / SOUTH — 2 - 600mm x 300mm
FUTURE 74 / 311 — 2 - 600mm x 600mm
← / ← — 2 - 525mm x 375mm

MOUNT BELOW SIGN NO. 302
MOUNT BELOW SIGN NO. 304
MOUNT BELOW SIGN NO. 305

534 537 576

WEST — 1 - 600mm x 300mm
INTERSTATE 74 — 1 - 600mm x 600mm
↑ — 1 - 525mm x 375mm

ONE "U" POST PER SIGN

542 553 562

WEST / EAST — 2 - 600mm x 300mm
INTERSTATE 74 / INTERSTATE 74 — 2 - 600mm x 600mm
↑ / → — 2 - 525mm x 375mm

TWO "U" POSTS PER SIGN

550 560

EAST — 1 - 600mm x 300mm
INTERSTATE 74 — 1 - 900mm x 900mm

ONE "U" POST PER SIGN

565

WEST / EAST — 2 - 600mm x 300mm
INTERSTATE 74 / INTERSTATE 74 — 2 - 600mm x 600mm
← / ↑ — 2 - 525mm x 375mm

TWO "U" POSTS PER SIGN

503 506 512 515 525 528 580 581

JCT / JCT — 2 - 525mm x 375mm
FUTURE 74 / 311 — 2 - 600mm x 600mm

TWO "U" POSTS PER SIGN

530

EAST / SOUTH — 2 - 600mm x 300mm
FUTURE 74 / 311 — 2 - 600mm x 600mm
→ / → — 2 - 525mm x 375mm

MOUNT BELOW SIGN NO. 308

535 539 545 549 552 556 561 568 578 579

JCT — 1 - 525mm x 375mm
INTERSTATE 74 — 1 - 600mm x 600mm

ONE "U" POST PER SIGN

543 554 570

WEST — 1 - 600mm x 300mm
INTERSTATE 74 — 1 - 600mm x 600mm
↰ — 1 - 525mm x 375mm

ONE "U" POST PER SIGN

551 566

WEST — 1 - 600mm x 300mm
INTERSTATE 74 — 1 - 900mm x 900mm

ONE "U" POST PER SIGN

569

WEST / EAST — 2 - 600mm x 300mm
INTERSTATE 74 / INTERSTATE 74 — 2 - 600mm x 600mm
↑ / → — 2 - 525mm x 375mm
SOUTH — 1 - 600mm x 300mm
311 — 1 - 600mm x 600mm
→ — 1 - 525mm x 375mm

TWO "U" POSTS PER SIGN

504 513 520 526

WEST / EAST — 2 - 600mm x 300mm
FUTURE 74 / FUTURE 74 — 2 - 600mm x 600mm
NORTH / SOUTH — 2 - 600mm x 300mm
311 / 311 — 2 - 600mm x 600mm
↑ / → — 2 - 525mm x 375mm

TWO "U" POSTS PER SIGN

531

EAST / WEST — 2 - 600mm x 300mm
INTERSTATE 74 / INTERSTATE 74 — 2 - 600mm x 600mm
← / → — 2 - 525mm x 375mm

TWO "U" POSTS PER SIGN

536

EAST — 1 - 600mm x 300mm
INTERSTATE 74 — 1 - 600mm x 600mm
→ — 1 - 525mm x 375mm

ONE "U" POST PER SIGN

546 557

EAST / WEST — 2 - 600mm x 300mm
INTERSTATE 74 / INTERSTATE 74 — 2 - 600mm x 600mm
↑ / → — 2 - 525mm x 375mm

TWO "U" POSTS PER SIGN

563

WEST — 1 - 600mm x 300mm
INTERSTATE 74 — 1 - 600mm x 600mm
→ — 1 - 525mm x 375mm

ONE "U" POST PER SIGN

571

EAST / WEST — 2 - 600mm x 300mm
INTERSTATE 74 / INTERSTATE 74 — 2 - 600mm x 600mm
↑ / → — 2 - 525mm x 375mm
SOUTH — 1 - 600mm x 300mm
311 — 1 - 600mm x 600mm
↑ — 1 - 525mm x 375mm

TWO "U" POSTS PER SIGN

505 514 522 527

WEST / NORTH — 2 - 600mm x 300mm
FUTURE 74 / 311 — 2 - 600mm x 600mm
← / ← — 2 - 525mm x 375mm

MOUNT BELOW SIGN NO. 301
MOUNT BELOW SIGN NO. 303
MOUNT BELOW SIGN NO. 306
MOUNT BELOW SIGN NO. 307

532

EAST — 1 - 600mm x 300mm
INTERSTATE 74 — 1 - 600mm x 600mm
↑ — 1 - 525mm x 375mm

ONE "U" POST PER SIGN

538 544 555 573 577

WEST — 1 - 600mm x 300mm
INTERSTATE 74 — 1 - 600mm x 600mm
← — 1 - 525mm x 375mm

ONE "U" POST PER SIGN

547 558

EAST — 1 - 600mm x 300mm
INTERSTATE 74 — 1 - 600mm x 600mm
↰ — 1 - 525mm x 375mm

ONE "U" POST PER SIGN

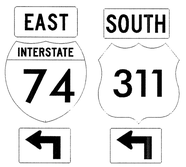
SEAL
11/1/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER A. ALQUDWAH

"F" SIGNS

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	APRIL 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	S. JOHNS	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

TIP NO.	SHEET NO.
R-0609IA	SIGN-40

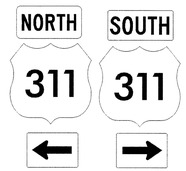
572



2 - 600mm x 300mm
2 - 600mm x 600mm
2 - 525mm x 375mm

TWO "U" POSTS PER SIGN

585



2 - 600mm x 300mm
2 - 600mm x 600mm
2 - 525mm x 375mm

TWO "U" POSTS PER SIGN

591

1 - 600mm x 300mm
1 - 600mm x 600mm
1 - 525mm x 375mm

ONE "U" POST PER SIGN

597

1 - 600mm x 300mm
1 - 600mm x 600mm
1 - 525mm x 375mm

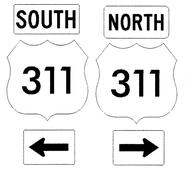
ONE "U" POST PER SIGN

574 **575**

2 - 600mm x 300mm
2 - 600mm x 600mm
2 - 525mm x 375mm

MOUNT BELOW SIGN NO. 309
MOUNT BELOW SIGN NO. 312

586



2 - 600mm x 300mm
2 - 600mm x 600mm
2 - 525mm x 375mm

TWO "U" POSTS PER SIGN

592

1 - 600mm x 300mm
1 - 600mm x 600mm
1 - 525mm x 375mm

ONE "U" POST PER SIGN

598

1 - 600mm x 300mm
1 - 600mm x 600mm
1 - 525mm x 375mm

ONE "U" POST PER SIGN

582

1 - 600mm x 300mm
1 - 600mm x 600mm

ONE "U" POST PER SIGN

587

1 - 600mm x 300mm
1 - 900mm x 900mm

ONE "U" POST PER SIGN

593

2 - 600mm x 300mm
2 - 600mm x 600mm
2 - 525mm x 375mm

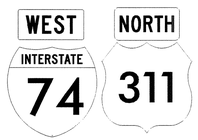
TWO "U" POSTS PER SIGN

599

2 - 600mm x 300mm
2 - 600mm x 600mm
2 - 525mm x 375mm

TWO "U" POSTS PER SIGN

583



2 - 600mm x 300mm
2 - 900mm x 900mm

TWO "U" POSTS PER SIGN

589 **595**

1 - 525mm x 375mm
1 - 600mm x 600mm

ONE "U" POST PER SIGN

594

1 - 600mm x 300mm
1 - 900mm x 900mm

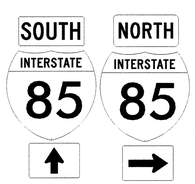
ONE "U" POST PER SIGN

584 **588**

1 - 600mm x 300mm
1 - 900mm x 900mm

ONE "U" POST PER SIGN

590



2 - 600mm x 300mm
2 - 900mm x 900mm
2 - 525mm x 375mm

TWO "U" POSTS PER SIGN

596

2 - 600mm x 300mm
2 - 900mm x 900mm
2 - 525mm x 375mm

TWO "U" POSTS PER SIGN

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AMAN J. ALQUDWAH

"F" SIGNS

SCALE	1:1000
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

FILES
SIGNS

TECC221656 6/8/2006 f sheet kjordan TECC-Oce34bond

TIP NO.	SHEET NO.
R-0609IA	SIGN-41

QUANTITY REQ'D 1

WEST FUTURE 74 MILE 56

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST FUTURE 74 MILE 58

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST FUTURE 74 MILE 61

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST FUTURE 74 MILE 63

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST INTERSTATE 74 MILE 66

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST INTERSTATE 74 MILE 68

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST INTERSTATE 74 MILE 71

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST INTERSTATE 74 MILE 73

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST FUTURE 74 MILE 56

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST FUTURE 74 MILE 59

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST FUTURE 74 MILE 61

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST FUTURE 74 MILE 64

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST INTERSTATE 74 MILE 66

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST INTERSTATE 74 MILE 69

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST INTERSTATE 74 MILE 71

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST INTERSTATE 74 MILE 73

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST INTERSTATE 74 MILE 75

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST FUTURE 74 MILE 57

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST FUTURE 74 MILE 59

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST FUTURE 74 MILE 62

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST FUTURE 74 MILE 64

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST INTERSTATE 74 MILE 67

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST INTERSTATE 74 MILE 69

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST INTERSTATE 74 MILE 72

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST INTERSTATE 74 MILE 74

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST INTERSTATE 74 MILE 75

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST FUTURE 74 MILE 57

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST FUTURE 74 MILE 60

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST FUTURE 74 MILE 62

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST INTERSTATE 74 MILE 65

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST INTERSTATE 74 MILE 67

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST INTERSTATE 74 MILE 70

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST INTERSTATE 74 MILE 72

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST INTERSTATE 74 MILE 74

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 2

MILE 1 1 4

1 - 300 X 1200

ONE "U" POST

QUANTITY REQ'D 1

WEST FUTURE 74 MILE 58

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST FUTURE 74 MILE 60

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST FUTURE 74 MILE 63

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST INTERSTATE 74 MILE 65

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

WEST INTERSTATE 74 MILE 68

1 - 300 X 800

ONE "U" POST

QUANTITY REQ'D 1

EAST INTERSTATE 74 MILE 70

1 - 300 X 800

ONE "U" POST

NOTE: THIS DRAWING IS DIMENSIONED IN MILIMETERS UNLESS OTHERWISE DEPICTED WITHIN THE DRAWING.

SEAL

6/9/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER KAREN A. JORDAN

MILEMARKERS

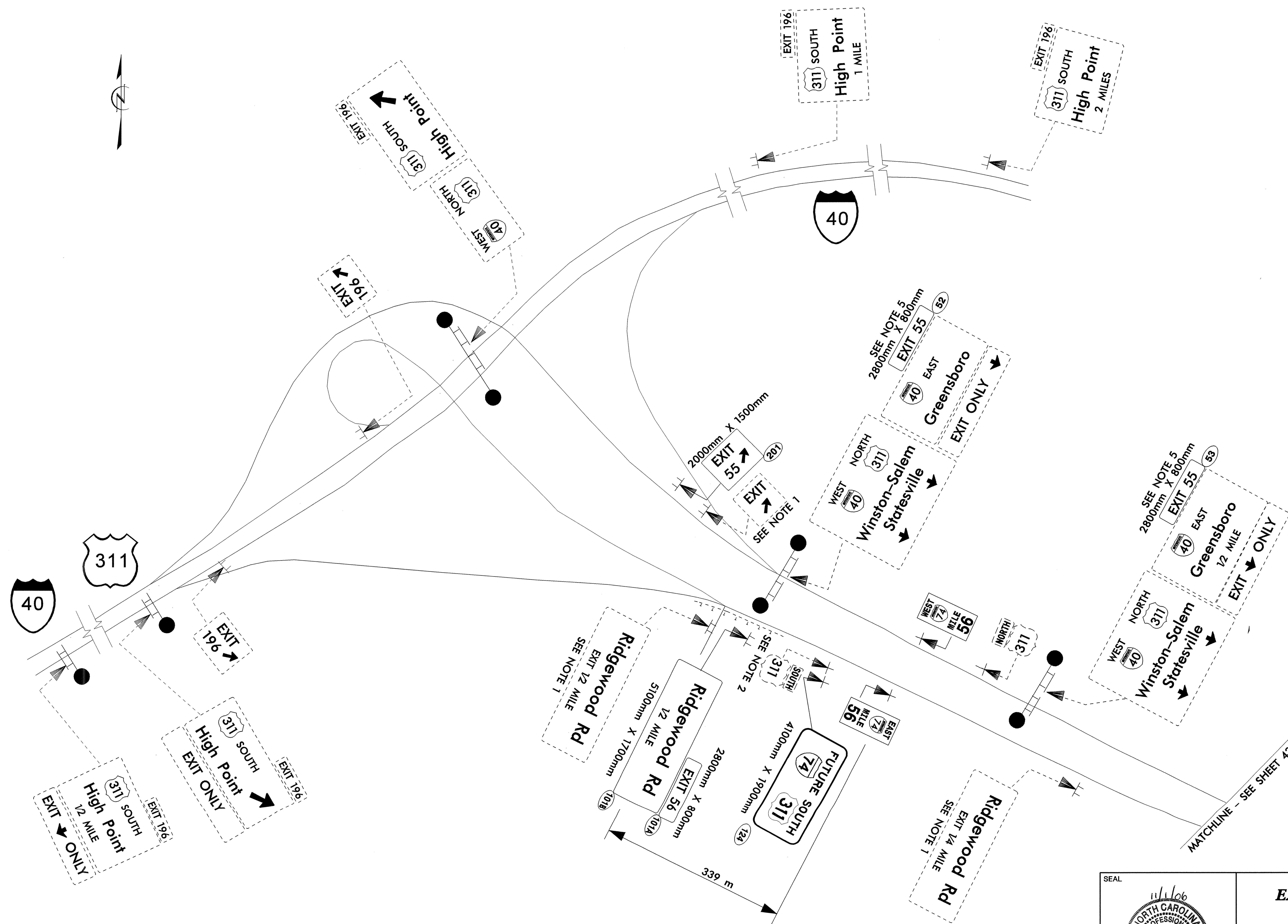
SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

TECC221656 6/8/2006 f:sheet kjordan TECC_Oca34bond

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-42



SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028387

EXISTING AND PROPOSED SIGNS

US 311 /FUTURE I-74

			REVISIONS
SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION	
DATE	MAR 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	S. JOHNS	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

TECC221636 11/1/2006 sheet1 gterlizzi TECC-Oce34bond

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-43

MATCHLINE – SEE SHEET 42

FUTURE NORTH 74 311 — 4100mm X 1900mm — 131

NORTH 311 SEE NOTE 2

1800mm X 400mm — HIGH POINT — 302

SOUTH 311 — FUTURE EAST 74 — 508

SEE NOTE 2 — SOUTH HIGH POINT 311

SEE NOTE 2 — SOUTH NORTH 311 311

JCT 311 — FUTURE 74 — JCT 311 — 506

SEE NOTE 2 — JCT 311

2200mm x 400mm — WINSTON-SALEM — 301

WEST FUTURE 74 311 NORTH — 505

2000mm X 1500mm — EXIT 56 — 203

EXIT — SEE NOTE 1

2800mm X 800mm — EXIT 56 — 103A

Ridgewood Rd — 5100mm X 2100mm — 103B

Ridgewood Rd — SEE NOTE 1

WEST FUTURE 74 MILE 57

EAST FUTURE 74 MILE 57

114 m

Ridgewood Rd

SEE NOTE 1 — Ridgewood Rd

EXIT — SEE NOTE 1

2000mm X 1500mm — EXIT 56 — 202

5100mm X 2100mm — Ridgewood Rd — 102B

2800mm X 800mm — EXIT 56 — 102A

SEE NOTE 2 — WINSTON-SALEM — NORTH 311

SEE NOTE 2 — NORTH SOUTH 311 311

WEST FUTURE 74 — EAST FUTURE 74 — NORTH 311 — SOUTH 311 — 504

JCT 311 — SEE NOTE 2

JCT FUTURE 74 — JCT 311 — 503

SEE NOTE 2 — SOUTH 311

MATCHLINE – SEE SHEET 44

FUTURE SOUTH 74 311 — 4100mm X 1900mm — 125

SEAL

4/1/06

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ANWAR ALQUDWAH

EXISTING AND PROPOSED SIGNS
US 311 /FUTURE I-74

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

METRIC

TIP NO.	SHEET NO.
R-0609IA	SIGN-44

MATCHLINE – SEE SHEET 43

WEST 74 MILE 58

EAST 74 MILE 58

2800mm X 800mm
EXIT 56
106A
Ridgewood Rd
1/2 MILE
5100mm X 1700mm
106B

Ridgewood Rd
EXIT 1/2 MILE
SEE NOTE 1

Union Cross Rd
EXIT 3/4 MILE
SEE NOTE 1

5700mm X 1700mm
Union Cross Rd
3/4 MILE
104B

2800mm X 800mm
EXIT 59
104A

1609 m

WEST 74 MILE 59

EAST 74 MILE 59

FUTURE NORTH 311 74
130
4100mm X 1900mm

NORTH 311
SEE NOTE 2

SEE NOTE 1
Union Cross Rd
5700mm X 2100mm
105B

SEE NOTE 1
Union Cross Rd
EXIT 59
2800mm X 800mm
105A

302 m

SEE NOTE 1
EXIT
20A

EXIT 59
2000mm X 1500mm

MATCHLINE – SEE SHEET 45

SEAL

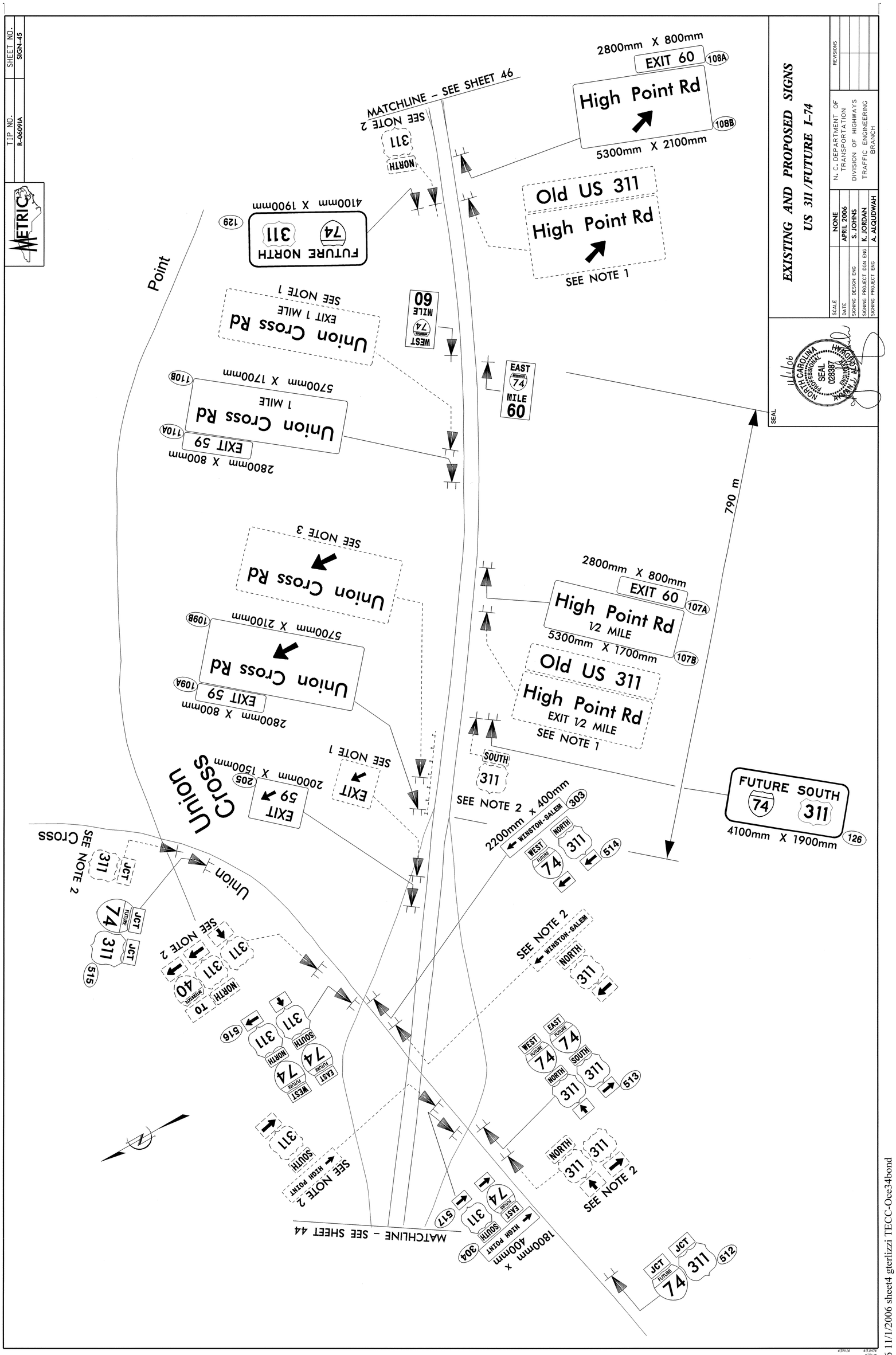
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AHMAD ALQUDWAH

EXISTING AND PROPOSED SIGNS
US 311 / FUTURE I-74

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

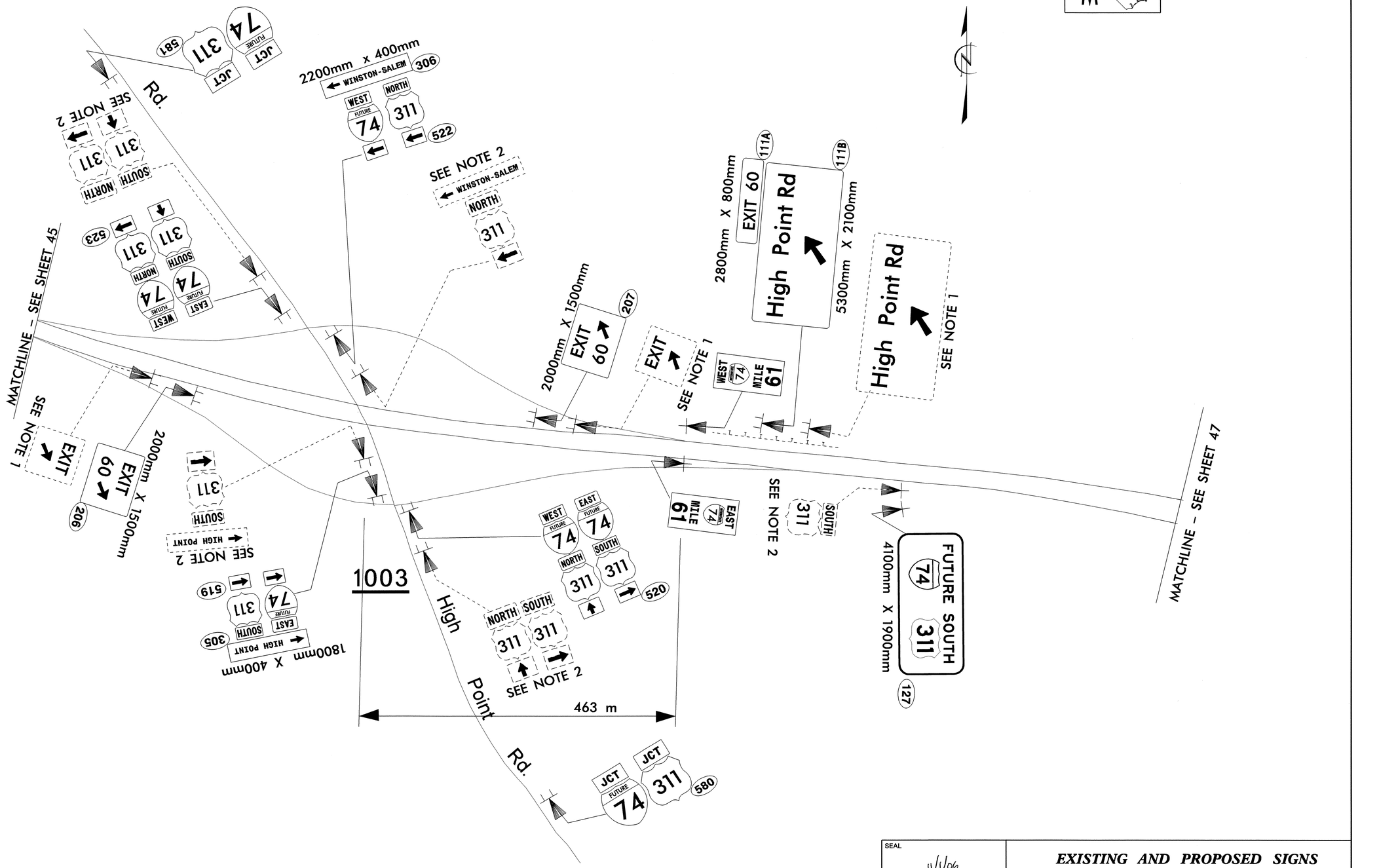
N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	



TECC221636 11/1/2006 sheet4 gterlizzi TECC-Oce34bond

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-46



SEAL

11/1/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ALQUDWAH

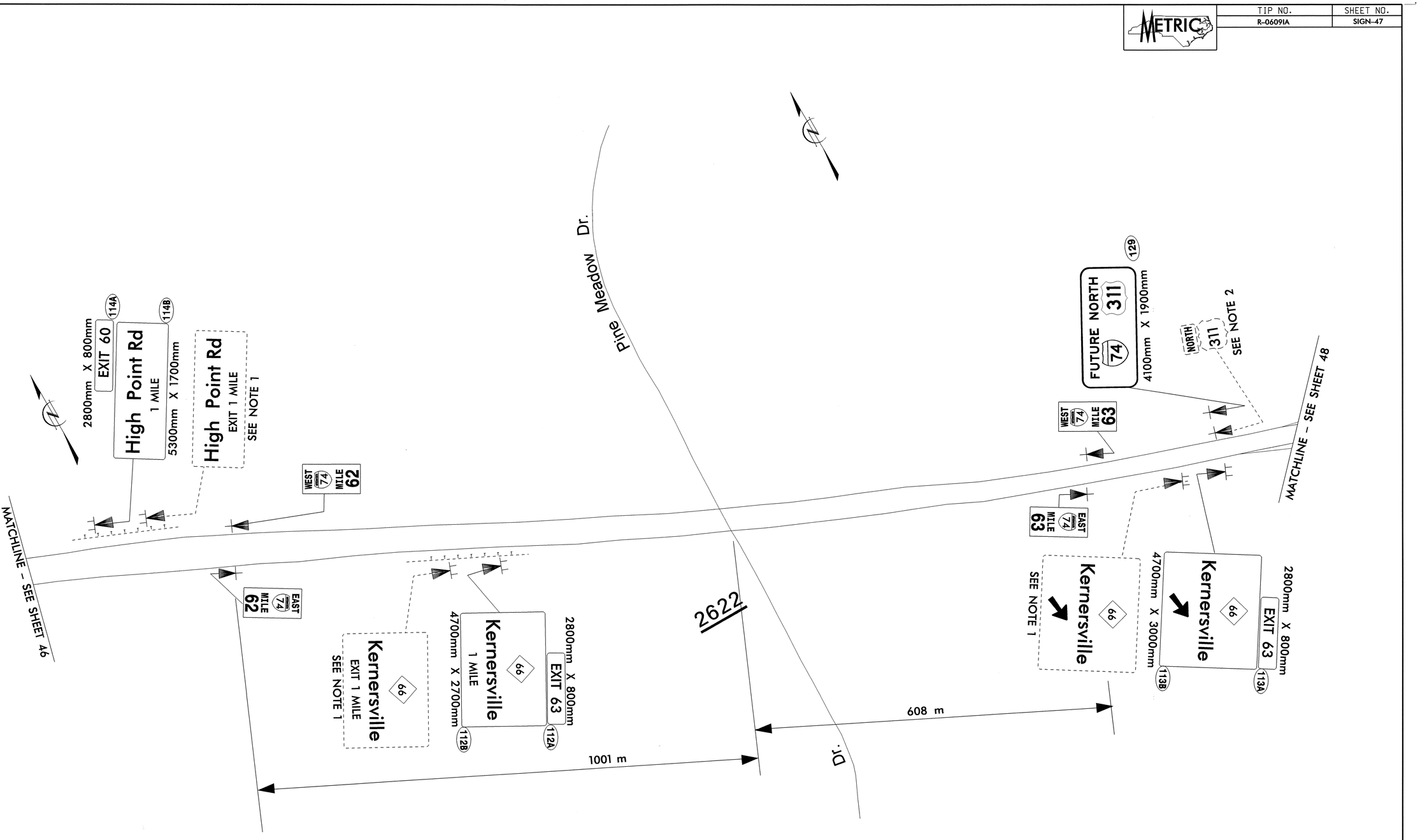
EXISTING AND PROPOSED SIGNS US 311 / FUTURE I-74

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-47



SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AHMAD M. ALQUDWAH

EXISTING AND PROPOSED SIGNS US 311 /FUTURE I–74

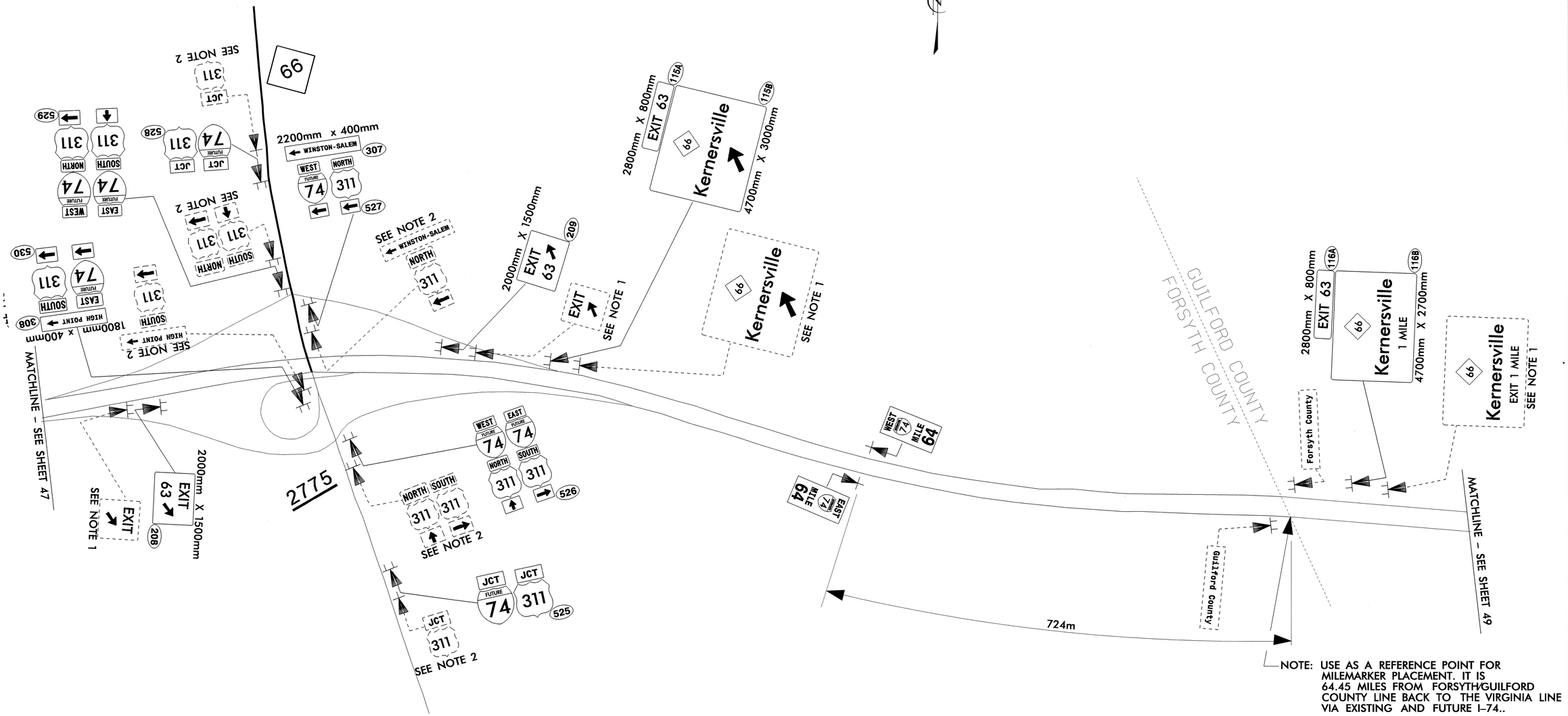
SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

TECC221636 11/1/2006 sheet6 gterlizzi TECC-Oce34bond

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-48



NOTE: USE AS A REFERENCE POINT FOR MILEMARKER PLACEMENT. IT IS 64.45 MILES FROM FORSYTH/GUILFORD COUNTY LINE BACK TO THE VIRGINIA LINE VIA EXISTING AND FUTURE I-74..

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ALQUDWAH

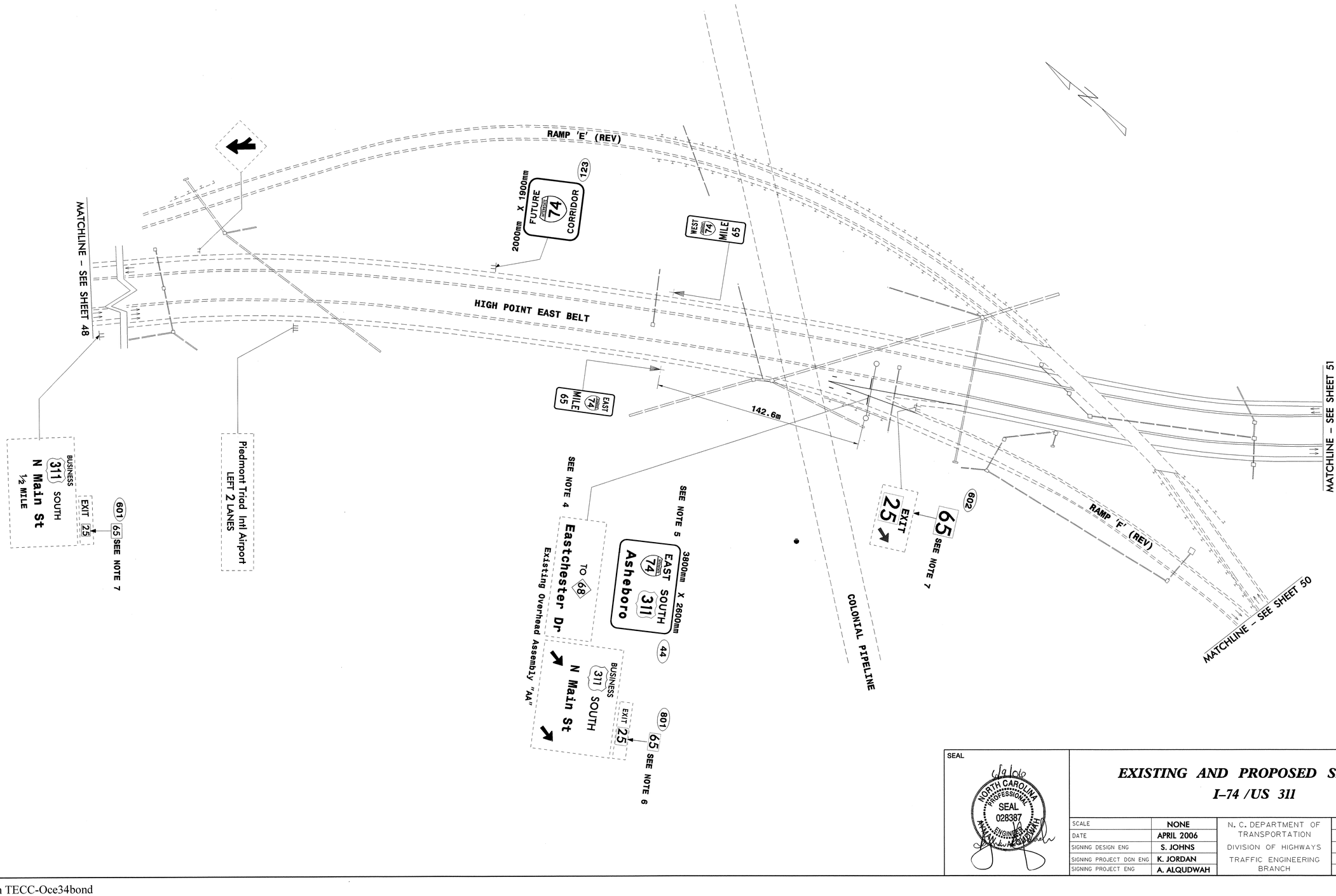
EXISTING AND PROPOSED SIGNS
US 311 /FUTURE I-74

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

TIP NO.	SHEET NO.
R-0609IA	SIGN-49



SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER A. ALQUDWAH

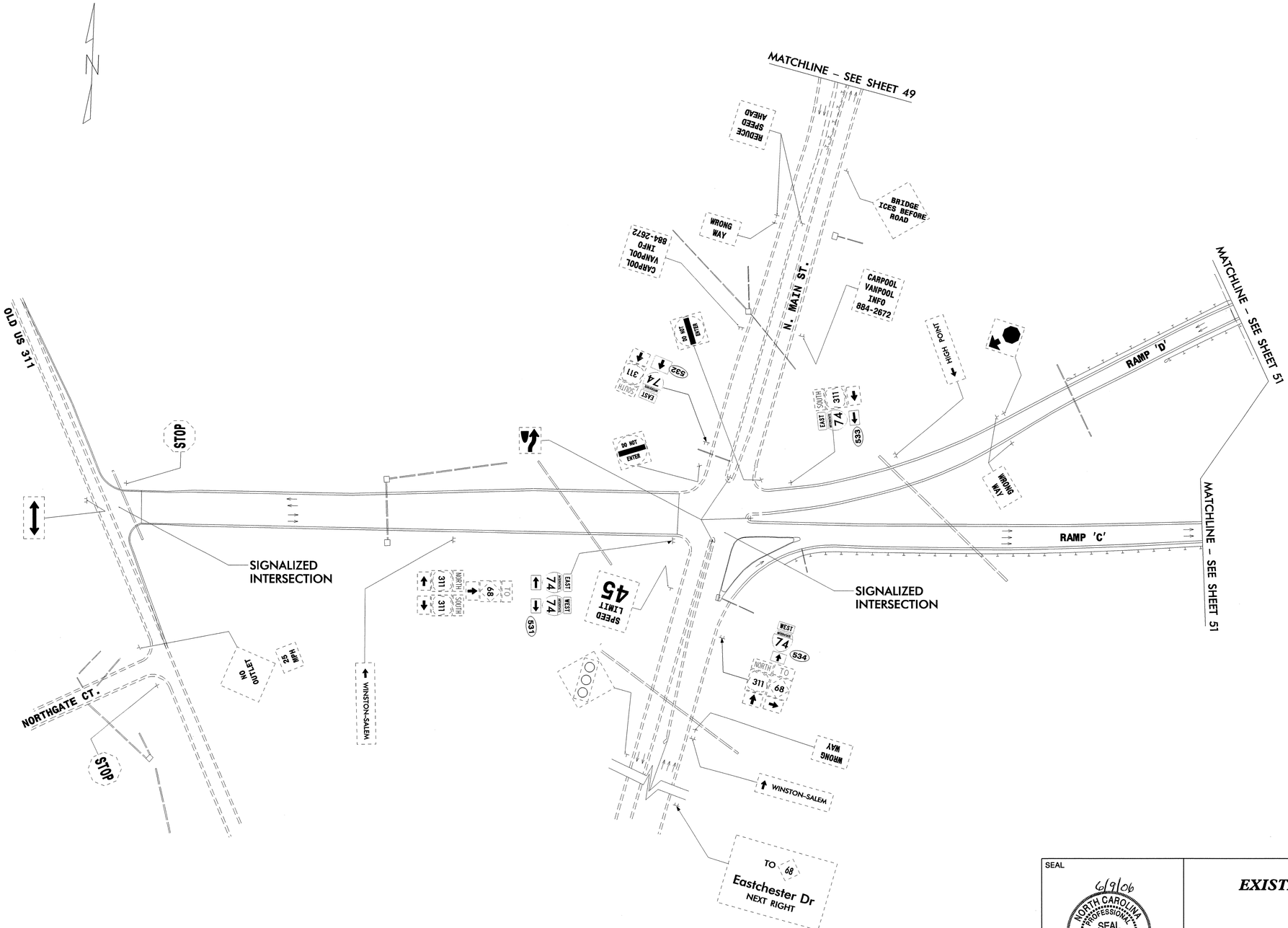
EXISTING AND PROPOSED SIGNS
I–74 /US 311

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

TIP NO.	SHEET NO.
R-0609IA	SIGN-50



SEAL

6/9/06

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ANWAR M. ALQUDWAH

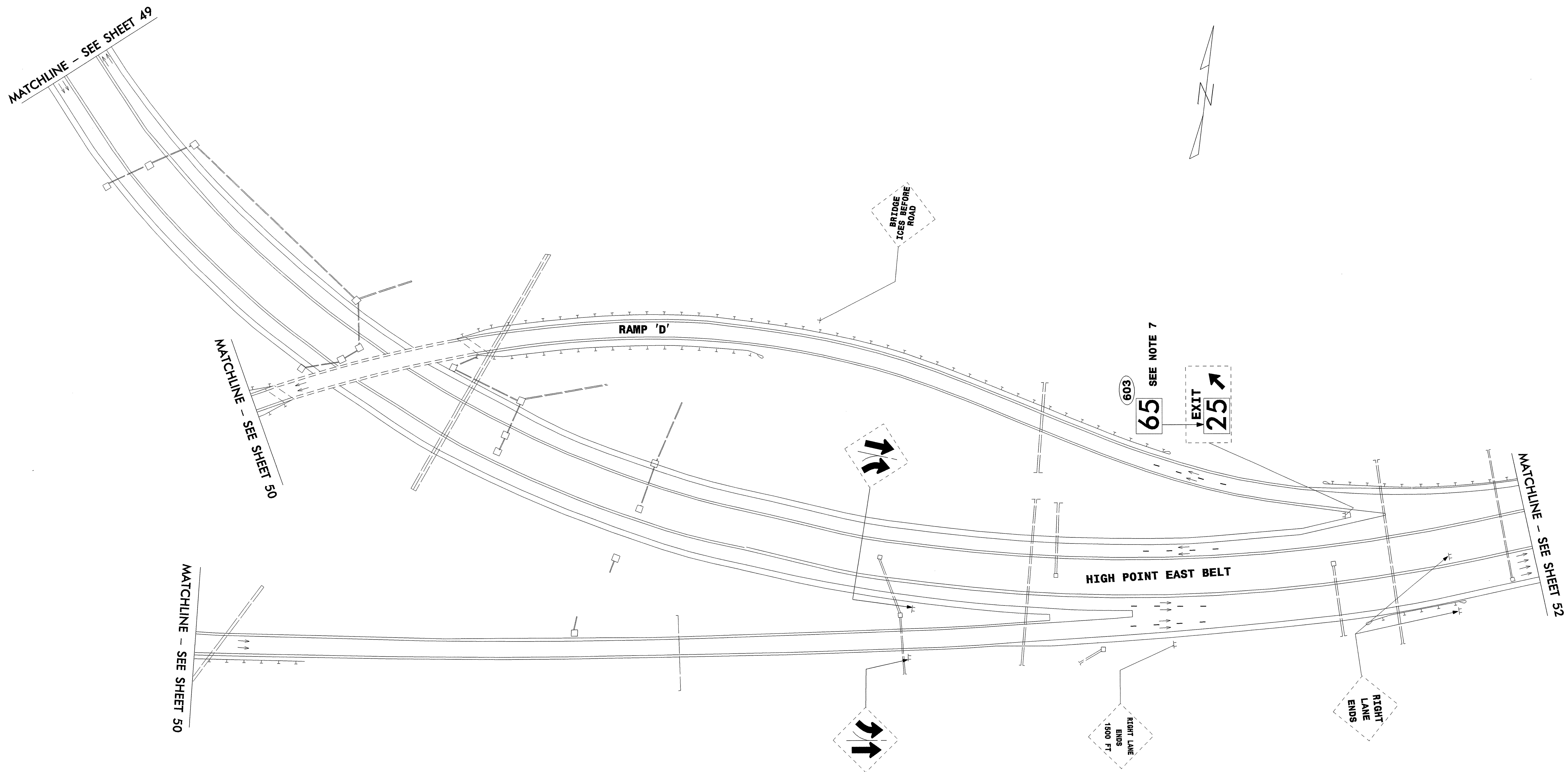
EXISTING AND PROPOSED SIGNS
I-74 /US 311

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-51



SEAL

6/9/06

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER A. ALQUDWAH

EXISTING AND PROPOSED SIGNS

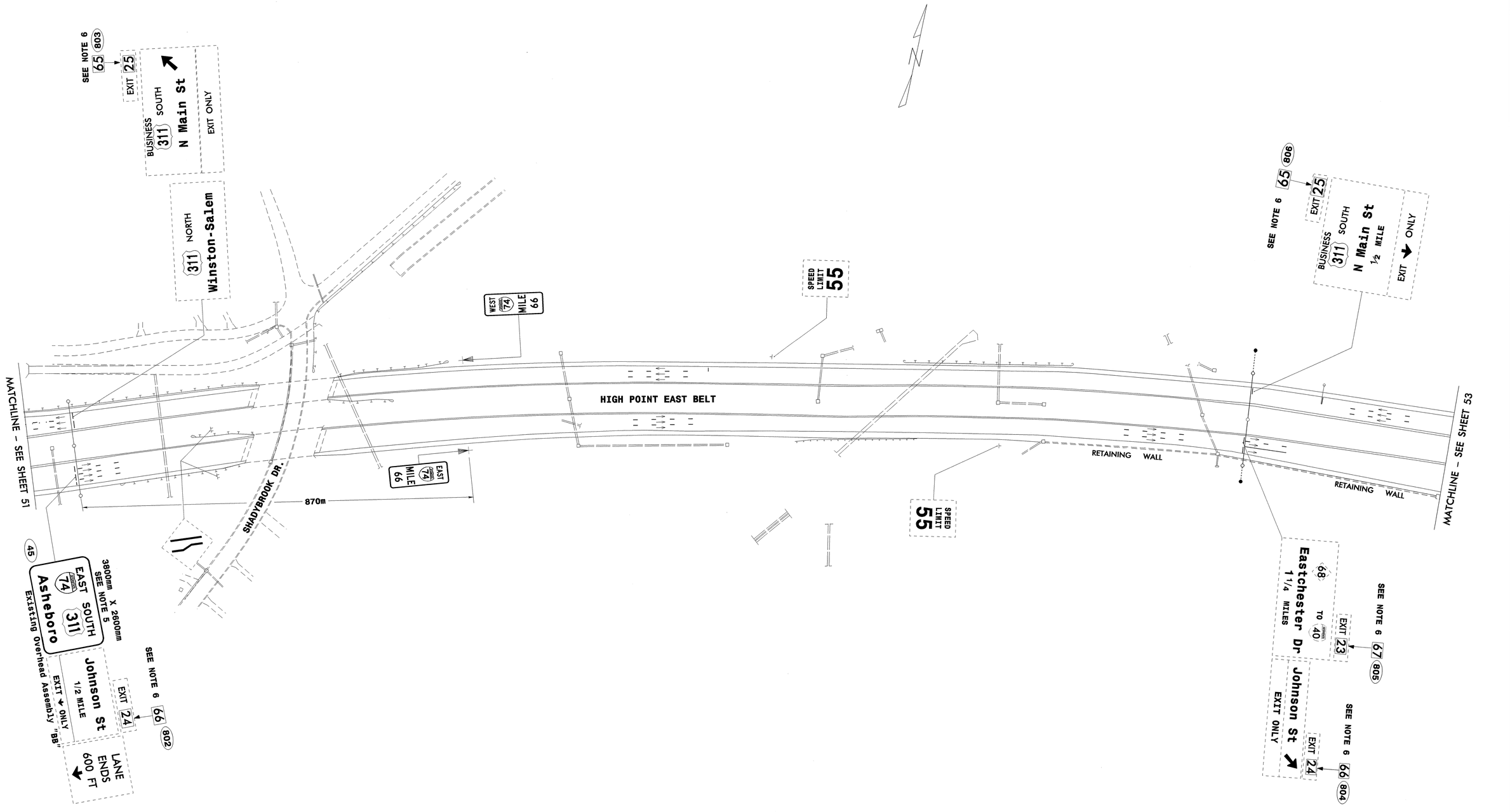
I-74 /US 311

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION
DATE	APRIL 2006	DIVISION OF HIGHWAYS
SIGNING DESIGN ENG	S. JOHNS	TRAFFIC ENGINEERING BRANCH
SIGNING PROJECT DGN ENG	K. JORDAN	
SIGNING PROJECT ENG	A. ALQUDWAH	

REVISIONS

TECC221656 6/8/2006 r0609g2 kjordan TECC-Oce34bond

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-52



SEAL

7/9/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ALAN J. ALQUDWAH

EXISTING AND PROPOSED SIGNS
I–74 /US 311

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

TECC221656 6/8/2006 r0609g2 kjordan TECC-Oce34bond

TIP NO.	SHEET NO.
R-0609IA	SIGN-53

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028387

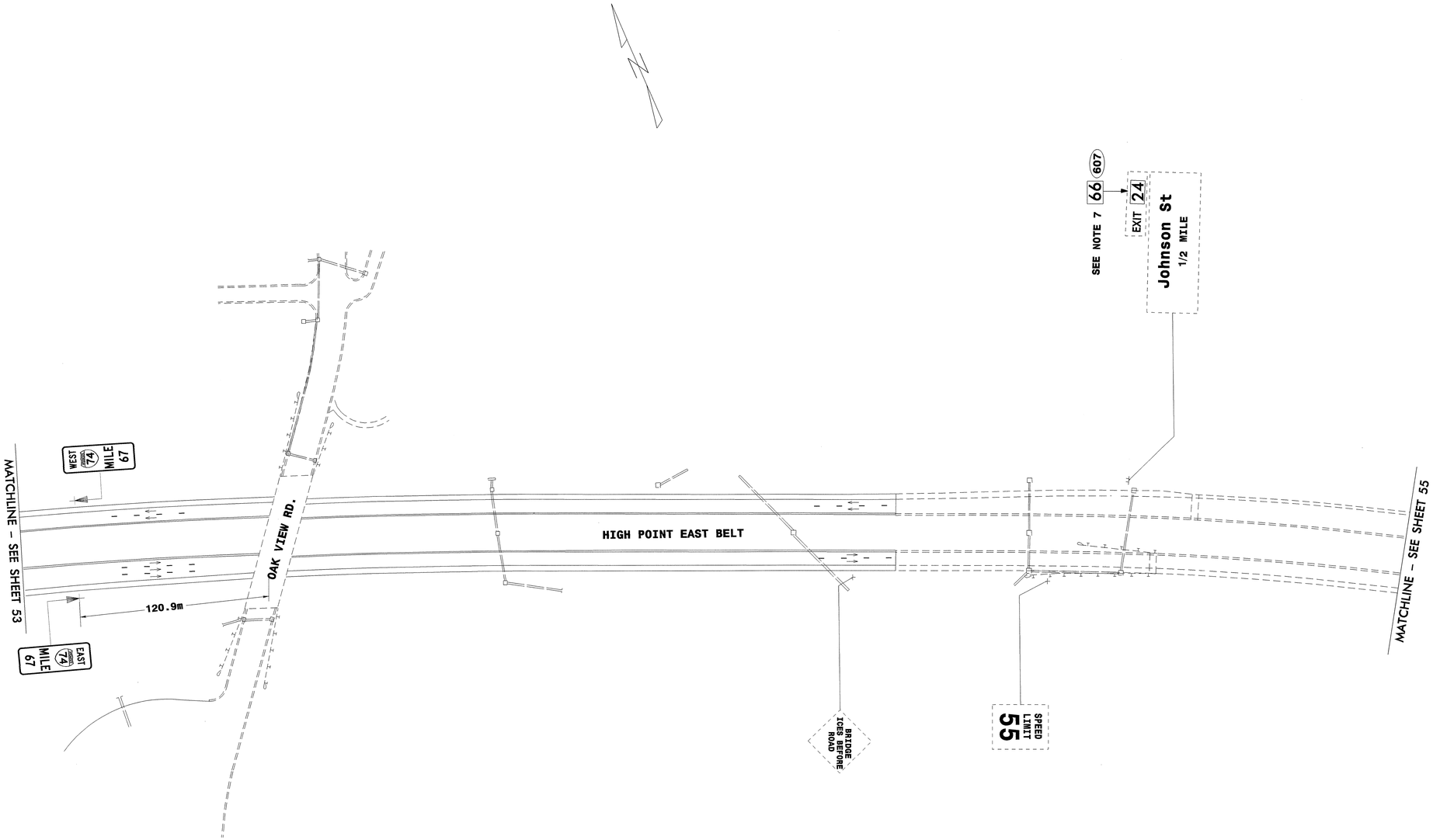
6/9/06

EXISTING AND PROPOSED SIGNS

I-74 /US 311

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	APRIL 2006		
SIGNING DESIGN ENG	S. JOHNS	DIVISION OF HIGHWAYS	
SIGNING PROJECT DGN ENG	K. JORDAN	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT ENG	A. ALQUDWAH		

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-54



SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028387

6/9/06

EXISTING AND PROPOSED SIGNS
I–74 /US 311

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

TECC221656 6/8/2006 r0609g2 kjordan TECC-Oce34bond

TIP NO. R-0609A

SHEET NO. SIGN-55

METRIC

EXISTING AND PROPOSED SIGNS
I-74 /US 311

REVISIONS

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DSN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ANWAR ALQUDWAH

MATCHLINE - SEE SHEET 56

BRIDGE ICES BEFORE ROAD

SEE NOTE 6 (809) 69

EXIT 21

Greensboro Rd
1¾ MILES

SEE NOTE 6 (808) 67

EXIT 23

68 TO INTERSTATE 40

Eastchester Dr

SEE NOTE 6 (807) 67

EXIT 23

TO 68 INTERSTATE 40

Eastchester Dr
¼ MILE

PTI Airport
EXIT 23

SEE NOTE 7 67 (608)

MATCHLINE – SEE SHEET 54

TIP NO.	SHEET NO.
R-0609IA	SIGN-56

* SIGNALIZED INTERSECTION

EASTCHESTER DR

NORTH 68 TO INTERSTATE 40

TO INTERSTATE 40

NORTH 68

SOUTH 68

WEST INTERSTATE 74 544 NORTH 311

JCT 311

EAST INTERSTATE 74 545 JCT

GREENSBORO WINSTON-SALEM

NORTH 311 SOUTH 311 EAST INTERSTATE 74 546 WEST INTERSTATE 74

SOUTH 311 SOUTH 68 547 EAST INTERSTATE 74

DO NOT ENTER

ONE WAY

SHOPPING CENTER PTI AIRPORT

WRONG WAY 2 SIGNS

WINSTON-SALEM

SEE NOTE 7 67 609 EXIT 23

MILE 2.3 SEE NOTE 2

MILE 2.2 SEE NOTE 2

WEST INTERSTATE 74 MILE 6.8

457.2m beyond existing MM23

MATCHLINE – SEE SHEET 55

MATCHLINE – SEE SHEET 57

GREENSBORO 548 EAST INTERSTATE 74 311 SOUTH

SHOPPING CENTER PTI AIRPORT

WRONG WAY 2 SIGNS

SEE NOTE 7 67 609 EXIT 23

NORTH 68 SOUTH 68 TO INTERSTATE 40

SPEED LIMIT 45

89 SOUTH

DO NOT ENTER

NC 68

WINSTON-SALEM GREENSBORO

JCT INTERSTATE 74 549 JCT 311

WEST INTERSTATE 74 542 NORTH 311

EAST INTERSTATE 74 SOUTH 311

WEST INTERSTATE 74 543 NORTH 311

TO INTERSTATE 40 NORTH 68

RIGHT LANE ENDS 1000 FT

RIGHT LANE ENDS

EAST INTERSTATE 74 MILE 6.8

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AHMAD ALQUDWAH

EXISTING AND PROPOSED SIGNS US 311

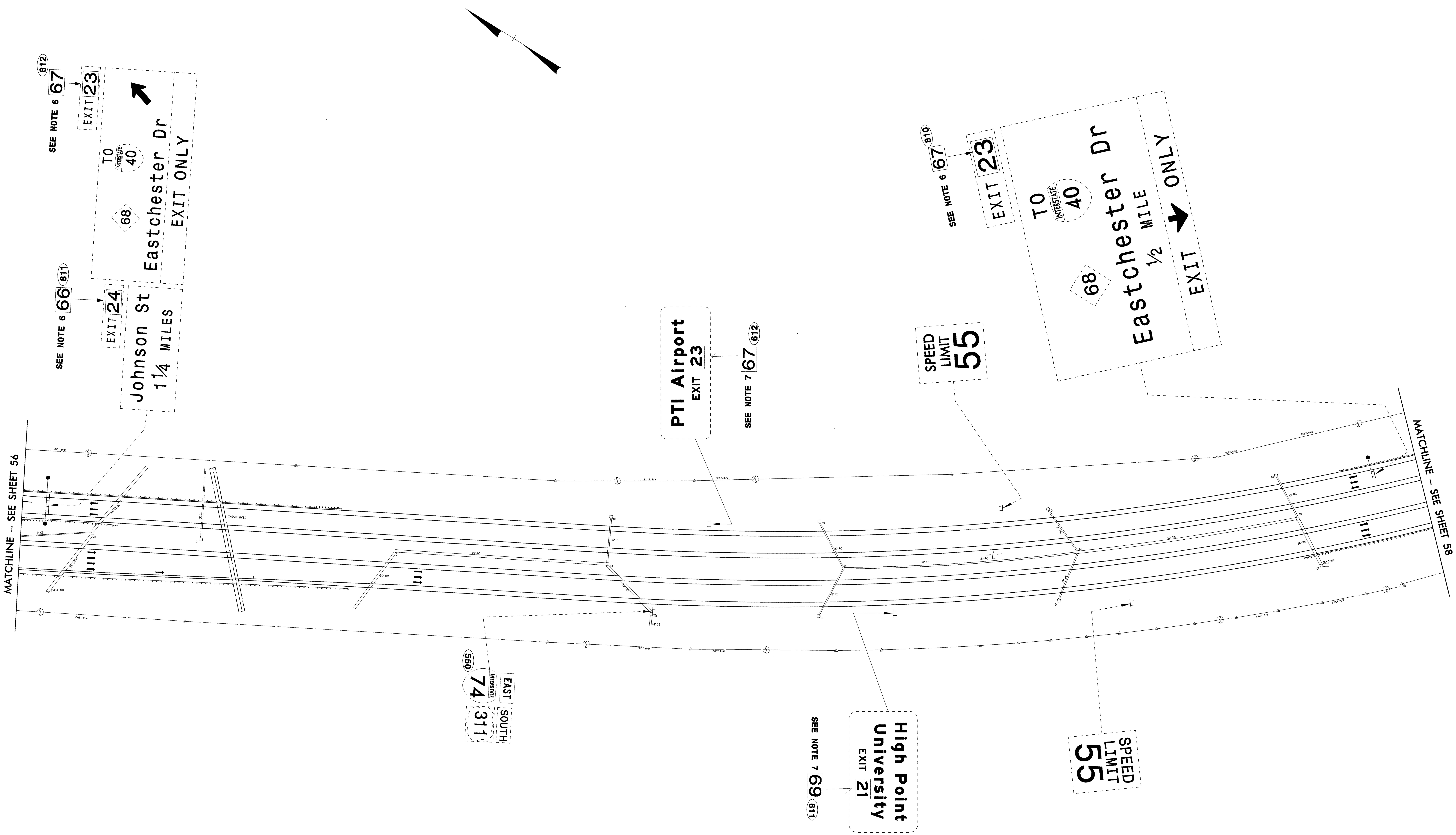
SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

METRIC

TIP NO.	SHEET NO.
R-0609IA	SIGN-57



SEAL

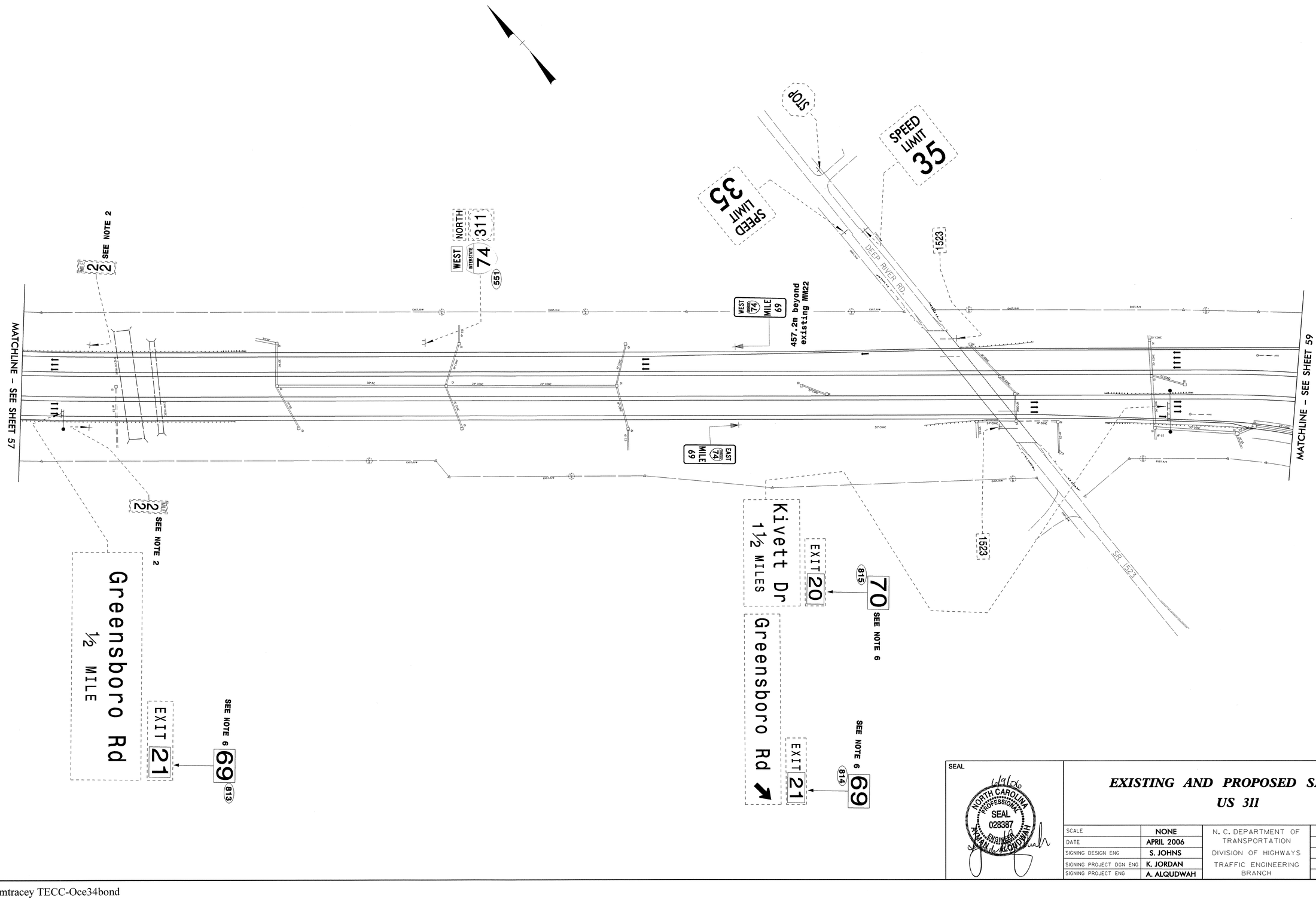
6/9/06

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AYMAN ALQUDWAH

EXISTING AND PROPOSED SIGNS
US 311

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	APRIL 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	S. JOHNS		
SIGNING PROJECT DGN ENG	K. JORDAN	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT ENG	A. ALQUDWAH		

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-58



SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AWAN A. ALQUDWAH

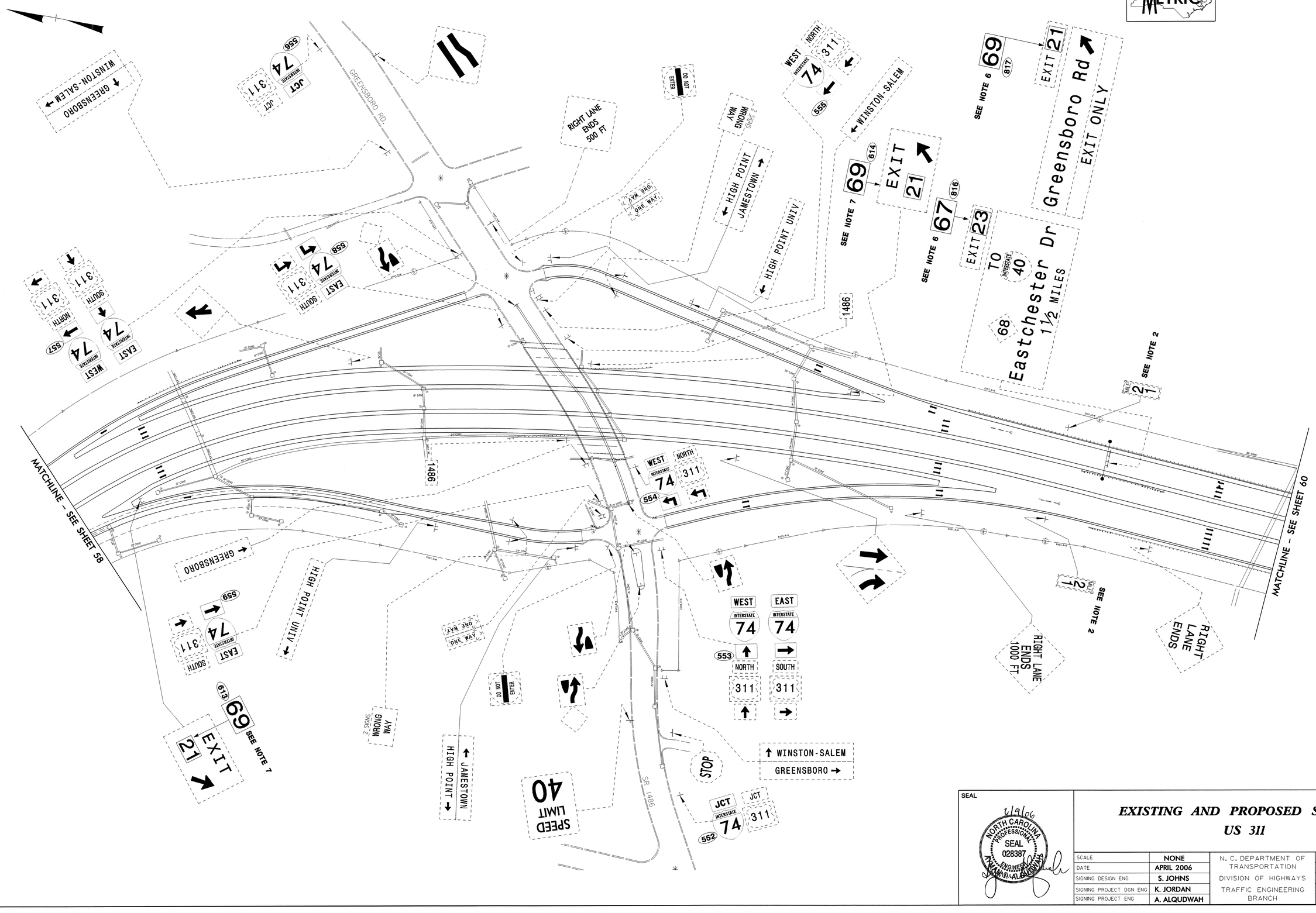
EXISTING AND PROPOSED SIGNS US 311

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

TIP NO.	SHEET NO.
R-0609IA	SIGN-59



SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER A. ALQUDWAH

6/9/06

EXISTING AND PROPOSED SIGNS US 311

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

TIP NO.	SHEET NO.
R-6091A	SIGN-60

MATCHLINE – SEE SHEET 59

MATCHLINE – SEE SHEET 61

SEE NOTE 2

LEFT
TWO LANES
END
1 MILE

2 SIGNS

SEE NOTE 7

70
615

DOWNTOWN
HOSPITAL
EXIT 20

457.2m beyond existing MM21

WEST
74
MILE
70

EAST
74
MILE
70

BRIDGE
ICES BEFORE
ROAD

SPEED
LIMIT
35

High Point
University
EXIT 21

SEE NOTE 7

69
616

SEE NOTE 6

69
819

EXIT 21

Greensboro Rd
½ MILE

EXIT ONLY

216" × 102"

SPEED
LIMIT
55

CEDROW DR.

Kivett Dr
¾ MILE

EXIT ONLY

EXIT 20

SEE NOTE 6

70
618

560

EAST
INTERSTATE
74

SOUTH
311

SPEED
LIMIT
55

SEE NOTE 2

LEFT
TWO LANES
END
½ MILE

2 SIGNS

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER A. ALQUDWAH

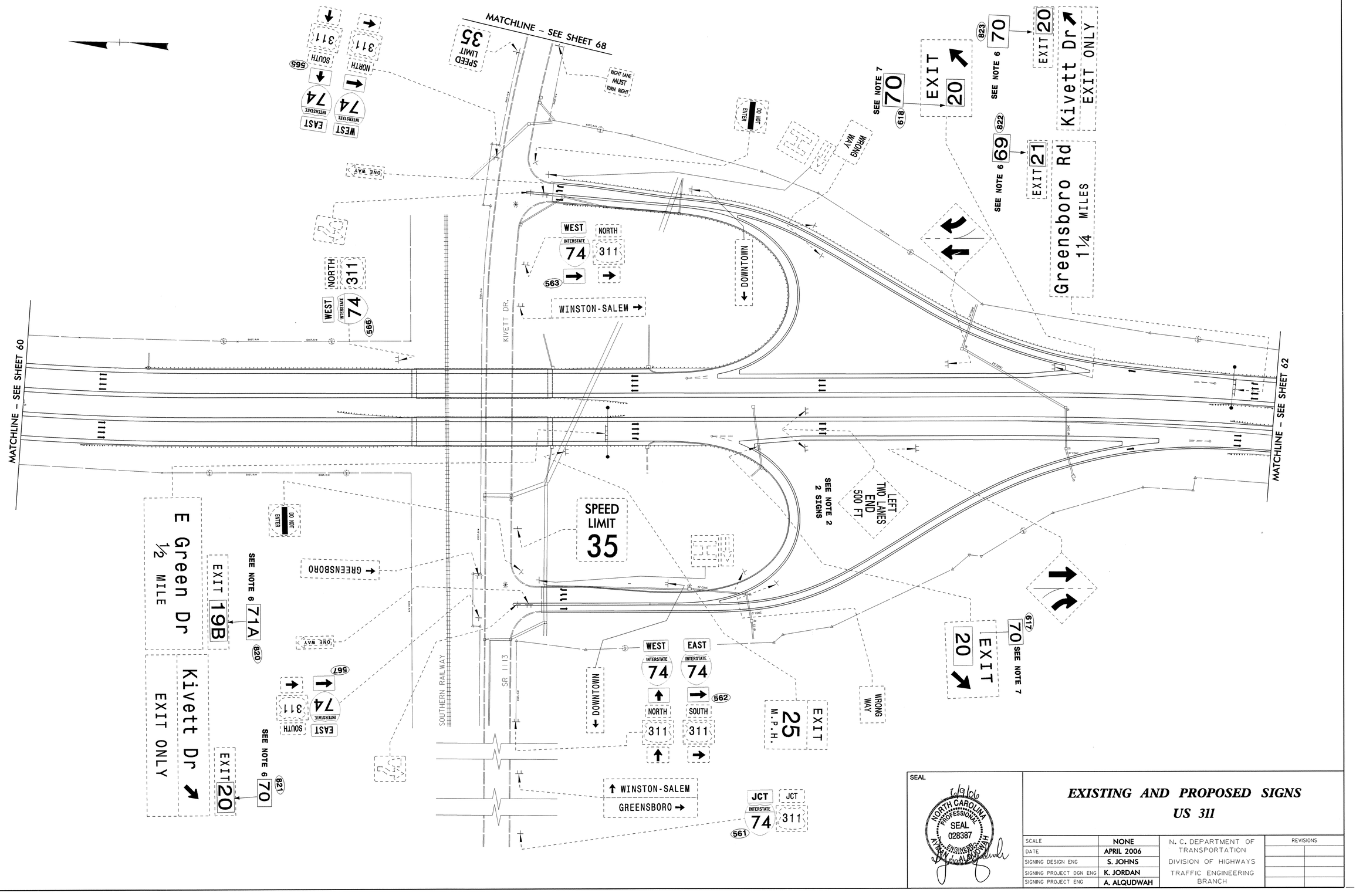
EXISTING AND PROPOSED SIGNS
US 311

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

TIP NO.	SHEET NO.
R-6091A	SIGN-61



SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER A. ALQUDWAH

EXISTING AND PROPOSED SIGNS US 311

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

TIP NO.	SHEET NO.
R-6091A	SIGN-62


METRIC
MATCHLINE - SEE SHEET 68
MATCHLINE - SEE SHEET 61
MATCHLINE - SEE SHEET 63
DOWNTOWN HOSPITAL EXIT 20
70 SEE NOTE 7 620
SEE NOTE 5 7800mm X 3300mm
WEST 74 NORTH 311 Winston-Salem
311 NORTH Winston-Salem
SEE NOTE 4
EXISTING OVERHEAD ASSEMBLY "CC"
EXIT 20 Kivett Dr 1/4 MILE EXIT ONLY
SEE NOTE 6 70 828
Kivett Dr 1/2 MILE
SEE NOTE 6 70 EXIT 20 829
WINSTON-SALEM
WEST 74 573
NORTH 311
EAST 74 SOUTH 311 572
DO NOT ENTER 411
WEST 74 NORTH 311 EAST 74 SOUTH 311 571
ONE WAY 413 414
WRONG WAY 2 SIGNS 410
1300
WEST 74 MILE 71
EAST 74 MILE 71
51.8m
SEE NOTE 2 2 SIGNS
LANE ENDS MERGE RIGHT 2 SIGNS
EXIT ONLY Thomasville Greensboro 3/4 MILE 85 29 70
SEE NOTE 4 ALL TRAFFIC EXIT
SEE NOTE 6 EXIT 19A 71B 825
EXIT ONLY Thomasville Greensboro 1/2 MILE 85 29 70
SEE NOTE 4 ALL TRAFFIC EXIT
SEE NOTE 6 EXIT 19A 71B 827
EXIT ONLY E Green Dr 1/4 MILE
SEE NOTE 6 EXIT 19B 71A 824
E Green Dr EXIT ONLY
SEE NOTE 6 EXIT 19B 71A 826
SEE NOTE 7 EXIT 19B 71A 619
SEE NOTE 1 ALL TRAFFIC MUST EXIT 1/4 MILE
EAST 74 SOUTH 311 574
ASHEBORO 1800mm X 400mm 309
WRONG WAY 2 SIGNS
DO NOT ENTER
SPEED LIMIT 35
STOP
BRIDGE ICES BEFORE ROAD
WINSTON-SALEM ASHEBORO 310 3200mm X 900mm
WEST 74 EAST 74 NORTH 311 SOUTH 311 569
JCT 311 JCT 74 568
WEST 74 NORTH 311 570
ONE WAY
E. GREEN DR
RIGHT LANE ENDS 2 SIGNS
* SIGNALIZED INTERSECTION

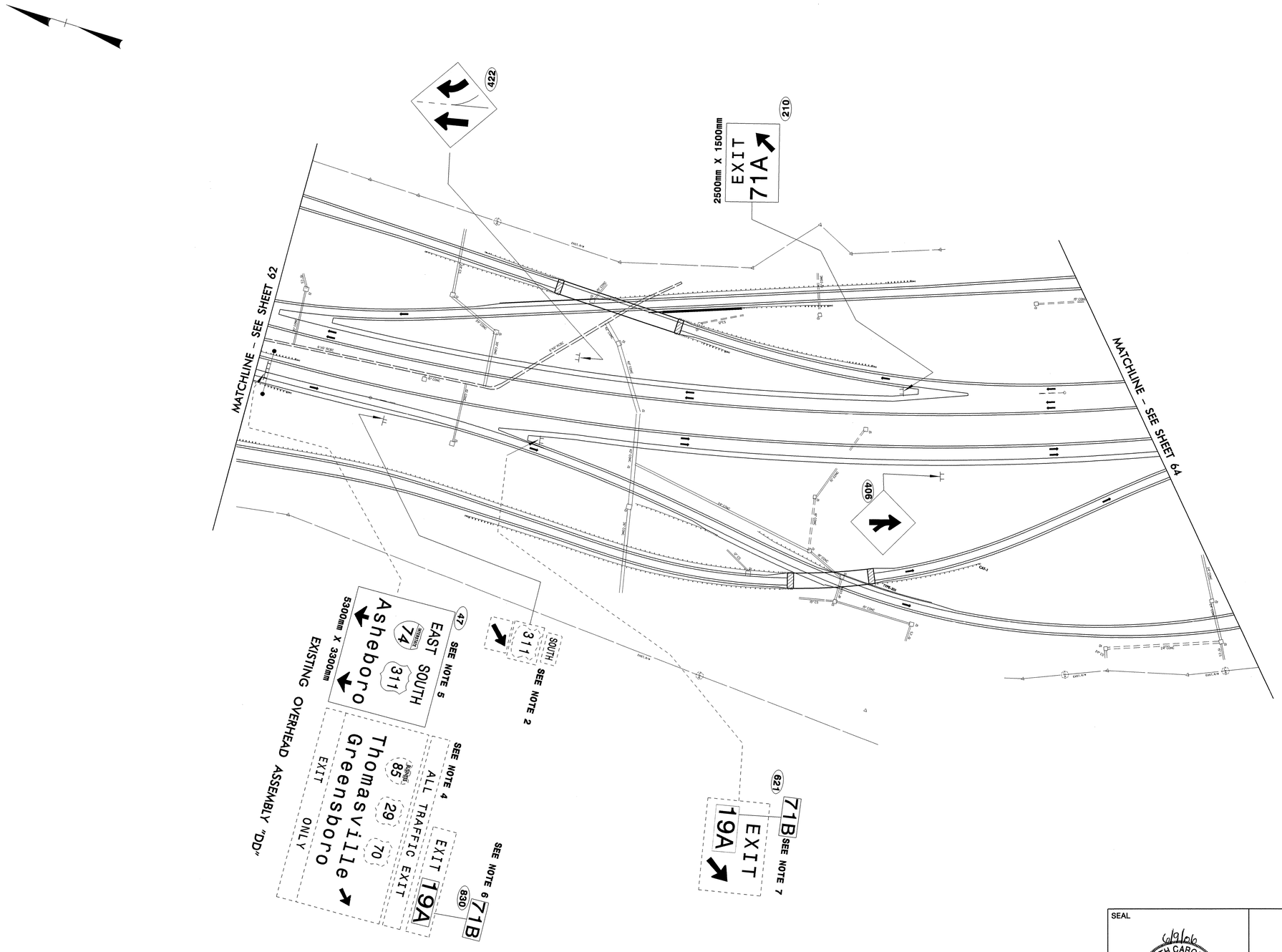
SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER A. ALQUDWAH 6/9/06

EXISTING AND PROPOSED SIGNS
_US 311_

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	APRIL 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	S. JOHNS	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

METRIC	TIP NO.	SHEET NO.
	R-6091A	SIGN-63



* SIGNALIZED INTERSECTION

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ANWAR A. ALQUDWAH

EXISTING AND PROPOSED SIGNS US 311

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

METRIC	TIP NO.	SHEET NO.
	R-6091A	SIGN-64

MATCHLINE – SEE SHEET 65

MATCHLINE – SEE SHEET 66

MATCHLINE – SEE SHEET 67

MATCHLINE – SEE SHEET 63

2 SIGNS WRONG WAY 410

2700mm X 2300mm
EAST SOUTH 311 74
Asheboro
NEXT RIGHT
SEE NOTE 5 50

EAST 70 NORTH 29 NORTH 85
Greensboro
SEE NOTE 4

EXISTING OVERHEAD ASSEMBLY "EE"
15 Greensboro
66 Durham

2 SIGNS 438
35 M.P.H. 482

GREENSBORO
WINSTON-SALEM

SEE NOTE 5
4600mm X 2600mm
WEST 74 NORTH 311
Winston-Salem
51

SEE NOTE 4
NORTH 311
Winston-Salem

2 SIGNS WRONG WAY

2000mm X 800mm
ASHEBORO
GREENSBORO 320

NORTH 85 NORTH 29 EAST 70
Greensboro

SOUTH 311
SEE NOTE 4

WEST 70 SOUTH 29 SOUTH 85
Thomasville

EXIT

Brentwood St
EXIT ONLY

NORTH 85 NORTH 29 EAST 70
Greensboro

SOUTH 85 SOUTH 29 WEST 70
Thomasville
NEXT RIGHT

SEE NOTE 4
SOUTH 311

TO BRENTWOOD ST
DRIVERS LICENSE OFFICE

SEE NOTE 2
THOMASVILLE

WRONG WAY

2 SIGNS

1900mm X 800mm
THOMASVILLE
ASHEBORO 312

EAST 74 SOUTH 311
575

4300mm X 2100mm
E Green Dr
EXIT 71A
117B

EAST 74 MILE 72

21.6m

WEST 74 MILE 72

2 SIGNS WRONG WAY

2 SIGNS RIGHT LANE ENDS

3200mm X 2600mm
EXISTING OVERHEAD ASSEMBLY "FF"
SEE NOTE 5 49
EAST SOUTH 311 74
Asheboro

Brentwood St
Winston-Salem
NEXT RIGHT
SEE NOTE 4
311 NORTH

SEE NOTE 5 48
3700mm X 2300mm
WEST 74 NORTH 311
Winston-Salem
NEXT RIGHT

NORTH 311 SOUTH 29 WEST 70
576
WEST 74 SOUTH 85

WINSTON-SALEM
THOMASVILLE

TO BRENTWOD ST
DRIVERS LICENSE OFFICE

DO NOT ENTER 411

TO BRENTWOOD ST
DRIVERS LICENSE OFFICE

2500mm X 800mm
E Green Dr
EXIT 71A
117A

4300mm X 1700mm
E Green Dr
EXIT 71A
118B

2500mm X 800mm
E Green Dr
EXIT 71A
118A

13.7m

* SIGNALIZED INTERSECTION

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ANWAR No. ALQUDWAH

6/9/06

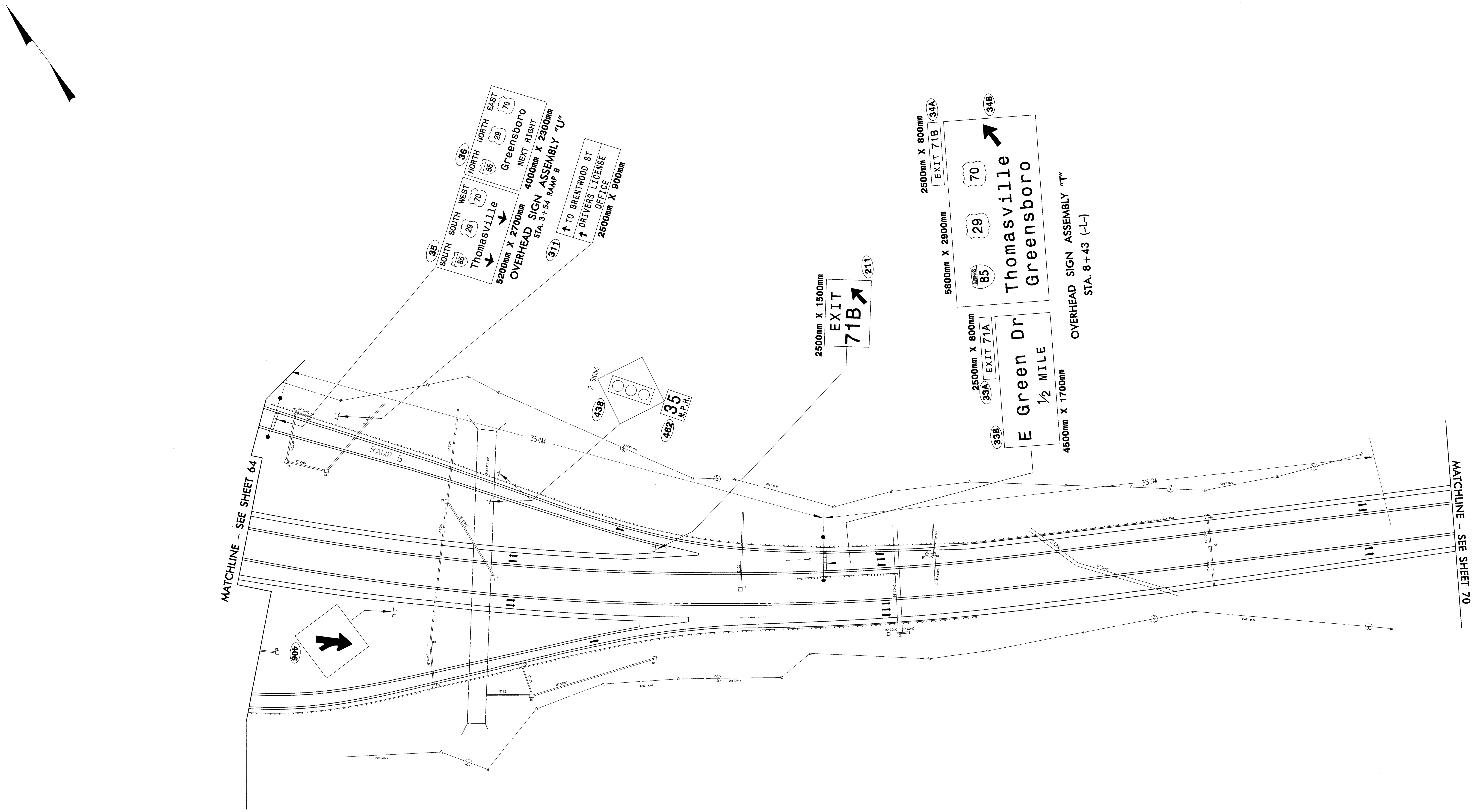
EXISTING AND PROPOSED SIGNS US 311

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

METRIC	TIP NO.	SHEET NO.
	R-6091A	SIGN-65



* SIGNALIZED INTERSECTION

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028387 AYMAN ALQUDWAH
6/9/06

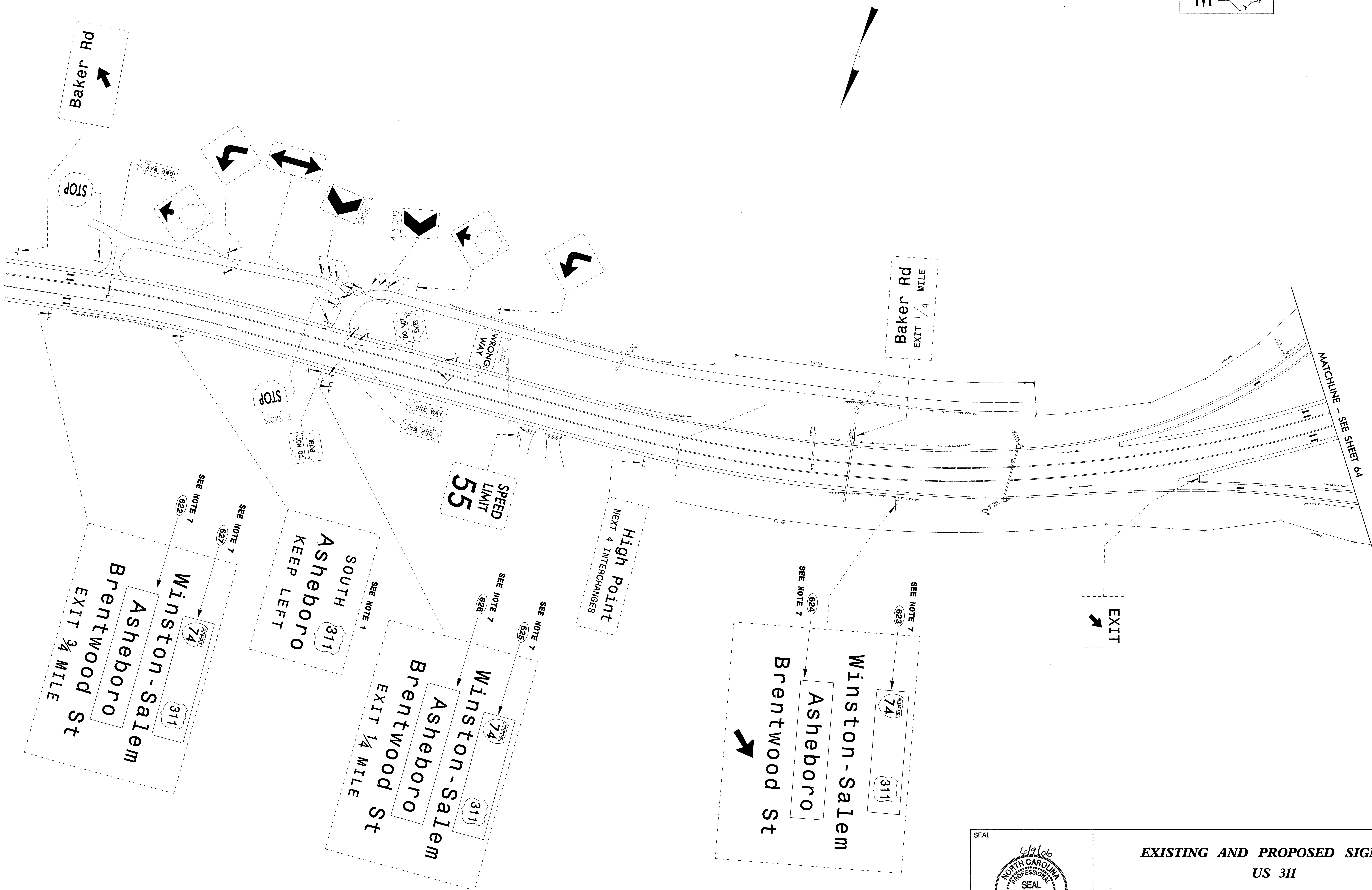
EXISTING AND PROPOSED SIGNS
US 311

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	APRIL 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	S. JOHNS		
SIGNING PROJECT DGN ENG	K. JORDAN	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT ENG	A. ALQUDWAH		

TECC221658 6/7/2006 p10 mtracey TECC-Oce34bond

METRIC

TIP NO.	SHEET NO.
R-6091A	SIGN-66



* SIGNALIZED INTERSECTION

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ... ALQUDWAH

6/9/06

EXISTING AND PROPOSED SIGNS
US 311

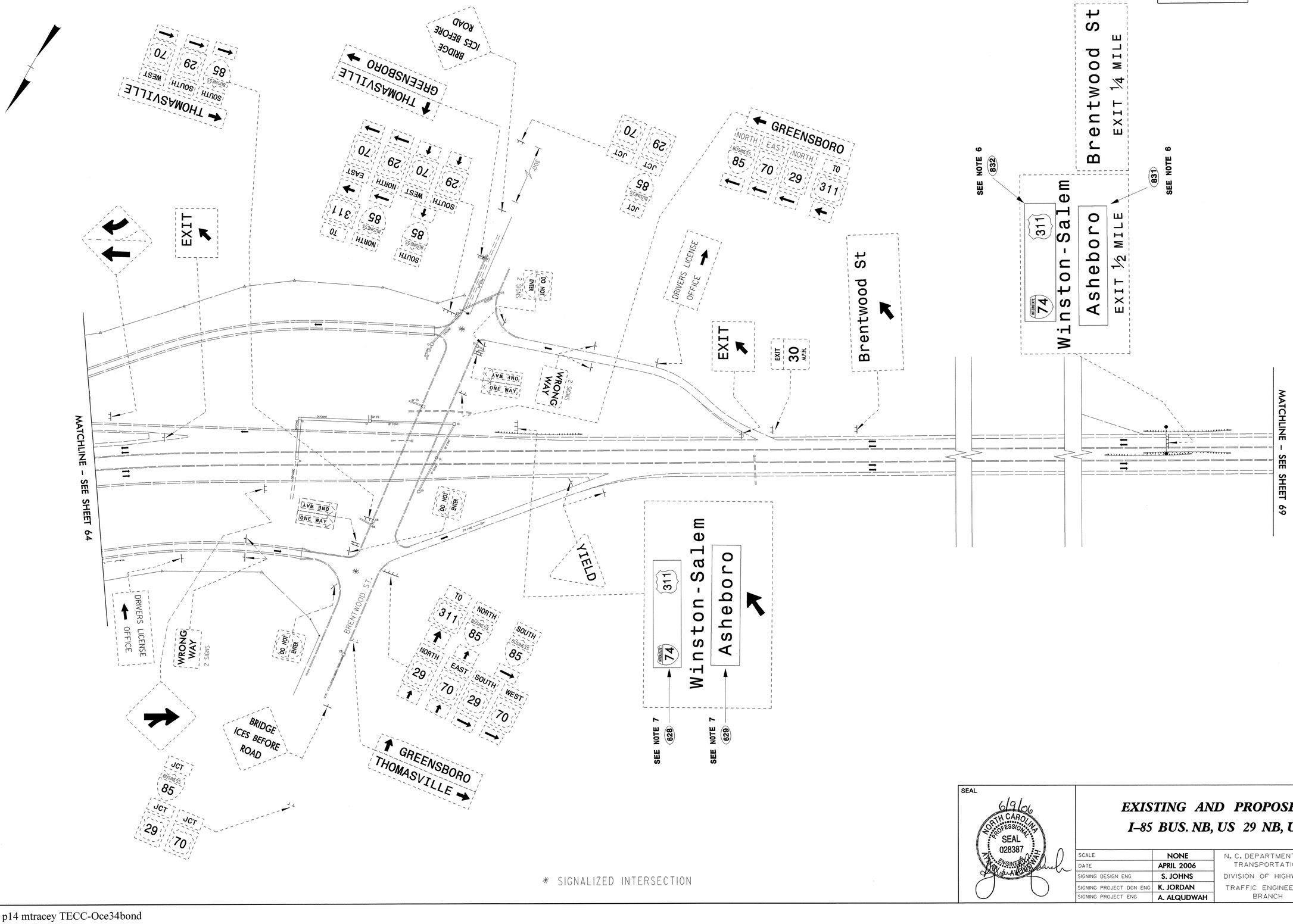
SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

TECC221658 6/7/2006 p12 mtracey TECC-Oce34bond

METRIC	TIP NO.	SHEET NO.
	R-6091A	SIGN-67



SEAL

6/9/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ALI A. ALQUDWAH

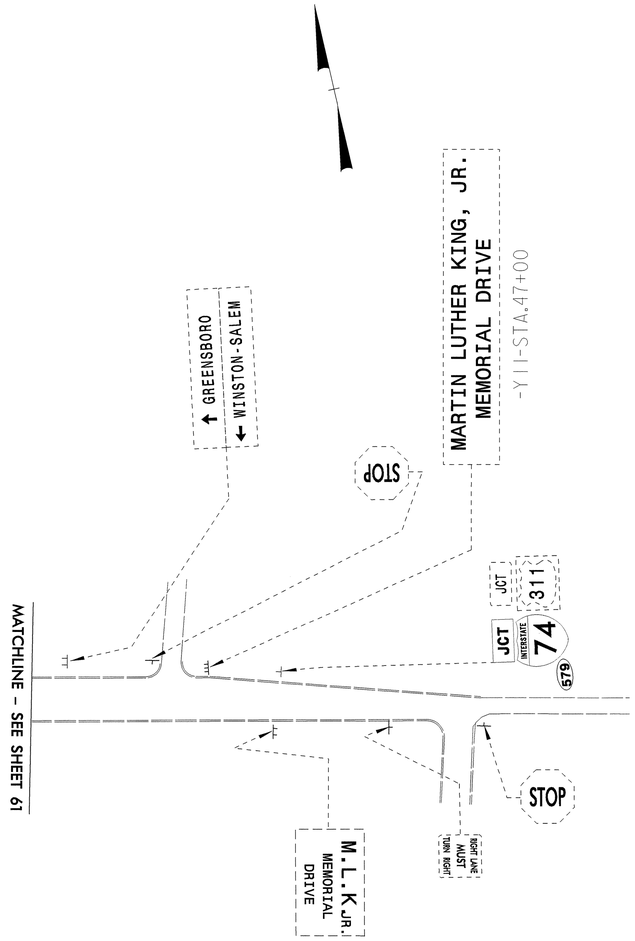
EXISTING AND PROPOSED SIGNS
I–85 BUS. NB, US 29 NB, US 70 EB

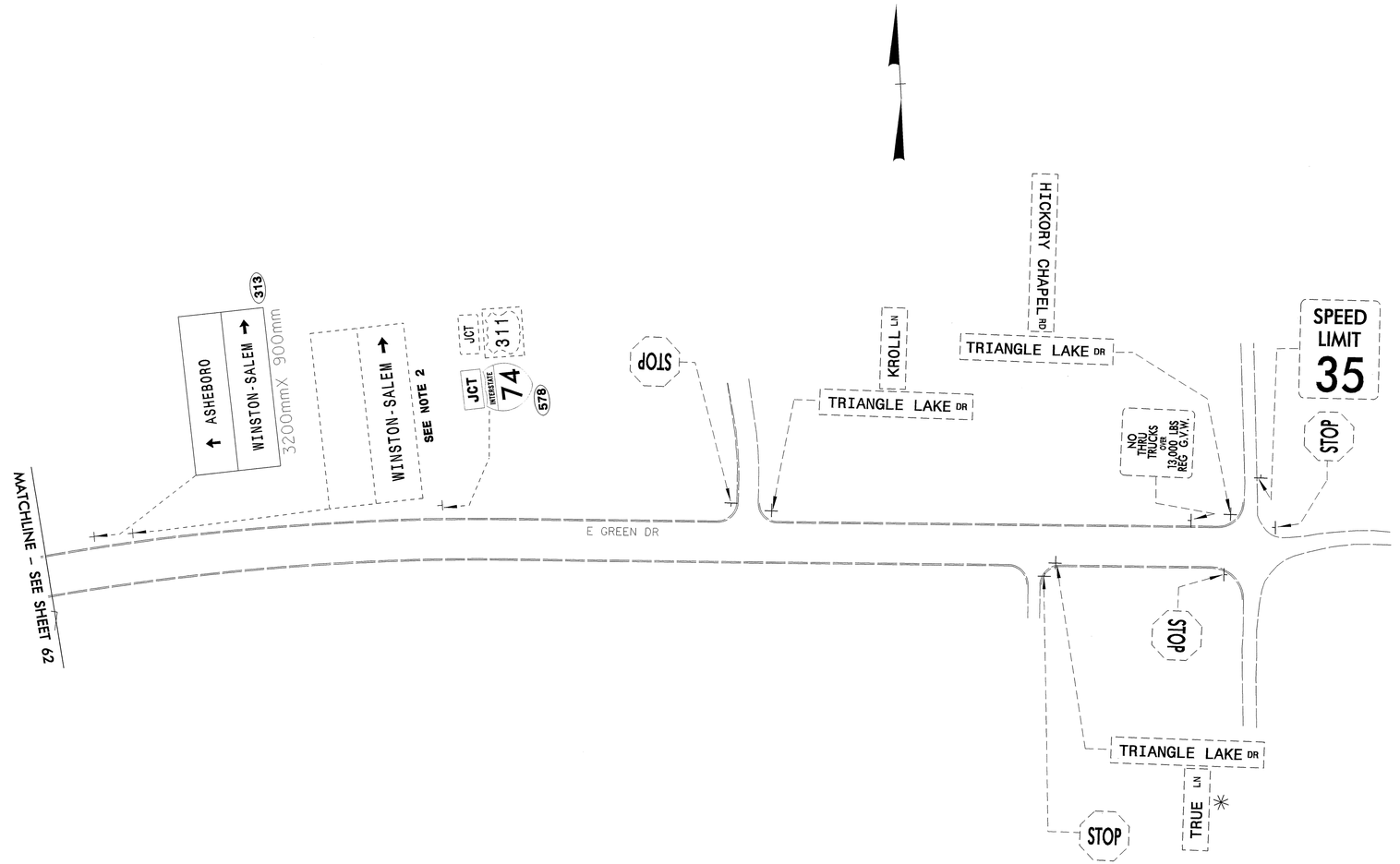
SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

METRIC	TIP NO.	SHEET NO.
	R-6091A	SIGN-68



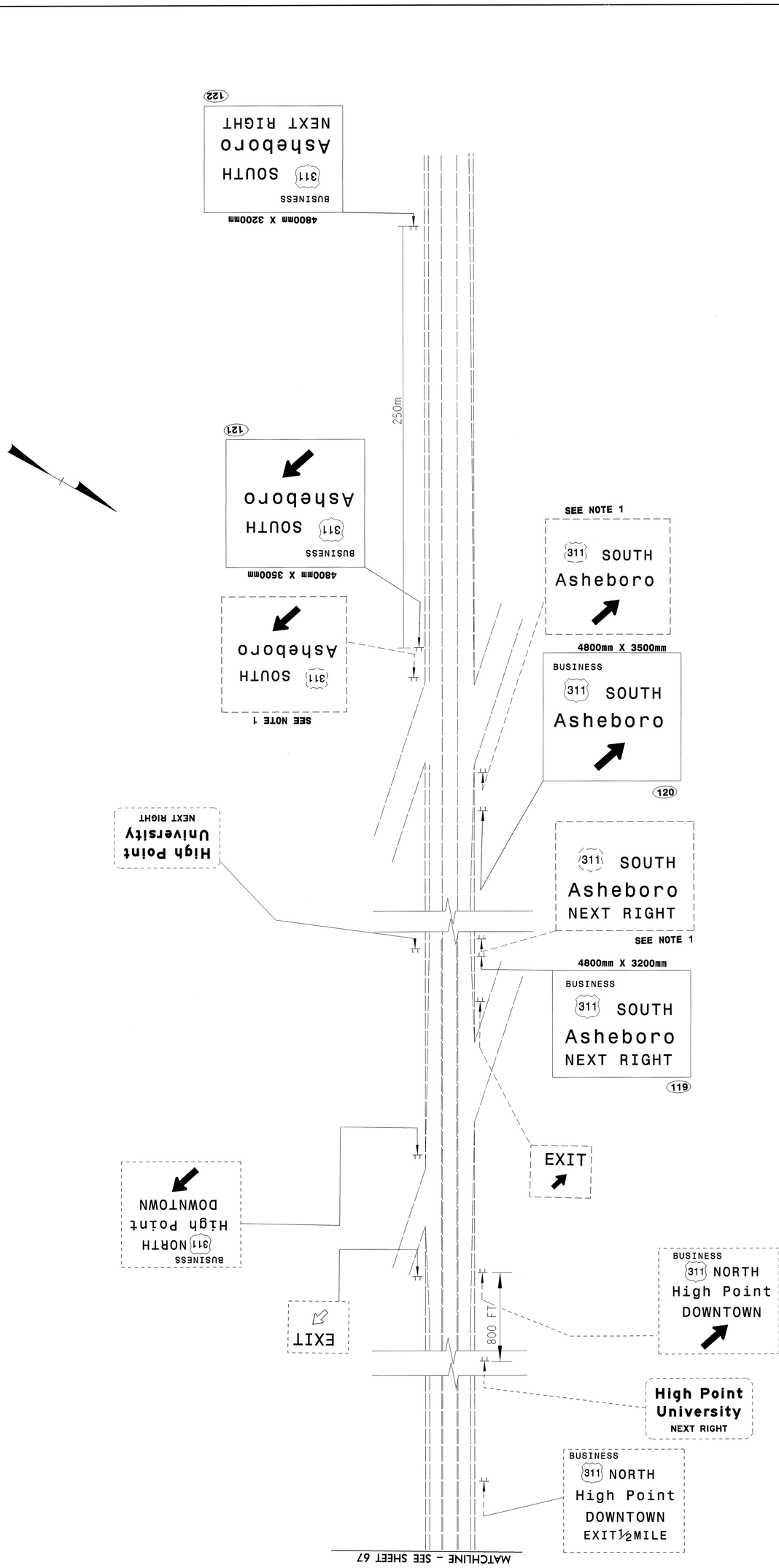


SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER A. ALQUDWAH

EXISTING AND PROPOSED SIGNS EAST GREEN DR

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRAFFIC ENGINEERING BRANCH	REVISIONS
DATE	APRIL 2006		
SIGNING DESIGN ENG	S. JOHNS		
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		



TIP NO. R-6091A

SHEET NO. SIGN-69

EXISTING AND PROPOSED SIGNS
I-85 BUS. NB, US 29 NB, US 70 EB

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

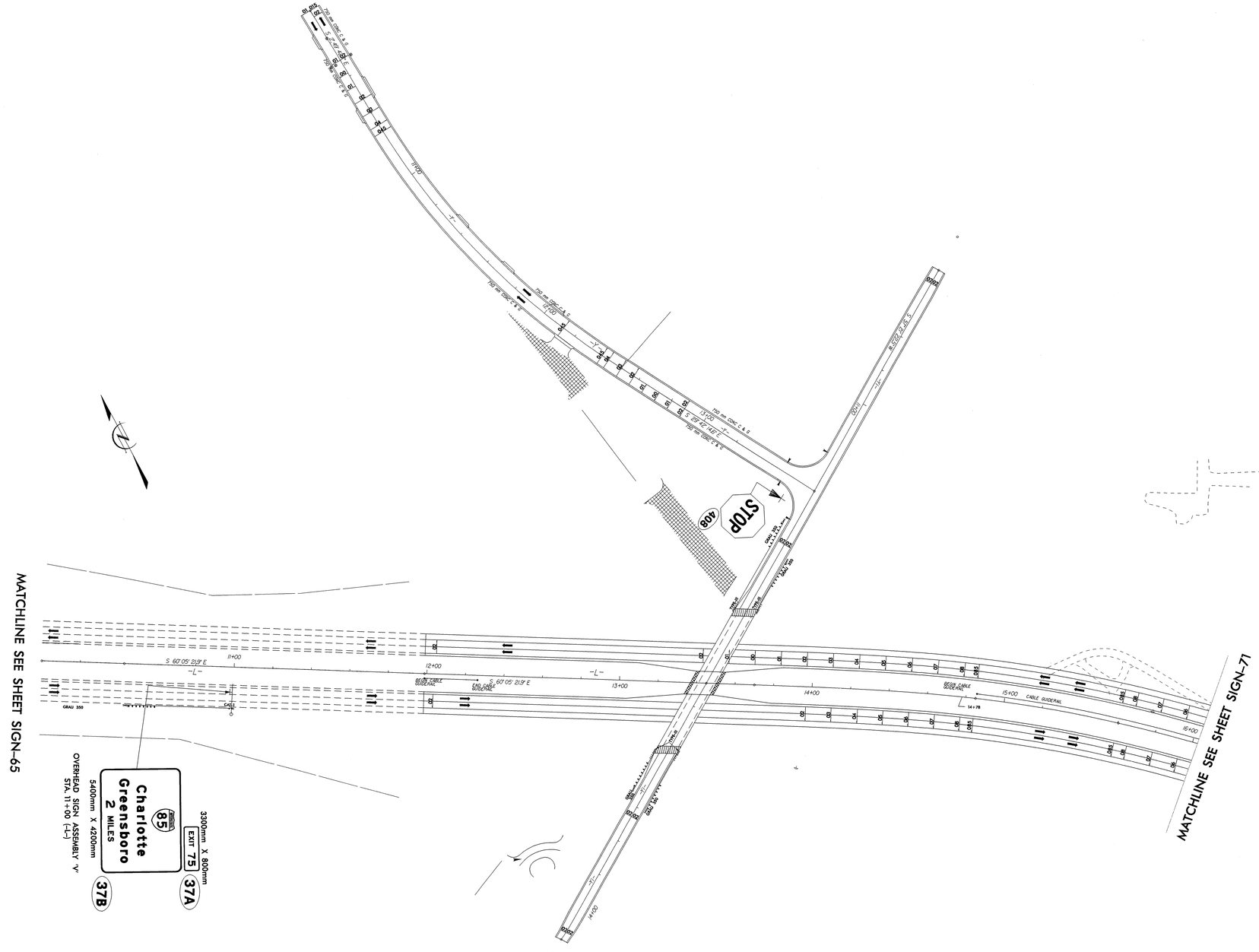
REVISIONS

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028387 ENGINEERING

TECC221658 6/7/2006 p14a mtracey TECC-Oce34bond

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-70



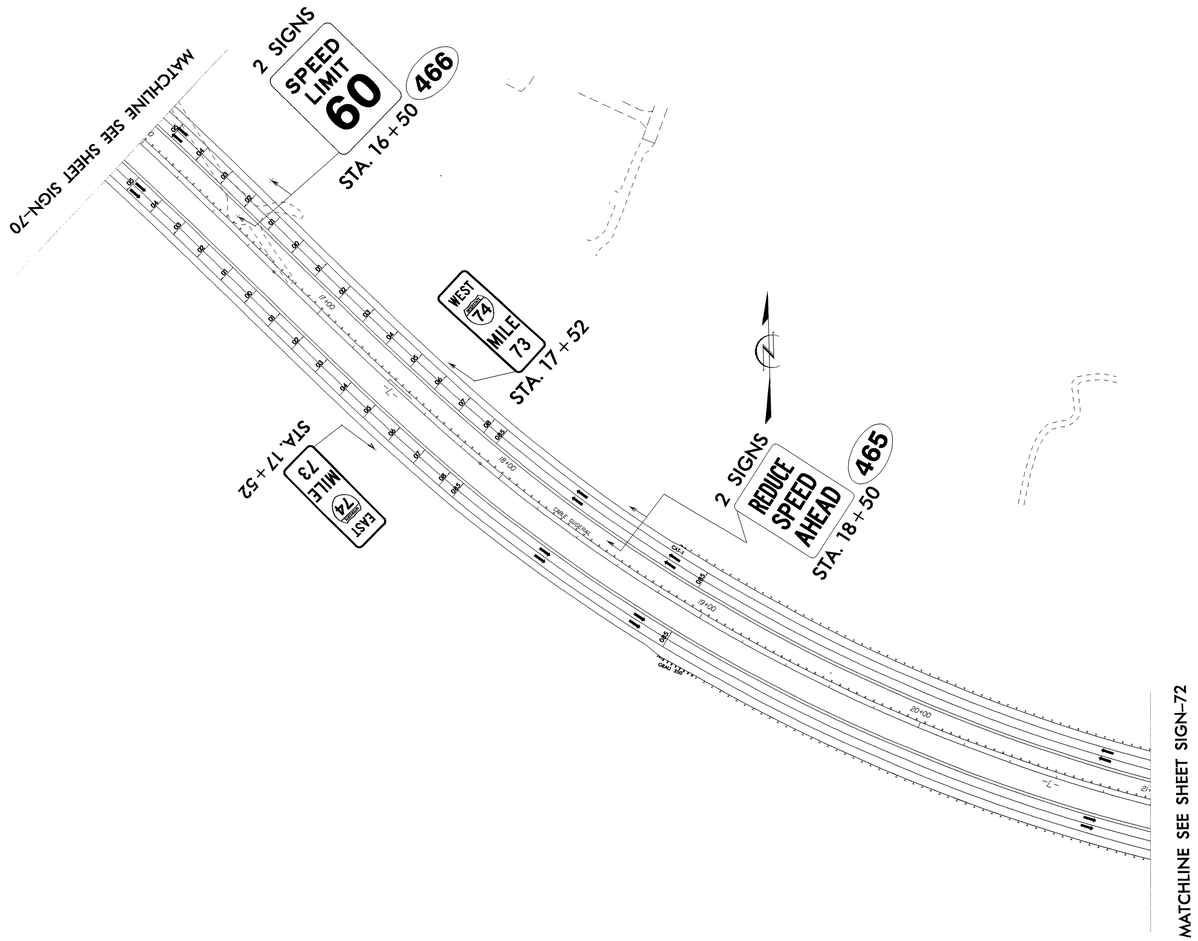
PROPOSED SIGNS
STA. 11+00 TO STA. 16+00 (L)
I-74/US 311

SCALE	NONE
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-71



SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ANWAR M. ALQUDWAH

6/9/06

PROPOSED SIGNS
STA. 16+00 TO STA. 21+00 (L)
I-74/US 311

SCALE	NONE
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

TIP NO.	SHEET NO.
R-0609IA	SIGN-72

MATCHLINE SEE SHEET SIGN-71

3300mm X 800mm
EXIT 71
32A
I-85 29 70
Thomasville
Greensboro
1 MILE
32B
4600mm X 3500mm
OVERHEAD SIGN ASSEMBLY 'S'
STA. 26+00 (-L-)

SPEED LIMIT 65
STA. 31+00
402

WEST I-74 MILE 74
STA. 33+61

EAST I-74 MILE 74
STA. 33+61

BREAKLINE SEE SHEET SIGN-73

SPEED LIMIT 65
STA. 31+00
402

I-85
Charlotte
Greensboro
1 MILE
5400mm X 4200mm
OVERHEAD SIGN ASSEMBLY 'W'
STA. 27+00 (-L-)
38B

3300mm X 800mm
EXIT 75
38A

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER
ANWAR M. ALQUDWAH

PROPOSED SIGNS
STA. 25+00 TO STA. 34+00 (L)
I-74/US 311

SCALE	NONE
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

TIP NO.	SHEET NO.
R-0609IA	SIGN-73

MATCHLINE SEE SHEET SIGN-74

BREAKLINE SEE SHEET SIGN-72

PROPOSED SIGNS
STA. 38+00 TO STA. 46+00 (L)
I-74/US 311

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER

SCALE	NONE
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS


METRIC
TIP NO. R-0609IA
SHEET NO. SIGN-74
MATCHLINE SEE SHEET SIGN-73
MATCHLINE SEE SHEET SIGN-75
MATCHLINE SEE SHEET SIGN-80
MATCHLINE SEE SHEET SIGN-82
85 NORTH Greensboro
LANE ENDS 1/2 MILE
85 SOUTH Charlotte
OVERHEAD SIGN ASSEMBLY 'Y'
STA. 15+28.4070 RAMP C
RAMP 50 M.P.H.
EXIT 218
STA. 11+20 RAMP C
RIGHT LANE ENDS
2 SIGNS
STA. 18+32 FLY1
GAS - EXIT 113 A
STA. 31+50
SEE NOTE 8
SEE PROJECT NOTE 2
STA. 30+25
EXIT 113B
EAST SOUTH 74 311 Asheboro
EXIT 113A 62 1/2 MILE
OVERHEAD SIGN ASSEMBLY 'E'
STA. 27+80 (-Y6-)
STA. 28+10
STA. 50+00
RIGHT LANE ENDS 3/4 MILE
RAMP 25 M.P.H.
STA. 27+50
EAST 74 MILE 75
STA. 49+70
WEST 74 MILE 75
B
EXIT 75A
STA. 51+10
LOGGING - EXIT 113 A
STA. 26+55
SEE NOTE 8
SEE PROJECT NOTE 2
EXIT 50 M.P.H.
STA. 24+90
NO TRUCKS 3 AXLES OR MORE LEFT LANE
STA. 23+92
SEE NOTE 1
EXIT 113C
STA. 23+85
STA. 26+00
SPEED LIMIT 70
SEE NOTE 2
Welcome To GUILFORD COUNTY North Carolina's Future
STA. 31+07
SEE NOTE 8
85 NORTH Greensboro
EXIT 113B
STA. 30+13
WEST NORTH 74 311 Winston-Salem 1/4 MILE EXIT ONLY
EXIT 113C
OVERHEAD SIGN ASSEMBLY 'N'
STA. 31+00 (-Y6-)
EAST SOUTH 74 311 Asheboro
EXIT 113B
STA. 21+05 FLY1
STA. 28+85
STA. 26+70
A
EXIT 113C
OVERHEAD SIGN ASSEMBLY 'O'
STA. 26+50 (-Y6-)
WEST NORTH 74 311 Winston-Salem EXIT ONLY
EXIT 75A
85 SOUTH Charlotte
OVERHEAD SIGN ASSEMBLY 'Q'
STA. 53+10 (-L-)
STA. 55+70
STA. 53+80

EXISTING AND PROPOSED SIGNS

STA. 48+20 TO STA. 55+80 (L)
STA. 34+00 TO STA. 23+00 (Y6)
I-74/US 311 and I-85

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028387 A. ALQUDWAH
6/12/06

SCALE	NONE
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

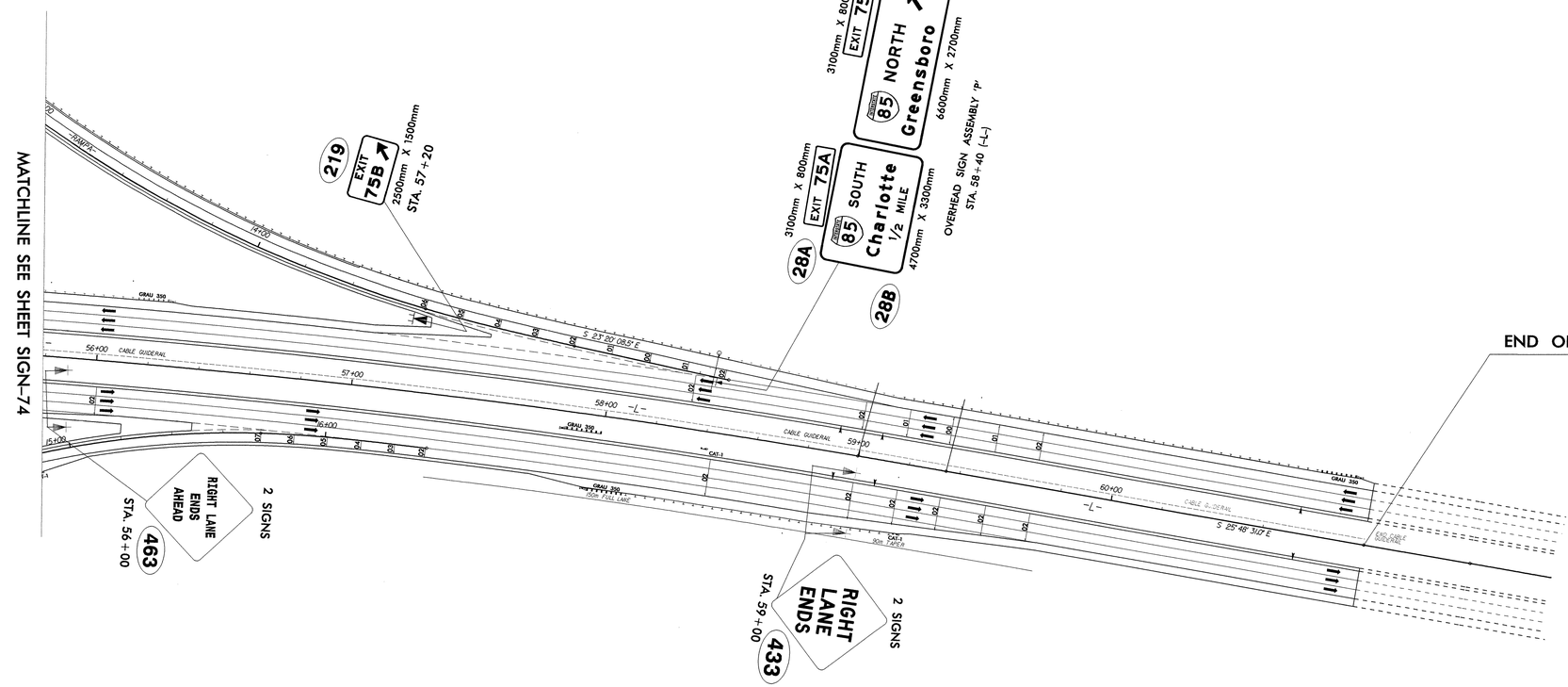
N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

TECC221636 6/12/2006 Sheet 3 gterlizzi TECC-Oce34bond

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-75

MATCHLINE SEE SHEET SIGN-74



SEAL

6/9/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER A. ALQUDWAH

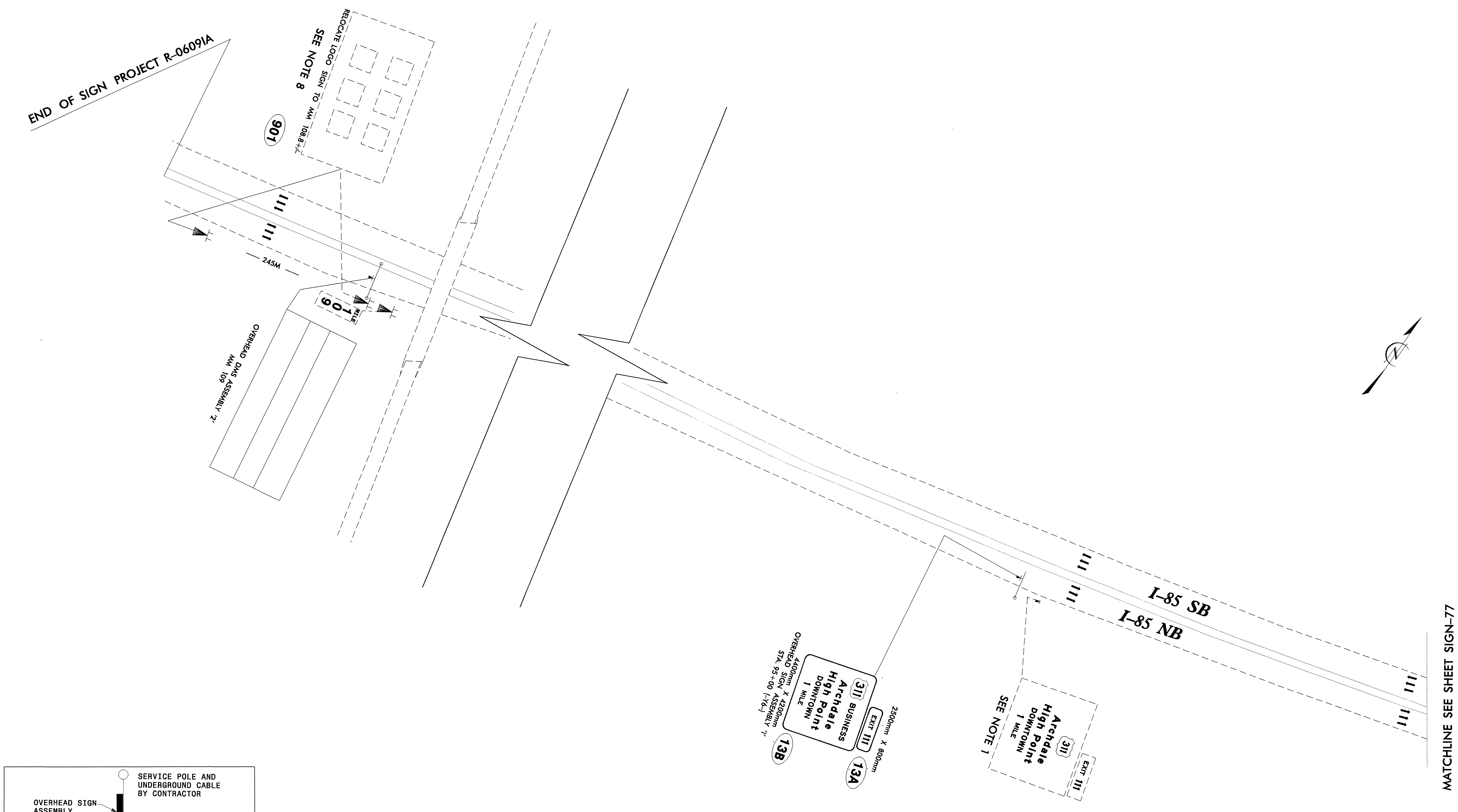
PROPOSED SIGNS
STA. 55+80 TO STA. 61+00 (L)
I-74/US 311

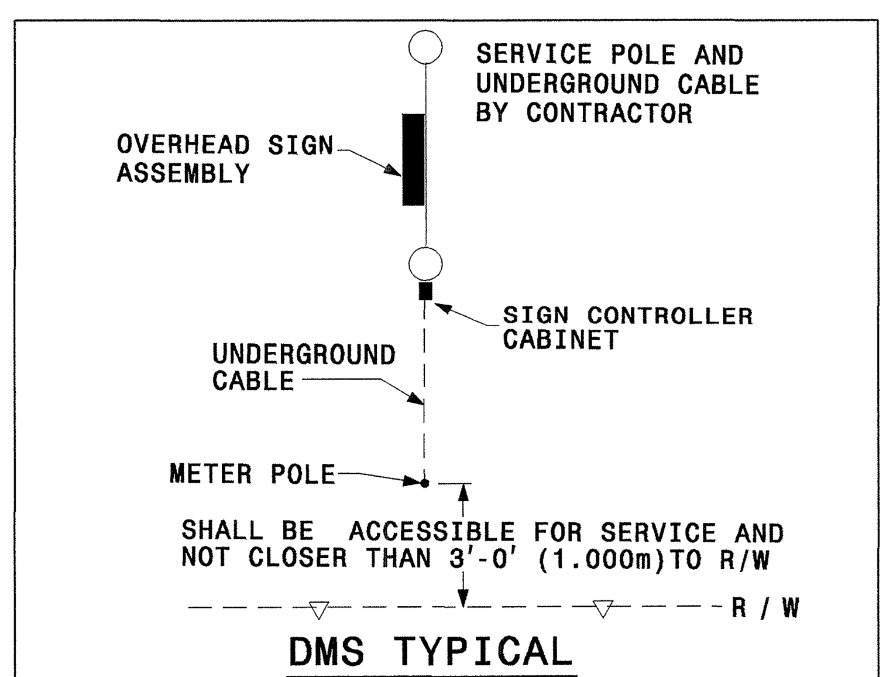
SCALE	NONE
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-76





* CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITY LOCATIONS BEFORE BEGINNING ANY UNDERGROUND WORK AND SHALL NOT DAMAGE ANY EXISTING UTILITIES DURING CONSTRUCTION

SEAL

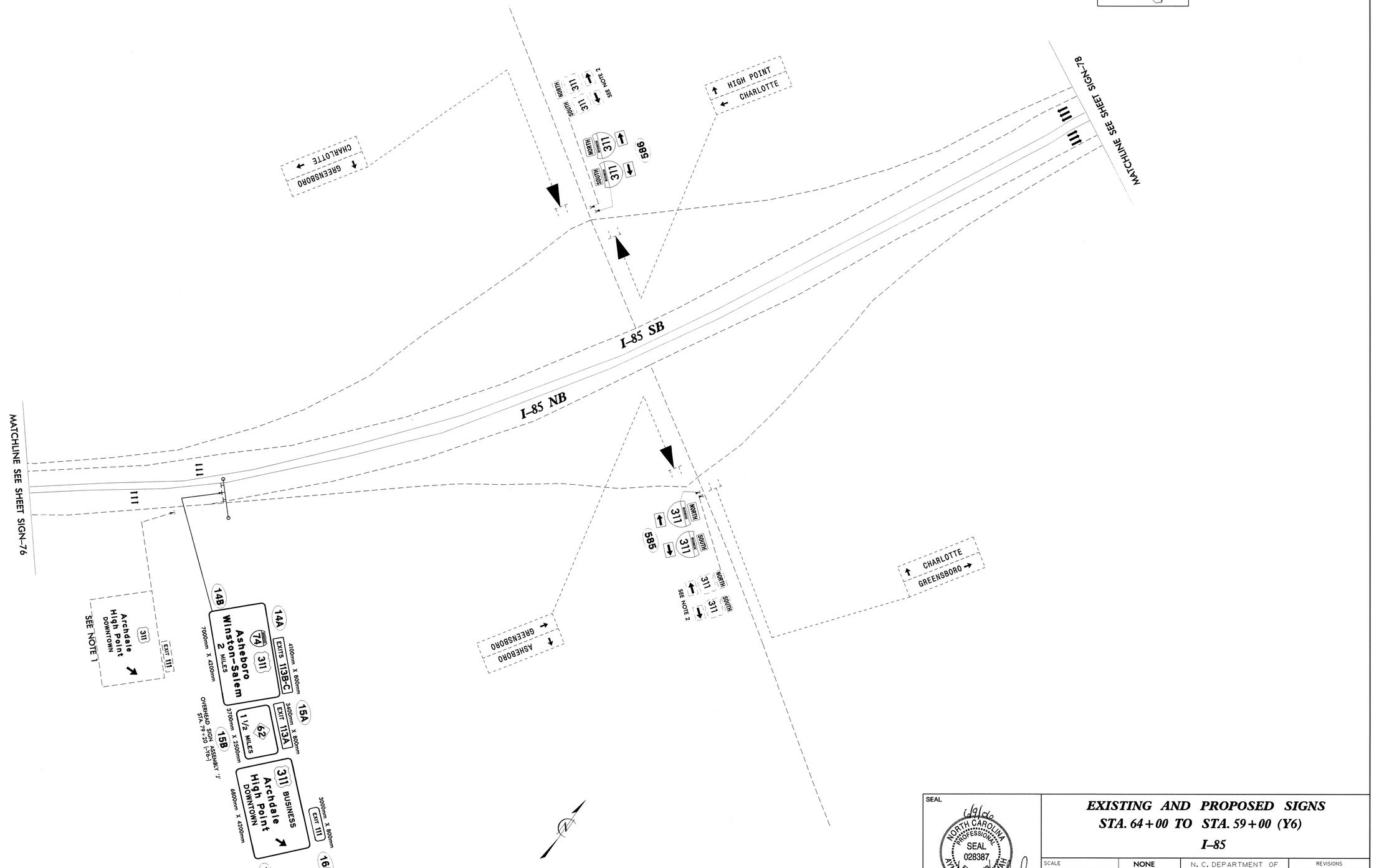
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AYMAN H. ALQUDWAH

PROPOSED SIGNS
MM 108+00 TO STA. 64+00 (Y6)
I-85

SCALE	NONE	N. C. DEPARTMENT OF TRANSPORTATION	REVISIONS
DATE	FEB 2006	DIVISION OF HIGHWAYS	
SIGNING DESIGN ENG	G. TERLIZZI	TRAFFIC ENGINEERING BRANCH	
SIGNING PROJECT DGN ENG	K. JORDAN		
SIGNING PROJECT ENG	A. ALQUDWAH		

TECC221636 6/9/2006 Sheet 8 gterlizzi TECC-Oce34bond

TIP NO.	SHEET NO.
R-0609IA	SIGN-77



SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 028387 AYMAN M. ALQUDWAH

EXISTING AND PROPOSED SIGNS STA. 64+00 TO STA. 59+00 (Y6)

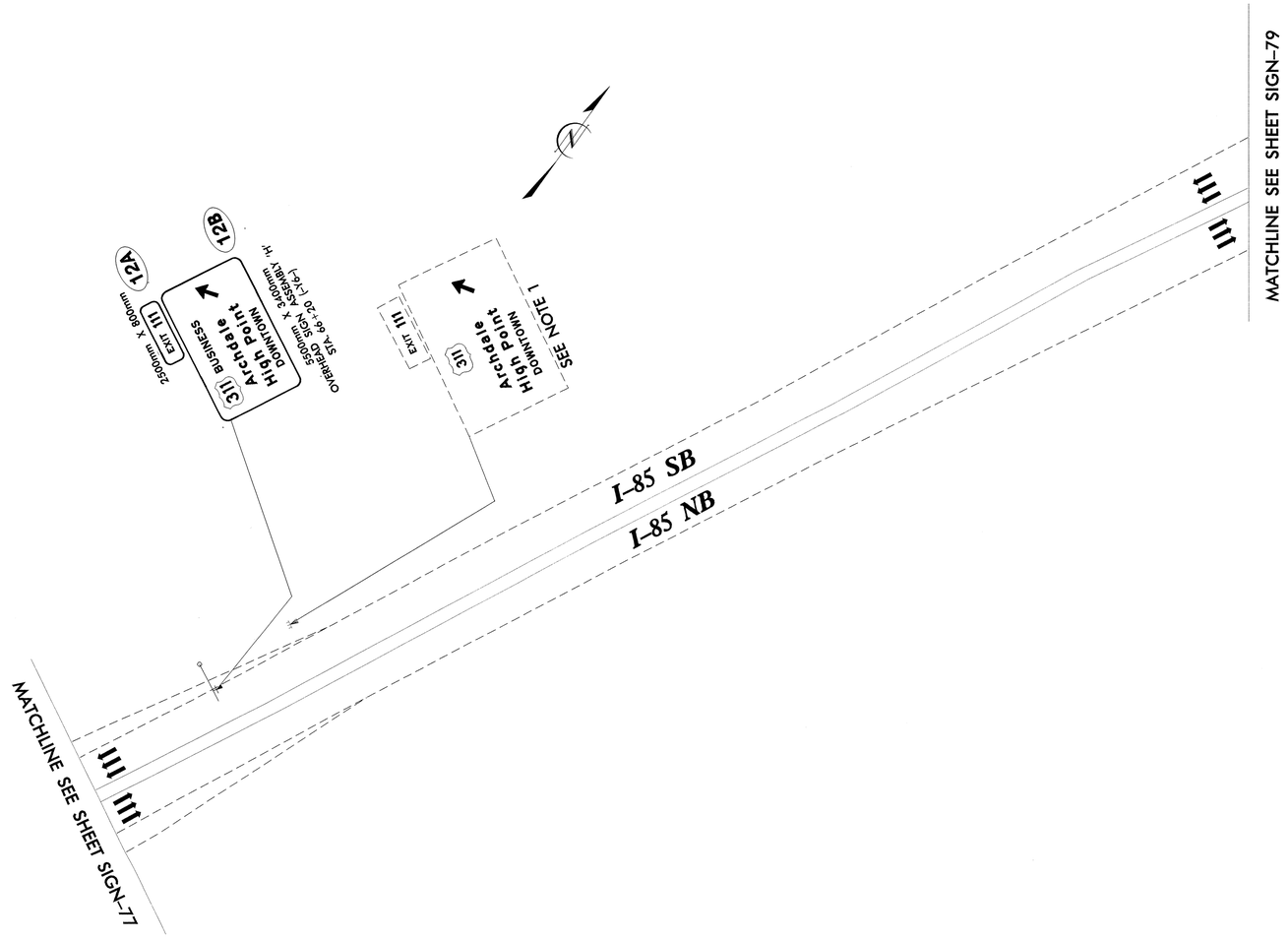
I-85

SCALE	NONE
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-78



SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER JAMIL A. ALQUDWAH

6/9/06

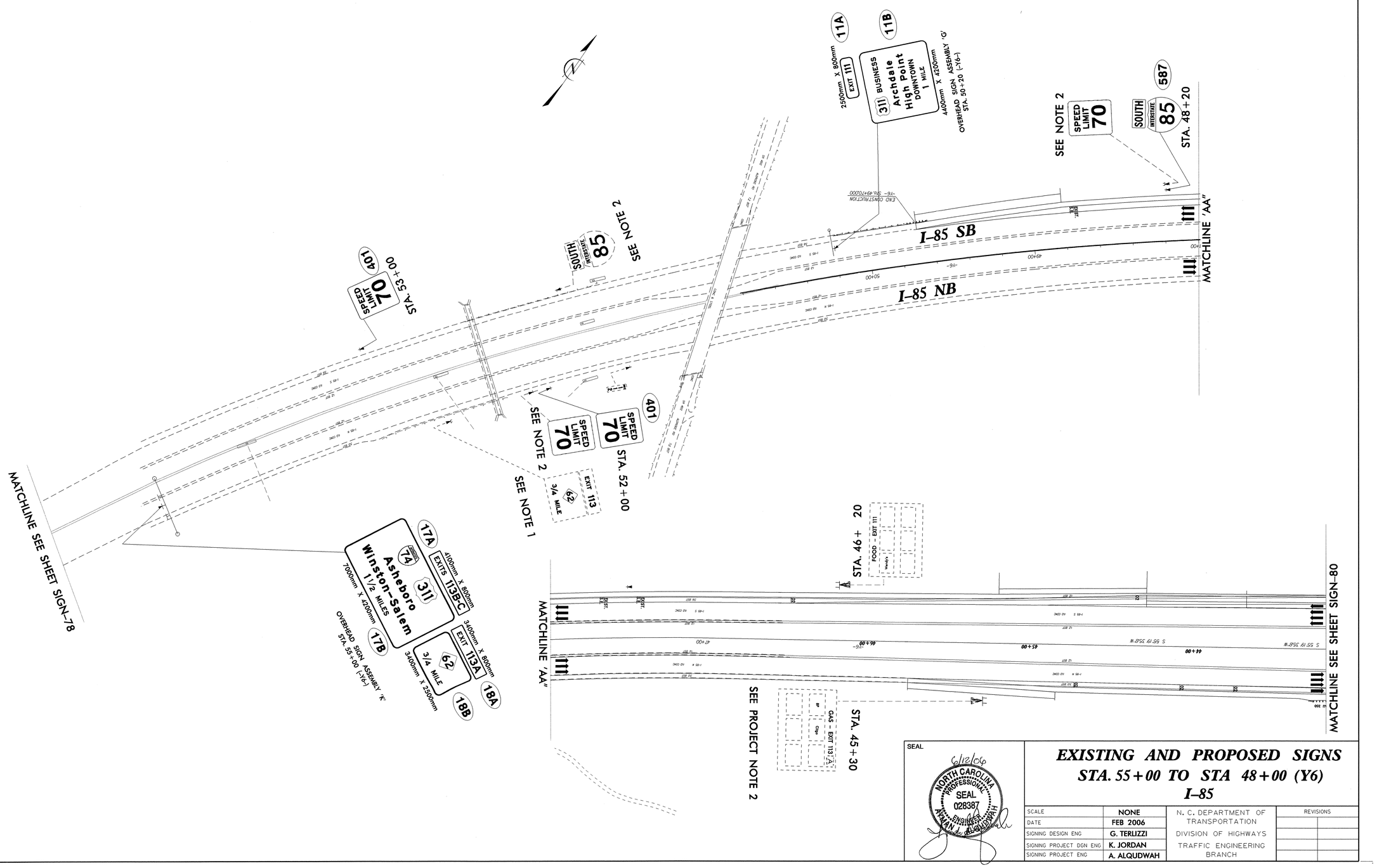
EXISTING & PROPOSED SIGNS STA. 59+00 TO STA. 55+00 (Y6) I-85

SCALE	NONE
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-79



SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER ARWAN J. ALQUDWAH

6/12/06

EXISTING AND PROPOSED SIGNS STA. 55+00 TO STA 48+00 (Y6) I-85

SCALE	NONE
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

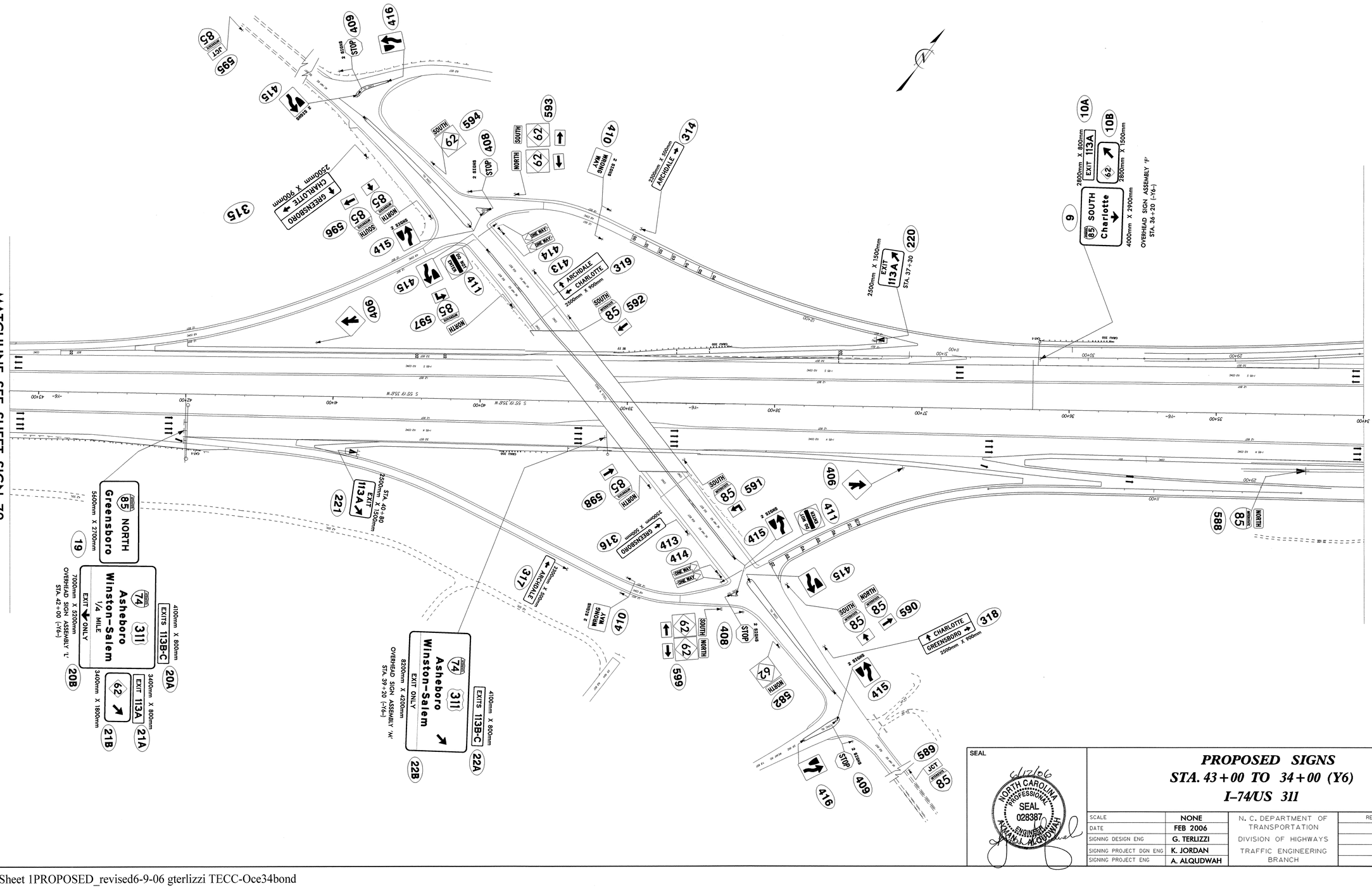
N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-80

MATCHLINE SEE SHEET SIGN-79

MATCHLINE SEE SHEET SIGN-74



SEAL

6/12/2006
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER KHANH J. ALQUDWAH

PROPOSED SIGNS
STA. 43+00 TO 34+00 (Y6)
I-74/US 311

SCALE	NONE
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

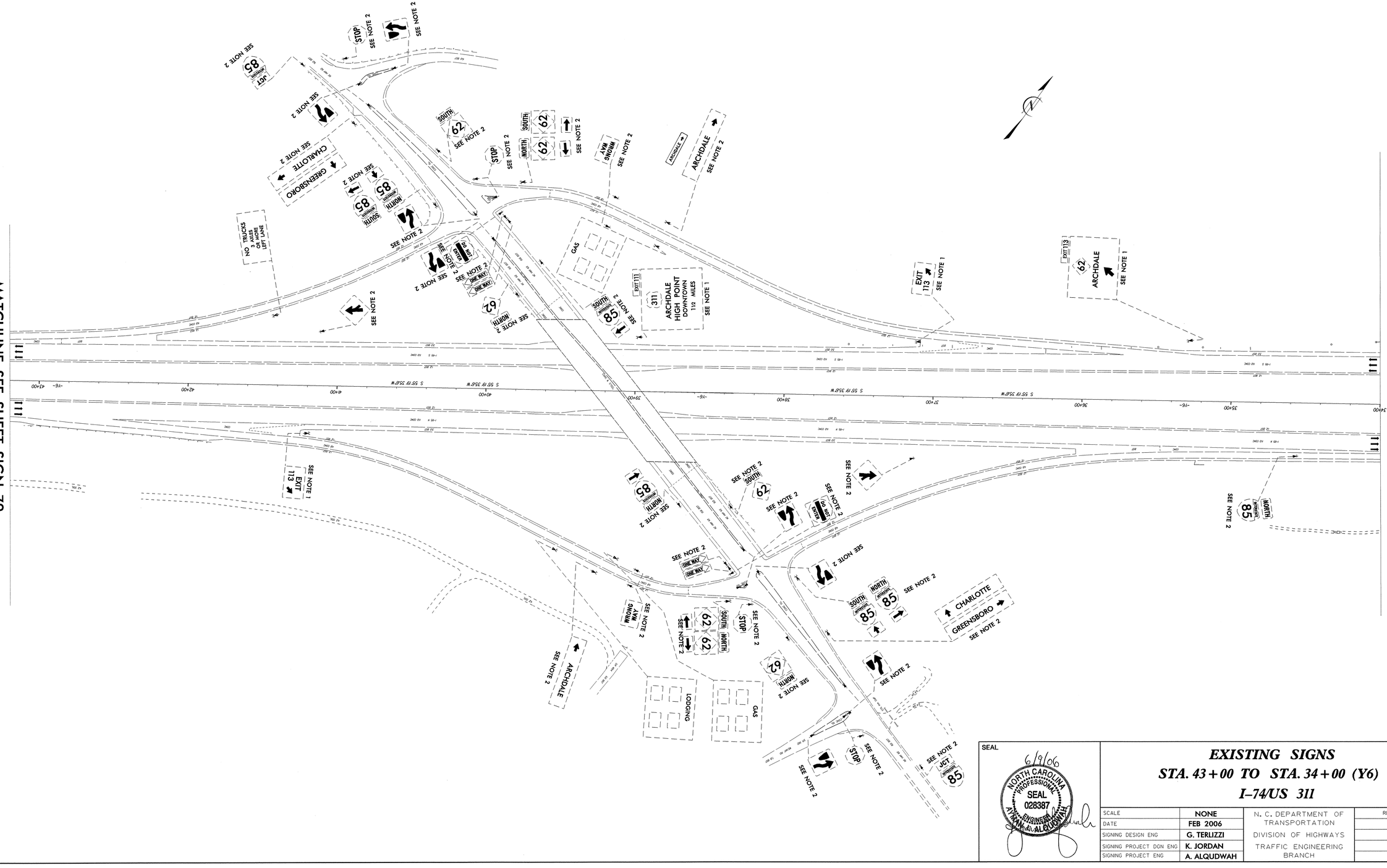
N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-81

MATCHLINE SEE SHEET SIGN-79

MATCHLINE SEE SHEET SIGN-74



SEAL

6/9/06
NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AYMAN M. ALQUDWAH

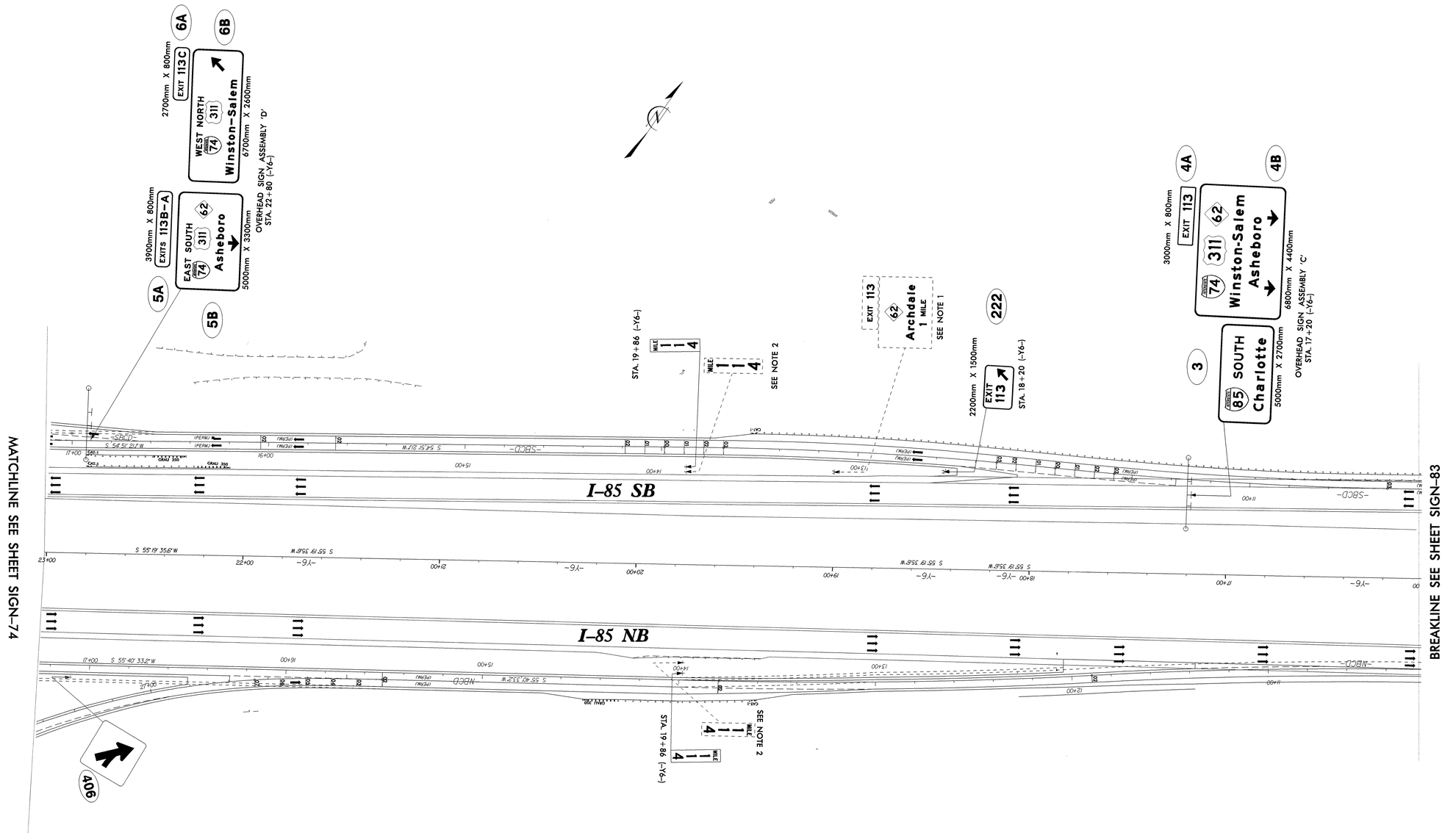
EXISTING SIGNS
STA. 43+00 TO STA. 34+00 (Y6)
I-74/US 311

SCALE	NONE
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

TIP NO.	SHEET NO.
R-0609IA	SIGN-82



SEAL

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AYKAN I. ALQUDWAH

6/12/06

EXISTING AND PROPOSED SIGNS STA. 23+00 TO STA. 16+00 (Y6) I-85

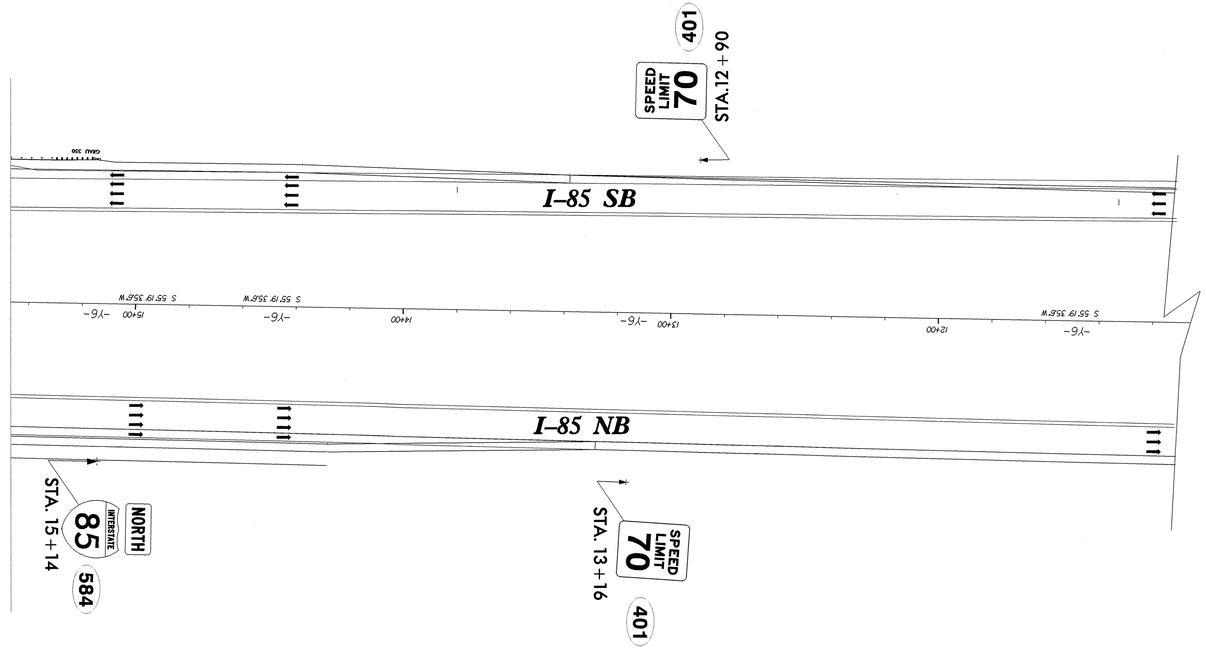
SCALE	NONE
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

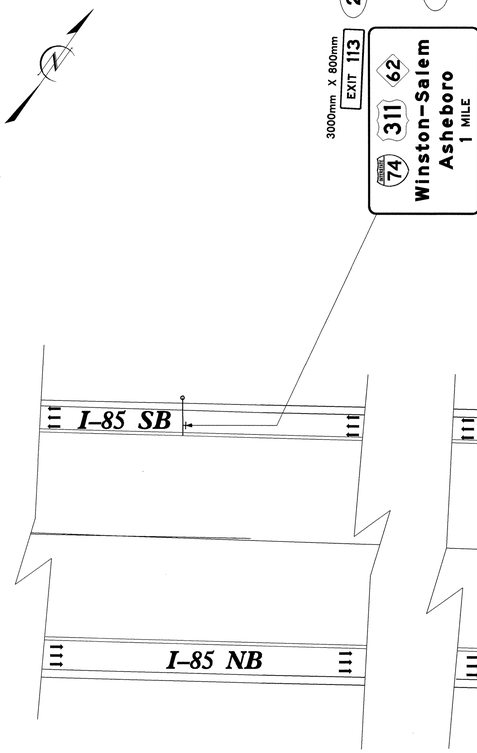
N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

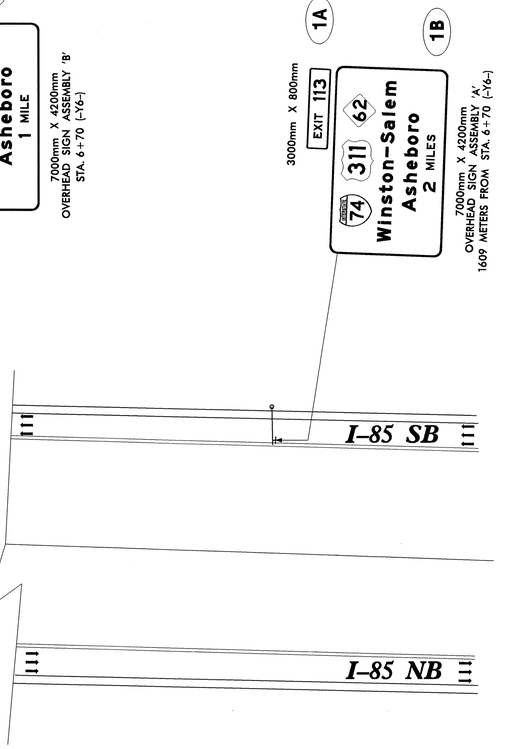
REVISIONS	

METRIC	TIP NO.	SHEET NO.
	R-0609IA	SIGN-83

MATCHLINE SEE SHEET SIGN-82







SEAL

6/12/06

NORTH CAROLINA PROFESSIONAL SEAL 028387 ENGINEER AYMAN I. ALQUDWAH

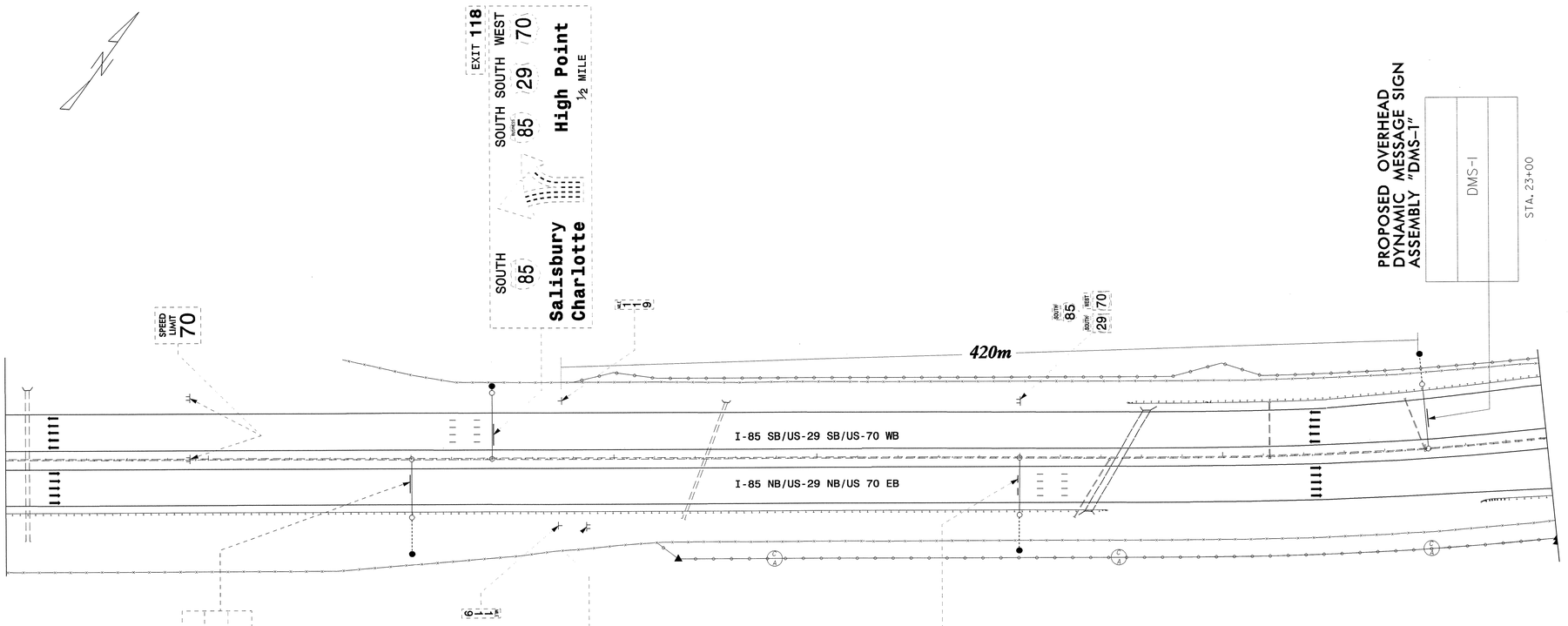
PROPOSED SIGNS
STA. 16+00 TO 1609M NORTH (Y6)
I-85

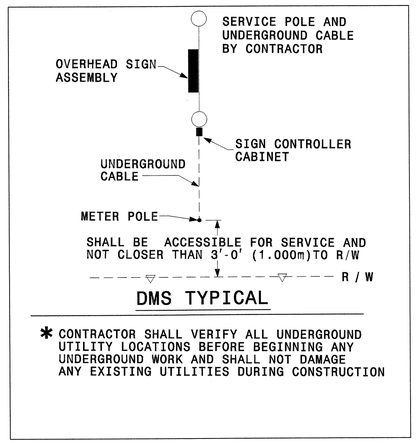
SCALE	NONE
DATE	FEB 2006
SIGNING DESIGN ENG	G. TERLIZZI
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS	

TIP NO.	SHEET NO.
R-0609IA	SIGN-84

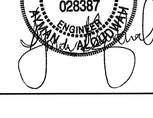




DMS TYPICAL

* CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITY LOCATIONS BEFORE BEGINNING ANY UNDERGROUND WORK AND SHALL NOT DAMAGE ANY EXISTING UTILITIES DURING CONSTRUCTION

SEAL



I-85
EXISTING SIGNS AND PROPOSED DMS
420M BEYOND M.M. #119

SCALE	NONE
DATE	APRIL 2006
SIGNING DESIGN ENG	S. JOHNS
SIGNING PROJECT DGN ENG	K. JORDAN
SIGNING PROJECT ENG	A. ALQUDWAH

N. C. DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
TRAFFIC ENGINEERING BRANCH

REVISIONS

TECC221656 6/8/2006 Proposed_DMS_location kjordan TECC-Oce34bond