

VEHICLE AND EQUIPMENT STORAGE BUILDING

CEILING SPACE

FIRST FLOOR

FLOOR SPACE

1 COPPER RISER DIAGRAM

NO SCALE

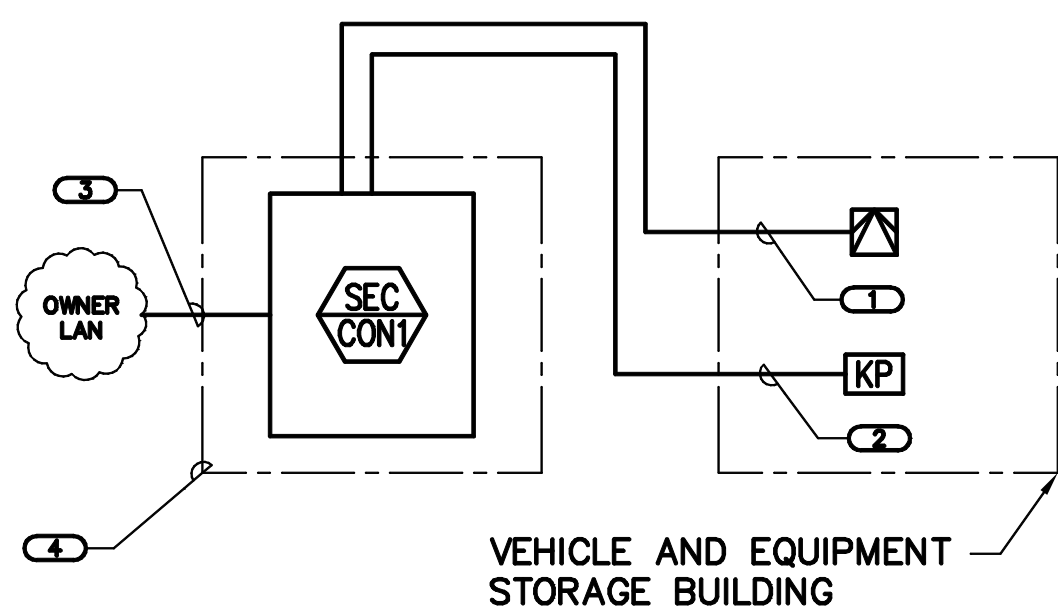
NOTES:

1. THIS RISER IS DIAGRAMATIC AND MAY NOT SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS SHOWN. THIS RISER IS SHOWN FOR CLARIFICATION OF CONNECTION LOCATIONS AND CABLE TYPE. ALL INFORMATION OUTLETS ARE TYPICAL OF THE OUTLETS IN THE AREA SHOWN. SEE PLANS FOR MORE SPECIFIC ROUTING INFORMATION. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

2. ALL CABLING SHALL BE INSTALLED IN CONDUIT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

KEYNOTES:

- 1 25-PAIR OSP BACKBONE CABLING. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 2 REFER TO FLOOR PLANS FOR QUANTITY OF CABLES AND JACKS TO BE INSTALLED AT EACH INFORMATION OUTLET.
- 3 23 GAUGE, 4-PAIR, CATEGORY 6, UNSHIELDED TWISTED PAIR CABLE, REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 4 CONTRACTOR PROVIDED, OWNER INSTALLED PATCH CORDS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 5 12-STRAND INDOOR/OUTDOOR 62.5 MICRON MULTIMODE FIBER. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 6 25-PAIR CATEGORY 3 CABLE. CONTRACTOR SHALL TERMINATE 1-PAIR PER PORT ON PINS 4 & 5. COIL THE 25TH PAIR FOR FUTURE AND SHALL BE ABLE TO TERMINATE ON ANY OF THE 24 PORTS.
- 7 OWNER PROVIDED AND INSTALLED FIBER PATCH CORD.



4 INTRUSION DETECTION RISER

NO SCALE

NOTES:

1. THIS RISER IS DIAGRAMATIC AND MAY NOT SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS SHOWN. THIS RISER IS SHOWN FOR CLARIFICATION OF CONNECTION LOCATIONS AND CABLE TYPE. ALL KEYPADS AND MOTION PIR ARE TYPICAL IN THE AREA SHOWN. REFER TO FLOOR PLANS FOR MORE SPECIFIC ROUTING INFORMATION. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

2. ALL CABLING SHALL BE INSTALLED IN CONDUIT. REFER TO FLOOR PLANS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PROGRAMMING TO INSURE A COMPLETE INSTALLATION. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

KEYNOTES:

- 1 (1) 22AWG 4-PAIR UTP CABLE.
- 2 (1) 18AWG 4-PAIR OR (1) 22AWG UTP CABLE. CONTRACTOR SHALL VERIFY RESISTANCE AND SHALL NOT EXCEED 14 Ω.
- 3 CONTRACTOR PROVIDED AND INSTALL CATEGORY 6 PATCH CABLE.
- 4 REFER TO 1/E-3003-7.3 FOR ADDITIONAL INFORMATION.

VEHICLE AND EQUIPMENT STORAGE BUILDING

FIRST FLOOR

GROUNDING ELECTRODE CONDUCTOR. COORDINATE CONNECTION WITH ELECTRICAL CONTRACTOR.

ELECTRICAL ENTRANCE FACILITY.

GROUND MAINTENANCE STORAGE S103.

BONDING CONDUCTOR FOR TELECOMMUNICATIONS (BCT).

EXISTING GROUNDING ELECTRODE SYSTEM (GROUND FIELD, WATER PIPE, ETC.).

2 GROUNDING RISER DIAGRAM

NO SCALE

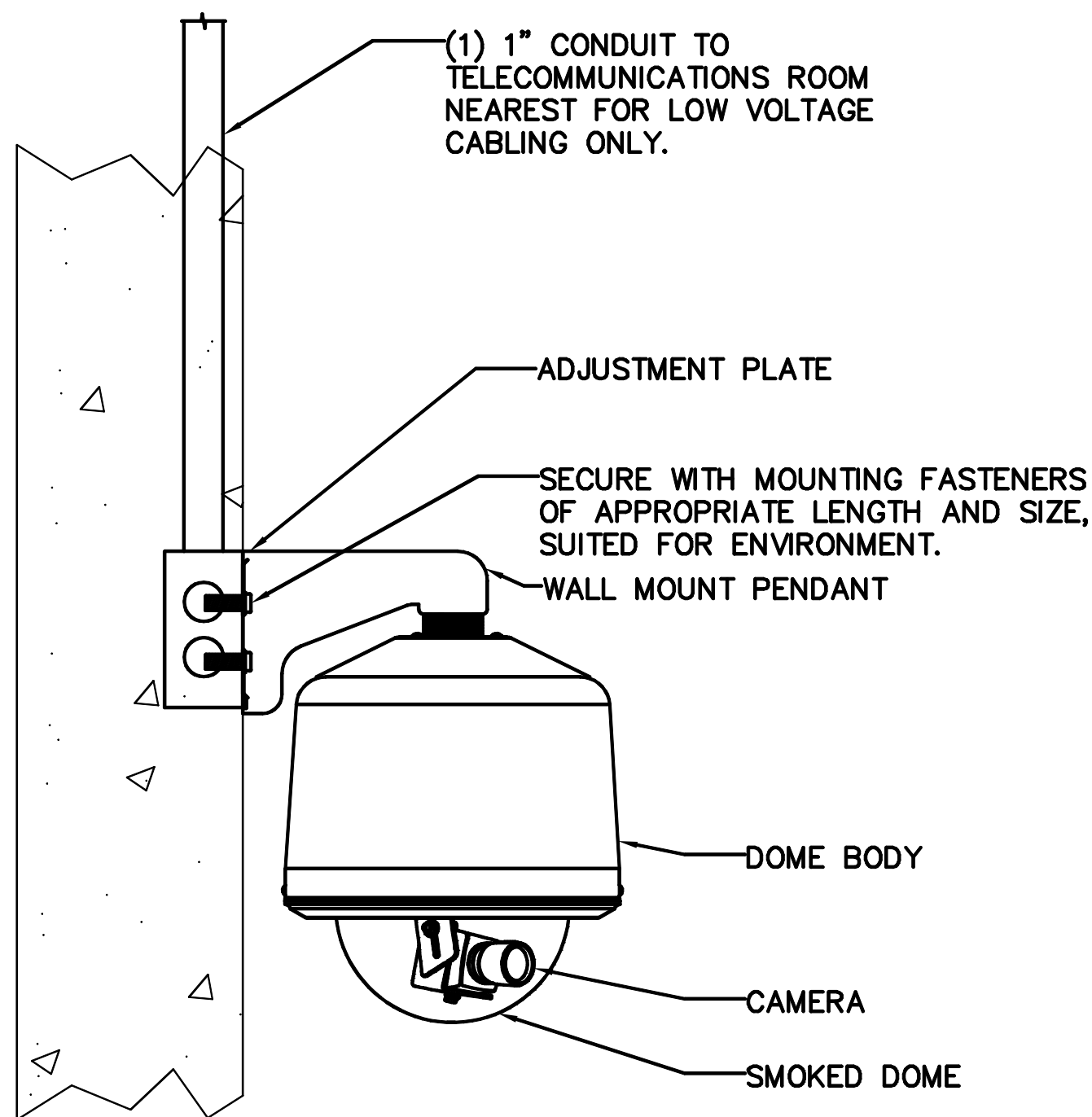
NOTES:

1. ALL CONDUCTORS IN THE TELECOMMUNICATIONS GROUNDING SYSTEM SHALL BE MINIMUM SIZE OF #6 AWG PLENUM RATED COPPER CONDUCTORS (GREEN) UNLESS DISTANCE IS GREATER THAN 12 FEET, THEN REFER TO GROUNDING CONDUCTOR SIZING SCHEDULE FOR SIZING CRITERIA.
2. GROUNDING CONDUCTORS AND BONDING JUMPERS SHALL BE CONNECTED BY EXOTHERMIC WELDING, LISTED PRESSURE CONNECTORS, LISTED CLAMPS OR OTHER LISTED MEANS. SOLDER IS NOT AN ACCEPTABLE MEANS OF CONNECTION.
3. REFER TO 3/E-3003-7.2 FOR TELECOM ROOM GROUNDING DETAIL.

KEYNOTES:

- 1 BCT SHALL BE AT LEAST THE SAME SIZE AS THE TBB. REFER TO GROUNDING CONDUCTOR SIZING SCHEDULE FOR SIZING REQUIREMENTS.

GROUNDING CONDUCTOR SIZING SCHEDULE	
CONDUCTOR LENGTH IN FEET	MINIMUM ACCEPTABLE SIZE - AWG
LESS THAN 13'	6
14' - 20'	4
21' - 26'	3
27' - 33'	2
34' - 41'	1
42' - 52'	1/0
53' - 66'	2/0
GREATER THAN 66'	3/0



5 EXTERIOR FIXED CAMERA WALL MOUNTING DETAIL

SCALE: 3/4"=1'-0"

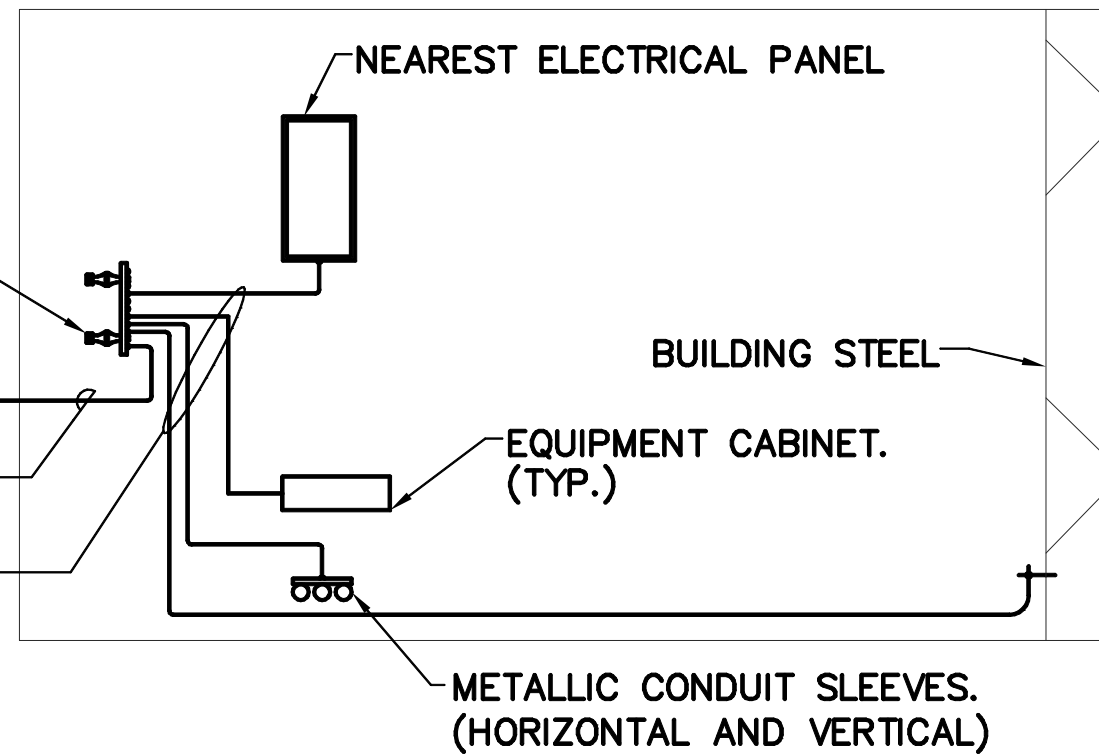
NOTES:

1. SECURE WALL MOUNT BASE PLATE WITH MINIMUM 1/4" FASTENERS.
2. REFER TO MANUFACTURER SPECIFICATIONS FOR INSTALLATION.

REFER TO 3/E-3003-7.3 FOR GROUND BAR DETAIL.

GND 1

BONDING CONDUCTOR FOR TELECOMMUNICATIONS (BCT) TELECOMMUNICATIONS BONDING JUMPER (TBJ).



3 TELECOM ROOM GROUNDING DETAIL

NO SCALE

NOTES:

1. ALL CONDUCTORS IN THE TELECOMMUNICATIONS GROUNDING SYSTEM SHALL BE #6 AWG PLENUM RATED COPPER CONDUCTORS (GREEN) UNLESS DISTANCE IS GREATER THAN 12 FEET, THEN SEE GROUNDING CONDUCTOR SIZING SCHEDULE.
2. SHEET METAL SCREWS SHALL NOT BE USED TO CONNECT TELECOMMUNICATIONS BONDING JUMPERS TO EQUIPMENT. ALL CONNECTIONS SHALL UTILIZE LISTED HARDWARE.
3. BONDING TO PAINT TREATED SURFACES SHALL UTILIZE PAINT PIERCING LUGS.
4. GROUNDING DETAIL IS DIAGRAMMATIC, REFER TO ENLARGED PLANS FOR QUANTITIES AND LOCATION OF EQUIPMENT.

KEYNOTES:

- 1 TO ELECTRICAL ENTRANCE FACILITY. REFER TO 2/E-3003-7.2 FOR GROUNDING RISER DIAGRAM.

6 CCTV CAMERA RISER DIAGRAM

NO SCALE

NOTES:


1. THIS RISER IS DIAGRAMATIC AND MAY NOT SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS SHOWN. THIS RISER IS SHOWN FOR CLARIFICATION OF CONNECTION LOCATIONS AND CABLE TYPE. ALL CAMERAS ARE TYPICAL IN THE AREA SHOWN. REFER TO FLOOR PLANS AND SITE PLAN ON E-2.1 FOR MORE SPECIFIC ROUTING INFORMATION. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

2. ALL CABLING SHALL BE INSTALLED IN CONDUIT. REFER TO FLOOR PLANS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

KEYNOTES:

- 1 REFER TO ADMINISTRATION FLOOR PLAN ON E-1001-7.5 AND SECURITY SITE PLAN ON E-2.1 FOR QUANTITY OF CABLES, JACKS, AND CAMERAS TO BE INSTALLED AT EACH LOCATION.
- 2 (1) 23 GAUGE, 4-PAIR CATEGORY 6 UNSHIELDED TWISTED PAIR CABLE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 3 CONTRACTOR PROVIDED AND INSTALL CATEGORY 6 PATCH CABLE. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 4 CONTRACTOR PROVIDED AND INSTALLED FIBER CROSS CONNECT.
- 5 ILLUMINATOR IS POE. IF ILLUMINATOR REQUIRES 120V AC POWER DUE TO MANUFACTURE EQUIVILANT CONTRACTOR SHALL PROVIDE NECESSARY POWER.

BID DOCUMENTS 7/1/2011

<div>Revisions</div> <div>Date</div>	<div><div>KJ ENGINEERING CONSULTANTS</div><div>623 25TH AVENUE ROCK ISLAND, IL 61201 309.786.0673 FAX: 309.786.5967 www.kjw.com KJW Project # 10.0356.00</div><div>STRUCTURAL / MECHANICAL / ELECTRICAL / TECHNOLOGY / MEDICAL EQUIPMENT SOLUTIONS</div></div> <div><div>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.</div><div>Signature: <u>Lee D. VanOpdorp</u> Name: <u>Lee D. VanOpdorp</u> Discipline: <u>Electrical</u> Oregon Registration No. <u>78702PE</u> Expiration date: <u>06.30.12</u> Date Issued: <u>**/**/11</u></div></div>	<div>Anderson Engineering of Minnesota, LLC</div> <div>13605 1st AVENUE NORTH, SUITE 100, PLYMOUTH, MN 55441 TEL (763) 412-4000 FAX (763) 412-4090 www.ae-mn.com</div>	<div><div>N ATIONAL C EMETERY A DMINISTRATION</div></div>	<div>Drawing Title</div> <div>TECHNOLOGY RISERS AND DETAILS</div> <div>Approved: Director, Office of Construction Management</div> <div>Approved: Director, Project Management Service</div>	<div>Project Title</div> <div>REPLACE ADMINISTRATION AND MAINTENANCE BUILDING AND SITE IMPROVEMENTS</div> <div>Building Number</div> <div>3003</div> <div>Checked</div> <div>PETMOG</div> <div>Drawn</div> <div>JAYSTI</div> <div>Location</div> <div>EAGLE POINT NATIONAL CEMETERY 2763 RILEY ROAD EAGLE POINT, OR 97524</div>	<div>Date</div> <div>7-1-2011</div> <div>Project No.</div> <div>906CM3009</div> <div>DRAWING NO.</div> <div>E-3003-7.2</div> <div>Dwg. 177 OF 181</div>
--------------------------------------	--	--	--	--	---	---