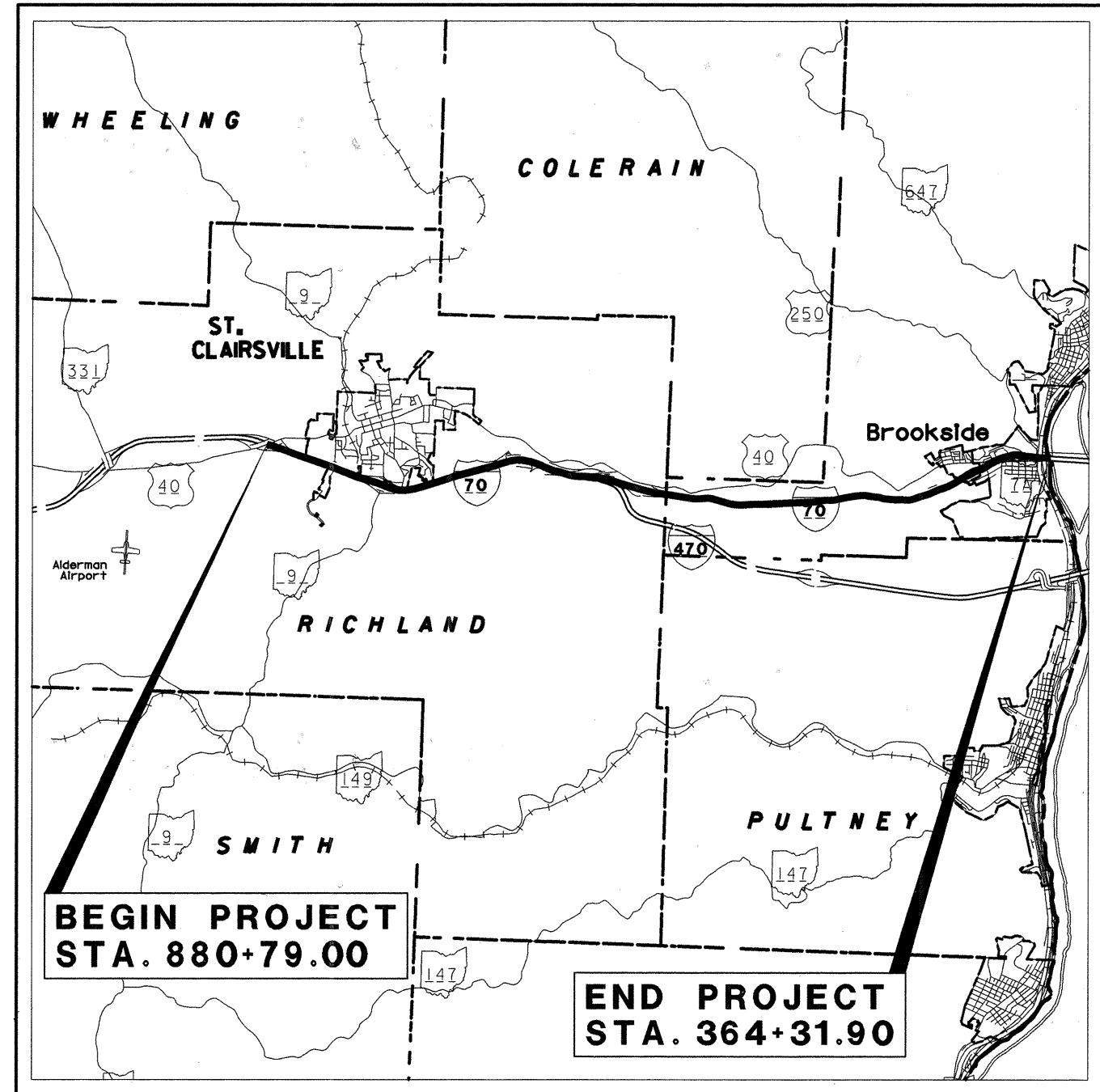
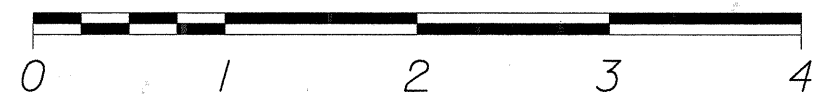




LOCATION MAP

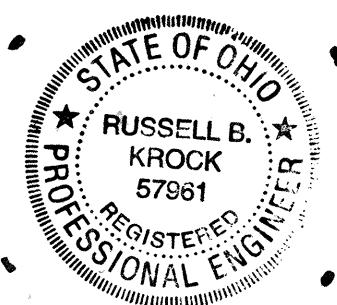
LATITUDE: N40°4'00" LONGITUDE: W80°50'15"

SCALE IN MILES



PORTION TO BE IMPROVED _____
FEDERAL ROUTES _____
STATE ROUTES _____
OTHER ROADS _____

ENGINEERS SEAL:



SIGNED: *Russell B. Krook*
DATE: *Aug. 16, 2002*

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

PLAN PREPARED BY:
ADR & ASSOCIATES, LTD.
88 WEST CHURCH STREET
NEWARK, OHIO 43055

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
BEL-70-16.60
VILLAGE OF BROOKSIDE
VILLAGE OF BRIDGEPORT
PEASE AND RICHLAND TOWNSHIPS
BELMONT COUNTY

INDEX OF SHEETS:

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PROJECT DESCRIPTION

UPGRADE EXISTING SIGNING BETWEEN US 40 INTERCHANGE AND THE WEST VIRGINIA STATE LINE ON IR-70; A DISTANCE OF 10.26 MILES. WORK TO INCLUDE SIGN REPLACEMENT ON IR-70 AND LEAD-IN SIGNING AT THE INTERCHANGES OF US 40, SR 9, MALL ROAD, BANFIELD ROAD, CR 214, AND SR 7A (MARION STREET).

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE REVISED CODE OF OHIO.

1997 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING OF THE HIGHWAY.

**AS-BUILT DRAWINGS
SEE SHEETS 5, 9, 13, 70, 71 AND 80
FOR RECORDED CHANGES
TO CONSTRUCTION PLANS.**

STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS
TC-07.65	1-19-01	TC-41.50	1-19-01	MT-35.10	4-20-01	HL-40.10	7-20-01			
TC-09.30	1-19-01	TC-42.10	1-19-01	MT-95.30M	4-25-94	HL-50.11	7-20-01			
TC-12.30	1-19-01	TC-42.20	4-20-01	MT-95.31M	4-25-94	HL-50.21	7-20-01			
TC-15.115	1-19-01	TC-51.11	4-20-01	MT-95.32M	4-25-94	HL-60.11	7-20-01			
TC-21.10	1-19-01	TC-51.12	4-20-01	MT-97.10M	4-25-94	HL-60.12	7-20-01			
TC-21.20	1-19-01	TC-52.10	4-20-01	MT-97.11M	1-30-95	HL-60.21	7-20-01			
TC-21.40	1-18-02	TC-52.20	4-20-01	MT-98.12M	6-24-93	HL-60.31	7-20-01			
TC-21.41	1-18-02	TC-61.10	1-19-01	MT-98.13M	6-24-93					
TC-22.10	1-19-01			MT-98.14M	6-24-93					
TC-22.20	1-19-01	RM-4.4M	10-21-97	MT-98.15M	6-24-93					
TC-31.21	4-20-01			MT-98.16M	6-24-93					
TC-32.10	10-19-01			MT-98.17M	4-25-94					
TC-32.11	10-19-01			MT-98.18M	4-25-94					
TC-41.10	1-19-01			MT-98.19M	3-1-96					
TC-41.20	1-19-01			MT-99.10M	1-30-95					
TC-41.40	1-18-02			MT-105.10M	4-25-94					
TC-41.41	1-19-01			MT-105.11M	4-25-94					

APPROVED _____
DATE _____ DISTRICT DEPUTY DIRECTOR

APPROVED _____
DATE _____ DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.

PID NO.

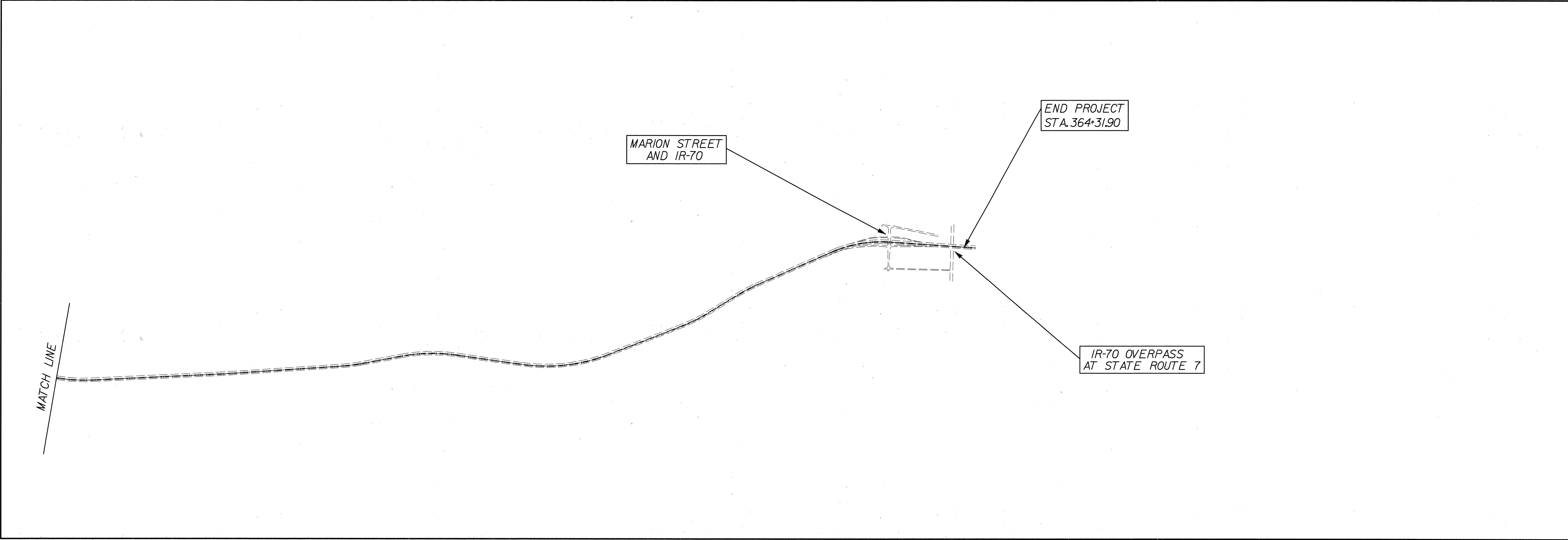
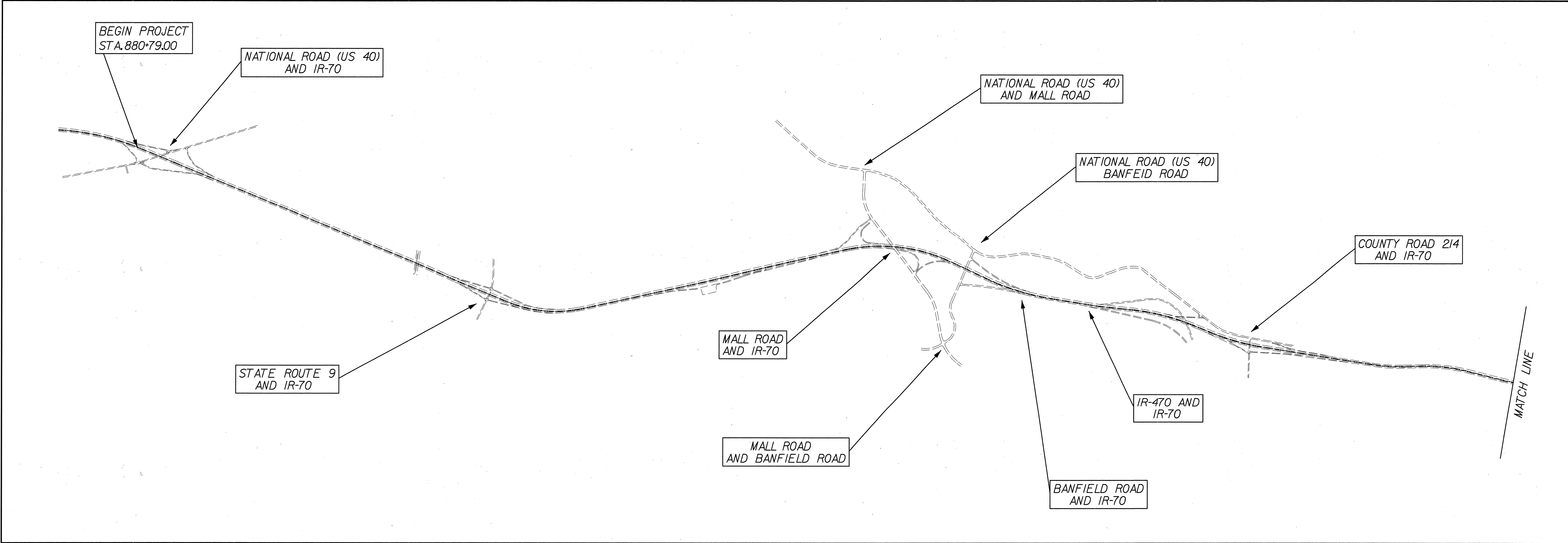
19576

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT

NONE

BEL-70-16.60



GENERAL REQUIREMENTS

IT IS THE INTENTION TO PERFORM THE REQUIRED WORK WITHIN THESE PLANS WITH THE LEAST INCONVENIENCE TO AND THE MAXIMUM SAFETY OF THE CONTRACTOR AND THE TRAVELING PUBLIC. THE REQUIREMENTS FOR MAINTAINING TRAFFIC AS SPECIFIED IN THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (CURRENT EDITION, LATEST REVISION), PERTINENT PROVISIONS OF THE "OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS" (INCLUDING SUPPLEMENTAL SPECIFICATIONS) AND APPLICABLE STANDARD DRAWINGS SHALL APPLY TO THIS PROJECT IN ADDITION TO THE FOLLOWING NOTES AND DETAILS.

UTILITIES

LISTED BELOW ARE ALL KNOWN UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS.

- BELMONT COUNTY
SANITARY SEWER DISTRICT
P.O. BOX 457
ST. CLAIRSVILLE, OH 43950

BELMONT COUNTY
COMMISSIONERS
101 WEST MAIN STREET
COURTHOUSE
ST. CLAIRSVILLE, OH 43950
- AEP OHIO POWER COMPANY
301 CLEVELAND AVENUE, S.W.
P.O. BOX 24630
CANTON, OH 44701-4630

MAYOR
CITY OF ST. CLAIRSVILLE
100 NORTH MARKET STREET
P.O. BOX 537
ST. CLAIRSVILLE, OH 43950
- ALLTEL
32699 OLD NATIONAL ROAD
BARNESVILLE, OH 43713

MAYOR
VILLAGE OF BRIDGEPORT
301 MAIN STREET
BRIDGEPORT, OH 43912
- AMERITECH
160 NORTH SIXTH STREET
ZANESVILLE, OH 43701

MAYOR
VILLAGE OF BROOKSIDE
875 NATIONAL ROAD
BRIDGEPORT, OH 43912
- BP EXPLORATION & OIL, INC.
200 PUBLIC SQUARE 7-I
CLEVELAND, OH 44114-2375

COLUMBIA GAS OF OHIO, INC.
2429 LINDEN AVENUE
ZANESVILLE, OH 43701
- MEDICAL FOUNDATION OF BELLAIRE
3000 GUERNSEY STREET
BELLAIRE, OH 43906

SOUTH CENTRAL POWER COMPANY
37801 BARNESVILLE-BETHESDA ROAD
P.O. BOX 270
BARNESVILLE, OH 43713-0270
- THF REALITY
955 EXECUTIVE PARKWAY
SUITE 210
ST. LOUIS, MO 63141

WHEELING ANTENNA COMPANY, TCI,
ADA ST. CLAIRSVILLE CABLE T.V.
2184 NATIONAL ROAD
WHEELING, WV 26003

OHIO DEPARTMENT OF TRANSPORTATION
ROADWAY SERVICES MANAGER
2201 REISER AVENUE, S.E.
NEW PHILADELPHIA, OH 44663

AT&T BROADBAND & INTERNET SERVICES
908 NATIONAL ROAD
P.O. BOX 469
BRIDGEPORT, OH 43912

THERE ARE NO UNDERGROUND UTILITIES SHOWN IN THE PLAN. THE NATURE OF THE WORK REQUIRED BY THIS PROJECT IS ANTICIPATED NOT TO AFFECT ANY KNOWN UNDERGROUND UTILITIES THAT EXIST UNDER OR ARE ADJACENT TO THE WORK AREA.

ITEM 614, MAINTAINING TRAFFIC

BEFORE ANY WORK BEGINS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THE NAME(S) AND TELEPHONE NUMBER(S) OF A PERSON OR PERSONS WHO CAN BE CONTACTED TWENTY-FOUR (24) HOURS A DAY BY THE OHIO DEPARTMENT OF TRANSPORTATION, THE HIGHWAY PATROL, OR ANY OTHER INTERESTED POLICE AGENCY.

THE CONTRACTOR WILL BE REQUIRED TO PROVIDE, ERECT MAINTAIN (IN PROPER POSITION, CLEAN AND LEGIBLE, AND IN GOOD WORKING CONDITION) AND REMOVE ALL LIGHTS, SIGNS, CONES, DRUMS AND ANY OTHER TRAFFIC CONTROL DEVICES NECESSARY FOR THE MAINTENANCE OF TRAFFIC ACCORDING TO PLAN NOTES AND DETAILS.

THE ORIGINAL LOCATION, PLACEMENT, SPACING AND SUBSEQUENT RELOCATION OR REMOVAL OF ALL TRAFFIC CONTROL DEVICES SHALL BE SUBJECT TO THE ENGINEERS APPROVAL.

LANE CLOSURES ARE PERMITTED AS FOLLOWS:

ROUTE	SECTION	WEEKDAYS	WEEKENDS
IR-70	SR331 TO IR-470 (14.45-21.34)	9 AM TO 3 PM 10 PM TO 6 AM	10 PM TO 6 AM
IR-70	IR-470 TO STATELINE (21.34-26.97)	ANYTIME (*)	ANYTIME (*)
IR-470	IR-70 TO STATELINE (0.00-6.69)	ANYTIME (*)	ANYTIME (*)

* IR-70 AND IR-470 ARE PARALLEL ROUTES.

CLOSE ONLY ONE LANE OF EITHER IR-70 OR IR-470 IN THE SAME DIRECTION AT THE SAME TIME.

MINIMUM LANE WIDTH = 12'.

TEMPORARY CLOSURE OF INTERSTATE FOR ERECTION OF OVERHEAD SIGN SUPPORTS WILL BE AS PER THE TRAFFIC CONTROL APPLICATION STANDARDS MANUAL. ROAD CLOSURES SHALL BE SCHEDULED FOR SUNDAY MORNINGS BETWEEN DAYLIGHT AND 11:00 AM, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

THE CONTRACTOR SHALL NOTIFY THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DISTRICT 6 OFFICE, TRAFFIC ENGINEER, (304)-843-4086 ANYTIME MOT SIGNING WILL BE PLACED IN WEST VIRGINIA. NOTIFICATION TO THE WEST VIRGINIA DOT AND THE ENGINEER SHALL BE A MINIMUM OF 14 DAYS PRIOR TO INSTALLATION.

IF IN THE OPINION OF THE ENGINEER THE LANE CLOSURE IS NOT JUSTIFIED HE MAY ORDER ALL OR PART OF THE LANE CLOSURE REOPENED TO TRAFFIC UNTIL SUCH TIME THIS CONDITION IS CORRECTED.

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOW DESIGNATED HOLIDAYS OR EVENTS:

- NEW YEARS

LABOR DAY
- MEMORIAL DAY

THANKSGIVING
- JAMBOREE IN THE HILLS
JULY 16-21, 2002

CHRISTMAS
- FOURTH OF JULY

THE PERIOD OF TIME THAT THE LANES ARE TO OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

WEEK DAY	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00 NOON FRIDAY THROUGH 12:00 NOON MONDAY
MONDAY	12:00 NOON FRIDAY THROUGH 12:00 NOON TUESDAY
TUESDAY	12:00 NOON MONDAY THROUGH 12:00 NOON WEDNESDAY
WEDNESDAY	12:00 NOON TUESDAY THROUGH 12:00 NOON THURSDAY
THURSDAY	12:00 NOON WEDNESDAY THROUGH 12:00 NOON MONDAY
FRIDAY	12:00 NOON THURSDAY THROUGH 12:00 NOON MONDAY
SATURDAY	12:00 NOON FRIDAY THROUGH 12:00 NOON MONDAY

NO EXTENSIONS OF TIME SHALL BE GRANTED FOR DELAYS IN MATERIAL DELIVERIES, UNLESS SUCH DELAYS ARE INDUSTRY WIDE, OR FOR LABOR STRIKES, UNLESS SUCH STRIKES ARE AREA WIDE.

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TRAFFIC CONTROL AND TRAFFIC CONTROL DEVICES REQUIRED BY THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL FOR STREETS AND HIGHWAYS" (CURRENT EDITION, LATEST REVISION) SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE LIMITS.

ITEM 614, LAW ENFORCEMENT OFFICER,
WITH PATROL CAR

IN ADDITION TO THE REQUIREMENTS OF 614 AND THE OHIO
MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD), A
UNIFORMED LAW ENFORCEMENT OFFICER (AND OFFICIAL PATROL
CAR WITH WORKING TOP MOUNTED EMERGENCY FLASHING
LIGHTS) SHALL BE PROVIDED FOR CONTROLLING TRAFFIC FOR
THE FOLLOWING TASKS:

WHEN DEEMED APPROPRIATE BY THE ENGINEER

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE
SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS
REQUIRED.

LAW ENFORCEMENT OFFICERS (L.E.O.'S) SHOULD NOT BE USED
WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED. THE
LEO'S ARE CONSIDERED TO BE EMPLOYED BY THE CONTRACTOR
AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR
ACTIONS. ALTHOUGH THEY ARE EMPLOYED BY THE CONTRACTOR,
THE PROJECT ENGINEER SHALL HAVE CONTROL OVER THEIR
PLACEMENT. THE OFFICIAL PATROL CAR SHALL BE A PUBLIC
SAFETY VEHICLE AS REQUIRED BY THE OHIO REVISED CODE.
THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THESE
SERVICES WITH:

OHIO STATE HIGHWAY PATROL
ST. CLAIRSVILLE PATROL POST
51400 NATIONAL ROAD
ST. CLAIRSVILLE, OH 43950
740-695-0915

BELMONT COUNTY SHERIFF
SHERIFF
68137 HAMMOND ROAD
ST. CLAIRSVILLE, OH 43950
740-695-2212

ST. CLAIRSVILLE POLICE DEPARTMENT
CHIEF OF POLICE
100 NORTH MARKET STREET
ST. CLAIRSVILLE, OH 43950
740-695-0123

BRIDGEPORT POLICE DEPARTMENT
CHIEF OF POLICE
301 MAIN STREET
BRIDGEPORT, OH 43912
740-635-2424

LAW ENFORCEMENT OFFICERS (WITH PATROL CAR) REQUIRED BY
THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON
A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT
OFFICER (WITH PATROL CAR). THE FOLLOWING ESTIMATED
QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR
100 HOURS

THE HOURS PAID SHALL INCLUDE MINIMUM SHOW-UP TIME
REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

IF CONTRACTORS WISH TO UTILIZE LEO'S FOR FLAGGING AND
TRAFFIC CONTROL OTHER THAN FOR THAT REQUIRED IN THESE
PLANS, THEY MAY DO SO AT THEIR OWN EXPENSE. PAYMENT
FOR THE EXCESS ABOVE THE CONTRACT REQUIREMENTS WILL
BE INCLUDED UNDER ITEM 614 MAINTAINING TRAFFIC.

ITEM 630, REMOVAL OF GROUND MOUNTED MAJOR SIGN
AND STORAGE, AS PER PLAN, AND ITEM 630,
REMOVAL OF OVERHEAD MOUNTED SIGN AND
STORAGE, AS PER PLAN.

EXTRUSHEET SIGNS, REMOVED UNDER ITEMS OF WORK, SHALL
BE PROCESSED AND SHIPPED TO THE ODOT CENTRAL OFFICE
SIGN SHOP, AT 1606 WEST BROAD STREET, COLUMBUS, OHIO.

THE LOADING, SECURING, TRANSPORTING AND UNLOADING OF
EXTRUSHEET SIGNS SHALL BE BY SUITABLE MEANS TO AVOID
DAMAGE TO THE SIGN PANELS. LARGE SIGNS MAY BE CAREFULLY
DISASSEMBLED INTO SMALLER ASSEMBLIES TO FACILITATE
TRANSPORTATION.

DELIVERIES SHALL BE MADE BETWEEN 8:00 AM AND 2:00 PM.
LATE ARRIVALS MUST UNLOAD THE FOLLOWING DAY. NO DELIVERIES
WILL BE ACCEPTED ON SATURDAY, SUNDAY, AND HOLIDAYS. THE
SIGN SHOP ADMINISTRATOR SHALL BE NOTIFIED AT (614) 351-2850
AT LEAST THREE DAYS PRIOR TO THE DELIVERY OF THE SIGNS.
DELIVERY ARRANGEMENTS, OTHER THAN THOSE DESCRIBED ABOVE,
MUST BE APPROVED, IN ADVANCE, BY THE SIGN SHOP ADMINISTRATOR.

THE SIGNS SHALL BE TRANSPORTED BY THE CONTRACTOR TO
THE SIGN SHOP WHERE THEY WILL BE UNLOADED AND STORED.
FOR UNLOADING PURPOSES, A FORKLIFT, OF 1000 POUNDS
MAXIMUM CAPACITY, AND ANY NECESSARY PERSONNEL WILL BE
PROVIDED BY THE STATE.

PAYMENT WILL BE AT THE CONTRACT PRICE PER EACH SIGN
INCLUDING ALL LABOR, EQUIPMENT, BANDING MATERIAL, PALLETS,
TRANSPORTATION, AND MISCELLANEOUS MATERIAL NECESSARY TO
PERFORM THE WORK.

ITEM 630, OVERHEAD SIGN SUPPORTS

THE SIX NEW OVERHEAD SIGN SUPPORTS LISTED AS SIGN
REFERENCE NO.'S 1, 2, 5, 6, 12, & 13 SHALL BE FURNISHED WITH
"SIGN ATTACHMENT ASSEMBLIES" AND "LUMINAIRE SUPPORT
ASSEMBLIES" PER ITEM 630. THE QUANTITIES SHOWN IN THE
SUB-SUMMARIES AND THE GENERAL SUMMARY FOR THESE SIX (6)
SIGN SUPPORTS ARE FOR INFORMATIONAL PURPOSES ONLY.

ITEM SPECIAL, REPLACE GALVANIZED,
STEEL HARDWARE

THIS ITEM OF WORK REQUIRES THE CONTRACTOR TO
REPLACE ALL GALVANIZED STEEL HARDWARE (BOLTS,
NUTS, AND WASHERS) ON EXISTING OVERHEAD TRUSS
STRUCTURES AND OVERHEAD CANTILEVER STRUCTURES
PER ITEM 630 AND THE APPROPRIATE STANDARD
CONSTRUCTION DRAWINGS. PAYMENT WILL BE AT THE
CONTRACT UNIT PRICE PER EACH EXISTING STRUCTURE
AND INCLUDES ALL LABOR, EQUIPMENT, AND MATERIAL
TO COMPLETE THE WORK.

ITEM SPECIAL, CLEANING AND COATING,
EXISTING OVERHEAD STRUCTURES

THIS ITEM OF WORK SHALL BE AS DESCRIBED IN PLAN
INSERT SHEETS, NO. 202310, EXCEPT THE BASIS OF
PAYMENT SHALL BE FOR EACH OVERHEAD STRUCTURE
INSTEAD OF EACH MAJOR SUPPORT SECTION. TYPICALLY
THE PORTION OF AN OVERHEAD TRUSS STRUCTURE THAT
SPANS THE ROAD IS ALUMINUM AND IS EXCLUDED FROM
THE CLEANING AND COATING WORK. THIS ITEM OF WORK
SHALL ALSO INCLUDE CLEANING AND COATING OF ALL
FOUNDATION ANCHOR BOLTS, NUTS AND WASHERS ABOVE
THE TOP OF CONCRETE FOUNDATIONS PER PLAN INSERT
SHEET NO. 202310.

GENERAL NOTES

BEL-70-16.60

4
84

CALCULATED
GCS
CHECKED
RBK

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SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630																						631					SPECIAL	
							GROUND MOUNTED SUPPORT, # 3 POST	GROUND MOUNTED SUPPORT, 4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, 6 X 9 BEAM	GROUND MOUNTED SUPPORT, 10 X 12 BEAM	GROUND MOUNTED SUPPORT, 10 X 22 BEAM	GROUND MOUNTED SUPPORT, 12 X 30 BEAM	BREAKAWY BEAM CONNECTION	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 5	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 7	OVERHEAD SIGN SUPPORT, TYPE TC-15.115 (STEEL TRUSS)	SIGN ATTACHMENT ASSEMBLY	LUMINAIRE SUPPORT ASSEMBLY, TYPE TC-31.21	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN EXTRUSHEET, TYPE G	SIGN FLATSHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND STORAGE, AS PER PLAN	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE, AS PER PLAN	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	SIGN SERVICE	SIGN WIRED	MECURY VAPOR LUMINAIRE, TYPE H38HT WITH 100 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H39KB WITH 175 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H37KB WITH 250 WATT LAMP	REPLACED GALVANIZED STEEL HARDWARE	CLEANING AND COATING, EXISTING OVERHEAD STRUCTURES
18	249	IR-70 WB	880+00	RT	W-49R-48	48 X 48	28												16	1			2												
19	153	IR-70 EB	887+25	RT	W-49R-48	48 X 48	32												16	1			2												
19	242	IR-70 WB	892+90	RT	GF	96 X 60			33.5				2					40			1	2													
20	154	IR-70 EB	912+00	RT	M-5-36-2	36 X 36	35												9	1			2												
20	154				IM-39-36	36 X 18												4.5	1																
20	240	IR-70 WB	912+00	RT	GB	192 X 114						65						152			1	2													
20	240				GEP-96	96 X 24												16			1														
20	241	IR-70 WB	900+20	RT	GE	192 X 114					64.5		2					152			1	2													
20	241				GEP-96	96 X 24												16			1														
21	155	IR-70 EB	919+00	RT	GB	216 X 114						64						171			1	2													
21	155				GEP-96	96 X 24												16			1														
21	156	IR-70 EB	921+20	RT	N-41-12	12 X 48	15												4	1			1												
21	239	IR-70 WB	921+20	RT	N-41-12	12 X 48	15												4	1			1												
22	157	IR-70 EB	933+00	RT	W-68-48	48 X 48	31												16	1			2												
22	237	IR-70 WB	935+00	RT	GB	192 X 114					43.5		2					152			1	2													
22	237				GEP-96	96 X 24												16			1														
22	238	IR-70 WB	931+50	RT	SPECIAL	120 X 60			31				2					50			1	2													
23	158	IR-70 EB	942+00	RT	GB	216 X114						64						171			1	2													
23	158				GEP-96	96 X 24												16			1														
23	158				D-4A-24	108 X 24												18			1														
23	159	IR-70 EB	945+25	RT	X-6R-12	12 X 36	11												3	1			1												
23	159	IR-70 EB	945+25	LT	X-6L-12	12 X 36	11												3	1			1												
23	159	IR-70 WB	946+80	LT	X-6L-12	12 X 36	11												3	1			1												
23	159	IR-70 WB	946+80	RT	X-6R-12	12 X 36	11												3	1			1												
23	160	IR-70 EB	950+40	RT	GE	216 X 114					42		2					171			1	2													
23	160				GEP-96	96 X 24												16			1														
23	236	IR-70 WB	940+00	RT	M-5-36-2	36 X 36	30.5												9	1			2												
23	236				IM-40-36	36 X 18													4.5	1															
24	161	IR-70 EB	959+00	RT	GF	96 X 60			36.5				2					40			1	2													
24	233	IR-70 EB	964+00	RT	X-6R-12	12 X 36	11												3	1			1												
24	233	IR-70 EB	964+00	LT	X-6L-12	12 X 36	11												3	1			1												
24	233	IR-70 WB	964+75	LT	X-6L-12	12 X 36	11												3	1			1												
24	233	IR-70 WB	964+75	RT	X-6R-12	12 X 36	11												3	1			1												
24	234	IR-70 WB	958+00	RT	W-49R-48	48 X 48	31												16	1			2												
25	167	IR-70 EB	968+00	RT	W-49R-48	48 X 48	35												16	1			2												
25	168	IR-70 EB	974+75	RT	N-41-12	12 X 48	15												4	1			1												
25	224	IR-70 WB	975+00	RT	N-41-12	12 X 48	14.5												4	1			1												
25	226	IR-70 WB	972+50	RT	GF	96 X 60			37				2					40			1	2													
26	169	IR-70 EB	981+00	RT	M-5-36-2	36 X 36	32												9	1			2												
26	169				IM-39-36	36 X 18													4.5	1			2												
26	170	IR-70 EB	988+00	RT	R-9-84	84 X 72				50								42			1	2													
26	223	IR-70 WB	981+00	RT	GE	216 X 114					41.5		2					171			1														
26	223				GEP-96	96 X 24												16			1														
TOTALS CARRIED TO GENERAL SUMMARY							402		138	50	191.5	193	16						1482	160.5	23	20	24	28											

SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630																				631					SPECIAL		CALCULATED GCS	CHECKED RBK		
							GROUND MOUNTED SUPPORT, # 3 POST	GROUND MOUNTED SUPPORT, 4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, 6 X 9 BEAM	GROUND MOUNTED SUPPORT, 10 X 12 BEAM	GROUND MOUNTED SUPPORT, 10 X 22 BEAM	GROUND MOUNTED SUPPORT, 12 X 30 BEAM	BREAKAWY BEAM CONNECTION	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 5	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 7	OVERHEAD SIGN SUPPORT, TYPE TC-15.115 (STEEL TRUSS)	SIGN ATTACHMENT ASSEMBLY	LUMINAIRE SUPPORT ASSEMBLY, TYPE TC-31.21	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN EXTRUSHEET, TYPE G	SIGN FLATSHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND STORAGE, AS PER PLAN	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE, AS PER PLAN	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	SIGN SERVICE	SIGN WIRED	MECURY VAPOR LUMINAIRE, TYPE H38HT WITH 100 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H39KB WITH 175 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H37KB WITH 250 WATT LAMP			REPLACED GALVANIZED STEEL HARDWARE	CLEANING AND COATING, EXISTING OVERHEAD STRUCTURES
27	171	IR-70 EB	992+00	RT	GS-1A-120	120 X 54				61									45			1	2														
27	172	IR-70 EB	1001+40	RT	SPECIAL	132 X 48			41				2						44			1	2														
27	221	IR-70 WB	996+00	RT	W-68-48	48 X 48	28													16	1			2													
27	222	IR-70 WB	991+00	RT	GB	216 X 114						64							171			1	2														
27	222				GEP-96	96 X 24													16			1															
28	300	IR-70 WB	1008+00	RT	GB	216 X 114						64	2						171			1															
28	300				GEP-96	96 X 24													16			1															
29	173	IR-70 EB	1017+90	RT	GB	192 X 102					47.5		2						136			1	2														
29	173				GEP-96	96 X 24													16			1															
29	174	IR-70 EB	1028+00	RT	N-41-12	12 X 48	15.5													4	1			1													
29	220	IR-70 WB	1028+00	RT	R-9-84	216 X 114			37.5				2						42			1	2														
29	277	IR-70 WB	1020+00	RT	N-41-12	12 X 48	14													4	1			1													
29	289	IR-70 WB	1024+70	RT	SPECIAL	180 X 108											3	2	135						1			1	1		2	1	1				
29	290	IR-70 WB	1016+00	RT	SPECIAL	180 X 108											3	2	135						1			1	1		2	1	1				
30	175	IR-70 EB	1031+30	RT	W-68-48	48 X 48	31													16	1			2													
30	219	IR-70 WB	1029+05	RT	M-5-36-2	36 X 36												1		9	1			2													
30	219				IM-40-36	36 X 18												1		4.5	1																
30	288	IR-70 WB	1029+05	RT	SPECIAL	180 X 108											3	2	135						1			1	1		2	1	1				
31	176	IR-70 EB	1042+30	RT	GB	192 X 102					47.5		2						136			1	2														
31	176				GEP-96	96 X 24													16			1															
31	177	IR-70 EB	1051+00	RT	GS-120	120 X 84				61									70			1															
31	218	IR-70 WB	1048+00	RT	W-49R-48	48 X 48	31.5													16	1			2													
32	179	IR-70 EB	1063+00	RT	GF	96 X 60			37.5				2						40			1	2														
32	207	IR-70 WB	1059+10	RT	W-97-48	48 X 60	34													20	1			2													
32	208	IR-70 EB	1055+70	RT	GF	96 X 60			37				2						40			1	2														
32	278	IR-70 EB	1059+00	RT	GG	144 X 90											3	2	90						1			1	1		2	1	1				
32	278				GB	228 X 150											3	2	237.5						1				1		2						
32	278				GEP-96	96 X 24													16					1													
32	278				GE	228 X 78											3	2	123.5					1				1			2						
32	278				GEP-96	96 X 24													16					1													
32	287	IR-70 WB	1057+20	RT	GG	156 X 90											3	2	97.5					1			1	1		2	1	1					
32	287				GB	216 X 120											3	2	180					1				1		2							
32	287				GEP-96	96 X 24													16					1													
32	287				GE	228 X 78											3	2	123.5					1				1			2						
32	287				GEP-96	96 X 24													16					1													
33	187	IR-70 EB	1070+00	RT	W-49R-48	48 X 48	31													16	1			2													
33	206	IR-70 WB	1071+30	RT	GS-120	120 X 84				44.5			2						70			1	2														
34	188	IR-70 EB	1080+40	RT	N-41-12	12 X 48	14													4	1			1													
34	189	IR-70 WB	1080+50	RT																		1	2														
34	190	IR-70 EB	1083+80	RT	W-49R-48	48 X 48	31													16	1			2													
34	204	IR-70 WB	1083+90	RT	W-68-486	48 X 48	31													16	1			2													
34	205	IR-70 WB	1080+40	RT	N-41-12	12 X 48	13													4	1			1													
34	285	IR-70 WB	1087+70	RT	SPECIAL	180 X 108											3	2	135						1			1	1		2	1	1				
TOTALS CARRIED TO GENERAL SUMMARY							274		153	166.5	95	128	16				30	20	2	2485	145.5	13	16	20	20	14		6	10		18	2	6	6			

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SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630																				631					SPECIAL		CALCULATED GCS	CHECKED RBK		
							GROUND MOUNTED SUPPORT, # 3 POST	GROUND MOUNTED SUPPORT, 4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, 6 X 9 BEAM	GROUND MOUNTED SUPPORT, 10 X 12 BEAM	GROUND MOUNTED SUPPORT, 10 X 22 BEAM	GROUND MOUNTED SUPPORT, 12 X 30 BEAM	BREAKAWY BEAM CONNECTION	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 5	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 7	OVERHEAD SIGN SUPPORT, TYPE TC-15.115 (STEEL TRUSS)	SIGN ATTACHMENT ASSEMBLY	LUMINAIRE SUPPORT ASSEMBLY, TYPE TC-31.21	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN EXTRUSHEET, TYPE G	SIGN FLATSHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND STORAGE, AS PER PLAN	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE, AS PER PLAN	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	SIGN SERVICE	SIGN WIRED	MECURY VAPOR LUMINAIRE, TYPE H38HT WITH 100 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H39KB WITH 175 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H37KB WITH 250 WATT LAMP			REPLACED GALVANIZED STEEL HARDWARE	CLEANING AND COATING, EXISTING OVERHEAD STRUCTURES
35	280	IR-70 EB	1099+12	RT	GG	204 X 120										3	2		170						1		1	1		2		1	1				
35	280																								1												
35	280				GE	288 X 150										3	2		237.5						1			1			2						
35	280				GEP-96	96 X 24													16						1												
36	281	IR-70 EB	1017+90	RT	GG	144 X 90										3	2		90						1		1	1		2		1	1				
36	281				GB	192 X 150										3	2		200						1			1			2						
36	281				GEP-96	96 X 24													16						1												
36	281				GE	228 X 150										3	2		237.5						1			1			2						
36	281				GEP-96	96 X 24													16						1												
36	203	IR-70 WB	1113+50	RT	W-49L-48	48 X 48	30													16	1				2												
37	202	IR-70 WB	1120+00	RT	W-49R-48	48 X 48	30													16	1				2												
37	282	IR-70 EB	1123+25	RT	GB	192 X 150										3	2		200						1		1	1			2	1	1				
37	282				GEP-96	96 X 24													16						1												
37	284	IR-70 WB	1117+00	RT	GB	192 X 102										3	2		136						1		1	1		2		1	1				
37	284				GEP-96	96 X 24													16						1												
38	191	IR-70 EB	1132+25	RT	N-41-12	12 X 48	14.5													4	1				1												
38	199	IR-70 WB	1051+00	RT	N-41-12	12 X 48	13													4	1				1												
38	200	IR-70 WB	1029+05	RT	N-94-48	48 X 30	27													10	1				2												
38	201	IR-70 WB	1042+30	RT	W-49R-48	48 X 48	31													16	1				2												
38	283	IR-70 EB	1051+00	RT	GB	228 X 114										3	2		180.5						1		1	1		2		1	1				
38	283				GEP-96	96 X 24													16						1												
39	192	IR-70 WB	1141+80	RT	GF	96 X 60			37.5				2						40				1	2													
39	193	IR-70 EB	1142+70	RT																	1			2													
39	193																				1			2													
39	198	IR-70 WB	1145+70	RT																			2														
40	11	IR-70 WB	1159+17	RT	GG	156 X 90										3	2		97.5						1		1	1		2		1	1				
40	11				GB	192 X 108										3	2		144						1			1		2							
40	11				GEP-96	96 X 24													16						1												
40	11				GE	228 X 120										3	2		190						1			1		2							
40	11				GEP-96	96 X 24													16						1												
40	49	IR-70 WB	1156+00	RT	GF	96 X 60			35.5				2						40			1	2														
40	55	IR-70 EB	1155+37	RT	W-49R-48	48 X 48	28													16	1			2													
41	10	IR-70 WB	1117+94	RT	GB	192 X 144										3	2		192						1		1			2	1	1					
41	10				GEP-96	96 X 24													16						1												
41	46	IR-70 WB	1177+94	RT	R-35-48	48 X 60															1																
41	47	IR-70 WB	1175+82	RT	W-139F-48	48 X 48	30													16	1			2													
41	56	IR-70 EB	1175+00	RT	M-5-36-2	36 X 36	28													9	1			1													
41	56				IM-39-36	36 X 18														4.5	1																
42	45	IR-70 WB	1185+26	RT	N-41-12	12 X 48	15													4	1			2													
42	57	IR-70 EB	1182+00	RT	SPECIAL	48 X 48	32													16	1			2													
42	58	IR-70 EB	1185+25	RT	N-41-12	12 X 48	14.5													4	1			2													
TOTALS CARRIED TO GENERAL SUMMARY							293		73				4					36	24	1	2299	155.5	16	2	6	25	22		7	12		14	10	7	7		

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SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630																				631					SPECIAL		CALCULATED GCS	CHECKED RBK		
							GROUND MOUNTED SUPPORT, # 3 POST	GROUND MOUNTED SUPPORT, 4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, 6 X 9 BEAM	GROUND MOUNTED SUPPORT, 10 X 12 BEAM	GROUND MOUNTED SUPPORT, 10 X 22 BEAM	GROUND MOUNTED SUPPORT, 12 X 30 BEAM	BREAKAWY BEAM CONNECTION	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 5	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 7	OVERHEAD SIGN SUPPORT, TYPE TC-15.115 (STEEL TRUSS)	SIGN ATTACHMENT ASSEMBLY	LUMINAIRE SUPPORT ASSEMBLY, TYPE TC-31.21	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN EXTRUSHEET, TYPE G	SIGN FLATSHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND STORAGE, AS PER PLAN	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE, AS PER PLAN	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	SIGN SERVICE	SIGN WIRED	MECURY VAPOR LUMINAIRE, TYPE H38HT WITH 100 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H39KB WITH 175 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H37KB WITH 250 WATT LAMP			REPLACED GALVANIZED STEEL HARDWARE	CLEANING AND COATING, EXISTING OVERHEAD STRUCTURES
							LIN FT	LIN FT	LIN FT	LIN FT	LIN FT	LIN FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	SQ FT	SQ FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH			EACH	EACH
43	9	IR-70 WB	1203+32	RT	GG	192 X 144										3	2		192						1		+(0)	+(0)									
43	9				GEP-96	96 X 24													16						1												
43	301	IR-70 EB	1194+00	RT	R-9-84	84 X 72				40									42			1	2														
44	44	IR-70 WB	1212+60	RT	R-35-48	48 X 60	36														20	1			2												
44	59	IR-70 EB	1204+10	RT	GJ	180 X 60					39.5								75				1	2													
45	43	IR-70 WB	1221+00	RT	GS-1A-120	120 X 54				44									45				1	2													
46	40	IR-70 WB	1238+93	RT	N-41-12	12 X 48	15.5													4	1				1												
46	41	IR-70 WB	1238+63	RT	R-9-84	84 X 72				40					2				42			1	2														
46	42	IR-70 WB	1230+71	RT	N-91-120	120 X 36				36				2					30			1		2													
46	42				NP-91-120	120 X 18													15			1															
46	60	IR-70 EB	1238+87	RT	N-41-12	12 X 48	15.5													4	1				1												
48	8	IR-70 WB	1260+00	RT	W-54C-240	240 X 78											4		130							1		+(0)	+(0)				1	1			
49	7	IR-70 WB	1276+13	RT	W-54D-240	240 X 78											4		130							1		+(0)	+(0)				1	1			
50	38	IR-70 WB	1292+00	RT	R-35-48	48 X 60	34													20	1				2												
50	39	IR-70 WB	1290+51	RT	N-41-12	12 X 48	15.5													4	1				1												
50	62	IR-70 EB	1290+51	RT	N-41-12	12 X 48	15.5													4	1				1												
51	37	IR-70 WB	1305+25	RT	W-139F-48	48 X 48	34													16	1				2												
52	36	IR-70 WB	1310+00	RT	R-35-48	48 X 60	33													20	1				2												
53	63	IR-70 EB	1342+50	RT	GS-1A-120	120 X 54				45.5									45				1	2													
54	35	IR-70 WB	1343+36	RT	N-41-12	12 X 48	15.5													4	1				1												
54	64	IR-70 EB	1336+50	RT	GB	168 X 138						60	2						161				1	2													
54	64				GEP-96	96 X 24													16			1															
54	65	IR-70 EB	1342+50	RT	GC	240 X 72					30								120				1	2													
54	65				GEP-96	96 X 24													16			1															
54	66	IR-70 EB	1343+39	RT	N-41-12	12 X 48	14													4	1				1												
55	34	IR-70 WB	1355+00	RT	RA-1-144	144 X 60					45								60				1	2													
55	67	IR-70 EB	1350+00	RT	GC	216 X 102							48						153				1	2													
55	67				GEP-96	96 X 24													16			1															
56	33	IR-70 WB	1362+50	RT	GJ	192 X 60						45							80					1	2												
56	68	IR-70 EB	1358+75	RT	GSH	120 X 48				34				2					40				1	2													
56	69	IR-70 EB	1364+22	RT	GN	96 X 42							2						28			1				2											
57	31	IR-70 WB	1383+26	RT	GN	96 X 42				36									28			1				2											
57	32	IR-70 WB	1377+00	RT	R-9-84	84 X 72						34							42																		
57	70	IR-70 EB	1373+50	RT	GB	168 X 138													161				1	2													
57	70				GEP-96	96 X 24													16			1															
57	71	IR-70 EB	1383+25	RT	GN	96 X 42				33																											

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SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630																						631					SPECIAL		CALCULATED GCS	CHECKED RBK
							GROUND MOUNTED SUPPORT, # 3 POST	GROUND MOUNTED SUPPORT, 4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, 6 X 9 BEAM	GROUND MOUNTED SUPPORT, 10 X 12 BEAM	GROUND MOUNTED SUPPORT, 10 X 22 BEAM	GROUND MOUNTED SUPPORT, 12 X 30 BEAM	BREAKAWY BEAM CONNECTION	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 5	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 7	OVERHEAD SIGN SUPPORT, TYPE TC-7.65 (ALUMINUM TRUSS)	SIGN ATTACHMENT ASSEMBLY	LUMINAIRE SUPPORT ASSEMBLY, TYPE TC-31.21	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN EXTRUSHEET, TYPE G	SIGN FLATSHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND STORAGE, AS PER PLAN	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE, AS PER PLAN	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	SIGN SERVICE	SIGN WIRED	MECURY VAPOR LUMINAIRE, TYPE H38HT WITH 100 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H39KB WITH 175 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H37KB WITH 250 WATT LAMP	REPLACED GALVANIZED STEEL HARDWARE	CLEANING AND COATING, EXISTING OVERHEAD STRUCTURES		
																																					LIN FT
58	12	IR-70 EB	330+70	RT	GE	204 X 90							1			3	2		127.5						1	1	1	1			2						
58	12				GEP-96	96 X 24													16						1												
58	27	IR-70 WB	332+51	RT	N-41-12	12 X 48	15													4	1			1													
58	28	IR-70 WB	330+06	RT	R-159-36	36 X 48	28													12	1			2													
58	29	IR-70 WB	1390+84	RT	R-70-48	48 X 36	28													12	1			2													
58	30	IR-70 WB	1387+00	RT	M-5-36-2	36 X 36	28													9	1			2													
58	30				IM-40-36	36 X 18														4.5	1			2													
58	72	IR-70 EB	1221+00	RT	N-41-12	12 X 48	14													4	1			1													
58	73	IR-70 EB	1221+00	RT	R-11A-48	48 X 60	34													20	1			2													
59	13	IR-70 EB	337+45	RT	GG	192 X 90									1	3	2		120						1	1	1	1			2						
59	13				GE	204 X 90										3	2		127.5						1			1			2						
59	13				GEP-96	96 X 24													16					1													
59	25	IR-70 WB	342+40	RT	W-49R-48	48 X 48	28													16	1			2													
59	74	IR-70 EB	340+10	RT	GF	96 X 60			31										40			1	2														
59	75	IR-70 EB	OFF RAMP	LT	R-41A-36	36 X 24	26													6	1			2													
60	6	IR-70 WB	353+74	RT	GT-276	276 X 84									1	4	3		161						1	1	1	1			3						
60	6	IR-70 WB			GE	204 X 90										3	2		127.5						1			1			2						
60	6	IR-70 WB			GEP-96	96 X 24													16					1													
60	17	IR-70 WB	353+74	RT	GF	96 X 60			34				2						40			1	2														
60	17	IR-70 WB			N-2A-60	60 X 12														5	1																
60	18	IR-70 WB	353+74	RT	R-35-48	48 X 60				33									42			1	2														
60	124	US 40		RT	M-5-36-2	36 X 36	14.5													9	1			1													
60	124				IM-17-21	21 X 15													2.1875	1																	
61	5	IR-70 WB	360+35	RT	GE	204 X 90									1	3	2		127.5						1	1	1	1			2						
61	5				GEP-96	96 X 24													16						1												
62	149	IR-70 EB	OFF RAMP	RT	R-41A-36	36 X 24	13													6	1			1													
62	150	IR-70 EB	OFF RAMP	RT	R-1-48	48 X 48	28													16	1			2													
62	150				R-41B-36	36 X 36														9	1																
62	151	IR-70 EB	OFF RAMP	RT	R-41B-36	36 X 36	28													9	1			2													
62	151				R-43R-36	36 X 12														3	1																
62	151				R-43L-36	36 X 12														3	1																
62	152	IR-70 EB	ON RAMP	RT	R-2-48	48 X 48	30													16	1			2													
62	256	NATIONAL RD		RT	D-4B-48	132 X 48			32				2						44			1	2														
62	256				IM-26-21	21 X 15														2.1875	1																
62	256				M-5-24-2	24 X 24														4	1																
62	256				IM-40-24	24 X 12														2	1																
62	256				IM-19-21	21 X 15														2.1875	1																
62	256				M-5-24-2	24 X 24														4	1																
62	256				IM-39-24	24 X 12														2	1																
62	258	NATIONAL RD		RT	M-52A-108	108 X 30		27					2																								

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SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630																				631					SPECIAL		CALCULATED		SUBSUMMARY
							GROUND MOUNTED SUPPORT, # 3 POST	GROUND MOUNTED SUPPORT, 4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, 6 X 9 BEAM	GROUND MOUNTED SUPPORT, 10 X 12 BEAM	GROUND MOUNTED SUPPORT, 10 X 22 BEAM	GROUND MOUNTED SUPPORT, 12 X 30 BEAM	BREAKAWY BEAM CONNECTION	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 5	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 7	OVERHEAD SIGN SUPPORT, TYPE TC-15.115 (STEEL TRUSS)	SIGN ATTACHMENT ASSEMBLY	LUMINAIRE SUPPORT ASSEMBLY, TYPE TC-31.21	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN EXTRUSHEET, TYPE G	SIGN FLATSHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND STORAGE, AS PER PLAN	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE, AS PER PLAN	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	SIGN SERVICE	SIGN WIRED	MECURY VAPOR LUMINAIRE, TYPE H38HT WITH 100 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H39KB WITH 175 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H37KB WITH 250 WATT LAMP	REPLACED GALVANIZED STEEL HARDWARE	CLEANING AND COATING, EXISTING OVERHEAD STRUCTURES	
63	244	IR-70 WB	OFF RAMP	RT	R-41A-36	36 X 24	14														6	1			1											
63	245	IR-70 WB	OFF RAMP	RT	R-1-48	48 X 48	31														16	1			2											
63	245				R-41B-36	36 X 36															9	1														
63	246	IR-70 WB	OFF RAMP	RT	R-41B-36	36 X 36	34														9	1			2											
63	246				R-43R-36	36 X 12															3	1														
63	246				R-43L-36	36 X 12															3	1														
63	247	IR-70 WB	ON RAMP	RT	R-2-48	48 X 48	28														16	1			2											
63	260	NATIONAL RD		RT	GG	84 X 66			38.5												38.5			1	2											
63	261	NATIONAL RD		LT	M-52A-108	108 X 30		29					2								22.5			1	2											
63	265	NATIONAL RD		LT	D-4B-48	132 X 48			31.5				2								44			1	2											
64	262	NATIONAL RD		LT	M-5-24-2	24 X 24	15															4	1			1										
64	262				IM-17-21	21 X 15															2.1875	1														
64	263	NATIONAL RD		LT	M-52A-108	108 X 30		29													22.5			1	2											
65	252	NATIONAL RD		RT																			1			1										
65	252																						1													
65	252																						1			1										
65	252																						1													
65	253	NATIONAL RD		RT	M-5-24-2	24 X 24	16															4	1			1										
65	253				IM-17-21	21 X 15															2.1875	1														
65	254	NATIONAL RD		RT	M-52A-108	108 X 30		28					2								22.5			1	2											
65	255	NATIONAL RD		RT																			1			1										
65	255																						1													
66	162	IR-70 EB	OFF RAMP	RT	D-4A-24	144 X 24			32				2								24			1	2											
66	162				M-25-21	21 X 15																2.1875	1													
66	162				M-2-24-2	24 X 24																4	1													
66	162				R-41A-36	36 X 24																6	1													
66	163	IR-70 EB	OFF RAMP	LT	R-41A-36	36 X 24	13															6	1			1										
66	164	IR-70 EB	OFF RAMP	RT	R-1-48	48 X 48	31															16	1			2										
66	164				R-41B-36	36 X 36																9	1													
66	164				R-43R-36	36 X 12																3	1													
66	164				R-43L-36	36 X 12																3	1													
66	165	IR-70 EB	OFF RAMP	LT	R-1-48	48 X 48	31															16	1			2										
66	165				R-41B-36	36 X 36																9	1													
66	166	IR-70 EB	ON RAMP	RT	R-15A-36	36 X 36	14															9	1			1										
66	266	STATE RT 9		RT	M-5-24-2	24 X 24	15															4	1			1										
66	266				IM-17-21	21 X 15																2.1875	1													
66	267	STATE RT 9		RT	D-4B-48	132 X 48			39				2								44				1	2										
66	268	STATE RT 9		LT	D-4A-24	144 X 24			26				2								24				1	2										
66	268				IM-24L-21	21 X 15																2.1875	1													
66	268				M-5-24-2	24 X 24																4	1													
66	268				IM-39-24	24 X 12																2	1													
66	269	STATE RT 9		RT	M-52A-108	108 X 30		26					2								22.5			1	2											
67	228	IR-70 WB	OFF RAMP	RT	D-4A-24	144 X 24			31				2								24				1	2										
67	228				M-25-21	21 X 15																2.1875	1													

SIGNING SUBSUMMARY

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SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630																						631					SPECIAL		CALCULATED GCS	CHECKED RBK
							GROUND MOUNTED SUPPORT, # 3 POST	GROUND MOUNTED SUPPORT, 4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, 6 X 9 BEAM	GROUND MOUNTED SUPPORT, 10 X 12 BEAM	GROUND MOUNTED SUPPORT, 10 X 22 BEAM	GROUND MOUNTED SUPPORT, 12 X 30 BEAM	BREAKAWY BEAM CONNECTION	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 5	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 7	OVERHEAD SIGN SUPPORT, TYPE TC-15.115 (STEEL TRUSS)	SIGN ATTACHMENT ASSEMBLY	LUMINAIRE SUPPORT ASSEMBLY, TYPE TC-31.21	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN EXTRUSHEET, TYPE G	SIGN FLATSHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND STORAGE, AS PER PLAN	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE, AS PER PLAN	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	SIGN SERVICE	SIGN WIRED	MECURY VAPOR LUMINAIRE, TYPE H38HT WITH 100 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H39KB WITH 175 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H37KB WITH 250 WATT LAMP	REPLACED GALVANIZED STEEL HARDWARE	CLEANING AND COATING, EXISTING OVERHEAD STRUCTURES		
																																					LIN FT
67	229	IR-70 WB	OFF RAMP	LT	R-41A-36	36 X 24	13																														
67	230	IR-70 WB	OFF RAMP	RT	R-1-48	48 X 48	31																														
67	230				R-41B-36	36 X 36																															
67	230				R-43R-36	36 X 12																															
67	230				R-43L-36	36 X 12																															
67	231	IR-70 WB	OFF RAMP	LT	R-1-48	48 X 48	31																														
67	231				R-41B-36	36 X 36																															
67	232	IR-70 WB	ON RAMP	RT	R-15A-36	36 X 36	14																														
67	270	STATE RT 9		LT	M-52A-108	108 X 30		27.5					2								22.5			1	2												
67	271	STATE RT 9		RT	D-4A-24	144 X 24			28				2								24			1	2												
67	271				IM-24L-21	21 X 15																2.1875	1														
67	271				M-5-24-2	24 X 24																4	1														
67	271				IM-40-24	24 X 12																2	1														
67	275	STATE RT 9		LT	M-52A-108	108 X 30		37.5													22.5		1		2												
67	276	STATE RT 9		LT	D-4B-48	132 X 48			37.5												44			1	2												
67	311	STATE RT 9		LT	M-5-24-2	24 X 24	16															4	1			1											
67	311				IM-17-21	21 X 15																2.1875	1														
68	108	BANFIELD RD		LT	D-4A-24	108 X 24			34												18			1	2												
68	108				IM-24L-24	24 X 18																3	1														
68	108				M-5-30-2	30 X 30																6.25	1														
68	108				IM-39-30	30 X 15																3.125	1														
68	108				IM-24L-24	24 X 18																3	1														
68	108				M-5-30-3	40 X 30																8.33	1														
68	108				IM-8-30	30 X 15																3.125	1														
68	109	BANFIELD RD		RT	M-52B-120	120 X 48		32													40			1	2												
68	109				IM-24L-24	24 X 18																3	1														
68	109				M-5-30-3	40 X 30																8.33	1														
68	109				IM-8-30	30 X 15																3.125	1														
68	312	IR-70 EB	ON RAMP	RT	R-15A-36	36 X 36	14															9															
69	100	US 40		RT	IM-26-21	21 X 15	36															2.1875	1			2											
69	100				M-5-24-2	24 X 24																4	1														
69	100				IM-39-24	24 X 12																2	1														
69	100				IM-8-24	24 X 12																2	1														
69	101	US 40		RT	D-4A-24	144 X 24		28.5					2								24			1	2												
69	101				M-25-21	21 X 15																2.1875	1														
69	101				M-1-24-2	24 X 24																4	1														
69	101				IM-24L-21	21 X 15																2.1875	1														
69	101				M-5-24-2	24 X 24																4	1														
69	101				IM-40-24	24 X 12																2	1														
69	101				IM-8-24	24 X 12																2	1														
69	102	US 40		LT	IM-24R-21	21 X 15	15															2.1875	1			1											
69	102				M-5-24-2	24 X 24																4	1														
69	102				IM-40-24	24 X 12															</																

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SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630																				631					SPECIAL		CALCULATED GCS	CHECKED RBK		
							GROUND MOUNTED SUPPORT, # 3 POST	GROUND MOUNTED SUPPORT, 4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, 6 X 9 BEAM	GROUND MOUNTED SUPPORT, 10 X 12 BEAM	GROUND MOUNTED SUPPORT, 10 X 22 BEAM	GROUND MOUNTED SUPPORT, 12 X 30 BEAM	BREAKAWY BEAM CONNECTION	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 5	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 7	OVERHEAD SIGN SUPPORT, TYPE TC-15.115 (STEEL TRUSS)	SIGN ATTACHMENT ASSEMBLY	LUMINAIRE SUPPORT ASSEMBLY, TYPE TC-31.21	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN EXTRUSHEET, TYPE G	SIGN FLATSHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND STORAGE, AS PER PLAN	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE, AS PER PLAN	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	SIGN SERVICE	SIGN WIRED	MECURY VAPOR LUMINAIRE, TYPE H38HT WITH 100 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H39KB WITH 175 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H37KB WITH 250 WATT LAMP			REPLACED GALVANIZED STEEL HARDWARE	CLEANING AND COATING, EXISTING OVERHEAD STRUCTURES
69	107	BANFIELD RD		LT																																	
69	107																																				
69	303	IR-70 WB	OFF RAMP	RT	R-1-48	48 X 48	31															16															
69	303				R-41B-36	36 X 36																9															
69	304	IR-70 WB	OFF RAMP	LT	R-1-48	48 X 48	31															16															
69	304				R-41B-36	36 X 36																9															
69	304				R-43R-36	36 X 12																3															
69	304				R-43L-36	36 X 12																3															
69	305	BANFIELD RD		LT	W-30-96	96 X 48	28															6															
70	116	MALL RD		RT	GE	108 X 90												2			67.5													1			
70	117				GE	108 X 90												2			67.5													1			
70	119	MALL RD		RT	IM-26-21	21 X 15	15.5						2									2.1875	1				2										
70	119				M-5-24-2	24 X 24																4	1														
70	119				IM-40-24	24 X 12																2	1														
70	178	MALL RD		RT	W-97-48	48 X 60	35															20	1				2										
70	180	IR-70 EB	OFF RAMP	LT	W-33R-30	30 X 36	15															7.5	1				1										
70	180				W-33R-30	30 X 36	15															7.5	1				1										
70	180				W-33R-30	30 X 36	15															7.5	1				1										
70	180				W-33R-30	30 X 36	15															7.5	1				1										
70	180				W-33R-30	30 X 36	15															7.5	1				1										
70	181	IR-70 EB	OFF RAMP	LT																			1				2										
70	182	IR-70 EB	OFF RAMP	RT	R-31C-48	48 X 30	28															10	1				2										
70	183	IR-70 EB	OFF RAMP	LT	R-41A-36	36 X 24	14															6	1				1										
70	184	IR-70 EB	OFF RAMP	RT	D-4B-486	108 X 48		32.5					2								(36)	36			1	2											
70	185	IR-70 EB	ON RAMP	LT	R-37R-36	36 X 48	28															12	1				2										
70	186	IR-70 EB	ON RAMP	RT	M-52A-108	108 X 30		26					2								22.5		1			2											
70	306	IR-70 EB	ON RAMP	RT	R-15A-36	36 X 36	14															9															
71	120	MALL RD		RT	M-45	42 X 78		28													22.75				1	2											
71	122	MALL RD		LT	GE	108 X 96																												1	1		
71	122				GE	108 X 96																															
71	209	IR-70 WB	OFF RAMP	LT	W-33R-30	30 X 36	14.5															7.5	1				1										
71	209				W-33R-30	30 X 36	14.5															7.5	1				1										
71	209				W-33R-30	30 X 36	14.5															7.5	1				1										
71	209				W-33R-30	30 X 36	14.5															7.5	1				1										
71	209				W-33R-30	30 X 36	14.5															7.5	1				1										
71	209				W-33R-30	30 X 36	14.5															7.5	1				1										
71	210	IR-70 WB	OFF RAMP																																		
71	211	IR-70 WB	OFF RAMP	RT	D-4B-486	108 X 48		35.5													(36)	36			1	2											
71	212	IR-70 WB	OFF RAMP	LT	R-31M-48	48 X 30	29															10	1				2										
71	213	IR-70 WB	OFF RAMP		R-41A-36	36 X 24	13.5															6	1				1										
71	214	IR-70 WB	OFF RAMP		R-41A-36	36 X 24	14															6	1				1										
71	215	IR-70 WB	OFF RAMP		R-41B-36	36 X 36	26															9	1				2										
71	215				R-43R-36	36 X 12																3	1														

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SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630																						631					SPECIAL	
							GROUND MOUNTED SUPPORT, # 3 POST	GROUND MOUNTED SUPPORT, 4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, 6 X 9 BEAM	GROUND MOUNTED SUPPORT, 10 X 12 BEAM	GROUND MOUNTED SUPPORT, 10 X 22 BEAM	GROUND MOUNTED SUPPORT, 12 X 30 BEAM	BREAKAWY BEAM CONNECTION	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 5	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 7	OVERHEAD SIGN SUPPORT, TYPE TC-15.115 (STEEL TRUSS)	SIGN ATTACHMENT ASSEMBLY	LUMINAIRE SUPPORT ASSEMBLY, TYPE TC-31.21	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN EXTRUSHEET, TYPE G	SIGN FLATSHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND STORAGE, AS PER PLAN	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE, AS PER PLAN	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	SIGN SERVICE	SIGN WIRED	MECURY VAPOR LUMINAIRE, TYPE H38HT WITH 100 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H39KB WITH 175 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H37KB WITH 250 WATT LAMP	REPLACED GALVANIZED STEEL HARDWARE	CLEANING AND COATING, EXISTING OVERHEAD STRUCTURES
72	103	NATIONAL RD		RT																	1			1											
72	103																				1														
72	103																				1														
72	103																				1														
72	104	NATIONAL RD		RT	GE	78 X 60			36				2							32.5			1	2											
72	105	NATIONAL RD		LT	GE	78 X 60			35				2							32.5			1	2											
72	121	MALL RD		LT	M-52A-108	108 X 30											2			22.5						1					1	1			
73	110	BANFIELD RD		RT	IM-19-24	24 X 18	15.5														3	1			2										
73	110				M-5-30-2	30 X 30															6.25	1													
73	110				IM-39-30	30 X 15															3.125	1													
73	110				IM-19-24	24 X 18	15.5														3	1			2										
73	110				M-5-30-3	40 X 30															8.33	1													
73	110				IM-39-30	30 X 15															3.125	1													
73	110				IM-8-30	30 X 15															3.125	1													
73	111	BANFIELD RD		RT	M-5-24-2	24 X 24	14														4	1			1										
73	111				IM-17-21	21 X 15															2.1875	1													
73	112	BANFIELD RD		RT	IM-24L-21	21 X 15	15.5														2.1875	1			1										
73	112				M-5-24-2	24 X 24															4	1													
73	112				IM-8-24	24 X 12															2	1													
73	113	MALL RD		RT	IM-26-21	21 X 15	15.5														2.1875	1			1										
73	113				M-5-24-2	24 X 24															4	1													
73	113				IM-8-24	24 X 12															2	1													
73	114	MALL RD		RT	M-5-24-2	24 X 24	14														4	1			1										
73	114				IM-17-21	21 X 15															2.1875	1													
73	115	MALL RD		RT	M-52A-108	108 X 30		28					2							22.5			1	2											
74	54	IR-70 EB	ON RAMP	RT	R-15A-36	36 X 36	14														9	1			1										
74	91	CO RD 214		LT	D-4A-24	108 X 24			29											18			1	2											
74	91				IM-24L-21	21 X 15															2.1875	1													
74	91				M-5-24-2	24 X 24															4	1													
74	91				IM-39-24	24 X 12															2	1													
74	92	CO RD 214		RT	D-4B-48	132 X 48			37.5											44			1	2											
74	92				IM-26-21	21 X 15															2.1875	1													
74	92				M-5-24-2	24 X 24															4	1													
74	92				IM-40-24	24 X 12															2	1													
74	92				IM-24R-21	21 X 15															2.1875	1													
74	92				M-5-24-2	24 X 24															4	1													
74	92				IM-39-24	24 X 12															2	1													
74	93	CO RD 214		RT	M-1-24-2	24 X 24	14.5														4	1			1										
74	93				M-17-21	21 X 15															2.1875	1													
74	93				M-5-24-2	24 X 24	14.5														4	1			1										
74	93				IM-17-21	21 X 15															2.1875	1													
74	194	IR-70 EB	OFF RAMP	RT	D-4B-48	108 X 48			37.5				2							36			1	2											
74	194				M-24L-21	21 X 15															2.1875	1													
74	194				M-1-24-2	24 X 24															4	1													
74	194				M-8-24	24 X 12															2	1													
74	195	IR-70 EB	OFF RAMP	LT	R-41A-36	36 X 24	13														6	1			1										
74	196	IR-70 EB	OFF RAMP	RT	R-1-48	48 X 48	30														16	1			2										
74	196				R-41B-36	36 X 36															9	1													
74	196				R-43R-36	36 X 12															3	1													
TOTALS CARRIED TO GENERAL SUMMARY							176	28	175				8					2		208	146.83	42	6	12	15	1						1	1		

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BEL-70-16.60

SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630																				631					SPECIAL		CALCULATED GCS	CHECKED RBK		
							GROUND MOUNTED SUPPORT, # 3 POST	GROUND MOUNTED SUPPORT, 4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, 6 X 9 BEAM	GROUND MOUNTED SUPPORT, 10 X 12 BEAM	GROUND MOUNTED SUPPORT, 10 X 22 BEAM	GROUND MOUNTED SUPPORT, 12 X 30 BEAM	BREAKAWY BEAM CONNECTION	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 5	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 7	OVERHEAD SIGN SUPPORT, TYPE TC-15.115 (STEEL TRUSS)	SIGN ATTACHMENT ASSEMBLY	LUMINAIRE SUPPORT ASSEMBLY, TYPE TC-3121	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN EXTRUSHEET, TYPE G	SIGN FLATSHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND STORAGE, AS PER PLAN	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE, AS PER PLAN	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	SIGN SERVICE	SIGN WIRED	MECURY VAPOR LUMINAIRE, TYPE H38HT WITH 100 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H39KB WITH 175 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H37KB WITH 250 WATT LAMP			REPLACED GALVANIZED STEEL HARDWARE	CLEANING AND COATING, EXISTING OVERHEAD STRUCTURES
74	196	IR-70 EB	OFF RAMP	RT	R-43L-36	36 X 12																															
74	197	IR-70 EB	OFF RAMP	LT	R-1-48	48 X 48	30																														
74	197				R-41B-36	36 X 36																															
75	96	US 40		RT	D-4A-24	132 X 24		20					2							22			1	2													
75	96				IM-28-21	21 X 15															2.1875	1															
75	96				M-5-24-2	24 X 24															4	1															
75	96				IM-40-24	24 X 12															2	1															
75	97	US 40		RT	M-52A-108	108 X 30		32					2							22.5			1	2													
75	98	US 40		RT	D-4B-48	132 X 48		34.5					2							44			1	2													
75	99	US 40		RT	M-5-24-2	24 X 24	15														4	1			1												
75	99				IM-17-21	21 X 15															2.1875	1															
75	227	IR-70 WB	ON RAMP	RT	R-2-48	48 X 48	28														16	1			2												
75	307	IR-70 WB	ON RAMP	RT	R-15A-36	36 X 36	14														9																
76	85	US 40		RT	M-52A-108	108 X 30		36												22.5			1	2													
76	85				M-21-21	21 X 15															2.1875	1															
76	85				M-6-18	18 X 18															2.25	1															
76	86	US 40		RT	D-4B-48	132 X 48				36										44			1	2													
76	86				M-24L-21	21 X 15															2.1875	1															
76	86				M-6-18	18 X 18															2.25	1															
76	86				IM-24L-21	21 X 15															2.1875	1															
76	86				M-5-24-2	24 X 24															4	1															
76	86				IM-39-24	24 X 12															2	1															
76	86				IM-26-21	21 X 15															2.1875	1															
76	86				M-5-24-2	24 X 24															4	1															
76	86				IM-40-24	24 X 12															2	1															
76	87	US 40		RT	D-4B-72	144 X 72				38										72			1	2													
76	87				IM-24L-21	21 X 15															2.1875	1															
76	87				M-5-24-2	24 X 24															4	1															
76	87				IM-40-24	24 X 12															2	1															
76	87				M-1-24-2	24 X 24															4	1															
76	87				M-25-21	21 X 15															2.1875	1															
76	88	US 40		LT	D-4A-24	108 X 24		26					2							18			1	2													
76	88				IM-24L-21	21 X 15															2.1875	1															
76	88				M-5-24-2	24 X 24															4	1															
76	88				IM-39-24	24 X 12															2	1															
76	88				M-24R-21	21 X 15															2.1875	1															
76	88				M-6-18	18 X 18															2.25	1															
76	89	CO RD 214		RT	R-1-30	30 X 30	12														6.25	1			1												
76	90	CO RD 214			R-1-30	30 X 30	12														6.25	1			1												
76	94	US 40		RT	M-45	108 X 30		33												22.75			1	2													
76	95	US 40		LT	M-45	108 X 30		33												22.75			1	2													
77	48	IR-70 WB	OFF RAMP	RT	W-45-48	48 X 48	29														16	1			2												
77	50	IR-70 WB	OFF RAMP	LT	R-41A-36	36 X 24	14														6	1			1												
77	51	IR-70 WB	OFF RAMP	RT	D-4B-48	108 X 48				39.5																											
77	51				M-1-24-2	24 X 24															4	1															
77																																					

SIGNING SUBSUMMARY

BEL-70-16.60

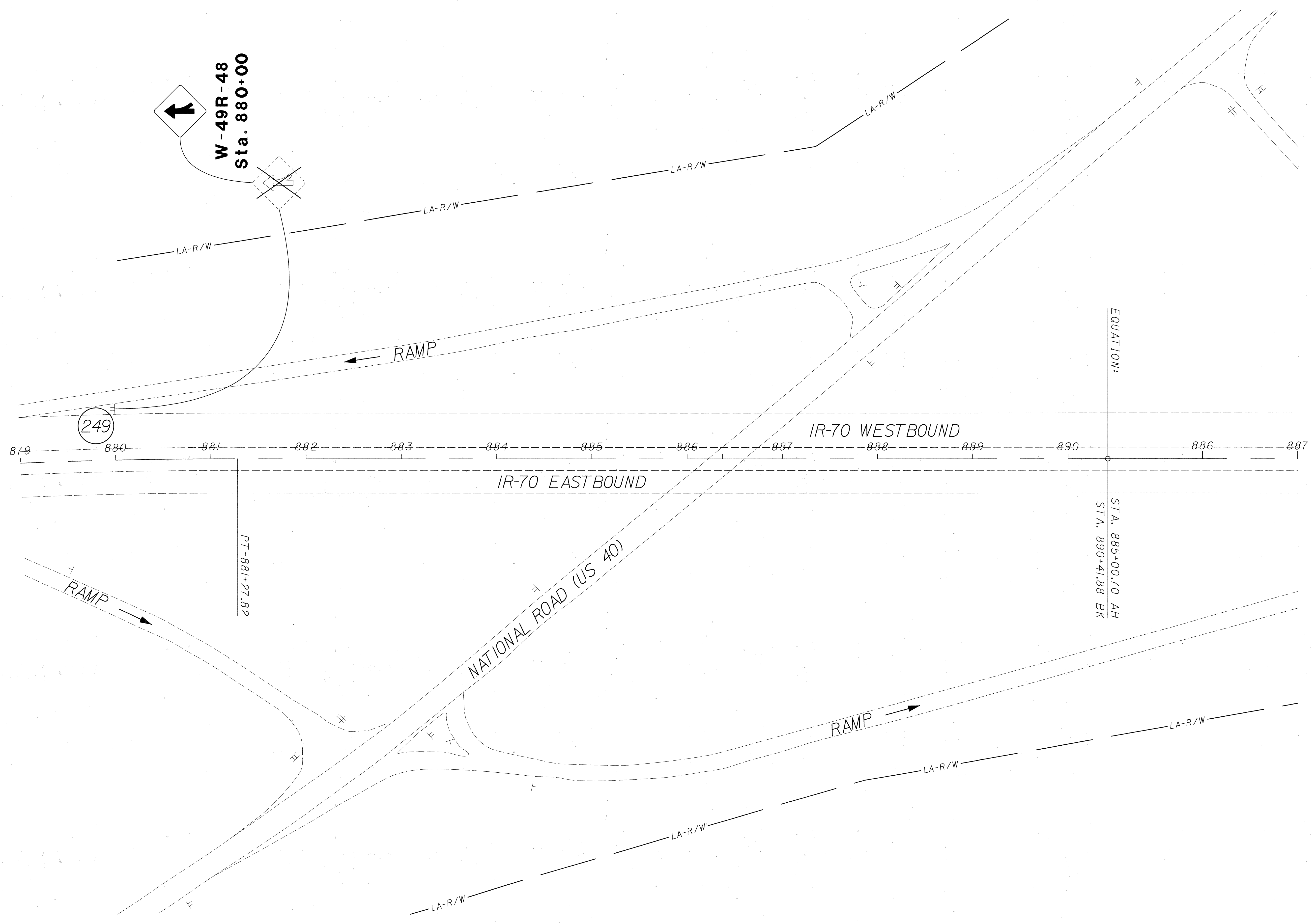
SHEET NO.	REFERENCE NO.	LOCATION	STATION	SIDE	CODE	SIZE (INCHES)	630																				631					SPECIAL		CALCULATED GCS	CHECKED RBK		
							GROUND MOUNTED SUPPORT, # 3 POST	GROUND MOUNTED SUPPORT, 4 X 7.7 BEAM	GROUND MOUNTED SUPPORT, 6 X 9 BEAM	GROUND MOUNTED SUPPORT, 10 X 12 BEAM	GROUND MOUNTED SUPPORT, 10 X 22 BEAM	GROUND MOUNTED SUPPORT, 12 X 30 BEAM	BREAKAWY BEAM CONNECTION	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 5	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 6	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 7	OVERHEAD SIGN SUPPORT, TYPE TC-15.II5 (STEEL TRUSS)	SIGN ATTACHMENT ASSEMBLY	LUMINAIRE SUPPORT ASSEMBLY, TYPE TC-31.21	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	SIGN EXTRUSHEET, TYPE G	SIGN FLATSHEET	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND STORAGE, AS PER PLAN	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND STORAGE, AS PER PLAN	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	SIGN SERVICE	SIGN WIRED	MECURY VAPOR LUMINAIRE, TYPE H38HT WITH 100 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H39KB WITH 175 WATT LAMP	MECURY VAPOR LUMINAIRE, TYPE H37KB WITH 250 WATT LAMP			REPLACED GALVANIZED STEEL HARDWARE	CLEANING AND COATING, EXISTING OVERHEAD STRUCTURES
77	52	IR-70 WB	OFF RAMP	LT	R-43R-36	36 X 12																															
77	53	IR-70 WB	OFF RAMP	RT	R-1-48	48 X 48	28																														
77	53				M-1-24-2	24 X 24																															
77	53				M-28-21	21 X 15																															
77	53				M-39-24	24 X 24																															
77	308	US 40		RT	M-5-24-2	24 X 24	14																														
77	308				IM-17-21	21 X 15																															
77	309	US 40		RT	M-17-21	21 X 15	14																														
77	309				M-6-18	18 X 18																															
78	1	MARION ST		RT	GG	144 X 120												3	2		120																
78	1				GG	144 X 120												3	2		120																
78	76	IR-70 EB	OFF RAMP	RT	M-24L-21	21 X 15														1		2.1875	1														
78	76				M-2-24-2	24 X 24														1		4	1														
78	76				M-37-24	24 X 12														1		2	1														
78	76				M-24R-21	21 X 15														1		2.1875	1														
78	76				M-2-24-2	24 X 24														1		4	1														
78	76				M-38-24	24 X 12														1		2	1														
78	76				M-24L-21	21 X 15														1		2.1875	1														
78	76				M-1-24-3	30 X 24														1		5	1														
78	76				M-40-24	24 X 12														1		2	1														
78	77	IR-70 EB	OFF RAMP	RT	IM-24L-21	21 X 15														1		2.1875	1														
78	77				GSS-5-24	24 X 24														1		2	1														
78	77																						1														
78	77																						1														
78	77																						1														
78	78	IR-70 EB	OFF RAMP	RT	R-1-48	48 X 48																		1													
78	78				R-41B-36	36 X 36																		1													
78	78				R-43L-36	36 X 12																		1													
78	79	IR-70 EB	ON RAMP	RT	R-15A-36	36 X 36																		1													
78	80	IR-70 EB	ON RAMP	RT	W-49R-30	30 X 30	32																														
78	129	MARION ST		RT	M-24L-21	21 X 15																															
78	129				M-2-24-2	24 X 24																															
78	129				M-37-24	24 X 12																															
78	129				M-24R-21	21 X 15																															
78	129				M-2-24-2	24 X 24																															
78	129				M-38-24	24 X 12																															
78	129				M-24L-21	21 X 15																															
78	129				M-1-24-3	30 X 24																															
78	129				M-40-24	24 X 12																															
78	140	MARION ST		LT	IM-24R-21	21 X 15																															
78	140				M-5-24-2	24 X 24																															
78	140				IM-17-21	21 X 15																															
78	310	MARION ST		LT	M-2-24-2	24 X 24																															
78	310				M-38-24	24 X 12																															
78	310				M-21-21	21 X 15																															
78	401	MARION ST		LT	M-2-24-2	24 X 24	14																														
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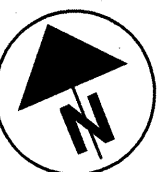
SIGNING SUBSUMMARY

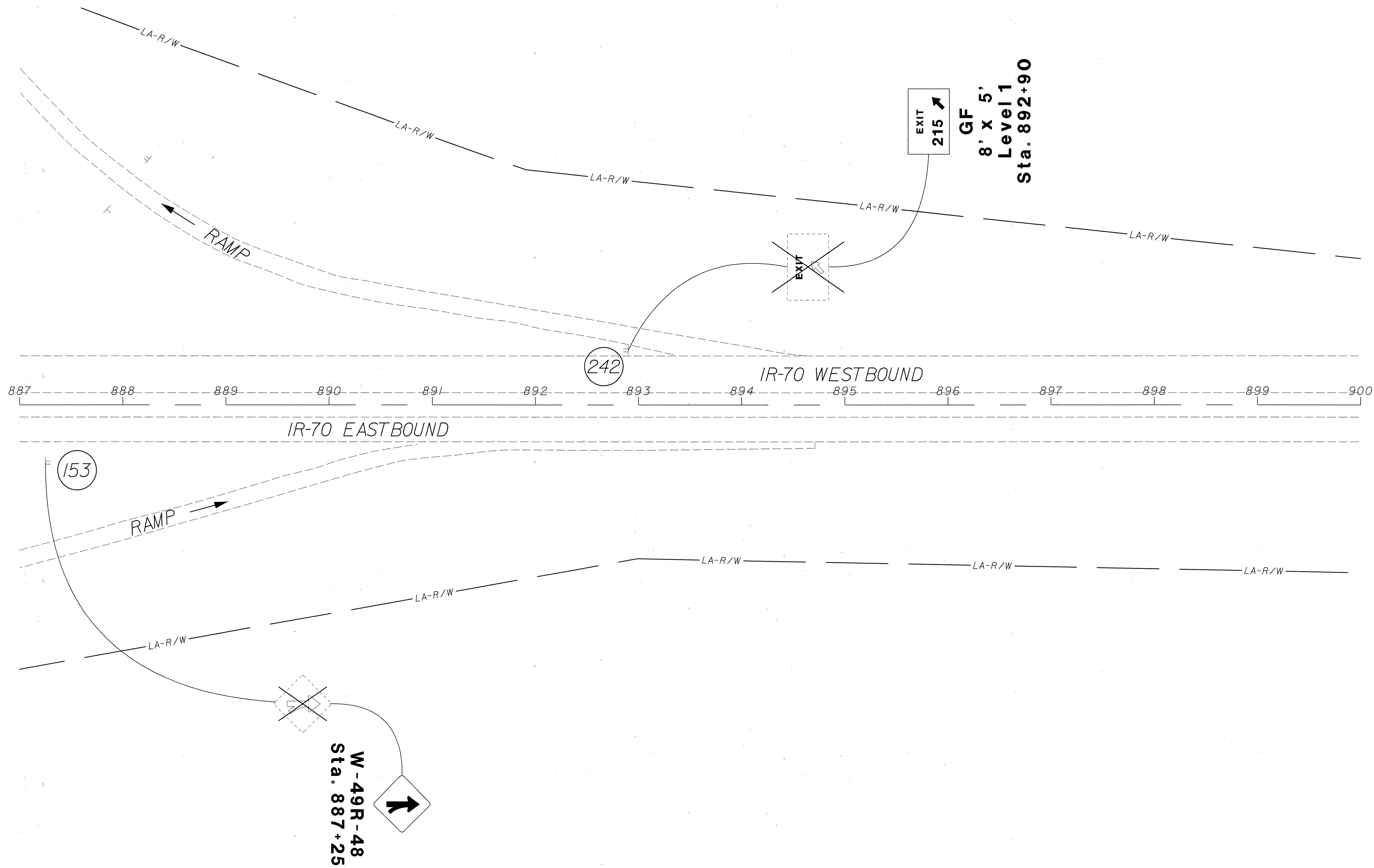
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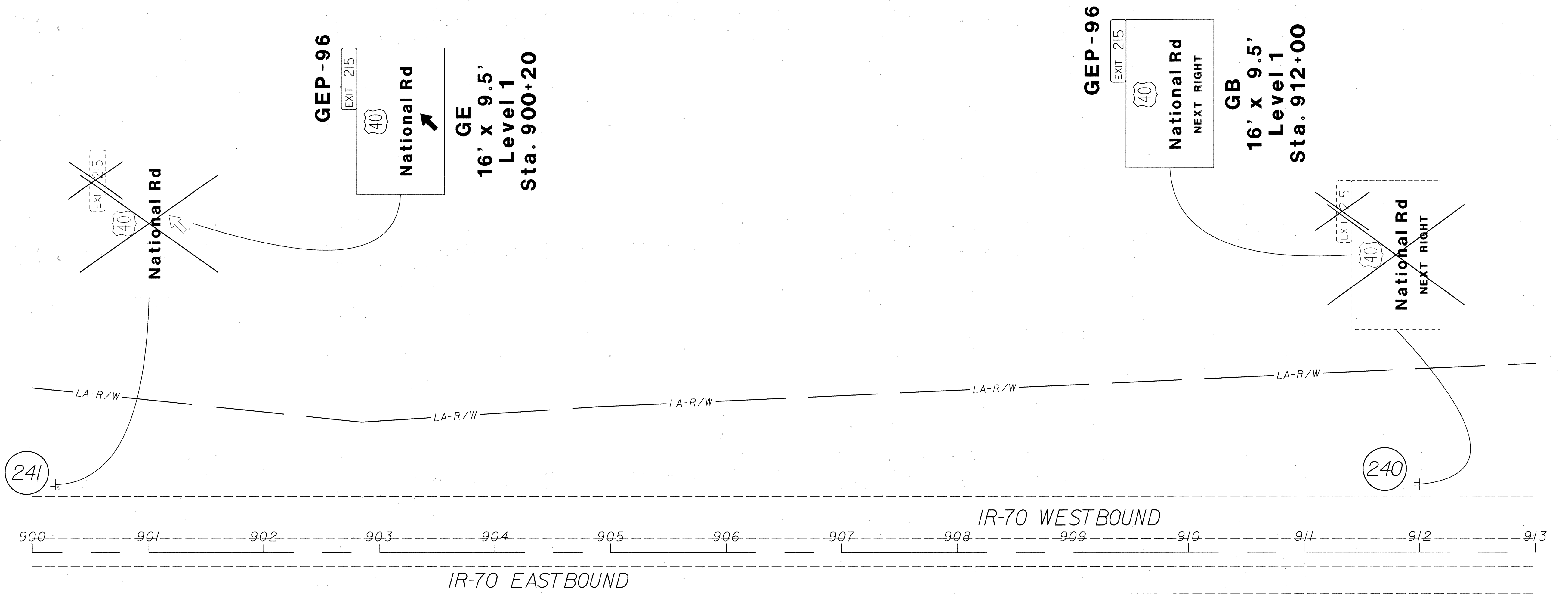
16
84

[illegible]



 0 50 100 HORIZONTAL SCALE IN FEET	CALCULATED GCS	PLAN - BEL IR-70 STA. 879+00 TO STA. 887+00	BEL-70-16.60	18 84
	CHECKED RBK			



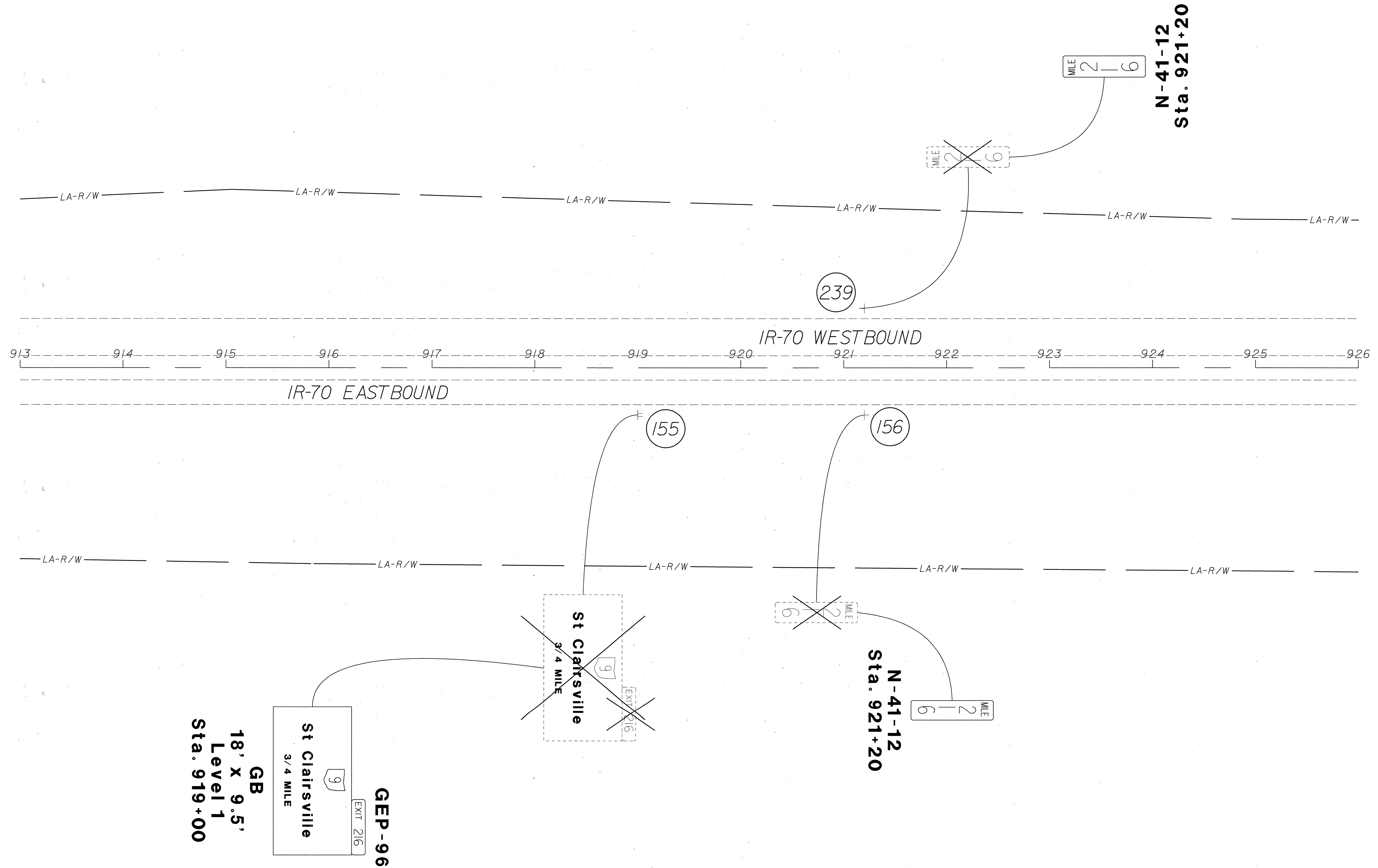


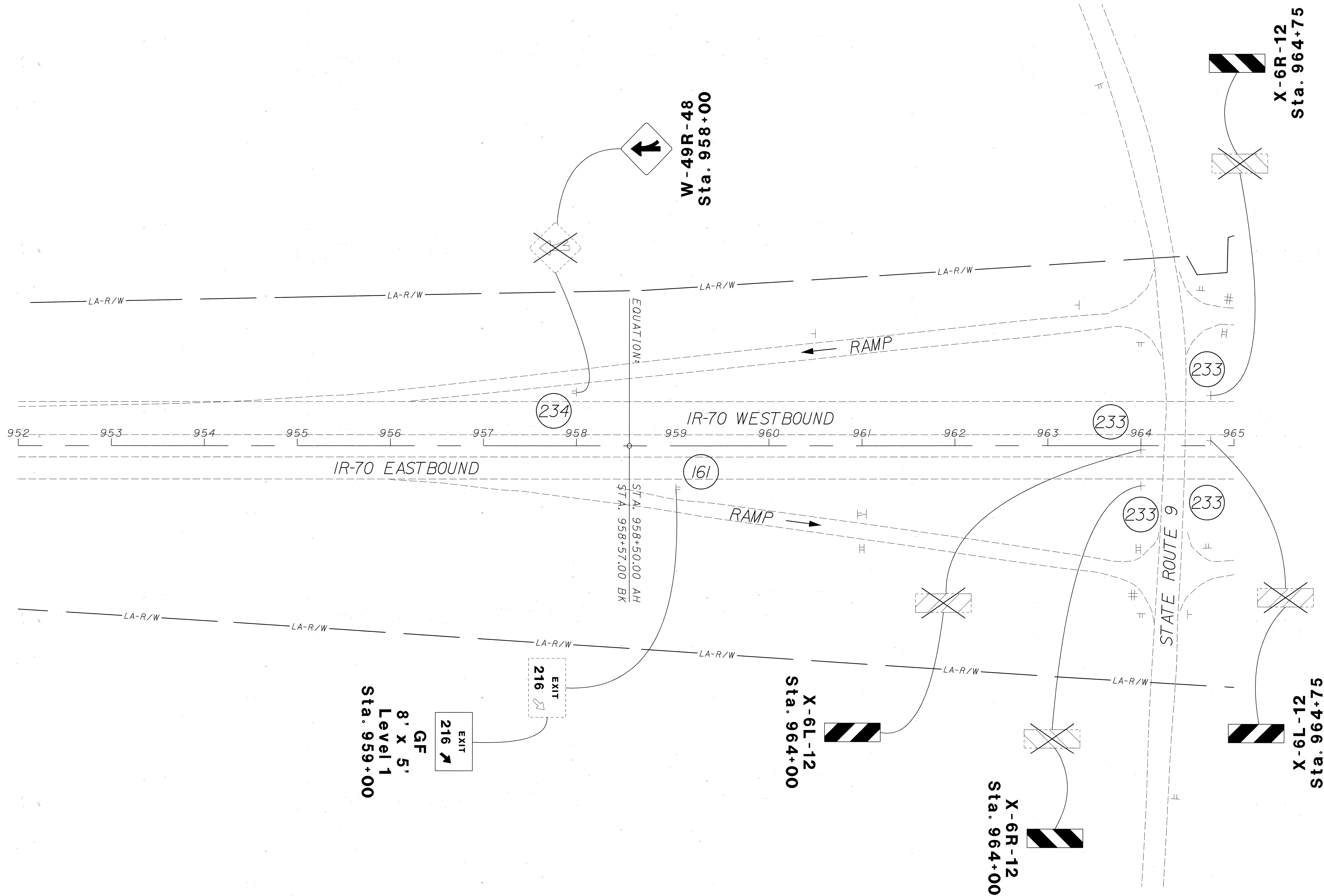


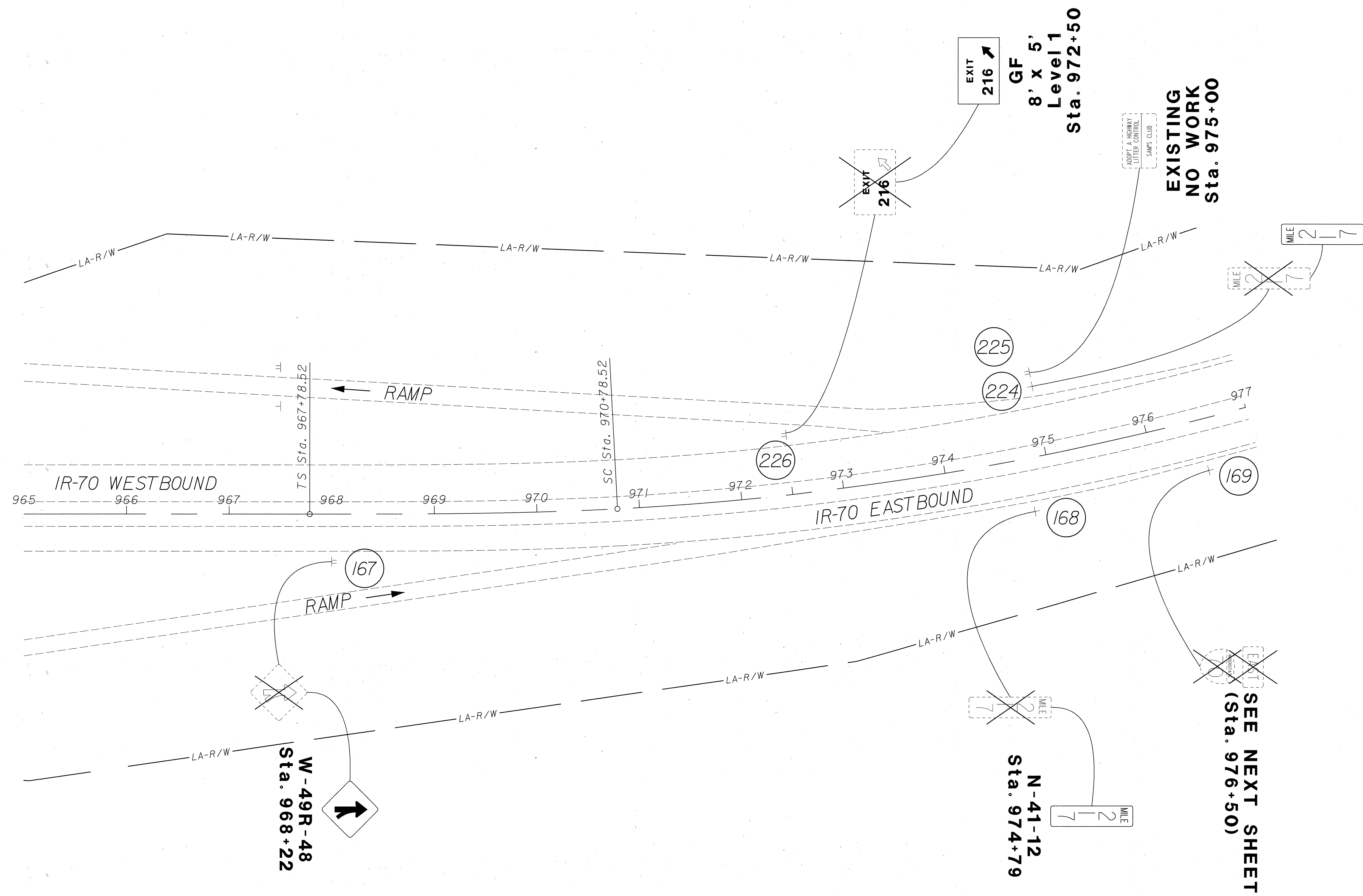
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GCS
CHECKED
RBK

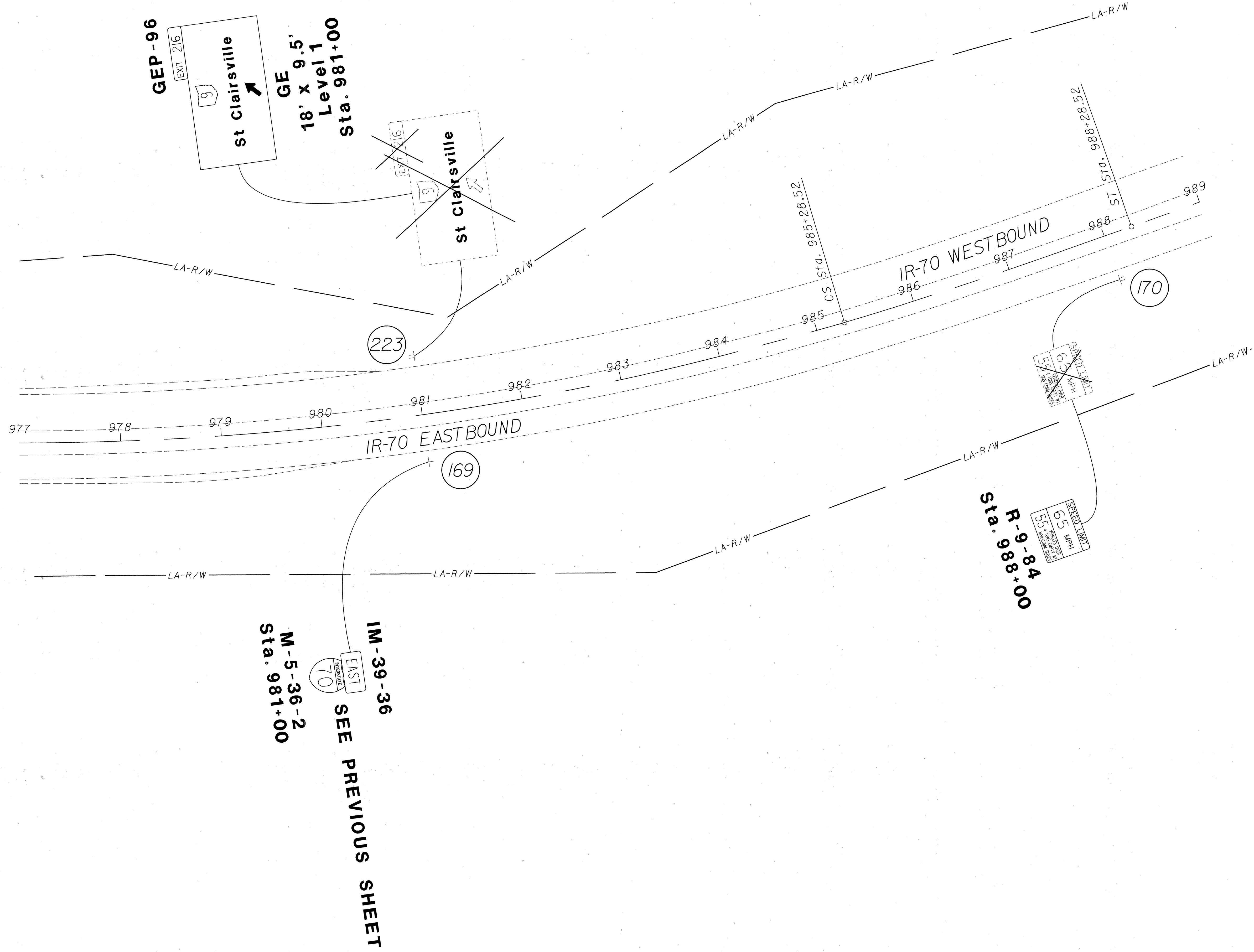
PLAN - BEL IR-70
STA. 913+00 TO STA. 926+00

09-01-07-1EB

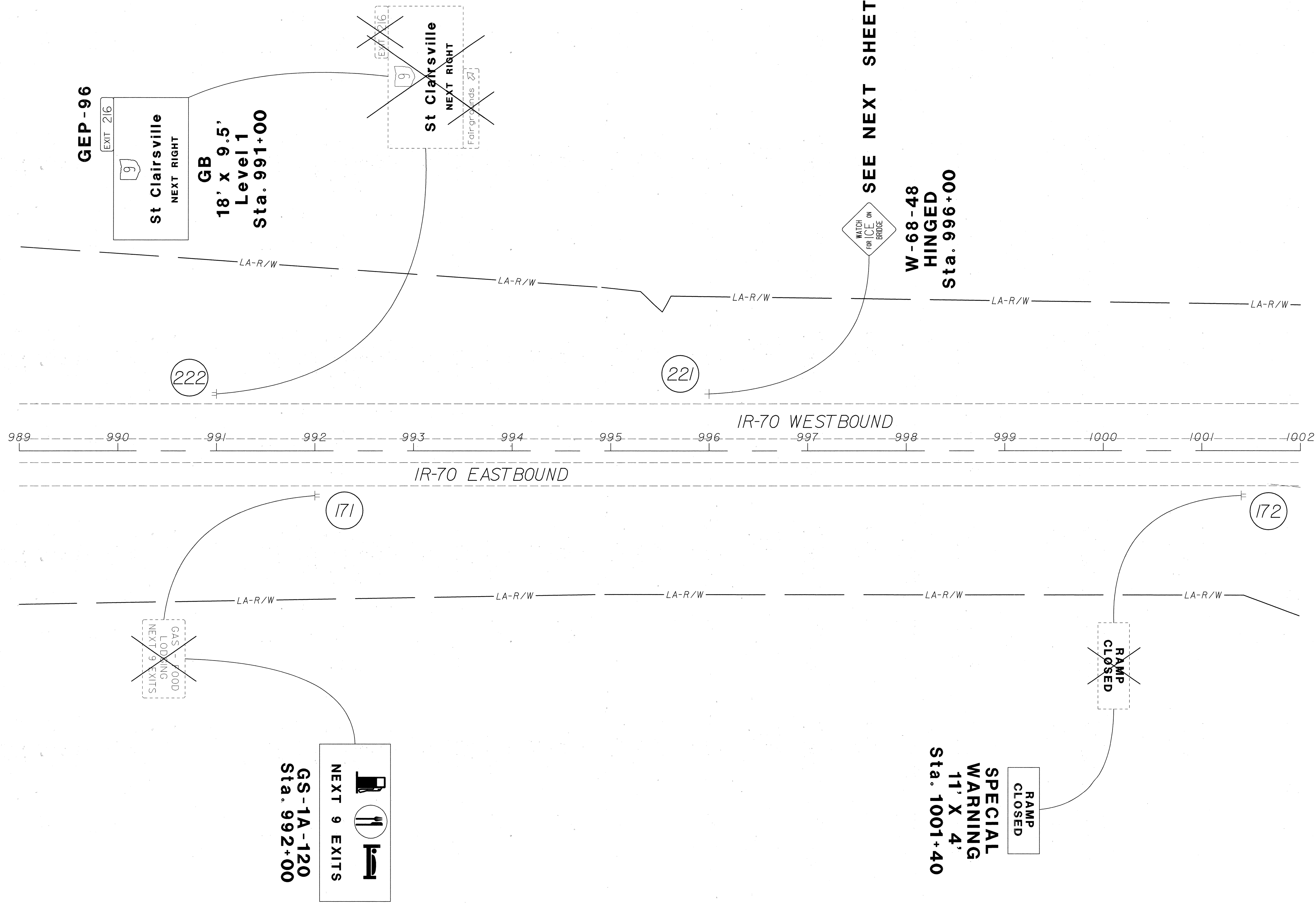


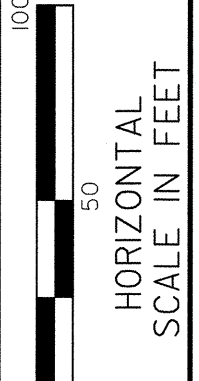
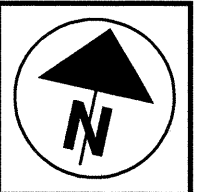






IM-39-36
SEE PREVIOUS SHEET
M-5-36-2
Sta. 981+00

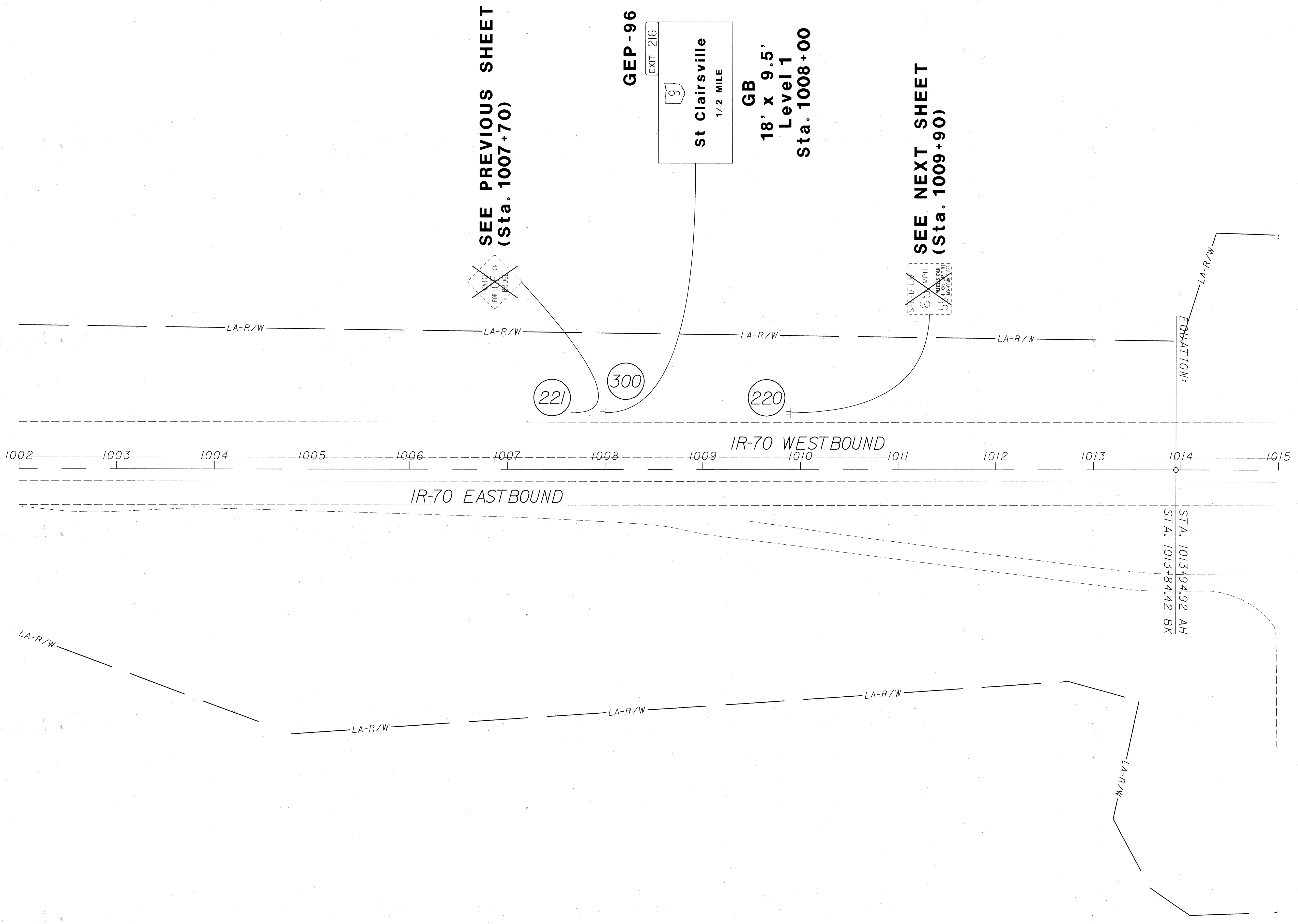


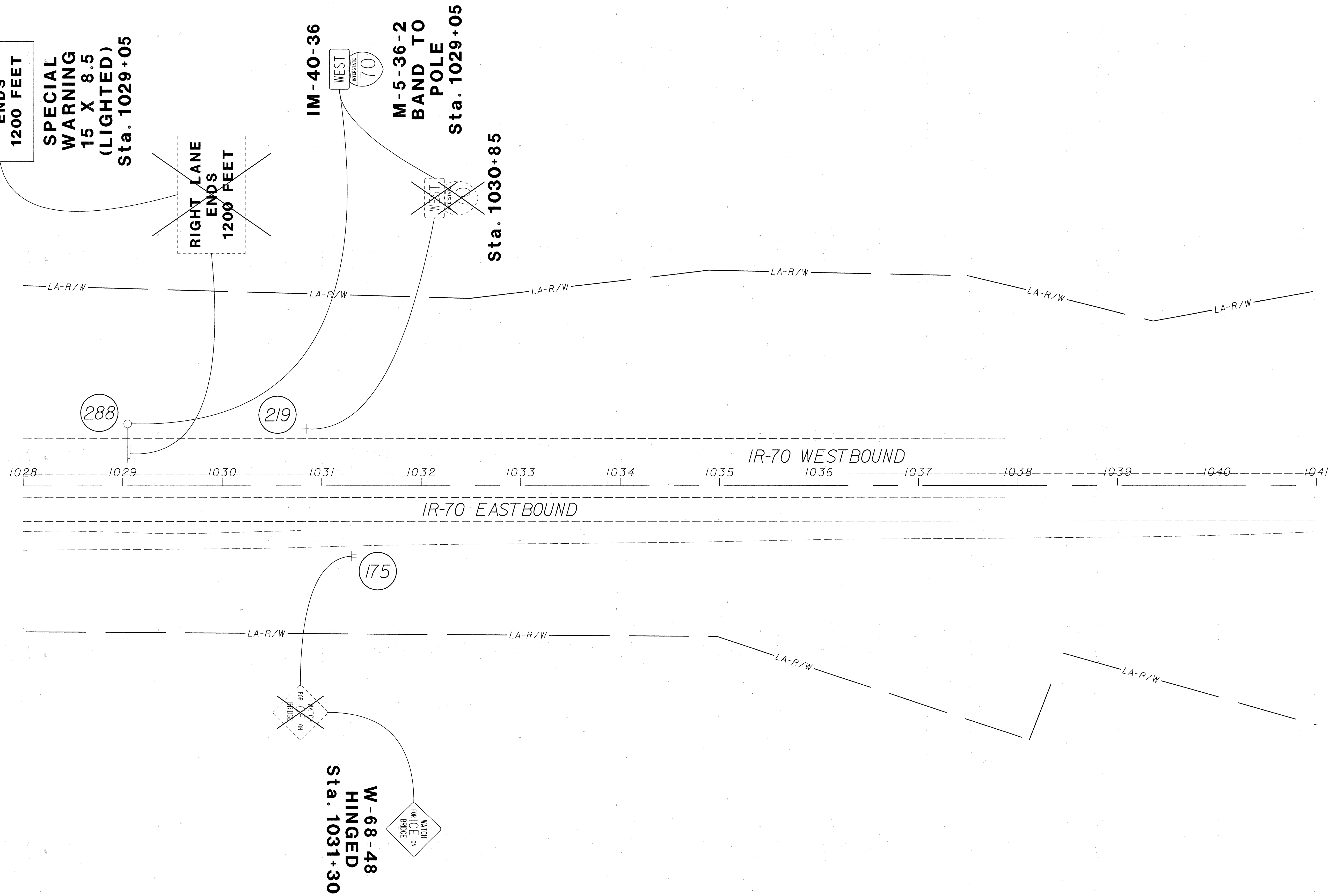


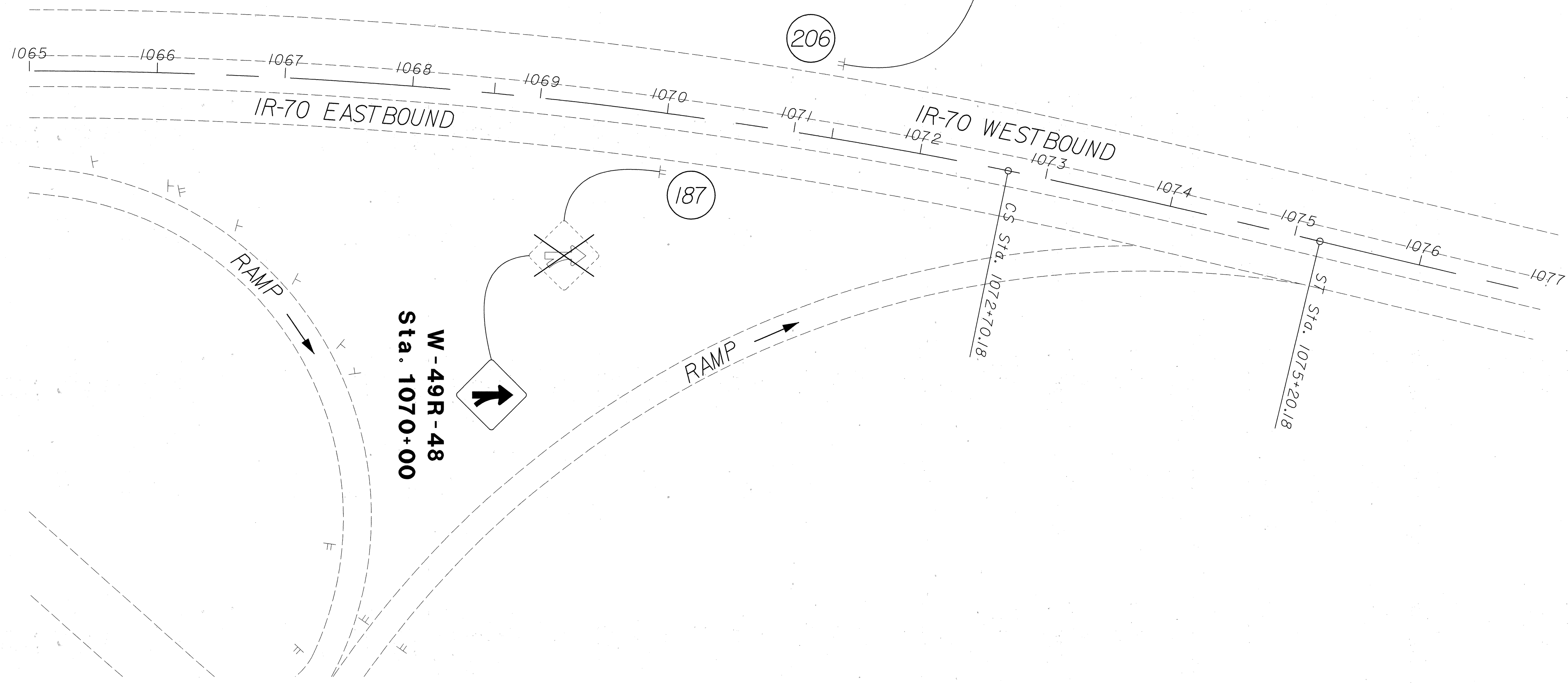
CALCULATED
GCS
CHECKED
RBK

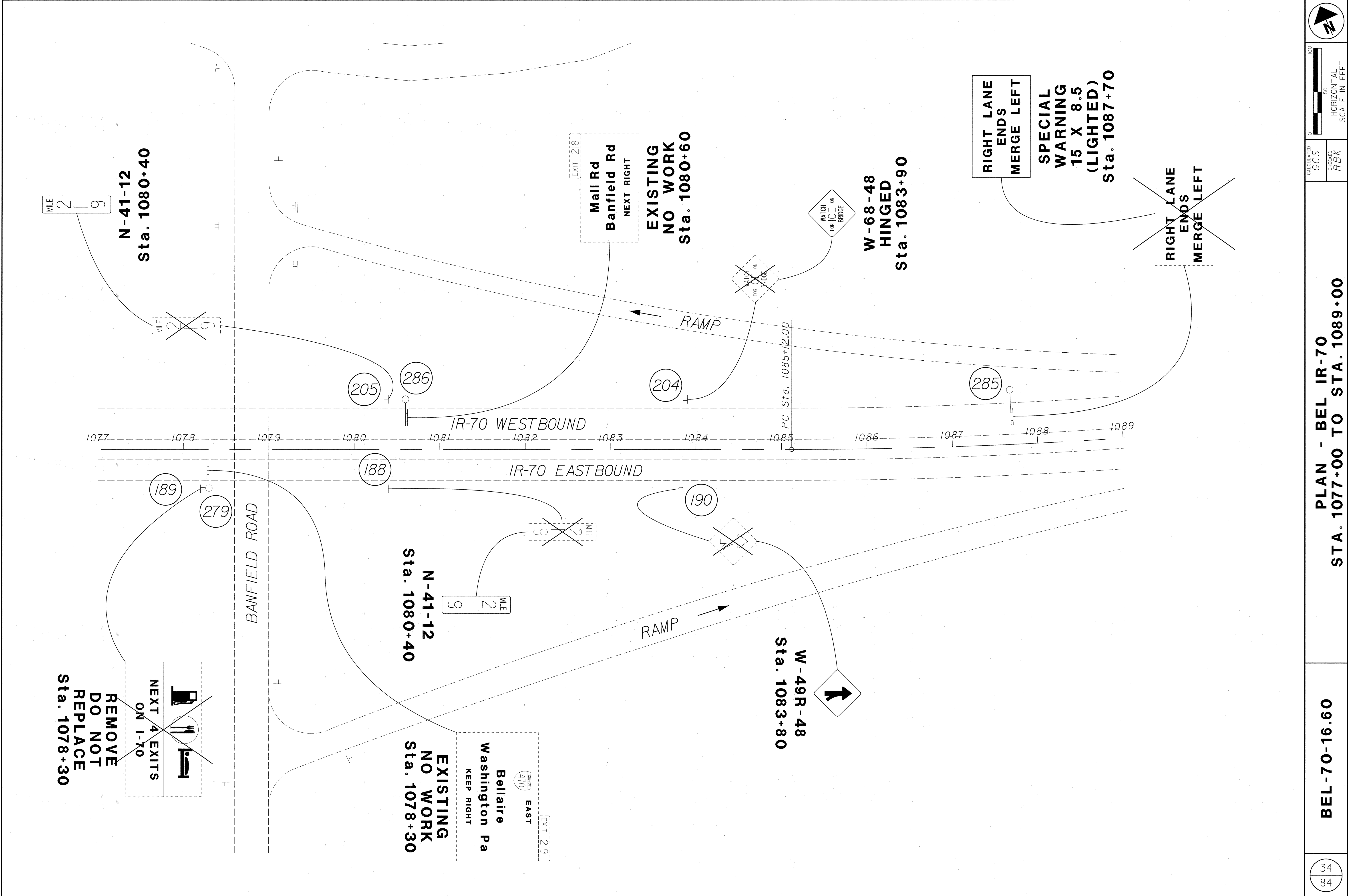
PLAN - BEL IR-70
STA. 1002+00 TO STA. 1015+00

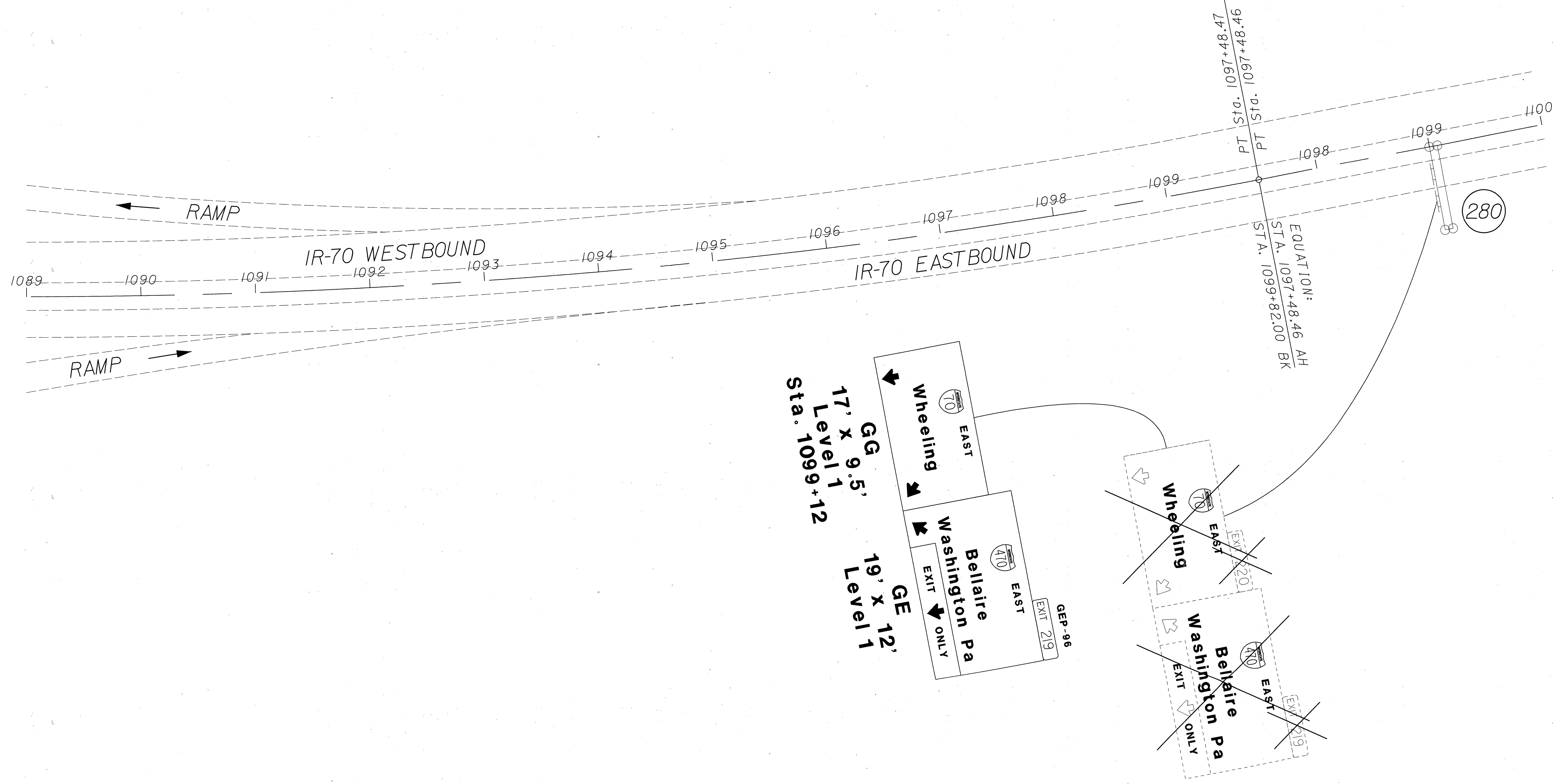
BEL-70-16.60

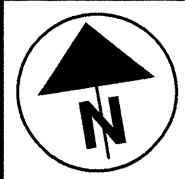












CALCULATED
GCS
CHECKED
RBK

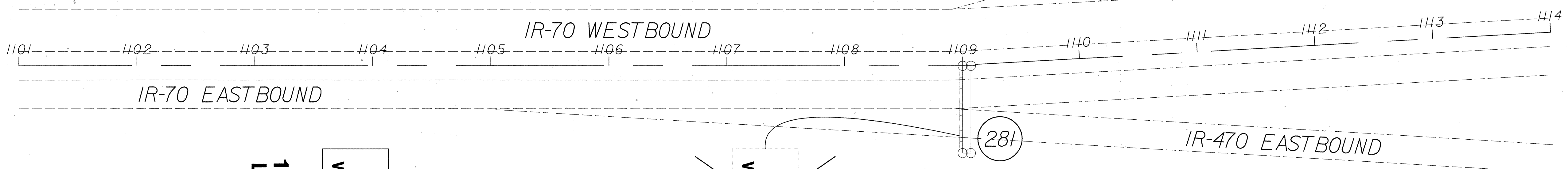
PLAN - BEL IR-70
STA. 1100+00 TO STA. 1114+00

BEL-70-16.60

36
84

SEE NEXT SHEET

W-49L-48
Sta. 1113+50



SEE PREVIOUS SHEET
(Sta. 1007+70)

Wheeling

EAST

National Rd
Co Rd 214

1/2 MILE

Bellaire
Washington Pa

EXIT ONLY

GEP-96

EXIT 220

GEP-96

EXIT 219

GG

12' x 7'

Level 1

GB

16' x 12'

Level 1

GE

19' x 12'

Level 1

Sta. 1109+00

~~Wheeling~~

~~EAST~~

~~National Rd
Co Rd 214~~

~~1/2 MILE~~

~~Bellaire
Washington Pa~~

~~EXIT ONLY~~

~~EXIT 220~~

~~EXIT 219~~

~~GG~~

~~12' x 7'~~

~~Level 1~~

~~GB~~

~~16' x 12'~~

~~Level 1~~

~~GE~~

~~19' x 12'~~

~~Level 1~~

~~Sta. 1109+00~~

W-49R-48
Sta. 1114+50

GEP-96

EXIT 218
Mall Rd
Banfield Rd
1 MILE

GB
16' x 8.5'
Level 1
Sta. 1117+00

EXIT 218
Mall Rd
Banfield Rd
1 MILE

IR-470 WESTBOUND

SEE PREVIOUS SHEET
(Sta. 1119+64)

1114

1115

1116

1117

1118

1119

1120

1121

1122

1123

1124

1125

1126

IR-70 EASTBOUND

IR-70 WESTBOUND

IR-470 EASTBOUND

LA-R/W

LA-R/W

LA-R/W

LA-R/W

LA-R/W

LA-R/W

LA-R/W

LA-R/W

LA-R/W

202

284

203

282

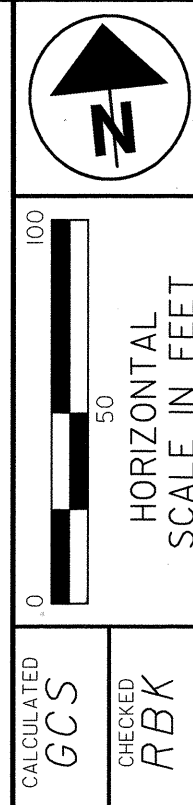
P.C. Sta. 1116+35.52

GB
16' x 12'
Level 1
Sta. 1123+25

EXIT 220
National Rd
Co Rd 214
NEXT RIGHT

GEP-96

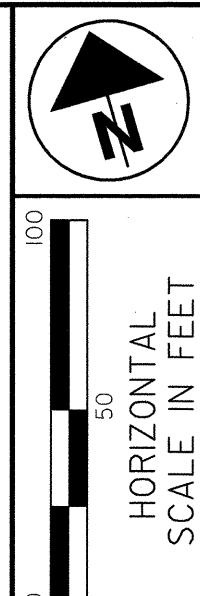
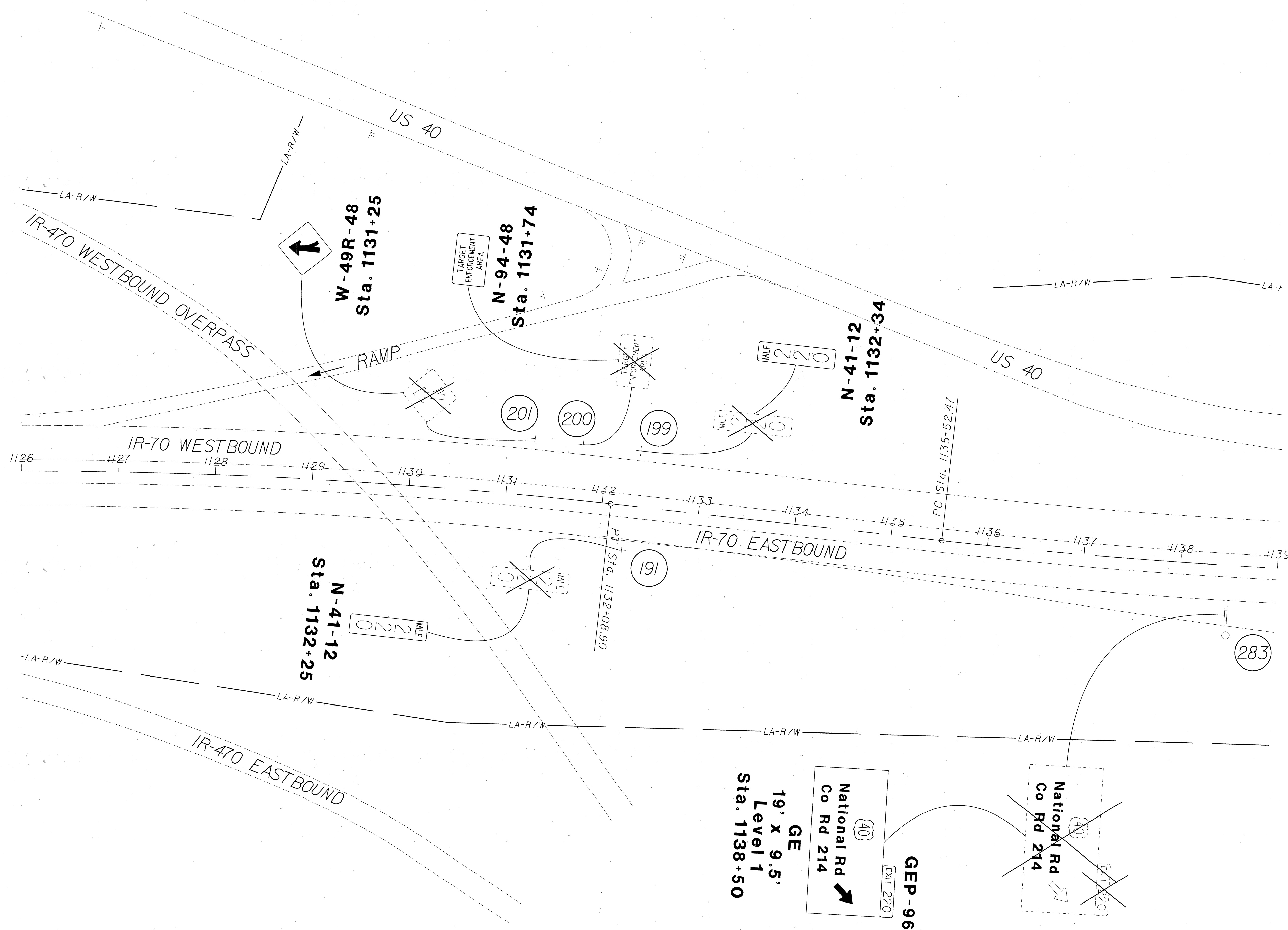
EXIT 220
National Rd
Co Rd 214
NEXT RIGHT



PLAN - BEL IR-70
STA. 1114+00 TO STA. 1126+00

BEL-70-16.60

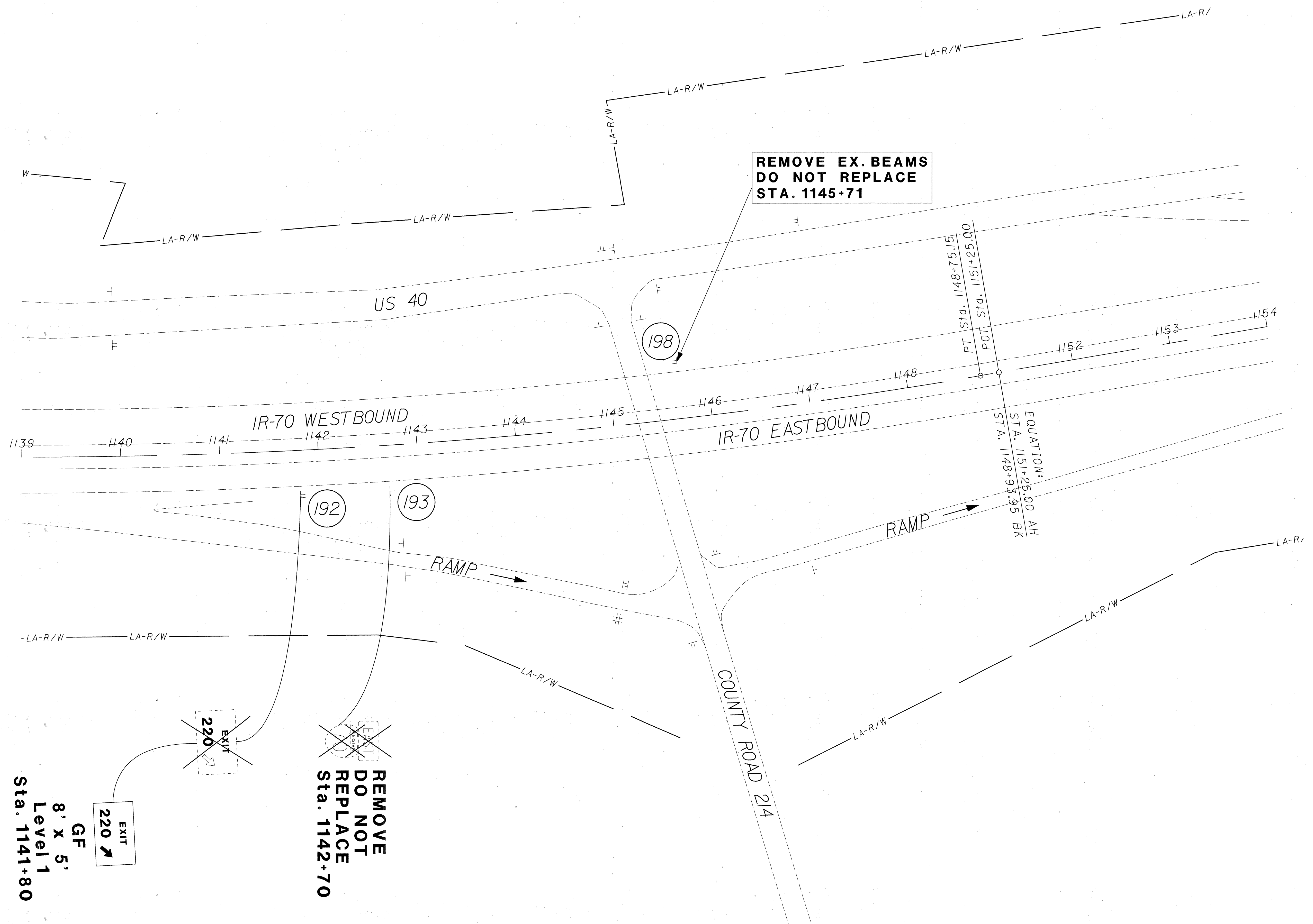
37
84



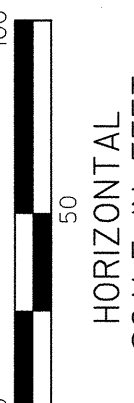
CALCULATED
GCS
CHECKED
RBK

PLAN - BEL IR-70
STA. 1126+00 TO STA. 1139+00

BEL-70-16.60



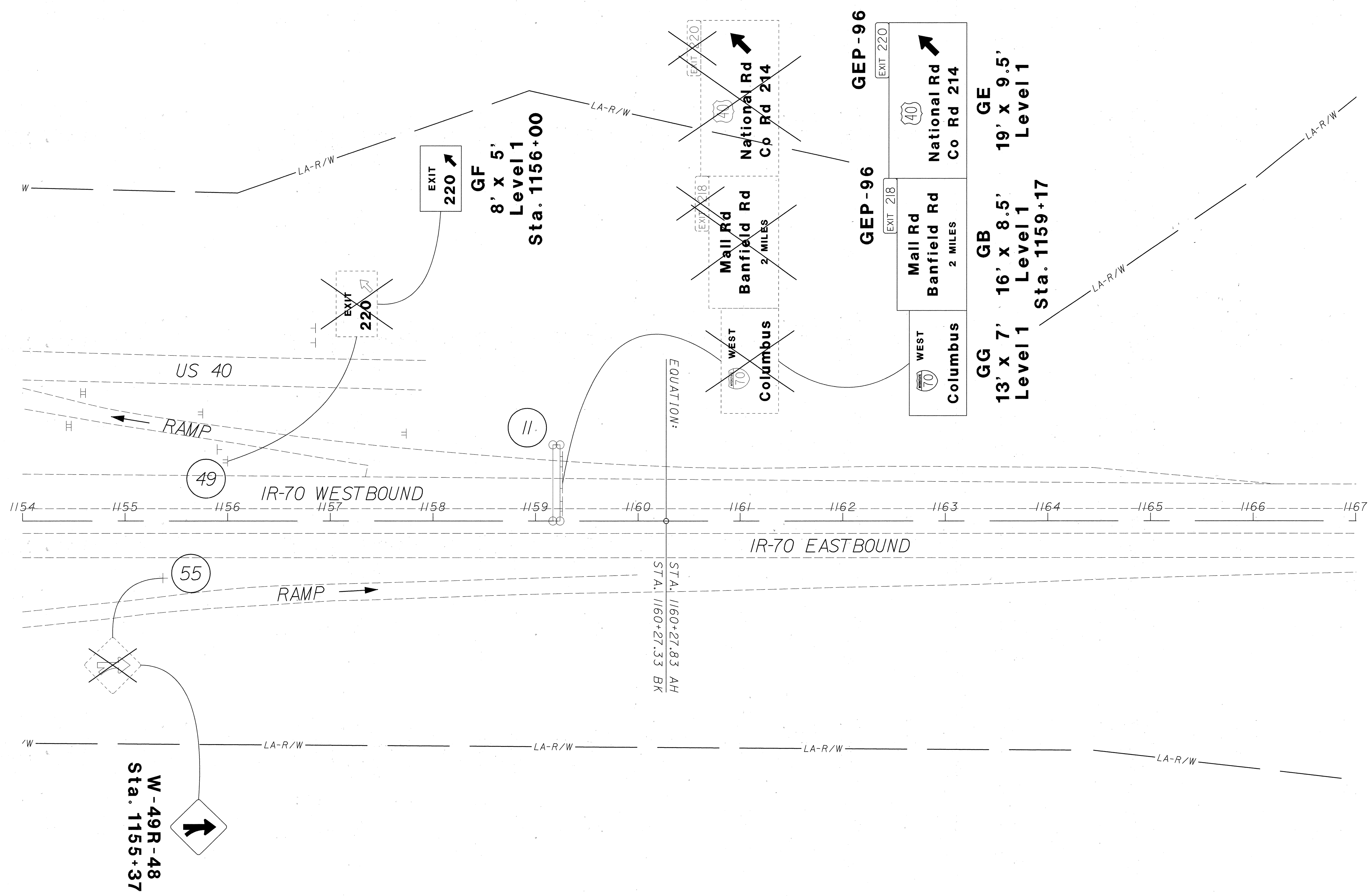


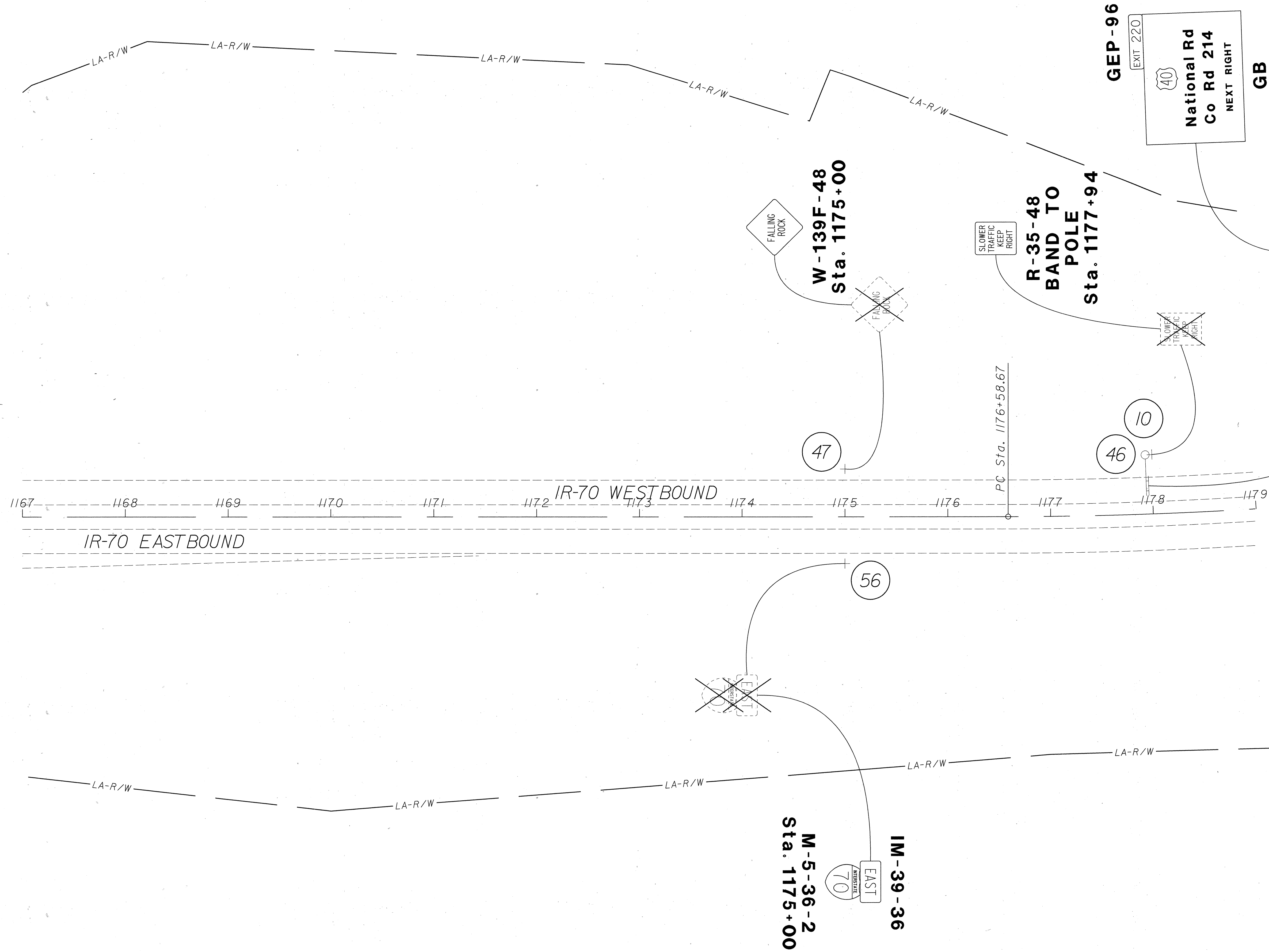


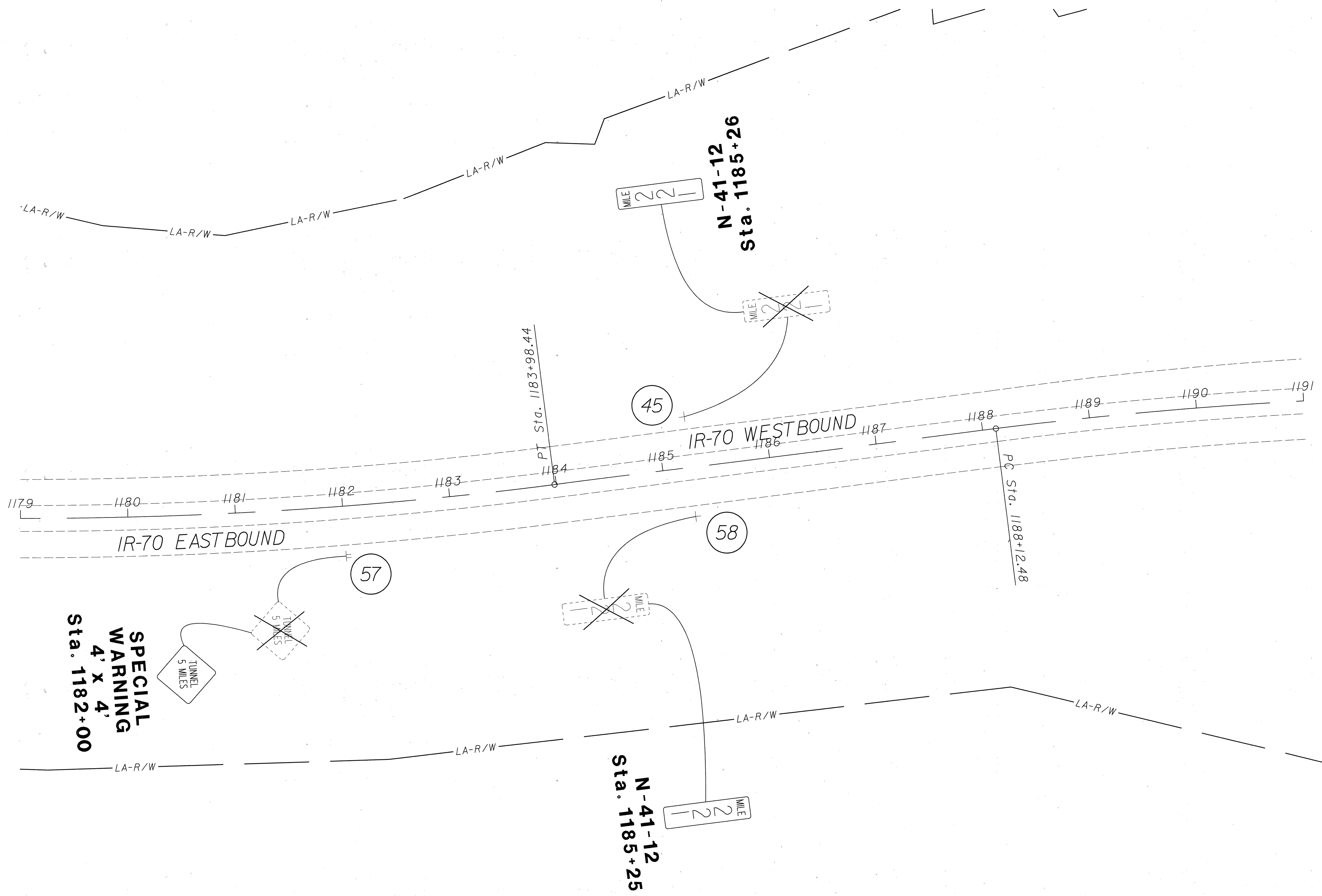
 HORIZONTAL SCALE IN FEET

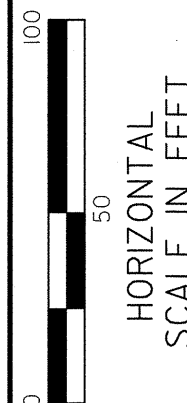
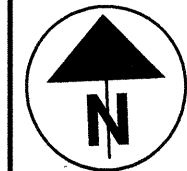
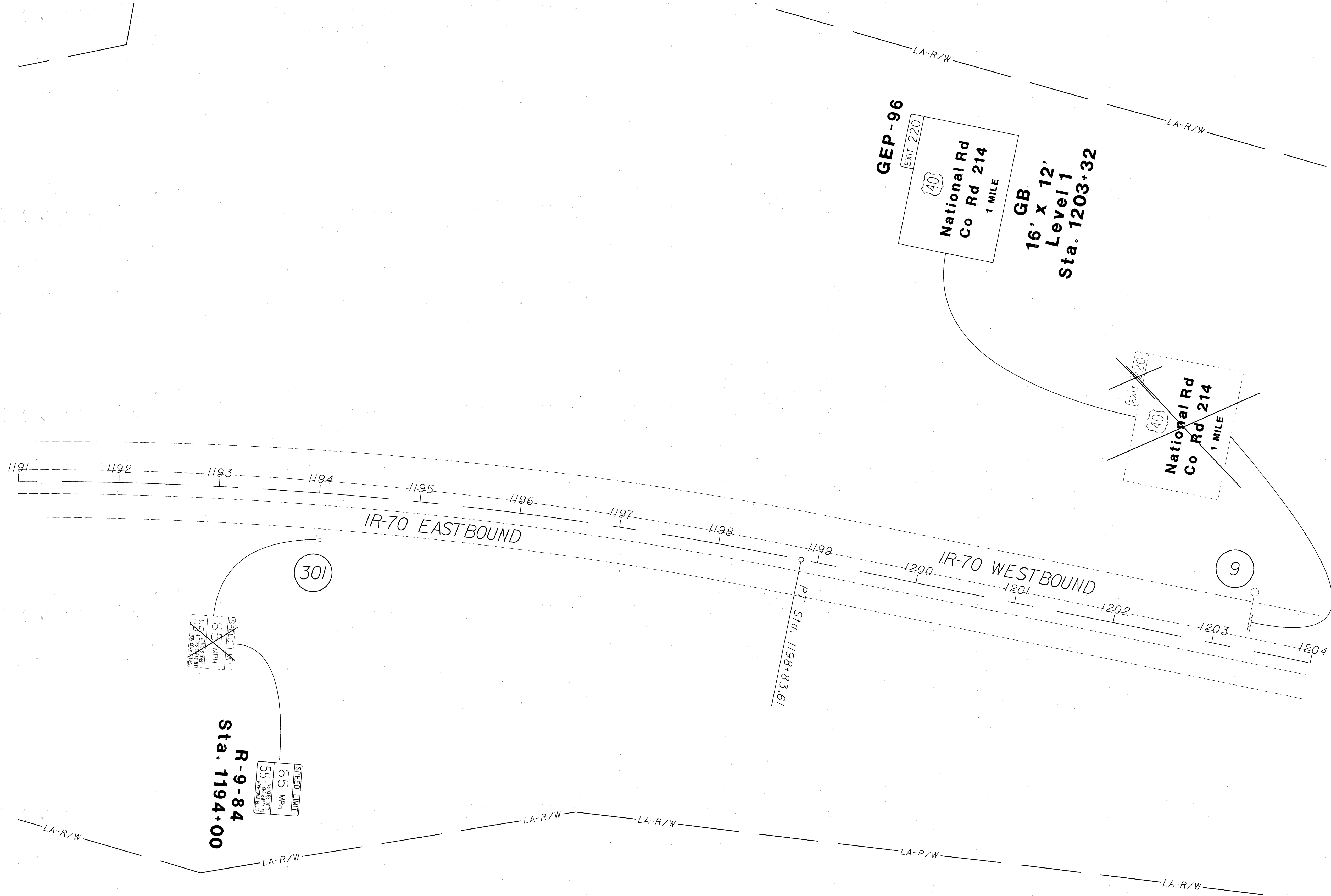
CALCULATED **CCS**
 CHECKED **RBK**

PLAN - BEL IR-70
STA. 1139+00 TO STA. 1154+00







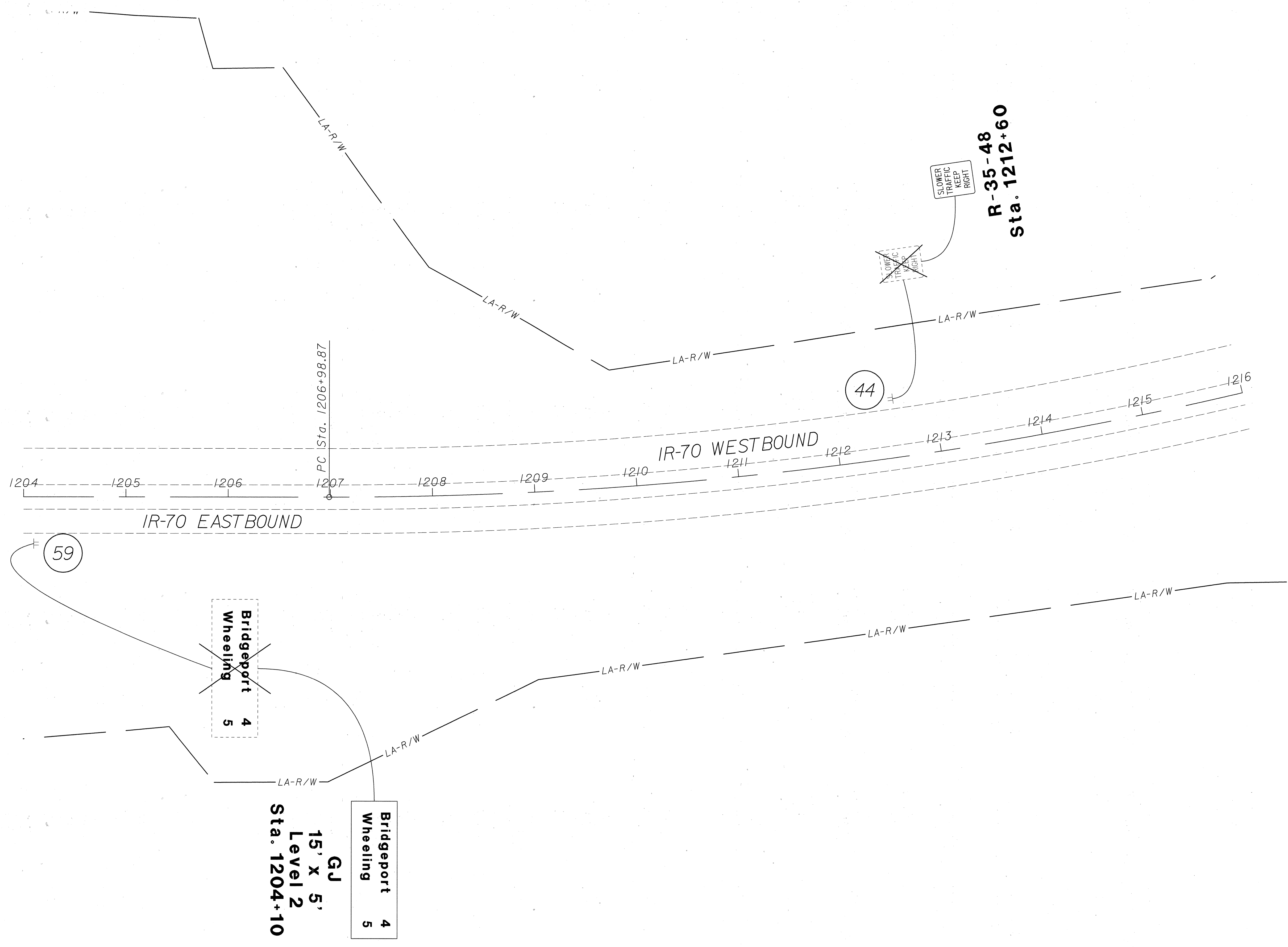


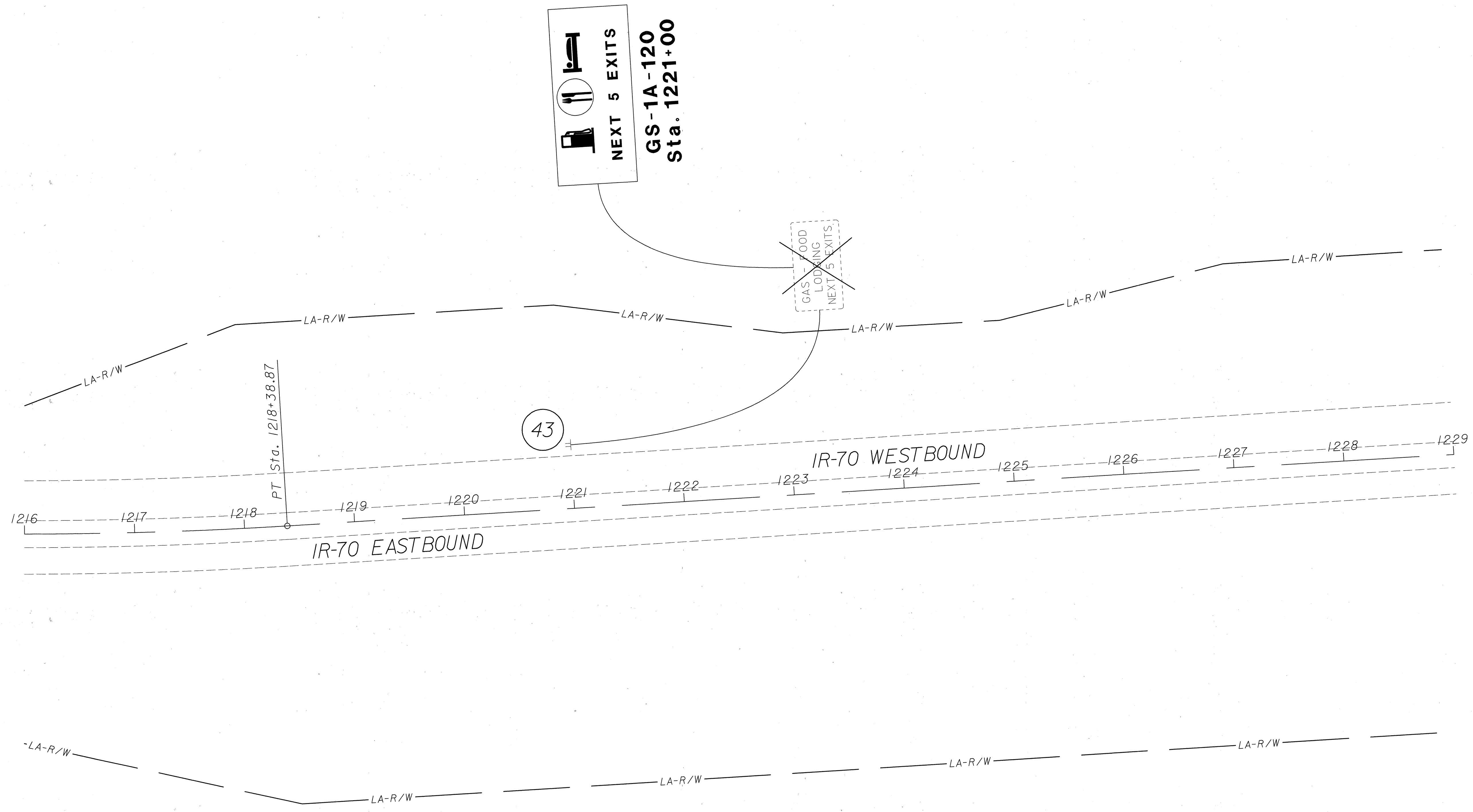
CALCULATED
GCS
CHECKED
RBK

PLAN - BEL IR-70
STA. 1191+00 TO STA. 1204+00

BEL-70-16.60

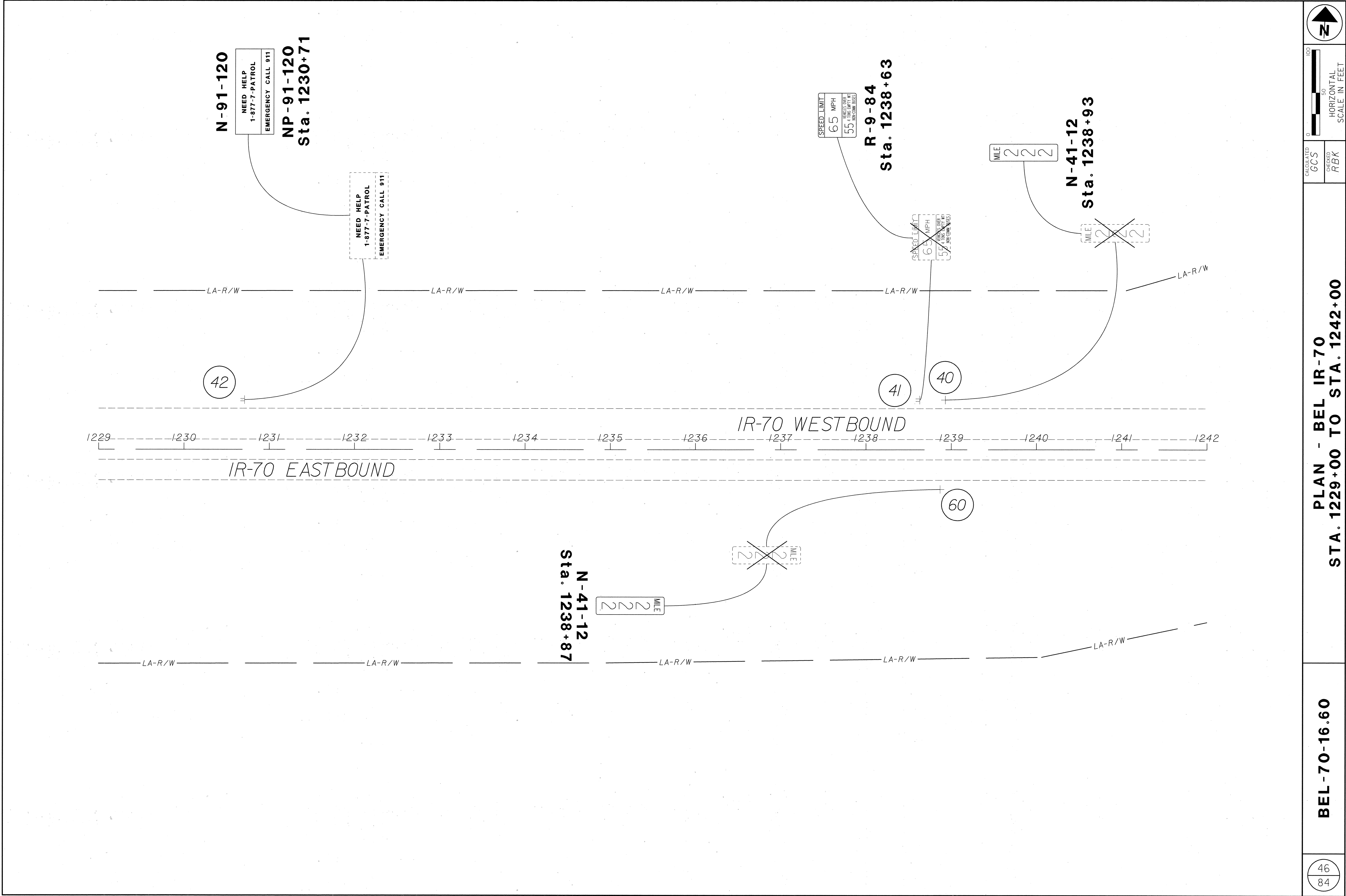
43
84

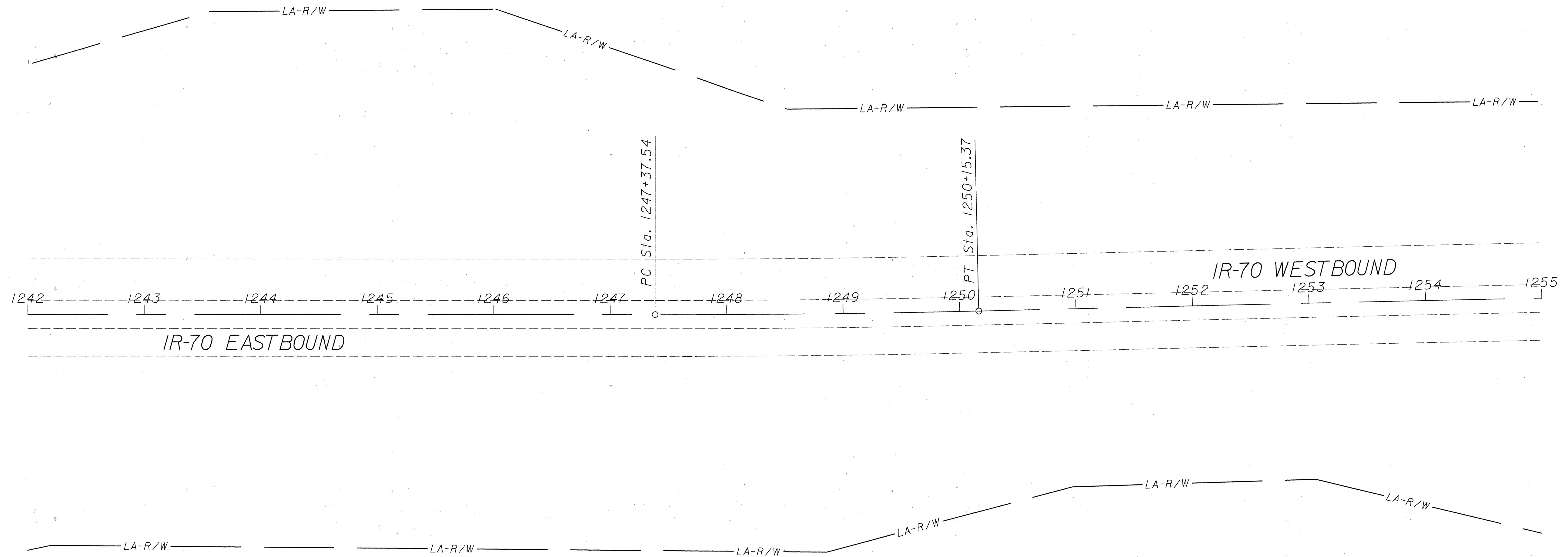




HORIZONTAL SCALE IN FEET	
CALCULATED GCS	CHECKED RBK

PLAN - BEL IR-70
STA. 1216+00 TO STA. 1229+00

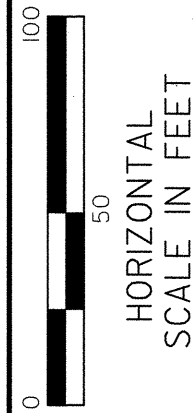
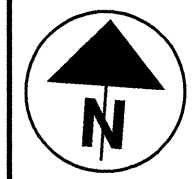
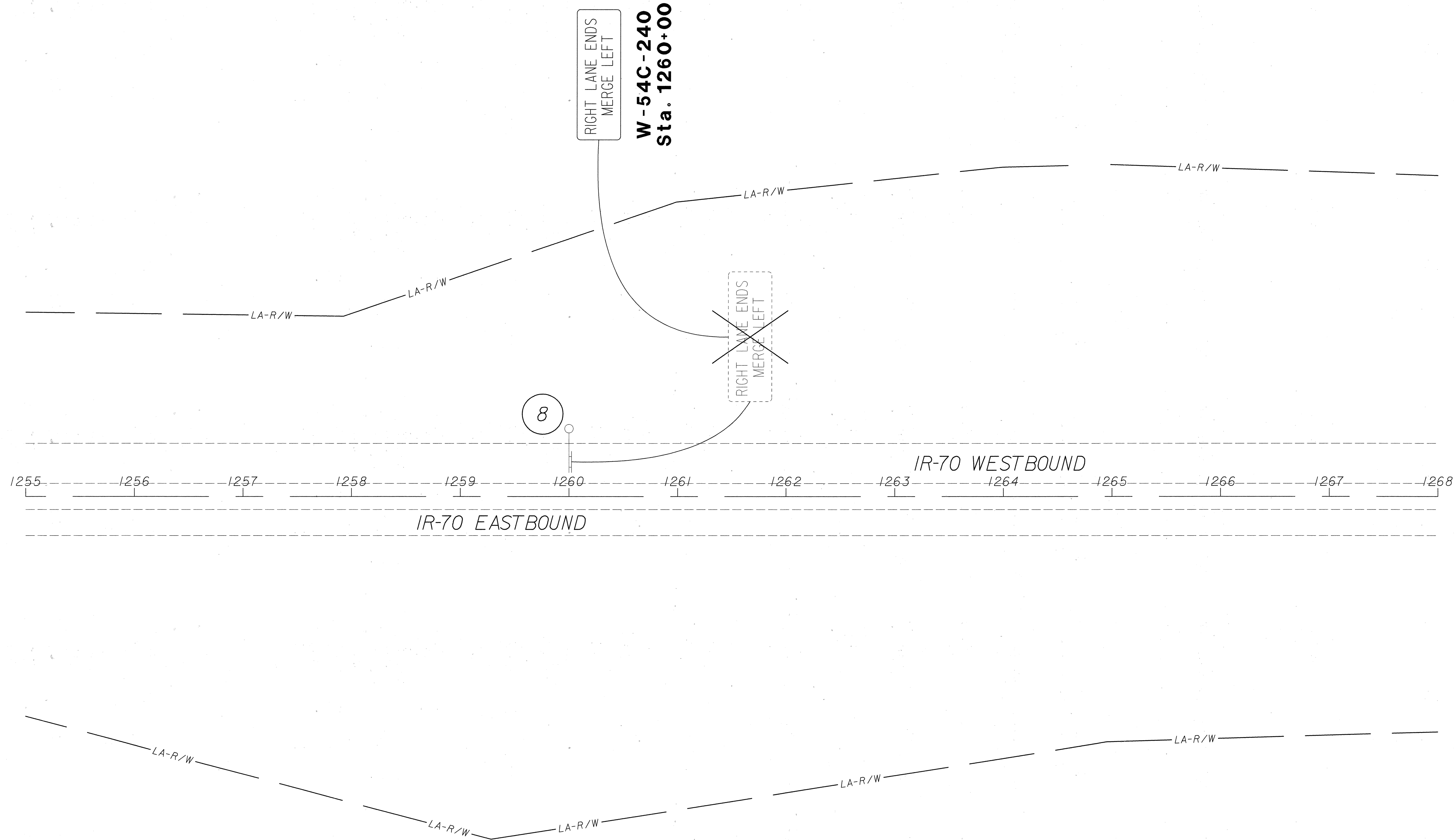




HORIZONTAL SCALE IN FEET	
CALCULATED GCS	CHECKED RBK

PLAN - BEL IR-70
STA. 1242+00 TO STA. 1255+00

BEL-70-16.60	47 84
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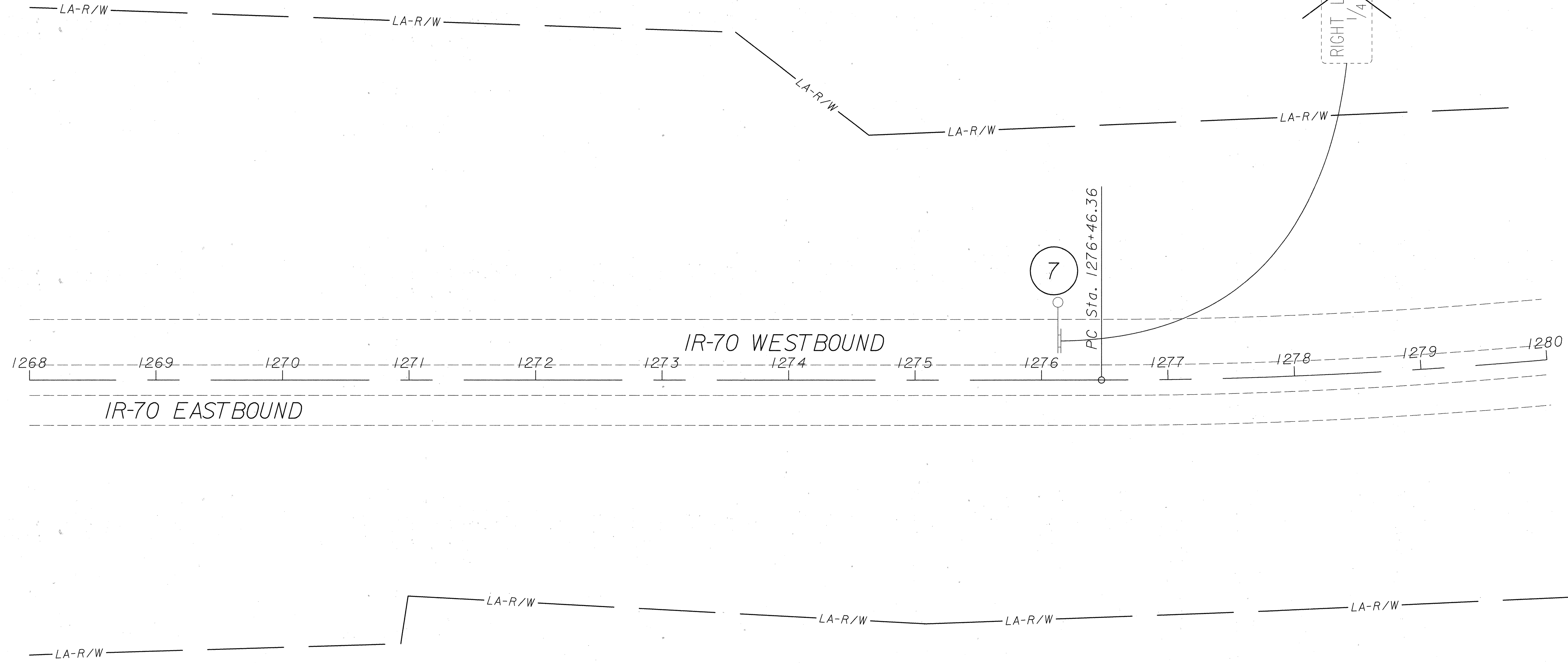


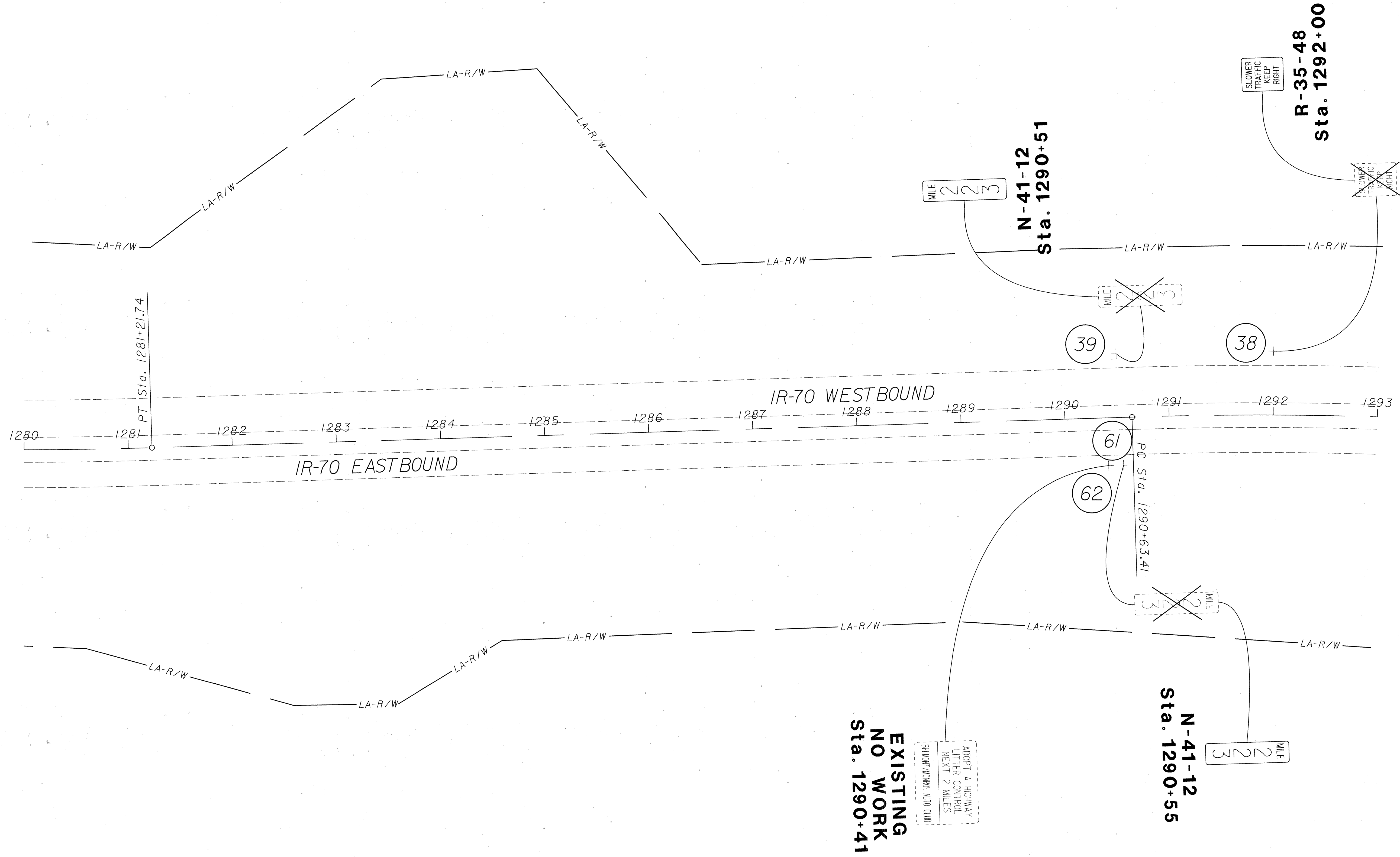
CALCULATED
GCS
CHECKED
R/BK

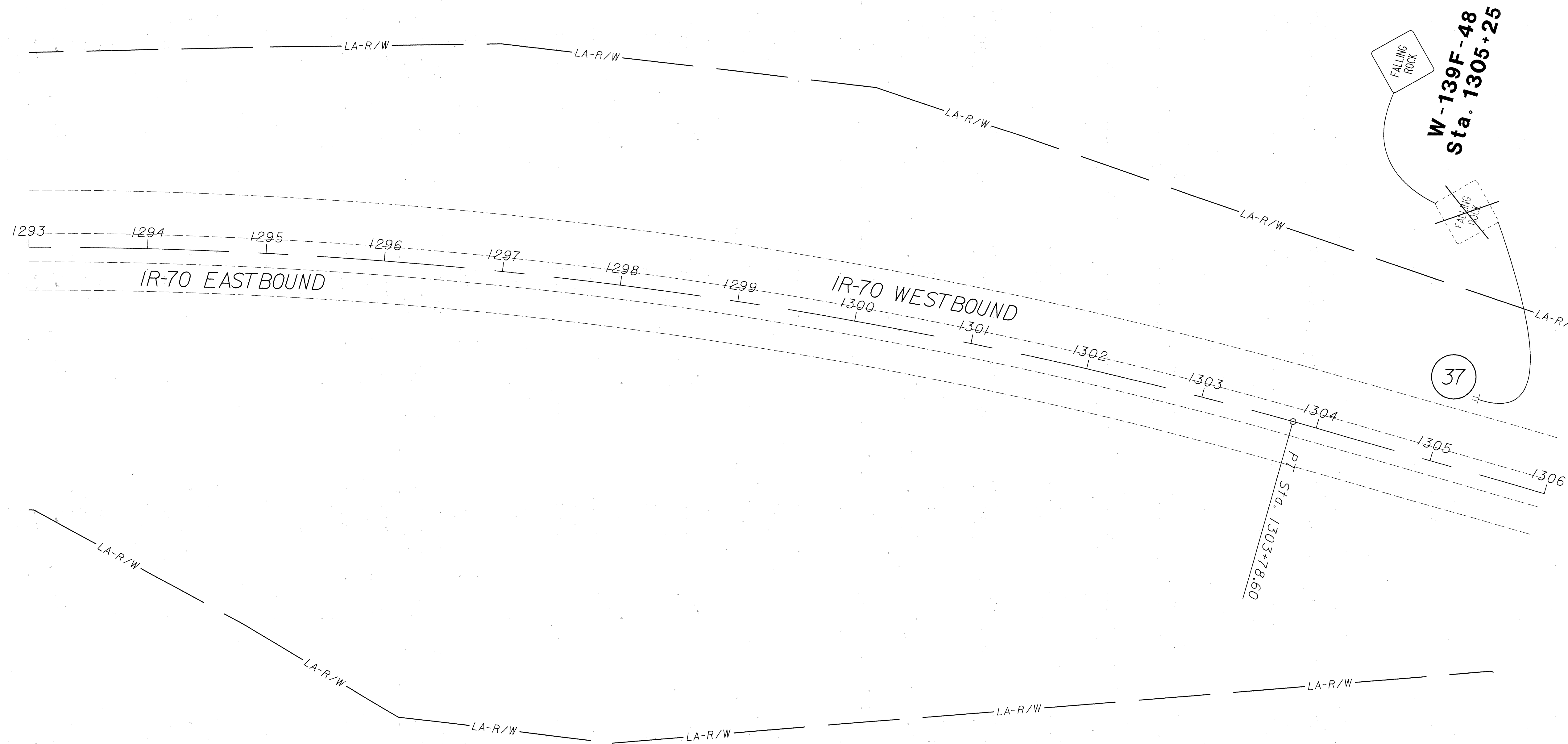
PLAN - BEL IR-70
STA. 1255+00 TO STA. 1268+00

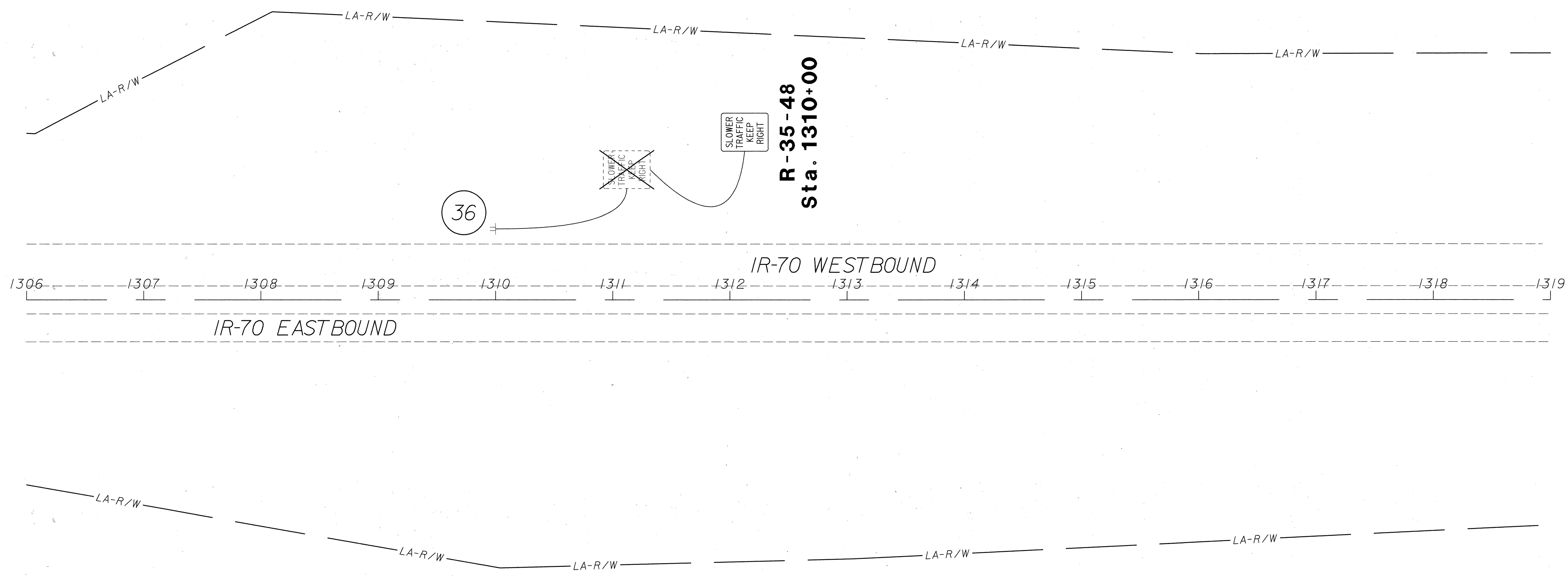
BEL-70-16.60

48
84









0

50

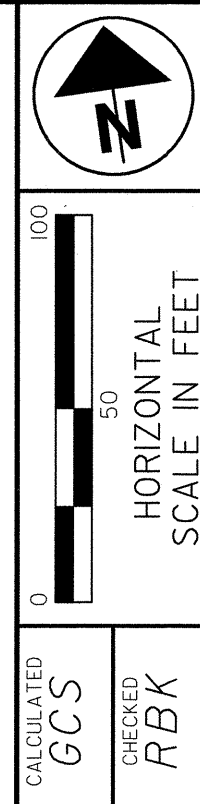
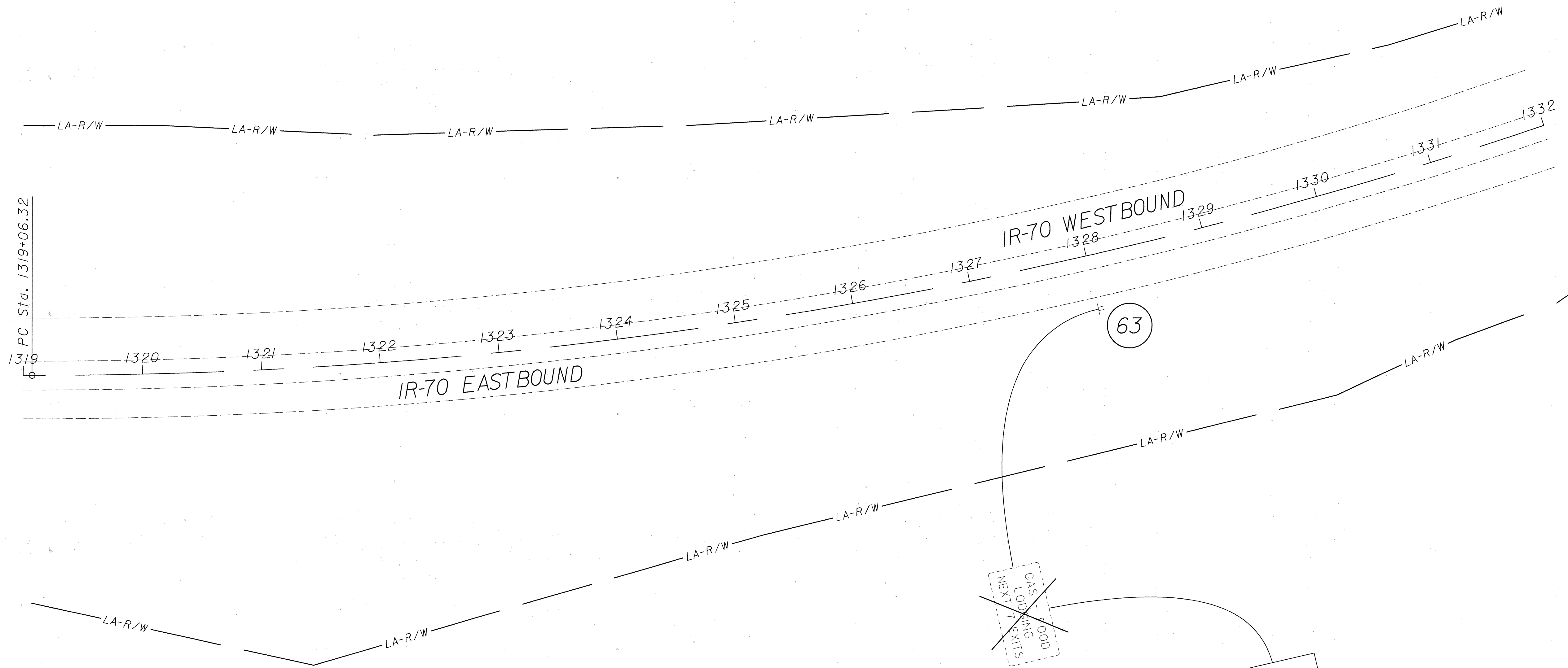
100

HORIZONTAL
SCALE IN FEET

CALCULATED
CCS

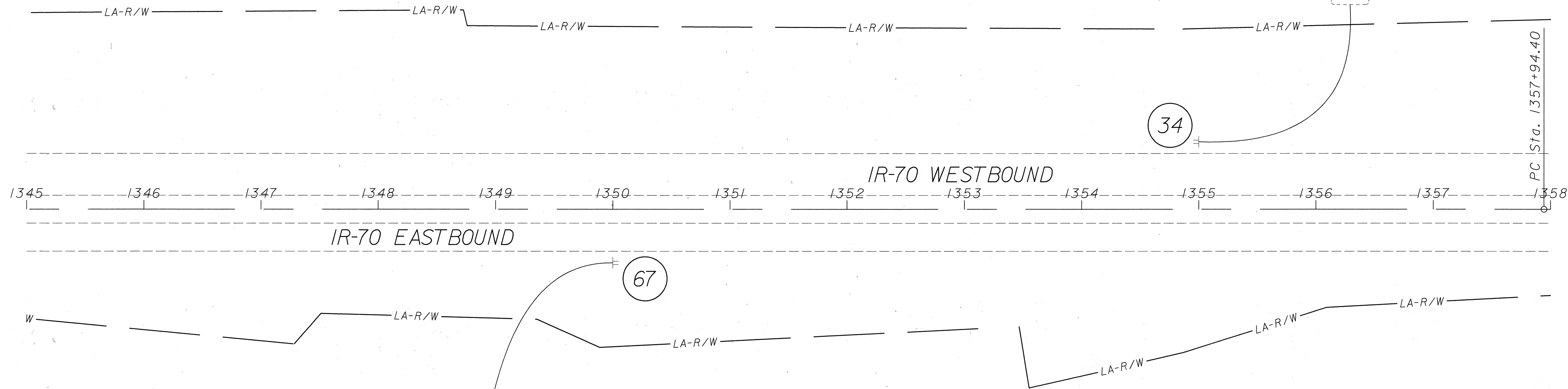
CHECKED
RBK

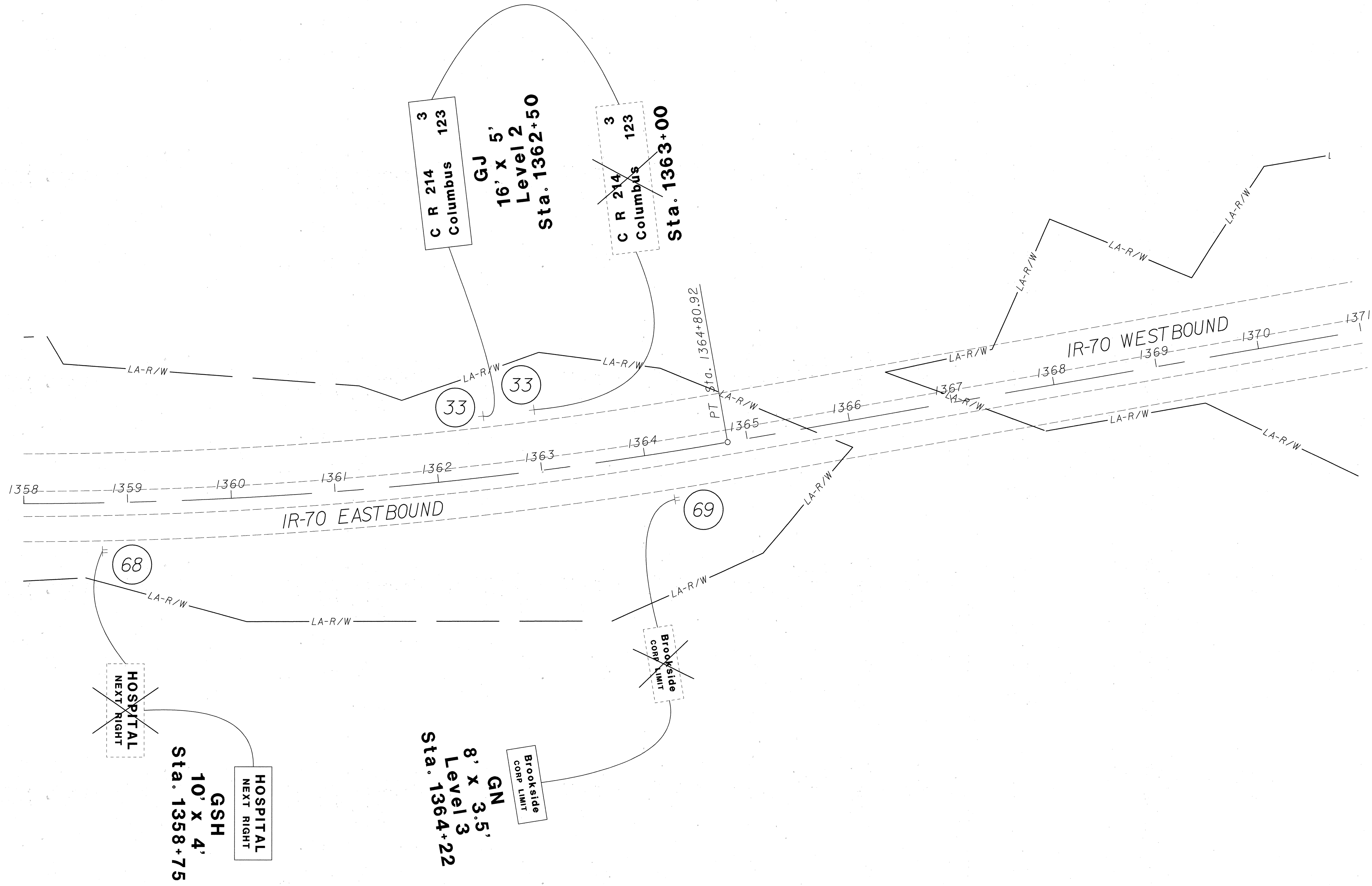
PLAN - BEL IR-70
STA. 1306+00 TO STA. 1319+00

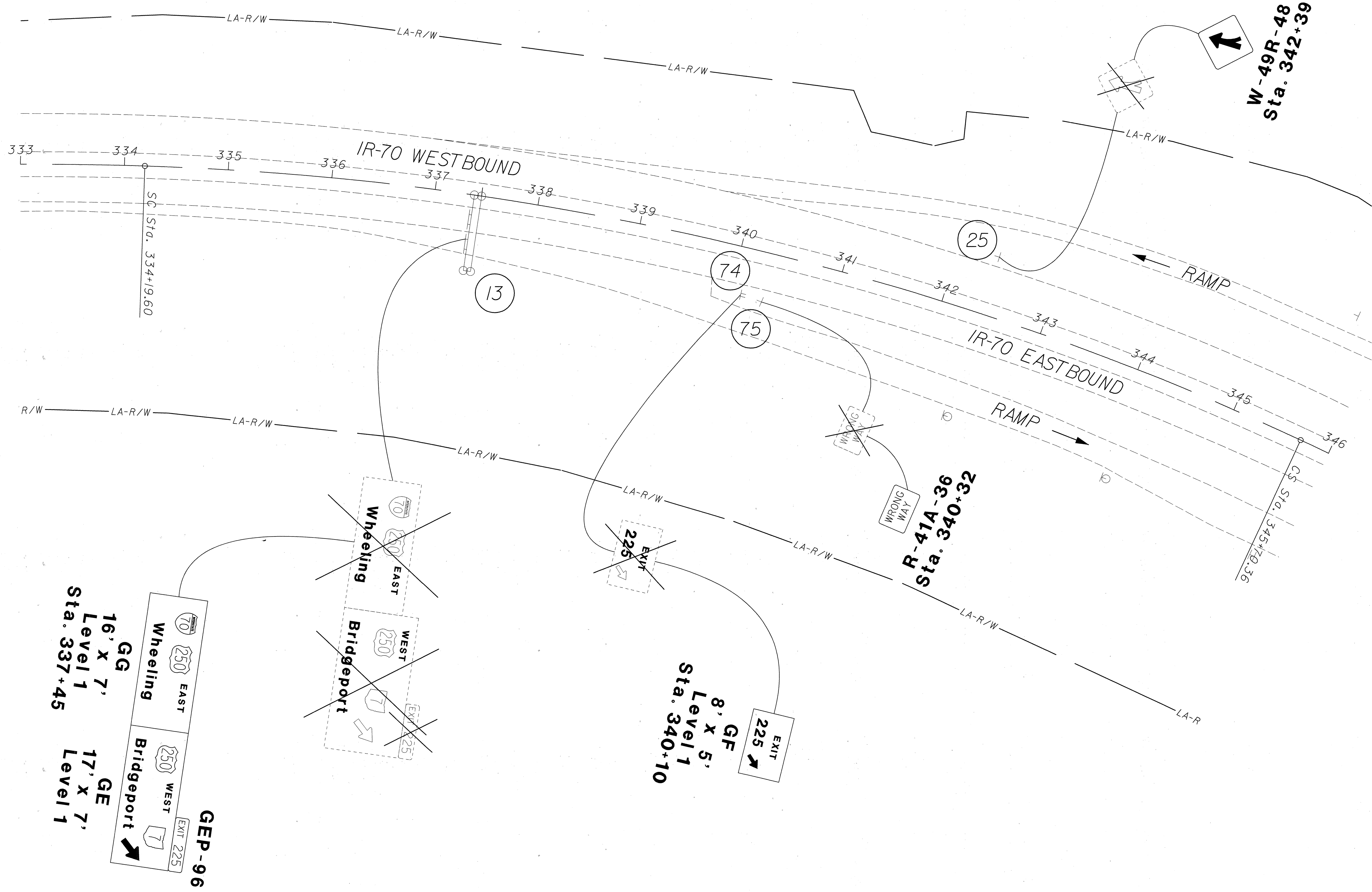


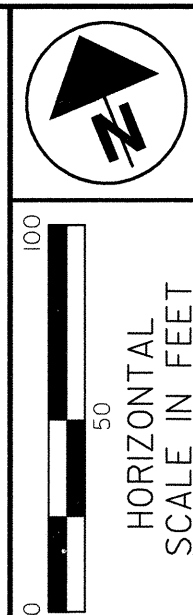
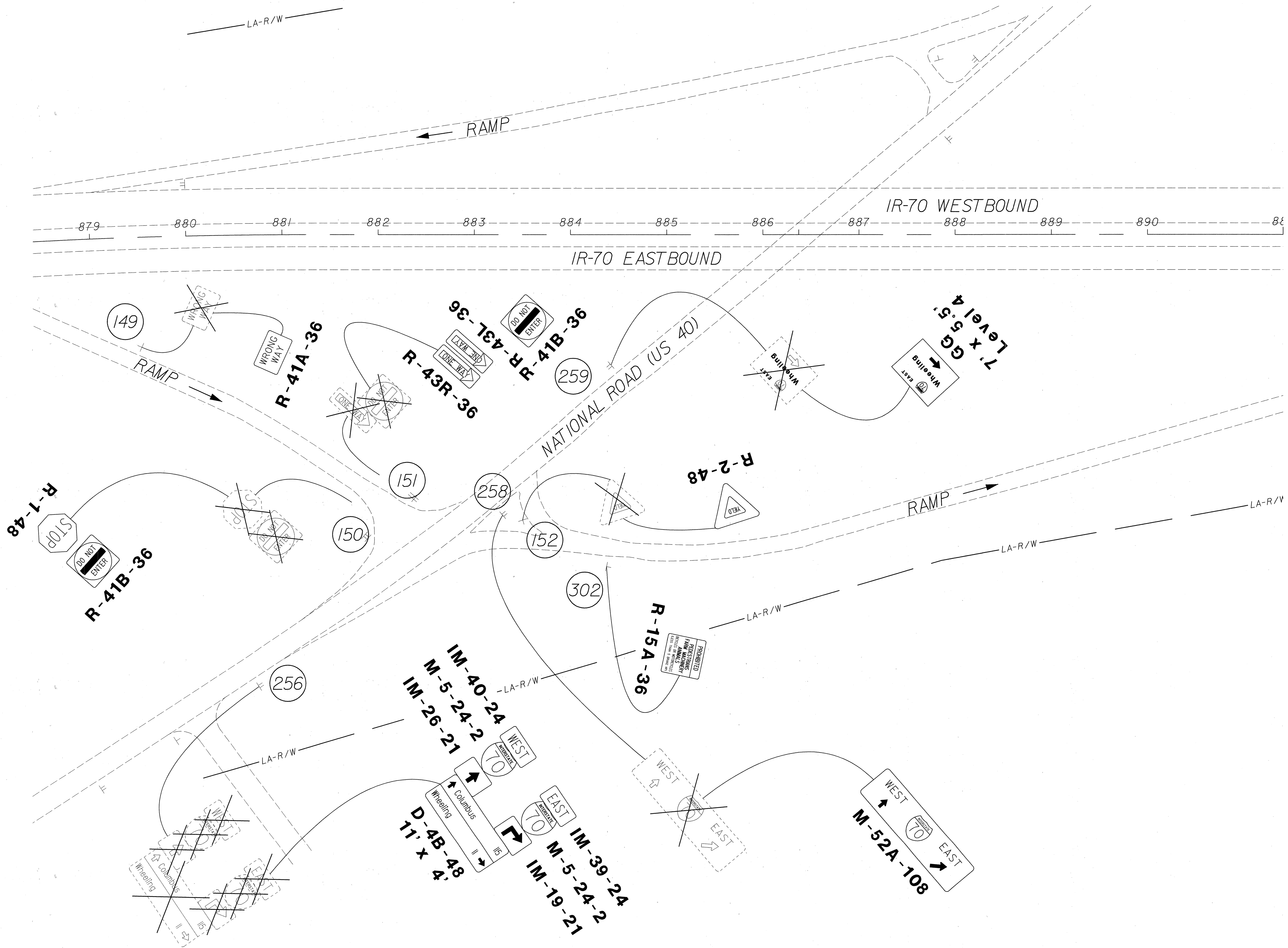
PLAN - BEL IR-70
STA. 1319+00 TO STA. 1332+00

BEL-70-16.60







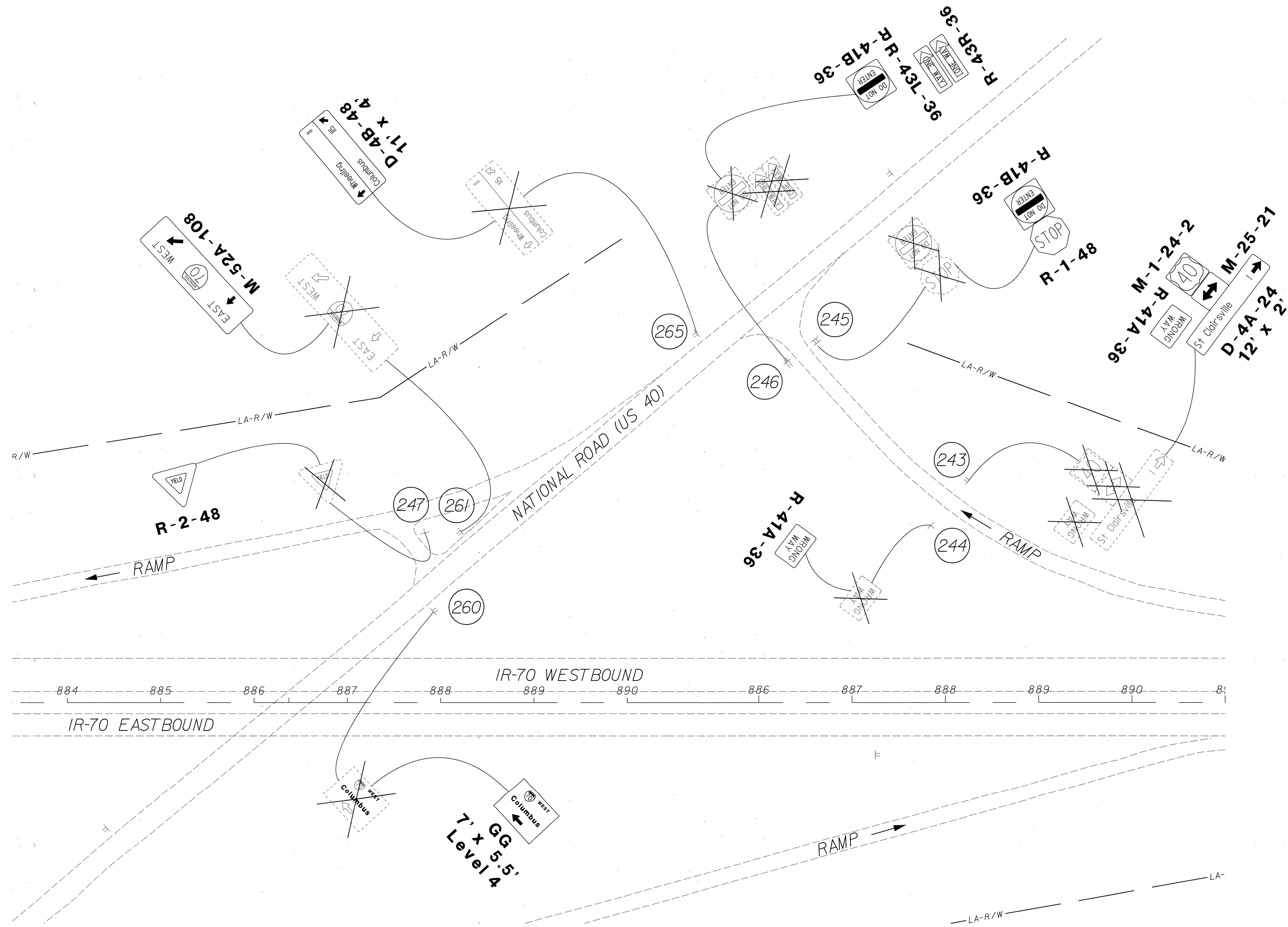


CALCULATED
GCS
CHECKED
RBK

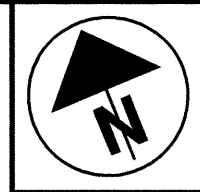
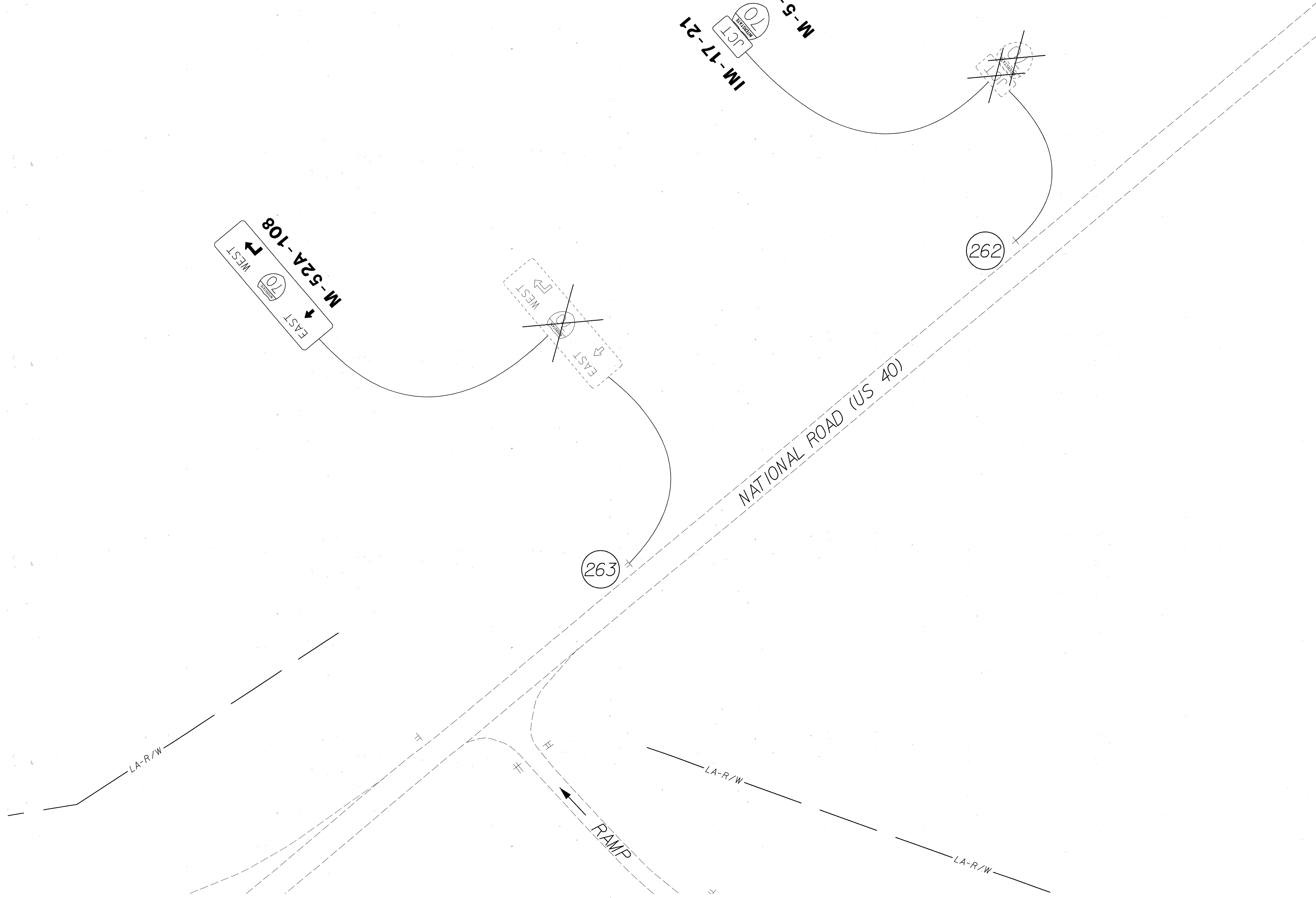
PLAN - BEL IR-70
IR-70 EB RAMPs AT NATIONAL RD (US 40)

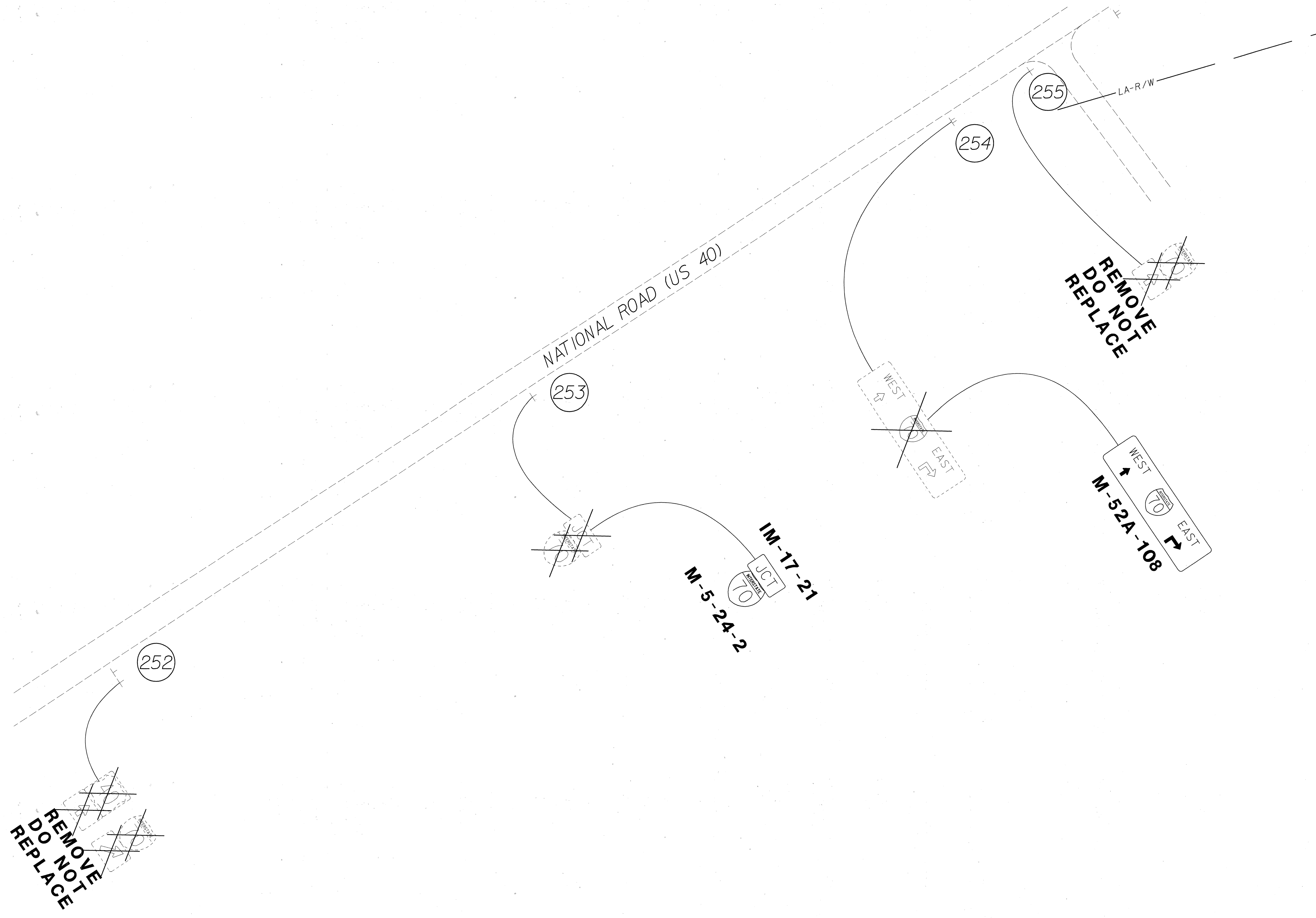
BEL-70-16.60

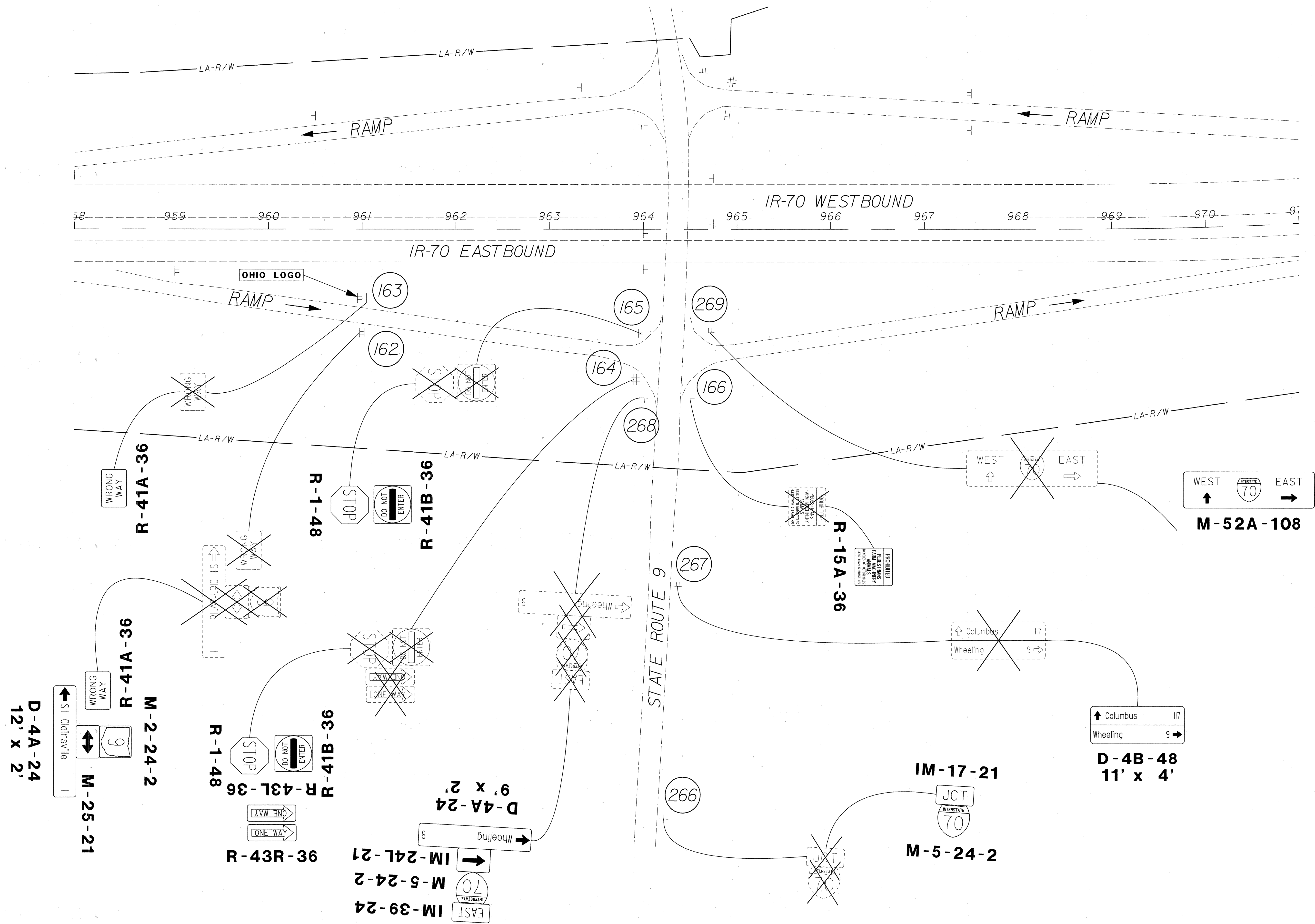
62
84



 HORIZONTAL SCALE IN FEET	CALCULATED GCS	PLAN - BEL IR-70 IR-70 WB RAMPs AT NATIONAL RD (US 40)	BEL-70-16.60
	CHECKED RBK		
63 84			

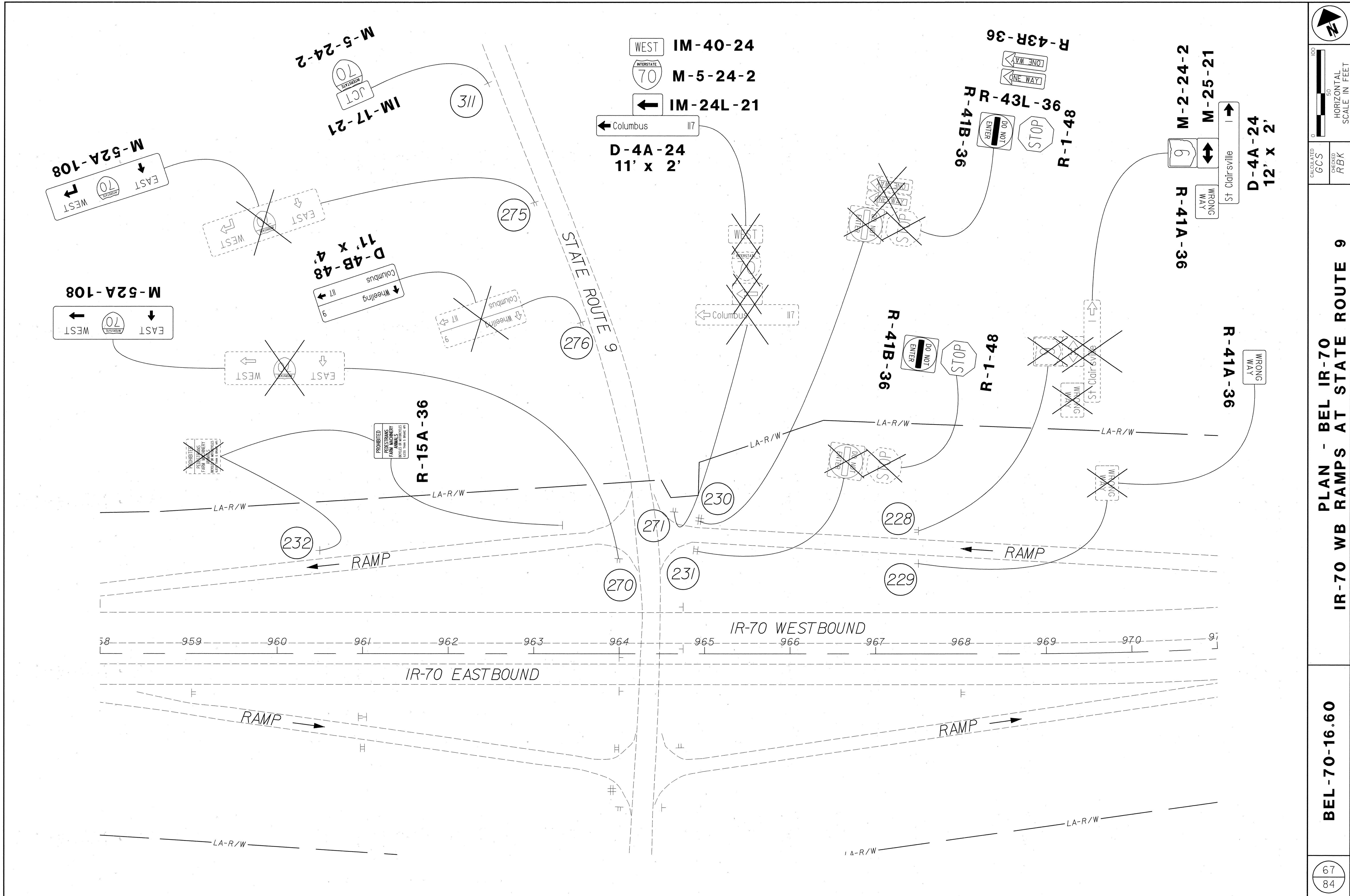


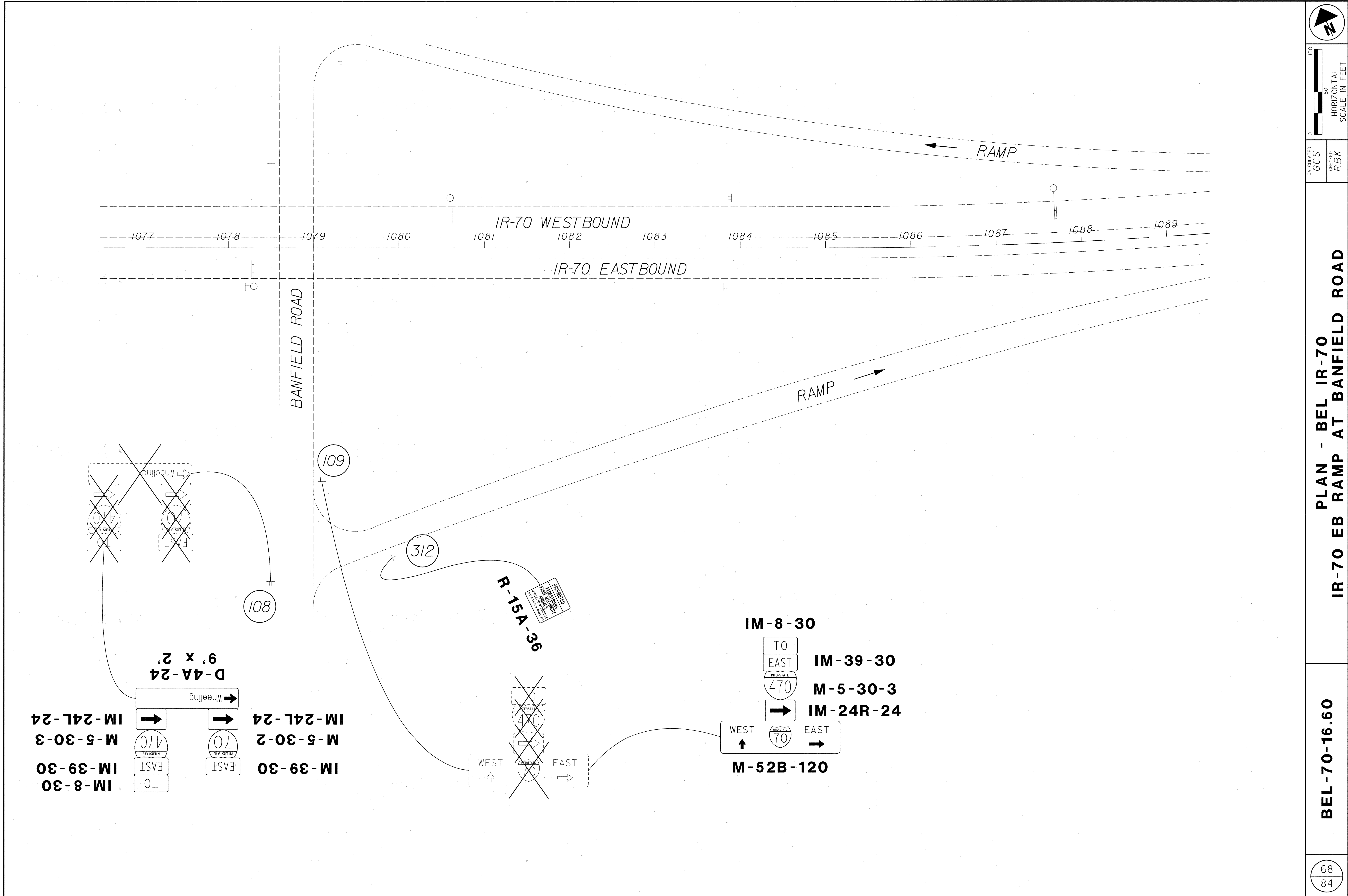




CALCULATED GCS	CHECKED RBK
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BEL-70
16.60-26.97





0

50

100

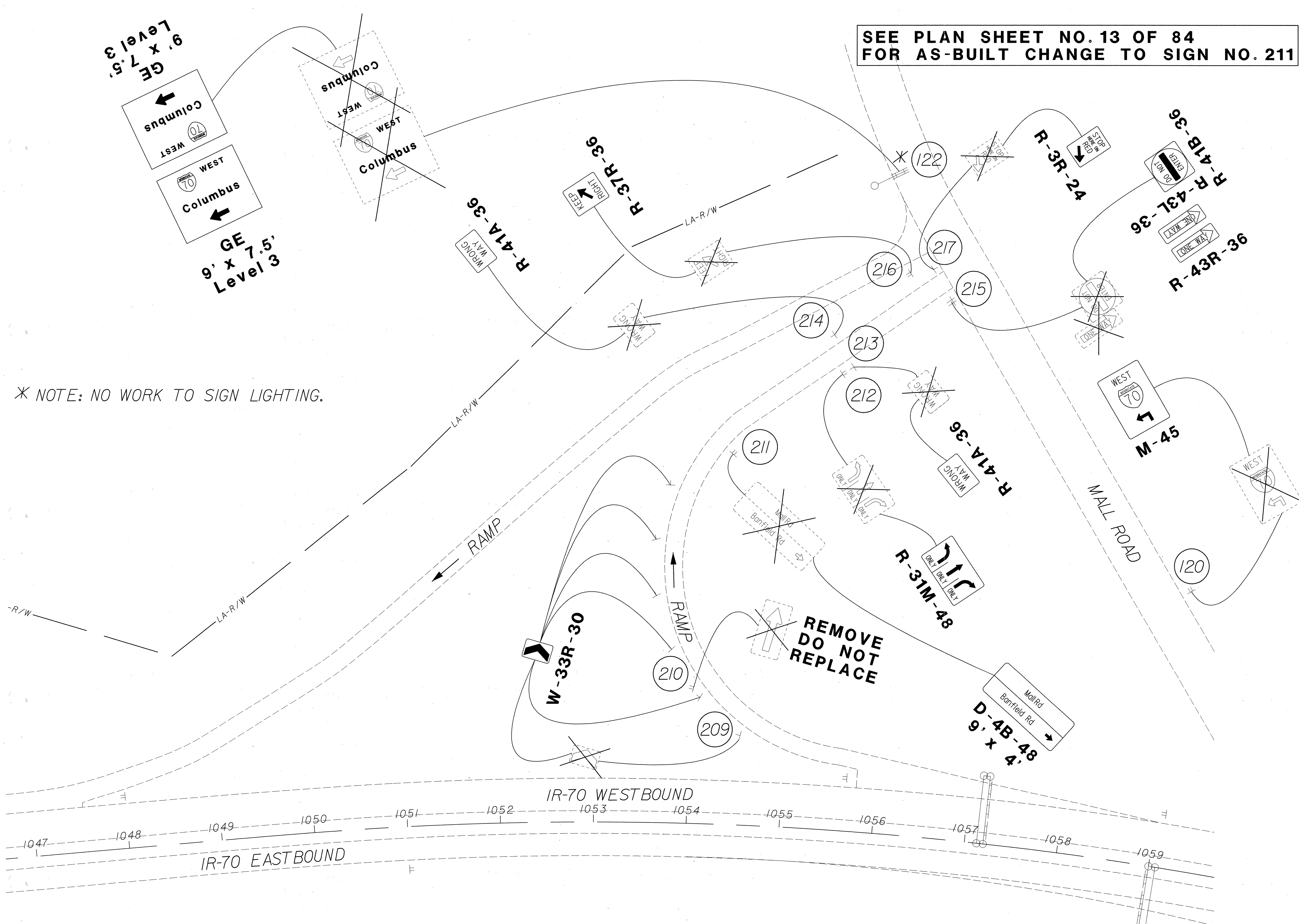
HORIZONTAL
SCALE IN FEET

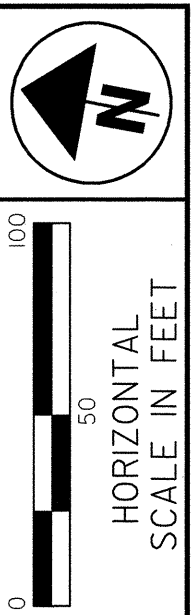
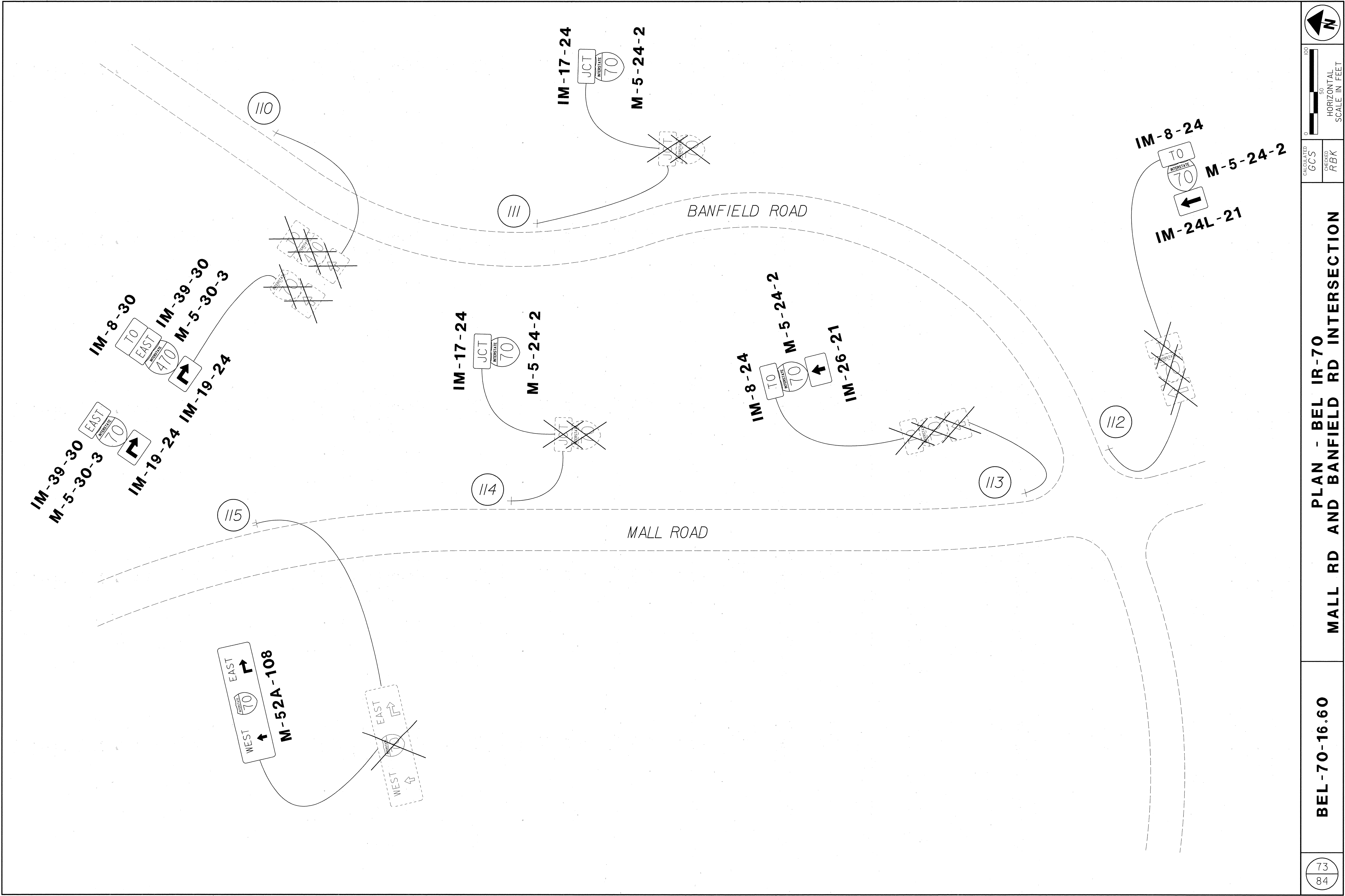
CALCULATED
GCS

CHECKED
RBK

PLAN - BEL IR-70

IR-70 EB RAMP AT BANFIELD ROAD



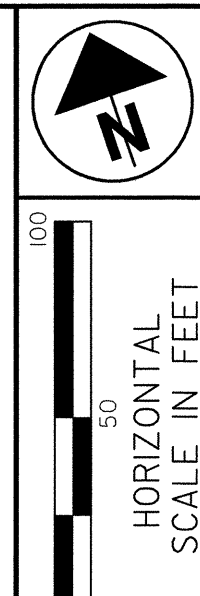
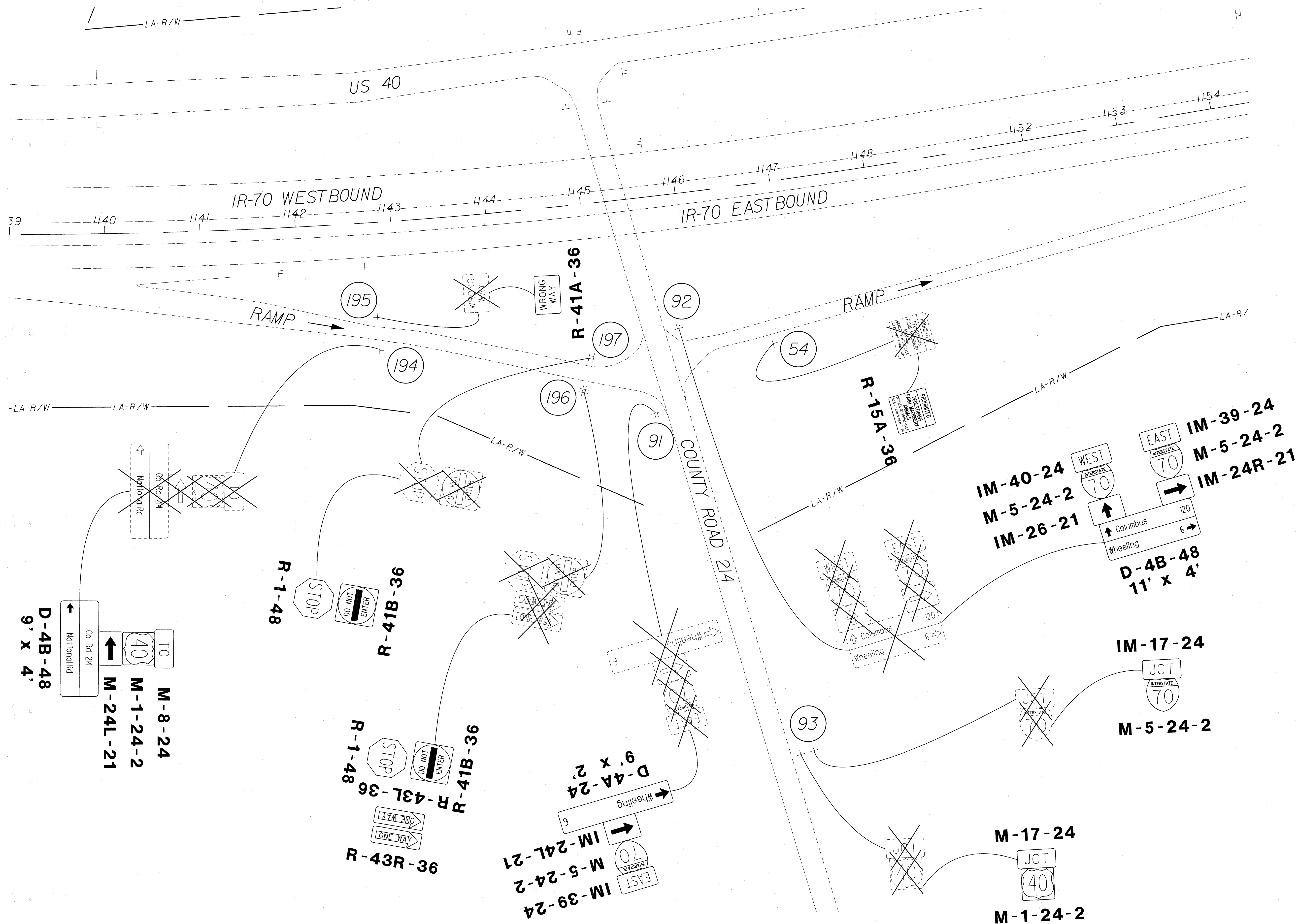


CALCULATED
GCS
CHECKED
RBK

PLAN - BEL IR-70
MALL RD AND BANFIELD RD INTERSECTION

BEL-70-16.60

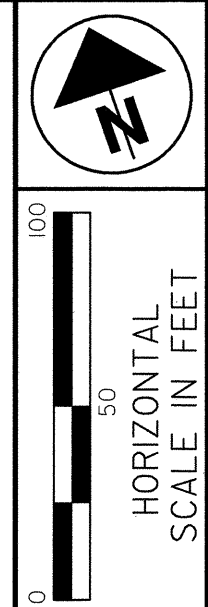
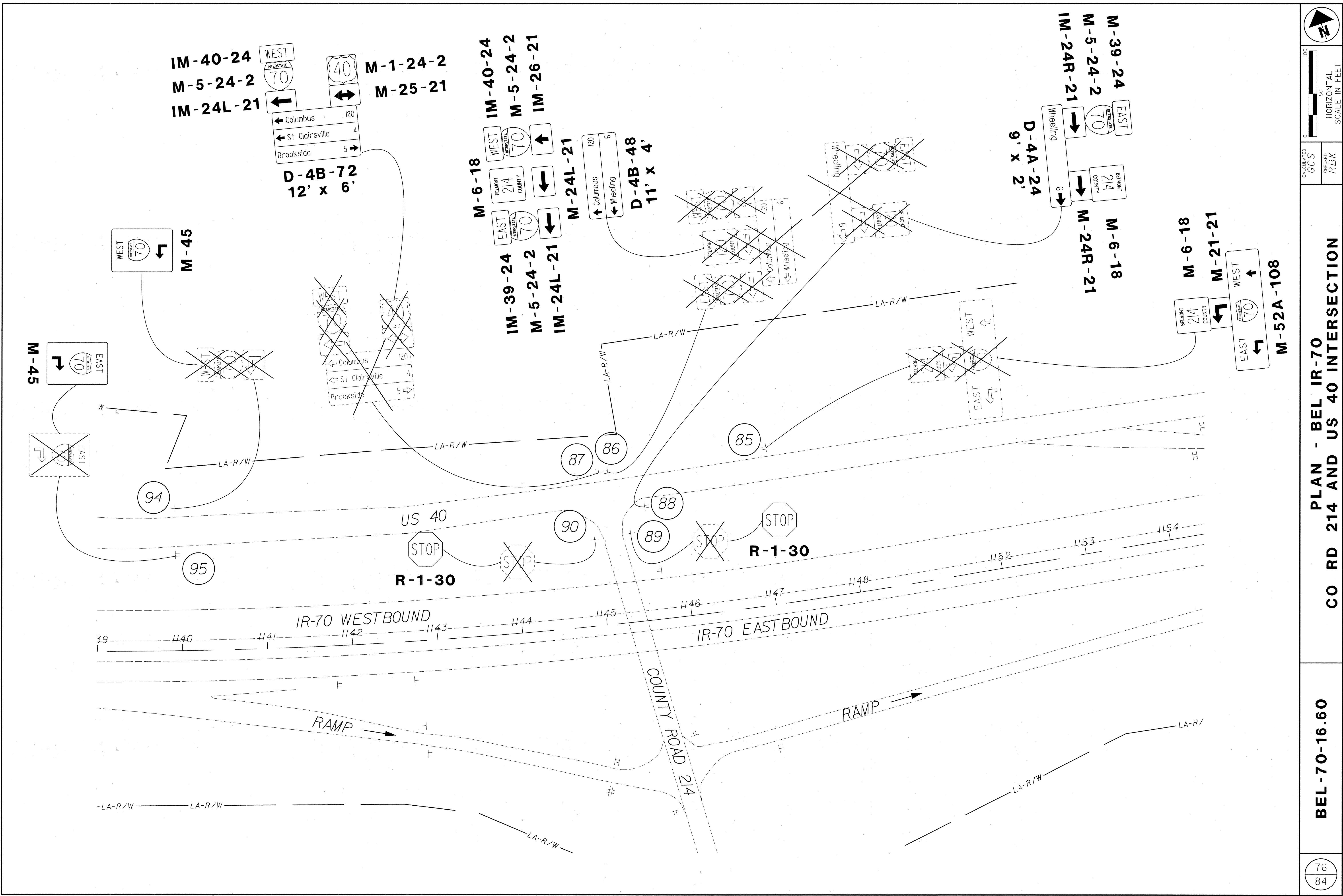
73
84



CALCULATED
GCS
CHECKED
RBK

PLAN - BEL IR-70
IR-70 EB RAMPs AT CO RD 214

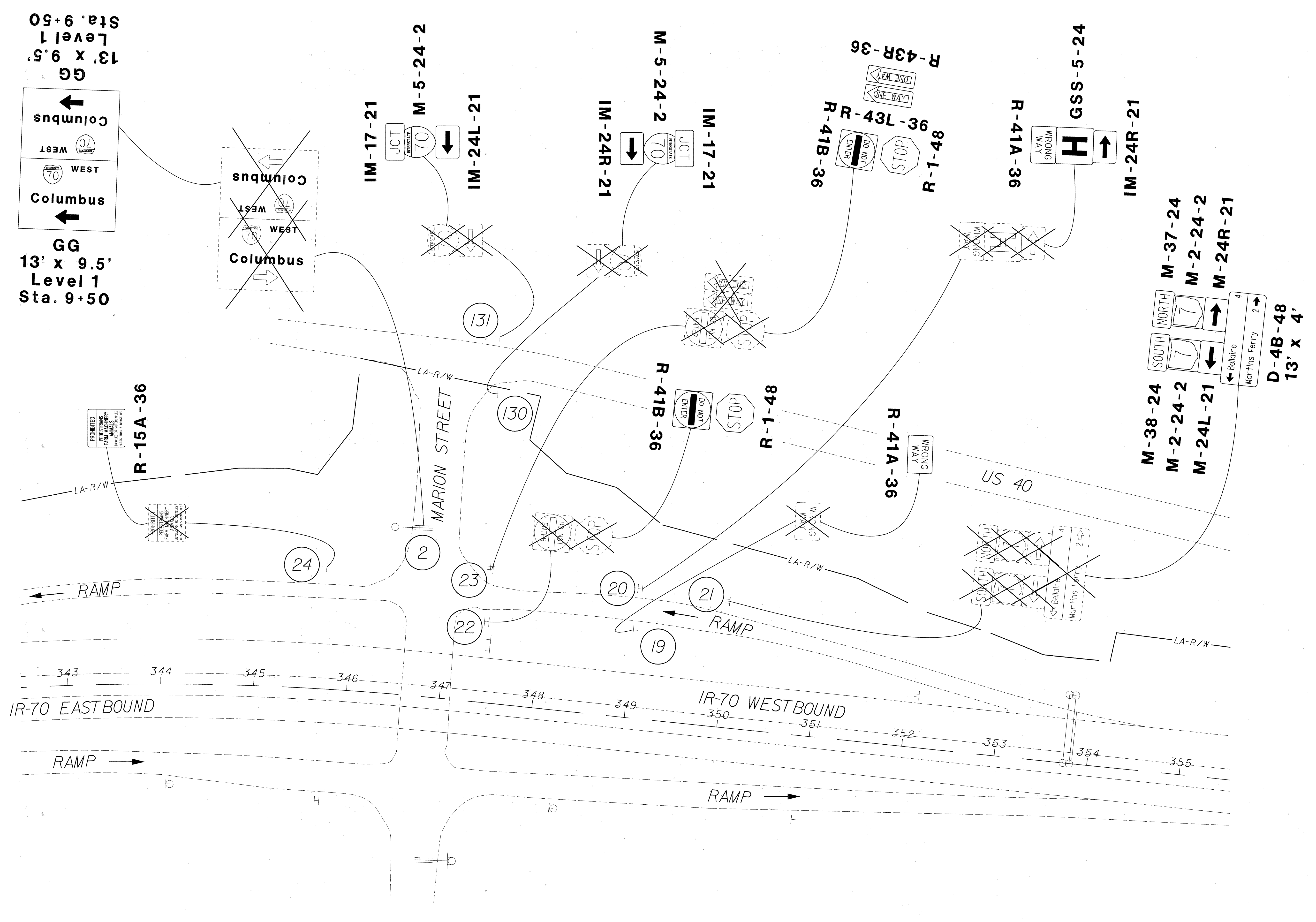
BEL-70-16.09



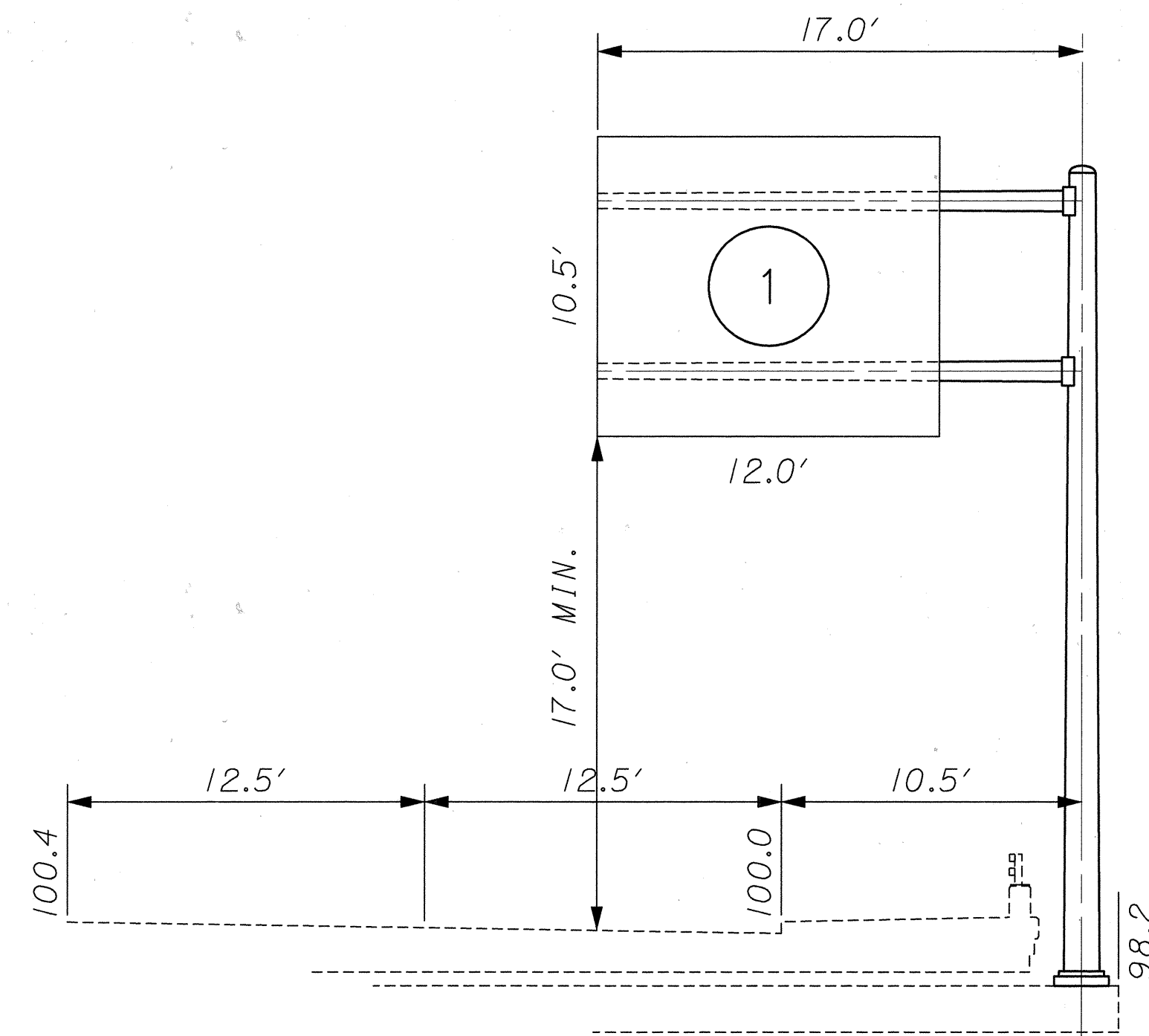
CALCULATED
GCS
CHECKED
RBK

**PLAN - BEL IR-70
CO RD 214 AND US 40 INTERSECTION**

BEL-70-16.60



SIGN LIGHTING AT 120V POWER.

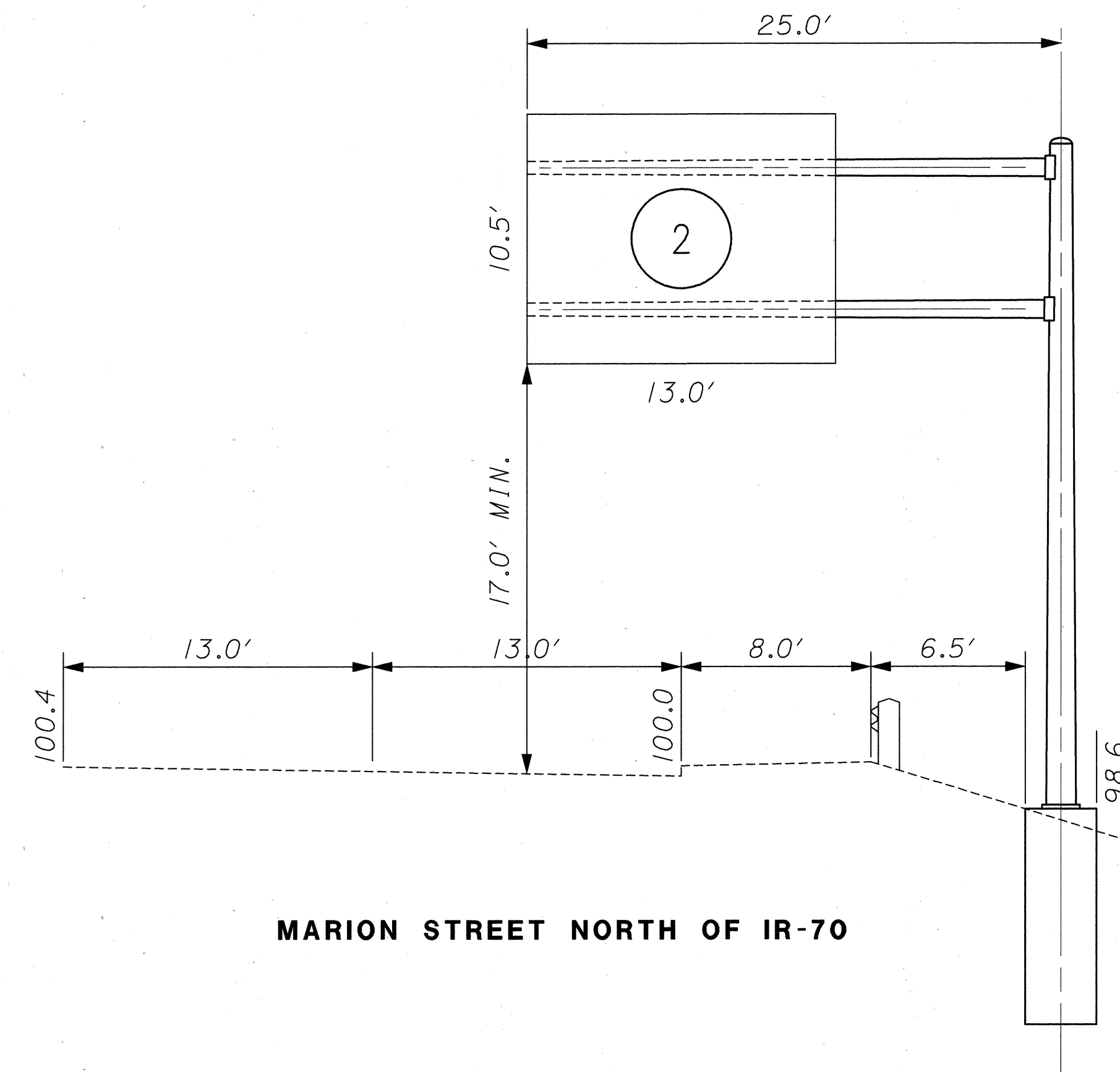


FOR CANTILEVER DETAILS SEE
STANDARD DRAWING TC-12.30
(DESIGN NO. 5)

SEE SHEET NO. 82 FOR
CANTILEVER CONNECTION DETAIL

MARION STREET SOUTH OF IR-70

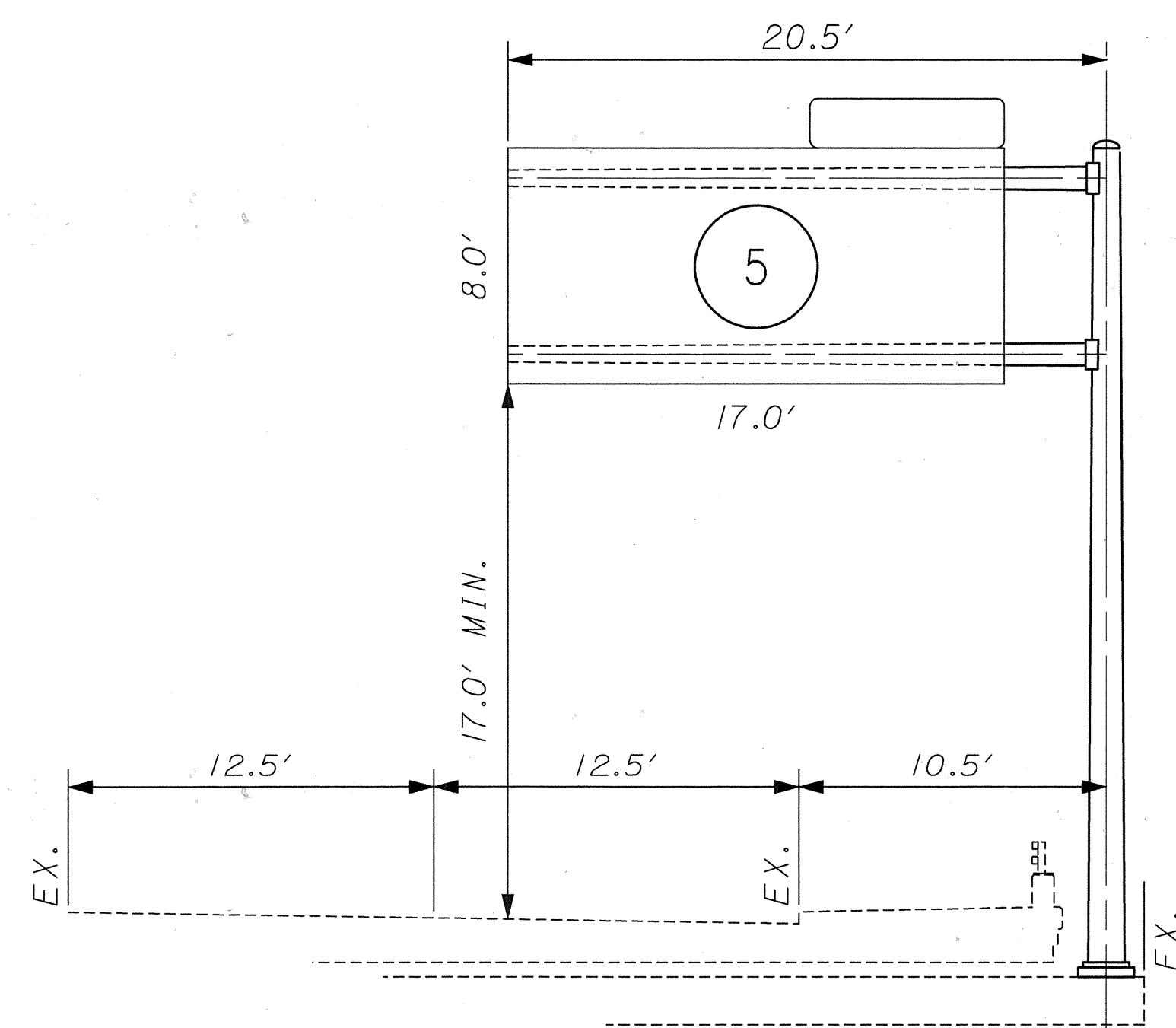
SIGN LIGHTING AT 120V POWER.



FOR CANTILEVER DETAILS SEE
STANDARD DRAWING TC-12.30
(DESIGN NO. 6)

FOR FOUNDATION DETAILS SEE
STANDARD DRAWING TC-21.20
(DESIGN NO. 6)

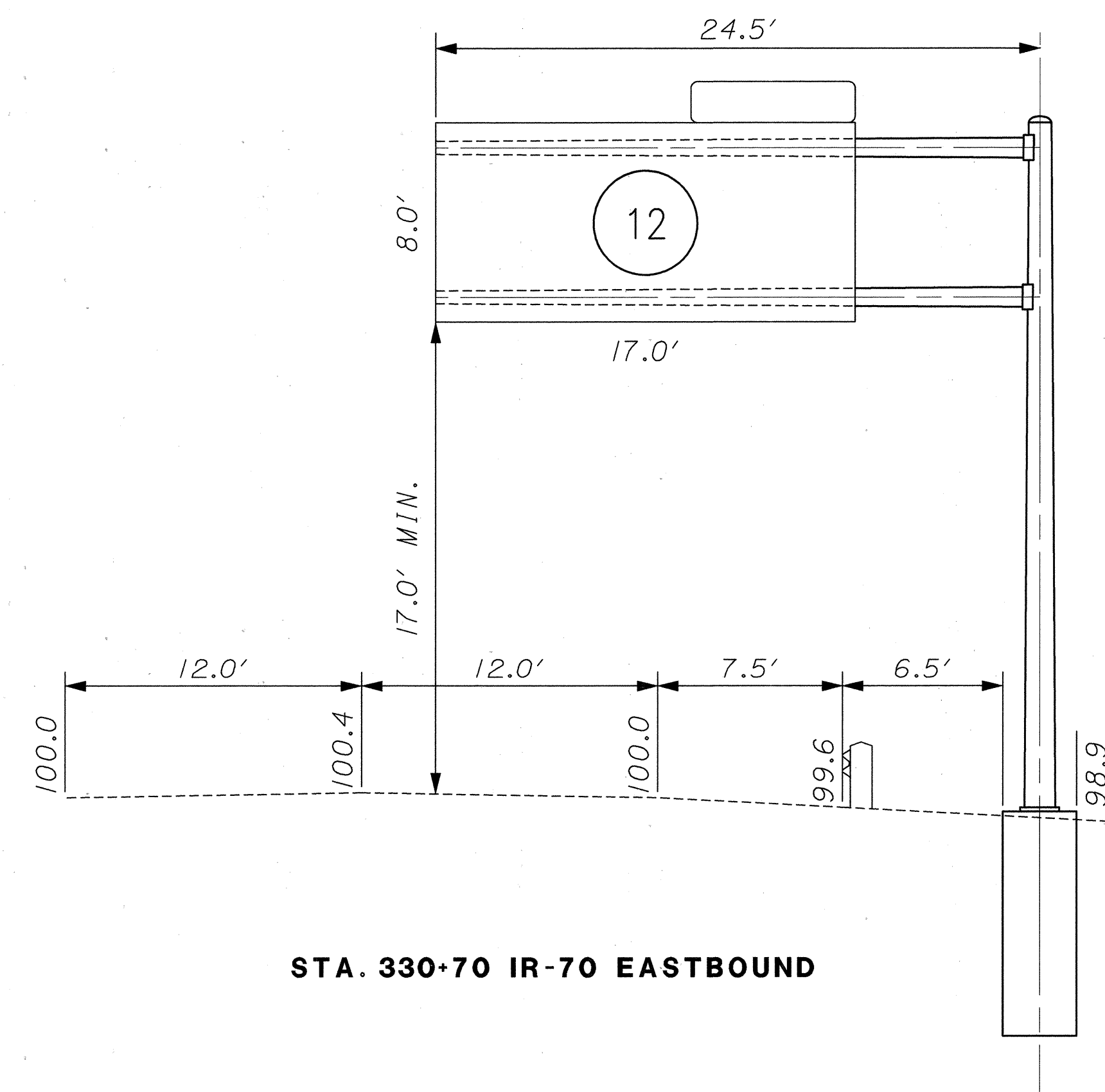
MARION STREET NORTH OF IR-70



FOR CANTILEVER DETAILS SEE
STANDARD DRAWING TC-12.30
(DESIGN NO. 7)

SEE SHEET NO. 82 FOR
CANTILEVER CONNECTION DETAIL

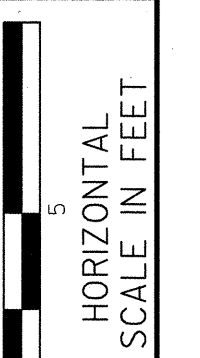
STA. 360+35 IR-70 WESTBOUND



FOR CANTILEVER DETAILS SEE
STANDARD DRAWING TC-12.30
(DESIGN NO. 6)

FOR FOUNDATION DETAILS SEE
STANDARD DRAWING TC-21.20
(DESIGN NO. 6)

STA. 330+70 IR-70 EASTBOUND



CALCULATED
GCS
CHECKED
RBK

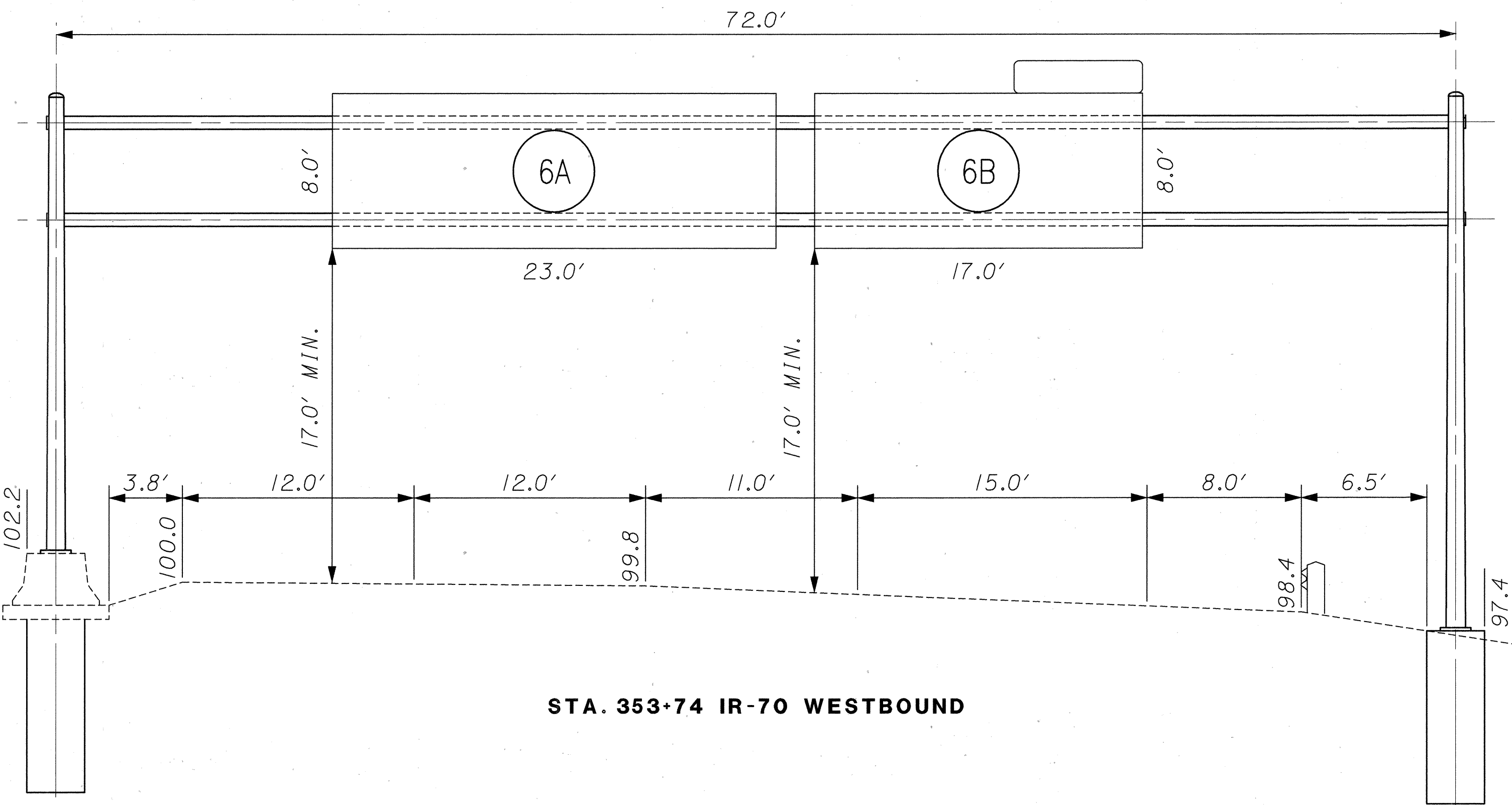
SIGN DETAILS

**BEL-70
16.60-26.97**

80
84

FOR CONCRETE BARRIER MEDIAN
SUPPORT FOUNDATION DETAILS SEE
STANDARD DRAWING TC-21.40

FOR BARRIER WALL ASSEMBLY FOR
SIGN SUPPORTS SEE STANDARD
DRAWING TC-21.41



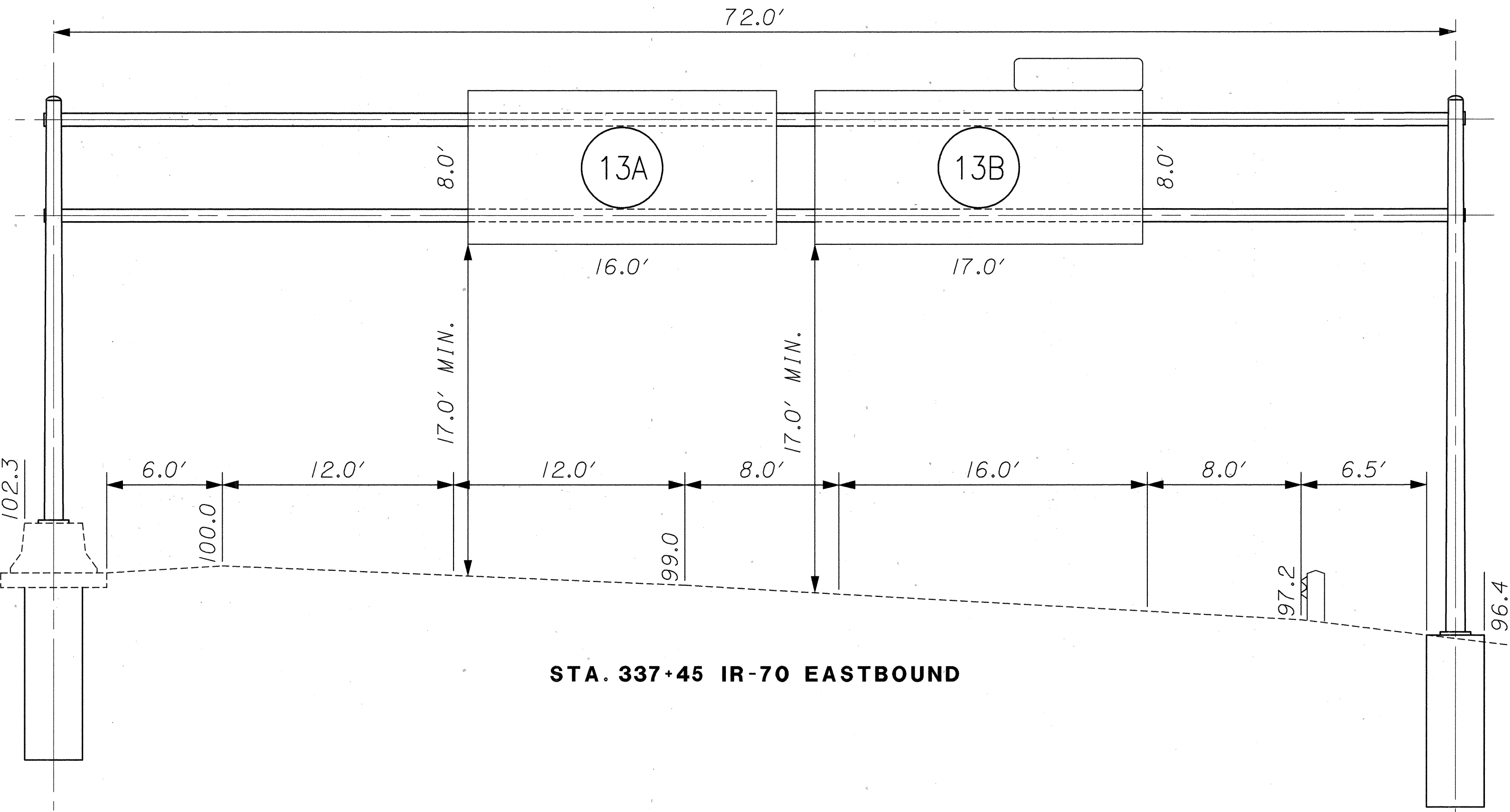
STA. 353+74 IR-70 WESTBOUND

FOR TRUSS DETAILS SEE
STANDARD DRAWING TC-7.65

FOR FOUNDATION DETAILS SEE
STANDARD DRAWING TC-21.20

FOR CONCRETE BARRIER MEDIAN
SUPPORT FOUNDATION DETAILS SEE
STANDARD DRAWING TC-21.40

FOR BARRIER WALL ASSEMBLY FOR
SIGN SUPPORTS SEE STANDARD
DRAWING TC-21.41



STA. 337+45 IR-70 EASTBOUND

FOR TRUSS DETAILS SEE
STANDARD DRAWING TC-7.65

FOR FOUNDATION DETAILS SEE
STANDARD DRAWING TC-21.20

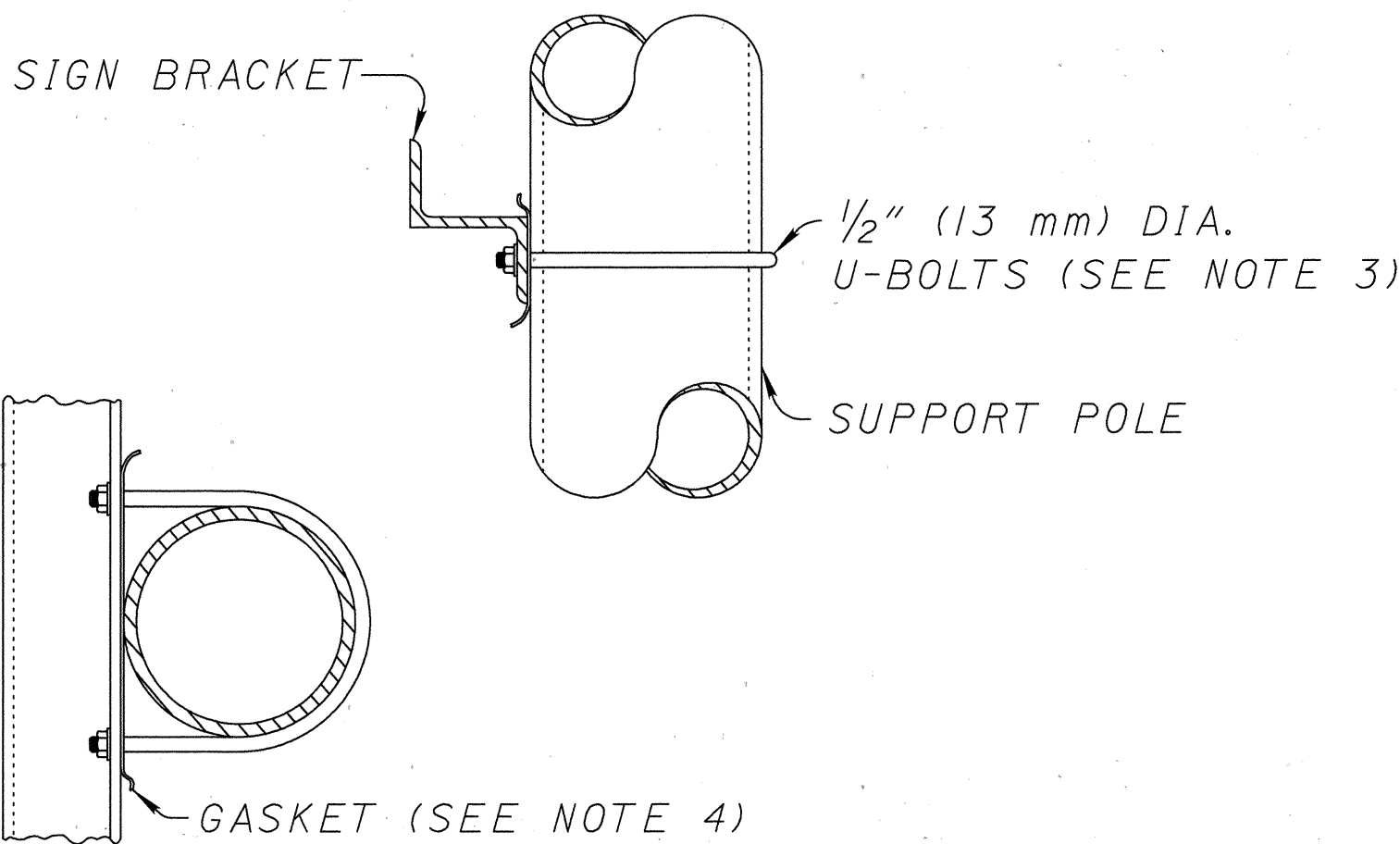
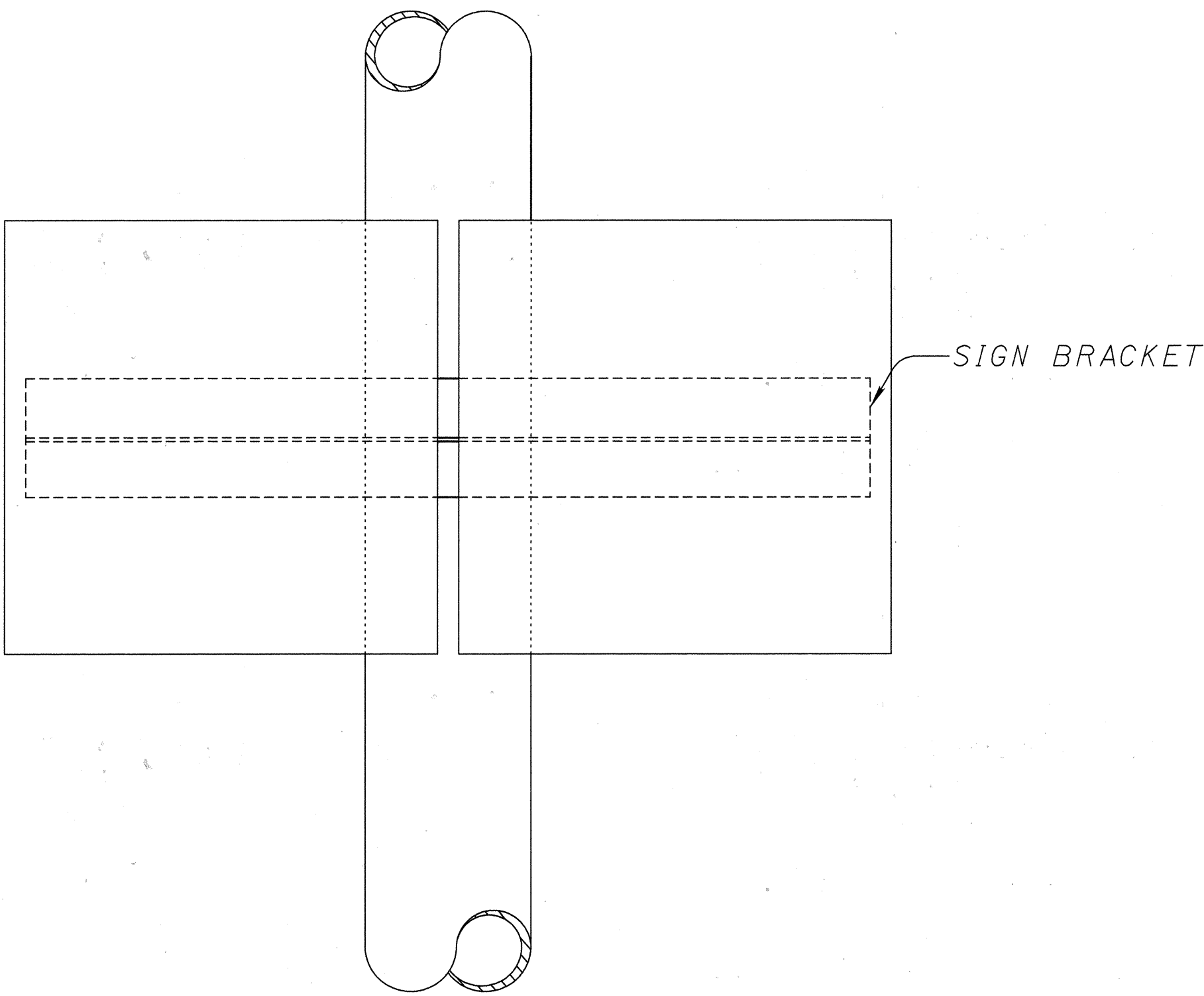
BEL-70
16.60-26.97

SIGN DETAILS

CALCULATED
GCS
CHECKED
RBK
HORIZONTAL
SCALE IN FEET
0 5 10

81
84

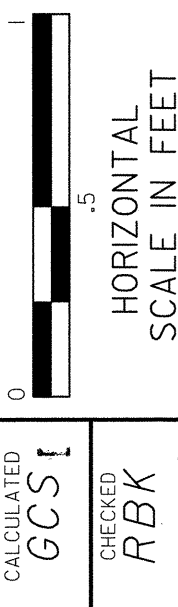
POLE MOUNTING DETAIL



NOTES

1. Sign brackets shall be a 4" x 3" x 1/4" (102 mm X 76 mm x 6.4 mm) aluminum zee at 2.85 LB/FT (4.23 kg/m).
2. Provide intermediate sign brackets if the sign extends more than 4 feet (1.2 m) above or below an attachment point.
3. U-Bolts, other bolts, nuts and washers shall be stainless steel for use with aluminum poles. When used with galvanized sign structures the U-Bolts only may be galvanized steel.
4. Prevent contact between aluminum and galvanized parts with a minimum 1/16" (1.6 mm) thick chloroprene gasket or aproved equal.

FOR DETAILS SEE
STANDARD DRAWING TC-22.20

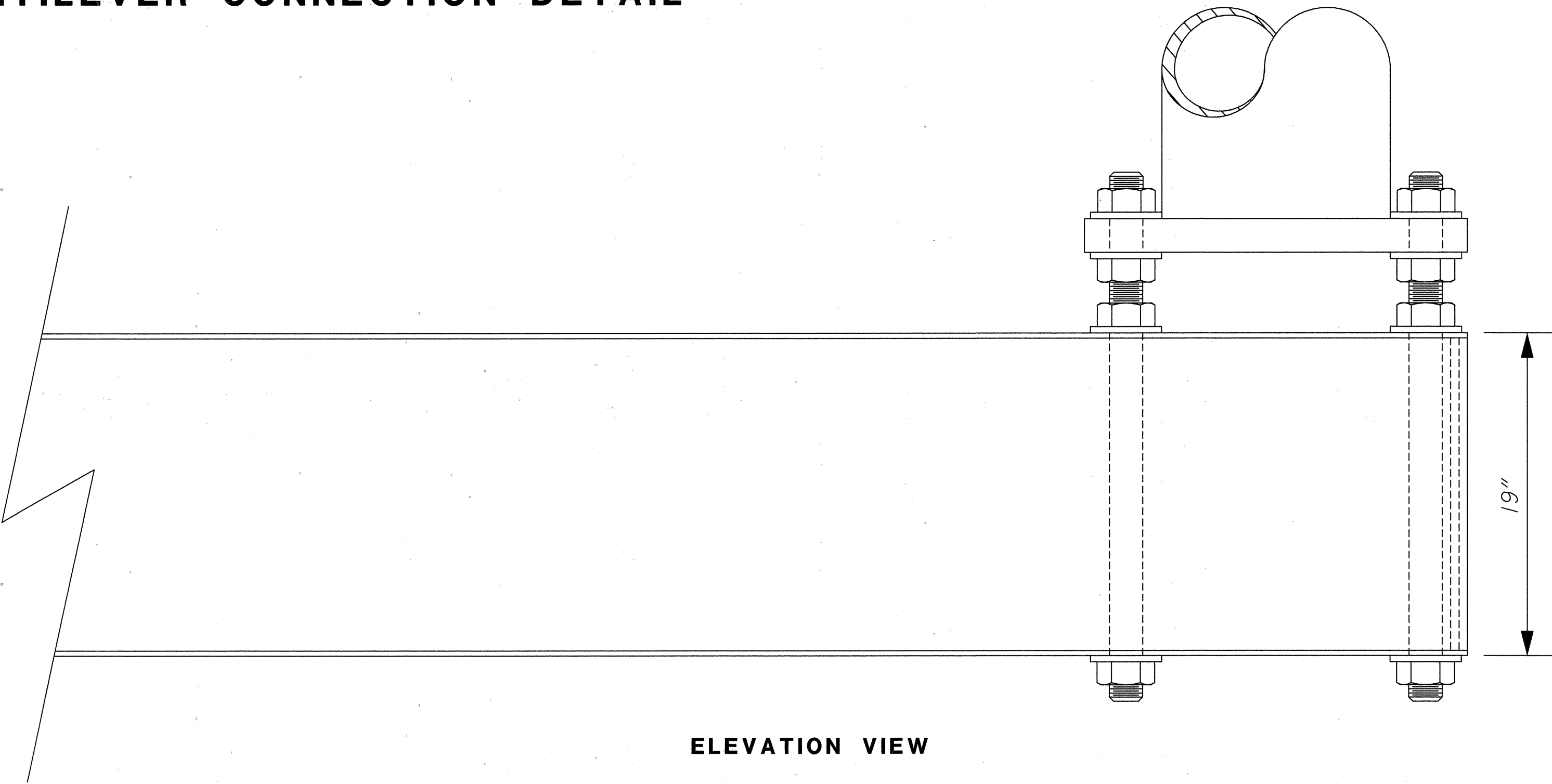
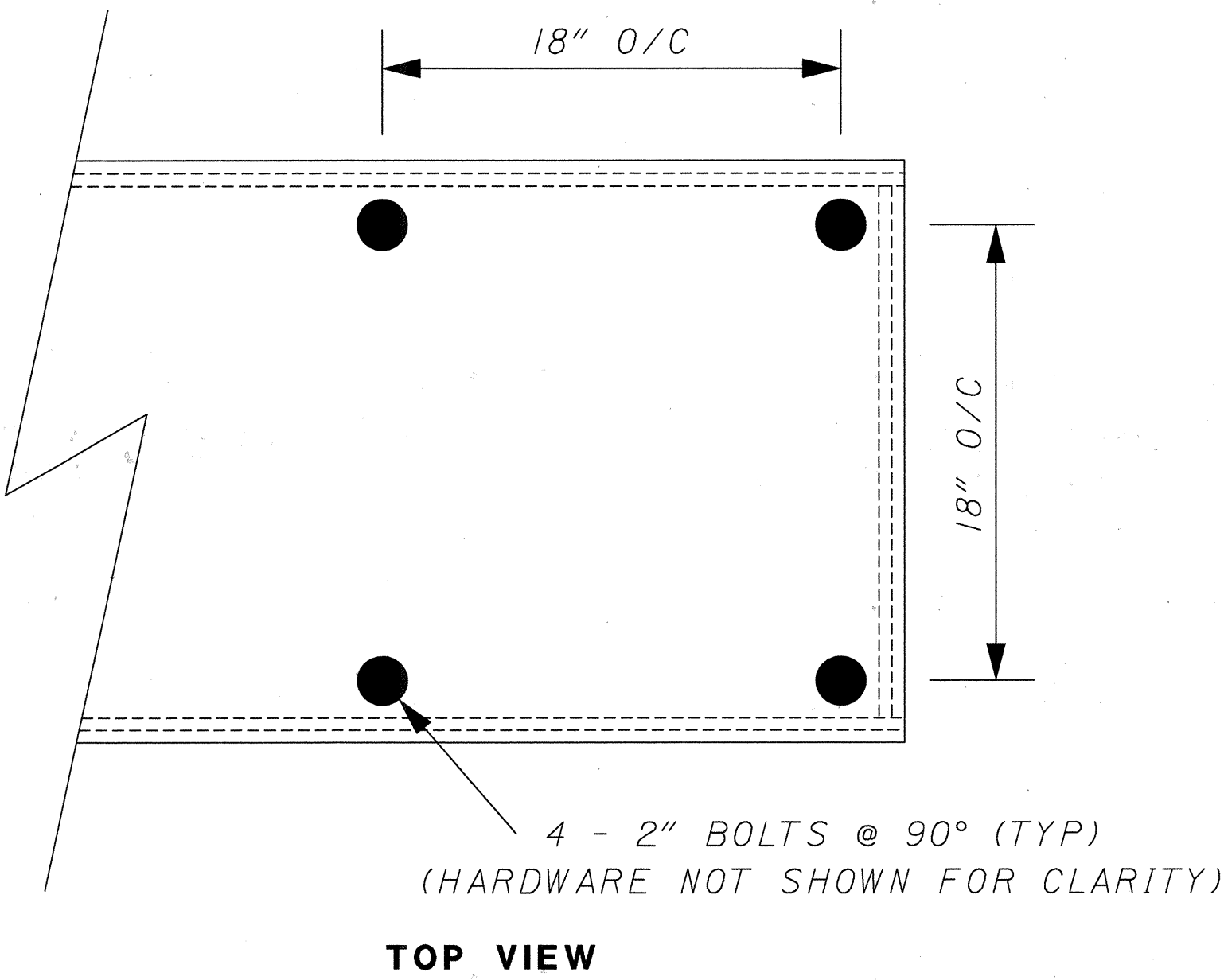


CALCULATED
GCS!
CHECKED
RBK

SIGN DETAILS

CANTILEVER CONNECTION DETAIL

NOTE: USE EXISTING HOLE PATTERN.



BEL-70
16.60-26.97

GENERAL

Overhead sign supports can be separated into major sections such as end frames, trusses, vertical poles and cantilever arms. For the implementation of this work item it will be beneficial to refer to the major sections of the overhead sign supports rather than the whole support. More specific instructions and flexibility can be given based upon the unit of measure and payment per major support section.

The protective coating of overhead sign support sections shall be a four part process to include surface preparation followed by a three coat paint system. This three coat system shall consist of an epoxy prime coat, an epoxy intermediate coat and a urethane top coat, with each coat being a different color. For an explanation of the materials to be used see note entitled "Coating System." The purpose of this coating is to provide protection for new (unweathered) and older (weathered) galvanized steel support sections from corrosive elements in the atmosphere. Coating and surface preparation of new galvanized support sections should be done by the manufacturer.

In the field, the Contractor shall take all necessary precautions to comply with pollution laws, rules or regulations of Federal, State or Local agencies. The coating materials specified for the work can be hazardous to the health of the applicator if not applied as per manufacturer's instruction. The Contractor shall follow the data sheet and the label on the paint containers. These precautions shall include the use of respirators and eye and skin protection as specified. The Contractor shall also insure that his painting operations and locations will not endanger or adversely affect the public in general.

The proposed cleaning and coating operations shall be performed only when the ambient temperature is 50 degrees F (10 Degrees C) or above. Paint shall not be applied during rain, fog or mist, or when the steel surface temperature is less than 5 degrees F (3 degrees C) above the dew point. Paint shall not be applied to wet or damp surfaces or on frosted or ice-coated surfaces. Paint shall not be applied when the relative humidity is greater than 85%. All steel surfaces of trusses and end frames including the welded areas, ballast enclosure mounting bracket and base plates are to be cleaned and coated. Before each coating is applied, it shall be mixed with an approved power mechanical mixer to a uniform consistency which shall be maintained during its application. Each coat shall be applied in a workmanlike manner as a continuous film of uniform thickness which is free of holidays, pores, runs or sags. All coats shall be applied by brush. Thinning of paint is strictly prohibited. Paint not capable of being applied as specified shall not be used. The coating shall penetrate all joints and connections. The Engineer shall be notified 24 hours prior to any cleaning or coating operations so that inspection services can be provided.

COATING SYSTEM

The coating system shall consist of a polyamide-cured epoxy prime coat, a polyamide-cured intermediate coat and an aliphatic polyurethane top coat. The coating materials used shall be those as listed from one of the following manufacturers:

1.

Ameron

210 North Berry Street

Brea, California 92621

Local Telephone Contact: (216) 896-3602

Prime Coat: Amercoat 71

Intermediate Coat: Amerlock 400 (light grey)

Top Coat: Amercoat 450 HS (medium grey)
2.

The Glidden Company

16651 Sprague Road

Strongsville, Ohio 44136

Local Telephone Contact: (216) 826 - 5528

Prime Coat: Glid - Guard Corrosion

Resistant HS Epoxy No. 5465

Intermediate Coat: Glid - Guard Corrosion

Resistant HS Epoxy No. 5466

Top Coat: Glid - Thane II Polyurethane

No. 6200 Series

3.

Porter Paint Co.

400 South 13th Street

Louisville, Ky. 40201

Local Telephone Contact: (216) 562-6709

Prime Coat: Porter Paints MCR 4300

Intermediate Coat: Porter Paints MCR 4300 (off-white)

Top Coat: Porter Paints Hythane
4.

Poly-Carb, Inc.

33095 Bainbridge Road

Cleveland, Ohio 44139

Local Telephone Contact: (216) 248-1223

Prime Coat: Mark-60 Ultrapox

Intermediate Coat: Mark-60 Ultrapox (light grey)

Top Coat: Mark-73 Ultrakote (medium grey)
5.

Sherwin Williams Company

761 Beta Drive

Mayfield Village, Ohio 44143

Local Telephone Contact: (216) 461-8287

Prime Coat: Tile-Clad II HI-Bild Primer

Intermediate Coat: HI-Solids Catalyzed Epoxy (pure white)

(slate grey)

Top Coat: HI-Bild Aliphatic Polyurethane Enamel

All three coats of the system shall be manufactured by the same company to insure compatibility among coats.

SURFACE PREPARATION, EXISTING SUPPORT SECTIONS

Existing, weathered galvanized support sections should have their surface preparation as well as their protective coating done under conditions of temperature and humidity within the same range as specified by the manufacturer of the epoxy-prime coat material to be used immediately after this cleaning operation. The support sections shall be prepared for coating by SSPC-SPI (solvent cleaning) followed by SSPC-SP6 (commercial blast cleaning). Before the prepared surface degrades from the prescribed standards, the prime coat shall be applied. In every case, the surface shall be coated with epoxy prime coat on the same day as the surface preparation. Careful handling and storage will be required to prevent any scraping, marring, or other damage to the prepared surface. Payment shall include all labor, equipment, handling, transportation costs and materials necessary to accomplish this item of work per major support section.

Basis of payment will be as follows:

Item Special- Surface Preparation, Existing Support Sections at contract bid price per each major support section.

SURFACE PREPARATION, NEW SUPPORT SECTIONS

New, unweathered galvanized support sections should have their surface preparation as well as their protective coating done at the manufacturer of the support sections.

The support sections shall be prepared for coating by SSPC-SPI (solvent cleaning) followed by SSPC-SP7 (brush-off blast). Before the prepared surface degrades from the prescribed standards, the prime coat shall be applied. In every case, the surface shall be coated with the epoxy prime coat on the same day of surface preparation. Careful handling and storage will be required to prevent any scraping, marring, or other damage to the prepared surface. Payment shall include all labor, equipment, handling, transportation costs and materials necessary to accomplish this item of work per major support section.

Basis of payment will be as follows:

Item Special- Surface Preparation, New Support Sections at contract bid price per each major support section.

COATING, EPOXY-PRIME COAT, SUPPORT SECTIONS

This item shall consist of the application of one (1) coat of an epoxy primer to support sections. The total dry film thickness of this coat shall be between 1.5 to 2.0 mils (38 to 51 micrometers). If more than one pass is necessary to obtain the required thickness, that cost shall be borne by the Contractor. The color of this coat shall be noticeably different from the base material and other proposed coats. This coat shall in all cases be applied over surfaces that were prepared earlier that same day. The thinning of the epoxy material is strictly prohibited. Material not capable of being applied as specified shall not be used. When the average dry film thickness of this coat over the entire support section is less than the specified 1.5 to 2.0 mils (38 to 51 micrometers) but is at least 1.25 mils (32 micrometers), the contract bid price for this item shall be reduced in direct proportion to the percent deficiency of coating up to 16-2/3%. If the deficiency of coating is more than that 16-2/3% [i.e., the average dry film thickness is less than 1.25 mils (32 micrometers)] the work for this item shall be considered unsatisfactory and shall be recoated at the full expense of the Contractor, including all labor, equipment and material. The epoxy prime coat chosen by the Contractor shall be one of the following two-component compositions conforming to its listed properties:

- Amercoat 71:

% Solids By Volume:

47% ± 3%

Pot Life:

8 hrs. @ 77 Degrees F. (25 Degrees C)

Drying Time:

4 hrs. @ 77 Degrees F. (25 Degrees C)
- Glid-Guard Corrosion Resistant HS Epoxy No. 5465:

% Solids By Volume:

54% ± 2%

Pot Life:

4 hrs. @ 70 Degrees F. (21 Degrees C)

Drying Time:

1-2 hrs. to touch, 7 hrs. to recoat

At 70 Degrees F. (21 Degrees C), 50% relative humidity

Viscosity:

95 - 100 KU

% Solids By Weight:

71% ± 2%
- MCR-430I Epoxy Primer:

% Solids By Volume

48.0% ± 2%

Pot Life:

30 hrs. @ 50-60 Degrees F. (10-16 Degrees C)

16 hrs. @ 80-100 Degrees F. (27-38 Degrees C)

Drying Time:

4-6 hrs. @ 50-60 Degrees F. (10-16 Degrees C)
- Mark-60 Ultrapox:

% Solids By Volume:

50% ± 5%

% Solids By Weight:

52% ± 5%

Pot Life:

6 hrs. @ 75 Degrees F. (24 Degrees C)

Drying Time:

2-3 hrs. initial set @ 75 Degrees F. (24 Degrees C)

Viscosity:

300-500 CPS @ 75 Degrees F. (24 Degrees C)
- Tile-Clad II HI-Bild Primer:

% Solids By Volume:

48% ± 2%

% Solids By Weight:

63% ± 2%

Pot Life:

8 hrs. @ 77 Degrees F. (25 Degrees C)

Drying Time:

1 hr. to touch, 6 hrs. to recoat

@ 77 Degrees F. (25 Degrees C)

For new support sections the prime coat should be done at the manufacturer of the support sections. Verification by the manufacturer of the coating material for the prime coat will be required. Careful handling and storage will be required to prevent any scraping, marring or other surface damage to the prime coat.

Payment shall include all labor, equipment, handling costs and materials necessary to accomplish this item of work. This prime coat shall be manufactured by the same company supplying the intermediate and top coats. A properly calibrated dry film thickness instrument will be used to check the coating.

Basis of payment will be as follows:
Item Special- Coating, Epoxy Prime Coat, Support Sections at contract bid price per each major support section.

12-01-00

PROTECTIVE COATING OF OVERHEAD
SIGN SUPPORT SECTIONS

BEL-70-16.60

202310

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84

COATING, EPOXY INTERMEDIATE COAT,
SUPPORT SECTIONS

This Item shall consist of the application of one (1) coat of epoxy to support sections. The total dry film thickness of this coat shall not be less than six (6.0) mils (152 micrometers). If more than one pass is necessary to obtain the required thickness, that cost shall be borne by the Contractor. Thinning of the epoxy materials is strictly prohibited. Material not capable of being applied as specified shall not be used. The color of this coat shall be light grey. When the average dry film thickness of this coat over the entire support section is less than the specified six (6.0) mils (152 micrometers), but is at least (5.0) mils (127 micrometers), the contract price for this item shall be reduced in direct proportion to the percent deficiency of coating up to 16-2/3%. If the deficiency of coating is more than 16-2/3%, [i.e. the average dry film thickness is less than 5.0 mils (127 micrometers)], the work for this item shall be considered unsatisfactory and shall be recoated at the full expense of the Contractor, including all labor, equipment and material. The epoxy intermediate coat chosen by the Contractor shall be one of the following two-component compositions conforming to its listed properties:

Amerlock 400:
% Solids By Volume: 83% ± 2%
Pot Life: 2-1/2 HRS. @ 70 Degrees F. (21 Degrees C)
Drying Time: 20 HRS. @ 70 Degrees F. (21 Degrees C)

Glid-Guard Corrosion Resistant HS Epoxy
No. 5466:
% Solids By Volume: 54% ± 2%
Pot Life: 4 HRS. @ 70 Degrees F. (21 Degrees C)
Drying Time: 1- 2 HRS. To Touch 7 HRS.
To Recoat at 70 Degrees F. (21 Degrees C), 50%
Relative Humidity

Viscosity: 95 - 100 KU
% Solids By Weight: 71% ± 2%

MCR 436 High Build Epoxy:
% Solids By Volume: 49.4% ± 2%
Pot Life: 30 HRS. @ 50-60 Degrees F. (10-16 Degrees C)
16 HRS. @ 80-100 Degrees F. (27-38 Degrees C)
1-2 HRS. @ 60-80 Degrees F. (16-27 Degrees C)

Drying Time:
Mark-60 Ultrapox:
% Solids By Volume: 50% ± 5%
% Solids By Weight: 52% ± 5%
Pot Life: 6 HRS. @ 75 Degrees F. (24 Degrees C)
Drying Time: 2-3 HRS. Initial Set
@ 75 Degrees F. (24 Degrees C)

Viscosity: 300-500 CPS @ 75 Degrees F. (24 Degrees C)

HI-Solids Catalyzed Epoxy:
% Solids By Volume: 61% ± 2%
% Solids By Weight: 77% ± 2%
Pot Life: 5 HRS. @ 77 Degrees F. (25 Degrees C)
Drying Time: 1HR. To Touch,
4 HRS. Tack Free,
6 HRS. To Recoat @ 77
Degrees F. (25 Degrees C) & 50% R.H.

At least 24 hours but no more than three (3) days shall elapse after the application of the epoxy prime coat and before the application of the epoxy intermediate coat. Surfaces shall in all cases be clean before the intermediate coat is applied. For new support sections, this intermediate coat should be done at the manufacturer of the support sections. Verification by the manufacturer for the intermediate coat will be required. Careful handling and storage will be required to prevent any scraping, marring or other surface damage to the intermediate coat.

Payment shall include all labor, equipment, handling cost and material necessary to accomplish this item of work. This intermediate coat shall be manufactured by the same company supplying the prime and top coats. A properly calibrated dry film thickness instrument will be used to check the coating.

Basis of payment will be as follows:

Item Special- Coating, Epoxy Intermediate Coat, Support Sections at contract bid price per each major support section.

COATING, URETHANE TOP COAT,
SUPPORT SECTIONS

This Item shall consist of the application of one (1) coat of urethane to support sections. The total dry film thickness of this coat shall not be less than one and one-half (1.5) mils (38 micrometers). If more than one pass is necessary to obtain the required thickness, that cost shall be borne by the Contractor. Thinning of the urethane material is strictly prohibited. Material not capable of being applied as specified shall not be used. The color of this coat shall be medium grey. When the average dry film thickness of this coat over the entire support section is less than the specified one and one-half (1.5) mils (38 micrometers) but is at least one (1.0) mil (25 micrometers), the contract price for this item shall be reduced in direct proportion to the percent deficiency of coating up to 33-1/3%. If the deficiency of coating is more than 33-1/3%, [i.e. the average dry film thickness is less than 1.0 mil (25 micrometers)], the work for this item shall be considered unsatisfactory and shall be recoated at the full expense of the Contractor, including all labor, equipment and material. The urethane top coat chosen by the Contractor shall be one of the following materials conforming to its listed properties:

Amercoat 450 HS:
% Solids By Volume: 66% ± 3%
Pot Life: 4 HRS. @ 70 Degrees F. (21 Degrees C)
Drying Time: 8 HRS. @ 70 Degrees F. (21 Degrees C)
Dry-Through

Glid-Thane II Polyurethane No. 6200:
% Solids By Volume: 40.3% ± 2%
Pot Life: 8 HRS.
Drying Time: 1HR. to Touch, 3 HRS. to Recoat
At 77 Degrees F. (25 Degrees C), 50% Relative
Humidity
% Solids By Weight: 57.8% ± 2%

Hythane 4610 Aliphatic Polyurethane:
% Solids By Volume: 43.4% ± 2%
Pot Life: 12 HRS. @ 75 Degrees F. (24 Degrees C)
Drying Time: ¾ HRS. to Touch @ 75 Degrees F. (24 Degrees C)

Mark-73 Ultrakote:
% Solids By Volume: 51%
Pot Life: 5½ HRS. @ 75 Degrees F. (24 Degrees C)
Drying Time: 4-5 HRS. @ 75 Degrees F. (24 Degrees C)
Tack Free

Viscosity: 1000 - 1500 CPS @ 75 Degrees F. (24 Degrees C)
% Solids By Weight: 64%

HI-Bild Aliphatic Polyurethane Enamel:
% Solids By Volume: 40% ± 2% (Catalyzed)
% Solids By Weight: 48% ± 2%
Pot Life: 6 HRS. @ 77 Degrees F. (25 Degrees C)
Drying Time: 30 min. to Touch,
4 HRS. Tack Free,
18 HRS. Minimum, 72 HRS.
Maximum to Recoat.

At least 24 hours but no more than three (3) days shall elapse after the application of the epoxy intermediate coat and before the application of the urethane top coat. Surfaces shall in all cases be clean before the top coat is applied.

For new support sections, this top coat should be done by the manufacturer of the support sections. Verification by the manufacturer for the top coat will be required. Careful handling and storage will be required to prevent any scraping, marring or other surface damage to the top coat.

Payment shall include all labor, equipment, handling cost and materials necessary to accomplish this item of work. This top coat shall be manufactured by the same company supplying the prime and intermediate coats. A properly calibrated, dry film thickness instrument will be used to check the coating.

Basis of payment will be as follows:

Item Special- Coating, Urethane Top Coat, Support Sections at contract bid price per each major support section.

PREQUALIFICATION

Prior to use, the Contractor shall submit to the director copies of the manufacturer's certified test data showing that the material complies with the requirements of this specification. The test data shall include the brand name of the paint, name of manufacturer, number of the lot tested and date of manufacture. When the paint has been approved by the Director, further performance testing by the manufacturer will not be required unless the formulation or manufacturing process has been changed, in which case new certified test results will be required.

ACCEPTANCE

The manufacturer shall submit certified test data in accordance with the requirements of this specification. The state reserves the right to sample and test delivered lots for compliance.

12-01-00

PROTECTIVE COATING OF OVERHEAD
SIGN SUPPORT SECTIONS

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