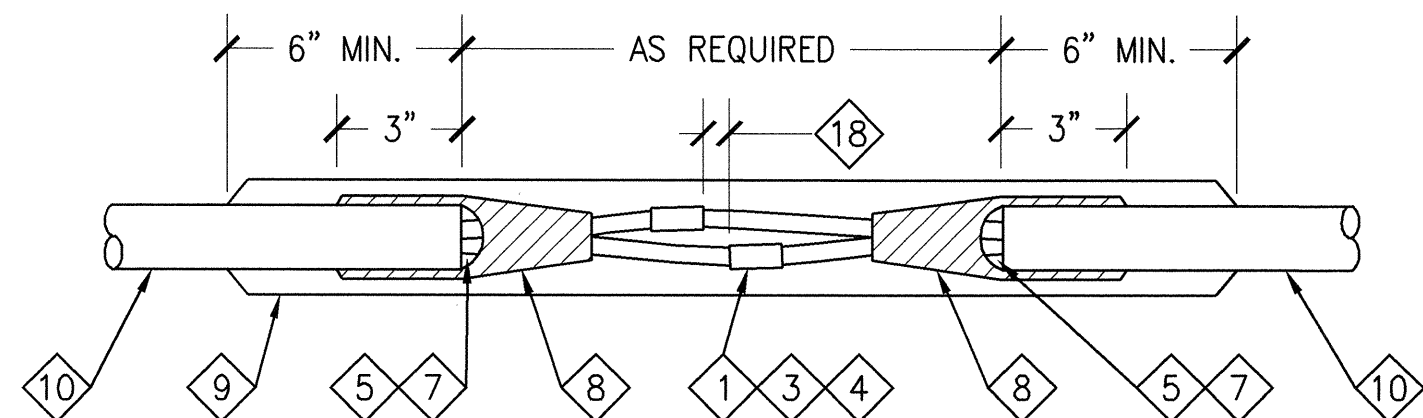
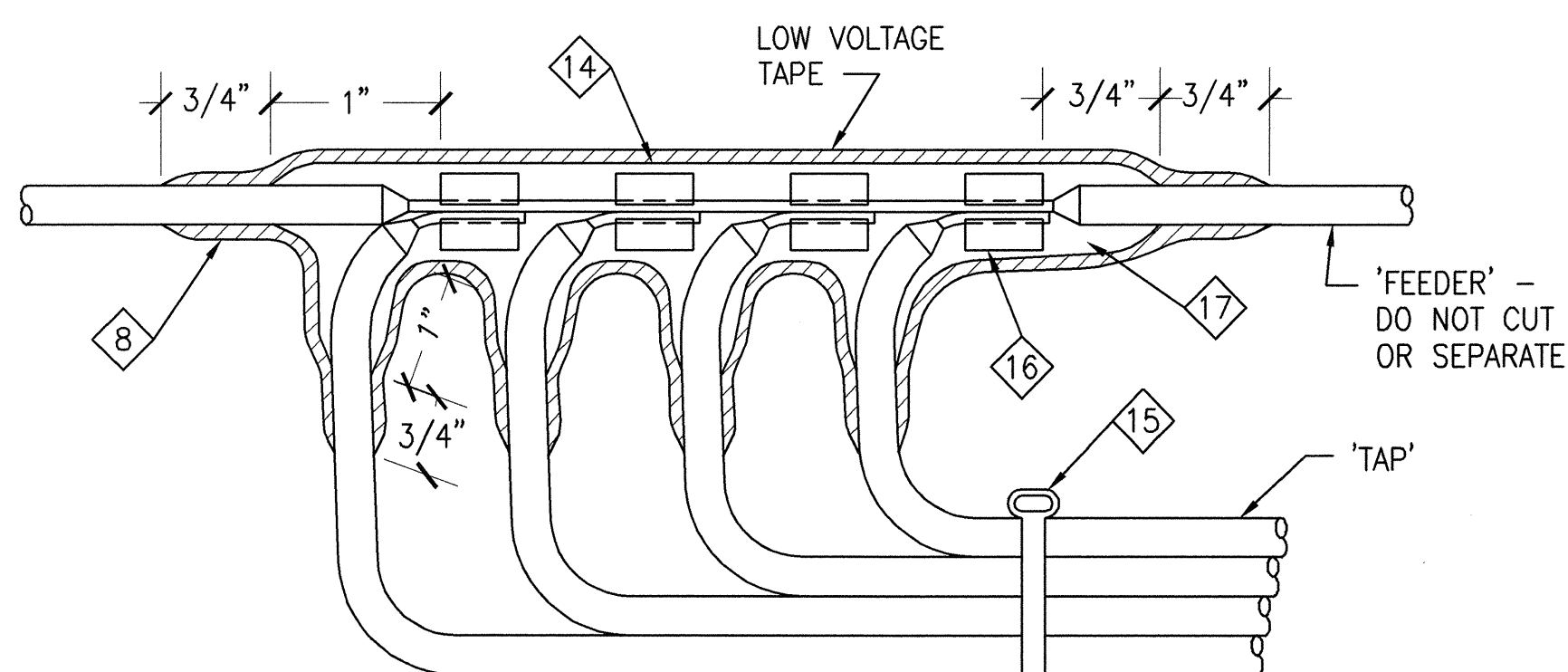


NOTE: BEFORE INSTALLING COMPOUND, PROVIDE 1/8" SPACING BETWEEN EACH CONDUCTOR TO ASURE WATERTIGHT SEAL

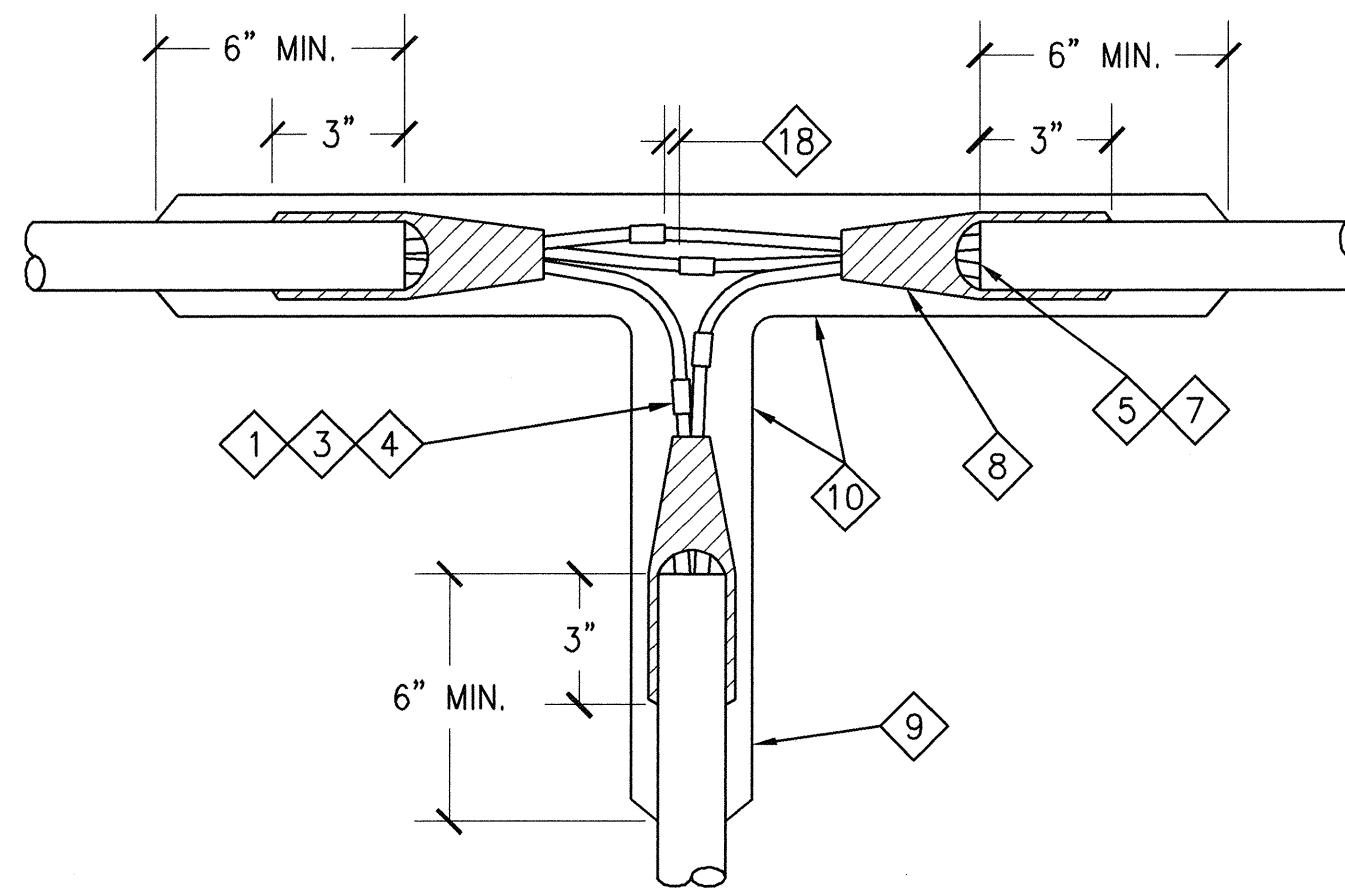
**TYPICAL TERMINATION OF MULTI-CONDUCTOR CABLES IN FLUSH-MOUNTED SIDEWALK BOXES OR IN METAL ENCLOSURES**



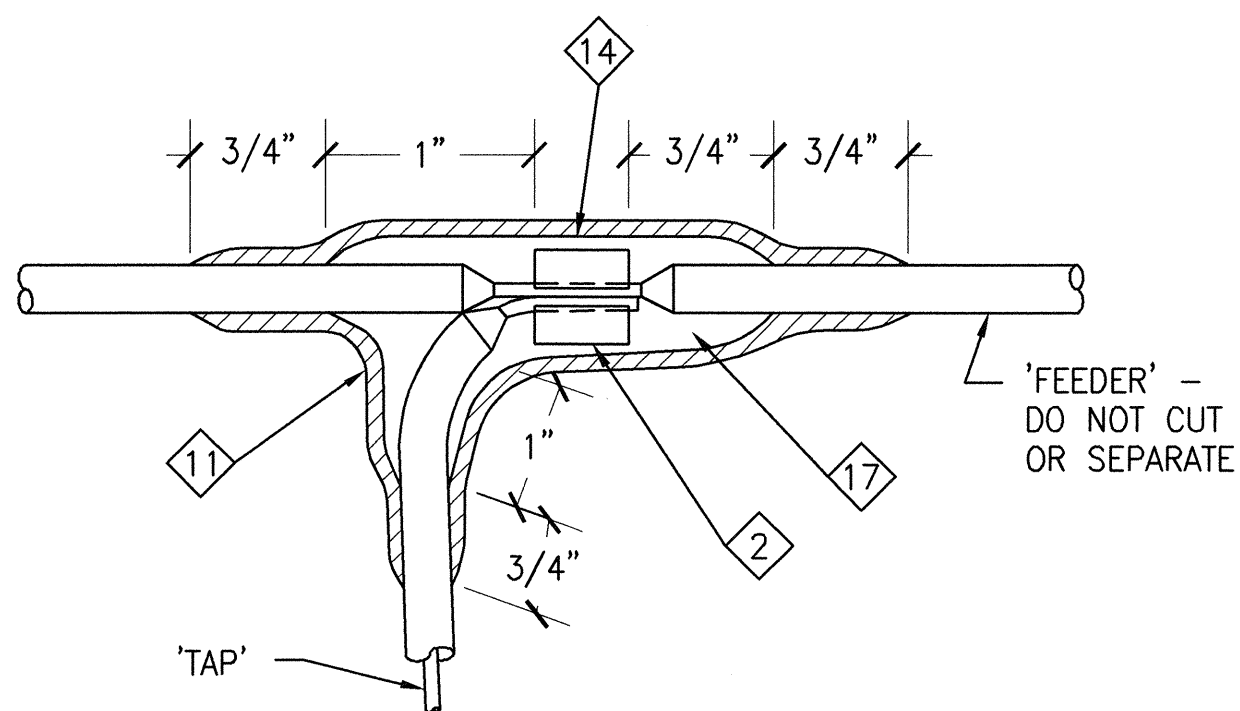
**TYPICAL 'TWO-WAY' SPLICE OF MULTI-CONDUCTOR CABLES**



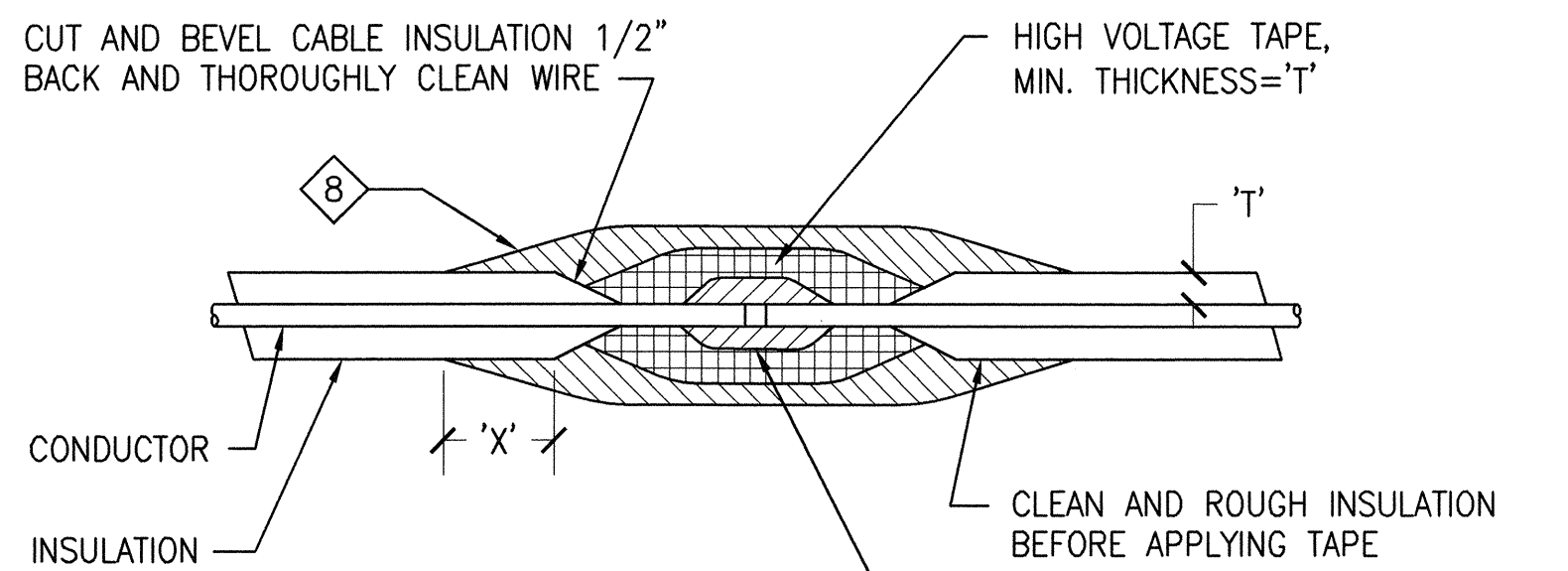
**TYPICAL MULTIPLE 'TAP' SPLICING**



**TYPICAL 'THREE-WAY' SPLICE OF MULTI-CONDUCTOR CABLES (4-WAY SIMILAR)**



**TYPICAL 'TAP' SPLICE FOR SINGLE CONDUCTOR WIRING**



| CONDUCTOR SIZE         | 'X' DISTANCE |
|------------------------|--------------|
| 14 - 10 AWG 600V       | 2"           |
| 8 - 1000 AWG 600-5000V | 3"           |

MINIMUM LENGTH OF CONNECTION:  
1" FOR 600 VOLT WIRES;  
3" FOR 5000 VOLT NON-SHIELDED  
PVC INSULATED CONDUCTORS

**TYPICAL 'TWO-WAY' SPLICE OF 600-VOLT AND 5000-VOLT THERMOPLASTIC WIRE AND CABLE**

**DETAIL NOTES:**

- 1 CONNECTORS FURNISHED AND INSTALLED FOR SPLICING CONDUCTORS IN 600-VOLT MULTI-CONDUCTOR CABLES SHALL BE 1-INCH LONG AND OF THE SLEEVE-INDENTURE TYPES EQUIPPED WITH 'BUILT-IN' BUTT STOPS AND HAVING INTERNAL DIAMETERS EQUAL TO THE EXTERNAL DIAMETERS OF THE WIRES BEING SPLICED TO ONE ANOTHER. EACH CONNECTOR SHALL BE SECURED TO THE WIRES WITH TWO INDENTATIONS APPLIED TO EACH SIDE OF THE TRANSVERSE CENTERLINE OF EACH CONNECTOR. EACH SPLICE SHALL BE INSULATED WITH A MINIMUM OF 3 TIGHTLY PLACED 1/2-LAP WRAPS OF PLASTIC TAPE.
- 2 CONNECTORS FURNISHED AND INSTALLED FOR SPLICING THREE (3) SINGLE-CONDUCTOR NO. 10 AWG COPPER WIRES TO ONE ANOTHER, OR, FOR SPLICING TWO OR MORE SINGLE-CONDUCTOR COPPER WIRES LARGER THAN NO. 10 AWG TOGETHER, OR, FOR SPLICING A SINGLE-CONDUCTOR 'TAP' TO A SINGLE-CONDUCTOR UNLIT 'FEEDER' SHALL BE COPPER 'C' SHAPED COMPRESSION CONNECTORS PROVIDED WITH THE PROPER INTERNAL DIAMETERS AND OF THE PROPER LENGTHS TO BE SECURED TO THE CONDUCTORS WITH TWO INDENTATIONS APPLIED TO EACH SIDE OF THE TRANSVERSE CENTERLINES OF THE CONDUCTORS.
- 3 EACH CONNECTOR AND EACH INDENTURE-TYPE TERMINAL SHALL BE SECURED TO THE WIRES WITH A TOOL EQUIPPED WITH A RATCHET-TYPE MECHANISM WHICH WILL PREVENT THE TOOL FROM BEING RELEASED FROM THE CONNECTOR UNTIL A COMPLETE INDENTATION HAS BEEN MADE. CONNECTORS AND WIRE TERMINALS SHALL BE MANUALLY TESTED FOR RIGIDITY AND NON-MOVEMENT OF CONDUCTORS WITHIN THE CONDUCTORS AND WIRE TERMINALS.
- 4 CONNECTORS AND WIRE TERMINALS INSTALLED ON CONDUCTORS ENERGIZED BY SOURCES WITH VOLTAGES OF 24 VOLTS OR LESS AND/OR PROVIDING FREQUENCIES OF CURRENTS OF GREATER THAN 60 HZ SHALL BE SOLDERED AFTER BEING SECURED BY AN INDENTURE-TYPE TOOL.
- 5 REMOVE A PORTION OF THE JACKET TO PROVIDE SUFFICIENT FREE LENGTH OF CONDUCTORS AS REQUIRED.
- 6 REMOVE A PORTION OF THE JACKET TO PROVIDE SUFFICIENT FREE LENGTH OF CONDUCTORS TO REACH THE TERMINALS ON THE ELECTRICAL FACILITY BEING SERVED BY THE CABLE. THE END OF EACH CONDUCTOR THAT IS CONNECTED TO A SCREW-TYPE TERMINAL SHALL BE PROVIDED WITH LOCKING-TYPE SPADE TERMINAL.
- 7 SQUARE CUT.
- 8 3 TIGHTLY PLACED 1/2-LAP WRAPS OF PLASTIC TAPE. THE FIRST WRAP SHALL BE PLACED WITH THE ADHESIVE SIDE EXPOSED AND THE NON-ADHESIVE SIDE AGAINST THE CABLE JACKET.
- 9 MOLDED RESIN SEAL.
- 10 CABLES SHALL BE TAGGED AS TO ORIGIN AND TERMINUS.
- 11 3 TIGHTLY PLACED 1/2-LAP WRAPS OF PLASTIC TAPE. THE TAPE SHALL BE COATED WITH AN ELECTRICAL GRADE ENAMEL PAINT AND SEALER, FORMULATED TO GIVE PROTECTION AGAINST WEATHER, MOISTURE, ACIDS, ALKALIES, AND OILS.
- 12 PLASTIC TAPE SHALL BE 7 MILS THICK (MINIMUM), AND SHALL MEET REQUIREMENTS OF ASTM D-3005-72, TYPE 1, UL 510 AND FED. SPEC. HH1-595C.
- 13 HIGH VOLTAGE TAPE SHALL BE CORONA RESISTANT AND SELF-FUSING; AND SHALL MEET REQUIREMENTS OF HH1-553C-GRADE A AND B, AND MIL-1-3825B.
- 14 COMPOUND THICKNESS EQUAL TO INSULATOR ON 'THROUGH' CONDUCTOR.
- 15 SELF-LOCKING PLASTIC CABLE TIE. SPACE 1'-0" O.C. MINIMUM FULL LENGTH OF WIRING IN PULL BOX.
- 16 COPPER 'C'-SHAPED COMPRESSION CONNECTOR OF THE PROPER SIZE. SECURE TO WIRE WITH TWO (2) INDENTATIONS ON EACH SIDE OF CENTER OF CONNECTOR.
- 17 ELECTRICAL FILLER COMPOUND.
- 18 1/4" SEPARATION BETWEEN ENDS OF ADJACENT CONNECTORS.

This Standard Plan was developed for use on public works projects in the City and County of San Francisco, and shall not be used without consulting a Registered Professional Engineer. The Department of Public Works reserves the right to make revisions to this Standard Plan at any time.

| NO.   | DATE | DESCRIPTION | BY | APP. |
|---|------|-------------|----|------|
| TABLE OF REVISIONS                                    |      |             |    |      |
| CHECK WITH TRACING TO SEE IF YOU HAVE LATEST REVISION |      |             |    |      |

REFERENCE INFORMATION & FILE NO. OF SURVEYS



**BUREAU OF ENGINEERING**  
DEPARTMENT OF PUBLIC WORKS  
CITY AND COUNTY OF SAN FRANCISCO

|                            |  |
|----------------------------|--|
| REVIEWED: DATE: BC 01/2007 | PLANS APPROVAL DATE: APRIL 30, 2007            |
| DRAWN: DATE: RT 01/2007    | <i>James Joseph</i> 4/27/07<br>SECTION MANAGER |
| CHECKED: DATE: TA 01/2007  | <i>M. M.</i> 4/30/07<br>DEPUTY BUREAU MANAGER  |
|                            | <i>James M.</i><br>BUREAU MANAGER              |

|                        |                 |
|------------------------|-----------------|
| <b>STANDARD PLAN</b>   | OLD FILE NO.    |
| <b>ELECTRICAL</b>      | 43,665          |
| <b>SPLICING DETAIL</b> | FILE NO. 87,204 |
|                        | REV. NO.        |

Drawing Path: V:\0966J Standard Plans & Specs Update\2\_Plan\Title\Block\BCE STD Title Block.dwg  
 Plot Time: Fri, 27 Apr 2007 - 5:45pm  
 Dimension Scale: 40  
 Model Units: Feet  
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