

Question #1: Is there a detail on manhole MH1?

Answer #1: No project-specific detail was developed for Manhole MH1. However, a typical manhole detail from a reference project is provided (see page 7) for guidance. The cable tray shown in the reference detail may be omitted if the Contractor elects to use traditional conduit or cable hangers. A standard-depth manhole, as shown in the reference detail, is acceptable, as the required bending radius for the 6-inch conduit is 60 inches. Final conduit penetration locations and elevations shall be adjusted by the Contractor based on the total number of conduits and the intended conduit routing depth.

Question #2: Exactly what is required for manhole MH1 termination box?

Answer #2: There is no special requirement for the MH1 termination box. The box shall be sized to safely accommodate splicing of the existing 500 kcmil cables and to meet required cable bending radius requirements. The termination box shall also allow the cables to be properly secured so that no mechanical stress is transferred to the splices.

Question #3: Plans call to splice 3/0 wire to 500mcm. Splices are standard 4/0 to 500mcm. Please advise.

Answer #3: Acceptable splice solutions are available for transitioning between 3/0 and 500 kcmil conductors. Refer to the provided excerpts from 3M and Prysmian product catalogs on Pages 8 through 12, which identify commercially available splice kits suitable for this conductor size combination.

Question #4: Regarding the Switchgear (EQ-YSS04-01), Transformer (TN-YSS04-01), and MDP (EQ-YSS04-02) in the Crusher Building, are these Owner provided or Contractor provided?

Answer #4: The Switchgear (EQ-YSS04-01), Transformer (TN-YSS04-01), and Main Distribution Panel (EQ-YSS04-02) in the Crusher Building are Contractor-provided as part of this Phase I construction contract. The Contractor's scope of work includes all services necessary to procure, furnish, install, and commission new Phase I portions of the power distribution system at the Yates Complex, including all required labor, materials, equipment, and incidental work to complete the construction in accordance with the Contract Documents. The Offeror may reference the green-colored portions of the one-line diagram on Page 14 and *Attachment E (SDSTA Bid Sheet)* as guides for identifying Contractor-provided equipment and conductors.

Question #5: We are adding a 3rd cable from the Switchgear to the Hoist Building, correct?

Answer #5: Yes. The updated design drawings (Yates Elec Rehab Drawing Package REV2) from the posted RFP Amendment shows details of the additional cable from the Yates Crusher Switchgear to the Yates Hoist Building. A #2/0 AWG cable from Yates Crusher Switchgear YC5A breaker, a #2/0 AWG cable from Yates Switchgear YC6A breaker, and a #2 AWG cable from Yates Crusher Switchgear YC7A breaker all run to the Yates Hoist Building MG Set Basement.

Question #6: Is Prysmian AirGuard Cable an approved equal for the VerLok Cable from the 12kv Switchgear to the Yates Hoist Building?

Answer #6: Prysmian AirGuard cable is acceptable for the runs from the Yates Crusher Switchgear to the Yates Hoist Building MG Set Basement.

The two Verlok cables identified on the design drawings as EQYSS04EL1700-MV and EQYSS04EL4850-MV are existing cables that run from the East Switchyard to the Yates Shaft via the underground Tramway-Level. In other RFP documentation, these cables are identified as the YS01 and YS02 Yates Shaft Feeders. Upon reaching the Yates Shaft, the Verlok cables continue down the shaft through splice boxes at intermediate levels, with one cable ending at the 4100-Level and the other ending at the 4850-Level. Between the ends of Phase I and Phase II construction, SDSTA will pull these Verlok cables back from the East Switchyard through the Tramway Level and reroute them up the Yates Shaft. Once at the top of the Yates Shaft, SDSTA will secure the cables either adjacent to or within the new cable tray extending from the Yates Crusher Switchgear to the Yates Shaft that is installed as part of Phase I. SDSTA will also terminate the Verlok cables on breakers YC3A and YC3B in the new Yates Crusher Switchgear. The Phase I contractor is not required to perform any work on these cables; however, the contractor shall provide sufficient space either adjacent to or within the new cable tray to accommodate them.

Question #7: We are aware of the 700-day total project duration noted in the RFP, but could we get a feel for when you imagine construction would occur?

Answer #7: The Contractor is solely responsible for means, methods, techniques, sequences, and procedures of construction, and shall plan and staff the work to meet the project constraints and the 700-day total project duration. Based on prior construction activities onsite, SDSTA imagines that early phases of the project would emphasize planning, site walkthroughs, submittals, procurement, and long-lead equipment fabrication, with field construction activities increasing during periods of favorable weather. Exterior and civil-intensive work would most likely occur during spring through fall, while interior electrical work, testing, commissioning, and closeout activities could be performed during winter months, provided extended outages and major civil work are avoided.

Question #8: Do any of the transformers that are to be demolished during Phase I contain PCBs?

Answer #8: Five out of the nine transformers identified for demolition have "PCB-free" stickers from testing performed by T&R Electric in the 1990s and early 2000s, and contractors may use those stickers to request the associated certified test reports. The remaining four transformers (pictured on Page 3) do not have documentation confirming PCB content below 50 ppm and were manufactured during a period when PCB-based insulating oils were commonly used. SDSTA will sample the insulating oil in these four units and have an off-site testing laboratory analyze the samples to determine their PCB concentration before demolition. For purposes of this proposal and the related construction contract, please assume all transformers identified for demolition are PCB-free. If testing later confirms PCB concentrations above 50 ppm, SDSTA will issue a change order to address the additional regulatory handling, transportation, and disposal requirements and associated costs.

(continued next page)



112kVA Transformer at E&O Substation



150kVA Transformer Bank at E&O Substation

Question #9: Are materials containing asbestos present at any of the work areas?

Answer #9: The interior of the E&O Substation includes 1930s-era 2,400-volt disconnects and fuses that use phase-separating (Transite) boards containing Category II non-friable asbestos (see image below). The scope of work inside this building is limited to disconnecting an existing metal-clad cable from a modern fusible disconnect and rerouting that cable to the Contractor's new transformer located outside. This cable can be de-terminated and rerouted without disturbing the asbestos-containing phase-separating boards.



Asbestos Phase-Separating Boards in the E&O Substation

Assessments conducted in the mid-1990s identified asbestos-containing pipe insulation in both the Yates Hoist Building and the Yates Crusher Building. This material was likely abated afterward; however, given the age of these buildings and their operation during a period when asbestos was commonly used, there remains a possibility of encountering asbestos-containing materials while working in either building. As a precaution, we recommend that the Contractor include a step in their work planning documents and JHAs requiring workers to issue Stop Work and re-evaluate protective measures if any evidence of friable asbestos is discovered during construction.

Question #10: Will the E&O Substation be de-energized during demolition?

Answer #10: This will depend on the Contractor's proposed sequencing of work. The existing transformers at the E&O Substation do not need to be demolished prior to installation of the new 225 kVA transformer (TN-YSS13-03) located outside the E&O Building. If demolition of the existing transformers at the E&O Substation is scheduled to occur after both the new 225 kVA transformer and the Yates Crusher Substation have been installed and energized, demolition activities may be performed with the E&O Substation de-energized.

Question #11: The design shows reusing an existing metal-clad cable with PVC jacket for the 480V circuit from the new switchboard in the Yates Crusher Substation to the new transformer outside the E&O building. If this cable ends up being too short to reach between these two components, would it be permissible to install a junction box to extend the conductors?

Answer #11: Yes.

Question #12: Would electrical disruptions to the smaller buildings be allowed to run longer than a weekend?

Answer #12: SDSTA relies on the Yates Complex power distribution system to support daily operations and scientific experiments. Any outage impacting the entire Yates Complex, such as those required to complete new medium-voltage connections at the Oro Hondo Utility Pole, shall be limited to one weekend, and the Offeror must plan and execute the work efficiently to minimize downtime.

Outages limited to individual buildings (for example, connecting new 208V electrical feeds to the Admin and E&O Buildings, or 480V to portions of the Yates Crusher/Headframe Buildings) must generally be scheduled to occur during weekends to avoid impacts to office staff and operations. In certain cases, SDSTA may consider extending a localized building outages into the workweek; however, this will be evaluated on a case-by-case basis and is dependent on the time of year, the weather, and the ability of office staff to work remotely or reschedule on-site activities at that time.

All outages require coordination with SDSTA and must be reflected in the project schedule included with the Contractor's preconstruction submittal. Any changes to planned outage timing or duration require a minimum of two weeks' advance notice and SDSTA approval.

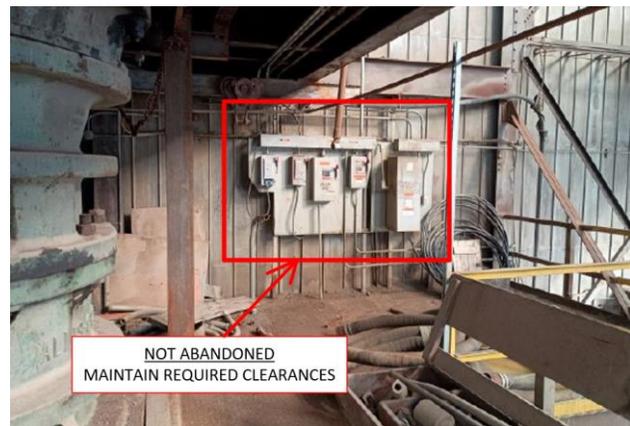
Question #13: Can we propose alternative brands of switchgear other than the brands listed in the design documents?

Answer #13: Yes, the switchgear configuration shown on the drawings represent the basis of design and is not intended to require sole-source unless explicitly stated in the project specifications. Contractors may propose alternative switchgear manufacturers, provided the proposed equipment meets or exceeds the technical, performance, rating, protection, space, and functional requirements indicated in the Contract Documents, including coordination with upstream and downstream equipment. Any proposed alternate switchgear shall be submitted to SDSTA for review and approval in accordance with the submittal and shop drawing requirements of the Contract Documents. As additional information,

the drawings include general allowances for approved-equal products for other materials and components (such as conduit materials, duct bank components, cable tray systems, and fittings), subject to SDSTA approval.

Question #14: Detail 4 on page E-106 of the design drawings show the new cable tray routing along mezzanine level 01 in the Yates Crusher Room. There is existing electrical distribution equipment mounted on the wall next to the cable tray route shown. Do we need to provide adequate clearances around these disconnects or have they been abandoned?

Answer #14: See two images below for existing equipment that has been identified as either being abandoned or not abandoned (still in use).



Question #15: 01 35 23 – 1.2.3 – “Contractor shall have a designated Safety Representative... may have other minor duties” – Can the Superintendent serve as SR?

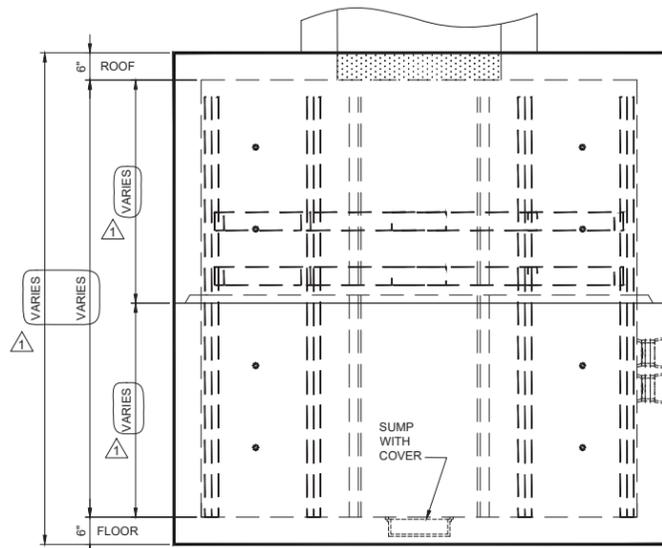
Answer #15: Yes. Paragraph 1.2.3 of specification Section 01 35 23 states “The superintendent or qualified designee may act as the SR.” Refer to Answer #16 for more information.

Question #16: Spec 01 30 00 – 1.2.2 states the Superintendent may also serve as the Quality Control Manager. Could the Project Superintendent fill all 3 roles (Superintendent, QC Manager, SR) while onsite full time if assisted part time and from the office with QC & SR assistance?

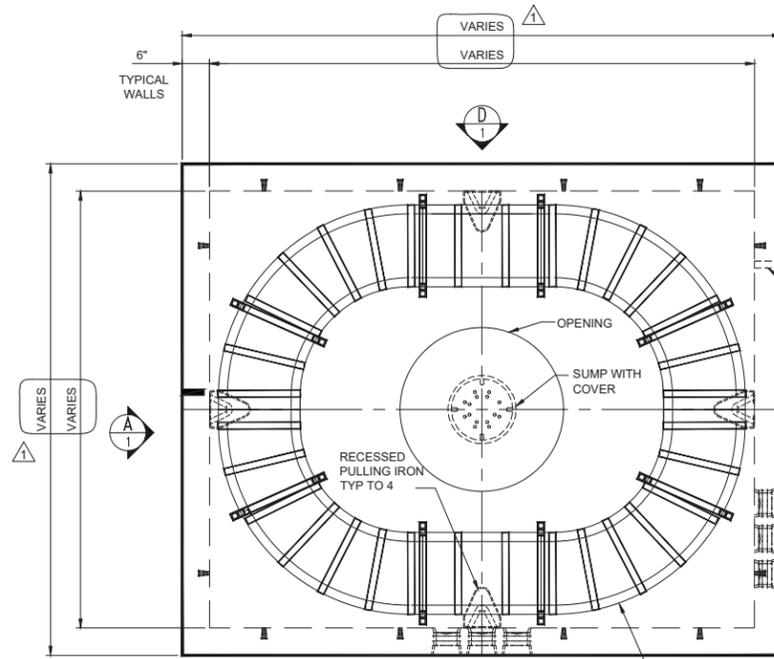
Answer #16: Based on the Contract Documents, including the General Conditions and Division 01 specifications, SDSTA will allow the Project Superintendent to concurrently serve as the Superintendent, Quality Control (QC) Manager, and Site Safety Representative (SR), provided the individual is onsite full time and all duties associated with each role are effectively and continuously fulfilled. Division 01 permits the Superintendent to also serve as the QC Manager and/or SR; however, this is conditional upon the individual meeting all qualification requirements, maintaining continuous onsite presence when work is being performed, and ensuring that safety oversight remains a primary responsibility rather than a secondary or nominal function.

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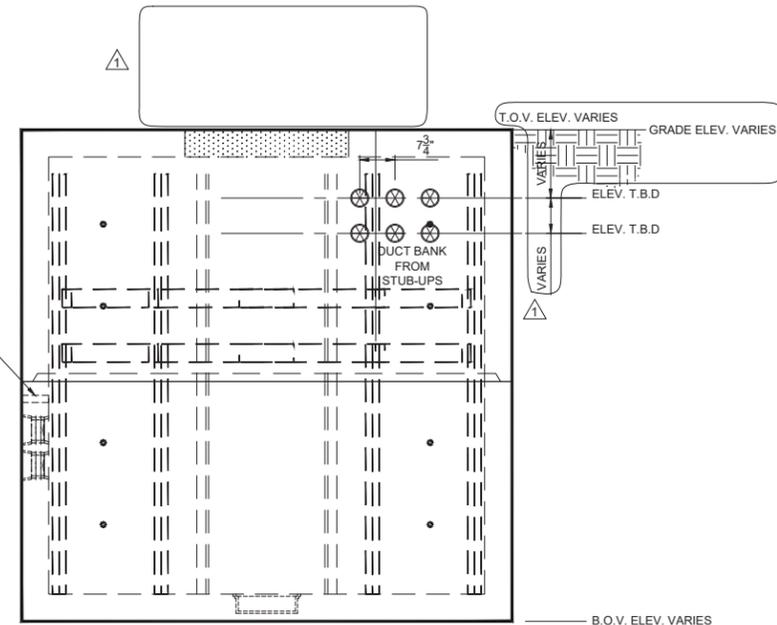
The Contractor remains fully responsible for providing sufficient, competent personnel to implement the QC program and safety program in accordance with Division 01 requirements. The QC Manager must be onsite whenever work or testing is performed, and the SR must be present at all times when work is physically underway. SDSTA reserves the right to assess the effectiveness of any individual serving in multiple roles and to require corrective action if, in SDSTA's judgment, the individual appears overloaded or unable to adequately perform all assigned responsibilities.



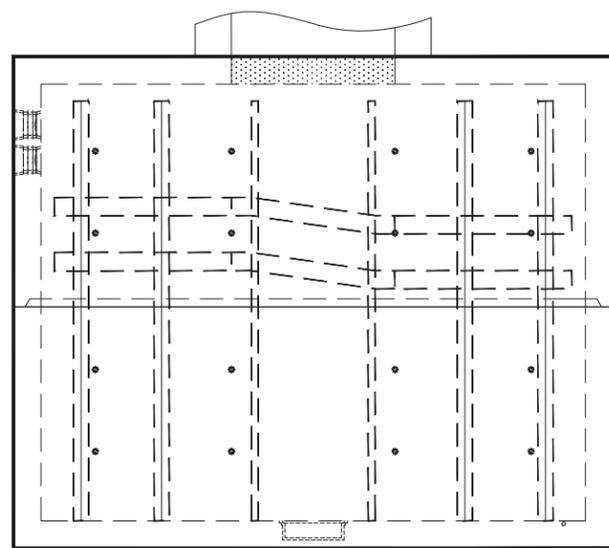
WEST ELEVATION VIEW "A"
SCALE: 3/4"=1'-0"



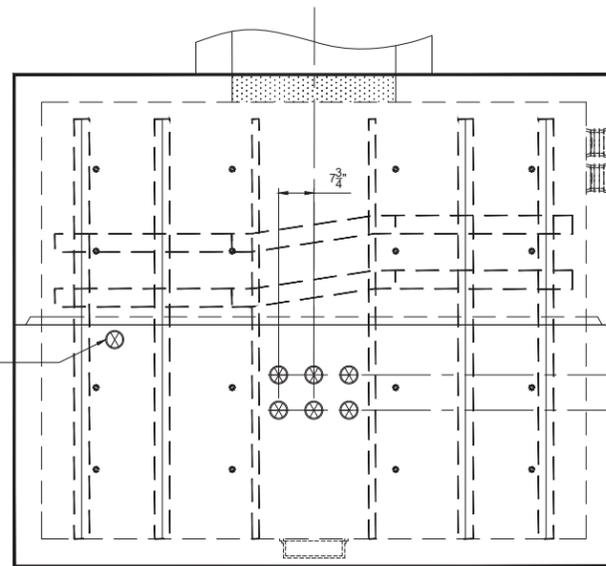
PLAN VIEW
SCALE: 3/4"=1'-0"



EAST ELEVATION VIEW "C"
SCALE: 3/4"=1'-0"



NORTH ELEVATION VIEW "D"
SCALE: 3/4"=1'-0"



SOUTH ELEVATION VIEW "B"
SCALE: 3/4"=1'-0"

CONTRACTOR SHALL SET
MANHOLE ON A LEVEL AND
COMPACT BEARING SURFACE
(TYP)

CONDUIT DUCT BANK NOTES:

1. STRENGTH DESIGN METHOD IN ACCORDANCE WITH (I.A.W.) ACI318.
2. APPLICABLE DESIGN DOCUMENTS (CURRENT EDITIONS):
 - ACI318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (MAIN DESIGN SPECIFICATION).
 - ASTM C857 STANDARD PRACTICE FOR MINIMUM STRUCTURAL DESIGN LOADING FOR UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES (LOADING SPECIFICATIONS).
 - ASTM C858 STANDARD SPECIFICATION FOR UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES (PRODUCT SPECIFICATION).
3. PRECAST RATED FOR HS20-44 TRUCK LIVE LOAD W/IMPACT I.A.W. ASTM C857.
4. DESIGN FILL RANGE: 1'-6"(MIN) TO 5'-0"(MAX).
5. GROUND WATER TABLE FOR STRUCTURAL CALCULATIONS IS BASED UPON GROUND WATER TABLE AT 3'-0" BELOW GRADE IF DESIGN (OR ACTUAL) WATER TABLE IS LESS THAN ASSUMED. REVIEWING ENGINEER/AUTHORITY SHALL NOTIFY OLD CASTLE PRECAST, INC. UPON REVIEW OF THIS SUBMITTAL.
6. LATERAL DESIGN PRESSURES (AS APPLICABLE TO DESIGN, SEE CALCULATIONS)
 - EQUIV DRY SOIL FLUID PRESSURE =47 PCF.
 - EQUIV SATURATED SOIL PRESSURE =85 PCF.
 - LIVE LOAD SURCHARGE PRESSURE =80 PSF.
 - HYDROSTATIC WATER PRESSURE =624 PCF.
7. DESIGN CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS=5,000 PSI (MIN).
8. REINFORCEMENT:
 - CARBON-STEEL DEFORMED BARS: A615, fy=60KSI (MIN).
9. JOINT SEALANT (AS DETAILED AND NOTED IN DRAWINGS HEREIN):
 - CS-102 CONSEAL BUTYL RUBBER SEALANT (OR EQUIV.) I.A.W. ASTM C990 FED. SPEC. SS-S-210.
10. PRECAST DESIGN DOES NOT INCLUDE ANY LATERAL OR SURCHARGE LOADS FROM OTHER BUILDINGS OR FOUNDATIONS ADJACENT TO THIS STRUCTURE. STRUCTURES SHALL BE KEPT A MINIMUM OF 1:1 RATIO AWAY FROM ANY OTHER FOOTING OR FOUNDATIONS.
11. COUNT NUMBER OF CONDUITS, PENETRATION REFER DUCT BANK DRAWING.

NOTES TO CONTRACTOR:

1. VERIFY ALL SIZES, LOCATIONS AND ELEVATIONS OF OPENINGS, TERMINATORS, INSERTS AND PULLING IRONS.
2. ENSURE ADEQUATE BEARING SURFACE IS PROVIDED (I.E. LEVEL AND COMPACTED) PER PROJECT SPECIFICATIONS AND DRAWINGS.
3. SEE PLAN PROFILE DRAWING FOR MANHOLE PENETRATION DETAILS.

E-900 ELECTRIC MANHOLE DETAIL

15 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C): Inline

3M™ Cold Shrink QS-III Inline Shielded Cable Splice Kits 5513A, 5514A, 5515A and 5516A Series (continued)

Order No.	UPC	Insulation O.D. Range	Conductor Size	Connector Included	Case Qty.
5515A-750-CU	054007-42137	1.04"-1.70" (26,4-43,2 mm)	750 kcmil	10019	1
5516A	054007-42139	1.08"-1.70" (27,4-43,2 mm)	500-1000 kcmil	–	1
5516A-500-AL	054007-44405	1.08"-1.70" (27,4-43,2 mm)	500 kcmil	20014	1
5516A-500-CU	054007-44406	1.08"-1.70" (27,4-43,2 mm)	500 kcmil	10014	1
5516A-750-AL	054007-43254	1.08"-1.70" (27,4-43,2 mm)	750 kcmil	20019	1
5516A-750-CU	054007-43255	1.08"-1.70" (27,4-43,2 mm)	750 kcmil	10019	1
5516A-1000-AL	054007-42901	1.08"-1.70" (27,4-43,2 mm)	1000 kcmil	20024	1
5516A-1000-CU	054007-42106	1.08"-1.70" (27,4-43,2 mm)	1000 kcmil	10024	1

15 kV: 3M™ Cold Shrink Splice Kits: Single Conductor (1/C): Branch

3M™ Cold Shrink Branch Splice Kit QS-2001B and 3M™ Cold Shrink Branch Splice Adapter QS-2000BA

The 3M™ Cold Shrink Branch Splice QS-2001B molded rubber splice kit is designed to connect extruded dielectric power cables rated 15 kV. The basic kit handles the main and branch cable range from 350–500 kcmil. (See note below for cable between 2 AWG-250 kcmil.) This kit utilizes the QS-2000 cold shrink technology and consists of a multi-layer silicone rubber splice and stress control body, each expanded on a removable, supporting polymeric core.

Kits contain sufficient material to make one branch splice.

Note: For 2 AWG-250 kcmil cable, the 3M™ Cold Shrink Branch Splice Adapter QS-2000BA must be ordered and used in conjunction with the 3M™ Cold Shrink Branch Splice Kit QS-2001B. The adapter kit will increase the cable insulation O.D. so that the cable will work with the splice body. Order one adapter kit for each cable end (3 maximum/splice) below 350 kcmil (185 mm²) conductor size.

Note: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.

Voltage	15 kV
Number of Conductors	Single Conductor Branch Splice
Shielding Type	Concentric Neutral (CN), Jacketed Concentric Neutral (JCN), Tape Shield, UniShield®, Wire Shield
Technology	Cold Shrink



Order No.	UPC	Insulation O.D. Range	Conductor Size	Product Type	Suggested Accessory	Case Qty.
QS2001B	051128-55254	1.00"-1.35" (25,4-34,3 mm); or 0.64"-1.01" (16,2-25,6 mm) with QS-2000BA Adapter Kit	2 AWG-500 kcmil (35-240 mm ²) Must use QS-2000BA Adapter Kit for 2 AWG-250 kcmil (35-150 mm ²)	Splice	3M™ Cold Shrink Branch Splice Adapter Kit QS-2000BA	1
QS2000B-A	051128-55255	N/A	N/A	Accessory	N/A	1

Electrical characteristics

Strong physical properties and moisture resistance are only some of the improved Elasppeed® splice characteristics when compared to alternative splice designs. The Eprotenax™ insulation utilized in Elasppeed® splices has been used in service up to 150kV and in medium voltage applications since 1963.

A fundamental measure of expected splice performance is its reaction to severe electrical conditions. Elasppeed® splices meet or exceed the requirements of IEEE 404 as shown below:

Basic Impulse Level

Voltage Class	IEEE 404 Test Level	Elasppeed™ Splice
15kV	110kV	150kV
25kV	150kV	170kV
35kV	200kV	220kV

Elasppeed® splices have been used on EPR insulated electrical systems where the conductor temperature has been maintained at 105°C for a complete test sequence.

Request copies of IEEE Transaction Paper #95 UM01 6-6 PWRD.

Design flexibility

Elasppeed® splices are available with several alternative shield/neutral connection systems. These include constant force springs, LC Shield® connection jumper kits or a combination of these shield connectors.

Further design flexibility is provided through the use of separate jackets over Elasppeed® splice cores, allowing the installer to connect existing concentric neutral wires before jacketing the splice.

These options may permit further inventory reduction by reducing the number of items in stock.

Qualification test copies are available on request. Contact your Prysmian representative.



Breaking the internal connection of the support tube



Support tube in self-ejecting mode



Connecting the shield braid to the cable metallic shield



Applying sealing mastic



Jacket recovery



The completed installation

MV 1/C Straight Splice

Part Number	Cable Size Range	Shielding Braid Size	Insulation Diameter Min. Inches	Insulation Diameter Max. Inches	Jacket Diameter Max. Inches
15kV - 100% Insulation Level (175mil)					
15SDJBe	2 - 3/0	1/0	0.68	1.13	1.34
15SEJCe	1/0 - 250	1/0	0.75	1.26	1.49
15SFJCe†	4/0 - 500	1/0	0.91	1.42	1.89
15SHJCe†	250 - 500	1/0	0.96	1.57	1.97
15SIPJCe	500 - 750	2/0	1.09	1.77	2.24
15SIJCe	750 - 1000	1/0	1.26	2.20	2.64
15kV - 133% Insulation Level (220 mil)					
15SDJBe	2 - 2/0	1/0	0.68	1.13	1.34
15SEJCe*	2 - 4/0	1/0	0.75	1.26	1.49
15SFJCe	3/0 - 500†	1/0	0.91	1.42	1.89
15SHJCe	4/0 - 500†	1/0	0.96	1.57	1.97
15SIPJCe	350 - 750	2/0	1.09	1.77	2.24
15SIJCe	500 - 1000	1/0	1.26	2.20	2.64
25kV - 100% Insulation Level (260 mil)					
25SDJBe	1 - 1/0	1/0	0.68	1.13	1.34
25SEJCe	1 - 2/0	1/0	0.75	1.26	1.49
25SFJCe**	1/0 - 350	1/0	0.91	1.42	1.89
25SHJCe	2/0 - 500	1/0	0.96	1.57	1.97
25SIPJCe	250 - 500	2/0	1.09	1.77	2.24
25SIJCe	500 - 1000	1/0	1.26	2.20	2.64
25kV - 133% Insulation Level (320 mil)					
25SFJCe	1 - 4/0	1/0	0.91	1.42	1.89
25SHJCe	1 - 350	1/0	0.96	1.57	1.97
25SIPJCe	3/0 - 500	2/0	1.09	1.77	2.24
25SIJCe	350 - 1000	1/0	1.26	2.20	2.64
35kV - 100% Insulation Level (345 mil)					
35SHJC	1 - 250	1/0	0.96	1.57	1.97
35SIPJC	1/0 - 500	1/0	1.09	1.77	2.24
35SIJC	4/0 - 1000	1/0	1.26	2.20	2.64
35SJJC	1250 - 2000	4/0	1.77	2.83	3.34
35kV - 133% Insulation Level (420 mil)					
35SHJC	1/0 - 3/0	1/0	0.96	1.57	1.96
35SIPJC	1/0 - 350	1/0	1.09	1.77	2.24
35SIJC	2/0 - 750	1/0	1.26	2.20	2.63
35SJJC	1000 - 2000	4/0	1.77	2.83	3.34

* These kits will not fit #2 solid conductor

** Splice kit will not fit 1/0 solid conductor

† For copper tape shielded cables this range can be extended to 750kcmil

Getting the right connector number (if required):

Connectors can be included by adding the appropriate part number suffix:

Conductor Size Part Number Suffixes

Conductor Size	Suffix	Conductor Size	Suffix
2	-2	250	-250
1	-1	350	-350
1/0	-1/0	500	-500
2/0	-2/0	750	-750
4/0	-4/0	1000	-1000

Also, specify your preference of copper (-CU) or aluminum (-AL).

Example:

A copper connector for a splice kit for a 750 kcmil conductor, 15kV with 100% insulation level, would be 15SIJCe-750-CU.

Notes:

- 1) When selecting kits at the top end of the use range, check for proper fit over jacket. Also consider the increased diameter associated with CN wire folded back over cable jacket.
- 2) The selection guide is based on jacketed concentric neutral cables. When using LC or copper tape shield cables, the range may be extended upwards.
- 3) The lower case "e" in the part numbers 15 thru 28kV indicates the splices have a built-in electrode. This eliminates the need to apply high permittivity mastic over the connector. The three larger (H, IP, I and J) 35kV splices are supplied with high permittivity mastic.
- 4) Prysmian Elaseed splices meet IEEE 404 specifications.

Contact your Prysmian sales representative for more information such as data on size transition limits or for conductor sizes not shown.





DESIGN FEATURES

UNIFORM CUTBACK DIMENSIONS

The Elasppeed™ Compact Splice is expanded to allow ‘parking’ on one side of the splice area, over the cable jacket. Installer errors during cable preparation are minimized, because cutbacks for jacket, shield, semiconductor and insulation are identical for both cables to be spliced.

WATERTIGHT INSTALLATION

Major accessory users are concerned that ingress of water in damaged cable jackets and unsealed splices can lead to premature failures. The Elasppeed™ Compact Splice has successfully passed IEEE 404-2012, the industry standard for splices. The Elasppeed™ Compact Splice has passed external water pressure tests of 45 psi. In addition, the tight interface between the cable and splice body can withstand internal pressures up to 30 psi. Internal mastic seals ensure that even cable jacket damage will not allow water to enter the splice area.

SMALL PROFILE

Elasppeed™ Compact Splices behave like EPR cable when it comes to bending in tight manhole situations. Splices can be bent to the same radius as the cable on which it is applied. This small profile consumes less racking space as well.

RANGE-TAKING CAPABILITY

The splice can easily accommodate different types of insulation (EPR to XLPE), different insulation thicknesses (175 mil to 220 mil, or 260 mil to 345 mil), as well as different conductor sizes and metals.

DESCRIPTION

The new Elasppeed™ Compact Splice (25% shorter in length) is a low-profile, range-taking, continuous use at 105°C-operating-temperature cable splice. It is designed to splice tape shield, wire shield, LC shield, UniShield, JCN and flat strap shielded cables. Compact structure allows for installation in confined areas and requires less cable to be prepared. The insulation is made from ethylene propylene rubber (EPR) on a vertical triple extruder which maintains its concentricity to tight tolerances. It is tested as a cable (partial discharge and AC withstand) to ensure long and trouble-free operation under a wide variety of applications and conditions. Elasppeed Compact Splices are suitable for installation in aerial, direct bury, duct bank and manhole environments. If installed in an aerial environment, a serve wire or basket support should be utilized to support the weight of the cable.

WHY USE ELASPEED™ COMPACT SPLICES?

25% SHORTER

Elasppeed™ Compact Splices are 25% shorter in length which makes it easier to park in tight manholes, requires less cable to prepare and reduces storage space over traditional splice kits.

SPEED

An Elasppeed™ Compact Splice can be performed in 30 minutes or less, saving time and money over other splices.

TESTING

All Elasppeed™ Compact Splices are pre-tested as cable to ensure that the splice will maintain the integrity of the electrical system. The Elasppeed™ EPR insulation system provides the highest dielectric strength over the full voltage range as well as the highest BIL available from any splice technology.

SAFETY

Elasppeed™ Compact Splices utilize cold shrink technology, which requires no open flames, eliminating the problems associated with handling and transporting gas bottles

RELIABILITY AND REPEATABILITY

Elasppeed™ Compact Splices are reliable because they always shrink uniformly, and there is only one part to shrink – the triple-extruded body.

Product Number	Cable Range	Shielding Braid Size	Shearbolt Range	Insulation Diameter		Jacket Diameter
				Minimum	Maximum	
5kV Elaseed™ - 100% Insulation Level (90 mils)						
15SDJCe-C	3/0 - 250	2/0	6-3/0	0.68"	1.13"	1.33"
15SEJCe-C	250 - 500	2/0	2-250	0.76"	1.26"	1.49"
15SFJCe-C	500-750	2/0	1/0-500	0.91"	1.42"	1.88"
15SHJCe-C	500-750	2/0	1/0-500	0.96"	1.57"	1.96"
15SIPJCe-C	500-1000	2/0	350-750	1.09"	1.77"	2.24"
15SIJCe-C	1000-1000	2/0	500-1000	1.26"	2.20"	2.63"
5kV Elaseed™ - 133% Insulation Level (115 mils)						
15SDJCe-C	2/0 - 250	2/0	6-3/0	0.68"	1.13"	1.33"
15SEJCe-C	4/0 - 350	2/0	2-250	0.76"	1.26"	1.49"
15SFJCe-C	350 - 500	2/0	1/0-500	0.91"	1.42"	1.88"
15SHJCe-C	500 - 500	2/0	1/0-500	0.96"	1.57"	1.96"
15SIPJCe-C	750 - 1000	2/0	350-750	1.09"	1.77"	2.24"
15SIJCe-C	1000 - 1000	2/0	500-1000	1.26"	2.20"	2.63"
15kV Elaseed™ - 100% Insulation Level (175 mils)						
15SDJCe-C	2 - 3/0	2/0	6-3/0	0.68"	1.13"	1.33"
15SEJCe-C	1/0 - 250	2/0	2-250	0.76"	1.26"	1.49"
15SFJCe-C	4/0 - 500	2/0	1/0-500	0.91"	1.42"	1.88"
15SHJCe-C	250 - 500	2/0	1/0-500	0.96"	1.57"	1.96"
15SIPJCe-C	250 - 500	2/0	350-750	1.09"	1.77"	2.24"
15SIJCe-C	750 - 1000	2/0	500-1000	1.26"	2.20"	2.63"
15kV Elaseed™ - 133% Insulation Level (220 mils)						
15SDJCe-C	2 - 2/0	2/0	6-3/0	0.68"	1.13"	1.33"
15SEJCe-C	2 - 4/0	2/0	2-250	0.76"	1.26"	1.49"
15SFJCe-C	3/0 - 500	2/0	1/0-500	0.91"	1.42"	1.88"
15SHJCe-C	4/0 - 500	2/0	1/0-500	0.96"	1.57"	1.96"
15SIPJCe-C	350 - 750	2/0	350-750	1.09"	1.77"	2.24"
15SIJCe-C	500 - 1000	2/0	500-1000	1.26"	2.20"	2.63"
25kV Elaseed™ - 100% Insulation Level (260 mils)						
25SDJCe-C	1 - 1/0	2/0	6-3/0	0.68"	1.13"	1.33"
25SEJCe-C	1 - 2/0	2/0	2-250	0.76"	1.26"	1.49"
25SFJCe-C	1/0 - 350	2/0	1/0-500	0.91"	1.42"	1.88"
25SHJCe-C	2/0 - 500	2/0	1/0-500	0.96"	1.57"	1.96"
25SIPJCe-C	250 - 500	2/0	350-750	1.09"	1.77"	2.24"
25SIJCe-C	500 - 1000	2/0	350-750	1.26"	2.20"	2.63"
25kV Elaseed™ - 133% Insulation Level (320 mils)						
25SDJCe-C	N/A	2/0	6-3/0	0.68"	1.13"	1.33"
25SEJCe-C	N/A	2/0	2-250	0.76"	1.26"	1.49"
25SFJCe-C	1 - 4/0	2/0	1/0-500	0.91"	1.42"	1.88"
25SHJCe-C	1 - 350	2/0	1/0-500	0.96"	1.57"	1.96"
25SIPJCe-C	3/0 - 500	2/0	350-750	1.09"	1.77"	2.24"
25SIJCe-C	350 - 1000	2/0	500-1000	1.26"	2.20"	2.63"

Notes:

- When selecting kits at the top end of the use range, check for proper fit over jacket
- The selection guide is based on jacketed concentric neutral cables. When using LC or copper tape shield cables, the range may be extended upwards
- Prysmian Elaseed™ Compact Splices meet IEEE 404-2012 specifications.
- Contact your Prysmian sales representative for more information, including data on size transition limits
- If Crimp Connectors are used Prysmian must verify the length of the crimp connector.

Splice Part Number Designation

Size selection is based on typical URD cable parameters:

- Class B Compressed Round Copper conductor.
- AEIC minimum insulation diameters.
- One-third concentric neutral.
- Concentric neutral wires not being brought out for grounding or fault current protection.
- Encapsulated jacket.
- XLPE or EPR Shielded Power Cable.

If the cable design or installation is based on other parameters, the recommended splice size may change.

The "15" in the splice part number indicates the rated voltage for the splice. Note that 15kV splices are used for 5kV and 8kV. This splice will simply provide more protection for the respective voltage classes.

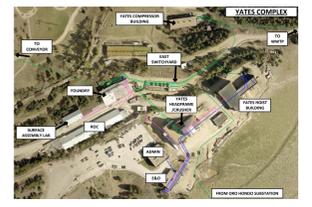
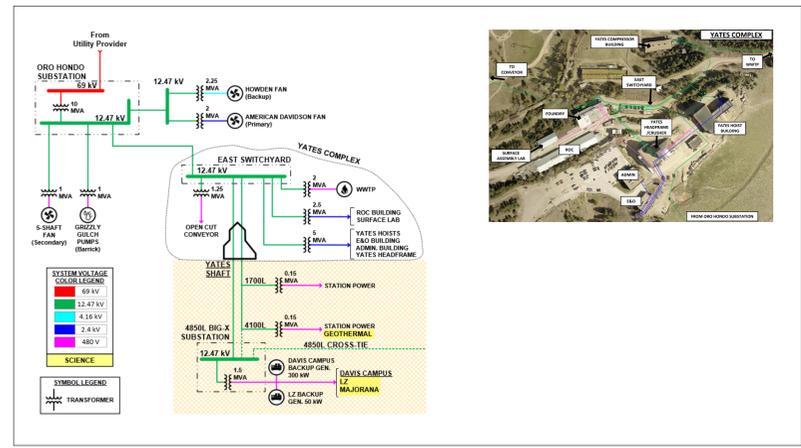
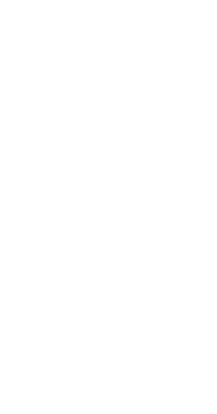
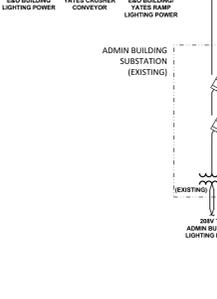
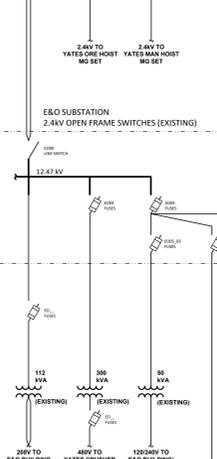
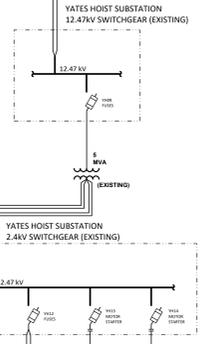
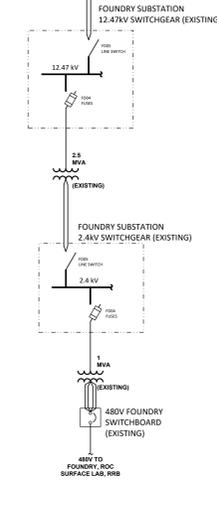
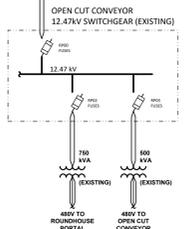
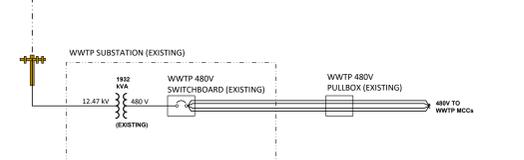
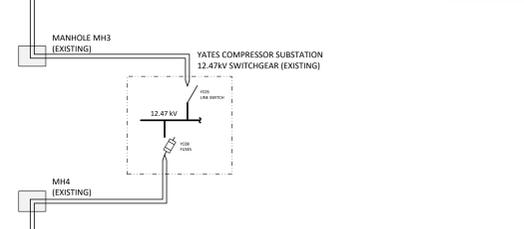
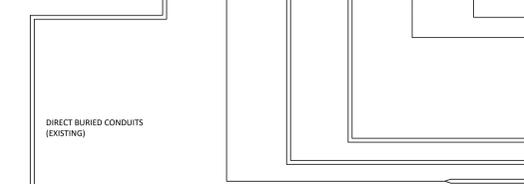
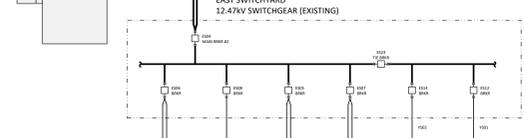
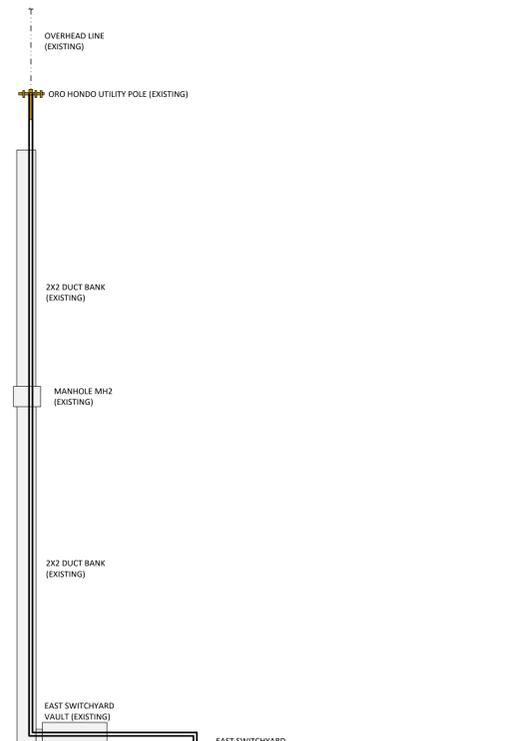
The "D", "E", "F", "H", "IP" or "I" in the splice part number denotes the size parameter of the splice. All of the splices for 5 thru 28kV have a built in electrode for stress control, which is denoted by the small "e" in the part number.

The "J" in the splice part number indicates a jacketed splice. Splices may be ordered without a jacket, in which case the "J" would not be included in the splice part number.

Splice Selection and Ordering

When selecting splice kits at the top end of the use range, check for proper fit over jacket. If standard splicing practice includes bringing out the neutral wires for grounding and/or fault protection, this will significantly increase the overall diameter of the cable and can change the recommended splice size.

EXISTING LAYOUT



PHASE I CONSTRUCTION

