

**GENERAL TECHNOLOGY NOTES:**

- 1/T-1001-2.1" INDICATES DETAIL NUMBER / SHEET NUMBER.
- "(ER/1)" INDICATES MATERIAL LIST ITEM IN HEX SYMBOL.
- "(CD)" INDICATES KEYED NOTE USED TO DESCRIBE ADDITIONAL INFORMATION OF WORK REQUIRED, SPECIFIC TO THE SHEET AND/OR DETAIL IT IS SHOWN WITH.

**4. ABBREVIATION KEY:**

- T.C. TELECOMMUNICATIONS CONTRACTOR
- E.C. ELECTRICAL CONTRACTOR
- M.C. MECHANICAL CONTRACTOR
- S.C. SECURITY CONTRACTOR
- A.V.C. AUDIO/VIDEO CONTRACTOR
- N.C.C. NURSE CALL CONTRACTOR
- AFF ABOVE FINISH FLOOR
- C CONDUIT
- TYP TYPICAL
- +# MOUNTING HEIGHT FROM FINISHED FLOOR TO CENTERLINE

**5. MOUNTING SUBSCRIPT KEY:**

1. TELECOMMUNICATION OUTLETS  
A MOUNT ABOVE COUNTER (+6" TO CENTERLINE ABOVE COUNTER OR BACKSPLASH)  
L MOUNT IN LAB CASEWORK
2. A SLASH IS USED BETWEEN TWO SUBSCRIPTS ie: A/H
3. REFER TO MATERIAL LIST AND SPECIFICATIONS FOR FULL DESCRIPTIONS AND MANUFACTURERS OF ALL DEVICES.

**6. LINE TYPE KEY:**

- NEW WORK BY THIS CONTRACTOR (DARK SOLID LINE)
- - - - - NEW WORK UNDERFLOOR OR UNDERGROUND BY THIS CONTRACTOR (DARK LONG DASHED LINE)
- NEW WORK BY OTHERS AND/OR EXISTING TO REMAIN (LIGHT SOLID LINE)

**TECHNOLOGY INSTALLATION NOTES:**

1. THE COMPLETE INSTALLATION SHALL BE IN ACCORDANCE WITH THE A.D.A.A.G. (AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES)
2. CONCEAL ALL CONDUIT IN WALLS, PARTITIONS, ABOVE CEILING, AND IN FLOOR SLAB, ETC. UNLESS OTHERWISE INDICATED ON THE PLANS OR IN THE SPECIFICATIONS. CONDUIT IN MECHANICAL ROOMS, AND STORAGE ROOMS WITHOUT CEILINGS MAY BE EXPOSED ON BUILDING STRUCTURE.
3. BOXES LOCATED ON OPPOSITE SIDES OF NON-RATED WALLS SHALL BE OFFSET A MINIMUM OF 6" HORIZONTALLY. BOXES ON OPPOSITE SIDES OF FIRE RATED WALLS SHALL BE OFFSET A MINIMUM OF 24" HORIZONTALLY. "THRU-THE-WALL" BOXES SHALL NOT BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.
4. FLUSH MOUNT ALL TELECOMMUNICATION OUTLETS AT +18" FROM FLOOR (CENTERLINE DIMENSION), EXCEPT WHERE OTHERWISE NOTED. OUTLETS MAY BE SURFACE MOUNTED WHEN CONDUIT IS SPECIFIED EXPOSED.
5. CONTRACTOR SHALL VERIFY ALL FURNITURE, MODULAR FURNITURE AND EQUIPMENT LOCATIONS WITH ARCHITECTURAL PLANS, ELEVATIONS AND REVIEWED SHOP DRAWINGS. PRIOR TO MAKING THE ACTUAL TELECOMMUNICATIONS INSTALLATION THIS CONTRACTOR SHALL ADJUST OUTLETS OR CONNECTION LOCATIONS TO ACCOMMODATE FURNITURE AND/OR EQUIPMENT.
6. TELECOMMUNICATIONS EQUIPMENT SHALL BE MOUNTED TO ALLOW ACCESS TO ELECTRICAL AND MECHANICAL EQUIPMENT. ALL MOUNTING OF TELECOMMUNICATION DEVICES ON EQUIPMENT SUPPLIED BY ANOTHER CONTRACTOR SHALL BE APPROVED IN ADVANCE BY THE OTHER CONTRACTOR.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPENINGS REQUIRED IN WALLS. ALL OPENINGS SHALL BE REPAIRED TO MATCH EXISTING BY A QUALIFIED CONTRACTOR AT THE EXPENSE OF THIS CONTRACTOR. ALL CONDUITS THROUGH WALLS SHALL BE GROUTED OR SEALED INTO OPENINGS.
8. ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOORS SHALL BE TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF THROUGH-PENETRATION FIRESTOPS, REFER TO 27 05 03 AND 28 05 03.
9. CONTRACTOR SHALL REMOVE AND REINSTALL ALL CEILING TILES AS REQUIRED FOR THE EXECUTION OF TELECOMMUNICATIONS WORK THAT IS OUTSIDE THE CONTRACT LIMITS OF CONSTRUCTION. CONTRACTOR SHALL REPLACE CEILING TILES WITH IDENTICAL MATERIAL WHERE DAMAGED BY THIS CONTRACTOR.

**TECHNOLOGY / ELECTRICAL COORDINATION MATRIX**

ITEM:	SHOWN ON:	FURNISHED BY:	INSTALLED BY:	NOTES: (SEE DESCRIPTIONS BELOW)
TECHNOLOGY ROUGH-IN (REFER TO MATERIAL LIST AND SPECIFICATION SECTION 27 05 11 FOR DEFINITION)	T-SERIES	E.C.	E.C.	1.
INFORMATION OUTLET FACEPLATE	T-SERIES	T.C.	T.C.	*
INFORMATION OUTLET JACKS AND TERMINATIONS	T-SERIES	T.C.	T.C.	*
CONDUIT SLEEVES (WHEN SHOWN ON DRAWINGS)	T-SERIES	E.C.	E.C.	*
CONDUIT SLEEVES (NOT SHOWN BUT REQUIRED FOR PROPER INSTALLATION OF SYSTEM)	N/A	T.C.	E.C.	2, 4.
TELECOMMUNICATION SYSTEMS ROUGH-IN	T-SERIES	E.C.	E.C.	3, 4.
SECURITY SYSTEMS ROUGH-IN FOR INTRUSION DETECTION	T-SERIES	E.C.	E.C.	3, 4.
SECURITY CABLING FOR INTRUSION DETECTION	T-SERIES	S.C.	S.C.	3, 4.
VIDEO SURVEILLANCE SYSTEMS ROUGH-IN	T-SERIES	E.C.	E.C.	3, 4.
VIDEO SURVEILLANCE FOR INTRUSION DETECTION	T-SERIES	S.C.	S.C.	3, 4.
LADDER RACK	T-SERIES	T.C.	T.C.	5.
FIRESTOPPING	N/A	E.C.	E.C.	9.
GROUNDING LUGS ON TECHNOLOGY EQUIPMENT	T-SERIES	T.C.	E.C.	6.
GROUNDING SYSTEM FOR TECHNOLOGY SYSTEM	T-SERIES	E.C.	E.C.	7.
CONNECTION OF TECHNOLOGY GROUND SYSTEM TO THE ELECTRICAL GROUND SYSTEM	T-SERIES	E.C.	E.C.	8.
LINE VOLTAGE POWER (+120V OR GREATER)	E-SERIES	E.C.	E.C.	*
LINE VOLTAGE POWER (NOT SHOWN BUT REQUIRED FOR PROPER INSTALLATION OF SYSTEM)	N/A	T.C.	E.C.	2, 4.
LOW VOLTAGE CABLING FOR TECHNOLOGY SYSTEMS	T-SERIES	T.C.	T.C.	*
BRIDLE RINGS OR OTHER CABLE ROUTING METHODS (OTHER THAN CONDUIT AND CABLE TRAY)	T-SERIES	T.C.	T.C.	5.
TECHNOLOGY SERVICE ENTRANCE CONDUITS AND HANDHOLES	E-SERIES	E.C.	E.C.	*
TELECOMMUNICATIONS TERMINAL BOARD (TTB)	T-SERIES	E.C.	E.C.	*

**SCHEDULE NOTES:**

1. LOCATIONS OF TELECOMMUNICATIONS ROUGH-IN SHALL BE INDICATED BY THE INFORMATION OUTLETS ON THE CONTRACT DOCUMENTS. REFER TO INFORMATION OUTLET SCHEDULE ON E3003-7.3 FOR ADDITIONAL INFORMATION.
2. BASED ON THE INHERENT DIFFERENCES IN PRODUCTS FROM VARIOUS MANUFACTURERS, ALL REQUIRED EQUIPMENT MAY NOT BE SHOWN ON THE DRAWINGS OR ON THE CONTRACT DOCUMENTS.
3. INCLUDES BACKBOXES AND CONDUIT REQUIRED FOR THE TECHNOLOGY SYSTEMS INSTALLATION. THE E.C. SHALL BASE THE BID ON THE BASIS OF DESIGN SHOWN ON THE CONTRACT DOCUMENTS.
4. ALL CHANGES TO THE SLEEVES, BACKBOXES, CONDUITS AND POWER REQUIRED BECAUSE OF THE T.C.'S SELECTION OF AN ALTERNATE ACCEPTABLE MANUFACTURER 4. (OR FROM SYSTEM CONFIGURATIONS THAT ARE LEFT TO THE CHOICE OF THE CONTRACTOR) SHALL BE INCLUDED IN THE T.C.'S BID. THIS BID SHALL INCLUDE INSTALLATION BY AN LICENSED ELECTRICIAN.
5. UNLESS TRADE RULES DICTATE OTHERWISE.
6. FURNISHED AS PART OF THE EQUIPMENT WHEN POSSIBLE, OR FURNISHED TO THE E.C. FOR INSTALLATION IN THE FIELD.
7. INCLUDES ALL CONDUCTORS, GROUND BARS, AND TERMINATION'S FOR THE COMPLETE GROUNDING SYSTEM REQUIRED BY THE SPECIFICATIONS INCLUDING CONNECTORS TO THE LUGS PROVIDED ON THE TECHNOLOGY EQUIPMENT.
8. REFER TO ELECTRICAL DRAWINGS FOR LOCATIONS OF ELECTRICAL PANELS AS SHOWN IN THE GROUNDING RISER.
9. FIRESTOPPING REFERS TO THE ITEMS SPECIFICALLY ADDRESSED IN DIVISION 26, 27 AND 28 DOCUMENTS. REFER TO INDIVIDUAL SPECIFICATION SECTIONS FOR INFORMATION SPECIFIC TO FIRESTOPPING.

ALL SYMBOLS AND ABBREVIATIONS LISTED MAY NOT BE APPLICABLE TO THIS PROJECT. REFER TO MATERIAL LIST FOR MORE COMPLETE DESCRIPTION AND ITEMS.

**TECHNOLOGY SYMBOL LIST**

SYMBOL:	DESCRIPTION:
	INFORMATION OUTLET
	TELEPHONE OUTLET ROUGH-IN
	MOTION DETECTOR - WALL
	SECURITY KEYPAD
	SECURITY ACCESS VIDEO CAMERA WITH LENS

**TELECOM ROOM REFERENCES**

TELECOM ROOM	DETAIL/SHEET REFERENCE	FLOORPLAN REFERENCE	ARCH. ROOM NUMBER
TR/2	1/E-3003-7.5	1/E-3003-7.5	S102

**BID DOCUMENTS 7/1/2011**

Revisions	Date

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I hereby certify that this Plan, Specification, or Report was prepared by me, or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Oregon.  
Signature: \_\_\_\_\_  
Name: **Lee D. VanOpporp**  
Discipline: **Electrical**  
Oregon Registration No. **78702PE** Expiration date: **06.30.12**  
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**NATIONAL CEMETERY ADMINISTRATION**

Drawing Title  
**TECHNOLOGY COVER SHEET**  
Approved: Director, Office of Construction Management  
Approved: Director, Project Management Service

Project Title  
**REPLACE ADMINISTRATION AND MAINTENANCE BUILDING AND SITE IMPROVEMENTS**  
Building Number: **3003**  
Checked: **PETMOG**  
Drawn: **JAYSTI**  
Location: **EAGLE POINT NATIONAL CEMETERY 2763 RILEY ROAD EAGLE POINT, OR 97524**

Date: **7-1-2011**  
Project No: **906CM3009**  
DRAWING NO.: **E-3003-7.1**  
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