

Sign Panel Library Coding Manual

Introduction and Definitions

Please direct all inquiries and coding questions to the OTE Signing section:

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All signs in the Standard Signs and Markings Summary (SSMS) are already designed and in the panel library. These panel designs should be used when creating field inventory records. ***If a user is unable to locate a design or needs a modification to an existing standard sign they should contact the OTE signing section. This will ensure that coding is correct and consistent.***

Panel Library: The panel library is where individual panel **designs** can be found for use on a Field Inventory record. The panel library is a collection of **panel designs** that can be accessed and used by all users statewide for creating Field Inventory Records.

Field Inventory Record: This is a record of all permanent signs (supports and panels) on or in MNDOT right of way and does not include temporary/construction signs. The field inventory record contains detailed information about an **individual support and all panels attached to that support at a specific location on the roadway**. This detailed information includes location, description (sign legend), facing direction, SignCAD details, roadway direction, structure details, tasks summary, etc. These records are specific to an individual District and their particular roadways. ***Information that is recorded in the field inventory record should not be duplicated in the Sign Library either in the coding or the description.***

SSMS Panel Library Codes: These are the codes for the signs in the Standard Sign Summary (SSMS) and/or the MUTCD that do not have variables in size, legend arrows or distance. ***See Sign Panel with 1 legend (or symbol), Sign Panel with Arrow or Direction and Sign Panel with 1 legend and variable color page 3.***

If the sign design is in the SSMS or the MUTCD but the size or legend does not match the standard the code will have NS at the end of it: R3-5R-066-NS.

Standard Generic Variable Panel Library Codes: There are also generic variable sign panel library designs that can be used statewide for creating Field Inventory records. These variable panel designs have an [X] in place of the actual number, specific service, etc. For these designs, use the generic panel code in the panel library when creating an individual Field Inventory record. Once a new record has been created, change the Field Inventory panel description to match the legend of the actual panel in the field. ***Exceptions: Speed limit and route markers See Sign Panel with variable legend page 3-4.***

Standard SSMS Codes with Variables: These are the codes used for panel designs with a variable of one or more of the following: Size, Legend, Arrows and Distance. **See pages 4-7.**

Advance Guide Panel Code with different legend, variable width and height:

These codes are for all advanced guide sign panels for all of the Support Class Codes (Ground, Overhead, I Beam and Other Asset). This coding will replace the previous "District Coding). This will improve the ability of the user to find existing panel designs in the library, reduce/eliminate duplication of designs in the library and improve reporting abilities and accuracy of reports.

Note: These designs require special coding from the D Series because of the addition of Route Marker to the design. See pages 7-9

Supplemental Guide Panel Code: These are green and brown requester pay signs such as High Schools, State Parks, Casinos, etc. **See page 10.**

Specific Service Panel Code: These are the code in the panel library that should be used and are the current standard designs for Specific Service signs. When creating or updating a record in the field inventory the user should use this code. Once the panel design has been added to the record the user should update the Description field on the record to match the actual legend on the panel. The actual design file for fabrication should be sent to the State Sign Shop with the TE Request. **See pages 11-12.**

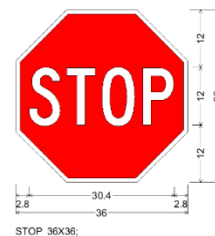
Abbreviations for panel library codes: These should be used to represent the legend of the sign in the code. This will keep the code as short as possible but will also promote consistency in the library coding statewide. This will improve the ability of the user to find existing panel designs in the library, reduce/eliminate duplication of designs in the library and improve reporting abilities and accuracy of reports. **See pages 13-15**

Sign Panel with 1 legend (or symbol)

Panel Library Code + width + (height if Overhead, I Beam, Bridge or Mast Arm – Contact OTE for design and addition to the panel library)

Panel Library Code Example: R1-1-036

Panel Library Description Example: STOP

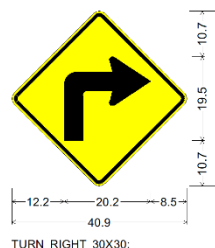


Sign Panel with Arrow or Direction

Panel Library Code + arrow direction + width + (height if Overhead, I Beam, Bridge or Mast Arm – Contact OTE for design and addition to the panel library)

Panel Library Code Example: W1-1R-030

Panel Library Description Example: Turn Right



Sign Panel with 1 legend and variable color

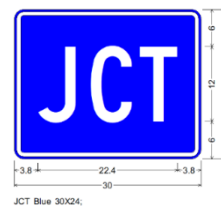
Panel Library Code + width + color

(Designs that allow for more than one color: if there is no color in the code it is the first color listed in the SSMS. For other color codes see abbreviations page 15)

Code Example: M2-1-030 (Black/White)

M2-1-030BL

Panel Library Description Example: JCT Blue



Sign Panel with variable legend

Exceptions: Speed limit and route markers

Panel Library Code + width + (height if Overhead, I Beam, Bridge or Mast Arm – Contact OTE for design and addition to the panel library)

Panel Library Code Example: R8-3PMa-024

Panel Library Description Example: XX XM TO XX XM

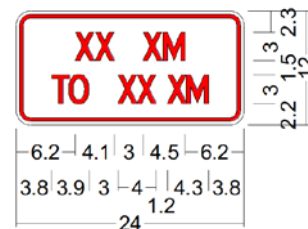
Panel Inventory Description: 10 PM TO 6 AM

Panel Library Code Example: W16-2P-024

Panel Library Description Example: XXX FEET

Panel Inventory Description: 500 FEET

Note: When the generic design is added to a field inventory record in TAMS the user will update the XX in the Panel Description field in the panel Inventory with the correct number/legend for the individual sign.



XX XM TO XX XM;

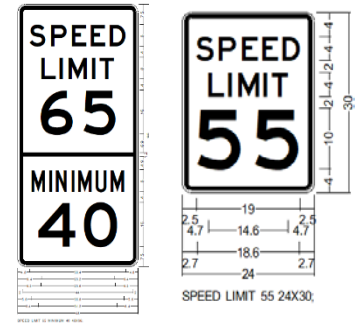


Speed Limit

Panel Library Code + speed limit + width

Panel Library Code Example: R2-1-55-024
R2-4a-65-048

Panel Library Description Example: SPEED LIMIT 55
SPEED LIMIT 65 MINIMUM 40



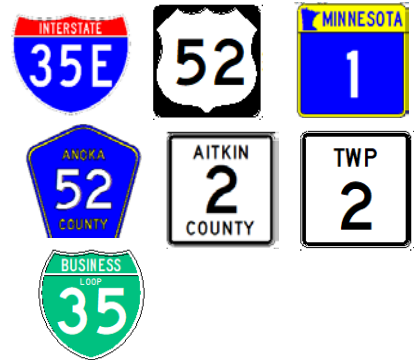
Route Markers

Panel Library Code + route + width

Panel Library Code +county name (or TWP) + route + width

Panel Library Code + BUS route (spur or loop) + width

Panel Library Code Example: M1-1-I35E-045
M1-4-US52-036
M1-5M-MN1-024
M1-X4-AITKIN2-024
M1-X5-TWP2-024
M1-2-BUSI35LOOP-024



Panel Library Description Example: Interstate 35E
US 52
MINNESOTA 1
ANOKA 52 COUNTY
AITKIN 2 COUNTY
TOWNSHIP 2
BUSINESS LOOP 35

Sign Panel - variable length with city name arrow/mileage/multiple legend

Left arrow: Panel Library Code + Lcity name + width + height

Right arrow: Panel Library Code + city nameR + width + height

Panel Library Code Examples: D1-1-LDARWIN-078-024
D1-1-DARWINR-078-024

Panel Library Description Examples: L Darwin
Darwin R

Right arrow: code + city name mileage + width + height

Left arrow: Panel Library Code + Lcity name mile(s)

Panel Library Code Examples: D1-1a-ALBANY15R-102-024
D1-1a-LALBANY15-102-024
D1-1d-FRONTAVER45D-072-018

Panel Library Description Examples: Albany 15 R
L Albany 15
Front Ave R45D



Panel Library Codes

Sign Panel - variable length with city name arrow/mileage/multiple legend

Arrows: Panel Library code + city names Arrows (or street names for D3-1Ma) + width + height

Arrows and Mileage: Panel Library Code + arrow city name miles city name miles arrow + width + height

Panel Library Code Examples: D1-2-RSTPAULFORESTLKL-108-042
 D1-2a-LFORESTON7GILMAN3R-102-042
 D1-3-UPMARSHALLBALATON-090-060
 D2-1M-STILLWATER10-078-018
 D2-2M-ASKOV8DULUTH65-060-030
 D2-3M-HASTINGS13REDWING42-078-042

Panel Library Description Examples: L St Paul Forest Lake R
 L Foreston 7 Gilman 3 R
 UP Marshall L Balaton Tracy R
 Stillwater 10
 Askov 8 Duluth 65
 Hastings 13 Red Wing 42 Winona 104

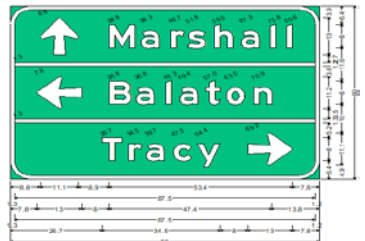
Note: The D1-3 and D2-3 series will only use the first 2 lines of the legend to insure unique code while keeping the code as minimal as possible.



L1 ARROW ST PAUL FOREST LAKE RT ARROW:
 6.0" Radius, 1.0" Border, White on, Green;
 Arrow L, 13.0" H80; "St Paul", E Mod 2K; "Forest Lake", E Mod 2K; Arrow R, 13.0" W;



L1 ARROW FORESTON 7 GILMAN 3 RT ARROW:
 6.0" Radius, 1.0" Border, White on, Green;
 Arrow L, 13.0" H80; "Foreston 7", E Mod 2K; "Gilman 3", E Mod 2K; Arrow R, 13.0" W;



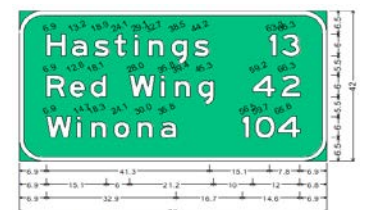
UP Marshall L Balaton Tracy R;



Stillwater 10;
 3.0" Radius, 1.0" Border, White on, Green;
 "Stillwater 10", E Mod 2K;



Askov 8 Duluth 65;
 3.0" Radius, 1.0" Border, White on, Green;
 "Askov", E Mod 2K; "8", E Mod 2K;
 "Duluth", E Mod 2K; "65", E Mod 2K;



Hastings 13 Red Wing 42 Winona 104;
 6.0" Radius, 1.0" Border, White on, Green;
 "Hastings", E Mod 2K; "13", E Mod 2K; "Red Wing", E Mod 2K;
 "42", E Mod 2K; "Winona", E Mod 2K; "104", E Mod 2K;

Sign Panel - variable length with street name/arrow

Panel Library Code + street name + width + height

Panel Library Code Example: D3-1-EMAIN-078-024

Panel Library Description Example: E Main St



E MAIN ST;
 3.0" Radius, 1.0" Border, White on, Green;
 "E Main St", E Mod 2K;

Left arrow: Panel Library Code + Lstreet name + width + height
 Right arrow: Panel Library Code + street nameR + width + height

Panel Library Code Examples: D3-1M-L-108-024LWRAFTON-150-024
 D3-1M-LWRAFTONR-150-024
 D3-1Ma-LBAILEYRDMAXWELLLEVEL

Panel Library Description Example: L Lower Afton Rd
 Lower Afton Rd R
 L Bailey Rd Maxwell Ave R



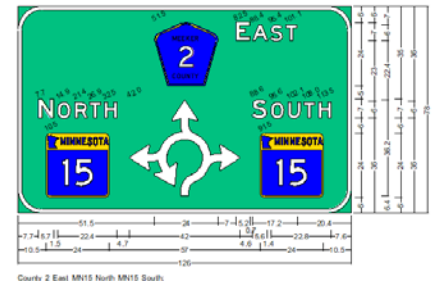
NOTE: If design is for Bridge or Ground Mounted with 8" E Mod add an 8 before the street name.
Example: D3-1-8LexingtonR-width-height

Sign Panel with variable length, multiple legend and roundabout arrow

Panel Library Code + Legend

Panel Library Code Example: D1-5-CR2EMN15NS

Panel Library Description Example: County 2 East MN15 North MN15 South



Sign Panel with different legend and variable length

I series:

Panel Library Code + top legend + width (If tribal language, use the English line of text)

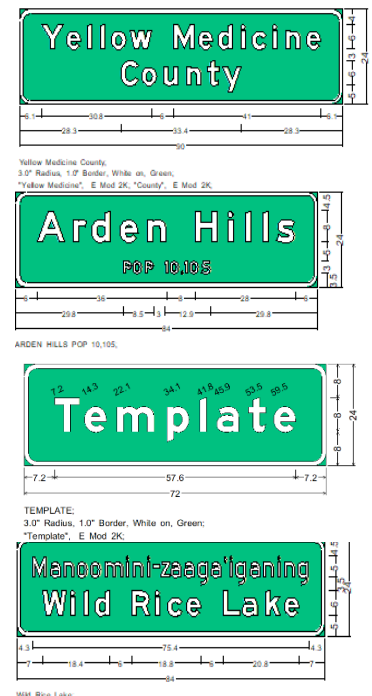
Panel Library Code Examples: I2-X3-YELLOWMEDICINE-090
 I2-X4-ARDENHILLS-084
 I2-X5-TEMPLATE-072
 I-3M-WILDRICELK-084

Panel Library Description Examples: Yellow Medicine County
 Arden Hills POP XX,XXX
 Template

(If tribal language, use the English line of text)

Wild Rice Lake

Note: When the I2-X4 is added to a field inventory record in TAMS the user will update the XX,XXX, in the Panel Description field in the Panel Inventory with the correct Population.

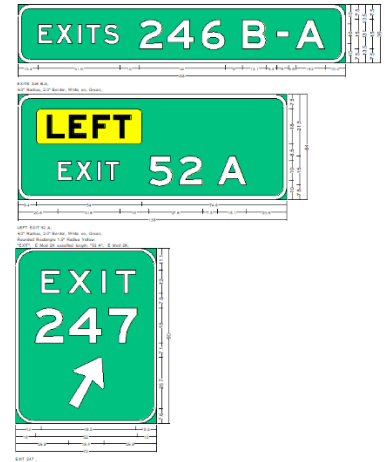


E series: Panel Library Code + exit number + width

Panel Library Code Example: E1-5P-246BA-168
 E1-5bP-52A-138
 E5-1aM-247R45D-072

Library Description: EXIT + exit number
E1-5bP (exit number only, not left since it is constant)

Panel Library Description Example: EXITS 246 B-A
 EXIT 52 A
 EXIT 247 R 45 degree



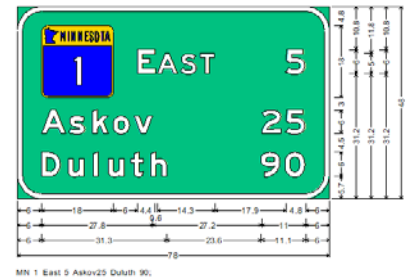
Advance Guide Sign Panel with different legend, variable width and height

Note: These designs require special coding from the D Series because of the addition of Route Marker to the design.

Distance Advance Guide Sign Panel

D2-GD + top legend + width + height

Panel Library Code Example: D2-GD-MN1E5-078-048
 Panel Library Description Example: MN1 E 5 Askov 25 Duluth 90

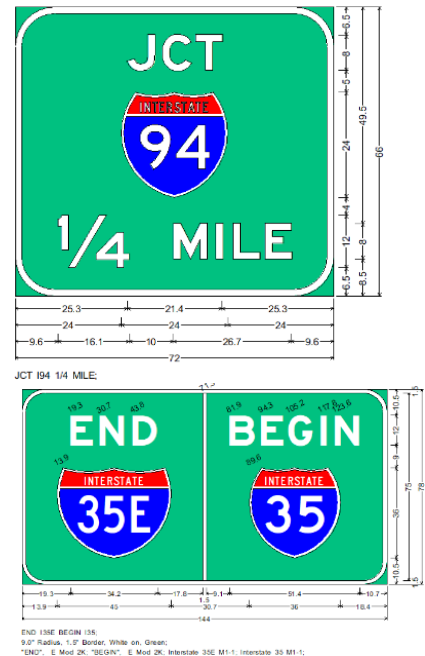


Junction Advance Guide Sign Panel

M2-GJ + route + distance or arrow + width + height
(Distance might not always apply)

Panel Library Code Example: M2-GJ-I94QTRMI-072-066
 M2-GJ-ENDI35E-144-078

Panel Library Description Example: JCT I94 1/4 MILE
 END I35E BEGIN I35

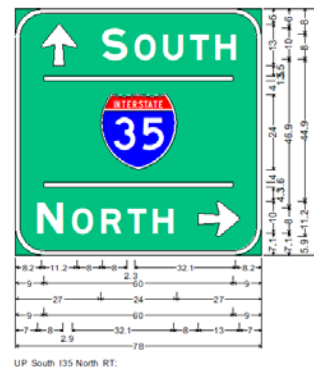


Directional Route Advance Guide Sign Panel

D3-GR + arrow + direction + route number + direction + arrow + width + height

Panel Library Code Example: D3-GR-UPSI35NR-078-078

Panel Library Description Example: UP South I35 North R



Directional Route Lane Designation Advance Guide Sign Panel

D3-GRL + 1st direction + route + width + height (words)

D3-GRL + route + direction + arrow + width + height (arrow(s))

Panel Library Code Example: D3-GRL-WI94-126-066 (words)

D3-GRL-I94WDWN-126-066 (arrows)

Panel Library Description: Example: West I94 East LT LN RT LN (words)

West I94 East DWN (arrow(s))

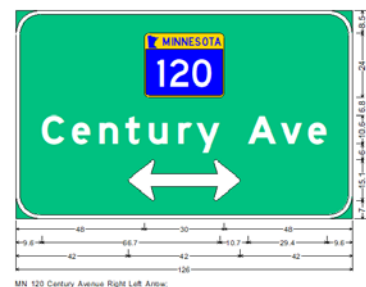


Directional Route and/or Street Advance Guide Sign Panel

D3-GRS + legend + width + height

Panel Library Code Example: D3-GRS-MN120CENTURYDBL-126-078

Panel Library Description Example: MN 120 Century Ave DBL

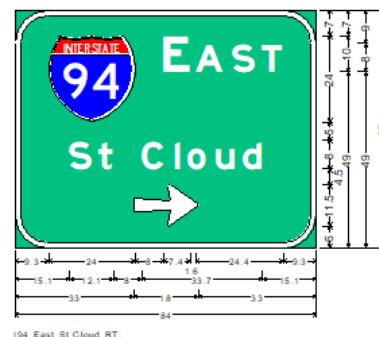


Directional Route/City Advance Guide Sign Panel

D3-GC + route + direction + city name + arrow + width + height

Panel Library Code Example: D3-GC-I94ESTCLOUDR-084-066

Panel Library Description Example: I94 East St Cloud R



Directional Route with Arrow Advance Guide Sign Panel

D3-1GRA + direction + route + arrow + width + height

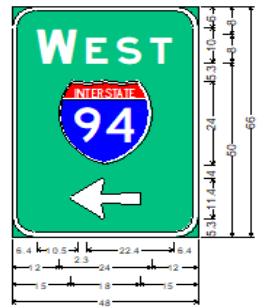
Panel Library Code Example: D3-1GRA-WI94L-048-066

Panel Library Description Example: West I94 L

D3-1GRA + route + arrow +width + height

Panel Library Code Example: D3-1GRA-MN95DBL-042-054

Panel Library Description Example: MN95 DBL



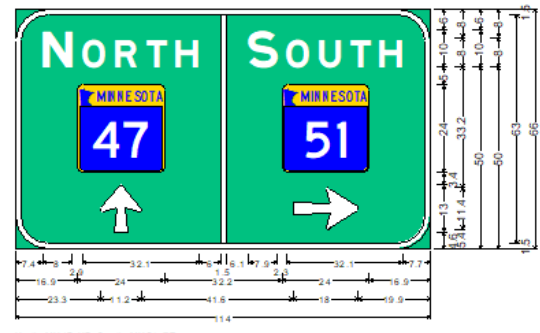
Shield 2 way arrow 1;
6.0" Radius; 1.3" Border; White on Green;
State Highway 95 M1-5b;
Double Headed Arrow 5 - 24.0" 0';

Directional Route Advance Guide Sign Panel

D3-GMADR + left legend + width + height

Panel Library Code Example: D3-GMADR-NMN47UP-114-066

Panel Library Description Example: North MN47 UP South MN51 R



North MN47 UP South MN51 RT;

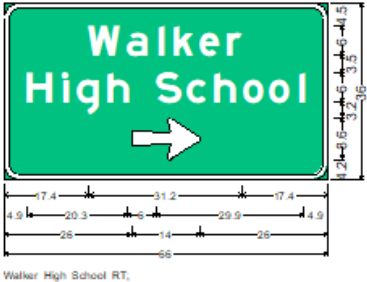
Supplemental Guide Sign Panel

Requester Pay

D7-RP + legend + arrow + width + height

Panel Library Code Example: D7-RP-WALKERHSR-066-036

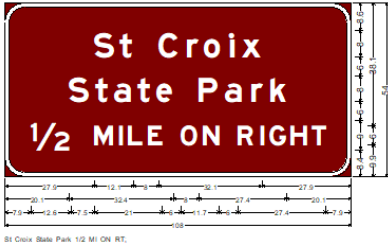
Panel Library Description Example: Walker High School R



D7-RP + legend + distance + width + height

Panel Library Code Example: D7-RP-STCROIXSPHLMIRT-108-054

Panel Library Description Example: St Croix State Park 1/2 MILE ON RIGHT



D7-RP + legend + exit number + width + height

Panel Library Code Example: D7-RP-BLUEMOUNDSSPEX12

Panel Library Description Example: Blue Mounds State Park EXIT 12



D7-RP + legend + direction + width + height


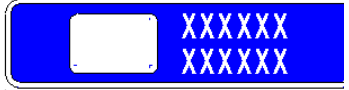










Panel Library Code Example: D7-RP-LINDBERGHSPHSNXTRT-156-096











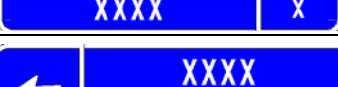



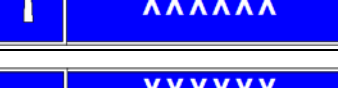
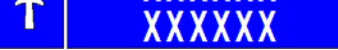
Panel Library Description Example: Lindbergh State Park-Historic Site NEXT RIGHT



Specific Service Panel Codes

These are the codes that should be used and are the current standards for Specific Service signs. When creating or updating a record in the field inventory the user should use this code. Once the panel design has been added to the record the user should update the Description field in the Panel Inventory to match the actual legend on the panel in the field. The actual design file for fabrication should be sent to the State Sign Shop with the TE Request.

<u>Sign Library Code</u>	<u>Sign Library Description</u>	<u>Example</u>
D9-X6-1	SPECIFIC SERVICE EXPWY 48X12 LOGO 72X18	
D9-X6-2	SPECIFIC SERVICE EXPWY 18X12 LOGO 72X18	
D9-X6-3	SPECIFIC SERVICE RT 48X12 LOGO 72X18	
D9-X6-4	SPECIFIC SERVICE RT 48X12 LOGO MI 72X18	
D9-X6-5	SPECIFIC SERVICE LT MI 48X12 LOGO 72X18	
D9-X6-6	SPECIFIC SERVICE LT 48X12 LOGO 72X18	
D9-X6-7	SPECIFIC SERVICE RT 18X12 LOGO 72X18	
D9-X6-8	SPECIFIC SERVICE RT 18X12 LOGO MI	
D9-X6-9	SPECIFIC SERVICE LT 18X12 LOGO 72X18	
D9-X6-10	SPECIFIC SERVICE LT 18X12 LOGO MI 72X18	
D9-X6-11	SPECIFIC SERVICE RT 18X12 LOGO 2 LINE 72X18	
D9-X6-12	SPECIFIC SERVICE RT 18X12 LOGO 2 LINE MI 72X18	

<u>Sign Library Code</u>	<u>Sign Library Description</u>	<u>Example</u>
D9-X6-13	SPECIFIC SERVICE LT 18X12 LOGO 2 LINE 72X18	
D9-X6-14	SPECIFIC SERVICE LT 18X12 LOGO 2 LINE MI 72X18	
D9-X6-15	SPECIFIC SERVICE EXPWY 72X18	
D9-X6-16	SPECIFIC SERVICE EXPWY 2 LINE 72X18	
D9-X6-17	SPECIFIC SERVICE LT 72X18	
D9-X6-18	SPECIFIC SERVICE LT MI 72X18	
D9-X6-19	SPECIFIC SERVICE RT 72X18	
D9-X6-20	SPECIFIC SERVICE RT MI 72X18	
D9-X6-21	SPECIFIC SERVICE RT 2 LINE 72X18	
D9-X6-22	SPECIFIC SERVICE LT 2 LINE MI 72X18	
D9-X6-23	SPECIFIC SERVICE RT 2 LINE MI 72X18	
D9-X6-24	SPECIFIC SERVICE LT 2 LINE 72X18	
D9-X6-28	SPECIFIC SERVICE THRU MI	
D9-X6-29	SPECIFIC SERVICE THRU 2 LINE MI	
D9-X6-30	SPECIFIC SERVICE THRU	
D9-X6-31	SPECIFIC SERVICE THRU 2 LINE	

ABBREVIATIONS FOR PANEL LIBRARY CODES

To maintain consistency in our coding please use these abbreviations. If you need an abbreviation for something that is not on these lists please contact Joani Nilan at Joani.nilan@state.mn.us or 651-234-7384 Common Word Abbreviations for Panel Legend.

Word Message	Abbr.	Word Message	Abbr.	Word Message	Abbr.
Access	ACCS	Hospital	HOSP	Place	PL
Ahead	AHD	Hour(s)	HR, HRS	Pounds	LBS
Afternoon/ Evening	PM	Information	INFO	Rail Road	RR
Alternate	ALT	International	INTL	Right	RT
Avenue	AVE	Intersection	INTL	River	RVR
Bicycle	BIKE	Interstate	I	Road	RD
Boulevard	BLVD	Junction/Intersection	JCT	Roundabout	RDBT
Bridge	BR	Lake	LK	Saint	ST
Camp Ground	CG	Lane	LN	Saturday	SAT
Center	CTR	Left	LT	Shoulder	SHLDR
Circle	CIR	Liquid Propane Gas	LPGAS	Signal	SIG
County	CNTY	Local	LOC	South	S
Court	CT	Lower	LWR	South East	SE
Crossing	XING	Maintenance	MAINT	South West	SW
Downtown	DWNTN	Major	MAJ	State Park	SP
Drive	DR	Maximum	MAX	State Route	MN
East	E	Mile(s)	MI	Street	ST
Electric Vehicle	EV	Miles Per Hour	MPH	Sunday	SUN
Emergency	EMER	Minimum	MIN	Telephone	PHONE
Entrance	ENT	Minor	MNR	Temporary	TEMP
Exit (Exit Only)	EX (EXO)	Monday	MON	Terrace	TER
Expressway	EXPWY	Morning/Late Night	AM	Thursday	THURS
Feet	FT	Mountain	MTN	Thruway	THWY
Freeway	FWY	National	NATL	Tons of Weight	T
Friday	FRI	Next	NXT	Trail	TR
Frontage Road	FRD	North	N	Tuesday	TUES
Hazardous Material	HAZMAT	North East	NE	Turnpike	TPK
High Occupancy	HOV	North West	NW	Upper	UPR
High School	HS	Oversized	OVRSZ	US Route	US
Highway	HWY	Parking	PKING	Warning	WARN
Hwy Rail Grade XING	RRXING	Parkway	PKWY	Wednesday	WED
Historic Site	HIST	Pedestrian	PED	West	W

Word Message	Abbrv.	Word Message	Abbrv.	Word Message	Abbrv.
Access	ACCS	Hospital	HOSP	Place	PL
Ahead	AHD	Hour(s)	HR, HRS	Pounds	LBS
Afternoon/ Evening	PM	Information	INFO	Rail Road	RR
Alternate	ALT	International	INTL	Right	RT
Avenue	AVE	Intersection	INTL	River	RVR
Bicycle	BIKE	Interstate	I	Road	RD
Boulevard	BLVD	Junction/Intersection	JCT	Roundabout	RDBT
Bridge	BR	Lake	LK	Saint	ST
Camp Ground	CG	Lane	LN	Saturday	SAT
Center	CTR	Left	LT	Shoulder	SHLDR
Circle	CIR	Liquid Propane Gas	LPGAS	Signal	SIG
County	CNTY	Local	LOC	South	S
Court	CT	Lower	LWR	South East	SE
Crossing	XING	Maintenance	MAINT	South West	SW
Downtown	DWNTN	Major	MAJ	State Park	SP
Drive	DR	Maximum	MAX	State Route	MN
East	E	Mile(s)	MI	Street	ST
Electric Vehicle	EV	Miles Per Hour	MPH	Sunday	SUN
Emergency	EMER	Minimum	MIN	Telephone	PHONE
Entrance	ENT	Minor	MNR	Temporary	TEMP
Exit	EX	Monday	MON	Terrace	TER
Expressway	EXPWY	Morning/Late Night	AM	Thursday	THURS
Feet	FT	Mountain	MTN	Thruway	THWY
Freeway	FWY	National	NATL	Tons of Weight	T
Friday	FRI	Next	NXT	Trail	TR
Frontage Road	FRD	North	N	Tuesday	TUES
Hazardous Material	HAZMAT	North East	NE	Turnpike	TPK
High Occupancy	HOV	North West	NW	Upper	UPR
High School	HS	Oversized	OVRSZ	US Route	US
Highway	HWY	Parking	PKING	Warning	WARN
Highway Rail Grade Crossing	RRXING	Parkway	PKWY	Wednesday	WED
Historic Site	HIST	Pedestrian	PED	West	W

Arrows	
Direction	Abbr.
Right	R
Advanced Right	AR
Right 45 Degree	R45D
Right 60 Degree	R60D
Left	L
Advanced Left	AL
Left 45 Degree	L45D
Left 60 Degree	L60D
Double Headed	DBL
Through	UP
Lane Designation	DWN
Roundabout	RDB

Fractions for Distance	
Fraction	Abbr.
1/4	QTR
1/2	HLF
3/4	3QTR
1 1/4	1QTR
1 1/2	1HLF

Miscellaneous	
Misc. Type	Abbr
Picture	PIC
Logo/Logo Program	LOGO

Color	
Color	Abbr.
Blue	BL
Green	GR
Red	RD
Fluorescent Yellow Green	FYG
Fluorescent Yellow	FY