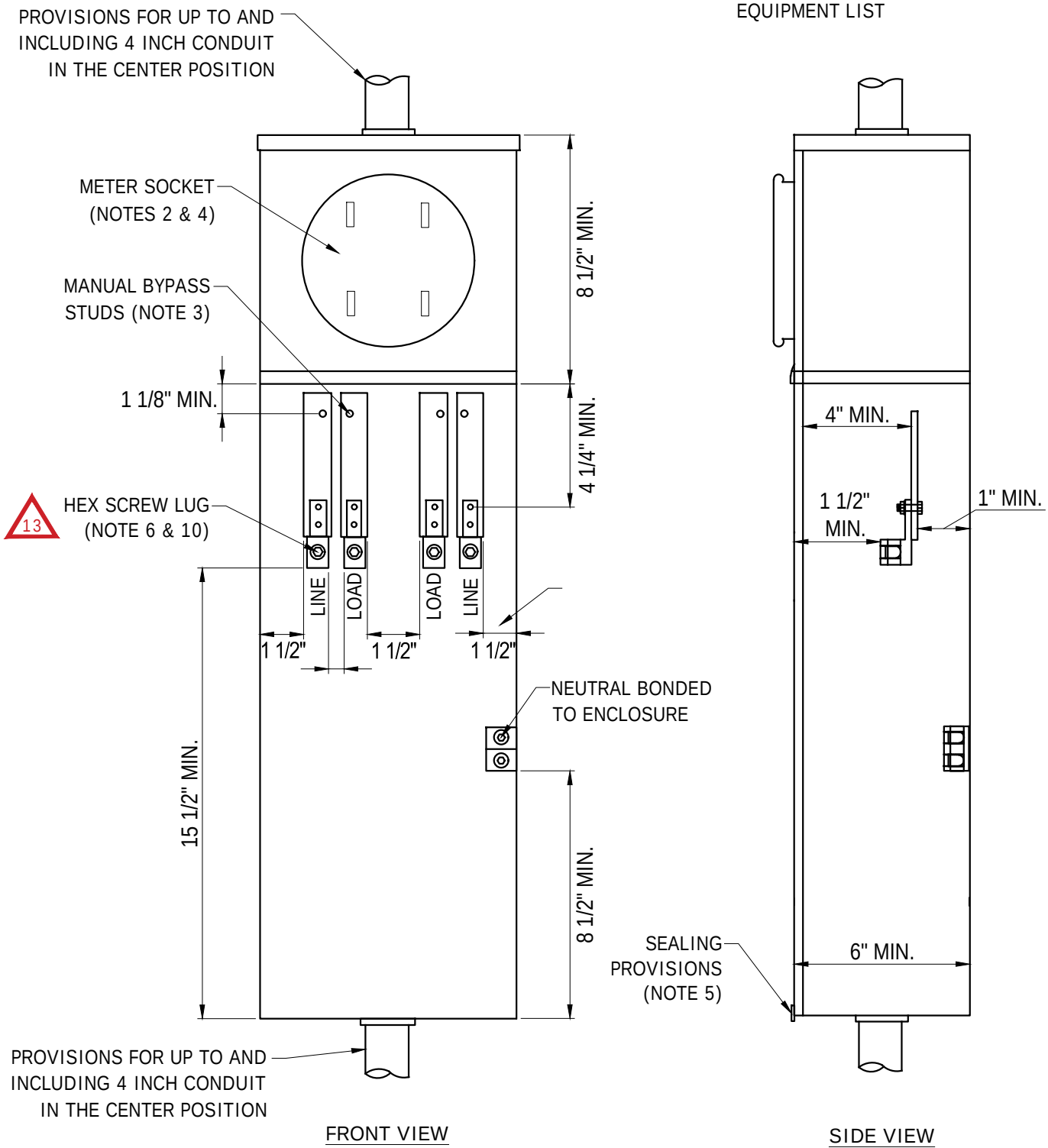
USE: COMMERCIAL OR RESIDENTIAL, UG OR OH 120/240V, 201-400A, WITH BYPASS CAPABILITY

SINGLE-PHASE, OVERHEAD OR UNDERGROUND, METER PANEL AND COMBINATION METER DISTRIBUTION SECTION, BY-PASS CAPABLE

EUSERC DWG. NO. 302B

REFER TO SR-452 FOR THE COMPLETE APPROVED METERING AND SERVICE EQUIPMENT LIST



FRONT VIEW

SIDE VIEW

TEP Tucson Electric Power / UniSourceEnergy SERVICES SANTA CRUZ COUNTY	INITIATED BY	GC	REVISION NO.	13	SR-412 Pg. 1 of 4
			ESR COMM.	5-22	
	ESR COMM.	8-06	EFFECTIVE DATE	5-22	

USE: COMMERCIAL OR RESIDENTIAL, OH OR UG, 120/240V, 201-400A, WITH BYPASS CAPABILITY

SINGLE-PHASE, OVERHEAD OR UNDERGROUND, METER PANEL AND COMBINATION METER DISTRIBUTION SECTION, BY-PASS CAPABLE

NOTES:

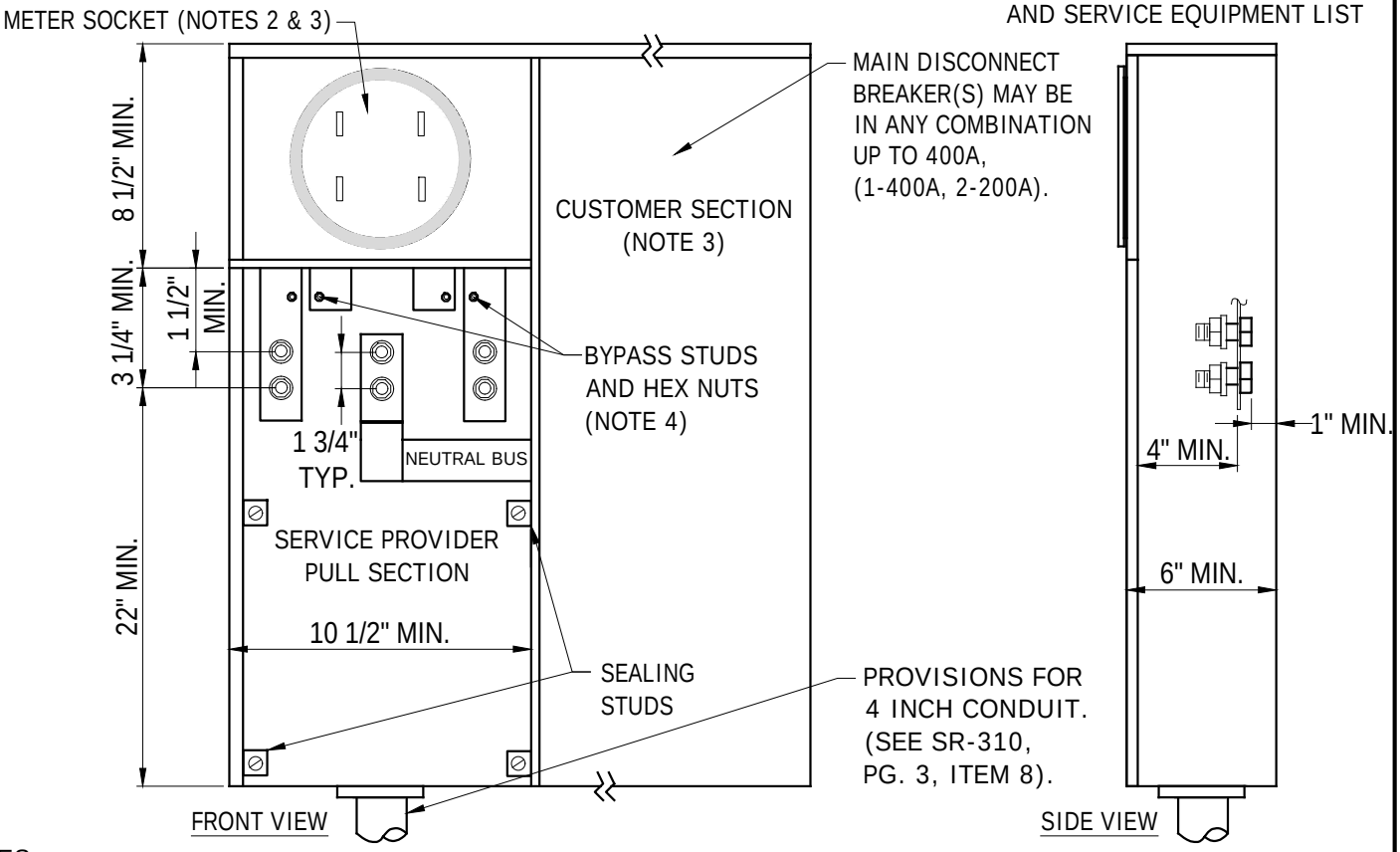
1. This service equipment shall be listed by an approved testing laboratory and marked with a continuous ampere rating of 320 amperes. Alternatively, it may be marked "400 amps" (320 amperes continuous)".
2. Only ring type sockets are acceptable. For ring-type meter panels, the panel shall be provided with a sealing ring and the meter socket shall be rigidly mounted on a support and attached to the meter panel.
3. 12-24 bypass studs, 1/2 inch height with 1/2 inch hex-nut (measured across the flat) shall be provided on each phase bus section. The studs shall have a horizontal spacing of 1 1/2 inch (measured from the centers) between the line and load bus sections, and shall be offset from the line side termination lugs to permit cable entry from the top without interference with the service provider's manual bypass links.
4. (3) Socket cover panels shall be removable, sealable and rainproof. The socket cover panel shall be provided with a sealing ring and shall not be removable with the meter in place.
5. The bypass and cable termination compartment cover panel shall be independent of the meter panel and it shall be removable, lockable and sealable.
6. Termination for service conductors shall be aluminum-bodied mechanical lugs with a range of 1/0 AWG - 350 KCMIL. The lugs shall be secured to assure vertical alignment and line side lugs shall be offset from the face of the bus to permit cable entry from the top. The line and load positions shall be identified in 3/4 inch block letters.
7. (3) If insulating material is provided the 1 1/2 inch dimension may be reduced between the line and load bus sections.
8. If panel is installed as an upgrade, the Service Provider will not splice underground service cable in order to terminate to the new panel. If additional cable length is required due to meter base changeout the customer will be required to lower the meter socket to obtain sufficient length or provide a new continous conduit system (including new service riser) to the Company equipment. Design Services will determine if the current service conductor is adequate for the service entrance amperage. If the current conductor meets the Service Provider's design needs and is damaged, the replacement of the conductor will be billable. (3) See Note 12.
9. This panel is the replacement for the K-4U meter socket, this includes the K-4U all-in-one load centers. The K-4U (bolt in meter) style panel is no longer approved.
10. (3) Customer shall provide the terminal connectors with a connector range of 1/0 AWG - 350 KCMIL per the specifications stated in Note 2, Page 2 of SR-425.
11. Customer owned conductors shall not pass through the pull section or meter socket section.
12. (3) For all underground service entrance panels rated at 320A or 400A, regardless of whether installation is new service or service upgrade the customer will be required to install a 2 1/2 inch continuous conduit system, unless such system already exists.

USE: COMMERCIAL OR RESIDENTIAL, UG, 120/240V, 400A (320A CONTINUOUS), WITH BYPASS CAPABILITY

SINGLE-PHASE, OVERHEAD OR UNDERGROUND METER PANEL WITH BYPASS STUDS AND COMBINATION METER DISTRIBUTION SECTION

EUSERC DWG. NO. 302

REFER TO SR-452 FOR THE COMPLETE APPROVED METERING AND SERVICE EQUIPMENT LIST



NOTES:

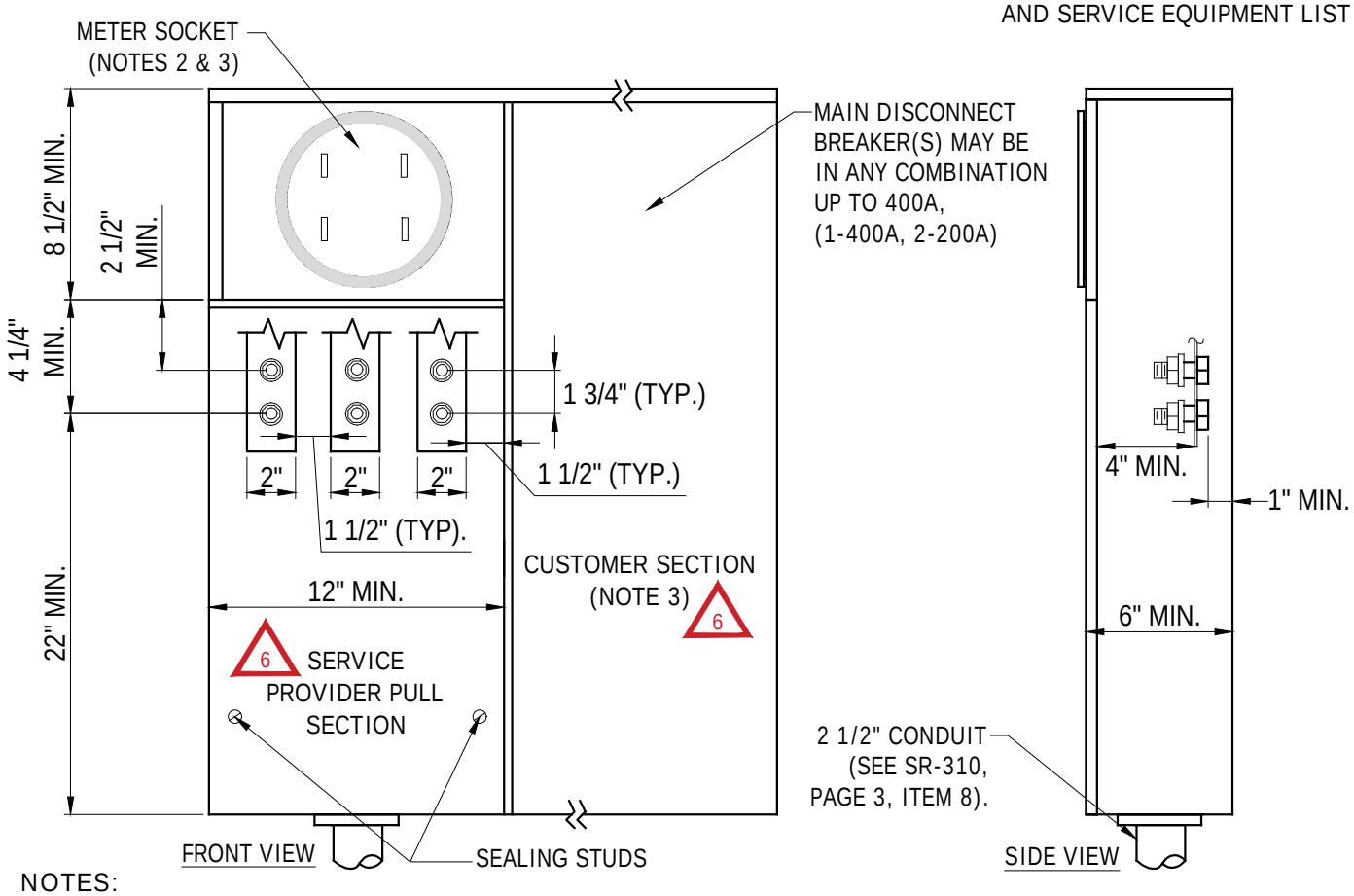
1. THIS SERVICE EQUIPMENT SHALL BE LISTED BY AN APPROVED TESTING LABORATORY AND MARKED WITH A CONTINUOUS AMPERE RATING OF 320 AMPERES. ALTERNATIVELY, IT MAY BE MARKED "400 AMPS" (320 AMPERES CONTINUOUS)."
2. ONLY RING TYPE SOCKETS ARE ACCEPTABLE. SOCKET COVER PANELS SHALL BE REMOVABLE, SEALABLE AND RAINPROOF.
3. THE METER SOCKET MAY BE LOCATED ABOVE, TO THE LEFT, OR TO THE RIGHT OF THE UNDERGROUND PULL SECTION. A SINGLE UNIT WITH ONLY SERVICE TERMINATION FACILITIES AND METERING IS ALSO ACCEPTABLE.
4. MANUAL BYPASS FACILITIES SHALL BE PROVIDED FOR COMMERCIAL SERVICE ONLY, WHICH WILL MAINTAIN SERVICE CONTINUITY TO THE CUSTOMER WHILE THE METER IS REMOVED FOR TEST OR INSPECTION.
5. MANUAL BYPASS PROVISIONS WHICH DE-ENERGIZE THE METER SOCKET ARE PREFERRED BUT NOT REQUIRED FOR RESIDENTIAL INSTALLATION. (AUTOMATIC BYPASSES ARE UNACCEPTABLE). 1
6. CUSTOMER-OWNED WIRING EXTENDING FROM THE DISTRIBUTION SECTION (BRANCH CIRCUITS) SHALL NOT PASS THROUGH ANY SECTION SEALED BY THE SERVICE PROVIDER.
7. PULL SECTION COVER PANELS SHALL BE REMOVABLE, SEALABLE, PROVIDED WITH TWO LIFTING HANDLES, AND LIMITED TO A MAXIMUM SIZE OF 9 SQUARE FEET IN AREA. SEALING PROVISIONS SHALL CONSIST OF TWO DRILLED STUD AND WING NUT ASSEMBLIES ON OPPOSITE SIDES OF THE PANELS. ALL SECURING SCREWS SHALL BE CAPTIVE.
8. TERMINAL CONNECTORS WITH A CONNECTOR RANGE OF #1/0 AWG-350 KCMIL ARE TO BE PROVIDED AS PER THE SPECIFICATIONS STATED IN SR-425, PAGE 2, NOTE #2.
12. FOR ALL UNDERGROUND SERVICE ENTRANCE PANELS RATED AT 320A OR 400A, REGARDLESS OF WHETHER INSTALLATION IS NEW SERVICE OR SERVICE UPGRADE THE CUSTOMER WILL BE REQUIRED TO INSTALL A 2 1/2 INCH CONTINUOUS CONDUIT SYSTEM, UNLESS SUCH SYSTEM ALREADY EXISTS. 1

USE: RESIDENTIAL AND UNOCCUPIED COMMERCIAL, UG, 120/240V, 320A CONTINUOUS

SINGLE-PHASE, OVERHEAD OR UNDERGROUND METER PANEL WITH BYPASS STUDS AND COMBINATION METER DISTRIBUTION SECTION

EUSERC DWG. NO. 302

REFER TO SR-452 FOR THE COMPLETE APPROVED METERING AND SERVICE EQUIPMENT LIST



NOTES:

1. THIS SERVICE EQUIPMENT SHALL BE LISTED BY AN APPROVED TESTING LABORATORY AND MARKED WITH A CONTINUOUS AMPERE RATING OF 320 AMPERES. ALTERNATIVELY, IT MAY BE MARKED "400 AMPS" (320 AMPERES CONTINUOUS)".
2. ONLY RING TYPE SOCKETS ARE ACCEPTABLE. SOCKET COVER PANELS SHALL BE REMOVABLE, SEALABLE AND RAINPROOF.
3. THE METER SOCKET MAY BE LOCATED ABOVE, TO THE LEFT, OR TO THE RIGHT OF THE UNDERGROUND PULL SECTION. A SINGLE UNIT WITH ONLY SERVICE TERMINATION FACILITIES AND METERING IS ALSO ACCEPTABLE.
4. CUSTOMER-OWNED WIRING EXTENDING FROM THE DISTRIBUTION SECTION (BRANCH CIRCUITS) SHALL NOT PASS THROUGH ANY SECTION SEALED BY THE SERVICE PROVIDER.
5. PULL SECTION COVER PANELS SHALL BE REMOVABLE, SEALABLE, PROVIDED WITH TWO LIFTING HANDLES, AND LIMITED TO A MAXIMUM SIZE OF 9 SQUARE FEET IN AREA. SEALING PROVISIONS SHALL CONSIST OF TWO DRILLED STUD AND WING NUT ASSEMBLIES ON OPPOSITE SIDES OF THE PANELS. ALL SECURING SCREWS SHALL BE CAPTIVE.
6. TERMINAL CONNECTORS WITH A CONNECTOR RANGE OF #1/0 AWG-350 KCMIL ARE TO BE PROVIDED AS PER THE SPECIFICATIONS STATED IN sr-425, PAGE 2, NOTE #2.
7. SEE SR-412, PG. 1 OR 3 FOR SELF CONTAINED METERING FOR OCCUPIED COMMERCIAL INSTALLATIONS
8. FOR ALL UNDERGROUND SERVICE ENTRANCE PANELS RATED AT 320A OR 400A, REGARDLESS OF WHETHER INSTALLATION IS NEW SERVICE OR SERVICE UPGRADE THE CUSTOMER WILL BE REQUIRED TO INSTALL A 2 1/2 INCH CONTINUOUS CONDUIT SYSTEM, UNLESS SUCH SYSTEM ALREADY EXISTS.

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			ESR COMM.	5-22	
	ESR COMM.	2-90	EFFECTIVE DATE	5-22	