Project Description

ERAU intends to expand the existing building F5. Office space will be added along with additional aircraft parts storage. The existing hanger portion of the building will remain the same. The existing fire sprinkler system will be expanded to include the new addition and the HVAC system will be modified as required.

Site / Vicinity Map

Graphic Standards

- NORTH ARROW INDICATOR
- DETAIL DESIGNATOR
- BUILDING SECTION DESIGNATOR
- REVISION DESIGNATOR
- TYPICALLY INDICATES EXISTING DOOR & FRAME TO BE REMOVED
- TYPICALLY INDICATES EXISTING DOOR & FRAME TO REMAIN
- ELEVATION DESIGNATOR
- DESCRIPTIVE NOTE DESIGNATOR
- ROOM NUMBER / FINISH DESIGNATOR
- DOOR NUMBER DESIGNATOR
- DOOR TYPE DESIGNATOR
- WINDOW TYPE DESIGNATOR
- GRID LINE DESIGNATOR
- TYPICALLY INDICATES PROPOSED DOOR & FRAME - REFER TO DOOR SCHEDULE

Deferred Submittals

The following items are required and will be provided as a deferred submittal:

1. Automatic Fire Sprinkler System.
2. Fire Alarm System.

Automatic Fire Sprinkler System & Fire Alarm System submittal documents for deferred submittal shall be submitted to the local fire district, who shall review them and forward them to the building official, with a notation indicating that the deferred submittal documents have been reviewed and that they have been found to be in general conformance with the design of the building. The deferred submittal items shall "NOT" be installed until their design and submittal documents have been approved by the fire marshal having jurisdiction. It should be noted that the fire alarm panel, the fire department knox box, and the FDC all already exist on the existing building.

IMPROVEMENTS FOR

EMBRY-RIDDLE

BUILDING F5 Addition

Project Information

OWNER:	Embry-Riddle Aeronautical University 3700 Willow Creek Road Prescott, AZ 86301	PH: 928-777-6600 Contact: Carl Beumer beumerc@erau.edu
PREPARED BY:	W. Alan Kenson & Associates, P.C. P.O. Box 11593 Prescott, AZ 86304	PH: 928-443-5812 Contact: Alan Kenson waka@cableone.net
CONTRACTOR:	To be determined	
SCOPE OF WORK:	Building Addition	
PROJECT ADDRESS:	6482 Corradi Way, Unit F5 Prescott, AZ 86301	
ZONE:	IL	
OCCUPANCY:	B & S1	
CONSTRUCTION TYPE:	II-B Sprinklered	

ACTUAL AREA

Existing:	11,739 S.F.
Proposed Addition:	1,920 S.F.
Total:	13,659 S.F.

EMERGENCY LIGHTING:	Yes
FIRE ALARMS:	Yes
FIRE SPRINKLERS:	Yes
FIRE EXTINGUISHERS:	Yes - 1 per 3,000 S.F.
BUILDING CODE:	2018 International Building Code
PARKING:	Parking is existing and adequate

Sheet Index

Architect:

W. Alan Kenson & Associates, P.C.

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ARCHITECTURE & PLANNING

Feb 13, 2020 - 1:56pm

REVISIONS	BY

REGISTERED ARCHITECT
CERTIFICATE NO.
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Date Signed 02/13/20
ARIZONA U.S.A.
EXPIRES: 6/30/21

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ARCHITECTURE & PLANNING

DRAWING: Cover Sheet

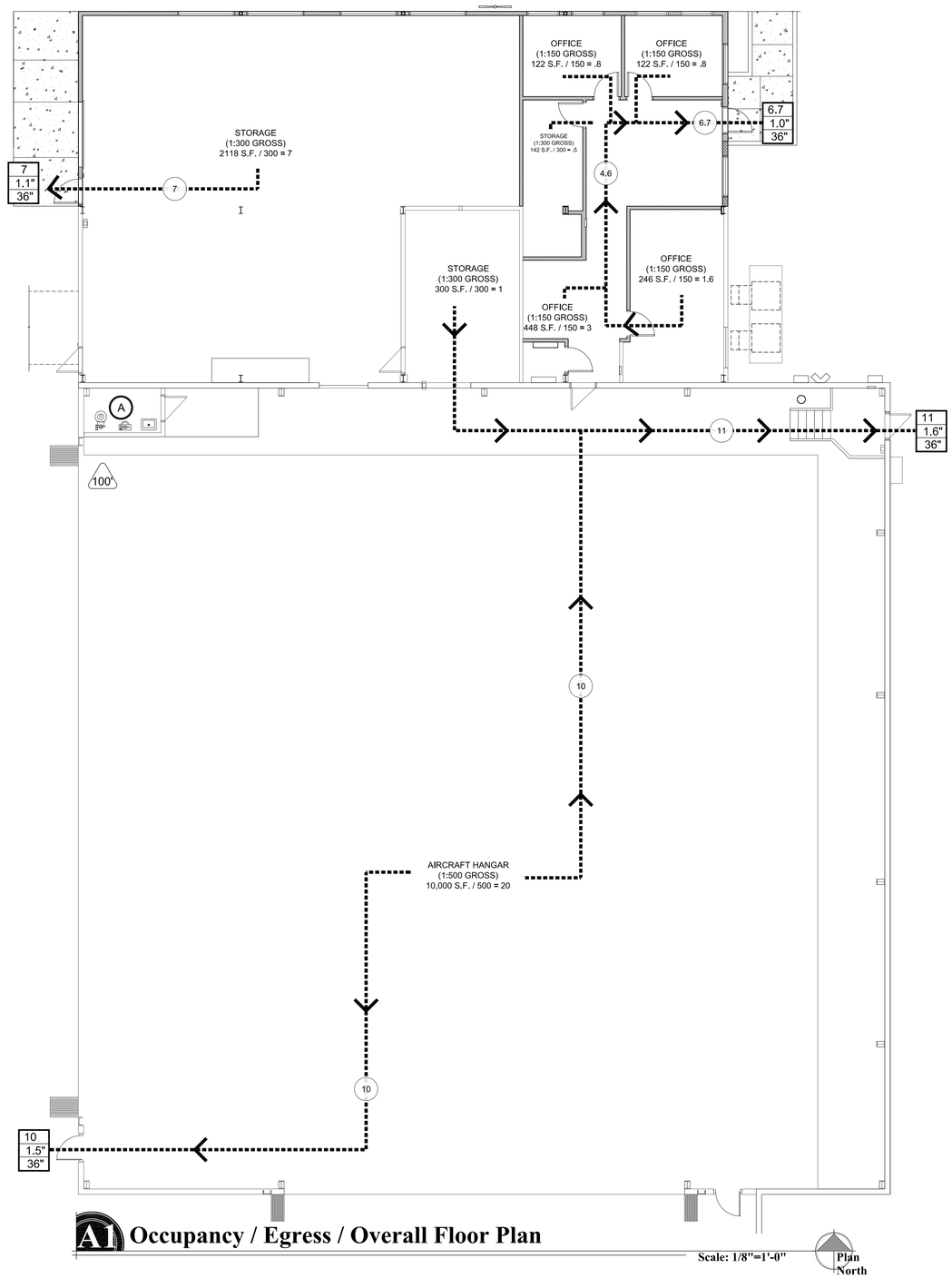
PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301
102-03-003A

APN:

DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: **CS1**

Plumbing Calculations

	OCCUPANCY CLASSIFICATION	OCCUPANCY COUNT	WATER CLOSETS	LAVATORIES
	EDUCATIONAL FACILITIES	7.5	.15	.15
	STORAGE	28	.28	.28
TOTAL REQUIRED			1	1
TOTAL EXISTING			1	1



A1 Occupancy / Egress / Overall Floor Plan

Scale: 1/8"=1'-0"

Plan North

Accessibility Notes

1. ACCESS TO THESE FACILITIES SHALL BE AT PRIMARY ENTRANCES.
2. THE SLOPE OF PUBLIC WALKS SHALL NOT EXCEED A MAXIMUM CROSS SLOPE OF 2%.
3. WALKING SURFACES GREATER THAN 2% SHALL BE SLIP RESISTANT.
4. PROVIDE A 44"x60" MINIMUM LANDING ON THE STRIKE SIDE OF THE ENTRANCE DOOR WITH 44" MINIMUM WIDTH IN THE DIRECTION OF TRAVEL.
5. WALLS SHALL EXTEND 18" TO THE SIDE OF THE STRIKE EDGE OF A DOOR OR GATE THAT SWINGS TOWARDS THE OCCUPANT.
6. RAMPS SHALL HAVE A NON-SLIP SURFACE.
7. RAMPS SHALL BE A MINIMUM OF 36" WIDE.
8. EVERY REQUIRED EXIT DOORWAY SHALL BE SIZED FOR A DOOR NOT LESS THAN 36" WIDE BY NOT LESS THAN 6'-8" HIGH CAPABLE OF OPENING 90 DEGREES AND MOUNTED SO THE CLEAR WIDTH OF THE EXIT WAY IS 32" MINIMUM.
9. THRESHOLDS TO BE A MAXIMUM OF 1/4" ABOVE ADJACENT FLOOR FINISH. ONE-HALF INCH THRESHOLD MAY BE USED IF BEVELED PER A.D.A. STANDARDS.
10. MAXIMUM EFFORT TO OPERATE A DOOR SHALL NOT EXCEED 5 POUNDS.
11. THE BOTTOM 10 INCHES OF ALL DOORS EXCEPT AUTOMATIC AND SLIDING DOORS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE.
12. PROVIDE LEVER TYPE HARDWARE, PANIC BARS, PUSH AND PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP THE OPENING HARDWARE. (30" TO 44" A.F.F.) REFER TO DOOR HARDWARE SCHEDULE.

Egress Legend:

- EXIT ACCESS
- (A) ACCESSORY USE (NO OCCUPANCY)
- [XX] ROOM OCCUPANCY LOAD
- (XX) SUBTOTAL OCCUPANCY LOAD
- [XX] OCCUPANCY TOTAL
  [XX] REQUIRED EXIT WIDTH (FACTOR = 0.15)
  [XX] PROVIDED EXIT WIDTH
- <#> WORST CASE TRAVEL DISTANCE

FUNCTION OF SPACE	OCCUPANT LOAD FACTOR
STORAGE	300 GROSS
OFFICE	150 GROSS
AIRCRAFT HANGAR	500 GROSS

Occupant load

NOTE:
GROSS SQUARE FOOTAGE LISTED BELOW DOES NOT INCLUDE ACCESSORY AREAS.

STORAGE:	2,560 SQ. FT.	8 OCCUPANTS
OFFICE:	828 SQ. FT.	6 OCCUPANTS
AIRCRAFT HANGAR	10,000 SQ. FT.	20 OCCUPANTS
TOTAL:	13,510 SQ. FT.	34 OCCUPANTS

NOTE:
- PROVIDE A 6"x9" BLUE TACTILE 'EXIT' SIGN AS MANUFACTURED BY 'SIMPLY EXIT SIGNS (#SE-1980)' OR EQUAL COMPLYING WITH ICCA117.1 AND IBC 1011.3 ADJACENT TO EACH DOOR TO AN EXIT PASSAGEWAY AND THE EXIT DISCHARGE. SIGN SHALL BE MOUNTED 60" A.F.F. TO THE CENTER OF THE SIGN.

REVISIONS	BY

REGISTERED ARCHITECT
CERTIFICATE NO.
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Date Signed 02/13/20
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EXPIRES: 6/30/21

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ARCHITECTURE & PLANNING

DRAWING: Occupancy / Egress / Overall Floor Plan

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

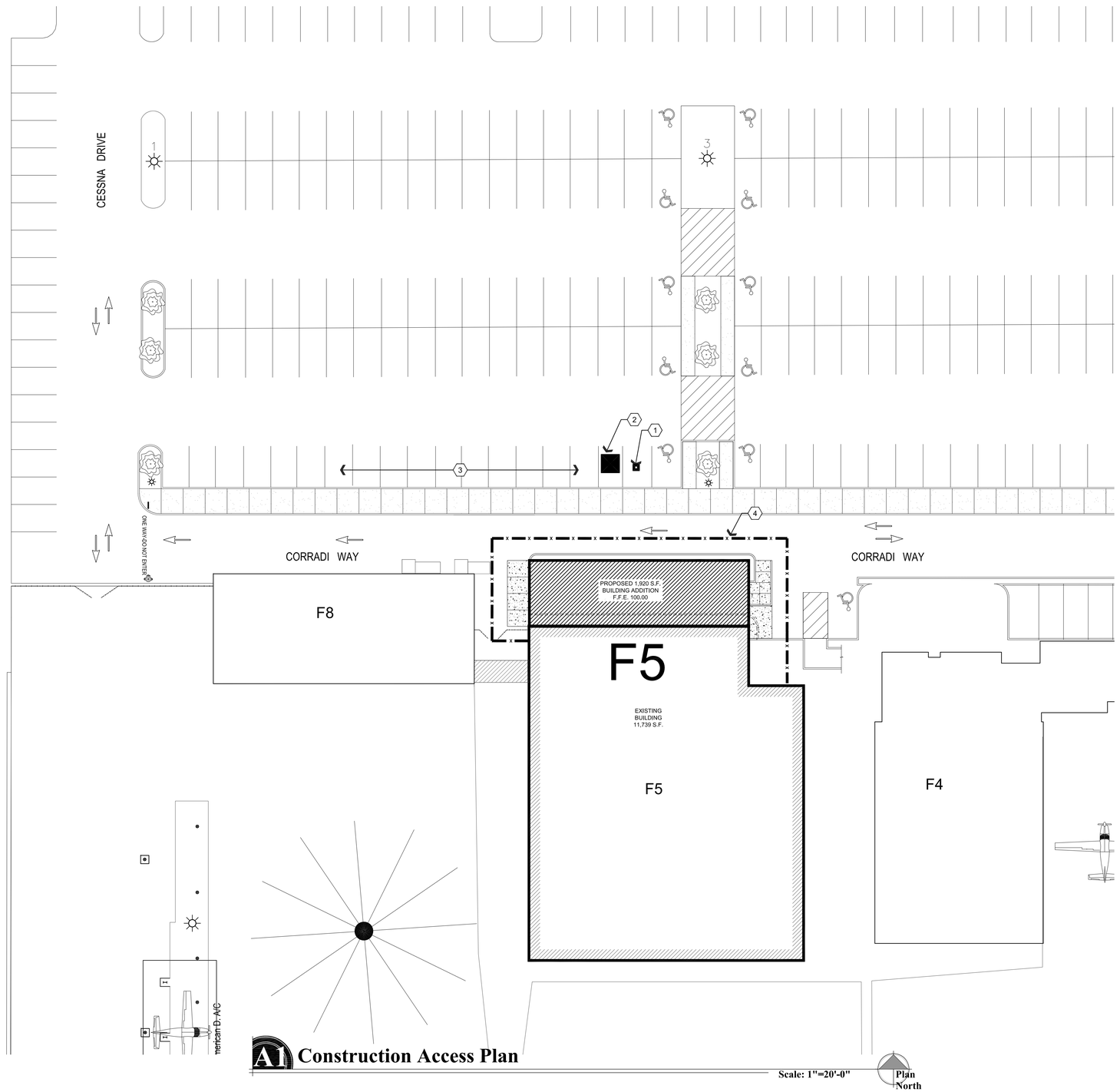
APN: 102-03-003A

DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: CS2

Feb 10, 2020 - 3:50pm

Descriptive Keynotes

1. LOCATION FOR J-JON.
2. LOCATION OF 6 YARD TRASH DUMPSTER PROVIDED BY CONTRACTOR.
3. CONTRACTOR PARKING AREA. 10 SPACES AVAILABLE. CONTRACTOR TO PROVIDE SIGNAGE DESIGNATING SPACES FOR CONSTRUCTION PARKING.
4. 6' TALL TEMPORARY CHAIN LINK FENCING BY CONTRACTOR.



A1 Construction Access Plan

Scale: 1"=20'-0"

Plan North

Feb 13, 2020 - 1:55pm

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ARCHITECTURE & PLANNING

DRAWING: Construction Access Plan

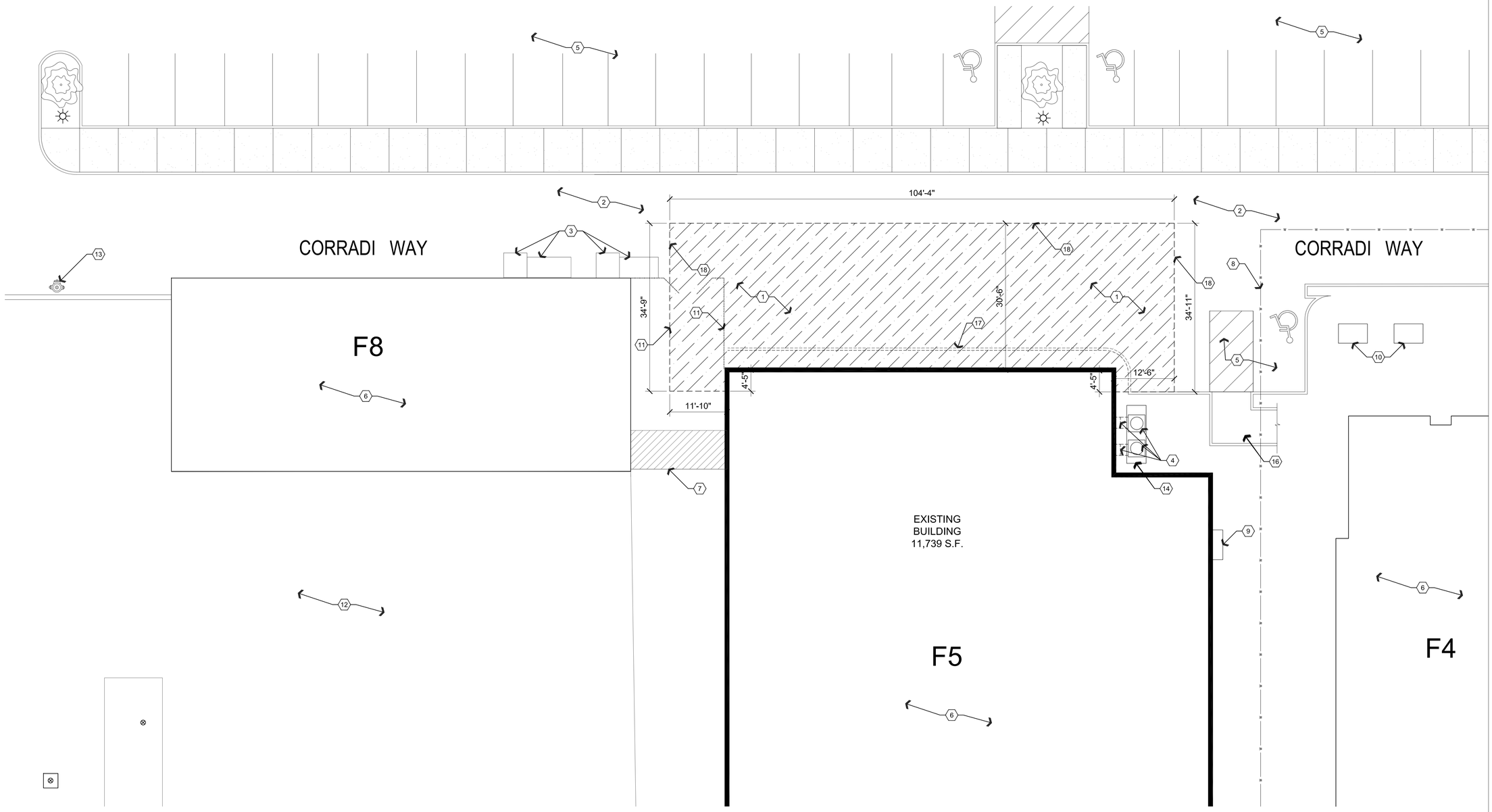
PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: **A0.0**

Descriptive Keynotes

1. REMOVE EXISTING ASPHALTIC PAVEMENT AND PARTIAL ABC AS REQUIRED.
2. EXISTING PARKING LOT DRIVEWAY.
3. EXISTING RAMP / LANDING TO REMAIN.
4. EXISTING HVAC UNIT AND DUCTWORK TO BE REMOVED, REFER TO MECHANICAL PLANS. .
5. EXISTING PARKING LOT.
6. EXISTING BUILDING.
7. EXISTING COVERED WALKWAY.
8. APPROXIMATE LOCATION OF EXISTING WATER LINE.
9. EXISTING ELECTRICAL SERVICE ENTRANCE SECTION.
10. EXISTING ELECTRICAL TRANSFORMER / SWITCHING CABINET.
11. EXISTING CHAIN LINK FENCE WITH GATE, TO BE REMOVED AND PARTIALLY RELOCATED.
12. EXISTING FLIGHT LINE.
13. EXISTING FIRE HYDRANT.
14. EXISTING CONCRETE PAD TO REMAIN.
15. ADA PARKING SPACE AND STRIPING TO REMAIN.
16. ADA RAMP TO REMAIN.
17. REMOVE EXISTING CURB.
18. PROVIDE CLEAN SMOOTH SAWCUT TO PATCH BACK TO.



A1 Demolition Site Plan

Scale: 1"=10'-0"

Plan North

Feb 10, 2020 - 3:52pm

REGISTERED ARCHITECT
CERTIFICATE NO.
25646
W. ALAN KENSON
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ARIZONA U.S.A.
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ARCHITECTURE & PLANNING

DRAWING: Demolition Site Plan

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: A0.1

Legend

TYPICALLY INDICATES NEW ASPHALTIC PAVEMENT

TYPICALLY INDICATES PROPOSED CONCRETE

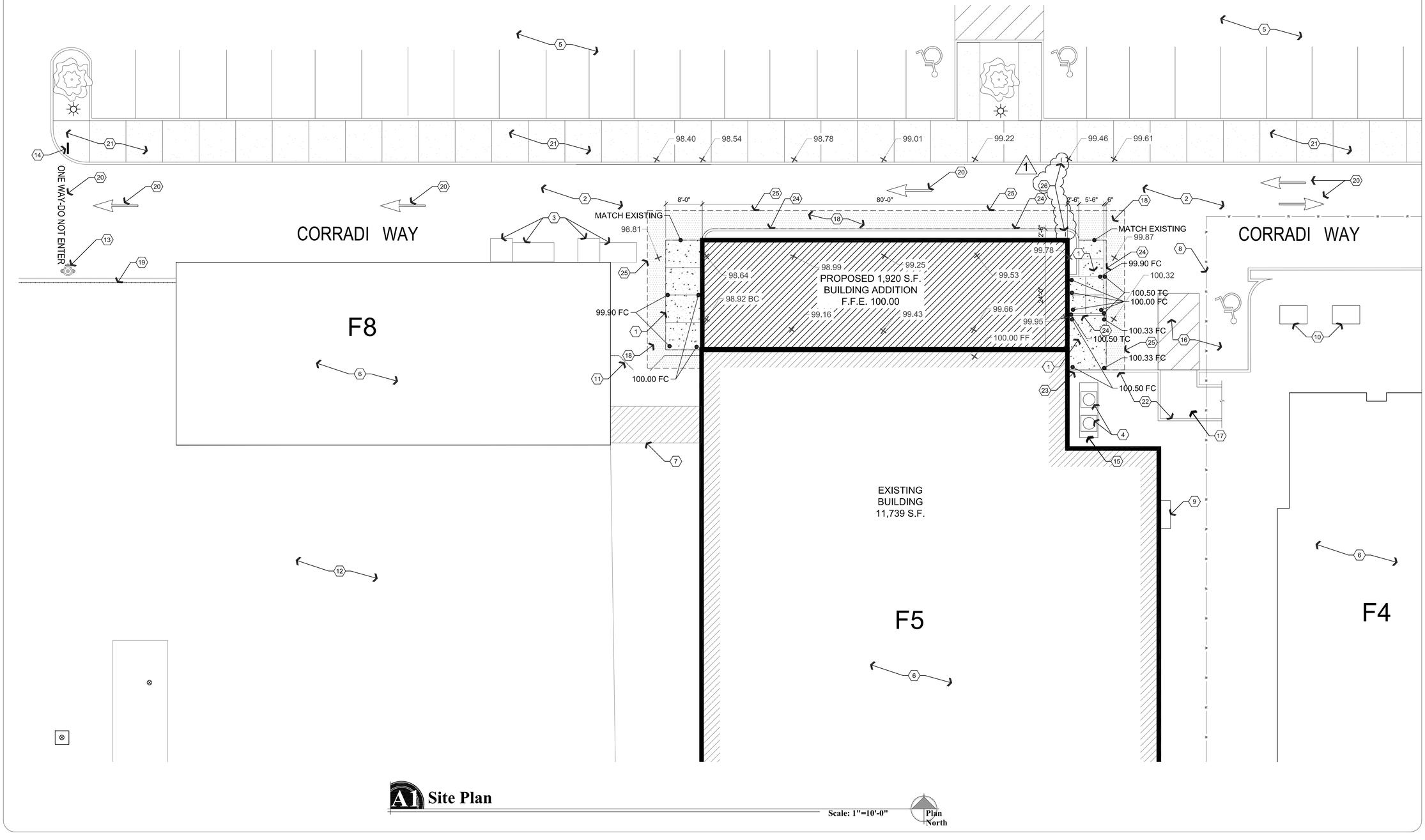
100.00 TYPICALLY INDICATES EXISTING SPOT ELEVATION

100.00 TYPICALLY INDICATES PROPOSED SPOT ELEVATION

FC : NEW FINISHED CONCRETE ELEVATION
TC : NEW TOP OF CURB ELEVATION
FF : FINISH FLOOR ELEVATION

Descriptive Keynotes

1. PROVIDE 4" CONCRETE SLAB W/ #3s @ 2'-0" O.C. OVER 4"COMPACTED A.B.C. PROVIDE 12" TURNDOWN AT PERIMETER WHERE CURB DOES NOT OCCUR.
2. EXISTING ASPHALT PARKING LOT DRIVEWAY.
3. EXISTING RAMP / LANDING.
4. PROVIDE CONDENSER, REFER TO MECHANICAL PLANS.
5. EXISTING PARKING LOT.
6. EXISTING BUILDING.
7. EXISTING COVERED WALKWAY.
8. APPROXIMATE LOCATION OF EXISTING WATER LINE.
9. EXISTING ELECTRICAL SERVICE ENTRANCE SECTION.
10. EXISTING ELECTRICAL TRANSFORMER / SWITCHING CABINET.
11. NEW LOCATION FOR RELOCATED CHAIN LINK FENCE WITH GATE.
12. EXISTING FLIGHT LINE.
13. EXISTING FIRE HYDRANT.
14. PROVIDE NEW SIGNAGE FOR ONE-WAY STREET.
15. EXISTING CONCRETE PAD TO REMAIN.
16. ADA PARKING SPACE AND STRIPING TO REMAIN.
17. ADA RAMP TO REMAIN.
18. PROVIDE 3" ASPHALTIC PAVEMENT OVER 6" COMPACTED ABC OVER COMPACTED SUBGRADE.
19. EXISTING FENCE TO REMAIN.
20. PROVIDE NEW DIRECTIONAL ARROWS FOR ONE WAY AND TWO WAY DIRECTIONS, AND PAINTED 'ONE WAY-DO NOT ENTER' ON ASPHALT.
21. EXISTING SIDEWALK TO REMAIN.
22. EXISTING CONCRETE CURB TO REMAIN.
23. EXTEND EXISTING CONCRETE CURB TO BUILDING.
24. PROVIDE 6" WIDE CONCRETE CURB WITH MINIMUM 12" EMBEDMENT BELOW FINISH GRADE.
25. PROVIDE 'TACK' AT EXISTING SAWCUT ASPHALT TO PATCH BACK TO.
26. PROVIDE 'NO PARKING - FIRE LANE - PCC 9-1-12 (f)' SIGN AS REQUIRED PER FIRE DEPARTMENT DETAIL FLD 1.06.



A1 Site Plan

Scale: 1"=10'-0"

Plan North

Mar 30, 2020 - 3:17pm

REVISIONS | BY
1 3-30-2020 LO

REGISTERED ARCHITECT
CERTIFICATE NO.
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ARCHITECTURE & PLANNING

DRAWING: Site Plan

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

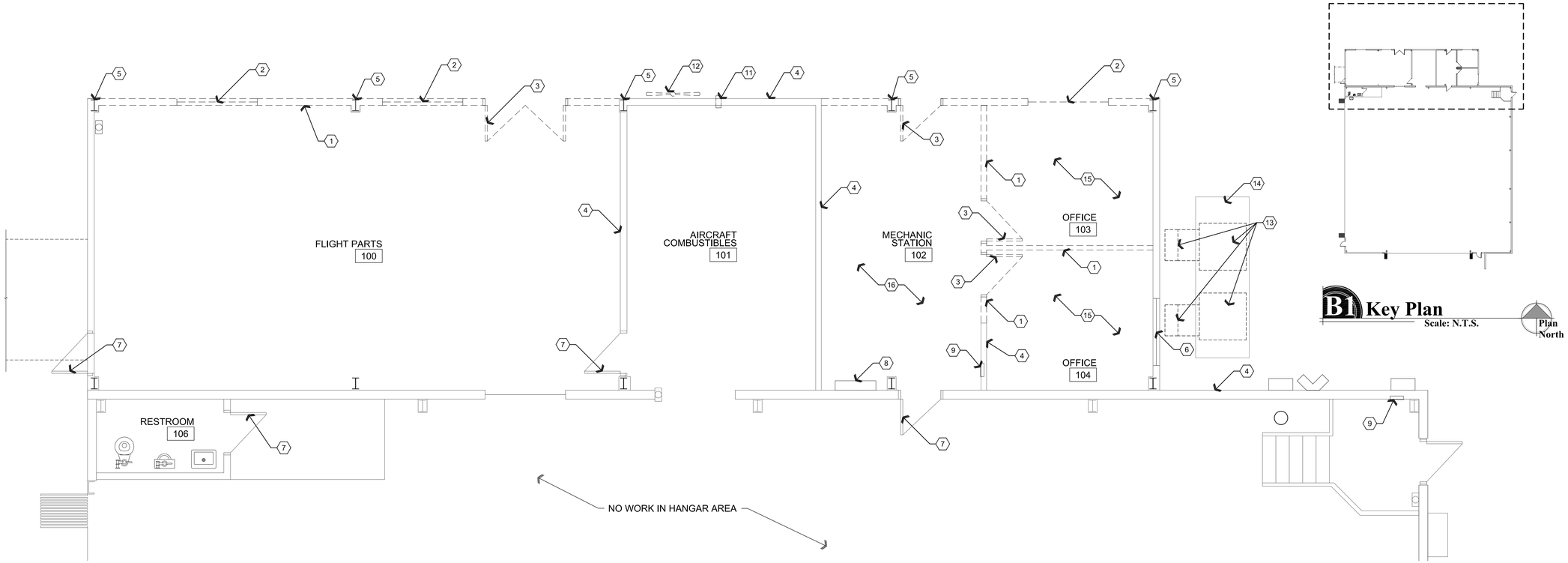
DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: A0.2

Descriptive Keynotes

1. REMOVE EXISTING WALL.
2. REMOVE EXISTING WINDOW.
3. REMOVE EXISTING DOOR.
4. EXISTING WALL FRAMING TO REMAIN.
5. EXISTING COLUMN TO REMAIN.
6. EXISTING WINDOW TO REMAIN.
7. EXISTING DOOR TO REMAIN.
8. EXISTING IT EQUIPMENT TO REMAIN.
9. EXISTING ELECTRICAL PANEL TO REMAIN, REFER TO ELECTRICAL PLANS.
10. EXISTING SERVICE ENTRANCE SECTION TO REMAIN, REFER TO ELECTRICAL PLANS.
11. REMOVE EXISTING DRYER VENT PIPE.
12. REMOVE AND RELOCATE EXISTING AIRPLANE PROPELLER, REFER TO REFERENCE FLOOR PLAN.
13. EXISTING HVAC UNIT AND DUCTWORK TO BE REMOVED, REFER TO MECHANICAL PLANS.
14. EXISTING CONCRETE SLAB TO REMAIN.
15. REMOVE EXISTING CARPET.
16. REMOVE EXISTING VCT.

GENERAL NOTES:

- INTERIOR FINISHES, GPDW, GRID CEILINGS, MECHANICAL SYSTEM, ELECTRICAL SYSTEM SHALL BE REMOVED IN THEIR ENTIRETY UNLESS NOTED OTHERWISE. EXTERIOR WALLS, ROOF ASSEMBLY, SUPPORT COLUMNS AND BEAMS TO REMAIN UNLESS NOTED OTHERWISE.
- ALL REMOVED ITEMS ARE TO BE DELIVERED TO OWNER AT OWNER'S DISCRETION. ITEMS ARE TO BE DELIVERED TO THE FACILITIES MANAGEMENT DEPARTMENT ON CAMPUS.



A1 Demolition Floor Plan

Scale: 1/4"=1'-0"

Plan North

B1 Key Plan

Scale: N.T.S.

Plan North

Feb 13, 2020 - 1:58pm

REVISIONS	BY

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ARCHITECTURE & PLANNING

DRAWING: Building F4 and F5 Proposed Addition

PROJECT: ERAU Building F5 Addition
6492 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET

A1.0

Wall Types Legend

A — EXTERIOR METAL WALL: PROVIDE EXTERIOR METAL BUILDING SIDING, REFER TO MATERIALS SCHEDULE, ON EXTERIOR SIDE OVER 6",18 GAUGE METAL STUDS AT 1'-4" O.C. INTERIOR SIDE TO BE 1/2" GPDW IN OFFICE AREA, AND 1/2" OSB IN FLIGHT PARTS AREA. REFER TO STRUCTURAL PLANS. PROVIDE R-19 UNFACED BATT INSULATION.

B — EXTERIOR METAL WALL: PROVIDE EXTERIOR METAL BUILDING SIDING, REFER TO MATERIALS SCHEDULE, ON EXTERIOR SIDE OVER 8",18 GAUGE METAL STUDS AT 1'-4" O.C. INTERIOR SIDE TO BE 1/2" GPDW. REFER TO STRUCTURAL PLANS. PROVIDE R-19 UNFACED BATT INSULATION.

C — EXTERIOR METAL BUILDING WALL: PROVIDE EXTERIOR METAL BUILDING SIDING, REFER TO MATERIALS SCHEDULE, ON EXTERIOR SIDE OVER 8",18 GAUGE METAL STUDS AT 1'-4" O.C. WITH 2'-0" A.F.F. TALL CMU WALL. INTERIOR SIDE TO BE 1/2" GPDW . REFER TO STRUCTURAL PLANS. PROVIDE R-19 UNFACED BATT INSULATION.

D — INTERIOR PARTITION WALL: PROVIDE TO 6" ABOVE CEILING 3-⅝" 25 GA. STEEL STUDS AT 1'-4" O.C. WITH 1/2" GPDW ON EXPOSED SIDES. PROVIDE R-11 UNFACED BATT INSULATION.

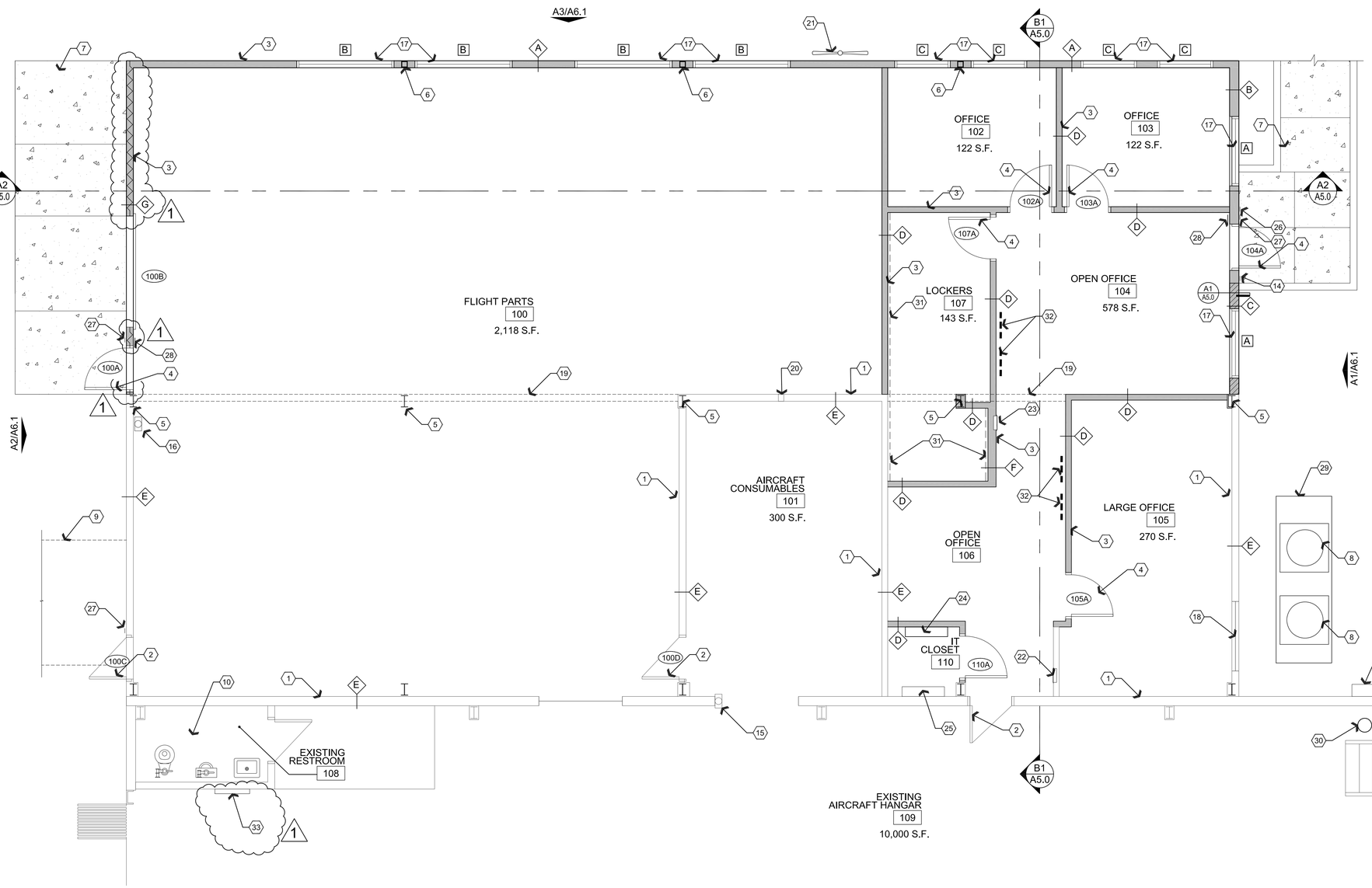
E — EXISTING WALL: AT EXTERIOR WALLS, FINISH PER EXTERIOR ELEVATIONS.

F — INTERIOR PARTITION WALL: PROVIDE TO 6" ABOVE CEILING 6" 25 GA. STEEL STUDS AT 1'-4" O.C. WITH 1/2" GPDW ON EXPOSED SIDES. PROVIDE R-11 UNFACED BATT INSULATION.

G — EXTERIOR 2 HOUR WALL: PROVIDE EXTERIOR METAL BUILDING SIDING (REFER TO MATERIALS SCHEDULE) ON EXTERIOR SIDE OVER (2) LAYERS 5/8" TYPE 'X' GPDW OVER 3-5/8",18 GAUGE METAL STUDS AT 1'-4" O.C. INTERIOR SIDE TO HAVE (2) LAYERS 5/8" GPDW AND (1) LAYER 1/2" OSB ON THE INTERIOR SIDE.

Descriptive Keynotes

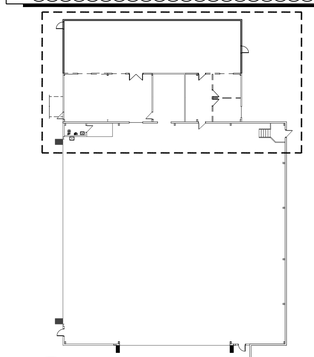
1. EXISTING WALL TO REMAIN, RE-TEXTURE AND ADD DRYWALL AS REQUIRED, TYPICAL.
2. EXISTING DOOR TO REMAIN, TYPICAL.
3. NEW WALL, TYPICAL, REFER TO WALL TYPES LEGEND.
4. NEW DOOR, TYPICAL, REFER TO DOOR SCHEDULE.
5. EXISTING COLUMN TO REMAIN, TYPICAL.
6. NEW COLUMN, TYPICAL, REFER TO STRUCTURAL PLANS.
7. NEW CONCRETE SIDEWALK, REFER TO SITE PLAN.
8. CONDENSING UNIT, REFER TO MECHANICAL PLANS.
9. EXISTING COVERED WALKWAY.
10. EXISTING RESTROOM.
11. EXISTING ELECTRICAL SERVICE ENTRANCE SECTION.
12. EXISTING GAS METER/REGULATOR.
13. EXISTING FIRE DEPARTMENT CONNECTION. PROVIDE LOCKING KNOX CAPS.
14. PROVIDE KNOX BOX FOR FIRE DEPARTMENT.
15. EXISTING FIRE EXTINGUISHER TO REMAIN.
16. PROVIDE TYPE 2A10BC FIRE EXTINGUISHER, SURFACE MOUNTED.
17. NEW WINDOW, REFER TO WINDOW TYPES.
18. EXISTING WINDOW TO REMAIN.
19. REPAIR CONCRETE FLOOR AS REQUIRED.
20. PATCH WALL WHERE DRYER VENT PIPE WAS REMOVED.
21. ATTACH RELOCATED AIRPLANE PROPELLER TO THE SIDE OF THE BUILDING AND TO CONCRETE, BACK IN SIMILAR MANNER AS IT PREVIOUSLY EXISTED.
22. EXISTING ELECTRICAL PANEL TO REMAIN, REFER TO ELECTRICAL PLANS.
23. PROVIDE NEW ELECTRICAL PANEL, REFER TO ELECTRICAL PLANS.
24. PROVIDE HONEYWELL DOOR ACCESS EQUIPMENT, REFER TO HARDWARE SCHEDULE.
25. EXISTING IT EQUIPMENT.
26. PROVIDE ADA DOOR OPENER PUSH BUTTON.
27. PROVIDE ACCESS ENTRY CARD READER.
28. PROVIDE A 6"x9" BLUE TACTILE 'EXIT' SIGN AS MANUFACTURED BY 'SIMPLY EXIT SIGNS (#SE-1980)' OR EQUAL COMPLYING WITH ICCA117.1 AND IBC 1011.3 ADJACENT TO EACH DOOR TO AN EXIT PASSAGEWAY AND THE EXIT DISCHARGE. SIGN SHALL BE MOUNTED 60" A.F.F. TO THE CENTER OF THE SIGN.
29. EXISTING CONCRETE SLAB TO REMAIN.
30. EXISTING FIRE RISER.
31. PROVIDE BLOCKING IN WALLS FOR LOCKERS AS REQUIRED.
32. PROVIDE BLOCK IN WALLS FOR MONITORS, VERIFY HEIGHT.
33. PROVIDE BABY CHANGING STATION, KOALA KARE MODEL #KB208-12.



A1 Reference Floor Plan

Scale: 1/4"=1'-0"

Plan North



B1 Key Plan

Scale: N.T.S.

Plan North

Mar 30, 2020 - 3:17pm

REVISIONS		BY
1	3-30-2020	LO

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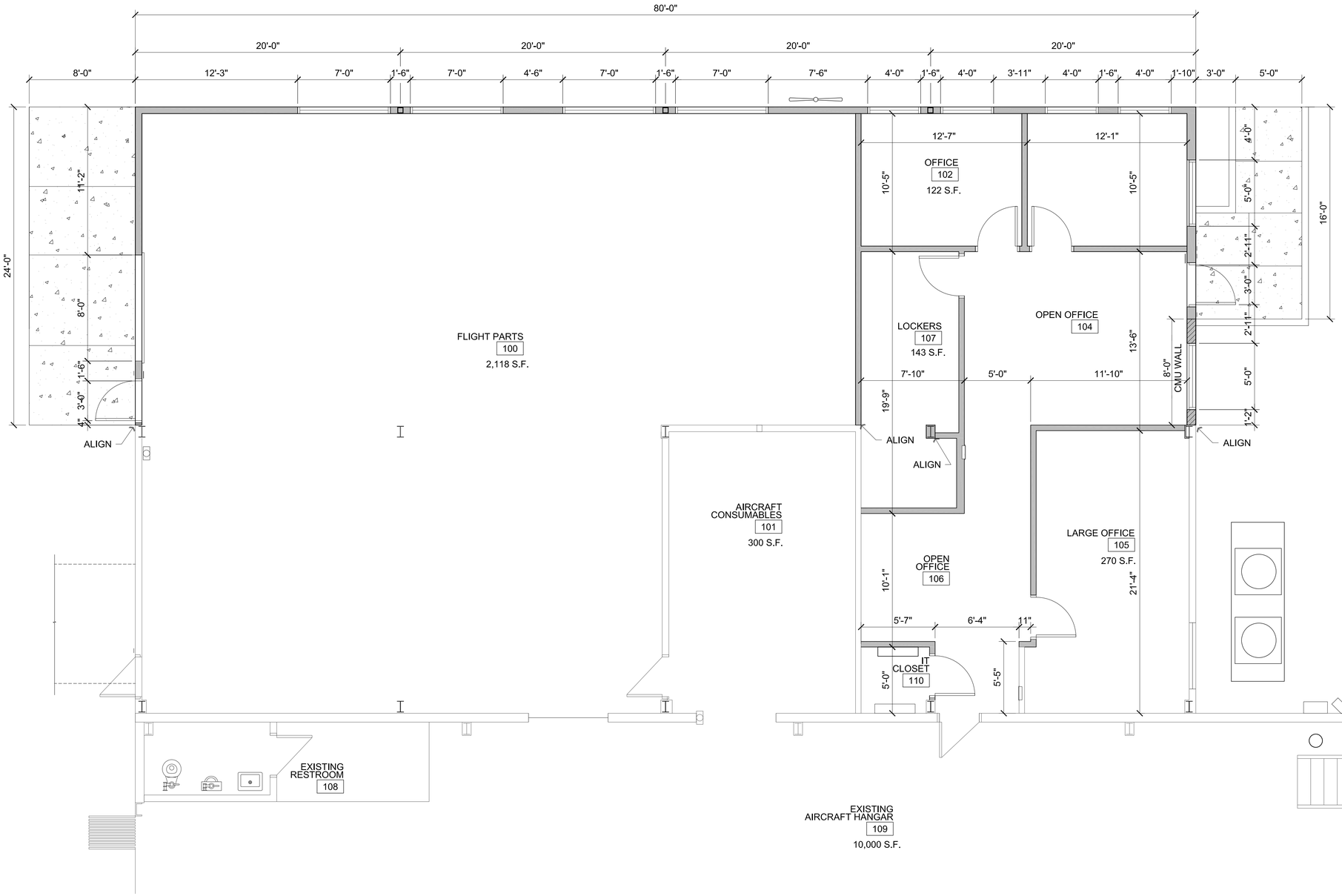
ARCHITECTURE & PLANNING

DRAWING: Reference Floor Plan

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

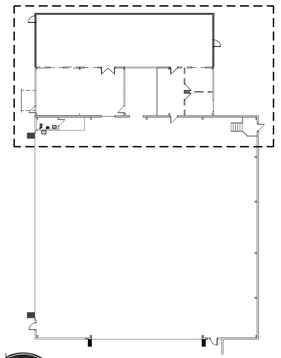
DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: A2.0



A1 Dimension Floor Plan

Scale: 1/4"=1'-0"

Plan North



B1 Key Plan

Scale: N.T.S.

Plan North

Feb 13, 2020 - 3:49pm

REVISIONS	BY

REGISTERED ARCHITECT
CERTIFICATE NO.
25646
W. ALAN KENSON
Date Signed 02/13/20
ARIZONA U.S.A.
EXPIRES: 6/30/21

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ARCHITECTURE & PLANNING

DRAWING: Dimension Floor Plan

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

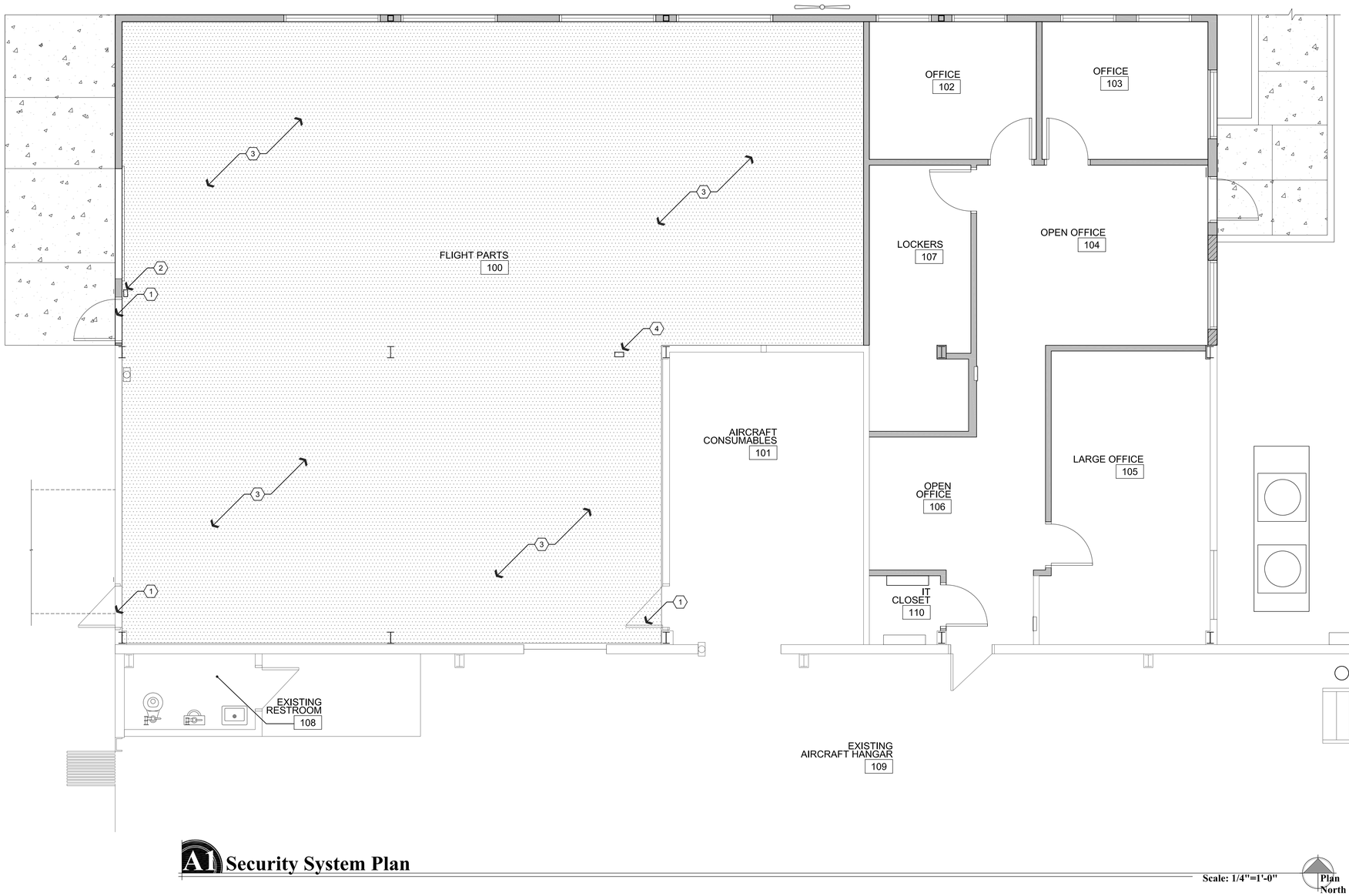
DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: **A2.1**

Descriptive Keynotes

1. PROVIDE SECURITY DOOR CONTACT AT THIS LOCATION.
2. LOCATION FOR RELOCATED SECURITY KEYPAD.
3. PROVIDE SECURITY MOTION SENSORS AT BOTTOM OF ROOF STRUCTURE TO ADEQUATELY PROTECT THIS ROOM.
4. EXISTING SECURITY KEYPAD TO BE RELOCATED.

Legend

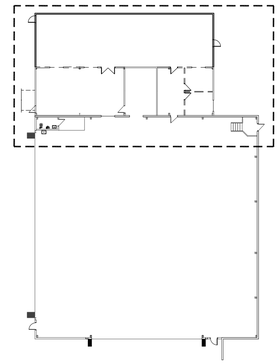
SECURED AREA



A1 Security System Plan

Scale: 1/4"=1'-0"

Plan North



B1 Key Plan

Scale: N.T.S.

Plan North

Feb 14, 2020 - 9:35am

REVISIONS	BY

REGISTERED ARCHITECT
CERTIFICATE NO.
25646
W. ALAN KENSON
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ARCHITECTURE & PLANNING

DRAWING: Security System Plan

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET

A2.2

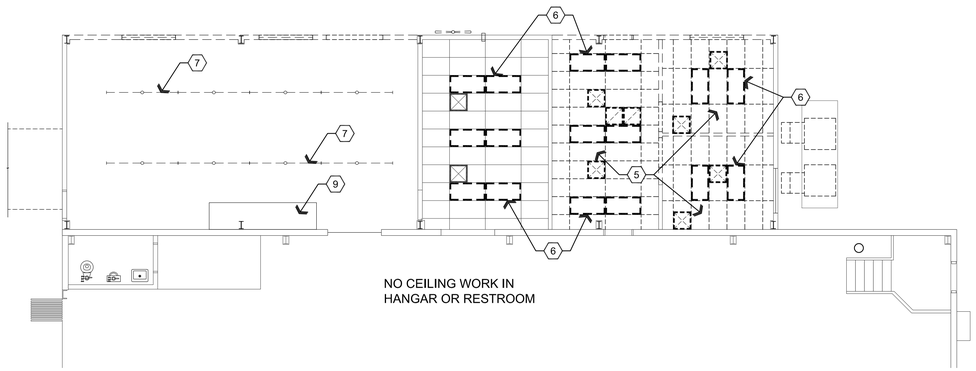
Legend

- 2'x2' ACOUSTICAL PANEL CEILING AND GRID TO BE REMOVED
- LIGHT FIXTURE TO BE REMOVED AND REPLACE
- EXISTING 2'x2' HVAC SUPPLY DIFFUSER
- EXISTING 2'x2' HVAC RETURN
- NEW 2'x2' ACOUSTIC PANEL CEILING
- NEW 2'x2' LED TROFFER LIGHT FIXTURE
- NEW 2'x2' HVAC SUPPLY DIFFUSER
- NEW 2'x2' HVAC RETURN
- EMERGENCY EXIT SIGN WITH BATTERY BACK-UP

NOTE:
REFER TO ELECTRICAL AND MECHANICAL PLANS.

Descriptive Keynotes

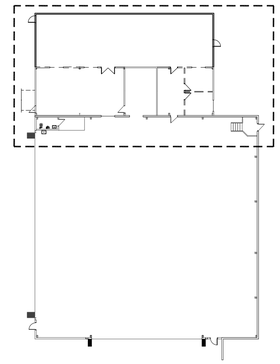
1. PROVIDE NEW SUSPENDED CEILING, REFER TO MATERIALS SCHEDULE. ACT-1
2. LIGHT FIXTURES SHOWN FOR QUANTITY AND LOCATION ONLY. REFER TO ELECTRICAL PLANS.
3. PROVIDE HVAC SUPPLY, TYPICAL. REFER TO MECHANICAL PLANS.
4. PROVIDE HVAC RETURN, TYPICAL. REFER TO MECHANICAL PLANS.
5. REMOVE ENTIRE SUSPENDED CEILING THIS AREA, INCLUDING ALL MECHANICAL, ELECTRICAL, & LOW VOLTAGE.
6. REMOVE EXISTING LIGHTING, TYPICAL, SALVAGE AND RETURN TO ERAU MATERIALS MANAGEMENT.
7. EXISTING LIGHTING TO BE RE-LAMPED, REFER TO ELECTRICAL PLANS..
8. EXISTING CEILING GRID TO REMAIN.
9. SHELVING HANGING FROM ROOF TO REMAIN.



A2 Demolition / Existing Reflected Ceiling Plan

Scale: 1/8"=1'-0"

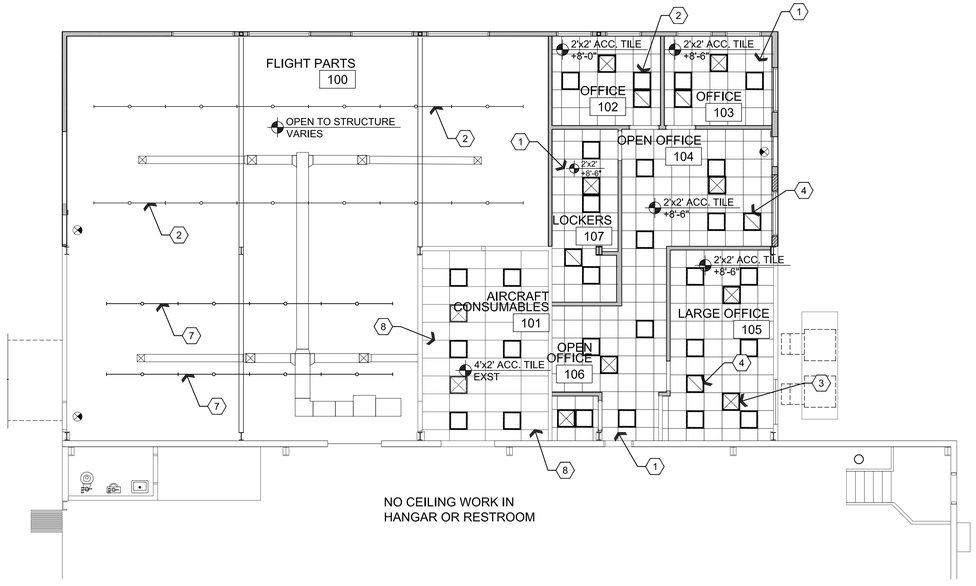
Plan North



B1 Key Plan

Scale: N.T.S.

Plan North



A1 Proposed Reflected Ceiling Plan

Scale: 1/8"=1'-0"

Plan North

Feb 14, 2020 - 3:06pm

REVISIONS	BY

REGISTERED ARCHITECT
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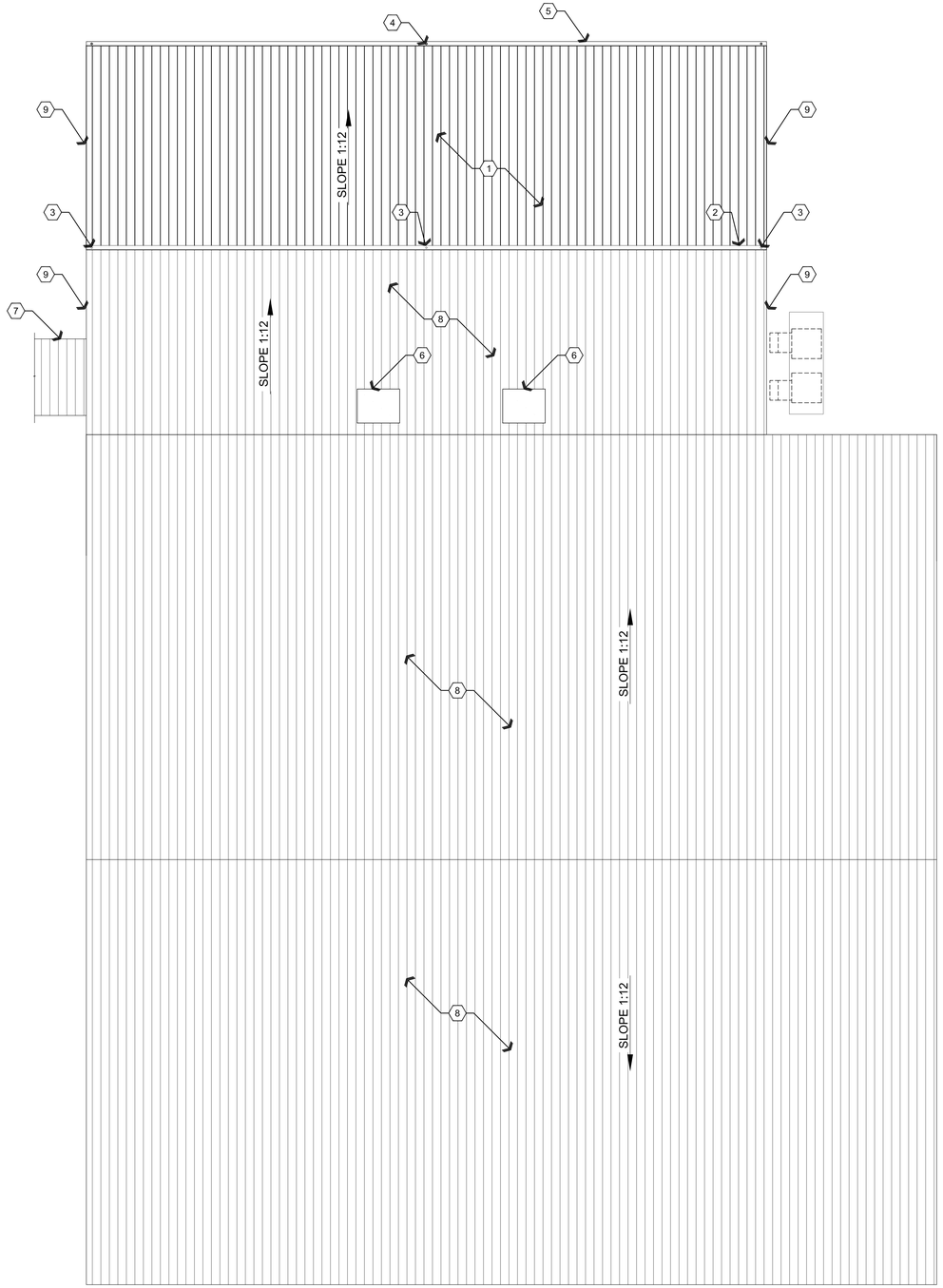
ARCHITECTURE & PLANNING

DRAWING: Demolition and Proposed Reflected Ceiling Plans

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

DRAWN BY	L.O.
CHECKED BY	W.A.K.
DATE	February 13th, 2020
JOB NO.	
SHEET	A3.0



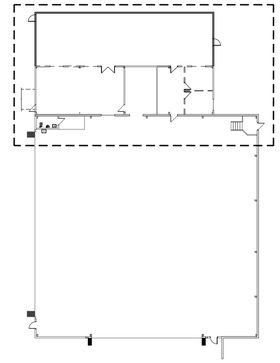
A1 Roof Plan

Scale: 1/8"=1'-0"

Plan North

Descriptive Keynotes

1. PROVIDE 'PBR' PANEL METAL ROOF, REFER TO MATERIALS SCHEDULE. M-1
2. EXISTING SHEET METAL GUTTER TO BE REMOVED.
3. EXISTING SHEET METAL DOWNSPOUT TO BE REMOVED.
4. PROVIDE SHEET METAL DOWNSPOUT, REFER TO MATERIALS SCHEDULE. M-3
5. PROVIDE SHEET METAL GUTTER, REFER TO MATERIALS SCHEDULE. M-4
6. EXISTING ROOF TOP HVAC UNIT TO REMAIN.
7. EXISTING COVERED WALKWAY TO REMAIN.
8. EXISTING ROOF TO REMAIN.
9. PROVIDE SHEET METAL RAKE TRIM TO MATCH.



B1 Key Plan

Scale: N.T.S.

Plan North

REVISIONS	BY

REGISTERED ARCHITECT
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ARIZONA U.S.A.
EXPIRES: 6/30/21

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ARCHITECTURE & PLANNING

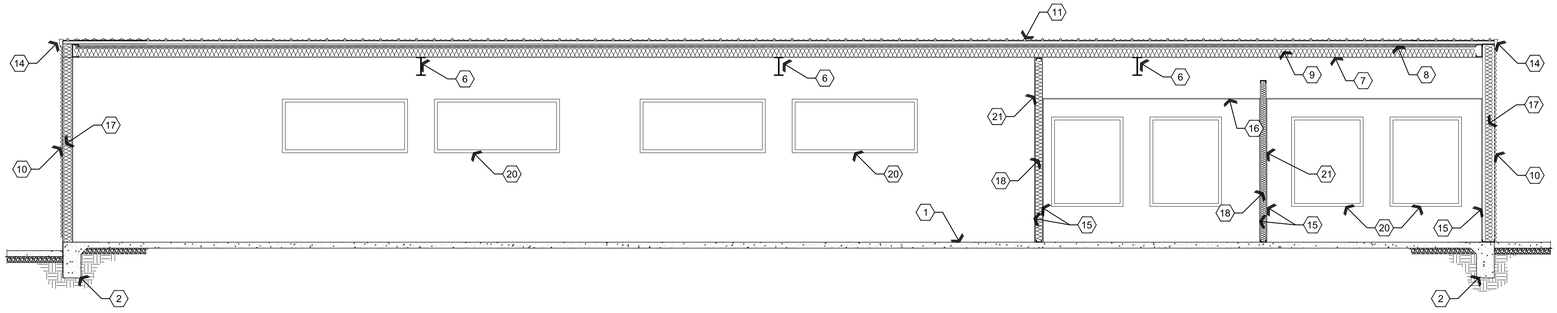
DRAWING: Roof Plan

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: A4.0

Feb 10, 2020 - 3:56pm

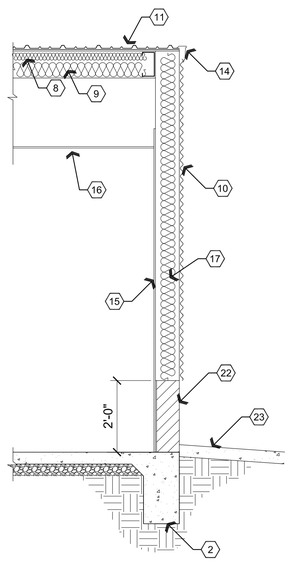


A2 Building Section

Scale: 1/4"=1'-0"

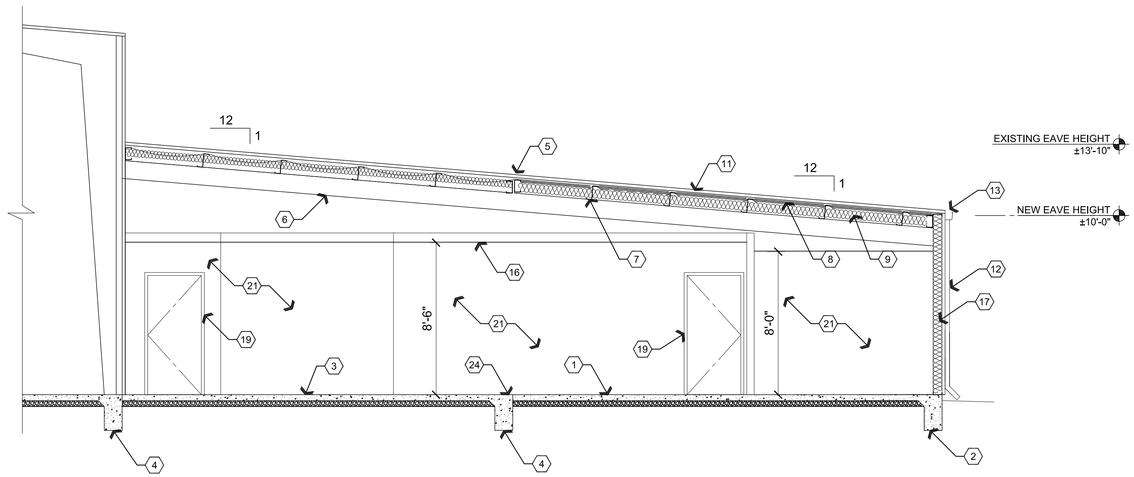
Descriptive Keynotes

1. PROVIDE CONCRETE SLAB OVER COMPACTED A.B.C., REFER TO STRUCTURAL PLANS.
2. PROVIDE CONCRETE FOOTING. REFER TO STRUCTURAL PLANS.
3. EXISTING CONCRETE SLAB TO REMAIN.
4. EXISTING CONCRETE FOOTING TO REMAIN.
5. LOOSEN EXISTING PBR ROOF SHEETS AND SLIDE NEW PBR ROOF SHEETS UNDER EXISTING TO CREATE A 6" LAP JOINT. APPLY TWO BEADS OF STRIP CAULKING BETWEEN SHEATHING.
6. PROVIDE STEEL BEAM. REFER TO STRUCTURAL PLANS.
7. PROVIDE ROOF PURLIN, TYPICAL. REFER TO STRUCTURAL PLANS.
8. PROVIDE R-13 BLANKET INSULATION OVER PURLINS.
9. PROVIDE R-25 VINYL FACED INSULATION WIRED BETWEEN PURLINS.
10. PROVIDE METAL SIDING, REFER TO MATERIALS SCHEDULE. M-2
11. PROVIDE PBR SHEET METAL ROOF PANELS. REFER TO MATERIAL SCHEDULE. M-1
12. PROVIDE SHEET METAL DOWNSPOUT, REFER TO MATERIALS SCHEDULE. M-3
13. PROVIDE SHEET METAL GUTTER, REFER TO MATERIALS SCHEDULE. M-4
14. PROVIDE RAKE TRIM TO MATCH.
15. PROVIDE 1/2" GPDW.
16. SUSPENDED CEILING. REFER TO REFLECTED CEILING PLAN. ACT-1
17. PROVIDE R-19 UNFACED BATT INSULATION.
18. PROVIDE R-11 UNFACED BATT INSULATION.
19. PROVIDE DOOR. REFER TO REFERENCE FLOOR PLAN AND DOOR SCHEDULE.
20. PROVIDE WINDOW. REFER TO REFERENCE FLOOR PLAN AND WINDOW TYPES.
21. PARTITION WALL. REFER TO REFERENCE FLOOR PLAN AND WALL TYPES PLAN.
22. PROVIDE CMU, REFER TO WALL TYPES AND STRUCTURAL PLANS.
23. PROVIDE CONCRETE SLAB FOR DRAINAGE AWAY FROM BUILDING, REFER TO SITE PLAN.
24. REPAIR CONCRETE FLOOR AT 'SHEETING NOTCH' AS REQUIRED.



A1 Wall Section

Scale: 1/2"=1'-0"



B1 Building Section

Scale: 1/4"=1'-0"

Feb 14, 2020 - 2:43pm

REVISIONS	BY

REGISTERED ARCHITECT
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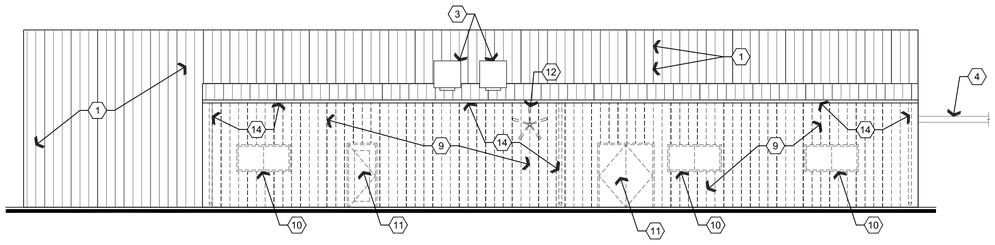
ARCHITECTURE & PLANNING

DRAWING: Building Section

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

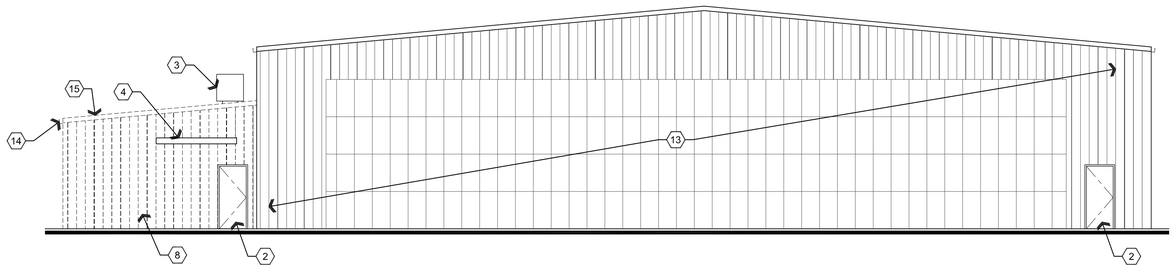
APN: 102-03-003A

DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: **A5.0**



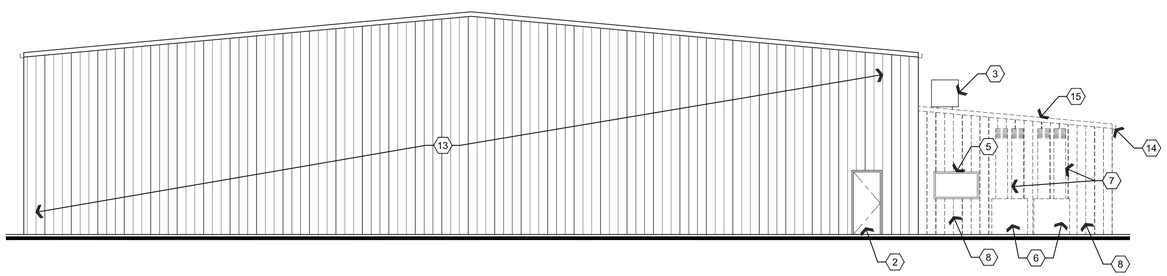
A3 Demolition / Existing North Elevation

Scale: 1/8"=1'-0"



A2 Demolition / Existing West Elevation

Scale: 1/8"=1'-0"



A1 Demolition / Existing East Elevation

Scale: 1/8"=1'-0"

Descriptive Keynotes

1. EXISTING WALL AND SIDING TO REMAIN.
2. EXISTING DOOR TO REMAIN.
3. EXISTING HVAC UNIT ON ROOF TO REMAIN.
4. EXISTING COVERED WALKWAY TO REMAIN.
5. EXISTING WINDOW TO REMAIN.
6. EXISTING HVAC UNIT TO BE REMOVED AND REPLACED WITH SPLIT SYSTEM, REFER TO MECHANICAL PLANS.
7. EXISTING DUCTWORK TO BE REMOVED.
8. EXISTING METAL SIDING AND 'HAT' CHANNEL TO BE REMOVED.
9. EXISTING METAL SIDING, 'HAT' CHANNEL AND WALL FRAMING TO BE REMOVED.
10. EXISTING WINDOW TO BE REMOVED.
11. EXISTING DOOR TO BE REMOVED.
12. REMOVE AND RELOCATE EXISTING AIRPLANE PROPELLER, REFER TO REFERENCE FLOOR PLAN.
13. EXISTING HANGAR TO REMAIN, NO WORK.
14. EXISTING GUTTER AND DOWNSPOUTS TO BE REMOVED.
15. REMOVE EXISTING RAKE TRIM.

REVISIONS	BY

REGISTERED ARCHITECT
CERTIFICATE NO.
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ARCHITECTURE & PLANNING

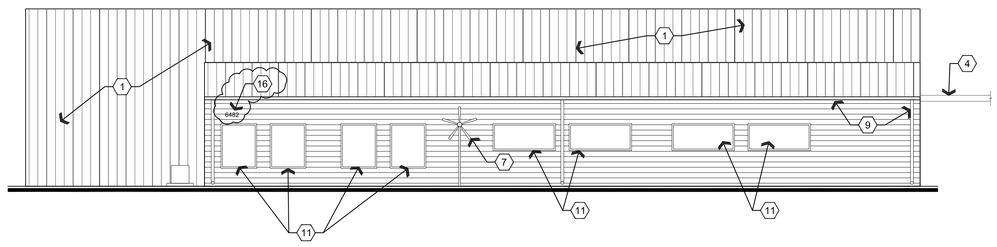
DRAWING: Demolition / Existing Exterior Elevations

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: A6.0

Feb 14, 2020 - 2:41pm

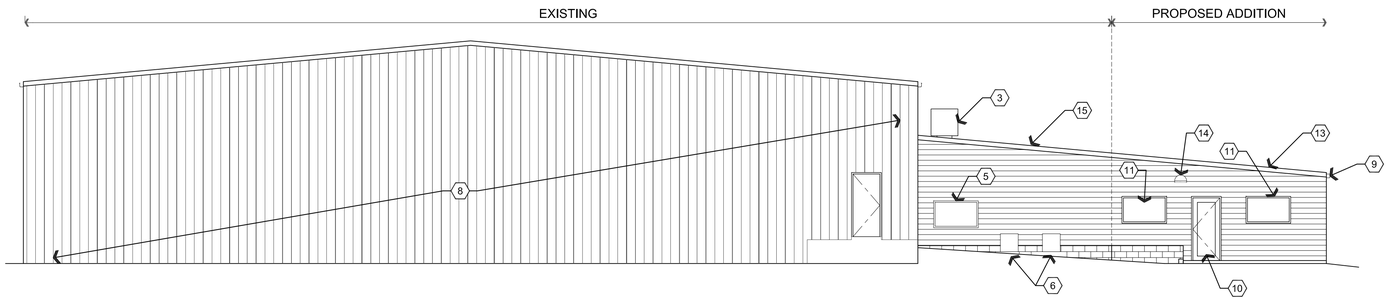


A3 North Elevation

Scale: 1/8"=1'-0"

A2 West Elevation

Scale: 1/8"=1'-0"



A1 East Elevation

Scale: 1/8"=1'-0"

Descriptive Keynotes

1. EXISTING WALL AND SIDING TO REMAIN.
2. EXISTING DOOR TO REMAIN.
3. EXISTING EVAP COOLER ON ROOF TO REMAIN.
4. EXISTING COVERED WALKWAY TO REMAIN.
5. EXISTING WINDOW TO REMAIN.
6. PROVIDE NEW HVAC SPLIT SYSTEM CONDENSERS, REFER TO MECHANICAL PLANS.
7. RELOCATED AIRPLANE PROPELLER, REFER TO REFERENCE FLOOR PLAN.
8. EXISTING HANGAR TO REMAIN, NO WORK.
9. PROVIDE NEW GUTTER AND DOWNSPOUTS, REFER TO MATERIALS SCHEDULE. M-3 M-4
10. PROVIDE NEW DOOR, REFER TO DOOR SCHEDULE AND REFERENCE FLOOR PLAN.
11. PROVIDE NEW WINDOW, REFER TO WINDOW TYPES AND REFERENCE FLOOR PLAN.
12. PROVIDE ROLL UP DOOR, REFER TO DOOR SCHEDULE AND REFERENCE FLOOR PLAN.
13. PROVIDE NEW METAL ROOF TO MATCH EXISTING. M-1
14. PROVIDE LIGHT, REFER TO ELECTRICAL PLANS.
15. PROVIDE NEW SHEET METAL RAKE TRIM TO MATCH WALL SIDING.
16. PROVIDE 6" TALL, CONTRASTING COLOR, ADDRESS NUMBERS CLEARLY VISIBLE FROM THE STREET.

1

REVISIONS	BY
1 3-30-2020	LO

REGISTERED ARCHITECT
CERTIFICATE NO.
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ARCHITECTURE & PLANNING

DRAWING: Proposed Exterior Elevations

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: A6.1

Mar 30, 2020 - 2:08pm

Hardware Schedule

DOOR HARDWARE SCHEDULE
ERAU BUILDING F5 ADDITION

HARDWARE SET 1: SINGLE DOOR
DOOR: TAG # 104A
EACH DOOR TO HAVE

QTY	DESCRIPTION		MANUFACTURER
3	HINGE FBB168 4.5 X 4.5	626	STANLEY
1	EXIT 99EO LD - 36" 626		VON DUPRIN
1	TRIM 990NL	626	VON DUPRIN
1	RIM CYLINDER 12E72 S2 RP LSFIC	626	BEST
1	ELECTRIC STRIKE 9600	630	HES
1	ADA OPENER 4642 – 36" ALUM		LCN
1	WIRELESS ACTUATOR KIT		SEDCO
1	ADDITIONAL WIRELESS RECIEVER		SEDCO
1	READER RP40SE		HID
1	REX SENSOR DS150		BOSCH
1	DOOR CONTACT 679-05		SCHLAGE
1	WEATHER STRIP 303AS 36 X 84	CLR	PEMKO
1	SWEEP 315CN-36"	CLR	PEMKO
1	THRESHOLD 171A-36" X 5" X 1/2" ALUM		PEMKO

PERMANENT CORES BY ERAU

HARDWARE SET 2: SINGLE DOOR
DOOR: TAG # 100A
EACH DOOR TO HAVE

QTY	DESCRIPTION		MANUFACTURER
3	HINGE FBB168 4.5 X 4.5	626	STANLEY
1	STOREROOM 9K3 7D 15DS3 LSFIC	626	BEST
1	ELECTRIC STRIKE 5200C	630	HES
1	CLOSER 4040XP S CUSH ALUM		LCN
1	READER PR40SE		HID
1	REX SENSOR DS150		BOSCH
1	DOOR CONTACT 679-05		SCHLAGE
1	WEATHERSTRIP 303AS 36" X 84"	CLR	PEMKO
1	SWEEP 315CN-36"	CLR	PEMKO
1	THRESHOLD 171A-36" X 5" X ½" ALUM		PEMKO

PERMANENT CORES BY ERAU

HARDWARE SET 3: SINGLE DOOR (EXISTING)
DOOR: TAG # 100C, 100D
EACH DOOR TO HAVE

QTY	DESCRIPTION		MANUFACTURER
1	ENTRY 9K3 7AB 15D S3 LSFIC	626	BEST
1	ELECTRIC STRIKE 5200C	630	HES
1	READER PR40SE		HID
1	REX SENSOR DS150		IVES
1	DOOR CONTACT 679-05		SCHLAGE

PERMANENT CORES BY ERAU, BALANCE OF EXISTING HARDWARE TO REMAIN. MODIFY EXISTING FRAMES AS REQUIRED TO ACCEPT THE NEW ELECTRIC STRIKE.

HARDWARE SET 4: SINGLE DOOR
DOOR: TAG # 102A, 103A, 105A, 107A
EACH DOOR TO HAVE

QTY	DESCRIPTION		MANUFACTURER
3	HINGE FBB179 4.5 X 4.5	626	STANELY
1	ENTRY 9K3 7AB 15D S3 LSFIC	626	BEST
1	WALL STOP 1270CV	626	TRIMCO
3	SILENCERS SR64	GRY	IVES

PERMANENT CORES BY ERAU

HARDWARE SET 5: SINGLE DOOR
DOOR: TAG # 110A
EACH DOOR TO HAVE

QTY	DESCRIPTION		MANUFACTURER
3	HINGES FBB179 4.5 X 4.5	626	STANLEY
1	STOREROOM 9K3 7D 15D S3 LSFIC	626	BEST
1	OVERHEAD STOP 454S 626		GLYNN-JOHNSON
3	SILENCERS SR64	GRY	IVES

PERMANENT CORES BY ERAU

HONEYWELL HEAD END SYSTEM

1- HONEYWELL PW6 SERIES NETWORK CONTROLLER

1- HONEYWELL PW SERIES ENCLOSURE WALL MOUNT

1- HONEYWELL PW6K1R2 DUAL READER BOARD

1- HONEYWELL 6 AMP POWER SUPPLY W/BATTERY BACK UP

2- PW6K1R2 READER BOARDS

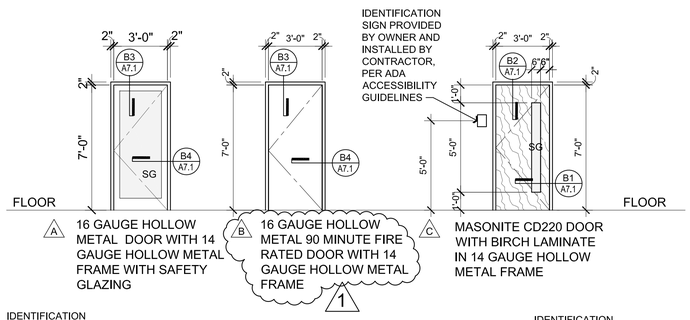
1- PS904-BBK POWER SUPPLY W/ BATTERY BACK UP BY SCHLAGE

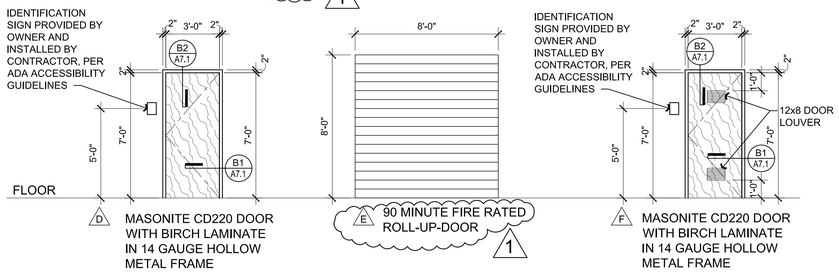
Door Schedule

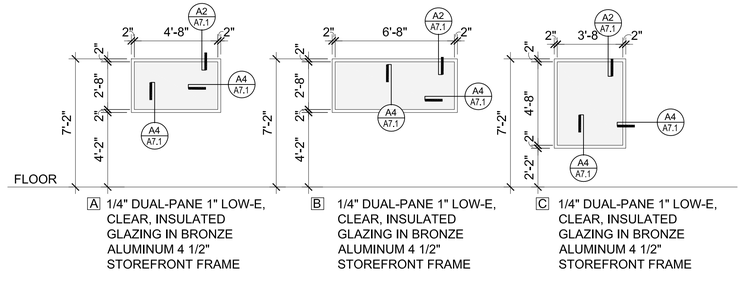
NO.	ROOM NAME	SIZE	TYPE	DOOR MATERIAL	DOOR FINISH	FRAME MATERIAL	FRAME FINISH	HARDWARE TYPE
100A	FLIGHT PARTS	3'-0"x7'-0"	B	HM	PAINT	HM	PAINT	2
100B	FLIGHT PARTS	8'-0"x8'-0"	E	METAL	PAINT	METAL	PAINT	-
100C	FLIGHT PARTS	EXST	EXST	EXST	EXST	EXST	EXST	3
100D	FLIGHT PARTS	EXST	EXST	EXST	EXST	EXST	EXST	3
102A	OFFICE	3'-0"x7'-0"	C	SCWD	STAIN	HM	PAINT	4
103A	OFFICE	3'-0"x7'-0"	C	SCWD	STAIN	HM	PAINT	4
104A	OPEN OFFICE	3'-0"x7'-0"	A	HM/GLASS	PAINT	HM	PAINT	1
105A	OFFICE	3'-0"x7'-0"	C	SCWD	STAIN	HM	PAINT	4
107A	LOCKERS	3'-0"x7'-0"	D	SCWD	STAIN	HM	PAINT	4
110A	IT CLOSET	3'-0"x7'-0"	F	SCWD	STAIN	HM	PAINT	5

NOTES:

1. ALL EXIT DOORS & HARDWARE SHALL COMPLY WITH THE 2012 I.B.C.
2. DOOR THRESHOLDS SHALL HAVE A MAX HEIGHT OF 1/2" FOR H.C. ACCESSIBILITY. THRESHOLD SHALL HAVE A MAXIMUM RISE OF 1/4" AND 1/2" RISE WHEN BEVELED WITH MAXIMUM 1:2 SLOPE.
3. ALL GLAZING IN DOORS SHALL BE SAFETY GLAZING.
4. ALL INTERIOR DOORS SHALL BE OPERABLE FOR EMERGENCY EXITING PURPOSES WITHOUT THE USE OF A KEY, SPECIAL KNOWLEDGE NOR EFFORT.
5. ALL GLAZING WITHIN 24" OF OPENINGS SHALL BE SAFETY GLASS.
6. IF A DOOR HAS A CLOSER, THEN THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR.
7. DOOR HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT PINCHING, OR TWISTING OF THE WRIST TO OPERATE. HARDWARE REQUIRED FOR DOOR PASSAGE SHALL BE MOUNTED NO HIGHER THAN 48" ABOVE FINISH FLOOR.
8. DOOR OPENING FORCE SHALL BE: 5lbf MAX INTERIOR HINGED, SLIDING OR FOLDING DOORS; FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY.







C1 Door and Window Types

Scale: 1/4"=1'-0"

REVISIONS	BY
1 3-30-2020	LO

ARCHITECT
CERTIFICATE NO.
25646
W. ALAN KENSON
Date Signed 02/13/20
ARIZONA U.S.A.
EXPIRES: 6/30/21

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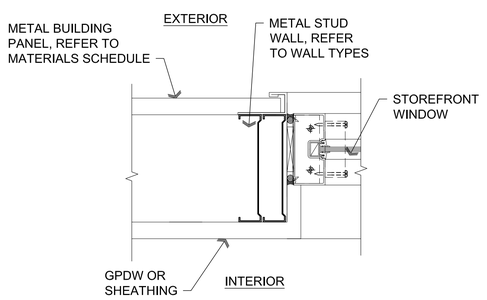
DRAWING: Door and Window Types and Schedules

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

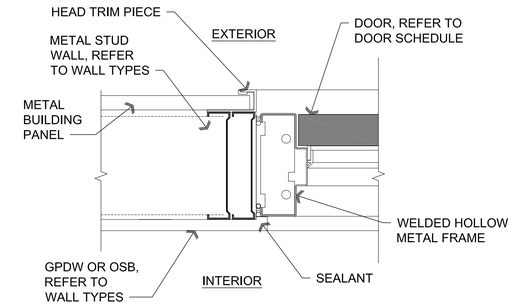
DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: **A7.0**

Mar 30, 2020 - 2:08pm



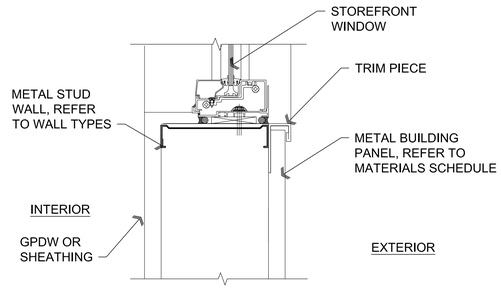
A4 Storefront Jamb

SCALE: 3" = 1'-0"



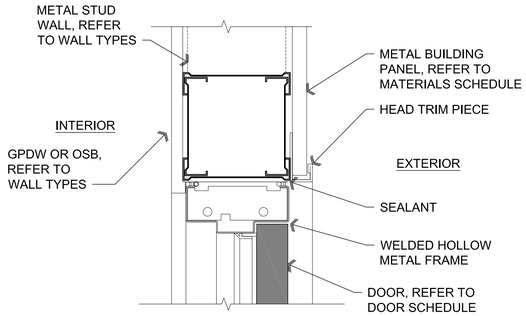
B4 Door Jamb

SCALE: 3" = 1'-0"



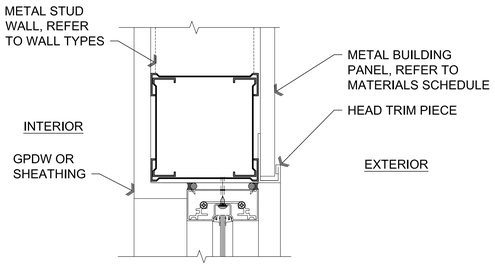
A3 Storefront Sill

SCALE: 3" = 1'-0"



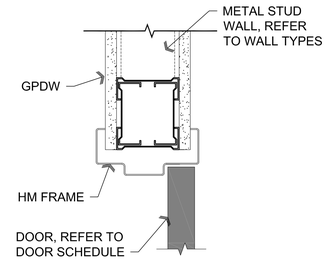
B3 Door Head

SCALE: 3" = 1'-0"



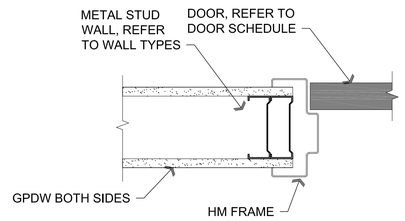
A2 Storefront Head

SCALE: 3" = 1'-0"



B2 Door Head at Framed Wall

SCALE: 3" = 1'-0"



B1 Door Jamb at Framed Wall

SCALE: 3" = 1'-0"

Feb 14, 2020 - 2:56pm

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ARCHITECTURE & PLANNING

DRAWING: Door and Window Details

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

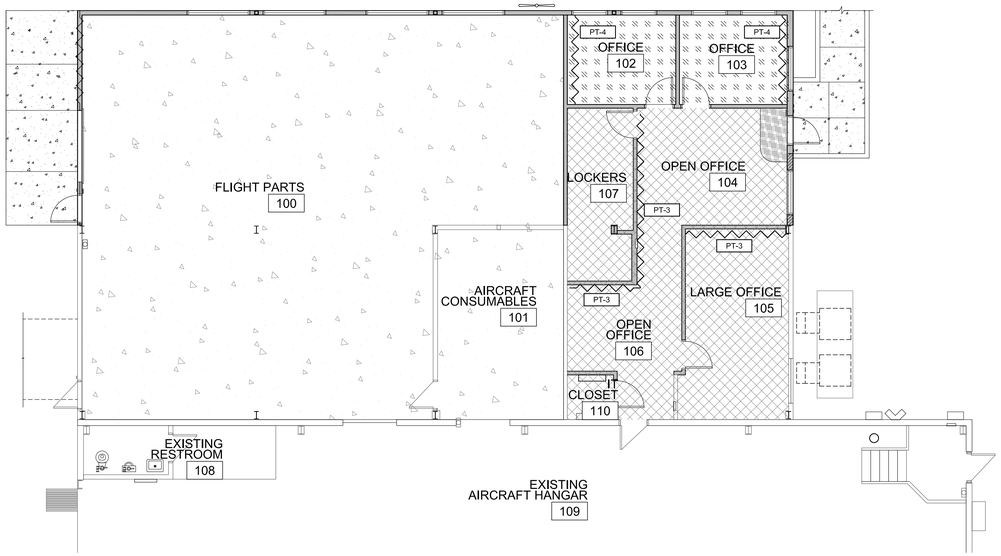
APN: 102-03-003A

DRAWN BY	L.O.
CHECKED BY	W.A.K.
DATE	February 13th, 2020
JOB NO.	
SHEET	A7.1

Legend

- LVT [LVT-1]
- CARPET [CPT-1]
- CONCRETE
- WALK-OFF MAT
- ACCENT WALL [PT-3] [PT-4]

REFER TO LOCATIONS ON PLAN (PT-3 ACCENT WALLS IN ROOMS WITH LVT, PT-4 ACCENT WALLS IN CARPETED OFFICES)



A1 Room Finish Plan

Scale: 1/8"=1'-0"

Plan North

Room Finish Schedule

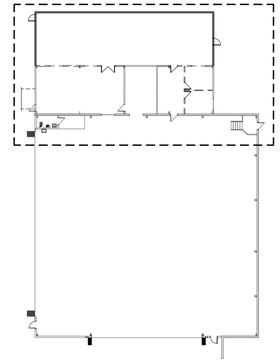
NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING	HEIGHT
100	FLIGHT PARTS	F3	B1	W1/W2	C3	VARIES
101	AIRCRAFT CONSUMABLES	F3	B1	W1	C2	9'-0" EXST
102	OFFICE	F2	B1	W1	C1	8'-0"
103	OFFICE	F2	B1	W1	C1	8'-6"
104	OPEN OFFICE	F1	B1	W1	C1	8'-6"
105	LARGE OFFICE	F1	B1	W1	C1	8'-6"
106	OPEN OFFICE	F1	B1	W1	C1	8'-6"
107	LOCKERS	F1	B1	W1	C1	8'-6"

FLOOR:
- F1 LVT [LVT-1]
- F2 CARPET [CPT-1]
- F3 EXISTING / NEW CONCRETE W/ NEW SEALANT

BASE:
- B1 RUBBER BASE [RB-1]

WALLS:
- W1 PAINTED GPDW [PT-1] [PT-3] [PT-4]
- W2 PAINTED OSB [PT-1]

CEILING:
- C1 2x2 SUSPENDED ACOUSTICAL PANELS [ACT-1]
- C2 EXISTING 2x4 ACOUSTICAL PANELS
- C3 OPEN TO STRUCTURE



B1 Key Plan

Scale: N.T.S.

Plan North

Materials schedule

XX-#

CODE	MATERIAL	LOCATION	MANUFACTURER	SPECIFICATION
ACT-1	ACOUSTIC CEILING TILE AND GRID	REFER TO REFLECTED CEILING PLAN	ARMSTRONG	ASTM C 36; 2'x2' #770 NON DIRECTIONAL SQUARE LAY-IN TILE, WHITE SUSPENDED GRIDS, SEISMIC CATEGORY 'C' ; 15/16" METAL WHITE
CPT-1	CARPET	OFFICES	TANDUS CENTIVA	FREELANCE, UNIVERSAL ELEMENT, #23802 (PROVIDED BY OWNER, INSTALLED BY CONTRACTOR)
LVT-1	LUXURY VINYL TILE	OPEN OFFICES, LOCKERS	TARKETT	LATITUDE SERIES, STYLE: CONCRETE, COLOR: GYPSUM (PROVIDED BY OWNER, INSTALLED BY CONTRACTOR)
M-1	METAL ROOF PANEL	ROOF	MBCI	PBR PANEL, 26 GAUGE, PRE-PAINTED, TO MATCH EXISTING (SIGNATURE 200)
M-2	METAL WALL PANEL	EXTERIOR WALLS	MBCI	PBC PANEL, INSTALLED HORIZONTALLY PRE-PAINTED, SIGNATURE 200 CHARCOAL GRAY
M-3	DOWNSPOUTS	EXTERIOR EAST SIDE OF BUILDING	MBCI	26 GAUGE, PRE-PAINTED, TO MATCH EXTERIOR WALLS, SIGNATURE 200
M-4	RAIN GUTTER	EXTERIOR EAST SIDE OF BUILDING	MBCI	26 GAUGE, PRE-PAINTED, TO MATCH EXTERIOR WALLS, SIGNATURE 200
M-5	RAKE AND CORNER TRIM	EXTERIOR	MBCI	26 GAUGE, PRE-PAINTED, TO MATCH EXTERIOR WALLS, SIGNATURE 200
PT-1	PAINT	WALLS, INTERIOR DOOR FRAMES	SHERWIN WILLIAMS	PACER WHITE 6098 PRO MAR 200 EGGSHELL
PT-2	PAINT	EXTERIOR METAL DOORS/TRIM	SHERWIN WILLIAMS	RAINSTORM 6230
PT-3	PAINT	ACCENT WALLS	SHERWIN WILLIAMS	ADRIATIC SEA 6790
PT-4	PAINT	ACCENT WALLS	SHERWIN WILLIAMS	ANONYMOUS 7046
RB-1	RUBBER BASE	ALL FLOORS	ARMSTRONG OR ROPPE	4" COVED WITH PRE-FORMED CORNERS, BLACK (PROVIDED AND INSTALLED BY CONTRACTOR)
S-1	SEALANT	CONCRETE	SHERWIN WILLIAMS	ARMORSEAL REXTHANE I FLOOR COATING
WM-1	WALK-OFF MAT	INTERIOR ENTRY	TANDUS CENTIVA	ABRASIVE ACTION POWER BOND CUSHION CHARCOAL #19100 (PROVIDED BY OWNER, INSTALLED BY CONTRACTOR)

1

REVISIONS	BY
1 3-30-2020	LO

REGISTERED ARCHITECT CERTIFICATE NO. 25646 W. ALAN KENSON Date Signed 02/13/20 ARIZONA U.S.A. EXPIRES: 6/30/21

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www.kenson-associates.com
ARCHITECTURE & PLANNING

DRAWING: Reference Floor Plan

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301
102-03-003A

APN:

DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: A8.0

Mar 30, 2020 - 2:08pm

Specifications

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01000 - DEFINITIONS

1. DRAWING PLAN CLARIFICATION: AN ANSWER FROM THE ARCHITECT, IN RESPONSE TO AN INQUIRY FROM THE CONTRACTOR, INTENDED TO MAKE SOME REQUIREMENT(S) OF THE DRAWINGS OR PLANS CLEARLY UNDERSTOOD. DRAWING/PLAN CLARIFICATIONS MAY BE SKETCHES, DRAWINGS OR IN NARRATIVE FORM AND WILL NOT CHANGE ANY REQUIREMENTS OF THE DRAWINGS OR PLANS, RESPONSES TO CONTRACTOR INQUIRIES SHALL BE AS OUTLINED IN SECTION 01005.
2. PROJECT COMMUNICATIONS: ROUTINE WRITTEN COMMUNICATIONS BETWEEN THE ARCHITECT AND THE CONTRACTOR SHALL BE IN LETTER, FIELD MEMO, OR EMAIL FORMAT. SUCH COMMUNICATIONS SHALL NOT BE IDENTIFIED AS REQUESTS FOR INFORMATION NOR SHALL THEY SUBSTITUTE FOR ANY OTHER WRITTEN REQUIREMENT PURSUANT TO THE PROVISIONS OF THE CONTRACT DOCUMENTS.
3. REQUEST FOR INFORMATION: A REQUEST FROM THE CONTRACTOR OR ONE OF THEIR SUBCONTRACTORS, TO THE ARCHITECT, SEEKING AN INTERPRETATION OR A CLARIFICATION OF SOME REQUIREMENT OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL CLEARLY AND CONCISELY SET FORTH THE ISSUE FOR WHICH THEY SEEK CLARIFICATION OR INTERPRETATION AND WHY A RESPONSE IS NEEDED FROM THE ARCHITECT. THE CONTRACTOR SHALL, IN THE WRITTEN REQUEST, SET FORTH ITS INTERPRETATION OR UNDERSTANDING OF THE CONTRACT'S REQUIREMENTS ALONG WITH REASONS WHY IT HAS REACHED SUCH AN UNDERSTANDING. RESPONSES FROM THE ARCHITECT WILL NOT CHANGE ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. RESPONSES TO CONTRACTOR INQUIRIES SHALL BE AS OUTLINED IN SECTION 01005

SECTION 01005 - REQUEST FOR INFORMATION (RFI) PROCEDURES

1. ALL RFIS SHALL BE SUBMITTED TO ARCHITECT VIA EMAIL IN WORD DOCUMENT (.DOC) OR ADOBE (.PDF) FORMATS ONLY. EMAIL ADDRESS IS WAKA@CABLEONE.NET. ANY OTHER TYPE OF SUBMITTAL PROCESS OR PROCEDURE WILL NOT BE RESPONDED TO.
2. IN THE EVENT THAT THE CONTRACTOR OR SUBCONTRACTOR, AT ANY TIME, DETERMINES THAT SOME PORTION OF THE DRAWINGS, SPECIFICATIONS, OR OTHER CONTRACT DOCUMENTS REQUIRES CLARIFICATION OR INTERPRETATION BY THE ARCHITECT, THE CONTRACTOR SHALL SUBMIT AN RFI TO THE ARCHITECT. RFIS MAY ONLY BE SUBMITTED BY THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL CLEARLY AND CONCISELY SET FORTH THE ISSUE OF WHICH CLARIFICATION OR INTERPRETATION IS SOUGHT AND WHY A RESPONSE IS NEEDED FROM THE ARCHITECT. IN THE RFI, THE CONTRACTOR SHALL SET FORTH THEIR INTERPRETATION OR UNDERSTANDING OF THE REQUIREMENT ALONG WITH REASONS WHY SUCH AN UNDERSTANDING WAS REACHED.
3. THE ARCHITECT ACKNOWLEDGES THAT THIS IS A COMPLEX PROJECT BASED UPON THE ARCHITECT'S PAST EXPERIENCE WITH PROJECTS OF SIMILAR COMPLEXITY.
4. THE ARCHITECT WILL REVIEW ALL PROPERLY SUBMITTED RFIS TO DETERMINE WHETHER THEY ARE RFIS WITHIN THE MEANING OF THIS TERM. IF THE ARCHITECT DETERMINES THAT THE DOCUMENT IS NOT AN RFI, IT WILL BE RETURNED TO THE CONTRACTOR, UN-REVIEWED AS TO CONTENT, FOR RE-SUBMITTAL IN THE PROPER FORM.
5. RESPONSES TO RFIS SHALL BE ISSUED WITHIN SEVEN (7) WORKING DAYS OF RECEIPT OF THE REQUEST FROM THE CONTRACTOR UNLESS THE ARCHITECT DETERMINES THAT A LONGER TIME IS NECESSARY TO PROVIDE AN ADEQUATE RESPONSE. IF A LONGER TIME IS DETERMINED NECESSARY BY THE ARCHITECT, THE ARCHITECT WILL WITHIN FIVE (5) WORKING DAYS OF RECEIPT OF THE REQUEST, NOTIFY THE CONTRACTOR OF THE ANTICIPATED RESPONSE TIME. IF THE CONTRACTOR SUBMITS AN RFI ON AN ACTIVITY WITH SEVEN(7) WORKING DAYS OR LESS OF FLOAT ON THE CURRENT PROJECT SCHEDULE THE CONTRACTOR SHALL NOT BE ENTITLED TO ANY TIME EXTENSION DUE TO THE TIME IT TAKES THE ARCHITECT TO RESPOND TO THE REQUEST PROVIDED THAT THE ARCHITECT RESPONDS WITHIN THE SEVEN (7) WORKING DAYS SET FORTH ABOVE.
6. ARCHITECT WILL RESPOND TO ALL RFIS VIA EMAIL TO ONE CONTACT IN THE CONTRACTOR'S OFFICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FORWARDING THIS RESPONSE EMAIL TO ALL PERTINENT PERSONNEL, SUBCONTRACTORS AND SUPPLIERS.
7. RESPONSES FROM THE ARCHITECT WILL NOT CHANGE ANY REQUIREMENT OF THE CONTRACT DOCUMENTS. IN THE EVENT THE CONTRACTOR BELIEVES THAT A RESPONSE TO AN RFI WILL CAUSE A CHANGE TO THE REQUIREMENTS OF THE CONTRACT DOCUMENT, THE CONTRACTOR SHALL GIVE WRITTEN NOTICE T THE ARCHITECT STATING THAT THE CONTRACTOR CONSIDERS THE RESPONSE TO BE A CHANGE ORDER. FAILURE TO GIVE SUCH WRITTEN NOTICE SHALL WAIVE THE CONTRACTOR'S RIGHT TO SEEK ADDITIONAL TIME OR COST.

SECTION 01010 - SUMMARY OF WORK

1. THE AIA "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION" (FORM A201-2017) SHALL BE A PART OF THE CONTRACT DOCUMENTS, ALONG WITH THESE DRAWINGS AND SPECIFICATIONS.
2. IN THE PREPARATION OF THESE SPECIFICATIONS AN EFFORT HAS BEEN MADE TO SEGREGATE THE VARIOUS BRANCHES OF THE WORK UNDER HEADINGS, BY TRADES. THIS IS DONE ONLY FOR CONVENIENCE AND SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF FURNISHING EVERY ITEM INDICATED OR SPECIFIED WHETHER PROPERLY SEGREGATED OR NOT.
3. THE MISPLACEMENT, ADDITION OR OMISSION OF ANY LETTER, WORD OR PUNCTUATION MARK, OR LACK OF CAPITALIZATION OF A WORD, SHALL IN NO WAY DAMAGE THE TRUE SPIRIT, INTENT, OR MEANING OF THESE SPECIFICATIONS.
4. CONTRACTOR SHALL COMPLY WITH, AND REQUIRE ALL SUBCONTRACTORS TO COMPLY WITH, STATE AND CITY CONTRACTOR'S LICENSE LAWS AND BE DULY REGISTERED AND LICENSED THEREUNDER.
5. WHERE SPECIFIC INSTRUCTIONS IN THESE SPECIFICATIONS REQUIRE THAT A PARTICULAR PRODUCT AND/OR MATERIAL(S) BE INSTALLED AND/OR APPLIED BY AN APPROVED APPLICATOR OF THE MANUFACTURER, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ANY SUBCONTRACTORS USED FOR SUCH WORK BE AN APPROVED APPLICATOR.

SECTION 01015 - PROJECT COORDINATION

1. THE GENERAL CONTRACTOR SHALL COORDINATE CONSTRUCTION OPERATIONS INCLUDED IN VARIOUS SECTIONS OF THESE SPECIFICATIONS TO ASSURE EFFICIENT COORDINATION AND ORDERLY INSTALLATION OF EACH PART OF THE WORK. THE GENERAL CONTRACTOR SHALL ALSO COORDINATE CONSTRUCTION OPERATIONS INCLUDED UNDER DIFFERENT SECTIONS THAT DEPEND ON EACH OTHER FOR PROPER INSTALLATION, CLEARANCES, CONNECTIONS, AND OPERATIONS.
2. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL COORDINATE THEIR WORK WITH THE OWNER'S VENDOR'S WORKS.
3. THE VENDOR'S THAT WILL SUPPLY AND INSTALL THESE ITEMS HAS NOT BEEN CHOSEN YET. AS SOON AS THE VENDOR'S ARE DETERMINED THE CONTRACTOR WILL BE NOTIFIED OF ALL CONTACT INFORMATION.
4. THE PROJECT SUPERINTENDENT AND THE PROJECT MANAGER SHALL HAVE A MEETING WITH THE FOREMEN OF THE MECHANICAL, ELECTRICAL, FIRE SPRINKLER, AND PLUMBING SUBCONTRACTORS PRIOR TO THE INSTALLATION OF ANY OF THEIR MATERIALS AND EQUIPMENT IN THE BUILDING. THE PURPOSE OF THIS MEETING SHALL BE TO REQUIRE ALL OF THESE SUBCONTRACTORS TO COORDINATE THEIR INSTALLATION LOCATIONS OF THEIR MATERIALS AND EQUIPMENT SO THAT THERE ARE NO CONFLICTS IN THE FIELD. ALL OF THESE SUBCONTRACTORS MATERIALS AND EQUIPMENT SHALL BE INSTALLED AS HIGH AS IS POSSIBLE WITHIN THE STRUCTURAL FRAMING SYSTEMS AND IS NOT TO BE INSTALLED ANY LOWER THAN THE BOTTOM OF THE STRUCTURAL ROOF AND FLOOR SYSTEMS UNLESS APPROVED IN ADVANCE IN WRITING BY THE ARCHITECT. SHOULD THERE END UP BEING A CONFLICT BETWEEN THE SUBCONTRACTORS MATERIALS AND EQUIPMENT, THEN THE CONFLICTING MATERIALS AND EQUIPMENT SHALL BE REMOVED AND PROPERLY REINSTALLED AT NO ADDITIONAL COST TO THE OWNER.

SECTION 01017 - SUPERINTENDENT

1. THE CONTRACTOR SHALL EMPLOY A COMPETENT SUPERINTENDENT AND NECESSARY ASSISTANTS WHO SHALL BE IN ATTENDANCE AT THE PROJECT SITE DURING PERFORMANCE OF THE WORK.
2. THE SUPERINTENDENT SHALL REPRESENT THE CONTRACTOR, AND COMMUNICATIONS GIVEN TO THE SUPERINTENDENT SHALL BE AS BINDING IF GIVEN TO THE CONTRACTOR. IMPORTANT COMMUNICATIONS SHALL BE CONFIRMED IN WRITING. OTHER COMMUNICATIONS SHALL BE SIMILARLY CONFIRMED ON WRITTEN REQUEST IN EACH CASE.

SECTION 01025 - APPLICATIONS FOR PAYMENT

1. SUBMIT APPLICATIONS FOR PAYMENT TO OWNER IN ACCORD WITH THE SCHEDULE ESTABLISHED BY CONDITIONS OF THE CONTRACT AND AGREEMENT BETWEEN OWNER AND CONTRACTOR.
2. NO PROJECTIONS IN PAYMENTS WILL BE ALLOWED.
3. SUBMIT ITEMIZED APPLICATIONS TYPED ON AIA DOCUMENT G702-92, " APPLICATIONS AND CERTIFICATE FOR PAYMENT" AND CONTINUATION SHEETS G703-92.
4. CONTRACTOR SHALL SUBMIT ROUGH DRAFT OF THE APPLICATIONS FOR PAYMENT TO ARCHITECT FOR AN ON-SITE REVIEW FOLLOWING END OF DRAW PERIOD; THEN SUBMIT ONE (1) FINAL COPY AT THE TIMES STIPULATED IN THE AGREEMENT.

SECTION 01040 - CONTRACTOR'S CONSTRUCTION SCHEDULES

1. THE CONTRACTOR SHALL PREPARE A CONSTRUCTION SCHEDULE, FOR THE WORK, WITHIN 7 CALENDAR DAYS OF BEING AWARDED THE CONTRACT AND SUBMIT IT FOR THE OWNER'S AND ARCHITECT'S INFORMATION.
2. THE SCHEDULE SHALL BE A CRITICAL PATH METHOD SCHEDULE AND SHALL DEMONSTRATE A REALISTIC, EXPEDITIOUS PLAN FOR COMPLETING THE WORK WITHIN THE PARAMETERS OF THE CONTRACT DOCUMENTS.
3. THE CONTRACTOR SHALL CONFORM TO THE MOST RECENT SCHEDULE.
4. THE SCHEDULE SHALL NOT EXCEED TIME LIMITS CURRENT UNDER THE CONTRACT DOCUMENTS.
5. THE SCHEDULE SHALL BE REVISED AT APPROPRIATE INTERVALS AS REQUIRED BY THE CONDITIONS OF THE WORK AND PROJECT, SHALL BE RELATED TO THE ENTIRE PROJECT TO THE EXTENT REQUIRED BY THE CONTRACT DOCUMENTS AND SHALL PROVIDE FOR EXPEDITIOUS AND PRACTICABLE EXECUTION OF THE WORK.

SECTION 01045 - SUBCONTRACTORS

1. THE CONTRACTOR SHALL FURNISH TO THE OWNER THROUGH THE ARCHITECT THE NAMES OF PERSONS OR ENTITIES (INCLUDING THOSE WHO ARE TO FURNISH MATERIALS OR EQUIPMENT FABRICATED TO A SPECIAL DESIGN) PROPOSED FOR EACH PRINCIPAL PORTION OF THE WORK.
2. THE ARCHITECT WILL PROMPTLY REPLY TO THE CONTRACTOR STATING WHETHER OR NOT THE OWNER OR THE ARCHITECT, AFTER DUE INVESTIGATION, HAS REASONABLE OBJECTIONS TO ANY SUCH PROPOSED PERSON OR ENTITY.
3. FAILURE OF THE OWNER OR ARCHITECT TO REPLY PROMPTLY SHALL CONSTITUTE NOTICE OF NO REASONABLE OBJECTION.
4. THE CONTRACTOR SHALL NOT CONTRACT WITH A PROPOSED PERSON OR ENTITY TO WHOM THE OWNER OR ARCHITECT HAS MADE REASONABLE AND TIMELY OBJECTION. THE CONTRACTOR SHALL NOT BE REQUIRED TO CONTRACT WITH ANYONE TO WHOM THE CONTRACTOR HAS MADE REASONABLE OBJECTION.

SECTION 01050 - FIELD ENGINEERING

1. CONTRACTOR SHALL VERIFY LOCATION OF ALL MONUMENTS AND BENCHMARKS SHOWN ON THE DRAWINGS.
2. CONTRACTOR SHALL:
   2.1 PROVIDE FIELD PROFESSIONAL ENGINEERING SERVICES AS SPECIFIED OR REQUIRED TO EXECUTE CONTRACTOR CONSTRUCTION METHOD.
   2.2 DEVELOP AND MAKE ALL DETAIL SURVEYS AND MEASUREMENT NEEDED FOR CONSTRUCTION, INCLUDING ALL WORKING LINES AND ELEVATION.
   2.3 PROVIDE ALL MATERIAL REQUIRED FOR BENCHMARKS, CONTROL POINTS, BATTER BOARDS, GRADE STAKES AND OTHER ITEMS.
   2.4 BE SOLELY RESPONSIBLE FOR ALL LOCATIONS, DIMENSIONS AND LEVELS. NO DATA OTHER THAN WRITTEN ORDERS OF THE ARCHITECT SHALL JUSTIFY DEPARTURE FROM THE DIMENSIONS AND LEVELS REQUIRED BY THE DRAWINGS.

SECTION 01340 - SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

1. SHOP DRAWINGS ARE DRAWINGS, DIAGRAMS, SCHEDULES AND OTHER DATA SPECIALLY PREPARED FOR THE WORK BY THE CONTRACTOR OR A SUBCONTRACTOR, SUB-SUBCONTRACTOR, MANUFACTURER, SUPPLIER OR DISTRIBUTOR TO ILLUSTRATE SOME PORTION OF THE WORK.
2. PRODUCT DATA ARE ILLUSTRATIONS, STANDARD SCHEDULES, PERFORMANCE CHARTS, INSTRUCTIONS, BROCHURES, DIAGRAMS AND OTHER INFORMATION FURNISHED BY THE CONTRACTOR TO ILLUSTRATE MATERIALS OR EQUIPMENT FOR SOME PORTION OF THE WORK.
3. SAMPLES ARE PHYSICAL EXAMPLES, WHICH ILLUSTRATE MATERIALS, EQUIPMENT OR WORKMANSHIP AND ESTABLISH STANDARDS BY WHICH THE WORK WILL BE JUDGED.
4. THE CONTRACTOR SHALL PREPARE AND KEEP CURRENT, FOR THE ARCHITECT'S APPROVAL, A SCHEDULE OF SUBMITTALS WHICH IS COORDINATED WITH THE CONTRACTOR'S CONSTRUCTION SCHEDULE AND ALLOWS THE ARCHITECT REASONABLE TIME TO REVIEW SUBMITTALS. THIS SCHEDULE OF SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT WITH THE CONTRACTOR'S CONSTRUCTION SCHEDULE. THE CONTRACTOR SHALL CONFORM TO THE MOST RECENT SCHEDULE.
5. THE PURPOSE FOR THESE SUBMITTALS IS TO DEMONSTRATE FOR THOSE PORTIONS OF THE WORK FOR WHICH SUBMITTALS ARE REQUIRED THE WAY THE CONTRACTOR PROPOSES TO CONFORM TO THE INFORMATION GIVEN AND THE DESIGN CONCEPT EXPRESSED IN THE CONTRACT DOCUMENTS.
6. THE CONTRACTOR SHALL REVIEW, APPROVE AND SUBMIT TO THE ARCHITECT SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND SIMILAR SUBMITTALS REQUIRED BY THE CONTRACT DOCUMENTS WITH REASONABLE PROMPTNESS AND IN SUCH SEQUENCE AS TO CAUSE NO DELAY IN THE WORK OR IN THE ACTIVITIES OF THE OWNER OR OF SEPARATE CONTRACTORS.
7. SUBMITTALS MADE BY THE CONTRACTOR, WHICH ARE NOT REQUIRED BY THE CONTRACT DOCUMENTS, MAY BE RETURNED WITHOUT ACTION.
8. THE CONTRACTOR SHALL PERFORM NO PORTION OF THE WORK REQUIRING SUBMITTAL AND REVIEW OF SHOP DRAWINGS, PRODUCT DATA, SAMPLES OR SIMILAR SUBMITTALS UNTIL THE ARCHITECT HAS APPROVED THE RESPECTIVE SUBMITTAL. SUCH WORK SHALL BE IN ACCORDANCE WITH APPROVED SUBMITTALS.
9. BY APPROVING AND SUBMITTING SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND SIMILAR SUBMITTALS, THE CONTRACTOR REPRESENTS THAT THE CONTRACTOR HAS DETERMINED AND VERIFIED MATERIALS, FIELD MEASUREMENTS AND FIELD CONSTRUCTION CRITERIA RELATED THERETO OR WILL DO SO, AND HAS CHECKED AND COORDINATED THE INFORMATION CONTAINED WITHIN SUCH SUBMITTALS WITH THE REQUIREMENTS OF THE WORK AND OF THE CONTRACT DOCUMENTS.
10. THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR DEVIATIONS FROM REQUIREMENTS OF THE CONTRACT DOCUMENTS BY THE ARCHITECT'S APPROVAL OF SHOP DRAWINGS, PRODUCT DATA, SAMPLES OR SIMILAR SUBMITTALS UNLESS THE CONTRACTOR HAS SPECIFICALLY INFORMED THE ARCHITECT IN WRITING OF SUCH DEVIATION AT THE TIME OF SUBMITTAL AND THE ARCHITECT HAS GIVEN WRITTEN APPROVAL TO THE SPECIFIC DEVIATION. THE CONTRACTOR SHALL NOT BE RELIEVED OF RESPONSIBILITY FOR ERRORS OR OMISSIONS IN SHOP DRAWINGS, PRODUCT DATA, SAMPLES OR SIMILAR SUBMITTALS BY THE ARCHITECT'S APPROVAL THEREOF.
11. THE CONTRACTOR SHALL DIRECT SPECIFIC ATTENTION, IN WRITING OR ON RESUBMITTED SHOP DRAWINGS, PRODUCT DATA, SAMPLES OR SIMILAR SUBMITTALS, TO REVISIONS OTHER THAN THOSE REQUESTED BY THE ARCHITECT ON PREVIOUS SUBMITTALS.
12. THE CONTRACTOR SHALL CHECK, APPROVE, AND SUBMIT WITH SUCH PROMPTNESS AS TO CAUSE NO DELAY IN HIS WORK, ONE (1) ELECTRONIC COPY AND ONE (1) PAPER COPY OF ALL SHOP DRAWINGS, PRODUCT DATA, SAMPLES OR SIMILAR SUBMITTALS AS CALLED FOR IN THE VARIOUS SECTIONS, DETAILS, AND PARTS TO BE USE IN THE WORK.

SECTION 01350 - SUBSTITUTIONS

1. THE CONTRACTOR SHALL BASE HIS PROPOSAL ON THE EXACT BRANDS, SYSTEMS, METHODS, AND MATERIALS SHOWN, IF THE CONTRACTOR DESIRES TO MAKE SUBSTITUTIONS, HE SHALL LIST THEM WITH HIS BID AND IN HIS CONTRACT. THE LISTING SHALL BE IN SUFFICIENT DETAIL TO AFFORD THE OWNER MEANS OF COMPARISON AND MUST INCLUDE THE MONETARY DIFFERENCE IN CONTRACT PRICE IF THE SUBSTITUTION IS ACCEPTED. SUBSTITUTIONS AFTER SIGNING THE CONTRACT SHALL BE BY CHANGE ORDER ONLY.

SECTION 01360 - RECORD DRAWINGS

1. THE WORK OF THE FOLLOWING TECHNICAL SECTIONS SHALL BE MARKED ON A CLEAN SET OF PLANS, SHOWING THE EXACT LOCATIONS OF THE VARIOUS PARTS OF THE WORK IF DIFFERENT FROM DRAWINGS: MECHANICAL, PLUMBING, AND ELECTRICAL.

SECTION 014000 - QUALITY CONTROL

1. ALL COSTS INCURRED FOR TESTING LABORATORY SERVICES SHALL BE PAID BY THE CONTRACTOR.
2. TESTING LABORATORY SHALL REPORT THE RESULTS OF ALL TESTS, IN WRITING, VIA EMAIL, SIMULTANEOUSLY TO THE FOLLOWING: ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR.

SECTION 01410 - ERRORS AND OMISSIONS

1. IF ANY ERRORS OR OMISSIONS APPEAR IN THE DRAWINGS, SPECIFICATIONS, OR OTHER DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING OF SUCH OMISSIONS OR ERRORS PRIOR TO PROCEEDING WITH ANY WORK WHICH APPEARS IN QUESTION.
2. IN THE EVENT OF THE CONTRACTOR'S FAILURE TO GIVE SUCH NOTICE, HE SHALL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY SUCH ERRORS OR OMISSIONS AND THE COST OF RECTIFYING IT.
3. THE CONTRACTOR SHALL HAVE ALL ITEMS OR DETAILS CLARIFIED WITH ARCHITECT PRIOR TO SUBMITTING A BID; OTHERWISE ARCHITECTS INTERPRETATION SHALL BE FINAL.
4. IF THERE IS A CONFLICT BETWEEN THESE SPECIFICATIONS AND THE DRAWINGS THEN THE ARCHITECT WILL MAKE A WRITTEN INTERPRETATION WHICH SHALL BE FINAL AND BINDING UPON THE CONTRACTOR. THE ARCHITECT'S INTERPRETATION SHALL BE REASONABLE AND CONSISTENT WITH THE INTENT EXPRESSED IN THE CONTRACT DOCUMENTS.

SECTION 015000 - CONST. FACILITIES & TEMPORARY UTILITIES

1. THE CONTRACTOR SHALL MAINTAIN AT THE SITE FOR THE OWNER, ONE RECORD COPY OF THE DRAWINGS, SPECIFICATIONS, ADDENDA, CHANGE ORDERS, RFI'S, PROPOSAL REQUESTS, AND OTHER MODIFICATIONS, IN GOOD ORDER AND MARKED CURRENTLY TO RECORD CHANGES AND SELECTIONS MADE DURING CONSTRUCTION, AND IN ADDITION APPROVED SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND SIMILAR REQUIRED SUBMITTALS. THESE SHALL BE AVAILABLE TO THE ARCHITECT AND SHALL BE DELIVERED TO THE ARCHITECT FOR SUBMITTAL TO THE OWNER UPON COMPLETION OF THE WORK.
2. THE CONTRACTOR SHALL PROVIDE THE OWNER AND ARCHITECT ACCESS TO THE WORK IN PREPARATION AND PROGRESS WHEREVER LOCATED.
3. OWNER SHALL PROVIDE TEMPORARY ADEQUATE LIGHT AND POWER SUPPLY FOR CONSTRUCTION.
4. OWNER SHALL PROVIDE TEMPORARY ADEQUATE WATER SUPPLY FOR CONSTRUCTION.
5. PROVIDE A CELLULAR JOB TELEPHONE FOR THE DURATION OF THE PROJECT.
6. PROVIDE PROPER SANITARY AND ADEQUATE TOILET FACILITIES FOR THE USE OF ALL WORKMEN EMPLOYED ON THE PROJECT, LOCATED WHERE DIRECTED, AND ENFORCE THEIR USE BY ALL PERSONNEL ON THE PROJECT. ENCLOSE AND WEATHERPROOF TOILETS AND KEEP IN A SANITARY CONDITION AT ALL TIMES. ALSO PROVIDE A TRASH BIN.
7. PROVIDE ADEQUATE FIRE EXTINGUISHERS ON THE PREMISES DURING THE COURSE OF CONSTRUCTION, OF THE TYPE AND SIZES RECOMMENDED BY THE NFPA TO CONTROL FIRES RESULTING FROM THE PARTICULAR WORK BEING PERFORMED.
8. PROVIDE 6 FOOT HIGH WOVEN WIRE TEMPORARY FENCING AROUND THE CONSTRUCTION AREA. FENCING SHALL BE ERECTED AND SECURED IN A MANNER TO WITHSTAND THE FORCES TO WHICH IT MAY BE SUBJECTED.
9. PROTECT ALL ELEMENTS OF CONSTRUCTION FROM ANY DANGER OF DAMAGE FROM WIND, RAIN, DUST, FROST, FREEZING TEMPERATURES, OR OTHER INFILTRATION OF WEATHER.
10. EXERCISE ALL POSSIBLE CARE TO CONTROL EXCESSIVE NOISE AND DUST DURING THE CONSTRUCTION TO KEEP THESE PROBLEMS TO A MINIMUM. TRAFFIC OR CONSTRUCTION AREAS SHALL BE SPRINKLED WITH WATER OR CHEMICALS REQUIRED AND IN ACCORDANCE WITH APPLICABLE COUNTY REQUIREMENTS. CONTRACTOR SHALL SECURE APPROPRIATE DUST PERMITS PRIOR TO SITE WORK BEGINNING.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY OF CONSTRUCTION, CONSTRUCTION MATERIALS AND EQUIPMENT ON THE SITE.
12. NO SIGNS SHALL BE PERMITTED ON PROJECT WITHOUT EXPRESS APPROVAL OF OWNER, EXCEPT FOR SAFETY SIGNS.

Feb 10, 2020 - 3:58pm

REVISIONS	BY

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DRAWING: Specifications

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301
102-03-003A

APN:

DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: A9.0

Specifications Continued

SECTION 016000 - MATERIAL AND EQUIPMENT

1. DELIVER ALL MANUFACTURED MATERIALS IN THE ORIGINAL PACKAGES, CONTAINERS OR BUNDLES (WITH THE SEALS UNBROKEN) BEARING THE NAME OR IDENTIFICATION MARK OF THE MANUFACTURER.
2. STORE ALL MATERIALS IN SUCH MANNER AS NECESSARY TO PROPERLY PROTECT IT FROM DAMAGE. MATERIALS OR EQUIPMENT DAMAGED BY HANDLING, WEATHER, DIRT OR FROM ANY OTHER CAUSE WILL NOT BE ACCEPTABLE.
3. STORE MATERIAL SO AS TO CAUSE NO OBSTRUCTIONS, STORED OFF SIDEWALKS, ROADWAYS AND UNDERGROUND SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL MATERIAL AND EQUIPMENT FURNISHED UNDER THE CONTRACT.
4. WHERE NOT MORE SPECIFICALLY DESCRIBED IN ANY OF THE VARIOUS SECTIONS OF THESE SPECIFICATIONS, WORKMANSHIP SHALL CONFORM TO ALL OF THE METHODS AND OPERATIONS OF BEST STANDARDS AND ACCEPTED PRACTICES OF THE TRADE OR TRADES INVOLVED, AND SHALL INCLUDE ALL ITEMS OF FABRICATION, CONSTRUCTION OR INSTALLATION REGULARLY FURNISHED OR REQUIRED FOR COMPLETION.
5. ALL WORK SHALL BE EXECUTED BY MECHANICS SKILLED IN THEIR RESPECTIVE LINES OF WORK.
6. WHEN A SPECIFIC MANUFACTURER, TRADE NAME OR MATERIAL IS SPECIFIED, OR INDICATED, IT IS TO ESTABLISH A STANDARD OF QUALITY AND SHALL NOT BE CONSTRUED AS LIMITING COMPETITION. IF THE CONTRACTOR DESIRES TO USE A MANUFACTURER, TRADE NAME OR MATERIAL OTHER THAN THAT SPECIFIED, HE SHALL REQUEST APPROVAL OF SUCH SUBSTITUTION, IN WRITING, TO THE ARCHITECT. ALL SUCH REQUESTS SHALL BE SUBMITTED PRIOR TO ORDERING MATERIALS.

SECTION 017000 - PROJECT CLOSE-OUT

1. CONTRACTOR SHALL PROVIDE RECORD DRAWINGS WHICH SHALL CLEARLY SHOW ALL DIFFERENCES BETWEEN THE CONTRACT WORK AS DRAWN AND AS INSTALLED FOR ALL WORK, AS WELL AS WORK ADDED TO THE CONTRACT WHICH IS NOT SHOWN ON THE CONTRACT DRAWINGS.
2. CONTRACTOR SHALL SUBMIT A FULLY EXECUTED "CERTIFICATE OF SUBSTANTIAL COMPLETION", AIA DOCUMENT G704 (LATEST EDITION) FOR OWNER'S AND ARCHITECT'S SIGNATURES.
3. UPON COMPLETION OF THE INSTALLATION OF ALL WORK, AND PRIOR TO FINAL INSPECTION, FURNISH ELECTRONIC COPIES OF OWNER'S CLOSE-OUT MANUAL. THE OWNER'S MANUAL SHALL INCLUDE: 1) ALL SUBCONTRACTOR'S NAMES, ADDRESS, PHONE NUMBER AND CONTACT, 2) GENERAL SUBCONTRACTOR'S ONE YEAR WARRANTY, 3) ALL SUBCONTRACTOR'S WARRANTIES, 4) COPY OF THE FINAL CERTIFICATE OF OCCUPANCY, 5) MANUFACTURER'S CUT SHEETS AND PARTS LISTS OF ALL LIGHT FIXTURES, ELECTRICAL GEAR, MECHANICAL AND PLUMBING EQUIPMENT, 6) MECHANICAL CONTRACTOR'S TEST AND BALANCE REPORT. PROVIDE A TABLE OF CONTENTS AND INDEX TABS FOR EACH HEADING.
4. INSTRUCT OWNER'S PERSONNEL IN OPERATION, ADJUSTMENT, AND MAINTENANCE OF EQUIPMENT AND SYSTEMS.
5. SUBMIT ALL REQUIRED GUARANTEES TO THE OWNER, PROVIDE WRITTEN GUARANTEE IN ACCORDANCE WITH SUBPARAGRAPH 13.2.2 OF THE GENERAL CONDITIONS. IN ADDITION, PROVIDE ALL WRITTEN GUARANTEES OR CERTIFICATES REQUIRED AS SPECIFIED IN THESE SPECIFICATIONS.
6. NEITHER FINAL PAYMENT NOR ANY REMAINING RETAINED PERCENTAGE WILL BE PAID TO CONTRACTOR UNTIL ALL OF THE ABOVE PROVISIONS ARE MET AND ALL REQUIREMENTS AS OUTLINED IN THE "GENERAL CONDITION OF THE CONTRACT FOR CONSTRUCTION" AIA DOCUMENT A201 (LATEST EDITION), PARAGRAPH 9.10.2

SECTION 01710 - CLEANING

1. SAFETY AND INSURANCE STANDARDS: MAINTAIN PROJECT IN ACCORDANCE WITH THE FOLLOWING SAFETY AND INSURANCE STANDARDS:
   STATE INDUSTRIAL COMMISSION (OF ARIZONA) OSHA
2. FIRE PROTECTION STORE VOLATILE WASTE IN COVERED METAL CONTAINERS, AND REMOVE FROM PREMISES DAILY.
3. POLLUTION CONTROL: CONDUCT CLEAN-UP AND DISPOSAL OPERATIONS TO COMPLY WITH LOCAL ORDINANCES AND ANTI-POLLUTION LAWS. BURNING OR BURYING OF RUBBISH AND WASTE MATERIAL ON THE PROJECT SITE IS NOT PERMITTED DISPOSAL OF VOLATILE FLUID WASTE (SUCH AS MINERAL SPIRITS, OIL, OR PAINT THINNER) IN STORM OR SANITARY SEWER SYSTEMS OR INTO STREAMS OR WATERWAYS IS NOT PERMITTED.
4. USE ONLY CLEANING MATERIALS RECOMMENDED BY MANUFACTURER OF SURFACE TO BE CLEANED.
5. THE CONTRACTOR SHALL KEEP THE PREMISES AND SURROUNDING AREA FREE FROM ACCUMULATION OF WASTE MATERIALS OR RUBBISH CAUSED BY OPERATIONS UNDER THE CONTRACT. AT COMPLETION OF THE WORK THE CONTRACTOR SHALL REMOVE FROM AND ABOUT THE PROJECT WASTE MATERIALS, RUBBISH, THE CONTRACTOR'S TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY AND SURPLUS MATERIALS.
6. IF THE CONTRACTOR FAILS TO CLEAN UP AS PROVIDED IN THE CONTRACT DOCUMENTS, THE OWNER MAY DO SO AND THE COST THEREOF SHALL BE CHARGED TO THE CONTRACTOR.
7. PROVIDE FOR THE DISPOSAL OF ALL WASTE PRODUCTS, TRASH, DEBRIS, ETC., AND MAKE NECESSARY ARRANGEMENT FOR LEGAL DISPOSAL OF IT OFF THE SITE.
8. MAKE BUILDINGS READY FOR OCCUPANCY IN ALL RESPECTS. LAY HEAVY BUILDING PAPER IN MAIN CIRCULATION AREAS TO PROTECT THE FLOORS UNTIL FINAL INSPECTION AND ACCEPTANCE.
9. ALL EXISTING IMPROVEMENTS, INSIDE OR OUTSIDE THE PROPERTY WHICH ARE DISTURBED, DAMAGED OR DESTROYED BY THE WORK UNDER THE CONTRACT SHALL BE RESTORED TO THE CONDITION IN WHICH THEY ORIGINALLY WERE, OR TO THE SATISFACTION OF THE ARCHITECT.
10. CONTRACTORS AND THEIR EMPLOYEES WILL NOT BE ALLOWED TO PARK ON CONCRETE FLOORS OR SLABS. IF ANY CONTRACTOR OR HIS EMPLOYEE DOES SO, THEY SHALL BE RESPONSIBLE FOR THE COST OF CLEANING THE SLAB TO THE FULL SATISFACTION OF THE OWNER AND AT NO COST TO THE OWNER.

DIVISION 2 - SITEWORK

SECTION 02075 DUST (PARTICULATE MATTER) CONTROL

1. THE GENERAL CONTRACTOR AND ALL OF THEIR SUBCONTRACTORS SHALL MEET ALL LOCAL, COUNTY, STATE, AND FEDERAL REGULATIONS AND SHALL BE SOLELY RESPONSIBLE FOR DUST CONTROL ON THE SITE FOR THE ENTIRE DURATION OF CONSTRUCTION AND SHALL STRICTLY CONFORM TO THESE REGULATIONS.

DIVISION 5 - METALS

SECTION 05100 - STRUCTURAL METAL FRAMING

1. FURNISH, FABRICATE AND ERECT THE FOLLOWING ITEMS OF STRUCTURAL METAL, INCLUDING BUT NOT LIMITED TO COLUMNS, BEAMS AND LINTELS.
2. METAL PRIMER SHALL BE TNEMEC 10-1009 OR APPROVED EQUAL. APPLY TO WET THICKNESS OF 4.5 MILS.
3. CONFORM WITH AISC 'SPECIFICATIONS FOR DESIGN FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS'. AISC 'CODE OF STANDARD PRACTICE' AND THE APPLICABLE BUILDING CODES.
4. WELDERS SHALL BE DULY QUALIFIED (TEST PASSED IN THE PRECEDING 12 MONTHS) IN THE POSITION IN WHICH THEY ARE TO WELD AND THE QUALIFICATIONS AND SPECIFICATIONS FOR WORKMANSHIP SHALL COMLPY WITH THE AWS REQUIREMENTS 'AWS SPECIFICATIONS FOR BUILDING'.

SECTION 05500 - MISCELLANEOUS METALS

1. THE TYPES OF MISCELLANEOUS METAL ITEMS INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
   LOOSE BEARING PLATES
   MISCELLANEOUS FRAMING AND SUPPORTS
   MISCELLANEOUS STEEL ANGLE EDGES AT FLOOR PITS
   EXTERIOR CANOPIES
   STEEL PIPE BOLLARDS
   STEEL SWING GATES
2. COMPLY WITH THE FOLLOWING CODES, STANDARDS AND SPECIFICATIONS:
   2.1 AISC 'SPECIFICATIONS FOR THE DESIGN, FABRICATIONS AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.' INCLUDING 'COMMENTARY OF THE AISC SPECIFICATIONS'.
   2.2 AISC 'SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS'.
   2.3 AWS 'CODE FOR WELDING IN BUILDING CONSTRUCTION'.
3. USE MATERIALS OF REQUIRED SIZE AND THICKNESS TO PRODUCE ADEQUATE STRENGTH AND DURABILITY OF THE FINISHED PRODUCT FOR THE INTENDED USE.
4. SHOP PAINT MISCELLANEOUS METAL WORK, EXCEPT THOSE MEMBERS OR PORTIONS OF MEMBERS TO BE EMBEDDED IN CONCRETE OR MASONRY AND SURFACES AND EDGES TO BE FIELD WELDED. APPLY ONE SHOP COAT OF METAL PRIMER PAINT TO FABRICATED METAL ITEMS, EXCEPT APPLY 2 COATES OF PAINT O SURFACES WHICH ARE INACCESSIBLE AFTER ASSEMBLY OR ERECTION PRIMER TO BE TNEMEC 10-1009 OR APPROVED EQUAL.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

SECTION 07210 - BUILDING INSULATION

1. INSULATION MATERIALS SHALL BE FLEXIBLE FIBERGLASS BATTS OR BLANKETS, WITH OR WITHOUT FACINGS, AS CALLED OUT ON PLANS. ALL COMPOSITE MATERIALS SHALL HAVE A FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DEVELOPED RATING OF 50 OR LESS AS TESTED IN ACCORDANCE WITH ASTM E84 U.L. 723
2. PROVIDE INSULATION AS FOLLOWS:
   2.1 REFER TO WALL TYPES SCHEDULE AND BUILDING SECTIONS / DETAILS.
3. CUT AND FIT INSULATION MATERIALS AROUND PIPES, CONDUITS, OUTLET BOXES, ETC., AS NECESSARY TO MAINTAIN THE INTEGRITY OF THE INSULATION. WHERE PIPES ARE INSTALLED IN SPACES TO RECEIVE INSULATION, PLACE INSULATION BETWEEN EXTERIOR WALL AND THE PIPE, COMPRESSING INSULATION AS NECESSARY.
4. AT WALL AND CEILING AREAS INSTALL INSULATION BETWEEN FRAMING MEMBERS WITH FLANGES CONTINUOUSLY TIGHT AGAINST FRAMING MEMBERS AND ENDS TIGHTLY BUTTED.

SECTION 07600 - SHEET METAL FLASHINGS & COUNTERFLASHINGS

1. PROVIDE AND INSTALL ALL FLASHINGS AND COUNTERFLASHINGS, AS REQUIRED TO MAKE ALL ROOFING SYSTEMS WATERTIGHT.
2. QUALITY, PROCEDURES AND METHODS SHALL BE AS RECOMMENDED BY SMACNA ARCHITECTURAL SHEET METAL MANUAL, 3rd EDITION.
3. MATERIALS:
   3.1 GALVANIZED SHEET METAL ASTM A-525, 24-GAUGE MINIMUM, UNLESS DETAILED OTHERWISE.
   3.2 SOLDER: ASTM B-32, 50% TIN AND 50% LEAD, USED WITH ROSIN FLUX.
   3.3 PLASTIC CEMENT: FS SS-C-153, TYPE I, AND ASTM D-2822.
   3.4 CAULKING: FS TT-S-00227E, 2-PART RUBBER BASE SEALANT.
   3.5 REGLETS & COUNTERFLASHING: AS MANUFACTURED BY FRY-REGLET CORPORATION, TYPE SM.
4. PROVIDE FOR THERMAL EXPANSION OF RUNNING TRIM FLASHING AND OTHER ITEMS EXPOSED FOR MORE THAN 15 FEET CONTINUOUS LENGTH. MAINTAIN A WATERTIGHT INSTALLATION AT EXPANSION SEAMS.
5. PROVIDE THE FOLLOWING SHEET METAL ITEMS:
   FRY REGLET COUNTERFLASHINGS
   EDGE DRIP FLASHING

SECTION 07900 - CAULKING AND SELANTS

1. ALL NEW EXTERIOR AND INTERIOR SEALANT SHALL BE DOW CORNING 795, UNLESS NOTED OTHERWISE.
2. PRIMER: WHERE REQUIRED, SHALL BE USED AS PER DOW CORNING'S WRITTEN INSTRUCTIONS. THE PRIMER SHALL HAVE BEEN TESTED FOR NON-STAINING CHARACTERISTICS AND DURABILITY ON SAMPLES OF ACTUAL SURFACES TO BE SEALED.
3. CONTRACTOR SHALL USE CLOSED CELL POLYETHYLENE BACKER RODS AS A JOINT BACKING TO CONTROL DEPTH OF SEALANT BEAD. WHERE DEPTH OF JOINT WILL PREVENT USE OF JOINT BACKING, AN ADHESIVE BACKED POLYETHYLENE TAPE (BOND BREAKER TAPE) SHALL BE INSTALLED TO PREVENT THREE SIDED ADHESION. JOINT BACKING SHALL BE DRY AT THE TIME OF SEALANT APPLICATION.
4. SURFACES MUST BE SOUND, CLEAN AND DRY. ALL RELEASE AGENTS, EXISTING WATERPROOFING, DUST, LOOSE MORTAR, LAITANCE, PAINTS, OR OTHER FINISHES MUST BE REMOVED. THIS SHALL BE ACCOMPLISHED WITH A THOROUGH WIRE BRUSHING, GRINDING, SANDBLASTING OR SOLVENT WASHING, DEPENDING ON THE CONTAMINATION.
5. PROVIDE CAULKING AT THE FOLLOWING LOCATIONS. THIS SCHEDULE IS NOT TO BE CONSTRUED TO BE COMPLETE. PROVIDE CAULKING AT OTHER AREAS AS INDICATED.
   5.1 PERIMETER OF ALL DOOR AND WINDOW FRAMES, INTERIOR AND EXTERIOR. COLOR TO MATCH DOOR FRAME COLOR.
   5.2 PERIMETER OF ALL ALUMINUM SECTIONS, INTERIOR AND EXTERIOR. COLOR TO MATCH ALUMINUM FRAME COLOR.
   5.3 AT BASE OF WATER CLOSETS AT FLOOR, COLOR TO BE WHITE TO MATCH WATER CLOSET.
   5.4 AT ALL WALL HUNG PLUMBING FIXTURES, COLOR TO BE WHITE TO MATCH FIXTURE.
   5.5 ALL NEW JOINTS AT ABUTTING DISSIMILAR BUILDING MATERIALS.
   5.6 JOINTS IN EXPOSED MASONRY SURFACES, INTERIOR AND EXTERIOR.
   5.7 TOP EDGE OF ALL FRY-REGLET COUNTERFLASHING ASSEMBLIES.
   5.8 CONTROL, COLD, EXPANSION AND SAW JOINTS IN CONCRETE SURFACES, INTERIOR AND EXTERIOR. INSTALL SEALANT AT ALL INTERIOR CONCRETE FLATWORK JOINTS WHICH DO NOT RECEIVE A FLOOR COVERING.

DIVISION 8 - DOORS, WINDOWS, GLASS

SECTION 08110 - HOLLOW METAL FRAMES

1. FRAMES TO MEET SPECIFIED REQUIREMENTS OF SDI AND/OR NAAMM FOR UNIT WELDED FRAMES.
2. CONTRACTOR SHALL ORDER ALL FRAMES FOR MASONRY WALLS IN A TIMELY MANNER SO THAT FRAME CAN BE INSTALLED WHILE MASONRY WALLS ARE BEING BUILT. FRAMES INSTALLED LATER WITH EXPANSION BOLTS WILL NOT BE ALLOWED.
3. ALL EXTERIOR FRAMES, WHERE OCCUR, SHALL BE 14 GAUGE GALVANIZED STEEL WITH CORNERS MITERED AND WELDED.
4. ALL INTERIOR FRAMES SHALL BE 14 GAUGE SHEET STEEL WITH CORNERS MITERED AND WELDED.
5. ALL HOLLOW METAL FRAMES IN MASONRY WALLS ARE TO BE SOLIDLY GROUTED.
6. PREPARE FRAMES TO RECEIVE MORTISED TYPE HARDWARE AND PROVIDE HARDWARE REINFORCING AS REQUIRED BY SDI.
7. INSTALL METAL FRAMES AT LOCATION INDICATED, SET SQUARE AND PLUMB WITH THE BUILDING LINES, ANCHORING SECURELY TO CONSTRUCTION.
8. ANCHOR EACH JAMB LEG WITH SILL CLIP WITH EXPANSION BOLT OR 'RAMSET' FASTENERS.
9. ANCHOR EACH JAMB WITH 3 ANCHORS AT MASONRY AND 4 ANCHORS AT GYPSUM BOARD.

SECTION 08115 - HOLLOW METAL DOORS

1. DOORS TO MEET SPECIFIED REQUIREMENTS OF SDI AND/OR NAAMM.
2. EXTERIOR STEEL DOORS SHALL BE FLUSH EXTRA HEAVY DUTY, 16 GAUGE GALVANIZED STEEL, 1-3/4" THICK, AND PRIME PAINTED. TOP AND BOTTOM OF EXTERIOR DOORS SHALL BE FLUSH.
3. U-FACTOR OF DOORS SHALL BE DETERMINED IN ACCORDANCE WITH NFRC 100 BY AN ACCREDITED, INDEPENDENT LABORATORY, AND LABELED AND CERTIFIED BY THE MANUFACTURER, PER 2012 IECC, SECTION C303.1.3. PROVIDE MANUFACTURER'S WRITTEN DOCUMENTATION TO ARCHITECT THAT THE DOORS MEET THIS CODE REQUIREMENT. CORE SHALL BE POLYISOCYANURATE INSULATION WITH A U-FACTOR OF 0.08.
4. INTERIOR STEEL DOORS SHALL BE FLUSH HEAVY DUTY, 16 GAUGE COLD ROLLED STEEL, 1-3/4" THICK, AND PRIME PAINTED.
5. PROVIDE SOLID DRIP CAP AT TOP OF ALL EXTERIOR OUT-SWINGING DOORS.
6. PROVIDE FOR GLAZING IN DOORS AS SCHEDULED. NON-REMOVABLE MINIMUM 20 GAUGE GLAZING STOPS SHALL OCCUR ON THE OUTSIDE OF EXTERIOR DOORS AND ON THE REVERSE SIDE OF INTERIOR DOORS. GLAZING BEADS ON THE INSIDE OF GLASS PANELS SHALL BE REMOVABLE.
7. DOORS TO BE THOROUGHLY CLEANED, BONDERIZED AND PRIMED WITH SHOP COAT OF LIGHT GRAY ZINC CHROMATE RUST INHIBITIVE PRIMER, BAKED ON.
8. INSTALL DOORS COMPLETELY AND ACCURATELY, COMPLETE WITH ALL FINISH HARDWARE. INSTALL FINISH HARDWARE IN A NEAT WORKMANLIKE MANNER IN ACCORDANCE WITH THE HARDWARE SCHEDULE USING ONLY MECHANICS SKILLED IN THIS TYPE OF WORK. DO NOT INSTALL HARDWARE UNTIL PAINTING IS COMPLETED. KEEP ALL HARDWARE FREE FROM SCRATCHES, DENTS OR OTHER DEFACEMENTS.

SECTION 08200 - WOOD DOORS

1. PROVIDE WOOD DOORS AND RELATED ITEMS IN ACCORDANCE WITH AWI 'QUALITY STANDARDS', SECTION 1300 AND COMMERCIAL STANDARDS CS-236. REFER TO MATERIALS SCHEDULE AND DETAILS.
2. FURNISH MANUFACTURER'S STANDARD 'LIFE OF THE INSTALLATION' GUARANTEE FOR ALL INTERIOR DOORS.
3. SOLID CORE WOOD DOORS: FLUSH CHERRY VENEER, CUSTOM GRADE, FOR AN OPAQUE FINISH. CORE TO BE TYPE PC-7, GRADE 1-L-1 PARTICLE BOARD.
4. STORE DOORS FLAT ON A LEVEL SURFACE IN A CLEAN, DRY, WELL-VENTILATED AREA, PROTECTED FROM SUNLIGHT. DOORS SHALL BE CONDITIONED TO THE AVERAGE PREVAILING HUMIDITY OF THE JOBSITE BEFORE INSTALLATION. HANDLE DOORS WITH CLEAN GLOVES. DO NOT DRAG DOORS ACROSS ONE ANOTHER OR ACROSS OTHER SURFACES.
5. INSTALLATION:
   5.1 INSTALL DOORS IN FRAMES WHERE INDICATED. HINGE DOORS WITH CLEARANCE OF NOT MORE THAN 3/32" AT EACH SIDE, AND HEAD; CLEARANCE AT BOTTOM 1/2" OR AS REQUIRED FOR CARPETING OR THRESHOLD. MORTISE, DRILL OR OTHERWISE WORK DOORS FOR FINISH HARDWARE AS SCHEDULED, BEVELING LOCK EDGE TO ALLOW FOR PROPER CLEARANCE IN OPENING AND CLOSING DOORS. REMOVE DOORS AFTER FITTING FOR FINISHING. RE-HANG AFTER FINISHING.
   5.2 INSTALL FINISH HARDWARE IN A NEAT AND WORKMANLIKE MANNER IN ACCORDANCE WITH THE HARDWARE SCHEDULE, USING ONLY MECHANICS SKILLED IN THIS TYPE OF WORK. DO ALL MORTISING FOR HARDWARE BEFORE PAINTING. DO NOT INSTALL HARDWARE UNTIL FINISHING OF DOOR IS COMPLETED. KEEP ALL HARDWARE FREE FROM SCRATCHES, DENTS OR OTHER DEFACEMENTS.
   5.3 THE FINISH HARDWARE SHALL BE ACCURATELY, FITTED AND INSTALLED ON PROPERLY PREPARED SURFACES IN CONFORMITY WITH THE MANUFACTURER'S INSTRUCTIONS AND TEMPLATES. UPON COMPLETION, THE FINISH HARDWARE SHALL BE IN PERFECT CONDITION AND IN PERFECT WORKING ORDER.

SECTION 08700 - FINISH HARDWARE

1. THE MAXIMUM DOOR-OPENING FORCE (IN POUNDS-FORCE) FOR PUSHING OR PULLING OPEN INTERIOR HINGED DOOR SHALL BE 5 LBF.
2. ALL HARDWARE SHALL MEET HANDICAPPED ACCESSIBILITY REQUIREMENTS OF AMERICANS WITH DISABILITIES ACT.
3. LOCKSETS AND LATCHSETS SHALL BE MOUNTED NO HIGHER THAN 48" ABOVE FINISH FLOOR.
4. EXIT DOORS SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
5. STRIKES SHALL BE EXTENDED LIPS WHERE REQUIRED TO PROTECT TRIM FROM BEING MARRED BY LATCH BOLT. WROUGHT BOXES SHALL BE FURNISHED WITH ALL STRIKES.
6. KEYS AND KEYING:
   6.1 ALL CYLINDERS FOR THIS PROJECT TO BE SET TO NEW MASTER KEY.
   6.2 ALL CYLINDERS TO BE CONSTRUCTION MASTER KEYED.
   6.3 MASTER KEY SETS AND INDIVIDUAL KEYING OF LOCKS WILL BE DETERMINED BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING WITH THE OWNER'S REPRESENTATIVE TO DETERMINE THE EXACT KEYING THAT WILL BE REQUIRED.
   6.4 FURNISH 6 EACH CONSTRUCTION MASTER KEYS TO BE DELIVERED WITH LOCKSETS TO CONTRACTOR. FURNISH 3 EACH MASTER KEY SETS. FURNISH 3 EACH CHANGE KEYS FOR EACH CYLINDER AND LOCKSET.
   6.5 ALL GRAND MASTER, MASTER, AND CHANGE KEYS SHALL BE PROPERLY TAGGED FOR EASY IDENTIFICATION AND DELIVERED TO AN AUTHORIZED RECIPIENT AS DIRECTED BY THE ARCHITECT.
7. PROVIDE A WRITTEN GUARANTEE FOR ALL HARDWARE FOR A PERIOD OF 2 YEARS FROM DATE OF CERTIFICATE OF OCCUPANCY. DEFECTS IN MATERIALS AND/OR WORKMANSHIP OCCURRING DURING THE GUARANTEE PERIOD SHALL BE CORRECTED AT NO EXPENSE TO THE OWNER.

Feb 10, 2020 - 3:58pm

REVISIONS	BY

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DRAWING: Specifications

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301
102-03-003A

APN:

DRAWN BY	L.O.
CHECKED BY	W.A.K.
DATE	February 13th, 2020
JOB NO.	
SHEET	A9.1

Specifications Continued

SECTION 08800 - GLASS AND GLAZING

1. GLASS AND GLAZING SHALL CONFORM TO CHAPTER 24 OF THE 2012 IBC, AND TO LOCAL CODE REQUIREMENTS. IN CASE OF CONFLICT, THE MORE STRINGENT REQUIREMENTS SHALL APPLY.
2. U-FACTOR OF GLASS SHALL BE DETERMINED IN ACCORDANCE WITH NFRC 100 BY AN ACCREDITED, INDEPENDENT LABORATORY, AND LABELED AND CERTIFIED BY THE MANUFACTURER. MANUFACTURER SHALL PROVIDE THIRD PARTY LABORATORY CERTIFICATION TO ARCHITECT, PRIOR TO MANUFACTURING GLASS UNITS.
3. THE SOLAR HEAT GAIN COEFFICIENT (SHGC) AND VISIBLE TRANSMITTANCE (VT) OF GLASS SHALL BE DETERMINED IN ACCORDANCE WITH NFRC 200 BY AN ACCREDITED, INDEPENDENT LABORATORY, AND LABELED AND CERTIFIED BY THE MANUFACTURER. MANUFACTURER SHALL PROVIDE THIRD PARTY LABORATORY CERTIFICATION TO ARCHITECT, PRIOR TO MANUFACTURING GLASS UNITS.
4. WATERTIGHT AND AIRTIGHT INSTALLATION OF EACH PIECE OF GLASS IS REQUIRED. EACH INSTALLATION MUST WITHSTAND NORMAL TEMPERATURE CHANGES, WIND LOADING AND IMPACT LOADING.
5. THE MAXIMUM PROBABLE BREAKAGE LEVEL SHALL BE 8 LITES PER THOUSAND FOR A 1-MINUTE UNIFORM WIND LOAD DURATION.
6. INTERIOR REGULAR PLATE GLASS: CLEAR 1/4" THICK COMPLYING WITH FS-DD-G-451, TYPE 1, CLASS 1, QUALITY Q-3, PLATE OR FLOAT.
7. INTERIOR TEMPERED GLASS: CLEAR 1/4" THICK FULLY TEMPERED PLATE GLASS. PERMANENTLY ETCH EACH LIGHT WITH MANUFACTURER'S NAME AND HIS COMPLIANCE WITH ANSI Z97.1.
8. EXTERIOR CLEAR LOW-E INSULATING GLASS UNITS: AT ALL (UNLESS NOTED OTHERWISE) WINDOW TYPES AND ALL ALUMINUM/GLASS DOORS PROVIDE PPG INSULATED UNITS, COMPRISED OF AN OUTER LAYER OF 6MM STARPHIRE (TEMPERED WHERE REQUIRED) SOLARBAN 70XL (2) AND AN INNER LAYER OF 6MM (TEMPERED WHERE REQUIRED) CLEAR GLASS, SEPARATED BYA 1/2" AIR SPACE. INSULATING GLASS UNITS SHALL HAVE A SHADING COEFFICIENT OF 0.32 A SHGC OF 0.27 AND A U-VALUE OF 0.26. LABEL EACH UNIT TO SHOW WHICH FACE IS TO BE EXPOSED TO EXTERIOR. PLACE LABEL ON INSIDE FACE. SUBMIT 2 SAMPLES TO ARCHITECT FOR APPROVAL PRIOR TO ORDERING GLASS UNITS.
9. INTERIOR GLAZING COMPOUND TO BE POLYMERIZED BUTYL RUBBER AND INERT FILLERS (PIGMENTS), SOLVENT BASED WITH MINIMUM 75% SOLIDS, NON-SAG CONSISTENCY, TACK-FREE TIME OF 24 HOURS OR LESS, PAINTABLE NON-STAINING.
10. SETTING BLOCKS TO BE NEOPRENE, EPDM, OR OTHER RESILIENT BLOCKS OF 85 SHORE A DUROMETER HARDNESS, MINIMUM LENGTH 4"
11. EXTERIOR GLAZING COMPOUND TO CONFORM TO ASTM C-920, TYPE S, GRADE NS, CLASS 25, USE G.
12. GLAZING INSTALLATION IS TO COMPLY WITH THE GANA 'GLAZING MANUAL', 50th ANNIVERSARY EDITION.

DIVISION 9 - FINISHES

SECTION 09110 - COLD-FORMED LIGHT GAUGE FRAMING

1. THE INSTALLATION AND CONSTRUCTION OF COLD-FORMED STRUCTURAL AND NON-STRUCTURAL STEEL FRAMING SHALL CONFORM TO THE 'STANDARD FOR COLD-FORMED STEEL FRAMING - GENERAL PROVISIONS' AS PUBLISHED BY THE AMERICAN IRON AND STEEL INSTITUTE THROUGH THE STEEL FRAMING ALLIANCE.
2. ALL MEMBERS SHALL BE MANUFACTURED BY THE CURRENT MEMBERS OF THE STEEL STUD MANUFACTURER'S ASSOCIATION.
3. ALL MEMBERS SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE AMERICAN IRON AND STEEL INSTITUTE, AISI, 'SPECIFICATION FOR THE DESIGN OF COLD-FORMED STRUCTURAL MEMBERS'.
4. METAL STUDS SHALL BE ROLL FORMED CHANNEL TYPE STUDS, PER ICC EVALUATION SERVICE REPORT NO. ER-4943P.
5. INTERIOR WALLS SHALL BE CONSTRUCTED OF STEEL STUDS AS FOLLOWS:

MAXIMUM WALL HEIGHT	PRODUCT NO.	STUD SPACING
12'-5"	362S125-18	16" O.C. (U.N.O.)
15'-6"	362S125-33	16" O.C. (U.N.O.)
16'-11"	362S125-43	16" O.C. (U.N.O.)
23'-0"	600S125-30	16" O.C. (U.N.O.)

   YIELD STRENGTH IS TO BE 33 KSI. CONTRACTOR SHALL USE MINIMUM 362S125-33 FOR WALLS THAT RECEIVE CERAMIC TILE. PROVIDE METAL FLOOR AND CEILING RUNNERS DESIGNED TO ACCOMMODATE THE SPECIFIED STUD GAUGES AND SIZES.
6. ALL INTERIOR WALLS SHALL GO FULL HEIGHT AND ATTACH TO THE ROOF STRUCTURE ABOVE, UNLESS THEY HAVE A SUSPENDED CEILING ON BOTH SIDES OF WALL.
7. PROVIDE AND INSTALL A SLIP-TRACK AT TOP OF ALL INTERIOR FULL HEIGHT WALLS. TO BE 20 GAUGE AND TO MATCH THE SIZE OF THE WALL STUDS. TO ALLOW FOR 1" VERTICAL MOVEMENT. PROVIDE WAFER-HEAD SCREWS TO POSITIVELY ATTACH THE STEEL STUDS THROUGH THE VERTICAL SLOTS IN THE SLIP-TRACK. VERTICAL SLOTS TO BE 1/4" WIDE x 1-1/2" LONG AND SPACED EVERY 1" O.C.
8. ATTACH BOTTOM STEEL TRACKS TO CONCRETE FLOORS WITH RAMSET/RED HEAD POWDER-ACTUATED POWER POINT FASTENERS @ 32" O.C. FASTENERS TO HAVE A SHANK DIAMETER OF 0.150", HEAD DIAMETER OF .0300" AND LENGTH OF 0.75". INSTALL FASTENERS PER I.C.B.O. EVALUATION REPORT NO. ER-1639 AND MANUFACTURER'S WRITTEN INSTRUCTIONS.

SECTION 09250 - GYPSUM WALL BOARD

1. ASTM C-840 AND C-754, AND GA-216, INSOFAR AS ANY PORTIONS ARE APPLICABLE, ARE HEREBY MADE A PART OF THIS SPECIFICATION AS THOUGH REPEATED HEREIN. IN CASE OF CONFLICTS, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.
2. GYPSUM WALLBOARD:
   2.1 REGULAR WALLBOARD: TO COMPLY WITH ASTM C-36; OR FS SS-L-30D, TYPE III, 5/8" THICKNESS, TAPERED EDGE.
   2.2 MOISTURE-RESISTANT WALLBORAD: TO COMPLY WITH ASTM C-630, GRADE REGULAR, 5/8" THICKNESS, TAPERED EDGE. USE WR BOARD FULL HEIGHT, ON ALL WALLS IN ALL RESTROOMS AND JANITOR'S CLOSET.
3. WALLBOARD ACCESSORIES:
   3.1 CORNER BEAD REINFORCEMENT: USG DUR-A-BEAD, SIZE AS REQUIRED.
   3.2 METAL EDGE REINFORCEMENT: USG NO. 200-B.
   3.3 CONTROL JOINTS: USG #093.
4. FASTENERS: SELF DRILLING, SELF TAPPING, BUGLE HEAD SCREWS, FOR USE WITH POWER DRIVEN TOOL TYPE S FOR APPLICATION TO LIGHT GAUGE METAL FRAMING, MINIMUM 1", TYPE 9-12 FOR APPLICATION TO HEAVY GAUGE METAL FRAMING (ASTM C-646.
5. INSTALLATION - SUSPENDED CEILINGS:
   5.1 EXCEPT WHERE OTHERWISE INDICATED, PROVIDE 1-1/2" MAIN RUNNER CHANNELS SPACED ON 4 FOOT CENTERS AND METAL FURRING CHANNELS SPACED ON NOT OVER 16" CENTERS. MAIN RUNNER CHANNELS TO HAVE HANGER WIRES SPACED 48" O.C. ALONG ITS LENGTH AND WITHIN 6" OF ENDS. WIRE HANGERS SHALL BE OF SUCH LENGTH SO THAT THE LOWER ENDS MAY BE SADDLE TIED OR WRAPPED AROUND THE MAIN RUNNERS SO AS TO PREVENT TURNING OR TWISTING OF THE RUNNERS.
   5.2 SECURELY CLIP METAL FURRING CHANNELS TO MAIN RUNNERS USING FURRING CHANNEL CLIPS OR SADDLE TIE WITH 2 STRANDS OF 16 GAUGE TIE WIRE. INSTALL FURRING CHANNEL CLIPS ON ALTERNATIVE SIDES OF THE MAIN RUNNER CHANNEL.
   5.3 AT LIGHTS OR OTHER OPENINGS THAT INTERRUPT THE MAIN RUNNER OR FURRING CHANNELS REINFORCE GRILLAGE WITH 3/4" COLD-ROLLED CHANNELS, WIRE TIED ATOP AND PARALLEL TO THE MAIN RUNNER CHANNELS.
   5.4 APPLY WALLBOARD WITH LONG DIMENSION AT RIGHT ANGLES TO THE FURRING CHANNELS, WITH ALL ABUTTING ENDS AND EDGES OCCURRING OVER THE WEB SURFACE OF THE FURRING CHANNEL. INSTALL WALLBOARD WITH 5/8" SCREWS SPACED 8" O.C. IN THE FIELD OF THE BOARD, AT ALL BEARINGS, AND ALONG ABUTTING EDGES. INSTALL CONTROL JOINTS AT A MAXIMUM OF 20'-0" O.C., IN EACH DIRECTION.
6. INSTALLATION - INTERIOR WALLS:
   6.1 APPLY WALLBOARD WITH LONG DIMENSION AT RIGHT ANGLES TO FRAMING OR FURRING MEMBERS WITH ALL ABUTTING ENDS AND EDGES OCCURRING OVER STUD FLANGES. CUT WALLBOARD NEATLY TO FIT AROUND ALL OPENINGS. WALLBOARD TO EXTEND TO WITHIN 1/4" OF THE FLOOR.
   6.2 WHEREVER WALLBOARD TERMINATES AGAINST DISSIMILAR MATERIALS OR WHERE EDGES OF WALLBOARD ARE EXPOSED, INSTALL METAL EDGE REINFORCEMENT AS SPECIFIED. AT ALL OUTSIDE CORNERS INSTALL METAL CORNER BEAD REINFORCEMENT AS SPECIFIED.
   6.3 INSTALL CONTROL JOINT OVER FACE OF WALLBOARD PANELS. CUT END JOINTS SQUARE, BUTT TOGETHER AND ALIGN TO PROVIDE NEAT FIT. ATTACH CONTROL JOINT TO WALLBOARD PER USG RECOMMENDATIONS. LOCATE CONTROL JOINTS AT MAXIMUM 50'-0" O.C. AND IN ACCORDANCE WITH USG GYPSUM CONSTRUCTION HANDBOOK, LATEST EDITION.
   6.4 AT METAL STUDS APPLY WALLBOARD USING SCREWS SPACED A MAXIMUM OF 12" O.C. IN THE FIELD OF THE BOARD AND 12" O.C. ALONG THE ABUTTING END JOINTS.
   6.5 WHERE W/R WALLBOARD IS USED, COAT ALL CUT EDGES AND FASTENER HEADS WITH USG SHEETROCK W/R SEALANT. TREAT ALL CUT EDGES, UTILITY HOLES, AND JOINTS, INCLUDING THOSE AT ANGLE INTERSECTIONS PRIOR TO INSTALLATION.
   6.6 PROVIDE PERIMETER RELIEF WHERE NON-LOAD-BEARING WALLBOARD PARTITIONS ABUT STRUCTURAL DECKS OR CEILINGS OR VERTICAL STRUCTURAL ELEMENTS. ALLOW NOT LESS THAN 1/4", NOR MORE THAN 1/2" GAP BETWEEN WALLBOARD AND STRUCTURE. FINISH EDGES OF WALLBOARD FACE LAYER WITH SQUARE-NOSE METAL CASING BEAD AND CAULK SPACE BETWEEN CASING BEAD AND STRUCTURE WITH CONTINUOUS SEALANT BEAD. ATTACH WALLBOARD TO STUDS NOT LESS THAN 1/2" BELOW BOTTOM EDGE OF CEILING TRACK FLANGES AND TO FIRST STUD ADJACENT TO VERTICAL TRACKS. DO NOT ATTACH WALLBOARD DIRECTLY TO TRACKS.
   6.7 WHERE WALLBOARD PARTITIONS INTERSECT MASONRY WALLS, PROVIDE CONTROL JOINT NO LESS THAN 1/4", NOR MORE THAN 3/8" WIDE BETWEEN WALLBOARD AND MASONRY. FINISH EXPOSED EDGES OF WALLBOARD WITH SQUARE-NOSE METAL CASING BEAD AND CAULK SPACE BETWEEN CASING BEAD AND MASONRY WITH CONTINUOUS SEALANT BEAD.
   6.8 INSTALL DRYWALL FULL HEIGHT AT ALL WALLS THAT GO FULL HEIGHT TO ROOF STRUCTURE.
7. FINISHING:
   7.1 ALL GYPSUM BOARD IS TO BE FINISHED PER GYPSUM ASSOCIATION PUBLICATION GA 216-96., 'RECOMMENDED LEVELS OF GYPSUM BOARD FINISH'.
   7.2 GYPSUM BOARD FINISH IS TO BE LEVEL 3, LIGHT SKIP TROWEL TEXTURE.
   7.3 APPLY WALL TEXTURE TO ALL EXPOSED WALLS, UPON COMPLETION OF FINISHING SPECIFIED ABOVE, SURFACES SHALL BE FREE OF DUST, DIRT AND OIL BEFORE APPLICATION. CONTRACTOR SHALL VERIFY WITH OWNER WHICH WALLS ARE TO RECEIVE WALL COVERING, IF ANY.
   7.4 FINISH SHALL BE A LIGHT SKIP TROWEL TEXTURE. FURNISH A 3'x3' FINISH SAMPLE FOR OWNER'S APPROVAL BEFORE MATERIALS ARE ORDERED.

SECTION 09500 - ACOUSTICAL TREATMENT - LAY IN

1. USE TILE UNITS AS INDICATED IN MATERIALS SCHEDULE.
2. SUSPENSION SYSTEMS IS TO BE ARMSTRONG PRELUDE XL, 15/16", GRID SYSTEM, FLAT WHITE. WHERE SUSPENSION SYSTEM METES WALLS USE SHADOW MOLDING, FLAT WHITE. SYSTEM SHALL CONFORM TO THE INTERMEDIATE DUTY CLASSIFICATION OF ASTM C-635.
3. CONTRACTOR SHALL LEAVE OWNER WITH THREE UNOPENED CARTONS OF CEILING TILES.
4. INSTALL THE CEILING SUSPENSION SYSTEM PER THE RECOMMENDATIONS OF ASTM C-636. THE 2012 IBC AND ICC REPORT NO. ESR-1308. LOADING OF ANY COMPONENT MAY NOT CAUSE DEFLECTION OF MORE THAN 1/360 OF THE SPAN. INSTALL 2 PROPER TYPE HOLD DOWN CLIPS PER LOCKING CROSS TEE.
5. ALL LIGHTING FIXTURES WEIGHING LESS THAN 56 POUNDS SHALL HAVE TWO NO. 12 GAGE HANGERS CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE. THESE WIRES MAY BE SLACK.

SECTION 09662 - RESILIENT RUBBER BASE

1. MOLDED RUBBER COVE BASE (TOP SET OR CARPET) SHALL BE 4" HIGH X 1/8" THICK.
2. AFTER PREPARATION OF WALL SURFACES, APPLY ADHESIVE TO BACK OF BASE LEAVING TOP 1/4" FREE OF ADHESIVE. PRESS BASE FIRMLY AGAINST THE WALLS SLIDING HORIZONTALLY INTO PLACE, MAKING SURE TOE IS TIGHT TO THE FLOOR AND AGAINST THE WALL. ROLL THE ENTIRE SURFACE OF THE BASE WITH A HAND ROLLER, AND PRESS THE TOP OF THE BASE AGAINST THE WALL WITH A STRAIGHT EDGE. REMOVE EXCESS ADHESIVE IMMEDIATELY. INSTALL PRE-FORMED CORNERS AT ALL OUTSIDE CORNERS. COPE AT INTERNAL CORNERS. WHERE BASE TERMINATES AT PROJECTIONS, INSTALL END CAPS.

SECTION 09900 - PAINTING

1. PROVIDE ALL PAINTING AND FINISHING REQUIRED FOR ALL INTERIOR AND EXTERIOR UNFINISHED SURFACES. ALSO PAINT ALL BACKFLOW PREVENTION DEVICES AND SERVICE ENTRANCE SECTIONS, TO MATCH MAIN BUILDING COLOR.
2. CONTRACTOR SHALL PROVIDE OWNER WITH ONE UNOPENED 5 GALLON BUCKET OF EACH TYPE AND COLOR OF PAINT USED IN THE PROJECT. BUCKETS ARE TO BE CLEARLY MARKED AS TO PAINT TYPE AND COLOR.
3. PREPARE A COMPLETE SCHEDULE SHOWING THE MATERIALS PROPOSED TO BE USED FOR EACH SURFACE AND SUBMIT SAME FOR REVIEW/APPROVAL BY ARCHITECT BEFORE PAINTING BEGINS.
4. DELIVER ALL PAINT TO SITE IN MANUFACTURER'S LABELED AND SEALED CONTAINERS LABELS SHALL GIVE MANUFACTURER'S NAME, BRAND, TYPE, BATCH NUMBER, COLOR OF PAINT AND INSTRUCTIONS FOR REDUCING. THIN ONLY IN ACCORDANCE WITH PRINTED DIRECTIONS OF MANUFACTURER.
5. BEFORE PAINTING, REMOVE HARDWARE, ACCESSORIES, PLATES, LIGHTING FIXTURES AND SIMILAR ITEMS OR PROVIDE AMPLE PROTECTION OF SUCH ITEMS. ON COMPLETION OF EACH SPACE, REPLACE ABOVE ITEMS. PROTECT ADJACENT SURFACES AS REQUIRED OR DIRECTED.
6. PREPARATION, APPLICATION, WORKMANSHIP, COMPLETION, AND ACCEPTANCE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND APPLICABLE PROVISIONS OF 'PAINTING SPECIFICATION MANUAL' BY P.D.C.A. FOR TYPE 1 STANDARD JOB. PERFORM ALL WORK USING ONLY EXPERIENCED, COMPETENT PAINTERS. HAND BRUSH OR ROLL WORK EXCEPT WHERE OTHERWISE PERMITTED OR DIRECTED. WHEN COMPLETED, THE PAINTING SHALL REPRESENT A FIRST-CLASS WORKMANLIKE APPEARANCE. APPLY ALL PAINT MATERIALS UNDER ADEQUATE ILLUMINATION.
7. ALL COATINGS MUST COMPLY WITH APPLICABLE LOCAL AND FEDERAL REGULATIONS GOVERNING VOLATILE ORGANIC COMPOUNDS. IF THESE SPECIFICATIONS DO NOT MEET THESE STANDARDS THEN CONTRACTOR SHALL NOTIFY ARCHITECT IMMEDIATELY.
8. PAINT ONLY WHEN SURFACES ARE CLEAN, DRY, SMOOTH AND ADEQUATELY PROTECTED FROM DAMPNESS. EACH COAT OF PAINT SHALL BE WELL BRUSHED ON, WORKED OUT EVENLY AND ALLOWED TO DRY AT LEAST 24 HOURS BEFORE THE SUBSEQUENT COAT IS APPLIED. FINISHED WORK SHALL BE UNIFORM, OF APPROVED COLOR, SMOOTH AND FREE FROM RUNS, SAGS, CLOGGING OR EXCESSIVE FLOODING. MAKE EDGES OF PAINT ADJOINING OTHER MATERIALS OR COLORS SHARP AND CLEAN, WITHOUT OVERLAPPING. WHERE HIGH GLOSS ENAMEL IS USED, LIGHTLY SAND UNDERCOATS TO OBTAIN A SMOOTH FINISH COAT.
9. ALL EXPOSED WATER, GAS, AIR, SPRINKLER, WASTE PIPING, EXPOSED CONDUIT, LIGHTING PANELS, AND TELEPHONE TERMINAL BOXES. EXPOSED DUCTWORK DOES NOT NEED TO BE PAINTED.
10. FOR EXTERIOR COLORS REFER TO MATERIALS SCHEDULE.
11. AL EXTERIOR MASONRY BUILDING AND SITE WALLS ARE TO BE SEALED PER SECTION 07170.

PAINTING SCHEDULES:

THE FOLLOWING SCHEDULES ARE BASED ON SHERWIN WILLIAMS

EXTERIOR:
PAINT SYSTEM 1 - GALVANIZED METAL (SEMI-GLOSS):
PRETREATMENT - SUPREME CHEMICAL, METAL CLEAN AND ETCH (ME 01)
1 COAT GALV-ALUM PREMIUM (GAPR00)
2 COATS OF EVERSHIELD (EVSH50)

INTERIOR DRYWALL:
1. PRIMER TO BE ONE COAT OF PVA DRYWALL PRIMER AND SEALER, WHITE
2. FINISH TO BE TWO COATS OF PROMAR 200 ZERO VOC INTERIOR LATEX, EGGSHELL

HOLLOW METAL DOOR AND FRAMES:
1. PRIMER TO BE ONE COAT OF B66W00310-PRO INDUSTRIAL PRO-CRYL UNIVERSAL ACRYLIC PRIMER, OFF WHITE
2. FINISH TO BE TWO COATS OF A76W00051 SOLO INT/EXT 100% ACRYLIC SEMI-GLOSS

DIVISION 10 - SPECIALTIES

SECTION 10400 - IDENTIFYING DEVICES

1. EXTERIOR EXITS SHALL HAVE TACTILE EXIT SIGNS AS INDICATED ON THE PLANS.

SECTION 10522 - FIRE EXTINGUISHERS & CABINETS

1. PROVIDE FIRE EXTINGUISHERS AT LOCATIONS AS REQUIRED BY 2012 IBC. IFC, AND NFPA 10, AND APPROVED BY THE PRESCOTT FIRE DEPARTMENT
2. THE MAXIMUM TRAVEL DISTANCE TO A FIRE EXTINGUISHER SHALL NOT EXCEED 75 FEET.
3. FIRE EXTINGUISHERS ARE TO BE BY LARSEN'S MANUFACTURING COMPANY, MP5 SERIES (2A-10B:C) WITH #818 WALL BRACKETS. WALL BRACKET MOUNTING IS TO ONLY TO BE USED IN ALL AREAS THAT ARE NOT ACCESSIBLE AND/OR VISIBLE TO THE GENERAL PUBLIC.
4. AT ALL AREAS THAT ARE ACCESSIBLE AND/OR VISIBLE TO THE GENERAL PUBLIC THE CONTRACTOR SHALL PROVIDE RECESSED FIRE EXTINGUISHER CABINETS, PROVIDED BY LARSEN'S MANUFACTURING COMPANY. CABINETS ARE TO BE ARCHITECTURAL SERIES, MODEL #2409-R1 WITH FULL GLASS DOOR. WALL PROJECTION SHALL NOT EXCEED 2-1/2".
5. FIRE EXTINGUISHERS AND CABINETS ARE TO BE MOUNTED SO THAT THEIR TOP IS NOT MORE THAN 5 FEET ABOVE THE FLOOR.

DIVISION 13 - SPECIAL CONSTRUCTION

SECTION 13122 - PRE-ENGINEERED METAL BUILDING SYSTEM

1. THE ENGINEERED METAL BUILDING SHALL BE COMPLETE WITH STRUCTURAL FRAMING (COLUMNS, BRACING, RAFTERS, STRUTS, ROOF PURLINS, ETC.); PRE-FINISHED ROOFING AND WALL PANELS; METAL FLASHINGS (EXCEPT FOR COUNTER-FLASHINGS); TRIM; GUTTERS; DOWNSPOUTS; DIAGONAL BRACING; AND OTHER COMPONENTS AND MATERIAL REQUIRED FOR A COMPLETE AND WATERTIGHT SYSTEM INSTALLATION.
2. PRODUCT HANDLING, DELIVERY AND STORAGE:
   2.1 DELIVER AND STORE PRE-FABRICATED COMPONENTS, SHEETS, PANELS, AND OTHER MANUFACTURED ITEMS SO THEY WILL NOT BE DAMAGED OR DEFORMED.
   2.2 STACK MATERIALS ON PLATFORMS OR PALLETS ABOVE GRADE OR ON CONCRETE SLAB, COVERED WITH OPAQUE TARPAULINS OR OTHER APPROVED WEATHER-RESISTANT VENTILATED COVERING.
   2.3 STORE METAL SHEETS AND PANELS IF SUBJECTED TO WATER ACCUMULATION IN SUCH A MANNER SO THEY WILL DRAIN FREELY. DO NOT STORE SHEETS AND PANELS IN CONTACT WITH OTHER MATERIALS WHICH MIGHT CAUSE STAINING.
   2.4 DAMAGED MATERIAL MUST BE REPORTED TO DETERMINE IF REPLACEMENT IS REQUIRED.
   2.5 INSPECT PANELS TO PREVENT MOISTURE BETWEEN PANELS, AND SECURE AS REQUIRED.
3. ROOF AND WALL INSULATION:
   3.1 ROOF INSULATION SHALL BE AS INDICATED ON THE PLANS.
   3.2 WALL INSULATION AT THE METAL WALL PANELS SHALL BE AS INDICATED ON THE PLANS.
   3.3 THE COMPOSITE OF FIBERGLASS AND FACING SHALL HAVE SURFACE BURNING CHARACTERISTICS NOT TO EXCEED 25 FLAME SPREAD AND 50 SMOKE DEVELOPED WHEN TESTED IN ACCORDANCE WITH UL 723 TEST METHOD OR ASTM E 84 TEST METHOD.
4. WARRANTIES:
   4.1 ALL COMPONENTS: MANUFACTURER'S STANDARD ONE (1) YEAR WORKMANSHIP WARRANTY.
   4.2 ROOF PANELS SHALL HAVE A MANUFACTURER'S STANDARD TWENTY (20) YEAR NO-PERFORATION WARRANTY.

Feb 10, 2020 - 3:58pm

REVISIONS	BY

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Date Signed 02/13/20
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DRAWING: Specifications

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301
102-03-003A

APN:

DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: A9.2

Specifications Continued

5. ERECTION:

5.1 ERECTION SHALL BE ACCOMPLISHED BY A TRAINED, COMPETENT ERECTOR HAVING EXPERIENCE IN ERECTING METAL BUILDINGS

5.2 ERECTOR SHALL OBSERVE AND FOLLOW RECOMMENDATIONS OF THE METAL BUILDING MANUFACTURERS ASSOCIATION (MBMA). THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) PRACTICES, PROCEDURES AND SAFETY STANDARDS WHERE APPLICABLE. DO NOT FIELD CUT OR ALTER STRUCTURAL MEMBERS WITHOUT APPROVAL FROM ARCHITECT.

5.3 ERECT STRUCTURAL FRAMES TRUE TO LINE, LEVEL AND PLUMB, BRACE AND SECURE WITH TEMPORARY BRACING IN ALL DIRECTIONS AS REQUIRED. LEVEL BASE PALATES AND SECURE TO ANCHOR BOLTS TO LEVEL PLANE WITH FULL BEARING TO FOUNDATION SUPPORTING STRUCTURES.

5.4 INSTALL ALL PERMANENT DIAGONAL ROD BRACING IN ROOF AS INDICATED ON STRUCTURAL PLANS. PROPERLY TIGHTEN RODS TO AVOID EXCESSIVE SAG.

5.5 INSTALL ROOF PANELS IN SUCH A MANNER TO PERMIT DRAINAGE TO GUTTERS, WITH PANEL ENDS SQUARE TO EAVE.

5.6 INSTALL APPROVED TYPE CLOSURES AT END OF ROOF PANELS TO EXCLUDE WEATHER. INSTALL WEATHER SEAL UNDER RIDGE CAP. FLASH AND SEAL ROOF PANELS AT GUTTERS, PARALLEL TRANSITIONS AND PERIMETER OF ALL OPENING S THROUGH ROOF AND ELSEWHERE AS REQUIRED OR SHOWN ON DRAWINGS.

5.7 REMOVE ALL FASTENER OR CUTTING SHAVINGS FROM ROOF AS ERECTION IS COMPLETED.

5.8 INSTALL RIDGE COVER UNITS OF APPROVED EXPANSION JOINT DESIGN TO ACCOMMODATE EXPANSION AND CONTRACTION MOVEMENT OF ROOF PANELS WITHOUT PONDING AT END SPLICES.

5.9 COORDINATE INSTALLATION OF ACCESSORIES AND ITEMS TO BE MOUNTED ON METAL ROOFING.

5.10 INSTALL GUTTERS, FLASHINGS, TRIM, RIDGE COVERS, CLOSURE STRIPS, AND OTHER ACCESSORIES AND SHEET METAL ITEMS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR POSITIVE ATTACHMENT TO BUILDING AND PROVIDE A WEATHER-TIGHT MOUNTING.

TOLERANCES:

ALL FRAMING MEMBERS SHALL BE ERECTED PLUMB, LEVEL OR ALIGNED NOT TO EXCEED A DEVIATION 1:300

DIVISION 22 - PLUMBING

1. REFER TO PLUMBING PLANS

DIVISION 23 - HEATING, VENTILATION AND AIR CONDITIONING

1. REFER TO MECHANICAL PLANS

DIVISION 26 - ELECTRICAL

1. REFER TO ELECTRICAL PLANS

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ARCHITECTURE & PLANNING

DRAWING: Specifications

PROJECT: ERAU Building F5 Addition
6492 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

DRAWN BY: L.O.
CHECKED BY: W.A.K.
DATE: February 13th, 2020
JOB NO.
SHEET: A9.3

Feb 10, 2020 - 4:23pm

GENERAL STRUCTURAL NOTES

(APPLY UNLESS NOTED OTHERWISE ON PLANS/DETAILS)

GENERAL REQUIREMENTS:

1. THESE DRAWINGS, AND THEIR ASSOCIATED STRUCTURAL CALCULATIONS, HAVE BEEN PERFORMED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE STRUCTURAL ENGINEER'S IN THIS OR SIMILAR LOCALITIES. THEY NECESSARILY ASSUME THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKMEN WHO HAVE A WORKING KNOWLEDGE OF THE INTERNATIONAL BUILDING CODE CONVENTIONAL FRAMING REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR FRAMING ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, IT IS UNDERSTOOD THAT THE CONTRACTOR WILL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR ALL MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
2. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED CONSTRUCTION SUCH THAT DESIGN LIVE LOAD PER SQUARE FOOT AS STATED HEREIN IS NOT EXCEEDED. OPTIONS ARE FOR CONTRACTOR'S CONVENIENCE. IF AN OPTION IS USED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CHANGES, AND SHALL COORDINATE ALL DETAILS, AT NO ADDITIONAL COST TO OWNER.
3. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN. TYPICAL DETAILS AND NOTES ARE NOT NECESSARILY INDICATED ON THE PLANS, BUT SHALL APPLY NONE-THE-LESS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT. DETAILS MAY SHOW ONLY ONE SIDE OF CONNECTION OR MAY OMIT INFORMATION FOR CLARITY.
4. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL WITH APPROPRIATE TRADES, DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO START OF CONSTRUCTION. RESOLVE ANY DISCREPANCY WITH THE ARCHITECT AND STRUCTURAL ENGINEER.
5. ANY INSPECTIONS, SPECIAL (IBC CHAPTER 17) OR OTHERWISE THAT ARE REQUIRED BY THE BUILDING CODES, LOCAL BUILDING DEPARTMENTS, OR BY THESE PLANS SHALL BE DONE BY AN INDEPENDENT INSPECTION COMPANY OR THE BUILDING DEPARTMENT, SITE VISITS BY THE STRUCTURAL ENGINEER DO NOT CONSTITUTE AN OFFICIAL INSPECTION, UNLESS SPECIFICALLY CONTRACTED FOR.
6. SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL ITEMS IN ADDITION TO ITEMS REQUIRED BY ARCHITECTURAL SPECIFICATIONS, THE CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMITTAL. ITEMS NOT IN ACCORDANCE WITH CONTRACT DRAWINGS SHALL BE FLAGGED UPON HIS REVIEW. VERIFY ALL DIMENSIONS WITH ARCHITECT. ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM ORIGINAL CONTRACT DRAWINGS SHALL BE CLOUDED. ANY OF THE AFOREMENTIONED WHICH ARE NOT CLOUDED OR FLAGGED BY SUBMITTING PARTIES, SHALL NOT BE CONSIDERED APPROVED AFTER THE STRUCTURAL ENGINEER'S REVIEW, UNLESS NOTED ACCORDINGLY. ANY STRUCTURAL ENGINEERING PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW, SHALL BEAR THE SEAL OF A STRUCTURAL ENGINEER REGISTERED IN THE APPROPRIATE STATE. THE SHOP DRAWINGS DO NOT REPLACE THE ORIGINAL CONTRACT DRAWINGS. ITEMS OMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL ENGINEER ARE NOT TO BE CONSIDERED CHANGES TO ORIGINAL DRAWINGS. THE ADEQUACY OF ENGINEERING DESIGNS AND LAYOUT PERFORMED BY THE OTHERS RESTS WITH THE DESIGNING OR SUBMITTING AUTHORITY. REVIEWING IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP DRAWINGS. RESPONSIBILITY FOR CORRECTNESS SHALL REST WITH THE CONTRACTOR. ALLOW (5) WORKING DAYS FOR THE STRUCTURAL ENGINEER'S REVIEW. ONE COPY OF EACH SUBMITTAL WILL BE RETAINED FOR THE STRUCTURAL ENGINEER'S RECORDS.

BASIS FOR DESIGN:

1. BUILDING CODE: 2018 EDITION OF THE IBC WITH CITY/COUNTY AMENDMENTS.

   RISK CATEGORY = II

2. VERTICAL LOADS:

LOCATION	LIVE / SNOW LOAD	DEAD LOAD
ROOF	30 PSF	10 PSF

3. SEISMIC DESIGN PARAMETERS:

ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE PROCEDURE
IMPORTANCE FACTOR	Ie = 1.00
SITE CLASS	D
SEISMIC DESIGN CATEGORY	C
SPECTRAL RESPONSE ACCELERATIONS	Sms = 0.520, Sm1 = 0.249
SPECTRAL RESPONSE COEFFICIENTS	Sds = 0.346, Sd1 = 0.166
HORIZONTAL SHEAR TRANSFER ELEMENTS:	
STEEL DECK – FLEXIBLE DIAPHRAM(S)	R = 3.5
VERTICAL SHEAR TRANSFER ELEMENTS:	
GYPBOARD SHEARWALL(S)	R = 2.0
PLYWOOD SHEARWALL(S)	R = 6.5
RIGID STEEL FRAME(S)	R = 3.0

4. WIND DESIGN PARAMETERS (STRENGTH):

ULTIMATE WIND SPEED	100 MPH (3 SECOND GUST)
WIND EXPOSURE	C
INTERNAL PRESSURE COEFFICIENT	+/-0.18
COMPONENT AND CLADDING PRESSURE	23.5 PSF
NET UPLIFT ON ROOF	21.0 PSF

FOUNDATION NOTES:

1. IN LIEU OF A GEOTECHNICAL REPORT: THE FOUNDATION HAS BEEN DESIGNED ACCORDING TO THE RECOMMENDATIONS OF CHAPTER 18 OF THE IBC.
2. THE SOIL DESIGN VALUES LISTED BLEOW HAVE BEEN APPROVED BY THE CITY/COUNTY BUILDING DEPARTMENT, CONTINGENT THAT THE SOIL ON THE SITE PREDOMINATELY CONSISTS OF SAND AND/OR GRAVEL.
   SPECIFIC SOIL CLASSIFICATIONS SHOULD BE ONE OF THE FOLLOWING: SANDY GRAVEL OR GRAVEL (GW OR GP), SAND (SW AND SP), SILTY SAND (SM), CLAYEY SAND (SC), SILTY GRAVEL (GM), OR CLAYEY GRAVEL (GC). THESE SOIL CLASSIFICATIONS CAN BE FOUND IN TABLE 1806.2 OF CHAPTER 18 OF THE IBC. VERIFICATION OF SOIL CLASSIFICATION IS THE RESPONSIBILITY OF THE CONTRACTOR.

THE SOIL DESIGN VALUES FOR THE FOUNDATION ARE:

ALLOWABLE BEARING PRESSURE	1500 PSF
ALLOWABLE LATERAL BEARING PRESSURE	150 PSF/FT
ALLOWABLE LATERAL SLIDING COEFFICIENT	0.25
LATERAL BACKFILL PRESSURE (UNRESTRAINED)	30 PSF/FT
LATERAL BACKFILL PRESSURE (RESTRAINED)	50 PSF/FT
SITE CLASS	D

3. A ONE-THIRD INCREASE IN BEARING PRESSURES IS ALLOWED WITH SEISMIC OR WIND LOAD COMBINATIONS. LATERAL BEARING AND LATERAL SLIDING RESISTANCE MAY BE COMBINED.

FOUNDATION BEARING DEPTH
18" BELOW FINISHED GRADE

4. ALL FOUNDATIONS SHALL BEAR ON UNDISTURBED NATURAL SOIL OR COMPACTED ENGINEERED FILL 18 INCHES MINIMUM BELOW FINISH GRADE. GRADE IS DEFINED AS TOP OF SLAB FOR INTERIOR FOOTINGS AND LOWEST ADJACENT GRADE WITHIN 5 FEET OF THE BUILDING FOR PERIMETER FOOTINGS. WHERE EXTERIOR PAVING OR CONCRETE IS DIRECTLY ADJACENT TO BUILDING, GRADE IS DEFINED AS TOP OF EXTERIOR PAVING AT LEAST 5 FEET FROM BUILDING. CONCRETE FOOTING EXCAVATIONS SHALL BE CLEAN AND FREE OF LOOSE DEBRIS OR UN-COMPACTED MATERIAL AT TIME OF CONCRETE PLACEMENT.
5. CONCRETE SLABS ON GRADE SHALL BE SUPPORTED ON A 4 INCH LAYER OF SELECT FILL MATERIAL ACCORDING TO THE SPECIFICATIONS OF THE SOIL REPORT. FILL MATERIAL SHOULD BE MOISTENED, BUT NOT SATURATED JUST PRIOR TO PLACING CONCRETE.

CONCRETE:

1. MINIMUM 28 DAY CONCRETE STRENGTH SHALL BE AS FOLLOWS:

USE:	CONCRETE STRENGTH:	REMARKS:
FOUNDATIONS	3000 PSI	DESIGNED FOR 2500 PSI
CONCRETE SLABS ON GRADE	3000 PSI	W/O INSPECTION

2. ALL NORMAL WEIGHT CONCRETE SHALL BE REGULAR WEIGHT OF 150 POUNDS PER CUBIC FOOT USING HARD-ROCK AGGREGATES. AGGREGATE USED IN CONCRETE SHALL CONFORM TO ASTM C67 FOR ¾", ASTM C57 FOR 1" AND ASTM C467 FOR 1½" AGGREGATE.
3. TENSION LAP SPLICES OF REINFORCING STEEL IN CONCRETE SHALL BE AS FOLLOW:

REBAR SIZE	STANDARD LAP
#3	20"
#4	32"
#5	39"

   LAP SPLICES FOR BEAMS AND FLOOR SLABS SHALL BE ACCORDING TO CHAPTER 12 OF ACI 318 OR LAP SCHEDULE ON THESE DRAWINGS.

   NO TACK WELDING OF REINFORCING BARS ALLOWED WITHOUT PRIOR REVIEW OF PROCEDURE WITH THE STRUCTURAL ENGINEER. LATEST ACI CODE AND DETAILING MANUAL APPLY. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT ALL CORNERS AND INTERSECTIONS PER TYPICAL DETAILS. VERTICAL WALL BARS SHALL BE SPLICED AT OR NEAR FLOOR LINES.
4. ALL DIMENSIONS SHOWING THE LOCATION OF REINFORCING STEEL NOT NOTED AS "CLEAR" OR "CLR" ARE TO CENTER OF STEEL. MINIMUM COVER FOR NON-PRESTRESSED CONCRETE REINFORCING SHALL BE AS FOLLOWS:

LOCATION:	MINIMUM COVER	TOLERANCE
CAST AGAINST EARTH (FOOTINGS)	3"	± ⅜"
SLABS ON GRADE	1½"	± ¼"
EXPOSED TO EARTH OR WEATHER – #5 AND SMALLER	1½"	± ⅜"

5. MAXIMUM SLUMP FOR ALL CONCRETE SHALL BE 4". SLUMP FOR EXTERIOR SLABS SHALL BE 6". PORTLAND CEMENT SHALL CONFORM TO ASTM C150. TYPE V CEMENT SHALL BE USED FOR CONCRETE IN CONTACT WITH ALKALINE SOIL, AND TYPE II ELSEWHERE.
6. NO MORE THAN 90 MINUTES SHALL ELAPSE BETWEEN CONCRETE BATCHING AND CONCRETE PLACEMENT UNLESS APPROVED BY THE TESTING AGENCY.
7. CONCRETE PLACEMENT AND QUALITY SHALL BE PER RECOMMENDATIONS IN ACI 614, ACI 301 AND ACI 318. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED, EXCEPT THAT SLABS ON GRADE NEED BE VIBRATED ONLY AROUND AND UNDER FLOOR DUCTS, ETC. CAST CLOSURE POUR, WHERE SHOWN ON PLANS AROUND COLUMNS AFTER COLUMN DEAD LOAD IS APPLIED. REMOVE ALL DEBRIS FROM FORMS BEFORE PLACING CONCRETE.

   ALL ITEMS TO BE CAST IN CONCRETE SUCH AS REINFORCING, DOWELS, BOLTS, ANCHORS, PIPES, SLEEVES, ETC., SHALL BE SECURELY POSITIONED IN THE FORMS BEFORE PLACING THE CONCRETE.
8. ALL CONCRETE SLABS ON GRADE SHALL BE DIVIDED INTO AREAS BY CONTROL JOINTS (KEYED OR SAW CUT) SUCH THAT ONE SLAB AREA DOES NOT EXCEED 250 SQUARE FEET, OR BE MORE THAN TWO TIMES LONGER THAN THE SLAB AREA WIDTH. THE FOUNDATION PLAN SHOWS A SUGGESTED METHOD OF CONTROL JOINT LAYOUT. IT IS RECOMMENDED THAT SAW CUTS BE MADE WITHIN 16 HOURS OF CONCRETE BATCHING.

   KEYED CONTROL JOINTS NEED ONLY OCCUR AT EXPOSED EDGES DURING POURING, ALL OTHER JOINTS MAY BE SAW CUT.
9. HORIZONTAL PIPES AND ELECTRICAL CONDUITS SHALL NOT BE EMBEDDED IN STRUCTURAL CONCRETE AND SLABS ON GRADE EXCEPT WHERE SPECIFICALLY APPROVED OR NOTED BY THE STRUCTURAL ENGINEER. PIPES AND CONDUITS SHALL NOT IMPAIR THE STRENGTH OF THE WORK.
10. FLY ASH MAY BE USED ONLY IF PERMITTED BY ARCHITECTURAL SPECIFICATIONS AND SHALL BE LIMITED TO 18 PERCENT OF CEMENTITIOUS MATERIALS AND SHALL HAVE A REPLACEMENT FACTOR OF 1.2 RELATIVE TO CEMENT REPLACED. NO FLY ASH ADDITIVES SHALL BE USED IN FLATWORK OR ARCHITECTURALLY EXPOSED CONCRETE.
11. COLD/HOT WEATHER CONCRETE CONSTRUCTION: PROTECT CONCRETE FROM DAMAGE OR REDUCED STRENGTH IN COMPLIANCE WITH ACI 305 AND 306.
12. OWNER REQUIRES CONCRETE MIX #160X109 IN WINTER AND #160X149 IN SUMMER AS PRODUCED BY HANSON PRODUCTS OR EQUAL.

MASONRY (CONCRETE BLOCK):

MINIMUM 28 DAY MASONRY STRENGTH SHALL BE 1500 PSI.

1. VERTICAL REINFORCING: #4 AT 48 INCHES ON CENTER FULL HEIGHT OF WALL, CENTERED IN GROUTED CELL AND AT ALL WALL INTERSECTIONS, CORNERS, WALL ENDS, JAMBS, OVER LINTELS, AND EACH SIDE OF CONTROL JOINTS (MINIMUM UNLESS NOTED OTHERWISE ON PLANS/DETAILS). DOWEL ALL REINFORCING TO FOUNDATION WITH DOWELS TO MATCH AND LAP VERTICAL WALL OR COLUMN REINFORCING.
2. HORIZONTAL REINFORCING: (MINIMUM UNLESS NOTED OTHERWISE ON PLANS/DETAILS) FOR 8 INCH THICK WALLS, ONE #4 BAR IN CENTER OF 8 INCH DEEP CONTINUOUS GROUTED BOND BEAM AT INTERVALS NOT TO EXCEED 48 INCHES ON CENTER AND AT TOP OF PARAPET OR FREE STANDING WALLS.

   HORIZONTAL BARS AT TOP OF PARAPET OR FREE STANDING WALLS SHALL BE PLACED 8 INCHES DOWN FROM THE TOP IN AN UPSIDE DOWN BOND BEAM BLOCK.
3. TENSION LAP SPLICES OF REINFORCING STEEL IN MASONRY SHALL BE AS FOLLOWS:

REBAR SIZE	STANDARD LAP
#4	24"
#5	30"

4. REINFORCING PLACEMENT TOLERANCES: ALL DIMENSIONS SHOWING THE LOCATION OF REINFORCING STEEL NOT NOTED AS "CLEAR" OR "CLR" ARE TO CENTER OF STEEL. TOLERANCES FOR PLACEMENT OF VERTICAL REINFORCING SHALL BE (±) ½" PERPENDICULAR TO WALL AND (±) 2" ALONG THE LENGTH OF THE WALL. PROVIDE ½" CLEARANCE BETWEEN MASONRY UNITS AND REINFORCING, AND REINFORCING RUNNING IN THE SAME DIRECTION. LAPS MAY BE BESIDE OR OVER THE REINFORCING BEING SPLICED.
5. BLOCK QUALITY: CONCRETE BLOCK SHALL BE HOLLOW LIGHTWEIGHT LOAD-BEARING CONCRETE MASONRY UNITS CONFORMING TO ASTM 90-75 WITH A MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI. USE BOND BEAM UNITS AT HORIZONTAL REINFORCING.
6. MORTAR: MORTAR MIX SHALL CONFORM TO REQUIREMENTS OF THE IBC STANDARDS, TYPE M OR S. MORTAR SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI AT 28 DAYS.
7. GROUT: GROUT SHALL CONFORM TO REQUIREMENTS OF CHAPTER 21 OF THE IBC FOR COARSE GROUT. USE SUFFICIENT WATER FOR GROUT TO FLOW INTO ALL JOINTS OF THE MASONRY WITHOUT SEGREGATION. GROUT SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS. ALL CELLS IN CONCRETE BLOCKS CONTAINING REINFORCING SHALL BE FILLED SOLID WITH GROUT. ALL MASONRY BELOW FINISHED FLOOR OR GRADE SHALL BE GROUTED SOLID. ALL GROUT SHALL BE MECHANICALLY VIBRATED.

   GROUT LIFTS OF 5 FEET OR LESS IS RECOMMENDED. FOR HIGHER GROUT LIFTS, CLEANOUTS (3"X3") AT THE BOTTOM OF ALL VERTICALLY REINFORCED CELLS SHALL BE PROVIDED. IN ADDITION, MECHANICAL DEVICES SHALL BE USED TO POSITION AND SECURE REINFORCING WHEN GROUT LIFTS EXCEED 5 FEET IN HEIGHT. IN SOLID GROUTED MASONRY, CLEANOUTS SHALL NOT BE SPACED MORE THAN 32" O.C.
8. BLOCK CONSTRUCTION: ALL BLOCKS SHALL BE PLACED IN RUNNING BOND CONSTRUCTION (UNLESS OTHERWISE NOTED) WITH ALL VERTICAL CELLS IN ALIGNMENT.

REINFORCING STEEL:

1. ASTM A615 GRADE 60 (FY = 60 KSI) DEFORMED BARS FOR ALL BARS #5 AND LARGER. ASTM A615 GRADE 40 (FY = 40 KSI) DEFORMED BARS FOR ALL BARS #4 AND SMALLER. GRADE 60 DEFORMED BARS SHALL BE USED FOR CONCRETE WALLS, BEAMS, ELEVATED SLABS AND COLUMN REINFORCING.
2. WELDING OF REINFORCING BARS SHALL BE MADE ONLY TO ASTM A706 GRADE 60 BARS AND ONLY USING E90 SERIES RODS. WELDING OF REINFORCING BARS SHALL BE MADE ONLY AT LOCATIONS SHOWN ON PLANS OR DETAILS.
3. REINFORCING BAR SPACING GIVEN ARE MAXIMUM ON CENTERS. ALL BARS PER CRSI SPECIFICATIONS AND HANDBOOK. DOWEL ALL VERTICAL REINFORCING TO FOUNDATION. SECURELY TIE ALL BARS IN LOCATION BEFORE PLACING CONCRETE.

STEEL:

1. MATERIALS: ROLLED W SHAPES, SHALL CONFORM TO ASTM A992 (FY=50 KSI). ALL OTHER STRUCTURAL STEEL SHAPES, ROLLED SECTIONS, BARS AND PLATES SHALL CONFORM TO ASTM A36 (FY = 36 KSI). ALL PIPE STEEL SHALL BE ASTM A501 (FY = 36 KSI) OR ASTM A53, TYPE E OR S, GRADE B (FY = 35 KSI). ALL TUBULAR STEEL SHALL BE ASTM A500 (FY = 46 KSI).
2. ALL BOLTS AND STUDS SHALL BE ASTM A307, UNLESS NOTED OTHERWISE. ALL EXPANSION BOLTS TO HAVE CURRENT ICBO RATING FOR MATERIAL INTO WHICH INSTALLATION TAKES PLACE. HEADED STUDS SHALL CONFORM TO ALL REQUIREMENTS OF THE LATEST EDITION OF THE "RECOMMENDED PRACTICES FOR STUD WELDING" AND THE "STRUCTURAL WELDING CODE" PUBLISHED BY AWS. ALL BOLTS, ANCHOR BOLTS, EXPANSION BOLTS, ETC. SHALL BE INSTALLED WITH STEEL WASHERS AT FACE OF WOOD OR AT SLOTTED HOLES IN STEEL SECTIONS.
3. ALL STRUCTURAL AND MISCELLANEOUS STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, LATEST EDITION.
4. WELDING SHALL BE BY WELDERS HOLDING VALID CERTIFICATES AND HAVING CURRENT EXPERIENCE IN THE TYPE OF WELD SHOWN ON THE DRAWINGS OR NOTES. ALL WELDING SHALL USE E70 SERIES LOW HYDROGEN RODS UNLESS NOTED OTHERWISE. ALL WELDING PER LATEST AMERICAN WELDING SOCIETY STANDARDS. ALL WELDS ON DRAWINGS ARE SHOWN AS SHOP WELDS. CONTRACTOR MAY SHOP WELD OR FIELD WELD AT HIS DISCRETION. ALL FULL PENETRATION WELDS SHALL BE TESTED AND CERTIFIED BY AN INDEPENDENT TESTING LABORATORY.
5. STEEL TO STEEL BOLTED CONNECTIONS: HIGH STRENGTH BOLTS SHALL BE ASTM A325N AND SHALL BE INSTALLED AS BEARING-TYPE CONNECTIONS WITH THREADS INCLUDED IN SHEAR PLANE (TYPE "N" CONNECTION). BOLTS MAY BE TIGHTENED USING ANY AISC APPROVED METHOD.
6. DRYPACK SHALL BE 5,000 PSI FIVE STAR NON-SHRINK GROUT OR EQUIVALENT. INSTALL DRYPACK UNDER BEARING PLATES BEFORE FRAMING MEMBER IS INSTALLED. AT COLUMNS, INSTALL DRYPACK UNDER BASE PLATES AFTER COLUMN HAS BEEN PLUMBED BUT PRIOR TO FLOOR OR ROOF INSTALLATION.

WOOD:

1. PLYWOOD: ALL PLYWOOD SHALL BE C-D OR C-C SHEATHING CONFORMING TO STANDARD PS 1-09. LAY UP PLYWOOD WITH FACE GRAIN IN PERPENDICULAR TO SUPPORTS (ON ROOFS WHERE PLYWOOD IS LAID UP WITH FACE GRAIN PARALLEL TO SUPPORTS, USE A MINIMUM OF 5-PLY PLYWOOD, STAGGER JOINTS). ALL NAILING, COMMON NAILS. BLOCKING AT PANEL EDGES WHERE INDICATED ON PLANS. ALL PLYWOOD SHALL BE OF THE FOLLOWNG NOMINAL THICKNESS, SPAN/INDEX RATING AND SHALL BE NAILED AS FOLLOWS UNLESS NOTED OTHERWISE ON THE PLANS:

LOCATION:	NOMINAL THICKNESS:	SPAN INDEX RATING:	EDGE ATTACHMENT:	FIELD ATTACHMENT:
WALLS	½" OR ⅜"	24/0	#10 SCREWS AT 6" O.C.	#10 SCREWS AT 12" O.C.

   PLYWOOD ALTERNATE: AMERICAN PLYWOOD ASSOCIATION PERFORMANCE RATED SHEATHING MAY BE USED AS AN ALTERNATE TO PLYWOOD WITH PRIOR APPROVAL OF OWNER, ARCHITECT AND ROOFER. IT MAY NOT BE USED ON ROOFS WHERE BUILT-UP ROOF SYSTEM IS TO BE GUARANTEED BY ROOFER. RATED SHEATHING SHALL COMPLY WITH DOC PS 2-10, EXPOSURE 1, AND SHALL HAVE A SPAN RATING EQUIVALENT TO OR BETTER THAN THE PLYWOOD IT REPLACES. ATTACHMENT AND THICKNESS (WITHIN ⅛") SHALL BE THE SAME AS THE PLYWOOD IT REPLACES. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

GYPSUM BOARD SHEATHING:

1. ALL GYPSUM BOARD SHEATHING MATERIALS SHALL CONFORM TO ASTM C79 AND SHALL BE INSTALLED IN ACCORDANCE WITH ASTM C1280. FOUR-FOOT WIDE PIECES OF GYPSUM SHEATHING SHALL BE APPLIED PARALLEL OR PERPENDICULAR TO THE STUDS. TWO-FOOT WIDE PIECES OF GYPSUM SHEATHING SHALL BE APPLIED PERPENDICULAR TO THE STUDS. END JOINTS OF ADJACENT COURSES OF GYPSUM BOARD SHALL BE STAGGERED.
2. FOR FIRE RATED WALLS WITH GYPSUM SHEATHING EACH SIDE, GYPSUM SHEATHING SHALL BE INSTALLED SO THAT ALL EDGES ARE SUPPORTED EXCEPT ⅝" TYPE-X GYPSUM SHEATHING SHALL BE PERMITTED TO BE INSTALLED HORIZONTALLY WITH THE HORIZONTAL JOINTS STAGGERED 24" FROM THE OPPOSITE SIDE, BUT JOINTS ARE UNSUPPORTED AND FINISHED.

COLD FORMED STEEL (ICBO ER 4943P):

1. MATERIALS: STANDARD COLD-FORMED STEEL STUDS, JOISTS, TRACK, BRIDGING AND STRAPS SHALL CONFORM TO AISI NAS-16 (FY = 33 KSI). STEEL FOR PURLINS AND GIRTS SHALL CONFORM TO (FY = 55 KSI). STEEL SHALL BE GALVANIZED AT EXTERIOR WALLS AND FRAMING.
2. FRAMING SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE LATEST EDITION OF "SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS" BY THE AMERICAN IRON AND STEEL INSTITUTE(AISI).
3. ALL STUDS SHALL BE SECURELY SEATED FOR FULL END BEARING ON TOP AND BOTTOM TRACK. UNLESS NOTED OTHERWISE, PROVIDE DOUBLE STUDS AT ALL JAMBS, CORNERS, INTERSECTIONS, BEAM BEARINGS AND JOIST BEARINGS.
4. ALL WELDING SHALL BE PERFORMED BY WELDERS EXPERIENCED IN LIGHT GAGE STRUCTURAL STEEL FRAMING WORK. MEMBERS SHALL HAVE THE FOLLOWING MINIMUM EFFECTIVE PROPERTIES PER STEEL STUD MANUFACTURERS ASSOCIATION(SSMA):

TYPE/STYLE	MEMBER	MILS(GA)	FY
6"X18GA. STUD	600S162-43	43(18)	33KSI
6"X18GA. TRACK	600T162-43	43(18)	33KSI
8"X18GA. STUD	800S162-43	43(18)	33KSI
8"X18GA. TRACK	800T162-43	43(18)	33KSI

SPECIAL INSPECTION ITEMS:

1. THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR DURING CONSTRUCTION OF CERTAIN TYPES OF WORK. PER IBC SECTION 1704 AND THE STRUCTURAL ENGINEER OF RECORD, SPECIAL INSPECTION IS (IS NOT) REQUIRED AS FOLLOWS:

TYPE OF WORK:	REQUIRED:	REMARKS:
CONCRETE SLAB ON GRADE	NO	DESIGN BASED ON f'c=2500 PSI
CONCRETE FOUNDATIONS	NO	DESIGN BASED ON f'c=2500 PSI
REINFORCING STEEL FOR ALL CONCRETE/ MASONRY THAT REQUIRES INSPECTION	YES	PRIOR TO PLACEMENT OF CONCRETE OR GROUT
EPOXY ANCHORS	YES	DURING INSTALLATION OF ANCHORS
FIELD WELDING	YES	AFTER WORK IS COMPLETE
STEEL TO STEEL BOLTED CONNECTIONS	YES	AFTER WORK IS COMPLETE

   SPECIAL INSPECTIONS NOT LISTED ABOVE ARE NOT REQUIRED BY FSE HOWEVER, ADDITIONAL SPECIAL INSPECTIONS MAY BE REQUIRED BY THE BUILDING OFFICIAL.

2. DESIGNATION OF SPECIAL INSPECTOR: A SPECIAL INSPECTION CERTIFICATE – CORRESPONDING TO THE REQUIREMENTS IN THE TABLE ABOVE HAS BEEN PROVIDED WITH THESE DRAWINGS BY FSE FOR PERMITTING PURPOSES.
   A. ACCORDING TO THE SI CERTIFICATE, THE SPECIAL INSPECTOR SHALL BE, OR WORK UNDER THE DIRECT SUPERVISION OF THE STRUCTURAL ENGINEER OF RECORD – FROST STRUCTURAL ENGINEERING(FSE) (928)776-4757. FSE IS NOT RESPONSIBLE FOR SPECIAL INSPECTIONS IF WE ARE NOT CONTACTED OR CONTRACTED TO DO SO.
   B. TO SCHEDULE ANY SPECIAL INSPECTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE SPECIAL INSPECTOR AT LEAST ONE DAY IN ADVANCE.
   C. AN ALTERNATE SPECIAL INSPECTOR MAY BE USED BY OBTAINING A NEW SI CERTIFICATE, AND MAKE THE NECESSARY NOTIFICATIONS TO ALL PARTIES INVOLVED. THE ALTERNATE SPECIAL INSPECTOR SHALL BE AN ARIZONA LICENSED CIVIL OR STRUCTURAL ENGINEER OR AN ICC CERTIFIED SPECIAL INSPECTOR.
   D. FOR GEOTECHNICAL ITEMS LISTED ABOVE, THE SPECIAL INSPECTOR SHALL BE, OR WORK UNDER THE DIRECT SUPERVISION OF A GEOTECHNICAL ENGINEER OR THE BUILDING OFFICIAL.
3. QUALITY ASSURANCE PROGRAM:
   A. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED TO BE CERTAIN IT CONFORMS WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.
   B. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE STRUCTURAL ENGINEER OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE DESIGN AUTHORITY AND THE BUILDING OFFICIAL.
   C. UPON COMPLETION OF THE ASSIGNED WORK THE STRUCTURAL ENGINEER SHALL COMPLETE AND SIGN THE APPROPRIATE FORMS CERTIFYING THAT TO THE BEST OF HIS KNOWLEDGE THE WORK IS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE INTERNATIONAL BUILDING CODE.

DRAWING INDEX

JOB NO.: 2019-0270 | PROJECT MANAGER: ANDY K. | CAD OPERATOR: MJS

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REVISIONS	BY

Registered Professional Engineer (Structural) CERTIFICATE NO. 27341 RICHARD K. FROST DATE SIGNED 2-6-20 ARIZONA U.S.A.
EXPIRES 9/30/2020

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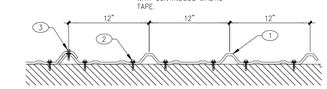
ARCHITECTURE & PLANNING

DRAWING: GENERAL STRUCTURAL NOTES
PROJECT: Erau Building F5 Additions, 6482 Corradi Way, Unit F5, Prescott, Az 86301
PROJECT: 102-03-003a

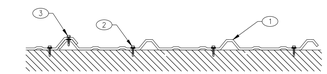
DRAWN BY: MJS
CHECKED BY: ANDY K.
DATE: 2/4/20
SCALE: AS NOTED
JOB NO.: 2019-0270
SHEET: S1

KEY NOTES:

1. METAL ROOF PANEL PER G.S.N.
2. #12 X 1.25" SELF-TAPPING TEKS SCREWS WITH NEOPRENE WASHERS AT 12" O.C.
3. ROOF PANEL STITCH SCREW: #14 X ⅞" SELF-TAPPING TEKS SCREWS AT 18" O.C. WITH CONTINUOUS MASTIC TAPE.



ROOF PANELS – ATTACHMENT AT PANEL ENDS

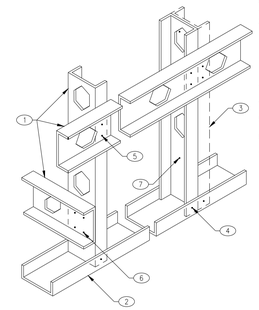


ROOF PANELS – INTERMEDIATE ATTACHMENT

T7 TYPICAL "PBR" PANEL ROOFING/SIDING ATTACHMENT
02-SD05

KEY NOTES:

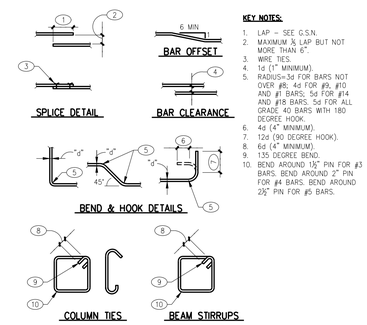
1. STEEL STUD.
2. UN-PUNCHED STEEL STUD TRACK – ATTACHMENT REQUIRED ⅜"ø ANCHOR BOLTS AT 48" O.C. (2 MINIMUM) OR 0.145"ø X ¾" LONG POWDER DRIVEN PINS AT 12" O.C. FASTENER PER G.S.N.
3. DOUBLE STUD WHERE SHOWN ON PLAN AND DETAILS.
4. #8X⅝" LONG TEK SCREWS EACH SIDE.
5. (2) #10X⅜" LONG TEK SCREWS.
6. (4) #10X¾" LONG TEK SCREWS.
7. #10X¾" LONG TEK SCREWS AT 12" O.C. AT DOUBLE STUDS.



T4 TYPICAL STEEL STUD ATTACHMENT – SCREW CONNECTION
02-LGS01 NO SCALE

KEY NOTES:

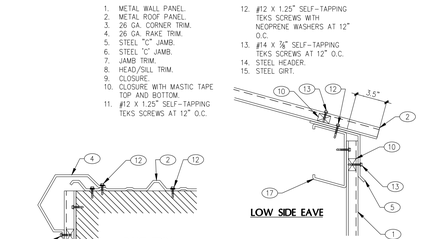
1. LAP – SEE G.S.N.
2. MAXIMUM ⅜ LAP BUT NOT MORE THAN 6".
3. WIRE TIES.
4. 1d (1" MINIMUM).
5. RADIUS=3d FOR BARS NOT OVER #8; 4d FOR #9, #10 AND #11 BARS; 5d FOR #14 AND #18 BARS. 5d FOR ALL GRADE 40 BARS WITH 180 DEGREE HOOK.
6. 4d (4" MINIMUM).
7. 12d (90 DEGREE HOOK).
8. 6d (4" MINIMUM).
9. 135 DEGREE BEND.
10. BEND AROUND 1½" PIN FOR #3 BARS. BEND AROUND 2" PIN FOR #4 BARS. BEND AROUND 2½" PIN FOR #5 BARS.



T1 TYPICAL REINFORCING DETAILS
02-C01 NO SCALE

KEY NOTES:

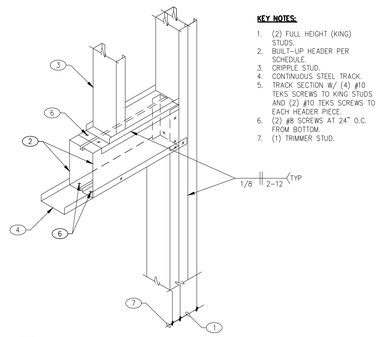
1. METAL WALL PANEL.
2. METAL ROOF PANEL.
3. 26 GA. CORNER TRIM.
4. 26 GA. RAKE TRIM.
5. STEEL "C" JAMB.
6. STEEL "C" JAMB.
7. JAMB TRIM.
8. HEAD/SILL TRIM.
9. CLOSURE.
10. CLOSURE WITH MASTIC TAPE TOP AND BOTTOM.
11. #12 X 1.25" SELF-TAPPING TEKS SCREWS AT 12" O.C.
12. #12 X 1.25" SELF-TAPPING TEKS SCREWS WITH NEOPRENE WASHERS AT 12" O.C.
13. #14 X ⅞" SELF-TAPPING TEKS SCREWS AT 12" O.C.
14. STEEL HEADER.
15. STEEL GIRT.



T8 TYPICAL METAL ROOFING/SIDING TRIM ATTACHMENT
02-SD06

KEY NOTES:

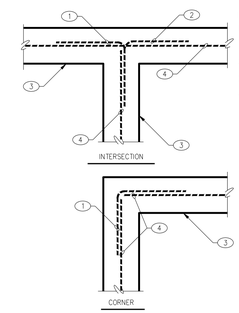
1. (2) FULL HEIGHT (KING) STUDS.
2. BUILT-UP HEADER PER SCHEDULE.
3. CRIPPLE STUD.
4. CONTINUOUS STEEL TRACK.
5. TRACK SECTION W/ (4) #10 TEKS SCREWS TO KING STUDS AND (2) #10 TEKS SCREWS TO EACH HEADER PIECE.
6. (2) #8 SCREWS AT 24" O.C. FROM BOTTOM.
7. (1) TRIMMER STUD.



T5 LIGHT GUAGE STEEL BOX-BEAM HEADER
02-LGS03.1 NO SCALE

KEY NOTES:

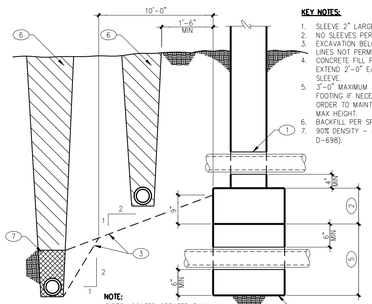
1. CORNER BARS SAME SIZE AND SPACING AS HORIZONTAL REINFORCING. MINIMUM LAP PER G.S.N.
2. ALTERNATE DIRECTION OF BENDS.
3. CONCRETE STEM WALL OR FOOTING.
4. REINFORCING PER PLANS AND SCHEDULES.



T2 PLAN – CORNER REINFORCING IN CONCRETE FOOTINGS AND/OR CONCRETE STEM WALLS
02-F02 NO SCALE

KEY NOTES:

1. SLEEVE 2" LARGER THAN PIPE.
2. NO SLEEVES PERMITTED.
3. EXCAVATION BELOW THESE LINES NOT PERMITTED.
4. CONCRETE FILL PIPE TRENCH – EXTEND 2'-0" EACH SIDE OF SLEEVE.
5. 3'-0" MAXIMUM – STEP FOOTING IF NECESSARY IN ORDER TO MAINTAIN 3'-0" MAX HEIGHT.
6. BACKFILL PER SPECS.
7. 90% DENSITY – (ASTM D-698).

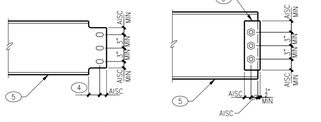


T3 PIPES AND TRENCHES AT CONCRETE FOOTING
02-F03 NO SCALE

NOMINAL BEAM DEPTH "D"	NUMBER OF ¾"ø ASTM, A325N BOLTS
UP TO 7"	2
8" – 11"	2
12" – 14"	3
15" – 17"	4
18" – 20"	5
21" – 23"	6
24" – 29"	7
30" – 32"	8
33" – 35"	9
36"	10

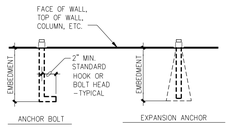
KEY NOTES:

1. THE TYPICAL STEEL BEAM TO STEEL COLUMN OR STEEL BEAM TO STEEL BEAM CONNECTION CONSISTS OF ⅜" THICK SINGLE SHEAR PLATES WITH ¾"ø ASTM A325N BOLTS. USE ¾" SHEAR PLATES WHERE "D"=27" OR GREATER.
2. ALL BOLTS SHALL BE INSTALLED USING SHORT SLOTTED HOLES IN EITHER THE BEAM WEB OR THE SHEAR PLATE PER LATEST AISC SPECIFICATIONS.
3. MAINTAIN MINIMUM BOLT SPACING AND EDGE DISTANCES PER AISC SPECIFICATIONS 1.16.4 AND 1.16.5, AND AS SHOWN BELOW.
4. CLIP FLANGE FOR ½" CLR.
5. STEEL BEAM.
6. SHEAR PLATE.



T10 BOLT SCHEDULE FOR STEEL CONNECTIONS
02-S02 NO SCALE

BOLT SIZE	CAST IN PLACE EMBEDMENT(MINIMUM)		EXPANSION ANCHOR EMBEDMENT(MINIMUM)	
	VERTICAL	HORIZONTAL	VERTICAL	HORIZONTAL
1/4"ø	4"	4"	2"	1.125"
3/8"ø	5"	4"	3"	1.5"
1/2"ø	7"	4"	4"	2"
5/8"ø	8"	5"	5"	2.5"
3/4"ø	9"	6"	6"	3"
7/8"ø	10"	7"	7"	3.5"
1"ø	11"	8"	9"	4"



KEY NOTES:
ANCHOR OR BOLT DIAMETERS SPECIFIED IN DETAILS OR ON PLANS SHALL MEET THESE MINIMUM REQUIREMENTS FOR EMBEDMENT.

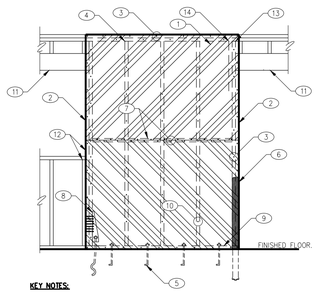
THICKNESS OF DRYPACK DOES NOT APPLY TOWARDS EMBEDMENT.

EXPANSION ANCHOR APPROVALS:
SIMPSON WEDGE-ALL (ESR-1396)
HILTI ANCHORS KWIK-BOLT (ESR-1917).
POWERS POWER-STUD (ESR-2818)

T9 TYPICAL ANCHOR BOLT, AND EXPANSION BOLT SCHEDULE
02-S0101 NO SCALE

KEY NOTES:

1. SHEATHING MATERIAL.
2. SHEARWALL END POST (DOUBLE STUD AT HOLDOWN U.N.O.).
3. EDGE NAILING AT ALL SHEATHING PANEL EDGES – STAGGER NAILS AT DOUBLE TOP PLATE AND DOUBLE STUD END POSTS.
4. FULL HEIGHT STEEL STUDS.
5. ANCHOR BOLTS TO FOUNDATION OR NAILS TO LOWER FRAMING PER SHEARWALL SCHEDULE.
6. SIMPSON STHD TYPE HOLDOWN.
7. SOLID BLOCKING AND EDGE NAILING REQUIRED AT PLYWOOD SHEET EDGES.
8. SIMPSON S/HDU TYPE HOLDOWN.
9. CONTINUOUS STEEL TRACK.
10. FIELD ATTACHMENT AWAY FROM PANEL EDGES.
11. LIGHT GAUGE STEEL HEADER.
12. TRIMMER STUD UNDER HEADER AND SILL. PROVIDE ADDITIONAL TRIMMER STUDS WHERE INDICATED ON PLANS.
13. FULL HEIGHT KING STUD.
14. PROVIDE ADDITIONAL KING STUDS WHERE INDICATED ON PLANS.



T6 ELEVATION-TYPICAL 1-STORY SHEARWALL AT DOOR/WINDOW
02-LGS601 NO SCALE

JOB NO.: 2019-0270 | PROJECT MANAGER: ANDY K. | CAD OPERATOR: MJS

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EXPIRES 9/30/2020

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ARCHITECTURE & PLANNING

DRAWING: TYPICAL DETAILS

PROJECT: Erau Building F5 Additions
6482 Corradi Way, Unit F5
Prescott, Az 86301

PROJECT: 102-03-003a

DRAWN BY: MJS
CHECKED BY: ANDY K.
DATE: 2/4/20
SCALE: AS NOTED
JOB NO.: 2019-0270
SHEET

S1.1

PLAN KEYNOTES

1. 8" MASONRY STEM WALL, APPROXIMATELY 2'-0" A.F.F. W/ #4 VERTICAL BARS AT 48" O.C. AND (1) #4 HORIZONTAL AT TOP OF WALL IN UPSIDE DOWN BOND BEAM BLOCK (SOLID GROUT).
2. EXISTING GYPBOARD WALL. NEW HOLDOWNS NEED TO BE INSTALLED.

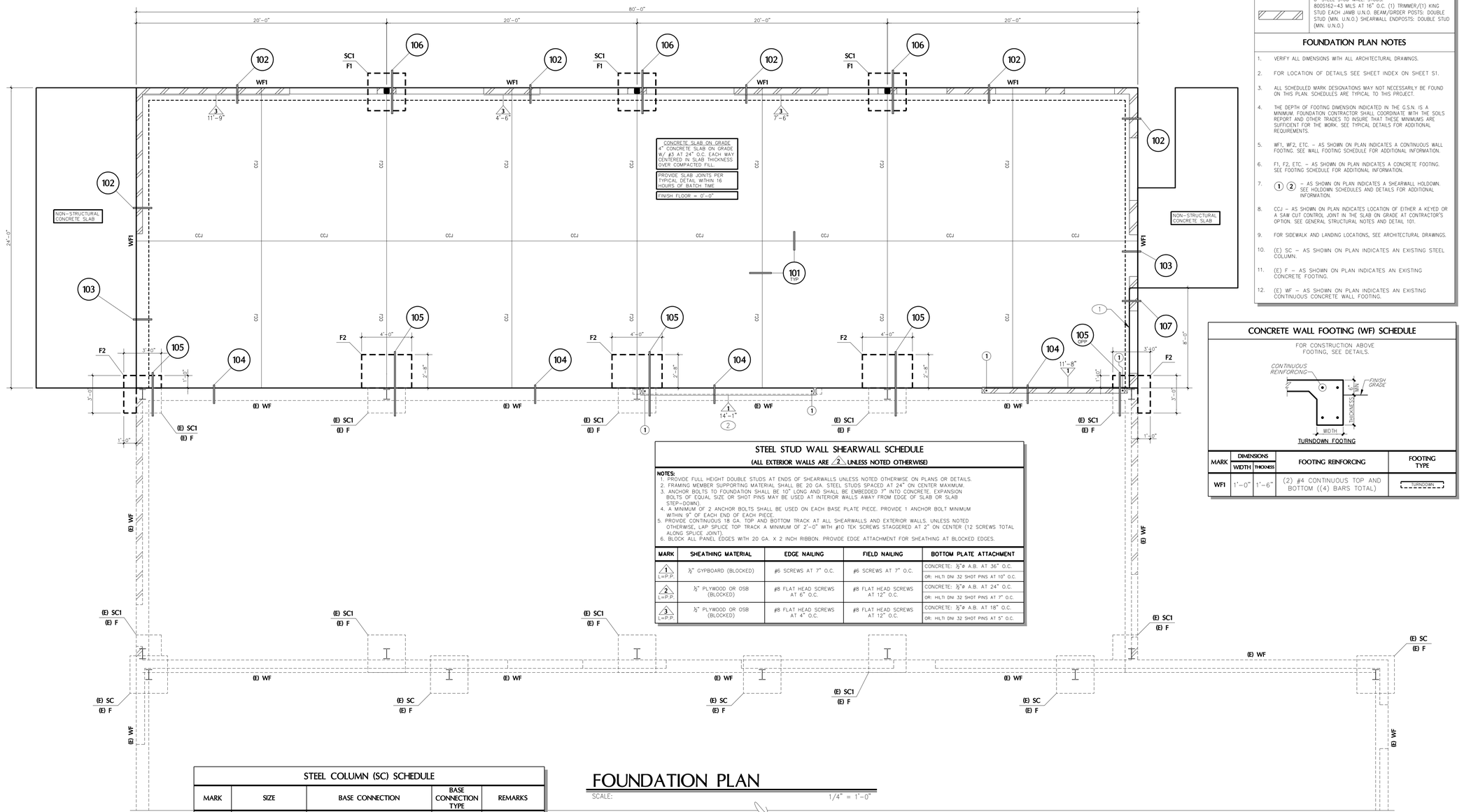
WALL SCHEDULE

-HATCHING INDICATES STRUCTURAL ELEMENT CONTINUES TO THE NEXT LEVEL (VERIFY WITH ARCHITECTURAL DRAWINGS).
-SEE PLAN SCHEDULES, DETAILS, AND GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.

AS SEEN ON PLANS	INDICATES-
	6" STEEL STUD WALL STUDS: 600S162-43 MILS AT 16" O.C. (1) TRIMMER/(1) KING STUD EACH JAMB U.N.O. BEAM/GIRDER POSTS: DOUBLE STUD (MIN. U.N.O.) SHEARWALL ENDPOSTS: DOUBLE STUD (MIN. U.N.O.)
	8" STEEL STUD WALL STUDS: 800S162-43 MILS AT 16" O.C. (1) TRIMMER/(1) KING STUD EACH JAMB U.N.O. BEAM/GIRDER POSTS: DOUBLE STUD (MIN. U.N.O.) SHEARWALL ENDPOSTS: DOUBLE STUD (MIN. U.N.O.)

FOUNDATION PLAN NOTES

1. VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL DRAWINGS.
2. FOR LOCATION OF DETAILS SEE SHEET INDEX ON SHEET S1.
3. ALL SCHEDULED MARK DESIGNATIONS MAY NOT NECESSARILY BE FOUND ON THIS PLAN. SCHEDULES ARE TYPICAL TO THIS PROJECT.
4. THE DEPTH OF FOOTING DIMENSION INDICATED IN THE G.S.N. IS A MINIMUM. FOUNDATION CONTRACTOR SHALL COORDINATE WITH THE SOILS REPORT AND OTHER TRADES TO INSURE THAT THESE MINIMUMS ARE SUFFICIENT FOR THE WORK. SEE TYPICAL DETAILS FOR ADDITIONAL REQUIREMENTS.
5. WF1, WF2, ETC. – AS SHOWN ON PLAN INDICATES A CONTINUOUS WALL FOOTING. SEE WALL FOOTING SCHEDULE FOR ADDITIONAL INFORMATION.
6. F1, F2, ETC. – AS SHOWN ON PLAN INDICATES A CONCRETE FOOTING. SEE FOOTING SCHEDULE FOR ADDITIONAL INFORMATION.
7. (1) (2) – AS SHOWN ON PLAN INDICATES A SHEARWALL HOLDOWN. SEE HOLDOWN SCHEDULES AND DETAILS FOR ADDITIONAL INFORMATION.
8. CCJ – AS SHOWN ON PLAN INDICATES LOCATION OF EITHER A KEYED OR A SAW CUT CONTROL JOINT IN THE SLAB ON GRADE AT CONTRACTOR'S OPTION. SEE GENERAL STRUCTURAL NOTES AND DETAIL 101.
9. FOR SIDEWALK AND LANDING LOCATIONS, SEE ARCHITECTURAL DRAWINGS.
10. (E) SC – AS SHOWN ON PLAN INDICATES AN EXISTING STEEL COLUMN.
11. (E) F – AS SHOWN ON PLAN INDICATES AN EXISTING CONCRETE FOOTING.
12. (E) WF – AS SHOWN ON PLAN INDICATES AN EXISTING CONTINUOUS CONCRETE WALL FOOTING.



STEEL STUD WALL SHEARWALL SCHEDULE

(ALL EXTERIOR WALLS ARE (2) UNLESS NOTED OTHERWISE)

NOTES:
1. PROVIDE FULL HEIGHT DOUBLE STUDS AT ENDS OF SHEARWALLS UNLESS NOTED OTHERWISE ON PLANS OR DETAILS.
2. FRAMING MEMBER SUPPORTING MATERIAL SHALL BE 20 GA. STEEL STUDS SPACED AT 24" ON CENTER MAXIMUM.
3. ANCHOR BOLTS TO FOUNDATION SHALL BE 10" LONG AND SHALL BE EMBEDDED 7" INTO CONCRETE. EXPANSION BOLTS OF EQUAL SIZE OR SHOT PINS MAY BE USED AT INTERIOR WALLS AWAY FROM EDGE OF SLAB OR SLAB STEP-DOWN).
4. A MINIMUM OF 2 ANCHOR BOLTS SHALL BE USED ON EACH BASE PLATE PIECE. PROVIDE 1 ANCHOR BOLT MINIMUM WITHIN 9" OF EACH END OF EACH PIECE.
5. PROVIDE CONTINUOUS 18 GA. TOP AND BOTTOM TRACK AT ALL SHEARWALLS AND EXTERIOR WALLS. UNLESS NOTED OTHERWISE, LAP SPLICE TOP TRACK A MINIMUM OF 2'-0" WITH #10 TEK SCREWS STAGGERED AT 2" ON CENTER (12 SCREWS TOTAL ALONG SPLICE JOINT).
6. BLOCK ALL PANEL EDGES WITH 20 GA. X 2 INCH RIBBON. PROVIDE EDGE ATTACHMENT FOR SHEATHING AT BLOCKED EDGES.

MARK	SHEATHING MATERIAL	EDGE NAILING	FIELD NAILING	BOTTOM PLATE ATTACHMENT
(1) L=P.P.	½" GYPBOARD (BLOCKED)	#6 SCREWS AT 7" O.C.	#6 SCREWS AT 7" O.C.	CONCRETE: ⅝"ø A.B. AT 36" O.C.
				OR: HILTI DNI 32 SHOT PINS AT 10" O.C.
(2) L=P.P.	½" PLYWOOD OR OSB (BLOCKED)	#8 FLAT HEAD SCREWS AT 6" O.C.	#8 FLAT HEAD SCREWS AT 12" O.C.	CONCRETE: ⅝"ø A.B. AT 24" O.C.
				OR: HILTI DNI 32 SHOT PINS AT 7" O.C.
(3) L=P.P.	½" PLYWOOD OR OSB (BLOCKED)	#8 FLAT HEAD SCREWS AT 4" O.C.	#8 FLAT HEAD SCREWS AT 12" O.C.	CONCRETE: ⅝"ø A.B. AT 18" O.C.
				OR: HILTI DNI 32 SHOT PINS AT 5" O.C.

CONCRETE WALL FOOTING (WF) SCHEDULE

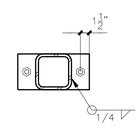
FOR CONSTRUCTION ABOVE FOOTING, SEE DETAILS.

TURNDOWN FOOTING

MARK	DIMENSIONS WIDTH	DIMENSIONS THICKNESS	FOOTING REINFORCING	FOOTING TYPE
WF1	1'-0"	1'-6"	(2) #4 CONTINUOUS TOP AND BOTTOM ((4) BARS TOTAL)	TURNDOWN

STEEL COLUMN (SC) SCHEDULE

MARK	SIZE	BASE CONNECTION	BASE CONNECTION TYPE	REMARKS
(E) SC1	W8X21	EXISTING BASE PLATE W/ (2) ⅝"ø ANCHOR BOLTS	---	EXISTING
SC1	HSS5X5X¼	11"X6"X½" THK STEEL PLATE W/ (2) ⅝"ø X 8" EXPANSION ANCHORS OR (2) ⅝"ø X 10" CAST-IN-PLACE J-BOLTS	TYPE A	---



TYPE: A

FOUNDATION PLAN

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

SHEARWALL HOLDOWN SCHEDULE

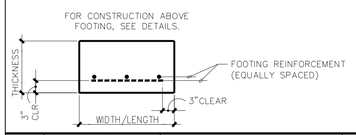
MARK	HOLDOWN	SHEARWALL END POST	DETAIL REFERENCE	ALTERNATE DETAIL
(1)	SIMPSON S/LTT20	(2) 6" METAL STUDS	(108)	NONE

SHEARWALL HOLDOWN FASTENERS

HOLDOWN	HOLDOWN CONNECTS TO STRUCTURE BELOW WITH:	HOLDOWN CONNECTS TO SHEARWALL ENDPOST WITH:
SIMPSON S/LTT20	½"ø THREADED ROD W/ SIMPSON SET-XP AND 8" EMBEDMENT	(8) #10 TEKS SCREWS

CONCRETE FOOTING (F) SCHEDULE

FOR CONSTRUCTION ABOVE FOOTING, SEE DETAILS.



MARK	DIMENSIONS LENGTH	DIMENSIONS WIDTH	DIMENSIONS THICKNESS	FOOTING REINFORCING	REMARKS
F1	3'-0"	3'-0"	10"	(6) #4 EACH WAY	---
F2	PER PLAN		10"	#4 AT 8" O.C. EACH WAY	SEE DETAIL 105

JOB NO.: 2019-0270 | PROJECT MANAGER: ANDY K. | CAD OPERATOR: MJS

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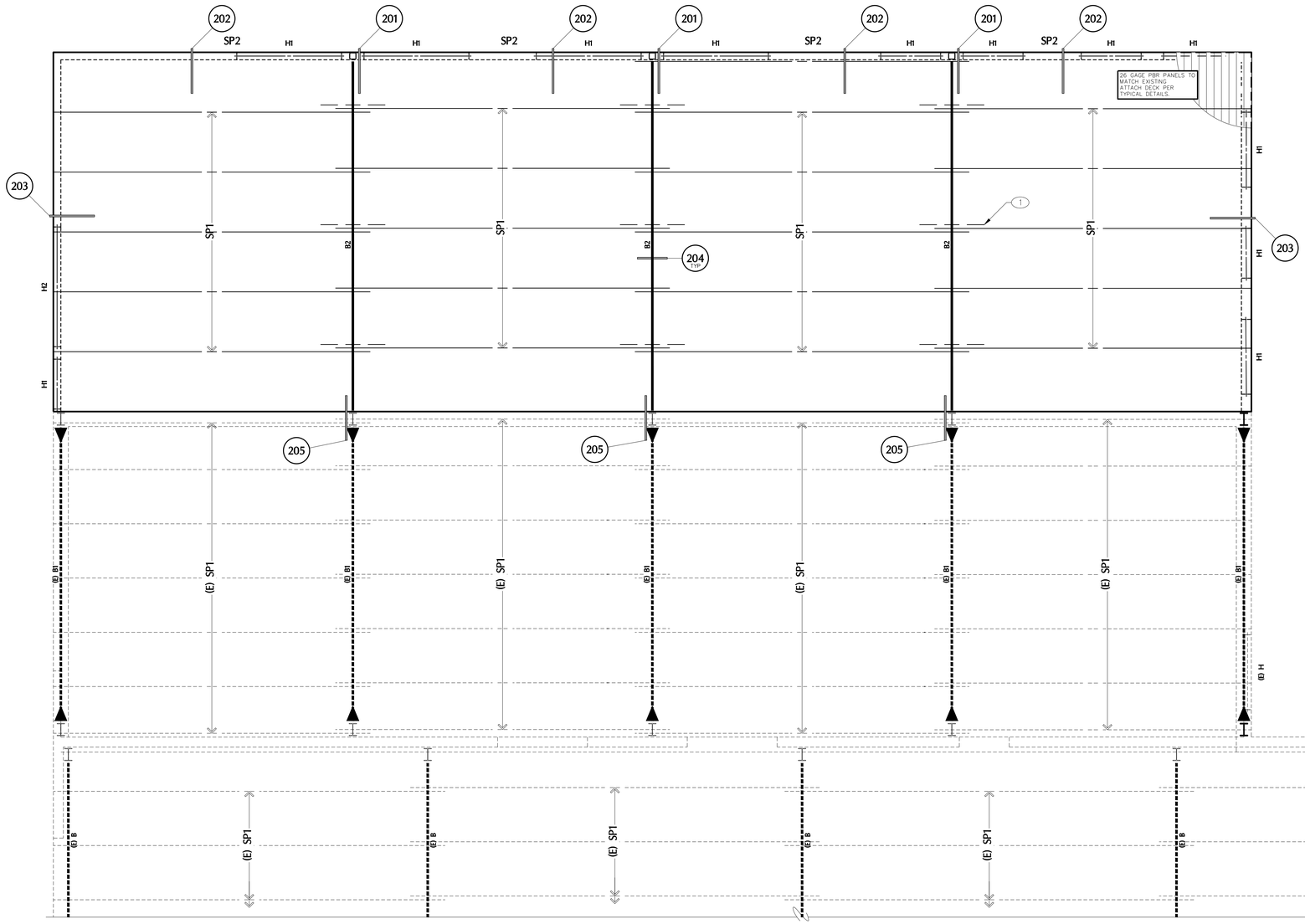
SHEET: **S2**



ROOF FRAMING PLAN

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

STEEL PURLIN (SP) SCHEDULE

MARK	JOIST	REMARKS
(E) SP1	EXISTING 8"X2.5"X14GA. 'Z' PURLINS AT 3'-8" O.C.	---
SP1	8"X3.5"X14GA. "Z" PURLINS AT 4'-0" O.C.	---

WALL SCHEDULE

NOTE:	SEE PLAN SCHEDULES, DETAILS AND GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.
AS SEEN ON PLANS	INDICATES-
[dashed]	STRUCTURAL WALL BELOW (BEARING WALL, SHEARWALL, OR EXTERIOR WALL).

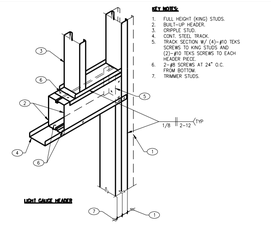
ROOF FRAMING PLAN NOTES

1. VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL DRAWINGS.
2. FOR LOCATION OF DETAILS SEE SHEET INDEX ON SHEET S1.
3. B1, B2, ETC. – AS SHOWN ON PLAN INDICATES A BEAM. SEE BEAM SCHEDULE FOR ADDITIONAL INFORMATION.
4. SP1, SP2, ETC. – AS SHOWN ON PLAN INDICATES STEEL PURLIN. SEE STEEL PURLIN SCHEDULE FOR ADDITIONAL INFORMATION.
5. H1, H2, ETC. – AS SHOWN ON PLAN INDICATES A HEADER. SEE HEADER SCHEDULE FOR ADDITIONAL INFORMATION.
6. (E) SP AS SHOWN ON PLAN INICATES AN EXISTING STEEL PURLIN.
7. (E) B AS SHOWN ON PLAN INDICATES AN EXISTING BEAM.
8. FOR CLARITY, DETAILS MAY SHOW ONLY ONE SIDE OF FRAMING CONDITION.
9. FOR CLARITY, ALL ROOF OPENINGS MAY NOT BE SHOWN ON THE ROOF FRAMING PLAN. FOR EXACT SIZE, NUMBER AND LOCATION OF OPENINGS, SEE ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS. FOR FRAMING AT OPENINGS, SEE TYPICAL DETAILS.

PLAN KEYNOTES

(1) L2X2X3/16 AT LOCATIONS SHOWN ON PLAN, SEE DETAIL 204.

LIGHT GAUGE STEEL HEADER (H) SCHEDULE



MARK	HEADER SIZE	FULL HEIGHT STUDS	TRIMMER STUDS/POST
H1	(2) 600S162-43	1	(2) 600S162-43
H2	(2) 800S162-43	2	(2) 600S162-43

BEAM (B) SCHEDULE

MARK	SIZE	CAMBER
(E) B1	EXISTING W12X19	---
B2	W12X22	---

JOB NO.: 2019-0270 | PROJECT MANAGER: ANDY K. | CAD OPERATOR: MJS

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REVISIONS	BY

Registered Professional Engineer (Structural) CERTIFICATE NO. 27341 RICHARD K. FROST DATE SIGNED 2.6.20 ARIZONA U.S.A.
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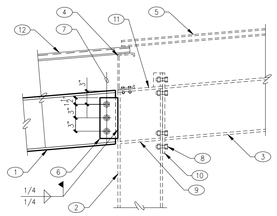
ARCHITECTURE & PLANNING

DRAWING: ROOF FRAMING PLAN

PROJECT: Erau Building F5 Additions
6482 Corradi Way, Unit F5
Prescott, Az 86301

PROJECT: 102-03-003a

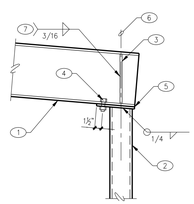
DRAWN BY	MJS
CHECKED BY	ANDY K.
DATE	2/4/20
SCALE	AS NOTED
JOB NO.	2019-0270
SHEET	S3



KEY NOTES:

1. NEW STEEL BEAM.
2. EXISTING STEEL COLUMN.
3. EXISTING STEEL BEAM.
4. EXISTING STEEL PURLIN W/ (2) ⅝"ø BOLTS TO COLUMN.
5. EXISTING METAL ROOFING.
6. ⅜" THICK STEEL SHEAR PLATE.
7. FOR TYPE, SIZE AND NUMBER OF BOLTS, SEE DETAIL **19** "BOLT SCHEDULE FOR STEEL CONNECTIONS".
8. EXISTING ⅞"ø A325 BOLTS ((8)–TOTAL).
9. EXISTING ⅜" STIFFENER PLATE.
10. EXISTING ⅜" THICK STEEL PLATE.
11. EXISTING ⅜" THICK CAP PLATE – NOTCHED FOR EXTENSION.
12. NEW METAL ROOFING, ATTACH TO EXISTING PURLIN PER TYPICAL DETAILS (ENSURE WATER PROOF CONNECTION AT TRANSITION W/ EXISTING).

205 NEW STEEL BEAM AT EXISTING STEEL COLUMN
NO SCALE



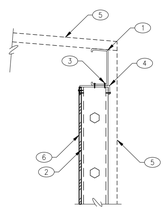
KEY NOTES:

1. STEEL BEAM.
2. STEEL COLUMN.
3. ⅜" STIFFENER PLATE EACH SIDE OF BEAM.
4. (2) ¾"ø BOLTS ON BEAM GAUGE.
5. ½" CAP PLATE, PLATE WIDTH EQUALS BEAM WIDTH.
6. CENTERLINE OF COLUMN.
7. WELD (3) SIDES–TYPICAL.

NOTE:

A. STUDS WELDED TO BOTTOM OF FLANGE MAY BE USED IN LIEU OF BOLTS.

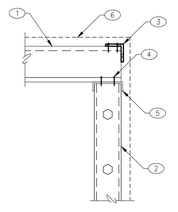
201 STEEL BEAM AT STEEL COLUMN
05–SB–SC0101
NO SCALE



KEY NOTES:

1. STEEL PURLIN.
2. STEEL STUD WALL.
3. #12 TEKS AT 12" O.C. STAGGERED.
4. CONTINUOUS STEEL TRACK.
5. METAL ROOFING AND SIDING PER ARCHITECTURAL DRAWINGS.
6. WALL SHEATHING PER PLAN.

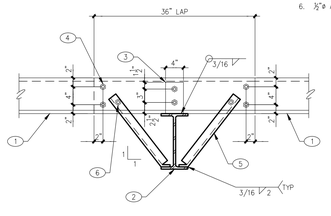
202 STEEL PURLIN AT STEEL STUD WALL
NO SCALE



KEY NOTES:

1. STEEL PURLIN.
2. STEEL STUD WALL (DOUBLE STUDS BELOW EACH PURLIN).
3. CONTINUOUS L4X2X12 GA. ANGLE (LLV) W/ (2) #12 TEKS TO EACH STEEL PURLIN.
4. (4) #12 TEKS SCREWS.
5. CONTINUOUS STEEL TRACK.
6. METAL ROOFING AND SIDING PER ARCHITECTURAL DRAWINGS.

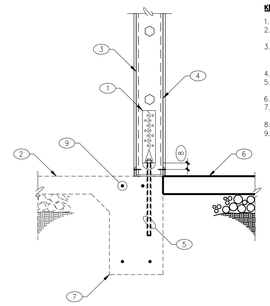
203 STEEL PURLIN AT STEEL STUD WALL
05–SP–SSW0101
NO SCALE



KEY NOTES:

1. STEEL PURLIN.
2. STEEL BEAM.
3. ⅜" THICK STEEL PLATE W/ (2) ¾"ø A307 BOLTS.
4. (4) ¾"ø A307 BOLTS AT SPLICE.
5. L2X2X¼ BRACE WHERE SHOWN ON ROOF PLAN.
6. ¾"ø A307 BOLT – TYPICAL.

204 STEEL PURLIN AT STEEL BEAM
05–SP–SB0101–2
NO SCALE



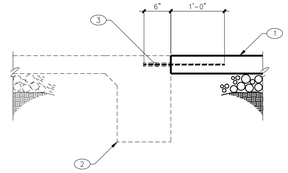
KEY NOTES:

1. HOLDOWN PER SCHEDULE.
2. EXISTING CONCRETE SLAB ON GRADE.
3. SHEARWALL END POST (DOUBLE STUD AT HOLDOWN U.N.O.).
4. WALL SHEATHING PER PLAN.
5. THREADED ROD EPOXIED TO EXISTING FOUNDATION.
6. CONCRETE SLAB.
7. EXISTING CONCRETE TURNDOWN FOOTING.
8. 1" MINIMUM / 12" MAXIMUM.
9. EXISTING FOOTING REINFORCEMENT.

108 "HDU" TYPE HOLDOWN AT CONCRETE FOUNDATION
04–HD0302
NO SCALE

KEY NOTES:

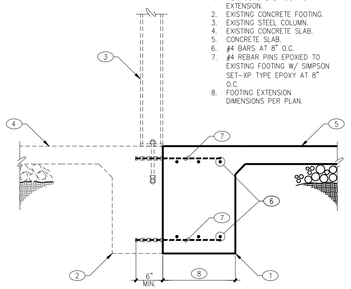
1. CONCRETE SLAB.
2. EXISTING CONCRETE FOOTING.
3. DRILL ⅝"ø HOLE AND POUND #5 BAR AT 48" O.C.



104 CONCRETE SLAB AT EXISTING CONCRETE FOOTING
NO SCALE

KEY NOTES:

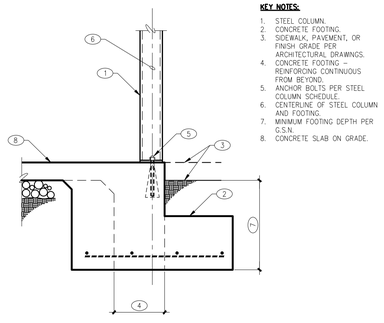
1. NEW CONCRETE FOOTING EXTENSION.
2. EXISTING CONCRETE FOOTING.
3. EXISTING STEEL COLUMN.
4. EXISTING CONCRETE SLAB.
5. CONCRETE SLAB.
6. #4 BARS AT 8" O.C.
7. #4 REBAR PINS EPOXIED TO EXISTING FOOTING W/ SIMPSON SET–XP TYPE EPOXY AT 8" O.C.
8. FOOTING EXTENSION DIMENSIONS PER PLAN.



105 CONCRETE FOOTING EXTENSION AT EXISTING CONCRETE FOOTING
NO SCALE

KEY NOTES:

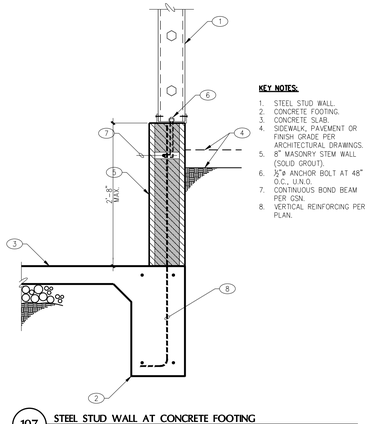
1. STEEL COLUMN.
2. CONCRETE FOOTING.
3. SIDEWALK, PAVEMENT, OR FINISH GRADE PER ARCHITECTURAL DRAWINGS.
4. CONCRETE FOOTING – REINFORCING CONTINUOUS FROM BEYOND.
5. ANCHOR BOLTS PER STEEL COLUMN SCHEDULE.
6. CENTERLINE OF STEEL COLUMN AND FOOTING.
7. MINIMUM FOOTING DEPTH PER G.S.N.
8. CONCRETE SLAB ON GRADE.



106 STEEL COLUMN AT CONCRETE FOOTING
08–MB–CF0101
NO SCALE

KEY NOTES:

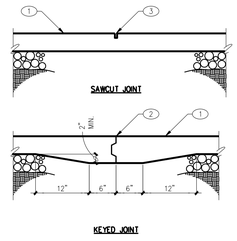
1. STEEL STUD WALL.
2. CONCRETE FOOTING.
3. CONCRETE SLAB.
4. SIDEWALK, PAVEMENT OR FINISH GRADE PER ARCHITECTURAL DRAWINGS.
5. 8" MASONRY STEM WALL (SOLID GROUT).
6. ⅝"ø ANCHOR BOLT AT 48" O.C., U.N.O.
7. CONTINUOUS BOND BEAM PER GSN.
8. VERTICAL REINFORCING PER PLAN.



107 STEEL STUD WALL AT CONCRETE FOOTING
NO SCALE

KEY NOTES:

1. CONCRETE SLAB ON GRADE.
2. CONTINUOUS KEYED JOINT.
3. SAWCUT: ⅜" WIDE X ¼" SLAB THICKNESS IN DEPTH, CUT SHALL BE MADE SOON ENOUGH TO PREVENT SHRINKAGE CRACKING, BUT NOT SO SOON AS TO CAUSE SPALLING OF THE CONCRETE WHILE SAWING. WORK MUST BE COMPLETE WITHIN 16 HOURS OF CONCRETE PLACEMENT.



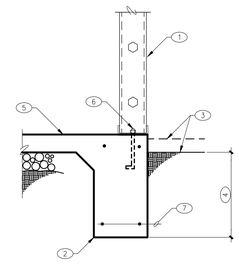
NOTE:

KEYED JOINTS NEED ONLY OCCUR AT EXPOSED EDGES DURING PLACEMENT UNLESS SPECIFICALLY NOTED ON THE PLANS. "TOOL WET JOINT", "ZIP STRIP", ETC. SHALL MATCH SAWCUT REQUIREMENTS.

101 CONTROL JOINTS IN CONCRETE SLAB ON GRADE
03–CS0101
NO SCALE

KEY NOTES:

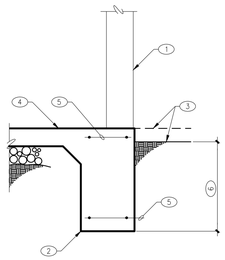
1. STEEL STUD WALL.
2. CONCRETE FOOTING.
3. SIDEWALK, PAVEMENT OR FINISH GRADE PER ARCHITECTURAL DRAWINGS.
4. MINIMUM FOOTING EMBEDMENT PER G.S.N.
5. CONCRETE SLAB ON GRADE.
6. ⅝"ø A.B. AT 48" O.C. UNLESS NOTED OTHERWISE.
7. FOOTING REINFORCEMENT PER SCHEDULE.



102 STEEL STUD WALL AT CONCRETE FOOTING
03–SSW–CF0702
NO SCALE

KEY NOTES:

1. STEEL STUD WALL BEYOND.
2. CONCRETE FOOTING.
3. SIDEWALK, PAVEMENT OR FINISH GRADE PER ARCHITECTURAL DRAWINGS.
4. CONCRETE SLAB ON GRADE.
5. FOOTING REINFORCEMENT.
6. MINIMUM FOOTING EMBEDMENT PER G.S.N.



103 STEEL STUD WALL DOOR OPENING AT CONCRETE FOOTING
03–SSW–CF0703
NO SCALE

JOB NO.: 2019–0270 | PROJECT MANAGER: ANDY K. | CAD OPERATOR: MJS

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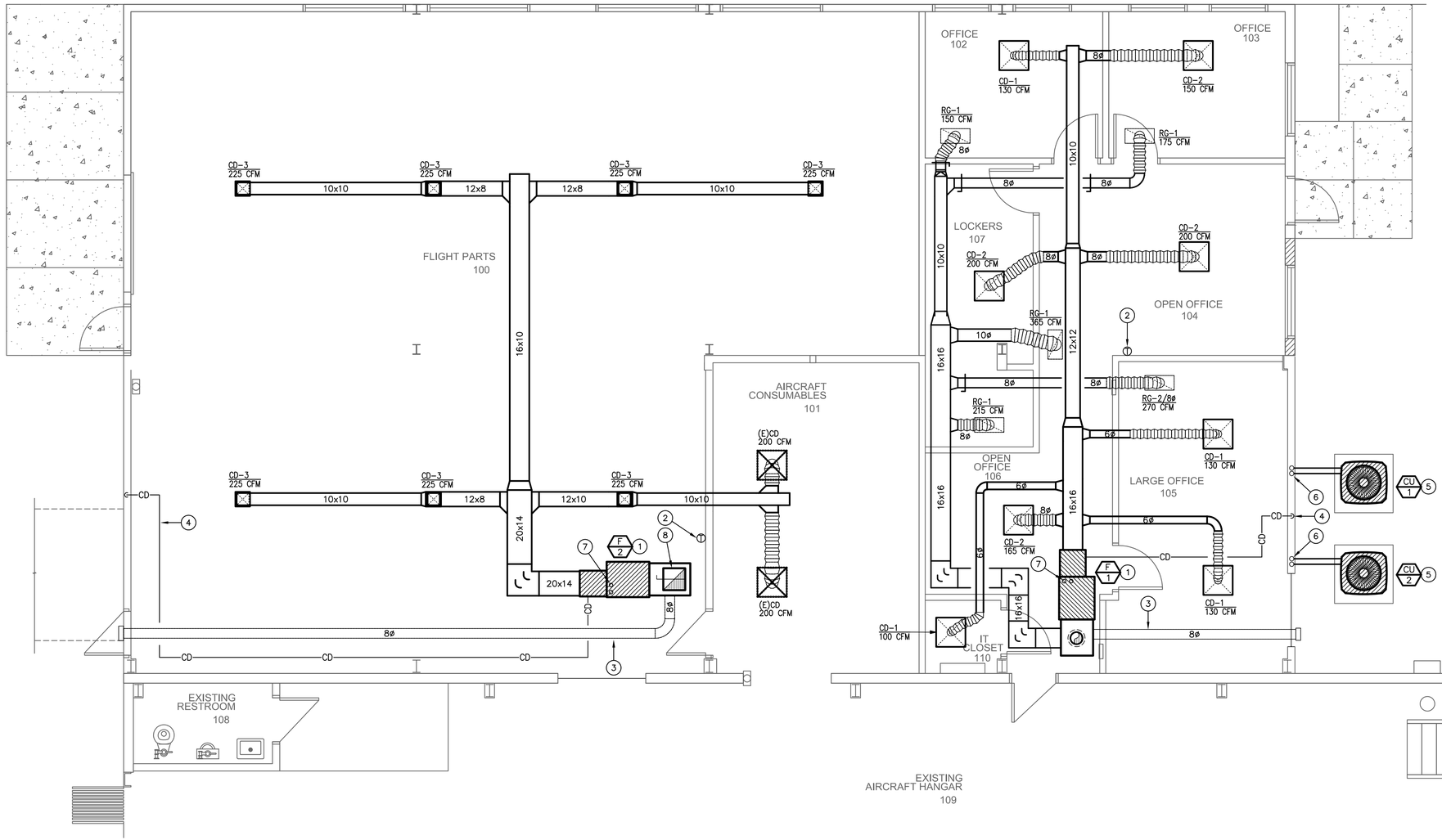
ARCHITECTURE & PLANNING

DRAWING: FOUNDATION AND FRAMING DETAILS 100 AND 200-SERIES

PROJECT: Erau Building F5 Additions
6482 Corradi Way, Unit F5
Prescott, Az 86301

PROJECT: 102-03-003a

DRAWN BY	MJS
CHECKED BY	ANDY K.
DATE	2/4/20
SCALE	AS NOTED
JOB NO.	2019-0270
SHEET	S4



Mechanical Floor Plan

Scale: 1/4"=1'-0"

Plan North

KEYNOTES

1. NEW HORIZONTAL NATURAL GAS FURNACE SUPPORTED FROM STRUCTURE. MAINTAIN ALL NECESSARY CLEARANCES AND MAINTENANCE ACCESS REQUIREMENTS. ROUTE AND CONNECT REFRIGERANT LINES FROM CONDENSING UNIT.
2. PROVIDE HEATING/COOLING PROGRAMMABLE THERMOSTAT ON WALL AT 48" ABOVE FINISHED FLOOR. VERIFY EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECT/OWNER.
3. EXTEND 8ø OUTSIDE AIR DUCT FROM UNIT RETURN PLENUM TO WALL INTAKE AND BALANCE OUTSIDE AIR AS SHOWN ON FURNACE SCHEDULE. INTAKE HOOD TO BE 8"ø, GREENHECK WC-8. INTAKE SHALL BE A MINIMUM OF 10' FROM EXHAUST DISCHARGE.
4. EXTEND NEW 3/4" TYPE 'M' COPPER CONDENSATE DRAIN PIPING FROM UNIT CONNECTION AND ROUTE TO EXTERIOR. SLOPE ALL DRAIN PIPING AT A MINIMUM 1/8" PER FOOT TOWARD DISCHARGE LOCATION.
5. NEW CONDENSING UNIT ON EXISTING CONCRETE PAD. PROVIDE CLEARANCES AS PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE FINAL LOCATION WITH ARCHITECT PRIOR TO COMMENCING WORK.
6. SLEEVE REFRIGERANT LINES THROUGH INTO WALL AND ROUTE UP INTO CEILING SPACE AND TO CORRESPONDING COIL. SIZE AND INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS.
7. PVC COMBUSTION AIR INTAKE AND VENT PIPING UP THROUGH ROOF TO CONCENTRIC TERMINATION PER MANUFACTURER. SHALL BE IN ACCORDANCE TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR THE INSTALLED LENGTH AND FITTINGS.
8. 18x18 SCREENED RETURN DUCT OPENING WITH BALANCING DAMPER.

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Jan 09, 2020 - 9:39am

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ARCHITECTURE & PLANNING

DRAWING: Mechanical Floor Plan

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

DRAWN BY
CHECKED BY
DATE: December 20th, 2019
JOB NO.
SHEET

M2.0

ASHRAE 62.1 VENTILAITON CALCULATION

Outside Air for unit F-1

Space	Area	Occ Density	Rp	Pz	Ra	Az	Vbz
Office Spaces	897	5	5	4.485	0.06	897	76.2
Conference	143	50	5	7.15	0.06	143	44.3
Storage	30	0	0	0	0.12	30	3.6
					Total Net OSA Required		124

Balance F-1 for 124 CFM

Outside Air for unit F-2

Space	Area	Occ Density	Rp	Pz	Ra	Az	Vbz
Warehouse	2,120	0	0	0	0.06	2120	127.2
Storage	299	0	0	0	0.12	299	35.9
					Total Net OSA Required		163

Balance F-2 for 163 CFM

6.2.2.1 Breathing Zone Outdoor Airflow. The design outdoor airflow required in the *breathing zone* of the occupiable space or spaces in a *zone, i.e., the breathing zone outdoor airflow* (V_{bz}), shall be determined in accordance with Equation 6-1.

$$V_{bz} = R_p \cdot P_z + R_a \cdot A_z \qquad (6\text{-}1)$$

where

A_z = *zone floor area*: the net occupiable floor area of the *zone* m^2 (ft^2)

P_z = *zone population*: the largest number of people expected to occupy the zone during typical usage. If the number of people expected to occupy the zone fluctuates, P_z may be estimated based on averaging approaches described in Section 6.2.6.2

Note: If P_z cannot be accurately predicted during design, it shall be an estimated value based on the zone floor area and the default occupant density listed in Table 6-1.

R_p = outdoor airflow rate required per person as determined from Table 6-1

Note: These values are based on adapted occupants.

R_a = outdoor airflow rate required per unit area as determined from Table 6-1

CONDENSING UNIT SCHEDULE

MARK	NOMINAL TONS	MFG'R	MODEL #	COOLING CAPACITY		DESIGN COND. DB/WB	INDOOR COIL MODEL #	COIL ENT. AIR DB/WB	ELECTRICAL DATA			MINIMUM SEER	REFRIGERANT	WEIGHT (LBS)	NOTES
				TOTAL	SENS.				MCA	FUSE	V / Ø				
CU–1	3	TRANE	4TTR6036	31.9	29.6	95/63	SELECTED BY MFG.	80°/63°	18	30	208/3/60	16	R–410A	212	1 2 3 4 5 6 7
CU–2	5	TRANE	4TTR6060	52.5	45.5	95/63	SELECTED BY MFG.	80°/63°	32	50	208/3/60	16	R–410A	277	1 2 3 4 5 6 7

1. INSTALL UNIT PER MANUFACTURER'S WRITTEN DIRECTIONS. SLEEVE PIPING PENETRATIONS THROUGH EXTERIOR WALL, SEAL WATERTIGHT AND PROVIDE ESCUTCHEONS.
2. UNIT SHALL BE PROVIDED WITH PROGRAMMABLE THERMOSTATS.
3. PROVIDE 10–YEAR COMPRESSOR WARRANTY AND 5–YEAR FOR OTHER COMPONENTS.
4. PROVIDE UNIT COMPLETE WITH ALL NECESSARY DISCONNECTS, OVERLOADS AND CONTROL COMPONENTS.
5. SIZE AND INSTALL ALL REFRIGERANT PIPING PER MFG'RS. INSTRUCTIONS.
6. PROVIDE LOW AMBIENT CONTROL KIT AND CRANK CASE HEATER.
7. OWNER SHALL PURCHASE AND HAVE MECHANICAL EQUIPMENT THAT IS MANUFACTURED BY TRANE OR AMERICAN STANDARD DELIVERED TO JOBSITE. MECHANICAL CONTRACTOR SHALL CONFIRM EQUIPMENT TO BE PURCHASED PRIOR TO ORDERING.

FURNACE SCHEDULE

MARK	NOMINAL TONS	MFG'R	MODEL #	ORIENTATION	CFM	OSA	E.S.P. ("W.G.)	HEATING CAPACITY		VENT SIZE	VENTING TYPE	FUEL	Min. A.F.U.E.	ELECTRICAL DATA		FILTER TYPE	WEIGHT W/O COIL	NOTES
								INPUT	OUTPUT					H.P.	V/Ø/Hz			
F–1	3	TRANE	TUH1B080	HORIZONTAL	1200	124	0.50	77,000	73,150	2"	2–PIPE SEALED	NAT. GAS	95.0%	1/2	115/1/60	DISPOSABLE	148	1 2 3 4 5
F–2	5	TRANE	TUH1C100	HORIZONTAL	2000	163	0.50	97,000	92,105	3"	2–PIPE SEALED	NAT. GAS	95.0%	3/4	115/1/60	DISPOSABLE	160	1 2 3 4 5

1. INSTALL WITH CLEARANCES PER MANUFACTURER'S RECOMMENDATIONS.
2. SIZE AND INSTALL 2 PIPE VENT PIPING PER MANUFACTURER'S INSTRUCTIONS FOR ACTUAL INSTALLED LENGTHS. PROVIDE CONCENTRIC ROOF TERMINATION AND MAINTAIN MINIMUM 12" CLEARENCE ABOVE ANTICIPATED SNOW LEVEL.
3. PROVIDE LEFT OR RIGHT CONNECTIONS AS REQUIRED FOR ACCESS IN MECHANICAL ROOMS.
4. OWNER SHALL PROVIDE, AND CONTRACTOR SHALL INSTALL HIGH ALTITUDE ORIFICE KIT.
5. OWNER SHALL PURCHASE AND HAVE MECHANICAL EQUIPMENT THAT IS MANUFACTURED BY TRANE OR AMERICAN STANDARD DELIVERED TO JOBSITE. MECHANICAL CONTRACTOR SHALL CONFIRM EQUIPMENT TO BE PURCHASED PRIOR TO ORDERING.

NOTE:
UPON RECIEPT OF OWNER PROVIDED HVAC EQUIPMENT AND ACCESSORIES BY THE GENERAL CONTRACTOR AND HVAC CONTRACTOR, THESE CONTRACTORS WILL TAKE FULL RESPONSIBILITY FOR THESE ITEMS. ANY OWNER PROVIDED EQUIPMENT AND/OR ACCESSORIES THAT ARE LOST, STOLEN, DAMAGED OR DESTROYED WILL BE REPLACED BY THE CONTRACTORS AT THEIR OWN EXPENSE.

GRILLES/REGISTERS/DIFFUSERS SCHEDULE

MARK	DESCRIPTION	MODULE SIZE	TYPE	OBD	FRAME	MATERIAL	FINISH	MANUF.	MODEL	REMARKS
CD–1	SUPPLY DIFFUSER	24" x 24"	SQUARE CEILING	NO	T–BAR	STEEL	WHITE	TITUS	TMS	8ø NECK
CD–2	SUPPLY DIFFUSER	24" x 24"	SQUARE CEILING	NO	T–BAR	STEEL	WHITE	TITUS	TMS	10ø NECK
CD–3	SUPPLY DIFFUSER	12" x 12"	LOUVERED CEILING	NO	SURFACE	STEEL	WHITE	TITUS	TDC	
RG–1	RETURN GRILLE	24" x 12"	SINGLE DEFLECTION	NO	T–BAR	STEEL	WHITE	TITUS	350RL	NECK SIZE PER PLAN

NOTES:

1. NECK SIZE SHOWN ON PLANS AND CORRESPONDS TO DUCT CONNECTION SIZE.
2. CONTRACTOR SHALL PROVIDE SQUARE TO ROUND ADAPTERS AS REQUIRED FOR INSTALLATION.
3. MOUNTING HEIGHT OF GRILLES AND EXACT LOCATION OF ALL DIFFUSERS TO FIELD COORDINATED AND APPROVED BY OWNER.
4. VERIFY MAKE, MODEL AND COLOR OF ALL DEVICES WITH OWNER.

DUCT CONSTRUCTION NOTES

1 – ALL DUCTWORK SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH "ASHRAE GUIDE" AND "SMACNA STANDARDS" AND IN CONFORMANCE WITH REQUIREMENTS OF LOCAL BUILDING, MECHANICAL AND ENERGY CONSERVATION CODES. WHERE MORE THAN ONE REGULATION OR CODE APPLIES, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.

2 – FLEXIBLE DUCTWORK SHALL COMPLY WITH THE CLASS I REQUIREMENTS OF THE NFPA BULLETIN NO. 90A AND SHALL BE INSULATED WITH 1" FIBERGLASS, SUPPORTED BY HELICALLY WOUND STEEL WIRE WITH REINFORCED METALIZED OUTER JACKET RATED FOR USE IN PLENUMS. ATTACHMENT SHALL BE WITH WORM DRIVE CLAMPS. LENGTH SHALL NOT EXCEED 10'–0", EXCEPT AS APPROVED BY ARCHITECT.

3 – PROVIDE MANUAL BALANCING DAMPER AT EACH BRANCH DUCT TAKE OFF.

4 – ALL DUCTWORK JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTION ON DUCTWORK SHALL BE LISTED AND LABELED BY UL 181A OR 181B TAPES AND MASTICS.

5 – ALL AIR SUPPLY AND RETURN DUCTS LOCATED IN CONDITIONED SPACES OR UNCONDITIONED SPACES SEPARATED FROM BUILDING EXTERIOR SHALL HAVE A MIN. R–5 INSULATION VALUE. ALL AIR SUPPLY AND RETURN DUCTS LOCATED IN UNCONDITIONED SPACES NOT SEPARATED FROM BUILDING EXTERIOR SPACES OR EXTERIOR DUCTS SHALL HAVE A MIN. R–8 INSULATION.

6 – PROVIDE RADIUS ELBOWS, TURNING VANES, AND SPLITTER DAMPERS IN BRANCHES AND EXTRACTORS WHERE APPLICABLE.

7 – TURNING VANES SHALL BE INSTALLED IN ALL MITERED ELBOWS.

8 – BRANCH DUCT SERVING DIFFUSERS SHALL BE SIZE AS INDICATED. PROVIDE INCREASER OR SHEET METAL PLENUM TO CONNECT TO DIFFUSER AS REQUIRED.

9 – ALL DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSIONS. IF DUCT LINER IS USED FOR INSULATION, CONTRACTOR SHALL INCREASE DUCT SIZE ACCORDINGLY.

10 – HANGERS FOR SHEET METAL DUCTWORK SHALL BE INSTALLED AS REQUIRED BY 2018 IMC.

COORDINATION NOTES

1 – COORDINATE OPENING'S FOR GRILLES, REGISTERS, DIFFUSERS AND DUCTWORK WITH FRAMING CONTRACTOR PRIOR TO ROUGH–IN.

2 – COORDINATE EXACT LOCATION OF ALL GRILLES, REGISTERS AND DIFFUSERS WITH ARCHITECTURAL PLANS.

3 – LIGHTING & SPRINKLER HEADS TAKE PRECEDENCE OVER DIFFUSER LOCATION. CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS TO DIFFUSERS TO AVOID ANY CONFLICT WITH LIGHTING LAYOUT & SPRINKLER HEADS.

4 – CONTRACTOR TO COORDINATE THERMOSTAT LOCATIONS WITH OWNER & ARCHITECT PRIOR TO MOUNTING.

5 – ALL THERMOSTATS ARE TO BE MOUNTED AT A HEIGHT OF 48" TO 54" ABOVE THE FLOOR LEVEL FOR DISABLED ACCESS.

GENERAL REQUIREMENTS

1 – PROVIDE CLEARANCES AS PER MANUFACTURER'S RECOMMENDATIONS.

2 – PITCH CONDENSATE DRAIN LINE 1/8" PER 12" RUN TOWARDS TERMINATION. INSULATE IN CONDENSATE DRAIN LINE WITH 3/8" CLOSED CELL "ARMIFLEX" TUBE INSULATION, TO PREVENT CONDENSATE DRIP.

3 – PRIOR TO THE CONTRACTOR ORDERING OR SETTING ANY AIR CONDITIONING EQUIPMENT, DUCTWORK, OR AIR DEVICE, HE SHALL VERIFY LOCATION OF PLACEMENT WITH STRUCTURAL DRAWINGS AND CONFIRM WEIGHTS, DISCHARGE CONFIGURATION, SIZES, ELECTRICAL CHARACTERISTICS AND ANY OTHER DIMENSIONAL DATA WHICH MIGHT AFFECT THE SUCCESSFUL INSTALLATION OF THE EQUIPMENT.

4 – KEEP ALL VENTS THROUGH ROOF AND EXHAUST DISCHARGE DUCTS A MINIMUM OF 10'–0" FROM OUTSIDE AIR INTAKES OR WINDOWS AND FROM ALL VERTICAL PORTIONS OF THE BUILDING.

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Jan 09, 2020 - 9:39am

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Registered Professional Engineer
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ARCHITECTURE & PLANNING

DRAWING: Mechanical Schedules
PROJECT: ERAU Building F5 Addition
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APN: 102-03-003A

DRAWN BY	
CHECKED BY	
DATE	December 20th, 2019
JOB NO.	
SHEET	M3.0

MECHANICAL SPECIFICATIONS

GENERAL REQUIREMENTS
GENERAL PROVISIONS WHICH MAKE SPECIFIC REFERENCE TO ELECTRICAL DIVISION ONLY ARE INCLUDED HEREIN FOR CLARITY AND SIMPLIFICATION OF SPECIFICATIONS WRITING AND ARE NOT PART OF THE MECHANICAL WORK. THE WORK OF DIVISION 15, MECHANICAL, IS SUBJECT TO THE CONDITIONS OF THE CONDITIONS OF THE CONTRACT, DIVISION 1, GENERAL REQUIREMENTS, AND APPLICABLE REQUIREMENTS OF OTHER PORTIONS OF THE CONTRACT DOCUMENTS. EXAMINE AND BECOME FAMILIAR WITH ALL CONTRACT DOCUMENTS AND COORDINATE THE MECHANICAL WORK ACCORDINGLY.

INTENT
IT IS THE INTENTION OF THE SPECIFICATIONS AND DRAWINGS TO CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION. ANY APPARATUS, APPLIANCE, MATERIAL OR WORK NOT SHOWN ON THE DRAWINGS, BUT MENTIONED IN THE SPECIFICATIONS OR VICE VERSA, OR ANY INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE WORK COMPLETE AND READY FOR OPERATION, EVEN IF NOT PARTICULARLY SPECIFIED, SHALL BE PROVIDED WITHOUT ADDITIONAL EXPENSE TO THE OWNER. SHALL THERE APPEAR TO BE DISCREPANCIES OR QUESTIONS OF INTENT IN THE CONTRACT. DOCUMENTS, REFER THE MATTER TO THE ARCHITECT FOR HIS DECISION BEFORE ORDERING ANY MATERIALS OR EQUIPMENT OR BEFORE THE START OF ANY RELATED WORK. THE DECISION OF THE ARCHITECT SHALL BE FINAL, CONCLUSIVE AND BINDING.

DRAWINGS AND DATA
DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO CONVEY SCOPE OF WORK AND TO INDICATE GENERAL ARRANGEMENT OF EQUIPMENT, DUCTS, CONDUITS, PIPING AND FIXTURES. THEY ARE NOT INTENDED TO SHOW EVERY OFFSET OR FITTINGS OR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED DURING INSTALLATION OF THE WORK. LOCATION OF ALL ITEMS NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. EXACT LOCATIONS NECESSARY TO SECURE BEST CONDITIONS AND RESULTS MUST BE DETERMINED AT PROJECT AND SHALL HAVE OVAL OF ARCHITECT BEFORE BEING INSTALLED. DO NOT SCALE DRAWINGS. IF SO DIRECTED BY ARCHITECT, WITHOUT EXTRA CHARGE, MAKE REASONABLE MODIFICATIONS IN LAYOUT AS NEEDED TO PREVENT CONFLICT WITH WORK OF OTHER TRADES OR FOR PROPER EXECUTION OF WORK. INCLUDE MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER INSTALLATION AND OPERATION OF A SYSTEM OR PIECE OF EQUIPMENT IN BID PRICE.

CODES
INCLUDE IN WORK, WITHOUT EXTRA COST TO OWNER, LABOR, MATERIALS, SERVICES, APPARATUS, DRAWINGS (IN ADDITION TO CONTRACT DRAWINGS AND DOCUMENTS) REQUIRED TO COMPLY WITH APPLICABLE LAWS, ORDINANCES, RULES AND REGULATIONS. DRAWINGS AND SPECIFICATIONS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT THAN CODES, ORDINANCES, STANDARDS AND STATUTES. CODES, ORDINANCES, STANDARDS AND STATUES TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH DRAWINGS OR SPECIFICATIONS. FOLLOWING INDUSTRY STANDARDS, SPECIFICATIONS AND CODES ARE MINIMUM REQUIREMENTS:

A. APPLICABLE CITY, COUNTY, AND STATE MECHANICAL, ELECTRICAL, GAS, PLUMBING, HEALTH AND SANITARY CODES, LAWS AND ORDINANCES.
B. 2018 INTERNATIONAL MECHANICAL CODE WITH LOCAL AMENDMENTS.
C. REGULATIONS, PERMITS, INSPECTIONS: COMPLY WITH ALL APPLICABLE CODED, RULES AND REGULATIONS. ALL MATERIALS, EQUIPMENT AND WORK MUST CONFORM TO THE UNIFORM MECHANICAL CODE. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND LICENSES. WHEN REQUIRED BY CODE, ALL WORK MUST BE INSPECTED AND APPROVED BY LOCAL AUTHORITIES.

GENERAL
MATERIALS AND EQUIPMENT STANDARD PRODUCTS OF A REPUTABLE MANUFACTURER REGULARLY ENGAGED IN MANUFACTURE OF THE SPECIFIED ITEMS. WHERE MORE THAN ONE UNIT IS REQUIRED OF ANY ITEM, FURNISHED BY THE SAME MANUFACTURER, EXCEPT WHERE SPECIFIED OTHERWISE. INSTALL MATERIAL AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. SHOULD VARIANCE BETWEEN PLANS AND SPECIFICATIONS OCCUR WITH THESE, CONTACT ARCHITECT IMMEDIATELY SO THAT VARIATIONS IN INSTALLATION CAN BE KNOWN BY ALL PARTIES CONCERNED. PROVIDE EQUIPMENT FROM MANUFACTURER WHOSE PRODUCTS HAVE LOCAL REPRESENTATION.

EXECUTION
PROTECT EXISTING ACTIVE SERVICES (WATER, GAS, SEWER, ELECTRIC) WHEN ENCOUNTERED, AGAINST DAMAGE FROM CONSTRUCTION WORK. DO NOT PREVENT OR DISTURB OPERATION OF ACTIVE SERVICES WHICH ARE TO REMAIN. IF WORK MAKES TEMPORARY SHUTDOWNS OF SERVICES UNAVOIDABLE, CONSULT WITH OWNER AS TO DATES, PROCEDURES, AND ESTIMATED DURATION OF AT LEAST 10 WORKING DAYS IN ADVANCE OF DATE WHEN WORK IS TO BE PERFORMED. ARRANGE WORK FOR CONTINUOUS PERFORMANCE TO ASSURE THAT EXISTING OPERATING SERVICES WILL BE SHUT DOWN ONLY DURING THE TIME REQUIRED TO MAKE NECESSARY CONNECTIONS. IF A SYSTEM CANNOT SHUT DOWN, INSTALL TEMPORARY BYPASSES OR JUMPERS UNTIL CONNECTIONS ARE COMPLETE. CONTRACTOR RESPONSIBLE FOR ALL COSTS INCURRED BY ABOVE SHUTDOWNS, INCLUDING BYPASS OR JUMPER INSTALLATIONS, FOR WORK PERFORMED UNDER THIS SECTION. IF EXISTING ACTIVE UTILITY SERVICES ARE ENCOUNTERED WHICH REQUIRE RELOCATION, MAKE REQUEST TO PROPER AUTHORITIES FOR DETERMINATION OF PROCEDURES. PROPERLY TERMINATE EXISTING SERVICES TO BE ABANDONED IN CONFORMANCE WITH REQUIREMENTS OF AUTHORITIES. WHERE CONNECTIONS OR DISRUPTIONS ARE MADE TO EXISTING SYSTEMS, REACTIVATE, REFILL, AND RECHARGE ALL COMPONENTS AND RESTORE SYSTEMS TO OPERATING CONDITIONS AT TIME OF DISRUPTION.

GUARANTEE
EACH COMPLETE SYSTEM GUARANTEED BY CONTRACTOR FOR A PERIOD OF ONE YEAR, FROM DATE OF ACCEPTANCE OF WORK BY OWNER IN WRITING, TO BE FREE OF DEFECTS OF MATERIALS AND WORKMANSHIP, AND TO PERFORM SATISFACTORILY UNDER ALL CONDITIONS OF LOAD OR SERVICE. THE GUARANTEES PROVIDE THAT ANY ADDITIONAL CONTROLS, PROTECTIVE DEVICES, OR EQUIPMENT BE PROVIDED AS NECESSARY TO MAKE THE SYSTEM OF EQUIPMENT OPERATE SATISFACTORILY, AND THAT ANY FAULTY MATERIALS OR WORKMANSHIP BE REPLACED OR REPAIRED. ON FAILURE OF GUARANTOR TO DO THE ABOVE AFTER WRITTEN NOTICE FROM OWNER, THE OWNER MAY HAVE THE WORK DOWN AT THE COST OF GUARANTOR. LOSS OF REFRIGERANT IS CONSIDERED A DEFECT IN WORKMANSHIP AND/OR EQUIPMENT, TO BE CORRECTED AS REQUIRED AT NO EXTRA COST TO THE OWNER.

PROVIDE EXTENDED FIVE (5) YEAR FACTORY PARTS & LABOR WARRANTY ON ALL AIR CONDITIONING COMPRESSORS.

AIR CONDITIONING, HEATING AND VENTILATING

SCOPE
WORK UNDER THIS SECTION INCLUDES FURNISHING ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR THE REMODELING, INSTALLATION AND PLACING INTO OPERATION THE HEATING, VENTILATING AND AIR CONDITIONING WORK AS SPECIFIED HEREIN AND INDICATED ON THE DRAWINGS.

VERIFICATION OF DIMENSIONS:
SCALED AND FIGURED DIMENSIONS ARE APPROXIMATE ONLY. BEFORE PROCEEDING WITH WORK, CAREFULLY CHECK AND VERIFY AT THE SITE, AND RESPONSIBLE FOR PROPERLY FITTING EQUIPMENT AND MATERIALS TOGETHER AND TO THE STRUCTURE IN SPACES PROVIDED. DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND MANY OFFSETS, BENDS, SPECIAL FITTINGS AND EXACT LOCATIONS ARE NOT INDICATED. CAREFULLY STUDY DRAWINGS AND PREMISES I ORDER TO DETERMINE BEST METHODS, EXACT LOCATIONS, ROUTES AND BUILDING OBSTRUCTIONS, PRESERVE HEADROOM, AND KEEP OPENINGS AND PASSAGEWAYS CLEAR.

CUTTING AND PATCHING:
CUT EXISTING WORK AND PATCH AS NECESSARY TO PROPERLY INSTALL THE NEW WORK. AS THE WORK PROGRESSES, LEAVE NECESSARY OPENINGS, HOLES AND CHASES, ETC., IN THEIR CORRECT LOCATIONS. IF THE REQUIRED OPENINGS, HOLES AND CHASES ETC., ARE NOT IN THEIR CORRECT LOCATIONS, MAKE THE NECESSARY CORRECTIONS AT NO COST TO THE OWNER. AVOID EXCESSIVE CUTTING AND DO NOT CUT STRUCTURAL MEMBERS WITHOUT CONSENT OF ARCHITECT.

REGULATIONS, PERMITS & INSPECTIONS
COMPLY WITH ALL APPLICABLE CODES, RULES AND REGULATIONS. ALL MATERIALS, EQUIPMENT AND WORK MUST CONFORM TO THE INTERNATIONAL MECHANICAL CODE. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND LICENSES. WHEN REQUIRED BY CODE, ALL WORK MUST BE INSPECTED AND APPROVED BY LOCAL AUTHORITIES.

DUCTWORK
ALL DUCTWORK FABRICATED AS PER LATEST INTERNATIONAL MECHANICAL CODE REQUIREMENTS AND SMACNA MANUAL. EXTENSION OF EXISTING DUCTWORK SHALL BE MADE WITH SOME MATERIAL. DUCTWORK SHALL BE CONSTRUCTED OF NEW HOT-DIPPED GALVANIZED SHEET METAL ASTM A-120 FOR EACH SIDE, WITH 1", 1 1/2 LB. DENSITY DUCT LINER. TAPE ALL CROSS-JOINTS IN SHEET METAL DUCT WITH HARDCAST. TAKE-OFF FITTINGS SHALL BE CONICAL SPIN-IN WITH QUADRANT DAMPER. TURNING VANES SHALL BE INSTALLED IN ALL MITERED ELBOWS.

FLEXIBLE DUCT
FLEXIBLE DUCT MAY BE USED FOR FINAL CONNECTION TO AIR DISTRIBUTION DEVICES, BUT SHALL NOT EXCEED 6 FEET IN LENGTH. FLEXIBLE DUCT SHALL HAVE A MINIMUM R-8 INSULATION VALUE.

DUCT INSULATION
DUCT SIZES ON DRAWINGS ARE "CLEAR INSIDE." INCREASE SHEET METAL SIZES ACCORDINGLY FOR LINED DUCTWORK. ADHESIVE AND INSULATING MATERIALS SHALL HAVE COMPOSITE FIRE AND SMOKE HAZARD RATINGS MAXIMUM 25 FOR FLAME SPREAD AND 50 FOR SMOKE DEVELOPED. ADHESIVES SHALL BE WATERPROOF.

DUCT INSULATION SCHEDULE:

CONCEALED RECTANGULAR	LINED
CONCEALED ROUND	LINED

DUCTS IN CONDITIONED SPACE OR UNCONDITIONED SPACE SEPARATED FROM BUILDING EXTERIOR :
RECTANGULAR LINED DUCTWORK – SEMI-RIGID GLASS FIBER INSULATION, 1 1/2 PCF,
1 1/2" THICK, THERMAL CONDUCTIVITY AT 75°. MAXIMUM 0.17 BTU/IN./SQ. FT./DEG./HR. MINIMUM "R-VALUE" SHALL BE 6.0.

DUCTS IN UNCONDITIONED SPACE OR EXTERIOR:
LINED DUCTWORK – SEMI-RIGID GLASS FIBER INSULATION, 1 1/2 PCF, 2" THICK, THERMAL CONDUCTIVITY AT 75°. MAXIMUM 0.13 BTU/IN./SQ. FT./DEG./HR. MINIMUM "R-VALUE" SHALL BE 8.0.

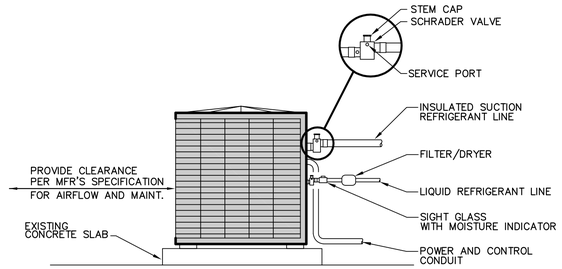
EXTERIOR DUCT SHALL BE SEALED WATER TIGHT.

ACCEPTABLE MANUFACTURERS
THE FOLLOWING IS A LIST OF MANUFACTURERS WHOSE EQUIPMENT AND HVAC MATERIALS ARE ACCEPTABLE, SUBJECT TO CONFORMANCE WITH CONTRACT DOCUMENTS. VERIFY THAT THE EQUIPMENT WILL MEET ALL CAPACITIES, SPACE ALLOCATIONS, AND THAT THE WEIGHTS WILL NOT EXCEED STRUCTURAL DESIGN LOADS.

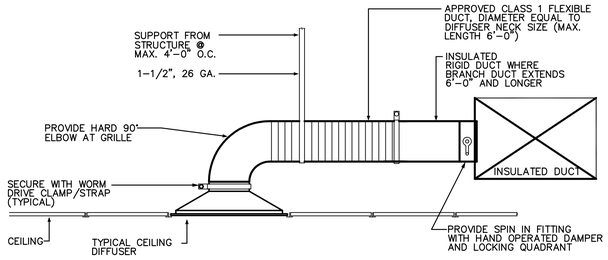
SPLIT SYSTEM FURNACE & AC: TRANE
GRILLES, REGISTERS, DIFFUSERS: KRUEGER, METAL-AIRE, TITUS,
FLEXIBLE DUCT: GENFLEX, THERMAFLEX, OR EQUIVALENT.
DUCT AND PIPE INSULATION: KNAUF, OWENS-CORNING, MANVILLE, CERTAIN-TEED, PPG.

AIR SYSTEM BALANCING
AIR SYSTEMS AND AIR DISTRIBUTION TEST AND BALANCE: THE CONTRACTOR SHALL INCLUDE IN HIS BID THE BALANCING AND TESTING OF HEATING, VENTILATION AND AIR CONDITIONING SYSTEMS TO BALANCE, ADJUST AND TEST AIR MOVING EQUIPMENT AND AIR DISTRIBUTING OR EXHAUSTING SYSTEMS AS HEREIN SPECIFIED. PROVIDE CERTIFIED REPORT.

INSTRUCTIONS/O&M MANUAL
THE CONTRACTOR SHALL INSTRUCT THE OWNER IN THE PROPER OPERATION AND MAINTENANCE OF ALL INSTALLED HVAC EQUIPMENT. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF TWO (2) BOUND OPERATING AND MAINTENANCE MANUALS TO THE OWNER AT THE COMPLETION OF THE PROJECT. THE MANUAL SHALL INCLUDE: CONTROL AND/OR INTERLOCK WIRING DIAGRAMS, SEQUENCE OF OPERATION, PREVENTATIVE MAINTENANCE ITEMS, AND A PARTS LIST WITH THE NOMENCLATURE, MAINTENANCE SCHEDULE, AND NAME, ADDRESS AND PHONE NUMBER OF THE LOCAL PRODUCT REPRESENTATIVE.



CONDENSING UNIT DETAIL
NOT TO SCALE
1 / M4.0



BRANCH DUCT TAKE-OFF DETAIL
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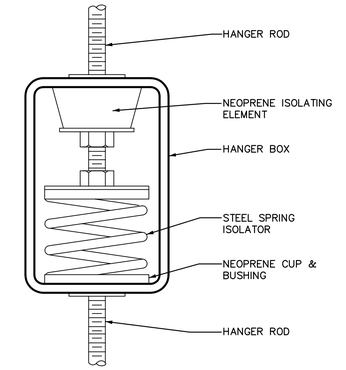
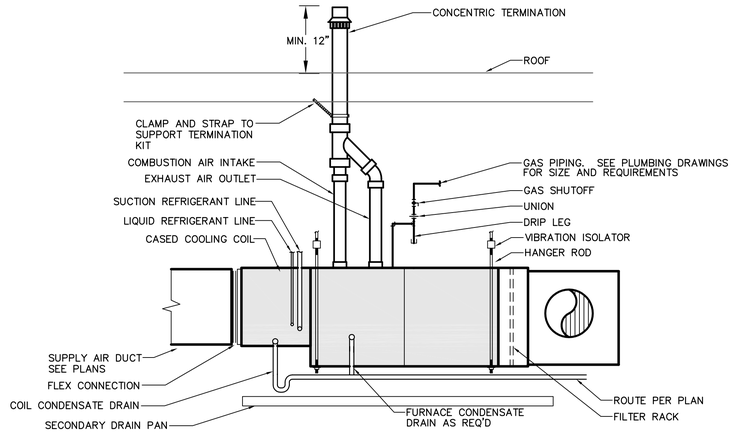
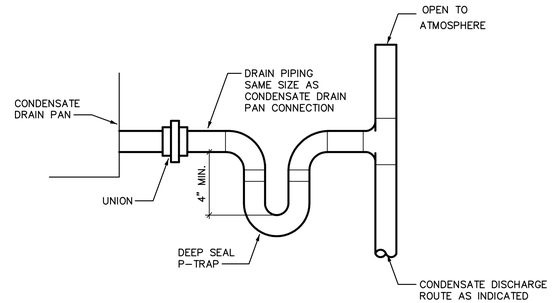
4 / M4.0



FURNACE HANGER DETAIL
NOT TO SCALE
2 / M4.0



HORIZONTAL GAS FURNACE DETAIL
NOT TO SCALE
5 / M4.0



CONDENSATE PIPING AT UNIT DETAIL
NOT TO SCALE
3 / M4.0

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ARCHITECTURE & PLANNING

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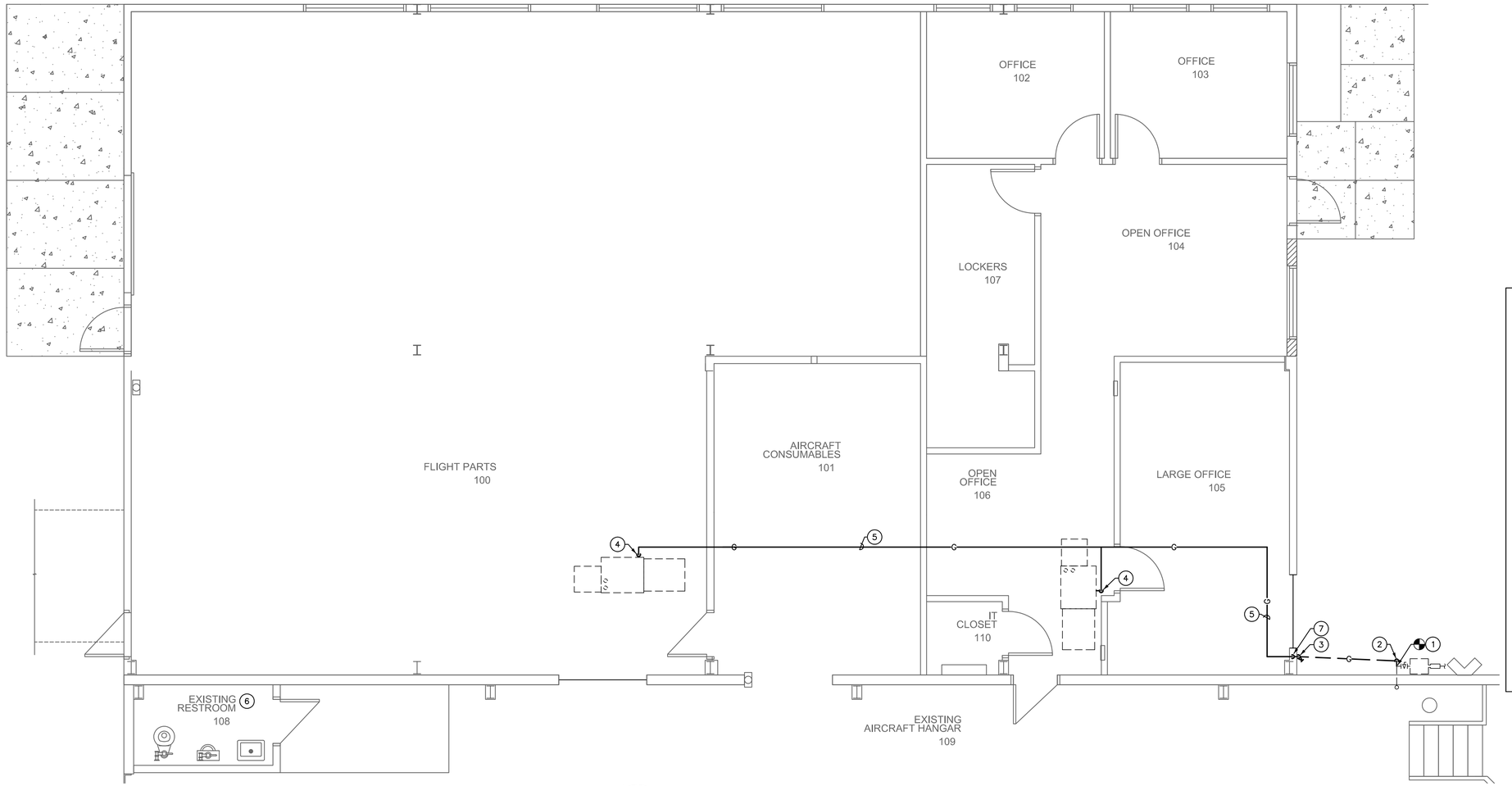


1 Plumbing Floor Plan

Scale: 1/4"=1'-0"

Plan North

KEYNOTES

1. CONNECT NEW GAS LINE TO EXISTING GAS OUT OF METER.
2. GAS PIPING DOWN TO ROUTE BELOW GRADE & EXTEND TO BUILDING.
3. GAS PIPING RISE FROM BELOW GRADE & ENTER BUILDING. PROVIDE SHUTOFF COCK AT EXTERIOR RISER.
4. GAS PIPING CONNECTION TO NEW FURNACE. PROVIDE LUBRICATED GAS COCK & 6" DIRT LEG AT UNIT CONNECTION.
5. COORDINATE ROUTING OF NEW GAS PIPING WITH NEW DUCTWORK & EXISTING CONDITIONS.
6. EXISTING RESTROOM – NO WORK REQUIRED.
7. GAS PIPING RISE IN WALL TO ROUTE ABOVE CEILING.

GAS PIPING NOTES:

1. MINIMUM DEPTH OF GAS PIPING TO BE 18" BELOW GRADE.
2. GAS PIPING SHALL NOT BE INSTALLED IN OR ON THE GROUND UNDER ANY BUILDING.
3. GAS PIPING SHALL NOT RUN IN HOLLOW CORE OF BLOCK.
4. PROVIDE SHUT–OFF COCK, UNION AND 6" LONG DIRT LEG WITH CAP AT EACH GAS LINE DROP TO APPLIANCE. DIRT LEG SHALL BE LOCATED DOWNSTREAM OF THE THE SHUT–OFF COCK.
5. ALL GAS USING EQUIPMENT TO BE NATURAL FUEL.
6. DO NOT USE FLEXIBLE PIPE CONNECTIONS TO EQUIPMENT.
7. ALL GAS PIPING UNDER ASPHALT OR CONCRETE PAVING ADJOINING BUILDING MUST BE SLEEVED IN GAS TIGHT PIPE (SCHEDULE 40 PVC PIPE), SLEEVE SIZE SHALL (MINIMUM) 2 PIPE SIZES LARGER THAN THE GAS PIPE.
8. ALL GAS PIPING, MATERIALS, VALVES, FITTINGS, INSTALLATION AND TESTING SHALL COMPLY WITH CHAP. 4, 2012 INTERNATIONAL FUEL GAS CODE.
9. VERIFY ALL GAS BTU/H INPUTS WITH ACTUAL BTU/H INPUT OF APPLIANCE SUPPLIED.
10. ALL GAS LINES INSTALLED THROUGH CMU WALLS, ETC., SHALL BE SLEEVED WITH STEEL PIPE A MINIMUM OF (2) (TWO) PIPE SIZES LARGER THAN THE GAS PIPE.
11. EXTERIOR GAS PIPING SHALL RECEIVE ONE COAT EACH OF A RUST AND WEATHER RESISTANT PRIMER AND TOP COAT. COORDINATE WITH ARCHITECT FOR COLOR.

PLUMBING SPECIFICATIONS:

1. GENERAL

1..1 Scope: Work under this section includes coordinating and furnishing all labor and material necessary to install a complete plumbing system as shown and specified and in accordance with the codes. Contractor shall pay for all permits, meters, fees, city inspections, legal notices, etc., as required.

1..2 Submittals: Within 15 days after award of contract, submit 8 copies of all items.

1..3 Record Drawings: Provide a set to the Architect at completion of project.

1..4 Instructions: Provide maintenance manual and instruct Owner in the proper operation and maintenance of the equipment.

1..5 Guarantee: One year on labor, material and equipment.

2. PRODUCTS

2..1.1 Gas Piping:

2..1.1.1 Gas Piping, interior above slab: Schedule 40 black steel conforming to ASTM A53. Fittings shall conform to the following:

2..1.1.1.1 Pipe 2" and Smaller: 150 psi, black malleable iron, conforming to ANSI B16.3, 150 psi SWP.

2..1.1.1.2 Pipe 2–1/2" and Larger: Black steel seamless welding fittings conforming to ANSI B16.9 and USAS B16.25, 150 psi SWP.

2..1.1.1.3 Unions: Black malleable iron screwed connections, ground iron–to–bronze seat, conforming to ASTM A47, 250 psi SWP.

2..1.1.1.4 Flanges: Black forged steel with weld neck flanges conforming to ANSI B16.5, 150 psi SWP.

2..1.1.2 Gas Piping, above grade or slab, exterior: Schedule 40 galvanized steel, conforming to ASTM A53–A, approved for natural gas. Fittings: 150# galvanized steel screwed fittings.

2..1.1.3 Gas piping, below grade or slab: Polyethylene (PE) pipe, conforming to ASTM D2513, with heat fused joints. Installed in accordance with IAPMO IS 12–83. All piping installed below slab shall be properly sleeved and vented. Verify proposed installation is acceptable to Authority Having Jurisdiction prior to construction.

2..1.2 Tracer Wire: Provide approved 14 gage copper (orange covered) tracer wire along all non metallic underground piping.

2..2 Valves:

2..2.1 Gas Valves, 1/2" and Smaller: Milwaukee BB–1–102.

2..2.2 Gas Valves, 1" to 1–1/2": Rockwell–Nordstrom #142 with #555 lubricant for natural gas service.

2..2.3 Gas Valves, 2" and Larger: Rockwell–Nordstrom #143 with #555 lubricant for natural gas service.

2..3 Pipe Hangers and Supports: Fee & Mason Figure 103 clevis hanger for insulated pipe and Figure 104 clevis hanger for cast iron pipe. Install #500 Trisolators on uninsulated copper lines at all hangers and wall penetrations.

2..4 Acceptable Manufacturers: The following is a list of manufacturers whose equipment is acceptable as to manufacturer, subject to conformance with all drawings, specifications and addenda items:

Valves: Milwaukee, Rockwell–Nordstrom, Butterball.

Hangers: Grinnell, Fee & Mason, Elcen, Kin–Line, F & S, B–Line, Michigan.

3. EXECUTION

3..1 Tests and Inspections:

3..1.1 All work to be tested and approved before covering as directed by Architect. Remake all leaking joints.

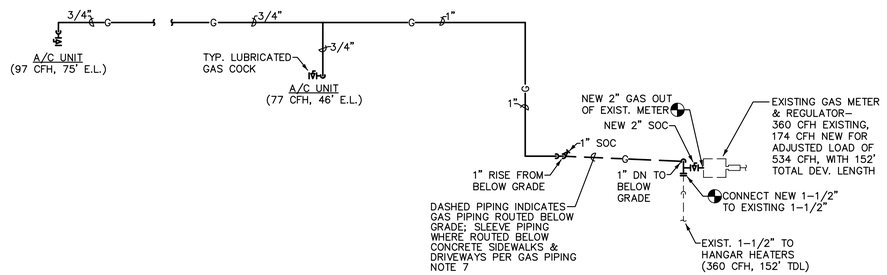
3..1.2 Gas System: Hold at 50 psi pneumatic for four hours with no pressure loss.

3..2 Flashing, Sleeves and Escutcheon Plates:

3..2.1 Flashing: Supply flashing for all vent pipe and other types of piping through roof to be installed with roofing. Flash vents with Stoneman S1300–4 or with sheet lead weighing not less than 4 pounds per square foot or equal. Extend flashing into roofing at least 10" from vent and turn flashing over and down into vent opening.

3..2.2 Sleeves: Use 20 gauge galvanized steel sleeves around pipes passing through masonry walls and concrete slabs.

3..2.3 Escutcheon Plates: Install cast brass split ring with setscrew at all locations where exposed pipes pass through walls, floors and/or ceilings. Provide polished chrome–plated escutcheons in finished rooms, all others polished brass.



NEW PIPING SIZED PER 2012 IFGC, TABLE G2413.4(1), WITH 75' TOTAL DEVELOPED LENGTH.

GAS PIPING DIAGRAM

NTS

NOTE:
LOCATIONS AND SIZES FOR ALL ITEMS ARE BASED ON THE BEST INFORMATION AVAILABLE. SOME ITEMS SHOWN ARE TO INDICATE THE INTENT OF THE PLUMBING SYSTEMS BUT MAY NOT NECESSARILY REFLECT THE EXACT ROUTING AND LOCATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL LOCATIONS AND SIZES OF THOSE ITEMS REQUIRING MODIFICATIONS.

PLUMBING LEGEND

SYMBOL	ABBR.	DESCRIPTION
	SOC	SHUTOFF COCK
—G—	G	NATURAL GAS PIPING

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Date Signed 12/10/19
ARIZONA U.S.A.

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ARCHITECTURE & PLANNING

DRAWING: Plumbing Floor Plan

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

DRAWN BY	
CHECKED BY	
DATE	December 20th, 2019
JOB NO.	
SHEET	P2.0

Jan 09, 2020 - 9:39am

ELECTRICAL SYMBOLS

NOTE: NOT ALL SYMBOLS ARE USED ON THIS PROJECT

- A / a — FLUORESCENT FIXTURE, WITH FIXTURE DESIGNATED BY LETTER. SMALL LETTER INDICATES SWITCH LEG
- NL — NIGHT LIGHT– NOT SWITCHED OR EMERGENCY
- FLUORESCENT STRIP FIXTURE.
- CEILING OR WALLMOUNTED FIXTURE.
- PC — PORCELAIN PULL CHAIN FIXTURE
- J — JUNCTION BOX
- JUNCTION BOX WITH FLEX CONNECTION.
- SINGLE FACE EXIT SIGN– NOT SWITCHED
- DOUBLE FACED EXIT SIGN– NOT SWITCHED.
- TWO HEAD EMERGENCY LIGHT WITH BATTERY.
- S — SINGLE POLE SWITCH, + 48" A.F.F. (20A–120/277V)
- S_3 — THREE WAY SWITCH, + 48" A.F.F. (20A–120/277V)
- S_4 — 4–WAY SWITCH +48" AFF (20A–120/277V)
- S_P — SWITCH AND PILOT LIGHT (20A–120–/277V)
- S_K — SINGLE POLE SWITCH, KEY OPERATED (20A)
- WALL OR CEILING MOUNTED MOTION SENSOR MANUFACTURE BY LAVITON
- DIMMER CONTROL, + 48" A.F.F. TYPE, RATING AS NOTED
- DUPLEX RECEPTACLE, + 18" A.F.F. (20A)
- DUPLEX RECEPTACLE ABOVE COUNTER, VERIFY HEIGHT. (20A)
- FOURPLEX RECEPTACLE, + 18" A.F.F. (20A)
- HALF SWITCHED DUPLEX RECEPTACLE (20A)
- SPECIAL RECEPTACLE – SIZE & TYPE AS NOTED
- POWER / PHONE / DATA FLUSH FLOOR OUTLET
- TELEPHONE OUTLET PLASTER RING AT + 18" A.F.F. HUBBELL #P12 COVERPLATE. 3/4"C TO CEILING SPACE UNLESS SHOWN WITH HOMERUNS.
- DATA SYSTEM OUTLET, 4" SQUARE BOX AND COVERPLATE, 3/4" C. TO CEILING SPACE UNLESS SHOWN WITH HOMERUN, + 18" A.F.F.
- TELE/DATA COMBO OUTLET, 4" SQUARE BOX AND COVERPLATE, 3/4" C. TO CEILING SPACE UNLESS SHOWN WITH HOMERUN, + 18" A.F.F.
- CABLE TELEVISION (CATV) OUTLET PLASTER RING AT + 18" A.F.F. U.N.O. HUBBELL COVERPLATE. 3/4"C TO CEILING SPACE UNLESS SHOWN WITH HOMERUNS.
- T — TELPHONE SYSTEM CONDUIT HOMERUN WITH NYLON PULLWIRE (1"C MIN UNO)
- TV — CLOSED CIRCUIT TV (CCTV) OUTLET SAME AS CATV OUTLET
- REMOTE CONTROL STATION @ +48" AFF
- DISCONNECT SWITCH, FUSE PER EQUIPMENT MANUFACTURERS RECOMMENDATION. OUTSIDE NEMA 3R – N.F. = NON–FUSED.
- COMBINATION STARTER AND FUSIBLE DISCONNECT SWITCH SIZE AS NOTED
- E — EQUIPMENT TERMINATION CONNECTION POINT VERIFY EXACT LOCATION LOAD AND VOLTAGE AS NOTED
- MOTOR
- SM — THERMAL PROTECTED SWITCH
- MOTOR STARTER – SHADING INDICATES F.B.O.
- DISTRIBUTION PANELBOARD.
- BRANCH CIRCUIT PANELBOARD.
- CONDUIT BELOW FLOOR OR UNDERGROUND
- CONDUIT IN WALL OR ABOVE CEILING
- HOMERUN TO PANEL
- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- CONDUIT STUB–OUT, MARK AND CAP AS DIRECTED
- GROUND WIRE (SIZE AS NOTED) EXTENDED AND CONNECTED TO APP'D GROUND

ALL WIRING #6 AWG AND LARGER SHALL BE XHHW COPPER. #8 AWG AND SMALLER SHALL BE THHN/THWN COPPER

SPECIFICATIONS

1. PRIOR TO SUBMITTING BID, SUBCONTRACTORS SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL HAVE TO OPERATE AND WHICH IN ANY WAY AFFECTS THE WORK UNDER HIS CONTRACT. NO SUBSEQUENT ALLOWANCE WILL BE MADE IN BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLIGENCE ON HIS PART.
2. THE SUBCONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR THE PROPER RESTORATION OF ALL EXISTING SURFACES REQUIRING PATCHING, PLASTERING, PAINTING AND /OR OTHER REPAIR DUE TO THE INSTALLATION OF ELECTRICAL WORK UNDER THE TERMS OF THE CONTRACT. CLOSE ALL OPENINGS, REPAIR ALL SURFACES, ETC., AS REQUIRED.
3. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS AND BUILDING DETAILS. VERIFY LOCATION OF ALL OUTLETS, SWITCHES, AND WALL MOUNTED LIGHTING FIXTURES WITH ARCHITECTURAL DRAWINGS AND ACTUAL CONDITIONS. VERIFY ALL CEILING TYPES WITH ARCHITECTURAL DRAWINGS BEFORE ORDERING FIXTURES.
4. PRIOR TO ROUGH–IN AND FINAL CONNECTION, VERIFY ELECTRICAL CHARACTERISTICS AND EXACT LOCATION OF EQUIPMENT.
5. GROUT AND SEAL ALL CONDUIT PENETRATIONS OF WALLS AND FLOOR SLABS TO PRESERVE FIRE RATING AND WATERTIGHT INTEGRITY.
6. BRANCH CIRCUIT WIRING SHALL BE THHN/THWN INSULATION. PANEL FEEDERS SHALL BE TYPE XHHW. ALL WIRE SHALL BE COPPER. MINIMUM WIRE SIZE SHALL BE #12.
7. ALL WIRING TO BE INSTALLED IN RACEWAYS. TYPE OF RACEWAY SHALL BE AS REQUIRED BY CODE. MINIMUM CONDUIT SIZE SHALL BE 1/2".
8. PROVIDE CODE SIZED BOND WIRE IN ALL EMT, FLEXIBLE CONDUIT
9. ALL ELECTRICAL EQUIPMENT SHALL BE NEW , U.L. APPROVED AND COMMERCIAL GRADE.
10. WIRE RATED FOR 150° CENTIGRADE SHALL BE USED FOR ALL INCANDESCENT LIGHTING FIXTURES.
11. ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST NATIONAL CODE, (N.E.C.), AND ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES.
12. PROVIDE TYPEWRITTEN DESCRIPTIVE PANEL DIRECTORIES

FIRE WALL/FLOOR PENETRATION

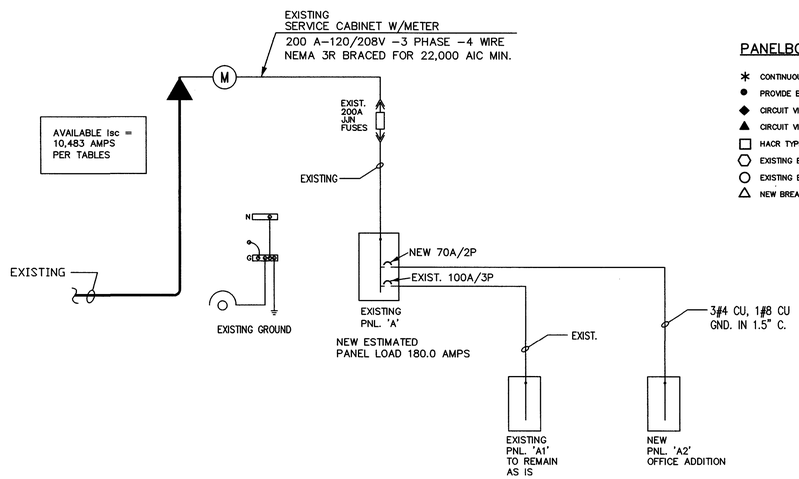
ALL PENETRATIONS OF FIRE RESISTIVE FLOORS OR SHAFT WALLS SHALL BE PROTECTED BY MATERIALS AND INSTALLATION DETAIL THAT CONFORM TO UNDERWRITERS LABORATORY'S LISTINGS FOR THROUGH PENETRATION FIRESTOP SYSTEMS. THE CONTRACTOR SHALL SUBMIT SHOP DRAWING DETAILS WHICH SHOW COMPLETE CONFORMANCE WITH THE LISTING TO THE ARCHITECT AND SUCH DRAWINGS SHALL BE AVAILABLE TO THE LOCAL GOVERNING INSPECTORS. THE DRAWINGS SHALL BE SPECIFIC FOR EACH PENETRATION WITH ALL VARIABLES DEFINED.

OUTLET MOUNTING HEIGHTS PER AMERICAN DISABILITY ACT

SWITCHES	+48" (MAX)
RECEPTACLES	+18" (MIN.)
TELEPHONE/DATA	+18" (MIN.)
SIDE REACH	+54" (MAX)

GENERAL ELECTRICAL DEMOLITION NOTES

1. RETURN REMOVED MATERIAL DEEMED SALVAGEABLE TO OWNER'S REPRESENTATIVE. MATERIALS DEEMED NOT SALVAGEABLE SHALL BE REMOVED FROM THE PREMISES.
2. THE CONTRACTOR WILL EXAMINE THE PREMISES AND SATISFIED HIMSELF AS TO EXISTING CONDITIONS UNDER WHICH HE WILL BE OBLIGED TO PERFORM HIS WORK. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND THE CONTRACTOR SHALL FIELD VERIFY ALL DETAILS OF DEMOLITION.
3. REMOVE ALL EXISTING WIRING DEVICES, LIGHT FIXTURES, WIRE, CONDUIT, DISCONNECTS, ETC., AS NOTED OR INDICATED WITHIN DEMOLITION AREA. (ALL ITEMS MAY NOT BE SHOWN.) REWORK AS NECESSARY ALL CIRCUITING WHICH REQUIRES CONTINUATION THROUGH THE AREA.
4. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK REQUIRED TO REMOVE/RELOCATE ANY EXISTING ELECTRICAL EQUIPMENT SUCH THAT ELECTRIC SHOCK HAZARDS TO WORKMEN ARE ELIMINATED DURING DEMOLITION AND NEW CONSTRUCTION.
5. REMOVED OR DAMAGED CONDUIT, WIRE AND FITTINGS SHALL NOT BE RE–USED
6. WORK REQUIRED FOR EXISTING EQUIPMENT NOTED AS "EXISTING TO BE REMOVED" SHALL INCLUDE:
   - A. SALVAGING OR DISPOSING OF ALL MATERIAL OR EQUIPMENT AS DIRECTED BY OWNER OR OWER'S REPRESENTATIVE.
   - B. REMOVAL OF FEEDER OR CABLING FROM EQUIPMENT TO POINT OF FEED.
   - C. REMOVAL OR RECIRCUITING (AS REQUIRED OR AS NOTED ON PANELS) OF ALL BRANCH CIRCUITING.
   - D. REMOVAL OF ALL FITTINGS, SUPPORTS, BRACKETS, ETC.
   - E. REPAIR AND PATCHING OF WALLS, FLOORS AND CEILINGS TO MATCH EXISTING OR PER ARCHITECT'S INSTRUCTIONS.
   - F. CAPPING OF IN–SLAB FEEDER CONDUITS FLUSH WITH THE FINISHED FLOOR.
   - G. CAPPING OF FEEDER CIRCUITS AT 6" ABOVE OR BELOW THE FLOOR OR CEILING FOR IN–SLAB CONDUITS LOCATED UP NEXT TO A WALL OR FOR CEILING AREA CONDUITS.
   - H. THE OPPOSITE END LOCATION OF ALL EMPTY FEEDER CONDUITS AT SWITCHBOARDS, PANELBOARDS, ETC., SHALL BE MARKED USING AN ENGRAVED BRASS TAG ATTACHED TO THE CONDUIT.
   - I. EXISTING FEEDER CONDUITS SHALL BE REMOVED OR CUT OFF AND ABANDONED IF FOUND TO BE UNSALVAGEABLE BY THE OWNER, ARCHITECT OR ENGINEER.
7. EXISTING EQUIPMENT NOT IMPICITLY SHOWN ON THE DRAWINGS IS INTENDED TO BE "EXISTING TO REMAIN, " UNLESS NOTED OTHERWISE.



EXIST. ONE LINE DIAGRAM

N.T.S.

PANELBOARD SYMBOLS

- ✱ CONTINUOUS DUTY/LARGEST MOTOR @ 125%
- ● PROVIDE BREAKER W/ HANDLE "LOCK–ON" DEVICE
- ◆ CIRCUIT VIA TIMECLOCK
- ▲ CIRCUIT VIA PHOTOCELL
- □ HACR TYPE CIRCUIT BREAKER
- ○ EXISTING BREAKER W/ NEW LOAD
- ○ EXISTING BREAKER W/ EXISTING LOAD
- △ NEW BREAKER W/ NEW LOAD

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REVISIONS	BY

EXPIRES 12/30/2021

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ARCHITECTURE & PLANNING

DRAWING: Electrical Panel Schedule, Spec's., Symbols With Notes

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

DRAWN BY: R. A.
CHECKED BY: A. O.
DATE: December 20th, 2019
JOB NO.
SHEET: E1.0

Feb 13, 2020 - 11:48am

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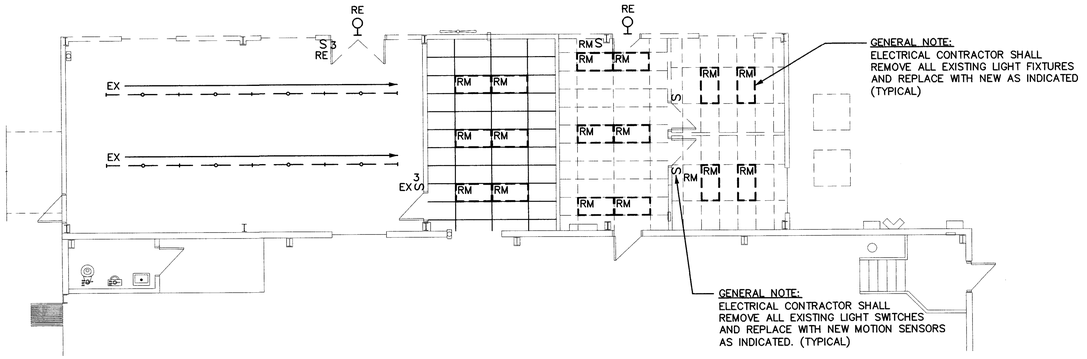
ARCHITECTURE & PLANNING

ABBREVIATIONS

EX	EXISTING LIGHT OR DEVICE TO REMAIN
RE	EXISTING LIGHT OR DEVICE TO BE REPLACED OR RELOCATED EXTEND CIRCUITING AS REQUIRED IF NOT SHOWN.
ER	REPLACED OR RELOCATED LIGHT OR DEVICE
RM	REMOVED LIGHT OR DEVICE
A.F.F.	ABOVE FINISHED FLOOR (℄ OF OUTLET)
A.F.G.	ABOVE FINISHED GRADE (℄ OF OUTLET)
E.C.	EMPTY CONDUIT
UNO	UNLESS OTHERWISE NOTED
FBO	FURNISHED BY OTHERS
NL	NIGHT LIGHT
TYP	TYPICAL



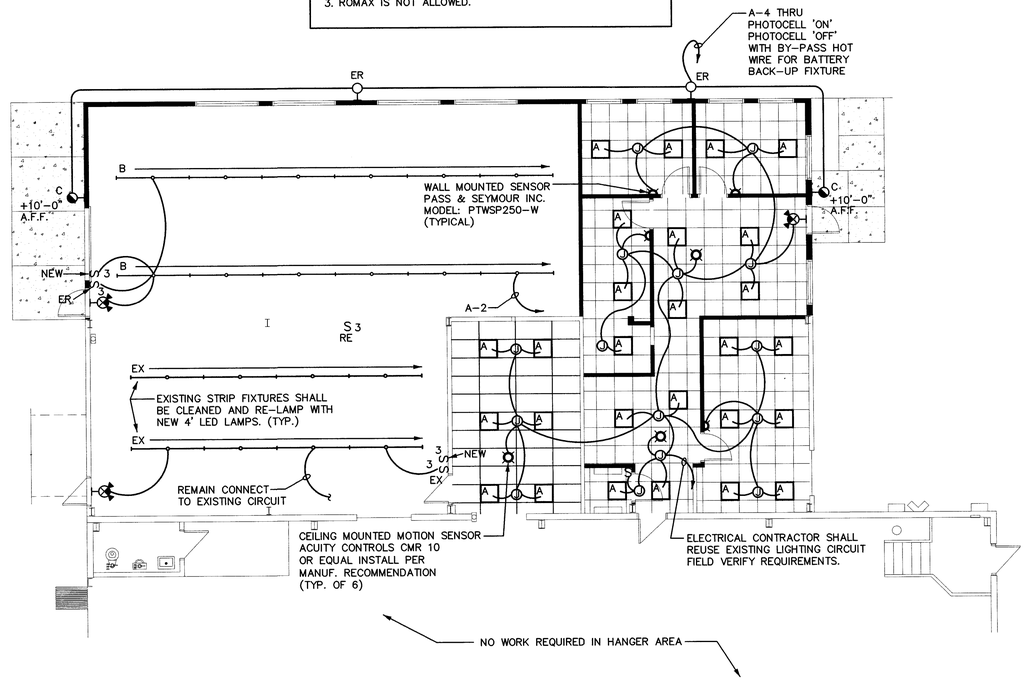
Lighting Demolition Floor Plan

Scale: 1/8"=1'-0"

Plan North

GENERAL LIGHTING NOTES:

1. CONTRACTOR SHALL VERIFY ALL MOUNTING HEIGHTS EXACT LOCATION AND REQUIREMENTS OF ALL LIGHTING FIXTURES AND SWITCHES WITH OWNER PRIOR TO ROUGH-IN.
2. NIGHT LIGHTS (NL), EMERGENCY & EXIT LIGHT FIXTURES SHALL BE CONNECTED TO UNSWITCHED LEG OF CIRCUIT.
3. ROMAX IS NOT ALLOWED.



New Lighting Design Floor Plan

Scale: 1/8"=1'-0"

Plan North

LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER AND MODEL NO.	VOLTS	LAMPS	MOUNTING	FINISH	REMARKS
A	RAB LIGHTING PANEL 2'x2' 40/D10/LC	120	39.5 WATT LEDS	LAY-IN	STANDARD	PANEL 2' x 2' LED - 4000 COLOR TEMP.
B	LITHONIA WL4 40L LP835	120	LEDS - 24 WATT	PENDENT VERIFY HEIGHT	STANDARD	LED STRIP FIXTURE
C	LITHONIA - WST LED P1 30K WF MVOLT DDBXD E20WC	120	LED - 25 WATT 35K CR1	WALL MOUNTED VERIFY HEIGHT	BRONZE	LED FULL CUT OFF WALL MOUNT
EH	LITHONIA LHQM S W 1 R 120 H	120	LED & (2) 6W HAL. FURN'D. WITH UNIT	WALL- 12" ABOVE DOOR	WHITE HOUSING RED LETTER	COMBINATION EMERGENCY/EXIT LIGHT WITH LEAD-CAL. BATTERY

NOTES: (1) VERIFY ALL FINAL MOUNTING HEIGHTS WITH ARCHITECT.

DRAWING: New Lighting Design & Demolition Floor Plan With Notes

PROJECT: ERAU Building F5 Addition
6482 Corradi Way, Unit F5
Prescott, AZ 86301

APN: 102-03-003A

DRAWN BY	R.A.
CHECKED BY	A.O.
DATE	December 20th, 2019
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SHEET	E1.1

Feb 13, 2020 - 1:42pm

PANELBOARD A SCHEDULE

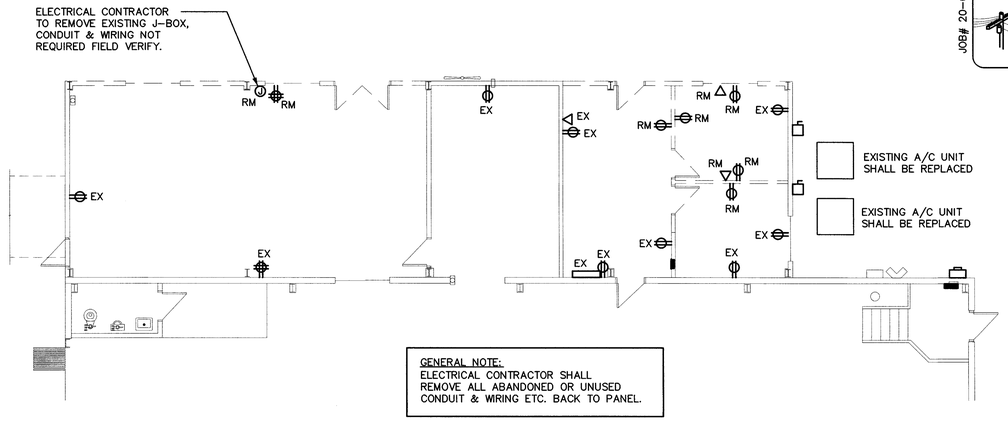
MAINS: 200A MLO				LOAD-✕ AMPS			LOCATION: SEE PLAN					
VOLTAGE: 120/208V, 3ø, 4W							MOUNTING: SURFACE					
TYPE: GE (EXISTING)							MIN. A.I.C.: EXISTING					
CIRCUIT DESCRIPTION	BKR.	CIR. NO.	ØA	ØB	ØC		CIR. NO.	BKR.	CIRCUIT DESCRIPTION			
△ NEW SUB-PANEL 'A2'	70 / 2	1	49.5				2		SPACE			
		3		28.1			4		SPACE			
○ EXISTING EQUIPMENT	20 / 1	5					6		EXISTING EQUIPMENT			○
	40 / 3	7					8	100 / 3				
		9					10					
		11					12					
	20 / 1	13					14	20 / 1				
	20 / 2	15					16					
		17					18					
	20 / 2	19					20					
		21					22	20 / 2				
	20 / 1	23					24					
		25					26	20 / 1				
		27					28					
		29					30					
		31					32					
		33					34					
		35					36	20 / 2				
		37					38					
SPACE		39					40		SPACE			
EXISTING EQUIPMENT	20 / 1	41					42	20 / 1	EXISTING EQUIPMENT			
TOTAL LOAD PER PHASE: ESTIMATED LOAD:			180.0	180.0	180.0		HI@	/	=	AMPS		

PANELBOARD A1 SCHEDULE

MAINS: 100				LOAD-✕ AMPS			LOCATION: SEE PLAN					
VOLTAGE: 120/208V, 3ø, 4W							MOUNTING: FLUSH (EXISTING)					
TYPE: SEIMENS							MIN. A.I.C.: EXISTING					
CIRCUIT DESCRIPTION	BKR.	CIR. NO.	ØA	ØB	ØC		CIR. NO.	BKR.	CIRCUIT DESCRIPTION			
○ EXISTING EQUIPMENT	20 / 1	1					2	30 / 2	EXISTING EQUIPMENT			
EXISTING EQUIPMENT	20 / 1	3					4					
○ NEW COND. UNIT CU-1 TO REPLACE EXIST.	30 / 3	5			18.0		6	20 / 1				
18.0 MCA, 208V, 3ø		7	18.0				8					
		9		18.0			10					
△ NEW COND. UNIT CU-2 TO REPLACE EXIST.	50 / 3	11			32.0		12					
32.0 MCA, 208V, 3ø		13	32.0				14					
		15		32.0			16					
SPACE		17					18		SPACE			
○ EXISTING COOLERS	20 / 3	19					20	20 / 3	EXISTING COOLERS			○
		21					22					
		23					24					
	20 / 3	25					26	20 / 3				
		27					28					
		29					30					
TOTAL LOAD PER PHASE: ESTIMATED LOAD:			70.0	70.0	70.0		HI@	/	=	AMPS		

PANELBOARD A2 SCHEDULE

MAINS: 70A MLO			LOAD-VA				LOCATION: SEE PLAN					
VOLTAGE: 120/208V, 1ø, 3W							MOUNTING: SURFACE					
TYPE: GE, EATON OR EQUAL							MIN. A.I.C.: 10,000					
CIRCUIT DESCRIPTION	BKR.	CIR. NO.	ØA	ØB			CIR. NO.	BKR.	CIRCUIT DESCRIPTION			
LIGHTS	20 / 1	1	500				2	20 / 1	RECEPT'S. -			
		3	720	200			4					
LIGHTS - EXTERIOR		5		720			6					
RECEPT'S. -		7	360				8					
		9	900	360			10					
RECEPT'S. -		11	720				12					
RECEPT'S. -		13	1080	1176			14		DOOR READER			
FURNACE F-1		15		200			16		SPARE			
FURNACE F-2		17	1656				18		SPACE			
RECEPT'S. - AV SYSTEM		19		400			20					
SPARE		21					22					
SPARE		23					24					
SPACE												
SPACE												
TOTAL LOAD PER PHASE:			5936	3776			HI@ 5936 / 120V = 49.5 AMPS					



Power Demolition Floor Plan

Scale: 1/8"=1'-0"

Plan North

PANELBOARD SYMBOLS

- ✱ CONTINUOUS DUTY/LARGEST MOTOR @ 125%
- ● PROVIDE BREAKER W/ HANDLE "LOCK-ON" DEVICE
- ◆ CIRCUIT VIA TIMECLOCK
- ▲ CIRCUIT VIA PHOTOCELL
- □ HACR TYPE CIRCUIT BREAKER
- ⬡ EXISTING BREAKER W/ NEW LOAD
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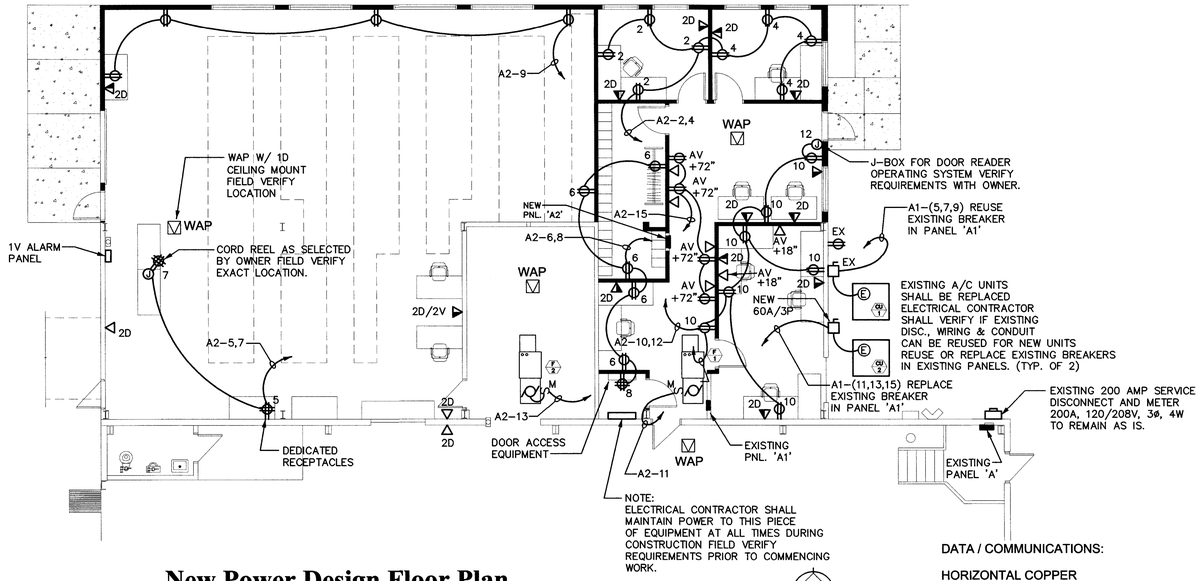

New Power Design Floor Plan

Scale: 1/8"=1'-0"

Plan North

GENERAL POWER NOTES:

1. CONTRACTOR SHALL VERIFY ALL MOUNTING HEIGHTS EXACT LOCATION AND REQUIREMENTS OF ALL ELECTRICAL EQUIPMENT AND DEVICES WITH ENG., OWNER OR ARCHITECT PRIOR TO ROUGH-IN.
2. ELECTRICAL CONTRACTOR SHALL RE-USE EXISTING CIRCUITS WHENEVER POSSIBLE.
3. ALL RECEPTACLES IN AREAS WITH-IN 6'-0" OF A SINK SHALL BE GFCI TYPE PER NEC
4. EXTERIOR & ROOF MOUNTED MAINT. RECEPT'S. SHALL BE WP, GFCI TYPE PER NEC
5. VERIFY THE EXACT LOCATIONS OF ALL TELEPHONE OUTLETS, DATA OUTLETS AND SPECIAL SYSTEMS OUTLETS WITH THE ARCHITECT/OWNER PRIOR TO ROUGH-IN.
6. ELECTRICAL CONTRACTOR SHALL PROVIDE COVER PLATES FOR ALL UNUSED OUTLETS, DATA OUTLETS AND SPECIAL SYSTEMS OUTLETS, FIELD VERIFY DEVICE NOT USED
7. ELECTRICAL CONTRACTOR SHALL VERIFY MECHANICAL EQUIPMENT REQUIREMENTS BREAKER, DISC. & WIRE SIZE WITH MANUFACTURER PRIOR TO ROUGH-IN.

DATA / COMMUNICATIONS:

HORIZONTAL COPPER

- PULL, TERMINATE, AND TEST A TOTAL OF 34 NEW DATA CABLES AND 3 NEW VOICE CABLE PER REMODEL PROGRAM.
- TERMINATE HORIZONTAL DATA CABLES TO NEW 48-PORT CAT6 PATCH PANEL IN BLDG-F5 EQUIPMENT ENCLOSURE
- TERMINATE HORIZONTAL VOICE CABLES TO EXISTING 110 BLOCK IN BLDG-F5 IT CLOSET.
- LEAVE UNTOUCHED EXISTING HORIZONTAL DATA TERMINATING IN BLDG-F5 EQUIPMENT ENCLOSURE.
- SUPPLY 25 FT AND 1 FT BLUE CAT6 PATCH CABLES. QUANTITY OF EACH LENGTH PATCH CABLES SUPPLIED SHALL EQUAL THE TOTAL NUMBER OF DATA PORTS INSTALLED.

GENERAL

- USE BLUE COLORED CAT6 CABLE AND JACKS FOR DATA PORTS AND WHITE COLORED CAT6 CABLE AND JACKS FOR VOICE PORTS.
- INTERNAL BUILDING CABLES SHALL BE ROUTED IN FRAMED WALLS AND ABOVE CEILING. CABLES MAY BE NEATLY SUSPENDED IN ENCLOSED CEILING AREAS USING CABLE HANGERS. CABLE MOLDING AND/OR SURFACE MOUNTED CONDUIT IS ACCEPTABLE IF THE CABLING CAN NOT BE ROUTED IN WALLS AND/OR ABOVE CEILING. MATCH EXISTING WALL COLORS WITH ALL SURFACE MOUNTED ITEMS.
- IT HEAD END EQUIPMENT WILL BE OWNER SUPPLIED.

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JOB# 20-04

REVISIONS	BY

Arizona Board of Technical Registration — CERTIFICATE NO. 7450 ANGELO OSSANNA — Date Signed 2/12/21 — ARIZONA, U.S.A. — EXPIRES 12/30/2021

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APN: 102-03-003A

DRAWN BY	R.A.
CHECKED BY	A.O.
DATE	December 20th, 2019
JOB NO.	
SHEET	E1.2

Feb 13, 2020 - 12:08pm