

SCHEMATIC

BA-34-14 / BA-34-15



SCHEMATIC LEGEND

UNLESS NOTED OTHERWISE

---	C-3-UA750K
---	C-3-UA40K
---	C-3-UA2K
---	E-3-UA750K
---	E-3-UA40K
---	E-UA2K
---	DOUBLE SLASH LINES INDICATE REMOVAL

PROJECT NOTES

SRP ELECTRIC SERVICE SPECIFICATIONS ARE AVAILABLE ON-LINE AT:
HTTP://WWW.SRPNET.COM/ELECTRIC/BUSINESS/SPECS

- CUSTOMER IS RESPONSIBLE FOR:
 - PROVIDING SRP VEHICLES WITH A MINIMUM 12' WIDE AND 20' HIGH PERMANENT TRUCK ACCESS TO ALL SRP EQUIPMENT. ANY SES OR EXTERIOR METER ROOM ENTRANCE, EACH SERVICE ENTRANCE PULL SECTION SHALL OPEN DIRECTLY TOWARDS THE EXTERIOR METER ROOM ENTRANCE. THIS PROVIDES EQUIPMENT ACCESS FOR CABLE INSTALLATION. WITH A MINIMUM WIDTH OF 12', REMOVABLE SCREEN WALLS, PANELS, OR DOORS MAY BE USED AS AN ARCHITECTURAL FEATURE, PROVIDED THE ACCESS ROUTE COMPLIES TO SRP VEHICLE ACCESS REQUIREMENTS.
 - ALL CONDUIT (PVC, DB120, RATED FOR 90 DEGREES C CABLE, ASTM F512 WITH ALL ELBOWS BEING SCHEDULE 40 3/8" RADIUS), TRENCH, BACKFILL, COMPACTION, (UNLESS OTHERWISE SPECIFIED), ALL FILL BELOW AND AROUND ELECTRIC UTILITY FIXTURE FOUNDATION PADS SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY (AT OR NEAR OPTIMUM MOISTURE CONTENT) IN ACCORDANCE WITH ASTM D698, 1/2 CONTROLLED LOW STRENGTH MATERIAL BACKFILL MAY BE PLACED IN LIEU OF COMPACTED BACKFILL) AND MAINTENANCE OF TRENCH AND CONDUIT UNTIL WIRE IS PULLED. CONTACT SRP AND SCHEDULE A HOT ID AFTER LOCATING AND EXPOSING EXISTING STUBBED CONDUIT.
 - INSTALLATION OF 3 PHASE TRANSFORMER PAD(S), TEMPLATES(S) AND GROUND ROD(S).
 - STAMPED AND REGISTERED PROPERTY PINS AND FINAL GRADE STAKES FOR PAD AND TRENCH LOCATIONS.
 - REVIEWING AND SIGNING OFF ON MATERIALS DELIVERED TO THE JOB SITE.
 - ALL SURFACE RESTORATIONS AND LANDSCAPE REPAIRS.
- SRP'S POINT OF DELIVERY TO BE: ☒ S.E.S., ☐ JUNCTION BOX, ☐ TRANSFORMER.
- SRP TO INSPECT THE FOLLOWING: TRENCHING, CONDUIT INSTALLATION, MANHOLE (IF REQUIRED), EQUIPMENT PAD(S), COMPACTION AND SERVICE ENTRANCE SECTION.
- METERING PER EUSERC, SRP SPECIFICATIONS AND MUNICIPAL CODES. SUBMIT ONE ELECTRONIC COPY OF SHOP DRAWINGS FOR ALL PROPOSED 400AMP OR LARGER SERVICE ENTRANCE SECTION, DOUBLE RESIDENTIAL METER PEDESTALS, AND COMMERCIAL SAFETY SOCKET PEDESTAL TO COMMERCIAL NEW BUSINESS FOR APPROVAL PRIOR TO PURCHASE AND/OR MANUFACTURING. SUCH DRAWINGS SHALL INDICATE THE PROJECT AND CUSTOMER NAME, SRP JOB NUMBER, JOB ADDRESS, CONTRACTORS NAME AND PHONE NUMBERS. SUBMIT TO: SHOPDRAW@SRPNET.COM
- FOR THAT PORTION OF THE FACILITY LOCATED WITHIN PUBLIC UTILITY EASEMENTS, THIS SUBMITTAL IS MADE FOR NOTIFICATION PURPOSES ONLY.

GRAPHIC SYMBOLS

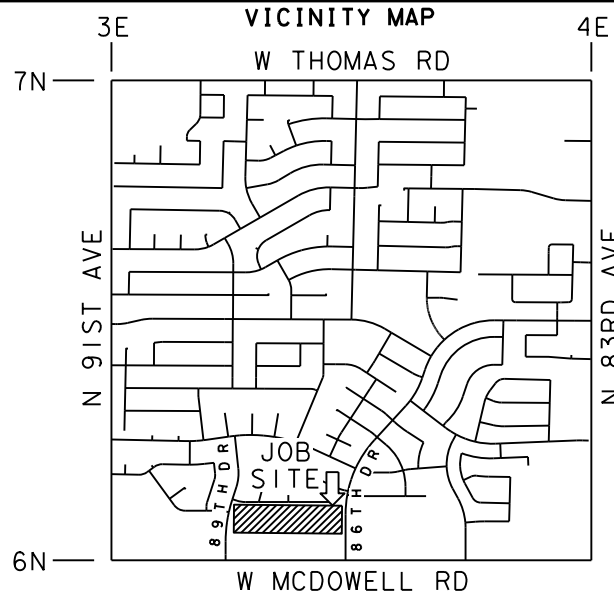
(SHADED SYMBOL INDICATES EXISTING FACILITY)

E-ELECTRIC C-COMMUNICATION W-WATER G-GAS SD-STORM S-SEWER
E E C W G SD S
E E C W G SD S
E E C W G SD S

TYPICAL SRP ABBREVIATIONS

C = CONSTRUCT
R = REMOVE
T = TRANSFER
A = ABANDON
F/SW = FRONT OF SIDEWALK
B/SW = BACK OF SIDEWALK
F/C = FRONT OF CURB
B/C = BACK OF CURB
E/P = EDGE OF PAVEMENT
L/G = LIP OF GUTTER
R/W = RIGHT OF WAY
PROPOSED SINGLE-PHASE TRANSFORMER
PROPOSED THREE-PHASE TRANSFORMER
PROPOSED FUSING ENCLOSURE
PROPOSED SWITCHING ENCLOSURE
PROPOSED 1 PHASE PULLING ENCLOSURE
PROPOSED 3 PHASE / FEEDER PULLING ENCLOSURE
PROPOSED 4/O PRIMARY TAP ENCLOSURE
PROPOSED CAPACITOR BANK
FOR MOST PRIMARY DEVICES OTHER THAN TRANSFORMERS, NO BAR ABOVE THE LETTER INDICATES AN EXIST. FACILITY
NO BAR IN PAD INDICATES FACILITY IS EXISTING
BAR INDICATES FRONT OF DEVICE
A SHADED BAR INDICATES FACILITY IS EXISTING

UNDERGROUND STREETLIGHT CONDUCTOR
UNDERGROUND SERVICE CONDUCTOR
UNDERGROUND SECONDARY CONDUCTOR
PROPOSED UNDERGROUND TRENCH/BORE
EXISTING UNDERGROUND TRENCH/BORE
INDICATES ABANDONMENT
SERVICE ENTRANCE SECTION (S.E.S.)
PROPOSED MANHOLE
PROPOSED PULL BOX
PROPOSED SPLICE POINT
PROPOSED STREET LIGHT
PROPOSED PRIVATE LIGHT (STAKED BY CUSTOMER)
PROPOSED POLE AND RISER
DOUBLE SLASH LINES INDICATE REMOVAL
ELECTRONIC MARKER
MATCH POINTS FOR MULTIPLE SHEETS OF DRAWING
CONDUIT
PROPOSED FLUSH-MOUNTED J-BOX
PROPOSED ABOVE-GROUND J-BOX
PROPOSED WOOD POLE
WORK POINT BOX



FIELD INSTALLATION STAMP

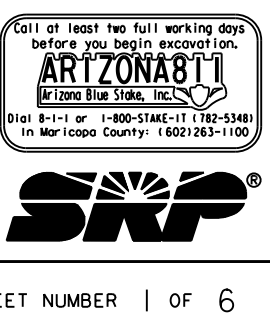
SURVEY AND PERMIT INFORMATION

- ☒ SRP SURVEY TO STAKE FOR LOCATION AND TIE FOR EASEMENTS. CUSTOMER CONTROL POINTS REQUIRED: YES ☐ NO ☐
- ☐ CUSTOMER'S SURVEY TO STAKE FOR LOCATION/CONSTRUCTION AND TIE FOR EASEMENTS. CUSTOMER'S SURVEYOR MUST ATTEND PRE-CON MEETING.
- ☐ SRP SURVEY TO STAKE FOR LOCATION, NO EASEMENT REQUIRED.
- ☐ 3RD PARTY EASEMENT REQUIRED.
- ☐ NO SURVEY REQUIRED.
- ☒ PERMIT REQUIRED: CITY OF TOLLESON COUNTY _____
OTHER _____ PERMIT NO. _____
- ☐ NO PERMIT REQ.

4			
3			
2	MIANAYA	12/17/18	SHEET 4 INCLUDED TO OBTAIN EASEMENTS
1	MIANAYA	12/12/18	ORDER YELLOW PRINTS
0	MIANAYA	11/19/18	JOB CREATED
REV	REVISED BY	DATE	REVISION DESCRIPTION

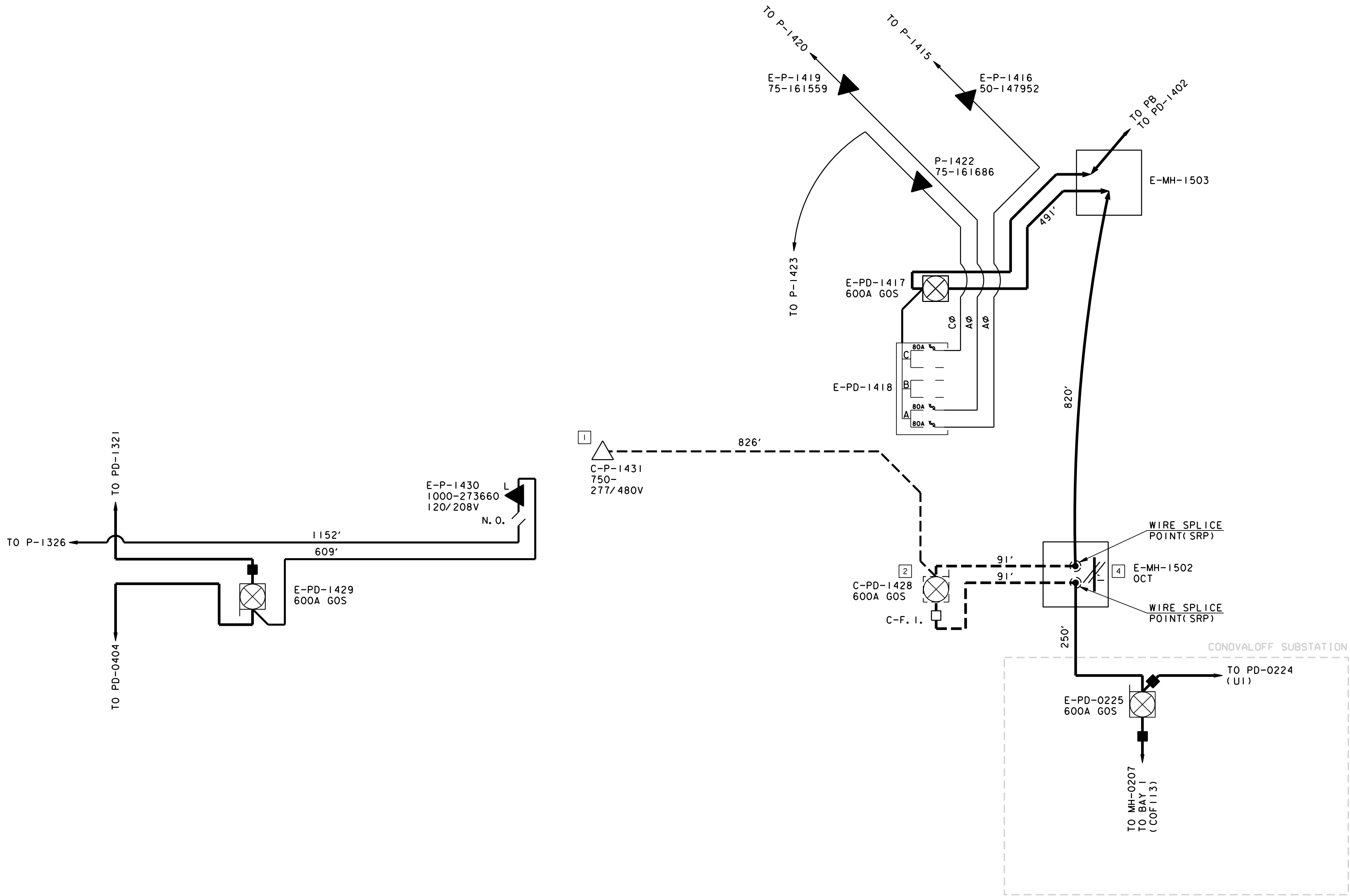
NATURAL GAS YES ☐ NO ☒

JOB NAME PAC - DESERT OASIS ELEM SCH CLSRM & GYM
ADDRESS/LOCATION 8802 W MCDOWELL RD
CONTACT ENRIQUE "LUPE" OCHOA PHONE 602-568-8995
BILLING ACCT NO. _____
FIS JO _____ MAP 1/4 SW S34 T2N R1E
40/ACRE BA-34-14 COORDS 3 3/8E - 6 1/16N
AMP NO T3101441 AMP VERSION _____
COST CENTER 22640
ROUTING CODE DDY+10



SHEET NUMBER | OF 6

First Page 22x34.JD2 02/01/2016



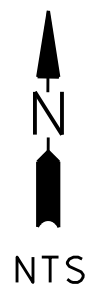
EASEMENTS

NOTE:
THIS JOB MAY INVOLVE ACQUIRING EASEMENTS FROM MORE THAN ONE PROPERTY OWNER. SRP ADVISES NO TRENCHING BE DONE UNTIL ALL SRP EASEMENTS HAVE BEEN SECURED. SHOULD THE CUSTOMER TRENCH PRIOR TO SRP EASEMENTS BEING SECURED, IT IS AT THE CUSTOMER'S OWN RISK AND SRP DOES NOT ASSUME ANY COST OR LIABILITY INVOLVED.

CONTACTS:

DESIGN CONSULTANT:
LUCAS MAESTAS
OFFICE: (602) 236-0897
MOBILE: (602) 329-9361
PROJECT LEADER:
SHANNON EMMONS
MOBILE: (602) 818-9266
INSPECTIONS:
OFFICE: (602) 236-0676
CONSTRUCTION CONSULTANT:
MONK JOHNSON
MOBILE: (602) 527-3005

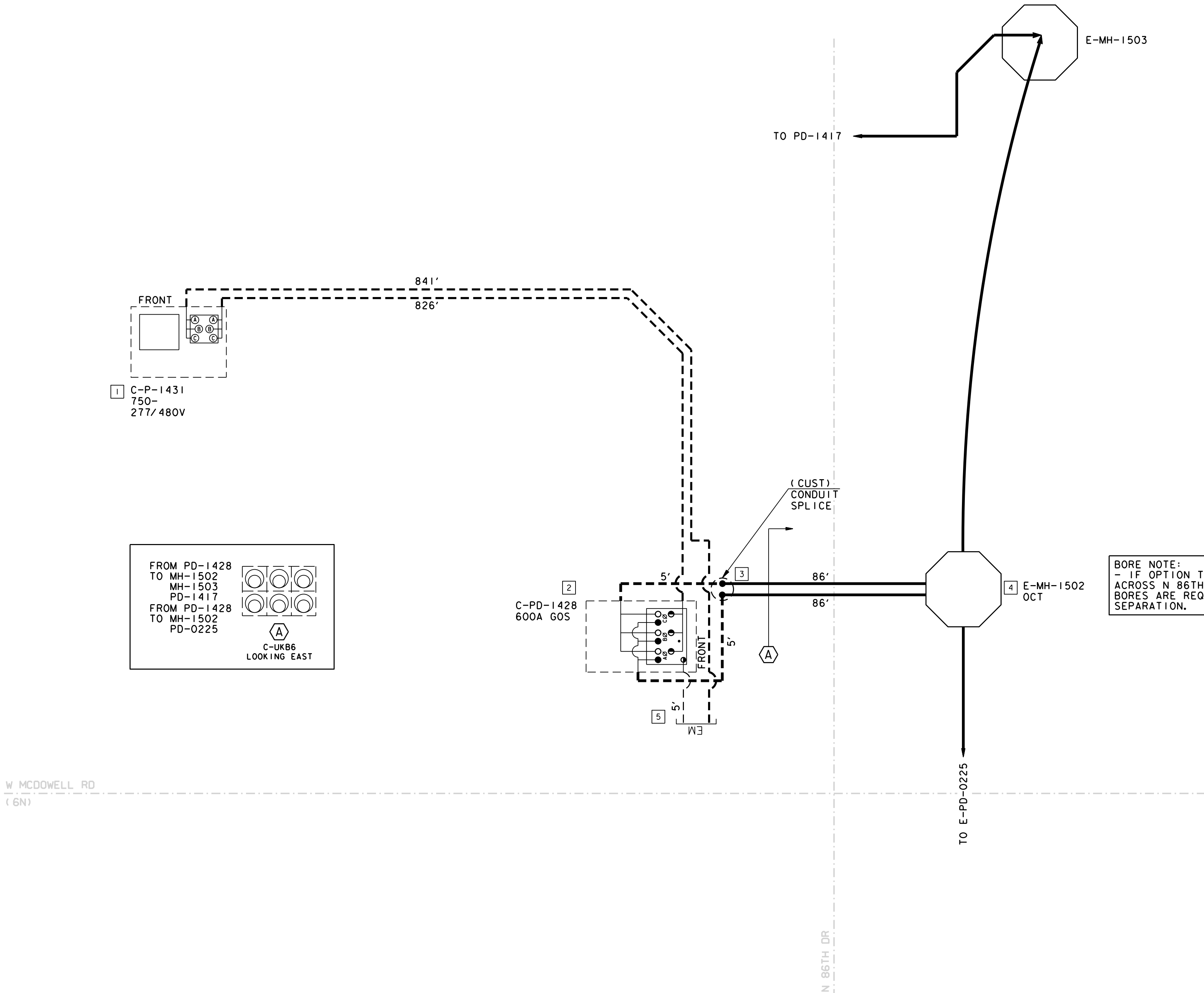
CONDUIT ONE LINE



CONDUIT ONE LINE LEGEND

UNLESS NOTED OTHERWISE

---	C-3-3" K (PRIMARY)
---	C-3-3" K (FEEDER)
---	C-1-2.5" K
++++	C-1-2.5" K (ST/LT)
---	E-3-3" K (PRIMARY)
---	E-3-3" K (FEEDER)
---	E-1-2.5" K
++++	E-1-2.5" K (ST/LT)
---	A-3-3" K
///	DOUBLE SLASH LINES INDICATE REMOVAL



1 C-P-1431
750-
277/480V

FROM PD-1428
TO MH-1502
MH-1503
PD-1417
FROM PD-1428
TO MH-1502
PD-0225

C-UKB6
LOOKING EAST

2 C-PD-1428
600A GOS

4 E-MH-1502
OCT

BORE NOTE:
- IF OPTION TO BORE IS USED
ACROSS N 86TH DR, 2 SEPARATE
BORES ARE REQUIRED WITH 2' MIN
SEPARATION.

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NATURAL GAS YES ☐ NO ☒

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BILLING ACCT NO.

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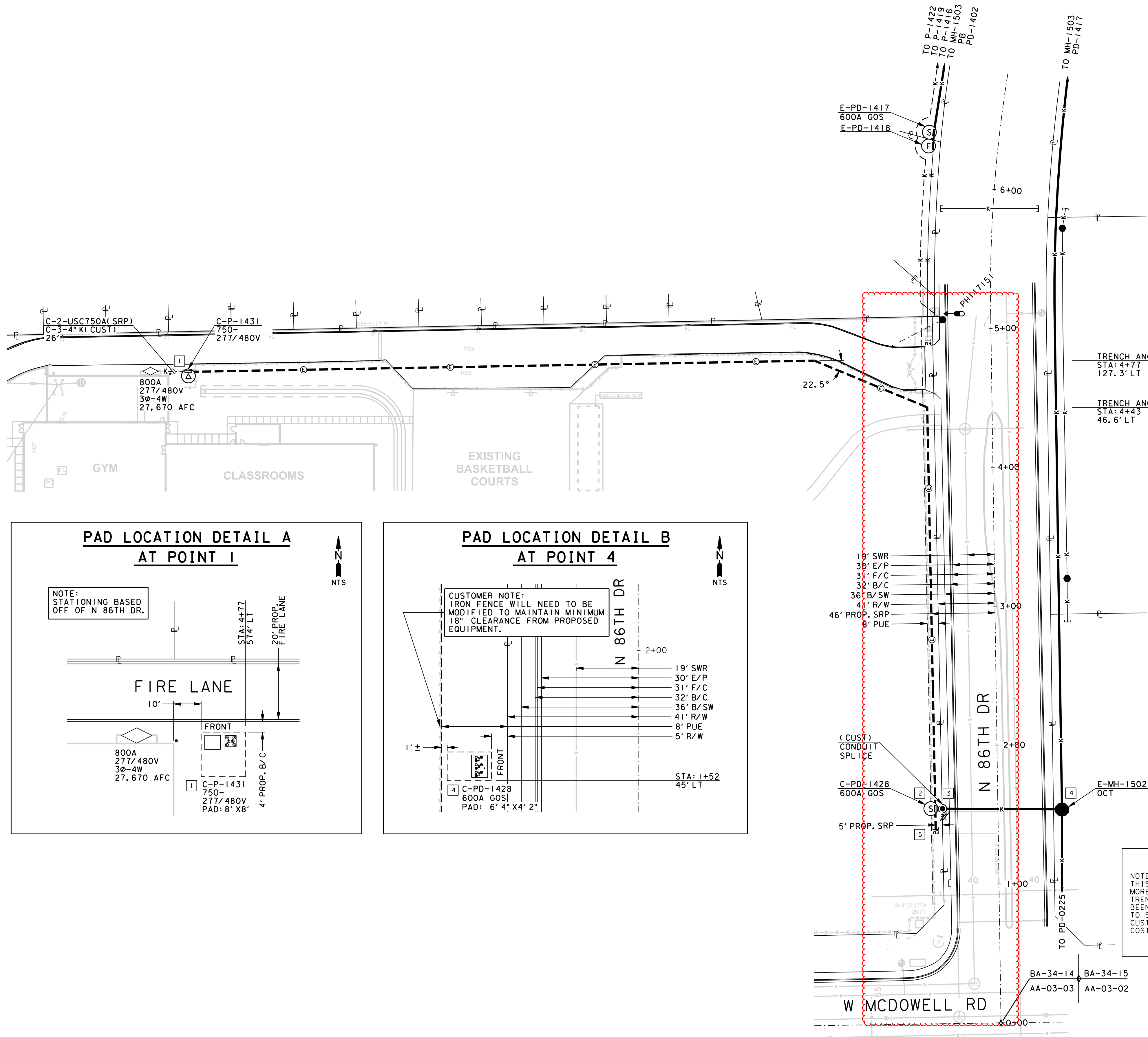
AMP NO T3101441 AMP VERSION

COST CENTER 22640

ROUTING CODE DDY+10

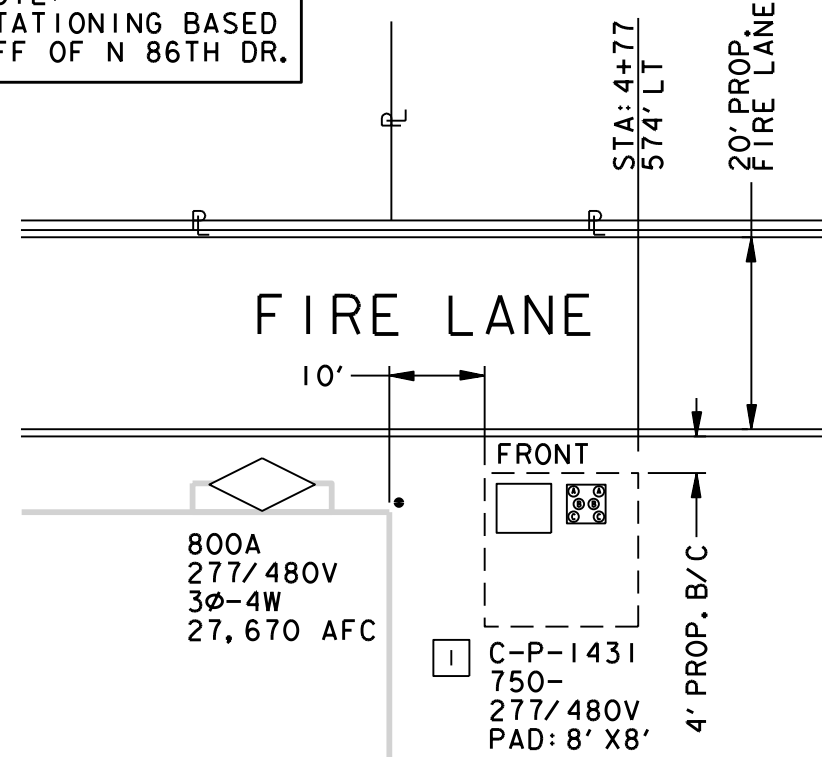
SHEET NUMBER 2 OF 6

MAINLINE



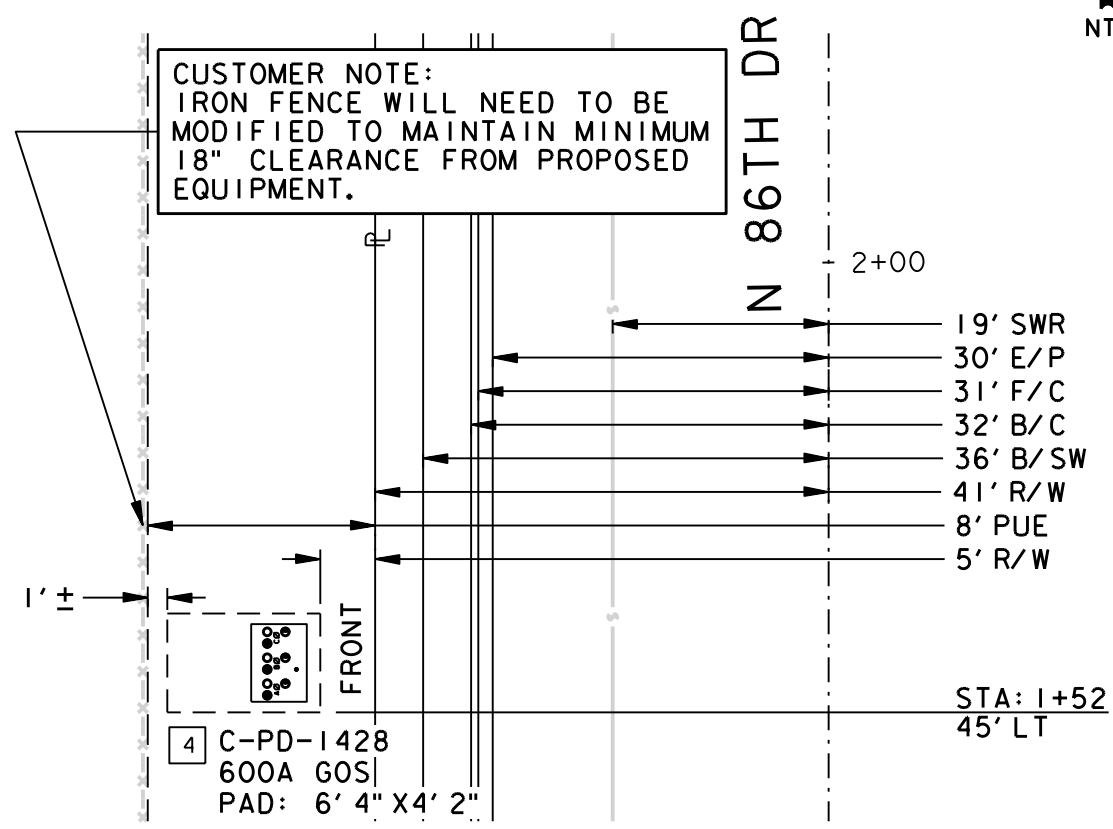
PAD LOCATION DETAIL A AT POINT 1

NOTE:
STATIONING BASED
OFF OF N 86TH DR.



PAD LOCATION DETAIL B AT POINT 4

CUSTOMER NOTE:
IRON FENCE WILL NEED TO BE
MODIFIED TO MAINTAIN MINIMUM
18" CLEARANCE FROM PROPOSED
EQUIPMENT.



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CABLE PULLING TAPE, 1,500' REEL



SRP Material Item No. 5031728	
Description	
Noun	Tape
Adjective	Cable pulling
Size	1,500' reel
Type	Polyester, 2,500 lb.
Style	Pre-lubricated
Use	Street lights, secondary and service conduits
Special Reference	Reel size: 9" outside traverse, 11 3/4" flange diameter, 1 3/4" arbor hole
Approved Suppliers	Part Number
A-D Technologies	WP251500
ARNCO Corp	WP251500
FiberTek, Inc.	WP2500-W
Herculene	Use description
L.H. Dottie	DWP1502
NEPTCO	WP2500P-1.5
Wellington	N303MS-9083SR

Electric Service Specifications SRP PROPRIETARY MATERIAL	CONTRACTOR-SUPPLIED MATERIAL CABLE PULLING TAPE, 1,500' REEL 11-6	ISSUE DATE: 08/03/04 REV. DATE: 12/15/16 APPROVAL: N. Sabah ESS11-06.doc
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REQUEST FOR SERVICE

- X. Responsibility**
The Customer has the responsibility to maintain their wiring and equipment in safe operating condition. SRP cannot accept any responsibility for the Customer's wiring and equipment.
NOTE: SRP gives no warranty, expressed or implied, as to the adequacy, safety or other characteristic of any equipment, wiring or device and assumes no responsibility with respect thereto.
- XI. Cooperation**
It is the sincere desire of SRP to provide and maintain dependable, safe, and satisfactory electric service in a courteous and efficient manner. Cooperation of Customers and their agents is appreciated. It is necessary to provide SRP with information leading to new or increased electric service early in the development of plans to aid the proper scheduling of service. Cooperation of all interested parties and strict adherence to the specifications in the manual will expedite satisfactory electric service.
- XII. Enforcement of Specifications**
SRP will allow a 45-day grace period prior to enforcing new or revised specifications placed in this ESS book.
EXCEPTION: Hazardous or safety-related requirements resulting in new or revised specifications shall be enforced immediately.
- XIII. Appeals**
SRP has an appeal process. Contact Customer Services for more information.
- XIV. Access to Service Entrance Section/Metering on Customer's Premises**
A. The SES/metering, and any other SRP equipment installed on the Customer's premises, shall be readily accessible by SRP's authorized employees or agents at all times. The Customer shall be required to relocate the SES if SRP access is later restricted by any condition (see Section 5 - Clearances and Section 9 - Metering & SES).
B. Electrically operated gates, which do not permit immediate 24-hour access to electric facilities for SRP personnel, could pose a safety hazard. Every existing or proposed electrically operated gate in SRP territory is required to have the approved SRP Restricted Access Switch assembly installed. Customers are responsible for installing the SRP approved switch, which will be wired to the gate controller, on electrically operated gates. The required lock and key switch will be available through SRP after payment for the lock and switch has been received. The switch will be installed by the Customer's gate service company and maintained by the Customer, according to SRP specifications. Customers are also required to provide the means of opening gates from the inside without the use of vehicles to activate the controller. This may require the installation of an additional SRP Restricted Access Switch assembly inside the gate if there is not an unsecured switch available for SRP use.

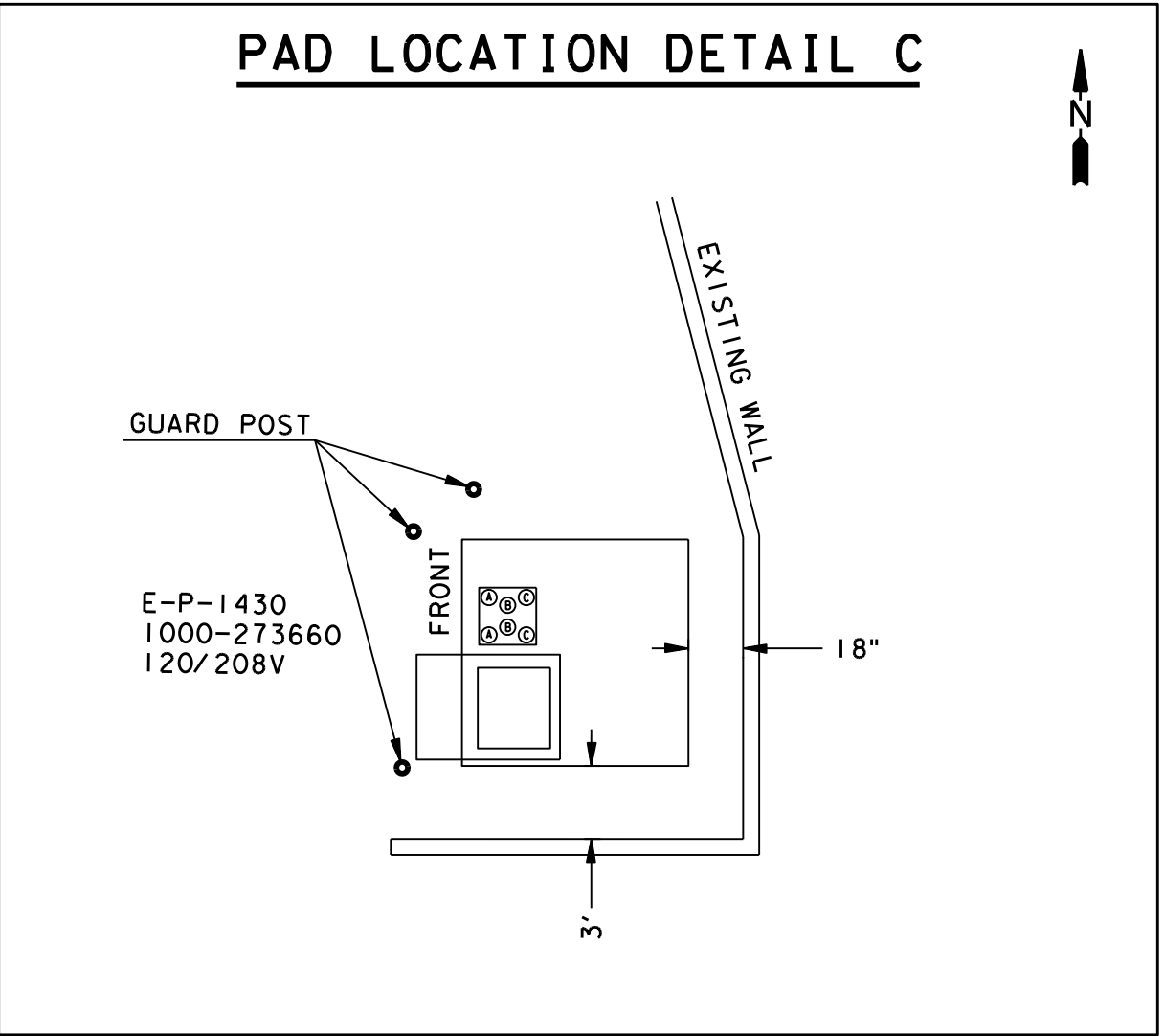
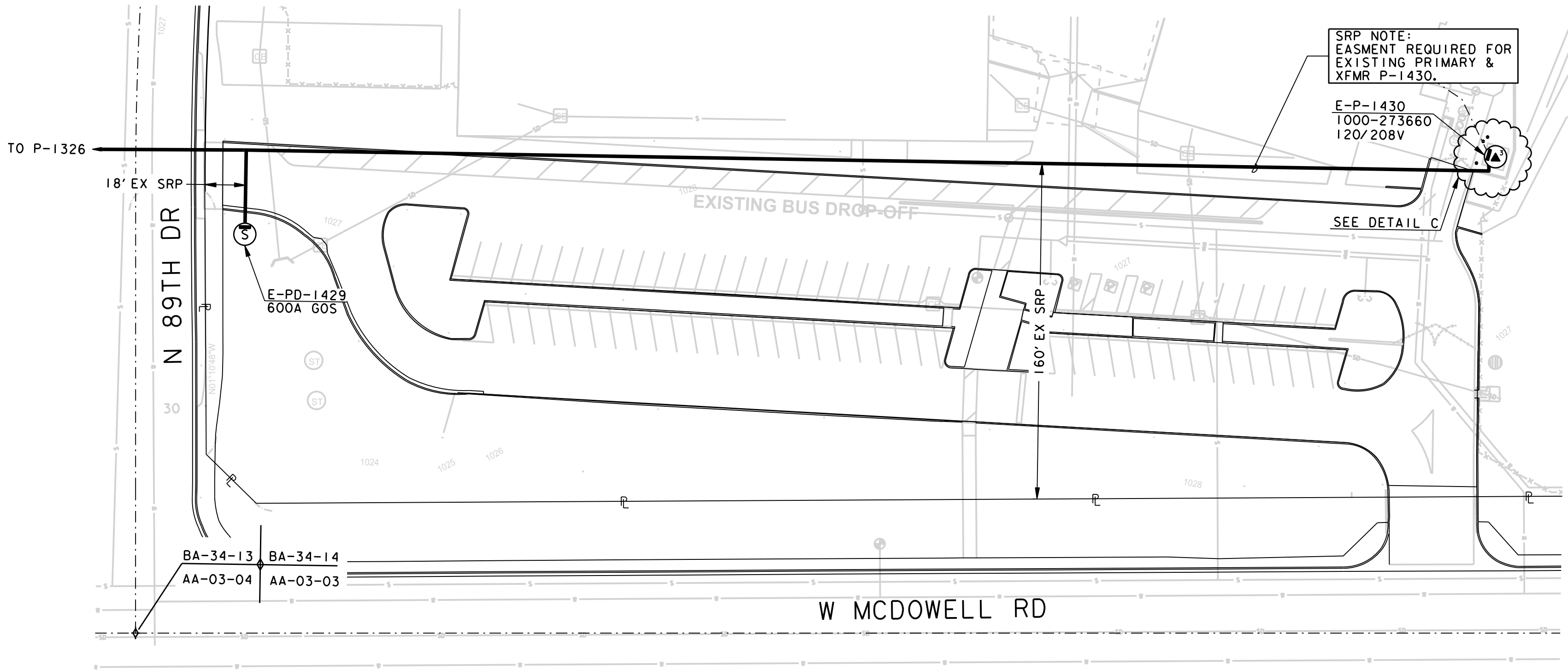
Electric Service Specifications SRP PROPRIETARY MATERIAL	GENERAL INFORMATION REQUEST FOR SERVICE 1-19	ISSUE DATE: 04/15/86 REV. DATE: 10/19/12 APPROVAL: W. Laramie ESS1-17b1-20.doc
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DETAILS PERTAINING TO SRP ELECTRICAL SERVICE
SPECIFICATIONS CAN BE FOUND AT:
[HTTP://WWW.SRPNET.COM/ELECTRIC/BUSINESS/SPECS/](http://www.srpnet.com/electric/business/specs/)

NATURAL GAS YES ☐ NO ☒
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COST CENTER 22640
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MAINLINE



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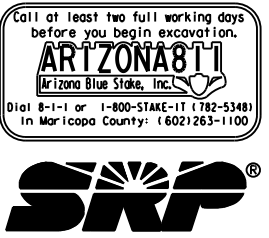
NATURAL GAS YES ☐ NO ☒

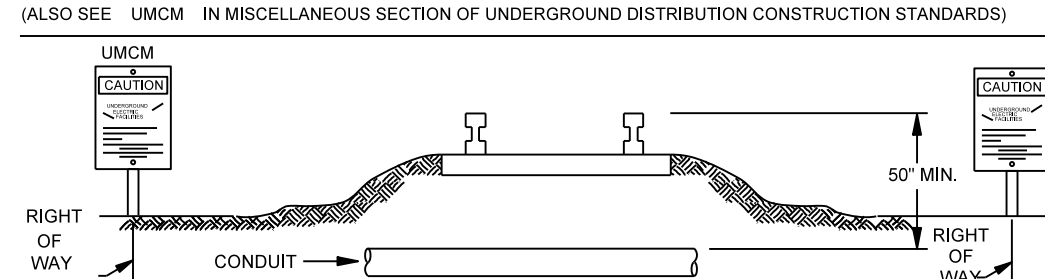
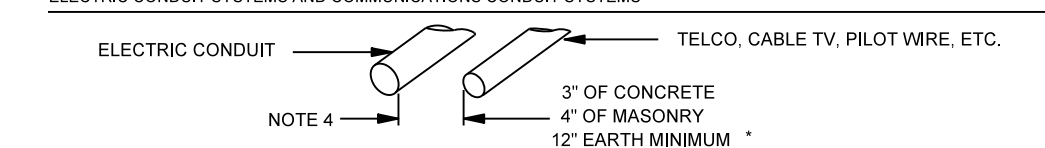
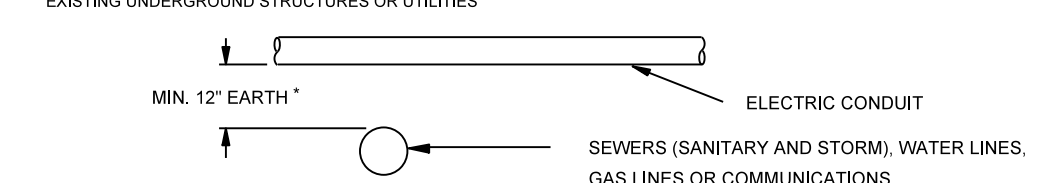
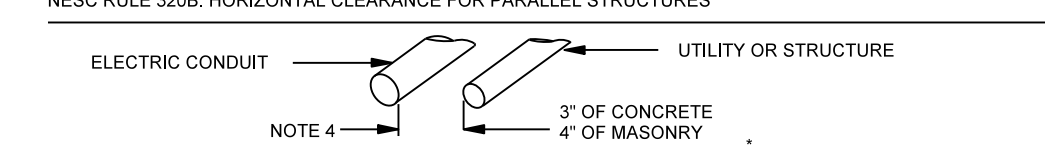

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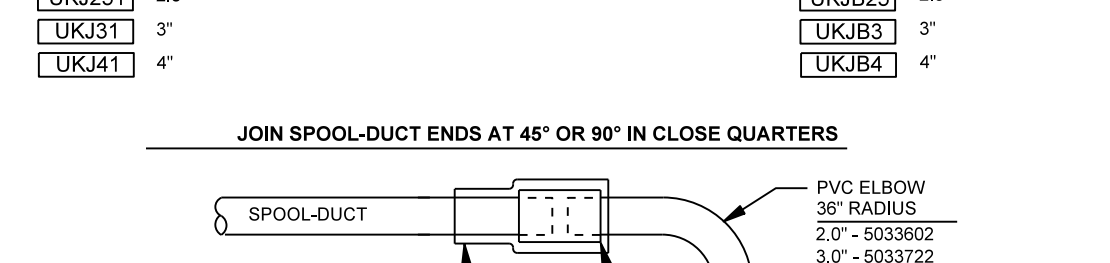

FIS JO _____ MAP 1/4 SW S34 T2N R1E
40/ACRE BA-34-14 COORDS 3 3/8E - 6 1/16N
AMP NO T3101441 AMP VERSION _____

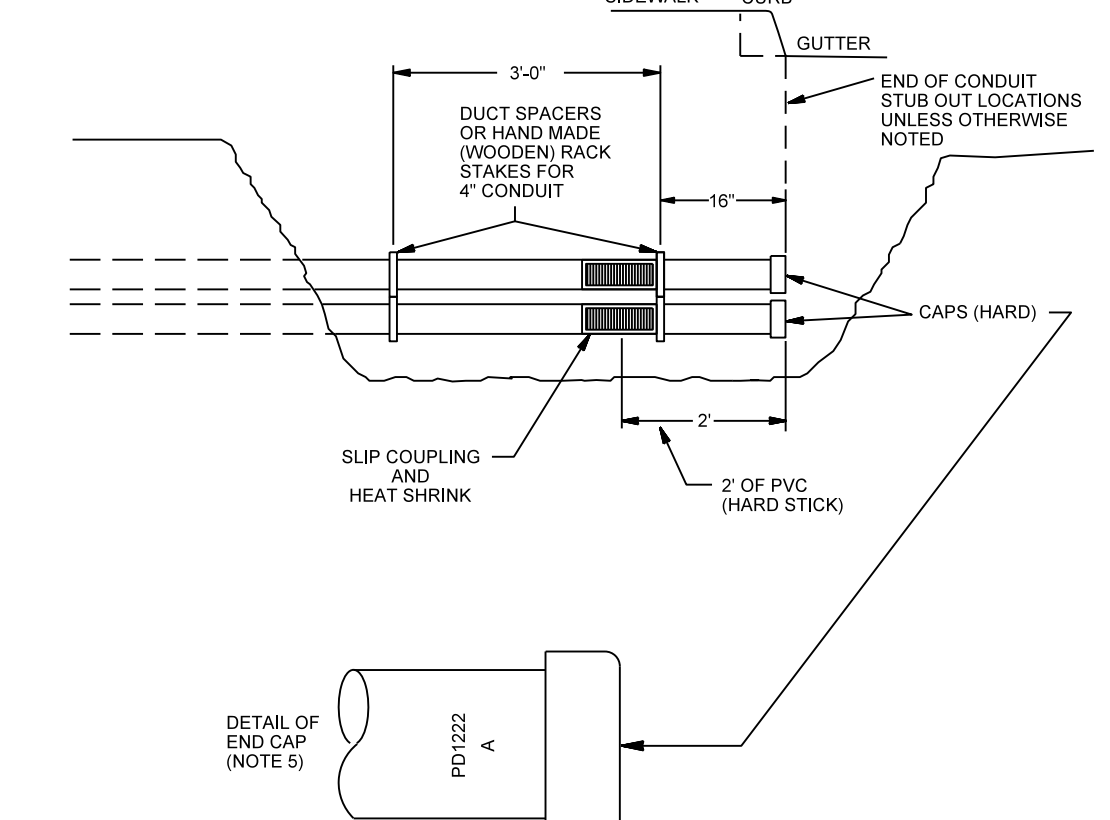

COST CENTER 22640
ROUTING CODE DDY+10

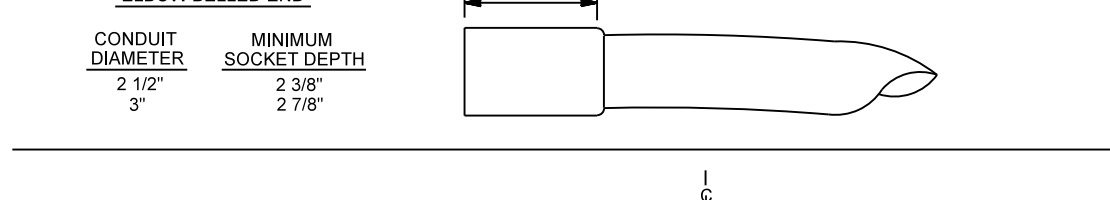
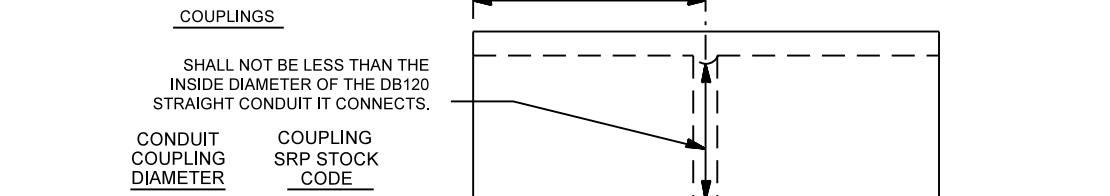
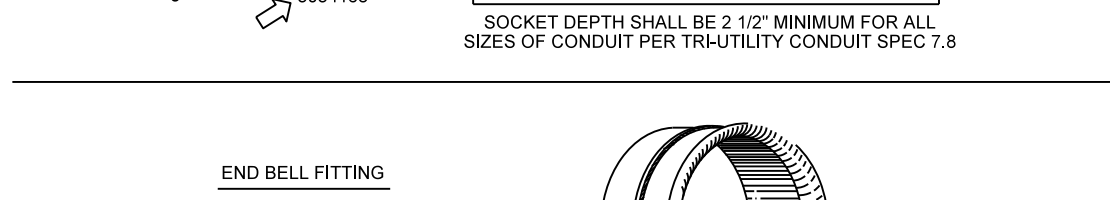
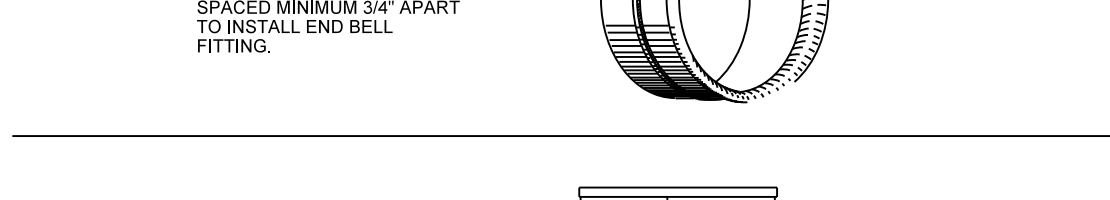

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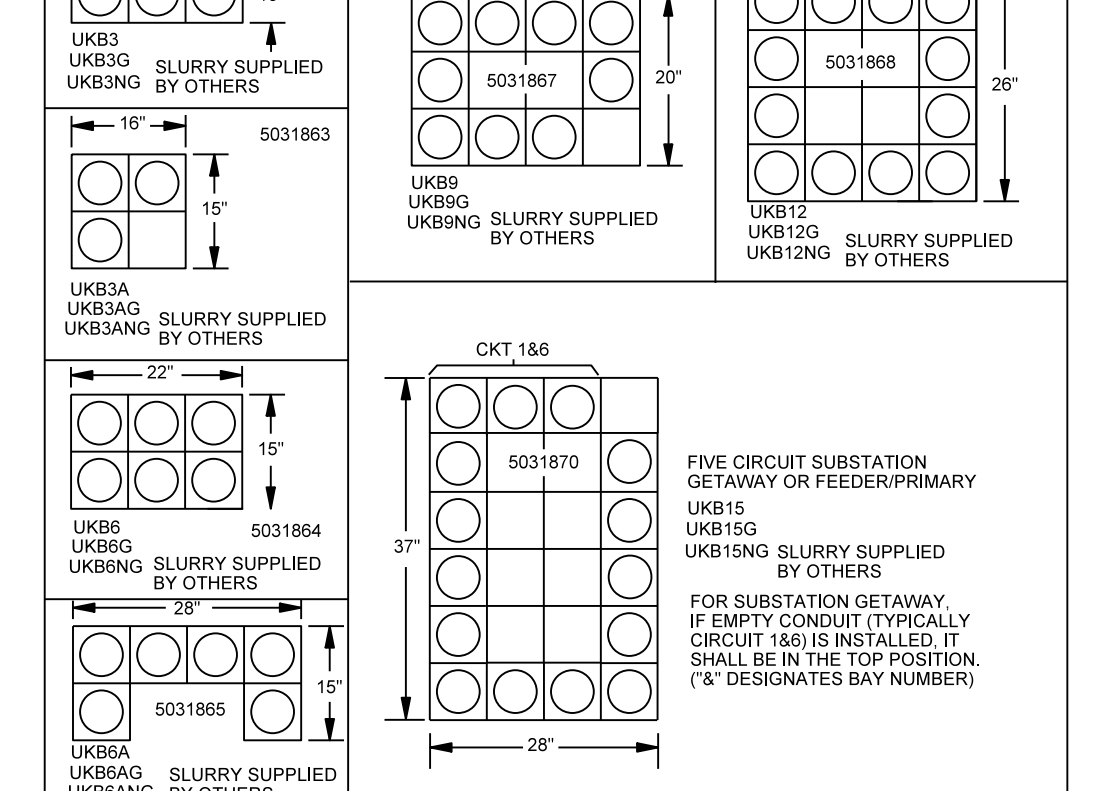



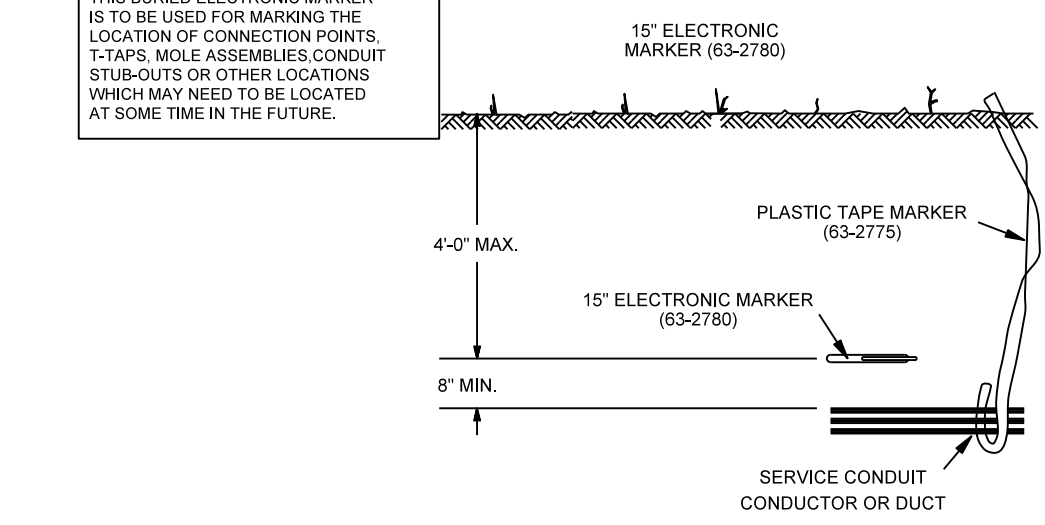

<p>NEC RULE 320A5: RAILROAD CROSSINGS (ALSO SEE UMCM IN MISCELLANEOUS SECTION OF UNDERGROUND DISTRIBUTION CONSTRUCTION STANDARDS)</p>  <p>NEC RULE 320B2: MINIMUM VERTICAL OR HORIZONTAL SEPARATIONS BETWEEN ELECTRIC CONDUIT SYSTEMS AND COMMUNICATIONS CONDUIT SYSTEMS</p>  <p>NEC RULE 320 B: MINIMUM CLEARANCE BETWEEN AN ELECTRIC CONDUIT SYSTEM AND OTHER EXISTING UNDERGROUND STRUCTURES OR UTILITIES</p>  <p>NEC RULE 320B: HORIZONTAL CLEARANCE FOR PARALLEL STRUCTURES</p>  <p>NOTES: 1. AN ALTERNATIVE TO 12" EARTH IS A RIGID SUPPORT FOR THE UPPER STRUCTURE TO PREVENT IT FROM TRANSFERRING ANY DIRECT LOAD TO LOWER STRUCTURE. 2. CONDUIT SHOULD BE INSTALLED AS FAR AS PRACTICAL FROM A WATER MAIN TO PROTECT IT FROM BEING UNDERMINED IF THE MAIN BREAKS. 3. EL PASO NATURAL GAS CO. HAS ADDITIONAL REQUIREMENTS AS DETAILED ON PAGE 2-7-1. 4. OTHER UTILITIES OR MUNICIPALITIES MAY HAVE REQUIREMENTS GREATER THAN THOSE REQUIRED BY N E S C AND THEREFORE WILL TAKE PRIORITY OVER THOSE SHOWN. • SEE PAGE 2-3-1 FOR SOIL DENSITY & COMPACTION REQUIREMENTS.</p>		
<p>Electrical Clearance Standards</p>  <p>PROPRIETARY MATERIAL</p>	<p>UNDERGROUND CLEARANCES UNDERGROUND CONDUIT NEC RULE 320A5, 320B2 AND 320B</p> <p>2-4-1</p>	<p>ISSUE DATE: 09/30/91 REV. DATE: 05/22/11 APPROVAL:M.DYER</p> <p>8509E308.DGN</p>

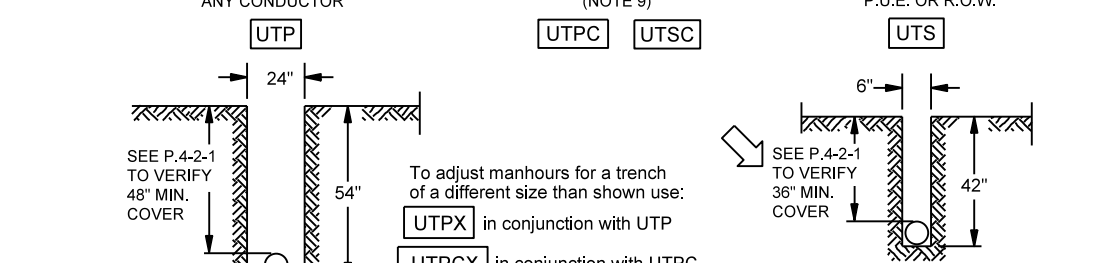
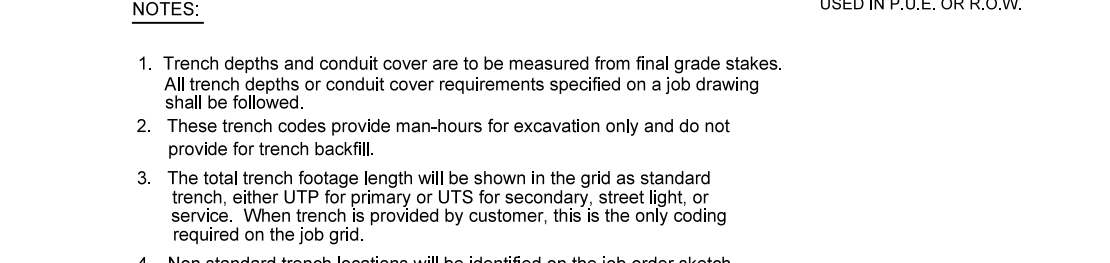
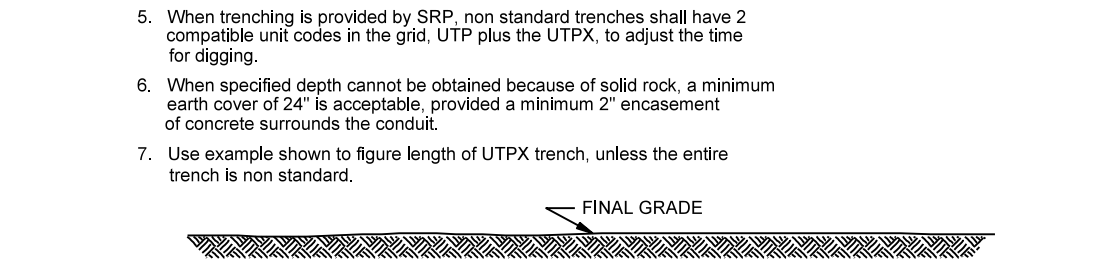

<p>SPOOL-DUCT TO SPOOL-DUCT OR PVC CONDUIT TO SPOOL-DUCT</p>  <p>JOIN SPOOL-DUCT ENDS AT 45° OR 90° IN CLOSE QUARTERS</p>  <p>NOTES: 1. GLUE COUPLING ONTO PVC CONDUIT AND BEVEL INSIDE ENDS OF SPOOL-DUCT 30°-40°. 2. PLACE HEAT SHRINK SLEEVES OVER ENDS OF DUCT AND INSERT SPOOL-DUCT INTO COUPLING (OR BELL END). 3. SHRINK HEAT SHRINK TUBE OVER COUPLING AND ONTO SPOOL-DUCT TO HOLD THEM TOGETHER. 4. GROUT FINAL ASSEMBLY PER CONDUIT ELBOW REINFORCEMENT DETAILS ON PG 4-6-1. 5. JOINING SPOOL-DUCT WITH A PVC ELBOW IS TO BE USED IN CLOSE QUARTERS WHERE SPOOL-DUCT CAN NOT BE INSTALLED IN ONE CONTINUOUS PIECE. 6. ADD A "G" TO THE END OF ANY ABOVE COMPATIBLE UNIT FOR MATERIAL PROVIDED BY SRP AND INSTALLED BY CUSTOMER.</p>		
<p>Underground Distribution Construction Standards</p>  <p>PROPRIETARY MATERIAL</p>	<p>CONDUIT SHORT RADIUS CORNER AND SPOOL-DUCT OR PVC TO SPOOL-DUCT JOINT</p> <p>4-8-1</p>	<p>ISSUE DATE: 02/14/90 REV. DATE: 07/29/13 APPROVAL:B.PRIEST</p> <p>8510E12.DGN</p>

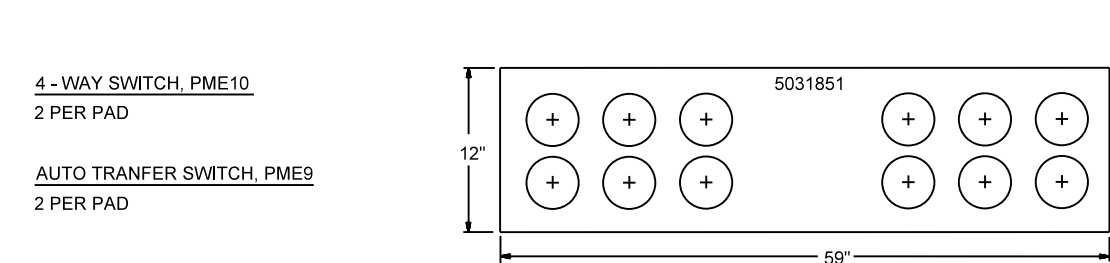
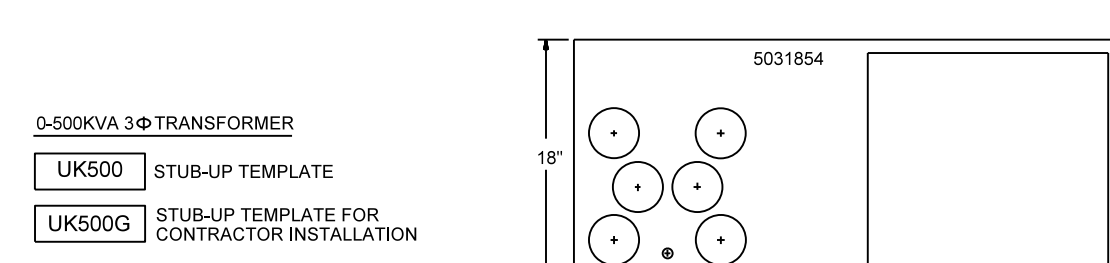
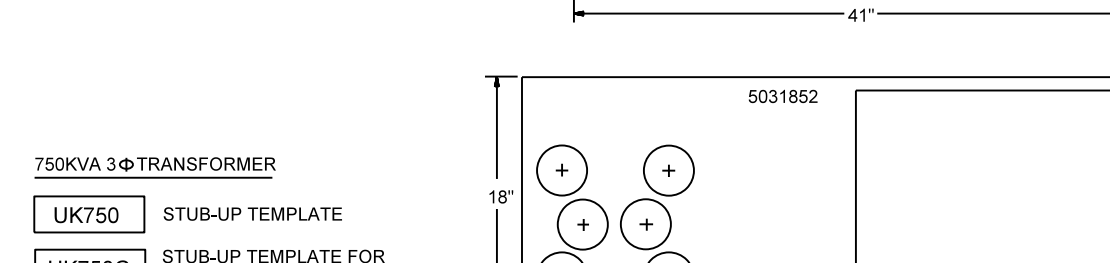
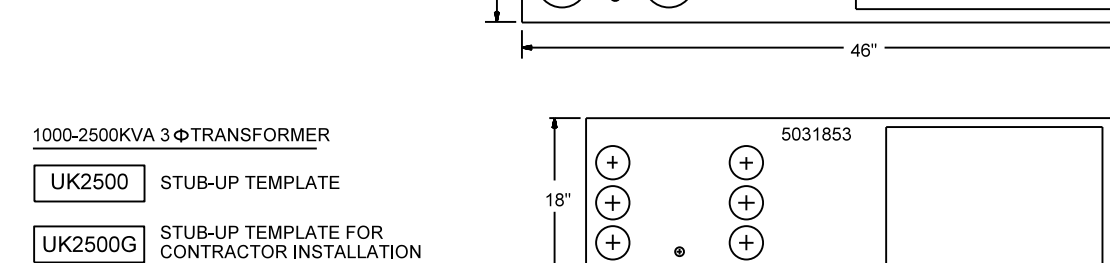
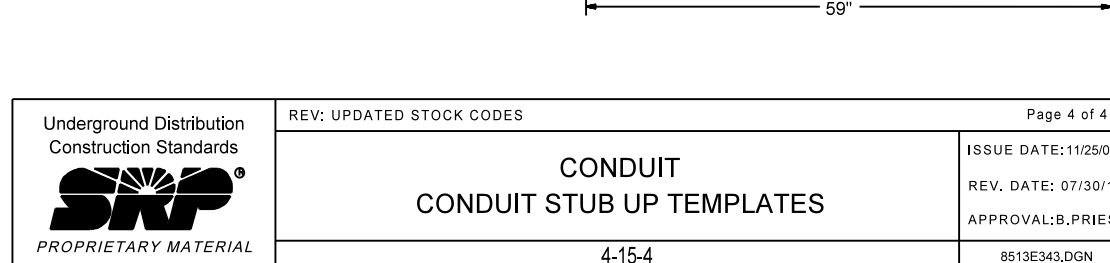

<p>PVC CONDUIT WITH BELLED END TO SPOOL-DUCT</p>  <p>DETAIL OF END GAP (NOTE 5)</p> <p>NOTES: 1. SPOOL DUCT STUB-OUTS SHALL BE INSTALLED STRAIGHT AND AT REQUIRED SPECIFIED DEPTH. 2. TWO OR MORE SPOOL DUCTS SHALL HAVE DUCT SPACERS INSTALLED. WHERE THREE FEET OR MORE OF SPOOLED DUCT IS EXPOSED IN BORE PIT, TWO SETS OF DUCT SPACERS SHALL BE INSTALLED AS SHOWN AND ARRANGED WITH SPECIFIED CONDUIT RACKING. 3. SPOOL DUCT STUB-OUTS SHALL BE CAPPED WITH PVC CONDUIT CAPS, BUT NOT GLUED. 4. STUB-OUT PIT MAY BE BACK FILLED IF REQUIRED, BUT MUST HAVE ELECTRONIC MARKER AND A RED FLAG OVER END OF CONDUIT. 5. WITH BLACK FELT TIP PEN, WRITE THE DEVICE CONDUIT IS FROM AND PHASE. 6. SPOOL DUCT SHALL HAVE APPROVED 2,500 POUND, CONTINUOUS (NO TIED PIECES), NON-CONDUCTIVE, PRE-LUBRICATED, FLAT PULL TAPE, FREE MOVING AND NOT GLUED TO DUCT.</p>		
<p>Electric Service Specifications</p>  <p>PROPRIETARY MATERIAL</p>	<p>TRENCHING AND CONDUIT SPOOLED DUCT AND CONDUIT STUB-OUTS</p> <p>6-7</p>	<p>ISSUE DATE: 09/01/09 REV. DATE: 10/25/12 APPROVAL:WEL</p> <p>8509E307.DGN</p>

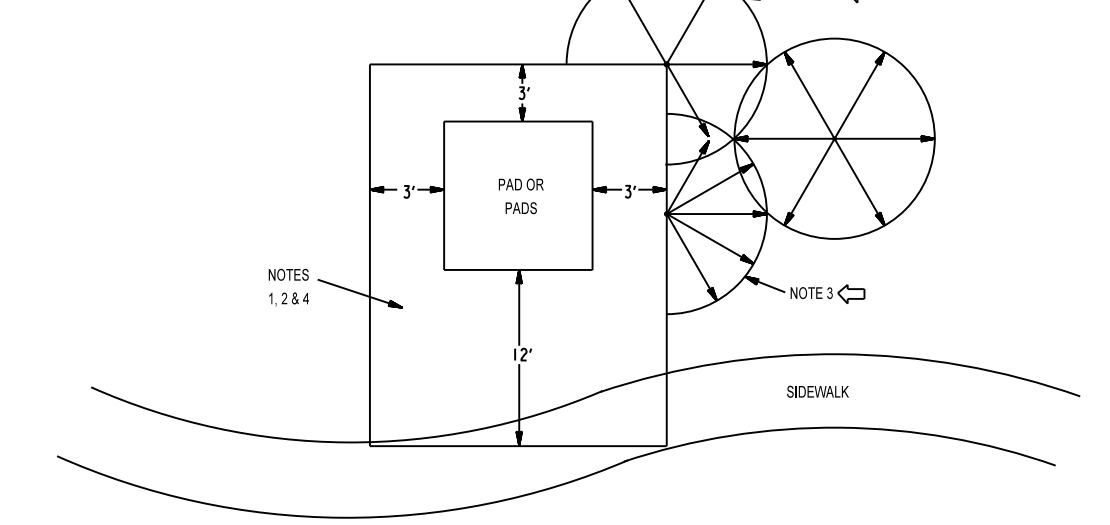

<p>PVC STRAIGHT AND ELBOW BELLED END</p>  <p>COUPLINGS</p>  <p>END BELL FITTING</p>  <p>REDUCER AT PULL FITTING</p> 		
<p>Electric Service Specifications</p>  <p>PROPRIETARY MATERIAL</p>	<p>TRENCHING AND CONDUIT SIZES & SPECIFICATIONS BELLED ENDS AND FITTINGS</p> <p>6-3</p>	<p>ISSUE DATE: 03/13/01 REV. DATE: 05/22/13 APPROVAL: WEL</p> <p>8509E127.DGN</p>

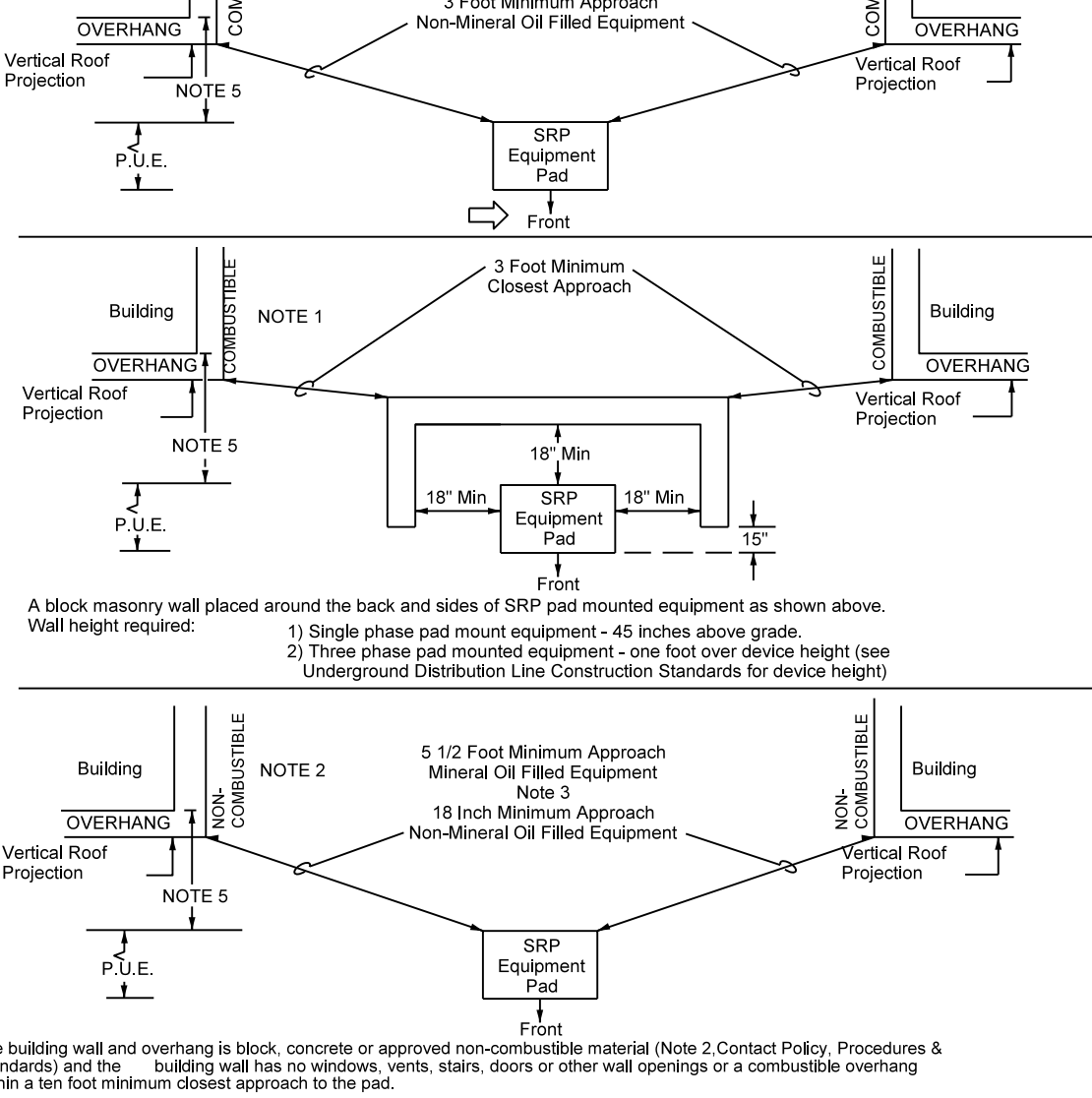

<p>CONDUIT FEEDER OR PRIMARY 3" CONDUIT BANK SPECIFICATION CODES</p>  <p>NOTES: 1. A 200 COPPER NEUTRAL WILL BE REQUIRED WITH DUCT BANKS FROM A SUBSTATION OUT TO THE TERMINATION OR SPICE POINT AS SPECIFIED BY DESIGNER. SEE PAGE 4-13-2 FOR 300 COPPER INSTALLATION INSTRUCTION. 2. ALL UKB CONDUIT BANKS CONSIST OF 3" CONDUITS WITH A MINIMUM OF 2 IN CONTROLLED LOW STRENGTH MATERIAL (1- 1/2 SACKS CEMENT/YD.) ENCASEMENT AND WILL HAVE SPACERS LOCATED AT 6 FT INTERVALS. 3. ADD "N" TO CONDUIT BANK CODE WHEN ENCASING WITH FULL STRENGTH CONCRETE. 4. ADD SUFFIX "TE" TO GET ENCASING WITH FULL STRENGTH RED CONCRETE. (EL PASO GAS CROSSING). 5. CONDUIT CONFIGURATIONS OTHER THAN THOSE SHOWN MUST BE SPECIFIED BY DESIGNER ON SKETCH. INNER SPACES OF UKB3, UKB12 & UKB15 ARE NOT TO BE USED, AS EXCESS HEATING WILL RESULT. 6. THESE CONDUIT BANKS, WITH THE EXCEPTION OF SUBSTATION GET-AWAYS, MAY BE ROTATED 90 OR 180 DEGREES AS SPECIFIED BY DESIGNER. 7. WHEN TRENCHING UNDER EXISTING CONDUIT BANKS REFER TO UKB52 FOR SUPPORTING SPECIFICATIONS (PG. 4-16-1). 8. THE ABOVE DIMENSIONS ARE NOMINAL OVERALL FOR DETERMINING TRENCH DIMENSIONS. 9. INDIVIDUAL CONDUITS ARE NOT TO BE ENCRILED WITH STEEL SUCH AS WIRE OR REBAR AS EXCESSIVE HEATING WILL RESULT. ENCRILEMENT AROUND ENTIRE DUCT BANK IS PERMISSIBLE. 10. REFER TO CLEARANCE SECTION FOR MINIMUM COVER OF A DUCT BANK INSTALLED IN ROAD RIGHT OF WAYS. 11. ON SUBSTATION GET-AWAYS DESIGNATE TOP ROW OF CONDUIT TO BE IN TOP WINDOW OF MANHOLE.</p>		
<p>Underground Distribution Construction Standards</p>  <p>PROPRIETARY MATERIAL</p>	<p>CONDUIT FEEDER OR PRIMARY 3" CONDUIT BANK SPECIFICATION CODES</p> <p>4-13-1</p>	<p>ISSUE DATE: 01/15/87 REV. DATE: 11/30/14 APPROVAL:S.PRIEST</p> <p>8510E13.DGN</p>

<p>THIS BURIED ELECTRONIC MARKER IS TO BE USED FOR MARKING THE LOCATION OF CONNECTION POINTS, T-TAPS, MOLE ASSEMBLIES CONDUIT STUB-OUTS OR OTHER LOCATIONS WHICH MAY NEED TO BE LOCATED AT SOME TIME IN THE FUTURE.</p>  <p>NOTES: 1. BURY AT LEAST 8" ABOVE ENERGIZED CONDUCTOR. CLOSER DISTANCE WILL CAUSE THE MARKER TO BE INEFFECTIVE AT 4 FOOT OR GREATER DEPTH. 2. THE MARKER IS TO BE BURIED FLAT AND LEVEL. 3. COVER WITH AT LEAST 4" OF SELECT BACK FILL TO PREVENT ACCIDENTAL MOVEMENT OR DAMAGE DURING BACK FILL. (FOR SERVICE CONDUIT, IT MAY BE IN BOTTOM OF TRENCH). 4. CARE SHOULD BE TAKEN TO INSURE THAT CABLE, TIN FOIL, OR OTHER EXTRANEOUS METAL DOES NOT GET DISCARDED INTO THE TRENCH PRIOR TO BACK FILL. METAL IN CLOSE PROXIMITY WILL RENDER THE MARKER INEFFECTIVE. 5. FOR PERMANENT INSTALLATION WITH A BURIED JUNCTION BOX: DRILL 2 HOLES IN LID AND SECURE MARKER TO LID WITH NYLON CABLE TIE.</p>		
<p>Electric Service Specifications</p>  <p>PROPRIETARY MATERIAL</p>	<p>TRENCHING AND CONDUIT PLACEMENT STANDARD FOR BURIED ELECTRONIC MARKER</p> <p>6-5</p>	<p>ISSUE DATE: 09/01/09 REV. DATE: 03/05/13 APPROVAL:WEL</p> <p>8509E308.DGN</p>

<p>TRENCH UNIVERSAL ANY CONDUCTOR</p>  <p>TRENCH WITH CONFLICTS OR DIFFICULTIES (NOTE 9)</p>  <p>STANDARD SECONDARY/SERVICE OR STREET LIGHT WHEN OUTSIDE P.U.E. OR R.O.W.</p>  <p>NOTES: 1. Trench depths and conduit cover are to be measured from final grade stakes. All trench depths or conduit cover requirements specified on a job drawing shall be followed. 2. These trench codes provide man-hours for excavation only and do not provide for trench backfill. 3. The total trench footage length will be shown in the grid as standard trench, either UTP for primary or UTS for secondary, street light, or service. When trench is provided by customer, this is the only coding required on the job grid. 4. Non standard trench locations will be identified on the job order sketch with required width and depth dimensions given. 5. When trenching is provided by SRP, non standard trenches shall have 2 compatible unit codes in the grid, UTP plus the UTPX, to adjust the time for digging. 6. When specified depth cannot be obtained because of solid rock, a minimum earth cover of 24" is acceptable, provided a minimum 2" encasement of concrete surrounds the conduit. 7. Use example shown to figure length of UTPX trench, unless the entire trench is non standard. 8. If secondary/service or street light must be placed in P.U.E. or road R.O.W. use UTP trench dimensions and enter UTS as the compatible unit. 9. Provides 1.5 times regular man-hours. 10. Trench bottom to be smooth and free of sharp rocks. Where excavation is in rock, bottom of trench to have protective layer of clean, level, tamped backfill or sand.</p>		
<p>Underground Distribution Construction Standards</p>  <p>PROPRIETARY MATERIAL</p>	<p>TRENCHING EXCAVATION CODES</p> <p>6-11-1</p>	<p>ISSUE DATE: 01/15/87 REV. DATE: 03/05/13 APPROVAL:S.PRIEST</p> <p>8510E135.DGN</p>

<p>4-WAY SWITCH, PME10 2 PER PAD</p>  <p>AUTO TRANSFER SWITCH, PME9 2 PER PAD</p>  <p>0-500KVA 3Φ TRANSFORMER</p>  <p>750KVA 3Φ TRANSFORMER</p>  <p>1000-2500KVA 3Φ TRANSFORMER</p> 		
<p>Underground Distribution Construction Standards</p>  <p>PROPRIETARY MATERIAL</p>	<p>CONDUIT CONDUIT STUB UP TEMPLATES</p> <p>4-15-4</p>	<p>ISSUE DATE: 11/05/02 REV. DATE: 07/30/13 APPROVAL:S.PRIEST</p> <p>8511E363.DGN</p>

<p>NOTES: 1. EASEMENT GRANTOR SHALL MAINTAIN A CLEAR AREA THAT EXTENDS 3 FEET FROM AND AROUND ALL EDGES OF ALL TRANSFORMER PADS AND OTHER EQUIPMENT PADS AND A CLEAR OPERATIONAL AREA THAT EXTENDS 12 FEET IMMEDIATELY IN FRONT OF ALL TRANSFORMER AND OTHER EQUIPMENT OPENINGS. DO NOT PLACE OBSTRUCTIONS, TREES, SHRUBS, FIXTURES OR PERMANENT STRUCTURES WITHIN AFOREMENTIONED AREAS, EASEMENT DOCUMENTS, MAY SUPERSEDE THESE REQUIREMENTS. 2. THIS SAME CLEAR AREA SHALL BE DRY LANDSCAPED. 3. DIRECT SPRINKLER HEADS AWAY FROM PAD MOUNTED EQUIPMENT, AS SHOWN ABOVE. SPRINKLER HEADS SHALL NOT SPRAY ON PAD MOUNTED EQUIPMENT OR DRY LANDSCAPE AREA AROUND EQUIPMENT. 4. DRY LANDSCAPE SURFACE MAY BE NATIVE SOIL, CONCRETE, ASPHALT PAVEMENT OR CRUSHED GRANITE OR GRAVEL WITH A MAXIMUM PARTICLE SIZE NO GREATER THAN ONE INCH. 5. A BORDER CURB IS REQUIRED IF SRP INSTALLS THE LANDSCAPE. 6. DRY LANDSCAPE IS REQUIRED IN COMMON AREAS SUCH AS SCHOOLS, WATER RETENTION BASIN BORDERS, PARKS, ETC.</p> 		
<p>Electric Service Specifications</p>  <p>PROPRIETARY MATERIAL</p>	<p>CLEARANCES DRY-LANDSCAPE CONTROLLED AREA DETAIL</p> <p>5-9</p>	<p>ISSUE DATE: 03/02/01 REV. DATE: 11/09/10 APPROVAL:M.MILLIES</p> <p>8509E133.DGN</p>

<p>NOTES: 1. Single phase pad mount equipment – 45 inches above grade. 2) Three phase pad mounted equipment – one foot over device height (see Underground Distribution Line Construction Standards for device height)</p>  <p>NOTES: 1. Exterior walls of Type V construction, per IBC Chapter 6, are considered combustible. 2. Exterior walls of Type I, II, III and IV construction, per IBC Chapter 6, are considered non-combustible. 3. SRP's mineral oil filled equipment are standard single and three phase transformers and capacitor banks and some existing installed but obsolete fusing cubicles. 4. Some SRP pad mounted switches have clear area requirements not shown. Contact SRP Design. 5. Building setbacks will be established by local ordinances. Additionally, planned structures shall not impede SRP's access to and excavation of the easement and/or P.U.E.</p>		
<p>Electric Service Specifications</p>  <p>PROPRIETARY MATERIAL</p>	<p>CLEARANCES SRP PAD MOUNTED EQUIPMENT PAD SEPARATION FROM A BUILDING</p> <p>5-18</p>	<p>ISSUE DATE: 02/16/05 REV. DATE: 02/20/14 APPROVAL: WEL</p> <p>8509E133.DGN</p>

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PROJECT LEADER:
SHANNON EMMONS
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INSPECTIONS:
OFFICE: (602) 236-0676

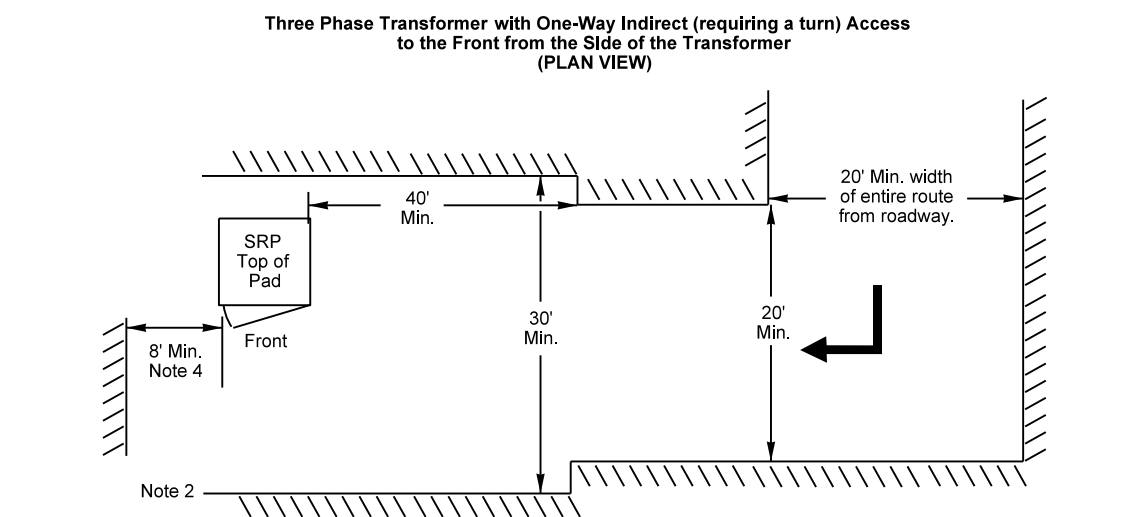
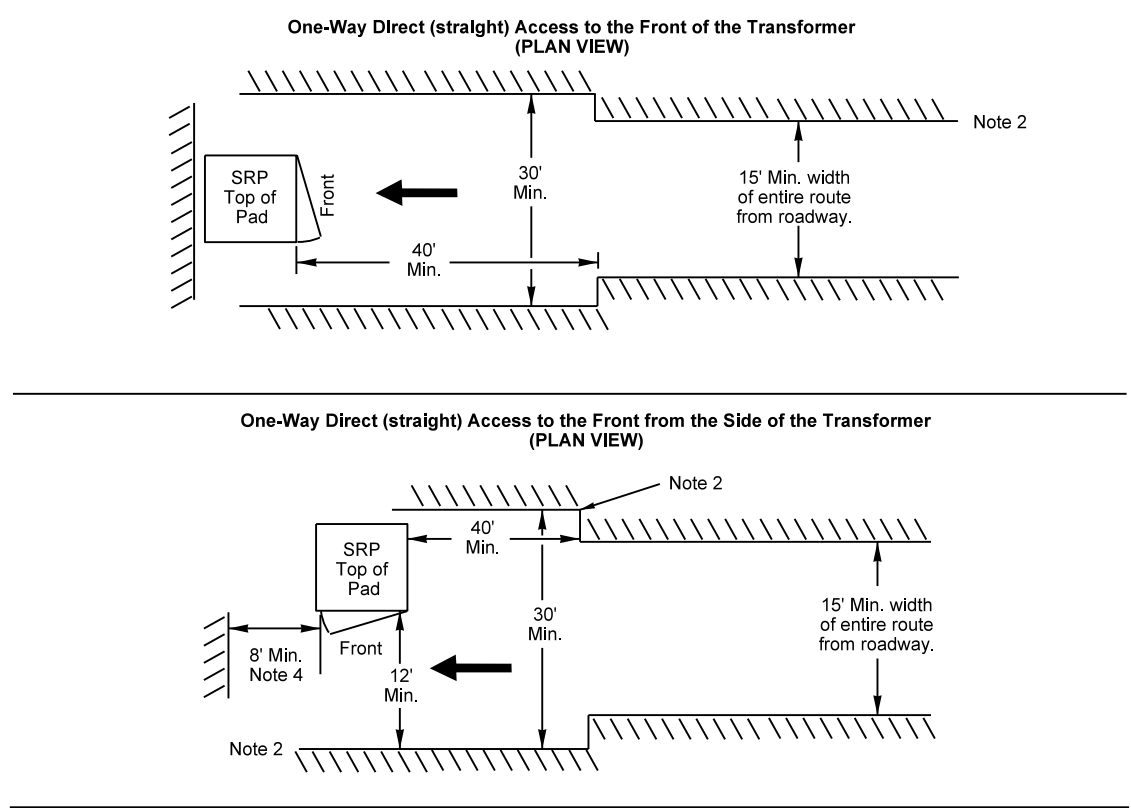
CONSTRUCTION CONSULTANT:
MONK JOHNSON
MOBILE: (602) 527-3005


DETAILS PERTAINING TO SRP ELECTRICAL SERVICE SPECIFICATIONS CAN BE FOUND AT:

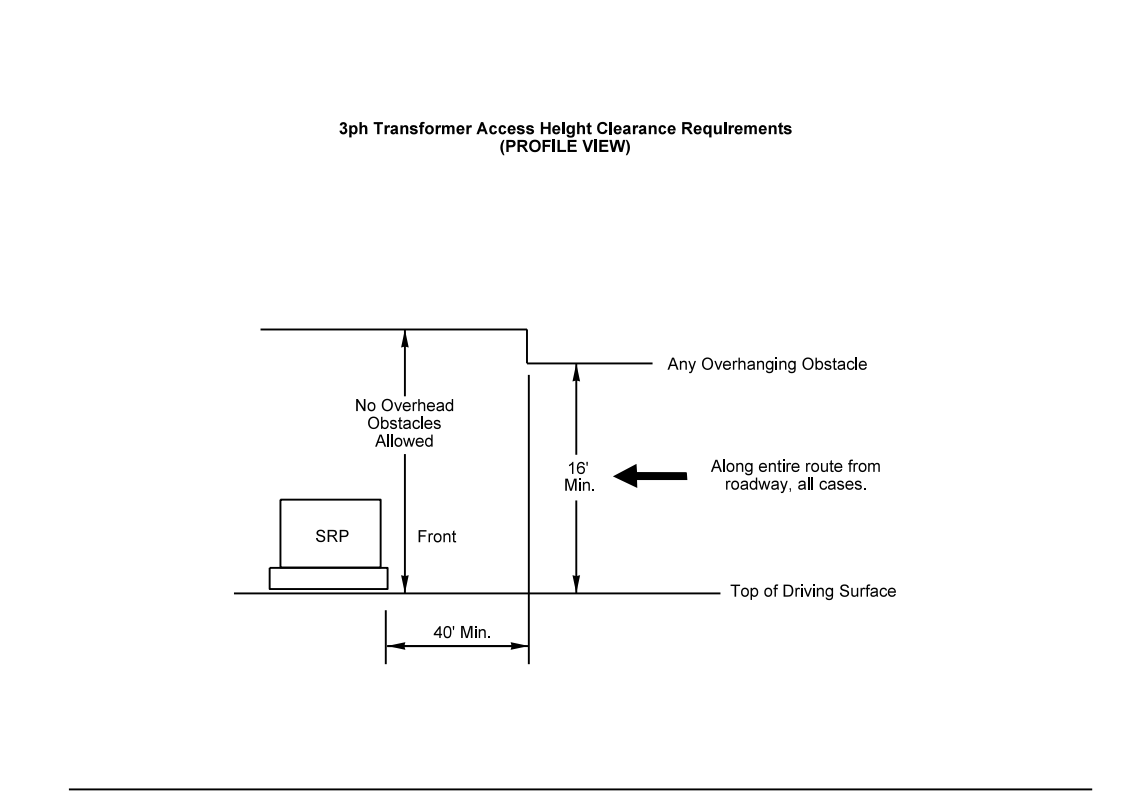
[HTTP://WWW.SRPNET.COM/ELECTRIC/BUSINESS/SPECS/](http://www.srpnet.com/electric/business/specs/)

NATURAL GAS YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
JOB NAME PAC - DESERT OASIS ELEM SCH CLSRM & GYM	
ADDRESS/LOCATION 8802 W MCDOWELL RD	
CONTACT ENRIQUE "LUPE" OCHOA	PHONE 602-568-8995
BILLING ACCT NO.	
FIS JO	MAP 1/4 SW S34 T2N R1E
40+ ACRE BA-34-14	COORDS 3 3/8 E - 6 1/16 N
AMP NO T3101441	AMP VERSION
COST CENTER 22640	
ROUTING CODE DDY+T0	



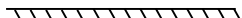


<div>Electric Service Specifications</div> <div></div> <div>PROPRIETARY MATERIAL</div>	REV. EQUIPMENT VERIFICATION	
	<div>CLEARANCES</div> <div>VEHICLE ACCESS REQUIREMENTS</div> <div>9 TRANSFORMERS</div>	<div>ISSUE DATE: 02/09/11</div> <div>REV. DATE: 06/01/18</div> <div>APPROVAL: N.SABBAH</div>
	5-20	8509E348.DGN

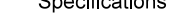


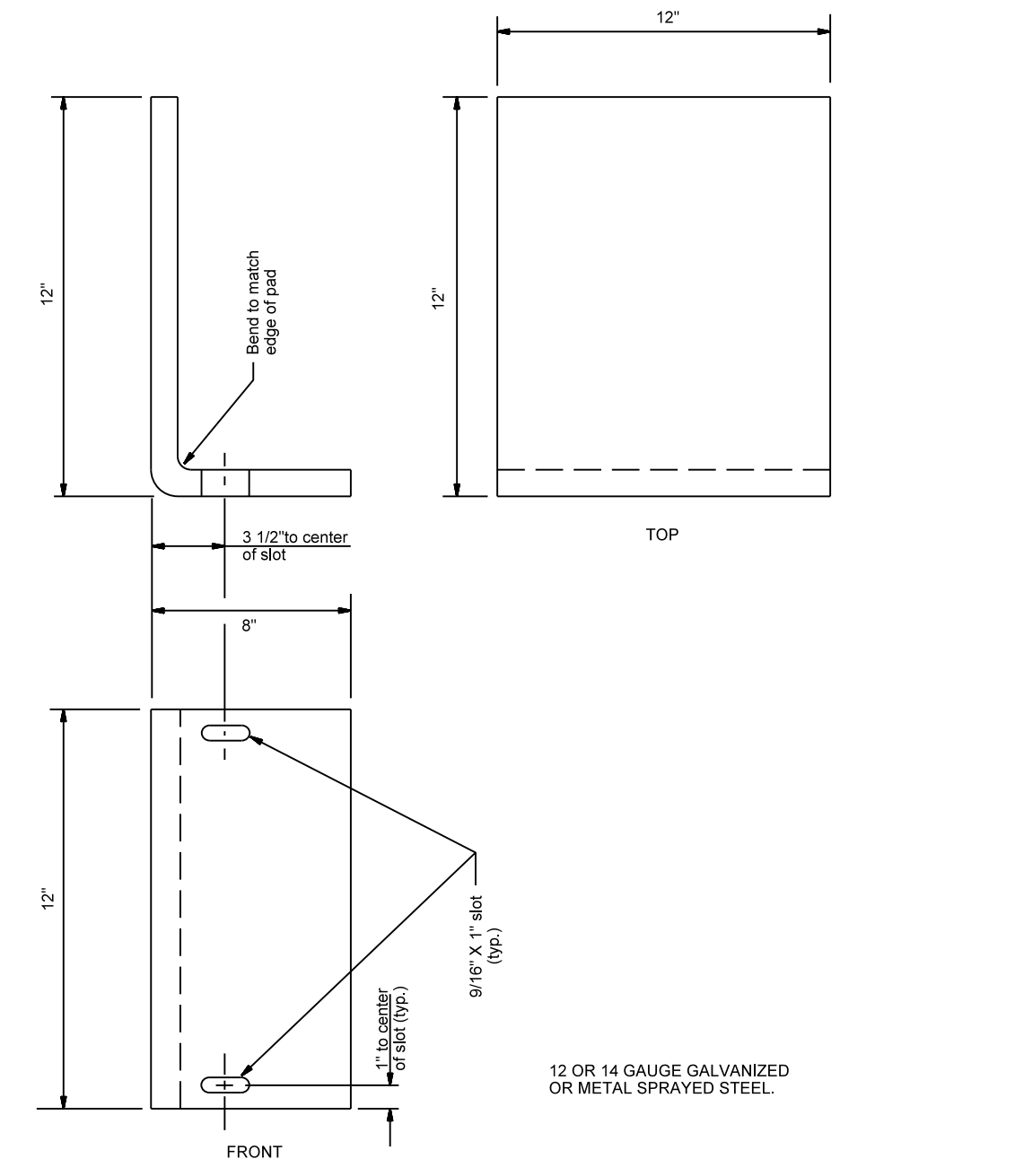
NOTES



1. These required access dimensions are in addition to the electrical clearance standards. See SRP's Electrical Clearance Standards book.
2. The Boundary of Traveled Way is any permanent obstacle to vehicle access (i.e., building, fence, Customer equipment, landscape, ditch, curb, etc.).

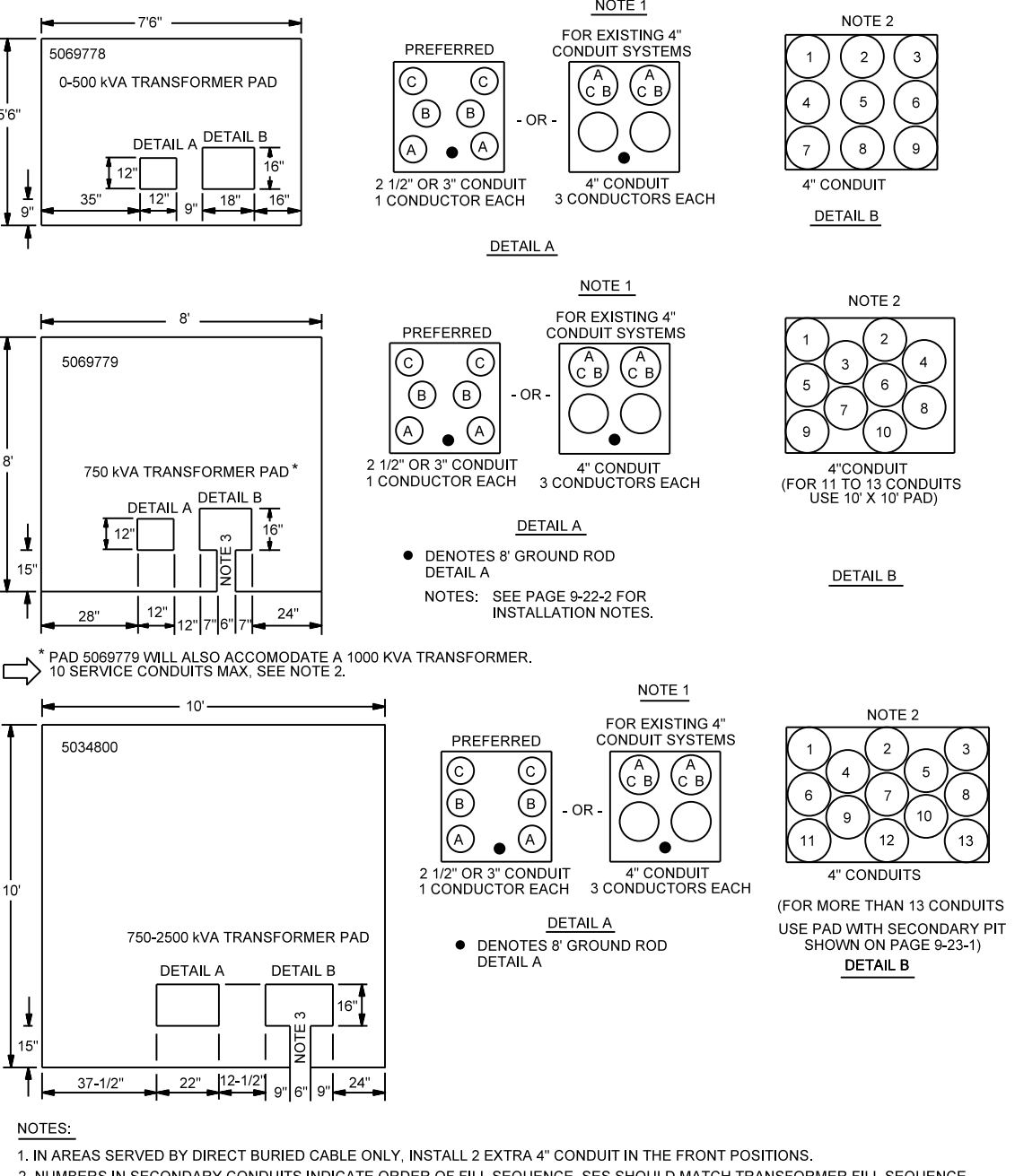
Boundary of Traveled Way 

3. These requirements are based on maneuvering requirements of the OMC. If these cannot be obtained, a crane will have to be used. Consult SRP Distribution Design.
4. 8' minimum clear space is required for backing and positioning beyond the equipment.
5. Access way must support 80,000 lbs. GVW.
6. Consult Distribution Design for vehicle access to multiple pad-mounted equipment..

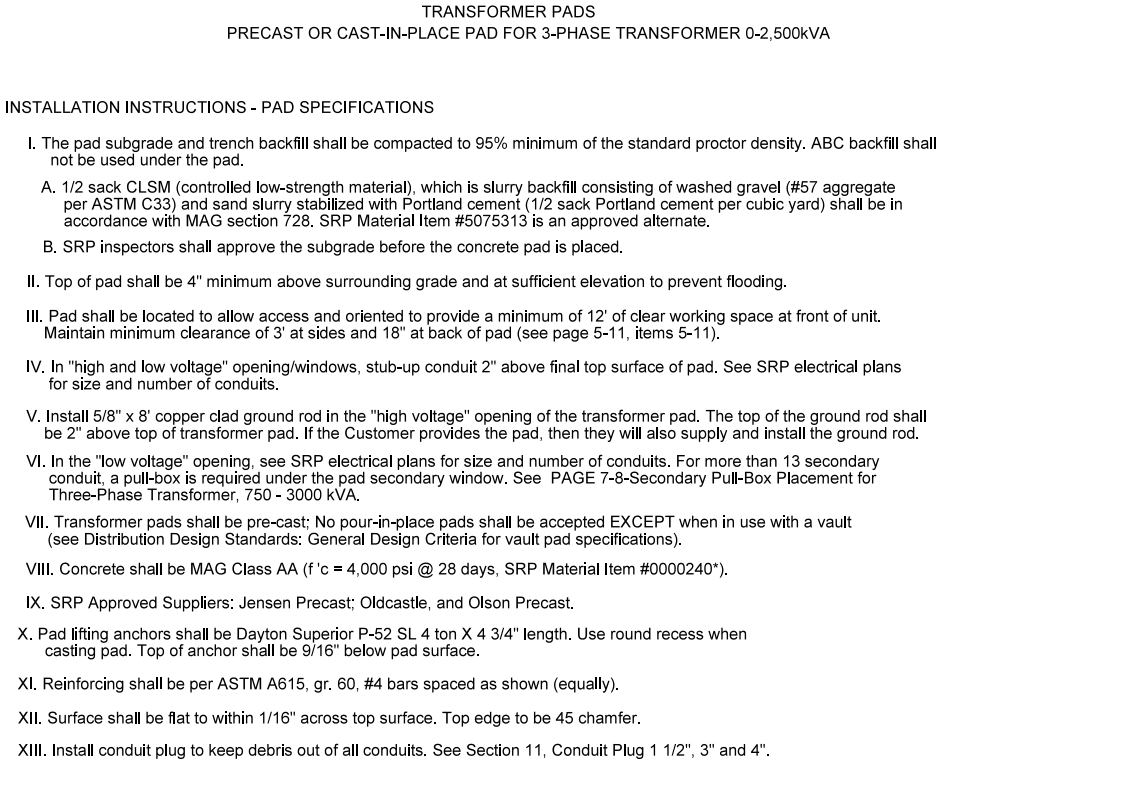
<div>Electric Service Specifications</div> <div></div> <div>PROPRIETARY MATERIAL</div>	REV. CLEARANCE HEIGHT UPDATE	
	CLEARANCES VEHICLE ACCESS REQUIREMENTS ☺ TRANSFORMERS	ISSUE DATE: 02/09/11 REV. DATE: 06/01/18 APPROVAL: N.SABBAH
	5-21	8509E349.DGN




<div>Electric Service Specifications</div> <div></div> <div>PROPRIETARY MATERIAL</div>	REV. TITLE CHANGE 1,000 TO 750,	Page 2 of 2
	<div>TRANSFORMER PADS PRECAST OR CAST-IN-PLACE PAD FOR THREE PHASE TRANSFORMER 750 - 2,500 kVA</div> <div></div>	<div>ISSUE DATE: 02/02/05</div> <div>REV. DATE: 02/02/17</div> <div>APPROVAL: N.SABBAH</div>
	7-6	8509E307.DGN

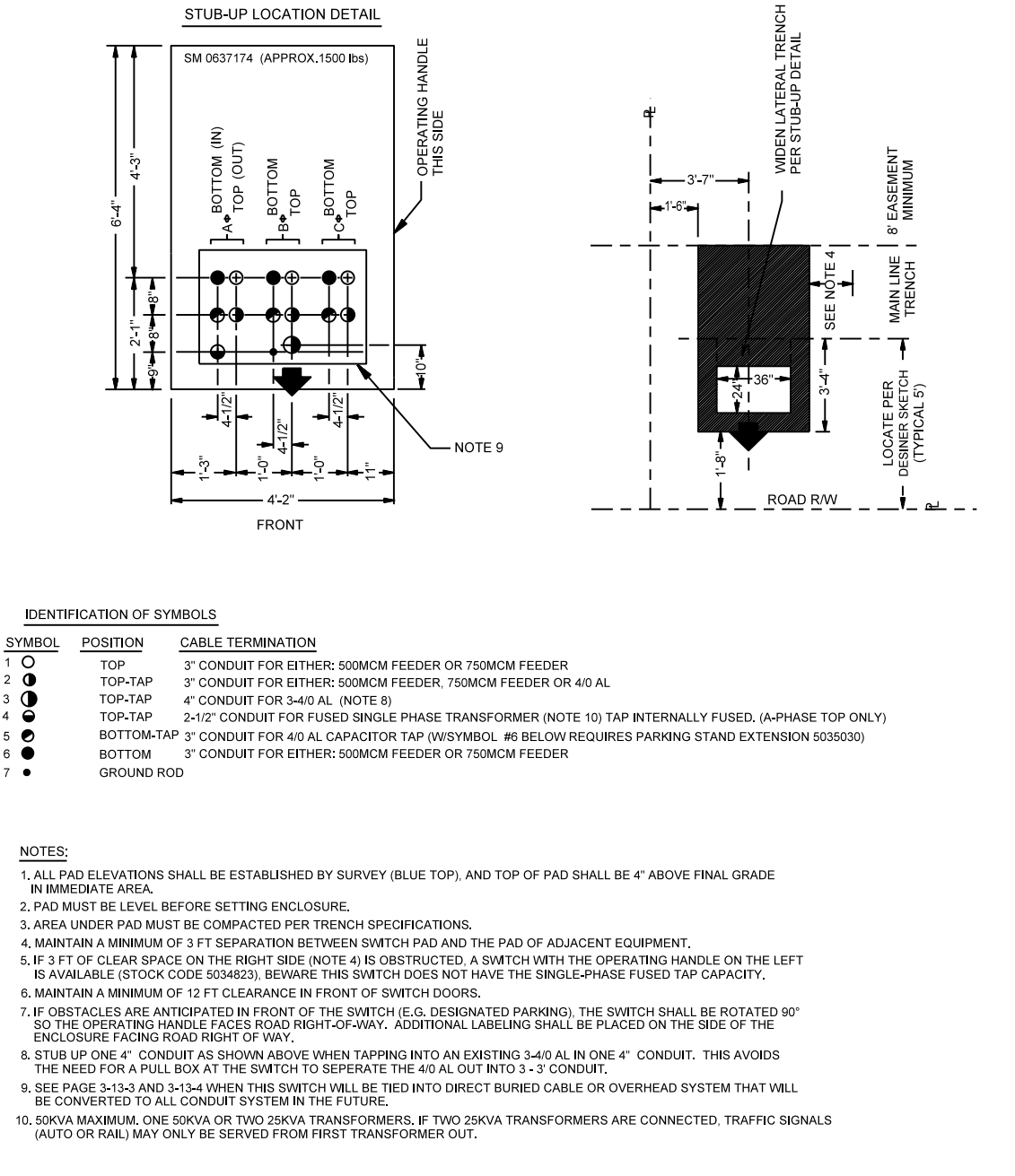



3. THE GAP IS COVERED BY A METAL PLATE PROVIDED BY THE MANUFACTURER.			
<div>Underground Distribution Construction Standards</div> <div></div> <div>PROPRIETARY MATERIAL</div>	REV. REVISED NOTE FOR 750KVA TRANSFORMER PAD	<div>ISSUE DATE: 01/15/87</div> <div>REV. DATE: 02/01/17</div> <div>APPROVAL: N. SABBAH</div> <div>8513E141.DGN</div>	
	TRANSFORMERS		
	THREE PHASE PAD INSTALLATION DETAILS		
	9-27-1		

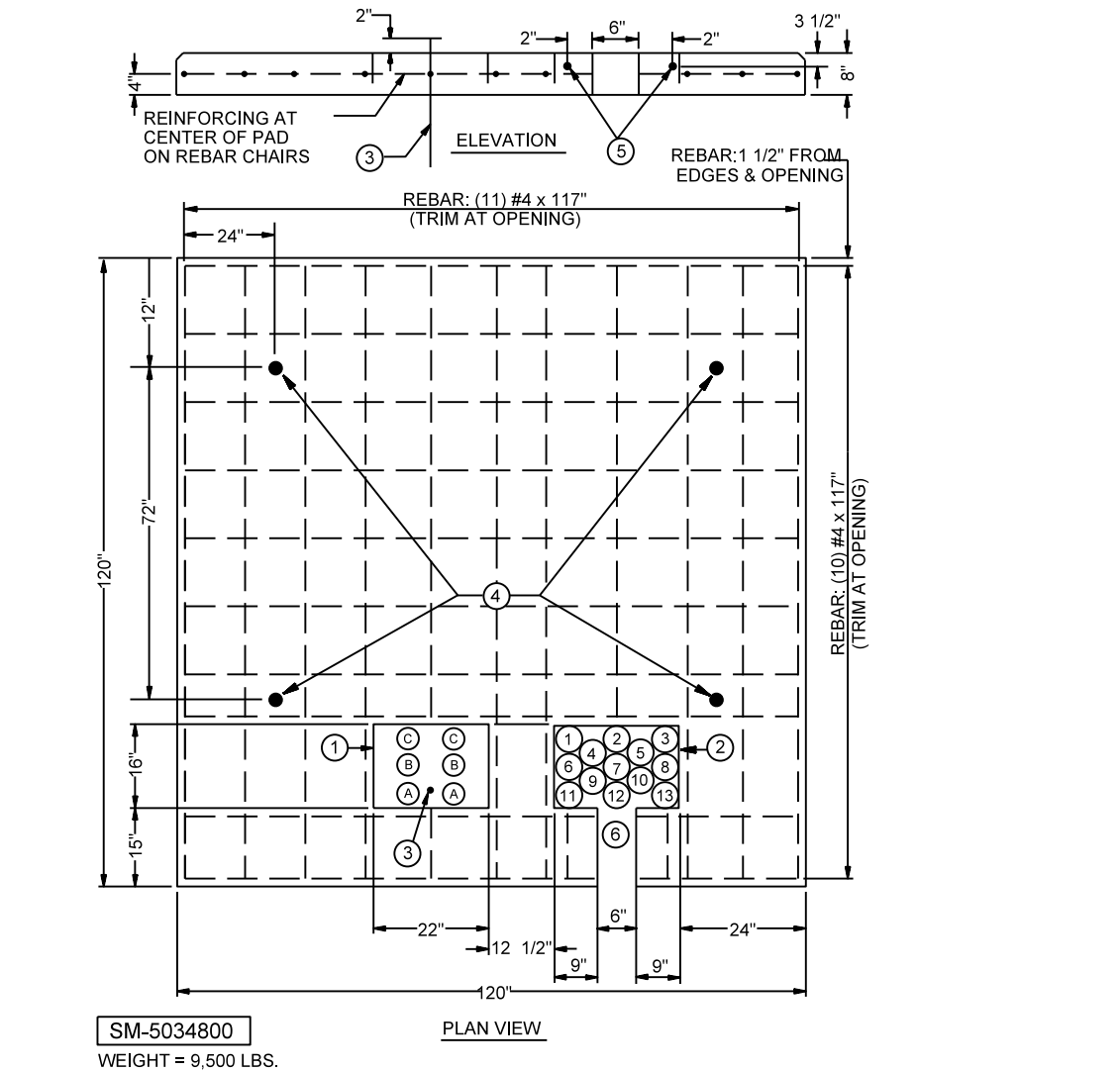


Underground Distribution Construction Standards SRP PROPRIETARY MATERIAL	REV. REVISED NOTE FOR 750KVA TRANSFORMER PAD	ISSUE DATE: 01/15/87 REV. DATE: 02/01/17 APPROVAL: N.SABBAH 8513E141.DGN
	TRANSFORMERS THREE PHASE PAD INSTALLATION DETAILS	
6-22-1		


<div>Electric Service Specifications</div> <div></div> <div>PROPRIETARY MATERIAL</div>	Page 2 of 2	
	TRANSFORMER PADS	
	PRECAST OR CAST-IN-PLACE PAD	
	FOR THREE PHASE TRANSFORMER	
	0 - 2,500 kVA	
	7-7	ISSUE DATE: 12/31/92
		REV. DATE: 03/22/16
		APPROVAL: N. SABBAH
		8509E352.DGN

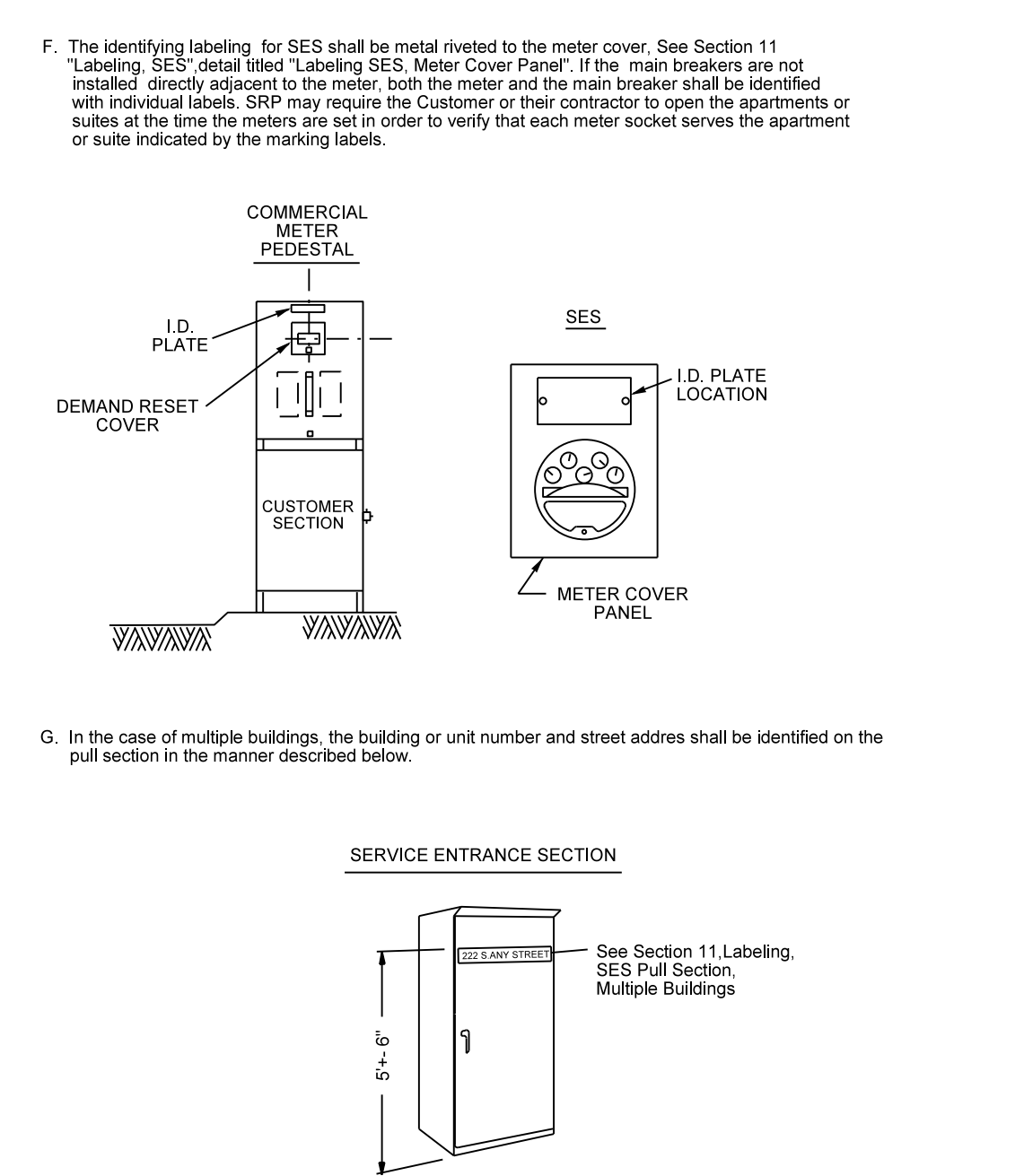



Underground Distribution Construction Standards  PROPRIETARY MATERIAL	REV. UPDATED STOCK CODES	Pg. 2 of 12
	SWITCHING AND FUSING DEAD FRONT SWITCHING ENCLOSURE	ISSUE DATE: 01/15/87 REV. DATE: 07/25/13 APPROVAL: B. PRIEST
	3.13.2	8513E141.DGN

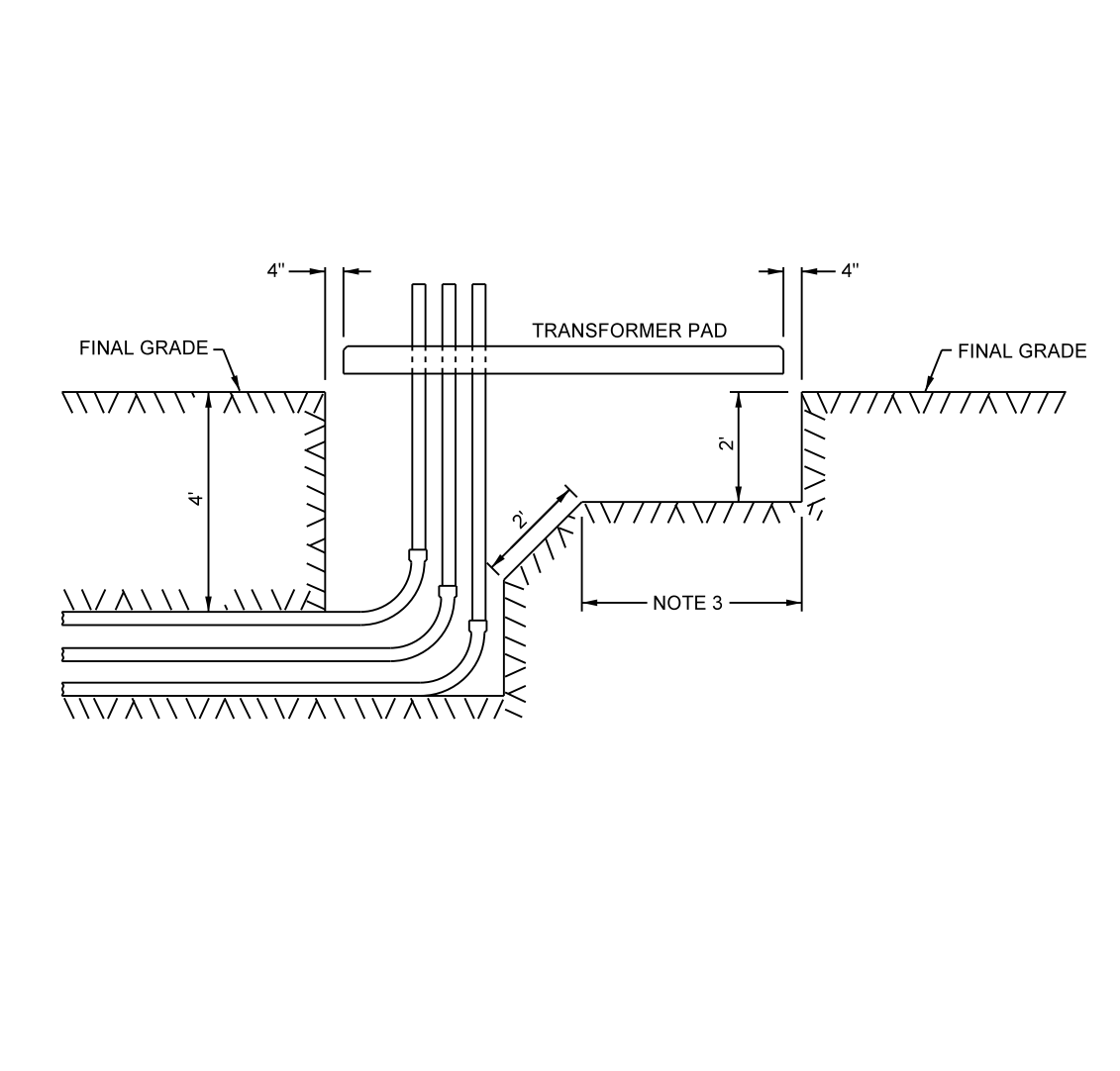


<div>LEND:</div> <div><div>HIGH VOLTAGE OPENING, LETTERS IN CONDUIT REPRESENT PHASING, 3" CONDUIT, ONE CONDUCTOR EACH.</div><div>LOW VOLTAGE OPENING, 4" CONDUIT, MAXIMUM NUMBER OF CONDUIT STUB UPS FOLLOW, NUMBERS IN SECONDARY CONDUITS INDICATE ORDER OF FILL, SEE SHEDS MATCH TRANSFORMER FILL SEQUENCE, 4" CONDUIT.</div><div>5/8" X 8'-0" COPPER CLAD GROUND ROD.</div><div>PAD LIFTING ANCHOR (4 PLACES FOR PRECAST PAD, SEE ITEM #10 PAGE 7-7, NOT REQUIRED IF POURED IN PLACE).</div><div>1-7" THREADED INSERTS.</div><div>THE 6" GAP SHALL BE COVERED WITH THE PLATE SHOWN ON PAGE 7-6.</div><div>INSTALLATION INSTRUCTIONS AND PAD SPECIFICATIONS ON PAGE 7-7.</div></div>	
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<div>Electric Service Specifications</div> <div></div> <div>PROPRIETARY MATERIAL</div>	REV: UPDATED TRANS. SIZE RANGE	PAGE 1 OF 2
	TRANSFORMER PADS PRECAST OR CAST-IN-PLACE PAD FOR THREE PHASE TRANSFORMER ➡ 750 - 2,500 kVA	ISSUE DATE: 04/15/86 REV. DATE: 01/27/2017 APPROVAL: N.SAABAH
	7-5	8509E95.DGN




<div>Electric Service Specifications</div> <div></div> <div>PROPRIETARY MATERIAL</div>	Page 2 of 2	
	METERING & SES SERVICE ENTRANCE SECTION ADDRESSING & IDENTIFICATION	
	Q. 11	ISSUE DATE: 04/15/86 REV. DATE: 11/02/12 APPROVAL: W.LARAME SE06C15E.DGN



NOTES

1. Reinforcing backfill material under transformer pad shall be CLSM 1" sack (Material Item Number 5075314).
2. Soil conditions vary and may require additional work to provide proper support of the transformer and transformer pad. SRP construction personnel (inspector, construction consultant, etc.) shall contact Civil Engineering Services inspections to review soil conditions at the site before setting the transformer pad.
3. Dimension of this cut shall be from the back of the transformer pad to the transformer pad centerline.

Underground Distribution Construction Standards  PROPRIETARY MATERIAL	THREE PHASE TRANSFORMER INSTALLATION REINFORCED EXCAVATION	ISSUE DATE: 10/20/17 REV. DATE: APPROVAL: S.DURAN
	6-9-3	8513E585.DGN



Underground Distribution Construction Standards SRP PROPRIETARY MATERIAL	REV. REVISED NOTE FOR 750KVA TRANSFORMER PAD	ISSUE DATE: 01/15/87 REV. DATE: 02/01/17 APPROVAL: N.SABBAH 8513E141.DGN
	TRANSFORMERS THREE PHASE PAD INSTALLATION DETAILS	
6-22-1		

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CONSTRUCTION CONSULTANT:
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MOBILE: (602) 527-3005

DETAILS PERTAINING TO SRP ELECTRICAL SERVICE SPECIFICATIONS CAN BE FOUND AT:
[HTTP://WWW.SRPNET.COM/ELECTRIC/BUSINESS/SPECS/](http://www.srpnet.com/electric/business/specs/)

NATURAL GAS YES ☐ NO ☐

JOB NAME PAC - DESERT OASIS ELEM SCH CLSRM & GYM
ADDRESS/LOCATION 8802 W MCDOWELL RD
CONTACT ENRIQUE "LUPE" OCHOA PHONE 602-568-8995
BILLING ACCT NO. _____
FIS JO _____ MAP 1/4 SW S34 T2N R1E
40+ ACRE BA-34-14 COORDS 3 3/8E - 6 1/16N
AMP NO T3101441 AMP VERSION _____
COST CENTER 22640
ROUTING CODE DDY+10

SHEET NUMBER 6 OF 6

