STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS** 

PLANS FOR PROPOSED HIGHWAY IMPROVEMENT

F.A.I. ROUTE 74 (I-74 EASTBOUND EXIT RAMP) SECTION 92(11,12,12-1)RS-1,I **VERMILION COUNTY** PROJECT H S -074-6(146)216

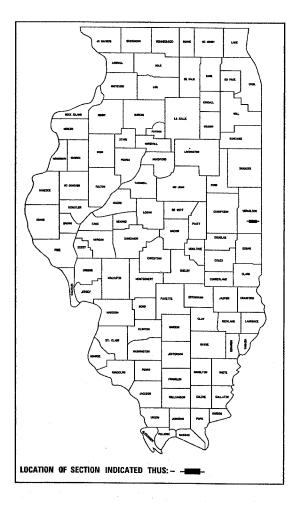
> C-95-024-05 SHOULDER RECONSTRUCTION

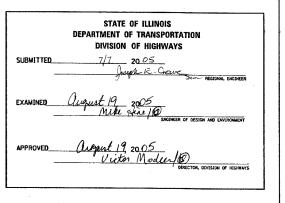
TOTAL LENGTH OF SECTION & PROJECT = 400.0 FEET = 0.076 MILES

NET LENGTH OF SECTION & PROJECT = 400.0 FEET = 0.076 MILES

STRUCTURE NO. 092-0084
PERRYSVILLE AVE. 0VER I-74

CONTRACT # 70477





FOR UNDERGROUND UTILITY LOCATIONS CALL LL FREE J.U.L.I.E. TELEPHONE NO. 1-800-892-0123

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**DESIGN DESIGNATION** 

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3

N.A.

CONTRACT NO. 70477

**DESIGN TRAFFIC** 

**DESIGN PERIOD 20** 

TRAFFIC FACTOR = SN = NA

% SU % MU

4,750 ADT 5,200 ADT 4.925 ADT 165 ADT

110 ADT

F.A.I. ROUTE 74 SECTION 92(11,12,12-1)RS-1,I VERMILION COUNTY

CONTRACT NO. 7047

## **GENERAL NOTES**

G. N. -100

ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

G. N. -1004.01

COARSE AGGREGATE GRADATION CA-10 MAY BE USED WHENEVER COARSE AGGREGATE CA-6 IS SPECIFIED IN THE STANDARD SPECIFICATIONS.

G. N. -105. 07B

EXISTING STATE-OWNED AND MAINTAINED UTILITY LINES ARE SHOWN ON THE PLANS TO INDICATE THEIR PRESENCE AND APPROXIMATE LOCATION. THE CONTRACTOR SHALL SECURE AN APPROVED LOCATING FIRM TO LOCATE STATE-OWNED UTILITIES PRIOR TO COMMENCING ANY EXCAVATION IN THE VICINITY OF THESE LINES IN ACCORDANCE TO SECTION 803 OF THE STANDARD SPECIFICATIONS. SHOULD ANY OF THE LINES BE DAMAGED BY THE CONTRACTOR'S OPERATION, THE CONTRACTOR SHALL REPAIR THEM TO THE SATISFACTION OF THE ENGINEER AT NO COST TO THE STATE.

ALSO THERE MAY BE UTILITIES PRESENT WHICH WERE INSTALLED BY THESTATE BUT ARE MAINTAINED BY OTHERS (CITY, TOWN, ETC.) THE APPROXIMATE LOCATIONS OF THESE LINES ARE ALSO SHOWN ON THE PLANS ALONG WITH THE NAME OF THE MAINTAINING AGENCY. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF THESE LINES WITH THE LOCAL AGENCY PRIOR TO COMMENCING ANY EXCAVATION OR BORING IN THEIR VICINITY. SHOULD THESE LINES BE DAMAGED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR SHALL REPAIR THEM TO THE SATISFACTION OF, AND AT NO COST TO, THE LOCAL AGENCY AND THE STATE.

G. N. -105, 09A

ALL ELEVATIONS SHOWN IN THE PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. (NAVD 88)

G. N. -202

GRADING SHALL BE DONE BY HAND AROUND LIGHT POLES, UTILITY POLES, SIGN POSTS, SHRUBS, TREES OR OTHER NATURAL OR MAN-MADE OBJECTS WHERE SHALLOW FILLS OR CUTS ARE ADJACENT TO THE ITEMS. IT IS THE INTENT THAT THE LIMITS OF CONSTRUCTION BE SUCH AS TO PRESERVE IN THE ORIGINAL STATE AS MUCH AREA OF TEMPORARY EASEMENTS AS POSSIBLE. THE DECISION AS TO ITEMS TO REMAIN IN PLACE SHALL BE AS DIRECTED BY THE ENGINEER.

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

G. N. -250C

SEEDING, CLASS 7 AND MULCH, METHOD 2 IS INCLUDED IN THIS CONTRACT TO SEED NEW EARTH SHOULDERS DURING TIME PERIODS WHEN PERMANENT SEEDING IS NOT ALLOWED. SOME OR ALL OF THE CLASS 7 SEEDING AND MULCH WILL BE DELETED IF IT IS POSSIBLE TO PLACE PERMANENT SEEDING ON EARTH SHOULDERS AT THE TIME OF THEIR COMPLETION.

G.N. -406H MIXTURE REQUIREMENTS THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

LOCATION: I-74 BOWMAN RAMP
MIXTURE USE: BIT SHOULDER
AC/PG: PG 58-22
RAP % (MAX.): 30
DESIGN AIR VOIDS: 3.0 % @ Ndes = 30
MIX COMP (GRADATION): IL 9.5L
FRICTION AGGREGATE: MIX C

G. N. -482

ALL MATERIAL PLACED AS BITUMINOUS SHOULDERS SUPERPAVE SHALL BE COMPACTED TO 94.0-98.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY. THIS REQUIREMENT SHALL APPLY TO BOTH B.A.M. AND IL 9.5L GRADATION SHOULDER MIXES. THIS MAXIMUM DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE OF FOUR TESTS AS IN OTHER OC/QA TESTING. A NUCLEAR GAUGE DENSITY/CORE CORRELATION SHALL BE PERFORMED FOR BOTH THE B.A.M. AND IL 9.5L MIXES USING STANDARD CORRELATION PROCEDURES.

## INDEX OF SHEETS

SHEET NO.	ITEM
1	COVER SHEET
2	GENERAL NOTES, INDEX OF SHEETS & STANDARDS IN THE PLANS
3	SUMMARY OF QUANTITIES
4	PROPOSED TYPICAL CROSS SECTIONS
5	SCHEDULE OF QUANTITIES
6	ROADWAY PLAN SHEET
7	TYPICAL APPLICATION OF PAVEMENT MARKINGS FOR INTERSTATE AND MULTI-LANE DIVIDED HIGHWAYS
8	SPECIAL DETAIL FOR RAMP WORK AREAS
9-13	CROSS SECTIONS

# HIGHWAY STANDARDS IN THE PLANS

280001-02	TEMPORARY EROSION CONTROL SYSTEMS
482011-01	BIT. SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
702001-05	TRAFFIC CONTROL DEVICES
000001-04	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT FIVE

REVIEWED BY:

DISTRICT ENGINEER OF PROGRAM DEVELOPMENT

DATE:

EXAMINED BY:

DISTRICT ENGINEER OF PROJECT IMPLEMENTATION

DISTRICT ENGINEER OF BUREAU OF OPERATIONS

CONTRACT NO. 70477

ECTION COUNTY TOTAL SHEET NO.

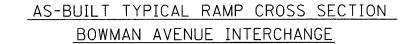
VERMILION 13 3

\*92(11,12,12-1)RS-1,I

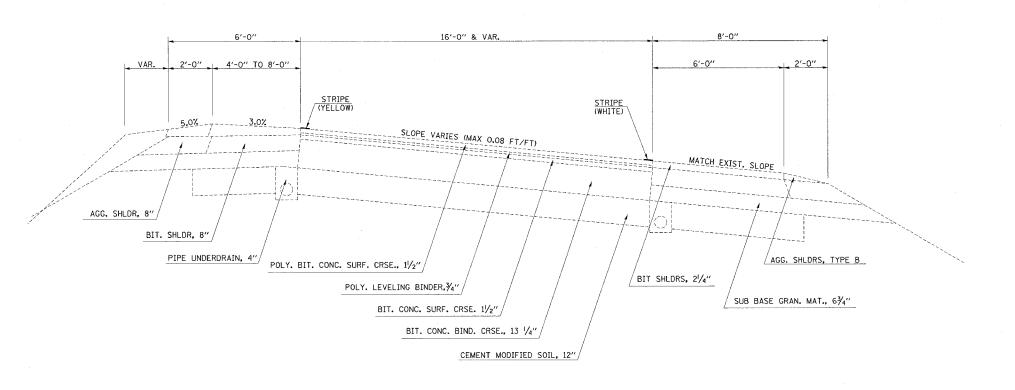
# **SUMMARY OF QUANTITIES**

					URBAN
		LOCATION OF WORK:			FAI 74 EB EXIT RAMP 90% FED. 10% STATE
		CONSTRUCTION TYPE CODE:		TOTAL	SFTY - 2A
CODE NO	ITEM		UNIT	QUANTITY	
20200100	EARTH EXCAVATION		CU YD	5.0	5.0
20400800	FURNISHED EXCAVATION		CU YD	20.0	20.0

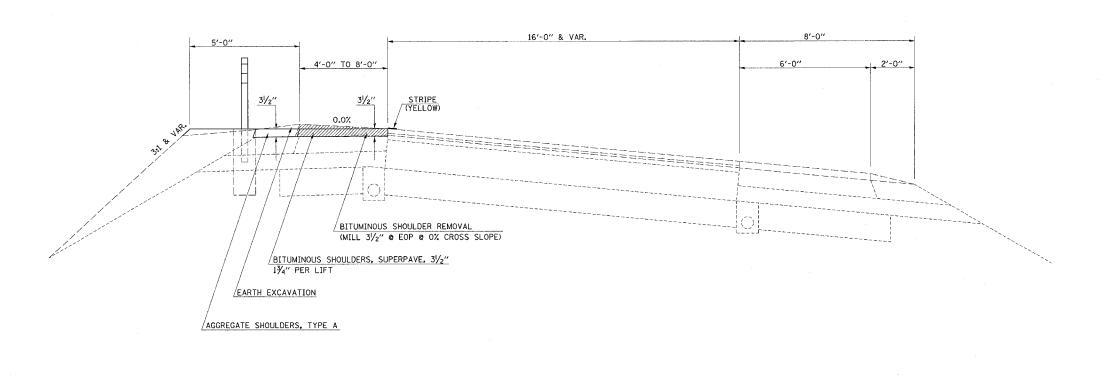
20200 20400 25000200 SEEDING CLASS 2 ACRE 0.1 0.1 25000350 SEEDING CLASS T ACRE 0.1 0.1 25000400 NITROGEN FERTILIZER NUTRIENT POUND 9.0 9.0 25000500 PHOSPHORUS FERTILIZER NUTRIENT 9.0 9.0 25000600 POTASSIUM FERTILIZER NUTRIENT POUND 9.0 9.0 25100115 MULCH METHOD 2 ACRE 0.1 0.1 28000400 PERIMETER EROSION BARRIER FOOT 425.0 425.0 40600100 BITUMINOUS MATERIALS PRIME COAT GAL 20.0 20.0 4400 430 BITUMINOUS SHOULDER REMOVAL SQ YD 197.0 197.0 48100100 AGGREGATE SHOULDERS, TYPE A TON 15.0 15.0 48202 NO BITUMINOUS SHOULDERS SUPERPAVE, 3 1/2 " SQ YD 197.0 197.0 63500120 DELINEATOR REMOVAL EACH 4.0 4.0 67100100 MOBILIZATION L SUM 1.0 1.0 70103815 TRAFFIC CONTROL SURVEILLANCE CAL DA 5.0 5.0 • 78003110 PREFORMED PLASTIC PAVEMENT MARKING TAPE TYPE B - LINE 4" FOOT 400.0 400.0 \* ZOO29650 HIGH TENSION CABLE MEDIAN BARRIER SYSTEM FOOT 371.5 371.5







# PROPOSED TYPICAL RAMP CROSS SECTION BOWMAN AVENUE INTERCHANGE



CONTRACT NO. 70477

# **SCHEDULE OF QUANTITIES**

LOCATION

F.A.I. SECTION COUNTY TOTAL SHEET NO. 74 • VERMILION 13 5 •92(11,12,12-1)RS-1,I

PREF PL PM TAPE TB LINE 4

LT. STA. 11+00 - 15+00

LOCATION FOOT

BITUMINOUS SHOULDER SUPERPAVE 3 1/2"

LOCATION

SQ. YD.

LT. 11+39.66 - LT. 14+63.79

197.0

BITUMINOUS SHOULDER REMOVAL

LOCATION

SQ. YD. 197.0

LT. 11+39.66 - LT. 14+63.79

AGGREGATE SHOULDERS, TYPE A

LT. 11+39.66 - LT. 14+63.79

EARTH EXC ADJ FOR BALANCE (-) FILL CU YD (2) EARTH

STA. 11+00 TO 15+00 3.0 2.3 22.0 -19.75 TOTAL 25.0 20.0

EMBANKMENT

5.0

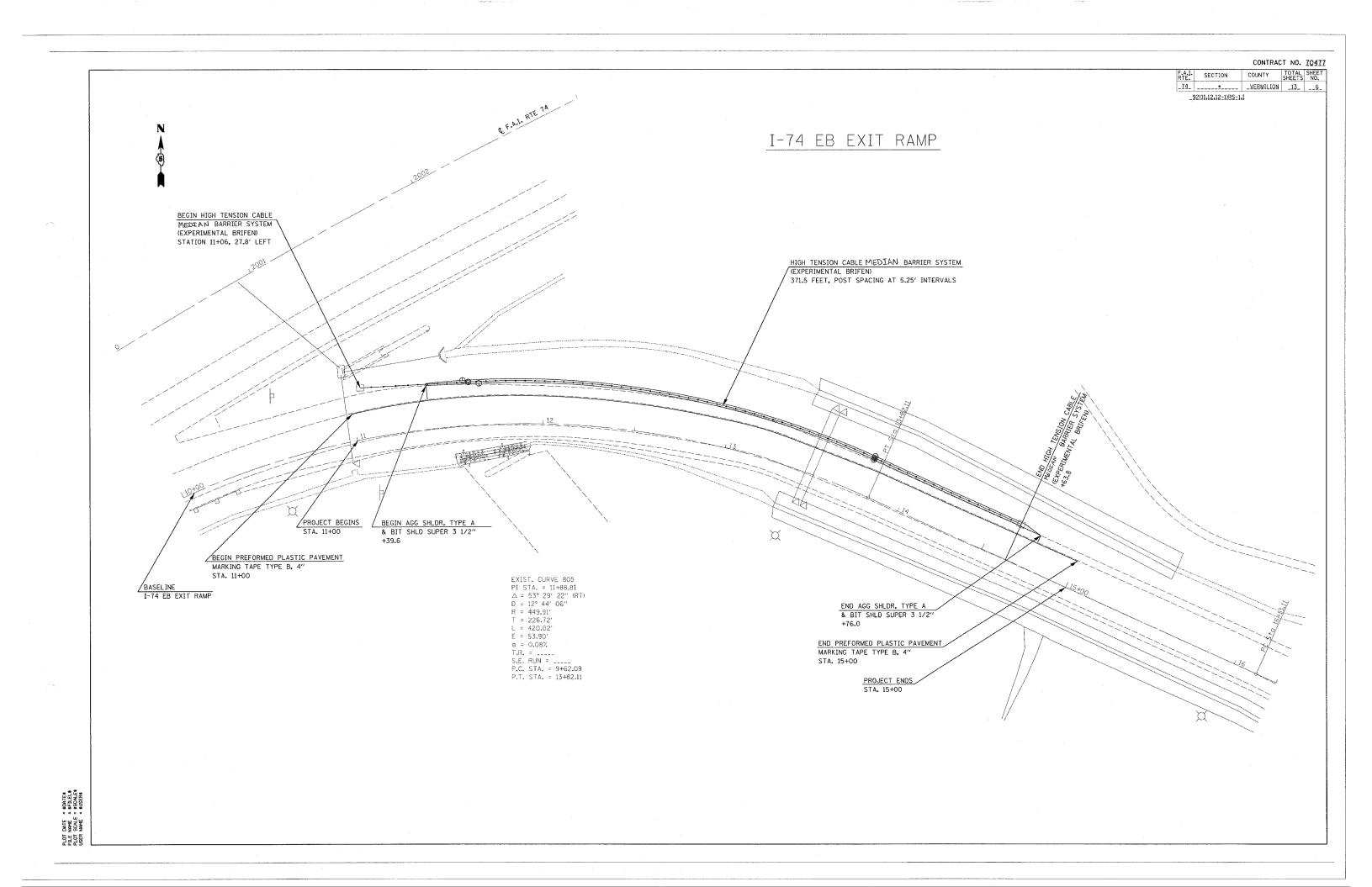
EXCAVATION

NOTES: 1- NO SHRINKAGE FACTOR APPLIED TO THE EMBANKMENT QUANTITY 2- A 25% EXPANSION FACTOR WAS USED IN COMPUTING BORROW QUANTITY

5 CUYDS EARTH EXCAVATION 25 CUYDS FURNISHED EXCAVATION

ITEM	QUANTITY	UNIT
SEEDING CLASS 2	0.1	ACRE
SEEDING CLASS 7	0.1	ACRE
NITROGEN FERTILIZER NUTRIENT	9.0	POUND
PHOSPHOROUS FERTILIZER NUTRIENT	9.0	POUND
POTASSIUM FERTILIZER NUTRIENT	9.0	POUND
MULCH METHOD 2	0.1	ACRE

SEEDING, FERTILIZER, AND MULCH METHOD QUANTITITES WERE CALULATED FROM LOCATIONS OFF OF THE CROSS SECTIONS.

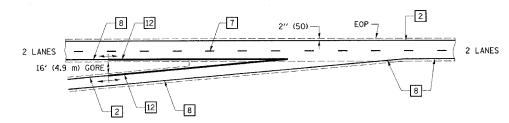


COUNTY TOTAL SHEET NO.

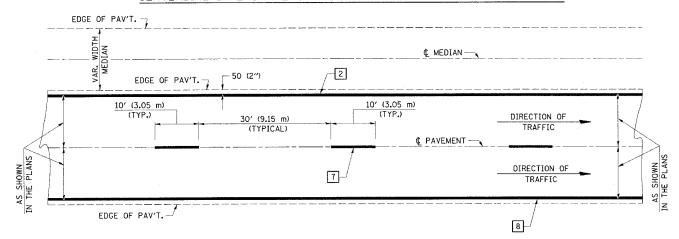
F.A.I. SECTION
74 \* VERMILION 13 7 \*92(11,12,12-1)RS-1,I

# TYPICAL APPLICATION OF PAVEMENT MARKINGS FOR INTERSTATE AND MULTI-LANE DIVIDED HIGHWAYS

#### TYPICAL ENTRANCE RAMP TERMINAL



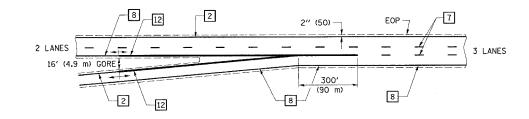
#### CENTERLINE INTERSTATE OR MULTI-LANE TWO WAY DIVIDED HIGHWAY



NOTE: PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE. NOTE: SEE ARTICLES 780.04 & 781.03 FOR LOCATION OF STRIPES AND MARKERS RELATIVE TO EDGES OR JOINTS.

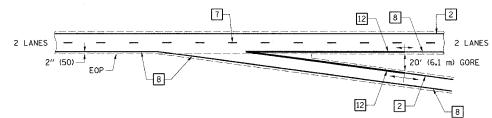
FOR RAISED REFLECTIVE PAVEMENT MARKERS, REFER TO STANDARD 781001.

# ENTRANCE RAMP TERMINAL with EXCLUSIVE LANE

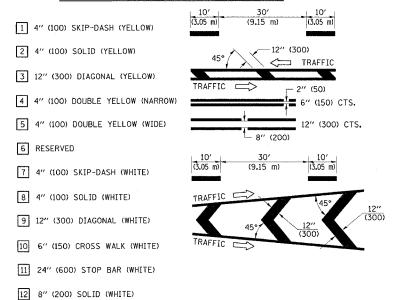


REVISIONS NAME DATE DESIGNED P.E.E. 03/89 DATE NAME ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) 08/97 CHECKED C.T.D. 04/89 D.L.P. UNLESS OTHERWISE SHOWN. CADD NO. 08/04

#### TYPICAL EXIT RAMP TERMINAL



#### TYPICAL PAVEMENT MARKING LEGEND

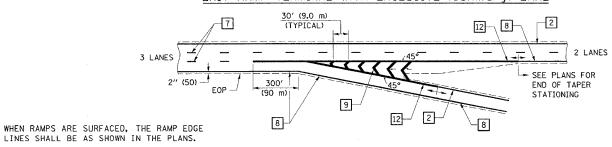


13 4" (100) LANE LINE EXTENSIONS (WHITE)

14 RESERVED

#### EXIT RAMP TERMINAL with EXCLUSIVE (auxiliary) LANE

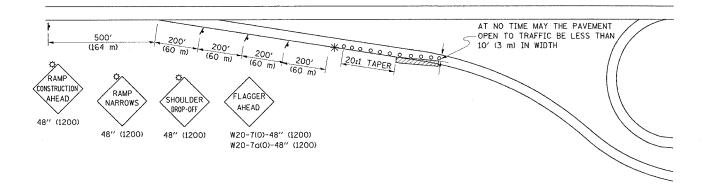
\2' TYP. (1.22 m)



\*92(11.12,12-1)RS-1.I

# SPECIAL DETAIL FOR RAMP WORK AREAS

TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES



#### SYMBOLS

- o TYPE I OR II BARRICADES OR DRUMS @ 50' (15 m) CTS.
- \* FLAGGER PLACED AS DIRECTED BY THE ENGINEER DURING DAYTIME CONSTRUCTION
- F SIGN ON PORTABLE OR PERMANENT SUPPORT

ZZZ WORK AREA

#### GENERAL NOTES

- CONSTRUCTION OPERATIONS SHALL BE CONFINED TO AN AREA NARROW ENOUGH THAT A MINIMUM OF 10' (3 m) OF PAVEMENT SHALL BE OPEN TO TRAFFIC AT ALL TIMES.
- CONES MAY BE SUBSTITUTED FOR BARRICADES DURING DAY OPERATIONS, AT 25' (7.5 m) SPACING.
- FLASING LIGHTS REQUIRED ON SIGNS IF DROP-OFF EXISTS DURING NON-WORKING HOURS.
- WHEN NO WORK IS BEING PERFORMED, THE FLAGGER WILL NOT BE REQUIRED. IF THE FLAGGER IS NOT PRESENT, THE FLAGGER SIGNS SHALL BE REMOVED OR COVERED.
- 5. ALL SIGNS SHALL BE POST MOUNTED IF WORK IN THE AREA EXCEEDS FOUR DAYS OF DAYTIME OPERATIONS.
- 6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED SLIGHTLY TO FIT FIFLD CONDITIONS.
- ALL VEHICLES, EQUIPMENT, WORKERS (EXCEPT FLAGGER) AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE PAVEMENT UNLESS OTHERWISE AUTHORIZED BY THE DISTRICT ENGINEER.
- 8. TYPE I OR II BARRICADES, VERTICAL BARRICADES, OR DRUMS WITH LIGHTS REQUIRED TO MARK HAZARD DROP-OFF.

REVISIONS

D.L.P. 3-95 NAME DATE
D.L.P. 08/00
F-5.01 K.A.G. 01/05

DATE UNLESS OTHERWISE SHOWN.

