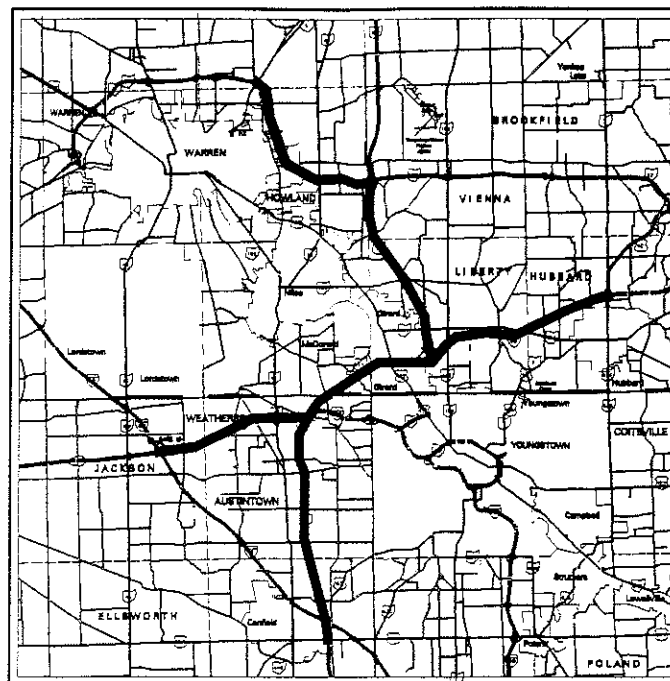
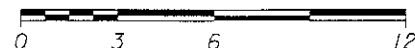




LOCATION MAP

LATITUDE: N41°06'36" LONGITUDE: W80°49'57"

SCALE IN MILES



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

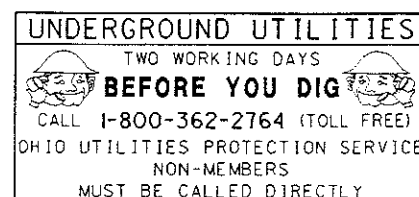
MAH - IR 80 - 0.00/Various

030035 PID - 25357

Dist 4 1/8/2003

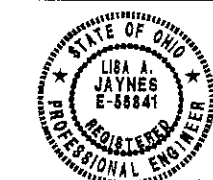
DESIGN EXCEPTIONS

NONE



PLAN PREPARED BY:

ODOT DISTRICT 4
PRODUCTION



SIGNED

DATE: _____

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

MAH-80-0.00 /
VARIOUS
Cities of Girard and Warren
Austintown, Canfield, Howland,
Hubbard, Jackson, Liberty, Vienna &
Weathersfield Townships
Mahoning & Trumbull Counties

INDEX OF SHEETS:

TITLE SHEET	1
LOCATION MAP	2
GENERAL NOTES	3
GENERAL SUMMARY	4
REFERENCE MARKER SUBSUMMARY	5
RAMP REFERENCE MARKER SIGN LETTERING	6-8
REFERENCE MARKER DETAILS	9-13

[illegible]

PROJECT DESCRIPTION

INSTALL URBAN FREEWAY REFERENCE
MARKERS ON VARIOUS ROUTES THROUGHOUT
MAHONING AND TRUMBULL COUNTIES.

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.

2002 SPECIFICATIONS

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

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

APPROVED _____
DATE 7-2-82 DISTRICT DEPUTY DIRECTOR

APPROVED London Proctor
DATE 10-8-02 DIRECTOR, DEPARTMENT OF
TRANSPORTATION

FEDERAL PROJECT NO.

NON-FEDERAL

FID NO.

25357

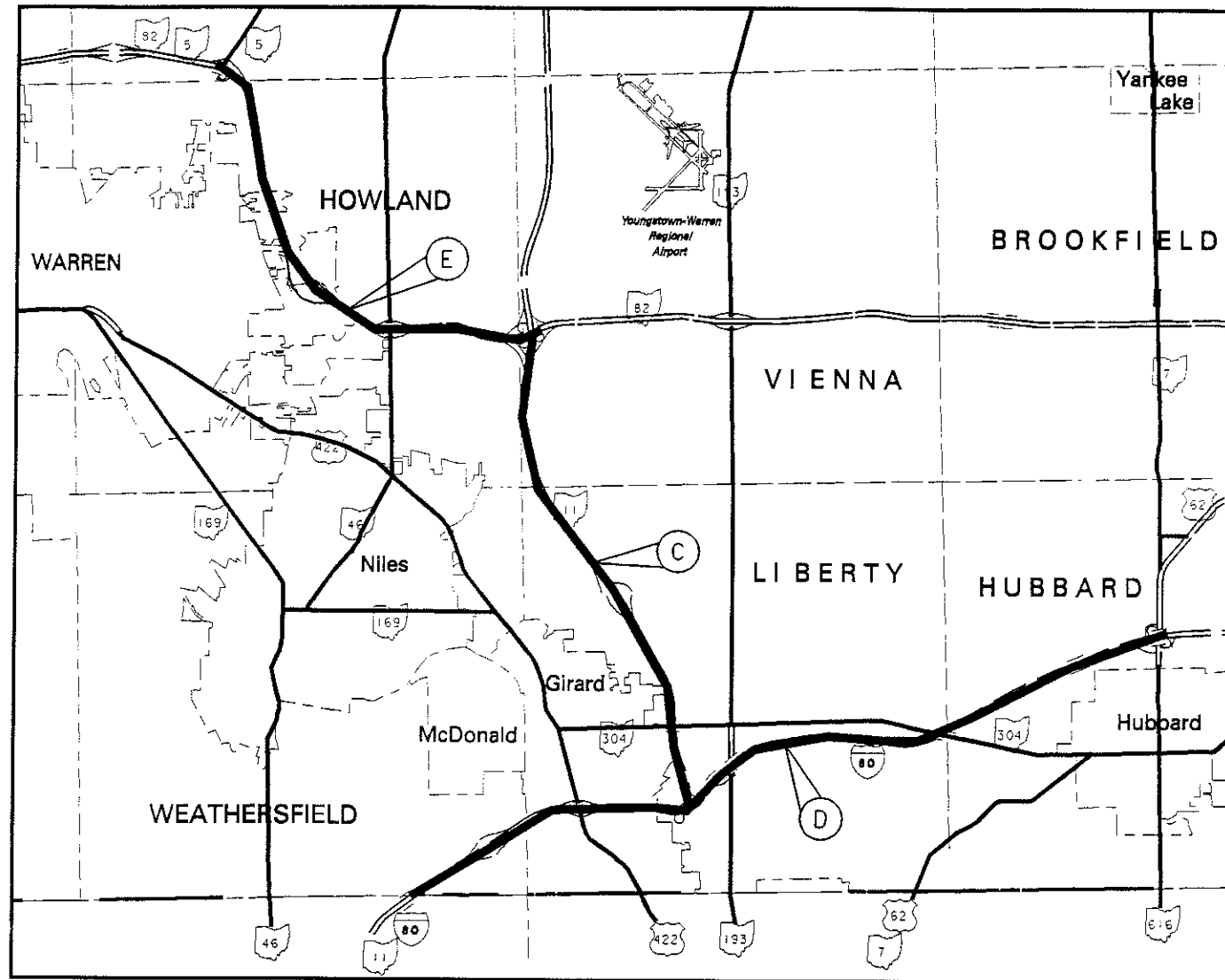
CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT

NONE

MAH-80-0.00

1
13



TRUMBULL COUNTY

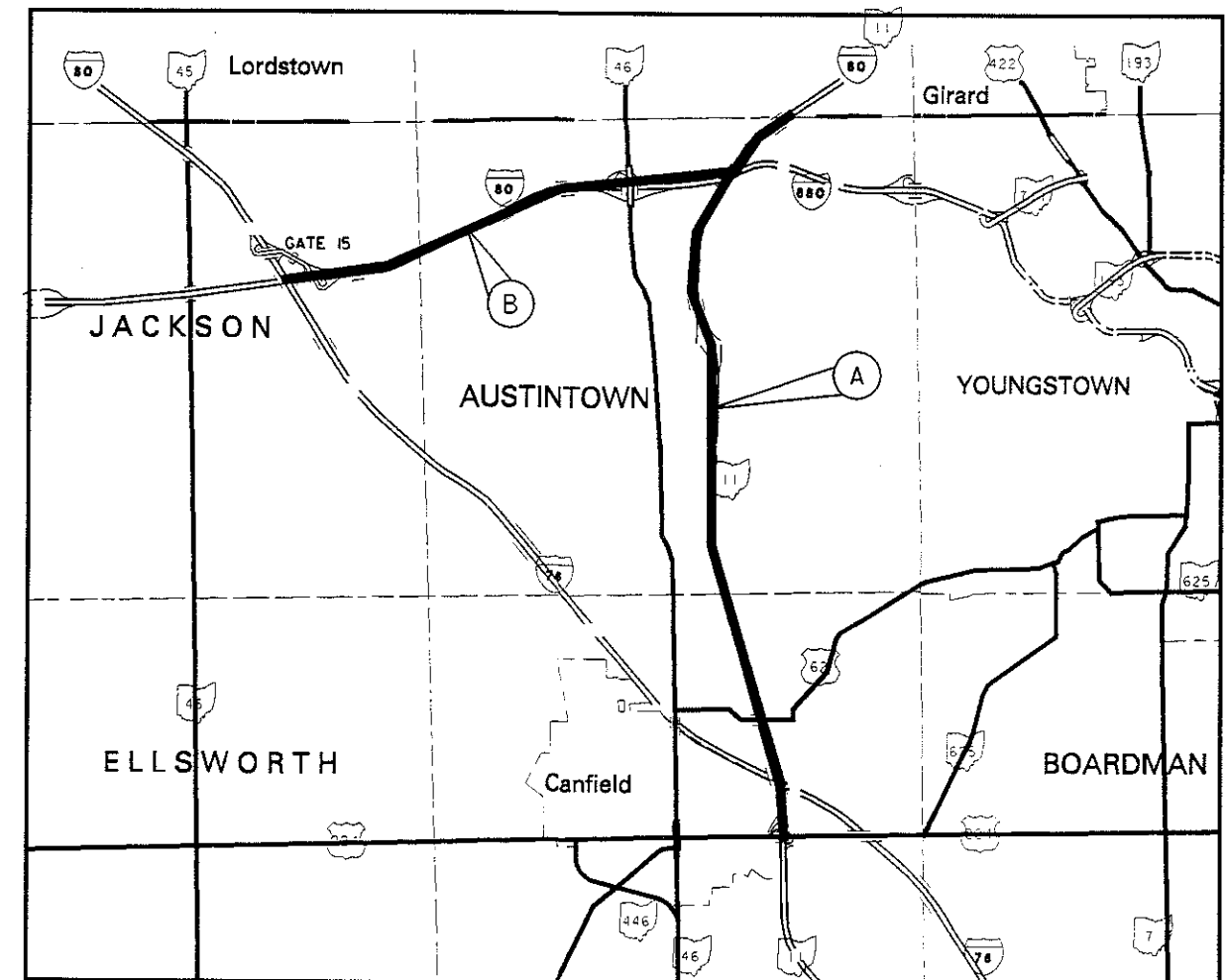
WORK LIMITS

- (A) SR 11: SLM 8.86 TO 16.19
- (B) IR 80: SLM 0.00 TO 5.75
- (C) SR 11: SLM 3.45 TO 9.59
- (D) IR 80: SLM 0.00 TO 9.58
- (E) SR 82: SLM 14.08 TO 19.75

NOTE: SLM's listed above are by county.



MAHONING COUNTY



ITEM 630 MAINLINE REFERENCE MARKERS

REFERENCE MARKERS SHALL BE LOCATED AND INSTALLED AS INDICATED ON THESE PLANS. THE DEFAULT INSTALLATION SHALL BE AT 2/10THS OF A MILE INCREMENTS (0.2,4,6,8).

THE CONTRACTOR SHALL LAYOUT ALL REFERENCE MARKER LOCATIONS TO ASSURE PROPER PLACEMENT. THE LAYOUT SHALL BE APPROVED BY THE ENGINEER BEFORE INSTALLATIONS ARE STARTED.

THE WHOLE DUIT REFERENCE MARKERS, E.G. 16.0, SHALL BE PLACED AT THE SAME STATION AS THE MILE MARKER.

MAINLINE REFERENCE MARKERS SHALL BE INSTALLED IN MEDIAN AS INDICATED ON SHEET 9. ON RAMPS, THE REFERENCE MARKERS SHALL BE INSTALLED ON THE RIGHT SIDE. FOR DIRECTIONAL MAINLINE SEGMENTS, THE MARKER SHALL BE PLACED ON THE LEFT SIDE.

MAINLINE REFERENCE MARKERS SHALL BE EITHER BACK-TO-BACK OR DUAL MOUNTED. BACK-TO-BACK BEING 2 SIGNS ON 1 SUPPORT AND DUAL BEING 2 SIGNS ON 2 SUPPORTS (1 SIGN ON 1 SUPPORT).

THE HEIGHT OF THE REFERENCE MARKERS SHALL BE SUCH THAT A UNIFORM APPEARANCE IS PRESENTED TO THE MOTORIST.

WHEN A REFERENCE MARKER IS OBSTRUCTED BY A SIGN TRUSS, BRIDGE, PIER OR THE LIKE, THE REFERENCE MARKER SHALL BE RELOCATED +50 FEET FROM THE LAYOUT LOCATION OR NOT INSTALLED WITH THE APPROVAL OF THE ENGINEER.

IF ANY MILE MARKERS ARE MISSING, A PRECISE LOCATION WILL BE PROVIDED BY THE DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 30 DAYS IN ADVANCE OF THE PLANNED REFERENCE MARKER INSTALLATION. THE ENGINEER WILL CONTACT THE OFFICE OF TECHNICAL SERVICES WHICH WILL LOCATE THE LONGITUDINAL POSITION OF MISSING MILE MARKERS BY MEANS OF A POINT MARK ON THE PAVEMENT EDGE.

PAYMENT SHALL BE MADE AT THE UNIT BID PRICE PER EACH FOR 630 MAINLINE REFERENCE MARKER AND SHALL INCLUDE ALL LABOR AND MATERIAL FOR INSTALLATION. THE SUMMARY TOTAL IS FOR ESTIMATING ONLY. PAYMENT WILL BE FOR THE ACTUAL NUMBER INSTALLED.

ITEM 630 RAMP REFERENCE MARKERS

ANY RAMP LESS THAN 1056 FEET IN LENGTH SHALL HAVE ONLY ONE RAMP REFERENCE MARKER PLACED AT THE MIDPOINT OF THE LENGTH OF THE RAMP. ANY RAMP OVER 1056 FEET IN LENGTH SHALL HAVE TWO RAMP MARKERS. THE FIRST RAMP MARKER SHALL, WHEN POSSIBLE, BE PLACED 500 FEET DOWNSTREAM FROM THE BEGINNING OF THE RAMP. THE SECOND RAMP MARKER SHALL BE PLACED 500 FEET UPSTREAM FROM THE BEGINNING OF THE RAMP. FOR SYSTEM-TO-SYSTEM INTERCHANGES WHEN RAMPS MAY SPLIT BEYOND THE MAINLINE, OR COLLECT BEFORE THE MAINLINE, A RAMP MARKER SHALL BE PLACED AT THE MIDPOINT OF THE DISTANCE BETWEEN THE MAINLINE AND THE RAMP SPLIT. ALL RAMP MARKERS SHALL BE PLACED ON THE RIGHT.

ADJUSTMENTS MAY BE MADE FOR BRIDGES AND OTHER OBSTRUCTIONS. AT THE DISCRETION OF THE ENGINEER, ADDITIONAL RAMP MARKERS MAY BE PLACED DUE TO RAMP LENGTH AND SIGHT DISTANCE CONDITIONS.

FINAL ADJUSTMENTS AND DETERMINATION OF NEED SHALL BE AT THE DISCRETION OF THE ENGINEER.

FOR INTERSTATE ROUTE REFERENCES ON RAMP MARKERS THE NUMERICAL DESIGNATION ONLY SHALL BE USED IN THE DESCRIPTION. FOR US AND STATE ROUTES, THE PREFIXES OF "US" AND "SR", AS APPROPRIATE, SHALL BE USED WITH THE NUMERICAL ROUTE DESIGNATION. THE DIRECTIONAL ORDINATE (N, S, E, W) SHALL PRECEDE THE ROUTE DESIGNATION.

PAYMENT SHALL BE MADE AT THE UNIT BID PRICE PER EACH FOR 630 RAMP REFERENCE MARKER AND SHALL INCLUDE ALL LABOR AND MATERIAL FOR INSTALLATION. THE SUMMARY TOTAL IS FOR ESTIMATING ONLY. PAYMENT WILL BE FOR THE ACTUAL NUMBER INSTALLED.

ITEM 630 CONCRETE MEDIAN BARRIER SIGN BRACKET

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING THE CONCRETE MEDIAN BARRIER SIGN BRACKET DETAILED ON SHEET 10.

PAYMENT SHALL BE AT THE UNIT PRICE BID PER EACH FOR 630 CONCRETE MEDIAN BARRIER SIGN BRACKET. THIS PRICE WILL BE FULL COMPENSATION FOR ALL NECESSARY MATERIALS (INCLUDING THE POST), LABOR, TOOLS, EQUIPMENT AND OTHER INCIDENTALS NECESSARY FOR EACH BRACKET FURNISHED, IN PLACE, COMPLETE AND ACCEPTED.

UTILITIES NOTIFICATION

BECAUSE OF THE NATURE OF THIS PROJECT, THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.06 AND 107.17 IN THE CONSTRUCTION SPECIFICATIONS:

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE OIL AND GAS PRODUCERS UNDERGROUND PROTECTION SERVICE (OGPUPS), NON-MEMBER UTILITY OWNERS AND THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT) DISTRICT 4 HEADQUARTERS AT LEAST TWO (2) WORKING DAYS PRIOR TO BEGINNING WORK AT ANY LOCATION.

- OUPS: 1-800-362-2764 (CONTACT NON-MEMBERS DIRECTLY)
- OGPUPS: 1-800-925-0988
- ODOT, DISTRICT 4: 330-297-0801 EXT 305

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS, BUT CAN BE OBTAINED FROM THE OWNERS OF THE UTILITIES.

NON-MEMBER UTILITIES

DISTRICT WIDE

DISTRICT 4 ODOT
705 OAKWOOD STREET
RAVENNA, OHIO 44266
330-297-0801, EXT 305
(SIGNAL LOOP DETECTORS)
(LIGHTING CIRCUITS)

OHIO EDISON COMPANY
1910 W. MARKET STREET
AKRON, OHIO 44313
330-384-5151

MAHONING COUNTY

MAHONING COUNTY ENGINEER
940 BEARS DEN ROAD
YOUNGSTOWN, OHIO 44511
330-799-1581

CITY OF YOUNGSTOWN
26 SOUTH PHELPS ST.
YOUNGSTOWN, OHIO 44503
330-742-8800

CITY OF CANFIELD
104 LISBON STREET
CANFIELD, OHIO 44406
330-533-1101

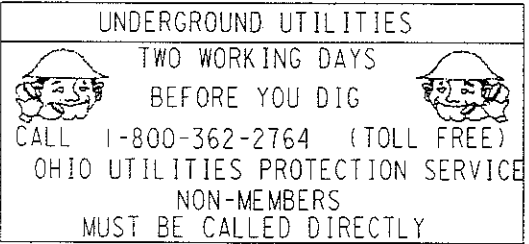
OHIO EDISON COMPANY
PO BOX 570
YOUNGSTOWN, OHIO 44501
1-800-356-4633

TRUMBULL COUNTY

TRUMBULL COUNTY ENGINEER
650 NORTH RIVER ROAD
WARREN, OHIO 44482
330-399-8396

CITY OF WARREN
391 MAHONING AVE NW
WARREN, OHIO 44483
330-841-2562

CITY OF GIRARD
100 W MAIN ST
GIRARD, OHIO 44420
330-545-1934



PERMITTED LANE CLOSURE TIMES

NO LANE RESTRICTIONS, REDUCTIONS OR CLOSURES SHALL BE IN PLACE AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING TIMES:

MAHONING COUNTY
SR-11 MONDAY-FRIDAY 6AM TO 7PM
I-80 MONDAY-FRIDAY 6AM TO 7PM; SATURDAY-SUNDAY 11AM TO 7PM

TRUMBULL COUNTY
SR-11 MONDAY-FRIDAY 7AM TO 9AM & NOON TO 7PM
I-80 MONDAY-FRIDAY 6AM TO 7PM; SATURDAY-SUNDAY 11AM TO 7PM

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED LIQUIDATED DAMAGES IN THE AMOUNT OF \$1500 PER HOUR FOR EACH HOUR THAT A LANE IS CLOSED OUTSIDE OF THE PERMITTED TIMES.

MAINTAINING TRAFFIC

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. A MINIMUM OF ONE ELEVEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT DURING CONSTRUCTION OF THE WORK.
2. CONES SHALL NOT BE ACCEPTABLE TRAFFIC CONTROL DEVICES FOR LANE RESTRICTIONS OR LANE REDUCTIONS THAT ARE IN OPERATION ONE-HALF HOUR AFTER SUNSET OR ONE HALF-HOUR BEFORE SUNRISE. ALL NIGHTTIME LANE RESTRICTIONS SHALL REQUIRE DRUMS OR BARRICADES AT A MAXIMUM SPACING OF FIFTY (50) FEET.
3. THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN AND SUBSEQUENTLY REMOVE ALL FLAGS, BARRICADES, SIGNS, SIGN SUPPORTS AND FURNISH AND MAINTAIN ALL FLAGGERS, WATCHERS AND INCIDENTALS RELATED THERETO.
4. TRAFFIC SHALL BE MAINTAINED AT ALL TIMES. LANE CLOSURES WHEN NECESSARY SHALL BE ACCORDING TO THE DISTRICT 4 PERMITTED LANE CLOSURE TIMES (SEE NOTE).

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

WEIGHTED CHANNELIZERS

THE WEIGHTED CHANNELIZER SHALL BE PREDOMINATELY 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 NON-RETROREFLECTIVE 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.

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.

ON OTHER HIGHWAYS:
THERE ARE NO DURATIONS OF WORK RESTRICTIONS FOR USE OF WEIGHTED CHANNELIZERS ON ALL OTHER TYPES OF HIGHWAYS, DAY OR NIGHT. ON THESE ROADWAYS THE WEIGHTED CHANNELIZER MAY BE USED IN THE TRANSITION TAPERS AS WELL AS IN THE TANGENT AREAS, DAY OR NIGHT.

MAXIMUM SPACING OF THE WEIGHTED CHANNELIZER SHALL BE 40 FEET.

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.

[illegible]

Estimated Quantities

Reference Marker Signs

COUNTY	ROUTE	COUNTY LOG FROM	COUNTY LOG TO	STATE LOG FROM	STATE LOG TO	TYPE OF INSTALLATION	630			
							MAINLINE REFERENCE MARKER	RAMP REFERENCE MARKER	GROUND MOUNTED SUPPORT, NO.3 POST	CONCRETE MEDIAN BARRIER SIGN BRACKET
							EACH	EACH	LIN FT	EACH
MAHONING	SR II	8.86	16.19	33.98	41.31	BACK-TO-BACK	74	16	518.5	
MAHONING	I-80	0.00	1.25	219.20	220.45	BACK-TO-BACK	14		115.5	
MAHONING	I-80	1.64	4.50	220.84	223.70	BACK-TO-BACK	30	5	535.0	
MAHONING	I-80	4.50	5.05	223.70	224.25	DUAL	6	4	144.0	
MAHONING	I-80/SR II	5.05	5.75	224.25	224.95	DUAL	6		99.0	
TRUMBULL	SR II	3.45	3.93	45.46	45.94	DUAL	4	5	91.0	
TRUMBULL	SR II	3.93	9.59	45.94	51.60	BACK-TO-BACK	56	9	396.0	
TRUMBULL	I-80/SR II	0.00	3.05	224.95	228.00	BACK-TO-BACK	30	8	366.0	
TRUMBULL	I-80/SR II	3.05	3.45	228.00	228.40	DUAL	4	1	70.0	
TRUMBULL	I-80	3.45	3.95	228.40	228.90	DUAL	4		58.0	
TRUMBULL	I-80	3.95	9.58	228.90	234.53	BACK-TO-BACK	56	12	438.0	
TRUMBULL	SR 82	14.08	16.40	72.86	75.18	BACK-TO-BACK	22	4	218.5	
TRUMBULL	SR 82	16.40	17.40	75.18	76.18	DUAL	10	5	137.5	
TRUMBULL	SR 82	17.40	18.35	76.18	77.13	BACK-TO-BACK	10	4	48.0	5
TRUMBULL	SR 82	18.35	19.10	77.13	77.88	BACK-TO-BACK	8		62.0	
TRUMBULL	SR 82	19.10	19.60	77.88	78.38	DUAL	4		31.0	
TRUMBULL	SR 82	19.60	19.75	78.38	78.53	BACK-TO-BACK	2	6	87.5	
TOTALS CARRIED TO GENERAL SUMMARY							340	79	34145.5	5

NOTE: TYPE OF INSTALLATION
BACK-TO-BACK OR DUAL.

DEFINITIONS:
1) BACK-TO-BACK: 2 SIGNS ON
1 SUPPORT
2) DUAL: 2 SIGNS AND 2 SUPPORTS,
1 SIGN ON EACH SUPPORT

kopnick@D:\CD125 - ufm7 - Monday September 16 2002 07:16:36 AM EDT

RAMP REFERENCE MARKER SIGN LETTERING

County	Route	STATE LOG	LINE 1	LINE 2	LINE 3	LINE 4	NO. MRKRS NEEDED
MAHONING	SR II	33.98	RAMP	S SR II	TO	US 224	2
MAHONING	SR II	33.98	RAMP	US 224	TO	S SR II	1
MAHONING	SR II	33.98	RAMP	W US 224	TO	N SR II	1
MAHONING	SR II	33.98	RAMP	E US 224	TO	N SR II	2
MAHONING	SR II	39.24	RAMP	N SR II	TO	MAHNG	1
MAHONING	SR II	39.24	RAMP	MAHNG	TO	N SR II	1
MAHONING	SR II	39.24	RAMP	MAHNG	TO	S SR II	1
MAHONING	SR II	39.24	RAMP	S SR II	TO	MAHNG	1
MAHONING	SR II	41.13	RAMP	N SR II	TO	E 680	1
MAHONING	SR II	41.16	RAMP	N SR II	TO	W 80	2
MAHONING	SR II	41.27	RAMP	W 680	TO	S SR II	2
MAHONING	SR II	41.31	RAMP	N SR II	TO	E 80	1
MAHONING	I-80	223.01	RAMP	E 80	TO	SR 46	1
MAHONING	I-80	223.01	RAMP	SR 46	TO	E 80	1
MAHONING	I-80	223.01	RAMP	W 80	TO	N SR 46	1
MAHONING	I-80	223.01	RAMP	W 80	TO	S SR 46	1
MAHONING	I-80	223.01	RAMP	SR 46	TO	W 80	1
MAHONING	I-80	223.91	RAMP	E 80	TO	S SR II	1
MAHONING	I-80	224.25	RAMP	W 80	TO	S SR II	2
MAHONING	I-80	224.01	RAMP	W 680	TO	W 80	1

Notes:
1. See Sheet ____ II ____ for typical ramp reference marker layout.

CALCULATED
TAK
CHECK

RAMP REFERENCE MARKER SIGN LETTERING

MAH-80-0.00

hkopnck@004CD125 - utfm71 - Monday September 16 2002 07:16:48 AM EDT

RAMP REFERENCE MARKER SIGN LETTERING

County	Route	STATE LOG	LINE 1	LINE 2	LINE 3	LINE 4	NO. MRKRS NEEDED
TRUMBULL	SR II	45.64	RAMP	S SR II	TO	W 80	2
TRUMBULL	SR II	45.64	RAMP	S SR II	TO	E 80	3
TRUMBULL	SR II	48.24	RAMP	N SR II	TO	TIBB-WCK	1
TRUMBULL	SR II	48.24	RAMP	TIBB-WCK	TO	N SR II	1
TRUMBULL	SR II	48.24	RAMP	S SR II	TO	TIBB-WCK	1
TRUMBULL	SR II	48.24	RAMP	TIBB-WCK	TO	S SR II	1
TRUMBULL	SR II	51.29	RAMP	N SR II	TO	W SR 82	1
TRUMBULL	SR II	51.60	RAMP	N SR II	TO	E SR 82	2
TRUMBULL	SR II	51.60	RAMP	S SR II	TO	E SR 82	1
TRUMBULL	SR II	51.60	RAMP	S SR II	TO	W SR 82	1
TRUMBULL	I-80	225.94	RAMP	E 80	TO	SALTSPRNG	1
TRUMBULL	I-80	225.94	RAMP	SALTSPRNG	TO	E 80	1
TRUMBULL	I-80	225.94	RAMP	W 80	TO	SALTSPRNG	1
TRUMBULL	I-80	225.94	RAMP	SALTSPRNG	TO	W 80	1
TRUMBULL	I-80	227.15	RAMP	E 80	TO	US 422	1
TRUMBULL	I-80	227.15	RAMP	US 422	TO	E 80	1
TRUMBULL	I-80	227.15	RAMP	W 80	TO	US 422	1
TRUMBULL	I-80	227.15	RAMP	US 422	TO	W 80	1
TRUMBULL	I-80	228.38	RAMP	E 80	TO	N SR II	1
TRUMBULL	I-80	229.16	RAMP	E 80	TO	SR 193	1
TRUMBULL	I-80	229.16	RAMP	SR 193	TO	E 80	1
TRUMBULL	I-80	229.16	RAMP	W 80	TO	SR 193	1

Notes:
1. See Sheet II for typical ramp reference marker layout.

kopnick@CD04CD125 - utm72 - Monday September 16 2002 07:17:02 AM EDT

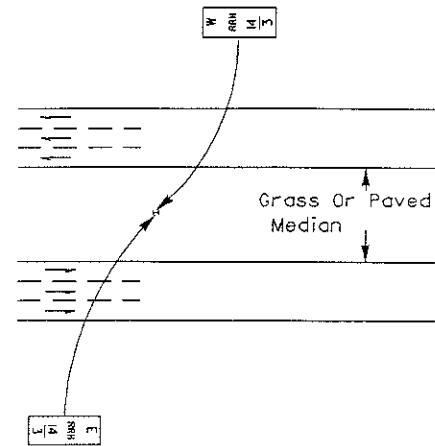
RAMP REFERENCE MARKER SIGN LETTERING

County	Route	STATE LOG	LINE 1	LINE 2	LINE 3	LINE 4	NO. MRKRS NEEDED
TRUMBULL	I-80	229.16	RAMP	SR 193	TO	W 80	1
TRUMBULL	I-80	234.53	RAMP	E 80	TO	W US62	2
TRUMBULL	I-80	234.53	RAMP	E 80	TO	E US62	2
TRUMBULL	I-80	234.53	RAMP	W 80	TO	W US62	1
TRUMBULL	I-80	234.53	RAMP	US62	TO	W 80	2
TRUMBULL	I-80	234.53	RAMP	SR7/62	TO	E 80	1
TRUMBULL	SR 82	72.86	RAMP	E SR 82	TO	ELM RD	1
TRUMBULL	SR 82	72.86	RAMP	ELM RD	TO	E SR 82	1
TRUMBULL	SR 82	72.86	RAMP	W SR 82	TO	ELM RD	1
TRUMBULL	SR 82	72.86	RAMP	ELM RD	TO	W SR 82	1
TRUMBULL	SR 82	75.58	RAMP	E SR 82	TO	E MARKT	1
TRUMBULL	SR 82	75.58	RAMP	E MARKT	TO	E SR 82	1
TRUMBULL	SR 82	75.58	RAMP	W SR 82	TO	E MARKT	2
TRUMBULL	SR 82	75.58	RAMP	E MARKT	TO	W SR 82	1
TRUMBULL	SR 82	76.85	RAMP	E SR 82	TO	SR 46	1
TRUMBULL	SR 82	76.85	RAMP	SR 46	TO	E SR 82	1
TRUMBULL	SR 82	76.85	RAMP	W SR 82	TO	SR 46	1
TRUMBULL	SR 82	76.85	RAMP	SR 46	TO	W SR 82	1
TRUMBULL	SR 82	78.53	RAMP	E SR 82	TO	S SR 11	2
TRUMBULL	SR 82	78.53	RAMP	E SR 82	TO	N SR 11	1
TRUMBULL	SR 82	78.53	RAMP	W SR 82	TO	S SR 11	2
TRUMBULL	SR 82	78.53	RAMP	W SR 82	TO	N SR 11	1

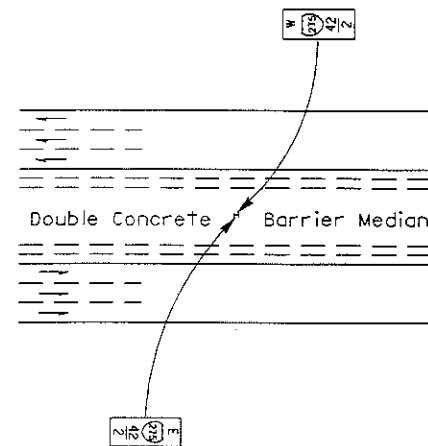
Notes:
1. See Sheet II for typical ramp reference marker layout.

Typical Reference Marker Placement

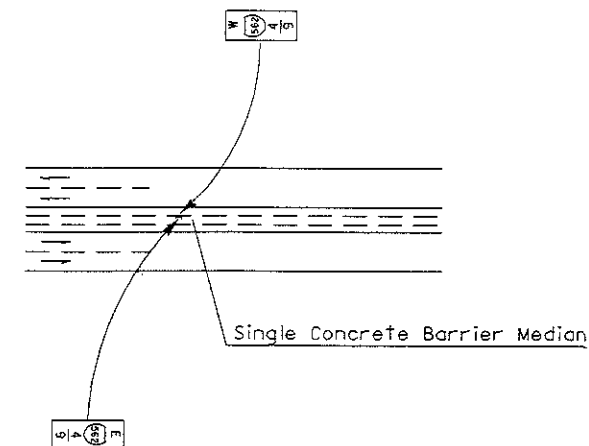
Median



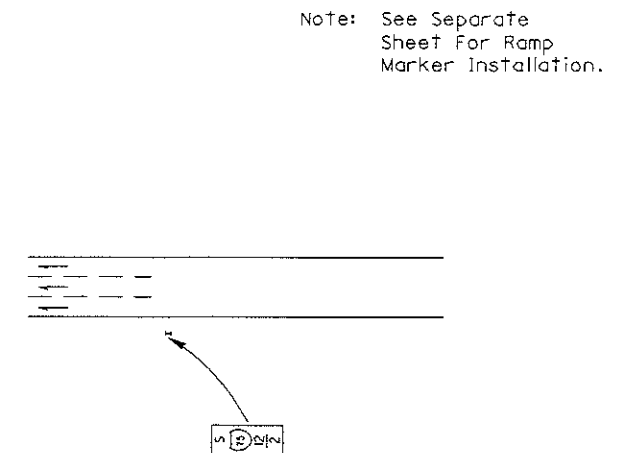
Double Concrete Barrier Median



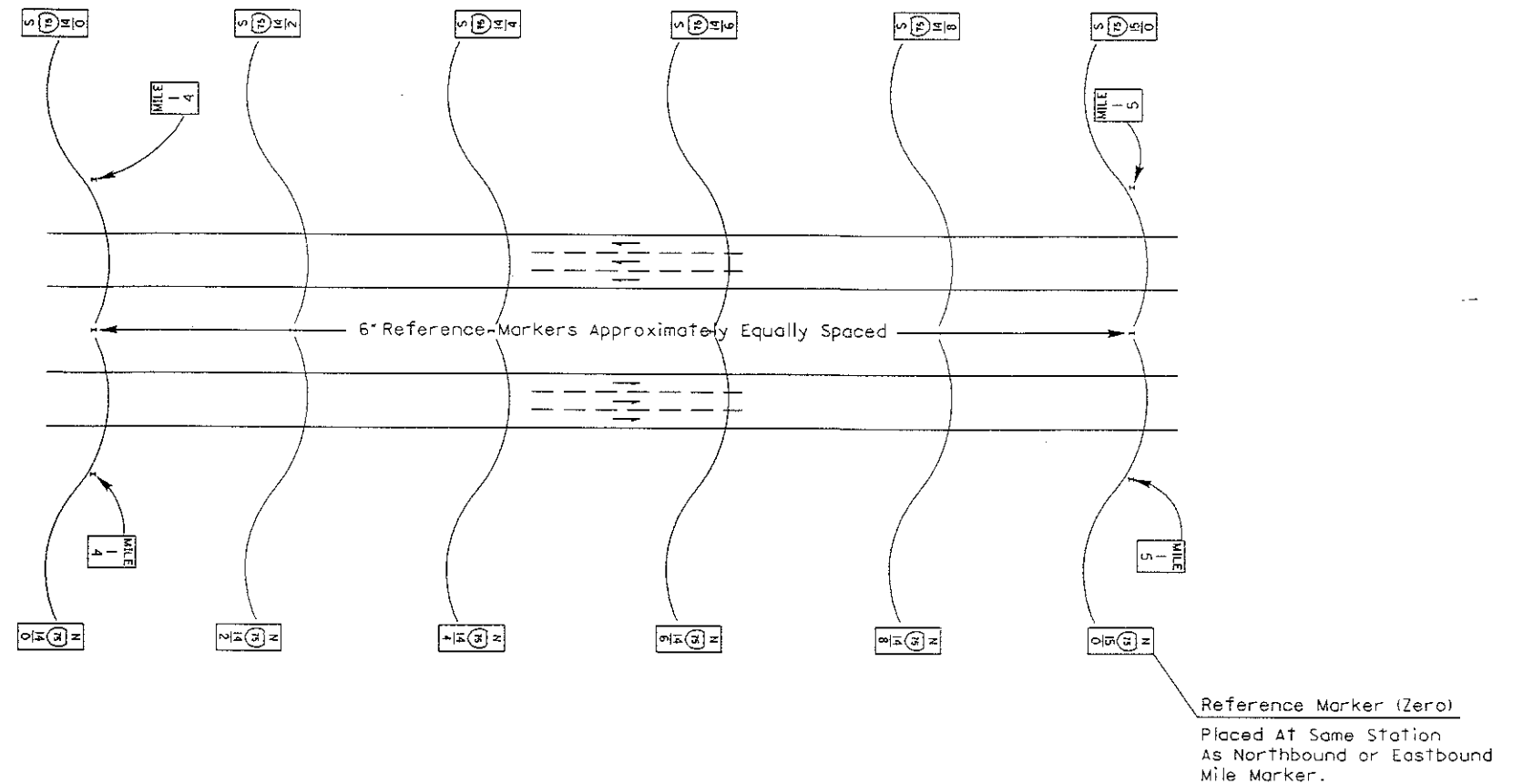
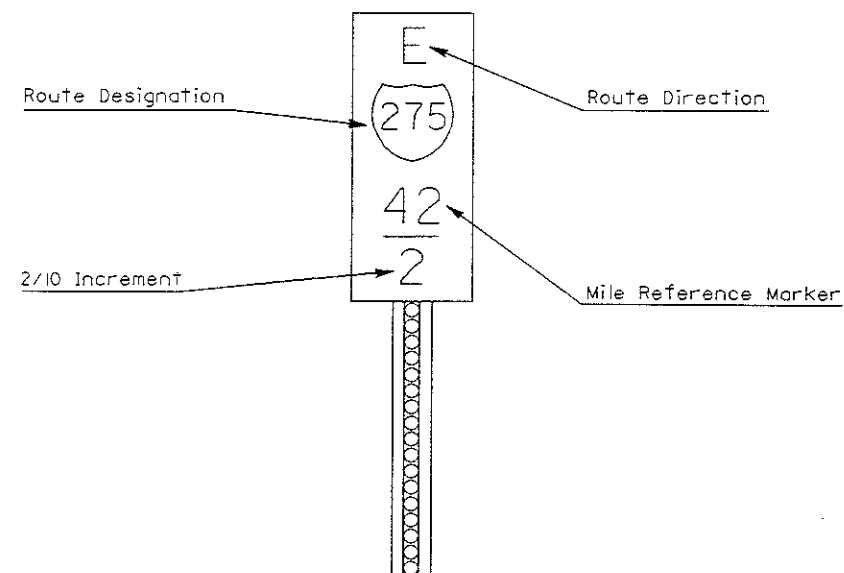
Single Concrete Barrier Median



No Median
Single Direction Traffic

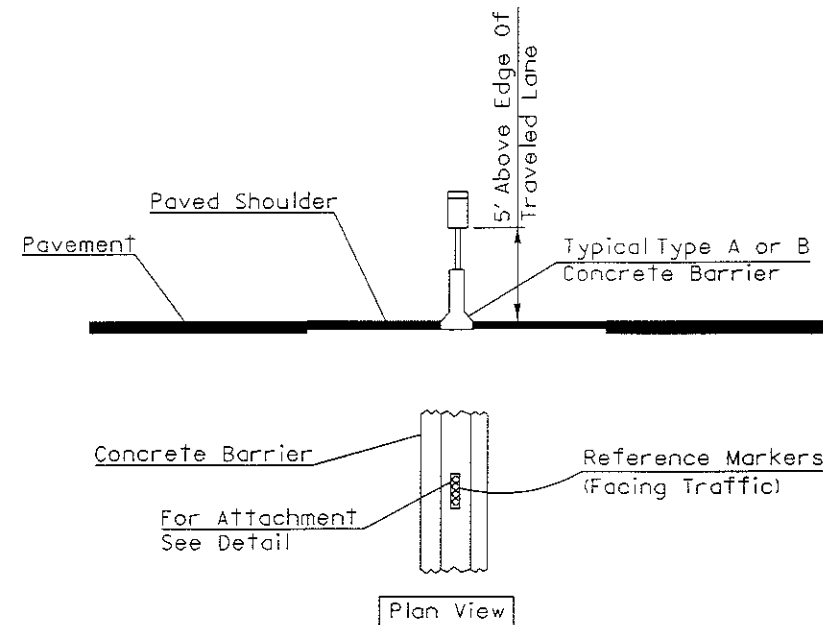


NOTES:
-Placement other than those depicted here may apply.
-No marker installation on bridges.



Typical Mainline Reference Marker Installation Plans

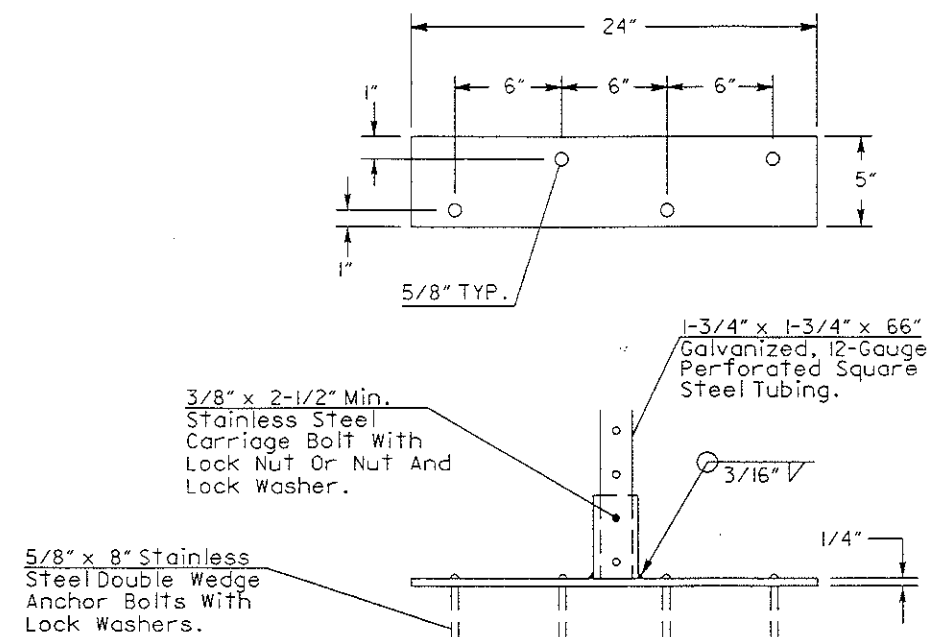
Single Median Barrier



Note:

1. Typical installed height is 2' from top of barrier wall to bottom of sign.

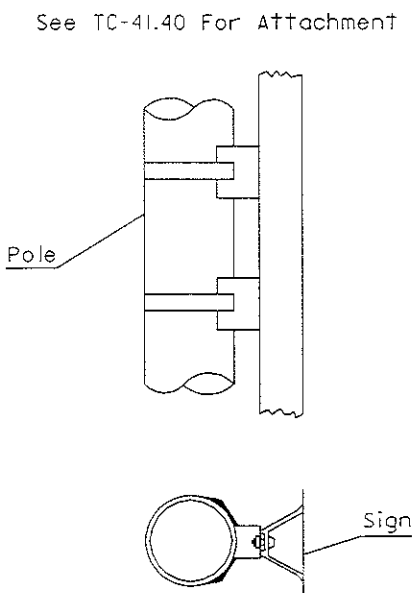
Barrier Mounting Bracket



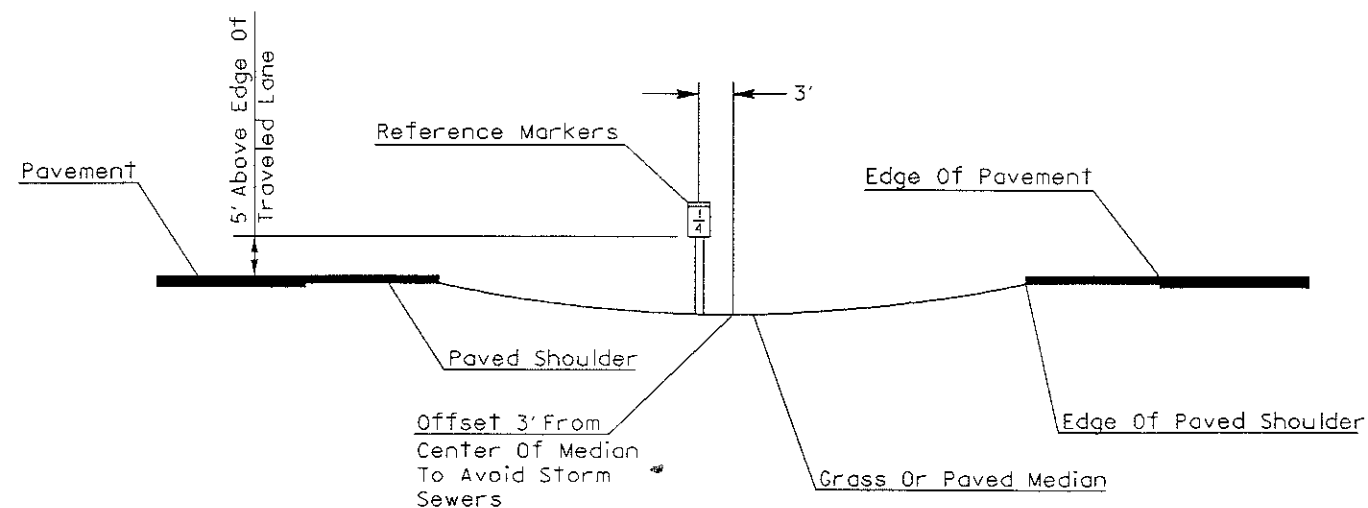
Note:

1. All Hardware Shall Be Galvanized Steel Or Stainless Steel As Specified.
2. All Work And Materials Shall Be In Accordance With Standard Specification.

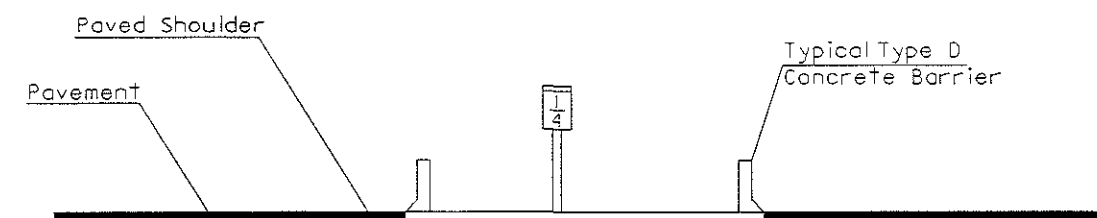
Light Poles



Median



Double Median Barrier



Note:

1. Typical installed height on a raised median is 4' from top of median to bottom of sign.

ikopnick@DD04CD125 - uftm4 - Monday September 16 2002 07:18:39 AM EDT

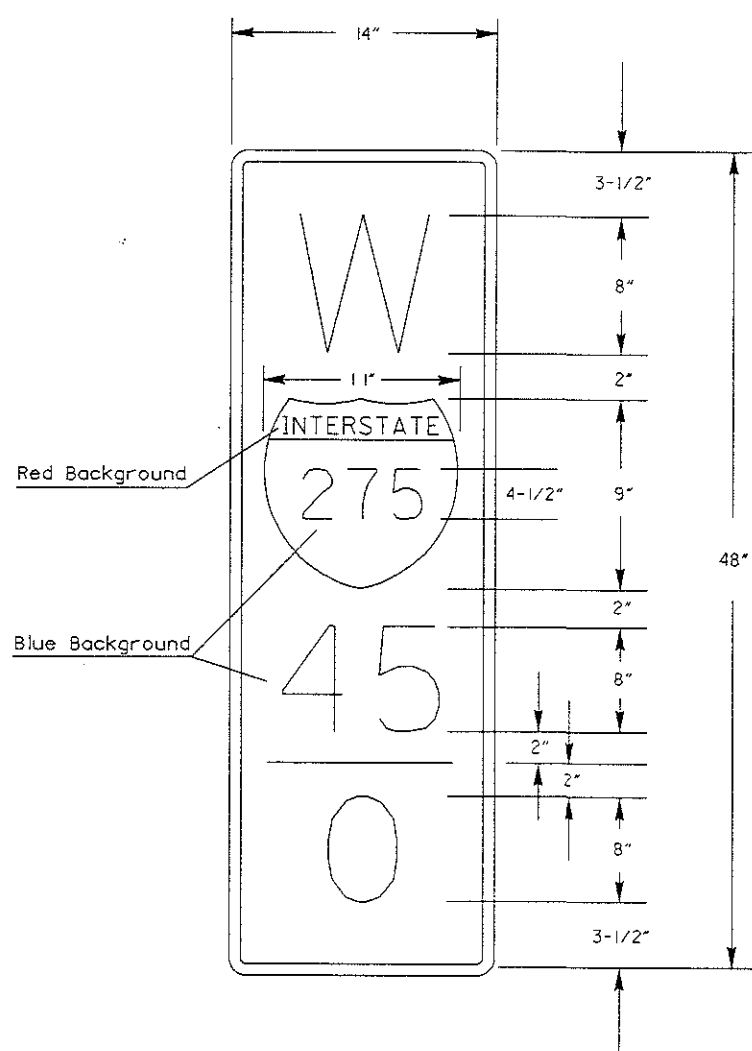
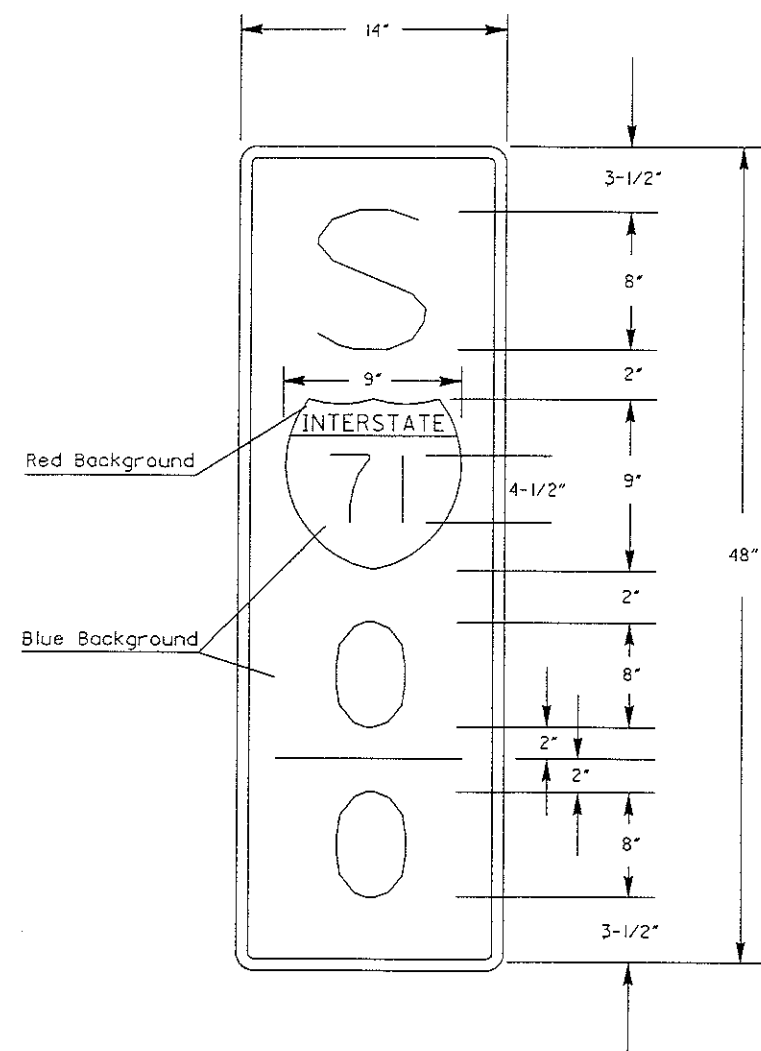


MAH-80-0.00

Typical Reference Markers

Typical Mainline Reference Marker

Color: White On Blue
Series C
Type G sheeting



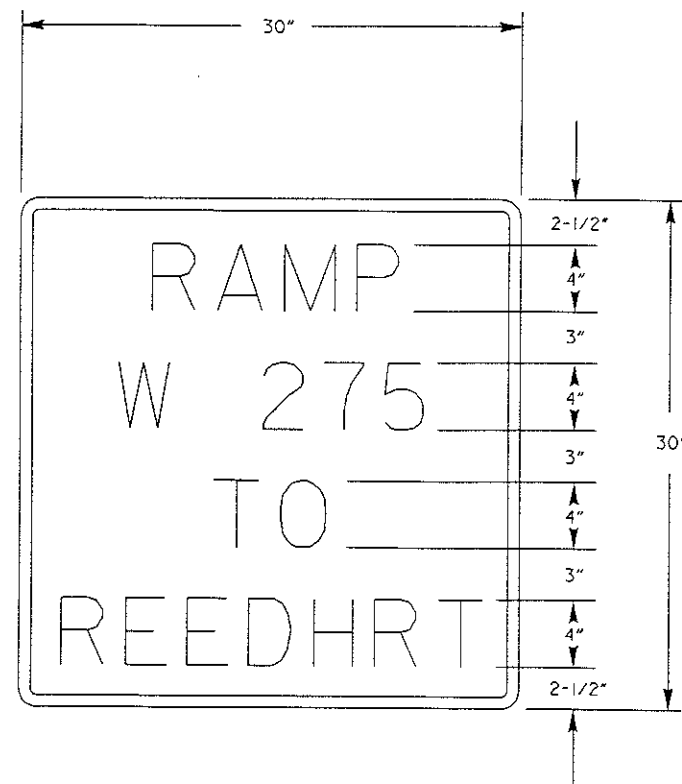
Note:
Divider Line Thickness = 1"
Divider Line Length = Width of Numbers above Line
Stroke Width = 1.60"
Border is white, width = 3/4"

Typical Reference Markers

Typical Ramp Reference Marker

Color: White On Blue
Series C

Type G sheeting



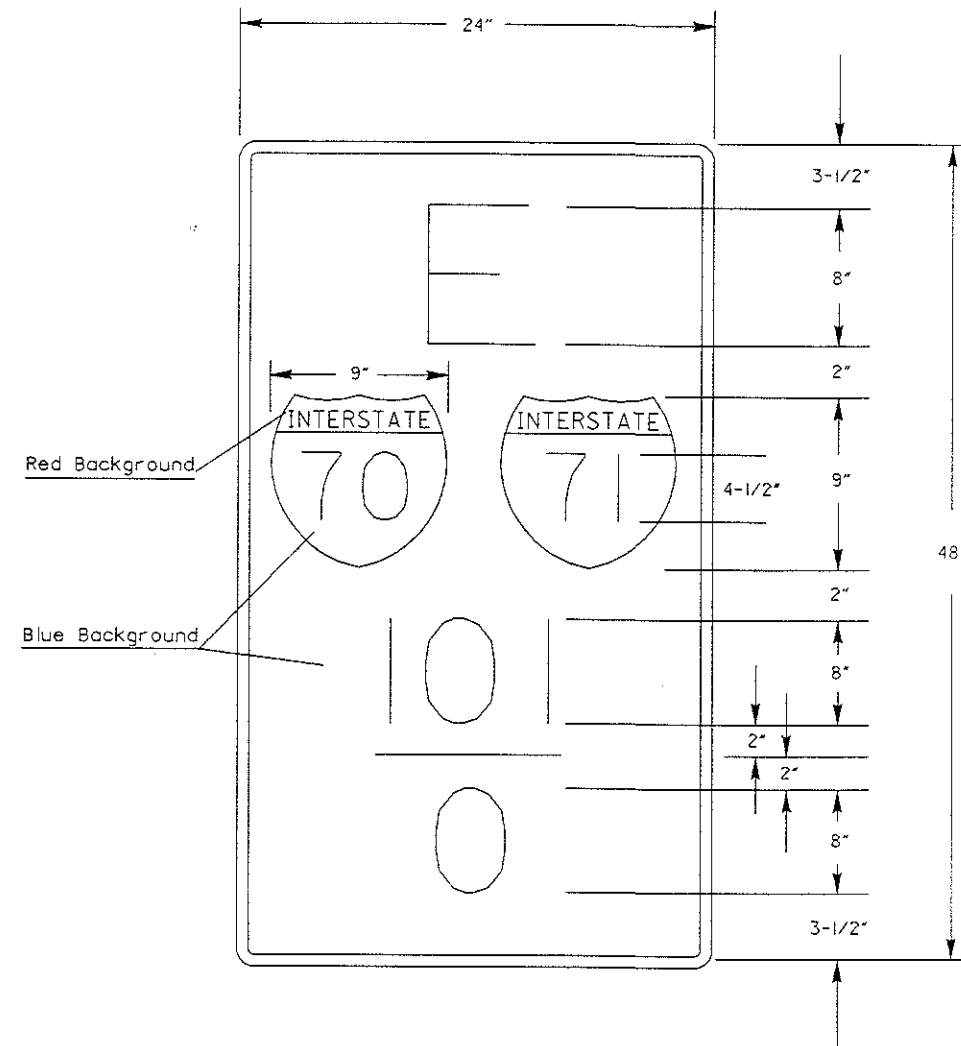
Note:

1. See Ramp Marker Installation Detail Sheets For Placement.
2. No Marker Installation On Bridges.
3. Stroke Width = 3/4"
4. Border is white, width = 3/4"
5. See Quantities For Specific Ramp Marker Lettering.

Typical Mainline Reference Marker

Color: White On Blue
Series C

Type G sheeting



Note:

- Divider Line Thickness = 1"
- Divider Line Length = Width of Numbers above Line
- Stroke Width = 1.60"
- Border is white, width = 3/4"
- Width of dual route marker shall be 24"