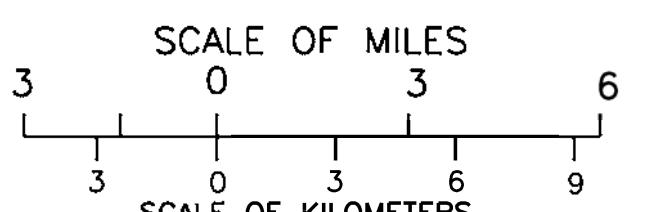
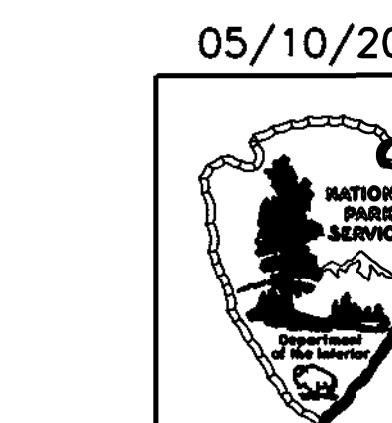


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| | | | | | | |
|---|---------|---|--|--|----------------------|---------------------------|
| | 100% CD | UNITED STATES DEPARTMENT OF THE INTERIOR | NATIONAL PARK SERVICE DENVER SERVICE CENTER | TITLE OF DRAWING COVER SHEET | | DRAWING NO. 613 |
| | | | | LOCATION WITHIN PARK MALAQUITE BEACH | | 125,059B |
| NAME OF PARK PADRE ISLAND NATIONAL SEASHORE | | REGION INTERMOUNTAIN | COUNTY KENEDY | STATE TEXAS | PKG. NO. 1 | SHEET 1 |
| | | | | | | OF 27 |



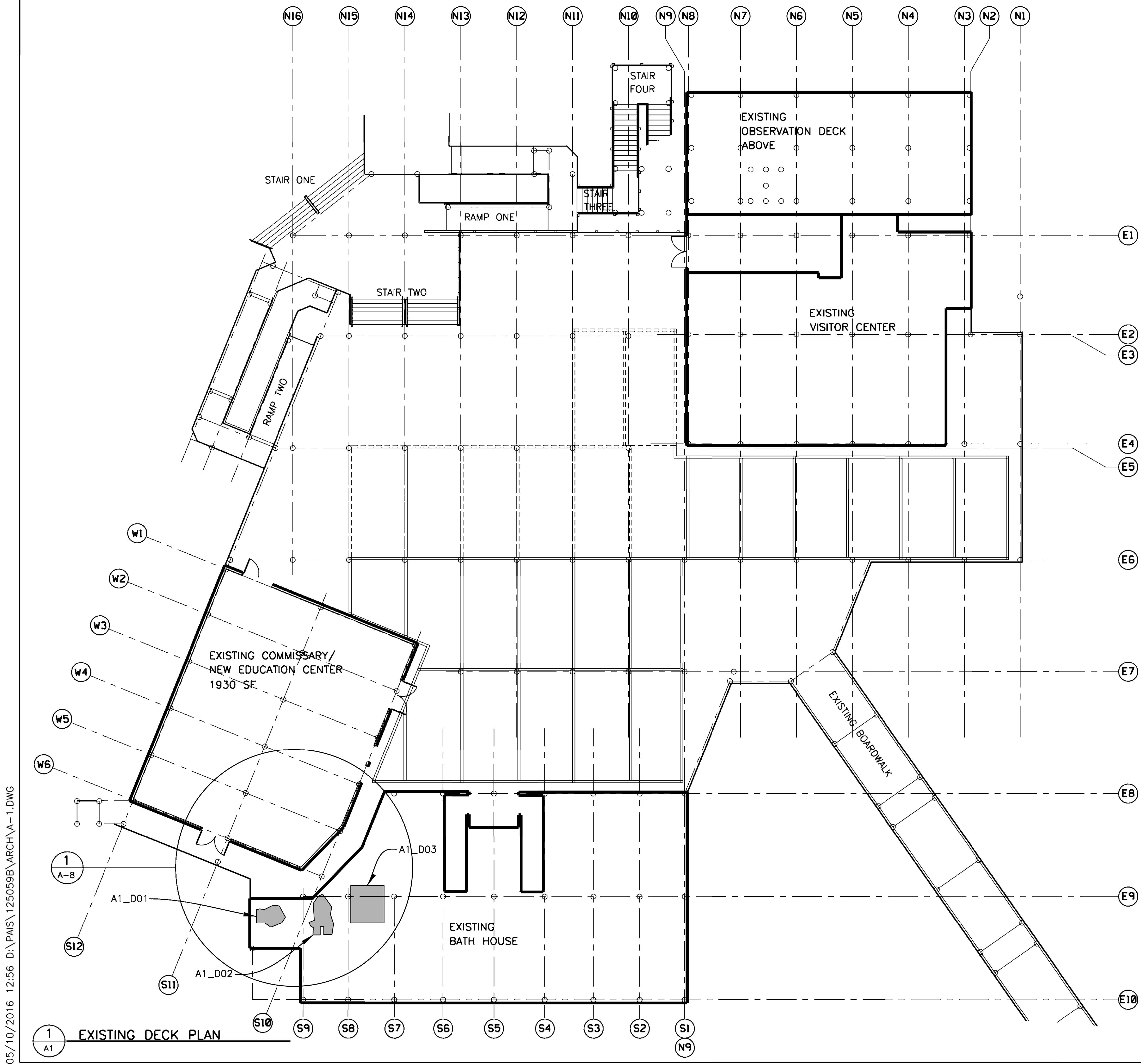
05/10/2016

100% CD

UNITED STATES
DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
DENVER SERVICE CENTER

TITLE OF DRAWING
COVER SHEET
LOCATION WITHIN PARK
MALAQUITE BEACH
NAME OF PARK
PADRE ISLAND NATIONAL SEASHORE
REGION
INTERMOUNTAIN

DRAWING NO.
613
125,059B
PKG. NO.
1
SHEET
1
OF
27



CONSTRUCTION STAGING PLAN
NOT TO SCALE

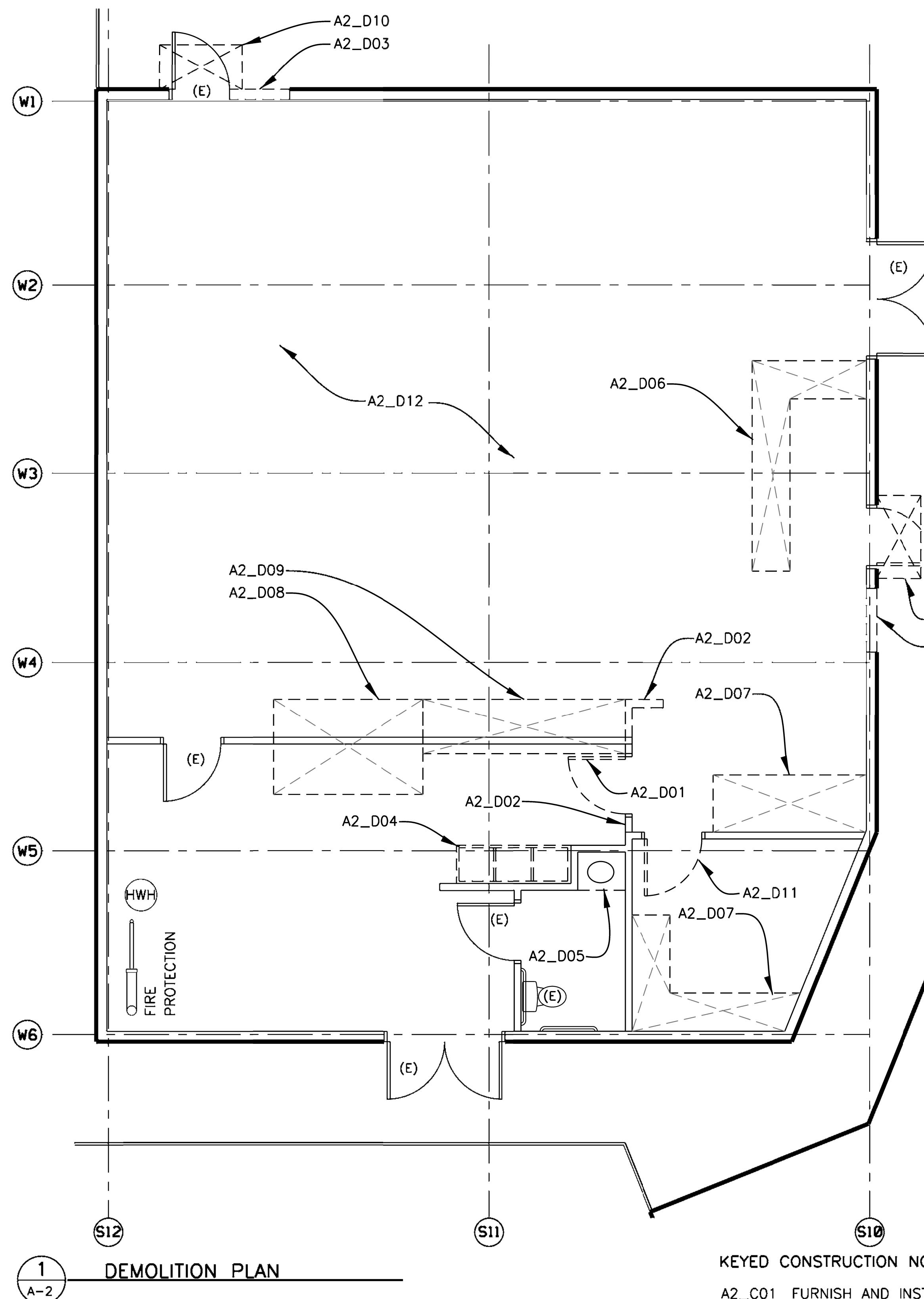
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20 0 20 40
SCALE OF FEET



| DESIGNED: LLL CADD LLL | SUB SHEET NO. | TITLE OF SHEET | DRAWING NO. 613 125059B |
|---------------------------------|---------------|----------------|-------------------------------|
| TECH. REVIEW: KCL | | | PMIS/PKG NO. 168359 |
| DATE: 05/10/2016 | | A-1 | SHEET 2 OF 27 |

**NEW EDUCATION CENTER
MALAQUITE BEACH
EXISTING DECK PLAN**
PADRE ISLAND NATIONAL SEASHORE



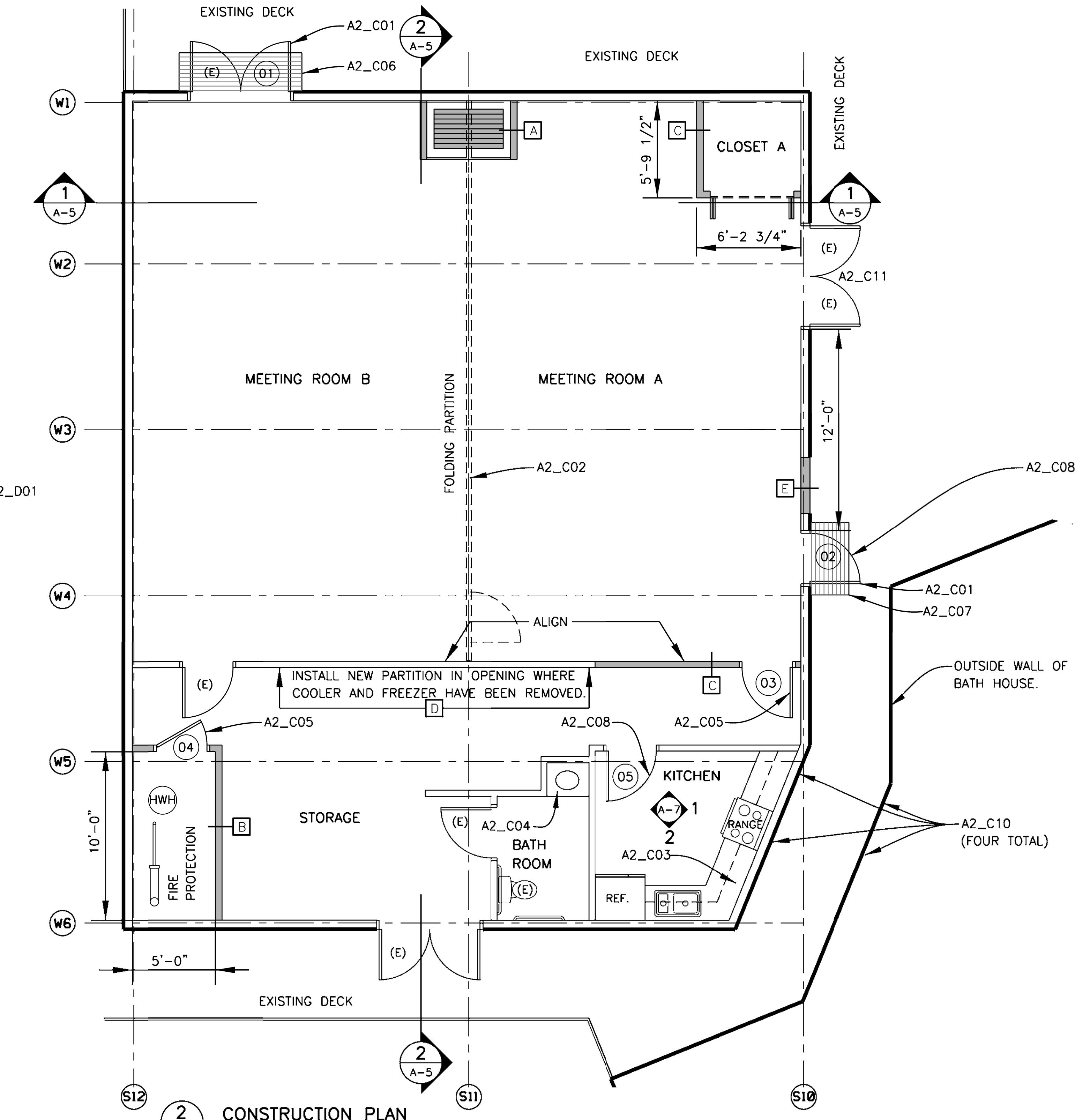
1 A-2 DEMOLITION PLAN

KEYED DEMOLITION NOTES:

- A2_D01 REMOVE EXISTING DOOR, FRAME, AND HARDWARE.
A2_D02 REMOVE EXISTING WOOD FRAMED PARTITION.
A2_D03 REMOVE EXISTING WOOD FRAMED WALL.
A2_D04 REMOVE EXISTING SINK RE: PLUMBING.
A2_D05 REMOVE EXISTING VANITY AND SINK.
A2_D06 REMOVE EXISTING CASH WRAP.
A2_D07 REMOVE EXISTING COUNTER.
- A2_D08 EXISTING FREEZER REMOVED BY OTHERS. N.I.C. CONTRACTOR SHALL REMOVE ELECTRICAL AND PLUMBING RE: ELECTRICAL AND PLUMBING.
A2_D09 EXISTING COOLER REMOVED BY OTHERS. N.I.C. CONTRACTOR SHALL REMOVE ELECTRICAL AND PLUMBING RE: ELECTRICAL AND PLUMBING.
A2_D10 REMOVE EXISTING SAND TRAP GRATE AND REPLACE WITH NEW DECK MATERIAL.
A2_D11 REMOVE EXISTING DOOR AND HARDWARE.
A2_D12 MAKE INVESTIGATIVE CUTS AT BASE OF INTERIOR DRYWALL RE: STRUCTURAL. PATCH REPAIR, AND REPAINT.

KEYED CONSTRUCTION NOTES:

- A2_C01 FURNISH AND INSTALL NEW DOORS, FRAME, HARDWARE, AND NEW HEADER RE: STRUCTURAL.
A2_C02 NEW FOLDING PARTITION. STC. 54 WITH MAN DOOR. SUSPEND FROM TRUSSES.
A2_C03 NEW ACCESSIBLE BASE CABINETS, WALL CABINETS, SINK, REFRIGERATOR, & RANGE.
A2_C04 NEW PLASTIC LAMINATE VANITY AND SINK.
A2_C05 NEW DOORS, FRAME, AND HARDWARE.
A2_C06 REPLACE EXISTING SAND TRAP GRATE WITH NEW ACCESSIBLE FIBERGLASS GRATE - 7'-0".
A2_C07 RELOCATE EXISTING SAND TRAP GRATE TO NEW DOOR LOCATION. RE: DRAWING 5/A-7.
A2_C08 NEW DOOR & HARDWARE.
A2_C09 CUT OPENING THROUGH EXISTING EXTERIOR WALL FOR NEW DUCTWORK. PROVIDE NEW LOUVER. FLASH/SEAL WALL PENETRATION.
A2_C10 CUT OPENING THROUGH EXISTING EXTERIOR WALL FOR NEW DUCTWORK. FLASH/SEAL WALL PENETRATION.
A2_C11 MODIFY EXISTING DOORS & PROVIDE PAIR OF PANIC DEVICES.



2 A-2 CONSTRUCTION PLAN

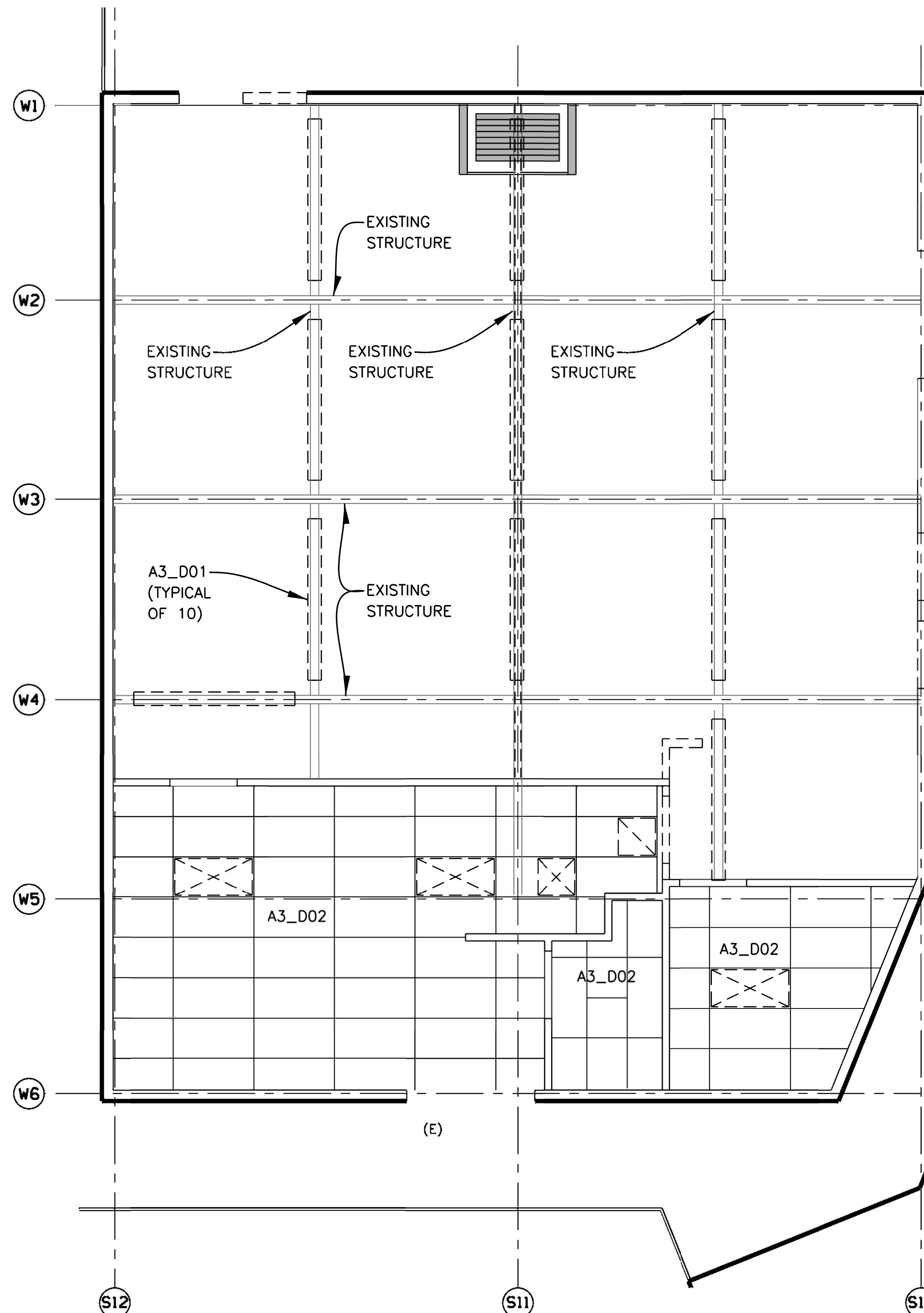
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SCALE OF FEET

| DESIGNED: LLL GADD LLL | SUB SHEET NO. |
|---------------------------------|---|
| TECH. REVIEW: KCL | TITLE OF SHEET DRAWING NO. 613 125059B PMIS/PKG NO. 168359 SHEET 3 OF 27 |

A-2

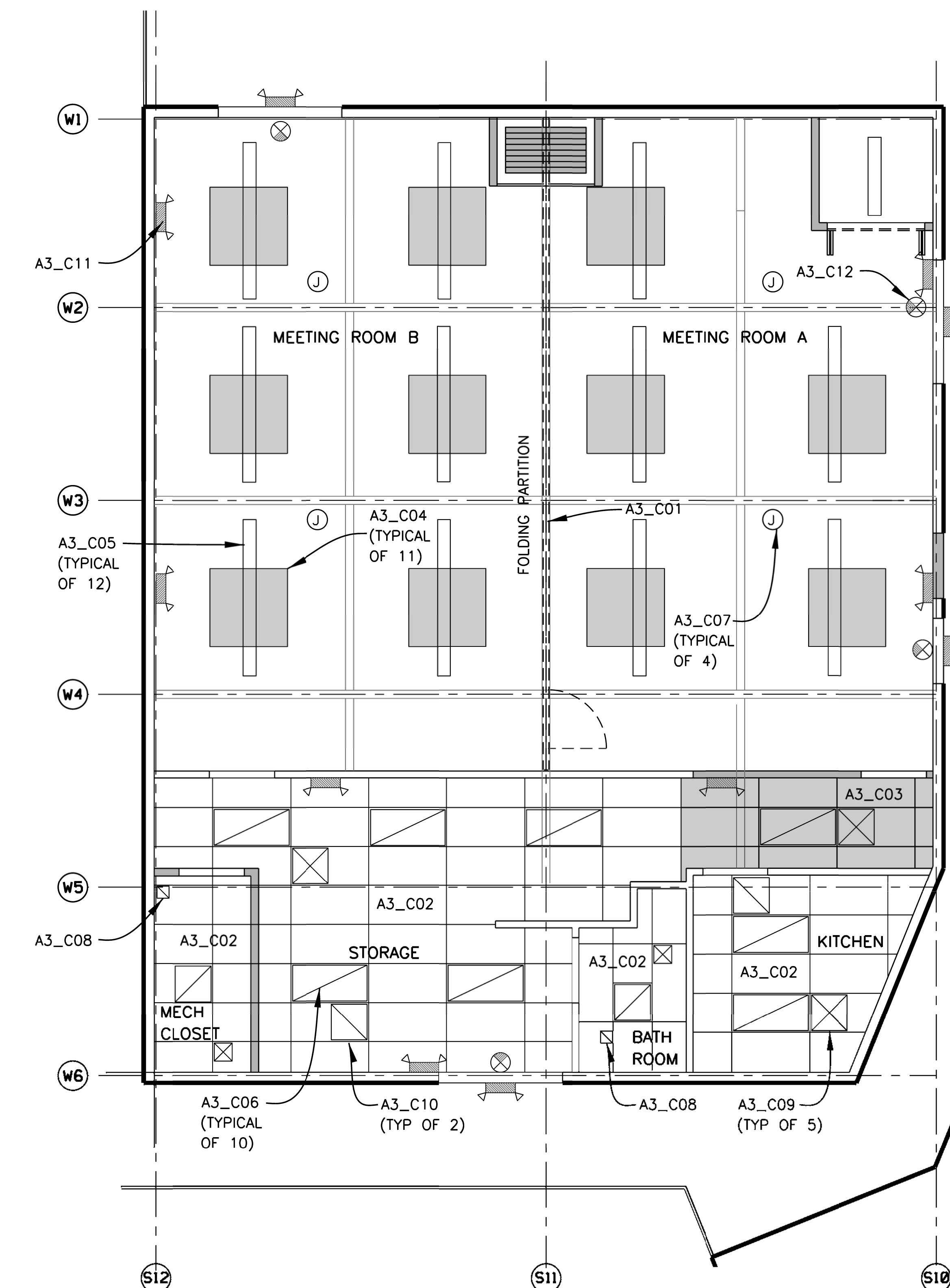
NEW EDUCATION CENTER
MALAQUITE BEACH
DEMO. & CONST. PLANS
PADRE ISLAND NATIONAL SEASHORE



1 CEILING DEMOLITION PLAN
A-3

KEYED DEMOLITION NOTES:

- A3_D01 REMOVE EXISTING LIGHT FIXTURE.
A3_D02 REMOVE LIGHT FIXTURE(S) AND CEILING TILE THIS ROOM. EXISTING GRID TO BE RE-USSED.



2 REFLECTED CEILING PLAN
A-3

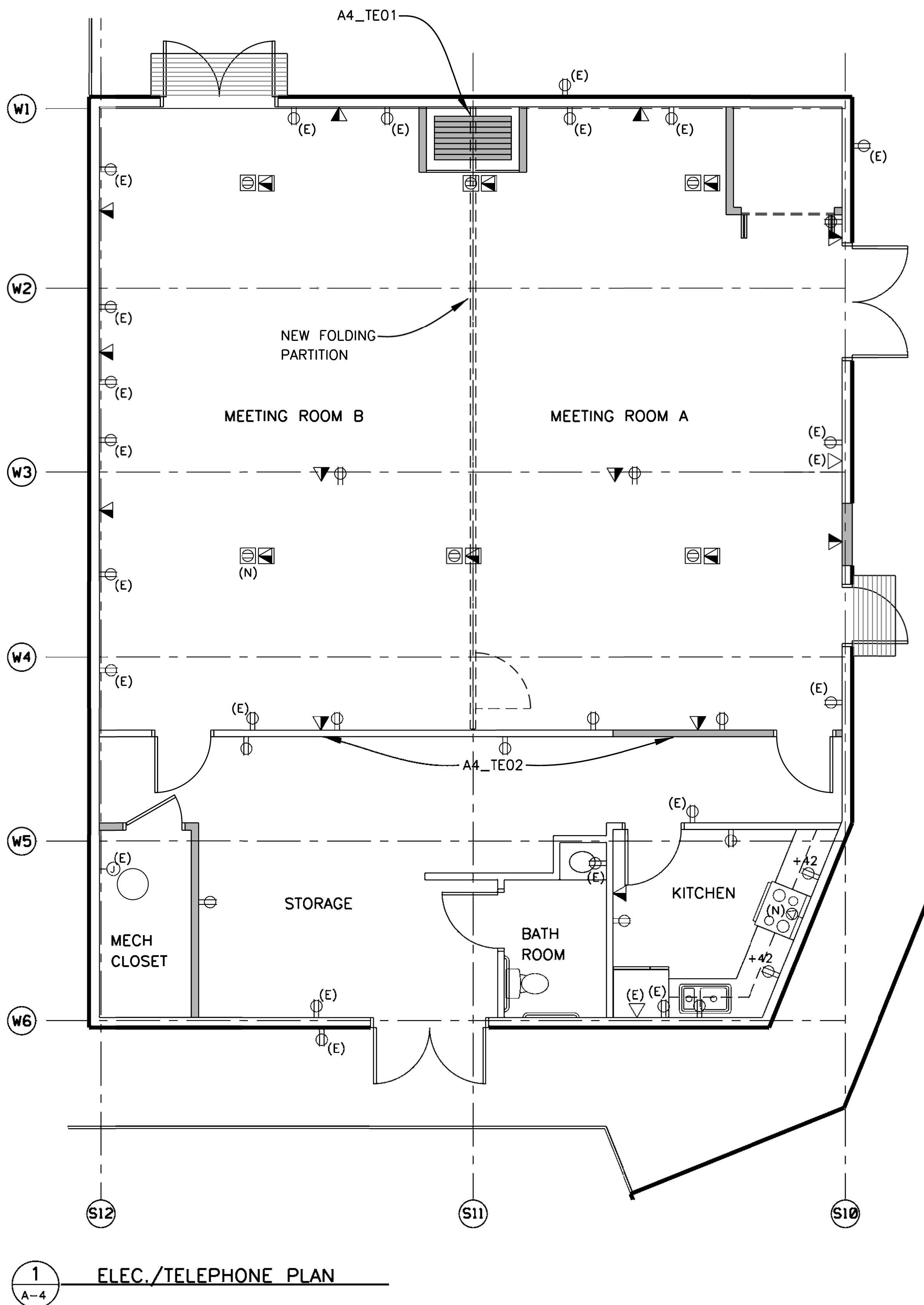
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SCALE OF FEET



| DESIGNED: LLL GADD LLL | SUB SHEET NO. | TITLE OF SHEET | DRAWING NO. 613 125059B |
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| TECH. REVIEW: KCL | | NEW EDUCATION CENTER MALAQUITE BEACH CEILING PLANS | PMIS/PKG NO. 168359 |
| DATE: 05/10/2016 | | | SHEET 4 OF 27 |
| A-3 | | | |

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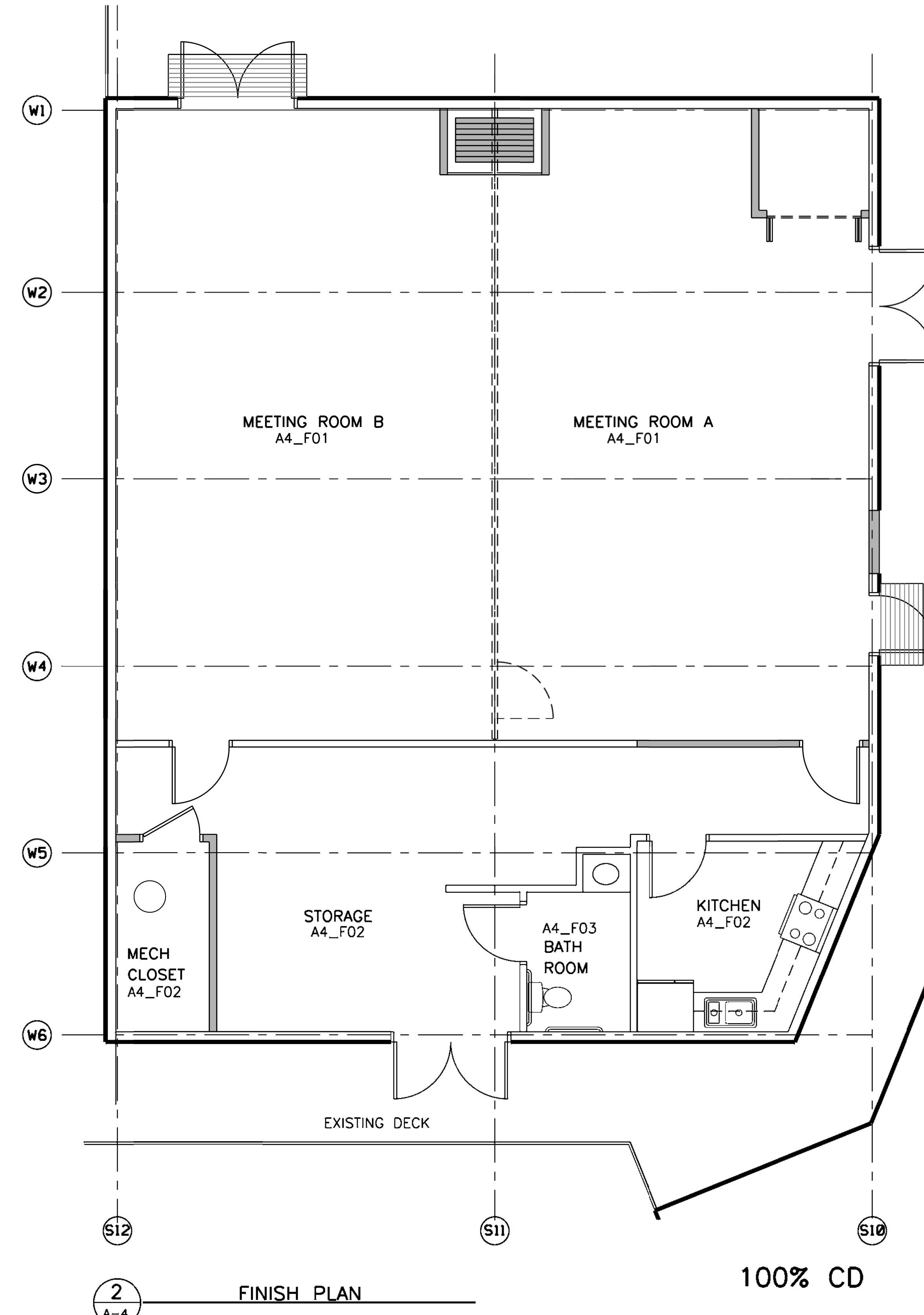


KEYED TELE./ELECT. NOTES:

A4_TE01 REMOVE DUPLEX OUTLET.

A4_TE02 PROVIDE 12"X12" PAINTED ACCESS PANEL.
MOUNT AT 5'-0" A.F.F.

(E) = EXISTING OUTLET

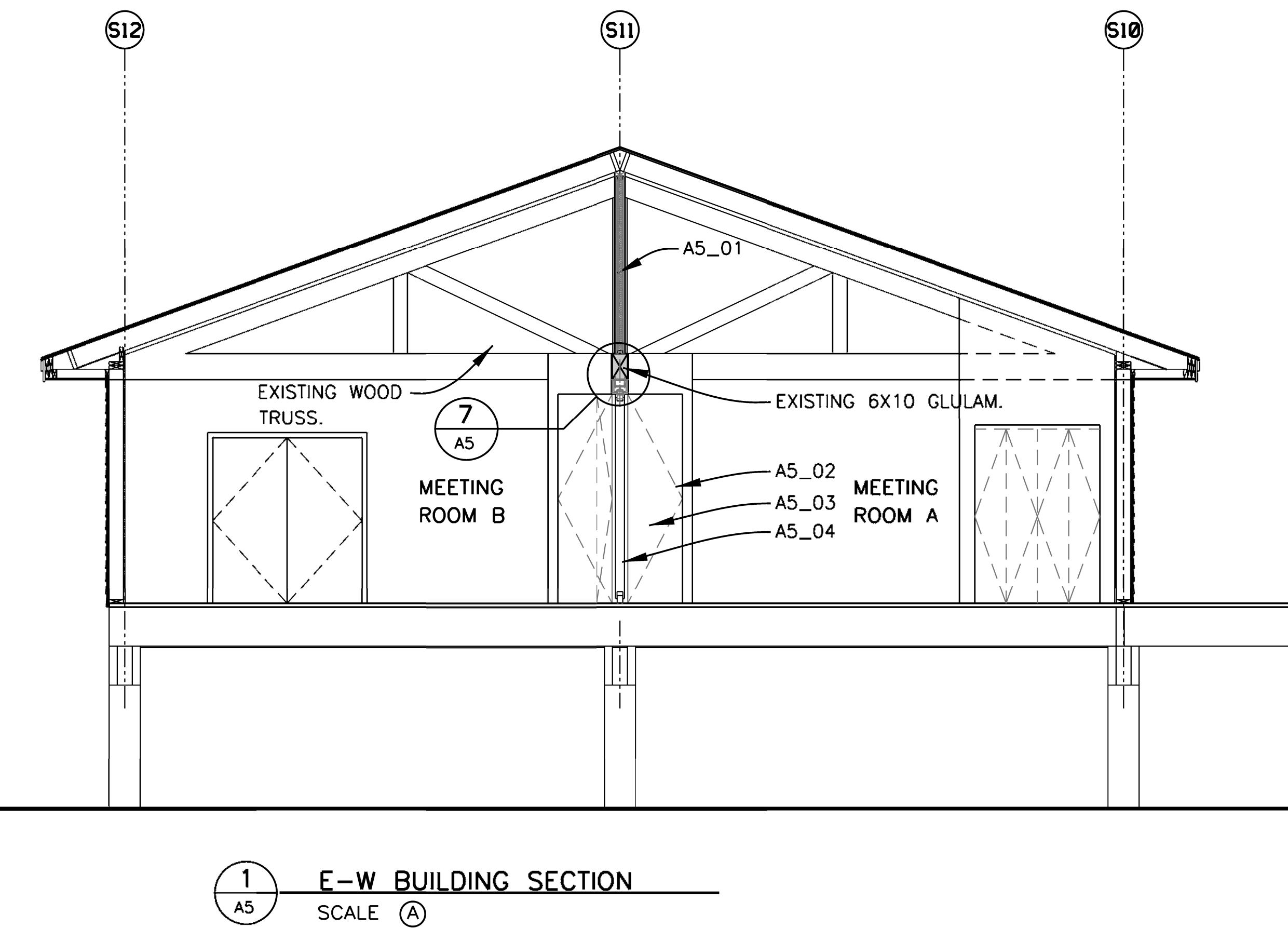


2 FINISH PLAN

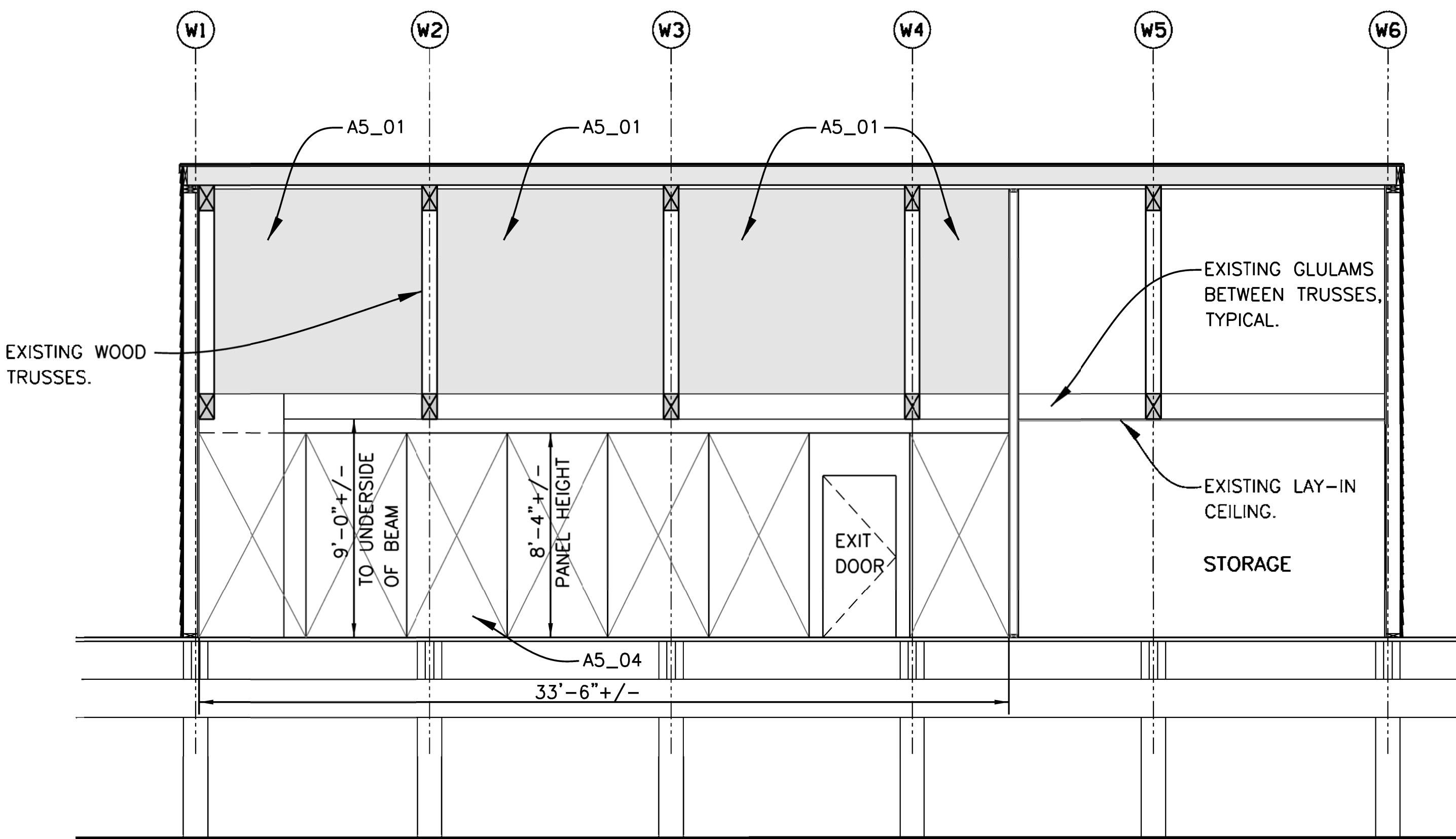
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| | | | |
|---|---------------------------------|---|---|
| DESIGNED: LLL CADD | SUB SHEET NO. <u>A-4</u> | TITLE OF SHEET NEW EDUCATION CENTER MALAQUITE BEACH T/E & FINISH PLANS PADRE ISLAND NATIONAL SEASHORE | DRAWING NO. <u>613</u> <u>125059B</u> |
| TECH. REVIEW: KCL | | | PMIS/PKG NO. <u>168359</u> |
| DATE: <u>05/10/2016</u> | | | SHEET <u>5</u> OF <u>27</u> |

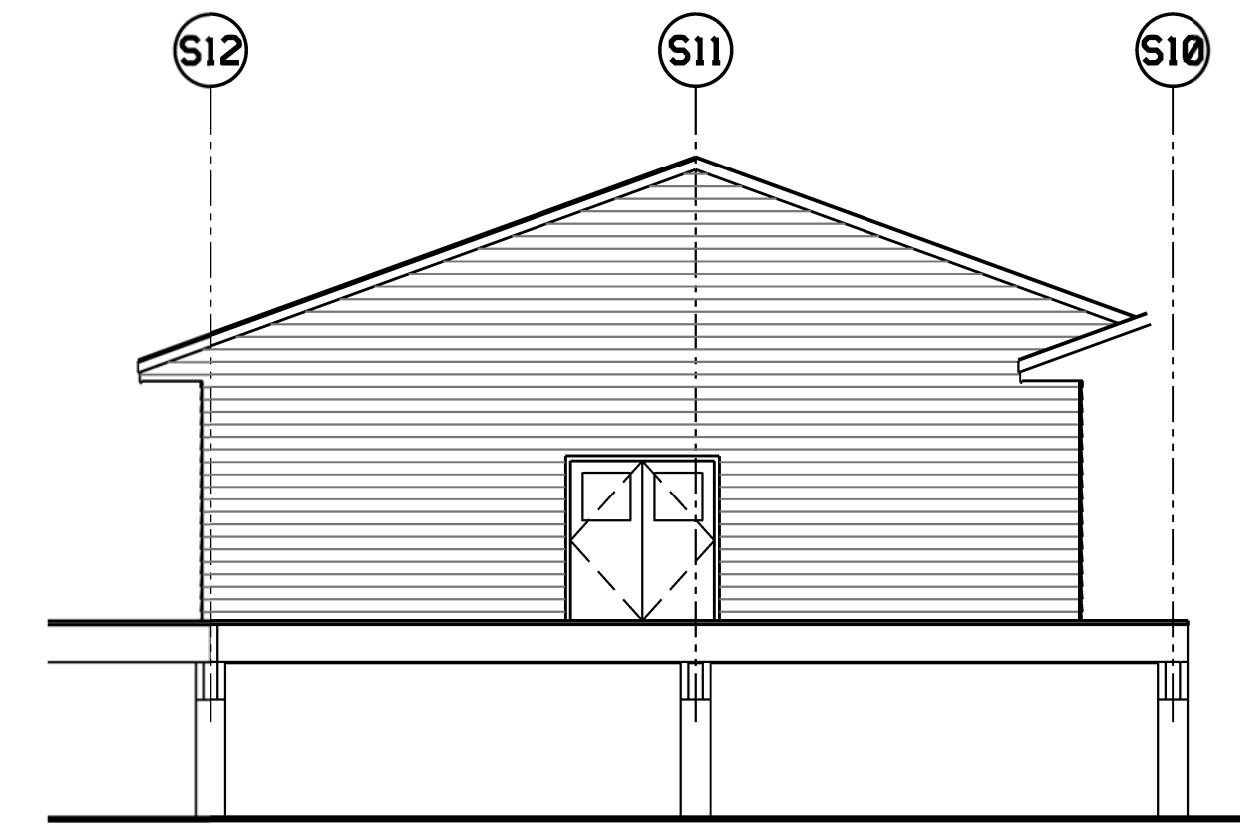


1 E-W BUILDING SECTION
SCALE A

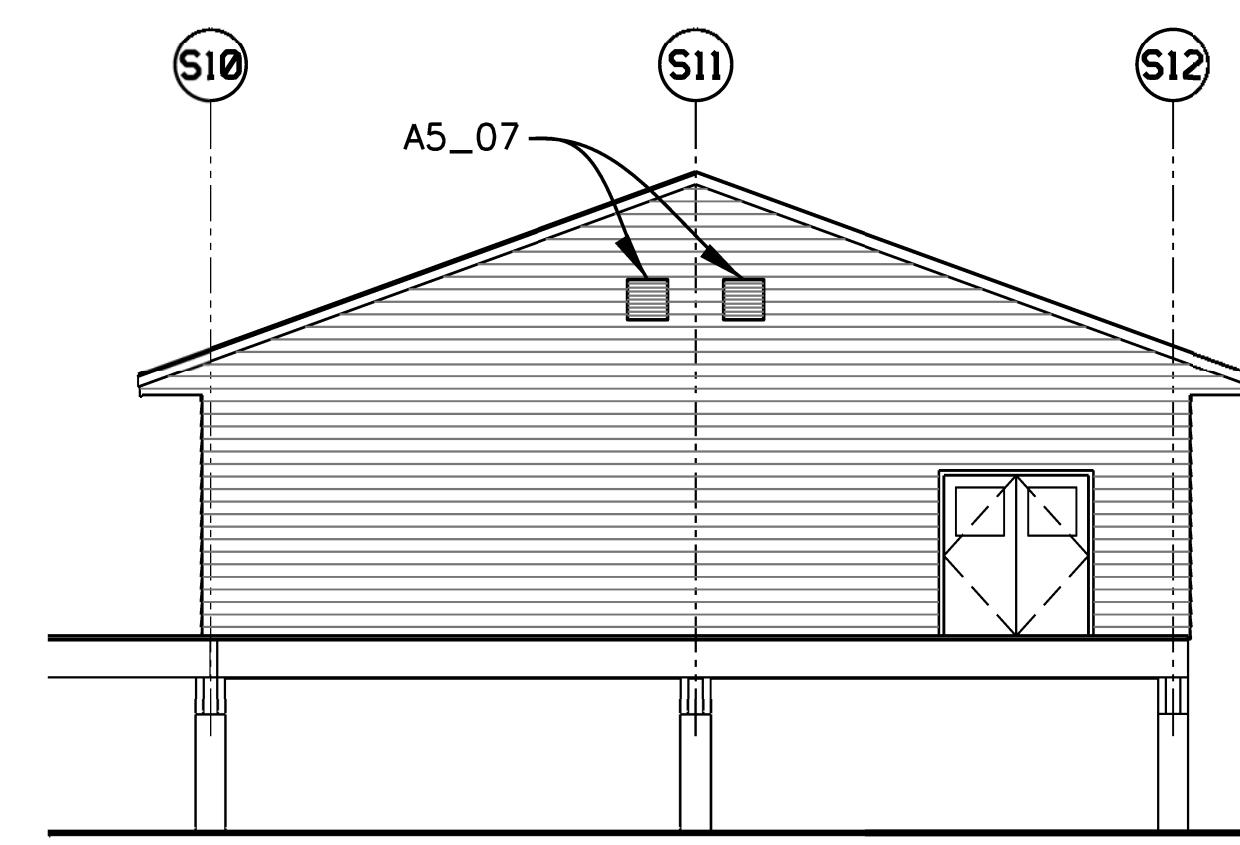


2 N-S BUILDING SECTION
SCALE A

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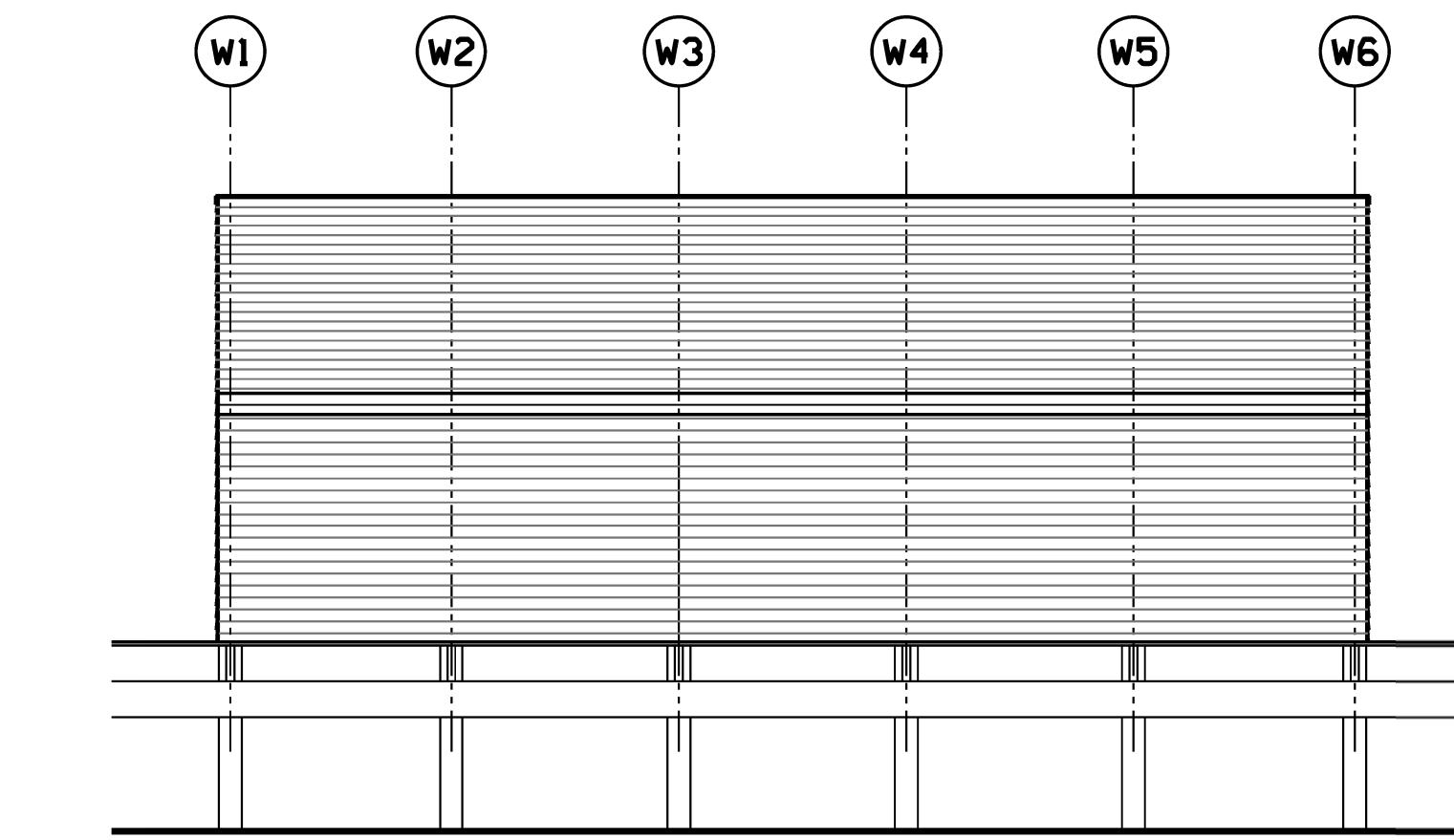
3 SOUTH ELEVATION
SCALE B



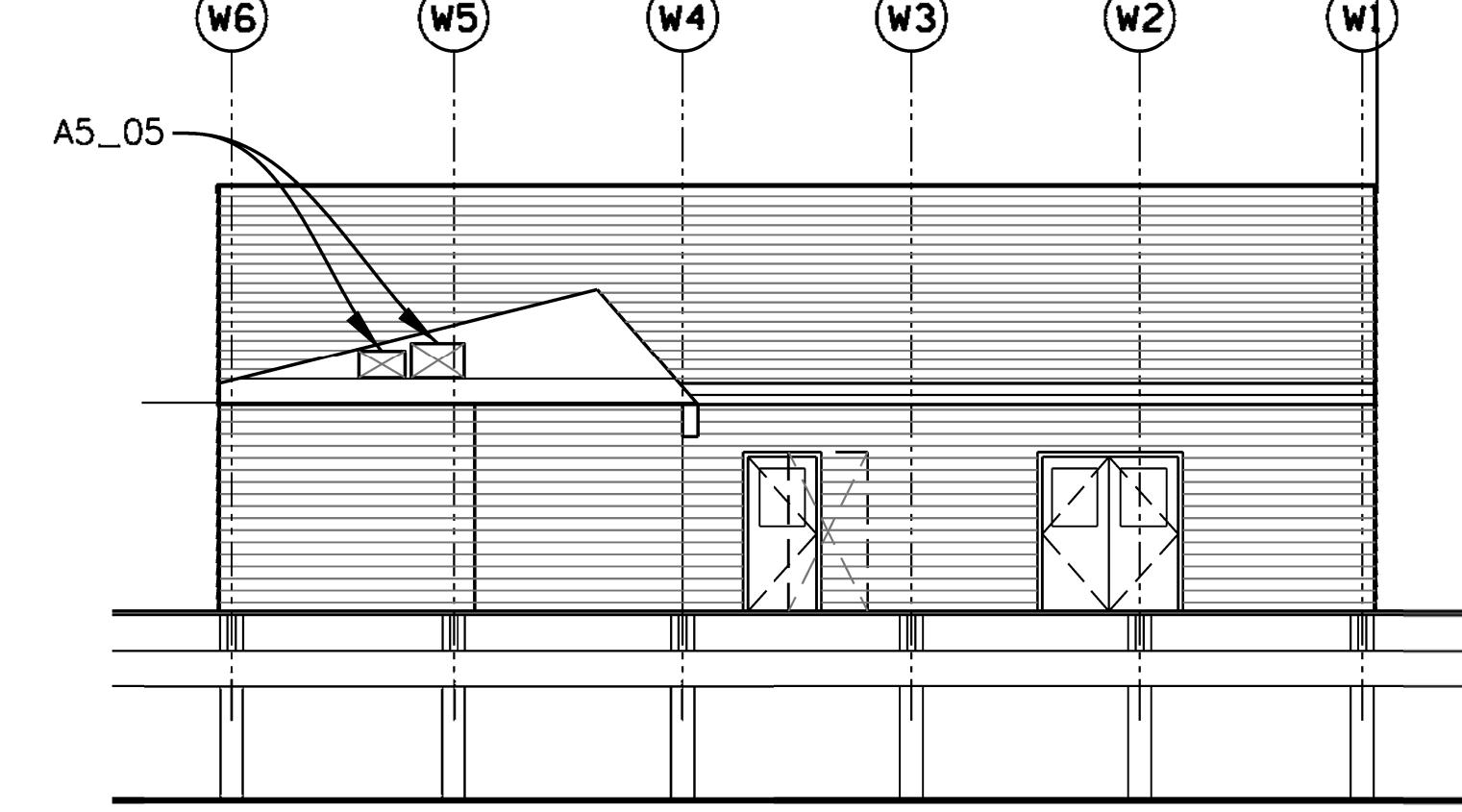
5 NORTH ELEVATION
SCALE B

KEYED NOTES:

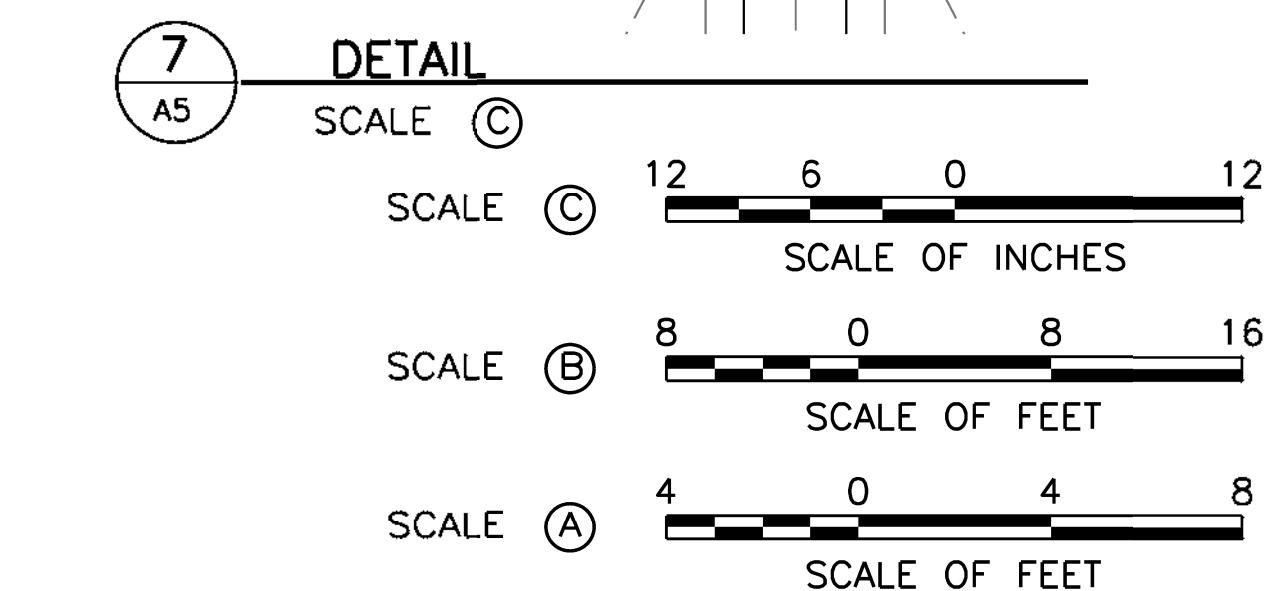
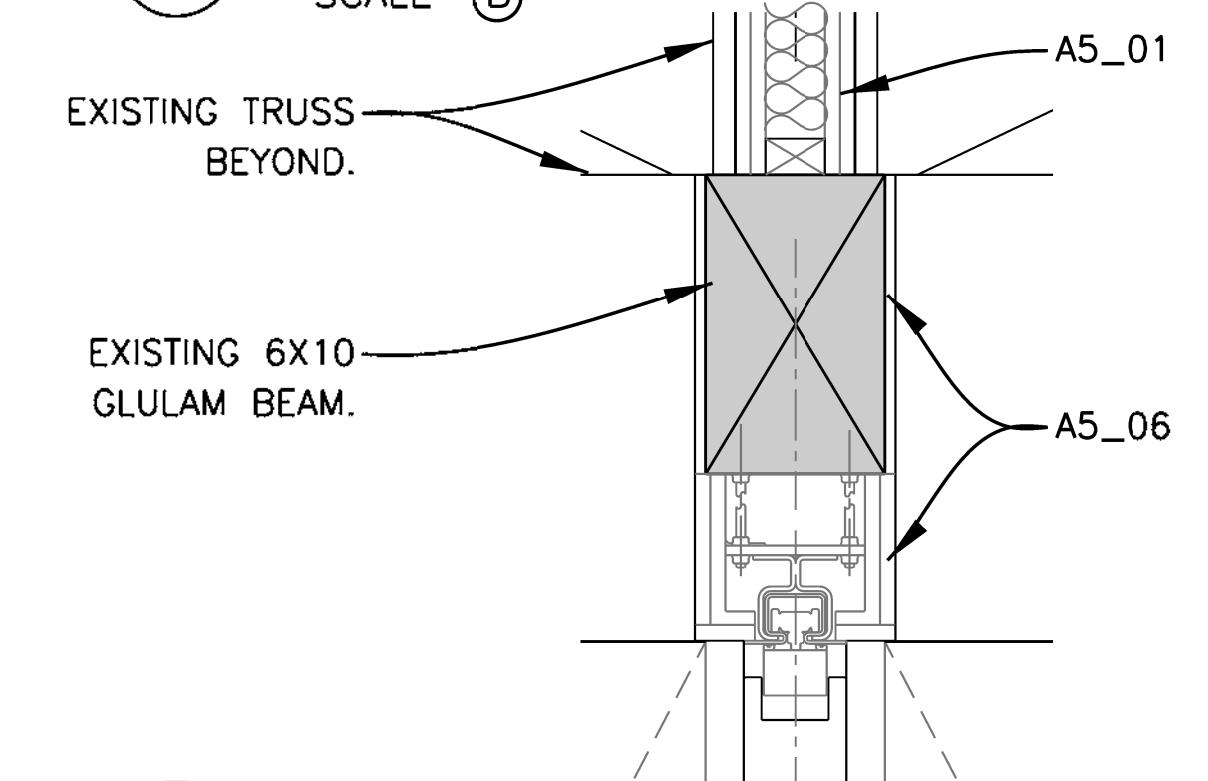
- A5_01 SOUND PARTITION. 2 1/2" WOOD STUDS AT 16" O.C. WITH TWO LAYERS NON-PAPER FACED 5/8" GYPSUM WALLBOARD EACH SIDE AND 2 1/2" SOUND BATTs BETWEEN STUDS. STC 57.
- A5_02 2X4 WOOD STUDS AT 16" O.C. WITH ONE LAYER NON-PAPER FACED 5/8" GYPSUM WALLBOARD EACH SIDE.
- A5_03 1 3/4" THICK PLASTIC LAMINATE POCKET DOORS. OFF SET PIVOTS TOP AND BOTTOM. ROUTED PULLS. PIANO HINGE AT FOLD-BACK DOOR.
- A5_04 PAIRED PANEL FOLDING PARTITION. 9'-0" HIGH WITH NON-RATED EXIT DOOR. STC 54.
- A5_05 MODIFY OPENINGS IN EXISTING WALLS FOR NEW DUCTS. SEAL WALLS TIGHT AROUND NEW WALL PENETRATIONS. REFER TO MECHANICAL DRAWINGS FOR NEW DUCT SIZES.
- A5_06 5/8" NON-PAPER FACED GYPSUM WALLBOARD OVER EXISTING GLULAM. BOX OVER TRACK SUPPORT.
- A5_07 NEW OPENINGS THROUGH EXISTING EXTERIOR WALL FOR NEW VENTS RE: MECHANICAL. SEAL AROUND NEW OPENINGS FOR WATER TIGHT FIT.



4 WEST ELEVATION
SCALE B



6 EAST ELEVATION
SCALE B

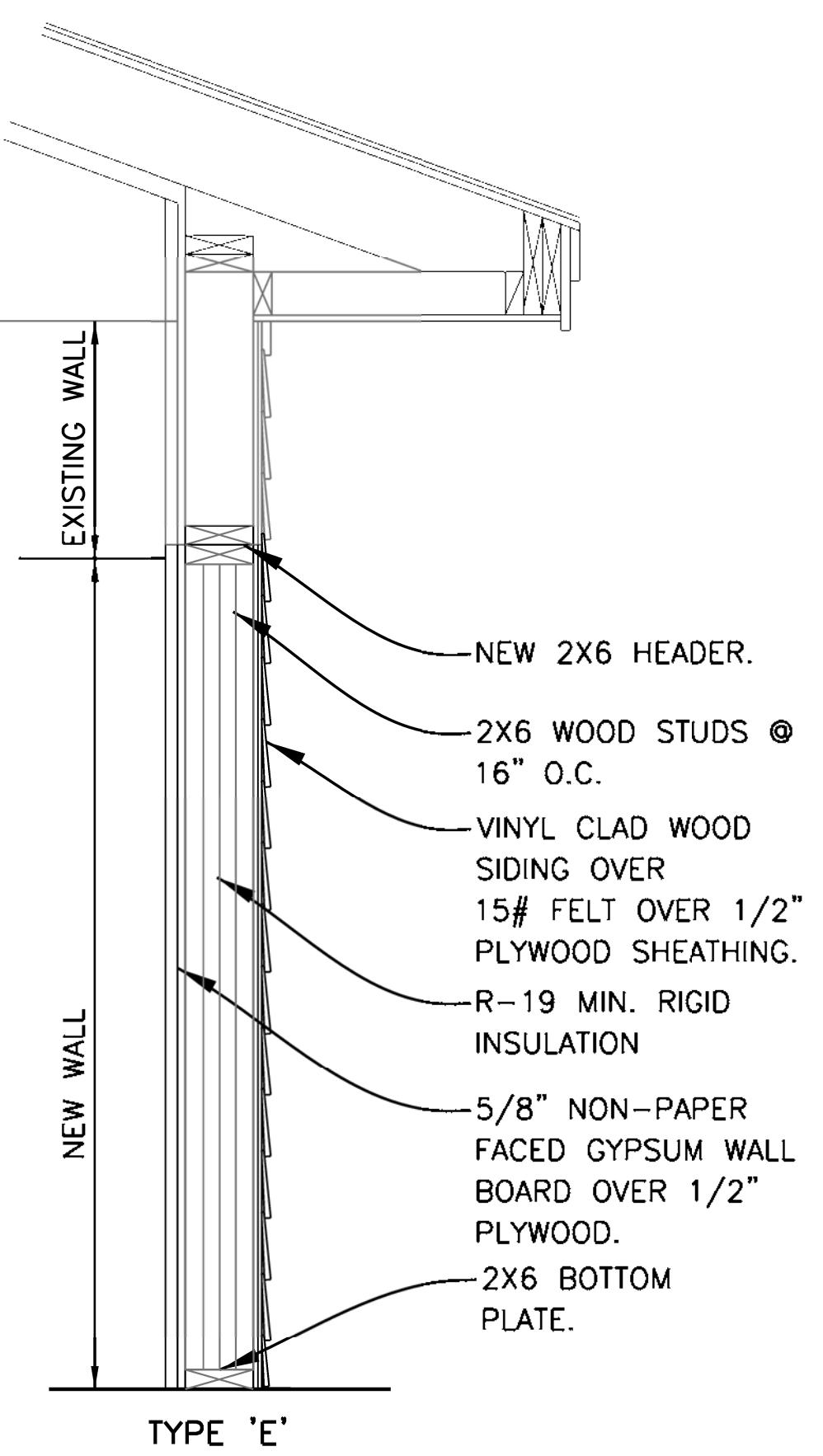
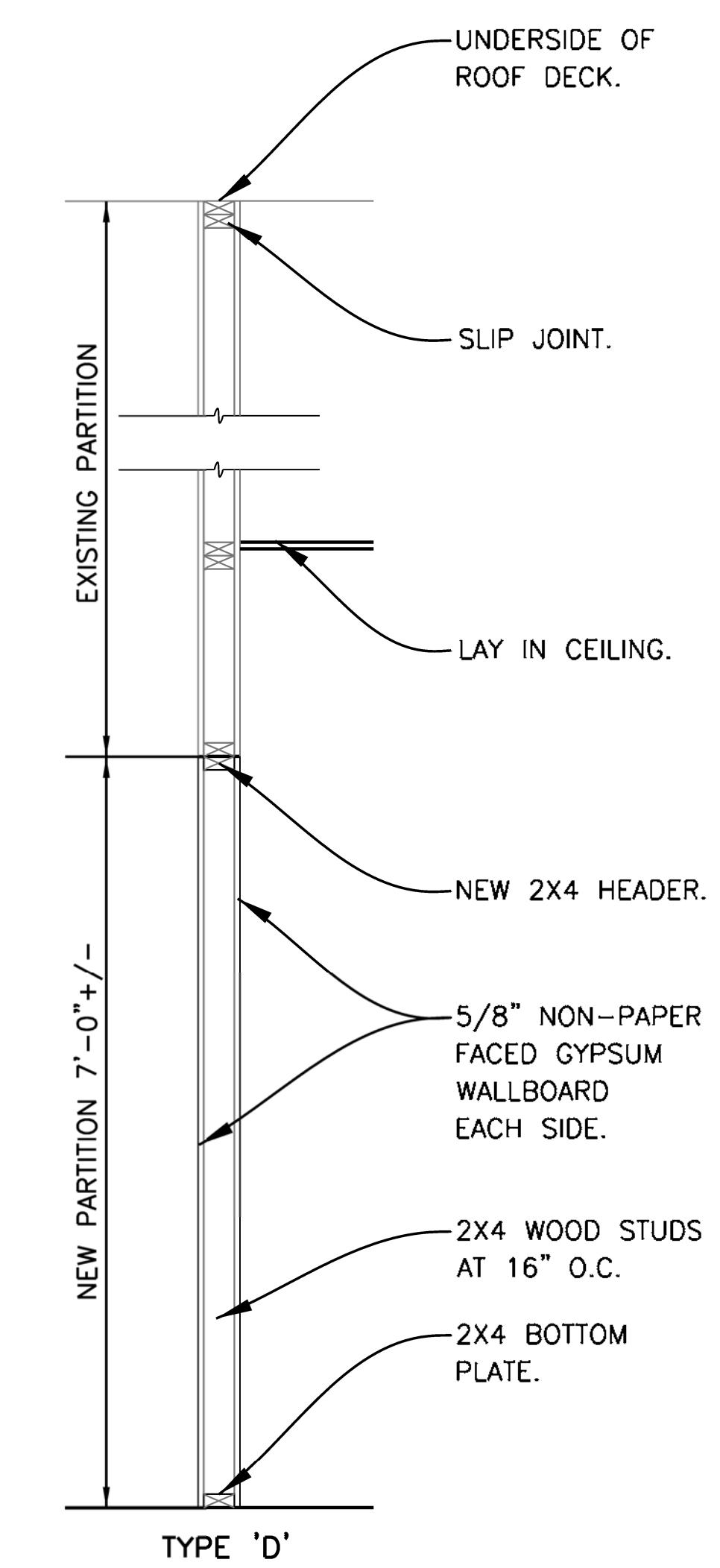
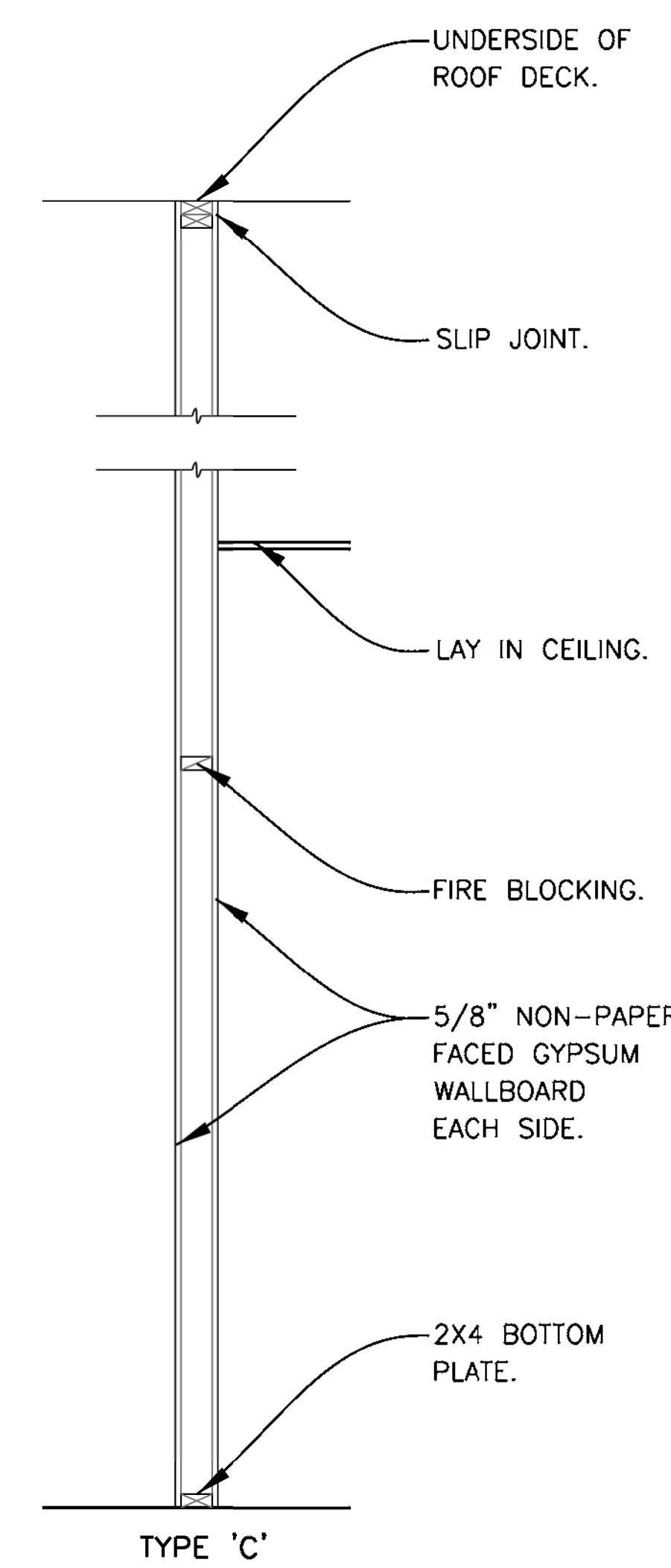
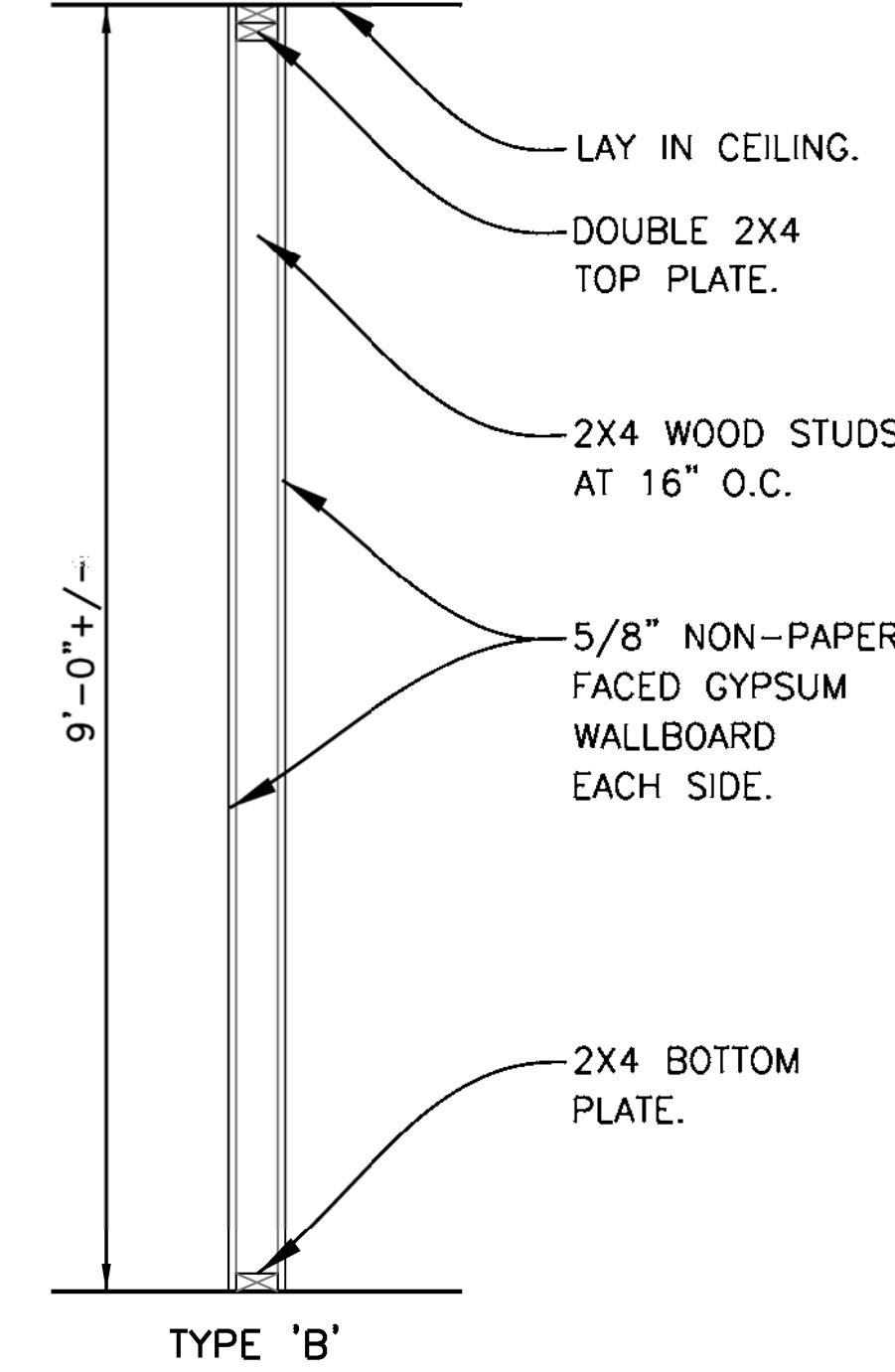
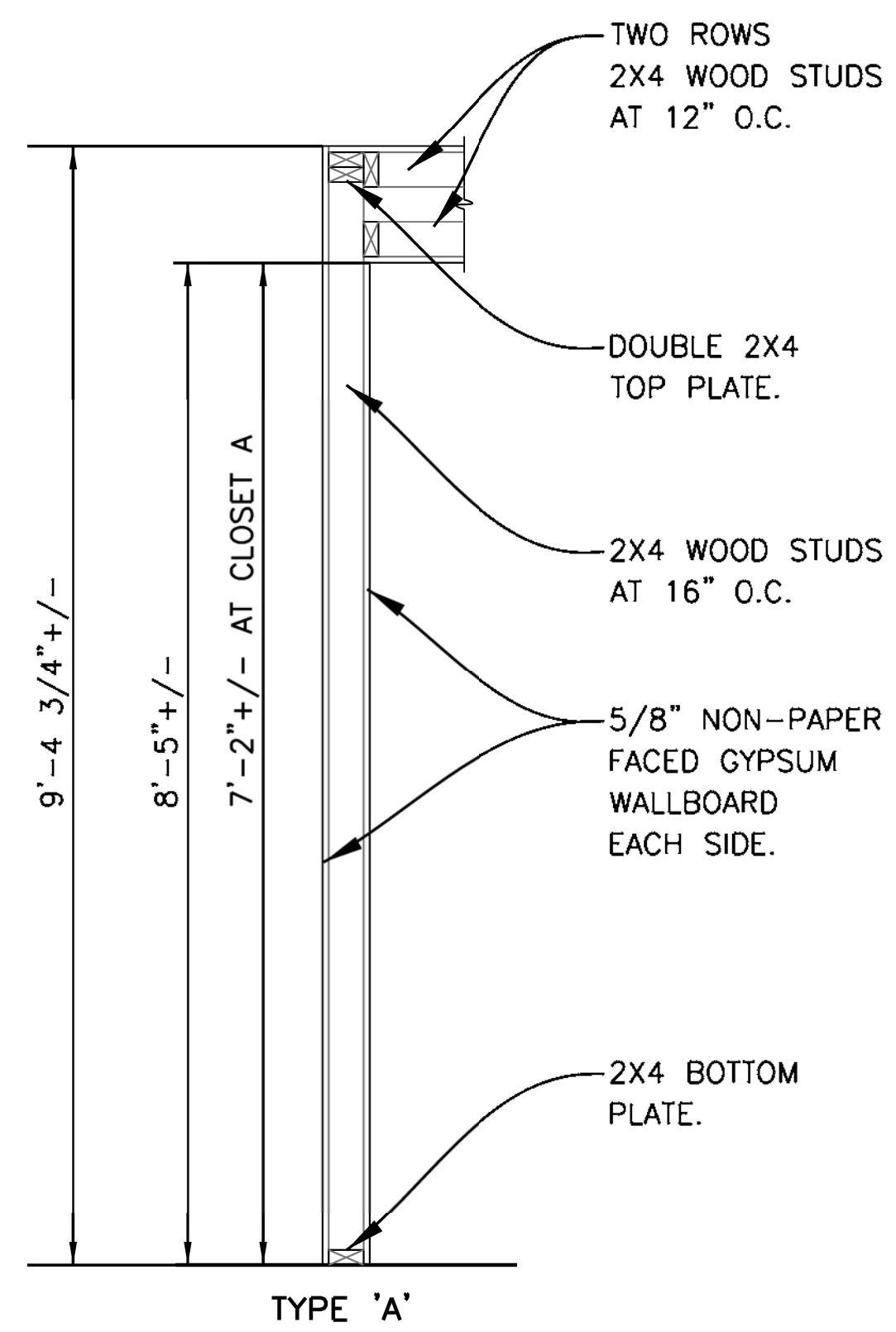


DESIGNED:
LLL
GADD
LLL
TECH. REVIEW:
KCL
DATE:
05/10/2016

SUB SHEET NO.
A-5

TITLE OF SHEET
NEW EDUCATION CENTER
MALAQUITE BEACH
BLDG SECTIONS/ELEVS.
PADRE ISLAND NATIONAL SEASHORE

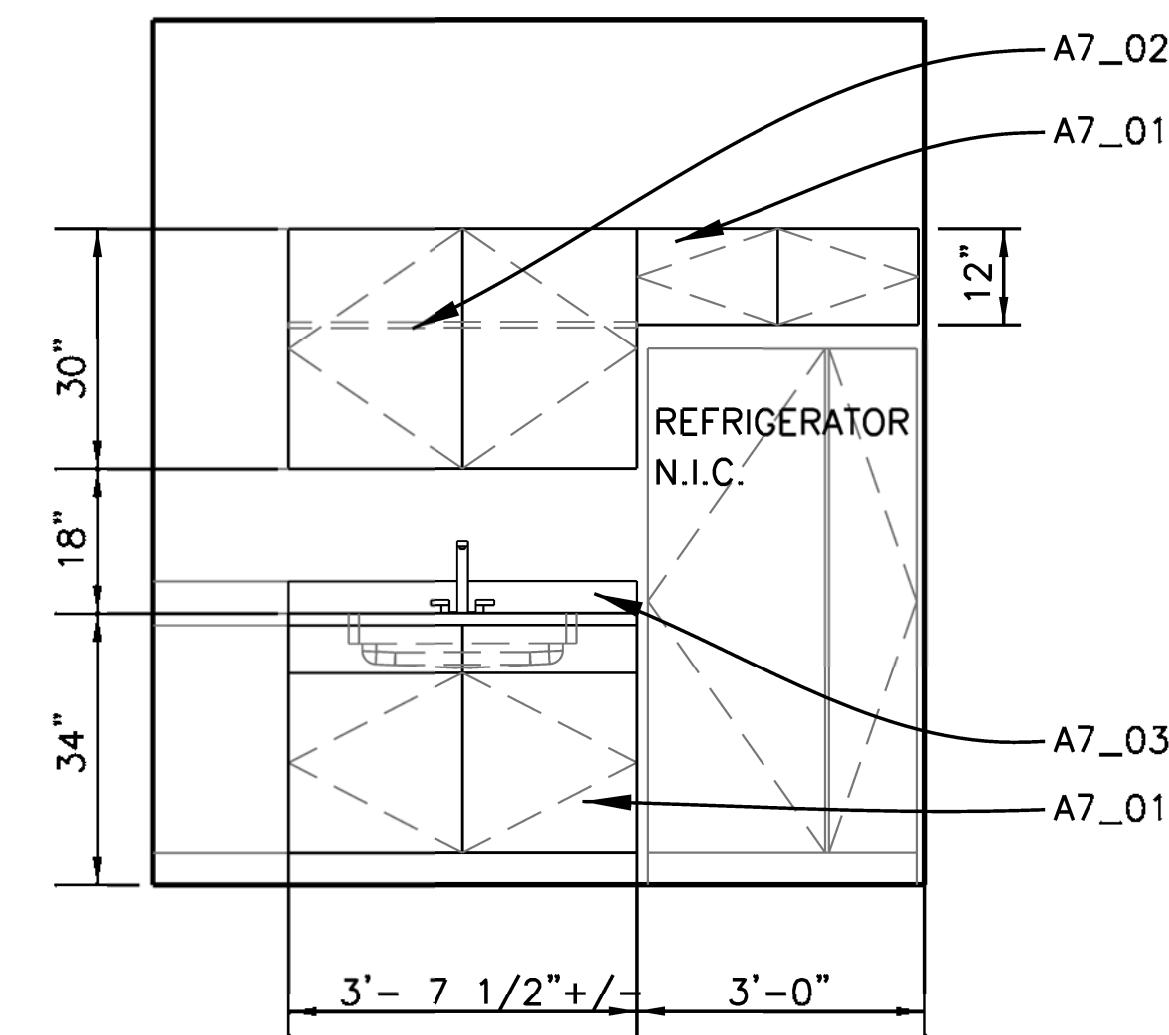
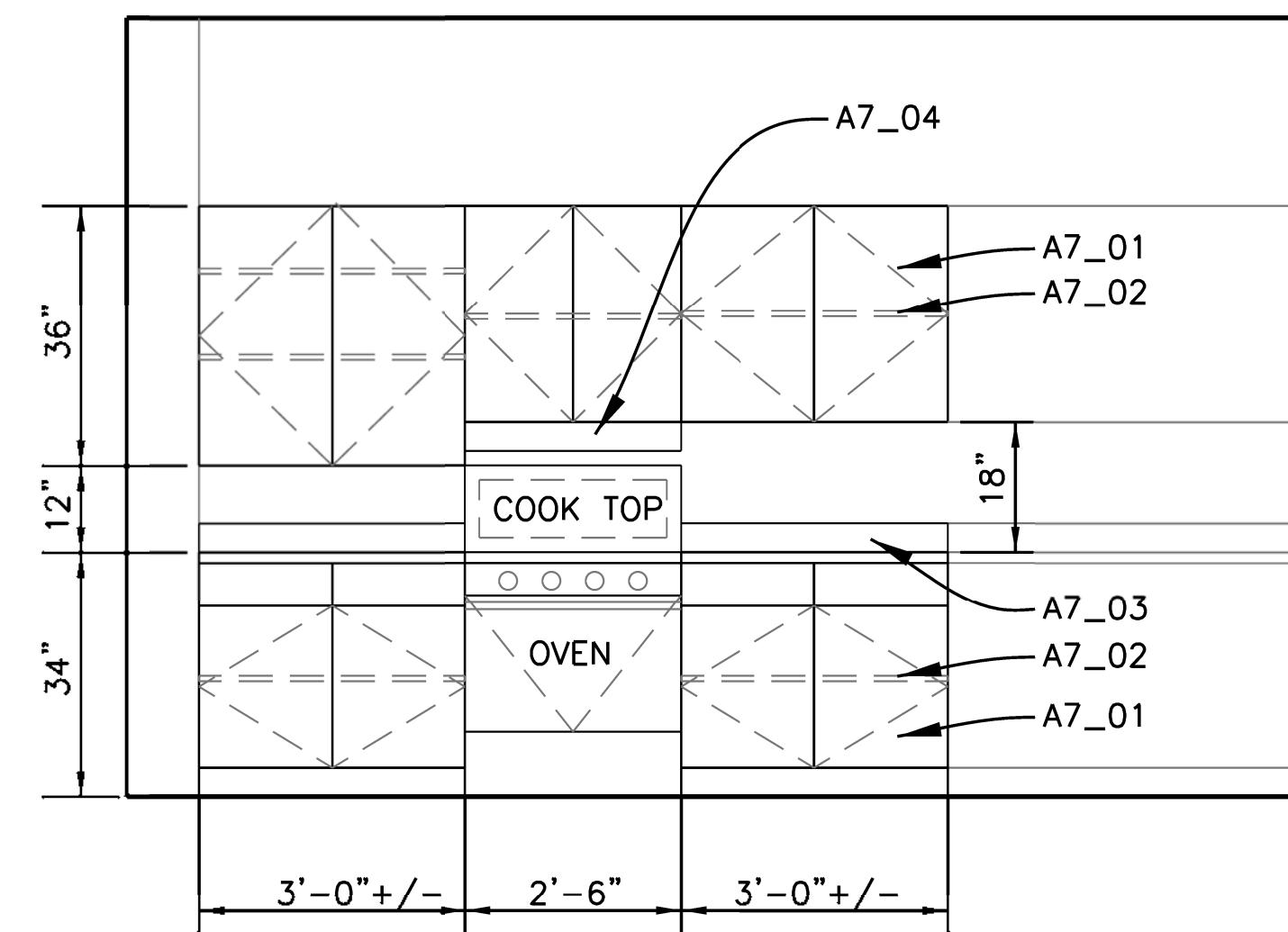
DRAWING NO.
613
125059B
PMIS/PKG NO.
168359
SHEET
6 OF 27



1
A6 WALL TYPES

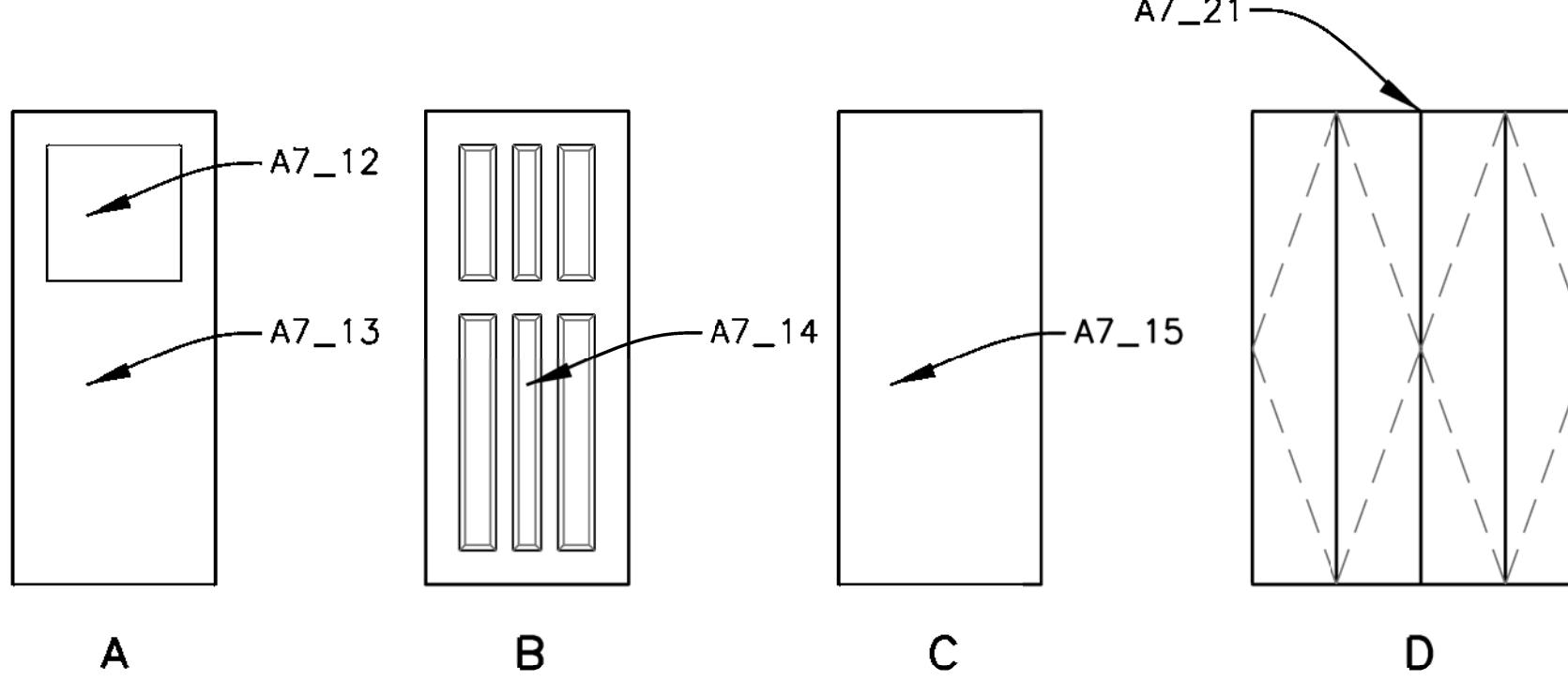
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1 0 1 2 3
SCALE OF FEET



KITCHEN ELEVATION
SCALE A-7

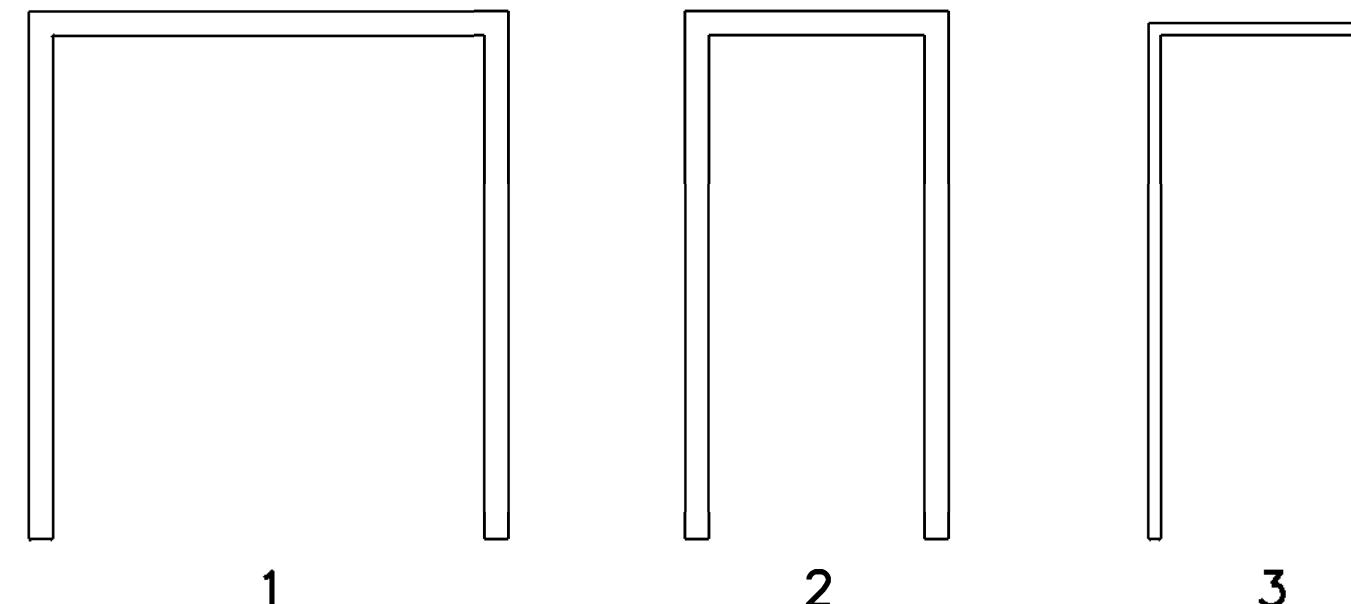
KITCHEN ELEVATION
SCALE A-7



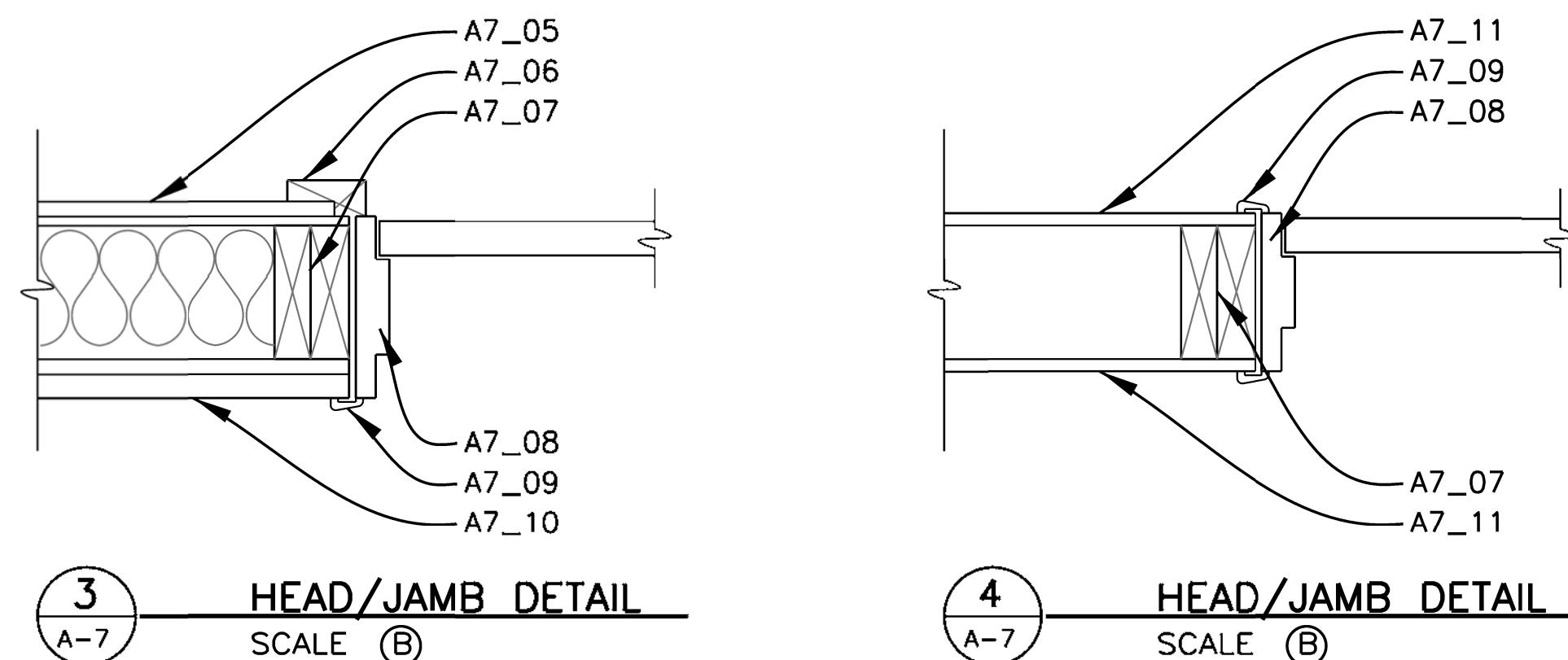
KEYED NOTES

- A7_01 PLASTIC LAMINATE BASE AND UPPER CABINETS. ROUTED PULLS.
- A7_02 ADJUSTABLE PLASTIC LAMINATE SHELVES, TYPICAL.
- A7_03 4" PLASTIC LAMINATE SPLASH.
- A7_04 EXHAUST HOOD.
- A7_05 SHIP LAP SIDING OVER HOUSE WRAP OVER PLYWOOD SHEATHING.
- A7_06 NOTCHED WOOD TRIM. MATCH EXISTING.
- A7_07 DOUBLE WOOD STUDS.
- A7_08 WOOD FRAME.
- A7_09 WOOD CASING.
- A7_10 CEDAR PANELS OVER 5/8" GYPSUM WALLBOARD.
- A7_11 5/8" GYPSUM WALLBOARD.
- A7_12 CLEAR SAFETY GLASS.
- A7_13 INSULATED HOLLOW METAL DOOR.
- A7_14 SOLID CEDAR WOOD DOOR.
- A7_15 FLUSH METAL DOOR.
- A7_16 2X6 DECK PLANKING
- A7_17 DOUBLE GLU-LAM FRAMING.
- A7_18 2X12 WOOD SUPPORT AROUND OPENING.
- A7_19 2X12 WOOD FRAMING.
- A7_20 ACCESSIBLE FIBERGLASS GRATE.
- A7_21 SOLID CORE DOORS, DOOR HARDWARE, WALL STOPS, AND TRACK.

DOOR TYPES



FRAME TYPES

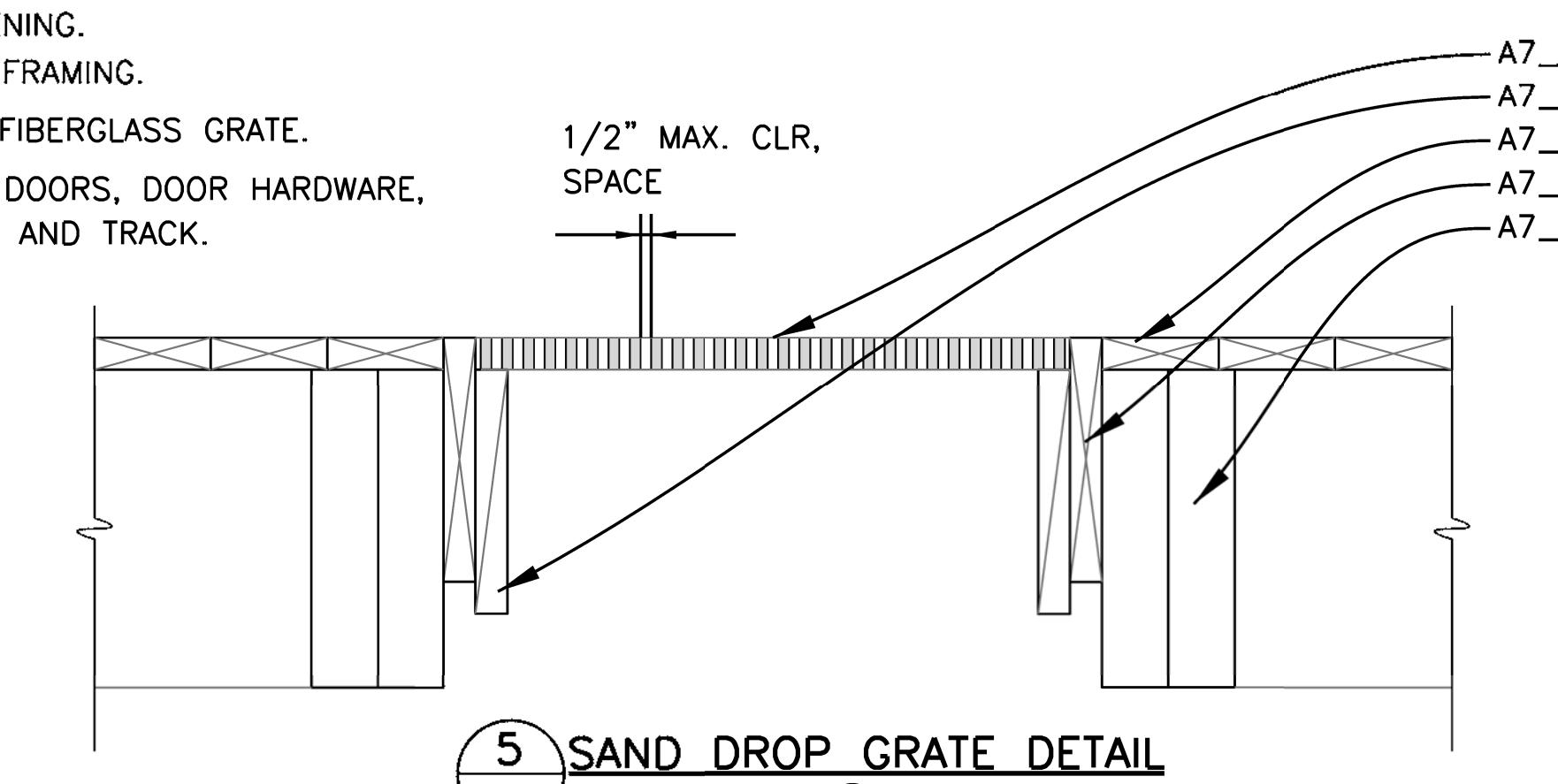


| DOOR SCHEDULE | | | | | | | | | | | |
|---------------|------|-------------------|----------|--------------------|-----------|-----------|-------------|-------------|-------|----------------------------|-----------------------------|
| NUMBER | PAIR | WIDTH FT IN | FT IN | HEIGHT FT IN | THICKNESS | DOOR TYPE | HEAD DETAIL | JAMB DETAIL | FRAME | HARDWARE SET | REMARKS |
| 01 | PR | 3 0 | 7 0 | 1 2" | 1 3/4" | A | 3 A-7 | 3 A-7 | 1 | 1 | |
| 02 | | 3 0 | 7 0 | 1 2" | 1 3/4" | C | 3 A-7 | 3 A-7 | 2 | 2 | |
| 03 | | 3 0 | 7 0 | 1 2" | 1 3/4" | B | 4 A-7 | 4 A-7 | 3 | 3 | |
| 04 | | 3 0 | 7 0 | 1 2" | 1 3/4" | B | 4 A-7 | 4 A-7 | 3 | 3 | |
| 05 | | 3 0 | 7 0 | 1 2" | 1 3/4" | A | N/A | N/A | 3 | 3 | NEW DOOR IN EXISTING FRAME. |
| 06 | | 3 0 | 7 0 | 1 2" | 1 3/4" | D | N/A | N/A | N/A | BY MFR. & BI-FOLD HARDWARE | NEW BI-FOLD DOORS |

| HARDWARE SETS | | | | | | | | | | |
|---------------|------------|----------------------|----------|--------------|--|--|--|--|--|--|
| NUMBER 1 | 3 PAIR | BUTTS 4-1/2 x 4-1/2 | BB191 | STANLEY | | | | | | |
| | 2 EA | PANIC DEVICE | 99NL | VON DUPRIN | | | | | | |
| | 2 EA | CLOSER | #281XP10 | SARGENT | | | | | | |
| | 2 EA | DOOR BOTTOM | 216AV | PEMKO | | | | | | |
| | 1 EA | THRESHOLD | 270A | PEMKO | | | | | | |
| | | WEATHERSTRIPPING | 319AN | PEMKO | | | | | | |
| NUMBER 2 | 1 1/2 PAIR | BUTTS 4-1/2 x 4-1/2 | BB191 | STANLEY | | | | | | |
| | 1 EA | PANIC DEVICE | 99NL | VON DUPRIN | | | | | | |
| | 1 EA | CLOSER | #281XP10 | SARGENT | | | | | | |
| | 1 EA | DOOR BOTTOM | 216AV | PEMKO | | | | | | |
| | 1 EA | THRESHOLD | 270A | PEMKO | | | | | | |
| | | WEATHERSTRIPPING | 319AN | PEMKO | | | | | | |
| NUMBER 3 | 1 1/2 PAIR | BUTTS 4-1/2 x 4-1/2 | BB191 | STANLEY | | | | | | |
| | 1 EA | LOCKSET (STORE ROOM) | 9K | BEST | | | | | | |
| | 1 EA | STOP | 430 | QUALITY DOOR | | | | | | |
| | 3 EA | SILENCERS | 308d | HACER | | | | | | |

FLOOR FINISH ALTERNATES:
ALT 2 REFINISH EXISTING WOOD FLOORING

| ROOM NAME | FLOOR | | | WALLS | | | | CEILING | | | REMARKS |
|-----------------|-----------|---------------|--------|-------------------|-------------------|-------------------|-------------------|-----------------|-------------|-----------|---------------------------------------|
| | MAT'L | FINISH | BASE | NORTH | SOUTH | EAST | WEST | MAT'L | FINISH | HEIGHT | |
| MEETING RM A | WOOD DECK | CARPET ALT #2 | RUBBER | PAINT | PAINT | PAINT | | WOOD DECK ABOVE | PAINT | VARIES | ACOUSTICAL PANELS |
| MEETING RM B | WOOD DECK | CARPET ALT #2 | RUBBER | PAINT | PAINT | | | WOOD DECK ABOVE | PAINT | VARIES | ACOUSTICAL PANELS |
| KITCHEN | WOOD DECK | Sheet Vinyl | Rubber | Paint | Paint | Paint | Paint | Lay-in | Acous. Tile | 9'-0" +/- | |
| BATH ROOM | WOOD DECK | Sheet Vinyl | Rubber | Wains-Cot & Paint | Wains-Cot & Paint | Wains-Cot & Paint | Wains-Cot & Paint | Lay-in | Acous. Tile | 9'-0" +/- | PVC WAINSCOT FROM FLOOR TO 48" A.F.F. |
| STORAGE | WOOD DECK | Seal | Rubber | Paint | Paint | Paint | Paint | Lay-in | Acous. Tile | 9'-0" +/- | |
| FIRE PROTECTION | WOOD DECK | Seal | None | Paint | Paint | Paint | Paint | None | None | | |
| CLOSET A | WOOD DECK | Carpet | Rubber | Paint | Paint | Paint | Paint | None | None | | |



100% CD

SCALE B 12 6 0 12
SCALE OF INCHES

SCALE A 2 0 2 4
SCALE OF FEET

DESIGNED:
LLL
GADD
LLL
TECH. REVIEW:
KCL
DATE:
05/10/2016

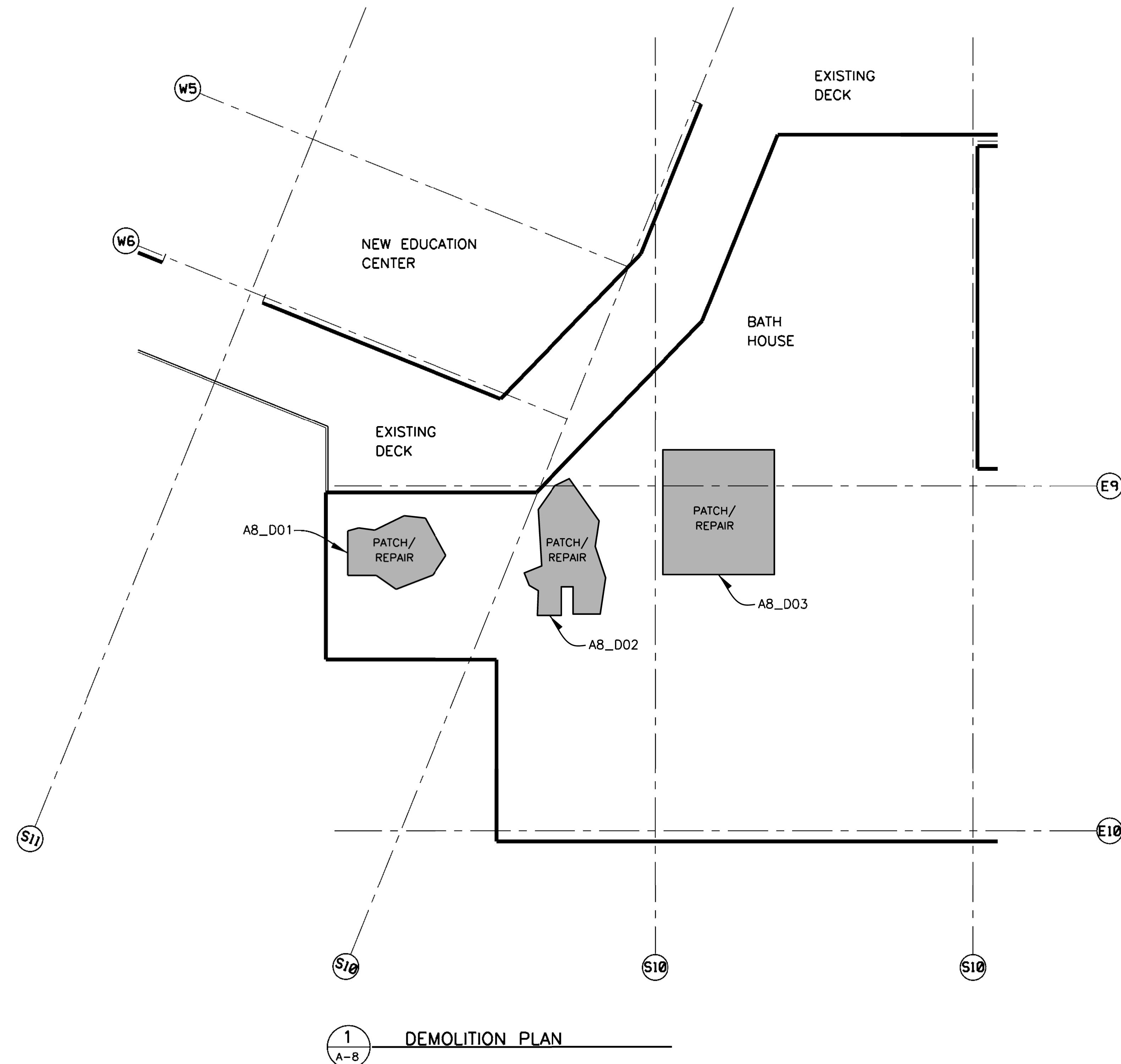
SUB SHEET NO.
A-7

TITLE OF SHEET
**NEW EDUCATION CENTER
MALAQUITE BEACH
ELEVATIONS & DETAILS**

DRAWING NO.
**613
125059B**

PMIS/PKG NO.
168359

SHEET
8 OF 27



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KEYED DEMOLITION NOTES:

- A8_D01 PATCH/REPAIR WOOD BOARD DECK WHERE EXISTING EQUIPMENT IS REMOVED.
- A8_D02 REMOVE EXISTING CONCRETE PAD. PATCH/ REPAIR WOOD BOARD DECK AT SYSTEM REMOVAL.
- A8_D03 PATCH/REPAIR WOOD BOARD DECK AT SYSTEM REMOVAL.

100% CD

2 0 2 4
SCALE OF FEET



| DESIGNED: LLL CADD LLL | SUB SHEET NO. 613 125059B | TITLE OF SHEET NEW EDUCATION CENTER MALAQUITE BEACH ENLARGED PLAN PADRE ISLAND NATIONAL SEASHORE | DRAWING NO. 613 125059B |
|---|---------------------------------|---|--|
| TECH. REVIEW: KCL DATE: 05/10/2016 | A-8 | | PMIS/PKG NO. 168359 SHEET 9 OF 27 |

STRUCTURAL GENERAL NOTES

DESIGN LOADS: 2015 INTERNATIONAL BUILDING CODE, ASCE 7-10
RISK CATEGORY II STANDARD

ROOFS:

| | |
|----------------|-----------------|
| ROOF DEAD LOAD | 15 PSF |
| ROOF LIVE LOAD | 20 PSF, 300 LBS |

FLOOR LIVE LOADS:

| | UNIFORMLY OCCUPANCY OR USE DISTRIBUTED (PSF) | CENTRATED (LBS) REDUCTION | LIVE LOAD REDUCTION |
|---------------------|--|------------------------------|------------------------|
| BUILDING #1 | 100 | N/A | NO |
| MOVEABLE PARTITIONS | 9.5 | N/A | NO |
| DECK | 100 | N/A | NO |

WIND:

| | |
|---|---------|
| ULTIMATE DESIGN WIND SPEED, Vult, (3-SECOND GUST) | 149 MPH |
| NOMINAL DESIGN WIND SPEED, Vasd, (3-SECOND GUST) | 115 MPH |
| INTERNAL PRESSURE COEFFICIENT | 0.18 |

WIND EXPOSURE

D

COMPONENTS AND CLADDING ULTIMATE DESIGN WIND PRESSURES

| | | | |
|--------|--------------------------|---------|---------|
| WALLS: | WITHIN 4 FEET OF CORNERS | +60 PSF | -80 PSF |
| | AWAY FROM CORNERS | +60 PSF | -65 PSF |

ROOFS:

| | | |
|---|---------|---------|
| WITHIN 4 FEET OF CORNERS, EDGES & RIDGES | +35 PSF | -96 PSF |
| AWAY FROM EDGES | +35 PSF | -55 PSF |

PRESSURES MAY BE REDUCED FOR EFFECTIVE WIND AREAS LARGER THAN 10 SQUARE FEET, BUT NOT BELOW 16 PSF (ULTIMATE).

SEISMIC:

| | | | |
|---|----|--------|------------|
| SPECTRAL RESPONSE ACCELERATION PARAMETERS | | | |
| SHORT PERIOD | SS | 0.058G | SDS 0.061G |
| ONE SECOND | S1 | 0.019G | SD1 0.031G |
| SOILS SITE CLASS | | | D |
| SEISMIC DESIGN CATEGORY | | | A |

BASIC SEISMIC-FORCE-RESISTING SYSTEM(S)

| | |
|---|--------------------------|
| LIGHT FRAMED WOOD SHEAR WALLS | |
| DESIGN BASE SHEAR(S) | 0.3 KIPS |
| SEISMIC RESPONSE COEFFICIENT(S), CS | 0.01 |
| RESPONSE MODIFICATION COEFFICIENT(S), R | 6.5 |
| ANALYSIS PROCEDURE | EQUIVALENT LATERAL FORCE |

STRUCTURAL WOOD FRAMING:

IN-GRADE BASE VALUES HAVE BEEN USED FOR DESIGN.

2X FRAMING SHALL BE SOUTHERN YELLOW PINE NO. 1 AND BETTER UNLESS NOTED. TOP AND BOTTOM PLATES SHALL BE SOUTHERN YELLOW PINE NO. 1 AND BETTER.

WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED SOUTHERN YELLOW PINE.

PLYWOOD AND ORIENTED STRAND BOARD (OSB) FLOOR AND ROOF SHEATHING SHALL BE APA GRADED WITH PANEL IDENTIFICATION INDEX, THICKNESS, BACK UP BLOCKING AND NAILING AS NOTED ON THE STRUCTURAL DRAWINGS.

EXCEPT AS NOTED OTHERWISE, MINIMUM NAILING SHALL BE PROVIDED AS SPECIFIED IN IBC TABLE 2304.9.1 "FASTENING SCHEDULE."

METAL FRAMING ANCHORS SHOWN OR REQUIRED SHALL BE STAINLESS STEEL SIMPSON STRONG-TIE OR EQUAL CODE APPROVED CONNECTORS AND INSTALLED WITH THE NUMBER AND TYPE OF NAILS RECOMMENDED BY THE MANUFACTURER TO DEVELOP THE RATED CAPACITY. OTHER MANUFACTURERS MAY BE SUBSTITUTED UPON APPROVAL BY THE CONTRACTING OFFICER. SUBSTITUTION REQUESTS MUST INCLUDE DATA SHOWING CAPACITY GREATER THAN OR EQUAL THAN THAT OF THE NOTED HANGER IN THE SAME APPLICATION. CORROSION PROTECTION AND APPEARANCE MUST BE APPROVED BY THE CONTRACTING OFFICER. NOTE THAT HEAVY-DUTY HANGERS AND SKEWED HANGERS MAY NOT BE STOCKED LOCALLY AND REQUIRE SPECIAL ORDER FROM THE FACTORY.

STRUCTURAL STEEL:

STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" (AISC 360) AND THE "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" (AISC 303) BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).

ROLLED SHAPES, INCLUDING PLATES, CHANNELS, WTS, AND ANGLES SHALL CONFORM TO ASTM A36-04.

EXCEPT AS NOTED, FRAMED BEAM CONNECTIONS SHALL BE BEARING-TYPE WITH 3/4" DIAMETER, SNUG TIGHT, ASTM A325-04 BOLTS, DETAILED IN CONFORMANCE WITH THE STRUCTURAL DRAWINGS AND THE "STEEL CONSTRUCTION MANUAL" BY THE AISC, 13TH EDITION. INSTALL BOLTS IN ACCORDANCE WITH AISC'S "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS," 2004.

ANCHOR RODS SHALL BE STAINLESS STEEL AND CONFORM TO ASTM F593B OR F593F GRADE 30 AS NOTED ON THE STRUCTURAL DRAWINGS.

PROVIDE GALVANIZING ON STRUCTURAL STEEL MEMBERS. HOT-DIP GALVANIZING SHALL BE IN ACCORDANCE ASTM A123 FOR STRUCTURAL MEMBERS AND WITH ASTM A 153 CLASS C FOR HARDWARE. WELDING SHALL BE DONE BY A CERTIFIED WELDER IN ACCORDANCE WITH THE AISC DOCUMENTS LISTED ABOVE, THE AMERICAN WELDING SOCIETY (AWS) D1.1: 2006 STRUCTURAL WELDING CODE, AND THE RECOMMENDATIONS FOR USE OF WELD E70 ELECTRODES. WHERE NOT SPECIFICALLY NOTED, MINIMUM WELD SHALL BE 3/16" FILLET BY LENGTH OF CONTACT EDGE.

SHOP DRAWINGS:

THE STRUCTURAL DRAWINGS SHALL NOT BE COPIED FOR USE AS ERECTION PLANS OR SHOP DETAILS. USE OF ELECTRONIC FILES AS THE BASIS FOR SHOP DRAWINGS REQUIRES PRIOR APPROVAL BY THE CONTRACTING OFFICER.

THE GENERAL CONTRACTOR SHALL SUBMIT IN WRITING ANY REQUESTS TO MODIFY THE STRUCTURAL DRAWINGS OR PROJECT SPECIFICATIONS.

ALL SHOP AND ERECTION DRAWINGS SHALL BE CHECKED AND STAMPED (AFTER HAVING BEEN CHECKED) BY THE GENERAL CONTRACTOR PRIOR TO SUBMISSION FOR THE CONTRACTING OFFICER'S REVIEW; SHOP DRAWING SUBMITTALS NOT CHECKED BY THE GENERAL CONTRACTOR PRIOR TO SUBMISSION TO THE CONTRACTING OFFICER WILL BE RETURNED WITHOUT REVIEW.

FURNISH FOUR (4) PRINTS OF SHOP AND ERECTION DRAWINGS TO THE CONTRACTING OFFICER FOR REVIEW PRIOR TO FABRICATION FOR

METAL FRAMING ANCHORS AND HANGER

SHOP DRAWINGS SUBMITTED FOR REVIEW DO NOT CONSTITUTE "REQUEST FOR CHANGE IN WRITING" UNLESS SPECIFIC SUGGESTED CHANGES ARE CLEARLY MARKED. IN ANY EVENT, CHANGES MADE BY MEANS OF THE SHOP DRAWING SUBMITTAL PROCESS BECOME THE RESPONSIBILITY OF THE ONE INITIATING THE CHANGE.

SPECIAL INSPECTIONS:

THE FOLLOWING SPECIAL INSPECTIONS AND TESTING SHALL BE PERFORMED BY A QUALIFIED SPECIAL INSPECTOR, RETAINED BY THE GOVERNMENT, IN ACCORDANCE WITH THE FOLLOWING SECTIONS OF IBC CHAPTER 17:

SECTION 1704 SPECIAL INSPECTIONS, CONTRACTOR RESPONSIBILITY, AND STRUCTURAL OBSERVATIONS AND THE FOLLOWING SUB-SECTIONS:

1704.2 SPECIAL INSPECTIONS

SECTION 1705 REQUIRED VERIFICATION AND INSPECTIONS AND TESTING AND THE FOLLOWING SUB SECTIONS: 1705.11 SPECIAL INSPECTIONS FOR WIND RESISTANCE.

THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE CONTRACTING OFFICER, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. THE APPROVED INSPECTOR MUST BE INDEPENDENT FROM THE CONTRACTOR RESPONSIBLE FOR THE WORK BEING INSPECTED.

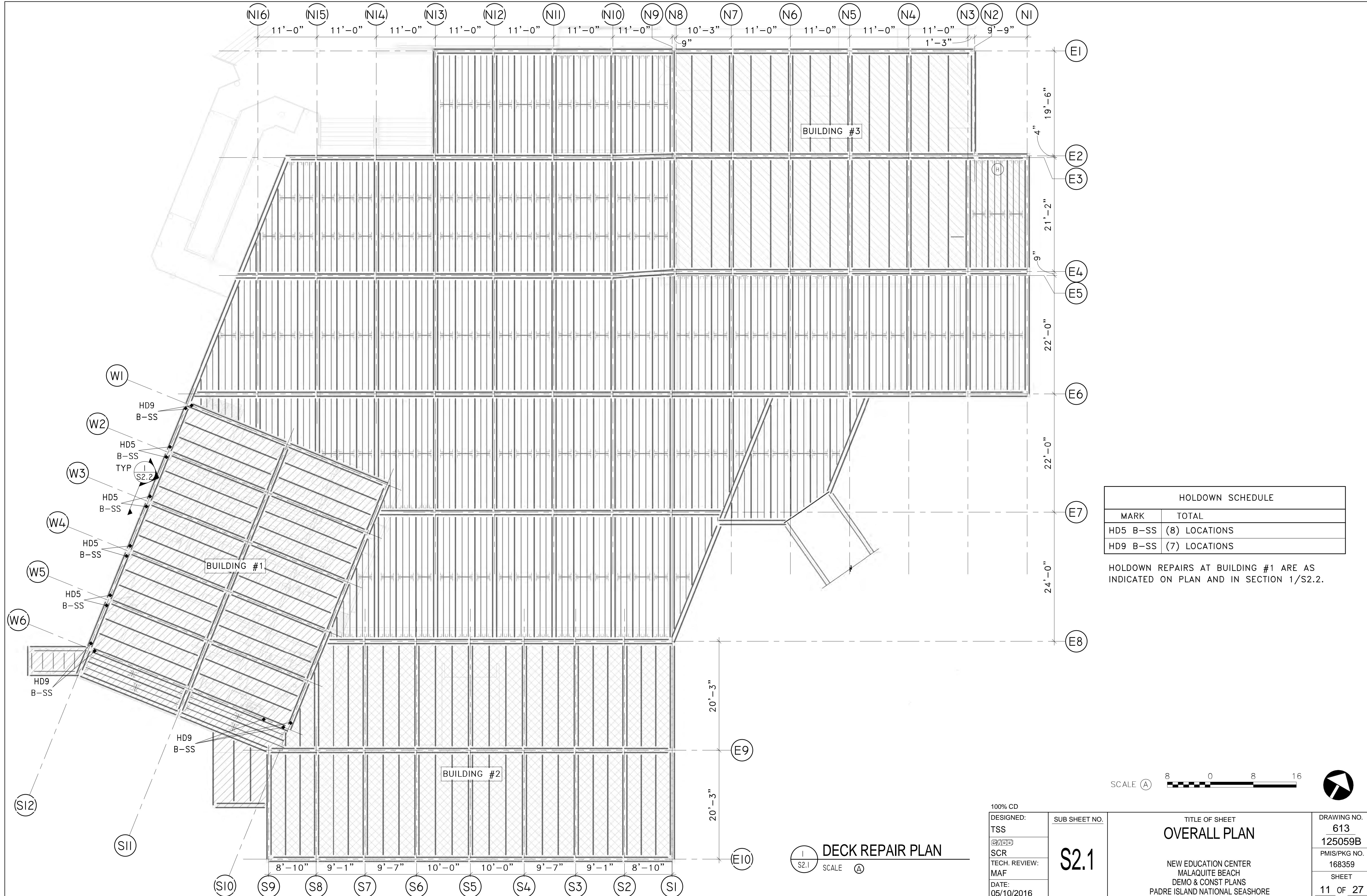
DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR SHALL BE TO INSPECT AND/OR TEST THE WORK OUTLINED ABOVE AND WITHIN THE STATEMENT OF SPECIAL INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE IBC FOR CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTING OFFICER AND CONTRACTOR FOR CORRECTION.

PER SECTION 1704.1.2 THE SPECIAL INSPECTOR SHALL FURNISH REGULAR REPORTS TO THE CONTRACTING OFFICER AND THE CONTRACTOR. PROGRESS REPORTS FOR CONTINUOUS INSPECTION SHALL BE FURNISHED WEEKLY. INDIVIDUAL REPORTS OF PERIODIC INSPECTIONS SHALL BE FURNISHED WITHIN ONE WEEK OF INSPECTION DATES. THE REPORTS SHALL NOTE UNCORRECTED DEFICIENCIES, CORRECTION OF PREVIOUSLY REPORTED DEFICIENCIES, AND CHANGES TO THE APPROVED CONSTRUCTION DOCUMENTS AUTHORIZED BY THE CONTRACTING OFFICER.

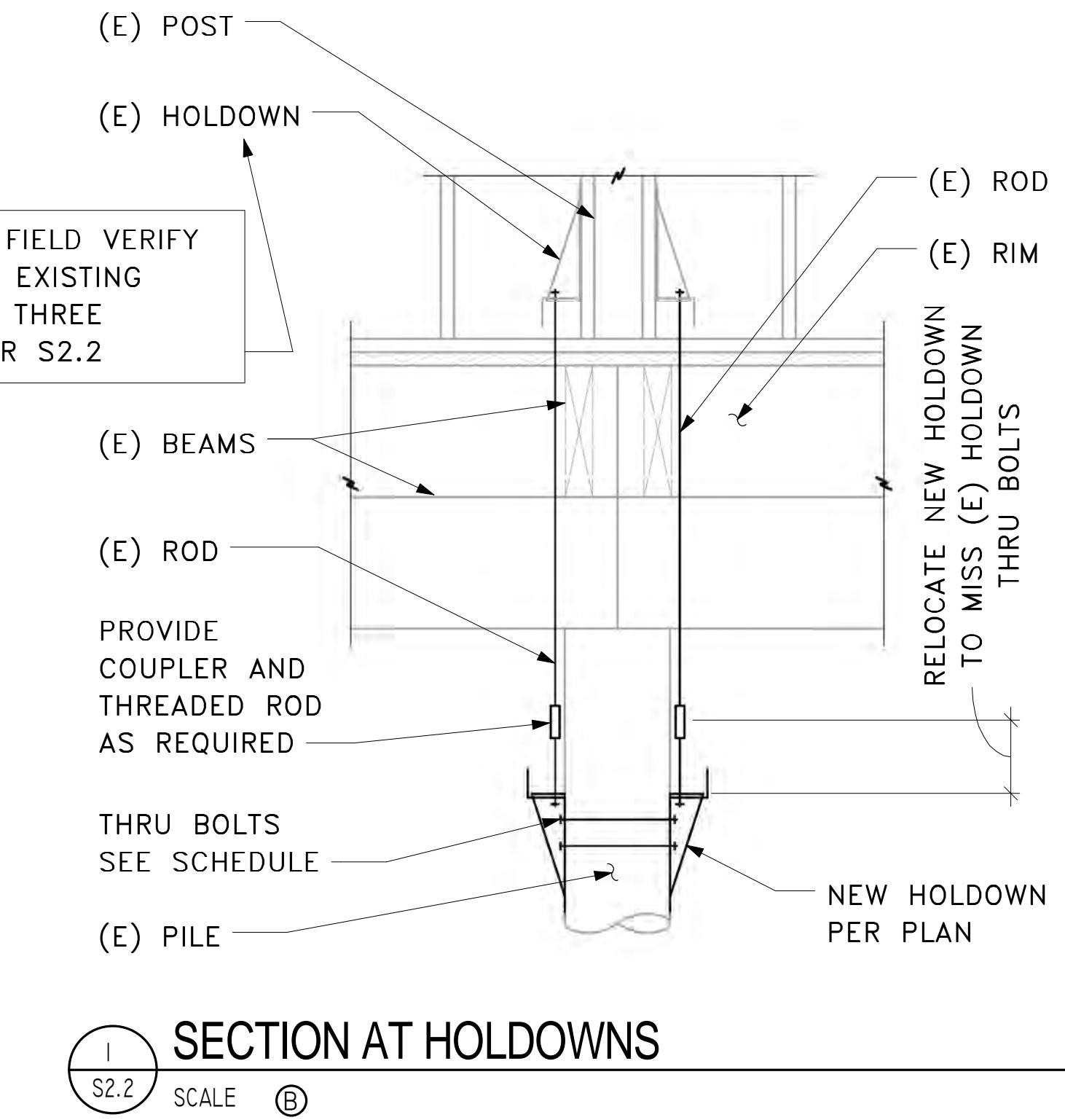
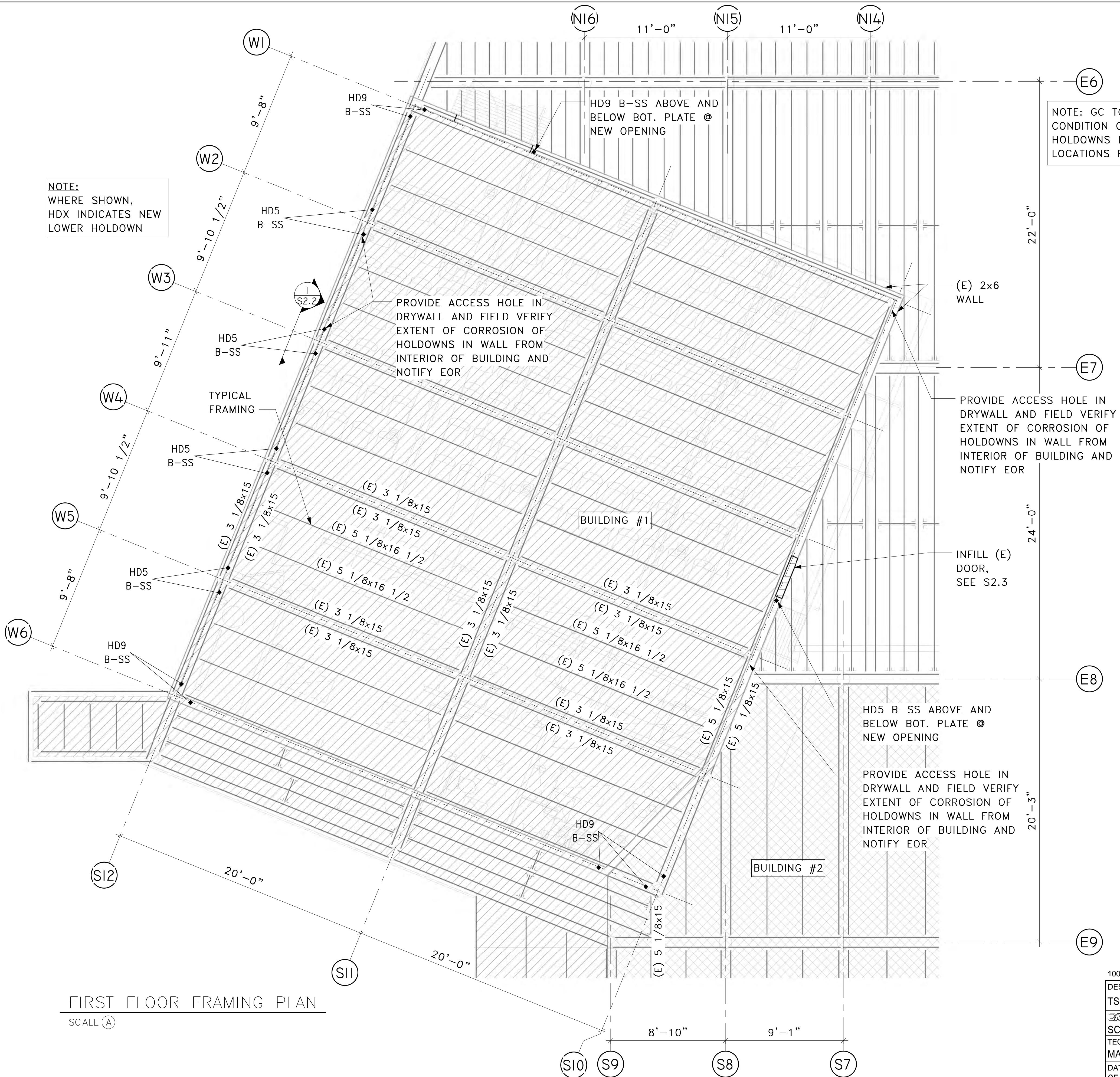
THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT WITHIN 10 DAYS OF THE FINAL SPECIAL INSPECTION STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE IBC. WORK NOT IN COMPLIANCE SHALL BE NOTED IN THE REPORT.

EXCEPT AS NOTED, THE SPECIAL INSPECTIONS OUTLINED ABOVE ARE IN ADDITION TO, AND BEYOND THE SCOPE OF, PERIODIC STRUCTURAL OBSERVATIONS AS DEFINED IN SECTION 1704.5.

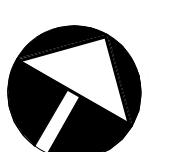
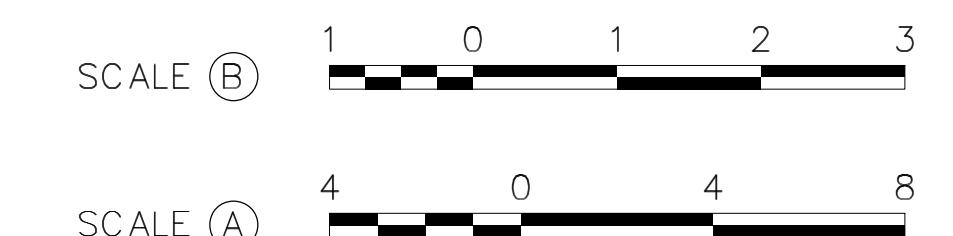
| 100% CD | | SUB SHEET NO. | TITLE OF SHEET | DRAWING NO. |
|---------------|-----|---------------|----------------|--------------|
| DESIGNED: | SCR | | | |
| TSS | | | GENERAL NOTES | 613 |
| GADD | | | | 125059B |
| SCR | | | | PMIS/PKG NO. |
| TECH. REVIEW: | | | | 168359 |
| MAF | | | | SHEET |
| DATE: | | | | 10 OF 27 |
| 05/10/2016 | | | | |



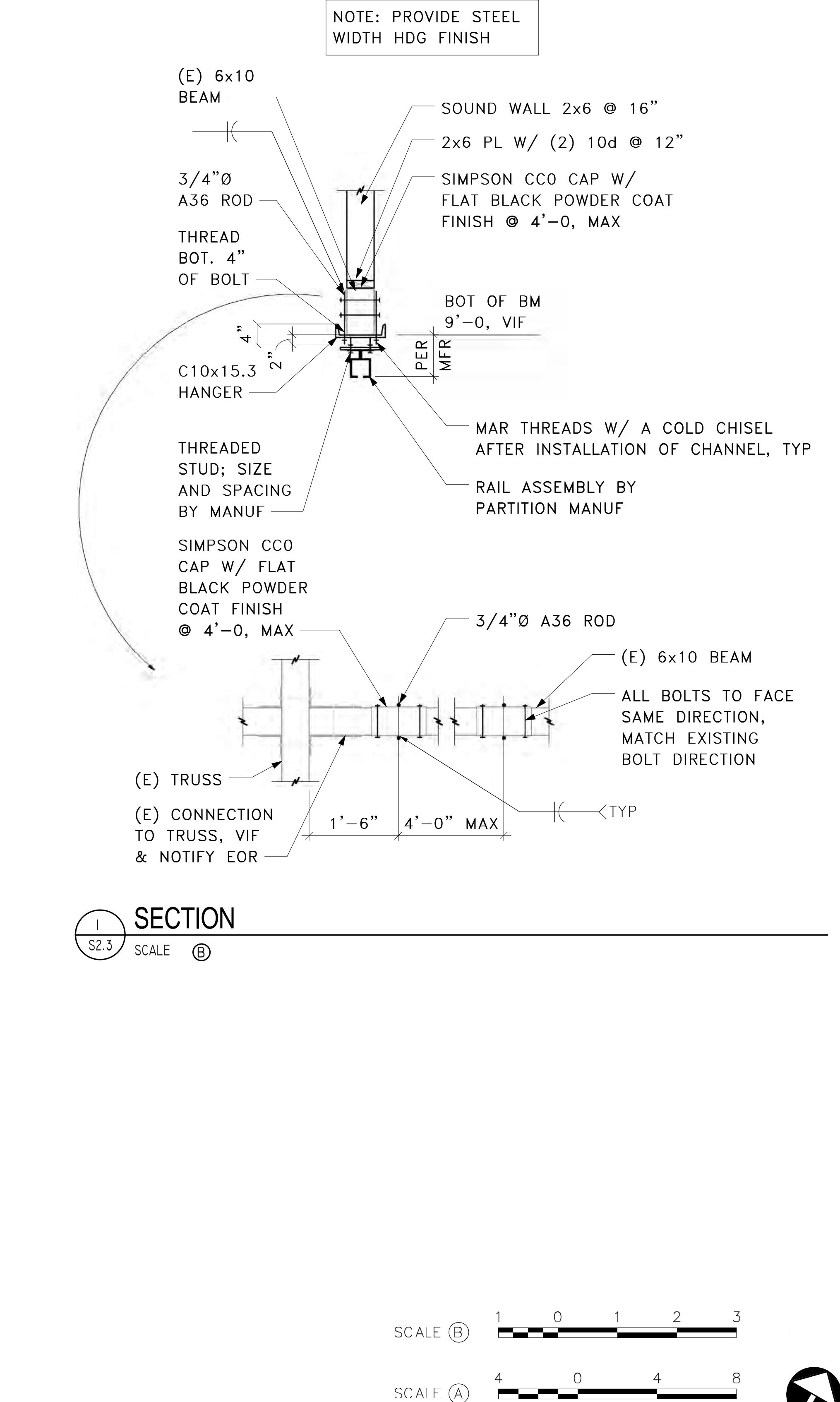
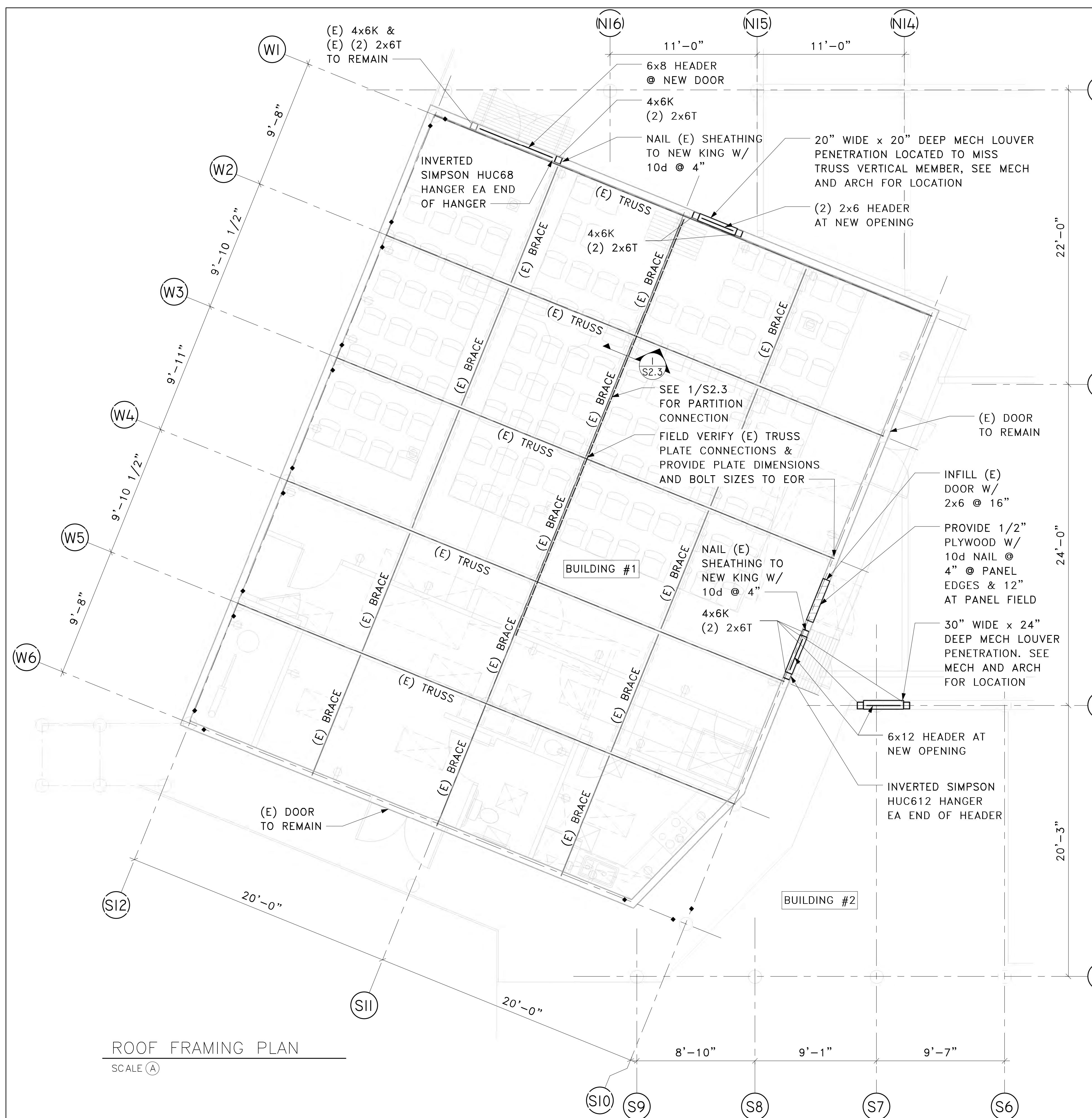
FIRST FLOOR FRAMING PLAN
SCALE (A)



| HOLDOWN SCHEDULE | | |
|------------------|--------------|----------------|
| MARK | THRU BOLTS | ANCHOR ROD |
| HD5 B-SS | (2) 3/4"Ø SS | MATCH EXISTING |
| HD9 B-SS | (3) 1"Ø SS | MATCH EXISTING |



| DESIGNED: TSS GABB SCR | SUB SHEET NO. S2.2 | TITLE OF SHEET FIRST FLOOR FRAMING PLAN | DRAWING NO. 613 125059B |
|---------------------------------|-----------------------|---|-------------------------------|
| TECH. REVIEW: MAF | | NEW EDUCATION CENTER MALAQUITE BEACH DEMO & CONST PLANS PADRE ISLAND NATIONAL SEASHORE | PMIS/PKG NO. 168359 |



| 100% CD | DESIGNED: | SUB SHEET NO. | TITLE OF SHEET | DRAWING NO. |
|---------|---------------|---------------|---|--------------|
| | TSS | | ROOF FRAMING PLAN | 613 |
| | SCR | | | 125059B |
| | TECH. REVIEW: | | | PMIS/PKG NO. |
| | MAF | | | 168359 |
| | DATE: | | | SHEET |
| | 05/10/2016 | | | 13 OF 27 |
| | | S2.3 | | |
| | | | NEW EDUCATION CENTER MALAQUITE BEACH DEMO & CONST PLANS PADRE ISLAND NATIONAL SEASHORE | |

| MECHANICAL LEGEND (NOTE: NOT ALL SYMBOLS SHOWN ARE USED ON THESE DRAWINGS) | | | | | | | | | | | |
|--|--------|-----------------------------------|-------|--------|---------------------------------|-------|-----------------|-------------|--------------------------------|--------|-------------|
| ABBR. | SYMBOL | DESCRIPTION | ABBR. | SYMBOL | DESCRIPTION | ABBR. | SYMBOL | DESCRIPTION | ABBR. | SYMBOL | DESCRIPTION |
| - PIPING - | | | | | | | | | | | |
| SA | | POSITIVE PRESSURE DUCT UP | | | 2-WAY CONTROL VALVE | | G | | PIPE DOWN | | |
| SA | | POSITIVE PRESSURE DUCT DOWN | | | 3-WAY CONTROL VALVE | | O | | PIPE UP | | |
| EA/RA | | NEGATIVE PRESSURE DUCT UP | | | BALANCE VALVE | | O | | TEE OUTLET UP | | |
| EA/RA | | NEGATIVE PRESSURE DUCT DOWN | | | BALL VALVE | | O | | TEE OUTLET DOWN | | |
| OA | | OUTSIDE AIR INTAKE DUCT UP | | | BUTTERFLY VALVE | HWS | HWS | | HEATING HOT WATER SUPPLY | | |
| OA | | OUTSIDE AIR INTAKE DUCT DOWN | | | CHECK VALVE | HWR | HWR | | HEATING HOT WATER RETURN | | |
| | | ROUND DUCT UP | | | GATE VALVE | CWS | CWS | | CHILLED WATER SUPPLY | | |
| | | ROUND DUCT DOWN | | | PRESSURE REDUCING VALVE | CWR | CWR | | CHILLED WATER RETURN | | |
| | | CONICAL FITTING WITH DAMPER | | | PRESSURE RELIEF VALVE | CTS | CTS | | COOLING TOWER SUPPLY | | |
| | | ECCENTRIC FITTING WITH DAMPER | | | HOSE END DRAIN VALVE | CTR | CTR | | COOLING TOWER RETURN | | |
| | | CONICAL FITTING WITHOUT DAMPER | | | STRAINER | RL | RL | | REFRIGERANT LIQUID | | |
| | | ECCENTRIC FITTING WITHOUT DAMPER | | | STRAINER WITH BLOW OFF VALVE | RS | RS | | REFRIGERANT SUCTION | | |
| | | ELBOW WITH TURNING VANES | | | PLUG VALVE | RHG | RHG | | REFRIGERANT HOT GAS | | |
| | | ELBOW WITHOUT TURNING VANES | | | GAS COCK | D | D | | CONDENSATE OR EQUIPMENT DRAIN | | |
| | | LONG RADIUS ELBOW | PRV | | SOLENOID VALVE | DCW | | | DOMESTIC COLD WATER | | |
| | | SHORT RADIUS ELBOW | | | PRESSURE REGULATING VALVE | DHW | | | DOMESTIC HOT WATER | | |
| | | SUPPLY DIFFUSER | | | TERMOWELL | DHWC | | | DOMESTIC HOT WATER CIRCULATING | | |
| | | SUPPLY DIFFUSER ROUND NECK | | | TERMOMETER WITH TERMOWELL | DTW | | | DOMESTIC TEMPERED WATER | | |
| | | SUPPLY DIFFUSER SQUARE NECK | | | UNION | DI | | | DEIONIZED WATER | | |
| | | EXHAUST/RETURN GRILLE SQUARE NECK | | | VENTURI | V | | | DOMESTIC VENT PIPING | | |
| | | EXHAUST/RETURN GRILLE ROUND NECK | | | AUTOMATIC AIR VENT | AV | | | ACID VENT PIPING | | |
| | | RETURN AIR GRILLE | | | MANUAL AIR VENT | W | | | SUSPENDED WASTE | | |
| | | ROUND DIFFUSER | | | VACUUM BREAKER | W | | | BURIED WASTE | | |
| | | SLOT DIFFUSER | | | THERMOMETER | AW | | | ACID WASTE | | |
| | | FLEXDUCT | | | GAUGE | OST | | | OVERFLOW STORM SEWER | | |
| | | DUCTWORK | | | GAUGE WITH BALL VALVE | ST | | | SUSPENDED STORM SEWER | | |
| MVD | | MANUAL VOLUME DAMPER | | | PRESSURE TEMPERATURE/TEST POINT | ST | | | BURIED STORM SEWER | | |
| | | PUMP | | | PIPE ANCHOR | G | | | NATURAL GAS, PROPANE | | |
| | | DUCT BREAK | | | PIPE GUIDE | FL | | | FIRE LINE | | |
| | | FIRE DAMPER | | | FLEX CONNECTION | | ZONE# | | THERMOSTAT W/ZONE CALLOUT | | |
| | | | | | PIPE CAP | | ZONE# | | HUMIDITY SENSOR W/ZONE CALLOUT | | |
| | | | | | PIPE BREAK | | T _S | | TEMP SENSOR W/ZONE CALLOUT | | |
| | | | | | FLOW ARROW | | CO | | CARBON MONOXIDE DETECTOR | | |
| | | | | | FLOW MEASURING STATION | | CO ₂ | | CARBON DIOXIDE SENSOR | | |
| | | | | | | | PD | | PRESSURE RELIEF DAMPER | | |

GENERAL NOTES:

CONTRACTOR SHALL REFERENCE SPECIFICATIONS FOR CONSTRUCTION MATERIALS AND INSTALLATION PROCEDURES. SPECIFICATIONS ARE A PART OF THE CONSTRUCTION DOCUMENTS. SHOULD ANY CONFLICT ARISE BETWEEN THE DRAWINGS AND SPECIFICATIONS, SUCH CONFLICT SHALL BE BROUGHT TO ATTENTION OF THE NPS CONTRACTING OFFICER FOR RESOLUTION.

ALL PENETRATIONS THROUGH FIRE SEPARATION WALLS ARE TO BE SEALED TO MAINTAIN SEPARATION RATING.

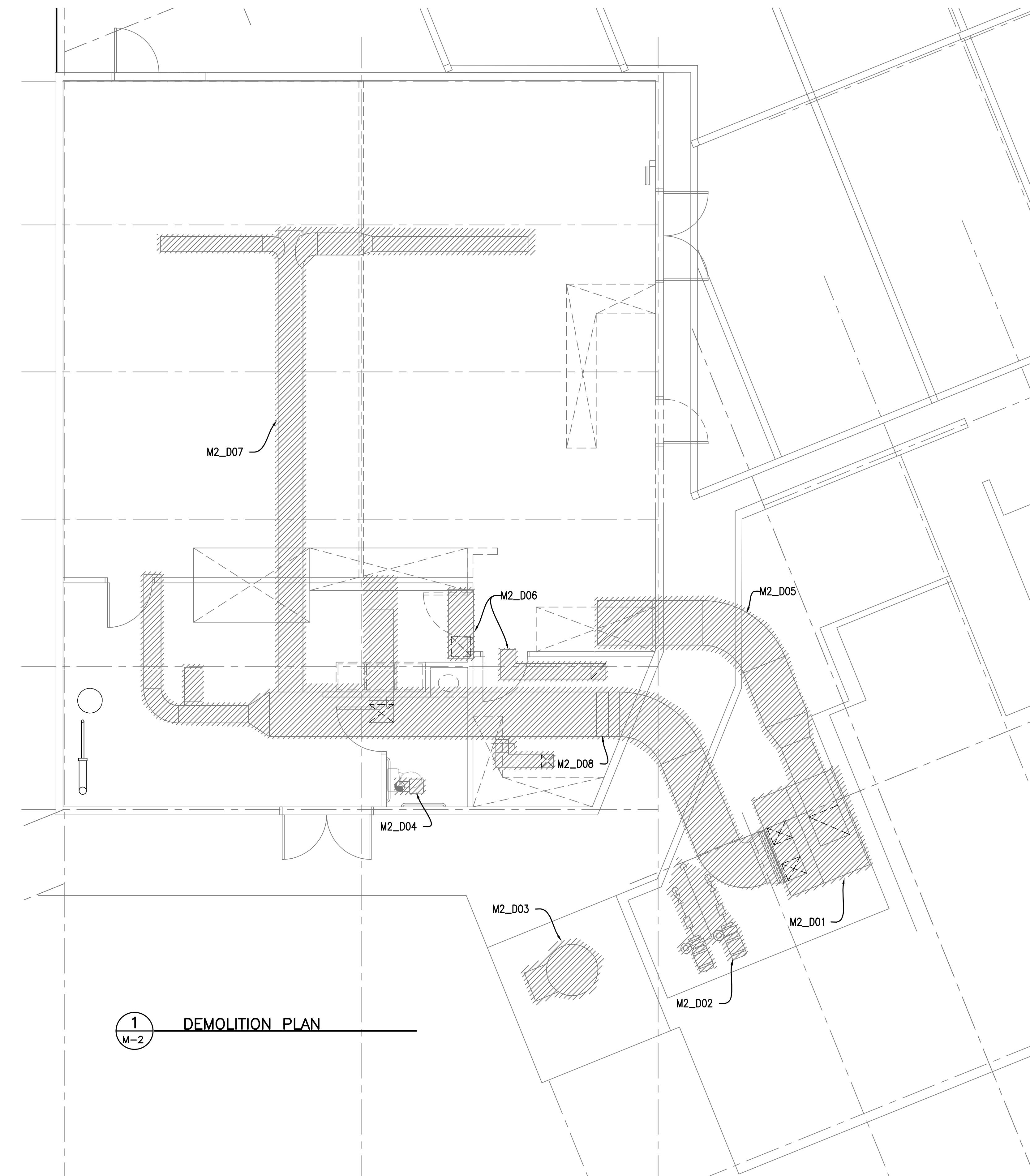
THESE DRAWINGS ARE DIAGRAMMATIC IN CHARACTER AND DO NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC.

ALL DUCTWORK DIMENSIONS SHOWN ARE INTERIOR CLEAR DIMENSIONS. ALLOWANCES FOR DUCT LINER OR INSULATION ARE NOT INCLUDED.

LOCATIONS AND INFORMATION FOR EXISTING MECHANICAL DEVICES AND EQUIPMENT SHOWN ON THESE PLANS ARE APPROXIMATE. THIS INFORMATION IS DERIVED FROM FIELD OBSERVATIONS AND RECORD DRAWINGS THAT WERE AVAILABLE AT THE TIME THESE DRAWINGS WERE ISSUED FOR PUBLICATION.

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NOT FOR CONSTRUCTION

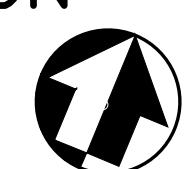
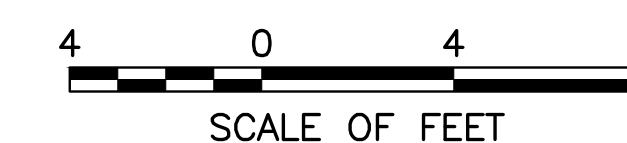
| | | | |
|--|----------------------|---|-------------------------------|
| DESIGNED: JF GADD | SUB SHEET NO. M-1 | TITLE OF SHEET NEW EDUCATION CENTER MALAQUITE BEACH | DRAWING NO. 613 125059B |
| JF TECH. REVIEW: DK DATE: 05/10/2016 | | PMS/PKG NO. 168359 | |
| | | SHEET | 14 OF 27 |



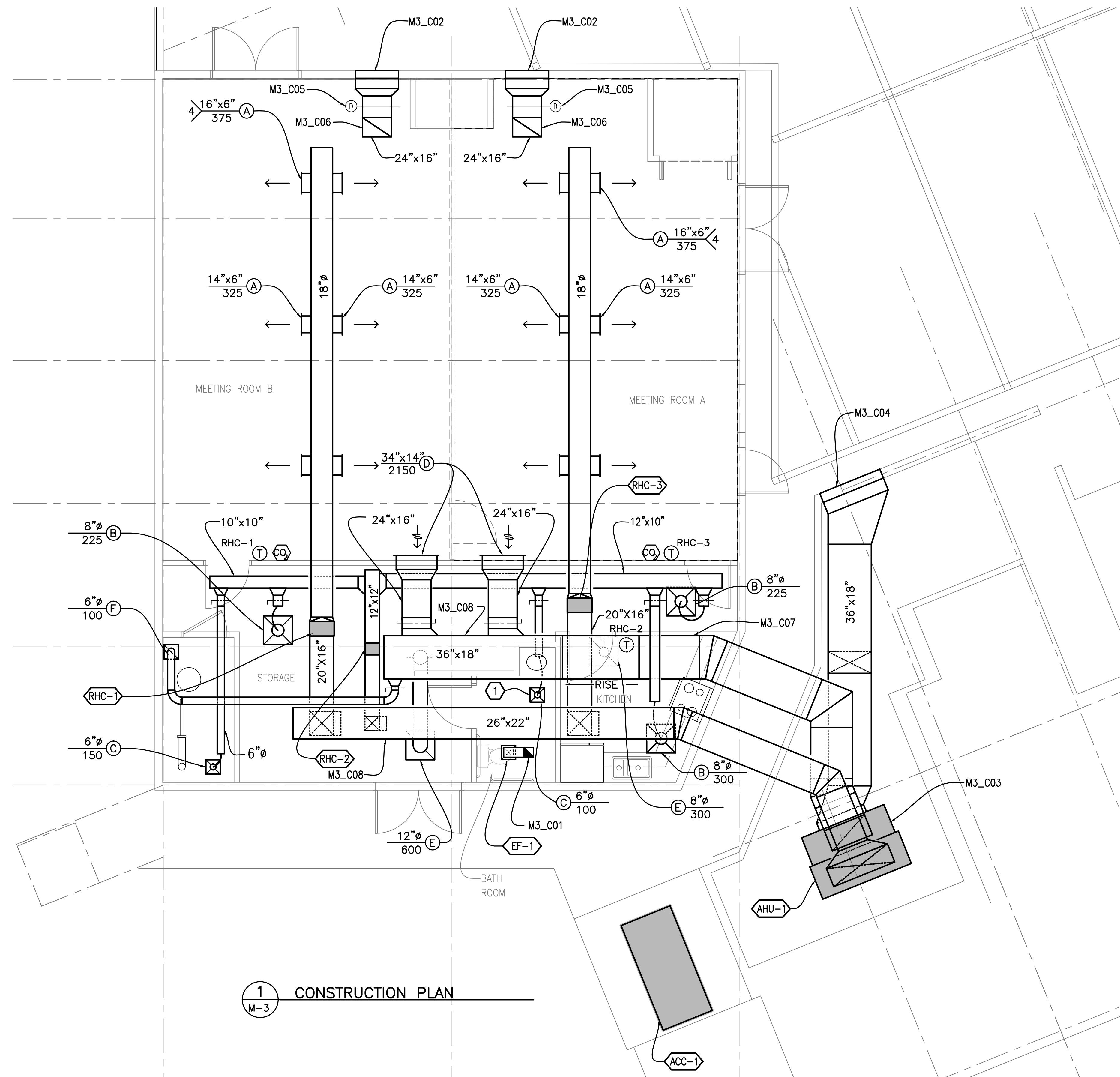
KEYED DEMOLITION NOTES:

- M2_D01 REMOVE EXISTING AIR HANDLER.
- M2_D02 REMOVE EXISTING PUMPS AND ASSOCIATED PIPING.
- M2_D03 REMOVE EXISTING COOLING TOWER AND ASSOCIATED PIPING.
- M2_D04 REMOVE EXISTING EXHAUST FAN, GRILLE AND ASSOCIATED DUCTWORK.
- M2_D05 REMOVE EXISTING RETURN DUCTWORK AND RETURN GRILLE WITHIN CONCESSIONS BUILDING TO AIR HANDLER.
- M2_D06 REMOVE EXISTING TRANSFER AIR DUCTWORK AND ASSOCIATED TRANSFER AIR GRILLES.
- M2_D07 REMOVE ALL EXISTING SUPPLY DUCTWORK AND SUPPLY DIFFUSERS WITHIN CONCESSIONS BUILDING TO AIR HANDLER.
- M2_D08 REMOVE EXISTING DUCT HEATER.

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NOT FOR CONSTRUCTION



| DESIGNED: | SUB SHEET NO. | TITLE OF SHEET | DRAWING NO. |
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| JF | | NEW EDUCATION CENTER | 613 |
| GADD | | | 125059B |
| JF | | MALAQUITE BEACH | |
| TECH. REVIEW: | | | PMIS/PKG NO. |
| DK | | | 168359 |
| DATE: | | | SHEET |
| 05/10/2016 | | | 15 OF 27 |



KEYED CONSTRUCTION NOTES:

M3_C01 INLINE EXHAUST FAN EF-1 IN CEILING. ROUTE 8" EXHAUST DUCT UP THROUGH ROOF. TERMINATE EXHAUST DUCT WITH HURRICANE RATED FITTING ON ROOF.

M3_C02 PROVIDE 36"x24" RELIEF AIR LOUVER IN EXTERIOR WALL. PROVIDE LOUVER SIMILAR TO GREENHECK MODEL ESD-435X. BOTTOM OF DUCT SHALL SLOPE AT A 45 DEGREE ANGLE TO LOUVER CONNECTION.

M3_C03 MOTORIZED CONTROL DAMPERS FOR OUTDOOR AIR INTAKE AND RETURN AIR LOCATED IN AHU-1 MIXING BOX. PROVIDE CONTROLLER FOR CO₂ SENSORS LOCATED IN MEETING ROOMS TO CONTROL DAMPERS. CONTROL DAMPERS SHALL MODULATE AS NEEDED TO PROVIDE THE REQUIRED OUTDOOR AIR TO KEEP THE SPACE BELOW 900 PPM WHEN AHU IS IN OCCUPIED MODE. ABOVE 78°F OUTDOOR AIR TEMPERATURE THE OUTDOOR AIR DAMPER SHALL BE AT MINIMUM POSITION. OUTDOOR AIR DAMPER SHALL BE CLOSED WHEN UNIT IS DE-ENERGIZED.

M3_C04 PROVIDE 54"x30" OUTDOOR AIR INTAKE LOUVER IN EXTERIOR WALL. PROVIDE LOUVER SIMILAR TO GREENHECK MODEL ESD-435X. BOTTOM OF DUCT SHALL SLOPE AT A 45 DEGREE ANGLE TO LOUVER CONNECTION.

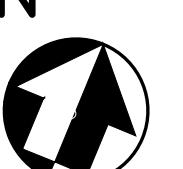
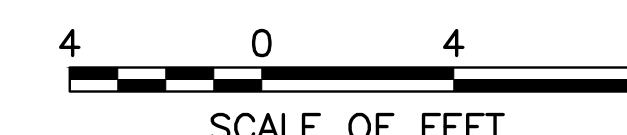
M3_C05 PROVIDE PRESSURE RELIEF AIR DAMPER IN RELIEF AIR DUCT. PROVIDE DAMPER EQUAL TO GREENHECK MODEL HPR-330 AND SET PRESSURE RELIEF TO 0.05" WG.

M3_C06 ROUTE RELIEF AIR DUCT UP 90° TOWARD CEILING AND PROVIDE WIRE MESH SCREEN ON END OF DUCT TO PREVENT OBJECTS FROM ENTERING RELIEF DUCT. REFER TO DETAIL 2 ON SHEET M-4.

M3_C07 BOTTOM OF DUCT TO BE 8'-6" ABOVE FINISHED FLOOR LEVEL.

M3_C08 BOTTOM OF DUCT TO BE 10'-9" ABOVE FINISHED FLOOR LEVEL.

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| DESIGNED: | SUB SHEET NO. | TITLE OF SHEET | DRAWING NO. |
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| JF | | NEW EDUCATION CENTER | 613 |
| GADD | | | 125059B |
| JF | | | PMIS/PKG NO. |
| TECH. REVIEW: | | | 168359 |
| DK | | | SHEET |
| DATE: | | | 16 OF 27 |
| 05/10/2016 | | | |

M-3

NEW EDUCATION CENTER
MALAQUITE BEACH

PADRE ISLAND NATIONAL SEASHORE

AIR HANDLING UNIT SCHEDULE

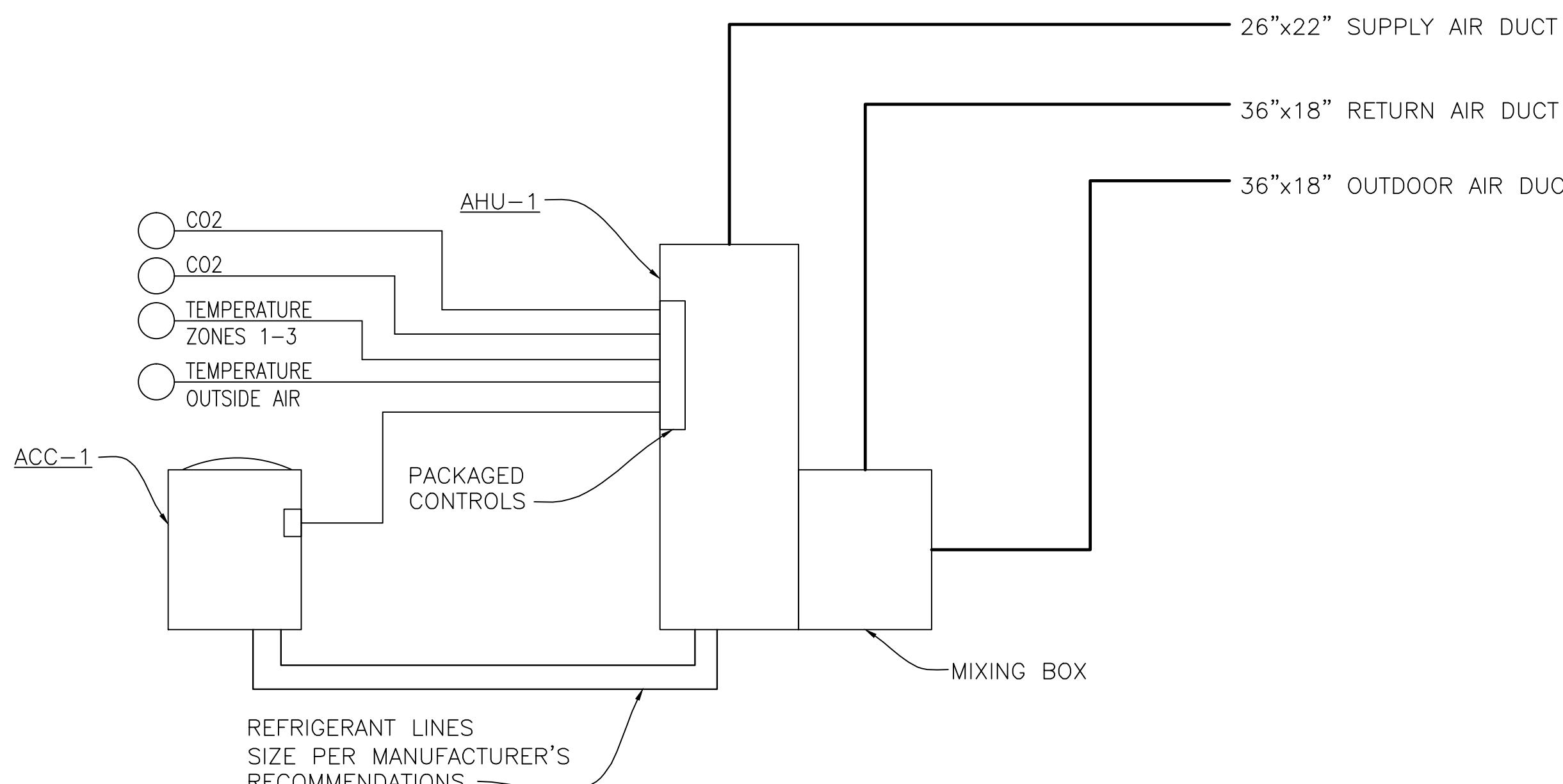
| TAG | PURPOSE | MIN. OSA CFM | SUPPLY FAN SECTION | | | | | | | DIRECT EXPANSION COIL | | | | | | | ELECTRIC HEATING COIL | | | | FILTER SPEC SPEC/MERV | ELECTRICAL | | | | MANUFACTURER AND MODEL | NOTES | | | | | | |
|-------|----------------------|--------------------|--------------------|-----------------|-----------------|-----|------|----|-----|-----------------------|--------------------|--------------|-----------------|--------------|-------------|-----------|-----------------------|-----------|-----------|------|--------------------------|------------|-------|-----------|-----------|---------------------------|--------------|-----|------|-------|----------------|--------------|-----------|
| | | | TOTAL CFM | TSP IN. W.G. | ESP IN. W.G. | RPM | BHP | HP | VFD | QTY. | NO. COMPRESSORS | NO. COILS | NO. CIRCUITS | TOTAL MBH | SENS. °F | EDB °F | EWB °F | LDB °F | LWB °F | ROWS | REFRIG. | CFM | KW | EDB °F | LDB °F | STAGES | INITIAL V | PH | MCA | OPD | | | |
| AHU-1 | AIR HANDLER | 400 | 5300 | 1.4 | 0.7 | 764 | 1.96 | 3 | NO | 1 | - | 1 | - | 192.56 | 116.54 | 81.74 | 70.88 | 62.81 | 60.5 | 4 | R-410A | 5300 | 22.00 | 62 | 80 | 2 | F-D/MERV8A | 208 | 3 | 101.5 | 110 | TRANE/TTA180 | 1,2,5,6,8 |
| ACC-1 | AIR COOLED CONDENSER | | | | | | | | | 3 | 2 | - | 1 | 192.56 | 116.54 | 95 | - | - | - | - | R-410A | - | - | - | - | - | 208 | 3 | 66.3 | 80 | TRANE/TTA180E3 | 1,3,4,5,7 | |

GENERAL NOTES:

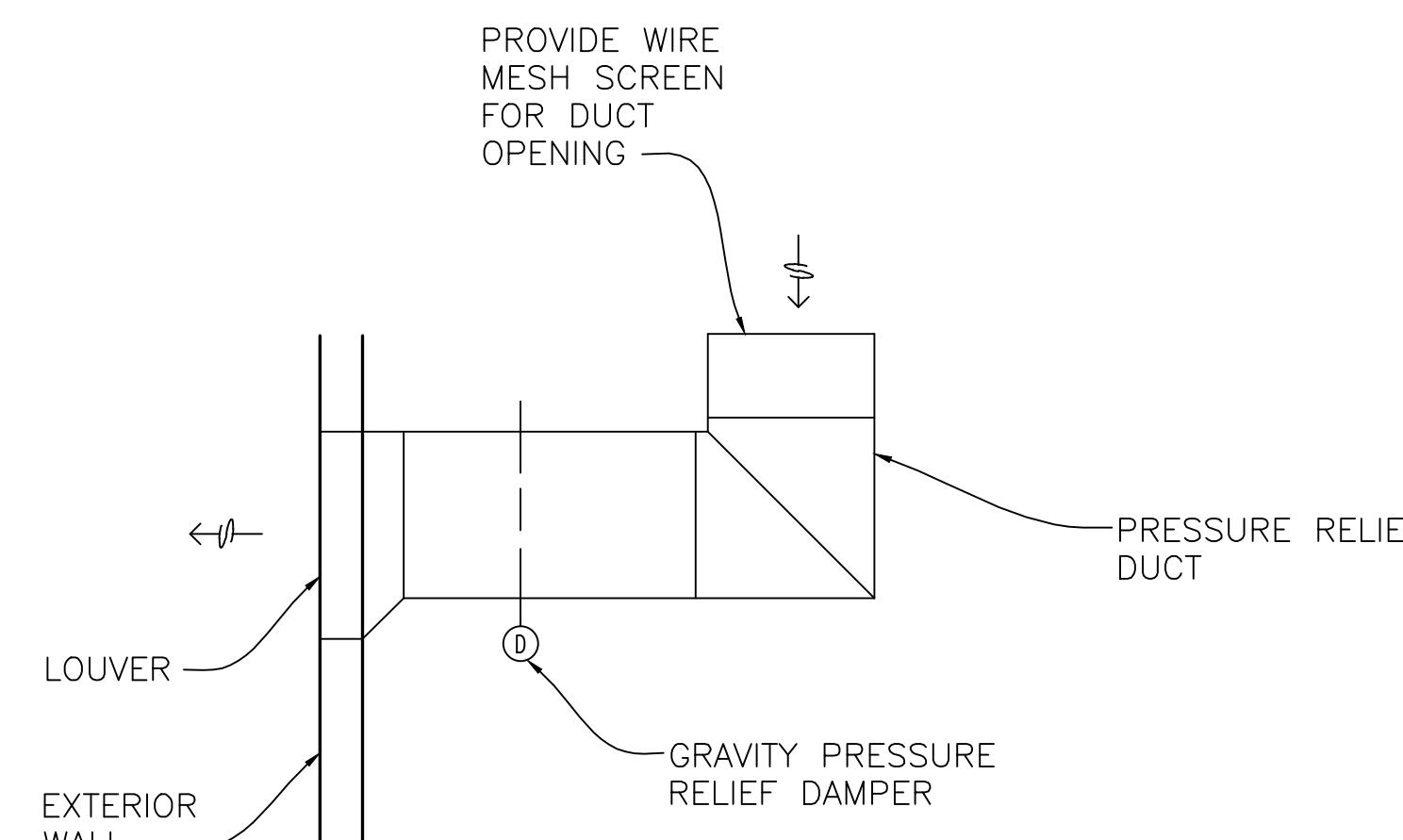
- A. PERFORMANCE IS AT SEA LEVEL CONDITIONS.
- B. APD ON ALL COILS AND COMPONENTS IS AT COOLING TOTAL CFM.
- C. AIR HANDLERS MAY CONTAIN RESERVE CAPACITY AND CAPACITY FOR DUCT LEAKAGE, BALANCE TO PLAN CFM.
- D. PROVIDE PACKAGED CONTROLS.

NOTES:

- 1. PROVIDE EQUIPMENT RAILS FOR STRUCTURAL BASE.
- 2. AHU-1 APPROXIMATE WEIGHT WITHOUT MIXING BOX= 729 LBS.
- 3. ACC-1 APPROXIMATE WEIGHT = 722
- 4. PROVIDE MARINE COATING ON CONDENSER COILS.
- 5. PROVIDE HEATING AND COOLING ELECTRICAL LOCKOUT TO PREVENT SIMULTANEOUS HEATING AND COOLING.
- 6. PROVIDE MIXING BOX SIMILAR TO MICROMETL MODEL 0857-0400-FCE OR EQUAL.
- 7. PROVIDE MOTOR STARTER AND DISCONNECT FOR ACC-1.
- 8. PROVIDE MOTOR STARTER AND DISCONNECT FOR AHU-1.



1 PACKAGED SPLIT SYSTEM DETAIL



2 TYPICAL RELIEF AIR DUCT DETAIL

FAN SCHEDULE

| TAG | SERVICE | TYPE | CFM | ESP | FAN | DRIVE | ELECTRICAL | | | WEIGHT | MANUFACTURER & MODEL | NOTES |
|------|------------------|--------|-----|------|-------|--------|------------|-------|---|--------|----------------------|-------|
| | | | | | | | RPM | WATTS | V | | | |
| EF-1 | BATHROOM EXHAUST | INLINE | 150 | 0.25 | 1,100 | DIRECT | 172 | 115 | 1 | 10 | GREENHECK/SP-B200 | |

GENERAL NOTES:

- A. PERFORMANCE IS AT SEA LEVEL CONDITIONS
- B. FANS MAY CONTAIN RESERVE CAPACITY, BALANCE TO PLAN CFM.

COIL SCHEDULE

| TAG | SERVES | SIZE | CFM | SENS. MBH | EDB °F | LDB °F | KW | VOLTAGE | APD | MANUFACTURER & MODEL | NOTES |
|-------|-----------------|---------|-------|--------------|-----------|-----------|-----|----------|------|----------------------|-------|
| | | | | | | | | | | | |
| RHC-1 | MEETING ROOM B | 26"X16" | 2,150 | 10.2 | 80 | 85.3 | 3.0 | 208/1/60 | 0.02 | GREENHECK/IDHB | 1 |
| RHC-2 | STORAGE/KITCHEN | 12"X12" | 1,000 | 3.4 | 80 | 83.4 | 1.0 | 120/1/60 | 0.02 | GREENHECK/IDHB | 1 |
| RHC-3 | MEETING ROOM A | 26"X16" | 2,150 | 10.2 | 80 | 85.3 | 3.0 | 208/1/60 | 0.02 | GREENHECK/IDHB | 1 |

NOTES:

- 1. PERFORMANCE IS AT SEA LEVEL.

GRILLE/REGISTER/DIFFUSER SCHEDULE

| TAG | PURPOSE | SIZE | DUCT | LOUVERED | 30 | AIR SCOOP/OBD | PRICE/SDGE | NOTES |
|-----|----------------|---------|----------|------------|----|---------------|-------------|-------|
| | | | | | | | | |
| A | SUPPLY | 12"x6" | DUCT | LOUVERED | 30 | AIR SCOOP/OBD | PRICE/SDGE | |
| B | SUPPLY | 24"x24" | CEILING | 4-WAY | 30 | - | PRICE/SCD | |
| C | SUPPLY | 12"x12" | CEILING | 4-WAY | 30 | - | PRICE/SCD | |
| D | RETURN | 24"x14" | SIDEWALL | LOUVERED | 30 | - | PRICE/630 | |
| E | RETURN | 24"x24" | CEILING | PERFORATED | 30 | - | PRICE/APPDR | |
| F | RETURN/EXHAUST | 12"x12" | CEILING | PERFORATED | 30 | - | PRICE/APPDR | |

GENERAL NOTES:

- A. ASSUMES 10dB ROOM ABSORPTION

VENTILATION SCHEDULE

| ROOM NAME | ROOM TYPE | AREA (SF) | DEFAULT OCCUPANT DENSITY (#/1,000 SF) | PEOPLE OUTDOOR AIRFLOW RATE IN BREATHING ZONE (CFM/PERSON) | AREA OUTDOOR AIRFLOW RATE IN BREATHING ZONE (CFM/SF) | BREATHING ZONE OUTDOOR AIRFLOW (CFM) | ZONE AIR DISTRIBUTION EFFECTIVENESS | ZONE OUTDOOR AIRFLOW (CFM) | EXHAUST AIRFLOW RATE (CFM/SF) | EXHAUST AIRFLOW RATE (CFM) | NOTES |
|----------------|-------------------|-----------|---------------------------------------|--|--|--------------------------------------|-------------------------------------|----------------------------|-------------------------------|----------------------------|-------|
| MEETING ROOM A | MULTIUSE ASSEMBLY | 656 | 100 | 7.5 | 0.06 | 531 | 1 | 531 | 0.0 | 0 | |
| MEETING ROOM B | MULTIUSE ASSEMBLY | 614 | 100 | 7.5 | 0.06 | 497 | 1 | 497 | 0.0 | 0 | |
| KITCHEN | BREAK ROOM | 102 | 5 | 5 | 0.06 | 9 | 1 | 9 | 0.0 | 0 | |
| STORAGE | STORAGE | 362 | - | - | - | - | - | - | - | - | |
| BATHROOM | BATHROOM | 45 | - | - | - | - | - | - | 0.5 | 23 | |
| TOTAL | | 1,779 | | | | | | 1,037 | | 23 | |

NOTE: VENTILATION BASED ON 2012 IMC TABLE 403.3

DESIGNED:
JF
GADD
JF
TECH. REVIEW:
DK
DATE:
05/10/2016

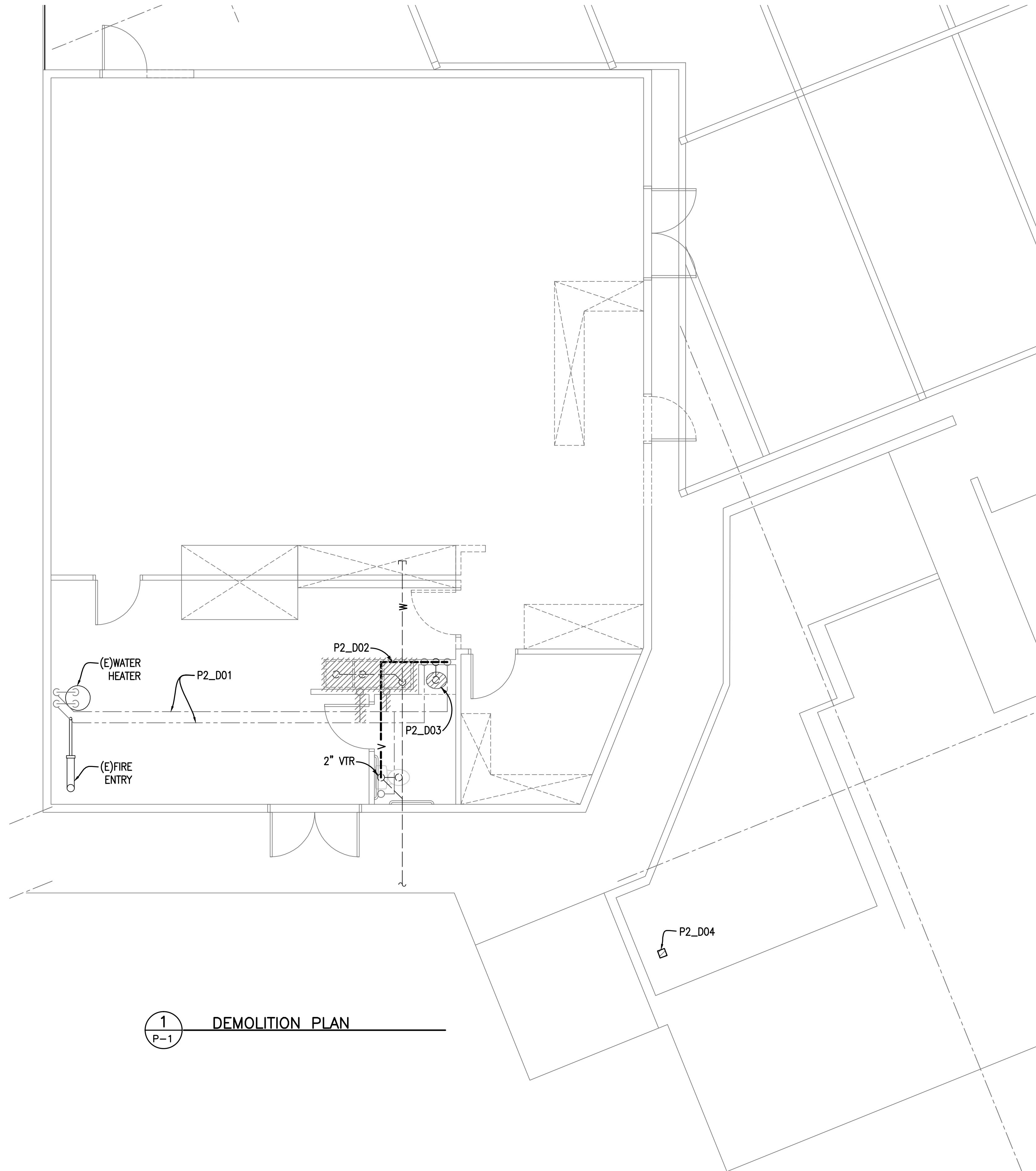
SUB SHEET NO.
M-4

TITLE OF SHEET
**NEW EDUCATION CENTER
MALAQUITE BEACH**

DRAWING NO.
**613
125059B**

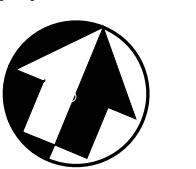
PMIS/PKG NO.
168359

SHEET
17 OF 27



- KEYED DEMOLITION NOTES:
- P2_D01 EXISTING 3/4" DOMESTIC COLD WATER AND HOT WATER PIPING UNDER FLOOR.
 - P2_D02 REMOVE 3-COMPARTMENT SINK IN ITS ENTIRETY. REMOVE DOMESTIC HOT AND COLD WATER PIPING BACK TO MAIN AND CAP. REMOVE ALL SANITARY WASTE PIPING BACK TO MAIN AND CAP.
 - P2_D03 REMOVE LAVATORY IN ITS ENTIRETY. DISCONNECT DOMESTIC HOT AND COLD WATER PIPING FROM LAVATORY AND CAP FOR FUTURE CONNECTION. DISCONNECT SANITARY WASTE PIPING AND CAP FOR FUTURE CONNECTION.
 - P2_D04 REMOVE EXISTING FLOOR SINK.

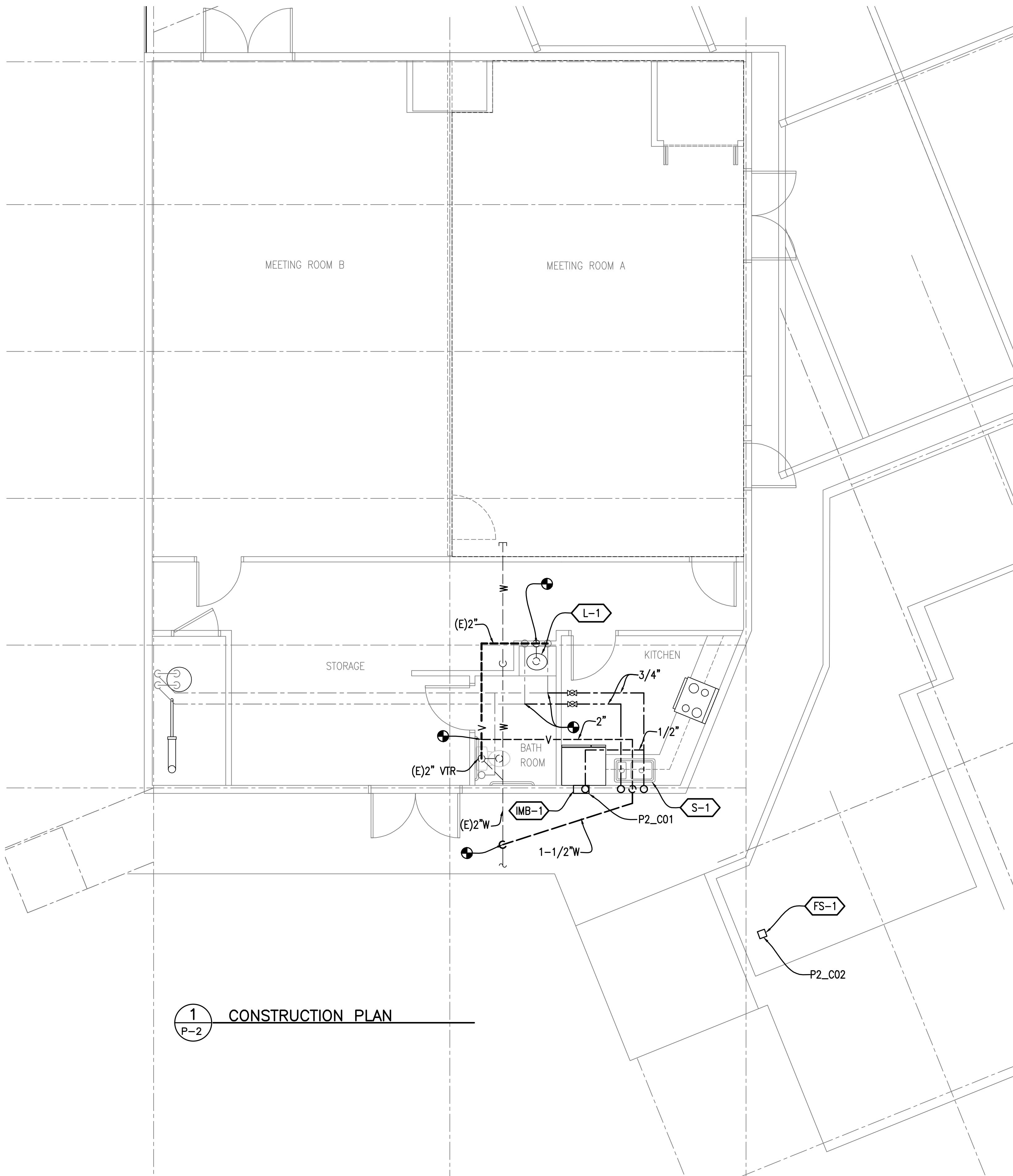
100% CD
NOT FOR CONSTRUCTION



| DESIGNED: | SUB SHEET NO. | TITLE OF SHEET | DRAWING NO. |
|---------------|---------------|----------------------|--------------|
| JF | | NEW EDUCATION CENTER | 613 |
| GADD | | MALAQUITE BEACH | 125059B |
| JF | | | PMIS/PKG NO. |
| TECH. REVIEW: | | | 168359 |
| DK | | | SHEET |
| DATE: | | | 18 OF 27 |
| 05/10/2016 | | | |

P-1

PADRE ISLAND NATIONAL SEASHORE



KEYED CONSTRUCTION NOTES:

P2_C01 ROUTE 1/2" DCW PIPE FROM SINK TO ICE MAKER BOX.

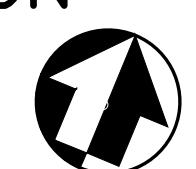
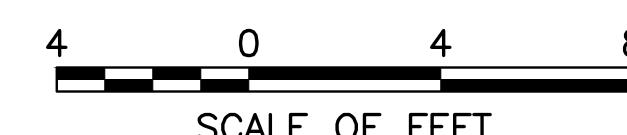
P2_C02 NEW FLOOR SINK FS-1 TO REPLACE EXISTING FLOOR SINK FOR AIR HANDLER CONDENSATE. CONNECT TO EXISTING WASTE PIPING UNDERFLOOR.

PLUMBING FIXTURE SCHEDULE

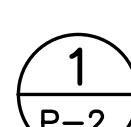
| SYM. | DESCRIPTION | CONNECTION SIZES* | | | | ELECT. REQD |
|-------|--|-------------------|--------|------|------|----------------|
| | | W | V | C | H | |
| IMB-1 | ICEMAKER WALL BOX, GUY GRAY MODEL MIB1AB, 20 GAUGE POWDER COATED WHITE BOX, 1/2", 1/4 TURN VALVE WITH WATER HAMMER ARRESTOR | - | - | 1/2" | - | NO |
| L-1 | LAVATORY, SELF-RIMMING COUNTERTOP, ADA COMPLIANT, AMERICAN STANDARD MODEL 0439.004US, WHITE VITREOUS CHINA, 20" x 17" OVAL WITH 3 HOLE PUNCH ON 4" CENTERS, 1-1/4" TAILPIECE, OVERFLOW, CHROME PLATED CAST BRASS ADJUSTABLE OFFSET 1-1/4" P-TRAP WITH CLEAN-OUT, 3/8" FLEXIBLE SUPPLIES, 1/4-TURN STOPS WITH LOOSE KEY, GRID STRAINER. FAUCET, CHICAGO FAUCET MODEL 895-317GN2AE35ABCP, 5-1/4" RIGID/SWING GOOSENECK FAUCET, 4" WRISTBLADE HANDLES, 0.5 GPM VANDAL-RESISTANT AERATOR, NSF-61 LEAD FREE. INSULATE SUPPLY AND WASTE WITH TRUEBRO INC. INSULATION KIT. ALL COMPONENTS MUST COMPLY WITH ADA. PROVIDE WITH TEMPERING VALVE. | 1-1/4" | 1-1/4" | 1/2" | 1/2" | NO |
| S-1 | KITCHEN SINK, ELYK MODEL DLR331910, TWO COMPARTMENT, 18 GAUGE TYPE 304 STAINLESS STEEL, 33" X 19" O.D. 10" DEEP BOWL, SELF RIMMING, 4 HOLE PUNCH, STAINLESS STEEL BASKET STRAINER. 1 1/2" 17 GAUGE CHROME PLATED P-TRAP WITH CLEAN-OUT, CHROME PLATED FLEXIBLE ANGLE SUPPLIES WITH KEYED STOPS. FAUCET, CHICAGO FAUCET MODEL 200-AGN8AE35-317AB, 8" CENTERS, DECK MOUNTED FITTING, 8" RIGID/SWING SPOUT, AERATOR, 4" WRISTBLADE HANDLES, CERAMIC DISC CARTRIDGES, WITH HAND SPRAY. | 1-1/2" | 1-1/4" | 1/2" | - | NO |
| FS-1 | STAINLESS STEEL FLOOR SINK, JOSAM MODEL 41332 FLOOR SINK WITH 6"X6" | 2" | - | - | - | NO |

* CONNECTION SIZES EQUAL BRANCH PIPE SIZES UNLESS NOTED ON PLAN OR REQUIRED TO BE OVERSIZED BY CODE.
FLUSH VALVES: MINIMUM BRANCH SIZE TO WATER CLOSET, 1-1/2"; MINIMUM BRANCH SIZE TO URINAL, 1-1/4".

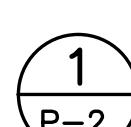
100% CD
NOT FOR CONSTRUCTION



| DESIGNED: JF GADD | SUB SHEET NO. | TITLE OF SHEET NEW EDUCATION CENTER MALAQUITE BEACH | DRAWING NO. 613 125059B |
|--|---------------|---|-------------------------------|
| JF TECH. REVIEW: DK DATE: 05/10/2016 | P-2 | PADRE ISLAND NATIONAL SEASHORE | PMIS/PKG NO. 168359 |
| | | | SHEET 19 OF 27 |



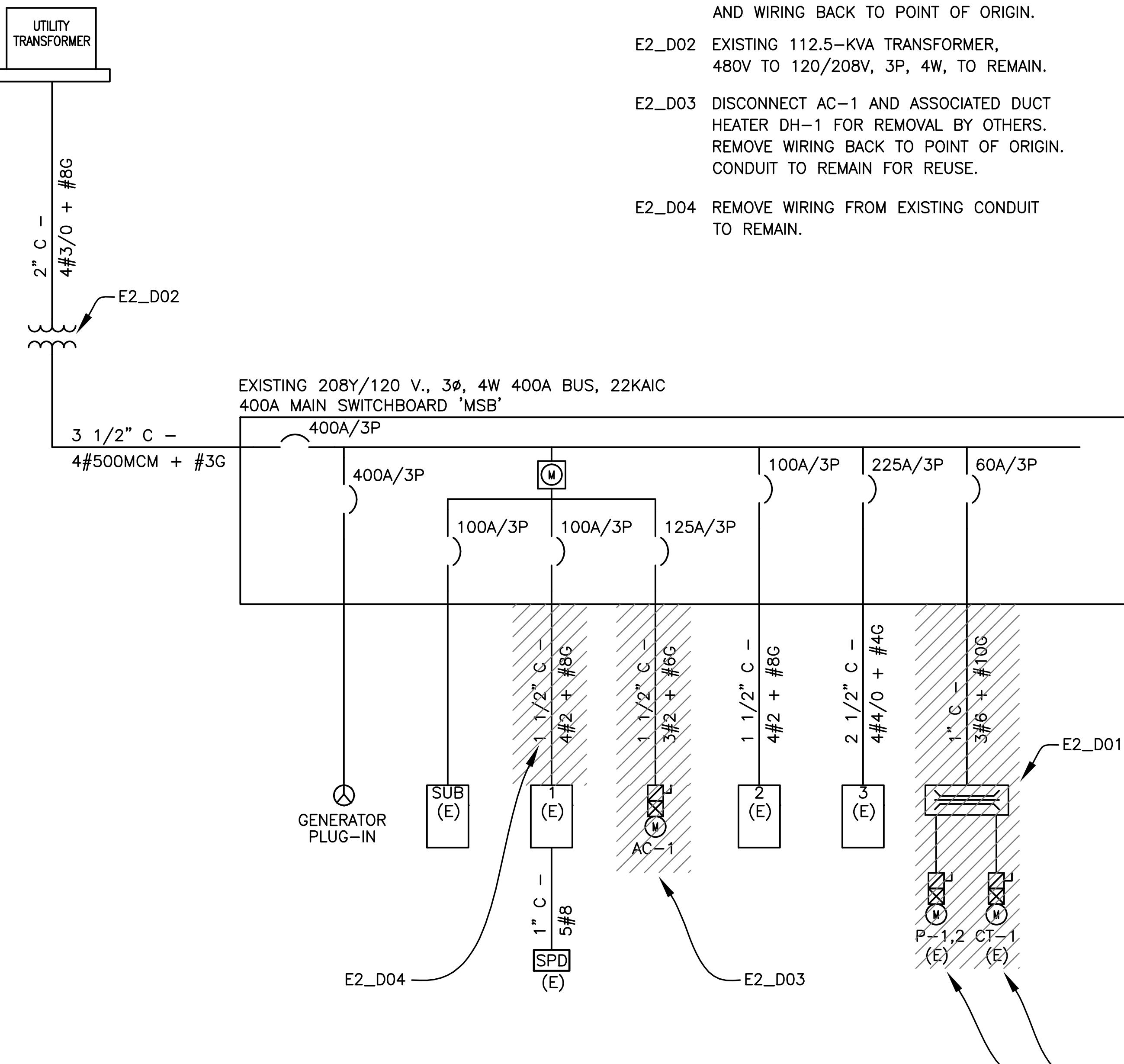
CONSTRUCTION PLAN



| ELECTRICAL LEGEND (NOTE: NOT ALL SYMBOLS SHOWN ARE USED ON THESE DRAWINGS) | | | | | | | | | | | | - ABBREVIATIONS - | | |
|--|--|------------------|---|----------------|---|---|--|----------------------------|--------------------------------------|---------------------------------------|-----------------------------------|--|--------------------------------|--|
| SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION | SYMBOL | DESCRIPTION | - ABBREVIATIONS - | | - ABBREVIATIONS - | | |
| -ONE LINE SYMBOLS- | | -GENERAL- | | -POWER- | | -LIGHTING (REFER TO LUMINAIRE SCHEDULE)- | | -GROUNDING SYMBOLS- | | (E) EXISTING | | IG ISOLATED GROUND | | |
| | CIRCUIT BREAKER | | BRAUCH CIRCUIT HOME RUN TO PANELBOARD, DESIGNATION INDICATES PANEL AND CIRCUIT NUMBERS. | | DUPLEX RECEPTACLE D = DEDUX DUPLEX GROUNDED RECEPTACLE IG = ISOLATED GROUND | | FLUORESCENT LUMINAIRES # = BRANCH CIRCUIT NUMBER x = SWITCH LEG IDENTIFIER | | GROUND TEST WELL | (N) NEW | JB JUNCTION BOX | K THOUSAND | | |
| | DRAW-OUT CIRCUIT BREAKER (MOLDED/INSULATED CASE) | | CONTROL WIRING | | GFCI = GROUND FAULT CIRCUIT INTERRUPTER | | FLOOR MOUNTED DUPLEX RECEPTACLE | | GROUNDING CONDUCTOR | (PART) | PARTIAL CIRCUIT | LTG LIGHTING | LTG LIGHTING | |
| | CONTROL FUSE | | LIGHTING, ONE-LINE, AND POWER CIRCUITING | | LIGHTING, ONE-LINE, AND POWER CIRCUITING (UNDERGROUND) | | FLOOR MOUNTED FOURPLEX RECEPTACLE | | LIGHTNING PROTECTION AIR TERMINAL | +XX | MONITOR ADDRESSABLE MODULE | MAM MONITOR ADDRESSABLE MODULE | LOW VOLTAGE | |
| | FUSE WITH SWITCH | | SWITCH | | CONDUIT BREAK SYMBOL | | CEILING MOUNTED DUPLEX RECEPTACLE | | BONDING POINT | A | AMP | MATV MONITOR ADDRESSABLE MODULE | MAIN CIRCUIT BREAKER | |
| | PANELBOARD | | CONDUIT CHANGE IN ELEVATION | | CONDUIT STUB DOWN (OUT OF DRAWING LIMITS) | | CONDUIT STUB UP (OUT OF DRAWING LIMITS) | | GROUND BAR | AB | AMPS BRACING | MCB MAIN CIRCUIT BREAKER | MOTOR CONTROL CENTER | |
| | TVSS OR MISC EQUIPMENT | | JUNCTION BOX | | FLOOR MOUNTED JUNCTION BOX | | RANGE RECEPTACLE | | ELECTRICAL GROUND | AC | ABOVE COUNTER TOP | MCC MOTOR CONTROL CENTER | MOLDED CASE SWITCH | |
| | AUTOMATIC TRANSFER SWITCH | | FEEDER DESIGNATION, SEE FEEDER SCHEDULE | | FLOOR MOUNTED JUNCTION BOX | | SINGLE RECEPTACLE | | GROUND ROD WITH INSPECTION TEST WELL | AF | ABOVE FINISHED COUNTER | MDF MAIN DISTRIBUTION FRAME | MAIN DISTRIBUTION PANEL | |
| | AUTOMATIC TRANSFER SWITCH WITH BY-PASS | | JUNCTION BOX | | SPECIAL PURPOSE RECEPTACLE | | SWITCHED RECEPTACLE | | PIGTAIL | AFF | ABOVE FINISHED GRADE | MDP MAIN DISTRIBUTION PANEL | MANHOLE | |
| | ENGINE GENERATOR | | TRANSFORMER | | WEATHERHEAD | | DISCONNECT SWITCH | | CONDUIT | AHJ | AUTHORITY HAVING JURISDICTION | MH MANHOLE | MAIN LUGS ONLY | |
| | TRANSFORMER | | MOTOR | | METERING DEVICE | | FUSED DISCONNECT SWITCH | | CAM | AT | AMPS INTERRUPTING CAPACITY | MTD MOUNTED | NEUTRAL | |
| | CURRENT TRANSFORMER | | POTENTIAL TRANSFORMER | | LOAD-BREAK CONNECTOR | | MOTOR STARTER | | CB | AS | AMPS SENSOR | MTG MOUNTING HEIGHT | NORMALLY CLOSED | |
| | LIGHTNING ARRESTOR | | THermal ELEMENT, OVERLOAD RELAY | | PROTECTIVE RELAY | | COMBINATION MOTOR STARTER | | CCTV | AT | AMP TRIP | NC NORMALLY OPEN | NATIONAL ELECTRIC CODE | |
| | PRIMARY COIL | | SECONDARY COIL | | MISC. SYSTEM COMPONENT | | DISTRIBUTION PANEL | | CLG | ATS | AUTOMATIC TRANSFER SWITCH | NEC NATIONAL ELECTRIC CODE | NON FUSED | |
| | SPECIAL SYSTEMS SYMBOLS: | | CO = CO2 SENSOR | | CR = CARD READER | | D = MAGNETIC DOOR HOLD | | CUH | CB | COMBINATION TELEPHONE/DATA OUTLET | NO NOT IN CONTRACT | POLE | |
| | CO2 SENSOR | | CRAD | | ATD | | D = D | | DMC | CB | COMBINATION TELEPHONE/DATA OUTLET | P NIGHT LIGHT | PULL BOX | |
| | CARD READER | | HTD | | HD | | KEYPAD | | DTB | CB | COMBINATION TELEPHONE/DATA OUTLET | POLE | PULL BOX | |
| | MAGNETIC DOOR HOLD | | HD | | K | | KEYPAD | | DTC | CB | COMBINATION TELEPHONE/DATA OUTLET | POLE | PULL BOX | |
| | HAND DRYER | | HD | | KEYPAD | | KEYPAD | | E/G | CB | COMBINATION TELEPHONE/DATA OUTLET | POLE | PULL BOX | |
| | MANHOLE | | HD | | K | | KEYPAD | | EC | CB | COMBINATION TELEPHONE/DATA OUTLET | POLE | PULL BOX | |
| | MAGNETIC SWITCH | | HD | | K | | KEYPAD | | EFC | CB | COMBINATION TELEPHONE/DATA OUTLET | POLE | PULL BOX | |
| | PULLBOX | | HD | | K | | KEYPAD | | ELEV | CB | COMBINATION TELEPHONE/DATA OUTLET | POLE | PULL BOX | |
| | PRESSURE SWITCH | | HD | | K | | KEYPAD | | EMERG | CB | COMBINATION TELEPHONE/DATA OUTLET | POLE | PULL BOX | |
| | RADON SENSOR | | HD | | K | | KEYPAD | | EMS | CB | COMBINATION TELEPHONE/DATA OUTLET | POLE | PULL BOX | |
| | SPLICING BOX | | HD | | K | | KEYPAD | | EP | CB | COMBINATION TELEPHONE/DATA OUTLET | POLE | PULL BOX | |
| | TIME CLOCK | | HD | | K | | KEYPAD | | EWC | CB | COMBINATION TELEPHONE/DATA OUTLET | POLE | PULL BOX | |
| | INTRUSION ALARM PANEL | | HD | | K | | KEYPAD | | EX | CB | COMBINATION TELEPHONE/DATA OUTLET | POLE | PULL BOX | |
| | INTRUSION DETECTOR | | HD | | K | | KEYPAD | | FAC | CB | COMBINATION TELEPHONE/DATA OUTLET | POLE | PULL BOX | |
| | DOOR BUZZER | | HD | | K | | KEYPAD | | FAP | CB | COMBINATION TELEPHONE/DATA OUTLET | POLE | PULL BOX | |
| | SOLENOID VALVE | | HD | | K | | KEYPAD | | FAC | CB | COMBINATION TELEPHONE/DATA OUTLET | POLE | PULL BOX | |
| -GENERAL- | | -GENERAL- | | -POWER- | | -LIGHTING (REFER TO LUMINAIRE SCHEDULE)- | | -GROUNDING SYMBOLS- | | (E) EXISTING | | IG ISOLATED GROUND | | |
| -GENERAL- | | -GENERAL- | | -POWER- | | -LIGHTING (REFER TO LUMINAIRE SCHEDULE)- | | (N) NEW | | JB JUNCTION BOX | | K THOUSAND | | |
| -GENERAL- | | -GENERAL- | | -POWER- | | -LIGHTING (REFER TO LUMINAIRE SCHEDULE)- | | (PART) | | K THOUSAND | | LTG LIGHTING | | |
| -GENERAL- | | -GENERAL- | | -POWER- | | -LIGHTING (REFER TO LUMINAIRE SCHEDULE)- | | (+XX) | | LTS LIGHTING | | LV LOW VOLTAGE | | |
| -GENERAL- | | -GENERAL- | | -POWER- | | -LIGHTING (REFER TO LUMINAIRE SCHEDULE)- | | (A) | | MAM MONITOR ADDRESSABLE MODULE | | MATV MONITOR ADDRESSABLE MODULE | | |
| -GENERAL- | | -GENERAL- | | -POWER- | | -LIGHTING (REFER TO LUMINAIRE SCHEDULE)- | | (AB) | | MCB MAIN CIRCUIT BREAKER | | MCC MOTOR CONTROL CENTER | | |
| -GENERAL- | | -GENERAL- | | -POWER- | | -LIGHTING (REFER TO LUMINAIRE SCHEDULE)- | | (AF) | | MDF MAIN DISTRIBUTION FRAME | | MCSW MAIN DISTRIBUTION PANEL | | |
| -GENERAL- | | -GENERAL- | | -POWER- | | -LIGHTING (REFER TO LUMINAIRE SCHEDULE)- | | (AFF) | | MH MANHOLE | | MLO MAIN LUGS ONLY | | |
| | | | | | | | | | | | | | | |

KEYED DEMOLITION NOTES:

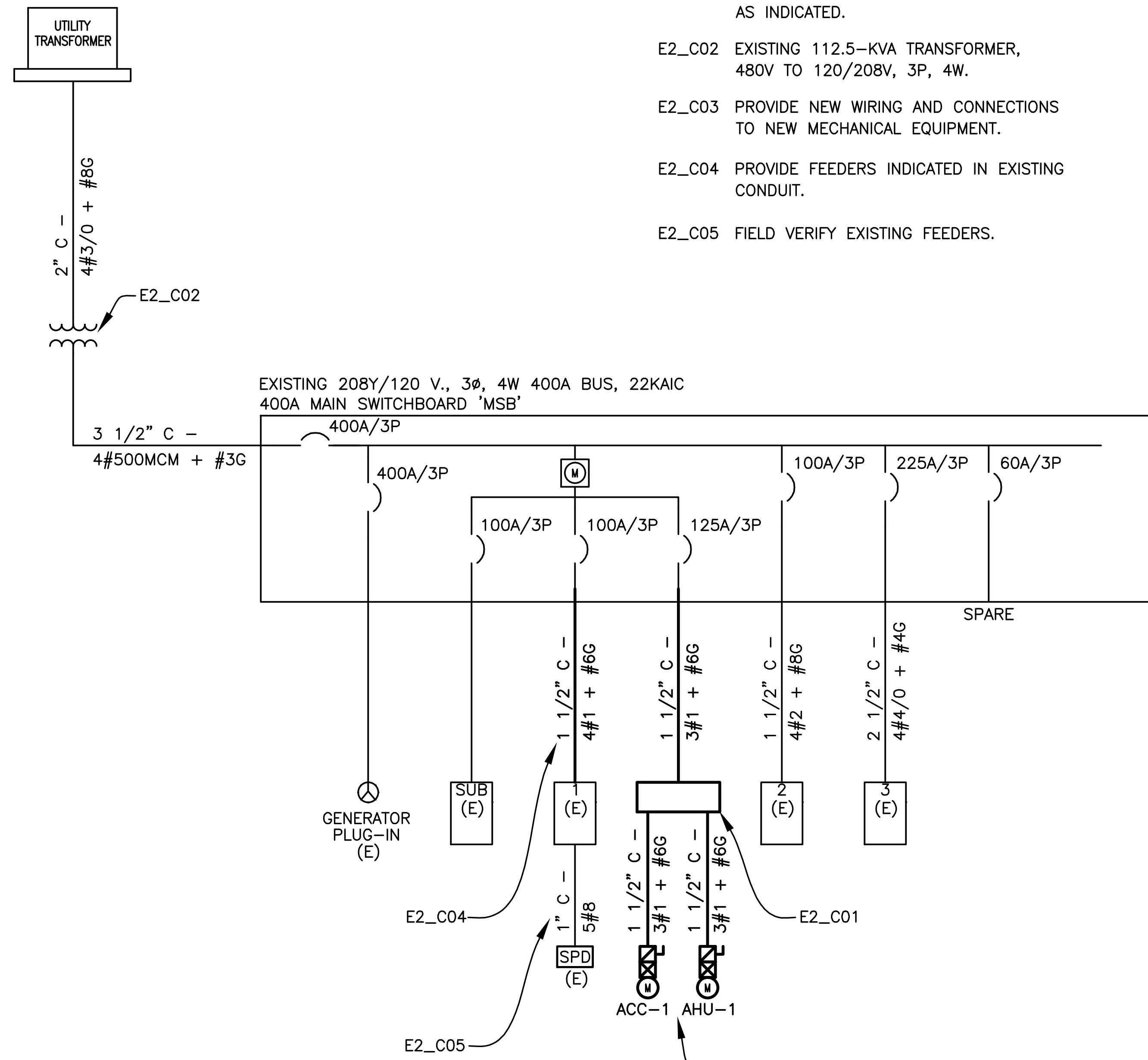
- E2_D01 DISCONNECT MECHANICAL EQUIPMENT FOR REMOVAL BY OTHERS. REMOVE CONDUIT AND WIRING BACK TO POINT OF ORIGIN.
- E2_D02 EXISTING 112.5-KVA TRANSFORMER, 480V TO 120/208V, 3P, 4W, TO REMAIN.
- E2_D03 DISCONNECT AC-1 AND ASSOCIATED DUCT HEATER DH-1 FOR REMOVAL BY OTHERS. REMOVE WIRING BACK TO POINT OF ORIGIN. CONDUIT TO REMAIN FOR REUSE.
- E2_D04 REMOVE WIRING FROM EXISTING CONDUIT TO REMAIN.



1
E-2 DEMO ONE-LINE DIAGRAM
SCALE: NONE

KEYED CONSTRUCTION NOTES:

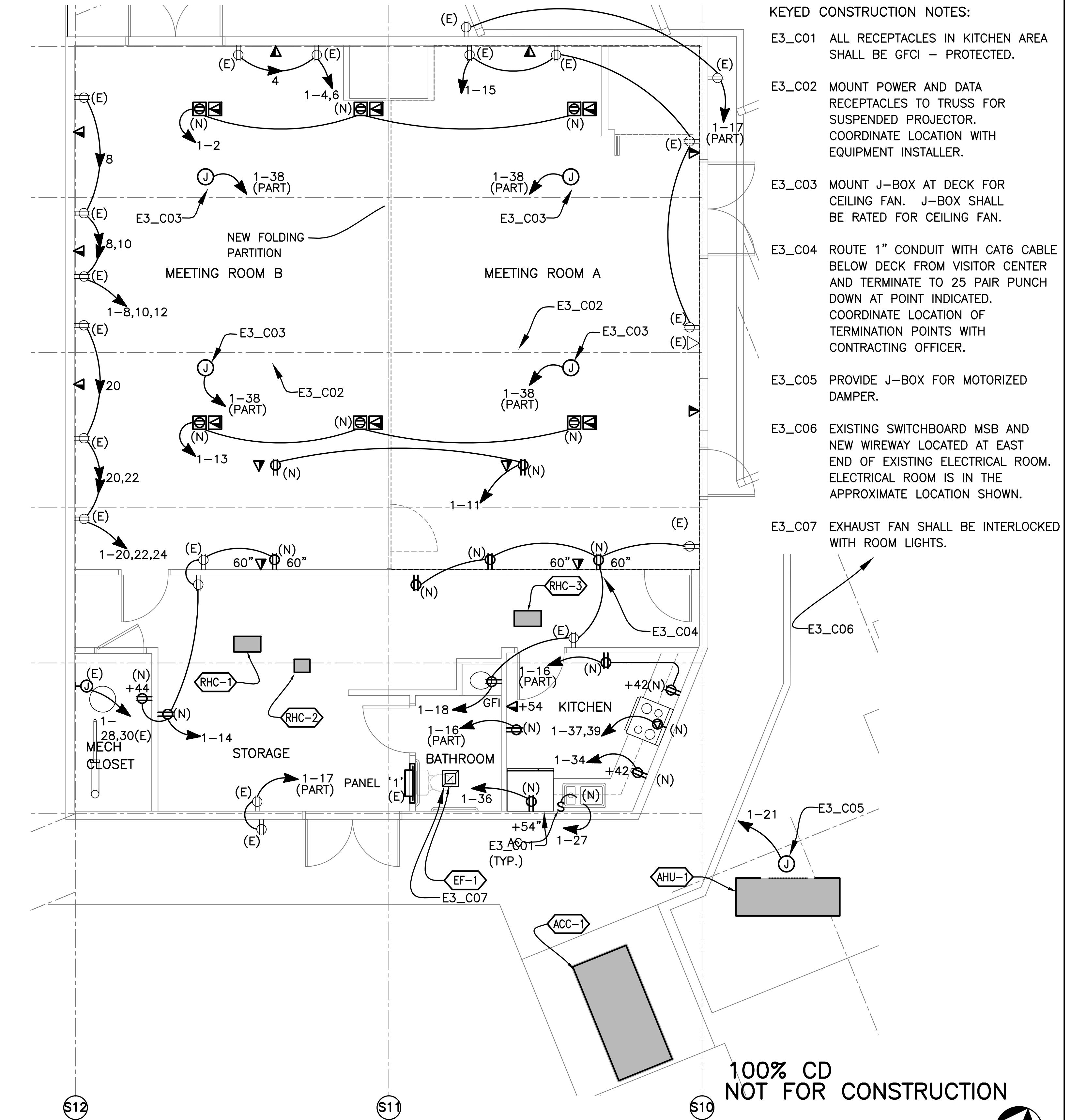
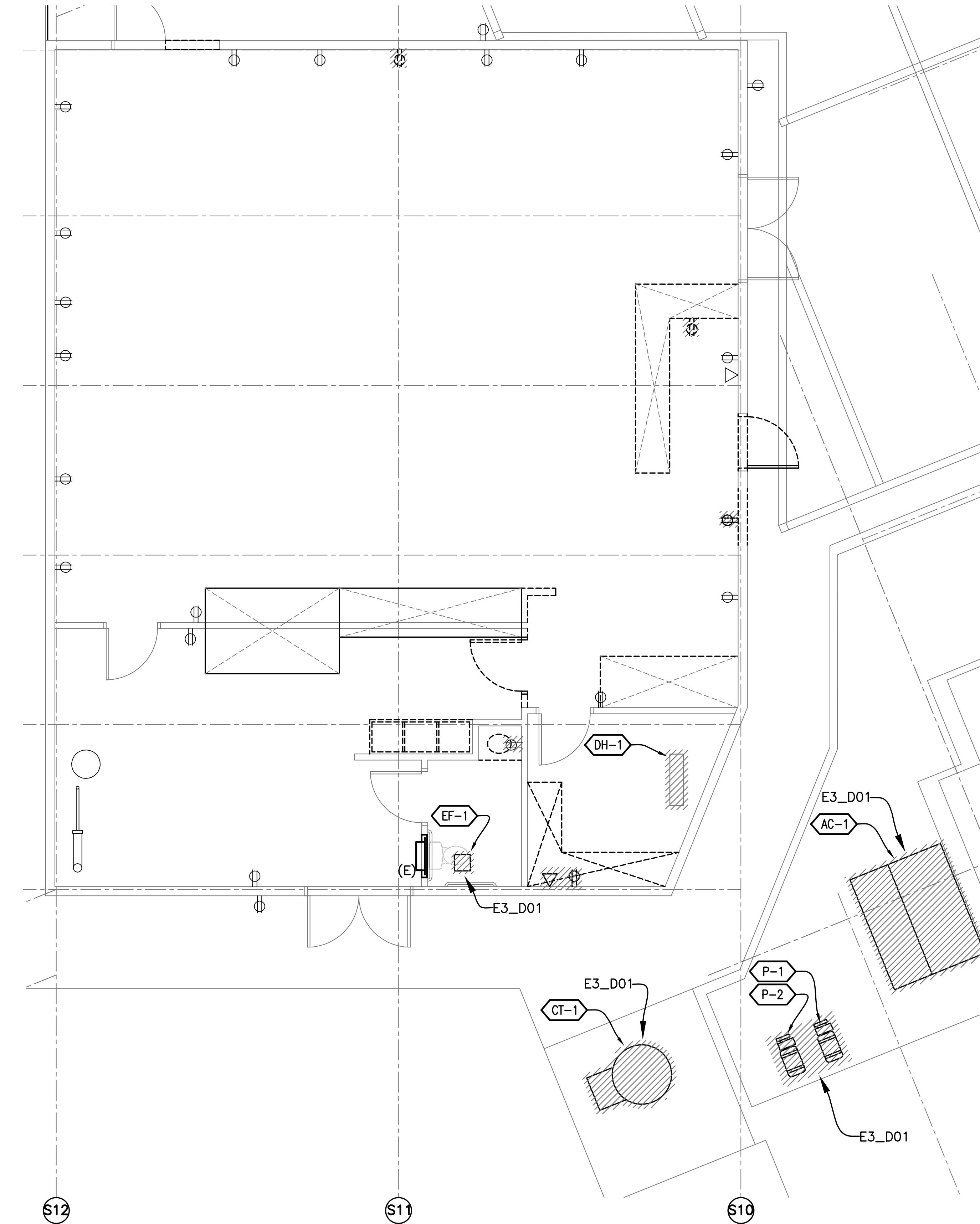
- E2_C01 NEW HVAC WIREWAY LOCATED IN ELECTRICAL ROOM IN BLDG 2. PROVIDE NEW FEEDERS AS INDICATED.
- E2_C02 EXISTING 112.5-KVA TRANSFORMER, 480V TO 120/208V, 3P, 4W.
- E2_C03 PROVIDE NEW WIRING AND CONNECTIONS TO NEW MECHANICAL EQUIPMENT.
- E2_C04 PROVIDE FEEDERS INDICATED IN EXISTING CONDUIT.
- E2_C05 FIELD VERIFY EXISTING FEEDERS.



2
E-2 ONE-LINE DIAGRAM
SCALE: NONE

100% CD
NOT FOR CONSTRUCTION

| DESIGNED: DR CADD EK TECH. REVIEW: KLC DATE: 05/10/2016 | SUB SHEET NO. E-2 | TITLE OF SHEET NEW EDUCATION CENTER MALAQUITE BEACH ONE-LINE DIAGRAM PADRE ISLAND NATIONAL SEASHORE | DRAWING NO. 613 PMIS/PKG NO. 168359 SHEET 21 OF 27 |
|--|----------------------|---|---|
|--|----------------------|---|---|



1 E-3 DEMOLITION PLAN

NOTE: DEVICES SHOWN ARE EXISTING TO REMAIN UNLESS SHOWN AS HATCHED.

KEYED DEMOLITION NOTES:

- E3_D01 REMOVE EXISTING MECHANICAL EQUIPMENT. REMOVE ASSOCIATED WIRING TO POINT OF ORIGIN. PRESERVE BREAKERS AND CONDUIT.

2 E-3 CONSTRUCTION PLAN

SHEET NOTES:

- CIRCUIT ALL VAV CONTROL POWER TO 1-23.

| DESIGNED: | SUB SHEET NO. |
|---------------|---------------|
| DR | |
| GADD | |
| EK | |
| TECH. REVIEW: | |
| KLC | |
| DATE: | |
| 05/10/2016 | |

E-3

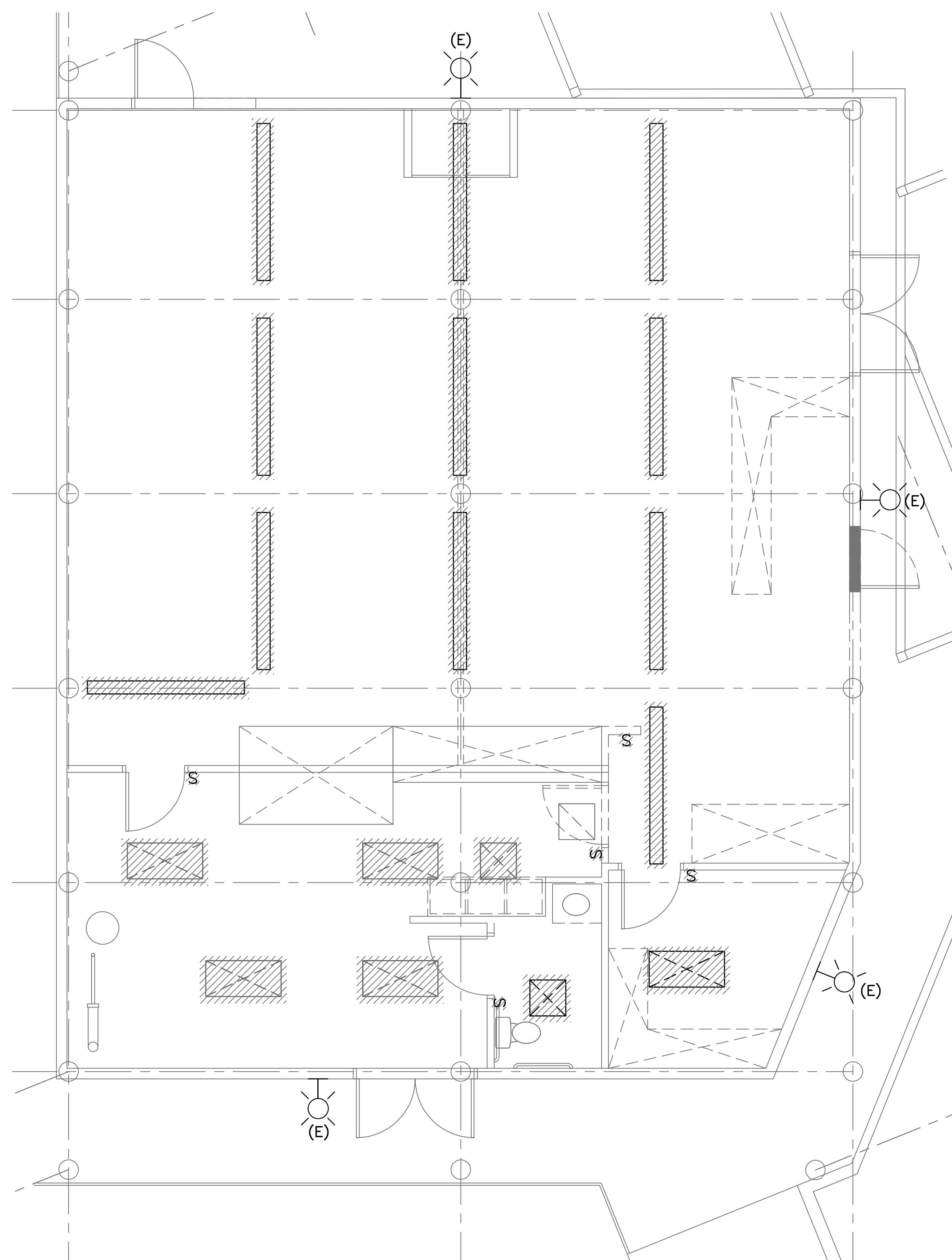
TITLE OF SHEET
NEW EDUCATION CENTER
MALAQUITE BEACH
POWER PLANS
PADRE ISLAND NATIONAL SEASHORE

DRAWING NO.
613
125059B

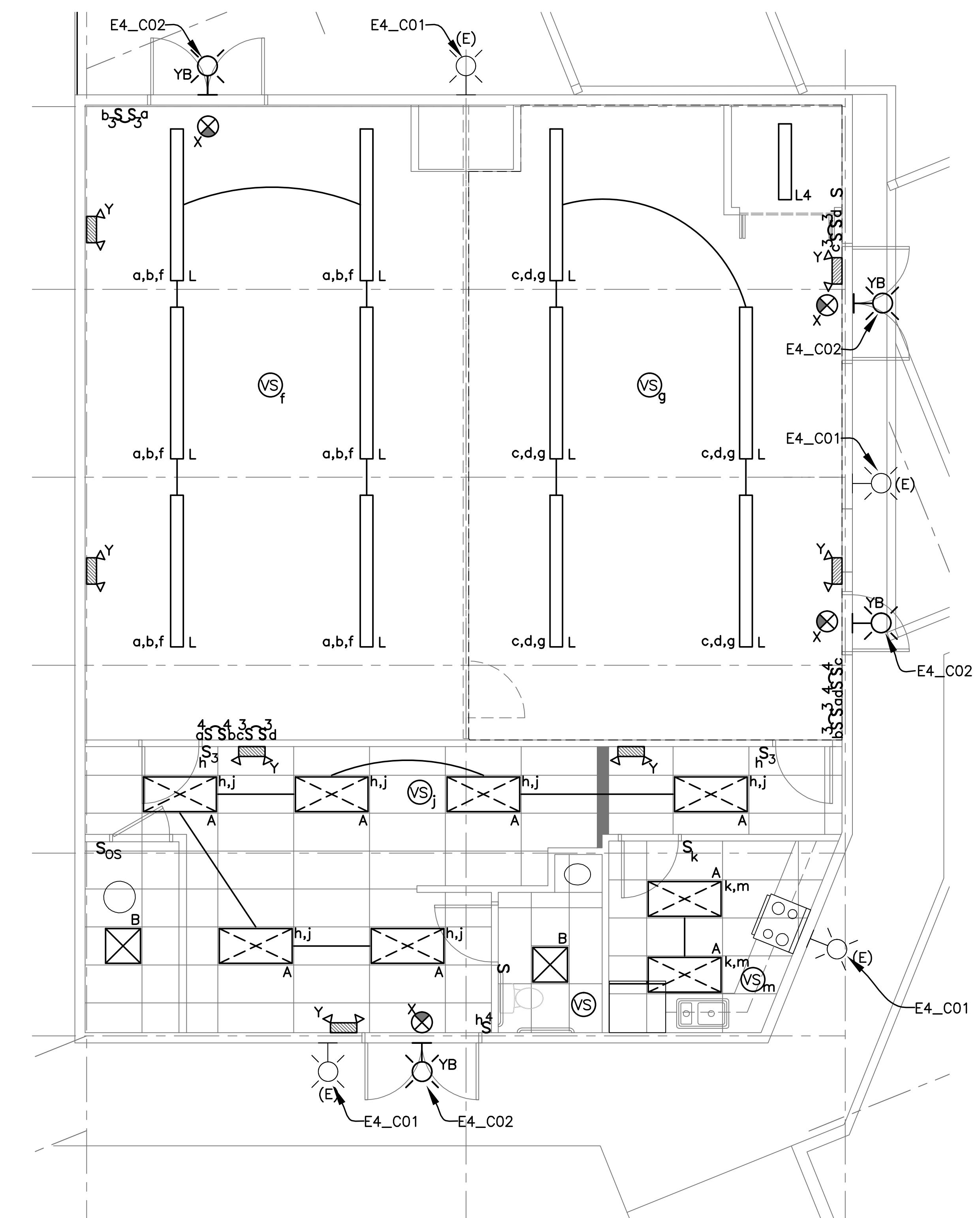
PMIS/PKG NO.
168359

SHEET

22 OF 27



1 E-4 DEMOLITION PLAN



2 E-4 CONSTRUCTION PLAN

SHEET NOTES:

- CIRCUIT ALL LIGHTING TO 1-7.
- CIRCUIT ALL EXIT SIGNS AND EMERGENCY LIGHTS AHEAD OF LOCAL SWITCHING.
- UPPER CASE LETTER DENOTES FIXTURE TYPE. LOWER CASE LETTER DENOTES LIGHTING CONTROL DEVICE AND THE FIXTURES CONTROLLED BY THAT DEVICE.

KEYED CONSTRUCTION NOTES:

E4_C01 EXISTING EXTERIOR LIGHT POWERED THROUGH EXISTING ROOF-MOUNTED PHOTOCELL AND CIRCUIT 1-40.

E4_C02 NEW EXTERIOR LIGHT SHALL BE POWERED THROUGH EXISTING ROOF-MOUNTED PHOTOCELL AND CIRCUIT 1-40.

100% CD
NOT FOR CONSTRUCTION

4 0 4 8
SCALE OF FEET



| DESIGNED: | SUB SHEET NO. | TITLE OF SHEET | DRAWING NO. |
|---------------|---------------|--------------------------------|--------------|
| DR | | NEW EDUCATION CENTER | 613 |
| GADD | | MALAQUITE BEACH | 125059B |
| EK | | LIGHTING PLANS | PMIS/PKG NO. |
| TECH. REVIEW: | | | 168359 |
| KLC | | PADRE ISLAND NATIONAL SEASHORE | SHEET |
| DATE: | | | 23 OF 27 |
| 05/10/2016 | | | |

E-4

| PANEL: 1 (E) | | VOLTAGE: 120/208 V. | | TYPE: PANELBOARD | |
|----------------------------|----------------------|---------------------------|-----------------|-------------------------|-------------|
| | | 3 PH 4 W 60 Hz | | MOUNTING: SEE PLAN | |
| FED FROM: MSB | | 100 AMP MAIN RATED AT 80% | | NEUTRAL BUS: YES | |
| N/A AMP MAIN LUGS | | GROUND BUS: YES | | ISOLATED GND: NO | |
| 100 AMP BUS | | NOTE: 1. NEW BREAKER | | | |
| COPPER BUSING | | 2. [] | | | |
| 10000 SYMMETRICAL RMS AMPS | | 3. [] | | | |
| PANEL SHORT CIRCUIT RATING | | 4. [] | | | |
| NOTE | DESCRIPTION | CCT VA | BREAKER AMP / P | CCT VA | DESCRIPTION |
| SURGE ARRESTER (E) | 0 40 / - 1 A 2 | 20 / 1 | 540 | RECEPTACLES FLOOR | NOTE |
| * | 0 -- / - 3 B 4 | 20 / 1 | 180 | RECEPTACLE ROOM B | |
| * | 0 -- / - 3 C 6 | 20 / 1 | 180 | RECEPTACLE ROOM B | |
| LIGHTS | 1188 20 / 1 7 A 8 | 20 / 1 | 180 | RECEPTACLE ROOM B | |
| SPARE | 0 20 / 1 9 B 10 | 20 / 1 | 180 | RECEPTACLE ROOM B | |
| RECEPTACLES PROJECTORS | 360 20 / 1 11 C 12 | 20 / 1 | 180 | RECEPTACLE ROOM B | |
| RECEPTACLES FLOOR | 540 20 / 1 13 A 14 | 20 / 1 | 720 | RECEPT ROOM B / STORAGE | |
| RECEPTACLES ROOM A | 720 20 / 1 15 B 16 | 20 / 1 | 540 | RECEPTACLES KITCHEN | |
| OUTSIDE OUTLETS (E) | 720 20 / - 17 C 18 | 20 / 1 | 1080 | RECEP RM B / GARAGE/RR | |
| SPARE | 0 -- / 2 19 A 20 | 20 / 1 | 180 | RECEPTACLE ROOM B | |
| 1 MOTORIZED DAMPER | 20 15 / 1 21 B 22 | 20 / 1 | 180 | RECEPTACLE ROOM B | |
| 1 VAV CONTROL POWER | 200 20 / 1 23 C 24 | 20 / 1 | 180 | RECEPTACLE ROOM B | |
| 1 RHC-2 | 1000 20 / 1 25 A 26 | 20 / 1 | 0 | SPARE | |
| 1 RHC-1 | 1500 20 / - 27 B 28 | 30 / -- | 2250 | WH-1 (E) | |
| * | 1500 -- / 2 29 C 30 | -- / 2 | 2250 | " | |
| 1 RHC-3 | 1500 20 / - 31 A 32 | 20 / 1 | 0 | SPARE | |
| * | 1500 -- / 2 33 B 34 | 20 / 1 | 1200 | MICROWAVE | |
| 1 EF-1 | 172 15 / 1 35 C 36 | 20 / 1 | 1000 | REFRIGERATOR | |
| 1 RANGE | 4850 50 / -- 37 A 38 | 15 / 1 | 400 | CEILING FANS | 1 |
| * | 4850 -- / 2 39 B 40 | 20 / 1 | 700 | OUTSIDE LIGHTS (E) | |
| SPARE | 0 20 / 1 41 C 42 | 20 / 1 | 70 | NIGHT LIGHT | |
| PANEL LOADING SUMMARY | | | | | |
| LOAD TYPE | PH A | PH B | PH C | TOTAL | |
| INCANDESCENT | 0.0 | 0.0 | 0.1 | 0.1 | KVA |
| INDUCTIVE LTG | 1.2 | 0.7 | 0.0 | 1.9 | KVA |
| RECEPTACLES | 2.2 | 1.8 | 2.0 | 5.9 | KVA |
| MOTORS | 0.0 | 0.0 | 0.2 | 0.2 | KVA |
| APPLIANCES | 4.9 | 6.1 | 1.7 | 12.6 | KVA |
| HEAT | 2.5 | 3.0 | 1.5 | 7.0 | KVA |
| COMPUTER | 0.0 | 0.0 | 0.0 | 0.0 | KVA |
| OTHER | 0.4 | 2.3 | 2.5 | 5.1 | KVA |
| NONCOINCIDEN | 0.0 | 0.0 | 0.0 | 0.0 | KVA |
| PEAK LOAD | 0.0 | 0.0 | 0.0 | 0.0 | KVA |
| TOTAL | 11.1 | 13.8 | 7.9 | 33.0 | KVA |
| PHASE BALANCE | A-B (%) | B-C (%) | C-A (%) | PF (%) | |
| | 75 | 46 | 71 | 88 | |
| MIN PANEL AMPACITY | 90 | AMPERES | | | |

Version 0615

| EQUIPMENT SCHEDULE | | | | | | | | | | | | |
|--------------------|-------------------------------|-------|----|----------|----------|----------|---------|--------------------|---------------------|-----------------------|----------------|--------------------------|
| Version 1115 | | | | | | | | | | | | |
| KEY | ITEM DESCRIPTION (SEE NOTE 1) | VOLTS | PH | MOTOR HP | UNIT FLA | UNIT KVA | UNIT KW | PANEL (SEE NOTE 2) | FUSING (SEE NOTE 4) | DISC. BY (SEE NOTE 4) | DISC. LOCATION | REMARKS |
| ACC-1 | CONDENSER | 200 | 3 | 0 | 66.3 | 23.0 | 18.4 | MSB | 80 | ON ONE-LINE | MECH | AT UNIT See Note(s) 1; 5 |
| AHU-1 | AIR HANDLER | 200 | 3 | 0 | 102 | 35.2 | 28.1 | MSB | 110 | ON ONE-LINE | MECH | AT UNIT See Note(s) 1; 5 |
| EF-1 | EXHAUST FAN | 115 | 1 | 0 | 1.5 | 0.2 | 0.1 | 1 | - | 3/4" C - 2#12, 1#12G | ELEC | AT UNIT -- |
| RHC-1 | REHEAT COIL | 200 | 1 | 0 | 14.4 | 2.9 | 2.9 | 1 | - | 3/4" C - 3#12, 1#12G | ELEC | AT UNIT -- |
| RHC-2 | REHEAT COIL | 115 | 1 | 0 | 8.3 | 1.0 | 1.0 | 1 | - | 3/4" C - 2#12, 1#12G | ELEC | AT UNIT -- |
| RHC-3 | REHEAT COIL | 200 | 1 | 0 | 14.4 | 2.9 | 2.9 | 1 | - | 3/4" C - 3#12, 1#12G | ELEC | AT UNIT -- |
| 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0 | 0 | - | 0 | 0 -- |

NOTES:

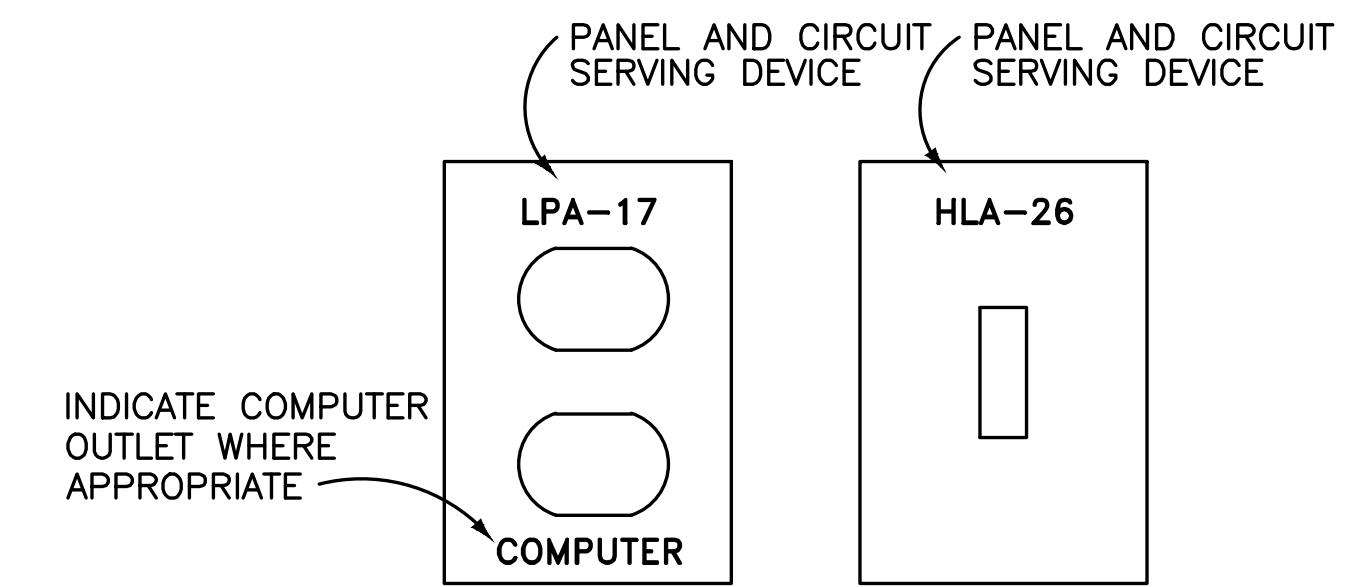
1. COORDINATE ELECTRICAL EQUIPMENT REQUIREMENTS WITH THE ACTUAL MECHANICAL EQUIPMENT SUPPLIED.
2. REFER TO PANEL SCHEDULES FOR EXACT CIRCUIT NUMBER.
3. IF A FUSE SIZE IS INDICATED, PROVIDE A FUSED DISCONNECT UNLESS INDICATED OTHERWISE.
4. FUSE SIZE INDICATED MUST BE USED IN COMBINATION WITH PROPERLY SIZED OVERLOAD RELAYS. UNLESS INDICATED OTHERWISE, FUSES SHALL BE BUSSMANN LPS-RK OR LPN-RK. CONFIRM ACTUAL NAMEPLATE DATA OF EQUIPMENT AND PROVIDE FUSES RECOMMENDED BY MANUFACTURER.
5. ACC-1 AND THE HEATING ELEMENT OF AHU-1 ARE NON-COINCIDENT LOADS.

| LUMINAIRE SCHEDULE | | | | | | | | | | | |
|--------------------|---------|--------------------------------------|----------|-----------|------------------------|------------------------------------|-------|------|--------|--|--|
| Version 1107 | | | | | | | | | | | |
| KEY | LAMP(S) | DESCRIPTION | FINISH | MOUNTING | SPECIFICATION (NOTE 1) | | | | | | |
| | | | | | MANUFACTURER | CATALOG NUMBER | VOLTS | VA | NOTES | | |
| A | - LED | LED 2X4 RECESSED DIRECT | RECESSED | LEDALITE | 4124D1STL8BCS11E | 120 | 45.9 | | | | |
| B | - LED | LED 2X2 RECESSED DIRECT | RECESSED | LEDALITE | 4122D1STL8BE11E | 120 | 27.9 | | | | |
| L | - LED | LED SUSPENDED LINEAR DIRECT/INDIRECT | ACRYLIC | SUSPENDED | LEDALITE | 24G6LCAG06B81ET | 120 | 71.2 | NOTE 2 | | |
| L4 | - LED | LED SUSPENDED LINEAR DIRECT/INDIRECT | ACRYLIC | SUSPENDED | LEDALITE | 24G5LCAG0411ET | 120 | 35.6 | NOTE 2 | | |
| X | - LED | UNIVERSAL MOUNT EXIT SIGN | WHITE | UNIVERSAL | CHLORIDE | ER44RLDU1WG | 120 | 3 | | | |
| Y | 2 MR16 | POLYCARBONATE EMERGENCY LIGHT | WHITE | UNIVERSAL | CHLORIDE | 65X6N12W6 | 120 | 4 | | | |
| YB | - LED | EXTERIOR WALL-MOUNTED EMERGENCY LT | WHITE | WALL | COOPER | ENC-E01-LED-E1-BL3-WH-LCF-BBB-120V | 120 | 25 | | | |

LUMINAIRE SCHEDULE NOTES:

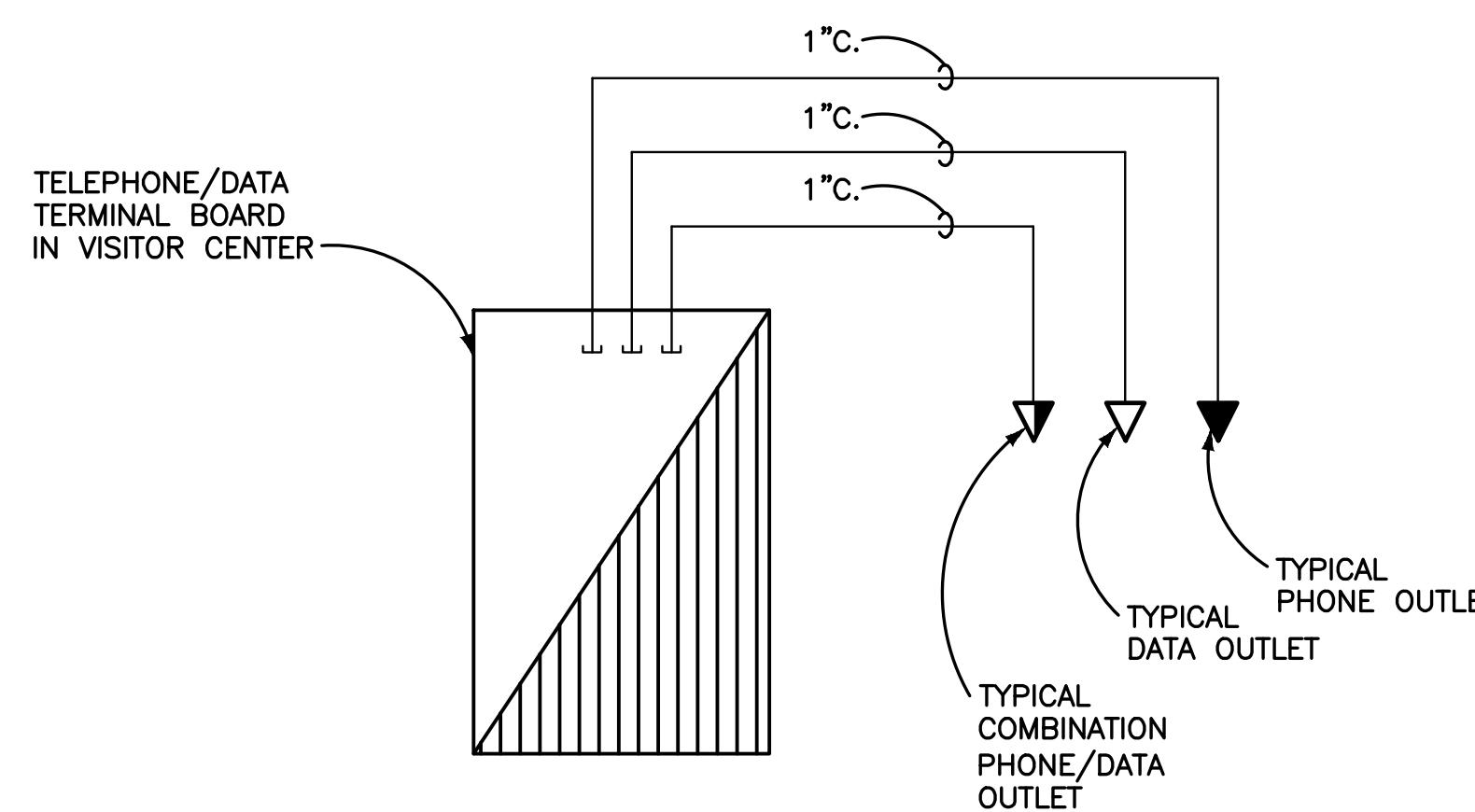
1. UNLESS INDICATED OTHERWISE, REFER TO THE SPECIFICATIONS FOR ALL LAMPS AND BALLASTS. COORDINATE THE VOLTAGE AND MOUNTING CONFIGURATION WITH THE PLANS.
2. MOUNT SUSPENDED FIXTURE LEVEL WITH THE BOTTOM OF THE TRUSSES.

| LOAD SUMMARY: | | | | | | |
|-----------------------------|------|-------|-------|-------|-----|--|
| 120 / 208 3PH, 4W | AMPS | KVA | kW | PF | | |
| BUS SIZE | 400 | | | | | |
| MAIN OCP | 400 | | | | | |
| FEEDER AMPACITY | 380 | | | | | |
| MAXIMUM LOAD CAPACITY | 380 | | 136.9 | 116.4 | 85% | |
| MEASURED PEAK DEMAND DATE: | | 178.7 | 64.4 | 54.7 | 85% | |
| PEAK DEMAND X 125% | | 223.4 | 80.5 | 68.4 | 85% | |
| NEC CALCULATED LOAD REMOVED | | | | | | |
| 1 PANEL 1 | | 122.2 | 44.1 | 51.9 | 85% | |
| 2 AC-1 | | 78.2 | 28.2 | 24 | 85% | |
| 3 CT-1 | | 7.8 | 21.6 | 18.4 | 85% | |
| 4 P-1 | | 4.8 | 13.3 | 11.3 | 85% | |
| 5 DH-1 | | 81.5 | 29.4 | 25 | 85% | |
| NEC CALCULATED LOAD ADDED | | | | | | |
| 1 PANEL 1 | | 94.5 | 34.1 | 29 | 85% | |
| 2 AHU-1 | | 101.5 | 36.6 | 31.1 | 85% | |
| 3 ACC-1 | | 66.3 | 23.9 | 20.3 | 85% | |
| 4 | | 0 | | | | |



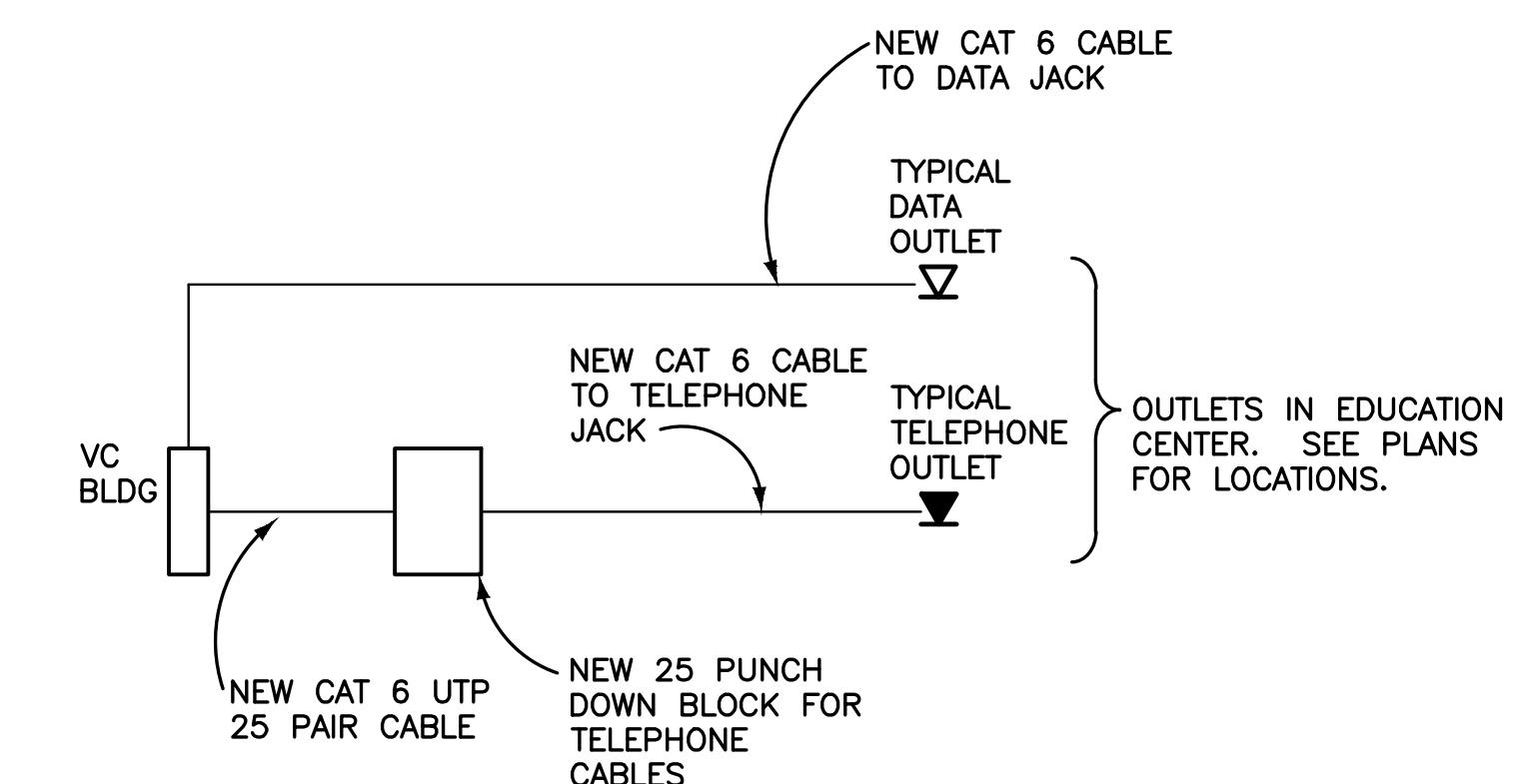
1 DEVICE LABELING DETAIL
E-6 SCALE: NONE

NOTE: LABEL ALL EQUIPMENT PROVIDED WITH A POWER CONNECTION WITH BROTHER "P-TOUCH" SYSTEM OR APPROVED EQUAL. PROVIDE CLEAR OR WHITE TAPE WITH BLACK LETTERING.



3 TELECOMMUNICATIONS CONDUIT RISER DIAGRAM
E-6 SCALE: NONE

NOTE: COORDINATE EXACT TERMINATION POINTS WITH CONTRACTING OFFICER.



4 TELECOM RISER DIAGRAM
E-6 SCALE: NONE

NOTE: COORDINATE EXACT TERMINATION POINTS WITH CONTRACTING OFFICER.

100% CD
NOT FOR CONSTRUCTION

| DESIGNED: | SUB SHEET NO. | TITLE OF SHEET | DRAWING NO. |
|---------------|---------------|----------------|--------------|
| DR | | | 613 |
| GADD | | | |
| EK | | | |
| TECH. REVIEW: | | | |
| KLC | | | |
| DATE: | | | PMIS/PKG NO. |
| 05/10/2016 | | | 168359 |
| | | | SHEET |
| | | | 25 OF 27 |

NEW EDUCATION CENTER
MALAQUITE BEACH
ELECTRICAL DETAILS
PADRE ISLAND NATIONAL SEASHORE

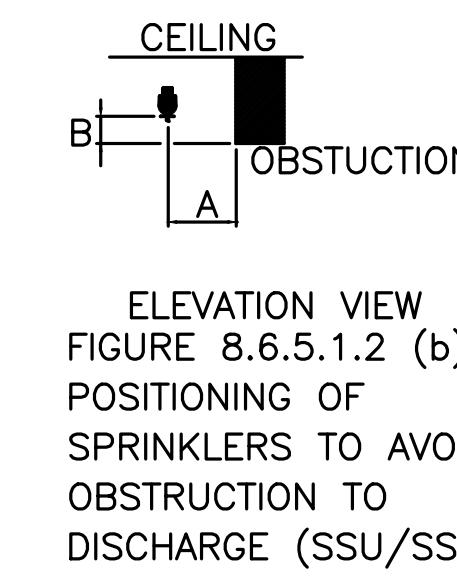
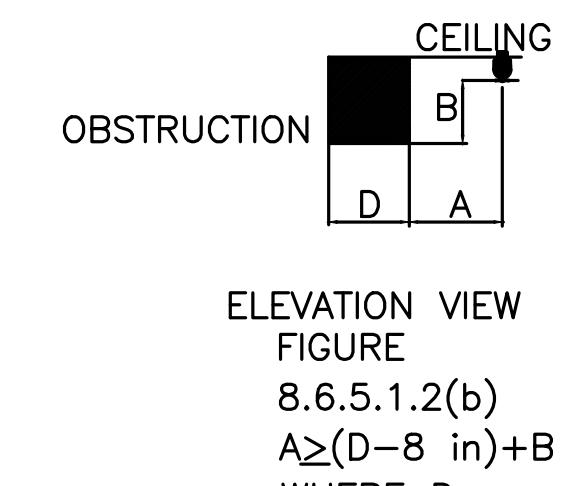
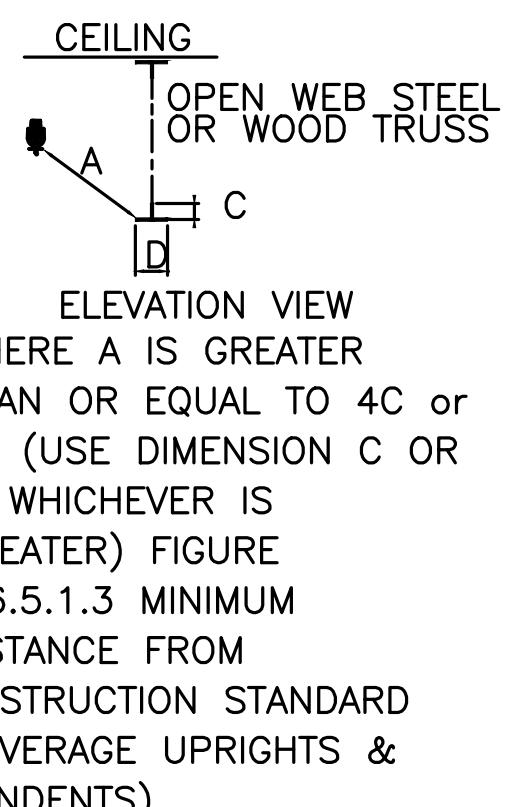


TABLE 8.6.5.1.2 POSITIONING OF SPRINKLERS TO AVOID OBSTRUCTION TO DISCHARGE (SSU/SSP).

| DISTANCE FROM SPRINKLERS TO SIDE OF OBSTRUCTION (A) | MAXIMUM ALLOWABLE DISTANCE OF DEFLECTOR ABOVE BOTTOM OF OBSTRUCTION (IN) (B) |
|--|--|
| LESS THAN 1' | 0 |
| 1' TO LESS THAN 1'-6" | 2-1/2" |
| 1'-6" TO LESS THAN 2'-0" | 3-1/2" |
| 2'-0" TO LESS THAN 2'-6" | 5-1/2" |
| 2'-6" TO LESS THAN 3'-0" | 7-1/2" |
| 3'-0" TO LESS THAN 3'-6" | 9-1/2" |
| 3'-6" TO LESS THAN 4'-0" | 12" |
| 4'-0" TO LESS THAN 4'-6" | 14" |
| 4'-6" TO LESS THAN 5'-0" | 16 1/2" |
| 5'-0" TO LESS THAN 5'-6" | 18" |
| 5'-6" TO LESS THAN 6'-0" | 20" |
| 6'-0" TO LESS THAN 6'-6" | 24" |
| 6'-6" TO LESS THAN 7'-0" | 30" |
| 7'-0" TO LESS THAN 7'-6" | 35" |

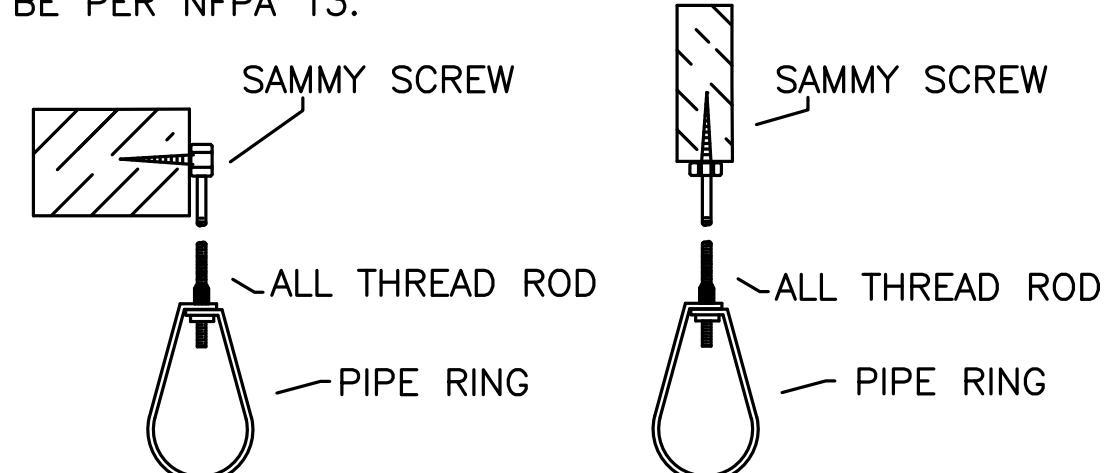
SCOPE OF WORK

ADD AND RELOCATE SPRINKLER HEADS AS REQUIRED TO ACCOMMODATE NEW FLOOR PLAN. REPLACE ALL SPRINKLER HEADS WITH QUICK RESPONSE SPRINKLER HEADS.
EXISTING EXTERIOR SPRINKLER HEADS SHALL REMAIN. ADD (2) NEW EXTERIOR STAINLESS STEEL SPRINKLER HEADS.

ADD AND RELOCATE FIRE ALARM APPLIANCES AS REQUIRED TO ACCOMMODATE NEW FLOOR PLAN LAYOUT. ADD SECOND ANNUNCIATOR IN STORAGE AREA. SEE SPECIFICATIONS.

| HANGER SPACING LEGEND | | | | | | | | | PER NFPA 13 TABLE 9.2.2.1(a) | | | | | | | | |
|--|------|------|--------|--------|------|--------|------|------|------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| NOMINAL PIPE SIZE (IN.) | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | 2 1/2" | 3" | 4" | 6" | 8" | | | | | | | |
| STEEL PIPE SCH 40, SCH 10, DF, EF THREADED LIGHTWALL | N/A | 12-0 | 12-0 | 15-0 | 15-0 | 15-0 | 15-0 | 15-0 | 15-0 | N/A |

WHERE STATIC OR OPERATING PRESSURES EXCEED 100 PSI
HANGERS SHALL BE PER NFPA 13.



1 FIRE SPRINKLER OBSTRUCTIONS

| SYMBOL | DESCRIPTION |
|---------|---|
| [FACP] | FIRE ALARM CONTROL PANEL |
| [FAA] | FIRE ALARM ANNUNCIATOR |
| (P) | SMOKE DETECTOR (PHOTOELECTRIC) |
| [P] | PULL STATION |
| (W) | WATERFLOW SWITCH |
| (V) | VALVE WITH TAMPER SWITCH |
| (OK)75 | HORN WITH STROBE (NUMBER INDICATES CANDELA) |
| (OK)15 | STROBE (NUMBER INDICATES CANDELA) |
| [EOL]RE | END OF LINE RESISTOR |
| [FDC] | FIRE DEPARTMENT CONNECTION |
| — — — | EXISTING SPRINKLER PIPE |
| — — — | NEW SPRINKLER PIPE |

2 HANGER DETAIL

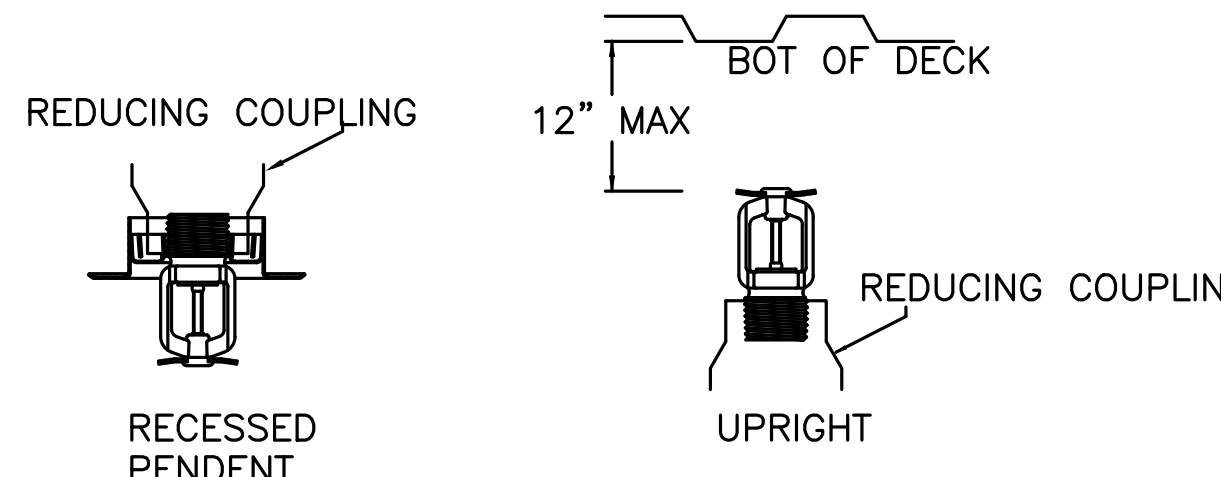
| SYM | CNT | POSITION | FINISH | TEMP | K | NPT | SIN | MFG. | MODEL# |
|------|------|-----------|--------|------|------|-----|-----|------------------------------------|--------|
| < 7 | SIDE | WHITE | 175 | 5.60 | 1/2" | | | EXISTING SPRINKLERS TO REMAIN | |
| < 2 | SIDE | STAINLESS | 175 | 5.60 | 1/2" | | | ADD/NEW | |
| ○ 5 | PEND | CHROME | 155 | 5.60 | 1/2" | | | EXISTING SPRINKLERS TO BE REPLACED | |
| ○ 6 | PEND | CHROME | 155 | 5.60 | 1/2" | | | ADD/NEW | |
| ○ 16 | UPR | BRASS | 155 | 5.60 | 1/2" | | | EXISTING SPRINKLERS TO BE REPLACED | |

5 SPRINKLER HEAD LEGEND

System Outputs

| Control Panel Annunciation | Notification | Safety Control |
|----------------------------|--------------|----------------|
|----------------------------|--------------|----------------|

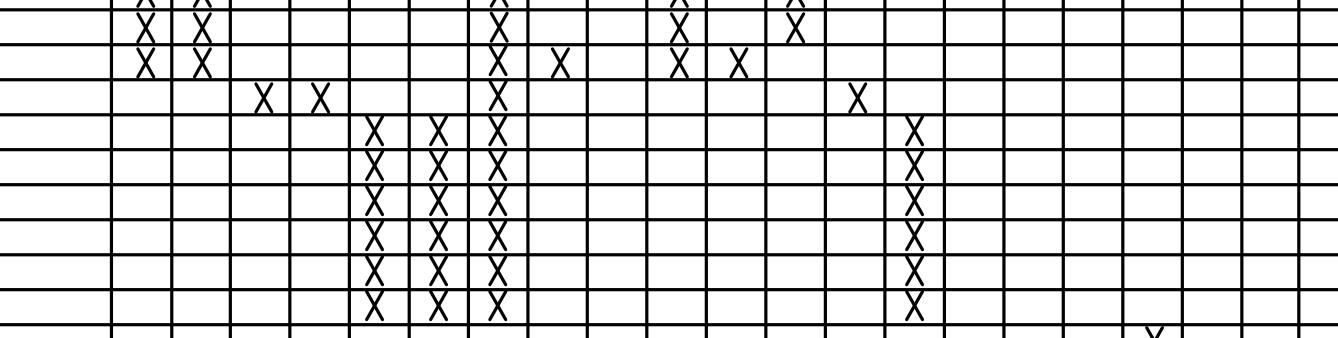
3 FIRE SPRINKLER LEGEND



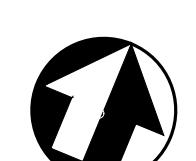
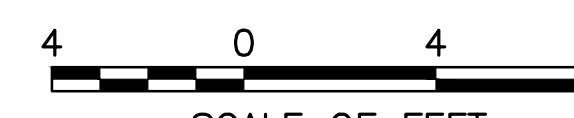
System Inputs

| | | | | | | | | | |
|--------------------------------|---|---|---|---|---|---|---|--|--|
| 1 Smoke Detector | X | X | | | | | | | |
| 2 Pull Station | X | X | | | | | | | |
| 3 Sprinkler Water Flow Valve | X | X | X | X | X | X | | | |
| 4 Sprinkler Tamper Valves | X | X | X | X | X | X | | | |
| 5 Ground Fault | | | | | | | | | |
| 6 Open Circuit | X | X | X | X | X | X | | | |
| 7 Notification Circuit Trouble | X | X | X | X | X | X | | | |
| 8 Low Battery | X | X | X | X | X | X | | | |
| 9 AC Power Failure | | | | | | | | | |
| 10 Telephone Line Fault | X | X | X | X | X | X | | | |
| 11 Silence feature at FACP | | | | | | | X | | |

6 SEQUENCE OF OPERATION



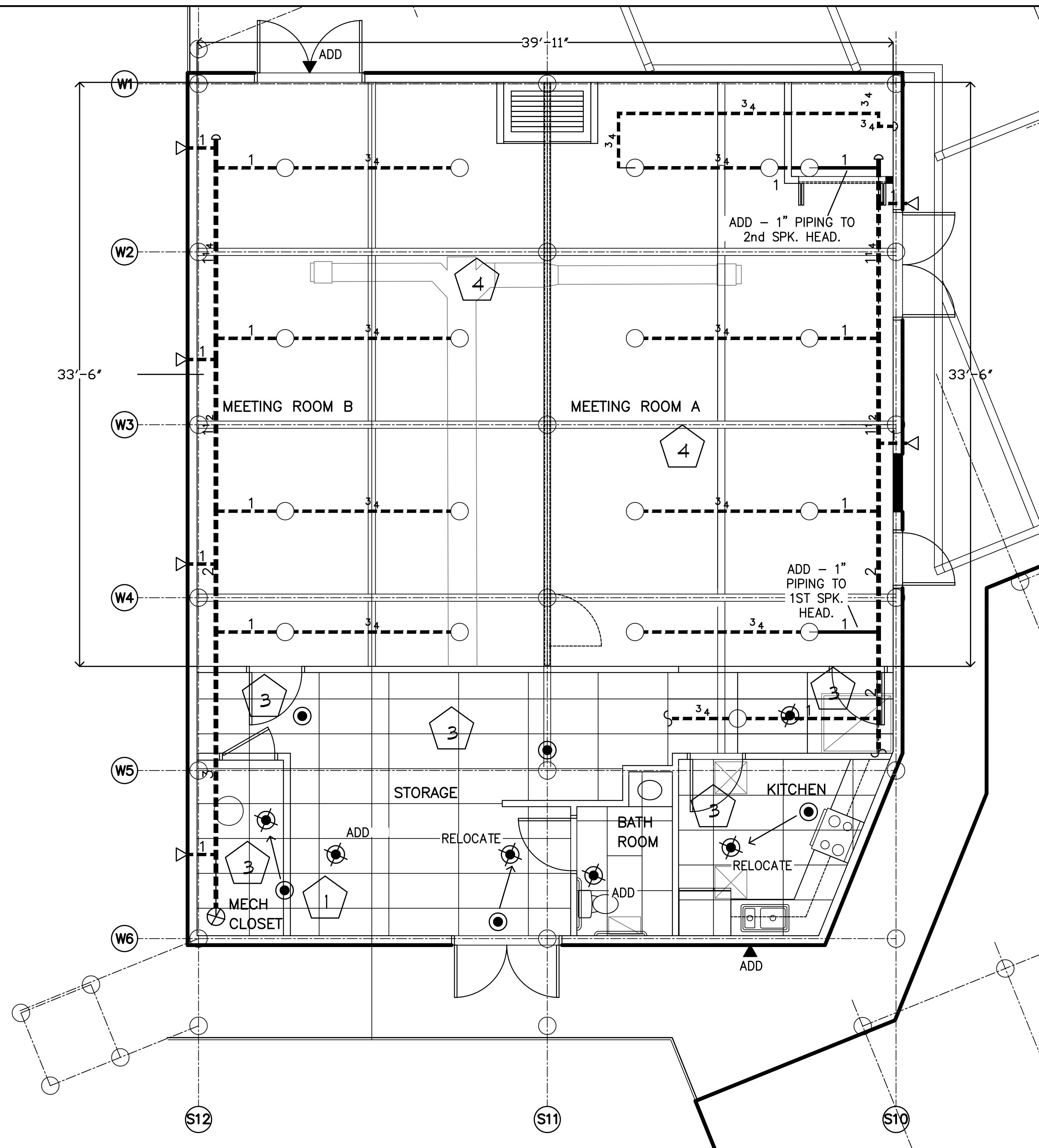
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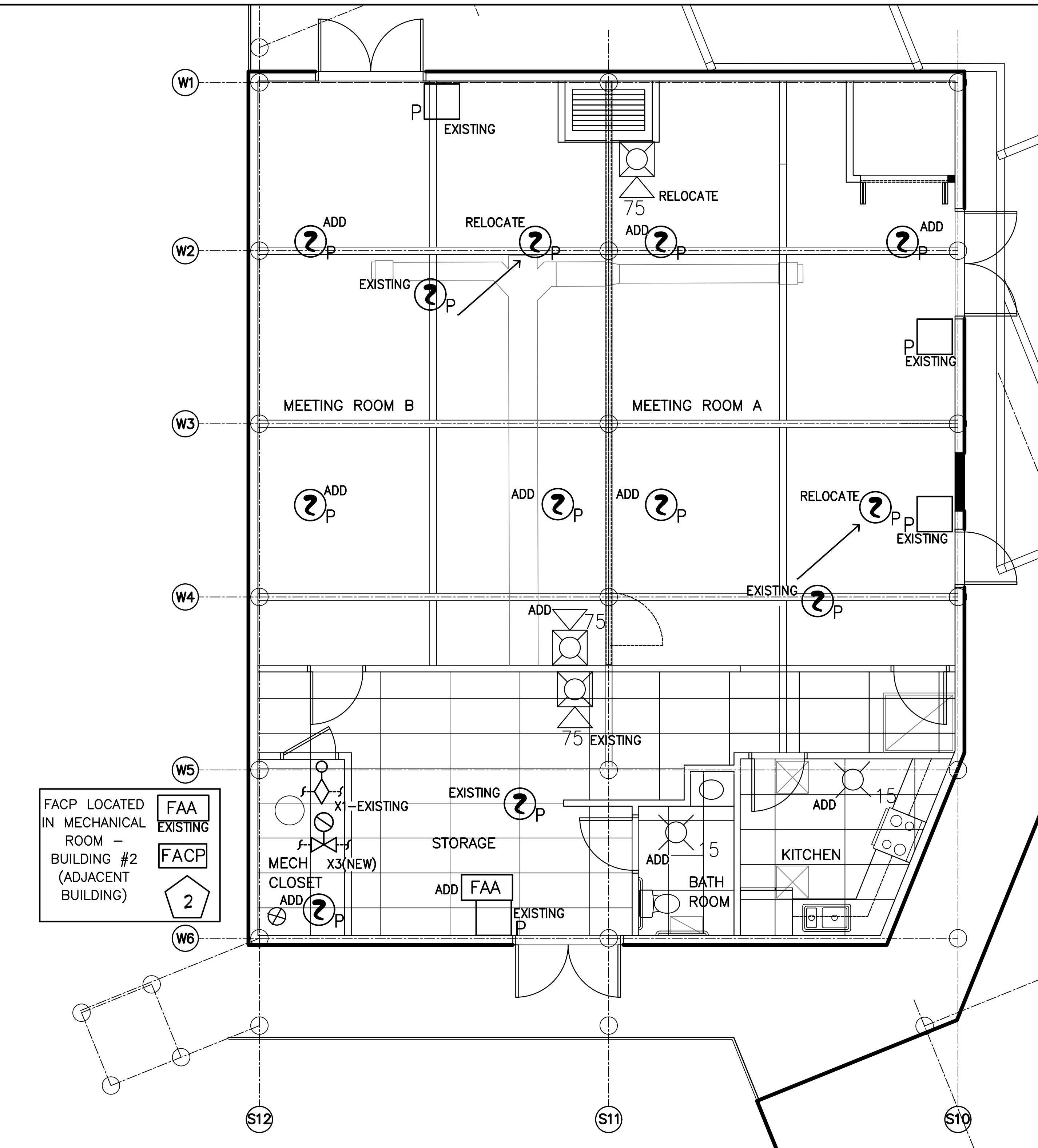
DESIGNED:
BAE
GADD
BAE
TECH. REVIEW:
KLM
DATE:
05/10/2016

SUB SHEET NO.
FP-0

TITLE OF SHEET
NEW EDUCATION CENTER
MALAQUITE BEACH
FIRE PROTECTION PLAN
PADRE ISLAND NATIONAL SEASHORE
PARKNAME2
DRAWING NO.
613
125059B
PMIS/PKG NO.
168359
SHEET
26 OF 27



1 FIRE SPRINKLER PLAN
FP-1 WITH ADD'S AND RELOCATES



2 FIRE ALARM PLAN
FP-1 WITH ADD'S AND RELOCATES

"100% CD"

4 0 4 8
SCALE OF FEET



KEYED CONSTRUCTION NOTES:

- ① EXISTING FIRE SPRINKLER RISER LOCATION
- ② FIRE ALARM CONTROL PANEL
- ③ AREAS ARE ORDINARY HAZARD.
- ④ AREAS ARE LIGHT HAZARD.
- ⑤ FP CONTRACTOR SHALL PROVIDE FOR DRAINAGE OF PIPE WHETHER INDICATED ON THESE PLANS OR NOT

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GADD
BAE
TECH. REVIEW:
KLM
DATE:
05/10/2016

SUB SHEET NO.
FP-1

TITLE OF SHEET
NEW EDUCATION CENTER
MALAQUITE BEACH
FIRE PROTECTION PLAN
PADRE ISLAND NATIONAL SEASHORE
PARKNAME2

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613
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PMIS/PKG NO.
168359
SHEET
27 OF 27