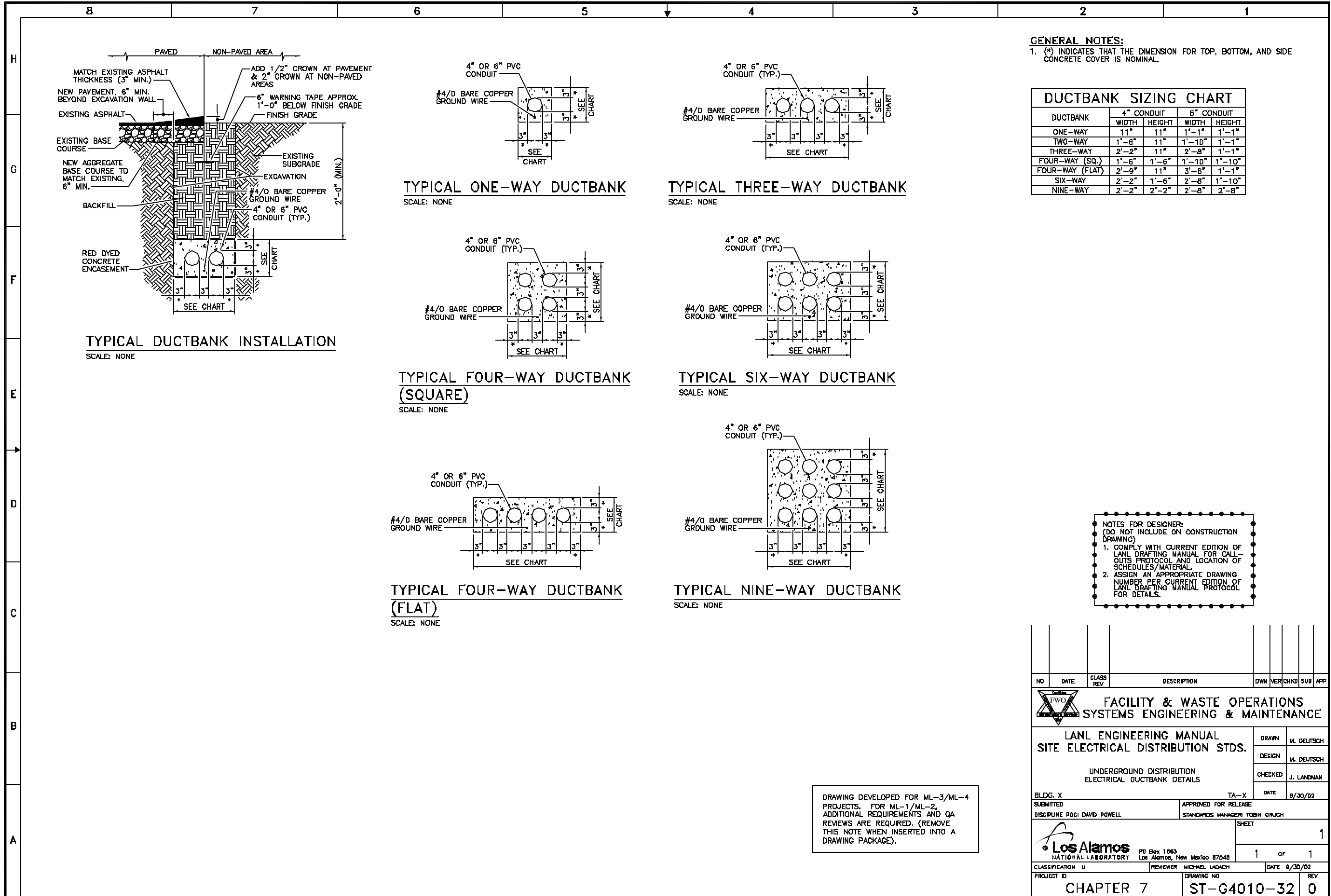


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**GENERAL NOTES:**  
 1. (\*) INDICATES THAT THE DIMENSION FOR TOP, BOTTOM, AND SIDE CONCRETE COVER IS NOMINAL.

| DUCTBANK        | 4" CONDUIT |        | 6" CONDUIT |        |
|-----------------|------------|--------|------------|--------|
|                 | WIDTH      | HEIGHT | WIDTH      | HEIGHT |
| ONE-WAY         | 11"        | 11"    | 1'-1"      | 1'-1"  |
| TWO-WAY         | 1'-8"      | 11"    | 1'-10"     | 1'-1"  |
| THREE-WAY       | 2'-2"      | 11"    | 2'-8"      | 1'-1"  |
| FOUR-WAY (SQ.)  | 1'-6"      | 1'-6"  | 1'-10"     | 1'-10" |
| FOUR-WAY (FLAT) | 2'-9"      | 11"    | 3'-8"      | 1'-1"  |
| SIX-WAY         | 2'-2"      | 1'-6"  | 2'-8"      | 1'-10" |
| NINE-WAY        | 2'-2"      | 2'-2"  | 2'-8"      | 2'-8"  |

**TYPICAL DUCTBANK INSTALLATION**  
 SCALE: NONE

**TYPICAL ONE-WAY DUCTBANK**  
 SCALE: NONE

**TYPICAL THREE-WAY DUCTBANK**  
 SCALE: NONE

**TYPICAL FOUR-WAY DUCTBANK (SQUARE)**  
 SCALE: NONE

**TYPICAL SIX-WAY DUCTBANK**  
 SCALE: NONE

**TYPICAL FOUR-WAY DUCTBANK (FLAT)**  
 SCALE: NONE

**TYPICAL NINE-WAY DUCTBANK**  
 SCALE: NONE

**NOTES FOR DESIGNER:**  
 (DO NOT INCLUDE ON CONSTRUCTION DRAWING)  
 1. COMPLY WITH CURRENT EDITION OF LANL DRAFTING MANUAL FOR CALL-OUTS PROTOCOL AND LOCATION OF SCHEDULES/MATERIAL.  
 2. ASSIGN AN APPROPRIATE DRAWING NUMBER PER CURRENT EDITION OF LANL DRAFTING MANUAL PROTOCOL FOR DETAILS.

DRAWING DEVELOPED FOR ML-3/ML-4 PROJECTS. FOR ML-1/ML-2, ADDITIONAL REQUIREMENTS AND QA REVIEWS ARE REQUIRED. (REMOVE THIS NOTE WHEN INSERTED INTO A DRAWING PACKAGE).

| NO   | DATE | CLASS REV | DESCRIPTION             | OWN  | VER          | CHKD | SUB | APP |
|--|------|-----------|-------------------------|--|--------------|------|-----|-----|
| <b>FACILITY &amp; WASTE OPERATIONS SYSTEMS ENGINEERING &amp; MAINTENANCE</b>     |      |           |                         |  |              |      |     |     |
| <b>LANL ENGINEERING MANUAL<br/>           SITE ELECTRICAL DISTRIBUTION STDS.</b> |      |           |                         | DRAWN<br>M. DEUTSCH                                  |              |      |     |     |
| UNDERGROUND DISTRIBUTION<br>ELECTRICAL DUCTBANK DETAILS                          |      |           |                         | DESIGN<br>M. DEUTSCH                                 |              |      |     |     |
|  |      |           |                         | CHECKED<br>J. LANDMAN                                |              |      |     |     |
|  |      |           |                         | DATE<br>8/30/02                                      |              |      |     |     |
| BLDG. X<br>SUBMITTED   |      |           |                         | TA-X   |              |      |     |     |
| DISCIPLINE POCI DAVID POWELL   |      |           |                         | APPROVED FOR RELEASE<br>STANDARDS MANAGER TOSH GRUCH |              |      |     |     |
|  |      |           |                         | SHEET  |              | 1    |     |     |
|  |      |           |                         | 1 of 1   |              |      |     |     |
| CLASSIFICATION U   |      |           | REVIEWER MICHAEL LADACH |  | DATE 8/30/02 |      | REV |     |
| PROJECT ID   |      |           | DRAWING NO              |  | REV          |      |     |     |
| <b>CHAPTER 7</b>   |      |           | <b>ST-G4010-32</b>      |  | <b>0</b>     |      |     |     |