ADOT TRAFFIC DESIGN

CADD STANDARDS

October 2019

CHAPTER 1 INTRODUCTION

The purpose of this manual is to establish uniform policies and procedures to ensure compliance with the Traffic Design Group's Computer Aided Design and Drafting (CADD) standards, to produce a plan set that is consistent in appearance, and to ensure quality.

This manual is intended to be used as a quick reference guide. Chapters are broken out by subject and sheet type. For more information regarding the Traffic Design Group's CADD Standards, visit the web site.

Drafting Standards for other Groups within ADOT can be found at their respective web sites and are not duplicated in this manual.

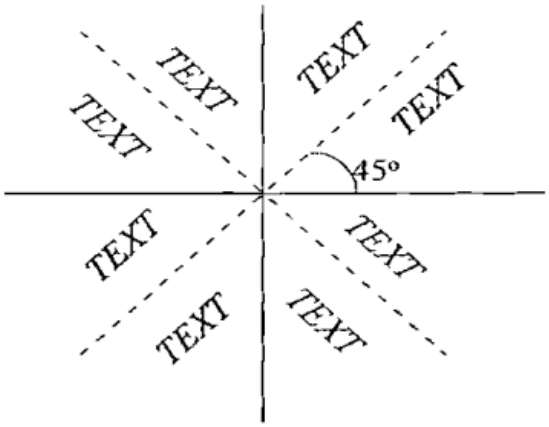
Although this manual contains information on MicroStation tools and functions, its intent is not to teach MicroStation, but to convey to the user established ADOT Traffic Design CADD Standards.

PLEASE NOTE:

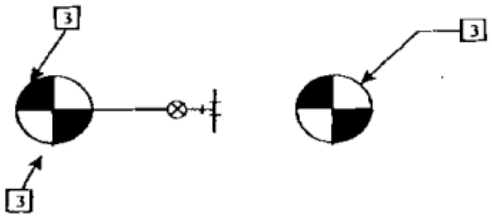
DRAFTING STANDARDS ARE ESSENTIAL IN PRODUCING A READABLE, CONSISTANT, QUALITY DOCUMENT. YOUR ATTENTION TO, AND USE OF THESE STANDARDS ARE IMPORTANT!

SOME HELPFUL DRAFTING TIPS:

1. Text conflicts are not acceptable, ever.
2. Spelling – Use Spellcheck - incorrect spelling and bad grammar are not acceptable.
3. Do not highlight a redline as being completed unless it is 100% complete. Highlighting incomplete work is unacceptable.
4. All text is to be read from the bottom and/or the right hand side – No exceptions.



5. No upside down text.
6. Text – same style/height/weight on every sheet – no exceptions.
7. Lines – same type/weight every sheet.
8. Leaders/Arrows – Radial, Perpendicular, Trimmed.



Not Acceptable

9. Check to make sure that the callouts/information on the plan makes sense – if [3] is for a fire hydrant, make sure it doesn't point to a valve. If you change inverts on a pipe you will have to revise the slope, etc.
10. Each time you run a plot it cannot look different (screening, etc.).
11. Use the correct levels/colors for everything.
12. Redlines are bad – the less red the better. Any more than one redline to get something done is inefficient.
13. If you are not sure – ASK!
14. Efficiency/Production are the goals.
15. Three Golden Rules:
    a. Check your work
    b. Check your work
    c. Check your work
16. The final product must be clear and correct – it's your job to ensure this.

CHAPTER 2 LEVELS

The ADOT Traffic Group uses the levels structure as defined in the ADOT Level Structure. Numerical values are used to designate the level names. Levels 1-63, (not Level 1, Level 2, etc.) or the original levels. Over the past few years additional level names have been added and incorporated, ADOT Traffic Design Group does not use any of the new levels, except level 295 which is a no-plot level. Level numbers and level names are the same allowing for key-ins “LV=1”, etc.

NO FILES SHALL BE DEEMED ACCEPTABLE THAT CONTAIN ANY OTHER LEVELS OTHER THAN THOSE DEFINED IN THE ADOT LEVEL STRUCTURE

See Appendix 2, ADOT Level Structure.

CHAPTER 3 CELLS

In the spring of 2014, ADOT Traffic Engineering updated some of their cell libraries. New sign libraries have been created to reflect the changes in the MOAS and ADOT Traffic Standards (see below). The new sign cells have been created so that they will all be proportional when placed at the same Active Scale.

Traffic_V8.cel has been updated and renamed to Traffic_V8i. Portions of the original cell library have been removed and placed into new libraries, Accident.cel & Pave_Patt.cel.

TSL_V8i includes updated cells for signal and lighting applications.

The following are the ONLY approved CADD cell libraries for Traffic Design. These libraries should contain most of the cells required to complete a pavement marking, signing, lighting and traffic control plan.

V:\Standards\English\ADOT.cel.....ADOT.cel (and other ADOT cell libraries).

V:\Traffic\Dev_V8i\Celllibs\traffic_V8i.cel.....Cells used in the preparation of Pavement Marking, Signing and Traffic Control plans.

V:\Traffic\Dev_V8i\Celllibs\Sign_2014-X.....Libraries containing signs from the Manual of Approved signs (sign04.cel may be used as needed).

V:\Traffic\Dev_V8i\Celllibs\tsl_V8i.cel…….Cells used in preparation of Signal and Lightingplans. All of the above cells may also be found on ADOT Traffic Engineering's web page;
http://www.azdot.gov/business/engineering-and-construction/traffic/cadd-standards

SIGN CELLS

Signs contained within the new Sign_2014_X series of libraries were all created at 1"=1'. If a sign is 24" x 24" in reality, when placed into a sheet at an active scale of 1, the sign will measure 24' x 24'. If all signs are placed using the same scale factor, the signs will be proportional to one another.

Once a scale factor is decided upon, all sheets in the project should use that scale for sign cells. TIPS WHILE

WORKING WITH CELLS

- Do not drop cells to edit the text, the word processor style text editor has the capability to edit text within cells.
- Do not use shared cells, unless a need truly exists.
- Users may create a library of their own to house custom cells.
  - Users may place custom cell libraries here:
    - **V:\Traffic\Users\[RACF ID]\v8i\Cellibs**
- Do not create cells within ADOT provided libraries.

CHAPTER 4 LINE STYLES

ADOT Traffic Engineering has modified and added new line styles.

Gore20_e has been renamed to Gore40_e, and a new Gore20_e has been created. A new line style DY (Double

Yellow) has been added.

It was determined that the size of the symbols in the line styles Typ220_e, Typ240_e, Typ280_e, Cone20_e, Cone40_e, Cone80_e, VP20_e, VP40_e, and VP80_e were too small for most applications. The original line styles are still available, and new line styles with larger symbols have been created, Typ220T2, Typ240T2, Typ280T2, Cone20T2, Cone40T2, Cone80T2, VP20T2, VP40T2, and VP80T2.
The symbols in the new line styles are 2 times larger than in the original line style.

- Use line styles “Leader” and “DimLeader” when dimensioning roadways, profiles and for use as note leaders.
- Use of terminators should be avoided.

See Appendix 5 for the complete list of ADOT approved line styles.

USING ACTIVE LINESTYLESCALE

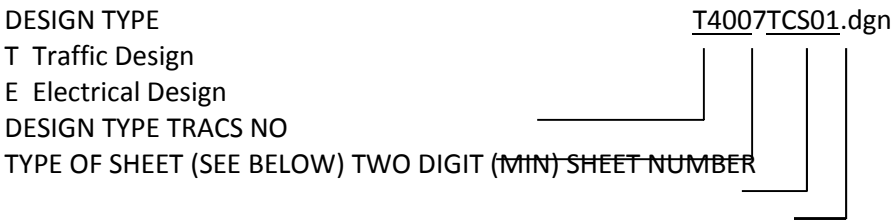
The Active LineStyleScale is a number that tells MicroStation how to scale and display a line style. An Active LineStyleScale of 1 is normal, that is, it will display with the same dimensions that it was created with. Active LineStyleScale is used to make the symbols in a line style appear smaller or larger – it scales the line style.

- When working in reference files, the Active Linestylescale should be set to 1
- When working in active files, the Active Linestylescale should be set to scale/100.

Refer to Chapter 7, Reference Files, for additional information about using Active Linestylescale.

TRAFFIC DESIGN CADD FILE NAMING

TRAFFIC DESIGN - ELECTRICAL DESIGN CAD FILE NAMING



TYPE OF SHEET

TRAFFIC DESIGN	ELECTRICAL DESIGN
TCS Traffic Control Sheet(s)	SIG Signal Sheet(s)
TCD Traffic Control Detail Sheet(s)	STS Signal/Electrical General Notes TCN Traffic Control Note Sheet(s)
SGN Signal General Notes	
TCQ Traffic Control Quantity sheet(s)	LIT Lighting Sheet(s)
MOT Maintenance of Traffic Sheet(s)	ELD Electric Detail Sheet(s)
PMS Pavement Marking Sheet(s)	UGR Underground Conduit sheet(s) PMD Pavement Marking Detail Sheet(s)
INT Interconnect Sheet(s)	
PMN Pavement Marking Notes Sheet(s)	FMS Freeway Management Sheet(s) SDS Sign Detail Sheet(s)
LRP Loop Replacement Sheet(s) SLS Sign Locations Sheet(s)	
SLT Sign Lighting Sheet(s)	

SSS Sign Summary Sheet(s) SFS Sign Formats Sheet(s) SNS Signing Notes Sheet(s) XRS Crossroad Sheet(s)

Example: T4007SDS15.dgn

REFERENCE FILE NAMES

Base files (reference files) shall conform to the above structure with the following exception: An "X" shall be placed at the beginning of the file name.

TRAFFIC DESIGN
PMB Pavement Marking Base
SSB Sign Summary Base
TCB Traffic Control Base SNB Signing Base
BDR Border File

ELECTRICAL DESIGN
CSB Conduit Schedule Base
SSB Pole Schedule Base SFB Sign Format Base

Example: XT4007TCB.dgn (Add two digit Sheet number if needed)

CHAPTER 6 REFERENCE FILES

While working with reference files;

- Try to use the same logical name for the same file in every sheet. The logical name should be the last 2 or 3 characters of the file name or a unique identifier that relates to the type of reference file.
  - Example: xh6301tpo.dgn = xtpo
  - Example h6301des.dgn = des
  - Example h6301xs.dgn = xs
- If the reference file is attached multiple times to the same sheet, the top left instance of the reference file shall be coordinately correct. Additional attachments shall use an identifier such as, top or left.
  - Logical names for sheets with multiple instances of the same reference files will be as stated above. Example: lft-xtpo, rght-xtpo
- All reference files should be clipped using a shape drawn on level 295 (RW-Work-1). This level is a no-plot level. The shape may be on a construction level if desired.
- If possible, set the override color, weight, and style values in the reference file itself, then when working in the active sheet the overrides can be easily set by clicking on “update levels”.

BORDER FILES

Border files shall use cell **trafd**, located in Traffic_V8i.cel. The border file should contain only the cell **trafd**, and any title block information that is used by all sheets in the set. Unless there is a special circumstance, only one border file should be used per project.

When attaching the border file to the active sheet, the border reference file may be scaled to accommodate the drawing. The border is one of the very few references that may be scaled or rotated.

USING PDFS AS A REFERENCE

Although MicroStation V8i has the ability to use PDFs as a reference choice, they should not be used as a permanent attachment, but rather as an aid to the drafting process.

USING REFERENCE FILES FROM OTHER ADOT GROUPS

Files referenced from any in-house source (Roadway or Bridge for example) should always be referenced from the source folder and never copied into the Traffic project folder.

REFERENCES & ACTIVE LINESTYLESCALE

When developing a file that will be used as a reference, care should be taken to ensure that the Active LineStyleScale (ALSS) is set to 1. The Active LineStyleScale (ALSS) is a number that tells MicroStation how to scale a custom line style. The 7 built in line styles are not affected by the ALSS.

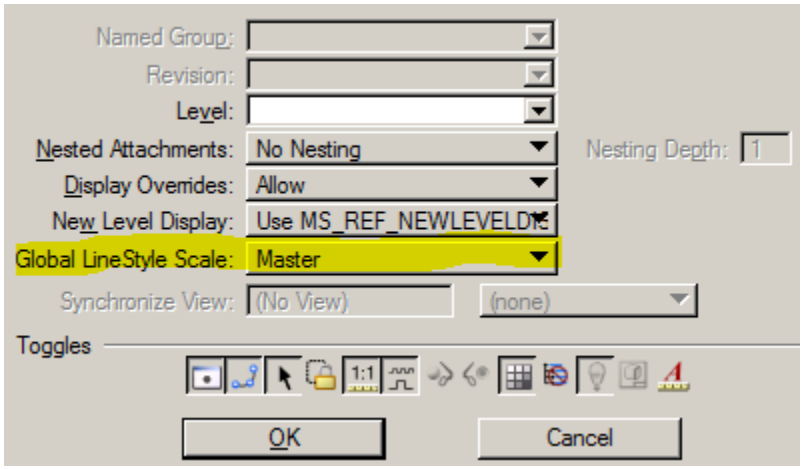
Working with Active LineStyleScales (ALSS) can be a bit tricky if care is not taken when developing the reference file. When creating a base file for Marking plans, for example, setting the ALSS to any other number than 1 can result in the pavement marking line styles not being to scale when measured on a plan sheet.

All base files should be drafted at 1:1, and the Active LineStyleScale should be set to 1.

A Marking Plan example: Marking plans are typically 40 scale. The border reference file has been scaled down

by 0.4 and moved and rotated to fit the area of interest. The ALSS for this sheet should also be 0.4. By setting the active sheet's ALSS to 0.4, however, changes the dimensions of the pavement marking line styles, and they are no longer correct. By using the steps below this can be remedied.

When attaching any reference file, the user is greeted by an Attachment Settings dialog box for that unique reference file. The user can also open this dialog box by double clicking on the highlighted reference in the References dialog box. Below is a partial screen shot of the Attachment Settings dialog box:



By setting the Global Linestylescale to Master, the Active LineStyleScale set in the active sheet is ignored for that attachment. Pavement marking line styles will then display as intended.

CHAPTER 7 PRINTING AND PLOTTING

Print Organizer is a utility for creating, managing, and publishing project deliverables and is a replacement for the Batch Print utility. Additional Printing enhancements include changes in the Print dialog for single sheet printing.

For both on-the-fly printing, or when using Print Organizer, there are three main components to printing or plotting; the plot driver, the pen table, and the print style.

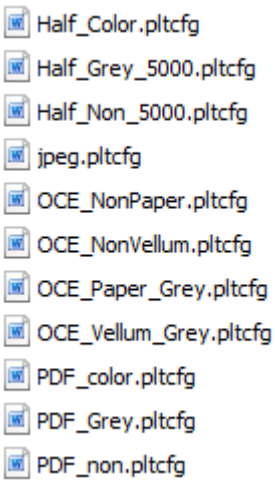
The Plot Driver contains information needed by MicroStation and Windows to successfully convert and send your drawing to the device.

Resymbolization is the process of changing characteristics of elements within a design file. When these changes are applied to printed output, the process is referred to as print resymbolization. Pen tables and design scripts control print resymbolization. Pen tables let you remap any of the characteristics associated with design file elements for the printed output.

Print styles are named sets of print definition properties, such as scale, rotation, and color, that allow you to create print sets in a consistent and automated manner.

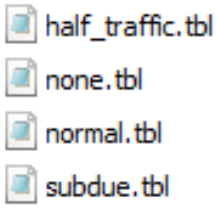
While the way print drivers and pen tables are created and their file structure has changed, they continue to function much the same as they did in V8. The extension for print drivers has changed from .plt to .pltcfg, and the format of the plot configuration files have changed from ascii to XML.

Below are the print drivers available for use to Traffic Design. They can be found at:
**V:\Traffic\Dev_V8i\Printers **



The print driver does not directly affect whether or not printing in grey scale is available or not; that is determined by the pen table. The printer driver names that include “non” in the file name will automatically load a pen table that does **not** support grey scale. When a print driver is selected and loaded, the appropriate pen table will also be loaded. Pen tables may be used with any print driver to achieve the desired results.

Here are the pen tables available to Traffic Design.



Half_traffic.tbl – This is the “generic” pen table and works best in most situations.
None.tbl –Use this table when printing in color.
Normal.tbl – prints everything in black and white, no greys or colors.

Subdue.tbl – Greys out all “existing” levels in the active file as well as all reference files.
Levels 1-24, 29, 31, 59-61, and colors 227 & 228 will plot in grey.
Color 227 RGB = 170, 170, 170 (lighter)
Color 228 RGB = 130,130,130 (darker)

CHAPTER 8 SET UP FOR TYPICAL PLAN SHEETS

SIGNING SHEETS

SIGNING LOCATION SHEETS:

Signing location sheets are plan sheets that show an image of the sign (cell), and the post symbol geometrically located relative to the roadway. In some cases, these sheets are combined with Pavement Marking Sheets. In any case the following applies.

When labeling the signs, three pieces of information are required to accompany the sign cell: **Summary Reference**: this is the label that refers the reader to the correct sign on the Summary Sheet. Typically this is the direction and mile post (E123.33, or N321.12).
Condition: This label indicates the state of the sign, New or Existing.
Action: This label shows what is intended for the sign. “Remove Existing”, “To Remain” are some examples of the Action Label.

When placing sign cells, or importing signs from SignCAD, attention to the scale and proportionality of the sign cell should be taken.

Sign Location plans (Main Line) are generally drawn at 100 scale. Sign Location plans (Cross Roads) are generally drawn at 200 scale.

When combined with Striping, the centerline line is not shown, however, the stationing tick marks are always visible.

SIGN SUMMARY SHEETS:

Sign Summary sheets contain sign installation data (number of posts, legend, etc.). This data is sometimes generated in Excel and then linked to the summary sheet. Linked Excel data is very convenient because the data can be manipulated in Excel perhaps much easier than in MicroStation. Additionally, the Excel data can be used for other purposes as well.

We have access to Axiom’s Office Importer. This application provides a convenient way to import Excel data into MicroStation and is great for Sign Summary Sheets.

SIGN FORMAT SHEETS:

Sign Format sheets show the output from SignCAD. Experimentation and experience led to the information provided below by Richard Moeur.

Excerpt from an email by Richard Moeur, dated August 10, 2009.

The SignCAD MDL settings that I used for placing the signs in MicroStation are as follows:

Active Scale (in MicroStation): 1.00
Rotation Angle: 0
Geometry Scale: 1.00
Master Units: Inch (NOT feet or meter)
Geometry Level: 54
Dimension Level: 54
Include Dimensions: Yes
Color Fill: NO
Dimension Sizing: Use SignCAD Size

I believe that the combinations that provide the best balance between appropriate sign size and legible dimensioning are as follows:

Large & medium mainline signs - Plan sheet scale: 1" = 25'
SignCAD dimension scale: 1:50
Ramp/crossroad/small mainline signs - Plan sheet scale: 1" = 12.5'
SignCAD dimension scale: 1:25

PAVEMENT MARKING SHEETS

Mainline Pavement Marking plans are typically drafted at 40 scale. Crossroad marking plans are typically drafted at 40 scale. Occasionally, 50 scale is used.

Text for proposed marking labels are drawn with a weight of 4.

The text sizes follow the rules as described above in Chapter 2. Call outs use title case, notes use sentence case.

Pavement Marking sheets will typically show any new edge of pavement (EOP) line work as existing. When the Contractor begins to lay down the markings, the roadway work has been completed so the EOP should be displayed as existing. One way to accomplish this is to use level overrides. From Level Manager set the appropriate level overrides for Roadway's "MAS" file to CO=16, LC=3, WT=2. The level override option must be on for overrides to display.

The weight of the pavement marking line work should generally be ½ of the actual width of the marking. Examples: a 12" wide stop bar would be drawn at a weight of 6, a 6" line would be drawn at a weight of 3, etc.

TRAFFIC CONTROL GENERAL NOTES:

Sentence case shall be used for all notes. Sentence case uses proper grammar and punctuation. Avoid using abbreviations when writing notes.

MAINTENANCE OF TRAFFIC SHEETS:

Sentence case shall be used for all notes and comments. Sentence Case uses proper grammar and punctuation.

TRAFFIC CONTROL QUANTITIES SHEETS:

Text for bid items, element of work descriptions, and other text contained within the quantities grid shall be title case. The first character of each word shall be capitalized. Exceptions to this are words defined as definite articles (“the”), indefinite articles (“a”, and, “an”) and coordinating conjunctions (“and”, “but”, “if”, “or”, “for”, “yet”, “so”, "non" and “nor”) these generally are not capitalized.

TRAFFIC CONTROL DETAIL SHEETS:

Traffic Control Detail sheets typically are drawn at a scale of 40.

Traffic Control Detail sheets will include a variety of elements such as notes, sign cells, and detail graphics. Care should be taken when importing sign cells. All signs should be proportional and the size consistent with the rest of the plan set. A Symbol legend is provided in the cell library and should be used.

CHAPTER 9 RECORD DRAWINGS

ARCHIVING PROJECTS

The following are general guidelines on the assembly of record drawings (as-builts):

- Copy and save signed & sealed plans from Road Portal or Data Warehouse.
- Set up new CADD pages with plot shapes and rasters in pages of the plans 20 sheets at a time depending on size of the plan set.
- Once plans are rastered in CADD, perform red-lining and clouding per documentation from District.
- Determine total number of pages, including changes & addenda and use information to perform numbering and dating of the plans.
- After completing redlines, clouding, numbering and dating you are ready to produce final PDF of plan set.
- Once final half-size is created, send to Resident Engineer (RE) for review and approval.
- Once the RE approves the record drawing set, create a new PDF/A set in both half-sized (11”x17”) and full-sized (34”x22”). Once this is complete, send to the RE, Project Resource Office (PRO), and design engineer.
- Verify Project Resource Office (PRO) has received final approval from RE (or forward along if you already have email available).
- The final record drawings are usually sent through ShareFile.

For more information on record drawings, please see ADOT’s **Record Drawing Guidelines** **,** administered by the Project Resource Office.

CHAPTER 10 TOOLS

THE TRAFFIC DESIGN PULL DOWN MENU

The purpose of the Traffic Design MicroStation Pull Down Menu is to help the user find and use proper cells, tools, information, and to assist the user to following Traffic Design CADD Standards.

Traffic Design's MicroStation Pull Down Menu is a work in progress. As new items or new suggestions become known, the menu will evolve. It is recommended that the user take a tour through the menu to see what is available, and to suggest items that could be added.

AXIOM OFFICE IMPORTER

This utility is used to import data from Excel into MicroStation. This utility seems to work quite well when linking Sign Summary data. A revised version of the normal sign summary spreadsheet is available at V:\Traffic\Dev_V8i\CADD Friendly SSS.xls. This revised addition has had some column widths adjusted so that the imported image matches the line work of the sheet.

ROTATE TEXT TO LINE

This MDL application rotates an existing text element to match the angle of a line, linestring, or shape. This application does not have a dialog box.

To load and this application:

Go to the VBA Tools pull down menu and choose "Rotate Text to Line"
Follow the prompts, pick and accept the line segment first. Pick and accept the text to rotate.

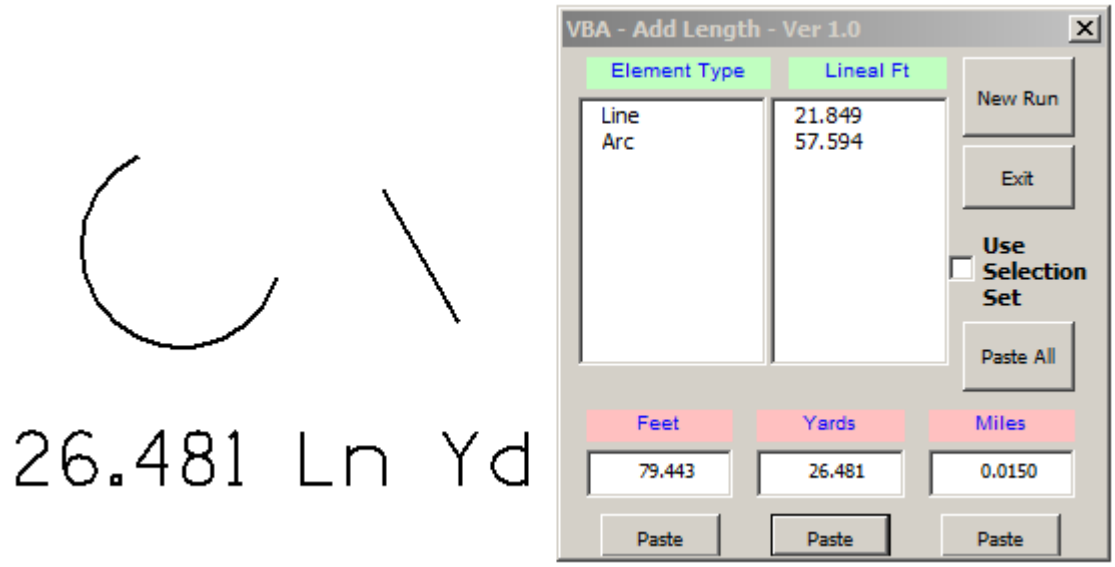
A few things about this application: if the line was drawn "backwards" the text will rotate to be backwards also, but it's possible to have the application activate the rotate command (at 180 °) so the text can be rotated if needed. If not, simply enter a reject.

ROTATE ELEMENT TO LINE

This VBA tool works much like the rotate text tool. Snap to the first end, then to the other end of a line, and then pick the element to rotate.

ADD LENGTH

As the name implies, this VBA sums lengths of various element types. The resultant can then be pasted into the drawing.

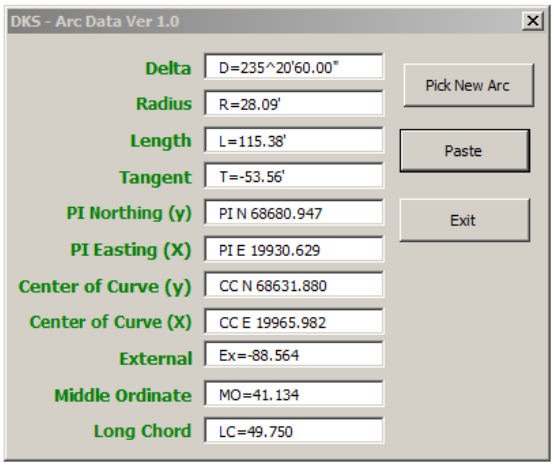


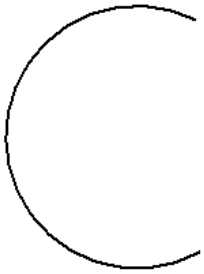
Note, pasted text will assume current symbology and attributes.

ARC DATA

This VBA displays information about a selected arc.

D=235°20'60.00"
R=28.09'
L=115.38'
T=-53.56'
PI N 68680.947
PI E 19930.629
CC N 68631.880
CC E 19965.982
Ex=-88.564
MO=41.134
LC=49.750





Note, Pasted text will assume current symbology and attributes.

STRAIGHTEN TEXT

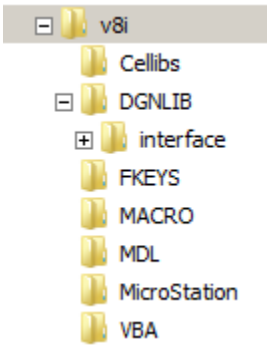
This VBA will rotate a text element to be horizontal with the current.

CHAPTER 11 MICROSTATION INTERFACE CUSTOMIZATION

MENUS

GENERAL INFORMATION ON USER CUSTOMIZATIONS

Every user has a location on the V: drive (V:\Traffic\Users\[RACF ID]\v8i\) where they may put their customization files. Pull down menus, as well as icon menus would be placed in the \V8i\DGNLIB\Interface\ folder. A custom function key menu would be placed in \V8i\FKEYS\



The user may even wish to have their own cell libraries, macros, or other enhancements that are unique to that user. MicroStation is configured such that if an appropriate file is placed in the appropriate folder it will be read and executed automatically by MicroStation at start up.

FUNCTION KEYS

Function keys are great. Every user should develop a set of function keys that suits their drafting style. The key to creating any kind of menu item in MicroStation is knowing the key-in for the command.
Multiple commands can even be strung together by separating them be a semi colon (;). Below are some examples of typical function key key-ins.

active angle pt2
AM=dks_adot_traffic_menu.dgnlib, screen1,sc1,s1
drop complex
choose prev
choose none
choose elem
spin orig
pla fence block
Inputmanager Menu DONPop
vba load Rotate_Elm.mvba; vba run Module1.GetRotation
SET CURSOR SMALL;ky=2;aa=0;as=1;LOCK SNAP KEYPOINT
SNap Nearest

Extend line
active axis 30;ky=2;LOCK AXIS
change element extended
macro K:\Rdwy\191214000-Williamson_Valley_Road\CADD\Sheet_Num\add_del_tags
aa=90
aa=0
SHOW REF
MATCH ELEMENT
VIEW PREVIOUS
LOCK GGROUP
lv=59;co=59;wt=2;ft=3;macro chng-tb FIT
FIT ALL
SET CURSOR FULL; ky=2
ZOOM IN 1.8
ZOOM OUT 2.3
snap intersection
macro kha-match element
choose previous
view off 1;view on 1;fit all;selview all;filedesign
change text case titlecase
change text case firstcapital

APPENDIX 1 TRAFFIC DESIGN DRAFTING GUIDE EXAMPLE SHEETS

The following sheets provide examples of CADD methods which follow these guidelines.

APPENDIX 1 TRAFFIC DESIGN DRAFTING GUIDE EXAMPLE SHEETS

ADVANCE WARNING, TRAFFIC CONTROL PLAN

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

GUIDELINES FOR TYPICAL, ADVANCE WARNING, TRAFFIC CONTROL PLAN

1. The contents of this drawing shall be used as a guide for drafting ADOT Traffic Engineering plans and should not be used as a design aid.

2. This drawing is a labeling and dimensioning presentation.

3. This drawing is cut 100 scale (the border is a reference file attached 1:1).
   The Border File has Data Fields for placement of Title Block Text. For Title Block Text that is sheet specific, the Data Fields need to be copied up into the Sheet File. Title Block Text that is not sheet specific can and should live in the Border File to avoid duplication of work.

4. For labeling text use Title Case. The first letter of each word is capitalized. Words that would not typically be capitalized within a label are words defined as definite articles ("the"), indefinite articles ("a" and "an"), and coordinating conjunctions ("and", "but", "if", "or", "for", "yet", "so", "non" and "nor").

5. Label text do not include punctuation. See Signing & Marking and Signal & Lighting Standard Drawings for Standard Abbreviations.

6. ALL graphic element items shall follow the ADOT LEVEL STRUCTURE. Existing items do not need to be screened on this type of drawing.

7. SIGN FORMATS (imported from SignCad), dimension text, and sign accessory cells are placed on;
   LV=54
   CO= Designer's discretion
   WT= Designer's discretion
   FT= SignCad default
   TX= Dimension Text is SignCad Designer's discretion. Adjusted Dimension Text on this example drawing is:
   WT=0

8. CELL PLACEMENT:
   LV= Cell attributes are built-in but can be adjusted to the Designer's discretion.
   WT=0 for filled cells
   The weight of any cell may be adjusted to the Designer's discretion.
   The, North Arrow, cell is placed or copied into each Sheet File at the drawing scale of AS=1.

9. TITLE TEXT:
   LV=55(Signing), 43(Traffic Control)
   CO=LV
   WT=6
   FT=1
   TX=22 (100 scale)
   LS=½ text height
   Text Justification = Center Bottom (also Center Top if using description text below the underline).
   This text uses upper case and does not have descenders.

10. All Title Text (Detail Titles) that is not in a Table or labeling roadways/street names will have an underline. This underline has all the same element attributes as the Title Text with the LC=0.

11. NOTES (TEXT):
    LV=55(Signing), 43(Traffic Control)
    CO=LV
    WT=4
    FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
    TX=17.5' (100 scale)
    LS=0.625 x (text height)
    Text Justification = Left Top (Because when editing, text will grow from top left and shrink from the bottom right).
    This text uses upper and lower case and has descenders.

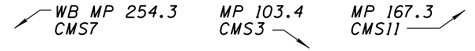
12. LABEL TEXT:
    LV=55(Signing), 43(Traffic Control)
    CO=LV
    WT=3
    FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
    TX=15' (100 scale) See Note #14
    LS=0.625 x (text height)
    Text Justification = Left Top (Because when editing, text will grow from top left and shrink from the bottom right).
    This text uses Title Case and has descenders.

13. CENTERLINE AND DATA TEXT:
    LV=21
    CO=LV
    WT=1
    FT=23
    TX= Designer's discretion
    LS=0.625 x (text height)
    Text Justification = Designer discretion

14. All text can be squeezed to fit tight spaces and to the Designer's discretion as long as it is legible when printed hard copy and in all pdf formats (half size/full size).

15. LEADER LINE:
    LV=55(Signing), 43(Traffic Control)
    CO=LV
    WT=1
    LC=Leader
    The leader line scale factor is 1.0 for 100 scale.
    Once you have created both and attached together, it is recommended to group together. Then you can copy and move to other label text.
    Using the modify command forces the arrowhead to follow the line angle modified because it is a custom linestyle.

16. LEADER EXTENSION LINE:
    LV=55(Signing), 43(Traffic Control)
    CO=LV
    WT=1
    LC=0



    The, Leader Extension, line length = Text Height (can be adjusted longer if coming off the right bottom on stacked text when the last line of text is shorter and the leader line is pointing up).
    It is spaced away from the text, ½ text height.
    It can be center eye-balled in the middle of the text from the top left or bottom right. (See example above)

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION
DESIGN			
DRAWN	LARRY LOPEZ	6/19	GUIDELINES FOR TYPICAL ADVANCE WARNING TRAFFIC CONTROL PLAN
CHECKED			
TEAM LEADER			
LOCATION			SHEET 1 OF 1
TRACS NO.			___ OF ___

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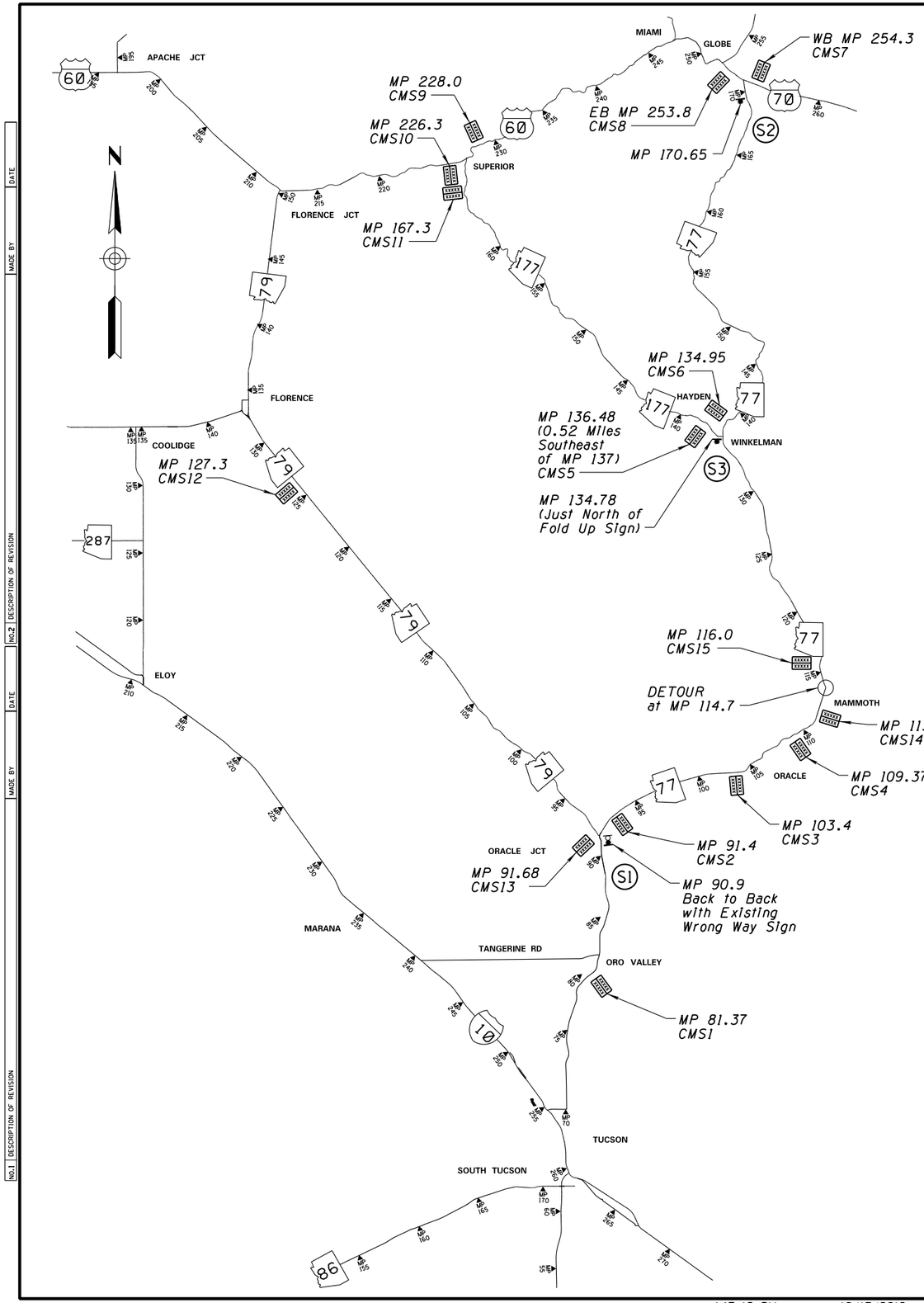
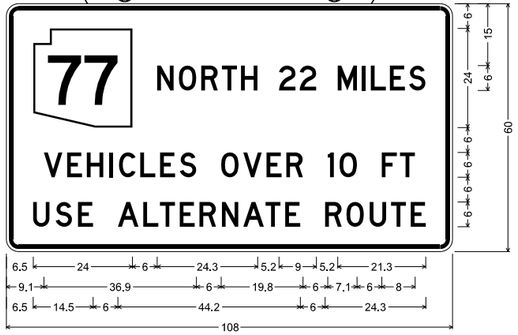
NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			

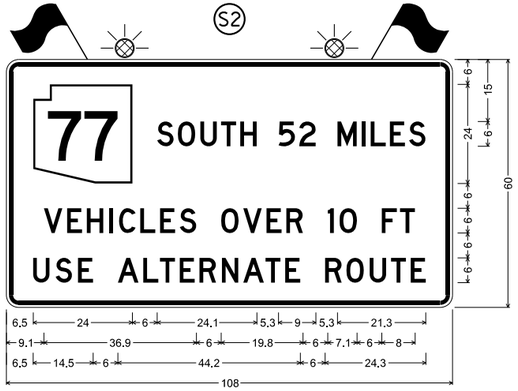


SIGN LEGEND:

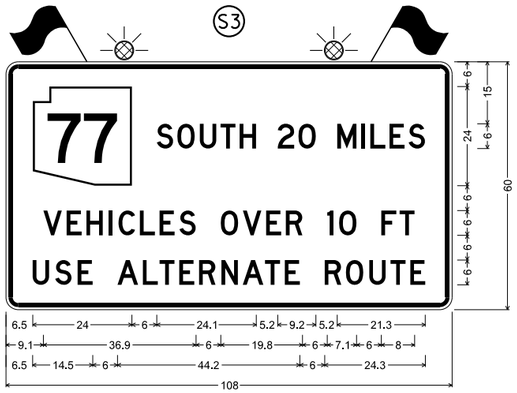
S1



S2



S3



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.		61		

NOTES:

1. *Each sign shown on this sheet is a specialty sign with black legend on an orange background.*
2. *Each* 77 *route shield shall be 24 in. x 24 in. and white with 12 in. black text. All other text shall be 6" text (D alphabet).*
3. *All distances and locations are approximate.*
4. *The Contractor shall not display these signs until 72 hours prior to the time SR 77 traffic will be diverted to the detour for the culvert work by MP 114.7. The Contractor shall remove or cover these signs as soon as SR 77 traffic will be allowed to return to the highway (as soon as the detour is no longer necessary).*

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

ADVANCE WARNING
TRAFFIC CONTROL AND
SPECIALTY SIGNS

LOCATION

SHEET 1 OF 1

TRACS NO.

___ OF ___

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APPENDIX 1 TRAFFIC DESIGN DRAFTING GUIDE EXAMPLE SHEETS

BRIDGE REPAIR, TRAFFIC CONTROL DETOUR

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			

GUIDELINES FOR TYPICAL, BRIDGE REPAIR, TRAFFIC CONTROL DETOUR

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

1. The contents of these drawings shall be used as a guide for drafting ADOT Traffic Engineering plans and should not be used as a design aid.

2. These drawings are a labeling and dimensioning presentation.

3. Drawings can be 20, 40, 50 or 100 scale (the border is a reference file attached 1:5 (20 scale), 1:2.5 (40 scale), 1:2 (50 scale), 1:1 (100 scale).
   These types of drawings can be schematic and not to scale.
   Text size TX=17.5' (100 scale), 8.75' (50 scale), 7' (40 scale), 3.5' (20 scale), (see Note #19). For Title Text see Notes #12, #13 and #17. The Border File has Data Fields for placement of Title Block Text. For Title Block Text that is sheet specific, the Data Fields need to be copied up into the Sheet File. Title Block Text that is not sheet specific can and should live in the Border File to avoid duplication of work.

4. For labeling text use Title Case. The first letter of each word is capitalized. Words that would not typically be capitalized within a label are words defined as definite articles ("the"), indefinite articles ("a" and "an"), and coordinating conjunctions ("and", "but", "if", "or", "for", "yet", "so", "non" and "nor").

5. Label text does not use punctuation. See Signing & Marking and Signal & Lighting Standard Drawings for Standard Abbreviations.

6. ALL existing items not part of the Bid Set and/or Contractor Construction Responsibility are to be screened (gray/level overrides).
   All graphic element items shall follow the ADOT LEVEL STRUCTURE.

7. WORK ZONE (Hatched Area):
   LV=15
   CO=LV
   WT=0
   LC=0

8. EDGE OF ROAD, PAVEMENT PRESERVATION LIMITS AND NEWLY CONSTRUCTED ROADWAY ITEMS (non Traffic Items are shown as existing):
   LV=16
   CO=LV
   WT=0
   LC=3

9. CURB AND GUTTER:
   LV=23
   CO=LV
   WT=0
   LC=2
   For all other Existing Items (bridges, guardrail, etc), see ADOT LEVEL STRUCTURE for (existing) level placement/level overrides. The line weight of any existing item can be adjusted to the Designer's discretion as long as it is screened (gray).

10. LANE LINE AND EDGELINE STRIPING:
    LV=46 (Existing LV=17)
    CO=0 for White pavement markings
    CO=17 for Yellow pavement markings
    WT=3 for 6" striping
    WT=6 for 12" striping
    WT=9 for 18" striping
    WT=12 for 24" striping
    LC=(see custom linestyle names)
    These pavement markings can live in a Master Base File or a Sheet File.

11. CELL PLACEMENT:
    LV= Cell attributes are built-in but can be adjusted to the Designer's discretion.
    LV=17 for existing traffic items/cells, (levels that screen/level overrides).
    WT=0 for filled cells (CO=17 for existing filled cells).
    The weight of any cell may be adjusted to the Designer's discretion.
    Pavement Arrows and "Only" legend pavement markings are cells that usually live in a Master Base File but can be shown in a Sheet File.
    These cells are brought into a Master Base File at AS=1.
    The North Arrow cell is placed or copied into each Sheet File at the same drawing scale (AS=Sheet File Scale).

12. TITLE TEXT:
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control), LV=25(Match Line)
    CO=LV
    WT=6
    FT=1
    TX=22' (100 scale), 11' (50 scale), 8.8' (40 scale), 4.4' (20 scale)
    LS=½ text height
    Text Justification = Center Bottom (also Center Top if using description text below the underline).
    This text uses upper case and does not have descenders.

13. All Title Text (Detail Titles) that are not in a Table or labeling roadways/street names will have an underline. This underline has all the same element attributes as the Title Text with the LC=0.

14. NOTES (TEXT):
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control)
    CO=LV
    WT=4
    FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
    TX=17.5' (100 scale), 8.75' (50 scale), 7' (40 scale), 3.5' (20 scale)
    LS=0.625 x (text height)
    Text Justification = Left Top (Because when editing, text will grow from top left and shrink from the bottom right).
    This text uses upper and lower case and has descenders.

15. LABEL TEXT:
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control)
    CO=LV
    WT=4, WT=2 (for smaller text used under Traffic Control Signs)
    FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
    TX=See Notes #3 and #19
    LS=0.625 x (text height)
    Text Justification = Left Top (Because when editing, text will grow from top left and shrink from the bottom right).
    This text uses Title Case and has descenders.

16. DIMENSION TEXT AND STATION CONTROL POINT TEXT:
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control)
    CO=LV
    WT=4
    FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
    TX=See Notes #3 and #19
    LS=0.625 x (text height) (space above and below the dimension line)
    Text Justification = Center Bottom (also Center Top if using description text below the dimension line)
    This text uses Title Case and has descenders because it sometimes includes a description.

17. CENTERLINE TITLE TEXT:
    (500' Stationing)
    LV=21
    CO=LV
    WT=1
    FT=1
    TX=22' (100 scale), 11' (50 scale), 8.8' (40 scale), 4.4' (20 scale)
    Text Justification = Center Center
    This text uses upper case and does not have descenders.

18. CENTERLINE DATA TEXT:
    (Curve Data, Station Equation)
    LV=21
    CO=LV
    WT=1
    FT=23
    TX=See Notes #3 and #19
    LS=0.625 x (text height)
    Text Justification = Designer's discretion

19. All text can be squeezed to fit tight spaces and to the Designer's discretion as long as it is legible when printed hard copy and in all pdf formats (half size/full size).

20. CENTERLINE TICK MARKS:
    LV=20
    CO=LV
    WT=1
    LC=0
    These tick marks are to be displayed screened (gray).
    Note: the centerline is never displayed so it won't conflict with striping.

21. LEADER LINE:
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control)
    CO=LV
    WT=1
    LC=Leader
    The leader line scale factor is 0.2 (20 scale), 0.4 (40 scale), 0.5 (50 scale), 1 (100 scale).
    Once you have created both and attached together, it is recommended to group together. Then you can copy and move to other label text.
    Using the modify command forces the arrowhead to follow the line angle modified because it is a custom linestyle.

22. LEADER EXTENSION LINE:
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control)
    CO=LV
    WT=1
    LC=0
    Inline Attenuator (Water Filled)
    Inline Attenuator (Water Filled)
    Channelizing Device @ 80' Spacing
    The, Leader Extension, line length = Text Height (can be adjusted longer if coming off the right bottom on stacked text when the last line of text is shorter and the leader line is pointing up).
    It is spaced away from the text, ½ text height.
    It can be center eye-balled in the middle of the text from the top left or bottom right. (See example above)

23. DIMENSION LINES:
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control)
    CO=LV
    WT=1
    LC=DimLeader
    (DimLeader2 is for dimensioning a space smaller than the size of arrowheads so that the arrowheads point towards each other).
    The dimension line scale factor is 0.4 for 40 scale
    (0.1 for 10 scale, 0.2 for 20 scale, 0.5 for 50 scale).

24. DIMENSION EXTENSION LINES:
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control)
    CO=LV
    WT=1
    LC=0

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION
DESIGN			
DRAWN	LARRY LOPEZ	6/19	GUIDELINES FOR TYPICAL BRIDGE REPAIR TRAFFIC CONTROL DETOUR
CHECKED			
TEAM LEADER			
LOCATION			SHEET 1 OF 14
TRACS NO.			___ OF ___

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

TRAFFIC CONTROL NOTES:

1. The traffic control plans represent a suggested method for traffic control during construction. The Contractor may prepare another traffic control plan in accordance with Section 701 of the Specifications, Part VI of the 2009 Manual of Uniform Traffic Control Devices, the Arizona Supplement to the MUTCD, and the 2010 ADOT Traffic Control Guidelines. All traffic control plans are subject to the approval of the Engineer before beginning construction.

2. Adjustments to the details of these traffic control plans and requirements may be necessary due to construction activities, as directed by the Engineer.

3. All existing signs in conflict with the construction signs shall be removed, relocated, or covered in place, as directed by the Engineer, at the Contractor's expense. The Contractor shall store and reinstall items which have been removed or relocated in a manner approved by the Engineer. All signs that are damaged during construction shall be replaced by the Contractor at no cost to the Department.

4. All construction signs shall have black letters on an orange background, except as otherwise indicated.

5. The retroreflective sheeting on all construction signs shall meet the criteria established for Type VIII, IX, or XI sheeting in accordance with ASTM D4956, except all black-on-white signs, barricades, vertical panels, and other work zone traffic control devices may have Type IV sheeting. All orange signs shall have fluorescent sheeting.

6. All signs shown on the plans shall be mounted on embedded posts, rigid stands, or spring stands except as otherwise noted by the Engineer. Signs installed on embedded posts shall be mounted a minimum height of 7 feet as measured from the bottom of the sign to the near edge of the pavement. All other short-term signs may be installed on portable stands at the height recommended by the portable stand manufacturer.

7. The nearest edge or corner of a sign shall be approximately 12 feet from the nearest edge of pavement or 6 feet behind guardrail for all signs mounted on embedded posts.

8. Flags shall be mounted on top of all construction signs except the "END ROAD WORK THANK YOU" sign.

9. Type A flashing warning lights shall be required on all night time construction signs except the "END ROAD WORK THANK YOU" sign.

10. Channelizing devices shall be drums, cones, or vertical panels and shall be placed 40 feet on center in tapers and 80 feet on center in tangents, except as otherwise noted on plans. For night time work Type "C" warning lights shall be required on top of every channelizing device in tapers and on alternating devices in tangent sections.

11. An adequate number of Type III barricades shall be placed across each roadway to be closed. A 48x30 inch "ROAD CLOSED" sign shall be attached to one of the Type III barricades closing the roadway. A Type "A" flashing warning light shall be mounted on each end of each Type III barricade.

12. Where insufficient shoulder width exists to accommodate a spring stand, signs shall be installed on concrete barrier or as directed by the Engineer. The installation costs are included in the cost of the sign.

13. The Contractor may substitute Type I barricades for Type II barricades as long as the reflective area on the top of panel of each Type I barricades is equivalent or greater than the reflective area of a Type II barricade.

14. The Contractor shall remove the existing pavement markers in connection with the stripe obliteration activities.

15. The Contractor shall not disturb any logo signing. The Contractor shall contact Grand Canyon Logo signs at least 1 week in advance to make any necessary adjustments to the existing logo signing. Any logo signing which is damaged as a result of construction activities shall be replaced or repaired at the discretion of the logo sign company at the contractor's expense.

16. Speed limit signing is preliminary and is subject to review and change by the Engineer as dictated by field conditions.

17. The Contractor shall utilize a flashing arrow panel in the sequential chevron mode for each closure of the through lane. The Contractor shall not utilize a flashing arrow panel for any shifting taper.

18. During work periods, lane closures shall generally conform to Figure SA-5(R) of the 2010 ADOT Traffic Control Design Guidelines.

19. Construction signs shall not be displayed to traffic more than 24 hours prior to the actual start of construction. These signs may be installed sooner but they must be covered or turned away from traffic. The cost for covering or turning them shall be considered part of the sign installation cost. No further compensation will be made. These signs shall be removed within 24 hours after the completion of the construction activities.

20. The Contractor shall position changeable message boards in advance of each road or lane closure as shown on plans or as directed by the Engineer.

21. Adjustments to the details of these traffic control plans and requirements maybe necessary due to construction activities or as directed by the Engineer.

22. All existing pavement markings in conflict with the traffic control plans shall be removed by approved methods, as indicated in the Special Provisions.

23. All re-striping activities along southbound I-17 on top of the bridge deck and along 7th Avenue below the bridge, shall use thermoplastic pavement markings or as directed by the Engineer.

24. Off-duty uniformed police officers and their vehicles shall be included as part of the Contractor's traffic control when the Engineer decides they should be present including during the installation and removal of temporary concrete barrier for the lane and road closures. The Contractor shall also utilize and provide flaggers and uniformed officers (DPS) at any other time determined by the Engineer.

25. Where no closure is necessary but where there is construction alongside a roadway under construction, the Contractor shall place 48x48 inch "ROAD WORK AHEAD" and "SHOULDER WORK AHEAD" signing as directed by the Engineer to alert the public to the construction activities.

26. While traffic control items are not in use, the Contractor shall remove these items to a location behind guardrail or at least 30 feet from the edge of the paved roadway. This includes all supports without sign panels. Any signs which are not in use but which cannot be moved behind guardrail or at least 30 feet from the roadway shall be covered so the public cannot read the legends.

27. For temporary concrete barrier markers, see ADOT Standard Drawing M-32 barrier markers. Markers shall be installed at 20 feet spacing. The installed price for the markers shall be considered part of the barrier cost.

28. The Contractor shall abide by the traffic control requirements specified for Subsection 104.04 - Maintenance of Traffic - of the Special Provisions. All references to the "MUTCD" refer to the 2009 version of the MUTCD as amended by the January 2012 ADOT supplement.

29. Note all drawings are schematic only and are not to scale. All dimensions are in feet, unless otherwise noted.

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
2			
1			

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TRAFFIC CONTROL NOTES

LOCATION: I-17 / 7TH AVENUE

SHEET 1 OF 14

TRACS NO.

___ OF ___

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

MAINTENANCE AND PROTECTION OF TRAFFIC

ACTIVITY NO.	CONSTRUCTION ACTIVITY	TRAFFIC CONTROL	REMARKS
1	Set up temporary concrete barrier. Start demolition of bridge deck and barrier.	Install warning signing on southbound I-17 for one lane closure. Set up full closure and warning signing for 7th Avenue in both directions.	Signs and changeable message boards are to remain for the duration of the work. Changeable message boards shall be displayed two weeks prior to start of project. Coordinate the message for each work activity with the engineer.
2	Set bridge girder, false work and rebar.	Set up weekday night closure on northbound 7th Avenue. Southbound 7th Avenue open to traffic.	Update messages on changeable message boards to reflect current traffic control conditions.
3	Pour bridge deck and strip formwork.	Set up weekend full closure for northbound 7th Avenue. At times, traffic on southbound I-17 will be restricted to one lane.	Other traffic control restrictions may be required and should be followed if requested by the Engineer.
4	Form and prep for new bridge barrier.	Set up weekday full closures for northbound and southbound 7th Avenue.	Update messages on changeable message boards to reflect current traffic control conditions.
5	Pour bridge barrier and remove temporary concrete barrier.	Set up weekend full closure for northbound 7th Avenue. At times, traffic on southbound I-17 will be restricted to one lane.	Update messages on changeable message boards to reflect current traffic control conditions.
6	Remove traffic control on southbound I-17.	Southbound I-17 open to traffic.	Remove all traffic control that is not being used on southbound I-17.
7	Paint bridge structure.	Set up nighttime full closure for northbound and southbound 7th Avenue.	Update messages on changeable message boards to reflect current traffic control conditions.
8	Perform asphalt paving and striping as needed on southbound I-17 and on 7th avenue.	Set one lane closure (right lane) on southbound I-17 per figure SA-5(R) of the 2010 ADOT Traffic Control Design Guidelines.	Permanent pavement markings and raised pavement markers shall be installed on 7th avenue below the bridge.

NOTE:

The above sequence of activities does not constitute a sequence of construction.

NO. | DESCRIPTION OF REVISION | MADE BY | DATE

NO.1
NO.2

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

MAINTENANCE AND PROTECTION OF TRAFFIC

LOCATION: I-17 / 7TH AVENUE

SHEET 2 OF 14

TRACS NO.

___ OF ___

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

APPROXIMATE TRAFFIC CONTROL QUANTITIES

ITEM NUMBER	ELEMENT OF WORK	UNIT	CONSTRUCTION ACTIVITY NUMBER								
			1	2	3	4	5	6	7	8	TOTAL
	Work Duration (Work Days)		*2*	*4*	*3*	*4*	*3*	*1*	*1*	*1*	*19*
7015091	*Specialty Sign*	*Sq-Ft*	*30*	*60*	*45*	*60*	*45*				*240*
7016030	*Barricade (Type II, Vertical Panel, Tubular Marker)*	*Each-Day*	*200*	*330*	*240*	*400*	*240*	*10*	*30*	*50*	*1,500*
7016031	*Barricade (Type III, High Level Flag Trees)*	*Each-Day*	*50*	*30*	*25*	*100*	*25*	*4*	*8*	*4*	*246*
7016032	*Portable Sign Stands (Rigid)*	*Each-Day*	*70*	*80*	*60*	*140*	*60*	*10*	*25*	*15*	*460*
7016033	*Portable Sign Stands (Spring Type)*	*Each-Day*	*35*	*75*	*55*	*70*	*55*		*2*	*15*	*307*
7016035	*Warning Lights (Type A)*	*Each-Day*	*130*	*180*	*130*	*260*	*130*	*10*	*20*	*20*	*880*
7016037	*Warning Lights (Type C)*	*Each-Day*	*190*	*310*	*230*	*380*	*230*	*10*	*45*	*50*	*1445*
7016039	*Embedded Sign Post*	*Each-Day*	*15*	*25*	*20*	*30*	*20*	*4*	*4*	*2*	*120*
7016050	*Truck Mounted Attenuator*	*Each-Day*	*1*					*1*		*1*	*3*
7016051	*Temporary Sign (Less Than 10 Sq-Ft)*	*Each-Day*	*55*	*65*	*50*	*110*	*50*	*10*		*2*	*342*
7016052	*Temporary Sign (10 Sq-Ft or More)*	*Each-Day*	*60*	*80*	*65*	*120*	*65*	*35*	*15*	*15*	*455*
7016061	*Flashing Arrow Panel*	*Each-Day*	*2*	*4*	*3*	*4*	*3*			*1*	*17*
7016067	*Changeable Message Board (Contractor furnished)*	*Each-Day*	*6*	*12*	*9*	*12*	*9*	*2*	*2*	*1*	*53*
7016080	*Flagging Services (DPS)*	*Hour*	*48*	*96*	*72*	*96*	*72*	*8*	*10*	*12*	*414*

APPROXIMATE PAVEMENT MARKING QUANTITIES

ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
7040005	*Pavement Marking (White Extruded Thermoplastic) (0.090")*	*LF*	*300*
7060017	*Pavement Marker (Raised Type G)*	*Each*	*8*
7080001	*Pavement Marking (Painted) (White)*	*LF*	*1,576*
7080121	*Pavement Marking (Painted Symbol) (Arrow)*	*Each*	*4*
7080221	*Pavement Marking (Painted Legend) (ONLY)*	*Each*	*2*

NOTES:

1. *The order of construction activities does not constitute a sequence of construction. The contractor shall perform the work in the most expeditious manner consistent with the plans and special provisions with approval of the Engineer.*
2. *All pavement marking quantities are calculated as 4" equivalents.*
3. *Placement of advance warning sign is included in Activity 1, Item #7016067*

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TRAFFIC CONTROL AND PAVEMENT MARKING QUANTITIES BRIDGE REPAIR

LOCATION: I-17 / 7TH AVENUE

SHEET 3 OF 14

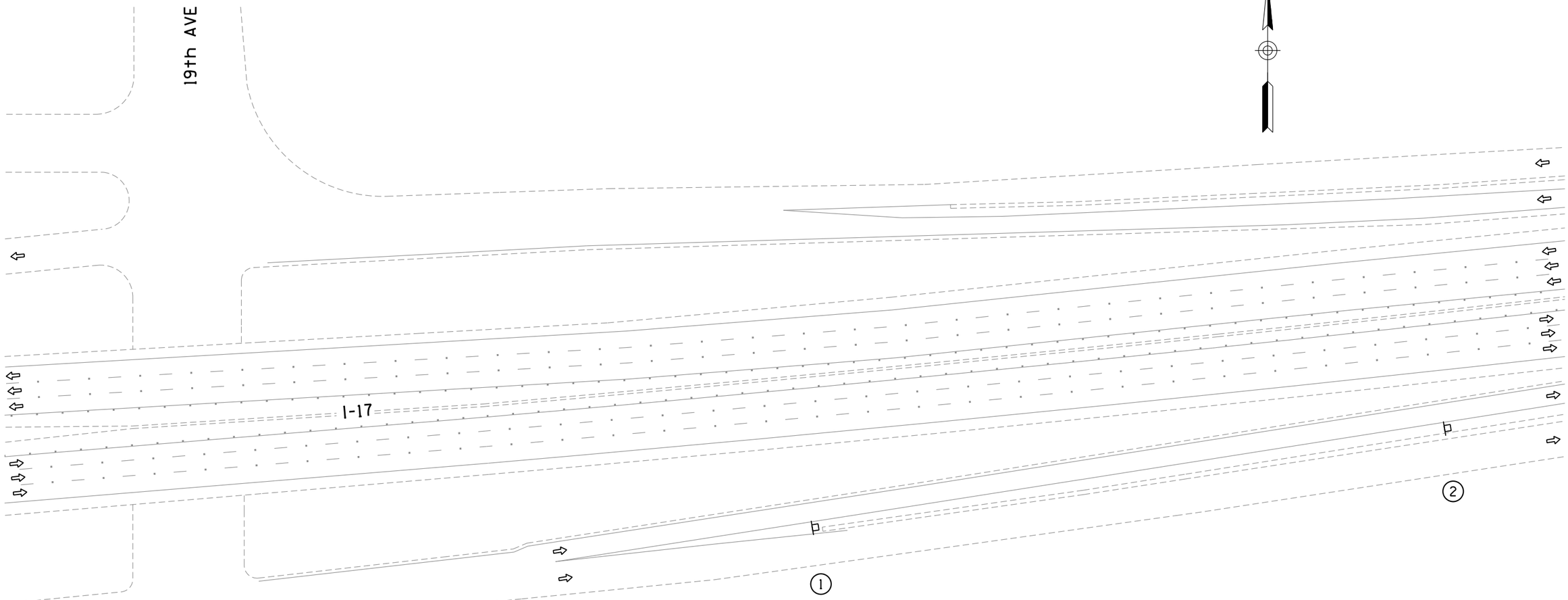
TRACS NO. ____ OF ____

DATE | MADE BY | NO.1 DESCRIPTION OF REVISION | NO.2 DESCRIPTION | DATE | MADE BY | DESCRIPTION OF REVISION

3:28:46 PM 6/18/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\TrafficControl\Bridge Repair\TC001.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			



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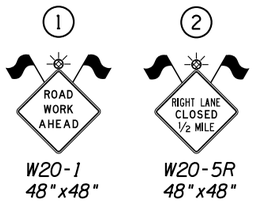


W20-1 48"x48"

W20-5R 48"x48"

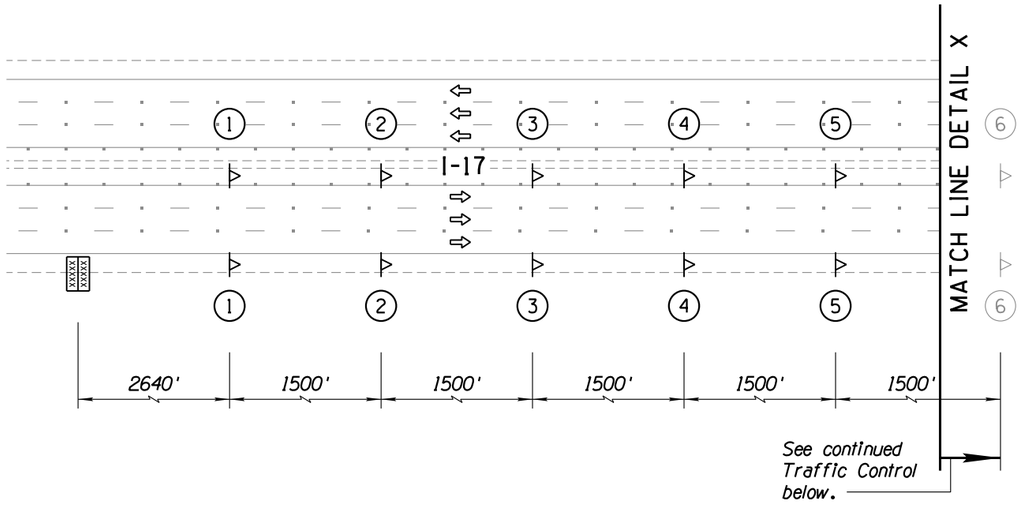
SYMBOL LEGEND:

	Sign on Rigid Stand
	Type A Flashing Warning Light
	Warning Flags
	Direction of Travel

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION
DESIGN			
DRAWN	LARRY LOPEZ	6/19	
CHECKED			TRAFFIC CONTROL PLANS BRIDGE REPAIR
TEAM LEADER			
LOCATION	I-17 / 19TH AVENUE		SHEET 4 OF 14
TRACS NO.			___ OF ___

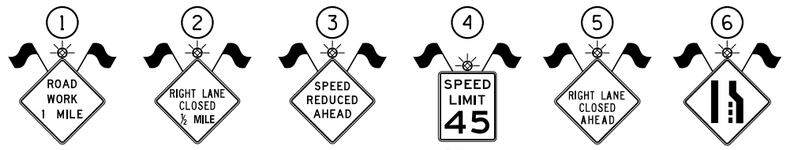
3:45:30 PM 9/11/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\TrafficControl\BridgeRepair\TCS01.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				



DETAIL X

SIGN LEGEND:



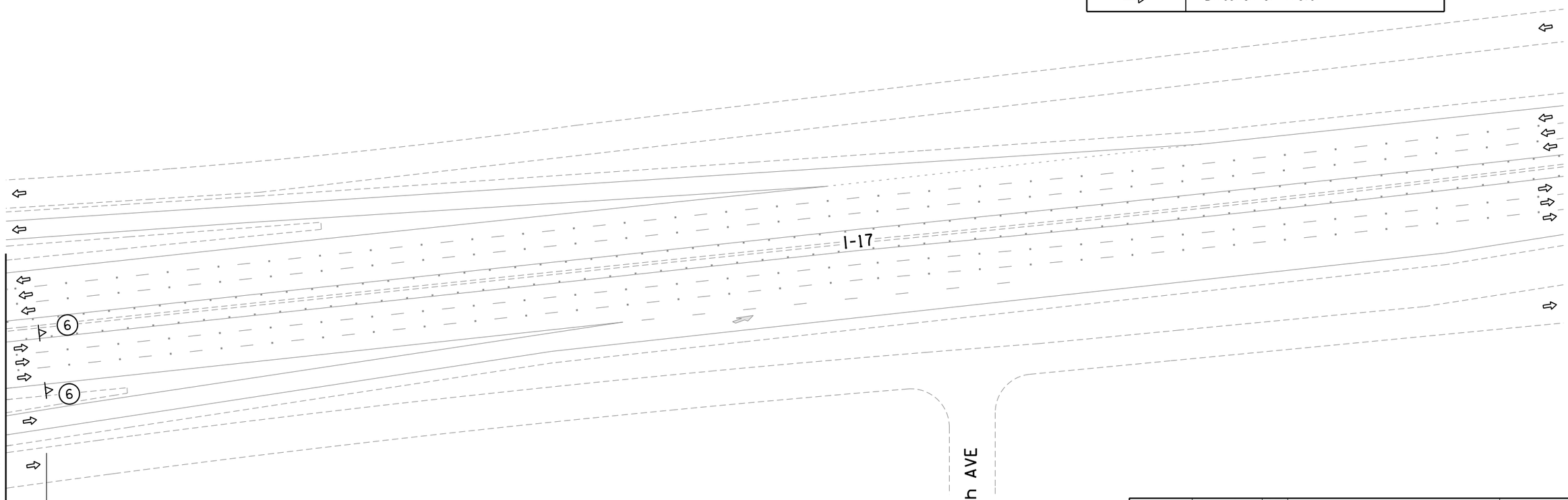
1. *W20-1 48"x48"*
2. *W20-5R 48"x48"*
3. *W3-5aAZ 48"x48"*
4. *R2-1 48"x60" Black on White*
5. *W20-5R 48"x48"*
6. *W4-2R 48"x48"*

NOTES:

1. *Signs may be used on embedded post(s) at the discretion of the Engineer.*
2. *The Contractor will coordinate message on changeable message board with the Engineer (14) days prior to construction.*

SYMBOL LEGEND:

XXXXX / XXXXX	*Changeable Message Board*
▷	*Sign on Spring Stand*
⊗	*Type A Flashing Warning Light*
⚑ ⚑	*Warning Flags*
⇨	*Direction of Travel*



For traffic control warning signs and changeable message board, see DETAIL X (this sheet) and ADOT Traffic Control Design Guidelines, Figure SA-5(R) or as directed by the Engineer.

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TRAFFIC CONTROL PLANS
BRIDGE REPAIR

LOCATION: I-17 / 16TH AVENUE

SHEET 5 OF 14

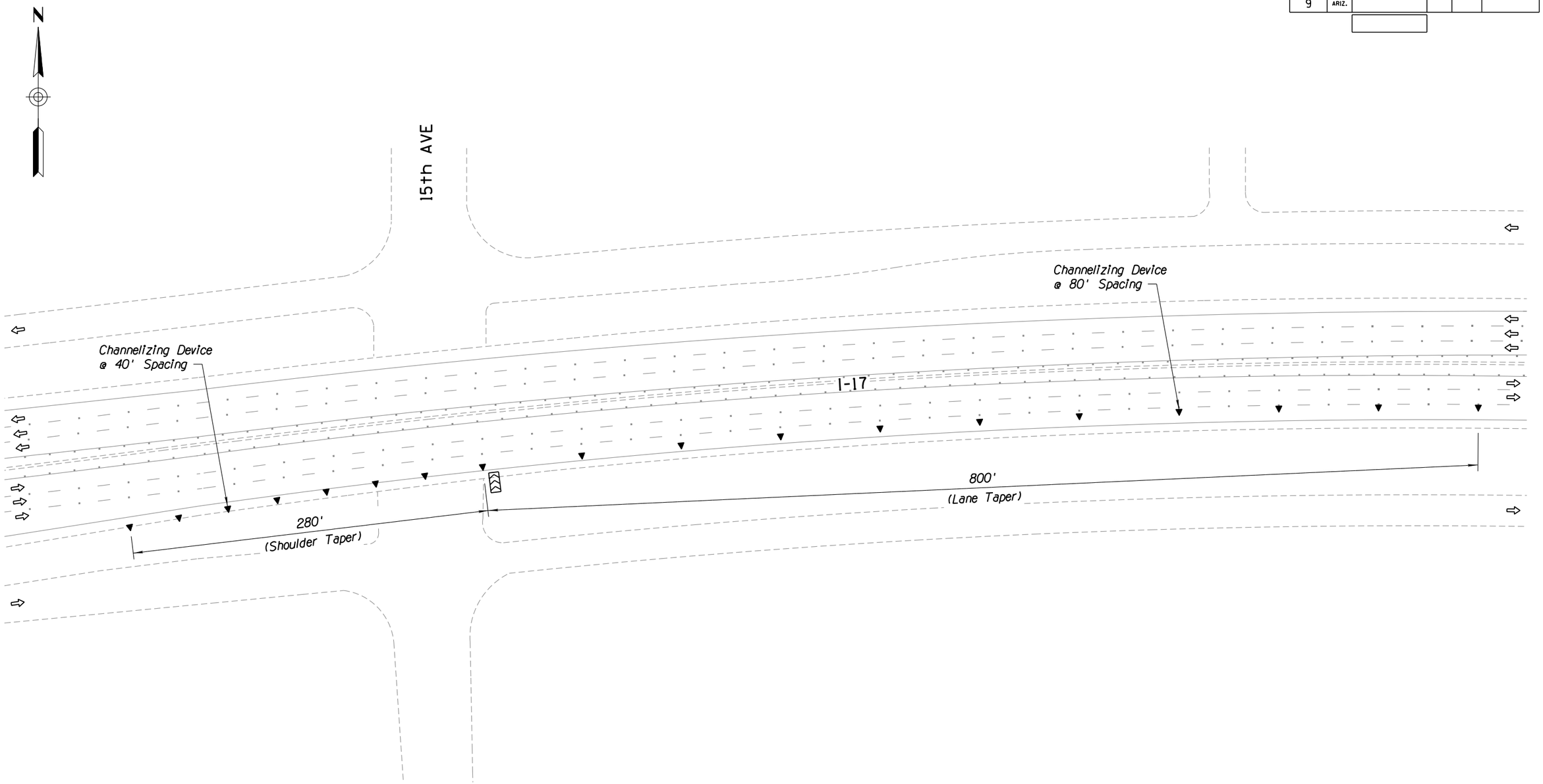
TRACS NO. ____ OF ____

NO.1 DESCRIPTION OF REVISION | MADE BY | DATE | NO.2 DESCRIPTION OF REVISION | MADE BY | DATE

6:27:47 PM 9/11/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\TrafficControl\BridgeRepair\TCS02.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			



SYMBOL LEGEND:

⇨	*Flashing Arrow Panel*
▲	*Channelizing Device with Type C Light*
⇨	*Direction of Travel*

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TRAFFIC CONTROL PLANS
BRIDGE REPAIR

LOCATION
I-17 / 15TH AVENUE

SHEET 6 OF 14

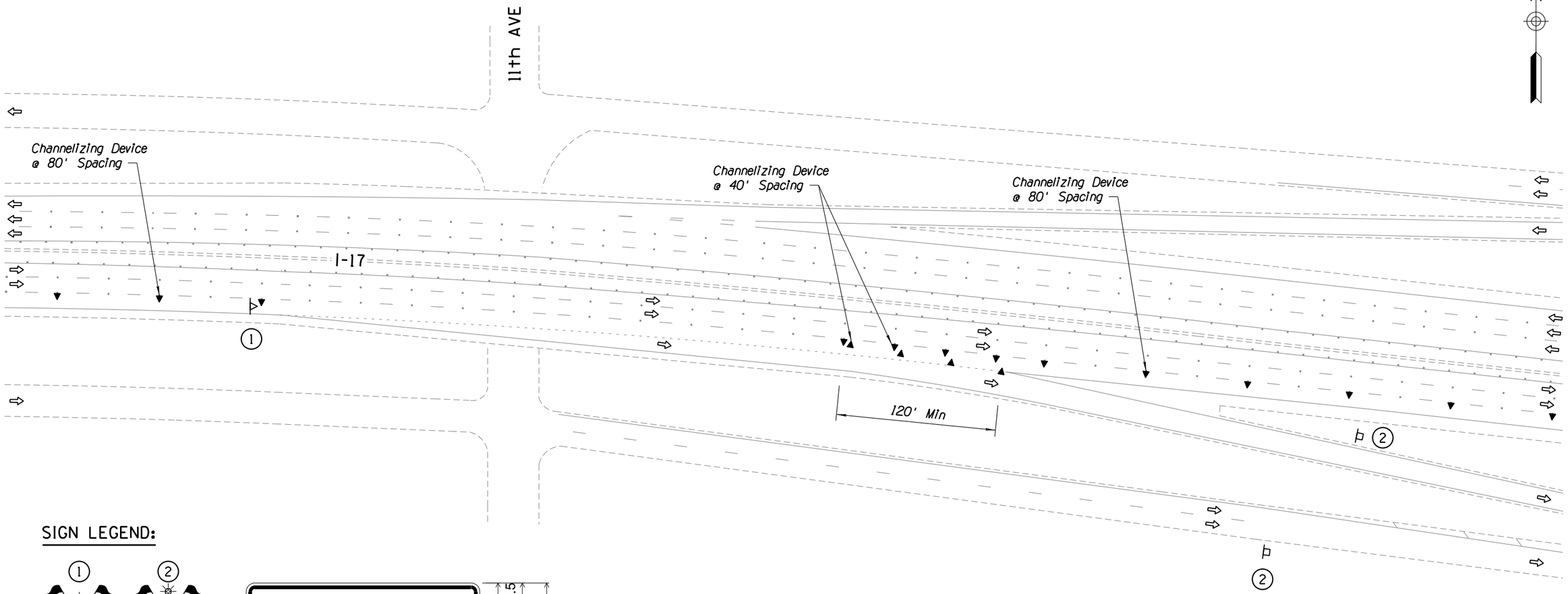
TRACS NO.

___ OF ___

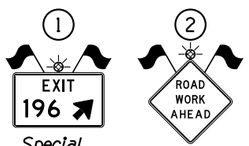
6:24:36 PM 9/11/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\TrafficControl\BridgeRepair\TCS03.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			

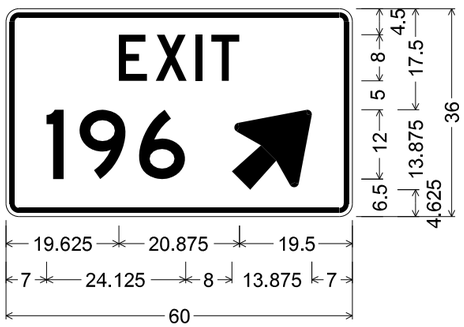


SIGN LEGEND:



Special 60"x36" Black on Orange (See Format this Sheet)

W20-1 48"x48"



2.250" Radius, 0.875" Border, 0.625" Indent, Black on Orange;
[EXIT] D; [196] D;
Arrow 6-8 Type B - 17.000" 45°;

SYMBOL LEGEND:

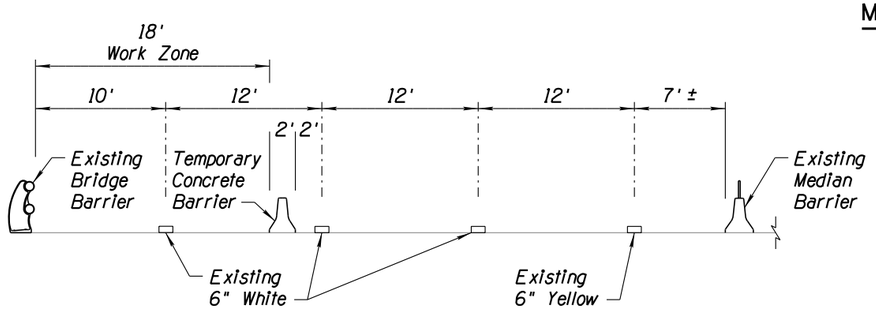
▷	*Sign on Spring Stand*
⊐	*Sign on Rigid Stand*
▲	*Channelizing Device with Type C Light*
✳	*Type A Flashing Warning Light*
⚑	*Warning Flags*
⇨	*Direction of Travel*

	NAME	DATE	
DESIGN			ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION
DRAWN	LARRY LOPEZ	6/19	
CHECKED			TRAFFIC CONTROL PLANS BRIDGE REPAIR
TEAM LEADER			
LOCATION	I-17 / 11TH AVENUE		SHEET 7 OF 14
TRACS NO.			____ OF ____

6:33:01 PM 9/11/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\TrafficControl\BridgeRepair\TCS04.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

MATCHLINE-1 NORTH 7th AVE



SECTION A-A

SYMBOL LEGEND:

	Sign on Spring Stand
	Sign on Rigid Stand
	Type II Barricade with Sign
	Type III Barricade
	Type III Barricade with Sign
	Channelizing Device with Type C Light
	Type A Flashing Warning Light
	Warning Flags
	Work Area
	Temporary Concrete Barrier See Std Dwg C-3 for Details.
	Direction of Travel

SIGN LEGEND:

1	2	3	4	5	6	7	8
SIDEWALK CLOSED	ROAD CLOSED	LEFT LANE CLOSED AHEAD		ONLY ONLY	ONLY	END ROAD WORK THANK YOU	SPEED LIMIT 55
R9-9 30"x18" Black on White	R11-2 48"x30" Black on White	W20-5L 36"x36"	R3-2 24"x24" Black/Red on White	R3-8RR 30"x30" Black on White	R3-8QR 30"x30" Black on White	G20-2AZ 48"x36"	R2-1 48"x60" Black on White

MATCHLINE-1 SOUTH 7th AVE

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TRAFFIC CONTROL PLANS
BRIDGE REPAIR
7TH AVENUE, NB & SB CLOSED

LOCATION: I-17 / 7TH AVENUE

TRACS NO.

SHEET 8 OF 14

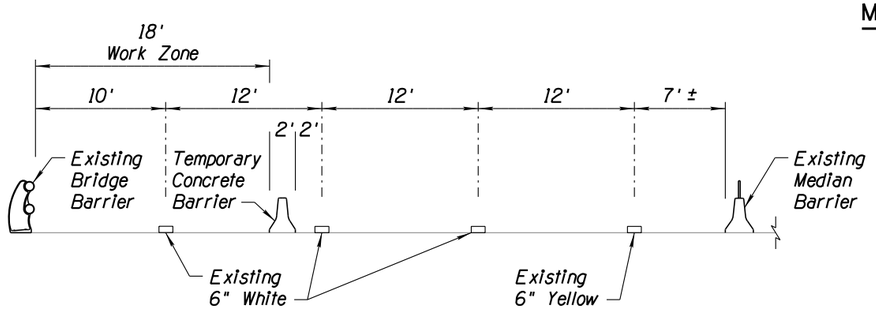
___ OF ___

NO.1 DESCRIPTION OF REVISION | DATE | MADE BY
NO.2 DESCRIPTION OF REVISION | DATE | MADE BY

6:34:48 PM 9/11/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\TrafficControl\BridgeRepair\TCS05-Phase1.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

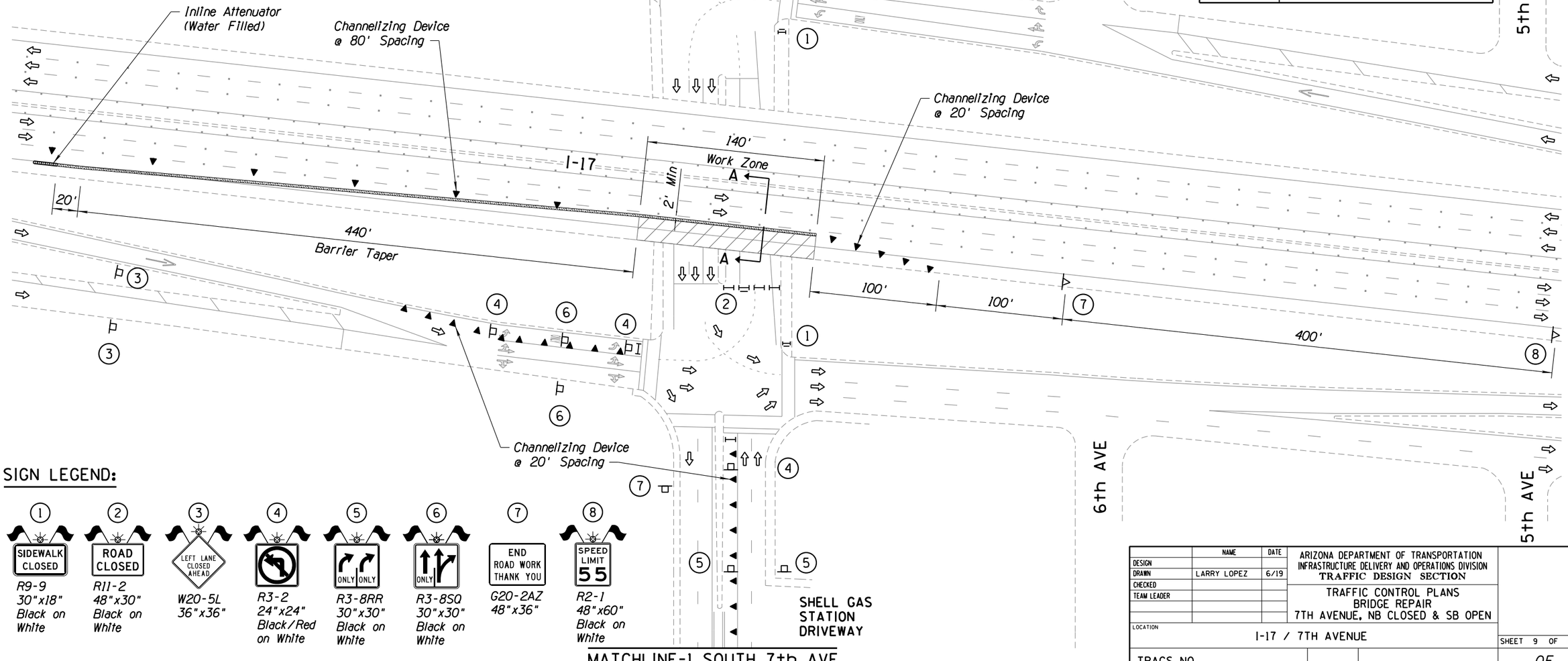
MATCHLINE-1 NORTH 7th AVE



SECTION A-A

SYMBOL LEGEND:

	Sign on Spring Stand
	Sign on Rigid Stand
II	Type II Barricade with Sign
I	Type III Barricade
II	Type III Barricade with Sign
▲	Channelizing Device with Type C Light
	Type A Flashing Warning Light
	Warning Flags
	Work Area
	Temporary Concrete Barrier See Std Dwg C-3 for Details.
	Direction of Travel



MATCHLINE-1 SOUTH 7th AVE

SIGN LEGEND:

1	2	3	4	5	6	7	8
SIDEWALK CLOSED	ROAD CLOSED	LEFT LANE CLOSED AHEAD		ONLY ONLY	ONLY	END ROAD WORK THANK YOU	SPEED LIMIT 55
R9-9 30"x18" Black on White	R11-2 48"x30" Black on White	W20-5L 36"x36"	R3-2 24"x24" Black/Red on White	R3-8RR 30"x30" Black on White	R3-8SQ 30"x30" Black on White	G20-2AZ 48"x36"	R2-1 48"x60" Black on White

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TRAFFIC CONTROL PLANS
BRIDGE REPAIR
7TH AVENUE, NB CLOSED & SB OPEN

LOCATION: I-17 / 7TH AVENUE

SHEET 9 OF 14

TRACS NO.

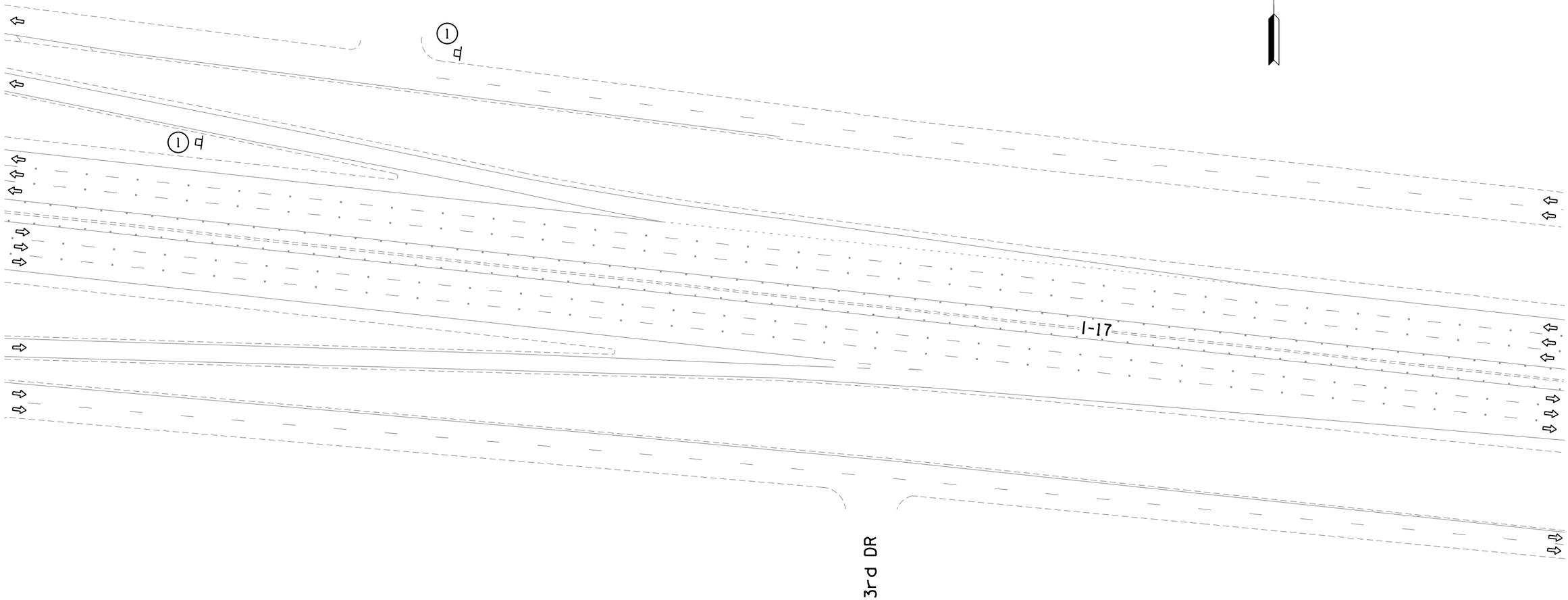
___ OF ___

NO.1 DESCRIPTION OF REVISION | DATE | MADE BY
NO.2 DESCRIPTION | DATE | MADE BY

6:39:18 PM 9/11/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\TrafficControl\BridgeRepair\TCS05-Phase2.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			



SIGN LEGEND:

W20-1
48"x48"

SYMBOL LEGEND:

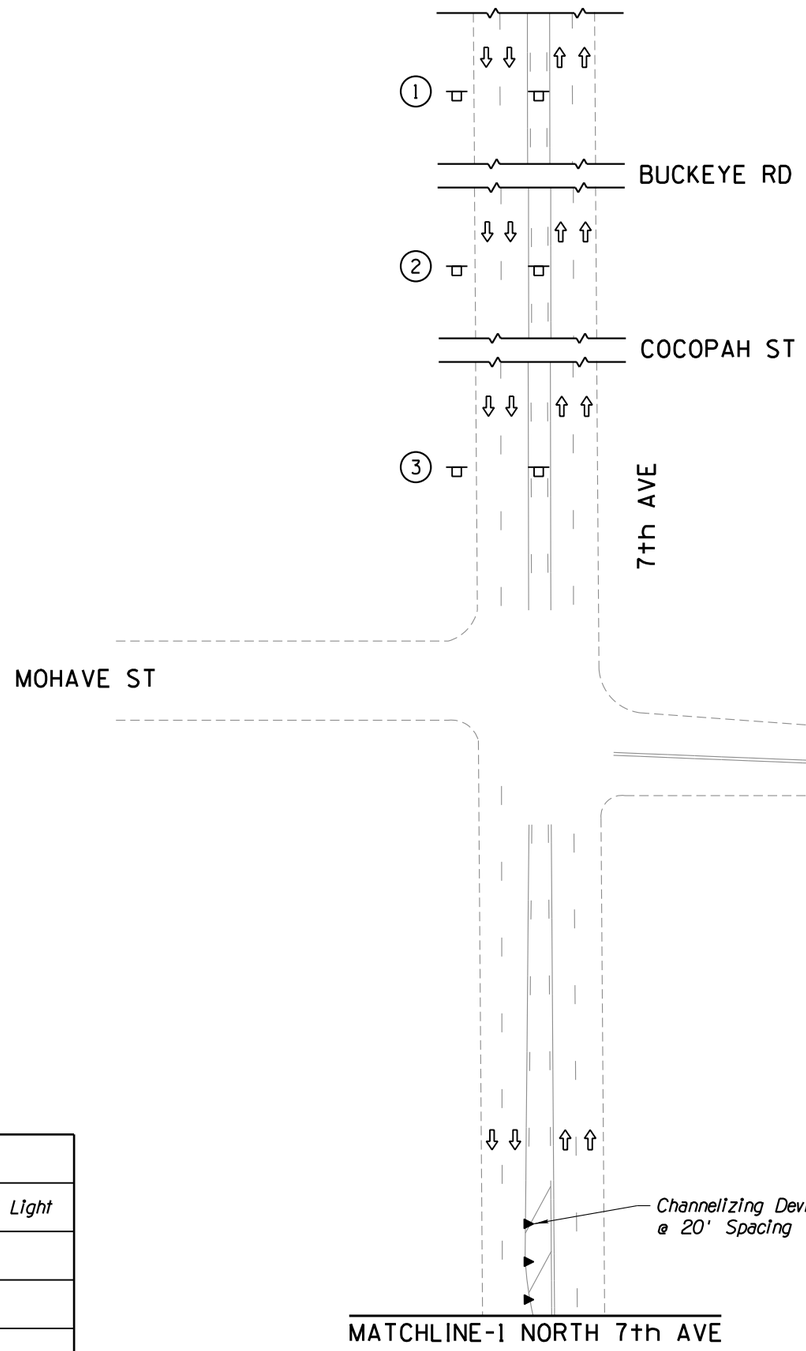
	Sign on Rigid Stand
	Type A Flashing Warning Light
	Warning Flags
	Direction of Travel

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION	
DESIGN				
DRAWN	LARRY LOPEZ	6/19		
CHECKED				
TEAM LEADER			TRAFFIC CONTROL PLANS BRIDGE REPAIR	
LOCATION	I-17 / 3rd DR			SHEET 10 OF 14
TRACS NO.				___ OF ___

10:59:24 AM 9/12/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\TrafficControl\BridgeRepair\TCS06.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
2			
1			



SIGN LEGEND:

W20-3 48"x48" *W20-3 48"x48"* *W20-3 48"x48"*

SYMBOL LEGEND:

⊓	*Sign on Rigid Stand*
▲	*Channelizing Device with Type C Light*
✳	*Type A Flashing Warning Light*
◠ ◠	*Warning Flags*
⇨	*Direction of Travel*

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION
DESIGN			
DRAWN	LARRY LOPEZ	6/19	
CHECKED			TRAFFIC CONTROL PLANS BRIDGE REPAIR 7TH AVENUE, NB & SB CLOSED
TEAM LEADER			

LOCATION: 7TH AVENUE, NORTH OF I-17

SHEET 11 OF 14

TRACS NO.

___ OF ___

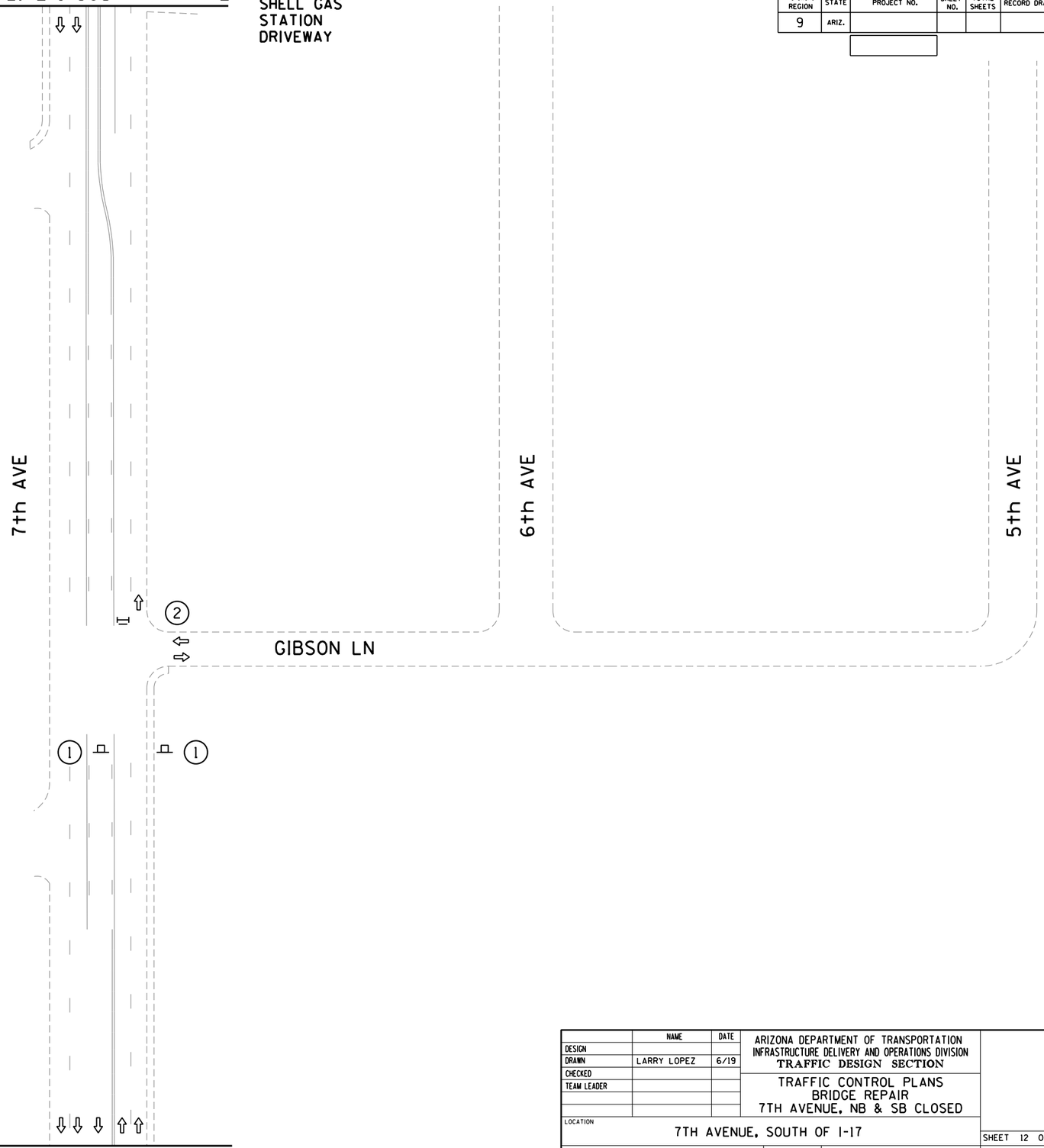
11:49:42 AM 9/12/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\TrafficControl\BridgeRepair\TCS07.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
NO.1			
NO.2			

MATCHLINE-1 SOUTH 7th AVE

SHELL GAS STATION DRIVEWAY



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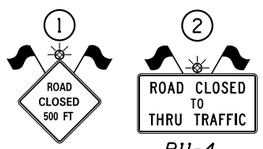


W20-3
48"x48"

R11-4
60"x30"
Black on White

SYMBOL LEGEND:

	Sign on Rigid Stand
	Type III Barricade with Sign
	Type A Flashing Warning Light
	Warning Flags
	Direction of Travel

MATCHLINE-2 SOUTH 7th AVE

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION
DESIGN			
DRAWN	LARRY LOPEZ	6/19	
CHECKED			TRAFFIC CONTROL PLANS BRIDGE REPAIR 7TH AVENUE, NB & SB CLOSED
TEAM LEADER			

LOCATION: 7TH AVENUE, SOUTH OF I-17

SHEET 12 OF 14

TRACS NO.

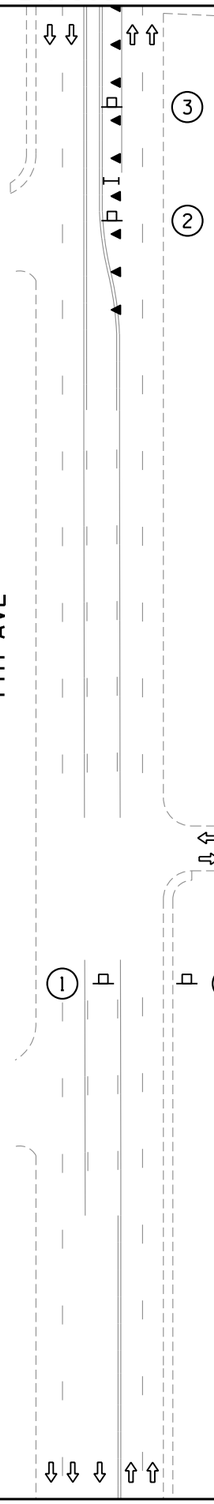
___ OF ___

11:04:13 AM 9/12/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\TrafficControl\BridgeRepair\TCS08-Phase1.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

MATCHLINE-1 SOUTH 7th AVE

SHELL GAS STATION DRIVEWAY



SIGN LEGEND:

W20-3
48"x48"

R4-7a
24"x30"
Black on White

R3-2
24"x24"
Black/Red on White

SYMBOL LEGEND:

	Sign on Rigid Stand
I	Type III Barricade
▲	Channelizing Device with Type C Light
	Type A Flashing Warning Light
	Warning Flags
	Direction of Travel

MATCHLINE-2 SOUTH 7th AVE

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TRAFFIC CONTROL PLANS
BRIDGE REPAIR
7TH AVENUE, NB CLOSED & SB OPEN

LOCATION
7TH AVENUE, SOUTH OF I-17

SHEET 13 OF 14

TRACS NO.

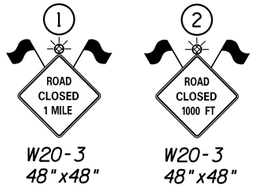
___ OF ___

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			

11:06:59 AM 9/12/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\TrafficControl\BridgeRepair\TCS08-Phase2.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

SIGN LEGEND:



W20-3 48"x48"

W20-3 48"x48"

SYMBOL LEGEND:

	Sign on Rigid Stand
XXXXX XXXXX	*Changeable Message Board*
	Type A Flashing Warning Light
	Warning Flags
	Direction of Travel

CHANGEABLE MESSAGE BOARD, MESSAGES:

For 7th Ave, NB & SB Closed:

1) TO I-17 CLOSED

2) USE ALTERNATE ROUTE

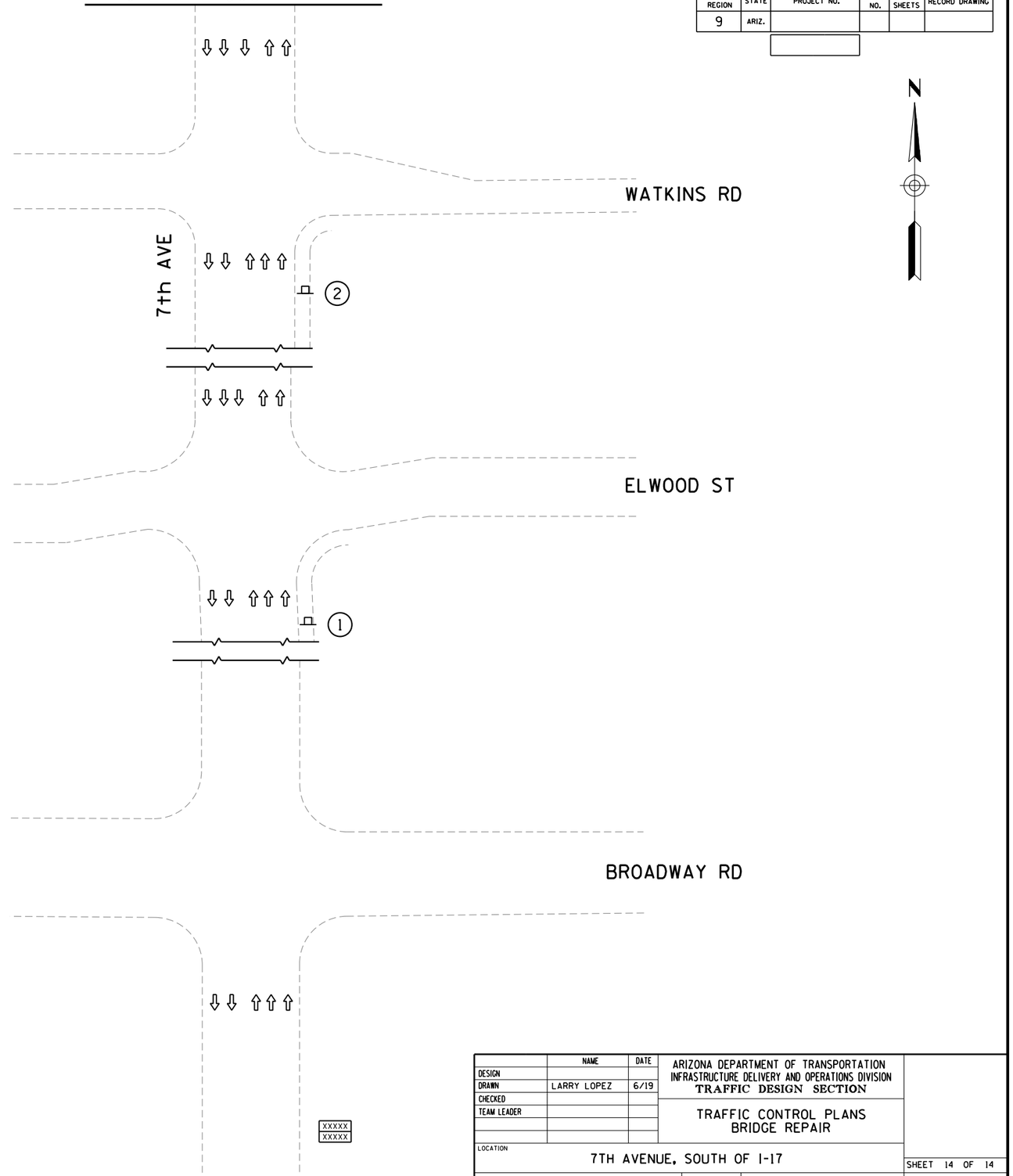
For 7th Ave, NB Closed & SB Open:

1) TO SB I-17 OPEN

2) TO NB I-17 CLOSED

NOTE:

The Contractor will coordinate message on changeable message board with the Engineer (14) days prior to construction.



	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TRAFFIC CONTROL PLANS
BRIDGE REPAIR

LOCATION
7TH AVENUE, SOUTH OF I-17

SHEET 14 OF 14

TRACS NO.

___ OF ___

NO.1 DESCRIPTION OF REVISION | DATE | MADE BY
NO.2 DESCRIPTION OF REVISION | DATE | MADE BY

11:09:34 AM 9/12/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\TrafficControl\BridgeRepair\TCS09.dgn

APPENDIX 1 TRAFFIC DESIGN DRAFTING GUIDE EXAMPLE SHEETS

CULVERT INSTALLATION, TRAFFIC CONTROL DETOUR

GUIDELINES FOR TYPICAL, CULVERT INSTALLATION, TRAFFIC CONTROL DETOUR

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

1. The contents of this drawing shall be used as a guide for drafting ADOT Traffic Engineering plans and should not be used as a design aid.

2. This drawing is a labeling and dimensioning presentation.

3. Drawings can be 20, 40, 50 or 100 scale (the border is a reference file attached 1:5 (20 scale), 1:2.5 (40 scale), 1:2 (50 scale), 1:1 (100 scale).
   These types of drawings can be schematic and not to scale.
   Text size TX=17.5' (100 scale), 8.75' (50 scale), 7' (40 scale), 3.5' (20 scale), (see Note #19). For Title Text see Notes #12, #13 and #17. The Border File has Data Fields for placement of Title Block Text. For Title Block Text that is sheet specific, the Data Fields need to be copied up into the Sheet File. Title Block Text that is not sheet specific can and should live in the Border File to avoid duplication of work.

4. For labeling text use Title Case. The first letter of each word is capitalized. Words that would not typically be capitalized within a label are words defined as definite articles ("the"), indefinite articles ("a" and "an"), and coordinating conjunctions ("and", "but", "if", "or", "for", "yet", "so", "non" and "nor").

5. Label text doe not use punctuation. See Signing & Marking and Signal & Lighting Standard Drawings for Standard Abbreviations.

6. ALL existing items not part of the Bid Set and/or Contractor Construction Responsibility are to be screened (gray/level overrides).
   All graphic element items shall follow the ADOT LEVEL STRUCTURE.

7. WORK ZONE (Hatched Area):
   LV=15
   CO=LV
   WT=0
   LC=0

8. EDGE OF ROAD, PAVEMENT PRESERVATION LIMITS AND NEWLY CONSTRUCTED ROADWAY ITEMS (non Traffic Items are shown as existing):
   LV=16
   CO=LV
   WT=0
   LC=3

9. CURB AND GUTTER:
   LV=23
   CO=LV
   WT=0
   LC=2
   For all other Existing Items (bridges, guardrail, etc), see ADOT LEVEL STRUCTURE for (existing) level placement/level overrides. The line weight of any existing item can be adjusted to the Designer's discretion as long as it is screened (gray).

10. LANE LINE AND EDGELINE STRIPING:
    LV=46 (Existing LV=17)
    CO=0 for White pavement markings
    CO=17 for Yellow pavement markings
    WT=3 for 6" striping
    WT=6 for 12" striping
    WT=9 for 18" striping
    WT=12 for 24" striping
    LC=(see custom linestyle names)
    These pavement markings can live in a Master Base File or a Sheet File.

11. CELL PLACEMENT:
    LV= Cell attributes are built-in but can be adjusted to the Designer's discretion.
    LV=17 for existing traffic items/cells, (levels that screen/level overrides).
    WT=0 for filled cells (CO=17 for existing filled cells).
    The weight of any cell may be adjusted to the Designer's discretion.
    Pavement Arrows and "Only" legend pavement markings are cells that usually live in a Master Base File but can be shown in a Sheet File.
    These cells are brought into a Master Base File at AS=1.
    The North Arrow cell is placed or copied into each Sheet File at the same drawing scale (AS=Sheet File Scale).

12. TITLE TEXT:
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control), LV=25(Match Line)
    CO=LV
    WT=6
    FT=1
    TX=22' (100 scale), 11' (50 scale), 8.8' (40 scale), 4.4' (20 scale)
    LS=½ text height
    Text Justification = Center Bottom (also Center Top if using description text below the underline).
    This text uses upper case and does not have descenders.

13. All Title Text (Detail Titles) that are not in a Table or labeling roadways/street names will have an underline. This underline has all the same element attributes as the Title Text with the LC=0.

14. NOTES (TEXT):
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control)
    CO=LV
    WT=4
    FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
    TX=17.5' (100 scale), 8.75' (50 scale), 7' (40 scale), 3.5' (20 scale)
    LS=0.625 x (text height)
    Text Justification = Left Top (Because when editing, text will grow from top left and shrink from the bottom right).
    This text uses upper and lower case and has descenders.

15. LABEL TEXT:
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control)
    CO=LV
    WT=4, WT=2 (for smaller text used under Traffic Control Signs)
    FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
    TX=See Notes #3 and #19
    LS=0.625 x (text height)
    Text Justification = Left Top (Because when editing, text will grow from top left and shrink from the bottom right).
    This text uses Title Case and has descenders

16. DIMENSION TEXT AND STATION CONTROL POINT TEXT:
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control)
    CO=LV
    WT=4
    FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
    TX=See Notes #3 and #19
    LS=0.625 x (text height) (space above and below the dimension line)
    Text Justification = Center Bottom (also Center Top if using description text below the dimension line)
    This text uses Title Case and has descenders because it sometimes includes a description.

17. CENTERLINE TITLE TEXT:
    (500' Stationing)
    LV=21
    CO=LV
    WT=1
    FT=1
    TX=22' (100 scale), 11' (50 scale), 8.8' (40 scale), 4.4' (20 scale)
    Text Justification = Center Center
    This text uses upper case and does not have descenders.

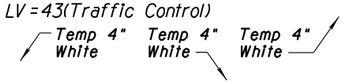
18. CENTERLINE DATA TEXT:
    (Curve Data, Station Equation)
    LV=21
    CO=LV
    WT=1
    FT=23
    TX=See Notes #3 and #19
    LS=0.625 x (text height)
    Text Justification = Designer's discretion

19. All text can be squeezed to fit tight spaces and to the Designer's discretion as long as it is legible when printed hard copy and in all pdf formats (half size/full size).

20. CENTERLINE TICK MARKS:
    LV=20
    CO=LV
    WT=1
    LC=0
    These tick marks are to be displayed screened (gray).
    Note: the centerline is never displayed so it won't conflict with striping.

21. LEADER LINE:
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control)
    CO=LV
    WT=1
    LC=Leader
    The leader line scale factor is 0.2 (20 scale), 0.4 (40 scale), 0.5 (50 scale), 1 (100 scale).
    Once you have created both and attached together, it is recommended to group together. Then you can copy and move to other label text. Using the modify command forces the arrowhead to follow the line angle modified because it is a custom linestyle.

22. LEADER EXTENSION LINE:
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control)
    CO=LV
    WT=1
    LC=0



    The, Leader Extension, line length = Text Height (can be adjusted longer if coming off the right bottom on stacked text when the last line of text is shorter and the leader line is pointing up).
    It is spaced away from the text, ½ text height.
    It can be center eye-balled in the middle of the text from the top left or bottom right. (See example above)

23. DIMENSION LINES:
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control)
    CO=LV
    WT=1
    LC=DimLeader
    (DimLeader2 is for dimensioning a space smaller than the size of arrowheads so that the arrowheads point towards each other).
    The dimension line scale factor is 0.2 (20 scale), 0.4 (40 scale), 0.5 (50 scale), 1 (100 scale).

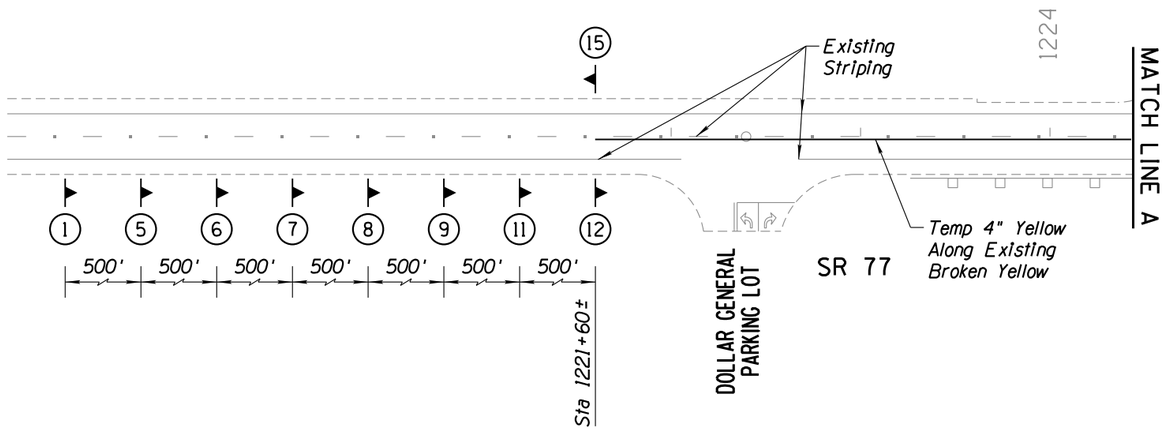
24. DIMENSION EXTENSION LINES:
    LV=47(Striping), LV=55(Signing), LV=43(Traffic Control)
    CO=LV
    WT=1
    LC=0

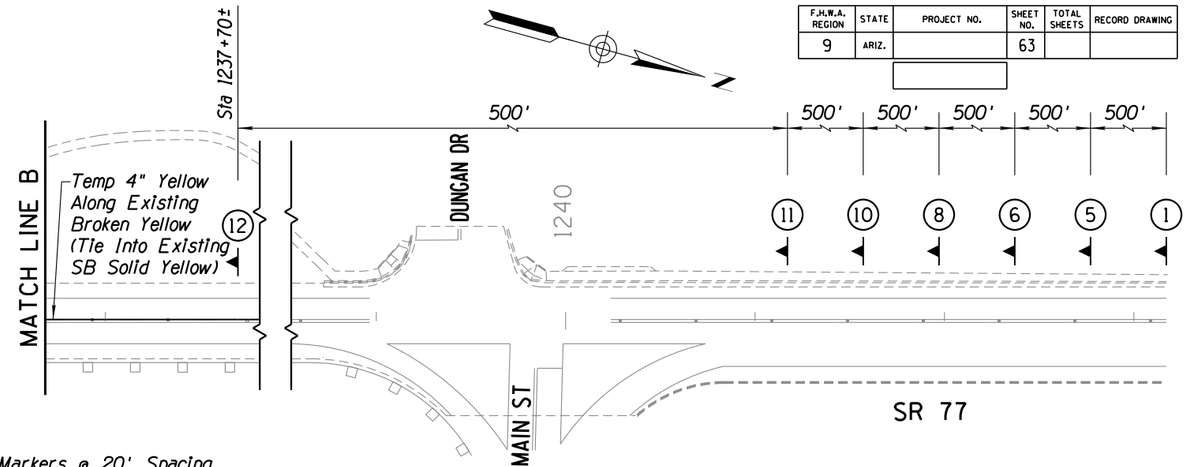
	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION	
DESIGN				
DRAWN	LARRY LOPEZ	6/19	GUIDELINES FOR TYPICAL CULVERT INSTALLTATION TRAFFIC CONTROL DETOUR	
CHECKED				
TEAM LEADER				
LOCATION				SHEET 1 OF 1
TRACS NO.				___ OF ___

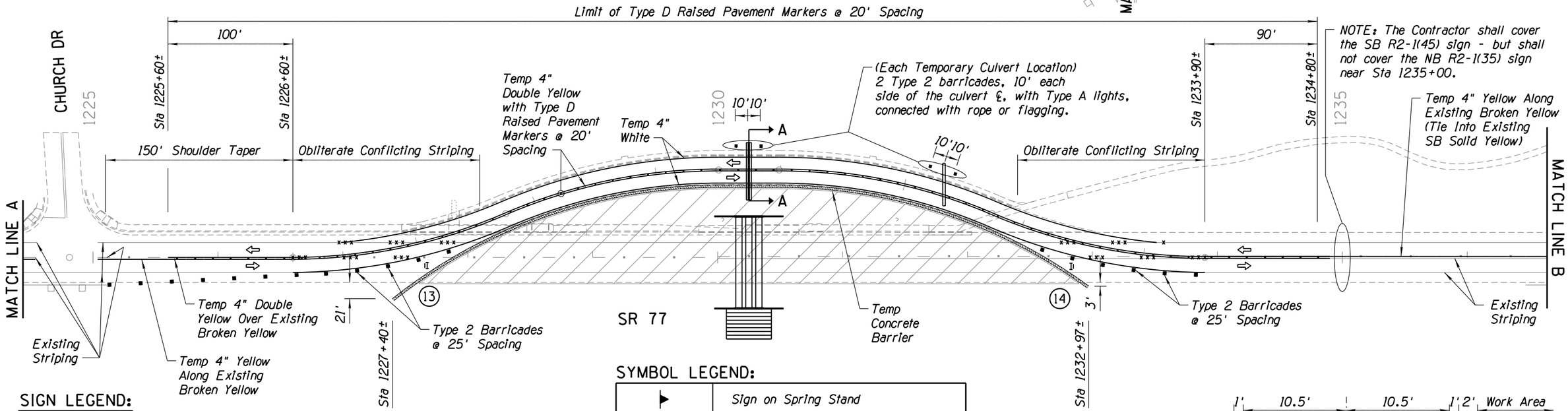
NO.1 DESCRIPTION OF REVISION | DATE | MADE BY | NO.2 DESCRIPTION OF REVISION | DATE | MADE BY

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.		63		

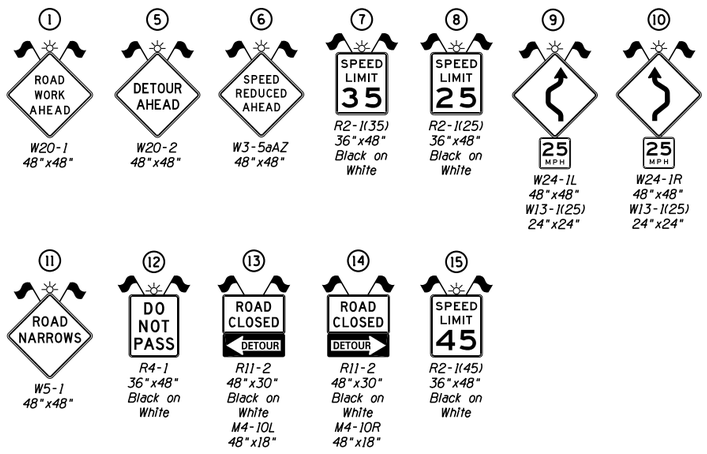
NO.	DESCRIPTION OF REVISION	DATE	MADE BY
1			
2			





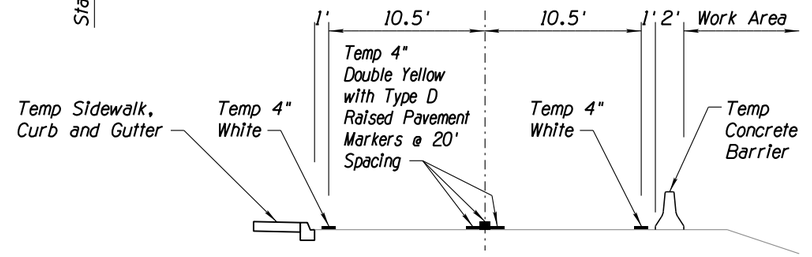


SIGN LEGEND:



SYMBOL LEGEND:

	Sign on Spring Stand
	Type 2 Barricade
	Type 3 Barricade
	Sign on Type 3 Barricade
	Direction of Travel
	Type A Flashing Warning Light
	Warning Flags
	Temporary Concrete Barrier. See Std Dwg C-3 for Details.
	Stripe Obliteration
	Work Area



SECTION A-A

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

CULVERT DETOUR
TRAFFIC CONTROL

LOCATION

SHEET 1 OF 1

TRACS NO.

____ OF ____

3:06:26 PM 6/20/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\TrafficControl\CulvertInstallation\CulvertTrafficControlDetour.dgn

APPENDIX 1 TRAFFIC DESIGN DRAFTING GUIDE EXAMPLE SHEETS

PAVEMENT MARKING NOTES AND QUANTITIES

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

GUIDELINES FOR TYPICAL, PAVEMENT MARKING, NOTES AND QUANTITIES PLAN SHEET

1. *The contents of this drawing shall be used as a guide for drafting ADOT Traffic Engineering plans and should not be used as a design aid.*

2. *This drawing is a typical Pavement Marking Notes and Quantities plan sheet presentation.*

3. *This drawing is created 100 scale (the border is a reference file attached 1:1). The Border File has Data Fields for placement of Title Block Text. For Title Block Text that is sheet specific, the Data Fields need to be copied up into the Sheet File. Title Block Text that is not sheet specific can and should live in the Border File to avoid duplication of work.*

4. *For table, discription text, use Title Case. The first letter of each word is capitalized. Words that would not typically be capitalized within a label are words defined as definite articles ("the"), indefinite articles ("a" and "an"), and coordinating conjunctions ("and", "but", "if", "or", "for", "yet", "so", "non" and "nor").*

5. *Table, Item No discription text, does not include punctuation except for the comma in numbers over one thousand (1,000) or decimal fractions (1.5). See Signing & Marking and Signal & Lighting Standard Drawings for Standard Abbreviations.*

6. *TABLE TITLE TEXT:*
   (APPROXIMATE PAVEMENT MARKING QUANTITIES)
   LV=47
   CO=LV
   WT=6
   FT=1
   TX=22' (100 scale)
   LS=½ text height (This means the space above and below Chart Title Text inside a box is minimum 11'.
   Table Title Text uses upper case only.
   Text Justification = Center Center (to be centered in box spaces)

7. *TABLE CATEGORY TITLE TEXT:*
   (ITEM NO), (ITEM), (UNIT), (TOTAL)
   LV=47
   CO=LV
   WT=5
   FT=1
   TX=17.5' (100 scale)
   LS=½ text height (This means the space above and below Table Title Text inside a box is minimum 8.75'.
   Table Category Title Text uses upper case only.
   Text Justification = Center Center (to be centered in box spaces)

8. *NOTES TITLE TEXT:*
   LV=47
   CO=LV
   WT=6
   FT=1
   TX=22' (100 scale)
   LS=½ text height
   Text Justification = Center Bottom
   This text uses upper case and does not have descenders.
   All Title Text (Detail Titles) that is not in a Table or labeling roadways/street names will have an underline. This underline has all the same element attributes as the Title Text with the LC=0.

9. *TABLE, ITEM NO, DESCRIPTION TITLE TEXT:*
   LV=47
   CO=LV
   WT=4
   FT=23 or 36 (font 36 has special characters for Signal & Lighting plans)
   TX=17.5' (100 scale)
   LS=½ text height = 8.75
   Text Justification = Center Center

10. *TABLE BODY TEXT:*
    LV=47
    CO=LV
    WT=4
    FT=23 or 36 (font 36 has special characters for Signal & Lighting plans)
    TX=17.5' (100 scale)
    LS=0.625 x (text height) (this is different than Title Text because Notes Text uses upper and lower case which has descenders)
    Text Justification = Left Center for notes type description, Right Center for numbers. (Because when editing, text will shrink or grow from the center left and for numbers the columns line up numerically and text will shrink or grow from the center right)

11. *NOTES TEXT:*
    LV=47
    CO=LV
    WT=4
    FT=23 or 36 (font 36 has special characters for Signal & Lighting plans)
    TX=17.5' (100 scale)
    LS=0.625 x (text height) (this is different than Title Text because Notes Text uses upper and lower case which has descenders)
    Text Justification = Left Top (Because when editing, text will grow from top left and shrink from the bottom right.)

12. *All text can be squeezed to fit tight spaces and to the Designer's discretion as long as it is legible when printed hard copy and in all pdf formats (half size/full size).*

13. *TABLE, OUTSIDE BORDER LINES:*
    LV=47
    CO=LV
    WT=5
    LC=0

14. *INSIDE BORDER LINES:*
    LV=47
    CO=LV
    WT=3
    LC=0

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

GUIDELINES FOR TYPICAL
PAVEMENT MARKING
NOTES AND QUANTITIES PLAN SHEET

LOCATION

SHEET 1 OF 1

TRACS NO.

___ OF ___

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

PAVEMENT MARKING NOTES:

1. It is the contractor's responsibility to ensure that the final surface course is placed so that the striping is offset 1 foot clear of the construction joint, unless otherwise directed by the Engineer.
2. The contractor shall be responsible for the layout and installation of pavement markings on the final surface course following points that have been set no more than 50 feet apart on the alignment of the yellow striping.
3. The dimensions shown to pavement striping are to the center of the striping or, in the case of double striping, to the center of the double striping.
4. Within 48 hours of the completion of the final pavement surface each section of roadway, center lines, lane lines, edge lines, stop bars, and pavement arrows shall be striped with one application of standard reflectorized traffic paint at the locations of the permanent striping. The paint shall have a minimum thickness of 15 mils wet. All painted striping shall be 4 inches wide. However, each painted stop bar and solid white lane line shall be at least 12 inches wide.
5. The final striping shall be 90 mil (0.090 inch) thick alkyd extruded thermoplastic reflectorized striping placed over the initial striping a minimum of 30 calendar days after the initial striping, as directed by the Engineer. All other markings shall be applied at the same time.
6. All final stop bars, crosswalk lines pavement arrows, and "ONLY" legends shall be white 90 mil (0.090 inch) thick alkyd extruded thermoplastic reflectorized markings.
7. All reflective raised pavement markers shall have an abrasion resistant coating on the face of the prismatic reflectors and shall conform to the details of Std. Dwg. M-19. They shall be installed with an approved bituminous adhesive. They shall be new; the contractor shall not install previously used pavement markers for these markers. Type C Raised Pavement Markers shall be installed so that the clear face of each marker is facing approaching traffic.
8. All reflective raised pavement markers shall be installed so that the reflective face of each marker is facing the direction of traffic and is perpendicular to the direction of traffic flow.
9. Where raised pavement markers are placed between double yellow striping, they shall be centered in the 6 inch gap between the lines, except as otherwise indicated on the plans. For broken yellow striping, the markers shall be placed to align with the broken yellow striping. Where raised pavement markers are placed along solid white striping, the nearest edge of each marker shall be offset 2 inches from the nearest edge of the striping on the side of the through lane.
10. Th contractor shall clean the roadway surface to the satisfaction of the Engineer, by sweeping and air-jet blowing, immediately prior to the placement of all pavement markings. The roadway surface shall be dry and the air and pavement temperatures shall not be less than 55°F for the placement of thermoplastic striping.
11. The contractor shall break, as needed or directed by the Engineer, the SR 77 center line and all edge line striping from River Rd. (MP 72.06) to Calle Concordia (MP 77.36). The contractor shall also break the nearby edge line across other turnouts.
12. When stripe obliteration is necessary, it shall be accomplished by approved methods. Painting over striping, removal of pavement, and overlaying pavement do not constitute stripe obliteration.
13. The pavement marking drawings are schematic and not to scale. The contractor shall follow all dimensions and details when installing pavement markings.
14. The contractor shall delineate the new ends of the guardrail in accordance with Std. Dwg. M-34. There shall be no measurement or payment for the guardrail end treatment delineation as the cost is included in other contract bid items.
15. The contractor shall delineate the existing barrier walls along SR 77 with BM-1 (white) barrier markers in accordance with Std. Dwgs. M-32 and M-33. The contractor shall affix evenly-spaced barrier markers on the roadway side of each existing barrier wall. There shall be no measurement or payment for the barrier markers as the cost is included in other contract bid items.
16. The contractor shall remove the existing pavement markers on SR 77 in conjunction with the construction operations. There shall be no measurement or payment for the removal of the existing pavement markers.
17. Single arrow, and " ONLY " legends shall be installed in accordance with ADOT Standard Drawing.
18. The Engineer may modify the pavement marking plans.
19. Single arrow, and " ONLY " legends shall be installed in accordance with ADOT Standard Drawing.
20. The contractor shall paint the curb at the ends of the raised islands and shall apply a minimum of four RPMs per end in accordance with these plans, the special provisions, and Std. Dwg. M-1.
21. The contractor shall contact South Central Regional Signing and Striping Section (Xavier Casillas) at (520) 838-2828 at least five working days prior to final striping layout to coordinate the layout inspection.
22. The contractor shall remove the curing compound and apply primer-sealer before installing the final striping on the bridge decks for a width of 10 inches per line of striping in accordance with the Specifications.

APPROXIMATE PAVEMENT MARKING QUANTITIES

ITEM NUMBER	ITEM		UNIT	TOTAL
7040005	Permanent Pavement Marking 90 Mil Extruded Thermoplastic (4" Equivalent)	6" White	LF	138,251
7040006		6" Yellow	LF	75,620
7040072	White 90 Mil Alkyd Extruded Thermoplastic Pavement Marking	Transverse (4" Equivalent)	LF	8,497
7040073		Pavement Legend	Each	78
7040074		Pavement Symbol	Each	154
7060013	Raised Pavement Markers	Type C	Each	1,142
7060015		Type D	Each	24
7080001	Standard Reflectorized Traffic Paint	4" White	LF	146,748
7080011		4" Yellow	LF	75,545
7080121		Pavement Symbol - Arrow	Each	154
7080221		Pavement Legend ONLY	Each	78
7080301		Painted Bull Nose	Each	61

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION
DESIGN			
DRAWN	MAIE ELKESHKY	6/19	PAVEMENT MARKING NOTES AND QUANTITIES
CHECKED			
TEAM LEADER			
LOCATION			SHEET 1 OF 1
TRACS NO.			___ OF ___

NO.1 DESCRIPTION OF REVISION | DATE | MADE BY
NO.2 DESCRIPTION OF REVISION | DATE | MADE BY

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APPENDIX 1 TRAFFIC DESIGN DRAFTING GUIDE EXAMPLE SHEETS

GORE PAVEMENT MARKING PLANS

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

GUIDELINES FOR TYPICAL GORE PAVEMENT MARKING PLANS

1. The contents of these drawings shall be used as a guide for drafting ADOT Traffic Engineering plans and should not be used as a design aid.

2. These drawing are a labeling and dimensioning presentation.

3. These drawings are cut 40 scale (the border is a reference file attached 1:2.5). These cuts are perfect sheet to sheet and do not need Matchlines on the mainline road. Text size for 40 scale is; TX=0.4 x 17.5'=7' (see Note #18). For Title Text see Notes #11, #12 and 16.
The blowup details are proportionally scaled up for detailed dimensioning and labeling clarity.
The Border File has Data Fields for placement of Title Block Text. For Title Block Text that is sheet specific, the Data Fields need to be copied up into the Sheet File. Title Block Text that is not sheet specific can and should live in the Border File to avoid duplication of work.

4. For labeling text use Title Case. The first letter of each word is capitalized. Words that would not typically be capitalized within a label are words defined as definite articles ("the"), indefinite articles ("a" and "an"), and coordinating conjunctions ("and", "but", "if", "or", "for", "yet", "so", "non" and "nor").

5. Label text does not use punctuation. See Signing & Marking and Signal & Lighting Standard Drawings for Standard Abbreviations.

6. ALL existing items not part of the Bid Set and/or Contractor Construction Responsibility are to be screened (gray/level overrides).
All graphic element items shall follow the ADOT LEVEL STRUCTURE.

7. EDGE OF ROAD, PAVEMENT PRESERVATION LIMITS AND NEWLY CONSTRUCTED ROADWAY ITEMS (non Traffic Items are shown as existing):
LV=16
CO=LV
WT=0
LC=3

8. CURB AND GUTTER:
LV=23
CO=LV
WT=0
LC=2
For all other Existing Items (bridges, guardrail, etc), see ADOT LEVEL STRUCTURE for (existing) level placement/level overrides. The line weight of any existing item can be adjusted to the Designer's discretion as long as it is screened (gray).

9. GORE, LANE LINE AND EDGELINE STRIPING:
LV=46
CO=0 for white pavement markings
CO=17 for yellow pavement markings
WT=3 for 6" striping
WT=6 for 12" striping
WT=9 for 18" striping
WT=12 for 24" striping
LC=(see custom linestyle names)
These pavement markings live in a Master Base File.
The blowup details live in the Sheet File.

10. CELL PLACEMENT:
LV= Cell attributes are built-in but can be adjusted to the Designer's discretion.
LV=17 for existing traffic items/cells, (levels that screen/level overrides).
WT=0 for filled cells (CO=17 for existing filled cells).
The weight of any cell may be adjusted to the Designer's discretion.
Pavement Arrows and "Only" legend pavement markings are cells that live in a Master Base File. The blowup details live in the Sheet File.
These cells are brought into a Master Base File at AS=1.
The North Arrow cell is placed or copied into each Sheet File at the same drawing scale (AS=Sheet File Scale).

11. TITLE TEXT:
LV=47
CO=LV
WT=6
FT=1
TX=8.8' (40 scale)
LS=½ text height
Text Justification = Center Bottom (also Center Top if using description text below the underline).
This text uses upper case and does not have descenders.

12. All Title Text (Detail Titles) that are not in a Table or labeling roadways/street names will have an underline. This underline has all the same element attributes as the Title Text with the LC=0.

13. NOTES (TEXT):
LV=47
CO=LV
WT=3
FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
TX=17.5' (100 scale), 8.75' (50 scale), 7' (40 scale), 3.5' (20 scale)
LS=0.625 x (text height)
Text Justification = Left Top (Because when editing, text will grow from top left and shrink from the bottom right).
This text uses upper and lower case and has descenders.

14. LABEL TEXT:
LV=47
CO=LV
WT=4
FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
TX=7' (see Note #18)
LS=0.625 x (text height)
Text Justification = Left Top (Because when editing, text will grow from top left and shrink from the bottom right).
This text uses Title Case and has descenders.

15. DIMENSION TEXT AND STATION CONTROL POINT TEXT:
LV=47
CO=LV
WT=4
FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
TX=7' (see Note #18)
LS=0.625 x (text height) (space above and below the dimension line)
Text Justification = Center Bottom (also Center Top if using description text below the dimension line)
This text uses Title Case and has descenders because it sometimes includes a description.

16. CENTERLINE TITLE TEXT:
(500' Stationing)
LV=21
CO=LV
WT=1
FT=1
TX=8.8 (40 scale)
Text Justification = Center Center
This text uses upper case and does not have descenders.

17. CENTERLINE DATA TEXT:
(Curve Data, Station Equation)
LV=21
CO=LV
WT=1
FT=23
TX=7
LS=0.625 x (text height)
Text Justification = Designer's discretion

18. All text can be squeezed to fit tight spaces and to the Designer's discretion as long as it is legible when printed hard copy and in all pdf formats (half size/full size).

19. CENTERLINE TICK MARKS:
LV=20
CO=LV
WT=1
LC=0
These tick marks are to be displayed screened (gray).
Note; the centerline is never displayed so it won't conflict with striping.

20. LEADER LINE:
LV=47
CO=LV
WT=1
LC=Leader
The leader line scale factor is 0.4 for 40 scale.
Once you have created both and attached together, it is recommended to group together. Then you can copy and move to other label text.
Using the modify command forces the arrowhead to follow the line angle modified because its a custom linestyle.

21. LEADER EXTENSION LINE:
LV=47
CO=LV
WT=1
LC=0

The, Leader Extension, line length = Text Height (can be adjusted longer if coming off the right bottom on stacked text when the last line of text is shorter and the leader line is pointing up).
It is spaced away from the text, ½ text height.
It can be center eye-balled in the middle of the text from the top left or bottom right. (See example above)

22. DIMENSION LINES:
LV=47
CO=LV
WT=1
LC=DimLeader
(DimLeader2 is for dimensioning a space smaller than the size of arrowheads so that the arrowheads point towards each other).
The dimension line scale factor is 0.4 for 40 scale
For dimensioning lane widths the scale factor is half (0.2) if used.

23. DIMENSION EXTENSION LINES:
LV=47
CO=LV
WT=1
LC=0

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

GUIDELINES FOR TYPICAL GORE PAVEMENT MARKING PLANS

LOCATION

SHEET 1 OF 1

TRACS NO.

___ OF ___

NO.1 NO.2 DESCRIPTION OF REVISION | DATE | MADE BY

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			

N

PT Sta 4305+57.40

348'
Edgeline Taper

Sta 4305+52

Sta 4309+00

4305

4310

PC Sta 0+00.00

EQUATION
PT Sta 4311+61.76 Bk =
POT Sta 4327+08.91 Ahd

PT Sta 2+86.97

4330

MP 102

Sta 4311+41

6" White,
10' Stripe,
30' Space

Sta 4328+42

278'
Edgeline Taper

Sta 4329+61
Nose of Gore

12" White with
Type C Raised
Pavement Markers
@ 20' Spacing

Sta 4331+25
Back of Gore

6" Yellow
6" White

RAMP A

283'

50'

160'

445'

50'

I-8 WB

6" White

6" Yellow with
Type E Raised
Pavement Markers
@ 20' Spacing

6" White, 10' Stripe,
30' Space with Type C
Raised Pavement Markers
@ 40' Spacing

I-8 EB

6" White,
2' Stripe,
4' Space

Sta 4323+57
Begin Taper

Sta 4326+00
End Taper

242'
Edgeline Taper

FRONTAGE RD

12" White with
Type C Raised
Pavement Markers
@ 20' Spacing

Sta 4328+54
Nose of Gore

Sta 4329+94
Back of Gore

RAMP D

6" Yellow
6" White

6" Yellow
12" White

6" White
12" White

6" Yellow
12" White

6" White
12" White

4305

EQUATION
PT Sta 4305+69.15 Bk =
POT Sta 4321+23.37 Ahd

4325

4330

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TYPICAL GORE
PAVEMENT MARKING
PLAN SHEET; SCALE: 1"=40'

LOCATION
I-8 - PAINTED ROCK ROAD

SHEET 1 OF 6

TRACS NO.

____ OF ____

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

N

4335 10 4340 15

PC Sta 6+53.99

PT Sta 9+41.71

6" Yellow

6" White

4' 12' 2'

RAMP A

I-8 WB

10' 12' 12' 4'

6" White

6" Yellow with Type E Raised Pavement Markers @ 20' Spacing

6" White, 10' Stripe, 30' Space with Type C Raised Pavement Markers @ 40' Spacing

I-8 EB

4' 12' 12' 10'

6" Yellow

2' 12' 4'

RAMP D

FRONTAGE RD

6" Yellow

6" White

PC Sta 8+70.56

PT Sta 13+07.56

Sta 14+39±

Sta 15+00±

4335 10

4335 15

See Cross Road Sheet

18" White Stop Bar

7'

20'

200'

6" Yellow

2' 12' 2'

RAMP B

4345

6" White

Wrong Way Arrow (Std Dwg M-12) (See DETAIL B)

4' 12' 2'

135' ±

Sta 13+94±

10' 12' 12' 4'

See PAINTED ROCK RD (Cross Road), Sheet 6 of 6

PAINTED ROCK RD

4' 12' 12' 10'

Sta 15+25±

Sta 14+25±

6" Yellow

2' 12'

Wrong Way Arrow (Std Dwg M-12) (See DETAIL B)

18" White Stop Bar

6' 12'

16' 16'

14'

5' 40'

8'

RAMP C

FRONTAGE RD

6" White

4' 159' ± 20' 26'

200'

Sta 4+00±

6" Double Yellow with Type D Raised Pavement Markers @ 40' Spacing

1' 11' 11' 1'

18" White Stop Bar

6" White

8'

75' ±

65' ±

100' ± Edgeline Taper

6" Double Yellow with Type D Raised Pavement Markers @ 40' Spacing

14 15 14

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TYPICAL GORE PAVEMENT MARKING
PLAN SHEET; SCALE: 1"=40'

LOCATION: I-8 - PAINTED ROCK ROAD

SHEET 2 OF 6

TRACS NO.

____ OF ____

NO.1 | DESCRIPTION OF REVISION | MADE BY | DATE

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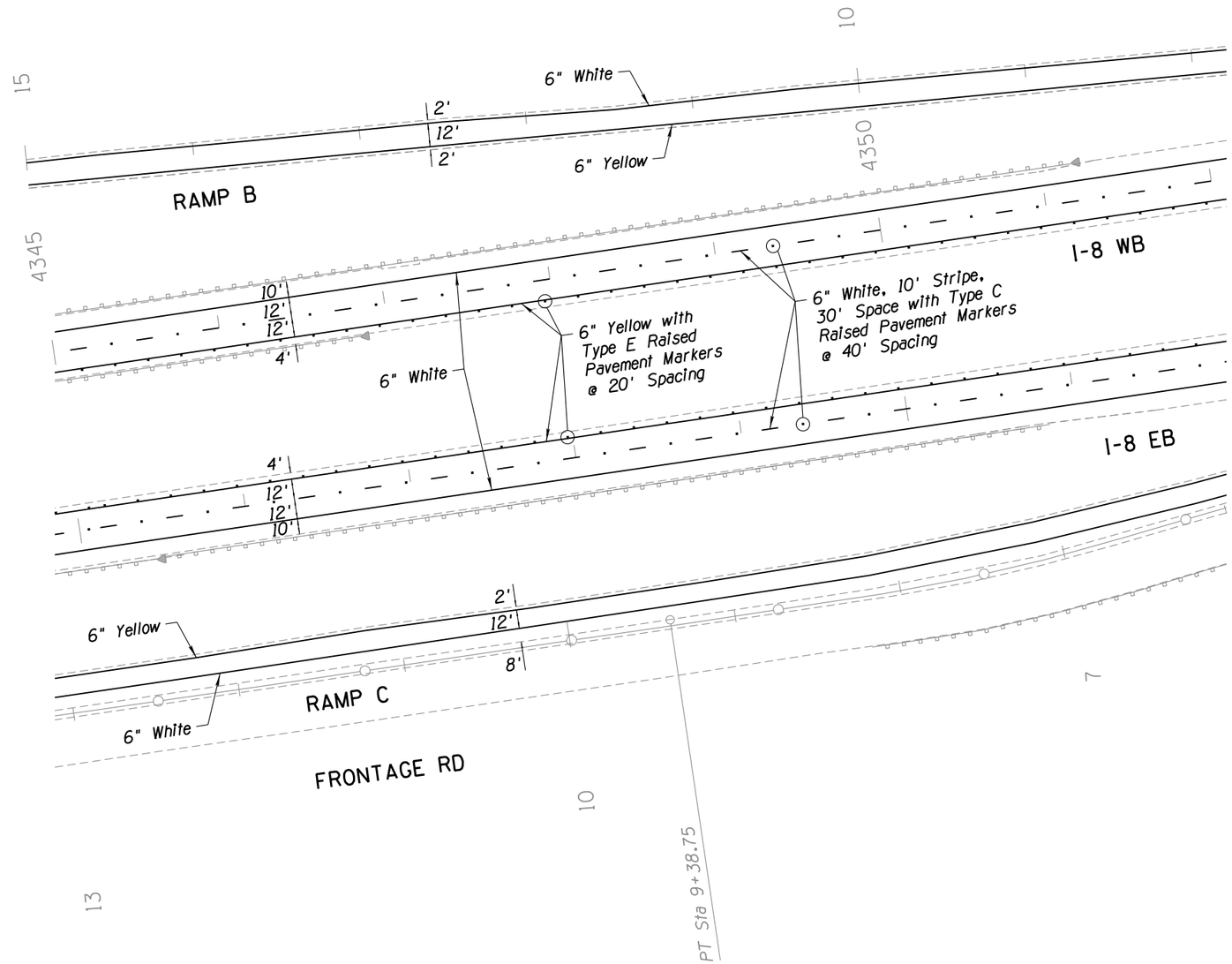
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

NO.	DESCRIPTION OF REVISION	DATE	MADE BY
1			
2			



	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION	
DESIGN				
DRAWN	LARRY LOPEZ	6/19		
CHECKED			TYPICAL GORE PAVEMENT MARKING PLAN SHEET; SCALE: 1"=40'	
TEAM LEADER				
LOCATION			I-8 - PAINTED ROCK ROAD	SHEET 3 OF 6
TRACS NO.				___ OF ___

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

N

PT Sta 7+50.14

PC Sta 6+28.06

5

4355

4360

12" White
6" White

12" White
6" Yellow

12" White with Type C Raised Pavement Markers @ 20' Spacing

Sta 4358+61

309'
Edgeline Taper

Sta 4361+70

6" White, 2' Stripe, 4' Space

6" White

6" Yellow

RAMP B

6" Yellow with Type E Raised Pavement Markers @ 20' Spacing

6" White, 10' Stripe, 30' Space with Type C Raised Pavement Markers @ 40' Spacing

6" White

335'

50'

120' ±

235'

I-8 WB

I-8 EB

582' ±
Edgeline Taper

Sta 463+39±
End Taper

12" White with Type C Raised Pavement Markers @ 20' Spacing

6" Yellow

142'
Edgeline Taper

120' ±
Edgeline Taper

RAMP C

6" White

Sta 4354+03
Begin Taper

Sta 4354+03
Back of Gore

Sta 4354+96
Nose of Gore, End Taper

Sta 4356+36
Begin Taper

Sta 457+56±

6" White
12" White

6" Yellow
12" White

PT Sta 0+00.00

PC Sta 5+38.75

5

PT Sta 4+00.00

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TYPICAL GORE
PAVEMENT MARKINGS
PLAN SHEET; SCALE: 1"=40'

LOCATION
I-8 - PAINTED ROCK ROAD

SHEET 4 OF 6

TRACS NO.

____ OF ____

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NO.2 DESCRIPTION OF REVISION | DATE | MADE BY

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
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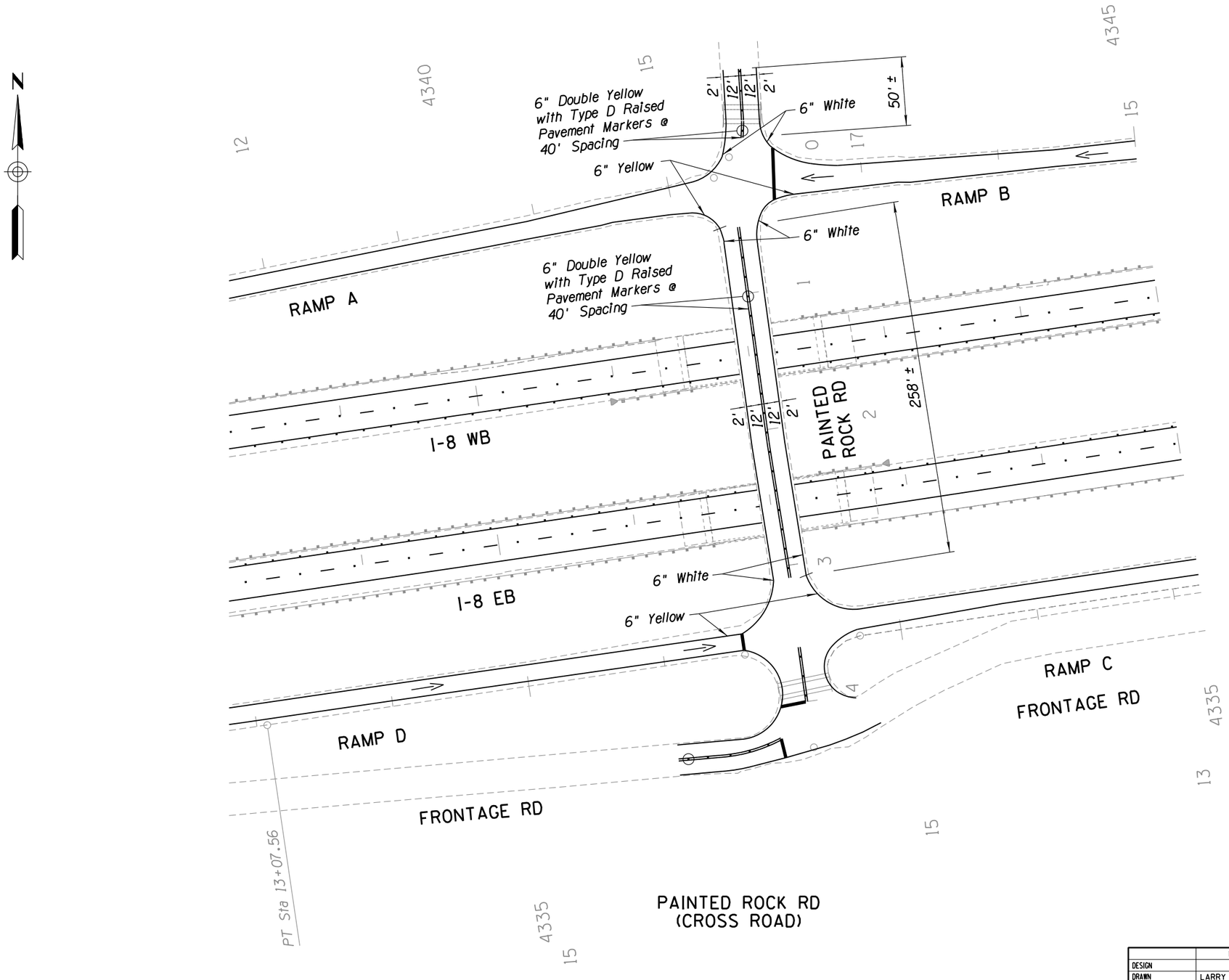

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TYPICAL GORE
PAVEMENT MARKING
PLAN SHEET; SCALE: 1"=40'

LOCATION
I-8 - PAINTED ROCK ROAD

SHEET 5 OF 6

TRACS NO.

___ OF ___

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			

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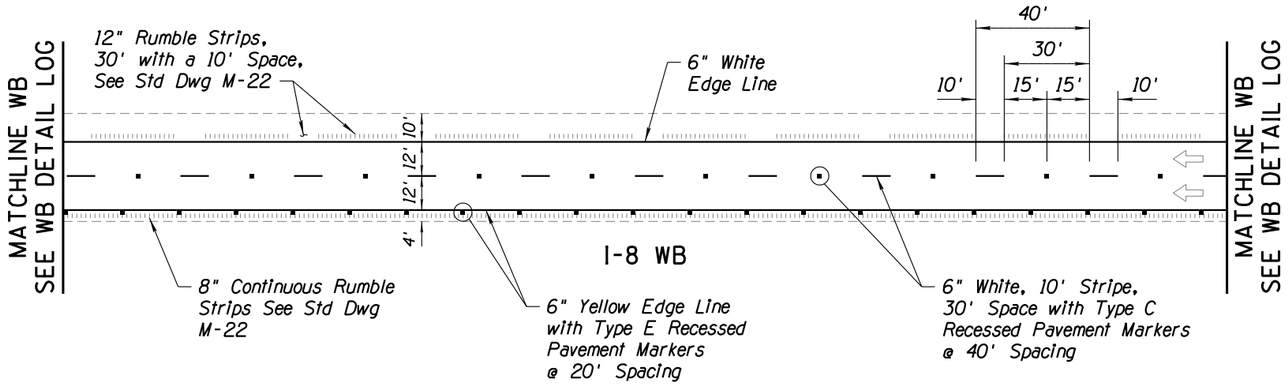
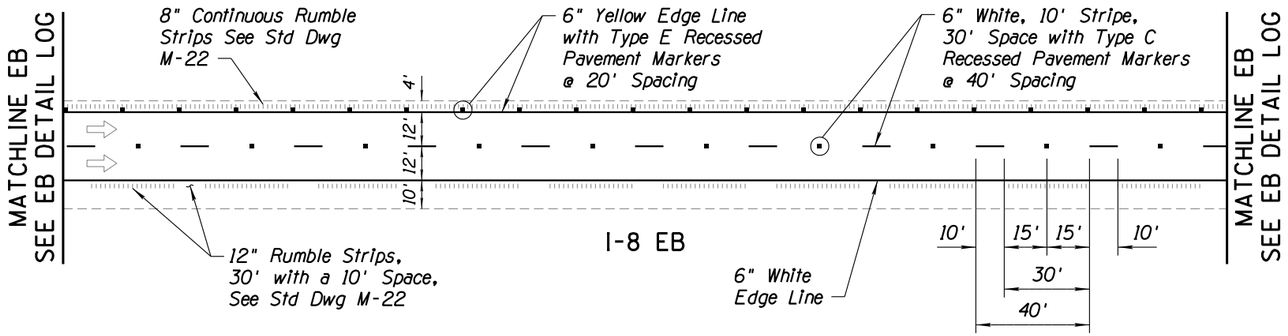
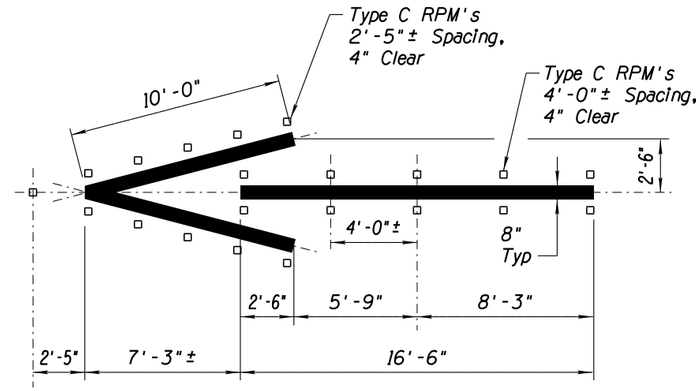
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				







DETAIL B
WHITE WRONG-WAY ARROW

EB I-8 PAVEMENT MARKING DETAIL LOG			
BEGINNING EB STATION	ENDING EB STATION	DETAIL	REMARKS
3995+00±	4305+00±	A	Install Pavement Markings as Shown in Detail A
4364+00±	4544+33±	A	Install Pavement Markings as Shown in Detail A

WB I-8 PAVEMENT MARKING DETAIL LOG			
BEGINNING WB STATION	ENDING WB STATION	DETAIL	REMARKS
3994+29±	4305+00±	A	Install Pavement Markings as Shown in Detail A
4364+00±	4544+34±	A	Install Pavement Markings as Shown in Detail A

DETAIL A
I-8 TYPICAL
PAVEMENT MARKING

APPROXIMATE SPACING FOR DELINEATORS ON HORIZONTAL CURVE	
CURVE (PC STA)	S - VALUE (FT)
4068+31.43 (EB)	300
4299+00.75 (EB)	300
4298+89.00 (WB)	300

NOTES:

1. The "S" value from the table above is the suggested approximate spacing between delineators on the curve.
2. Before and after a curve, spacing shall be per note no. 4, Table 3F-1, MUTCD 2009.
3. Placement of delineators shall be per ADOT Std Dwg M-26.

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

DETAIL A, DETAIL B
DELINEATOR SPACING TABLE

LOCATION: I-8 - PAINTED ROCK ROAD

SHEET 6 OF 6

TRACS NO.

____ OF ____

NO.1 | DESCRIPTION OF REVISION | MADE BY | DATE
NO.2 | DESCRIPTION OF REVISION | MADE BY | DATE

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APPENDIX 1 TRAFFIC DESIGN DRAFTING GUIDE EXAMPLE SHEETS

URBAN STATE ROUTE WITH MAJOR INTERSECTION PAVEMENT MARKING PLANS

GUIDELINES FOR TYPICAL, URBAN STATE ROUTE WITH MAJOR INTERSECTION, PAVEMENT MARKING PLANS

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

1. The contents of these drawings shall be used as a guide for drafting ADOT Traffic Engineering plans and should not be used as a design aid.

2. These drawings are a labeling and dimensioning presentation.

3. These drawings are cut 40 scale (the border is a reference file attached 1:2.5). These cuts are perfect sheet to sheet and do not need Matchlines on the mainline road. Text size for 40 scale is; TX=0.4 x 17.5' =7' (see Note #18). For Title Text see Notes #11, #12 and 16.
The blowup details are proportionally scaled up for detailed dimensioning and labeling clarity.
The Border File has Data Fields for placement of Title Block Text. For Title Block Text that is sheet specific, the Data Fields need to be copied up into the Sheet File. Title Block Text that is not sheet specific can and should live in the Border File to avoid duplication of work.

4. For labeling text use Title Case. The first letter of each word is capitalized. Words that would not typically be capitalized within a label are words defined as definite articles ("the"), indefinite articles ("a" and "an"), and coordinating conjunctions ("and", "but", "if", "or", "for", "yet", "so", "non" and "nor").

5. Label text do not include punctuation. See Signing & Marking and Signal & Lighting Standard Drawings for Standard Abbreviations.

6. ALL existing items not part of the Bid Set and/or Contractor Construction Responsibility are to be screened (gray/level overrides).
All graphic element items shall follow the ADOT LEVEL STRUCTURE.

7. EDGE OF ROAD, PAVEMENT PRESERVATION LIMITS AND NEWLY CONSTRUCTED ROADWAY ITEMS (non Traffic Items are shown as existing):
LV=16
CO=LV
WT=0
LC=3

8. CURB AND GUTTER:
LV=23
CO=LV
WT=0
LC=2
For all other Existing Items (bridges, guardrail, etc), see ADOT LEVEL STRUCTURE for (existing) level placement/level overrides. The line weight of any existing item can be adjusted to the Designer's discretion as long as it is screened (gray).

9. LANE LINE AND EDGELINE STRIPING:
LV=46
CO=0 for white pavement markings
CO=17 for yellow pavement markings
WT=3 for 6" striping
WT=6 for 12" striping
WT=9 for 18" striping
WT=12 for 24" striping
LC=(see custom linestyle names)
These pavement markings live in a Master Base File.
The blowup details live in the Sheet File.

10. CELL PLACEMENT:
LV= Cell attributes are built-in but can be adjusted to the Designer's discretion.
LV=17 for existing traffic items/cells, (levels that screen/level overrides).
WT=0 for filled cells (CO=17 for existing filled cells).
The weight of any cell may be adjusted to the Designer's discretion.
Pavement Arrows and "Only" legend pavement markings are cells that live in a Master Base File. The blowup details live in the Sheet File.
These cells are brought into a Master Base File at AS=1.
The, North Arrow, cell is placed or copied into each Sheet File at the same drawing scale (AS=Sheet File Scale).

11. TITLE TEXT:
LV=47
CO=LV
WT=6
FT=1
TX=8.8' (40 scale)
LS=½ text height
Text Justification = Center Bottom (also Center Top if using description text below the underline).
This text uses upper case and does not have descenders.

12. All Title Text (Detail Titles) that is not in a Table or labeling roadways/street names will have an underline. This underline has all the same element attributes as the Title Text with the LC=0.

13. NOTES (TEXT):
LV=47
CO=LV
WT=3
FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
TX=17.5' (100 scale), 8.75' (50 scale), 7' (40 scale), 3.5' (20 scale)
LS=0.625 x (text height)
Text Justification = Left Top (Because when editing, text will grow from top left and shrink from the bottom right).
This text uses upper and lower case and has descenders.

14. LABEL TEXT:
LV=47
CO=LV
WT=4
FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
TX=7' (see Note #18)
LS=0.625 x (text height)
Text Justification = Left Top (Because when editing, text will grow from top left and shrink from the bottom right.)
This text uses Title Case and has descenders.

15. DIMENSION TEXT AND STATION CONTROL POINT TEXT:
LV=47
CO=LV
WT=4
FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
TX=7' (see Note #18)
LS=0.625 x (text height) (space above and below the dimension line)
Text Justification = Center Bottom (also Center Top if using description text below the dimension line)
This text uses Title Case and has descenders because it sometimes includes a description.

16. CENTERLINE TITLE TEXT:
(500' Stationing)
LV=21
CO=LV
WT=1
FT=1
TX=8.8 (40 scale)
Text Justification = Center Center
This text uses upper case and does not have descenders.

17. CENTERLINE DATA TEXT:
(Curve Data, Station Equation)
LV=21
CO=LV
WT=1
FT=23
TX=7
LS=0.625 x (text height)
Text Justification = Designer's discretion

18. All text can be squeezed to fit tight spaces and to the Designer's discretion as long as it is legible when printed hard copy and in all pdf formats (half size/full size).

19. CENTERLINE TICK MARKS:
LV=20
CO=LV
WT=1
LC=0
These tick marks are to be displayed screened (gray).
Note; the centerline is never displayed so it won't conflict with striping.

20. LEADER LINE:
LV=47
CO=LV
WT=1
LC=Leader
The leader line scale factor is 0.4 for 40 scale.
Once you have created both and attached together, it is recommended to group together. Then you can copy and move to other label text.
Using the modify command forces the arrowhead to follow the line angle modified because its a custom linestyle.

21. LEADER EXTENSION LINE:
LV=47
CO=LV
WT=1
LC=0
"ONLY" Legend (Typ) (Std Dwg M-10) "ONLY" Legend (Typ) (Std Dwg M-10) "ONLY" Legend (Typ) (Std Dwg M-10)
The, Leader Extension, line length = Text Height (can be adjusted longer if coming off the right bottom on stacked text when the last line of text is shorter and the leader line is pointing up).
It is spaced away from the text, ½ text height.
It can be center eye-balled in the middle of the text from the top left or bottom right. (See example above)

22. DIMENSION LINES:
LV=47
CO=LV
WT=1
LC=DimLeader
(DimLeader2 is for dimensioning a space smaller than the size of arrowheads so that the arrowheads point towards each other).
The dimension line scale factor is 0.4 for 40 scale
For dimensioning lane widths the scale factor is half (0.2) if used.

23. DIMENSION EXTENSION LINES:
LV=47
CO=LV
WT=1
LC=0

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		
LOCATION		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TYPICAL URBAN STATE ROUTE WITH MAJOR INTERSECTION PAVEMENT MARKING SET UP NOTES

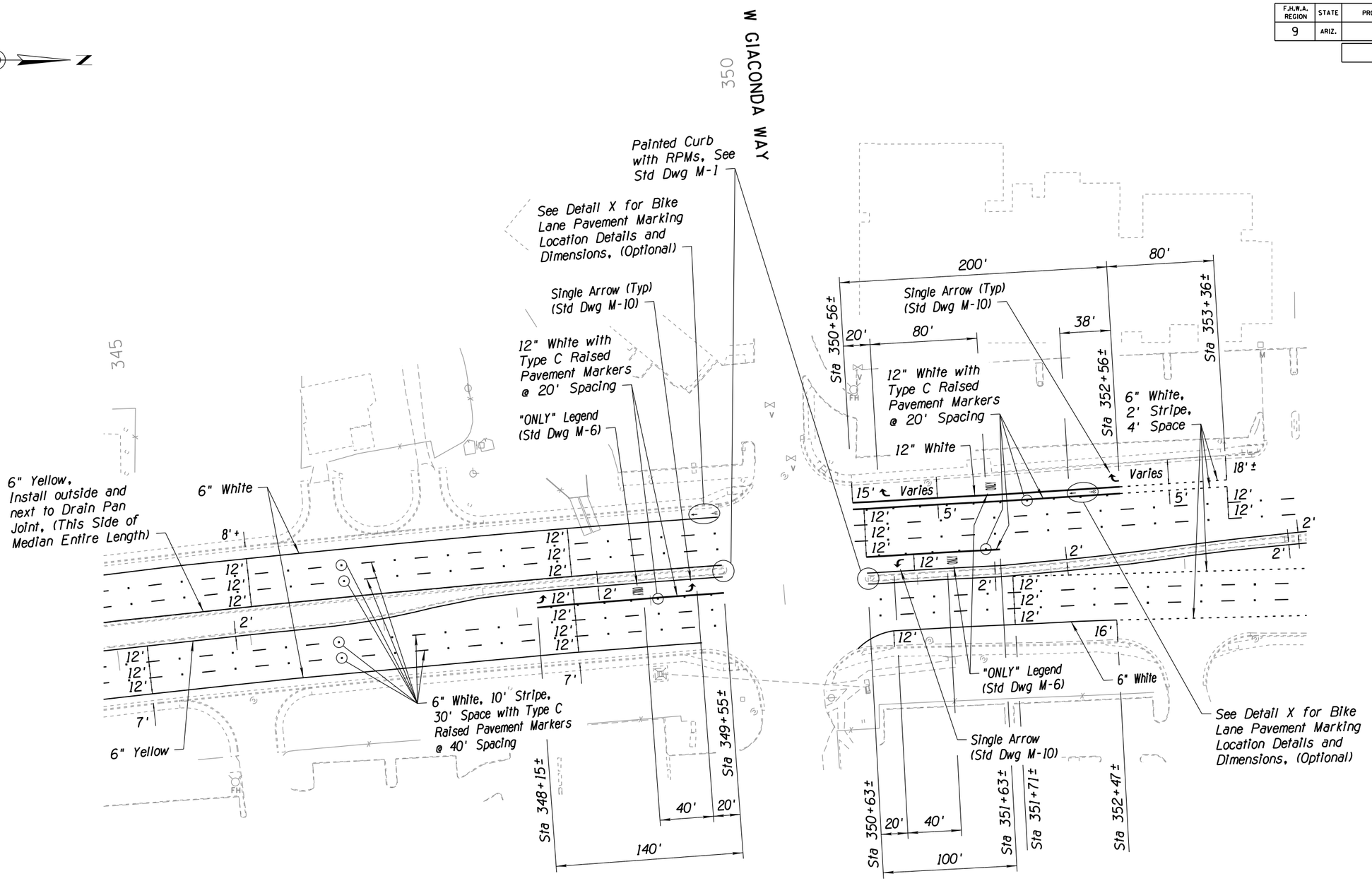
SHEET 1 OF 1

TRACS NO. ___ OF ___

NO.1 DESCRIPTION OF REVISION DATE MADE BY
NO.2 DESCRIPTION OF REVISION DATE MADE BY

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
2			
1			



SR 77/N ORACLE RD

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION	
DESIGN				
DRAWN	LARRY LOPEZ	6/19		
CHECKED			TYPICAL URBAN STATE ROUTE PAVEMENT MARKINGS AND SHEET CUT EXAMPLE: SCALE: 1"=40'	
TEAM LEADER				
LOCATION	SR77/N ORACLE ROAD - W INA ROAD			SHEET 1 OF 5
TRACS NO.				___ OF ___

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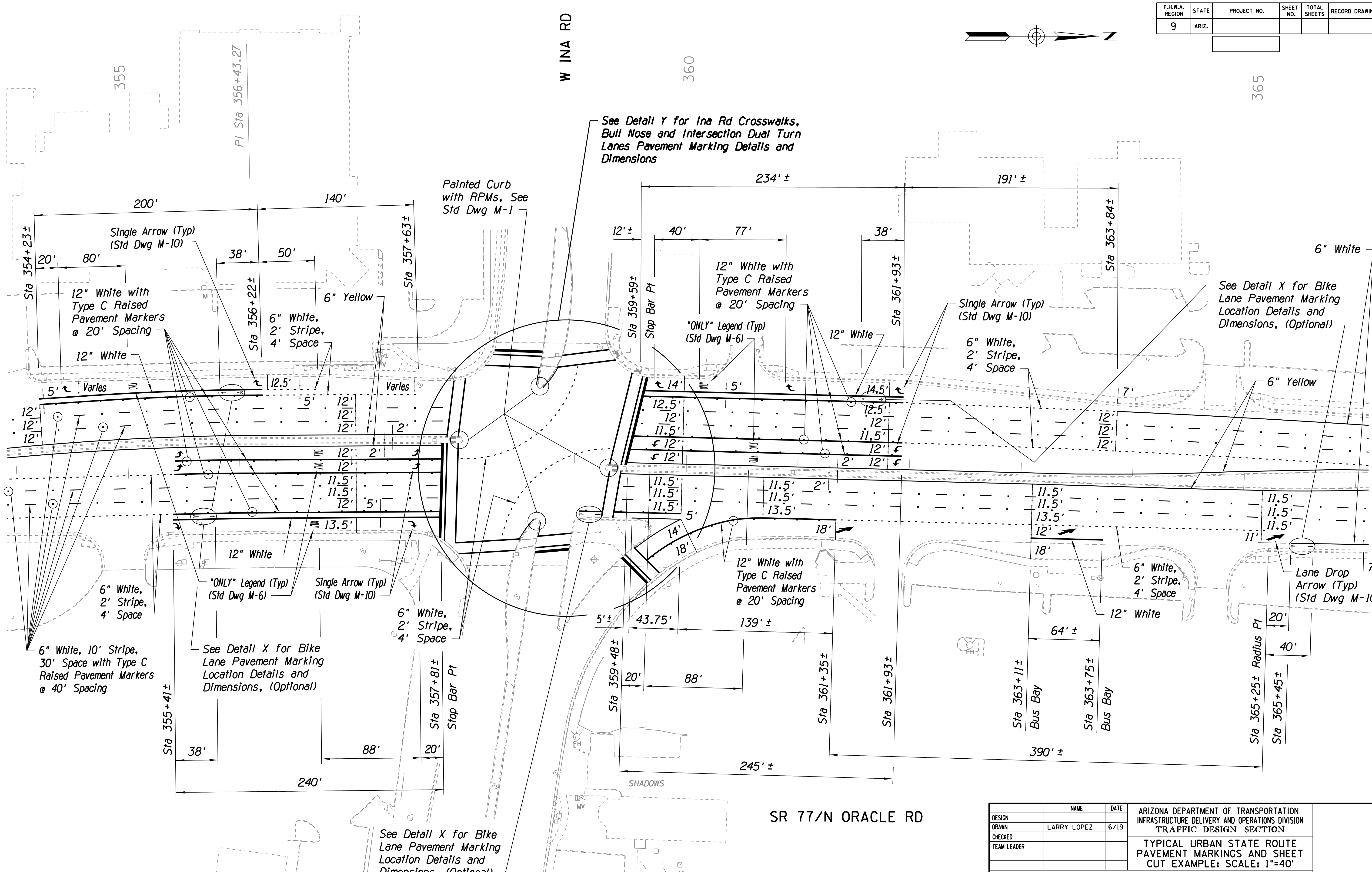
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				



	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION
DESIGN			
DRAWN	LARRY LOPEZ	6/19	TYPICAL URBAN STATE ROUTE PAVEMENT MARKINGS AND SHEET CUT EXAMPLE: SCALE: 1"=40'
CHECKED			
TEAM LEADER			

LOCATION SR77/N ORACLE ROAD - W INA ROAD

SHEET 2 OF 5

TRACS NO.

___ OF ___

NO.1 DESCRIPTION OF REVISION | MADE BY | DATE
NO.2 DESCRIPTION OF REVISION | MADE BY | DATE

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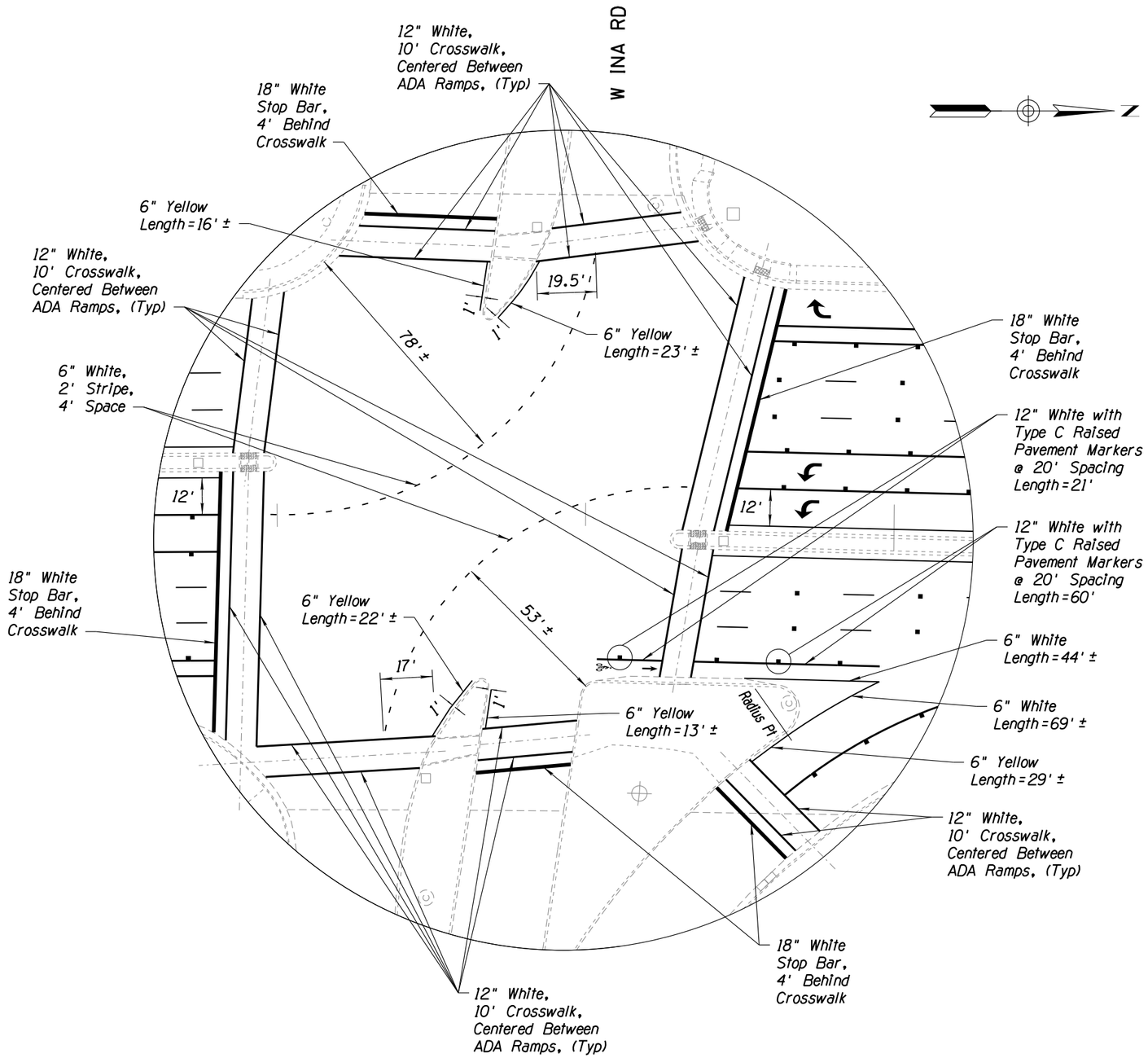
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

NO.1	DESCRIPTION OF REVISION	DATE	MADE BY
NO.2	DESCRIPTION OF REVISION	DATE	MADE BY



SR 77/N ORACLE RD

DETAIL Y

SR77/ORACLE RD and W INA RD

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TYPICAL URBAN STATE ROUTE
PAVEMENT MARKINGS & SHEET CUT
SCALE: 1"=40', DRAWING SCALE: 1'=20'

LOCATION
SR77/N ORACLE ROAD - W INA ROAD

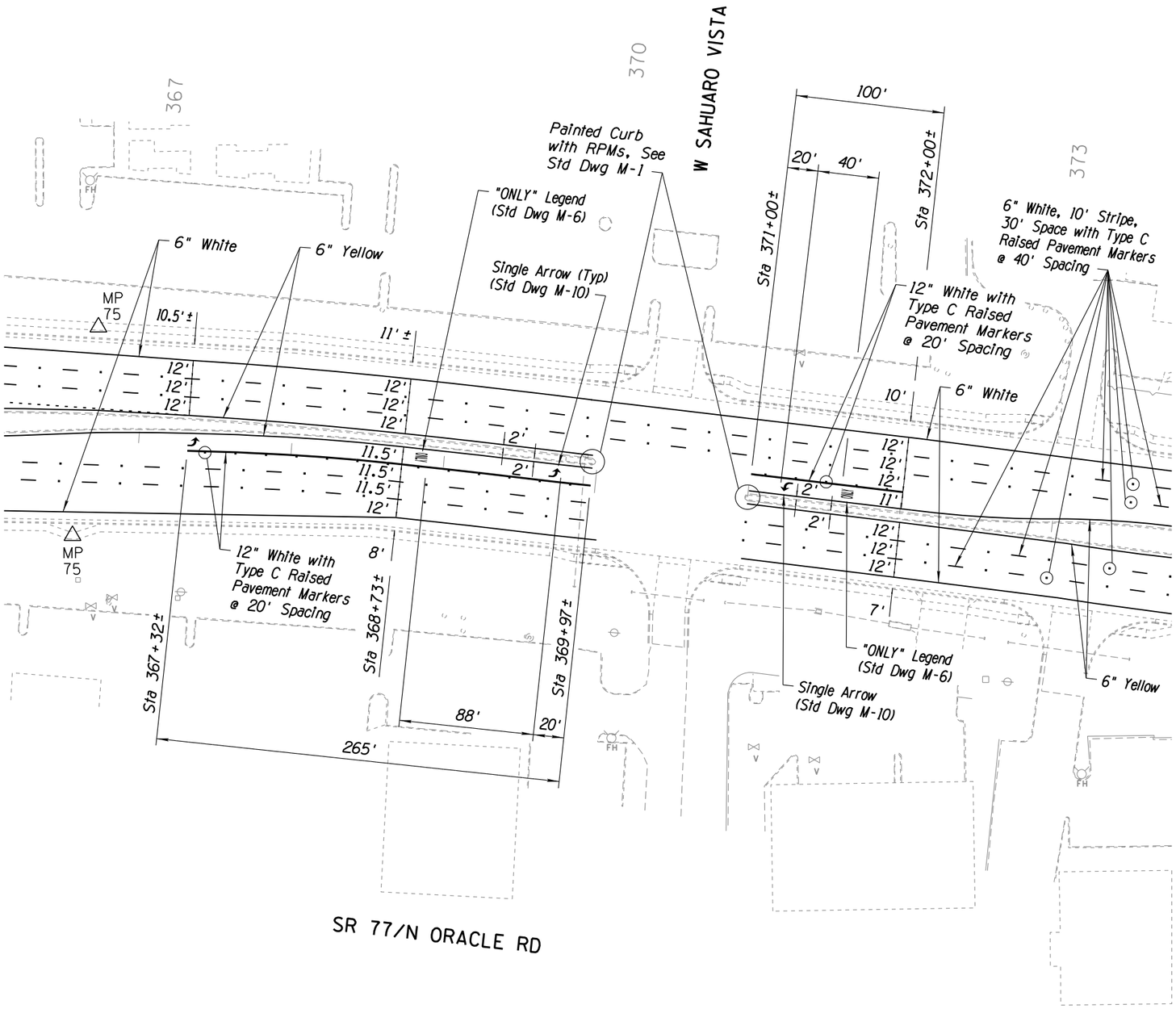
SHEET 3 OF 5

TRACS NO.

___ OF ___

2:16:16 PM 10/18/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\UrbanSR-MajorIntersectionPavementMarking\UrbanSR-MajorIntersectionPM-Example3-DetailY.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

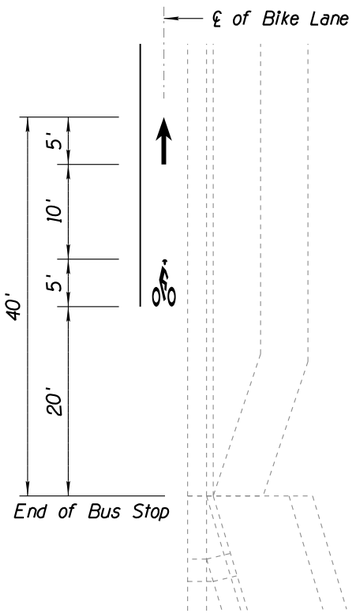


	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION	
DESIGN				
DRAWN	LARRY LOPEZ	6/19		
CHECKED			TYPICAL URBAN STATE ROUTE PAVEMENT MARKINGS AND SHEET CUT EXAMPLE: SCALE: 1"=40'	
TEAM LEADER				
LOCATION	SR77/N ORACLE ROAD - W INA ROAD			SHEET 4 OF 5
TRACS NO.				___ OF ___

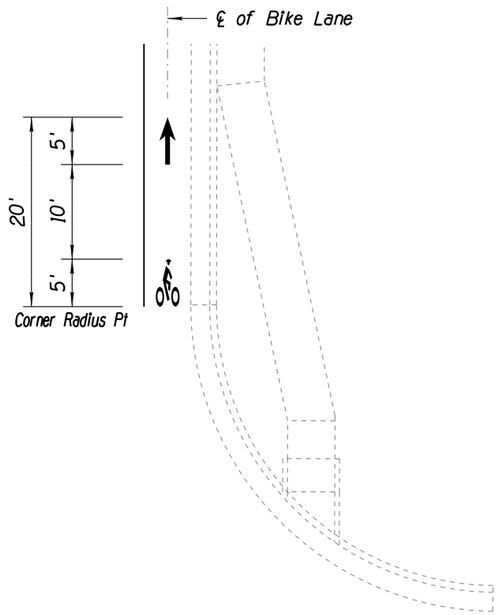
NO.	DESCRIPTION OF REVISION	MADE BY	DATE
NO.1			
NO.2			

6:04:59 PM 10/18/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\UrbanSR-MajorIntersectionPavementMarking\UrbanSR-MajorIntersectionPM-Example4.dgn

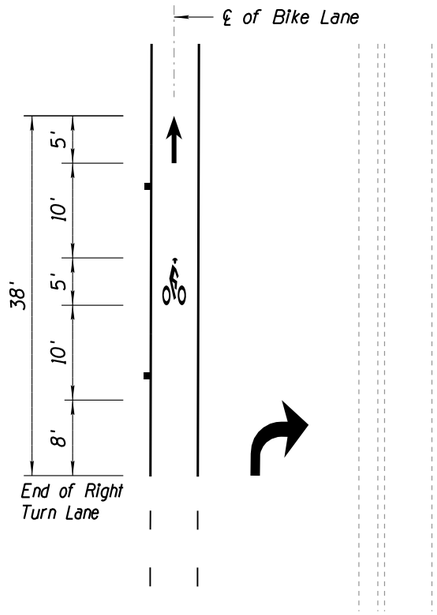
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				



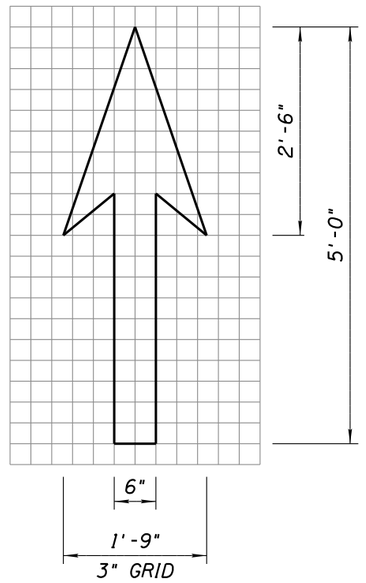
BUS STOP



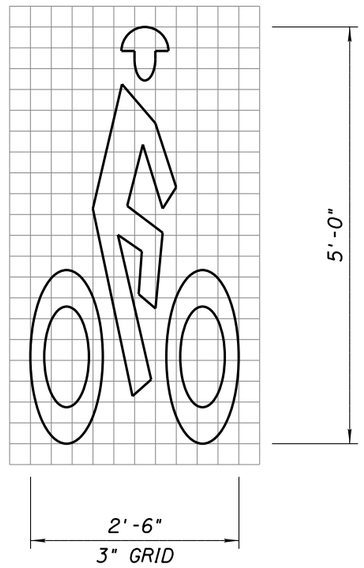
CORNER RADIUS PT



RIGHT TURN LANE

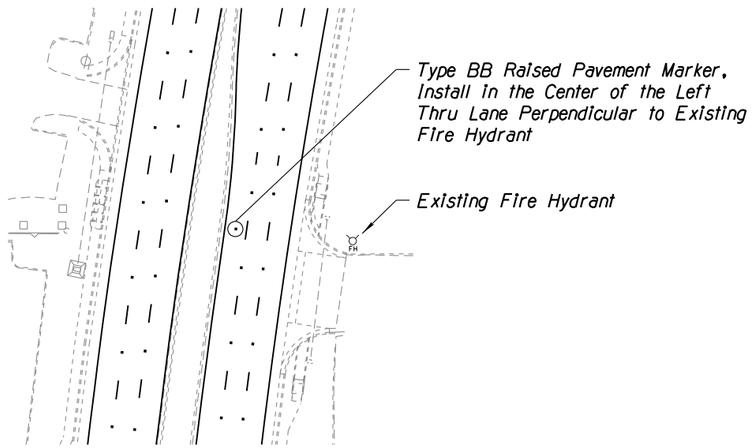


BIKE LANE ARROW



BIKE LANE SYMBOL

DETAIL X
TYPICAL BIKE LANE PAVEMENT MARKING INSTALLATION



TYPICAL TYPE BB RAISED PAVEMENT MARKER INSTALLATION

NOTES:

1. *The contents of this drawing shall be used as a guide for drafting ADOT Traffic Engineering plans and should not be used as a design aid.*
2. *This drawing is a labeling and dimensioning presentation.*
3. *These blowup details are proportionally scaled up for detailed dimensioning and labeling clarity and are not drawn to a specific scale.*

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION
DESIGN			
DRAWN	LARRY LOPEZ	6/19	
CHECKED			PAVEMENT MARKING INSTALLATION DETAIL X
TEAM LEADER			
LOCATION			SHEET 5 OF 5
TRACS NO.			___ OF ___

NO.1 DESCRIPTION OF REVISION | MADE BY | DATE
NO.2 DESCRIPTION OF REVISION | MADE BY | DATE

3:32:01 PM 10/18/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\UrbanSR-MajorIntersectionPavementMarking\UrbanSR-MajorIntersectionPM-Example5-DetailX.dgn

APPENDIX 1 TRAFFIC DESIGN DRAFTING GUIDE EXAMPLE SHEETS

URBAN STATE ROUTE (HAWK) PAVEMENT MARKING PLANS

GUIDELINES FOR TYPICAL, URBAN STATE ROUTE (HAWK), PAVEMENT MARKING PLANS

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

1. The contents of these drawings shall be used as a guide for drafting ADOT Traffic Engineering plans and should not be used as a design aid.

2. These drawings are a labeling and dimensioning presentation.

3. These drawings are cut 40 scale (the border is a reference file attached 1:2.5). These cuts are perfect sheet to sheet and do not need Matchlines on the mainline road. Text size for 40 scale is; TX=0.4 x 17.5'=7' (see Note #18). For Title Text see Notes #11, #12 and 16.
The blowup details are proportionally scaled up for detailed dimensioning and labeling clarity.
The Border File has Data Fields for placement of Title Block Text. For Title Block Text that is sheet specific, the Data Fields need to be copied up into the Sheet File. Title Block Text that is not sheet specific can and should live in the Border File to avoid duplication of work.

4. For labeling text use Title Case. The first letter of each word is capitalized. Words that would not typically be capitalized within a label are words defined as definite articles ("the"), indefinite articles ("a" and "an"), and coordinating conjunctions ("and", "but", "if", "or", "for", "yet", "so", "non" and "nor").

5. Label text do not include punctuation. See Signing & Marking and Signal & Lighting Standard Drawings for Standard Abbreviations.

6. ALL existing items not part of the Bid Set and/or Contractor Construction Responsibility are to be screened (gray/level overrides).
All graphic element items shall follow the ADOT LEVEL STRUCTURE.

7. EDGE OF ROAD, PAVEMENT PRESERVATION LIMITS AND NEWLY CONSTRUCTED ROADWAY ITEMS (non Traffic Items are shown as existing):
LV=16
CO=LV
WT=0
LC=3

8. CURB AND GUTTER:
LV=23
CO=LV
WT=0
LC=2
For all other Existing Items (bridges, guardrail, etc), see ADOT LEVEL STRUCTURE for (existing) level placement/level overrides. The line weight of any existing item can be adjusted to the Designer's discretion as long as it is screened (gray).

9. LANE LINE AND EDGELINE STRIPING:
LV=46
CO=0 for white pavement markings
CO=17 for yellow pavement markings
WT=3 for 6" striping
WT=6 for 12" striping
WT=9 for 18" striping
WT=12 for 24" striping
LC=(see custom linestyle names)
These pavement markings live in a Master Base File.
The blowup details live in the Sheet File.

10. CELL PLACEMENT:
LV= Cell attributes are built-in but can be adjusted to the Designer's discretion.
LV=17 for existing traffic items/cells, (levels that screen/level overrides).
WT=0 for filled cells (CO=17 for existing filled cells).
The weight of any cell may be adjusted to the Designer's discretion.
Pavement Arrows and "Only" legend pavement markings are cells that live in a Master Base File. The blowup details live in the Sheet File.
These cells are brought into a Master Base File at AS=1.
The, North Arrow, cell is placed or copied into each Sheet File at the same drawing scale (AS=Sheet File Scale).

11. TITLE TEXT:
LV=47
CO=LV
WT=6
FT=1
TX=8.8' (40 scale)
LS=½ text height
Text Justification = Center Bottom (also Center Top if using description text below the underline).
This text uses upper case and does not have descenders.

12. All Title Text (Detail Titles) that is not in a Table or labeling roadways/street names will have an underline. This underline has all the same element attributes as the Title Text with the LC=0.

13. NOTES (TEXT):
LV=47
CO=LV
WT=3
FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
TX=17.5' (100 scale), 8.75' (50 scale), 7' (40 scale), 3.5' (20 scale)
LS=0.625 x (text height)
Text Justification = Left Top (Because when editing, text will grow from top left and shrink from the bottom right).
This text uses upper and lower case and has descenders.

14. LABEL TEXT:
LV=47
CO=LV
WT=4
FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
TX=7' (see Note #18)
LS=0.625 x (text height)
Text Justification = Left Top (Because when editing, text will grow from top left and shrink from the bottom right).
This text uses Title Case and has descenders.

15. DIMENSION TEXT AND STATION CONTROL POINT TEXT:
LV=47
CO=LV
WT=4
FT=23 or 36 (font 36 has special characters for Signal & Lighting plans).
TX=7' (see Note #18)
LS=0.625 x (text height) (space above and below the dimension line)
Text Justification = Center Bottom (also Center Top if using description text below the dimension line)
This text uses Title Case and has descenders because it sometimes includes a description.

16. CENTERLINE TITLE TEXT:
(500' Stationing)
LV=21
CO=LV
WT=1
FT=1
TX=8.8 (40 scale)
Text Justification = Center Center
This text uses upper case and does not have descenders.

17. CENTERLINE DATA TEXT:
(Curve Data, Station Equation)
LV=21
CO=LV
WT=1
FT=23
TX=7
LS=0.625 x (text height)
Text Justification = Designer's discretion

18. All text can be squeezed to fit tight spaces and to the Designer's discretion as long as it is legible when printed hard copy and in all pdf formats (half size/full size).

19. CENTERLINE TICK MARKS:
LV=20
CO=LV
WT=1
LC=0
These tick marks are to be displayed screened (gray).
Note; the centerline is never displayed so it won't conflict with striping.

20. LEADER LINE:
LV=47
CO=LV
WT=1
LC=Leader
The leader line scale factor is 0.4 for 40 scale.
Once you have created both and attached together, it is recommended to group together. Then you can copy and move to other label text.
Using the modify command forces the arrowhead to follow the line angle modified because its a custom linestyle.

21. LEADER EXTENSION LINE:
LV=47
CO=LV
WT=1
LC=0


The, Leader Extension, line length = Text Height (can be adjusted longer if coming off the right bottom on stacked text when the last line of text is shorter and the leader line is pointing up).
It is spaced away from the text, ½ text height.
It can be center eye-balled in the middle of the text from the top left or bottom right. (See example above)

22. DIMENSION LINES:
LV=47
CO=LV
WT=1
LC=DimLeader
(DimLeader2 is for dimensioning a space smaller than the size of arrowheads so that the arrowheads point towards each other).
The dimension line scale factor is 0.4 for 40 scale
For dimensioning lane widths the scale factor is half (0.2) if used.

23. DIMENSION EXTENSION LINES:
LV=47
CO=LV
WT=1
LC=0

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION
DESIGN			
DRAWN	LARRY LOPEZ	6/19	GUIDELINES FOR TYPICAL URBAN STATE ROUTE (HAWK) PAVEMENT MARKING PLANS
CHECKED			
TEAM LEADER			
LOCATION			SHEET 1 OF 1
TRACS NO.			___ OF ___

NO.1 DESCRIPTION OF REVISION | DATE | MADE BY | NO.2 DESCRIPTION OF REVISION | DATE | MADE BY

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

N

PC Sta 252+67.43

255

260

W ROLLER COASTER RD

6" Double Yellow, Center and Field Locate, Length=30'±

18" White Stop Bar, Field Locate 9' Behind ADA Ramps ℄

Single Arrow (Typ) (Std Dwg M-10)

12" White with Type C Raised Pavement Markers @ 20' Spacing

"ONLY" Legend (Std Dwg M-6)

Sta 256+73±

Sta 257+07±

Radius Pt

Sta 258+23±

Sta 258+82±

Sta 260+17±

150'

194'±

20'

12" White with Type C Raised Pavement Markers @ 20' Spacing

6" White, 2' Stripe, 4' Space

8.25'±

Sta 261+34±

Radius Pt

MP 73

7.75'±

7'+

12'

2'

6" Yellow

6" White

15'

3'

Install outside and next to Drain Pan Joint

6" Yellow, Install outside and next to Drain Pan Joint, (This Side of Median Entire Length)

14'

9'+

8'±

6" White, 10' Stripe, 30' Space with Type C Raised Pavement Markers @ 40' Spacing

Single Arrow (Typ) (Std Dwg M-10)

MP 73

Sta 255+19±

Sta 256+44±

40'

20'

125'

SR 77/N ORACLE RD

12" White, Skewed 45° @ 10' Spacing

Radius Pt

29.75'

28.75'

15'

6" White Length=45.5'

Single Arrow and Double Arrow (Typ) (Std Dwg M-10)

6" White Length=47.5'

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TYPICAL URBAN STATE ROUTE (HAWK) PAVEMENT MARKINGS AND SHEET CUT EXAMPLE: SCALE: 1"=40'

LOCATION: SR77/N ORACLE ROAD - W LAS LOMITAS ROAD

SHEET 1 OF 3

TRACS NO.

___ OF ___

NO.1 DESCRIPTION OF REVISION DATE MADE BY

NO.2 DESCRIPTION OF REVISION DATE MADE BY

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
2			
1			

W LAS LOMITAS RD

PI Sta 263+67.94

265

270

N

Painted Curb with RPMs, See Std Dwg M-1

6" Yellow, Install outside and next to Drain Pan Joint, (This Side of Median Entire Length)

Single Arrow (Std Dwg M-10)

"ONLY" Legend (Std Dwg M-6)

12" White Length=65'

7.25'±

6.5'±

6" Yellow

6" White

12" White with Type C Raised Pavement Markers @ 20' Spacing

6" White, 10' Stripe, 30' Space with Type C Raised Pavement Markers @ 40' Spacing

Sta 262+88±

Sta 263+88±

Sta 264+38±

Sta 264+83±
Radius Pt

Sta 265+12±

Sta 266+77±

40'

20'

50'±

74'±

115'±

50'

100'

339'±

5' to Drain Pan

12" White

6" White, 10' Stripe, 30' Space with Type C Raised Pavement Markers @ 40' Spacing

6" White, 10' Stripe, 30' Space with Type C Raised Pavement Markers @ 40' Spacing

6" Yellow

6" White

10.5'

12'

3'

18'

24" White High Visibility Stop Bar

Sta 266+27± Field Locate Across from Existing Signs

24" White Crossbars with 24" Space

12" White, 16' High Visibility Crosswalk, Centered Between ADA Ramps (Special)

24" White Crossbars with 24" Space

50'

324'±

Sta 267+25±

Sta 267+75± Field Locate Across from Existing Signs

6" Yellow, Install outside and next to Drain Pan Joint, (This Side of Median Entire Length)

24" White, High Visibility Stop Bar

12" White with Type C Raised Pavement Markers @ 20' Spacing

6" Yellow, Install outside and next to Drain Pan Joint, (This Side of Median Entire Length)

Sta 270+99±

6" White, 10' Stripe, 30' Space with Type C Raised Pavement Markers @ 40' Spacing

9.5'±

12" White with Type C Raised Pavement Markers @ 20' Spacing

Painted Curb with RPMs, See Std Dwg M-1

6" Yellow

6" White

7'

"ONLY" Legend (Std Dwg M-6)

Single Arrow (Std Dwg M-10)

Sta 270+05±

Sta 270+99±

Sta 271+99±

94'±

40'

20'

100'

SR 77/N ORACLE RD

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TYPICAL URBAN STATE ROUTE (HAWK) PAVEMENT MARKINGS AND SHEET CUT EXAMPLE: SCALE: 1"=40'

LOCATION
SR77/N ORACLE ROAD - W LAS LOMITAS ROAD

SHEET 2 OF 3

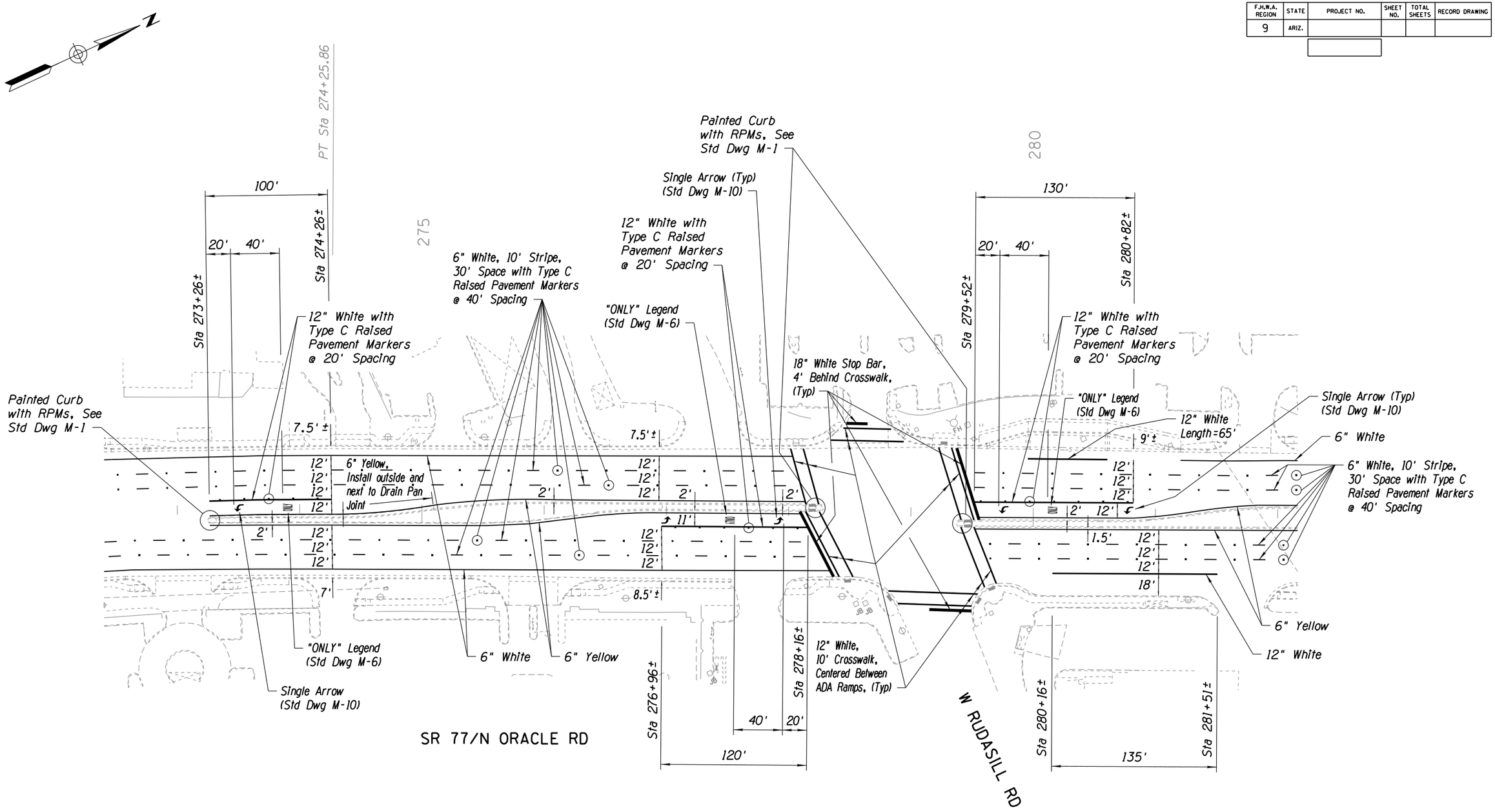
TRACS NO.

____ OF ____

5:00:55 PM 10/18/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\UrbanSR-HAWK-PavementMarking\HAWK-PM-Example2.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

NO.	DESCRIPTION OF REVISION	DATE	MADE BY
NO.1			
NO.2			



	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TYPICAL URBAN STATE ROUTE (HAWK) PAVEMENT MARKINGS AND SHEET CUT EXAMPLE: SCALE: 1"=40'

LOCATION
SR77/N ORACLE ROAD - W LAS LOMITAS ROAD

SHEET 3 OF 3

TRACS NO.

___ OF ___

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APPENDIX 1 TRAFFIC DESIGN DRAFTING GUIDE EXAMPLE SHEETS

RAMP PAVEMENT MARKING AND SIGNING

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.		47		

NO.1	DESCRIPTION OF REVISION	DATE	MADE BY
NO.2	DESCRIPTION OF REVISION	DATE	MADE BY

MATCHLINE RAMP C STA 9+84

I-40 EB

Sta 10+00.00 (Survey & Csl ℄ Ramp C)=
Sta 10+00.00 (Survey & Csl ℄ Ramp CD)

Sta 15+23.74 (Survey & Csl ℄ Meteor City Rd)=
Sta 21+49.90 (Survey & Csl ℄ Meteor City Rd)

METEOR CITY RD

MATCHLINE METEOR CITY RD (SOUTH)

MATCHLINE RAMP CD

Sta 10+00± End Ramp C Striping, Match Existing

179' ±

89' ±

97' ±

88'

20'

Sta 11+79±

Sta 12+68±

Sta 13+65±

Sta 14+53±

Sta 14+73±

6" White

6" Yellow

2'

12'

8'

Dual Movement Arrow (Std Dwg M-10)

12" White with Type C Recessed Pavement Markers @ 20' Spacing

18" White Stop Bar

6" Double Yellow

4.25'

14'

"ONLY" Legend (Std Dwg M-10)

Single Arrow (Std Dwg M-10)

Wrong Way Arrow (Std Dwg M-12)

RAMP C

S 52°58'13" E

PC 10+11.69

METEOR CITY RD

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

PAVEMENT MARKING PLAN

LOCATION
I-40 METEOR CITY TI OP EB #20175 & WB #20176

SHEET 1 OF 2

TRACS NO.

___ OF ___

6:07:03 PM 7/2/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\RampSigning-PavementMarking\T8735PM05.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.		57		

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			

10

New
WRONG WAY
S3, S4
Install

Existing
WRONG WAY
S5, S6
Remove

New
S1
Install

Existing
S2
Remove

New
ONLY
S3A, S4A
Install

RAMP C

New
DO NOT ENTER
WRONG WAY
S17, S18
Install

New
STOP
S16
Install

Existing
ONE WAY
ONE WAY
S19, S20
Remove

New
ONE WAY
ONE WAY
S21, S22
Install

Existing
EAST
Albuquerque
S25
Remove

New
EAST
Albuquerque
S26
Install

Existing
STOP
DO NOT ENTER
S23, S24
Remove

New
RIGHT LANE
ONLY
S7A
Install

New
STOP
S7
Install

Existing
STOP
DO NOT ENTER
S8, S9
Remove

New
DO NOT ENTER
WRONG WAY
S10, S11
Install

Existing
ONE WAY
ONE WAY
S12, S13
Remove

New
ONE WAY
ONE WAY
S14, S15
Install

METEOR CITY RD

15

Existing
WEST I-40
EAST I-40
Flagstaff
Albuquerque
S27
Remove

New
WEST I-40
EAST I-40
Flagstaff
Albuquerque
S28
Install

Existing
S29
Remove

New
S30
Install

New
Meteor City Rd
X00
Install

Existing
Meteor City Rd
S32
Remove

New
EAST I-40
S33
Install

Existing
EAST I-40
S34
Remove

METEOR CITY RD

	NAME	DATE
DESIGN		
DRAWN LOPEZ	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

SIGNING PLAN

LOCATION
I-40 METEOR CITY TI OP EB #20175 & WB #20176

SHEET 2 OF 2

TRACS NO.

___ OF ___

6:19:19 PM 7/2/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\RampSigning-PavementMarking\T8735SP01.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.		44		

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			

RED GAP RANCH RD

PT 15+46.06

PC 5+60.33

231±

Sta 15+83±
End Ramp AB Striping
Match Existing

88'±

83'

88'

Sta 13+52±

Sta 12+64±

Sta 11+81±

Sta 10+93±

Sta 10+73±

6" White

6" Yellow

12" White with Type C Recessed Pavement Markers @ 20' Spacing

Single Arrow (Std Dwg M-10)

Single Arrow (Std Dwg M-10)

6" Double Yellow

20'

12'

4.5'

14'

14'

4.5'

8'

12'

12'

2'

2'

Wrong Way Arrow (Std Dwg M-12)

"ONLY" Legend (Std Dwg M-10)

Dual Movement Arrow (Std Dwg M-10)

6" White

18" White Stop Bar

6" Yellow

2'

6" Yellow

RAMP AB

MATCHLINE RAMP A

MATCHLINE METEOR CITY RD (NORTH)

METEOR CITY RD

S 52°33'58" E

Sta 10+29.76 (Survey & Cst ℄ Ramp AB)=
Sta 14+42.77 (Survey & Cst ℄ Meteor City Rd)

Sta 15+47.73 (Survey & Cst ℄ Ramp AB)=
Sta 5+25.00 (Survey & Cst ℄ Ramp B)

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

PAVEMENT MARKING PLAN

LOCATION
I-40 METEOR CITY TI OP EB #20175 & WB #20176

SHEET 1 OF 2

TRACS NO.

____ OF ____

6:26:01 PM 7/2/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\RampSigning-PavementMarking\T8735PM03.dgn

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.		58		

RED GAP RANCH RD

RAMP AB

METEOR CITY RD

New
DO NOT ENTER
WRONG WAY
57, S58 Install

New
ONE WAY
ONE WAY
S54, S55 Install

Existing
ONE WAY
ONE WAY
S52, S53 Remove

Existing
STOP
DO NOT ENTER
S50, S51 Remove

New
STOP
S56 Install

S7A Install

New
RIGHT LANE
ONLY
S56A Install

Existing
WRONG WAY
S59 Remove

New
ONLY
S61A, S62A Install

New
WRONG WAY
S62 Install

Existing
S63 Remove

New
S64 Install

New
ONE WAY
ONE WAY
S48, S49 Install

New
STOP
S47 Install

Existing
STOP
DO NOT ENTER
S45, S46 Remove

New
Meteor City Rd
S38 Install

Existing
ONE WAY
ONE WAY
S43, S44 Remove

New
DO NOT ENTER
WRONG WAY
S41 Install

EAST 40 ALBUQUERQUE
WEST 40 FLAGSTAFF
New
Albuquerque
Flagstaff
S36 Install

Existing
Meteor City Rd
S37 Remove

Existing
WEST 40 Flagstaff
S40 Remove

New
WEST 40 Flagstaff
S39 Install

EAST 40 ALBUQUERQUE
WEST 40 FLAGSTAFF
Existing
Albuquerque
Flagstaff
S35 Remove

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

SIGNING PLAN

LOCATION
I-40 METEOR CITY TI OP EB #20175 & WB #20176

SHEET 2 OF 2

TRACS NO.

___ OF ___

NO.1 DESCRIPTION OF REVISION | MADE BY | DATE
NO.2 DESCRIPTION OF REVISION | MADE BY | DATE

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APPENDIX 1 TRAFFIC DESIGN DRAFTING GUIDE EXAMPLE SHEETS

ROUNDABOUT TRAFFIC CONTROL, PAVEMENT MARKINGS, SIGNING AND LIGHTING

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

TRAFFIC CONTROL NOTES:

1. The traffic control plans represent a suggested method for traffic control during construction. The contractor may prepare another traffic control plan in accordance with Section 701 of the Standard Specifications. All traffic control plans are subject to the approval of the Engineer before beginning construction.

2. Adjustments to the details of these traffic control plans and requirements may be necessary due to construction activities, as directed by the Engineer.

3. All existing signs in conflict with the construction signs shall be removed, relocated, or covered in place, as directed by the Engineer, at the contractor's expense. The contractor shall store and reinstall items which have been removed or relocated in a manner approved by the Engineer.

4. All construction signs shall have black letters on an orange background, except as otherwise indicated.

5. The retroreflective sheeting on all orange signs and delineation for impact attenuators shall meet the criteria established for Type VIII, IX, or XI sheeting in accordance with ASTM D4956, except all black-on-white signs, barricades, vertical panels, and other work zone traffic control devices may have Type IV sheeting. All orange signs shall have fluorescent sheeting.

6. All signs shown on the plans shall be mounted on embedded posts, except as otherwise indicated. For signs installed on embedded posts, sign mounting height is a minimum of 7 feet as measured from the bottom of the sign to the near edge of the pavement. All other short-term signs may be installed on portable stands at least 5 feet above the pavement.

7. The nearest edge or corner of a sign shall be approximately 12 feet from the nearest edge of pavement or 6 feet behind guardrail for all signs mounted on embedded posts.

8. Flags shall be mounted on top of all construction signs. Type A flashing warning lights shall be required on all nighttime construction signs, except "END ROAD WORK THANK YOU" signs.

9. During nighttime the contractor shall utilize only Type I or Type II barricades for channelizing devices, except the Engineer may allow the contractor to substitute vertical panels on tangents.

10. Type I or Type II barricades shall be placed 40 feet o.c. in tapers and 80 feet o.c. on tangents, except as otherwise indicated.

11. A Type C steady-burning yellow light shall be mounted on every Type I or Type II barricade or vertical panel used for channelization during nighttime activities.

12. The contractor shall clean the roadway surface to the satisfaction of the Engineer, by sweeping and air-jet blowing, immediately prior to the placement of all temporary pavement markings. The roadway surface shall be dry.

13. Construction signs shall not be displayed to traffic more than 24 hours prior to the actual start of construction. These signs may be installed sooner but they must be covered or turned away from traffic. The cost for covering or turning them shall be considered part of the sign installation cost. No further compensation will be made. These signs shall be removed within 24 hours after the completion of the construction activities.

14. Signing for double fines in work zones, when approved by Engineer, shall generally conform to Figure SA-12 of the ADOT Traffic Control Guidelines. Such signing shall only be in place during working periods when workers are present in accordance with the guidelines for signing for double fines in work zones.

15. Lane closures shall generally conform to Figure SA-5(L) and SA-5(R) of the 2010 ADOT Traffic Control Design Guidelines.

16. Off-duty uniformed police officers and their vehicles shall be included as part of the contractor's traffic control as approved by the Engineer.

17. Where no closure is necessary but where there is construction alongside a roadway under construction, the contractor shall place 48 inch x 48 inch "ROAD WORK AHEAD" and "SHOULDER WORK AHEAD" signing as directed by the Engineer to alert the public to the construction activities.

18. While traffic control items are not in use, the contractor shall remove these items to a location at least 30 feet from the edge of the paved roadway. This includes all supports without sign panels. Any signs which are not in use but which cannot be moved at least 30 feet from the roadway shall be covered so the public cannot read the legends.

19. For each changeable message sign used on the project but not located in a protected location, the contractor shall position ten Type I or Type II barricades, with an affixed Type A flashing warning light for nighttime use but not vertical panels, around the changeable message sign.

20. The contractor shall position changeable message signs in advance of each road closure or as directed by the Engineer.

21. Cycle time and duration of the message on the changeable message sign shall be such that the entire message can be read twice at the operating speed from no farther than 650 feet.

22. A Type A flashing warning light shall be positioned on each end of each Type III barricade. The contractor shall position Type III barricades across the detour roadway at both east and west connections to SR 88 while traffic is traveling on SR 88 and the detour looks like another roadway.

23. All drawings are schematic only and not to scale.

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TRAFFIC CONTROL NOTES

LOCATION
SR 88 - SUPERSTITION BLVD INTERSECTION

SHEET 1 OF 20

TRACS NO.

___ OF ___

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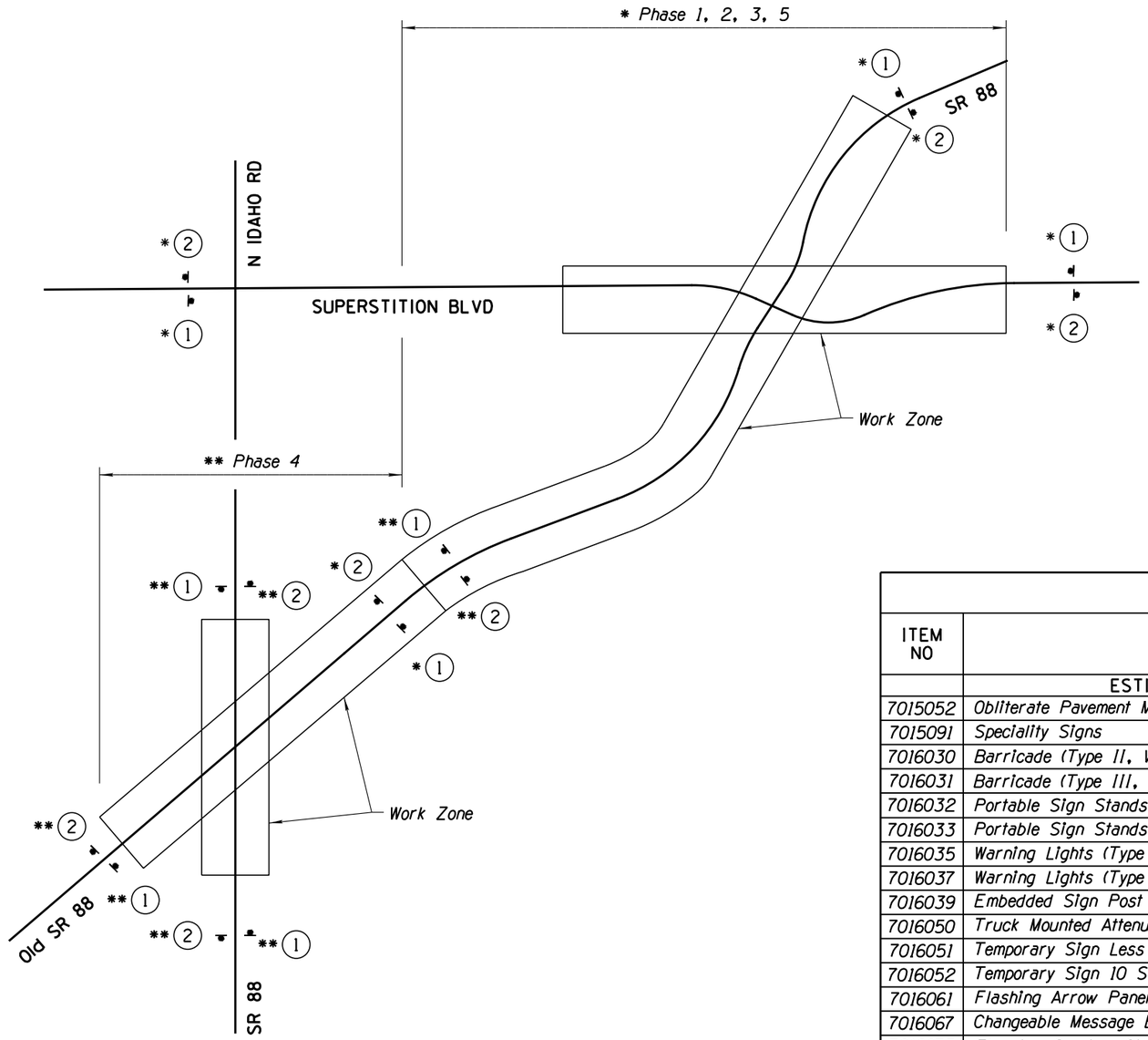
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.		87		



ADVANCE SIGNING

SIGN LEGEND:

(1)

W20-1
48"x48"

(2)

G20-2
48" X 36"

APPROXIMATE TRAFFIC CONTROL QUANTITIES

ITEM NO	ITEM	UNIT	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	TOTAL
	ESTIMATED DURATION	Days*	250	150	30	35	35	
7015052	Obliterate Pavement Marking (Stripe)	LF	0	0	0	0	263	263
7015091	Speciality Signs	Sq-Ft	0	0	88	0	0	88
7016030	Barricade (Type II, Vertical Panel, Tubular Marker)	Each-Day	5,000	7,500	1,740	4,349	406	18,995
7016031	Barricade (Type III, High Level Flag Trees)	Each-Day	0	0	720	464	14	1,198
7016032	Portable Sign Stands (Rigid)	Each-Day	0	300	0	544	28	872
7016033	Portable Sign Stands (Spring Type)	Each-Day	0	4,200	0	32	84	4,316
7016035	Warning Lights (Type A)	Each-Day	8,000	0	3,270	902	0	12,172
7016037	Warning Lights (Type C)	Each-Day	5,000	7,500	1,740	4,349	406	18,995
7016039	Embedded Sign Post	Each-Day	16,000	0	1,140	280	0	17,420
7016050	Truck Mounted Attenuator	Each-Day	4	4	4	0	7	19
7016051	Temporary Sign Less Than 10 Sq-Ft	Each-Day	2,000	1,500	2,880	32	84	6,496
7016052	Temporary Sign 10 Sq-Ft or More	Each-Day	6,000	3,000	390	708	28	10,126
7016061	Flashing Arrow Panel	Each-Day	0	0	120	108	14	242
7016067	Changeable Message Board (Contractor Furnished)	Each-Day	500	0	30	98	0	628
7016075	Flagging Service (Civilian)	Hours	0	0	0	0	70	70
7016078	Flagging Service (Local Enforcement Officer)	Hours	0	100	30	0	20	150
7016080	Flagging Services (DPS)	Hours	0	100	30	0	20	150

NOTE:

* = Calendar days

	NAME	DATE
DESIGN		
DRAWN	O.Z. L.L.	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

TRAFFIC CONTROL QUANTITIES AND ADVANCE SIGNING

LOCATION
SR 88 - SUPERSTITION BLVD INTERSECTION

SHEET 2 OF 20

TRACS NO. ____ OF ____

NO.1 DESCRIPTION OF REVISION | MADE BY | DATE
NO.2 DESCRIPTION OF REVISION | MADE BY | DATE

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NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

(1) ROAD WORK AHEAD
W20-1
48"x48"

(2) ROAD CLOSED
R11-2
48"x30"
Black on White

(3) DETOUR AHEAD
W20-2
48"x48"

(4) DETOUR EAST 88 SUPERSTITION BLVD ←
M4-8
24"x12"
M3-2
24"x12"
M1-5a
24"x24"
Specialty Sign
48"x24"
M5-1(L)
24"x18"

(5) DETOUR EAST 88 SUPERSTITION BLVD ←
M4-8
24"x12"
M3-2
24"x12"
M1-5a
24"x24"
Specialty Sign
48"x24"
M6-1(L)
24"x18"

(6) DETOUR WEST 88 SUPERSTITION BLVD ↑
M4-8
24"x12"
M3-4
24"x12"
M1-5a
24"x24"
Specialty Sign
48"x24"
M6-3
24"x18"

(7) DETOUR WEST 88 ↑
M4-8
24"x12"
M3-4
24"x12"
M1-5a
24"x24"
M6-3
24"x18"

(8) DETOUR EAST 88 SUPERSTITION BLVD ↑
M4-8
24"x12"
M3-2
24"x12"
M1-5a
24"x24"
Specialty Sign
48"x24"
M6-3
24"x18"

(9) DETOUR EAST 88 SUPERSTITION BLVD ↱
M4-8
24"x12"
M3-2
24"x12"
M1-5a
24"x24"
Specialty Sign
48"x24"
M5-1(R)
24"x18"

(10) DETOUR EAST 88 SUPERSTITION BLVD →
M4-8
24"x12"
M3-2
24"x12"
M1-5a
24"x24"
Specialty Sign
48"x24"
M6-1(R)
24"x18"

(11) DETOUR EAST 88 ↑
M4-8
24"x12"
M3-2
24"x12"
M1-5a
24"x24"
M6-3
24"x18"

(12) DETOUR SUPERSTITION BLVD →
M4-8
24"x12"
Specialty Sign
48"x24"
M6-1(R)
24"x18"

(13) DETOUR WEST 88 ↗
M4-8
24"x12"
M3-4
24"x12"
M1-5a
24"x24"
M6-2(R)
24"x18"

(14) DETOUR WEST 88 SUPERSTITION BLVD ↰
M4-8
24"x12"
M3-4
24"x12"
M1-5a
24"x24"
Specialty Sign
48"x24"
M5-1
24"x18"

(15) DETOUR WEST 88 SUPERSTITION BLVD ←
M4-8
24"x12"
M3-4
24"x12"
M1-5a
24"x24"
Specialty Sign
48"x24"
M6-1(L)
24"x18"

(16) DETOUR WEST 88 ↖
M4-8
24"x12"
M3-4
24"x12"
M1-5a
24"x24"
M6-2(L)
24"x18"

(17) DETOUR SUPERSTITION BLVD ↑
M4-8
24"x12"
Specialty Sign
48"x24"
M6-3
24"x18"

(18) DETOUR SUPERSTITION BLVD ←
M4-8
24"x12"
Specialty Sign
48"x24"
M6-1(L)
24"x18"

(19) DETOUR WEST 88 ←
M4-8
24"x12"
M3-4
24"x12"
M1-5a
24"x24"
M6-1(L)
24"x18"

(20) DETOUR WEST 88 →
M4-8
24"x12"
M3-4
24"x12"
M1-5a
24"x24"
M6-1(R)
24"x18"

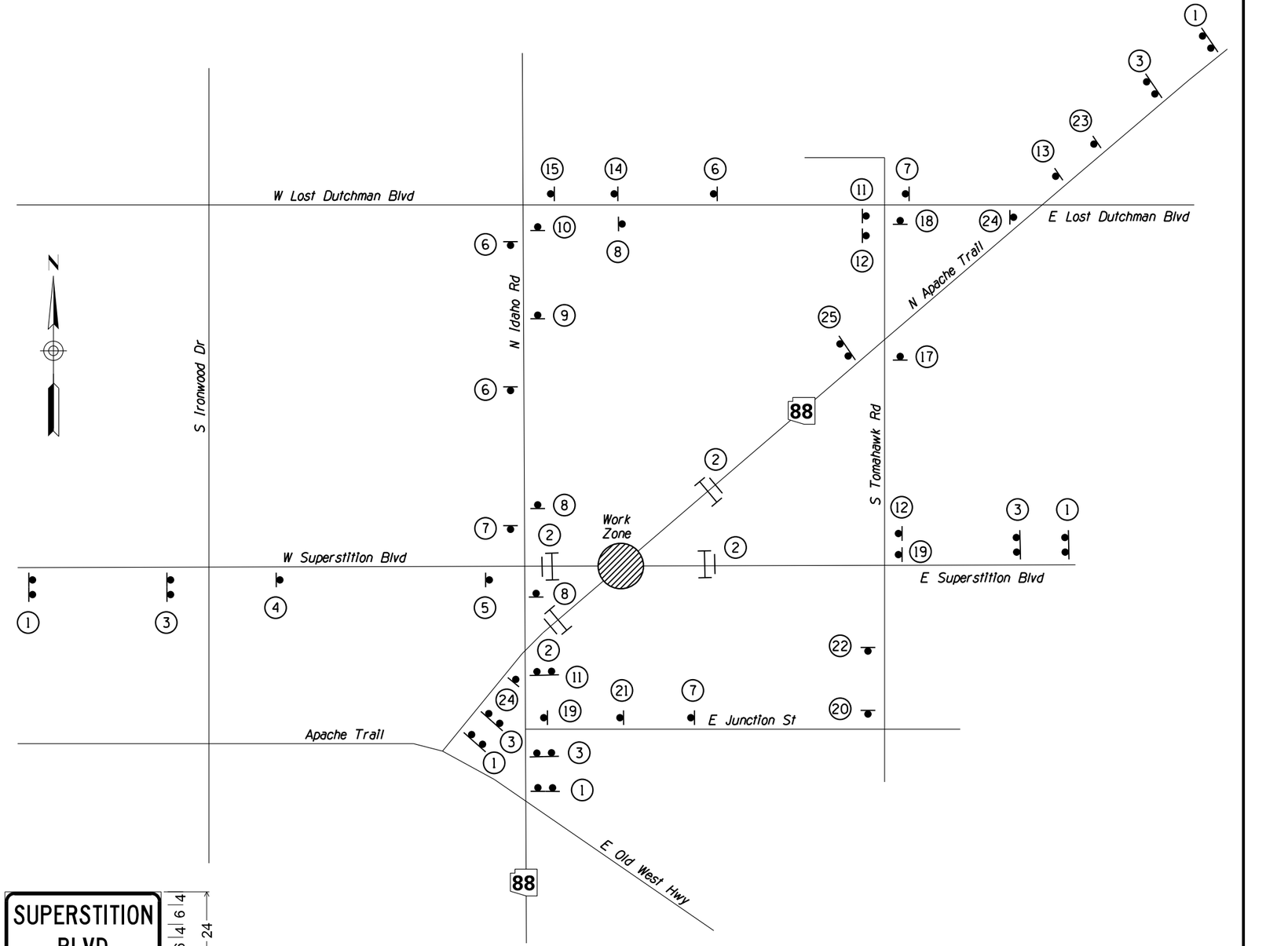
(21) DETOUR WEST 88 ↰
M4-8
24"x12"
M3-4
24"x12"
M1-5a
24"x24"
M5-1(L)
24"x18"

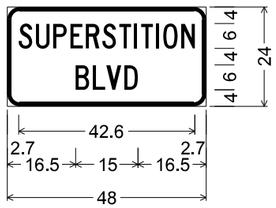
(22) DETOUR WEST 88 ↱
M4-8
24"x12"
M3-4
24"x12"
M1-5a
24"x24"
M5-1(R)
24"x18"

(23) DETOUR WEST 88 ↗
M4-8
24"x12"
M3-4
24"x12"
M1-5a
24"x24"
M5-2(R)
24"x18"

(24) DETOUR EAST 88 ↘
M4-8
24"x12"
M3-2
24"x12"
M1-5a
24"x24"
M6-2(L)
24"x18"

(25) ROAD CLOSED 1/2 MILE
W20-3
48"x48"





3.0" Radius, 1.0" Border, Black on Orange;
[SUPERSTITION] C 70% spacing;
[BLVD] C 70% spacing;

	NAME	DATE
DESIGN		
DRAWN	BRUCE FICKLIN	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

DETOUR PLAN

LOCATION
SR 88 - SUPERSTITION BLVD INTERSECTION

SHEET 3 OF 20

TRACS NO.

___ OF ___

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

SIGNING NOTES:

1. All signs shall be in compliance with the Manual on Uniform Traffic Control Devices (MUTCD), the ADOT Signing and Marking Standard Drawings, and the Traffic Engineering Manual of Approved Signs.

2. The sign locations and the post lengths are approximate. The contractor shall verify the sign locations and actual post lengths with the Engineer prior to installing signs.

3. The bottom of each sign installed on a new post shall be at least 7 feet above the nearest edge of pavement and at least 7 feet above the ground under the sign.

4. For signs installed on new posts, the contractor shall install the new signs so the nearest edge or corner of each sign is offset 12 feet from the nearest edge of the pavement, except as otherwise indicated.

5. All signs shall be fabricated of flat sheet aluminum or extruded aluminum as indicated in Section 608.

6. The retroreflective sheeting on all new signs shall meet the criteria established for Type IX or XI sheeting in accordance with ASTM D4956. All new yellow and yellow-green signs shall have fluorescent sheeting.

7. All new ground-mounted signs shall be installed on new square tube posts with foundations in accordance with Std Dwg S-3 with two nuts per bolt or on new breakaway posts in accordance with Std Dwg S-2, S-4, S-5 and S-6.

8. Where indicated in the sign summary, new slip bases shall be installed in accordance with Std Dwg S-3.

9. Where indicated in the sign summary, the contractor shall install horizontal stringers in accordance with Std Dwg S-3.

10. All bolts used to install signing shall have hex heads, not slotted heads, and shall not be painted.

11. The contractor shall use only zinc plated steel washers, not nylon washers, between each bolt head and the face of the sign panel. The washers shall not be painted.

12. Shop drawings will be required.

13. The Engineer may modify the signing plans.

SIGNING QUANTITIES

ITEM NO	ITEM	UNIT	TOTAL
2020047	Removal of Signs	Each	26
6070002	Breakaway Sign Post S4x7.7	LF	30
6070004	Breakaway Sign Post W6x12	LF	156
6070022	Foundation for Breakaway Sign Post S4x7.7	Each	2
6070024	Foundation for Breakaway Sign Post W6x12	Each	10
6070038	Slip Base (New)	Each	48
6070055	Sign Post (Perforated) (2 1/2 S)	LF	167
6070057	Sign Post (Perforated) (2 1/2 T)	LF	502
6070060	Foundation for Sign Post (Concrete)	Each	56
6080005	Warning, Marker or Regulatory Sign Panel	Sq-Ft	478
6080018	Extruded Aluminum Sign Panel	Sq-Ft	398
6080025	Flat Sheet Aluminum Sign Panel	Sq-Ft	77
6080110	Remove and Reinstall Sign	Each	1

NO.1 DESCRIPTION OF REVISION | DATE | MADE BY
NO.2 DESCRIPTION OF REVISION | DATE | MADE BY

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

PAVEMENT MARKING NOTES AND QUANTITIES

LOCATION
SR 88 - SUPERSTITION BLVD INTERSECTION

SHEET 4 OF 20

TRACS NO.

____ OF ____

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.		90		

Plan Sht No.	Sign Number	Sign Code	Work: New	Work: Existing: Replace Panel	Work: Existing: Relocate Panel	Work: Existing: Modify Legend	Work: Existing: Remove	Work: Existing: To Remain	Offset (ft)	Mounting Height (ft)	Background Color	Panel: Legend	Panel: Width (in)	Panel: Height (in)	Panel: Area (sq. ft.)	Panel: Type	Panel: Bid Item Number	Ground Mounted: Foundations	Ground Mounted: Posts: Type	Ground Mounted: Posts: Total length (ft)	Ground Mounted: New Slipbases	Ground Mounted: Stringer: Type	Ground Mounted: Stringer: Total Length (ft)	Overhead: Structure Type	Overhead: #of Lights	Remarks
T-04.03	EB Sta. 99+13	R2-1 (35)	X							7	WH	SPEED LIMIT 35	30	36	7.5	RWM	6080005									Pole Mounted on Existing Sign Structure
T-04.03	EB Sta. 100+75	W4-2R					X					Lane Ends					2020047									
T-04.03	EB Sta. 101+75	R5-111	X						12	7.5	WH	No Truck Symbol	84	72	42.0	EXT	6080018	2	S4X7.7	30						
												OVER 40 FEET														
												23 MILES AHEAD														
	+	R12-1	X								WH	WEIGHT LIMIT 10 TONS	24	30	5.0	RWM	6080005									Mounted on Left Post Below Main Panel at 5 Feet
T-04.03	EB Sta. 102+24	R2-1 (40)					X					SPEED LIMIT 40					2020047									
T-04.03	EB Sta. 102+58	R12-1					X					WEIGHT LIMIT 10 TONS					2020047									
	+	R5-111					X					No Truck Symbol														
												OVER 40 FEET														
												23 MILES AHEAD														
T-04.03	EB Sta. 104+25	Special			X				12	7	WH	HIGHWAY SR 88 Shield / CLOSED					6080110	2	2 1/2T	26	2					Relocated Panel (Folded Sign) from EB Sta. 104+74
												BEYOND TORTILLA FLAT														
T-04.03	EB Sta. 106+75	W2-6	X						6	7	YL	Roundabout	36	36	9.0	RWM	6080005	1	2 1/2T	15	1					
	+	W13-1P (20)	X								YL	20 MPH	24	24	4.0	RWM	6080005									
T-04.03	EB Sta. 109+07	R4-7	X							7	WH	Keep Right Symbol	24	30	5.0	RWM	6080005	1	2 1/2S	12						
T-04.03	EB Sta. 109+25	GUIDE	X						12	7	GR	SR 88 Shield East	192	84	112.0	EXT	6080018	3	W6X12	48						
												West Superstition Blvd / Roundabout /														
												East Superstition Blvd														
T-04.03	EB Sta. 109+63	W2-1					X					Cross Road					2020047									
		W16-8P					X					Superstition Blvd														
T-04.04	EB Sta. 111+14	R3-8KQ	X							7	WH	Left-Straight Arrow Symbol /	36	30	7.5	RWM	6080005									Mount on Light Pole
												Straight-Right Arrow Symbol														
T-04.04	EB Sta. 113+30	OM3-L					X					Object Marker					2020047									
T-04.04	EB Sta. 113+38	W11-2	X						6	7	YL/GR	Pedestrian Symbol	36	36	9.0	RWM	6080005	1	2 1/2T	12	1					
	+	W16-7P	X								YL/GR	Diagonal Down Left Arrow	30	18	3.8	RWM	6080005									

NOTES:

1. The contractor shall verify post lengths and elevations and cantilever column and mast arm lengths and elevations for Engineer's approval.
2. The Engineer may shift a sign in order to achieve a more desirable location.
3. Quantities are approximate and for the contractor's information only.

NOTE: Markers and Ground Mount Guide Signs are Sheeting Type IX or XI. Regulatory, Warning and Over-head Guide Signs are Sheeting Type XI.

PANEL TYPES:

RWM: Regulatory, Warning or Marker

F-DA: Flat-sheet aluminum with demountable characters

Ext: Aluminum extrusions

BACKGROUND COLORS:
RD = RED
BK = BLACK
BL = BLUE
GR = GREEN
YL = FLUORESCENT YELLOW
BR = BROWN
WH = WHITE
OR = ORANGE
YL/GR = FLUORESCENT YELLOW-GREEN

STRINGER TYPES:
P: Square-tube post
T: T-section (WT 3x6)

	NAME	DATE
DESIGN		
DRAWN	QIAN ZHOU	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

EB SR 88
SIGN SUMMARY

LOCATION: SR 88 - SUPERSTITION BLVD INTERSECTION

SHEET 5 OF 20

TRACS NO.

___ OF ___

NO.1 DESCRIPTION OF REVISION | DATE | MADE BY

NO.2 DESCRIPTION OF REVISION | DATE | MADE BY

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Plan Sht No.	Sign Number	Sign Code	Work: New	Work: Existing: Replace Panel	Work: Existing: Relocate Panel	Work: Existing: Modify Legend	Work: Existing: Remove	Work: Existing: To Remain	Offset (ft)	Mounting Height (ft)	Background Color	Panel: Legend	Panel: Width (in)	Panel: Height (in)	Panel: Area (sq. ft.)	Panel: Type	Panel: Bid Item Number	Ground Mounted: Foundations	Ground Mounted: Posts: Type	Ground Mounted: Posts: Total length (ft)	Ground Mounted: New Slipbases	Ground Mounted: Stringer: Type	Ground Mounted: Stringer: Total Length (ft)	Overhead: Structure Type	Overhead: #of Lights	Remarks
T-04.04	EB Sta. 113+80	M3-2					X					East					2020047									
	+	M1-5a(88)					X					SR 88														
T-04.04	EB Sta. 113+91(L)	R1-2	X						6	7	WH	YIELD	48	48	7.0	RWM	6080005	1	2 1/2T	11	1					Left Side
T-04.04	EB Sta. 114+00(R)	R1-2	X						3	7	WH	YIELD	48	48	7.0	RWM	6080005	1	2 1/2T	11	1					Right Side
T-04.04	EB Sta. 114+46	R6-1R	X						6	5	BK	ONE WAY (Right)	54	18	6.8	RWM	6080005	2	2 1/2T	20	2	P	8			
	+	R6-4b	X								WH	Roundabout Directional(4)	60	24	10.0	RWM	6080005									
T-04.04	EB Sta. 114+76	Guide	X						6	7	GR	E Superstition	66	30	13.8	F-DA	6080025	2	2 1/2S	23	2	P	10			
												Blvd Right Diagonal Arrow														
T-04.04	EB Sta. 115+65	M3-2	X						6	7	WH	East	24	12	2.0	RWM	6080005	1	2 1/2T	14	1					
	+	M1-5a(88)	X								WH	SR 88	24	24	4.0	RWM	6080005									
	+	M6-2R	X								WH	Diagonal Arrow	24	18	3.0	RWM	6080005									
T-04.04	EB Sta. 115+90	W11-2	X						3	7	YL/GR	Pedestrian Symbol	36	36	9.0	RWM	6080005	1	2 1/2T	12	1					
	+	W16-7P	X								YL/GR	Diagonal Down Left Arrow	30	18	3.8	RWM	6080005									
T-04.04	EB Sta. 116+97	GUIDE					X					Canyon Lake 14/Apache Lake 32/Roosevelt Lake 44					2020047									
T-04.04	EB Sta. 117+25	W4-2R	X						6	7	YL	Lane Ends	36	36	9.0	RWM	6080005	1	2 1/2T	12	1					
T-04.04	EB Sta. 117+41	M3-2					X					East					2020047									
	+	M1-5a(88)					X					SR 88														
T-04.04	EB Sta. 118+19	R2-1(50)					X					SPEED LIMIT 50					2020047									
T-04.06	EB Sta. 124+08	W8-18aAZ					X					FLASH FLOOD AREA					2020047									
	+	W16-104P					X					NEXT 8 / MILES														
T-04.06	EB Sta. 125+92	GUIDE	X						12	7	BR	Canyon Lake 14/Apache Lake 32/Roosevelt Lake 44	108	42	31.5	F-DA	6080025	2	2 1/2T	22	2	P	16			
T-04.06	EB Sta. 128+42	W8-18aAZ	X						12	7	YL	FLASH FLOOD AREA	36	36	9.0	RWM	6080005	1	2 1/2T	14	1					
	+	W16-104P	X								YL	NEXT 8 / MILES	36	18	4.5	RWM	6080005									
T-04.06	EB Sta. 130+92	R2-1(50)	X						12	7	WH	SPEED LIMIT 50	24	30	5.0	RWM	6080005	1	2 1/2S	12						

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.		91		

NOTES:
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PANEL TYPES:
RWM: Regulatory, Warning or Marker
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BACKGROUND COLORS:
RD = RED
BK = BLACK
BL = BLUE
GR = GREEN
YL = FLUORESCENT YELLOW
BR = BROWN
WH = WHITE
OR = ORANGE
YL/GR = FLUORESCENT YELLOW-GREEN

STRINGER TYPES:
P: Square-tube post
T: T-section (WT 3x6)

	NAME	DATE
DESIGN		
DRAWN	QIAN ZHOU	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

EB SR 88
SIGN SUMMARY

LOCATION: SR 88 - SUPERSTITION BLVD INTERSECTION

SHEET 6 OF 20

TRACS NO.

___ OF ___

DATE | MADE BY | NO.2 DESCRIPTION OF REVISION | DATE | MADE BY | NO.1 DESCRIPTION OF REVISION

12:18:27 PM 6/27/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\RoundAbout\T8308SSS02.dgn

Plan Sht No.	Sign Number	Sign Code	Work: New	Work: Existing: Replace Panel	Work: Existing: Relocate Panel	Work: Existing: Modify Legend	Work: Existing: Remove	Work: Existing: To Remain	Offset (ft)	Mounting Height (ft)	Background Color	Panel: Legend	Panel: Width (in)	Panel: Height (in)	Panel: Area (sq. ft.)	Panel: Type	Panel: Bid Item Number	Ground Mounted: Foundations	Ground Mounted: Posts: Type	Ground Mounted: Posts: Total length (ft)	Ground Mounted: New Slipbases	Ground Mounted: Stringer: Type	Ground Mounted: Stringer: Total Length (ft)	Overhead: Structure Type	Overhead: #of Lights	Remarks
T-04.06	WB Sta. 131+50	W3-5	X						12	7	YL	Speed Reduction 35	36	36	9.0	RWM	6080005	1	2 1/2T	12	1					
T-04.06	WB Sta. 129+00	R2-1 (35)	X						12	7	WH	SPEED LIMIT 35	36	48	12.0	RWM	6080005	1	2 1/2T	13	1					
T-04.06	WB Sta. 124+00	W2-6	X						12	7	YL	Roundabout	36	36	9.0	RWM	6080005	1	2 1/2T	14	1					
	+	W13-1P	X								YL	20 MPH	24	24	4.0	RWM	6080005									
T-04.06	WB Sta. 124+00	W3-5aAZ					X					SPEED REDUCED AHEAD					2020047									
T-04.06	WB Sta. 121+55	R4-7	X						Ctr	7	WH	Keep Right Symbol	24	30	5.0	RWM	6080005	1	2 1/2S	12						Center In Island
T-04.06	WB Sta. 120+30	W2-1					X					Cross Road					2020047									
	+	W16-8P					X					Superstition Blvd														
T-04.06	WB Sta. 120+04	GUIDE	X						12	7	GR	SR 88 Shield West	192	84	112.0	EXT	6080018	3	W6X12	48						
												East Superstition Blvd / Roundabout /														
												West Superstition Blvd														
T-04.04	WB Sta. 118+39	R3-8KQ	X							7	WH	Left-Straight Arrow Symbol /	36	30	7.5	RWM	6080005									Mount on Light Pole
												Straight-Right Arrow Symbol														
T-04.04	WB Sta. 118+19	R2-1 (40)					X					SPEED LIMIT 40					2020047									
T-04.04	WB Sta. 116+18	W11-2	X							7	YL/GR	Pedestrian Symbol	36	36	9.0	RWM	6080005									Mount on Light Pole
	+	W16-7P	X							7	YL/GR	Downward Diagonal	30	18	3.8	RWM	6080005									
T-04.04	WB Sta. 115+63(L)	R1-2	X						6	7	WH	YIELD	48	48	7.0	RWM	6080005	1	2 1/2T	11	1					Left Side
T-04.04	WB Sta. 115+50(R)	R1-2	X						3	7	WH	YIELD	48	48	7.0	RWM	6080005	1	2 1/2T	11	1					Right Side
T-04.04	WB Sta. 115+05	R6-1R	X						6	5	BK	ONE WAY (Right)	54	18	6.8	RWM	6080005	2	2 1/2T	20	2	P	8			
	+	R6-4b	X								WH	Roundabout Directional(4)	60	24	10.0	RWM	6080005									
T-04.04	WB Sta. 114+77	Guide	X						6	7	GR	W Superstition	66	30	13.8	F-DA	6080025	2	2 1/2S	23	2	P	10			
												Blvd Right Diagonal Arrow														
T-04.04	WB Sta. 113+95	M3-4	X						6	7	WH	West	24	12	2.0	RWM	6080005	1	2 1/2T	14	1					
	+	M1-5a(88)	X								WH	SR 88	24	24	4.0	RWM	6080005									
	+	M6-2R	X								WH	Diagonal Arrow	24	18	3.0	RWM	6080005									

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.		92		

DATE | MADE BY | NO.2 DESCRIPTION OF REVISION | NO.1 DESCRIPTION OF REVISION

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BR = BROWN
WH = WHITE
OR = ORANGE
YL/GR = FLUORESCENT YELLOW-GREEN

STRINGER TYPES:
P: Square-tube post
T: T-section (WT 3x6)

	NAME	DATE
DESIGN		
DRAWN	QIAN ZHOU	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

WB SR 88
SIGN SUMMARY

LOCATION: SR 88 - SUPERSTITION BLVD INTERSECTION

SHEET 7 OF 20

TRACS NO.

___ OF ___

12:23:22 PM 6/27/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\RoundAbout\T8308SSS03.dgn

Plan Sht No.	Sign Number	Sign Code	Work: New	Work: Existing: Replace Panel	Work: Existing: Relocate Panel	Work: Existing: Modify Legend	Work: Existing: Remove	Work: Existing: To Remain	Offset (ft)	Mounting Height (ft)	Background Color	Panel: Legend	Panel: Width (in)	Panel: Height (in)	Panel: Area (sq. ft.)	Panel: Type	Panel: Bid Item Number	Ground Mounted: Foundations	Ground Mounted: Posts: Type	Ground Mounted: Posts: Total length (ft)	Ground Mounted: New Slipbases	Ground Mounted: Stringer: Type	Ground Mounted: Stringer: Total Length (ft)	Overhead: Structure Type	Overhead: #of Lights	Remarks
T-04.04	WB Sta. 113+72	W11-2	X						3	7	YL/GR	Pedestrian Symbol	36	36	9.0	RWM	6080005	1	2 1/2T	12	1					
	+	W16-7P	X								YL/GR	Downward Diagonal	30	18	3.8	RWM	6080005										
T-04.04	WB Sta. 113+64	OM3-L					X					Object Marker					2020047										
T-04.04	WB Sta. 112+77	R5-104					X					LITTERING HIGHWAYS UNLAWFUL					2020047										
T-04.04	WB Sta. 111+72	R2-1(35)	X						12	7	WH	SPEED LIMIT 35	30	36	7.5	RWM	6080005	1	2 1/2S	12							
T-04.03	WB Sta. 108+58	R5-104	X						12	7	WH	LITTERING HIGHWAYS UNLAWFUL	48	36	12.0	RWM	6080005	2	2 1/2S	25	2						
T-04.03	WB Sta. 107+00	R1-1	X						12	7	RD	STOP	36	36	9.0	RWM	6080005	1	2 1/2T	12	1						Install on Cross Road
T-04.03	WB Sta. 106+07	W3-3					X					Signal Ahead					2020047										Removal of Electrical Items will be Reimbursed Under Item 2020057
T-04.03	WB Sta. 105+56	W3-3	X						12	7	YL	Signal Ahead	36	36	9.0	RWM	6080005	1	2 1/2T	14	1						
T-04.03	WB Sta. 104+74	R2-1(35)					X					SPEED LIMIT 35					2020047										
T-04.03	WB Sta. 103+48	M3-4	X						10	7	WH	West	24	12	2.0	RWM	6080005	1	2 1/2T	14	1						
	+	M1-5a(88)	X								WH	SR 88	24	24	4.0	RWM	6080005										
	+	M5-1L	X								WH	Advance Turn Arrow (Left)	24	18	3.0	RWM	6080005										
T-04.03	WB Sta. 103+30	Special					X					RIGHT TURN ONLY					2020047										
T-04.03	WB Sta. 102+08	Special					X					RIGHT TURN ONLY					2020047										
T-04.03	WB Sta. 101+35	R1-1	X				X		12	7	RD	STOP	36	36	9.0	RWM	6080005	1	2 1/2T	12	1						
T-04.03	WB Sta. 100+95	GUIDE					X					PHOENIX / Left Arrow					2020047										
	+	GUIDE					X					Up Arrow / BUSINESS / DISTRICT															
T-04.03	WB Sta. 100+80	GUIDE	X						10	7	GR	Up Arrow / Business / District	60	42	17.5	F-DA	6080025	2	2 1/2T	26	2	P	8				
												Left Arrow Phoenix															

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.		93		

DATE | MADE BY | NO.2 DESCRIPTION OF REVISION | NO.1 DESCRIPTION OF REVISION

NOTES:

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YL/GR = FLUORESCENT YELLOW-GREEN

STRINGER TYPES:
P: Square-tube post
T: T-section (WT 3x6)

	NAME	DATE
DESIGN		
DRAWN	QIAN ZHOU	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

WB SR 88
SIGN SUMMARY

LOCATION
SR 88 - SUPERSTITION BLVD INTERSECTION

SHEET 8 OF 20

TRACS NO.

___ OF ___

12:28:48 PM 6/27/2019 V:\Traffic\Dev\tr_dev\english_stds\Traffic CADD Standards May2019\RoundAbout\T8308SSS04.dgn

Plan Sht No.	Sign Number	Sign Code	Work: New	Work: Existing: Replace Panel	Work: Existing: Relocate Panel	Work: Existing: Modify Legend	Work: Existing: Remove	Work: Existing: To Remain	Offset (ft)	Mounting Height (ft)	Background Color	Panel: Legend	Panel: Width (in)	Panel: Height (in)	Panel: Area (sq. ft.)	Panel: Type	Panel: Bid Item Number	Ground Mounted: Foundations	Ground Mounted: Posts: Type	Ground Mounted: Posts: Total length (ft)	Ground Mounted: New Slipbases	Ground Mounted: Stringer: Type	Ground Mounted: Stringer: Total Length (ft)	Overhead: Structure Type	Overhead: #of Lights	Remarks
T-04.04	EB Sta. 2+08	W4-2R	X						12	7	YL	Lane Ends	36	36	9.0	RWM	6080005	1	2 1/2T	12	1					
T-04.04	EB Sta. 5+61	W4-2R					X					Lane Ends					2020047									
T-04.04	EB Sta. 7+58	W2-6	X						12	7	YL	Roundabout	36	36	9.0	RWM	6080005	1	2 1/2T	14	1					
	+	W13-1P (20)	X								YL	20 MPH	24	24	4.0	RWM	6080005									
T-04.04	EB Sta. 9+58	GUIDE	X						12	7	GR	E Superstition Blvd East SR88/RA Arrow/West SR88	132	72	66.0	EXT	6080018	2	W6x12	30						
T-04.04	EB Sta. 11+60	R4-7	X						Ctr	7	WH	Keep Right Symbol	24	30	5.0	RWM	6080005	1	2 1/2S	12						
T-04.04	EB Sta. 12+35	W11-2	X							7	YL/GR	Pedestrian Symbol	36	36	9.0	RWM	6080005									Mount on Light Pole
	+	W16-7P	X								YL/GR	Downward Diagonal Arrow	30	18	3.8	RWM	6080005									
T-04.04	EB Sta. 12+87	R1-1					X					STOP					2020047									
	+	Special					X					SR 88 Shield TRAFFIC / DOES NOT STOP														
T-04.04	EB Sta. 12+96(L)	R1-2	X						6	7	WH	YIELD	48	48	7.0	RWM	6080005	1	2 1/2T	11	1					Left Side
T-04.04	EB Sta. 12+98(R)	R1-2	X						3	7	WH	YIELD	48	48	7.0	RWM	6080005	1	2 1/2T	11	1					Right Side
T-04.04	EB Sta. 13+62	R6-1R	X						6	5	BK	ONE WAY (Right)	54	18	6.8	RWM	6080005	2	2 1/2T	20	2	P	8			
	+	R6-4b	X								WH	Roundabout Directional (4)	60	24	10.0	RWM	6080005									
T-04.04	EB Sta. 14+97	W11-2	X						3	7	YL/GR	Pedestrian Symbol	36	36	9.0	RWM	6080005	1	2 1/2T	12	1					
	+	W16-7P	X								YL/GR	Downward Diagonal Arrow	30	18	3.8	RWM	6080005									
T-04.04	EB Sta. 20+28	W14-1						X				DEAD END														
	+	D3-1						X				SUPERSTITION BLVD														
	+	D3-1						X				COLT RD														
	+	R1-1						X				STOP														
T-04.04	EB Sta. 20+66	R2-1 (35)	X				X		12	7	WH	SPEED LIMIT 35	24	30	5	RWM	6080005	1	2 1/2S	12						

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.		94		

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STRINGER TYPES:
P: Square-tube post
T: T-section (WT 3x6)

	NAME	DATE
DESIGN		
DRAWN	QIAN ZHOU	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

EB SUPERSTITION BLVD
SIGN SUMMARY

LOCATION: SR 88 - SUPERSTITION BLVD INTERSECTION

SHEET 9 OF 20

TRACS NO.

___ OF ___

DATE | MADE BY | NO.2 DESCRIPTION OF REVISION | DATE | MADE BY | NO.1 DESCRIPTION OF REVISION

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.		95		

Plan Sht No.	Sign Number	Sign Code	Work: New	Work: Existing: Replace Panel	Work: Existing: Relocate Panel	Work: Existing: Modify Legend	Work: Existing: Remove	Work: Existing: To Remain	Offset (ft)	Mounting Height (ft)	Background Color	Panel: Legend	Panel: Width (in)	Panel: Height (in)	Panel: Area (sq. ft.)	Panel: Type	Panel: Bid Item Number	Ground Mounted: Foundations	Ground Mounted: Posts: Type	Ground Mounted: Posts: Total length (ft)	Ground Mounted: New Slipbases	Ground Mounted: Stringer: Type	Ground Mounted: Stringer: Total Length (ft)	Overhead: Structure Type	Overhead: #of Lights	Remarks
T-04.04	WB Sta. 20+61	W2-6	X						12	7	YL	Roundabout	36	36	9.0	RWM	6080005	1	2 1/2T	14	1					
	+	W13-1P (20)	X								YL	20 MPH	24	24	4.0	RWM	6080005										
T-04.04	WB Sta. 18+63	GUIDE	X						12	7	GR	W Superstition Blvd West SR88/RA Arrow/East SR88	132	72	66.0	EXT	6080018	2	W6x12	30							
T-04.04	WB Sta. 17+40	R4-7	X						Ctr	7	WH	Keep Right Symbol	24	30	5.0	RWM	6080005	1	2 1/2S	12							
T-04.04	WB Sta. 15+51	W11-2	X							7	YL/GR	Pedestrian Symbol	36	36	9.0	RWM	6080005									Mount on Light Pole	
	+	W16-7P	X								YL/GR	Downward Diagonal Arrow	30	18	3.8	RWM	6080005										
T-04.04	WB Sta. 14+94(R)	R2-1	X						3	7	WH	YIELD	48	48	7.0	RWM	6080005	1	2 1/2T	11	1					Left Side	
T-04.04	WB Sta. 14+90(L)	R2-1	X						6	7	WH	YIELD	48	48	7.0	RWM	6080005	1	2 1/2T	11	1					Right Side	
T-04.04	WB Sta. 14+83	R1-1					X					STOP					2020047										
	+	Special					X					SR 88 Shield TRAFFIC / DOES NOT STOP															
T-04.04	WB Sta. 14+18	R6-1R	X						6	5	BK	ONE WAY (Right)	54	18	6.8	RWM	6080005	2	2 1/2T	20	2	P	8			
	+	R6-4b	X								WH	Roundabout Directional (4)	60	24	10.0	RWM	6080005										
T-04.04	WB Sta. 12+86	W11-2	X							7	YL/GR	Pedestrian Symbol	36	36	9.0	RWM	6080005									Mount on Light Pole	
	+	W16-7P	X								YL/GR	Downward Diagonal Arrow	30	18	3.8	RWM	6080005										
T-04.04	WB Sta. 12+00	R2-1 (35)					X					SPEED LIMIT 35					2020047										
T-04.04	WB Sta. 10+68	R1-1	X						12	7	RD	STOP	36	36	9.0	RWM	6080005	1	2 1/2T	12	1						
T-04.04	WB Sta. 10+07	R2-1 (35)	X						12	7	WH	SPEED LIMIT 35	30	36	7.5	RWM	6080005	1	2 1/2S	12							

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	NAME	DATE
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DRAWN	QIAN ZHOU	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

WB SUPERSTITION BLVD SIGN SUMMARY

LOCATION: SR 88 - SUPERSTITION BLVD INTERSECTION

TRACS NO.

SHEET 10 OF 20

___ OF ___

DATE | MADE BY | NO.2 DESCRIPTION OF REVISION | DATE | MADE BY | NO.1 DESCRIPTION OF REVISION

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

PAVEMENT MARKING NOTES:

1. It is the contractor's responsibility to ensure that the final surface course is placed so that the striping is offset one foot clear of the construction joint, unless otherwise directed by the Engineer.

2. The contractor shall be responsible for the layout and installation of pavement markings on the final surface course following points that have been set no more than 50 feet apart on the alignment of the yellow striping.

3. The dimensions shown to pavement striping are to the center of the striping or, in the case of double striping, to the center of the double striping.

4. Three working days prior to final striping layout, the contractor shall contact Phoenix Regional Signing and Striping Section at (602) 291-1318, Marcos Espinosa, to coordinate the layout inspection.

5. At the completion of the final pavement surface each day, center lines, lane lines, edge lines, stop bars, crosswalk lines and pavement arrows shall be striped with one application of standard reflectorized traffic paint at the locations of the permanent striping. The paint shall have a minimum thickness of 15 mils wet. All painted striping shall be 4 inches wide. However, each painted stop bar and each solid white lane line and crosswalk line striping shall be at least 12 inches wide.

6. The final striping shall be 90 mil (0.090 inch) thick alkyd extruded thermoplastic reflectorized striping placed over the existing striping a minimum of 30 calendar days after the initial striping, as directed by the Engineer. All other markings shall be applied at the same time.

7. All final stop bars, pavement arrows, legends, and crosswalk lines shall be white 90 mil (0.090 inch) thick alkyd extruded thermoplastic reflectorized markings, except as otherwise indicated on the pavement marking plans.

8. All raised pavement markers shall have an abrasion resistant coating on the face of the prismatic reflectors, and shall conform to the details of Std. Dwg. M-19. They shall be installed with a bituminous adhesive which is on the ADOT Approved Products List or an approved equal.

9. All raised pavement markers shall be installed so that the reflective face of each marker is facing the direction of traffic and is perpendicular to the direction of traffic flow.

10. Where raised pavement markers are placed between double yellow striping, they shall be centered in the 6 inch gap between the lines. For broken striping, the markers shall be placed to align with the broken striping. For solid striping, the markers shall be offset 2 inches from the nearest edge of the striping on the side of the through lane.

11. The contractor shall paint the end of the raised "medians and islands" in accordance with the project plans and Std. Dwg. M-1.

12. The contractor shall clean the roadway surface to the satisfaction of the Engineer, by sweeping and air-jet blowing, immediately prior to the placement of all pavement markings. The roadway surface shall be dry and the air and pavement temperatures shall not be less than 55°F for the placement of thermoplastic striping.

13. When stripe obliteration is necessary, it shall be accomplished by approved methods. Painting over striping, removal of pavement, and overlaying pavement do not constitute stripe obliteration.

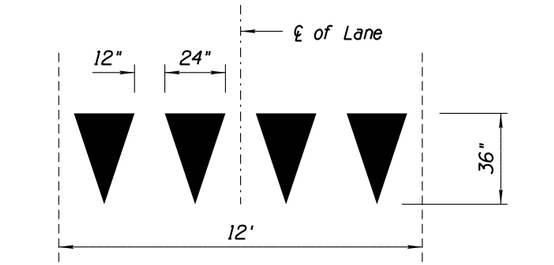
14. The pavement marking drawings are schematic only and not to scale. The contractor shall follow all dimensions and details when installing pavement markings.

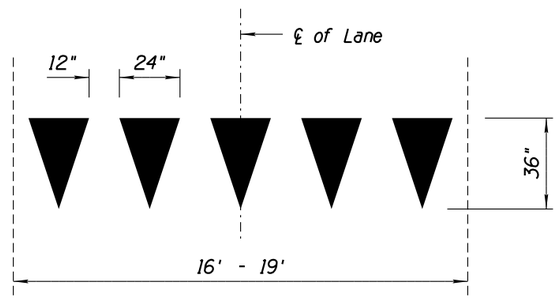
15. The contractor shall preserve all roadway sign panels, sign posts, object markers and milepost markers. The contractor shall replace any signing, object markers and milepost markers damaged as a result of the construction at the contractor's expense, except as otherwise shown on the plans.

16. The contractor shall remove the existing pavement markers on SR 88 and Superstition Blvd. in conjunction with the construction operations. There shall be no measurement or payment for the removal of the existing pavement markers.

17. All gaps in striping begin at the return radius of the perpendicular cross street except where otherwise noted.

18. The Engineer may modify the pavement marking plans.





DETAIL X

White Yield Line
See 2009 MUTCD
Figure 3B-16

APPROXIMATE PAVEMENT MARKING QUANTITIES

ITEM NO	ITEM		UNIT	TOTAL
7040005	Permanent Pavement Marking 90 Mil Extruded Thermoplastic (4" Equivalent)	6" White	LF	9,073
7040006		6" Yellow	LF	14,294
7040072	White 90 Mil Alkyd Extruded Thermoplastic Pavement Marking	Transverse (4" Equivalent)	LF	6,774
7040073		Pavement Legend	Each	5
7040074		Pavement Symbol - Arrow	Each	28
7060015	Raised Pavement Markers	Type D	Each	224
7060018		Type G	Each	234
7080001	Standard Reflectorized Traffic Paint	4" White	LF	9,833
7080011		4" Yellow	LF	14,294
7080121		Pavement Symbol - Arrow	Each	28
7080301		Painted Bull Nose	Each	12

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION
DESIGN			
DRAWN	LARRY LOPEZ	6/19	
CHECKED			PAVEMENT MARKING NOTES AND QUANTITIES
TEAM LEADER			
LOCATION	SR 88 - SUPERSTITION BLVD INTERSECTION		SHEET 11 OF 20
TRACS NO.			___ OF ___

NO.2 DESCRIPTION OF REVISION | DATE | MADE BY
NO.1 DESCRIPTION OF REVISION | DATE | MADE BY

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			

WB Sta 100+80 NEW
Business District
Phoenix

WB Sta 100+95
PHOENIX
BUSINESS DISTRICT
REMOVE Existing

REMOVE Existing
STOP
Sta 101+35 NEW

Existing Overhead Sign Structure

Sta 100+00
See Sheet T-04.02

PC 102+08.21

WB Sta 102+08
WB Sta 103+30
RIGHT TURN ONLY
REMOVE Existing

WB Sta 103+48 NEW
WEST
88

WB Sta 104+74
SPEED LIMIT 35
REMOVE Existing

WB Sta 105+56 NEW
PT 105+24.45

WB Sta 106+07
REMOVE Existing

6" Yellow 10' Stripe
30' Space with Type D Raised Pavement Markers @ 40' Spacing

STOP
Sta 107+00 NEW

6" White 10' Stripe
30' Space with Type G Raised Pavement Markers @ 40' Spacing

WB Sta 108+58 NEW
LITTERING HIGHWAYS UNLAWFUL

Sta 109+00

EB Sta 109+07 NEW
REMOVE Existing
Superstition Blvd

EB Sta 109+63

MATCHLINE STA 111+00

16' 12' 12' 12' 16'

N49°24'05"E

SR 88

N69°32'02"E

EB Sta 99+13 NEW
SPEED LIMIT 35
Pole Mounted

REMOVE Existing

EB Sta 100+75

EB Sta 101+75 NEW
OVER 40 FEET 23 MILES AHEAD
WEIGHT LIMIT 10 TONS

EB Sta 102+24
SPEED LIMIT 40
REMOVE Existing

EB Sta 102+58
REMOVE Existing
OVER 40 FEET 23 MILES AHEAD
WEIGHT LIMIT 10 TONS

EB Sta 104+25
HIGHWAY 88 CLOSED BEYOND TORTILLA FLAT

EB Sta 104+74
RELOCATED Sta 104+25 EB 104+74 From
RELOCATE Existing
HIGHWAY 88 CLOSED BEYOND TORTILLA FLAT

EB Sta 106+75 NEW
20 MPH

Paint Bull Nose Yellow with 6 Type D RPM's (See Std Dwg M-1)

6" Yellow

EB Sta 109+25 NEW
West Superstition Blvd
88 EAST
East Superstition Blvd

PC 108+16.42

	NAME	DATE
DESIGN		
DRAWN	O.Z. L.L.	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

PAVEMENT MARKING AND SIGNING PLAN

LOCATION
SR 88 - SUPERSTITION BLVD INTERSECTION

SHEET 12 OF 20

TRACS NO.

___ OF ___

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
1			
2			

MATCHLINE STA 6+60

EB Sta 2+08 NEW

REMOVE Existing EB Sta 5+61

WB Sta 12+00

SPEED LIMIT 35 REMOVE Existing

MATCHLINE STA 6+60

WB Sta 10+07 NEW

SPEED LIMIT 35

STOP Sta 10+68 NEW

EB Sta 11+60 NEW

W Superstition Blvd WB Sta 11+77 NEW

Light Pole Mounted WB Sta 12+86 WB Sta 116+18 NEW

REMOVE Existing WB Sta 118+19

MATCHLINE STA 120+00

Light Pole Mounted WB Sta 118+39 NEW

EB Sta 117+25 NEW

SR 88

EB Sta 118+19 SPEED LIMIT 50 REMOVE Existing

EB Sta 117+41 EAST 88 REMOVE Existing

Canyon Lake Apache Lake Roosevelt Lake 143244 REMOVE Existing EB Sta 116+97

WB Sta 18+63 NEW

W Superstition Blvd EAST 88 WEST 88

WB Sta 20+61 NEW

20 MPH

WB Sta 14+83

STOP SR 88 TRAFFIC DOES NOT STOP REMOVE Existing

WB Sta 14+90(L) WB Sta 14+94(R) NEW

YIELD

EB Sta 115+90 WB Sta 15+51 NEW

Light Pole Mounted

WB Sta 115+63(L) WB Sta 115+50(R) NEW

YIELD

SUPERSTITION BLVD

Light Pole Mounted

EB Sta 12+35 NEW

WB Sta 113+64 REMOVE Existing

LITTERING HIGHWAYS UNLAWFUL REMOVE Existing

EB Sta 12+87

REMOVE Existing SR 88 TRAFFIC DOES NOT STOP STOP

WB Sta 112+77

EB Sta 12+96(L) EB Sta 12+98(R) NEW

YIELD

EB Sta 113+30 REMOVE Existing

EB Sta 113+80 EAST 88 REMOVE Existing

WB Sta 113+72 NEW

EB Sta 7+58 NEW

20 MPH

E Superstition Blvd EAST 88 WEST 88

EB Sta 9+58 NEW

MATCHLINE STA 111+00

SR 88

EB Sta 111+14 NEW

SPEED LIMIT 35 WB Sta 111+72 NEW

Light Pole Mounted

EB Sta 113+91(L) EB Sta 114+00(R) NEW

YIELD

WB Sta 113+95 NEW

WEST 88 Arizona

EB Sta 114+46 WB Sta 14+18 WB Sta 115+05 EB Sta 13+62 NEW

ONE WAY

EB Sta 113+38 EB Sta 14+97 NEW

EB Sta 114+76 NEW

E Superstition Blvd

EB Sta 115+65 NEW

EAST 88 Arizona

WB Sta 17+40 NEW

EB Sta 20+28

DEAD END SUPERSTITION BLVD COLT RD STOP

Existing to REMAIN

EB Sta 20+66 NEW

REMOVE Existing SPEED LIMIT 35

N

NOTE:

See T-04.05 for Pavement Marking Plan.

	NAME	DATE
DESIGN		
DRAWN	O.Z. L.L.	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

SIGNING PLAN
STA 111+00 TO STA 120+00

LOCATION
SR 88 - SUPERSTITION BLVD INTERSECTION

TRACS NO.

SHEET 13 OF 20

___ OF ___

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9	ARIZ.		100		

MADE BY | DATE | NO.2 DESCRIPTION OF REVISION | DATE | MADE BY | NO.1 DESCRIPTION OF REVISION

MATCHLINE STA 6+60

263' ±
Limits of Striping Obliteration

SUPERSTITION BLVD

Sta 3+60 Begin Stripe Obliteration

Sta 6+23 End Stripe Obliteration

6" Yellow 6" White

6" White 6" Yellow

Paint Bull Nose White with 5 Type G RPM's (See Std Dwg M-1)

MATCHLINE STA 120+00

6" White 10' Stripe 30' Space with Type G Raised Pavement Markers @ 40' Spacing

6" Yellow

White Lane Drop Arrow See Std Dwg M-10

Sta 118+38

Sta 118+00

Pavement Markings See Std Dwg M-10

SR 88

6" White

Sta 116+26

12" White

Pavement Markings See Std Dwg M-10

Sta 17+40

6" White 2' Stripe 4' Space

18" White 3' Stripe 3' Space

Paint Bull Nose White with 5 Type G RPM's (See Std Dwg M-1)

4" Double Yellow with Type D Raised Pavement Markers @ 20' Spacing

Paint Bull Nose Yellow with 4 Type D RPM's (See Std Dwg M-1)

Sta 19+72

PT 20+29.82

4" White 2' from Roadway Edge

4" Double Yellow with Type D Raised Pavement Markers @ 40' Spacing

Sta 21+94 Match Existing End Edge Line Taper

N89°36'43"E

4" Yellow 10' Stripe 30' Space with Type D Raised Pavement Markers @ 40' Spacing

Sta 7+05

Sta 6+60 Match Existing Striping

4" White 10' Stripe 30' Space with Type G Raised Pavement Markers @ 40' Spacing

Paint Bull Nose Yellow with 4 Type D RPM's (See Std Dwg M-1)

Sta 10+05

Sta 11+81

4" Yellow

12" White

24"x36" Yield Line, See Detail X

Pavement Markings See Std Dwg M-10

18" White 3' Stripe 3' Space

6" White 2' Stripe 4' Space

PC 11+69.09

PRC 16+33.01

Sta 17+66

Sta 113+27

Sta 113+23

6" White 10' Stripe 30' Space with Type G Raised Pavement Markers @ 40' Spacing

6" Yellow

Paint Bull Nose White with 5 Type G RPM's (See Std Dwg M-1)

MATCHLINE STA 111+00

SR 88

Sta 111+62

NOTE:

All crosswalk pavement markings are 12" White, 10' width measured from the center of the stripe.

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

PAVEMENT MARKING PLAN
STA 111+00 TO STA 120+00

LOCATION
SR 88 - SUPERSTITION BLVD INTERSECTION

SHEET 14 OF 20

TRACS NO.

____ OF ____

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.		101		

NO.	DESCRIPTION OF REVISION	MADE BY	DATE
NO.1			
NO.2			

WB Sta 120+04 NEW

WEST 88

West Superstition Blvd

East Superstition Blvd

120 121 122 123 124 125 126

WB Sta 121+55 NEW

WB Sta 124+00 NEW

20 MPH

PC 124+00.73

WB Sta 124+00

SPEED REDUCED AHEAD

REMOVE Existing

6" White 10' Stripe 30' Space with Type G Raised Pavement Markers @ 40' Spacing

6" Yellow

Paint Bull Nose Yellow with 7 Type D RPM's (See Std Dwg M-1)

MATCHLINE STA 120+00

16' 12' 2' 2' 28' 2' 2'

Sta 123+63 End Double Yellow Taper

6" Double Yellow with Type D Raised Pavement Markers @ 40' Spacing

PT 126+76.00

White Lane Drop Arrow See Std Dwg M-10

Sta 120+55±

Sta 121+55 Begin Edge Line and Double Yellow Taper

6" White

6" Double Yellow with Type D Raised Pavement Markers @ 20' Spacing

SR 88

N66°55'48"E

PT 121+55.30

WB Sta 120+30

Superstition Blvd

REMOVE Existing

Sta 123+95 End Edge Line Taper

Sta 126+75 Match Existing Striping

REMOVE Existing

NEXT 8 MILES

FLASH FLOOD AREA

EB Sta 124+08

Canyon Lake 14
Apache Lake 32
Roosevelt Lake 44

EB Sta 125+92 NEW

WB Sta 129+00 NEW

SPEED LIMIT 35

WB Sta 131+50 NEW

SPEED LIMIT 35

NEXT 8 MILES

FLASH FLOOD AREA

EB Sta 128+42 NEW

SPEED LIMIT 50

EB Sta 130+92 NEW

	NAME	DATE
DESIGN		
DRAWN	O.Z. L.L.	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

PAVEMENT MARKING AND SIGNING PLAN
STA 120+00 TO STA 126+75

LOCATION
SR 88 - SUPERSTITION BLVD INTERSECTION

SHEET 15 OF 20

TRACS NO.

___ OF ___

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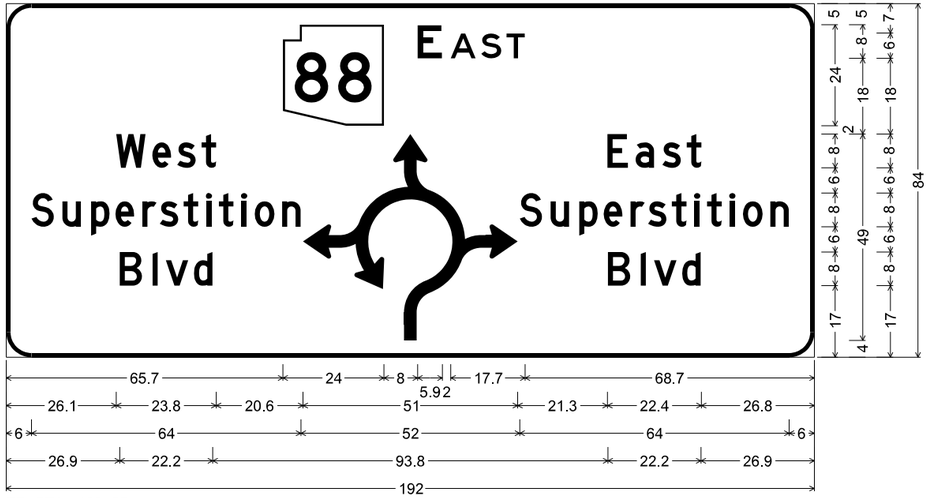
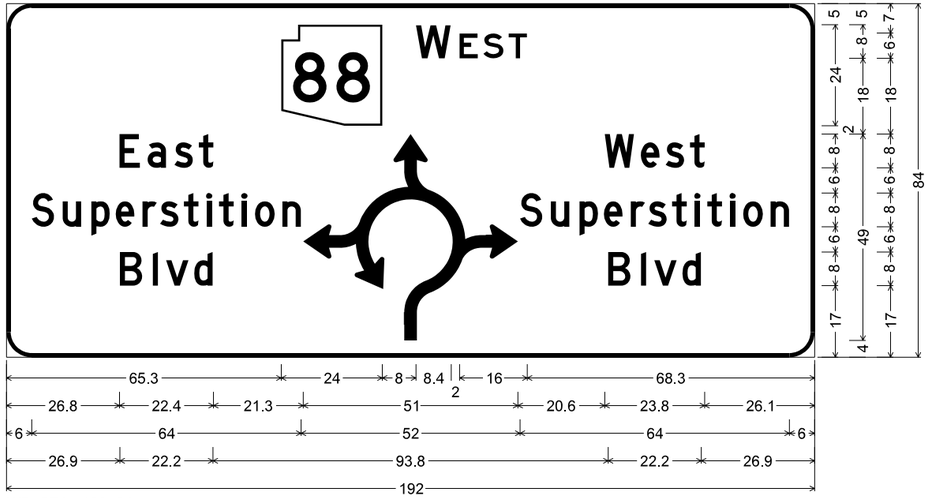
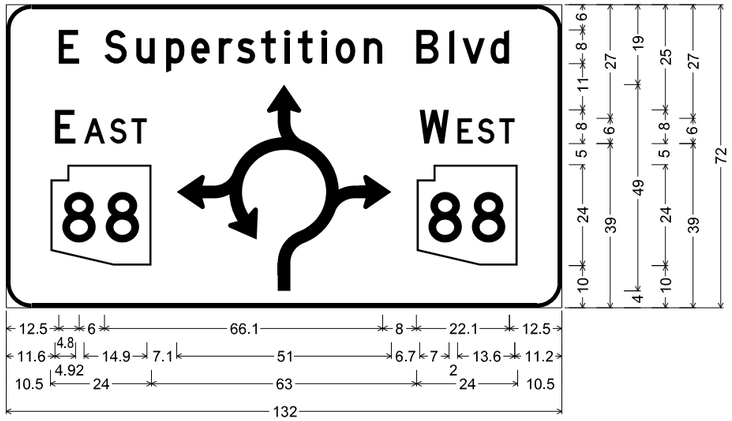


EB STA. 109+25;
6.0" Radius, 1.0" Border, White on Green;
State Highway 88 M1-5c; [E AST] E [ ] D; [West] D; [Superstition] D 90% spacing; [Blvd] D;
Roundabout Graphic 3; [East] D; [Superstition] D 90% spacing; [Blvd] D;

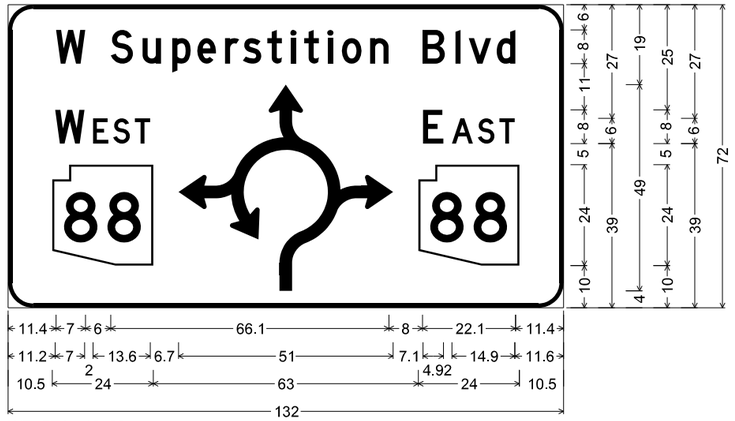


WB STA. 120+04;
6.0" Radius, 1.0" Border, White on Green;
State Highway 88 M1-5c; [W] E [ ] D [EST] E [ ] D; [East] D; [Superstition] D 90% spacing; [Blvd] D;
Roundabout Graphic 3; [West] D; [Superstition] D 90% spacing; [Blvd] D;

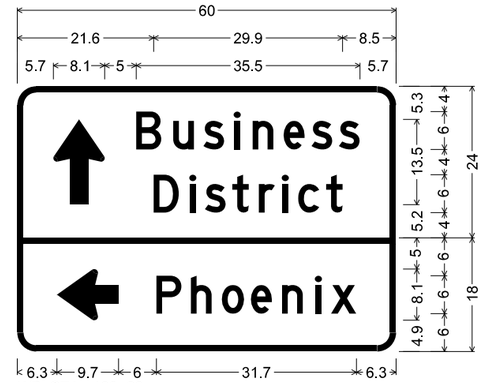
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				



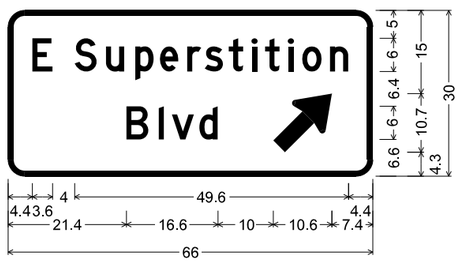
EB STA. 9+58;
6.0" Radius, 1.0" Border, White on Green;
[E Superstition Blvd] D; [E AST] D; State Highway 88 M1-5c;
Roundabout Graphic 3; [W EST] D; State Highway 88 M1-5c;



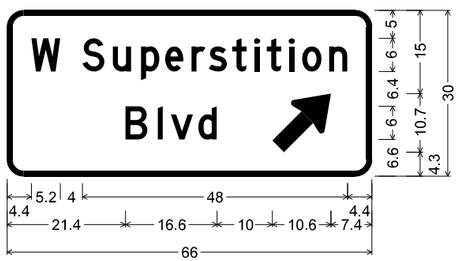
WB STA. 18+63;
6.0" Radius, 1.0" Border, White on Green;
[W Superstition Blvd] D; [W EST] D; State Highway 88 M1-5c;
Roundabout Graphic 3; [E AST] D; State Highway 88 M1-5c;



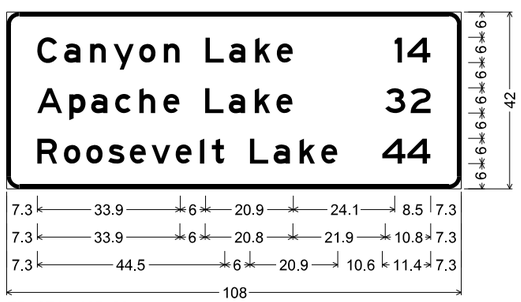
WB STA. 100+80;
3.0" Radius, 1.0" Border, White on Green;
Arrow 6" Type D2 - 13.5" 90°; [Business] D;
[District] D;
Identifier : D1-1 (conventional road - 2 line)◇;
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.8" X 8.1" 180°;
[Phoenix] D;



EB STA. 114+76
3.0" Radius, 1.0" Border, White on Green;
[E] D; [Superstition] D; [Blvd] D;
Standard Arrow Custom 13.5" X 8.1" 45°;



WB STA. 114+77
3.0" Radius, 1.0" Border, White on Green;
[W] D; [Superstition] D 90% spacing;
[Blvd] D;
Standard Arrow Custom 13.5" X 8.1" 45°;



EB STA. 125+92;
3.0" Radius, 1.0" Border, White on Brown;
[Canyon Lake] E; [14] E; [Apache Lake] E; [32] E;
[Roosevelt Lake] E; [44] E;

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

SIGN FORMATS

LOCATION
SR 88 - SUPERSTITION BLVD INTERSECTION

SHEET 16 OF 20

TRACS NO.

___ OF ___

NO.1 DESCRIPTION OF REVISION | DATE | MADE BY
NO.2 DESCRIPTION OF REVISION | DATE | MADE BY

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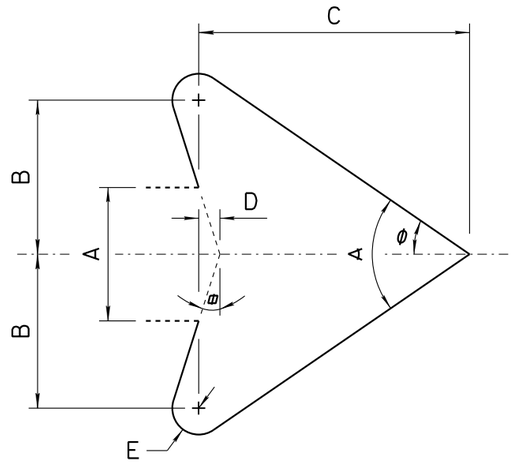
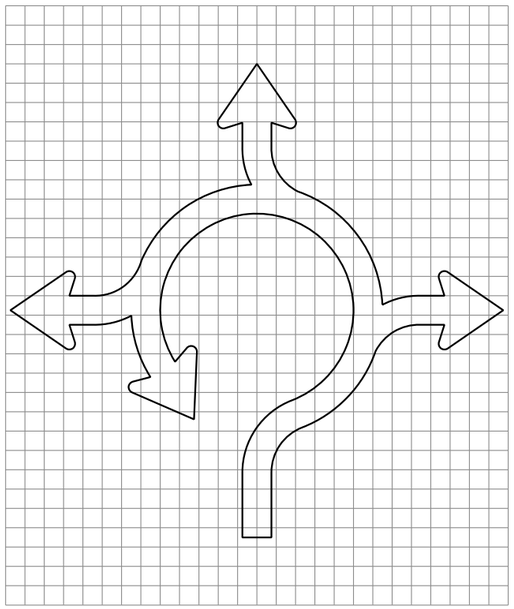
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

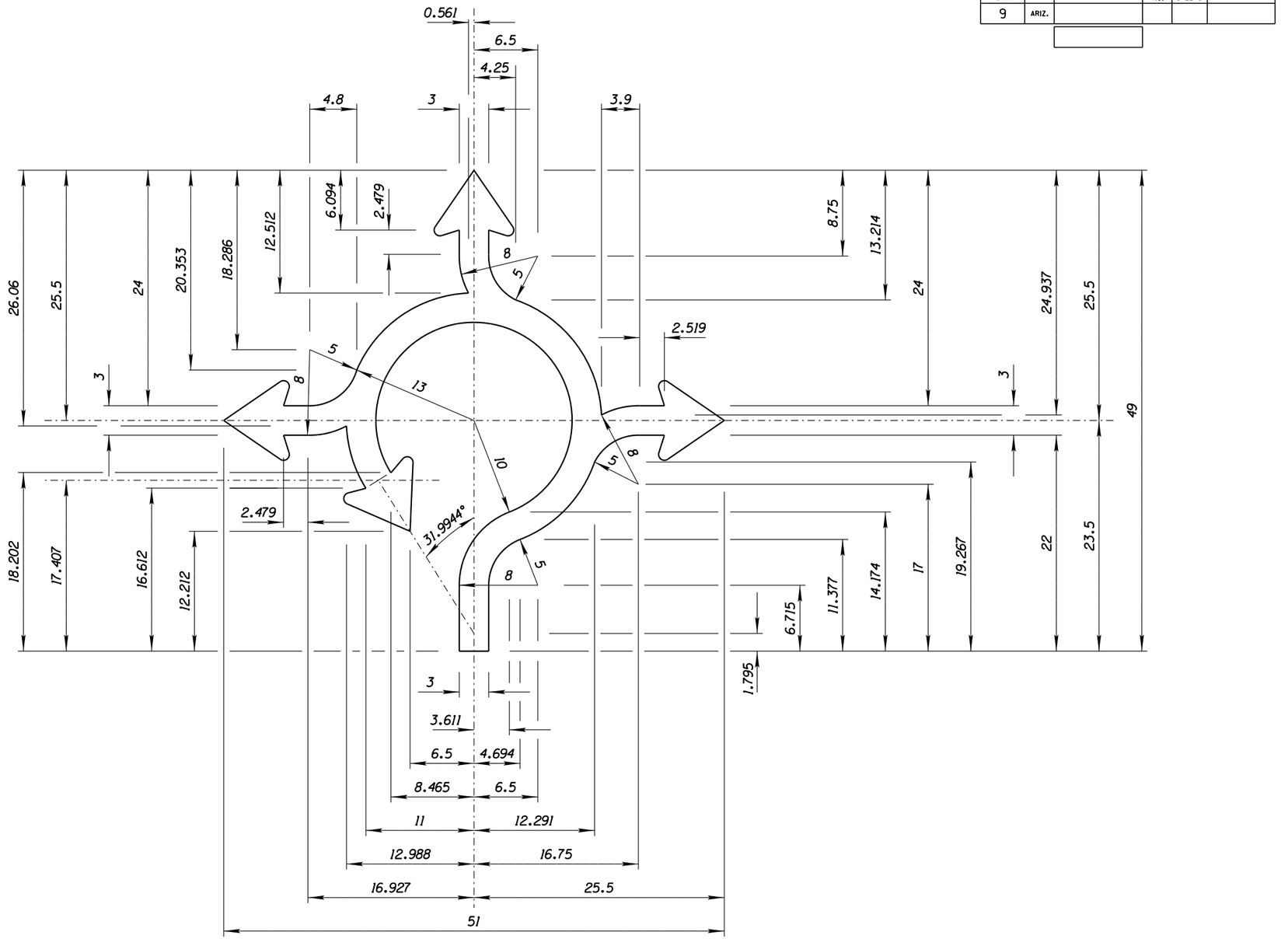
ADOT STANDARD ARROW HEAD DETAILS



A = Arrow Shaft Stroke Width
B = 1.15 x A
C = 2.025 x A
D = 0.16169 x A
E = 0.2 x A
θ = 17.92°
ϕ = 34.519°
∢ = 69.038°



ARROW DETAILS
White Arrow
1 Unit = 2"



ROUNDABOUT ARROW DETAIL (3" STROKE)

All Dimensions are in Inches

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION
DESIGN			
DRAWN	LARRY LOPEZ	6/19	
CHECKED			ROUNDABOUT ARROW DETAIL
TEAM LEADER			
LOCATION	SR 88 - SUPERSTITION BLVD INTERSECTION		SHEET 17 OF 20
TRACS NO.			___ OF ___

NO.1 DESCRIPTION OF REVISION | MADE BY | DATE | NO.2 DESCRIPTION OF REVISION | MADE BY | DATE

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

GENERAL NOTES FOR ROADWAY LIGHTING:

1. The location of utilities, including existing roadway lighting features (poles, luminaires, pull boxes and conduit) are approximate. The contractor shall be responsible, per section 730-6 of the ADOT Standard Specifications, for contacting all utilities (including ADOT) for exact locations prior to any construction activity. The contractor is responsible for maintaining proper clearances as required by the utility company.

2. Each luminaire shall be individually fused with in-line connectors in the nearest adjacent pull box per ADOT Std. Dwg. T.S. 1-4.

3. The contractor shall verify the actual location of the electrical service with the SRP prior to trenching and installing 2.5" Schedule 40 PVC conduit (maximum 2 feet from service point). Contractor shall coordinate with SRP for inspection of conduit before trench is backfilled. Contractor shall coordinate with SRP when the system is ready to be energized, SRP will install conductors and meter.

4. The contractor shall obtain maintenance unit numbers from ADOT Traffic Operations. Contact Bill Major (602) 712-6793. Maintenance unit numbers shall be affixed to the Pole facing the roadway as shown in Detail A.

5. All type "G" poles and mast arms shall be aluminum type "G" poles per ADOT Standard Drawing T.S. 4-5 and T.S. 4-27.

6. Breakaway bases for type "G" poles shall be type 2 breakaway bases per ADOT Standard Drawing T.S. 5-1.

7. When using breakaway bases, in-line unfused connectors are used in the breakaway base in conjunction with in-line connector clamps per ADOT Standard Drawings T.S. 5-0 and T.S. 5-1.

8. All work shall conform to the Arizona Department of Transportation (ADOT) Standard Specifications for Road and Bridge Construction 2008, 2012 Standard Drawings for Traffic Signals and Lighting, and the Special Provisions.

9. Contractor shall coordinate the construction work requirements of the lighting plans with the construction work requirements of the total project plan set(s). Contractor's work shall be installed in a timely and coordinated basis with the other contractors working within the project limits.

10. The plans show the general path and location of the conduit in relation to major physical features. The locations of other utilities and other objects along the conduit path may not be shown in the plans but shall be identified by the contractor as the conduit route is marked just prior to installation. The information on the drawings concerning the type and location of existing underground and overhead utilities is approximate and has not been independently verified by the Engineer or the Engineer's agent. The contractor shall determine the exact location of all existing utilities and shall be fully responsible for any and all damages which might result from the contractor's failure to locate and preserve any and all underground and overhead utilities. Repairing utility facilities damaged by the contractor shall be replaced in kind at no additional cost to the Department.

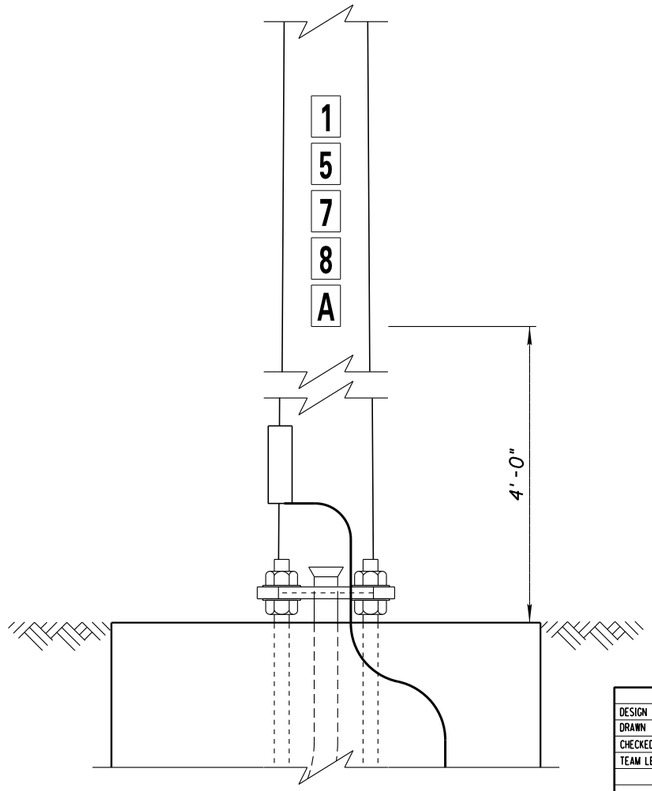
11. The contractor shall place warning tape in all trenches in which new conduit is placed per section 732-2.02 and 732-3.02 in the 2008 Arizona Standard Specifications for Road and Bridge Construction. The cost of the warning tape and installation shall be included in the cost of the conduit and not paid for separately.

12. The contractor shall perform a ground resistance test for each installed ground rod and each pole foundation grounding coil in accordance with subsection 732-3.03. All test results shall be documented and submitted to the Engineer.

13. All new pole foundations shall be inspected by the traffic signal inspector prior to placement of concrete. Placement of all poles shall provide 10 feet minimum clearance from poles/arms/fixtures and all features to any electrical high voltage power lines. Top of foundation shall match the finished surrounding grade.

ROADWAY LIGHTING POLE AND LUMINAIRE QUANTITIES

ITEM NUMBER	ITEM	UNIT	TOTAL
7310190	Pole (Type G) (Aluminum)	Each	16
7310197	Braeakaway Base for Lighting Pole or Signal Flasher	Each	16
7310371	Pole Foundation (Type G) (Aluminum Breakaway Base)	Each	16
7310650	Mast Arm (10 Ft) (Aluminum)	Each	16
7320050	Electrical Conduit (2") (PVC)	LF	1,950
7320410	Pull Box (No. 5)	Each	16
7320420	Pull Box (No. 7)	Each	1
7320500	Conductor (No. 12)	LF	1,000
7320520	Conductor (No. 8)	LF	5,200
7320590	Conductor (Insulated Bond) (No. 8)	LF	1,600
7360112	Luminaire (Horizontal Mount) (LED 25L)	Each	16
7360220	Load Center Cabinet (Type II) (120/240 Volt)	Each	1
7370400	Electrical Service	L Sum	1
9240103	Miscellaneous Work (Electrical Record Drawings)	L Sum	1



DETAIL A

	NAME	DATE
DESIGN		
DRAWN	LARRY LOPEZ	6/19
CHECKED		
TEAM LEADER		

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
TRAFFIC DESIGN SECTION

LIGHTING NOTES AND QUANTITIES

LOCATION: SR 88 - SUPERSTITION BLVD INTERSECTION

SHEET 18 OF 20

TRACS NO.

___ OF ___

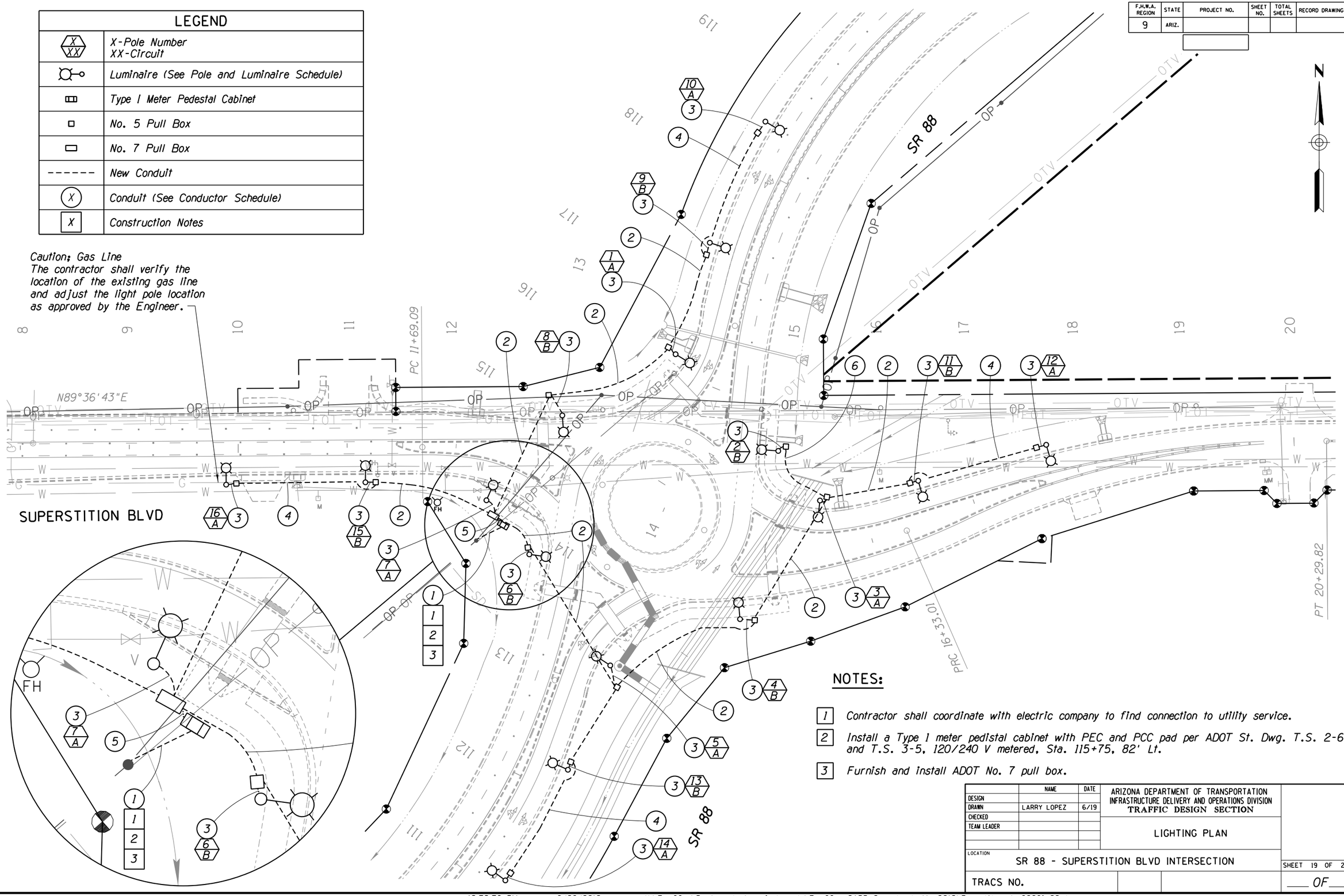
NO.1 DESCRIPTION OF REVISION | DATE | MADE BY
NO.2 DESCRIPTION OF REVISION | DATE | MADE BY

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

LEGEND

X / XX	X-Pole Number XX-Circuit
	Luminaire (See Pole and Luminaire Schedule)
	Type I Meter Pedestal Cabinet
	No. 5 Pull Box
	No. 7 Pull Box
------	New Conduit
(X)	Conduit (See Conductor Schedule)
[X]	Construction Notes

Caution; Gas Line
The contractor shall verify the location of the existing gas line and adjust the light pole location as approved by the Engineer.



NOTES:

1. *Contractor shall coordinate with electric company to find connection to utility service.*
2. *Install a Type 1 meter pedistal cabinet with PEC and PCC pad per ADOT St. Dwg. T.S. 2-6 and T.S. 3-5, 120/240 V metered, Sta. 115+75, 82' Lt.*
3. *Furnish and install ADOT No. 7 pull box.*

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION	
DESIGN				
DRAWN	LARRY LOPEZ	6/19		
CHECKED			LIGHTING PLAN	
TEAM LEADER				
LOCATION	SR 88 - SUPERSTITION BLVD INTERSECTION			SHEET 19 OF 20
TRACS NO.				___ OF ___

NO.1 DESCRIPTION OF REVISION | DATE | MADE BY | NO.2 DESCRIPTION OF REVISION | DATE | MADE BY

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F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	ARIZ.				

POLE AND LUMINAIRE SCHEDULE

POLE NO.	CIRCUIT	ROADWAY	STATION	OFFSET	POLE		FOUNDATION		LUMINAIRE				MAINTENANCE UNIT NO.
					TYPE	MAST ARM	TYPE	BASE	TYPE	WATT	TYPE	DIST. TYPE	
1	A	SR 88	116+18	46' Lt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	
2	B	SR 88	115+75	76' Rt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	
3	A	Superstition Blvd	15+51	47' Lt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	
4	B	Superstition Blvd	14+91	68' Rt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	
5	A	SR 88	113+24	44' Rt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	
6	B	SR 88	113+83	67' Lt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	
7	A	Superstition Blvd	12+35	44' Rt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	
8	B	Superstition Blvd	12+86	47' Lt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	
9	B	SR 88	117+26	42' Lt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	
10	A	SR 88	118+39	42' Lt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	
11	B	Superstition Blvd	16+60	38' Lt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	
12	A	Superstition Blvd	17+78	32' Lt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	
13	B	SR 88	112+23	40' Rt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	
14	A	SR 88	111+14	42' Rt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	
15	B	Superstition Blvd	11+17	32' Rt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	
16	A	Superstition Blvd	9+89	33' Rt	G-Alum	10'	Std	B/A-2	HZ	25L	LED	III	

CONDUCTOR SCHEDULE

	CONDUIT RUN NUMBER	1*	2	3	4	5	6
	CONDUIT SIZE IN INCHES		2	2	2	2	2
AWG	CIRCUIT PHASE						
#8	Lighting (pullbox to pole)	S		2			
		R					
#8	Lighting Circuit A	P	2		2	2	
	Lighting Circuit B		2			2	2
#8	Insulated Bond (Green)		1	1	1	1	1

* Conduit size and type shall conform to SRP requirements; and paid for per bid item #7370400

Circuit A- 20 amp double pole breaker
Circuit B- 20 amp double pole breaker

LEGEND:

G - Aluminum Type G Pole per ADOT Std. Dwg. T.S.4-5

B/A-2 - Type 2 breakaway base per ADOT Std Dwg. T.S. 5-1

STD - Type G Pole Foundation

HZ - Horizontal Mount Luminaire

LED - Light Emitting Diode

NOTES:

1. Offset is referenced from the SR 88 center line to the center of the pole.
2. The contractor shall obtain maintenance unit numbers from ADOT Traffic Operations. Maintenance unit numbers shall be filled in the Pole and Luminaire Schedule as part of the Record Drawings process.
3. All type G pole foundations with breakaway bases shall be constructed with the top of foundation flat and level in accordance with the breakaway base manufacturer's recommendation.
4. All luminaires shall be 240 Volt fixtures.
5. All street lights shall be installed perpendicular to the curb face.

NO.2 DESCRIPTION OF REVISION | MADE BY | DATE
NO.1 DESCRIPTION OF REVISION | MADE BY | DATE

	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION TRAFFIC DESIGN SECTION	
DESIGN				
DRAWN	KARIM RASHID	6/19		
CHECKED			LIGHTING POLE AND CONDUCTOR SCHEDULE	
TEAM LEADER				
LOCATION	SR 88 - SUPERSTITION BLVD INTERSECTION			SHEET 20 OF 20
TRACS NO.				____ OF ____

APPENDIX 2 ADOT LEVEL STRUCTURE

LV	CO	DESCRIPTION
1	1	GRID TICKS, LINE TERMINATORS
2	2	SPOT ELEV., PHOTO AND PRIMARY CONTROL POINTS
3	3	SECTION CORNERS, QUARTER CORNERS, RANGE LINES, CENTER OF SECTION, PHOTOGRAMMETRY - TEXT
4	4	MONUMENTS, BOUNDARIES: CITY, COUNTY, STATE, PARK, FOREST, RESERVATION - TEXT
5	5	EXIST. INDEX CONTOUR LINES AND TEXT
6	6	EXIST. INTERMEDIATE CONTOUR LINES - TEXT
7	7	EXIST. VEGETATION - TEXT
8	8	MAPPING SYMBOLS: WATER ITEMS AND TEXT
9	9	EXIST. MAN-MADE TOPOGRAPHY: BUILDINGS, NOISE WALLS, BILLBOARDS, FOUNDATIONS, DRIVEWAYS, SIDEWALKS, CATTLE GUARDS, PUMP HOUSES, ETC.
10	10	TEXT FOR LEVEL 9 ITEMS
11	11	EXIST. UTILITIES 9NOT COVERED BELOW), RAILROADS, STANDPIPES, WELLS
12	12	TEXT FOR LEVEL 11 ITEMS
13	13	EXIST. MINOR DRAINAGE ITEMS: CATCH BASINS, MANHOLES, STORM DRAINS, SANITARY SEWERS, DITCHES, DIKES, CANALS, DAMS, GABIONS, HEADWALLS, BERMS, PIPES, END SECTIONS, DOWNDRAINS, SPILLWAYS, APRONS, PIPE OUTLETS, RIPRAP, BANK PROTECTION
14	14	TEXT FOR LEVEL 13, TEXT FOR LEVEL 22
15	15	EXIST. EASEMENT AND PERMIT LINES, TEXT
16	16	EXIST. EDGES OF ROADWAYS, GORE PAVING, GRADER ROADS, TURNOUTS
17	17	EXIST. TRAFFIC ITEMS: X-WALKS, ROADWAY STRIPPING, SIGNAL AND LIGHT POLES. ALL SIGNS AND DELINEATION. EXIST.. SIGNS
18	18	TEXT FOR LEVEL 17
19	19	ROAD NAMES, TEXT FOR LEVEL 16 ITEMS
20	20	EXIST. NON SURVEYED ROADWAY CENTERLINES WITH TICK MARKS / NEW TOP OF PAVEMENT (TYP SEC)
21	21	EXIST. NON SURVEYED ROADWAY CENTERLINE ITEMS: BEARINGS, STATIONING, EQUATIONS, CURVE DATA, ID FOR: PC, PI, PT
22	22	EXIST. MAJOR DRAINAGE ITEMS: BRIDGES, BOX CULVERTS, RETAINING WALLS, MAJOR CHANNELS, STRUCTURAL PLATE PIPES, TUNNELS.
23	23	EXIST. CHANNELIZATION ITEMS: CURBS, GUARDRAILS, IMPACT ATTENUATORS, CONCRETE BARRIERS (MEDIAN AND HALF), BARRICADES, CHAN LINK CABLE BARRIERS
24	24	TEXT FOR LEVEL 23 ITEMS

25	25	NORTH ARROW, MILEPOST MARKERS, ROADWAY DIMENSIONS, MATCH LINES AND OTHER MISCELLANEOUS ITEMS
26	26	ALL MISCELLANEOUS CENTERLINES: SURVEY, OFFICE, ETC. MISCELLANEOUS CENTERLINE ITEMS: BEARINGS, STATIONING, EQUATIONS, CURVE DATA, ID FOR: PC, PI, PT. LOCATION SERVICES: ALL NEW CENTERLINES AND CENTERLINE ITEMS
27	27	NEW CONSTRUCTION CL WITH TICK MARKS, CL STATIONING
28	28	NEW CONSTRUCTION CENTERLINE ITEMS: BEARINGS, CURVE DATA, EQUATIONS, ID FOR: PC, PI, PT
29	29	EXIST. FENCES, RIGHT OF WAY MARKERS AND LINES - TEXT
30	30	NEW FENCES, RIGHT OF WAY MARKERS AND LINES - TEXT
31	31	EXIST. ACCESS CONTROL
32	32	NEW ACCESS CONTROL
33	33	
34	34	RW PROPERTY LINES
35	35	NEW EDGES OF PAVEMENT, TURNOUTS, GRADER ROADS, SAW CUTS
36	36	TEXT FOR LEVEL 35 ITEMS
37	37	NEW INTERMEDIATE AND INDEX CONTOUR LINES, NEW CUT AND FILL LINES
38	38	NEW MINOR DRAINAGE ITEMS: CATCH BASINS, MANHOLES, STORM DRAINS, DITCHES, DIKES, CANALS, DAMS, GABIONS, HEADWALLS, END SECTIONS, BERMS, DOWNDRAINS, SPILLWAYS, PIPE OUTLETS, APRONS, PIPES, RIPRAP, BANK PROTECTION / DRAINAGE CHANNEL (TYP SEC)
39	39	TEXT FOR LEVEL 38 ITEMS (NEW MINOR DRAINAGE ITEMS). TEXT FOR LEVEL 48 ITEMS (NEW MAJOR DRAINAGE ITEMS)
40	40	NEW UTILITIES (NOT COVERED BELOW), RAILROADS, STANDPIPES, WELLS
41	41	TEXT FOR LEVEL 40 ITEMS
42	42	NEW MISCELLANEOUS ITEMS (HAZARDS): CATTLE GUARDS, CONCRETE BARRIERS, (MEDIAN AND HALF), IMPACT ATTENUATORS, GUARDRAILS, BARRICADES, BLOCK FENCES, CHAN LINK CABLE BARRIERS, NOISE WALLS, TRAFFIC CONTROL ITEMS - CONES, VERTICAL PANELS, FLAGGING TREES
43	43	TEXT FOR LEVEL 42 ITEMS
44	44	NEW MISCELLANEOUS ITEMS (ROADWAY EDGES), GORE PAVING, CURBS, SIDEWALKS, DRIVEWAY, ROADWAY SHOULDERS / CURB AND GUTTER (TYP SEC)
45	45	TEXT FOR LEVEL 44 ITEMS
46	0 or 17	NEW ROADWAY STRIPPING ITEMS (PAVEMENT MARKINGS); 0 FOR WHITE, 17 FOR YELLOW.
47	47	TEXT FOR LEVEL 46 ITEMS - DIMENSION LINES AND TEXT FOR SIGNING & MARKING SHEETS
48	48	NEW MAJOR DRAINAGE ITEMS: BRIDGES, BOX CULVERTS, TUNNELS, RETAINING WALLS, PUMP HOUSES, MAJOR CHANNELS, STRUCTURAL PLATE PIPES
49	49	NEW LIGHT POLES
50	50	NEW PULLBOXES AND CONDUITS, CABINETS, LOOP DETECTORS,

		NEW DRAINAGE EASEMENT
51	51	TEXT FOR LEVEL 49 AND LEVEL 50 ITEMS, TEXT FOR POLE SCHEDULE
52	52	NEW SIGNALS & LUMINAIRS
53	53	TEXT FOR LEVEL 52 ITEMS - CONDUCTOR SCHEDULE, PHASE DIAGRAMS
54	54	NEW SIGNS - TEXT - CHANGEABLE MESSAGE SIGNS
55	55	LANDSCAPE DETAILS / INDEX OF SHEETS TEXT - SIGNING SHEETS TEXT, GENERAL NOTES
56	56	TEXT FOR LEVEL 55 ITEMS
57	57	IRRIGATION DETAILS
58	58	TEXT FOR LEVEL 57
59	59	ALL AREA PATTERNING AND SHADING / SLOPE TEXT (TYP SEC)
60	60	STANDARD GRID - PROFILE SHEET (1 INCH)
61	61	STANDARD GRID - PROFILE SHEET (INTERMEDIATE)
62	62	PLAN SHEET TEXT NODES
63	63	PLAN SHEET BORDER
100-199		**LOCATION SURVEY + LEGACY**
103	3	GRADEBREAK / BREAKLINES FOR DTM
104	4	GROUND SHOT / MASS POINTS FOR DTM
200-299		**RIGHT OF WAY**
201	1	RW - CELL - ARROW - GRID TICKS
203	3	RW - LINE-SECTION-MID-SECTION-TOWNSHIP-RANGE-MEANDER [CELL-SECTIONAL CORNERS]
204	4	RW - LINE-CITY-FOREST-COUNTY-STATE-PARK-RESERVATION [CELL-PLOT SHAPE]
205	5	RW - TEXT-SECTION LINE BEARING & DISTANCE, CORNER DESCRIPTIONS [CELL-QTR QTR CALLOUTS & LABELS
206	6	RW - CELL-LABELS
207	7	RW - CELL-STANDARD ABBREVIATIONS
211	11	RW - LINE-RAILROAD CENTERLINE [CELL-STANDARD ABBREVIATIONS]
215	15	RW - LINE-EXISTING EASEMENT [CELL-LABELS & STANDARD ABBREVIATIONS]
217	17	RW - TEXT-PARCEL RECORD INFORMATION [CELL-LEGENDS, DIMENSIONS ARROWS, PARCEL BUBBLES]
218	18	RW - TEXT-SUBDIVISION NAME-BOOK & PAGE
219	19	RW - TEXT - ROAD NAMES
220	20	RW - LINE-EXISTING CENTERLINE [CELL-LABELS, STANDARD ABBREVIATIONS]
221	21	RW - CELL-EXISTING CURVE DATA
222	22	RW - LINE-DITCH RIVER [CELL-STANDARD ABBREVIATIONS]
223	23	RW - TEXT-DITCH RIVER
225	25	RW - TEXT-STATE ROUTE-INTERSTATE [CELL-DATA SQUARES, PROJECT LABELS]

226	26	RW - LINE-SURVEY CENTERLINE [CELL-LABELS, LINES, STANDARD ABBREVIATIONS]
227	27	RW - LINE-CONSTRUCTION CENTERLINE [CELL-LABELS, LINES, STANDARD ABBREVIATIONS]
228	28	RW - CELL-NEW CURVE DATA, STANDARD ABBREVIATIONS
229	29	RW - LINE-EXISTING RIGHT OF WAY-NEW DE-NEW SE [CELL- LEGEND, LABELS, STD. ABR.]
230	30	RW - LINE-NEW RIGHT OF WAY-NEW DE-NEW SE [CELL-LEGEND, LABELS, STD. ABR.]
231	31	RW - LINE-EXISTING ACCESS [CELL-STD. ABR.]
232	32	RW - LINE-NEW ACCESS [CELL-STD. ABR.]
233	33	RW - LINE-ACTIVE POINT
234	34	RW - LINE-PROPERTY-SUBDIVISION BOUNDARY-LOT-MINING CLAIM [CELL-STD. ABR.]
246	46	RW - TEXT-NEW R/W BEARINGS & DISTANCES-NEW PLUS/OUTS-DIMENSION TABLES [CELL-DATA CIRCLE, STD. ABR.]
248	48	RW - LINE-NEW DRAINAGE STRUCTURES [FROM DESIGN CONSULTANT]
250	50	RW - CELL-PLAN SHEET, STD. ABR.
254	54	RW - CELL-LOGO, IN-HOUSE LABEL
257	57	RW - CELL-SHEET OUTLINE
259	59	RW - LINE-CROSS HATCHING-SPECIAL DETAILING TO ENHANCE READABILITY [CELL-DOT PATTERN]
262	62	RW - PLAN SHEET TEXT NODES [CELL-PLAN SHEET, STAR, REVISION BLOCK]
263	63	RW - PLAN SHEET BORDER [CELL-PLAN SHEET, REVISION BLOCK, BIA SHEET]
264	64	RW - LINE-GLO LOT
265	65	RW - LINE 1/16 LOT
266	66	RW - LINE-TEMPORARY CONSTRUCTION EASEMENT
267	67	RW - LINE/TEXT-MATCH LINE AND TEXT
270	70	RW - TEXT-STATION VALUES ALONG CENTERLINES
271	71	RW - TEXT-CITY OF, STATE PARKS, COUNTY, RESERVATION, FOREST
272	72	RW - TEXT-SURVEY-EXISTING CENTERLINE BEARINGS-P.C.
273	73	RW - TEXT-ALL SCHEDULE B
274	74	RW - TEXT-CONSTR CENTERLINE BEARINGS-P.C., P.T., S.C., ETC. CALLOUTS
275	75	RW - TEXT-DATA TABLES-PLUS & OUT TABLES
290	90	RW - MISC. ITEMS NOT OTHERWISE NOTED ON OTHER LEVELS
295	95	RW - WORK-1 (NO PLOT)
296	96	RW - WORK-2 (NO PLOT)
297	97	RW - WORK-3 (NO PLOT)
298	98	RW - WORK-4 (NO PLOT)
299	99	RW - WORK-5 (NO PLOT)
300-399		**ROADWAY + LEGACY**

301	0	RDWY - SAW CUT LINES
302	0	RDWY - TEXT FOR LEVEL 301
303	33	RDWY - INROADS REFERENCE LINE [NO PLOT]
304	34	RDWY - TEXT FOR LEVEL 303 [NO PLOT]
329	29	RDWY - EXISTING RIGHT OF WAY LINES
348	48	RDWY - MAJOR BELOW GROUND DRAINAGE ITEMS - BRIDGES, BOX CULVERTS, TUNNELS, RETAINING WALLS, PUMP HOUSES, MAJOR CHANNELS, PIPES
349	49	RDWY - MAJOR ABOVE GROUND DRAINAGE ITEMS - BRIDGES, BOX CULVERTS, TUNNELS, RETAINING WALLS, PUMP HOUSES, MAJOR CHANNELS, PIPES
364	64	RDWY - FENCES NOT ON NEW RW LINE
400-499		**TRAFFIC - STAY WITH LEGACY LEVELS (0-63)**
500-599		**BRIDGE - STAY WITH LEGACY LEVELS (0-63)**
600-699		**ROADSIDE + LEGACY (BETA)**
609	9	ROADSIDE - HARDSCAPE AND ARCHTECTURE DESIGN
627	27	ROADSIDE - PERMENENT EROSION/SEDIMENT CONTROL AND WATER QUALITY PROTECTION BMP'S
633	33	ROADSIDE - LANDSCAPE IRRIGATION DESIGN
634	34	ROADSIDE - TEMPORARY EROSION/SEDIMENT CONTROL AND WATER QUALITY PROTECTION BMP'S
635	35	ROADSIDE - LANDSCAPE IRRIGATION MAINLINES
655	55	ROADSIDE - LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL/ECOLOGICAL AND WATER QUALITY DESIGN
656	56	ROADSIDE - TEXT AND DIMENSIONS FOR LANDSCAPE ARCHITECTURE, ENVIRONMENTAL/ECOLOGICAL AND WATER QUALITY DESIGN
657	57	ROADSIDE - LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL/ECOLOGICAL DESIGN-SHRUBS, FORBS, GRASSES AND GROUND COVER
659	59	ROADSIDE - LANDSCAPE ARCHITECTURE AND ENVIRONMENTAL/ECOLOGICAL DESIGN CACTI
699	99	ROADSIDE - SEEDING AND REVEGETATION
700-799		**UTILITIES + LEGACY**
701	42	EXIST. POWER (UNDERGROUND)
702	42	EXIST TEXT POWER (UNDERGROUND)
703	142	NEW POWER (UNDERGROUND)
704	142	NEW TEXT POWER (UNDERGROUND)
705	17	EXIST GAS
706	17	EXIST TEXT FOR EXISTING GAS
707	117	NEW GAS
708	117	NEW TEXT FOR NEW GAS
709	43	EXIST TRAFFIC POWER
710	43	EXIST TEXT FOR TRAFFIC POWWER
711	143	NEW TRAFFIC POWER
712	143	NEW TEXT FOR TRAFFIC POWER

713	95	EXIST TELEPHONE
714	95	EXIST TEXT FOR TELEPHONE
715	195	NEW TELEPHONE
716	195	NEW TEXT FOR TELEPHONE
717	95	EXIST TV
718	95	EXIST TEXT FOR TV
719	195	NEW TV
720	195	NEW TEXT FOR TV
721	65	EXST SEWER, STORM DRAIN
722	65	EXSIT TEXT SEWER, STORM DRAIN
723	165	NEW SEWER, STORM DRAIN
724	165	NEW TEXT FOR SEWER, STORM DRAIN
725	38	EXIST WATER
726	38	EXSIT TEXT FOR WATER
727	138	NEW WATER
728	138	NEW TEXT FOR WATER
729	188	EXIST IRRIGATION
730	188	EXIST TEXT FOR IRRIGATION
731	188	NEW IRRIGATION
732	188	NEW TEXT FOR IRRIGATION
733	0	UNKNOWN UTILITY
734	0	TEXT FOR UNKNOWN UTILITY
735	95	EXIST FREEWAY MANAGEMENT SYSTEM
736	95	EXIST TEXT FOR FREEWAY MANAGEMENT SYSTEM
737	195	NEW FREEWAY MANAGEMENT SYSTEM
738	195	NEW TEXT FOR FREEWAY MANAGEMENT SYSTEM
739	100	VACANT LEVEL FOR PROJECT SPECIFIC DATA
740	100	VACANT LEVEL FOR PROJECT SPECIFIC DATA
RDWY-WORK-1	95	WORKING LEVEL (NO PLOT)
RDWY-WORK-2	95	WORKING LEVEL (NO PLOT)
RDWY-WORK-3	95	WORKING LEVEL (NO PLOT)
RDWY-WORK-4	95	WORKING LEVEL (NO PLOT)
RDWY-WORK-5	95	WORKING LEVEL (NO PLOT)
TR-WORK-1	95	WORKING LEVEL (NO PLOT)
TR-WORK-2	96	WORKING LEVEL (NO PLOT)
TR-WORK-3	97	WORKING LEVEL (NO PLOT)
TR-WORK-4	98	WORKING LEVEL (NO PLOT)
TR-WORK-5	99	WORKING LEVEL (NO PLOT)
900-999		**RESERVED FOR MATERIALS**

Note: The full Dictionary can be found here.

490 Computer Aided Design and Drafting (CADD) Requirements (Traffic Design Only)

ADOT shall retain all rights and ownership of all Electronic Files and Hardcopy Deliverables throughout the Design Phases.

General Specifications:

All files to be archived shall conform to ADOT drafting and CADD standards (for ADOT CADD standards, Technical Bulletins, and additional archiving information contact the corresponding Group/Discipline).

Each consultant shall submit all their files in a folder (with no subfolders) to be archived in a project folder. The current ADOT approved version of MicroStation software will be used. All graphic files shall be provided in MicroStation native design file format (.dgn), and contain data in vector format only. Digital Terrain Model (.dtm) files shall be produced with InRoads/Site/Survey compatible file formats. Raster data shall not be accepted unless otherwise stated by ADOT. For non-photogrammetric disciplines, the use of non-MicroStation vector format and subsequent translation of graphic files to the .dgn format shall not be accepted. No zipped files shall be accepted. All reference files shall be delivered, and are not to be copied into the plan sheet files. All electronic "design sheets" shall include border information and display a fitted "plan view" (in View 1). View 1 shall be the final plot view and as such, all appropriate reference files, levels, view attributes shall be displayed. No vector or raster elements shall be outside the border. ADOT cells and custom line styles are not to be modified unless approved by ADOT.

All final Consultant project Electronic CADD data files shall be delivered on CD-ROM/DVD (multiple CD's/ DVD's shall be allowed). All final project documentation, electronic files and hard copy shall be packaged separately, labeled and delivered to the assigned ADOT Project Manager, and/or to the Technical Leader.

All deliverables shall contain an electronic Index of files on the storage media and a letter of transmittal to the ADOT designated areas and all CD's/DVD's must be labeled with the information stated below:

Identification Label for CD and Case:

Prepared By:
Federal Project Number:
Route:
Milepost (Beginning/Ending):
Prefix (Rt, Co, MP) and TRACS Number:
Project Name:
Creation Date:
Disc (#) of (total #)

In addition to the requirements stated above in the General Specifications, all designers of ADOT projects shall provide the following information requested by the individual areas. If unclear about items needed for your project, please contact the Project Manager.

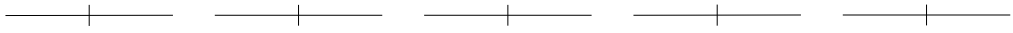
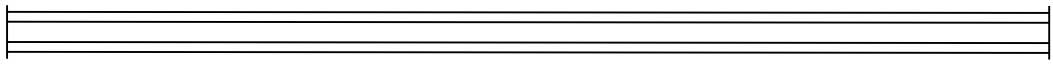
Traffic Engineering:

Upon **Final Design Approval** for any and all work that involves Traffic Engineering/Design, the Traffic Engineering Group requires that the following CADD related deliverables be submitted to the Primary Project Manager as indicated in the General Specifications. In addition, a copy of the Letter of Transmittal indicating all Traffic related deliverables submitted to ADOT shall be forwarded to the Traffic Engineering Project Manager for approval.

1. All Design files associated with Traffic Design, including Traffic Signal, Signing, Pavement Marking, Traffic Control, Pre-Design, HES Projects, and Permit Designs, shall be submitted in ADOT's current version of MicroStation 2D format (.DGN)(2D).
2. All sign designs/formats shall be submitted in ADOT's current version of sign design software (.sgn).
3. All sign summary Excel spreadsheets used to import sign summary data into MicroStation shall be submitted in ADOT's current version of Excel (.xls).

CADD STANDARDS
LINE STYLE LIBRARY

GRAPHIC DEFINITION

.rsc	
roadway	NAME: ACFC LEVEL: 17 COLOR: 17 WEIGHT: 2 GRAPHIC:  DESCRIPTION: ASPHALTIC CONCRETE FRICTION COURSE
adot	NAME: ARR100_e LEVEL: 11 COLOR: 11 WEIGHT: 0 GRAPHIC:  DESCRIPTION: ABANDONED RAILROAD SC 100
adot	NAME: ARR50_e LEVEL: 11 COLOR: 11 WEIGHT: 0 GRAPHIC:  DESCRIPTION: ABANDONED RAILROAD SC 50
traf	NAME: BRKLN_e LEVEL: 46 COLOR: 63 WEIGHT: 0 GRAPHIC: DESCRIPTION: 2' x 4' BROKEN STRIPE LINE
roadway	NAME: Cattle Guard LEVEL: 42 COLOR: 42 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW CATTLE GUARD
adot	NAME: CEHP_e LEVEL: 15 COLOR: 15 WEIGHT: 4 GRAPHIC: DESCRIPTION: CONSTRUCTION EASEMENT HP
adot	NAME: CITY_e LEVEL: 4 COLOR: 4 WEIGHT: 4 GRAPHIC: DESCRIPTION: CITY LIMITS LINE
adot	NAME: CNTR_e LEVEL: 17 COLOR: 17 WEIGHT: 0 GRAPHIC: DESCRIPTION: LANE AND CL STRIPING

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

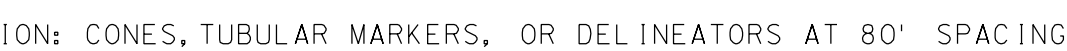
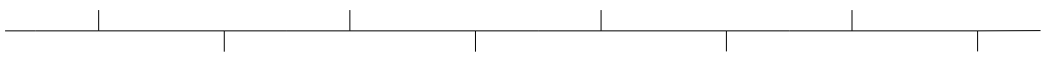
For existing traffic items, use Subdued linestyle. Graphic Color 17 = yellow (shown here in black for clarity)

Not to scale.

REVISION DATE
04-26-10

CADD STANDARDS
LINE STYLE LIBRARY

GRAPHIC DEFINITION

.rsc	
adot	NAME: CNTY_e LEVEL: 4 COLOR: 4 WEIGHT: 4 GRAPHIC: DESCRIPTION: COUNTY LINE
traf	NAME: CONE20_e LEVEL: 42 COLOR: 42 WEIGHT: 2 GRAPHIC: DESCRIPTION: CONES, TUBULAR MARKERS, OR DELINEATORS AT 20' SPACING
traf	NAME: CONE40_e LEVEL: 42 COLOR: 42 WEIGHT: 2 GRAPHIC: DESCRIPTION: CONES, TUBULAR MARKERS, OR DELINEATORS AT 40' SPACING
traf	NAME: CONE80_e LEVEL: 42 COLOR: 42 WEIGHT: 2 GRAPHIC:  DESCRIPTION: CONES, TUBULAR MARKERS, OR DELINEATORS AT 80' SPACING
road way	NAME: corpipe LEVEL: 38 COLOR: 38 WEIGHT: 3 GRAPHIC:  DESCRIPTION: CORRUGATION PATTERN FOR DETAILS
road way	NAME: corrigate LEVEL: 38 COLOR: 38 WEIGHT: 3 GRAPHIC:  DESCRIPTION: CORRUGATTION SYMBOL SHADING FOR DETAILS
adot	NAME: DIKE_e LEVEL: 13 COLOR: 13 WEIGHT: 0 GRAPHIC:  DESCRIPTION: EXISTING DIKE (PHOTOGRAMMETRY)
road way	NAME: DimLeader LEVEL: 25 COLOR: 25 WEIGHT: 1 GRAPHIC: DESCRIPTION: DIMENSION LINE

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

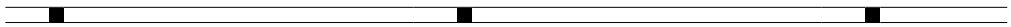
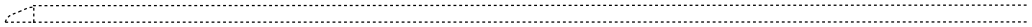
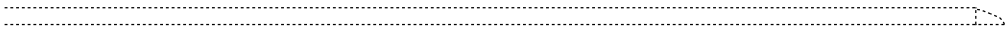
For existing traffic items, use Subdued linestyle. Graphic Color 17 = yellow (shown here in black for clarity)

Not to scale.

REVISION DATE
04-26-10

CADD STANDARDS
LINE STYLE LIBRARY

GRAPHIC DEFINITION

.rsc	
roadway	NAME: DimLeader 2 LEVEL: 25 COLOR: 25 WEIGHT: 1 GRAPHIC: DESCRIPTION: DIMENSION LINE
adot	NAME: DRT_e LEVEL: 16 COLOR: 16 WEIGHT: 1 GRAPHIC: DESCRIPTION: EDGE OF MAJOR DIRT ROAD
traf	NAME: DY20PM_e (SEE NOTES) LEVEL: 46 COLOR: 17 WEIGHT: 0 GRAPHIC:  DESCRIPTION: DOUBLE YELLOW WITH 20' RPMS (RPM, INSIDE DOUBLE YELLOW)
traf	NAME: DY40PM_e (SEE NOTES) LEVEL: 46 COLOR: 17 WEIGHT: 0 GRAPHIC:  DESCRIPTION: DOUBLE YELLOW WITH 40' RPMS (RPM, INSIDE DOUBLE YELLOW)
traf	NAME: DY80PM_e (SEE NOTES) LEVEL: 46 COLOR: 17 WEIGHT: 0 GRAPHIC:  DESCRIPTION: DOUBLE YELLOW WITH 80' RPMS (RPM, INSIDE DOUBLE YELLOW)
roadway	NAME: ExES(LtSide) LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING PIPE PROFILE - LEFT SIDE
roadway	NAME: ExES(RtSide) LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING PIPE PROFILE - RIGHT SIDE
roadway	NAME: Exst Cattleguard LEVEL: 9 COLOR: 9 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING CATTLE GUARD

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

For existing traffic items, use Subdued linestyle. Graphic Color 17 = yellow (shown here in black for clarity)

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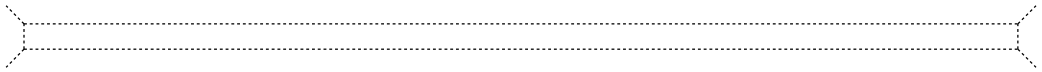
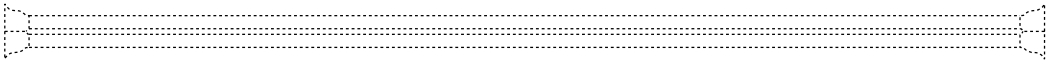
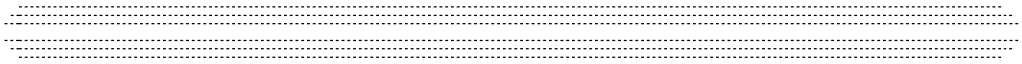
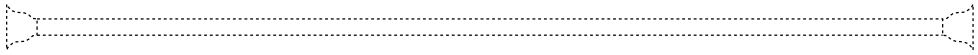
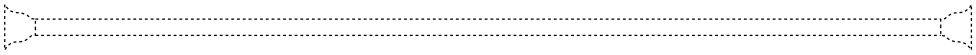
CADD STANDARDS
LINE STYLE LIBRARY

GRAPHIC DEFINITION

.rsc	
roadway	NAME: Exst CBC LEVEL: 22 COLOR: 22 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING CONCRETE BOX CULVERT
roadway	NAME: Exst Dbl LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING DOUBLE PIPE INSTALLATION
roadway	NAME: Exst Dbl(Small) LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING DOUBLE PIPE INSTALLATION (UNDER 42")
roadway	NAME: Exst Median Dike LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING MEDIAN DIKE
roadway	NAME: Exst Single LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING SINGLE PIPE INSTALLATION
roadway	NAME: Exst Single (Small) LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING SINGLE PIPE INSTALLATION (UNDER 42")
adot	NAME: FRST_e LEVEL: 4 COLOR: 4 WEIGHT: 4 GRAPHIC: DESCRIPTION: FOREST OR RESERVATION LINE
traf	NAME: GORE20RPM_e LEVEL: 46 COLOR: 63 WEIGHT: 0 GRAPHIC: DESCRIPTION: 12" GORE STRIPE WITH RPM AT 20' SPACING

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

For existing traffic items, use Subdued linestyle. Graphic Color 17 = yellow (shown here in black for clarity)

Not to scale.

REVISION DATE
04-26-10

CADD STANDARDS
LINE STYLE LIBRARY

GRAPHIC DEFINITION

.rsc	
adot	NAME: HDFLN_e LEVEL: 8 COLOR: 8 WEIGHT: 2 GRAPHIC: DESCRIPTION: HIDDEN STREAM OR SHORLINE
adot	NAME: HDG_e LEVEL: 7 COLOR: 7 WEIGHT: 0 GRAPHIC:  DESCRIPTION: EXISTING SHRUB
traf	NAME: HOVBFR_e LEVEL: 46 COLOR: 46 WEIGHT: 0 GRAPHIC:  DESCRIPTION: HOV LANE BUFFER
traf	NAME: LDS_e LEVEL: 46 COLOR: 63 WEIGHT: 0 GRAPHIC:  DESCRIPTION: LANE DROP STRIPING
traf	NAME: LESL20_e LEVEL: 46 COLOR: 63 WEIGHT: 0 GRAPHIC: DESCRIPTION: LEFT EDGE LINE WITH RPMS AT 20' SPACING
traf	NAME: LESL40_e LEVEL: 46 COLOR: 63 WEIGHT: 0 GRAPHIC: DESCRIPTION: LEFT EDGE LINE WITH RPMS AT 40' SPACING
traf	NAME: LL40PM_e LEVEL: 46 COLOR: 63 WEIGHT: 0 GRAPHIC: DESCRIPTION: LANE LINE WITH RPMS AT 40' SPACING
traf	NAME: LL80PM_e LEVEL: 46 COLOR: 63 WEIGHT: 0 GRAPHIC: DESCRIPTION: LANE LINE WITH RPMS AT 80' SPACING

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

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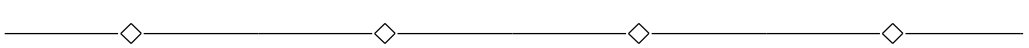
GRAPHIC DEFINITION

.rsc	
traf	NAME: LLS_e LEVEL: 46 COLOR: 63 WEIGHT: 0 GRAPHIC: DESCRIPTION: LANE LINE STRIPING
traf	NAME: LLTWLTB_e (SEE NOTES) LEVEL: 46 COLOR: 17 WEIGHT: 0 GRAPHIC: DESCRIPTION: STRIPE WITH BROKEN YELLOW BOTTOM LINE
traf	NAME: LLTWLTB40_e (SEE NOTES) LEVEL: 46 COLOR: 17 WEIGHT: 0 GRAPHIC: DESCRIPTION: STRIPE WITH BROKEN YELLOW RPMS AT 40' SPACING, BOTTOM LINE
traf	NAME: LLTWLTB80_e (SEE NOTES) LEVEL: 46 COLOR: 17 WEIGHT: 0 GRAPHIC: DESCRIPTION: STRIPE WITH BROKEN YELLOW RPMS AT 80' SPACING, BOTTOM LINE
traf	NAME: LLTWLTT_e (SEE NOTES) LEVEL: 46 COLOR: 17 WEIGHT: 0 GRAPHIC: DESCRIPTION: STRIPE WITH BROKEN YELLOW TOP LINE
traf	NAME: LLTWLTT40_e (SEE NOTES) LEVEL: 46 COLOR: 17 WEIGHT: 0 GRAPHIC: DESCRIPTION: STRIPE WITH BROKEN YELLOW RPMS AT 40' SPACING, TOP LINE
traf	NAME: LLTWLTT80_e (SEE NOTES) LEVEL: 46 COLOR: 17 WEIGHT: 0 GRAPHIC: DESCRIPTION: STRIPE WITH BROKEN YELLOW RPMS AT 80' SPACING, TOP LINE
adot	NAME: MED_e LEVEL: 23 COLOR: 23 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING MEDIAN BARRIER

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

For existing traffic items, use Subdued linestyle. Graphic Color 17 = yellow (shown here in black for clarity)

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REVISION DATE
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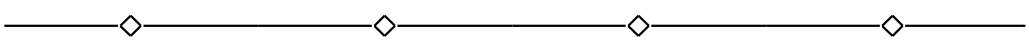
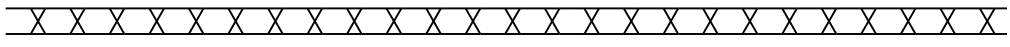
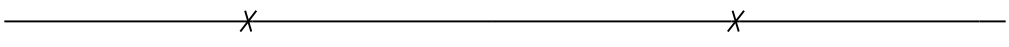
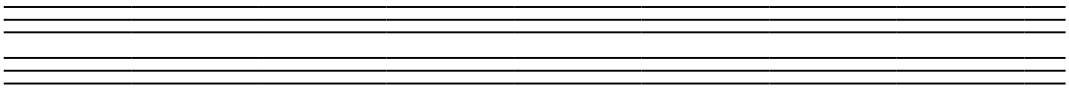
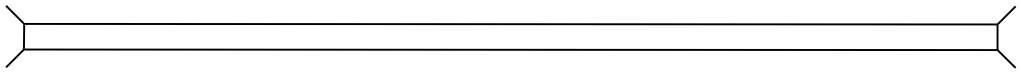
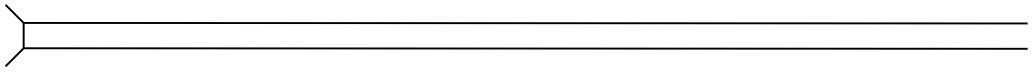
CADD STANDARDS
LINE STYLE LIBRARY

GRAPHIC DEFINITION

.rsc	
adot	NAME: MID_e LEVEL: 3 COLOR: 3 WEIGHT: 4 GRAPHIC:  DESCRIPTION: MID OR QUARTER SECTION LINE
adot	NAME: NACS_e LEVEL: 32 COLOR: 32 WEIGHT: 0 GRAPHIC:  DESCRIPTION: NEW ACCESS CONTROL
adot	NAME: NBNKPT_e LEVEL: 38 COLOR: 38 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW BANK PROTECTION
adot	NAME: NLFCWL_e LEVEL: 30 COLOR: 30 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW LONG FENCE WITH LINE
adot	NAME: NDIKE_e LEVEL: 38 COLOR: 38 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW DIKE
adot	NAME: NDRNES_e LEVEL: 50 COLOR: 50 WEIGHT: 3 GRAPHIC: DESCRIPTION: NEW DRAINAGE EASEMENT
road way	NAME: New CBC LEVEL: 48 COLOR: 48 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW CONCRETE BOX CULVERT
road way	NAME: New CBC Ext LEVEL: 48 COLOR: 48 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW CONCRETE BOX CULVERT EXTENSION

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

For existing traffic items, use Subdued linestyle. Graphic Color 17 = yellow (shown here in black for clarity)

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REVISION DATE
04-26-10

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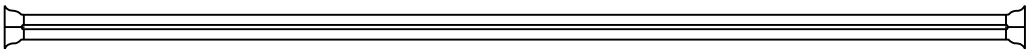
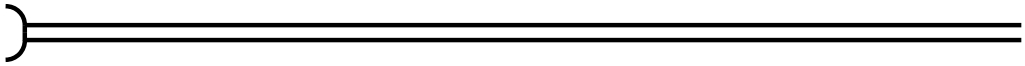
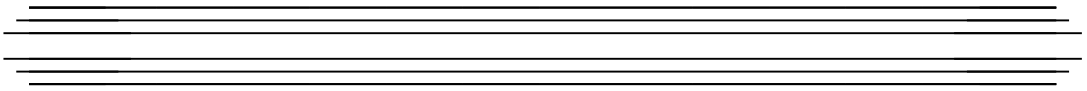
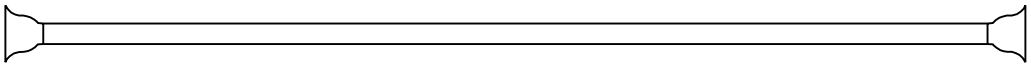
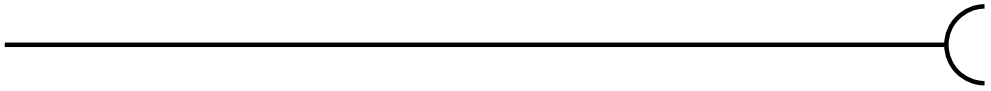
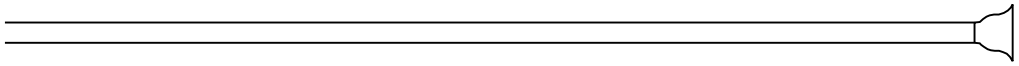
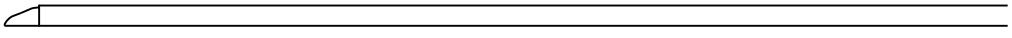
GRAPHIC DEFINITION

.rsc	
roadway	NAME: New Double LEVEL: 38 COLOR: 38 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW DOUBLE PIPE INSTALLATION
roadway	NAME: New Double (Small) LEVEL: 38 COLOR: 38 WEIGHT: 7 GRAPHIC:  DESCRIPTION: NEW DOUBLE PIPE EXTENSION (UNDER 42")
roadway	NAME: New Double Ext LEVEL: 38 COLOR: 38 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW DOUBLE PIPE EXTENSION
roadway	NAME: New Median Dike LEVEL: 38 COLOR: 38 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW MEDIAN DIKE
roadway	NAME: New Single LEVEL: 38 COLOR: 38 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW SINGLE PIPE INSTALLATION
roadway	NAME: New Single (Small) LEVEL: 38 COLOR: 38 WEIGHT: 7 GRAPHIC:  DESCRIPTION: NEW SINGLE PIPE INSTALLATION (UNDER 42")
roadway	NAME: New Single Ext LEVEL: 38 COLOR: 38 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW SINGLE PIPE EXTENSION
roadway	NAME: NewES(LtSide) LEVEL: 38 COLOR: 38 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW PIPE PROFILE - LEFT SIDE

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

For existing traffic items, use Subdued linestyle. Graphic Color 17 = yellow (shown here in black for clarity)

Not to scale.

REVISION DATE
04-26-10

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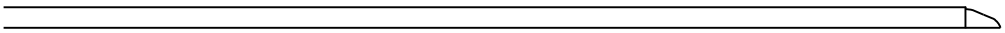
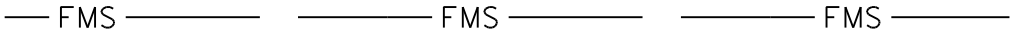
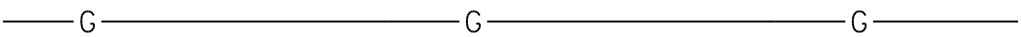
GRAPHIC DEFINITION

.rsc	
roadway	NAME: NewES(RtSide) LEVEL:38 COLOR:38 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW PIPE PROFILE - RIGHT SIDE
ADOT	NAME: NFMS_e LEVEL:737 COLOR:195 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW FREEWAY MANAGEMENT SYSTEM
adot	NAME: NGL_e LEVEL:707 COLOR:117 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW GAS LINE
adot	NAME: NGRL_e LEVEL:42 COLOR:42 WEIGHT:3 GRAPHIC: DESCRIPTION: NEW GUARDRAIL LEFT
roadway	NAME: NGRLAHD LEVEL:42 COLOR:42 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW GUARDRAIL LEFT WITH END TREATMENT LEFT AHEAD
roadway	NAME: NGRLBACK LEVEL:42 COLOR:42 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW GUARDRAIL LEFT WITH END TREATMENT LEFT BACK
roadway	NAME: NGRLEND LEVEL:42 COLOR:42 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW GUARDRAIL LEFT WITH END TREATMENTS
adot	NAME: NGRR_e LEVEL:42 COLOR:42 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW GUARDRAIL RIGHT

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

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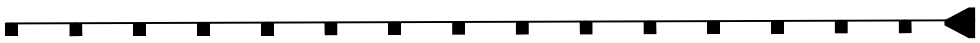
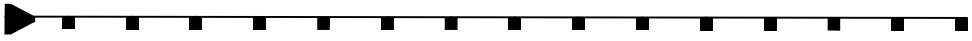
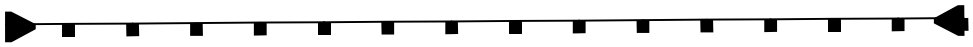
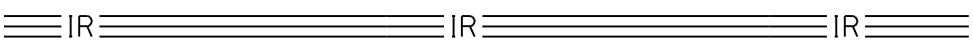
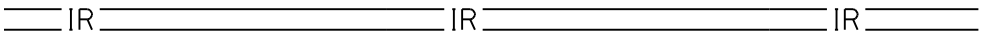
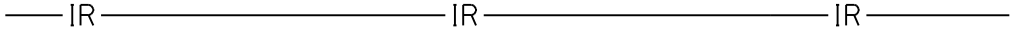
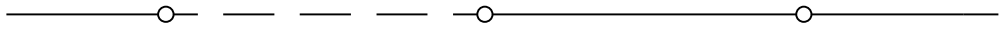
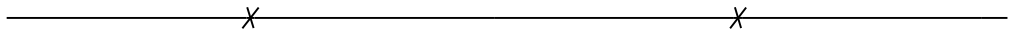
.rsc	
roadway	NAME: NGRRAHD LEVEL:42 COLOR:42 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW GUARDRAIL RIGHT WITH END TREATMENT RIGHT AHEAD
roadway	NAME: NGRRBACK LEVEL:42 COLOR:42 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW GUARDRAIL RIGHT WITH END TREATMENT RIGHT BACK
roadway	NAME: NGRREND LEVEL:42 COLOR:42 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW GUARDRAIL RIGHT WITH END TREATMENTS
adot	NAME: NIRDC_e LEVEL:731 COLOR:188 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW CONCRETE IRRIGATION DITCH
adot	NAME: NIRDE_e LEVEL:731 COLOR:188 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW IRRIGATION DITCH EARTH
adot	NAME: NIRL_e LEVEL:731 COLOR:188 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW IRRIGATION LINE
adot	NAME: NLCLRW_e LEVEL:30 COLOR:30 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW LONG CHAIN LINK FENCE ON RW
adot	NAME: NLFCWL_e LEVEL:30 COLOR:30 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW LONG FENCE WITH LINE

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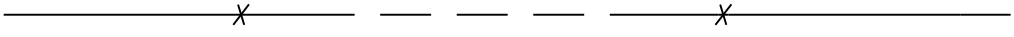
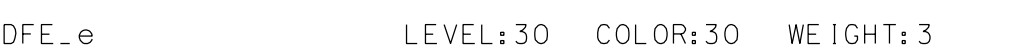
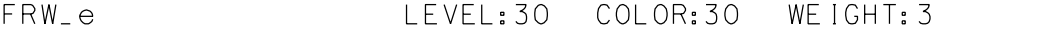
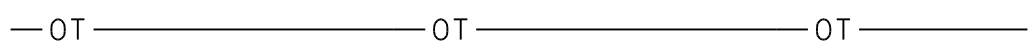
adot	NAME: NLFCRW_e LEVEL:30 COLOR:30 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW LONG FENCE ON RW
adot	NAME: NLWDFE_e LEVEL:30 COLOR:30 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW LONG WOOD FENCE WITH LINE
adot	NAME: NLWFRW_e LEVEL:30 COLOR:30 WEIGHT:3 GRAPHIC: DESCRIPTION: NEW LONG WOOD FENCE ON RW
adot	NAME: NOHPJL_e LEVEL:703 COLOR:142 WEIGHT:3 GRAPHIC:  DESCRIPTION: NEW OVERHEAD POWER/JOINT USE LINE
adot	NAME: NOHTL_e LEVEL: 715 COLOR: 195 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW OVERHEAD TELEPHONE LINE
adot	NAME: NPJUL_e LEVEL: 703 COLOR: 142 WEIGHT: 3 GRAPHIC: DESCRIPTION: NEW UNDERGROUND POWER/JOINT USE LINE
adot	NAME: NRET_e LEVEL: 48 COLOR: 48 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW RETAINING WALL
adot	NAME: NRW_e LEVEL: 30 COLOR: 30 WEIGHT: 4 GRAPHIC:  DESCRIPTION: NEW RIGHT OF WAY LINE

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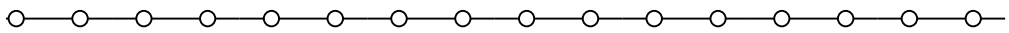
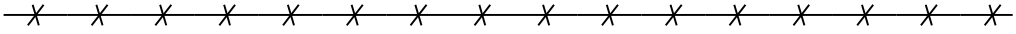
.rsc	
roadway	NAME: nrwm LEVEL: 30 COLOR: 30 WEIGHT: 1 GRAPHIC:  DESCRIPTION: NEW RIGHT OF WAY MARKERS
adot	NAME: NRWSHT_e LEVEL: 30 COLOR: 30 WEIGHT: 4 GRAPHIC: DESCRIPTION: NEW SHORT RIGHT OF WAY LINE
adot	NAME: NSB_e LEVEL: 4 COLOR: 4 WEIGHT: 4 GRAPHIC: DESCRIPTION: NATIONAL, STATE BOUNDARY
adot	NAME: NSCLFC_e LEVEL: 30 COLOR: 30 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW SHORT CHAIN LINK FENCE WITH LINE
adot	NAME: NSDL_e LEVEL: 38 COLOR: 38 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW STORM DRAIN LINE
adot	NAME: NSFC_e LEVEL: 30 COLOR: 30 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW SHORT FENCE WITH LINE
adot	NAME: NSSL_e LEVEL: 723 COLOR: 165 WEIGHT: 1 GRAPHIC:  DESCRIPTION: NEW SANITARY SEWER LINE
adot	NAME: NTTL_e LEVEL: 715 COLOR: 195 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW UNDERGROUND TELEPHONE/TELEGRAPH LINE

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adot
NAME: NTVL_e LEVEL: 719 COLOR: 195 WEIGHT: 3
GRAPHIC: —TV—————TV—————TV———
DESCRIPTION: NEW UNDERGROUND TELEVISION/CABLE LINE

adot
NAME: NWL_e LEVEL: 727 COLOR: 138 WEIGHT: 3
GRAPHIC: ——W————W————W———
DESCRIPTION: NEW WATER LINE

rw
NAME: PRMID_e LEVEL: 203 COLOR: 7 WEIGHT: 4
GRAPHIC: ———— ———— ———— ———
DESCRIPTION: PROTRACTED MID SECTION LINE

rw
NAME: PRSCLN_e LEVEL: 203 COLOR: 3 WEIGHT: 7
GRAPHIC: ———— ———— ———— ———
DESCRIPTION: PROTRACTED TOWNSHIP/SEC LINE

traf
NAME: RESL20_e LEVEL: 46 COLOR: 63 WEIGHT: 0
GRAPHIC: ■——■——■——■——■——■——■——
DESCRIPTION: RIGHT EDGE LINE WITH RPMS AT 20' SPACING

traf
NAME: RESL40_e LEVEL: 46 COLOR: 63 WEIGHT: 0
GRAPHIC: ■————■————■————■——
DESCRIPTION: RIGHT EDGE LINE WITH RPMS AT 40' SPACING

adot
NAME: RET_e LEVEL: 22 COLOR: 22 WEIGHT: 1
GRAPHIC: – — —/\— — — —/\— — — —/\—
DESCRIPTION: EXISTING RETAINING WALL (PHOTOGRAMMETRY-BANK PROTECTION)

adot
NAME: RGRL_e LEVEL: 42 COLOR: 42 WEIGHT: 3
GRAPHIC: —□—■—□—■—□—■—□—
DESCRIPTION: RECONSTRUCT GUARDRAIL LEFT

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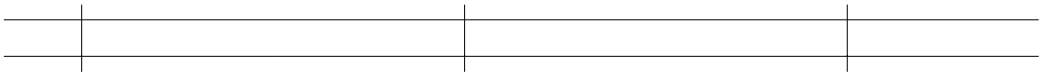
.rsc	
adot	NAME: RGRR_e LEVEL: 42 COLOR: 42 WEIGHT: 3 GRAPHIC:  DESCRIPTION: RECONSTRUCT GUARDRAIL RIGHT
roadway	NAME: Riprap LEVEL: 38 COLOR: 38 WEIGHT: 3 GRAPHIC:  DESCRIPTION: RIPRAP MATERIAL PATTERN
adot	NAME: ROK_e LEVEL: 13 COLOR: 13 WEIGHT: 0 GRAPHIC: DESCRIPTION: ROCK OUTLINE
traf	NAME: RPM20_e LEVEL: 46 COLOR: 42 WEIGHT: 0 GRAPHIC:  DESCRIPTION: RPMS AT 20' SPACING
traf	NAME: RPM40_e LEVEL: 46 COLOR: 42 WEIGHT: 0 GRAPHIC: DESCRIPTION: RPMS AT 40' SPACING
adot	NAME: RR100_e LEVEL: 11 COLOR: 11 WEIGHT: 0 GRAPHIC:  DESCRIPTION: RAILROAD SC 100
adot	NAME: RR50_e LEVEL: 11 COLOR: 11 WEIGHT: 0 GRAPHIC:  DESCRIPTION: RAILROAD SC 50
rw	NAME: RWCITY_e LEVEL: 204 COLOR: 4 WEIGHT: 7 GRAPHIC:  DESCRIPTION: CITY LIMITS BOUNDARY LINE

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.rsc	
rw	NAME: RWCNTY_e LEVEL: 204 COLOR: 4 WEIGHT: 7 GRAPHIC: DESCRIPTION: COUNTY LINE
rw	NAME: RWCUT_e LEVEL: varies COLOR: 227 WEIGHT: 0 GRAPHIC: DESCRIPTION: CUT SLOPE LIMIT LINE
rw	NAME: RWEXTOPO_e LEVEL: varies COLOR: 227 WEIGHT: 0 GRAPHIC: DESCRIPTION: EXISTING TOPO LINE
rw	NAME: RWFEN1_e LEVEL: varies COLOR: 227 WEIGHT: 0 GRAPHIC: DESCRIPTION: EXISTING FENCE LINE (1)
rw	NAME: RWFILL_e LEVEL: varies COLOR: 227 WEIGHT: 0 GRAPHIC: DESCRIPTION: FILL SLOPE LIMIT LINE
rw	NAME: RWFRCI_e LEVEL: 204 COLOR: 4 WEIGHT: 7 GRAPHIC: DESCRIPTION: FOREST-CITY LIMIT LINE
rw	NAME: RWFRST_e LEVEL: 204 COLOR: 4 WEIGHT: 7 GRAPHIC: DESCRIPTION: FOREST-RESERVATION LINE
rw	NAME: RWLGB_e LEVEL: 204 COLOR: 4 WEIGHT: 7 GRAPHIC: DESCRIPTION: LAND GRANT BOUNDARY LINE

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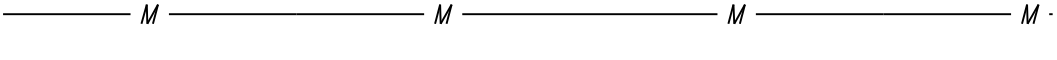
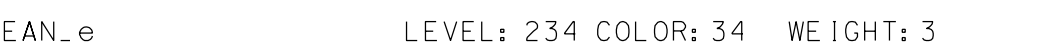
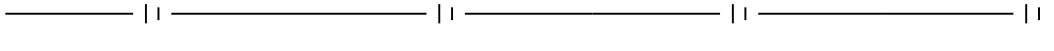
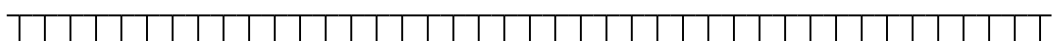
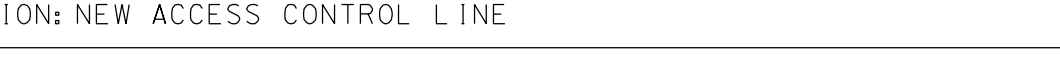
GRAPHIC DEFINITION

.rsc	
rw	NAME: RWMC_e LEVEL: 234 COLOR: 34 WEIGHT: 3 GRAPHIC:  DESCRIPTION: MINING CLAIM LINE
rw	NAME: RWMEAN_e LEVEL: 234 COLOR: 34 WEIGHT: 3 GRAPHIC:  DESCRIPTION: MEANDER LINE
rw	NAME: RWMID_e LEVEL: 203 COLOR: 7 WEIGHT: 4 GRAPHIC:  DESCRIPTION: MID SECTION LINE
rw	NAME: RWNAC_e LEVEL: 232 COLOR: 32 WEIGHT: 3 GRAPHIC:  DESCRIPTION: NEW ACCESS CONTROL LINE
rw	NAME: RWNSB_e LEVEL: 204 COLOR: 4 WEIGHT: 7 GRAPHIC: DESCRIPTION: NATIONAL OR STATE BOUNDARY LINE
rw	NAME: RWPL_e LEVEL: 234 COLOR: 34 WEIGHT: 3 GRAPHIC: DESCRIPTION: PROPERTY LINE
rw	NAME: RWPLB_e LEVEL: 234 COLOR: 34 WEIGHT: 3 GRAPHIC:  DESCRIPTION: LEASE PROPERTY LINE
rw	NAME: RWRH_e LEVEL: 229 COLOR: 29 WEIGHT: 3 GRAPHIC:  DESCRIPTION: RAILROAD - HIGHWAY RIGHT OF WAY LINE

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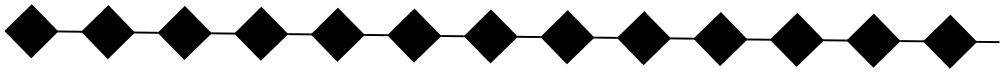
.rsc	
rw	NAME: RWRIVR_e LEVEL: 222 COLOR: 22 WEIGHT: 0 GRAPHIC: DESCRIPTION: DITCH - RIVER LINE
rw	NAME: RWRR_e LEVEL: 229 COLOR: 29 WEIGHT: 3 GRAPHIC: DESCRIPTION: RAILROAD RIGHT OF WAY LINE
rw	NAME: RWSCLN_e LEVEL: 203 COLOR: 3 WEIGHT: 7 GRAPHIC: DESCRIPTION: PROTRACTED TOWNSHIP/SEC LINE
rw	NAME: RWSDE1_e LEVEL: 229 COLOR: 29 WEIGHT: 3 GRAPHIC: DESCRIPTION: EXISTING DRAINAGE EASEMENT LINE
rw	NAME: RWSIX_e LEVEL: 265 COLOR: 65 WEIGHT: 3 GRAPHIC: DESCRIPTION: SIXTEENTH (1/16) LINE
rw	NAME: RWTCE_e LEVEL: 266 COLOR: 66 WEIGHT: 7 GRAPHIC: DESCRIPTION: TCE LINE
rw	NAME: RWTOTACQ1_e LEVEL: 234 COLOR: 34 WEIGHT: 3 GRAPHIC:  DESCRIPTION: TOTAL ACQUISITION PROPERTY LINES
rw	NAME: RWTOTACQ2_e LEVEL: 234 COLOR: 34 WEIGHT: 3 GRAPHIC:  DESCRIPTION: TOTAL ACQUISITION PROPERTY LINES

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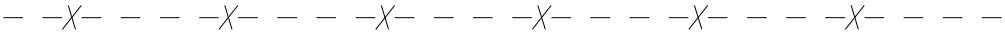
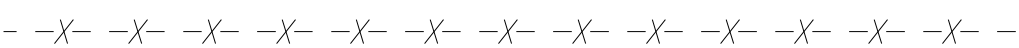
.rsc	
rw	NAME: RWTRLN_e LEVEL: 203 COLOR: 3 WEIGHT: 7 GRAPHIC: DESCRIPTION: TOWNSHIP - RANGE LINE
rw	NAME: RWXAC_e LEVEL: 231 COLOR: 31 WEIGHT: 2 GRAPHIC:  DESCRIPTION: EXISTING ACCESS CONTROL LINE
rw	NAME: RWXCL_e LEVEL: 220 COLOR: 20 WEIGHT: 2 GRAPHIC: DESCRIPTION: EXISTING CENTERLINE W/O TICK MARKS
rw	NAME: RWXFN1_e LEVEL: varies COLOR: 227 WEIGHT: 0 GRAPHIC:  DESCRIPTION: EXISTING FENCE LINE (1)
rw	NAME: RWXFN2_e LEVEL: varies COLOR: 227 WEIGHT: 0 GRAPHIC:  DESCRIPTION: EXISTING FENCE LINE (2)
rw	NAME: RWXFN3_e LEVEL: varies COLOR: 227 WEIGHT: 0 GRAPHIC: DESCRIPTION: EXISTING FENCE LINE (3)
rw	NAME: RWXRWL_e LEVEL: 229 COLOR: 29 WEIGHT: 3 GRAPHIC: DESCRIPTION: EXISTING NON-ADOT RIGHT OF WAY LINE
rw	NAME: RWXRWL_e LEVEL: 229 COLOR: 29 WEIGHT: 6 GRAPHIC: DESCRIPTION: EXISTING ADOT RIGHT OF WAY LINE

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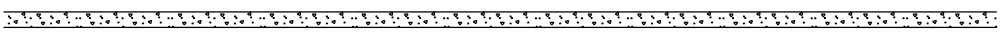
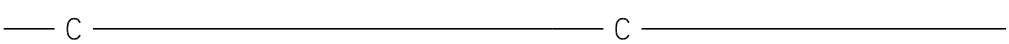
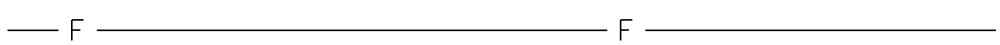
.rsc	
adot	NAME: SCLN_e LEVEL: 3 COLOR: 3 WEIGHT: 4 GRAPHIC: DESCRIPTION: SECTION LINE
adot	NAME: SIXTH_e LEVEL: 3 COLOR: 3 WEIGHT: 3 GRAPHIC: DESCRIPTION: SIXTEENTH LINE
traf	NAME: STROB_e LEVEL: 46 COLOR: 42 WEIGHT: 0 GRAPHIC: X X X X X X X X X X X X DESCRIPTION: STRIPE OBLITERATION
traf	NAME: TCB_e LEVEL: 42 COLOR: 42 WEIGHT: 1 GRAPHIC:  DESCRIPTION: TEMPORARY CONCRETE BARRIER
adot	NAME: TCE_e LEVEL: 30 COLOR: 30 WEIGHT: 7 GRAPHIC: DESCRIPTION: TEMPORARY CONSTRUCTION EASEMENT
road way	NAME: TOSCUT_e LEVEL: 37 COLOR: 37 WEIGHT: 2 GRAPHIC:  DESCRIPTION: SLOPE - TOP OF CUT LINE
road way	NAME: TOSFIL_e LEVEL: 37 COLOR: 38 WEIGHT: 2 GRAPHIC:  DESCRIPTION: SLOPE - TOE OF FILL
adot	NAME: TR_e LEVEL: 3 COLOR: 3 WEIGHT: 4 GRAPHIC: DESCRIPTION: TOWNSHIP OR RANGE LINE

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

For existing traffic items, use Subdued linestyle. Graphic Color 17 = yellow (shown here in black for clarity)

Not to scale.

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04-26-10

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GRAPHIC DEFINITION

.rsc	
adot	NAME:TRELN_e LEVEL:7 COLOR:7 WEIGHT:0 GRAPHIC:  DESCRIPTION:TREE LINE
adot	NAME:TRL_e LEVEL:16 COLOR:16 WEIGHT:0 GRAPHIC: DESCRIPTION:TRAIL CENTERLINE
traf	NAME:TYP220_e LEVEL:42 COLOR:42 WEIGHT:2 GRAPHIC:  DESCRIPTION:TYPE II BARRICADE AT 20' SPACING
traf	NAME:TYP240_e LEVEL:42 COLOR:42 WEIGHT:2 GRAPHIC:  DESCRIPTION:TYPE II BARRICADE AT 40' SPACING
traf	NAME:TYP280_e LEVEL:42 COLOR:42 WEIGHT:2 GRAPHIC:  DESCRIPTION: TYPE II BARRICADE AT 80' SPACING
traf	NAME:VP20_e LEVEL:42 COLOR:42 WEIGHT:2 GRAPHIC:  DESCRIPTION: VERTICAL PANEL AT 20' SPACING
traf	NAME:VP40_e LEVEL:42 COLOR:42 WEIGHT:2 GRAPHIC:  DESCRIPTION: VERTICAL PANEL AT 40' SPACING
traf	NAME:VP80_e LEVEL:42 COLOR:42 WEIGHT:2 GRAPHIC: DESCRIPTION: VERTICAL PANEL AT 80' SPACING

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

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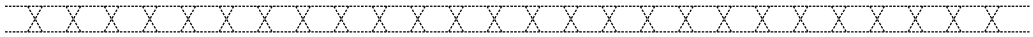
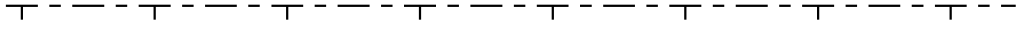
GRAPHIC DEFINITION

.rsc	
adot	NAME: XACS_e LEVEL: 31 COLOR: 31 WEIGHT: 0 GRAPHIC:  DESCRIPTION: EXISTING ACCESS CONTROL
adot	NAME: XBNKPT_e LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING BANK PROTECTION
adot	NAME: XDAM_e LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING DAM CENTERLINE
adot	NAME: XDICL_e LEVEL: 5 COLOR: 5 WEIGHT: 4 GRAPHIC:  DESCRIPTION: EXISTING DEPRESSED INDEX CONTOUR LINE
adot	NAME: XDIKE_e LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING DIKE
adot	NAME: XDMCL_e LEVEL: 6 COLOR: 6 WEIGHT: 0 GRAPHIC:  DESCRIPTION: EXISTING DEPRESSED INTERMEDIATE CONTOUR LINE
adot	NAME: XDRNES_e LEVEL: 15 COLOR: 15 WEIGHT: 1 GRAPHIC: DESCRIPTION: EXISTING DRAINAGE EASEMENT
traf	NAME: XDY220M_e (SEE NOTES) LEVEL: 46 COLOR: 17 WEIGHT: 0 GRAPHIC:  DESCRIPTION: DOUBLE YELLOW WITH 20' RPMS (2 RPMS OUTSIDE OF DOUBLE YELLOW)

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

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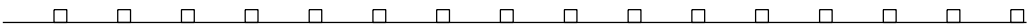
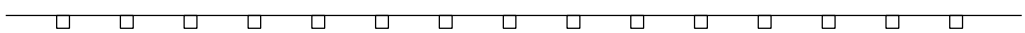
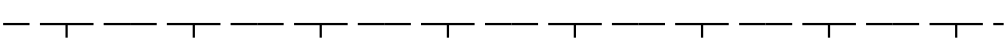
GRAPHIC DEFINITION

.rsc	
traf	NAME: XDY240M_e (SEE NOTES) LEVEL: 46 COLOR: 17 WEIGHT: 0 GRAPHIC:  DESCRIPTION: DOUBLE YELLOW WITH 40' RPMS (2 RPMS OUTSIDE OF DOUBLE YELLOW)
adot	NAME: XEIDIT_e LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC: DESCRIPTION: EXISTING EARTH IRRIGATION DITCH (PHOTOGRAMMETRY ONLY)
adot	NAME: XGL_e LEVEL: 705 COLOR: 17 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING GAS LINE
adot	NAME: XGRL_e LEVEL: 23 COLOR: 23 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING GUARDRAIL, LEFT
adot	NAME: XGRR_e LEVEL: 23 COLOR: 23 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING GUARDRAIL, RIGHT
adot	NAME: XHDICL_e LEVEL: 5 COLOR: 5 WEIGHT: 4 GRAPHIC:  DESCRIPTION: EXISTING HIDDEN DEPRESSED INDEX CONTOUR LINE
adot	NAME: XHDMCL_e LEVEL: 6 COLOR: 6 WEIGHT: 0 GRAPHIC:  DESCRIPTION: EXISTING HIDDEN DEPRESSED INTERMEDIATE CONTOUR LINE
adot	NAME: XHEDIT_e LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC: DESCRIPTION: EXISTING HIDDEN EARTH IRRIGATION DITCH (PHOTOGRAMMETRY)

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

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GRAPHIC DEFINITION

.rsc	
adot	NAME: XIRDC_e LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC: ═══IR═══ ═══IR═══ ═══IR═══ DESCRIPTION: EXISTING CONCRETE IRRIGATION DITCH
adot	NAME: XIRDE_e LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC: ═══IR═══ ═══IR═══ ═══IR═══ DESCRIPTION: EXISTING IRRIGATION DITCH, EARTH
adot	NAME: XIRL_e LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC: ——IR—— ——IR—— ——IR—— DESCRIPTION: EXISTING IRRIGATION LINE
adot	NAME: XLBW_e LEVEL: 29 COLOR: 29 WEIGHT: 0 GRAPHIC: ——‾——_——‾——_——‾——_——‾——_—— DESCRIPTION: EXISTING LONG BLOCK WALL
adot	NAME: XLCLRW_e LEVEL: 29 COLOR: 29 WEIGHT: 1 GRAPHIC: ——o—— — — —o——o—— DESCRIPTION: EXISTING LONG CHAIN LINK FENCE ON R/W
adot	NAME: XLCLWL_e LEVEL: 29 COLOR: 29 WEIGHT: 1 GRAPHIC: - — — —o— — — — — —o— — — — — —o— — — — DESCRIPTION: EXISTING LONG CHAIN LINK FENCE WITH LINE
adot	NAME: XLFCRW_e LEVEL: 29 COLOR: 29 WEIGHT: 1 GRAPHIC: ——————x—— — — —— x—————— DESCRIPTION: EXISTING LONG FENCE ON R/W
adot	NAME: XLFCWL_e LEVEL: 29 COLOR: 29 WEIGHT: 1 GRAPHIC: - — — — — x — — — — — — — — — x — — — — — DESCRIPTION: EXISTING LONG FENCE WITH LINE

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

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GRAPHIC DEFINITION

.rsc	
traf	NAME: XLLRPM_e LEVEL: 46 COLOR: 63 WEIGHT: 0 GRAPHIC: ○○○○ ■ ○○○○ ■ ○○○○ ■ ○○○○ DESCRIPTION: RPM LANE LINE
adot	NAME: XLWDFE_e LEVEL: 29 COLOR: 29 WEIGHT: 1 GRAPHIC: – — — —□— — — — — — —□— — — — — —□— — — — – DESCRIPTION: EXISTING LONG WOOD FENCE WITH LINE
adot	NAME: XLWFRW_e LEVEL: 29 COLOR: 29 WEIGHT: 1 GRAPHIC: ————□— — — — —□————————□———— DESCRIPTION: EXISTING LONG WOOD FENCE ON R/W
adot	NAME: XOHPJL_e LEVEL: 701 COLOR: 42 **WEIGHT:** 1 GRAPHIC: —OP———— ————OP———— ————OP———— - DESCRIPTION: EXISTING OVERHEAD POWER/JOINT USE LINE
adot	NAME: XOHTL_e LEVEL: 713 COLOR: 95 WEIGHT: 1 GRAPHIC: —OT———— ————OT———— ————OT———— DESCRIPTION: EXISTING OVERHEAD TELEPHONE LINE
adot	NAME: XOHTV_e LEVEL: 717 COLOR: 95 WEIGHT: 1 GRAPHIC: —OTV———— ————OTV———— ————OTV———— DESCRIPTION: EXISTING OVERHEAD TELEVISION LINE
adot	NAME: XPJUL_e LEVEL: 701 COLOR: 42 WEIGHT: 1 GRAPHIC: —P———— ————P———— ————P———— DESCRIPTION: EXISTING UNDERGROUND POWER/JOINT USE LINE
adot	NAME: XPMR50_e LEVEL: 11 COLOR: 11 WEIGHT: 0 GRAPHIC: ——|————|————|————|————|————|————|—— DESCRIPTION: EXISTING RAILROAD - PHOTOGRAMMETRY VERSION

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

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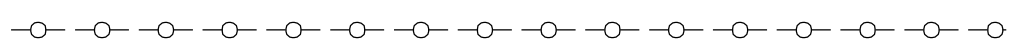
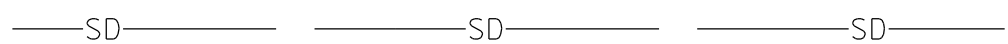
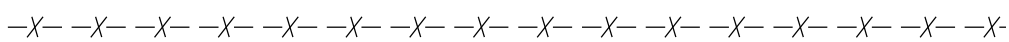
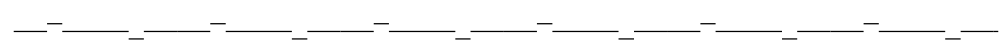
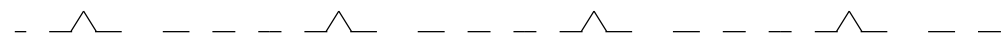
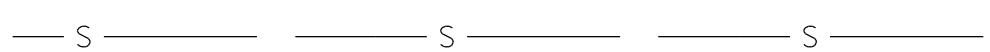
GRAPHIC DEFINITION

.rsc	
adot	NAME: XRW_e LEVEL: 29 COLOR: 29 WEIGHT: 1 GRAPHIC: DESCRIPTION: EXISTING RIGHT OF WAY LINE
roadway	NAME: xrwm LEVEL: 29 COLOR: 29 WEIGHT: 0 GRAPHIC:  DESCRIPTION: EXISTING RIGHT OF WAY MARKERS
adot	NAME: XSCLFC_e LEVEL: 29 COLOR: 29 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING SHORT CHAIN LINK FENCE WITH LINE
adot	NAME: XSD_e LEVEL: 13 COLOR: 13 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING STORM DRAIN
adot	NAME: XSFC_e LEVEL: 29 COLOR: 29 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING SHORT FENCE WITH LINE
adot	NAME: XSHBW_e LEVEL: 29 COLOR: 29 WEIGHT: 0 GRAPHIC:  DESCRIPTION: EXISTING SHORT BLOCK WALL
adot	NAME: XSRET_e LEVEL: 22 COLOR: 22 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING SHORT RETAINING WALL
adot	NAME: XSSL_e LEVEL: 721 COLOR: 65 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING SANITARY SEWER LINE

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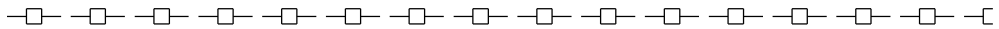
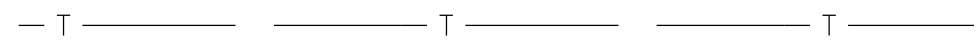
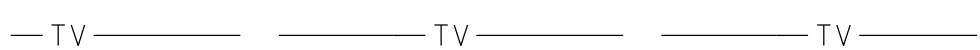
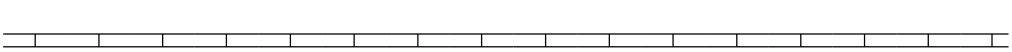
GRAPHIC DEFINITION

.rsc	
adot	NAME: XSWDFE_e LEVEL: 29 COLOR: 29 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING SHORT WOOD FENCE
traf	NAME: XTLRPMB_e (SEE NOTES) LEVEL: 46 COLOR: 17 WEIGHT: 0 GRAPHIC:  DESCRIPTION: TURN LANE WITH RPMS
traf	NAME: XTLRPMT_e (SEE NOTES) LEVEL: 46 COLOR: 17 WEIGHT: 0 GRAPHIC:  DESCRIPTION: TURN LANE WITH RPMS
adot	NAME: XTTL_e LEVEL: 713 COLOR: 95 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING UNDERGROUND TELEPHONE/TELEGRAPH LINE
adot	NAME: XTVL_e LEVEL: 717 COLOR: 95 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING UNDERGROUND TELEVISION LINE
adot	NAME: XWALL_e LEVEL: 29 COLOR: 29 WEIGHT: 1 GRAPHIC:  DESCRIPTION: EXISTING WALL
adot	NAME: XWASH_e LEVEL: 8 COLOR: 8 WEIGHT: 2 GRAPHIC: DESCRIPTION: EXISTING MAJOR WASH OR DRAINAGE CHANNEL, EXISTING MINOR WASH, OR EXISTING DRAINAGE DITCH
adot	NAME: XWL_e LEVEL: 725 COLOR: 38 WEIGHT: 1 GRAPHIC: DESCRIPTION: EXISTING WATER LINE

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

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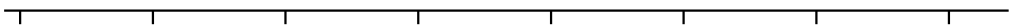
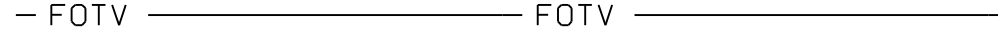
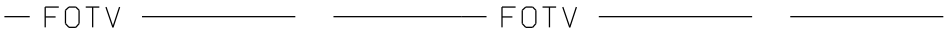
GRAPHIC DEFINITION

.rsc	
adot	NAME: PMXDICL_e LEVEL: 5 COLOR: 5 WEIGHT: 4 GRAPHIC:  DESCRIPTION: INDEX DEPRESSION CONTOUR
adot	NAME: PMXDMCL_e LEVEL: 6 COLOR: 6 WEIGHT: 0 GRAPHIC:  DESCRIPTION: INTERMEDIATE DEPRESSION COUNTOUR
adot	NAME: PMXLFCWL_e LEVEL: 29 COLOR: 29 WEIGHT: 0 GRAPHIC:  DESCRIPTION: LONG BARBED WIRE FENCE
adot	NAME: NFOT_e LEVEL: 739 COLOR: 195 WEIGHT: 3 GRAPHIC:  DESCRIPTION: TELEPHONE FIBER OPTIC (NEW)
adot	NAME: XFOT_e LEVEL: 741 COLOR: 95 WEIGHT: 1 GRAPHIC:  DESCRIPTION: TELEPHONE FIBER OPTIC (EXISTING)
adot	NAME: NFOTV_e LEVEL: 743 COLOR: 195 WEIGHT: 3 GRAPHIC:  DESCRIPTION: TV FIBER OPTIC (NEW)
adot	NAME: XFOTV_e LEVEL: 745 COLOR: 95 WEIGHT: 1 GRAPHIC:  DESCRIPTION: TV FIBER OPTIC (EXISTING)

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

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GRAPHIC DEFINITION

.rsc	
NA	NAME: NOT A CELL LEVEL: 5 COLOR: 5 WEIGHT: 4 LINE CODE: 0 GRAPHIC: DESCRIPTION: EXISTING INDEX CONTOUR LINE (PHOTOGRAMMETRY)
NA	NAME: NOT A CELL LEVEL: 5 COLOR: 5 WEIGHT: 4 LINE CODE: 7 GRAPHIC: DESCRIPTION: EXISTING INDEX CONTOUR LINE (OTHERS)
NA	NAME: NOT A CELL LEVEL: 5 COLOR: 5 WEIGHT: 4 LINE CODE: 3 GRAPHIC: DESCRIPTION: EXISTING HIDDEN INDEX CONTOUR LINE
NA	NAME: NOT A CELL LEVEL: 6 COLOR: 6 WEIGHT: 0 LINE CODE: 0 GRAPHIC: DESCRIPTION: EXISTING INTERMEDIATE CONTOUR LINE (PHOTOGRAMMETRY)
NA	NAME: NOT A CELL LEVEL: 6 COLOR: 6 WEIGHT: 0 LINE CODE: 7 GRAPHIC: DESCRIPTION: EXISTING INTERMEDIATE CONTOUR LINE (OTHERS)
NA	NAME: NOT A CELL LEVEL: 6 COLOR: 6 WEIGHT: 0 LINE CODE: 3 GRAPHIC: DESCRIPTION: EXISTING HIDDEN INTERMEDIATE CONTOUR LINE
NA	NAME: NOT A CELL LEVEL: 9 COLOR: 9 WEIGHT: 1 LINE CODE: 3 GRAPHIC: DESCRIPTION: EXISTING SIDEWALK
NA	NAME: NOT A CELL LEVEL: 9 COLOR: 9 WEIGHT: 3 LINE CODE: 0 GRAPHIC: DESCRIPTION: EXISTING BUILDING (PHOTOGRAMMETRY)

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

For existing traffic items, use Subdued linestyle. Graphic Color 17 = yellow (shown here in black for clarity)

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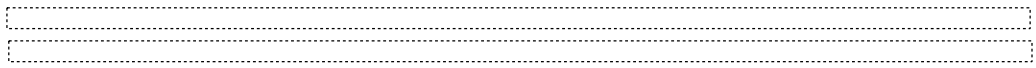
.rsc	
NA	NAME: NOT A CELL LEVEL: 9 COLOR: 9 WEIGHT: 1 LINE CODE: 5 GRAPHIC: DESCRIPTION: EXISTING BUILDING (OTHERS)
NA	NAME: NOT A CELL LEVEL:13 COLOR:13 WEIGHT: 1 LINE CODE: 1 GRAPHIC: DESCRIPTION: EXISTING SINGLE PIPE INSTALLATION 42" DIA OR LARGER, SCALE 1:50 OR SMALLER ALL PIPES AT SCALE LARGER THAN 1:50
NA	NAME: NOT A CELL LEVEL:13 COLOR:13 WEIGHT: 1 LINE CODE: 1 GRAPHIC:  DESCRIPTION: EXISTING DOUBLE PIPE INSTALLATION 42" DIA OR LARGER, SCALE 1:50 OR SMALLER ALL PIPES AT SCALE LARGER THAN 1:50
NA	NAME: NOT A CELL LEVEL:13 COLOR:13 WEIGHT: 1 LINE CODE: 1 GRAPHIC: DESCRIPTION: EXISTING SINGLE PIPE INSTALLATION 36" DIA OR SMALLER, SCALE 1:50 OR SMALLER
NA	NAME: NOT A CELL LEVEL:13 COLOR:13 WEIGHT: 1 LINE CODE: 1 GRAPHIC: DESCRIPTION: EXISTING DOUBLE PIPE INSTALLATION 36" DIA OR SMALLER, SCALE 1:50 OR SMALLER
NA	NAME: NOT A CELL LEVEL:16 COLOR:16 WEIGHT: 1 LINE CODE: 0 GRAPHIC: DESCRIPTION: EXISTING PAVEMENT EDGE (PHOTOGRAMMETRY)
NA	NAME: NOT A CELL LEVEL:16 COLOR:16 WEIGHT: 1 LINE CODE: 3 GRAPHIC: DESCRIPTION: EXISTING PAVEMENT EDGE (OTHERS)
NA	NAME: NOT A CELL LEVEL:16 COLOR:16 WEIGHT: 1 LINE CODE: 5 GRAPHIC: DESCRIPTION: EXISTING EDGE OF CONCRETE ROAD (PHOTOMRAMMETRY ONLY)

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

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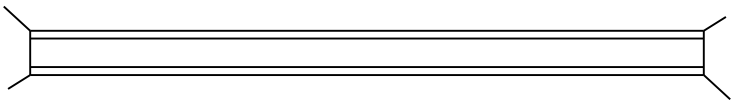
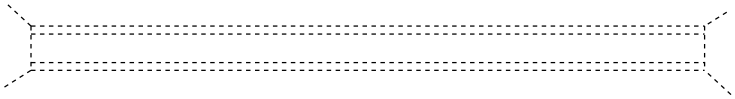
GRAPHIC DEFINITION

.rsc	
NA	NAME: NOT A CELL LEVEL: 20 COLOR: 20 WEIGHT: 1 LINE CODE: 3 GRAPHIC: ---------- DESCRIPTION: EXISTING C/L GRADE, PROFILE
NA	NAME: NOT A CELL LEVEL: 22 COLOR: 22 WEIGHT: 3 LINE CODE: 0 GRAPHIC:  DESCRIPTION: EXISTING BRIDGE (PHOTOGRAMMETRY)
NA	NAME: NOT A CELL LEVEL: 22 COLOR: 22 WEIGHT: 1 LINE CODE: 5 GRAPHIC:  DESCRIPTION: EXISTING BRIDGE (OTHERS)
NA	NAME: NOT A CELL LEVEL: 23 COLOR: 23 WEIGHT: 3 LINE CODE: 0 GRAPHIC: ---------- DESCRIPTION: EXISTING CURB, CURB & GUTTER (SCALE 1"=100' AND SMALLER) PHOTOGRAMMETRY
NA	NAME: NOT A CELL LEVEL: 23 COLOR: 23 WEIGHT: 1 LINE CODE: 3 GRAPHIC: ---------- DESCRIPTION: EXISTING CURB, CURB & GUTTER (SCALE 1"=100' AND SMALLER) OTHERS
NA	NAME: NOT A CELL LEVEL: 23 COLOR: 23 WEIGHT: 1 LINE CODE: 0 GRAPHIC: ---------- DESCRIPTION: EXISTING CURB, CURB & GUTTER (SCALE 1"=50' AND LARGER) PHOTOGRAMMETRY
NA	NAME: NOT A CELL LEVEL: 23 COLOR: 23 WEIGHT: 1 LINE CODE: 3 GRAPHIC: ---------- DESCRIPTION: EXISTING CURB, CURB & GUTTER (SCALE 1"=50' AND LARGER) OTHERS
NA	NAME: NOT A CELL LEVEL: 27 COLOR: 27 WEIGHT: 6 LINE CODE: 0 GRAPHIC: ---------- DESCRIPTION: NEW CENTERLINE GRADE, PROFILE

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

For existing traffic items, use Subdued linestyle. Graphic Color 17 = yellow (shown here in black for clarity)

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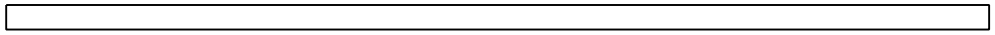
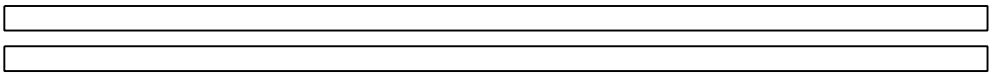
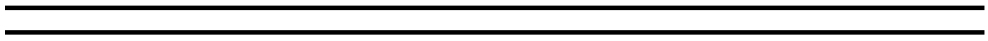
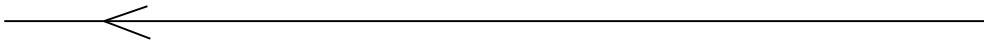
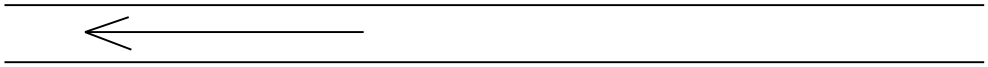
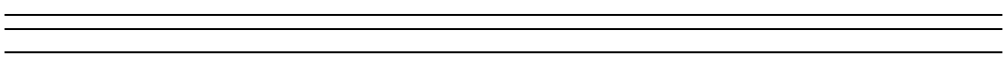
NA	NAME: NOT A CELL LEVEL:35 COLOR:35 WEIGHT:3 LINE CODE:0 GRAPHIC: DESCRIPTION: NEW PAVEMENT EDGE
NA	NAME: NOT A CELL LEVEL:38 COLOR:38 WEIGHT:3 LINE CODE:0 GRAPHIC:  DESCRIPTION: NEW SINGLE PIPE INSTALLATION 42" OR LARGER, SCALE 1:50 OR SMALLER ALL PIPES AT SCALE LARGER THAN 1:50
NA	NAME: NOT A CELL LEVEL:38 COLOR:38 WEIGHT:7 LINE CODE:0 GRAPHIC: DESCRIPTION: NEW SINGLE PIPE INSTALLATION 36" OR SMALLER, SCALE 1:50 OR SMALLER
NA	NAME: NOT A CELL LEVEL:38 COLOR:38 WEIGHT:3 LINE CODE:0 GRAPHIC:  DESCRIPTION: NEW DOUBLE PIPE INSTALLATION 42" OR LARGER, SCALE 1:50 OR SMALLER ALL PIPES AT SCALE LARGER THAN 1:50
NA	NAME: NOT A CELL LEVEL:38 COLOR:38 WEIGHT:7 LINE CODE:0 GRAPHIC:  DESCRIPTION: NEW DOUBLE PIPE INSTALLATION 36" OR SMALLER, SCALE 1:50 OR SMALLER
NA	NAME: NOT A CELL LEVEL:38 COLOR:38 WEIGHT:3 LINE CODE:0 GRAPHIC:  DESCRIPTION: NEW DRAINAGE DITCH
NA	NAME: NOT A CELL LEVEL:38 COLOR:38 WEIGHT:3 LINE CODE:0 GRAPHIC:  DESCRIPTION: NEW DRAINAGE CHANNEL
NA	NAME: NOT A CELL LEVEL:44 COLOR:44 WEIGHT:3 LINE CODE:0 GRAPHIC:  DESCRIPTION: NEW CURB, CURB & GUTTER (SCALE 1"=100')

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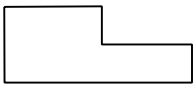
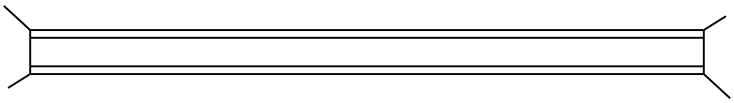
NA	NAME: NOT A CELL LEVEL:44 COLOR:44 WEIGHT:3 LINE CODE:0 GRAPHIC: DESCRIPTION: NEW SIDEWALK
NA	NAME: NOT A CELL LEVEL:44 COLOR:44 WEIGHT:3 LINE CODE:0 GRAPHIC:  DESCRIPTION: NEW BUILDING
NA	NAME: NOT A CELL LEVEL:48 COLOR:48 WEIGHT:3 LINE CODE:0 GRAPHIC:  DESCRIPTION: NEW BRIDGE
NA	NAME: NOT A CELL LEVEL:15 COLOR:15 WEIGHT:7 LINE CODE:0 GRAPHIC: DESCRIPTION: NEW HWY SLOPE & DRAINAGE EASEMENT R/W ONLY
NA	NAME: NOT A CELL LEVEL:230 COLOR:30 WEIGHT:7 LINE CODE:0 GRAPHIC: DESCRIPTION: NEW RIGHT OF WAY LINE R/W ONLY
NA	NAME: NOT A CELL LEVEL:50 COLOR:50 WEIGHT:6 LINE CODE:3 GRAPHIC: DESCRIPTION: PROPOSED CONDUIT
NA	NAME: NOT A CELL LEVEL:17 COLOR:17 WEIGHT:2 LINE CODE:7 GRAPHIC: DESCRIPTION: EXISTING CONDUIT
NA	NAME: NOT A CELL LEVEL:38 COLOR:38 WEIGHT:7 LINE CODE:0 GRAPHIC: DESCRIPTION: NEW SLOTTED DRAIN

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NA	NAME: NOT A CELL LEVEL:301 COLOR:0 WEIGHT:1 LINE CODE:0 GRAPHIC: DESCRIPTION: NEW SAWCUT LINES
NA	NAME: NOT A CELL LEVEL:38 COLOR:38 WEIGHT:3 LINE CODE:0 GRAPHIC: DESCRIPTION: NEW EMBANKMENT CURB
NA	NAME: NOT A CELL LEVEL:27 COLOR:27 WEIGHT:6 LINE CODE:0 GRAPHIC: DESCRIPTION: NEW CENTERLINE
NA	NAME: NOT A CELL LEVEL:59 COLOR:59 WEIGHT:1 LINE CODE:5 GRAPHIC: DESCRIPTION: EXISTING PROFILE-GROUNDLINE
NA	NAME: NOT A CELL LEVEL:20 COLOR:20 WEIGHT:2 LINE CODE:0 GRAPHIC: DESCRIPTION: EXISTING CENTERLINE
NA	NAME: NOT A CELL LEVEL:42 COLOR:42 WEIGHT:3 LINE CODE:0 GRAPHIC: DESCRIPTION: BARRIER, PRIVACY AND SOUND WALLS
	NAME: LEVEL: COLOR: WEIGHT: LINE CODE: GRAPHIC: DESCRIPTION:
	NAME: LEVEL: COLOR: WEIGHT: LINE CODE: GRAPHIC: DESCRIPTION:

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.rsc	
traf	NAME: GORE20RPM_e LEVEL: 46 COLOR: 46 WEIGHT: 2 GRAPHIC: DESCRIPTION: HIDDEN STREAM OR SHORLINE
traf	NAME: GORE40RPM_e LEVEL: 46 COLOR: 46 WEIGHT: 0 GRAPHIC: DESCRIPTION: EXISTING SHRUB
traf	NAME: TYP220T2 LEVEL: 42 COLOR: 42 WEIGHT: 0 GRAPHIC:  DESCRIPTION: TYPE II BARRICADE AT 20' SPACING (2X)
traf	NAME: TYPE240T2 LEVEL: 42 COLOR: 42 WEIGHT: 0 GRAPHIC:  DESCRIPTION: TYPE II BARRICADE AT 40' SPACING (2X)
traf	NAME: TYPE280T2 LEVEL: 42 COLOR: 42 WEIGHT: 0 GRAPHIC:  DESCRIPTION: TYPE II BARRICADE AT 80' SPACING (2X)
traf	NAME: CONE20T2 LEVEL: 42 COLOR: 42 WEIGHT: 0 GRAPHIC: DESCRIPTION: CONES, TUBULAR MARKERS, DELINEATORS AT 20' SPACING (2X)
traf	NAME: CONE40T2 LEVEL: 42 COLOR: 42 WEIGHT: 0 GRAPHIC:  DESCRIPTION: CONES, TUBULAR MARKERS, DELINEATORS AT 40' SPACING (2X)
traf	NAME: CONE80T2 LEVEL: 42 COLOR: 42 WEIGHT: 0 GRAPHIC: DESCRIPTION: CONES, TUBULAR MARKERS, DELINEATORS AT 80' SPACING (2X)

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

For existing traffic items, use Subdued linestyle. Graphic Color 17 = yellow (shown here in black for clarity)

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.rsc	
traf	NAME: VP20T2 LEVEL: 42 COLOR: 42 WEIGHT: 2 GRAPHIC: ▲ DESCRIPTION: VERTICAL PANEL AT 20' SPACING (2X)
traf	NAME: VP40T2 LEVEL: 42 COLOR: 42 WEIGHT: 0 GRAPHIC: ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ ▲ DESCRIPTION: VERTICAL PANEL AT 40' SPACING (2X)
traf	NAME: VP80T2 LEVEL: 42 COLOR: 42 WEIGHT: 0 GRAPHIC: ▲ ▲ ▲ ▲ ▲ ▲ DESCRIPTION: VERTICAL PANEL AT 80' SPACING (2X)
road way	NAME: TOSFIL_TOSTRA LEVEL: 37 COLOR: 38 WEIGHT: 2 GRAPHIC: ⊖—F———————————F———————————⊖ DESCRIPTION: SLOPE - TOE OF FILL With TOSTRA
traf	NAME: DY LEVEL: 42 COLOR: 42 WEIGHT: 0 GRAPHIC: ═══════════════════════════ DESCRIPTION: DOUBLE YELLOW CENTER LINE
traf	NAME: LEVEL: COLOR: WEIGHT: 0 GRAPHIC: DESCRIPTION:
traf	NAME: LEVEL: COLOR: WEIGHT: GRAPHIC: DESCRIPTION:
traf	NAME: LEVEL: 46 COLOR: 63 WEIGHT: 0 GRAPHIC: DESCRIPTION:

NOTES: Levels, Weights and Colors will vary dependent upon Agency Standards.

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