

PORT OF TACOMA

EBC MOTIVE TEMPORARY POWER
PROJECT ID # 101686.01
PURCHASE AGREEMENT # POT-PA-0000000068

PORT COMMISSIONERS:

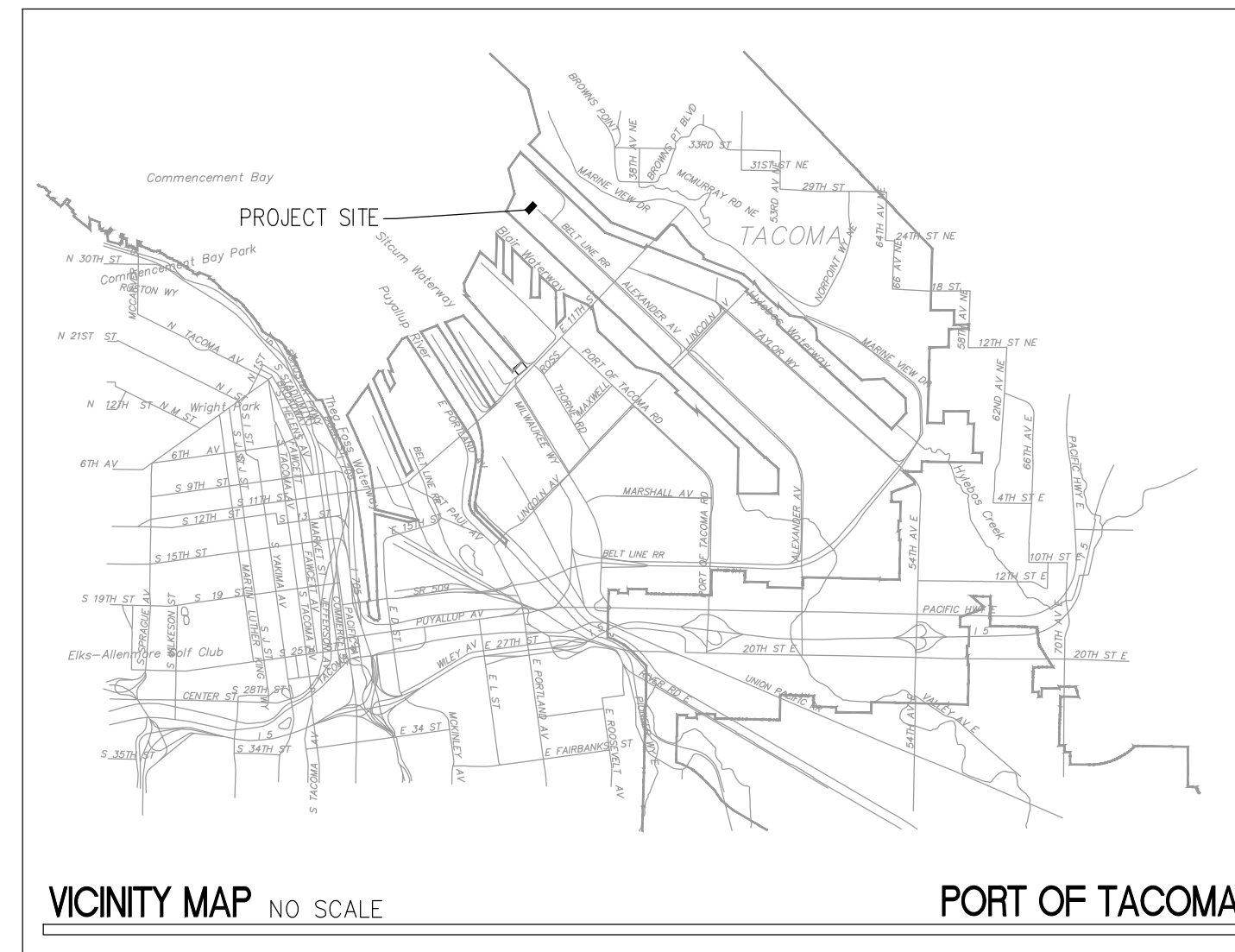
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DRAWING LIST			
SHEET DESIGNATION	SHEET #	SHEET TITLE	REVISION
1	G01	COVER SHEET	IFB
2	G02	SITE PLAN	IFB
3	C0.1	GENERAL NOTES	IFB
4	C1.0	DEMOLITION AND TESC PLAN	IFB
5	C2.0	SURFACING PLAN	IFB
6	C3.0	CIVIL DETAILS	IFB
7	C4.0	CIVIL DETAILS	IFB
8	E0.0	ELECTRICAL LEGENDS & SYMBOLS	IFB
9	E1.0TR	TEMPORARY POWER SITE PLAN - REMOVAL	IFB
10	E1.0T	TEMPORARY POWER SITE PLAN	IFB
11	E4.0T	MOTIVE MARINE SERVICE BLDG. ENLARGED PLAN	IFB
12	E10.0T	TEMPORARY ELECTRICAL ONE-LINE DIAGRAM	IFB
13	E10.2	MM-DP-1 PANEL SCHEDULE	IFB
14	E10.4T	TEMPORARY EQUIPMENT RACK ELEVATION	IFB
15	E10.5T	ENLARGED TEMPORARY POWER SITE PLAN	IFB
16	E11.1T	DUCT BANK DETAILS	IFB
17	E11.2T	VAULT DETAILS	IFB
18	E11.3T	DETAILS	IFB
19	E11.4T	TPU TRANSFORMER VAULT STANDARDS	IFB

PROJECT INFORMATION:

SITE ADDRESS:	401 TAYLOR WAY, TACOMA, WA 98421
SITE PARCEL:	PORT PARCEL 1B (2,073,538.15 SF; 47.60 ACRES)
PROPERTY OWNER:	PORT OF TACOMA 902 PORT OF TACOMA ROAD TACOMA, WA
ZONING:	PMI; PORT MARITIME & INDUSTRIAL DISTRICT
SCOPE OF WORK:	CONSTRUCT NEW POWER FOR TEMPORARY USE BY MOTIVE MARINE.
NEW IMPERVIOUS SURFACE:	0 S.F.
REPLACED IMPERVIOUS SURFACE:	3,230 S.F.
ESTIMATED EARTHWORK:	480± CY CUT/FILL (0± NET)

ISSUE FOR BID
MAY 9, 2025

MARK:	REVISION:	BY:	APPR:	DATE:
	0 - ISSUE FOR BID	SHG	CEC	



APPROVED:	CEC 04/8/25
	CHECKED BY: DATE
	AA 04/8/25
DIRECTOR ENG. DATE	PROJ. ENGR DATE
PRINTED BY: steven.garrett	May 09, 2025
PORT ADDRESS: 802 PORT CENTER ROAD TACOMA, WA 98421	

EBC MOTIVE TEMPORARY POWER

6709
G01
SH # 1 OF 19

COVER SHEET SH # 1 OF 19	PA: POT-PA-0000000068	TOWNSHIP: 21	RANGE: 03	SECTION: 27
	PROJ. ID: 101686.01	DATE-HRZ: . NAD83	VERT: MLW 1983-2001	EPOCH
	PHASE: ISSUE FOR BID	PARCEL: PORT PARCEL 1B	DRAWING SCALE: AS NOTED	

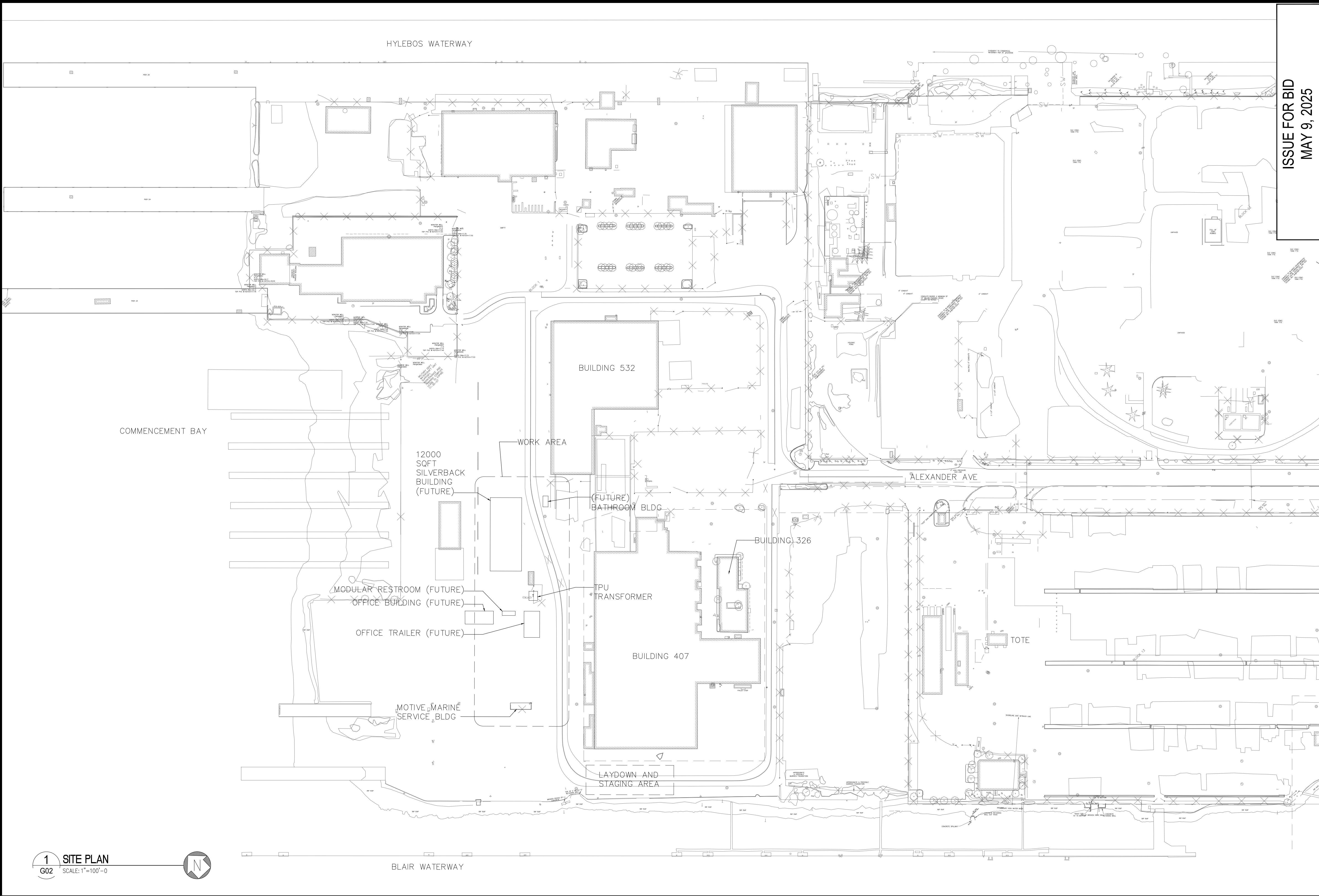
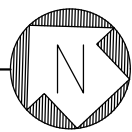
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C:\Users\steven.garrett_KIRKLAND\OneDrive - Casne Engineering\Port of Tacoma\241038-005 POT EBC Substation_ Drawings\G02 - Steven.garrett - LAST SAVE: 5/9/25 16:09:20 - PLOTTED: 5/9/25 21:57:05

BINDING EDGE

1
G02

SITE PLAN
SCALE: 1"=100'-0"



6709

G02

Sheet 2 of 19

EBC MOTIVE TEMPORARY POWER

SITE PLAN

PA: POT-PA-000000068	TOWNSHIP: 21	RANGE: 03	SECTION: 27
PROJ. ID: 101686.01	DAT-HRZ: NAD83	VERT: MLW, 1983-2001 EPOCH	
PHASE: ISSUE FOR BID	PARCEL: -----	DRAWING SCALE: AS NOTED	

APPROVED:

DIRECTOR	ENG. DATE	DATE
PRINTED BY: steven.garrett	PROJ. ENGR	DATE
PORT ADDRESS: 401 East Alexander Ave		
TACOMA, WA 98421		

CEC	04/8/25
CHECKED BY	DATE



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MARK:	REVISION:	BY:	APPR:	DATE:

ISSUE FOR BID
MAY 9, 2025

PROJECT NOTES

- BACKGROUND INFORMATION PROVIDED BY PORT OF TACOMA. THE HORIZONTAL DATUM USED FOR THESE PLANS IS WASHINGTON STATE PLANE COORDINATE SYSTEM, SOUTH ZONE NAD 83/11. THE VERTICAL DATUM USED FOR THESE PLANS IS MLLW, 1983-2001 EPOCH.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL ON-SITE AND SHALL COORDINATE HIS ACTIVITIES WITH THE OWNER AND ENGINEER A MINIMUM OF TWO (2) WEEKS IN ADVANCE OF THE BEGINNING OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL TRAFFIC CONTROL SIGNS, SAFE VEHICULAR AND PEDESTRIAN ACCESS SHALL BE PROVIDED AT ALL TIMES DURING CONSTRUCTION. SHUTDOWN OF OWNER OPERATION OR ACCESS WILL NOT BE PERMITTED. A MINIMUM OF ONE LANE SHALL REMAIN OPEN AT ALL TIMES DURING CONSTRUCTION.
- THE BURIED UTILITIES ON THIS PROJECT ARE SHOWN IN THEIR APPROXIMATE LOCATION WHERE KNOWN. OTHER EXISTING BURIED UTILITIES MAY NOT BE SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND HAVE THEIR LOCATION MARKED ON THE GROUND PRIOR TO CONSTRUCTION. THE CONTRACTOR WILL PROTECT, OR IMMEDIATELY REPAIR, ANY DAMAGED UTILITY "DISCOVERED" ON THIS PROJECT WITHOUT ADDITIONAL COSTS.
- CALL THE UNDERGROUND LOCATE LINE 1-800-424-5555, AND A PRIVATE UTILITY LOCATE, A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATIONS.
- WHERE CONFLICTS OCCUR BETWEEN EXISTING FEATURES AND THE PLACEMENT OF NEW FACILITIES, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BY THE CONTRACTOR, AND WILL BE RESOLVED BY THE ENGINEER.
- THE CONTRACTOR FOR THIS PROJECT SHALL MAINTAIN A CLEAN, LEGIBLE SET OF THESE PLANS AND NOTE ALL DEVIATIONS THEREON. UPON COMPLETION OF CONSTRUCTION, THESE DRAWINGS SHALL BE DELIVERED TO THE ENGINEER FOR THE PREPARATION OF RECORD DRAWINGS.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT TO PREVENT UTILITY INTERRUPTION INCLUDING, BUT NOT LIMITED TO, PORTABLE GENERATORS, DOMESTIC WATER PIPING, AND SEWAGE CONVEYANCE. NOTIFY THE PORT OF TACOMA ONE WEEK IN ADVANCE OF EACH UTILITY CONNECTION.
- PRIOR TO BIDDING, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MAKE ALL NECESSARY SITE INSPECTIONS AND DETERMINATIONS OF ITEMS AND QUANTITIES OF WORK TO ENSURE THAT ALL ITEMS OF WORK NECESSARY TO PERFORM A COMPLETE AND ACCEPTABLE JOB HAVE BEEN TAKEN INTO CONSIDERATION.

PLASTIC COVERING NOTES

- PLASTIC SHEETING SHALL HAVE A MINIMUM THICKNESS OF 6 MILS AND SHALL MEET THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.
- COVERING SHALL BE INSTALLED AND MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR TIRES ON ROPES WITH A MAXIMUM 10-FOOT GRID SPACING IN ALL DIRECTIONS. ALL SEAMS SHALL BE TAPED OR WEIGHTED DOWN FULL LENGTH AND THERE SHALL BE AT LEAST A 12-INCH OVERLAP OF ALL SEAMS.
- CLEAR PLASTIC COVERING SHALL BE INSTALLED IMMEDIATELY ON AREAS SEEDED BETWEEN NOVEMBER 1 AND MARCH 31 AND REMAIN UNTIL VEGETATION IS FIRMLY ESTABLISHED.
- WHEN THE COVERING IS USED ON UN-SEEDED SLOPES, IT SHALL BE KEPT IN PLACE UNTIL THE NEXT SEEDING PERIOD.
- PLASTIC COVERING SHEETS SHALL BE BURIED TWO FEET AT THE TOP OF SLOPES IN ORDER TO PREVENT SURFACE WATER FLOW BENEATH SHEETS.
- PROPER MAINTENANCE INCLUDES REGULAR CHECKS FOR RIPS AND DISLODGED ENDS.

STOCKPILE NOTES

- PLACE STOCKPILES ON LAYERED PLASTIC SHEETS WITH A COMBINED THICKNESS OF NO LESS THAN 10 MILS.
- STOCKPILES SHALL BE STABILIZED (WITH PLASTIC COVERING OR OTHER APPROVED DEVICE) DAILY.
- IN ANY SEASON, SEDIMENT LEACHING FROM STOCK PILES MUST BE PREVENTED.
- TOPSOIL SHALL NOT BE PLACED WHILE IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBGRADE IS EXCESSIVELY WET OR WHEN CONDITIONS EXIST THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING OR PROPOSED SODDING OR SEEDING.
- PREVIOUSLY ESTABLISHED GRADES ON THE AREAS TO BE TOPSOILED SHALL BE MAINTAINED ACCORDING TO THE APPROVED PLAN.

SEASONAL LIMITATIONS ON CONSTRUCTION ACTIVITIES

THE FOLLOWING SHALL BE ADHERED TO ON ALL CONSTRUCTION SITES WITH EROSIIVE SOILS AND/OR A GRADIENT OF GREATER THAN TWO PERCENT FOR LIMITING EXPOSED SOILS TO EROSIIVE PROCESSES.

MAY 1ST TO SEPTEMBER 30TH (DRY SEASON)

THE CLEARING OF LAND, INCLUDING THE REMOVAL OF EXISTING VEGETATION OR OTHER GROUND COVER, MUST BE LIMITED TO ONLY AS MUCH LAND AREA AS CAN RECEIVE APPROPRIATE PROTECTIVE COVER OR BE OTHERWISE STABILIZED AFTER HAVING BEEN CLEARED OR OTHERWISE DISTURBED BY NO LATER THAN SEPTEMBER 30TH OF A GIVEN YEAR, UNLESS IMMEDIATE STABILIZATION IS SPECIFIED IN THE EROSION AND SEDIMENTATION CONTROL PLAN, ALL AREAS CLEARED OR OTHERWISE DISTURBED MUST BE APPROPRIATELY STABILIZED THROUGH THE USE OF MULCHING, NETTING, PLASTIC SHEETING, EROSION BLANKETS, FREE DRAINING MATERIALS, ETC.

IN THE EVENT THAT CONSTRUCTION ACTIVITIES OR OTHER SITE DEVELOPMENT ACTIVITIES ARE DISCONTINUED FOR FOUR CONSECUTIVE DAYS OR MORE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSPECTION OF ALL EROSION AND SEDIMENTATION CONTROL FACILITIES IMMEDIATELY AFTER STORM EVENTS AND AT LEAST ONCE EVERY WEEK. THE CONTRACTOR SHALL BE RESPONSIBLE TO THE MAINTENANCE AND REPAIR OF ALL EROSION AND SEDIMENTATION CONTROL FACILITIES.

THE CONTRACTOR SHALL PROVIDE MATERIALS ONSITE READILY AVAILABLE TO IMMEDIATELY STABILIZE DENUDDED AREAS DURING PERIODS OF INCLEMENT WEATHER WHICH RESULT IN EROSION AND SEDIMENT TRANSPORT OFFSITE.

THE CONTRACTOR SHALL ENSURE THE PROPER CONTINUED FUNCTIONING OF THE ESC FACILITIES BY PROMPT CLEANING AND MAINTENANCE AFTER EACH EROSION AND SEDIMENT PRODUCING RAINFALL EVENT.

OCTOBER 1ST TO APRIL 30TH (WET SEASON)

ON SITES WHERE UNINTERRUPTED CONSTRUCTION ACTIVITY IS IN PROGRESS, THE CLEARING OF LAND, INCLUDING THE REMOVAL OF EXISTING VEGETATION OR OTHER GROUND COVER, SHALL BE LIMITED TO ONLY AS MUCH LAND AREA AS CAN BE COVERED OR STABILIZED WITHIN 24 HOURS IN THE EVENT A MAJOR STORM IS PREDICTED AND/OR EROSION/SEDIMENT TRANSPORT OFFSITE IS OBSERVED.

ADDITIONALLY, ALL CLEARED OR DISTURBED AREAS WILL RECEIVE APPROPRIATE PROTECTIVE COVER OR BE OTHERWISE STABILIZED (SUCH AS MULCHING, NETTING, PLASTIC SHEETING, EROSION BLANKETS, FREE DRAINING MATERIAL, ETC.) WITHIN FIVE DAYS AFTER HAVING BEEN CLEARED OR OTHERWISE DISTURBED IF NOT BEING ACTIVELY WORKED. FILTER FABRIC FENCING, SEDIMENT TRAPS, SEDIMENT PONDS, ETC., WILL NOT BE VIEWED AS ADEQUATE COVER IN AND OF THEMSELVES. IN THE EVENT THAT ANY LAND AREA NOT BEING ACTIVELY WORKED REMAINS UNPROTECTED OR HAS NOT BEEN APPROPRIATELY STABILIZED FIVE DAYS AFTER HAVING BEEN CLEARED, ALL CONSTRUCTION ACTIVITY ON THE SITE, EXCEPT FOR APPROVED EROSION AND SEDIMENTATION CONTROL ACTIVITY, SHALL IMMEDIATELY CEASE UNTIL SUCH A TIME AS SAID LAND HAS BEEN APPROPRIATELY PROTECTED OR STABILIZED.

THE CONTRACTOR SHALL AT ALL TIMES HAVE AVAILABLE FOR THE PROJECT SUFFICIENT QUANTITIES OF PROTECTIVE COVERING MATERIALS TO IMMEDIATELY STABILIZE ALL DISTURBED AREAS IN CASE THE PROJECT ENGINEER OR CITY DIRECTS THEM TO COVER DUE TO OBSERVED MIGRATION OF SOILS OR INCLEMENT WEATHER.

POLLUTION PREVENTION NOTES

- EQUIPMENT LUBRICATION AND FUELING OPERATIONS SHALL OCCUR AT THE DESIGNATED FUELING AREA OR AN APPROVED OFF-SITE LOCATION.
- PREVENT OILS AND FUELS FROM ENTERING THE STORM DRAINAGE SYSTEM AND WATERWAYS WITH PROPER CONTAINMENT DEVICES.
- ACCESS TO CONSTRUCTION IS VIA ADJACENT EXISTING PAVED STREETS OR THE PROPOSED CONSTRUCTION ENTRANCE. SWEEP DIRT FROM PAVING DAILY OR AS NEEDED. THE INTENT IS TO PREVENT DIRT AND DEBRIS FROM VEHICLES AND EQUIPMENT FROM BEING DEPOSITED ON PUBLIC STREET PAVEMENT.
- SPILL CLEANUP PROCEDURES SHALL BE POSTED ON-SITE. IN CASE OF A SPILL THAT MAY ENTER GROUNDWATER, SURFACE WATER, OR STORM DRAIN SYSTEM, CONTACT THE DIVISION OF EMERGENCY MANAGEMENT AT (800) 258-5990. SPILLS SHALL BE CLEANED UP IMMEDIATELY AND CONTAMINATED MATERIAL DISPOSED OF PROPERLY.
- THE CONTRACTOR SHALL PREVENT ALL MATERIAL USED OR GENERATED ON-SITE FROM ENTERING THE STORM DRAINAGE SYSTEM. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE CONTAINMENT/SEPARATION AT ALL TIMES. ALL STORMWATER POLLUTION PREVENTION MEASURES SHALL BE COORDINATED WITH ENGINEER TO ENSURE COMPLIANCE WITH APPLICABLE STORMWATER PERMITS. CONTACT PORT OF TACOMA A MINIMUM OF TWO (2) WEEKS PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL SUBMIT DOCUMENTATION SUPPORTING THE CURRENT CERTIFICATION OF THE CONTRACTOR'S DESIGNATED CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (CESCL). THE DOCUMENT SHALL CONTAIN AT A MINIMUM THE FOLLOWING INFORMATION: NAME, CESCL NUMBER, AND EXPIRATION DATE.
- THE CONTRACTOR SHALL SUBMIT FOR APPROVAL A SAMPLE OF THE SITE LOG BOOK TO BE USED ON THE PROJECT FOR MAINTAINING EROSION CONTROL INSPECTION, OBSERVATION, CHECKLIST, AND CORRECTION REPORTS. UPON APPROVAL THE CONTRACTOR SHALL KEEP AND MAINTAIN THE SITE LOG BOOK ON-SITE DURING CONSTRUCTION.
- THE CONTRACTOR SHALL COMPLETE AN EROSION CONTROL CHECKLIST, CAREFULLY REVIEW, AND MAINTAIN ALL STORMWATER POLLUTION PREVENTION MEASURES DAILY BETWEEN NOVEMBER 1 AND MARCH 31 AND WEEKLY DURING ALL OTHER CONSTRUCTION SEASONS. SCOPE OF DAILY INSPECTION SHALL BE COORDINATED WITH SITE ENVIRONMENTAL ENGINEERING.
- CHECKLISTS AND MAINTENANCE INFORMATION SHALL BE KEPT IN THE SITE LOG BOOK (MAINTAINED BY THE CESCL DESIGNATED BY THE CONTRACTOR) AND BE AVAILABLE FOR REVIEW BY THE OWNER, ENGINEER, AND/OR GOVERNING AGENCY.
- MONTHLY DURING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT A COPY OF ALL RECENT INSPECTION, OBSERVATION, CHECKLIST, AND CORRECTION REPORTS TO THE OWNER AND ENGINEER.

DEMOLITION NOTES

- REMOVE ALL DELETERIOUS MATERIAL FOUND ON-SITE INCLUDING VEGETATION, SCRAP WOOD, TRASH, ETC. AND DISPOSE OF AT AN APPROVED OFF-SITE LOCATION.
- AT ALL TIMES THE CONTRACTOR SHALL MAINTAIN SIGNS, BARRICADES, FENCING, OR OTHER MEASURES TO ENSURE CONTINUOUS PROTECTION OF THE PUBLIC AND TO PREVENT UNAUTHORIZED ENTRY TO THE CONSTRUCTION AREA. AT A MINIMUM FENCING SHALL BE 6.0 FEET HIGH. COORDINATE SAFETY AND SECURITY MEASURES WITH PORT OF TACOMA.
- DAMAGE TO ANY PROPERTY, INCLUDING BUT NOT LIMITED TO, BUILDINGS, UTILITIES, VEHICLES, FENCING, OR LANDSCAPING AS A RESULT OF CONTRACTORS ACTIVITIES WILL BE REPAIRED OR REPLACED AT THE CONTRACTORS EXPENSE.
- THE CONTRACTOR IS FINANCIALLY RESPONSIBLE FOR THE MAINTENANCE AND/OR REPAIR OF OFF-SITE AND ON-SITE PAVED SURFACES WHERE DAMAGE HAS BEEN SUSTAINED DUE TO THE DEVELOPMENT'S CONSTRUCTION TRAFFIC.

EXCAVATION NOTES

- EXCAVATE TO ELEVATIONS, LINES AND GRADES INDICATED TO NOT MORE THAN 1/2-INCH ABOVE OR BELOW THAT REQUIRED.
- SLOPE SIDES OF EXCAVATION AS INDICATED OR COMPLY WITH LOCAL CODES AND ORDINANCES HAVING JURISDICTION, WHICHEVER IS MORE STRINGENT. SHORE AND BRACE WHERE SLOPING IS NOT POSSIBLE BECAUSE OF SPACE RESTRICTIONS OR STABILITY OF MATERIAL EXCAVATED.
- STOCKPILE SATISFACTORY EXCAVATED MATERIALS UNTIL REQUIRED FOR BACKFILL OR FILL. PLACE, GRADE AND SHAPE STOCKPILES FOR PROPER DRAINAGE. LOCATE AND RETAIN SOIL MATERIALS AWAY FROM EDGE OF EXCAVATIONS.
- DISPOSE OF EXCESS SOIL AND UNSUITABLE SOIL MATERIAL OFF-SITE AS DIRECTED.
- DEWATERING WILL LIKELY BE REQUIRED DURING EXCAVATION AND CONSTRUCTION. SEE C0.1 FOR DEWATERING NOTES.

DEWATERING NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING ALL EXCAVATIONS. ALL WATER GENERATED FROM DEWATERING OPERATIONS SHALL BE DISPOSED OF IN A MANNER AND LOCATION APPROVED BY THE IESC PLAN, CITY OF TACOMA, AND PORT OF TACOMA. CONTRACTOR SHALL PREPARE AND SUBMIT A DEWATERING PLAN PRIOR TO COMMENCING CONSTRUCTION.
- CONTRACTOR TO ANTICIPATE GROUNDWATER AND PROVIDE ALL EQUIPMENT NECESSARY TO DEWATER EXCAVATIONS. COORDINATE DISCHARGE WITH OWNER NEAR OPERATIONAL FACILITIES (I.E. SURFACE PIPING IS NOT ACCEPTABLE WITHOUT APPROPRIATE, APPROVED TRAFFIC CONTROL MEASURES).
- ALL GROUNDWATER OR INCIDENTAL SURFACE RUNOFF COLLECTED SHALL BE DISCHARGED TO THE ON-SITE STORMWATER SYSTEM FOLLOWING APPROPRIATE TREATMENT UNTIL CONSTRUCTION IS COMPLETE.
- NO SEDIMENT, TURBID WATER, OR OTHER POLLUTANTS (HEAVY METALS, OIL SHEEN, ETC.) SHALL BE DISCHARGED TO THE ON-SITE STORMWATER SYSTEM. ANY TREATMENT OF COLLECTED WATER SHALL BE APPROVED BY PORT OF TACOMA AND THEIR ENGINEERING CONSULTANT REPRESENTATIVES PRIOR TO DISCHARGE.
- A LOG OF ALL DISCHARGED STORMWATER SHALL BE KEPT ON-SITE AT ALL TIMES DURING CONSTRUCTION. AT A MINIMUM, THE LOG SHALL CONTAIN THE FOLLOWING ITEMS:
 - DATE DISCHARGED
 - SOURCE OF WATER (VAULT, PIPE, ETC.)
 - TYPE OF WATER DISCHARGED (GROUNDWATER, STORMWATER, ETC.)
 - METHOD OF COLLECTION (PUMP TO TANK, ETC.)
 - METHOD OF DISCHARGE (DRAIN FROM TANK, PUMPED DISCHARGE, ETC.)
 - VOLUME OF WATER DISCHARGED
 - DISCHARGE LOCATION
 - RECEIVING SYSTEM (ON-SITE STORM SYSTEM, SEWER, OFF-SITE FACILITY, ETC.)
 - DURATION OF DISCHARGE
- ANY STORMWATER COLLECTED INTO A TRUCK SHALL NOT BE DISCHARGED TO THE STORMWATER SYSTEM.
- THE CONTRACTOR SHALL OBTAIN PRIOR APPROVAL FROM PORT OF TACOMA AND THEIR ENGINEERING CONSULTANT REPRESENTATIVES FOR ANY OFF-SITE DISPOSAL OF WATER, SEDIMENT, OR DEBRIS.

UTILITY NOTES

- DETECTABLE MARKING TAPE SHALL BE INSTALLED ALONG THE FULL LENGTH OF EACH PROPOSED UTILITY. DETECTION TAPE SHALL BE 2-INCH WIDTH (MINIMUM), CONTAIN A 0.35 MIL SOLID ALUMINUM CORE, BE A MINIMUM OF 5.0 MIL OVERALL THICKNESS, AND BE SUITABLE FOR DIRECT BURY. THE TAPE SHALL BE COLOR CODED ACCORDING TO AWWA AND CONTINUOUSLY IMPRINTED WITH THE TYPE OF UTILITY FOR EACH UTILITY SHOWN.
- ADJUST RIM OF ALL EXISTING UTILITIES WITHIN DISTURBED AREAS TO MATCH FINISH GRADE.
- DISCOVERED ABANDONED UTILITIES SHALL BE REMOVED WHERE IN CONFLICT WITH NEW CONSTRUCTION. IF NOT IN CONFLICT WITH NEW CONSTRUCTION, UTILITIES MAY BE ABANDONED IN PLACE, AS APPROVED BY THE OWNER, IF THE FOLLOWING IS PROVIDED:
 - UTILITY IS DEEPER THAN 3.5' FROM TOP TO FINISH GRADE AND,
 - PIPE >6" DIAMETER IS FILLED WITH LOW STRENGTH LEAN CONCRETE (CDF) AND CAPPED AT EXPOSED END (FOR STRUCTURE ABANDONMENT, CONFORM WITH WSDOT STANDARD SPECIFICATION 7-05.3(2)) AND,
 - AS-BUILT MEASUREMENTS ARE TAKEN TO DENOTE THE KNOWN TYPE, SIZE, AND EXTENT OF THE ABANDONED UTILITY AND REDLINED ON THE RECORD DRAWINGS.



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Project No.: 20,757

Project Mgr.: DCD

Proj. Engineer: DKM

Proj. Drafter: DKM

C0.1	EBC MOTIVE TEMPORARY POWER	APPROVED:	DCD CHECKED BY: DATE DKM 11/22/24	GENERAL NOTES TOWNSHIP: 21 RANGE: 04 SECTION: 31 DAT-HRZ: NAD83 VERT: MLLW, 1983-2001 EPOCH PARCEL: PORT PARCEL 1B DRAWING SCALE: AS NOTED	PA: POT-PA-000000068 PROJ ID: 101686.01 PHASE: ISSUED FOR CONST.	DIRECTOR ENG. DATE PRINTED BY: DonDavis May 08, 2025 PORT ADDRESS: 802 PORT CENTER ROAD TACOMA, WA 98421	MARK:	REVISION:	BY:	APPR:	DATE:	 <div>P.O. BOX 1837 TACOMA, WA 98401 (253)85-5841</div>

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DEMOLITION AND TESC PLAN

SCALE: 1"=30'

LEGEND

PROPOSED FEATURES-

- PROJECT LIMITS
- CATCH BASIN PROTECTION
- SAWCUT
- FEATURE DEMOLITION, AS NOTED PER PLAN
- FEATURE DEMOLITION, AS NOTED PER PLAN
- SURFACE DEMOLITION

GENERAL NOTES

- SEE SHEET C0.1 FOR GENERAL CIVIL NOTES.
- BACKGROUND INFORMATION PROVIDED BY PORT OF TACOMA.
- CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY ENGINEER IF THERE ARE ANY DISCREPANCIES AFFECTING WORK.
- CONTRACTOR SHALL PROTECT UTILITIES AND FEATURES ON-SITE NOT MARKED FOR REMOVAL AND REPAIR ANY DAMAGE AT NO COST. UTILITIES AND FEATURES INCLUDE, BUT ARE NOT LIMITED TO, THOSE RECORDED, LOCATED BEFORE CONSTRUCTION, OR DISCOVERED DURING CONSTRUCTION.
- DEMOLISHED FEATURES SHALL BECOME THE PROPERTY OF THE CONTRACTOR, AND SHALL BE DISPOSED OF PER THE PROJECT PLANS AND SPECIFICATIONS.
- ALL CLEAN EXCAVATED MATERIAL SHALL BE REUSED TO THE MAXIMUM EXTENT POSSIBLE IN TRENCH AND VAULT BACKFILL. EXCESS EXCAVATION SPOILS SHALL BE STORED IN A DESIGNATED SOIL STORAGE AREA AND COVERED WITH PLASTIC SHEETING PER DETAIL 2/C3.0. CONTRACTOR SHALL COORDINATE WITH ENGINEER WHERE TEMPORARY SOIL STORAGE AREA SHALL BE LOCATED ON-SITE. ANY EXCESS SPOILS NOT USED SHALL EVENTUALLY BE DISPOSED OF OFFSITE.
- PROTECT VEGETATION NOT MARKED FOR REMOVAL. IF VEGETATION REMOVAL IS REQUIRED FOR CONSTRUCTION, COORDINATE VEGETATION REMOVAL WITH ENGINEER.
- CONTRACTOR RESPONSIBLE FOR MAINTAINING WORK AREA.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT TO PREVENT UTILITY INTERRUPTION.

KEY NOTES

- SAWCUT TO FULL DEPTH.
- REMOVE ASPHALT.
- PROTECT UTILITY AS NOTED.
- SALVAGE FEATURE AS NOTED, IF POSSIBLE.
- INSTALL CATCH BASIN PROTECTION PER DETAIL 1/C3.0.
- PROTECT FEATURE AS NOTED.
- PREPARE NEW SUBSTATION YARD. REMOVE EXISTING CHAINLINK FENCING, GATES, ECOLOGY BLOCKS, AND OTHER MISCELLANEOUS SURFACE FEATURES. REMOVE EXISTING SURFACING, ASPHALT PAVEMENT, GRAVEL, LANDSCAPING, ETC. WALK SITE WITH PORT PRIOR TO CONSTRUCTION.
- REMOVE EXISTING UTILITY VAULT COVER AND CONDUITS/CONDUCTORS. SEE PHOTOS 09-12 ON SHEET C4.0.
- REMOVE APPROXIMATELY 5' OF EXISTING WATER SERVICE PIPE TO ACCOMMODATE INSTALLATION OF NEW SANITARY SEWER.
- REMOVE EXISTING METAL SHED (30'x12'x10'H), REDUCED PRESSURE BACKFLOW PREVENTION VALVE, AND ASSOCIATED SURFACE FEATURES. SEE PHOTOS 01-04 AND 08 ON SHEET C4.0.
- REMOVE LIDS OF TWO EXISTING VAULTS INSIDE THE SHED (4'x4'x4'H AND 9'x5'x6'H). SAWCUT THROUGH VAULTS AS NECESSARY TO ACCOMMODATE NEW SANITARY SEWER LINE. BACKFILL VAULTS WITH CLEAN EXCAVATION SPOILS PER GENERAL NOTE 6. SEE PHOTOS 05-07 ON SHEET C4.0.
- REMOVE EXISTING DUCT BANK AND CONDUITS WHERE IN CONFLICT WITH PROPOSED DUCT BANK.
- EXISTING VAULTS OUT OF SERVICE SHALL BE ABANDONED IN PLACE. REMOVE LIDS AND DISPOSE, BACKFILL WITH CLEAN EXCAVATED SPOILS. IF ROUTING PROPOSED CONDUITS AROUND VAULT(S) IS NOT FEASIBLE, VAULTS MAY BE SAWCUT AND DEMOLISHED TO ACCOMMODATE CONDUIT ROUTING THROUGH VAULT(S). SEE PHOTOS 09-12 ON SHEET C4.0.



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MAY 8, 2025



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4815 CENTER STREET | TACOMA, WA 98409
PHONE: (253) 474-9449 | www.sittshill.com

Project No.: 20,757 Project Mgr.: DCD
Proj. Engineer: DKM Proj. Drafter: DKM



APPROVED: DCD 11/22/24
CHECKED BY: DKM 11/22/24
DIRECTOR: ENG. DATE: DonDavis May 08, 2025
PRINTED BY: DonDavis May 08, 2025
PORT ADDRESS: 802 PORT CENTER ROAD
TACOMA, WA 98421

EBC MOTIVE TEMPORARY POWER

C1.0
SH # 4 OF 19

DEMOLITION AND TESC PLAN
TOWNSHIP: 21 RANGE: 03 SECTION: 27
DAT-HRZ: NAD83 VERT: M.L.W. 1983-2001 EPOCH
PHASE: ISSUED FOR CONST. PARCEL: PORT PAGEL 1B DRAWING SCALE: AS NOTED



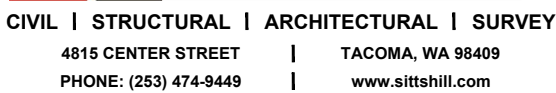
SCALE: 1"=30'



- 1 CONCRETE FOUNDATION FOR POWER UTILITY RACK PER DETAIL 9/C3.0.
ALSO COORDINATE WITH ELECTRICAL DRAWINGS.
- 2 POWER UTILITY VAULT PER ELECTRICAL DRAWINGS
- 3 ASPHALT PAVEMENT PER DETAIL 4/C3.0.
- 4 CRUSHED ROCK SURFACING PER DETAIL 6/C3.0. MATCH ELEVATIONS AND
GRADES OF ADJACENT EXISTING PAVED SURFACES.
- 5 MATCH EXISTING ELEVATION, PAVEMENT JOINT PER 5/C3.0.
- 6 PROPOSED 3/4" DOMESTIC WATER CONNECTION TO NEW MOTIVE MARINE
MODULAR OFFICE BUILDING. HOT TAP EXISTING DOMESTIC WATER LINE
AND PROVIDE CORP STOP IN TRAFFIC RATED METER BOX OR ACCEPTED
ALTERNATE. PREPARE WORK PLAN AND SUBMITTAL PACKAGE FOR
ENGINEER REVIEW PRIOR TO PROCUREMENT AND INSTALLATION.
- 7 PERMANENTLY CAP ABANDONED IN PLACE WATER PIPE, SEE SHEET C1.0.
- 8 OVERHEAD POWER/POLE INSTALLED BY TPU
- 9 POLE INSTALLED BY CONTRACTOR

811 Call 811
two business days
before you dig

ISSUED FOR BID
MAY 8, 2025



Project No.: 20,757	Project Mgr.: DCD
Proj. Engineer: DKM	Proj. Drafter: DKM

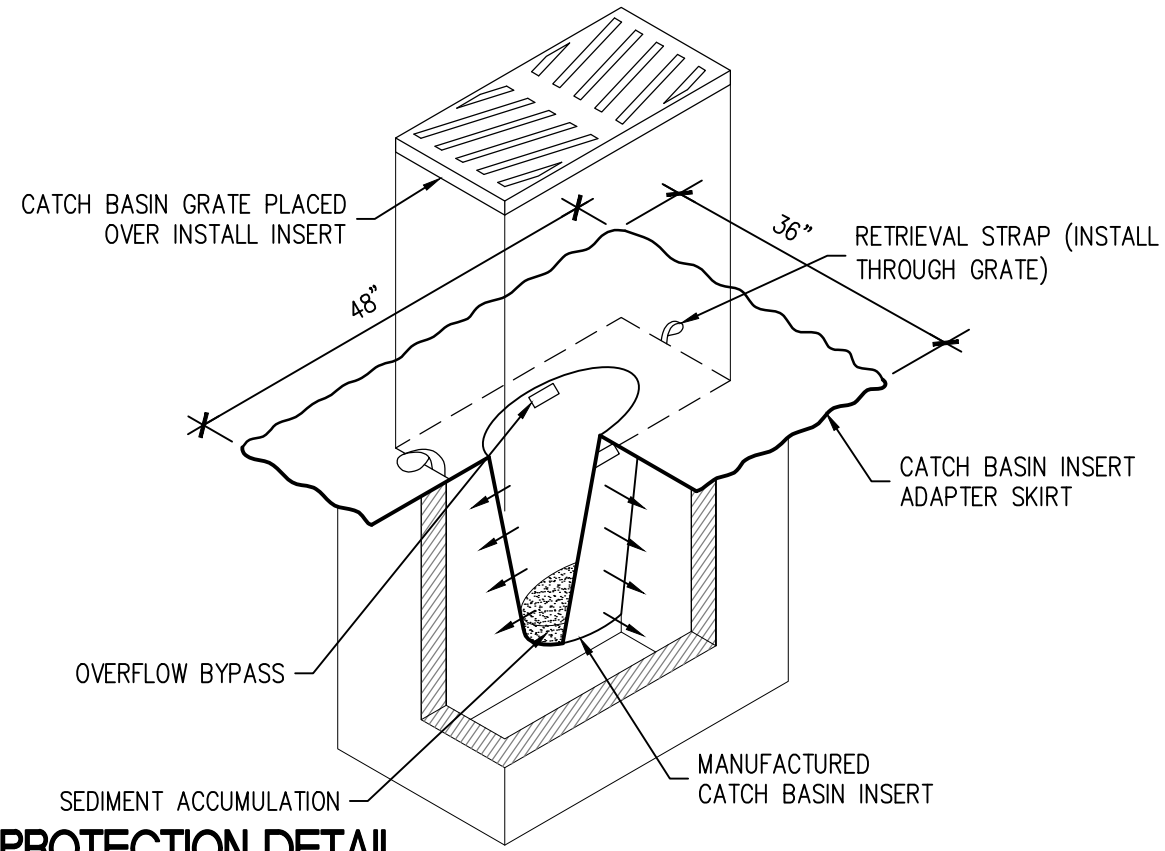
APPROVED:	DCD	11/22/24
	CHECKED BY	DATE
	DKM	11/22/24
	DIRECTOR	ENG. DATE
	PRINTED BY:	DonDavis May 08, 2025
	PORT ADDRESS:	802 PORT CENTER ROAD
		TACOMA, WA 9842

EBC MOTIVE TEMPORARY POWER

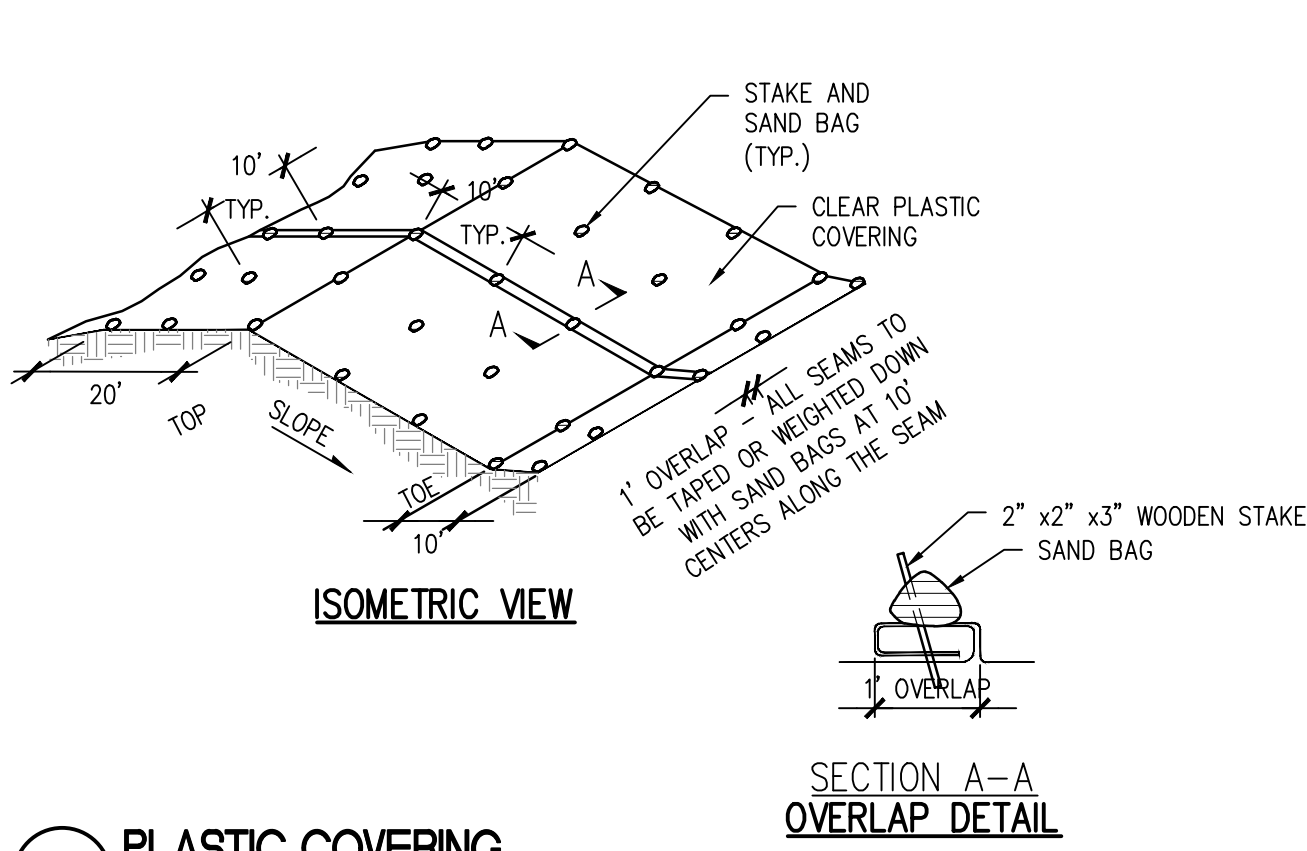
C2.0
SH #5 OF 19

PA: POT-PA-000000068	TOWNSHIP: 21	RANGE: 03	SECTION: 27
PROJ ID: 101686.01	DAT-HRZ: NAD83	VERT: MLW, 1983-2001	EPOCH
PHASE: ISSUED FOR CONSTRUCTION	DRAWING SCALE: AS NOTED		

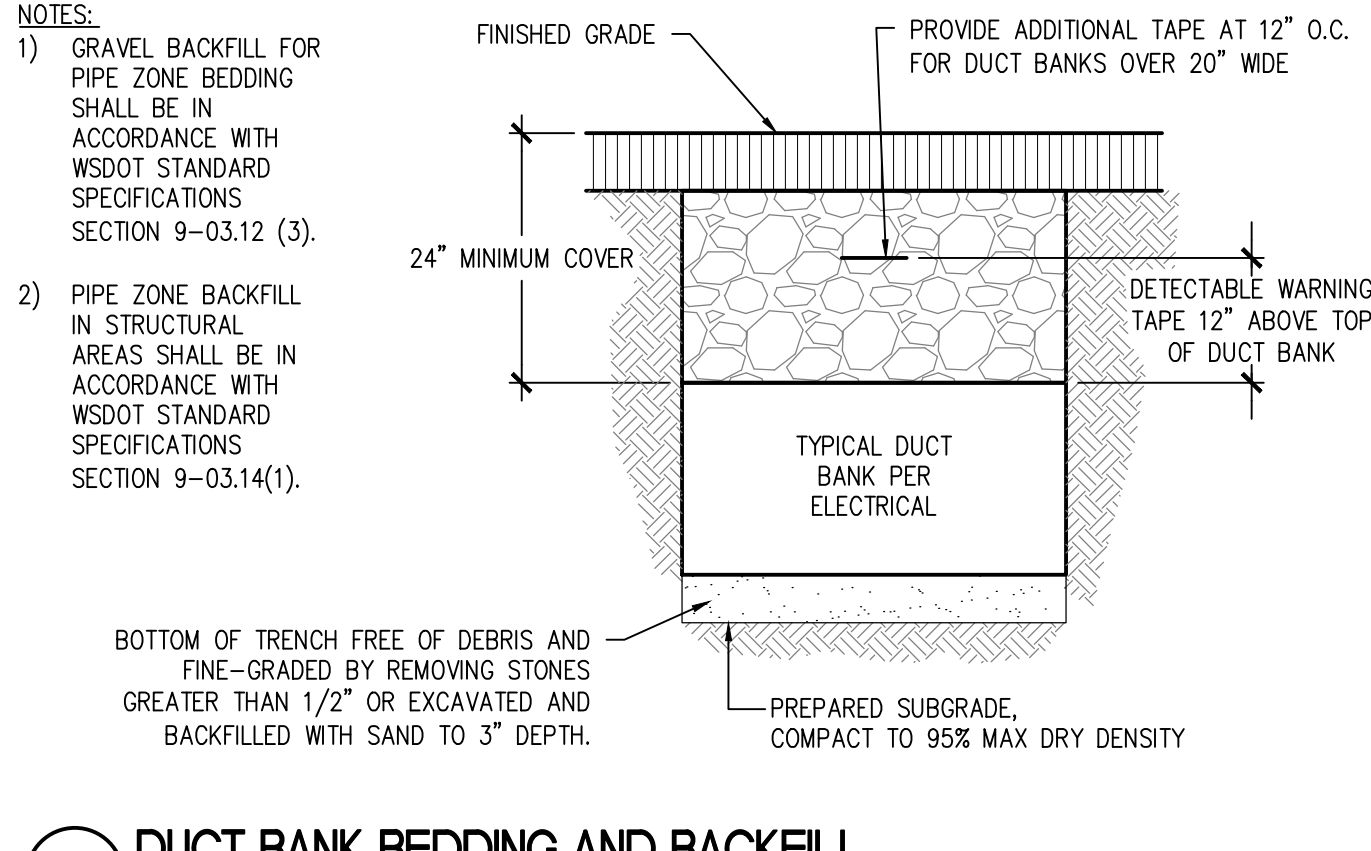
THIS DRAWING IS THE PROPERTY OF THE PORT OF TACOMA AND SHALL NOT BE USED ON OTHER WORK. DISCLOSED, COPIED, IN WHOLE OR IN PART, WITHOUT WRITTEN PERMISSION OF THE PORT OF TACOMA.



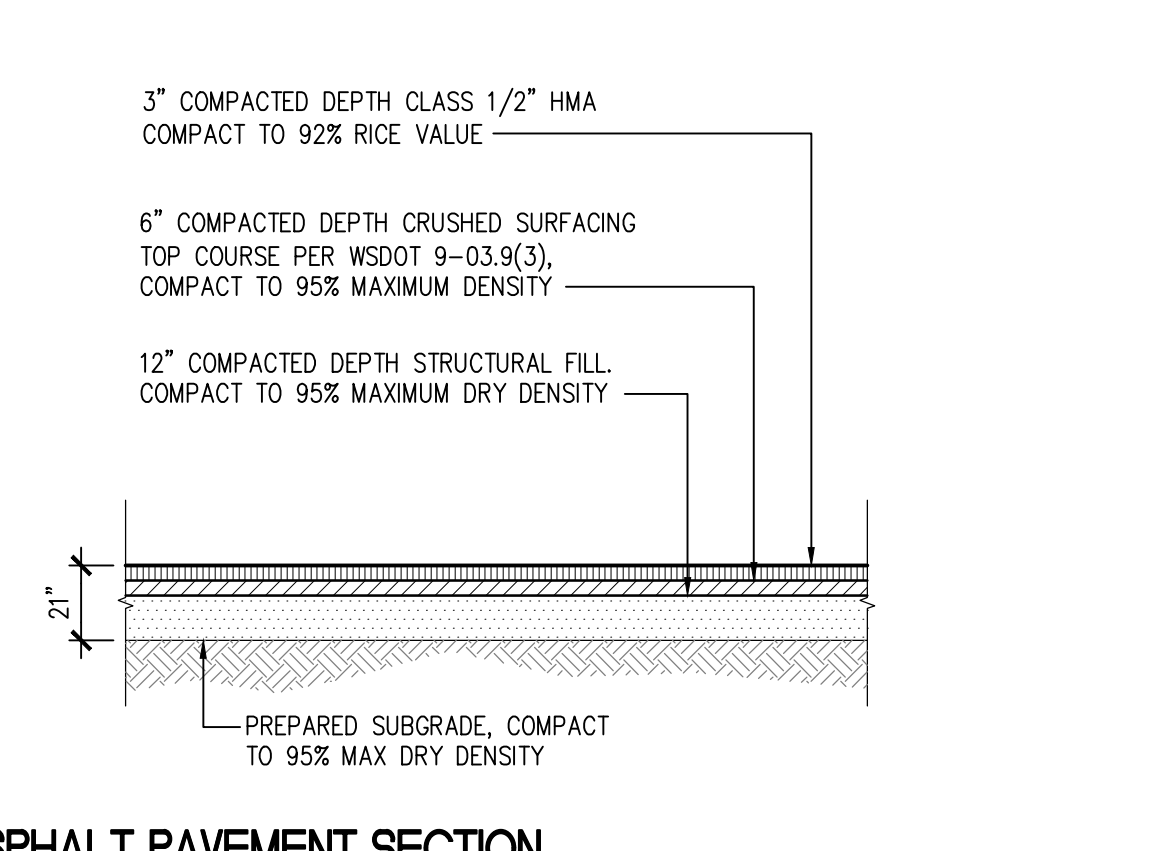
01 CB PROTECTION DETAIL
SCALE: N.T.S.



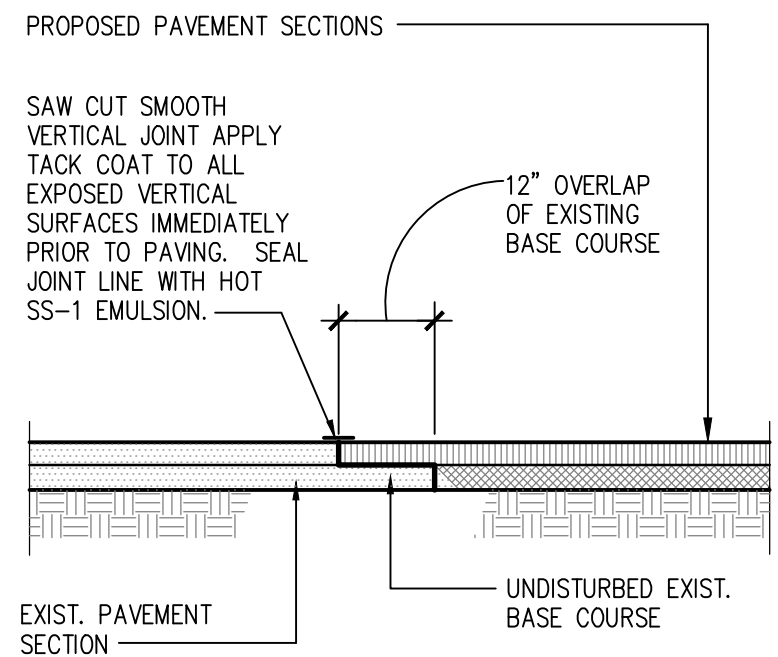
02 PLASTIC COVERING
SCALE: N.T.S.



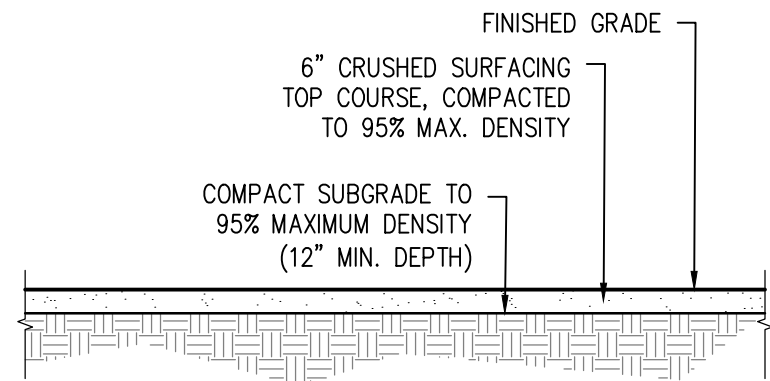
03 DUCT BANK BEDDING AND BACKFILL
SCALE: N.T.S.



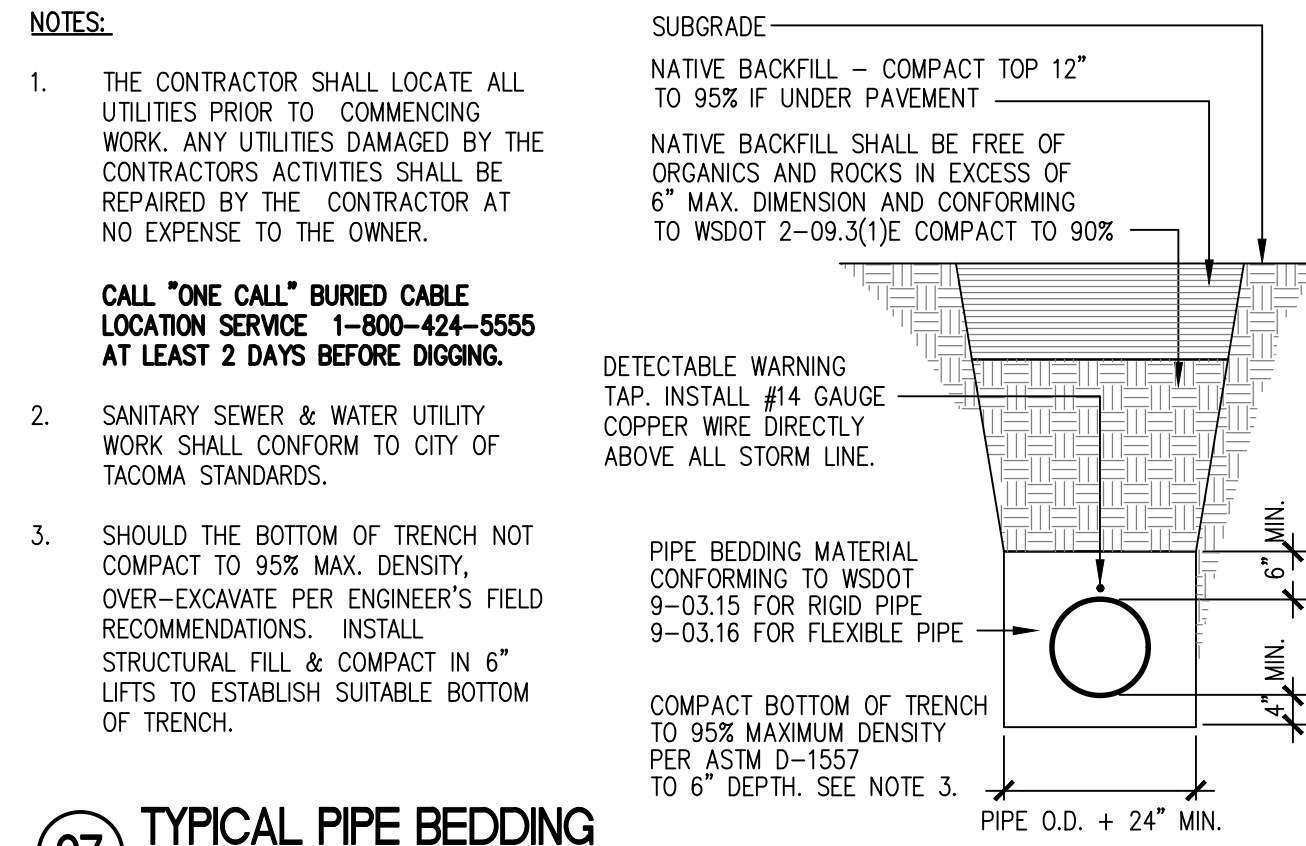
04 ASPHALT PAVEMENT SECTION
SCALE: N.T.S.



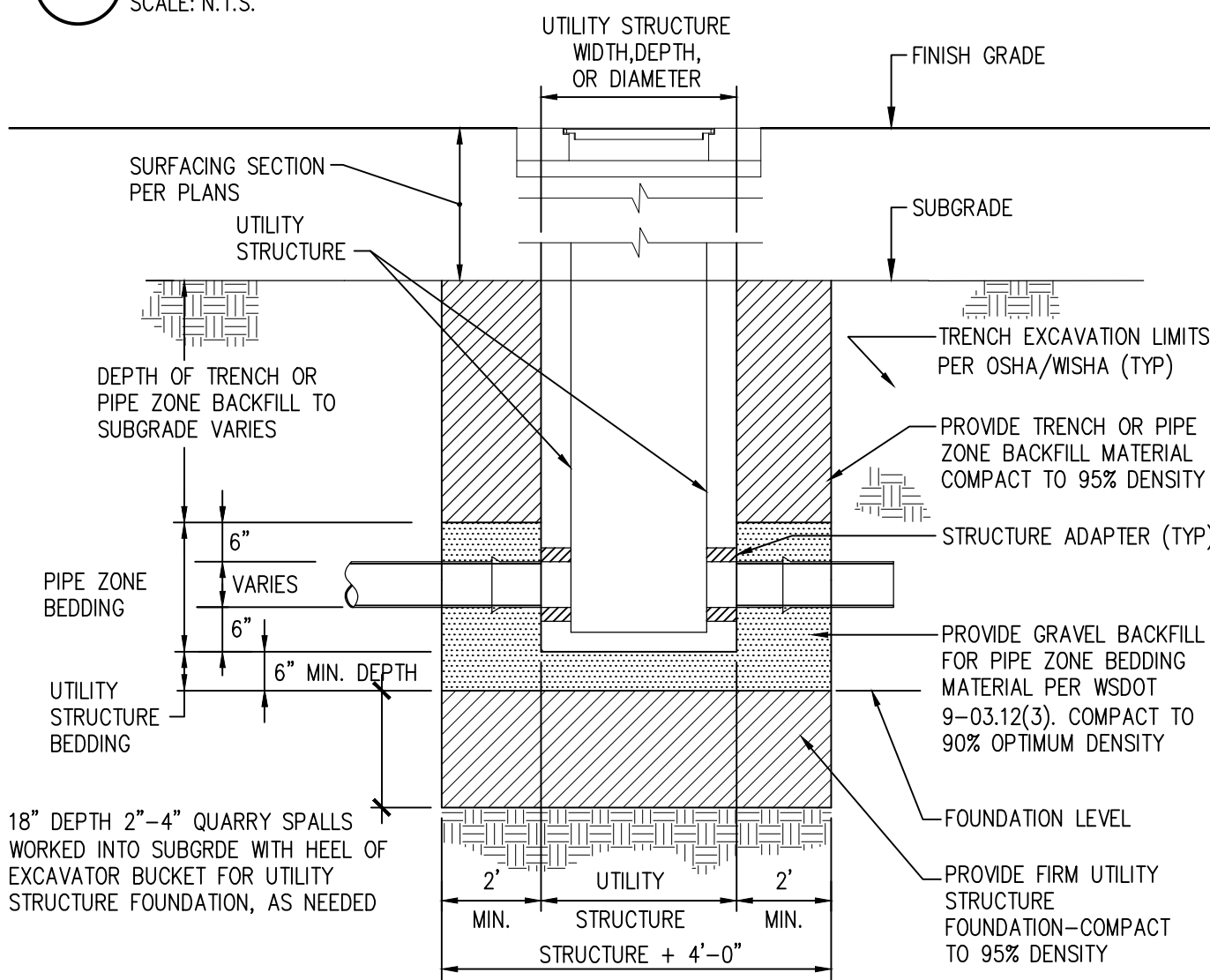
05 ASPHALT PAVEMENT JOINT SECTION
SCALE: N.T.S.



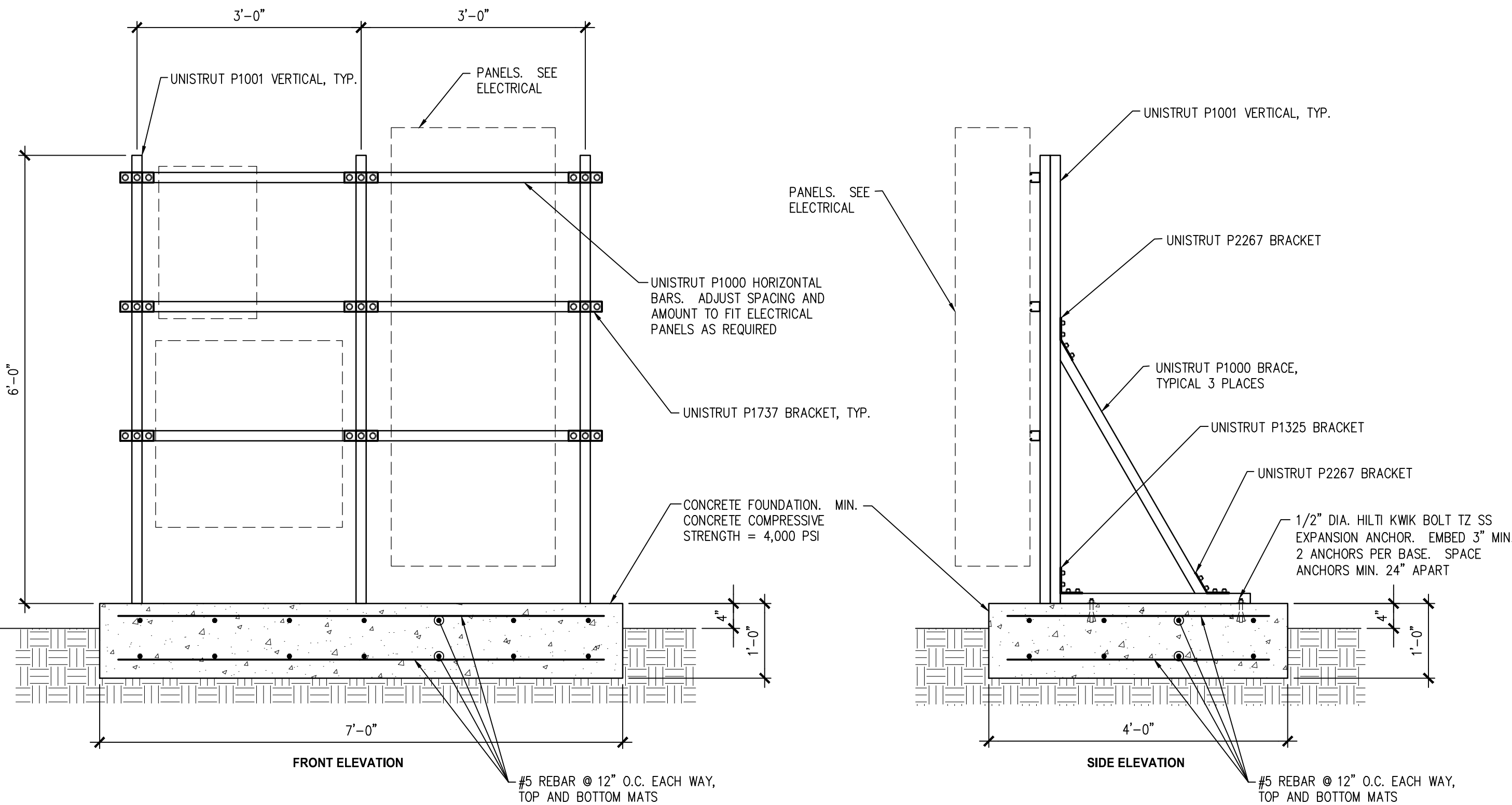
06 CRUSHED SURFACING TOP COURSE
SCALE: N.T.S.



07 TYPICAL PIPE BEDDING
SCALE: N.T.S.



08 TYPICAL UTILITY STRUCTURE EXCAVATION, FOUNDATION, BEDDING AND BACKFILL DETAIL
SCALE: N.T.S.



09 TEMPORARY SERVICE MOUNT FOUNDATION
SCALE: N.T.S.

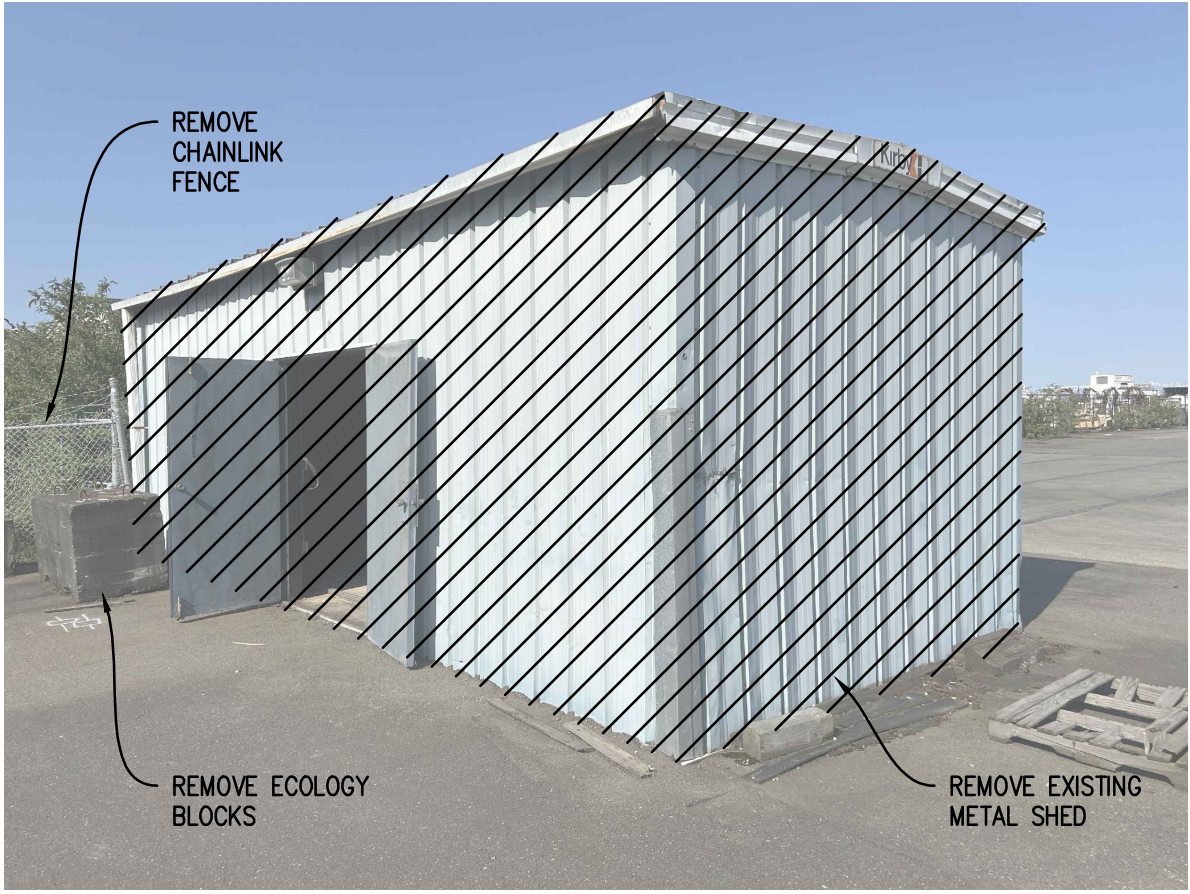


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MAY 8, 2025

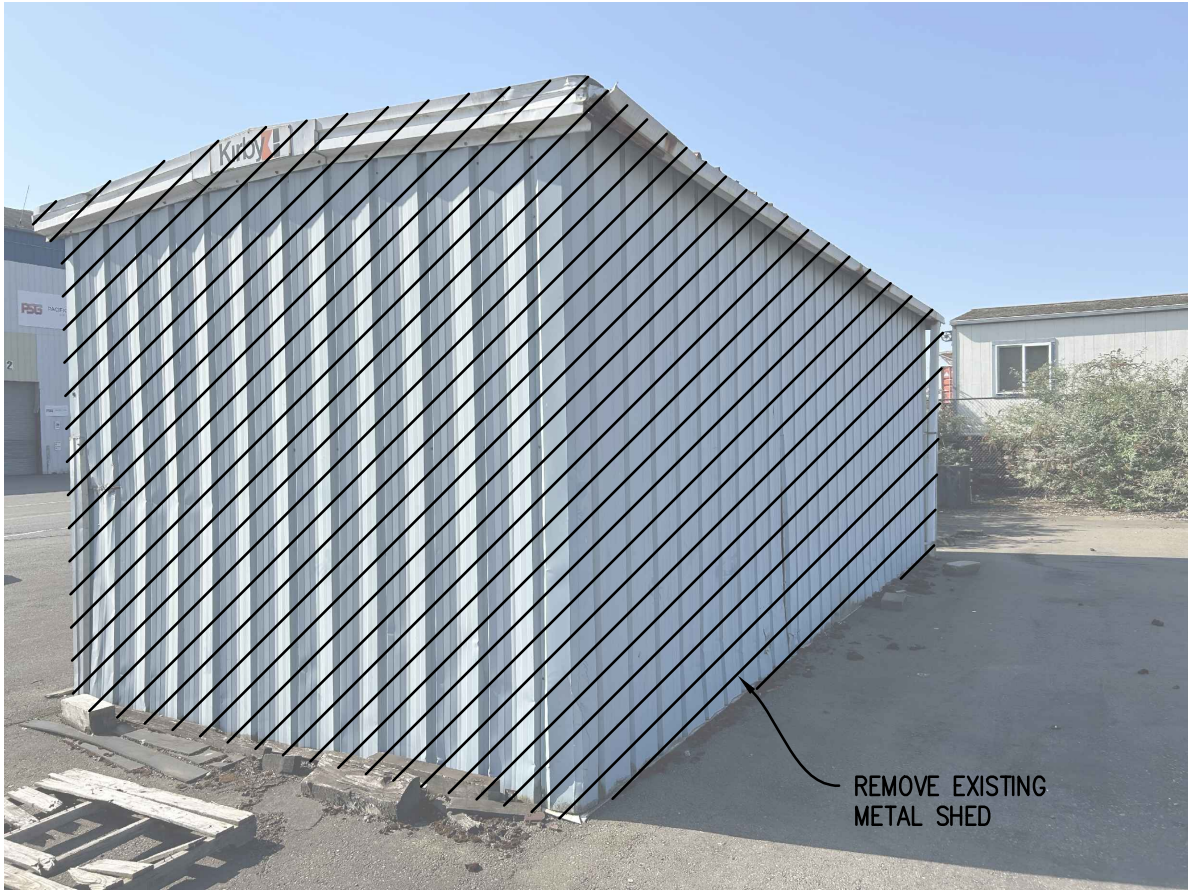
sh **sitts & hill**
CIVIL | STRUCTURAL | ARCHITECTURAL | SURVEY
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PHONE: (253) 474-9449 | www.sittshill.com

Project No.:	20,757	Project Mgr.:	DCD
Proj. Engineer:	DKM	Proj. Drafter:	DKM

C3.0 SH # 6 OF 19	EBC MOTIVE TEMPORARY POWER	APPROVED:	DCD	11/22/24	CHECKED BY	DATE	
			DKM	11/22/24	PROJ. ENGR	DATE	
			DIRECTOR				ENG. DATE
			PRINTED BY: DonDavis May 08, 2025				
TOWNSHIP: 21		RANGE: 03	SECTION: 27	CIVIL DETAILS			
DAT-HRZ: NAD83		VERT: M.W. 1983-2001 EPOCH		PARCEL: PORT PAGER 1B			
PHASE: ISSUED FOR CONST.		DRAWING SCALE: AS NOTED		TACOMA, WA 98421			
PA: POT-PA-00000068		TOWNSHIP: 21		RANGE: 03			
PROJ ID: 101686.01		DAT-HRZ: NAD83		VERT: M.W. 1983-2001 EPOCH			
PHASE: ISSUED FOR CONST.		DRAWING SCALE: AS NOTED		TACOMA, WA 98421			
P.O. BOX 1837 TACOMA, WA 98401 (253)88-5841		P.O. BOX 1837 TACOMA, WA 98401 (253)88-5841		P.O. BOX 1837 TACOMA, WA 98401 (253)88-5841			
Part of Tacoma		sitts & hill		sh			
MARK:		REVISION:	BY:	DATE:	APPR:		



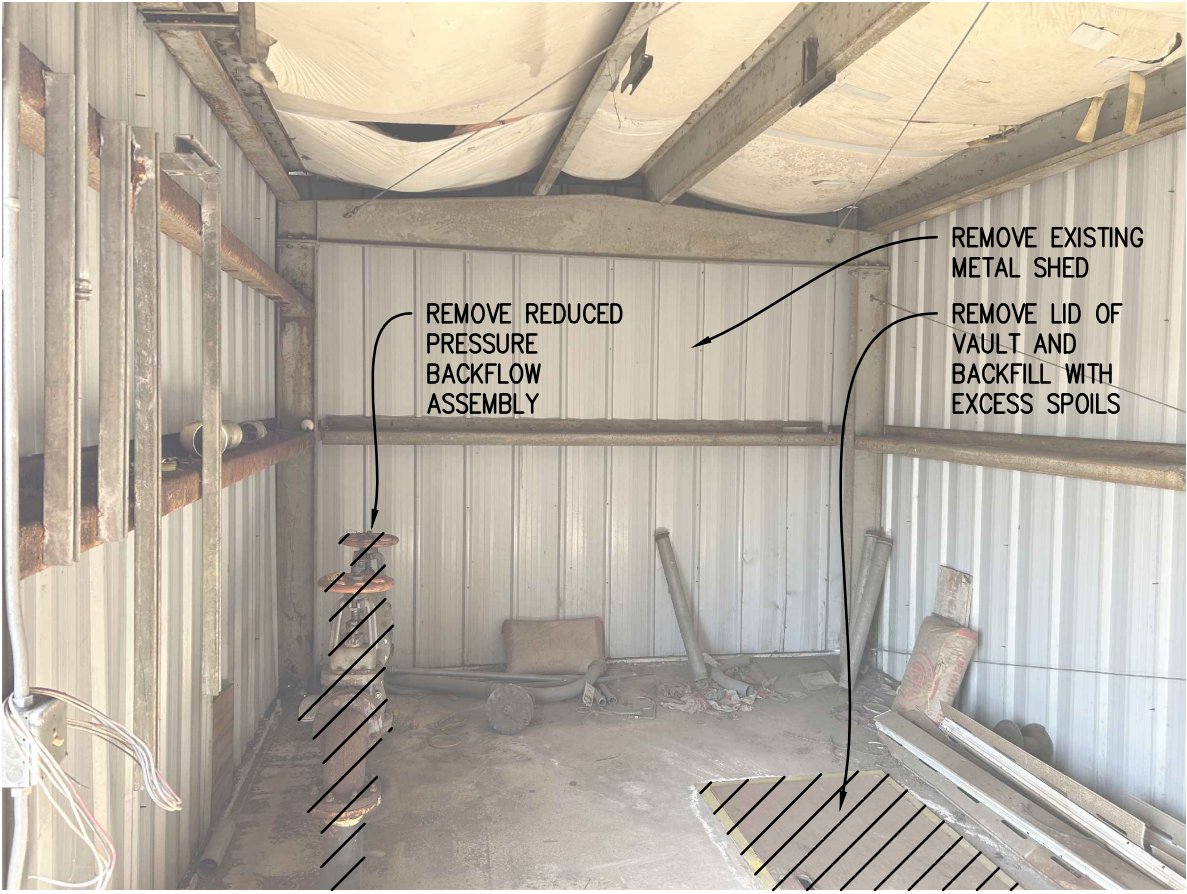
01 METAL SHED (VIEW LOOKING NORTH)
SCALE: N.T.S.



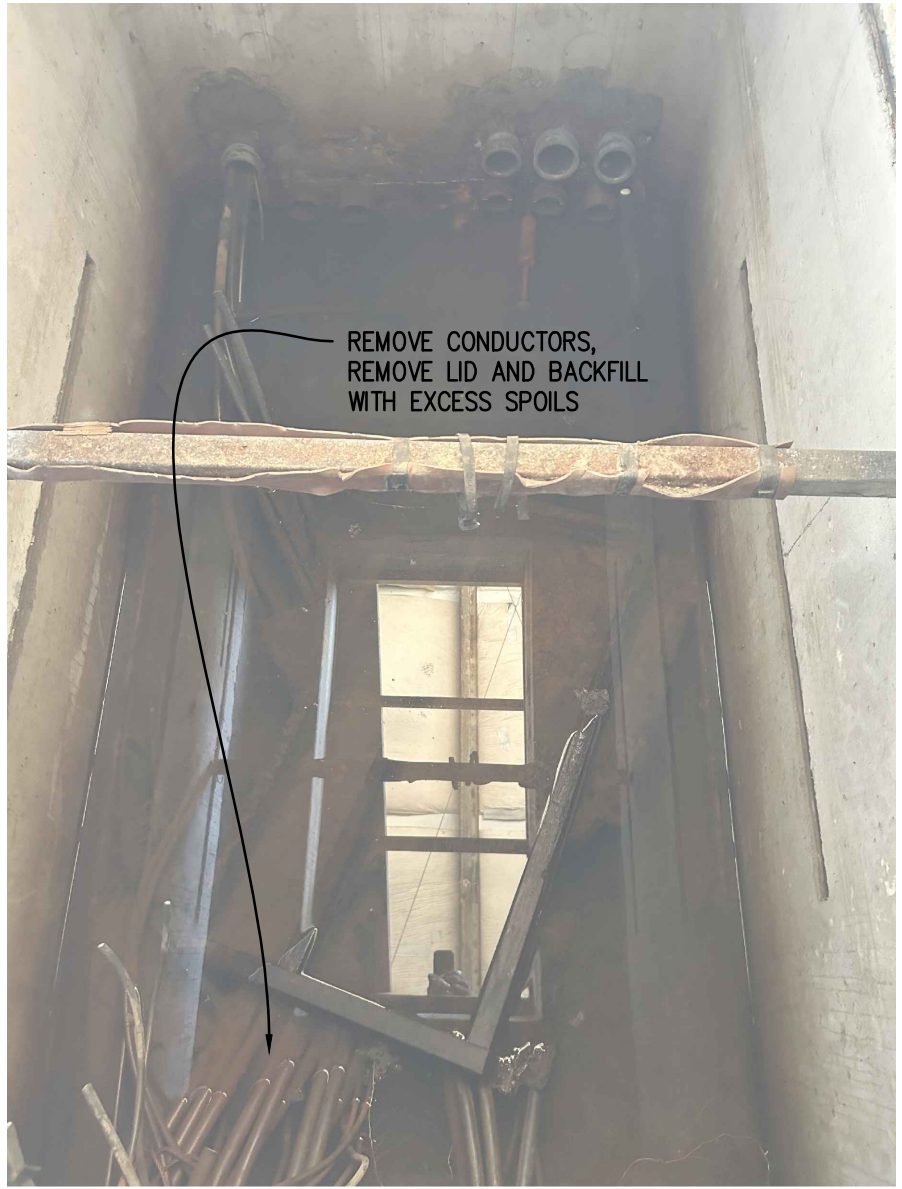
02 METAL SHED EXTERIOR (VIEW LOOKING SOUTH)
SCALE: N.T.S.



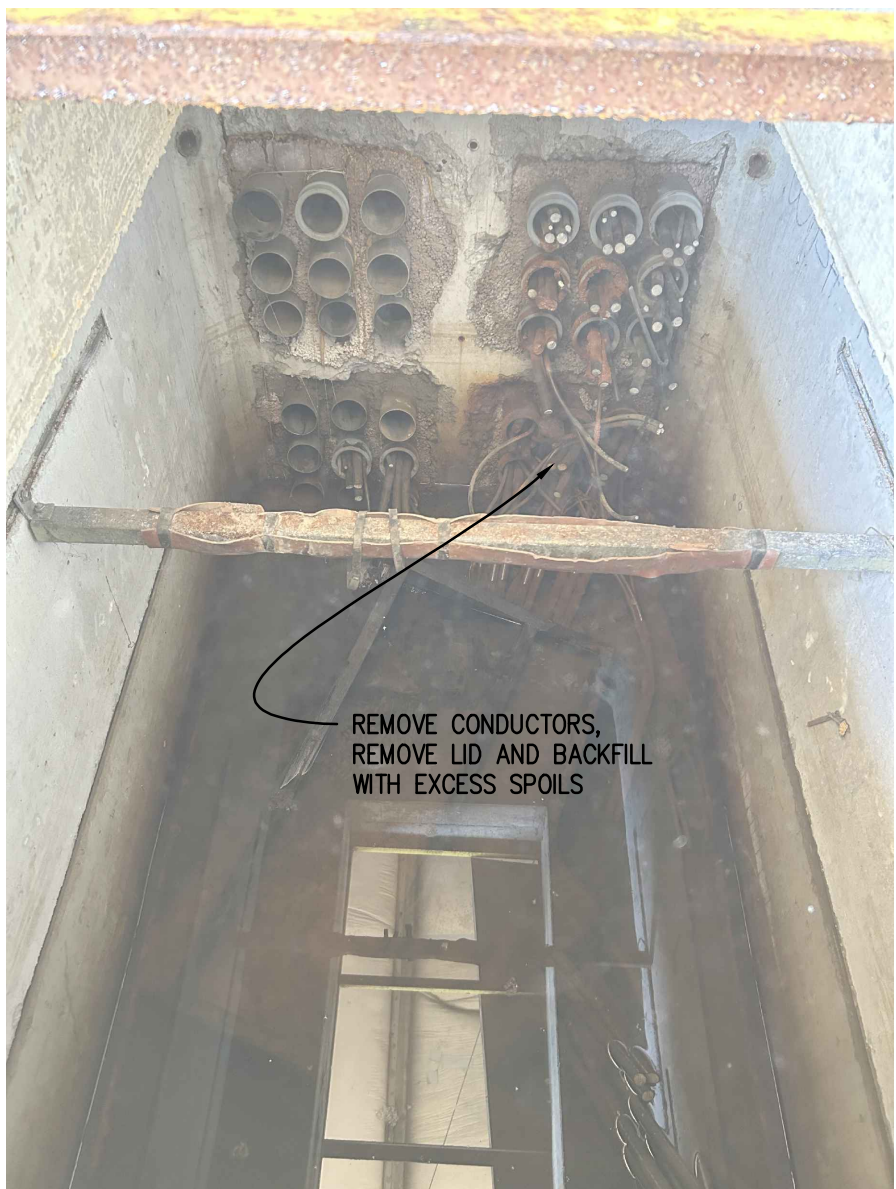
03 METAL SHED INTERIOR (VIEW LOOKING NORTHEAST)
SCALE: N.T.S.



04 METAL SHED INTERIOR (VIEW LOOKING SOUTHWEST)
SCALE: N.T.S.



05 9'x5'x6' VAULT INSIDE METAL SHED
SCALE: N.T.S.



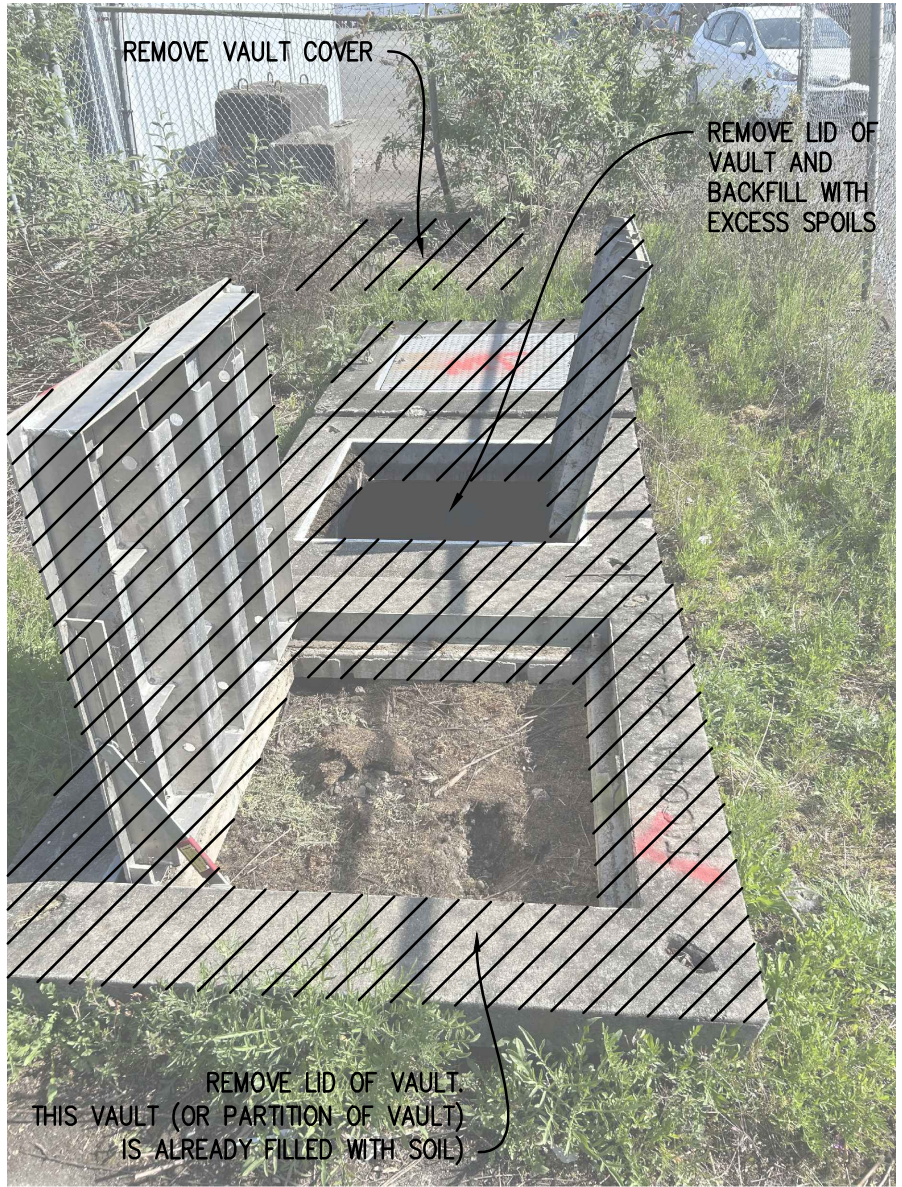
06 9'x5'x6' VAULT INSIDE METAL SHED
SCALE: N.T.S.



07 4'x4'x4' VAULT INSIDE METAL SHED
SCALE: N.T.S.



08 REDUCED PRESSURE BACKFLOW ASSEMBLY (INSIDE SHED)
SCALE: N.T.S.



09 SUBSTATION YARD EXISTING VAULTS (LOOKING N.E.)
SCALE: N.T.S.



10 9'x5'x6' EXISTING SUBSTATION VAULT
SCALE: N.T.S.



11 9'x5'x6' EXISTING SUBSTATION VAULT
SCALE: N.T.S.



12 SUBSTATION YARD EXISTING VAULTS (LOOKING WEST)
SCALE: N.T.S.



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Project No.:	20,757	Project Mgr.:	DCD
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APPROVED:	DCD	11/22/24	CHECKED BY:	DATE
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			PRINTED BY:	DonDavis May 08, 2025
			PORT ADDRESS:	802 PORT CENTER ROAD TACOMA, WA 98421

EBC MOTIVE TEMPORARY POWER			
CIVIL DETAILS			
TOWNSHIP:	21	RANGE:	03
SECTION:	27	DATE-HRZ:	NAD83
VERT:	MLW, 1983-2001 EPOCH	PORT PAGES:	1B
DRAWING SCALE:	AS NOTED	PHASE:	ISSUED FOR CONST.
PA: POT-PA-00000068			
PROJ ID:	101686.01		
SH #	7	OF	19

C4.0

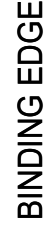
SDEV25-0024

sh sitts & hill CIVIL STRUCTURAL ARCHITECTURAL SURVEY P.O. BOX 1837 TACOMA, WA 98401 (253) 474-9449 www.sittshill.com			
MARK:	REVISION:	BY:	DATE:



C:\Users\steven.garrett\KIRKL AND OneDrive - Casne Engineering\Port of Tacoma\241038-005 POT EBC Substation\Drawings\E0.0 - Steven.garrett - LAST SAVE: 5/9/25 16:29:48 - PLOTTED: 5/9/25 21:57:18

PLAN SYMBOLS		WIRING DIAGRAM SYMBOLS			ABBREVIATIONS	
<div>GROUNDING</div> <div><div></div>GROUND CABLE CONNECTION</div> <div><div></div>GROUND ROD CONNECTION</div> <div><div></div>GROUND CABLE PIGTAIL</div> <div><div></div>GROUND CABLE (UNDERGROUND)</div> <div><div></div>EQUIPMENT/STRUCTURAL GROUND CONNECTION</div> <div>POWER</div> <div><div></div>PANELBOARD, 208Y/120V, 3 PHASE</div> <div><div></div>PANELBOARD, 480V OR 480Y/277V, 3 PHASE</div> <div><div></div>EQUIPMENT IDENTIFICATION "X" DENOTES EQUIPMENT NUMBER "Y" DENOTES HP OR AMPS</div> <div><div></div>SPECIAL PANELBOARD/ENCLOSURE (TYPE AS NOTED)</div> <div><div></div>ENCLOSED CIRCUIT BREAKER DISCONNECT (SIZE AS NOTED)</div> <div><div></div>VARIABLE SPEED MOTOR STARTER</div> <div><div></div>SOLID STATE MOTOR STARTER</div> <div><div></div>DISCONNECT SWITCH (FUSED OR UNFUSED) 30/20</div> <div><div></div>MAGNETIC MOTOR STARTER (COMBINATION)</div> <div><div></div>TRANSFORMER (SIZE AS SHOWN, IN KVA)</div> <div><div></div>JUNCTION BOX</div> <div><div></div>ESTOP SWITCH – MAINTAINED</div> <div><div></div>VAULT</div> <div><div></div>PULL BOX</div> <div><div></div>HAND HOLE</div> <div><div></div>MAN HOLE</div> <div><div></div>OFF/ON SELECTOR SWITCH CONTROL STATION</div> <div><div></div>STOP–START PUSHBUTTON CONTROL STATION</div> <div><div></div>460 VOLT MOTOR (SIZE AS NOTED)</div> <div><div></div>208 VOLT OR 240 V MOTOR (SIZE AS NOTED)</div> <div><div></div>115 VOLT MOTOR (SIZE AS NOTED)</div> <div>CONDUIT & WIRE</div> <div><div></div>CONDUIT SURFACE MOUNTED OR CONCEALED.</div> <div><div></div>CONDUIT SURFACE MOUNTED OR CONCEALED. "E" INDICATES EMERGENCY CIRCUIT.</div> <div><div></div>CONDUIT UNDERGROUND, UNDER FLOOR SLAB, OR IN CEILING SPACE OF FLOOR BELOW WITH CONDUCTORS AS ABOVE.</div> <div><div></div>CONDUIT ONLY.</div> <div><div></div>FLEXIBLE METAL CONDUIT. PROVIDE CIRCUIT CONDUCTORS REQUIRED BASED ON 60 DEGREE CELCIUS CONDUCTOR RATING.</div> <div><div></div>INDICATES PHASE CONDUCTOR (#12 OR SIZE AS NOTED) INDICATES NEUTRAL CONDUCTOR (#12 OR SIZE AS NOTED) INDICATES GROUND CONDUCTOR (#12 OR SIZE AS NOTED) INDICATES ISOLATED GREEN GROUND CONDUCTOR (#12 OR SIZE AS NOTED)</div> <div><div></div>HOMERUN W/7#10 SHOWING CIRCUIT SOURCE (PANEL/PANEL POSITION)</div> <div><div></div>HOMERUN W/CIRCUIT SOURCE & CONDUIT & WIRE SIZE NOTED 1B2–8/1,3,5 1–1/2" C, 3#2+2#2/ON+2#8G</div>		<div>SINGLE LINE</div> <div><div></div>TRANSFORMER (DASHED LINE INDICATES ELECTROSTATIC SHIELD)</div> <div><div></div>SURGE ARRESTER</div> <div><div></div>CIRCUIT BREAKER (DRAW–OUT TYPE)</div> <div><div></div>POTENTIAL TRANSFORMER QUANTITY & RATIO AS SHOWN</div> <div><div></div>CURRENT TRANSFORMER QUANTITY & RATIO AS SHOWN</div> <div><div></div>AMMETER w/SWITCH</div> <div><div></div>VOLTMETER w/SWITCH</div> <div><div></div>WATTHOUR METER</div> <div><div></div>480V OR 480Y/277V PANELBOARD (RATINGS AS NOTED)</div> <div><div></div>208V OR 208Y/120V PANELBOARD (RATINGS AS NOTED)</div> <div>COMBINATION STARTER</div> <div><div></div>CONTROLLER OR MCC CUBICLE NUMBER</div> <div><div></div>STARTER SIZE</div> <div><div></div>POWER FACTOR CORRECTION CAPACITOR (IF REQUIRED)</div> <div><div></div>MOTOR HORSEPOWER</div> <div><div></div>THERMO MAGNETIC CIRCUIT BREAKER</div> <div><div></div>MAGNETIC ONLY CIRCUIT BREAKER</div> <div>SINGLE LINE</div> <div><div></div>FUSED SWITCH</div> <div><div></div>M.V. DISCONNECT SWITCH</div> <div><div></div>(NF OPTION) L.V. DISCONNECT SWITCH 60 NF (NON FUSED) SWITCH RATING</div> <div><div></div>INTERLOCK K=KEY M=MECHANICAL E=ELECTRICAL</div> <div><div></div>FEEDER TYPE DESIGNATION</div> <div><div></div>AVAILABLE FAULT CURRENT (CLOSED TRANSITION/NORMAL)</div> <div><div></div>EQUIPMENT AIC RATING</div> <div><div></div>APPROXIMATE FEEDER LENGTH IN FEET TO BE CONFIRMED LATER.</div> <div>VFD</div> <div><div></div>VFD</div> <div><div></div>HP</div>		<div>SCHEMATIC</div> <div><div></div>DISCONNECT SWITCH</div> <div><div></div>FUSE</div> <div><div></div>CIRCUIT BREAKER</div> <div><div></div>TRANSFORMER</div> <div><div></div>GROUND CONNECTION</div> <div><div></div>PILOT LIGHT * INDICATES COLOR</div> <div>AF AFF AHU AL AT AWG BKR C CMCS CO CT CU DED DWG EF EMT EUSERC FVNR GFCI GND GRC HP IMC kcMIL LV M.BKR. MCC MLO NEC N/A NC NO PH PNL PT PVC SWBD SWGR ST TBD THHN THWN TP TPU T/S UG VFD WP XFMR XHHW XP</div> <div>FRAME RATING IN AMPS ABOVE FINISHED FLOOR AIR HANDLING UNIT ALUMINUM TRIP RATING IN AMPS AMERICAN WIRE GAUGE CIRCUIT BREAKER CONDUIT CENTRAL MANAGEMENT CONTROL SYSTEM CONDUIT ONLY CURRENT TRANSFORMER COPPER DEDICATED DRAWING EXHAUST FAN ELECTRICAL METALLIC TUBING ELECTRIC UTILITY SERVICE EQUIPMENT REQUIREMENTS COMMITTEE FULL VOLTAGE, NON–REVERSING GROUND FAULT INTERRUPTER GROUND GALVANIZED RIGID (CONDUIT) HORSEPOWER INTERMEDIATE METAL CONDUIT THOUSAND CIRCULAR MILS LOW VOLTAGE MAIN BREAKER MOTOR CONTROL CENTER MAIN LUGS ONLY NATIONAL ELECTRICAL CODE NOT APPLICABLE NORMALLY CLOSED NORMALLY OPEN PHASE PANEL POTENTIAL (VOLTAGE) TRANSFORMER POLY–VINYL CHLORIDE (CONDUIT) SWITCHBOARD SWITCHGEAR SHUNT TRIP TO BE DETERMINED WIRE INSULATION TYPE WIRE INSULATION TYPE TACOMA POWER TACOMA PUBLIC UTILITIES TWISTED & SHIELDED UNDERGROUND VARIABLE FREQUENCY DRIVE WEATHER PROTECTED TRANSFORMER WIRE INSULATION TYPE EXPLOSION–PROOF</div>		
ISSUE FOR BID MAY 9, 2025		<div>CASNEEngineering 3545 FACTORIA BOULEVARD SE, SUITE 200 BELLEVUE, WA 98006 (425) 522-1000 WWW.CASNE.COM</div> <div>MARK: REVISION: BY: APPR: DATE:</div>		<div>CEC 04/8/25 CHECKED BY: DATE AA 04/8/25 DIRECTOR ENG. DATE PROJ. ENGR DATE PRINTED BY: steven.garrett May 09, 2025 PORT ADDRESS: 401 East Alexander Ave TACOMA, WA 98421</div> <div>EBC MOTIVE TEMPORARY POWER ELECTRICAL LEGENDS & SYMBOLS TOWNSHIP: 21 RANGE: 03 SECTION: 27 PROJ. ID: 101686.01 DAT–HRZ: - NAD83 VERT: MLW, 1983–2001 EPOCH PARCEL: PORT PARCEL 1B DRAWING SCALE: AS NOTED</div> <div>6709 E0.0 SH# 8 OF 19</div> <div>PA: POT–PA–0000000068 PROJ. ID: 101686.01 PHASE: ISSUE FOR BID</div>		



LEGEND:

1. REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS.

GENERAL NOTES:

1. REFER TO PROJECT SPECIFICATIONS FOR GENERAL ELECTRICAL NOTES.
2. COORDINATE ALL SHUT-DOWN AND REMOVAL WORK WITH THE PORT OF TACOMA.
3. WORK IDENTIFIED UNDER "PORT CONSTRUCTION NOTES" TO BE PERFORMED UNDER PORT OF TACOMA CONTRACT. WORK IDENTIFIED UNDER "MOTIVE CONSTRUCTION NOTES" TO BE PERFORMED UNDER MOTIVE MARINE CONTRACT.

PORT CONSTRUCTION NOTES:

- 1> PROVIDE AND INSTALL UNDERGROUND CONDUIT FITTINGS, AND SUPPORTS. CONDUCTORS PROVIDED BY OTHERS.
- 2> PROVIDE AND INSTALL ELECTRICAL VAULT. REFER TO DRAWING E11.2T FOR DETAILS.
- 3> PROVIDE TPU 774 VAULT WITH COVER#2 FOR TEMPORARY TPU TRANSFORMER. COORDINATE SIZE, LOCATION AND INSTALLATION OF LID AND TRANSFORMER WITH TPU. REFER TO DRAWING E11.4T FOR TPU STANDARDS.
- 4> PROVIDE SERVICE CONDUIT ONLY, INSTALLED PER TACOMA POWER STANDARD C-UG-1100. COORDINATE INSTALLATION WITH UTILITY.
- 5> POLE TO BE PROVIDED BY TPU. PROVIDE RISER CONDUIT UP POLE, EXTENDING UNDERGROUND CONDUIT TO TRANSFORMER VAULT. REFER TO DRAWING E11.3T DETAIL 4.
- 6> PROVIDE AND INSTALL 4" CONDUIT PER TACOMA PUBLIC UTILITY C-UG-1100 STANDARD FOR MEDIUM VOLTAGE TRANSFORMER PRIMARY.
- 7> PROVIDE CONDUIT ONLY FROM FUTURE DISCONNECT/METERING LOCATION TO FUTURE MODULAR LOCATION, FOLLOWING SANITARY SEWER TRENCH. PROVIDE PULL STRING IN CONDUIT AND CAP FOR FUTURE USE.
- 8> PROVIDE AND INSTALL DISTRIBUTION POLE FOR FUTURE TEMPORARY SERVICE TO MODULAR BUILDINGS.

MOTIVE CONSTRUCTION NOTES:

- 9 PROVIDE CONDUCTORS IN UNDERGROUND CONDUIT. CONDUIT PROVIDED BY OTHERS.
- 10 PROVIDE AND INSTALL 480V TEMPORARY SERVICE CT ENCLOSURE, METER BASE AND FUSED DISCONNECT ON UTILITY RACK. SEE DRAWING E10.4T FOR UTILITY RACK DETAIL.
- 11 PROVIDE AND INSTALL 480/277V PANEL FOR BUILDING SERVICE.
- 12 PROVIDE SERVICE CONDUCTORS IN CONDUIT, INSTALLED PER TACOMA POWER STANDARD C-UG-1100. COORDINATE INSTALLATION WITH UTILITY.

ISSUE FOR BID
MAY 9, 2025



CASNEEngineering
3545 FACTORIA BOULEVARD SE., SUITE 200
BELLEVUE, WA 98006
(425) 522-1000 WWW.CASNE.COM JOB NO. 2410



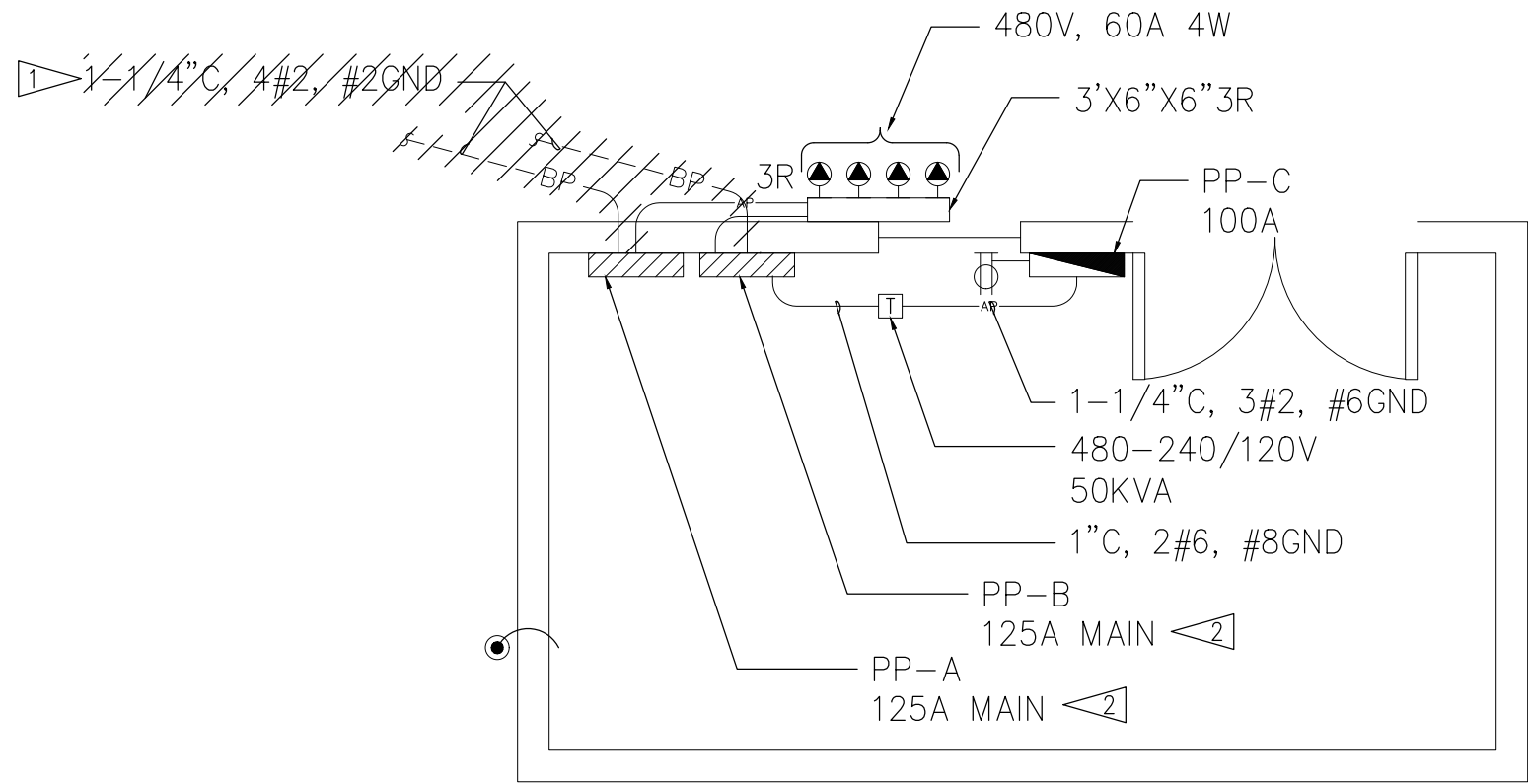
APPROVED:	CEC 04/8/25
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	AA 04/8/25
DIRECTOR ENG. DATE	PROJ. ENGR DATE
	PRINTED BY: steven.garrett May 09, 2025
	PORT ADDRESS: 401 East Alexander Ave
	TACOMA, WA 98421

EBC MOTIVE TEMPORARY POWER

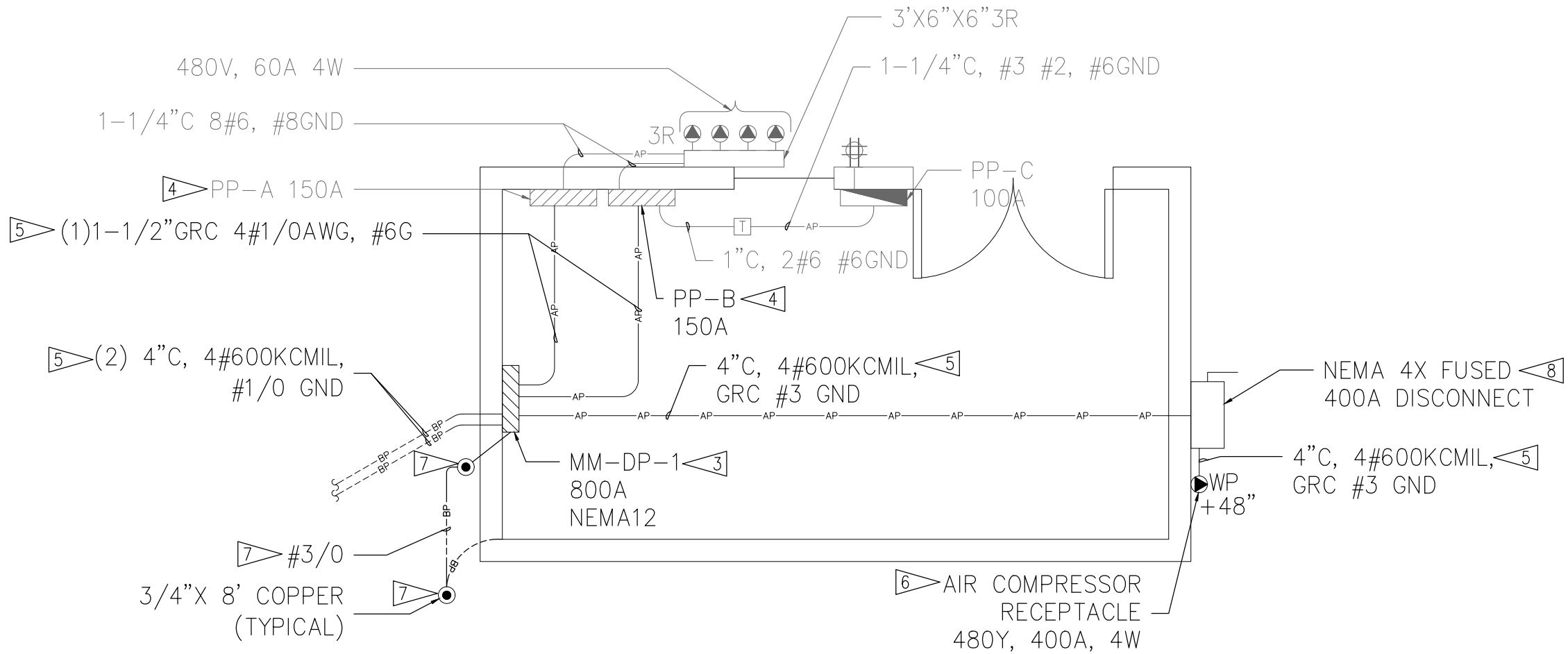
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SH# 10 OF 19

PA: POT-PA-000000068	TOWNSHIP: 21	RANGE: 03	SECTION: 27
PROJ. ID: 101686.01	DAT-HRZ: , NAD83	VERT: MLW, 1983-2001	EPOCH
PHASE: ISSUE FOR BID	PARCEL: ----	DRAWING SCALE: AS NOTED	



1 SERVICE BUILDING 480V PLAN-REMOVAL
E4.0T SCALE: 1/4" = 1'-0"



2 SERVICE BUILDING 480V PLAN
E4.0T SCALE: 1/4" = 1'-0"

LEGEND:

1. REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS

480V 3Ø PANELBOARD

240/120V 1Ø PANEL

TRANSFORMER

480V SPECIALTY RECEPTACLE

120V DUPLEX RECEPTACLE

120V QUADPLEX RECEPTACLE

GROUNDING ROD

GENERAL NOTES:

1. REFER TO PROJECT SPECIFICATIONS FOR GENERAL ELECTRICAL NOTES.
2. REFER TO DRAWINGS E1.0TR FOR SITE PLAN REMOVAL AND E1.0T FOR SITE PLAN.
3. "PORT CONSTRUCTION NOTES" APPLY TO WORK TO BE PERFORMED UNDER THE PORT OF TACOMA CONTRACT.
4. "MOTIVE CONSTRUCTION NOTES" APPLY TO WORK TO BE PERFORMED UNDER THE MOTIVE MARINE CONTRACT.

PORT CONSTRUCTION NOTES:

1. NO WORK SHOWN.

MOTIVE CONSTRUCTION NOTES:

1. REMOVE ELECTRICAL FEEDERS TO BUILDING ONCE NEW 800A SERVICE MM-DP-1 IS ENERGIZED.
2. REMOVE 125A MAIN BREAKER TO MAKE SPACE FOR 150A MAIN BREAKER.
3. PROVIDE AND INSTALL PANEL MM-DP-1.
4. PROVIDE AND INSTALL NEW 150A MAIN BREAKERS AT PP-A AND PP-B.
5. PROVIDE AND INSTALL CONDUIT, BOXES, FITTINGS, SUPPORTS AND CONDUCTORS.
6. PROVIDE 400A 480V 4W RECEPTACLE FOR AIR COMPRESSOR.
7. PROVIDE SUPPLEMENTAL GROUND ROD AND #3/0 GROUND ELECTRODE AT BUILDING SERVICE.
8. PROVIDE NEMA 4X FUSED DISCONNECT SIZED AS SHOWN.

6709

E4.0T

SH# 11 OF 19

PA: POT-PA-00000068
PROJ. ID: 101686.01
PHASE: ISSUE FOR BID

TOWNSHIP: 21
RANGE: 03
SECTION: 27
DAT-HRZ: NAD83
PARCEL: ---

DRAWING SCALE: AS NOTED

EBC MOTIVE TEMPORARY POWER

MOTIVE MARINE SERVICE BLDG. ENLARGED PLAN

TOWNSHIP: 21
RANGE: 03
SECTION: 27
DAT-HRZ: NAD83
PARCEL: ---

APPROVED:

CHECKED BY: CEC 04/8/25

DATE: AA 04/8/25

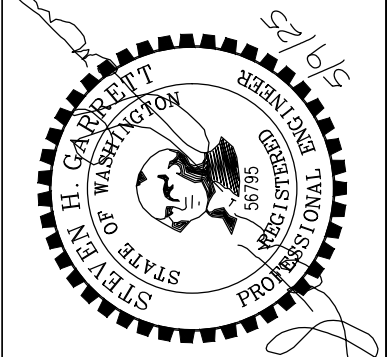
PROJ. ENGR: steven.garrett

DATE: May 09, 2025

PRINTED BY: steven.garrett

PORT ADDRESS: 401 East Alexander Ave

TACOMA, WA 98421



Port of Tacoma
P.O. BOX 1837 TACOMA, WA 98401 (253) 855-5441

Casne Engineering

3545 FACTORIA BOULEVARD SE, SUITE 200
BELLEVUE, WA 98006
(425) 522-1000 WWW.CASNE.COM

MARK:

REVISION:

BY:

DATE:

APPR:

DATE:

ISSUE FOR BID
MAY 9, 2025



1. REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS.

1. REFER TO PROJECT SPECIFICATIONS FOR
GENERAL ELECTRICAL NOTES.

2. "PORT CONSTRUCTION NOTES" APPLY TO WORK TO BE PERFORMED UNDER THE PORT OF TACOMA CONTRACT.
3. "MOTIVE CONSTRUCTION NOTES" APPLY TO WORK TO BE PERFORMED UNDER THE MOTIVE MARINE CONTRACT.

1 PROVIDE SERVICE CONDUIT PER TACOMA
PUBLIC UTILITY STANDARDS. COORDINATE
INSTALLATION WITH TACOMA PUBLIC UTILITIES.

- 2> PROVIDE CONDUIT ONLY. CONDUCTORS PROVIDED BY OTHERS.
- 3> COORDINATE INSTALLATION OF TRANSFORMER WITH TACOMA POWER.
- 4> CONDUCTORS PROVIDED BY TACOMA POWER.

5 PROVIDE CONDUCTORS IN CONDUIT PER
TACOMA PUBLIC UTILITY STANDARDS.
COORDINATE INSTALLATION WITH TACOMA
PUBLIC UTILITIES.

6. PROVIDE NEMA 3R SERVICE ENTRANCE RATED FUSED DISCONNECT WITH CLASS L 800A FUSES.
7. PROVIDE PANELBOARD WITH RATINGS AS SHOWN, PER SPECIFICATION 26-24-16. SEE PANEL SCHEDULE ON E10.2 FOR DETAILS.
8. PROVIDE UTILITY INSTRUMENT METERING SOCKET AND 800A CT ENCLOSURE PER TACOMA PUBLIC UTILITIES STANDARD.
9. EXISTING PANEL TO BE RE-FED FROM NEW SOURCE. PROVIDE 150A MAIN BREAKER IN PLACE OF EXISTING 125A.
10. PROVIDE CONDUCTORS AS SHOWN. CONDUIT PROVIDED BY OTHERS.
11. PROVIDE CONDUCTORS, CONDUITS, FITTINGS, SUPPORTS AND ANCILLARY HARDWARE.
12. PROVIDE SERVICE GROUND RODS, GROUNDING ELECTRODE CONDUCTOR, AND BONDING HARDWARE.
13. PROVIDE NEMA 4X FUSED DISCONNECT WITH RATINGS AS SHOWN.
14. PROVIDE 400A RECEPTACLE. COORDINATE RECEPTACLE TYPE WITH MOTIVE POWER MARINE.

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CASNE Engineering
3545 FACTORIA BOULEVARD SE., SUITE 200
BELLEVUE, WA 98006
(425) 522-1000 WWW.CASNE.COM JOB NO. 2410

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PRINTED BY: steven.garrett May 09, 2025
PORT ADDRESS: 401 East Alexander Ave
TACOMA, WA 98421

EBC MOTIVE TEMPORARY POWER

TEMPORARY ELECTRICAL ONE-LINE DIAGRAM

TOWNSHIP: 21	RANGE: 03	SECTION: 27
DAT-HRZ: . NAD83	VERT: MLW, 1983-2001	EPOCH
PARCEL: PORT PARCEL 1B	DRAWING SCALE: AS NOTED	

6709
E10.0T
SH# 12 OF 19

PA:	POT-PA-000000068
PROJ. ID:	101686.01

PHASE: ISSUE FOR BID

MM-DP-1																																
VOLTS: 480/277V PH & WIRE: 3Ø, 4W BUS RATING: 800 Amp				MAIN BREAKER: 800A 100% Rtd PANEL AIC RATING: 65 kA FED FROM: MDS-1				FEEDER CONDUCTORS: (2) sets 4 #600, 1/0 G MOUNTING: SURFACE ENCLOSURE: NEMA 12				SURGE PROTECTOR: NO ACCESSORIES:				INSTALL DATE: TBD REV. VERSION: ORIGINAL REV. DATE: 10/8/2024																
CKT. #	BKR. AMPS	BKR. POLES	WIRE SIZE	CIRCUIT DESCRIPTION	LOAD TYPE	LOAD (KVA)	NOTES	CKT. #	CIRCUIT PHASE			CKT. #	BKR. AMPS	POLES	WIRE SIZE	CIRCUIT DESCRIPTION	LOAD TYPE	LOAD (KVA)	NOTES	CKT. #												
									A	B	C																					
1	150	3		Power Skid - (2) 45KVA 3ph & (1) 5KVA 1ph	1	26.5		1				2	100	2		SPARE	G			2												
3	/	/			1	26.5		3				4	/	/		-	G			4												
5	/	/			1	24		5				6	-	-		SPACE	G			6												
7	150	3		Power Skid - (3) 45KVA XFMRs	1	36		7				8	125	3		SPARE	G			8												
9	/	/			1	36		9				10	/	/		-	G			10												
11	/	/			1	36		11				12	/	/		-	G			12												
13	400	3		COMPRESSOR - 270HP	1	99	1	13				14	150	3		SPARE	G			14												
15	/	/		-	1	99	1	15				16	/	/		-	G			16												
17	/	/		-	1	99	1	17				18	/	/		-	G			18												
19	200	3		SPARE	G			19				20	100	3		SPARE	G			20												
21	/	/		-	G			21				22	/	/		-	G			22												
23	/	/		-	G			23				24	/	/		-	G			24												
NOTES: 1) SOLID STATE TRIP UNIT WITH ADJUSTABLE LT,ST,AND INST PROTECTION.					CONNECTED LOAD SUBTOTAL (PER PHASE)				161	161	159	(KVA)	NEW LOAD WORKSHEET																			
									583	583	574	(AMPS)																				
					TOTAL CONNECTED LOAD				481.80				3Ø	LOAD (KVA)	METERED DATA COLLECTION NOTES:																	
									580				3Ø	LOAD (AMPS)																		
					TOTAL DEMAND LOAD				481.80				3Ø	LOAD (KVA)																		
									580				3Ø	LOAD (AMPS)																		
					METERED LOAD (PER PHASE)				0	0	0	(KVA)																				
												(AMPS)																				
					Available Fault Current:				0.00				3Ø	LOAD (KVA)																		
									0				3Ø	LOAD (AMPS)																		
Date of Calculation:													SUBTRACTED LOAD:											0.00	(KVA)							
													ADDED LOAD:											0.00	(KVA)							
													125% METERED LOAD:									0.00	(KVA)									
													TOTAL EXPECTED LOAD:									0.00	(KVA)									
													TOTAL EXPECTED LOAD:									0	(AMPS)									

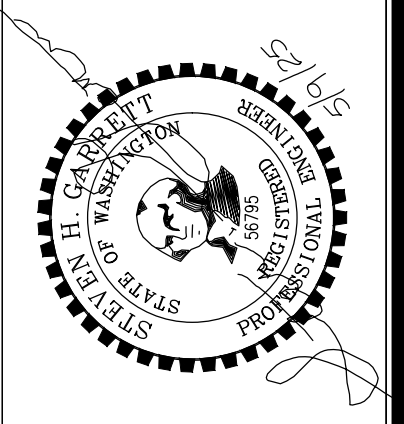
LEGEND:

1. REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS

GENERAL NOTES:

1. REFER TO PROJECT SPECIFICATIONS FOR GENERAL ELECTRICAL NOTES.

ISSUE FOR BID
MAY 9, 2025



APPROVED:

CEC 04/8/25

CHECKED BY: DATE

AA 04/8/25

DIRECTOR ENG. DATE

PROJ. ENGR DATE

PRINTED BY: steven.garrett May 09, 2025

PORT ADDRESS:401 East Alexander Ave

TACOMA, WA 98421

EBC MOTIVE TEMPORARY POWER

MM-DP-1 PANEL SCHEDULE

TOWNSHIP: 21 RANGE: 03 SECTION: 27

DAT—HRZ: . NAD83 VERT: M.L.W, 1983—2001 EPOCH

PARCEL: PORT PARCEL 1B DRAWING SCALE: AS NOTED

6709

E10.2

SH# 13 OF 19

PA: POT—PA—000000068

PROJ. ID: 101686.01

PHASE: ISSUE FOR BID

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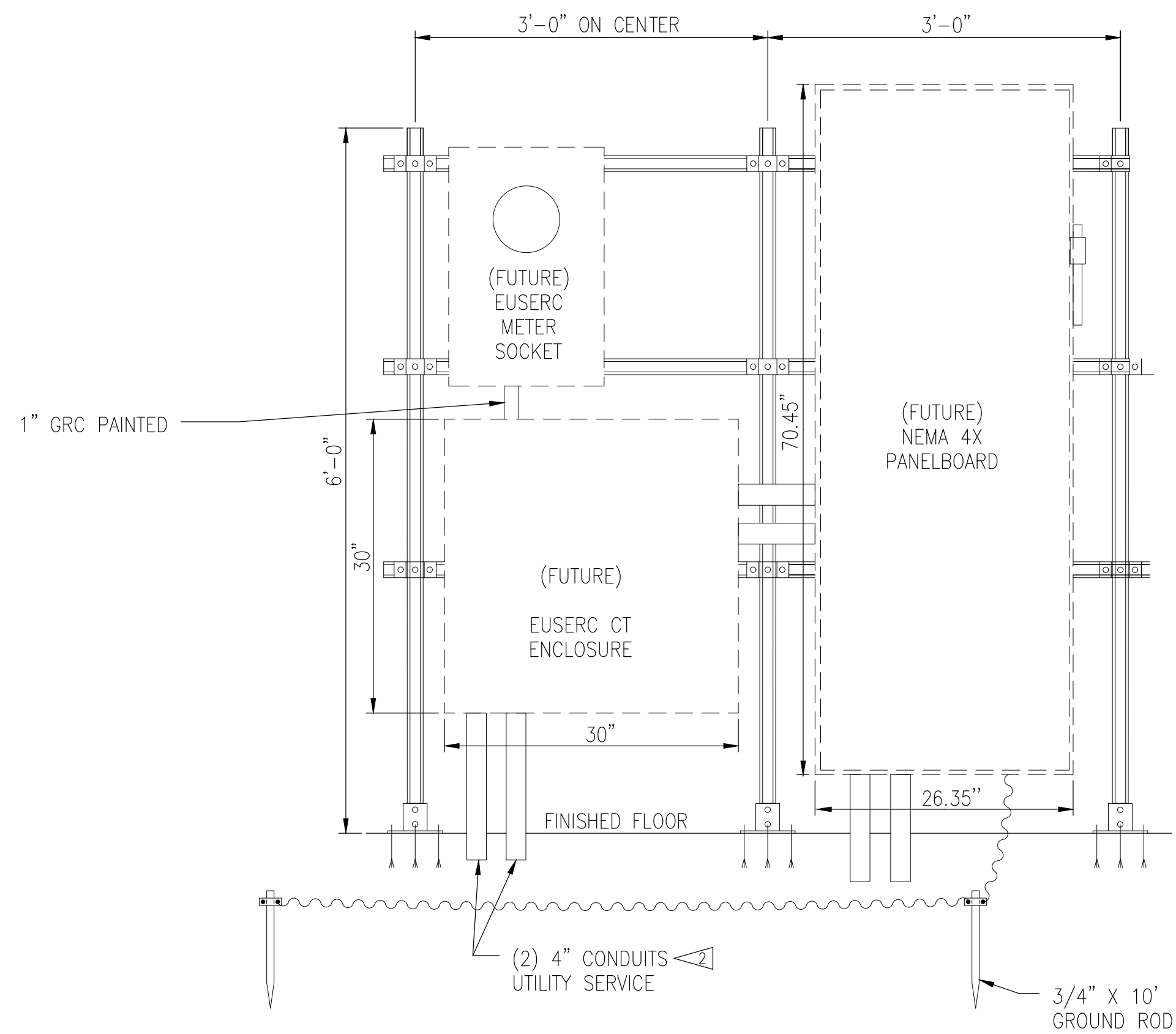
BELLEUE, WA 98006

WWW.CASNE.COM JOB NO. 241038-005

P.O. BOX 1837 TACOMA, WA 98401 (253)883-5841

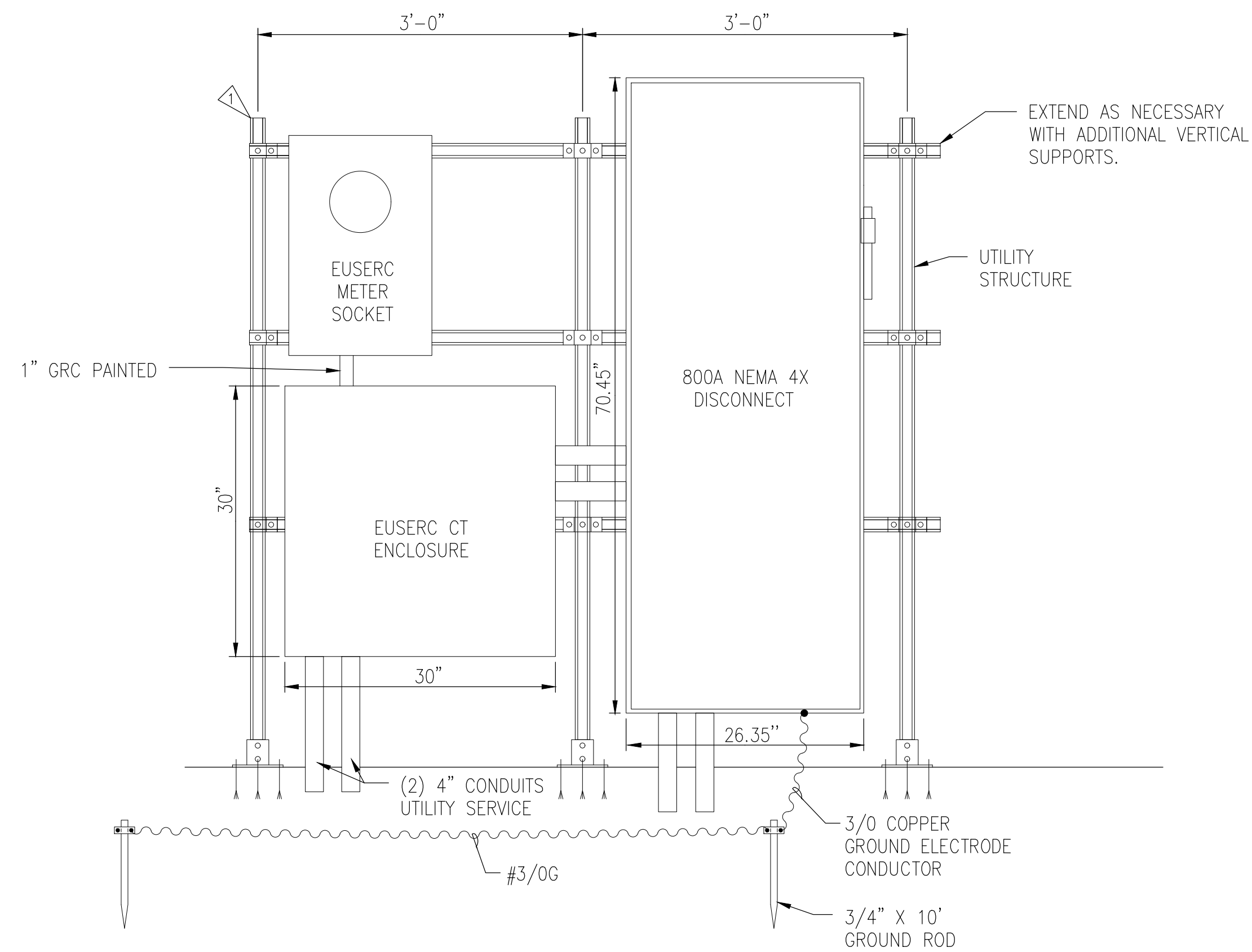
MARK: REVISION: BY: APPR: DATE:





FUTURE TEMPORARY SERVICE
MOUNTING DETAIL

SCALE: 1"=1'-0"



MOTIVE TEMPORARY SERVICE
MOUNTING DETAIL

SCALE: 1"=1'-0"

LEGEND:

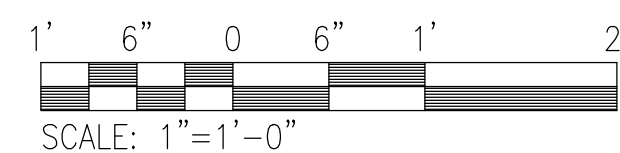
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GENERAL NOTES:

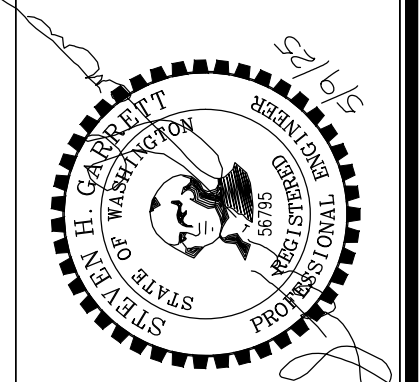
1. REFER TO PROJECT SPECIFICATIONS FOR GENERAL ELECTRICAL NOTES.
2. "PORT CONSTRUCTION NOTES" APPLY TO WORK TO BE PERFORMED UNDER THE PORT OF TACOMA CONTRACT.
3. "MOTIVE CONSTRUCTION NOTES" APPLY TO WORK TO BE PERFORMED UNDER THE MOTIVE MARINE CONTRACT.

MOTIVE CONSTRUCTION NOTES:

- 1 PROVIDE GREEN PAINTED C-CHANNEL
STRUT RACK WITH EQUIPMENT AS SHOWN.
REFER TO ONE-LINE DIAGRAM E10.0T FOR
EQUIPMENT DETAILS. REFER TO CIVIL
DRAWINGS FOR RACK DETAILS.
- 2 PROVIDE CONDUIT ONLY FOR FUTURE
SERVICE.



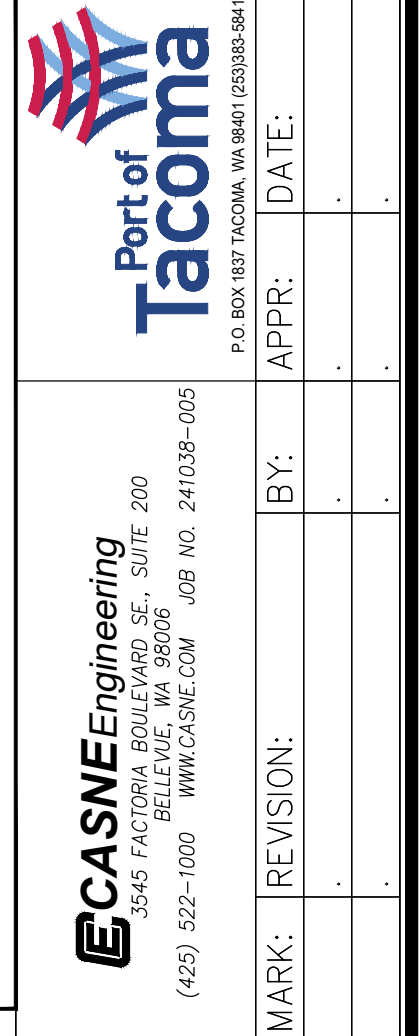
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MAY 9, 2025

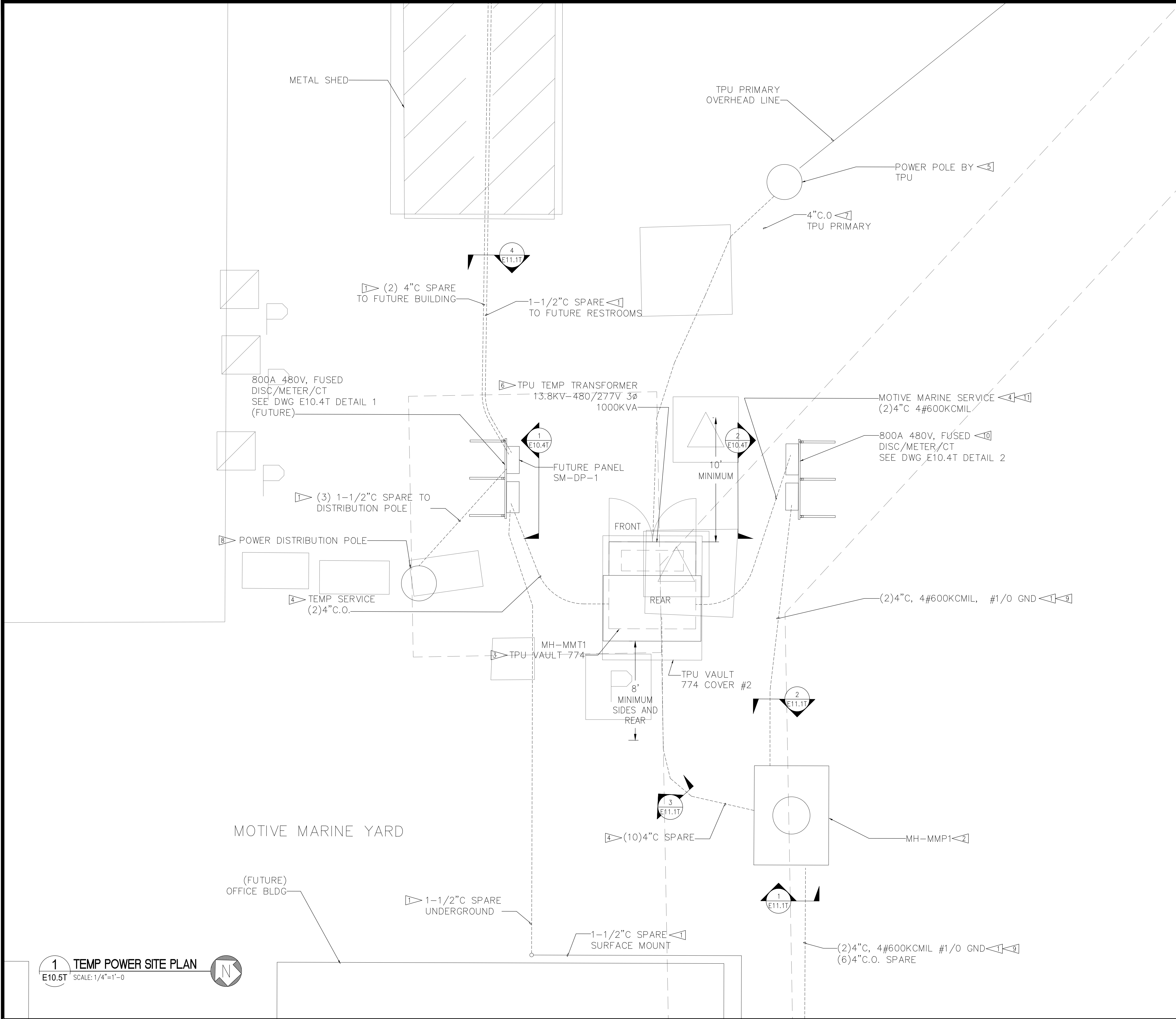


APPROVED:	CEC 04/8/25
DIRECTOR ENG. DATE	AA 04/8/25
PROJECT ENG. DATE	May 09, 2025
PRINTED BY:	stevan.garrett
REPORT ADDRESS:	401 East Alexander Ave TACOMA, WA 98421

EBC MOTIVE TEMPORARY POWER

6709	E10.4T	SH# 14 OF 19	PA: POT-PA-0000000068	PROJ. ID: 101686.01	PHASE: ISSUE FOR BID
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LEGEND:

1. REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS.

GENERAL NOTES:

1. REFER TO PROJECT SPECIFICATIONS FOR GENERAL ELECTRICAL NOTES.
2. COORDINATE ALL SHUT-DOWN AND REMOVAL WORK WITH THE PORT OF TACOMA.
3. WORK IDENTIFIED UNDER "PORT CONSTRUCTION NOTES" TO BE PERFORMED UNDER PORT OF TACOMA CONTRACT. WORK IDENTIFIED UNDER "MOTIVE CONSTRUCTION NOTES" TO BE PERFORMED UNDER MOTIVE MARINE CONTRACT.

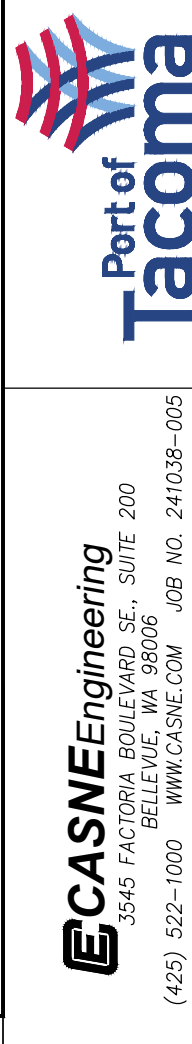
PORT CONSTRUCTION NOTES:

1. PROVIDE AND INSTALL UNDERGROUND CONDUIT FITTINGS, AND SUPPORTS. CONDUCTORS PROVIDED BY OTHERS.
2. PROVIDE AND INSTALL UTILITY VAULT. REFER TO DRAWING E11.2T FOR DETAILS.
3. PROVIDE TPU 774 VAULT WITH COVER#2 FOR TEMPORARY TPU TRANSFORMER. COORDINATE SIZE, LOCATION AND INSTALLATION OF LID AND TRANSFORMER WITH TPU. REFER TO DRAWING E11.4T FOR TPU STANDARDS.
4. PROVIDE SERVICE CONDUIT ONLY, INSTALLED PER TACOMA POWER STANDARD C-UG-1100. COORDINATE INSTALLATION WITH UTILITY.
5. POLE TO BE PROVIDED BY TPU. PROVIDE RISER CONDUIT UP POLE, EXTENDING UNDERGROUND CONDUIT TO TRANSFORMER VAULT. REFER TO DRAWING E11.3T DETAIL 4.
6. TRANSFORMER PROVIDED AND INSTALLED BY TACOMA PUBLIC UTILITIES.
7. PROVIDE AND INSTALL 4" CONDUIT PER TACOMA PUBLIC UTILITY STANDARD FOR MEDIUM VOLTAGE TRANSFORMER PRIMARY
8. PROVIDE AND INSTALL DISTRIBUTION POLE.

MOTIVE CONSTRUCTION NOTES:

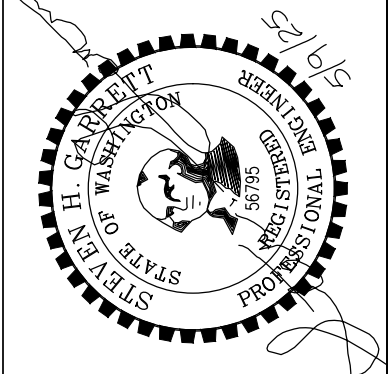
9. PROVIDE CONDUCTORS IN UNDERGROUND CONDUIT. CONDUIT PROVIDED BY OTHERS.
10. PROVIDE AND INSTALL 480V TEMPORARY SERVICE CT ENCLOSURE, METER BASE AND FUSED DISCONNECT ON UTILITY RACK. SEE DRAWING E10.4T FOR UTILITY RACK DETAIL.
11. PROVIDE SERVICE CONDUCTORS IN CONDUIT, INSTALLED PER TACOMA POWER STANDARD. COORDINATE INSTALLATION WITH UTILITY.

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CASNE Engineering
3545 FACTORIA BOULEVARD SE, SUITE 200
BELLEVUE, WA 98006
(425) 922-1000
WWW.CASNE.COM

DATE: .
APPR: .
BY: .
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MARK: .



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AA 04/8/25	PROJ. ENGR	DATE
PRINTED BY: steven.garrett	May 09, 2025	
PORT ADDRESS: 401 East Alexander Ave	TACOMA, WA 98421	

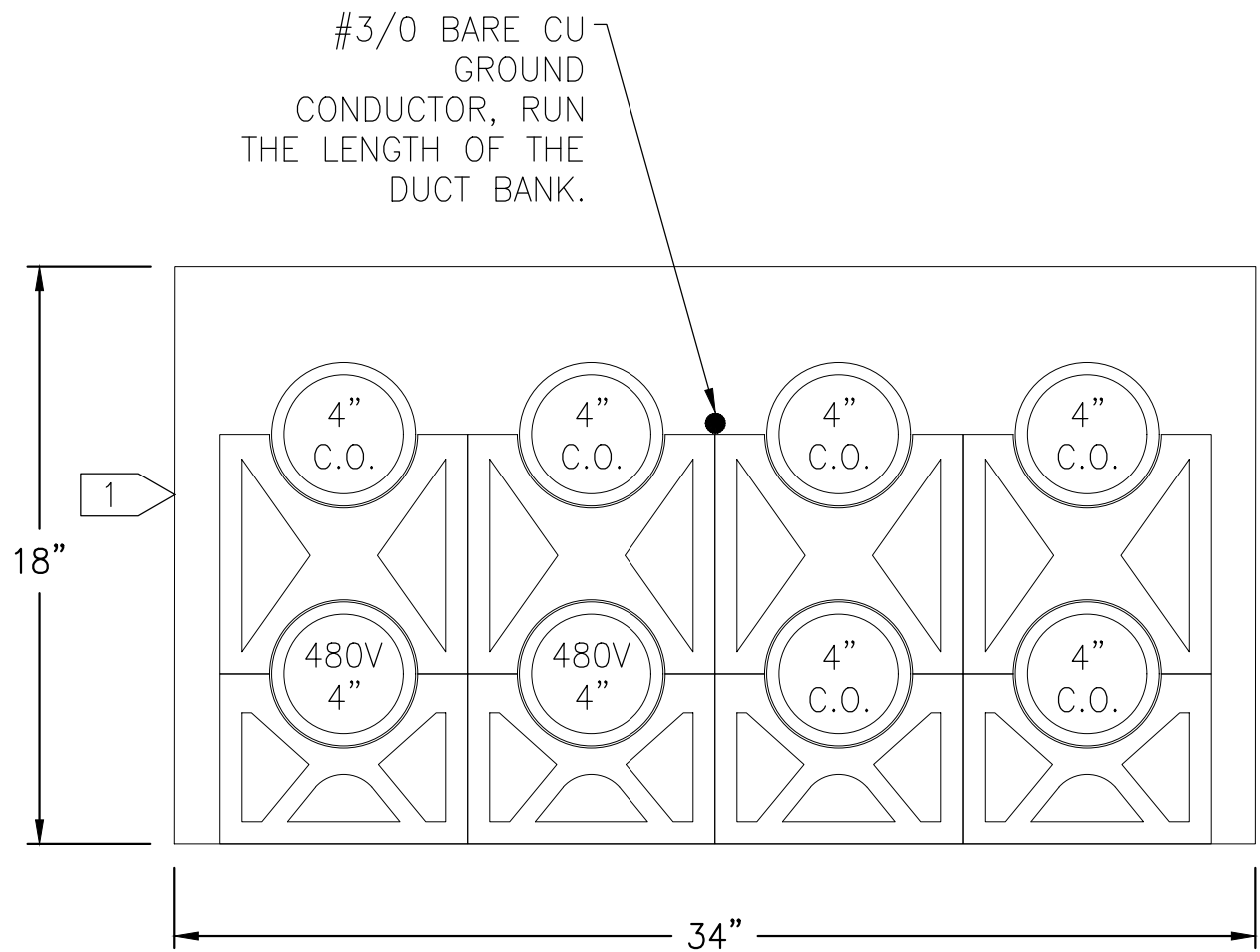
EBC MOTIVE TEMPORARY POWER			
ENLARGED TEMPORARY POWER SITE PLAN			
TOWNSHIP: 21	RANGE: 03	SECTION: 27	
DAT-HRZ: . NAD83	VERT: MLW, 1983-2001 EPOCH		
PARCEL: ----	DRAWING SCALE: AS NOTED		

6709
E10.5T
S# 15 OF 19

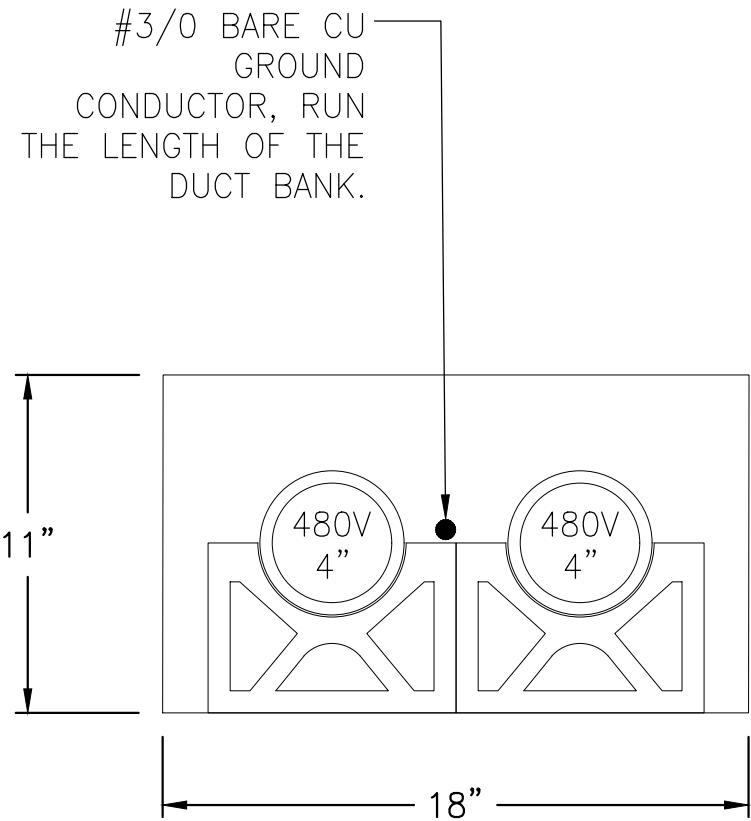
PA: POT-PA-000000068
PROJ. ID: 101686.01
PHASE: ISSUE FOR BID

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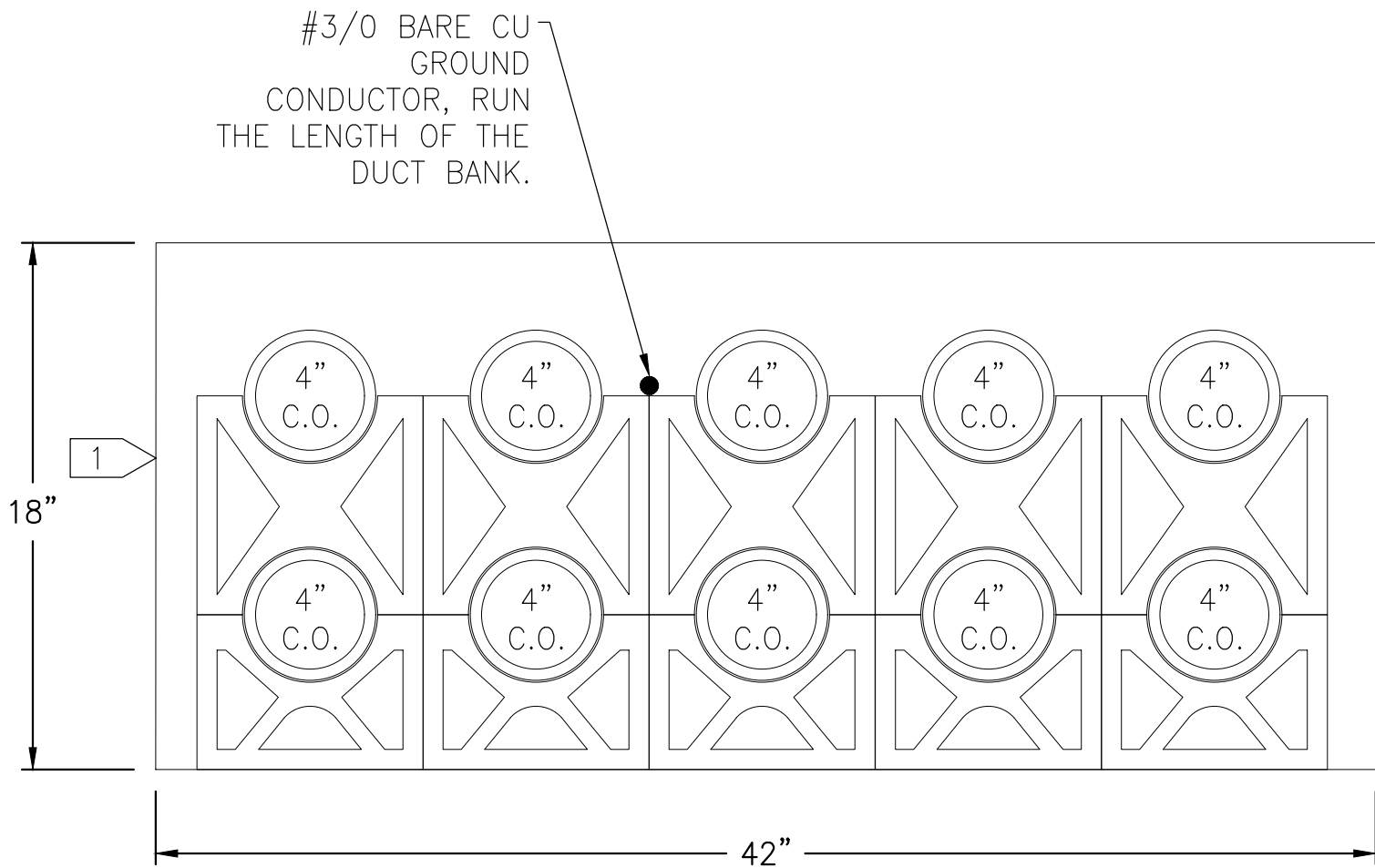
BINDING EDGE



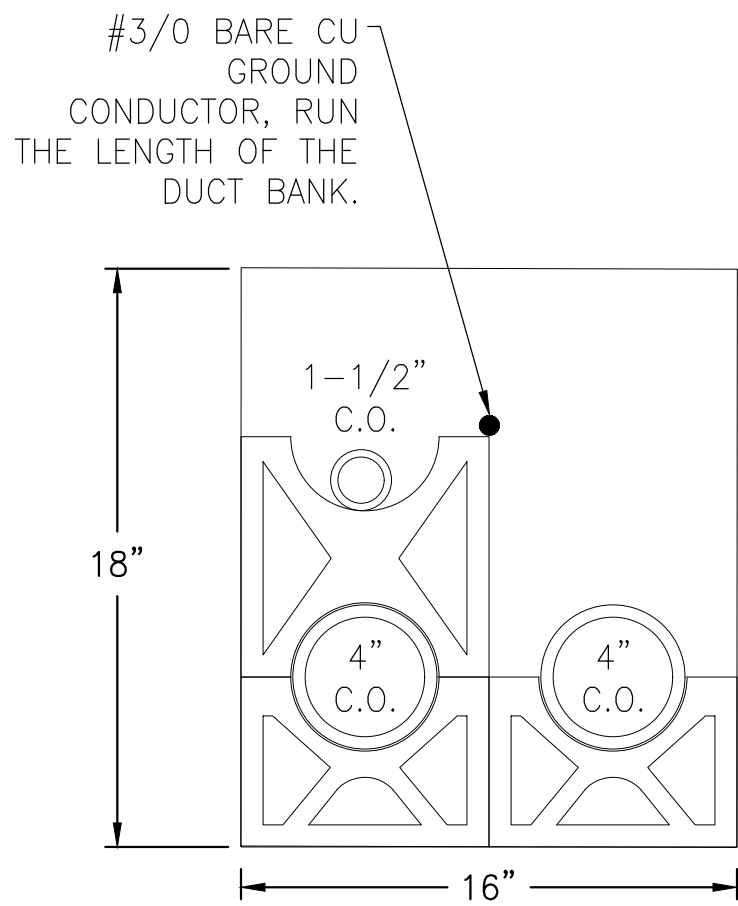
1 480V DUCT BANK SECTION
E11.1T SCALE: 2" = 1'-0"



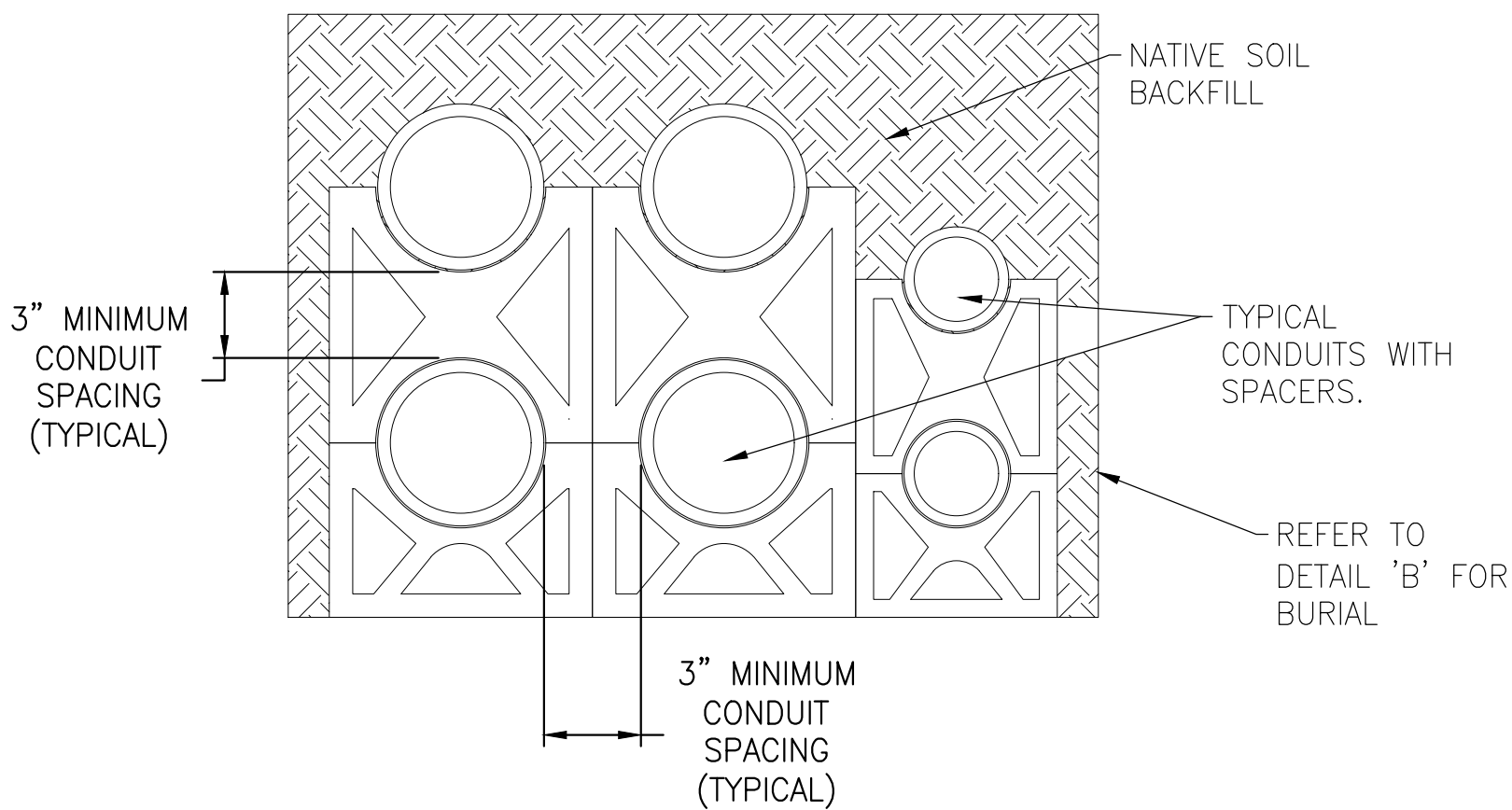
2 480V DUCT BANK SECTION
E11.1T SCALE: 2" = 1'-0"



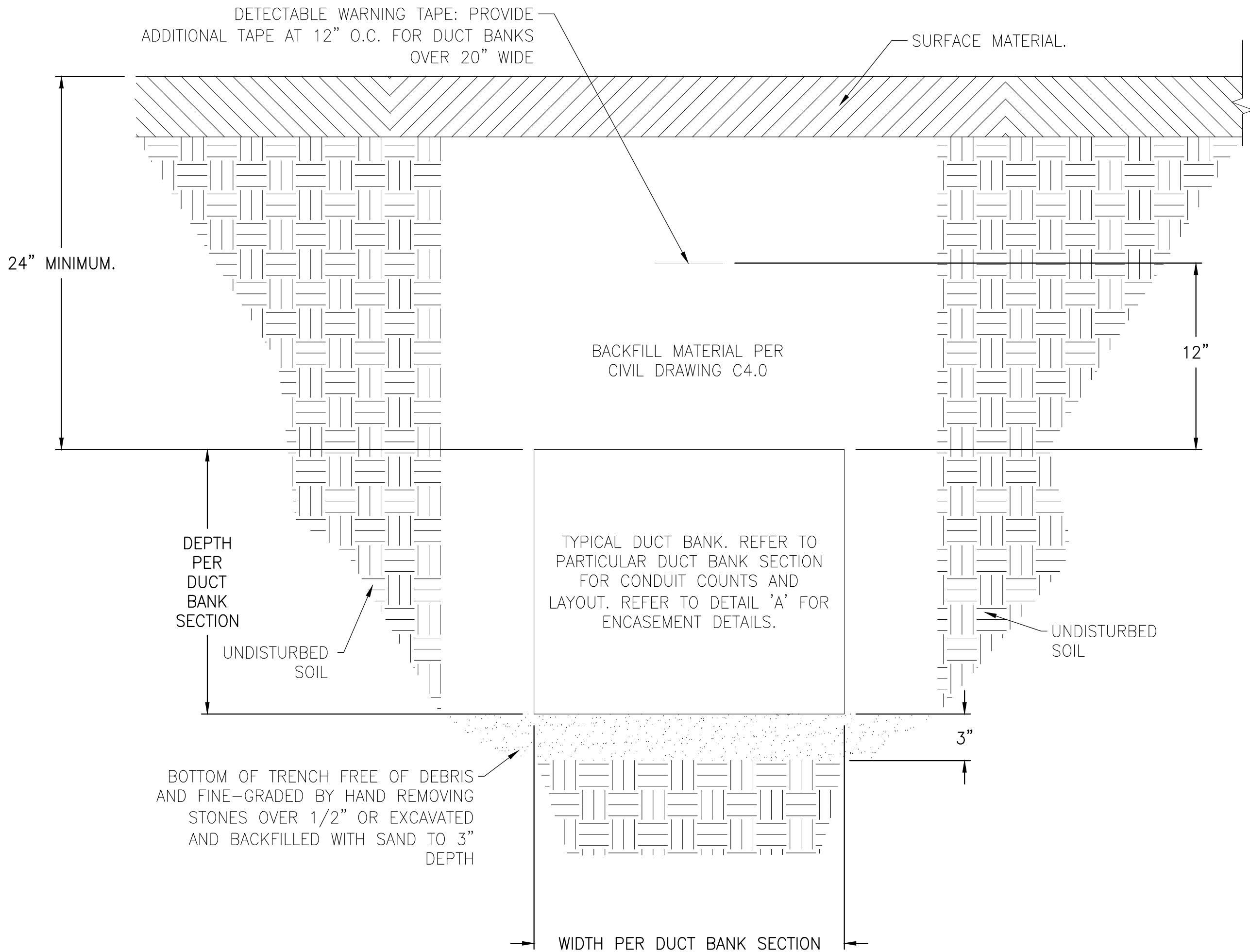
3 SPARE DUCT BANK SECTION
E11.1T SCALE: 2" = 1'-0"



4 SPARE DUCT BANK SECTION
E11.1T SCALE: 2" = 1'-0"



A TYPICAL DUCT BANK CONCRETE ENCASEMENT DETAIL
E11.1T SCALE: 2" = 1'-0"



B SERVICE BUILDING 480V PLAN-REMOVAL
E11.1T SCALE: 2" = 1'-0"




LEGEND:

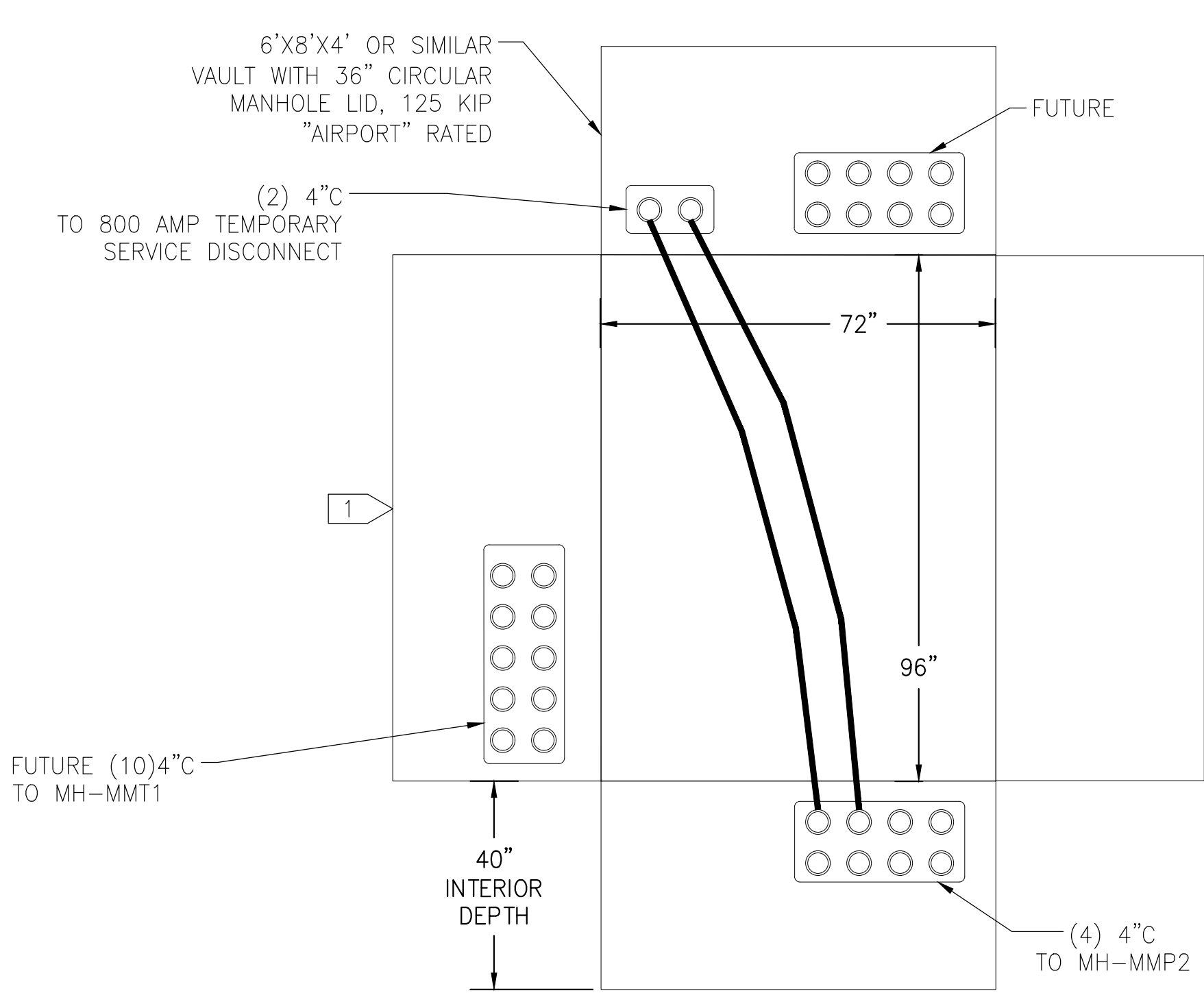
1. REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS

GENERAL NOTES:

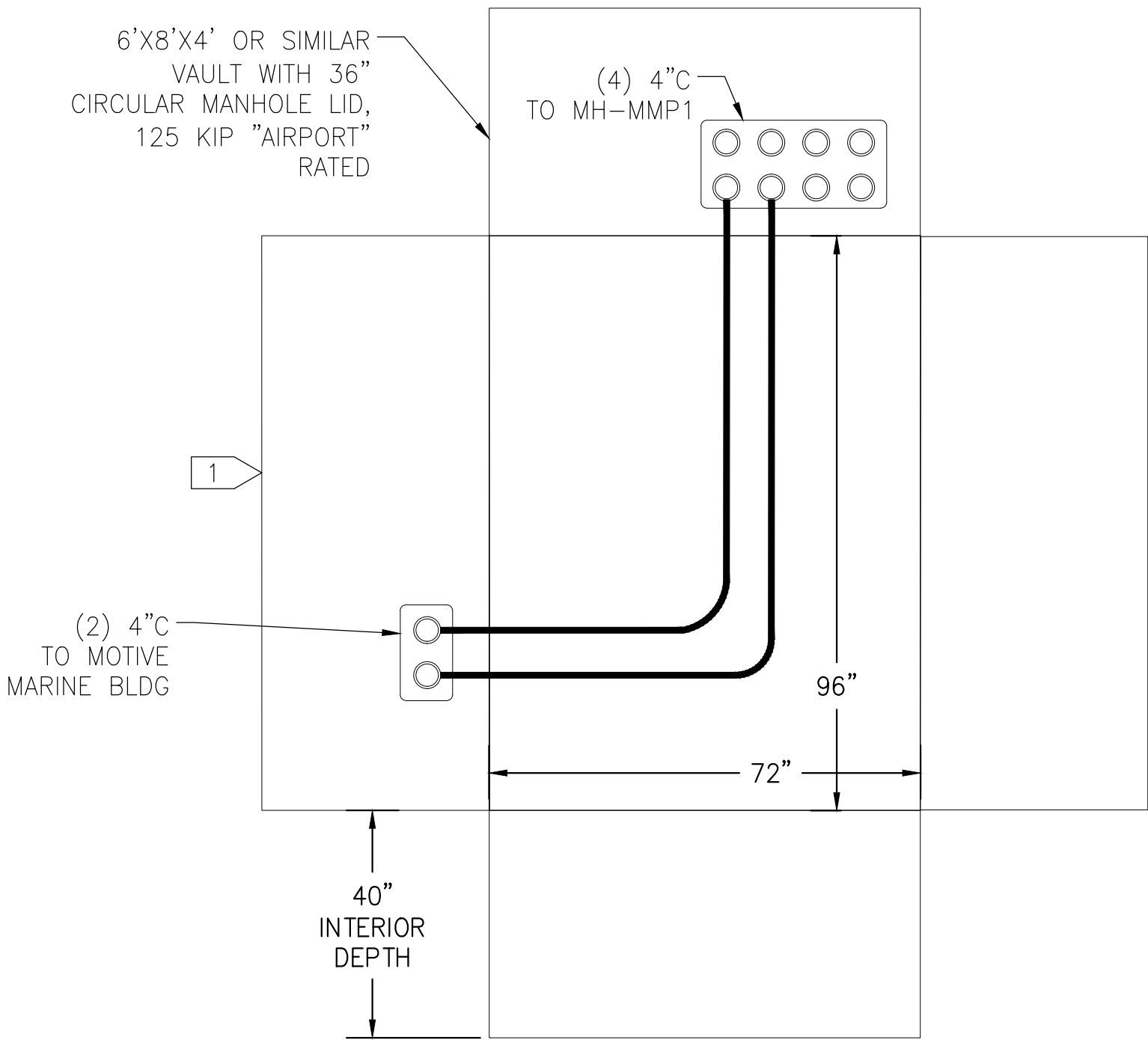
1. DUCT BANK SECTION SHOWN SHALL INSTALLED PER DETAILS A AND B (THIS DRAWING).
2. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL EXISTING UNDERGROUND INTERFERENCES INCLUDING MECHANICAL, ELECTRICAL AND CIVIL INSTALLATIONS WHICH MAY NOT BE SHOWN BUT MAY OVERLAP WITH FINAL ROUTING OF DUCT BANKS AND/OR LOCATION OF MANHOLES. ANY DAMAGE TO SUCH EXISTING INSTALLATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTORS EXPENSE.
3. BASE AND INTERMEDIATE DUCT SPACERS SHALL BE PLACED 12" FROM EACH JOINT AND ON 5'-0" CENTERS THROUGHOUT THE DUCT RUN.
4. ANCHOR CONDUIT SPACERS TO PAVERS OR BRICKS AS REQUIRED TO PREVENT FLOTATION DUE TO HIGH WATER TABLE DURING CONSTRUCTION OR CONCRETE POURING. ALLOW HORIZONTAL MOVEMENT DUE TO TEMPERATURE FLUCTUATIONS.
5. MAINTAIN 12" MINIMUM EDGE-TO-EDGE SEPARATION BETWEEN POWER CONDUIT AND COMMUNICATION CONDUIT IN CONCRETE OR IN EARTH.
5. MAINTAIN MINIMUM 12" SEPARATION BETWEEN DUCT BANK AND UTILIDOR OR EXPOSED MECHANICAL PIPING UNLESS OTHERWISE NOTED.
6. ALL PROJECT RELATED CONDUITS, EXISTING OR NEW SHALL BE PROVEN SUITABLE FOR CABLE PLACEMENT BY PULLING THROUGH THE FOLLOWING MANDRELS IN THE ORDER DEFINED:
 1. A WOODEN OR ALUMINUM TEST MANDREL TO VERIFY CONDUITS ARE NOT CRUSHED.
 2. A POLYURETHANE, NEOPRENE OR LEATHER MANDREL FOR CLEANING DEBRIS.
 3. A LUBRICATION SPREADING MANDREL TO PREPARE FOR CABLE PULLING (WHERE APPLICABLE).
7. ALL SPARE OR EMPTY CONDUITS SHALL BE EQUIPPED WITH 1/2" MULETAPE OR EQUIVALENT, RATED AT MINIMUM 1,500 POUNDS PULLING STRENGTH.
8. USE MINIMUM 25' BENDING RADIUS FOR ALL HORIZONTAL BENDS EXCEPT WHERE PLANS INDICATE OTHERWISE.
9. USE MINIMUM 3' BENDING RADIUS FOR ALL CONDUIT STUB-UPS.
10. SEE SPECIFICATION 26 05 43 FOR ADDITIONAL REQUIREMENTS.
11. REFER TO DRAWING E1.0T FOR SECTION CUT LOCATIONS.

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MAY 9, 2025

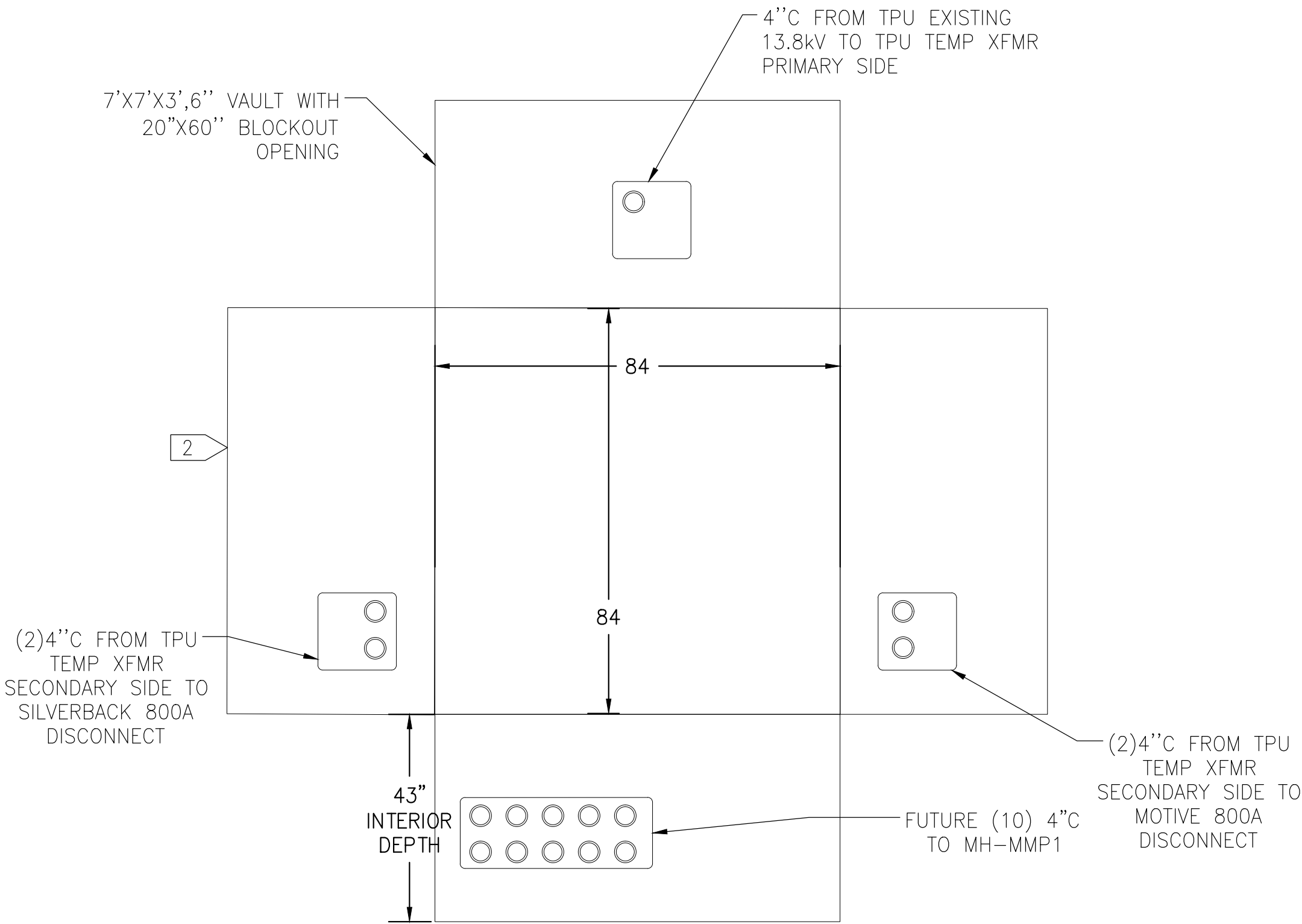
6709 E11.1T SH# 16 OF 19		EBC MOTIVE TEMPORARY POWER				APPROVED:		CEC 04/8/25 CHECKED BY: AA 04/8/25 DATE: PROJ. ENGR. DATE DIRECTOR: steven.garrett May 09, 2025 PRINTED BY: steven.garrett May 09, 2025 TACOMA, WA 98421				 CASNE Engineering 3545 TACOMA BOULEVARD SE, SUITE 200 BELLEVUE, WA 98006 (425) 522-1000 WWW.CASNE.COM JOB NO. 241038-005		 Port of Tacoma P.O. BOX 1837 TACOMA, WA 98401 (253)883-5441					
PA: POT-PA-000000068		TOWNSHIP: 21 NORTH		RANGE: 3 EAST		SECTION: 27		DUCT BANK DETAILS		MARK:		REVISION:		BY:		APPR:		DATE:	
PROJ. ID: 101686.01		DAT-HRZ: NAD83		VERT: MLLW 1983-2001 EPOCH		PARCEL: PORT PARCEL 1B		DRAWING SCALE: AS NOTED											



1 MH-MMP1 480V VAULT BUTTERFLY
E11.2T SCALE: 1/2" = 1'-0"



2 MH-MMP2 480V VAULT BUTTERFLY
E11.2T SCALE: 1/2" = 1'-0"



3 MH-MMT1 TRANSFORMER VAULT BUTTERFLY
E11.2T SCALE: 1/2" = 1'-0"

LEGEND:

- REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS

GENERAL NOTES:

- REFER TO DRAWING E11.3T DETAILS 1 AND 2 FOR MANHOLE GROUNDING AND CABLE RACKING DETAILS.
- REFER TO DRAWING E11.4T DETAILS 1 THROUGH 5 FOR 1500KVA TRANSFORMER 774 VAULT WITH COVER #2 CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL EXISTING UNDERGROUND INTERFERENCES INCLUDING MECHANICAL, ELECTRICAL AND CIVIL INSTALLATIONS WHICH MAY NOT BE SHOWN BUT MAY OVERLAP WITH FINAL ROUTING OF DUCT BANKS AND/OR LOCATION OF MANHOLES. ANY DAMAGE TO SUCH EXISTING INSTALLATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTORS EXPENSE.
- VERIFY MANHOLE ELEVATIONS AND DUCT ARRANGEMENT PRIOR TO PLACEMENT TO ENSURE PROPER COORDINATION WITH DUCT BANK ELEVATION, CROSS-SECTIONS AND THE PREMANUFACTURED CONDUIT KNOCKOUTS. THE CONTRACTOR MAY USE MANUFACTURER'S STANDARD DESIGN KNOCKOUTS OR CUSTOM DESIGNED KNOCKOUTS AS REQUIRED TO ACCOMMODATE THE DUCT BANK PROFILES AND CROSS SECTIONS INDICATED.
- ADD RISERS AS NECESSARY TO BRING MANHOLE OPENING TO GRADE. MANHOLE COVER SHALL BE 1" ABOVE FINISH GRADE AND SLOPED TO PREVENT WATER ENTRY.
- ALL SEAMS IN RISER AND MANHOLES SHALL BE GROUTED WITH QUICK PLUG OR EQUIVALENT PER UTILITY VAULT SPECIFICATIONS.
- CONDUIT TERMINATIONS AT MANHOLES SHALL ENTER THROUGH PRE-SET KNOCKOUTS ONLY AND NOT EXTEND MORE THAN 3/4" BEYOND INSIDE WALL EXCEPT WHERE CONDUIT IS REQUIRED TO PASS THROUGH.
- ALL MANHOLES SHALL BE EQUIPPED WITH STAINLESS STEEL PULLING IRONS AND STAINLESS HARDWARE.
- STAINLESS STEEL OR NON-METALLIC CABLE RACKING SHALL BE PROVIDED IN ALL POWER MANHOLES AS REQUIRED FOR THE SPECIFIC QUANTITY OF CABLE AND/OR TYPE OF TERMINATION/SPLICE.
- SEE CIVIL AND STRUCTURAL PLANS FOR TRENCH AND BACKFILL REQUIREMENTS.
- REFER TO DRAWINGS E1.0T FOR VAULT LOCATIONS.

6709

E11.2T

SH# 17 OF 19

TOWNSHIP: 21

DAT-HRZ: .

PARCEL: PORT PARCEL 1B

RANGE: 3

VERT: M.W. 1983-2001 EPOCH

DRAWING SCALE: AS NOTED

SECTION: 27

DATE: .

PARCEL: .

PA: POT-PA-00000068

PROJ. ID: 101686.01

PHASE: ISSUE FOR BID

EBC MOTIVE TEMPORARY POWER

VAULT DETAILS

CEC 04/8/25

CHECKED BY: AA

DIRECTOR ENG. DATE: 04/8/25

PRINTED BY: steven.garrett

PORT ADDRESS: 401 EAST ALEXANDER AVE

TACOMA, WA 98421

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MAY 9, 2025

CASNE Engineering
3545 FACTORIA BOULEVARD SE, SUITE 200
BELLEVUE, WA 98006
(425) 522-1000 WWW.CASNE.COM

MARK:

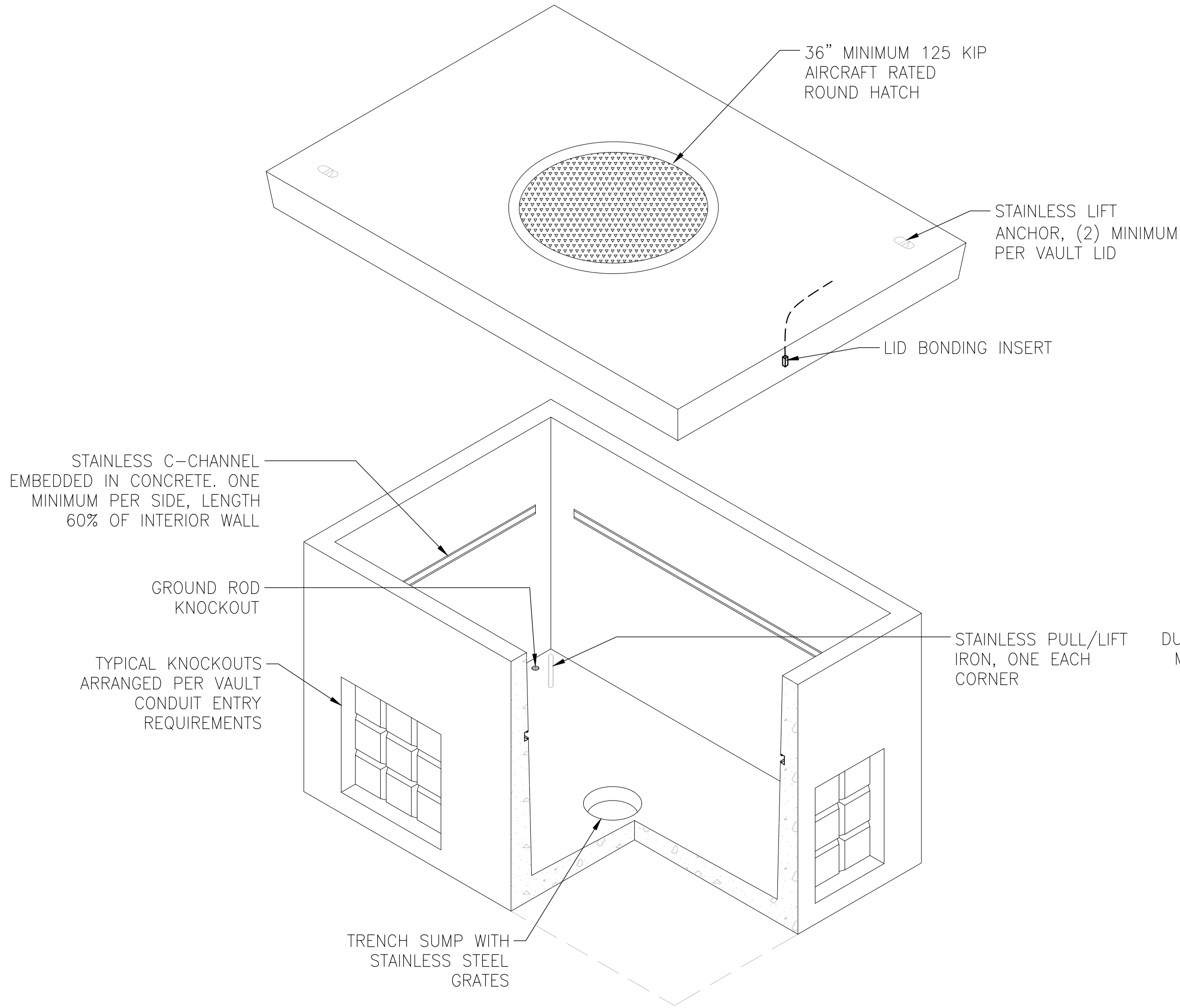
REVISION:

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DATE:

5/9/25

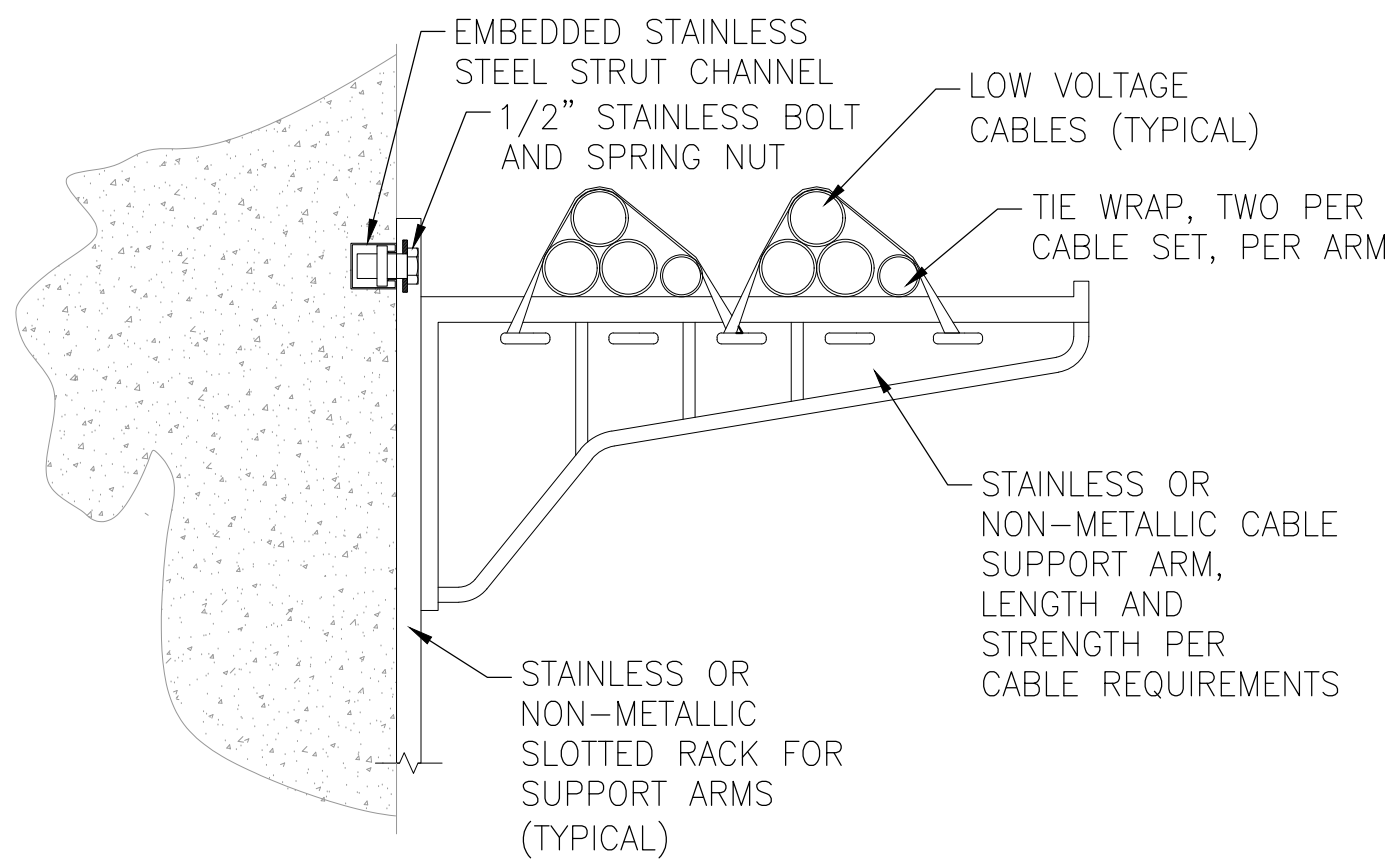


1

TYPICAL ELECTRICAL VAULT DETAIL

E11.3T

SCALE: NONE

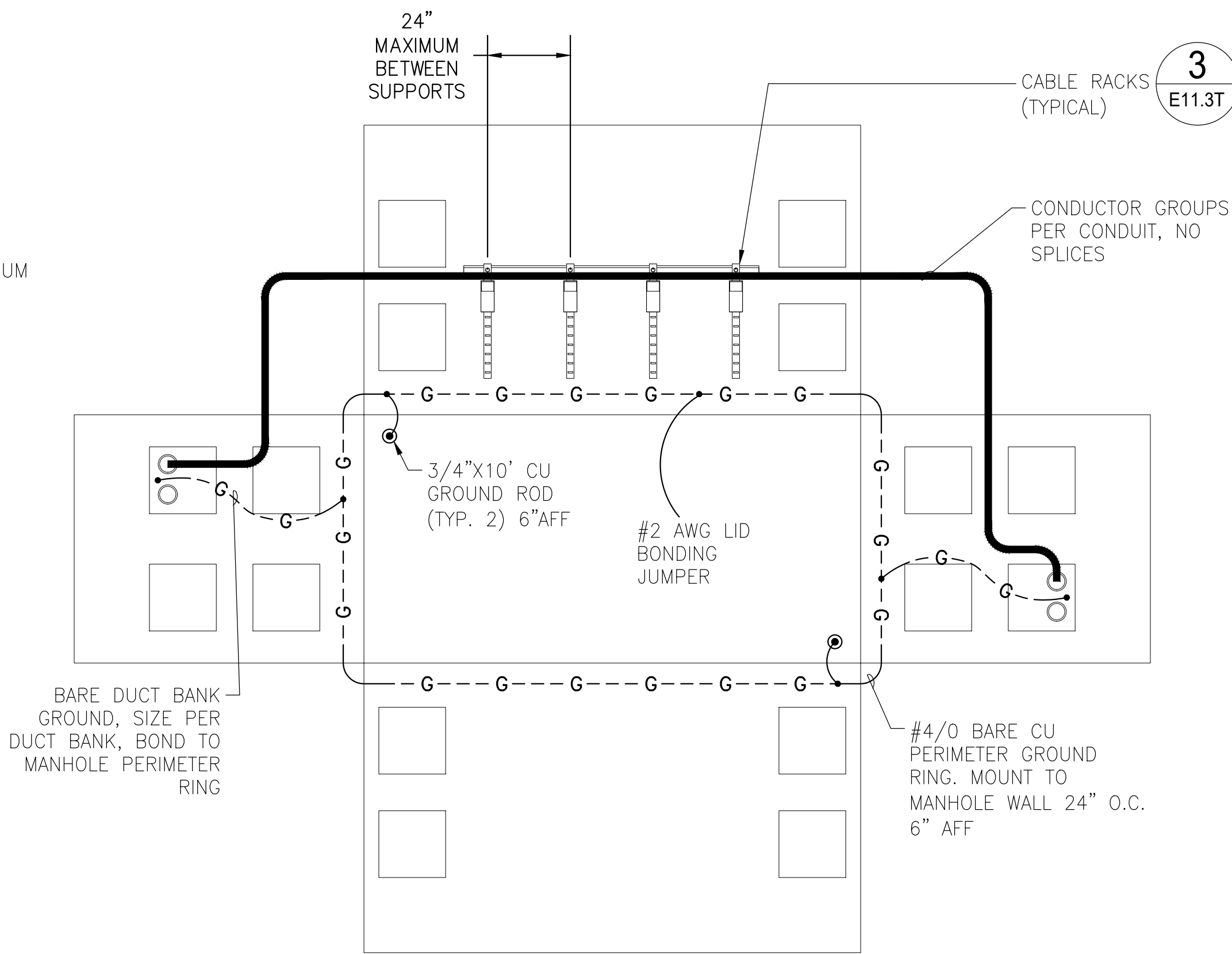


3

CABLE SUPPORT DETAIL

E11.3T

SCALE: NONE

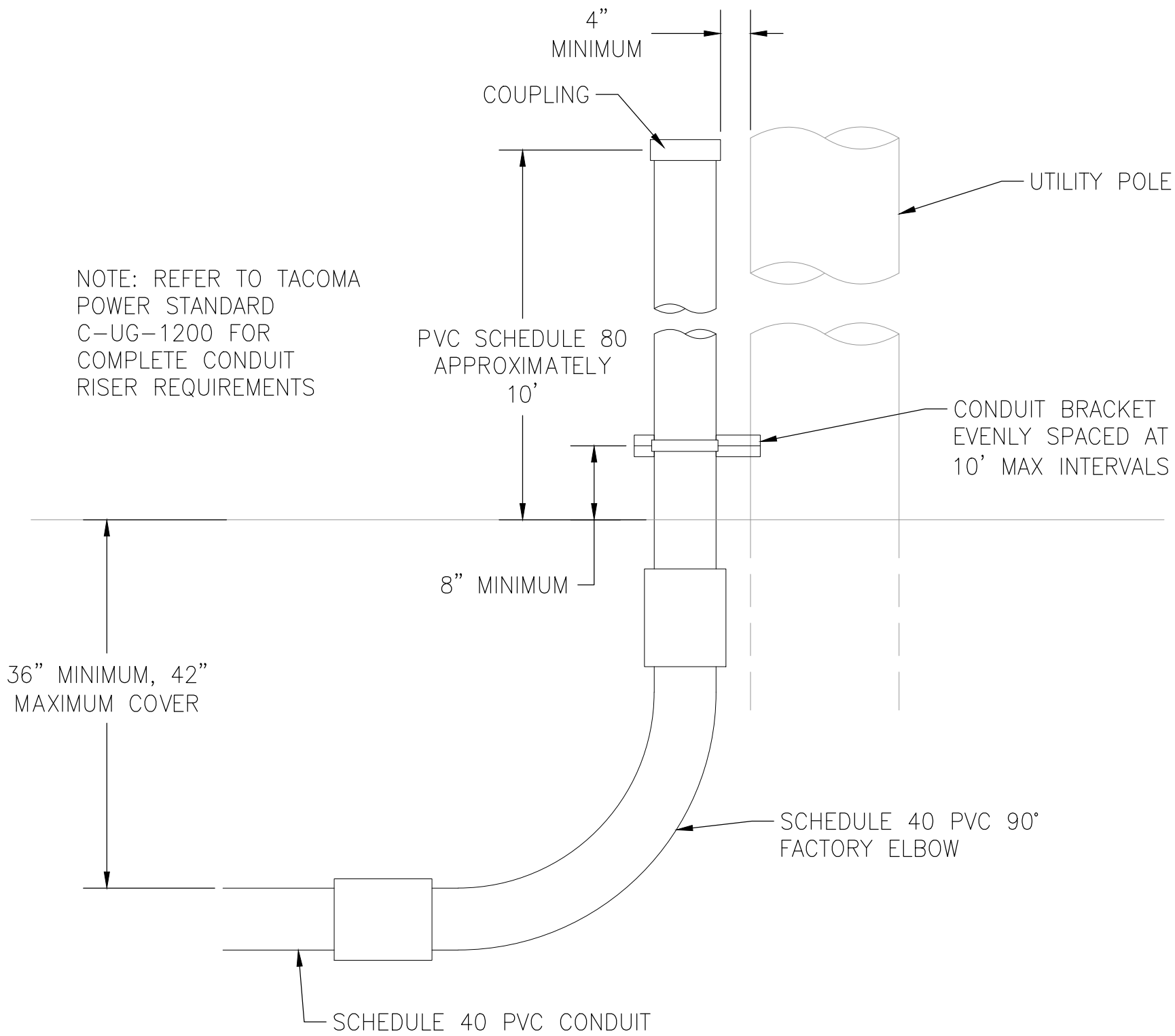


2

TYPICAL ELECTRICAL VAULT
SUPPORT AND GROUNDING DETAIL

E11.3T

SCALE: NONE



4

CONDUIT RISER DETAIL

E11.3T

SCALE: NONE

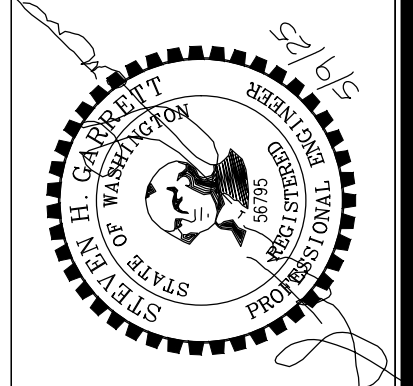
LEGEND:

1. REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS

GENERAL NOTES:

1. REFER TO PROJECT SPECIFICATIONS FOR GENERAL ELECTRICAL NOTES.

ISSUE FOR BID
MAY 9, 2025



CEC	04/8/25
CHECKED BY	DATE
AA	04/8/25
PROJ. ENGR	DATE
PRINTED BY:	steven.garrett
PORT ADDRESS:	401 EAST ALEXANDER AVE
	TACOMA, WA 98421

EBC MOTIVE TEMPORARY POWER			
DETAILS			
TOWNSHIP: 21	RANGE: 3	SECTION: 27	
DAT-HRZ: .	VERT: MLW, 1983-2001 EPOCH		
PARCEL: PORT PARCEL 1B	DRAWING SCALE: AS NOTED		

6709
E11.3T
SH# 18 OF 19

CASNE Engineering
3545 FACTORIA BOULEVARD SE, SUITE 200
BELLEVUE, WA 98006
(425) 522-1000
WWW.CASNE.COM

Port of Tacoma
P.O. BOX 1837 TACOMA, WA 98401 (253) 893-5441

MARK:	REVISION:	BY:	APPR:	DATE:

TPU XFMR VAULT

1 INSTALLATION STANDARD

E11.4T SCALE: NONE

TPU XFMR VAULT
774 STANDARD COVER #2 (1500KVA)
3
E11.4T SCALE: NONE

Customer Requirements Transformer Vault Installation

May 18, 2023

C-UG-1700

Installation of Vault and Cover *(continued)*

Guard Posts Guard posts may be required by the **New Services Engineer** to protect vaults against damage due to vehicular traffic. See C-UG-1400 "Customer Requirements, Padmount Equipment Guard Posts Installation" for guard post construction and placement.

Figure 2 Stopping Installations

For transformer vaults installed on a slope, the **minimum** dimensions for clearances are:


- Front clearance = **8 feet**
- Side clearance = **8 feet**

Construction Notes

- The transformer vault must be kept clear of any **obstructions**, such as:
 - fences, mail boxes, rockeries, berms, and vegetation.
 - bark, sod, ground cover mulch, and rocks, etc., on any part of the structure.
 - trees and bushes extending into the clearance area.
- Phone and TV pedestals must be installed behind the vault on back corners as shown above.
- The clearance area grade shall be level and a retaining wall shall be provided when required by the **New Services Engineer**.
 - A wooden, concrete or rockery wall shall have 1 to 4 maximum allowable slope to the property line.

Transmission & Distribution Standards

Page 5 of 9

	Precast Concrete Vaults	August 8, 2024
		A-UG-1150
<hr/>		
774 Vault <i>(continued)</i>		
Material	MID#	
774 Vault Base (7,500 lbs)	21167	
774 Transformer (500 kVA to 1500 kVA) or Primary Meter Cabinet Cover #1, 8ft x 8ft (5,600 lbs)	19461	
774 Transformer (2000 kVA to 2500 kVA) Cover #2, 8ft x 10ft (7,200 lbs)	19463	
774 Secondary Service Cabinet Cover #3 (5,000 lbs)	50893	
774 Secondary Service Box Cover #4 Standard (4,000 lbs)	67541	
774 Secondary Service Box Cover #4 Non-skid (4,000 lbs)	67540	
774 Riser, 6in (1,200 lbs)	39974	
774 Riser, 12in (2,000 lbs)	43256	
APPLICATION: Large 3Ø Transformers (500 kVA to 2500 kVA), 3Ø Primary Metering Cabinet, Secondary Service Cabinet, Commercial Secondary Service Box		
<hr/>		
Transmission & Distribution Standards	Page 11 of 25	

TPU XFMR VAULT
 4 774 STANDARD (1500KVA) BOM
 E11.4T SCALE: NONE

LEGEND:

1. REFER TO DRAWING E0.0 FOR COMMON SYMBOLS AND ABBREVIATIONS

GENERAL NOTES:

1. REFER TO PROJECT SPECIFICATIONS FOR GENERAL ELECTRICAL NOTES.
2. THE TACOMA PUBLIC UTILITIES STANDARDS PROVIDED ON THIS DRAWING ARE INCLUDED FOR REFERENCE ONLY. COORDINATE ALL TACOMA PUBLIC UTILITIES INFRASTRUCTURE INSTALLATION WITH TACOMA PUBLIC UTILITIES.

20"x60" BLOCKOUT OPENING

LID BONDING INSERT

STAINLESS LIFT ANCHOR, (1) IN EACH CORNER OF PER VAULT COVER

STAINLESS C-CHANNEL EMBEDDED IN CONCRETE. ONE MINIMUM PER SIDE, LENGTH 60% OF INTERIOR WALL


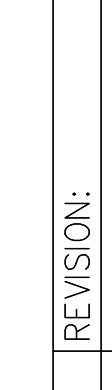

GROUND ROD KNOCKOUT

TYPICAL KNOCKOUTS ARRANGED PER VAULT CONDUIT ENTRY REQUIREMENTS

STAINLESS PULL/LIFT IRON, ONE EACH CORNER

TRENCH SUMP WITH STAINLESS STEEL GRATES

TPU XFMR VAULT
 4 774 STANDARD COVER #2 (1500KVA) DETAIL
 E11.4T SCALE: NONE

<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>6709</p> <p>E11.4T</p> <p>SH# 19 OF 19</p> </div> <div style="width: 50%;"> <p>EBC MOTIVE TEMPORARY POWER</p> <p>TPU TRANSFORMER VAULT STANDARDS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>TOWNSHIP: 21</td> <td>RANGE: 3</td> <td>SECTION: 27</td> </tr> <tr> <td>DAT-HRZ: .</td> <td>VERT: MLW, 1983-2001</td> <td>EPOCH</td> </tr> <tr> <td>PARCEL: PORT PARCEL 1B</td> <td>DRAWING SCALE: AS NOTED</td> <td></td> </tr> </table> </div> </div>	TOWNSHIP: 21	RANGE: 3	SECTION: 27	DAT-HRZ: .	VERT: MLW, 1983-2001	EPOCH	PARCEL: PORT PARCEL 1B	DRAWING SCALE: AS NOTED		<p>APPROVED:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"> <p>CEC 04/8/25</p> <p>AA 04/8/25</p> <p>DIRECTOR ENG. DATE PROJ. ENGR DATE</p> <p>PRINTED BY: steven.garrett May 09, 2025</p> <p>PORT ADDRESS: 401 EAST ALEXANDER AVE</p> <p>TACOMA, WA 98421</p> </td> </tr> </table>		<p>CEC 04/8/25</p> <p>AA 04/8/25</p> <p>DIRECTOR ENG. DATE PROJ. ENGR DATE</p> <p>PRINTED BY: steven.garrett May 09, 2025</p> <p>PORT ADDRESS: 401 EAST ALEXANDER AVE</p> <p>TACOMA, WA 98421</p>	<div style="text-align: center;">  </div>	<div style="text-align: center;">  <p>CASNEE Engineering 3545 FACTORIA BOULEVARD SE, SUITE 200 BELLEVUE, WA 98006 (425) 522-1000 WWW.CASNEE.COM JOB NO. 241038-005</p> </div>	<div style="text-align: center;">  <p>Port of Tacoma P.O. BOX 1837 TACOMA, WA 98401 (253)893-5841</p> </div>	<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <p>ISSUE FOR BID</p> <p>MAY 9, 2025</p> </div> <div style="width: 60%;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>MARK:</td> <td>REVISION:</td> <td>BY:</td> <td>APPR:</td> <td>DATE:</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> </div> </div>	MARK:	REVISION:	BY:	APPR:	DATE:															
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