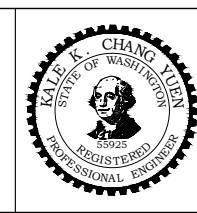
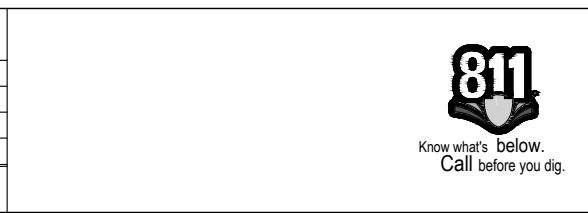


KING COUNTY METRO TRANSIT TRANSIT PASSENGER FACILITIES IMPROVEMENTS STANDARD DETAILS

THE DETAILS THAT FOLLOW ARE TO SUPPLEMENT THE REQUIREMENTS IMPOSED BY THE AGENCIES HAVING JURISDICTION OVER THE AREAS OF WORK INVOLVED IN THIS CONTRACT. IN CASE OF CONFLICT, THE MOST STRINGENT REQUIREMENTS SHALL APPLY. IN CASE THAT ONE OR MORE ELEMENTS OF THE WORK ARE NOT COVERED BY JURISDICTIONAL REQUIREMENTS, THE REQUIREMENTS INCLUDED WITH THE DETAILS THAT FOLLOW SHALL APPLY.

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KCMT 2021-2022 STANDARD DETAILS				
No.	REVISION	BY	APPD	DATE



DESIGNED: K. CHANG YUEN	APPROVED: P. ENG
DRAWN: L. ANDERSON	PROJECT NO: -
CHECKED: K. CHANG YUEN	CONTRACT NO: -
CHECKED: C. ASQUITH	



METRO TRANSIT CAPITAL DIVISION
TRANSIT PASSENGER FACILITIES - IMPROVEMENTS

 STANDARD METRO DETAILS

DATE: 05/2022
DRAWING NO: G0.00
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GENERAL NOTES

1. DETAILS MAY BE MODIFIED TO FIT EXISTING SITE CONDITIONS. REFER TO NOTES ON PROPOSED SITE PLAN FOR MODIFICATIONS.

2. CURB RAMPS SHALL LINE UP WITHIN MARKED CROSSWALK IF NOT SPECIFIED ON PLANS. PROJECT REPRESENTATIVE TO FIELD LOCATE CENTER OF CURB RAMPS PRIOR TO CONSTRUCTION. PROVIDE PROJECT REPRESENTATIVE WITH 48 HOURS NOTICE OF REQUIRING RAMPS TO BE FIELD LOCATED.

INDEX TO DRAWINGS

SHEET NO.	DRAWING NO.	DRAWING TITLE
1	G0.00	COVER SHEET
2	G0.01	GENERAL NOTES, STRUCTURAL NOTES, SYMBOL LEGEND & ABBREVIATIONS
3	G0.02	FACILITY NOTES
4	D101	RAPIDRIDE SHELTER FOOTING PLANS, SECTIONS AND DETAILS
5	D101A	RAPIDRIDE SHELTER FOOTING REBAR LAYOUT DETAILS
6	D101B	RAPIDRIDE SHELTER FOOTING REBAR LAYOUT DETAILS
7	D101C	F50 SHELTER FOUNDATION PLAN AND DETAILS
8	D102	RAPIDRIDE TECH PYLON AND BLADE MARKER FOOTING AND FOUNDATION DETAILS AND SECTIONS
9	D103	STANDARD SHELTER FOOTING PLANS, SECTIONS AND DETAILS
10	D104	SECTIONS AND DETAILS
11	D104A	SIGN FOOTING DETAILS
12	D105	RETAINING WALLS AND OTHER DETAILS
13	D106	COUNTERFORT WALL SECTIONS
14	D107	SECTIONS AND DETAILS
15	D108	SECTIONS AND DETAIL
16	D108A	PAVING DETAILS
17	D109	SECTIONS AND DETAILS
18	D110	CURB RAMP CONSTRUCTION DETAILS
19	D111	INTERNAL SOLAR SHELTER LIGHTING ELECTRICAL DETAILS
20	D112	HANDHOLE CONDUIT DETAILS STANDARD SHELTER

STRUCTURAL NOTES

1. **CODES & STANDARDS**
INTERNATIONAL BUILDING CODE (IBC) 2009 BUILDING CODE
REQUIREMENTS FOR REINFORCED CONCRETE ACI 318 (REVISED 2008)

2. **ASPHALT PAVEMENT**
REFER TO TECHNICAL SPECIFICATIONS SECTION 32 12 16 OR 32 12 16 A

3. **PORTLAND CEMENT CONCRETE PAVEMENT**
REFER TO TECHNICAL SPECIFICATIONS SECTION 32 13 13 OR 32 13 13-A

4. **CAST-IN-PLACE CONCRETE**
REFER TO TECHNICAL SPECIFICATIONS SECTION 03 30 00

5. **REQUIREMENTS FOR REINFORCED CONCRETE**
AMERICAN CONCRETE INSTITUTE (ACI) 318 (REVISED 2008).
f'c = 4000 PSI
fy = 60,000 PSI
POZZOLANS = 25% MIN.

6. **FOUNDATION PRESSURE DATA:**
ALLOWABLE BEARING PRESSURE = 2.0 KSF.
FOUNDATION BEARING SURFACE AND REINFORCING STEEL PLACEMENT SHALL BE APPROVED BY THE KING COUNTY PROJECT REPRESENTATIVE PRIOR TO PLACEMENT OF CONCRETE.

7. **REINFORCING STEEL GRADE 60**

a. MINIMUM COVER ON REINFORCING STEEL IN WALLS:
EXPOSED TO EARTH - 2"
EXPOSED TO WEATHER - 1 1/2" (#5 & SMALLER)

b. SLABS ON GRADE, AND FOUNDATIONS:
EXPOSED TO EARTH - 3"
EXPOSED TO WEATHER - 3" (#5 & SMALLER)

8. **DETAILING OF REINFORCING STEEL**
DETAIL IN ACCORDANCE WITH ACI 318-08.

a. SUBMIT REINFORCING STEEL DETAILS FOR APPROVAL PRIOR TO FABRICATION AND PLACEMENT.

b. SUBMIT SHOP FABRICATION DRAWINGS ON ALL PRECAST CONCRETE TO KING COUNTY PROJECT REPRESENTATIVE FOR APPROVAL PRIOR TO FABRICATION.

9. **DESIGN LOADING**
ROOF SNOW LOAD = 25 PSI
BASIC WIND SPEED = 85 MPH
WIND EXPOSURE B
SEISMIC DESIGN CATEGORY D
SEISMIC SITE CLASS D

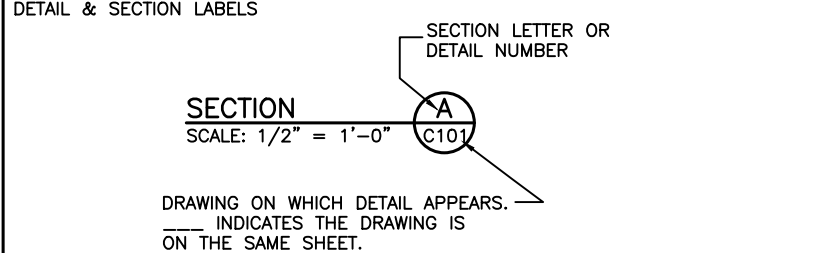
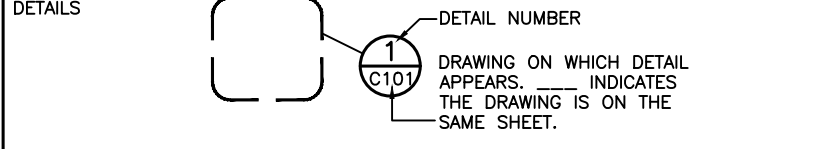
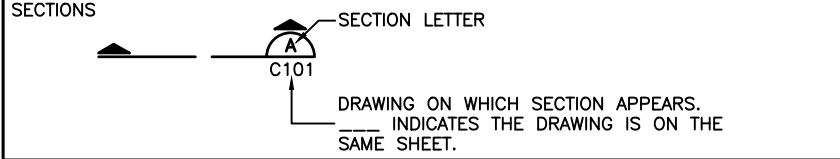
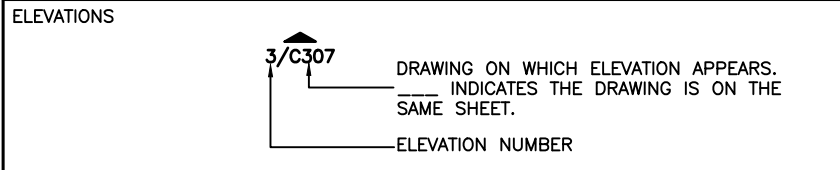
10. **CONDUIT**
UNDERGROUND ELECTRICAL OR COMMUNICATION CONDUIT SHALL BE PVC SCHEDULE 80, 1" DIAMETER MINIMUM UNLESS STATED OTHERWISE. CONDUITS UNDER PAVEMENT AND WITHIN FURNITURE FOUNDATIONS SHALL BE RIGID GALVANIZED STEEL PIPES.

11. **STRUCTURAL FILLS**
REFER TO TECHNICAL SPECIFICATIONS SECTION 31 00 00

ABBREVIATIONS

ACP	ASPHALT CONCRETE PAVEMENT	NO.	NUMBER
⊙	AT	#	NUMBER
APPROX	APPROXIMATELY	O.C.	ON CENTER
APWA	AMERICAN PUBLIC WORKS ASSOCIATION	PCCP	PORTLAND CEMENT CONCRETE PAVEMENT
AVE	AVENUE	PL.	PLACE
CB	CATCH BASIN	PP	POWER POLE
CLR	CLEAR	PSI	POUNDS PER SQUARE INCH
CO	CEAN OUT	PVC	POLYVINYLCHLORIDE
CONC	CONCRETE	R	RADIUS
CY	CUBIC YARD	RD	ROAD
DET	DETAIL	R&F	FOR REFERENCE ONLY
DWG	DRAWING	R W	RIGHT OF WAY
IE	INVERT ELEVATION	S	SOUTH
E	EAST	SEC	SECTION
E.J.	EXPANSION JOINT	SB	SIGN-BUS SIGN
EH	ELECTRIC HANDHOLE	SW	SOUTHWEST
EXIST	EXISTING	SQ	SQUARE
EV	ELECTRIC VALVE	SS	STAINLESS STEEL
E.W.	EACH WAY	STL	STEEL
FH	FIRE HYDRANT	ST	STREET
GA	GUY ANCHOR	STD	STANDARD
GRS	GALVANIZED RIGID STEEL	STS	STREET SIGN
GV	GAS VALVE	TOP	TOP OF WALL
HMA	HOT MIXED ASPHALT	TP	TOP OF PAD
HORIZ	HORIZONTAL	TPD	TELEPHONE PEDESTAL
HT	HEIGHT	TRH	TRAFFIC HANDHOLE
HWY	HIGHWAY	TSP	TRAFFIC SIGNAL POLE
LBS	POUNDS	TW	TOP OF WALL
L.F.	LINEAR FOOT	TYP	TYPICAL
LP	LIGHT POLE	VERT	VERTICAL
LR	LITTER RECEPTACLE	W	WEST
MAX	MAXIMUM	W/	WITH
MH	MANHOLE	WM	WATER METER
MIN	MINIMUM	W/O	WITH OUT
MIC	MOMUMENT IN CASE	WV	WATER VALVE
MON	SURFACE MONUMENT	WWF	WELDED WIRE FABRIC
N	NORTH		
NC	NATIONAL COARSE		
NE	NORTHEAST		
N.I.C.	NOT IN CONTRACT		

TYPICAL ELEVATION, SECTION AND DETAIL NUMBERING CONVENTIONS



SYMBOL LEGEND

	DIRECTION OF DRAINAGE AND SLOPE
	SIGN (EXISTING)
	SIGN (NEW)
	FENCE
	DITCH WITH SLOPE AND FLOW INDICATORS
	PROPERTY LINE
	CENTER LINE
	NEW CONCRETE PAVEMENT
	ROAD PAVEMENT REMOVAL
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	NEW LIGHT POLE
	DECIDUOUS TREE
	EVERGREEN TREE
	BUSH OR SHRUB
	EXISTING SPOT ELEVATION
	FINISHED ELEVATION
	COLUMN MOUNTED LITTER RECEPTACLE
	LITTER RECEPTACLE
	BENCH (1' x 4')
	BLADE MARKER
	MONUMENT/TBM
	TECH PYLON W/ OVERHEAD REAL TIME DISPLAY (1.5'x 5' & 1'x 5')
	BIKE LOOP
	CONCRETE SHELTER FOOTING WITH DASHED ROOF OVERHANG OUTLINE
	ELECTRICAL HANDHOLE

KCMT 2021-2022 STANDARD DETAILS

No.	REVISION	BY	APPD	DATE



DESIGNED: K. CHANG YUEN	APPROVED: P. ENG
DRAWN: L. ANDERSON	PROJECT NO.:
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METRO TRANSIT CAPITAL DIVISION TRANSIT PASSENGER FACILITIES - IMPROVEMENTS	DATE: 05/2022
GENERAL NOTES, STRUCTURAL NOTES, SYMBOL LEGEND & ABBREVIATIONS	DRAWING NO: G0.01
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METRO PASSENGER FACILITY IMPROVEMENT NOTES

APPLICABILITY

THE REQUIREMENTS IN THESE NOTES, AS WELL AS IN THE CONTRACT SPECIFICATIONS, SUPPLEMENT THE REQUIREMENTS OF THE AGENCY OR AGENCIES HAVING JURISDICTION OVER THE WORK IN THIS CONTRACT. IN CASE OF CONFLICT, THE MOST STRINGENT REQUIREMENTS SHALL APPLY. IN CASE THAT ONE OR MORE ELEMENTS OF THE WORK ARE NOT COVERED BY REQUIREMENTS OF AN AGENCY, OR AGENCIES, THE REQUIREMENTS IN THESE NOTES SHALL APPLY.

GENERAL NOTES

- ALL WORK METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND THE LATEST EDITION OF THE SPECIFICATIONS AND THE APPLICABLE DEVELOPMENT GUIDELINES AND DESIGN AND CONSTRUCTION STANDARDS FROM THE AGENCY HAVING JURISDICTION OVER THE SITES OF WORK.
- CONTACT EACH AGENCY'S PUBLIC WORKS DEPARTMENT AND SCHEDULE AND ATTEND A PRECONSTRUCTION MEETING AT LEAST ONE WEEK BEFORE BEGINNING CONSTRUCTION. ATTENDANTS ARE TO INCLUDE EACH AGENCY'S APPOINTED REPRESENTATIVE(S) AND THE PROJECT REPRESENTATIVE.
- ASSUME FULL RESPONSIBILITY FOR WORKER SAFETY, AND DAMAGE TO STRUCTURES AND IMPROVEMENTS RESULTING FROM CONSTRUCTION OPERATIONS.
- MAINTAIN THE FOLLOWING THROUGHOUT THE EXECUTION OF THIS PROJECT, AND AT A LOCATION KNOWN AND ACCEPTABLE TO THE PROJECT REPRESENTATIVE AND THE JURISDICTIONAL REPRESENTATIVES ASSIGNED TO THE PROJECT:
 - ALL APPLICABLE PERMITS, AND CONDITIONS THEREIN.
 - THE APPROVED PLANS.
 - A CURRENT COPY OF THE DEVELOPMENT GUIDELINES AND DESIGN AND CONSTRUCTION STANDARDS FROM EACH AGENCY HAVING JURISDICTION OVER THE SITES OF WORK.
 - TRAFFIC CONTROL AND STREET MAINTENANCE PLANS APPROVED BY THE AGENCY OR AGENCIES HAVING JURISDICTION OVER THE SITES OF WORK.
 - A CURRENT SET OF RECORD (AS CONSTRUCTED) DRAWINGS.
 - COPIES OF THE HEALTH, SAFETY AND ACCIDENT PREVENTION PLANS.
- WORK SHALL CONFORM TO THE APPROVED DRAWINGS AND THE CONTRACT SPECIFICATIONS. CHANGES TO THESE DOCUMENTS REQUIRE PRE-APPROVAL FROM THE PROJECT REPRESENTATIVE AND THE AGENCY HAVING JURISDICTION OVER THE SITES OF WORK.
- PROVIDE THE PROJECT REPRESENTATIVE WITH A SET OF RECORD DRAWINGS THAT MEET THE CONTRACT REQUIREMENTS PRIOR TO THE PROJECT FINAL APPROVAL.
- PRIOR TO CONSTRUCTION OF METRO FOOTINGS AND FACILITIES, PLEASE CONTACT METRO INSPECTORS AND CONSTRUCTION AT BUSSTOPINSPECTIONS@KINGCOUNTY.GOV OR BY PHONE AT 206-263-2381. PLEASE NOTE THAT METRO REQUIRES NOTICE OF AT LEAST THREE WEEKS IN ADVANCE TO SCHEDULE AN INSPECTION. ALL METRO FOOTINGS MUST BE INSPECTED AND APPROVED BY METRO INSPECTORS BEFORE ANY CONCRETE IS POURED.

WORK SCHEDULE NOTES

- DAYS AND HOURS OF WORK SHALL CONFORM TO THE CONDITIONS IN THE PERMITS ISSUED BY THE AGENCY HAVING JURISDICTIONS OVER SITES OF WORK.

EROSION CONTROL NOTES

- THE EROSION PREVENTION AND SEDIMENT CONTROL (ESC) MEASURES SHOWN ON THE APPROVED PLANS ARE MINIMUM REQUIREMENTS.
- BEFORE ANY GROUND DISTURBANCE OCCURS, ALL DOWNSTREAM ESC MUST BE CONSTRUCTED AND IN OPERATION. INSTALL AND MAINTAIN ALL ESC MEASURES ACCORDING TO THE ESC PLAN. THESE ESC MEASURES, INCLUDING PERIMETER CONTROLS, SHALL REMAIN IN PLACE UNTIL FINAL CONSTRUCTION IS COMPLETED AT EACH SITE OF WORK AND PERMANENT SOILS STABILIZATION HAS BEEN ACHIEVED.
- FROM MAY 1 THROUGH SEPTEMBER 30, PROVIDE TEMPORARY AND PERMANENT COVER MEASURES TO PROTECT DISTURBED AREAS THAT WILL REMAIN UNWORKED FOR SEVEN DAYS OR MORE.
- FROM OCTOBER 1 THROUGH APRIL 30, PROVIDE TEMPORARY AND PERMANENT COVER MEASURES TO PROTECT DISTURBED AREAS THAT WILL REMAIN UNWORKED FOR TWO DAYS OR MORE. IN ADDITION TO COVER MEASURES, THE CONTRACTOR SHALL:
 - PROTECT STOCKPILES AND STEEP CUT AND FILL SLOPES IF UNWORKED FOR MORE THAN 12 HOURS.
 - STOCKPILE, ON SITE, ENOUGH COVER MATERIALS TO COVER ALL DISTURBED AREAS.
- BY OCTOBER 8, SEED ALL AREAS THAT WILL REMAIN UNWORKED DURING THE WET SEASON (OCTOBER 1 THROUGH APRIL 30). MULCH ALL SEEDED AREAS.

UTILITY NOTES

- NOT ALL UNDERGROUND UTILITIES ARE NECESSARILY SHOWN ON THE DRAWINGS. CALL 811 "CALL BEFORE YOU DIG" FOR UNDERGROUND UTILITY FIELD LOCATION 48 HOURS PRIOR TO BEGINNING WORK AT EACH SITE.

- FIBER OPTIC CABLES ARE BURIED WITHIN MOST OF THE SITES OF WORK. EXERCISE EXTREME CARE TO AVOID DAMAGE TO THESE CABLES. REPAIR OR REPLACE THEM, AS DIRECTED BY THE PROJECT REPRESENTATIVE AND TO THE SATISFACTION OF THEIR OWNER(S), IF DAMAGED AS A RESULT OF THE WORK UNDER THIS CONTRACT.
- ALL TRENCH EXCAVATION OPERATIONS SHALL MEET OR EXCEED ALL APPLICABLE SHORING LAWS FOR TRENCHES. ALL TRENCH SAFETY SYSTEMS SHALL MEET WISHA REQUIREMENTS. TRENCHING THAT MAY AFFECT TREE ROOTS SHALL BE DONE UNDER THE SUPERVISION OF AN ARBORIST APPROVED BY THE AGENCY HAVING JURISDICTION OVER THE SITE WORK.
- ADJUST TO NEW GRADE ALL MANHOLES, CATCH BASINS, BOXES AND HAND HOLES.

WORK IN RIGHT-OF-WAY AND WITHIN PRIVATE PROPERTY EASEMENTS

- WHEN THE WORK SITE IS UNATTENDED, INSTALL A SIGN WITH MINIMUM TWO-INCH LETTERS STATING PERMITTEE OR COMPANY NAME, AND DAY AND EVENING PHONE NUMBERS.
- INSTALL BARRICADES, SIGNS, WARNING LIGHTS, AND SAFETY DEVICES SUFFICIENT TO NOTIFY PUBLIC OF OBSTRUCTIONS OR TRAFFIC HAZARDS. DEVICES MUST REMAIN UNTIL THE OBSTRUCTIONS OR TRAFFIC HAZARDS ARE CLEARED.
- MAINTAIN ACCESS TO FIRE STATIONS, FIRE HYDRANTS, FIRE ESCAPES, AND FIRE FIGHTING EQUIPMENT.
- MAINTAIN ACCESS TO PROPERTY AND BUSINESSES ADJOINING THE SITES OF WORK. FURNISH, INSTALL AND MAINTAIN TEMPORARY "BUSINESSES ARE OPEN" SIGNS AT LOCATION DESIGNATED BY THE PROJECT REPRESENTATIVE. REMOVE UPON COMPLETION OF WORK.
- PRESERVE AND PROTECT ALL PROPERTIES ADJOINING THE SITES OF WORK.
- RESTORE AREAS DISTURBED BY THE WORK TO ORIGINAL OR BETTER CONDITION. REPAIR OR REPLACE DAMAGED ITEMS AS DIRECTED BY AND TO THE SATISFACTION OF THE PROJECT REPRESENTATIVE.
- DO NOT DISTURB SURVEY MONUMENTS AND MARKERS WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE CITY HAVING JURISDICTION AND FROM THE PROJECT REPRESENTATIVE. REPLACEMENT OR RESETTING OF DISTURBED MONUMENTS AND MARKERS SHALL BE BY A WASHINGTON STATE LICENSED LAND SURVEYOR.
- INSTALL TEMPORARY ADA-COMPLIANT SIDEWALK OR CURB RAMPS IF PERMANENT RAMPS OR ADA PATHS ARE BLOCKED. IF IT IS UNFEASIBLE TO PROVIDE TEMPORARY SIDEWALK/RAMPS, PROVIDE APPROPRIATE ACCESS DETOURS, WITH THE CORRESPONDING SIGNAGE AND AT LOCATIONS APPROVED BY THE PROJECT REPRESENTATIVE.
- COVER OPEN EXCAVATION WITH NON-SKID STEEL PLATES RAMPED TO ELEVATION OF CONTIGUOUS SURFACES.
- MATERIAL STOCKPILING AT THE SITES OF WORK SHALL BE MAINTAINED TO A MINIMUM AND ONLY AS APPROVED BY CITY INSPECTORS, AFFECTED PROPERTY OWNERS AND THE PROJECT REPRESENTATIVE. MATERIALS SHALL BE STORED AS NECESSARY TO PROTECT THE PUBLIC.
- WHERE TRAFFIC LANES AND SIDEWALK CLOSURES ARE REQUIRED, IMPLEMENT THEM AS NECESSARY TO MINIMIZE PUBLIC IMPACT AND IN STRICT CONFORMANCE WITH THE CORRESPONDING, AGENCY-APPROVED, TRAFFIC CONTROL PLANS.
- UNLESS INDICATED OTHERWISE IN THE CONDITIONS OF THE CORRESPONDING PERMITS, COMPLETE CONCRETE AND OTHER SURFACING OR RESURFACING WORK UNDER THE FOLLOWING SCHEDULE:
 - IN PRINCIPAL ARTERIALS AND MAJOR COLLECTOR STREETS: WITHIN 3 CALENDAR DAYS.
 - IN OTHER STREETS: WITHIN 7 CALENDAR DAYS.

DEMOLITION NOTES

- CALL 811 "CALL BEFORE YOU DIG" FOR LOCATING UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO BEGINNING SITE WORK.
- AT LEAST FIVE (5) WORKING DAYS PRIOR TO MOBILIZATION AND CLOSING OF ANY BUS STOP, CONTACT METRO TRANSIT CONSTRUCTION COORDINATOR AT (206) 477-1140 TO COORDINATE POSTING RIDER ALERT ABOUT BUS STOP CLOSURE AND ESTABLISHMENT OF INTERIM BUS ZONES.
- WHEN ENCOUNTERING CONSTRUCTION SITES WITH EXISTING TRANSIT FURNITURE, SUCH AS SHELTERS, PEDESTRIAN LIGHT POSTS, LUMINARIES, BENCHES, LITTER RECEPTACLES AND EXISTING BUS STOP SIGNS AND POSTS, CALL MATT RAWSON (206-263-5681) OF TRANSIT SOUTH FACILITIES AT LEAST 72 HOURS PRIOR TO MOBILIZATION FOR REMOVAL AND SALVAGE OF SITE FIXTURES TO METRO TRANSIT.
- AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION AT A SITE OF WORK, CONTACT DOUG MUSSELMAN-BROWN OF SEATTLE TIMES AT (206) 423-4384 OR EMAIL DMBROWN@SEATTLETIMES.COM FOR REMOVAL OF NEWSPAPER BOXES FROM THE SITE.

- REMOVE DEMOLITION DEBRIS FROM THE WORK SITES AT THE END OF EACH DAY AND DISPOSE OF IT AT LEGALLY APPROVED SITES.
- UNLESS OTHERWISE SPECIFIED ON THE SITE PLANS, EXISTING PEDESTRIAN LIGHT POLE FOUNDATIONS DESIGNATED TO BE REMOVED SHALL BE TAKEN OUT ENTIRELY. ELECTRICAL CONNECTORS SHALL BE REMOVED FROM THE CONDUITS FROM HAND-HOLE TO THE EXISTING FOUNDATION. IF THE CONDUIT IS EXPOSED, REMOVE IT FROM FOUNDATION TO THE HANDHOLE, OTHERWISE CAP OR PLUG AND ABANDON IN PLACE. PLUG CONDUIT HOLE AT HAND-HOLE. IF SPECIFIED ON THE SITE PLANS FOR AN ELECTRICAL HANDHOLE TO BE REMOVED, DE-ENERGIZE AND REMOVE ELECTRICAL CONDUCTORS ALL THE WAY TO THE SOURCE, ABANDON THE CONDUIT IN PLACE AND CAP ITS ENDS WITH EPOXY. THEN, REMOVE THE HANDHOLE AND RESTORE SITE TO MATCH EXISTING.
- SAWCUT PAVEMENT TO BE REMOVED TO STRAIGHT VERTICAL LINES. SIDEWALK PANELS SHALL BE REMOVED TO THE NEAREST SCORE-LINES OR CONSTRUCTION JOINTS. FIELD-VERIFY LOCATION OF SCORE-LINES AND CONSTRUCTION JOINTS.

SITE RESTORATION NOTES

- UNLESS SPECIFIED OTHERWISE, RESTORE SITE TO MATCH EXISTING CONDITIONS WHERE FOUNDATIONS OF SHELTERS, PEDESTRIAN LIGHT POSTS AND OTHER SITE FURNITURE ARE REMOVED. FILL EXCAVATED AREAS WITH STRUCTURAL FILL AND COMPACT TO 95 PERCENT OF PROCTOR DENSITY. RESTORATION WORK SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO LAWN BY SODDING; SURFACING WITH MATCHING BEAUTY BARKS; AND SIDEWALK/PATHWAY REPAIRS THAT MATCH EXISTING MATERIALS, COLOR, AND TEXTURE.
- REFER TO CORRESPONDING ELECTRICAL SITE PLANS FOR ELECTRICAL WORK, INCLUDING CONDUIT RUNS, POWER PEDESTAL FOUNDATION AND DETAILS; CONDUIT ENTRY POINTS AT SHELTER/TECH PYLON FOUNDATIONS, AND PEDESTRIAN LEVEL LUMINARIES; AND CONNECTION POINTS TO POWER SOURCE. RESTORE TO MATCH EXISTING ASPHALT PAVEMENT, LANDSCAPED AREAS, AND CONCRETE SIDEWALK OVER TRENCHES EXCAVATED FOR ELECTRICAL WORK.
- PRIOR TO WORKING ON EXISTING SPRINKLER IRRIGATION SYSTEMS, TEST IN THE PRESENCE OF THE PROJECT REPRESENTATIVE AND RECORD THE SYSTEM CONDITION. UPON COMPLETION OF THE CONTRACT WORK, TEST AGAIN TO SATISFY THE PROJECT REPRESENTATIVE THAT THE CONDITION OF THE SYSTEM MEETS THE REQUIREMENT OF THIS CONTRACT.
- FOOTINGS SHALL BE PLACED TO ENSURE THE SHELTER IS A MINIMUM THREE FEET FROM FACE OF CURB TO THE VERTICAL STRUCTURE; WHICH INCLUDES CANTILEVER OVERHANG AND EDGE OF THE SHELTER IF PLACED REVERSE TO CURB.

NEW SITE FURNITURE/FIXTURE NOTES

- BENCHES, LITTER RECEPTACLES AND BIKE LOOPS: METRO TRANSIT WILL FURNISH, TRANSPORT AND INSTALL THE SITE FURNITURE AT EACH BUS ZONE.
- PEDESTRIAN LIGHT POLES AND LUMINARIES: CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL FOUNDATIONS FOR PEDESTRIAN LIGHT POLES AND LUMINARIES. TASKS SHALL INCLUDE PROVIDING AND INSTALLING J-BOLTS, CONDUITS, GROUNDING RODS, REBARS, AND OTHER MATERIALS FOR THE FOUNDATIONS. OBTAIN LIGHT POLE BASE BOLT CIRCLE PRIOR TO SETTING FOUNDATIONS. UNLESS STATED OTHERWISE ON THE ELECTRICAL SITE PLANS, METRO TRANSIT WILL SUPPLY PEDESTRIAN LIGHT POLES AND LUMINARIES. CONTRACTOR SHALL PICK UP AND TRANSPORT THE LIGHTING HARDWARE FROM METRO SOUTH FACILITIES TO EACH PROJECT SITE. METRO'S SOUTH FACILITIES IS LOCATED AT 11911 EAST MARGINAL WAY S, BUILDING C, TUKWILA, WASHINGTON 98168. CONTACT MATT RAWSON AT (206) 263-5681 AT LEAST 72 HOURS IN ADVANCE. CONTRACTOR SHALL PROVIDE ALL HARDWARE AND CONDUCTORS REQUIRED TO CONNECT THE PEDESTRIAN LUMINARIES TO THE POWER PEDESTAL OR OTHER POWER SOURCE AS SHOWN ON ELECTRICAL PLANS, AND TO MAKE THE LUMINARIES FUNCTIONAL.
- BUS SHELTERS, RAPIDRIDE TECHNOLOGY PYLONS, AND BLADE MARKERS: METRO TRANSIT WILL PROVIDE, TRANSPORT, AND INSTALL THE FIXTURES/FURNITURE UPON COMPLETION OF THE SITE WORK, INCLUDING THE POWER CONNECTION FROM THE FOUNDATIONS TO THE FIXTURES/FURNITURE. CONTRACTOR SHALL PROVIDE CONDUITS AND PULL CONDUCTORS BETWEEN THE POWER SOURCE AND THE FOUNDATIONS.
- BUS SIGNS: UNLESS OTHERWISE SPECIFICALLY INDICATED ON THE DRAWINGS, METRO TRANSIT WILL FURNISH AND INSTALL BUS SIGNS AT THE ZONES.
- OTHER FURNITURE AND HARDWARE NOT MENTIONED IN THIS LIST: FURNISH AND INSTALL OTHER FURNITURE/HARDWARE NOT LISTED BUT SHOWN ON THE DRAWINGS.

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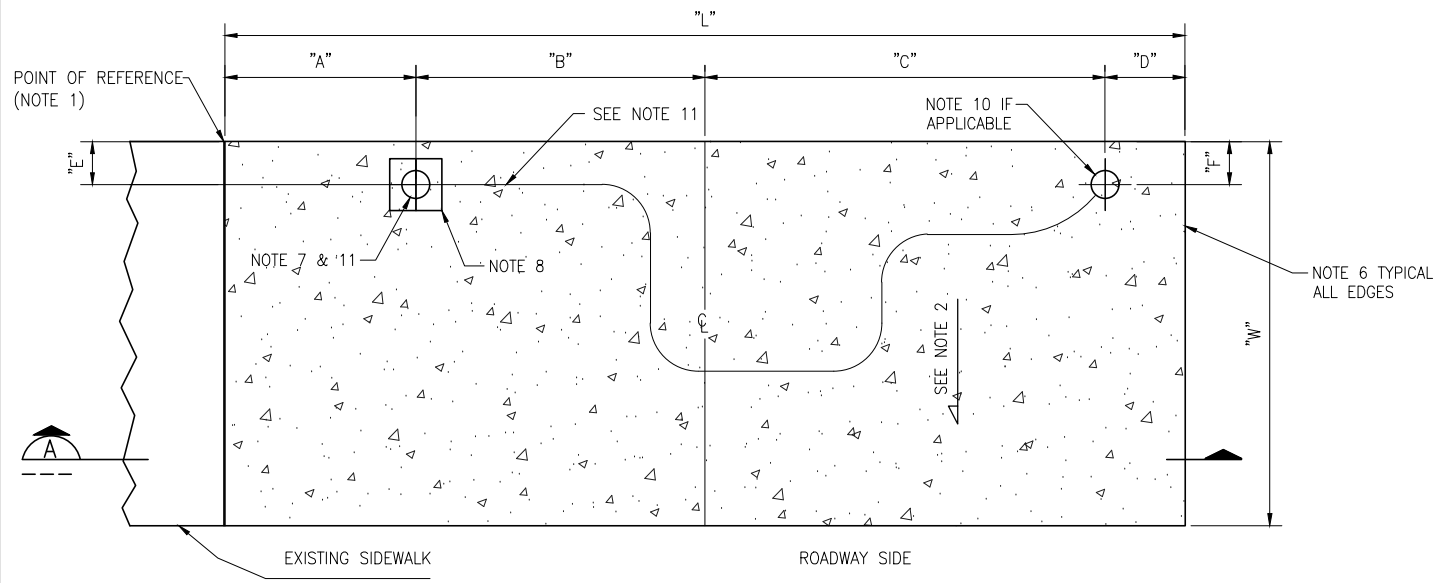
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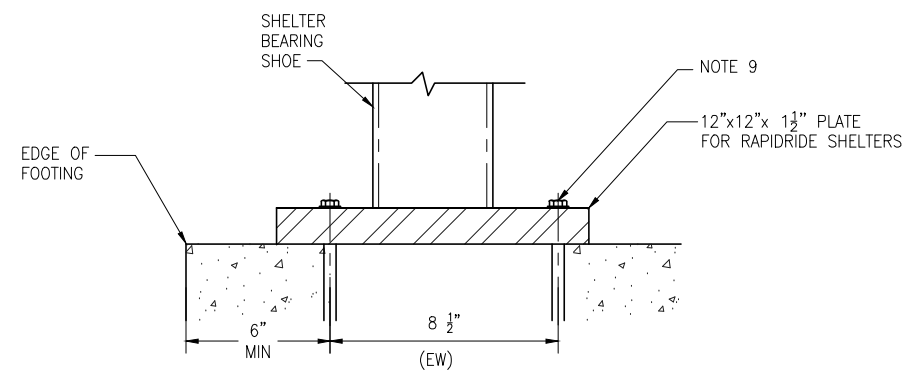
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CHECKED: C. ASQUITH	CONTRACT NO: -



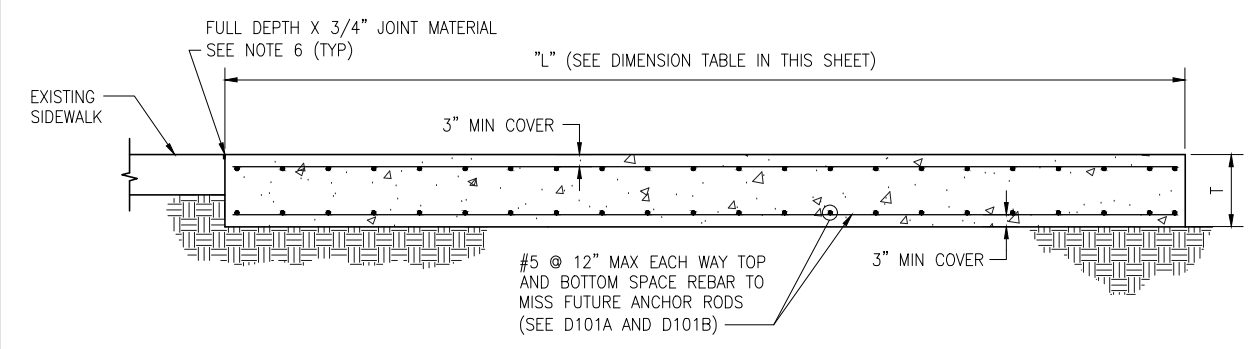
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FACILITY NOTES		DRAWING NO: G0.02
		SHEET NO. OF 3 20



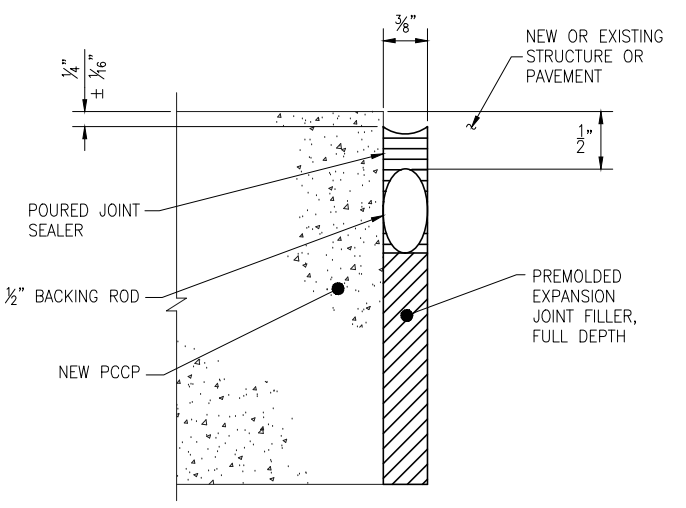
FOOTING PLAN
DETAIL 1
 SCALE: NONE
 (SEE FOOTING DIMENSION CHART THIS SHEET)



RAPIDRIDE SHELTER REAR LEG INSTALLATION
DETAIL 2
 SCALE: NONE



FOOTING SECTION
SCALE: NONE



ISOLATION JOINT DETAIL
SCALE: NONE

RAPIDRIDE SHELTER FOOTING DIMENSIONS												
RAPIDRIDE FOOTING	SHELTER FRAMES	LENGTH 'L' (MIN)	WIDTH 'W' (MIN)	A	B	C (NOTE 10)	D (NOTE 10)	E	F (NOTE 10)	THICKNESS 'T' (MIN)	CONCRETE (CY)	REBAR (LBS)
RR-10	RR-124, RR-125, RR-126, F21	9'-8"	4'-4"	1'-6 3/4"	3'-3 1/4"	4'-2"	8"	10 3/4"	8"	14"	2	190
RR-15	RR-206, RR-208, RR-208B, F21, F11	15'-0"	8'-0"	1'-4 3/4"	6'-1 1/4"	6'-10"	8"	10 3/4"	8"	18"	7	532
RR-20	RR-206, RR-208, RR-208B, F22	20'-0"	5'-0"	3'-10 3/4"	6'-1 1/4"	9'-4"	8"	10 3/4"	8"	18"	6	451

* "D" INCREASES IF "L" IS LARGER THAN STANDARD DIMENSION.

(SEE NOTE 10)

GENERAL NOTES

- INSTALL A PK NAIL AT THIS CORNER IF SHELTER FOOTING IS INTERGRATED INTO OTHER CONCRETE SURFACES. DIMENSIONS "A", "B" AND "C" ARE OFFSET FROM THIS POINT OF REFERENCE. SEE DRAWINGS D101A AND D101B FOR REBAR LAYOUT DETAILS.
- PROVIDE MAX 2% SLOPE TOWARDS STREET TO ASSURE PROPER DRAINAGE OF SURFACE WATER UNLESS DIFFERENT SLOPE IS SPECIFIED ON SITE PLAN.
- CONTRACTOR SHALL COORDINATE WORK WITH RELATED WORK INCLUDING ELECTRICAL.
- VERIFY AND LOCATE ALL EXISTING UTILITIES PRIOR TO STARTING WORK; CONDUCT OPERATIONS IN A MANNER WHICH ENSURES THAT THE UTILITIES WILL NOT BE DISTURBED OR ENDANGERED, AND ASSUME FULL RESPONSIBILITY FOR ANY DAMAGE TO UTILITIES DURING CONSTRUCTION. METRO DOES NOT ASSUME RESPONSIBILITY FOR REIMBURSEMENT, PARTICIPATION IN DESIGN AND/OR REVISIONS, OR LIABILITY FOR ACCURACY OF TYPE, SIZE, AND LOCATION OF ANY UTILITY.
- COORDINATE THE REQUIREMENTS FOR LOCATION, PROTECTION, AND/OR RELOCATION OF UTILITIES WITH THE UTILITY OWNER PRIOR TO STARTING WORK.
- ISOLATION JOINT BETWEEN FOOTING AND ADJACENT SIDEWALK OR IMPROVEMENTS SEE DETAIL 3 THIS SHEET.
- ELECTRICAL CONDUIT LOCATION. SEE D111 FOR DETAILS.
- SHELTER FOOTING REAR ANCHOR BY OTHERS. SEE DETAIL 2 FOR MINIMUM EDGE DISTANCE FROM BACK OF FOOTING.
- ANCHOR ROD (4 TYP, BY OTHERS). 1" φ S. S. THREADED ROD. 8 1/4" MIN EMBED. EPOXY WITH HILTI HIT-HY 150 ADHESIVE, WITH 6" MIN EDGE DISTANCE. FOLLOW HILTI INSTALLATION INSTRUCTIONS.
- FOR INTERIM INSTALLATION OF A STANDARD SHELTER FRAME ON A RAPIDRIDE FOOTING, ALSO INSTALL AN ELECTRICAL CONDUIT AT THIS LOCATION. (REAR RIGHT SHELTER LEG.)
- SEE GROUNDING ELECTRODE INSTALLATION DETAILS ON SHEET D111 FOR SHELTERS TO RECEIVE SOLAR LIGHTS. IF FOOTING IS DESIGNATED FOR BOTH INTERIM STANDARD SHELTER AND FUTURE RAPIDRIDE SHELTER, TERMINATE EACH END OF THE GROUNDING ELECTRODE AT EACH SHELTER LEG LOCATION.

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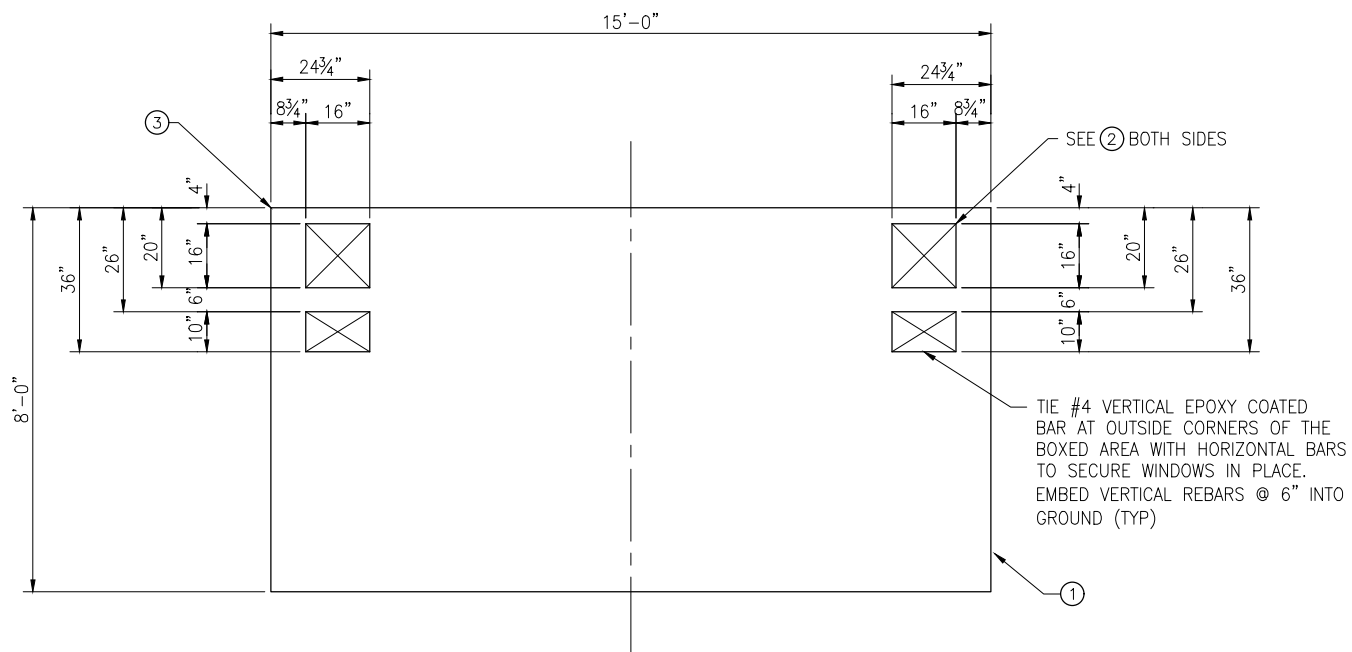


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CHECKED: K. CHANG YUEN	CONTRACT NO.:
CHECKED: C. ASQUITH	



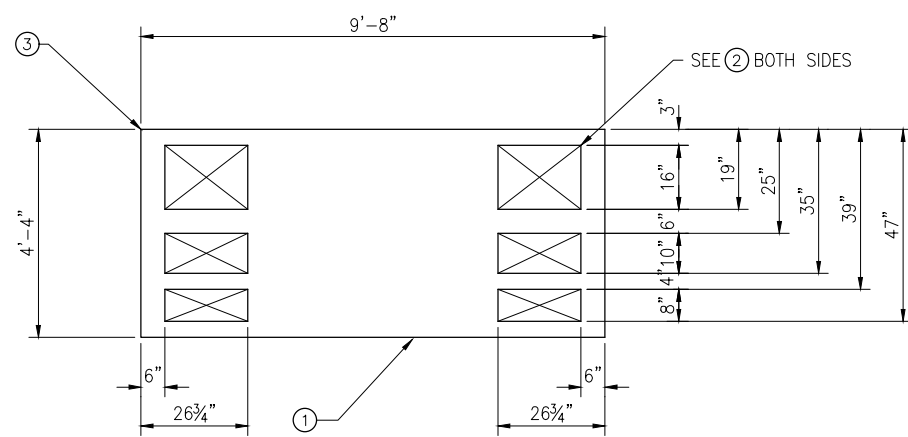
METRO TRANSIT CAPITAL DIVISION
 TRANSIT PASSENGER FACILITIES - IMPROVEMENTS
 RAPIDRIDE SHELTER
 FOOTING PLAN, SECTIONS AND DETAILS

DATE: 05/2022
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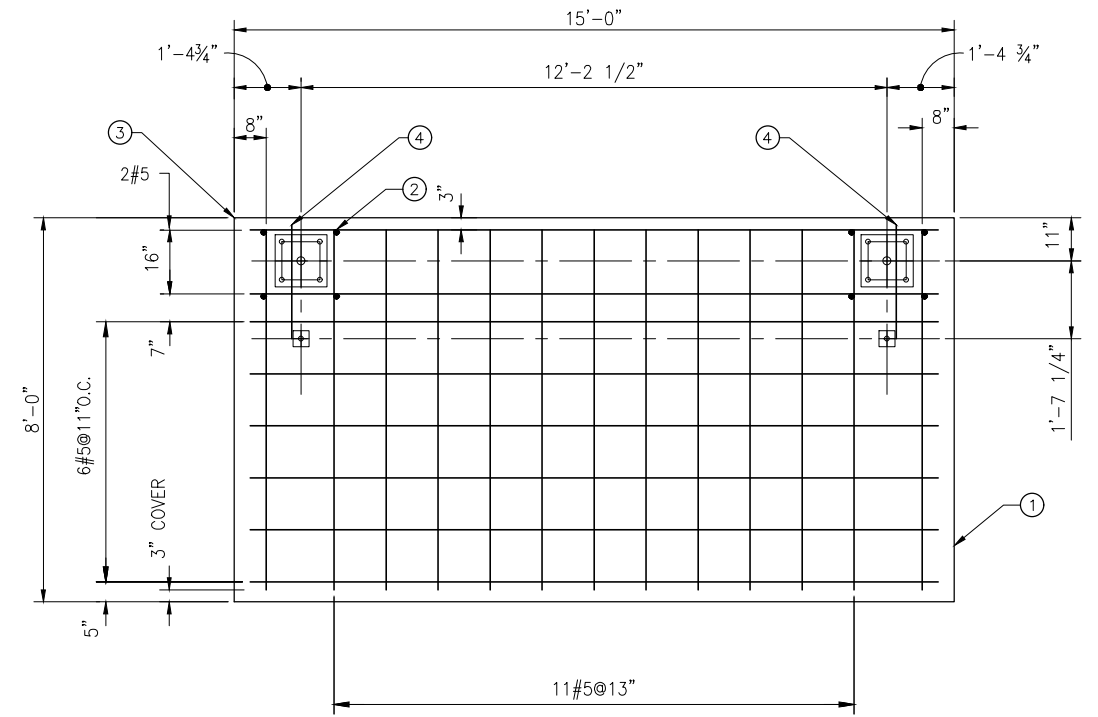
RAPIDRIDE RR-15 SHELTER FOOTING (FOR RR206/RR208/RR208B)
REBAR BLOCKOUTS FOR SHELTER ANCHOR BOLTS

DETAIL 1
SCALE: NONE



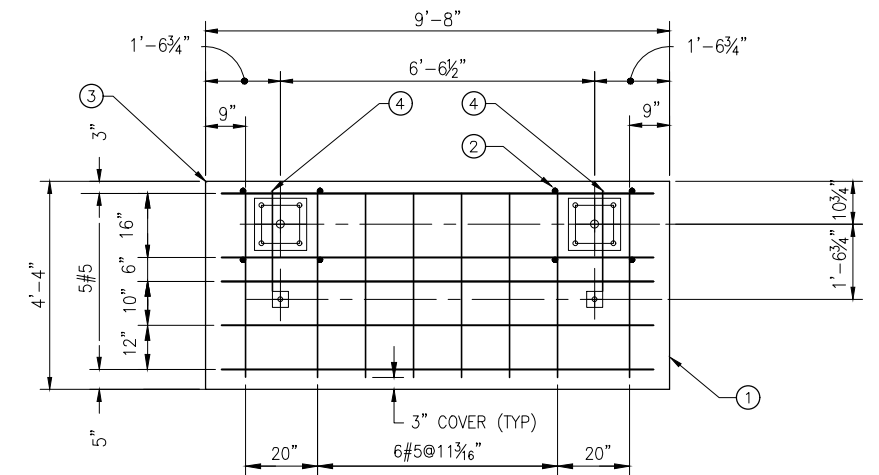
RAPIDRIDE RR-10 SHELTER FOOTING
REBAR BLOCKOUTS FOR SHELTER ANCHOR BOLTS

DETAIL 2
SCALE: NONE



RAPIDRIDE RR-15 SHELTER FOOTING (FOR RR206/RR208/RR208B)

DETAIL 3
SCALE: NONE



RAPIDRIDE RR-10 SHELTER FOOTING (RR124/RR125/RR126)
REINFORCEMENT LAYOUT DETAILS

DETAIL 4
SCALE: NONE

CONSTRUCTION NOTES

1. JOINT PER DET 3/D101 TO ISOLATE EDGES FROM PAVEMENT, SIDEWALKS, OR OTHER STRUCTURES.
2. #4 VERTICAL EPOXY-COATED BARS 6" EMBEDMENT INTO SOIL FOR RESTRAINT (TYP).
3. POINT OF REFERENCE, (SEE NOTE 1/D101).
4. 20" LONG #5 REBAR @ 6" OFFSET FROM THE ADJACENT REBAR. BOTH TOP & BOTTOM LAYERS.

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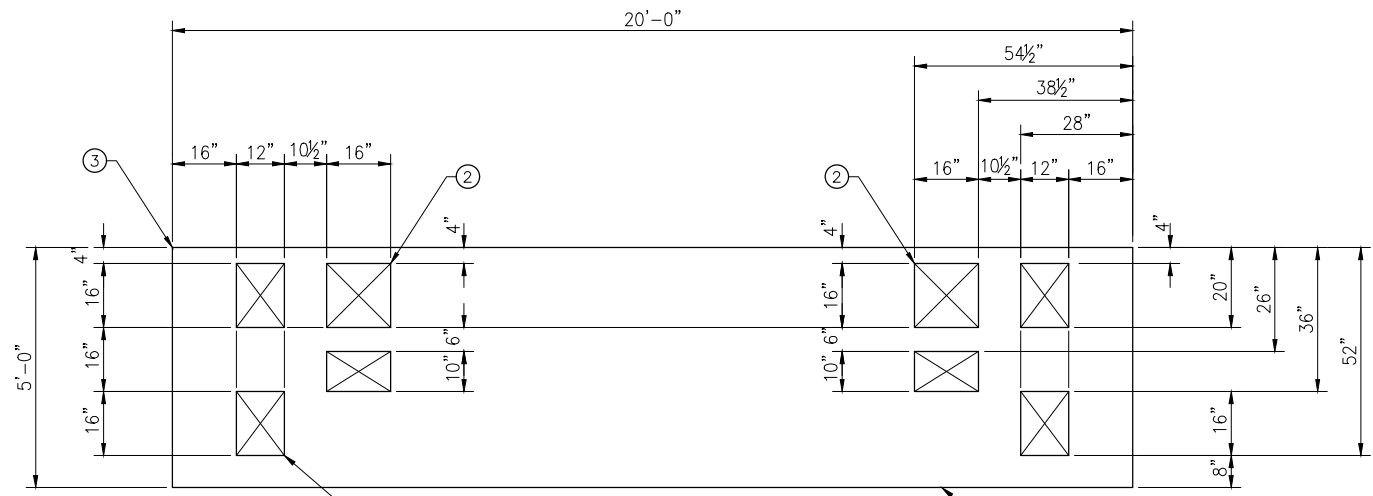
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C. ASQUITH	



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RAPIDRIDE SHELTER FOOTING REBAR LAYOUT DETAILS		DRAWING NO: D101A
		SHEET NO. OF 5 20

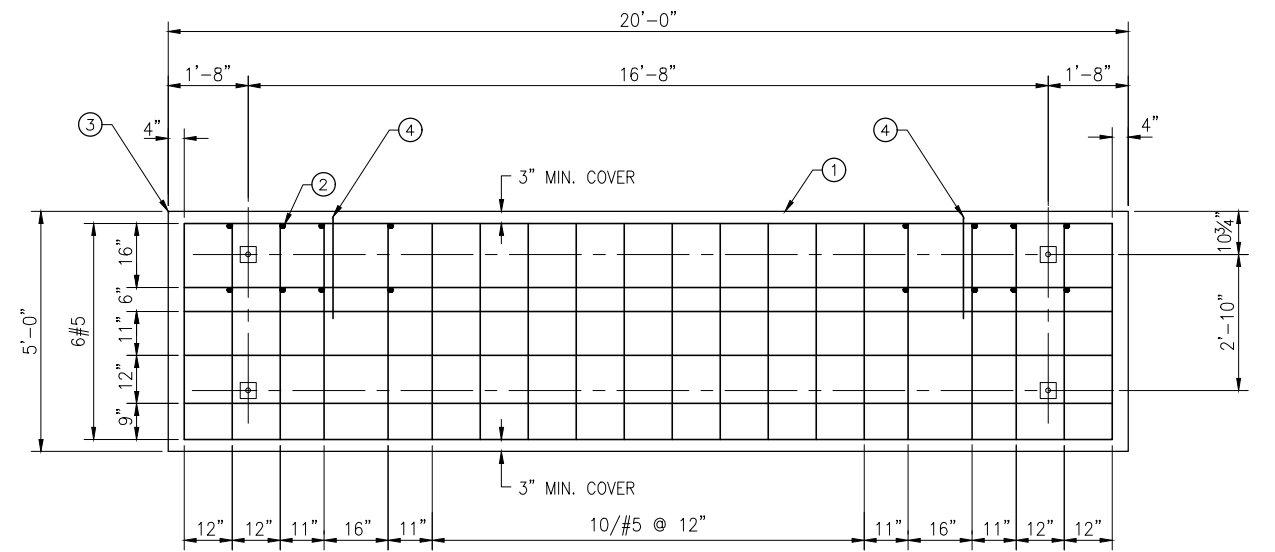


RAPIDRIDE RR-20 SHELTER FOOTING (FOR RR206/RR208/RR208B/F22)
REBAR BLOCKOUTS FOR SHELTER ANCHOR BOLTS

DETAIL 1
SCALE: NONE

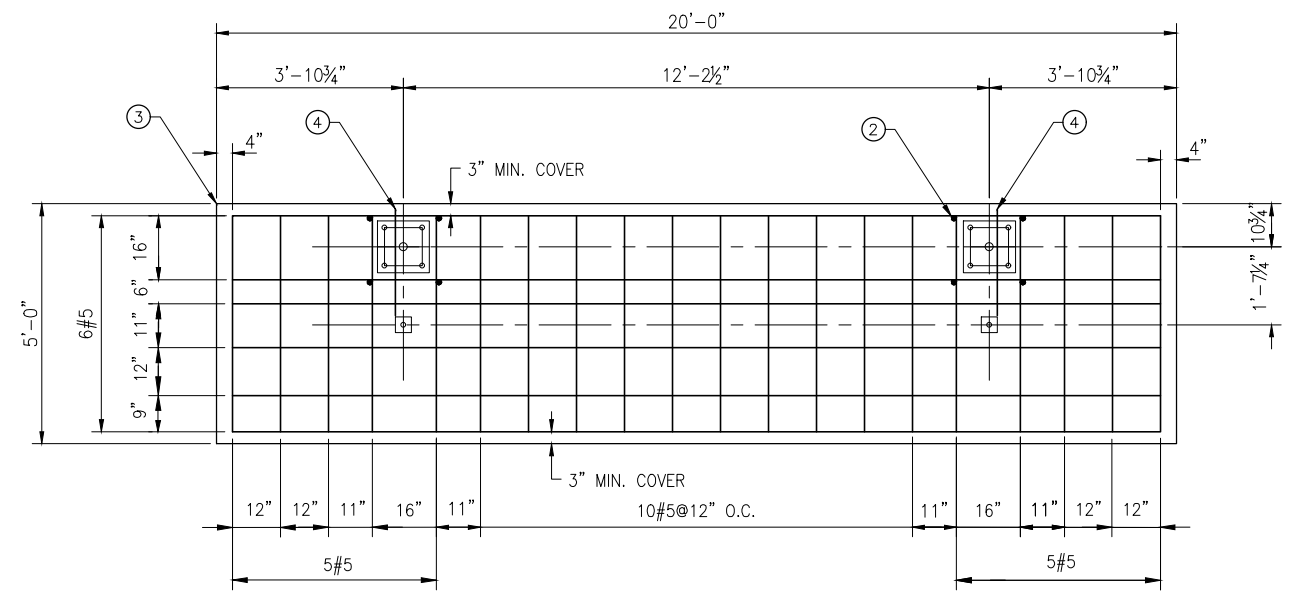
CONSTRUCTION NOTES ○

1. JOINT PER DET 3/D101 TO ISOLATE EDGES FROM PAVEMENT, SIDEWALKS, OR OTHER STRUCTURES.
2. #4 VERTICAL EPOXY-COATED BARS 6" EMBEDMENT INTO SOIL FOR RESTRAINT (TYP).
3. POINT OF REFERENCE, (SEE NOTE 1/D101).
4. 20" LONG #5 REBAR @ 6" OFFSET FROM THE ADJACENT REBAR. BOTH TOP & BOTTOM LAYERS.



RAPIDRIDE RR-20 SHELTER FOOTING (FOR F-22)

DETAIL 2
SCALE: NONE



RAPIDRIDE RR-20 SHELTER FOOTING (FOR RR206/RR208/RR208B)

DETAIL 3
SCALE: NONE

KCMT 2021-2022 STANDARD DETAILS

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METRO TRANSIT CAPITAL DIVISION
TRANSIT PASSENGER FACILITIES - IMPROVEMENTS

RAPIDRIDE SHELTER FOOTING
REBAR LAYOUT DETAILS

DATE: 05/2022
DRAWING NO: D101B
SHEET NO. OF 6 20

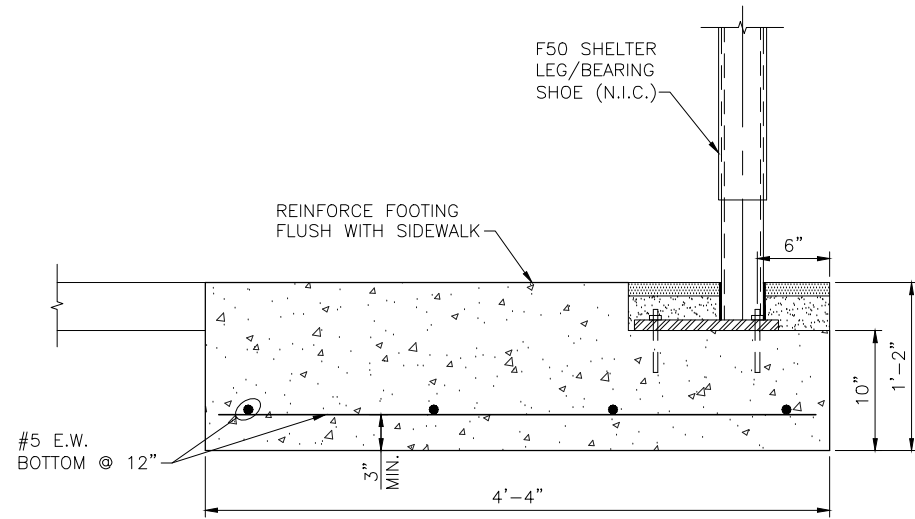
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 XREFS: KCMTD-BORDER.dwg IMAGES:

F50 SHELTER INSTALLATION NOTES

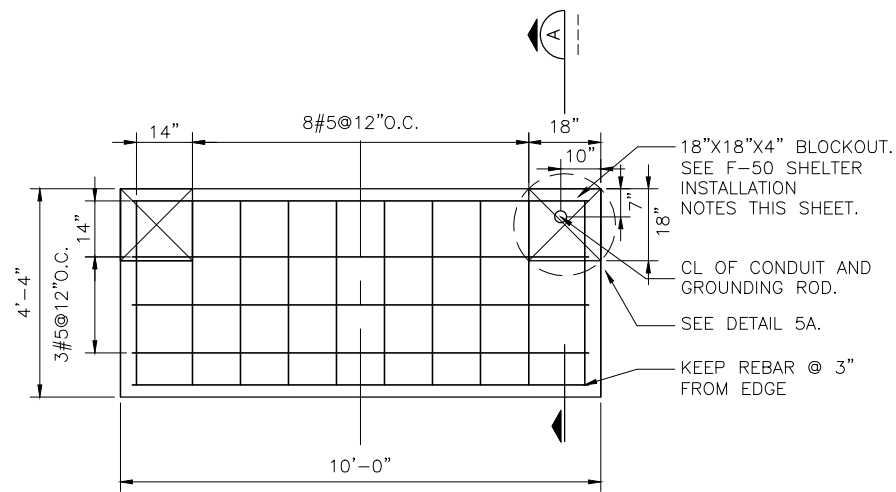
1. F50 SHELTER FRAME SHALL BE INSTALLED AT SITE WITH LONGITUDINAL SLOPE NOT MORE THAN 5%
2. KEEP THE BEARING SHOE BLOCKOUTS IN-PLACE AFTER FOOTING CONSTRUCTION UNTIL SHELTER IS TO BE INSTALLED.
3. UPON COMPLETION OF SHELTER INSTALLATION FILL THE BEARING SHOE BLOCKOUTS IMMEDIATELY TO FLUSH WITH ADJACENT SURFACE. SEE SECTION A THIS SHEET.

F50 BEARING SHOE INSTALLATION NOTES (N.I.C.)

- ① EMBED 3/4" DIA S.S. THREADED ROD AT LEAST 6-3/4" INTO FOOTING. USE HILTI HIT-RE-500 EPOXY. TYPICAL FOR FOUR.
- ② 1/2" THICK OWEN CORNING INSULATION BOARD. BORE HOLES TO ACCOMMODATE ANCHOR BOLTS AND NUTS.
- ③ WRAP BOTTOM 4" OF BEARING SHOE WITH 3M BLACK VINYL TAPES PRIOR TO APPLYING TOPPING COURSE.
- ④ APPLY APPROX. 1/4" THICK FIBER-REINFORCED CEMENT, FLUSH WITH SHELTER FOOTING. (INDUSTRIAL PRODUCT: PROFLEX 1FR-INDUSTRIAL FLOOR REPAIR.)

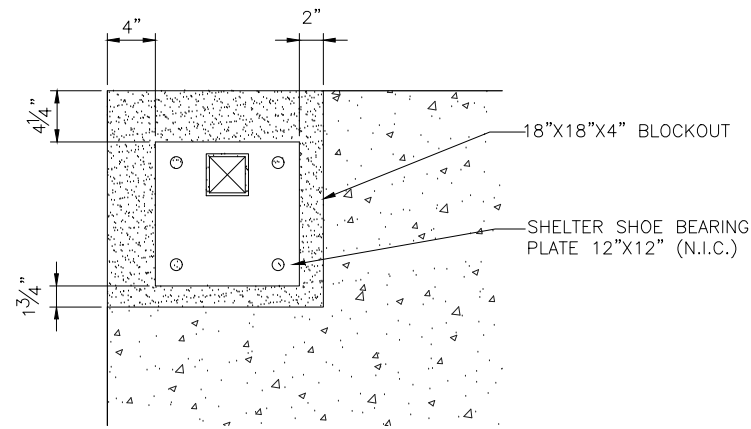


SECTION A
SCALE: NONE



F50 SHELTER FOOTING
BLOCKOUTS FOR SHELTER BEARING SHOES

DETAIL 4
SCALE: NONE



SHELTER SHOE BEARING PLATE LOCATION (N.I.C.)

DETAIL 5A
SCALE: NONE

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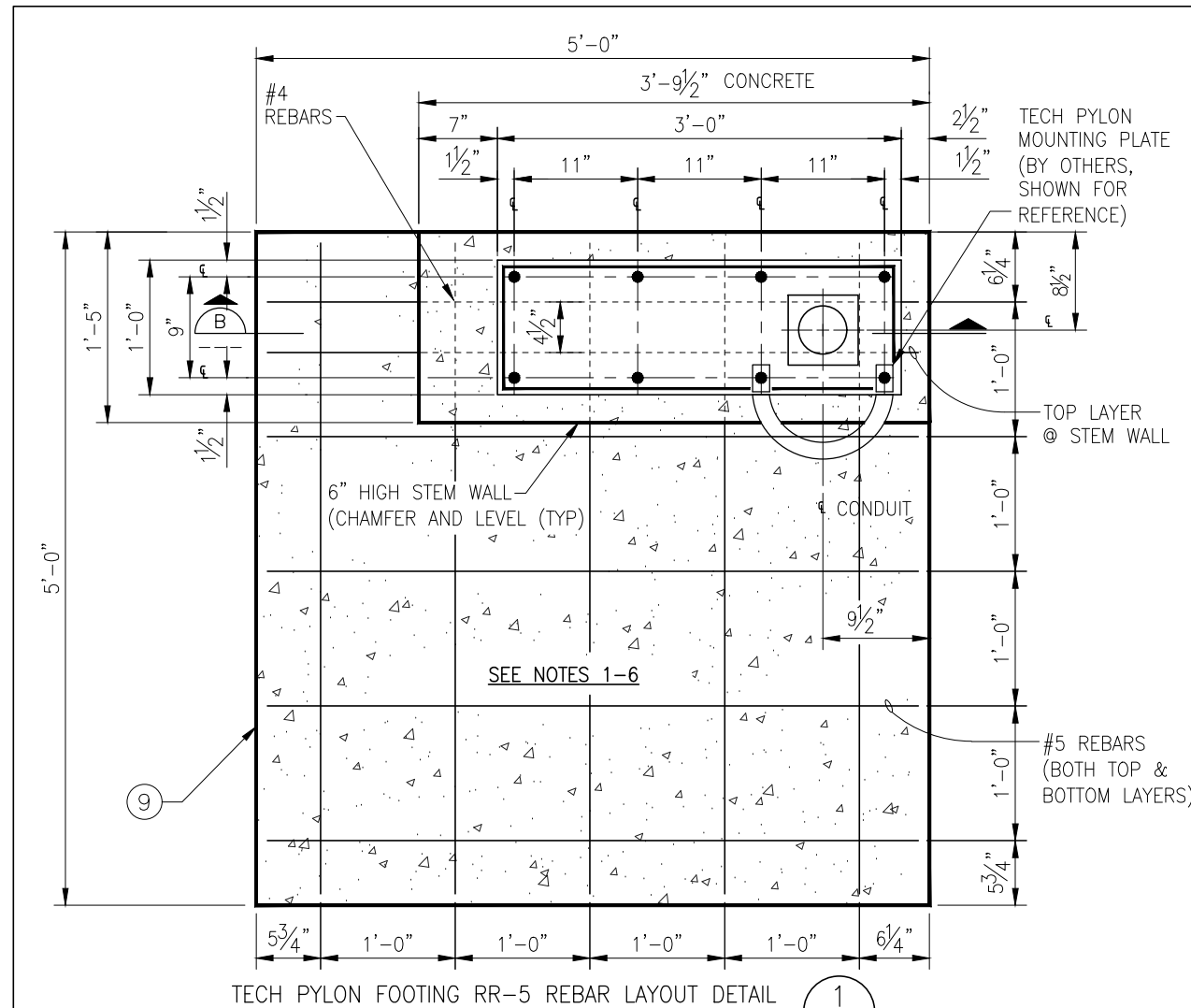
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No.	REVISION	BY	APPD	DATE



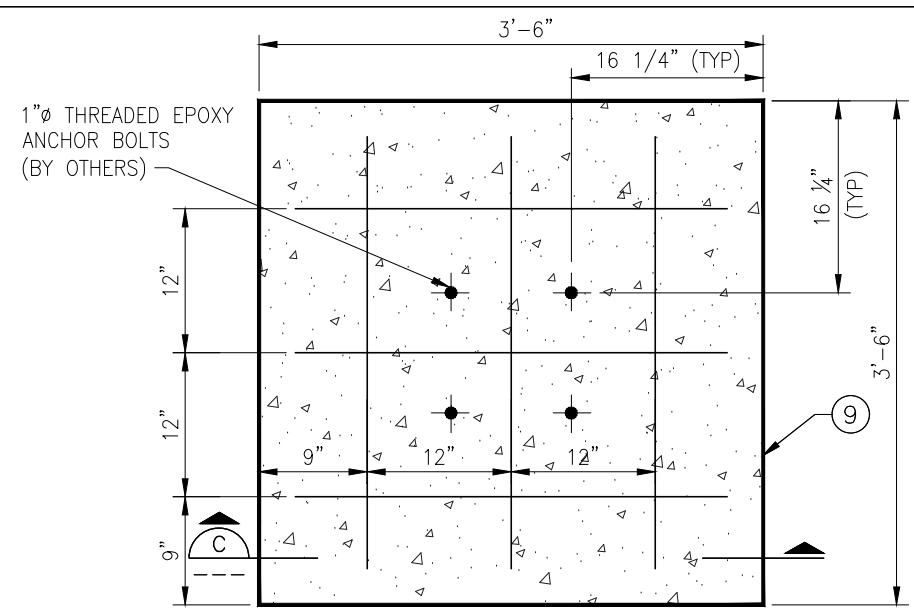
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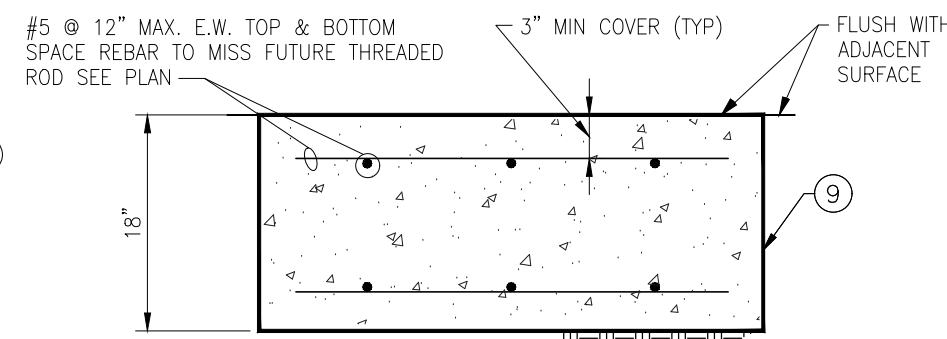
METRO TRANSIT CAPITAL DIVISION TRANSIT PASSENGER FACILITIES - IMPROVEMENTS	DATE: 05/2022
F-50 SHELTER FOUNDATION PLAN AND DETAILS	DRAWING NO: D101C
	SHEET NO. OF 7 20



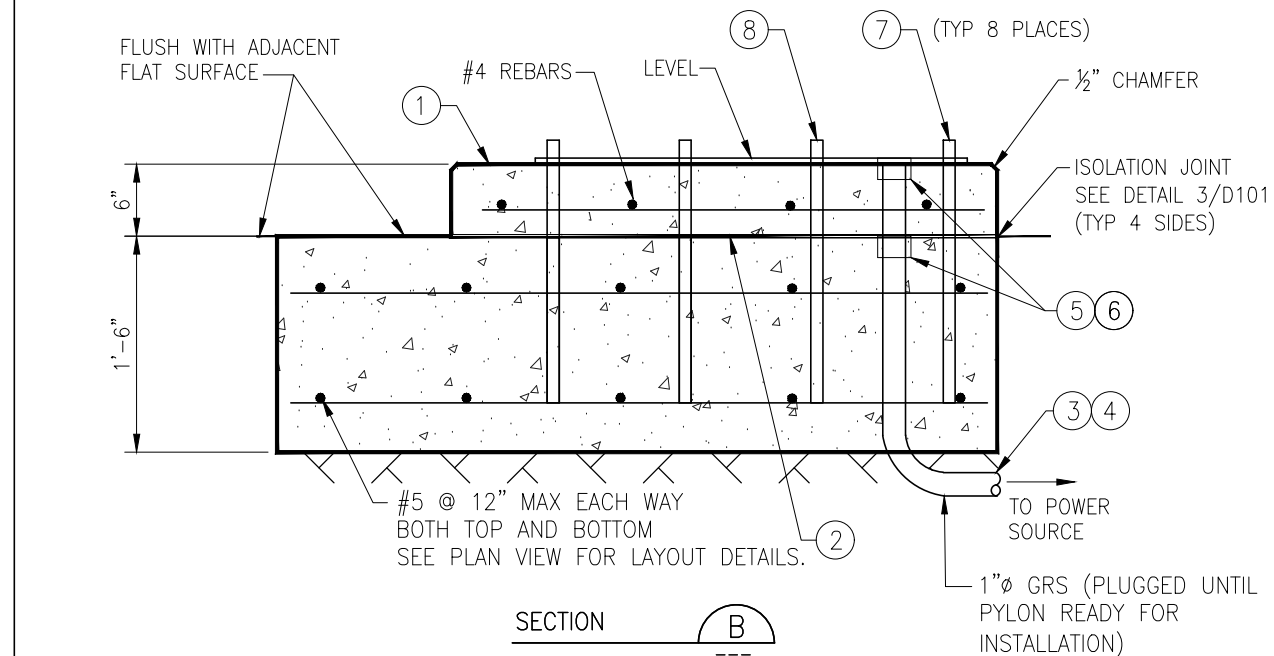
TECH PYLON FOOTING RR-5 REBAR LAYOUT DETAIL (1)



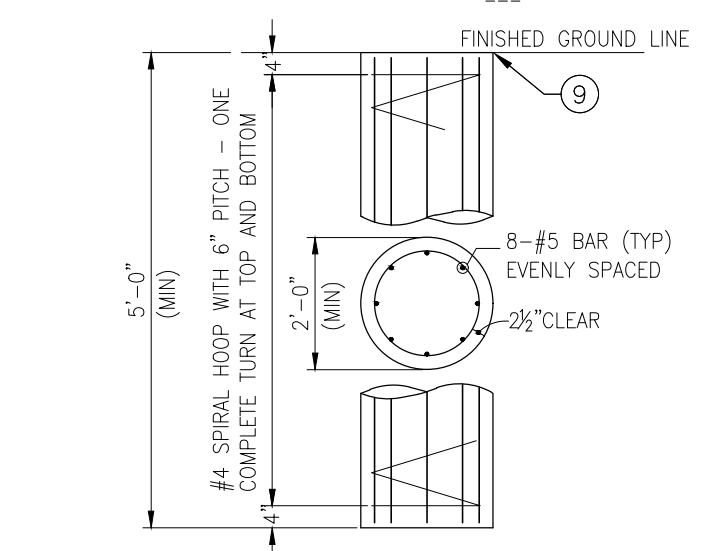
BLADE MARKER FOUNDATION RR-4 DETAIL (2)



SECTION C



SECTION B



ALTERNATIVE BLADE MARKER FOUNDATION RR-2 DETAIL (3)

- CONSTRUCTION NOTES**
- UNLESS OTHERWISE STATED ON SITE PLANS, TECH PYLON FOOTING AND CURB (STEM WALL) SHALL BE POURED MONOLITHICALLY, SEE SECTION B. FOOTING SHALL BE FLUSH WITH ADJACENT SIDEWALK OR SITE IMPROVEMENT. STEM WALL (CURB) SHALL BE LEVEL.
 - IF STEM WALL (CURB) IS CONSTRUCTED SEPARATELY FROM THE FOOTING, ROUGHEN THE FOOTING SURFACE OVER THE AREA OF CONTACT WITH THE WALL, CLEAN IT THOROUGHLY AND COAT IT WITH AN EPOXY BONDING AGENT PRIOR TO PLACING THE CONCRETE FOR THE STEM WALL.
 - ALL NEW CONDUIT INSTALLED UNDERGROUND SHALL HAVE A MINIMUM COVER OF 24 INCHES.
 - PLACE 6 INCH WIDE MAGNETEK WARNING TAPE, OR APPROVED EQUAL, 12 INCHES BELOW GRADE OVER ALL CONDUIT RUNS.
 - STUB UP THE CONDUIT AS INDICATED WITH A COUPLING INSTALLED ON THE STUBBED UP END WITH THE TOP OF THE COUPLING FLUSH WITH FINISHED SURFACE. A THREADED MALE PLUG SHALL BE INSTALLED IN THE TOP OF THE COUPLING AT THE TIME OF THE FOOTING/STEM WALL PLACEMENT. WRAP PLUG, COUPLING AND TOP 2 INCHES OF CONDUIT WITH DUCT TAPE PRIOR TO POURING CONCRETE.
 - EPOXY ALL JOINTS TO ENSURE WATER CANNOT ENTER THE CONDUIT THROUGH THE CONNECTION. DO NOT EPOXY THE PLUG.
 - 1" φ GALVANIZED A36 THREADED ROD. 24" LONG WITH 3" ABOVE FINISHED GRADE OF STEM WALL. USE TEMPLATE TO ENSURE ANCHORING RODS ARE SET PRECISELY AND PLUMB. IF STEM WALL IS CONSTRUCTED SEPARATELY FROM PYLON FOUNDATION, DRILL 1 1/8" HOLE (8 TYP). SECURE IN PLACE WITH NON-SHRINK EPOXY 1" φ S.S. THREADED ROD (TYP) OR 1" φ F1554 GR 36 ANCHOR ROD. MIN. EMBED INTO UNDERLYING FOUNDATION AT LEAST 1'-3".
 - SECURE TWO TRAFFIC CONES ON STEM WALL TO PREVENT TRIPPING HAZARD. FASTEN EACH CONE WITH TWO WASHERS AND NUTS ON ANCHOR RODS UNTIL PYLON IS INSTALLED BY OTHERS.
 - JOINT PER DET 3/D101 TO ISOLATE EDGES FROM PAVEMENT, SIDEWALKS, OR OTHER STRUCTURES.

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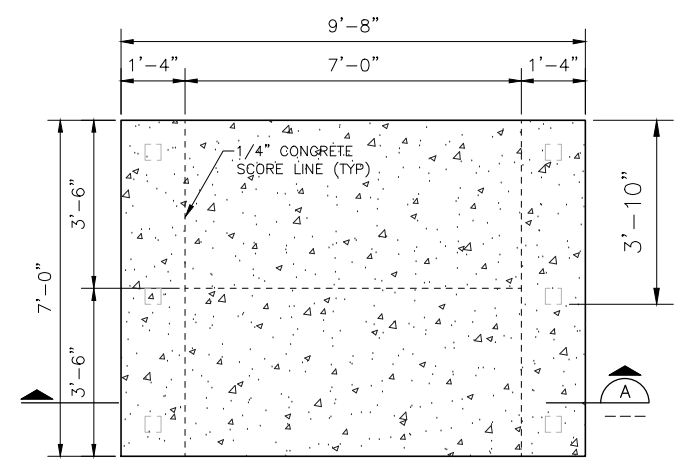
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TRANSIT PASSENGER FACILITIES - IMPROVEMENTS

**RAPIDRIDE TECH PYLON
 AND BLADE MARKER FOOTING
 AND FOUNDATION DETAILS AND SECTIONS**

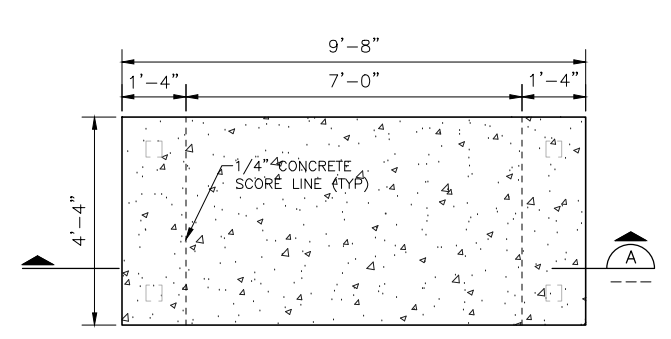
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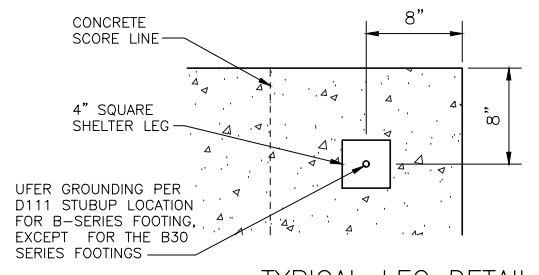
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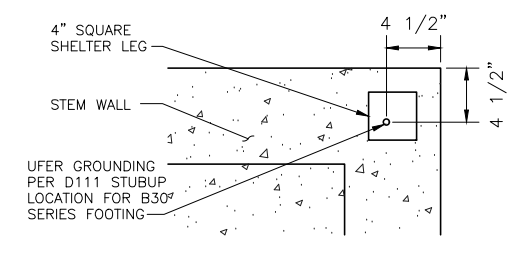
B11 FOOTING DETAIL
SCALE: NONE



B21 FOOTING DETAIL
SCALE: NONE

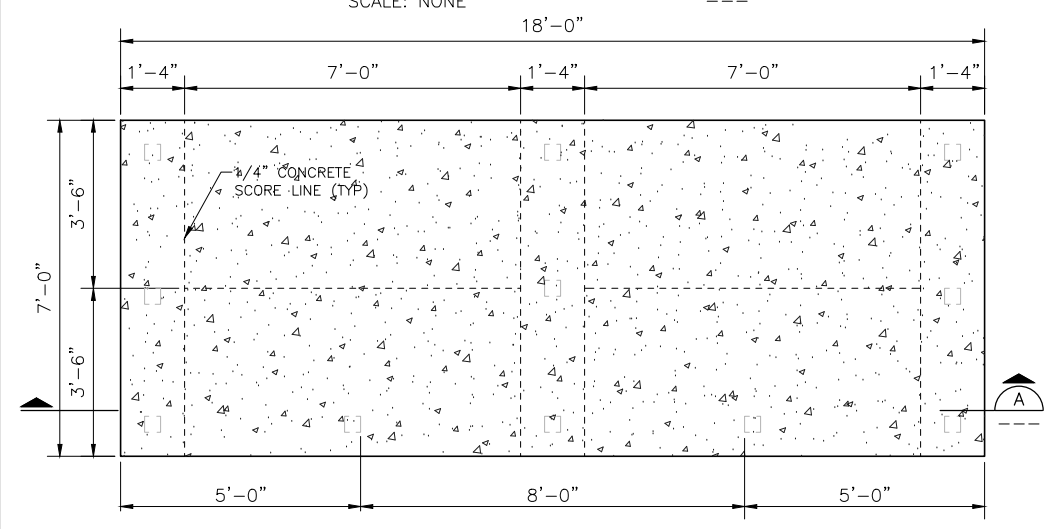


TYPICAL LEG DETAIL
@ CORNER FOR B-SERIES FOOTING
(EXCEPT B30 SERIES)

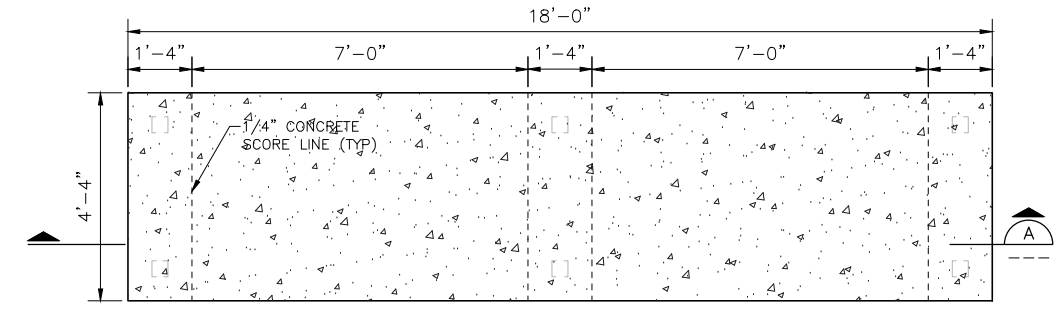


TYPICAL LEG DETAIL
@ CORNER FOR B30
SERIES FOOTING

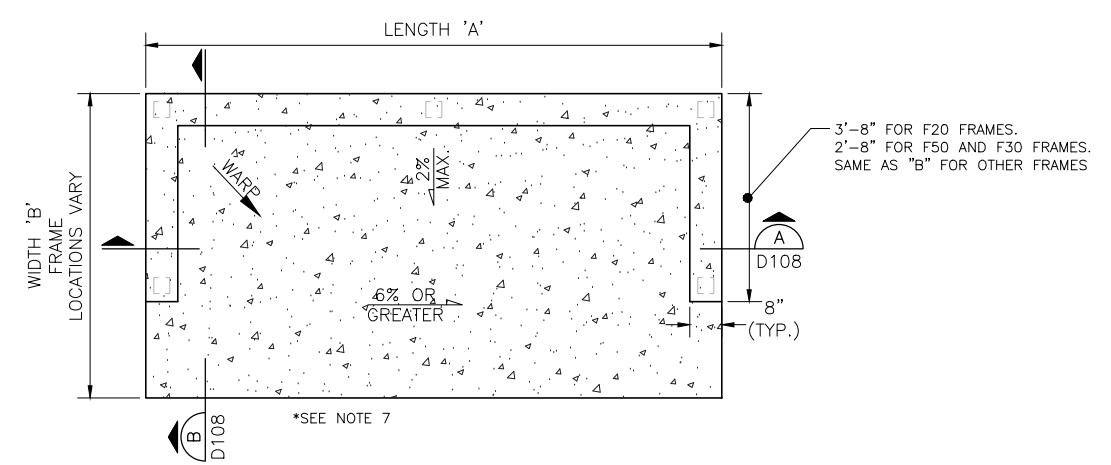
TYPICAL LEG DETAILS FOR B-SERIES FOOTINGS
SCALE: NONE



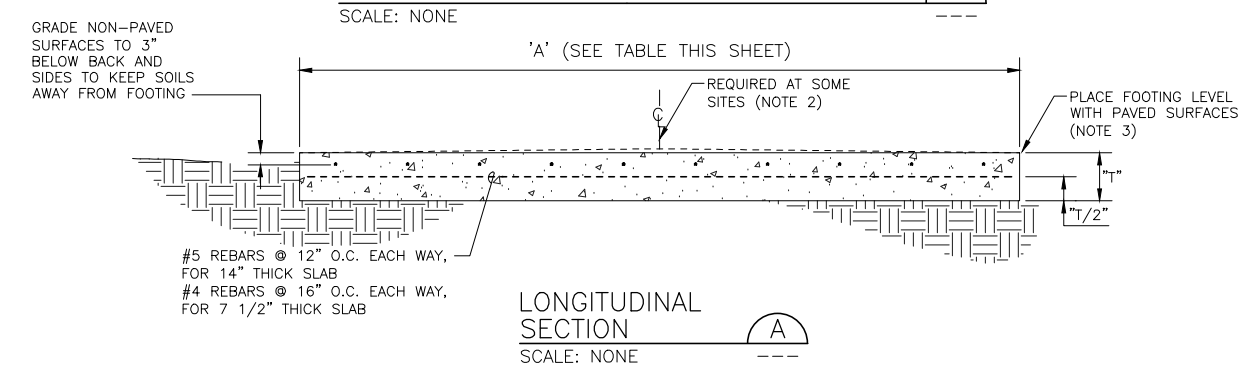
B12 FOOTING DETAIL
SCALE: NONE



B22 FOOTING DETAIL
SCALE: NONE



B30 SERIES FOOTING DETAIL
SCALE: NONE



LONGITUDINAL SECTION
SCALE: NONE

FOOTING DIMENSIONS				
FOOTING TYPE	SHELTER FRAME TYPE	LENGTH 'A'	WIDTH 'B'	SLAB THICKNESS 'T'
B11	PER PLAN	9'-8"	7'-0"	7 1/2"
B12	PER PLAN	18'-0"	7'-0"	7 1/2"
B13	PER PLAN	12'-8"	9'-8"	7 1/2"
B21	PER PLAN	9'-8"	4'-4"	14"
B22	PER PLAN	18'-0"	4'-4"	14"
B31	F11	9'-0"	6'-4"	7 1/2"
B31	F21	9'-0"	4'-4"	14"
B31	F31 OR F51	9'-0"	4'-4"	14"
B32	F12	17'-4"	6'-4"	7 1/2"
B32	F13	12'-0"	9'-0"	7 1/2"
B32	F14	17'-4"	6'-4"	7 1/2"
B32	F22 OR F52	17'-4"	4'-4"	14"
B32	F32	17'-4"	4'-4"	14"

GENERAL NOTES:

- "1" INDICATES AREAS FOR FUTURE SHELTER LEGS. AVOID PLACING REINFORCEMENT IN THESE AREAS.
- FOR SITES WITH SLOPES LESS THAN 0.5% IN 'A' DIMENSION, INCREASE DIMENSION AT MIDDLE OF FOOTING BY 1" TO ASSURE PROPER DRAINAGE OF SURFACE WATER.
- JOINT PER DET 3/D101 TO ISOLATE EDGES FROM PAVEMENT, SIDEWALKS, OR OTHER STRUCTURES.
- WHEN USING B-32 FOOTING WITH DOUBLE FRAMES, USE A LONGER BEARING SHOE TO SUPPORT THE FRONT MIDDLE LEG (BY METRO).
- SEE DET D111 FOR CONDUIT AND GROUNDING WIRE.
- FOOTINGS SHALL BE PLACED TO ENSURE THE SHELTER IS A MINIMUM THREE FEET FROM FACE OF CURB TO THE VERTICAL STRUCTURE; WHICH INCLUDES THE CANTILEVER OVERHANG AND EDGE OF THE SHELTER IF PLACED REVERSE TO CURB.
- B30 SERIES FOR USE WITH STEM WALL IN AREAS WITH RUNNING GRADES OF 6% OR GREATER.

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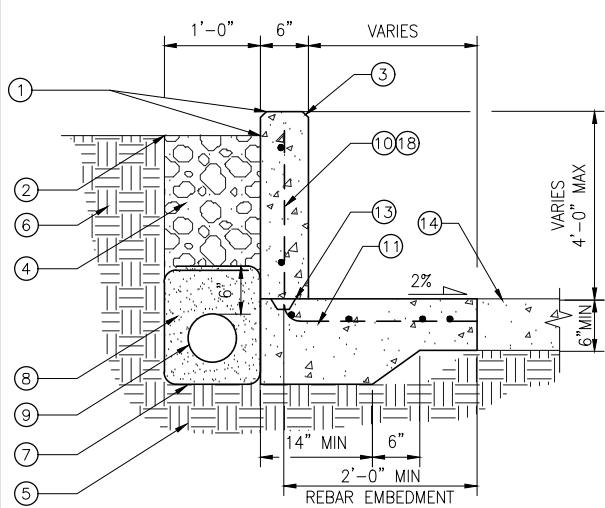
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CHECKED: C. ASQUITH	



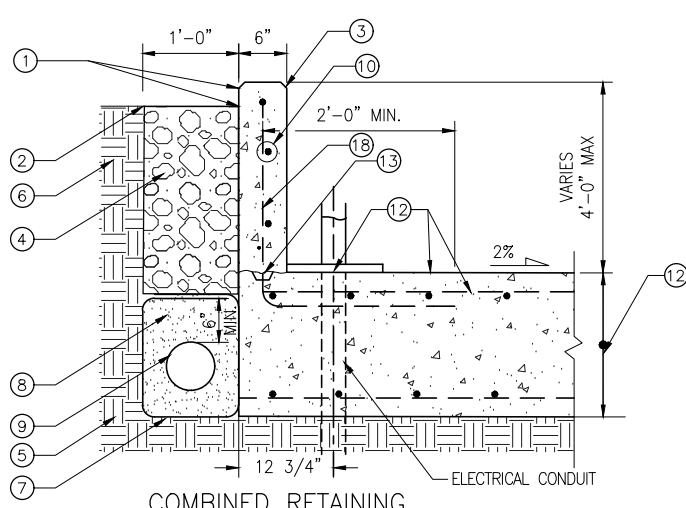
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TRANSIT PASSENGER FACILITIES - IMPROVEMENTS

STANDARD SHELTER
FOOTING PLANS, SECTIONS
AND DETAILS

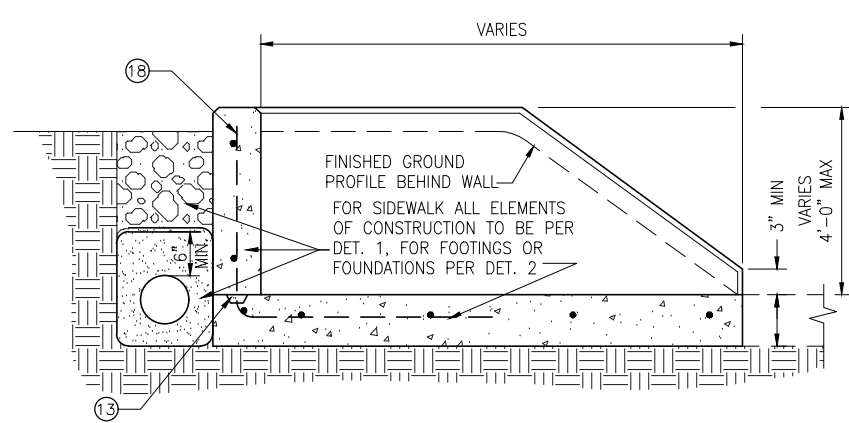
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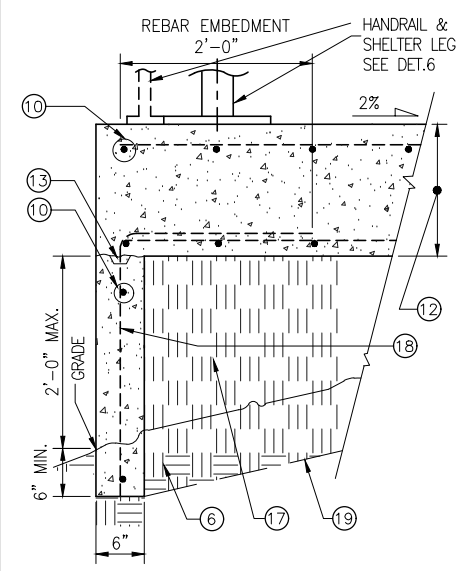
COMBINED RETAINING WALL - SIDEWALK
 DETAIL
 SCALE: NTS



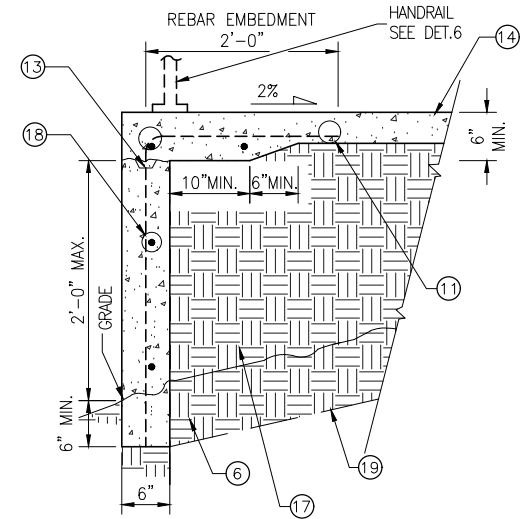
COMBINED RETAINING WALL - 2' SHELTER FOOTING
 DETAIL
 SCALE: NTS



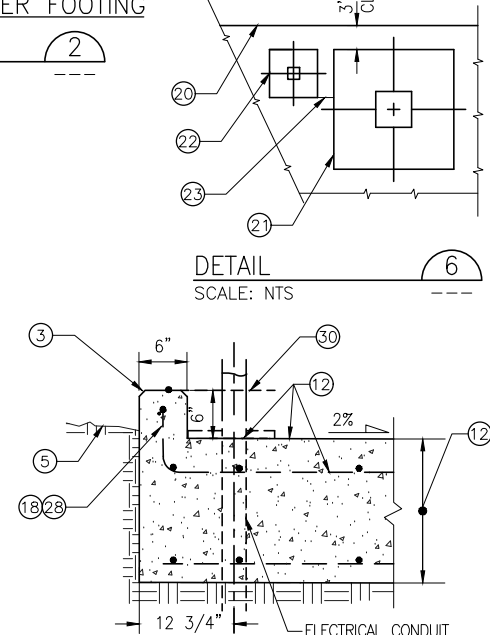
RETAINING WALL WITH WING WALL FOR COMBINATION FOOTINGS, FOUNDATIONS OR SIDEWALKS
 DETAIL
 SCALE: NTS



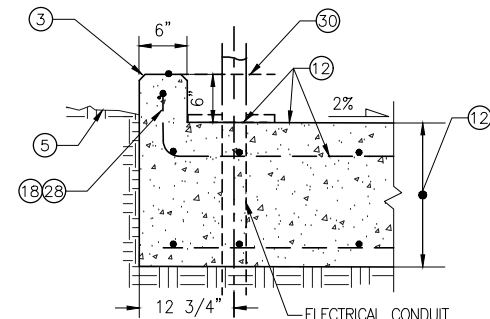
COMBINED FILL WALL - SHELTER FOOTING
 DETAIL
 SCALE: NTS



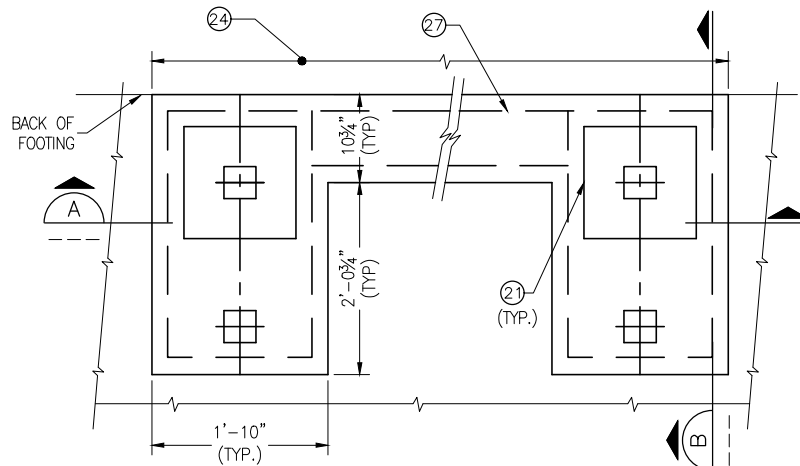
COMBINED FILL WALL - SIDEWALK
 DETAIL
 SCALE: NTS



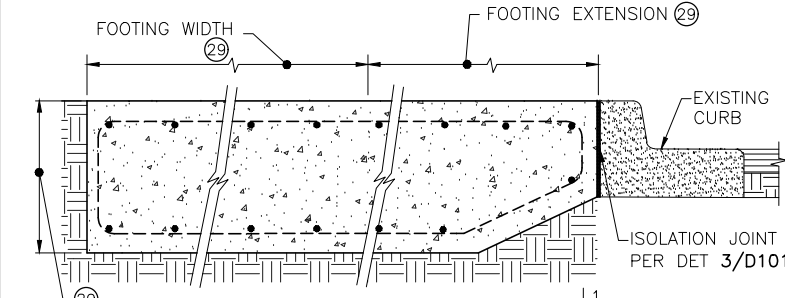
COMBINED 6" CURB AND FOOTING
 DETAIL
 SCALE: NTS



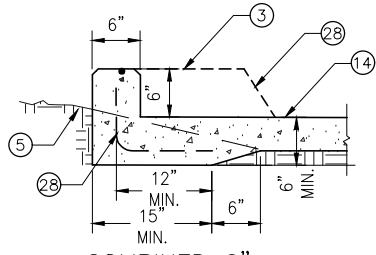
COMBINED 6" CURB AND FOOTING
 DETAIL
 SCALE: NTS



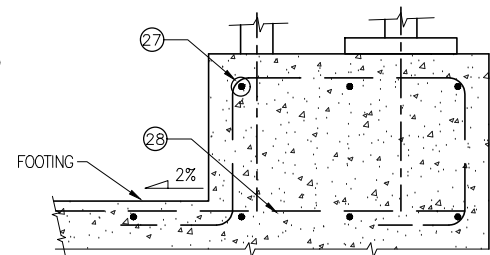
STUB WALL PLAN
 DETAIL
 SCALE: NTS



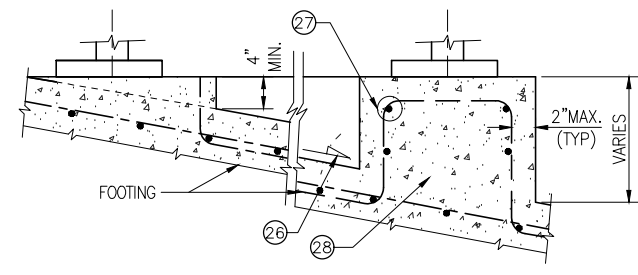
COMBINED FILL WALL - SHELTER FOOTING
 DETAIL
 SCALE: NTS



COMBINED 6" CURB AND SIDEWALK
 DETAIL
 SCALE: NTS



SECTION A
 SCALE: NTS



SECTION B
 SCALE: NTS

GENERAL NOTES

- DRAIN PIPE NOT REQUIRED FOR WALLS 3 FEET HIGH OR LESS. SEE SITE PLANS FOR DAYLIGHTING DETAILS.
- TOP OF WALLS TO MATCH THE LONGITUDINAL SLOPE OF FOOTINGS AND SIDEWALK.
- JOINT PER DET 3/D101 TO ISOLATE SHELTER FOOTING EDGES FROM PAVEMENT, SIDEWALKS, OR OTHER STRUCTURES.

CONSTRUCTION NOTES

- TOP OF WALL 3" ABOVE FINISHED GRADE.
- RESTORE SURFACE TO ORIGINAL OR BETTER CONDITION.
- 3/4" CHAMFER FOR ALL EXPOSED EDGES.
- 4" - 6" QUARRY SPALLS
- UNDISTURBED SOIL
- UNDISTURBED SOIL OR COMPACTED NATIVE SOIL OR STRUCTURAL FILL IF NEEDED.
- FILTER FABRIC AND DRAIN PIPE FOR WALLS HIGHER THAN 3'-0"
- 1" MINUS WASHED ROCK
- 4" SCH 40 PERFORATED PVC PIPE FOR WALLS HIGHER THAN 3'-0"
- # 4 @ 12" OC E.W. WITH 2" COVER. SEE 4/D106 FOR REBARS AT WALL CORNERS
- # 4 @ 12" OC WITH 3" COVER
- SEE SITE PLAN AND DWG D101 OR D103 FOR SHELTER FOOTING DETAILS. 12 3/4" FROM BACK OF WALL TO CENTERLINE OF ELECTRICAL CONDUIT.
- IF WALL/FOOTING NOT CONSTRUCTED MONOLITHICALLY, ROUGHEN TOP SURFACE OF SLAB UNDER WALL, CLEAN AND COAT WITH CONCRETE EPOXY BONDING COMPOUND OR PROVIDE A 1" DEEP BY 4" WIDE CONTINUOUS KEYWAY.
- NEW SIDEWALK OR SIDEWALK EXTENSION PER CITY STANDARD DETAIL BEYOND THE THICKENED EDGE SHOWN.
- SEE DETAIL 1 FOR SIDEWALK OR 2 FOR SHELTER FOOTING
- FINISHED GROUND PROFILE BEHIND WING WALL
- STRUCTURAL FILL COMPACTED TO 90% OF PROCTOR
- REINFORCEMENT BARS CONTINUOUS BETWEEN WALL OR CURB AND FOOTING OR SIDEWALK. DOWELLING THE WALL OR CURB TO THE FOOTING SHALL NOT BE ACCEPTABLE.
- TAPER SIDEWALK TO EDGE OF FOOTING OR SIDEWALK EXTENSION.
- BACK EDGE OF FILL WALL
- TYPICAL 12" X 12" RAPIDRIDE SHELTER REAR LEG SHOE PLATE (BY OTHERS). PLACE REBARS TO AVOID INTERFERENCE WITH ANCHOR BOLTS. SEE DETAILS ON SHEET D101A & D101B.
- TYPICAL HANDRAIL POST BASE PLATE. PLACE FOOTING REBARS TO AVOID INTERFERENCE WITH ANCHORS. SEE DET 3/D107 FOR BOLT PATTERN.
- 2" CLEARANCE AT EITHER SIDE OF SHELTER REAR LEG SHOE PLATE
- 8'-4 1/2" FOR SHELTERS RR-125 AND RR-126, 14'-0 1/2" FOR LARGE SHELTERS.
- NOT USED
- 5% SLOPE OR MORE
- REINFORCEMENT SAME AS FOOTING, # 5 @ 12" MAX E.W. PLACE AS NECESSARY TO AVOID INTERFERENCE WITH SHOE PLATE ANCHORS. SEE DET 1/D101 FOR BOLT PATTERN.
- IF THE WALL OR CURB IS NOT CONSTRUCTED MONOLITHICALLY, CONSTRUCT THE FOOTING OR SIDEWALK SLAB WITH THE REINFORCEMENT BARS FOR THE WALL OR CURB IN PLACE, THEN ROUGHEN THE FOOTING OR SIDEWALK SURFACE AND CLEAN AND COAT WITH CONCRETE EPOXY BONDING AGENT PRIOR TO PLACING THE WALL OR CURB. DOWELLING THE WALL OR CURB TO THE FOOTING OR SIDEWALK SHALL NOT BE ACCEPTABLE.
- DIMENSIONS VARY. SEE ZONE PLAN FOR FOOTING TYPE AND EXTENSION LENGTH AND DWG D101 OR D103 FOR OTHER FOOTING DETAILS.

I:\DOT\kingcounty\dot\transit\CCAD_Folders\Projects\passenger_facilities\standard_details\2021-2022\standard_details\0104.dwg | Layout: D104
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 XREFS: KCMTD-BORDER.dwg IMAGES

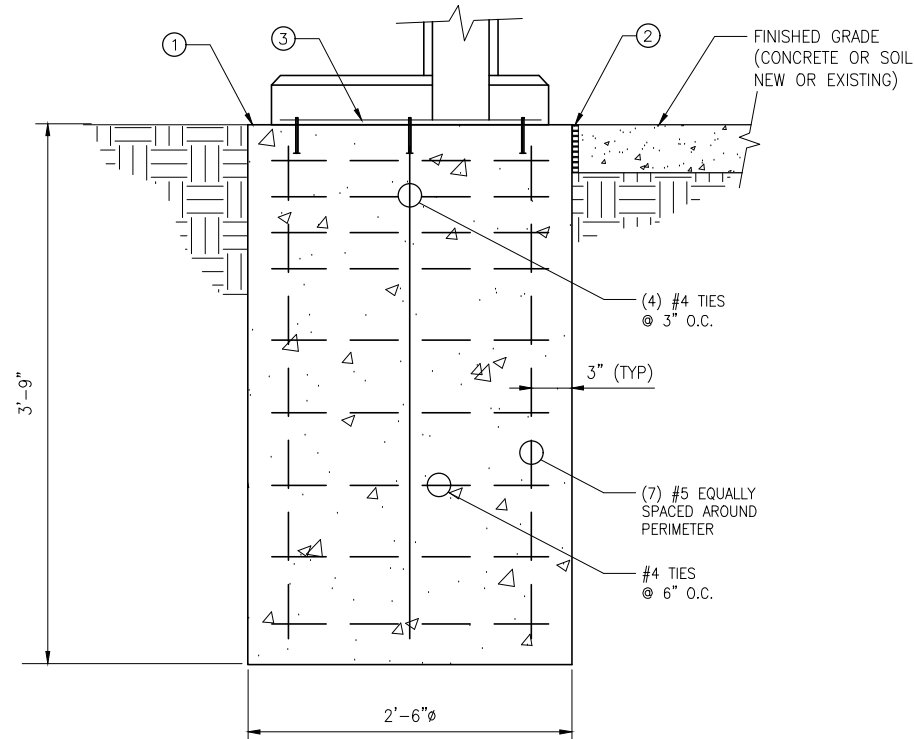
KCMT 2021-2022 STANDARD DETAILS				
No.	REVISION	BY	APPD	DATE



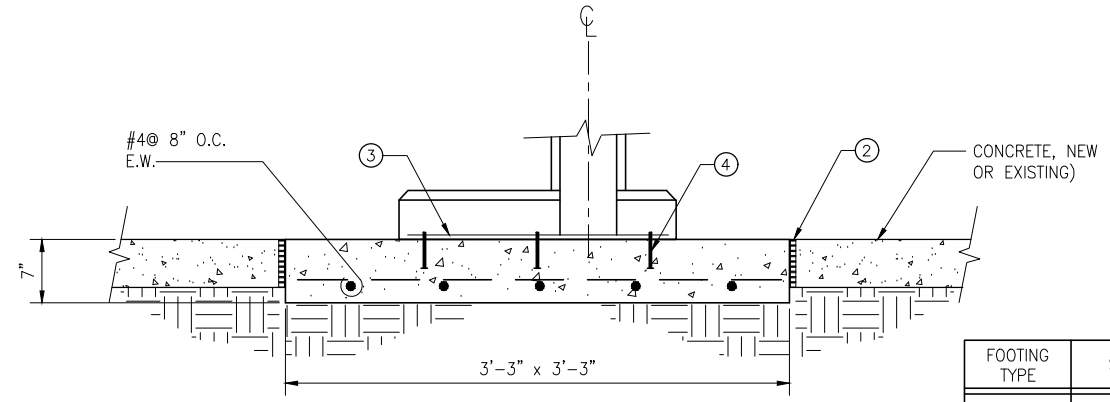
DESIGNED: K. CHANG YUEN	APPROVED: P. ENG
DRAWN: L. ANDERSON	PROJECT NO.:
CHECKED: K. CHANG YUEN	CONTRACT NO.:
CHECKED: C. ASQUITH	



METRO TRANSIT CAPITAL DIVISION		DATE: 05/2022
TRANSIT PASSENGER FACILITIES - IMPROVEMENTS		
SECTIONS AND DETAILS		DRAWING NO.:
		D104
		SHEET NO. OF:
		10 20



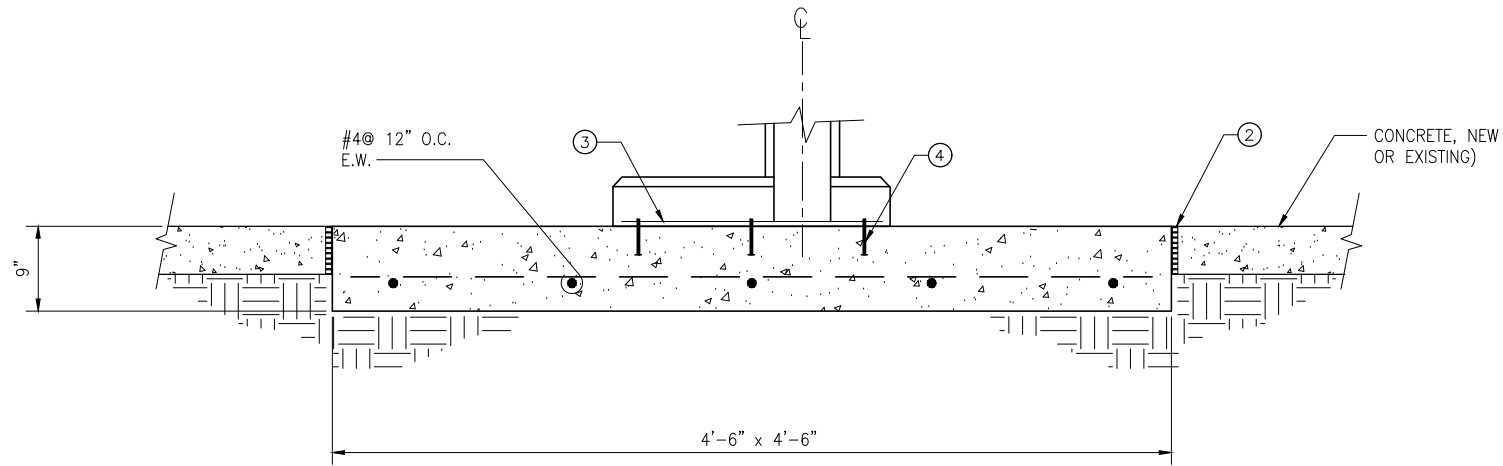
TYPE I SIGN FOOTING
ELEVATION
DETAIL
SCALE: NONE



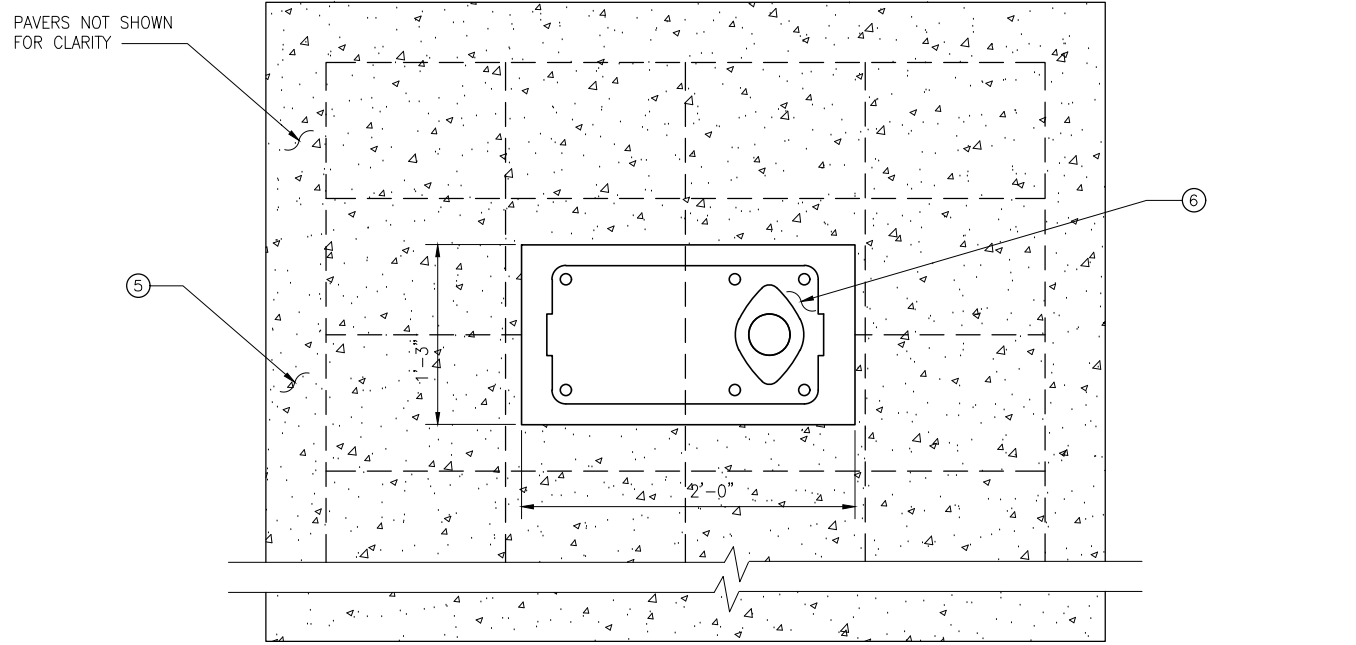
TYPE II SIGN FOOTING
ELEVATION
DETAIL
SCALE: NONE

FOOTING TYPE	SIGN TYPES
TYPE I	B1, C1, C2, D1
TYPE II	D1
TYPE III	B1, C1, C2

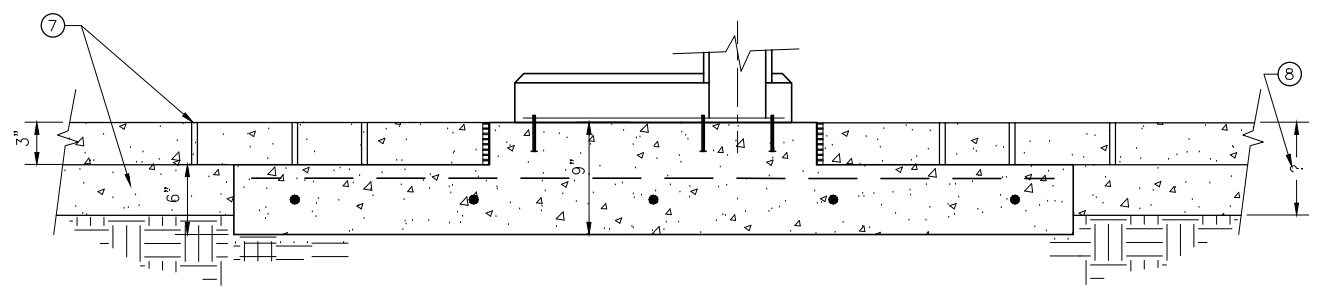
- CONSTRUCTION NOTES**
- TOP OF CONCRETE FOOTING FLUSH WITH EXISTING FINISHED GRADE ALL AROUND.
 - JOINT PER 3/D101 TO ISOLATE ALL EDGES FROM PAVEMENT, SIDEWALKS, AND OTHER STRUCTURES.
 - BASE PLATE, ANCHOR BOLTS AND SIGN INSTALLATION (BY OTHERS).
 - 3/4" S.S. THREADED ROD, TYP. 4" MIN EMBED, (6) PER SIGN. USE HILTI-HIT-RE 500-SD TO EPOXY ANCHORS IN PLACE. PROVIDE LEVELING NUTS AND NON-METALLIC NON-SHRINK GROUT TO SET SIGN PLUMB AND LEVEL (BY OTHERS).
 - SEE SITE PLAN FOR FOOTING DIMENSIONS AND TYPE.
 - SEE SITE PLAN FOR SIGN TYPE AND PLATE INSTALLATION DETAILS.
 - EXISTING PAVERS AND SIDEWALK STRUCTURE. SEE SITE PLAN FOR DETAILS AND PAVERS REMOVAL AND REINSTALLATION INSTRUCTIONS.
 - UNLESS SHOWN OTHERWISE IN THE SITE PLAN, T=9" FOR TYPE III FOOTING AND 7" FOR TYPE II FOOTING.



TYPE III SIGN FOOTING
ELEVATION
DETAIL
SCALE: NONE



PLAN VIEW



ELEVATION
TYPE II OR TYPE III SIGN FOOTING UNDER PAVERS
DETAIL
SCALE: NONE

I:\DOT\kingcounty\dot\transit\DC\CAD_Folders\Projects\passenger_facilities\standard_details\2021-2022 standard details\D104A.dwg | Layout: D104A
 PLOTTED: May 19, 2022 9:08:16pm By: dbernet
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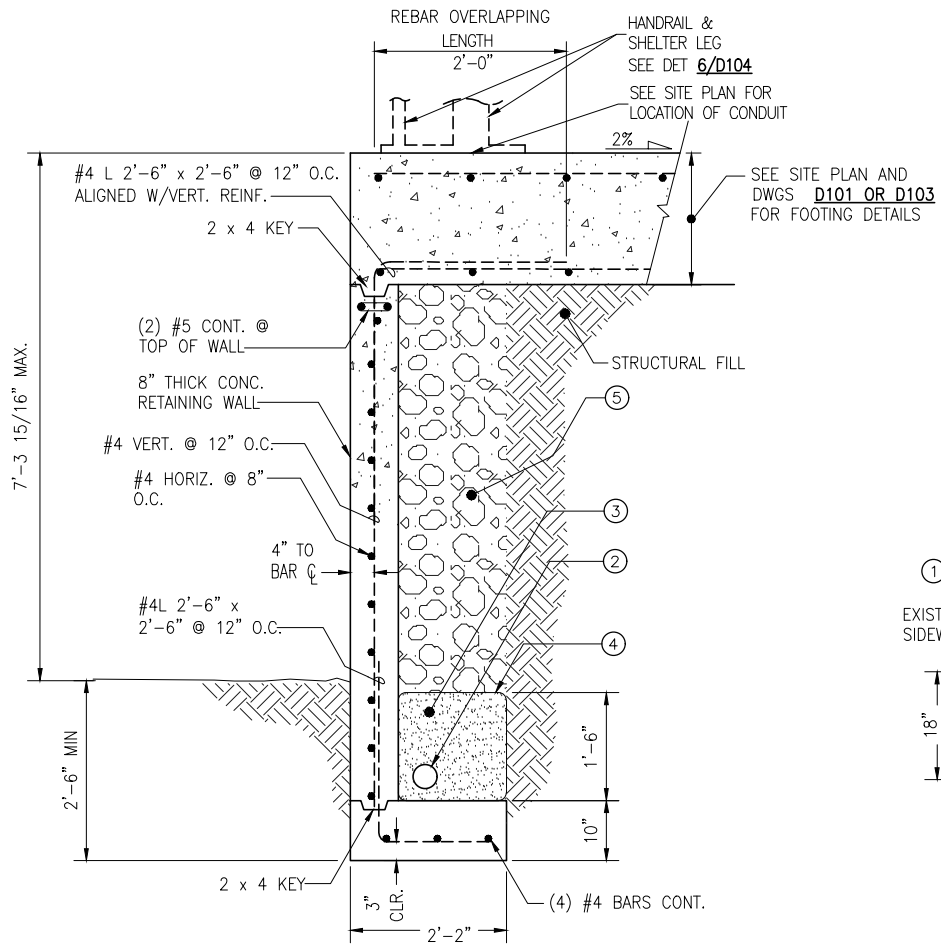
KCMT 2021-2022 STANDARD DETAILS				
No.	REVISION	BY	APP'D	DATE



DESIGNED: K. CHANG YUEN	APPROVED: P. ENG
DRAWN: L. ANDERSON	PROJECT NO.:
CHECKED: K. CHANG YUEN	CONTRACT NO.:
CHECKED: C. ASQUITH	

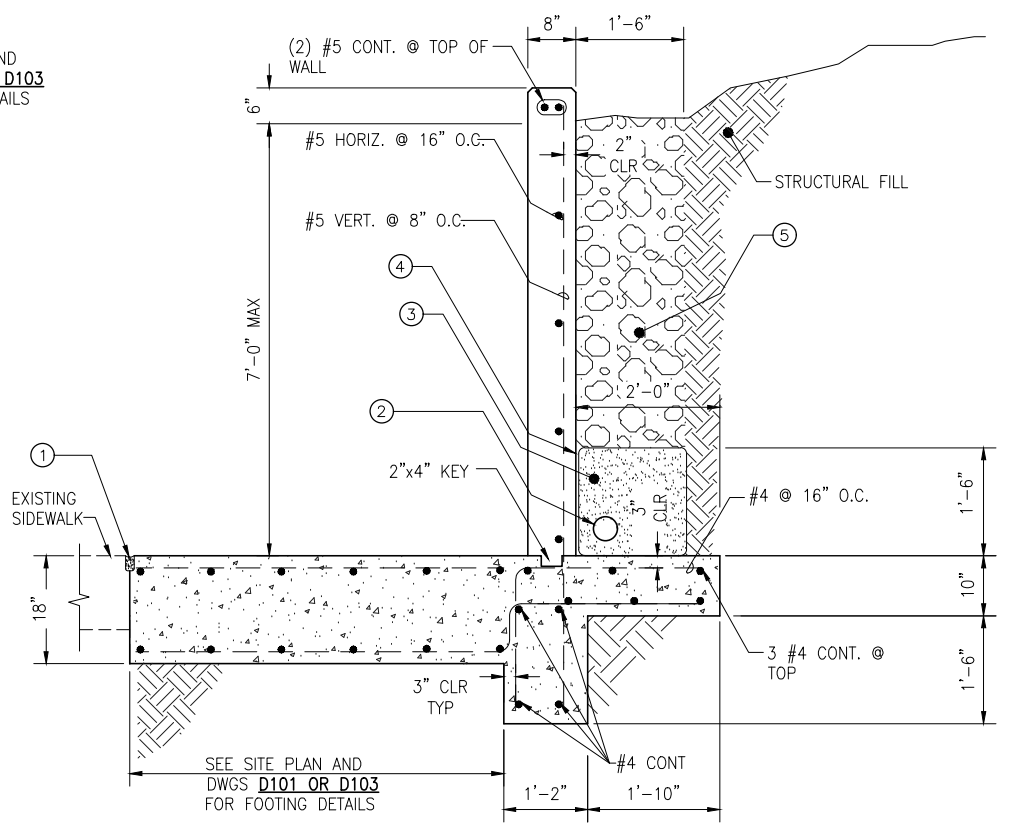


METRO TRANSIT CAPITAL DIVISION TRANSIT PASSENGER FACILITIES - IMPROVEMENTS	DATE: 05/2022
SIGN FOOTING DETAILS	DRAWING NO: D104A
	SHEET NO. OF 11 20



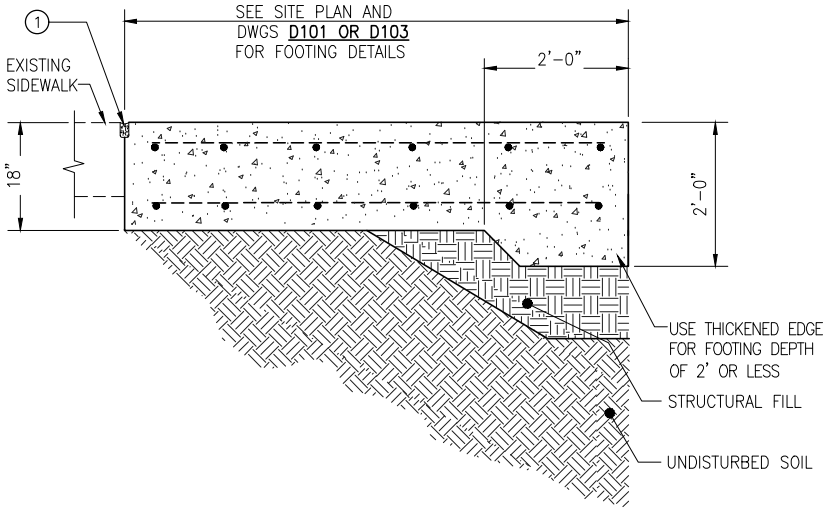
COUNTERFORT WALL WITH INTEGRATED SHELTER FOOTING

DETAIL 1 SCALE: NTS



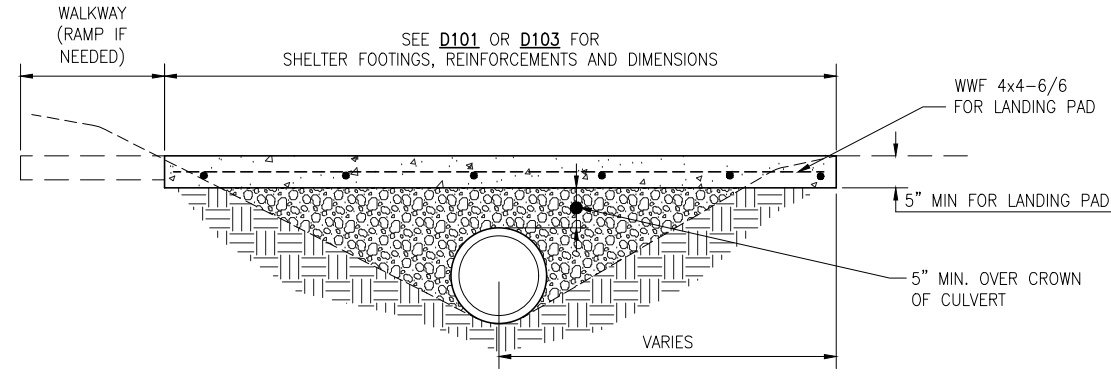
COUNTERFORT WALL WITH INTEGRATED SHELTER FOOTING

DETAIL 2 SCALE: NTS



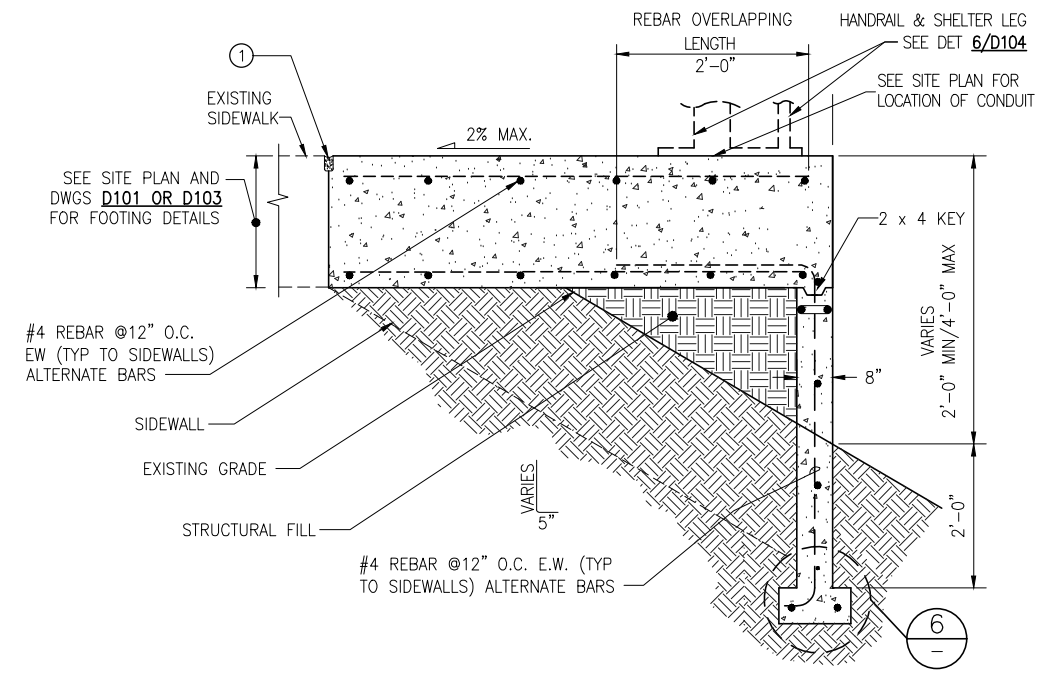
FOOTING W/THICKENED EDGE

DETAIL 3 SCALE: NTS



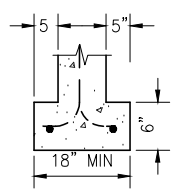
REINFORCED SLAB/SHELTER FOOTING OVER DRAINAGE DITCH

DETAIL 5 SCALE: NTS



COMBINED OVER 2' HIGH FILL WALL-FOOTING/FOUNDATION

DETAIL 4 SCALE: NTS



DETAIL 6 SCALE: NTS

CONSTRUCTION NOTES

1. JOINT PER DET 3/D101 TO ISOLATE EDGES FROM PAVEMENT, SIDEWALKS, OR OTHER STRUCTURES.
2. 4" PERFORATED PIPE, SEE PLANS FOR DAYLIGHTING REQUIREMENTS.
3. 1" MINUS WASHED ROCK.
4. FILTER FABRIC
5. 4" TO 6" QUARRY SPALLS.

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 PLOTTED: May 19, 2022 9:08:19pm By: dbernett
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KCMT 2021-2022 STANDARD DETAILS				
No.	REVISION	BY	APPD	DATE

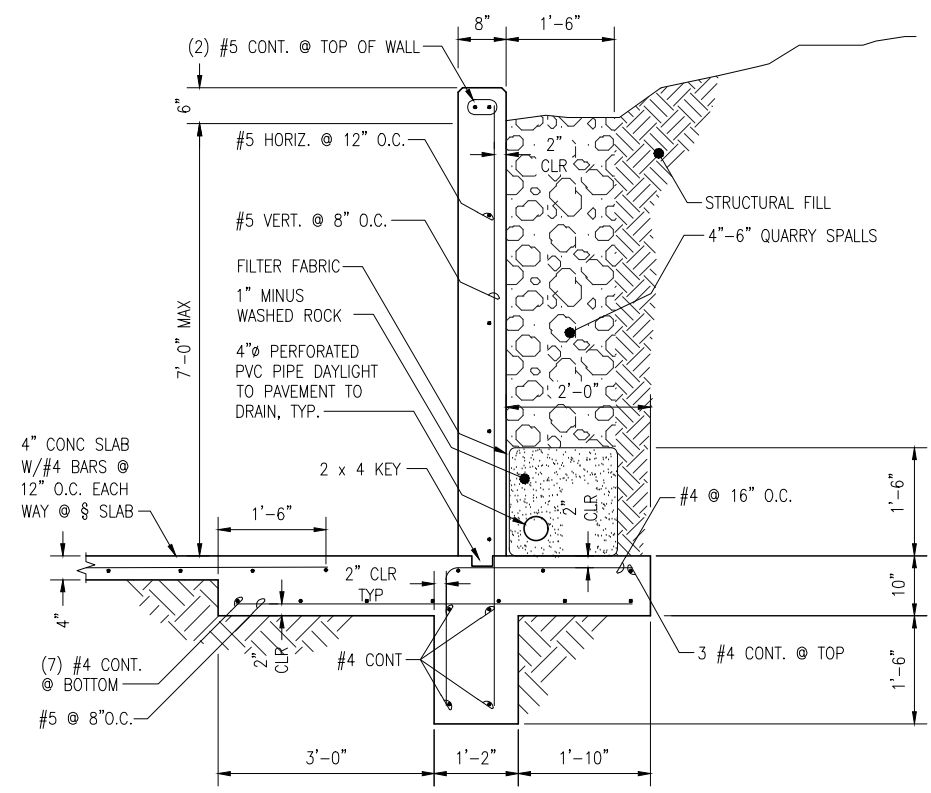


DESIGNED: K. CHANG YUEN	APPROVED: P. ENG
DRAWN: L. ANDERSON	PROJECT NO.:
CHECKED: K. CHANG YUEN	CONTRACT NO.:
CHECKED: C. ASQUITH	

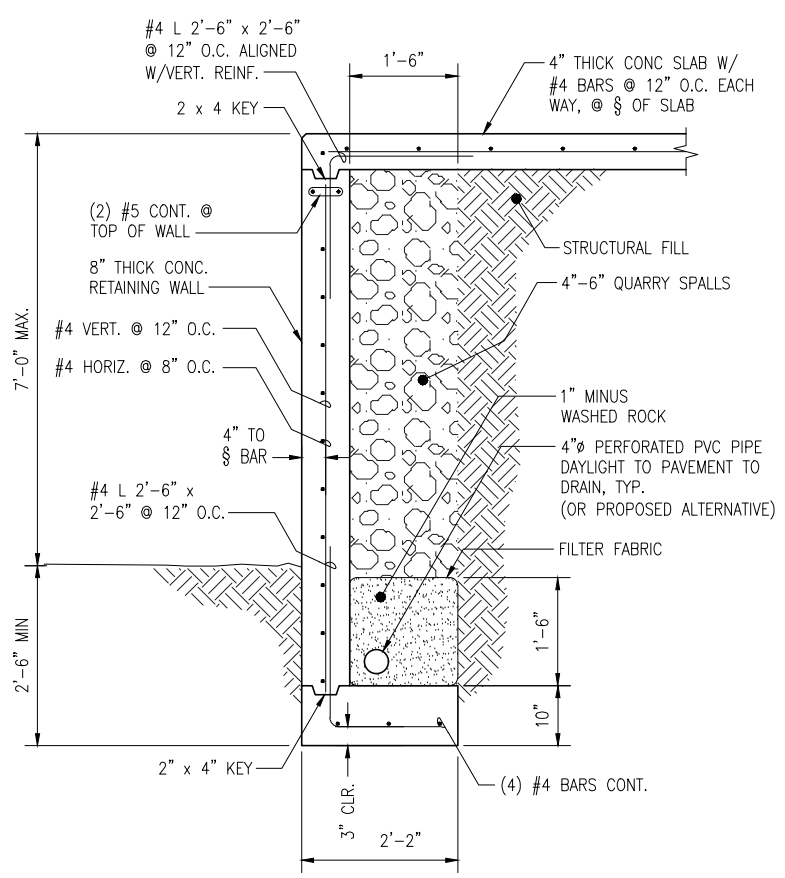


METRO TRANSIT CAPITAL DIVISION TRANSIT PASSENGER FACILITIES - IMPROVEMENTS		DATE: 05/2022
RETAINING WALLS AND OTHER DETAILS		DRAWING NO: D105
		SHEET NO. OF 12 20

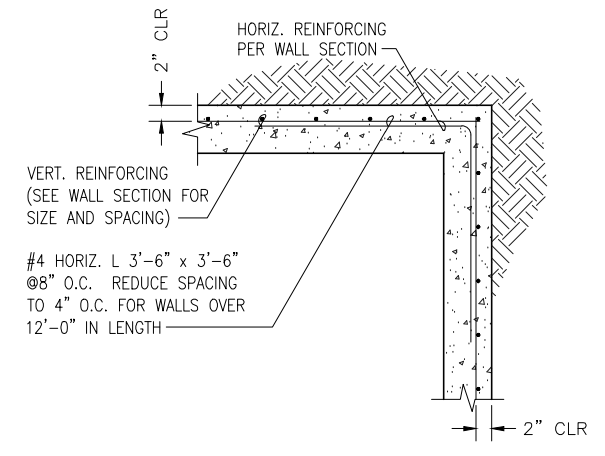
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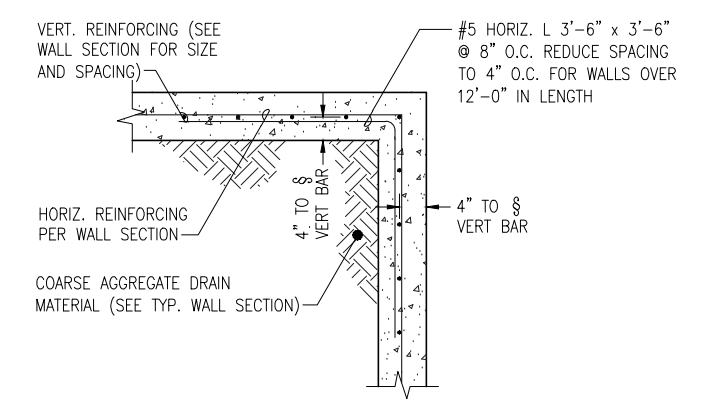
TYPICAL COUNTERFORT WALL TYPE I ELEVATION
 DETAIL 1
 SCALE: 3/4"=1'-0"



TYPICAL COUNTERFORT WALL II ELEVATION
 DETAIL 2
 SCALE: 3/4"=1'-0"



TYPICAL COUNTERFORT WALL CORNER
 DETAIL 3
 SCALE: 3/4"=1'-0"



TYPICAL COUNTERFORT WALL CORNER
 DETAIL 4
 SCALE: 3/4"=1'-0"

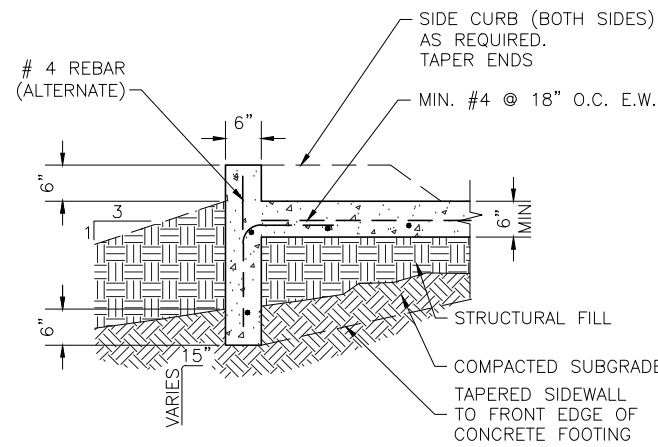
KCMT 2021-2022 STANDARD DETAILS				
No.	REVISION	BY	APP'D	DATE



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DRAWN: L. ANDERSON	PROJECT NO.:
CHECKED: K. CHANG YUEN	CONTRACT NO.:
CHECKED: C. ASQUITH	

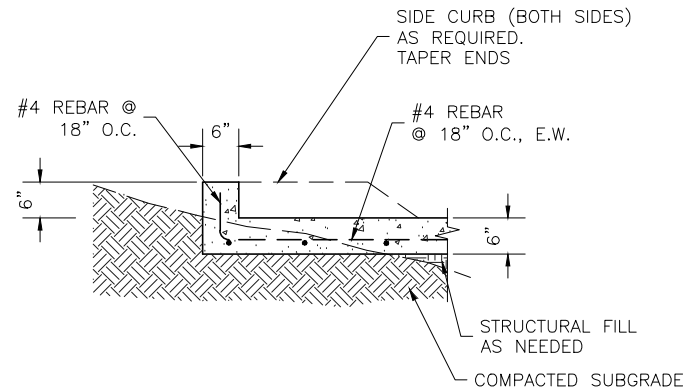


METRO TRANSIT CAPITAL DIVISION TRANSIT PASSENGER FACILITIES - IMPROVEMENTS		DATE: 05/2022
COUNTERFORT WALL DETAILS		DRAWING NO: D106
		SHEET NO. OF 13 20



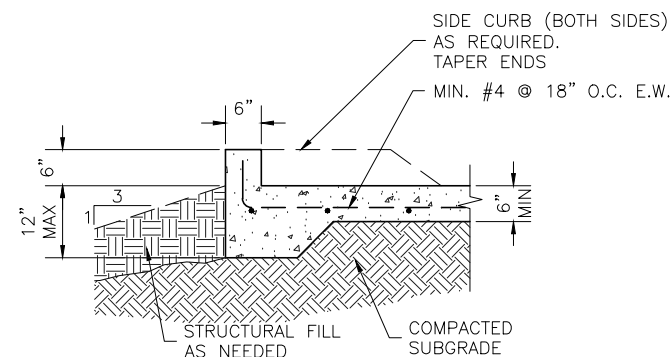
REINFORCING SLAB WITH FILL WALL

SECTION A
SCALE: NONE



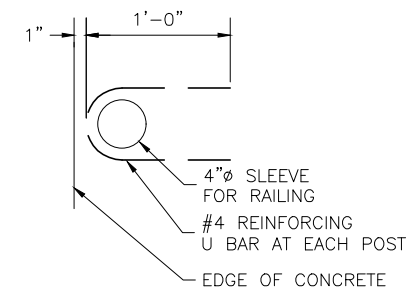
REINFORCED SLAB WITH CURB

SECTION D
SCALE: NONE

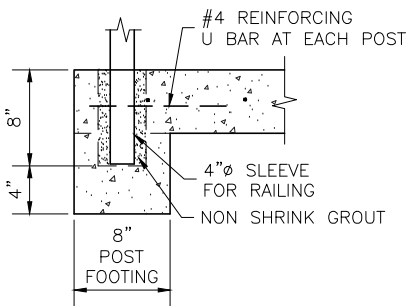


REINFORCED SLAB W/CURB AND THICKENED EDGE

SECTION B
SCALE: NONE



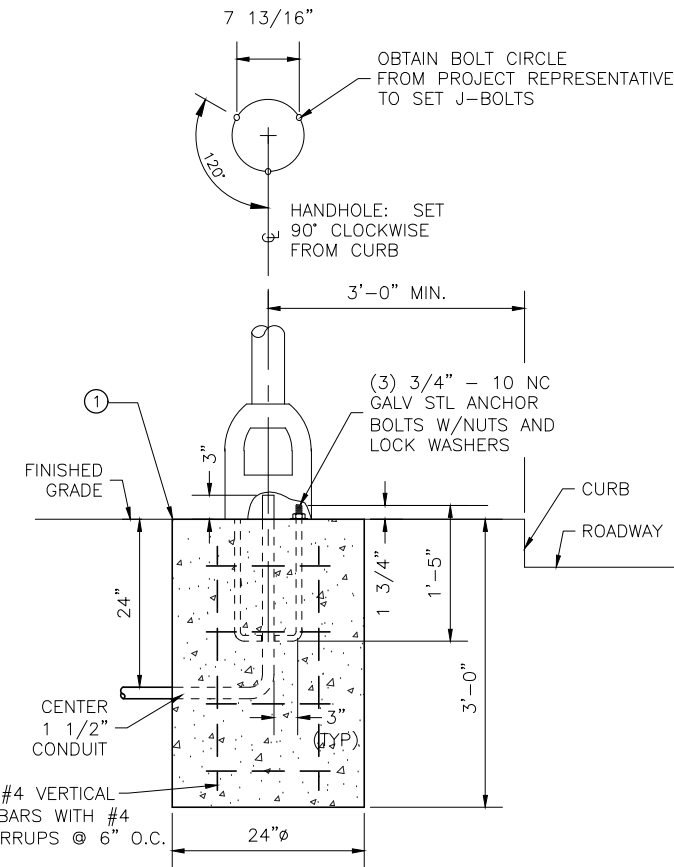
PLAN



SECTION

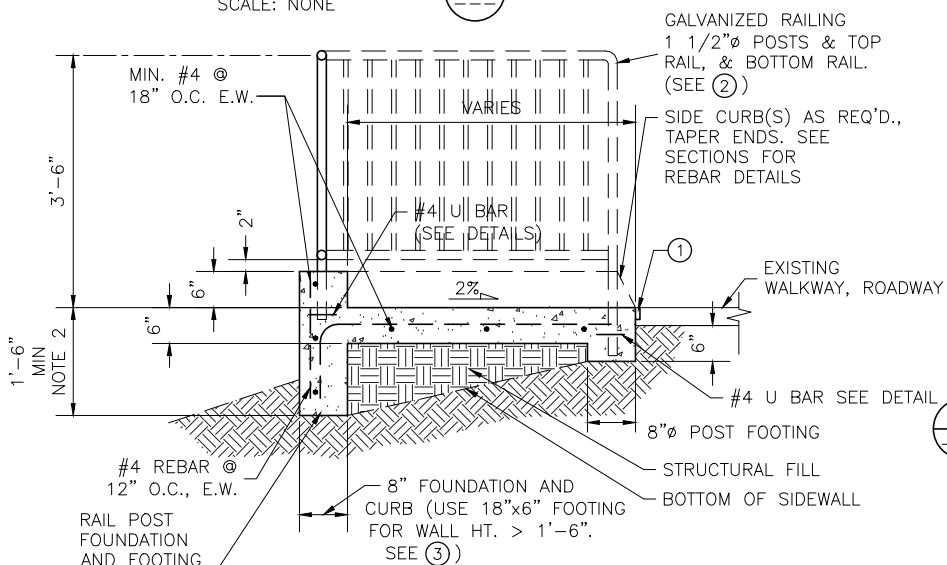
RAILING SLEEVE

DETAIL 1
SCALE: NONE



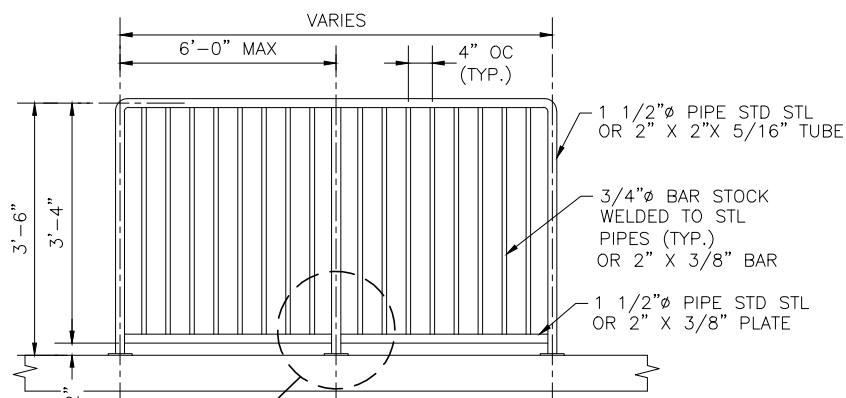
BUS ZONE LIGHT POLE FOUNDATION

DETAIL 4
SCALE: NONE



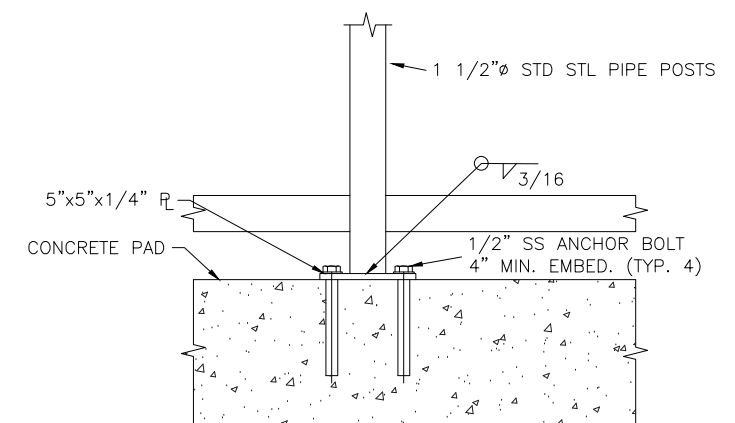
REINFORCED SLAB WITH PEDESTRIAN GUARDRAIL

SECTION C
SCALE: NONE



PEDESTRIAN GUARDRAIL

DETAIL 2
SCALE: NONE



ALTERNATE RAIL ATTACHMENT

DETAIL 3
SCALE: NONE

CONSTRUCTION NOTES

1. JOINT PER DET 3/D101 TO ISOLATE EDGES FROM PAVEMENT, SIDEWALKS, OR OTHER STRUCTURES.
2. INSTALL RAILING PER LOCAL JURISDICTION STANDARDS WHEN SLOPE AT BASE OF PAD IS STEEPER THAN 1:3 AND VERTICAL DROP WITHIN 3' FROM PAD IS MORE THAN 18". SAME APPLIES TO SIDES OF LANDING PAD.
3. USE SPREAD FOOTING FOR HEIGHT OF WALL GREATER THAN 18". SEE DET. 6/D105.

RAILING NOTES:

1. RAILING SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
2. ALL POSTS SHALL BE PLUMB AND RAILS PARALLEL TO GRADE.
3. PIPE MATERIAL SHALL CONFORM TO ASTM A53.
4. ANCHOR BOLTS SHALL BE 1/2" Ø STAINLESS STEEL.
5. MAINTAIN RAIL @ 6" O.C. FROM EDGE OF CONCRETE.

KCMT 2021-2022 STANDARD DETAILS				
No.	REVISION	BY	APPD	DATE



DESIGNED: K. CHANG YUEN	APPROVED: P. ENG
DRAWN: L. ANDERSON	PROJECT NO.:
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METRO TRANSIT CAPITAL DIVISION
TRANSIT PASSENGER FACILITIES - IMPROVEMENTS

DETAILS AND SECTIONS

DATE: 05/2022
DRAWING NO.:
D107
SHEET NO. OF 14 20

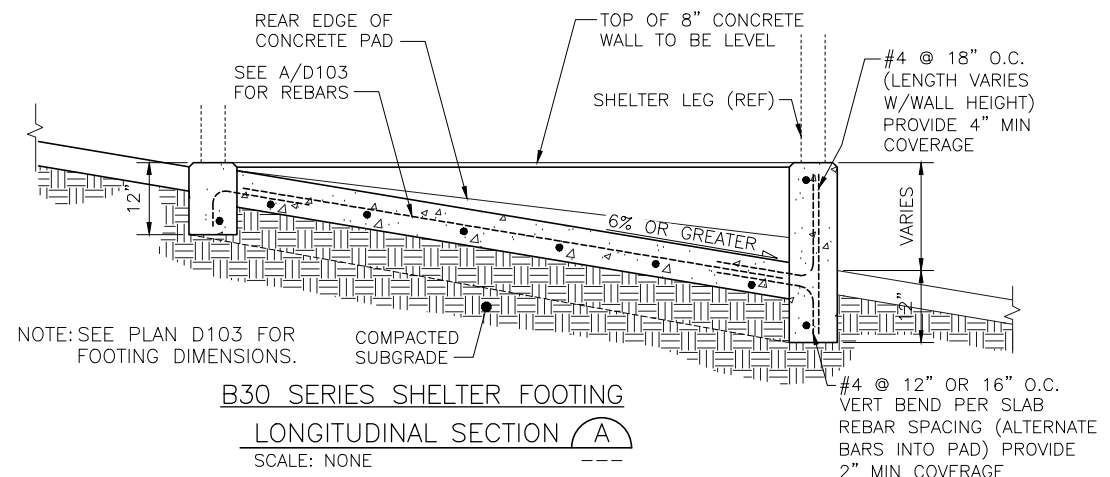
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 XREFS: KCMTD-BORDER.dwg IMAGES:

GENERAL NOTES

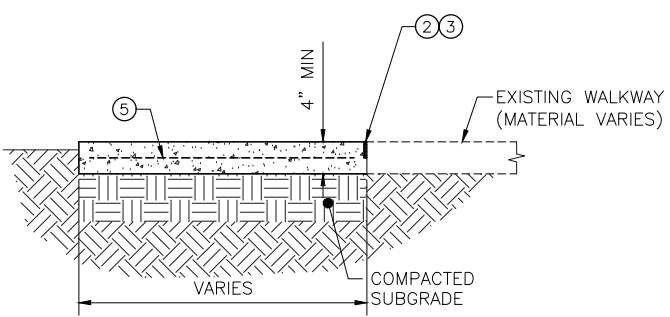
1. NEW WALKWAYS AND LANDING PADS SHALL BE BUILT TO MATCH WITH EXISTING SURFACE TO MAINTAIN NATURAL DRAINAGE COURSES. TYPICAL PASSENGER LANDING PAD DIMENSIONS SHALL BE AS SHOWN ON THE PLANS AND AS REQUIRED TO MATCH EXISTING SIDEWALK JOINTS OR SCORES WHERE APPLICABLE.

CONSTRUCTION NOTES

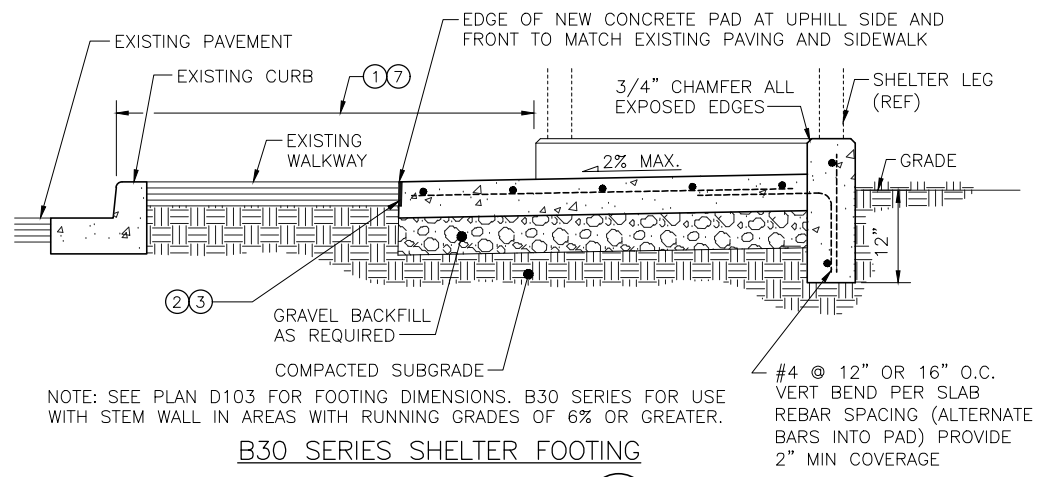
1. FOR ADA, MINIMUM HORIZONTAL CLEARANCE BETWEEN FACE OF CURB AND FACE OF ANY STRUCTURE SHALL BE 4 FT. UNLESS OTHERWISE NOTED ON DRAWING.
2. JOINT PER DET 3/D101 TO ISOLATE EDGES FROM PAVEMENT, SIDEWALKS, OR OTHER STRUCTURES.
3. SAWCUT EXISTING PAVEMENT TO STRAIGHT VERTICAL LINES TO PLACE NEW CONSTRUCTION ELEMENTS.
4. CLASS 1/2" HMA OR AS REQUIRED BY LOCAL JURISDICTION. MATCH EXISTING PAVEMENT THICKNESS.
5. WWF 4x4-6/6
6. WWF NOT NEEDED FOR SIDEWALK EXTENSION.
7. SHELTER SHALL BE PLACED SO VERTICAL STRUCTURE, INCLUDING CANTILEVER OVERHANG, SHALL BE A MINIMUM 3 FT FROM FACE OF CURB.



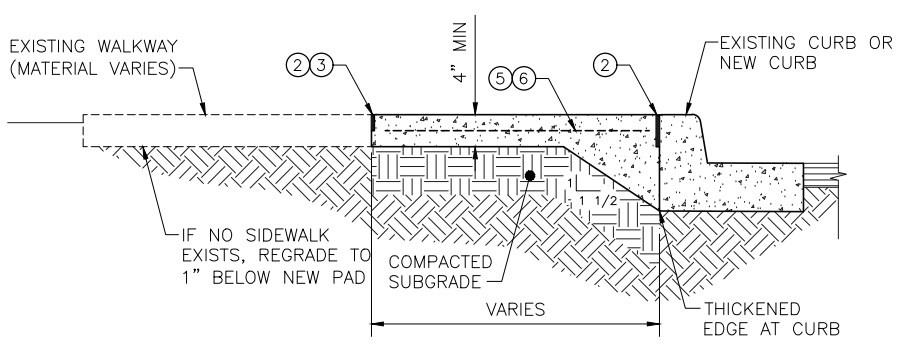
B30 SERIES SHELTER FOOTING
LONGITUDINAL SECTION A
SCALE: NONE



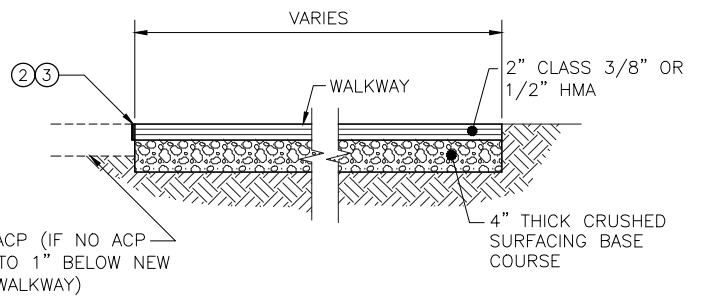
LANDING PAD
SECTION D
SCALE: NONE



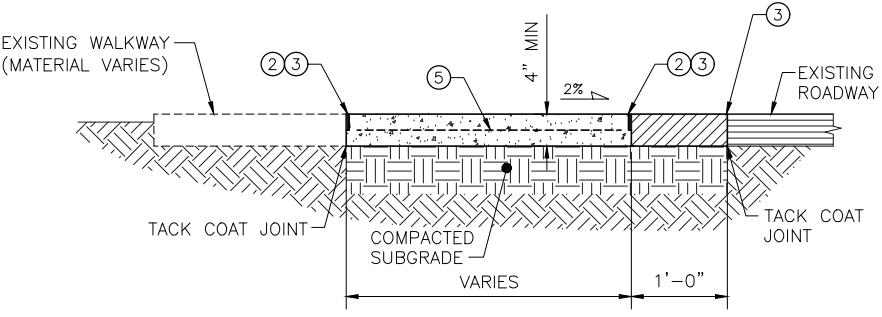
B30 SERIES SHELTER FOOTING
CROSS-SLOPE SECTION B
SCALE: NONE



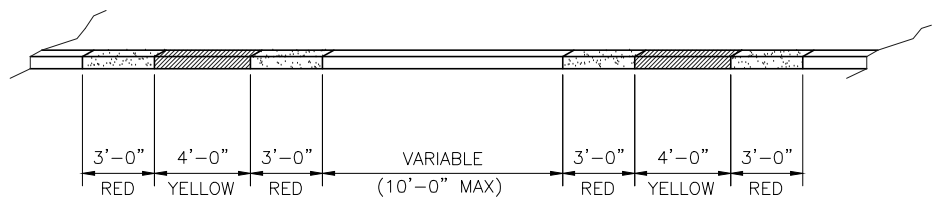
LANDING PAD/SIDEWALK EXTENSION W/THICKENED EDGE
SECTION E
SCALE: NONE



ASPHALT WALKWAY
SECTION C
SCALE: NONE



LANDING PAD
SECTION F
SCALE: NONE



BUS ZONES ARE PAINTED ON TOP AND FACE OF CURB

BUS ZONE PAINTING
DETAIL 1
SCALE: NONE

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 PLOTTED: May 19, 2022 9:08:45am By: dbernini
 XREFS: KCMTD-BORDER.dwg

KCMT 2021-2022 STANDARD DETAILS					
No.	REVISION	BY	APPD	DATE	



DESIGNED: K. CHANG YUEN	APPROVED: P. ENG
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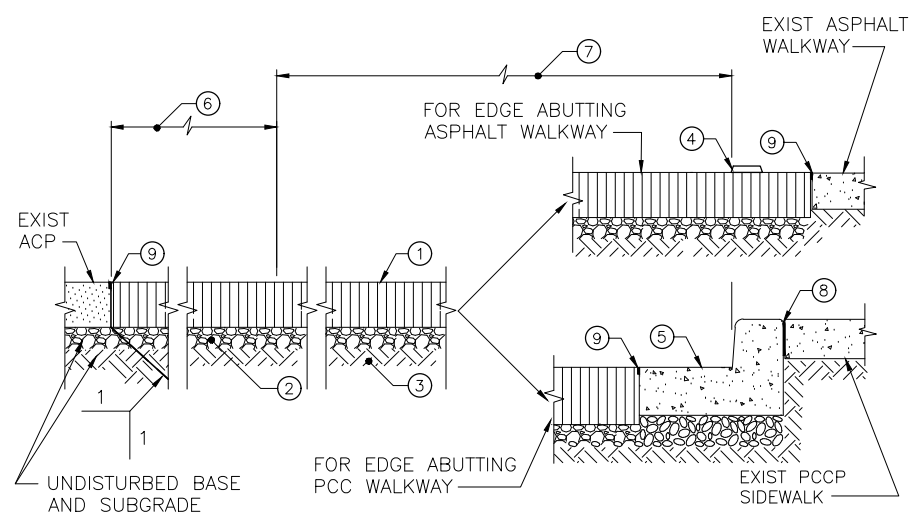


METRO TRANSIT CAPITAL DIVISION
TRANSIT PASSENGER FACILITIES - IMPROVEMENTS

**B30 SERIES SHELTER FOOTING
CROSS SECTIONS, DETAILS
AND BUS ZONE PAINTING**

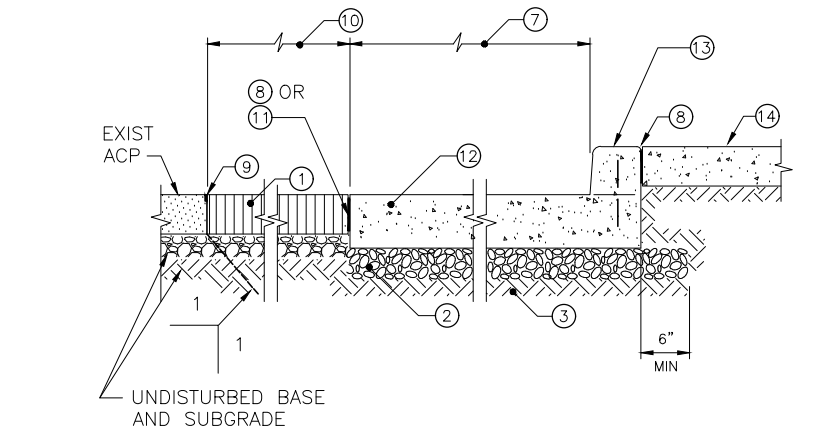
DATE: 05/2022
DRAWING NO: D108
SHEET NO. OF 15 20

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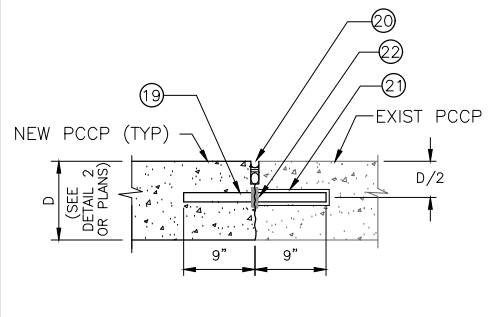
ASPHALT CONCRETE PAVED BUS PULLOUT TYPICAL CROSS SECTION

DETAIL SCALE: NONE (1)



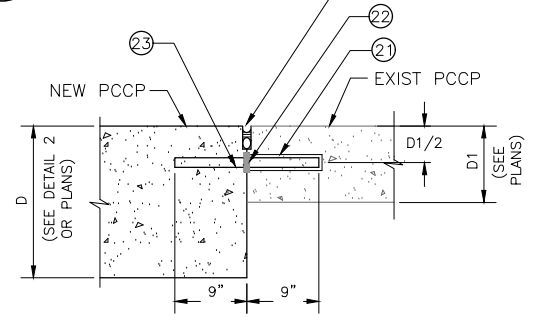
PORTLAND CEMENT CONCRETE PAVED BUS PULLOUT TYPICAL CROSS SECTION

DETAIL SCALE: NONE (2)



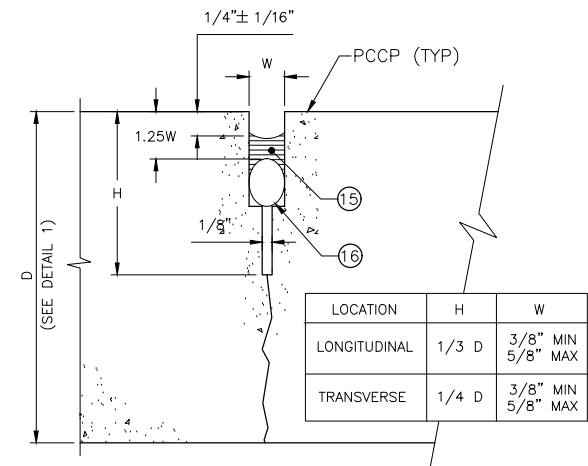
CONSTRUCTION JOINT TYPE 3 LONGITUDINAL OR TRANSVERSE

DETAIL SCALE: NONE (7)



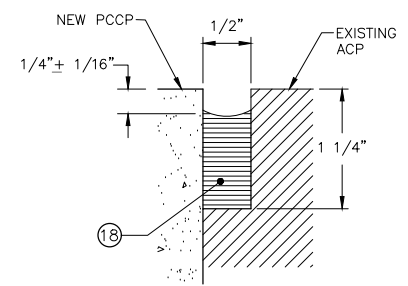
CONSTRUCTION JOINT TYPE 4 LONGITUDINAL OR TRANSVERSE

DETAIL SCALE: NONE (8)



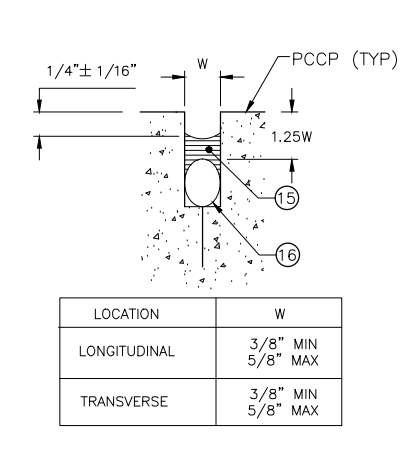
CONTROL JOINT SEAL

DETAIL SCALE: NONE (3)



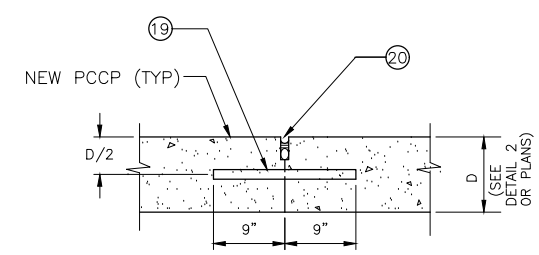
JOINT SEAL

DETAIL SCALE: NONE (5)



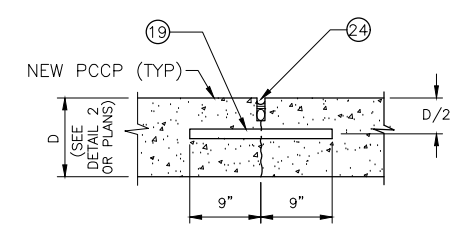
CONSTRUCTION JOINT SEAL

DETAIL SCALE: NONE (4)



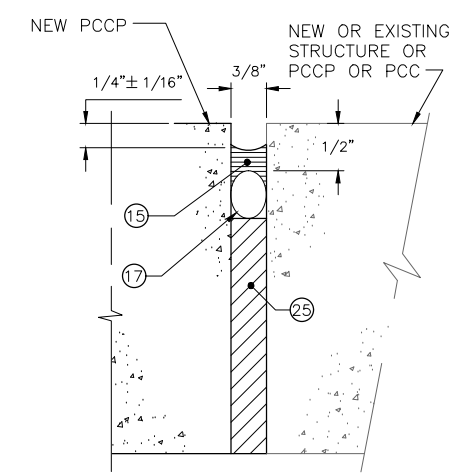
CONSTRUCTION JOINT TYPE 1 LONGITUDINAL OR TRANSVERSE

DETAIL SCALE: NONE (6)



CONTROL JOINT TYPE 1 LONGITUDINAL OR TRANSVERSE

DETAIL SCALE: NONE (9)



ISOLATION JOINT

DETAIL SCALE: NONE (10)

DOWEL SETTING NOTES

- A. SET DOWELS AT 90° FROM ALL POINTS OF THE FACE OF THE PCCP PANELS.
- B. GREASE THE HALF OF ALL DOWELS TO GO IN NEW PCCP.
- C. SET DOWEL FOR JOINTS BETWEEN NEW AND EXISTING PCCP FOLLOWING THE SUBSEQUENT PROCEDURES:
 1. DRILL HOLES ON EXISTING PCCP PANELS THAT ARE 1/16" LARGER IN DIAMETER THAN THE DOWEL AND AT 90° FROM ALL POINTS OF THE FACE OF THE PANELS. REMOVE DEBRIS FROM HOLES BY BLOWING THEM WITH COMPRESSED AIR. ENSURE THAT THE HOLES ARE DRY.
 2. AFTER THE PROJECT REPRESENTATIVE HAS VERIFIED COMPLIANCE WITH "1" ABOVE, PLACE SUFFICIENT EPOXY GROUT IN THE BACK OF THE HOLES TO COMPLETELY FILL THE GAP BETWEEN THE DOWELS AND THE WALL OF THE HOLES. USE FLEXIBLE TUBES OR CARTRIDGES WITH LONG NOZZLES TO ENSURE THAT THE GROUT IS PLACED AT THE BACK OF THE HOLES.
 3. AFTER PLACING THE GROUT AS DESCRIBED IN "2" ABOVE, PLACE A THIN, PLASTIC GROUT RETENTION DISK OVER THE DOWELS SO THEY WILL REST AGAINST THE FACE OF THE EXISTING PCCP PANELS AND PREVENT THE GROUT MATERIAL FROM FLOWING OUT OF THE HOLES. WITH THE RETENTION DISKS IN PLACE, INSERT THE DOWELS INTO THE HOLES WITH A TWISTING MOTION SO THAT THE MATERIAL IN THE BACK OF THE HOLES IS FORCED OUT AND AROUND THE DOWELS. USE CHAIRS, OR OTHER PRODUCT OF NON-CORRODING MATERIAL, TO MAINTAIN THE DOWELS AT THE CENTER OF THE HOLES, AND AT 90° FROM THE FACE OF THE PANEL.
 4. SLIGHTLY GREASE THE PROTRUDING END OF THE DOWELS.
 5. OBTAIN APPROVAL OF THE DOWEL INSTALLATION FROM THE PROJECT REPRESENTATIVE PRIOR TO PROCEEDING WITH PLACEMENT OF NEW PCCP.

CONSTRUCTION NOTES

1. NEW ACP HMA CLASS 1/2", PG 70-22ER PER TSS 9.02.1(4), 7" MINIMUM COMPACTED THICKNESS, UNLESS OTHERWISE NOTED ON THE PLANS.
2. 4" MINIMUM THICKNESS OF CRUSHED ROCK BASE COMPACTED TO 95% OF MAXIMUM DRY DENSITY PER MODIFIED PROCTOR, UNLESS OTHERWISE NOTED ON PLANS.
3. SUBGRADE SCARIFIED TO 6" MINIMUM DEPTH AND COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE PER PROCTOR.
4. WHEN NEW PAVEMENT ABUTS EXISTING AC PAVED WALKWAYS PLACE MUTCD-APPROVED, WHITE, REFLECTIVE, RAISED PAVEMENT MARKERS AT 12" OC AT THE EDGE OF THE PULLOUT LANE.
5. PORTLAND CEMENT CONCRETE CURB AND GUTTER.
6. 4'-0" MINIMUM, OR AS REQUIRED TO SET JOINT AWAY FROM VEHICLES NORMAL WHEEL PATH.
7. WIDTH OF PULLOUT LANE AS SHOWN ON PLANS.
8. SEE DETAIL 10/---.
9. SEE DETAIL 5/---.
10. 4'-0" MINIMUM, OR AS REQUIRED TO SET JOINT AWAY FROM VEHICLES NORMAL WHEEL PATH. USE ONLY IF NEW PCCP ABUTS EXISTING ACP. SEE NOTE 11.
11. IF NEW PCCP ABUTS EXISTING AC PAVED WALKWAYS PLACE MUTCD-APPROVED, WHITE, REFLECTIVE, RAISED PAVEMENT MARKERS AT 12" OC AT THE EDGE OF THE PULLOUT LANE.
12. NEW PCCP CLASS C-1, 10" MINIMUM THICKNESS, UNLESS OTHERWISE SHOWN ON PLANS.
13. DOWELED CURB PER 7/D109.
14. NEW PCC SIDEWALK OR LANDING PAD, AS SHOWN ON PLANS.
15. POURED SILICONE JOINT SEALANT.
16. BACKING ROD $\phi = 1.25W$.
17. BACKING ROD $\phi = 1/2"$.
18. LOW MODULUS HOT-POUR RUBBERIZED ASPHALT JOINT SEALANT.
19. ROUND, EPOXY-COATED, GRADE 60 SMOOTH STEEL DOWEL BAR, $\phi = 1/8D$, 18" LONG @ 12" OC (SEE NOTES A & B).
20. JOINT SEAL PER DETAIL 4/---.
21. DRILL EXISTING PCCP TO SET DOWELS IN EPOXY GROUT (SEE NOTE C).
22. GROUT RETENTION DISK (SEE NOTE C).
23. ROUND, EPOXY-COATED, GRADE 60 SMOOTH STEEL DOWEL BAR, $\phi = 1/8D$, 18" LONG @ 12" OC (SEE NOTES A & B).
24. JOINT SEAL PER DETAIL 3/---.
25. FULL DEPTH PREMOLDED EXPANSION JOINT FILLER.

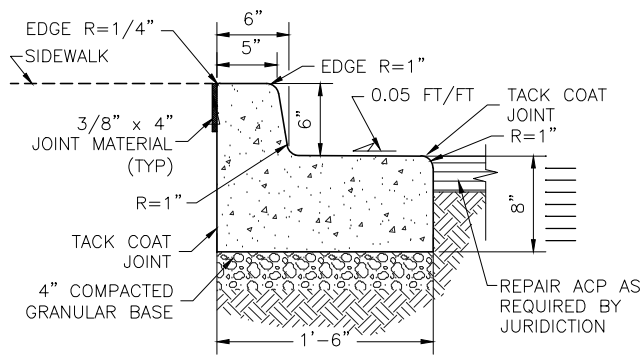
KCMT 2021-2022 STANDARD DETAILS				
No.	REVISION	BY	APPD	DATE



DESIGNED: K. CHANG YUEN	APPROVED: P. ENG
DRAWN: L. ANDERSON	PROJECT NO.:
CHECKED: K. CHANG YUEN	CONTRACT NO.:
CHECKED: C. ASQUITH	

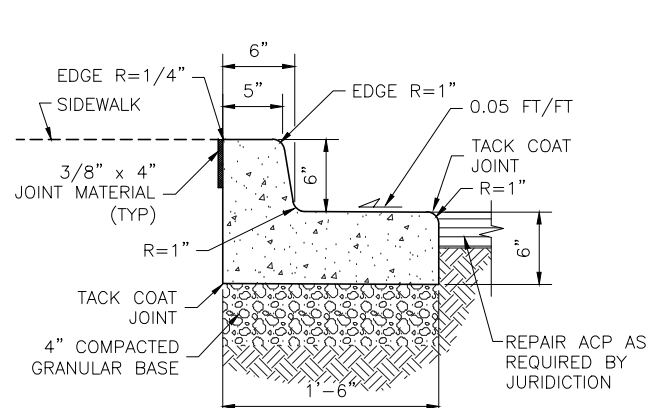


METRO TRANSIT CAPITAL DIVISION TRANSIT PASSENGER FACILITIES - IMPROVEMENTS		DATE: 05/2022
PAVING AND JOINT DETAILS		DRAWING NO.: D108A
		SHEET NO. OF: 16 20



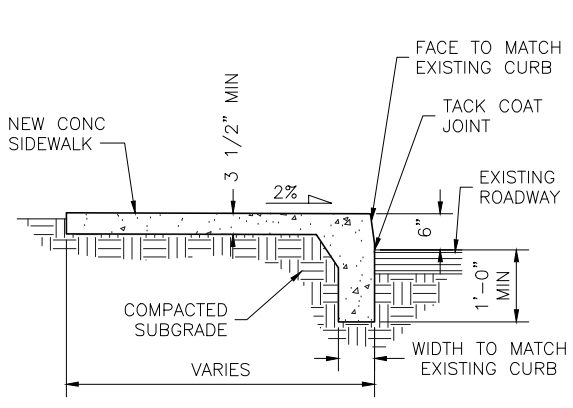
HEAVY CURB & GUTTER

DETAIL 2A
SCALE: NONE



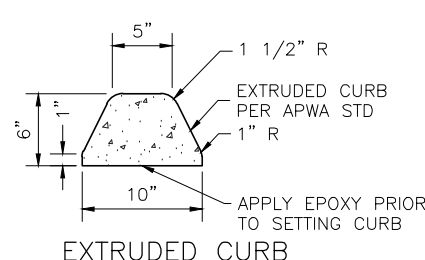
CURB & GUTTER

DETAIL 2
SCALE: NONE



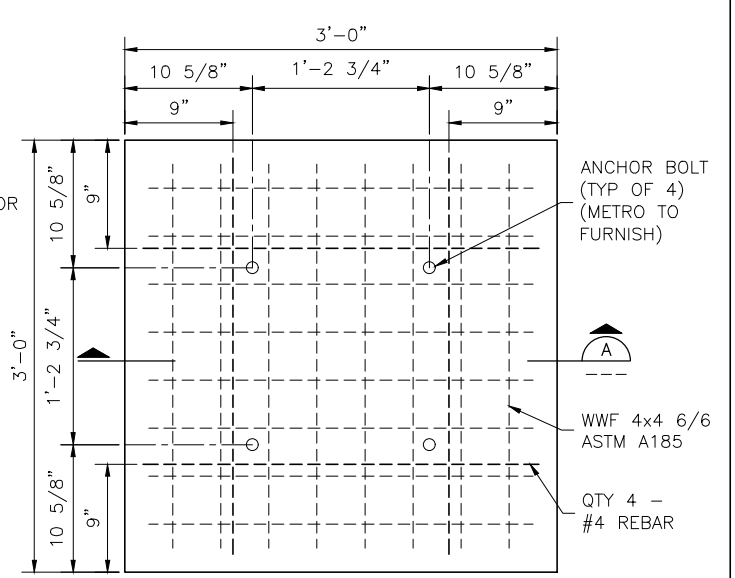
**MONOLITHIC SIDEWALK/
CURB**

DETAIL 3
SCALE: NONE



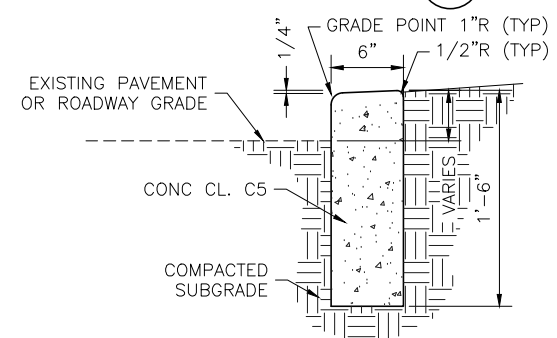
EXTRUDED CURB

DETAIL 1
SCALE: NONE



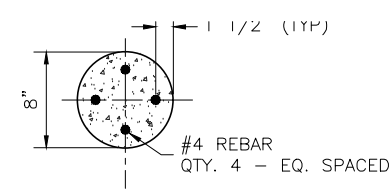
LITTER RECEPTACLE PAD PLAN

DETAIL 4
SCALE: NONE



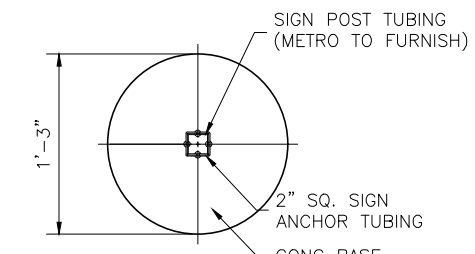
DEEP CURB

DETAIL 5
SCALE: NONE



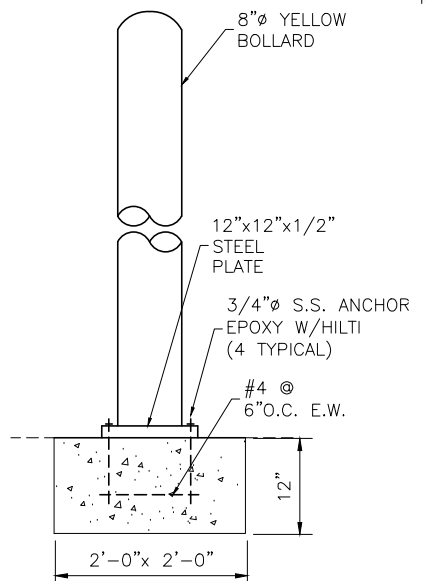
CONCRETE BOLLARD

SECTION C
SCALE: NONE



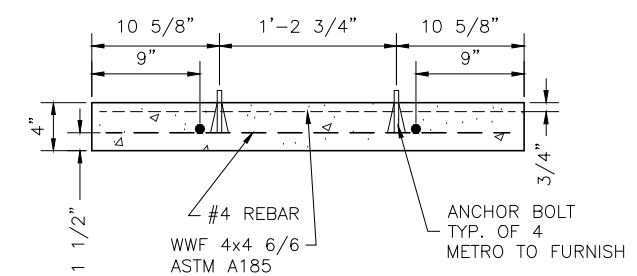
BUS SIGN FOUNDATION PLAN

SECTION D
SCALE: NONE



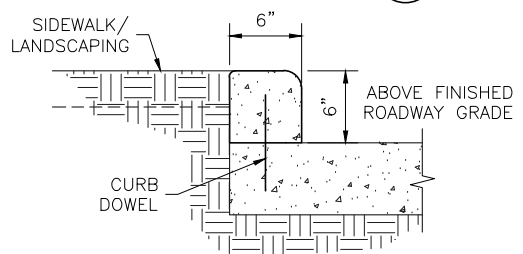
**SURFACE MOUNTED
BOLLARD CONCRETE FOOTING**

DETAIL 10
SCALE: NONE



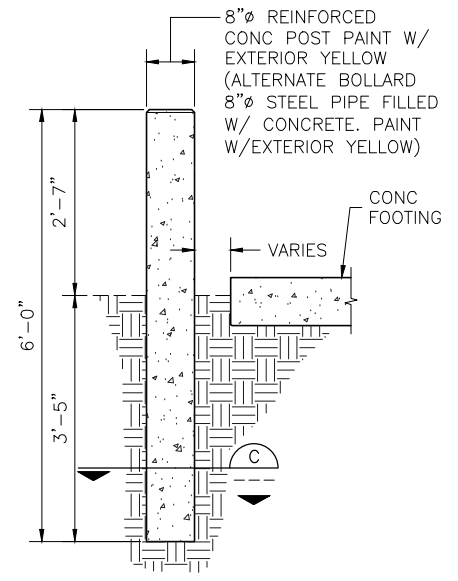
LITTER RECEPTACLE PAD

SECTION A
SCALE: NONE



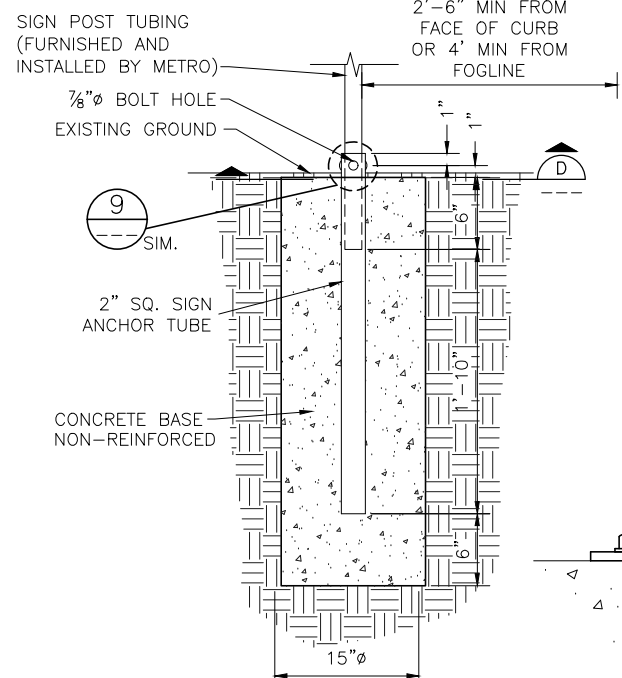
DOWELED CURB

SECTION B
SCALE: NONE



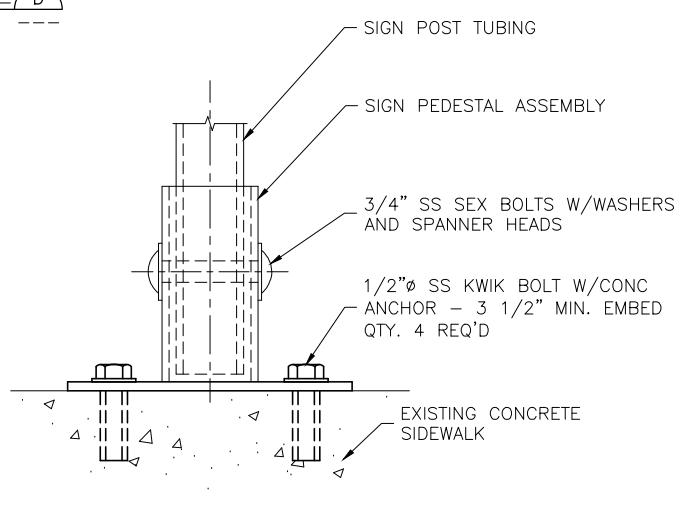
BOLLARD

DETAIL 8
SCALE: NONE



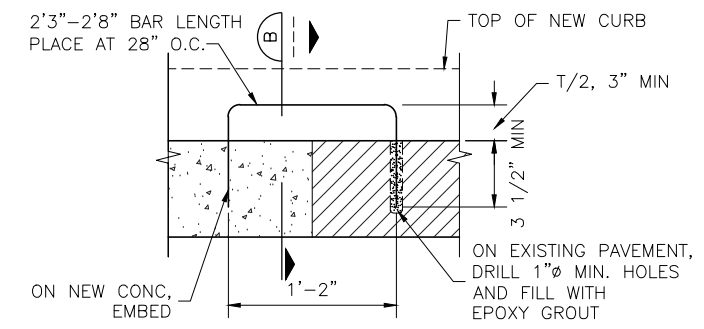
BUS SIGN FOUNDATION

DETAIL 6
SCALE: NONE



BUS SIGN PEDESTAL MOUNT

DETAIL 9
SCALE: NONE



DOWELED CURB

DETAIL 7
SCALE: NONE

- LITTER RECEPTACLE PAD NOTES**
1. SAWCUT AS REQUIRED, FOR THE CONCRETE PAD.
 2. CONCRETE PAD TO BE CAST IN PLACE.
 3. CONCRETE PAD TO BE INSTALLED LEVEL AND PARALLEL WITH THE SHELTER FOOTING OR LANDING PAD.
 4. JOINT PER DET 3/D101 TO ISOLATE EDGES FROM PAVEMENT, SIDEWALKS, OR OTHER STRUCTURES.

- SIGN POLE NOTES**
1. CONCRETE MIX TO BE CLASS C-5.
 2. METRO WILL PROVIDE NEW ANCHOR TUBING AND DRIVE RIVETS.
 3. RESTORE AREA IN KIND.
 4. INSTALLATION FOR RELOCATION OF STREET SIGNS AND SIGNS OTHER THAN BUS SIGNS SHALL MATCH THE EXISTING INSTALLATION AND JURISDICTIONAL STANDARDS.

KCMT 2021-2022 STANDARD DETAILS				
No.	REVISION	BY	APPD	DATE



DESIGNED: K. CHANG YUEN	APPROVED: P. ENG
DRAWN: L. ANDERSON	PROJECT NO.:
CHECKED: K. CHANG YUEN	CONTRACT NO.:
CHECKED: C. ASQUITH	

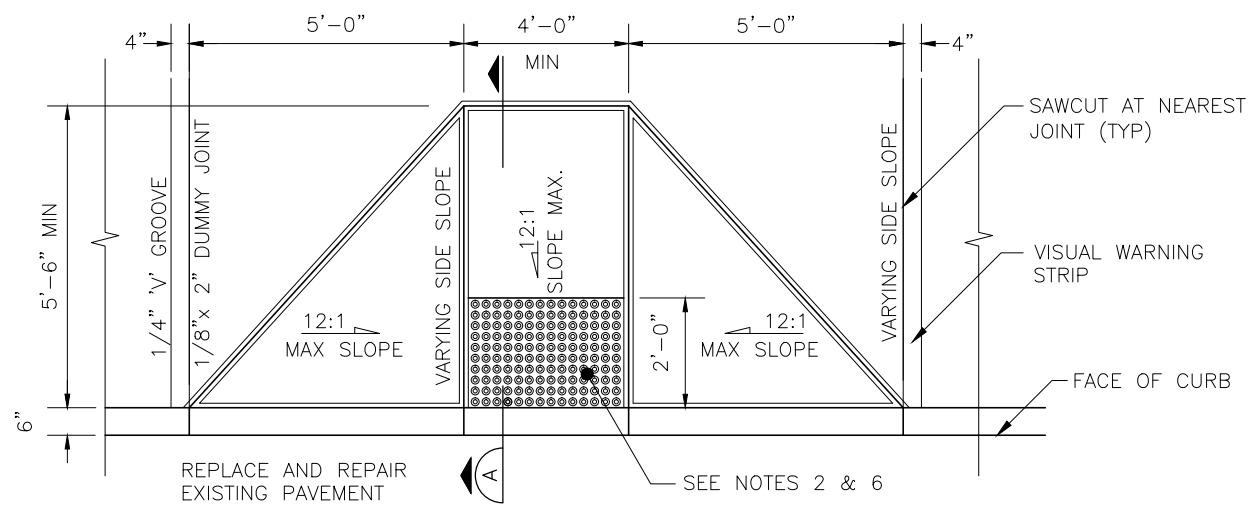


METRO TRANSIT CAPITAL DIVISION
TRANSIT PASSENGER FACILITIES - IMPROVEMENTS

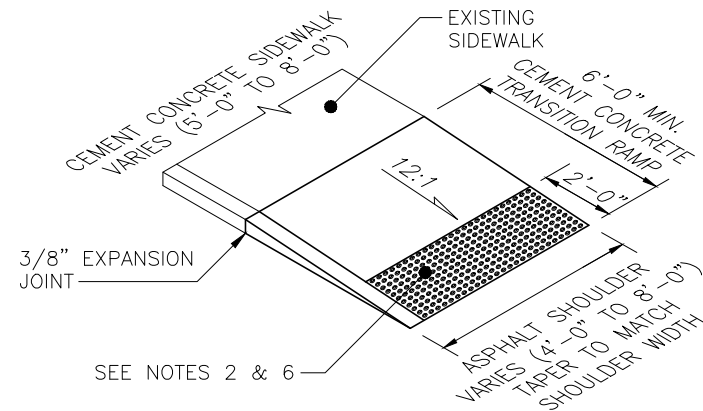
SECTIONS AND DETAILS FOR
BOLLARDS, SIGNS & FOOTING FOUNDATIONS
CURBS, GUTTERS & SIDEWALKS

DATE: 05/2022
DRAWING NO.:
D109
SHEET NO. OF 17 20

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 PLOTTED: May 19, 2022 9:03:09am | By: gbernet
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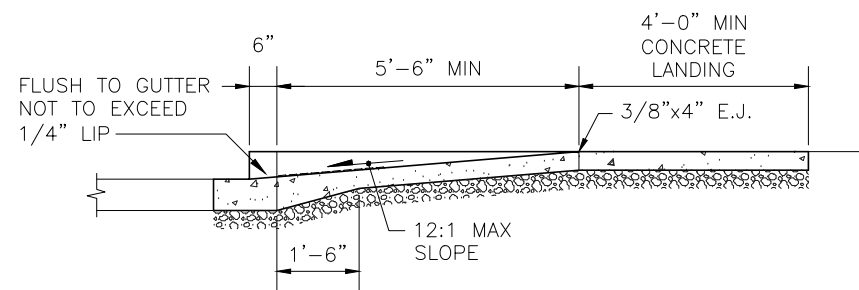


PLAN
SCALE: NONE



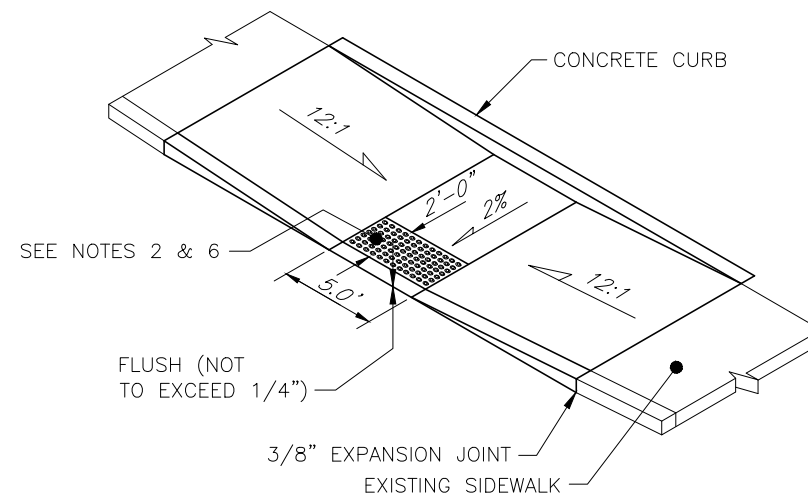
TRANSITION CURB RAMP

DETAIL
SCALE: NONE



PERPENDICULAR CURB RAMP

SECTION
SCALE: NONE



PARALLEL CURB RAMP

DETAIL
SCALE: NONE

NOTES:

- RAMP AND APPROACHES SHALL BE CLEAR OF OBSTACLES INCLUDING HYDRANTS, POLES, AND INLETS.
- RAMP SHALL HAVE DETECTABLE WARNING SURFACE PER WSDOT STANDARD PLAN F-45.10-01.
- RAMP ϕ SHALL BE PERPENDICULAR TO OR RADIAL TO CURB RETURNS UNLESS OTHERWISE APPROVED BY THE PROJECT REPRESENTATIVE.
- WHERE REQUIRED BY THE JURISDICTIONAL AGENCY STANDARDS, PLACE A 4" WIDE VISUAL WARNING STRIP BETWEEN JOINTS OR SCORES.
- REMOVAL OF EXISTING CURB RAMPS OR SIDEWALK FOR CONSTRUCTION OF NEW CURB RAMPS SHALL BE TO THE NEAREST JOINT. SAWCUT AT EXPANSION JOINT AS REQUIRED. REMOVE SIDEWALK AND CURB AND GUTTER AS REQUIRED TO OBTAIN ADEQUATE SPACING FOR NEW CURB RAMP TRANSITION AND WARNING STRIP(WHERE REQUIRED).
- CURB RAMP LOCATION AND CONSTRUCTION ON ARTERIAL AND RESIDENTIAL STREETS SHALL BE IN ACCORDANCE WITH THE STANDARDS OF THE JURISDICTIONAL AGENCY.

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KCMT 2021-2022 STANDARD DETAILS					
No.	REVISION	BY	APPD	DATE	



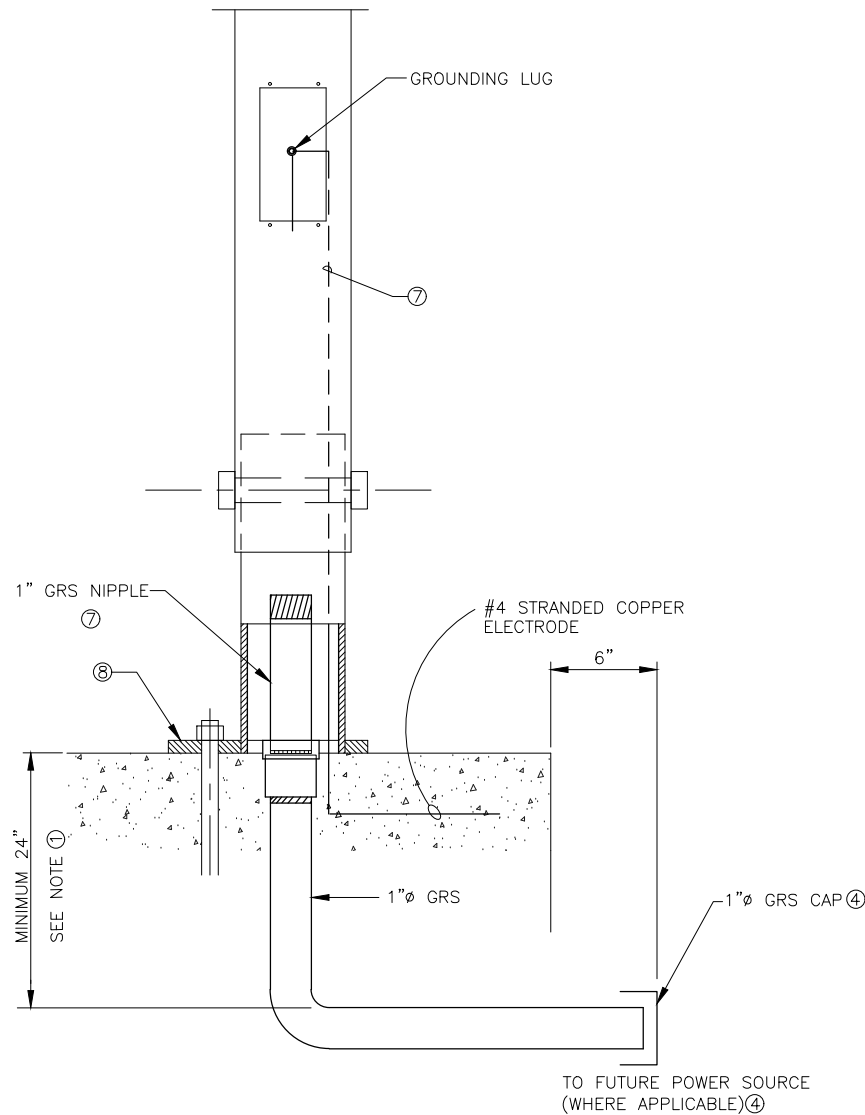
DESIGNED: K. CHANG YUEN	APPROVED: P. ENG
DRAWN: L. ANDERSON	PROJECT NO.:
CHECKED: K. CHANG YUEN	CONTRACT NO.:
CHECKED: C. ASQUITH	



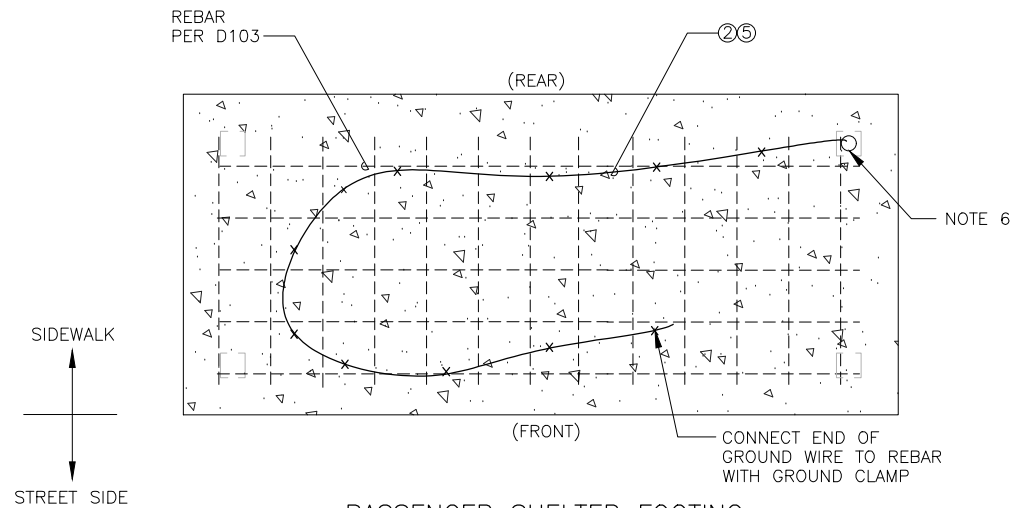
METRO TRANSIT CAPITAL DIVISION TRANSIT PASSENGER FACILITIES - IMPROVEMENTS	
CURB RAMP CONSTRUCTION DETAILS	

DATE: 05/2022
DRAWING NO: D110
SHEET NO. OF 18 20

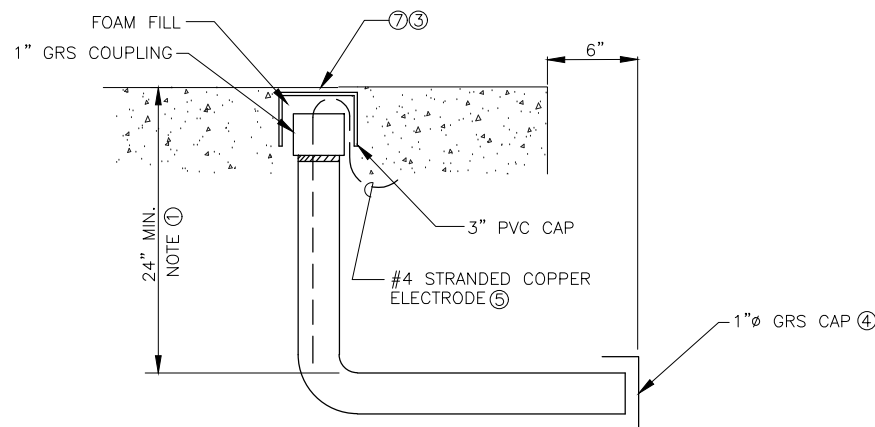
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 PLOTTED: May 19, 2022 9:09:59am By: dbernett
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INTERNAL SHELTER SOLAR LIGHTING
SCALE: NTS



PASSENGER SHELTER FOOTING
(SEE DWGS D101 & D103 FOR SHELTER FOOTING DETAILS AND DIMENSIONS)



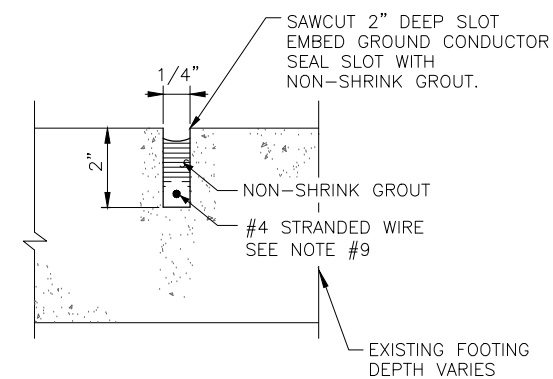
DETAIL "1"
INTERNAL SHELTER LIGHTING
BURIED CONDUIT AND GROUNDING ELECTRODE
SCALE: NTS

GENERAL NOTES:

1. THIS CONDUIT/GROUNDING ELECTRODE DESIGN IS FOR BUS STOPS WHERE HARD-WIRE ELECTRICAL CONNECTION IS NOT READILY AVAILABLE. IT ALLOWS FOR FUTURE HARD-WIRE CONNECTION FOR 110V SHELTER LIGHTING AND/OR GROUNDING FOR A SOLAR SHELTER LIGHTING SYSTEM.

CONSTRUCTION NOTES:

1. CONDUIT SHALL BE INSTALLED 24" BELOW FINISHED GRADE.
2. FOR SHELTER GROUNDING, TIE 25 FEET OF #4 STRANDED COPPER GROUNDING ELECTRODE TO THE SHELTER FOUNDATION REBARS WITH TIE WIRES. LEAVE 2 FEET AT THE END FOR ATTACHMENT TO THE GROUNDING LUG ON THE SHELTER LEG. PROVIDE ONE HOLE COPPER LUG SHORT BARREL THOMAS & BETTS #54130 ON END OF GROUND WIRE. SEE DETAIL "1" AND NOTE 3 BELOW. (REFER TO NOTE 11 ON D101 IF SHELTER FOOTING IS DESIGNED FOR BOTH INTERIM STANDARD SHELTER AND FUTURE RAPIDRIDE SHELTER).
3. PLACE THE 2 FT. #4 13 STRANDED BARE COPPER GROUND ELECTRODE INTO THE 1" DIA GRS CONDUIT AS SHOWN IN DETAIL "1". SECURE 1" GRS COUPLING IN PLACE. SEAL THE GRS CONDUIT/COUPLING WITH DUCT TAPE. CAP THE ASSEMBLY WITH A 3" PVC CAP AND FILL VOID WITH SPRAY-ON FOAM. TOP OF PVC CAP SHALL BE 1/4" BELOW THE FINISHED CONCRETE GRADE.
4. IF NO SPECIFIED CONNECTION TO A POWER SOURCE, THE 1" GRS CONDUIT SHALL BE EXTENDED 6 INCHES BEYOND THE EDGE OF SHELTER FOUNDATION AND CAPPED.
5. THE #4 13 STRANDED BARE COPPER GROUND ELECTRODE SHALL BE ENCLOSED BY AT LEAST 2" OF CONCRETE IN ACCORDANCE WITH NEC 250.52 (A) (3).
6. FOR STANDARD METRO SHELTERS, ELECTRICAL LEG SHALL BE AT THE REAR RIGHT CORNER. FOR RAPID RIDE SHELTERS, ELECTRICAL LEG SHALL BE AT THE REAR LEFT CORNER. (LOOKING INTO SHELTER) SEE TABLE ON DWG. D101 AND D103 FOR EXACT LOCATIONS OF THE ELECTRICAL LEG FOR VARIOUS FOOTING TYPES.
7. (INFORMATION FOR METRO'S SHELTER CREW: PRIOR TO INSTALLING SHELTER WITH A SOLAR LIGHTING SYSTEM, CHIP AWAY THE 1/4" CONCRETE COVER AND REMOVE THE 3" PVC CAP. PULL OUT THE #4 COPPER ELECTRODE. CONNECT THE ELECTRODE TO THE SHELTER LEG VIA A GROUNDING LUG. SEAL THE 1" DIA GRS WITH A WATER-TIGHT PLUG FOR FUTURE USE.)
8. ALL WORK ABOVE FINISHED GRADE IS BY OTHERS.
9. SAW 8"x2"x1/4" GROOVE IN EXISTING SHELTER FOOTING. CLEAN THE GROOVE AND EMBED GROUND CONDUCTOR. LEAVING 6" EXPOSED ABOVE SURFACE FILL GROOVE WITH NON-SHRINK GROUT.



SOLAR SHELTER FOOTING RETROFIT
SECTION
SCALE: 3/4"=1'-0"

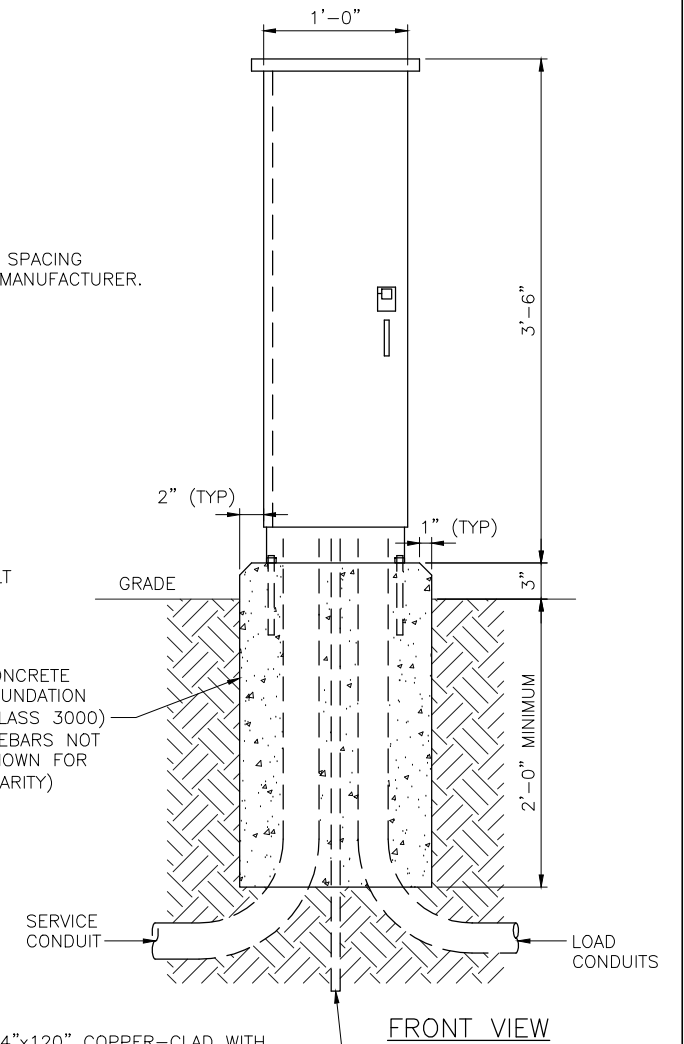
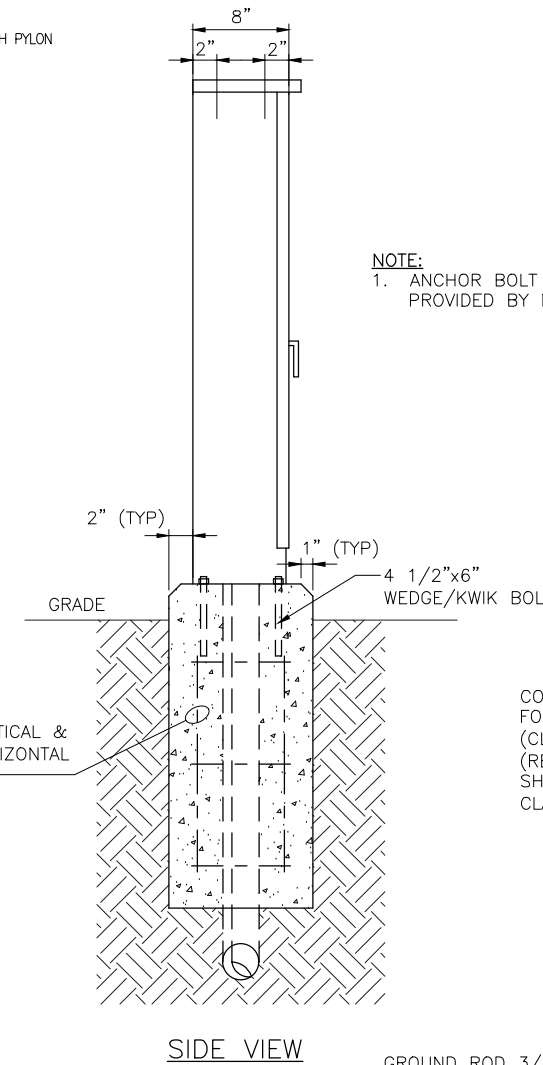
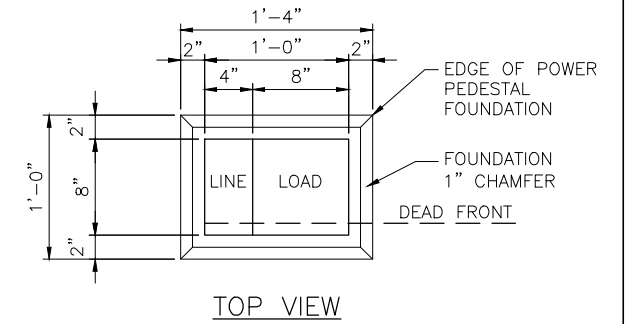
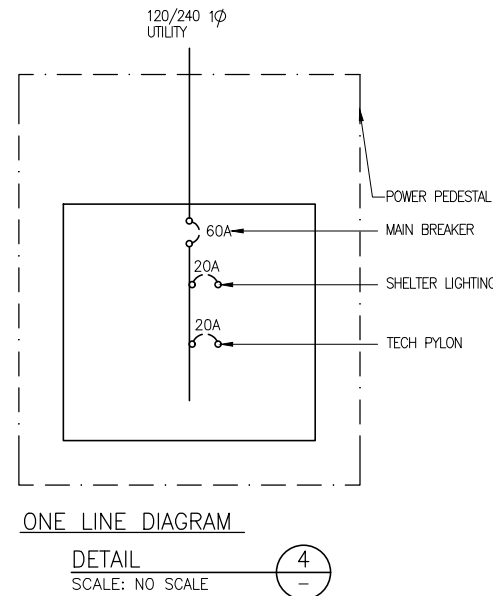
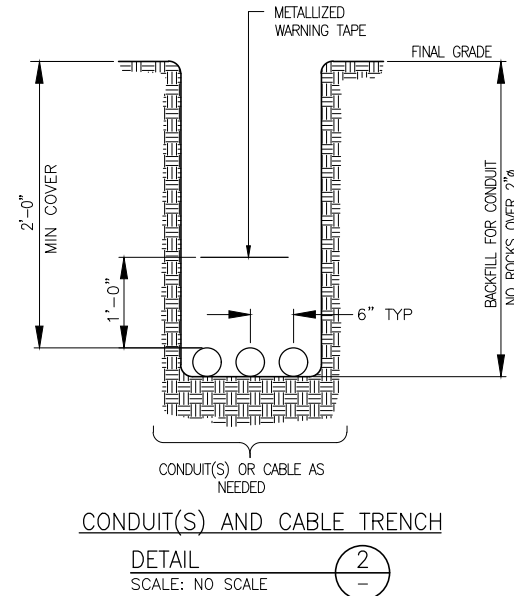
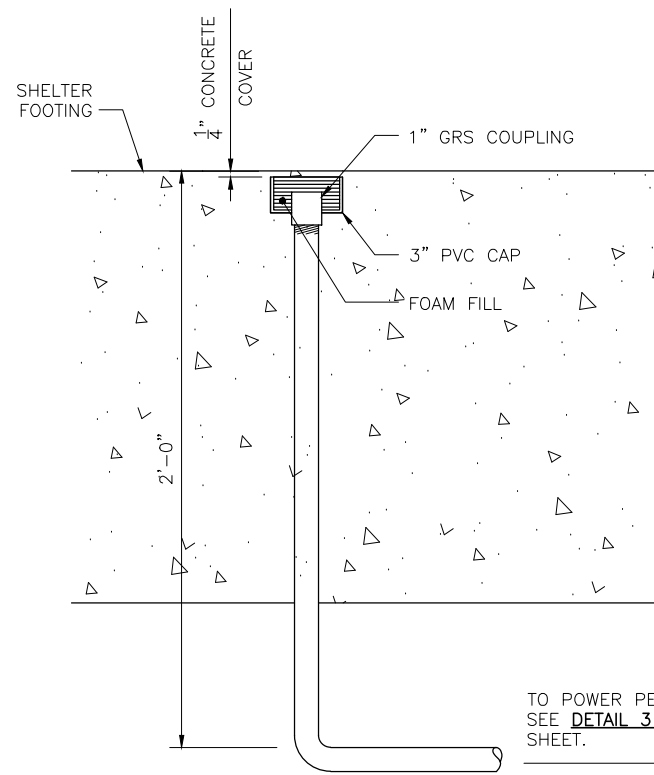
KCMT 2021-2022 STANDARD DETAILS				
No.	REVISION	BY	APP'D	DATE



DESIGNED: S. ANOD	APPROVED: P. ENG
DRAWN:	
S. DO CHECKED:	PROJECT NO: -
CHECKED: C. REYNOLDS	CONTRACT NO: -



METRO TRANSIT CAPITAL DIVISION TRANSIT PASSENGER FACILITIES - IMPROVEMENTS	DATE: 12/2021
INTERNAL SOLAR SHELTER LIGHTING ELECTRICAL DETAILS	DRAWING NO: D111
	SHEET NO. OF 19 20



NOTE:
1. ANCHOR BOLT SPACING PROVIDED BY MANUFACTURER.

GROUND ROD 3/4"x120" COPPER-CLAD WITH GROUND CLAMP. A SECOND GROUND SHALL BE INSTALLED A MINIMUM OF 8' AWAY IN A GROUND ROD HANDHOLE AS PER CITY OF SEATTLE STANDARD PLAN NO 550b. COORDINATE WITH ELECTRICAL INSPECTOR FOR LOCATION. INSTALL 3/4" GRS CONDUIT WITH #6 GROUND WIRE BETWEEN CABINET FOUNDATION AND GROUND ROD HANDHOLE.

ELECTRICAL CONDUIT STUB-UP
DETAIL 1
SCALE: NONE

CONSTRUCTION NOTES

ELECTRICAL CONDUIT

- INSTALLATIONS SHALL CONFORM TO ALL APPLICABLE CODES AND THE KING COUNTY ELECTRICAL SPECIFICATIONS.
- ALL NEW CONDUIT INSTALLED UNDERGROUND SHALL HAVE A MINIMUM COVER OF 24 INCHES.
- PLACE 6" WIDE WARNING TAPE 12 INCHES BELOW GRADE OVER ALL CONDUIT RUNS. TAPE SHALL BE MAGNATEC®, OR PRODUCT EQUIVALENT IN MATERIAL TYPE, SIZE, STYLE AND DURABILITY, SUITABLE FOR THIS SPECIFIED APPLICATION.
- STUB UP CONDUIT IN LOCATIONS INDICATED BY PLAN. CONFIGURE AS DESCRIBED BY **DETAIL 1/-**. INSTALL COUPLING AND THREADED PLUG. SET PVC CAP 1/4-INCH BELOW FINISH GRADE DESIGN OF FOUNDATION AT STUB-UP POINTS. FILL CAP CAVITY WITH FOAM AND COMPLY WITH MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS FOR DRYING TIME PRIOR TO POURING CONCRETE.
- EPOXY ALL CONDUIT JOINTS TO ENSURE WATER CANNOT ENTER THE CONDUIT THROUGH THE CONNECTION. DO NOT EPOXY THE REMOVABLE PLUG.
- COORDINATE THE REQUIREMENTS OF THIS WORK WITH THE RELATED WORK OF OTHER TRADES, INCLUDING CONCRETE FORMING AND POURING.
- THE CONTRACTOR SHALL PLACE A GROUNDING ROD IN EACH HANDHOLE IN ACCORDANCE WITH NEC 250.53 (G) AND 250.66 (A) AND INSTALL A BELL END OR BONDING BUSHING ON THE CONDUIT. THE CONTRACTOR SHALL BOND ALL METAL PARTS OF THE HANDHOLE TO THE GROUND ROD, PROVIDE SUFFICIENT SLACK IN GROUNDING THE LID TO ALLOW REMOVAL.
- SERVICE ENTRANCE CONDUIT SHALL BE 2 INCHES OR SMALLER, AS REQUIRED BY SERVICE CONDUCTORS.
- ALL ELBOWS GRC MUST BE WRAPPED WITH 2 LAYERS OF ANTI-CORROSION TAPE OR PAINTED. ALL PVC MUST BE SCHEDULE 80 PVC.
- SHELTER WIRE SHALL BE #12 BLACK, WHITE, GREEN. ALL WIRES ARE NOT ALLOWED TO BE SPLICED. GROUNDING SHALL BE BONDED TO REBAR, SHELTERS, AND POLES.

POWER PEDESTAL FOUNDATION
DETAIL 3
SCALE: NONE

KCMT 2021-2022 STANDARD DETAILS				
No.	REVISION	BY	APP'D	DATE



DESIGNED: S. ANOD	APPROVED: P. ENG
DRAWN:	
S. DO	PROJECT NO.:
CHECKED:	
CHECKED: C. REYNOLDS	CONTRACT NO.:



METRO TRANSIT CAPITAL DIVISION TRANSIT PASSENGER FACILITIES - IMPROVEMENTS		DATE: 12/2021
HANDHOLE CONDUIT DETAILS STANDARD SHELTER		DRAWING NO: D112
		SHEET NO. OF 20 20

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 PLOT: Tue May 19 2022 10:03:59pm By: dbermeil
 XREFS: C:\BZZACK\RC & D\ELECTRICAL\KCMFD-BORDER-ELEC.dwg; KCMFD-BORDER-ELEC.dwg