INSTRUCTIONS FOR FABRICATION AND INSTALLATION OF STREET NAME, DEAD END & NO OUTLET SIGNS

1) SIGN BLANK MATERIALS – FOR STANDARD SIZE STREET NAME SIGNS, BLANKS SHALL BE 9" TALL EXTRUDED ALUMINUM PLATE (6063-T6). FOR LARGER SIGNS (WHEN APPROACH SPEED IS 45 MPH OR ABOVE), BLANKS SHALL USE 12" TALL EXTRUDED ALUMINUM PLATE. FOR ROUNDABOUT SIGNS, BLANKS SHALL BE FLAT ALUMINUM SIGN PLATE WITH A MINIMUM THICKNESS OF 0.125 INCH.

2) LETTER SIZE

   a. FOR STANDARD STREET NAME SIGNS AND ROUNDABOUT SIGNS, THE STREET NAME SHALL USE 6 INCH UPPER CAPITAL LETTERS AND 5 INCH LOWER CASE LETTERS. THE SUFFIX AND ADDRESS SHALL USE 3 INCH LETTERS

   b. FOR SIGNS ON APPROACHES WITH SPEEDS OF 45 MPH OR MORE, THE STREET NAME SHALL USE 8 INCH UPPER CAPITAL LETTERS AND 6.5 INCH LOWER CASE LETTERS. THE SUFFIX AND ADDRESS SHALL USE 4 INCH LETTERS

3) ACCEPTABLE SUFFIX'S SHALL BE Ave, Blvd, Ctr, Cir, Ct, Dr, Ln, Loop, Pkwy, Pl, Rd, St, Ter, Trl, Way.

4) FONTS – FONTS SHALL BE TYPE C TO START UNTIL IT IS DETERMINED THAT THE TARGET SIGN SIZES, 36" OR LESS FOR STANDARD SIGNS AND 42" OR LESS FOR LARGER SIGNS, CANNOT BE MET. REDUCE LETTER SPACING TO AS LOW AS 70% OF NORMAL (IN 5% INCREMENTS) TO MAINTAIN TARGET SIGN LENGTHS. IF THAT FAILS TO WORK, SWITCH TO B FONT FOR THE ADDRESS FIRST AND IF STILL TOO LARGE SWITCH TO B FONT FOR THE STREET NAME AND ADDRESS. REPEAT SPACING REDUCTION PROCESS WITH B FONT BEFORE MOVING UP TO NEXT BLADE SIZE.

5) SPACING – SPACING BETWEEN THE BORDERS, WORDS, AND THE SUFFIX/ADDRESS SHALL BE PER THE EXAMPLES ON TR2

6) FOR STREET NAMES WITH LOWER CASE DESCENDERS (I.E. g, j, p, q, y) THE SIGN TEXT MAY MOVED UP TO ENSURE THAT THE DESCENDER HAS CLEAR SPACE FROM THE BORDER. IN SOME CASES THE LOWER CASE LETTERS MAY HAVE TO BE ALIGNED TO THE CENTER VERTICALLY WITH THE UPPER CASE LETTERS INSTEAD OF THE PREFERRED ALIGNMENT ALONG THE BOTTOM BASELINE.

7) ONCE ALL OTHER PARAMETERS ARE SET, BALANCE THE HORIZONTAL SPACE BY ADJUSTING THE SPACE BETWEEN THE STREET NAME AND THE SUFFIX/ADDRESS BLOCK TO MATCH THE SPACE BETWEEN THE TEXT AND BORDER AT THE ENDS OF THE SIGN.

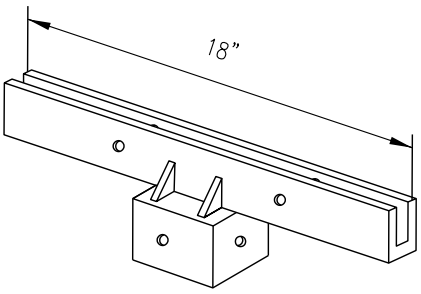
8) COLORS SHALL BE GREEN WITH WHITE TEXT FOR STANDARD STREETS. BLUE WITH WHITE TEXT FOR PRIVATE STREETS

9) DEAD END AND NO OUTLET SIGNS SHALL USE 5C LETTERING (WITH SPACING REDUCED TO 50%) ON A STANDARD 9"X36" EXTRUDED ALUMINUM PLATE WITH FLUORESCENT YELLOW SHEETING AND BLACK TEXT. ARROWS SHALL BE 5"TALL AND 6" LONG.

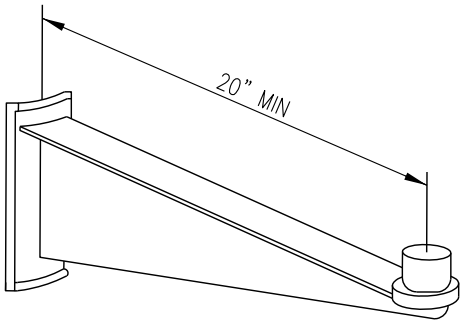
10) SIGN BRACKETS – SIGNS SHALL BE INSTALLED ON THE SIGN POST OR STREET LIGHT STANDARD BY MEANS OF ALUMINUM SIGN BRACKETS AND CROSSPIECES.

11) SEE DRAWING TR2 FOR EXAMPLE SIGNS AND TR3 FOR ELEVATIONS AND STANDARD SIGN SIZES.

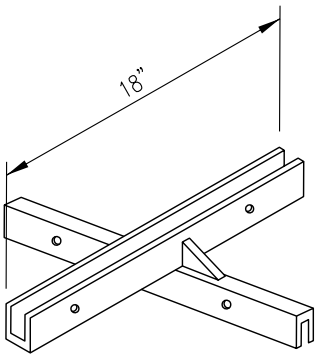
12) SIGN SUBMITTALS SHALL INCLUDE PROOFS THAT INCLUDE THE MUTCD SIGN CODE, SIGN SIZE, AS WELL AS LETTER SIZE AND FONT STYLE.



POST CAP BRACKET



CANTILEVER ARM BRACKET FOR STREET LIGHT



CROSS PIECE

STREET SIGN BRACKETS

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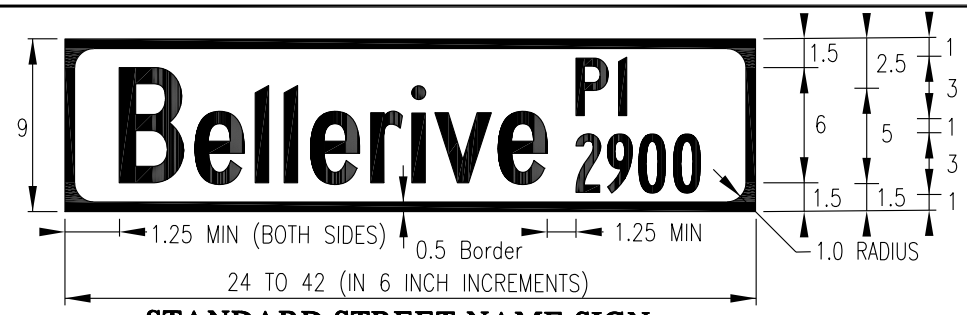
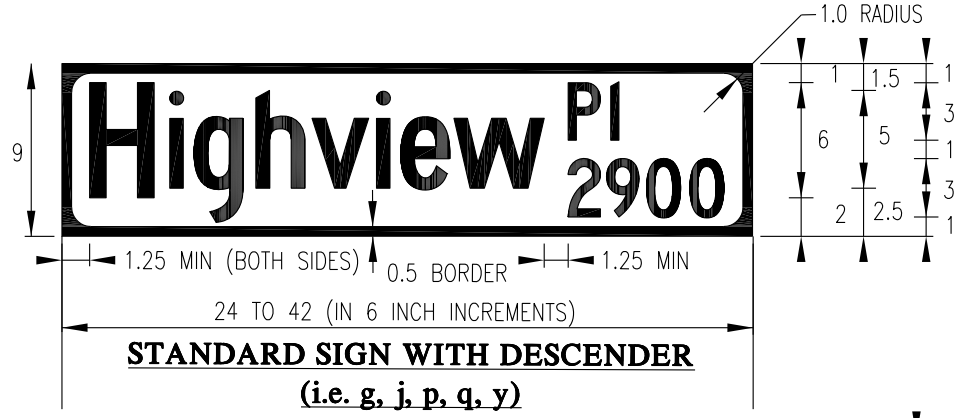
STREET NAME SIGN FABRICATION & INSTALLATION

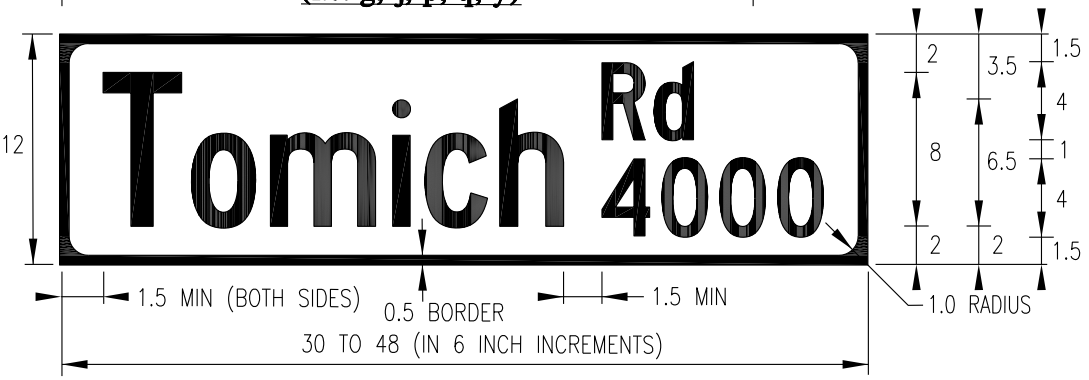
PUBLIC WORKS ENGINEERING	
APPR. BY: PKR	DATE: 02.24
DRAWN BY: EY	DWG: TR1
CAD FILE: 2021_TR1_07_2024	



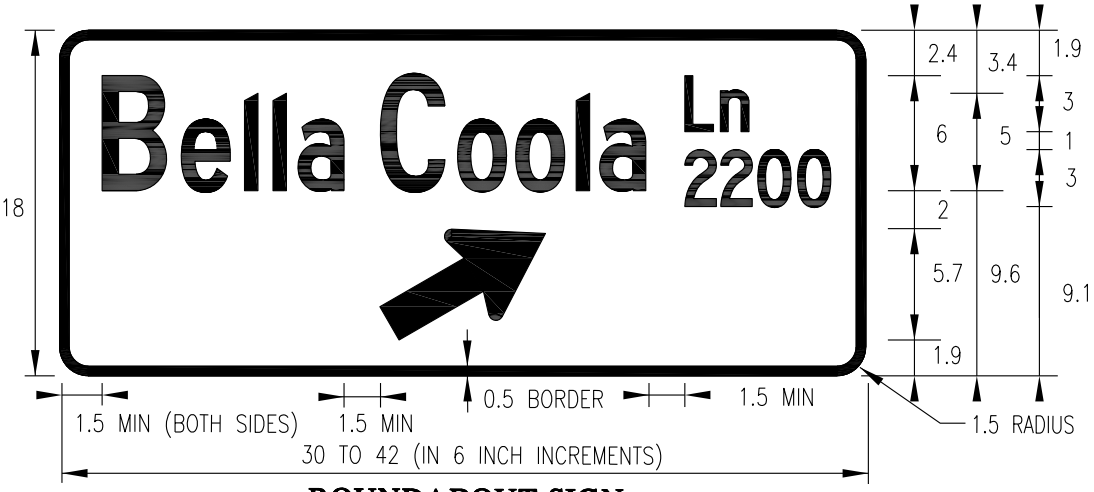
STANDARD STREET NAME SIGN



STANDARD SIGN WITH DESCENDER
(i.e. g, j, p, q, y)



SIGN WHEN STREET APPROACH SPEED IS 45 MPH OR ABOVE



ROUNDABOUT SIGN

NOTES:

1. ALL DIMENSIONS IN INCHES
2. ARROWS FOR STANDARD SIGNS SHALL BE SIZE 2 WITH 6" LENGTH.
3. FOR 12" SIGNS WITH LOWER CASE DESCENDERS SEE NOTE 6 ON TR1
4. ROUNDABOUT SIGNS GREATER THAN 36" IN LENGTH SHALL USE SIGN BRACE PER STD. DET. TR6.
5. ARROWS FOR ROUNDABOUT SIGNS SHALL BE SIZE 2 ANGLED AT 30 DEGREES WITH A 9.375" LENGTH.

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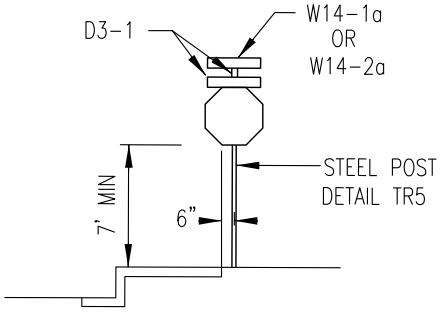
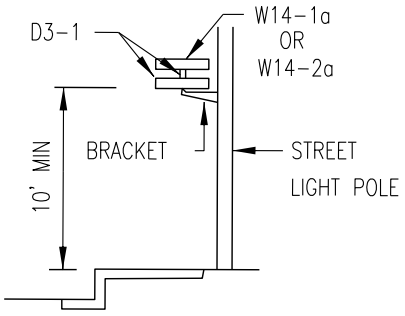
STREET NAME SIGN EXAMPLES

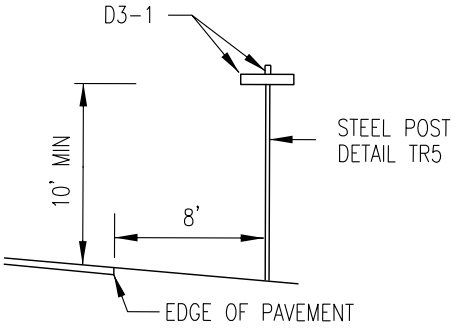
PUBLIC WORKS ENGINEERING	
APPR. BY: PKR	DATE: 02.24
DRAWN BY: EY	DWG: TR2
CAD FILE: 2021_TR2_07_2024	



POST MOUNT

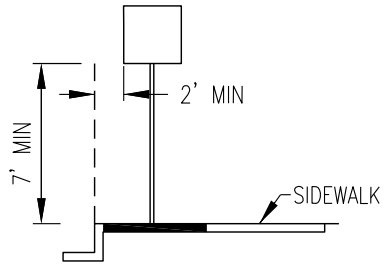


STREET LIGHT MOUNT

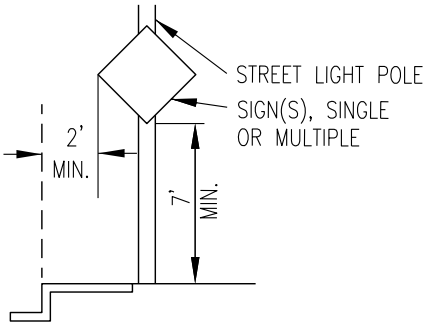


POST MOUNT, NO CURB

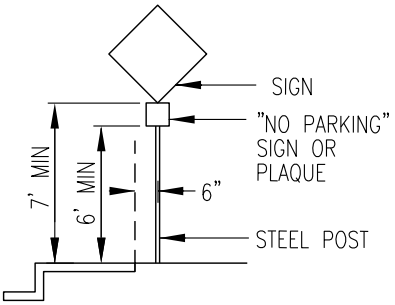
STREET NAME SIGNS



POST MOUNT, PLANTER STRIP OR STAMPED CONCRETE

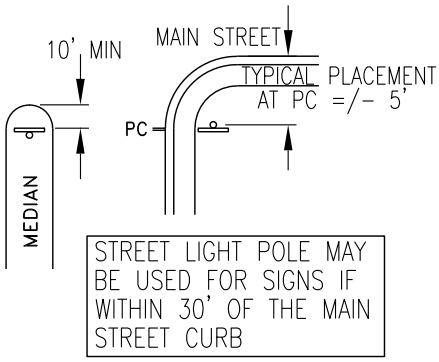


STREET LIGHT MOUNT



POST MOUNT MULTI-SIGN

STANDARD SIGNS



CORNER SIGN PLACEMENT

CITY STANDARD SIGN SIZES

SIGN	TYPE	SIZE
R1-1	STOP	30"X30"*
R1-2	YIELD	36"X36"X36"
R2-1(XX)	SPEED LIMIT (SPEED)	24"X30"
R8-3	NO PARKING SYMBOL	12"X12"
WX-X	WARNING SIGN**	PER PLANS

NOTES:

1. SIGNS GREATER THAN 36"X36" SHALL USE FLAT ALUMINUM PLATE WITH 0.125 THICKNESS.
2. GRAFFITI OVERLAY FILM SHALL BE USED ON ALL SIGNS EXCEPT EXTRUDED STREET NAME SIGN BLADES AND CALLED OUT ON PROOFS.

* 36"X36" WHEN ON AN APPROACH TO A STREET WITH A SPEED OF 45 MPH OR HIGHER.

** WARNING SIGNS SHALL USE FLUORESCENT YELLOW SHEETING.

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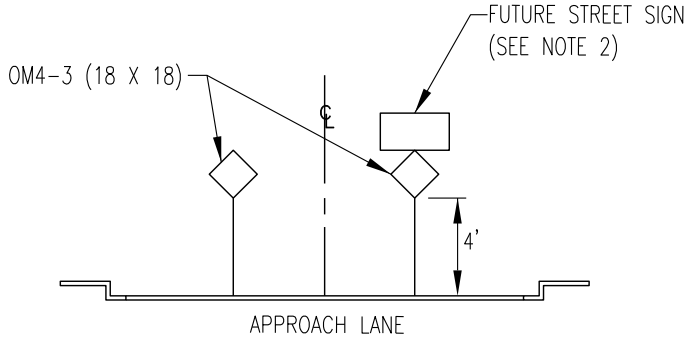
TYPICAL SIGN PLACEMENT & STANDARD SIGN SIZES

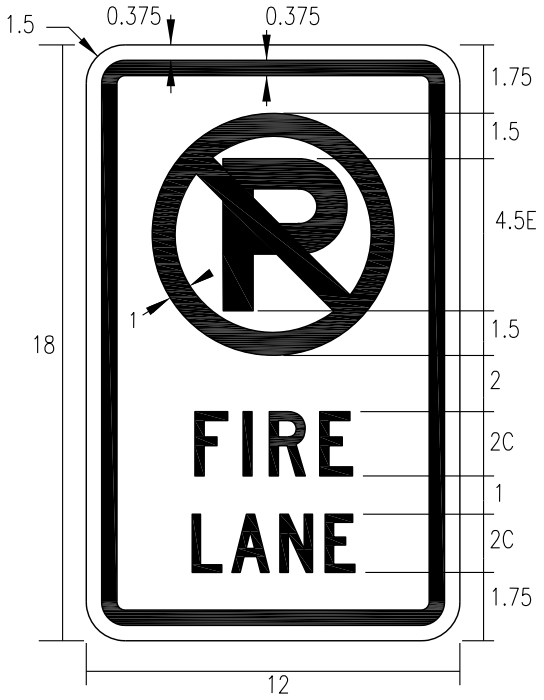
PUBLIC WORKS ENGINEERING	
APPR. BY: PKR	DATE: 02.24
DRAWN BY: EY	DWG: TR3
CAD FILE: 2021_TR3_07_2024	



TYPICAL END OF THE ROADWAY SIGNAGE

NOTES:

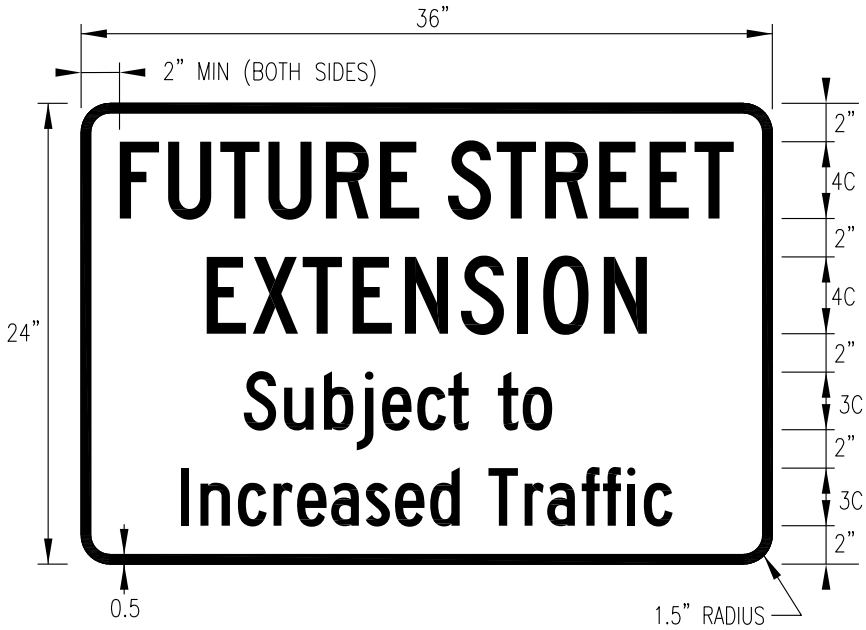
1. OM4-3 SIGNS ARE TO BE INSTALLED IN THE CENTER OF TRAVEL AND/OR PARKING LANES.
2. ONE "FUTURE STREET EXTENSION" SIGN SHALL BE INSTALLED ABOVE ONE OF THE OM4-3 SIGNS AT THE BOUNDARY EDGES OF PRE-PLATS. THE SIGNS ARE NOT REQUIRED ABOVE INTERIOR PHASES OF THE SAME PRE-PLAT.
3. SIGN SIZES AND MOUNTING HEIGHTS FOR SHARED USE PATH SIGNS SHALL BE PER MUTCD PART 9B.



NO PARKING FIRE LANE

R8-3(FL)

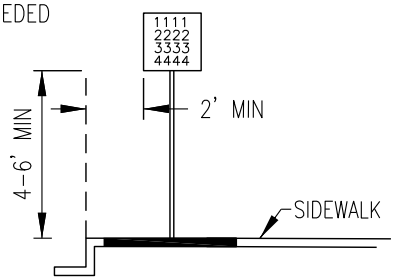
ALL DIMENSIONS ARE IN INCHES, WHITE BACKGROUND WITH RED BORDER, LEGEND AND SYMBOL. LARGE "P" IS BLACK



FUTURE STREET EXTENSION

COLOR: BROWN BACKGROUND
WITH WHITE LETTERS

SIGN DIMENSIONS:
WIDTH =18" TO 24"
HEIGHT = 9" TO 30"
AS NEEDED



PRIVATE ADDRESS SIGN

(WHEN REQUIRED PER RMC 12.01.140.C)

NOTES:

1. SIGN SHALL BE BLUE WITH WHITE LETTERS NO BORDER. MINIMUM FONT SIZE PER TABLE 2D-2 OF MUTCD.
2. SIGN MOUNTED PARALLEL TO STREET WITH POST PLACED ONE FOOT BEHIND SIDEWALK (IF PRESENT).
3. SIGN TO BE MOUNTED OUTSIDE THE VISION CLEARANCE TRIANGLE PER RMC 12.11

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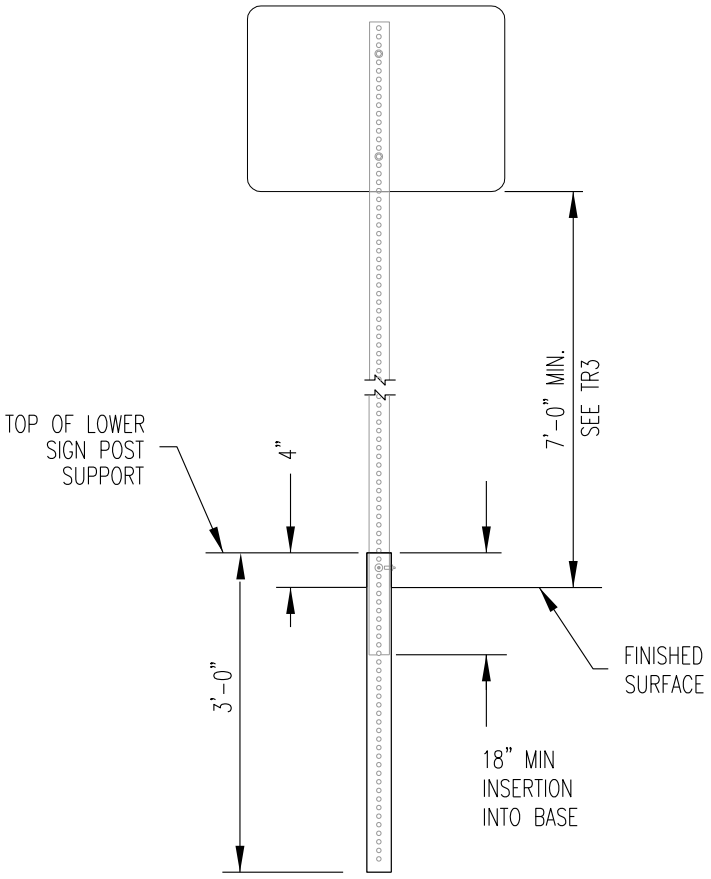
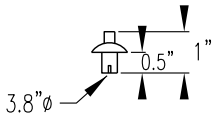
MISCELLANEOUS SIGNS

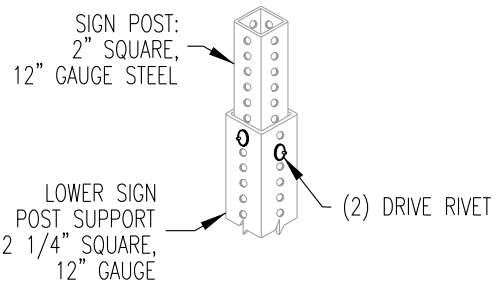
PUBLIC WORKS ENGINEERING	
APPR. BY: PKR	DATE: 07.22
DRAWN BY: EY	DWG: TR4
CAD FILE: 2021_TR4_07_2022	



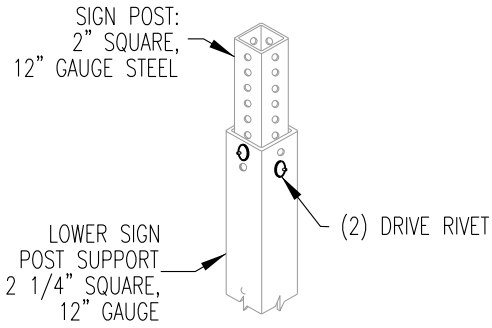
TYPICAL SIGN POST INSTALLATION



STEEL DRIVE RIVET



STANDARD BASE PARTS (ST-2)



HEAVY DUTY ANCHOR BASE PARTS (ST-4)

NOTES:

1. TYPE ST-2 AND ST-4 SIGN SUPPORTS/BASES SHALL BE DRIVEN IN COMPACTED BACKFILL OR NATIVE, UNDISTURBED SOIL WITH A MECHANICAL DRIVER UNLESS OTHERWISE APPROVED BY CITY ENGINEER.
2. WHEN PLACED IN NEW OR EXISTING CONCRETE (I.E. IN ISLANDS, SIDEWALK, OR AS OTHERWISE IDENTIFIED ON PROJECT PLANS) HEAVY DUTY ANCHOR BASE SHALL BE USED.
3. WHEN INSTALLED IN EXISTING CONCRETE USE A 6" CORE DRILL, DRIVE THE POST, BACKFILL WITH SOIL, AND TOP WITH CONCRETE TO MATCH THE THICKNESS OF THE EXISTING CONCRETE.

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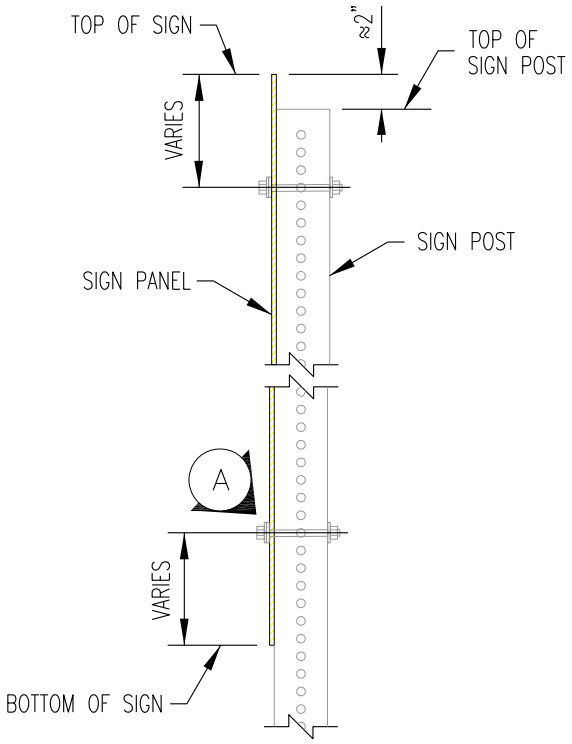
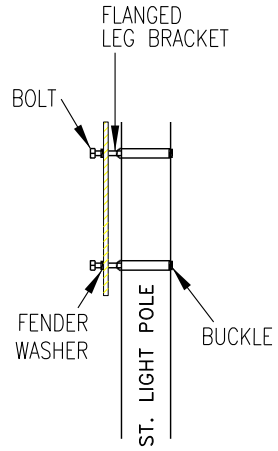
TYPICAL SIGN POST INSTALLATION

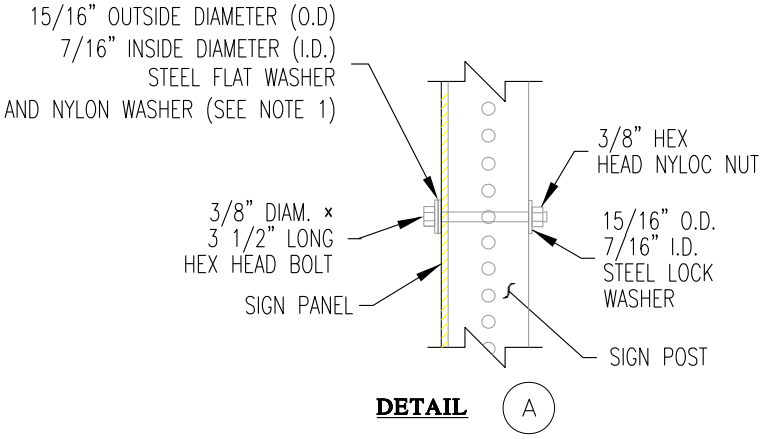
PUBLIC WORKS ENGINEERING	
APPR. BY: SAW	DATE: 01.24
DRAWN BY: JLR	DWG: TR5
CAD FILE: 2018_TR5_01_2024	



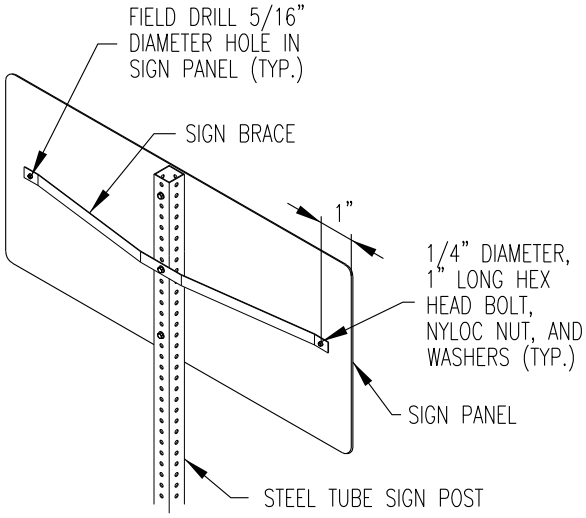
SIGN ATTACHMENT ON POST



SIGN ATTACHMENT ON STREETLIGHT POLE



DETAIL (A)



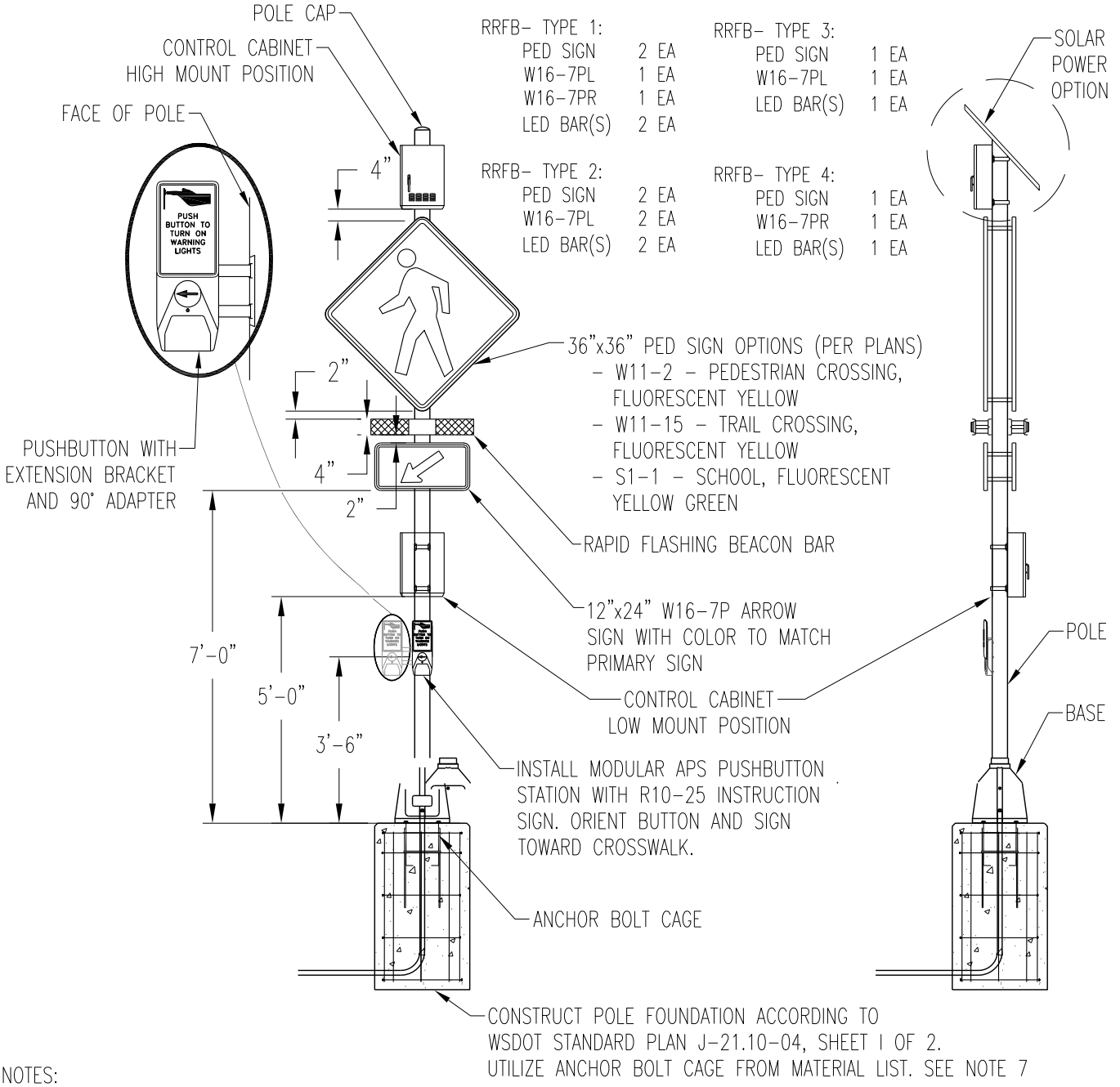
FOR ROUNDABOUT SIGNS 42" AND WIDER

NOTES:

1. NYLON WASHER SHALL BE PLACED AGAINST FRONT FACE OF SIGN.

SIGN MOUNTING DETAILS

PUBLIC WORKS ENGINEERING	
APPR. BY: PKR	DATE: 02.24
DRAWN BY: EY	DWG: TR6
CAD FILE: 2021_TR6_10_2024	



NOTES:

1. SIGN TYPES, SIZES AND COLORS PER PLAN OR SPECIFICATIONS.
2. INSTALL SIGNS, LIGHTBARS AND CABINETS WITH "BAND-IT" TOOL.
3. PUSHBUTTON SHALL BE WITHIN 10" REACH OF FACE OF CURB.
4. INSTALL POLE ONTO BASE USING STRAP WRENCH. TURN UNTIL SNUG AND POLE BOTTOMS OUT TO PREVENT MOVEMENT AND ROTATION DUE TO WIND.
5. SOLAR HARNESS SHALL BE ORIGINAL EQUIPMENT FROM THE MANUFACTURER AND SIZED LONG ENOUGH SO THAT THERE ARE NO SPLICES IN THE CABLE.
6. POLE PENETRATIONS SHALL BE MADE AS SMALL AS PRACTICAL AND UTILIZE GROMMETS WHEN APPROPRIATE TO PROTECT THE CABLE SHEATHING. EXCESS SPACE AROUND THE HOLES SHALL BE FILLED WITH RTV SEALANT.
7. PRECAST FOUNDATION MAY BE USED. SELECT FROM MATERIAL LIST.

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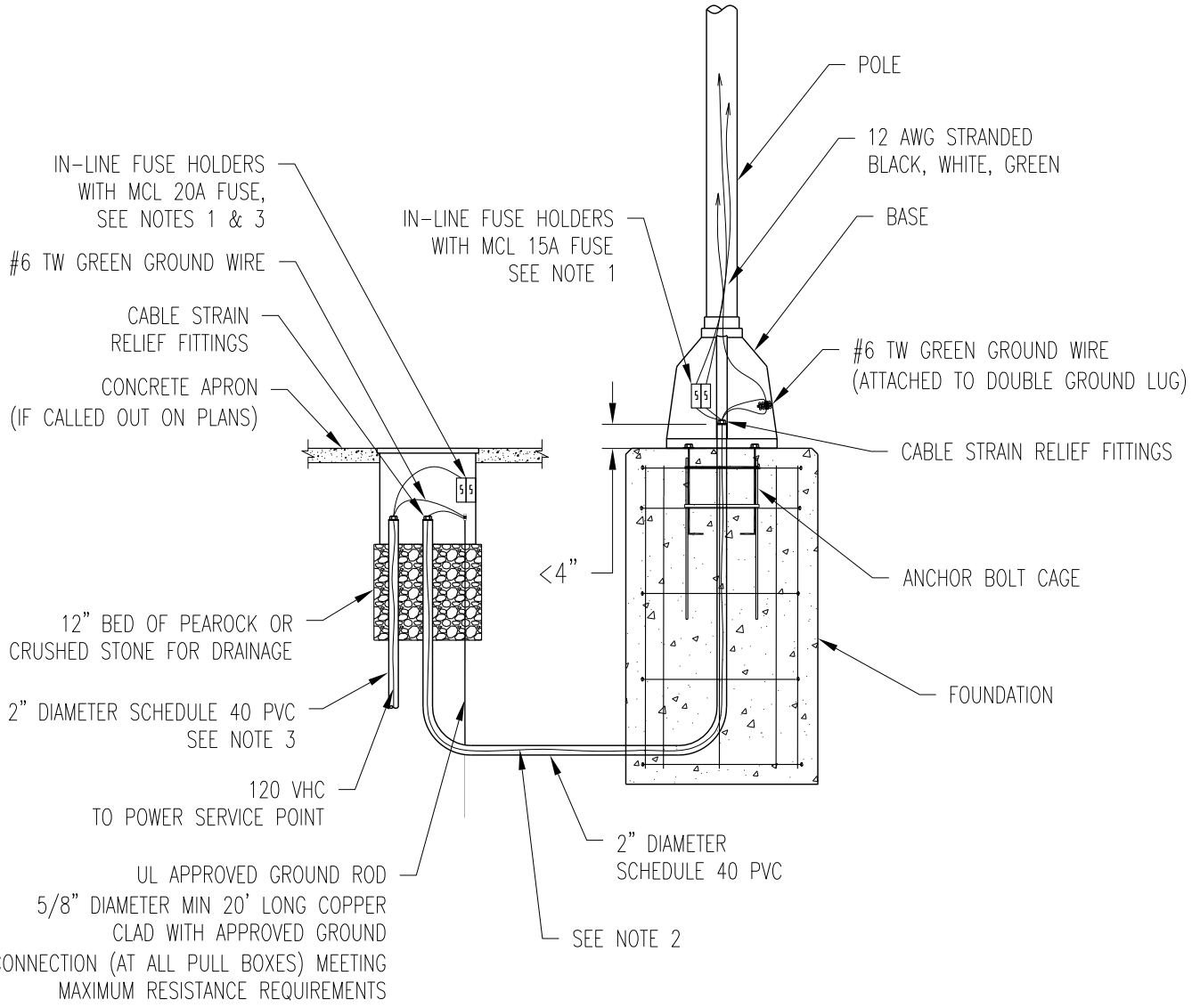
RECTANGULAR RAPID FLASHING BEACON SYSTEM (RRFB)

CIVIL & UTILITY ENGINEERING	
APPR. BY: PKR	DATE: 02.24
DRAWN BY: EY	DWG: TR7
CAD FILE: 2022_TR7_06_2024	

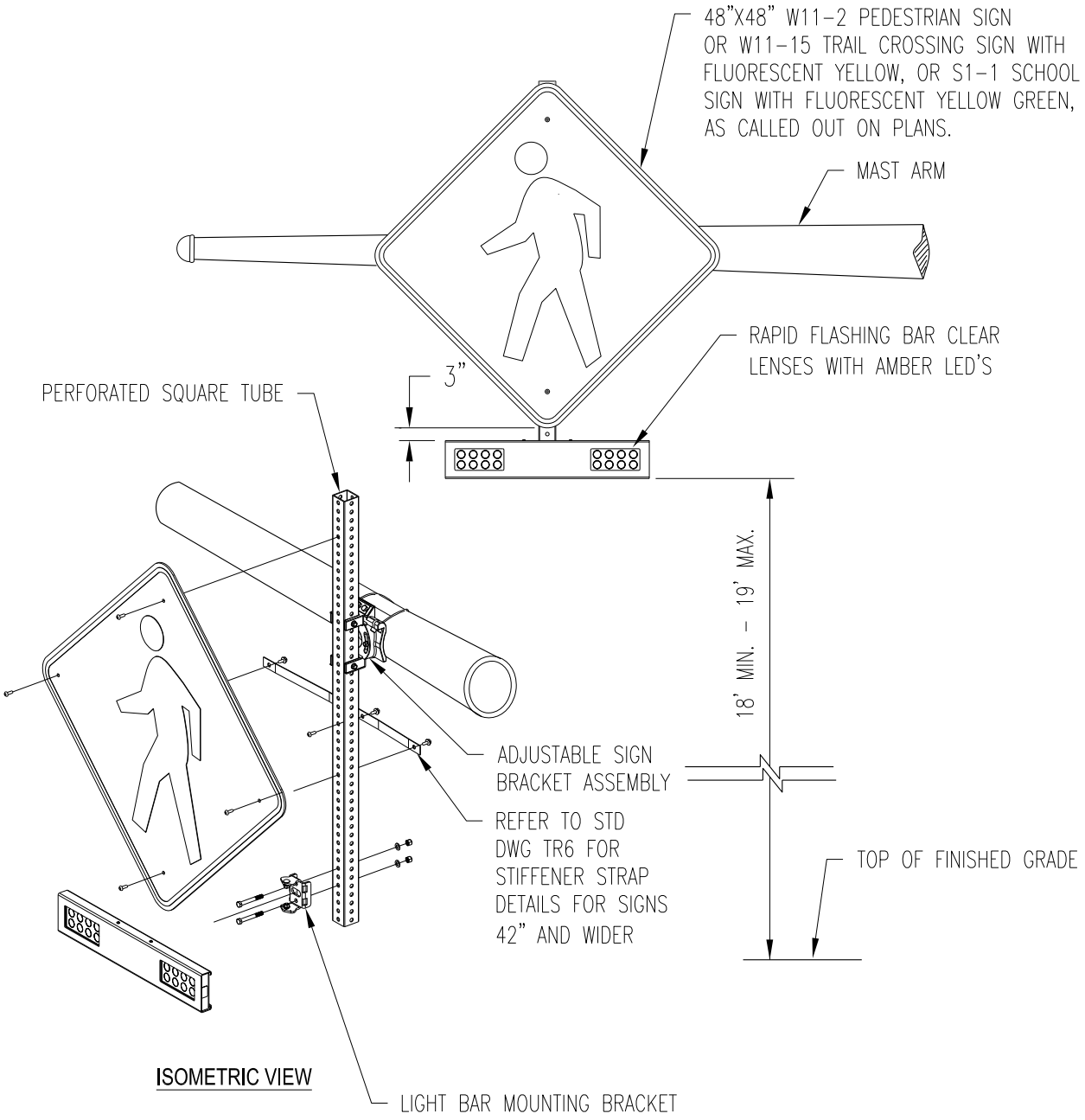


NOTES:

1. SINGLE-POLE IN-LINE FUSE HOLDER WITH SOLID BREAKAWAY OPTION FOR IMPACT SEPARATION: RATED 30A, 600V: FOR THE FUSED DISCONNECT AND HAVING A PERMANENTLY INSTALLED SOLID NEUTRAL (FOR THE NON-FUSED DISCONNECT).
2. CONDUCTORS MUST BE SOOW TYPE WITH A 600V RATING, 12 AWG, 12/2.
3. NOT REQUIRED FOR SOLAR INSTALLATIONS.

POLE WIRING DETAIL FOR SCHOOL BEACONS & RRFB

CIVIL & UTILITY ENGINEERING	
APPR. BY: PKR	DATE: 02.24
DRAWN BY: EY	DWG: TR8
CAD FILE: 2022_TR8_06_2024	



NOTES:

1. SIGN SHALL BE 0.125 MINIMUM THICKNESS.
2. WHEN USING AN OVERHEAD SYSTEM, SOLAR PANEL SHALL BE MOUNTED AT 15' ABOVE SURFACE ELEVATION ON THE TYPE II OR TYPE III SIGNAL POLE UNLESS OTHERWISE NOTED (I.E. ON THE MAST ARM) ON PLANS.
3. SOLAR HARNESS SHALL BE ORIGINAL EQUIPMENT FROM THE MANUFACTURER AND SIZED LONG ENOUGH SO THAT THERE ARE NO SPLICES IN THE CABLE.
4. POLE PENETRATIONS SHALL BE MADE AS SMALL AS PRACTICAL AND UTILIZE GROMMETS AND/OR CORD GRIPS AS APPROPRIATE TO PROTECT THE CABLE SHEATHING. EXCESS SPACE AROUND THE HOLES SHALL BE FILLED WITH RTV SEALANT.

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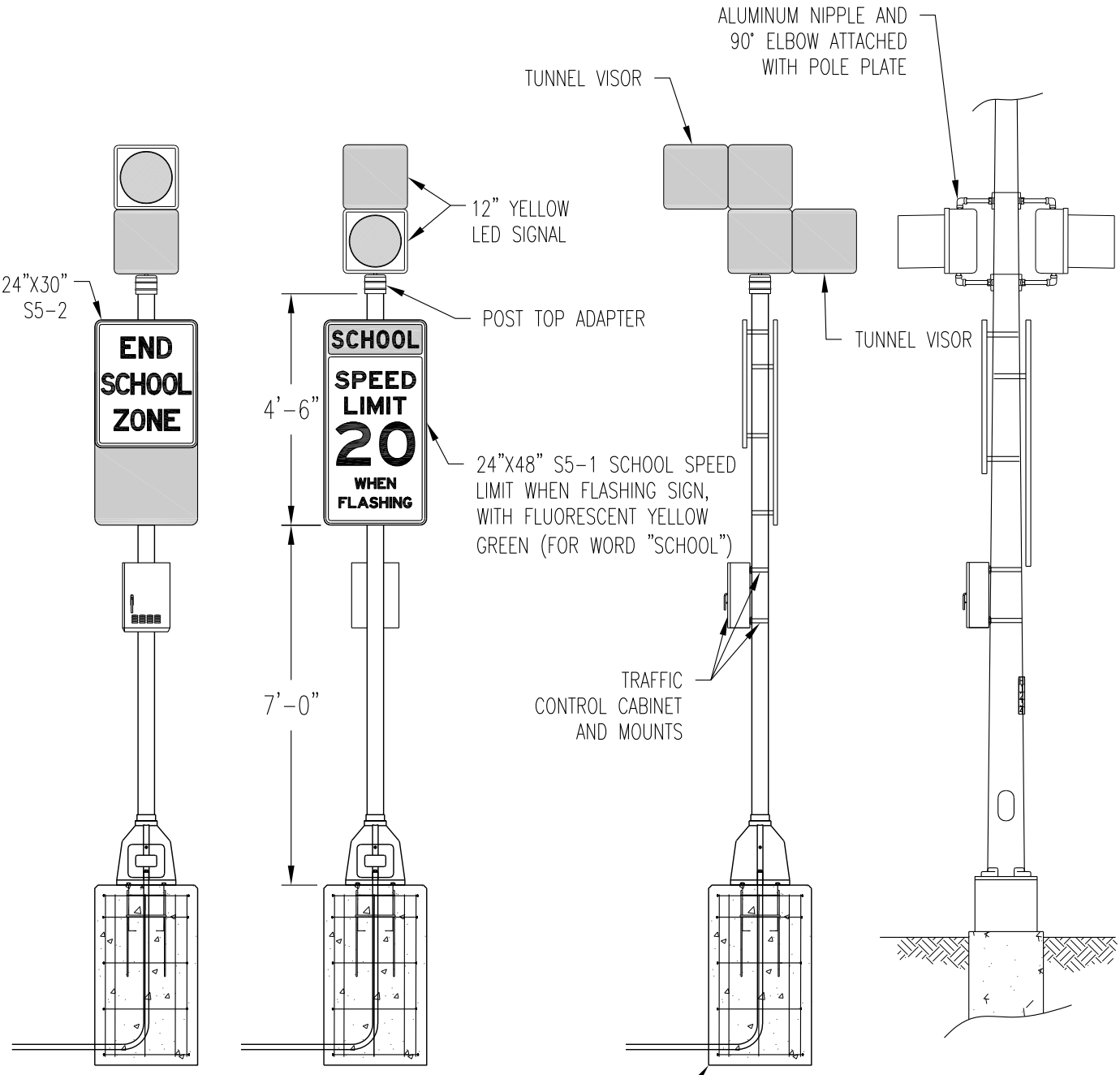
RECTANGULAR RAPID FLASHING BEACON SYSTEM (RRFB) OVERHEAD MOUNTING DETAIL AND NOTES

CIVIL & UTILITY ENGINEERING	
APPR. BY: PKR	DATE: 02.24
DRAWN BY: EY	DWG: TR9
CAD FILE: 2022_TR9_06_2024	



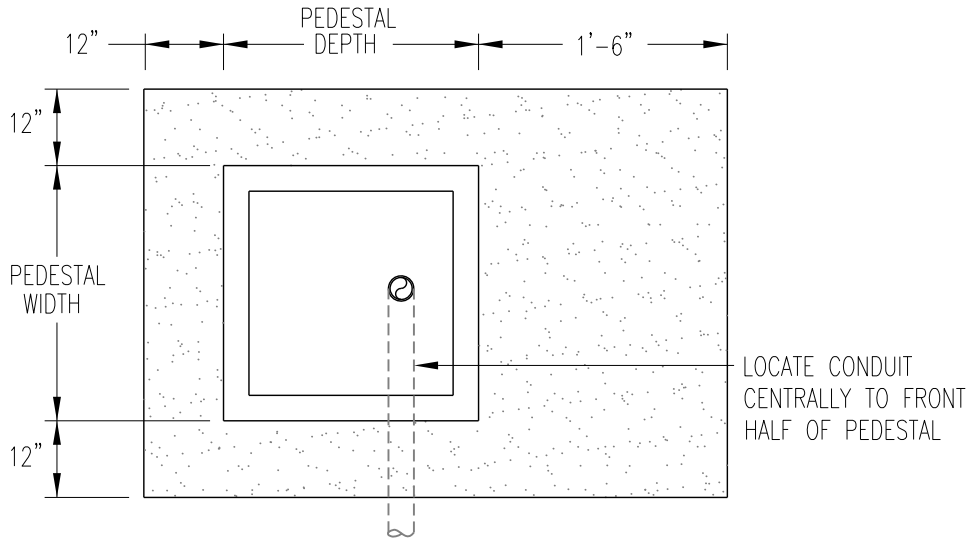
NOTES:

1. PRECAST FOUNDATION MAY BE USED. SELECT FROM MATERIAL LIST.

Richland Washington

SCHOOL BEACON DETAIL

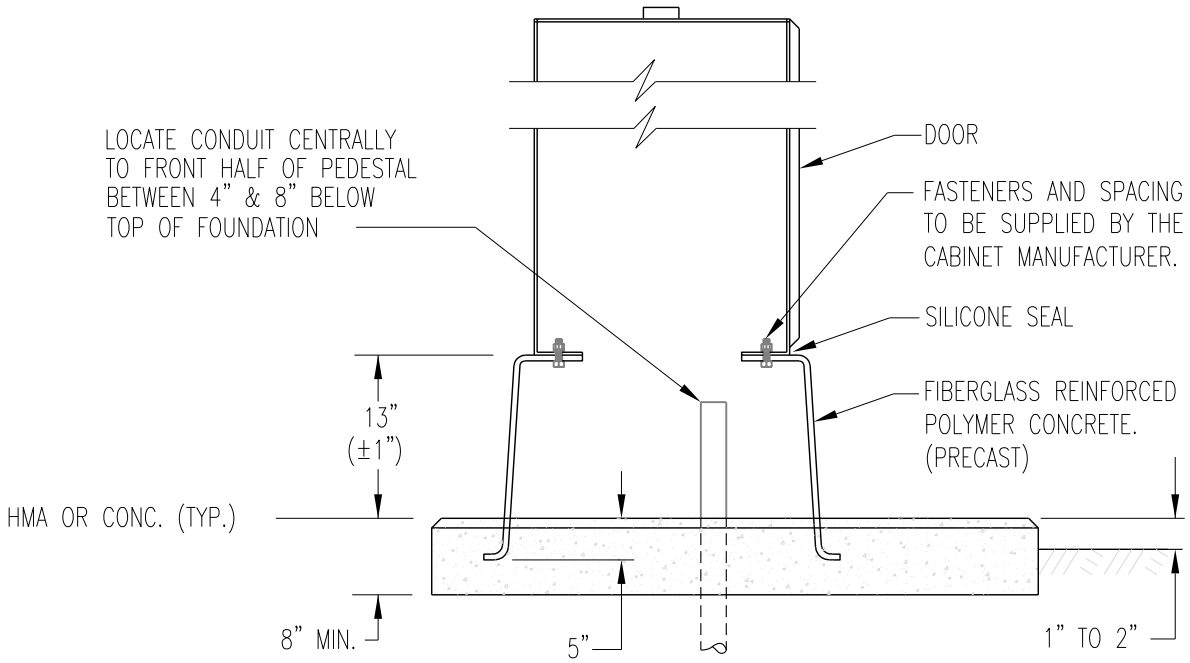
CIVIL & UTILITY ENGINEERING	
APPR. BY: PKR	DATE: 02.24
DRAWN BY: EY	DWG: TR10
CAD FILE: 2022_TR10_06_2024	



PLAN

NOTES:

1. WHERE THE FOUNDATION PAD IS LOCATED IN A SIDEWALK, CONSTRUCT TOP OF PAD FLUSH WITH SIDEWALK GRADE, OMITTING CHAMFER WHERE PAD & SIDEWALK ABUT.
2. CABINET FOUNDATION SHALL BE CLASS B CONCRETE.
3. MODIFY FOUNDATION OPENING TO MATCH CABINET OPENING.
4. THE FOUNDATION PAD SHALL BE A MONOLITHIC CONCRETE POUR BOTH INTERNAL & EXTERNAL OF THE PRECAST PEDESTAL AND IN BOTH AREAS TROWEL FINISHED SMOOTH & LEVEL.

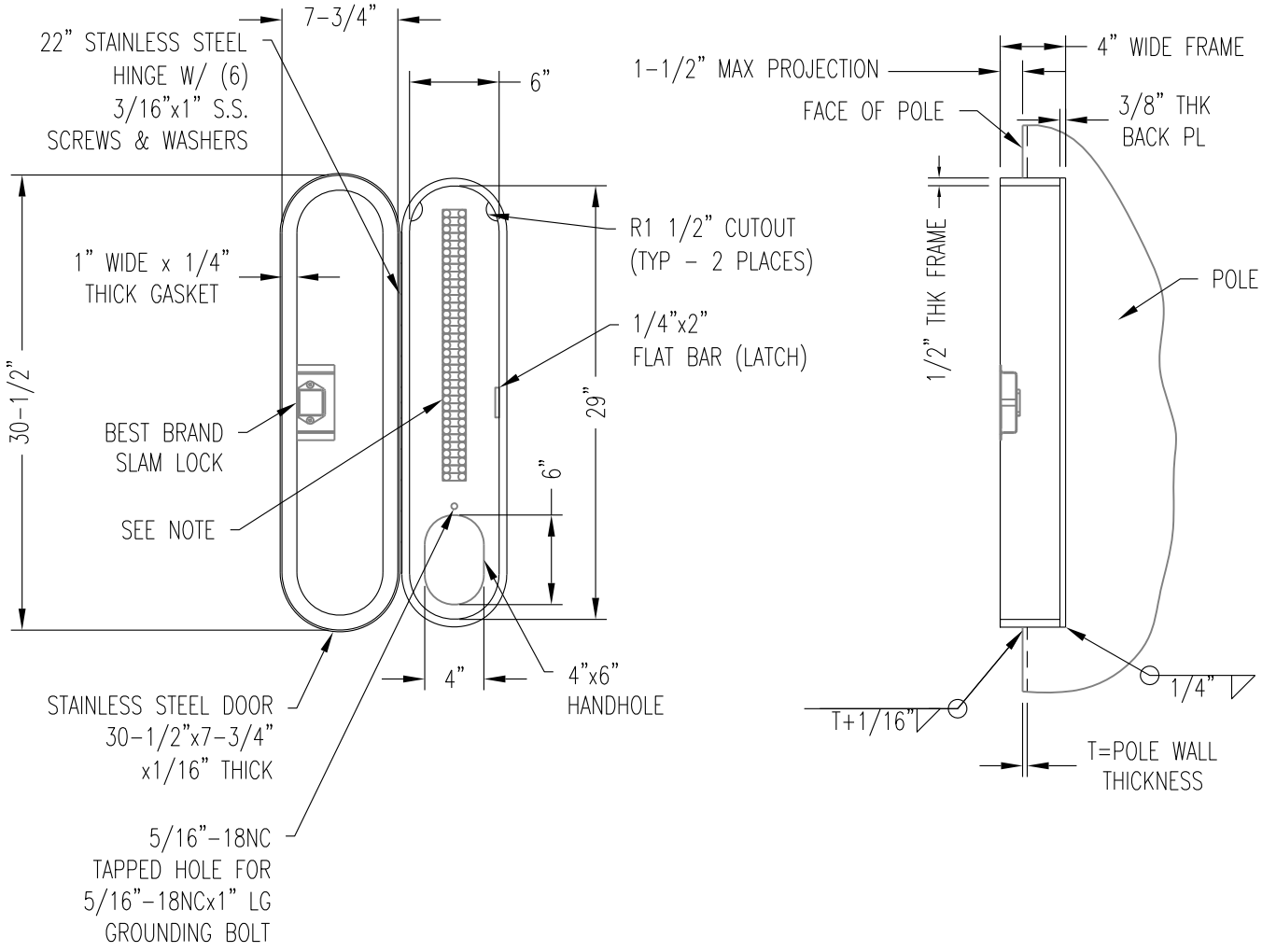


SECTION

Richland Washington

TRAFFIC SIGNAL FOUNDATION

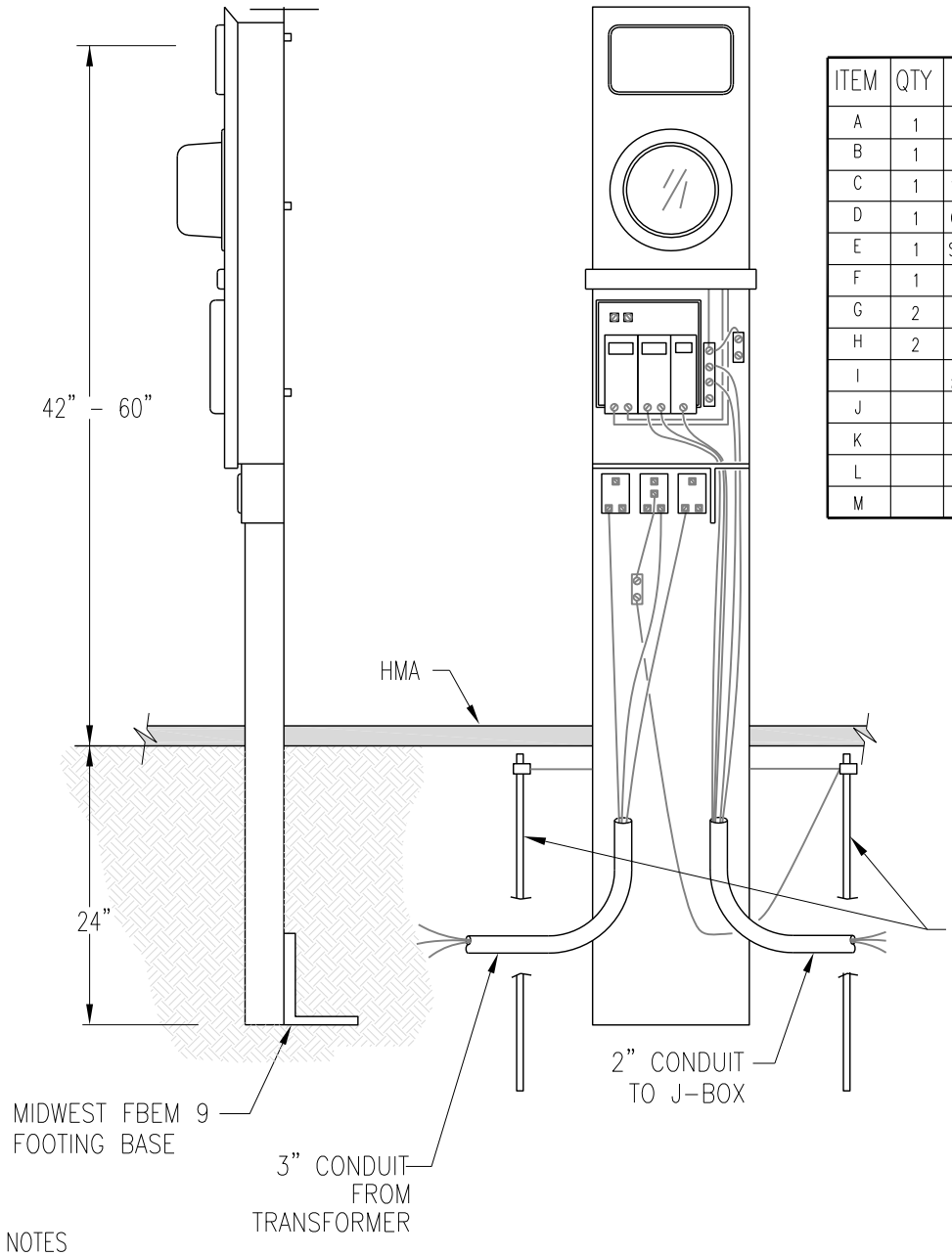
CIVIL & UTILITY ENGINEERING	
APPR. BY: PKR	DATE: 06.22
DRAWN BY: JC	DWG: TR11
CAD FILE: 2022_TR11_06_2022	



TERMINAL COMPARTMENT DETAIL

NOTE: TERMINAL STRIPS & COPPER NEUTRAL BAR SUPPLIED BY CONTRACTOR

Richland Washington	TRAFFIC SIGNAL TERMINAL COMPARTMENT	CIVIL & UTILITY ENGINEERING
	APPR. BY: PKR	DATE: 05.22
	DRAWN BY: JC	DWG: TR12
	CAD FILE: 2022_TR12_06_2022	



ITEM	QTY	MATERIAL DESCRIPTION
A	1	SERVICE ENTRANCE, POWER CENTER
B	1	FOOTING BASE
C	1	1/0 TPX. CONDUCTOR, (LENGTH AS RQRD.)
D	1	GROUND LUG, EXTERNAL
E	1	SINGLEPOLE, BRANCH CIRCUIT BREAKER
F	1	DOUBLE POLE BRANCH CIRCUIT BREAKER
G	2	GROUND ROD 5/8" X 8'
H	2	CLAMP, GROUND ROD
I		#8 WIRE, BARE COPPER SOFT DRAWN
J		#8 WIRE, WHITE-SIGNAL CABINET
K		#8 WIRE, BLACK-SIGNAL CABINET
L		#10 WIRE, BLACK-STREET LIGHTING
M		#10 WIRE, BLACK-STREET LIGHTING

NOTES

1. USE MIDWEST SERVICE ENTRANCE RATED LOAD CENTER WITH INTEGRAL RING TYPE METER BASE MODEL #M101CP6. (OR EQUAL) LOAD CENTER MUST BE NEMA 3R & SERVICE ENTRANCE RATED. PROVIDE (1) 40 AMP SINGLE POLE & (1) 20 AMP DOUBLE BRANCH CIRCUIT BREAKERS. ALL BREAKERS MUST BE UL LISTED FOR USE IN THE LOAD CENTER.
2. USE MIDWEST (OR EQUAL) EXTERNAL GROUND LUG, MODEL #GL-6.
3. USE MIDWEST (OR EQUAL) FOOTING BASE, MODEL #FBEM9.

Richland Washington

SERVICE CABINET DETAIL

CIVIL & UTILITY ENGINEERING	
APPR. BY: PKR	DATE: 11.22
DRAWN BY: LD	DWG: TR13
CAD FILE: 2022_TR13_11_2022	