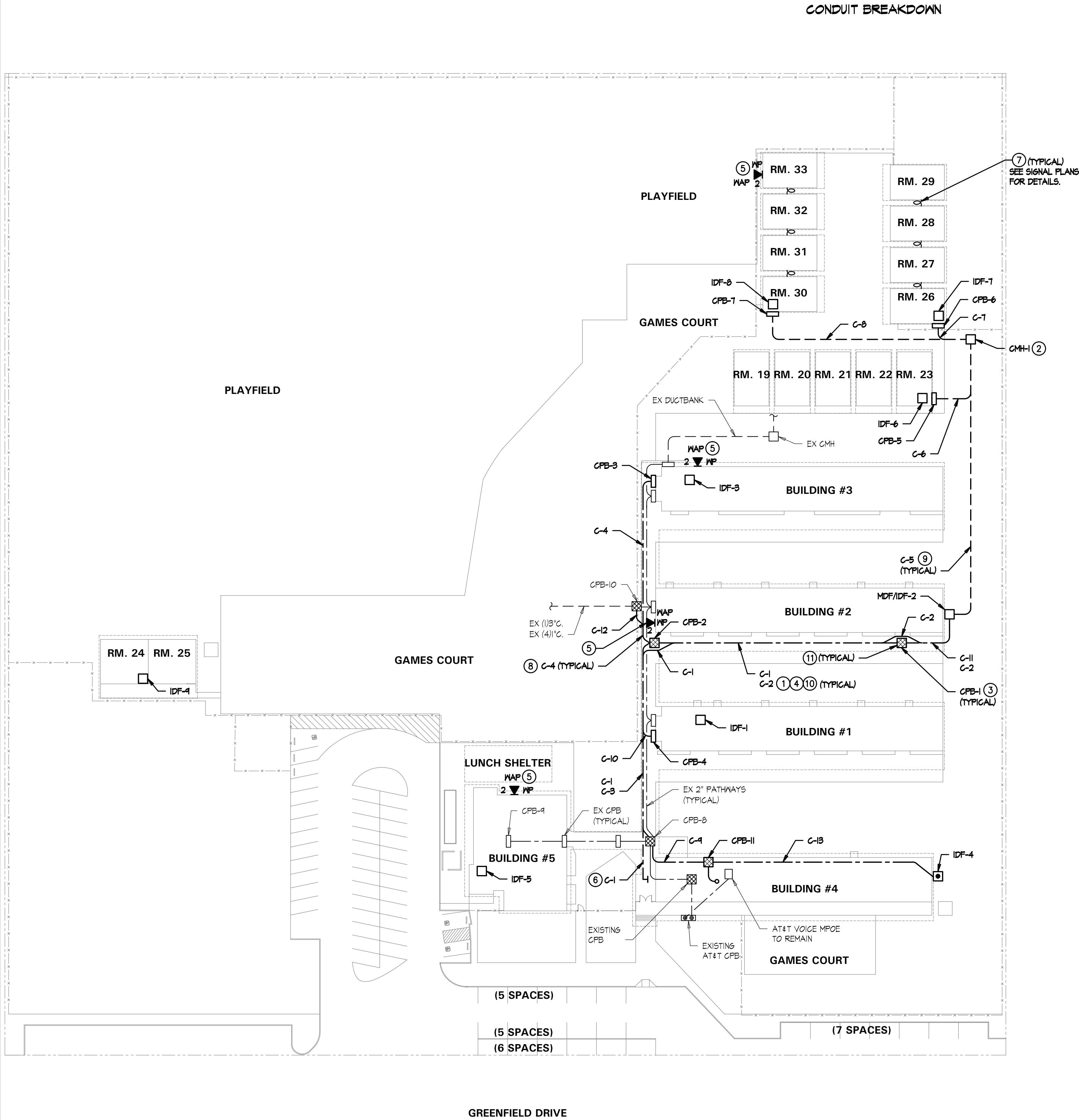




CONDUIT BREAKDOWN									
CONDUIT SEGMENT NAME	FIBER CONDUITS W/3 1/4" INNERDUCTS EA. #			COPPER DATA/VOICE/TV/ SECURITY/CLOCK/EMCS			GROUND	SPARE	AT&T
	F1	F2	F3	C1	C2	C3			
C-1	-	-	-	-	-	-	-	-	2"
C-2	2"	2"	-	2"	-	-	2"	2"	-
C-3	2"	-	-	-	-	-	2"	2"	-
C-4	2"	-	-	2"	-	-	2"	2"	-
C-5	4"	-	-	2"	-	-	2"	4"	-
C-6	2"	-	-	-	-	-	2"	2"	-
C-7	2"	-	-	-	-	-	2"	2"	-
C-8	2"	-	-	-	-	-	2"	2"	-
C-9	2"	-	-	-	-	-	2"	2"	-
C-10	2"	-	-	-	-	-	2"	2"	-
C-11	-	-	-	-	-	-	-	-	2"
C-12	2"	-	-	-	-	-	2"	2"	-
C-13	2"	-	-	2"	2"	-	2"	2"	-

* PROVIDE MAXCELL 2" 3-CELL FABRIC INNERDUCT IN 2" CONDUITS. USE (1) CELL PER CABLE TYPE.

COMMUNICATIONS DUCT BANK SCHEDULE				
CONDUIT SEGMENT NAME	FROM	TO	TOTAL NUMBER OF CONDUITS	
			4"	2"
C-1	AT&T	CPB-1	-	1
C-2	MDF	CPB-2	-	5
C-3	CPB-2	CPB-3	-	3
C-4	CPB-2	CPB-3	-	4
C-5	MDF	CMH-1	2	2
C-6	CMH-1	CPB-5	-	3
C-7	CMH-1	CPB-6	-	3
C-8	CMH-1	CPB-7	-	3
C-9	CPB-3	CPB-11	-	3
C-10	CPB-2	CPB-4	-	3
C-11	MDF	CPB-1	-	1
C-12	CPB-2	CPB-10	-	3
C-13	CPB-11	IDF-4	-	5

COMMUNICATION FULLBOX SCHEDULE			
NAME	SIZE	TYPE	DETAIL REFERENCE
CPB-1	18"SQ. X 10'D	NEMA_3R	D/E-10.3
CPB-2	24"SQ. X 12'D	NEMA_3R	D/E-10.3
CPB-3	18"SQ. X 10'D	NEMA_3R	B/E-10.1
CPB-4	18"SQ. X 10'D	NEMA_3R	B/E-10.1
CPB-5	18"SQ. X 10'D	NEMA_3R	B/E-10.1
CPB-6	18"SQ. X 10'D	NEMA_3R	B/E-10.1
CPB-7	18"SQ. X 10'D	NEMA_3R	B/E-10.1
CPB-8	30"SQ	NEMA_3R	EXISTING
CPB-9	18"SQ	NEMA_3R	EXISTING
CPB-10	24"SQ	NEMA_3R	EXISTING
CPB-11	18"SQ. X 10'D	NEMA_3R	B/E-10.3

COMMUNICATIONS MAINTENANCE HOLE SCHEDULE		
NAME	SIZE	DETAIL REFERENCE
CMH-1	3' X 5' X 3'	B/E-10.3

- KEYNOTES**
- SEE DETAIL C/ET-5.3 FOR CABLE DISTRIBUTION.
 - SEE DETAIL F/ET-5.3 FOR LABELING REQUIREMENTS.
 - SEE DETAIL D/ET-5.3 FOR LABELING REQUIREMENTS.
 - SEE DETAIL E/ET-5.3 FOR LABELING REQUIREMENTS.
 - SEE BUILDING SIGNAL SHEET FOR ADDITIONAL DETAIL.
 - INTERCEPT EXISTING AT&T FIBER CONDUIT, EXTEND TO MDF WITH DEDICATED 2" CONDUIT.
 - SEE DETAIL D/E-10.1 FOR FLEX CONDUIT SUPPORT.
 - SEE DETAIL E/E-10.3 FOR ROOF PENETRATION.
 - SEE DETAIL A/E-10.3 AND C/E-10.3.
 - SEE DETAIL E/ET-10.1
 - SEE DETAIL D/E-10.3 FOR PULLBOX MOUNTED ON ROOF OR WALKWAY OVERHANG.

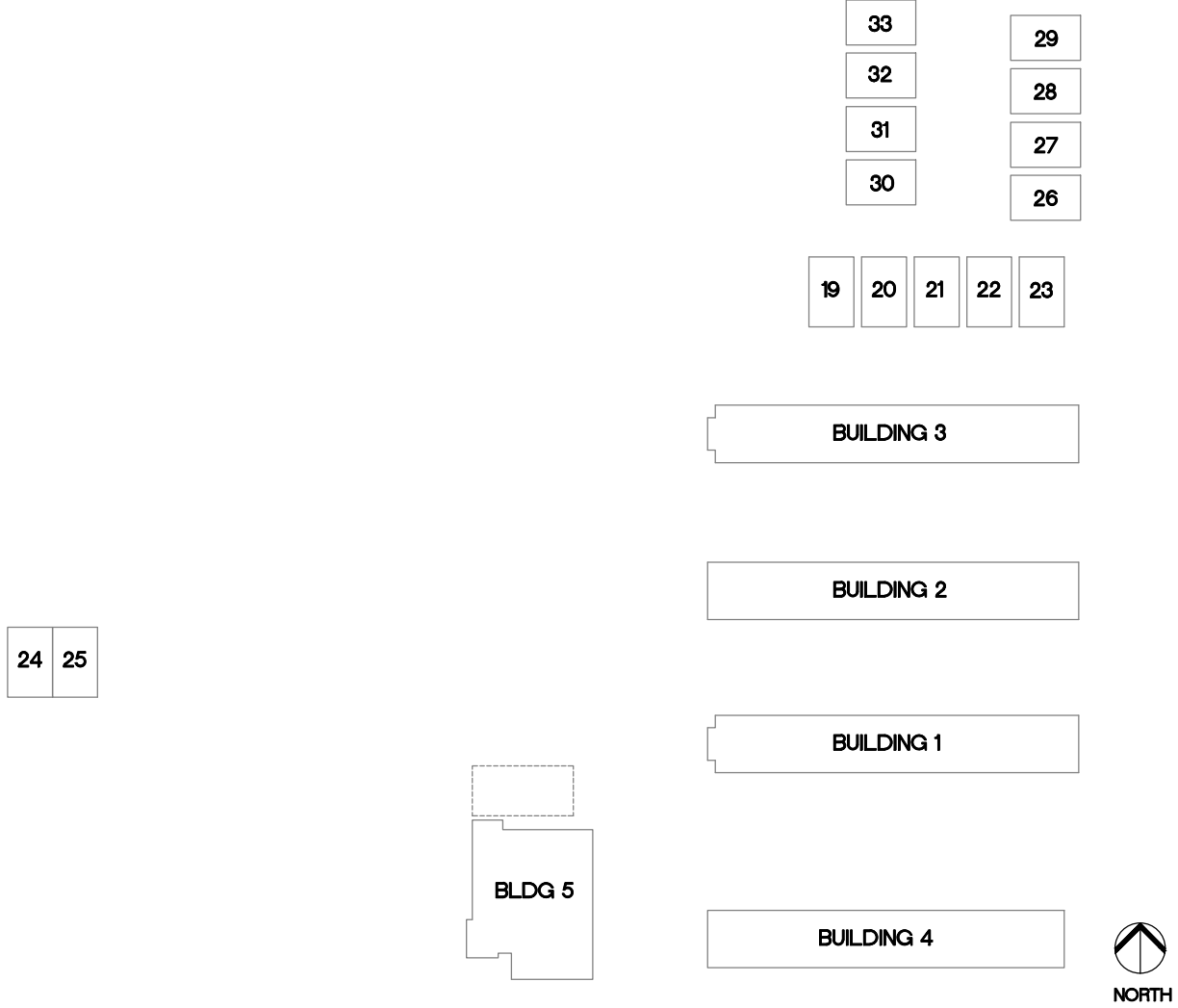
TRENCHING NOTE

LOCATIONS OF EXISTING UNDERGROUND UTILITY AND OTHER UNDERGROUND OBSTRUCTIONS AND CONDITIONS ARE GENERALLY UNKNOWN. HIRE A UTILITY LOCATING SERVICE TO LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO DIGGING. VERIFY EXACT LOCATION SIZE AND EXTENT OF ALL OBSTRUCTIONS AND OTHER CONDITIONS WHICH MAY AFFECT THE PROPOSED WORK UNDER THE PROJECT. TAKE EVERY PRECAUTION TO PREVENT DAMAGE TO EXISTING WORK, INCLUDING HAND DIGGING AROUND EXISTING UTILITIES, TREE ROOT SYSTEMS, AND HARDSCAPE FEATURES. ANY DAMAGE TO EXISTING UTILITIES OR STRUCTURES SHALL BE IMMEDIATELY REPAIRED OR REPLACED IN ACCORDANCE WITH THE CLIENT'S DIRECTION AT THE CONTRACTOR'S EXPENSE.

SPECIAL NOTE

IT IS THE INTENT OF THIS CONTRACT TO LOCATE ALL DATA OUTLETS IN EACH BUILDING AND REPLACE THE DATA OUTLETS AND CABLING WITH CATEGORY 6 JACKS AND CABLE. ALL EXISTING VOICE OUTLETS ARE TO REMAIN IN SERVICE.

- GENERAL NOTES**
- ALL EXISTING SYSTEMS NOT UPGRADED UNDER THIS CONTRACT TO REMAIN OPERATIONAL DURING CONSTRUCTION.
 - REMOVE ALL DISCONNECTED CABLING BACK TO SOURCE. NO CABLES ARE TO BE ABANDONED IN PLACE.
 - SEE DEMOLITION RISER SHEETS ET-1.0 & ET-1.1
 - EXISTING CONDUITS NOT VERIFIED TO HAVE INNER DUCTS.



KEYPLAN NTS

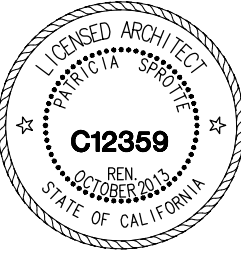
TURPIN & RATTAN
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TREI # 12163
E.JINA 10/26/12 - 9:14AM

REGISTERED PROFESSIONAL ENGINEER
DATE: 10/26/12
NO. 11533
EXP. 6/30/2014
ELECTRICAL
STATE OF CALIFORNIA

MARK FORTIE, RCDD
REGISTERED COMMUNICATIONS DESIGNER
BICSI
EXPIRES 12/31/13
Regis. No. 081432



SIGNAL SITE PLAN



IT UPGRADE YEAR TWO
MAGNOLIA ELEMENTARY SCHOOL
CAJON VALLEY UNION SCHOOL DISTRICT
650 GREENFIELD DRIVE
EL CAJON, CA 92021

CONSULTANT

APPROVALS

DESCRIPTION

SIGNAL SITE PLAN

DATE

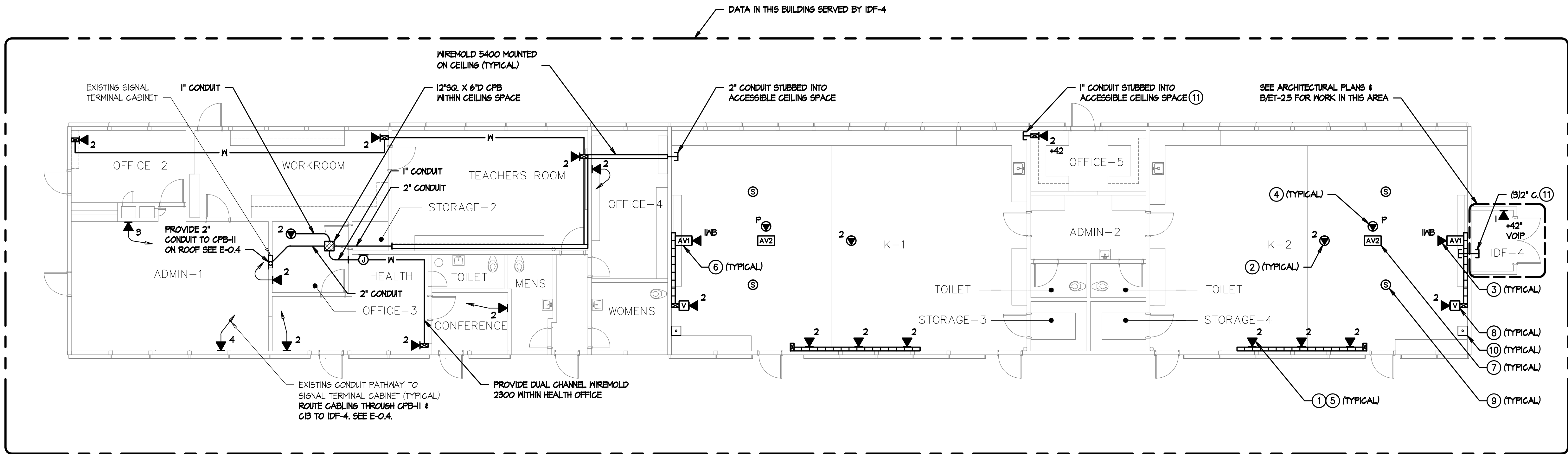
10/26/12

JOB #

12163

SHEET #

E-04



SIGNAL PLAN KEYNOTES

- CATEGORY 6 DATA OUTLET. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. UTILIZE EXISTING PATHWAYS U.O.N. FOR INSTALLATION IN WALLS.
- CATEGORY 6 DATA OUTLET MOUNTED ABOVE LAY-IN CEILING DESIGNATED FOR WIRELESS NETWORK. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. SEE DETAIL F/ET-5.2.
- (I) PORT CATEGORY 6 DATA OUTLET DESIGNATED FOR FUTURE INTERACTIVE WHITEBOARD. PROVIDE NEW CATEGORY 6 JACK AND CABLE TO IDF. LOCATION TO BE AT CENTER OF TEACHING MALL AT +18" AFF. SEE DETAIL A/ET-5.5.
- (I) PORT CATEGORY 6 DATA OUTLET AT CEILING MOUNTED PROJECTOR DESIGNATED FOR PROJECTOR MONITORING. PROVIDE NEW CATEGORY 6 JACK AND CABLE TO IDF. CONTRACTOR TO COORDINATE EXACT LOCATION WITH CEILING MOUNTED PROJECTOR MOUNTING PLATE. SEE DETAIL B/ET-5.5.
- PROVIDE NEW FACEPLATES, DEVICE BRACKETS (SURFACE RACEWAY) AND OR DEVICE BOXES. SEE DETAIL A/B/ET-5.3 FOR FACEPLATE & LABELING REQUIREMENTS.
- AVI INTERFACE MOUNTED AT CENTER OF TEACHING MALL AT +18" AFF. PROVIDE EXTRON 2-GANG ENB SERIES WALL BOX FOR AVI INTERFACE. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
- AUDIO/VISUAL FLYING LEADS AT CEILING MOUNTED PROJECTOR LOCATION. SEE ET-5.4 & B/ET-5.5 FOR DETAILS.
- AUDIO VOLUME CONTROL OUTLET MOUNTED AT TEACHER'S STATION LOCATION AT +45" AFF. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
- AUDIO/VISUAL SPEAKER FLUSH IN CEILING TILE. SEE ET-5.4 FOR DETAILS.
- EXISTING PHONE (BOGEN HANDSET), TO REMAIN.
- SEE DETAIL C/E-10.1

GENERAL NOTES (SIGNAL)

- SEE DATA RISER DIAGRAM ON ET-1.2 FOR CABLING DETAILS.
- SUPPORT CATEGORY 6 & AUDIO/VISUAL CABLING WITH U-HOOK SUPPORTS EVERY 4' WHERE CABLES ARE NOT SUPPORTED, ROUTED THROUGH CONDUIT OR CABLE TRAY. MAINTAIN 12" CLEARANCE FROM ELECTRICAL & LIGHTING. SEE DETAIL D/ET-5.2.

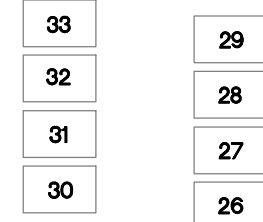


1/8" = 1'-0"

KEYPLAN

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CONSULTANT

APPROVALS

DESCRIPTION

**BUILDING 4
SIGNAL PLAN**

DATE

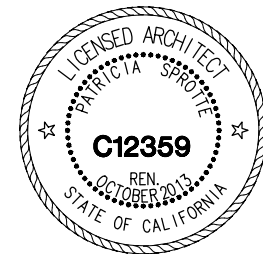
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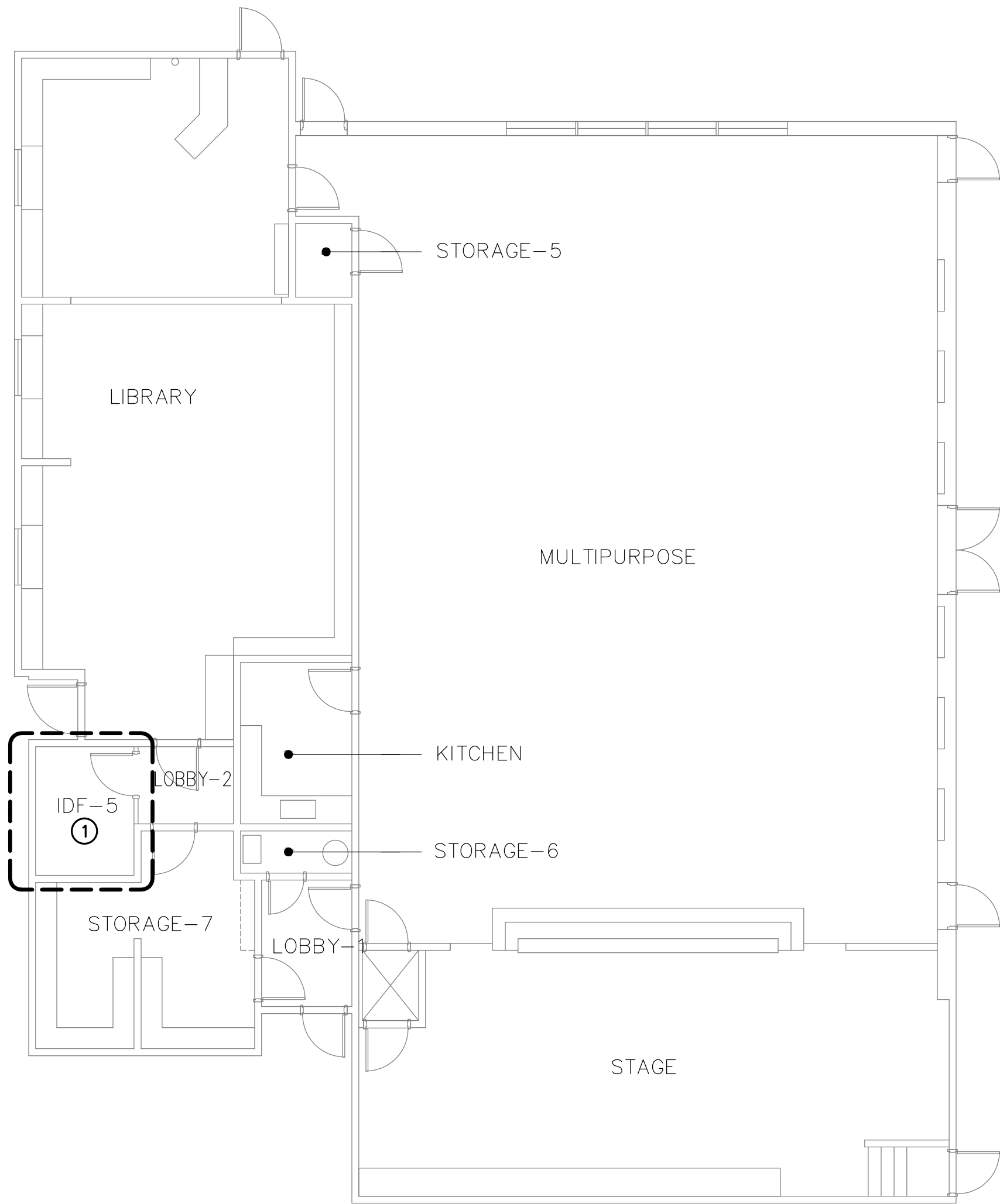
JOB #

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SHEET #

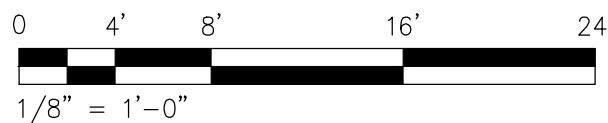
E-4.2



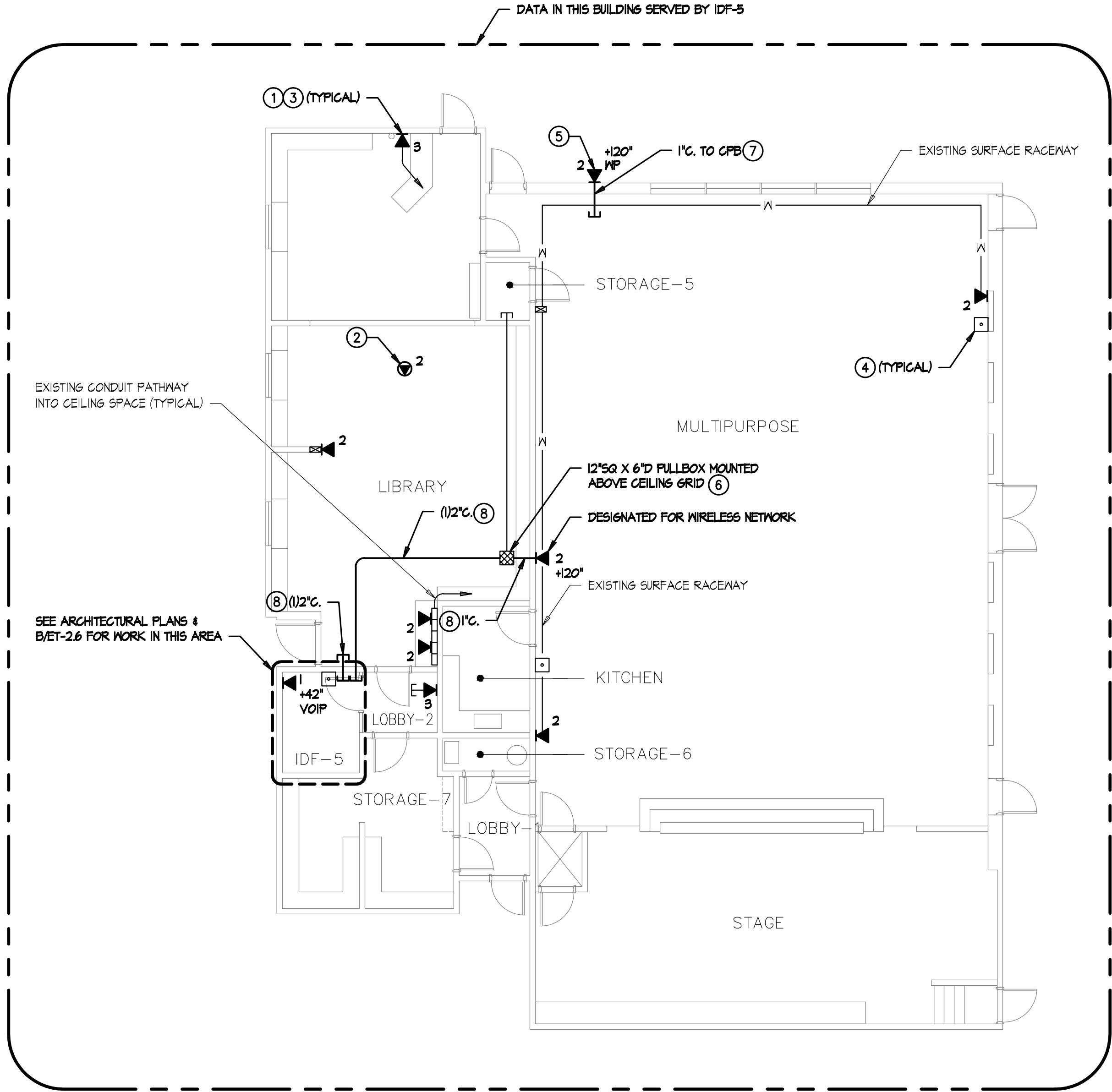


POWER PLAN KEYNOTES

- ① PROVIDE NEW POWER OUTLETS FOR IDF. SEE E-0.3 AND EF-0.1 FOR ADDITIONAL POWER LIGHTING AND FIRE ALARM WORK IN THIS AREA.



BUILDING 5 - POWER PLAN

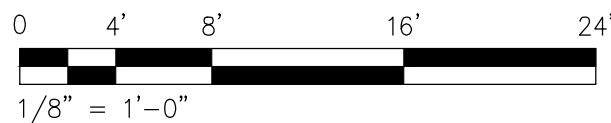


SIGNAL PLAN KEYNOTES

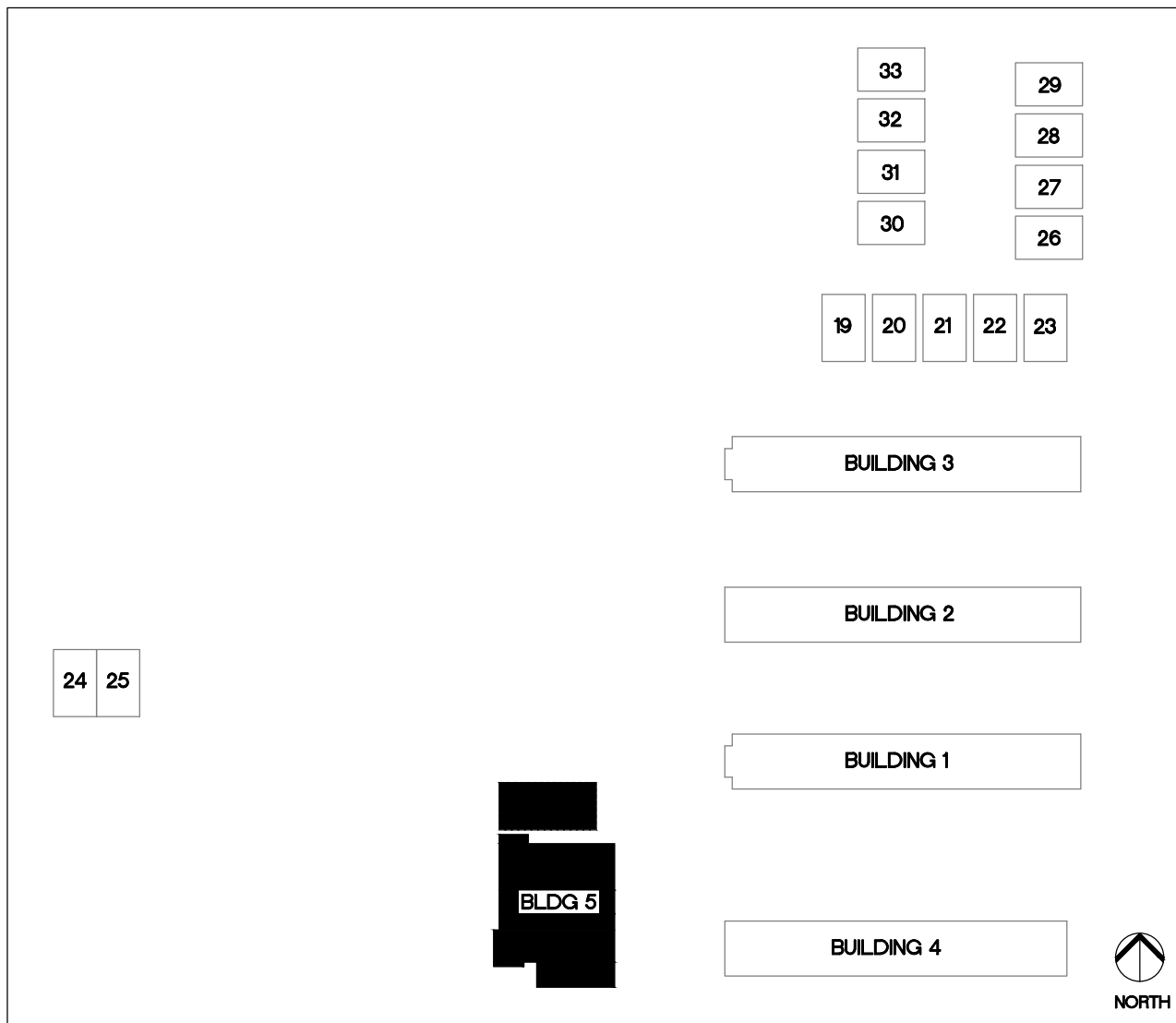
- ① CATEGORY 6 DATA OUTLET. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. UTILIZE EXISTING PATHWAYS U.O.N. FOR INSTALLATION IN WALLS.
- ② CATEGORY 6 DATA OUTLET MOUNTED ON WALL. DESIGNATED FOR WIRELESS NETWORK. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. SEE DETAIL F/ET-5.2.
- ③ PROVIDE NEW FACEPLATES, DEVICE BRACKETS (SURFACE RACEWAY) AND OR DEVICE BOXES. SEE DETAIL A/B/ET-5.3 FOR FACEPLATE & LABELING REQUIREMENTS.
- ④ EXISTING PHONE (BOGEN HANDSET), TO REMAIN.
- ⑤ DATA OUTLET WITHIN WEATHER PROOF ENCLOSURE FOR EXTERIOR WIRELESS ACCESS POINT. COORDINATE MOUNTING HEIGHT/LOCATION WITH WIRELESS ACCESS POINT INSTALLER.
- ⑥ SEE D/ET-5.3 FOR LABELING REQUIREMENTS.
- ⑦ SEE F/E-10.1 FOR PENETRATION DETAIL.
- ⑧ SEE G/E-10.1 FOR PENETRATION DETAIL.

GENERAL NOTES (SIGNAL)

1. SEE DATA RISER DIAGRAM ON ET-1.3 FOR CABLING DETAILS.
2. SUPPORT CATEGORY 6 & AUDIO/VISUAL CABLING WITH 'J-HOOK' SUPPORTS EVERY 4' WHERE CABLES ARE NOT SUPPORTED, ROUTED THROUGH CONDUIT OR CABLE TRAY. MAINTAIN 12" CLEARANCE FROM ELECTRICAL & LIGHTING. SEE DETAIL D/ET-5.2.



BUILDING 5 - SIGNAL PLAN



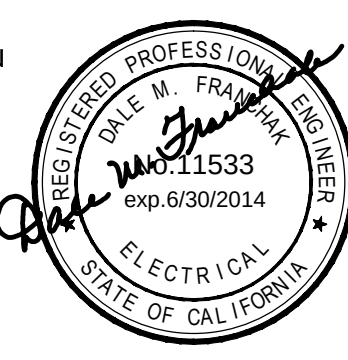
KEYPLAN



1/8" = 1'-0"

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MARK FORTIE, RCDD
REGISTERED COMMUNICATIONS DESIGNER
BICSI
EXPIRES 12/31/13
Regis. No. 081432

APPROVALS

DESCRIPTION

BUILDING 5
POWER AND
SIGNAL PLANS

DATE

10/26/12

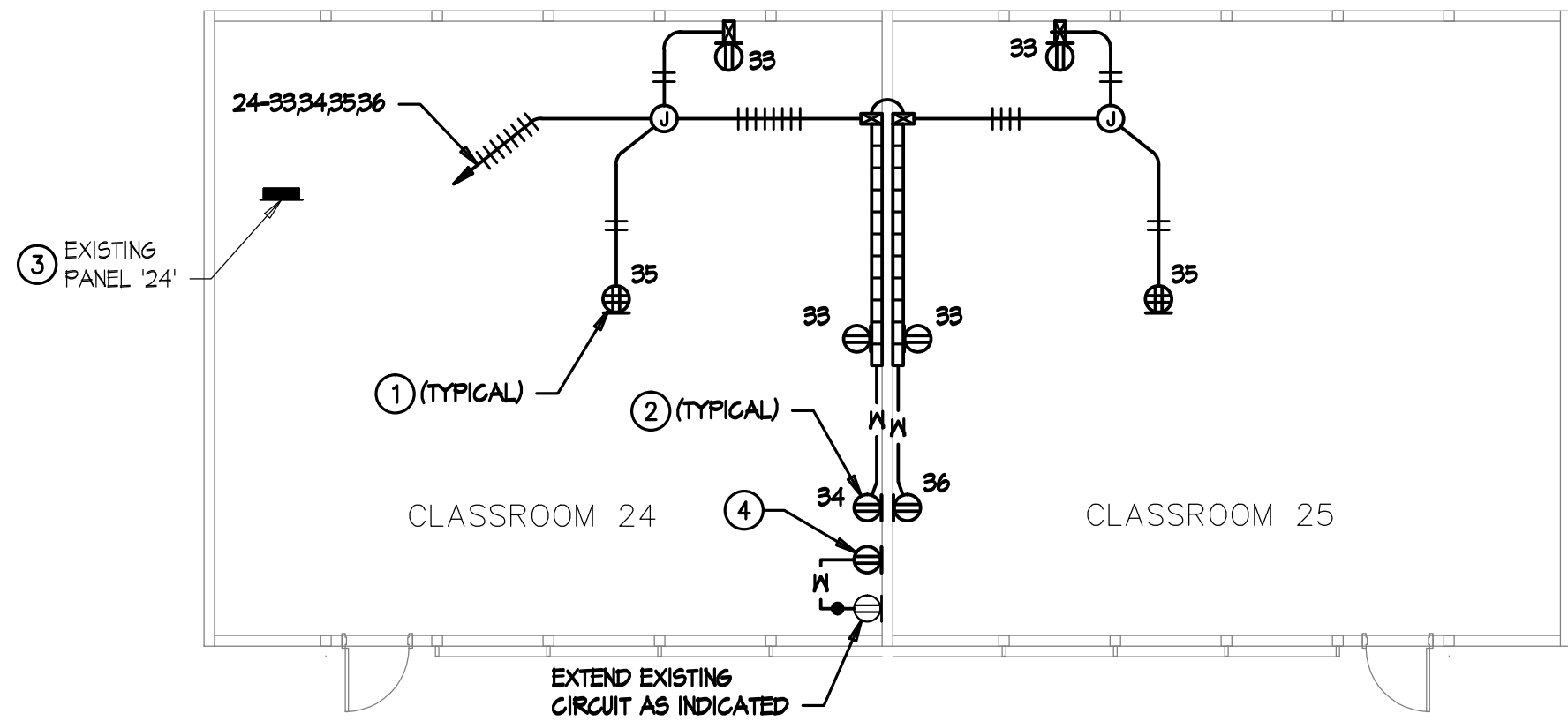
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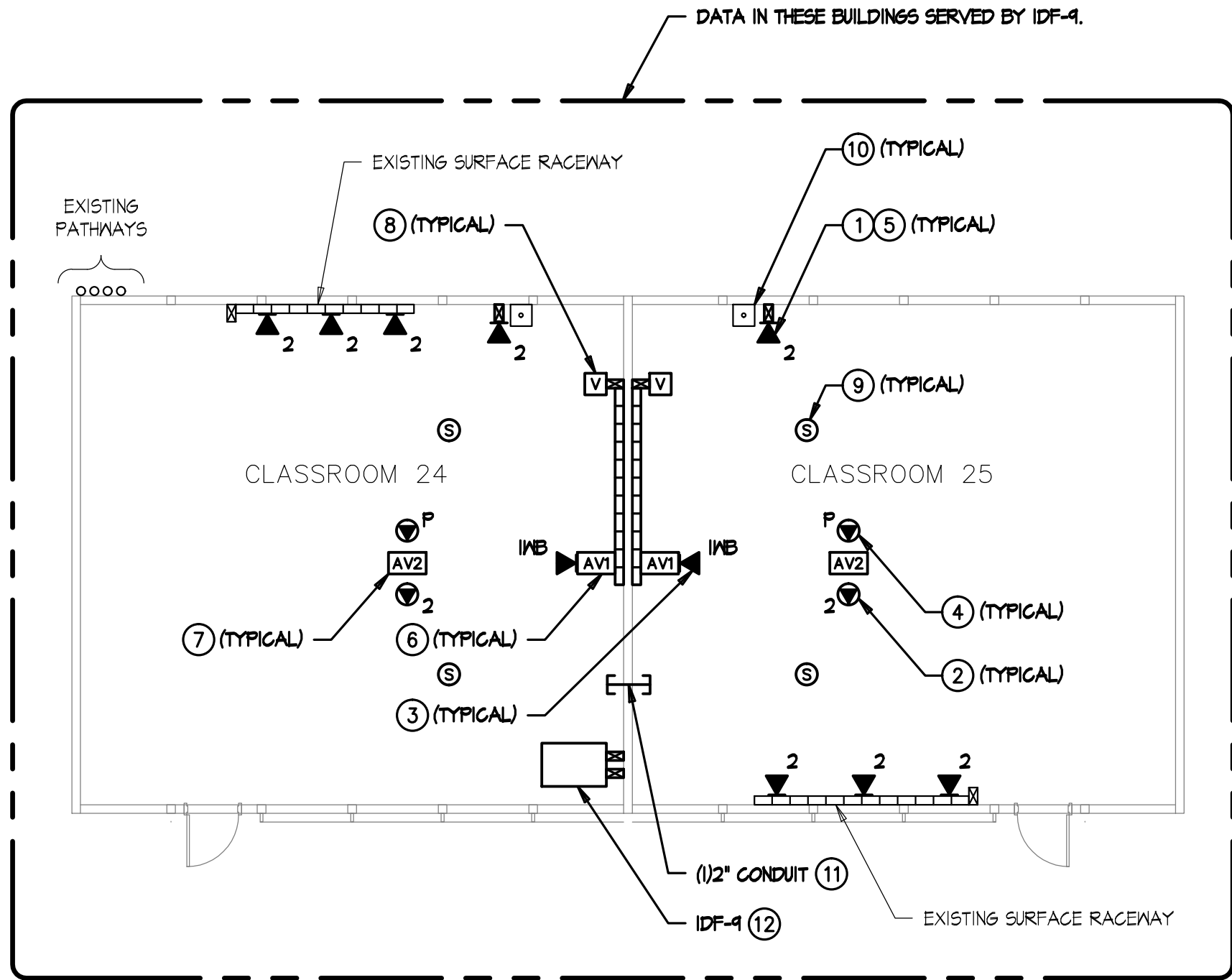
SHEET #

E-5.1





PORTABLE 24-25 - POWER PLAN



PORTABLE 24-25 - SIGNAL PLAN

POWER PLAN KEYNOTES

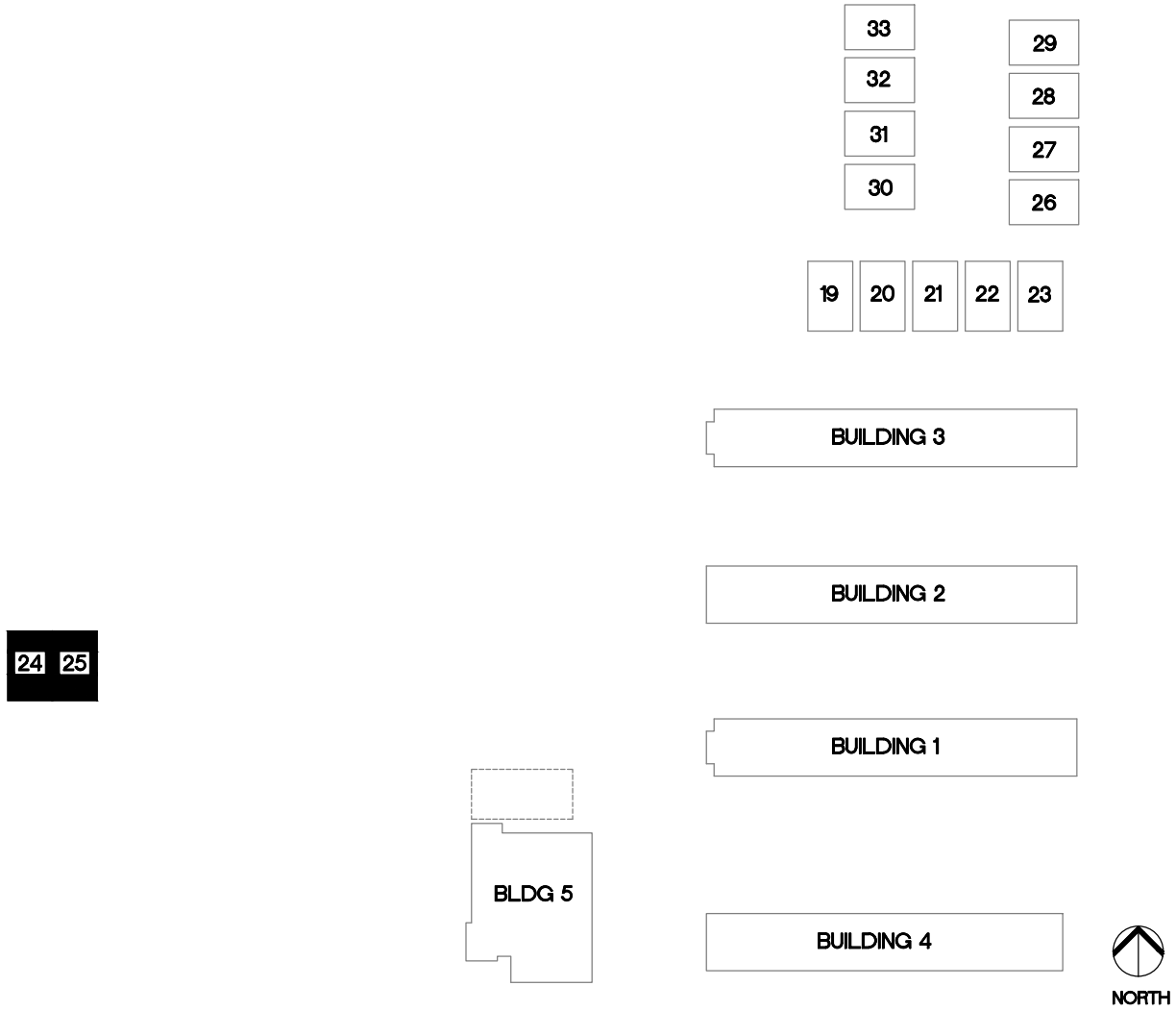
- 1 MOUNT DOUBLE DUPLEX RECEPTACLE IN CEILING TILE FOR CEILING MOUNTED PROJECTOR AND A/V POWER SUPPLY.
- 2 PROVIDE RECEPTACLE MOUNTED AT +18" AFF FOR LAPTOP CART. PROVIDE DEDICATED BRANCH CIRCUIT. USE WIREHOLD 2500 WITH ASSOCIATED CONDUIT TRANSITION FITTINGS. PROVIDE FURRING AS REQUIRED.
- 3 SEE RESPECTIVE PANEL SCHEDULE FOR ADDITIONAL WORK AT EXISTING PANEL.
- 4 PROVIDE RECEPTACLE MOUNTED AT +18" AFF FOR FLOOR MOUNTED IDF CONSOLE. PROVIDE DEDICATED BRANCH CIRCUIT UNLESS OTHERWISE NOTED.

SIGNAL PLAN KEYNOTES

- 1 CATEGORY 6 DATA OUTLET. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. UTILIZE EXISTING PATHWAYS U/D.N. FOR INSTALLATION IN WALLS.
- 2 CATEGORY 6 DATA OUTLET MOUNTED ABOVE LAY-IN CEILING DESIGNATED FOR WIRELESS NETWORK. PROVIDE NEW CATEGORY 6 JACKS AND CABLES TO IDF. SEE DETAIL F/ET-5.2.
- 3 (1) PORT CATEGORY 6 DATA OUTLET DESIGNATED FOR FUTURE INTERACTIVE WHITEBOARD. PROVIDE NEW CATEGORY 6 JACK AND CABLE TO IDF. LOCATION TO BE AT CENTER OF TEACHING WALL AT +18" AFF. SEE DETAIL A/ET-5.5.
- 4 (1) PORT CATEGORY 6 DATA OUTLET AT CEILING MOUNTED PROJECTOR DESIGNATED FOR PROJECTOR MONITORING. PROVIDE NEW CATEGORY 6 JACK AND CABLE TO IDF. CONTRACTOR TO COORDINATE EXACT LOCATION WITH CEILING MOUNTED PROJECTOR MOUNTING PLATE. SEE DETAIL B/ET-5.5.
- 5 PROVIDE NEW FACEPLATES, DEVICE BRACKETS (SURFACE RACEWAY) AND OR DEVICE BOXES. SEE DETAIL A/B/ET-5.3 FOR FACEPLATE & LABELING REQUIREMENTS.
- 6 A/V INTERFACE MOUNTED AT CENTER OF TEACHING WALL AT +18" AFF. PROVIDE EXTRON 2-GANG EMB SERIES WALL BOX FOR A/V INTERFACE. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
- 7 AUDIO/VISUAL FLYING LEADS AT CEILING MOUNTED PROJECTOR LOCATION. SEE ET-5.4 & B/ET-5.5 FOR DETAILS.
- 8 AUDIO VOLUME CONTROL OUTLET MOUNTED AT TEACHER'S STATION LOCATION AT +18" AFF. SEE ET-5.4 & A/ET-5.5 FOR DETAILS.
- 9 AUDIO/VISUAL SPEAKER FLUSH IN CEILING TILE. SEE ET-5.4 FOR DETAILS.
- 10 EXISTING PHONE (BOSEN HANDSET), TO REMAIN.
- 11 SEE DETAIL G/E-10.1.
- 12 SEE DETAIL A/ET-5.6 FOR INSTALLATION.

GENERAL NOTES

1. SEE DATA RISER DIAGRAM ON ET-1.3 FOR CABLING DETAILS.
2. SUPPORT CATEGORY 6 & AUDIO/VISUAL CABLING WITH 'U-HOOK' SUPPORTS EVERY 4' WHERE CABLES ARE NOT SUPPORTED, ROUTED THROUGH CONDUIT OR CABLE TRAY. MAINTAIN 12" CLEARANCE FROM ELECTRICAL & LIGHTING. SEE DETAIL D/ET-5.2.
3. USE EXISTING UNDERGROUND PATHWAYS FOR FIBER TO PORTABLE 24.



KEYPLAN

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REGISTERED PROFESSIONAL ENGINEER
DATE: 10/26/12
NO. 11533
EXP. 6/30/2014
ELECTRICAL
STATE OF CALIFORNIA
EXPIRES 12/31/13
Regis. No. 081432

MARK FORTIE, RCDD
REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
EXPIRES 12/31/13
Regis. No. 081432

APPROVALS

DESCRIPTION

PORTABLE
24-25 POWER
AND SIGNAL
PLANS

DATE

10/26/12

JOB #

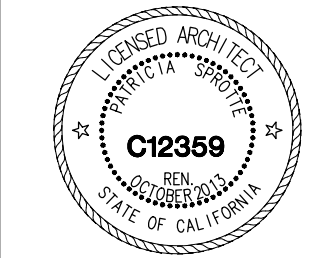
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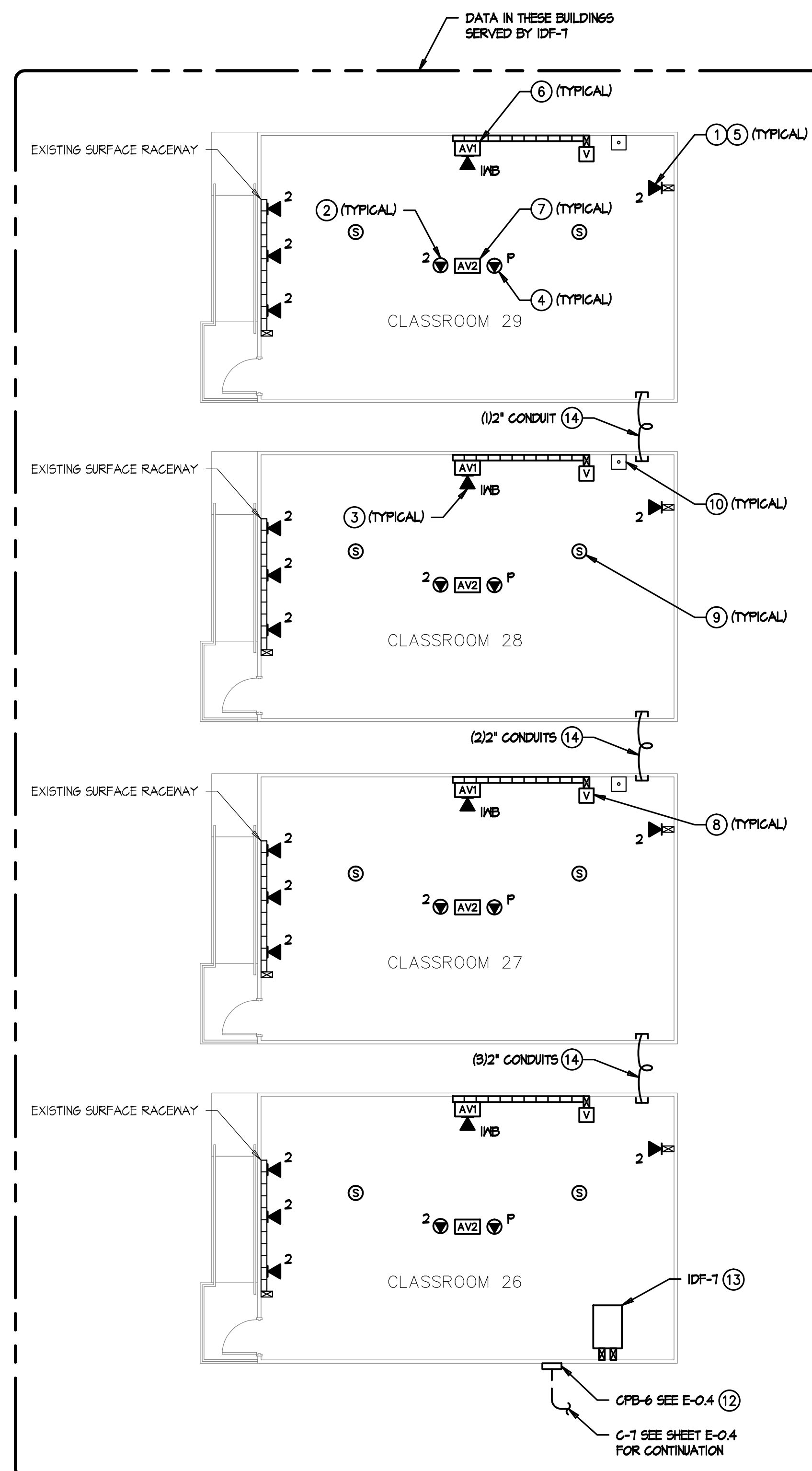
E-6.2

CONSULTANT

IT UPGRADE YEAR TWO
MAGNOLIA ELEMENTARY SCHOOL
CAJON VALLEY UNION SCHOOL DISTRICT
650 GREENFIELD DRIVE
EL CAJON, CA 92021



SPROTTE WATSON
ARCHITECTURE PLANNING
440 S. Main Street, Suite 200, Vista, California 92081 | 760.639.4120 | www.sprotte-watson.com



1. SEE DATA RISER DIAGRAM ON ET-1.3 FOR CABLING DETAILS.
2. SUPPORT CATEGORY 6 & AUDIO/VISUAL CABLING WITH 'J-HOOK' SUPPORTS EVERY 4' INHERE CABLES ARE NOT SUPPORTED, ROUTED THROUGH CONDUIT OR CABLE TRAY. MAINTAIN 12" CLEARANCE FROM ELECTRICAL & LIGHTING. SEE DETAIL D/ET-5.2.



MARK FORTIE, RCDD

REGISTERED COMMUNICATIONS
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DISTRIBUTION DESIGNER

EXPIRES 12/31/13
Regis. No. 081432

E-7.2

G:\12\12163\12163.00\ACADPROV\12163.00_E-7.2 PORTABLE 26-33 SIGNAL.dwg 10/26/12 09:16:01