Traffic Signs
NHSN-075-2(138)--2R-75
LETTING DATE Nov 17, 2026

PLYMOUTH COUNTY

INDEX OF SHEETS	
No.	DESCRIPTION
A Sheets	**Title Sheets**
* A.1	Title Sheet
B Sheets	**Typical Cross Sections and Details**
* B.1 - 6	Perforated Square Steel Tube Sign Post Details
* B.6 - 12	Sign Panel Details
C Sheets	**Quantities and General Information**
C.1 - 2	Estimated Project Quantities and Reference Notes
C.3 - 4	Signing Notes
C.5	Standard Road Plans
C.5 - 10	Tabulations
J Sheets	**Traffic Control and Staging Sheets**
J.1	Traffic Control Plan
N Sheets	**Traffic Signing Sheets**
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* N.3 - 5	Proposed Traffic Signing Layout
* N.6 - 8	Cross Sections
	* Color Plan Sheets

IOWA DOT

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM

PLYMOUTH COUNTY

Traffic Signs

Co Rd C80 and Co Rd C70 Intersections

SCALES: As Noted

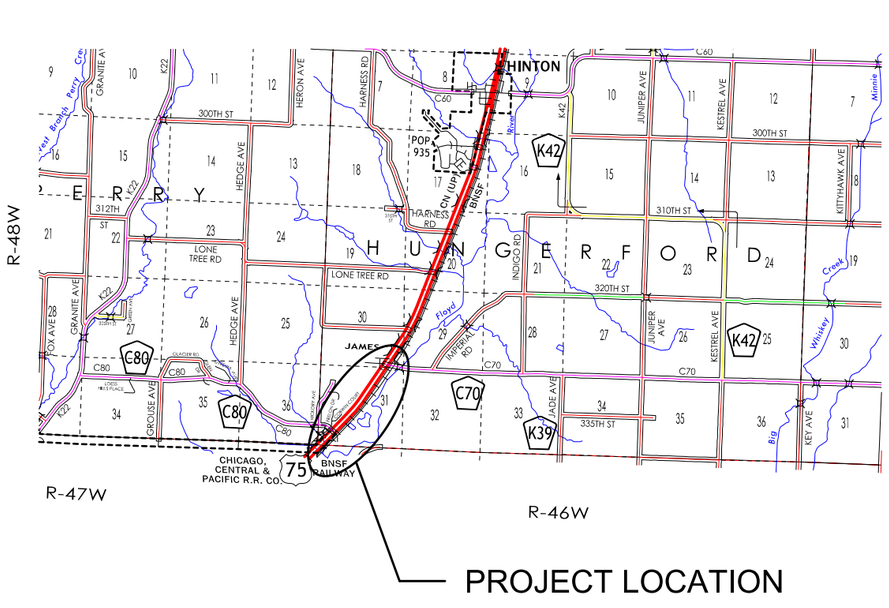
Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.14 of the Specifications.

IOWA ONE CALL
1-800-292-8989
www.iowaonecall.com
811 Know what's below. Call before you dig.

REVISIONS

	TOTAL
	32
PROJECT IDENTIFICATION NUMBER	
26-75-075-020	
PROJECT NUMBER	
NHSN-075-2(138)--2R-75	
R.O.W. PROJECT NUMBER	



LOCATION MAP SCALE
0 1 2 3
Miles

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Neal T. Fobian 16513 LICENSED PROFESSIONAL ENGINEER IOWA

Signature 09/01/2026 Date

Neal Fobian
Printed or Typed Name

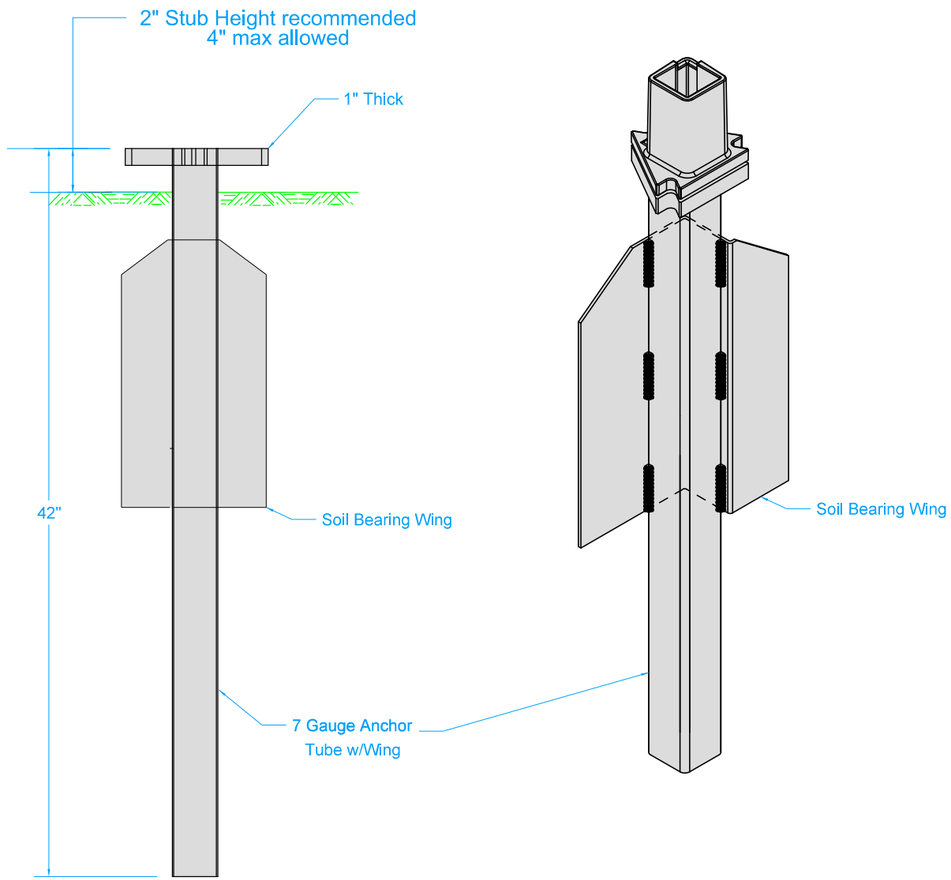
My license renewal date is December 31, 20 26

Pages or sheets covered by this seal: A.1; B.1-B.12; C.1-C.9; J.1; N.1-N.7

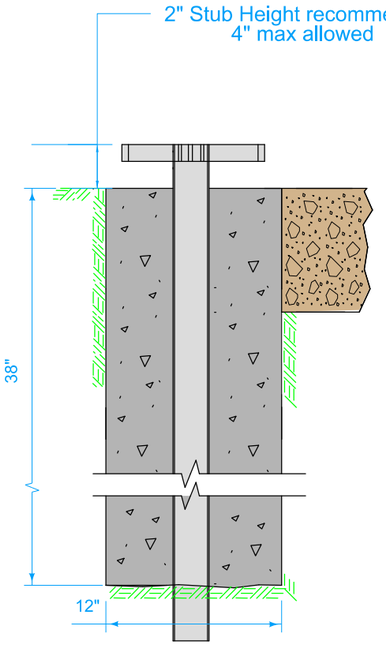
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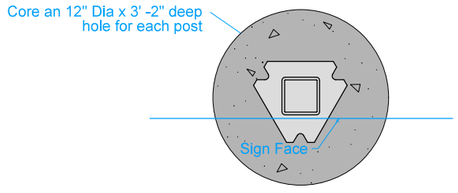
3:34:51 PM 8/14/2026 skenton pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7507502026\TrafficAndSafety\(138)_Signs\CADD Files\SHT_75075138_A1.dgn

TYPE 3 INSTALLATION
(TRIANGULAR SLIP BASE SOIL)



TYPE 4 INSTALLATION
(TRIANGULAR SLIP BASE CONCRETE)





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TAS STANDARD

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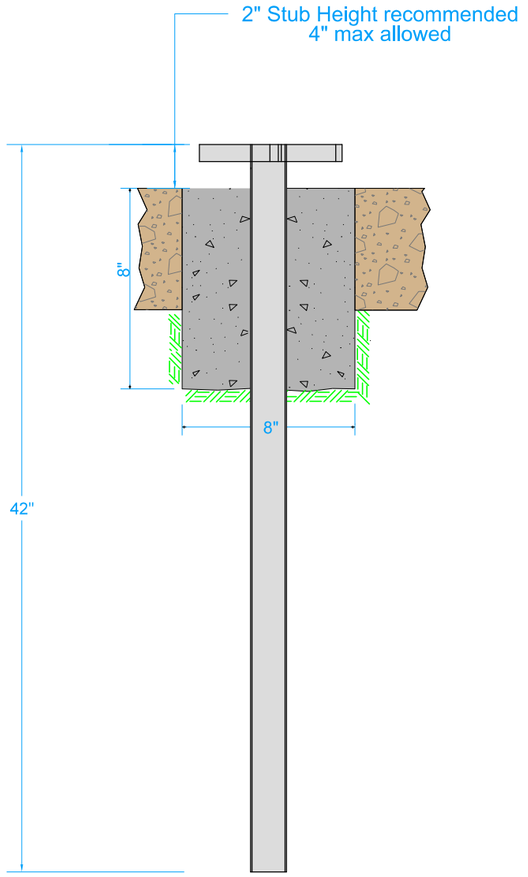
Support Structures -
Perforated Square Steel Tube
Anchor and Post

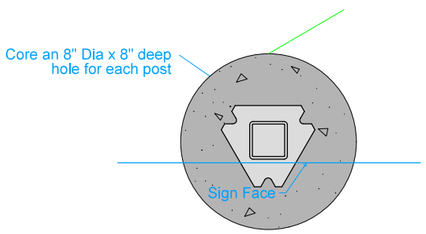
FILE NO.	ENGLISH	DESIGN TEAM **Fobian/Kenton**	**PLYMOUTH** COUNTY	PROJECT NUMBER **NHSN-075-2(138)--2R-75**	SHEET NUMBER **B.1**

3:37:29 PM 7/28/2026 skenton pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7507502026\TrafficAndSafety\(138)_Signs\CADD Files\SHT_75075138_B1.dgn

(1)

TYPE 5 INSTALLATION
(TRIANGULAR SLIP BASE CONCRETE)





(1) Used in concrete islands.

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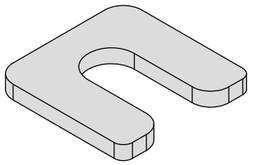
TAS STANDARD

REVISION: __

**Support Structures -
Perforated Square Steel Tube
Anchor and Post**

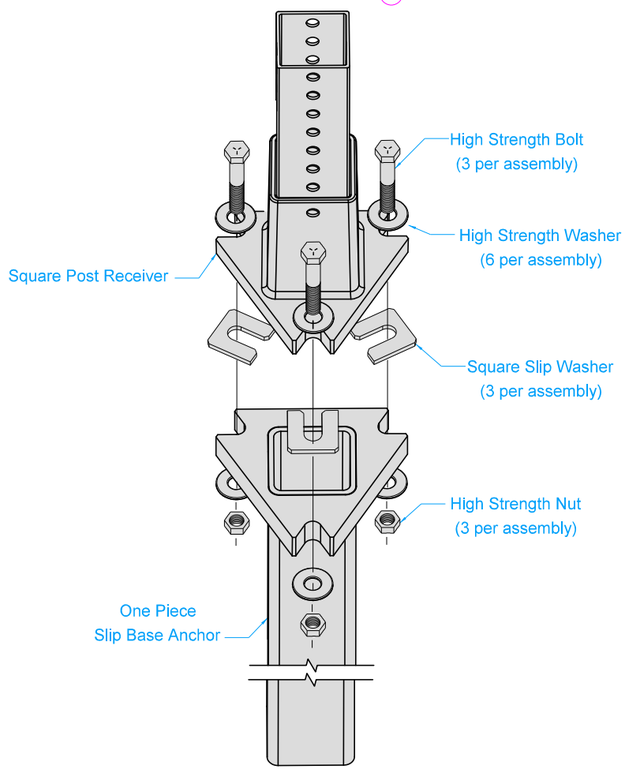
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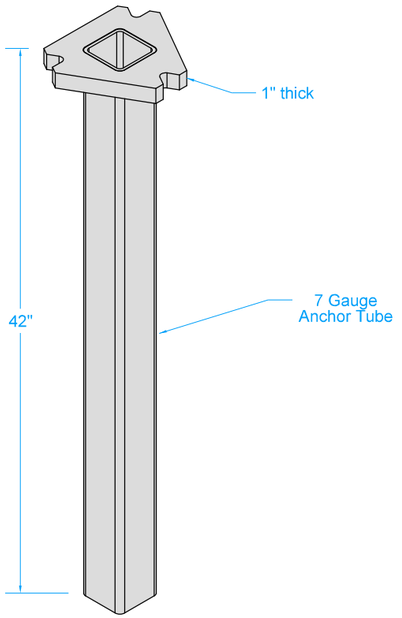
1 $\frac{3}{4}$" SQUARE X $\frac{3}{16}$" (1)
SQUARE SLIP WASHER

(2)



EXPLODED VIEW (1)
SLIP BASE, RECEIVER AND
CONNECTION HARDWARE

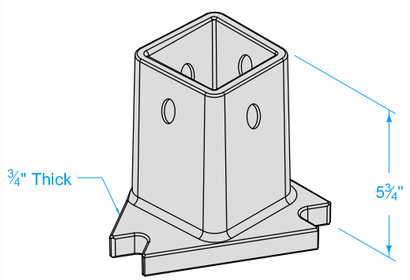
(1)
ONE PIECE
SLIP BASE ANCHOR



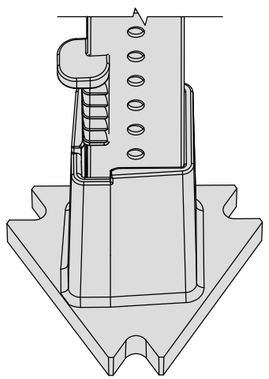
(1) Type III/IV installation

(2) Fastener size and installation procedure shall be according to manufacturer's recommendation.

OPTION 1



OPTION 2



2 $\frac{1}{2}$" SQUARE POST RECEIVER (1)

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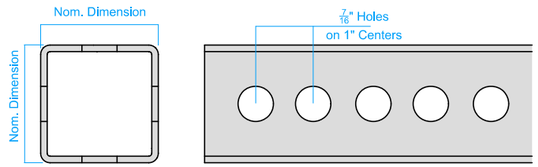
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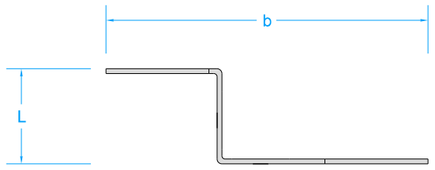
Support Structures - Perforated Square Steel Tube Anchor and Post

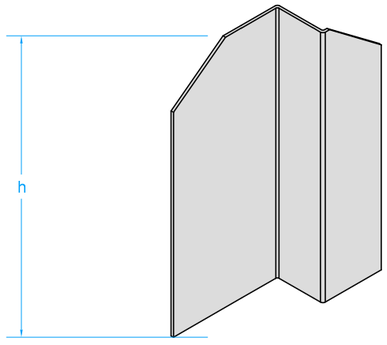
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PERFORATED STEEL SQUARE TUBE POST DETAILS

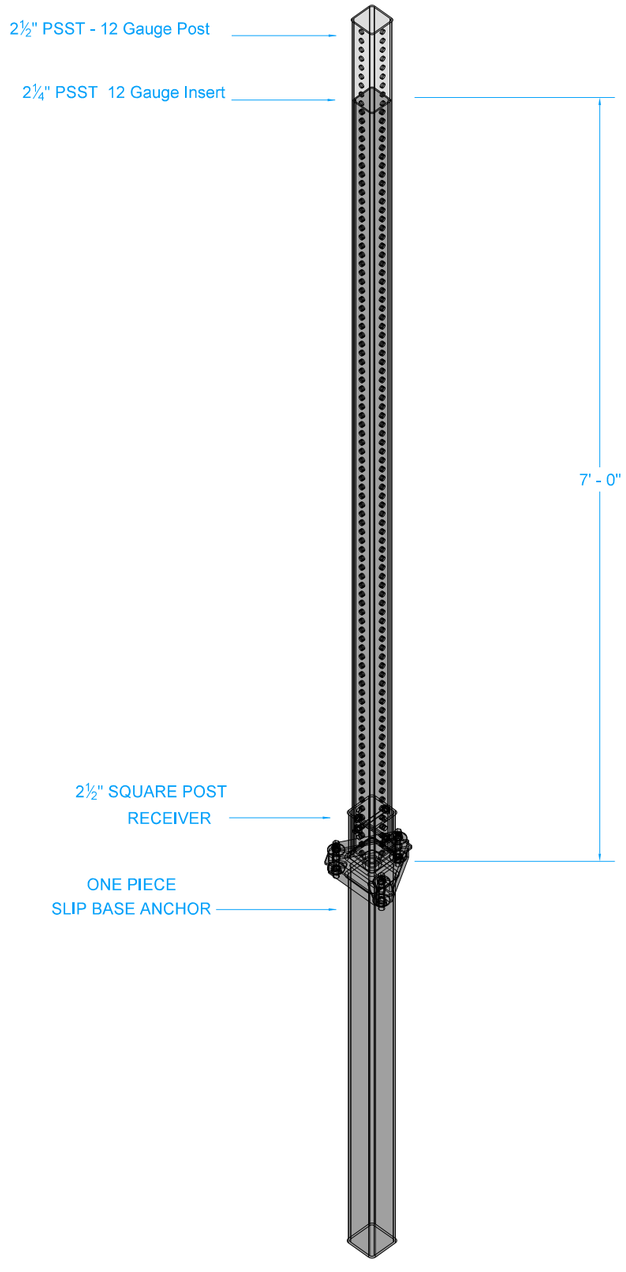




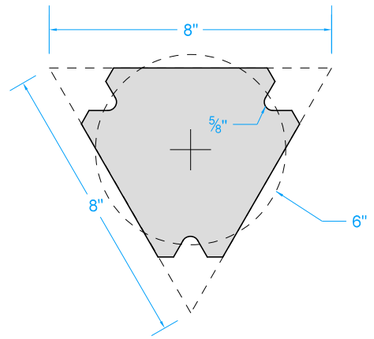


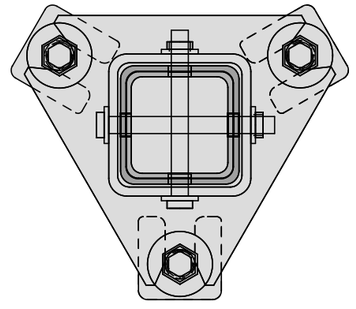
SOIL BEARING WING

SLIP BASE WITH NESTED PERFORATED SQUARE STEEL TUBE POST (1)



SLIP PLATE DIMENSIONS (1)





(1) Type III/IV installation only

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**Support Structures -
Perforated Square Steel Tube
Anchor and Post**

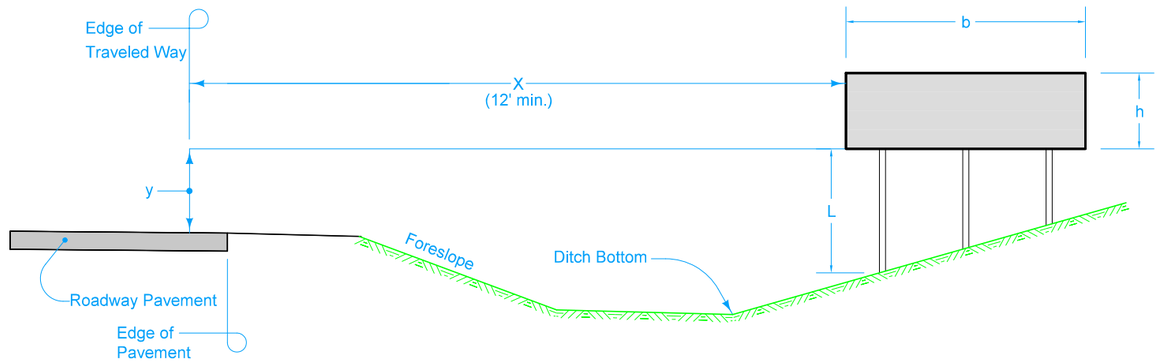
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Note: The sign centroid is equivalent to L + h/2, (length of the longest post from the ground to the bottom of the sign plus the half the height of the sign.) and the Sign Area Yielding Design is the maximum area that the corresponding sign can have without failure. Sign Area is equivalent to b x h.

POST LOADING FOR PERFORATED SQUARE STEEL TUBE POSTS (1) (2)

SIGN CENTROID (FT)	SIGN AREA (SQ-FT) YIELDING DESIGN					
	TYPE 1 TYPE 2	TYPE 3/TYPE 4 (SLIP BASE REQUIRED)				
	2 ½" x 12ga	2 ½" x 12ga		2 ¼" x 12ga inserted into a 2 ½" x 12 ga		
	1 Post	2 Post	3 Post	1 Post	2 Post	3 Post
16.5	10.44	20.88	31.32	18.78	37.56	56.34
16	10.76	21.52	32.28	19.36	38.72	58.08
15.5	11.11	22.22	33.33	19.99	39.98	59.97
15	11.48	22.96	34.44	20.65	41.3	61.95
14.5	11.87	23.74	35.61	21.36	42.72	64.08
14	12.3	24.6	36.9	22.13	44.26	66.39
13.5	12.75	25.5	38.25	22.95	45.9	68.85
13	13.24	26.48	39.72	23.83	47.66	71.49
12.5	13.77	27.54	41.71	24.78	49.56	74.34
12	14.35	28.7	43.05	25.82	51.64	77.46
11.5	14.97	29.94	44.91	26.94	53.88	80.82
11	15.65	31.3	46.95	28.16	56.32	84.48
10.5	16.4	32.8	49.2	29.5	59	88.5
10	17.22	34.44	51.66	30.98	61.96	92.94
9.5	18.12	36.24	54.36	32.61	65.22	97.83
9	19.13	38.26	57.39	34.42	68.84	103.26
8.5	20.26	40.52	60.78	36.45	72.9	109.35
8	21.52	43.04	64.56	38.72	77.44	116.16



(1) Adapted from AASHTO Standard Specifications for - Highway Signs, Luminaires, and Traffic Signals. 6th Edition 2013. <Rev B 4/7/14>

(2) 90 MPH Wind Load

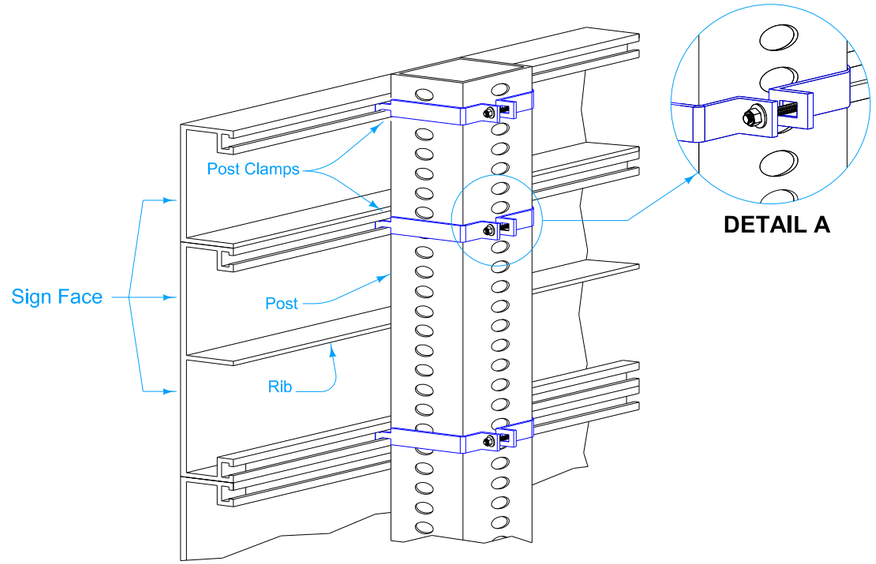
IOWA DOT

REVISION - 00-00-00

TAS STANDARD

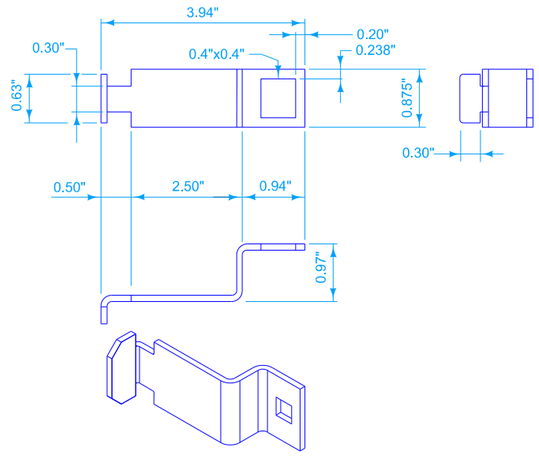
REVISION: __

Support Structures - Perforated Square Steel Tube Anchor and Post



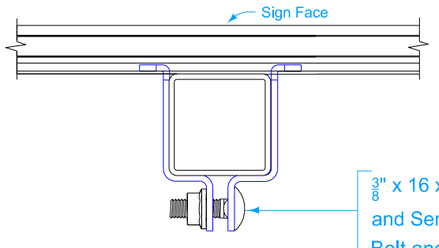
DETAIL A

Install post clamps at top and bottom of the sign,
and at each joint for each post.



POST CLAMP DETAIL

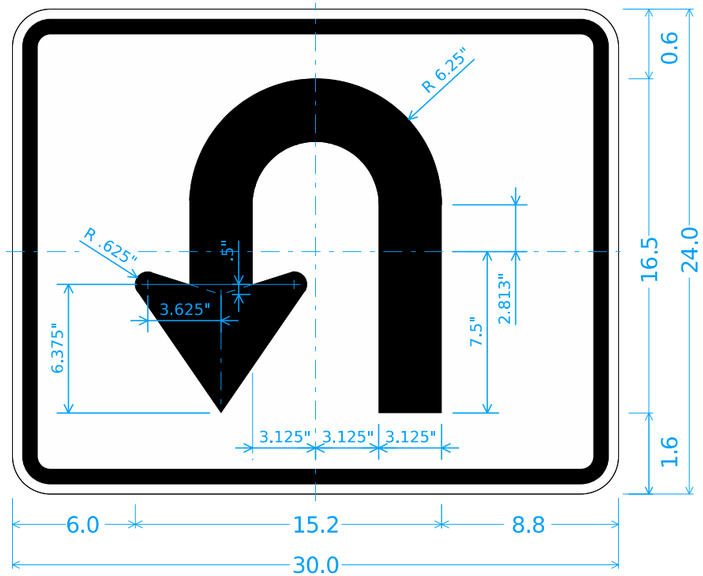
Post clamp shall be stainless.



3/8" x 16 x 2" Carriage Bolt
and Serated Flange Nut.
Bolt and Nut shall be stainless steel.

PLAN VIEW

PSST POST
TYPE 'B' SIGN
ATTACHMENT DETAILS



1.9" Radius, 0.8" Border, 0.5" Indent, Black on White;

R3-4 (MOD)

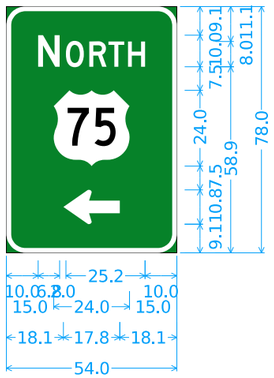
For use on Restricted Crossing U Turn intersections.

TYPE A SIGN DETAIL
R3-4 (MOD)

FILE NO.	ENGLISH	DESIGN TEAM **Fobian/Kenton**	**PLYMOUTH** COUNTY	PROJECT NUMBER **NHSN-075-2(138)--2R-75**	SHEET NUMBER **B.6**	REVISED

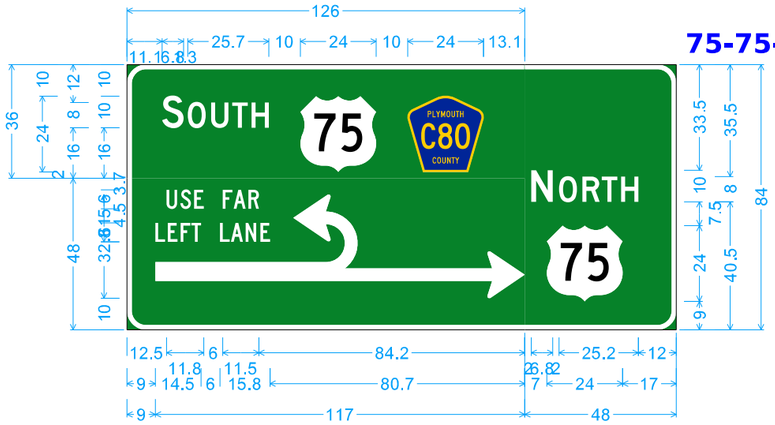
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75-75-100 M001



6.0" Radius, 1.5" Border, White on Green;
"NORTH", D 2K;
Standard Arrow 4 17.9" X 10.9" 180°;

75-75-100 M002

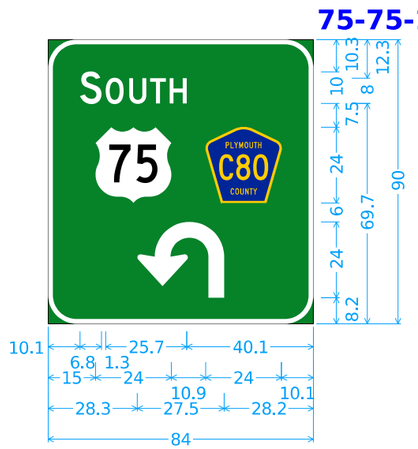


6.0" Radius, 1.5" Border, White on Green;
"SOUTH", D 2K; Pentagonal County C80 M1-6;

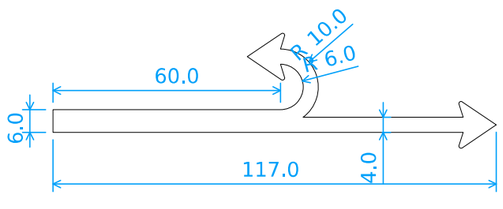
6.0" Radius, 1.5" Border, White on Green;
"USE FAR", C 2K; "LEFT LANE", C 2K;

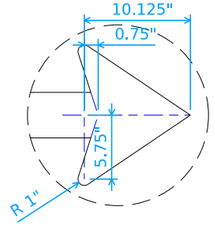
6.0" Radius, 1.5" Border, White on Green;
"NORTH", D 2K;

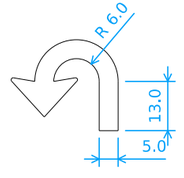
75-75-100 M003



9.0" Radius, 1.5" Border, White on Green;
"SOUTH", D 2K;
Pentagonal County C80 M1-6;
Turn Arrow;





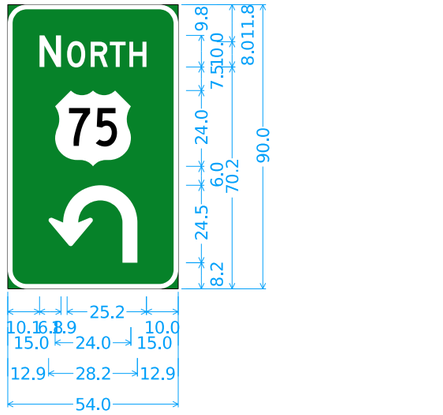


SIGN PANEL DETAILS

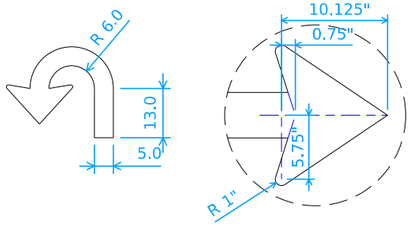
FILE NO.	ENGLISH	DESIGN TEAM **Fobian/Kenton**	**PLYMOUTH** COUNTY	PROJECT NUMBER **NHSN-075-2(138)--2R-75**	SHEET NUMBER **B.7**

8:04:18 AM 8/31/2026 skenton pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7507502026\TrafficAndSafety\(138)_Signs\CADD Files\SHT_75075138_B1.dgn

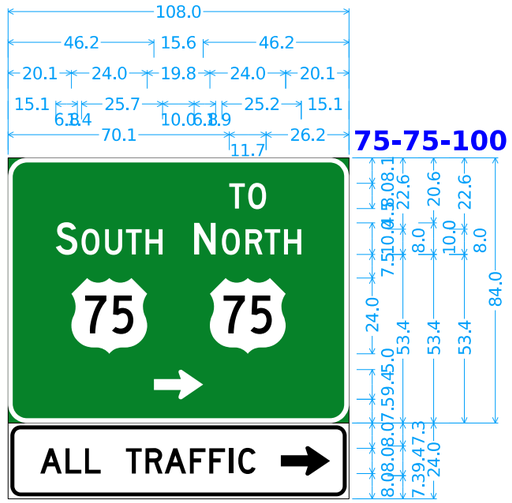
75-75-100 M103



6.0" Radius, 1.5" Border, White on Green;
"NORTH", D 2K;
Turn Arrow;



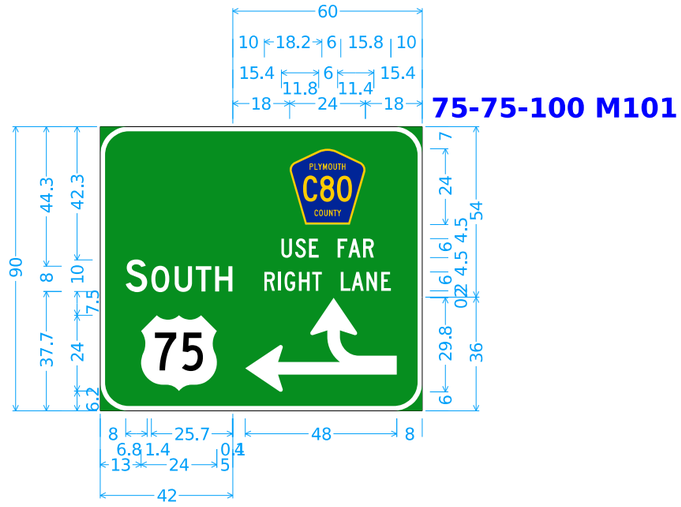
75-75-100 S001



6.0" Radius, 1.5" Border, White on Green;
"TO", D 2K; "SOUTH", D 2K;
"NORTH", D 2K;
Standard Arrow 3.5 15.6" X 9.4" 0°;

4.0" Radius, 1.3" Border, 0.8" Indent, Black on White;
"ALL TRAFFIC", D 2K;
Standard Arrow 3.5 15.6" X 9.4" 0°;

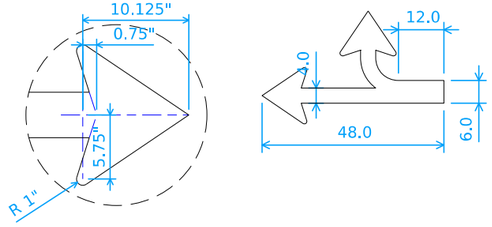
75-75-100 M101



9.0" Radius, 1.5" Border, White on Green;
"SOUTH", D 2K;

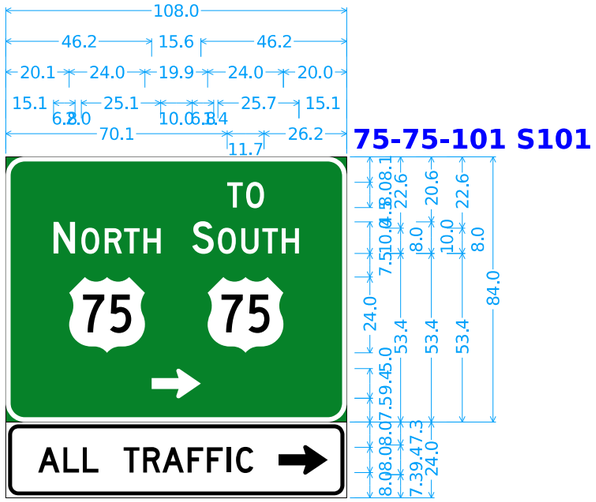
9.0" Radius, 1.5" Border, White on Green;
Pentagonal County C80 M1-6;
"USE FAR", C 2K; "RIGHT LANE", C 2K;

9.0" Radius, 1.5" Border, White on Green;



SIGN PANEL
DETAILS

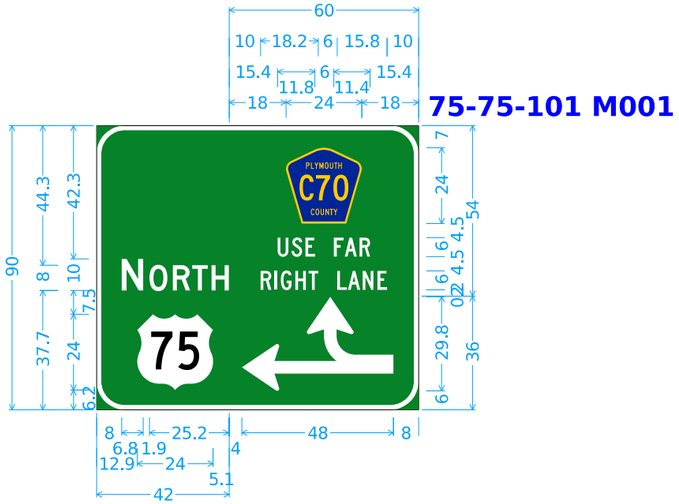
75-75-101 S101



6.0" Radius, 1.5" Border, White on Green;
"TO", D 2K; "NORTH", D 2K;
"SOUTH", D 2K;
Standard Arrow 3.5 15.6" X 9.4" 0°;

4.0" Radius, 1.3" Border, 0.8" Indent, Black on White;
"ALL TRAFFIC", D 2K;
Standard Arrow 3.5 15.6" X 9.4" 0°;

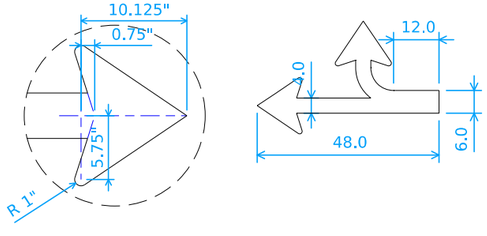
75-75-101 M001



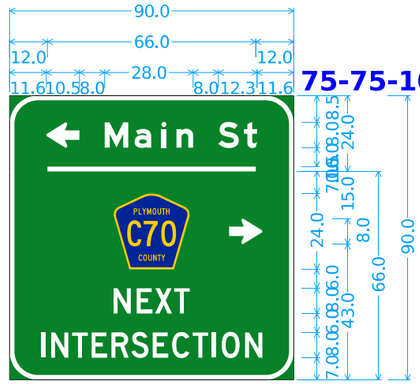
9.0" Radius, 1.5" Border, White on Green;
"NORTH", D 2K;

9.0" Radius, 1.5" Border, White on Green;
Pentagonal County C70 M1-6;
"USE FAR", C 2K; "RIGHT LANE", C 2K;

9.0" Radius, 1.5" Border, White on Green;



75-75-101 M002



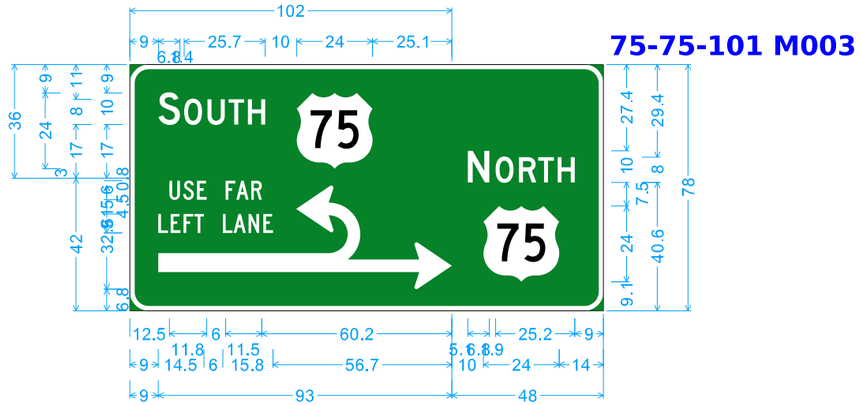
Expressway Destination 2 Line;

9.0" Radius, 1.5" Border, White on Green;
Arrow III-8S - 10.5" 180°;
"Main St", E Mod 2K;

9.0" Radius, 1.5" Border, White on Green;
Pentagonal County C70 M1-6;
Arrow III-8S - 10.5" 0°;
"NEXT", D 2K;
"INTERSECTION", D 2K;

SIGN PANEL DETAILS

75-75-101 M003

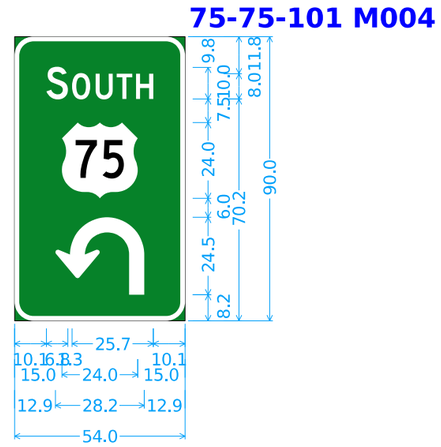


6.0" Radius, 1.5" Border, White on Green;
"SOUTH", D 2K;

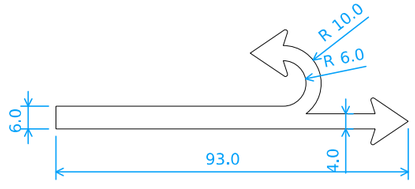
6.0" Radius, 1.5" Border, White on Green;
"USE FAR", C 2K; "LEFT LANE", C 2K;

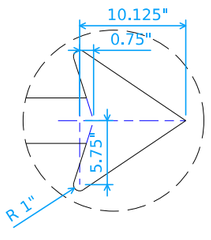
6.0" Radius, 1.5" Border, White on Green;
"NORTH", D 2K;

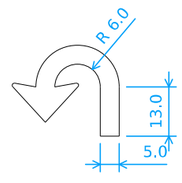
75-75-101 M004



6.0" Radius, 1.5" Border, White on Green;
"SOUTH", D 2K;
Turn Arrow;





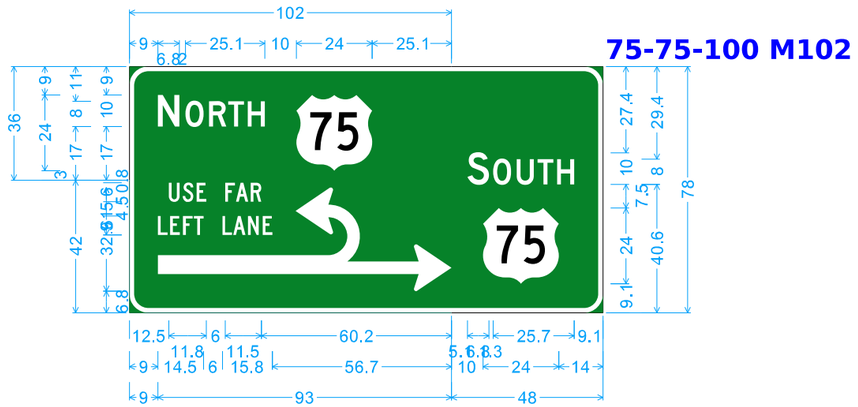


SIGN PANEL DETAILS

FILE NO.	ENGLISH	DESIGN TEAM **Fobian/Kenton**	**PLYMOUTH** COUNTY	PROJECT NUMBER **NHSN-075-2(138)--2R-75**	SHEET NUMBER **B.10**

8:04:20 AM 8/31/2026 skenton pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7507502026\TrafficAndSafety\(138)_Signs\CADD Files\SHT_75075138_B1.dgn

75-75-100 M102

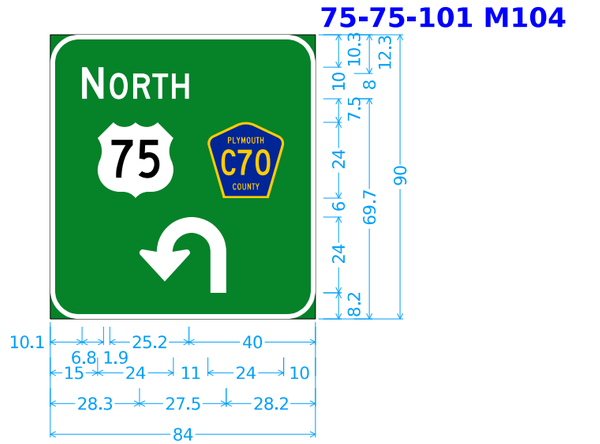


6.0" Radius, 1.5" Border, White on Green;
"NORTH", D 2K;

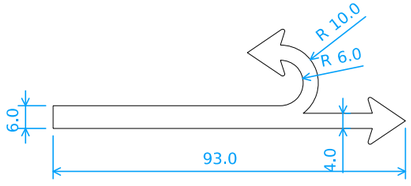
6.0" Radius, 1.5" Border, White on Green;
"USE FAR", C 2K; "LEFT LANE", C 2K;

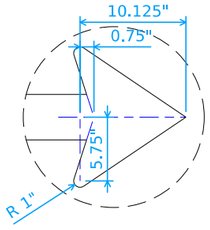
6.0" Radius, 1.5" Border, White on Green;
"SOUTH", D 2K;

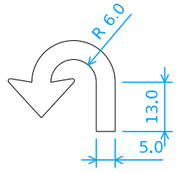
75-75-101 M104



9.0" Radius, 1.5" Border, White on Green;
"NORTH", D 2K;
Pentagonal County C70 M1-6;
Turn Arrow;





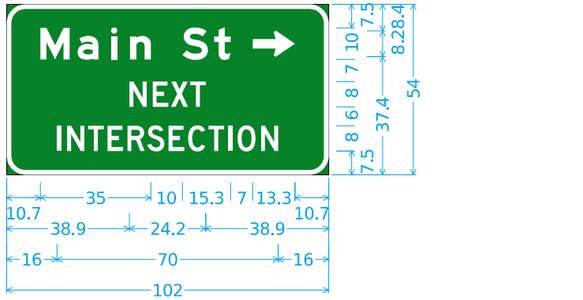


SIGN PANEL DETAILS

FILE NO.	ENGLISH	DESIGN TEAM **Fobian/Kenton**	**PLYMOUTH** COUNTY	PROJECT NUMBER **NHSN-075-2(138)--2R-75**	SHEET NUMBER **B.11**

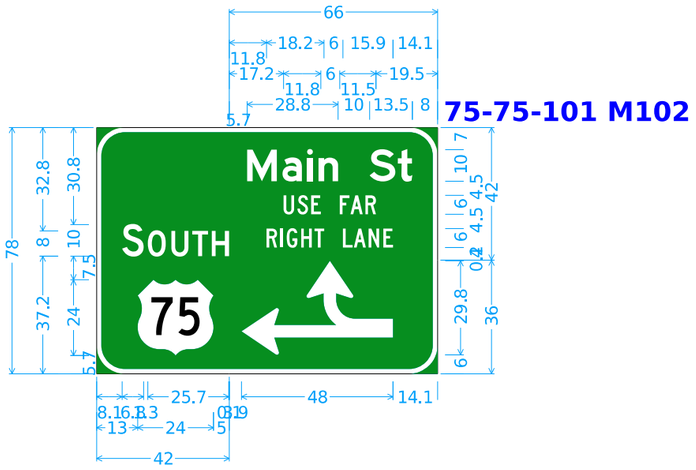
8:04:20 AM 8/31/2026 skenton pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7507502026\TrafficAndSafety\(138)_Signs\CADD Files\SHT_75075138_B1.dgn

75-75-101 M101



Expressway Mileage 1 Line;
6.0" Radius, 1.5" Border, White on Green;
"Main St", E Mod 2K;
Standard Arrow 3 13.4" X 8.1" 0°;
"NEXT", D 2K; "INTERSECTION", D 2K;

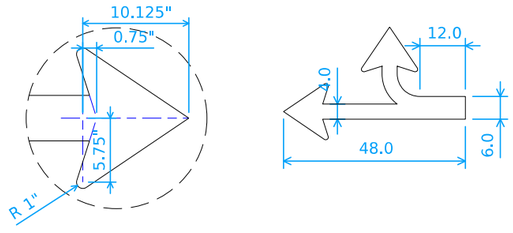
75-75-101 M102



9.0" Radius, 1.5" Border, White on Green;
"SOUTH", D 2K;

9.0" Radius, 1.5" Border, White on Green;
"Main St", E 2K; "USE FAR", C 2K;
"RIGHT LANE", C 2K;

9.0" Radius, 1.5" Border, White on Green;



SIGN PANEL DETAILS

FILE NO.	ENGLISH	DESIGN TEAM **Fobian/Kenton**	**PLYMOUTH** COUNTY	PROJECT NUMBER **NHSN-075-2(138)--2R-75**	SHEET NUMBER **B.12**

8:04:21 AM 8/31/2026 skenton pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7507502026\TrafficAndSafety\(138)_Signs\CADD Files\SHT_75075138_B1.dgn

ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Item no.	Item Code	Item	Unit	Quantities Estimated Traffic Sign Items	Estimate Reference Notes
1	2524-6765210	REMOVAL OF TYPE A SIGN ASSEMBLY	EACH	43	Refer to Tabulation 190-62 for location and details. This item for the removal of Type A Sign Assemblies, including the sign panels, sign brackets, supporting structures and hardware. Contractor shall carefully dismantle each sign assembly. Sign posts, brackets and hardware shall become property of the Contractor. Sign panels shall become property of the DOT and shall be delivered to the nearest DOT maintenance facility. All holes resulting from removal of post shall be filled level with the adjacent grade with backfill material conforming to the Standard Specifications. Measurement: The Engineer will count the number of sign assemblies removed. Payment: The Contractor will be paid the contract unit price for each sign assembly removed.
2	2524-9081275	CONCRETE FOOTING FOR BREAKAWAY SIGN POST, 2'-8" DIA. X 7'-6"	EACH	6	Refer to Tabulation 190-50 for details.
3	2524-9089110	DELINEATOR, RIGID - TYPE IA	EACH	9	Refer to Tabulation 190-25 for locations and details. Removal of existing delineators and mileposts shall be incidental.
4	2524-9100010	OBJECT MARKER, TYPE 1	EACH	1	Item shall be Type OM1-2, yellow reflector buttons on black aluminum sheet sign blank mounted on Type 1 delineator post. See Iowa DOT Standard Road Plan SI-173 for fabrication and installation details. Fabricate object markers from materials complying with Section 4186 of the Standard Specifications. Contractor shall furnish all materials and hardware required to fabricate and install each Object Marker complete. For locations within concrete, core drill 8" diameter hole, install Object Marker to proper depth and backfill to top of hole with Class A crushed stone meeting the requirements of Article 4120.04. Object Markers shall be installed so that the bottom of the marker panel is 4' above the edge of roadway nearest the Object Marker. When installed alone, ensure top of post does not extend above top of Object Marker. MEASUREMENT: Each. PAYMENT: Contractor shall be paid the contract unit price for each Object Marker installed.
5	2524-9276010	PERFORATED SQUARE STEEL TUBE POSTS	LF	1,675.5	Refer to Tabulations 190-50 and 190-51 for locations and details.
6	2524-9276024	PERFORATED SQUARE STEEL TUBE POST ANCHOR, BREAK-AWAY CONCRETE INSTALLATION	EACH	8	
7	2524-9276027	PERFORATED SQUARE STEEL TUBE POST ANCHOR, TRIANGULAR SLIP BASE ASSEMBLY	EACH	87	
8	2524-9281210	STEEL BREAKAWAY SIGN POSTS FOR TYPE A OR B SIGNS, W 8 X 21	LF	110.3	Refer to Tabulation 190-50 for locations and details.
9	2524-9325001	TYPE A SIGNS, SHEET ALUMINUM	SF	859.6	Refer to Tabulation 190-51 and 190-66 for locations and details.
10	2524-9380001	TYPE B SIGNS, EXTRUDED ALUMINUM STRUCTURAL PANEL	SF	1,039.6	Refer to Tabulation 190-50 for locations and details.
11	2526-8285040	CONSTRUCTION SURVEY, LOCATION SURVEY	LS	1	

Item no.	Item Code	Item	Unit	Quantities	Estimate Reference Notes
				Estimated	
				Traffic Sign Items	
12	2533-4980005	MOBILIZATION	LS	1	- -
13	2599-9999005	('EACH' ITEM) MASSH-400 SIGN POSTS	EACH	5	Item is for furnishing and installing MASSH-400 breakaway post system. Refer to sheet B.XX for installation details. Item includes: - (1) 13” slip base top kit - (1) 13” unibase 4”x48" (including concrete for complete 18"x48" footing) - (1) ¾” redi Torque kit - (7) universal post clamp (min. of 1 clamp per 10 sq. ft. of sign with a min. of at least 3 clamps) - (1) closure cap for 4” sq post - (1) sign post 4”x(varies)’ 8ga. - All hardware required to assemble the sign post system complete MASSH-400 posts shall be installed per the manufacturer's specifications. Measurement: The Engineer will count each MASSH-400 post furnished and installed. Payment: The Contractor shall be paid the contract until price for each MASSH-400 post furnished and installed complete.

SIGNING NOTES

The following tolerances will be allowed on all signs:

Accumulation error of not greater than +/-0.50" per line of copy, not greater than +/-0.50" for spacing between lines of copy, and the margin between lines of copy and the inside edge of the sign border.

The following tolerances will be allowed on each letter or numeral:

nominal height	variation in height	variation in width
4" thru 12"	-1/8" to +3/8"	-1/4" to +1/4"
over 12"	-1/8" to +3/8"	-3/8" to +3/8"

Type B signs can be separated into two categories:
- Major Guide Signs.
- Minor Guide Signs.

Major Guide Signs include the advance and exit direction guide signs for an interchange or intersection.

Minor Guide Signs include all other guide signs such as NEXT EXIT signs, supplemental guide signs, logo signs, exit gore signs, post-interchange mileage signs, ramp destination signs, and ramp logo signs for an interchange, as well as destination signs along sideroads.

Type A signs are not separated into categories, but special consideration should be given to regulatory signs.

Do not remove Type B signs until replacement signs have been installed. If construction activities require the removal of a sign, the existing sign may be relocated to temporary posts, or a temporary plywood sign may be installed to replace the existing sign.

Existing non-regulatory Type A signs are NOT required to remain in place until installation of replacement signs. Existing regulatory Type A signs, particularly Stop signs, should not be removed until replacement signs are installed. Where a staged traffic control plan is contrary to this guidance, follow the direction of the traffic control plan.

Apply the following during the replacement or modification of signs:
- No more than one of the major guide signs for each direction of travel at an interchange out of service at any one time.
- No major guide sign out of service for more than 8 hours.
- No minor guide out of service for more than 24 hours.

Remove existing signs and posts within 24 hours following the installation of a new replacement sign.

In any case where the plans call for a new sign and posts to be installed at the same station location and offset as an existing sign, install the new posts at a minimum of either 5 ft ahead or behind the existing sign installation. Signs shall not be installed more than 25 ft ahead or behind the existing sign installation. Whenever posts for a replacement sign are erected directly in front of an existing sign, install the new replacement sign and remove the existing sign installation within 24 hours of the time that the new posts are erected.

Where signs are located behind guardrail, locate the near edge of the sign a minimum of 3 ft behind the guardrail posts.

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SIGNING NOTES

Unless noted otherwise, leave auxiliary panels, such as exit number panels, in place or reattach to the sign using the existing mounting hardware. Also, when replacing an existing logo sign with a new logo sign, remove the business logo panel(s) from the existing sign and attach to the new sign as directed by the Engineer. Do not damage the auxiliary or logo panels when removing and reattaching them. This work is incidental to other work and no separate payment will be made.

The following notes apply to the corresponding sign installations shown on the plan sheets and listed in the tabulations.

IB INSTALL NEW TYPE B SIGN
IA INSTALL NEW TYPE A SIGN

Install new signs at the location identified in the plans.

For installation of new signs on an existing sign support structure, refer to note (L).

For installation of new signs on existing posts:

- if the new sign is taller than the existing sign, furnish the necessary hardware to extend the sign above the posts. Refer to Standard Road Plan SI-132.

- if the new sign is shorter than the existing sign:

- for wood posts and perforated square tube posts, install the sign at the proper height and cut off the excess post length.

- for MASSH-400 and steel breakaway posts, install the sign at the top of the posts.

For plywood signs, no vertical splices are allowed in signs less than or equal to 10 ft wide. No horizontal splices are allowed in signs less than or equal to 4 ft tall.

Each new sign installed shall have a sticker applied to the back of the sign that shows the date the sign was installed. The Contractor shall supply the sticker for all contractor suppled signs. The DOT will supply date stickers on any signs supplied by the department.

Payment for installing Type A signs or Type B signs includes furnishing hardware for mounting, extending signs above existing posts, and cutting posts to length.

MS MODIFICATION OF EXISTING SIGNS

For removal and/or installation of logo panels, and other sign modifications. Refer to the project plans and typical details for additional information.

SC SIGN COVER

For the installation or removal of temporary sign covers for the purposes of temporary traffic control. Sign covers shall completely cover the existing Sign. Care should be taken so that covers, fasteners, and installation practices do not damage the existing sign. Tape of any type shall not be applied to the sheeted face of the existing sign under any circumstances. Repair of damage to the existing sign caused by sign covers will be the responsibility of the Contractor.

SO OVERLAY TYPE B GUIDE SIGNS
MB INSTALL SPECIAL MOUNTING BRACKET

Install special mounting brackets at the locations identified in the plans. Refer to Tabulations 190-51 and/or 190-65.

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10/15/25

SIGNING NOTES

PB INSTALL NEW BREAKAWAY STEEL POSTS AND FOOTING
PP INSTALL NEW PERFORATED SQUARE TUBE POSTS AND ANCHORS
PM INSTALL NEW MASSH-400 POSTS AND ANCHORS

Install new breakaway steel posts and footings, perforated square tube posts and anchors, or MASSH-400 posts and anchors at the locations identified in the plans. Refer to the Standard Road Plans, Typicals, and Tabulations 190-51 and 190-50 for post size and footing information.

New posts shall be installed in undisturbed soil. The new posts shall not be placed in the hole of removed posts.

Remove excess soil from footing hole. Do not spread soil on adjacent seeded or vegetated areas.

If note (RR) accompanies (PB), (PP), or (PM), install an existing sign on the new posts.

RR REMOVE AND REINSTALL SIGN AS PER PLAN

Do not remove existing major Type B guide signs on posts until the new posts are installed. Promptly remove sign and install at the new location.

Existing major Type B guide signs on overhead support structures, minor Type B guide signs, plywood signs, and Type A signs may be removed and stored. Transport the signs to a DOT storage area as designated by the Engineer. Transport the signs back to the job site when ready for installation at the new location.

Signs to be reinstalled shall not be stored for any length of time with the sheeted face in contact with the ground.

Replace signs damaged by the Contractor's activities at no additional cost to the Contracting Authority.

Payment for Remove and Reinstall Sign includes sign removal, delivery to and from the DOT storage area (if applicable), and reinstallation, including any hardware required for reinstallation. When noted in the plans, payment for delivery and stockpile of existing signs will be separate from the payment for Remove and Reinstall Sign.

RA REMOVAL OF TYPE A SIGN ASSEMBLY
RB REMOVAL OF TYPE B SIGN ASSEMBLY

Type A Sign Assembly consists of one or more signs installed on one or more posts, either directly mounted to the post or mounted to the post with special sign mounting brackets.

Type B Sign Assembly consists of the main sign, all auxiliary signs and brackets, and posts.

Unless stated otherwise in the plans, remove all posts with the signs and brackets.

Remove each sign assembly identified in the plans. Sign posts removed become the property of the Contractor. All other materials removed remain the property of the DOT.

For each sign assembly removed, disassemble each assembly before delivering to the DOT.

* For Type A sign assemblies, unbolt all signs, special mounting brackets, and posts from each other.

* For Type B assemblies, unbolt all extruded aluminum panels, brackets, and posts from each other. Do not damage the disassembled materials.

When the plans call for the removal of posts, the entire existing post shall be removed. The post shall not be broken off or cut off at the ground line. Place backfill in holes remaining from the removal of posts and restore to the surrounding conditions.

Deliver the removed signs, special sign mounting brackets, and extruded aluminum panels to a DOT storage area, as designated by the Engineer.

The concrete footings for steel posts are not considered part of the sign assembly. Refer to note RF for concrete footing removal.

Payment for Removal of Type A Sign Assembly or Removal of Type B Sign Assembly includes sign assembly removal and disassembly, post removal (if applicable), delivery to the DOT storage area, placing backfill in holes, and restoration of the surrounding conditions.

RF REMOVE EXISTING CONCRETE FOOTING FOR STEEL POST

Remove existing concrete footings to a depth of at least 1 ft below the natural groundline. Place backfill in holes remaining from removal and restore to the normal surrounding conditions. This work is incidental to other work and no separate payment will be made.

RS REMOVE EXISTING TYPE B SIGN SUPPORT STRUCTURE

The following are considered Type B Sign Support Structures:
- Overhead sign trusses and foundations
- Cantilever sign trusses and foundations
- Bridge-mounted brackets

Unless stated otherwise in the plans, existing overhead trusses, cantilever trusses, and bridge brackets which are removed become the property of the Contractor. If stated in the plans, deliver overhead trusses, cantilever trusses, and bridge brackets to a DOT storage area, as designated by the Engineer.

Payment for Removal of Sign Support Structure and Foundation includes sign support structure removal, delivery to the DOT storage area (if applicable), and restoration of the surrounding conditions. Removal of the foundation includes removal of the stem to a minimum of 1 ft below the natural groundline.

L MODIFY SIGN SUPPORT ANGLES NEEDED TO INSTALL SIGNS ON EXISTING SIGN SUPPORT STRUCTURES

Refer to the sign support structure details for information on the required angle brackets.

Provided all specifications are met, the existing sign support angles may be reused. Install existing sign support angles to be reused only on the sign support structure from which they were removed.

Sign support angles removed and not reused become the property of the Contractor.

259_01
10/15/25

SIGNING NOTES

When reusing the existing sign support angles with a shorter replacement sign, the sign support angles may need to be trimmed. Refer to the sign support details to determine if and where to trim the sign support angles.

Do not use existing fasteners. Use new U-Bolts, stainless steel bolts and nuts to install the existing or new sign support angles to the sign support structure.

Removal of existing sign support angles is incidental to removal of the sign.

Reinstalling and/or modifying existing sign support angles; furnishing and installing new sign support angles (if required); and furnishing and installing new fasteners is incidental to work associated with Type B signs.

SIGN INSTALLATION QUALITY CONTROL NOTES

Post lengths have been derived from the proposed grading cross sections. Verify post lengths in the field prior to ordering or fabrication.

Slight differences between the design template and the actual conditions should be expected. These variations should be resolved by doing some localized shaping and grading. Obtain material needed to meet the site requirements of SI-112 from the excavation and/or the area immediately adjacent to the work. Ensure reshaping work does not substantially change foreslopes or the drainage in the vicinity of the sign.

Significant differences between the plan design and the actual field conditions shall be resolved in this manner:

Survey the location and draw the actual template on the cross section. Recalculate each post length and compare to the maximum allowable leg length. If all of the maximum leg lengths are less than or equal to the maximum allowable leg length, then the proposed post design will be sufficient. If any leg is greater than the maximum allowable leg length, then submit the cross section with the actual template drawn (including offsets and elevation from the survey shown) to the Engineer. The Engineer may forward this information to the Engineer of Record in order to complete a new post design.

Install the footings, stub posts, and posts according to the tolerances shown on the applicable SI Series Standard Road Plans.

Footing construction is the controlling activity that substantially affects the quality of the site installation. Verify the elevation difference between the stubs is exactly the same as the elevation difference between the post lengths. If the Engineer requests, submit documentation detailing the site cross section in order to verify site installation.

105_04
10/20/26

STANDARDS

The following Standards apply to construction work on this project.

Number	Date	Title
SI-101	04-19-16	Locations - Type 'A' Signs
SI-102	04-19-16	Locations - Type 'B' Signs
SI-112	04-19-16	Footings For Steel Breakaway Posts
SI-113	10-15-19	Support Structures - Steel Breakaway Posts
SI-121	10-16-18	Fabrication - Sign Legend Components
SI-123	10-20-20	Fabrication - Type 'B' Signs
SI-131	10-18-16	Installation - Type 'A' Signs
SI-132	04-17-18	Installation - Type 'B' Signs
SI-133	10-17-17	Installation - Type 'A' Sign Shim
SI-172	04-19-16	Delineators
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-202	04-18-23	Work Within 15 ft of Traveled Way
TC-211	10-15-19	Lane Closure on Low Volume Roadway
TC-402	04-18-23	Work Within 15 ft of Traveled Way
TC-418	04-18-23	Lane Closure on Divided Highway

190_50
3/24/25

MATERIALS FOR TYPE 'B' SIGNS

Line No.	Number	Route	County	Exit Number	Road ID	Seq. No.	Dir of Travel	Sign Location Station	Fab Info	Sign Width (FT)	Sign Height (FT)	New Area (SF)	4x6 L (FT)	4x6 M (FT)	4x6 R (FT)	Perf. Sq. Steel L (FT)	Perf. Sq. Steel M (FT)	Perf. Sq. Steel R (FT)	Perf. Sq. Anchor Type	Anchor Quantity (EA)	W8x21 L (FT)	W8x21 M (FT)	W8x21 R (FT)	Footing 2'8"x7'6" (EA)	W12x26 L (FT)	W12x26 M1 (FT)	W12x26 M2 (FT)	W12x26 R (FT)	Footing 2'8"x9' (EA)	Install Type	Install Dim 'X'	Install Dim 'Y'	See Signing Notes	Remarks
1.0	1	75	75	100	M	001	NB	1007+00.00	NEW	4.5	6.5	29.3																		1	30.0	7.0	RB	MASSH-400 Post
2.0	2	75	75	100	M	103	SB	8+00.00	NEW	4.5	7.5	33.8																		3	30.0	7.0	RB	MASSH-400 Post
3.0	3	75	75	100	M	102	SB	12+20.00	NEW	12.5	7.0	87.5																		3	14.0	7.0	RB/PP	See Note 1
4.0	4	75	75	100	M	002	NB	1013+05.00	NEW	14.5	7.0	101.5																		3	14.0	7.0	RB/PP	See Note 2
6.0	6	75	75	100	M	003	NB	1018+60.00	NEW	7.0	7.5	52.5																		3	30.0	7.0	RB	MASSH-400 Post
7.0	7	75	75	100	M	101	SB	19+60.00	NEW	9.5	7.5	71.3				18.5	18.5	18.5	Slip	3										1	30.0	7.0	RB/PP	
8.0	8	75	75	100	S	001	EB	3011+00.00	NEW	9.0	9.0	81.0									17.0		18.0	2						1	16.0	7.0	RB/IB	
9.0	9	75	75	101	M	001	NB	1063+25.00	NEW	9.5	7.5	71.3				17.5	17.5	17.5	Slip	3										1	30.0	7.0	RB/PP	
10.0	10	75	75	101	M	104	SB	64+15.00	NEW	7.0	7.5	52.5																		3	30.0	7.0	RB	MASSH-400 Post
11.0	11	75	75	101	M	002	NB	1065+00.00	NEW	7.5	7.5	56.3									18.7		18.1	2						1	24.0	7.0	RB/IB	
12.0	12	75	75	101	M	103	SB	69+25.00	NEW	14.5	7.0	101.5																		3	14.0	7.0	RB/PP	See Note 2
13.0	13	75	75	101	M	003	NB	1070+05.00	NEW	12.5	7.0	87.5																		3	14.0	7.0	RB/PP	See Note 1
14.0	14	75	75	101	M	004	NB	1074+75.00	NEW	4.5	7.5	33.8																		3	30.0	7.0	RB	MASSH-400 Post
15.0	15	75	75	101	M	102	SB	75+65.00	NEW	10.0	6.5	65.0				16.5	16.5	16.5	Slip	3										1	30.0	7.0	RB/PP	
16.0	16	75	75	101	S	101	WB	3071+70.00	NEW	9.0	9.0	81.0									20.1		18.4	2						1	16.0	7.0	RB/IB	
16.0	16	75	75	101	M	101	SB	76+75.00	NEW	7.5	4.5	33.8				16.0		14.5	Slip	2										1	30.0	7.0	RB/PP	
Total												1039.6				68.5	52.5	67.0		11	55.8	0	54.5	6									

Note 1: Install sign on (4) 17.5 LF PSST posts with 7' PSST inserts each post (70 LF TOTAL). Install (1) PSST Slip Base Anchor per post (4 EA TOTAL).

Note 2: Install sign on (5) 17.5 LF PSST posts with 7' PSST inserts each post (87.5 LF TOTAL). Install (1) PSST Slip Base Anchor per post (5 EA. TOTAL).

MATERIALS FOR TYPE 'A' SIGNS

Refer to SI-101, SI-111, SI-119 and N Sheets.

Line No.	Type A Signing Typicals	Sign Number	Dir. of Travel	Sign Location Station	Wood Posts (No.)	4 x 6 Leg 1 (FT)	4 x 6 Leg 2 (FT)	Perf. Sq. Steel Leg 1 (FT)	Perf. Sq. Steel Leg 2 (FT)	Perf. Sq. Steel Leg 3 (FT)	Perf. Sq. Anchor Type	Anchor Quantity (EA)	Steel Rect. Tube (No)	Steel Rect. Tube (FT)	Steel Rect. Tube Anchors (EA)	Type A Bracket One Post	Type A Bracket Two Post	Type A Bracket Auxiliary	Type A Bracket (H)	Type A Bracket (F)	Type A Bracket (F1)	Install. Type	Install. Dim X (FT)	Install. Signing Notes	Remarks
1.0		M2-1	NB	1006+50.00				15.0			Slip	1										1	30.0	IA, PP	
2.0		M1-6																						IA	
3.0																									
4.0		M1-6	NB	1009+50.00				14.0			Slip	1										1	30.0	IA, PP	
5.0		R3-4MOD																						IA	
6.0																									
7.0		R5-1		1011+75.00				13.0		13.0	Slip	2										3		IA, PP	
8.0																									
9.0		R5-1		1011+75.00				13.0		13.0	Slip	2										1	30.0	IA, PP	
10.0																									
11.0		R5-1		1013+75.00				13.0		13.0	Slip	2										3		IA, PP	
12.0																									
13.0		R5-1		1014+50.00				13.0		13.0	Slip	2										1	30.0	IA, PP	
14.0																									
15.0		R3-18		1030+03.00				10.5			Slip	1										3		IA, PP	
16.0		R3-18																						IA	
17.0																									
18.0		R3-18		1048+23.00				10.5			Slip	1										3		IA, PP	
19.0		R3-18																						IA	
20.0																									
21.0		M3-1	SB	11+00.00				15.0			Slip	1										3	18.0	IA, PP	
22.0		M1-4																						IA	
23.0		R3-4MOD																						IA	
24.0																									
25.0		M3-3	SB	11+00.00				14.0			Slip	1										1	30.0	IA, PP	
26.0		M1-4																						IA	
27.0																									
28.0		M3-3	NB	1014+75.00				15.0		13.0	Slip	2										3	18.0	IA, PP	
29.0		M1-4																						IA	
30.0		R3-4MOD																						IA	
31.0		M1-6																						IA	
32.0		R3-4MOD																						IA	
33.0																									
34.0		M3-1	NB	1014+75.00				16.0			Slip	1										1	30.0	IA, PP	
35.0		M1-4																						IA	
36.0																									
37.0		M1-6	SB	20+50.00				14.0			Slip	1										1	30.0	IA, PP	
38.0		M6-1																						IA	
39.0																									
40.0		M2-1	SB	23+50.00				15.5			Slip	1										1	30.0	IA, PP	
41.0		M1-6																						IA	
42.0																									
43.0		R5-1		1066+45.00				13.0		13.0	Slip	2										1	30.0	IA, PP	
44.0																									
45.0		R5-1		1066+45.00				13.0		13.0	Slip	2										3		IA, PP	
46.0																									

MATERIALS FOR TYPE 'A' SIGNS

Refer to SI-101, SI-111, SI-119 and N Sheets.

Line No.	Type A Signing Typicals	Sign Number	Dir. of Travel	Sign Location Station	Wood Posts (No.)	4 x 6 Leg 1 (FT)	4 x 6 Leg 2 (FT)	Perf. Sq. Steel Leg 1 (FT)	Perf. Sq. Steel Leg 2 (FT)	Perf. Sq. Steel Leg 3 (FT)	Perf. Sq. Anchor Type	Anchor Quantity (EA)	Steel Rect. Tube (No)	Steel Rect. Tube (FT)	Steel Rect. Tube Anchors (EA)	Type A Bracket One Post	Type A Bracket Two Post	Type A Bracket Auxiliary	Type A Bracket (H)	Type A Bracket (F)	Type A Bracket (F1)	Install. Type	Install. Dim X (FT)	Install. Signing Notes	Remarks
47.0		R5-1		1068+60.00				13.0		13.0	Slip	2										1	30.0	IA, PP	
48.0																									
49.0		R5-1		1068+60.00				13.0		13.0	Slip	2										3		IA, PP	
50.0																									
51.0		R5-1		1070+80.00				13.0		13.0	Slip	2										3		IA, PP	
52.0																									
53.0		R5-1		1070+80.00				13.0		13.0	Slip	2										3		IA, PP	
54.0																									
55.0		M3-1	SB	67+50.00				13.0		15.5	Slip	2										3	18.0	IA, PP	
56.0		M1-4																						IA	
57.0		R3-4MOD																						IA	
58.0		M1-6																						IA	
59.0		R3-4MOD																						IA	
60.0																									
61.0		M3-3	SB	67+50.00				16.0			Slip	1										1	30.0	IA, PP	
62.0		M1-4																						IA	
63.0																									
64.0		M1-6	SB	71+70.00				13.5			Slip	1										1	30.0	IA, PP	
65.0		R3-4MOD																						IA	
66.0																									
67.0		M3-3	NB	1072+25.00				15.0		13.0	Slip	2										3	18.0	IA, PP	
68.0		M1-4																						IA	
69.0		R3-4MOD																						IA	
70.0																									
71.0		M3-1		1072+25.00				16.0			Slip	1										1	30.0	IA, PP	
72.0		M1-4																						IA	
73.0																									
74.0		M2-1	SB	74+70.00				15.0			Slip	1										1	30.0	IA, PP	
75.0		M1-6																						IA	
76.0																									
77.0	County C80																								
78.0		R3-5R						11.5			Slip	1										1	18.0	IA, PP	
79.0																									
80.0		R1-1						14.0		14.5	Slip	2										1	12.0	IA, PP	
81.0																									
82.0		R6-1R						12.5		12.5	Concrete	2										3		IA, PP	
83.0		R1-1																						IA	
84.0																									
85.0		R4-7						10.0			Concrete	1										3		IA, PP	
86.0																									
87.0		R6-1R						14.0		14.5	Slip	2										1	12.0	IA, PP	
88.0		R1-1																						IA	
89.0																									
90.0	Highland Ave																								
91.0		R6-1R						14.5		15.0	Slip	2										1	12.0	IA, PP	
92.0		R1-1																						IA	

MATERIALS FOR TYPE 'A' SIGNS

Refer to SI-101, SI-111, SI-119 and N Sheets.

Line No.	Type A Signing Typicals	Sign Number	Dir. of Travel	Sign Location Station	Wood Posts (No.)	4 x 6 Leg 1 (FT)	4 x 6 Leg 2 (FT)	Perf. Sq. Steel Leg 1 (FT)	Perf. Sq. Steel Leg 2 (FT)	Perf. Sq. Steel Leg 3 (FT)	Perf. Sq. Anchor Type	Anchor Quantity (EA)	Steel Rect. Tube (No)	Steel Rect. Tube (FT)	Steel Rect. Tube Anchors (EA)	Type A Bracket One Post	Type A Bracket Two Post	Type A Bracket Auxiliary	Type A Bracket (H)	Type A Bracket (F)	Type A Bracket (F1)	Install. Type	Install. Dim X (FT)	Install. Signing Notes	Remarks
93.0																									
94.0		R3-5R						11.5			Slip	1										1		IA, PP	
95.0																									
96.0	Plymouth St																								
97.0		R6-1R						14.5		15.0	Slip	2										1	12.0	IA, PP	
98.0		R1-1																						IA	
99.0		R3-5R																						IA	
100.0																									
101.0	Main St																								
102.0		R6-1R						14.5		15.0	Slip	2										1		IA, PP	
103.0		R1-1																						IA	
104.0		R3-5R																						IA	
105.0																									
106.0	County C70																								
107.0		R6-1R						14.5		15.0	Concrete	2										3	12.0	IA, PP	
108.0		R1-1																							
109.0																									
110.0		R1-1						13.0		13.5	Slip	2										1		IA, PP	
111.0																									
112.0		R3-5R		3071+00.00				11.5			Slip	1										1	16.0	IA, PP	
113.0																									
114.0	U-Turn #1																								
115.0		R5-1						13.5		13.5	Slip	2										3	18.0	IA, PP	
116.0																									
117.0		R6-1R						12.5			Slip	1										3	12.0	IA, PP	
118.0		R1-2																						IA	
119.0																									
120.0		R6-1R						12.5			Slip	1										3	12.0	IA, PP	
121.0		R1-2																						IA	
122.0																									
123.0		R3-4						11.0			Slip	1										3	12.0	IA, PP	
124.0																									
125.0		R5-1						15.0		15.0	Slip	2										1	30.0	IA, PP	
126.0																									
127.0	U-Turn #2																								
128.0		R5-1						13.5		13.5	Slip	2										3	18.0	IA, PP	
129.0																									
130.0		R6-1R						12.5			Slip	1										3	12.0	IA, PP	
131.0		R1-2																						IA	
132.0																									
133.0		R6-1R						12.5			Slip	1										3	12.0	IA, PP	
134.0		R1-2																						IA	
135.0																									
136.0		R3-4						11.0			Slip	1										3	12.0	IA, PP	
137.0																									
138.0		R5-1						15.0		15.0	Slip	2										1	30.0	IA, PP	

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2/10/23

MATERIALS FOR TYPE 'A' SIGNS

Refer to SI-101, SI-111, SI-119 and N Sheets.

Line No.	Type A Signing Typicals	Sign Number	Dir. of Travel	Sign Location Station	Wood Posts (No.)	4 x 6 Leg 1 (FT)	4 x 6 Leg 2 (FT)	Perf. Sq. Steel Leg 1 (FT)	Perf. Sq. Steel Leg 2 (FT)	Perf. Sq. Steel Leg 3 (FT)	Perf. Sq. Anchor Type	Anchor Quantity (EA)	Steel Rect. Tube (No)	Steel Rect. Tube (FT)	Steel Rect. Tube Anchors (EA)	Type A Bracket One Post	Type A Bracket Two Post	Type A Bracket Auxiliary	Type A Bracket (H)	Type A Bracket (F)	Type A Bracket (F1)	Install. Type	Install. Dim X (FT)	Install. Signing Notes	Remarks
139.0																									
140.0	U-Turn #3																								
141.0		R5-1						13.5		13.5	Slip	2										3	18.0	IA, PP	
142.0																									
143.0		R6-1R						12.5			Slip	1										3	12.0	IA, PP	
144.0		R1-2																						IA	
145.0																									
146.0		R6-1R						12.5			Slip	1										3	12.0	IA, PP	
147.0		R1-2																						IA	
148.0																									
149.0		R5-1						15.0		15.0	Slip	2										1	30.0	IA, PP	
150.0																									
151.0	U-Turn #4																								
152.0		R5-1						13.5		13.5	Slip	2										3	18.0	IA, PP	
153.0																									
154.0		R6-1R						12.5			Slip	1										3	12.0	IA, PP	
155.0		R1-2																						IA	
156.0																									
157.0		R3-4						11.0			Slip	1										3	12.0	IA, PP	
158.0																									
159.0		R6-1R						12.5			Slip	1										3	12.0	IA, PP	
160.0		R1-2																						IA	
161.0																									
162.0		R3-4						11.0			Slip	1										3	12.0	IA, PP	
163.0																									
164.0		R5-1						15.0		15.0	Slip	2										1	30.0	IA, PP	
Total								772.0	0	400.5		87													

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2/10/23

REFERENCE LOCATION SIGNS AND DELINEATORS

Refer to SI-171, SI-172 and SI-173.

Line No.	Station From	Station To	Location	Reference Location Sign Type	Quantity (EA)	Enhanced Reference Location Sign Type	Quantity (EA)	Intermediate Reference Location Sign Type	Quantity (EA)	Type I Delineator White (EA)	Type I Delineator Yellow (EA)	Type IA Delineator White (EA)	Type IA Delineator Yellow (EA)	Type II Delineator White (EA)	Type II Delineator Yellow (EA)	Type III Delineator White (EA)	Type III Delineator Yellow (EA)	Object Marker Type 1 (EA)	Object Marker Type 2 (EA)	Object Marker Type 3 (EA)	Installation Type	Installation Offset
1.0	1007+17.00	1012+45.00	NB Lanes									3									1	8.0
2.0	1062+70.00	1067+98.00	NB Lanes									3									1	8.0
3.0	70+59.00	75+87.00	SB Lanes									3									1	8.0
4.0	3012+50.00		C80 (Stop Island)															1			3	
Total												9						1				

190_62
2/13/23

EXISTING SIGNS TO BE REMOVED

Line No.	Sign Number or Description	Location Station	Direction of Travel	Type 'A' Sign Assembly (RA) (EA)	Type 'B' Sign Assembly (RB) (EA)	Type 'A' Remove and Reinstall (RR) (EA)	Type 'B' Remove and Reinstall (RR) (EA)	Concrete Foundation (RF) (EA)	Support Structure & Foundation (RS) (EA)	Applicable Signing Notes	Remarks
1.0	COUNTY JCT SIGN	1009+71.00	NB	1						RA	
2.0	DISTANCE BOARD 'LEMARS 18'	1009+84.00	NB	1						RA	
3.0	DO NOT ENTER SIGN	1011+63.00	NB	1						RA	
4.0	DO NOT ENTER SIGN	1011+56.00	NB	1						RA	
5.0	ONE WAY SIGN	1012+38.00	NB	1						RA	
6.0	YIELD/ONE WAY SIGN	1012+37.00	NB	1						RA	
7.0	STOP SIGN	12+93.00	EB	1						RA	
8.0	STOP SIGN	1013+30.00	WB	1						RA	
9.0	YIELD/ONE WAY SIGN	1013+49.00	WB	1						RA	
10.0	ONE WAY SIGN	13+71.00	WB	1						RA	
11.0	DO NOT ENTER SIGN	1014+31.00	NB	1						RA	
12.0	DO NOT ENTER SIGN	1063+99.00	NB	1						RA	
13.0	DO NOT ENTER SIGN	1063+99.00	NB	1						RA	
14.0	YIELD SIGN	1064+77.00	NB	1						RA	
15.0	ONE WAY SIGN	1064+95.00	NB	1						RA	
16.0	ONE WAY SIGN	1065+71.00	NB	1						RA	
17.0	R/R CROSSING	1068+08.00	NB	1						RA	
18.0	DO NOT ENTER SIGN	1067+86.00	NB	1						RA	
19.0	DO NOT ENTER SIGN	1067+86.00	NB	1						RA	
20.0	YIELD SIGN	1068+91.00	NB	1						RA	
21.0	ONE WAY SIGN	1069+02.00	NB	1						RA	
22.0	STOP SIGN ASSEMBLY	1070+13.00	NB	1						RA	
23.0	DO NOT ENTER SIGN	1072+51.00	NB	1						RA	
24.0	DO NOT ENTER SIGN	1072+51.00	NB	1						RA	
25.0	YIELD SIGN	1072+94.00	NB	1						RA	
26.0	ONE WAY SIGN	1073+50.00	NB	1						RA	
27.0	ONE WAY SIGN	1074+21.00	NB	1						RA	
28.0	STOP SIGN	64+78.00	EB	1						RA	
29.0	ONE WAY SIGN	65+65.00	WB	1						RA	
30.0	YIELD/ONE WAY SIGN	65+81.00	WB	1						RA	
31.0	DO NOT ENTER SIGN	66+28.00	NB	1						RA	
32.0	DO NOT ENTER SIGN	66+28.00	NB	1						RA	
33.0	STOP SIGN	68+79.00	EB	1						RA	
34.0	YIELD SIGN	69+92.00	WB	1						RA	
35.0	ONE WAY SIGN	69+79.00	WB	1						RA	
36.0	DO NOT ENTER SIGN	70+59.00	NB	1						RA	
37.0	DO NOT ENTER SIGN	70+59.00	NB	1						RA	
38.0	STOP ASSEMBLY	72+81.00	EB	1						RA	
39.0	ONE WAY SIGN	73+74.00	WB	1						RA	
40.0	YIELD/ONE WAY SIGN	73+83.00	WB	1						RA	
41.0	DO NOT ENTER SIGN	74+68.00	NB	1						RA	
42.0	DO NOT ENTER SIGN	74+68.00	NB	1						RA	
43.0	R/R CROSSING	76+12.00	SB	1						RA	
Total				43	0	0	0	0	0		

190_66
9/29/23

SUMMARY OF TYPE 'A' SIGNS

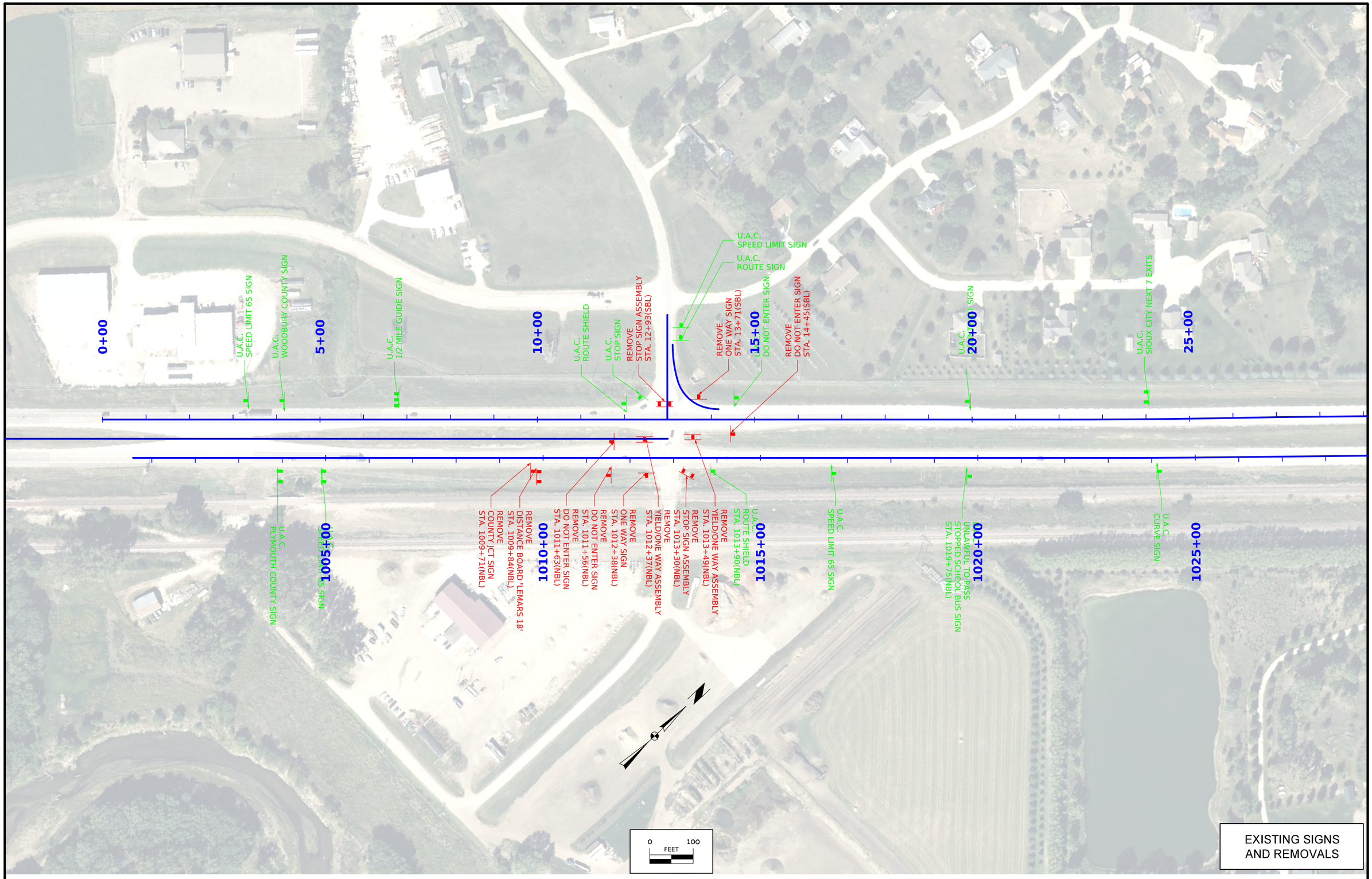
Line No.	Sign Number	Non-Standard Sign Number or Name	Quantity (EA)	Size (IN)	Total Sign Area (SF)
1.0	M1-4		8	36 X 36	72.0
2.0	M1-6		8	36 X 36	72.0
3.0	M2-1		3	30 X 24	15.0
4.0	M3-1		4	36 X 18	18.0
5.0	M3-3		4	36 X 18	18.0
6.0	M6-1		1	30 X 18	11.3
7.0	R1-1		8	48 X 48	112.0
8.0	R1-2		8	48 X 48 X 48	64.0
9.0	R3-4		4	36 X 36	36.0
10.0		R3-4MOD	8	30 X 24	30.0
11.0		R3-5R	5	30 X 36	30.0
12.0		R3-18	4	30" X 30"	25.0
14.0	R4-7		1	30 X 36	7.5
15.0	R5-1		18	48 X 48	288.0
16.0		R6-1R	14	54 X 18	60.8
Total					859.6

7/28/2026 9:07:48 AM steve.kenton@dot.iowa.gov

See project NHSN-075-2(137)--2R-75 for traffic control details.

FILE NO.	ENGLISH	DESIGN TEAM **Fobian/Kenton**	**PLYMOUTH** COUNTY	PROJECT NUMBER **NHSN-075-2(138)--2R-75**	SHEET NUMBER **J.1**	

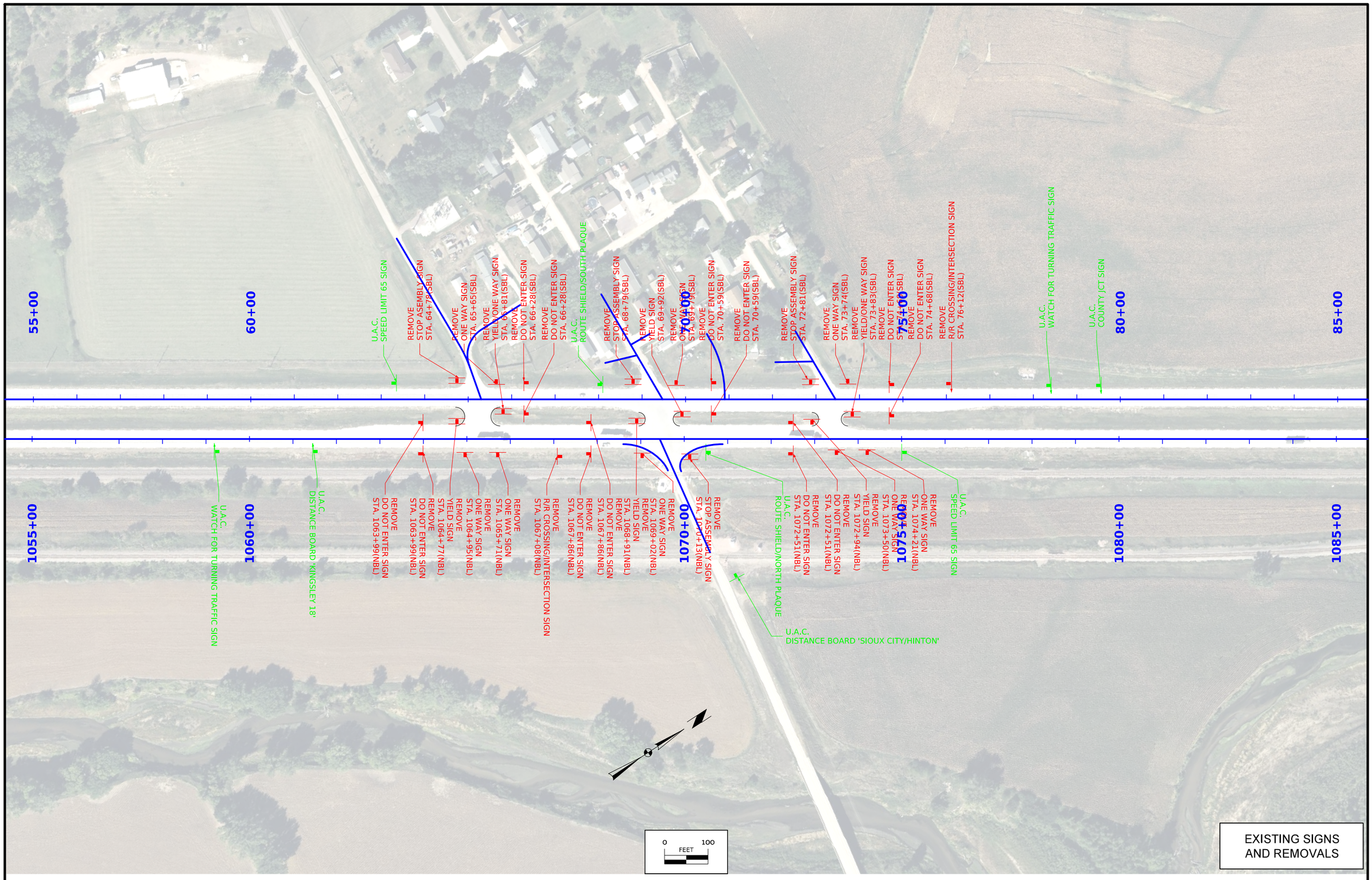
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FILE NO. 98765	ENGLISH	DESIGN TEAM Fobian/Kenton	PLYMOUTH COUNTY	PROJECT NUMBER NHSN-075-2(138)--2R-75	SHEET NUMBER N.1	

3:07:51 PM 7/27/2026 skenton pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7507502026\TrafficAndSafety\(138)_Signs\CADD Files\SGN_RMV_75075138.dgn

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FILE NO. 98765	ENGLISH	DESIGN TEAM Fobian/Kenton	PLYMOUTH COUNTY	PROJECT NUMBER NHSN-075-2(138)--2R-75	SHEET NUMBER N.2	

3:07:56 PM 7/27/2026 skenton pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7507502026\TrafficAndSafety\(138)_Signs\CADD Files\SGN_RMV_75075138.dgn

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1. R3-5R (30"x36")
2. R1-1 (48"x48")
3. R6-1R (54"x18")
   R1-1 (48"x48")
4. R5-1 (48"x48")
   Aim sign toward center of stop line

Raised Island Signing

R4-7 (30"x36")
OM1-2 (18"x18")
R6-1R (54"x18")
R1-1 (48"x48")
2" min.
Sign posts in Raised Island
Use Type 5 Triangular Slip Base Anchors
See detail on Sheet B.2
Dimensions measured from near edge of sign assembly to front of curb.

County Hwy C80
FRELON DR
CORWIN CT
HIGHLAND AVE
Highland Ave

INSTALL 75-75-100 M103 MASSH-400 POST STA. 8+00(SBL)
INSTALL M3-1 (36"x18") North Plaque M1-4 (36"x36") Route Shield R3-4 (MOD) (30"x24") U Turn Plaque PSST POST STA. 11+00(SBL)
INSTALL M3-3 (36"x18") South Plaque M1-4 (36"x36") Route Shield PSST POST STA. 11+00(SBL)
INSTALL 75-75-100 S001 PSST POSTS STA. 3011+00(SR_C80)
INSTALL 75-75-100 M102 PSST POSTS STA. 12+20(SBL)
INSTALL 75-75-100 M101 PSST POSTS STA. 19+60(SBL)
INSTALL M1-6 (36"x36") Route Shield M6-1 (30"x18") Arrow PSST POSTS STA. 20+50(SBL)
INSTALL M2-1 (30"x18") Junction Plaque M1-6 (36"x36") Route Shield PSST POST STA. 23+50(SBL)

0+00 5+00 10+00 15+00 20+00 25+00

Raised Island Signing See detail this sheet

U Turn Intersection #1 See Traffic Control Signing Detail this sheet

U Turn Intersection #2 See Traffic Control Signing Detail this sheet

US 75 SB
US 75 NB

1005+00 1010+00 1015+00 1020+00 1025+00

INSTALL M2-1 (30"x18"), Junction Plaque M1-6 (36"x36"), Route Shield PSST POST STA. 1006+50(NBL)
INSTALL 75-75-100 M001 MASSH-400 POST STA. 1007+00(NBL)
INSTALL M1-6 (36"x36"), Route Shield R3-4 (MOD) (30"x24") U Turn Plaque STA. 1009+50(NBL)
INSTALL 75-75-100 M002 PSST POSTS STA. 1013+05(NBL)
INSTALL M3-3 (36"x18") South Plaque M1-4 (36"x36") Route Shield R3-4 (MOD) (30"x24") U Turn Plaque M1-6 (36"x36") Route Shield R3-4 (MOD) (30"x24") U Turn Plaque PSST POSTS STA. 1014+75(NBL)
INSTALL M3-1 (36"x18") North Plaque M1-4 (36"x36") Route Shield PSST POSTS STA. 1014+75(NBL)
INSTALL 75-75-100 M003 MASSH-400 POST STA. 1018+60(NBL)

U Turn Traffic Control Signing Detail

R5-1 48"x48"
R3-4 36"x36"
R6-1 54"x18"
R1-2 48"x48"

0 100 FEET

REFERENCE POST & DELINEATOR LEGEND

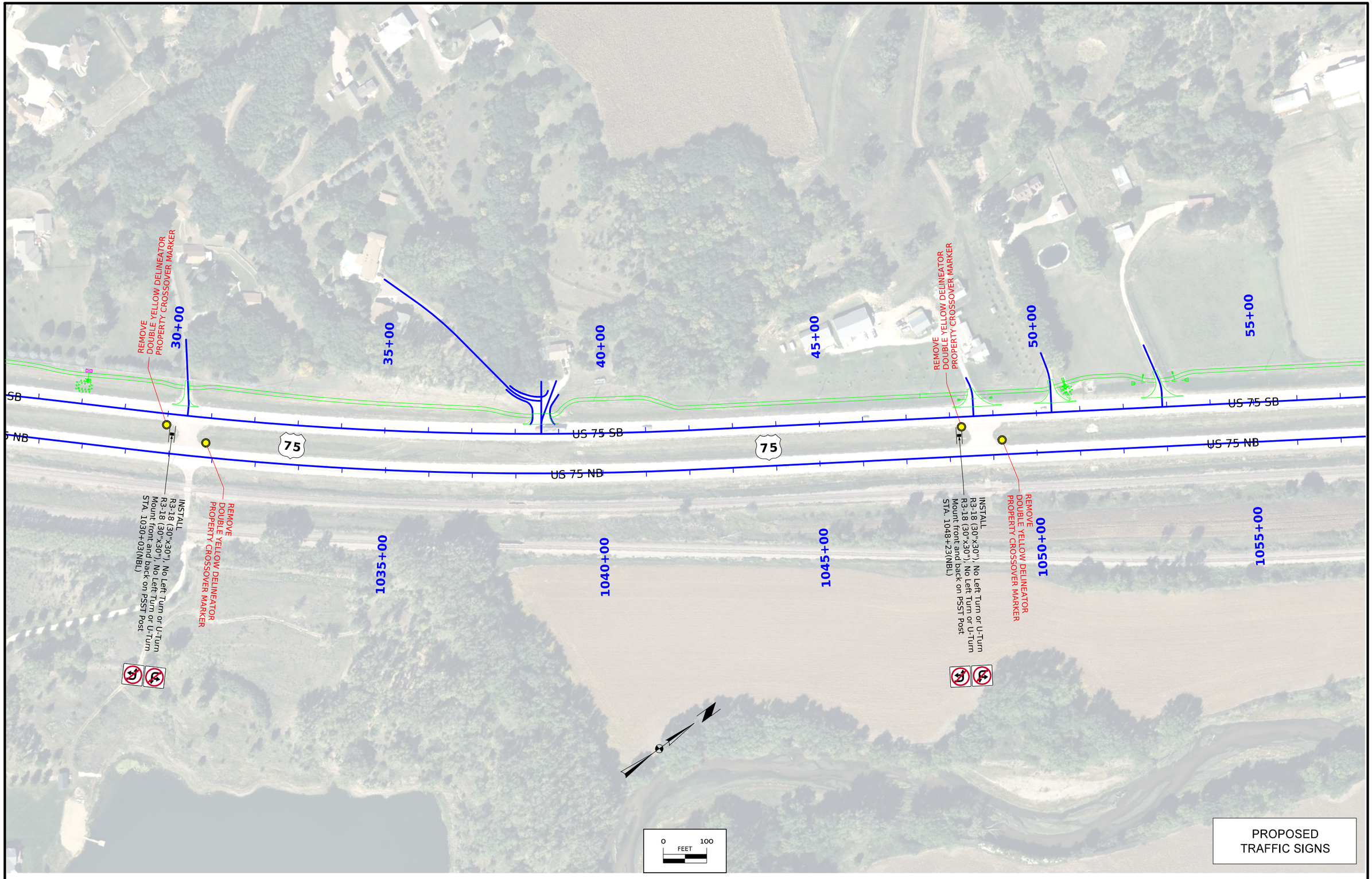
- Reference Post (SI-171)
- One-Tenth Reference Post (SI-171)
- Single White Delineator (SI-172, Type IA)
- Single White Delineator (SI-172, Type I)
- Double White Delineator (SI-172, Type II)
- Single Yellow Delineator (SI-172, Type I)
- Double Yellow Delineator (SI-172, Type II)
- Yellow Object Marker (TAS-811)
- White Object Marker (TAS-811)

PROPOSED TRAFFIC SIGNS

FILE NO.	ENGLISH	DESIGN TEAM Fobian/Kenton	PLYMOUTH COUNTY	PROJECT NUMBER NHSN-075-2(138)--2R-75	SHEET NUMBER N.3

8:07:00 AM 8/31/2026 skenton pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7507502026\TrafficAndSafety\(138)_Signs\CADD Files\SGN_PRO_75075138.dgn

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FILE NO.	ENGLISH	DESIGN TEAM Fobian/Kenton	PLYMOUTH COUNTY	PROJECT NUMBER NHSN-075-2(138)--2R-75	SHEET NUMBER N.4

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1 ONE WAY R6-1R (54"x18")
STOP R1-1 (48"x48")
ONLY R3-5R (30"x36")

2 ONE WAY R6-1R (54"x18")
STOP R1-1 (48"x48")

3 STOP R1-1 (48"x48")

4 ONLY R3-5R (30"x36")

5 DO NOT ENTER R5-1 (48"x48")
Aim sign toward center of stop line

55+00 60+00 65+00 70+00 75+00 80+00
1055+00 1060+00 1065+00 1070+00 1075+00 1080+00

PLYMOUTH ST
2ND ST
MAIN ST
FULTON ST

INSTALL 75-75-101 M104 STA. 64+15(SBL)
INSTALL M3-1 (36"x18") North Plaque M1-4 (36"x36") Route Shield R3-4 (MOD) (30"x24") U Turn Plaque M1-6 (36"x36") Route Shield R3-4 (MOD) (30"x24") U Turn Plaque PSST POSTS STA. 67+50(SBL)
INSTALL M3-3 (36"x18") South Plaque M1-4 (36"x36") Route Shield PSST POST STA. 67+50(SBL)
INSTALL 75-75-101 M103 PSST POSTS STA. 69+25(SBL)
INSTALL M1-6 (36"x36") Route Shield R3-4 (MOD) (30"x24") U Turn Plaque PSST POST STA. 71+70(SBL)
INSTALL M2-1 (30"x18") Junction Plaque M1-6 (36"x36") Route Shield PSST POST STA. 74+70(SBL)
INSTALL 75-75-101 M102 PSST POSTS STA. 75+65(SBL)
INSTALL 75-75-101 M101 PSST POSTS STA. 76+75(SBL)

NORTH 75 C70
SOUTH 75
NORTH 75 C70 USE FAR LEFT LANE SOUTH 75
JCT C70
Main St USE FAR RIGHT LANE SOUTH 75
Main St → NEXT INTERSECTION

U Turn Intersection #3
See Traffic Control Signing Detail this sheet

US 75 SB
US 75 NB
75

1066+45 1066+60 1068+60 1070+60

U Turn Intersection #4
See Traffic Control Signing Detail this sheet

NORTH 75 C70 USE FAR RIGHT LANE
Main St ← NEXT INTERSECTION
SOUTH 75 USE FAR LEFT LANE NORTH 75
TO NORTH 75 SOUTH 75 ALL TRAFFIC →
SOUTH 75
NORTH 75
SOUTH 75

INSTALL 75-75-101 M001 PSST POSTS STA. 1063+25(NBL)
INSTALL 75-75-101 M002 STA. 1065+00(NBL)
INSTALL 75-75-101 M003 PSST POSTS STA. 1070+05(NBL)
INSTALL 75-75-101 S101 STA. 3071+70(SR_C70)
INSTALL M3-3 (36"x18") South Plaque M1-4 (36"x36") Route Shield R3-4 (MOD) (30"x24") U Turn Plaque PSST POST STA. 1072+25(NBL)
INSTALL M1-6 (36"x36") Route Shield PSST POST STA. 1072+25(NBL)
INSTALL M3-1 (36"x18") North Plaque M1-4 (36"x36") Route Shield PSST POST STA. 1072+25(NBL)
INSTALL 75-75-101 M004 MASSH-400 POST STA. 1074+75(NBL)

DO NOT ENTER R5-1 48"x48"
ONE WAY YIELD R6-1 54"x18" R1-2 48"x48"
R3-4 36"x36"

U Turn Traffic Control Signing Detail

0 100 FEET

REFERENCE POST & DELINEATOR LEGEND
- Reference Post (SI-171)
- One-Tenth Reference Post (SI-171)
- Single White Delineator (SI-172, Type IA)
- Single White Delineator (SI-172, Type I)
- Double White Delineator (SI-172, Type II)
- Single Yellow Delineator (SI-172, Type I)
- Double Yellow Delineator (SI-172, Type II)
- Yellow Object Marker (TAS-811)
- White Object Marker (TAS-811)

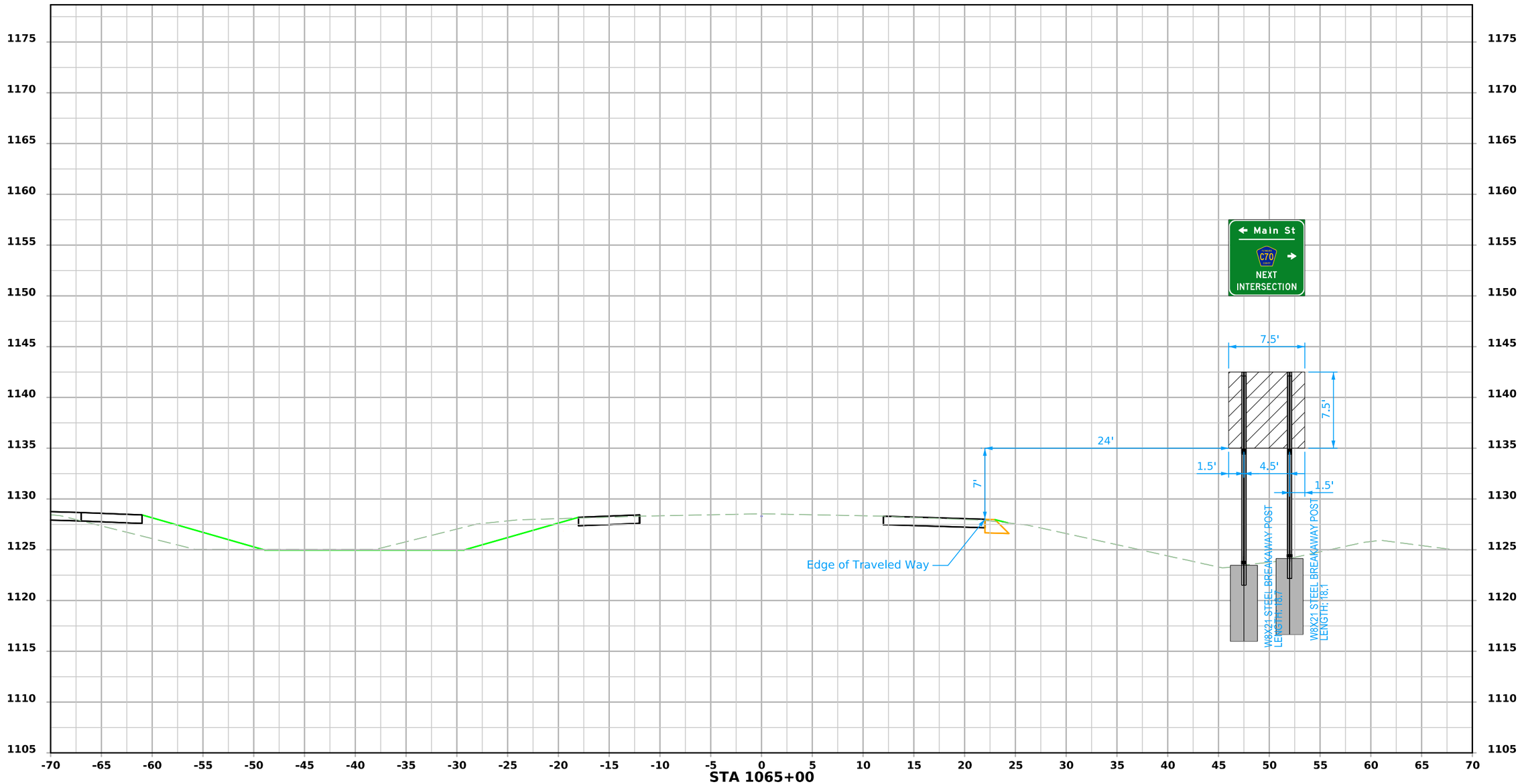
PROPOSED TRAFFIC SIGNS

FILE NO.	ENGLISH	DESIGN TEAM Fobian/Kenton	PLYMOUTH COUNTY	PROJECT NUMBER NHSN-075-2(138)--2R-75	SHEET NUMBER N.5

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US-75 (SB)



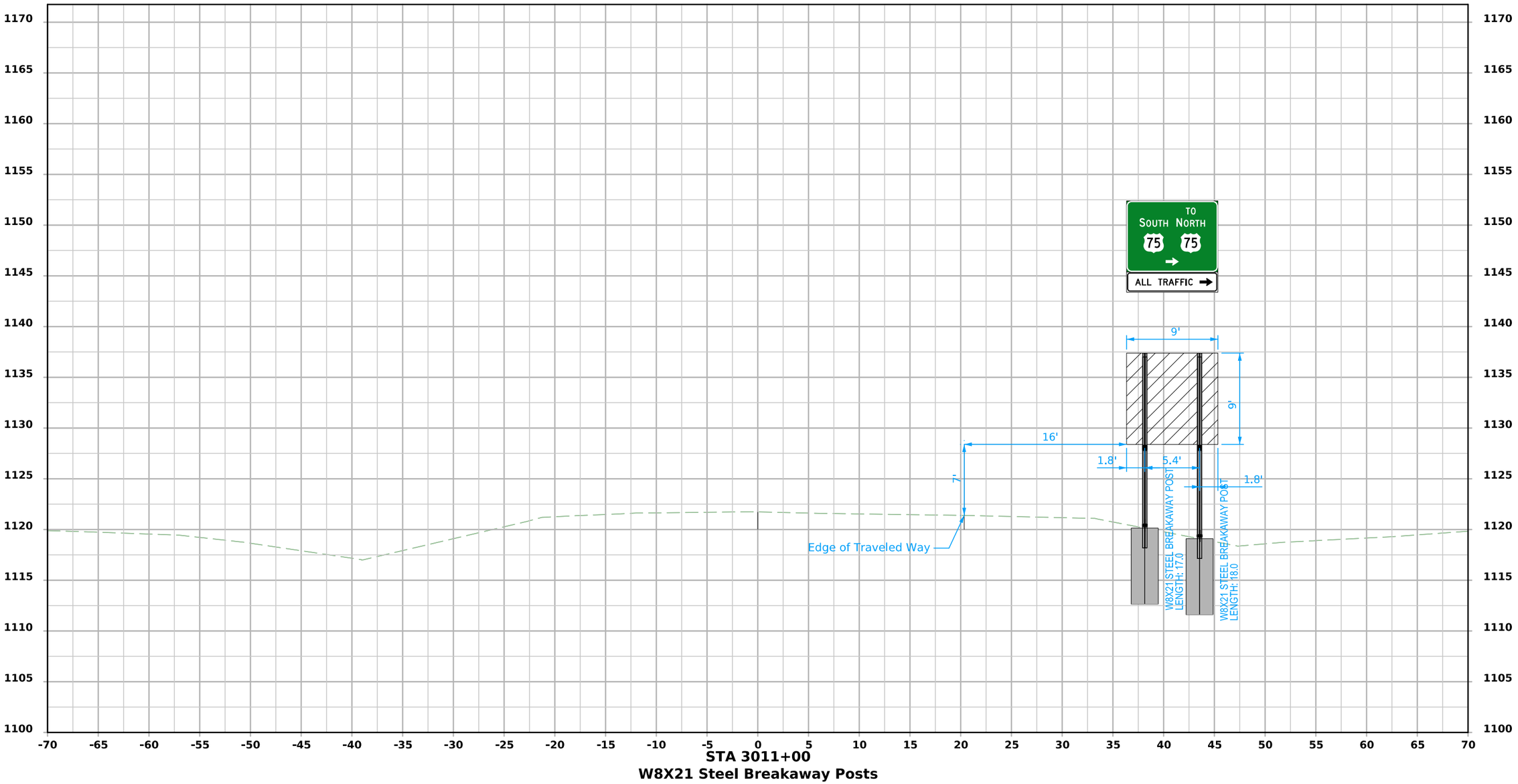
STA 1065+00

W8X21 Steel Breakaway Posts

FILE NO.	ENGLISH	DESIGN TEAM Fobian/Kenton	PLYMOUTH COUNTY	PROJECT NUMBER NHSN-075-2(138)--2R-75	SHEET NUMBER N.6

2:00:14 PM 7/29/2026 skenton pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7507502026\TrafficAndSafety\(138)_Signs\CADD Files\SGN_XS_75055138.dgn

County C80



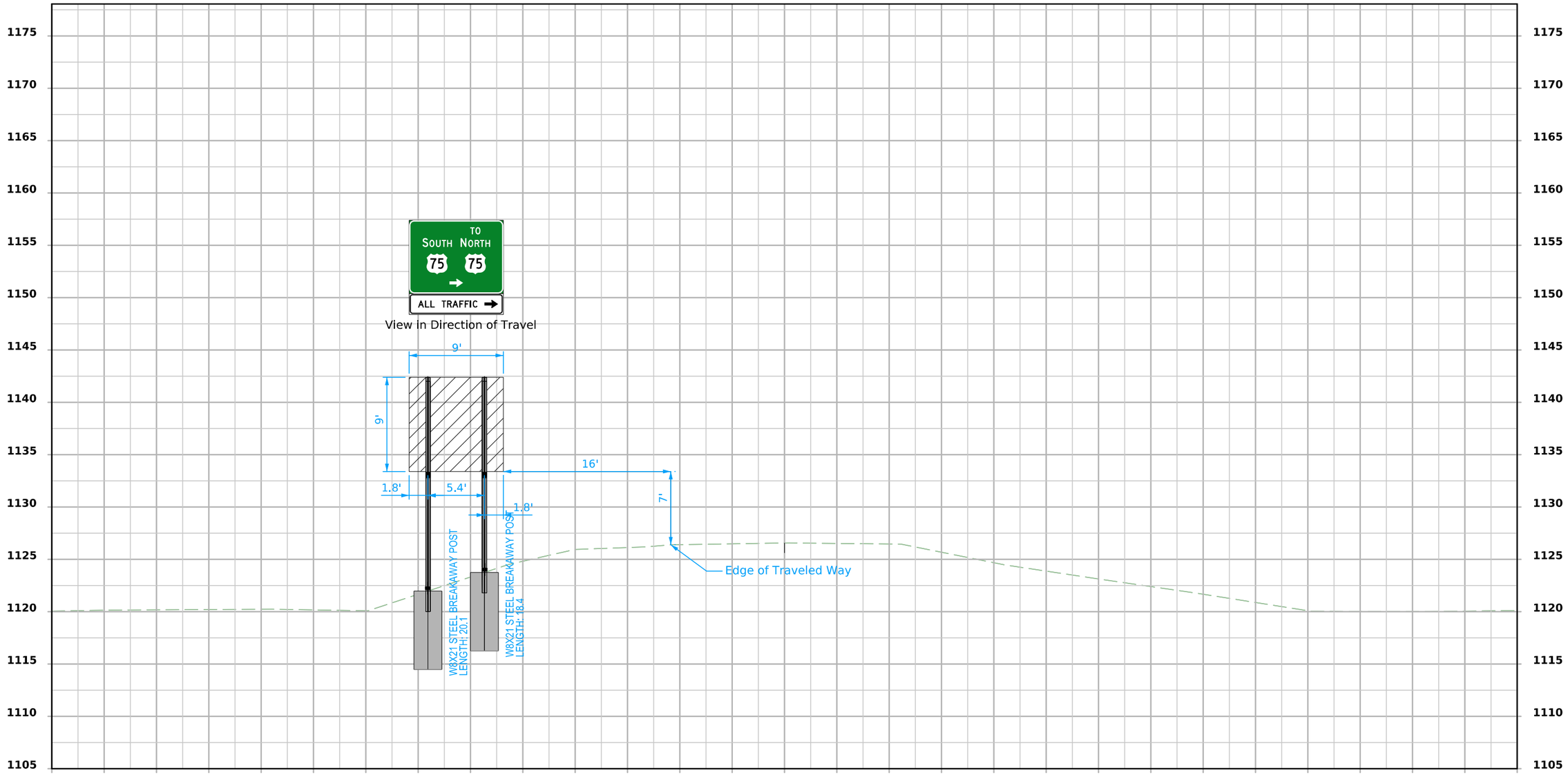
STA 3011+00

W8X21 Steel Breakaway Posts

FILE NO.	ENGLISH	DESIGN TEAM Fobian/Kenton	PLYMOUTH COUNTY	PROJECT NUMBER NHSN-075-2(138)--2R-75	SHEET NUMBER N.7

2:00:14 PM 7/29/2026 skenton pw:\\NTPwint1.dot.int.lan:PWMain\Documents\Projects\7507502026\TrafficAndSafety\(138)_Signs\CADD Files\SGN_XS_75055138.dgn

County C70



STA 3071+70

W8X21 Steel Breakaway Posts

FILE NO.	ENGLISH	DESIGN TEAM Fobian/Kenton	PLYMOUTH COUNTY	PROJECT NUMBER NHSN-075-2(138)--2R-75	SHEET NUMBER N.8

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