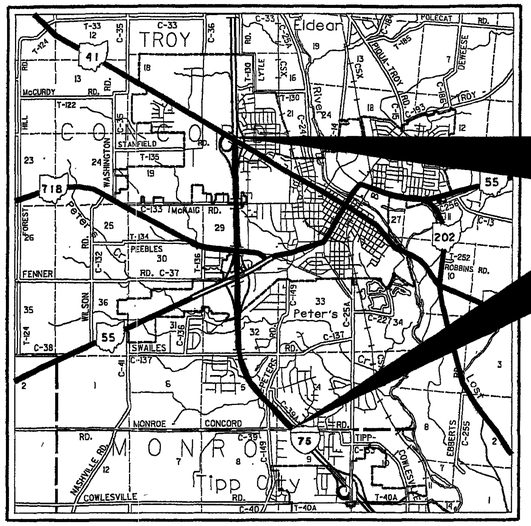


LOCATION MAP

LATITUDE: 40°01'30" LONGITUDE: 84°13'55"

SCALE IN MILES

0 1 2 3 4

PORTION TO BE IMPROVED

INTERSTATE & DIVIDED HIGHWAY

UNDIVIDED STATE & FEDERAL ROUTES

OTHER ROADS

DESIGN DESIGNATION (MAINLINE)

CURRENT ADT (2004)	41320
DESIGN YEAR ADT (2024)	70880
DESIGN HOURLY VOLUME (2024) (K=0.10)	7100
DIRECTIONAL DISTRIBUTION	55%
T-24 (24 HOUR B&C)	21%
TD (PEAK HOUR B&C)	12%
DESIGN SPEED	70 MPH
LEGAL SPEED	65 MPH

DESIGN FUNCTIONAL CLASSIFICATION - RURAL-INTERSTATE

DESIGN EXCEPTIONS

NONE

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

PLAN PREPARED BY:

BARR & PREVOST
2800 CORPORATE EXCHANGE DRIVE, SUITE 240
COLUMBUS, OHIO 43231
TEL. 614-714-0270 FAX. 614-714-0322

ENGINEERS SEAL:

STATE OF OHIO
JAMES E. PREVOST E-64055 REGISTERED PROFESSIONAL ENGINEER

SIGNED: James E. Prevost
DATE: 3/15/07

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
MIA-75-4.94
CITY OF TROY
MONROE AND CONCORD TOWNSHIPS
MIAMI COUNTY

INDEX OF SHEETS:

PROJECT DESCRIPTION

THIS BRIDGE REHABILITATION PROJECT INVOLVES 15 STRUCTURES. INCIDENTAL CONSTRUCTION INCLUDES DRAINAGE IMPROVEMENTS, SHEET PILING CUT OFF WALL, SEALING OF CONCRETE SURFACES AND BRIDGE DECKS.

EARTH DISTURBED AREAS (E.D.A.)

PROJECT E.D.A: N/A (MAINTENANCE PROJECT)

CONTRACTOR E.D.A.: N/A (MAINTENANCE PROJECT)

NOI E.D.A.: N/A (MAINTENANCE PROJECT)

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.

2005 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING 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 Rex Dickey, P.E., P.S./PEW
DATE 3-15-07 DISTRICT DEPUTY DIRECTOR

APPROVED James G. Beasley JR
DATE 4-2-07 DIRECTOR, DEPARTMENT OF TRANSPORTATION

STANDARD CONSTRUCTION DRAWINGS

BP-5.1	7-28-00
DM-1.1	4-21-06
DM-4.1	7-19-02
DM-4.3	7-19-02
DM-4.4	7-19-02
GR-2.1	1-16-04
GR-4.2	1-19-07
GR-5.3	1-16-04
MT-35.10	4-20-01
MT-95.30	9-05-06
MT-95.31	9-05-06
MT-97.10	9-05-06
MT-105.10	10-18-02
MT-105.11	10-18-02

SUPPLEMENTAL SPECIFICATIONS

800	04-20-07
832	4-25-06

SPECIAL PROVISIONS

NWP #3
2-13-07

FEDERAL PROJECT NO. E060 (745)

PID NO. 81454

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT NONE

MIA-75-04.94

1/33

MIA-IR 75-4.94
070305 PID-81454
Dist 7 6/13/2007

...\roadway\sheets\gt100l75.dgn 03/15/2007 10:08:05 AM

SCHEMATIC PLAN

HORIZONTAL SCALE IN FEET
0 50 100 200

N

MIA-55-0982 L/R
MIA-75-0714
MIA-75-0681
MIA-75-0623 L/R
MIA-75-0608
MIA-75-0728
MIA-75-0793C
MIA-75-0793L/R
MIA-718-1015
MIA-75-0793D
MIA-41-1124
MIA-75-0885

Tipp City
TROY
KESSLER - COWLESVILLE RD.
MONROE - CONCORD RD.
SWAILES RD.
FENNER RD.
McKAIG RD.
PETERS RD.
TIPP-COWLESVILLE RD.
Peter's Creek
CSX
C-40
C-39
C-137
C-136
C-37
C-133
C-149
C-39A
C-25A
C-15
C-227
C-244
C-14
55
718
41
75
80

MIA-75-04.94

DESIGN SPECIFICATIONS:
THE PROPOSED WORK CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2002, AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN STRESSES:

CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 P.S.I.

REINFORCING STEEL - ASTM A615 OR A996
GRADE 60 - MINIMUM YIELD STRENGTH
60,000 P.S.I.

DECK PROTECTION METHOD:

SOLUBLE REACTIVE SILICATE (SRS) SEALER

ITEM 202- PORTIONS OF STRUCTURE REMOVED, AS PER PLAN:

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES THAT ARE NOT SEPARATELY LISTED FOR PAYMENT. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WOULD NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

REMOVAL METHODS: THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS.

LOADING LIMITATIONS: NO PART OF THE STRUCTURE SHALL BE SUBJECTED TO UNIT STRESSES THAT EXCEED 136.5% OF ALLOWABLE UNIT STRESSES AS DEFINED IN THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES DUE EITHER TO DEMOLITION, ERECTION OR CONSTRUCTION METHODS, OR TO THE USE OR MOVEMENT OF DEMOLITION OR ERECTION EQUIPMENT ON OR ACROSS THE STRUCTURE.

ANY DAMAGE TO THE EXISTING STRUCTURAL STEEL COATING SHALL BE REPAIRED ACCORDING TO CMS 514.19 AT THE CONTRACTOR'S EXPENSE. TINT THE FINAL COAT TO MATCH THE EXISTING COATING.

MEASUREMENT & PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN.

ITEM 202 - FENCE REMOVED FOR REUSE, AS PER PLAN:

REMOVE PORTIONS OF EXISTING FENCE FOR INSTALLATION OF ROCK CHANNEL PROTECTION AND SODDING. REINSTALL PORTIONS OF EXISTING FENCE. QUANTITIES LISTED ARE AN ESTIMATE OF DISTURBED AREAS.

ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN:
PLANE ASPHALT NEAR APPROACH SLABS TO ALLOW FOR A SMOOTH TRANSITION AND PROPER DRAINAGE.

ITEM 504 - STEEL SHEET PILING LEFT IN PLACE, AS PER PLAN:

STEEL SHEET PILING LEFT IN PLACE SHALL HAVE A MINIMUM SECTION MODULUS OF 30 IN^3 PER FOOT OF WALL. TOP CHANNEL SIZE SHALL BE COORDINATED WITH SHEET PILING SELECTION. ALLOW ADEQUATE CLEARANCE FOR WELDING.

ALL EXPOSED SURFACES OF THE SHEET PILE AND TOP CHANNEL SHALL BE COATED WITH A BITUMASTIC COLD TAR EPOXY. SURFACES TO BE WELDED SHALL BE PREPARED FOR PROPER STEEL TO STEEL CONNECTION. FIELD WELDS SHALL BE COATED WITH PRIME COAT OF PAINT.

ALL EQUIPMENT, LABOR AND MATERIAL TO INSTALL THE SHEETING CUT OFF WALL AND TOP CHANNEL PER THE DETAILS PROVIDED ON SHEET 25 / 27, SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THIS ITEM.

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

-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.

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

OHIO STATE HIGHWAY PATROL
PIQUA PATROL POST
401 WEST US ROUTE 36
PIQUA, OH 45356
PHONE: (937) 773-1131
FAX: (937) 773-1753

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

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR - 56 HOURS

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

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

ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN

LANE CLOSURES SHALL BE PERMITTED AT THE TIMES LISTED ON THE OHIO DEPARTMENT OF TRANSPORTATION'S PERMITTED LANE CLOSURE WEBSITE WHICH IS LOCATED AT HTTP://DOTAW100.DOT.STATE.OH.US/PLCM/PLCM_WEB.JSP. THE PERMITTED LANE CLOSURE TIMES POSTED ON THE WEBSITE 14 DAYS PRIOR TO THE BID LETTING SHALL BE IN EFFECT FOR THIS PROJECT.

LANE CLOSURES FOR ROADWAYS THAT ARE NOT LISTED ON THE ABOVE WEBSITE SHALL BE RESTRICTED TO NON-RUSH HOUR TIMES, FROM 9 AM TO 3 PM.

THE MAINTENANCE OF TRAFFIC FOR THE CONSTRUCTION ON THE FOLLOWING TWO LANE OVERHEAD STRUCTURES SHALL BE IN STRICT ACCORDANCE WITH THE ODOT STANDARD CONSTRUCTION DRAWING MT-97.10:

MIA-75-0608
MIA-75-0681
MIA-718-1015

THE MAINTENANCE OF TRAFFIC FOR THE WORK ON STRUCTURES MIA-75-0714 AND MIA-75-0728 SHALL CONFORM TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES TYPICAL APPLICATION 1, WORK BEYOND THE SHOULDER.

EXISTING STRUCTURE PLANS:
THE ORIGINAL DESIGN PLANS MAY BE EXAMINED BY PROSPECTIVE BIDDERS AT THE DEPARTMENT OF TRANSPORTATION, DISTRICT 7 OFFICE, 1001 ST. MARY'S AVE. S.R. 29, SYDNEY, OHIO 45365 (937) 492-1141.

ITEM 653 - TOPSOIL FURNISHED AND PLACED, AS PER PLAN:
THE FOLLOWING QUANTITIES HAVE BEEN PROVIDED TO ACCOUNT FOR THE INSTALLATION OF THE SODDING.

BRIDGE NO.	ITEM 653 - TOPSOIL FURNISHED AND PLACED, AS PER PLAN (CU YD)
MIA-75-0608	4
MIA-75-0681	2
MIA-41-1124	3
MIA-718-1015	2
TOTAL	11

EXISTING STRUCTURE VERIFICATION:
DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.
BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

STRUCTURE FILE NUMBERS:

MIA-75-0608:	5501873
MIA-75-0623 L:	5501962
MIA-75-0623 R:	5501997
MIA-75-0681:	5502055
MIA-75-0714:	5502071
MIA-75-0728:	5502101
MIA-55-0982 L:	5501350
MIA-55-0982 R:	5501385
MIA-75-0793 C:	5502233
MIA-75-0793 L:	5502292
MIA-75-0793 R:	5502322
MIA-75-0793 D:	5502357
MIA-718-1015:	5504724
MIA-75-0885:	5502438
MIA-41-1124:	5500753

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE 240
COLUMBUS, OH 43231
(614) 714-0270 FAX (614) 714-0322

DESIGNED	DRAWN	REVIEWED	DATE
JGM	JGM	KCS	1/30/07
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JEP		SEE LIST	

GENERAL NOTES

MIA-75-04.94
PID NO. 81454

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN:
APPLY THE EPOXY-URETHANE SEALER PRIOR TO THE SRS APPLICATION.
WHERE SPECIFIED, THE CONCRETE SURFACES SHALL BE SEALED AS FOLLOWS:

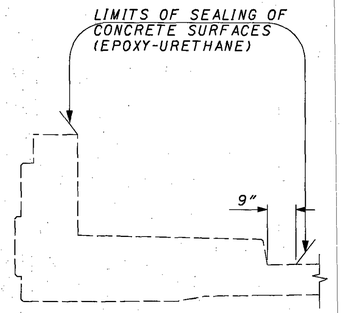
PARAPETS & MEDIAN BARRIERS: SEAL ENTIRE LENGTH OF THE BRIDGE AND APPROACHS.

REMOVE DUST, DIRT, OIL, WAX, CURING COMPOUNDS, EFFLORESCENCE, LAITANCE, COATINGS AND OTHER FOREIGN MATERIALS FROM SURFACES TO BE SEALED. USE CHEMICALS OR OTHER CLEANING COMPOUNDS IF REMOVAL REQUIRES THEIR USE BUT ONLY USE PRODUCTS APPROVED BY THE SEALER MANUFACTURER. FURNISH THE ENGINEER DOCUMENTATION OF THE SEALER MANUFACTURER'S APPROVAL. APPLY THE SEALER WITHIN 48 HOURS OF SURFACE PREPARATION.

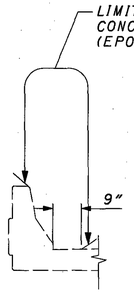
INSTALL SUITABLE TRAPS, FILTERS, DRIP PANS AND OTHER SEPARATION DEVICES IN THE CLEANING EQUIPMENT SO OIL AND OTHER FOREIGN MATERIAL IS NOT DEPOSITED ON THE SURFACE.

USE THE FOLLOWING CLEANING METHODS DEPENDING ON THE SURFACE TYPE:
EXISTING CONCRETE SURFACES: WATER BLAST AT 7,000 PSI (48 MPa) MINIMUM.
CONTRACTOR SHALL PREVENT OVERSPRAY FROM INTERFERENCE WITH TRAFFIC.

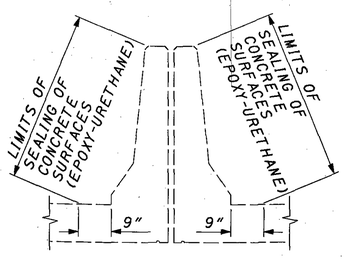
COLOR: TINT SO THE FINAL COLOR IS FEDERAL COLOR STANDARD NO. 17778 - LIGHT NEUTRAL FOR ALL APPLICATIONS EXCEPT FOR THE MIA-41-1124 BRIDGE. COLOR FOR MIA-41-1124 IS COLOR NO. 25630.



SIDEWALK



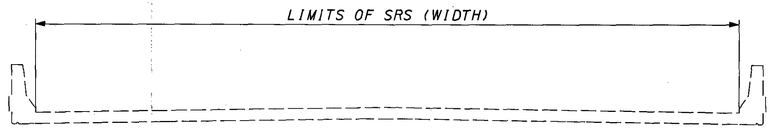
PARAPET



MEDIAN

ITEM 512 - SEALING OF CONCRETE SURFACE (EPOXY-URETHANE)						
BRIDGE NO.	SEALING PERIMETER (FT.)				L (FT)	AREA (SQ.YD.)
	PARAPET	MEDIAN	SIDEWALK	TOTAL		
MIA-75-0608	4.30			8.60	310.85	297.03
MIA-75-0623 L	4.66	5.33		9.99	66.42	73.73
MIA-75-0623 R	4.66	5.33		9.99	66.42	73.73
MIA-75-0681	4.16			8.32	216.72	200.35
MIA-75-0793 C	4.16			8.32	119.81	110.76
MIA-75-0793 D	4.16			8.32	118.33	109.39
MIA-75-0793 L	4.66	5.33		9.99	98.79	109.66
MIA-75-0793 R	4.66	5.33		9.99	98.79	109.66
MIA-75-0885	4.16			8.32	214.00	197.83
MIA-41-1124			9.08	18.16	329.10	664.05
MIA-718-1015	4.16			8.32	231.18	213.71
MIA-55-0982 L	4.45	5.10		9.55	298.00	316.21
MIA-55-0982 R	4.45	5.10		9.55	294.92	312.94
					TOTAL	2789.05

ITEM 512 - TREATING OF CONCRETE BRIDGE DECK WITH SRS, AS PER PLAN:
AFTER SEALING OF CONCRETE SURFACES WITH EPOXY-URETHANE, THE CONCRETE SURFACES SHALL BE TREATED AS SHOWN IN THE DIAGRAM ALONG THE ENTIRE LENGTH OF THE DECK AND APPROACH SLABS. THE USE OF SPRAYERS TO APPLY THE SRS WILL BE PROHIBITED. THE CONTRACTOR SHALL APPLY THE SRS BY FLOODING THE DECK.



ITEM 512 - TREATING OF CONCRETE BRIDGE DECK WITH SRS			
BRIDGE NO.	W (FT)	L (FT)	AREA (SQ.YD.)
MIA-75-0608	44.00	320.41	1566.45
MIA-75-0623 L	66.42	116.38	858.88
MIA-75-0623 R	66.42	116.38	858.88
MIA-75-0681	44.00	216.72	1059.52
MIA-75-0793 C	38.00	169.81	716.98
MIA-75-0793 D	30.00	168.33	561.11
MIA-75-0793 L	66.42	148.79	1098.08
MIA-75-0793 R	66.42	148.79	1098.08
MIA-75-0885	44.00	214.00	1046.22
MIA-718-1015	44.00	231.18	1130.21
MIA-55-0982 L	52.42	298.00	1735.68
MIA-55-0982 R	52.42	294.92	1717.75
		TOTAL	13,447.84

ITEM 519 - PATCHING CONCRETE STRUCTURE, AS PER PLAN:
PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN NOVEMBER 2006. ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION. EXACT DIMENSIONS AND LOCATIONS OF PATCHES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD FOR FINAL PAY QUANTITY.

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

ITEM 519 - PATCHING CONCRETE STRUCTURE (SQ. FT.)		
BRIDGE NO.	PIER	ABUTMENT
MIA-75-0608		5
MIA-41-1124	30	50
MIA-718-1015		15
TOTAL	30	70

ENVIRONMENTAL COMMITMENTS
THE PROJECT IS LOCATED WITHIN THE BOUNDARIES OF A DESIGNATED SOLE SOURCE AQUIFER. BEST CONSTRUCTION PRACTICES ARE TO BE IMPLEMENTED TO MINIMIZE WATER QUALITY IMPACTS. ON-SITE STORAGE OF PETROLEUM PRODUCTS/CHEMICALS IS TO BE MINIMIZED. A SPILL CONTAINMENT KIT IS TO BE MAINTAINED ON-SITE THROUGHOUT CONSTRUCTION ACTIVITIES. SPILLS OF FUELS, OILS, CHEMICALS OR OTHER MATERIALS WHICH COULD POSE A THREAT TO GROUNDWATER SHALL BE CLEANED UP IMMEDIATELY. IF THE SPILL IS A REPORTABLE AMOUNT, THE LOCAL FIRE DEPARTMENT IS TO BE CONTACTED.

PROPOSED WORK FOR STRUCTURES NOT SHOWN
MIA-75-0623L/0623R MIA-75-0793C/0793D/0793L/0793R MIA-55-0982L/0982R 1. REMOVE EXISTING CONCRETE EPOXY SEALER BY WATER BLAST AT 7,000 (MIN.) PSI. 2. SEAL PARAPETS WITH EPOXY-URETHANE SEALER. 3. TREAT BRIDGE DECK AND APPROACH SLABS WITH SRS.

STRUCTURE FILE NUMBERS:

MIA-75-0608:	5501873
MIA-75-0623 L:	5501962
MIA-75-0623 R:	5501997
MIA-75-0681:	5502055
MIA-75-0714:	5502071
MIA-75-0728:	5502101
MIA-55-0982 L:	5501350
MIA-55-0982 R:	5501385
MIA-75-0793 C:	5502233
MIA-75-0793 L:	5502292
MIA-75-0793 R:	5502322
MIA-75-0793 D:	5502357
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MIA-75-0885:	5502438
MIA-41-1124:	5500753

DESIGN AGENT
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE 240
COLUMBUS, OH 43231
(614) 714-0270 FAX (614) 714-0322

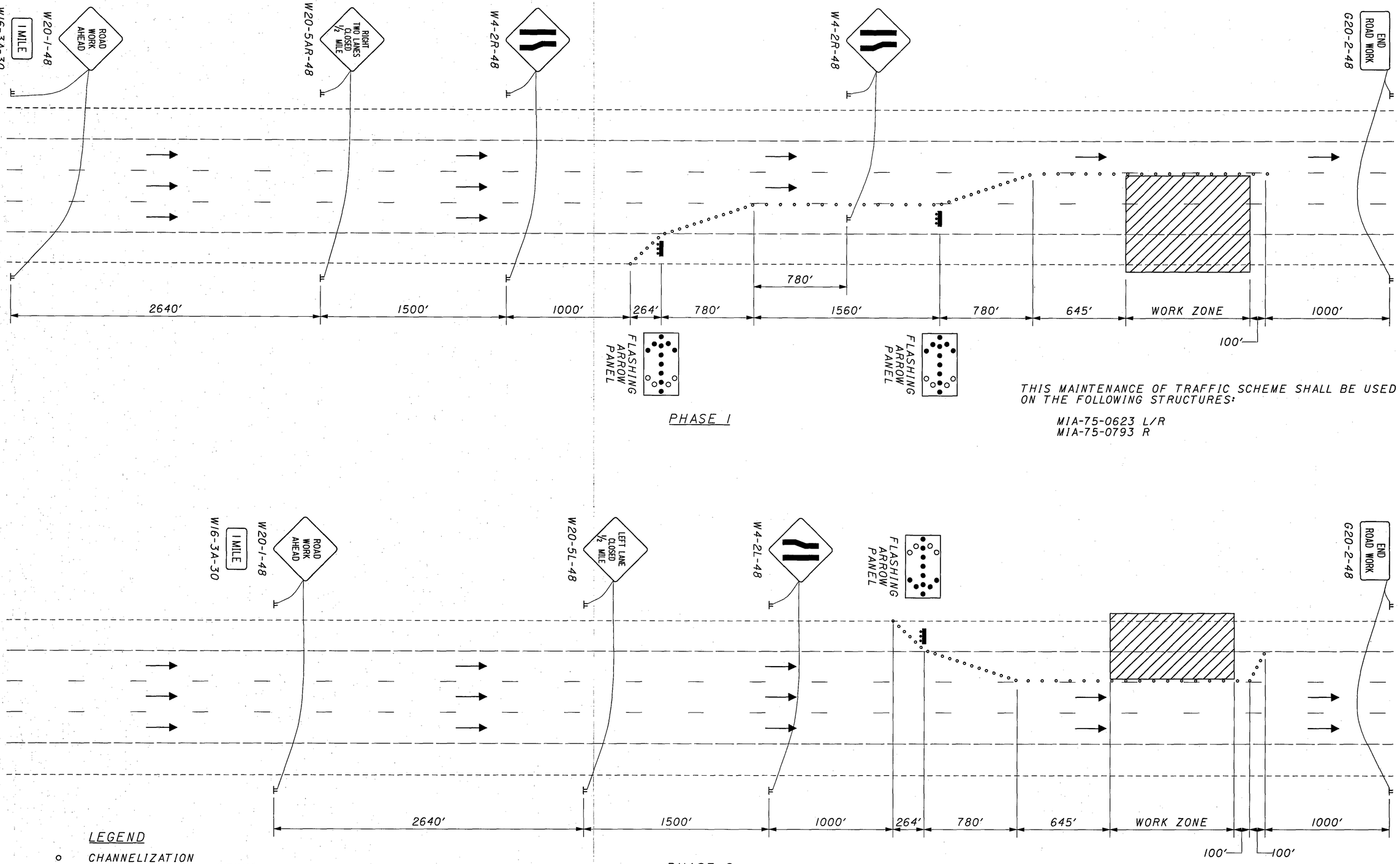
DESIGNED	DRAWN	REVIEWED	DATE
JGM	JGM	KCS	1/30/07
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JEP		SEE LIST	

GENERAL NOTES

MIA-75-04.94
PID NO. 81454

MAINTENANCE OF TRAFFIC

CALCULATED WMS
CHECKED JEJ



PHASE 1

THIS MAINTENANCE OF TRAFFIC SCHEME SHALL BE USED ON THE FOLLOWING STRUCTURES:

MIA-75-0623 L/R
MIA-75-0793 R

PHASE 2

LEGEND

- ○ CHANNELIZATION
  ON TAPERS - DRUMS SPACED AT 65′ C/C
  ON TANGENTS - 42″ CHANNELIZERS SPACED AT 120′ C/C
- ⊢ SIGN SUPPORT, TWO POST
- ▨ WORK ZONE

MIA-75-04.94

LEGEND

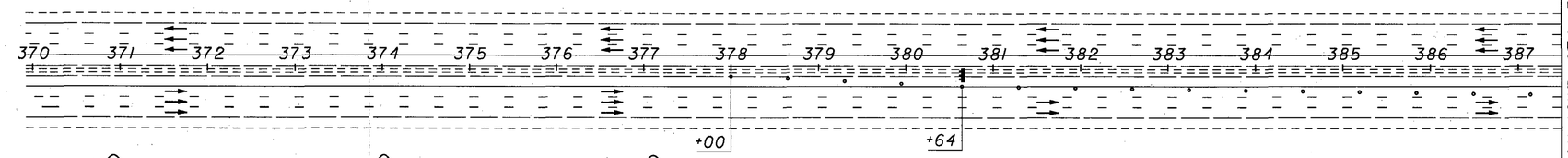
WORK ZONE

CHANNELIZATION
ON TAPERS - DRUMS SPACED @ 65' C/C
ON TANGENTS - 42" CHANNELIZERS SPACE @ 120' C/C

SIGN SUPPORT, TWO-POST

FLASHING ARROW PANEL

DIRECTION OF TRAFFIC



ROAD WORK AHEAD

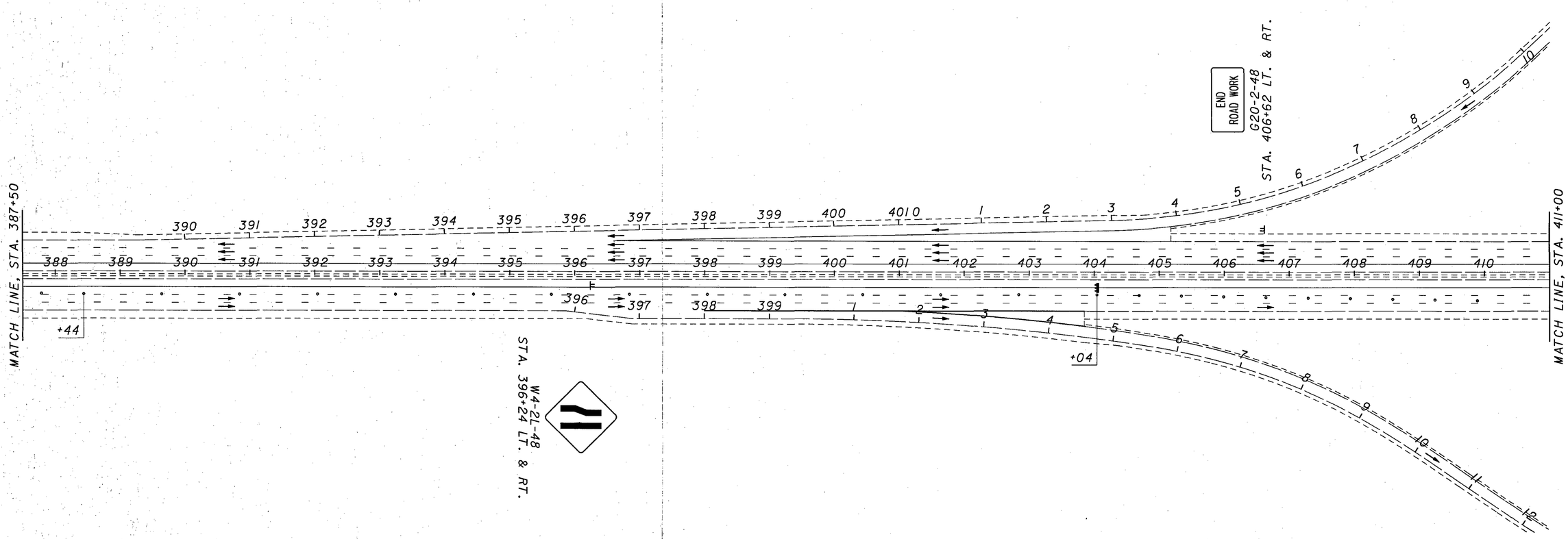
1 MILE

W20-1-48
W16-3A-30
STA. 326+60 LT. & RT.

LEFT TWO LANES CLOSED ½ MILE

W20-5AL-48
STA. 353+00 LT. & RT.

W4-2L-48
STA. 368+00 LT. & RT.



W4-2L-48
STA. 396+24 LT. & RT.

END ROAD WORK

G20-2-48
STA. 406+62 LT. & RT.

HORIZONTAL SCALE IN FEET
0 40 80 160

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - MIA-75-0793L/R
PHASE 1 - STA. 370+00 TO STA. 411+00

MIA-75-4.94

6
33

NOTE: SEE INDIVIDUAL MAINTENANCE OF TRAFFIC PLAN FOR PART WIDTH CONSTRUCTION ON MIA-55-0982 L/R

END ROAD WORK
G20-2-48
STA. 1+00 LT.

LEGEND
WORK ZONE
CHANNELIZATION
ON TAPERS - DRUMS SPACED @ 65' C/C
ON TANGENTS - 42" CHANNELIZERS SPACE @ 120' C/C
SIGN SUPPORT, TWO-POST
FLASHING ARROW PANEL
DIRECTION OF TRAFFIC

+73 END TAPER
MIA-75-0793 C
+01
+04
+64 BEGIN TAPER
+22 END MERGING TAPER
MIA-718-1018
MIA-75-0793 L
℄ I-75
℄ RAMP C
+62
+84 END MERGING TAPER
MIA-75-0793 R
+44
℄ RAMP D
MIA-55-0982 L/R
STA. 30+89 LT. & RT.
W20-1-48
ROAD WORK AHEAD
+46 END TAPER
+86
MIA-75-0793 D
SR 55
+44 BEGIN TAPER
+93
+02 BEGIN MERGING TAPER
STA. 431+44 LT. & RT.
END ROAD WORK
G20-2-48

MATCH LINE, STA. 411+00

MATCH LINE, STA. 434+50

NOTE: WORK IN THIS PHASE SHALL INCLUDE 2' OF THE OUTSIDE (RIGHT) LANE.

N

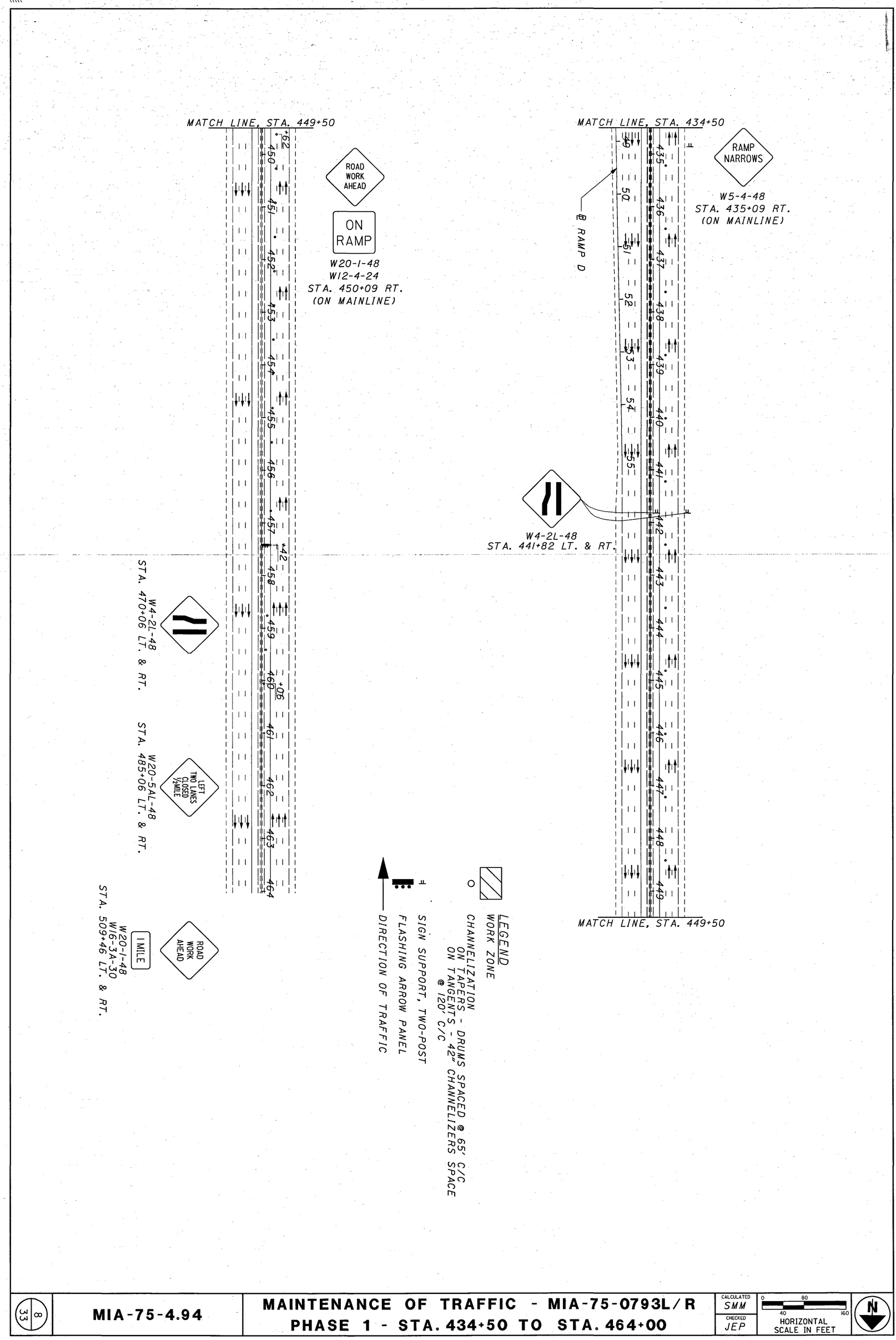
HORIZONTAL SCALE IN FEET
0' 40 80 160

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - MIA-75-0793L/R
PHASE 1 - STA. 411+00 TO STA. 434+50

MIA-75-4.94

7
33



8/33	MIA-75-4.94	MAINTENANCE OF TRAFFIC - MIA-75-0793L/R PHASE 1 - STA. 434+50 TO STA. 464+00	CALCULATED SMM CHECKED JEP	0 80 40 160 HORIZONTAL SCALE IN FEET	N

LEGEND

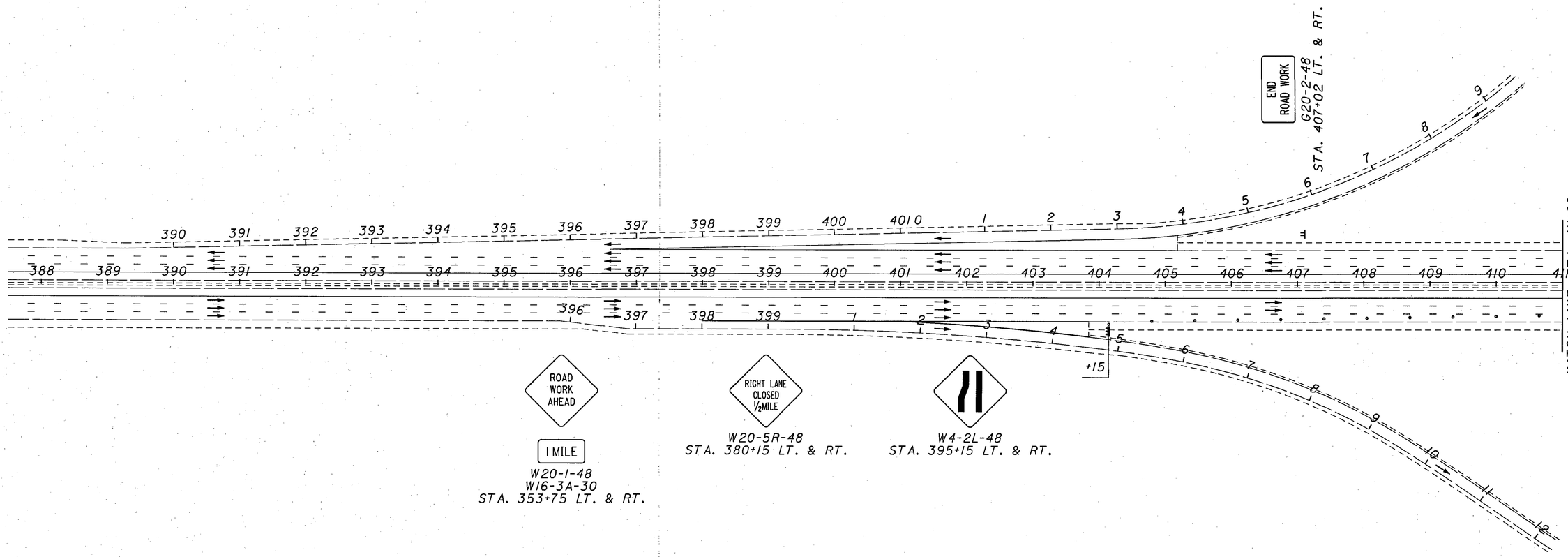
WORK ZONE

CHANNELIZATION
ON TAPERS - DRUMS SPACED @ 65' C/C
ON TANGENTS - 42" CHANNELIZERS SPACE @ 120' C/C

SIGN SUPPORT, TWO-POST

FLASHING ARROW PANEL

DIRECTION OF TRAFFIC



HORIZONTAL SCALE IN FEET
0 40 80 160

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - MIA-75-0793L/R
PHASE 2 - STA. 387+50 TO STA. 411+00

MIA-75-4.94

NOTE: SEE INDIVIDUAL MAINTENANCE OF TRAFFIC PLAN FOR PART WIDTH CONSTRUCTION ON MIA-55-0982 L/R

LEGEND
WORK ZONE
CHANNELIZATION
ON TAPERS - DRUMS SPACED @ 65' C/C
ON TANGENTS - 42" CHANNELIZERS SPACE @ 120' C/C
SIGN SUPPORT, TWO-POST
FLASHING ARROW PANEL
DIRECTION OF TRAFFIC

END ROAD WORK
G20-2-48
STA. 1+00 LT.

MIA-75-0793C

MIA-75-0793 L

℄ I-75

℄ RAMP C

EXIT OPEN
E5-2-48
STA. 433+61 LT.

MATCH LINE, STA. 411+00

MATCH LINE, STA. 434+50

MIA-75-0793 R

SEE ODOT SCD MT-95.31

MIA-55-0982 L/R

℄ RAMP D

MIA-718-1018

END ROAD WORK
G20-2-48
STA. 432+55 LT. & RT.

MIA-75-0793D

℄ RAMP D

ROAD WORK AHEAD
W20-1-48
STA. 30+89 LT. & RT.

SR 55

N

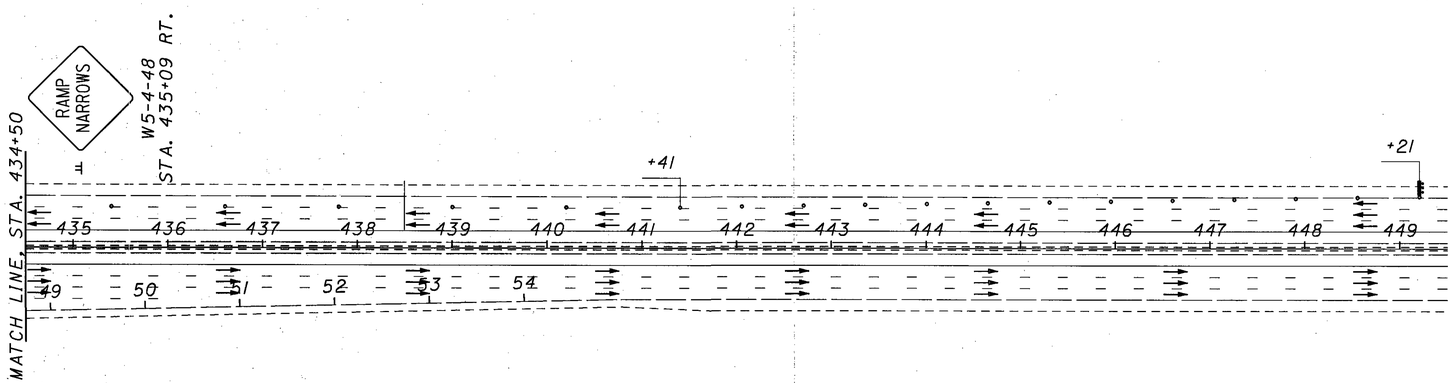
HORIZONTAL SCALE IN FEET
0 40 80 160

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - MIA-75-0793L/R
PHASE 2 - STA. 411+00 TO STA. 434+50

MIA-75-4.94

10
33



W20-1-48
W12-4-24
STA. 450+09 RT.

W4-2R-48
STA. 461+85 LT. & RT.

W20-5R-48
W13-1-24
STA. 476+85 LT. & RT.

E5-H2b-48
STA. 490+05 LT. & RT.

W20-1-48
W16-3A-30
STA. 503+25 LT. & RT.

LEGEND

WORK ZONE

CHANNELIZATION
ON TAPERS - DRUMS SPACED @ 65' C/C
ON TANGENTS - 42" CHANNELIZERS SPACE @ 120' C/C

SIGN SUPPORT, TWO-POST

FLASHING ARROW PANEL

DIRECTION OF TRAFFIC

N

0 40 80 160
HORIZONTAL SCALE IN FEET

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - MIA-75-0793L/R
PHASE 2 - STA. 434+50 TO STA. 449+50

MIA-75-4.94

11
33

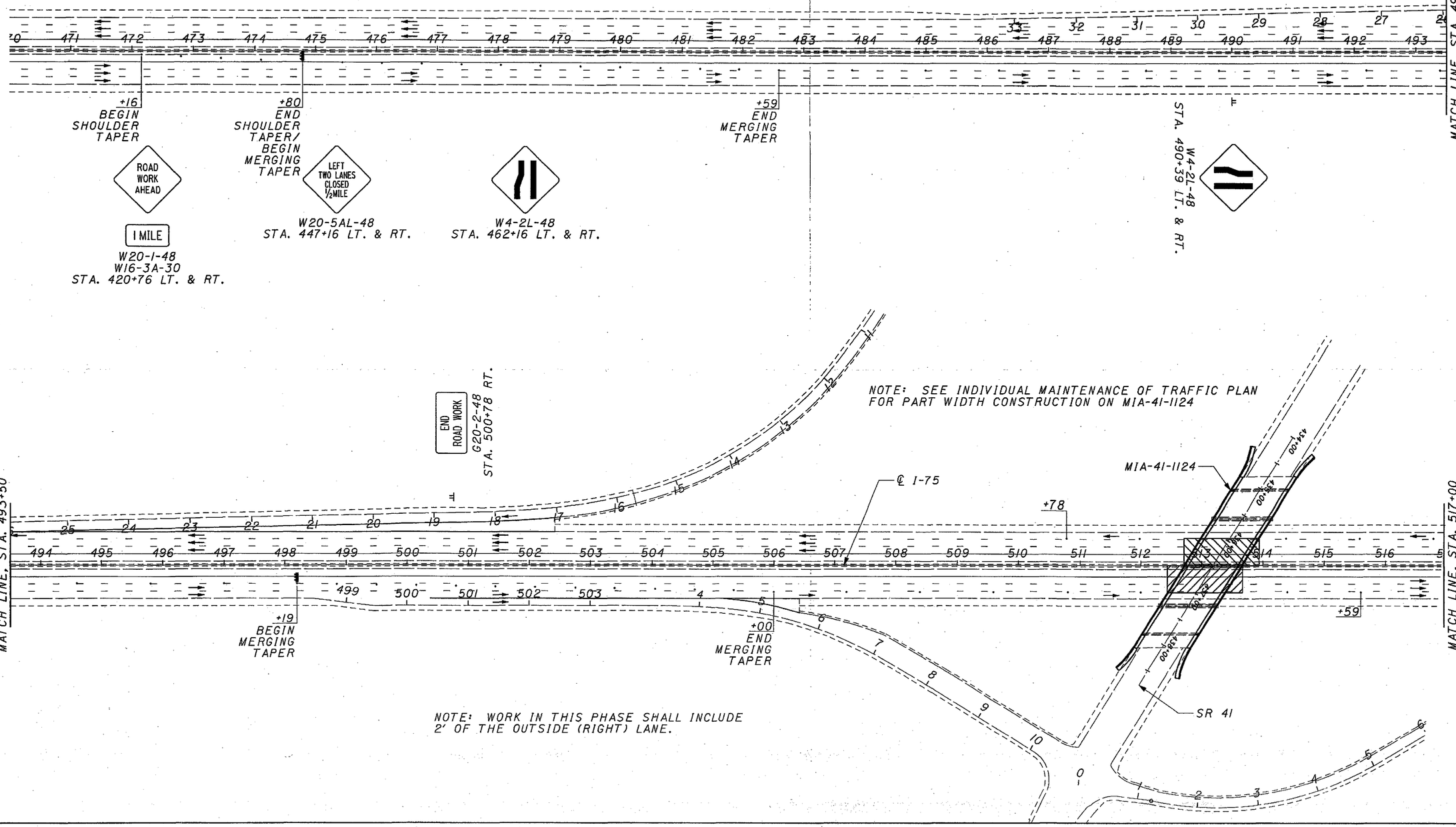
LEGEND
WORK ZONE

CHANNELIZATION
ON TAPERS - DRUMS SPACED @ 65' C/C
ON TANGENTS - 42" CHANNELIZERS SPACE @ 120' C/C

SIGN SUPPORT, TWO-POST

FLASHING ARROW PANEL

DIRECTION OF TRAFFIC



N

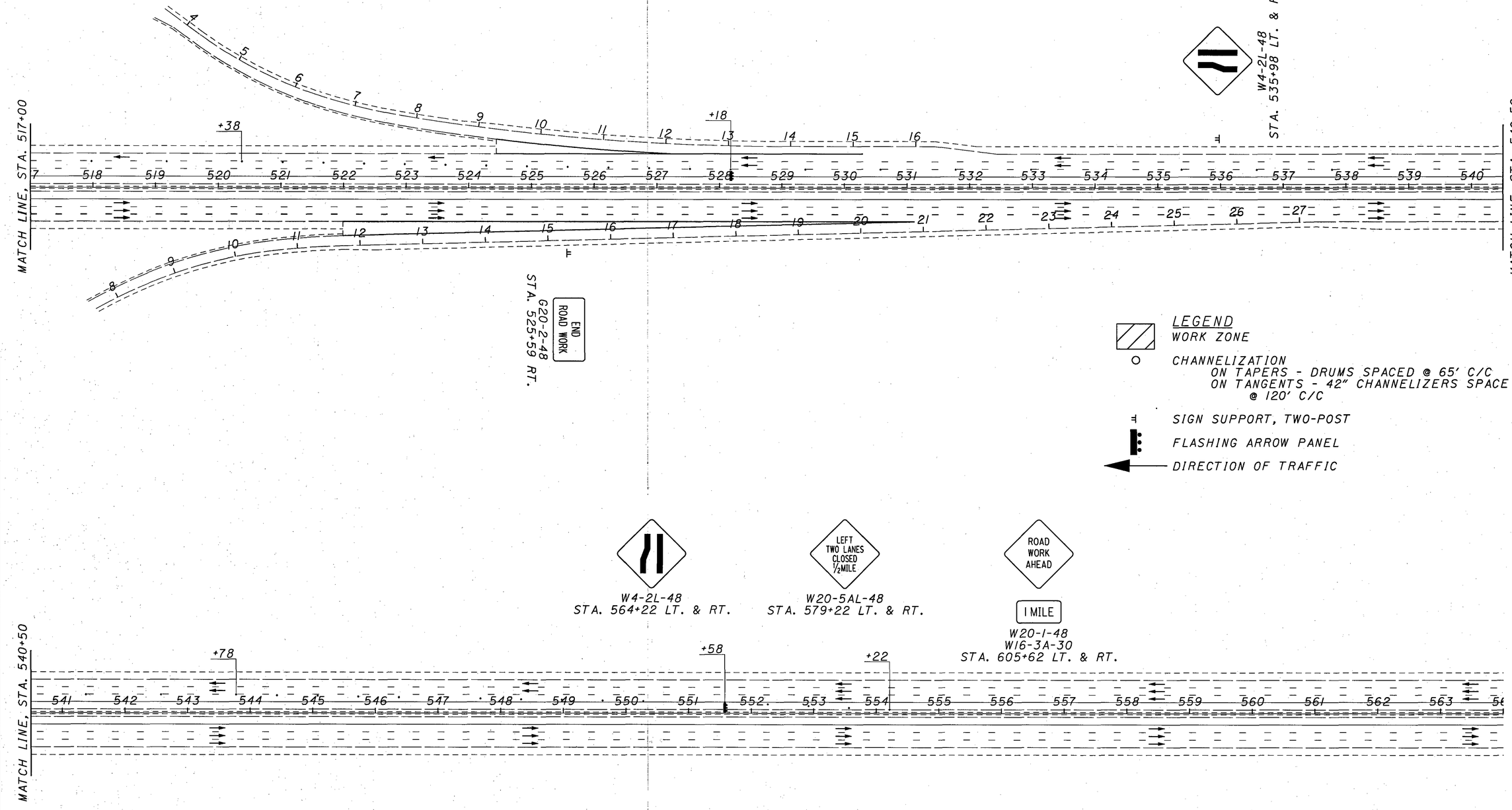
HORIZONTAL SCALE IN FEET
0 40 80 150

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - MIA-41-1124
PHASE 1 - STA. 470+00 TO STA. 517+00

MIA-75-4.94

12
33



N

HORIZONTAL SCALE IN FEET
0 40 80 160

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - MIA-41-1124
PHASE 1 - STA. 517+00 TO STA. 561+00

MIA-75-4.94

13
33

LEGEND

WORK ZONE

CHANNELIZATION
ON TAPERS - DRUMS SPACED @ 65' C/C
ON TANGENTS - 42" CHANNELIZERS SPACE @ 120' C/C

SIGN SUPPORT, TWO-POST

FLASHING ARROW PANEL

DIRECTION OF TRAFFIC

MATCH LINE, STA. 387+50

MATCH LINE, STA. 517+00

ROAD WORK AHEAD

1 MILE

W20-1-48
W16-3A-30
STA. 420+76 LT. & RT.

LEFT TWO LANES CLOSED 1/2 MILE

W20-5AL-48
STA. 447+16 LT. & RT.

W4-2L-48
STA. 462+16 LT. & RT.

EXIT OPEN

E5-2-48
STA. 497+50 RT.

NOTE: SEE INDIVIDUAL MAINTENANCE OF TRAFFIC PLAN FOR PART WIDTH CONSTRUCTION ON MIA-41-1124

MIA-41-1124

℄ I-75

SR 41

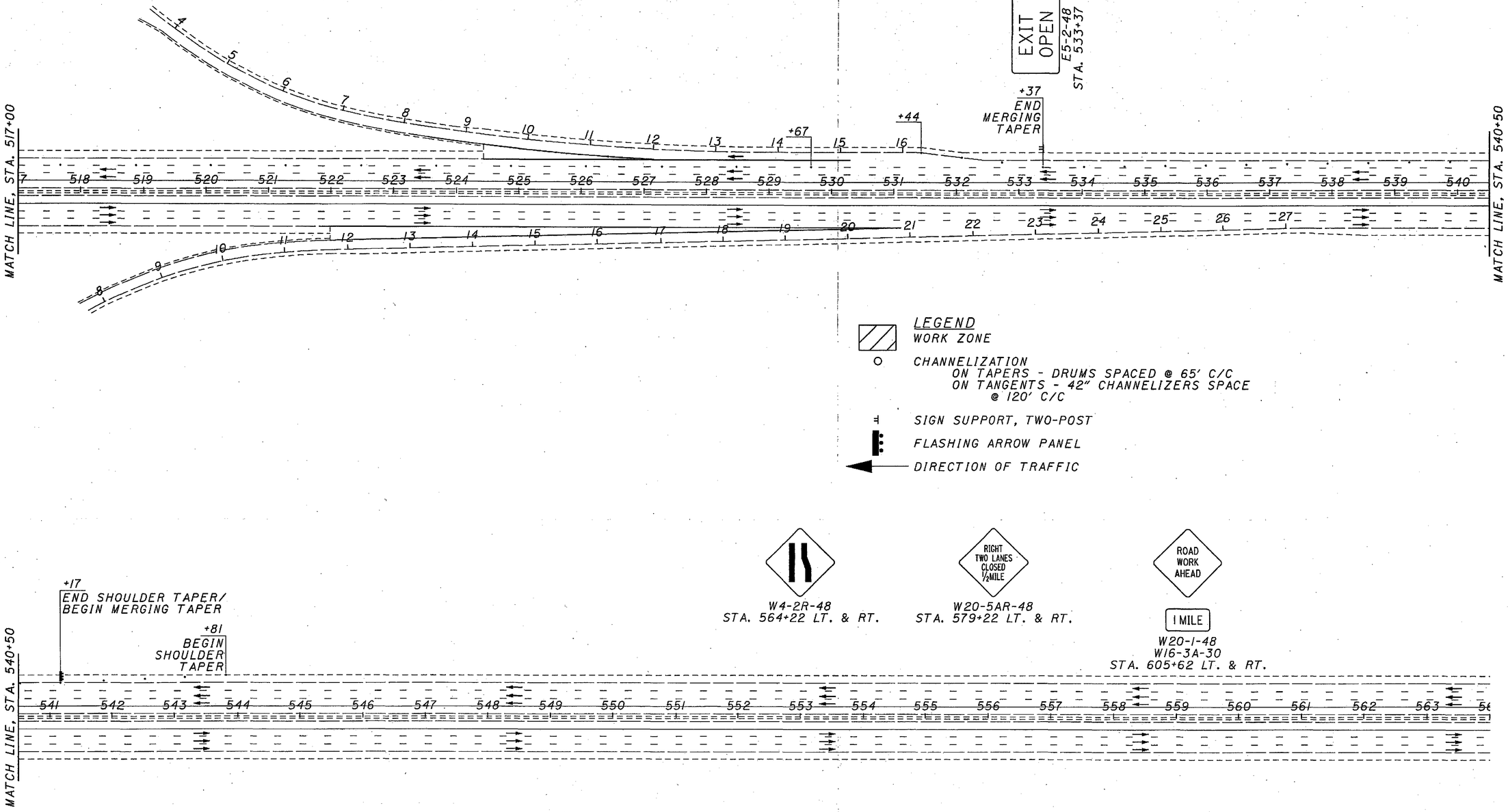
HORIZONTAL SCALE IN FEET
0 40 80 160

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - MIA-41-1124
PHASE 2 - STA. 470+00 TO STA. 517+00

MIA-75-4.94

14
33



MAINTENANCE OF TRAFFIC - MIA-41-1124
PHASE 2 - STA. 517+00 TO STA. 564+00

HORIZONTAL SCALE IN FEET
0 40 80 160

MIA-75-4.94

15
33

LEGEND

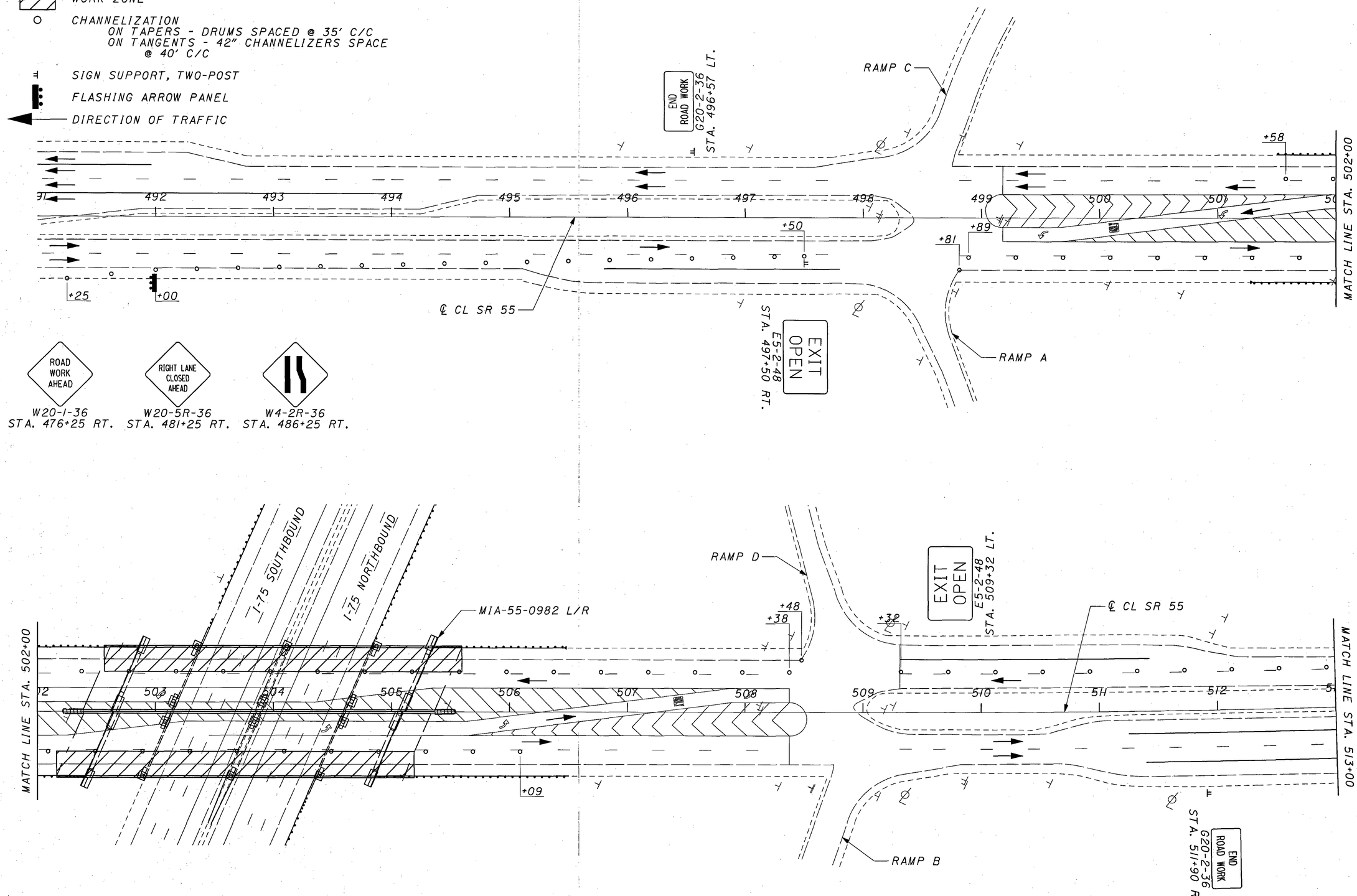
WORK ZONE

CHANNELIZATION
ON TAPERS - DRUMS SPACED @ 35' C/C
ON TANGENTS - 42" CHANNELIZERS SPACE @ 40' C/C

SIGN SUPPORT, TWO-POST

FLASHING ARROW PANEL

DIRECTION OF TRAFFIC



ROAD WORK AHEAD
W20-1-36
STA. 476+25 RT.

RIGHT LANE CLOSED AHEAD
W20-5R-36
STA. 481+25 RT.

W4-2R-36
STA. 486+25 RT.

HORIZONTAL SCALE IN FEET
0 20 40 80

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - SR 55
PHASE 1 - STA. 491+00 TO STA. 513+00

MIA-75-4094

16
33

LEGEND

WORK ZONE

CHANNELIZATION
ON TAPERS - DRUMS SPACED @ 35' C/C
ON TANGENTS - 42" CHANNELIZERS SPACE @ 40' C/C

SIGN SUPPORT, TWO-POST

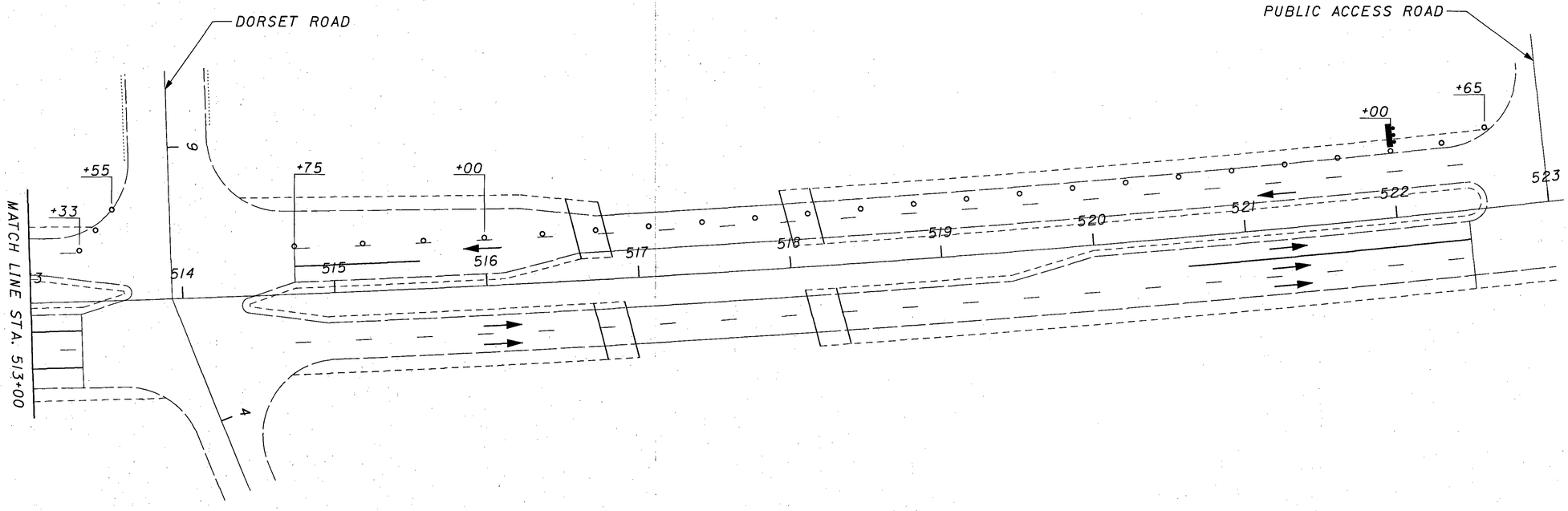
FLASHING ARROW PANEL

DIRECTION OF TRAFFIC

W4-2R-36
STA. 527+65 LT.

W20-5R-36
STA. 532+65 LT.

W20-1-36
STA. 537+65 LT.



HORIZONTAL SCALE IN FEET
0 20 40 80

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - SR 55
PHASE 1 - STA. 513+00 TO STA. 523+00

MIA-75-4094

17
33

LEGEND

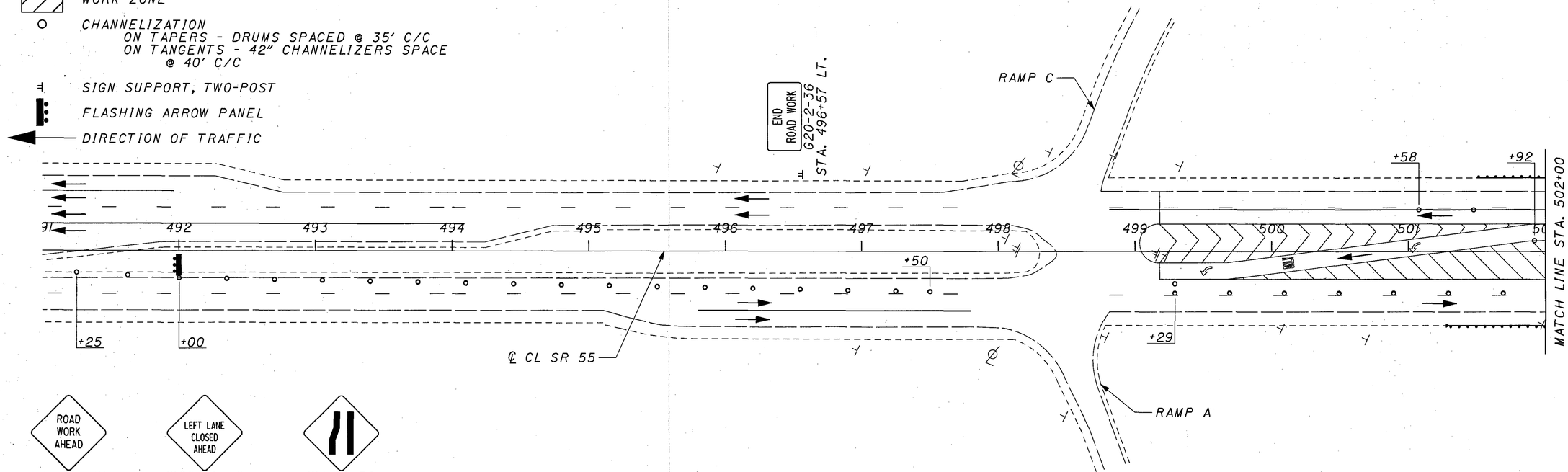
WORK ZONE

CHANNELIZATION
ON TAPERS - DRUMS SPACED @ 35' C/C
ON TANGENTS - 42" CHANNELIZERS SPACE @ 40' C/C

SIGN SUPPORT, TWO-POST

FLASHING ARROW PANEL

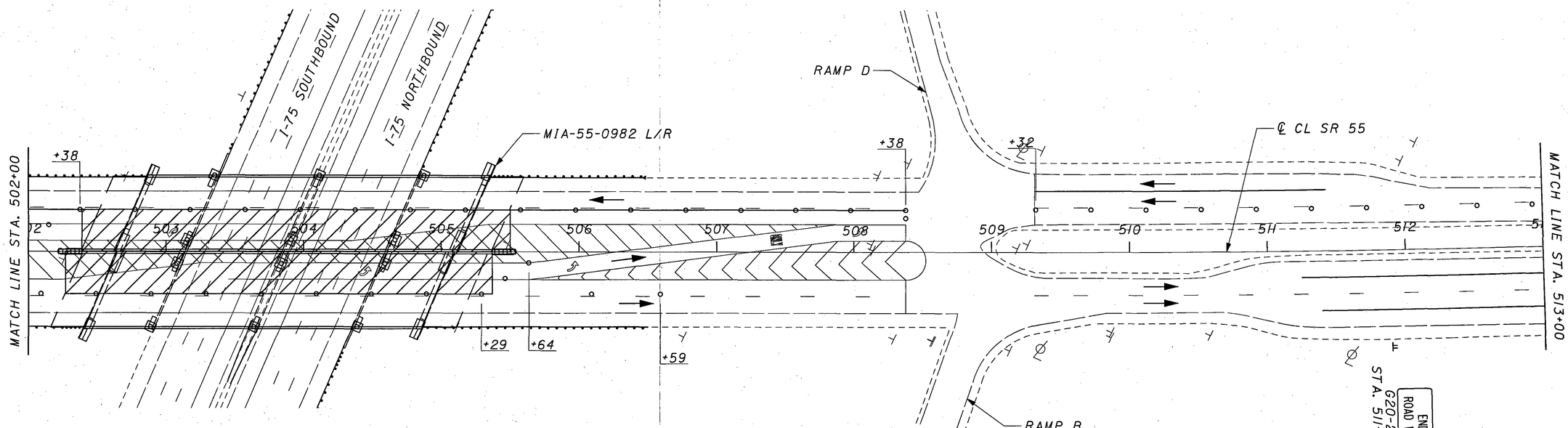
DIRECTION OF TRAFFIC



W20-1-36
STA. 476+25 RT.

W20-5L-36
STA. 481+25 RT.

W4-2L-36
STA. 486+25 RT.



HORIZONTAL SCALE IN FEET
0 20 40 60

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - SR 55
PHASE 2 - STA. 491+00 TO STA. 513+00

MIA-75-4094

18
33

LEGEND

WORK ZONE

CHANNELIZATION
ON TAPERS - DRUMS SPACED @ 35' C/C
ON TANGENTS - 42" CHANNELIZERS SPACE @ 40' C/C

SIGN SUPPORT, TWO-POST

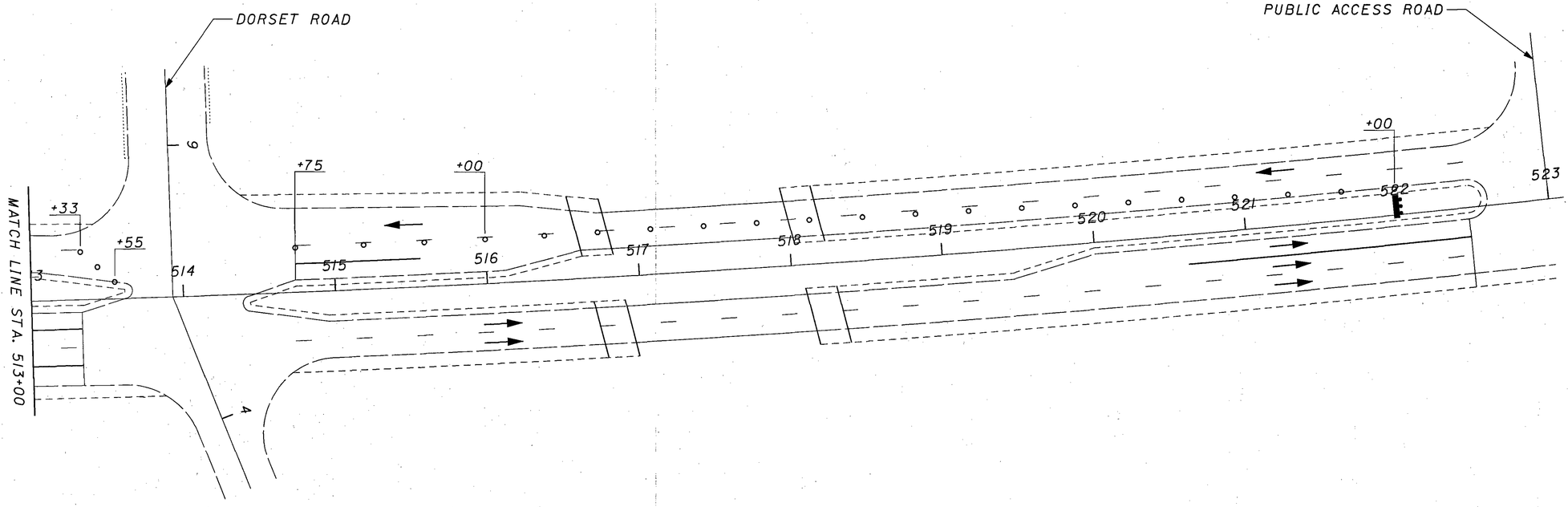
FLASHING ARROW PANEL

DIRECTION OF TRAFFIC

W4-2L-36
STA. 527+65 LT.

W20-5L-36
STA. 532+65 LT.

W20-1-36
STA. 537+65 LT.



N

HORIZONTAL SCALE IN FEET
0 20 40 80

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - SR 55
PHASE 2 - STA. 513+00 TO STA. 523+00

MIA-75-4094

19
33

END ROAD WORK
G20-2-48
STA. 431+00, LT.

+06

431+00

432+00

+06

433+00

+06

434+00

435+00

436+00

I-75 SOUTHBOUND

514

I-75 NORTHBOUND

513

MATCH LINE, 436+50

LEGEND

WORK ZONE

CHANNELIZATION
ON TAPERS - DRUMS SPACED @ 35' C/C
ON TANGENTS - 28" CHANNELIZERS SPACE @ 40' C/C

SIGN SUPPORT, TWO-POST

FLASHING ARROW PANEL

DIRECTION OF TRAFFIC

PC Sta. 1+23.24

+25

+11

437+00

438+00

439+00

440+00

MATCH LINE, 436+50

I-75 SOUTHBOUND

I-75 NORTHBOUND

RIGHT LANE MUST TURN RIGHT

R3-7R-30
STA. 441+14 LT.

RIGHT LANE MUST TURN RIGHT

R3-7R-30
STA. 442+89 LT.

THRU TRAFFIC MERGE LEFT

W4-1AL-48
STA. 444+64 LT.

ROAD WORK AHEAD

W20-1-48
STA. 448+14 LT.

N

0 10 20 40
HORIZONTAL SCALE IN FEET

CALCULATED SWM
CHECKED JEP

MAINTENANCE OF TRAFFIC - SR 41
PHASE 1

MIA-75-4.94

20
33

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED SMM
CHECKED JEP

MAINTENANCE OF TRAFFIC - SR 41 PHASE 2

MIA-75-4.94

21
33

COMPUTED BY : JGM DATE : 1/2007
CHECKED BY : JEP DATE : 1/2007

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.	BRIDGE NO. MIA-75-0608	MIA-75-0623L	MIA-75-0623R	MIA-75-0681	MIA-75-0714	MIA-75-0728	MIA-75-0793C	MIA-75-0793D	MIA-75-0793L	MIA-75-0793R	MIA-75-0885	MIA-41-1124	MIA-718-1015	MIA-55-0982L	MIA-55-0982R
202	11201	LUMP		PORTIONS OF STRUCTURE REMOVED, AS PER PLAN	3	LUMP			LUMP							LUMP	LUMP			
202	75201	340	FT	FENCE REMOVED FOR REUSE, AS PER PLAN	3	110			65							105		60		
202	98000	LUMP		REMOVAL MISC.: REMOVE ROCK CHANNEL PROTECTION												LUMP				
203	20000	214	CU YD	EMBANKMENT		32			30							135		17		
254	01001	46	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	3	9			14							9		14		
257	10000	36	SQ YD	DIAMOND GRINDING PORTLAND CEMENT CONCRETE PAVEMENT		9			9							9		9		
504	11101	800	SQ FT	STEEL SHEET PILING LEFT IN PLACE, AS PER PLAN	3											800				
511	46000	23	CU YD	CLASS C CONCRETE		7			5							6		5		
512	10101	2791	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN	4	297	74	74	200			111	110	110	110	198	664	214	316	313
512	10401	13,448	SQ YD	TREATING OF CONCRETE BRIDGE DECK WITH SRS, AS PER PLAN	4	1566	859	859	1060			717	561	1098	1098	1046		1130	1736	1718
516	13200	62	SQ FT	½" PREFORMED EXPANSION JOINT FILLER		16			16							14		16		
SPECIAL	516E31400	4	CU YD	POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM (2" THICK)	33	1			1							1		1		
518	21200	3	CU YD	POROUS BACKFILL WITH FILTER FABRIC												3				
518	40000	40	FT	6" PERFORATED CORRUGATED PLASTIC PIPE												40				
518	40012	5	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE												5				
519	11101	20	SQ FT	PATCHING CONCRETE STRUCTURE, AS PER PLAN	4	5												15		
601	26000	46	CU YD	DUMPED ROCK FILL, TYPE B						18	28									
601	32204	362	CU YD	ROCK CHANNEL PROTECTION, TYPE C, WITH FABRIC FILTER		78			84							102		98		
602	20000	8	CU YD	CONCRETE MASONRY		2			2							3		1		
603	07600	671	FT	18" CONDUIT, TYPE C					230							310		131		
603	13600	190	FT	30" CONDUIT, TYPE C		190														
604	09500	3	EACH	CATCH BASIN RECONSTRUCTED TO GRADE					1									2		
606	13000	1312.5	FT	GUARDRAIL, TYPE 5		325			325							537.5		125		
606	22010	5	EACH	ANCHOR ASSEMBLY, TYPE E-98		1			1							2		1		
606	26500	5	EACH	ANCHOR ASSEMBLY, TYPE T		1			1							2		1		
609	26001	80	FT	CURB, TYPE 6, AS PER PLAN	4	20			20							20		20		
614	11100	56	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR																
626	00100	17	EACH	BARRIER REFLECTOR, TYPE A		4			4							6		3		
626	00200	10	EACH	BARRIER REFLECTOR, TYPE B			2	2						3	3					
653	10001	11	CU YD	TOPSOIL FURNISHED AND PLACED, AS PER PLAN	3	4			2							3		2		
659	00510	360	SQ YD	SEEDING AND MULCHING, CLASS 2		96			90							123		51		
660	25000	361	SQ YD	SODDING STAKED		140			62							98		61		
614	11001	LUMP		MAINTAINING TRAFFIC, AS PER PLAN	3															
623	10000	LUMP		CONSTRUCTION LAYOUT STAKES																
624	10000	LUMP		MOBILIZATION																

STRUCTURE FILE NUMBERS:

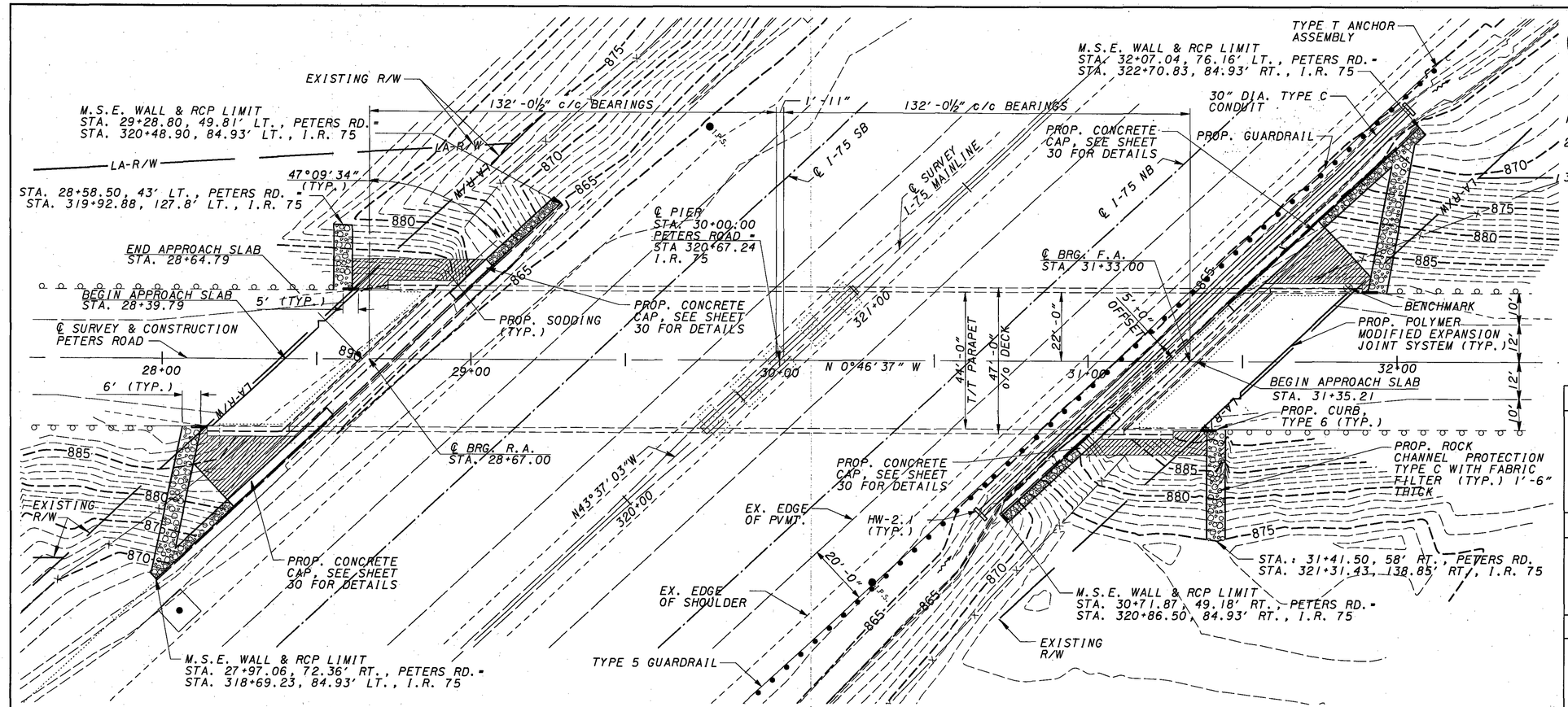
MIA-75-0608:	5501873	MIA-75-0793 C:	5502233
MIA-75-0623 L:	5501962	MIA-75-0793 L:	5502292
MIA-75-0623 R:	5501997	MIA-75-0793 R:	5502322
MIA-75-0681:	5502055	MIA-75-0793 D:	5502357
MIA-75-0714:	5502071	MIA-718-1015:	5504724
MIA-75-0728:	5502101	MIA-75-0885:	5502438
MIA-55-0982 L:	5501350	MIA-41-1124:	5500753
MIA-55-0982 R:	5501385		

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE 240
COLUMBUS, OH 43231
(614) 714-0270 FAX (614) 714-0322

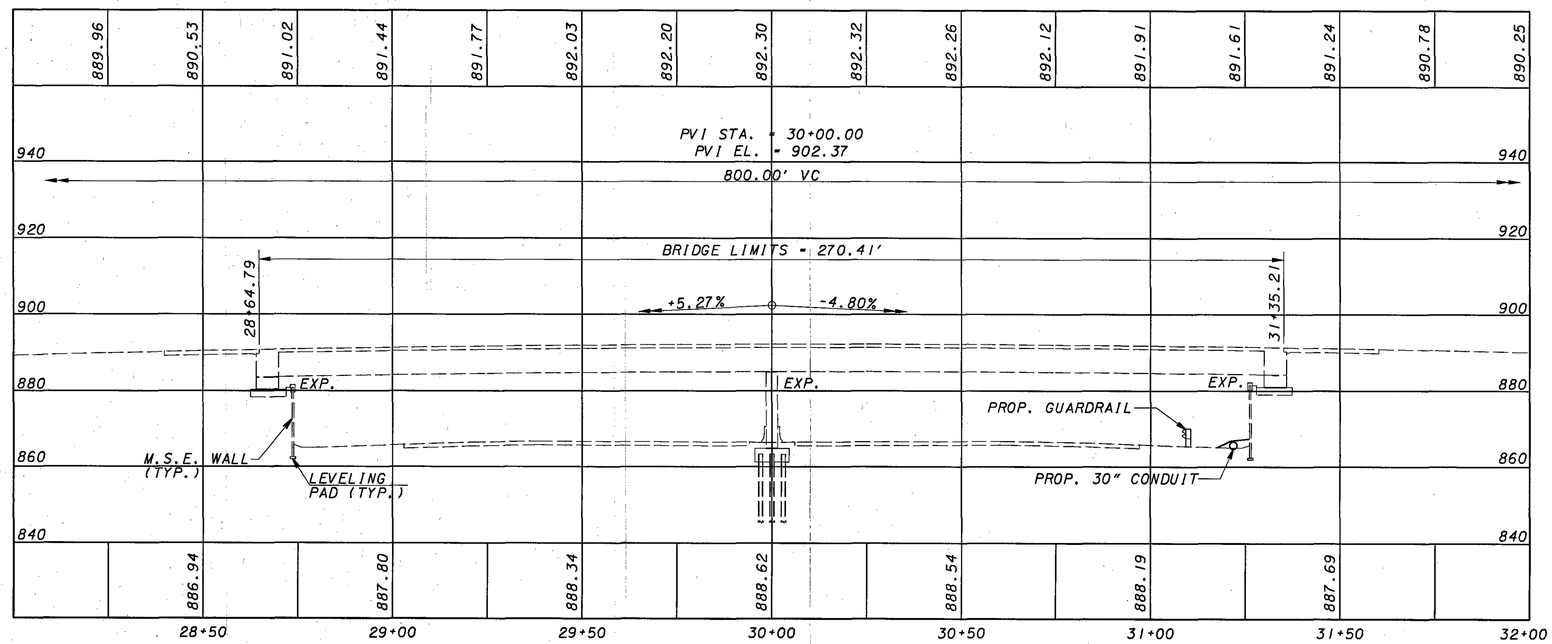
DESIGNED JGM | DRAWN JGM | REVIEWED KCS | DATE 1/30/07
CHECKED JEP | REVISED | STRUCTURE FILE NUMBER SEE LIST

ESTIMATED QUANTITIES

MIA-75-04.94
PID NO. 81454



PLAN



PROFILE ALONG ℄ SURVEY AND CONSTRUCTION PETERS ROAD

NOTES:

1. SEE SHEET 29 / 33 FOR DRAINAGE DETAILS.
2. SEE SHEET 32 & 33 / 33 FOR POLYMER MODIFIED ASPHALT JOINT DETAILS.
3. SEE SHEET 29 / 33 FOR GUARDRAIL DETAILS.

SURVEY DATA

BENCHMARK: CHISELED SQUARE CUT IN THE WINGWALL AT GUARDRAIL IN THE NE CORNER

ELEV. 892.68

TRAFFIC DATA (PETERS ROAD)

CURRENT ADT (2004) = 5,910
DESIGN YEAR ADT (2024) = 9,730
DESIGN YEAR ADTT = 389

EXISTING STRUCTURE

TYPE: TWO SPAN PRESTRESSED CONCRETE I-BEAMS (MODIFIED TYPE 4, CONTINUOUS FOR LIVE LOAD) WITH COMPOSITE REINFORCED CONCRETE DECK ON SEMI-INTEGRAL ABUTMENTS AND CAP AND COLUMN PIER.

SPANS: 132'-0½", 132'-0½" C/C BRGS.

ROADWAY: 44'-0" T/T PARAPET

ORIGINAL DESIGN LOADING: HS20-44 & THE ALTERNATE MILITARY LOADING

CROWN: 0.0156

ALIGNMENT: TANGENT

SKEW: 47°09'34"± LEFT FORWARD

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: AS-1-81 (25'-0") LONG

YEAR CONSTRUCTED: 2000

STRUCTURE FILE NUMBER: 5501873

PROPOSED WORK

1. INSTALL CURB AT APPROACH SLABS AS SHOWN ON THE PLANS.
2. INSTALL A CLOSED CONDUIT IN FRONT OF THE MSE WALLS IN FRONT OF FORWARD ABUTMENT AND RE-GRADE AS SHOWN ON THE PLANS.
3. REMOVE EXISTING CONCRETE CAPS.
4. INSTALL CONCRETE CAPS IN-BETWEEN THE ABUTMENT AND MSE WALLS AS SHOWN ON THE PLANS.
5. PLACE ROCK FLUMES AS SHOWN IN THE PLANS.
6. PATCH ABUTMENT WITH ITEM 519
7. INSTALL POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM.
8. REMOVE EXISTING CONCRETE EPOXY SEALER BY A WATER BLAST AT 7,000 (MIN.) PSI.
7. SEAL PARAPETS WITH EPOXY-URETHANE SEALER.
8. TREAT BRIDGE DECK AND APPROACH SLABS WITH SRS.

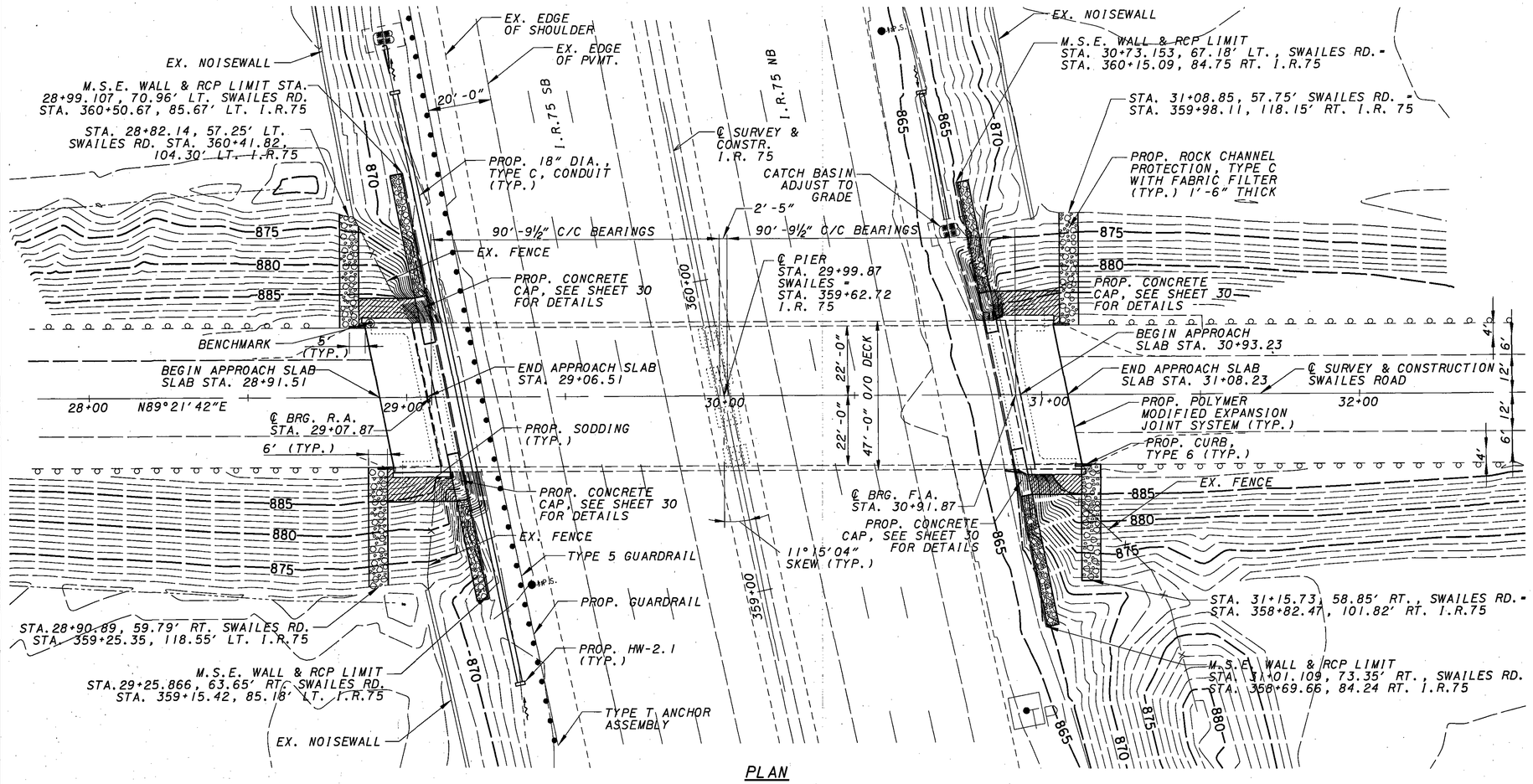
DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE 240
COLUMBUS, OH 43231
(614) 714-0270 FAX (614) 714-0322

REVIEWED	DATE
KCS	1/30/07
STRUCTURE FILE NUMBER	
5501873	
DRAWN	REVISED
DB	
DESIGNED	CHECKED
JGM	JEP

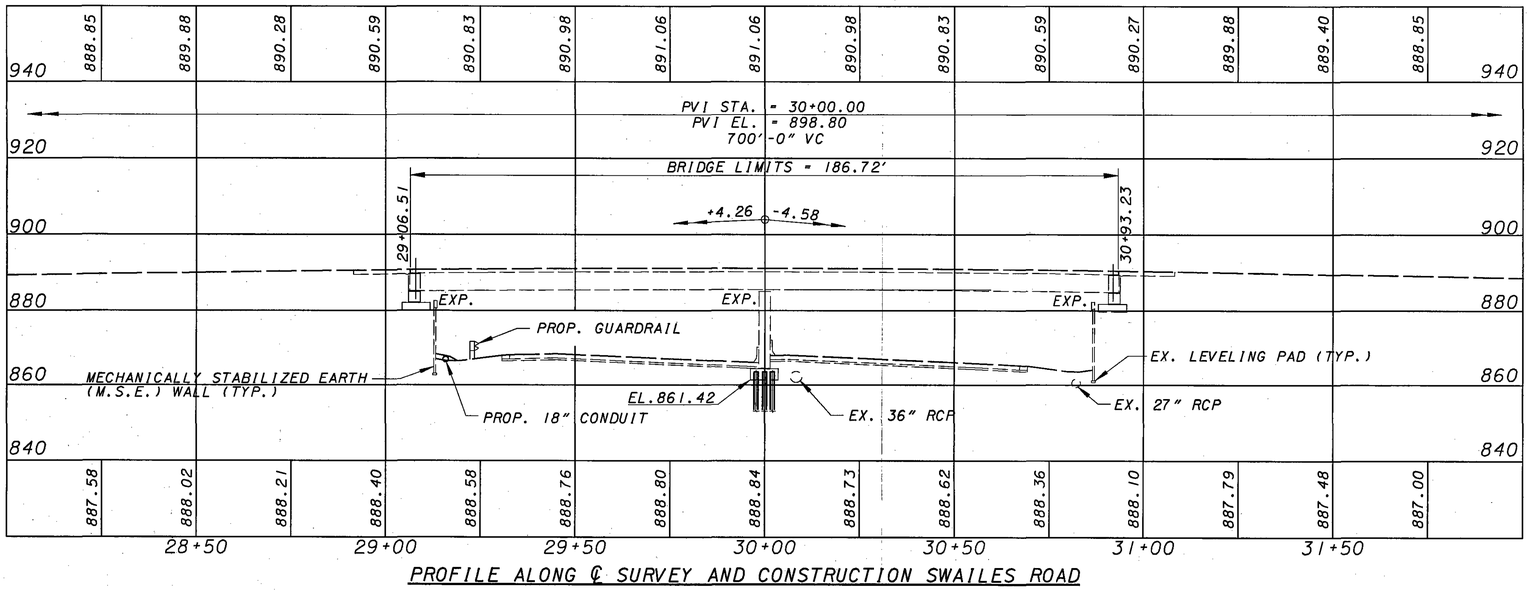
MIAMI COUNTY
STA. 28+64.79
STA. 31+35.21

SITE PLAN
BRIDGE NO. MIA-75-0608
PETERS ROAD OVER I.R. 75

MIA-75-04.94
PID NO. 81454



PLAN



PROFILE ALONG ℄ SURVEY AND CONSTRUCTION SWAILES ROAD

NOTES:

1. SEE SHEET 29 / 33 FOR DRAINAGE DETAILS.
2. SEE SHEET 32 & 33 / 33 FOR POLYMER MODIFIED ASPHALT JOINT DETAILS.
3. SEE SHEET 29 / 33 FOR GUARDRAIL DETAILS.

SURVEY DATA

BENCHMARK: CHISELED SQUARE CUT IN THE WINGWALL AT GUARDRAIL IN THE NORTHWEST CORNER OF THE BRIDGE

ELEV. 893.15

TRAFFIC DATA (SWAILES RD.)

CURRENT ADT (2004) - 2,900
DESIGN YEAR ADT (2024) - 4,200
DESIGN YEAR ADTT - 126

EXISTING STRUCTURE

TYPE: TWO SPAN PRESTRESSED CONCRETE I-BEAMS (CONTINUOUS FOR LIVE LOAD) WITH COMPOSITE REINFORCED CONCRETE DECK, ON SEMI-INTEGRAL ABUTMENTS AND CAP AND COLUMN PIER.

SPANS: 91'-1½"± , 91'-1½"± C/C BRGS.

ROADWAY: 44'-0"± T/T BARRIER

ORIGINAL DESIGN LOADING: HS20-44 & THE ALTERNATE MILITARY LOADING,

CROWN: 0.0156

ALIGNMENT: TANGENT

SKEW: 11°15'04" RIGHT FORWARD

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: AS-1-81 (15'-0") LONG

YEAR CONSTRUCTED: 2000

STRUCTURE FILE NUMBER: 5502055

PROPOSED WORK

1. INSTALL CURB AT APPROACH SLABS AS SHOWN ON THE PLANS.
2. INSTALL A CLOSED CONDUIT IN FRONT OF THE MSE WALL IN FRONT OF THE REAR ABUTMENT.
3. ADJUST CATCH BASIN TO GRADE.
4. INSTALL A CLOSED CONDUIT IN FRONT OF THE MSE WALL AT THE FORWARD ABUTMENT TO DRAIN TO EX. CATCH BASIN. RE-GRADE AS SHOWN ON THE PLANS.
5. REMOVE EXISTING CONCRETE CAPS.
6. INSTALL PROPOSED CONCRETE CAPS IN-BETWEEN THE ABUTMENT AND MSE WALLS AS SHOWN ON THE PLANS.
7. PLACE ROCK FLUMES AS SHOWN IN THE PLANS.
8. PLANE ASPHALT TO A SMOOTH TRANSITION
9. INSTALL POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM AT THE END OF EACH APPROACH SLAB.
10. REMOVE EXISTING CONCRETE EXPOXY SEALER BY A WATER BLAST AT 7,000 (MIN.) PSI.
11. SEAL PARAPETS WITH EPOXY-URETHANE SEALER.
12. TREAT BRIDGE DECK AND APPROACH SLABS WITH SRS.

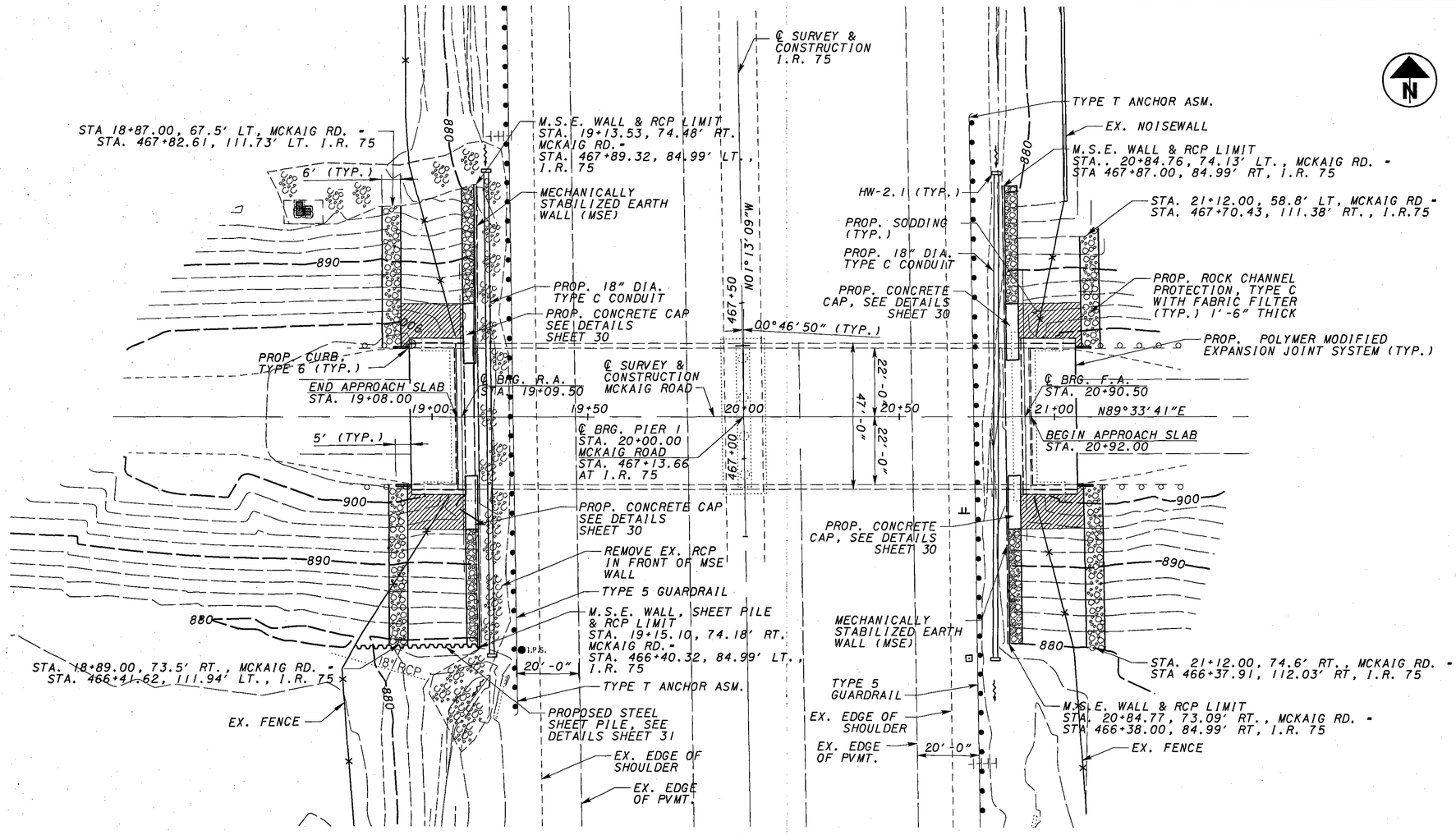
DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE 240
COLUMBUS, OH 43231
(614) 714-0270 FAX (614) 714-0322

DESIGNED	DRAWN	REVIEWED	DATE
JGM	DB	KCS	1/30/07
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JEP		5502055	

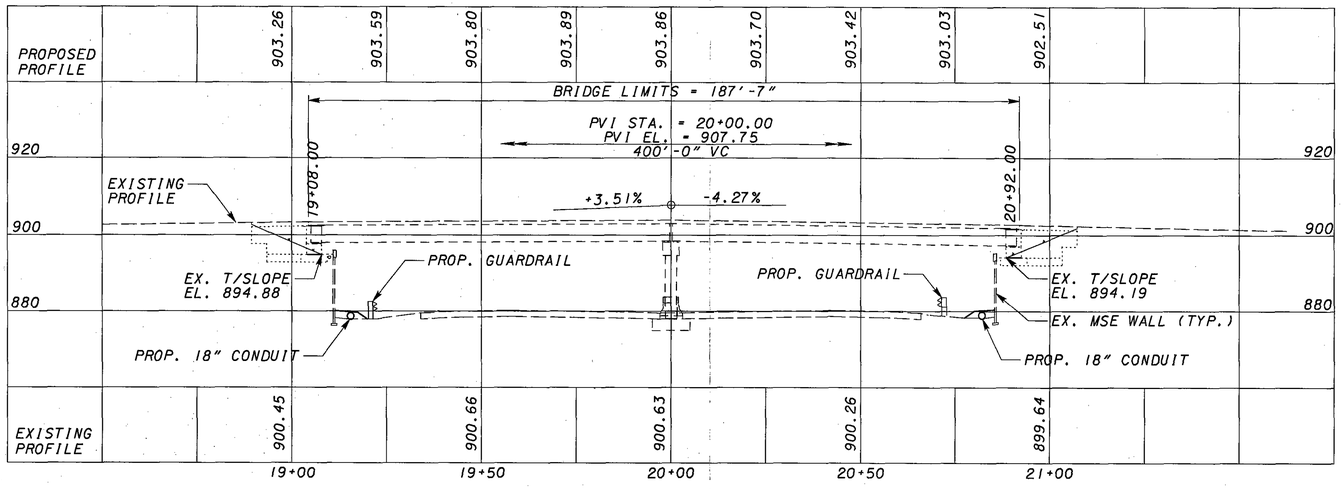
MIAMI COUNTY
STA. 29+06.51
STA. 30+93.23

SITE PLAN
BRIDGE NO. MIA-75-0681
SWAILES ROAD OVER I.R. 75

MIA-75-04.94
PID NO. 81454



PLAN



PROFILE ALONG ℄ SURVEY AND CONSTRUCTION MCKAIG ROAD

NOTES:

1. SEE SHEET 29 / 33 FOR DRAINAGE DETAILS.
2. SEE SHEET 32 & 33 / 33 FOR POLYMER MODIFIED ASPHALT JOINT DETAILS.
3. SEE SHEET 29 / 33 FOR GUARDRAIL DETAILS.

SURVEY DATA

BENCHMARK: CHISELED SQUARE CUT IN THE WINGWALL AT GUARDRAIL IN THE NORTHWEST CORNER OF THE BRIDGE

ELEV. 905.35

TRAFFIC DATA (MCKAIG RD.)

CURRENT ADT (2004) - 6,450
DESIGN YEAR ADT (2024) - 9,760
DESIGN YEAR ADTT - 390

EXISTING STRUCTURE

TYPE: TWO SPAN PRESTRESSED CONCRETE I-BEAMS (MODIFIED TYPE 4 WITH MODIFIED TOP FLANGE) WITH COMPOSITE REINFORCED CONCRETE DECK SUPPORTED ON CAP AND COLUMN PIERS AND SEMI-INTEGRAL ABUTMENTS.

SPANS: 90'- 6", 90'-6" C/C BRGS.

ROADWAY: 44'-0" T/T PARAPET

ORIGINAL DESIGN LOADING: HS20-44 & THE ALTERNATE MILITARY LOADING

CROWN: 0.0156

ALIGNMENT: TANGENT

SKEW: 0°46'50"± RIGHT FORWARD

WEARING SURFACE: MONOLITHIC CONCRETE

APPROACH SLABS: AS-1-81 (15'-0") LONG

YEAR CONSTRUCTED: 2000

STRUCTURE FILE NUMBER: 5502438

PROPOSED WORK

1. INSTALL SHEETING AT THE SOUTH SIDE OF THE REAR ABUTMENT AND RE-GRADE AS SHOWN ON THE PLANS.
2. INSTALL CURB ALONG APPROACH SLABS AS SHOWN ON THE PLANS.
3. REMOVE RIP-RAP IN THE EXISTING DITCH LOCATED ALONG THE REAR ABUTMENT.
4. INSTALL A CLOSED CONDUIT IN FRONT OF THE MSE WALLS IN FRONT OF BOTH ABUTMENTS AND RE-GRADE AS SHOWN ON THE PLANS.
5. REMOVE EXISTING CONCRETE CAP LOCATED IN-BETWEEN THE ABUTMENT AND MSE WALL.
6. INSTALL PROPOSED CONCRETE CAPS IN-BETWEEN THE ABUTMENT AND MSE WALLS AS SHOWN ON THE PLANS.
7. PLACE ROCK FLUMES AS SHOWN IN THE PLANS.
8. INSTALL POLYMER MODIFIED ASPHALT EXPANSION JOINT.
9. REMOVE EXISTING CONCRETE EPOXY SEALER BY A WATER BLAST AT 7,000 (MIN.) PSI.
10. SEAL PARAPETS WITH EPOXY-URETHANE SEALER.
11. TREAT BRIDGE DECK AND APPROACH SLABS WITH SRS.

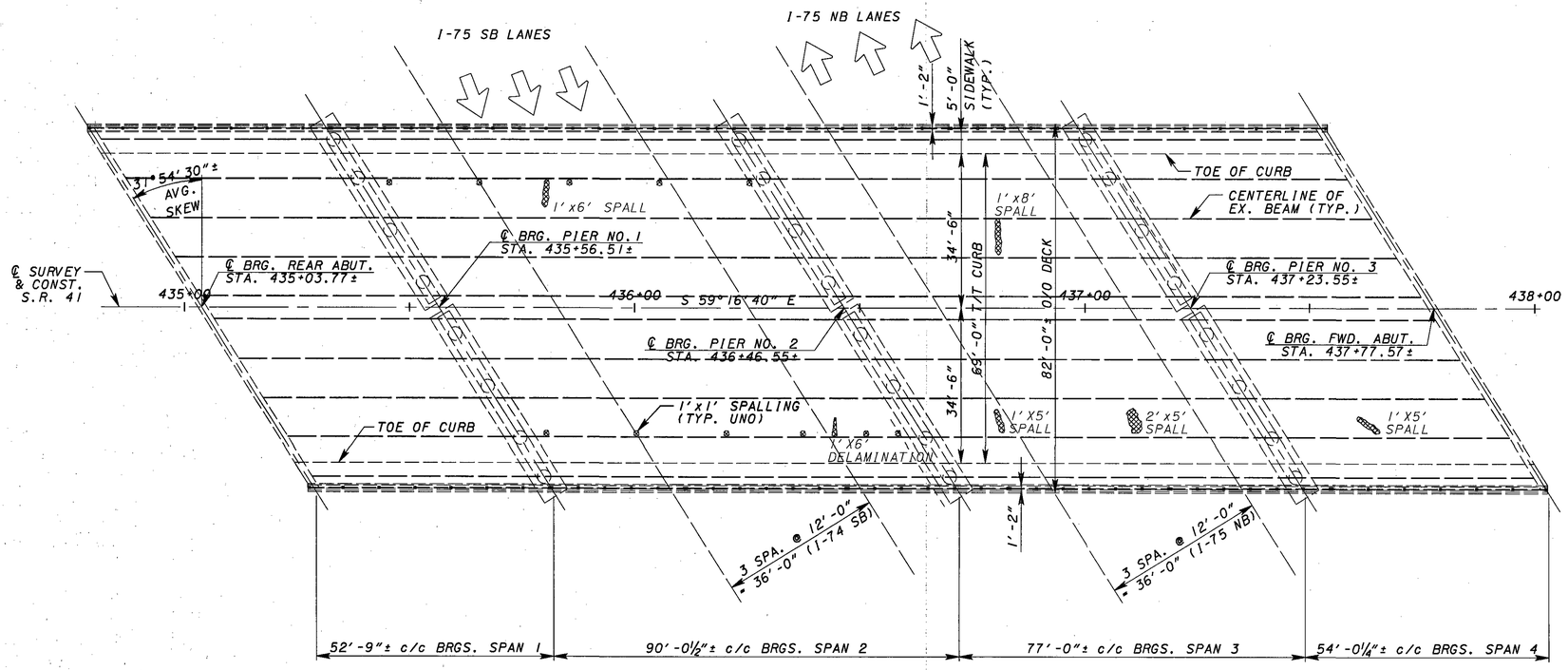
DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE 240
COLUMBUS, OH 43231
(614) 714-0270 FAX (614) 714-0322

DESIGNED	DRAWN	REVIEWED	DATE
JGM	DB	KCS	1/30/07
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JEP		5502438	

MIAMI COUNTY
STA. 19+08.00
STA. 20+92.00

SITE PLAN
BRIDGE NO. MIA-75-0885
MCKAIG ROAD OVER I.R. 75

MIA-75-04.94
PID NO. 81454



DECK PLAN

NOTES:

1. ITEM 202 - PORTIONS OF STRUCTURE REMOVED, AS PER PLAN:

   EXACT DIMENSIONS AND LOCATIONS OF SPALLS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. ALL WORK NECESSARY TO REMOVE SPALLS IS PAID FOR UNDER THIS ITEM.

2. SPALLED CONCRETE IS LOCATED ALONG THE UNDERSIDE OF THE DECK.

3. MAINTENANCE OF TRAFFIC DURING THE REMOVAL SHALL ADHERE TO STANDARD DRAWING MT-95.30.

LEGEND:

DENOTES LOCATIONS FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED

SURVEY DATA

BENCHMARK #1, TOP OF HUB #M301
STA. 430+95.37, 60.55' LT.
ELEV. 910.57

BENCHMARK #2, TOP OF HUB #M302
STA. 439+44.10, 47.18' LT.
ELEV. 901.07

TRAFFIC DATA (S.R. 41)

CURRENT ADT (2004) - 32,220
DESIGN YEAR ADT (2024) - 38,280
DESIGN YEAR ADTT - 1,531

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL BEAMS (PAINTED A373 & A36) WITH REINFORCED CONCRETE DECK ON REINFORCED CONCRETE STUB ABUTMENTS AND CAP & COLUMN PIERS.

SPANS: 52'-9", 90'- 0½", 77'-0", 54'-0¼"± C/C BRGS.

ROADWAY: 69'-0" T/T CURBS WITH 5'-0" SIDEWALKS

ORIGINAL DESIGN LOADING: CF-150 (51) (1957 CONST.) & HS20-44 (1977 WIDENING)

ALIGNMENT: TANGENT

SKEW: 31°54'30"± RIGHT FORWARD (AVG.)

WEARING SURFACE: 3"± SDC OVERLAY

APPROACH SLABS: AS-1-72 (25'-0") LONG

YEAR CONSTRUCTED: 1957

STRUCTURE FILE NUMBER: 5500753

PROPOSED WORK

1. REMOVE EXISTING CONCRETE EPOXY SEALER BY A WATER BLAST AT 7,000 (MIN.) PSI.
2. SEAL PARAPETS WITH EPOXY-URETHANE SEALER.
3. REMOVE CONCRETE SPALLS AS SHOWN IN THE PLANS.

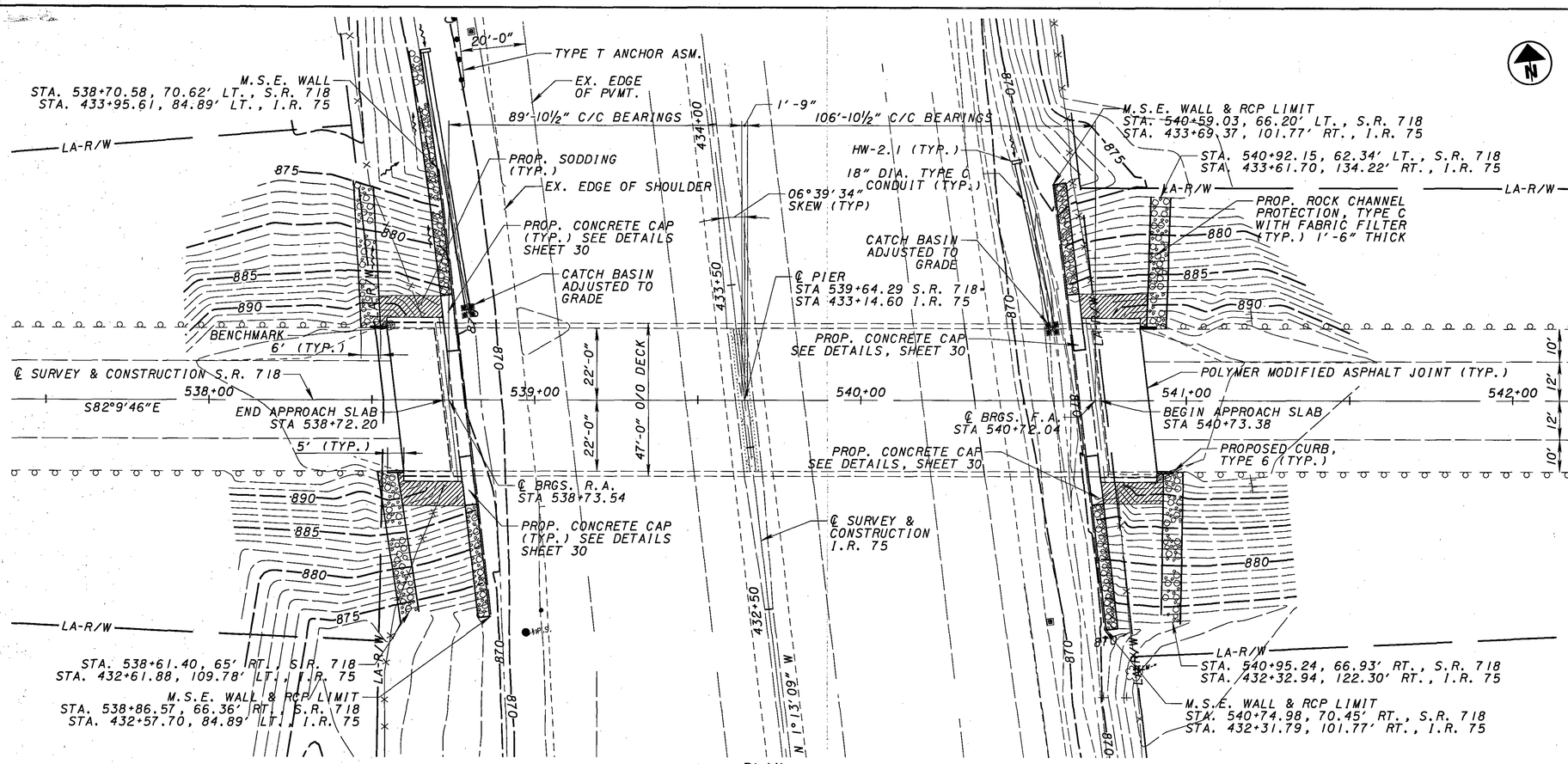
DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE 240
COLUMBUS, OH 43231
(614) 714-0270 FAX (614) 714-0322

DESIGNED	DRAWN	REVIEWED	DATE
JGM	JGM	KCS	1/30/07
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JEP		5500753	

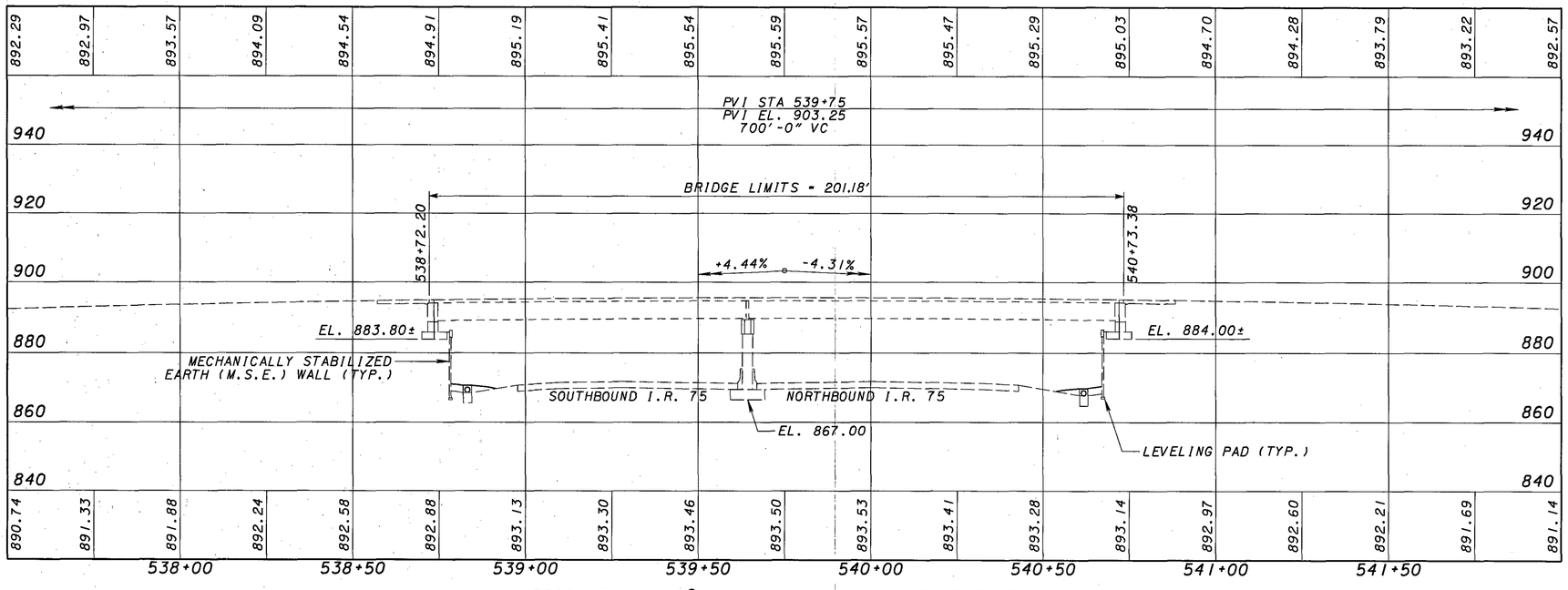
MIAMI COUNTY
STA. 435+03.77
STA. 437+77.57

SITE PLAN
BRIDGE NO. MIA-41-1124
OVER I.R. 75

MIA-75-04.94
PID NO. 81454



PLAN



PROFILE ALONG ℄ SURVEY & CONSTRUCTION S.R. 718

NOTES:

1. SEE SHEET 29 / 33 FOR DRAINAGE DETAILS.
2. SEE SHEET 32 & 33 / 33 FOR POLYMER MODIFIED ASPHALT JOINT DETAILS.
3. SEE SHEET 32 / 33 FOR GUARDRAIL DETAILS.

SURVEY DATA

BENCHMARK: CHISELED SQUARE CUT IN THE WINGWALL AT GUARDRAIL IN THE NORTHWEST CORNER OF THE BRIDGE

ELEV. 896.49

TRAFFIC DATA (S.R. 718)

CURRENT ADT (2004) = 3,900
DESIGN YEAR ADT (2024) = 5,500
DESIGN YEAR ADTT = 220

EXISTING STRUCTURE

TYPE: TWO SPAN PRESTRESSED CONCRETE I-BEAMS (MODIFIED TYPE 4 WITH MODIFIED TOP FLANGE, CONTINUOUS FOR LIVE LOAD) WITH COMPOSITE REINFORCED CONCRETE DECK SUPPORTED ON CAP AND COLUMN PIERS AND SEMI- INTEGRAL ABUTMENTS.

SPANS: 89'- 10½", 106'-10½" C/C BRGS.

ROADWAY: 44'-0" T/T PARAPET

ORIGINAL DESIGN LOADING: HS20-44 & THE ALTERNATE MILITARY LOADING

CROWN: 0.0156

ALIGNMENT: TANGENT

SKEW: 06°39'34"± RIGHT FORWARD

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: AS-1-81 (15'-0") LONG

YEAR CONSTRUCTED: 2000

STRUCTURE FILE NUMBER: 5504724

PROPOSED WORK

1. INSTALL CURB ALONG APPROACH SLABS AS SHOWN IN THE PLANS.
2. ADJUST CATCH BASINS TO GRADE.
3. INSTALL A CLOSED CONDUIT IN FRONT OF THE MSE WALLS IN FRONT OF BOTH ABUTMENTS TO DRAIN TO EX. CATCH BASIN. RE-GRADE AS SHOWN ON THE PLANS.
4. INSTALL CONCRETE CAPS IN-BETWEEN THE ABUTMENT AND MSE WALLS AS SHOWN ON THE PLANS.
5. PLACE ROCK FLUMES AS SHOWN IN THE PLANS.
6. PATCH FORWARD ABUTMENT
7. PLANE ASPHALT TO A SMOOTH TRANSITION
8. INSTALL POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM.
9. REMOVE EXISTING CONCRETE EPOXY SEALER BY A WATER BLAST AT 7,000 (MIN.) PSI.
10. SEAL PARAPETS WITH EPOXY-URETHANE SEALER.
11. TREAT BRIDGE DECK AND APPROACH SLABS WITH SRS.

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE 240
COLUMBUS, OH 43231
(614) 714-0270 FAX (614) 714-0322

DATE	REVIEWED	DRAWN	DESIGNED	CHECKED
1/30/07	KCS	DB	JGM	JEP

STRUCTURE FILE NUMBER 5504724

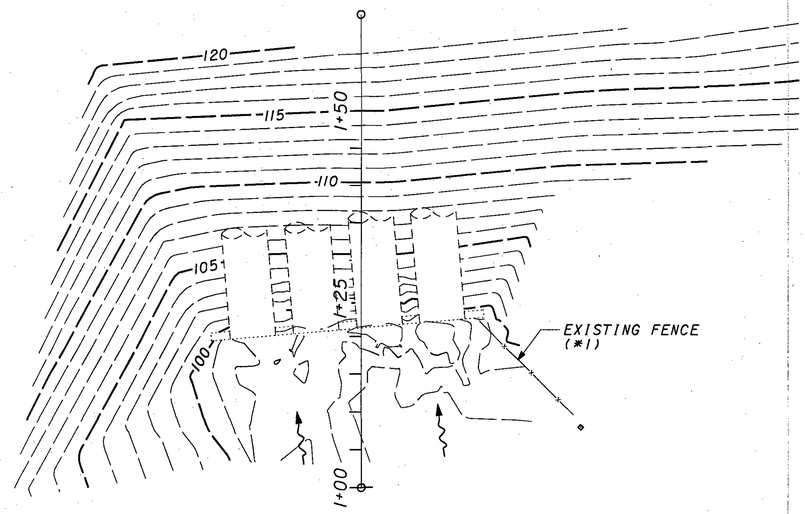
REVISED

MIAMI COUNTY
STA. 538+72.20
STA. 540+73.38

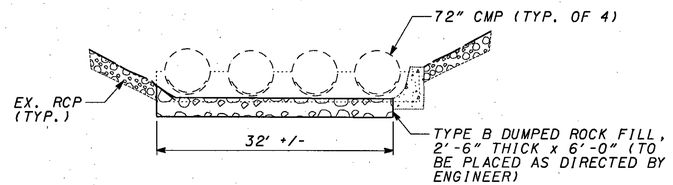
SITE PLAN
BRIDGE NO. MIA-718-1015
OVER I.R. 75

MIA-75-04.94
PID NO. 81454

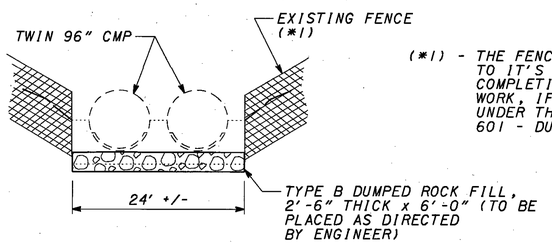
27
33



INLET PLAN VIEW MIA-75-0714

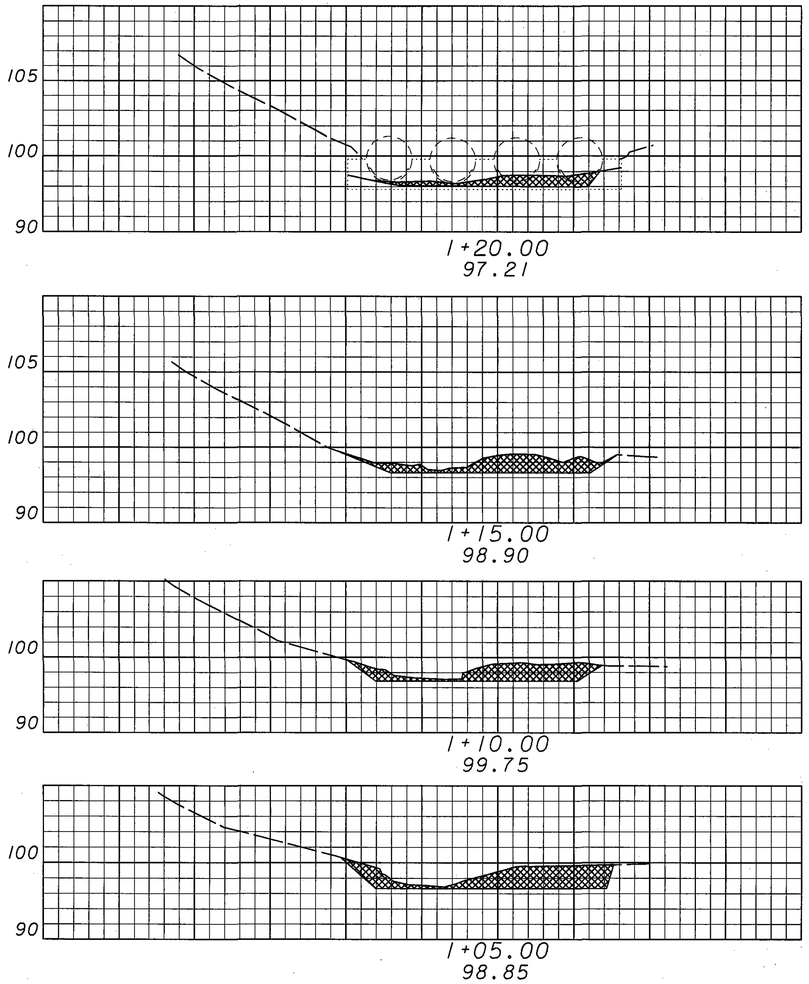


OUTLET ELEVATION VIEW MIA-75-0714



(*1) - THE FENCE SHALL BE RESTORED TO IT'S ORIGINAL CONDITION UPON COMPLETION OF THE WORK. ASSOCIATED WORK, IF NECESSARY, SHALL BE PAID UNDER THE UNIT BID PRICE FOR ITEM 601 - DUMPED ROCK FILL, TYPE B

ELEVATION VIEW MIA-75-0728
(INLET & OUTLET)



INLET CHANNEL SECTIONS MIA-75-0714

LEGEND

- DEBRIS AREA TO BE CLEARED AS DIRECTED BY ENGINEER. PAYMENT TO BE INCLUDED WITH ITEM 601 - DUMPED ROCK FILL, TYPE B

SURVEY DATA

BENCHMARK: TOP OF INLET HEADWALL AT MIA-75-0714

ELEV. 100.0

EXISTING STRUCTURE MIA-75-0714

TYPE: TWIN 96" CMP, 216 FT. LONG WITH ½ HEIGHT CONCRETE HEADWALLS.

ROADWAY: 128'

ORIGINAL DESIGN LOADING: HS20

SKEW: 10°

STRUCTURE FILE NUMBER: 5502071

EXISTING STRUCTURE MIA-75-0728

TYPE: FOUR 72" CMP, 302 FT. LONG WITH ½ HEIGHT CONCRETE HEADWALLS.

ROADWAY: 128'

ORIGINAL DESIGN LOADING: HS20

SKEW: 0°

STRUCTURE FILE NUMBER: 5502101

PROPOSED WORK

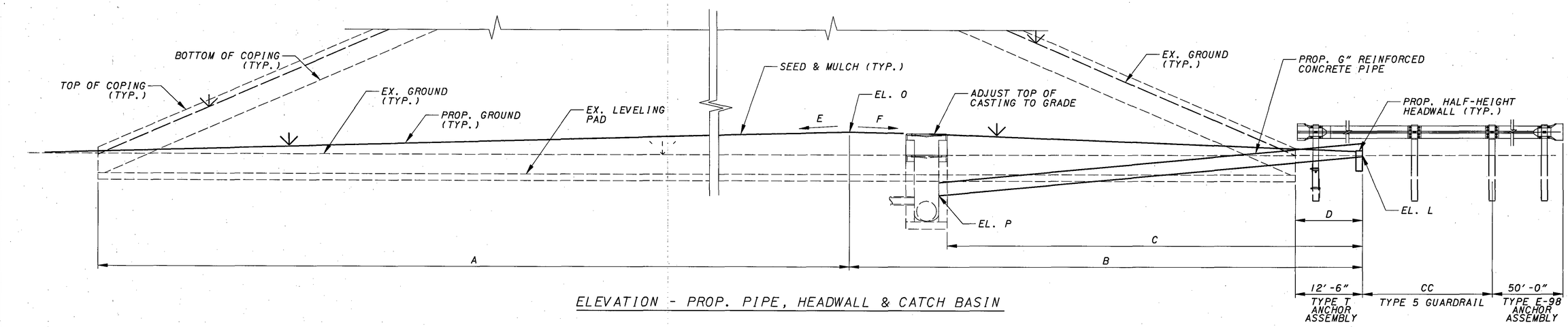
1. CLEAR DEBRIS FROM CHANNEL AS INDICATED IN THE PLANS.
2. INSTALL DUMPED ROCK FILL, TYPE B

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE 240
COLUMBUS, OH 43231
(614) 714-0270 FAX (614) 714-0322

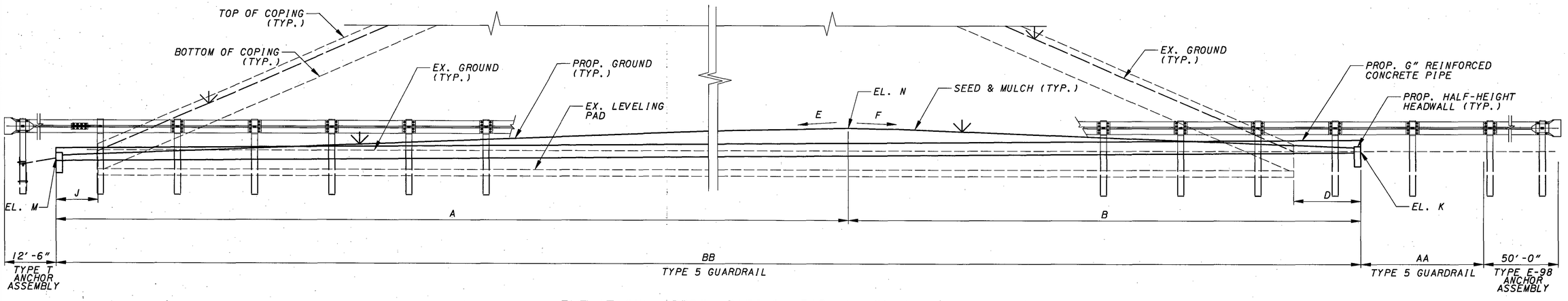
DESIGNED	DRAWN	REVIEWED	DATE
JEP	DB	KCS	1/30/07
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JGM		5502101 & 5502071	

CULVERT DETAILS
BRIDGE NO. MIA-75-0714
BRIDGE NO. MIA-75-0728

MIA-75-04.94
PID NO. 81454

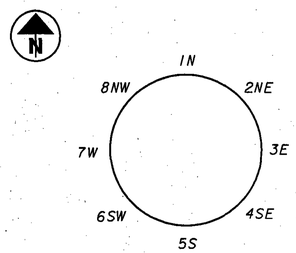


ELEVATION - PROP. PIPE, HEADWALL & CATCH BASIN



ELEVATION - PROP. PIPE & HEADWALL ONLY

BRIDGE NO.	RA/FA	A	B	C	D	E	F	G	J	K	L	M	N	O	P	AA	BB	CC
MIA-75-0608	FA	94′	98′	-	4′	0.003	0.000	30″	2′	863.88	-	863.20	866.00	-	-	125′	200′	-
MIA-75-0681	RA	150′	40′	-	26′	0.001	0.006	18″	26′	866.00	-	866.20	867.75	-	-	125′	200′	-
MIA-75-0681	FA	130′	45′	40′	30′	0.008	0.005	18″	-	-	863.78	-	-	865.50	860.50	-	-	-
MIA-75-0885	RA	157′	1′	-	5′	0.013	0.000	18″	3′	877.50	-	875.25	879.00	-	-	112.5′	162.5′	-
MIA-75-0885	FA	1′	155′	-	5′	0.000	0.006	18″	4′	877.10	-	878.00	879.60	-	-	100′	162.5′	-
MIA-718-1015	RA	98′	85′	80′	37′	0.001	0.003	18″	-	-	869.20	-	-	871.00	867.00	-	-	125′
MIA-718-1015	FA	95′	55′	50′	10′	0.001	0.003	18″	-	-	869.20	-	-	871.00	866.75	-	-	-



EX. CATCH BASIN INVERTS

BRIDGE NO.	RA/FA	EXIST. RIM ELEV.	PROP. RIM ELEV.	IN		2NE		3E		4SE		5S		6SW		7W		8NW	
				SIZE	INV.	SIZE	INV.	SIZE	INV.	SIZE	INV.	SIZE	INV.	SIZE	INV.	SIZE	INV.	SIZE	INV.
MIA-75-0681	FA	863.30	865.50	6″	860.97							24″	860.30						
MIA-718-1015	RA	869.20	871.00	6″	866.87			24″	866.78										
MIA-718-1015	FA	868.50	871.00	6″	866.08							6″	866.0	6″	866.58	24″	865.92		

STRUCTURE FILE NUMBERS:

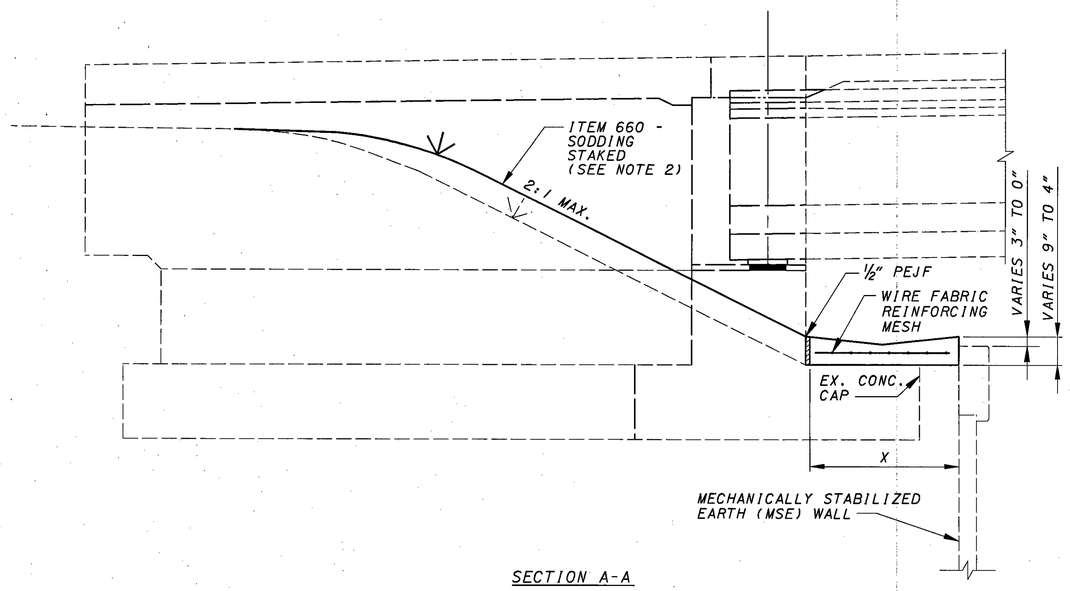
MIA-75-0608:	5501873
MIA-75-0681:	5502055
MIA-718-1015:	5504724
MIA-75-0885:	5502438

DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE 240
COLUMBUS, OH 43231
(614) 714-0270 FAX (614) 714-0322

DESIGNED	DRAWN	REVIEWED	DATE
JGM	JGM	KCS	1/30/07
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JEP		SEE LIST	

MISCELLANEOUS DETAILS

MIA-75-04.94
PID NO. 81454



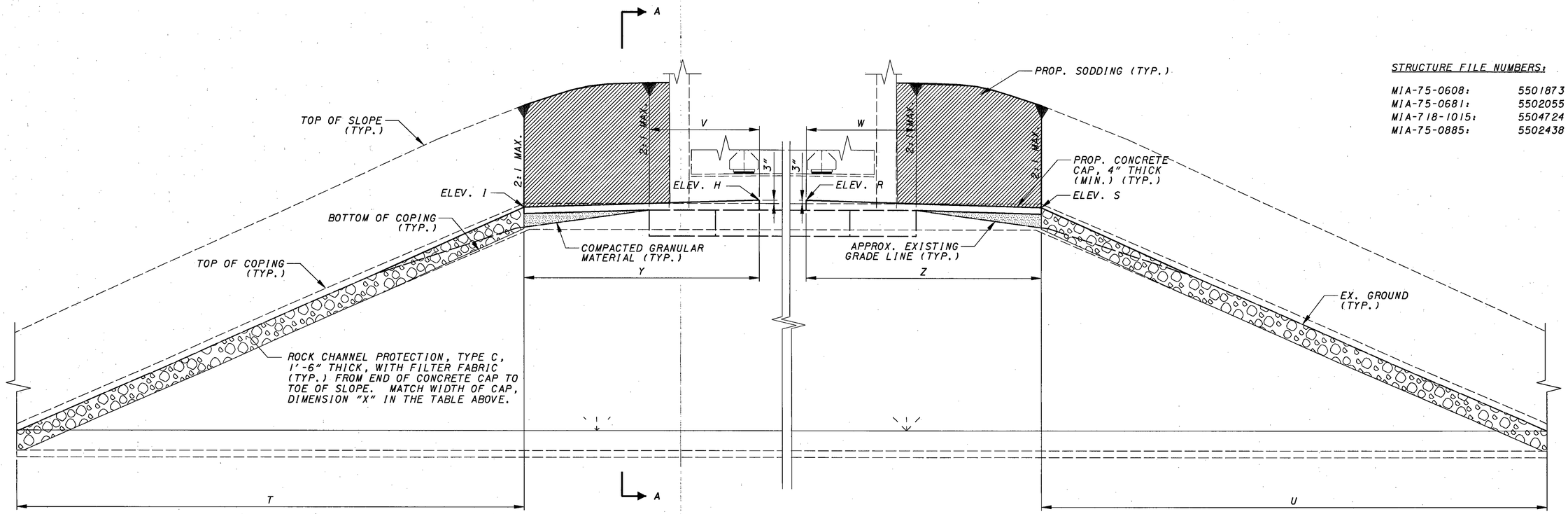
SECTION A-A

NOTES:

1. COMPACTED GRANULAR MATERIAL SHALL BE INCLUDED IN ITEM 511 CLASS C CONCRETE FOR PAYMENT.
2. THERE SHALL BE NO EXISTING SOIL EXCAVATED TO INSTALL THE SOD. REMOVE VEGETATION AND LOOSEN THE SURFACE WITH HOES AND RAKES BEFORE INSTALLATION. A QUANTITY OF TOPSOIL HAS BEEN INCLUDED IF LESS THAN 1" OF TOPSOIL EXISTS.

CONCRETE CAP & MSE WALL DIMENSIONS (FT) & ELEVATIONS

BRIDGE	RA/FA	H	I	R	S	T	U	V	W	X	Y	Z
MIA-75-0608	RA	880.86	880.61	880.90	880.65	35	30	7.42	7.42	3.00	44	16
MIA-75-0608	FA	881.77	881.52	881.77	881.52	45	32	7.42	7.42	3.00	40	17
MIA-75-0681	RA	882.90	882.65	882.79	882.54	32	40	7.33	7.00	3.58	15	15
MIA-75-0681	FA	882.85	882.60	882.70	882.45	36	42	7.00	7.33	3.58	13	15
MIA-75-0885	RA	895.08	894.83	895.64	895.39	38	38	6.33	6.33	4.00	17	19
MIA-75-0885	FA	894.38	894.13	894.95	894.70	38	38	6.33	6.33	4.00	18	17
MIA-718-1015	RA	886.10	885.85	886.22	885.97	34	39	7.42	7.42	3.58	15	17
MIA-718-1015	FA	886.50	886.25	886.42	886.17	34	39	7.42	7.42	3.58	17	15



TYPICAL MSE WALL ELEVATION

STRUCTURE FILE NUMBERS:

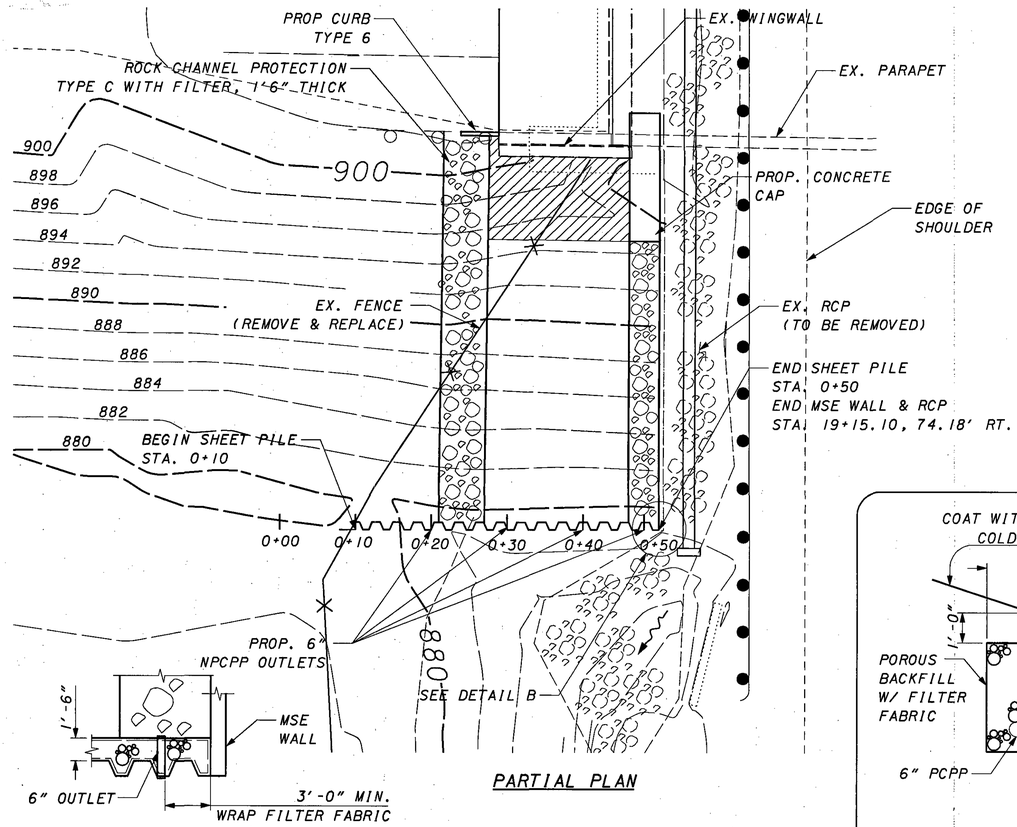
MIA-75-0608:	5501873
MIA-75-0681:	5502055
MIA-718-1015:	5504724
MIA-75-0885:	5502438

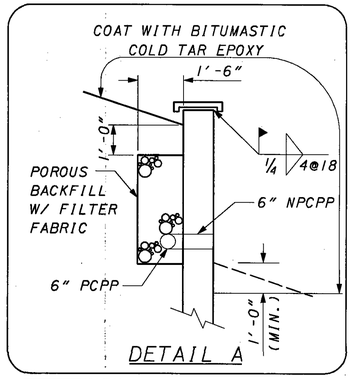
DESIGN AGENCY
BARR & PREVOST
2800 CORPORATE EXCHANGE DR., STE 240
COLUMBUS, OH 43231
(614) 714-0270 FAX (614) 714-0322

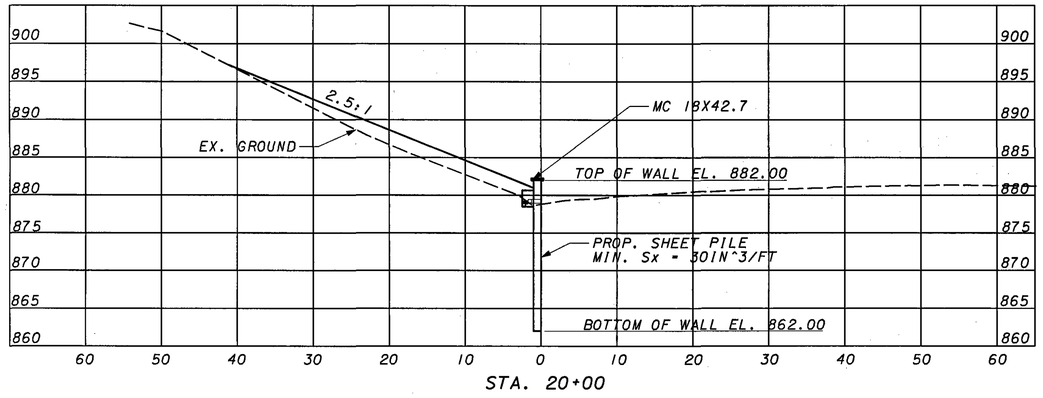
DESIGNED	DRAWN	REVIEWED	DATE
JGM	JGM	KCS	1/30/07
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JEP		SEE LIST	

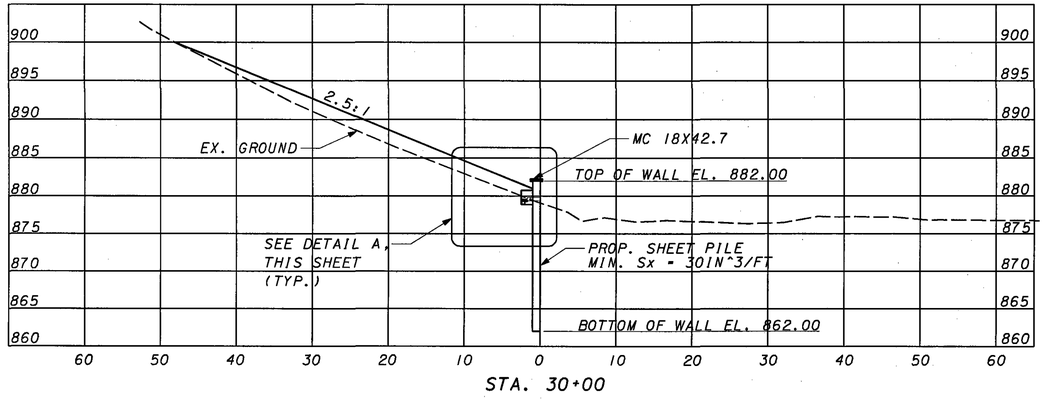
MISCELLANEOUS DETAILS

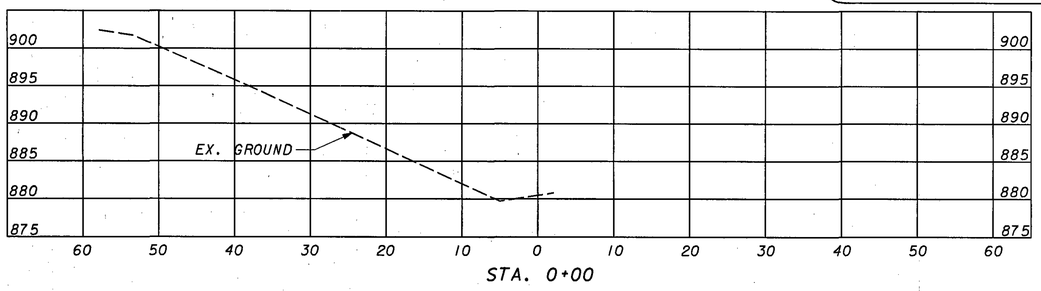
MIA-75-04.94
PID NO. 81454

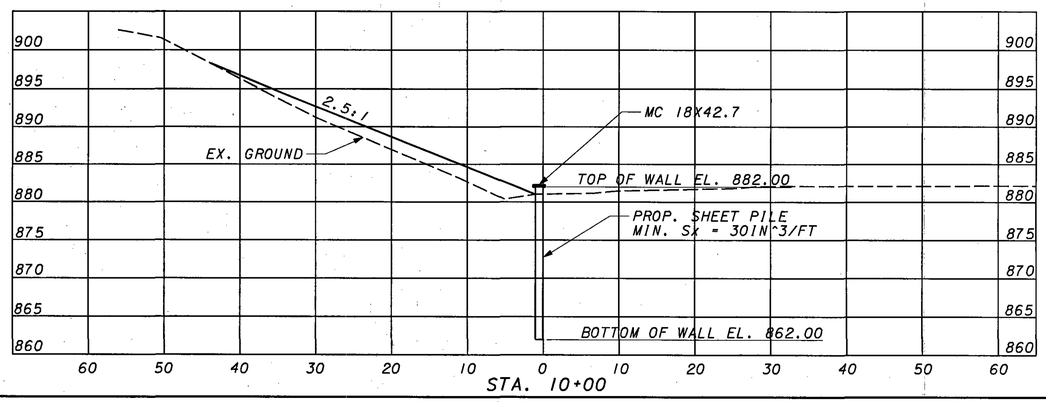


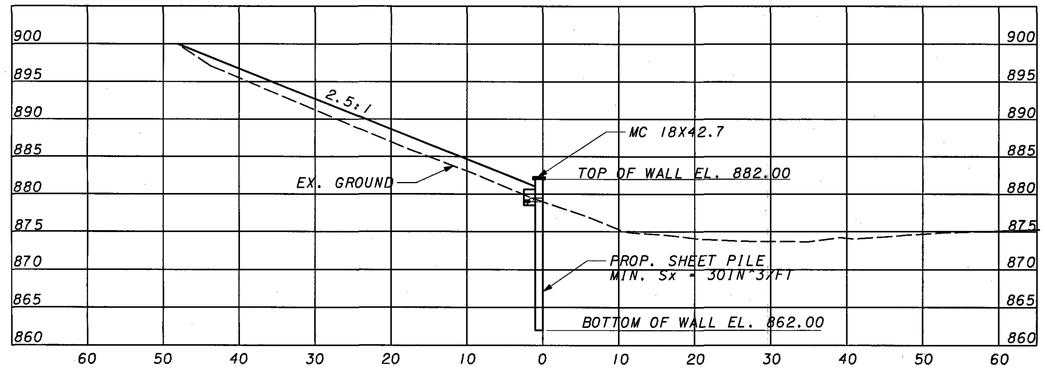


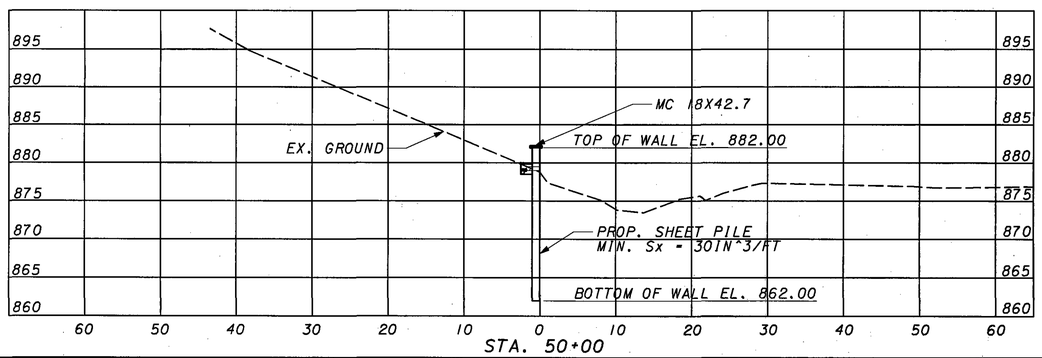












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(614) 714-0270 FAX (614) 714-0322

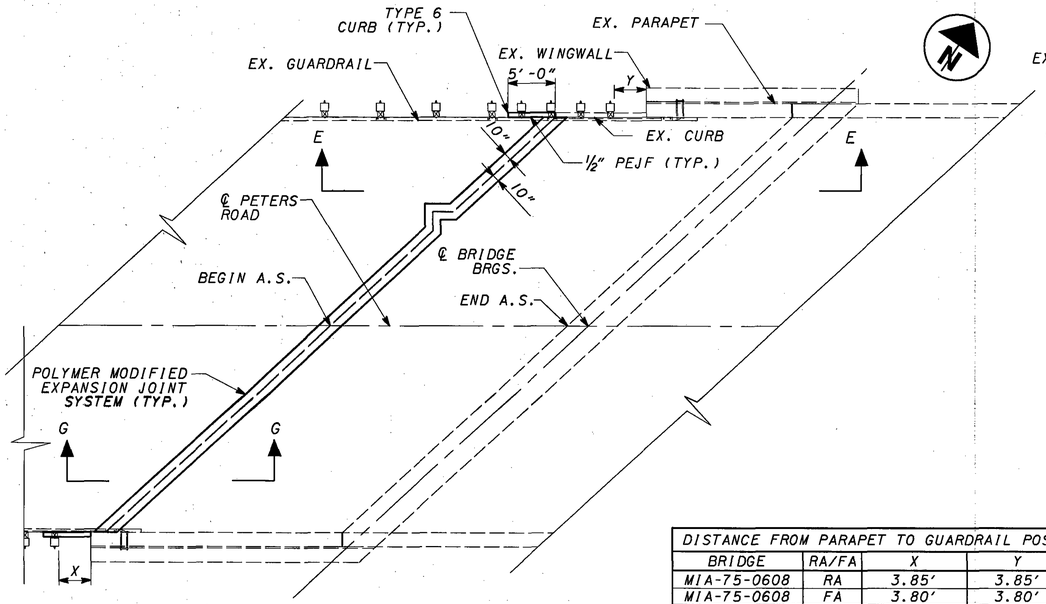
DESIGNED	DRAWN	REVIEWED	DATE
JGM	JGM	KCS	1/30/07
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JEP		5502438	

SHEET PILE DETAILS

BRIDGE NO. MIA-75-0885

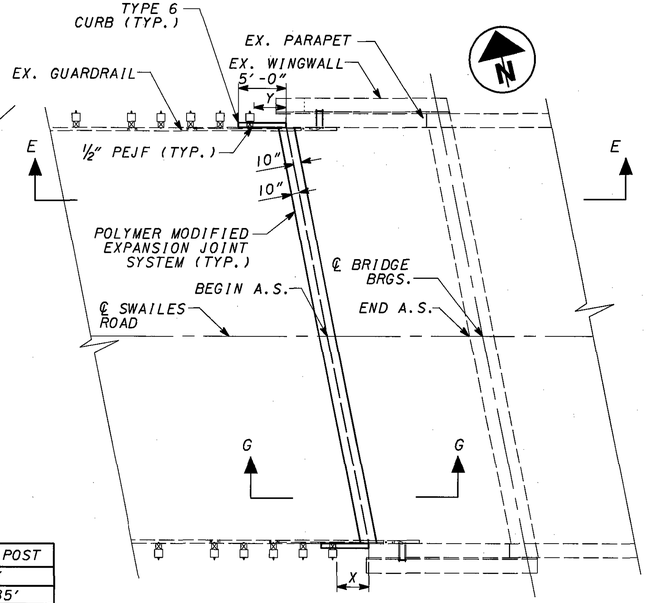
MIA-75-04.94

PID NO. 81454

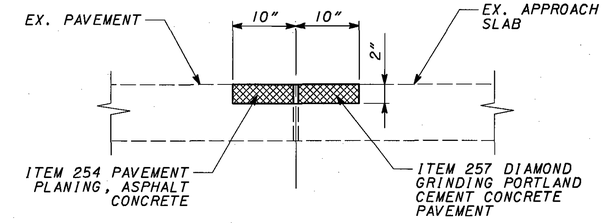


MIA-75-0608 (PETERS ROAD) PLAN

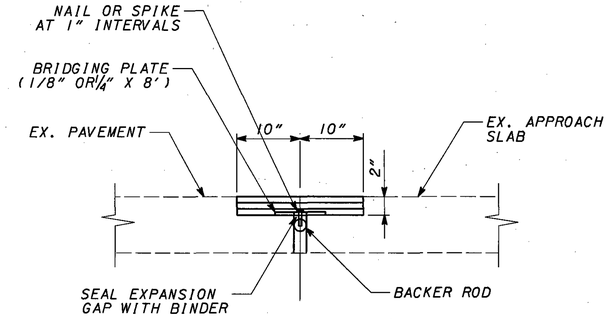
DISTANCE FROM PARAPET TO GUARDRAIL POST			
BRIDGE	RA/FA	X	Y
MIA-75-0608	RA	3.85′	3.85′
MIA-75-0608	FA	3.80′	3.80′
MIA-75-0681	RA	3.80′	3.85′
MIA-75-0681	FA	3.75′	3.85′
MIA-75-0885	RA	3.70′	3.60′
MIA-75-0885	FA	3.75′	3.70′
MIA-718-1015	RA	3.85′	3.75′
MIA-718-1015	FA	3.90′	3.80′



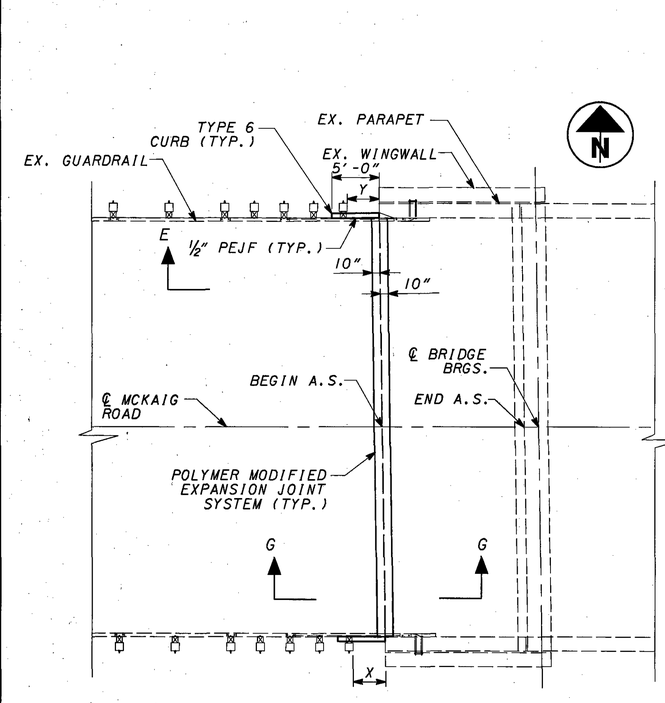
MIA-75-0681 (SWAILES RD.) PLAN



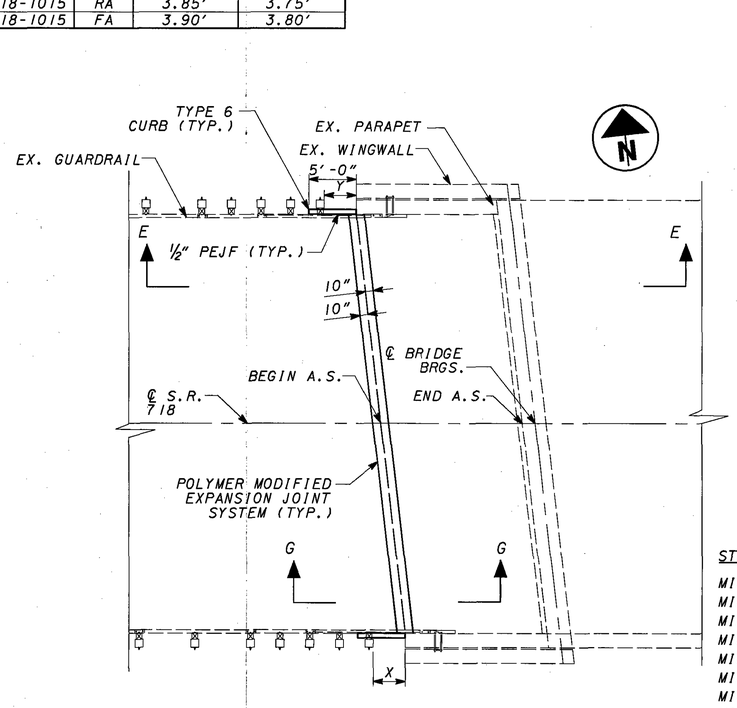
SECTION G-G REMOVAL



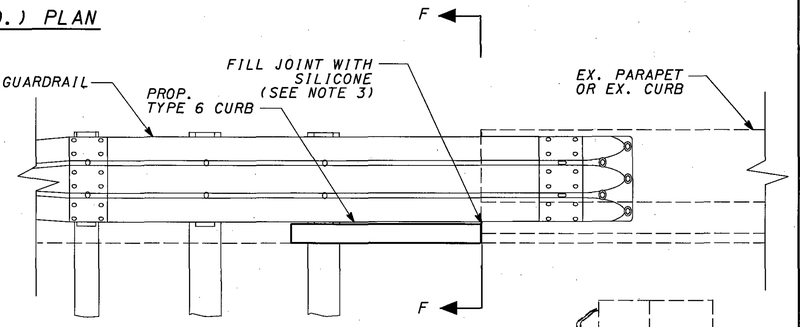
SECTION G-G



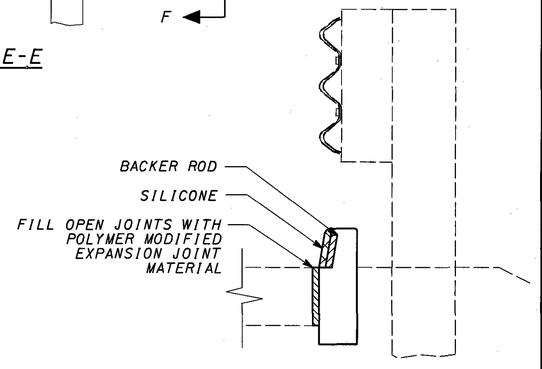
MIA-75-0885 (MCKAIG ROAD) PLAN



MIA-718-1015 (S.R. 718) PLAN



VIEW E-E



SECTION F-F

STRUCTURE FILE NUMBERS:

MIA-75-0608:	5501873
MIA-75-0623 L:	5501962
MIA-75-0623 R:	5501997
MIA-75-0681:	5502055
MIA-75-0714:	5502071
MIA-75-0728:	5502101
MIA-55-0982 L:	5501350
MIA-55-0982 R:	5501385
MIA-75-0793 C:	5502233
MIA-75-0793 L:	5502292
MIA-75-0793 R:	5502322
MIA-75-0793 D:	5502357
MIA-718-1015:	5504724
MIA-75-0885:	5502438
MIA-41-1124:	5500753

NOTES:

1. APPLY POLYMER MODIFIED EXPANSION JOINT SYSTEM TO BOTH REAR AND FORWARD APPROACH SLAB JOINTS.
2. FOR ADDITIONAL DETAILS, SEE SHEET 33 / 33.
3. USE DOW 888 OR DOW 902 SILICONE ALONG THE VERTICAL FACE WHERE THE EXISTING PARAPET OR CURB MEETS UP WITH THE PROPOSED CURB. THIS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 609 - CURB, TYPE 6, AS PER PLAN.

DESIGN AGENCY
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JEP		SEE LIST	

POLYMER MODIFIED EXPANSION JOINT SYSTEM

MIA-75-04.94
PID NO. 81454

GENERAL NOTES AND DETAILS FOR POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM

ITEM SPECIAL - POLYMER-MODIFIED ASPHALT EXPANSION JOINT SYSTEM

THIS ITEM WILL BE USED TO SEAL THE JOINTS AS PER PLAN DETAILS AND THE MANUFACTURER'S REQUIREMENTS USING A POLYMER-MODIFIED ASPHALT SYSTEM. THE PRIME CONTRACTOR WILL OBTAIN THE SERVICES OF ONE OF THE FOLLOWING APPROVED APPLICATORS WHO WILL FURNISH AND INSTALL THE NEW BRIDGE EXPANSION JOINT SYSTEM.

PRODUCT NAME	SUPPLIER	ADDRESS	PHONE NO.
THORMA-JOINT	DYNAMIC SURFACE APPLICATIONS, LTD	373 VILLAGE RD. PENNSDALE, PA 17756	(570)546-6041
MATRIX 502	CRAFCO INC.	420 N. ROOSEVELT AVE. CHANDLER, AZ 85226	(800)528-8242
EXPANDEX JOINT SYSTEM	WATSON-BOWMAN ACME	95 PINEVIEW DR. AMHERST, NY 14228	(716)691-7566
APJ ASPHALTIC PLUG EXPANSION JOINT	WYOMING EQUIPMENT SALES	281 SIXTH STREET P.O. BOX 287 WEST WYOMING, PA 18644	(570)693-2810

MATERIALS:

BRIDGING PLATE:

MILD STEEL 18" OR 14" THICK PLATE, 8" WIDE OR 18 GAUGE ALUMINUM, 8" WIDE.

BINDER:

TYPE:	POLYMER MODIFIED ASPHALT
SOFTENING POINT:	180 DEGREES F. MIN.
FLOW:	3 mm. MAX. AT 140 DEGREES F.
PENETRATION:	9 mm. MAX. AT 77 DEGREES F.
	1mm. MIN AT 0 DEGREES F.
	ASTM D 3407
DUCTILITY:	40 cm. MIN. ASTM D 113
RESILIENCE:	60% MIN. AT 77 DEGREES F.
TENSILE ADHESION:	700% MIN.
SPECIFIC GRAVITY:	1.10 ▪ 0.05
POURI NG TEMP:	350 - 390 DEGREES F.

AGGREGATE:

TYPE:	CRUSHED, DOUBLE WASHED, AND DRIED GRANITE OR BASALT
GRADATION:	THE GRADATION OF THE AGGREGATE VARIES BY MANUFACTURER AND WILL BE AS PER THE MANUFACTURER'S RECOMMENDATIONS FOR THE SYSTEM BEING USED ON THIS PROJECT.

BACKER ROD:

THE BACKER SHALL BE A CLOSED CELL FOAM EXPANSION JOINT FILLER CAPABLE OF WITHSTANDING THE PLACEMENT TEMPERATURE OF THE POLYMER MODIFIED ASPHALT.

NOTE: PRIOR TO PLACEMENT OF ANY PORTION OF THE JOINT SYSTEM, THE PROJECT ENGINEER MUST HAVE CERTIFIED TEST DATA MEETING ALL THE MINIMUM REQUIREMENTS OF ALL THE MATERIALS OF THE JOINT SYSTEM.

INSTALLATION PROCEDURES:

SAWING AND SURFACE PREPARATION:

THE OVERLAY IS TO BE TRANSVERSELY SAW CUT FULL DEPTH NO LESS THAN TWO INCHES DEEP (20" CENTERED OVER JOINT OPENING, UNLESS OTHERWISE NOTED).
REMOVE ALL MATERIAL, INCLUDING WATER-PROOFING MATERIAL, BETWEEN SAW CUTS. THOROUGHLY CLEAN AND DRY EXPOSED CONCRETE, STEEL, AND CUT SURFACES USING COMPRESSED AIR AND A HOT COMPRESSED AIR (HCA) LANCE. THE LANCE MUST PRODUCE A FLAME RETARDED AIR STREAM TEMPERATURE OF 3000 DEGREES F. AT A VELOCITY OF 3,000 FEET PER SECOND WITH 15 PSIG CHAMBER PRESSURE. IF THERE IS AN INTERRUPTION DUE TO WEATHER OR OTHER CAUSES, THE OPERATION WILL BE REPEATED WITH THE HCA LANCE IMMEDIATELY BEFORE THE BINDER COAT OPERATION. ALSO, 6 INCHES OF THE ROAD SURFACE ON EITHER SIDE OF THE JOINT WILL BE DRIED SO THAT A SUITABLE SURFACE FOR BITUMEN ADHESION IS OBTAINED.

SEALING OF EXPANSION JOINT:

THE EXPANSION JOINT GAP IS TO BE SEALED AND A BRIDGING PLATE CENTERED ALONG IT. A VERY NARROW GAP WILL BE SEALED BY POURING HOT BINDER INTO THE GAP. GAPS OF 1/8" OR MORE WILL FIRST BE FILLED WITH AN APPROPRIATELY SIZED BACKER ROD. THE BACKER ROD WILL BE INSTALLED SO THAT IT IS BETWEEN 1/8" AND 1 1/8" BELOW THE TOP OF THE EXISTING GAP. THE GAP WILL THEN BE FILLED WITH BINDER.

BOND BREAKER:

SPREAD BINDER OVER SURFACE AREA WHERE THE METAL BRIDGING PLATE WILL BE PLACED. CENTER THE BRIDGING PLATE OVER THE EXISTING JOINT AND BED INTO THE HOT BINDER. BUTT JOINT THE BRIDGING PLATES TO ACCOMODATE THE ENTIRE JOINT LENGTH. SPIKE HOLES WILL BE DRILLED AT 1 FOOT INTERVALS ALONG THE LONGITUDINAL CENTERLINE OF THE PLATES. SECURE BRIDGING PLATE WITH NAILS OR SPIKES. SEAL BUTT JOINTS WITH HOT BINDER AND ALLOW BINDER TO SETUP BEFORE NEXT OPERATION. WHEN ALUMINUM BRIDGING PLATES ARE USED, ONLY THE BINDER IS REQUIRED TO SECURE THE INDIVIDUAL PLATES.

BINDER COAT:

SEAL ALL PREPARED, EXPOSED SURFACES OF THE JOINT WITH BINDER. POUR THE HOT BINDER OVER THE FLOOR AREA OF THE JOINT AND SPREAD TO COAT ALL EXPOSED SURFACES. THE BINDER WILL BE A MINIMUM OF 1/32" THICK ON THE BOTTOM OF THE JOINT CAVITY, WITH POOLS OF GREATER THICKNESS WHERE SURFACE IRREGULARITIES EXIST. THE BINDER APPLICATION TEMPERATURE WILL BE BETWEEN 350 AND 390 DEGREES F. THE BINDER WILL NOT BE ALLOWED TO BE HEATED ABOVE 410 DEGREES F. NOR ALLOWED TO EXCEED 390 DEGREES F. FOR MORE THAN 1 HOUR. A DOUBLE JACKETED OIL MELTER WILL BE USED TO HEAT THE BINDER. THE MELTER WILL BE EQUIPPED WITH A CONTINUOUS AGITATION SYSTEM, TEMPERATURE CONTROLS, AND A CALIBRATED THERMOMETER. ALSO A SYSTEM FOR ACCURATELY MEASURING THE WEIGHTS OF THE BINDER AND THE AGGREGATE WILL BE REQUIRED.

BUILD-UP OF JOINT LAYERS:

AGGREGATE PREPARATION:

HEAT THE AGGREGATE TO A TEMPERATURE OF 275 TO 325 DEGREES F., WITH A SUITABLE ROTATING DRUM WITH ATTACHED HEAT SOURCE OR A HOT COMPRESSED AIR LANCE, TO REMOVE DUST AND MOISTURE.

AGGREGATE PROPORTION AND LAYER THICKNESS:

MIX THE AGGREGATE WITH THE BINDER SUCH THAT THE MINIMUM AGGREGATE CONTENT BY WEIGHT WILL BE 68%. THE HEATED AGGREGATE AND BINDER WILL BE COMBINED IN LAYERS, UNLESS PATENTED INSTALLATION REQUIRES DIFFERENTLY, NOT LESS THAN 3/4 OF AN INCH NOR EXCEEDING 2-1/2 INCHES. THE THICKNESS OF EACH LAYER CAN BE VARIED WITHIN THESE LIMITS, TO ACHIEVE THE REQUIRED JOINT THICKNESS (MIN. 2 INCHES). THE OBJECTIVE IS TO COAT EACH STONE AND FILL THE VOIDS WHILE AVOIDING AN EXCESS OF BINDER. THIS WILL ACHIEVE THE MAXIMUM CONTENT OF STONE CONSISTENT WITH ALL STONES BEING COATED WITH BINDER. RAKE THE MIXTURE TO MIX AND LEVEL.

THE TOP LAYER THICKNESS WILL VARY BETWEEN 1/2 INCH AND ONE (1) INCH. IN PREPARING THE TOP LAYER, THE RATIO OF AGGREGATE TO BINDER WILL BE APPROXIMATELY 6:1 BY WEIGHT. OVERFILL THE TOP LAYER AND COMPACT TO THE LEVEL OF THE ADJACENT SURFACES USING A ROLLER OR VIBRATORY PLATE COMPACTOR. IMMEDIATELY AFTER COMPLETION OF THE COMPACTION, POUR SUFFICIENT BINDER OVER THE JOINT TO FILL THE SURFACE VOIDS AND COAT THE SURFACE STONE. DUST THE FINISHED JOINT WITH A FINE, DRY AGGREGATE TO PREVENT TACKINESS.

MAINTENANCE OF TRAFFIC:

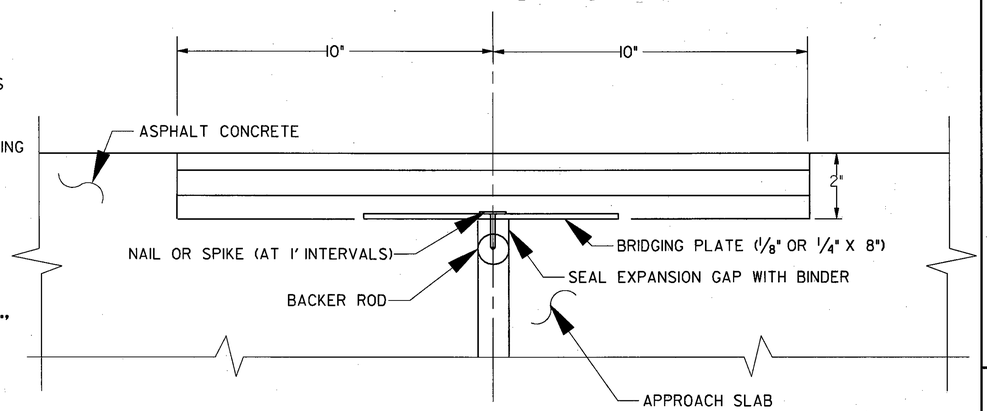
IF NECESSARY TO FACILITATE TRAFFIC MAINTENANCE, THE JOINT WILL BE INSTALLED IN TWO (2) HALF-WIDTH PHASES. DURING PHASE 1 APPROXIMATELY HALF OF THE TOTAL JOINT WILL BE INSTALLED. DURING PHASE 2, A MINIMUM OF TWO (2) INCHES OF THE PHASE 1 JOINT WILL BE REMOVED, AT OR NEAR THE CENTERLINE, WITH THE REMAINDER OF THE JOINT INSTALLED. IN ALL CASES, OPERATIONS WILL BE SCHEDULED SO THAT ALL LANES CAN BE OPEN TO TRAFFIC DURING ALL NON-WORKING HOURS.

TESTING:

CERTIFICATION WILL BE SUPPLIED FOR EACH PROJECT SHOWING BINDER COMPLIANCE WITH REQUIRED PROPERTIES. A ONE QUART SAMPLE OF BINDER WILL BE RETRIEVED FROM EACH BRIDGE FOR FURTHER TESTING BY THE O.D.O.T OFFICE OF MATERIALS MANAGEMENT.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT:

THE DEPARTMENT WILL MEASURE THE JOINT BY CUBIC YARD AND WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE AS: ITEM SPECIAL, CU.YD., POLYMER MODIFIED ASPHALT EXPANSION JONT SYSTEM.



TYPICAL JOINT DETAIL

OFFICE OF STRUCTURAL ENGINEERING

CHECKED JEP REVIEWED KCS

DESIGNED JGM

MISCELLANEOUS DETAILS

PLAN INSERT SHEET - POLYMER MODIFIED ASPHALT JOINT SYSTEM

MIA-75-04.94
PID NO. 81454

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