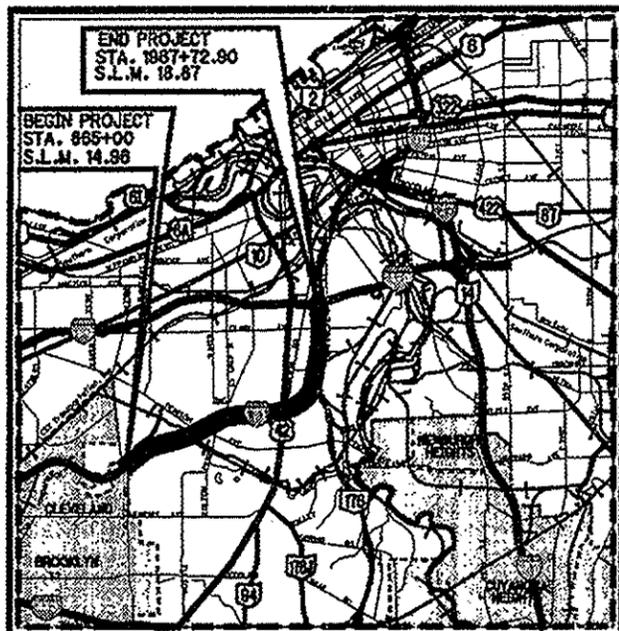


STATE OF OHIO
 DEPARTMENT OF TRANSPORTATION
CUY-71-14.96
 CITY OF CLEVELAND
 CITY OF BROOKLYN
 CUYAHOGA COUNTY



LOCATION MAP

LATITUDE: 41°27'25" LONGITUDE: 81°42'03"



PORTION TO BE IMPROVED	-----
INTERSTATE HIGHWAY	-----
STATE & FEDERAL ROUTES	-----
COUNTY & TOWNSHIP ROADS	-----
OTHER ROADS	-----

DESIGN DESIGNATION

CURRENT ADT (2011)	89,000
DESIGN YEAR ADT (2031)	101,320
DESIGN HOURLY VOLUME (2031)	9,119
DIRECTIONAL DISTRIBUTION	55%
TRUCKS (24 HOUR B&C)	8%
DESIGN SPEED	65 M.P.H.
LEGAL SPEED	60 M.P.H.
DESIGN FUNCTIONAL CLASSIFICATION	URBAN INTERSTATE

DESIGN EXCEPTIONS

NONE REQUIRED

UNDERGROUND UTILITIES
 CONTACT BOTH SERVICES
 CALL TWO WORKING DAYS
 BEFORE YOU DIG

CALL 1-800-382-2784 (TOLL FREE)

OHIO UTILITIES PROTECTION SERVICE
 NON-MEMBERS
 MUST BE CALLED DIRECTLY

OIL & GAS PRODUCERS PROTECTIVE
 SERVICE CALL: 1-800-825-0888

PLAN PREPARED BY:
 ODOT District 12 Production
 5500 Transportation Blvd.
 Garfield Heights, OH 44125

INDEX OF SHEETS:

TITLE SHEET	1
SCHEMATIC PLAN	2-4
TYPICAL SECTIONS	5-14
GENERAL NOTES	15-18
MAINTENANCE OF TRAFFIC NOTES	19-23, 23A
SUBSUMMARIES	24-30
GENERAL SUMMARY	31-32
PLAN SHEETS	33-51
TRAFFIC CONTROL PLANS	52-70
MISCELLANEOUS DETAILS	71

PROJECT EARTH DISTURBED AREA: N/A MAINTENANCE PROJECT
 ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A MAINTENANCE PROJECT
 NOTICE OF INTENT EARTH DISTURBED AREA: N/A MAINTENANCE PROJECT

ENGINEERS SEAL:	STANDARD CONSTRUCTION DRAWINGS	SUPPLEMENTAL SPECIFICATIONS
<p>SIGNED: Gary J. Nowac DATE: 3/1/11</p>	BP-3.1 4/20/12 TC-41.20 1/19/01	800 10/19/12
	BP-7.1 10/15/10 MT-95.30 7/20/12 TC-52.10 1/19/07	821 4/20/12
	BP-9.1 4/15/05 MT-95.50 7/20/12 TC-52.20 1/19/07	832 5/5/09
	MT-98.10 7/20/12	921 4/20/12
	DN-4.4 7/20/12 MT-98.11 7/20/12 TC-65.10 4/20/12	
	RM-4.2 10/15/10 MT-98.20 7/20/12 TC-65.11 4/20/12	
	MT-98.22 7/20/12 TC-71.10 1/21/11	
	CR-1.1 7/20/12 MT-98.28 7/20/12 TC-72.20 7/20/12	
	CR-2.1 7/20/12 MT-98.29 7/20/12 TC-73.10 4/20/12	
	CR-4.2 7/20/12 MT-99.20 7/20/12 TC-82.10 1/21/11	
CR-5.3 4/16/10 MT-105.10 1/16/09		
		SPECIAL PROVISIONS

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE RESURFACING OF 3.91 MILES OF IR-71 WITH ASPHALT CONCRETE FROM SLM 14.96 TO SLM 18.87 IN THE CITIES OF CLEVELAND AND BROOKLYN. ADDITIONAL WORK ITEMS INCLUDE RAISED PAVEMENT MARKERS AND PAVEMENT MARKINGS.

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 OHIO REVISED CODE.

2010 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 APPROVED THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED:
 DATE: 03-02-11 DISTRICT DEPUTY DIRECTOR

APPROVED:
 DATE: 10-29-12 DIRECTOR, DEPARTMENT OF TRANSPORTATION

CUY - IR-71-14.96
 130034 PID - 21810
 Dist 12 1/17/2013

Contract Proposal Available @www.contracts.dot.state.oh.us/home

FEDERAL PROJECT NO. E071(010)

PID NO. 21810

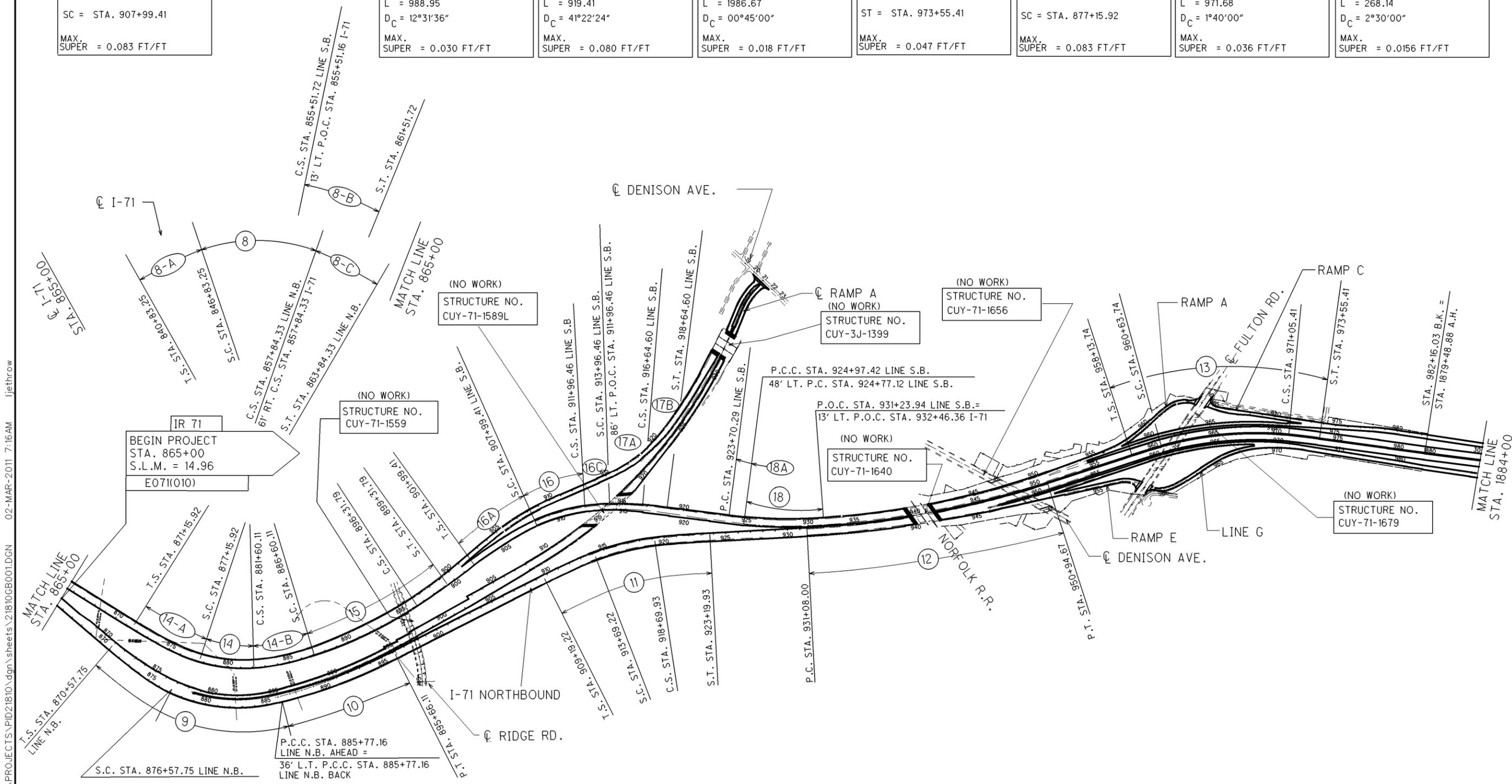
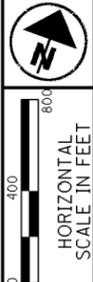
CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT NONE

CUY-71-14.96

71

CURVE NO. 8 SC = STA. 846+83.25 L = 1101.08 $D_C = 3^{\circ}30'00''$ MAX. SUPER = 0.083 FT/FT	SPIRAL NO. 8A TS = STA. 840+83.25 SC = STA. 846+83.25 MAX. SUPER = 0.083 FT/FT	SPIRAL NO. 8B CS = STA. 855+51.72 ST = STA. 861+51.72 MAX. SUPER = 0.083 FT/FT	SPIRAL NO. 11 TS = STA. 909+19.22 SC = STA. 913+69.22 MAX. SUPER = 0.059 FT/FT	CURVE NO. 11 SC = STA. 913+69.22 L = 500.71 $D_C = 2^{\circ}00'00''$ MAX. SUPER = 0.059 FT/FT	SPIRAL NO. 13 TS = STA. 958+13.74 SC = STA. 960+63.74 MAX. SUPER = 0.047 FT/FT	CURVE NO. 14 SC = STA. 877+15.92 L = 144.19 $D_C = 4^{\circ}30'00''$ MAX. SUPER = 0.083 FT/FT	CURVE NO. 18 P.C. = STA. 924+77.12 L = 646.82 $D_C = 1^{\circ}28'00''$ MAX. SUPER = 0.036 FT/FT	SPIRAL NO. 16C CS = STA. 911+96.46 SC = STA. 913+96.46 MAX. SUPER = 0.083 FT/FT
CURVE NO. 18A PC = STA. 923+70.29 L = 127.13 $D_C = 1^{\circ}29'06''$ MAX. SUPER = 0.083 FT/FT	CURVE NO. 16 SC = STA. 907+99.41 L = 408.85 $D_C = 4^{\circ}00'00''$ MAX. SUPER = 0.083 FT/FT	SPIRAL NO. 8C CS = STA. 857+84.33 ST = STA. 863+84.33 MAX. SUPER = 0.083 FT/FT	SPIRAL NO. 9 TS = STA. 870+57.75 SC = STA. 876+57.75 MAX. SUPER = 0.083 FT/FT	SPIRAL NO. 11 CS = STA. 918+69.93 ST = STA. 923+19.93 MAX. SUPER = 0.059 FT/FT	CURVE NO. 13 SC = STA. 960+63.74 L = 1041.67 $D_C = 2^{\circ}00'00''$ MAX. SUPER = 0.047 FT/FT	SPIRAL NO. 15 CS = STA. 896+31.79 ST = STA. 899+31.79 MAX. SUPER = 0.036 FT/FT	SPIRAL NO. 14-B CS = STA. 881+60.11 SC = STA. 886+60.11 MAX. SUPER = 0.083 FT/FT	SPIRAL NO. 17B CS = STA. 916+64.60 SC = STA. 918+64.60 MAX. SUPER = 0.0156 FT/FT
SPIRAL NO. 16A TS = STA. 901+99.41 SC = STA. 907+99.41 MAX. SUPER = 0.083 FT/FT	CURVE NO. 10 P.C.C. = STA. 885+77.16 L = 988.95 $D_C = 12^{\circ}31'36''$ MAX. SUPER = 0.030 FT/FT	CURVE NO. 9 SC = STA. 876+57.75 L = 919.41 $D_C = 41^{\circ}22'24''$ MAX. SUPER = 0.080 FT/FT	CURVE NO. 12 P.C.C. = STA. 931+23.94 L = 1986.67 $D_C = 00^{\circ}45'00''$ MAX. SUPER = 0.018 FT/FT	SPIRAL NO. 13 CS = STA. 971+05.41 ST = STA. 973+55.41 MAX. SUPER = 0.047 FT/FT	SPIRAL NO. 14A TS = STA. 871+15.92 SC = STA. 877+15.92 MAX. SUPER = 0.083 FT/FT	CURVE NO. 15 SC = STA. 886+60.11 L = 268.14 $D_C = 1^{\circ}40'00''$ MAX. SUPER = 0.036 FT/FT	CURVE NO. 17A SC = STA. 913+96.46 L = 268.14 $D_C = 2^{\circ}30'00''$ MAX. SUPER = 0.0156 FT/FT	



I:\PROJECTS\PID21810\dgn\sheets\21810G001.DGN 02-MAR-2011 7:16AM jthrow

**SCHEMATIC PLAN
STA. 865+00 TO STA. 1884+00**

CUY-71-14.96



SCHEMATIC PLAN
STA 1884+00 TO STA 1948+00

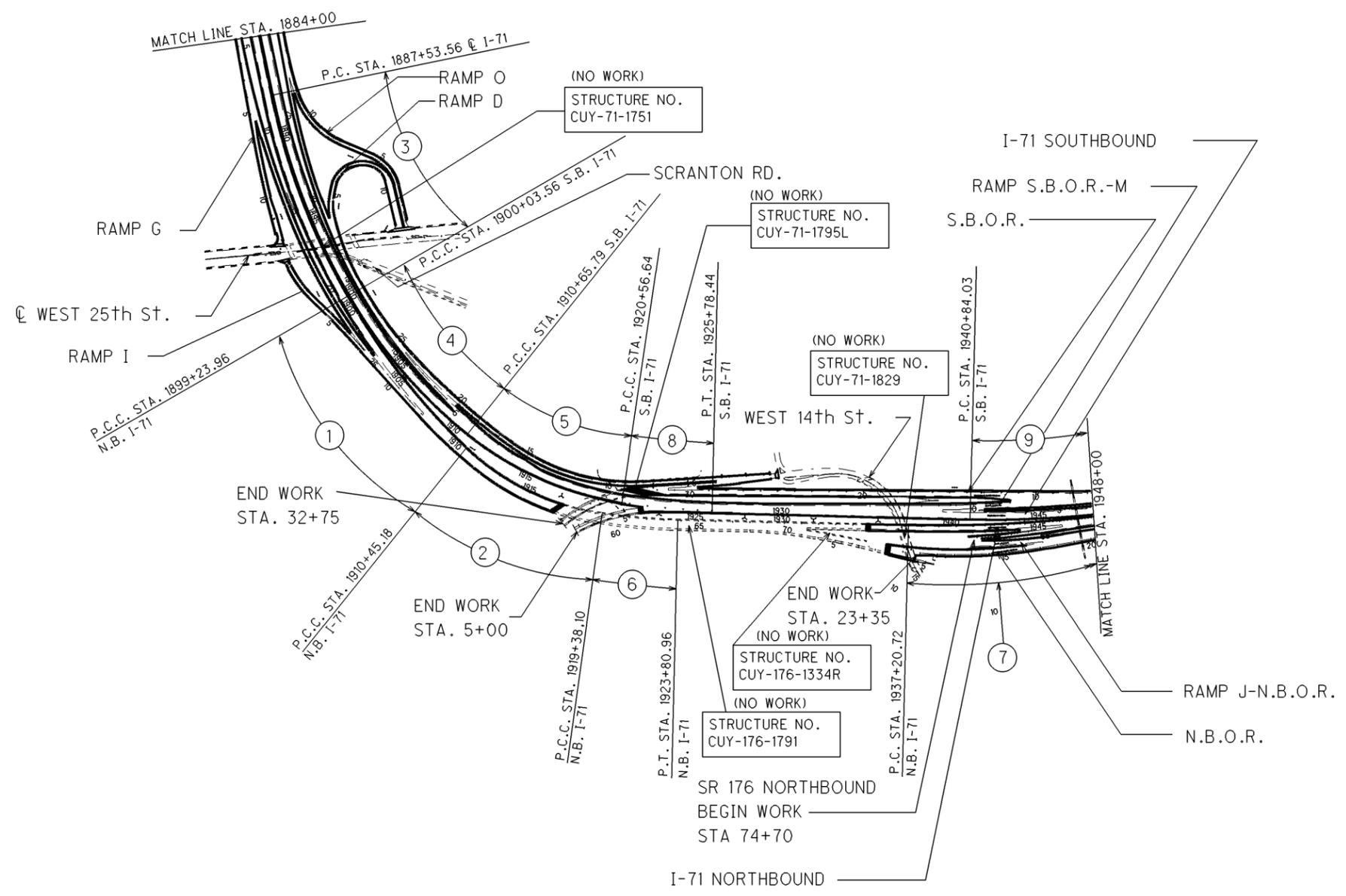
CUY-71-14.96

CURVE NO. 1 PCC = STA. 1899+23.96 L = 1121.23 D _C = 4°0'00" MAX. SUPER = 0.036 FT/FT	CURVE NO. 5 PCC = STA. 1910+65.79 L = 990.85 D _C = 3°0'00" MAX. SUPER = 0.071 FT/FT	CURVE NO. 9 PC = STA. 1940+84.03 L = 1394.59 D _C = 1°0'00" MAX. SUPER = 0.024 FT/FT
---	--	--

CURVE NO. 2 PCC = STA. 1910+45.18 L = 892.92 D _C = 4°0'00" MAX. SUPER = 0.083 FT/FT	CURVE NO. 6 PCC = STA. 1919+38.10 L = 442.86 D _C = 1°28'00" MAX. SUPER = 0.083 FT/FT
--	---

CURVE NO. 3 PC = STA. 1887+53.56 L = 1250.00 D _C = 1°28'00" MAX. SUPER = 0.036 FT/FT	CURVE NO. 7 PC = STA. 1937+20.73 L = 1449.78 D _C = 0°45'00" MAX. SUPER = 0.071 FT/FT
---	---

CURVE NO. 4 PCC = STA. 1900+03.56 L = 1062.23 D _C = 2°0'00" MAX. SUPER = 0.047 FT/FT	CURVE NO. 8 PCC = STA. 1920+56.64 L = 521.80 D _C = 1°28'00" MAX. SUPER = 0.036 FT/FT
---	---

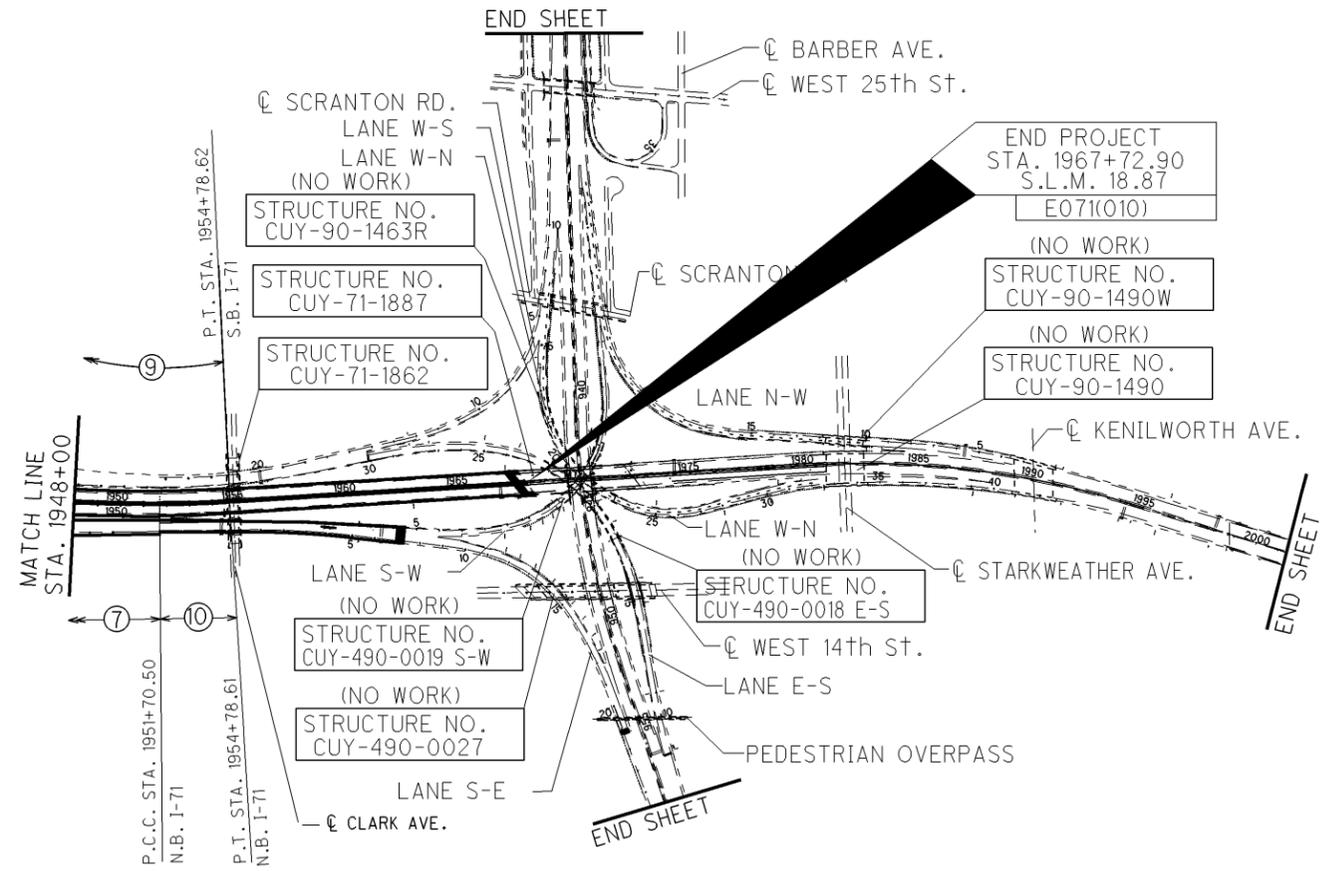


I:\PROJECTS\PID21810\dgn\sheets\21810GB002.DGN 02-MAR-2011 7:16AM jethrow

CURVE NO. 7
 PC = STA. 1937+20.73
 L = 1449.78
 D_C = 0°45'00"
 MAX.
 SUPER = 0.071 FT/FT

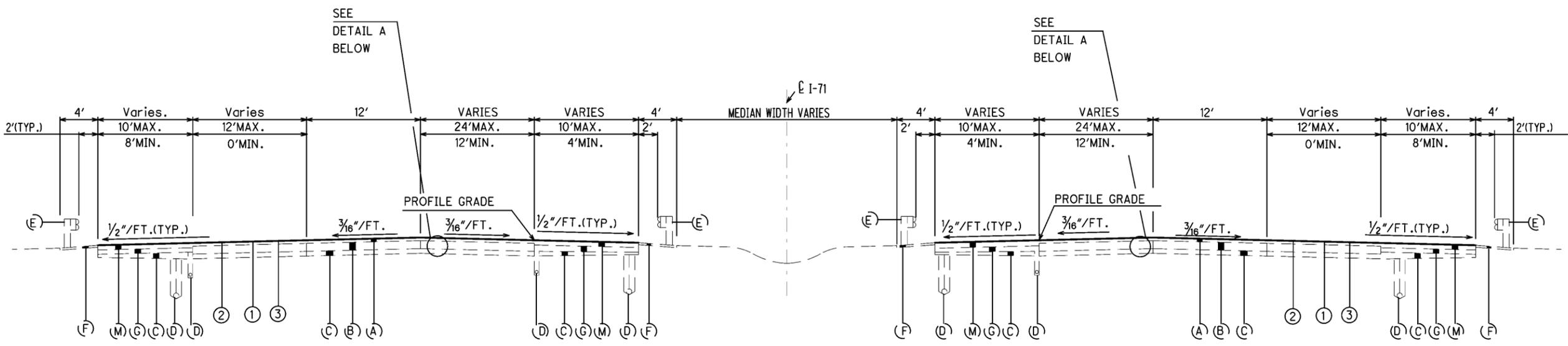
CURVE NO. 9
 PCC = STA. 1940+84.03
 L = 1394.59
 D_C = 1°00'00"
 MAX.
 SUPER = 0.024 FT/FT

CURVE NO. 10
 PCC = STA. 1951+70.50
 L = 308.11
 D_C = 0°45'00"
 MAX.
 SUPER = 0.078 FT/FT



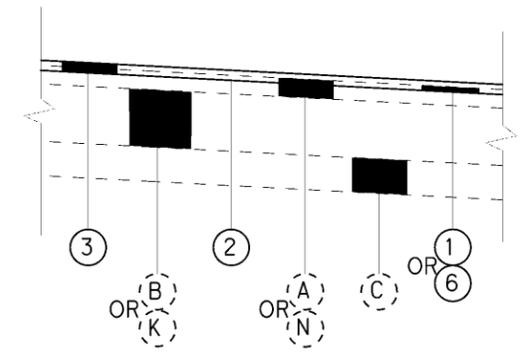
CALCULATED
 CHECKED
SCHEMATIC PLAN
STA 1948+00 TO STA. 1967+72.90

CUY-71-14.96
 4
 71

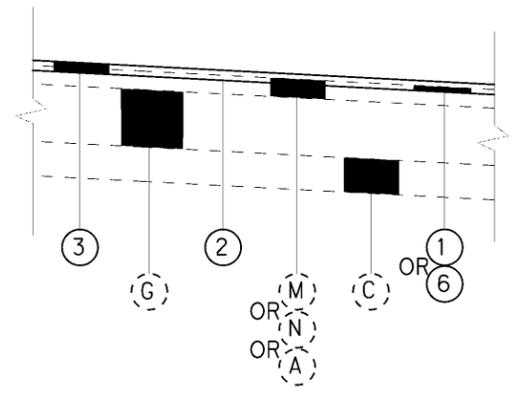


NORMAL UNCURBED DIVIDED SECTION

- STA. 865+00 TO STA. 869+75 (SB)
- STA. 896+25 TO STA. 902+00 (SB)
- STA. 912+00 TO STA. 924+75 (SB)
- STA. 1929+50 TO STA. 1935+00 (SB)
- STA. 865+00 TO STA. 879+00 (NB)
- STA. 892+00 TO STA. 907+75 (NB)



PAVEMENT DETAIL A



PAVEMENT DETAIL B

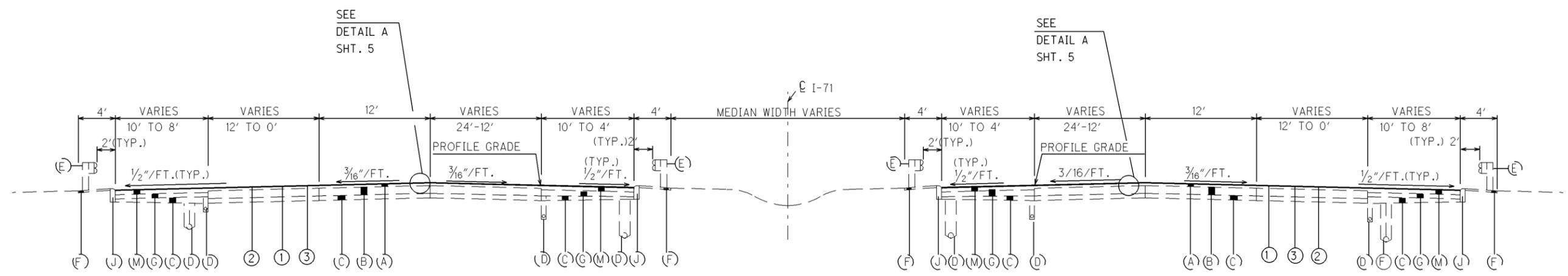
EXISTING LEGEND

- | | |
|--------------------------------------|-------------------------|
| (A) 4" ASPHALT CONCRETE | (M) 6" ASPHALT CONCRETE |
| (B) 9" OR 10" CONCRETE BASE PAVEMENT | (N) 2" ASPHALT CONCRETE |
| (C) SUBBASE | |
| (D) UNDERDRAIN | |
| (E) GUARDRAIL | |
| (F) ASPHALT CONCRETE UNDER GUARDRAIL | |
| (G) AGGREGATE BASE | |
| (H) CONCRETE MEDIAN | |
| (I) CONCRETE BARRIER | |
| (J) CURB (SANDSTONE OR CONCRETE) | |
| (K) 9" PLAIN CONCRETE PAVEMENT | |
| (L) CONCRETE BARRIER | |

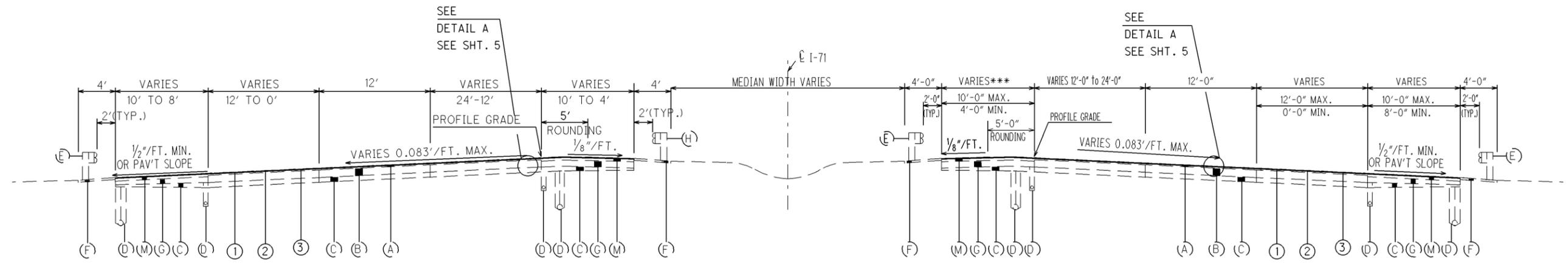
PROPOSED LEGEND

- (1) ITEM 254 - PAVEMENT PLANING , ASPHALT CONCRETE, AS PER PLAN 1/2"
- (2) ITEM 407 - TACK COAT, TRACKLESS TACK, SURFACE COURSE
- (3) ITEM 424 - 1" FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN
- (4) ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN
- (5) NOT USED
- (6) ITEM 254 - PAVEMENT PLANING , ASPHALT CONCRETE, AS PER PLAN 1"

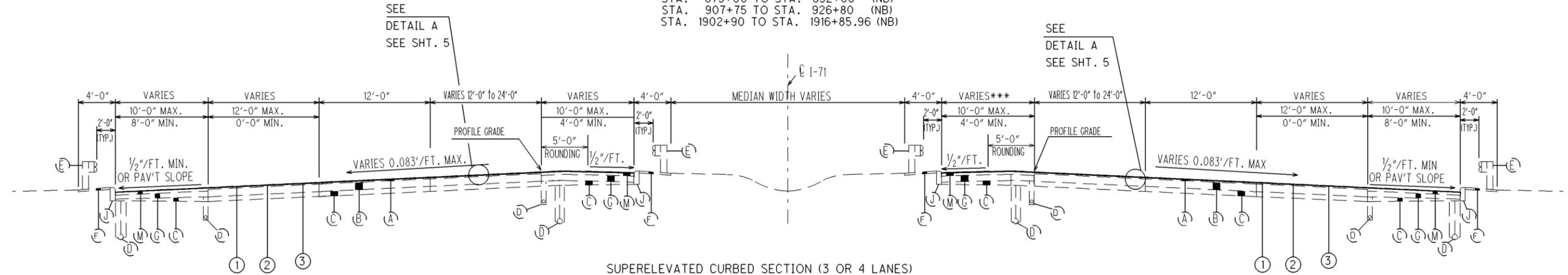
I:\PROJECTS\PID21810\dgn\sheets\21810GY002.DGN 02-MAR-2011 7:17AM jjethrow



NORMAL CURBED DIVIDED SECTION
 STA. 1924+50 TO STA. 1929+50 (SB)
 STA. 1935+00 TO STA. 1937+00 (SB)
 STA. 1935+46.25 TO STA. 1936+75 (NB)

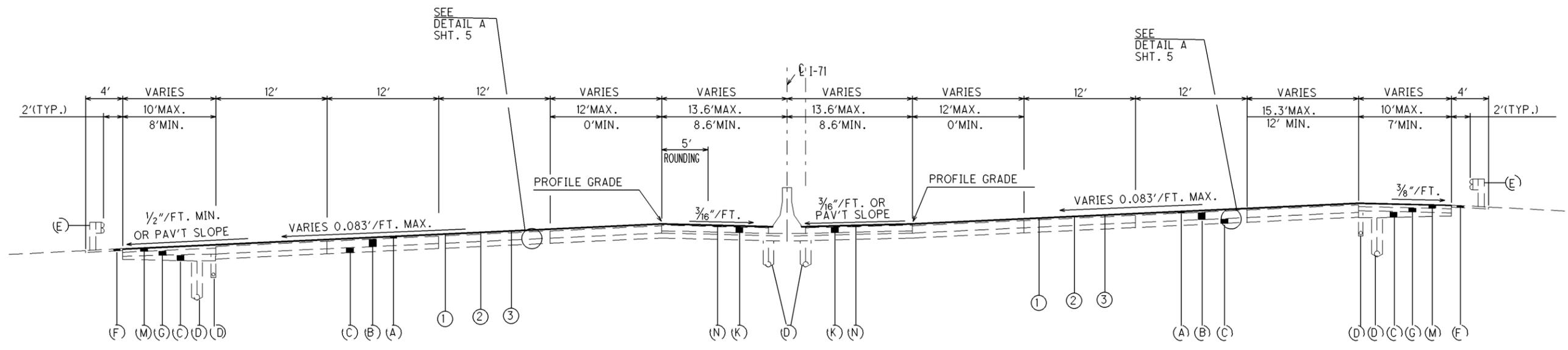


SUPERELEVATED UNCURBED SECTION (3 OR 4 LANES)
 STA. 869+75 TO STA. 896+25 (SB)
 STA. 902+00 TO STA. 912+00 (SB)
 STA. 924+75 TO STA. 926+80 (SB)
 STA. 879+00 TO STA. 892+00 (NB)
 STA. 907+75 TO STA. 926+80 (NB)
 STA. 1902+90 TO STA. 1916+85.96 (NB)

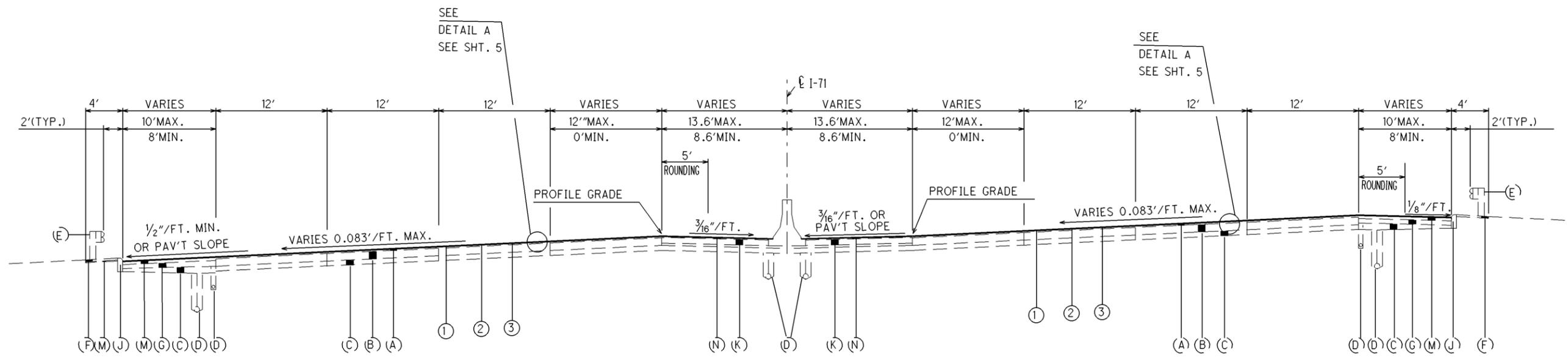


SUPERELEVATED CURBED SECTION (3 OR 4 LANES)
 STA. 1902+90 TO STA. 1924+50 (SB)
 STA. 1937+75 TO STA. 1947+85 (SB)
 STA. 1936+75 TO STA. 1947+85 (NB)

FOR LEGEND, SEE SHEET 5



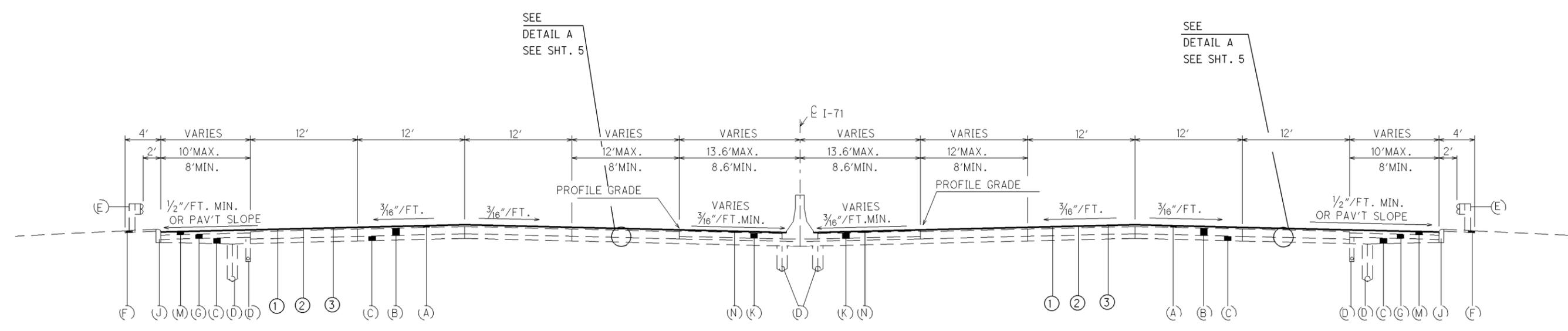
SUPERELEVATED UNCURBED SECTION (3 OR 4 LANES)
 STA. 926+80 TO STA. 939+91.73
 STA. 939+91.73 TO STA. 970+00
 STA. 1895+51 TO STA. 1902+90



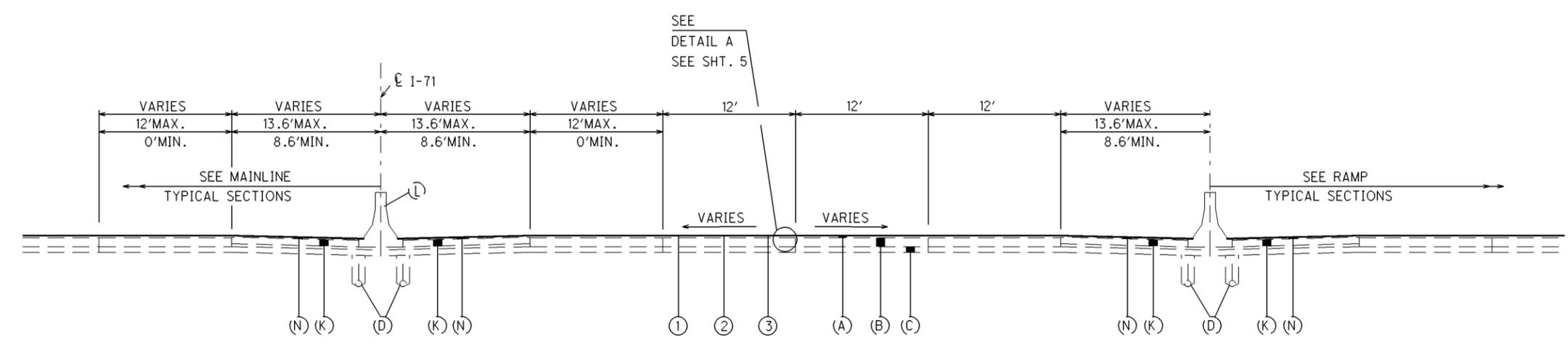
SUPERELEVATED CURBED SECTION (3 OR 4 LANES)
 STA. 970+00 TO STA. 975+75
 STA. 1887+00 TO STA. 1895+51
 STA. 1947+85 TO STA. 1954+00

FOR LEGEND, SEE SHEET 5

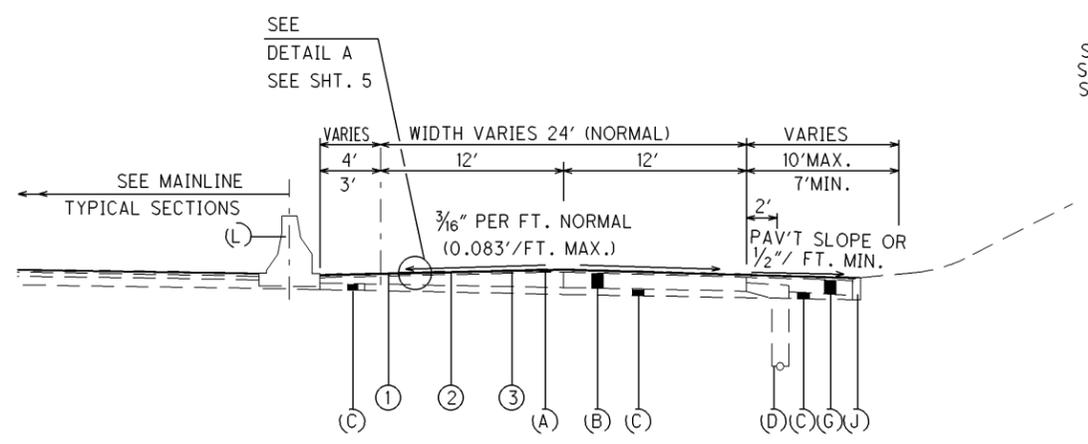
I:\PROJECTS\PID21810\dgn\sheets\21810GY003.DGN 02-MAR-2011 7:18AM jjetthrow



NORMAL CURBED SECTION (3 OR 4 LANES)
 STA. 975+75 TO STA. 982+16.03 (BK)=STA. 1879+48.88 (AH)
 STA. 1879+48.88 TO STA. 1887+00
 STA. 1954+00 TO STA. 1967+34.92



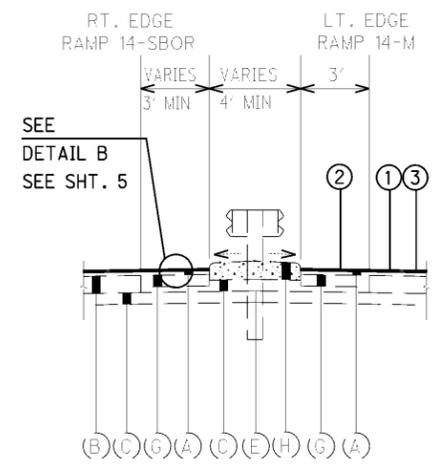
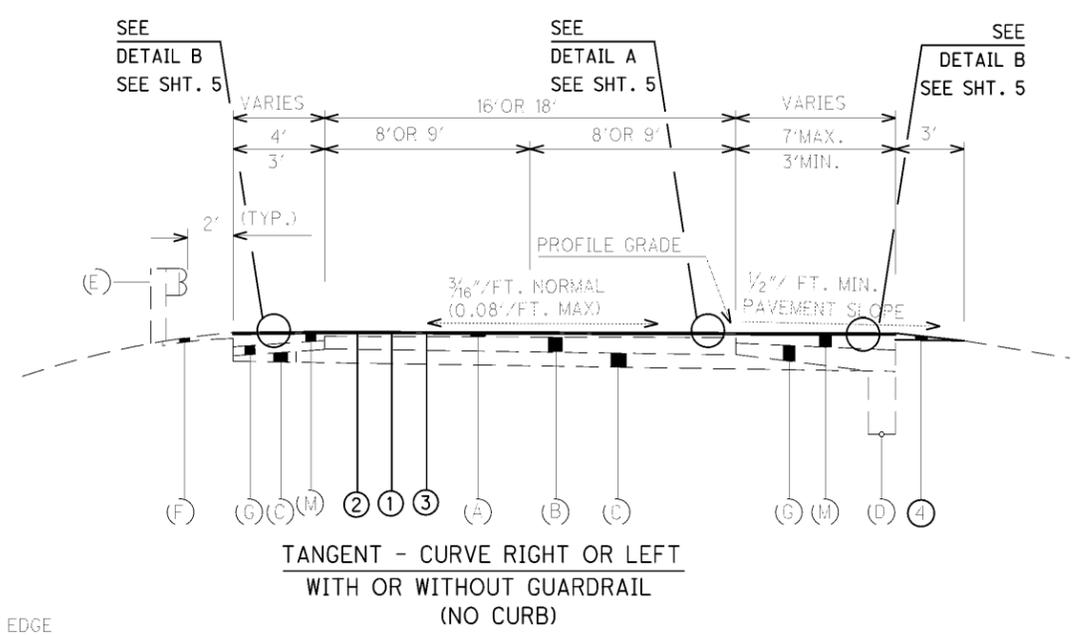
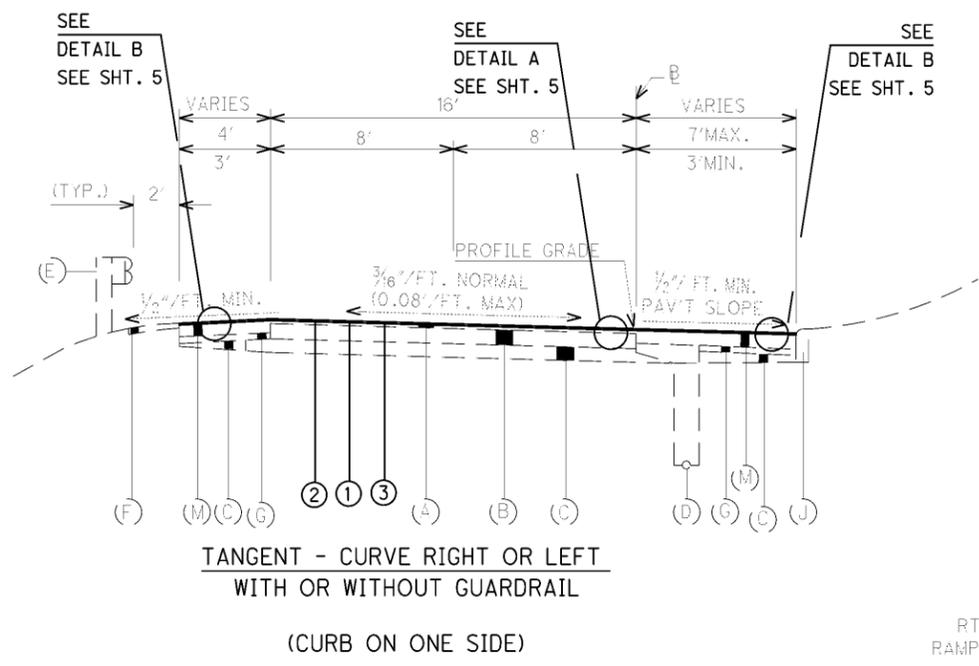
BARRIER MAINLINE-RAMP
 STA. 946+88 TO STA. 971+75 (NB) I-71 (LINE F)
 STA. 955+22 TO STA. 972+00 (SB) I-71 (LINE B)
 STA. 1895+51 TO STA. 1908+10 (SB) I-71 (LANE J)



**TANGENT - CURVE RIGHT OR LEFT
 WITH CONCRETE BARRIER**
 LINE B STA. 955+22 TO STA. 972+00
 LINE F STA. 946+88 TO STA. 971+75
 LANE J STA. 14+55 TO STA. 20+45

FOR LEGEND, SEE SHEET 5

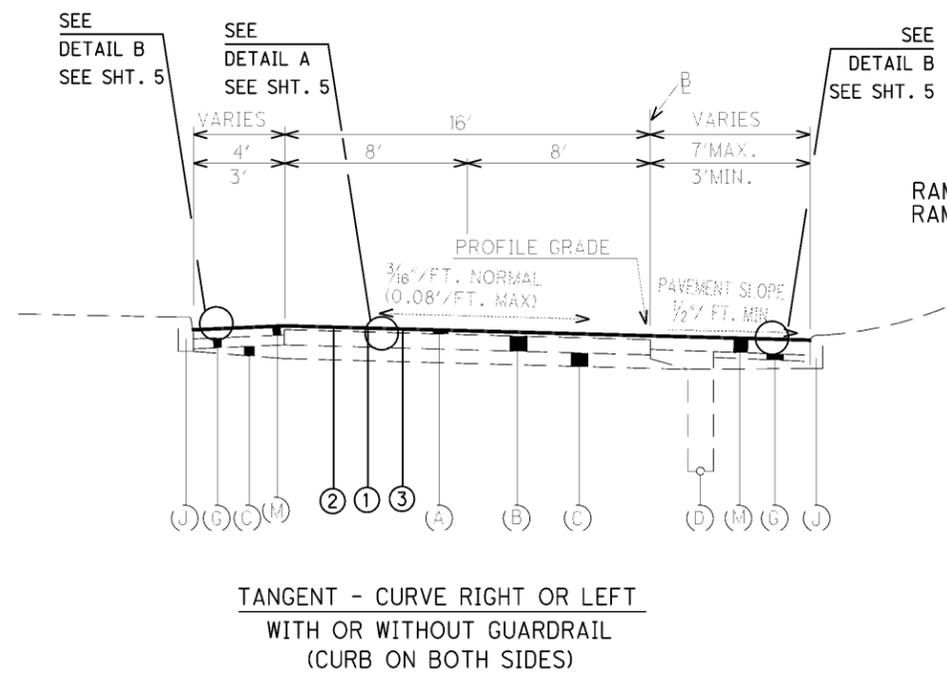
I:\PROJECTS\PID21810\dgn\sheets\21810GY004.DGN 02-MAR-2011 7:18AM jjethrow



MEDIAN SECTION
RAMP 14-SBOR STA.0+00.09 TO STA.4+75.00
RAMP 14-M STA.3+79.99 TO STA.8+54.00

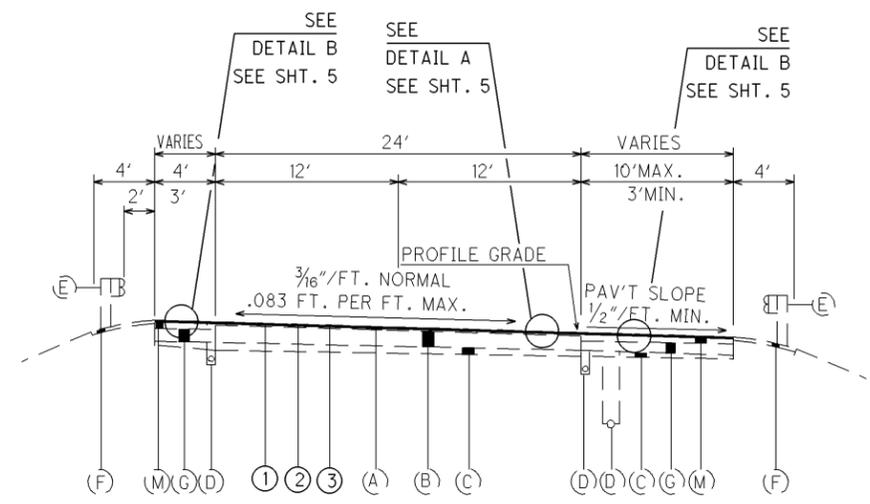
ONE LANE RAMP SECTIONS

- LANE H (STA. 10+35 TO STA. 24+09)
- RAMP A
- RAMP B (STA. 956+75 TO STA. 971+17.56)
- RAMP C
- RAMP E
- RAMP F (STA. 952+34 TO STA. 969+98.80)
- RAMP G
- LANE J (STA. 5+40 TO STA.9+60.09)
& (STA. 18+68 TO STA. 27+19)
- RAMP 14-M
- RAMP I
- RAMP SBOR-14
- RAMP SBOR-M
- RAMP O (STA. 4+60 TO STA. 13+61)
- RAMP D (STA. 0+00 TO STA. 9+00)

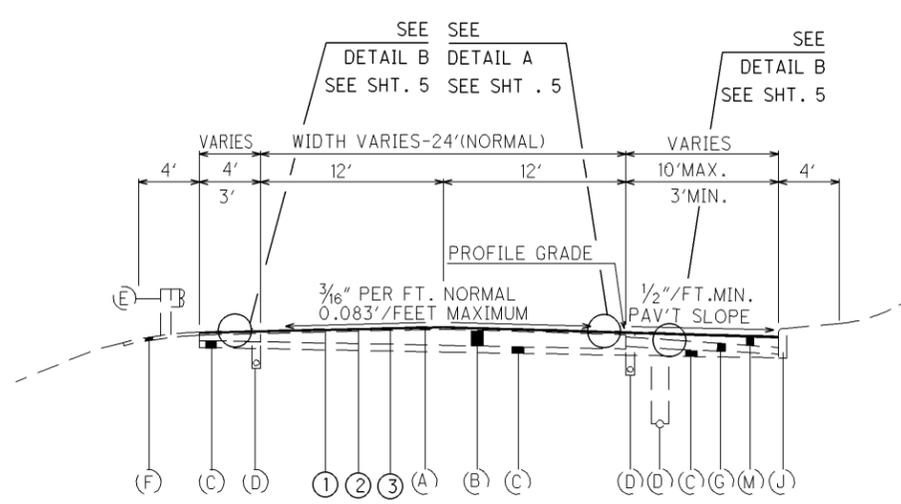


FOR LEGEND, SEE SHEET 5.

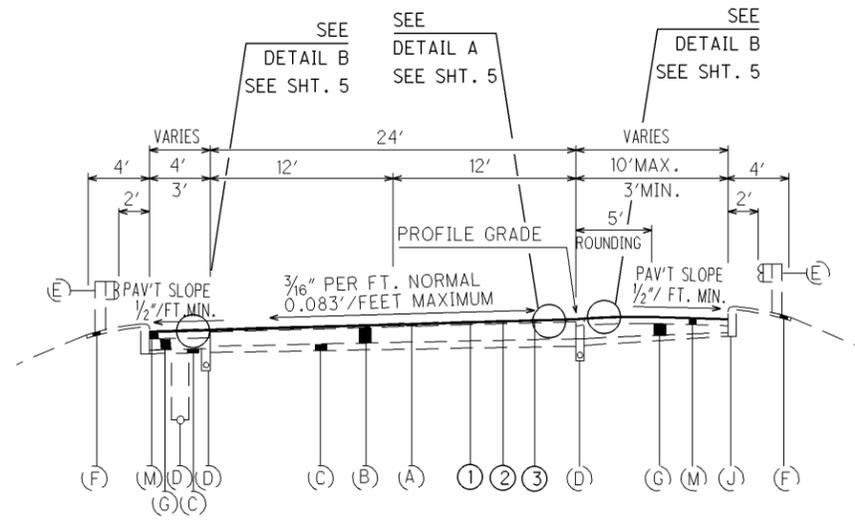
I:\PROJECTS\PID21810\dm\sheet\21810G\006.DGN 05-NOV-2012 7:28AM ekalic



TANGENT - CURVE RIGHT OR LEFT
(NO CURB)



TANGENT - CURVE RIGHT OR LEFT
(CURB ON 1 SIDE)

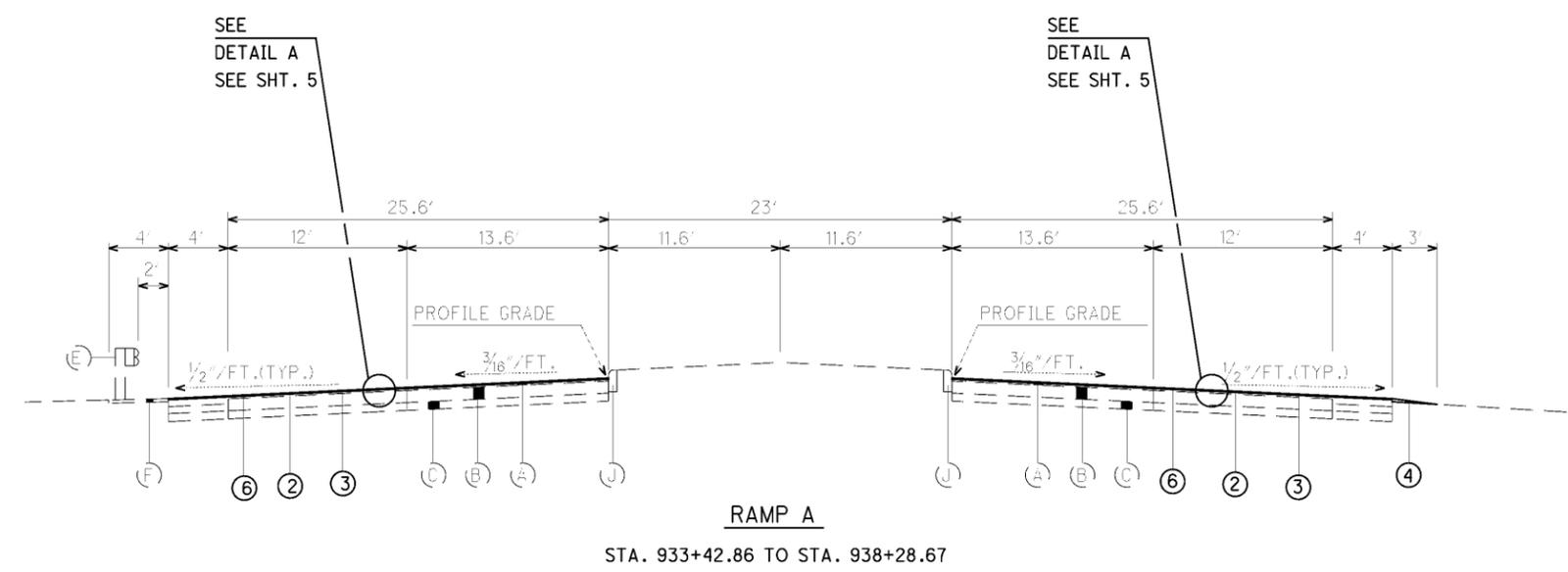


TANGENT - CURVE RIGHT OR LEFT
(CURBED)

TYPICAL RAMP AND TWO LANE ROADWAY SECTIONS

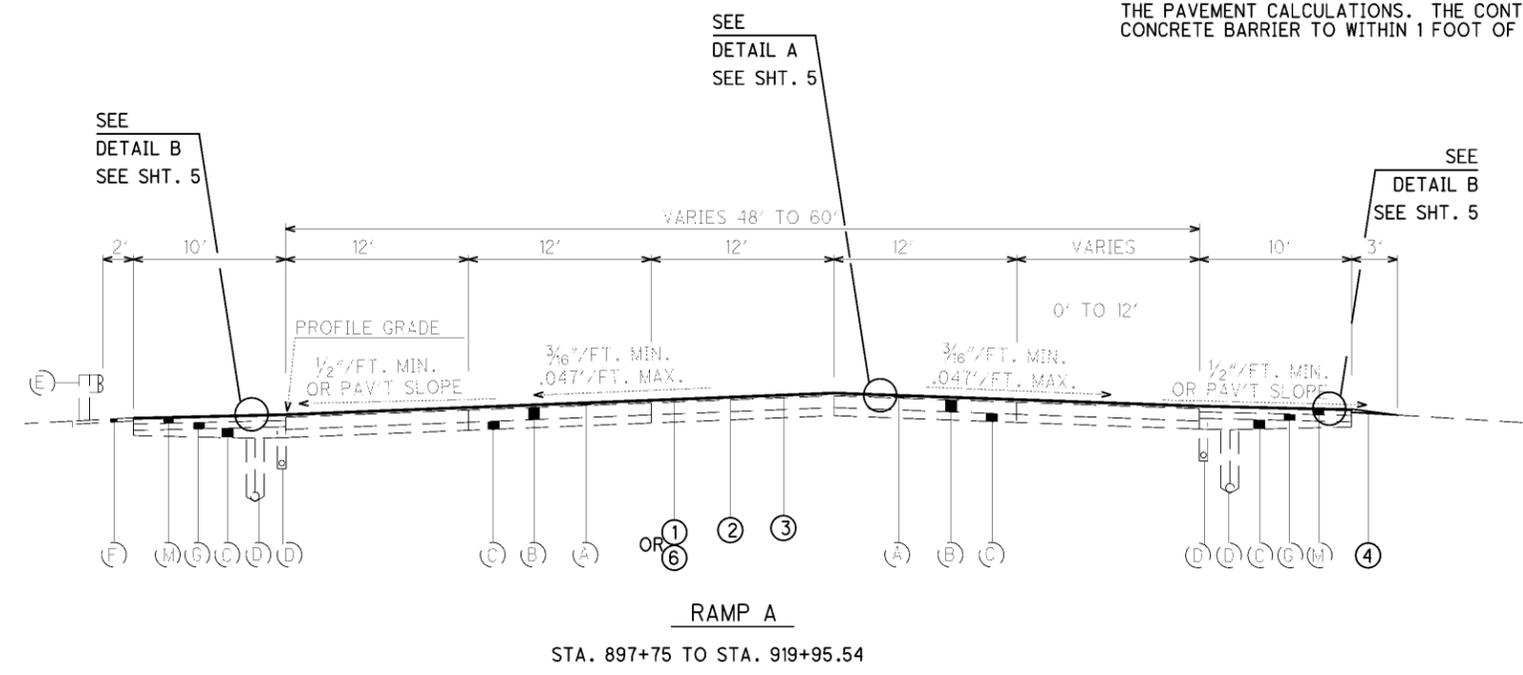
- RAMP D
- LANE H
- LANE J
- LANE E-S
- LANE S-E
- LANE S-W
- NBOR
- SBOR
- S.R. 176 - NB
- S.R. 176 - SB
- RAMP SBOR-M
- RAMP J-NBOR
- RAMP F

FOR LEGEND, SEE SHEET 5.



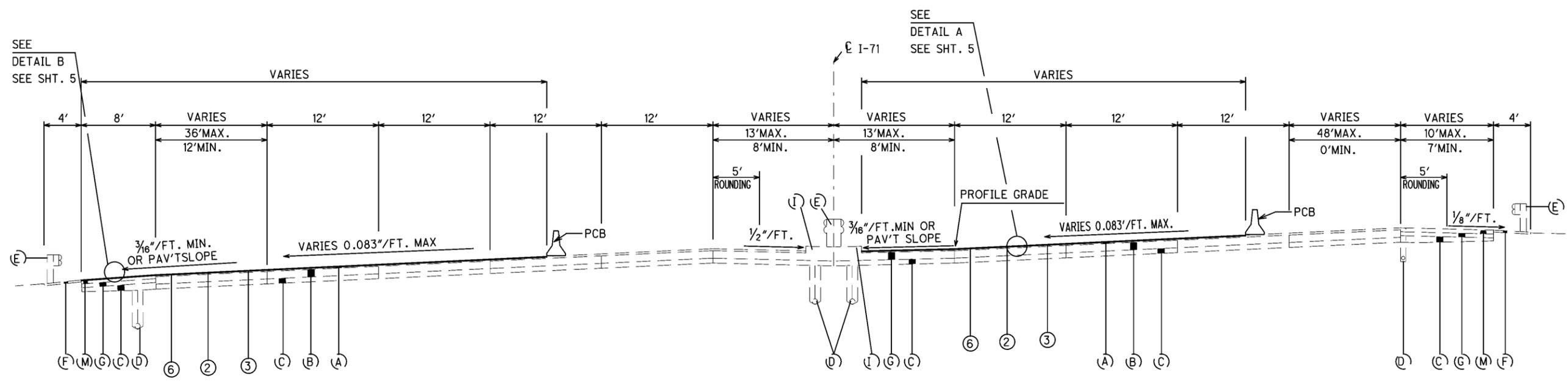
* RAMP A FROM STA. 918+09.78 TO STA. 938+28.27 SHALL BE PLANED TO A DEPTH OF 1" AS DEPICTED IN THE PAVEMENT CALCULATIONS. THE CONTRACTOR SHALL PLANE PARALLEL TO THE PROPOSED PORTABLE CONCRETE BARRIER TO WITHIN 1 FOOT OF THE BARRIER.

* RAMP D FROM STA. 917+98.73 TO STA. 938+08.27 SHALL BE PLANED TO A DEPTH OF 1" AS DEPICTED IN THE PAVEMENT CALCULATIONS. THE CONTRACTOR SHALL PLANE PARALLEL TO THE PROPOSED PORTABLE CONCRETE BARRIER TO WITHIN 1 FOOT OF THE BARRIER.



FOR LEGEND, SEE SHEET 5.

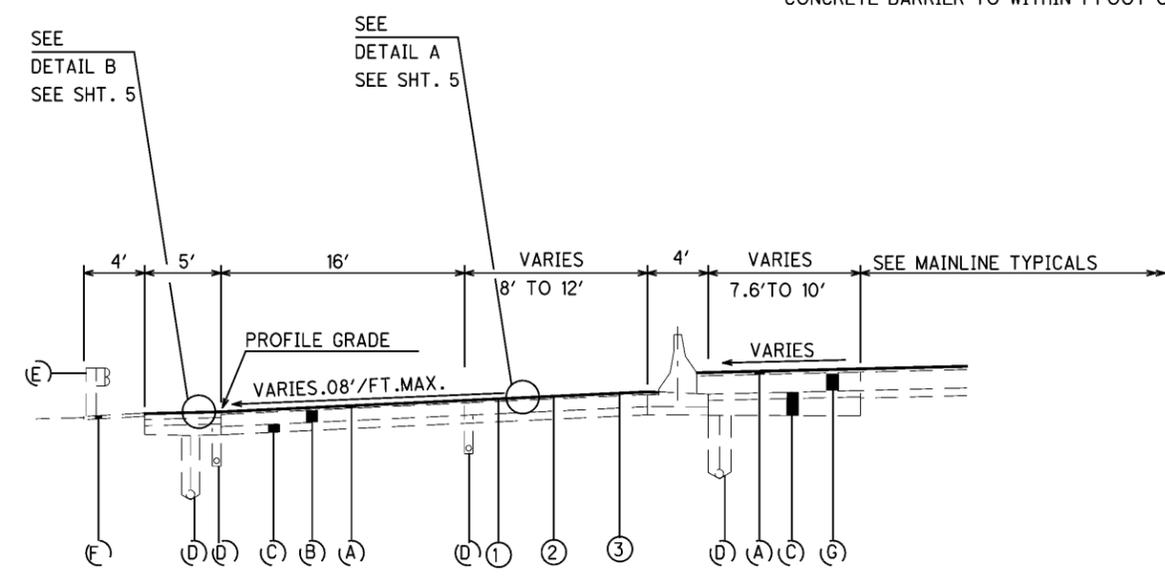
I:\PROJECTS\PID21810\dm\sheets\21810G\008.DGN 06-NOV-2012 7:31AM ekalfio



RAMP A
STA. 919+95.54 TO STA. 931+25.76

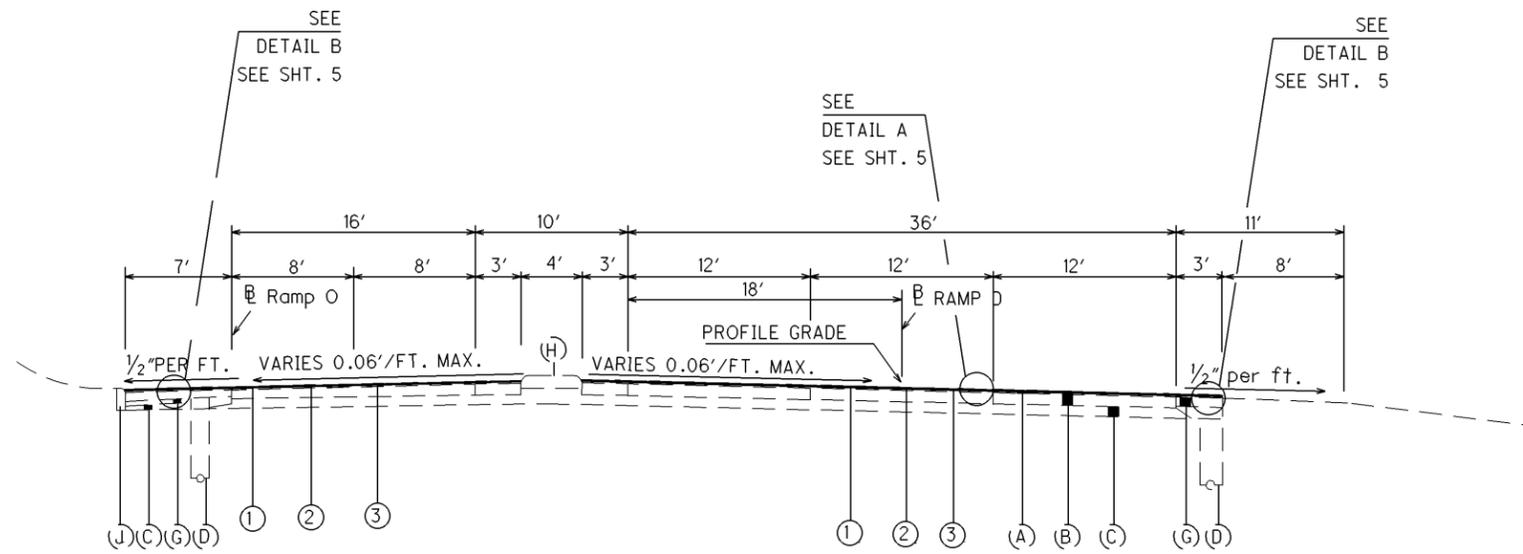
* RAMP A FROM STA. 918+09.78 TO STA. 938+28.27 SHALL BE PLANNED TO A DEPTH OF 1" AS DEPICTED IN THE PAVEMENT CALCULATIONS. THE CONTRACTOR SHALL PLANE PARALLEL TO THE PROPOSED PORTABLE CONCRETE BARRIER TO WITHIN 1 FOOT OF THE BARRIER.

* RAMP D FROM STA. 917+98.73 TO STA. 938+08.27 SHALL BE PLANNED TO A DEPTH OF 1" AS DEPICTED IN THE PAVEMENT CALCULATIONS. THE CONTRACTOR SHALL PLANE PARALLEL TO THE PROPOSED PORTABLE CONCRETE BARRIER TO WITHIN 1 FOOT OF THE BARRIER.



RAMP A
STA. 878+56.28 TO STA. 897+75

FOR LEGEND, SEE SHEET 5.



TYPICAL SECTION RAMP "D" & RAMP "O"
RAMP D STA. 9+00 TO STA. 13+09.61
RAMP O STA. 0+00 TO STA. 4+60

FOR LEGEND, SEE SHEET 5.

GENERAL

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE IMPROVEMENT OF IR-71 BY REMOVING 1/2" OR 1" OF ASPHALT AND OVERLAYING THE ROADWAY WITH 1" OF ITEM 424, FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN FROM SLM 14.96 TO SLM 18.87. INCIDENTAL WORK INCLUDES PARTIAL DEPTH PAVEMENT REPAIRS, PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS

EXISTING TYPICAL SECTIONS

EXISTING TYPICAL SECTIONS HAVE BEEN TAKEN FROM THE RECORDS AND ARE BELIEVED TO REPRESENT THE EXISTING PAVEMENT, BUT THE STATE OF OHIO DOES NOT GUARANTEE THE ACCURACY OF THE SAME.

FOR FURTHER INFORMATION IN REGARD TO THE EXISTING TYPICAL SECTIONS, THE CONTRACTOR SHALL REFER TO THE PREVIOUS CONSTRUCTION PLANS.

THESE PLANS MAY BE REVIEWED AT THE

OHIO DEPARTMENT TRANSPORTATION
DISTRICT 12 OFFICE
5500 TRANSPORTATION BOULEVARD
GARFIELD HEIGHTS, OHIO 44125

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL COOPERATE AND COORDINATE OPERATIONS WITH THE CONTRACTORS ON OTHER PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THE CONTRACT.

ALTERNATE METHODS

IF THE CONTRACTOR SO ELECTS, HE/SHE MAY SUBMIT ALTERNATE METHODS FOR THE MAINTENANCE OF TRAFFIC, PROVIDED THE INTENT OF THE PROVISIONS IS FOLLOWED AND NO ADDITIONAL INCONVENIENCE TO THE TRAVELING PUBLIC RESULTS THERE FROM. NO ALTERNATE PLAN SHALL BE PLACED INTO EFFECT UNTIL APPROVAL HAS BEEN GRANTED IN WRITING, BY THE DIRECTOR.

RIGHT OF WAY

ALL WORK SHALL BE PERFORMED WITHIN THE EXISTING RIGHT OF WAY OR EASEMENTS.

EQUIPMENT AND MATERIAL STORAGE

IN ORDER TO PROVIDE FOR THE SAFETY OF THE TRAVELING PUBLIC THE CONTRACTOR'S ATTENTION IS DIRECTED TO 614.03. IN ADDITION THE FOLLOWING PROVISIONS SHALL APPLY:

- 1) ANY REMOVED ITEMS SHALL NOT BE STORED ON THE RIGHT OF WAY FOR MORE THAN THIRTY DAYS.
- 2) THE STORAGE OF EQUIPMENT, MATERIALS, AND VEHICLES WITHIN THE HIGHWAY RIGHT OF WAY WILL BE PERMITTED. THE NUMBER OF AREAS AND EXACT LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
- 3) ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE STATE.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS

ITEM 619 - FIELD OFFICE, TYPE B

A TYPE B FIELD OFFICE IS REQUIRED FOR THIS PROJECT.

THE FOLLOWING ESTIMATED QUANTIFY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 619 - FIELD OFFICE, TYPE B 6 MONTH

UTILITY OWNERSHIP

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT. THE OHIO DEPARTMENT OF TRANSPORTATION HAS USED THE BEST AVAILABLE INFORMATION TO DETERMINE THE UTILITY COMPANIES SERVING THIS AREA, BUT CANNOT GUARANTEE THE UTILITY COMPANY LIST IS COMPLETE.

CITY OF CLEVELAND
DIVISION OF WATER
1201 LAKESIDE AVE.
CLEVELAND, OH 44114
(216) 664-2444, EXT 5555
FAX: (216) 664-2378

AT&T
13630 LORAIN AVE.
4TH FLOOR
CLEVELAND, OHIO 44111
(216) 476-6142
FAX: (216)573-5792

THE ILLUMINATING CO.
6896 MILLER RD
BRECKSVILLE, OH 44141
(440) 546-8748
FAX: (440) 546-8775

DOMINION EAST OHIO GAS CO.
1201 E. 55TH ST.
CLEVELAND, OH 44103
(216) 736-6675
FAX: (216) 736-6883

CUYAHOGA COUNTY
SANITARY ENGINEER
6100 WEST CANAL RD.
VALLEY VIEW, OHIO 44125
(216) 443-8204
FAX:(216) 443-8236

CITY OF CLEVELAND
WATER POLLUTION CONTROL
12302 KIRBY RD.
CLEVELAND, OHIO 44108
PHONE: (216) 664-3785

CITY OF CLEVELAND
PUBLIC POWER
1300 LAKESIDE AVE.
CLEVELAND, OHIO 44114
ATTN: MARVIN O. JONES
PHONE: (216) 664-3922, EXT. 151
FAX: (216) 664-2972

ROADWAY

ITEM 659 - SEEDING, MISC.: SEEDING AND MULCHING

THIS ITEM SHALL BE USED TO SEED AND MULCH ALL DISTURBED AREAS ADJACENT TO CURB RAMPS, CURB, AND SIDEWALK, AS DIRECTED BY THE ENGINEER. USE CLASS 1 LAWN MIXTURE.

AT DISTURBED AREAS, REMOVE TOP 2" OF SOIL AND REPLACE WITH MATERIAL CONFORMING TO 659.05.

PROVIDE A SINGLE APPLICATION OF COMMERCIAL FERTILIZER PER THE REQUIEMTS OF 659.04.

PLACEMENT OF TOPSOIL AND APPLICATION OF FERTILIZER ARE INCIDENTAL TO THIS ITEM.

THE FOLLOWING ESTIMATED QUANTITY IS CARRIED TO THE GENERAL SUMMARY FOR THIS PURPOSE.

ITEM 659 - SEEDING, MISC.:SEEDING AND MULCHING LUMP SUM

CALCULATED
CHECKED

GENERAL NOTES

CUY - 71 - 14.96

I:\PROJECTS\PID21810\dmn\sheet\21810\G01.dgn 06-NOV-2012 7:43AM ekallo

CURB RAMP

REFERENCE NO.	LOCATION	202	202	608	608
		WALK REMOVED	CURB REMOVED	CURB RAMP, AS PER PLAN	4' CONCRETE WALK
		S. F.	FT.	S. F.	S. F.
CR-1	RAMP A (DENISON)	105	15	50	63
CR-2	RAMP A (DENISON)	105	15	50	63
CR-3	RAMP E (FULTON)	60	12	50	16
CR-4	RAMP E (FULTON)	60	12	50	16
CR-5	RAMP G (FULTON)	90	10	50	45
CR-6	RAMP G (FULTON)	120	15	50	78
CR-7	RAMP A (FULTON)	120	15	50	78
CR-8	RAMP A (FULTON)	120	10	50	75
CR-9	RAMP A (FULTON)	60	10	50	15
CR-10	RAMP C (FULTON)	160	25	50	123
CR-11	RAMP C (FULTON)	60	12	50	16
CR-12	RAMP D (W. 25 TH)	100	15	50	58
CR-13	RAMP D (W. 25 TH)	140	15	50	98
CR-14	RAMP D (W. 25 TH)	64		50	14
CR-15	RAMP D (W. 25 TH)	60	10	50	15
CR-16	RAMP G (W. 25 TH)	80	15	50	38
CR-17	RAMP G (W. 25 TH)	120	15	50	78
CR-18	RAMP G (W. 25 TH)	80		50	30
CR-19	RAMP G (W. 25 TH)	80		50	30
CR-20	RAMP I (W. 25 TH)	175	20	50	135
CR-21	RAMP I (W. 25 TH)	240	20	50	200
	TOTAL TO GEN. SUMMARY	2199	261	1050	1284

ITEM 608 - CURB RAMP, AS PER PLAN

IMPROVE EXISTING CURB RAMPS BY PROVIDING A LANDING AREA WITH TRUNCATED DOMES. IMPROVE EXISTING SIDEWALK AT ITS CURRENT WIDTH AND LOCATION. WORK AROUND EXISTING UTILITY FEATURES AND WITHIN THE EXISTING BACK OF SIDEWALK. CONSTRUCT RAMPS CONFORMING TO THE DETAILS RELATED TO THE SIZE AND CROSS-SLOPE OF THE LANDING AREA AND WITH TRUNCATED DOMES AS SHOWN ON STD. DRAWING BP-7.1.

MINIMIZE DISTURBED AREAS ADJACENT TO CURB RAMPS, CURB, AND SIDEWALK.

IN ADDITION TO THE CMS REQUIREMENTS FOR ITEM 608, CURB RAMP, A.P.P. WORK SHALL INCLUDE ANY SAWCUTTING OF ADJACENT WALK OR CURB AND ANY ADDITIONAL EXCAVATION NEEDED TO PLACE THE PROPOSED TRUNCATED DOMES.

ITEM 202 - REMOVAL MISC.: PORTABLE CONCRETE BARRIER

THIS ITEM OF WORK SHALL USED TO REMOVE PORTABLE CONCRETE BARRIER, INCLUDING END SECTIONS, AT THE LOCATIONS SPECIFIED IN THE PLANS. AFTER REMOVAL, THE BARRIER SHALL BECOME THE PROPERTY OF THE STATE OF OHIO AND THE CONTRACTOR SHALL DELIVER ALL THE REMOVED TO THE VROOMAN RD YARD (6073 VROOMAN RD, LeRoy TOWNSHIP).

GUARDRAIL PROTECTION

EXISTING GUARDRAIL WHICH IS SCHEDULED TO BE REPLACED WITH TYPE 5 GUARDRAIL, SHALL NOT BE REMOVED UNTIL THE NEW GUARDRAIL IS READY TO BE INSTALLED. UNDER NO CIRCUMSTANCES SHALL ANY HAZARD BE WITHOUT GUARDRAIL PROTECTION FOR MORE THAN 24 HOURS.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A "W-BEAM RAIL SPLICE" AS SHOWN ON STANDARD CONSTRUCTION DRAWING GR-1.1. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

DRAINAGE AND EROSION CONTROL

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY

CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 604 ITEMS.

ITEM SPECIAL - MISCELLANEOUS METAL

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIALS MUST MEET ITEM 604 OF THE SPECIFICATIONS AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE EXPENSE OF THE CONTRACTOR. THE CONTRACTOR SHALL NOT ORDER MATERIALS UNTIL AUTHORIZED BY THE ENGINEER AND IF NONE ARE NEEDED THE ITEM IS TO BE NON-PERFORMED.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM SPECIAL - MISCELLANEOUS METAL **5,000 LBS**

CASTINGS RECONSTRUCTED TO GRADE

THE CONTRACTOR AND FIELD ENGINEER SHALL FIELD CHECK ALL EXISTING CATCH BASINS AND INLETS LOCATED WITHIN THE LIMITS OF THE PROJECT. ANY CASTING FOUND THAT EXHIBITS SUBSTANTIAL DETERIORATION AND REQUIRES MORE WORK THAN IS SPECIFIED UNDER CASTINGS ADJUSTED TO GRADE, SHALL BE RECONSTRUCTED TO GRADE AS DIRECTED BY THE ENGINEER. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 604 - CATCH BASIN RECONSTRUCTED TO GRADE **6 EACH**
 ITEM 604 - INLET RECONSTRUCTED TO GRADE **9 EACH**
 ITEM 604 - MANHOLE RECONSTRUCTED TO GRADE **5 EACH**

ITEM 604 - CASTINGS ADJUSTED TO GRADE, AS PER PLAN

DO NOT USE ADJUSTMENT DEVICES.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 604 - CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN ... **12 EACH**
 ITEM 604 - MANHOLE ADJUSTED TO GRADE, AS PER PLAN **16 EACH**
 ITEM 604 - INLET ADJUSTED TO GRADE, AS PER PLAN **35 EACH**
 ITEM 638 - VALVE BOX ADJUSTED TO GRADE, AS PER PLAN **10 EACH**

PAVEMENT

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN A

THIS ITEM SHALL BE USED FOR THE REPAIR OF UNSOUND, COLD-PATCH, OR POP-OUT AREAS OF LONGITUDINAL JOINTS AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PERFORMED PRIOR TO THE MILLING OPERATION. THE DEPTH OF THE REPAIR FROM THE TOP OF THE EXISTING SURFACE SHALL BE 3". THE WIDTH OF THE REPAIR SHALL BE 12" CENTERED OVER THE EXISTING JOINT.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY:

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR,
 AS PER PLAN A **900 SQ. YD.**

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN B

THIS ITEM SHALL BE USED FOR THE REPAIR OF UNSOUND, COLD-PATCH, OR POP-OUT AREAS OF TRANSVERSE JOINTS AND CRACKS AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PERFORMED PRIOR TO THE MILLING OPERATION. THE DEPTH OF THE REPAIR FROM THE TOP OF THE EXISTING SURFACE SHALL BE 3". THE WIDTH OF THE REPAIR SHALL BE 12" CENTERED OVER THE EXISTING JOINT.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY:

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR,
AS PER PLAN B 1500 SQ. YD.

ITEM 424 - FINE GRADED ASPHALT CONCRETE, TYPE B, AS PER PLAN

THE COURSE AGGREGATE FOR THIS ITEM SHALL BE LIMITED TO A BLEND OF AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO AND LIMESTONE. THE CONTRACTOR SHALL USE A MINIMUM OF 50% OF ACBFS OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE.

SECTION 424.08 SHALL BE REVISED TO READ "FOR TYPE B MIXES COMPLY WITH ALL REQUIREMENTS OF 446."

ASPHALT CONCRETE SURFACE COURSES

IN ADDITION TO THE GUTTER SEALING REQUIREMENTS SPECIFIED ON SCD BP-3.1 AND IN 401.15, AFTER COMPLETION OF THE SURFACE COURSE, THE CONTRACTOR SHALL SEAL, WITH ASPHALT BINDER, THE FOLLOWING LOCATIONS:

- ALL CASTINGS INCLUDING BUT NOT LIMITED TO MONUMENTS, MANHOLES, WATER VALVES, CATCH BASINS.
- BUTT JOINTS INCLUDING BRIDGE APPROACHES.
- FOREWARD JOINT FOR DRIVEWAY ASPHALT AND TRAILING JOINT WHEN BUTTING TO EXISTING ASPHALT DRIVE.
- PERIMETER OF ALL ASPHALT PAVEMENT REPAIRS WHEN PAVEMENT REPAIRS ARE NOT OVERLAYED WITH ASPHALT CONCRETE.

THE MATERIAL USED SHALL BE A CERTIFIED 702.01 PG BINDER. THE WIDTH OF THE SEALER SHALL BE 2 INCHES.

ANY ADDITIONAL COSTS ASSOCIATED WITH THE WORK IDENTIFIED IN THIS NOTE SHALL BE INCLUDED IN THE APPROPRIATE ASPHALT CONCRETE SURFACE COURSE ITEM OF WORK.

ALIGNMENT AND PROFILE

THE WORK PROPOSED BY THIS PROJECT IS FOR THE RE-SURFACING OF THE EXISTING PAVEMENT. THE PROFILE OF THE PROPOSED SURFACE WILL BE PARALLEL TO THAT OF THE EXISTING IR-71 AND RAMP PAVEMENT.

LONGITUDINAL JOINTS (FLEXIBLE PAVEMENT)

LONGITUDINAL JOINTS BETWEEN A PAVEMENT LANE AND ADJOINING BERM OR SPEED CHANGE LANE, AND BETWEEN A SPEED CHANGE LANE AND THE ADJOINING BERM SHALL BE MADE THE SAME DAY. ALL LONGITUDINAL JOINTS SHALL BE HOT WITH THE EXCEPTION OF ONE COLD JOINT PER ROADWAY. LONGITUDINAL JOINT LOCATIONS SHALL BE AS APPROVED BY THE ENGINEER. EACH RAMP SHALL HAVE ONLY ONE LONGITUDINAL COLD JOINT LOCATED APPROXIMATELY HALFWAY ACROSS THE RAMP.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

THIS ITEM SHALL BE USED TO PLANE THE EXISTING ASPHALT CONCRETE PAVEMENT AT 1/2" OR 1" DEPTH AS SPECIFIED. THIS ITEM SHALL ALSO BE USED TO PLANE THE TRANSITIONS AT MAINLINE AND OVERHEAD BRIDGES AND BUTT JOINTS.

ALL COST ASSOCIATED WITH PLANING THE TRANSITIONS AND THE EXTRA PLANING UNDER THE OVERHEAD BRIDGES SHALL BE INCLUDED IN THE BID FOR ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN.

ITEM 407 - TACK COAT, TRACKLESS TACK, SURFACE COURSE

DESCRIPTION: THIS WORK CONSISTS OF PREPARING AND TREATING A PAVED SURFACE WITH NTSS-11HM TRACKLESS TACK PRODUCED BY BLACKLIDGE EMULSIONS, INC. MEET ALL REQUIREMENTS OF CONSTRUCTION AND MATERIAL SPECIFICATIONS ITEM 407 TACK COAT EXCEPT AS NOTED BELOW.

MATERIAL: CONFORM TO THE FOLLOWING TYPICAL PHYSICAL PROPERTIES:

PARAMETER	TEST METHOD	MIN.	MAX.
SAYBOLT FUROL VISCOSITY, SFS @ 25°C	ASTM D88	15	100
STORAGE STABILITY, 24 HRS, %	ASTM D244	--	1
STORAGE STABILITY, 5 DAYS, %	ASTM D244	--	5
RESIDUE BY DISTILLATION, %	ASTM D244	50	--
OIL DISTILLATE, %	ASTM D244	--	1
SIEVE TEST, %	ASTM D244	--	0.3
TEST ON RESIDUE:			
PENETRATION, @ 25°C.	ASTM D5	--	20
SOFTENING POINT RANGE DEG C	ASTM D36	65	--
SOLUBILITY, %	ASTM D2042	97.5	--
ORIGINAL BINDER DSR@82°C G*/SIN 8,10 RAD/SEC	AASHTO T111	1	--

NOTE: PRODUCT SHOULD NOT CONTAIN FILLER SUCH AS CLAY, ETC. KEEP FROM FREEZING. SUPPLY CERTIFIED TEST DATA TO THE ENGINEER SHOWING THE MATERIAL SUPPLIED WAS TESTED FOR AND MEETS THE ABOVE PROPERTIES.

EQUIPMENT: ALL REQUIREMENTS OF 407.03 APPLY. SEE MANUFACTURER'S REPRESENTATIVE FOR CORRECT DISTRIBUTOR

SETTINGS. THOROUGHLY CLEAN ALL EQUIPMENT IF CATIONIC EMULSION WAS PREVIOUSLY USED.

WEATHER LIMITATIONS: ALL REQUIREMENTS OF 407.04 APPLY.

PREPARATION OF SURFACE: ALL REQUIREMENTS OF 407.05 APPLY.

APPLICATION OF ASPHALT MATERIAL: UNIFORMLY APPLY THE ASPHALT MATERIAL WITH A DISTRIBUTOR PER THE REQUIREMENTS OF 407.06 EXCEPT AS NOTED.

ENSURE THE TACK BREAKS BEFORE RELEASING TO TRAFFIC UNLESS THE PAVER IS EQUIPPED WITH A SPRAY BAR SYSTEM TO APPLY TACK JUST PRIOR TO MAT PLACEMENT.

IF PRODUCT IS STORED FOR AN EXTENDED PERIOD OF TIME, PRIOR TO APPLICATION, AGITATE OR GENTLY CIRCULATE THE MATERIAL.

ALL NOZZLES AND SPRAY PATTERNS SHALL BE IDENTICAL TO ONE ANOTHER ALONG THE DISTRIBUTOR SPRAY BAR. THE ANGLE OF THE NOZZLE SHOULD A 15 TO 30 DEGREE ANGLE TO THE SPRAY BAR AXIS TO MAXIMIZE OVERLAP OR AS RECOMMENDED BY THE NOZZLE MANUFACTURER. CONTACT THE MANUFACTURER'S REPRESENTATIVE FOR REQUIRED SPRAY NOZZLE SIZE, AND DISTRIBUTOR AND NOZZLE SETTINGS.

APPLY AT A RATE OF 0.04 TO 0.08 GALLONS PER SQUARE YARD. RECOMMENDED APPLICATION TEMPERATURE IS 160°F TO 180° F. DO NOT EXCEED 180°F.

DILUTION IS NOT ALLOWED.

THE ENGINEER AND MANUFACTURER'S REPRESENTATIVE WILL APPROVE RATE OF APPLICATION, TEMPERATURE, DISTRIBUTOR SETTINGS, AND AREAS TO BE TREATED BEFORE APPLICATION OF THE TACK COAT.

THE ENGINEER WILL DETERMINE THE ACTUAL APPLICATION IN GALLONS PER SQUARE YARD BY A CHECK ON THE PROJECT.

THE APPLICATION IS CONSIDERED SATISFACTORY WHEN THE ACTUAL RATE IS WITHIN ±10 PERCENT OF THE REQUIRED RATE AND THE MATERIAL IS APPLIED UNIFORMLY WITH NO VISIBLE EVIDENCE OF STREAKING, RIDGING OR PICKUP BY CONSTRUCTION TRAFFIC. THE ENGINEER WILL REQUIRE PROPER CORRECTION WHEN RIDGING, STREAKING, PICKUP OR OTHER NON-UNIFORM COVERAGE IS OBSERVED. CORRECT NON-UNIFORM TACK ONLY IN AREAS OF NON-UNIFORM COVERAGE. DO NOT REAPPLY TACK IN AREAS WHERE THE TACK MEETINGS UNIFORMITY AND APPLICATION REQUIREMENTS.

IF THE COVERAGE IS NOT UNIFORM AND NOT CORRECTED THE TOTAL SQUARE YARDAGE OF NON-UNIFORM APPLICATION WILL BE CONSIDERED NON SPECIFICATION MATERIAL. THE ENGINEER WILL DETERMINE THE NUMBER OF GALLONS (LITERS) FOR NON-PAYMENT BY USING THE APPROVED RATE OF APPLICATION TIMES THE TOTAL SQUARE YARDS (SQUARE METERS) OF NON-UNIFORM APPLICATION.

METHOD OF MEASUREMENT: ALL REQUIREMENTS OF 407.07 APPLY.

BASIS OF PAYMENT: ALL REQUIREMENTS OF 407.08 APPLY.

I:\PROJECTS\PID21810\dm\sheets\21810GN001.dgn 06-NOV-2012 7:48AM ekallo

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

THIS ITEM SHALL BE USED ALONG THE SHOULDERS. MATERIAL SHALL BE LIMITED TO RECLAIMED ASPHALT CONCRETE PAVEMENT.

THE ACTUAL DEPTH USED WILL VARY DEPENDING UPON EXISTING CONDITIONS. FOR ESTIMATING PURPOSES, AN AVERAGE DEPTH OF 1 INCH WILL BE USED. WATER, IF NEEDED, SHALL BE APPLIED AS PER 617 AND INCLUDED UNDER ITEM 617, COMPACTED AGGREGATE, AS PER PLAN.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN **375 CU. YD.**

ITEM 618 - RUMBLE STRIPS, (ASPHALT CONCRETE)

THE FOLLOWING ESTIMATED QUANTITY SHALL BE USED TO CONSTRUCT ITEM 618, RUMBLE STRIPS, (ASPHALT CONCRETE) AS PER STANDARD DRAWING BP-9.1:

ITEM 618 - RUMBLE STRIPS, (ASPHALT CONCRETE) **15 MILE**

TRAFFIC CONTROL

RAISED PAVEMENT MARKERS

RAISED PAVEMENT MARKER SPACING SHALL BE 80 FEET.

PAVEMENT MARKINGS

ENTRANCE AND EXIT MARKINGS SHALL BE LOCATED AND INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-72.20. PLAN DETAILS SHOWING GORE LOCATIONS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM ANY MEASUREMENTS AS NEEDED TO DETERMINE THE LOCATION OF THE MARKINGS.

AUXILIARY MARKINGS SHALL BE LOCATED AND INSTALLED AS PER STANDARD CONSTRUCTION DRAWING TC-71.10.

ITEM 621-RAISED PAVEMENT MARKER REMOVED

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO REMOVE AND DISPOSE OF RPMS.

ITEM 621- RAISED PAVEMENT MARKER REMOVED **1,982 EACH**

PERMANENT PAVEMENT MARKINGS ON BRIDGES

PROPOSED PAVEMENT MARKINGS ON BRIDGES SHALL BE PLACED ON TOP OF EXISTING MARKINGS.

ITEM 632 - DETECTOR LOOP, AS PER PLAN

PRIOR TO PLANING THE PAVEMENT, THE CONTRACTOR SHALL FIELD SURVEY THE LOCATIONS OF THE EXISTING LOOP DETECTORS WITHIN THE PROJECT LIMITS. THE SURVEY SHALL INCLUDE THE LOCATION OF THE LOOP, SIZE OF THE LOOP, OFFSET FROM CURB AND/OR CENTERLINE AND THE LOCATION OF THE STUB. A COPY OF THIS SURVEY SHALL BE GIVEN TO THE PROJECT ENGINEER.

AN ESTIMATED QUANTITY OF ITEM 632 - DETECTOR LOOP, AS PER PLAN HAS BEEN PROVIDED AS A CONTINGENCY WHEN WIRE IS CUT, BROKEN, OR DESTROYED DUE TO PAVEMENT PLANING OPERATIONS.

ALL STOP LINE INDUCTANCE DETECTOR LOOPS SHOWN IN THE PLANS SHALL BE THE POWERHEAD CONFIGURATION SHOWN ON TC-82.10. THE WIDTH SHALL BE AS SPECIFIED ON TC-82.10 AND THE LENGTH SHALL BE AS CURRENTLY CALLED FOR IN THE PLANS. THE STOP LINE DETECTOR LOOPS SHALL NOT BE WIRED TO ANY OTHER LOOPS AND SHALL HAVE ITS OWN DETECTOR CHANNEL. THE LOCATION OF THESE LOOPS SHALL BE SUCH THAT THE POWERHEAD IS LOCATED AT THE STOP LINE, NOT PAST IT.

ALL DILEMMA ZONE INDUCTANCE DETECTOR LOOPS CALLED FOR IN THE PLANS SHALL BE THE ANGULAR DESIGN DETECTION (ADD) LOOP AS SHOWN ON TC-82.10. DIMENSIONS SHALL BE AS SPECIFIED ON TC-82.10. SYSTEM LOOPS SHALL BE AS DEPICTED IN THE PLANS.

ALL STOP LINE DETECTION SHALL BE TESTED FOR A BICYCLE TARGET AND ALL DILEMMA DETECTION ZONES SHALL BE TESTED FOR A MOTORCYCLE TARGET.

WHEN REPLACING THE LOOP DETECTORS, THE LOOP DETECTOR WIRE SHALL BE REPLACED TO THE PULL BOX OR POLE, WHICHEVER IS APPLICABLE. UNDER ITEM 632 AND TC-82.10. THE NEW CABLE SPLICE KITS SHALL BE INCLUDED IN THIS PAY ITEM.

THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER, 7 DAYS PRIOR TO PLANING THROUGH AN INTERSECTION TO ADJUST SIGNAL OPERATION AS NEEDED. THE DETECTOR LOOPS SHALL BE PLACED IN THE SURFACE COURSE.

REFER TO PLAN SHEETS FOR APPROXIMATE LOCATION. THESE LOCATIONS ARE FROM RECORD PLANS AND FIELD VERIFICATION OF LOOPS IS NEEDED.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

ITEM 632 - DETECTOR LOOP, AS PER PLAN **11 EACH**

DETECTOR LOOP LOCATIONS:

REF.	LOCATIONS:	6' X 20'			
		LOOP SIZE			
		EACH			
L-1	RAMP A (DENISON)	2			
L-2	RAMP E (FULTON)	2			
L-3	RAMP C (FULTON)	2			
L-4	RAMP D (W. 25 TH)	3			
L-5	RAMP G (W. 25 TH)	2			

ITEM 623 - CONSTRUCTION LAYOUT STAKES, AS PER PLAN

PRIOR TO THE PLANING OF PAVEMENT BENEATH ALL OVERHEAD STRUCTURES, A REGISTERED SURVEYOR SHALL MEASURE THE VERTICAL CLEARANCES AND DOCUMENT THE MEASUREMENTS ON AN APPROVED OHIO DEPARTMENT OF TRANSPORTATION FORM AVAILABLE FROM THE DISTRICT BRIDGE OFFICE. THE MEASUREMENTS SHALL BE TAKEN AT THE LOCATIONS INDICATED ON THE APPROVED ODOT FORM AND SUBMITTED TO THE PROJECT ENGINEER. AFTER THE NEW PAVING HAS BEEN COMPLETED, A REGISTERED SURVEYOR AGAIN SHALL TAKE VERTICAL CLEARANCE MEASUREMENTS AT LOCATIONS INDICATED ON THE APPROVED ODOT FORM. THESE FINAL MEASUREMENTS SHALL BE RECORDED ON THE FORM AND SUBMITTED TO THE PROJECT ENGINEER AND THE DISTRICT BRIDGE ENGINEER. THE RECORD SHALL BEAR THE STAMP OR SEAL OF THE REGISTERED SURVEYOR WHO HAS TAKEN THE MEASUREMENTS AND WILL VERIFY THAT PRE-CONSTRUCTION VERTICAL CLEARANCES HAVE BEEN PRESERVED.

IN ADDITION TO ITEM 623 AND THE ITEMS OUTLINED ABOVE, THE CONTRACTOR SHALL PROVIDE FIELD SURVEYS FOR ALL ASPHALT TRANSITIONS. SEE DETAIL ON SHEET 71. SAID SURVEY SHALL CONSIST OF ELEVATIONS TAKEN AT THE BRIDGE EXPANSION JOINT (WHERE APPLICABLE) AND EXTENDING AS SHOWN ON THE DETAILS. ELEVATIONS AFTER RESURFACING SHALL BE TAKEN ALONG EACH EDGE LINE AND LANE LINE AND SHALL BE TAKEN AT THE FOLLOWING DISTANCES: 0 FEET, 5 FEET, 10 FEET, 25 FEET, THEN EVERY 25 FEET AND AT THE END OF THE TRANSITION. THE CONTRACTOR SHALL PLOT THESE AT EACH LOCATION AT A SCALE OF 1 INCH EQUALS 10 FOOT HORIZONTALLY AND 1 INCH EQUALS 2 FOOT VERTICALLY. THIS SURVEY SHALL BE DONE AND THE PLOTTED RESULTS GIVEN TO THE ENGINEER AS SOON AS POSSIBLE AFTER THE PLACEMENT OF THE SURFACE COURSE.

I:\PROJECTS\PID21810\dm\sheet\21810GN01.dgn 06-NOV-2012 7:50AM ekallo

GENERAL

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THRU VEHICULAR ACCESS AT ALL TIMES THROUGHOUT THE PROJECT AREA. THE PROJECT SHALL BE CONSTRUCTED IN PHASES IN ORDER TO MINIMIZE TRAFFIC DISRUPTION AND INCONVENIENCE TO THE GENERAL PUBLIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL EQUIPMENT, MATERIALS AND MANPOWER NEEDED TO ADEQUATELY MAINTAIN TRAFFIC AS PROVIDED FOR IN THE PLANS AND SPECIFICATIONS.

THE CONTRACTOR IS REMINDED THAT, IN THE CONDUCT OF THIS PROJECT, HIS SEQUENCE OF OPERATIONS SHALL BE PLANNED IN SUCH A WAY AS TO MINIMIZE THE NUMBER OF LANE REDUCTIONS AND/OR LANE WIDTH REDUCTIONS REQUIRED TO MAINTAIN TRAFFIC THROUGH THE PROJECT.

PERMITTED LANE CLOSURES SHALL BE AS SHOWN ON THE "SCHEDULE OF THRU LANES TO BE MAINTAINED TABLE." THE TIME LIMITS SHOWN IN THIS TABLE SHALL BE ADHERED TO OR LIQUIDATED DAMAGES WILL BE ASSESSED.

NIGHT VEST

ALL OF THE CONTRACTORS AND SUB-CONTRACTORS PERSONNEL WORKING DURING THE HOURS OF DARKNESS SHALL WEAR A 100% SILVER REFLECTIVE SAFETY VEST. THE SAFETY VEST SHALL BE PROVIDED BY THE CONTRACTOR. THE VEST MAY HAVE SEVERAL LIME OR ORANGE STRIPES ON IT.

MAINTENANCE OF TRAFFIC CONTROL ZONES

THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THE SIGNS, DRUMS OR CONES SPECIFIED IN THE STANDARD DRAWINGS. WHEN THE CONTRACTOR IS NOTIFIED OF DEFICIENCIES HE SHALL CORRECT THE DEFICIENCIES AS SOON AS POSSIBLE.

CONTRACTOR'S EQUIPMENT - OPERATION AND STORAGE

VEHICLES AND EQUIPMENT SHALL ALWAYS MOVE WITH, AND NOT ACROSS OR AGAINST THE FLOW OF TRAFFIC. VEHICLES AND OTHER EQUIPMENT SHALL NOT PARK OR STOP EXCEPT WITHIN DESIGNATED WORK AREAS; AND SHALL NOT ENTER AND LEAVE WORK AREAS IN A MANNER WHICH WILL BE HAZARDOUS TO, OR INTERFERE WITH THE NORMAL TRAFFIC FLOW. PERSONAL VEHICLES WILL NOT BE PERMITTED TO PARK WITHIN THE RIGHT-OF-WAY EXCEPT IN SPECIFIC AREAS DESIGNATED BY THE ENGINEER.

EQUIPMENT, VEHICLES AND MATERIALS SHALL NOT BE STORED OR PARKED WITHIN 30 FEET OF THE TRAVELED WAY UNLESS 6 FEET BEHIND PCB OR GUARDRAIL.

ALL WORK VEHICLES AND EQUIPMENT THAT ENTERS THE WORK ZONE MORE THAN ONCE A DAY MUST BE EQUIPPED WITH AT LEAST ONE FLASHING, ROTATING, OR OSCILLATING AMBER LIGHT THAT IS VISIBLE IN ALL DIRECTIONS OF TRAFFIC FOR AT LEAST ONE QUARTER OF A MILE, DAY OR NIGHT.

MAINTAINING VEHICULAR TRAFFIC

GENERAL PROVISIONS

1. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE "SCHEDULE OF THRU LANES TO BE MAINTAINED" DESCRIBED ON SHEET NO. 23. THE CONTRACTOR SHALL SET UP AND OPERATE HIS EQUIPMENT IN SUCH A MANNER AS TO MINIMIZE ENCROACHMENT UPON THE TRAVELED WIDTH OF PAVEMENT.
2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER, THE RESPONSIBLE LAW ENFORCEMENT AGENCY AND THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 12 PUBLIC INFORMATION OFFICER ((216) 584-2007) NOT LESS THAN SEVENTY-TWO (72) HOURS PRIOR TO A SCHEDULED DISRUPTION OF TRAFFIC.
3. NIGHTTIME WORK SHALL BE PERMITTED IN ACCORDANCE WITH THESE PLANS AND NOTES. THE CONTRACTOR SHALL PROVIDE FLOOD LIGHTING OF THE WORK AREA IN ORDER TO ASSURE THE SAFEST CONDITIONS DURING NIGHTTIME WORK. A LIGHTING PLAN FOR NIGHTTIME OPERATIONS SHALL BE PRESENTED TO AND APPROVED BY THE ENGINEER.
4. THE CONTRACTOR SHALL FURNISH, ERECT AND MAINTAIN ALL NEW WARNING AND INFORMATION SIGNS NECESSARY FOR MAINTAINING TRAFFIC. THE CONTRACTOR SHALL DETERMINE WHAT SIGNS ARE NEEDED AND ADVISE THE ENGINEER TWO (2) WEEKS IN ADVANCE OF HIS DETAILED PLANS.

SEE THE OMUTCD AND STANDARD DRAWINGS FOR THE MINIMUM SIGNAGE REQUIRED.

CONSTRUCTION TRAFFIC

ALL CONSTRUCTION TRAFFIC SHALL USE ACCEPTABLE TRUCK ROUTES TO ACCESS THE CONSTRUCTION AREA. USE OF LOCAL RESIDENTIAL STREETS IS STRICTLY PROHIBITED UNLESS ALLOWED IN WRITING BY THE LOCAL ENFORCEMENT AUTHORITY.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ANY DAMAGE TO TURN AROUNDS LOCATED WITHIN THE PROJECT LIMITS. ANY DAMAGE CAUSED BY THE CONTRACTOR'S ACTIONS SHALL BE REPAIRED AT NO COST TO THE STATE.

MAJOR WORK ITEMS

THE FOLLOWING MAJOR WORK ITEMS WILL REQUIRE TRAFFIC MAINTENANCE WHICH SHALL BE INCORPORATED INTO THE CONTRACTORS SEQUENCE OF OPERATIONS.

- A. REMOVAL OF EXISTING RPM'S
- B. PLANE ASPHALT CONCRETE
- C. PLACE ASPHALT CONCRETE
- D. PLACE PROPOSED PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS
- E. RUMBLE STRIPS

TRAFFIC CONTROL MATERIALS

A. SIGNS

SIGN DIMENSIONS AND SPECIFICATIONS, INCLUDING LETTER SIZES, SHALL BE AS PROVIDED IN THE "MANUAL", OR IN SIGN DESIGN DRAWINGS PROVIDED BY THE DEPARTMENT OF TRANSPORTATION. THE SIGNS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER PRIOR TO THE START OF THE PROJECT.

ALL SIGNS SHALL HAVE A REFLECTORIZED BACKGROUND OF REFLECTIVE MATERIALS AS DESCRIBED IN THE "MANUAL".

B. SIGN SUPPORTS

TEMPORARY SIGN SUPPORTS SHALL BE AS SHOWN ON MT-105.10 AND MT-105.11.

C. DRUMS

DRUMS SHALL BE IN ACCORDANCE WITH PERTINENT SECTIONS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL PERMANENT LANE CLOSURES SHALL BE DELINEATED WITH DRUMS SPACED AT 50 FEET CENTER TO CENTER. ALL COSTS FOR INSTALLING, MAINTAINING AND SUBSEQUENT REMOVAL OF SAID DRUMS SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

D. LIGHTING DEVICES

FLASHERS SHALL BE 12 VOLT BATTERY OPERATED MODELS WITH 7 INCH DIAMETER YELLOW LENSES ILLUMINATED BY RAPID INTERMITTENT FLASHES OF SHORT DURATION AND SHALL BE PLACED ON ALL SIGNS AT ALL TIMES.

CONTINUOUS BURN LIGHTS SHALL BE 12 VOLT BATTERY OPERATED MODELS WITH MINIMUM 7 INCH DIAMETER YELLOW LENSES.

E. FLASHING ARROW PANEL

WHENEVER ANY PART OF THE TRAVELED SURFACE IS CLOSED, THE MOTORIST SHALL BE WARNED AND DIVERTED BY THE CONTRACTOR THROUGH THE USE OF ONE FLASHING ARROW PANEL FOR EACH LANE CLOSED. THE CONTRACTOR SHALL REFER TO STANDARD DRAWING MT-35.10 AND THE PROVISION SET FORTH IN OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS FOR ALL INFORMATION REGARDING FURNISHING, MAINTAINING, AND USE OF FLASHING ARROW PANEL. IF THE FLASHING ARROW PANEL IS WITHIN 300 FT OF A RESIDENCE OR ON A SURFACE STREET, A SOLAR POWERED FLASHING ARROW PANEL SHALL BE USED. PAYMENT FOR THE ABOVE SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614, MAINTAINING TRAFFIC.

I:\PROJECTS\PID21810\dm\sheet\21810\MN001.dgn 02-OCT-2012 7:35AM ekallo

CALCULATED
CHECKED

MAINTENANCE OF TRAFFIC GENERAL NOTES

CUY-71-14.96

ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED IN THIS NOTE WILL NOT GENERALLY BE PERMITTED AT PROJECT COST UNLESS PRIOR APPROVAL HAS BEEN OBTAINED FROM THE ENGINEER. LEOS SHOULD NOT BE USED WHERE THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) INTENDS THAT FLAGGERS BE USED.

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

- FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED. IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.
- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.
- DURING A TRAFFIC SIGNAL INSTALLATION OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).
- ROUTING PATROLLING THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) AS SPECIFIED IN THE PLANS.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORISTS ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A LIST OF THE APPROPRIATE LAW ENFORCEMENT AGENCY(S), INCLUDING ADDRESS AND TELEPHONE NUMBER.

THE LEO SHOULD REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING THE SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF THE SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHOULD NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF THE SHIFT.

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 QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - LAW ENFORCEMENT OFFICER W/PATROL CAR FOR ASSISTANCE **600 HRS**

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

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL

PLANED SURFACES

THE DURATION OF TIME BETWEEN PLANING THE ASPHALT AND PLACING THE ASPHALT OVERLAY SHALL BE KEPT TO A MINIMUM. IN NO INSTANCE SHALL THIS TIME EXCEED 14 CALENDAR DAYS. THIS IS TO ENSURE THAT THE POTENTIAL DEGRADATION OF THE EXPOSED PAVEMENT DUE TO TRAFFIC IS KEPT TO A MINIMUM.

ITEM 630 - SIGNING MISC.: ADDITIONAL SIGNS, GROUND MOUNTED, AS DIRECTED BY THE ENGINEER

WHEN ADDITIONAL SIGNING IS NEEDED TO MAINTAIN TRAFFIC, THE CONTRACTOR SHALL FURNISH THE SIGN OR SIGNS AS DIRECTED BY THE ENGINEER. THESE SIGNS SHALL BE GROUND MOUNTED AND MEET ALL THE SPECIFICATIONS OF THE PLAN, PROPOSAL AND CURRENT YEAR CMS.

PAYMENT FOR THIS ITEM SHALL INCLUDE BUT NOT BE LIMITED TO THE COST TO FURNISH AND ERECT THE SIGN, INCLUDING DRIVE POSTS OR OTHER APPROVED METHODS OF SUPPORT, MAINTAINING THE SIGN AND REMOVAL OF THE SIGN. THE FOLLOWING QUANTITY SHALL BE CARRIED TO THE GENERAL SUMMARY:

ITEM 630 - SIGNING MISC.: ADDITIONAL SIGNS, GROUND MOUNTED, AS DIRECTED BY THE ENGINEER **300 SQ. FT.**

APPLICATION FOR USE OF WEIGHTED CHANNELIZER (GRABBER CONE)

THE WEIGHTED CHANNELIZER MAY BE USED ON THIS PROJECT AS DESCRIBED BELOW:

THE WEIGHTED CHANNELIZER SHALL BE PREDOMINANTLY ORANGE IN COLOR AND SHALL BE MADE OF A LIGHTWEIGHT, FLEXIBLE, AND DEFORMABLE MATERIAL. THEY SHALL BE AT LEAST 42 INCHES IN HEIGHT WITH A WEIGHTED BASE. THEY MAY HAVE A "HANDLE" OR LIFTING DEVICE WHICH EXTENDS ABOVE THE 42" MINIMUM HEIGHT.

THE MARKINGS ON THE WEIGHTED CHANNELIZER SHALL BE HORIZONTAL, CIRCUMFERENTIAL, ALTERNATING ORANGE AND WHITE RETROREFLECTIVE STRIPES 4 INCHES WIDE. EACH WEIGHTED CHANNELIZER SHALL HAVE A MINIMUM OF TWO ORANGE AND TWO WHITE STRIPES. ANY NONRETRO- REFLECTIVE SPACES BETWEEN THE HORIZONTAL ORANGE AND WHITE STRIPES, SHALL NOT EXCEED 2 INCHES WIDE. THE WEIGHTED CHANNELIZER SHALL HAVE A 4-INCH MINIMUM WIDTH, REGARDLESS OF ORIENTATION.

USE OF WEIGHTED CHANNELIZERS ON ODOT MAINTAINED HIGHWAY SHALL BE AS FOLLOWS:

ON FREEWAYS AND MULTILANE HIGHWAYS USE OF WEIGHTED CHANNELIZERS ON FREEWAYS AND MULTILANE HIGHWAYS SHALL BE LIMITED TO SHORT-TERM OPERATION, GENERALLY TWELVE HOURS OR LESS, FOR EITHER DAY OR NIGHT. UPON COMPLETION OF WORK WITHIN THE ABOVE NOTED TIME PERIOD, THE WEIGHTED CHANNELIZERS SHALL BE REMOVED. THE WEIGHTED CHANNELIZERS MAY AGAIN BE PLACED ON THE HIGHWAY WHEN THE WORK IS TO RESUME ON THE FOLLOWING DAY OR NIGHT. ANY LANE CLOSURE USING CHANNELIZATION DEVICES, EXPECTED TO REMAIN FOR MORE THAN TWELVE HOURS, SHALL REQUIRE THE USE OF DRUMS OR BARRIERS.

WHEN USED AT NIGHT, WEIGHTED CHANNELIZERS SHALL ONLY BE PLACED IN THE "TANGENT AREA." THE "TANGENT AREA" IS DEFINED AS THE AREA AFTER THE TRANSITION TAPER WHERE THE WORK TAKES PLACE. DRUMS SHALL BE USED IN THE TRANSITION TAPERS FOR NIGHT OPERATIONS.

MAXIMUM SPACING OF THE WEIGHTED CHANNELIZER SHALL BE 40 FT.

STEPS SHOULD BE TAKEN TO ENSURE THAT THE WEIGHTED CHANNELIZERS WILL NOT BE BLOWN OVER OR DISPLACED BY WIND OR MOVING TRAFFIC. BALLASTS SHOULD NOT PRESENT A HAZARD IF THE WEIGHTED CHANNELIZERS ARE INADVERTENTLY STRUCK, NOR SHOULD THEY AFFECT THE VISIBILITY OF THE WEIGHTED CHANNELIZERS. ALL BALLASTS USED SHOULD BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

SUSPENSION OF WORK

IF THE CONTRACTOR FAILS TO COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AS SET FORTH IN THESE PLANS OR WITH PROVISIONS OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, THE ENGINEER SHALL SUSPEND WORK UNTIL THE CONTRACTOR COMPLIES WITH THE NECESSARY REQUIREMENTS.

I:\PROJECTS\PID21810\dmn\sheet\21810.mfd01.dgn 06-NOV-2012 7:52AM ekallo

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC AS PER PLAN

THIS ITEM SHALL BE USED TO PROVIDE TEMPORARY ASPHALT RAMPS FOR TRANSVERSE DISCONTINUITIES. RAMPING SHALL BE PLACED AT THE RATE OF 1" PER 10 FT OR TO BE USED AS DIRECTED BY THE ENGINEER.

TEMPORARY ASPHALT RAMPS SHALL BE REMOVED AS PART OF THIS ITEM.

ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN **100 CU. YD.**

WORK ZONE PAVEMENT MARKINGS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY, TO BE USED AS DIRECTED BY THE ENGINEER, TO PLACE WORK ZONE PAVEMENT MARKINGS AFTER THE CONTRACTOR HAS PLANNED AND AFTER THE SURFACE COURSE HAS BEEN PLACED.

- ITEM 614 - WORK ZONE EDGE LINE, CLASS I, 642 PAINT **62.40 MILE**
- ITEM 614 - WORK ZONE LANE LINE, CLASS I, 642 PAINT **38.34 MILE**
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT **40,790 FT.**
- ITEM 614 - WORK ZONE STOP LINE, CLASS I, 642 PAINT **458 FT.**
- ITEM 614 - WORK ZONE CROSSWALK LINE, CLASS I, 642 PAINT **2,444 FT.**
- ITEM 614 - WORK ZONE ARROW, CLASS I, 642 PAINT **54 EACH**
- ITEM 614 - WORK ZONE DOTTED LINE, CLASS I, 642 PAINT **5524 FT.**

WORKSITE TRAFFIC SUPERVISOR

SUBJECT TO APPROVAL OF THE ENGINEER, THE CONTRACTOR SHALL EMPLOY AND IDENTIFY (SOMEONE OTHER THAN THE SUPERINTENDENT) A CERTIFIED WORKSITE TRAFFIC SUPERVISOR (WTS) BEFORE STARTING WORK IN THE FIELD. THE WTS MAY BE CERTIFIED FROM ONE OF THE FOLLOWING ORGANIZATIONS:

1. AMERICAN TRAFFIC SAFETY SERVICE ASSOCIATION (ATSSA), PHONE NUMBER 1-800-272-8772, CERTIFIED TRAFFIC CONTROL SUPERVISOR (TCS).
2. NATIONAL HIGHWAY INSTITUTE, DESIGN AND OPERATION OF WORK ZONE TRAFFIC CONTROL, PHONE NUMBER 1-703-235-0528.
3. THE OHIO CONTRACTORS ASSOCIATION, TRAFFIC CONTROL SUPERVISOR (OCA/TCS) WORK ZONE CLASS, ONLY IF TAKEN AFTER MAY 5, 2004, PHONE NUMBER 1-614-599-7915.
4. OHIO LABORERS' TRAINING, TRAFFIC CONTROL SUPERVISORS CLASS, PHONE NUMBER 1-740-599-7915.

A COPY OF EACH WTSS CERTIFICATION AND 24-HOUR CONTACT INFORMATION SHALL BE PROVIDED TO THE ENGINEER AT THE PRECONSTRUCTION CONFERENCE. IF THE DESIGNATED WTS WILL NOT BE AVAILABLE FULL TIME (24/7) THE CONTRACTOR MAY DESIGNATE AN ALTERNATE WTS TO BE AVAILABLE WHEN THE PRIMARY IS OFF DUTY. EACH WTS SHALL HAVE A CURRENT WTS CERTIFICATION (WITH AN EXPIRATION DATE NO MORE THAN 5 YEARS FROM THE DATE OF ISSUE) FROM ANY OF THE APPROVED ORGANIZATIONS.

THE WTS POSITION HAS THE RESPONSIBILITY OF MONITORING AND CORRECTING TRAFFIC CONTROL DEFICIENCIES FOR THE ENTIRE WORK ZONE. THE DUTIES OF THE WTS ARE AS FOLLOWS:

1. BE AVAILABLE ON A 24-HOUR PER DAY BASIS, AND BE ABLE TO BE ON SITE FOR ALL EMERGENCY TRAFFIC CONTROL NEEDS WITHIN ONE HOUR OF NOTIFICATION BY POLICE OR PROJECT STAFF AND BE PREPARED TO EFFECT CORRECTIVE MEASURES IMMEDIATELY ON EXISTING WORK ZONE TRAFFIC CONTROL DEVICES.
2. ATTEND PRECONSTRUCTION MEETING AND ALL PROJECT MEETINGS WHERE TRAFFIC CONTROL MANAGEMENT IS DISCUSSED.
3. BE AVAILABLE FOR MEETINGS OR DISCUSSIONS WITH THE ENGINEER UPON REQUEST OR WITHIN 36 HOURS.
4. BE AWARE OF, AND COORDINATE IF NECESSARY, ALL TRAFFIC CONTROL OPERATIONS, INCLUDING THOSE OF SUBCONTRACTORS AND SUPPLIERS.
5. COORDINATE PROJECT ACTIVITIES WITH ALL LAW ENFORCEMENT OFFICERS (LEOS). A WTS SHALL ALSO BE THE MAIN CONTACT PERSON WITH THE LEOS WHILE THEY ARE ON THE PROJECT.
6. COORDINATE MEETINGS WITH ODOT PERSONNEL, LEOS AND OTHER APPLICABLE ENTITIES BEFORE EACH PLAN PHASE SWITCH TO DISCUSS WORK ZONE TRAFFIC CONTROL.
7. ENSURE COMPLIANCE WITH THE CONTRACT DOCUMENTS FOR SIGNS, BARRICADES, TEMPORARY CONCRETE BARRIER, PAVEMENT MARKINGS, PORTABLE MESSAGE SIGNS, AND OTHER TRAFFIC CONTROL DEVICES ON A DAILY BASIS; AND FACILITATE ANY CORRECTIVE ACTION NECESSARY.
8. NOTIFY THE CONTRACTOR OF THE NEED FOR CLEANING AND MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES, INCLUDING THE COVERING AND REMOVAL OF INAPPLICABLE SIGNS.
9. INSPECT, EVALUATE, PROPOSE NECESSARY MODIFICATIONS TO, AND DOCUMENT THE EFFECTIVENESS OF, THE TRAFFIC CONTROL DEVICES AND/OR TRAFFIC OPERATIONS ON A DAILY BASIS (7 DAYS A WEEK). IN ADDITION, A WEEKLY NIGHT INSPECTION OF THE WORK ZONE SETUP FOR DAYTIME WORK OPERATIONS; AND ONE DAYTIME INSPECTION PER WEEK FOR NIGHTTIME PROJECTS. THIS SHALL INCLUDE (BUT NOT BE LIMITED TO) DOCUMENTATION ON THE FOLLOWING PROJECT EVENTS:

- a. INITIAL TRAFFIC CONTROL SETUP (DAY AND NIGHT REVIEW).
- b. DAILY TRAFFIC CONTROL SETUP AND REMOVAL.
- c. WHEN CONSTRUCTION STAGING CAUSES A CHANGE IN THE TRAFFIC CONTROL SETUP.
- d. CRASH OCCURRENCES WITHIN THE CONSTRUCTION AREA.
- e. REMOVAL OF TRAFFIC CONTROL DEVICES AT THE END OF A PHASE OR PROJECT.
- f. ALL OTHER EMERGENCY TRAFFIC CONTROL NEEDS.

10. COMPLETE THE DEPARTMENT APPROVED LONG TERM INSPECTION FORM (CA-D-8) AFTER EACH INSPECTION AS REQUIRED IN # 9 AND SUBMIT IT TO THE ENGINEER THE FOLLOWING WORK DAY. THESE REPORTS SHALL INCLUDE A CHECKLIST OF ALL TRAFFIC CONTROL MAINTENANCE ITEMS TO BE REVIEWED. A COPY OF THE FORM WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING. ANY DEFICIENCIES OBSERVED SHALL BE NOTED, ALONG WITH RECOMMENDED CORRECTIVE ACTIONS AND THE DATES BY WHICH SUCH CORRECTIONS WERE, OR WILL BE, COMPLETED. A COPY OF THIS DOCUMENT CAN BE FOUND IN THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION INSPECTION FORMS MANUAL DATED 10/15/06 OR CURRENT REVISION.

11. VERIFY THAT ALL FLAGGING OPERATIONS ARE BEING CONDUCTED PER THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

12. HAVE COPIES OF THE ODOT TEMPORARY TRAFFIC CONTROL MANUAL AND APPLICABLE STANDARDS AND SPECIFICATIONS INCLUDED IN THE CONTRACT DOCUMENTS AVAILABLE AT ALL TIMES ON THE PROJECT.

THE DEPARTMENT WILL NOT PAY THE UNIT PRICE BID FOR THE WTS FOR ANY DAY ON WHICH THE CONTRACTOR FAILS TO PERFORM THE DUTIES SET FORTH ABOVE. SHOULD THE CONTRACTOR'S FAILURE TO PERFORM ANY OF THE DUTIES DESCRIBED ABOVE RESULT IN A MAINTENANCE OF TRAFFIC SAFETY ISSUE, THE DEPARTMENT WILL DEDUCT THE PRORATED DAILY AMOUNT FOR ITEM 614 MAINTENANCE OF TRAFFIC FROM THE CONTRACTOR'S NEXT SCHEDULED ESTIMATE.

IF THREE OR MORE FAILURES TO PERFORM THE DUTIES SET FORTH ABOVE OCCUR, THE WTS SHALL BE IMMEDIATELY REMOVED FROM THE WORK IN ACCORDANCE WITH C&MS 108.05.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED FOR THE WORKSITE TRAFFIC SUPERVISOR:

ITEM 614 - WORKSITE TRAFFIC SUPERVISOR **6 MONTH**

ITEM 622 - PORTABLE CONCRETE BARRIER, 32", AS PER PLAN

THESE ITEMS SHALL BE PLACED AS DETAILED IN THE PLAN AND SHALL BE LEFT IN PLACE AT THE CONCLUSION OF THE PROJECT. THEY WILL THEN BECOME THE PROPERTY OF THE STATE.

I:\PROJECTS\PID21810\dm\sheet\21810\m01.dgn 06-10-07 7:56 AM ekallo

ITEM 614 - WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL OR BIDIRECTIONAL), AS PER PLAN

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ONE OF THE FOLLOWING IMPACT ATTENUATORS:

1. THE QUADGUARD CZ. (24 INCHES WIDE SIX-BAY) WORK ZONE IMPACT ATTENUATOR MANUFACTURED BY ENERGY ABSORPTION SYSTEMS, INC., ONE EAST WACKER DRIVE, CHICAGO, IL 60601 (TELEPHONE: 312-467-6750.)

THE LENGTH OF THE SIX-BAY QUADGUARD CZ IS 20'-9". INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING	TITLE	DRAWING AND REVISION DATE	ODOT APPROVAL DATE
QSCZCVR-T4	QUADGUARD CZ SYSTEM FOR CONSTRUCTION ZONES	5/13/99 REV. J	8/27/99
35-40-10	QUADGUARD SYSTEM CONCRETE PAD, CZ, QG	11/19/99 REV. D	8/27/99
35-40-16	QUADGUARD SYSTEM BACKUP ASSEMBLY, CZ, QG	7/30/99 REV. F	8/27/99
354051Z	QUADGUARD CZ SYSTEM NOSE ASSEMBLY, CZ, QG, 24, 30, 36	5/17/99	8/27/99
35-40-18	TRANSITION ASSEMBLY, 4 OFFSET, QG	6/25/99 REV. F	8/27/99
35400260	QUADGUARD SYSTEM PCMB ANCHOR ASSEMBLY	11/19/97 REV. C	8/27/99

2. THE TRACC (TRINITY ATTENUATING CRASH CUSHION) MANUFACTURED BY TRINITY INDUSTRY, 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-4373).

THE TRACC IS 21'-0" LONG AND 2'7" WIDE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING	TITLE	DRAWING AND REVISION DATE	ODOT APPROVAL DATE
SS450	CRASH-CUSHION ATTENUATING TERMINAL PLAN, ELEVATION & SECTIONS	3/12/99 REV. 1	8/27/99

DRAWING	TITLE	DRAWING AND REVISION DATE	ODOT APPROVAL DATE
SS455	TRACC TRANSITION TO W-BEAM MEDIAN BARRIER PLAN, ELEVATION & SECTIONS	2/18/99	8/27/99
SS461	TRACC TRANSITION TO CONCRETE SAFETY SHAPE BARRIER PLAN, ELEVATION & SECTIONS	6/30/99 REV. 1	8/27/99
SS462	TRACC TRANSITION TO CONCRETE BARRIER SINGLE SLOPE PLAN, ELEVATION & SECTIONS	6/30/99	8/27/99

3. THE BARRIER SYSTEMS, INC. TAU-II IMPACT ATTENUATOR, DISTRIBUTED BY ROAD SYSTEMS, INC., SALES SUPPORT, 2183 ELM TRACE, AUSTINTOWN, OHIO 44515 (TELEPHONE: 330-799-9291).

THE TAU-II IS A PARALLEL 8-BAY UNIT 24'-0" LONG AND 35" WIDE. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DRAWING	TITLE	DRAWING AND REVISION DATE	ODOT APPROVAL DATE
A040416	UNIVERSAL TAU-II PARTS LIST	4/22/04	10/16/04
A040420	UNIVERSAL TAU-II FOUNDATION, FLUSH MOUNT BACKSTOP	4/28/04	10/16/04
A040105	UNIVERSAL TAU-II FOUNDATION, PCB BACKSTOP (REFERENCED ON A04020)	1/07/04	10/16/04
B040239	APPLICATION, FLUSH MOUNT BACKSTOP (TYPICAL FOR PARALLEL 60 MPH UNIT)	4/21/04	10/16/04

THESE ITEMS SHALL BE PLACED AS DETAILED IN THE PLAN AND SHALL BE LEFT IN PLACE AT THE CONCLUSION OF THE PROJECT. THEY WILL THEN BECOME THE PROPERTY OF THE STATE.

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, AND REMOVE WHEN NO LONGER NEEDED A PORTABLE CHANGEABLE MESSAGE SIGN(S). THE PCMS SHALL BE OF THE TYPE SHOWN ON THE LIST OF APPROVED PCMS MAINTAINED BY THE DIRECTOR. THE PCMS SHALL BE A CLASS I OR II TYPE UNIT.

THE PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE MOUNTED ON A TRAILER. THE LOCATION OF THE PCMS SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS UNIT SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS WILL BE OFF.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS.

THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER THE SOFTWARE NECESSARY TO CONTROL THE PCMS REMOTELY.

NO FLIP DISK UNITS ARE ALLOWED. AT THE DIRECTION OF THE ENGINEER THE PCMS MAY BE REMOVED FOR PERIODS OR TIMES WHEN NOT IN USE. NO PAYMENT WILL BE MADE FOR THESE TIMES (EX. WINTER MONTHS).

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC AND THE ENTIRE COST TO CONTROL TRAFFIC ACCRUED BY THE DEPARTMENT WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24 HOURS PER DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE BID PER SIGN MONTH FOR EACH ITEM 614 PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

THERE SHALL BE TWO CLASS I OR II CHANGEABLE MESSAGE SIGNS AT 6 MONTHS EACH.

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 365 DAY

I:\PROJECTS\PID21810\dm\sheet\21810\N001.dgn 02-OCT-2012 7:37AM ekallo

CALCULATED CHECKED MAINTENANCE OF TRAFFIC GENERAL NOTES CUY-71-14.96 22/72

SCHEDULE OF THROUGH LANES TO BE MAINTAINED

Location	Lane Reductions		Permitted Ramp Closures			Half Width Ramp Paving
	1 Lane Closure	2 Lane Closure	Yes/No	Short Term Closure		
				Weekdays	Weekends	
IR-71 4 Lanes	Weekday ♦	Weekday ♦				
	Weekend ♦	Weekend ♦				
IR-71 3 Lanes	Weekday ♦	Weekday ♦				
	Weekend ♦	Weekend ♦				
IR-71 2 Lanes	Weekday ♦	NA				
	Weekend ♦	NA				
All One Lane Ramps			NO	NO	NO	7 pm-6 am
All Two Lane Ramps			NO	NO	NO	7 pm-6 am
## Ramp F, Ramp B, Lane H, Lane J Between Entrance/Exit Ramps			YES	7 pm-6 am	7 pm-6 am	7 pm-6 am

♦ - ALL LANE CLOSURES LISTED ABOVE MAY ONLY BE IMPLEMENTED AT THE TIMES PERMITTED BY THE "DISTRICT 12, PERMITTED LANE CLOSURE TIMES" LIST, WHICH IS LOCATED ON THE ODOT WEBSITE AT:

www.dot.state.oh.us/districts/D12/HighwayManagement/Pages/PermittedLaneClosures.aspx

THE LATEST REVISION, AT 14 DAYS PRIOR TO THE BID DATE, SHALL BE IN EFFECT FOR THIS PROJECT. NO LANE OR SHOULDER CLOSURES SHALL BE IN PLACE WHEN NO WORK IS BEING PERFORMED.

- DETOURED TRAFFIC SHALL USE EXIT AND ENTRANCE RAMPS. A LEO SHALL BE PRESENT AT THE TOP OF THE RAMPS TO FACILITATE TRAFFIC. TWO LANE SECTIONS SHALL UTILIZE HALF WIDTH RAMP PAVING.

ROAD USER COSTS/SHORT TERM LANE CLOSURES

SHORT TERM LANE CLOSURES ARE THOSE WHICH ARE PERMITTED BY THE "SCHEDULE OF THRU LANES TO BE MAINTAINED" TABLE.

THESE TIMES SHALL NOT BE REVISED WITHOUT PRIOR APPROVAL FROM THE DISTRICT 12 WORK ZONE TRAFFIC CONTROL ENGINEER.

IF SHORT TERM LANE CLOSURES ARE IN PLACE OUTSIDE THE SPECIFIED TIMES, THE CONTRACTOR WILL BE ASSESSED ROAD USER COSTS IN THE AMOUNT OF \$75.00 PER MINUTE SHALL BE ASSESSED TO THE CONTRACTOR FOR EACH MINUTE THE LANE REMAINS CLOSED.

SHORT TERM LANE CLOSURES SHALL ONLY BE IMPLEMENTED WHEN WORK IS BEING CONTINUOUSLY PERFORMED. THE CLOSURE SHALL BE REMOVED AS SOON AS POSSIBLE AFTER WORK HAS STOPPED.

HOLIDAY CLOSURES

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

CHRISTMAS NEW YEARS MOTHERS DAY
MEMORIAL DAY FOURTH OF JULY EASTER
LABOR DAY THANKSGIVING

THE PERIOD OF TIME THAT THE LANES ARE TO BE 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:

DAY OF THE WEEK TIME ALL LANES MUST BE OPEN TO TRAFFIC

SUNDAY	12:00N	FRIDAY	THROUGH 12:00N	MONDAY
MONDAY	12:00N	FRIDAY	THROUGH 12:00N	TUESDAY
TUESDAY	12:00N	MONDAY	THROUGH 12:00N	WEDNESDAY
WEDNESDAY	12:00N	TUESDAY	THROUGH 12:00N	THURSDAY
THURSDAY	12:00N	WEDNESDAY	THROUGH 12:00N	MONDAY
FRIDAY	12:00N	THURSDAY	THROUGH 12:00N	MONDAY
SATURDAY	12:00N	FRIDAY	THROUGH 12:00N	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.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN ACCORDANCE WITH 108.07.

ITEM 614 MAINTAINING TRAFFIC--WORK ZONE SPEED ZONE SIGNS FOR FREEWAY RESURFACINGS

A WORK ZONE SPEED ZONE IS AN APPROVED SPEED LIMIT REVISION TO BE IMPLEMENTED ON THIS PROJECT TO ENHANCE THE SAFETY OF BOTH WORKERS AND MOTORISTS WITHIN THE LIMITS OF ACTIVE WORK ZONES. WORK ZONE SPEED ZONES ARE TEMPORARY IN NATURE AND WILL BE IN EFFECT ONLY DURING THE TIMES WHICH LANE CLOSURES ARE IN PLACE.

IMPLEMENTATION OF WORK ZONE SPEED ZONES IS REQUIRED FOR ALL OPERATIONS REQUIRING THE CLOSURE OF ONE OR MORE LANES TO PERFORM ITEMS OF WORK DETAILED IN THE PLANS, EXCEPT FOR LANE CLOSURES NEEDED TO INSTALL PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS.

THE DISTRICT SPEED ZONE COORDINATOR WILL RETAIN THE OFFICIAL WORK ZONE SPEED LIMIT REVISION AND JUSTIFICATION REPORT. THE PROJECT ENGINEER WILL RETAIN ALL RECORDS FURNISHED BY THE WORKSITE TRAFFIC SUPERVISOR INDICATING WHAT SIGNS WERE IN PLACE ON EVERY DAY THAT WORK ZONE SPEED ZONES WERE IN PLACE.

FURNISH, INSTALL, MAINTAIN, COVER DURING SUSPENSION OF WORK, AND SUBSEQUENTLY REMOVE WORK ZONE SPEED LIMIT (R2-1) (50 MPH SPEED LIMIT) SIGNS AND SUPPORTS WITHIN THE WORK LIMITS IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

COVER OR REMOVE ANY EXISTING SPEED LIMIT SIGNS WITHIN ACTIVE WORK ZONE SPEED ZONES. RESTORE EXISTING SPEED LIMIT SIGNS ONCE LANE CLOSURES ARE NO LONGER IN PLACE.

ERECT OR UNCOVER WORK ZONE SPEED LIMIT SIGNS NO MORE THAN ONE HOUR BEFORE THE START OF WORK REQUIRING LANE CLOSURES. REMOVE OR COVER SPEED REDUCTION AND WORK ZONE SPEED LIMIT SIGNS AND RESTORE EXISTING SPEED LIMIT SIGNS NO LATER THAN ONE HOUR FOLLOWING THE RE-OPENING OF ALL LANES TO TRAFFIC.

ERECT SPEED REDUCTION (SPEED ZONE AHEAD SYMBOL) SIGNS (W3-5) APPROXIMATELY 1250' IN ADVANCE OF THE FIRST WORK ZONE SPEED LIMIT SIGNS. PROVIDE A DUAL INSTALLATION.

ERECT THE FIRST WORK ZONE SPEED LIMIT SIGNS APPROXIMATELY 500' IN ADVANCE OF A LANE CLOSURE AS DEPICTED IN SCD MT-102.30. PROVIDE A DUAL INSTALLATION.

ERECT SIGNS INDICATING THE RESUMPTION OF THE STATUTORY SPEED LIMIT AT THE END OF THE LANE CLOSURE. PROVIDE A DUAL INSTALLATION. THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD CONDITION, PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE RETRO-REFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF CMS 730.19.

MOUNT WORK ZONE SPEED LIMIT SIGNS ON TWO ITEM 630, GROUND MOUNTED SUPPORTS, NO. 3 POSTS, UNLESS MOUNTED ON A TEMPORARY SIGN SUPPORT PER SCD MT 105.10.

OBSERVE ALL REQUIREMENTS OF THE OMUTCD FOR WORK ZONE SPEED LIMIT AND RELATED SIGN SIZES, PLACEMENT, SUPPORTS, ETC WITH TWO EXCEPTIONS: 1) EXPRESSWAY SIZE SPEED LIMIT SIGNS MAY BE USED ON FREEWAYS AND EXPRESSWAYS, IF NECESSARY; 2) THE HEIGHT OF SIGNS MOUNTED ON PORTABLE SUPPORTS SHOULD BE THE HEIGHT REQUIRED FOR GROUND-MOUNTED SIGNS BUT SHALL NOT BE MORE THAN 1 FOOT LOWER THAN THE HEIGHT REQUIRED BY THE OMUTCD, OR AS DIRECTED BY THE ENGINEER. PORTABLE SUPPORTS SHOULD NOT BE USED FOR MORE THAN 3 DAYS.

PROVIDE WORK ZONE SPEED LIMIT SIGNS AND SUPPORTS AND COVER, REMOVE, AND RESTORE EXISTING SPEED LIMIT OR MINIMUM SPEED LIMIT SIGNS INCIDENTAL TO ITEM 614 MAINTAINING TRAFFIC.

THE FOLLOWING TABLE PROVIDES DETAILS ON WORK ZONE SPEED ZONES APPROVED FOR USE ON THIS PROJECT.

WZSZ Revision Number	County & Route	SLM		Phase/ Part & Direction	Approved Speed Limit (mph)	Specific Warranting Conditions and Factors
		From	To			
WZ-65137	CUY-71	Varies ^A	Varies ^A	All	50 MPH	Lane reductions necessary to improve highway.

^AThe begin and end point of the WZSZ will vary within the project limits based on where lane reductions are in place to perform work required by the plans.

ITEM 614 WORK ZONE INCREASED PENALTIES SIGN

R11-H5A-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

UNCOVER OR PLACE WORK INCREASED PENALTIES SIGNS ONCE THE PAVEMENT SURFACE IS UNDER CONSTRUCTION FOR OVERLAY REMOVAL, PAVEMENT REPAIR, AND PLACEMENT OF INTERMEDIATE AND SURFACE COURSES. UNCOVER OR PLACE INCREASED PENALTIES SIGNS NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. DO NOT COVER SIGNS WHEN LANES ARE RE-OPENED TO TRAFFIC SUBJECT TO THE PROVISIONS OF THE "SCHEDULE OF THROUGH LANES TO BE MAINTAINED." COVER OR REMOVE SIGNS BETWEEN OCTOBER 15 AND APRIL 1 EACH YEAR. REMOVE SIGNS ONCE ALL WORK REQUIRING LANE CLOSURES IS COMPLETE.

THE SIGNS SHALL BE DUAL MOUNTED. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-1) SIGN AND THE NEXT SIGN IN THE SEQUENCE. SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY 2 MILES (3 KILOMETERS) THROUGH THE CONSTRUCTION WORK LIMITS.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE REFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF CMS 730.19.

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND RE-ERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

ITEM 614 - WORK ZONE INCREASED PENALTIES SIGN **30 EACH**

ITEM 614 WORKSITE TRAFFIC SUPERVISOR

IN ADDITION TO THE PLAN REQUIREMENTS FOR WORKSITE TRAFFIC SUPERVISOR, COMPLETE A DEPARTMENT-APPROVED INSPECTION FORM FOR EACH DAY A WORK ZONE SPEED ZONE IS IMPLEMENTED. IN THE INSPECTION REPORT, NOTE THE DISPOSITION OF ALL EXISTING AND WORK ZONE SPEED LIMIT SIGNING, INCLUDING THE ACTUAL TIMES THAT THE WORK ZONE SPEED LIMIT SIGNS WERE IN PLACE EACH DAY. SUBMIT THESE DAILY INSPECTION REPORTS TO THE ENGINEER AT LEAST AS OFTEN AS THE WEEKLY INSPECTION REPORTS REQUIRED IN ITEM 9 OF THE WORK ZONE SUPERVISOR PLAN NOTE.

PAVING OPERATION

WHEN SCHEDULING SURFACE COURSE PAVING OPERATIONS FOR ANY SECTION OF ROADWAY OR RAMP, AFTER PAVING IS COMPLETE, THE CONTRACTOR SHALL PROVIDE AT LEAST ONE HOUR WHERE THE NEWLY PLACED MAT CAN COOL PRIOR TO RETURNING TRAFFIC TO ITS NORMAL LANES.

I:\PROJECTS\1021810\dmn\sheets\21810M1001.dgn 15-OCT-2012 2:39PM ek:llc

LOCATION	LOCATIONS		LENGTH FEET	AVERAGE WIDTH FEET	PAVEMENT AREA		254		407		424	
	STATION				SQ. FT.	SQ. YD.	SQ. YD.	SQ. YD.	GAL.	CU. YD.		
	FROM	TO										
I.R.-71 N.B.	865+00.00	867+24.40	224.40	68	15259	1695	1695		169.5	47.1		
	867+24.40	868+24.40	100.00	74	7400	822	822		82.2	22.8		
	868+24.40	870+00.00	175.60	80	14048	1561	1561		156.1	43.4		
	870+00.00	878+64.42	864.42	88	76069	8452	8452		845.2	234.8		
	878+64.42	931+57.16	5292.74	68	359906	39990	39990		3999.0	1110.8		
	931+08.00	938+95.79	787.79	68	53570	5952	5952		595.2	165.3		
	938+95.79	940+03.05	107.26	68.4	7337	815	815		81.5	22.6		
	941+73.97	946+66.18	492.21	82.1	40410	4490	4490		449.0	124.7		
	946+66.18	950+94.67	428.49	56	23995	2666	2666		266.6	74.1		
	950+94.71	958+13.76	719.05	53.5	38469	4274	4274		427.4	118.7		
	958+13.76	982+16.02	2402.26	51	122515	13613	13613		1361.3	378.1		
	1879+48.88	1900+03.56	2054.68	51	104789	11643	11643		1164.3	323.4		
	1899+23.96	1902+90.00	366.04	51	18668	2074	2074		207.4	57.6		
	1902+90.00	1912+01.12	911.12	80	72890	8099	8099		809.9	225.0		
	1912+01.12	1916+67.41	466.29	60	27977	3109	3109		310.9	86.4		
	1916+67.41	1917+14.14	46.73	30	1402	156	156		15.6	4.3		
	1935+00.00	1943+67.64	867.64	37.4	32450	3606	3606		360.6	100.2		
	1943+67.64	1949+48.00	580.36	62.3	36156	4017	4017		401.7	111.6		
	1949+48.00	1954+90.71	542.71	50	27135	3015	3015		301.5	83.8		
	1954+90.71	1966+44.98	1154.27	50.4	58175	6464	6464		646.4	179.6		
1966+44.98	1966+96.80	51.82	50	2591	288	288		28.8	8.0			
1966+96.80	1967+44.18	47.38	50.8	2407	267	267		26.7	7.4			
1967+44.18	1967+61.10	16.92	53.8	910	101	101		10.1	2.8			
1967+61.10	1968+21.17	60.07	26.9	1616	180	180		18.0	5.0			
I.R.-71 S.B.	865+00.00	887+20.00	2220.00	68	150960	16773	16773		1677.3	465.9		
	887+20.00	900+11.04	1291.04	82.3	106253	11806	11806		1180.6	327.9		
	900+11.04	902+11.08	200.04	53	10602	1178	1178		117.8	32.7		
	902+11.08	908+23.00	611.92	50	30596	3400	3400		340.0	94.4		
	908+00.00	914+88.61	688.61	50	34431	3826	3826		382.6	106.3		
	914+88.61	918+87.32	398.71	56.6	22567	2507	2507		250.7	69.7		
	918+87.32	921+30.12	242.80	65.6	15928	1770	1770		177.0	49.2		
	921+30.12	922+21.26	91.14	66.5	6061	673	673		67.3	18.7		
	922+21.26	924+97.42	276.16	66.50	18365	2041	2041		204.1	56.7		
	924+97.42	925+19.50	22.08	68	1501	167	167		16.7	4.6		
	925+00.00	931+24.90	624.90	68	42493	4721	4721		472.1	131.2		
	932+46.36	939+30.90	684.54	68	46549	5172	5172		517.2	143.7		
	941+05.87	943+33.04	227.17	68	15448	1716	1716		171.6	47.7		
	943+33.04	954+60.41	1127.37	79.48	89603	9956	9956		995.6	276.6		
	954+60.41	958+13.74	353.33	52.3	18479	2053	2053		205.3	57.0		
	958+13.74	982+16.03	2402.29	51	122517	13613	13613		1361.3	378.1		
	1879+48.88	1908+00.00	2851.12	51	145407	16156	16156		1615.6	448.8		
	1908+00.00	1908+99.74	99.74	51.2	5107	567	567		56.7	15.8		
	1908+99.74	1909+22.18	22.44	51.3	1151	128	128		12.8	3.6		
	1909+22.18	1914+84.75	562.57	72.7	40899	4544	4544		454.4	126.2		
1914+84.75	1915+55.11	70.36	55.5	3905	434	434		43.4	12.1			
1915+55.11	1920+52.41	497.30	52.2	25959	2884	2884		288.4	80.1			
1920+52.41	1921+78.44	126.03	56.4	7108	790	790		79.0	21.9			
1921+78.44	1929+42.05	763.61	76.5	58416	6491	6491		649.1	180.3			
1929+42.05	1941+72.00	1113.4	81.5	100204	11134	11134		1113.4	309.3			
1941+72.00	1951+71.16	999.16	51	50957	5662	5662		566.2	157.3			
1951+71.16	1967+44.18	1573.02	52.5	82584	9176	9176		917.6	254.9			
TOTALS LEFT COLUMN							266688		26669	7408		

LOCATION	LOCATIONS		LENGTH FEET	AVERAGE WIDTH FEET	PAVEMENT AREA		254		407		424	
	STATION				SQ. FT.	SQ. YD.	SQ. YD.	SQ. YD.	GAL.	CU. YD.		
	FROM	TO										
I.R.-71 N.B. RAMP A	878+33.10	879+56.00	122.90	31	3847	427	427		42.7	11.9		
	879+56.00	884+24.73	468.73	28.5	13359	1484	1484		148.4	41.2		
	884+24.73	887+14.82	290.09	32.2	9341	1038	1038		103.8	28.8		
	887+14.82	890+28.50	313.68	38.7	12139	1349	1349		134.9	37.5		
	890+28.50	893+00.00	271.50	40.5	10996	1222	1222		122.2	33.9		
	893+00.00	894+72.30	172.30	39	6720	747	747		74.7	20.7		
	894+72.30	895+89.22	116.92	46	5378	598	598		59.8	16.6		
	895+89.22	897+07.18	117.96	51	6016	668	668		66.8	18.6		
	897+07.18	902+59.74	552.56	59	32601	3622	3622		362.2	100.6		
	902+59.74	908+06.22	546.48	74	40440	4493	4493		449.3	124.8		
	908+06.22	914+52.67	646.45	68	43959	4884	4884		488.4	135.7		
	918+09.90	918+61.01	51.11	68	3475	386	386		38.6	10.7		
	918+61.01	922+91.95	430.94	52.5	22624	2514	2514		251.4	69.8		
	922+91.95	931+45.27	853.32	37.00	31573	3508	3508		350.8	97.4		
	933+11.43	934+00.00	88.57	38	3366	374	374		37.4	10.4		
	934+00.00	934+50.00	50.00	31	1550	172	172		17.2	4.8		
	934+50.00	937+63.73	313.73	29.5	9255	1028	1028		102.8	28.6		
	937+63.73	938+08.27	44.54	36.2	1612	179	179		17.9	5.0		
	938+08.27	938+28.27	20.00	118	2360	262	262		26.2	7.3		
	TOTAL							20533	8424	2895.7	804.4	
I.R. 71 N.B. RAMP F	946+91.12	951+32.90	441.78	42.8	18908	2101	2101		210.1	58.4		
	951+32.90	959+42.02	809.12	25.3	20471	2275	2275		227.5	63.2		
	959+42.02	968+10.39	868.37	22	19104	2123	2123		212.3	59.0		
	968+10.39	972+22.21	411.82	46.9	19314	2146	2146		214.6	59.6		
	972+22.21	981+87.18	964.97	34.1	32905	3656	3656		365.6	101.6		
TOTAL							12300		1230.0	341.7		
I.R. -71 N.B. RAMP H	+00.00	3+90.56	390.56	34	13279	1475	1475		147.5	41.0		
	3+90.56	9+33.43	542.87	47	25515	2835	2835		283.5	78.7		
	9+33.43	10+35.02	101.59	28	2845	316	316		31.6	8.8		
	10+35.02	10+59.49	24.47	25.5	624	69	69		6.9	1.9		
	10+59.49	22+75.14	1215.65	25	30391	3377	3377		337.7	93.8		
	22+75.14	24+59.65	184.51	48.4	8930	992	992		99.2	27.6		
	TOTAL							9065		906.5	251.8	
LANE NBOR	8+22.17	9+73.84	151.67	67.1	10177	1131	1131		113.1	31.4		
	9+73.84	10+74.97	101.13	41.9	4237	471	471		47.1	13.1		
	10+74.97	12+51.32	176.35	39	6878	764	764		76.4	21.2		
	12+51.32	16+20.10	368.78	37.5	13829	1537	1537		153.7	42.7		
	16+20.10	24+06.14	786.04	64.2	50464	5607	5607		560.7	155.8		
	24+06.14	27+03.72	297.58	52.1	15504	1723	1723		172.3	47.9		
	27+03.72	27+48.59	44.87	50.6	2270	252	252		25.2	7.0		
LANE S-E	+00.00	2+80.04	280.04	50.8	14226	1581	1581		158.1	43.9		
	2+80.04	7+23.99	443.95	61.30	27214	3024	3024		302.4	84.0		
TOTAL							16089		1608.9	446.9		

ROUTE	LOCATIONS		LENGTH FEET	AVERAGE WIDTH FEET	PAVEMENT AREA		254		407		424	
	STATION	STATION			SQ. FT.	SQ. YD.	SQ. YD.	SQ. YD.	GAL.	CU. YD.		
											FROM	TO
I.R. -71 N.B. RAMP G (FULTON)	958+70.48	959+22.58	52.10	48.8	2542	282	282		28.2	7.8		
	959+22.58	959+73.59	51.01	19.7	1005	112	112		11.2	3.1		
	959+73.59	960+25.00	51.41	24.1	1239	138	138		13.8	3.8		
	960+25.00	968+16.72	791.72	25	19793	2199	2199		219.9	61.1		
TOTAL							2731		273.1	75.9		
I.R. -71 N.B. RAMP G (W. 25TH)	5+44.59	6+46.49	101.90	26.8	2731	303	303		30.3	8.4		
	6+46.49	10+00.00	353.51	26	9191	1021	1021		102.1	28.4		
	10+00.00	11+00.00	100.00	30	3000	333	333		33.3	9.3		
	11+00.00	12+07.26	107.26	34	3647	405	405		40.5	11.3		
	12+07.26	12+54.56	47.30	27.9	1320	147	147		14.7	4.1		
	12+54.56	12+84.07	29.51	66	1948	216	216		21.6	6.0		
TOTAL							2426		242.6	67.4		
I.R. -71 N.B. RAMP I	+43.40	+92.37	48.97	42.5	2081	231	231		23.1	6.4		
	+92.37	1+13.00	20.63	23.1	477	53	53		5.3	1.5		
	1+13.00	6+18.91	505.91	26	13154	1462	1462		146.2	40.6		
TOTAL							1746		174.6	48.5		
S.R. 176 N.B.	74+70.50	80+49.84	579.34	52.2	30242	3360	3360		336.0	93.3		
	80+49.84	81+28.35	78.51	67	5260	584	584		58.4	16.2		
	81+28.35	83+50.97	222.62	24.4	5432	604	604		60.4	16.8		
TOTAL							4548		454.8	126.3		
S.R. 176 RAMP J N.B.O.R.	7+40.90	7+95.46	54.56	37.1	2024	225	225		22.5	6.2		
	7+95.46	8+33.26	37.80	40.70	1538	171	171		17.1	4.7		
	8+33.26	9+82.99	149.73	40	5989	665	665		66.5	18.5		
TOTAL							1061		106.1	29.5		
I.R. -71 S.B. RAMP A	954+55.99	957+53.35	297.36	34.6	10289	1143	1143		114.3	31.8		
	957+53.35	958+32.31	78.96	25	1974	219	219		21.9	6.1		
	958+32.31	964+11.30	578.99	26	15054	1673	1673		167.3	46.5		
	964+11.30	964+19.64	8.34	19	158	18	18		1.8	0.5		
	964+19.64	964+99.72	80.08	54.7	4380	487	487		48.7	13.5		
TOTAL							3539		353.9	98.3		
I.R. -71 S.B. RAMP B	957+60.55	958+86.54	125.99	20.4	2570	286	286		28.6	7.9		
	958+86.54	971+13.19	1226.65	22	26986	2998	2998		299.8	83.3		
	971+13.19	972+20.99	107.80	25.9	2792	310	310		31.0	8.6		
TOTAL							3594		359.4	99.8		
I.R. -71 S.B. LANE J	5+17.81	5+30.00	12.19	30	366	41	41		4.1	1.1		
	5+30.00	5+39.61	9.61	46.9	451	50	50		5.0	1.4		
	5+39.61	14+52.16	912.55	50.2	45810	5090	5090		509.0	141.4		
	14+52.16	15+86.37	134.21	34.9	4684	520	520		52.0	14.5		
	15+86.37	18+67.17	280.80	47.7	13394	1488	1488		148.8	41.3		
	18+67.17	20+69.53	202.36	25	5059	562	562		56.2	15.6		
	20+69.53	26+22.31	552.78	22	12161	1351	1351		135.1	37.5		
	26+22.31	29+58.22	335.91	44.6	14982	1665	1665		166.5	46.2		
	29+58.22	34+41.44	483.22	34	16429	1825	1825		182.5	50.7		
TOTAL							12593		1259.3	349.8		
I.R. -71 S.B. SBOR M	+33.39	7+84.64	751.25	80	60100	6678	6678		667.8	185.5		
	7+84.64	9+32.89	148.25	40.8	6049	672	672		67.2	18.7		
TOTAL							7350		735.0	204.2		
TOTALS LEFT COLUMN							39589	0	3959	1100		

LOCATION	LOCATIONS		LENGTH FEET	AVERAGE WIDTH FEET	PAVEMENT AREA		254		407		424	
	STATION	STATION			SQ. FT.	SQ. YD.	SQ. YD.	SQ. YD.	GAL.	CU. YD.		
											FROM	TO
I.R. -71 S.B. RAMP C	964+42.72	964+57.58	14.86	47.7	709	79	79		7.9	2.2		
	964+57.58	964+96.46	38.88	47.3	1839	204	204		20.4	5.7		
	964+96.46	965+16.49	20.03	27.5	551	61	61		6.1	1.7		
	965+16.49	966+29.36	112.87	30.5	3443	383	383		38.3	10.6		
	966+29.36	967+00.33	70.97	34	2413	268	268		26.8	7.4		
	967+00.33	968+00.00	99.67	30	2990	332	332		33.2	9.2		
	968+00.00	971+18.49	318.49	26	8281	920	920		92.0	25.6		
	971+18.49	972+20.45	101.96	27	2753	306	306		30.6	8.5		
	972+20.45	974+65.61	245.16	47.3	11596	1288	1288		128.8	35.8		
	974+65.61	975+86.44	120.83	34.4	4157	462	462		46.2	12.8		
	975+86.44	978+01.86	215.42	31.7	6829	759	759		75.9	21.1		
	978+01.86	980+26.72	224.86	32.9	7398	822	822		82.2	22.8		
	980+26.72	982+46.36	219.64	34	7468	830	830		83.0	23.0		
TOTAL							6714		671.4	186.5		
I.R. -71 S.B. RAMP O	+57.01	+71.39	14.38	38	546	61	61		6.1	1.7		
	+71.39	1+01.03	29.64	22.9	679	75	75		7.5	2.1		
	1+01.03	1+20.00	18.97	22.5	427	47	47		4.7	1.3		
	1+20.00	10+41.52	921.52	26	23960	2662	2662		266.2	73.9		
	10+41.52	11+46.10	104.58	24.4	2552	284	284		28.4	7.9		
TOTAL							3129		312.9	86.9		
I.R. -71 S.B. RAMP D	3+73.94	4+75.89	101.95	26	2651	295	295		29.5	8.2		
	4+75.89	8+44.91	369.02	24	8856	984	984		98.4	27.3		
	8+44.91	9+92.94	148.03	33	4885	543	543		54.3	15.1		
	9+92.94	11+91.65	198.71	42	8346	927	927		92.7	25.8		
	11+91.65	12+13.33	21.68	40.5	878	98	98		9.8	2.7		
	12+13.33	12+33.45	20.12	47.8	962	107	107		10.7	3.0		
	12+33.45	12+46.05	12.60	58.5	737	82	82		8.2	2.3		
TOTAL							3035		303.5	84.3		
I.R. -71 S.B. RAMP 14-M	+38.00	3+77.99	339.99	43.9	14926	1658	1658		165.8	46.1		
	3+77.99	19+99.50	1621.51	26.00	42159	4684	4684		468.4	130.1		
TOTAL							6343		634.3	176.2		
I.R. -71 S.B. LANE SBOR	12+50.23	13+63.25	113.02	41.5	4690	521	521		52.1	14.5		
	13+63.25	29+64.09	1600.84	39	62433	6937	6937		693.7	192.7		
	29+64.06	32+70.79	306.73	60.4	18526	2058	2058		205.8	57.2		
	32+70.79	33+39.12	68.33	38	2597	289	289		28.9	8.0		
	33+39.12	34+04.06	64.94	13.2	857	95	95		9.5	2.6		
TOTAL							9900		990.0	275.0		
I.R. -71 S.B. RAMP 14 -SBOR	+00.00	1+05.96	105.96	21.6	2289	254	254		25.4	7.1		
TOTALS RIGHT COLUMN							29376		2938	816		
TOTALS LEFT COLUMN							39589		3959	1100		
TOTALS TO GENERAL SUMMARY							68965		6897	1916		

ROUTE	LOCATIONS		LENGTH FEET	AVERAGE WIDTH FEET	PAVEMENT AREA		254		407	424
	STATION				SQ. FT.	SQ. YD.	SQ. YD.	SQ. YD.	GAL.	CU. YD.
	FROM	TO								
I.R. -71 N.B. RAMP D (DENISON)	901-07.89	901-56.82	48.93	38.6	1889	210	210		21.0	5.8
	901-56.82	917-28.61	1571.79	38	59728	6636	6636		663.6	184.3
	917-28.61	917-98.73	70.12	39.6	2777	309	309		30.9	8.6
	917-98.73	918-26.89	28.16	38.2	1076	120		120	12.0	3.3
	918-26.89	920-94.22	267.33	43.9	11736	1304		1304	130.4	36.2
	920-94.22	922-66.78	172.56	50	8628	959		959	95.9	26.6
	925-47.00	928-90.86	343.86	48.6	16712	1857		1857	185.7	51.6
	928-90.86	931-62.05	271.19	56.6	15349	1705		1705	170.5	47.4
	933-26.01	934-00.00	73.99	38	2812	312		312	31.2	8.7
	934-00.00	935-66.46	166.46	28.8	4794	533		533	53.3	14.8
	935-66.46	937-62.64	196.18	29.5	5787	643		643	64.3	17.9
	937-62.64	937-79.00	16.36	30.4	497	55		55	5.5	1.5
	937-79.00	938-08.27	29.27	39.7	1162	129		129	12.9	3.6
TOTAL							7155	7617	1477.2	410.3

LOCATION	LOCATIONS		LENGTH FEET	AVERAGE WIDTH FEET	PAVEMENT AREA		254		254	407	424
	STATION				SQ. FT.	SQ. YD.	SQ. YD.	SQ. YD.	GAL.	CU. YD.	
	FROM	TO									
							TOTALS RIGHT COLUMN	0	0	0	0
							TOTALS LEFT COLUMN	7155	7617	1477	410
							TOTALS TO GENERAL SUMMARY	14772	1477	410	

I:\PROJECTS\PID21810\dm\sheet\21810TSC01.dgn 02-OCT-2012 9:16AM ekallo

LOCATION	LOCATIONS - FROM PLAN RECORD		646													621				
	STATION		EDGE LINE, 6"		LANE LINE, 6"	CHANNELIZING LINE, 12"		TRANSVERSE/DIAGONAL LINE		STOP LINE	CROSSWALK LINE	LANE ARROW	WORD ON PAVEMENT, 72 INCH	PAVEMENT MARKING, MISC.: 12" DOTTED LINE, 3' LONG WITH 12' GAPS	DOTTED LINE, 12" (WHITE)	RPM				
	FROM	TO	WHITE FOOT	YELLOW FOOT		GORE FOOT	FOOT	WHITE FOOT	YELLOW FOOT							FOOT	FOOT	EACH	EACH	FOOT
																EACH				
I.R.-71, N.B.	865+00	867+25	225	225	675											85				
	867+25	869+69	244	244	732									244		10				
	869+69	871+57	188	188	752											9				
	871+57	878+85	728	728	2184	1456		320								28		37		
	878+85	935+00	5615	5615	16845											211				
	935+00	941+06	606	606	1212			606								23				
	941+06	946+80	574	574	1148	1148		180								15		29		
	946+80	982+16.02 BK	3536	3536	7072											89				
	1879+48.88 AH	1895+78	1629	1629	3258											41				
	1895+78	1902+90	712	712	712									712		18				
	1902+90	1912+00	910	910	910	1820								910		23		23		
	1912+00	1921+50	950	950	1900								2	950		36				
	1921+50	1928+00	650	650	1300			650					4			25				
	1928+00	1931+35	335	335	670	670										9		17		
	1931+35	1943+67	1232	1232	1232											16				
	1943+67	1949+48	581	581	581	1162										8		15		
	1949+48	1961+34	1186	1186	2372											30				
	1961+34	1967+77	643	643	643											8				
	I.R.-71, S.B.	865+00	898+45	3345	3345	10035											126			
898+45		901+12	267	267	534	534										7		7		
901+12		928+00	2688	2688	5376											68				
928+00		946+90	1890	1890	3780									1890		48				
946+90		949+00	210	210	630											7				
949+00		951+30	460	230	460	230										6		6		
951+30		982+16.02 BK	3086	3086	6172											78				
1879+48.88 AH		1909+00	2951	2951	5902											74				
1909+00		1912+87	387	387	774	774		135								10		20		
1912+87		1920+80	793	793	1586											20				
1920+80		1923+90	310	310	620			620	90							8		16		
1923+90		1929+80	590	590	1180									590		15				
1929+80		1930+18	38	38	114									38		2				
1930+18		1932+55	237	237	711											6				
1932+55		1939+25	1340	670	1340	670										17		17		
1939+25		1967+56	2831	2831	5662											71				
I.R.-71, N.B., RAMP A		878+56	893+00	1444	1444															19
		893+00	934+00	4100	4100	4100														52
		934+00	938+00	400	400				400		34	280	8							5
I.R.-71, S.B., RAMP D	901+12	909+83	871	871															11	
	909+83	937+79	2796	2796	2796														35	
* - INSTEAD OF LANE LINE																				
TOTALS TO GENERAL SUMMARY			51578	50678	95970	8464	2276	725	0	34	280	8	6	2572	2762	1247	0	187	122	
			19.36 MI.	18.18 MI.	10740			725												1556

CALCULATED
 CHECKED
PAVEMENT MARKINGS / RAISED PAVEMENT MARKER
SUB-SUMMARY
CUY-71-14.96
 27
 71

I:\PROJECTS\PID21810\dm\sheet\21810TSC01.dgn 02-OCT-2012 9:18AM ekallo

LOCATION	LOCATIONS - FROM PLAN RECORD		646													621				
			EDGE LINE, 6"		LANE LINE, 6"	CHANNELIZING LINE, 12"		TRANSVERSE/DIAGONAL LINE		STOP LINE	CROSSWALK LINE	LANE ARROW	WORD ON PAVEMENT, 72 INCH	PAVEMENT MARKING, MISC.: 12" DOTTED LINE, 3' LONG WITH 12' GAPS	DOTTED LINE, 12" (WHITE)	RPM				
	WHITE	YELLOW	GORE	*		WHITE	YELLOW	W	Y							W/R	Y/R			
	FROM	TO	FOOT	FOOT	FOOT	FOOT	FOOT			FOOT	FOOT	FOOT	FOOT	FOOT	FOOT			FOOT	EACH	
I.R.-71, SB, LANE J	27+79	34+41	662	662	662												9			4
	26+20	27+79	159	159		318														
	18+69	26+20	751	751																
	17+30	18+69	139	139		278		40												7
	11+00	17+30	630	630	630												8			
	5+40	11+00	560	560		1120														14
I.R.-71 SB, SBOR-M	9+30	11+80	250			250														7
	8+90	9+30	40	40																
	1+40	8+90	750	750		1500		590												38
	0+30	1+40	110	110	110												2			
I.R.-71, SB, RAMP C	973+80	982+46.36	866	866	866												11			
	972+19	973+80	161	161		322		50												8
	966+80	972+19	539	539																
	964+50	966+80	230	230			175		50	130	7									7
I.R.-71, SB, RAMP O	0+59	11+50	1091	1091																14
I.R.-71, SB, RAMP D	3+77	9+98	621	621																8
	9+98	12+23	225	225			300		51	200	12									3
I.R.-71, SB, RAMP 14-M	3+80	20+00	1620	1620																21
	1+50	3+80	230	230		460		50												3
	0+18	1+50	132	132																2
LANE SBOR	29+65	33+65	400	400		745		48												10
	12+50	29+65	1715	1715				408												5
I.R. -71 SB, RAMP D (DENISON RAMP)	901+08	909+83	875	875																
	909+83	928+42.77 B.K.	1860	1860	1860															
	931+33.72 (AH)	937+79	645	645	645															
* - INSTEAD OF LANE LINE																				
TOTALS TO GENERAL SUMMARY			15261	15011	4773	4993	475	730	456	101	330	19	0	0	0	0	30	0	100	88
			5.73 MI.	0.90 MI.	5468	1186											218			

SHEET NUMBER	REFERENCE NUMBER	LOCATION				DIRECTION OF LANES	SIDE OF LANES	202	202	614	614	606	606	606		622		626		626		
		EXISTING		PROPOSED				GUARDRAIL REMOVED	REMOVAL MISC. PORTABLE CONCRETE BARRIER	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL), AS PER PLAN	WORK ZONE IMPACT ATTENUATOR (BIDIRECTIONAL), AS PER PLAN	GUARDRAIL, TYPE 5	ANCHOR ASSEMBLY, TYPE T	ANCHOR ASSEMBLY, TYPE E		PORTABLE CONCRETE BARRIER, 32", AS PER PLAN			BARRIER REFLECTOR, TYPE A	BARRIER REFLECTOR, TYPE B (SPACED * 100 FT.)		
		FROM	TO	FROM	TO			FT.	FT.	EACH	EACH	FT.	EACH	EACH		FT.			WH	YEL	WH	YEL
																				EACH		EACH
		RAMP A (DENISON)																				
38	R-1	918+00	931+20	918+50	931+20	NB		1320						1290					13			
38	R-2	925+47	933+20	925+47	934+00	SB		770		1				840					9			
39	R-3	931+20	933+40	931+20	933+40	NB		220						220					3			
		RAMP D (DENISON)																				
38	R-2	918+20	922+67.02	918+20	922+67.02	SB		450						450					5			
		RAMP A (DENISON)																				
38	GR-1	918+12	918+37	918+24.5	918+62	NB	12.5				25	1					2					
38	GR-2	919+75	920+00	919+25	920+00	NB	25				25		1				2					
		I.R. 71																				
71	R-4	1963+97	1980+21	1966+80	1967+70	NB		1630	1					70					3			
TOTALS CARRIED TO GENERAL SUMMARY:							38	4390	1	1	50	1	1		2870			2	2	19	14	
																			37			

CALCULATED
GJN
CHECKED
LDH

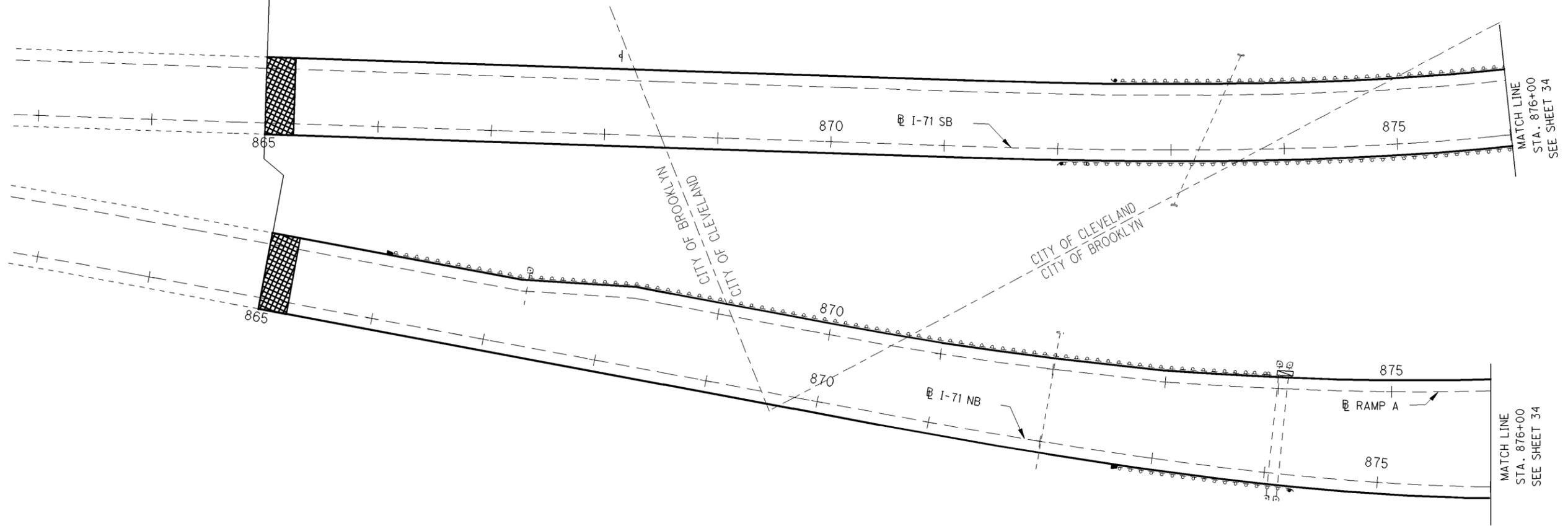
GUARDRAIL SUBSUMMARY

CUY-71-14.96

I:\PROJECTS\PID21810\dgn\sheets\21810TC001.DGN 02-MAR-2011 7:18AM jjethrow

Begin Project
Sta. 865+00
N.B. & S.B. I-71
S.L.M. 14.96

E071(010)



 - ASPHALT TRANSITION
PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70

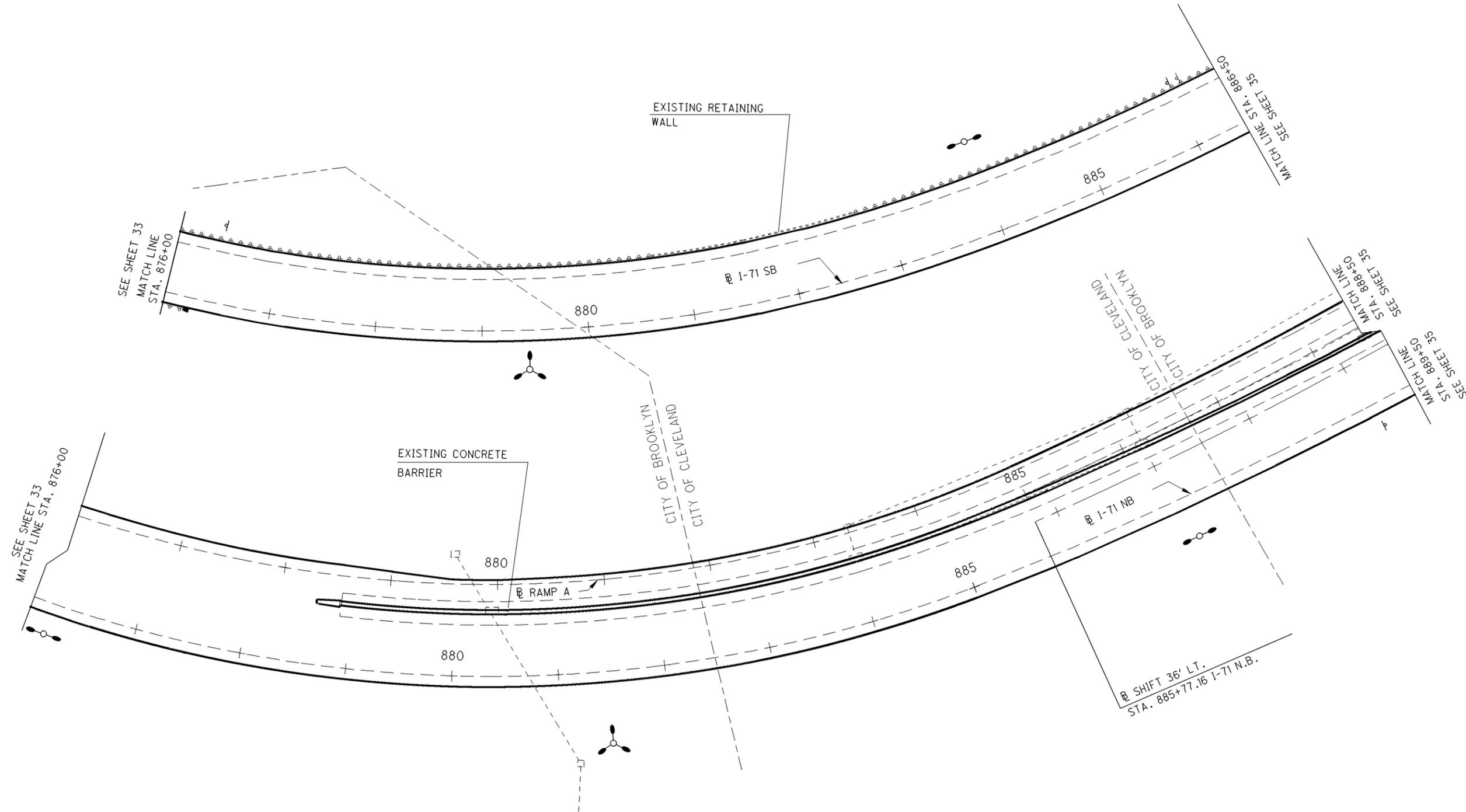
CALCULATED
CHECKED




HORIZONTAL
SCALE IN FEET

PLAN SHEET - I.R. 71
STA. 865+00 TO STA. 876+00

CUY-71-14.96



 - ASPHALT TRANSITION PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
RESURFACING SUBSUMMARY	24-36
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70

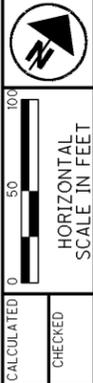
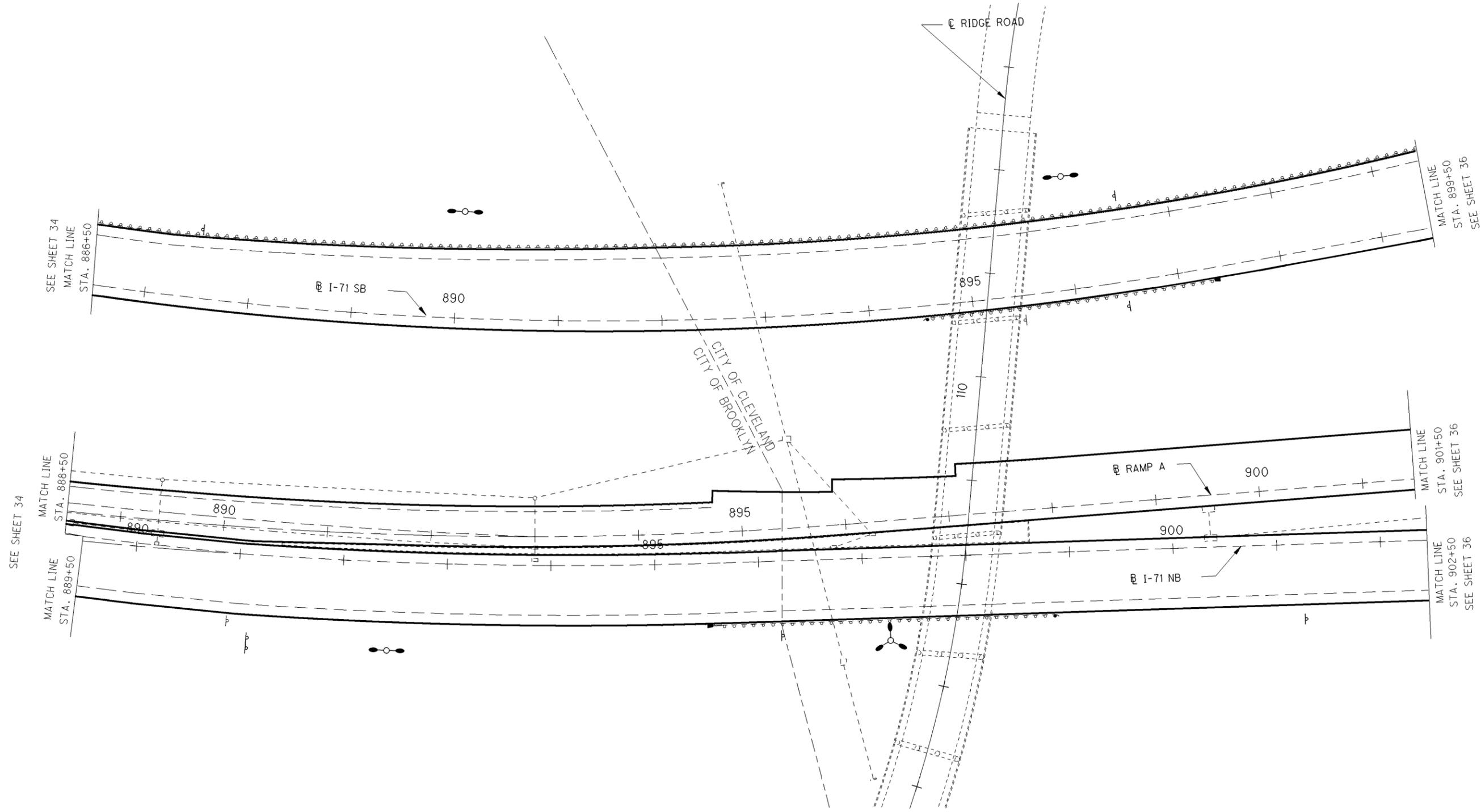
CALCULATED CHECKED

 HORIZONTAL SCALE IN FEET

0 50 100

PLAN SHEET - I.R. 71
STA. 876+00 TO STA. 889+50

I:\PROJECTS\PID21810\dgn\sheets\21810TC003.DGN 02-MAR-2011 7:18AM jje:throw



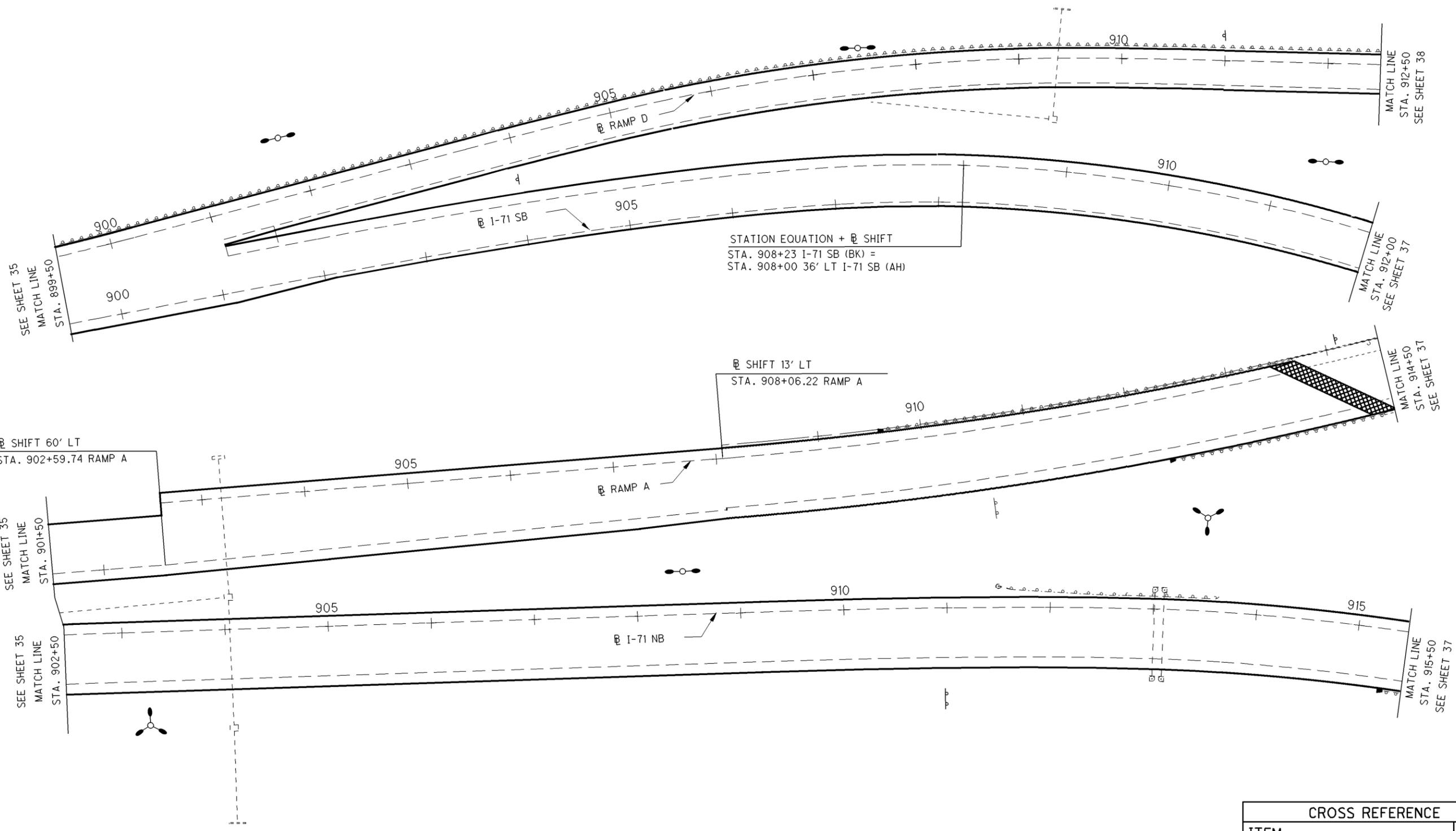
PLAN SHEET - I.R. 71
STA. 889+50 TO STA. 902+50

CUY-71-14.96

 - ASPHALT TRANSITION PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70

I:\PROJECTS\PID21810\dgn\sheets\21810TC004.DGN 02-MAR-2011 7:18AM jjetthrow



STATION EQUATION + SHIFT
 STA. 908+23 I-71 SB (BK) =
 STA. 908+00 36' LT I-71 SB (AH)

SHIFT 13' LT
 STA. 908+06.22 RAMP A

SHIFT 60' LT
 STA. 902+59.74 RAMP A

 - ASPHALT TRANSITION PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70

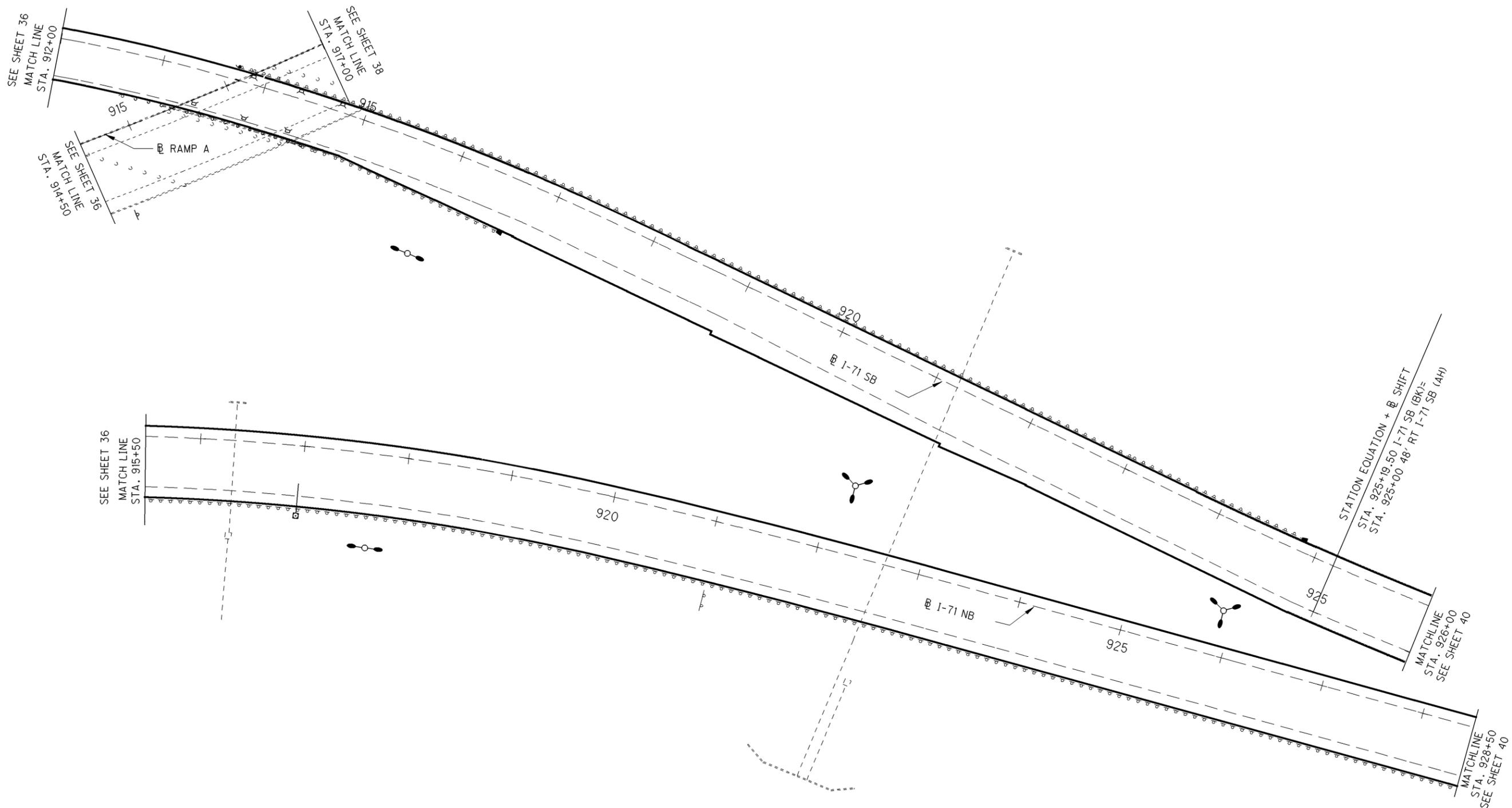
CALCULATED
 CHECKED




HORIZONTAL SCALE IN FEET

PLAN SHEET - I.R. 71
STA. 902+50 TO STA. 915+50

CUY-71-14.96



 - ASPHALT TRANSITION PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70

CALCULATED CHECKED




HORIZONTAL SCALE IN FEET

PLAN SHEET - I.R. 71
STA. 915+50 TO STA. 928+50

I:\PROJECTS\PID21810\dm\sheets\21810TC006.DGN 02-MAR-2011 2:10PM gnowcc

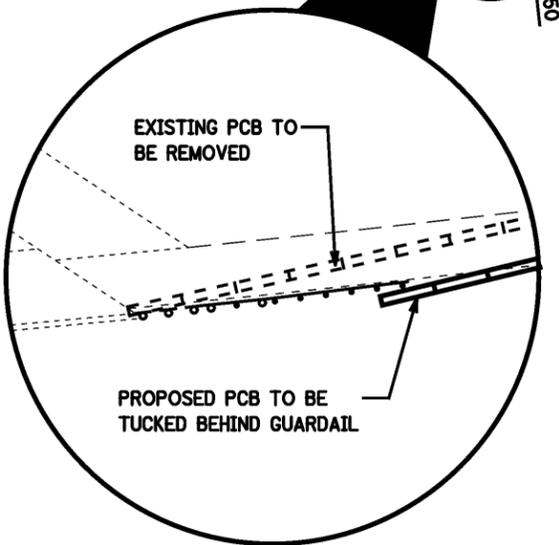
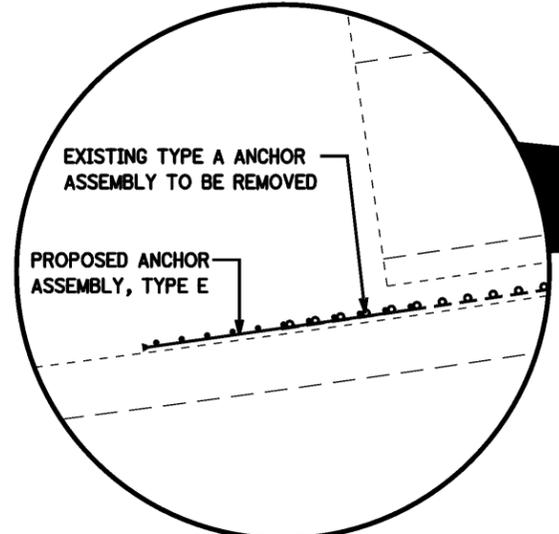
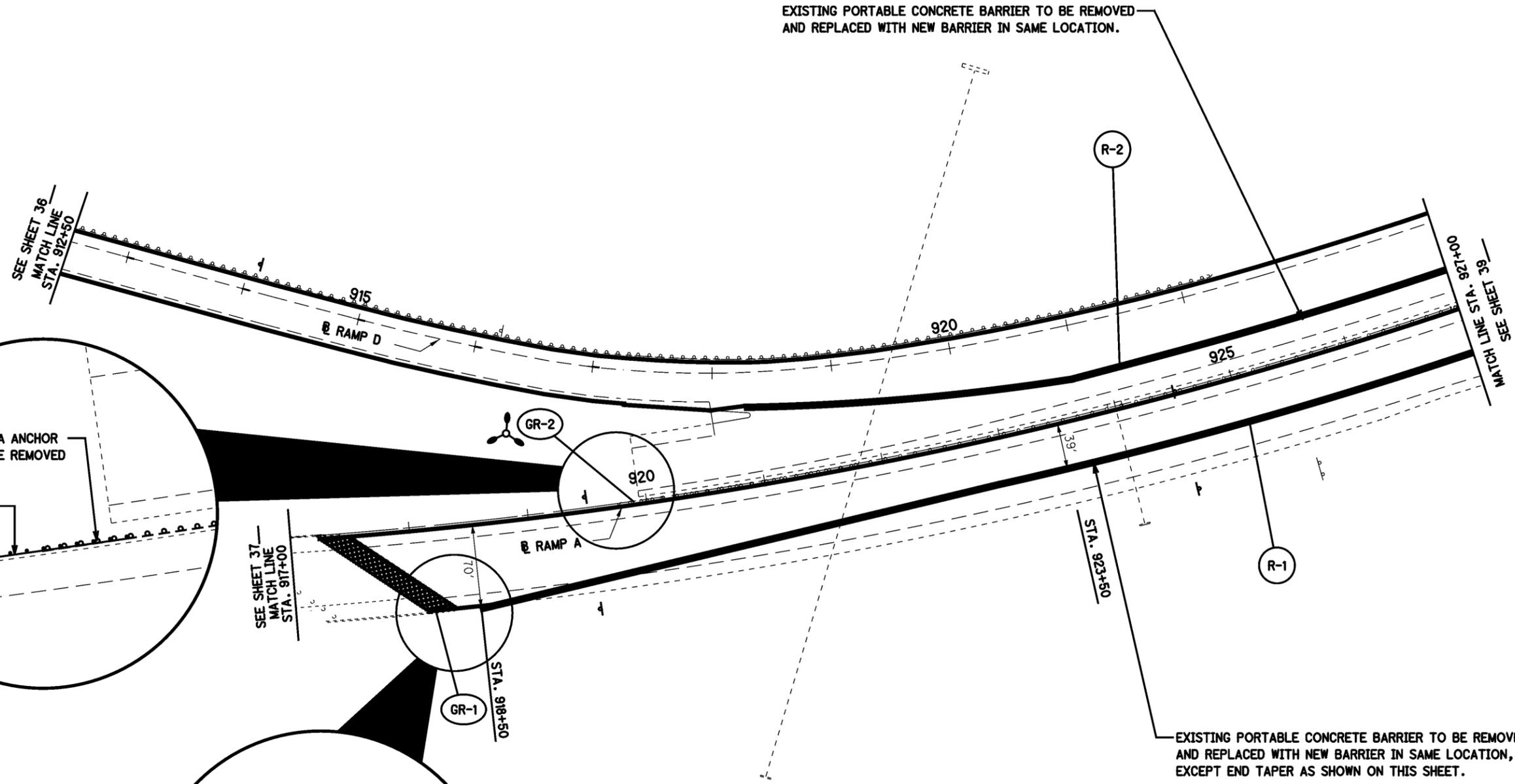
CALCULATED
CHECKED

HORIZONTAL SCALE IN FEET

PLAN SHEET - I.R. 71
STA. 917+00 TO STA. 927+00

CUY-71-14.96

38
71



EXISTING PORTABLE CONCRETE BARRIER TO BE REMOVED AND REPLACED WITH NEW BARRIER IN SAME LOCATION.

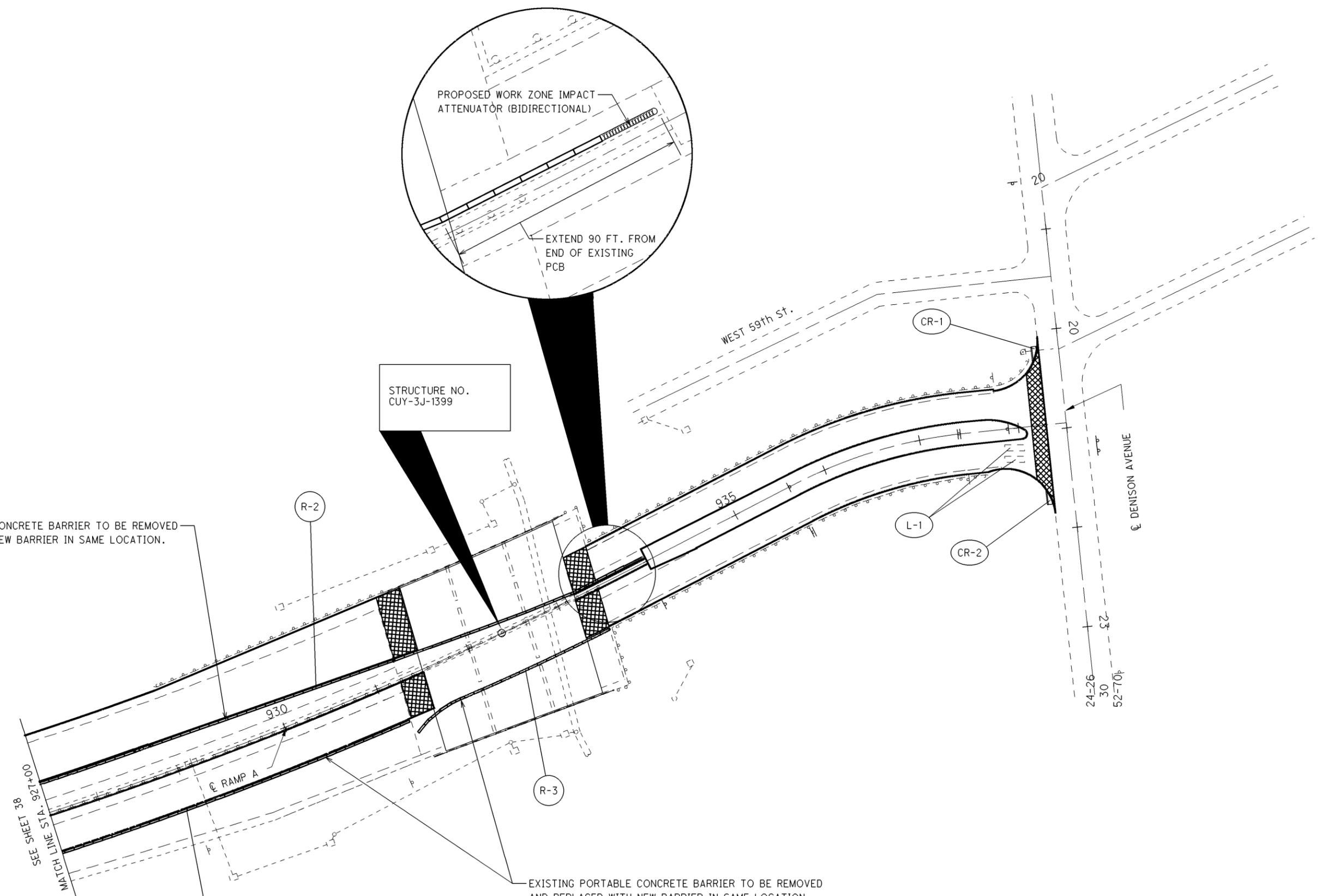
EXISTING PORTABLE CONCRETE BARRIER TO BE REMOVED AND REPLACED WITH NEW BARRIER IN SAME LOCATION, EXCEPT END TAPER AS SHOWN ON THIS SHEET.

- ASPHALT TRANSITION PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70

I:\PROJECTS\PID21810\dgn\sheets\21810TC007.DGN 02-MAR-2011 7:18AM jje:throw

EXISTING PORTABLE CONCRETE BARRIER TO BE REMOVED AND REPLACED WITH NEW BARRIER IN SAME LOCATION.

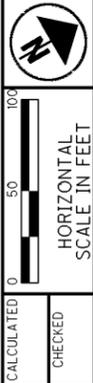


STRUCTURE NO.
CUY-3J-1399

EXISTING PORTABLE CONCRETE BARRIER TO BE REMOVED AND REPLACED WITH NEW BARRIER IN SAME LOCATION.

 - ASPHALT TRANSITION PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
CURB RAMP SUBSUMMARY	16
LOOP DETECTOR SUBSUMMARY	18
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70

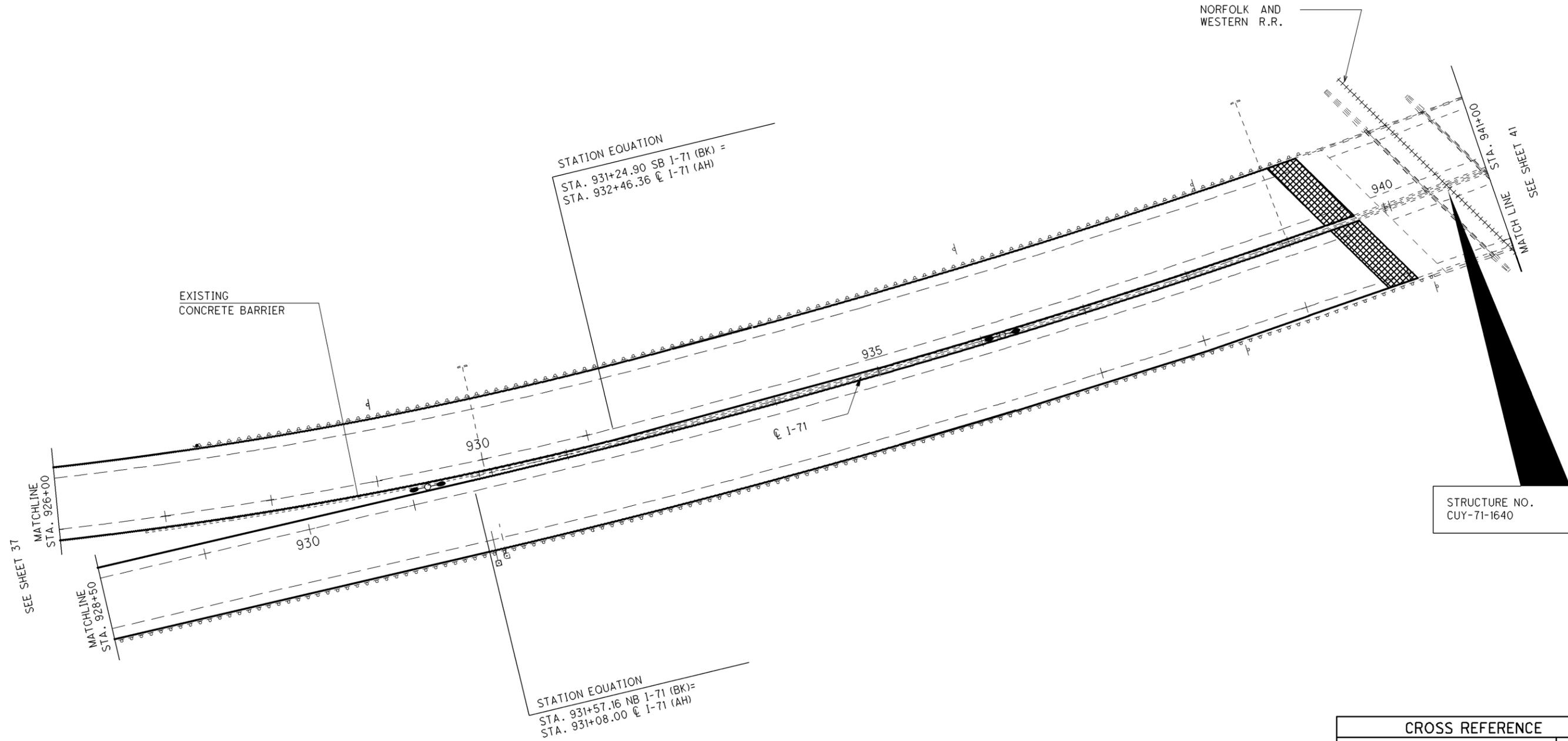


PLAN SHEET - I.R. 71
STA. 927+00 TO STA. 939+00

CUY-71-14.96

39
71

I:\PROJECTS\PID21810\dgn\sheets\21810TC008.DGN 02-MAR-2011 7:18AM jje:throw



CALCULATED
CHECKED

HORIZONTAL SCALE IN FEET

PLAN SHEET - I.R. 71
STA. 928+50 TO STA. 941+00

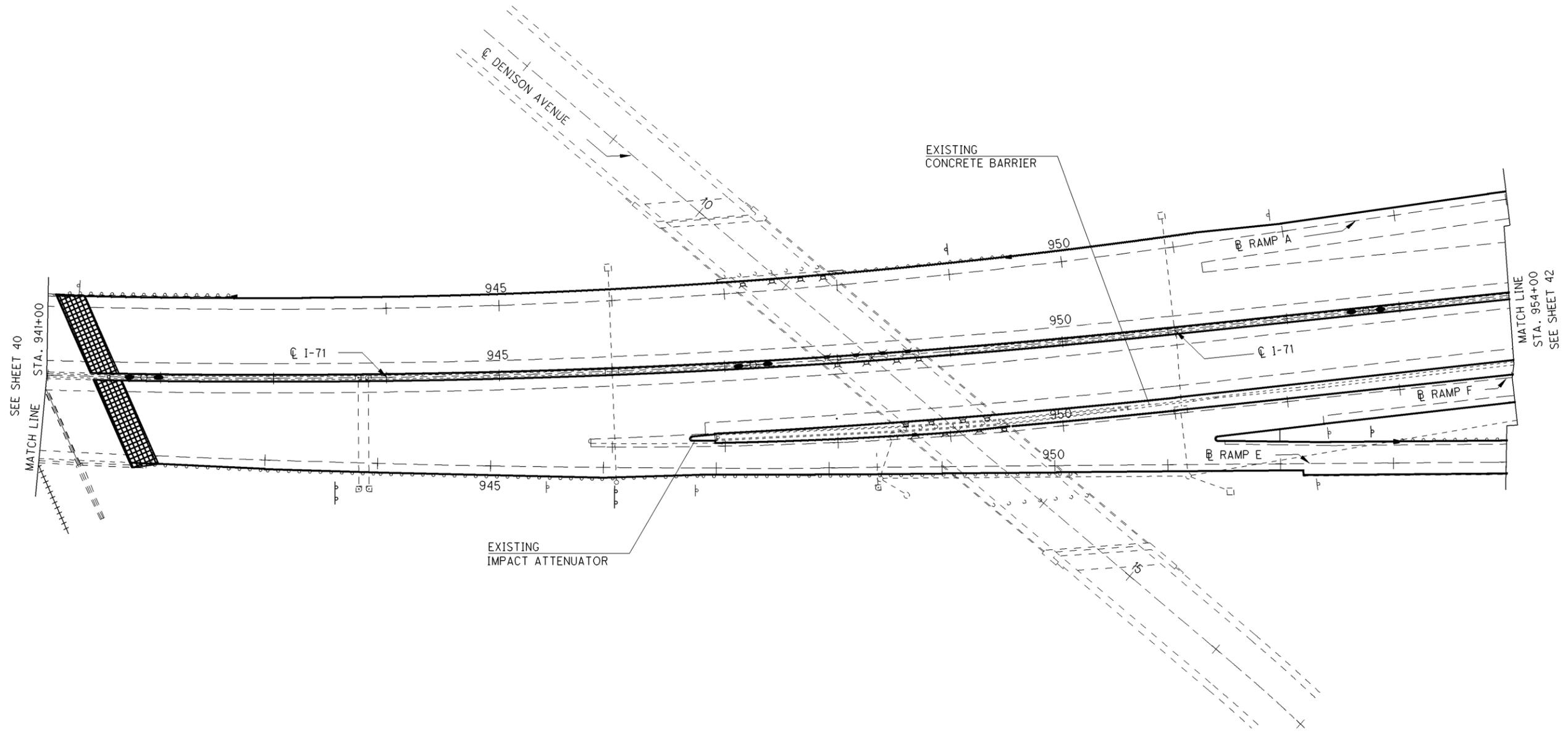
CUY-71-14.96

40
71

STRUCTURE NO.
CUY-71-1640

- ASPHALT TRANSITION PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70



 - ASPHALT TRANSITION PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70

CALCULATED
CHECKED




HORIZONTAL SCALE IN FEET

PLAN SHEET - I.R. 71
STA. 941+00 TO STA. 954+00

CUY-71-14.96

I:\PROJECTS\PID21810\dgn\sheets\21810TC010.DGN 02-MAR-2011 7:18AM jthrow

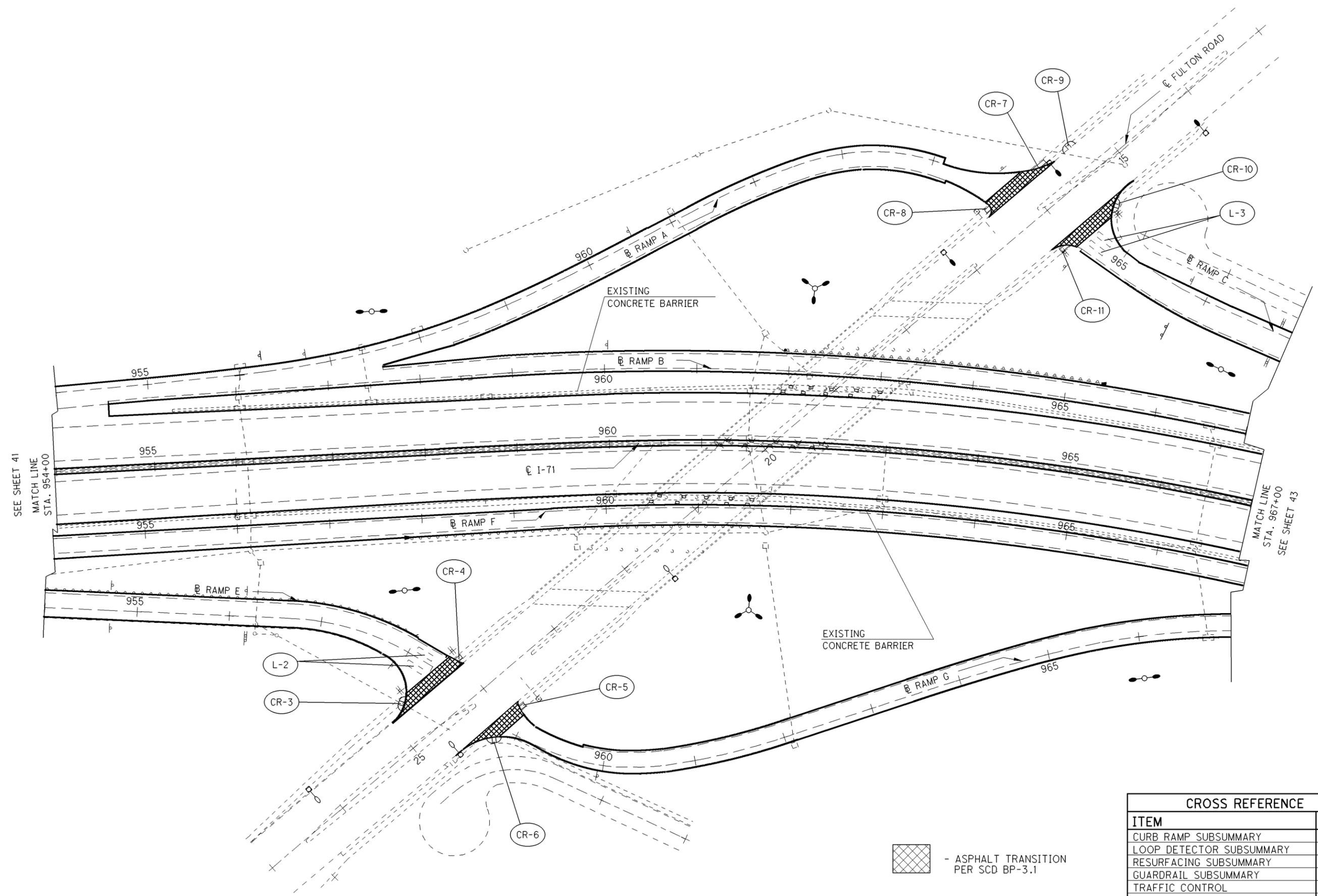
CALCULATED
CHECKED

HORIZONTAL SCALE IN FEET

PLAN SHEET - I.R. 71
STA. 954+00 TO STA. 967+00

CUY-71-14.96

42
71



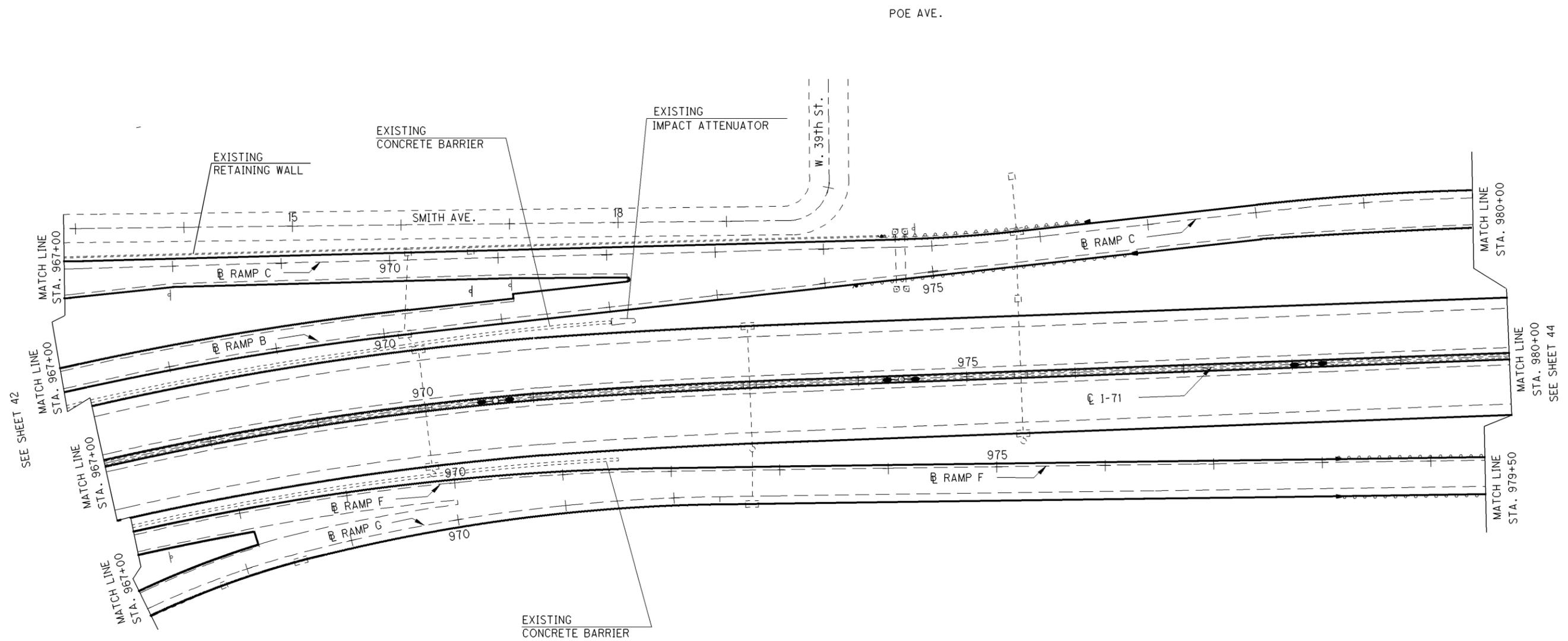
CROSS REFERENCE	
ITEM	SHEET
CURB RAMP SUBSUMMARY	16
LOOP DETECTOR SUBSUMMARY	18
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70

- ASPHALT TRANSITION PER SCD BP-3.1

SEE SHEET 41
MATCH LINE
STA. 954+00

MATCH LINE
STA. 967+00
SEE SHEET 43

I:\PROJECTS\PID21810\dgn\sheets\21810TC011.DGN 02-MAR-2011 7:18AM jethrow



CALCULATED

CHECKED

0 50 100

HORIZONTAL SCALE IN FEET

PLAN SHEET - I.R. 71

STA. 967+00 TO STA. 980+00

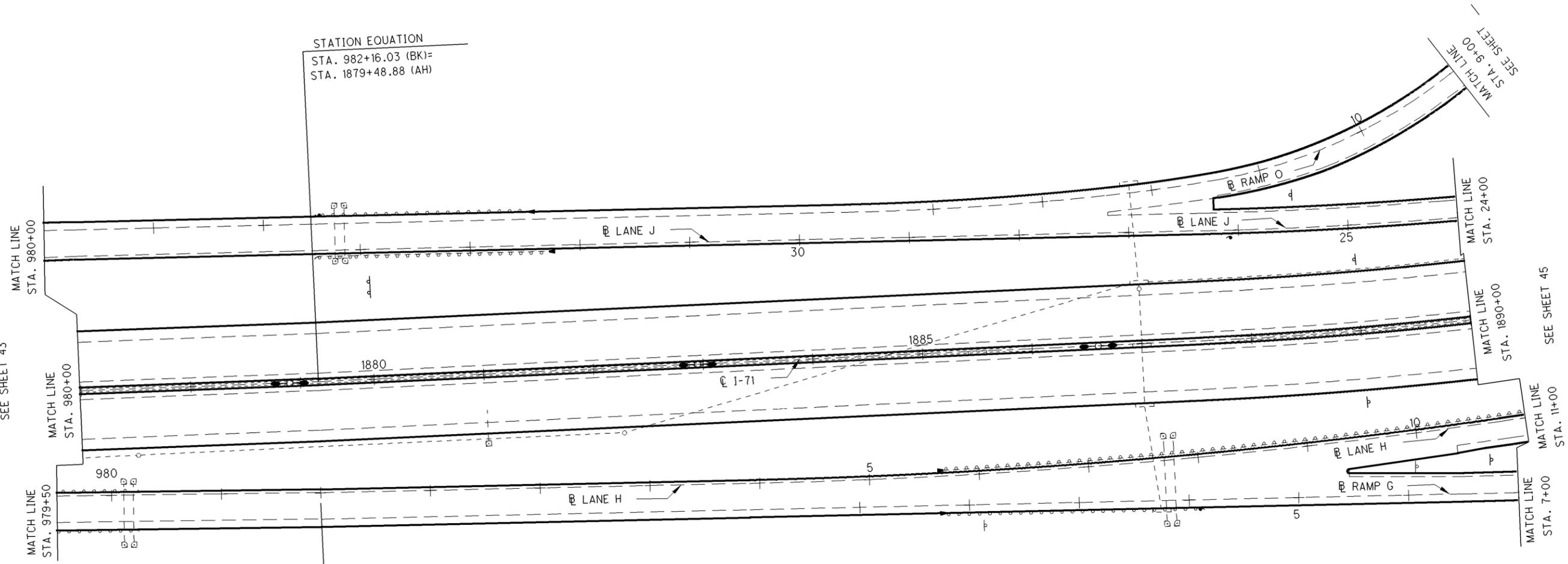
CUY-71-14.96

 - ASPHALT TRANSITION PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70

SEE SHEET 42

SEE SHEET 44



STATION EQUATION
 STA. 982+16.03 (BK)=
 STA. 1879+48.88 (AH)

STA. 981+87.18 RAMP F (BK)=
 STA. 0+00.00 LANE H (AH)

 - ASPHALT TRANSITION
 PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70

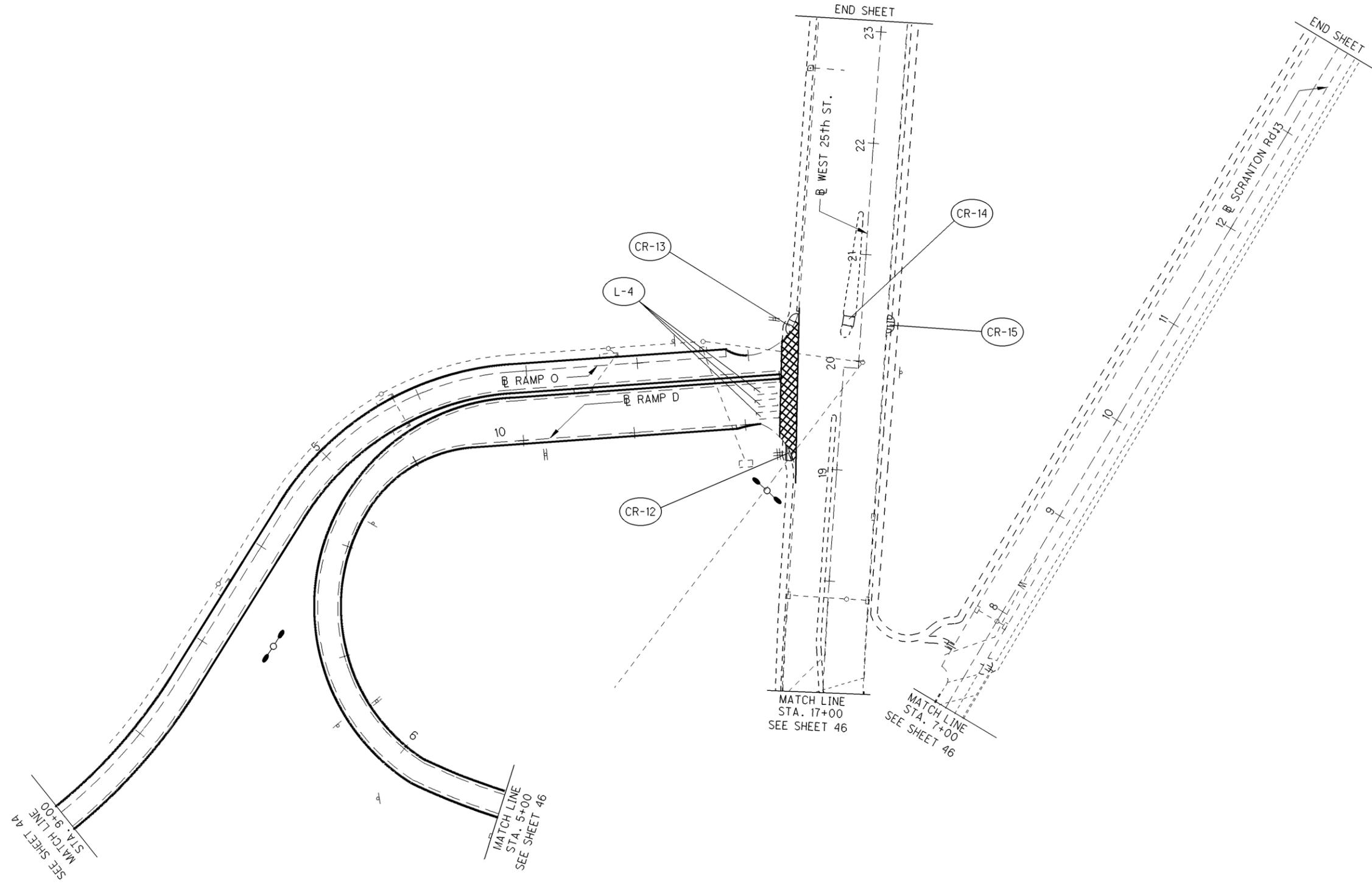
CALCULATED
 CHECKED




HORIZONTAL
 SCALE IN FEET

PLAN SHEET - I.R. 71
STA. 980+00 TO STA. 1890+00

CUY-71-14.96



 - ASPHALT TRANSITION PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
CURB RAMP SUBSUMMARY	16
LOOP DETECTOR SUBSUMMARY	18
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70

CALCULATED CHECKED

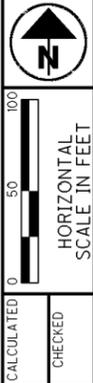
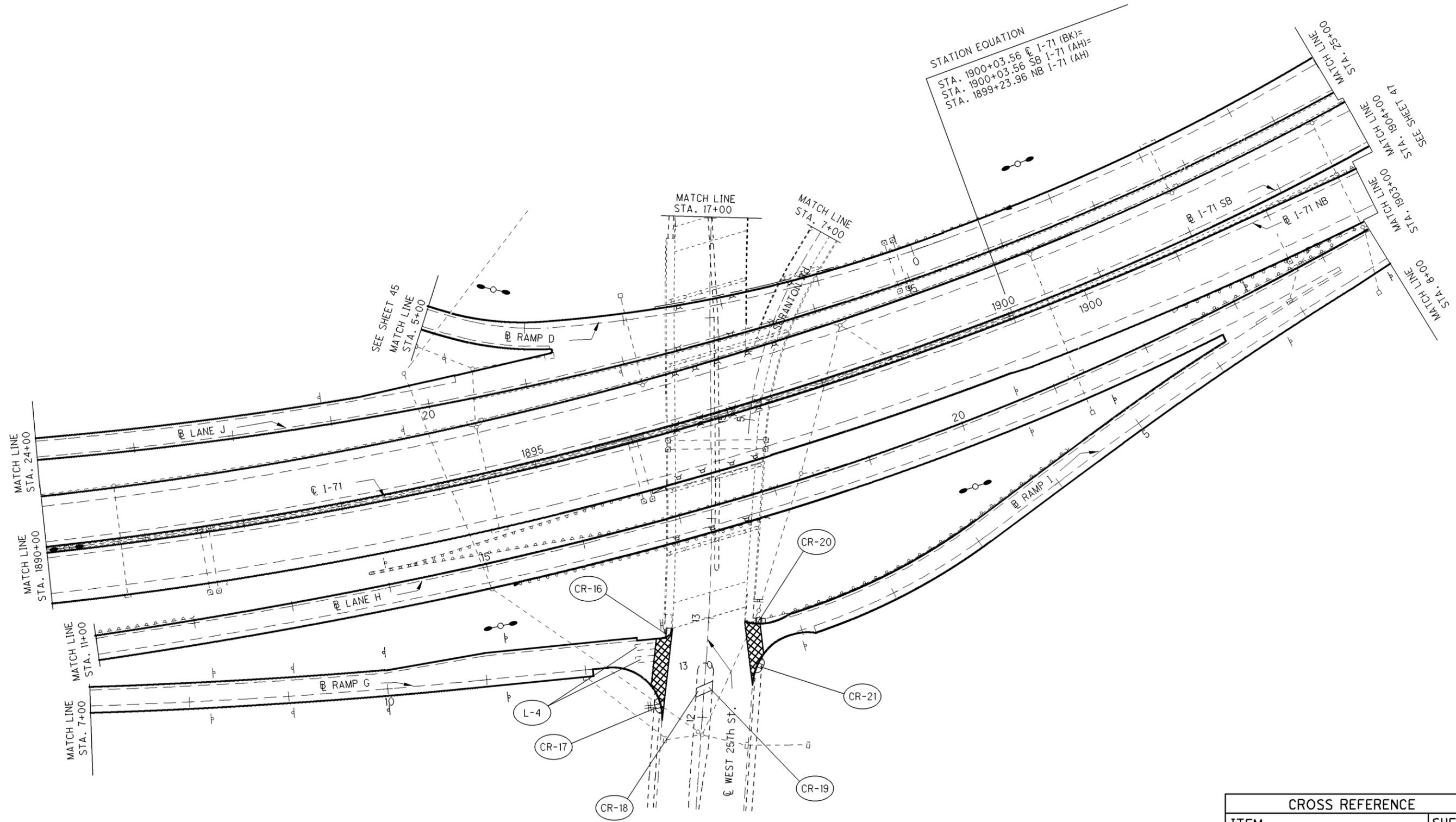
 HORIZONTAL SCALE IN FEET



PLAN SHEET - I.R. 71
STA. 5+00 TO STA. 12+50

CUY-71-14.96

SEE SHEET 44

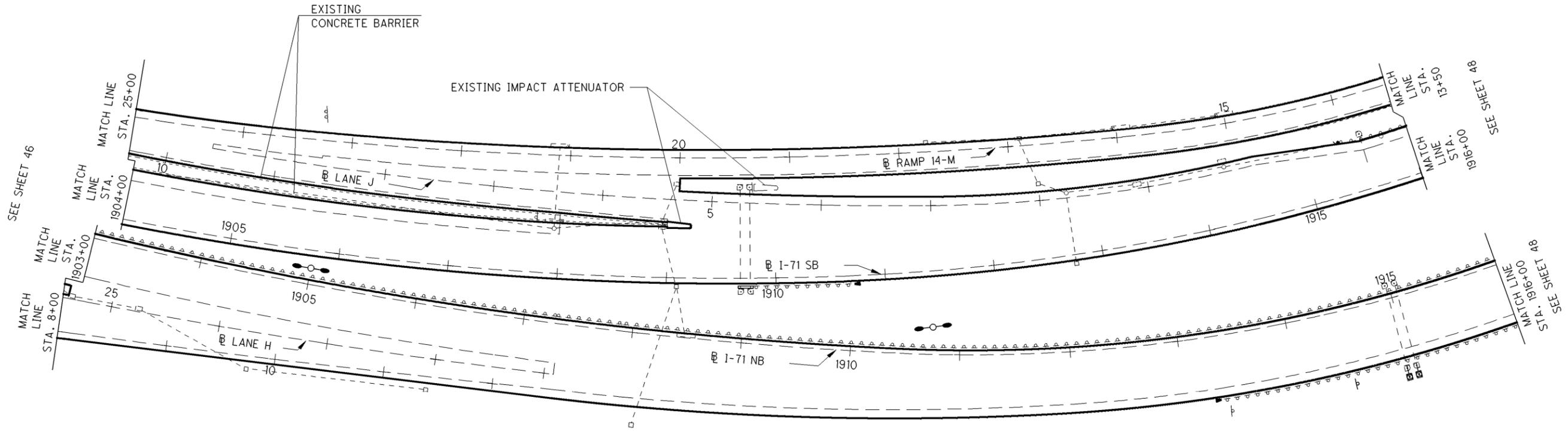


PLAN SHEET - I.R. 71
STA. 1890+00 TO STA. 1903+00

CUY-71-14.96

CROSS REFERENCE	
ITEM	SHEET
CURB RAMP SUBSUMMARY	16
DETECTOR LOOP SUBSUMMARY	18
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70

- ASPHALT TRANSITION PER SCD BP-3.1



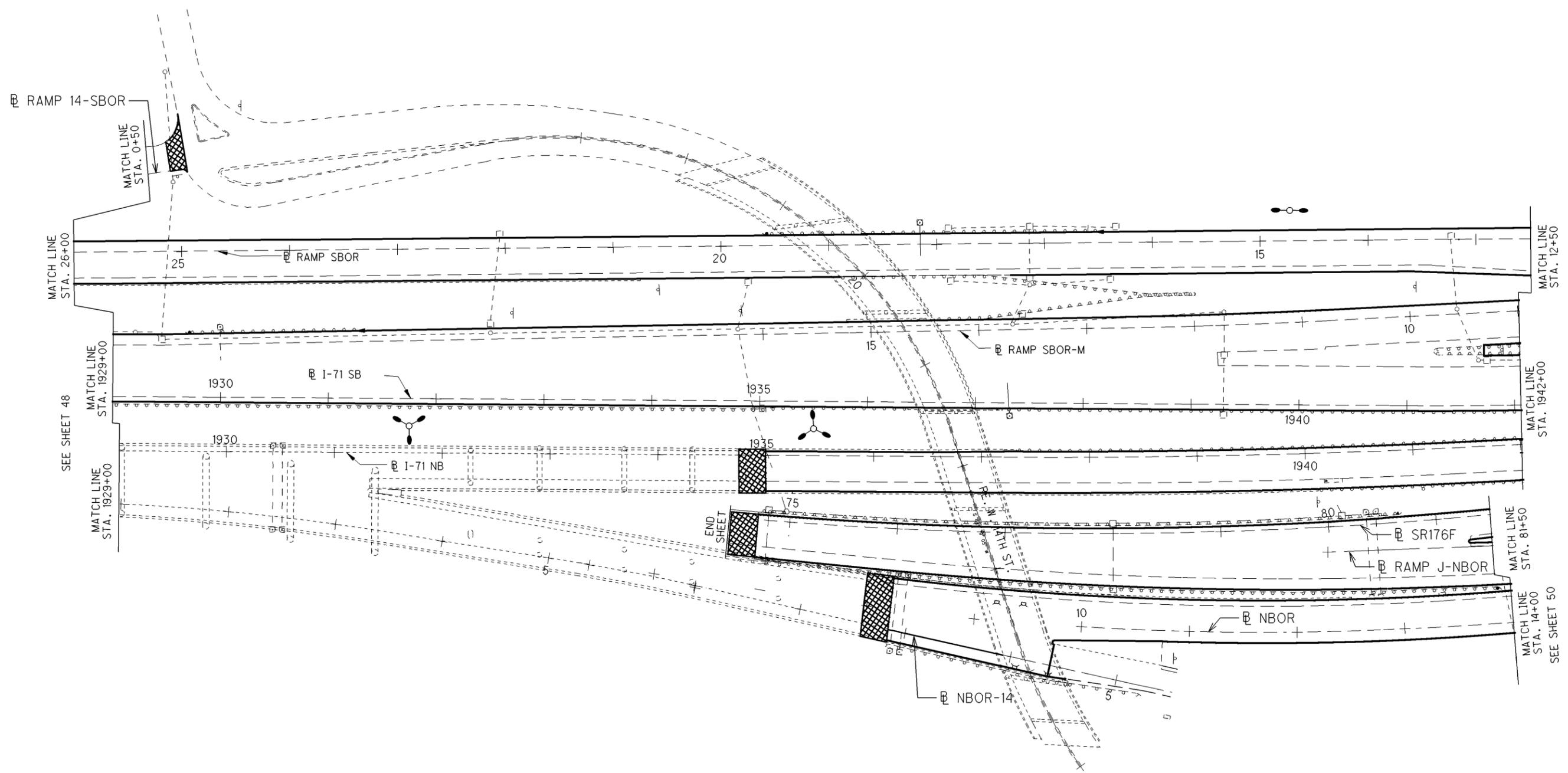
 - ASPHALT TRANSITION PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70



PLAN SHEET - I.R. 71
STA. 1903+00 TO STA. 1916+00

CUY-71-14.96



CALCULATED
CHECKED

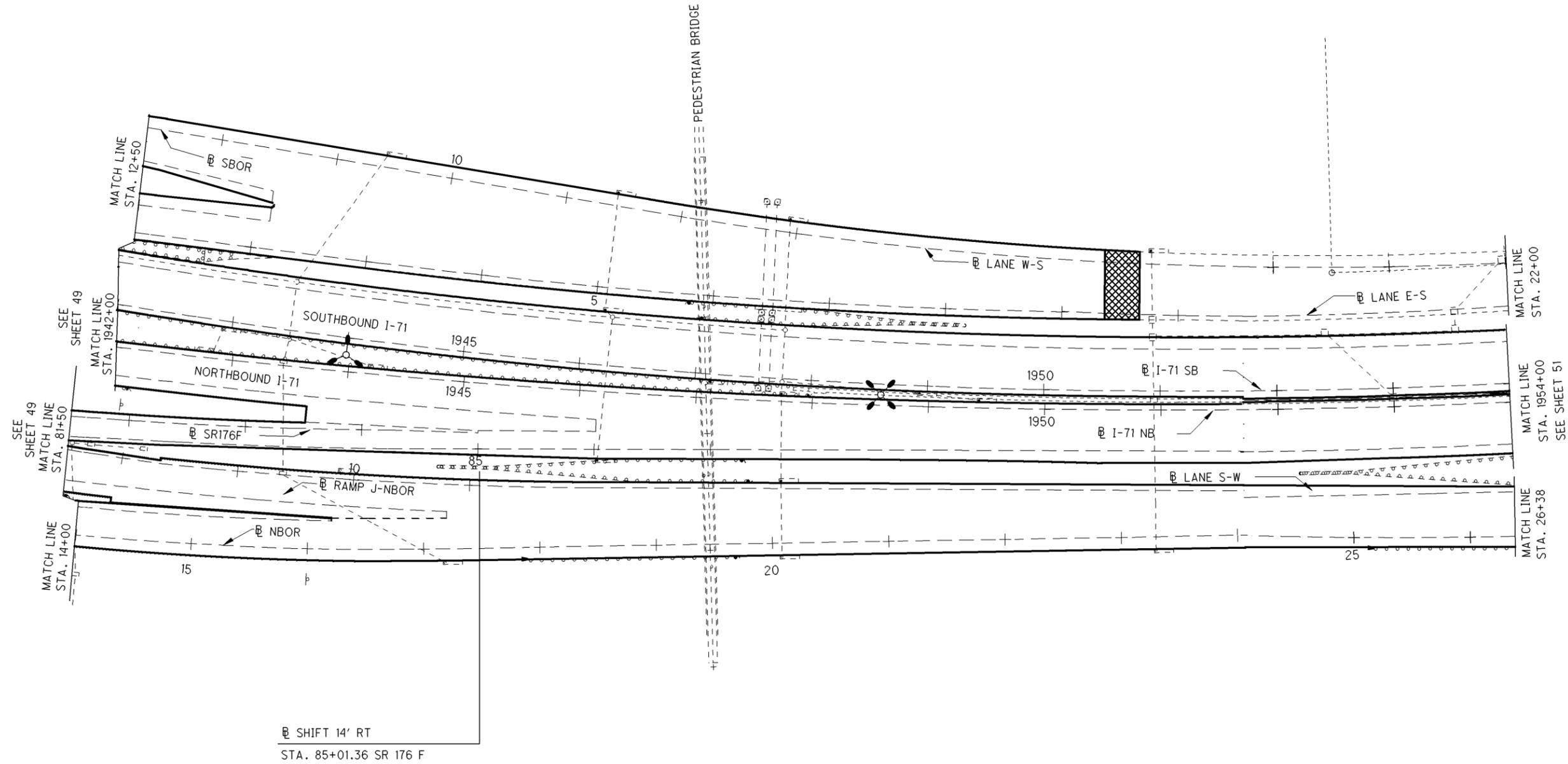
**PLAN SHEET - I.R. 71
STA. 1929+00 TO STA. 1942+00**

SEE SHEET 50

CUY-71-14.96

- ASPHALT TRANSITION PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70



 - ASPHALT TRANSITION PER SCD BP-3.1

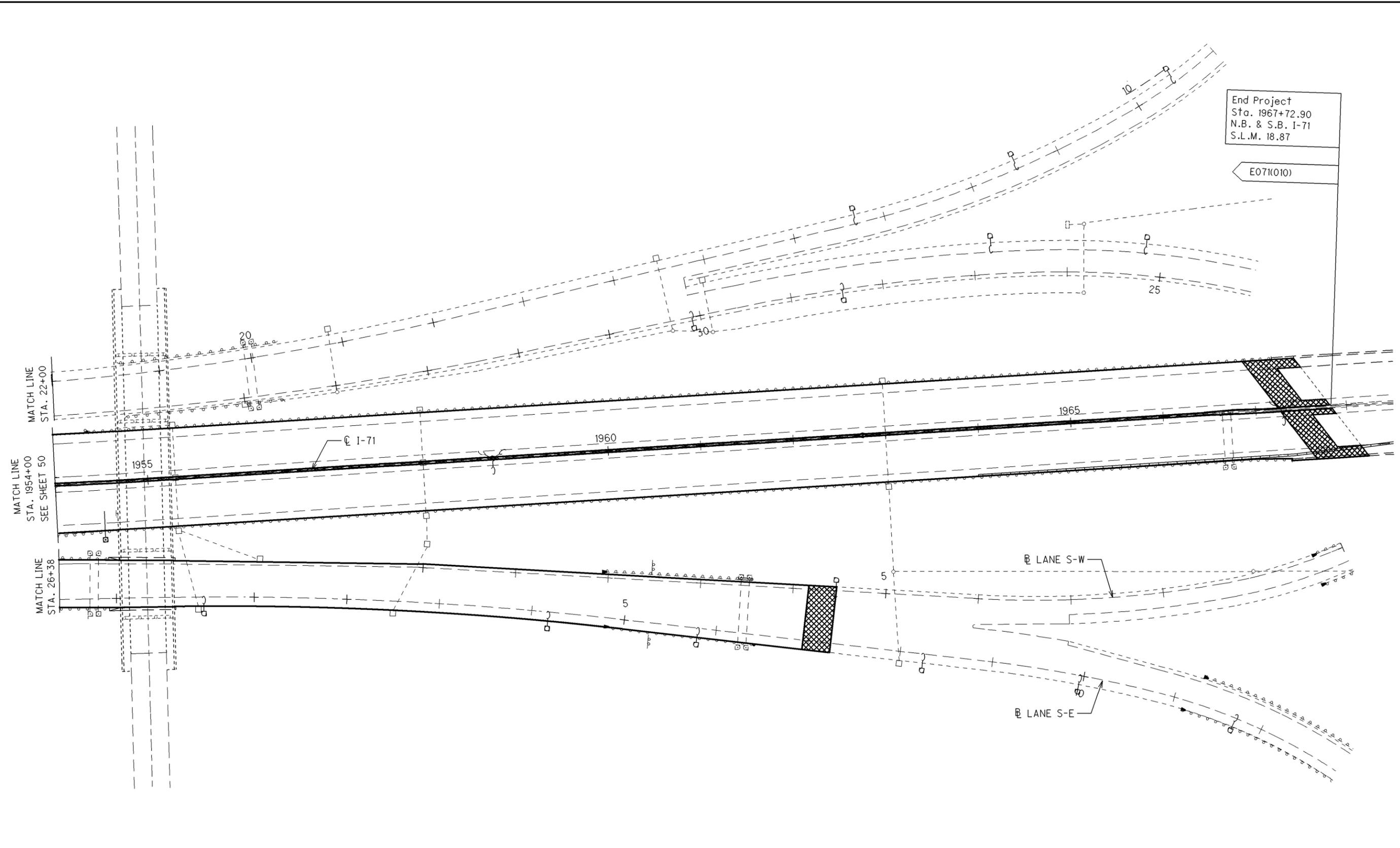
CROSS REFERENCE	
ITEM	SHEET
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70

CALCULATED CHECKED

 HORIZONTAL SCALE IN FEET

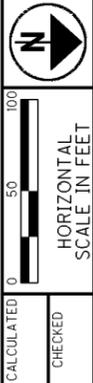


PLAN SHEET - I.R. 71
STA. 1942+00 TO STA. 1954+00



End Project
Sta. 1967+72.90
N.B. & S.B. I-71
S.L.M. 18.87

E071(010)



CALCULATED
CHECKED

PLAN SHEET - I.R. 71
STA. 1954+00 TO STA. 1967+72.90

CUY-71-14.96

51
71

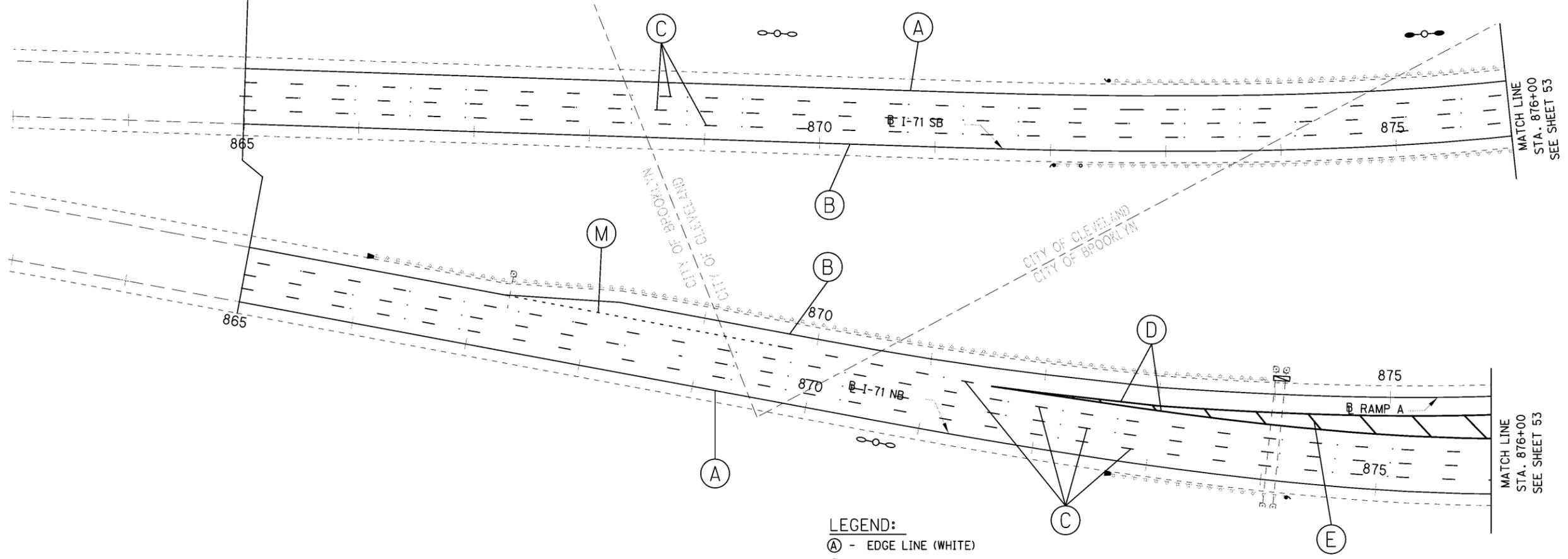
 - ASPHALT TRANSITION PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
RESURFACING SUBSUMMARY	24-26
GUARDRAIL SUBSUMMARY	30
TRAFFIC CONTROL	52-70

I:\PROJECTS\PID21810\dm\sheets\21810GP001.DGN 02-OCT-2012 10:21AM ekalfic

Begin Project
Sta. 865+00
N.B. & S.B. I-71
S.L.M. 14.96

E071(010)



- LEGEND:**
- (A) - EDGE LINE (WHITE)
 - (B) - EDGE LINE (YELLOW)
 - (C) - LANE LINE
 - (D) - CHANNELIZING LINE
 - (E) - TRANSVERSE LINE (WHITE)
 - (G) - CROSSWALK LINE
 - (H) - STOP LINE
 - (I) - LANE ARROW
 - (L) - TRANSVERSE LINE (WHITE), 100' C/C
 - (M) - 12" DOTTED LINE (WHITE)
 - (N) - TRANSVERSE LINE (YELLOW), 100 C/C
 - (O) - 12" DOTTED LINE, 3' LONG WITH 12' GAPS
 - * - WORD "ONLY" ON PAVEMENT
 - ** - WORD "EXIT" ON PAVEMENT
 - # - WORD "W 14th" ON PAVEMENT

CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51

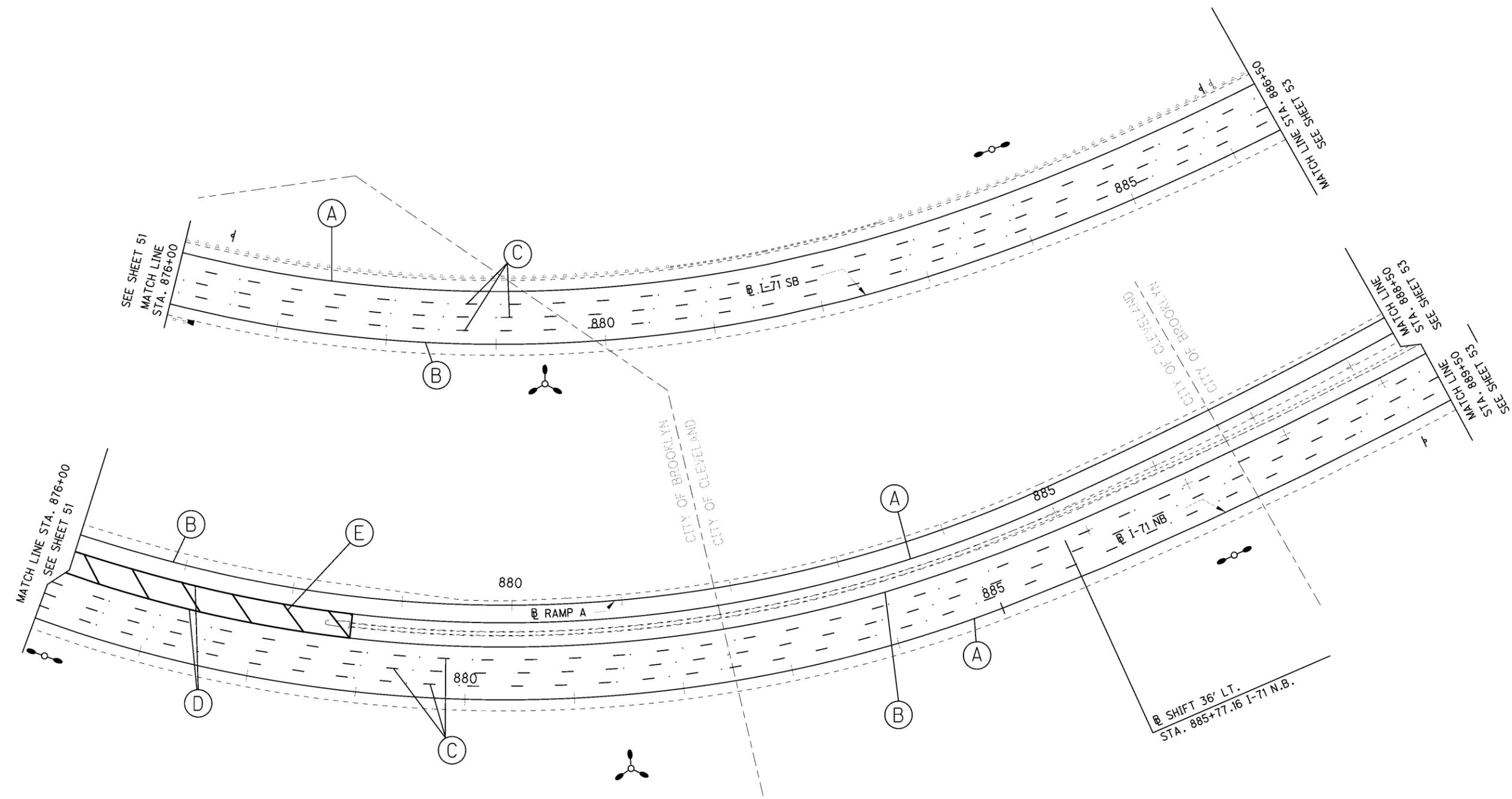
CALCULATED
CHECKED

HORIZONTAL SCALE IN FEET

0 50 100

TRAFFIC CONTROL SHEET - I.R. 71
STA. 865+00 TO STA. 876+00

I:\PROJECTS\PID21810\dm\sheets\21810SP002.DGN 02-OCT-2012 10:22AM ekallio



CALCULATED CHECKED

0 50 100
HORIZONTAL SCALE IN FEET

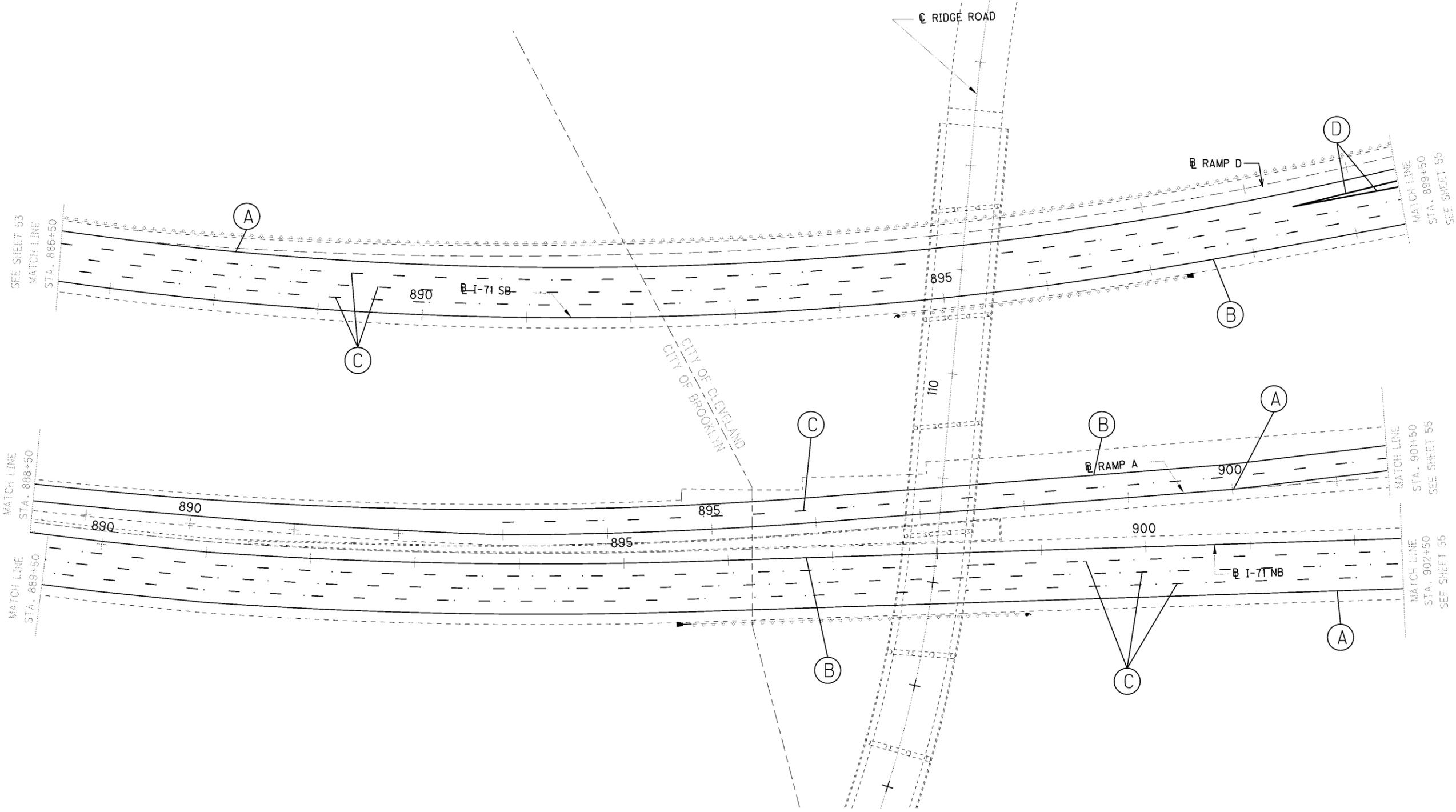
TRAFFIC CONTROL SHEET - I.R. 71
STA. 876+00 TO STA. 889+50

CUY-71-14.96

53
71

CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52

I:\PROJECTS\PID21810\dm\sheet\21810GP003.DGN 02-OCT-2012 10:24AM ekallo

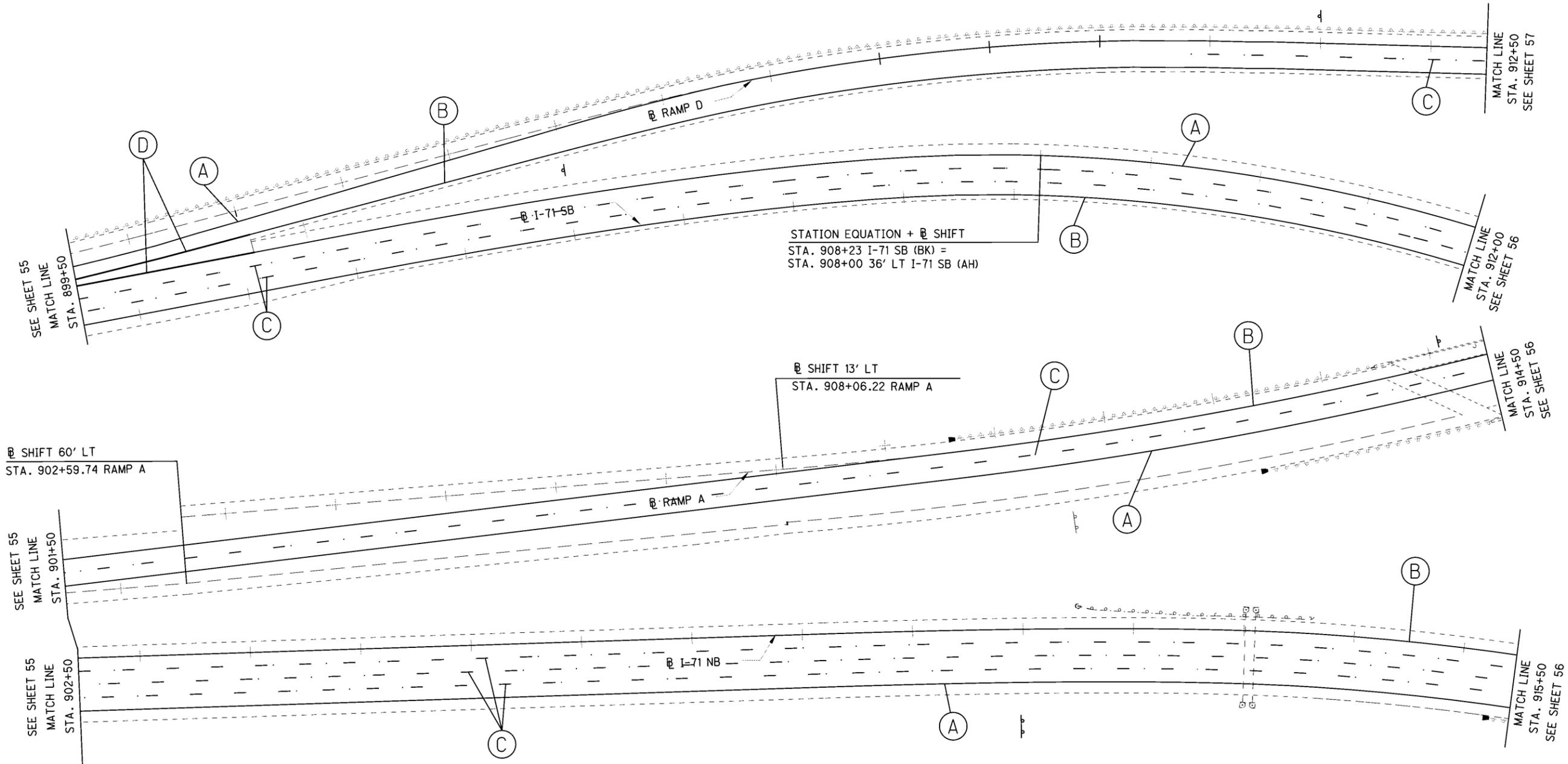


TRAFFIC CONTROL SHEET - I.R. 71
STA. 889+50 TO STA. 902+50

CUY-71-14.96

CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52

I:\PROJECTS\PID21810\dm\sheets\21810GP004.DGN 02-OCT-2012 10:27 AM ekallo



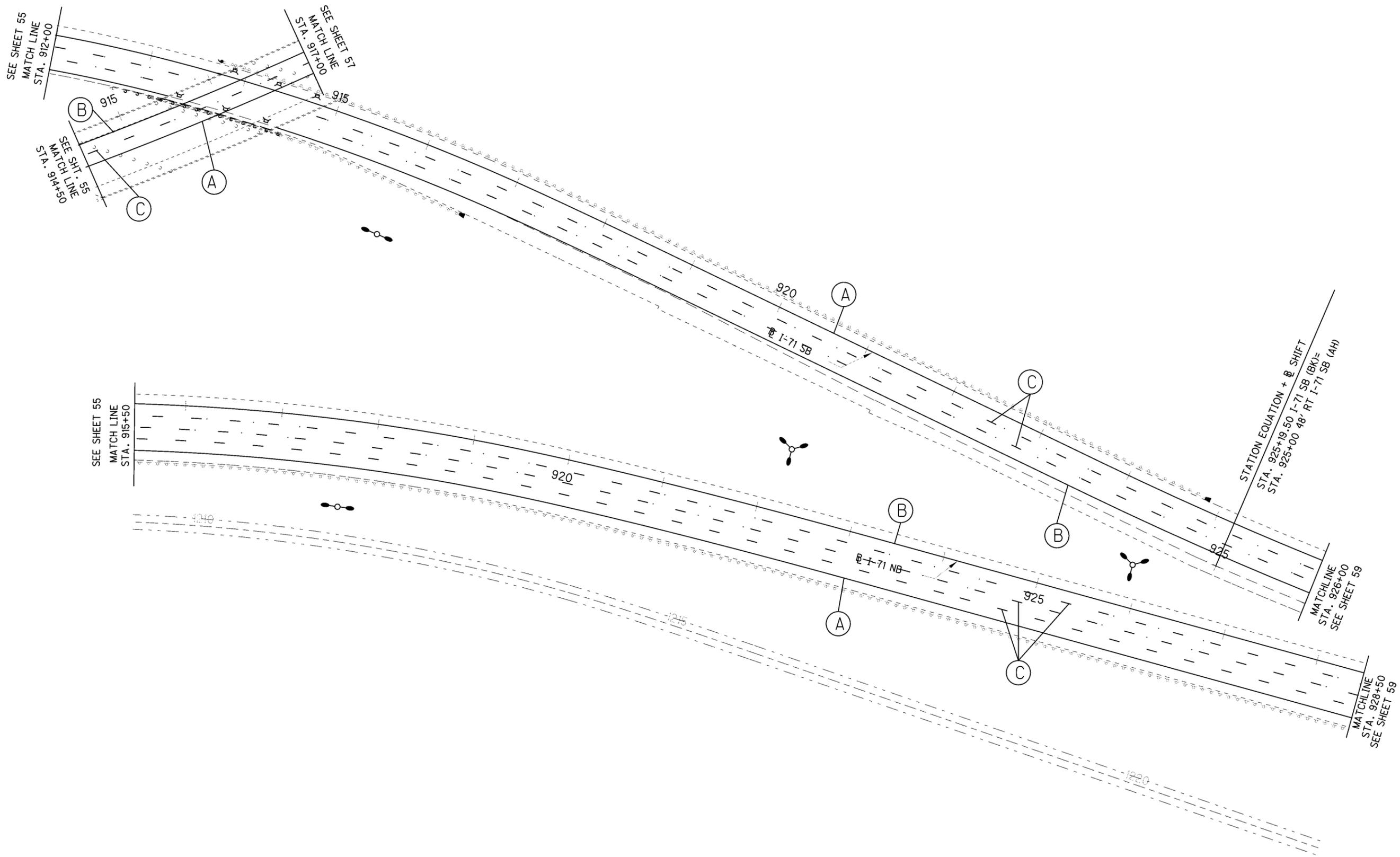
CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52

TRAFFIC CONTROL SHEET - I.R. 71
STA. 902+50 TO STA. 915+50

CUY-71-14.96

55
71

CALCULATED
CHECKED

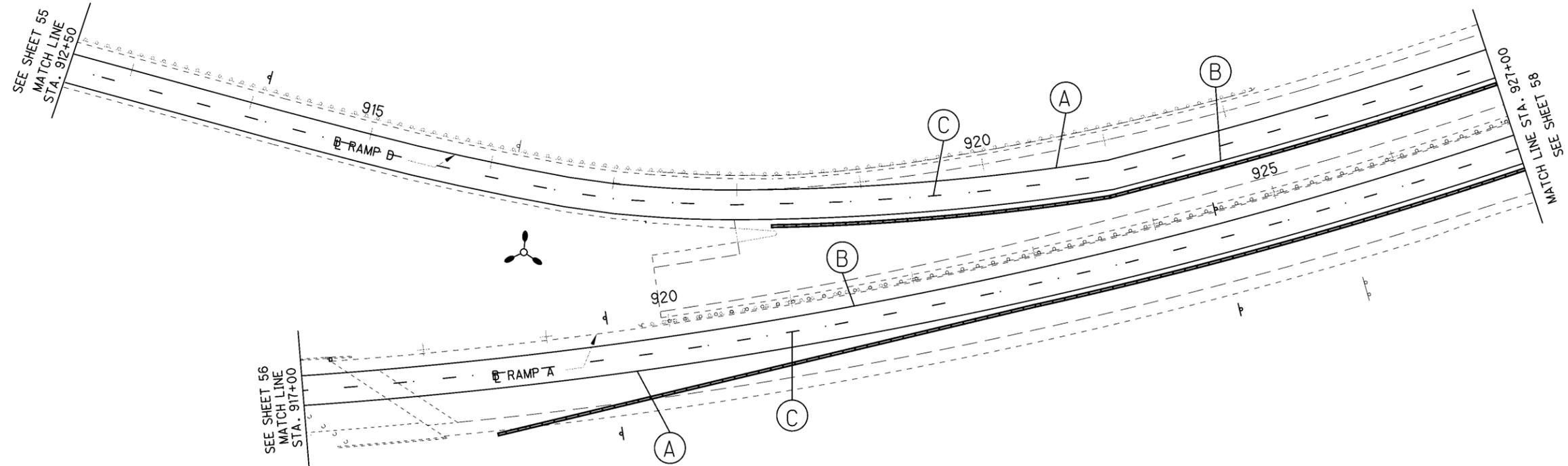


CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52

CALCULATED CHECKED

0 50 100
HORIZONTAL SCALE IN FEET

TRAFFIC CONTROL SHEET - I.R. 71
STA. 915+50 TO STA. 28+50



CALCULATED

CHECKED

0 50 100

HORIZONTAL
SCALE IN FEET

↑

N

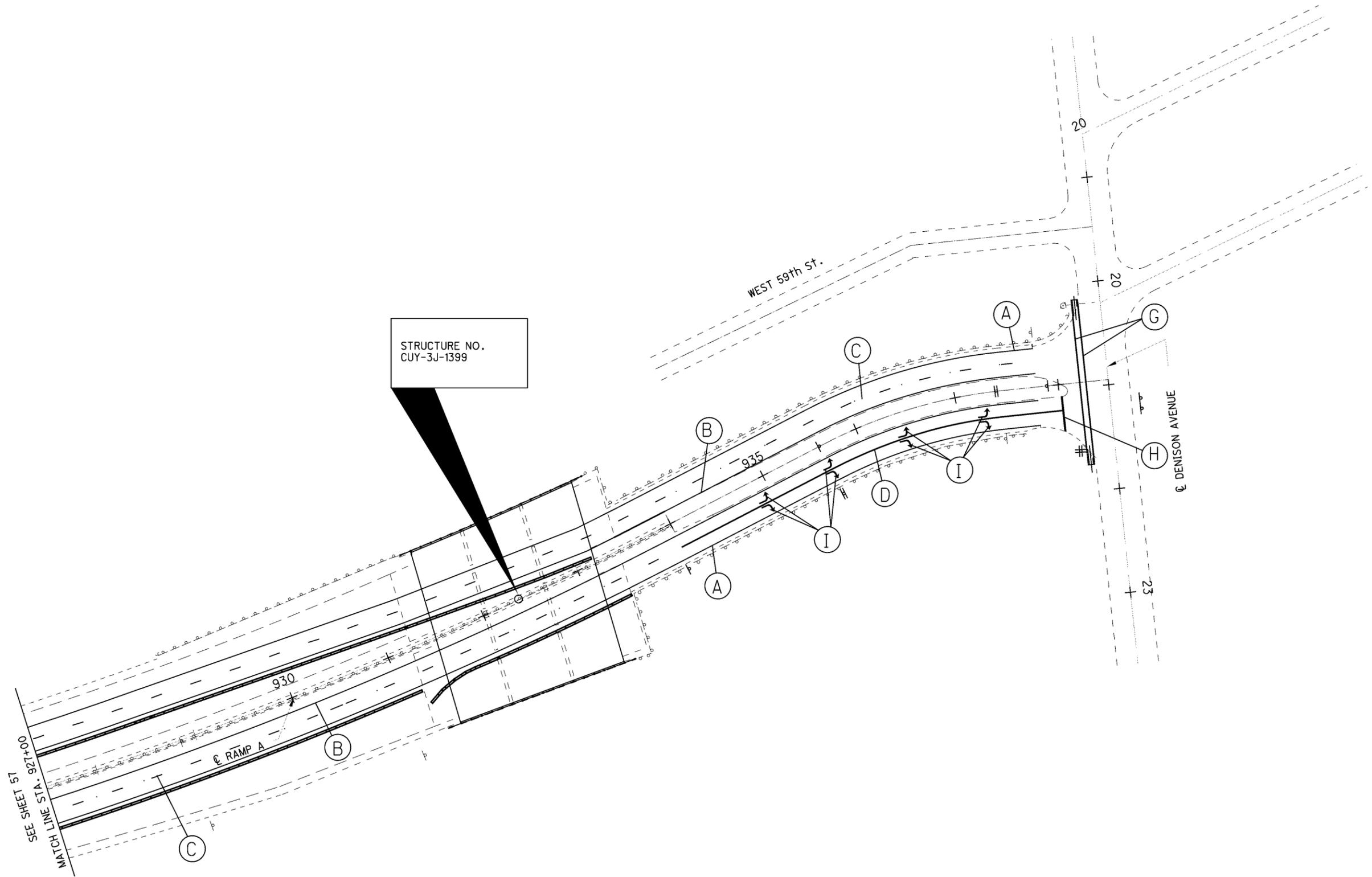
TRAFFIC CONTROL SHEET - I.R. 71
STA. 917+00 TO STA. 927+00

CUY-71-14.96

57
71

CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52

I:\PROJECTS\PID21810\dm\sheets\21810GP007.DGN 02-OCT-2012 10:51AM ekallo



STRUCTURE NO.
CUY-3J-1399

CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52

CALCULATED
CHECKED

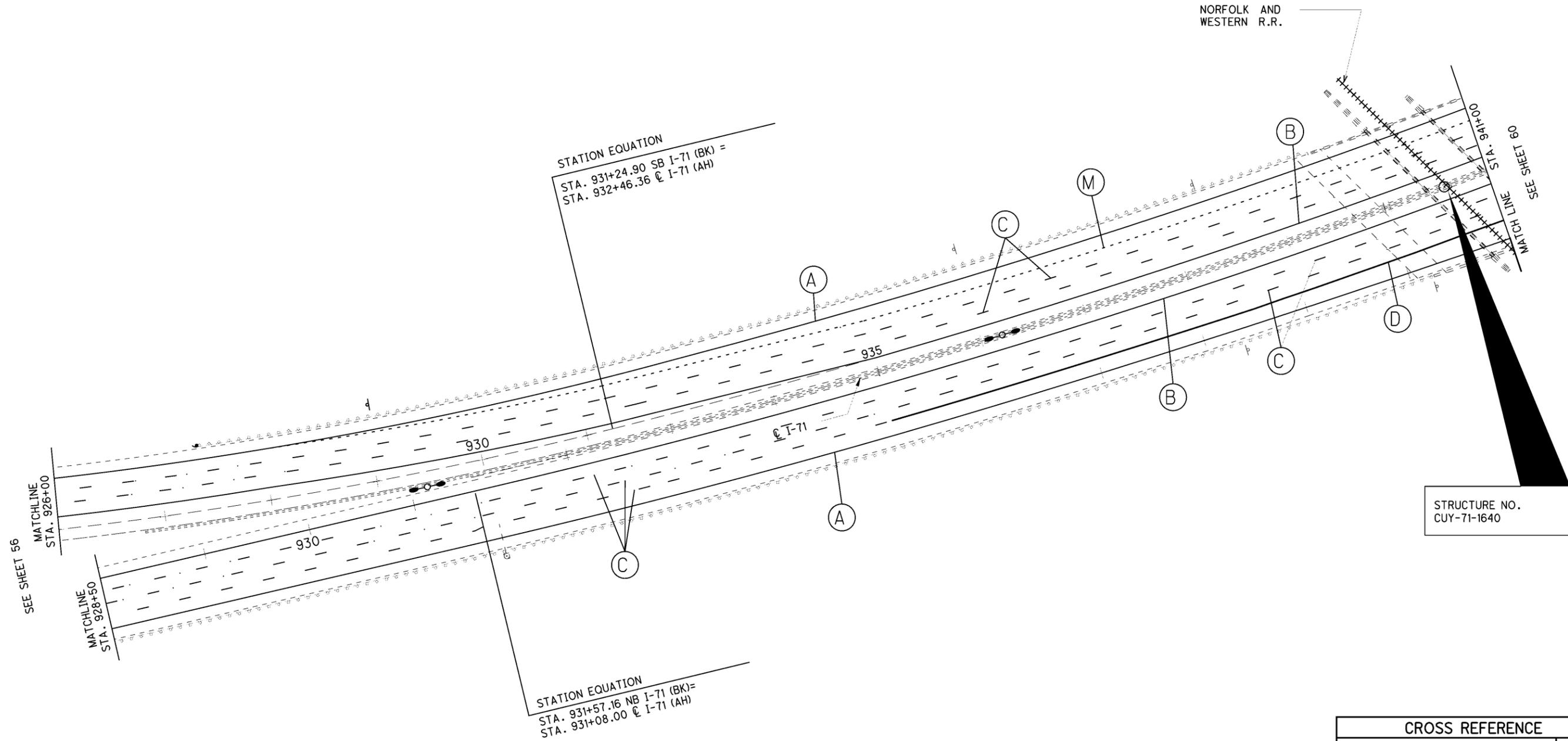
HORIZONTAL
SCALE IN FEET

TRAFFIC CONTROL SHEET - I.R. 71
STA. 927+00 TO STA. 939+00

CUY-71-14.96

58
71

I:\PROJECTS\PID21810\dm\sheets\21810GP008.DGN 02-OCT-2012 10:53AM ekallo



CALCULATED
 CHECKED

0 50 100
 HORIZONTAL SCALE IN FEET

↑
 N

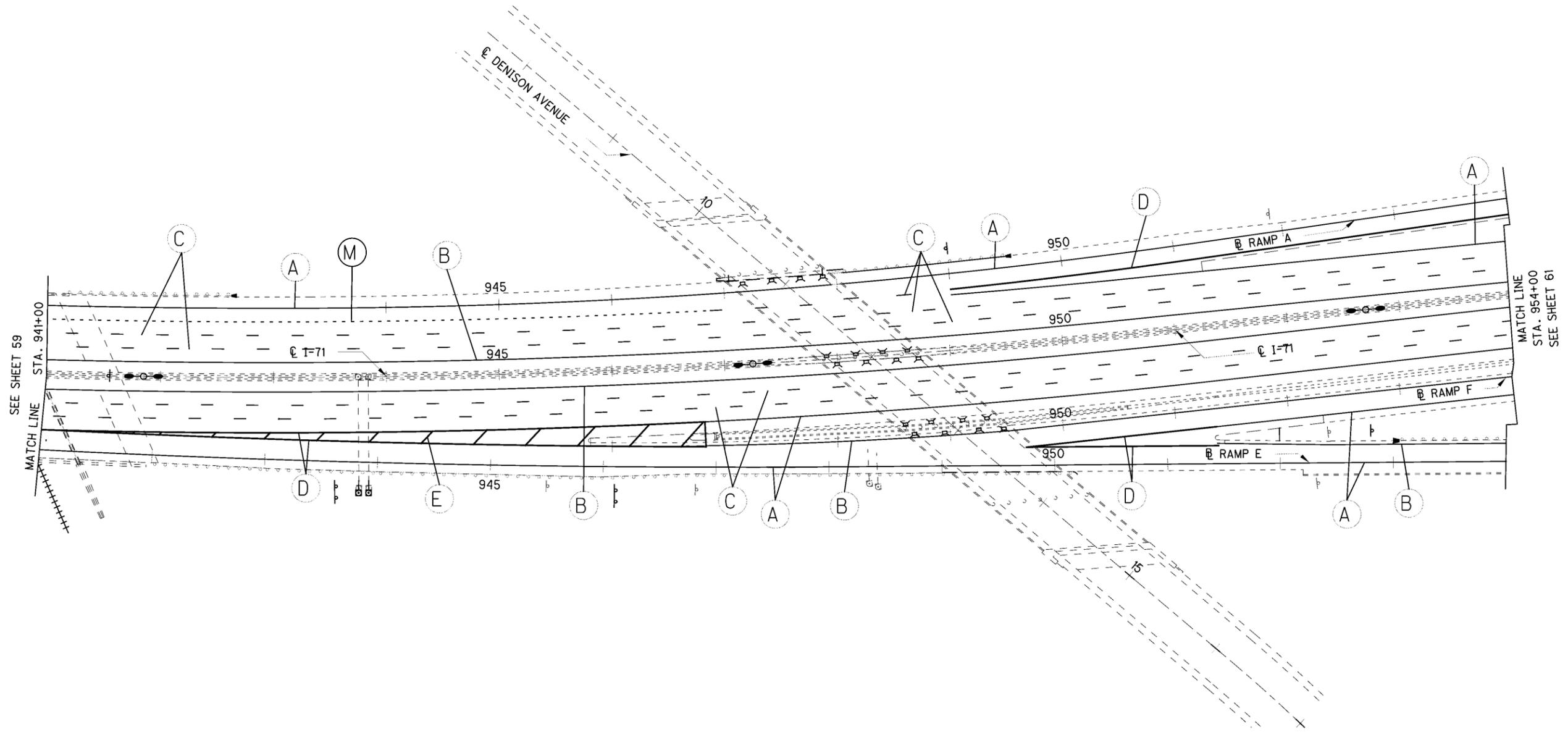
TRAFFIC CONTROL SHEET - I.R. 71
 STA. 928+50 TO STA. 941+00

CUY-71-14.96

59
 71

CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52

I:\PROJECTS\PID21810\dm\sheets\21810GP009.DGN 02-OCT-2012 10:34AM ekallo



CALCULATED
CHECKED

0 50 100
HORIZONTAL
SCALE IN FEET

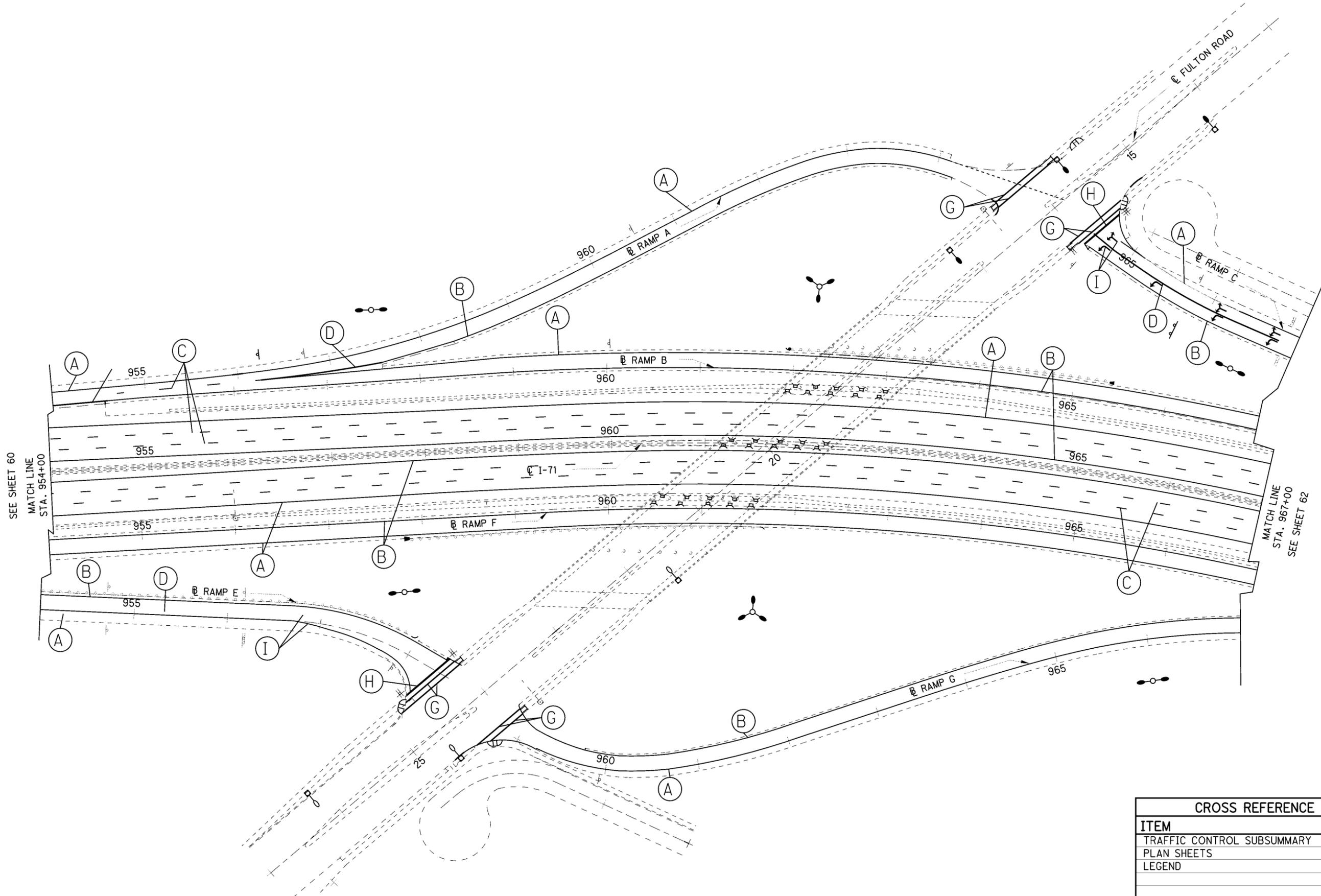
TRAFFIC CONTROL SHEET - I.R. 71
STA. 941+00 TO STA. 954+00

CUY-71-14.96

60
71

CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52

I:\PROJECTS\PID21810\dm\sheets\21810GPO10.DGN 02-OCT-2012 10:35AM ekallo



HORIZONTAL SCALE IN FEET

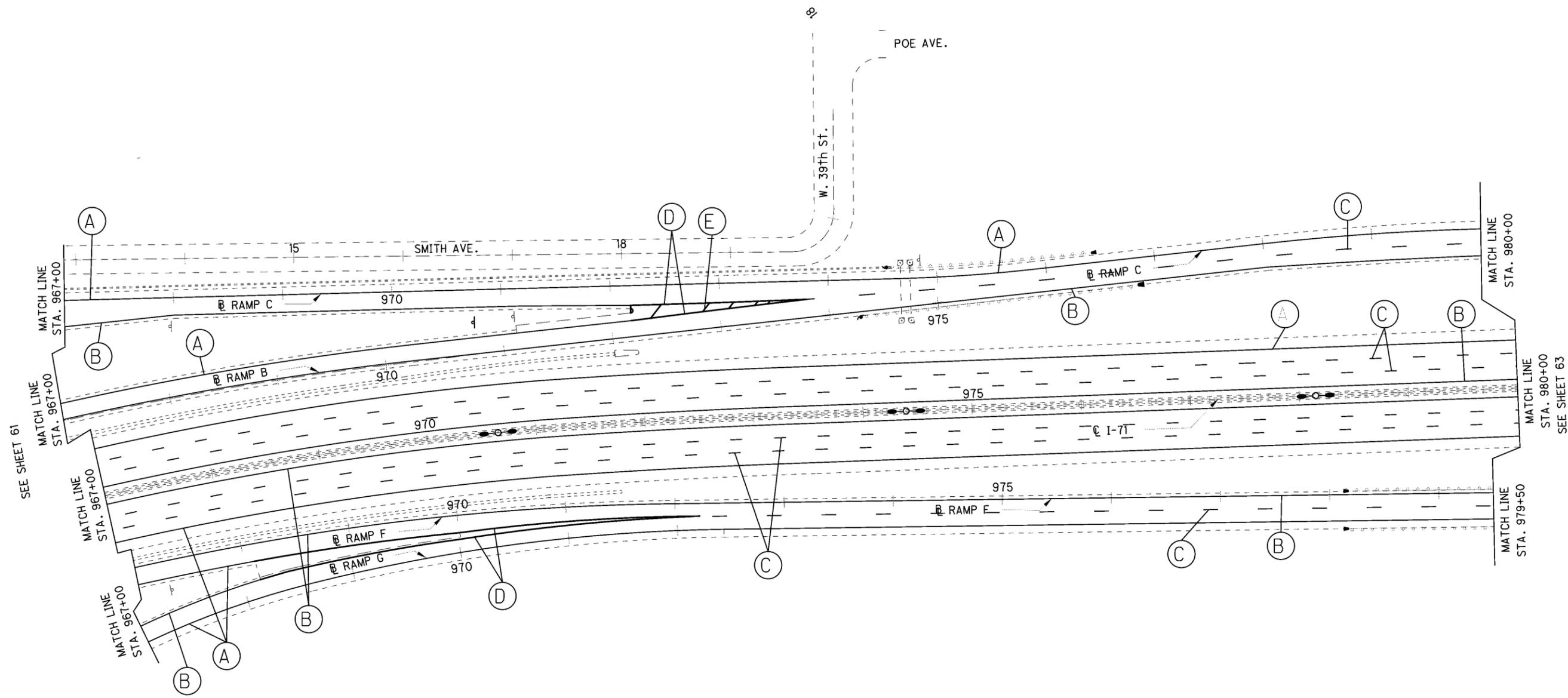
CALCULATED
CHECKED

TRAFFIC CONTROL SHEET - I.R. 71
STA. 954+00 TO STA. 967+00

61
71

CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52

I:\PROJECTS\PID21810\dm\sheets\21810GP011.DGN 02-OCT-2012 10:45AM ekallo

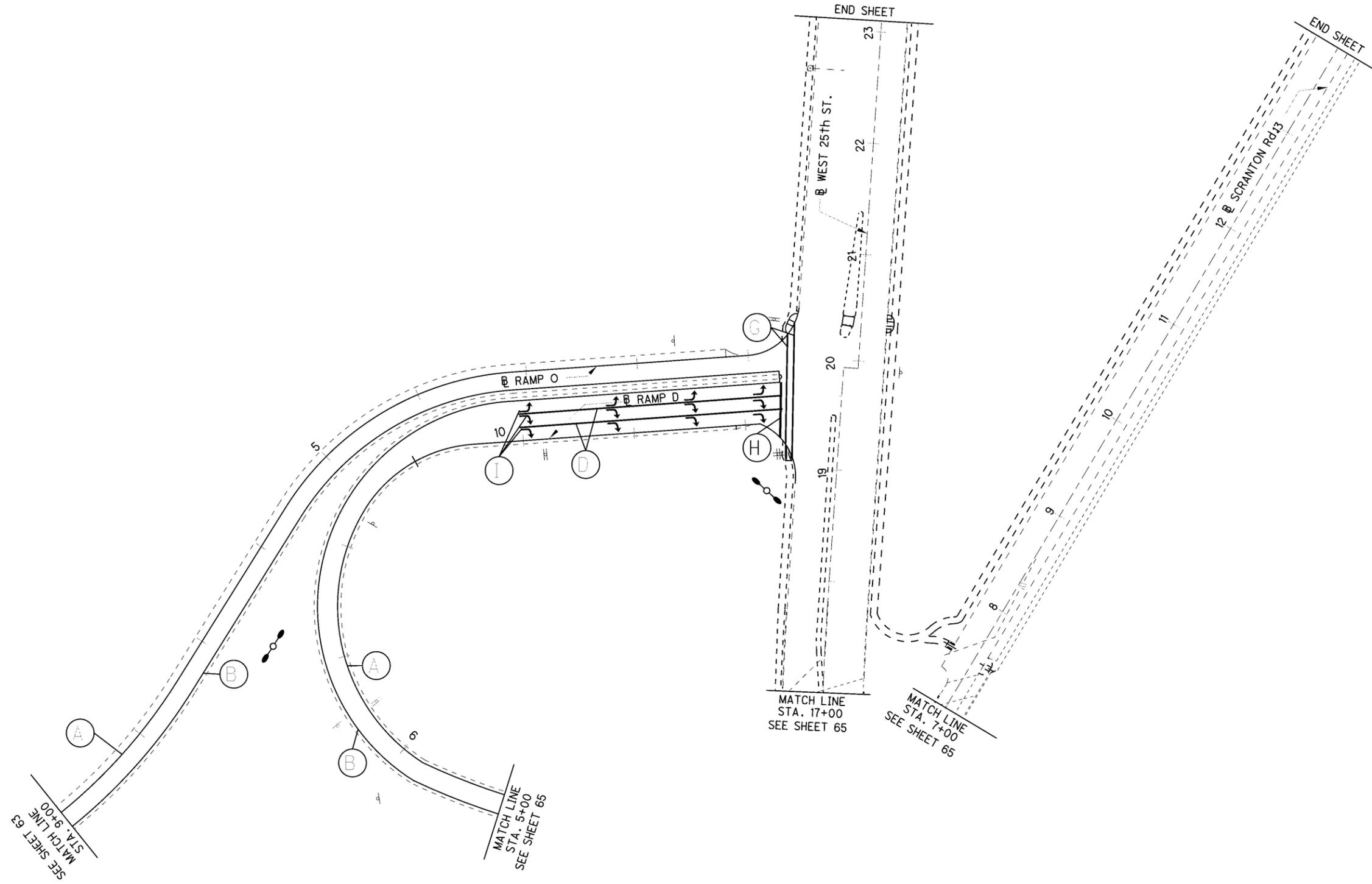


CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52

CALCULATED
CHECKED

HORIZONTAL SCALE IN FEET

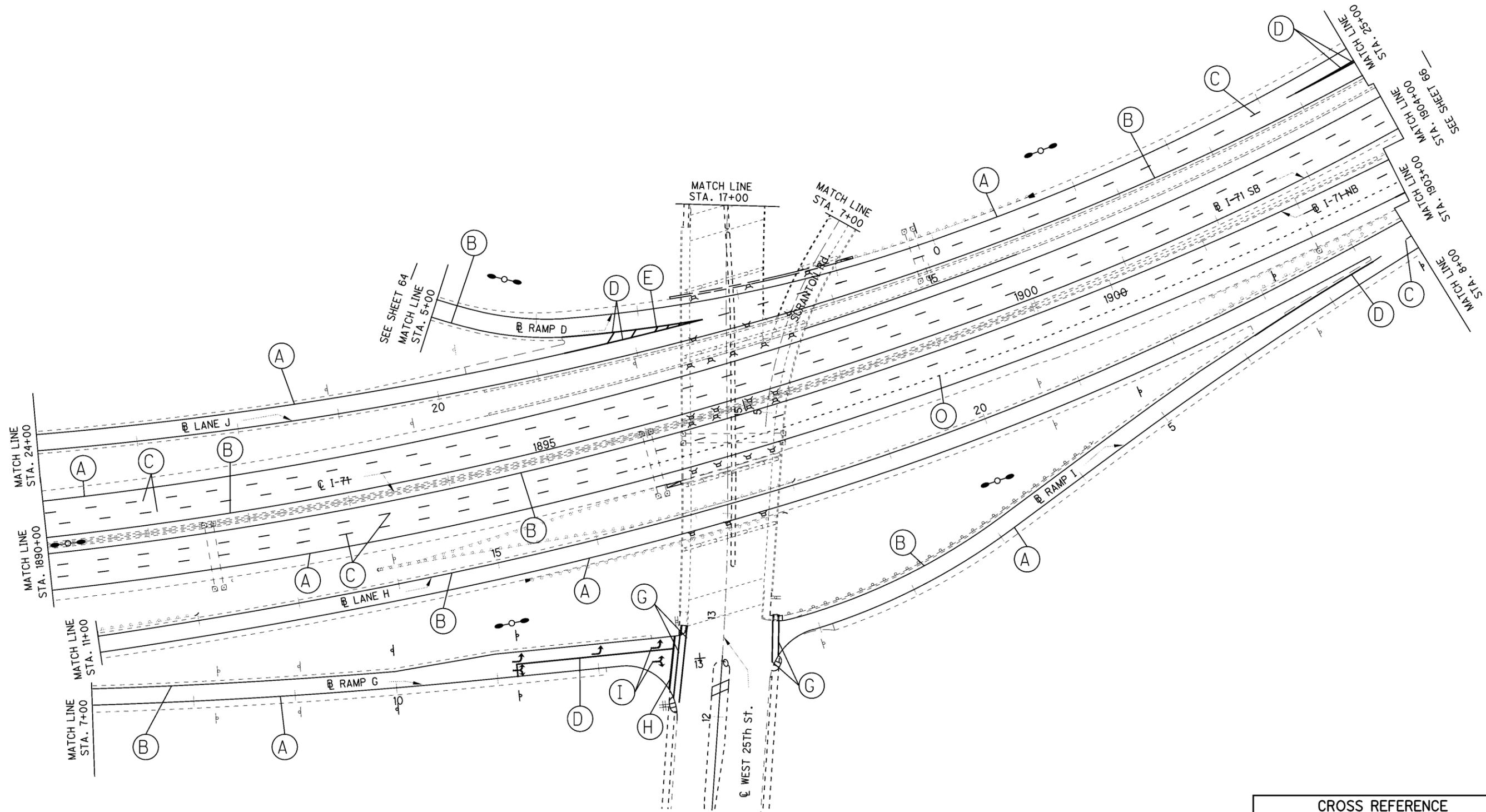
TRAFFIC CONTROL SHEET - I.R. 71
STA. 967+00 TO STA. 980+00



CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52

I:\PROJECTS\PID21810\dm\sheets\21810GP014.DGN 02-OCT-2012 11:03AM ekallo

SEE SHEET 63

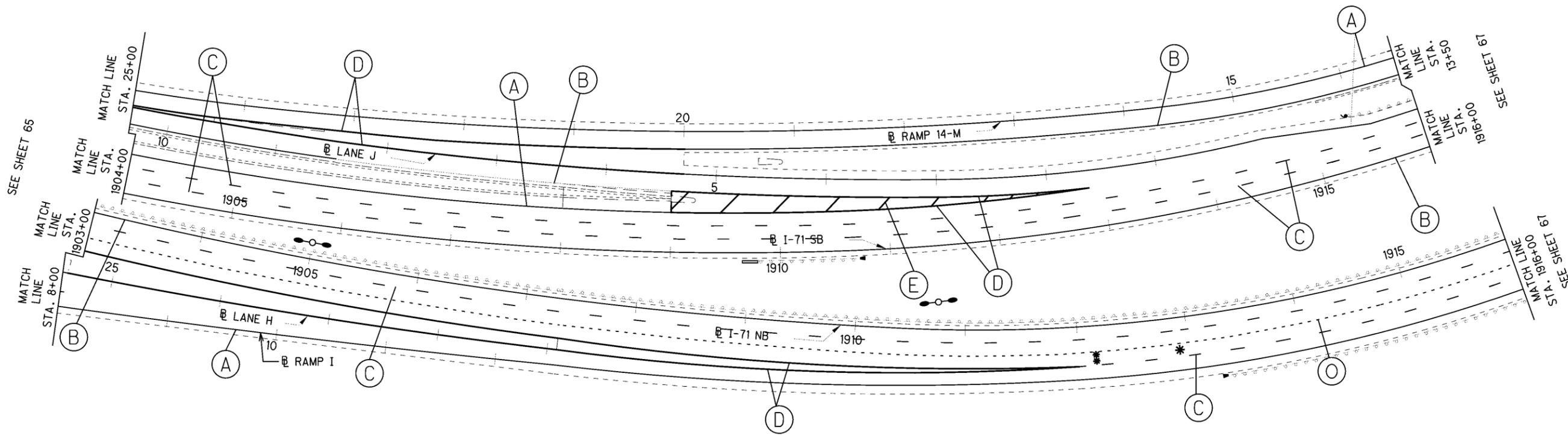


TRAFFIC CONTROL SHEET - I.R. 71
 STA. 1890+00 TO STA. 1903+00

CUY-71-14.96

CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52

I:\PROJECTS\PID21810\dm\sheet\21810GPO15.DGN 02-OCT-2012 11:04AM ekalic



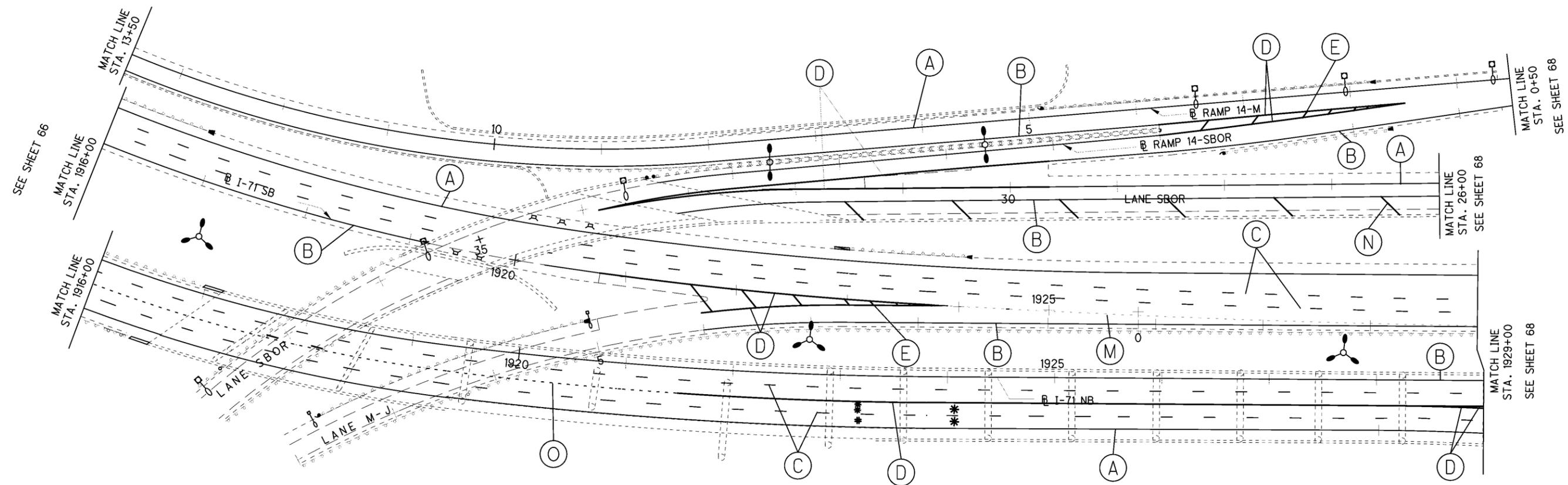
CALCULATED
CHECKED

0 50 100
HORIZONTAL
SCALE IN FEET

TRAFFIC CONTROL SHEET - I.R. 71
STA. 1903+00 TO STA. 1916+00

CUY-71-14.96

CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52



CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52



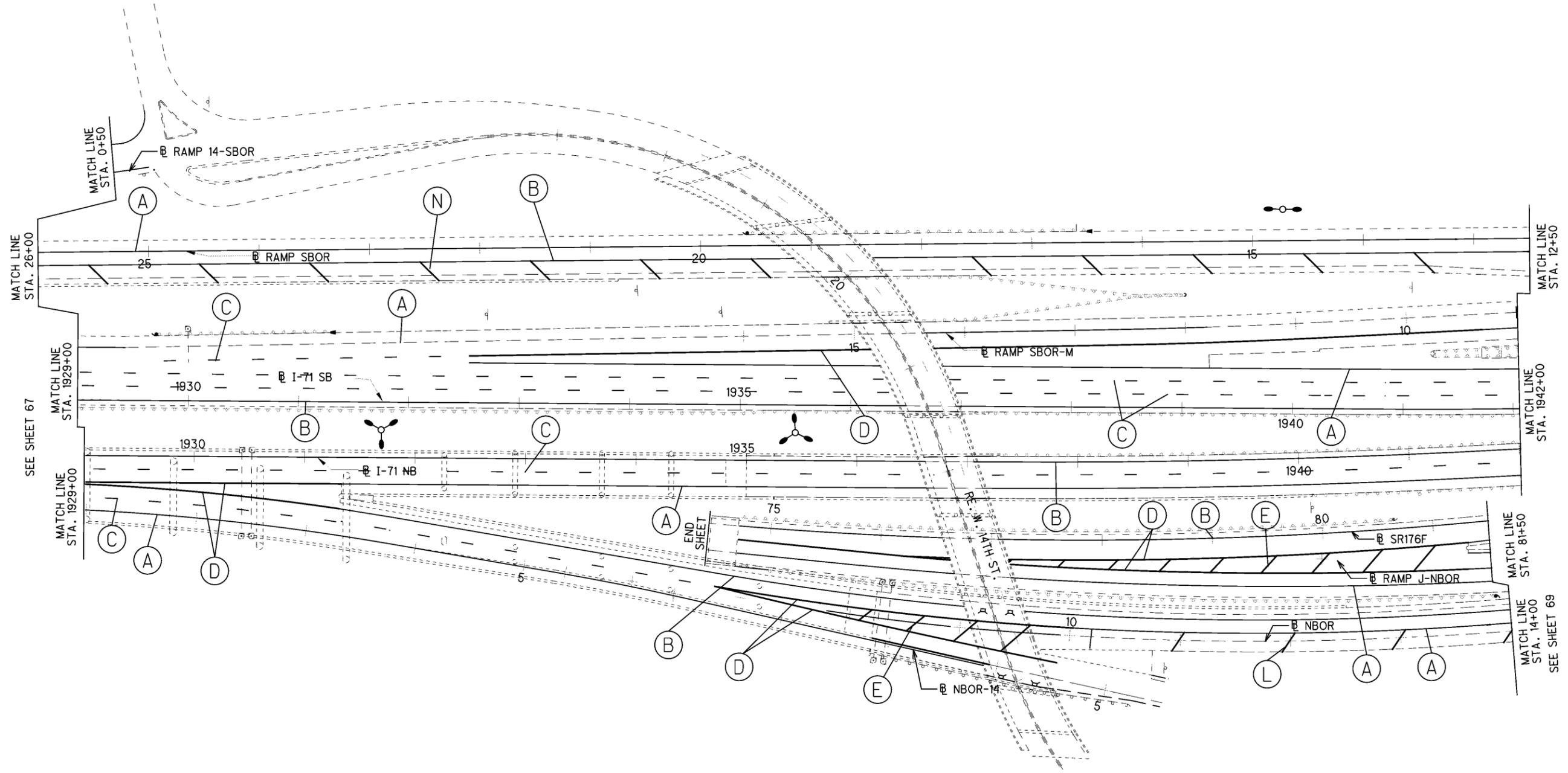
0 50
HORIZONTAL
SCALE IN FEET

CALCULATED
CHECKED

TRAFFIC CONTROL SHEET - I.R. 71
STA. 1916+00 TO STA. 1929+00

CUY-71-14.96

I:\PROJECTS\PID21810\dm\sheet\21810GP017.DGN 02-OCT-2012 11:07AM ekallo



SEE SHEET 67

SEE SHEET 69

SEE SHEET 69

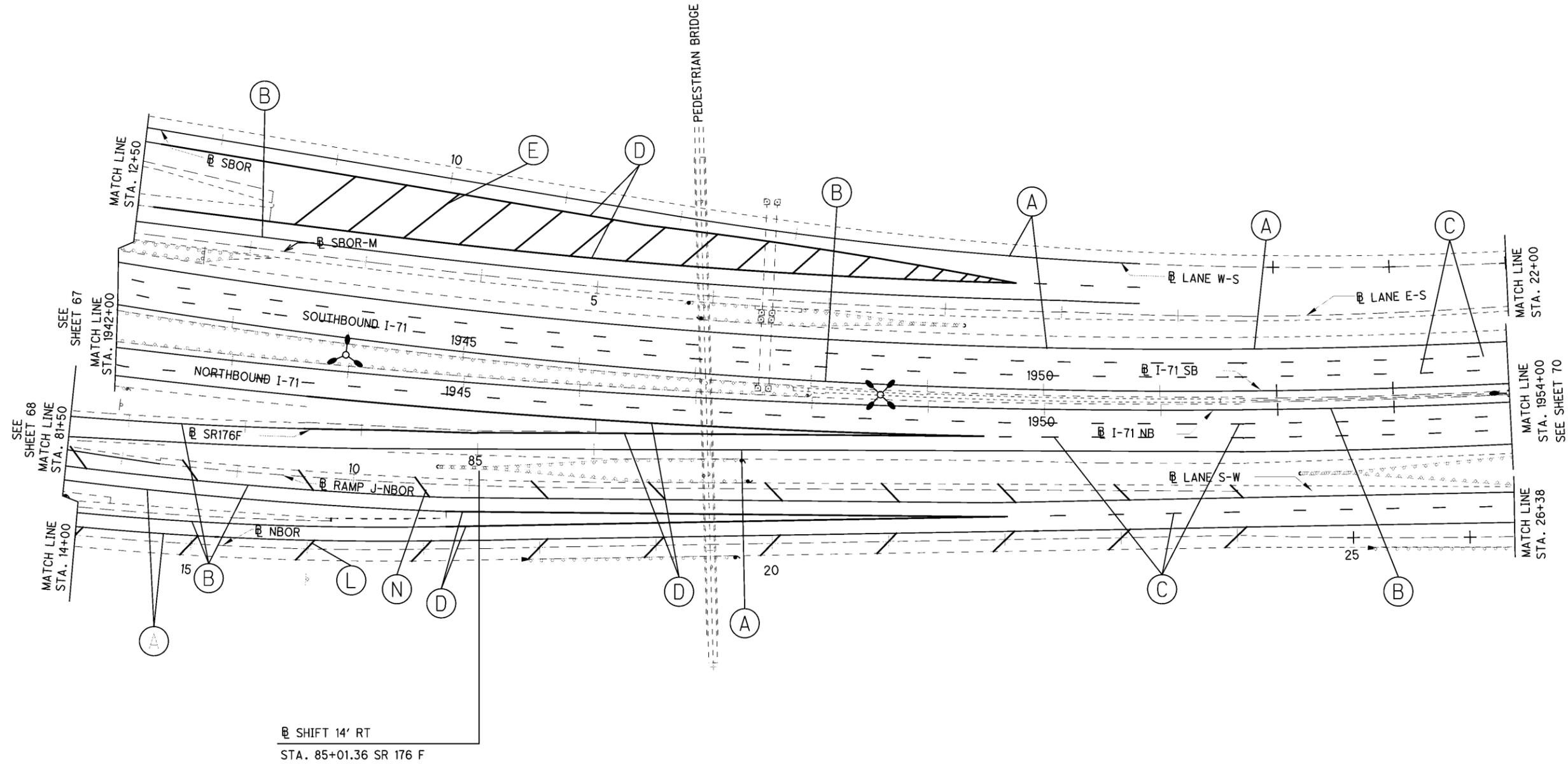
CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52

CALCULATED
CHECKED

HORIZONTAL SCALE IN FEET

TRAFFIC CONTROL SHEET - I.R. 71
STA. 1929+00 TO STA. 1942+00

I:\PROJECTS\PID21810\dm\sheets\21810GP018.DGN 02-OCT-2012 11:13AM ekallo



CALCULATED
CHECKED

0 50 100
HORIZONTAL
SCALE IN FEET

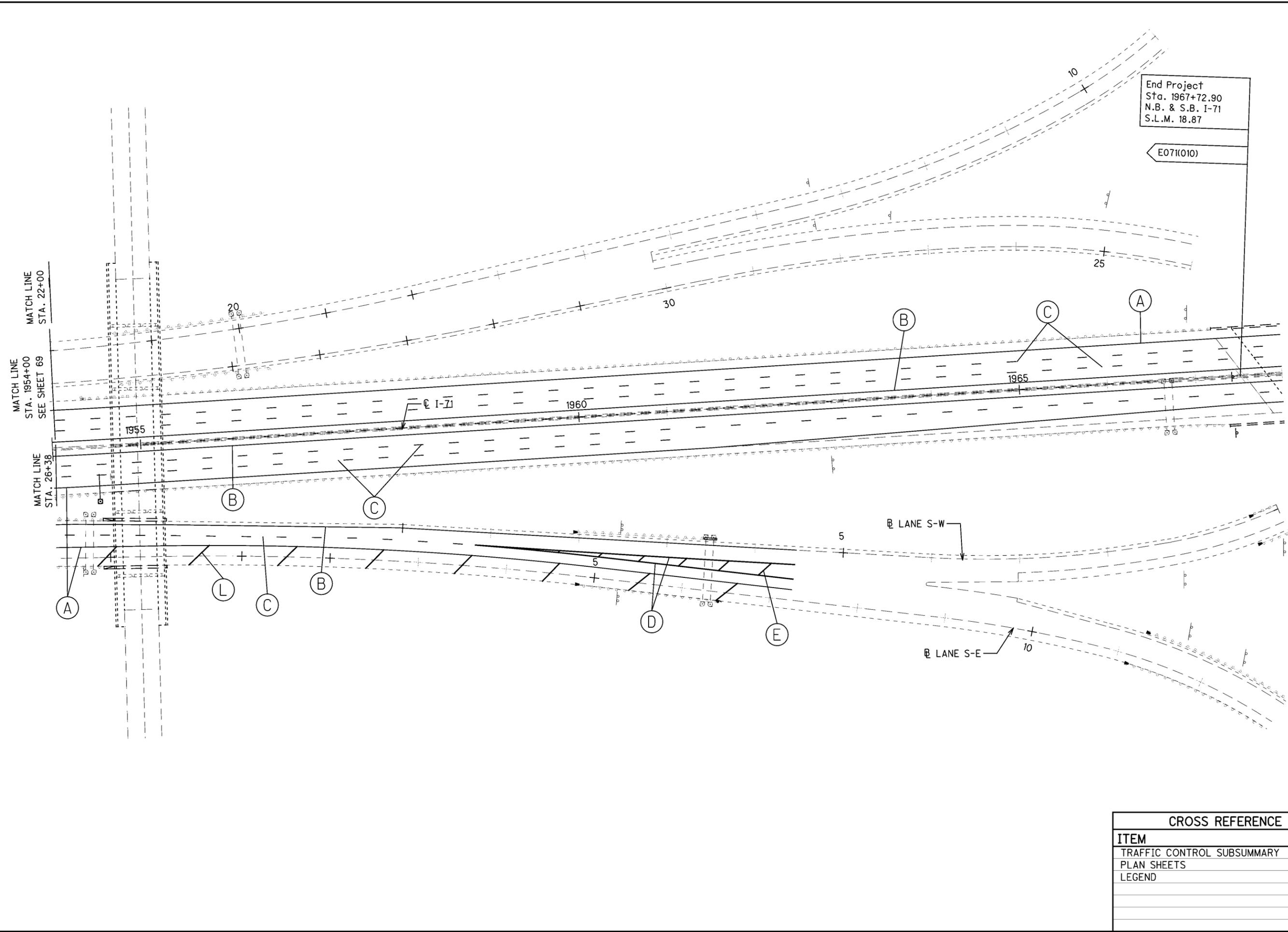
N

TRAFFIC CONTROL SHEET - I.R. 71
STA. 1942+00 TO STA. 1954+00

CUY-71-14.96

CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52

I:\PROJECTS\PID21810\dm\sheet\21810GP019.DGN 02-OCT-2012 11:15 AM ekallo



End Project
Sta. 1967+72.90
N.B. & S.B. I-71
S.L.M. 18.87

E071(K010)



0 50 100
HORIZONTAL
SCALE IN FEET

CALCULATED
CHECKED

TRAFFIC CONTROL SHEET - I.R. 71
STA. 1954+00 TO STA. 1967+72.90

CUY-71-14.96

70
71

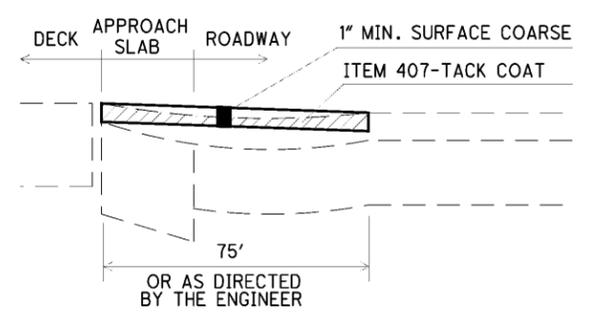
CROSS REFERENCE	
ITEM	SHEET
TRAFFIC CONTROL SUBSUMMARY	27-29
PLAN SHEETS	33-51
LEGEND	52

* - STRAIGHT GRADE - THE ASPHALT TRANSITIONS SHALL BE CONSIDERED UNACCEPTABLE IF THE FINAL GRADE VARIES FROM THE DESIRED STRAIGHT GRADE BY GREATER THAN 3/8 INCHES ANYWHERE THROUGHOUT THE LENGTH OF THE TRANSITION. THIS TOLERANCE IS REDUCED TO 1/4 INCH FOR THE FIRST 5 FEET ADJACENT TO AN EXPANSION JOINT.

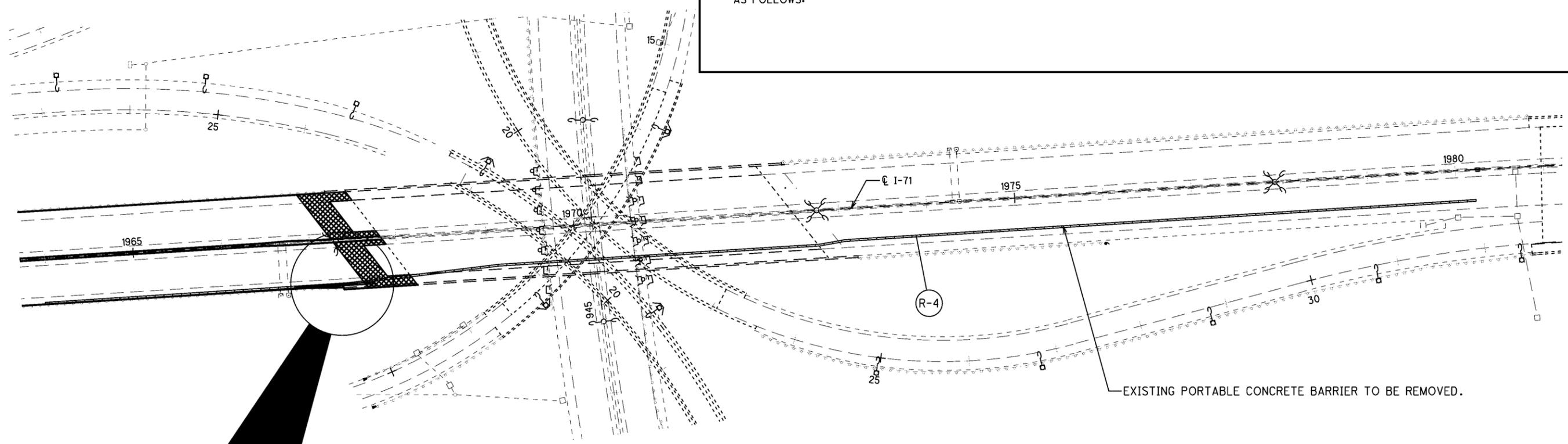
PAYMENT WILL BE HELD FOR 1 C.Y. OF ASPHALT PER FOOT OF PAVING WIDTH AT EACH TRANSITION LOCATION UNTIL THE TRANSITION IS SHOWN TO BE ACCEPTABLE. THE CONTRACTOR IS TO PROVIDE THE NECESSARY SURVEY WORK TO SHOW THAT THESE STRAIGHT GRADES ARE MET ALONG EACH EDGE LINE AND LANE LINE.

ALL UNACCEPTABLE ASPHALT TRANSITIONS SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE. THE REPAIR METHOD SHALL BE AS FOLLOWS:

- A. DETERMINE FINAL GRADE LINE BY EXTENDING A STRAIGHT LINE FROM THE TOP OF THE BRIDGE END DAM JOINT TO A POINT 75' AWAY ON THE TOP OF RESURFACING.
- B. REMOVE ASPHALT CONCRETE EXACTLY 1" BELOW THE FINAL GRADE.
- C. PLACE ITEM 407 - TACK COAT AND ITEM 446 - ASPHALT CONCRETE, TO DESIRED GRADE.
- D. SURVEY TRANSITION TO VERIFY THAT THE REPAIR IS WITHIN THE ALLOWABLE TOLERANCE.



CORRECTION OF UNACCEPTABLE ASPHALT TRANSITIONS




 - ASPHALT TRANSITION PER SCD BP-3.1

CROSS REFERENCE	
ITEM	SHEET
GUARDRAIL SUBSUMMARY	30