

ABBREVIATIONS:	
A	AMPERE
AF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
ANN	ANNUNCIATOR
AP	ACCESS POINT
BFF	BELOW FINISHED FLOOR
BFG	BELOW FINISHED GRADE
BICSI	BUILDING INDUSTRY CONSTRUCTION SERVICE INTERNATIONAL
BLDG	BUILDING
C	CONDUIT
CAB	CABINET
CAT	CATEGORY
CATV	CABLE TELEVISION
CD	CANDELA
CFOI	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED
CL	CENTER LINE
CO	CARBON MONOXIDE
DN	DOWN
EXIST	EXISTING
EMT	ELECTRICAL METALLIC TUBING
EOL	END OF LINE
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FTC	FIRE TERMINAL CABINET
GR	GALVANIZED RIGID CONDUIT
G OR GB	GROUND BOX
IACP	INTRUSION ALARM CONTROL PANEL
IDF	INTERMEDIATE DISTRIBUTION FRAME
IMC	INTERMEDIATE METAL CONDUIT
J OR JB	JUNCTION BOX
MEP	MECHANICAL / ELECTRICAL / PLUMBING
MDF	MAIN DISTRIBUTION FRAME
MP	MINIMUM PONT OF ENTRY
(N)	NEW
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NTS	NOT TO SCALE
N/A	NOT APPLICABLE
OFE	OWNER FURNISHED EQUIPMENT
OF	OWNER FURNISHED/CONTRACTOR INSTALLED
OF	OWNER FURNISHED/OWNER INSTALLED
OSP	OUTSIDE PLANT
PVC	POLYVINYL CHLORIDE
RCD	REGISTERED COMMUNICATION DISTRIBUTION DESIGNER
ROW	RACEWAY
RM	ROOM
SR	SURFACE RACEWAY
TY	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
V	VOLTS
W	WATT
WP	WEATHERPROOF

TECHNOLOGY SYMBOL LEGEND: ALL EQUIPMENT AND MATERIALS ARE CONTRACTOR FURNISHED, INSTALLED AND CONFIGURED (UNO)				
SYMBOL	DESCRIPTION	MANUFACTURER	PART NUMBER	NOTES / DETAIL REFERENCES
	(N) SURFACE MOUNTED CONDUIT	COMMERCIAL GENERIC	N/A	GREY = EXISTING
	(N) UNDERGROUND CONDUIT	COMMERCIAL GENERIC	N/A	GREY = EXISTING
	(N) MEDIUM CAPACITY SURFACE MOUNTED CABLE RACEWAY	WIREMOLD	WM2300	GREY = EXISTING
	(N) HIGH CAPACITY SURFACE MOUNTED CABLE RACEWAY	WIREMOLD	WM5400	GREY = EXISTING
	(N) CONDUIT STUB	COMMERCIAL GENERIC	N/A	GREY = EXISTING
	(E) CONDUIT RISER	N/A	N/A	N/A
	(E) DATA RACK	EXISTING	EXISTING	N/A
	(E) DATA RACK	EXISTING	EXISTING	N/A
	(N) GROUND BOX	COMMERCIAL GENERIC	N/A	GREY = EXISTING
	(N) JUNCTION BOX	COMMERCIAL GENERIC	N/A	GREY = EXISTING
	(E) MINIMAL POINT OF ENTRY	EXISTING	EXISTING	N/A
	(E) INTERCOM CONTROL CENTER HEADEND	EXISTING	EXISTING	N/A
	(E) INTRUSION KEYPAD	EXISTING	EXISTING	N/A
	(N) CAT6A DATA DROP LOCATION (QTY = 1) - IP CLOCK/SPEAKER/MP MODULE COMBO BOX	RAULAND	SEE SHEET T400	N/A
	(N) CAT6A DATA DROP LOCATION - WALL MOUNTED SPEAKER/MP MODULE	RAULAND	SEE SHEET T400	N/A
	(N) CAT6A DATA DROP LOCATION - EXTERIOR INTERCOM SPEAKER/MP MODULE	RAULAND & LOWELL	SEE SHEET T400	N/A
	(N) CAT6A DATA DROP LOCATION	SEE 27 10 00	SEE 27 10 00	QTY. AS PER PLAN
	(N) CAT6A DATA DROP LOCATION (QTY = 2) - WIRELESS ACCESS POINT (T-BAR)	SEE 27 10 00	SEE 27 10 00	N/A
	(N) CAT6A DATA DROP LOCATION - EXTERIOR WIRELESS ACCESS POINT	SEE 27 10 00	SEE 27 10 00	N/A
	NETWORK SECURITY CAMERA (1X5MP SENSORS)	I-PRO	WV-S25500-V3L	N/A
	NETWORK SECURITY CAMERA (2X4MP SENSORS)	I-PRO	WV-U85402-V2L	N/A
	LADDER RACK	CHATSWORTH PRODUCTS	11275-712	

PRE-CON MEETING REQUIREMENTS:
1. PRIOR TO BEGINNING ANY SITE WORK, INCLUDING DEMO, AN ON-SITE PRE-CONSTRUCTION MEETING SHALL BE HELD WITH THE LOW VOLTAGE DESIGNER. ANY SITE WORK COMMENCED PRIOR TO THIS MEETING SHALL BE AT THE CONTRACTOR'S SOLE RISK.

JOB SPECIFIC STANDARDS FOR LOW VOLTAGE:
SEE SPECIFICATIONS DIVISION 27 AND 28 FOR COMPLETE REQUIREMENTS.
1. CONDUIT BODIES, CONDULETS, PULLING ELBOWS, AND/OR "LB" FITTINGS ARE PROHIBITED IN ANY PATHWAY CONTAINING DATA CABLING (COPPER OR FIBER).
2. SINGLE HOLE CONDUIT STRAPS ARE PROHIBITED.
3. ALL WIRE AND CABLE PASSING THROUGH METALWORK SHALL BE SLEEVED WITH AN APPROPRIATE GROMMET OR BUSHING.

SYSTEM PROGRAMMING AND COMMISSIONING REQUIREMENTS:
1. THE DISTRICT WILL PERFORM ALL DATA NETWORK (CISCO) SWITCH PROGRAMMING. ALL OTHER PROGRAMMING/COMMISSIONING IS THE RESPONSIBILITY OF THE CONTRACTOR.
2. TO FACILITATE DATA NETWORK SWITCH PROGRAMMING BY THE DISTRICT, THE CONTRACTOR SHALL PROVIDE, NO LATER THAN 14 CALENDAR DAYS PRIOR TO CUTOVER, AN INVENTORY OF SWITCH PORTS THAT WILL BE UTILIZED BY THE TELECENTER SYSTEM. THIS SHALL INCLUDE ALL DATA DROPS, NEW AND EXISTING.

SCOPE OF WORK:
1. 1. THE CONTRACTOR SHALL PROVIDE A (N) RAULAND TELECENTER U INTERCOM SYSTEM IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL REWORK THE (E) IDF AND MDF LOCATIONS, INCLUDING INSTALLATION OF (N) OWNER-FURNISHED DATA NETWORK SWITCHES, AS NOTED.
3. THE CONTRACTOR SHALL PROVIDE AND PERFORM OTHER DATA NETWORK INSTALLATION AND REWORK AS NOTED.
4. SYSTEMS ON THIS PROJECT REQUIRE CERTIFIED INSTALLERS. CONTRACTOR SHALL COMPLY WITH ALL CERTIFICATION REQUIREMENTS AS A CONDITION OF BID.
5. ALL EQUIPMENT SHALL BE NEW AND CONTRACTOR FURNISHED, UNO.
6. AFTER CUTOVER TO NEW SYSTEMS, THE CONTRACTOR SHALL REMOVE OLD OR ABANDONED DATA NETWORK, AUDIOVISUAL, ANALOG TELEPHONE, ANALOG INTERCOM, ANALOG CLOCK, AND COAX CABLING AND DEVICES AS NOTED.
7. THE PROJECT WILL REQUIRE SWING AND/OR GRAVEYARD AND/OR WEEKEND AND/OR HOLIDAY WORK SCHEDULES IN ORDER TO MEET THE PROJECT REQUIREMENTS AND MINIMIZE DISRUPTION TO THE ACTIVE USE OF THE SITE.
8. THE CONTRACTOR SHALL CAREFULLY COORDINATE CUTOVERS AND ACTIVATION/COMMISSIONING OF NEW SYSTEMS WITH THE DISTRICT REPRESENTATIVE.
9. THE CLOCK/INTERCOM SYSTEM AND ALL DATA NETWORK SYSTEMS SHALL BE MAINTAINED OPERATIONAL AT ALL TIMES THAT SCHOOL IS IN SESSION.
10. PRIOR TO START OF CONSTRUCTION, CONTRACTOR TO PROVIDE DISTRICT REPRESENTATIVE WITH THREE (3) 12TB HARD DRIVES COMPATIBLE WITH (E) NVR SERVER: MFG: AXIOM PART NUMBER: 7XB7A00068-AX CAPACITY: 12TB
11. PROVIDE AND INSTALL I-PRO CAMERAS AND COMPONENTS. SEAL AND WEATHER PROOF ALL EXTERIOR CAMERAS / PENETRATIONS.
12. PROVIDE DISTRICT REPRESENTATIVE WITH MAC ADDRESSES OF ALL (N) CAMERAS A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO INSTALL. DO NOT CONNECT (N) CAMERAS TO DISTRICT NETWORK SWITCH WITHOUT PRIOR AUTHORIZATION FROM DISTRICT REPRESENTATIVE.
13. REVIEW ALL (N) AND (E) CAMERA VIEWS WITH SITE ADMINISTRATION AND DISTRICT OR ITS REPRESENTATIVE AND MAKE ADJUSTMENTS AS REQUIRED PRIOR TO PROJECT COMPLETION.

CONTRACTOR FURNISHED DOCUMENTS:
(SHOP DRAWINGS / PRODUCT SUBMITTALS / QUALIFICATIONS)
1. ORDERING AND INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL THE FOLLOWING:
1.1. CONTRACTOR FURNISHED SHOP DRAWINGS ARE RECEIVED AND APPROVED BY THE DESIGNER.
1.2. PRODUCT SUBMITTAL DOCUMENTS ARE RECEIVED AND APPROVED BY THE DESIGNER.
1.3. APPLICABLE QUALIFICATION DOCUMENTATION ARE RECEIVED AND APPROVED BY THE DESIGNER.
2. ANY DESIGN AND/OR INSTALLATION DISCREPANCIES/CHANGE ORDER REQUESTS ARE TO BE ADDRESSED AT TIME OF SHOP DRAWING CREATION. CHANGE ORDERS AFTER APPROVED SHOP DRAWINGS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
3. ALTERNATIVE PRODUCTS ARE TO SUBMITTED WITH A FORMAL SUBSTITUTION REQUEST AND THE CONTRACTOR IS RESPONSIBLE FOR DEMONSTRATING PRODUCT FULL EQUIVALENCY.
4. IT SHALL BE UNDERSTOOD THAT THE DRAWINGS, DETAILS, AND ONE-LINES PROVIDED WITH THE DESIGN PACKAGE ARE DIAGRAMMATIC. INFORMATION PRESENTED IN DESIGN DRAWINGS ARE AS ACCURATE AS POSSIBLE, BUT ACCURACY IS NOT GUARANTEED AND FIELD VERIFICATION OF ALL DIMENSIONS, ROUTING, ETC., BY THE CONTRACTOR IS REQUIRED.
5. DRAWINGS AND SPECIFICATIONS ARE PROVIDED TO SHOW THE INTENT OF THE DESIGN TO ASSIST THE CONTRACTOR IN SUBMITTING AN ACCURATE BID. CONTRACTOR IS DIRECTED TO MAKE FIELD SURVEYS AS PART OF THEIR WORK PRIOR TO SUBMITTING SYSTEM LAYOUT DRAWINGS (SHOP DRAWINGS). THE CONTRACTOR SHALL MAKE ALLOWANCE IN THE PROPOSAL TO COMPLY WITH THE INTENT OF THE DESIGN.
6. IN CASE OF DOUBT OF WORK INTENDED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REQUEST INSTRUCTIONS FROM THE DESIGNER OR OWNER PRIOR TO BID.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING A COMPLETE, OPERABLE, AND FULLY FUNCTIONING SYSTEM.

TECHNOLOGY GENERAL PROJECT NOTES:
1. UPON COMPLETION OF THE INSTALLATION OF THE SYSTEMS, THE CONTRACTOR SHALL PROVIDE A SATISFACTORY TEST OF THE ENTIRE SYSTEMS IN THE PRESENCE OF THE ARCHITECT/DESIGNER, INSPECTOR, AND THE OWNER.
2. A STAMPED SET OF APPROVED SYSTEM DESIGN DOCUMENTS, AND CONTRACTOR FURNISHED SHOP DRAWINGS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION. THE CONTRACTOR SHALL INCORPORATE ANY AND ALL REVISIONS TO DRAWINGS SETS AS REQUIRED. ANY DEVIATION FROM APPROVED DESIGN DOCUMENTS, INCLUDING THE SUBSTITUTION OF DEVICES, SHALL BE APPROVED BY THE ARCHITECT/DESIGNER AND THE OWNER PRIOR TO INSTALLATION.
3. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGNER PRIOR TO INSTALLATION.
4. ALL PENETRATIONS THROUGH RATED ASSEMBLIES REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITH THROUGH PENETRATION FIRST STOP SYSTEMS WITH A "T" RATING EQUAL TO THE ASSEMBLY PENETRATED. SEE DETAILS ON SHEET T801 FOR MORE INFORMATION.
5. PER CEC STANDARDS, ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY TO EACH DEVICE. DO NOT SPlice THE WIRE. THERE MUST BE AT LEAST 6" OF LEAD WIRE FROM THE BOX TO THE DEVICE.
6. ALL CLOCK, BELL, AND INTERCOM CIRCUITS SHALL BE IN CONDUIT, SURFACE RACEWAY, OR OPEN RUN ABOVE CEILINGS, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANNER AS INDICATED ON DESIGN DOCUMENTS. EXPOSED CABLES ARE ONLY PERMITTED IF INDICATED ON DESIGN DOCUMENTS AS "EXPOSED".
7. LOW VOLTAGE PANELS, REMOTES, AND COMPONENTS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURER'S SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED THE WEIGHT FOR 20 lbs., WITHOUT SPECIAL MOUNTING DETAILS.
8. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/DESIGNER AT A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO FINAL INSPECTION FOR FINAL PUNCH ALL ITEMS ON PUNCH LIST MUST BE COMPLETE FOR JOB TO FINAL.
9. PRIOR TO FINAL INSPECTION, THE CONTRACTOR SHALL PROVIDE ALL PROJECT AS-BUILT DRAWINGS AND MANUALS PER SPECIFICATIONS.
10. THE CONTRACTOR SHALL ALSO PROVIDE A TYPED RECORD OF COMPLETION. A FINAL WILL NOT BE GRANTED UNTIL THE ABOVE IS APPROVED BY THE OWNER.
11. THE TERM "PROVIDE" SHALL MEAN TO FURNISH, INSTALL AND MAKE FULLY OPERATIONAL.

PROJECT CODES AND STANDARDS:
PARTIAL LIST OF APPLICABLE CODES AND STANDARDS EFFECTIVE : JANUARY 1, 2023:
2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), CCR, TITLE 24, PART 1
2022 CALIFORNIA BUILDING CODE (CBC), CCR, TITLE 24, PART 2 (2018 INTERNATIONAL BUILDING CODE WITH CALIFORNIA AMENDMENTS)
2022 CALIFORNIA ELECTRICAL CODE (CEC), CCR, TITLE 24, PART 3 (2017 NATIONAL ELECTRICAL CODE WITH CALIFORNIA AMENDMENTS)
2022 CALIFORNIA MECHANICAL CODE (CMC), CCR, TITLE 24, PART 4 (2018 UNIFORM MECHANICAL CODE, WITH CALIFORNIA AMENDMENTS)
2022 CALIFORNIA ENERGY CODE, CCR, TITLE 24, PART 6
2022 CALIFORNIA FIRE CODE (CFC), CCR, TITLE 24, PART 9 (2018 INTERNATIONAL FIRE CODE WITH CALIFORNIA AMENDMENTS)
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, CCR, TITLE 24, PART 11
2022 CALIFORNIA REFERENCED STANDARDS CODE, CCR, TITLE 24, PART 12
2022 NFPA 72: NATIONAL FIRE ALARM AND SIGNALING CODE, NATIONAL FIRE PROTECTION ASSOCIATION

ANCHORAGE AND BRACING NOTES:
APPLICABLE CODE: 2019 CBC REVISED: 02/14/2020
MEP COMPONENT ANCHORAGE NOTE:
ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE USA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2019 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 THRU 30:
1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVEABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.
3. TEMPORARY, MOVEABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.
THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCT/WORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS.
A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENTS.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTION SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.
THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL. IN GENERAL, RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.
PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE:
PIPING, DUCTWORK, AND ELECTRICAL SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTIONS 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2019 CBC SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26
THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTIONS SYSTEM ARE A NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PRE-APPROVED INSTALLATION GUIDE (E.G. OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.
MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPES (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):
MP MD PP EX OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS
MP MD PP PP OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVED (OPM #)

SHEET INDEX:
SHEET DESCRIPTION
T000 TECHNOLOGY COVER SHEET
T010 TECHNOLOGY SITE PLAN - DEMO
T100 TECHNOLOGY SITE PLAN - NEW
T101 TECHNOLOGY SITE PLAN - EXTERIOR SPEAKER COVERAGE
T200 TECHNOLOGY FLOOR PLAN - MDF 1.00
T201 TECHNOLOGY FLOOR PLAN - IDF 1.01
T202 TECHNOLOGY FLOOR PLAN - IDF 1.02
T203 TECHNOLOGY FLOOR PLAN - IDF 1.03 AND 1.04
T700 TECHNOLOGY RACK ELEVATIONS
T701 TECHNOLOGY RACK ELEVATIONS
T702 TECHNOLOGY SINGLE LINE DIAGRAMS
T800 TECHNOLOGY DETAILS
T801 TECHNOLOGY CCTV DETAILS
T802 TECHNOLOGY FIRE DETAILS
T900 TECHNOLOGY CCTV PICTURES



KMM SERVICES, INC
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SHEET REVISIONS

DELTA	DESCRIPTION	DATE
	ADDENDUM 001	2025-10-16

SITE KEY PLAN

PROJECT
SACRAMENTO CITY
UNIFIED SCHOOL DISTRICT
SUTTERVILLE ES
TELECENTER UPGRADE
4967 MONTEREY WAY
SACRAMENTO, CA, 95823

SHEET TITLE

TECHNOLOGY
COVER SHEET

DRAWING STATUS

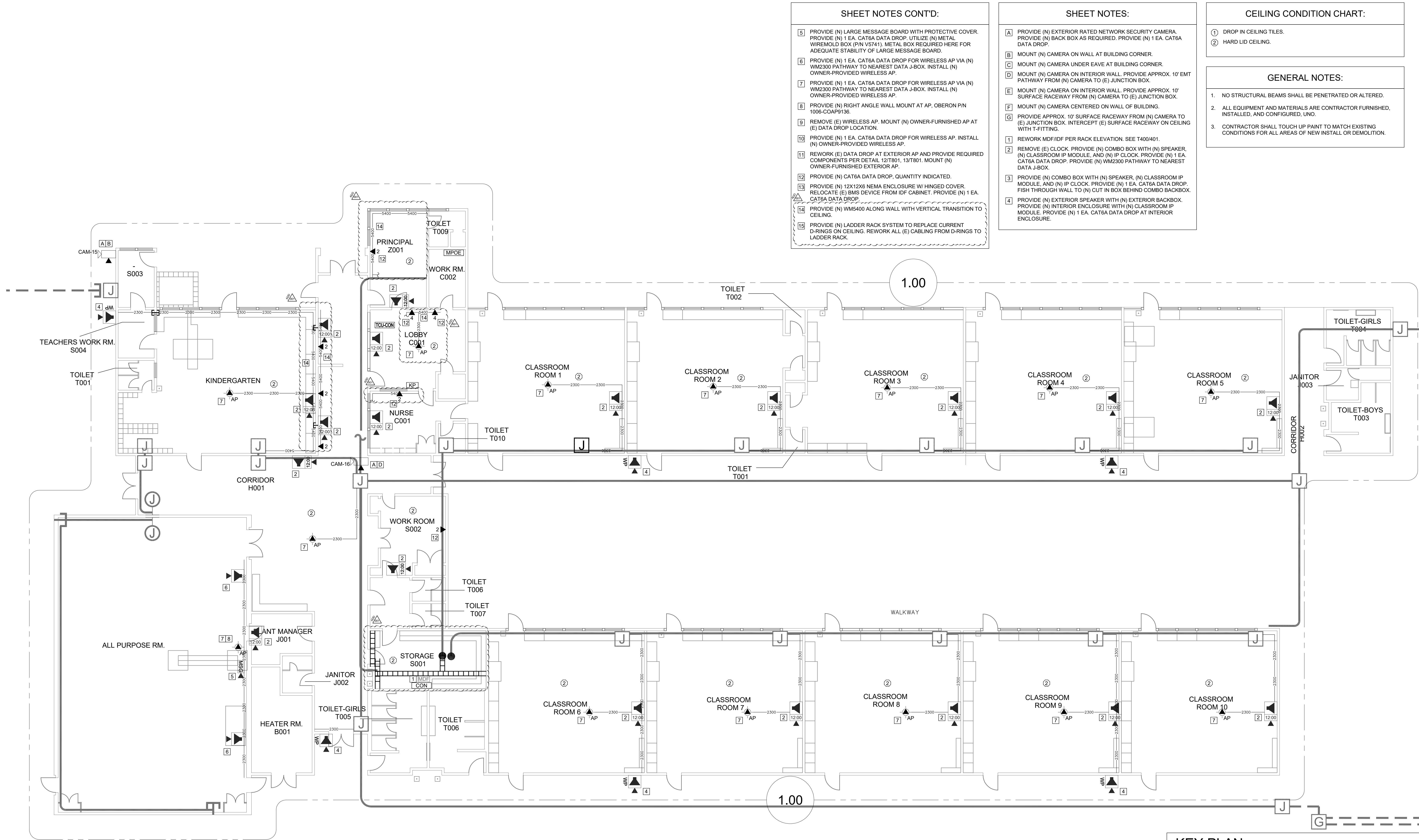
CONSTRUCTION DOCUMENTS

PROJECT NO:	0354-411
BID PACKAGE:	-
DESIGNED BY:	CS/RW
CHECKED BY:	SD
ISSUE DATE:	2025-09-15
WORKING DATE:	2025-10-16

REVISION

SHEET

T000

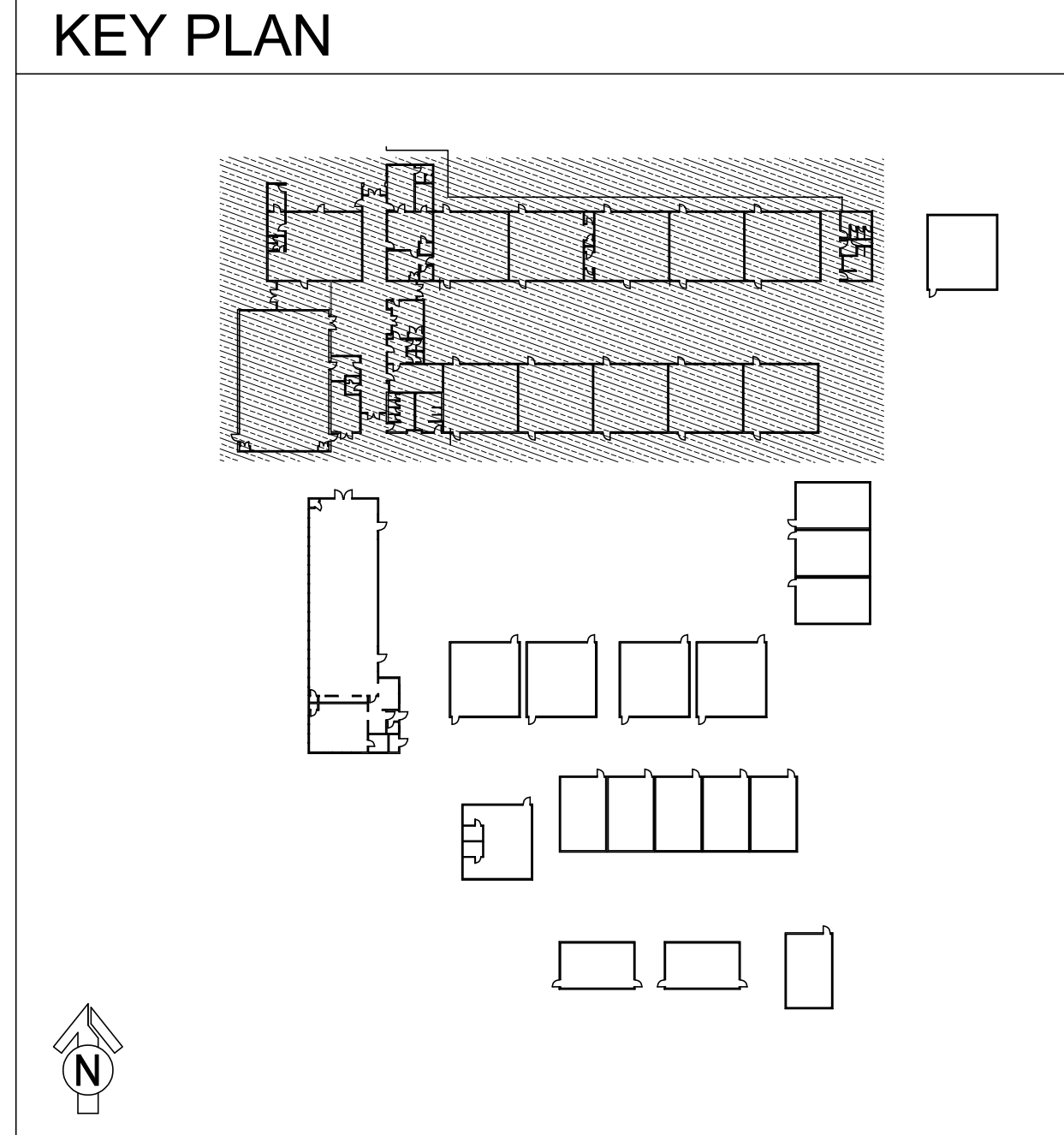


- SHEET NOTES CONT'D:**
- 5 PROVIDE (N) LARGE MESSAGE BOARD WITH PROTECTIVE COVER. PROVIDE (N) 1 EA. CAT6A DATA DROP. UTILIZE (N) METAL WIREMOLD BOX (P/N V5741). METAL BOX REQUIRED HERE FOR ADEQUATE STABILITY OF LARGE MESSAGE BOARD.
 - 6 PROVIDE (N) 1 EA. CAT6A DATA DROP FOR WIRELESS AP VIA (N) WM2300 PATHWAY TO NEAREST DATA J-BOX. INSTALL (N) OWNER-PROVIDED WIRELESS AP.
 - 7 PROVIDE (N) 1 EA. CAT6A DATA DROP FOR WIRELESS AP VIA (N) WM2300 PATHWAY TO NEAREST DATA J-BOX. INSTALL (N) OWNER-PROVIDED WIRELESS AP.
 - 8 PROVIDE (N) RIGHT ANGLE WALL MOUNT AT AP, OBERON P/N 1006-COAP9136.
 - 9 REMOVE (E) WIRELESS AP. MOUNT (N) OWNER-FURNISHED AP AT (E) DATA DROP LOCATION.
 - 10 PROVIDE (N) 1 EA. CAT6A DATA DROP FOR WIRELESS AP. INSTALL (N) OWNER-PROVIDED WIRELESS AP.
 - 11 REWORK (E) DATA DROP AT EXTERIOR AP AND PROVIDE REQUIRED COMPONENTS PER DETAIL 12/T801, 13/T801. MOUNT (N) OWNER-FURNISHED EXTERIOR AP.
 - 12 PROVIDE (N) CAT6A DATA DROP. QUANTITY INDICATED.
 - 13 PROVIDE (N) 12X12X6 NEMA ENCLOSURE W/ HINGED COVER. RELOCATE (E) BMS DEVICE FROM IDF CABINET. PROVIDE (N) 1 EA. CAT6A DATA DROP.
 - 14 PROVIDE (N) WMS400 ALONG WALL WITH VERTICAL TRANSITION TO CEILING.
 - 15 PROVIDE (N) LADDER RACK SYSTEM TO REPLACE CURRENT D-RINGS ON CEILING. REWORK ALL (E) CABLING FROM D-RINGS TO LADDER RACK.

- SHEET NOTES:**
- A PROVIDE (N) EXTERIOR RATED NETWORK SECURITY CAMERA. PROVIDE (N) BACK BOX AS REQUIRED. PROVIDE (N) 1 EA. CAT6A DATA DROP.
 - B MOUNT (N) CAMERA ON WALL AT BUILDING CORNER.
 - C MOUNT (N) CAMERA UNDER EAVE AT BUILDING CORNER.
 - D MOUNT (N) CAMERA ON INTERIOR WALL. PROVIDE APPROX. 10' ENT PATHWAY FROM (N) CAMERA TO (E) JUNCTION BOX.
 - E MOUNT (N) CAMERA ON INTERIOR WALL. PROVIDE APPROX. 10' SURFACE RACEWAY FROM (N) CAMERA TO (E) JUNCTION BOX.
 - F MOUNT (N) CAMERA CENTERED ON WALL OF BUILDING.
 - G PROVIDE APPROX. 10' SURFACE RACEWAY FROM (N) CAMERA TO (E) JUNCTION BOX. INTERCEPT (E) SURFACE RACEWAY ON CEILING WITH T-FITTING.
 - H REWORK MDF/IDF PER RACK ELEVATION. SEE T400/401.
 - I REMOVE (E) CLOCK. PROVIDE (N) COMBO BOX WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) IP CLOCK. PROVIDE (N) 1 EA. CAT6A DATA DROP. PROVIDE (N) WM2300 PATHWAY TO NEAREST DATA J-BOX.
 - J PROVIDE (N) COMBO BOX WITH (N) SPEAKER, (N) CLASSROOM IP MODULE, AND (N) IP CLOCK. PROVIDE (N) 1 EA. CAT6A DATA DROP. FISH THROUGH WALL TO (N) CUT IN BOX BEHIND COMBO BACKBOX.
 - K PROVIDE (N) EXTERIOR SPEAKER WITH (N) EXTERIOR BACKBOX. PROVIDE (N) INTERIOR ENCLOSURE WITH (N) CLASSROOM IP MODULE. PROVIDE (N) 1 EA. CAT6A DATA DROP AT INTERIOR ENCLOSURE.

- CEILING CONDITION CHART:**
- 1 DROP IN CEILING TILES.
 - 2 HARD LID CEILING.
- GENERAL NOTES:**
- 1. NO STRUCTURAL BEAMS SHALL BE PENETRATED OR ALTERED.
 - 2. ALL EQUIPMENT AND MATERIALS ARE CONTRACTOR FURNISHED, INSTALLED, AND CONFIGURED, UNO.
 - 3. CONTRACTOR SHALL TOUCH UP PAINT TO MATCH EXISTING CONDITIONS FOR ALL AREAS OF NEW INSTALL OR DEMOLITION.

TECHNOLOGY FLOOR PLAN NEW - MDF 1.00
SCALE: 1/8"=1'
0 4 8 12 16



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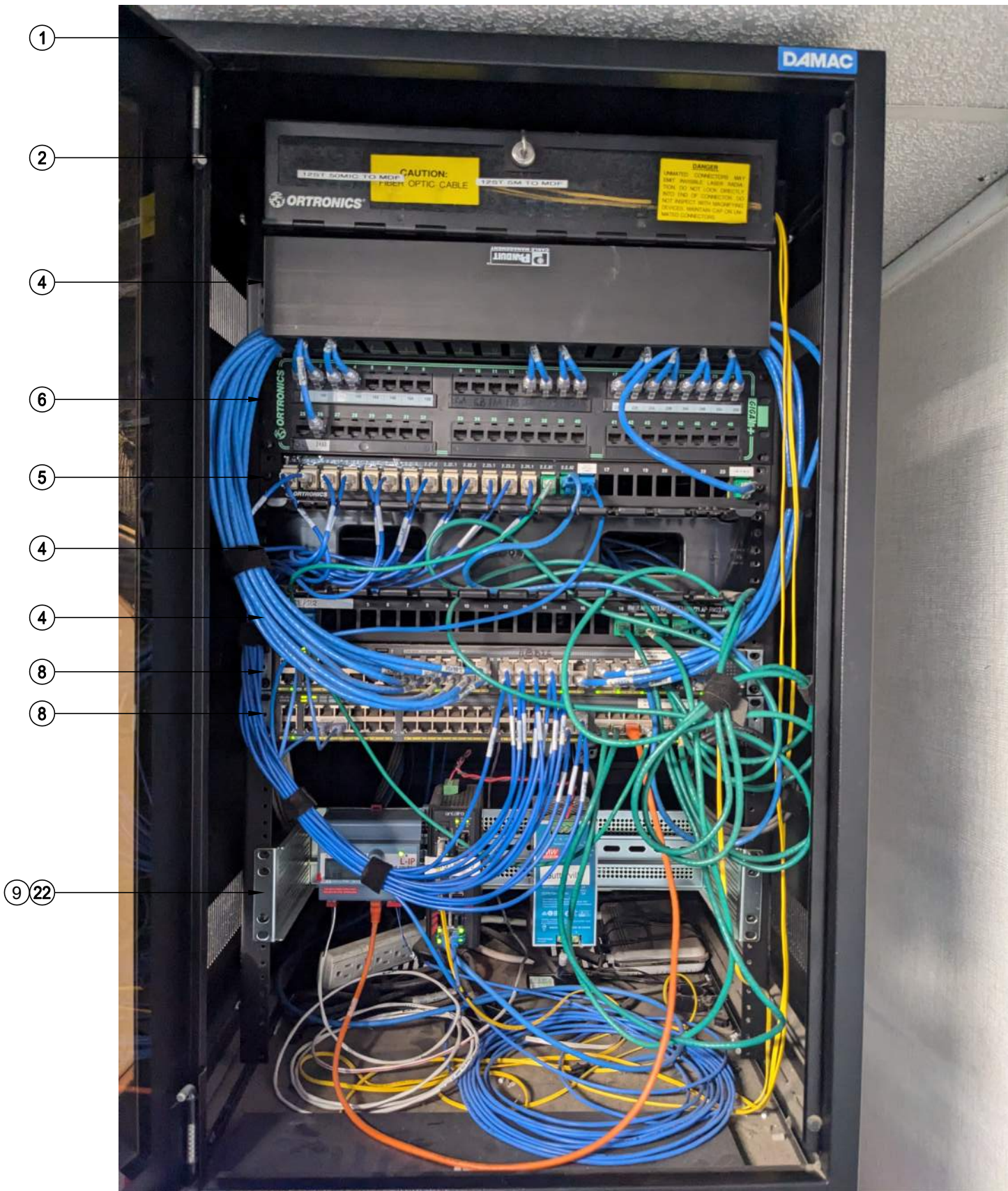
SHEET TITLE
TECHNOLOGY
FLOOR PLAN
- MDF 1.00

DRAWING STATUS
CONSTRUCTION DOCUMENTS

PROJECT NO:	0354-411
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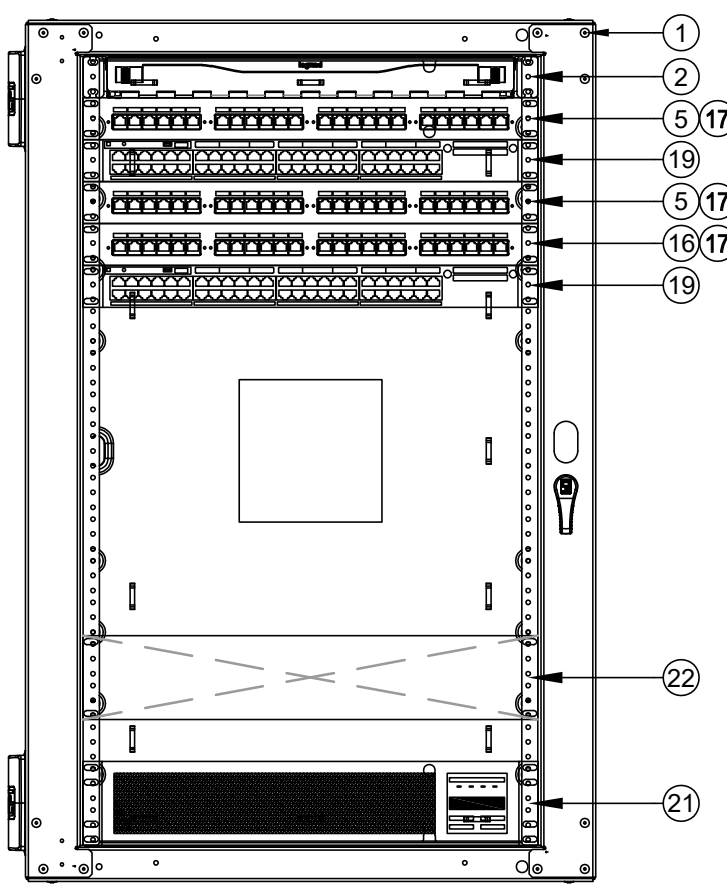
REVISION
SHEET **T200**

- SCOPE OF WORK - IDF 1.02
1. DEMO (E) 48 PORT PATCH PANEL AT TOP OF RACK AND ALL ASSOCIATED CABLING TO FIELD.
 2. RE-LABEL AND RE-ORDER ALL (E) DROPS PER 11/7800 AT BOTH PATCH PANEL AND FIELD AND BOTH ENDS OF CABLE.
 3. TERMINATE 2 EA. (E) CCTV DATA DROP ON (N) BLUE KEYSTONE.
 4. REMOVE (E) CCTV SWITCH AND PSU (SYMBOL 9) AND RETURN TO DISTRICT.
 5. PROVIDE (N) UNINTERRUPTIBLE POWER SUPPLY PER THE ELEVATION. ROUTE POWER FOR ALL RACK COMPONENTS SO THAT IT IS PROTECTED BY THE UPS.



RACK - EXISTING CONDITION

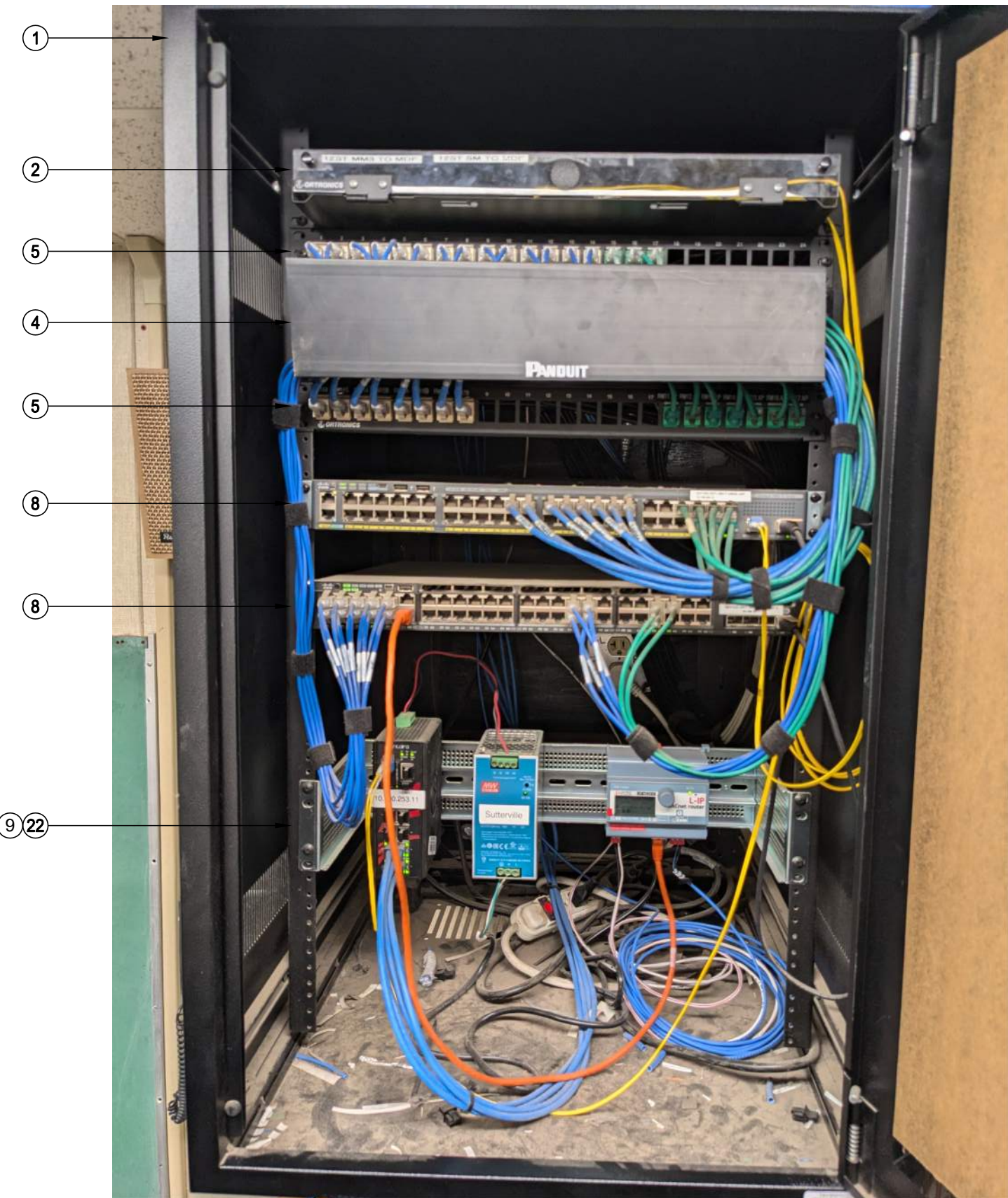
SCALE: NONE



RACK - FINAL LAYOUT

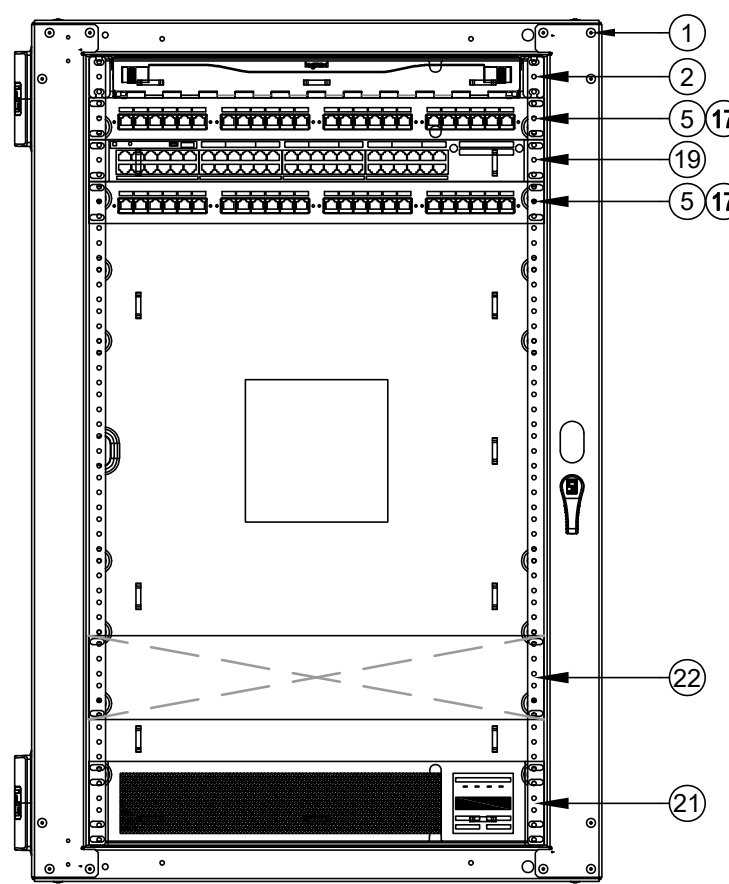
SCALE: NONE

- SCOPE OF WORK - IDF 1.01
1. RE-LABEL AND RE-ORDER ALL (E) DROPS PER 11/7800 AT BOTH PATCH PANEL AND FIELD AND BOTH ENDS OF CABLE.
 2. TERMINATE 4 EA. (E) CCTV DATA DROP ON (N) BLUE KEYSTONE IN (N) PATCH PANEL P2.
 3. REMOVE (E) CCTV SWITCH AND PSU (SYMBOL 9) AND RETURN TO DISTRICT.
 4. PROVIDE (N) UNINTERRUPTIBLE POWER SUPPLY PER THE ELEVATION. ROUTE POWER FOR ALL RACK COMPONENTS SO THAT IT IS PROTECTED BY THE UPS.



RACK - EXISTING CONDITION

SCALE: NONE



RACK - FINAL LAYOUT

SCALE: NONE

- GENERAL SCOPE OF WORK:
(ALL IDF/MDF)
1. REMOVE ALL (E) RACK-MOUNTED CABLE MANAGER(S).
 2. PROVIDE (N) REAR CABLE MANAGEMENT BAR(S) AT EACH PATCH PANEL AND DRESS (E) CABLES FOR STRAIN RELIEF PER 11/7800.
 3. RELOCATE (E) DEVICES PER THE ELEVATION.
 4. INSTALL (N) OWNER-FURNISHED SWITCHES PER THE ELEVATION.
 5. PROVIDE (N) 6" SLIMLINE CAT6A PATCH CABLES TO REPLACE ALL (E) PATCH CABLES AND FOR ALL (N) DROPS, COLOR CODED TO DISTRICT STANDARD.

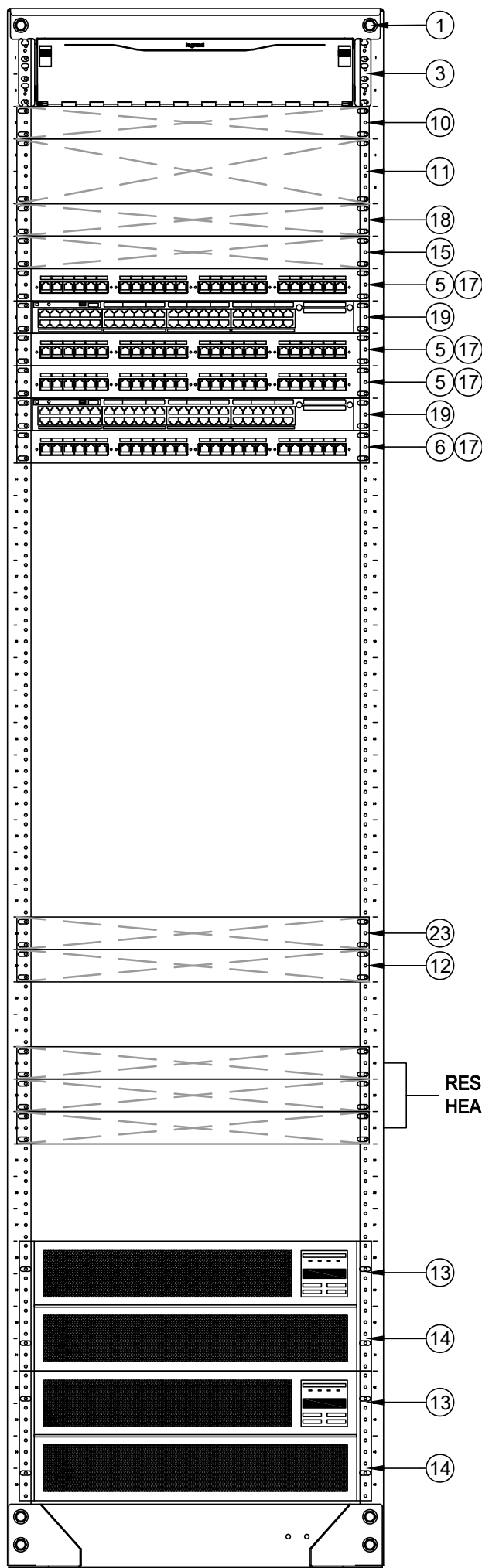
- SCOPE OF WORK - MDF 1.00
1. DEMO (E) 48 PORT PATCH PANEL AT TOP OF RACK AND ALL ASSOCIATED CABLING TO FIELD EXCEPT FOR PORTS 46, 47, 48. RE-TERMINATE CABLE TO PORTS 46, 47, 48 ON (N) KEYSTONES.
 2. RETERMINATE 8 EA. CCTV DATA DROPS ON BLUE KEYSTONES.
 3. RELABEL AND RE-ORDER (E) DATA DROPS IN PATCH PANELS TO MATCH DISTRICT STANDARD PER DETAIL 11/7800. PROVIDE NEW LABELING AT PATCH PANEL, FIELD, AND WRAPS AT BOTH ENDS OF CABLE. NOTE: THE 2U/24P PATCH PANEL SHALL BE LABELED "P2".
 4. DEMO AND RETURN TO DISTRICT THE CCTV DATA SWITCH (KEYNOTE 9).
 5. ROUTE POWER FOR ALL RACK COMPONENTS SO THEY ARE PROTECTED BY THE UNINTERRUPTIBLE POWER SUPPLIES.



RACK - EXISTING CONDITION

SCALE: NONE

EQUIPMENT SCHEDULE: ALL EQUIPMENT AND MATERIALS ARE CONTRACTOR FURNISHED, INSTALLED AND CONFIGURED (UNO)				
SYMBOL	DESCRIPTION	MFG	PART NUMBER	NOTES / DETAIL REFERENCES
1	RACK CABINET	EXISTING	EXISTING	N/A
2	(E) 1U FIBER LIU	EXISTING	EXISTING	N/A
3	(E) 2U FIBER LIU	EXISTING	EXISTING	N/A
4	(E) 2U CABLE MANAGER	EXISTING	EXISTING	DEMO
5	(E) 1U 24P PATCH PANEL	EXISTING	EXISTING	RELOCATE PER ELEVATION
6	(E) 2U 48P PATCH PANEL	EXISTING	EXISTING	RELOCATE PER ELEVATION
7	(E) 24P SWITCH	EXISTING	EXISTING	DEMO
8	(E) 48P SWITCH	EXISTING	EXISTING	DEMO
9	(E) CCTV SWITCH AND PSU	EXISTING	EXISTING	DEMO
10	(E) CORE SWITCH	EXISTING	EXISTING	N/A
11	(E) VOIP GATEWAY	EXISTING	EXISTING	N/A
12	(E) NVR	EXISTING	EXISTING	N/A
13	(E) UPS	EXISTING	EXISTING	N/A
14	(E) UPS BATTERY	EXISTING	EXISTING	N/A
15	(E) SERVICE PROVIDER LIU	EXISTING	EXISTING	RELOCATE PER ELEVATION
16	(N) 1U 24P PATCH PANEL	ORTRONICS	SPKSU24	N/A
17	(N) REAR CABLE MANAGEMENT BAR	ORTRONICS	OR-CMBFR0RU	N/A
18	(E) CWDI CHASSIS	EXISTING	EXISTING	RELOCATE PER ELEVATION
19	(N) 48P SWITCH	QSCO	OPCI	N/A
20	(N) UPS - 1000VA	NIC	N1CL1000	N/A
21	(N) UPS - 2000VA	NIC	N1CL2000	N/A
22	(E) BACNET ROUTER	EXISTING	EXISTING	N/A
23	(N) 1U RACK MOUNT MONITOR	TRIPP LITE	B021-SWHD-K	N/A



RACK - FINAL LAYOUT

SCALE: NONE



KMM SERVICES, INC
TECHNOLOGY & FIRE LIFE SAFETY

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SHEET REVISIONS

DELTA	DESCRIPTION	DATE
ADDENDUM 001		2025-10-16

SITE KEY PLAN

PROJECT
SACRAMENTO CITY
UNIFIED SCHOOL DISTRICT
SUTTERVILLE ES
TELECENTER UPGRADE
4967 MONTEREY WAY
SACRAMENTO, CA, 95823

SHEET TITLE
TECHNOLOGY
RACK ELEVATIONS

DRAWING STATUS
CONSTRUCTION DOCUMENTS

PROJECT NO:	0354-411
BID PACKAGE:	-
DESIGNED BY:	CS/RW
CHECKED BY:	SD
ISSUE DATE:	2025-09-15
WORKING DATE:	2025-10-16

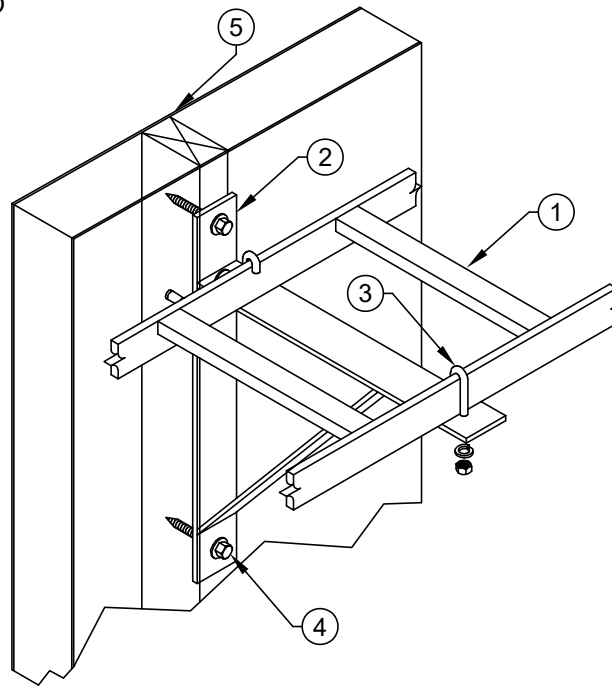
REVISION

SHEET

T400

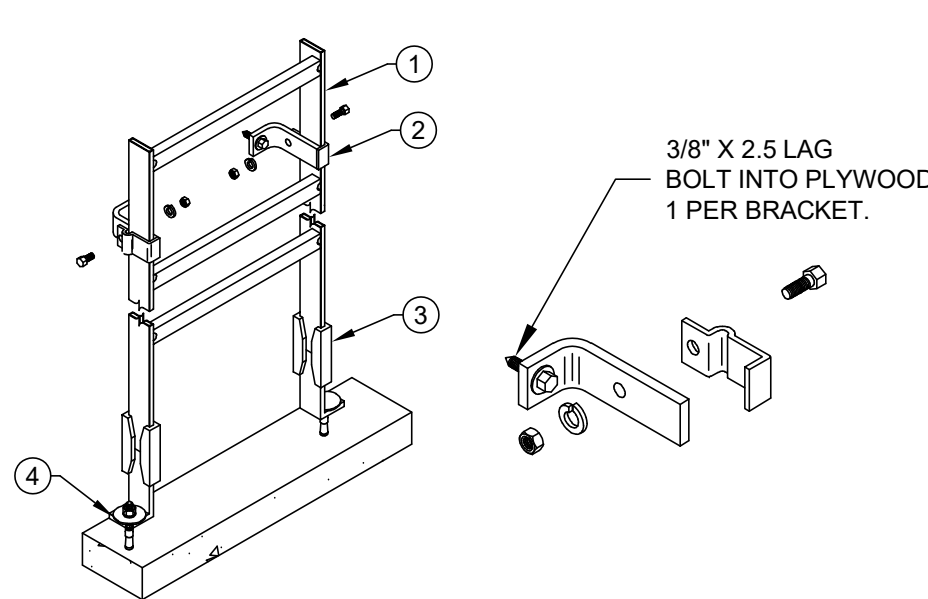


- CHATS WORTH 11275-712 LADDER RACK ASSEMBLY, PER DRAWINGS.
- MOUNTING BRACKET, 60° OC MAXIMUM SPACING BETWEEN BRACKETS.
- MFR. INCLUDED MOUNTING BRACKET J-HOOK HARDWARE.
- 3/16" DIA. WOOD LAG SCREW W/ WASHER, 1.5" MIN. EMBEDMENT INTO CENTER OF STUD.
- STUD, AS OCCURS.



18 RUNWAY SIDE WALL SUPPORT DETAIL
SCALE: NONE

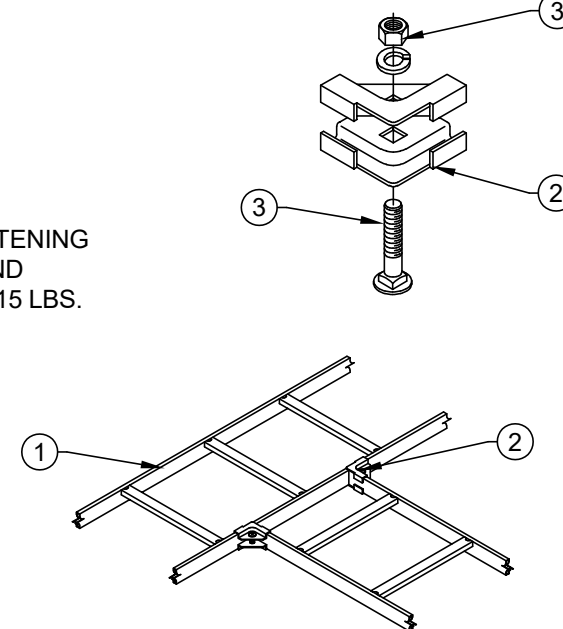
- CABLE LADDER PER DRAWINGS.
- VERTICAL WALL BRACKETS, CHATS WORTH PN 10608-001 OR EQUAL.
- VERT. LADDER FLOOR BRACKET, CHATS WORTH PN 11309-000 OR EQUAL.
- 3/8" DIA. HILTI KB-T22 316 WEDGE ANCHOR, 2" EMBED (2-TOTAL).



16 VERTICAL LADDER SUPPORT DETAIL
SCALE: NONE

- (N) 18" LADDER RACK ASSEMBLY
- MOUNTING BRACKET FOR 90 DEGREE ATTACHMENT
- MFR. INCLUDED TEE SPLICE BRACKET HARDWARE

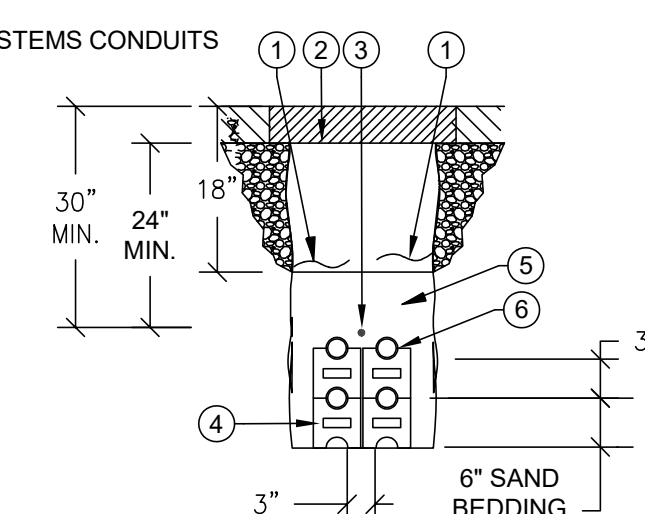
*TIGHTEN FASTENING
HARDWARE AND
ANCHORS TO 15 LBS.



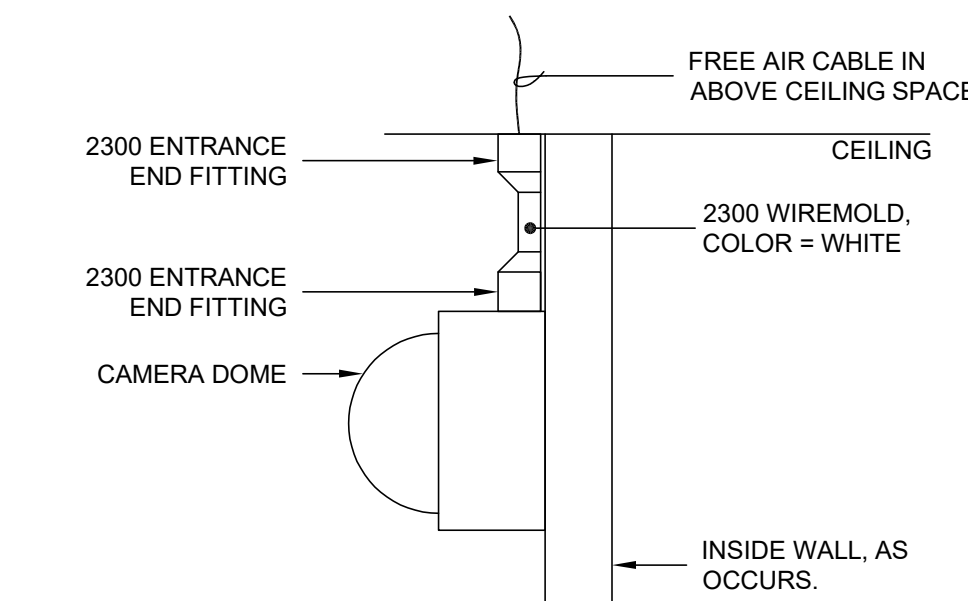
14 HORIZONTAL TEE SPLICE KIT DETAIL
SCALE: NONE

NOT USED

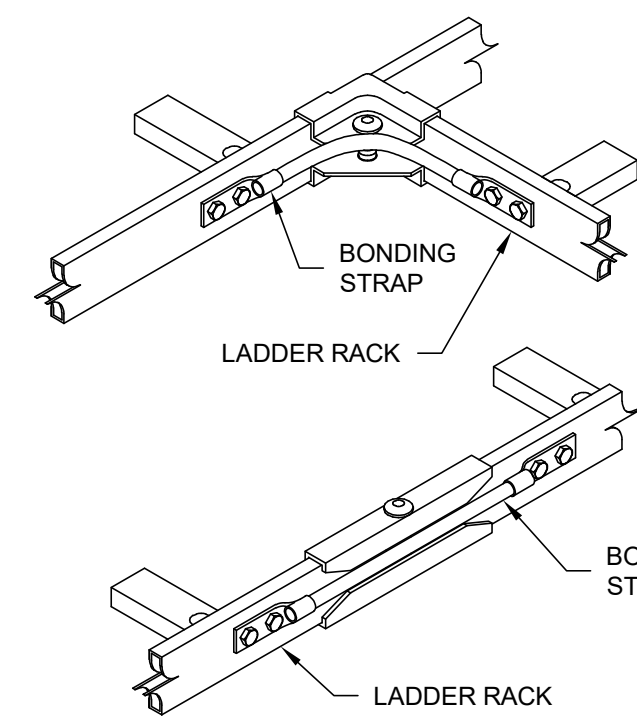
- PLASTIC WARNING TAPE
- LAST 12" AB MATERIAL AT 95% COMPACTION FOR ASPHALT AND CONCRETE, 90% FOR PLANTED AREAS
- 10 AWG WIRE OR METAL TRACING TAPE PLACED ON TOP OF CONDUITS AND CONTINUOUS THROUGHOUT ENTIRE TRENCH LENGTH AND TERMINATING ON RISER UNISTRUT OR GROUNDING BAR IN GROUND BOX.
- BOTTOM AND MIDDLE PLASTIC SPACERS EVERY 5'-0" SHALL BE USED WHERE CONDUITS HAVE TO BE STACKED ON TOP OF ONE ANOTHER DUE TO SPACE LIMITATIONS.
- SAND AT 90% COMPACTION
- SIGNAL SYSTEMS CONDUITS



10 TRENCH DETAIL
SCALE: NONE

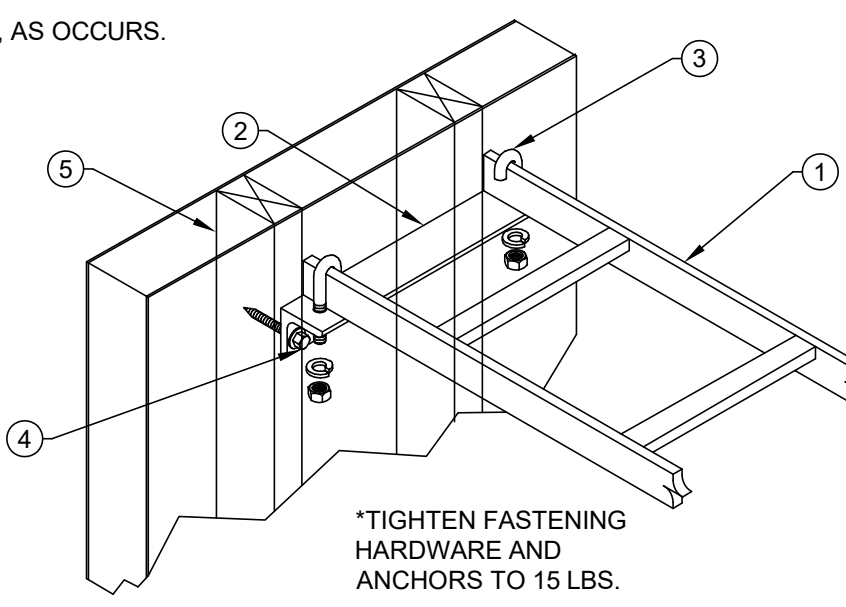


5 CCTV CAMERA WALL MOUNTING - INTERIOR
SCALE = NONE



17 LADDER RACK BONDING DETAIL
SCALE: NONE

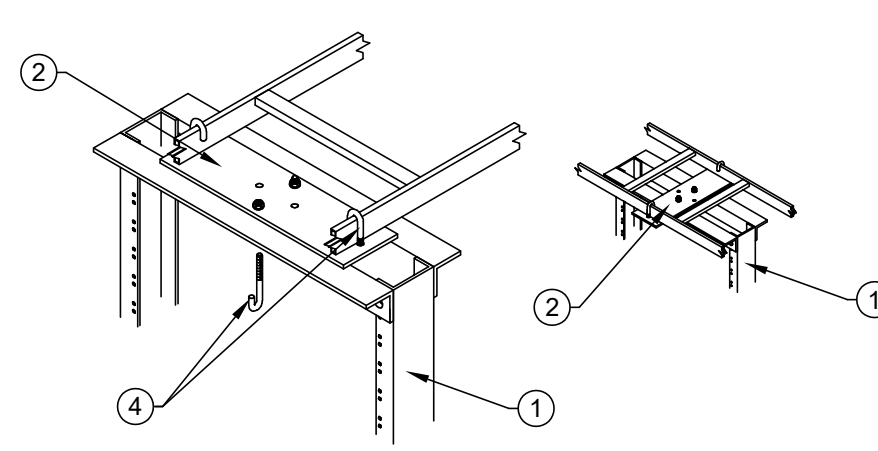
- LADDER RACK ASSEMBLY PER DRAWINGS.
- MOUNTING BRACKET FOR WALL
- MFR. INCLUDED MOUNTING BRACKET J-HOOK HARDWARE
- 3/16" DIA. WOOD LAG SCREW W/ WASHER, 1.5" MIN. EMBEDMENT INTO CENTER OF STUD.
- STUD, AS OCCURS.



15 RUNWAY END WALL SUPPORT DETAIL
SCALE: NONE

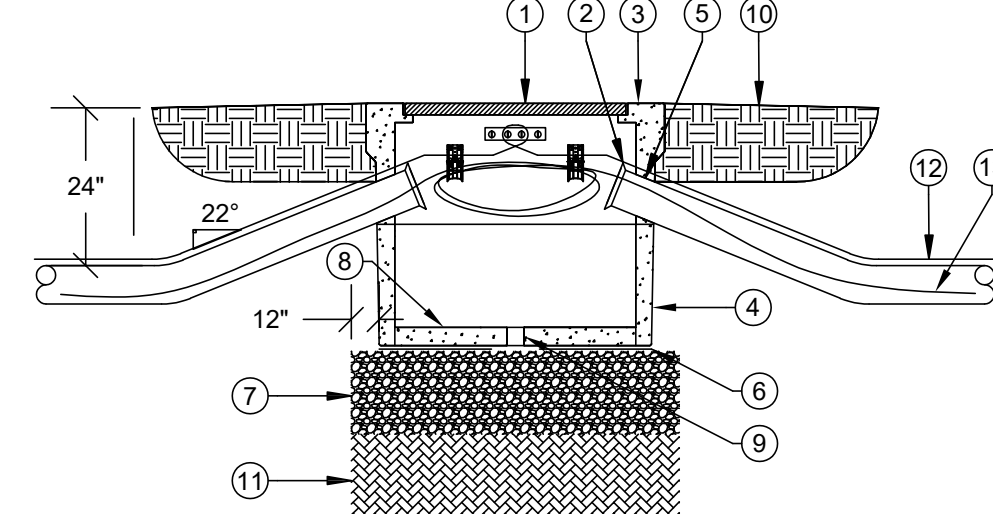
- DATA RACK ASSEMBLIES
- TOP PLATE MOUNTING BRACKET
- MFR. INCLUDED TOP PLATE MOUNTING BRACKET, J-HOOK HARDWARE.

*TIGHTEN FASTENING
HARDWARE AND
ANCHORS TO 15 LBS.

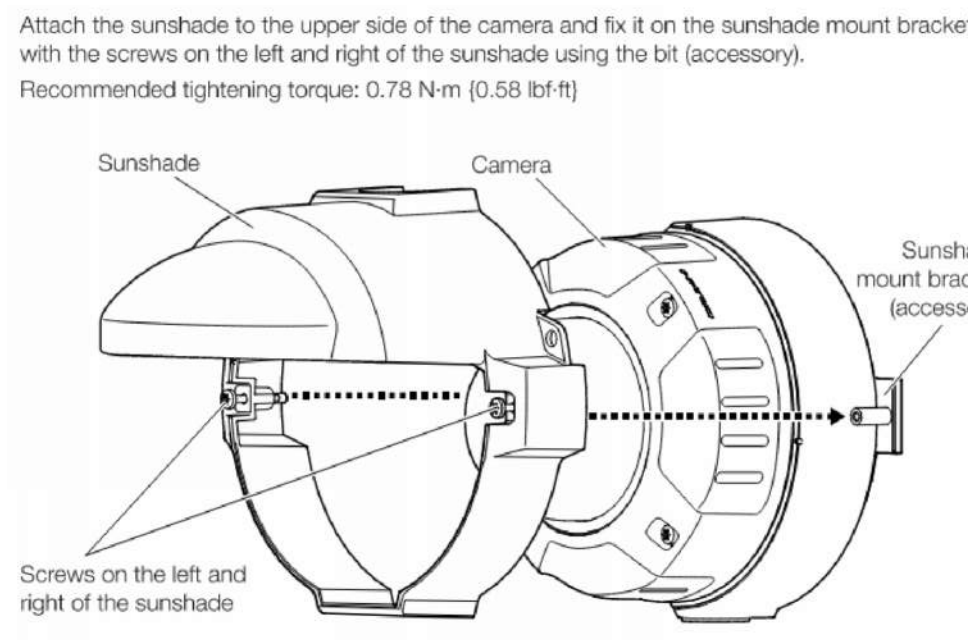


13 RUNWAY SUPPORT KIT FOR RACK DETAIL
SCALE: NONE

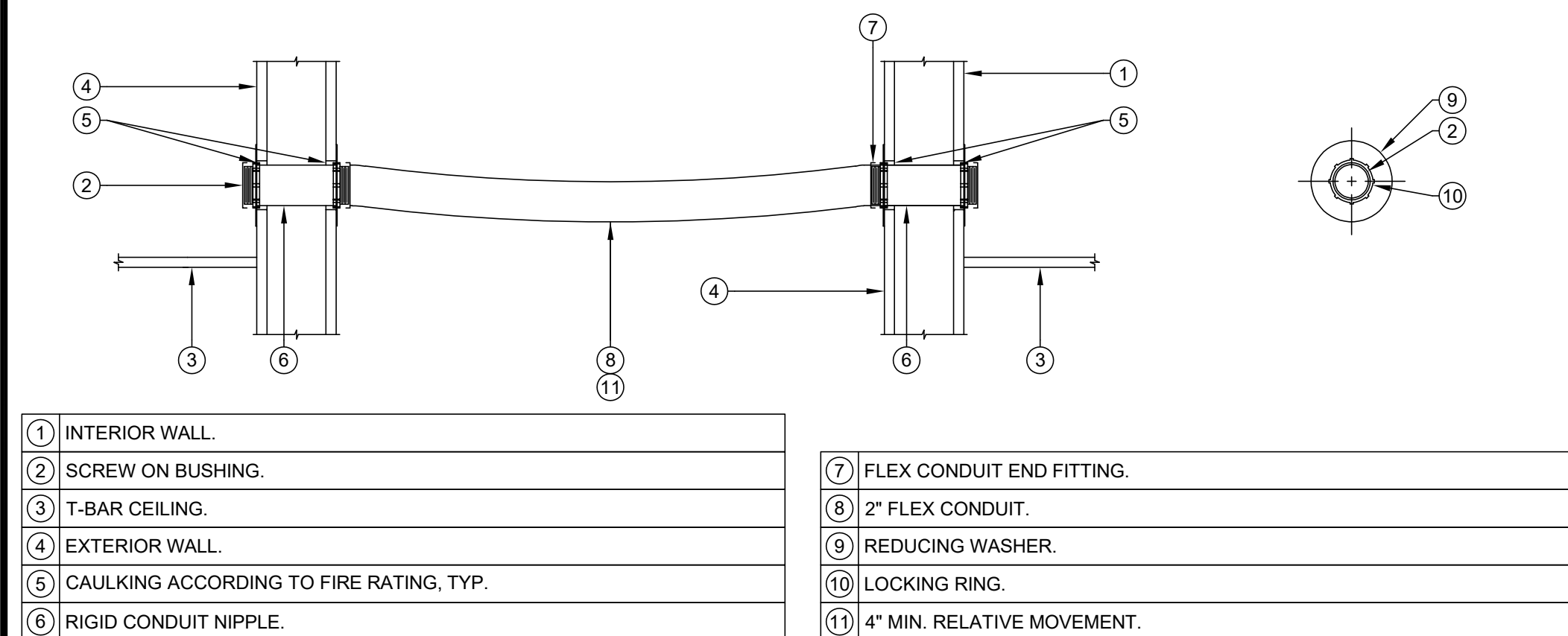
- LID PER, TYPE PER GROUND BOX DETAIL
- BELL ENDS TYP.
- PRE CAST REINFORCED CONCRETE BOX, SIZE PER PLANS
- PRE CAST REINFORCED CONCRETE EXTENSIONS AS REQUIRED
- SEAL AROUND CONDUIT, BOX & JUNCTION OF EXTENSION(S) WITH MORTAR
- VAPOR RETARDER
- 12" CRUSHED ROCK
- REINFORCED CONCRETE BOTTOM
- 1" DRAIN HOLE
- FINISHED GRADE, SLOPE 1/8" OVER 12" EXTEND 4'-0"
- COMPACTED SOIL



9 GROUND PULL BOX DETAIL
SCALE: NONE



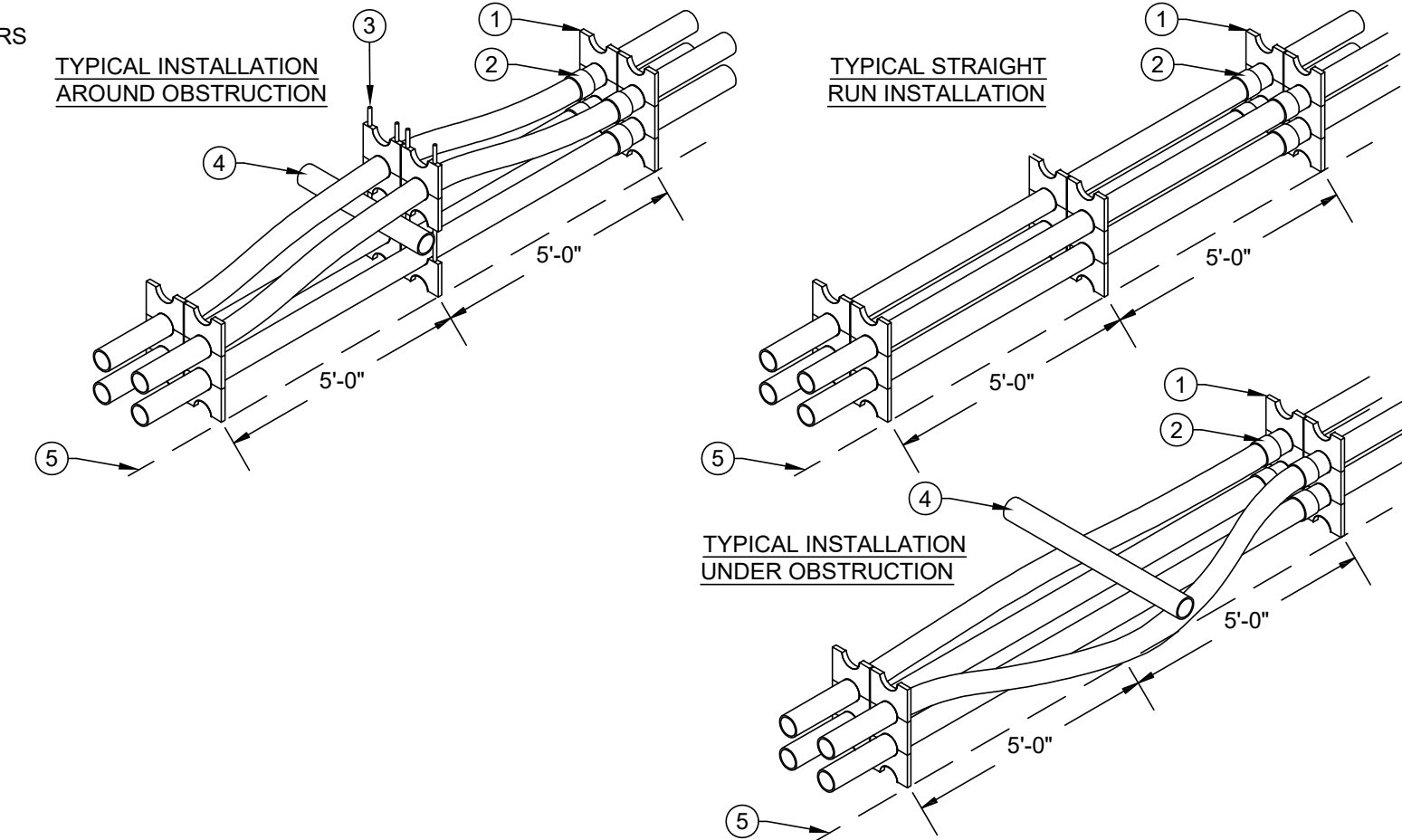
4 CCTV CAMERA SUN SHADE MOUNTING DETAIL
SCALE = NONE



12 FLEX CONDUIT INSTALLATION BETWEEN BUILDINGS DETAIL - ABOVE T-BAR CEILING PENETRATION
SCALE: NONE

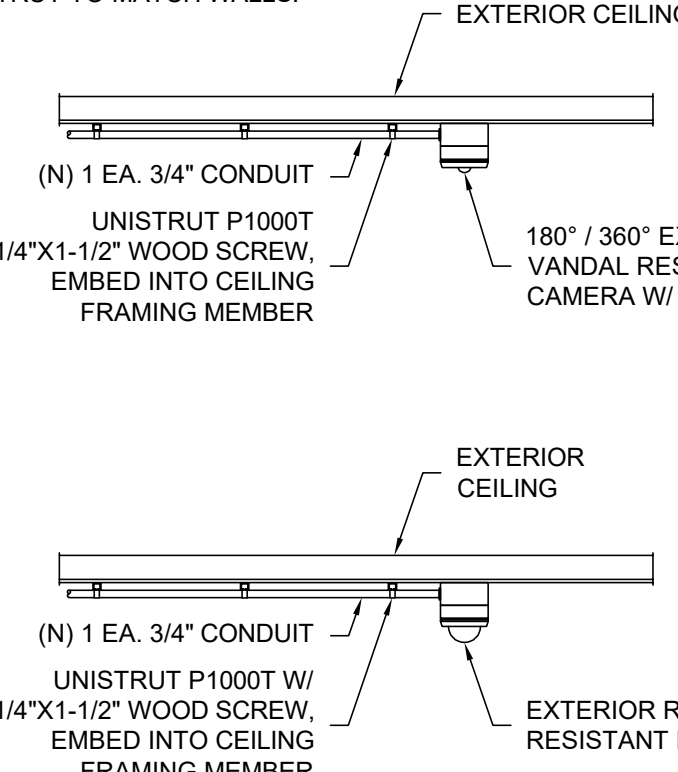
- BOTTOM & MIDDLE PLASTIC SPACERS EVERY 5' SHALL BE USED WHERE CONDUITS HAVE TO BE STACKED ON TOP OF ONE ANOTHER DUE TO SPACE LIMITATIONS.
- COUPLING
- REINFORCING STEEL RODS
- OBSTRUCTION
- TRENCH BOTTOM

NOTES:
1. USE THESE DETAILS TO AVOID CONFLICTS WITH EXISTING OR NEW OBSTRUCTIONS.
2. SPACE SIGNAL AND COMMUNICATION CONDUIT 12" FROM POWER CONDUIT (ABOVE 120V) AND 3" FROM ALL OTHER CONDUIT.

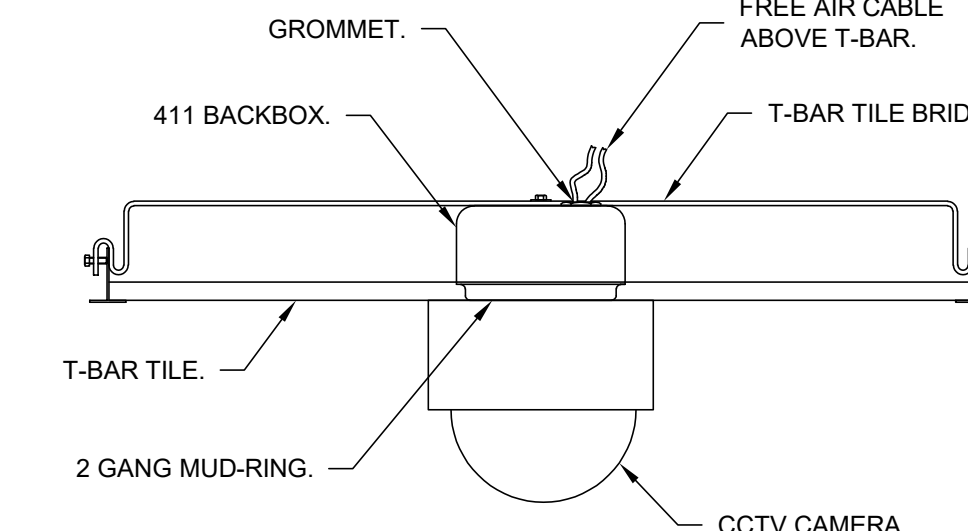


8 CONDUIT TRANSITION DETAIL
SCALE: NONE

NOTE: PAINT ALL CONDUIT AND UNISTRUT TO MATCH WALLS.

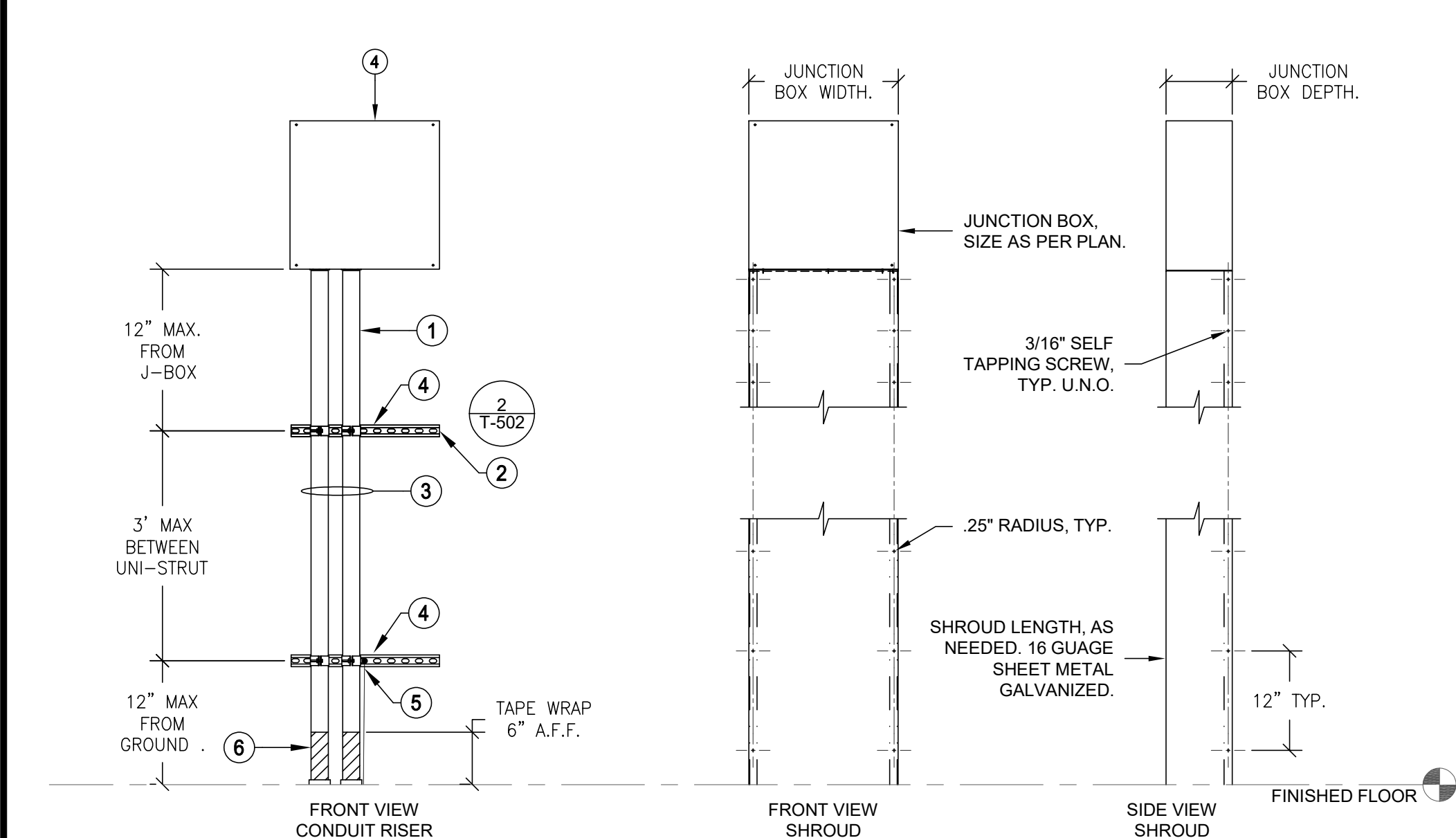
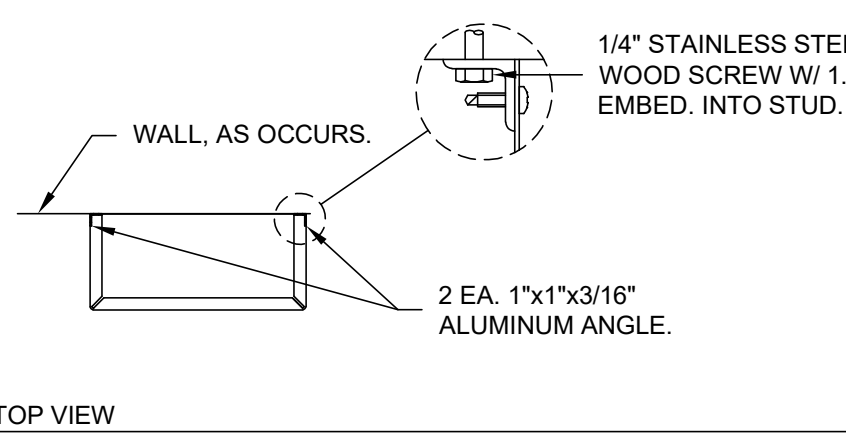


6 CCTV EXTERIOR CEILING TO EXTERIOR HORIZONTAL BACKBONE DETAIL
SCALE = NONE



3 CCTV CAMERA T-BAR SUPPORT DETAIL
SCALE = NONE

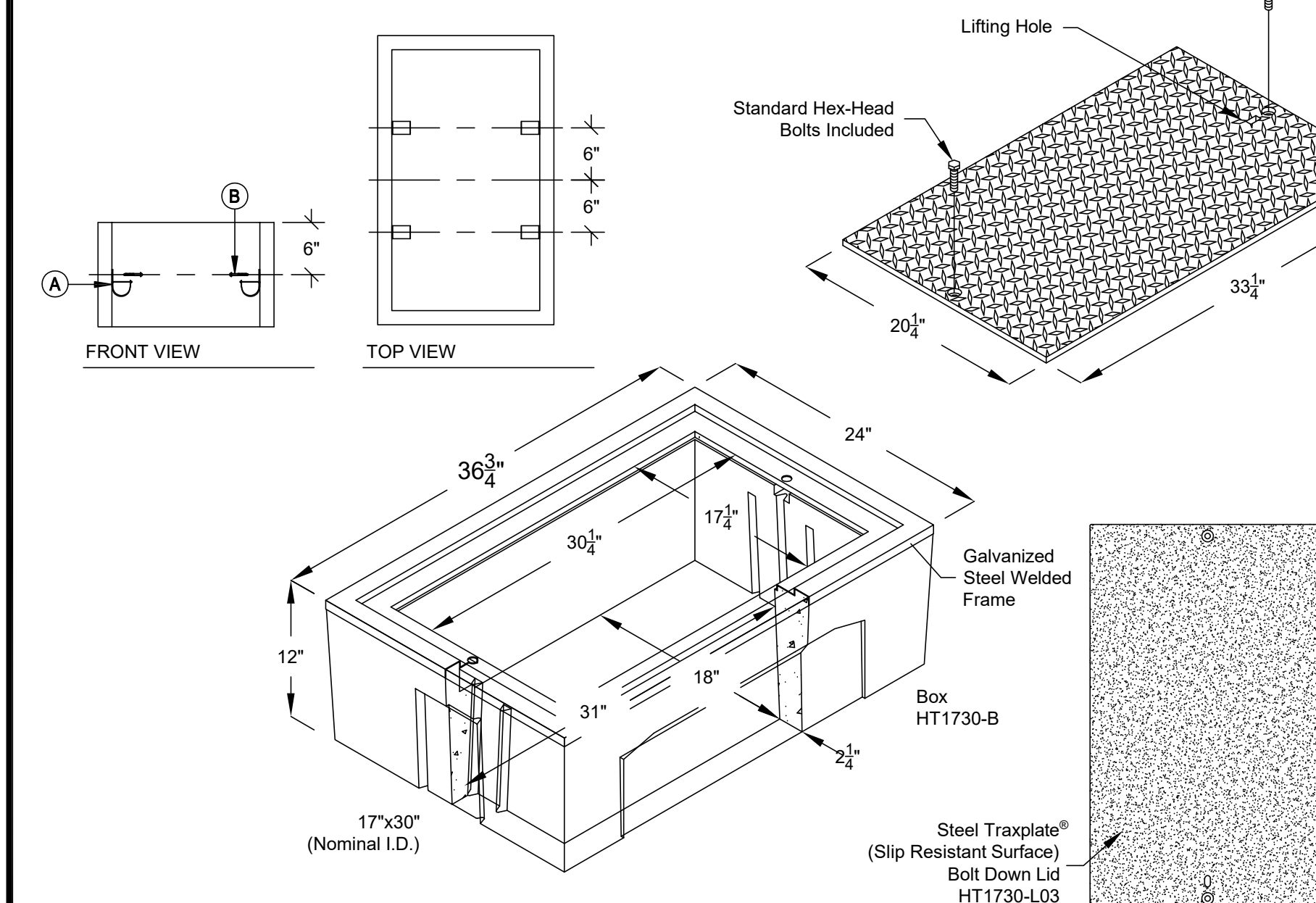
- INSTALL CONDUIT AS CLOSE AS POSSIBLE AND TO ONE SIDE OF J-BOX TO ACCOMMODATE FUTURE INSTALLATIONS
- UNI-STRUT TO BE CUT THE SAME LENGTH AS J-BOX.
- RIGID CONDUIT.
- CAULKING ACCORDING TO FIRE RATING-TYPICAL.
- 10 AWG WIRE OR METAL TRACING TAPE PLACED ON TOP OF CONDUITS AND CONTINUOUS THROUGHOUT ENTIRE TRENCH LENGTH AND TERMINATING ON RISER UNISTRUT OR GROUNDING BAR IN GROUND BOX.



NOTE:
1. PAINT SHROUD TO MATCH EXISTING BUILDING.

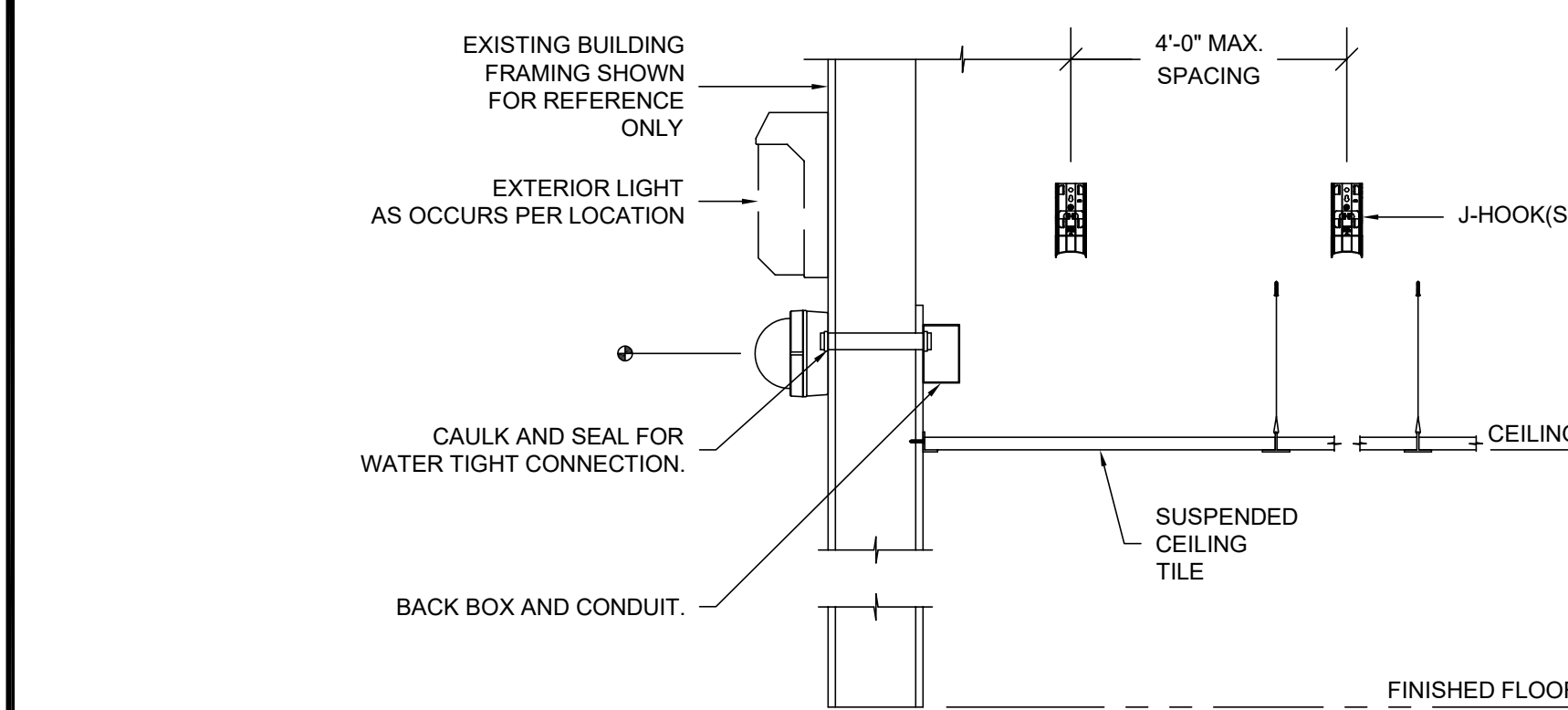
11 WALL MOUNTED JUNCTION BOX WITH CONDUIT RISER AND SHROUD DETAIL
SCALE: NONE

- J-HOOK, 2" CADDY (PN CAT32), MOUNT DIRECTLY TO SIDE OF GROUND BOX, TYP.
- 3/16" X 1-1/4" STAINLESS STEEL TAPCON HEX HEAD CONCRETE SCREW ANCHOR.

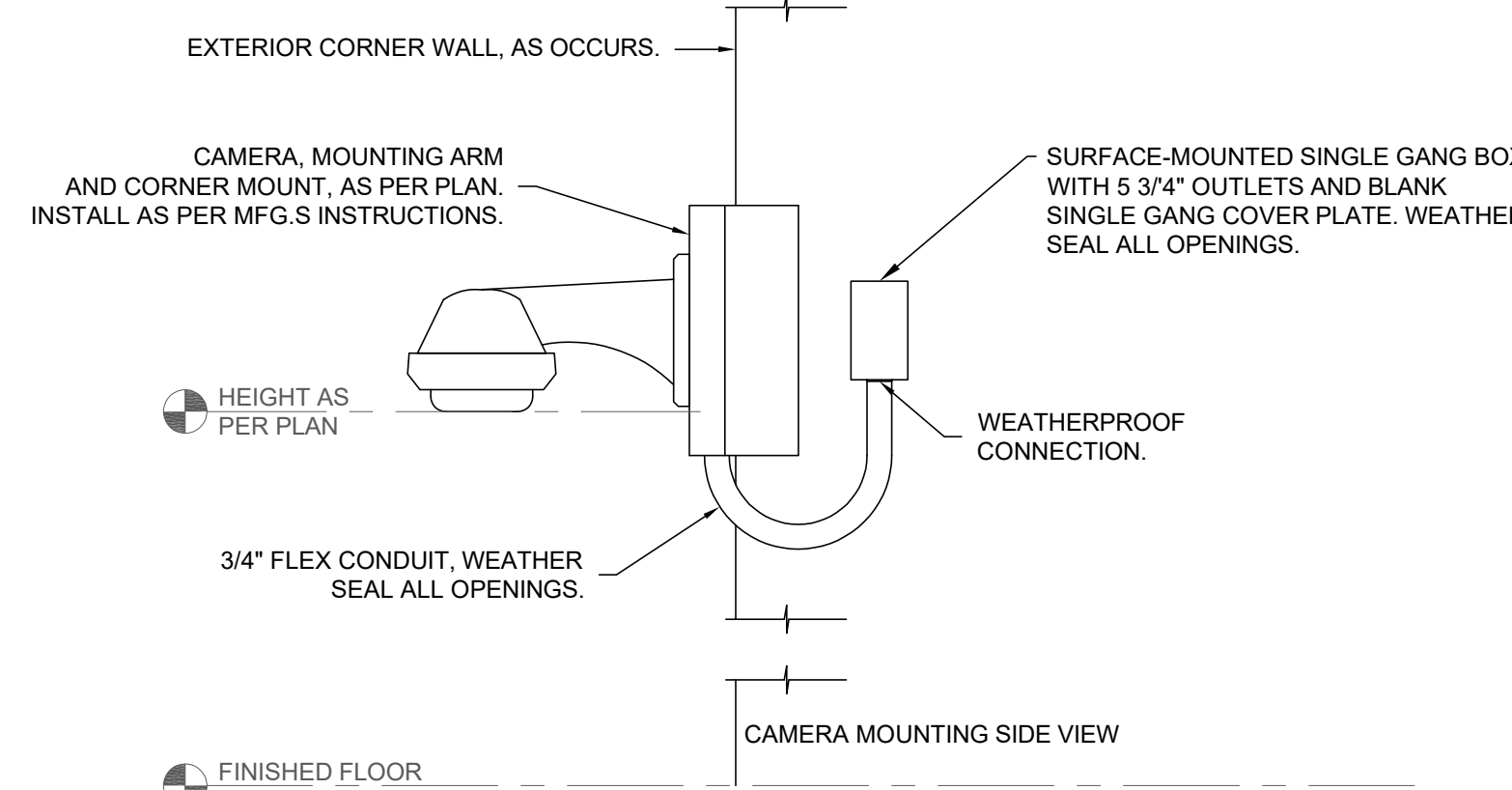


MFG.	PART NO.	PRODUCT	DESCRIPTION	APPROX. WEIGHT	QTY. PER PALLET
JENSEN*	HT1730-B	BOX	17"x30"x12" Concrete Traffic Rated Box (Comes Standard With Hex Bolts)	290	6
JENSEN*	HT1730-E	EXTENSION	17"x30"x12" Concrete Extension	288	6
JENSEN*	HT1730-L01	LID	Steel Diamond Plate Bolt Down Lid	105	
JENSEN*	HT1730-L03	LID	Steel Traxplate® Bolt Down Slip Resistant Traffic Rated Lid	105	

7 IN-GROUND PULL BOX DETAIL - G1
SCALE: NONE



2 CCTV EXTERIOR WALL MOUNTING DETAIL
SCALE: NONE



NOTE: TOTAL ASSEMBLY WEIGHT = 18.8 LBS.

1 MULTI-SENSOR CAMERA EXTERIOR CORNER WALL MOUNTING DETAIL
SCALE: NONE



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CCTV DETAILS

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REVISION

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T801