

STATE OF OHIO  
DEPARTMENT OF TRANSPORTATION

**CUY-90-16.19**

CITY OF CLEVELAND

CUYAHOGA COUNTY

**PROJECT DESCRIPTION**

THIS PROJECT CONSISTS OF THE PLANING OF THE EXISTING ASPHALT CONCRETE OVERLAY AND PLACING A PROPOSED ASPHALT CONCRETE OVERLAY FROM SLM 16.19 TO SLM 18.17 IN THE CITY OF CLEVELAND.

**LIMITED ACCESS**

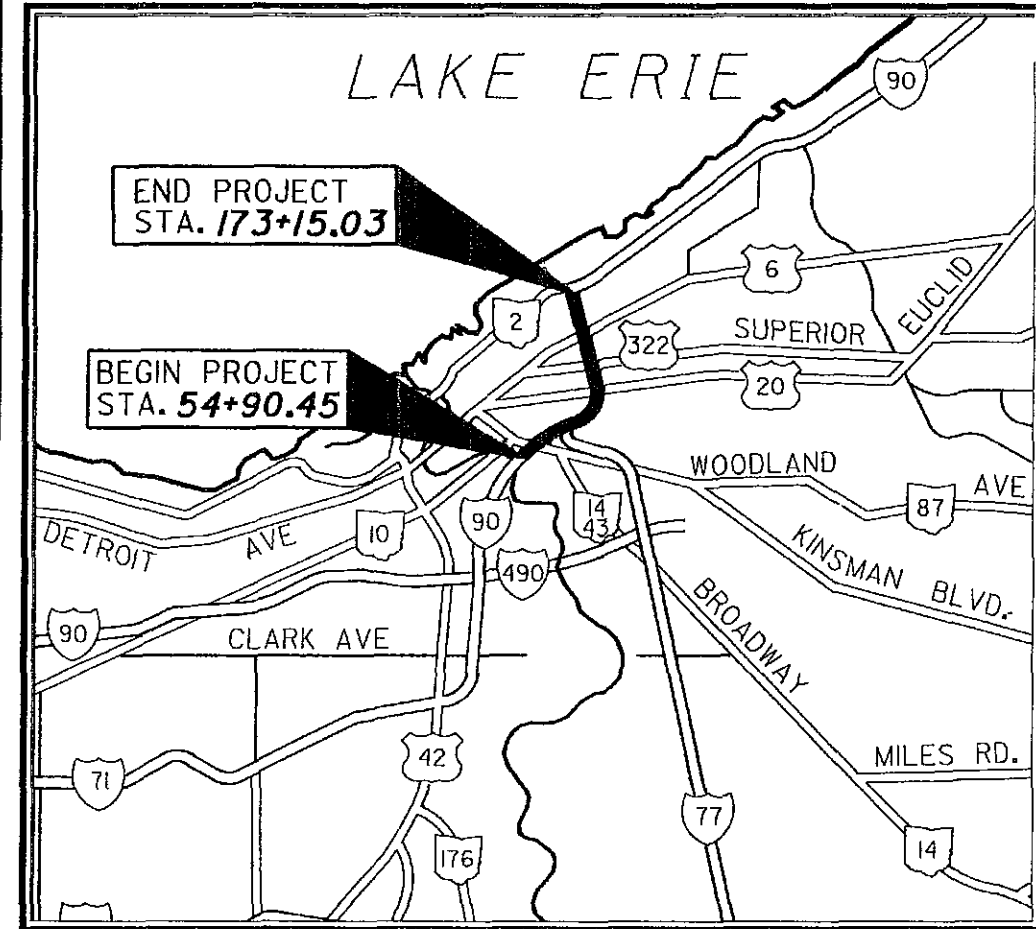
THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

**2005 SPECIFICATIONS**

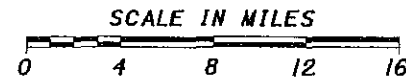
THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

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 IN THE PLANS AND ESTIMATES.

UNDER AUTHORITY OF SECTION 4511.21, DIVISION (H) OF THE OHIO REVISED CODE, THE REVISED PRIMA FACIE SPEED LIMITS AS INDICATED HEREIN ARE DETERMINED TO BE REASONABLE AND SAFE, AND ARE HEREBY ESTABLISHED FOR THE DURATION OF THIS PROJECT. THE PRIMA FACIE SPEED LIMIT OR LIMITS HEREBY ESTABLISHED SHALL BECOME EFFECTIVE WHEN APPROPRIATE SIGNS GIVING NOTICE THEREOF ARE ERECTED.



LATITUDE: 41°-30'-11" LONGITUDE: 81°-40'-11"



PORTION TO BE IMPROVED: INTERSTATE & DIVIDED HIGHWAY: UNDIVIDED STATE & FEDERAL ROUTES: OTHER ROADS:

**DESIGN EXCEPTIONS**

NONE REQUIRED

**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

ENGINEERS SEAL

SIGNED: *Eric M. Kallio*  
DATE: 10/11/07

PLAN PREPARED BY:  
OHIO DEPARTMENT OF TRANSPORTATION  
DISTRICT 12 PRODUCTION  
GARFIELD HEIGHTS, OHIO 44125  
216-581-2100

**INDEX OF SHEETS:**

TITLE SHEET ..... 1  
SCHEMATIC PLAN ..... 2  
TYPICAL SECTIONS ..... 3-5  
GENERAL NOTES ..... 6-13, 8A  
PLAN SHEETS ..... 14-23  
SUB-SUMMARIES ..... 24-33  
GENERAL SUMMARY ..... 34, 34A  
MISC. DETAILS ..... 35

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS
BP-3.1	07-16-04	TC-41.10	01-19-01	MT-35.10	04-20-01	800 10-19-07
MH-1.1	07-19-02	TC-41.20	01-19-01	MT-95.30	09-05-06	832 04-25-06
		TC-52.10	01-19-07	MT-95.50	09-05-06	
		TC-52.20	01-19-07	MT-98.12	04-19-02	
		TC-65.10	01-21-05	MT-98.13	04-19-02	
		TC-65.11	01-21-05	MT-98.14	04-19-02	
				MT-98.15	07-16-04	
		TC-71.10	01-19-07	MT-98.16	04-19-02	
		TC-72.20	01-21-05	MT-98.17	10-18-02	
				MT-98.18	10-18-02	
				MT-105.10	10-18-02	
				MT-105.11	10-18-02	

**SPECIAL PROVISIONS**

APPROVED: *Paul H. Yan*  
DATE: 10/11/07 DISTRICT DEPUTY DIRECTOR

APPROVED: *James J. Beasley III*  
DATE: 11-21-07 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO. E 070 (120)

PID NO. 81506

CONSTRUCTION PROJECT NO.

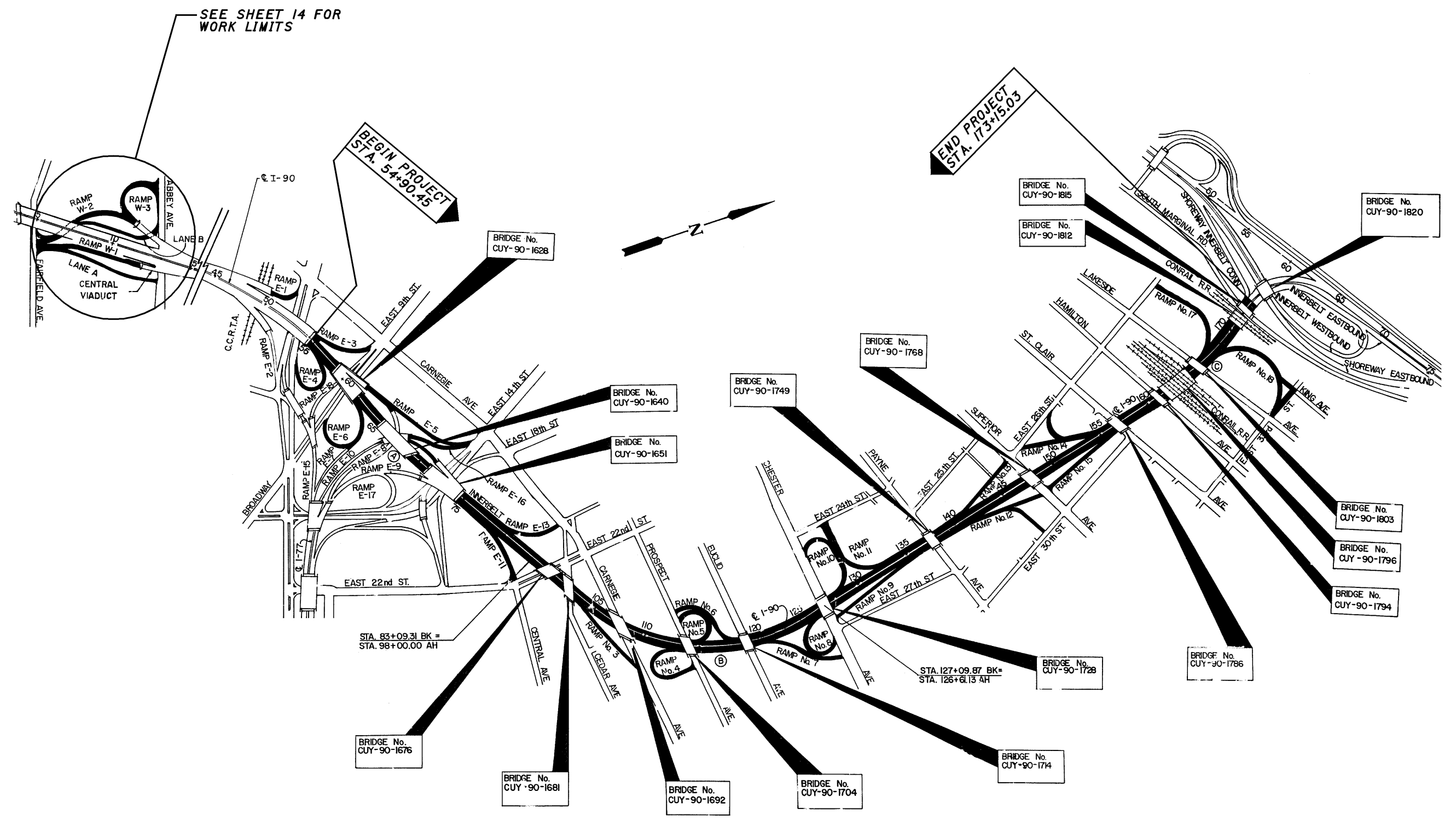
RAILROAD INVOLVEMENT NONE

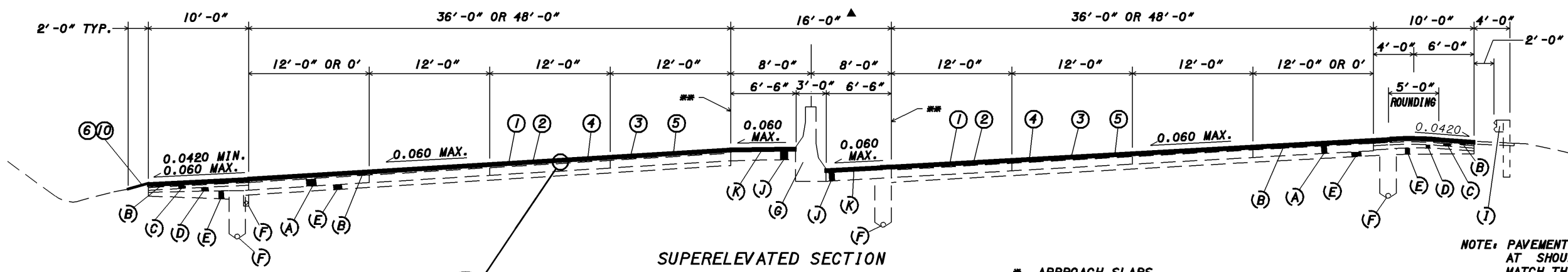
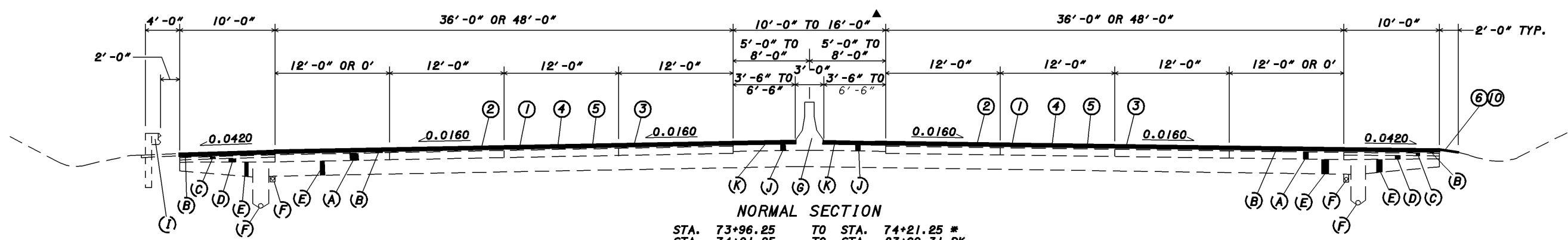
CUY-90-16.19

CUY-IR-90-16.19  
080006 PID-81506  
Dist 12 1/9/2008

I:\PROJECTS\PID81506\9090909090.dwg 11/01/07 8:41AM

I:\PROJECTS\PID81506\dgn\81506qba.dgn 11-OCT-2007 8:45AM ekalito





NOTE: PAVEMENT PLANING, BITUMINOUS AT SHOULDERS SHOULD MATCH THE EXISTING SHOULDER SLOPE.

\* APPROACH SLABS

\*\* FROM STA. 54+90.87 TO STA 70+80±, A PORTION OF THE EXISTING MEDIAN SHOULDER HAS AN EXISTING CONCRETE WEARING SURFACE. THE LIMITS OF THE PROPOSED PLANING AND PAVING, ALONG THE INSIDE MEDIAN SHOULDER, SHALL COINCIDE WITH THIS JOINT.

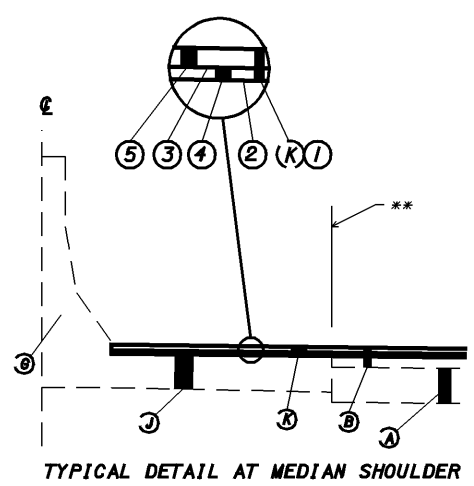
▲ THE MEDIAN SHOULDER WIDTHS SHOWN FOR THE NORMAL AND SUPERELEVATED SECTIONS ARE INTERCHANGEABLE.

**EXISTING**

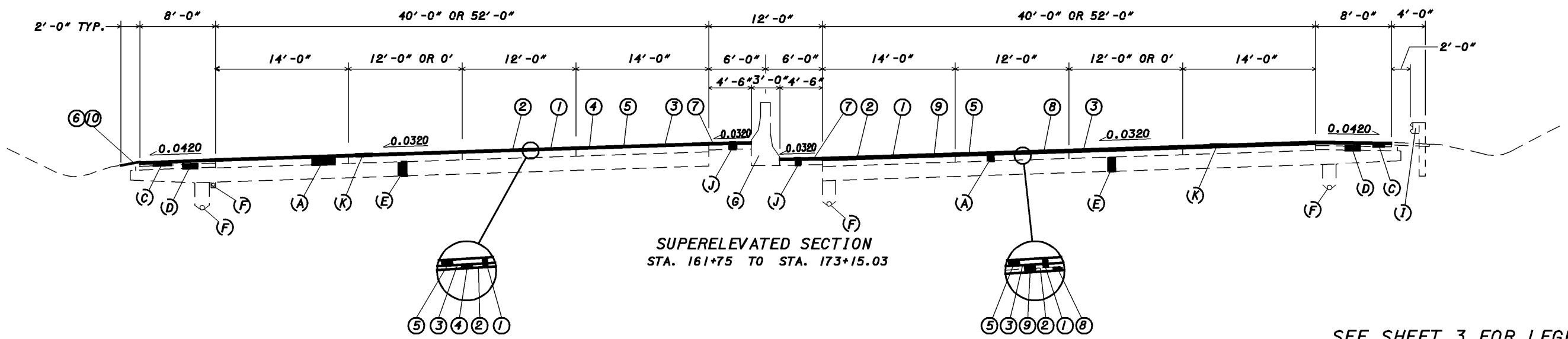
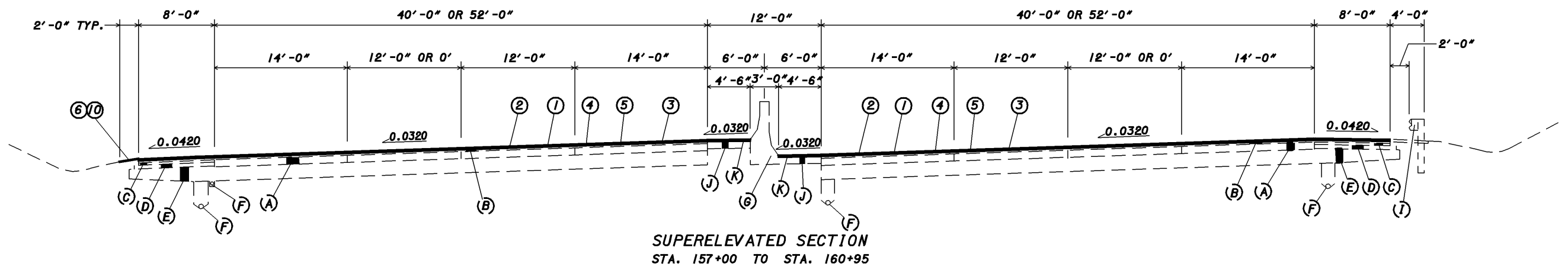
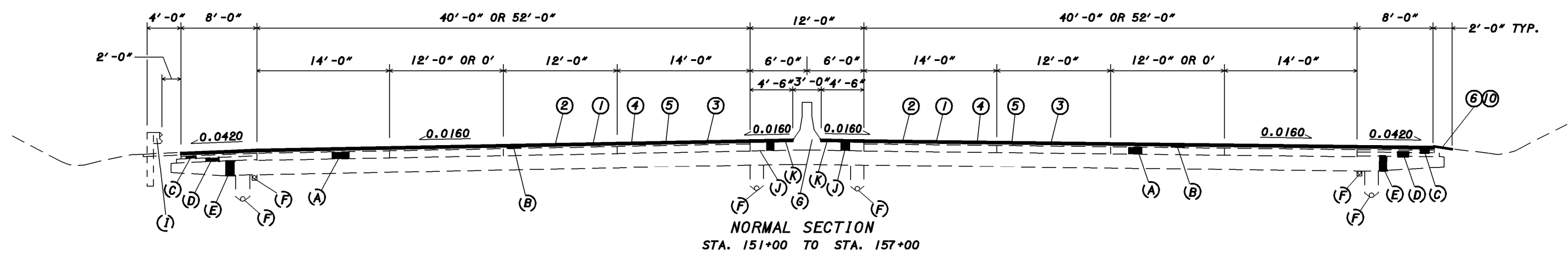
- (A) 9" REINFORCED CONCRETE PAVEMENT
- (B) 5" ± EXISTING ASPHALT
- (C) BITUMINOUS AGGREGATE BASE
- (D) AGGREGATE BASE
- (E) SUBBASE, 6" OR 18"
- (F) UNDERDRAIN
- (G) CONCRETE BARRIER MEDIAN
- (H) CURB
- (J) GUARDRAIL
- (J) 9" PLAIN CONCRETE PAVEMENT
- (K) 2-1/2" ± EXISTING ASPHALT
- (L) 3-1/2" ± EXISTING ASPHALT

**PROPOSED**

- (1) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN, 2-1/2"
- (2) ITEM 407 - TACK COAT
- (3) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
- (4) ITEM 448 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, P664-28, 1" (VAR.)
- (5) ITEM 446 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1H, AS PER PLAN 1-1/2"
- (6) ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN
- (7) ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, 2-1/2" OR 3-1/2"
- (8) ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN, 1"
- (9) ITEM 448 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, P664-28, 2"
- (10) ITEM 209 - LINEAR GRADING

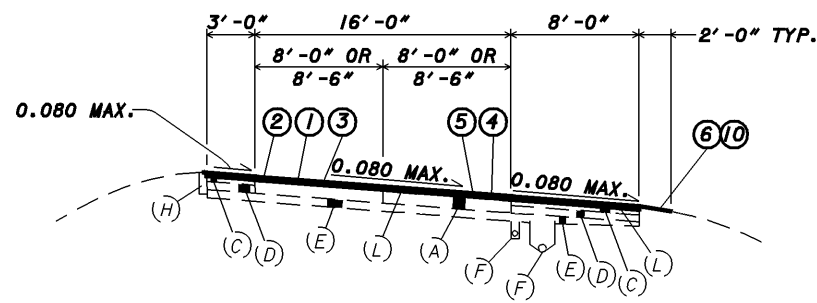


I:\PROJECTS\PID81506\dgn\81506.qxd 11-OCT-2007 8:46AM ekallo

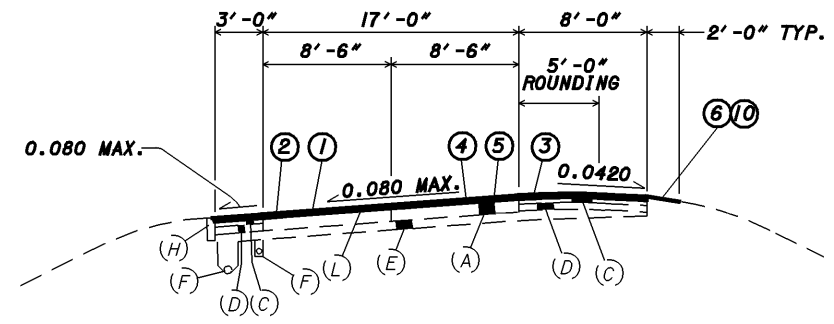


SEE SHEET 3 FOR LEGEND

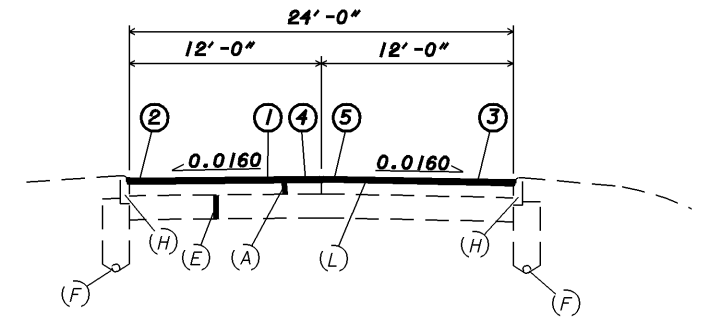
I:\PROJECTS\PID81506\dmn\81506.dgn 11-OCT-2007 8:47AM ekallio



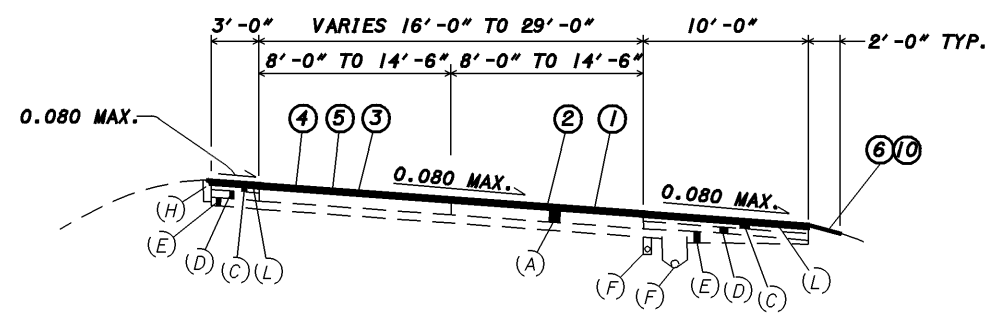
RAMP E-5  
 RAMP E-6 STA. 9+03.24 TO STA. 10+38.11  
 RAMP E-16 STA. 1+82.29 TO STA. 4+98.38



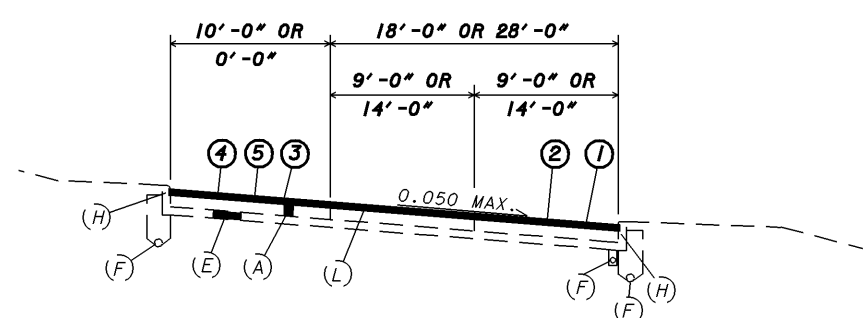
RAMP E-16 STA. 4+98.88 TO STA. 6+50.46



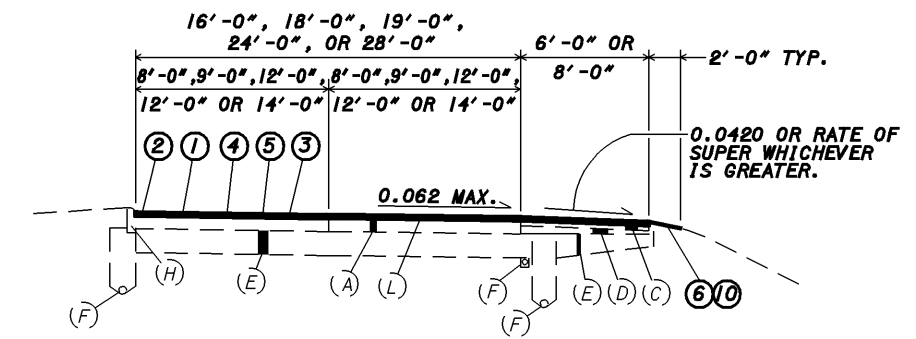
RAMP NO. 14  
 RAMP NO. 15  
 RAMP NO. 17  
 RAMP NO. 18



RAMP E-6 STA. 1+98.47 TO STA. 9+03.24  
 RAMP E-10 STA. 4+11.38 TO STA. 5+06.54  
 RAMP E-11  
 RAMP E-13



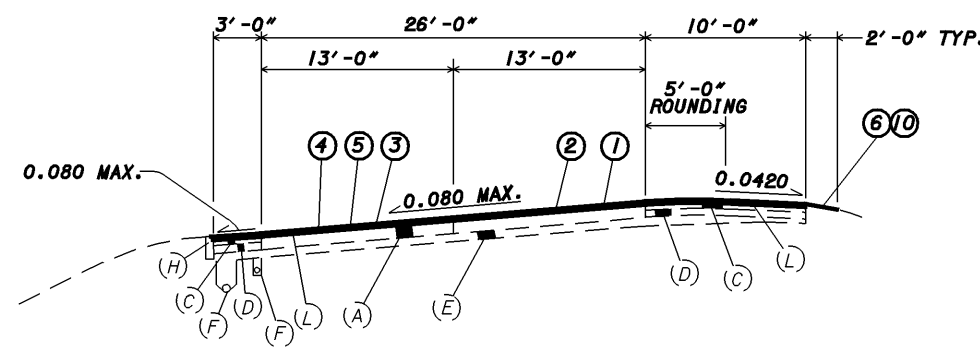
LANE B STA. 0+61.52 TO STA. 2+40.00, \*  
 RAMP W-2 STA. 8+96.92 TO STA. 10+96.47, \*  
 \* - OVERLAY ONLY 3"



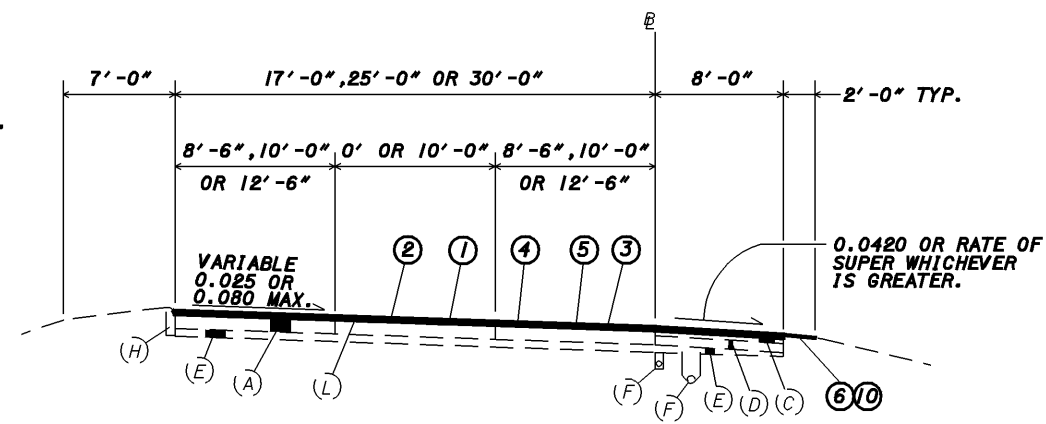
RAMP NO. 3,\* RAMP NO. 4  
 RAMP NO. 5 RAMP NO. 6,\*  
 RAMP NO. 7,\* RAMP NO. 8  
 RAMP NO. 9 RAMP NO. 10  
 RAMP NO. 11 RAMP NO. 12  
 RAMP NO. 13

RAMP W-1,\*\*  
 RAMP W-2 STA. 6+11.02 TO STA. 8+96.92,\*\*  
 RAMP W-3,\*  
 LANE A,\*\*  
 LANE B STA. 2+40.00 TO STA. 5+44.90,\*\*

\* - SUPERELEVATED IN TWO DIRECTIONS  
 \* - OVERLAY ONLY 3"



RAMP E-10 STA. 5+06.54 TO STA. 8+09.78



RAMP E-1  
 RAMP E-3  
 RAMP E-4

I:\PROJECTS\PID81506.dgn 8/15/06 gva,dan ll-OCT-2007 8:47AM ekallio

SEE SHEET 3 FOR LEGEND

# GENERAL

## PROJECT DESCRIPTION

THIS PROJECT INVOLVES PLANING 2-1/2" OF THE EXISTING ASPHALT OVERLAY AND PLACING A 1-1/2" ASPHALT CONCRETE SURFACE COURSE ON A VARIABLE 1" INTERMEDIATE ASPHALT CONCRETE COURSE.

THE ALIGNMENT OF THE EXISTING PAVEMENT WILL NOT BE CHANGED. THE PROFILE OF THE PROPOSED SURFACE WILL BE SIMILAR TO THAT OF THE EXISTING PAVEMENT.

## RIGHT OF WAY

ALL WORK IS TO BE PERFORMED WITHIN THE EXISTING RIGHT OF WAY

## 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.

## 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.

## COOPERATION AMONG CONTRACTORS

THE CONTRACTOR SHALL COOPERATE AND COORDINATE HIS/HER OPERATIONS WITH THE CONTRACTORS ON OTHER PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THE CONTRACT. NO WAIVER OF ANY PROVISIONS OF 105.08 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS IS INTENDED.

## EXISTING TYPICAL SECTIONS

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

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

## EQUIPMENT OPERATION 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.
- 4) 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.

## ITEM 619 - FIELD OFFICE, TYPE B, AS PER PLAN

A TYPE B FIELD OFFICE IS REQUIRED FOR THIS PROJECT. IN ADDITION TO THE REQUIREMENTS AS DESCRIBED IN ITEM 619 OF CMS, THE FIELD OFFICE SHALL ALSO INCLUDE BROADBAND (CABLE OR DSL) INTERNET ACCESS.

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

ITEM 619 - FIELD OFFICE, TYPE B, AS PER PLAN . . . 6 MONTH

## PLAN SHEET STATIONING

THE ROADWAY WAS NOT SURVEYED PRIOR TO THE PREPARATION OF THESE PLANS. PREVIOUS CONSTRUCTION PLAN STATIONING WAS USED TO PREPARE PLAN SHEETS AND CALCULATE ESTIMATED PAVEMENT AREA QUANTITIES AND PAVEMENT MARKING QUANTITIES.

## UTILITIES

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.

AT&T  
13630 LORAIN AVE. - 4<sup>TH</sup> FLOOR  
CLEVELAND, OHIO 44111  
PHONE: (216) 476-6142  
FAX: (216) 476-6013

DOMINION EAST OHIO GAS COMPANY  
1201 EAST 55<sup>TH</sup> STREET  
CLEVELAND, OHIO 44111  
PHONE: (216) 736-6675  
FAX: (216) 736-6883

THE ILLUMINATING COMPANY  
6896 MILLER ROAD  
BRECKSVILLE, OHIO 44141  
PHONE: (440) 546-8748  
FAX: (440) 546-8775

GREATER CLEVELAND REGIONAL  
TRANSIT AUTHORITY  
1240 WEST SIXTH STREET  
CLEVELAND, OHIO 44113  
PHONE: (216) 566-5100  
FAX: (216) 781-4043

CITY OF CLEVELAND  
DEPT. OF PUBLIC UTILITIES  
DIV. OF WATER  
1201 LAKESIDE AVENUE  
CLEVELAND, OHIO 44114  
PHONE: (216) 664-2444  
FAX: (216) 664-2378

CITY OF CLEVELAND  
DIVISION OF CLEVELAND PUBLIC POWER  
(MELP)  
1300 LAKESIDE AVENUE  
CLEVELAND, OHIO 44114  
PHONE: (216) 664-4245 EXT. 115  
FAX: (216) 664-2777

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

CALCULATED  
EMK  
CHECKED  
LDH

GENERAL NOTES

CUY - 90 - 16 . 19

6  
35

I:\PROJECTS\PID81506\dgn\81506gna.dgn 11-OCT-2007 12:45PM ekallo

**ROADWAY**

ITEM 209 - LINEAR GRADING

THIS ITEM SHALL BE USED TO PREPARE THE SHOULDER PER SECTION 617.04 OF THE CMS PRIOR TO PLACING THE COMPACTED AGGREGATE.

ALL EQUIPMENT, MATERIALS, AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 209 - LINEAR GRADING.

PAYMENT FOR ALL THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 209 - LINEAR GRADING

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

ITEM 209 - LINEAR GRADING . . . . . 17 STA.

**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 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 NEW INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED 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 DRAINAGE ITEMS.

CASTINGS ADJUSTED TO GRADE

ALL CASTINGS SHALL BE ADJUSTED TO THE FINISHED ROADWAY ELEVATION BY THE CONTRACTOR. THE TIME BETWEEN ADJUSTING THE CASTINGS AND RESURFACING SHALL BE KEPT TO AN ABSOLUTE MINIMUM. NO ADJUSTING RINGS SHALL BE PERMITTED. WHEN PERFORMING THIS WORK, THE PAVEMENT SHALL BE SAWCUT PRIOR TO REMOVAL AND HOOKBOLTS SHALL BE USED WHERE PRACTICAL TO CONNECT EXISTING PAVEMENT TO NEW CONCRETE.

DUE TO TIME CONSTRAINTS WHERE MANHOLES EXIST IN THE TRAVELED LANE, FS CONCRETE SHALL BE USED TO EXPEDITE THE WORK.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

- ITEM 604 - CATCH BASIN ADJUSTED TO GRADE,  
AS PER PLAN . . . . . 20 EA.
- ITEM 604 - MANHOLE ADJUSTED TO GRADE,  
AS PER PLAN . . . . . 10 EA.
- ITEM 638 - VALVE BOX ADJUSTED TO GRADE,  
AS PER PLAN . . . . . 3 EA.

ITEM 604 - CATCH BASIN, MONUMENT BOX, OR MANHOLE RECONSTRUCTED TO GRADE

THE CONTRACTOR AND FIELD ENGINEER SHALL FIELD CHECK ALL EXISTING CATCH BASINS, MANHOLES, OR MONUMENT BOXES 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.

ITEM 604 - CATCH BASIN RECONSTRUCTED TO GRADE . . . 5 EA.

ITEM 604 - MANHOLE RECONSTRUCTED TO GRADE . . . . 5 EA.

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 SHALL MEET ITEM 604 OF THE SPECIFICATIONS AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

IF MANHOLE CASTINGS THAT ARE TO BE REPLACED LIE WITHIN PAVED SHOULDERS OR LANES, THE CASTINGS SHALL BE HEAVY DUTY AND THE COVERS SHALL BE BOLTED-DOWN IN ACCORDANCE WITH THE MANUFACTURERES RECOMMENDATIONS.

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 SHALL 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 . . . . . 10000 LBS.

I:\PROJECTS\PID81506\dgn\81506gna.dgn 11-OCT-2007 12:46PM ekallo

CALCULATED  
EMK  
CHECKED  
LDH

GENERAL NOTES

CUY-90-16.19

# 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 AFTER THE MILLING OPERATION AND PRIOR TO RESURFACING. THE DEPTH OF THE REPAIR FROM THE TOP OF THE MILLED SURFACE DOWN TO THE TOP OF THE EXISTING CONCRETE BASE SHALL BE 2-1/2". THE WIDTH OF THE REPAIR SHALL BE 12" CENTERED OVER THE EXISTING JOINT AS SHOWN ON SHEET 35.

FOR ADDITIONAL NOTES, DETAILS, AND QUANTITIES, SEE SHT. 35.

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

THIS ITEM SHALL BE USED FOR THE REPAIR OF UNSOUND, COLD-PATCH, OR POP-AREAS OF TRANSVERSE JOINTS AND CRACKS AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PERFORMED AFTER THE MILLING OPERATION AND PRIOR TO RESURFACING. THE DEPTH OF THE REPAIR FROM THE TOP OF THE MILLED SURFACE DOWN TO THE TOP OF THE EXISTING CONCRETE BASE SHALL BE 2-1/2". THE WIDTH OF THE REPAIR SHALL BE 12" CENTERED OVER THE EXISTING JOINT OR CRACK AS SHOWN ON SHEET 35.

FOR ADDITIONAL NOTES, DETAILS, AND QUANTITIES, SEE SHT. 35.

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

THIS ITEM SHALL BE USED TO REMOVE THE EXISTING ASPHALT OVERLAY FULL WIDTH TO A DEPTH OF (2-1/2") TWO AND ONE-HALF INCHES.

AREAS WHICH HAVE TRANSVERSE WEDGES (BUTT JOINTS) ARE TO BE REMOVED IN TWO PASSES AS REQUIRED FOR MAINTAINING TRAFFIC. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THE SECOND PASS.

PRIOR TO PLANING THE PAVEMENT, THE CONTRACTOR SHALL FIELD SURVEY THE LOCATIONS OF THE EXISTING PAVEMENT MARKINGS AND TRAFFIC LOOP DETECTORS WITHIN THE PROJECT LIMITS FOR THE PLACEMENT OF TEMPORARY MARKINGS, PROPOSED FINAL PAVEMENT MARKINGS AND RE-ESTABLISHING TRAFFIC LOOP DETECTORS. THE FIELD SURVEY SHALL BE USED IN CONJUNCTION WITH THE PLAN SHEETS. THE PLAN SHEETS AND QUANTITIES WERE DEVELOPED BASED UPON PREVIOUS PLAN UPGRADES. AN EXACT FIELD SURVEY WAS NOT PERFORMED. THE TRAFFIC CONTROL PLAN SHEETS SHALL BE USED FOR REFERENCE, WITH THE FIELD SURVEY BEING USED TO CONFIRM THE PLANS. ANY DISCREPANCIES BETWEEN THE PLANS AND THE FIELD SURVEY, THE FIELD SURVEY SHALL DICTATE. ALL COSTS ASSOCIATED WITH THIS SURVEY SHALL BE INCLUDED IN THE UNIT BID PRICE FOR ITEM 254 - PAVEMENT PLANING BITUMINOUS, AS PER PLAN.

## ITEM 446 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1H, AS PER PLAN

THE GRADATION FOR THIS ITEM SHALL BE AS PER TABLE 441.02-1, TYPE 1 SURFACE, MEDIUM. THE COURSE AGGREGATE FOR THIS ITEM SHALL BE A BLEND OF 50 PERCENT (MINIMUM) AIR COOLED BLAST FURNACE SLAG WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE. ALL OTHER SPECIFICATIONS SHALL BE AS PER TYPE 1H.

## ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN

THIS ITEM SHALL BE USED TO REMOVE AN ADDITIONAL INCH OF CONCRETE FROM THE CONCRETE BASE BETWEEN THE RUMBLE STRIPS.

THE CONTRACTOR MAY ELECT TO REMOVE THE EXISTING ASPHALT OVERLAY AND THE ADDITIONAL INCH OF CONCRETE BASE WITH ONE PASS DUE TO THE TIME CONSTRAINTS.

ALL COSTS FOR THE REMOVAL OF THE INCH OF CONCRETE BASE SHALL BE INCLUDED IN THE ITEM 254, PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN.

### PLANED SURFACES

THE DURATION OF TIME BETWEEN MILLING AND PLACEMENT OF THE INTERMEDIATE COURSE SHALL BE NO LONGER THAN FOURTEEN (14) DAYS, UNLESS MOT NOTES STATE OTHERWISE. THE TIME LIMIT SHALL BEGIN ON THE FIRST DAY OF PLANING, AND SHALL CONTINUE BASED ON CALENDAR DAYS, MINUS ANY BAD WEATHER DAYS, UNTIL COMPLETION OF THE ASPHALT CONCRETE SURFACE COURSE.

IF THE CONTRACTOR FAILS TO COMPLY WITH THE ABOVE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED DAMAGES FOR EACH DAY BEYOND THE FOURTEEN AS SHOWN IN TABLE 108.07-1 IN SECTION 108.07 OF THE CMS.

### ITEM 407 - TACK COAT

THE RATE OF APPLICATION OF THE 407 - TACK COAT SHALL BE SUBJECT TO ADJUSTMENTS, AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.10 GAL/SQ.YD. FOR ESTIMATION PURPOSES ONLY.

### ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE

THE RATE OF APPLICATION OF THE 407 - TACK COAT FOR INTERMEDIATE COURSE SHALL BE SUBJECT TO ADJUSTMENTS, AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.05 GAL/SQ.YD. FOR ESTIMATION PURPOSES ONLY.

### ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

THIS ITEM SHALL BE USED ALONG THE SHOULDERS. MATERIALS SHALL BE LIMITED TO CRUSHED SLAG, CRUSHED LIMESTONE, OR ASPHALT GRINDINGS. IF ASPHALT GRINDINGS ARE USED, AN ADDITIONAL MATERIAL REQUIREMENT IS THAT 100% SHALL PASS A 1" SIEVE.

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, IS TO 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 . . . . . 95 CU YD

## 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-90 AND RAMP PAVEMENT.

## ITEM 252 - FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT

THIS ITEM SHALL CONSIST OF REPAIRING EXISTING CONCRETE PAVEMENT PER ITEM 252 AND THE DETAILS ON SHEET 35. ALL REPAIR AREAS SHALL BE MARKED BY THE PROJECT ENGINEER PRIOR TO COMMENCEMENT OF WORK. ALL WORK SHALL BE PERFORMED WITHIN THE TIME PERMITTED BY THE "SCHEDULE OF THROUGH LANES TO BE MAINTAINED" NOTE.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT BID PRICE FOR:

<u>ITEM</u>	<u>UNIT</u>	<u>DESCRIPTION</u>
252	SQ.YDS.	FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT
252	FOOT	FULL DEPTH PAVEMENT SAWING

FOR ESTIMATED QUANTITIES, SEE SHEET 35.

GENERAL NOTES

CUY-90-16.19



# 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 202 - RPM REMOVED AND DISPOSED

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

ITEM 202-RPM REMOVED AND DISPOSED..... 680 EACH

## ITEM 646 - EPOXY PAVEMENT MARKINGS, AS PER PLAN

THE EPOXY PAVEMENT MARKING MATERIAL FURNISHED FOR THIS PROJECT SHALL BE EPOPLEX LS-60 AS FURNISHED BY EPOPLEX, MAPLESIDE, NJ.

THE WIDTH OF THE LANE LINES SHALL BE SIX INCHES (6"). ALL OTHER PAVEMENT MARKINGS SHALL BE PLACED PER C.M.S. 641.08.

## ITEM 646 - EPOXY PAVEMENT MARKINGS - (POLYCARB) - ALTERNATE BID

THE EPOXY PAVEMENT MARKING MATERIAL SHALL BE MARK 55.4 AS FURNISHED BY POLYCARB, CLEVELAND, OH. PAYMENT WILL BE AT THE NORMAL CONTRACT UNIT PRICE AS SPECIFIED IN ITEM 646.

THE WIDTH OF THE LANE LINES SHALL BE SIX INCHES (6"). ALL OTHER PAVEMENT MARKINGS SHALL BE PLACED PER C.M.S. 641.08.

## 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 PROJECT ENGINEER AND THE CITY OF CLEVELAND SHALL CONFIRM THESE LOCATIONS. 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, OR BUTT JOINT OPERATIONS.

NEW LOOP DETECTORS SHALL BE PLACED AT THE SAME LOCATIONS AND SAME SIZE AS THE EXISTING.

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 CITY OF CLEVELAND (216-664-3194), 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 QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER:

ITEM 632 - DETECTOR LOOP, AS PER PLAN . . . . . 5 EACH

## DETECTOR LOOP LOCATIONS:

LOCATIONS:	6' X 15' LOOP SIZE	6' X 20' LOOP SIZE	6' X 30' LOOP SIZE
	EACH	EACH	EACH
RAMP E-11 @ E 22 ND ST.			1
RAMP E-11 @ E 22 ND ST.			1
RAMP NO. 6 @ PROSPECT AVE		1	
RAMP NO. 6 @ PROSPECT AVE		1	
RAMP NO. 14 E 26 TH ST.	1		
	1	2	2

CALCULATED  
EMK  
CHECKED  
LDH

GENERAL NOTES

CUY-90-16.19

8A  
35

**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.

**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.

**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.

**FLOODLIGHTING**

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHT TIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIONAL PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

**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. 13. THE CONTRACTOR SHALL SET UP AND OPERATE 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.

**SPECIAL EVENT LIMITATIONS**

DURING ANY DOWNTOWN EVENT WITH ANTICIPATED ATTENDANCE IN EXCESS OF 20,000, ESPECIALLY HOME BASEBALL GAMES, THE CONTRACTOR SHALL NOT INSTITUTE ANY LANE CLOSURES IN THE INBOUND DIRECTION DURING THE TWO (2) HOURS BEFORE THE EVENT AND IN THE OUTBOUND DIRECTION DURING THE TWO (2) HOURS AFTER AN EVENT ENDS. ANTICIPATED EVENTS INCLUDE HOME GAMES OF THE INDIANS, BROWNS, CAVALIERS, CONCERTS, FIREWORKS, ETC.

**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.

CALCULATED  
EMK  
CHECKED  
LDH

MAINTENANCE OF TRAFFIC GENERAL NOTES

CUY -90 -16.19

I:\PROJECTS\PID81506\dgn\81506mna.dgn 11-OCT-2007 12:50PM ekallo

**ITEM 614 - LAW ENFORCEMENT OFFICER WITH PATROL CAR**

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

- FOR PART WIDTH PAVING OF ENTRANCE/EXIT RAMPS.
- 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.
- WHEN DIRECTED BY THE ENGINEER.

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

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 W/PATROL CAR . . . 250 HRS

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

IF THE CONTRACTOR WISHES TO UTILIZE LEO'S FOR FLAGGING AND TRAFFIC CONTROL OTHER THAN FOR THAT REQUIRED IN THESE PLANS, THE CONTRACTOR MAY DO SO AT HIS OWN EXPENSE.

**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 THE ASPHALT, PLACED THE INTERMEDIATE COURSE AND AFTER THE SURFACE COURSE HAS BEEN PLACED.

- ITEM 614 - WORK ZONE EDGE LINE, CLASS I,  
642 PAINT . . . . . 43.44 MILE
- ITEM 614 - WORK ZONE LANE LINE, CLASS I,  
642 PAINT . . . . . 29.60 MILE
- ITEM 614 - WORK ZONE CHANNELIZING LINE, CLASS I,  
642 PAINT . . . . . 29,892 FOOT
- ITEM 614 - WORK ZONE STOP LINE, CLASS I,  
642 PAINT . . . . . 1089 FOOT
- ITEM 614 - WORK ZONE CENTER LINE, CLASS I,  
642 PAINT . . . . . 0.09 MILE
- ITEM 614 - WORK ZONE CROSSWALK LINE, CLASS I,  
642 PAINT . . . . . 6,252 FOOT

**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 . . . . . 400 SQ. FT.

**ITEM 614 - ASPHALT CONCRETE FOR MAINTAINING TRAFFIC**

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 . . . . . 100 CU. YD.

**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.

**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 6 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.

**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 COURSES
- D. PLACE PROPOSED PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS

**PLANED SURFACES**

THE DURATION OF TIME BETWEEN REMOVING THE EXISTING ASPHALT CONCRETE PAVEMENT AND PLACING THE INTERMEDIATE COURSE OF ASPHALT SHALL BE KEPT TO A MINIMUM. IN NO INSTANCE SHALL THIS TIME EXCEED 15 CALENDAR DAYS. THIS IS TO ENSURE THAT THE POTENTIAL DEGRADATION OF THE EXISTING ASPHALT CONCRETE DUE TO TRAFFIC IS KEPT TO A MINIMUM.

**HOLIDAY CLOSURES**

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES, EXCEPT FOR THE LONGTERM LANE CLOSURE 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:

<u>DAY OF WEEK</u>	<u>ALL LANES MUST BE OPEN TO TRAFFIC</u>
SUNDAY	12:00 N FRIDAY THROUGH (12:00N OR 6:00 AM) MONDAY
MONDAY	12:00 N FRIDAY THROUGH (12:00N OR 6:00 AM) TUESDAY
TUESDAY	12:00 N MONDAY THROUGH (12:00N OR 6:00 AM) WEDNESDAY
WEDNESDAY	12:00 N TUESDAY THROUGH (12:00N OR 6:00 AM) THURSDAY
THURSDAY	12:00 N WEDNESDAY THROUGH (12:00N OR 6:00 AM) FRIDAY
FRIDAY	12:00 N THURSDAY THROUGH (12:00N OR 6:00 AM) MONDAY
SATURDAY	12:00 N FRIDAY THROUGH (12:00N OR 6:00 AM) MONDAY

NO EXTENSION IN 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.

**MAINTAINING TRAFFIC AND SEQUENCE OF OPERATIONS**

ALL ASPHALT CONCRETE OPERATIONS SHALL BE CONDUCTED IN A MANNER THAT WILL ASSURE MINIMUM DANGER AND INCONVENIENCE TO THE HIGHWAY USERS. ALL WORK SHALL BE PERFORMED AT THE TIMES PROVIDED IN THE "SCHEDULE OF THROUGH LANES TO BE MAINTAINED." THE PROCEDURE FOR THE REMOVAL OR PLACEMENT OF ANY EXISTING OR PROPOSED ASPHALT COURSE SHALL BE SUCH THAT NO GREATER THAN 1 1/2" DISCONTINUITY IN THE ELEVATION OF THE TRAVELED SURFACE SHALL BE EXPOSED TO TRAFFIC.

TRAFFIC SHALL NOT BE PERMITTED TO CROSS ANY PARTIAL-WIDTH REMOVAL OR RESURFACING JOINT EXCEPT AS NECESSARY DURING THE ACTUAL REMOVAL OR PAVING OPERATION. ANY PARTIAL-WIDTH LONGITUDINAL JOINTS WHICH MUST BE EXPOSED TO TRAFFIC SHALL BE RAMPED USING ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC AT A RATE NOT STEEPER THAN 6:1.

TEMPORARY TRANSVERSE REMOVAL OR PAVING JOINTS WHICH MUST BE EXPOSED TO TRAFFIC SHALL BE RAMPED USING ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC AT A RATE NOT TO EXCEED 1" IN 10'.

FOR REMOVAL OF EXISTING OVERLAYS, A TRANSITION MAY BE PLANED INTO THE EXISTING OVERLAY AND MAY BE SUBSTITUTED FOR THE ASPHALT RAMPS PREVIOUSLY DESCRIBED, PROVIDED THE TRANSITION IS REMOVED IN A SUBSEQUENT OPERATION WITHIN 24 HOURS.

WHENEVER TRAFFIC IS SUBJECT TO PARTIAL WIDTH REMOVALS OR OVERLAYS PRIOR TO FULL WIDTH COMPLETION, THE CONTRACTOR SHALL PROVIDE W8-11-48 SIGNS (DUAL SIGN INSTALLATION). PLACEMENT SHALL BE AS DIRECTED BY THE ENGINEER AND INCLUDED IN THE LUMP SUM BID FOR ITEM 614 MAINTAINING TRAFFIC.

WHENEVER ANY PART OF THE TRAVELED SURFACE IS CLOSED, THE MOTORISTS SHALL BE WARNED AND DIVERTED BY THE CONTRACTOR THROUGH THE USE OF A FLASHING ARROW, IN ADDITION TO THOSE PROVISIONS SET FORTH IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

**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, USER COSTS IN THE AMOUNT OF \$10.00 PER MINUTE SHALL BE ACCESSED THE CONTRACTOR FOR EACH MINUTE THE LANE REMAINS CLOSED FOR THE FIRST HOUR AND \$30.00 PER MINUTE FOR ANY TIME BEYOND ONE HOUR.

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.

**SPECIAL ASPHALT PAVING OPERATIONS**

THE FOLLOWING LOCATIONS REQUIRE SPECIAL PAVING OPERATIONS AS OUTLINED BELOW:

- 1) RUMBLE STRIPS (STA. 161+50 +/- TO STA. 173+15+/-, EB) THE CONTRACTOR SHALL UTILIZE THE PERMITTED LANE CLOSURE TIMES TO BE ABLE TO PLANE THE EXISTING ASPHALT OVERLAY (2-1/2"), PLACE THE PROPOSED ASPHALT CONCRETE INTERMEDIATE COURSE (1") AND PROPOSED SURFACE COURSE (1-1/2") WITHIN THE SAME CLOSURE TIMES (I.E. WITHIN STA. 161+50 +/- TO STA. 173+15 +/-, NO PAVEMENT DROPOFFS SHALL EXIST AFTER ALL LANES ARE OPEN TO TRAFFIC AFTER PAVING IS COMPLETED).
- 2) MANHOLES (STA. 99+08 +/- TO STA. 172+26 +/-, WB) FROM STA. 99+08 +/- TO STA. 153+20 +/-, EXISTING MANHOLES EXIST IN THE RIGHT LANE OF THE 3 LANE SECTIONS OR IN WEAVE LANES BETWEEN EXIT AND ENTRANCE RAMPS (I.E. RIGHT LANE OF 4 LANE SECTION). FROM STA. 154+75 +/- TO STA. 172+26 +/-, EXISTING MANHOLES EXIST IN THE RIGHT LANE OF THE 4 LANE SECTION. IN THESE SECTIONS, THE CONTRACTOR SHALL UTILIZE THE PERMITTED LANE CLOSURE TIMES TO BE ABLE TO PLANE THE EXISTING ASPHALT OVERLAY (2-1/2") AND PLACE THE PROPOSED ASPHALT CONCRETE INTERMEDIATE COURSE (1") WITHIN THE SAME CLOSURE TIMES. THE MANHOLES SHALL BE RAMPED AS PER "MAINTAINING TRAFFIC AND SEQUENCE OF OPERATIONS" NOTE.

MANHOLE AT STA. 106+00 +/- IS LOCATED IN THE MIDDLE LANE OF A 3 LANE SECTION. AFTER PLANING THE MIDDLE LANE (2-1/2"), THE MANHOLE SHALL BE RAMPED AS PER "MAINTAINING TRAFFIC AND SEQUENCE OF OPERATIONS" NOTE.

**PERMANENT PAVEMENT MARKINGS**

AFTER PLACING THE SURFACE COURSE, THE CONTRACTOR MAY PLACE THE PERMANENT PAVEMENT MARKINGS AT LOCATIONS SHOWN IN THE TYPICALS AND THE PLAN SHEETS INSTEAD OF PLACING THE WORK ZONE PAVEMENT MARKINGS, WHICH SHALL BE NON-PERFORMED AT THESE LOCATIONS.

I:\PROJECTS\PID81506\dgn\81506mna.dgn 11-OCT-2007 12:55PM ekallo

CALCULATED  
EMK  
CHECKED  
LDH

MAINTENANCE OF TRAFFIC GENERAL NOTES

CUY-90-16.19

**WORKSITE TRAFFIC SUPERVISOR**

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

- 1) AMERICAN TRAFFIC SAFETY SERVICE ASSOCIATION A.T.S.S.A. PHONE NUMBER 1-800-272-8772, CERTIFIED WORKSITE TRAFFIC SUPERVISOR (WTS)
- 2) THE NATIONAL SAFETY COUNCIL, TRAFFIC CONTROL ZONES SUPERVISORS COURSE, PHONE NUMBER 1-800-441-5103
- 3) NATIONAL HIGHWAY INSTITUTE, DESIGN AND OPERATION OF WORK ZONE TRAFFIC CONTROL, PHONE NUMBER 1-703-235-0528

A CERTIFIED WTS SHALL BE PRESENT WHEN THE CONTRACTOR OR SUBCONTRACTOR INSTALLS A TRAFFIC RESTRICTION, LANE CLOSURE, ETC. THE CONTRACTOR OR SUBCONTRACTOR MUST PRESENT A COPY OF CERTIFICATES FOR ALL WTS TO THE ENGINEER. A WTS MUST BE PRESENT WHEN THE WORK ZONE IS BEING SET UP OR REMOVED. HE MUST APPROVE THE WORK ZONE BEFORE HE LEAVES OR PERFORMS OTHER DUTIES.

THE WTS POSITION IS ESTABLISHED FOR THE PURPOSE OF MONITORING THE TRAFFIC CONTROL PLAN (TCP) AND CORRECTING ANY TRAFFIC CONTROL DEFICIENCIES IN THE WORK ZONE. THE WTS MUST ALSO COORDINATE WITH ALL LAW ENFORCEMENT AGENCIES RESPONSIBLE FOR THE ROADWAY UNDER CONSTRUCTION AND RETRIEVE ALL CRASH REPORTS (OH-1) THAT OCCUR WHEN THE WORK ZONE TRAFFIC CONTROL DEVICES ARE IN PLACE. THE WTS SHALL OVERSEE ALL OPERATIONS THAT AFFECT THE MOVEMENT OF VEHICULAR AND PEDESTRIAN TRAFFIC THROUGH THE WORK ZONE. TRAFFIC CONTROL AND CRASH DATA EVALUATION WILL BE THE WTS MAIN RESPONSIBILITY WHEN A WORK ZONE IS IN PLACE.

DAILY, INCLUDING WEEKEND AND HOLIDAYS, THE WTS SHALL SPEND A MINIMUM OF ONE HOUR REVIEWING THE WORK ZONE AND/OR CRASH DATA FOR DEFICIENCIES AND MAINTAINING THE WORK ZONE.

WEEKLY, THE WTS MUST RETRIEVE/COLLECT ALL CRASH REPORTS (OH-1) FROM ALL LAW ENFORCING AGENCIES, EVALUATE THE CRASHES, AND RECOMMEND SOLUTIONS TO ADDRESS ANY ISSUES WITH THE TCP THAT ARE POTENTIALLY CREATING CRASHES WITHIN THE WORK ZONE. THE WTS MUST PRESENT THESE SOLUTIONS TO THE ENGINEER FOR APPROVAL WEEKLY. UPON APPROVAL BY THE ENGINEER AND THE DISTRICT WORK ZONE TRAFFIC MANAGER (DWZTM), THE CONTRACTOR MUST IMPLEMENT THE RECOMMENDED SOLUTIONS TO THE WORK ZONE WITHIN ONE WEEK - ADDITIONAL COST TO BE PAID UNDER CONSTRUCTION AND MATERIALS SPECIFICATIONS 109. THE WTS MUST INSPECT THE WORK ZONE AT THE BEGINNING AND THE END OF EACH WORK DAY AND ONE TIME PER WEEK DURING THE HOURS OF DARKNESS. THE FOLLOWING ITEMS SHALL BE INCLUDED, BUT NOT RESTRICTED TO, IN EACH REVIEW: TRAFFIC CONTROL DEVICE CONDITION; PLACEMENT; VISIBILITY; TRAFFIC FLOW CONDITIONS; INCIDENTS; CONGESTION POINTS; DELAYS; ADEQUACY OF ADVANCED INFORMATIONAL SIGNS BEYOND PROJECT LIMITS; INTERACTION OF WORK VEHICLES AND TRAFFIC; ACCIDENTS; PROPER STORAGE OF MATERIALS AND EQUIPMENT; CONFORMANCE WITH TCP;

ADEQUACY OF TCP; CONFLICTING OR NON-CONFORMING PAVEMENT MARKINGS. THE WTS SHALL HAVE THE NECESSARY AUTHORITY TO IMMEDIATELY PERFORM ANY CORRECTIVE WORK A RECORD OF EACH DAYS REVIEW SHALL BE GIVEN TO THE ENGINEER THE FOLLOWING DAY IN WRITING AND SHALL INCLUDE ALL DEFICIENCIES AND RESOLUTIONS TO THE DEFICIENCIES. THE INSPECTION WILL BE DOCUMENTED ON THE LONG/SHORT TERM WORK ZONE REVIEW FORM PROVIDED BY ODOT. WEEKLY, THE INSPECTION FORM MUST BE ACCOMPANIED BY ALL OF THE OH-1 CRASH REPORTS AND THE PROPOSED SOLUTIONS TO ANY IDENTIFIED CRASH PROBLEMS.

IF THE RESTRICTIONS ARE SHORT TERM, THE WTS SHALL MONITOR THE ZONE FOR COMPLIANCE, DURING LANE CLOSURES; HE SHALL MAKE SURE ALL TRAFFIC CONTROL ITEMS ARE FUNCTIONING PROPERLY. TRAFFIC CONTROL AND CRASH DATA EVALUATION WILL BE THE WTS MAIN RESPONSIBILITY DURING IMPLEMENTATION OF ZONES OR SHORT TERM ZONES. THE WTS SHALL PROVIDE THE DWZTM A SKETCH OF THE TRAFFIC CONTROL PLAN EVERYDAY THERE IS TO BE A SHORT TERM TRAFFIC RESTRICTION, LANE CLOSURE, ETC. THIS TCP SHALL SHOW HOW THE WORK ZONES ARE TO BE IMPLEMENTED.

THE WTS SHALL BE ON STANDBY 24 HOUR BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISSING TRAFFIC CONTROL DEVICES. A 24 HOUR CONTACT NUMBER(S) SHALL BE MADE AVAILABLE TO THE ENGINEER TO CONTACT THE WTS.

FAILURE OF THE CONTRACTOR TO COMPLY WITH ANY OF THE ABOVE, SHALL CONSTITUTE CAUSE FOR THE PROJECT ENGINEER TO DEDUCT \$500.00 PER DAY FROM MONEY DUE TO THE CONTRACTOR NOT AS A PENALTY, BUT AS A LIQUIDATED DAMAGE.

PAYMENT FOR THE WTS SHALL BE INCLUDED UNDER THE ITEM 614, WORKSITE TRAFFIC SUPERVISOR BY MONTH.

THE FOLLOWING ESTIMATED QUANTITY SHALL BE CARRIED TO THE GENERAL SUMMARY TO BE USED AS DETAILED ABOVE:

ITEM 614 - WORKSITE TRAFFIC SUPERVISOR . . . . . 4 MONTH

**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 PCMS SHALL CONTAIN A CELLULAR TELEPHONE LINK WHICH WILL ALLOW REMOTE SIGN ACTIVATION, DEACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES.

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 4 MONTHS EACH.

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN . . . . . 8 SIGN-MONTHS

**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.

I:\PROJECTS\PID81506\dgn\81506mna.dgn 11-OCT-2007 12:56PM ekallo

CALCULATED  
CHK  
CHECKED  
LDH

MAINTENANCE OF TRAFFIC GENERAL NOTES

CUY-90-16.19

**ITEM 614, WORK ZONE SPEED LIMIT SIGN**

THE CONTRACTOR SHALL 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:

THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SPEED LIMIT SIGNS WITHIN THE REDUCED SPEED ZONE. THESE SIGNS SHALL BE RESTORED DURING SUSPENSION OR TERMINATION OF THE REDUCED SPEED LIMIT. THE EXPENSE OF COVERING OR REMOVAL AND RESTORATION OF EXISTING SPEED LIMIT OR MINIMUM SPEED LIMIT SIGNS SHALL BE INCLUDED IN THE PAY ITEM FOR THE WORK ZONE SPEED LIMIT SIGNS.

THE WORK ZONE SPEED LIMIT SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE DAYS, SUCH AS DURING WINTER SHUT-DOWNS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS, ITEM 614, PARAGRAPH 614.02(B) INDICATES THAT THE TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS.

THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, SPEED REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE SPEED REDUCTION IN THE OPPOSITE DIRECTION. SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION, IN SUCH CASE, IS APPROPRIATE ONLY IF CONDITIONS ARE EXPECTED TO HAVE AN IMPACT ON THE DIRECTIONAL TRAFFIC FLOW, AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL ERECT A WORK ZONE SPEED LIMIT SIGN IN ADVANCE OF ANY LANE RESTRICTION EXPECTED TO LAST AT LEAST 30 CONSECUTIVE CALENDAR DAYS, OR AS DIRECTED BY THE ENGINEER. THE SIGN SHALL BE MOUNTED ON BOTH SIDES OF A DIRECTIONAL ROADWAY OF DIVIDED HIGHWAYS. THE FIRST WORK ZONE SPEED LIMIT SIGN SHALL BE PLACED 500 FEET (150 METERS) IN ADVANCE OF THE LANE REDUCTION OR SHIFT TAPER OR AT A POINT WHEREVER CONSTRUCTION BEGINS, WHICHEVER COMES FIRST. ON UNDIVIDED HIGHWAY THE SIGN SHALL BE MOUNTED ON THE RIGHT SIDE, 250 FEET (75 METERS) IN ADVANCE OF THE TAPER. THE SIGN SHALL BE REPEATED, ON THE SIDE NEAREST TRAFFIC, EVERY 1 MILE (1.6 KILOMETERS) FOR 55 MPH ZONES AND EVERY ONE-HALF MILE (0.8 KILOMETERS) FOR 50 MPH AND 45 MPH ZONES. THESE SIGNS SHALL ALSO BE ERECTED IMMEDIATELY AFTER EACH OPEN ENTRANCE RAMP WITHIN THE ZONE.

REDUCED SPEED AHEAD SIGNS SHALL BE ERECTED IN ADVANCE OF THE SPEED REDUCTION, APPROXIMATELY 1300 FEET (390 METERS) ON MULTI-LANE HIGHWAYS AND 500 FEET (150 METERS) ON 2-LANE HIGHWAYS.

A SIGN(S) TO INDICATE THE RESUMPTION OF THE STATUTORY SPEED LIMIT SHALL BE ERECTED AT THE END OF ANY REDUCED SPEED ZONE. R2-1 (SPEED LIMIT) SIGNS SHALL BE USED ON UNDIVIDED ROADWAYS. R2-1 (SPEED LIMIT) AND R2-H2A SIGNS SHALL BE USED ON DIVIDED ROADWAYS. WHEN USED THE R2-1 AND R2-H2A SIGNS SHALL BE MOUNTED SIDE-BY-SIDE ON SEPARATE SUPPORTS. 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 SPEED LIMIT SIGNS SHALL BE MOUNTED ON TWO ITEM 630, GROUND MOUNTED SUPPORTS, NO. 3 POSTS. WORK ZONE SPEED LIMIT SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGNS AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION WITHIN THE PROJECT DUE TO CHANGES IN THE SPEED ZONE 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 REMOVING THE SIGNS AND SUPPORTS. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 WORK ZONE SPEED LIMIT SIGN . . . . . **30 EACH**

**SCHEDULE OF THROUGH LANES TO BE MAINTAINED**

ROAD	LANE REDUCTIONS		PERMITTED RAMP CLOSURES			HALF WIDTH RAMP PAVING
	1 LANE CLOSURE	2 LANE CLOSURE	YES /NO	SHORT TERM CLOSURE		
				WEEK-DAYS	WEEK-ENDS	
IR-90	WEEKDAY ◆	WEEKDAY ◆				
	WEEKEND ◆	WEEKEND ◆				
ALL ONE LANE RAMPS	NA	NA	YES	*	*	10:00PM TO 6:00AM

◆ - 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/DIST12/WORKZONE/LANECLCLO.HTM](http://WWW.DOT.STATE.OH.US/DIST12/WORKZONE/LANECLCLO.HTM)

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.

\* - A RAMP CAN BE CLOSED A MAXIMUM OF THREE TIMES FOR PLANING AND PAVING OPERATIONS. CLOSURE TIMES SHALL BE LIMITED TO 10:00 PM TO 6:00 AM. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPOSED DETOUR SIGNING, WHICH SHALL BE APPROVED BY THE ENGINEER.

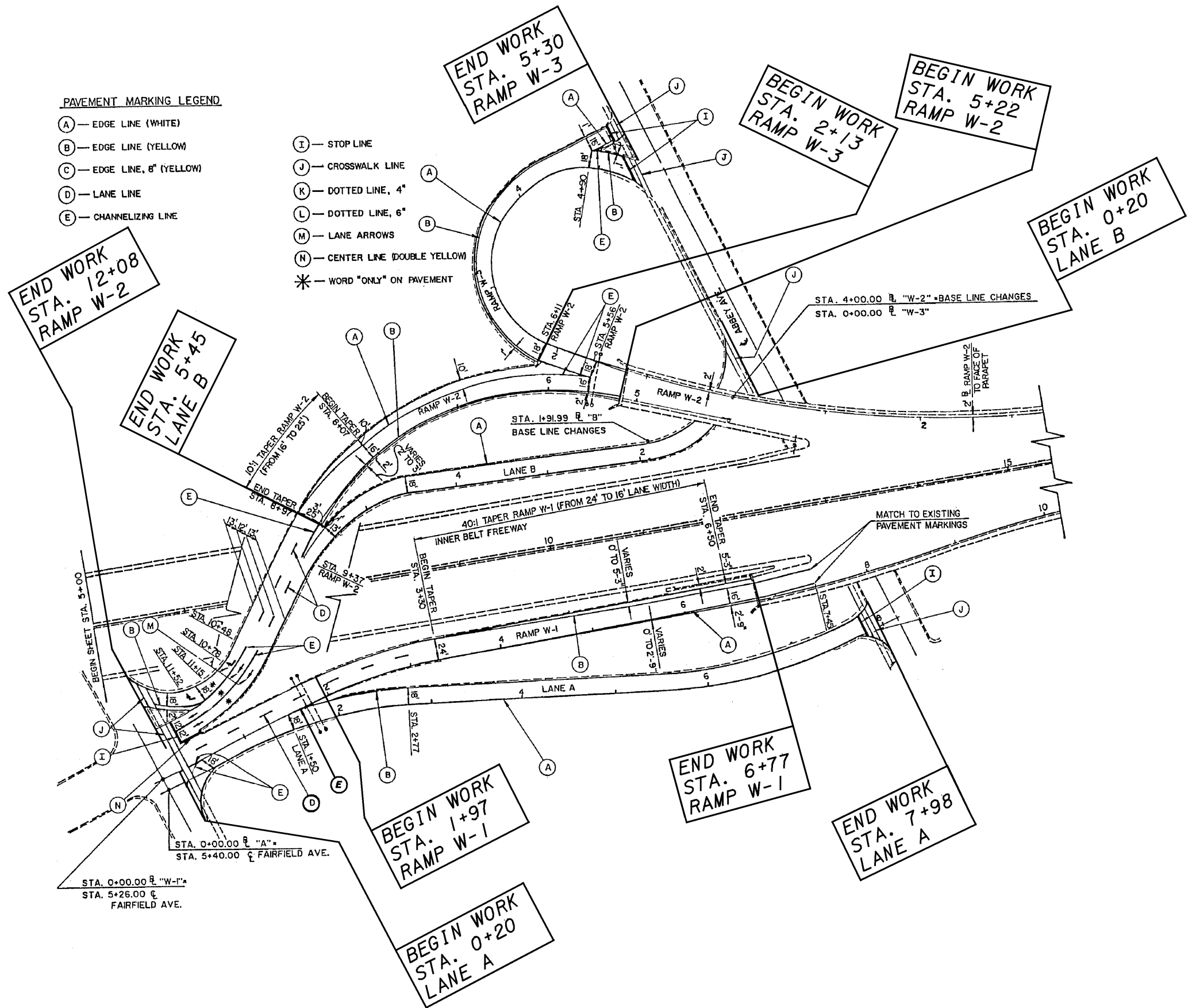
I:\PROJECTS\PID81506\dgn\81506mna.dgn 11-OCT-2007 12:57PM ekallo

CALCULATED  
EMK  
CHECKED  
LDH

**MAINTENANCE OF TRAFFIC GENERAL NOTES**

**CUY -90 -16.19**

- PAVEMENT MARKING LEGEND**
- (A) — EDGE LINE (WHITE)
  - (B) — EDGE LINE (YELLOW)
  - (C) — EDGE LINE, 8" (YELLOW)
  - (D) — LANE LINE
  - (E) — CHANNELIZING LINE
  - (I) — STOP LINE
  - (J) — CROSSWALK LINE
  - (K) — DOTTED LINE, 4"
  - (L) — DOTTED LINE, 6"
  - (M) — LANE ARROWS
  - (N) — CENTER LINE (DOUBLE YELLOW)
  - \* — WORD "ONLY" ON PAVEMENT



I:\PROJECTS\PID81506\dgn\81506gpa.dgn 11-OCT-2007 12:59PM ekalilo

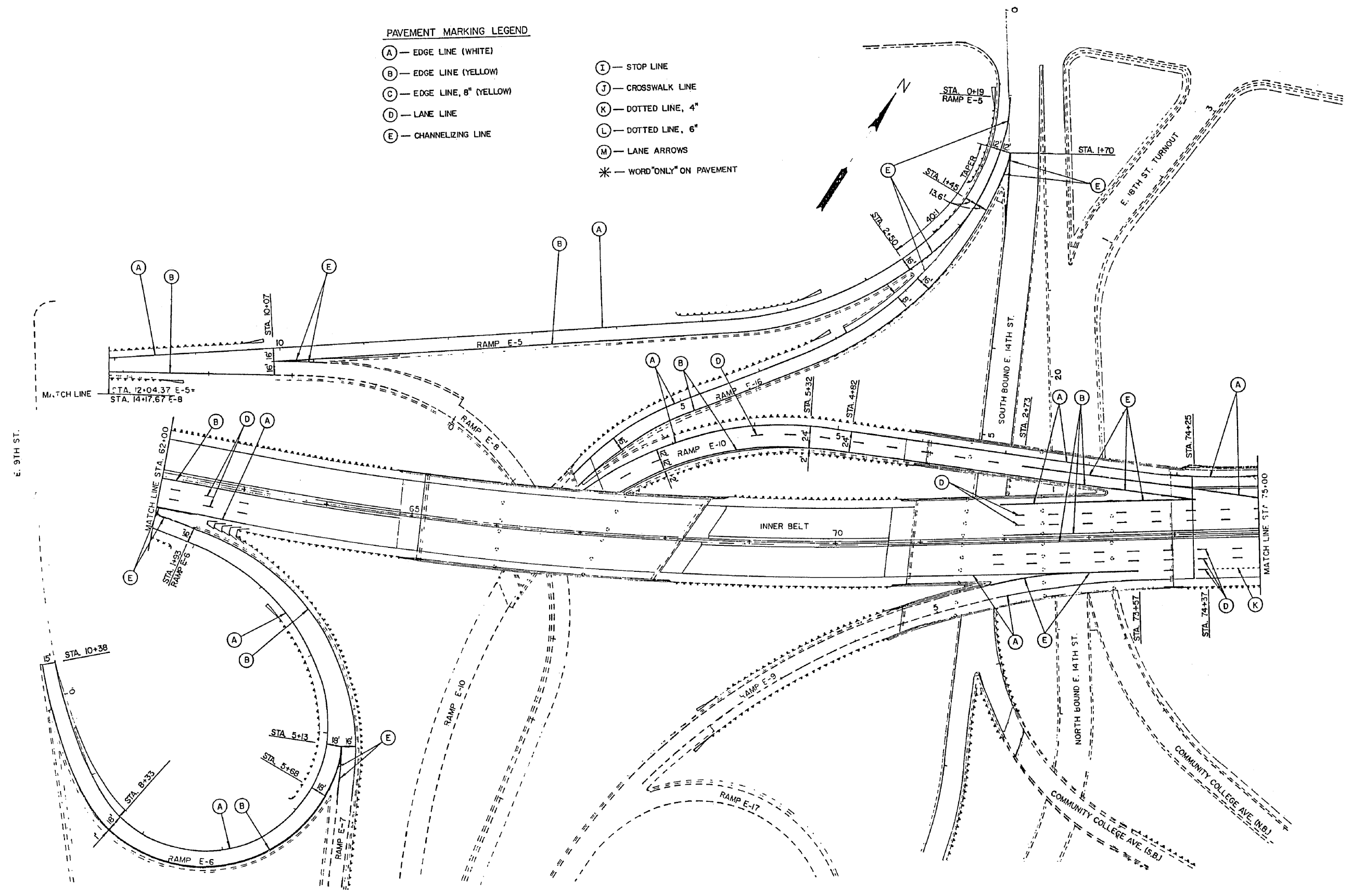
NOT TO SCALE



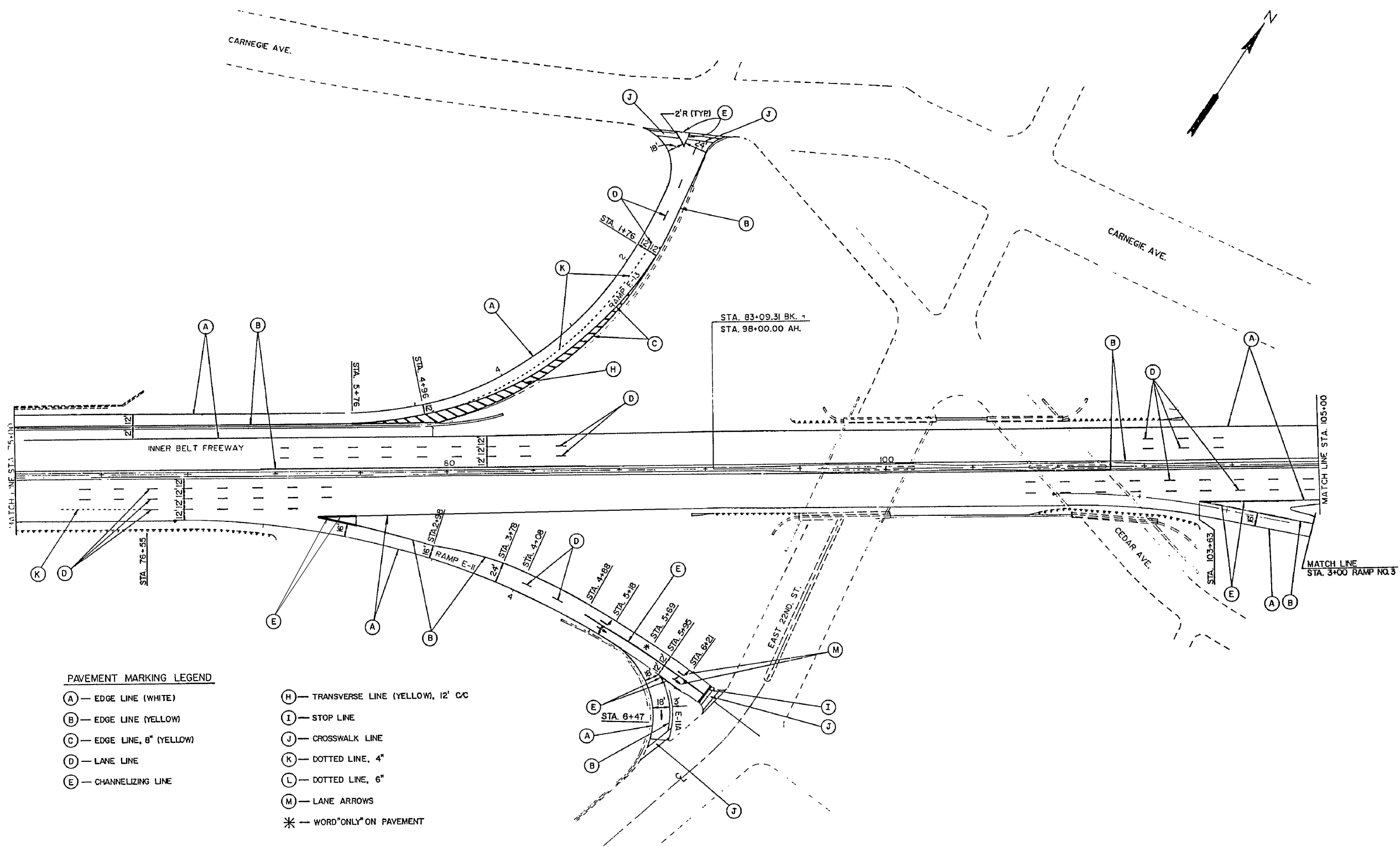


PAVEMENT MARKING LEGEND

- (A) — EDGE LINE (WHITE)
- (B) — EDGE LINE (YELLOW)
- (C) — EDGE LINE, 8" (YELLOW)
- (D) — LANE LINE
- (E) — CHANNELIZING LINE
- (I) — STOP LINE
- (J) — CROSSWALK LINE
- (K) — DOTTED LINE, 4"
- (L) — DOTTED LINE, 6"
- (M) — LANE ARROWS
- \* — WORD "ONLY" ON PAVEMENT



NOT TO SCALE



PAVEMENT MARKING LEGEND

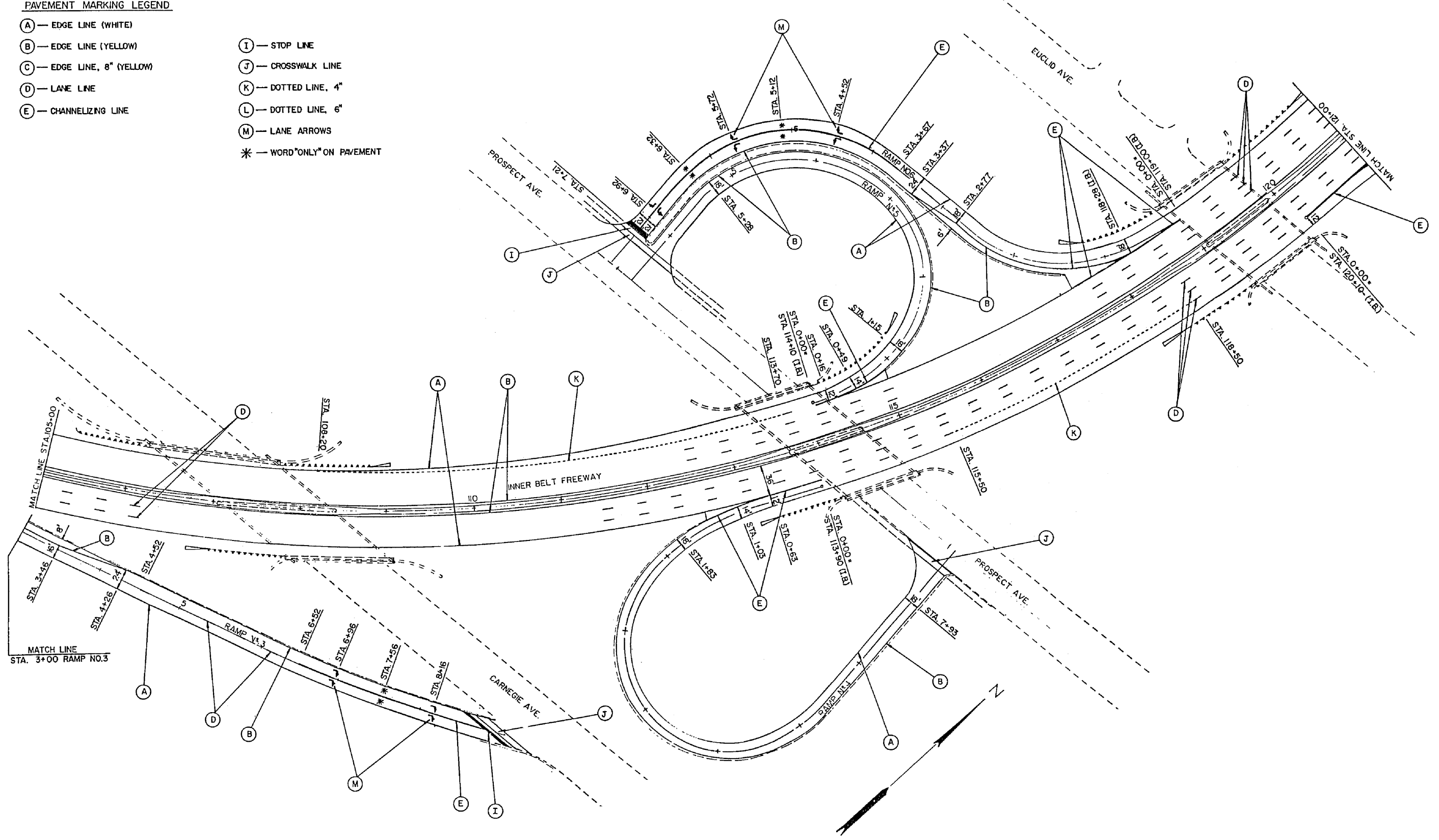
- (A) — EDGE LINE (WHITE)
- (B) — EDGE LINE (YELLOW)
- (C) — EDGE LINE, 8" (YELLOW)
- (D) — LANE LINE
- (E) — CHANNELIZING LINE
- (H) — TRANSVERSE LINE (YELLOW, 12' CC)
- (I) — STOP LINE
- (J) — CROSSWALK LINE
- (K) — DOTTED LINE, 4"
- (L) — DOTTED LINE, 6"
- (M) — LANE ARROWS
- \* — WORD "ONLY" ON PAVEMENT

I:\PROJECTS\PID81506\dgn\81506gpd.dgn 11-OCT-2007 10:44PM ekallo

NOT TO SCALE

PAVEMENT MARKING LEGEND

- (A) — EDGE LINE (WHITE)
- (B) — EDGE LINE (YELLOW)
- (C) — EDGE LINE, 8" (YELLOW)
- (D) — LANE LINE
- (E) — CHANNELIZING LINE
- (I) — STOP LINE
- (J) — CROSSWALK LINE
- (K) — DOTTED LINE, 4"
- (L) — DOTTED LINE, 6"
- (M) — LANE ARROWS
- \* — WORD "ONLY" ON PAVEMENT

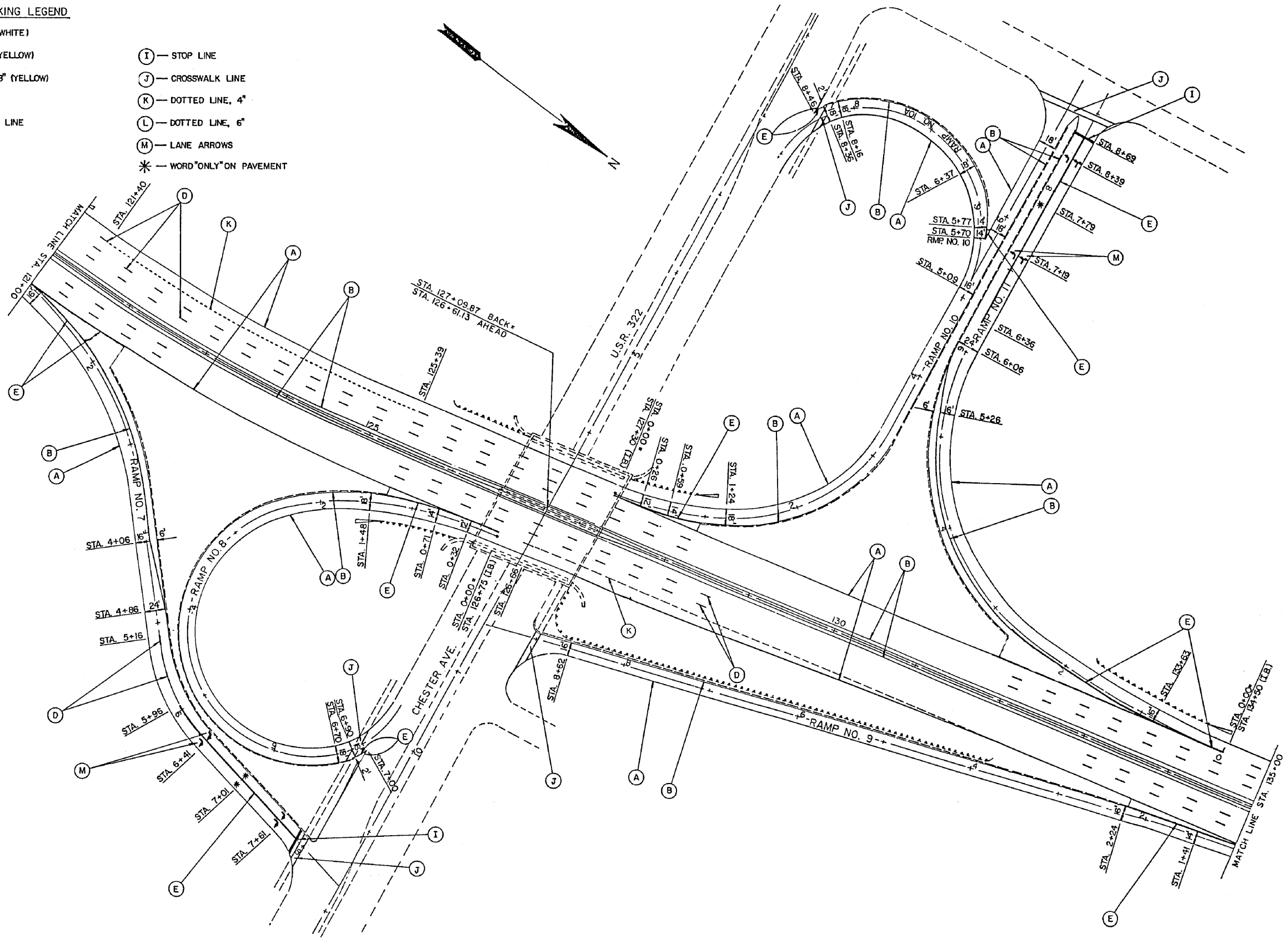


I:\PROJECTS\PID81506\dgn\81506gpe.dgn 11-OCT-2007 1:06PM ekallio

NOT TO SCALE

PAVEMENT MARKING LEGEND

- (A) — EDGE LINE (WHITE)
- (B) — EDGE LINE (YELLOW)
- (C) — EDGE LINE, 6" (YELLOW)
- (D) — LANE LINE
- (E) — CHANNELIZING LINE
- (I) — STOP LINE
- (J) — CROSSWALK LINE
- (K) — DOTTED LINE, 4"
- (L) — DOTTED LINE, 6"
- (M) — LANE ARROWS
- \* — WORD "ONLY" ON PAVEMENT



I:\PROJECTS\PID81506\dgn\81506gpf.dgn 11-OCT-2007 1:09PM ekallio

EMK  
LDH

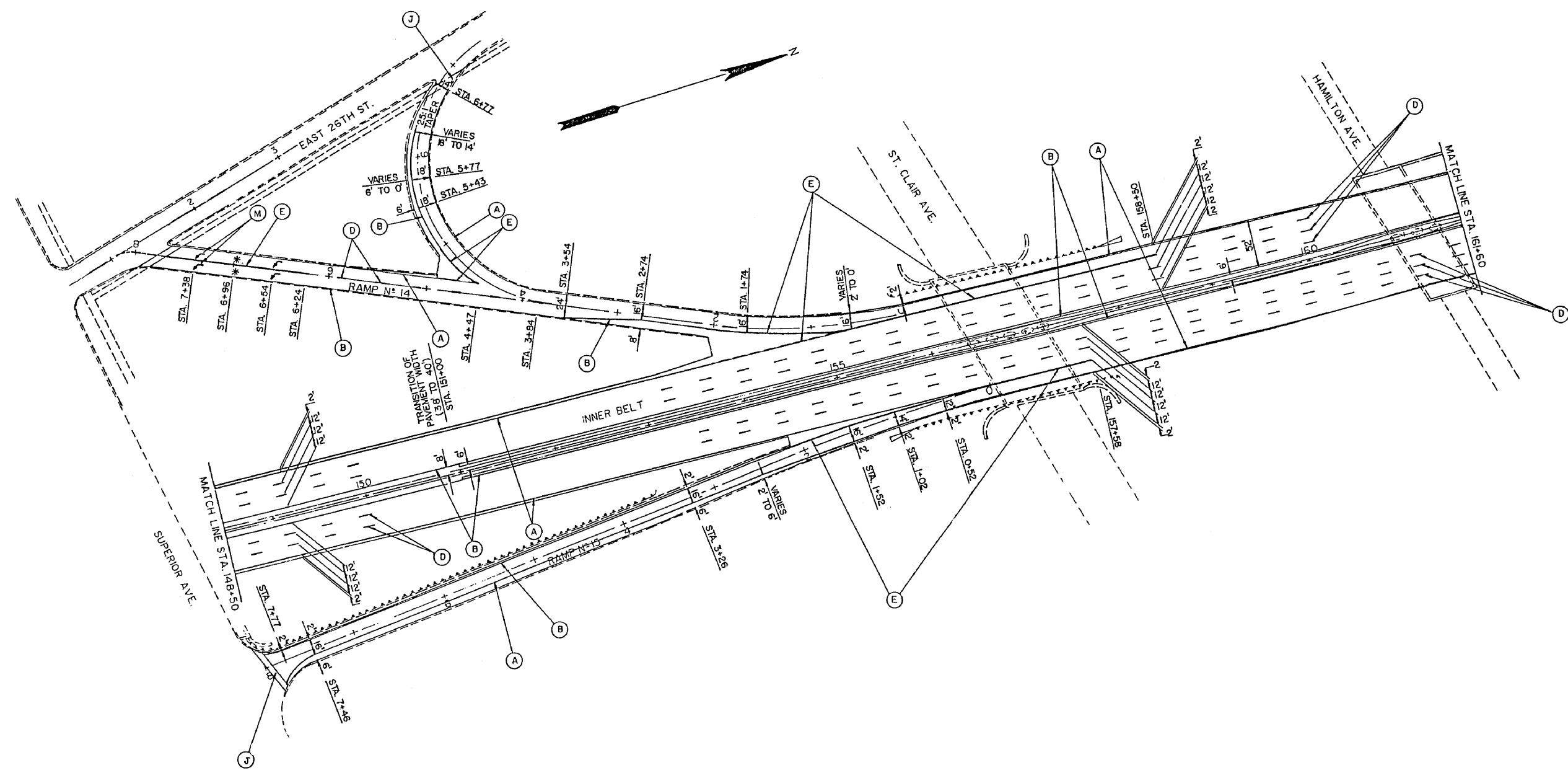
PLAN SHEET

CUY-90-16.19

19  
35

NOT TO SCALE

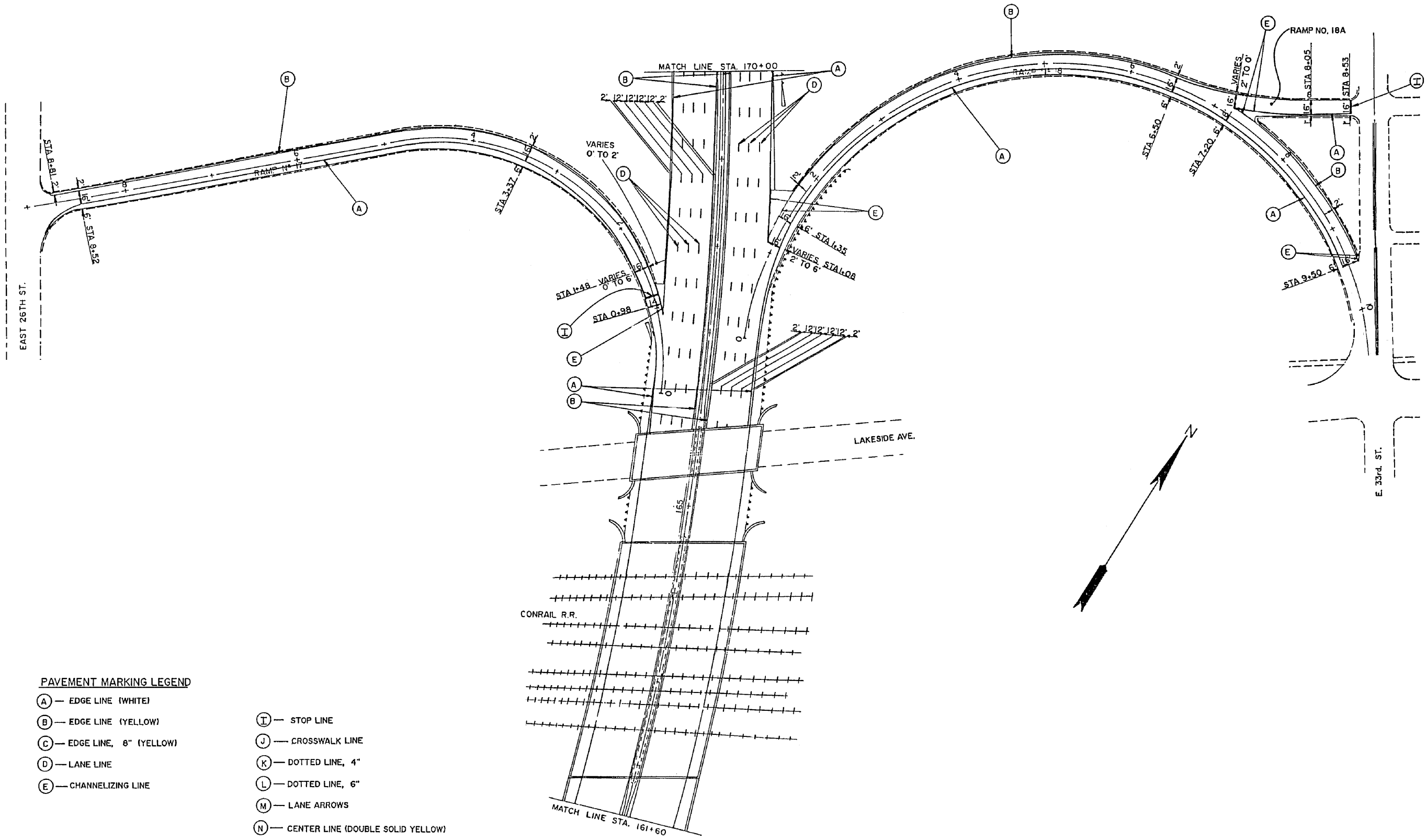




PAVEMENT MARKING LEGEND

- (A) — EDGE LINE (WHITE)
- (B) — EDGE LINE (YELLOW)
- (C) — EDGE LINE, 8" (YELLOW)
- (D) — LANE LINE
- (E) — CHANNELIZING LINE
- (I) — STOP LINE
- (F) — CROSSWALK LINE
- (K) — DOTTED LINE, 4"
- (L) — DOTTED LINE, 6"
- (M) — LANE ARROWS
- (N) — CENTER LINE (DOUBLE SOLID YELLOW)
- \* — WORD "ONLY" ON PAVEMENT

NOT TO SCALE



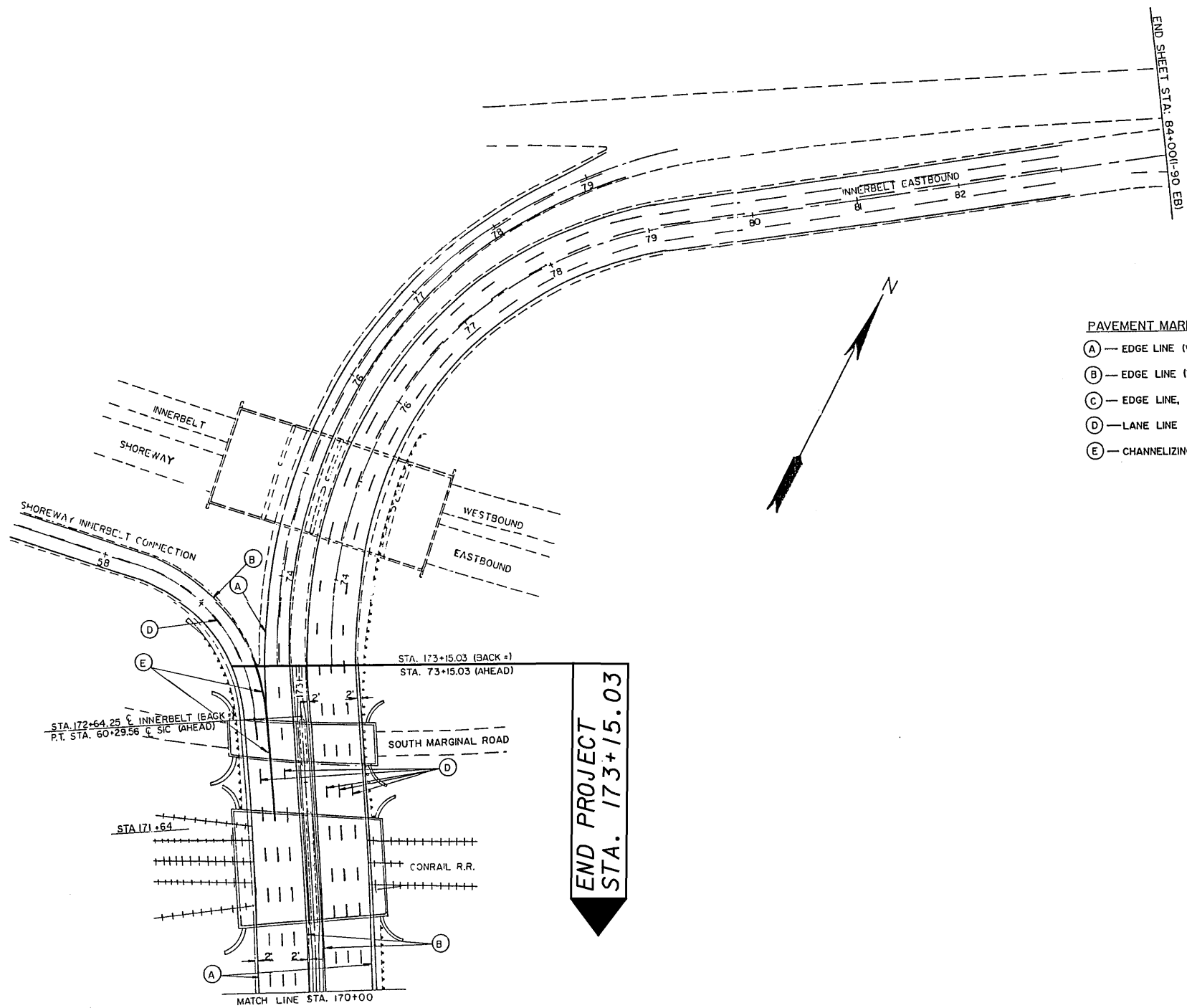
PAVEMENT MARKING LEGEND

- (A) — EDGE LINE (WHITE)
- (B) — EDGE LINE (YELLOW)
- (C) — EDGE LINE, 8" (YELLOW)
- (D) — LANE LINE
- (E) — CHANNELIZING LINE
- (I) — STOP LINE
- (J) — CROSSWALK LINE
- (K) — DOTTED LINE, 4"
- (L) — DOTTED LINE, 6"
- (M) — LANE ARROWS
- (N) — CENTER LINE (DOUBLE SOLID YELLOW)
- \* — WORD "ONLY" ON PAVEMENT

I:\PROJECTS\PID81506\dgn\81506gp1.dgn 11-OCT-2007 11:33PM ekallio

NOT TO SCALE

I:\PROJECTS\PID81506\dgn\81506gpk.dgn 11-OCT-2007 11:16PM ekallio



PAVEMENT MARKING LEGEND

- (A) — EDGE LINE (WHITE)
- (B) — EDGE LINE (YELLOW)
- (C) — EDGE LINE, 8" (YELLOW)
- (D) — LANE LINE
- (E) — CHANNELIZING LINE
- (J) — STOP LINE
- (K) — CROSSWALK LINE
- (L) — DOTTED LINE, 4"
- (M) — DOTTED LINE, 6"
- (N) — LANE ARROWS
- (O) — CENTER LINE (DOUBLE SOLID YELLOW)
- \* — WORD "ONLY" ON PAVEMENT

NOT TO SCALE



LOCATION	LOCATIONS - FROM PLAN RECORD		LENGTH FEET	AVERAGE WIDTH FEET	PAVEMENT AREA		254	254	407	407	446	448	448	254
	STATION				SQ. FT.	SQ. YD.	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN ( 2-1/2" )	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, ( 3-1/2" )	TACK COAT RATE = 0.10 GAL./SQ.YD.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./SQ.YD.	1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1H, AS PER PLAN	1" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-28 (VAR.)	2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-28	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN ( 1" )
	FROM	TO					SQ. YD.	SQ. YD.	SQ. YD.	SQ. YD.	GAL.	GAL.	CU. YD.	CU. YD.
NORMAL PROJECT PARTICIPATION	I.R.-90	EASTBOUND												
		54+90.45	57+06	216	73	15739	1749	1749	175	87	72.9	48.6		
		57+06	58+79.98	174	62	10788	1199	1199	120	60	49.9	33.3		
		BRIDGE CUY-90-1628												
		61+16.05	62+48.58	133	72	9540	1060	1060	106	53	44.2	29.4		
		62+48.58	65+10.18	262	49.5	12949	1439	1439	144	72	59.9	40.0		
		BRIDGE CUY-90-1640												
		68+19.03	70+89.23	270	49.5	13375	1486	1486	149	74	61.9	41.3		
		BRIDGE CUY-90-1651												
		73+96.25	76+85.50	289	61	17644	1960	1960	196	98	81.7	54.5		
		76+85.50	78+86.88	201	71	14299	1589	1589	159	79	66.2	44.1		
		78+86.88	80+09.31	122	49.5	6059	673	673	67	34	28.0	18.7		
		80+09.31	83+09.31 BK =	300	51	15300	1700	1700	170	85	70.8	47.2		
		98+00.00 AH	102+00	400	52.5	21000	2333	2333	233	117	97.2	64.8		
		102+00	104+45	245	69.5	17028	1892	1892	189	95	78.8	52.6		
		104+45	112+33	788	52.5	41370	4597	4597	460	230	191.5	127.7		
		112+33	113+90	157	73	11461	1273	1273	127	64	53.1	35.4		
		113+90	120+10	620	64.5	39990	4443	4443	444	222	185.1	123.4		
		120+10	122+10	200	82	16400	1822	1822	182	91	75.9	50.6		
		122+10	125+40	330	52.5	17325	1925	1925	193	96	80.2	53.5		
		125+40	126+75	135	71	9585	1065	1065	107	53	44.4	29.6		
		126+75	127+09.87 BK	35	64.5	2249	250	250	25	12	10.4	6.9		
		126+61.13 AH	127+41	80	64.5	5152	572	572	57	29	23.9	15.9		
		127+41	132+21	480	58.5	28080	3120	3120	312	156	130.0	86.7		
		132+21	133+10	89	52.5	4673	519	519	52	26	21.6	14.4		
		133+10	136+00	290	71	20590	2288	2288	229	114	95.3	63.5		
		136+00	139+94	394	64.5	25413	2824	2824	282	141	117.7	78.4		
		139+94	142+65	271	80	21680	2409	2409	241	120	100.4	66.9		
		142+65	154+60	1196	52.5	62790	6977	6977	698	349	290.7	193.8		
		154+60	156+48	188	71.5	13442	1494	1494	149	75	62.2	41.5		
	156+48	161+75	527	64.5	33992	3777	3777	378	189	157.4	104.9			
	161+75	167+00	525	69	36225	4025	3763	263	403	201	167.7		223.6	3763
	167+00	168+60	160	86	13760	1529	1449	80	153	76	63.7		84.9	1449
	168+60	173+15.03	455	69	31397	3489	3261	228	349	174	145.4		193.8	228
	RUMBLE STRIPS													
	TOTAL LENGTH =	(10 @ 22' EACH)	220	52	11440	1271	-1271		-127	-64	-53.0			
NORMAL PROJECT PARTICIPATION	I.R.-90	WESTBOUND												
		54+90.45	58+79.98	390	59	22982	2554	2554	255	128	106.4	70.9		
		BRIDGE CUY-90-1628												
		61+16.05	65+10.18	394	49.5	19509	2168	2168	217	108	90.3	60.2		
		BRIDGE CUY-90-1640												
		68+19.03	70+89.23	270	49.5	13375	1486	1486	149	74	61.9	41.3		
		BRIDGE CUY-90-1651												
		73+96.25	79+85.88	590	73	43043	4783	4783	478	239	199.3	132.8		
		79+85.88	83+09.31 BK =	323	51	16495	1833	1833	183	92	76.4	50.9		
		98+00 AH	108+20	1020	52.5	53550	5950	5950	595	298	247.9	165.3		
		108+20	113+00	480	58.5	28080	3120	3120	312	156	130.0	86.7		
		113+00	115+00	200	79.5	15900	1767	1767	177	88	73.6	49.1		
<b>TOTALS TO GENERAL SUMMARY</b>							<b>87296</b>	<b>571</b>	<b>8787</b>	<b>4393</b>	<b>3661</b>	<b>2225</b>	<b>502</b>	<b>5440</b>

PAVEMENT SUBSUMMARY

CUY - 90.16.19

LOCATION	LOCATIONS - FROM PLAN RECORD						254	254	407	407	446	448	448		
	STATION		LENGTH	AVERAGE WIDTH	PAVEMENT AREA		PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN( 2-1/2" )	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, ( 2-1/2" )	TACK COAT RATE = 0.10 GAL./SQ.YD.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./SQ.YD.	1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1H, AS PER PLAN	1" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-28 (VAR.)	2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-28		
	FROM	TO	FEET	FEET	SQ. FT.	SQ. YD.	SQ. YD.	SQ. YD.	GAL.	GAL.	CU. YD.	CU. YD.	CU. YD.		
NORMAL PROJECT PARTICIPATION	I.R.-90	WESTBOUND													
		115+00	117+40	240	52.5	12600	1400	1400	140	70	58.3	38.9			
		117+40	119+00	160	84	13440	1493	1493	149	75	62.2	41.5			
		119+00	127+09.87 BK =	810	64.5	52237	5804	5804	580	290	241.8	161.2			
		126+61.13 AH	127+30	69	64.5	4442	494	494	49	25	20.6	13.7			
		127+30	128+20	90	76	6840	760	760	76	38	31.7	21.1			
		128+20	132+20	400	52.5	21000	2333	2333	233	117	97.2	64.8			
		132+20	134+50	230	79	18170	2019	2019	202	101	84.1	56.1			
		134+50	139+00	450	64.5	29025	3225	3225	323	161	134.4	89.6			
		139+00	140+30	130	72	9360	1040	1040	104	52	43.3	28.9			
		140+30	154+05	1375	52.5	72188	8021	8021	802	401	334.2	222.8			
		154+05	155+82.23	177	76.5	13558	1506	1506	151	75	62.8	41.8			
		155+82.23	161+75	593	64.5	38234	4248	4248	425	212	177.0	118.0			
		161+75	166+90	515	69	35535	3948	3691	258	395	164.5	109.7			
		166+90	167+40	50	80	4000	444	419	25	44	18.5	12.3			
		167+40	172+64.25	524	69	36173	4019	3757	262	402	167.5	111.6			
		172+64.25	173+15	51	72.5	3679	409	383	26	41	17.0	11.4			
		RAMP E-1	1+25	1+82	57	30	1710	190	190	19	10	7.9	5.3		
			1+82	2+77	95	38	3610	401	401	40	20	16.7	11.1		
		RAMP E-3	0+40	1+15	75	17	1275	142	142	14	7	5.9	3.9		
			1+15	2+03	88	26	2288	254	254	25	13	10.6	7.1		
			2+03	3+06	103	37.5	3863	429	429	43	21	17.9	11.9		
			3+06	6+49	343	33	11319	1258	1258	126	63	52.4	34.9		
		RAMP E-3A	0+50	2+07	157	18	2826	314	314	31	16	13.1	8.7		
		RAMP E-4	2+62	8+40	578	25	14450	1606	1606	161	80	66.9	44.6		
			8+40	9+20	80	20	1600	178	178	18	9	7.4	4.9		
		RAMP E-5	2+50.32	9+60	710	27	19161	2129	2129	213	106	88.7	59.1		
			9+60	12+25	265	36	9540	1060	1060	106	53	44.2	29.4		
		RAMP E-6	2+43	4+48	205	31	6355	706	706	71	35	29.4	19.6		
			4+48	5+68	120	46.5	5580	620	620	62	31	25.8	17.2		
			5+68	8+22	254	30	7620	847	847	85	42	35.3	23.5		
			8+22	10+38	216	22	4752	528	528	53	26	22.0	14.7		
		RAMP E-10	3+92	8+19	427	37	15799	1755	1755	176	88	73.1	48.8		
		RAMP E-11	1+98	3+90	192	27	5184	576	576	58	29	24.0	16.0		
			3+90	4+66	76	28.5	2166	241	241	24	12	10.0	6.7		
			4+66	5+55	89	27	2403	267	267	27	13	11.1	7.4		
			5+55	6+65	110	25.5	2805	312	312	31	16	13.0	8.7		
		RAMP E-11A	CADD AREA				166	166	166	17	8	6.9	4.6		
		RAMP E-13	0+26	3+35	90	30	2700	300	300	30	15	12.5	8.3		
			3+35	8+30	495	32	15840	1760	1760	176	88	73.3	48.9		
		8+30	9+15	85	28	2380	264	264	26	13	11.0	7.3			
	RAMP E-16	0+00	1+82	182	35	6370	708	708	71	35	29.5	19.7			
		1+82	4+87	305	27	8235	915	915	92	46	38.1	25.4			
		4+87	5+11	24	27.5	660	73	73	7	4	3.1	2.0			
		5+11	6+51	14	24	336	37	37	4	2	1.6	1.0			
<b>TOTALS TO GENERAL SUMMARY</b>									<b>58629</b>	<b>571</b>	<b>5920</b>	<b>2960</b>	<b>2467</b>	<b>1644</b>	

NORMAL PROJECT PARTICIPATION

ROUTE	LOCATIONS - FROM PLAN RECORD						254 PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN( 2-1/2" )	254 PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, ( 2-1/2" )	407 TACK COAT RATE = 0.10 GAL./SQ.YD.	407 TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./SQ.YD.	446 1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1H, AS PER PLAN	448 1" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-28 (VAR.)	448 2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-28							
	STATION		LENGTH FEET	AVERAGE WIDTH FEET	PAVEMENT AREA									SQ. YD.	SQ. YD.	GAL.	GAL.	CU. YD.	CU. YD.	CU. YD.
	FROM	TO			SQ. FT.	SQ. YD.														
RAMP NO. 3	2+45	3+35	90	30	2700	300	300	30	15	12.5	8.3									
	3+35	8+30	495	32	15840	1760	1760	176	88	73.3	48.9									
	8+30	9+15	85	28	2380	264	264	26	13	11.0	7.3									
RAMP NO. 4	1+57	7+93	636	26	16536	1837	1837	184	92	76.6	51.0									
	7+93	8+47	54	46	2484	276	276	28	14	11.5	7.7									
RAMP NO. 5	0+89	5+89	500	26	13000	1444	1444	144	72	60.2	40.1									
	5+89	6+39	50	43	2150	239	239	24	12	10.0	6.6									
RAMP NO. 6	1+55	6+50	495	32	15840	1760	1760	176	88	73.3	48.9									
	6+50	7+01	51	28	1428	159	159	16	8	6.6	4.4									
	7+01	7+41	40	36	1440	160	160	16	8	6.7	4.4									
RAMP NO. 7	2+08	7+27	519	32	16608	1845	1845	185	92	76.9	51.3									
	7+27	7+78	51	28	1428	159	159	16	8	6.6	4.4									
	7+78	8+10	32	36	1152	128	128	13	6	5.3	3.6									
RAMP NO. 8	1+35	6+70	535	26	13910	1546	1546	155	77	64.4	42.9									
	6+70	6+89	19	27	513	57	57	6	3	2.4	1.6									
	6+89	7+15	26	20	520	58	58	6	3	2.4	1.6									
RAMP NO. 9	2+35	8+62	627	24	15048	1672	1672	167	84	69.7	46.4									
	8+62	9+10	48	36	1728	192	192	19	10	8.0	5.3									
RAMP NO. 10	0+90	5+09	419	26	10894	1210	1210	121	61	50.4	33.6									
	5+09	5+77	68	34	2312	257	257	26	13	10.7	7.1									
	5+77	6+37	60	24	1440	160	160	16	8	6.7	4.4									
	6+37	8+14	177	26	4602	511	511	51	26	21.3	14.2									
	8+14	8+34	20	27	540	60	60	6	3	2.5	1.7									
	8+34	8+60	26	20	520	58	58	6	3	2.4	1.6									
RAMP NO. 10A	5+78	6+90	112	18	2016	224	224	22	11	9.3	6.2									
	6+90	7+45	55	32	1760	196	196	20	10	8.1	5.4									
RAMP NO. 11	2+25	8+18	593	32	18976	2108	2108	211	105	87.9	58.6									
	8+18	8+69	51	28	1428	159	159	16	8	6.6	4.4									
	8+69	8+94	25	28	700	78	78	8	4	3.2	2.2									
RAMP NO. 12	2+71	4+06	135	32	4320	480	480	48	24	20.0	13.3									
	4+06	5+27	121	49	5929	659	659	66	33	27.4	18.3									
	5+27	7+19	192	32	6144	683	683	68	34	28.4	19.0									
	7+19	7+69	50	28	1400	156	156	16	8	6.5	4.3									
	7+69	7+90	21	36	756	84	84	8	4	3.5	2.3									
RAMP NO. 12A	5+24	5+53	29	33	957	106	106	11	5	4.4	3.0									
	5+53	7+79	226	32	7232	804	804	80	40	33.5	22.3									
	7+79	8+29	50	28	1400	156	156	16	8	6.5	4.3									
	8+29	8+69	40	36	1440	160	160	16	8	6.7	4.4									
RAMP NO. 13	1+70	7+57	82	26	2132	237	237	24	12	9.9	6.6									
	7+57	8+02	82	26	2132	237	237	24	12	9.9	6.6									
RAMP NO. 14	2+02	3+75	173	24	4152	461	461	46	23	19.2	12.8									
	3+75	4+68	93	39	3627	403	403	40	20	16.8	11.2									
	4+68	6+19	151	26	3926	436	436	44	22	18.2	12.1									
	6+19	7+65	146	24	3504	389	389	39	19	16.2	10.8									
	7+65	7+91	26	24	624	69	69	7	3	2.9	1.9									
<b>TOTALS TO GENERAL SUMMARY</b>							<b>24396</b>		<b>2410</b>	<b>1205</b>	<b>1004</b>	<b>669</b>								

PAVEMENT SUBSUMMARY

CUY - 90.16.19

ROUTE	LOCATIONS - FROM PLAN RECORD						254		254	407	407	446	448	448	
	STATION		LENGTH FEET	AVERAGE WIDTH FEET	PAVEMENT AREA SQ. FT. SQ. YD.		PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN ( 2-1/2" ) SQ. YD.	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, ( 2-1/2" ) SQ. YD.	TACK COAT RATE = 0.10 GAL./SQ.YD.	TACK COAT FOR INTERMEDIATE COURSE @ 0.05 GAL./SQ.YD.	1-1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1H, AS PER PLAN CU. YD.	1" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, PG64-28 (VAR.) CU. YD.	2" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG64-28 CU. YD.		
	FROM	TO													
RAMP NO. 14A	4+66	5+43	77	24	1848	205	205		21	10	8.6	5.7			
	5+43	6+77	134	19	2546	283	283		28	14	11.8	7.9			
	6+77	6+93	16	14	224	25	25		2	1	1.0	0.7			
RAMP NO. 15	1+88	3+26	138	22	3036	337	337		34	17	14.1	9.4			
	3+26	7+46	420	24	10080	1120	1120		112	56	46.7	31.1			
	7+46	8+08	62	46	2852	317	317		32	16	13.2	8.8			
RAMP NO. 17	0+98	3+7	239	19	4541	505	505		50	25	21.0	14.0			
	3+37	8+37	500	24	12000	1333	1333		133	67	55.6	37.0			
	8+37	8+82	45	41	1845	205	205		21	10	8.5	5.7			
RAMP NO. 18	1+62	6+50	488	24	11712	1301	1301		130	65	54.2	36.1			
	6+50	7+48	98	36	3528	392	392		39	20	16.3	10.9			
	7+48	7+85	37	25	925	103	103		10	5	4.3	2.9			
	7+85	9+39	154	24	3696	411	411		41	21	17.1	11.4			
RAMP NO. 18 CON.	7+48	8+03	55	19.5	1073	119	119		12	6	5.0	3.3			
	8+03	8+50	47	17	799	89	89		9	4	3.7	2.5			
	8+50	8+60	10	27	270	30	30		3	2	1.2	0.8			
LANE A	0+20	0+69	49	48	2352	261	261		26	13	10.9	7.3			
	0+69	0+93	24	38	912	101	101		10	5	4.2	2.8			
	0+93	1+97	104	43	4472	497	497		50	25	20.7	13.8			
	1+97	2+17	20	22	440	49	49		5	2	2.0	1.4			
	2+17	2+93	76	25	1900	211	211		21	11	8.8	5.9			
	2+93	6+05	312	24	7488	832	832		83	42	34.7	23.1			
	6+05	7+44	139	25	3475	386	386		39	19	16.1	10.7			
	7+44	7+98	54	30	1620	180	180		18	9	7.5	5.0			
LANE B	0+20	2+40	220	18	3960	440	440		44	22	18.3	12.2			
	2+40	2+60	20	21	420	47	47		5	2	1.9	1.3			
	2+60	4+22	162	24	3888	432	432		43	22	18.0	12.0			
	4+22	4+42	20	21	420	47	47		5	2	1.9	1.3			
	4+42	5+45	103	16	1648	183	183		18	9	7.6	5.1			
RAMP W-1	1+97	3+21	124	25	3100	344	344		34	17	14.4	9.6			
	3+21	3+41	20	27	540	60	60		6	3	2.5	1.7			
	3+41	5+77	236	30	7080	787	787		79	39	32.8	21.9			
	5+77	6+77	100	32	3200	356	356		36	18	14.8	9.9			
RAMP W-2	5+22	6+11	89	46	4094	455	455		45	23	19.0	12.6			
	6+11	6+93	82	29	2378	264	264		26	13	11.0	7.3			
	6+93	7+13	20	31	620	69	69		7	3	2.9	1.9			
	7+13	8+77	164	34	5576	620	620		62	31	25.8	17.2			
	8+77	8+97	20	31	620	69	69		7	3	2.9	1.9			
	8+97	9+55	58	42	2436	271	271		27	14	11.3	7.5			
	9+55	10+96	141	38	5358	595	595		60	30	24.8	16.5			
	10+96	11+65	69	42	2898	322	322		32	16	13.4	8.9			
	11+65	12+08	43	20	860	96	96		10	5	4.0	2.7			
	11+65	11+98	33	24	792	88	88		9	4	3.7	2.4			
RAMP W-3	2+13	2+95	82	26	2132	237	237		24	12	9.9	6.6			
	2+95	4+40	145	25	3625	403	403		40	20	16.8	11.2			
	4+40	4+97	57	36	2052	228	228		23	11	9.5	6.3			
	4+97	5+72	75	19	1425	158	158		16	8	6.6	4.4			
	5+72	5+30	33	19	627	70	70		7	3	2.9	1.9			
<b>TOTALS TO GENERAL SUMMARY</b>							<b>15931</b>		<b>1573</b>	<b>786</b>	<b>655</b>	<b>437</b>			

NORMAL PROJECT PARTICIPATION

I:\PROJECTS\PID8506\dgn\81506t.sa.dgn 11-OCT-2007 1:39PM ek:allo

STATION		LENGTH	646										621				
			EDGE LINE, AS PER PLAN (WHITE)	EDGE LINE, AS PER PLAN (YELLOW)	LANE LINE, 6", AS PER PLAN	CHANNELIZING LINE, AS PER PLAN	STOP LINE, AS PER PLAN	CROSSWALK LINE, AS PER PLAN	LANE ARROW, AS PER PLAN	WORD ON PAVEMENT, 96", AS PER PLAN	6" DOTTED LINE, AS PER PLAN	CENTER LINE, AS PER PLAN	RPM, WHITE	RPM, WHITE / RED	RPM, YELLOW / RED		
FROM	TO	FEET	FEET	FEET	FEET	FEET	FEET	FEET	EACH	EACH	FEET	FEET			EACH	EACH	EACH
<i>IR-90 EASTBOUND</i>																	
54+90	56+44	154	154	154	462										6		
56+44	57+07	63	63	63	189	126									3	5	
57+07	58+82	175	175	175	525										6		
58+82	61+20	238	238	238	476	238									12		
61+20	62+50	130	130	130	260	260									4	7	
62+50	71+82	932	932	932	1864										24		
71+82	72+77	95	190	95	190	95									2	2	
72+77	73+57	80	80	80	160	80									2	3	
73+57	74+37	80	80	80	240										3		
74+37	76+55	218	218	218	436						218				9		
76+55	78+40	185	185	185	555										6		
78+40	78+85	45	45	45	135	90									3	5	
78+85	83+09.31 BK-	424	424	424	848										10		
98+00 AH	103+63	563	563	563	1126										14		
103+63	104+67	104	104	104	208	208									2	7	
104+67	112+55	788	788	788	1576										20		
112+55	113+27	72	144	72	144	72									2	3	
113+27	113+90	63	63	63	126	63									2	2	
113+90	115+50	160	160	160	480										6		
115+50	118+50	300	300	300	600						300				9		
118+50	120+10	160	160	160	480										6		
120+10	121+05	95	95	95	190	95									2	3	
121+05	122+20	115	115	115	230	230									4	7	
122+20	125+45	325	325	325	650										8		
125+45	126+00	55	110	55	110	55									2	2	
126+00	126+75	75	75	75	150	75									2	2	
126+75	127+09.87 BK-	35	35	35	70						35				3		
126+61.13 AH	132+00	539	539	539	1078						539				18		
132+00	133+75	175	175	175	350										4		
133+75	136+00	225	450	225	450	225									6	6	
136+00	136+80	80	80	80	240										3		
136+80	139+14	234	234	234	468						234				9		
139+14	139+94	80	80	80	240										3		
139+94	140+78	84	84	84	252	84									3		
140+78	142+52	174	174	174	348	348									4	9	
142+52	154+35	1183	1183	1183	2366										30		
154+35	157+58	323	646	323	646	323									8	8	
157+58	168+07	1049	1049	1049	3147										39		
168+07	168+67	60	60	60	180	120									3	5	
168+67	173+15	448	448	448	1344										18		
<i>IR-90 WESTBOUND</i>																	
54+90	58+36	346	346	346	692										8		
58+36	58+76	40	40	40	120										3		
58+76	59+06	30	60	30	60	60										2	
<b>SHEET TOTALS</b>			11599	10799	24461	2847					1326				331	78	

CALCULATED  
 EMK  
 CHECKED  
 LDH  
**PAVEMENT MARKING SUB-SUMMARY**  
**CUY - 90 - 16.19**  
 28  
 35

I:\PROJECTS\PID8506\dgn\81506+sa.dgn 11-OCT-2007 1:40PM ek:clllo

STATION		LENGTH	646										621				
			EDGE LINE, AS PER PLAN (WHITE)	EDGE LINE, AS PER PLAN (YELLOW)	LANE LINE, 6", AS PER PLAN	CHANNELIZING LINE, AS PER PLAN	STOP LINE, AS PER PLAN	CROSSWALK LINE, AS PER PLAN	LANE ARROW, AS PER PLAN	WORD ON PAVEMENT, 96", AS PER PLAN	6" DOTTED LINE, AS PER PLAN	CENTER LINE, AS PER PLAN	RPM, WHITE	RPM, WHITE / RED	RPM, YELLOW / RED		
FROM	TO	FEET	FEET	FEET	FEET	FEET	FEET	FEET	EACH	EACH	FEET	FEET			EACH	EACH	EACH
<b>1R-90 WESTBOUND</b>																	
59+06	73+24	1418	1418	1418	2836										36		
73+24	74+25	101	101	101	202	303									2	7	
74+25	83+09.31 BK-	884	884	884	1768										22		
98+00 AH	108+20	1020	1020	1020	2040										26		
108+20	113+70	550	550	550	1100						550				21		
113+70	114+10	40	40	40	120										3		
114+10	115+00	90	180	90	180	90									2	2	
115+00	117+43	243	243	243	486										6		
117+43	118+28	85	85	85	170	170									2	5	
118+28	119+00	72	72	72	144	72									2	2	
119+00	121+40	240	240	240	720										9		
121+40	125+39	399	399	399	798						399				15		
125+39	127+09.87 BK-	171	171	171	513										6		
126+61.13 AH	127+30	69	69	69	207										3		
127+30	128+20	90	180	90	180	90									2	3	
128+20	131+80	360	360	360	720										8		
131+80	133+63	183	183	183	366	366									4	9	
133+63	134+50	87	87	87	174	87									2	2	
134+50	135+70	120	120	120	360										6		
135+70	137+80	210	210	210	420						210				9		
137+80	139+00	120	120	120	360										6		
139+00	140+60	160	320	160	320	160									4	5	
140+60	153+80	1320	1320	1320	2640										34		
153+80	155+25	145	145	145	290	290									4	7	
155+25	158+50	325	325	325	650	325									8	8	
158+50	167+15	865	865	865	2595										33		
167+15	167+50	35	70	35	105	35									3	2	
167+50	171+64	414	414	414	1242										15		
171+64	172+64	100	100	100	200	100									2	3	
172+64	173+15	51	102	51	102	51									2	2	
<b>LANE A</b>																	
	0+28								54								
0+19	0+46	25				81											
1+50	1+97	47				94											
1+97	2+77	80	80	80													
2+77	7+44	467	467														
	7+84							24									
	7+91								76								
<b>LANE B</b>																	
	0+37								68								
2+40	5+45	305	305														
<b>RAMP W-1</b>																	
	0+28								24								
0+50	3+00	250			250										4		
3+00	7+45	445	455	455													
<b>SHEET TOTALS</b>			11700	10502	22258	2314	24	222			1159				301	57	6

CALCULATED  
EMK  
CHECKED  
LDH

PAVEMENT MARKING SUB-SUMMARY

CUY-90-16.19

29  
35

I:\PROJECTS\PID8506\dgn\81506+sa.dgn 11-OCT-2007 1:41PM ekallio

STATION		LENGTH FEET	646										621				
			EDGE LINE, AS PER PLAN (WHITE) FEET	EDGE LINE, AS PER PLAN (YELLOW) FEET	LANE LINE, 6", AS PER PLAN FEET	CHANNELIZING LINE, AS PER PLAN FEET	STOP LINE, AS PER PLAN FEET	CROSSWALK LINE, AS PER PLAN FEET	LANE ARROW, AS PER PLAN EACH	WORD ON PAVEMENT, 96", AS PER PLAN EACH	6" DOTTED LINE, AS PER PLAN FEET	CENTER LINE, AS PER PLAN FEET	RPM, WHITE EACH	RPM, WHITE / RED EACH	RPM, YELLOW / RED EACH		
<b>RAMP W-2</b>																	
5+22	5+56	34	34	34													1
5+56	6+11	55	55	55		110										3	1
6+11	8+97	286	286	286													3
8+97	9+37	40	40		40												1
9+37	10+48	111			222										2		
10+48	11+80	132		39		264			6	3			23			8	
	11+82							24									
	11+89									100							
<b>RAMP W-3</b>																	
2+15	4+90	275	275	275													4
4+90	5+00	10	10	10		20										3	
5+00	5+35	35	35	35													1
	5+37							49									
	5+44									112							
<b>RAMP E-1</b>																	
1+25	1+44	19	19														
1+44	1+62	18	18			36										3	
1+62	2+77	115	115	115													2
<b>RAMP E-3</b>																	
0+50	0+63	13	13														
0+63	0+86	23	23			46										2	
0+86	6+49	563	563	563													7
<b>RAMP E-3A</b>																	
	0+64									64							
0+67	2+03	136	136	136													2
<b>RAMP E-4</b>																	
2+62	9+20	658	658	658													8
<b>RAMP E-5</b>																	
0+19	0+90	71	71			71										3	
0+90	1+25	35	35			105										4	
1+25	1+45	20	20	20		20										1	1
1+45	2+50	105	105	105		210										7	1
2+50	9+60	710	710	710													9
9+60	10+07	47	94	47		47										1	1
10+07	12+25	118	118	118													1
<b>RAMP E-6</b>																	
1+93	5+13	320	320	320													4
5+13	5+68	55	55	55		110										3	1
5+68	10+38	470	470	470													6
<b>RAMP E-10</b>																	
0+00	0+17	17	17	17													
0+17	2+73	256	256			256										6	
2+73	8+19	546	546	546	546											7	7
<b>SHEET TOTALS</b>			5097	4614	808	1295	73	276	6	3		23		10	44	60	

CALCULATED  
 EMK  
 CHECKED  
 LDH  
**PAVEMENT MARKING SUB-SUMMARY**  
**CUY - 90 - 16.19**  
 30  
 35

I:\PROJECTS\PID8506\dgn\81506+sa.dgn 11-OCT-2007 1:42PM ekollio

STATION		LENGTH	646										621			
			EDGE LINE, AS PER PLAN (WHITE)	EDGE LINE, AS PER PLAN (YELLOW)	LANE LINE, 6", AS PER PLAN	CHANNELIZING LINE, AS PER PLAN (* -YELLOW)	STOP LINE, AS PER PLAN	CROSSWALK LINE, AS PER PLAN	LANE ARROW, AS PER PLAN	WORD ON PAVEMENT, 96", AS PER PLAN	6" DOTTED LINE, AS PER PLAN	CENTER LINE, AS PER PLAN	TRANSVERSE/ DIAGONAL LINE, AS PER PLAN	RPM, WHITE	RPM, WHITE/RED	RPM, YELLOW/RED
FROM	TO	FEET	FEET	FEET	FEET	FEET	FEET	FEET	EACH	EACH	FEET	FEET	FEET	EACH	EACH	EACH
<b>RAMP E-11</b>																
1+95	4+08	213	213	213												3
4+08	4+88	80	80	80	80									1		1
4+88	5+95	107	107	107		107			2	1					4	1
5+95	6+10	15	15	15		45									3	1
6+10	6+49	39	39	39		39			2						1	1
	6+51							24								
	6+58									56						
<b>RAMP E-11A</b>																
6+10	6+77	67	67	67												1
	6+80									84	1					
<b>RAMP E-13</b>																
	0+34							62		124						
0+41	1+76	135	135	135	135									3		2
1+76	4+96	320	320	320		* 640					320		295			5
4+96	5+76	80	80	80		* 160							110			2
5+76	9+70	394	394	394												5
<b>RAMP NO. 3</b>																
2+45	4+52	207	207	207												2
4+52	6+52	200	200	200	200									3		3
6+52	8+80	228	228	228		228			4	2					6	3
	8+82							60								
	8+97									122						
<b>RAMP NO. 4</b>																
1+35	8+42	707	707	707												9
	8+45									110						
<b>RAMP NO. 5</b>																
0+90	6+22	532	532	532												7
<b>RAMP NO. 6</b>																
1+57	3+67	210	210	210												3
3+67	7+22	355	355	355		355			6	4					9	4
	7+24							31								
	7+31									186						
<b>RAMP NO. 7</b>																
2+16	5+16	300	300	300												4
5+16	5+96	80	80	80	80									1		1
5+96	7+89	193	193	193		193			4	2					5	3
	7+91							29								
	7+99									68						
<b>RAMP NO. 8</b>																
1+32	6+91	559	559	559												7
	6+94									64						
6+90	7+00					20										
<b>RAMP NO. 9</b>																
2+25	8+97	672	672	672												9
	9+00									82						
<b>SHEET TOTALS</b>			5693	5293	495	1849	144	896	19	9	320		405	8	28	77

CALCULATED  
 EMK  
 CHECKED  
 LDH  
**PAVEMENT MARKING SUB-SUMMARY**  
**CUY-90-16.19**  
 31  
 35



I:\PROJECTS\PD8506\dgn\81506+sa.dgn 11-OCT-2007 1:44PM ek:allo

STATION		LENGTH FEET	646										621				
			EDGE LINE, AS PER PLAN (WHITE) FEET	EDGE LINE, AS PER PLAN (YELLOW) FEET	LANE LINE, 6", AS PER PLAN FEET	CHANNELIZING LINE, AS PER PLAN (* -YELLOW) FEET	STOP LINE, AS PER PLAN FEET	CROSSWALK LINE, AS PER PLAN FEET	LANE ARROW, AS PER PLAN EACH	WORD ON PAVEMENT, 96", AS PER PLAN EACH	6" DOTTED LINE, AS PER PLAN FEET	CENTER LINE, AS PER PLAN FEET	TRANSVERSE/ DIAGONAL LINE, AS PER PLAN FEET	RPM, WHITE EACH	RPM, WHITE/RED EACH	RPM, YELLOW/RED EACH	
<b>RAMP NO. 10</b>																	
0+89	5+70	481	481	481													6
5+70	5+80	10	20	10		10										3	
5+80	7+37	157	157	157													2
<b>RAMP NO. 10A</b>																	
5+77	8+36	259	259	259													3
	8+41									68							
8+35	8+46					40											
<b>RAMP NO. 11</b>																	
2+70	6+36	366	366	366													5
6+36	8+67	231	231	231		231			4	1						6	3
	8+69							24									
	8+92									170							
<b>RAMP NO. 12</b>																	
2+58	4+33	175	175	175													2
4+33	4+87	54	54	54	54									/			/
4+87	5+39	52	52	52	52	104								/	5		/
5+39	5+93	54	54	54	54									/			/
5+93	7+65	172	172	172		172			4	2					5		2
	7+67							25									
	7+74									54							
<b>RAMP NO. 12A</b>																	
5+39	7+32	193	193	193													3
7+32	8+52	120	120	120		120										4	2
	8+54							30									
	8+61									82							
<b>RAMP NO. 13</b>																	
1+58	2+82	124	124	124													2
2+82	6+30	348	348				* 696								186		9
6+44	7+88	144											144				
	7+90							12									
	7+97									66							
<b>RAMP NO. 14</b>																	
2+08	3+84	176	176	176													3
3+84	4+47	63	63	63	63										2		/
4+47	4+91	44	44	44	44	88								/	3		
4+91	6+24	133	133	133	133									2			2
6+24	7+68	144	144	144		144			4	2				2		4	2
	7+72									78							
<b>RAMP NO. 14A</b>																	
5+00	6+68	168	168	168													2
	6+72									74							
<b>RAMP NO. 15</b>																	
2+12	7+92	580	580	580													7
	7+95									98							
<b>SHEET TOTALS</b>			4114	3756	400	1605	91	690	12	5		144	186	8	30	59	

CALCULATED  
 EMK  
 CHECKED  
 LDH  
**PAVEMENT MARKING SUB-SUMMARY**  
**CUY - 90 - 16.19**  
 32  
 35

I:\PROJECTS\PD8506\dgn\81506+sa.dgn 11-OCT-2007 1:51PM ekallio

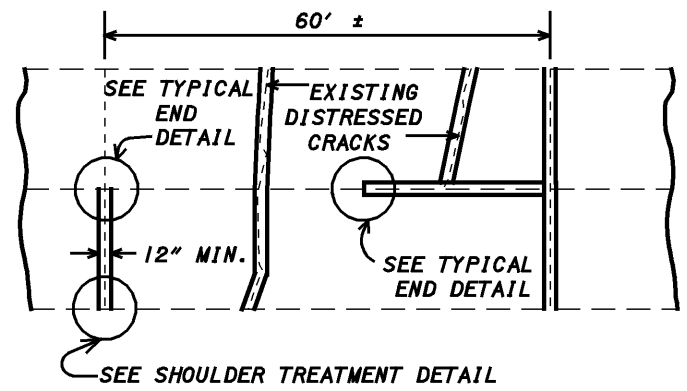
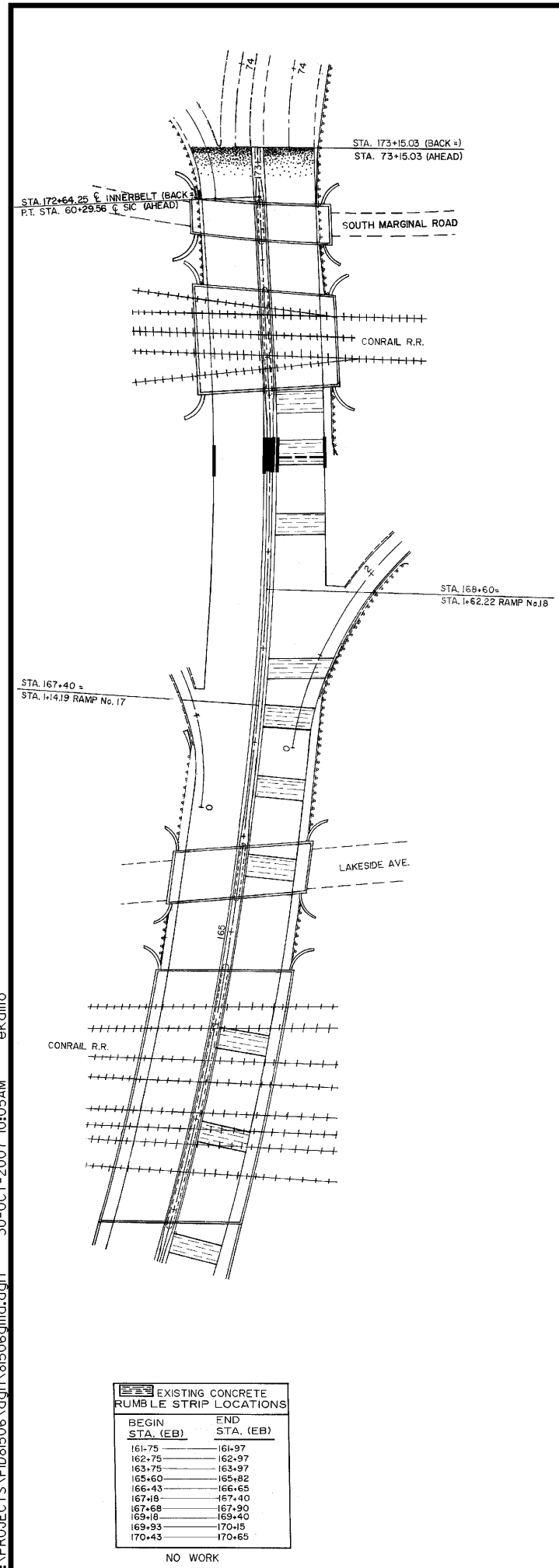
STATION		LENGTH FEET	646										621					
			EDGE LINE, AS PER PLAN (WHITE) FEET	EDGE LINE, AS PER PLAN (YELLOW) FEET	LANE LINE, 6", AS PER PLAN FEET	CHANNELIZING LINE, AS PER PLAN (* -YELLOW) FEET	STOP LINE, AS PER PLAN FEET	CROSSWALK LINE, AS PER PLAN FEET	LANE ARROW, AS PER PLAN EACH	WORD ON PAVEMENT, 96", AS PER PLAN EACH	6" DOTTED LINE, AS PER PLAN FEET	CENTER LINE, AS PER PLAN FEET	TRANSVERSE/ DIAGONAL LINE, AS PER PLAN FEET	RPM, WHITE EACH	RPM, WHITE/RED EACH	RPM, YELLOW/RED EACH		
FROM	TO	FEET	FEET	FEET	FEET	FEET	FEET	FEET	EACH	EACH	FEET	FEET	FEET		EACH	EACH	EACH	
<i>RAMP NO. 17</i>																		
	1+12																	
1+25	8+94	769	769	769				15										10
<i>RAMP NO. 18</i>																		
1+73	7+20	547	547	547														7
7+20	7+47	27	27	27		54										3		1
7+47	9+50	203	203	203														3
<i>RAMP NO. 18A</i>																		
7+47	8+51	104	104	104														2
	8+53							16										
<b>SHEET TOTALS</b>			1650	1650		54	31										3	23
<b>TOTALS FROM SHEET 28</b>			11599	10799	24461	2847					1326				331	78		
<b>TOTALS FROM SHEET 29</b>			11700	10502	22258	2314	24	222			1159				301	57		6
<b>TOTALS FROM SHEET 30</b>			5097	4614	808	1295	73	276	6	3		23			10	44		60
<b>TOTALS FROM SHEET 31</b>			5693	5293	495	1849	144	896	19	9	320		405		8	28		77
<b>TOTALS FROM SHEET 32</b>			4114	3756	400	1605	91	690	12	5		144	186		8	30		59
<b>TOTALS TO GENERAL SUMMARY</b>			39853	36614	48422	9964	363	2084	37	17	2805	167	591	658	240		225	
			14.48 MI.		9.17 MI.						0.03 MI.				1123			

CALCULATED  
 EMK  
 CHECKED  
 LDH  
**PAVEMENT MARKING SUB-SUMMARY**  
**CUY-90-16.19**  
 33  
 35

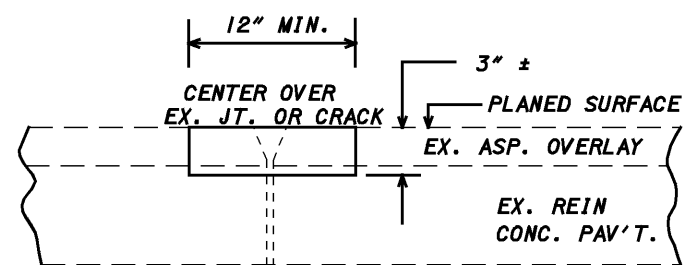




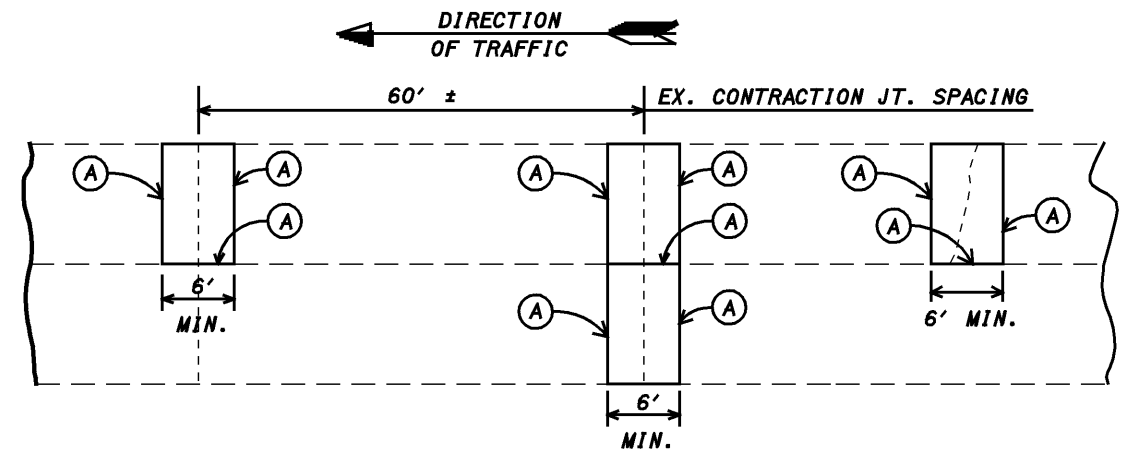
I:\PROJECTS\PID81506\dgn\81506gma.dgn 30-OCT-2007 10:05AM ekallo



**PARTIAL DEPTH JOINT OR CRACK REPAIR**

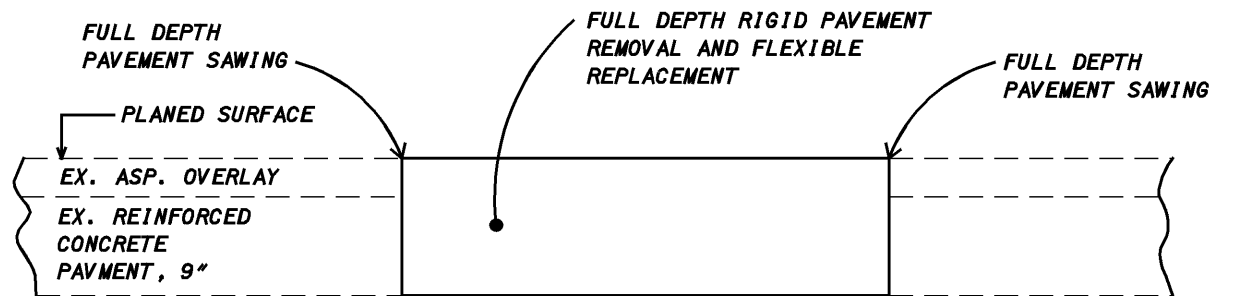


**ITEM 251 - PARTIAL DEPTH PAV'T REPAIR**

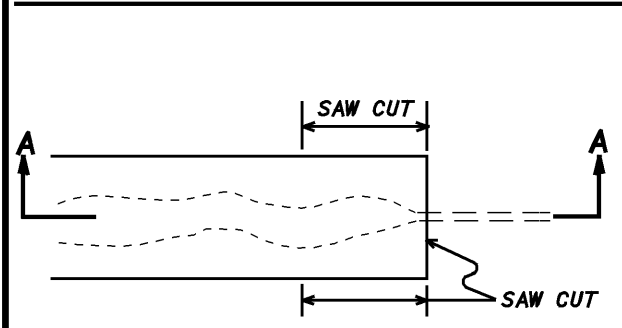


**TYPICAL REPAIRS**

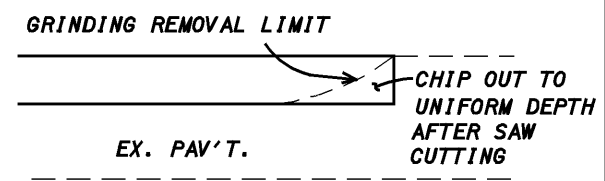
Ⓐ ITEM 252 - FULL DEPTH PAVEMENT SAWING



**ITEM 252 - FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT**



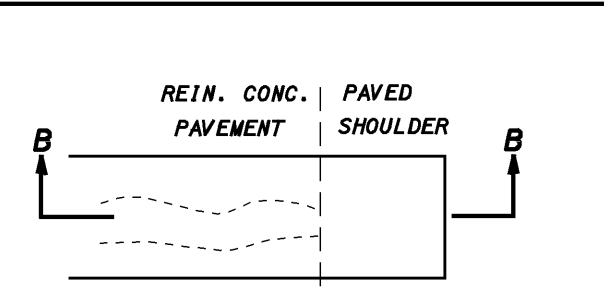
**DISTRESSED JOINT-PLAN VIEW**



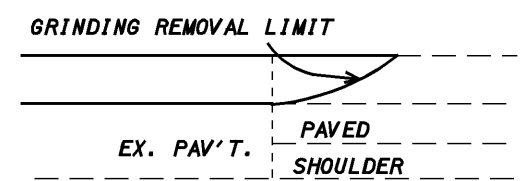
**SECTION A-A**

**TYPICAL END DETAIL**

NO SEPARATE PAYMENT WILL BE MADE FOR THESE SAW CUTS



**DISTRESSED JOINT-PLAN VIEW**



**SECTION B-B**

**SHOULDER TREATMENT DETAIL**

MEASURED QUANTITY SHALL NOT INCLUDE THE PAVED SHOULDER AREA

ESTIMATED QUANTITIES *		
ITEM 252	FULL DEPTH RIGID PAVEMENT REMOVAL FLEXIBLE REPLACEMENT	600 SQ. YD.
ITEM 252	FULL DEPTH PAVEMENT SAWING	2,700 FT.

ESTIMATED QUANTITY *	
ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN A	250 SQ. YD.
ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN B	400 SQ. YD.

SEE GENERAL NOTES ON SHEET 8 FOR ADDITIONAL INFORMATION.

\* QUANTITY ESTIMATES ARE BASED ON VISUAL INSPECTION. AN ADDITIONAL 5% WAS ADDED TO THE REPAIR AREA TO COMPENSATE FOR ANY ROADWAY DETERIORATION THAT MAY OCCUR BETWEEN THE TIME OF PLAN PREPARATION AND ACTUAL CONSTRUCTION.

VISUAL SURVEY DATE - 09/13/2007

CALCULATED  
 ENK  
 CHECKED  
 LDH  
 MISCELLANEOUS DETAILS  
 CUY-90-16.19  
 35  
 35