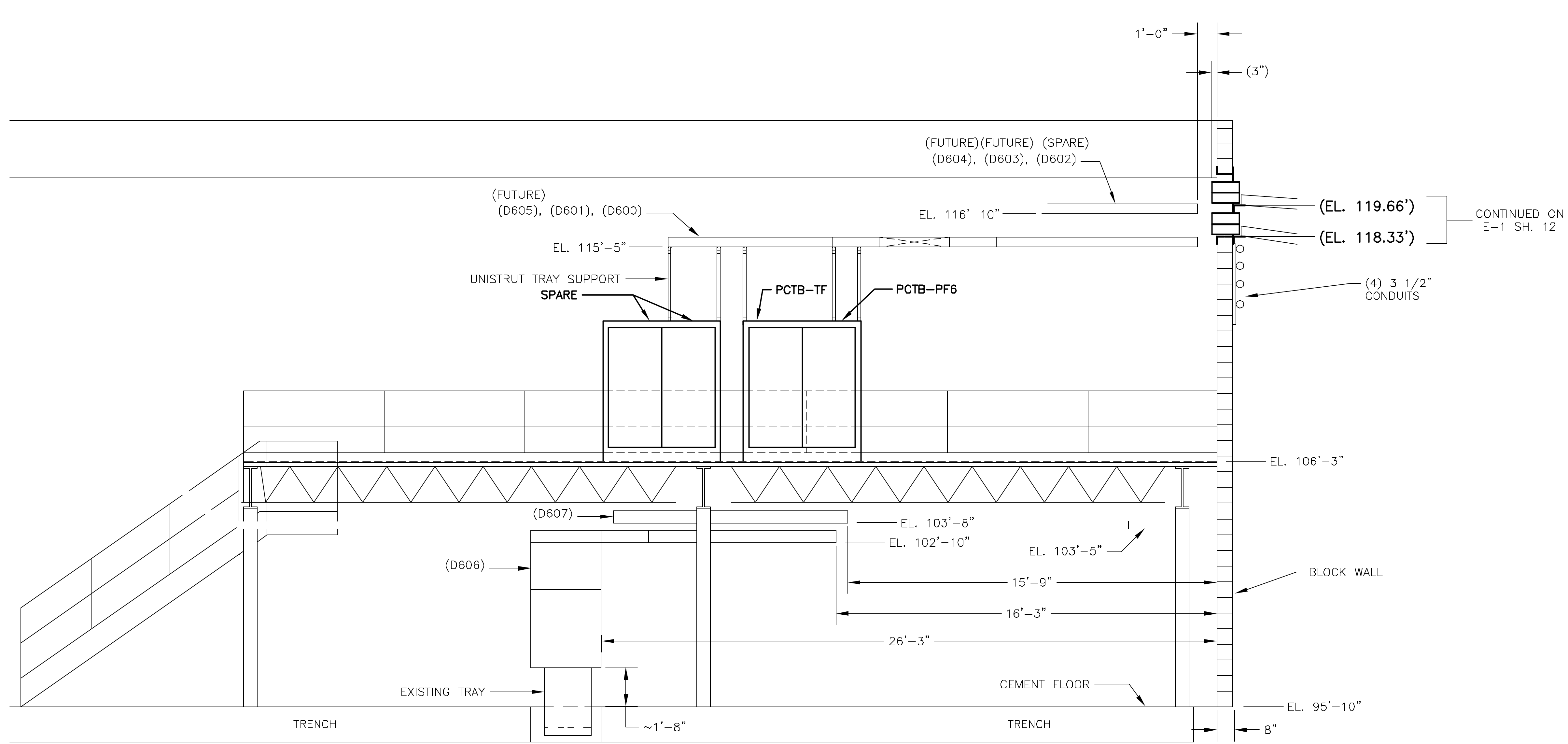


(SE431E001\_2)  
**SECTION A-A (G8)**



(SE431E001\_2)  
**SECTION C-C (F8)**

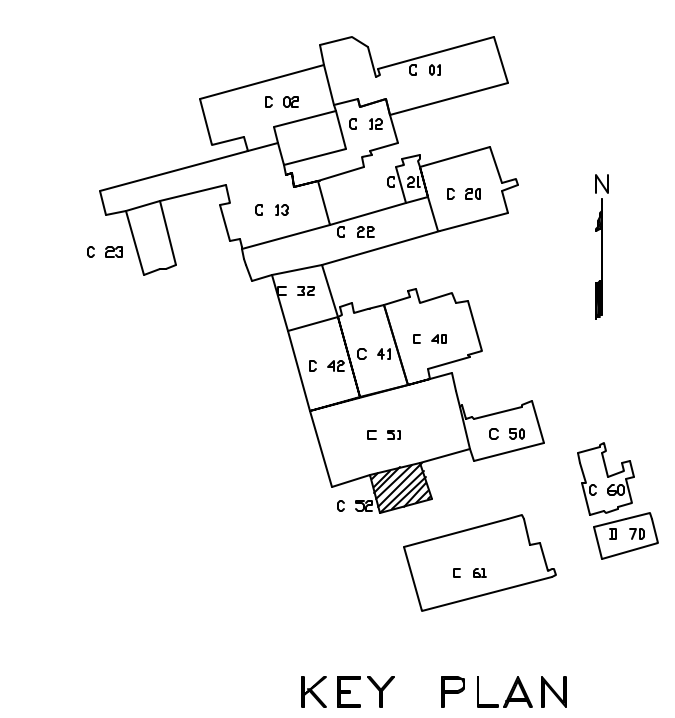
**REFERENCE DRAWINGS:**

- SE431E001\_1 - C-SITE POWER BUILDING GENERAL ARRANGEMENT - EQUIPMENT LAYOUT
- SE431E001\_2 - C-SITE POWER BUILDING CONDUIT AND TRAY LAYOUT
- E-1 SH. 12 - C-SITE TO D-SITE DC TRANSMISSION CABLE TRAY LAYOUT
- E-2 SH. 13 - C-SITE TO D-SITE DC TRANSMISSION CABLE TRAY BRIDGE STRUCTURAL SUPPORT ASSEMBLIES AND DETAILS
- E-3 SH. 14 - C-SITE TO D-SITE DC TRANSMISSION CABLE TRAY BRIDGE STRUCTURAL SUPPORT ASSEMBLIES AND PENETRATION DETAILS
- SE433E001\_1 - D-SITE FIELD COIL POWER CONVERSION BUILDING, EL. 118'-9" CONDUIT AND TRAY LAYOUT
- SE433E001\_2 - D-SITE FIELD COIL POWER CONVERSION BUILDING, EL. 118'-9" TRAY SECTIONS AND DETAILS
- SE433E001\_3 - D-SITE FIELD COIL POWER CONVERSION BUILDING, EL. 118'-9" GENERAL ARRANGEMENT - EQUIPMENT LAYOUT
- SE433E001\_4 - D-SITE FIELD COIL POWER CONVERSION BUILDING, EL. 118'-9" FLOOR AND ELEVATION PENETRATION LAYOUT
- SE433E001\_5 - D-SITE FIELD COIL POWER CONVERSION BUILDING, 1ST FL. WEST WING GENERAL ARRANGEMENT - EQUIPMENT LAYOUT
- 5602-D-5449-PP-SH.2 - C-SITE POWER BUILDING CABLE TROUGH SECTIONS
- 5602-D-5449-PP-SH.3 - C-SITE POWER BUILDING CABLE TROUGH LAYOUT

**NOTES: UNLESS OTHERWISE SPECIFIED**

1. INSIDE TRAYS SHALL BE NEMA 12C AND OF T.J. COPE ALUMINUM LADDER, SYSTEM NUMBER 3B48, 36" WIDE, 4" LOAD DEPTH, 13/16" FLANGE, 9" RUNG SPACING AND OF 24" RADIUS FITTINGS.
2. INSIDE HORIZONTAL TRAY STRAIGHT SECTIONS SHOULD BE SUPPORTED AT INTERVALS NOT TO EXCEED 8'.
3. ALL TRAY ELEVATIONS ARE TO BOTTOM OF TRAY.
4. TRAY SHALL BE INSTALLED TO LATEST VERSION OF NEMA VE-1, 2 AND MANUFACTURER'S RECOMMENDED INSTALLATION NOTES.
5. TRAYS AND SUPPORT ASSEMBLIES SHALL BE ASSEMBLED WITH MANUFACTURER'S RECOMMENDED HARDWARE AND ACCESSORIES.
6. INSIDE ALUMINUM TRAYS SHALL BE SUPPORTED AT EACH SECTION WITH A TRAPEZE HANGER SUPPORT SYSTEM OF 5/8" STEEL ROD AND HOT-DIPPED GALVANIZED CHANNEL OR ANGLE PER MANUFACTURER'S RECOMMENDED INSTALLATION. DEPICTED BY ▶▶
7. PROVIDE CABLE SUPPORTS FROM TRAY TO EQUIPMENT WITH UNISTRUT CHANNEL, PERMA GREEN II FINISH. HARDWARE MUST MEET OR EXCEED SAE GRADE 3 CARBON STEEL, BE ELECTRO-GALVANIZED PLATED AND INSTALLED TO ASTM TORQUE SPECIFICATIONS.
8. 1/0 AWG COPPER BONDING JUMPER SHALL BE REQUIRED ACROSS ALL TRAY SECTIONS.
9. ▲ DENOTES A PLAN POINT WHICH REPRESENTS A LOCATION WITHIN A TRAY SYSTEM FOR ROUTING OF CABLES.
10. TRAY IDENTIFICATIONS INDICATE TRAY VOLTAGE CLASS:  
D-5KV TO 15KV DC POWER  
S-13.8KV POWER  
Q-4150V (1KV TO 5KV) POWER  
P-480V POWER  
L-120V CONTROL  
N- (50V) LOW LEVEL INSTRUMENTATION
11. CABLE TRAY TRAPEZE HANGER SUPPORT SYSTEM SHALL HAVE NO HORIZONTAL OR LATERAL MOVEMENT.
12. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF PROCEDURE EM-002. VISUAL WELD INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE ACCEPTANCE OF CRITERIA OF AWS D1.3 WHERE APPLICABLE.
13. LIGHTING FIXTURE MAY HAVE TO BE RELOCATED TO ACCOMMODATE NCSX CABLE TRAY LAYOUT.

RELEASED FOR BID  
JULY 20 2004



**RELEASED FOR FABRICATION / INSTALLATION**

COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED AUTOCAD 2002 DO NOT VERIFY INFORMATION BY SCALING DRAWING	OSGN: R. VAN KIRK CHK: J. NELSON ENGR: S. RAMAKRISHNAN SUPV: J. SIEGEL	PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY <b>NATIONAL COMPACT STELLARATOR EXPERIMENT</b> ELECTRICAL POWER SYSTEMS DC SYSTEMS C-SITE DC SYSTEMS C-SITE POWER BUILDING CONDUIT AND TRAY LAYOUT SECTIONS	DATE: 8-01-03 SHEET 2 REV 0
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