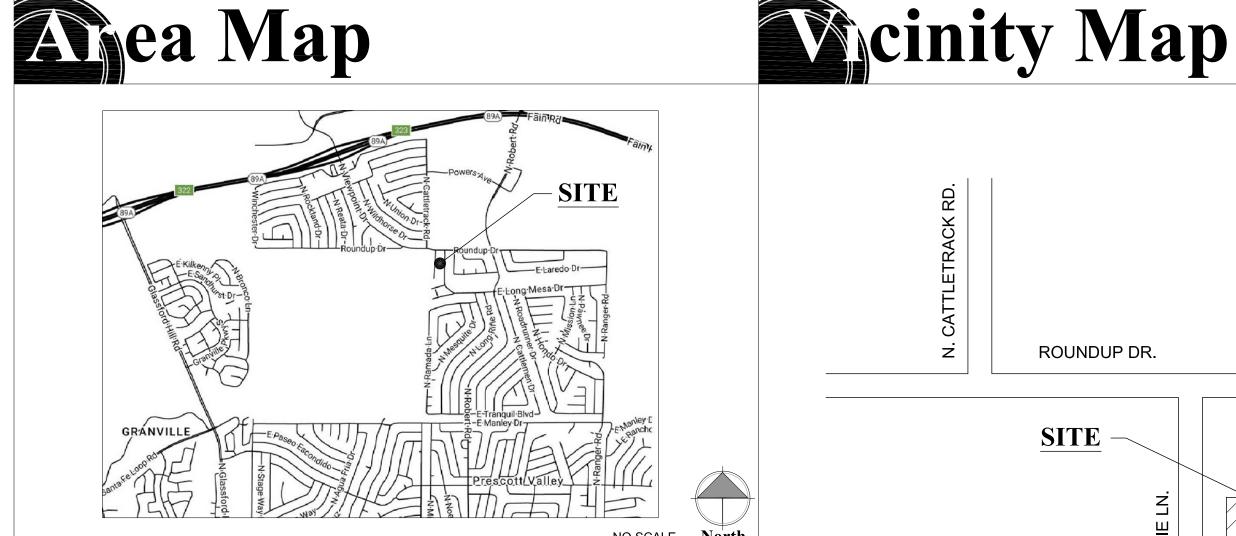
# Yavapai Mechanical Building Addition

# PRESCOTT VALLEY, ARIZONA



# Deferred Submittals

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

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.

# ROUNDUP DR. SITE

Caphic Standards

EXISTING DOOR

PROPOSED

DOOR

NORTH ARROW INDICATOR

DETAIL DESIGNATOR

BUILDING SECTION DESIGNATOR

GRID LINE DESIGNATOR

**REVISION DESIGNATOR** 

**ELEVATION DESIGNATOR** 

DESCRIPTIVE NOTE DESIGNATOR

ROOM NUMBER / FINISH DESIGNATOR

DOOR TYPE DESIGNATOR

WALL TYPE DESIGNATOR

DOOR NUMBER DESIGNATOR

WINDOW TYPE DESIGNATOR

(#)

# Roject Information Seet Index

Yavapai Mechanical 5860 N. Fulton Dr. Prescott Valley, AZ 86314

PH: 928-776-7025 Contact: Jeremy Rushton jrushton@ypeinc.com

W. Alan Kenson & Assoc., P.C. PH: 928-443-5812 P.O. Box 11593 Contact: Alan Kenson Prescott, AZ 86304 WAKA@cableone.net

Kenson Construction 6135 Corsair Ave. Prescott, AZ 86301

C3 Commercial

F2

5914 N. Fulton Dr. **JOBSITE ADDRESS:** Prescott Valley, AZ

PARCEL NUMBER: 103-33-297B

**CONST. TYPE:** 

**OCCUPANCY:** 

**EXISTING BLDG: EXISTING BLDG: PROPOSED ADDITION:** 

**CLIENT:** 

PREPARED BY:

**CONTRACTOR:** 

**ZONING:** 

Existing 3,578 S.F Existing 4,472 S.F Proposed 1st Floor: 3,120 2nd Floor: 2,045

**BUILDING CODES:** 

2012 International Building Code 2012 International Plumbing Code 2012 International Mechanical Code 2012 International Fuel Gas Code 2012 International Fire Code 2011 National Electric Code

2006 International Energy Conservation Code 2010 ADA Standards for Accessible Design

PARKING REQUIREMENTS: Parking is existing and adequate

#### ARCHITECTURAL

**Cover Sheet / Project Information** Occupancy / Egress and Code Summary **Civil Cover Sheet Architectural / Utilities Site Plan Grading and Drainage Plan Reflected Ceiling Plan** 

**Building Sections** Stair plans, Sections and Details **Guardrail Elevation and Detail** 

**Exterior Elevations Door Schedule and Materials Schedule** 

#### **STRUCTURAI**

**General Structural Notes Typical Details Foundation Plan** Framing Plans Structural Elevations **Foundation Details** Framing Details

**Mechanical & Plumbing Plans and Notes** 

**Lighting and Power Floor Plan with Notes** E1.0 E1.1 Electrical Site Plan, One-Line Diagram, Panel Schedule and Notes

# **Project Description**

YAVAPAI MECHANICAL INTENDS TO CONSTRUCT A BUILDING ADDITION BETWEEN TWO EXISTING BUILDINGS. A FIRE RISER WITH FIRE SPRINKLER SYSTEM AND FIRE ALARM SYSTEM WILL BE ADDED. UNIT HEATERS AND EVAPORATIVE COOLING WILL ALSO BE PROVIDED IN THE NEW PORTION OF THE BUILDING. THE ADDITION WILL BE CONSTRUCTED TO MATCH THE EXISTING BUILDINGS USING STEEL CUSTOM STRUCTURE.

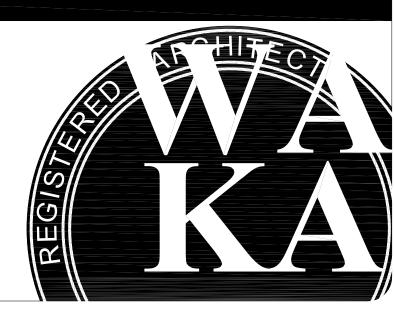
# **Architect:**

# W. Alan Kenson & Associates, P.C.

P 928-443-5812 F 928-443-5815 P.O. Box 11593 Prescott, AZ 86304

email: waka@cableone.net www.kenson-associates.com

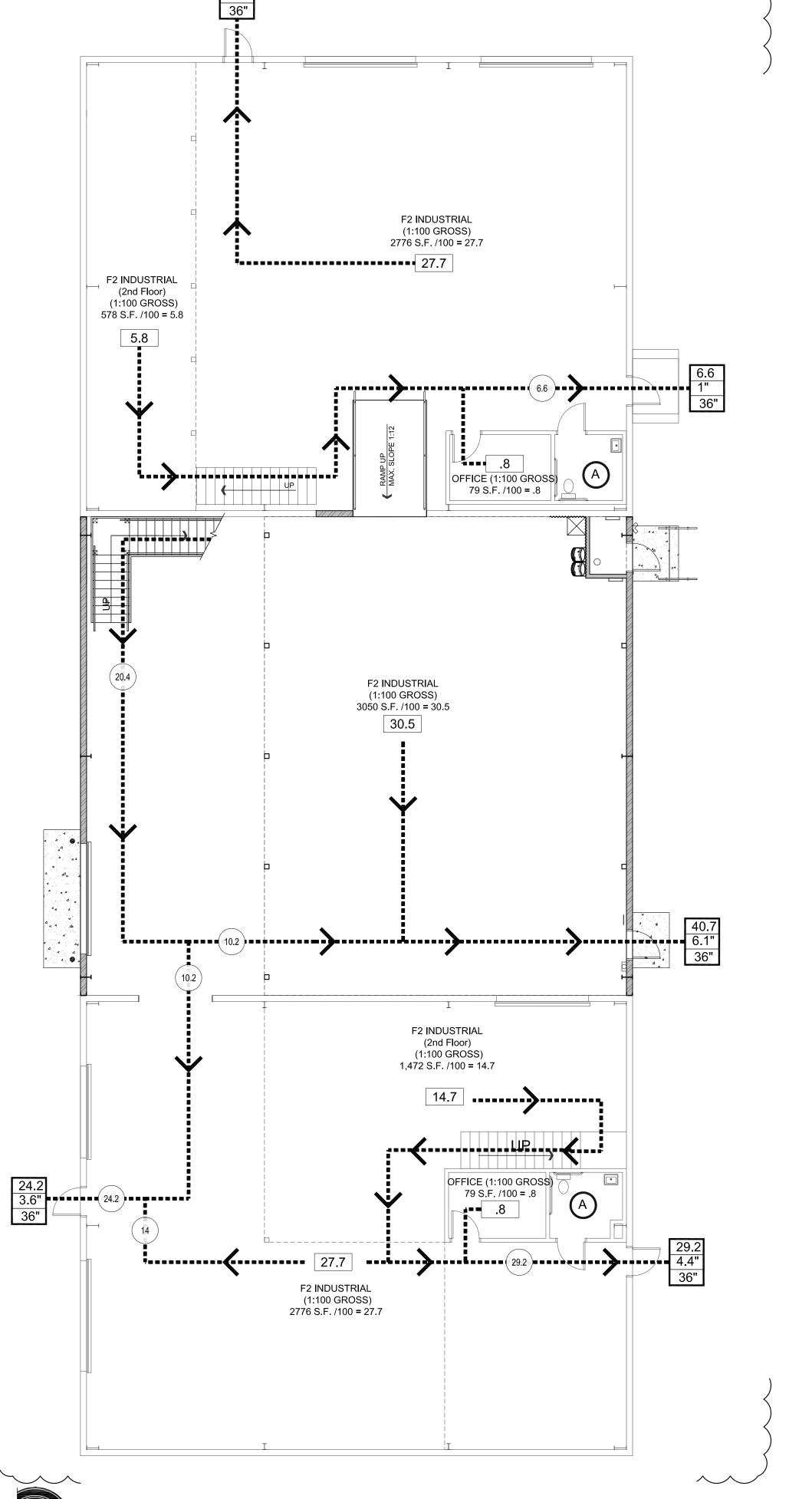
ARCHITECTURE & PLANNING

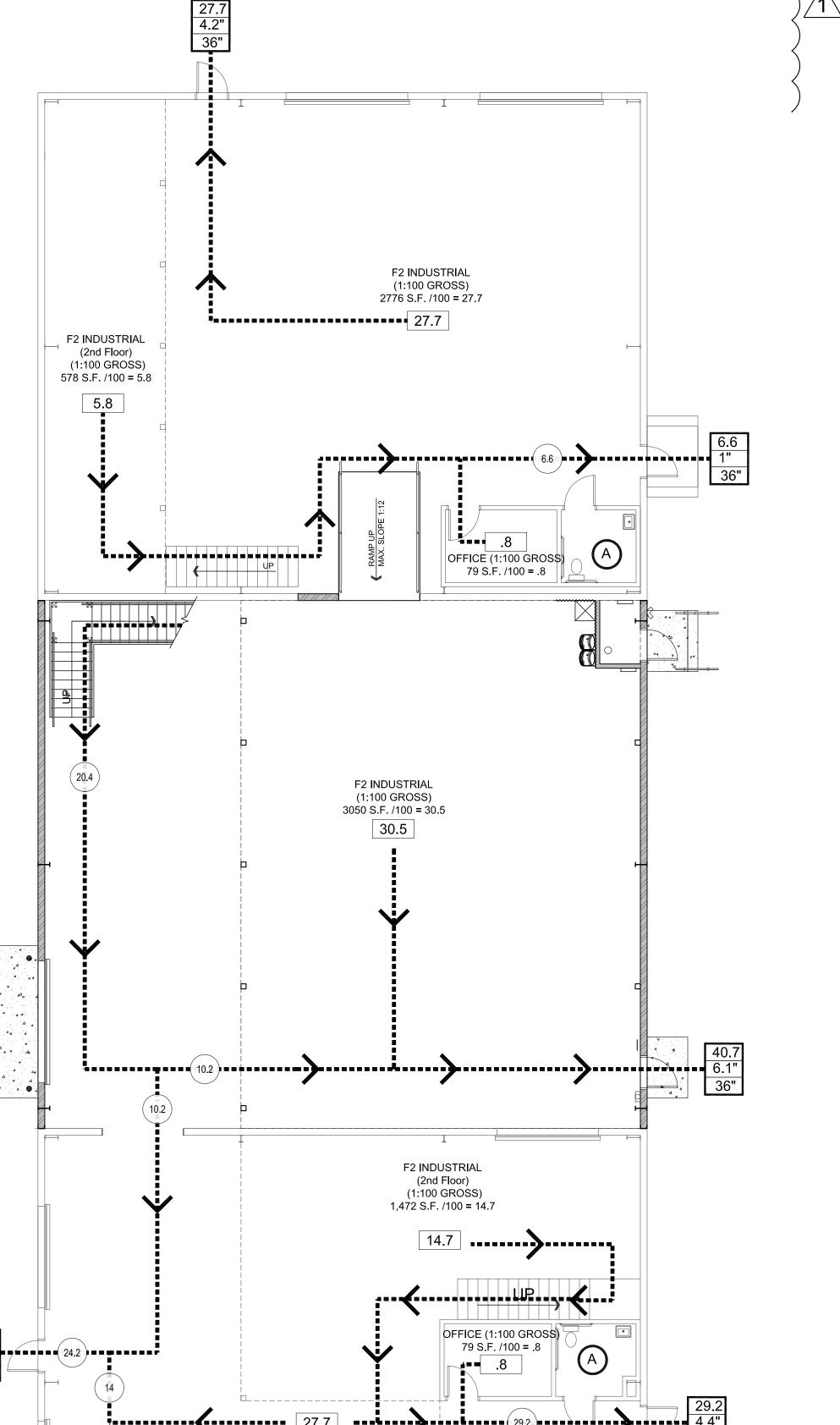


7/25/19, 7/30/19, 8/5/19

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<b>Rumbing</b> Ca	alculations					
	OCCUPANCY CLASSIFICATION	OCCUPANCY COUNT	WATER CLOSETS	LAVATORIES	DRINKING FOUNTAINS	SERVICE SINK
	FACTORY & INDUSTRIAL	129	1.3	1.3	1	1
TOTAL REQUIRED			1.3	1.3	1	1
TOTAL EXISTING			2 (SINGLE USER ACCESSIBLE)	2	2 NEW	1 NEW





Deress Legend:

1000000

**EXIT ACCESS** 

ACCESSORY USE (NO OCCUPANCY)

SUBTOTAL OCCUPANCY LOAD

ROOM OCCUPANCY LOAD

PROVIDED EXIT WIDTH

OCCUPANCY TOTAL REQUIRED EXIT WIDTH (FACTOR = 0.15)

OFFICE

WORST CASE TRAVEL DISTANCE

**FUNCTION OF SPACE** 

OCCUPANT LOAD FACTOR

F1 INDUSTRIAL

100 GROSS

## Ocupant load

GROSS SQUARE FOOTAGE LISTED BELOW DOES NOT INCLUDE ACCESSORY AREAS.

OFFICE AREA: FI INDUSTRIAL: TOTAL:

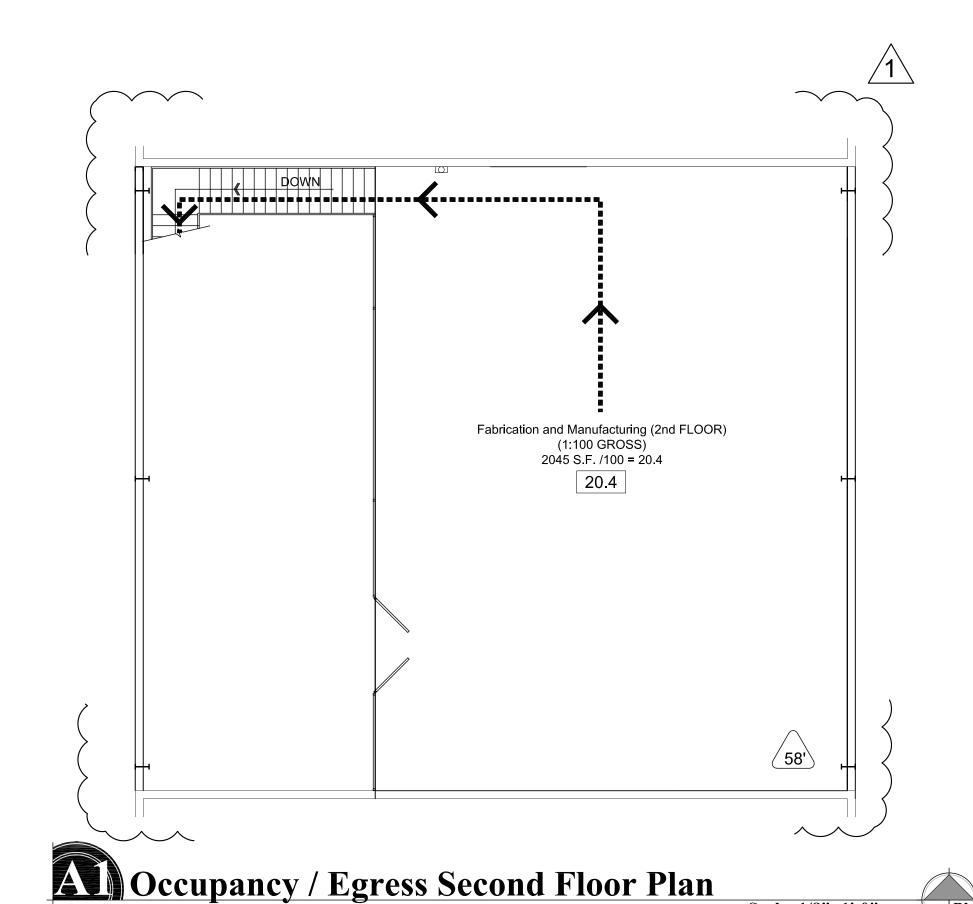
158 SQ. FT. 1.5 OCCUPANTS 12,697 SQ. FT 127 OCCUPANTS 12,855 SQ. FT. 129 OCCUPANTS

\_\_\_\_\_

 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.

# Accessibility Notes

- 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.)



Occupancy / Egress First Floor Plan

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

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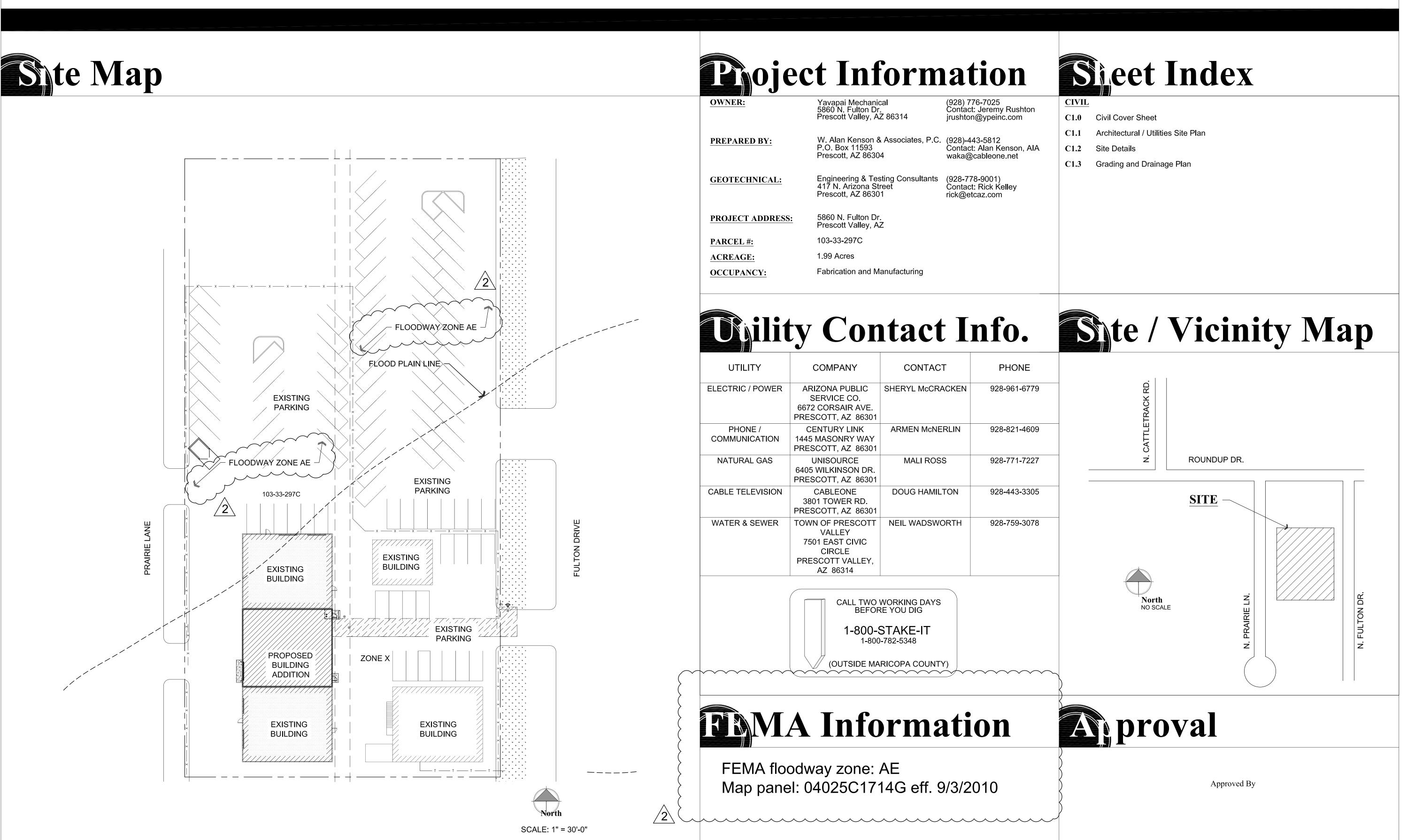
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# Yavapai Mechanical Building Addition

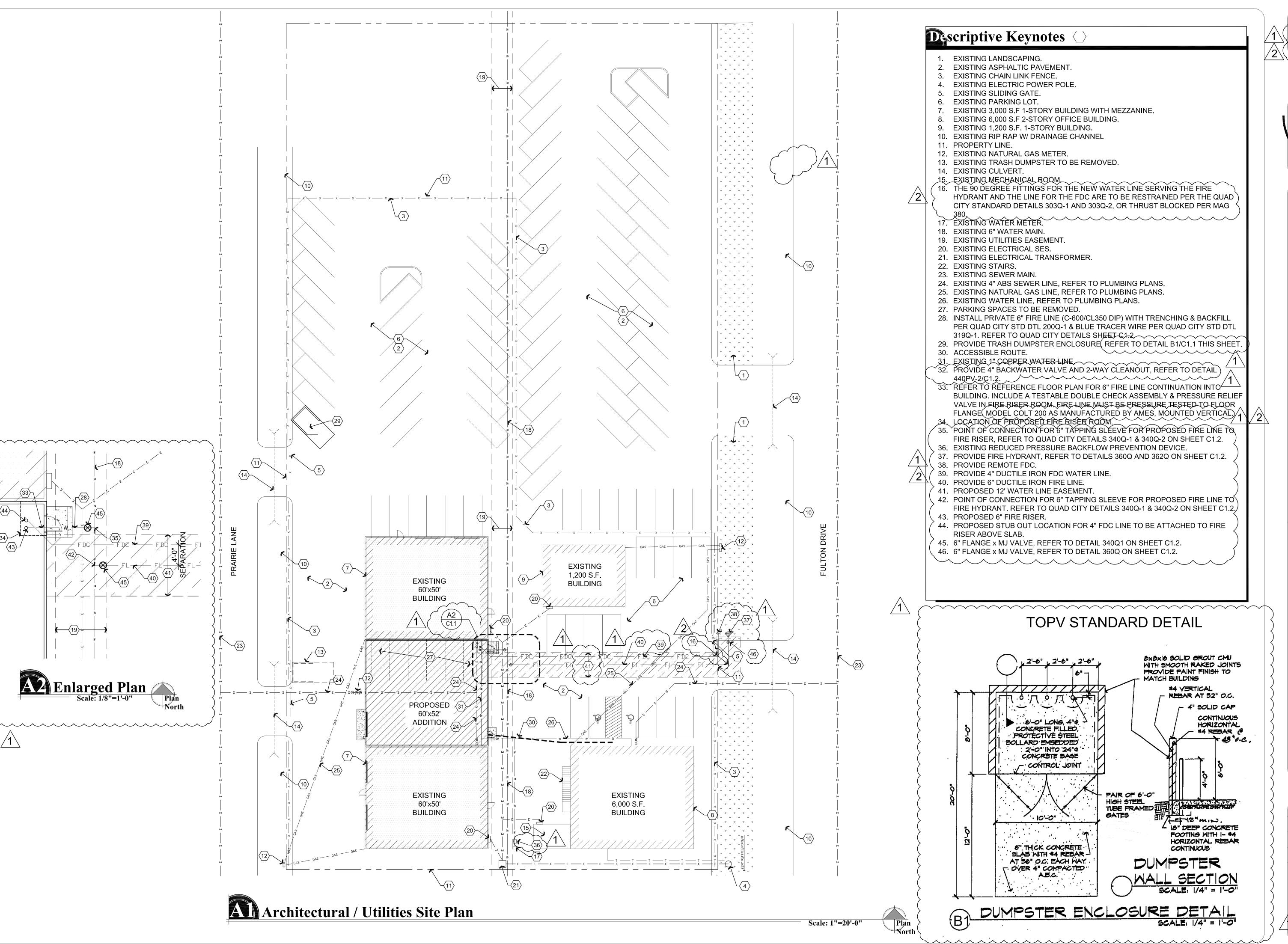
CIVIL COVER SHEET



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Date

Town of Prescott Valley



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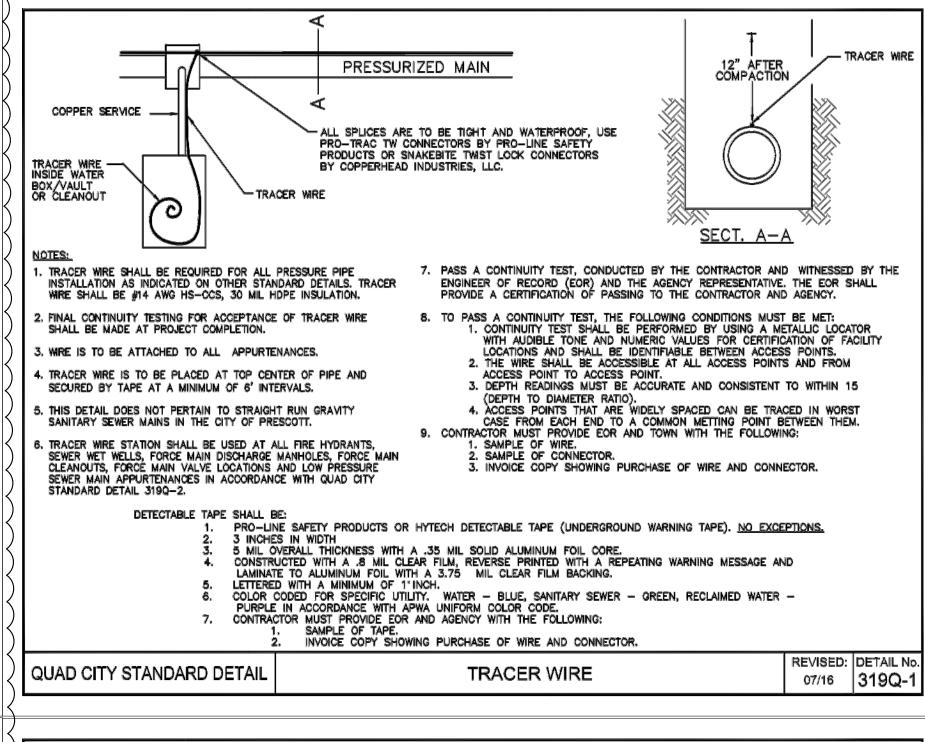
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APPROACH

DETAIL "A"

- 6' HIGH BLOCK WALL (OPTIONAL) EXCLUSIVE OF SLAB — REINFORCED W/#5 BARS 12" O.C. EA. WAY,

GATES ARE NOT ALLOWED

24"

4' HIGH ABOVE PAD

SECTION A-A

QUAD CITY STANDARD DETAIL

4' HIGH CONC. FILLED — BOLLARD — BURY 2' W/24"

SLAB DATA

1. MIN. 6" THICK CLASS "A" CONCRETE ON 4" A.B.C.

95% COMP. AS PER

2. SLAB TO BE REINFORCED

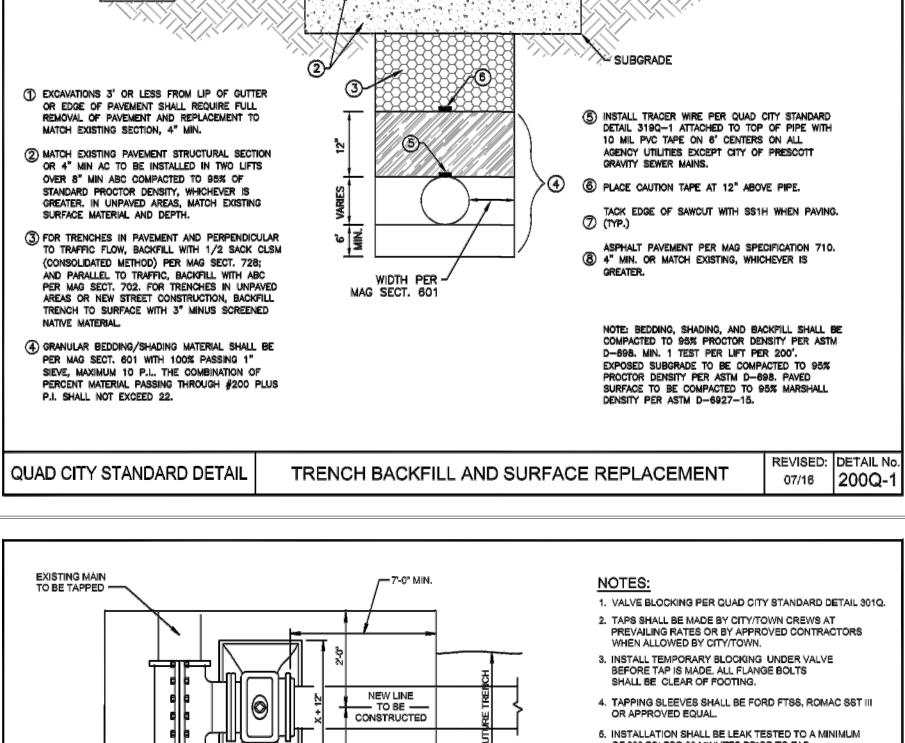
W/ 6x6 - 8/8 W.W.F.

MAG SECTIONS 340 & 725

3. SLAB TO BE POURED TO THE SAME ELEV. AS THE APPROACH.

REVISED: DETAIL No

07/16 303Q-2



TRENCH WIDTH SEE PLANS

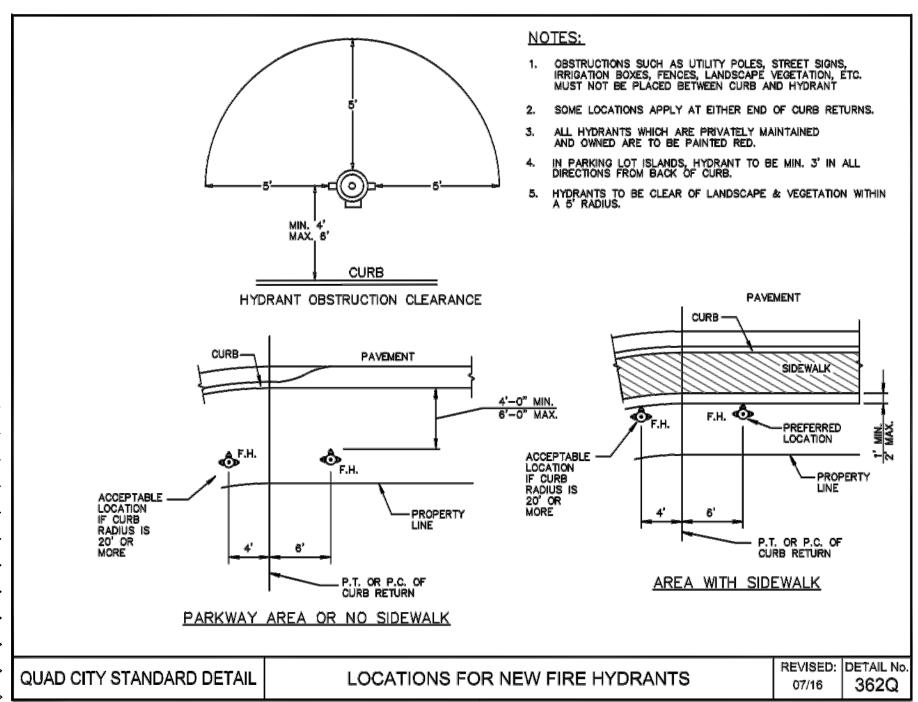
PRIOR TO REMOVALS, SAWOUT NEAT LINE 1' MIN.

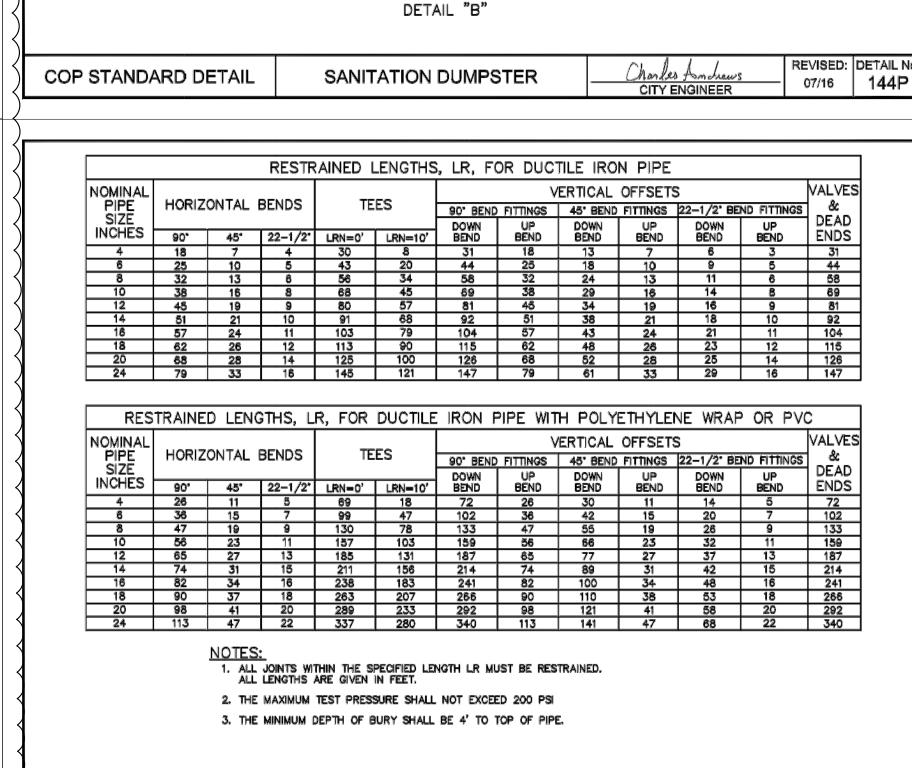
THEN SAWCUT NEAT LINE 1' MIN BACK OF THE MAXIMUM TRENCH EDGE.

- EXISTING PAVEMENT

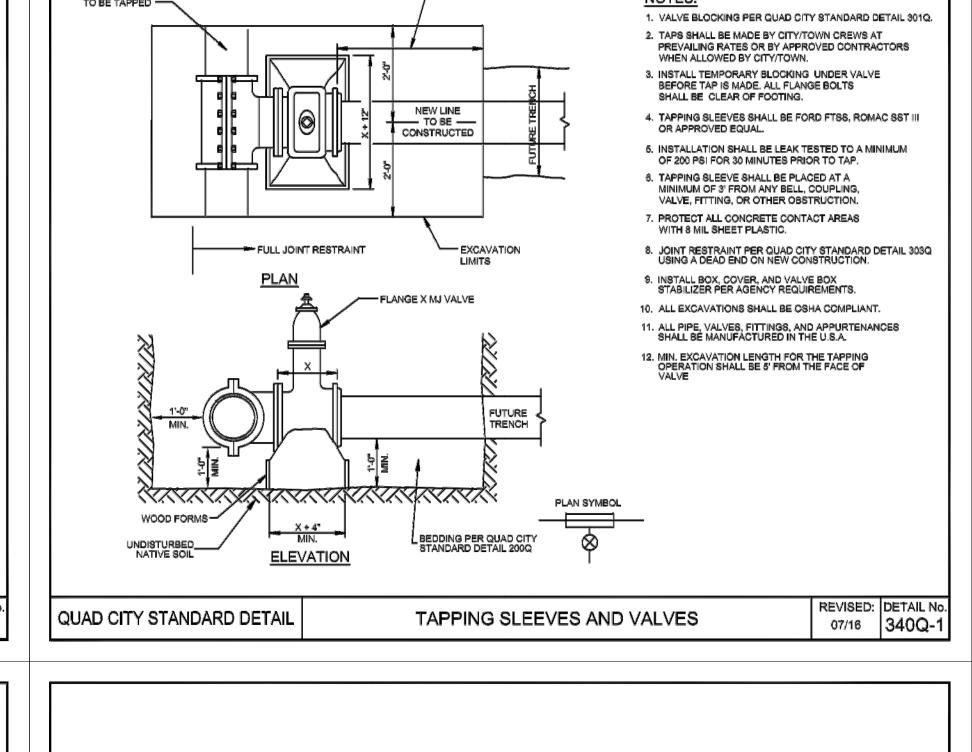
OF ROADWAY

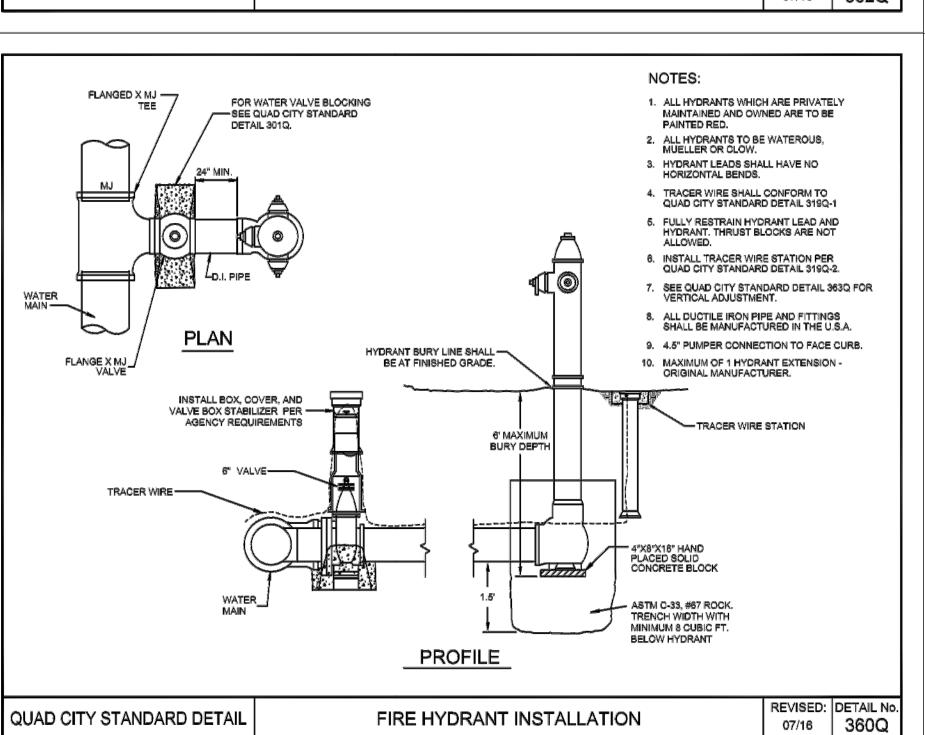
BACK FROM TRENCH EDGE ON BOTH SIDES. IF DURING CONSTRUCTION THE TRENCH EDGE WIDENS,



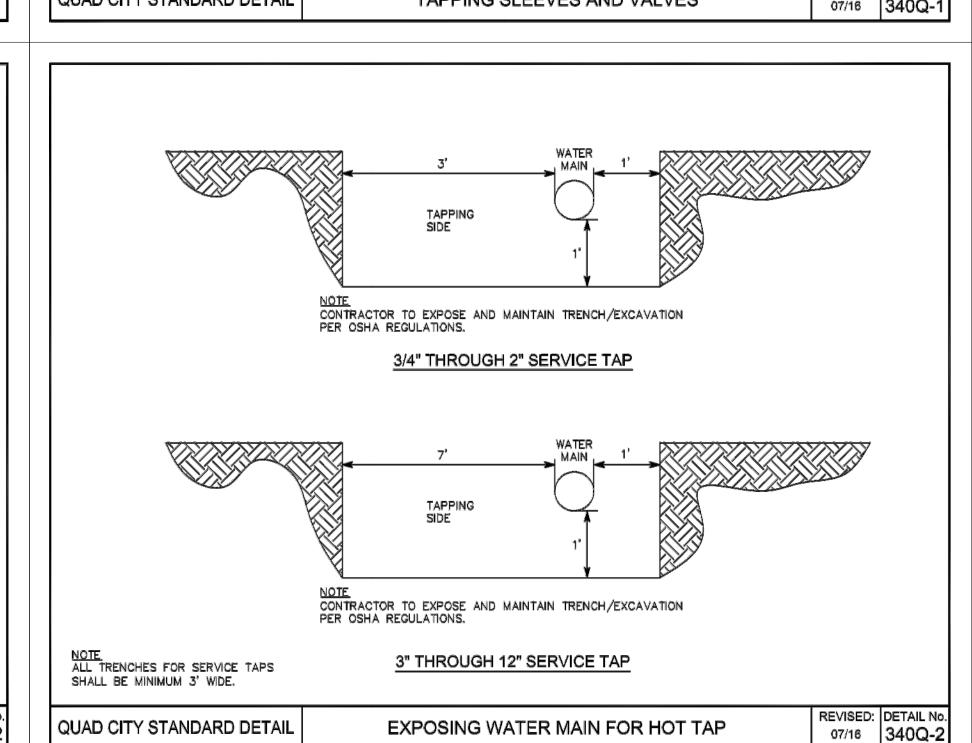


JOINT RESTRAINT FOR DUCTILE IRON AND POLYETHYLENE WRAPPED DUCTILE IRON WATER PIPES





^^^^^





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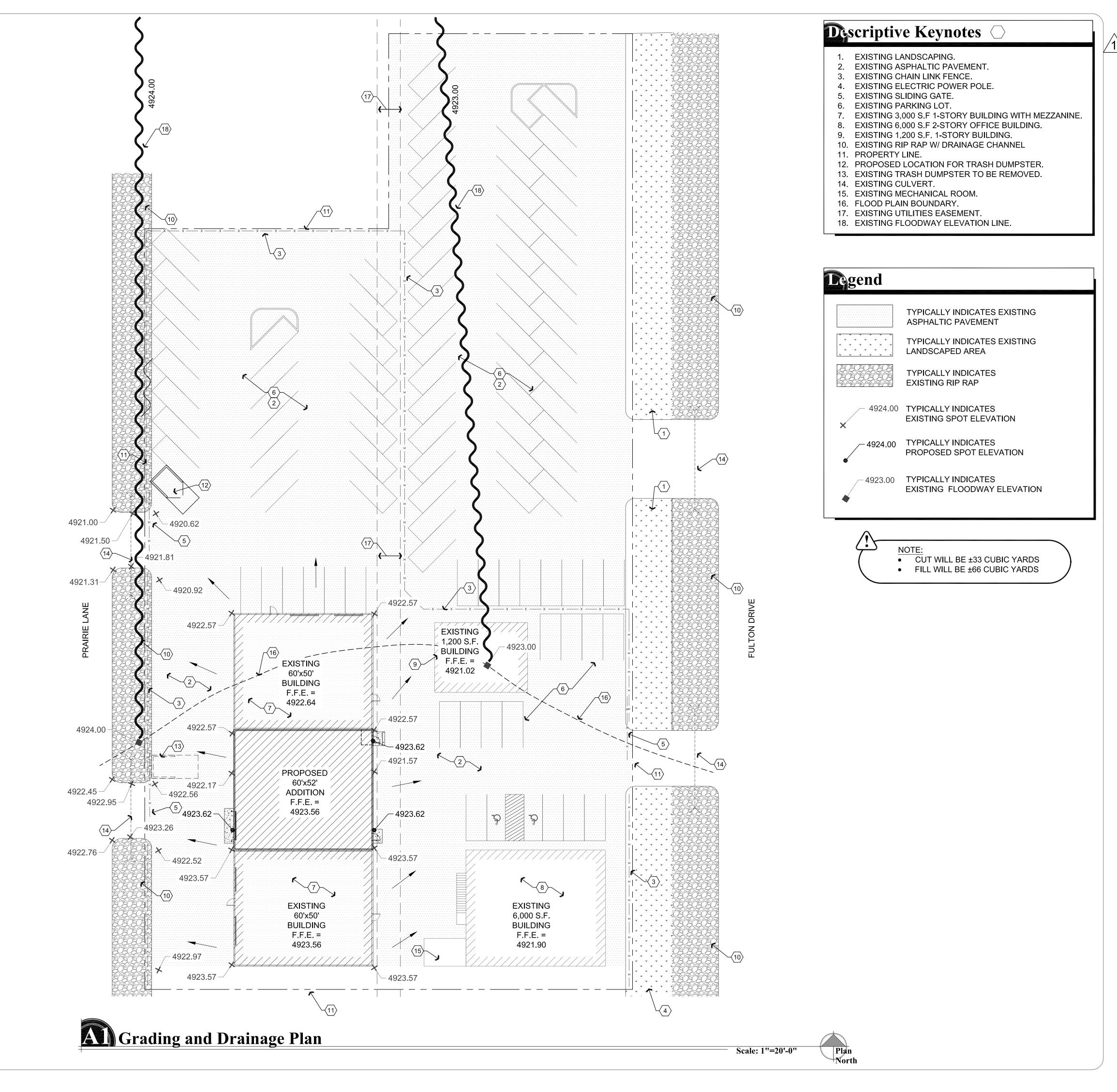
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EXPIRES: 6,

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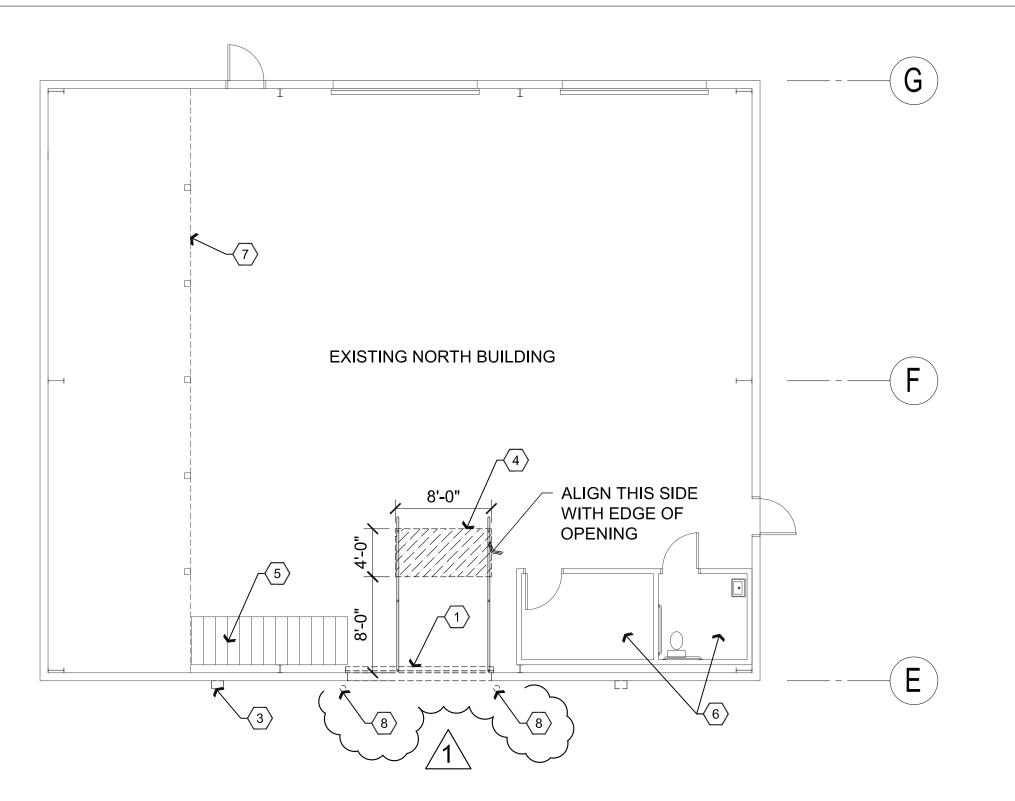
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# Descriptive Keynotes $\bigcirc$

- REMOVE AND RELOCATE EXISTING DOOR, REFER
  TO REFERENCE FLOOR PLAN.
   REMOVE PORTION OF STEEL BUILDING WALL TO
- CREATE OPENING BETWEEN THE EXISTING
  BUILDING AND THE PROPOSED ADDITION.
  3. REMOVE AND RELOCATE EXISTING LIGHT, REFER
- TO ELECTRICAL PLANS.

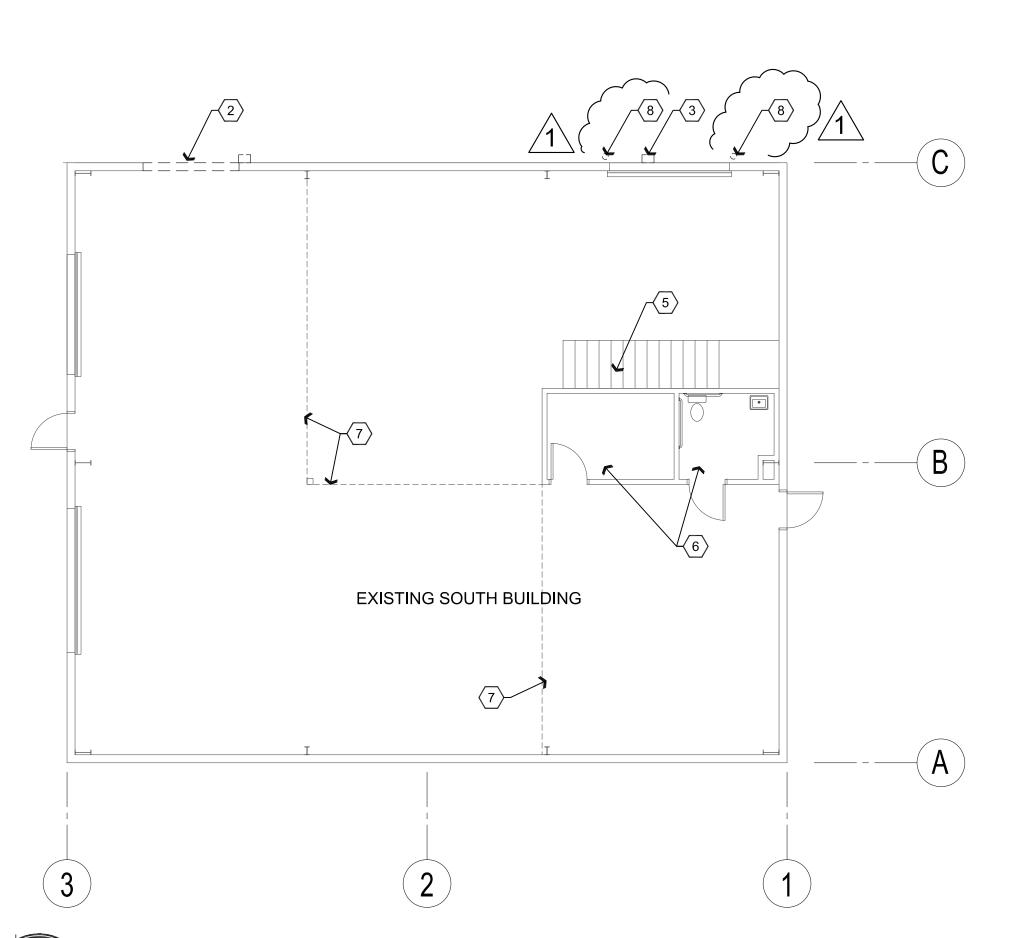
  4. REMOVE PORTION OF EXISTING CONCRETE SLAB FOR INSTALLATION OF NEW RAMP, REFER TO
- DETAIL A1/A5.1.
  5. EXISTING STAIRS.
- 6. EXISTING INTERIOR ROOMS.
- EXISTING LOCATION OF UPPER LEVEL.

  REMOVE EXISTING BOLLARDS AND OTHER

  PROTECTIVE DEVICES BETWEEN THE BUILDINGS,

TYPICAL.

\_\_\_\_**D** 



Existing / Demolition Floor Plans

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



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P. 928-443-5812 P.O. Box 11593

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vapai Mechanical Building Addition
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scott Valley, AZ 86314

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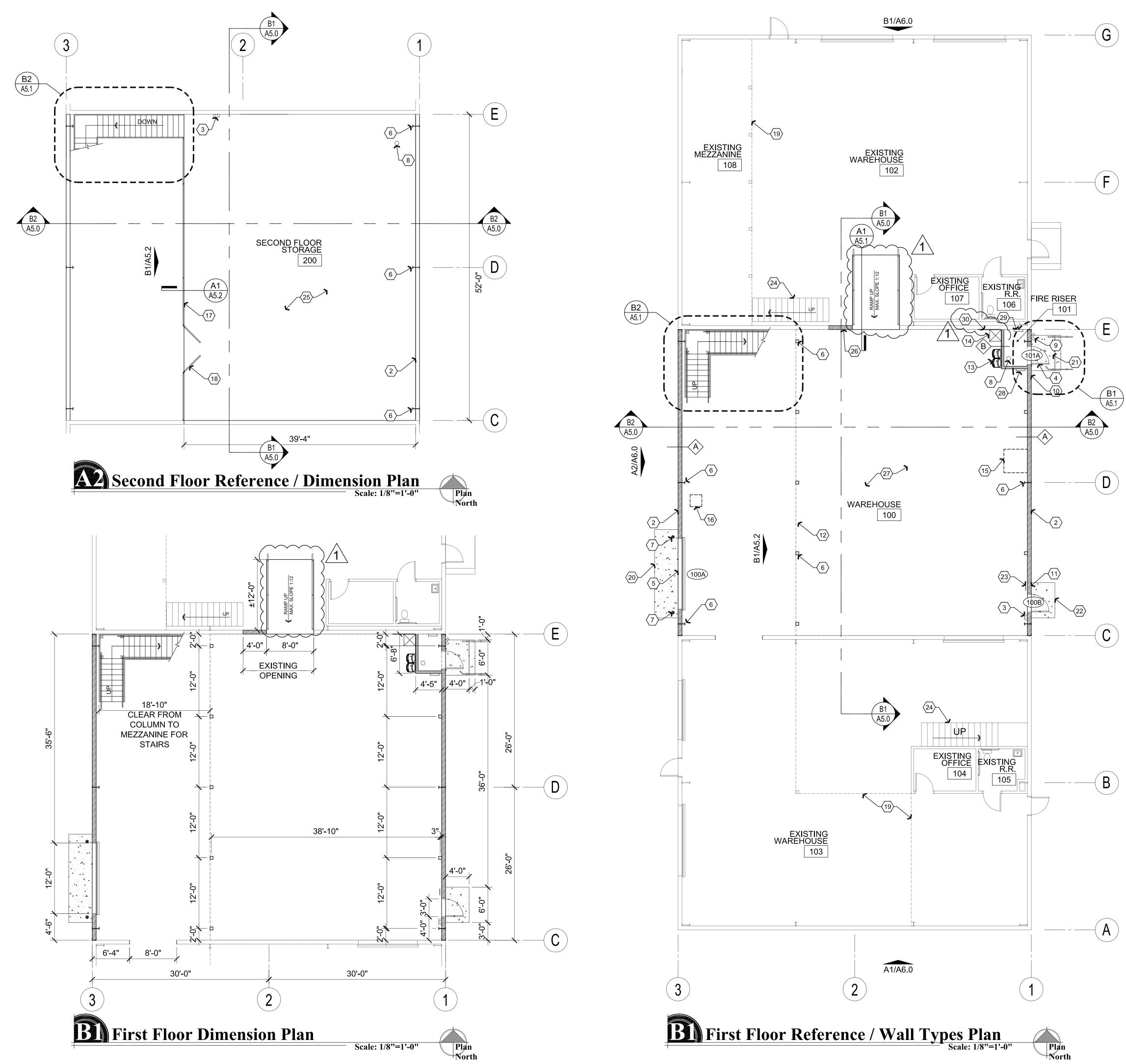
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L.O.

CHECKED BY
W.A.K.

DATE
August 1st, 2019

A1.0

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Discriptive Keynotes  $\bigcirc$ 

PROVIDE INTERIOR WALL, REFER TO WALL TYPES

LEGEND FOR TYPE OF CONSTRUCTION.

PROVIDE EXTERIOR WALL, REFER TO WALL TYPES LEGEND FOR TYPE OF CONSTRUCTION. PROVIDE TYPE 2A10BC FIRE EXTINGUISHER,

SURFACE MOUNTED. 4. PROVIDE DOOR, REFER TO DOOR SCHEDULE,

RELOCATED SECTIONAL ROLL UP DOOR, REFER

TO DOOR SCHEDULE. PROVIDE STEEL COLUMN, REFER TO STRUCTURAL

PLANS, TYPICAL. PROVIDE 6'-0" LONG 4" DIAMETER, CONCRETE FILLED, PROTECTIVE STEEL BOLLARDS, EMBEDDED 2'-0" BELOW GRADE INTO CONCRETE FOOTING, TYPICAL AT EACH NEW OVERHEAD

PROVIDE AUTOMATIC FIRE SPRINKLER SYSTEM RISER, REFER TO FIRE SPRINKLER PLANS / SITE UTILITY PLAN.

9. PROVIDE FIRE DEPARTMENT CONNECTION WITH LOCKING CAPS. REFER TO FIRE SPRINKLER PLANS. 10. PROVIDE FIRE ALARM GONG. REFER TO FIRE

SPRINKLER PLANS. 11. PROVIDE FIRE DEPARTMENT LOCK BOX MOUNTED

6'-0" A.F.F. 12. EDGE OF PROPOSED SECOND FLOOR ABOVE.

13. PROVIDE ELECTRIC DRINKING FOUNTAIN, REFER TO PLUMBING PLANS.

14. PROVIDE MOP SINK, REFER TO PLUMBING PLANS. 15. PROVIDE SIDEWALL EVAPORATIVE COOLER @

12'-0" A.F.F., REFER TO MECHANICAL PLANS. 16. PROVIDE UNIT HEATER @ 12'-0" A.F.F., REFER TO

MECHANICAL PLANS. 17. PROVIDE 2"x1" STEEL TUBE GUARDRAIL PLACED AT 3'-6" ABOVE UPPER LEVEL FLOOR WITH

INTERMEDIATE 1"x1" STEEL TUBE RAILS NOT TO EXCEED 12" O.C. PROVIDE 2"x2" STEEL POSTS SPACED AT 8'-0" O.C. 18. PROVIDE PAIR OF 4'-0" WIDE SWINGING STEEL

GATES CONSTRUCTED SIMILAR TO GUARDRAIL CONSTRUCTION, REFER TO DESCRIPTIVE KEYNOTE #17.

19. EXISTING MEZZANINE.

20. PROVIDE 5" THICK CONCRETE APRON W/ #4s @ 3'-0" O.C. EACH WAY OVER 4" COMPACTED A.B.C. PROVIDE 8" TURNDOWN AT PERIMETER. 21. PROVIDE CONCRETE STAIRS.

22. PROVIDE CONCRETE LANDING. 23. 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.

24. EXISTING STAIRS. 25. PROVIDE 3/4" OSB SHEATHING, REFER TO STRUCTURAL PLANS.

26. INFILL EXISTING OPENING TO MATCH EXISTING CONSTRUCTION.

27. PROVIDE 5" THICK CONCRETE SLAB W/ #4s @3'-0" O.C. EACH WAY OVER 4" COMPACTED A.B.C., REFER TO STRUCTURAL PLANS.

28. PROVIDE ELECTRICAL PANEL, REFER TO ELECTRICAL PLANS.

29. FIRE ALARM PANEL, REFER TO FIRE ALARM PLANS.
30. PROVIDE 48" HIGH FRP MINIMUM 24" BEYOND MOP

**Wall Types Legend** 

A EXTERIOR METAL BUILDING WALL: PROVIDE EXTERIOR METAL BUILDING SIDING, 26 GAUGE, 'PBR' PANELS OVER 8" HORIZONTAL GIRTS BETWEEN STEEL COLUMNS. PROVIDE R-11 VINYL BACKED, METAL BUILDING INSULATION AT INTERIOR.

B 3-5/8" STUD WALL: PROVIDE 3-5%" 25 GA. STEEL STUDS AT 2'-0" O.C. WITH 5/8" GPDW EACH SIDE. PROVIDE R-11 BATT INSULATION.

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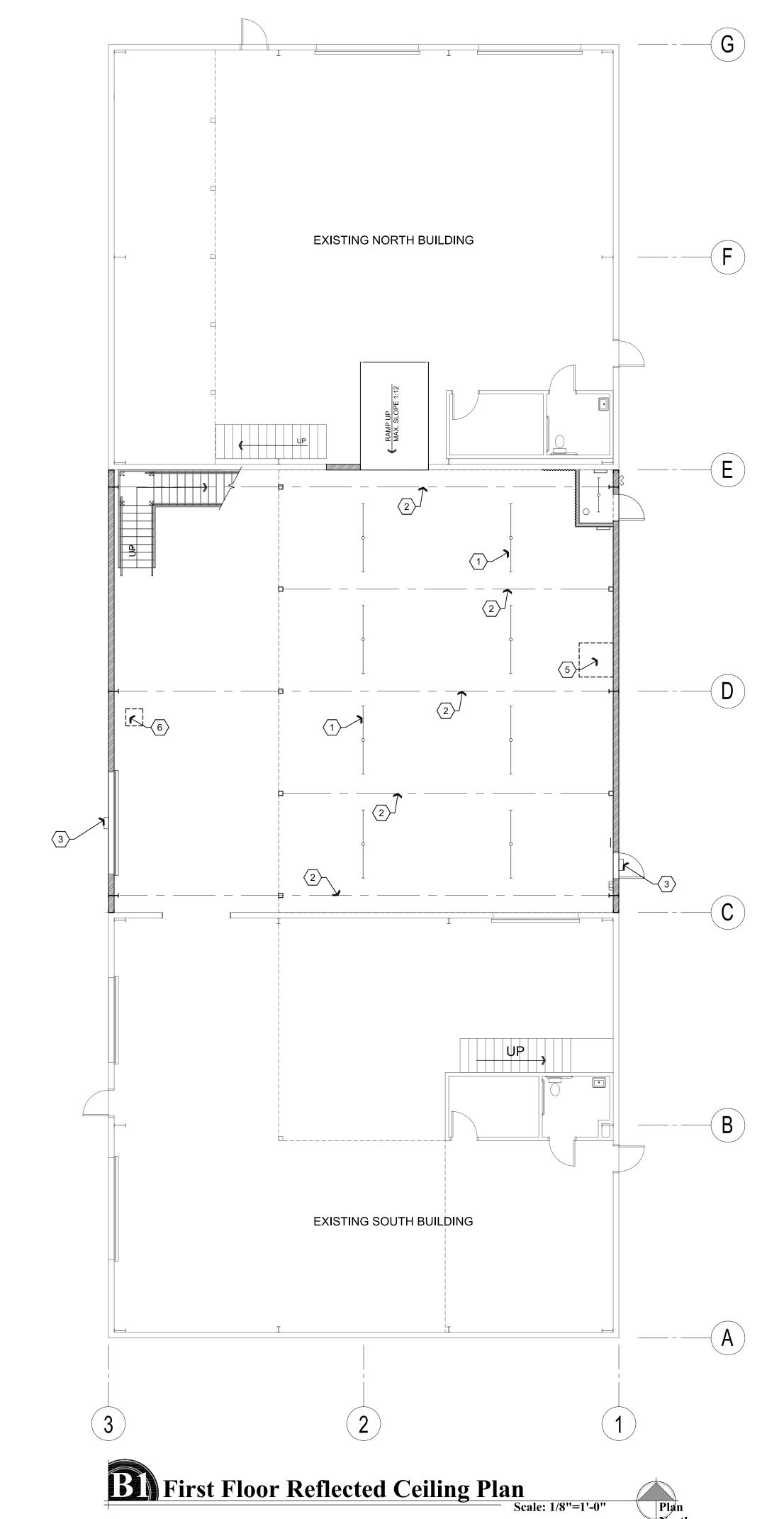
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Descriptive Keynotes  $\bigcirc$ 

- 1. LIGHT FIXTURE(S) SHOWN FOR QUANTITY AND LOCATION ONLY, TYPICAL. REFER TO ELECTRICAL PLAN.
- 2. PROVIDE STEEL BEAM, REFER TO STRUCTURAL
- 3. EXTERIOR LIGHT FIXTURE. REFER TO ELECTRICAL PLANS.
- 4. ROOF PURLIN, REFER TO STRUCTURAL PLANS. 5. PROVIDE SIDEWALL EVAPORATIVE COOLER @
- 12'-0" A.F.F., REFER TO MECHANICAL PLANS. 6. PROVIDE UNIT HEATER @ 12'-0" A.F.F., REFER

TO MECHANICAL PLANS.

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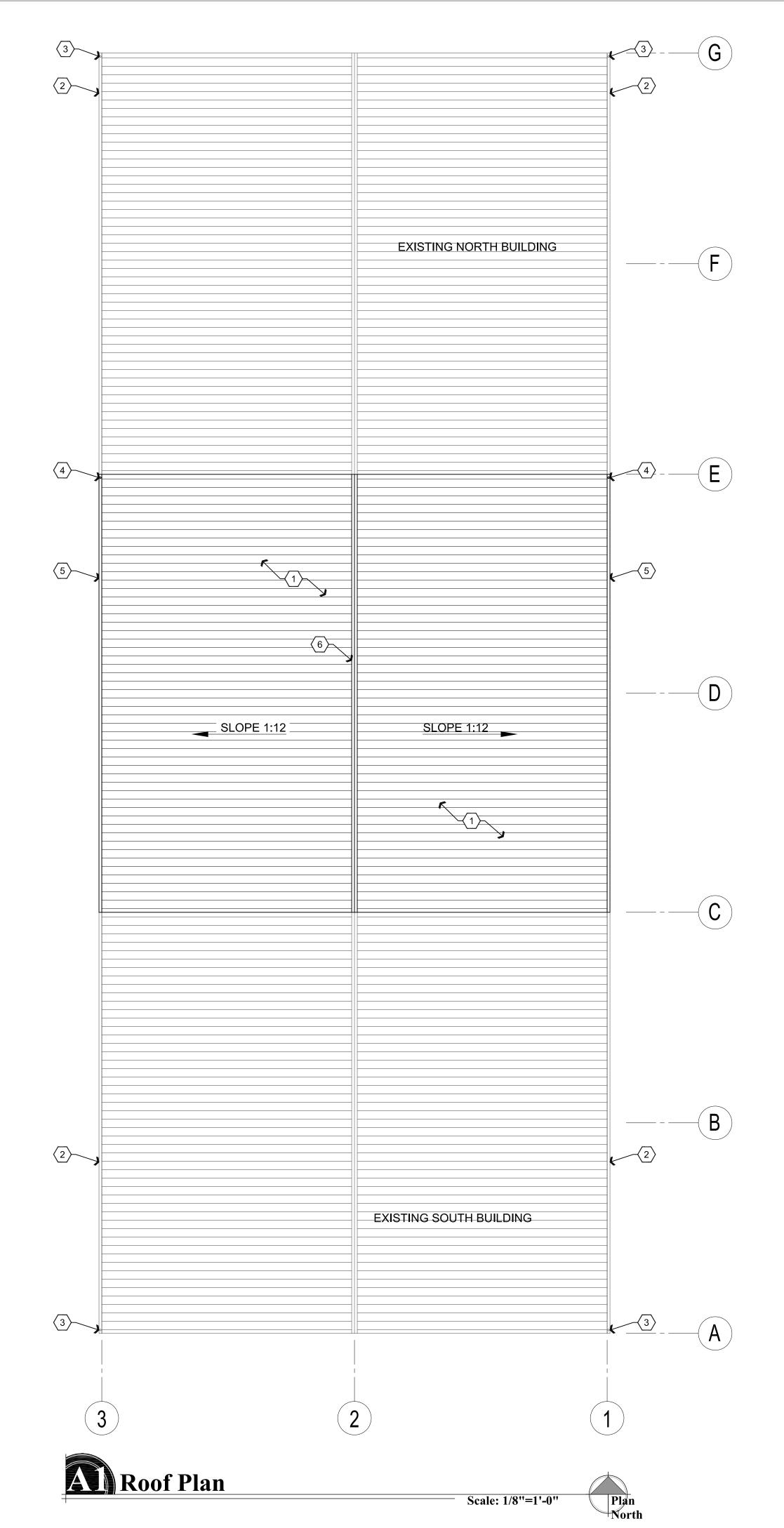
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Second Floor Reflected Ceiling Plan
Scale: 1/8"=1'-0"





# Descriptive Keynotes $\bigcirc$



- 1. PROVIDE 'PBR' PANEL METAL ROOF, REFER TO MATERIALS SCHEDULE. M-1
- 2. EXISTING SHEET METAL GUTTER.
- 3. EXISTING SHEET METAL DOWNSPOUT.
- 4. PROVIDE SHEET METAL DOWNSPOUT, REFER TO MATERIALS SCHEDULE. M-4
- 5. PROVIDE SHEET METAL GUTTER, REFER TO MATERIALS SCHEDULE. M-3
- 6. PROVIDE RIDGE CAP, REFER TO MATERIALS SCHEDULE. M-2

# Roof Drain Leader Sizes:

ROOF AREA: 3,120 S.F.

3,120 S.F. x 3" RAINFALL P.H. = (1) 3"x4" LEADERS REQUIRED \* (2) 3"x4" LEADERS PROVIDED

\*PER 2012 IPC SECTION 1106 (TABLE 1106.2)

ssociates

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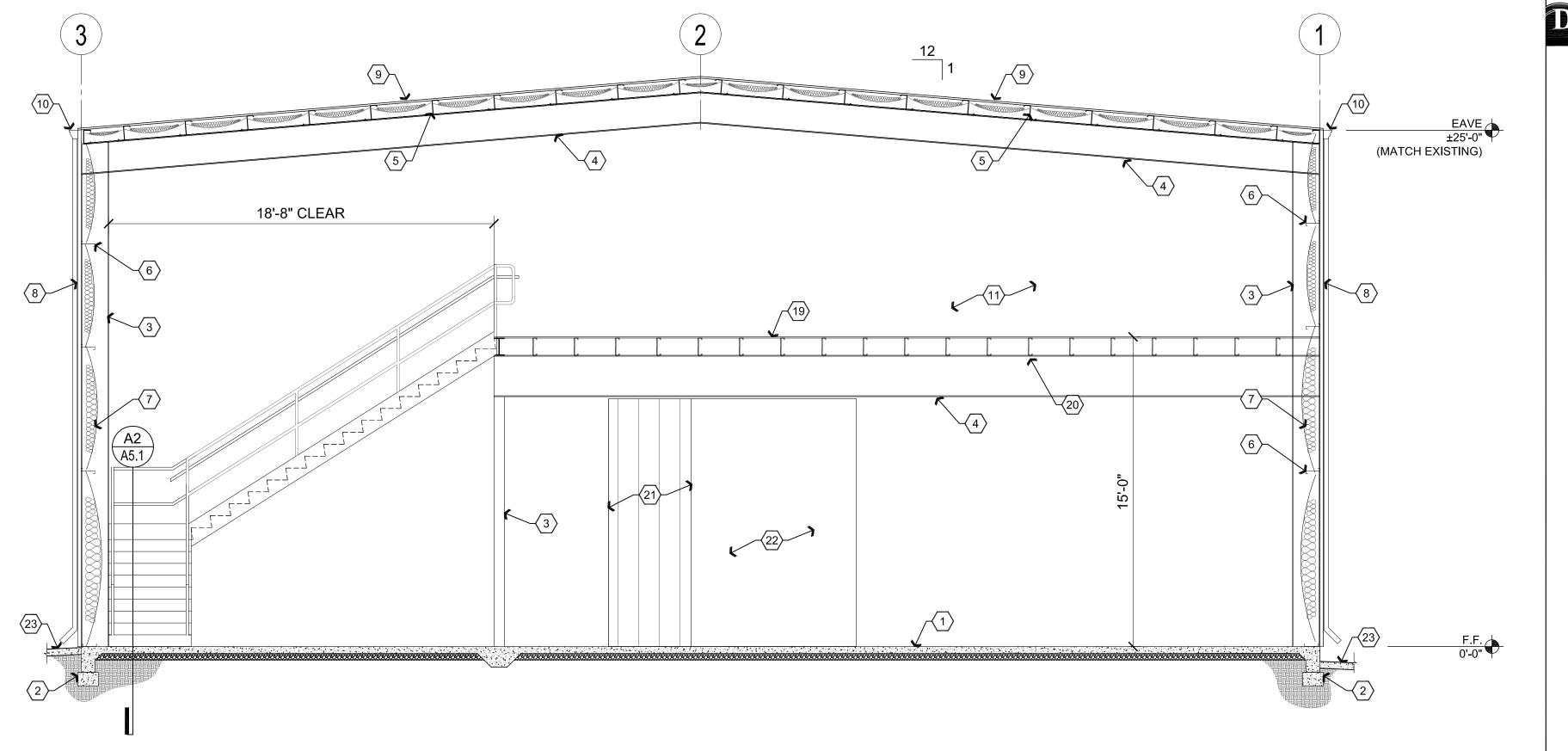
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JOB NO. **733** 



Discriptive Keynotes  $\bigcirc$ 

1. PROVIDE 5" CONCRETE SLAB OVER 4" COMPACTED A.B.C., SAWCUT SLAB AT APPROXIMATELY 12'-0" O.C. IN BOTH DIRECTIONS. REFER TO STRUCTURAL

2. PROVIDE CONCRETE FOOTING. REFER TO

STRUCTURAL PLANS. 3. PROVIDE STEEL COLUMN. REFER TO STRUCTURAL

4. PROVIDE STEEL BEAM. REFER TO STRUCTURAL

5. PROVIDE ROOF PURLIN, TYPICAL. REFER TO STRUCTURAL PLANS.

6. PROVIDE STEEL GIRT, TYPICAL. REFER TO STRUCTURAL PLANS.

7. PROVIDE R-11 VINYL FACED BLANKET INSULATION. 8. PROVIDE 'PBR' METAL SIDING, REFER TO

MATERIALS SCHEDULE. M-5

9. PROVIDE 'PBR' ROOF PANELS, REFER TO MATERIALS SCHEDULE. M-1

10. PROVIDE SHEET METAL GUTTER AND DOWNSPOUT, REFER TO MATERIALS SCHEDULE. M-3 M-4

11. SECOND FLOOR STORAGE AREA. 12. REMOVE EXISTING ROLL-UP DOOR, TO BE

RELOCATED, REFER TO REFERENCE FLOOR PLAN.

13. PROVIDE RAMP, REFER TO A1/A5.1. 14. EXISTING DOOR.

15. EXISTING OFFICE.

16. EXISTING COLUMN.

17. EXISTING STEEL GIRT.

18. EXISTING ROOF.

19. 3/4" OSB SHEATHING, REFER TO STRUCTURAL

20. PROVIDE FLOOR JOIST, REFER TO STRUCTURAL

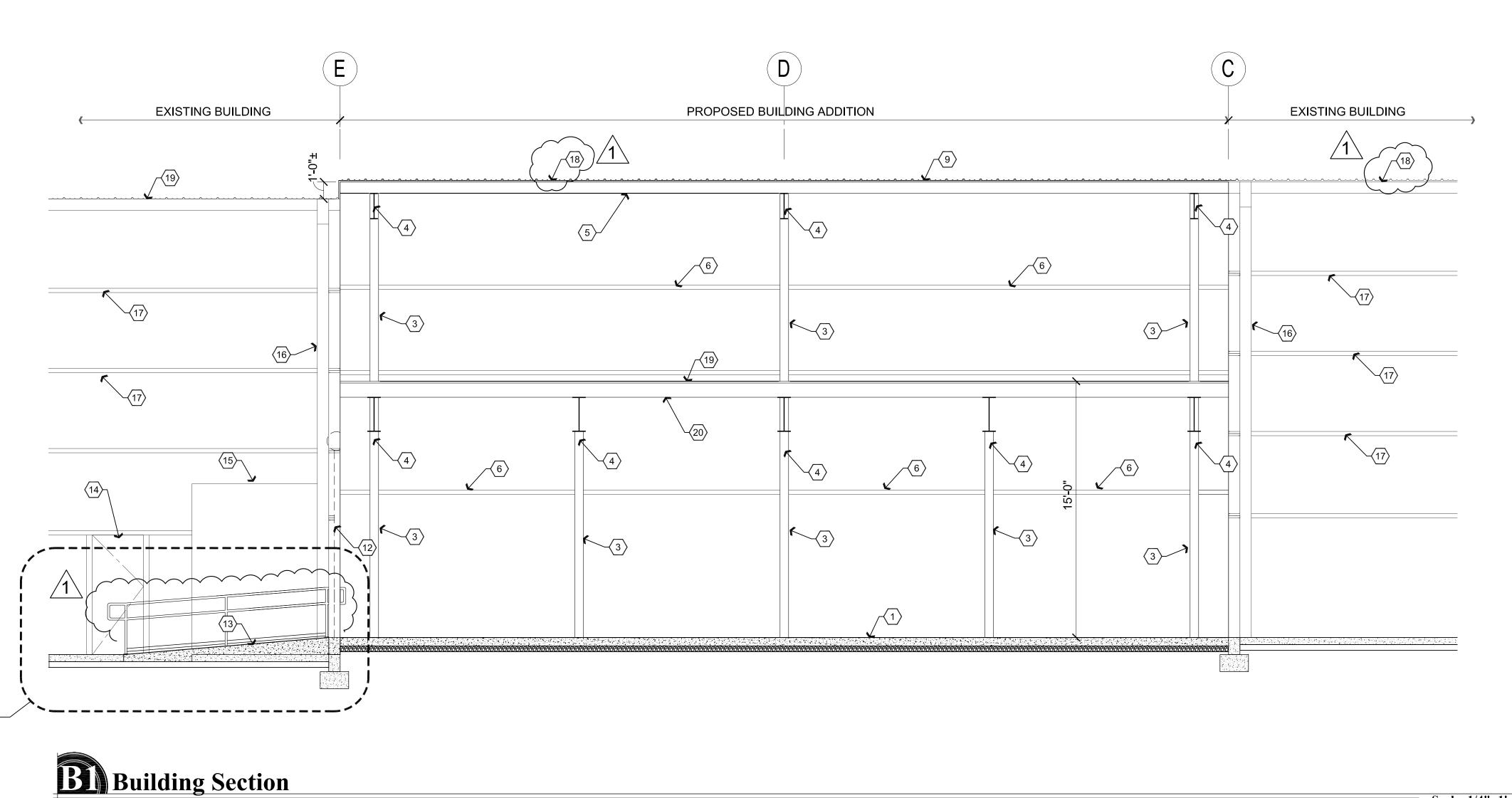
21. INFILL PORTION OF OPENING TO MATCH EXISTING. 22. OPENING INTO EXISTING BUILDING WHERE

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

ROLL-UP DOOR WAS REMOVED. 23. EXISTING ASPHALT PAVEMENT.

**B** Preliminary Building Section

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



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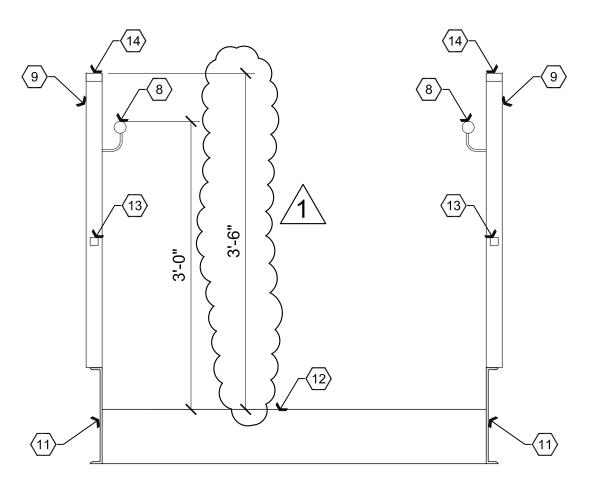
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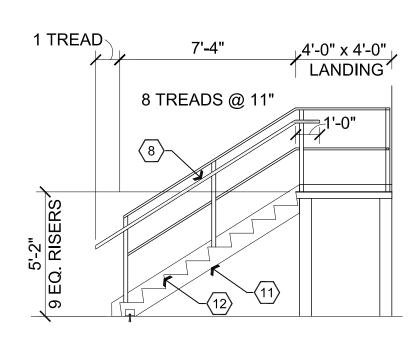
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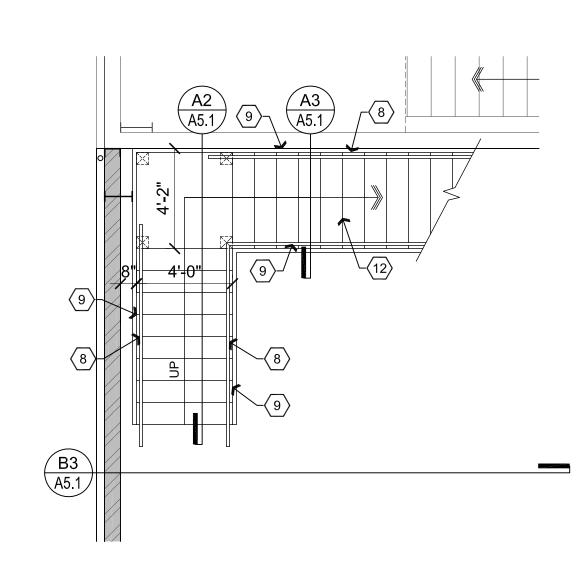
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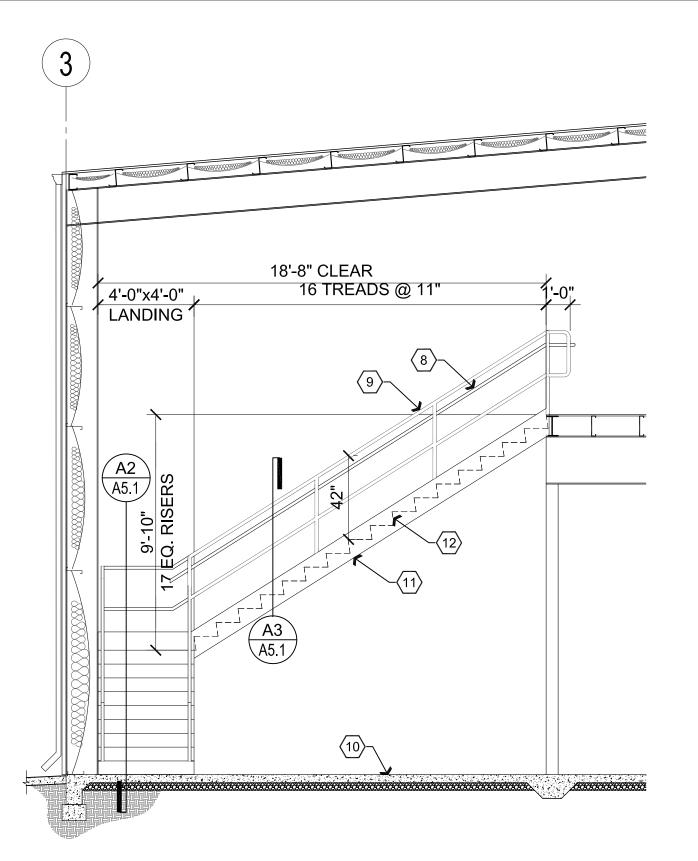
August 1st, 2019 JOB NO. **733** 







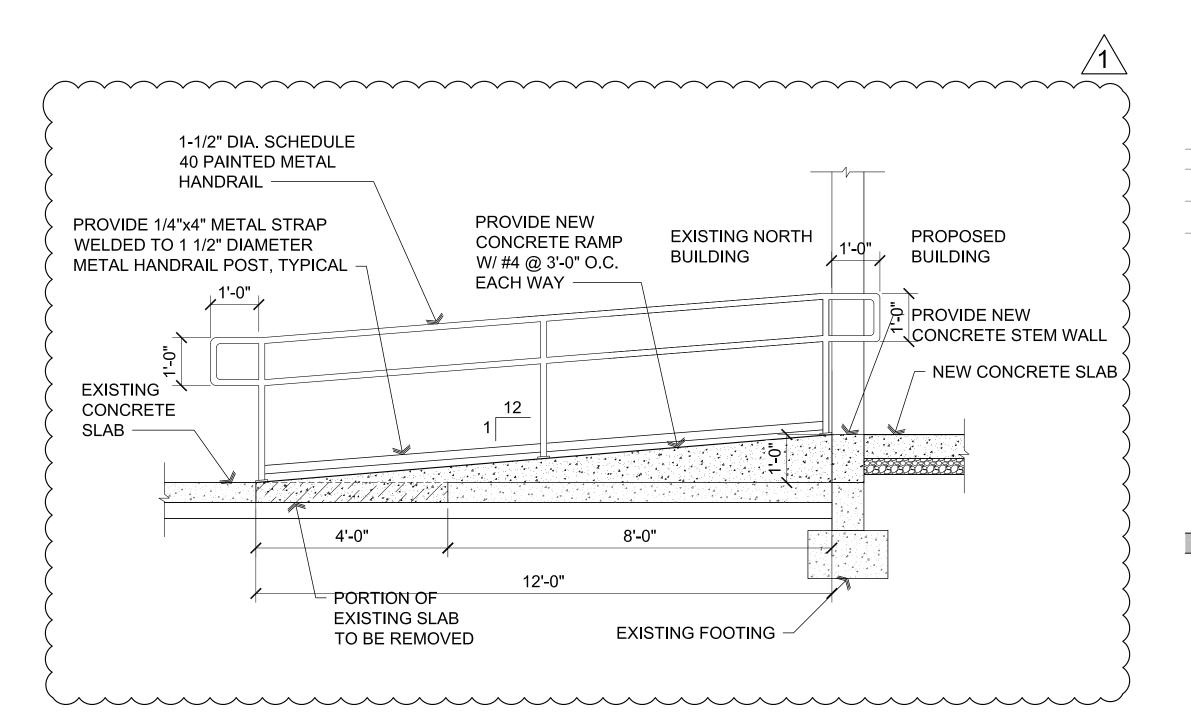


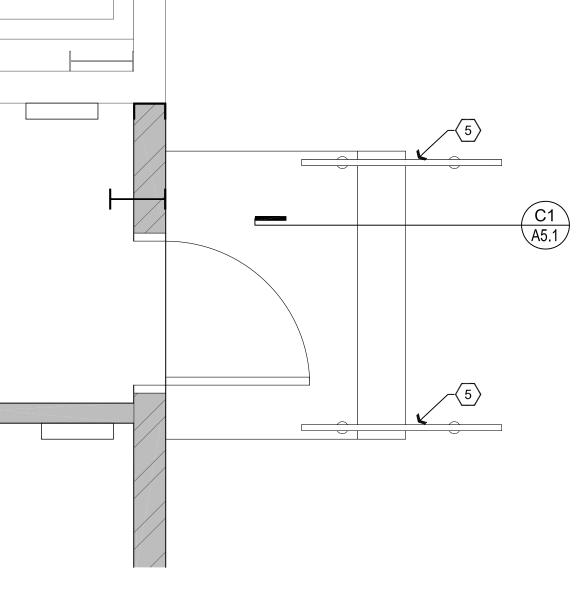


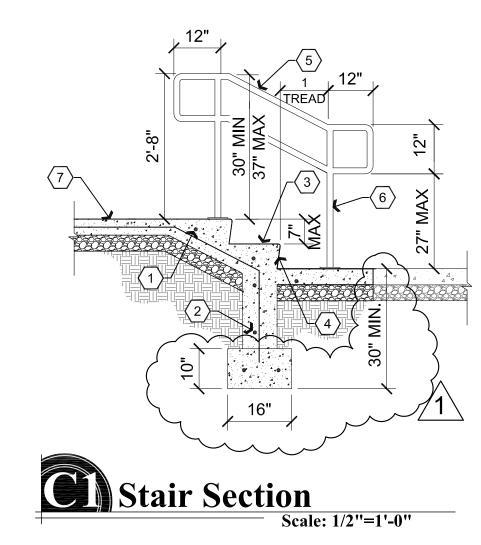
B Stair Section











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

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







- 1. #3 AT 12" O.C. EACH WAY.
- 2. (1) #4 TOP AND BOTTOM.
- 3. (1) 12" TREADS.
- 4. (2) 7" MAX RISERS EQUAL HEIGHT. VERIFY IN FIELD.
- 5. 1 1/2" DIAMETER SCHEDULE 40 PAINTED METAL HANDRAIL.
- 6. 1 1/2" DIAMETER SCHEDULE 40 PAINTED METAL BALUSTER, TYPICAL.
- 7. 4" THICK CONCRETE SIDEWALK W/ #3 @ 3'-0" O.C. EACH WAY OVER 4" COMPACTED A.B.C. PROVIDE 8" MINIMUM TURNDOWN ON SIDES.
- 8. 1-1/2" SCHEDULE 40 PAINTED PIPE STEEL HANDRAIL @ 36" ABOVE STAIR NOSING. ATTACH TO GUARDRAIL / STAIR STRINGER.
- 9. 2"x2"x3/16" PAINTED PIPE STEEL GUARDRAIL. TOP OF GUARDRAIL TO BE 42" ABOVE STAIR NOSING. GUARDS SHALL NOT HAVE OPENING WHICH ALLOW PASSAGE OF A SPHERE 21 INCHES IN DIAMETER.
- 10. CONCRETE SLAB REFER TO STRUCTURAL PLANS.
- 11. STEEL STRINGER REFER TO STRUCTURAL PLANS.
- 12. PRE-BENT 12 GAUGE DIAMOND PLATE,

  IBC COMPLIANT) TREAD / RISERS REFER TO 1 STRUCTURAL PLANS.
- 13. 1"x1"x1/8" PAINTED PIPE INTERMEDIATE RAIL. 14. 2"x1"x3/16" PAINTED PIPE TOP RAIL.

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Town of PV COMMENTS 7/25/19, 7/30/19, 8/5/19 LO

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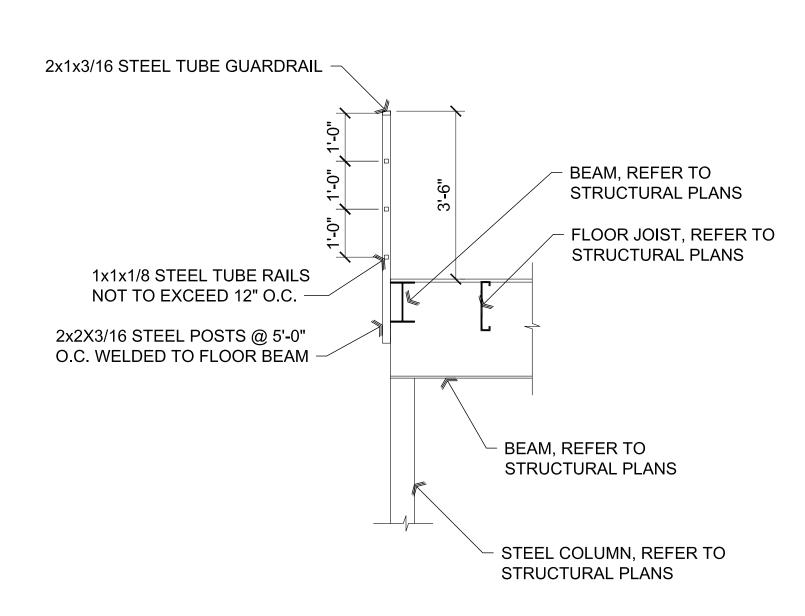
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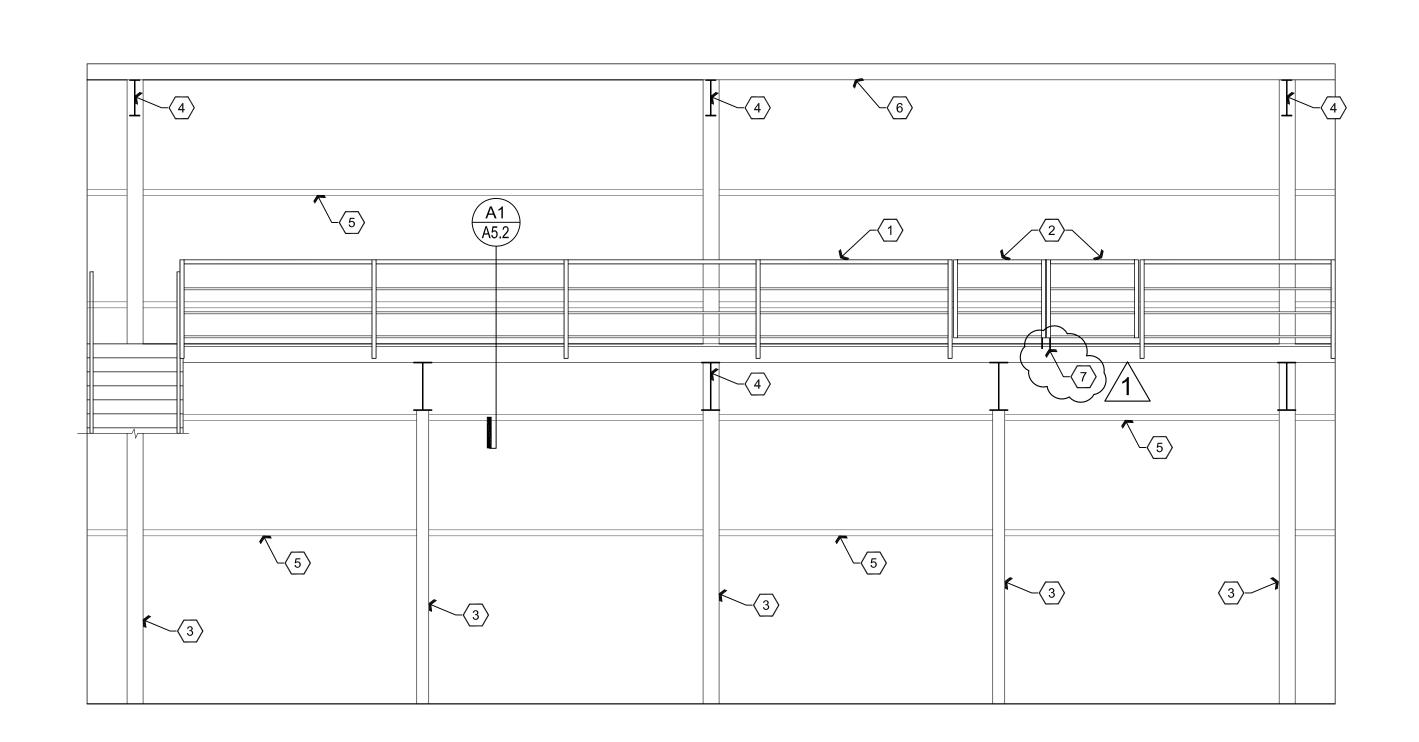
## Descriptive Keynotes $\bigcirc$

- 1. PROVIDE 2"x1"x3/16" STEEL TUBE GUARDRAIL PLACED AT 3'-6" ABOVE UPPER LEVEL FLOOR WITH INTERMEDIATE 1"x1"x1/8" STEEL TUBE RAILS NOT TO EXCEED 12" O.C. PROVIDE 2"x2"x3/16" STEEL POSTS SPACED AT 8'-0" O.C.
- 2. PROVIDE PAIR OF 4'-0" WIDE SWINGING STEEL GATES CONSTRUCTED SIMILAR TO GUARDRAIL CONSTRUCTION, REFER TO DESCRIPTIVE KEYNOTE #1.
- PROVIDE STEEL COLUMN. REFER TO STRUCTURAL PLANS.
- 4. PROVIDE STEEL BEAM. REFER TO STRUCTURAL PLANS.
- 5. PROVIDE STEEL GIRT, TYPICAL. REFER TO STRUCTURAL PLANS.
- 6. PROVIDE STEEL PURLIN, REFER TO STRUCTURAL
- PLANS.

  7. PROVIDE A DROP BOLT ON EACH SIDE TO

SECURE GATE.











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

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Guardrail Elevation and Detail

Yavapai Mechanical Building Addition

5914 N. Fulton Dr.

BROJE L.O.

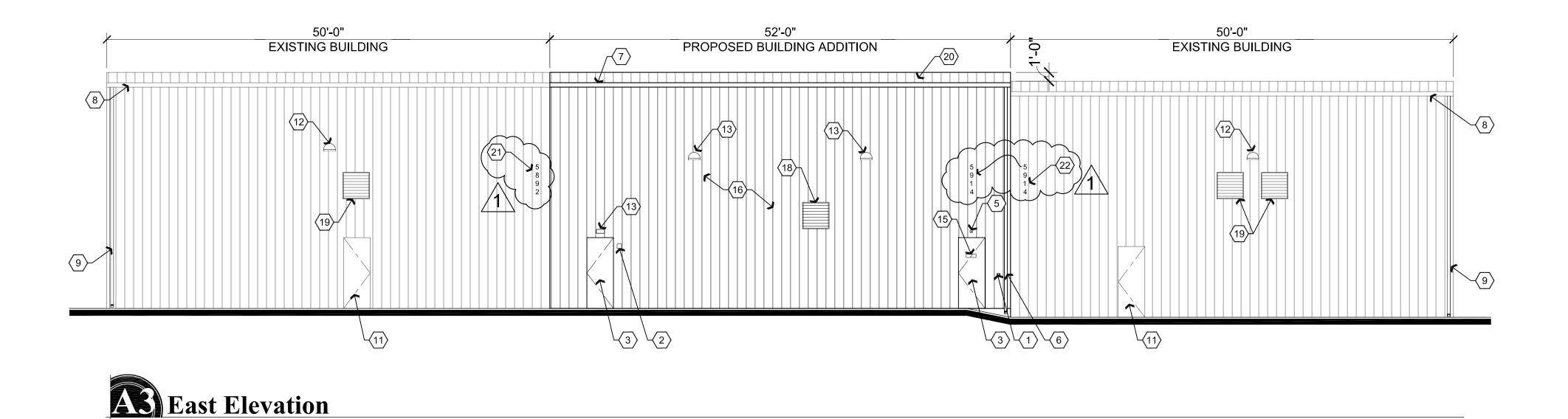
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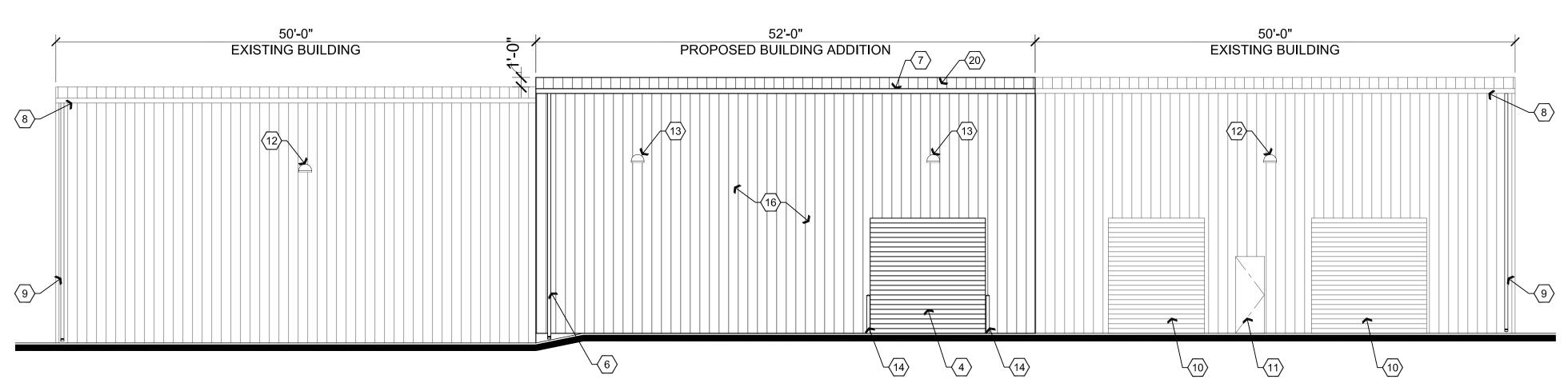
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W.A.K.

DATE
August 1st, 2019

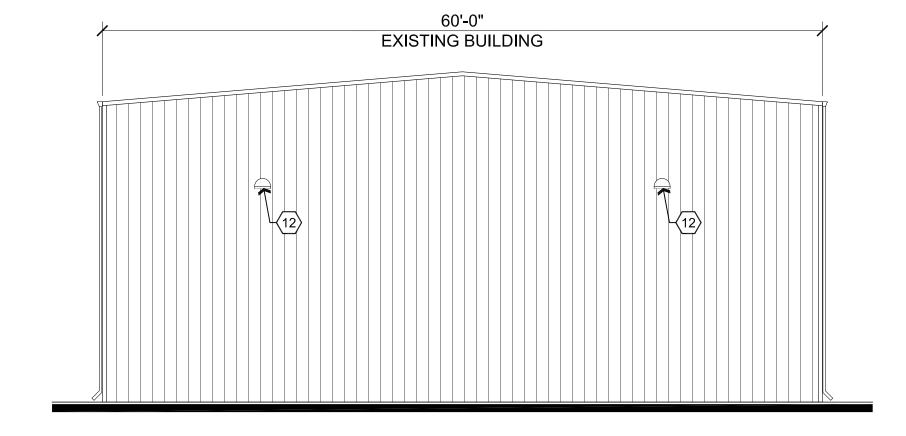
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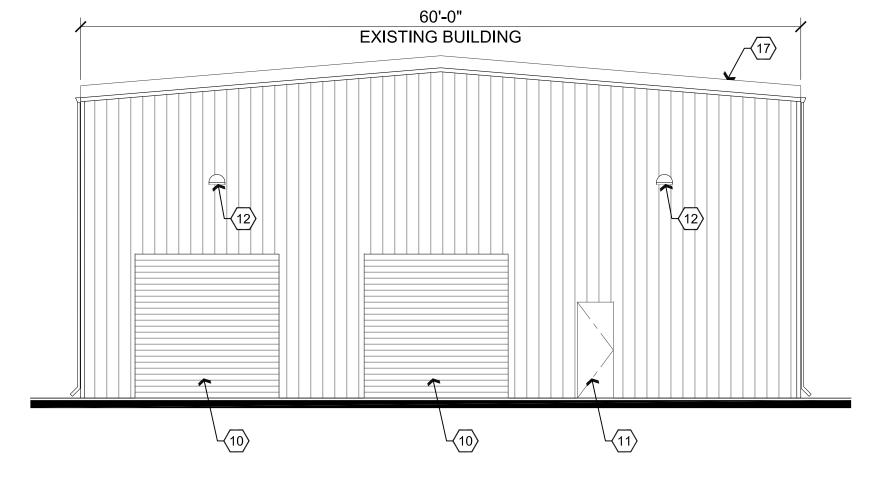
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Existing South Elevation

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

**B** Existing North Elevation

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



- 1. PROVIDE FIRE DEPARTMENT CONNECTION WITH LOCKING CAPS, REFER TO FIRE SPRINKLER PLANS.
- 2. PROVIDE FIRE DEPARTMENT LOCK BOX MOUNTED 6'-0" A.F.F.
- 6'-0" A.F.F.

  3. PROVIDE DOOR, REFER TO REFERENCE FLOOR
  PLAN AND DOOR SCHEDULE.
- 4. PROVIDE ROLL-UP DOOR, REFER TO REFERENCE FLOOR PLAN AND DOOR SCHEDULE.
- 5. PROVIDE FIRE ALARM GONG. REFER TO AUTOMATIC FIRE SPRINKLER PLANS.

  6. PROVIDE SHEET METAL DOWNSPOLIT REFER TO
- 6. PROVIDE SHEET METAL DOWNSPOUT, REFER TO MATERIALS SCHEDULE. M-4
- 7. PROVIDE SHEET METAL GUTTER, REFER TO
- MATERIALS SCHEDULE. M-3
- 8. EXISTING GUTTER.9. EXISTING DOWNSPOUT.

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

- 10. EXISTING ROLL-UP DOOR.
- 11. EXISTING DOOR.
- 12. EXISTING LIGHT FIXTURE.
- 13. PROVIDE NEW LIGHT FIXTURE, REFER TO ELECTRICAL PLANS.
- 14. 4" STEEL CONCRETE FILLED BOLLARDS, 4'-0" ABOVE CONCRETE WITH 2'-0" EMBEDDED INTO CONCRETE FOOTING BELOW, TYPICAL.
- 15. PROVIDE SIGN STATING "FIRE RISER INSIDE".
  LETTERS SHALL BE MINIMUM OF 1" TALL, RED IN
  COLOR ON WHITE BACKGROUND.
- 16. PROVIDE METAL WALL PANEL. REFER TO, WALL TYPES PLAN AND MATERIALS SCHEDULE. M-5
- 17. PROPOSED BUILDING ADDITION BEYOND.
- 18. PROPOSED EVAPORATIVE COOLER LOUVER.
- 19. EXISTING EVAPORATIVE COOLER LOUVER.
  20. PROVIDE METAL ROOF PANELS, REFER TO
- 20. PROVIDE METAL ROOF PANELS, REFER TO

  MATERIALS SCHEDULE.

  21. REMOVE EXISTING ADDRESS NUMBERS FROM
- EXISTING SOUTH BUILDING.

  22. EXISTING ADDRESS NUMBERS TO BE RELOCATED
- TO ABOVE FIRE RISER ROOM DOOR.

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O ARC

EXPIRES: 6/30/21

EXPIRES: 6/30/21

W. Alan Kenson & L. P. 928-443-5812 P.O. Box 11 P. 928-443-5815 Prescott, A.

oai Mechanical Building Addition

N. Fulton Dr.

ott Valley, AZ 86314

COJECT: (Yavapai Mechar 5914 N. Fulton I Prescott Valley,

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L.O.
CHECKED BY
W.A.K.

August 1st, 2019

JOB NO.
733

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Mate	rials schedule	XX-#		
CODE	MATERIAL	LOCATION	MANUFACTURER	SPECIFICATION
M-1	METAL ROOF PANEL	ROOF	MBCI	PBR PANEL, 26 GAUGE, PRE-PAINTED TO MATCH EXISTING
M-2	RIDGE CAP	ROOF	MBCI	SIGNATURE 200, TO MATCH EXISTING
M-3	METAL RAIN GUTTER	EXTERIOR	MBCI	26 GAUGE, SIGNATURE 200 PRE-PAINTED TO MATCH EXISTING
M-4	METAL DOWNSPOUT	EXTERIOR	MBCI	26 GAUGE, SIGNATURE 200 PRE-PAINTED TO MATCH EXISTING
M-5	EXTERIOR METAL WALL PANEL	EXTERIOR WALLS	MBCI	PBR PANEL 26 GAUGE, SIGNATURE 200 PRE-PAINTED TO MATCH EXISTING

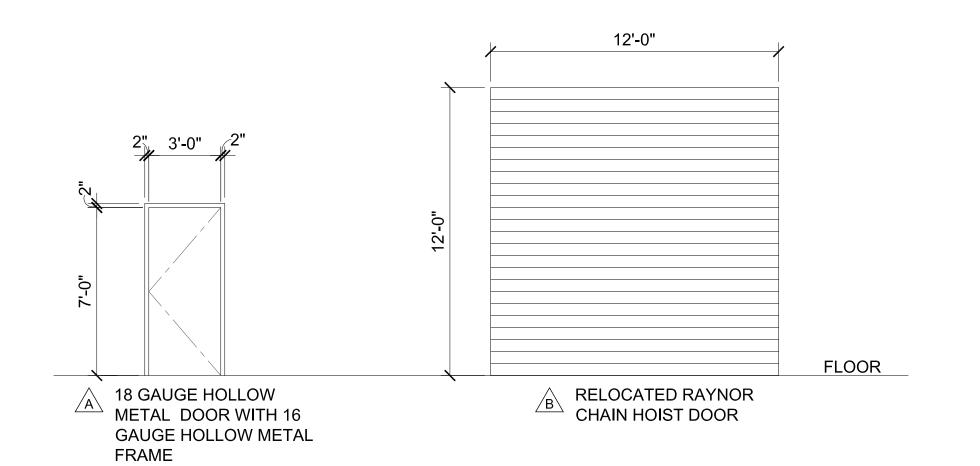
Cor	Schedule							
NO.	ROOM NAME	SIZE	TYPE	DOOR MATERIAL	DOOR FINISH	FRAME MATERIAL	FRAME FINISH	HARDWARE TYPE
100A	WAREHOUSE	12'-0"x12'-0" RELOCATED	В	STEEL	PAINT	STEEL	PAINT	RELOCATED
100B	WAREHOUSE	3'-0"x7'-0"	Α	НМ	PAINT	НМ	PAINT	1
100C	FIRE RISER	3'-0"x7'-0"	Α	HM	PAINT	НМ	PAINT	1

## **R**rdware Schedule

HW-01: LEVER ENTRY LOCK, CHAIN STOP, WEATHER STRIP, THRESHOLD, DOOR BOTTOM

#### 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.



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NG: Schedules

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L.O.
CHECKED BY
W.A.K.
DATE
August 1st, 2019
JOB NO.
733

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### GENERAL REQUIREMENTS:

- 1. THE STRUCTURAL SYSTEMS AND MEMBERS DEPICTED HEREIN HAVE BEEN DESIGNED PRIMARILY TO SAFEGUARD AGAINST MAJOR STRUCTURAL DAMAGE AND LOSS OF LIFE, NOT TO LIMIT DAMAGE OR MAINTAIN FUNCTION (IBC SECTION 101.3).
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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
- 6. 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.
- 7. 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 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: 2012 EDITION OF THE IBC WITH CITY/COUNTY AMENDMENTS.
- RISK CATEGORY = II
- VERTICAL LOADS:

LOCATION	LIVE / SNOW LOAD	DEAD LOAD
ROOF	30 PSF	10 PSF
FLOOR	125 PSF	10 PSF
STAIRS	100 PSF	25 PSF

#### 3 SEISMIC DESIGN DARAMETERS

3. SEISMIC DESIGN PARAMETERS:	
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE PROCEDURE
IMPORTANCE FACTOR	le = 1.00
SITE CLASS	D
SEISMIC DESIGN CATEGORY	С
SPECTRAL RESPONSE ACCELERATIONS	Sms = 0.480, Sm1 = 0.216
SPECTRAL RESPONSE COEFFICIENTS	Sds = 0.320, Sd1 = 0.144
HORIZONTAL SHEAR TRANSFER ELEMENT	S:
X-BRACE(S)	R = 3.0
PLYWOOD-FLEXIBLE DIAPHRAM(S)	R = 6.5
VERTICAL SHEAR TRANSFER ELEMENTS:	
X-BRACE(S)	R = 3.0
RIGID STEEL FRAME(S)	R = 3.0

#### 4. WIND DESIGN PARAMETERS (STRENGTH):

WIND SPEED	115 MPH (3 SECOND GUST)
WIND EXPOSURE	С
IMPORTANCE FACTOR	Iw = 1.00
INTERNAL PRESSURE COEFFICIENT	+/-0.18
COMPONENT AND CLADDING PRESSURE	33.5 PSF
NET UPLIFT ON ROOF	27.6 PSF

#### FOUNDATION NOTES:

- FOUNDATIONS DESIGNED IN CONFORMANCE WITH RECOMMENDATIONS BY: ENGINEERING TESTING CONSULTANTS, INC. REPORT NO. 3047 DATED FEBRUARY 28, 2002.
- 2. SITE PREPARATION AND GRADING REQUIREMENTS OF THE SOIL REPORT AND ANY ADDENDUM'S SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF FOUNDATIONS. ANY TESTS OR INSPECTIONS REQUIRED BY THE SOIL REPORT SHALL BE PERFORMED PRIOR TO PLACEMENT OF FOUNDATION REINFORCING STEEL OR CONCRETE. ALTERATIONS TO SITE PREPARATION OR GRADING SHALL BE REPORTED TO THE GEOTECHNICAL ENGINEER PRIOR TO FOUNDATION CONSTRUCTION.

#### THE SOIL DESIGN VALUES FOR THE FOUNDATION ARE:

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
	30" BELOW FINISHED GRADE
4.	ALL FOUNDATIONS SHALL BEAR ON UNDISTURBED NATURAL SOIL OR LEAN

- CONCRETE SLURRY 30 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
- 5. INTERIOR CONCRETE SLABS ON GRADE SHALL BE SUPPORTED ON A 12 INCH LAYER OF SELECT FILL MATERIAL ACCORDING TO THE SPECIFICATIONS OF THE SOIL REPORT EXTERIOR CONCRETE SLABS ON GRADE SHALL BE SUPPORTED ON A 8 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 3/4", 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"
#6	47"

- LAP SPLICES FOR BEAMS AND FLOOR SLABS SHALL BE ACCORDING TO CHAPTER 12 OF ACI 318 OR LAP SCHEDULE ON THESE DRAWINGS.
- STAGGER SPLICES A MINIMUM OF ONE LAP LENGTH. 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
- 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

FOR NON-PRESTRESSED CONCRETE REINFORCING S	FOR NON-PRESTRESSED CONCRETE REINFORCING SHALL BE AS FULLOWS:				
LOCATION:	MINIMUM COVER	TOLERANCE			
CAST AGAINST EARTH (FOOTINGS)	3"	± ¾"			
SLABS ON GRADE	1½"	± 1/4"			
EXPOSED TO EARTH OR WEATHER — #5 AND SMALLER	1½"	± 3/8"			
EXPOSED TO EARTH OR WEATHER - #6 AND LARGER	2"	± 3%"			
SMALLER "	-	-			

- 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.
- 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.

#### 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
- 3. REINFORCING BAR SPACING GIVEN ARE MAXIMUM ON CENTERS. ALL BARS PFR 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 FOLLOWING NOMINAL THICKNESS, SPAN/INDEX RATING AND SHALL BE NAILED AS FOLLOWS UNLESS NOTED OTHERWISE ON THE PLANS:

SLOOP 34" 48/ #8 SCREWS AT #8 SCREWS A	.OCATION:	NOMINAL THICKNESS:	SPAN INDEX RATING:	EDGE ATTACHMENT:	FIELD ATTACHMENT:
T&G 7 <sup>24</sup> 6" O.C. 12" O.C.	FLOOR	¾" T&G	48/24	"	#8 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  $\frac{1}{32}$ ") Shall be the same as the plywood it replaces. Install per MANUFACTURER'S RECOMMENDATIONS.

#### STEEL DECKING (ICBO #2078):

- 1. PER ARCHITECTURAL DRAWINGS.
- 2. ROOF DECK ATTACHMENT: PER TYPICAL DETAILS.
- 3. WALL SHEETING (PBR PANEL): DECK SHALL BE 1.25" DEEP, 36" WIDE, 26 GAUGE PRE-FINISHED STEEL, WITH MINIMUM YIELD STRESS OF 80 KSI, WITH MINIMUM S = 0.0381  $IN^3$  AND I = 0.0309  $IN^4$  PER FOOT OF WIDTH.
- 4. SHEETING ATTACHMENT: PER TYPICAL DETAILS.

#### COLD FORMED STEEL (ICBO ER 4943P):

- 1. MATERIALS: STANDARD COLD-FORMED STEEL STUDS, JOISTS, TRACK, BRIDGING AND STRAPS SHALL CONFORM TO AISI NAS-01 WITH 2004 SUPPLEMENT (FY = 33 KSI). STFFL 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 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):

#### **DEFERRED SUBMITTAL ITEMS:**

STEEL ERECTION SHOP DRAWINGS

#### 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:
SOIL BEARING SUBGRADE	YES	PER GEOTECHNICAL REPORT
CONCRETE SLAB ON GRADE	NO	DESIGN BASED ON f'c=2500 PSI
CONCRETE FOUNDATIONS	NO	DESIGN BASED ON f'c=2500 PSI
FIELD WELDING	YES	AFTER WORK IS COMPLETE
STEEL TO STEEL BOLTED CONNECTIONS	YES	AFTER WORK IS COMPLETE
EPOXY ANCHORS	YES	DURING INSTALLATION.

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
- 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
- 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 THE GEOTECHNICAL ENGINEER OF 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
- C. UPON COMPLETION OF THE ASSIGNED WORK THE STRUCTURAL ENGINEER SHALL COMPLETE AND SIGN THE APPROPRIATE FORMS FRIFYING 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							
DETAILS	SHEET	DESCRIPTION						
	S1	GENERAL STRUCTURAL NOTES						
T1-T11	S1.1	TYPICAL DETAILS						
	<b>S2</b>	FOUNDATION PLAN						
	<b>S</b> 3	FRAMING PLAN						
220-225	S3.1	STRUCTURAL ELEVATIONS						
101-110	S4	FOUNDATION DETAILS						
201-219	<b>S</b> 5	FRAMING DETAILS						

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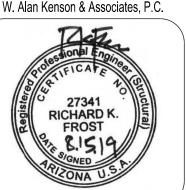
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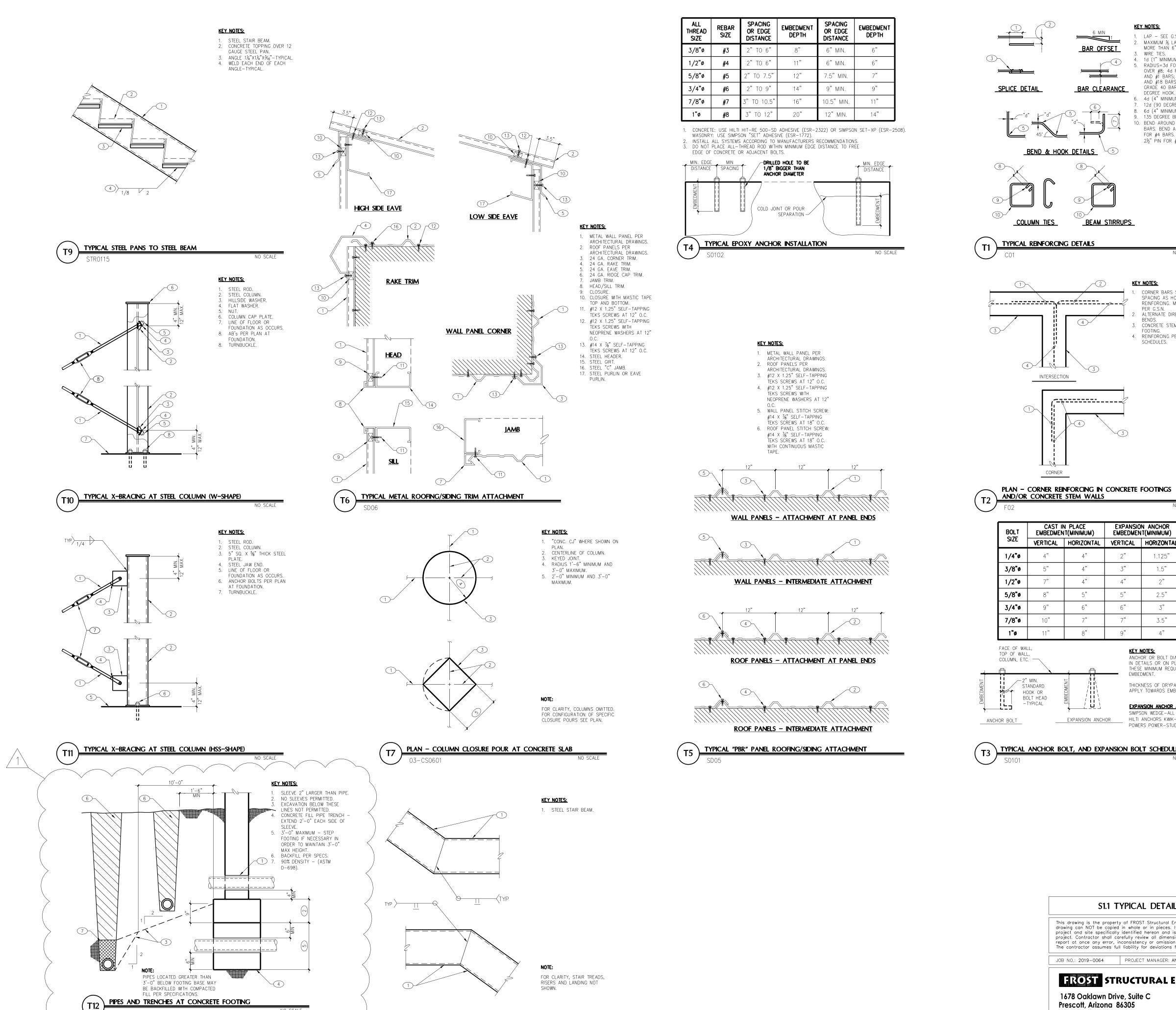
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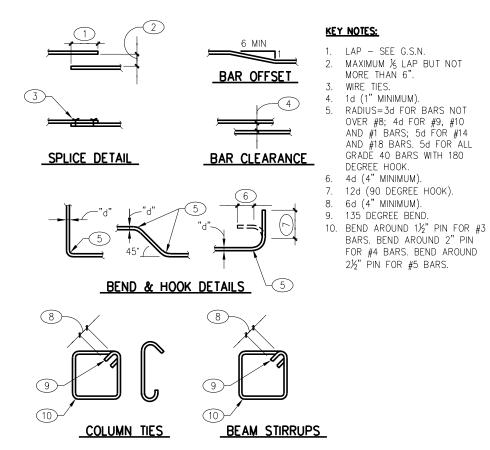
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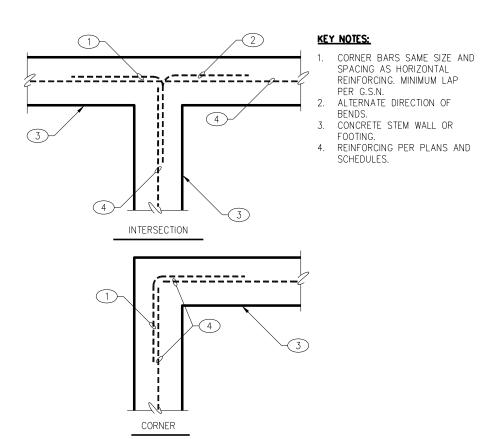
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GU CHECKED BY AGK 6/28/19 AS NOTED JOB NO. 2019-0064



TYPICAL SPLICE AT STEEL STAIR BEAM





BOLT	CAST II Embedmen	N PLACE IT(MINIMUM)	EXPANSION ANCHOR EMBEDMENT(MINIMUM)				
SIZE	VERTICAL	HORIZONTAL	VERTICAL	HORIZONTAL			
1/4 <b>"</b> ø	4"	4"	2"	1.125"			
3/8"ø	5"	4"	3"	1.5"			
1/2"ø	7"	4"	4"	2"			
5/8 <b>"</b> ø	8"	5"	5"	2.5"			
3/4"ø	9"	6"	6"	3"			
7/8 <b>"</b> ø	10"	7"	7"	3.5"			
1 <b>"</b> ø	11"	8"	9"	4"			

	'/0	10	/	/	5.5	
	1 <b>"</b> ø	11"	8"	9"	4"	
EMBEDMENT	ST/ HC BO		EXPANSION ANCH	ANCHI IN DE THESE EMBEI  THICK APPLY  SIMPS  OR HILTI	NOTES:  DR OR BOLT DIAME TAILS OR ON PLAN MINIMUM REQUIRE DMENT.  NESS OF DRYPACK ( TOWARDS EMBED  NSION ANCHOR AP ON WEDGE—ALL (E ANCHORS KWIK—BORS POWER—STUD (	DOES NOT MENT.  PROVALS: SR-1396) DLT (ESR-1917).

TYPICAL ANCHOR BOLT, AND EXPANSION BOLT SCHEDULE

#### S1.1 TYPICAL DETAILS T1-T11

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1 PLAN CHECK COMMENTS

8.05.2019

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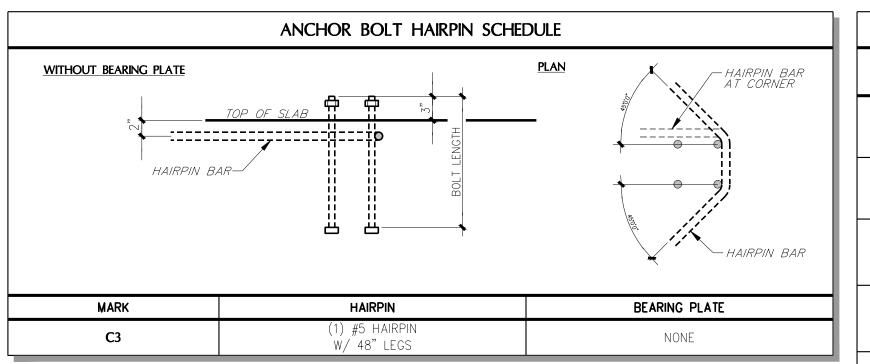
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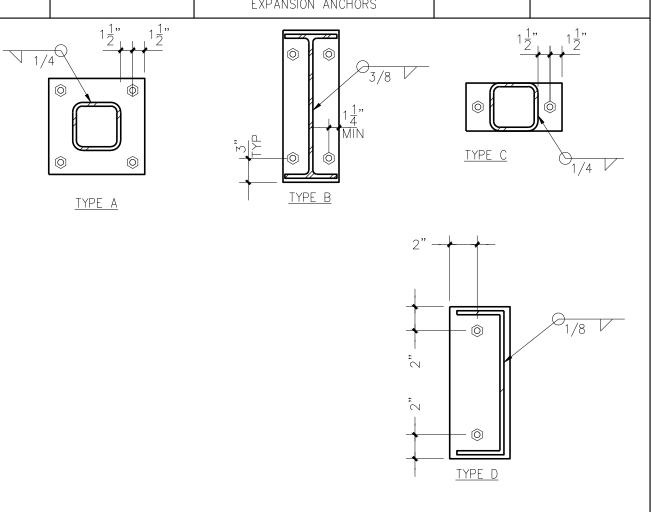
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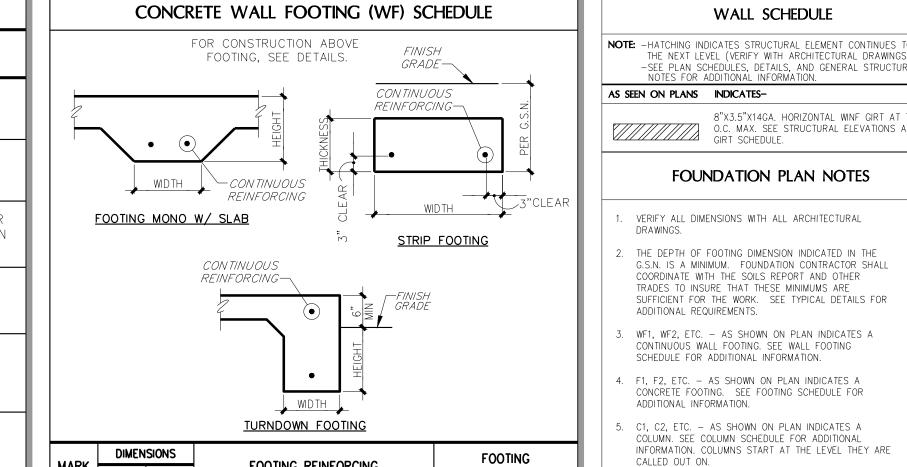
DR DRAWN BY GU CHECKED BY AGK

8/12/19 AS NOTED JOB NO. **2019-0064** 



STEEL COLUMN (SC) SCHEDULE    BASE									
MARK	SIZE	BASE CONNECTION	CONNECTION TYPE	REMARKS					
C1	HSS4X4X¾ <sub>6</sub>	10" SQ. X %" THICK STEEL PLATE W/ (4) %"Ø X 4" EXPANSION ANCHORS	TYPE A						
C2	HSS6X6X1/4	12" SQ X %" THICK STEEL PLATE W/ (4) ¾"ø X 10" J-BOLTS	TYPE A						
C3	W14X61	15" x 11" x 5%" THICK STEEL PLATE W/ (4) 34"ø X 12" LONG ASTM F 1554 GR36 HEADED ANCHORS	TYPE B	SEE ANCHOR BOLT HAIRPIN SCHEDULE					
C4	HSS 6X6X⅓	12" X 6.5" X %" THICK STEEL PLATE W/ (2) ¾"ø X 10" J-BOLTS.	TYPE C						
C5	8"X3.5"X14 GA. 'C' COLUMN	8.5" X 4" X ¼" THICK STEEL PLATE W/ (2) %" DIAMETER X 6" J-BOLT ANCHORS OR (2) %" DIAMETER X 6" EXPANSION ANCHORS	TYPE D						





							COLUMN. SEE COLUMN SCHEDULE FOR ADDITIONAL			
MARK	DIMENSIONS		FOOTING REINFORCING	FOOTING			INFORMATION. COLUMNS START AT THE LEVEL THEY ARE CALLED OUT ON.			
WIANN	WIDTH	THICKNESS	FOOTING REINFORGING	TYPE		6.	CCJ - AS SHOWN ON PLAN INDICATES LOCATION OF			
WF1	16"	10"	(2) #4 CONTINUOUS	[ STRIP ]			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)			
WF2	16"	12"	(2) #4 CONTINUOUS	[ MONO W/ SLAB ]		7.	VERIFY EXACT SIZE AND LOCATION OF DEPRESSED AND/OR RAISED SLABS WITH ARCHITECTURAL DRAWNGS.			
WF3	12"	30"	(2) #4 CONTINUOUS TOP & BOTTOM	TURNDOWN		8.	FOR SIDEWALK AND LANDING LOCATIONS, SEE ARCHITECTURAL DRAWINGS.			
					- [					

	CONCRETE FOOTING (F) SCHEDULE									
				TION ABOVE E DETAILS.						
HICKNESS	FOOTING REINFORCING.									
<b>⊢</b> ▼	3"CLEAR  WIDTH/LENGTH									
MARK	D LENGTH	IMENSION WIDTH	THICKNESS	FOOTING REINFORCING	REMARKS					

		7		•	
RK	LENGTH	IMENSIONS WIDTH THICKNESS		FOOTING REINFORCING	REMARKS
·1	24"	24"	12"	(4) #4 EACH WAY	MONO W/ SLAB
2	48"	48"	12"	(8) #4 EACH WAY	
3	60"	60"	12"	(10) #4 EACH WAY	
4	84"	84"	12"	(18) #4 EACH WAY	

	CONCRETE WALL FOOTING (WF) SCHEDULE	WALL SCHEDULE
	FOR CONSTRUCTION ABOVE FINISH GRADE—	NOTE: -HATCHING INDICATES STRUCTURAL ELEMENT CONTINUES TO THE NEXT LEVEL (VERIFY WITH ARCHITECTURAL DRAWINGS)SEE PLAN SCHEDULES, DETAILS, AND GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.
	CONTINUOUS	AS SEEN ON PLANS INDICATES-
4	HICKNESS HICKNESS N.S.S.N.	8"X3.5"X14GA. HORIZONTAL WINF GIRT AT 7'-0" O.C. MAX. SEE STRUCTURAL ELEVATIONS AND WII GIRT SCHEDULE.
	WIDTH CONTINUOUS REINFORCING	FOUNDATION PLAN NOTES
	FOOTING MONO W/ SLAB	VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL     DRAWINGS.
1	CONTINUOUS REINFORCING   TO STRIP FOOTING  CONTINUOUS REINFORCING  FINISH GRADE	2. 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.
1	FIGHT -	3. WF1, WF2, ETC. — AS SHOWN ON PLAN INDICATES A CONTINUOUS WALL FOOTING. SEE WALL FOOTING SCHEDULE FOR ADDITIONAL INFORMATION.
	WIDTH _	4. F1, F2, ETC. — AS SHOWN ON PLAN INDICATES A CONCRETE FOOTING. SEE FOOTING SCHEDULE FOR ADDITIONAL INFORMATION.

IA DIC	DIMEN	ISIONS	FOOTING DEINFORGING	FOOTING		
IARK	WIDTH	THICKNESS	FOOTING REINFORCING	TYPE		
WF1	16"	10"	(2) #4 CONTINUOUS	STRIP		
WF2	16"	12"	(2) #4 CONTINUOUS	MONO W/ SLAB		
WF3	12"	30"	(2) #4 CONTINUOUS TOP & BOTTOM	TURNDOWN		

PLAN KEYNOTES

#5 HAIRPIN W/ 48" LONG LEGS, THICKEN SLAB AROUND HAIRPINS.

WALL SCHEDULE

8"X3.5"X14GA. HORIZONTAL WINF GIRT AT 7'-0"
O.C. MAX. SEE STRUCTURAL ELEVATIONS AND WIND
GIRT SCHEDULE.

IF EXISTING BUILDING FOOTING CONFLICTS WITH NEW FOOTING SHIFT FOOTING ACCORDINGLY AND EPOXY ENDS OF REQUIRED REINFORCING INTO EXISTING FOOTING WITH SIMPSON SET-XP TYPE EPOXY AND 6" EMBED (NOTE-SPECIAL INSPECTION REQUIRED DURING EPOXY INSTALLATION).

( <b>3</b>				<b>2</b>				$(\widehat{1})$	F3	60"	60"	12"	(10)
	_'								F4	84"	84"	12"	(18)
1'- <u>7"</u> 2 C3  F3  103  OPP  C1  F1	C1 C1 (E)WF (E)WF (CC) (CC)	30'-0"  WF3  TYP  S  C1  F1	9'-9"  C2 F2	<b>WF3</b> ccJ	TE SLAB ON GRADE RETE SLAB ON GRADE RETE SLAB ON GRADE O IN SLAB THICKNESS MPACTED FILL. TECH REPORT)	(E)W 	<del>, -,, -,, -,, -, -, -, -, -, -, -, -, -,</del>	C5 F3	103	12,-0"			—( <b>E</b> )
103	F4 C3 CCJ	105 TYP	C2 F3	PROVIDE : TYPICAL [ HOURS OF	SLAB JOINTS PER DETAIL WITHIN 16 F BATCH TIME  OOR = 0'-0"	CCJ 101 TYP		C4 F3  C3 F4	104	12,-0"			—( <b>D</b> )
102 103 2 C3 F3 C5	(E)WF	C2 F2	C2 F3	CCJ (E)WF		CCJ 	103 OPP	C4 F3 C3 F3 (E)C (E)F	104	2,-0,,			—(c)

FOUNDATION PLAN

LOCATION OF DETAILS						
DETAILS	SHEET	DESCRIPTION				
	<b>S</b> 1	GENERAL STRUCTURAL NOTES				
T1 — T11	S1.1	TYPICAL DETAILS				
220-225	S3.1	STRUCTURAL ELEVATIONS				
101-109	<b>S4</b>	FOUNDATION DETAILS				
201-219	<b>S</b> 5	FRAMING DETAILS				

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CHECKED BY DATE 5/23/19 SCALE AS NOTED 2019-0064 SHEET

STEEL PURLIN (SP) SCHEDULE							
MARK	SIZE	REMARKS					
SP1	10"X2.5"X14GA. 'Z' PURLIN AT 3'-0"						
SP2	10"X2.5"X16 GA. 'C' PURLIN AT 2'-0" O.C.						
SP3	10"X2.5"X14 GA. 'C' PURLIN	EAVE PURLIN					

	STEEL BEAM (B, SSB) SCHED							
MARK	SIZE	REMARKS						
B1	W24X84							
B2	W10X22							
В3	W24X84							
B4	W8X24	FLAT						
SSB1	MC12X10.6							
SSB2	C8X11.5							
SSB3	L3.5X3.5X1⁄4	SPACE AT 16" O.C MAX.						

WALL	SCHEDULE	

NOTE: -SEE PLAN SCHEDULES, DETAILS AND GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION. AS SEEN ON PLANS INDICATES-

F----- STRUCTURAL WALL BELOW (BEARING WALL, SHEARWALL, OR EXTERIOR WALL)

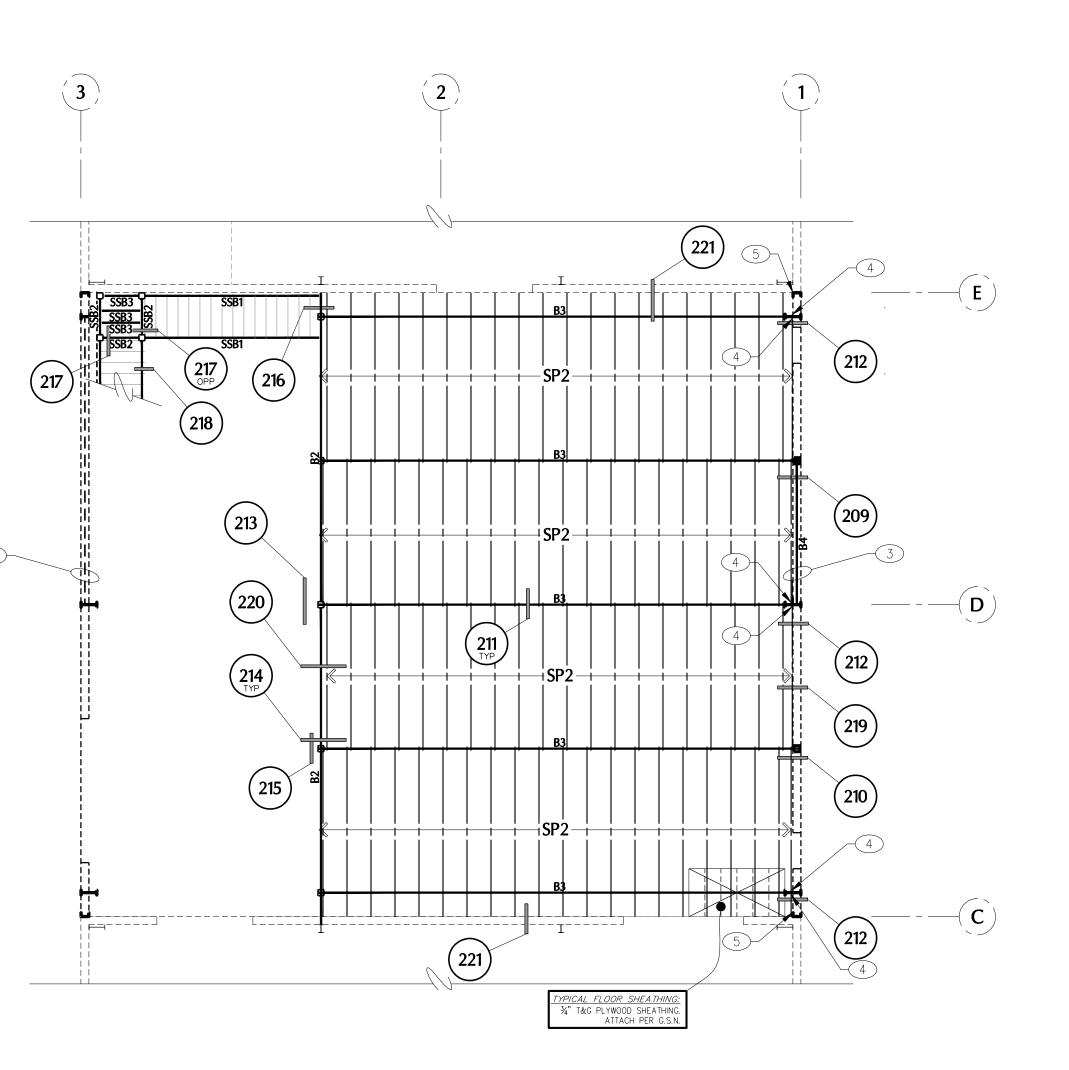
NON-STRUCTURAL WALL BELOW.

#### ROOF FRAMING PLAN NOTES

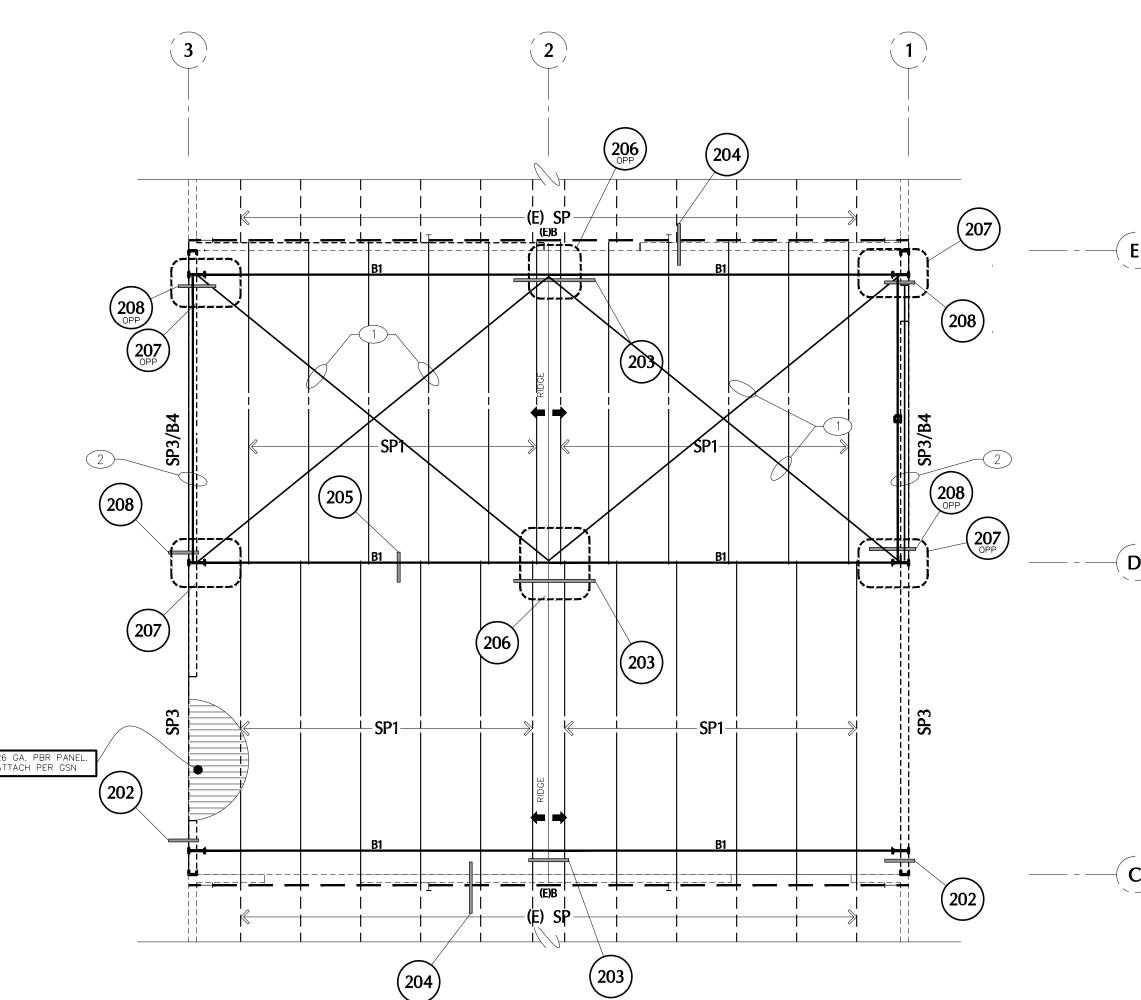
- VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL
- . ALL SCHEDULED MARK DESIGNATIONS MAY NOT NECESSARILY BE FOUND ON THIS PLAN. SCHEDULES ARE TYPICAL TO THIS PROJECT.
- 3. B1, B2, ETC. AS SHOWN ON PLAN INDICATES A BEAM. SEE BEAM SCHEDULE FOR ADDITIONAL INFORMATION.
- SP1, SP2, ETC. AS SHOWN ON PLAN INDICATES A STEEL PURLIN. SEE STEEL PURLIN SCHEDULE FOR ADDITIONAL INFORMATION.
- 5. SSB1, SSB2, ETC. AS SHOWN ON PLAN INDICATES A STEEL STAIR BEAM. SEE BEAM SCHEDULE FOR MORE
- 6. (E)B AS SHOWN ON PLAN. INDICATES AN EXISTING BEAM.
- 7. (E)SP AS SHOWN ON PLAN INDICATES AN EXISTING STEEL PURLIN. 8. FOR CLARITY, DETAILS MAY SHOW ONLY ONE SIDE OF FRAMING CONDITION.

X	PLAN	KEYNOTE

- 1. 1/2"ø STEEL ROD HORIZONTAL X-BRACE. 2. 1/2"ø STEEL ROD VERTICAL X-BRACE, SEE WALL
- ELEVATIONS ON S3.1. 3. 7/8" DIA. STEEL ROD X-BRACE, SEE ELEVATIONS ON
- 4. 8" SQ. X 1/8" THICK SHEAR PLATE WELDED TO WEB
- OF STEEL COLUMN WITH 1/8" FILLET WELD EACH SIDE AND (2)1/8" DIA. A307 THRU BOLTS TO STEEL PURLIN. 5. (2)%" DIAMETER A307 THRU BOLTS STEEL PURLIN WEB TO STEEL COLUMN FLANGE.



FLOOR FRAMING PLAN



ROOF FRAMING PLAN

	LOC	ATION OF DETAILS
DETAILS	SHEET	DESCRIPTION
	S1	GENERAL STRUCTURAL NOTES
T1 — T11	S1.1	TYPICAL DETAILS
220-225	S3.1	STRUCTURAL ELEVATIONS
101-109	S4	FOUNDATION DETAILS
201-219	<b>S</b> 5	FRAMING DETAILS

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JOB NO.: 2019-0064 PROJECT MANAGER: ANDY K. CAD OPERATOR: GU

# FROST STRUCTURAL ENGINEERING

1678 Oaklawn Drive, Suite C phone Prescott, Arizona 86305 fax info@frost-structural.com phone: 928.776.4757 fax: 928.776.4931

REVISIONS

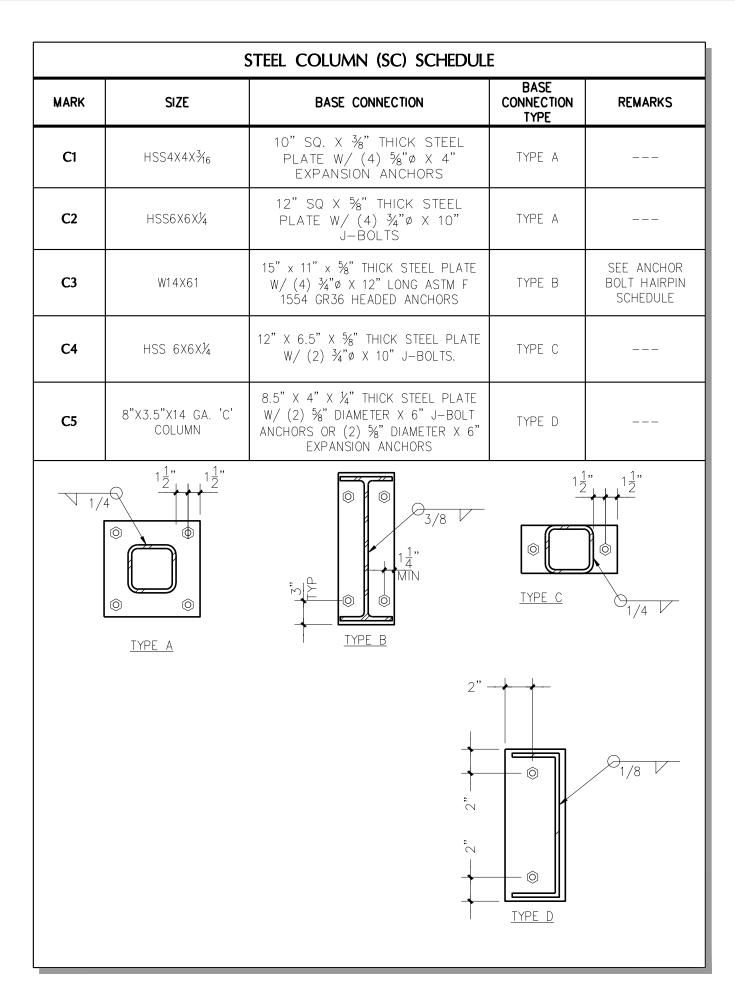
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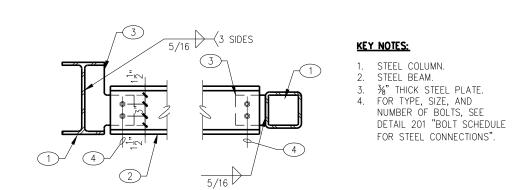
DATE 5/23/19 SCALE AS NOTED JOB NO. 2019-0064



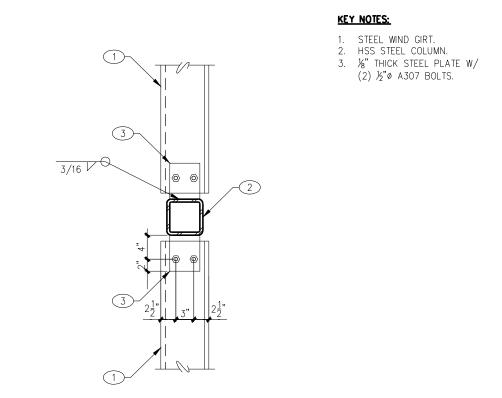
WIND	GIRT (G) SCHEDULE
MARK	SIZE
G1	8"X3.5"X14 GA. 'Z'
G2	8" X 3.5" X 14 GA. 'C'

	STEEL BEAM (B, SSB) SO	EL BEAM (B, SSB) SCHEDULE				
MARK	SIZE	REMARKS				
B1	W24X84					
B2	W10X22					
В3	W24X84					
B4	W8X24	FLAT				
SSB1	MC12X10.6					
SSB2	C8X11.5					
SSB3	L3.5X3.5X1⁄4	SPACE AT 16" O.C MAX.				

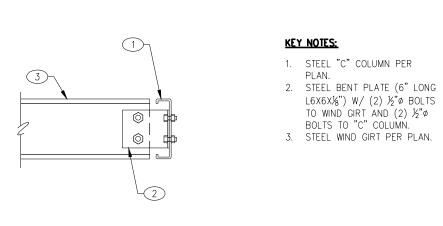
	STEEL PURLIN (SP) SCHEDULE							
MARK	SIZE	REMARKS						
SP1	10"X2.5"X14GA. 'Z' PURLIN AT 3'-0"							
SP2	10"X2.5"X16 GA. 'C' PURLIN AT 2'-0" O.C.							
SP3	10"X2.5"X14 GA. 'C' PURLIN	EAVE PURLIN						



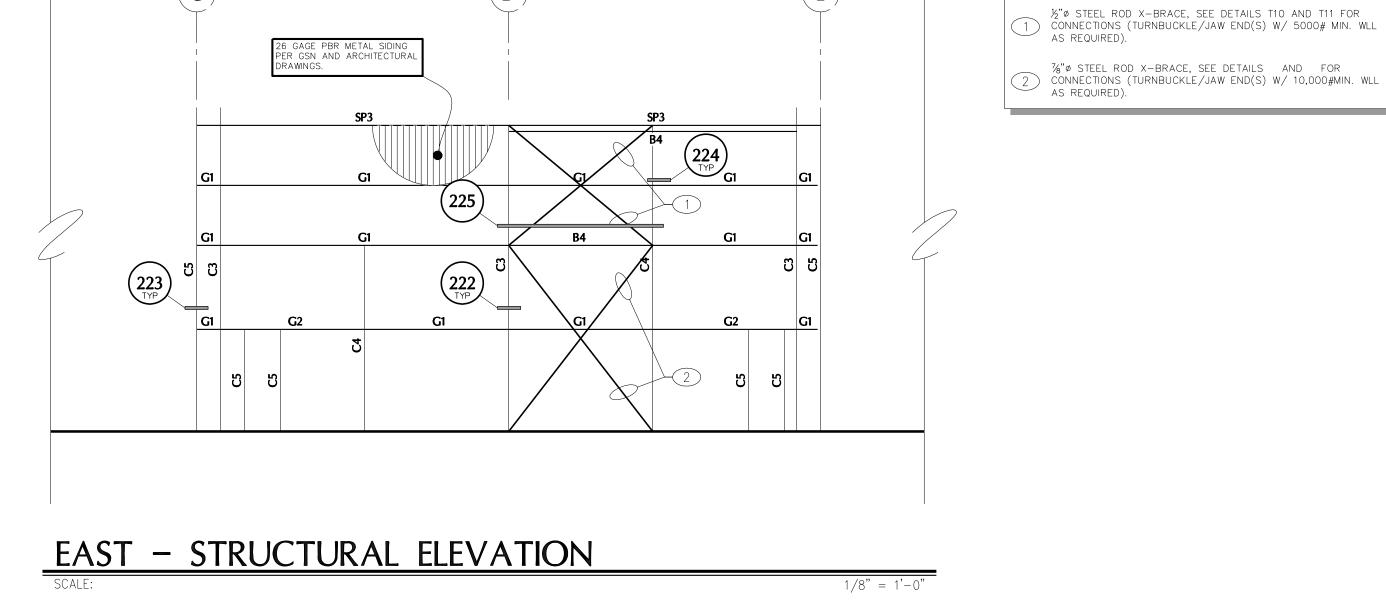
(225) PLAN - STEEL BEAM AT STEEL COLUMN

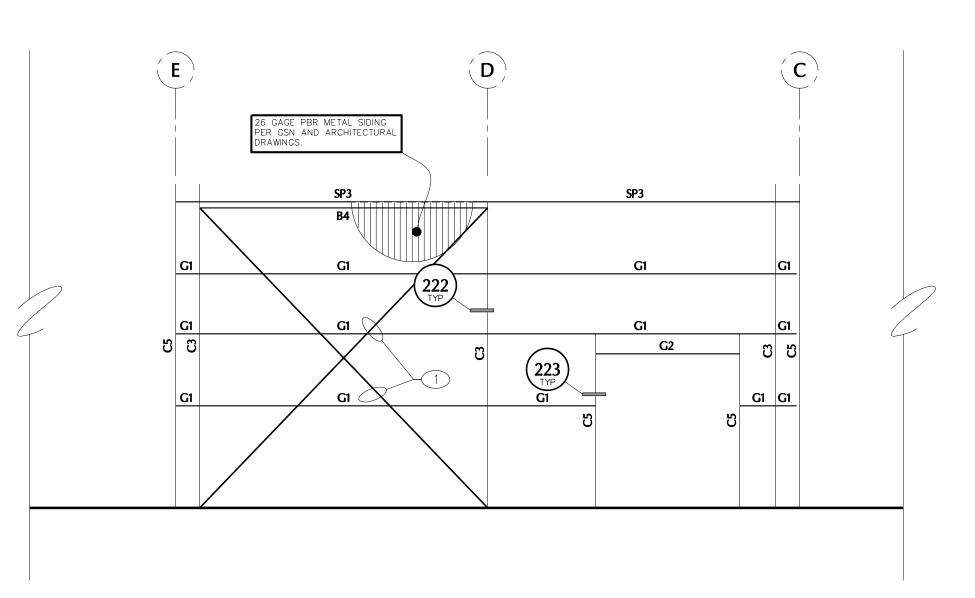




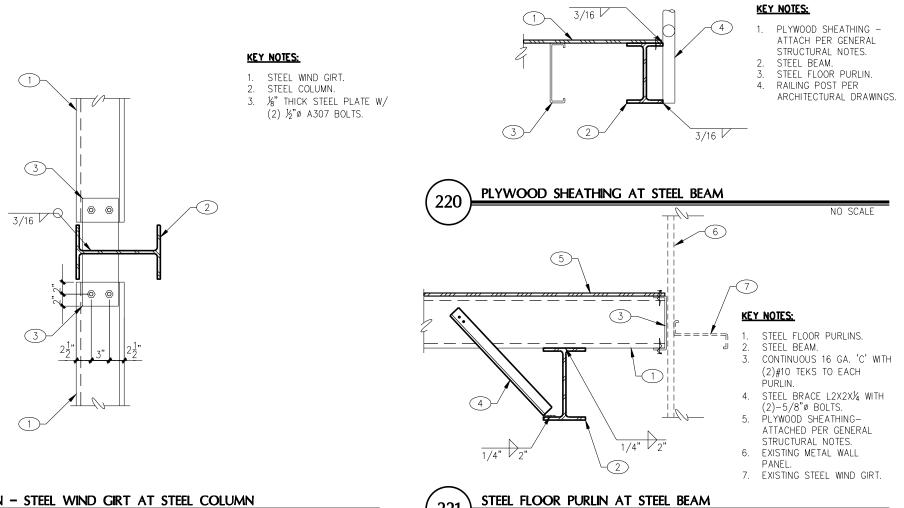












LOCATION OF DETAILS				
DETAILS SHEET DESCRIPTION				
	<b>S</b> 1	GENERAL STRUCTURAL NOTES		
T1-T11	S1.1	TYPICAL DETAILS		
220-225	S3.1	STRUCTURAL ELEVATIONS		
101-109	S4	FOUNDATION DETAILS		
201-219	<b>S</b> 5	FRAMING DETAILS		

STRUCTURAL ELEVATION KEYNOTES

AS REQUIRED).

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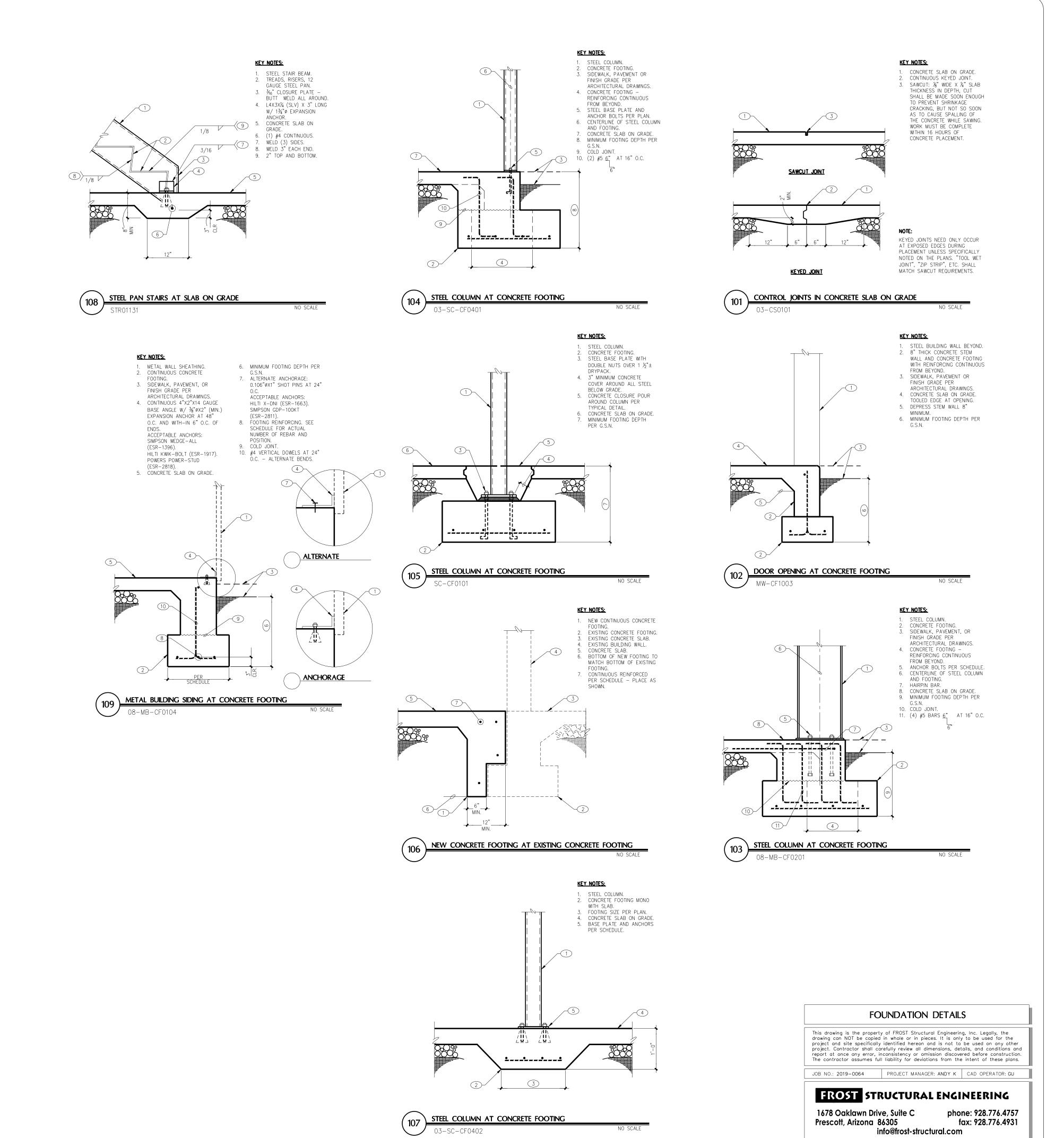
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JOB NO. 2019-0064	



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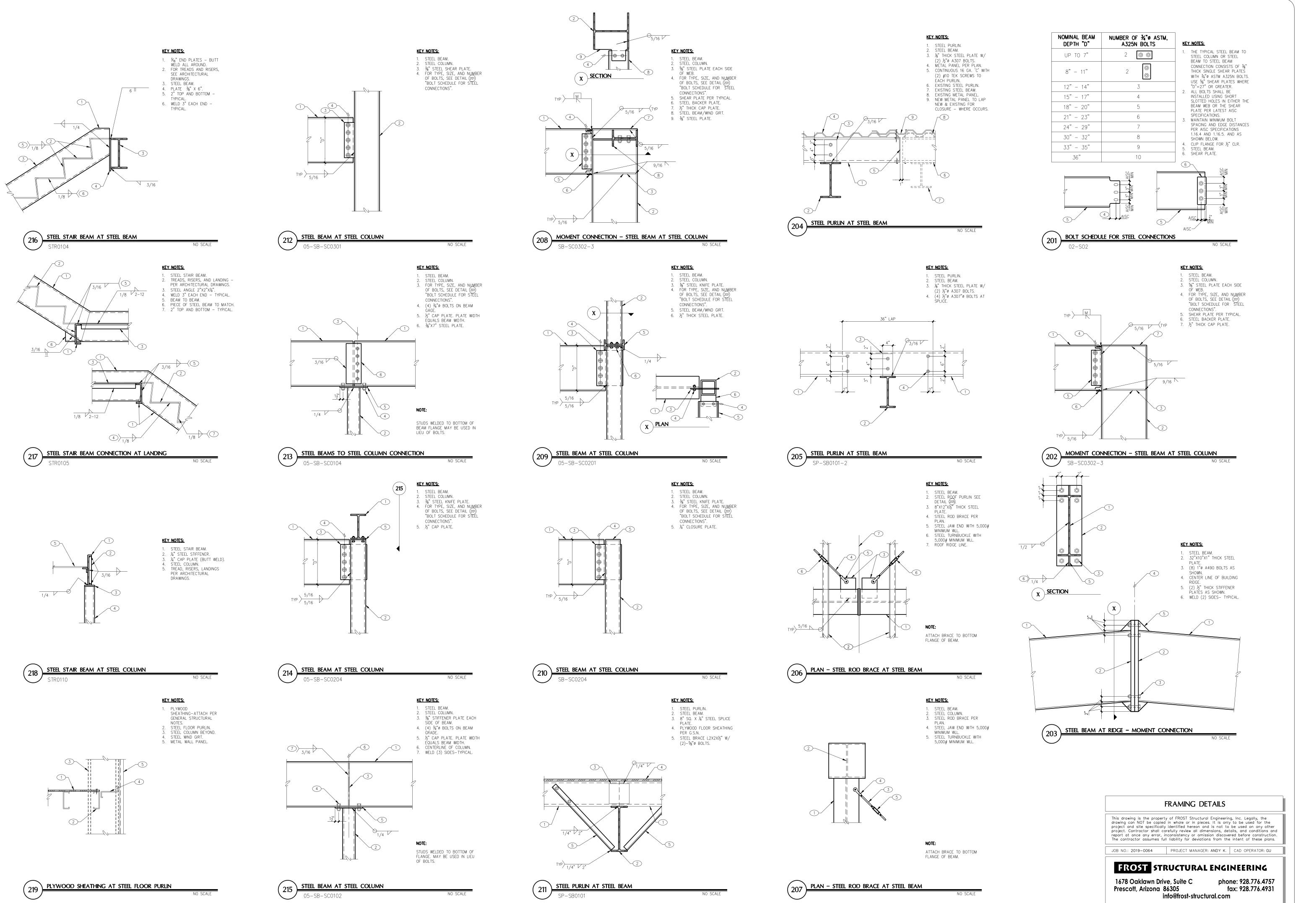
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S4 FOUNDATION I DETAILS 101-119

DR



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RICHARD K. FROST



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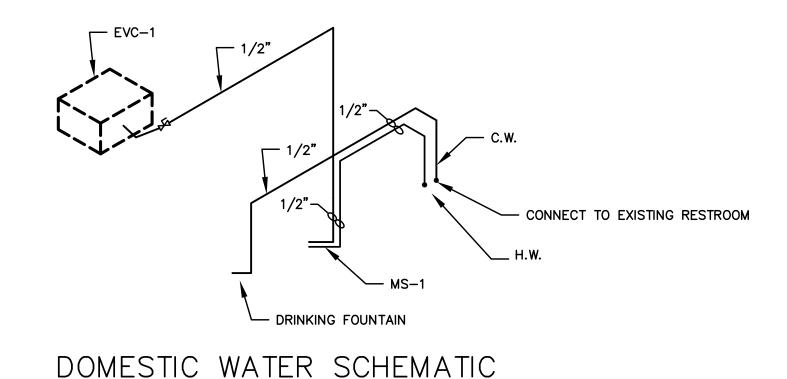
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S5 FRAMING I DETAILS 201-3

DR

#### WASTE & VENT SCHEMATIC SCALE: N.T.S.



#### **MECHANICAL GENERAL NOTES**

- FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, FEES, PERMITS, CERTIFICATE OF INSPECTION, ETC. NECESSARY OR REASONABLE REQUIRED FOR THE COMPLETE INSTALLATION OF ALL AIR—CONDITIONING WORK, THE WORK SHALL BE IN STRICT ACCORDANCE WITH ASHRAE GUIDELINES, AND ALL LOCAL AND STATE CODES, ORDINANCES
- MECHANICAL EQUIPMENT LOCATIONS TO COMPLY WITH ALL APPLICABLE CODES. . COORDINATE EXACT DIFFUSER AND GRILLE LOCATIONS WITH OTHER TRADES.
- PROVIDE 1 1/2" DUCT LINER IN ALL SUPPLY & RETURN DUCTS WITHIN 20 FT. OF AIR HANDLER/AC UNIT DUCT CONNECTIONS AND WHERE SHOWN ON DRAWINGS, INCREASE SHEETMETAL DIMENSIONS ACCORDINGLY. ALL SUPPLY AND RETURN DUCTS TO BE SHEET METAL WITH 1 1/2" EXTERIOR INSULATION WITH FOIL FACE, EXCEPT FOR LINED DUCT. SUPPLY AND RETURN DUCTS EXPOSED TO WEATHER SHALL BE LINED WITH 2" DUCT
- FLEX DUCTS TO BE THERMAFLEX TYPE GKM OR APPROVED EQUAL, 8FT. MAX. LENGTH OUTSIDE AIR INTAKES SHALL BE MINIMUM 10 FEET FROM ANY EXHAUST OR PLUMBING VENTS.
- EXTEND 3/4" CONDENSATE DRAIN AS SHOWN ON DRAWING, OR TO NEAREST PLUMBING TAIL PIECE. INTERIOR CONDENSATE DRAINS TO BE SCHED. 40 PVC, OUTSIDE CONDENSATE DRAINS TO BE TYPE "M" COPPER. · SET A/C UNIT OSA TO CFM AS SPECIFIED ON DRAWING.
- 10 TEST & BALANCE SYSTEM, MAY BE DONE BY INSTALLATION CONTRACTOR. (LOCAL GOVERNING AUTHORITIES MAY ALSO REQUIRE A CERTIFIED REPORT) SUBMIT CERTIFIED REPORT TO ENGINEER WITH 10 DAYS OF COMPLETING TEST AND BALANCE.
- NEW DUCTWORK TO BE CONSTRUCTED AND INSTALLED IN ACCORDANCE W/ "ASHRAE GUIDE AND SMACNA STANDARDS"
- 2. MECHANICAL CONTRACTOR TO VERIFY THAT ALL DUCTWORK WILL FIT WHERE INDICATED W/O INTERFERENCE WITH STRUCTURAL MEMBERS OR OTHER MATERIALS OR EQUIPMENT.

GAS LINE SEE SITE

PLAN FOR CONT.

- 13. CONTRACTOR AND ARCHITECT TO VERIFY T-STAT LOCATIONS WITH OWNER PRIOR TO INSTALLING THERMOSTATS, CONTRACTOR SHALL PROVIDE ALL NECESSARY WIRING AND CONDUIT.

  14. COORDINATE ALL MECHANICAL WORK, INCLUDING EQUIPMENT, DUCTWORK AND PIPING, W/ARCHITECT AND OTHER TRADES PRIOR TO COMMENCING WORK.
- 15. THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL CONTRACTOR REGARDING SPACE AVAILABILITY FOR RECESSED LIGHTING AND DUCTWORK TO AVOID RELOCATION OF DUCTWORK AT THE MECHANICAL CONTRACTOR'S EXPENSE
- 16. THERMOSTATS SHALL BE 7 DAY PROGRAMMABLE WITH AUTOMATIC CHANGE-OVER LOCKING COVER AND FAN ON CONTINUOUSLY (NO EXCEPTIONS). HONEYWELL OR EQUAL T-7300 W/COMMERCIAL SUBBASE.
- 17. DUCTS SHALL CONFORM TO DIMENSIONS ON THE DRAWING UNLESS LOCATION OF STRUCTURAL MEMBERS PROHIBITS. IN CASE OF A CHANGE IN DIMENSIONS, CROSS SECTIONAL AREAS SHALL BE MAINTAINED.
- B. DUCTS SHALL BE SUBSTANTIALLY SUPPORTED WITH HANGERS TO THE STRUCTURE.
  PLACING SUPPORTS NOT OVER 8 FEET APART ALONG THE LENGTH OF THE DUCT. SHEET
  METAL SHALL BE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE: UP TO 12" WIDTH 13" TO 30" WIDTH 26 GAUGE STEEL 24 GAUGE STEEL
- 22 GAUGE STEEL 19. DUCTWORK SHALL BE INSTALLED PER THE LATEST SMACNA MANUAL FOR LOW PRESSURE DESIGN.
- 20. DUCTWORK TO CONFORM TO CURRENT APPLICABLE CODES 21. INSULATION, MATERIAL, CONVERINGS, ADHESIVES, VAPOR-BARRIERS & TAPES SHALL CONFORM TO NFPA '90A, FLAME SPREAD CLASSIFICATION NOT TO EXCEED 25 AND SMOKE DEVELOPMENT NOT TO EXCEED 50.
- 22. THE EXHAUST DUCTS MUST TERMINATE 10 FEET HORIZONTALLY FROM OR 3 FT. ABOVE ALL AIR INTAKES.

- 23. SEAL ALL JOINTS IN DUCTWORK WITH DUCT SEALER.
- 24. PROVIDE RADIUS ELBOWS, TURNING VANES, AND SPLITTER DAMPERS IN BRANCHES & EXTRACTORS WHERE APPLICABLE.
- 25. DUCT SIZES SHOWN ARE "CLEAR INSIDE" DIMENSIONS.
- 26. MECHANICAL CONTRACTOR TO VERIFY AND COORDINATE AVAILABLE VOLTAGE, PHASE & MCA LOADS WITH THE ELECTRICAL CONTRACTOR PRIOR TO ORDERING ELECTRICAL & MECHANICAL EQUIPMENT.
- 27. MECHANICAL CONTRACTOR TO VERIFY THAT ALL SPECIFIED EQUIPMENT IS COMPATIBLE WITH DUCTWORK, STRUCTURE & OTHER PHYSICAL FACTORS BEFORE ORDERING
- 28. LOCATE ALL DIFFUSERS, GRILLES & REGISTERS ACCORDING TO ARCHITECTURAL REFLECTED CEILING PLAN.
- 29. ANY PROBLEMS THAT DEVELOP WITH THE MECHANICAL SYSTEMS AS A RESULT OF "VALUE ENGINEERING" OR OTHER CHANGES BY OWNER/CONTRACTOR (WITHOUT APPROVAL OF ENGINEER) SHALL BE THE RESPONSIBILITY OF OWNER/CONTRACTOR.
- 30. SYSTEMS SHALL NOT BE USED FOR TEMPORARY HEATING OR COOLING DURING CONSTRUCTION.
- 32. SUBMITTAL: WITHIN 30 DAYS AFTER AWARD OF CONTRACT FOR THIS WORK. SEVEN COPIES OF PRODUCT BROCHURES, ONE COMPLETE BINDER FOR HVAC ITEMS INDEXED AND SEPARATED BY DIVIDERS, ONE BINDER FOR ALL PLUMBING ITEMS.
- 33. ALL MECHANICAL EQUIPMENT AND MATERIALS SHALL BE INSTALLED AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

#### **GENERAL PLUMBING NOTES**

- COMPLY WITH ALL LOCAL, COUNTY, STATE AND FEDERAL CODES, ORDINANCES, RULES AND REGULATIONS.
- 2. EXACT LOCATION OF PLUMBING FIXTURES SHALL BE DETERMINED FROM ARCHITECTURAL DRAWINGS.
- 3. USE 95-5 TIN-ANTIMONY SOLDER ON ALL SOLDERED JOINTS 1/2"
- THROUGH 2". PREPARE JOINTS WITH SOLVENT AND EMERY CLOTH. 4. CONTRACTOR TO EXTEND WATER PIPING TO ALL FIXTURES, OUTLETS, AND EQUIPMENT. PROVIDE SHUT-OFF VALVES OR FIXTURE STOPS, AS REQUIRED FOR PROPER SERVICE.
- 5. SIZE ALL HANGERS ON INSULATED LINES TO FIT AROUND OUTSIDE DIAMETER OF INSULATION SPECIFIED WITH ALLOWANCES FOR GALVANIZED SHEET METAL SHIELD.
- 6. INSTALL DIELECTRIC FITTING BETWEEN FERROUS AND NON-FERROUS
- MATERIALS.
  7. PIPE RELIEF DRAIN FOR WATER HEATER TO OUTSIDE OR APPROVED RECEPTACLE.
- 8. SOIL AND WASTE PIPING SHALL BE SCHEDULE 40 ABS OR PVC PIPE.
- 9. SLOPE SOIL/WASTE/DRAIN PIPING 3" AND SMALLER AT A GRADIENT SLOPE OF NOT LESS THAN 1/4" P.L.F. UNLESS SPECIFICALLY NOTED ON THE
- O. EACH VENT SHALL TERMINATE NOT LESS THAN SIX (6) INCHES ABOVE ROOF NOR LESS THAN ONE (1) FOOT FROM ANY VERTICAL SURFACE AND NOT LESS THAN TEN (10) FEET FROM OR AT LEAST THREE (3) FEET ABOVE ANY WINDOW, DOOR, OPENING, AIR INTAKE OR VENT SHAFT. VENT RISERS AS REQUIRED TO MEET THESE MINIMUM CLEARANCES.
- GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE W/ MALLEABLE IRON FITTINGS. GAS PIPING BELOW GRADE SHALL ALSO HAVE 'SCOTCH-GUARD' PLASTIC COATING OR APPROVED PLASTIC PIPE.
- 12. GAS PIPING JOINTS SHALL BE THREADED, EXCEPT PIPING 2 1/2" AND LARGER SHALL BE WELDED. 3. GAS LINE FLEXIBLE PIPE CONNECTORS SHALL BE CONSTRUCTED OF A ONE
- PIECE DESIGN AND SHALL BE U.L. AND OR AGA APPROVED AS REQUIRED BY LOCAL AUTHORITIES.
- . ADEQUATELY SUPPORT ALL PIPE AGAINST SAGGING, POCKETING, SWAYING AND DISPLACEMENT. PROPERLY SPACE AND APPLY HANGERS PER CODE.
- 5. CONTRACTOR SHALL ROUGH-IN ALL WASTES AND WATER SUPPLIES TO SPECIAL EQUIPMENT ACCORDING TO MANUFACTURER'S SHOP DRAWINGS AND MAKE FINAL CONNECTIONS. ALL WATER SUPPLIES SHALL BE VALVED.
- GENERAL, MECHANICAL, ELECTRICAL AND PLUMBING CONTRACTORS AND SUBCONTRACTORS SHALL COORDINATE THEIR WORK PRIOR TO INSTALLATION TO PROVIDE FOR PROPER CLEARANCES BETWEEN EQUIPMENT DUCTWORK, PIPING, JOISTS, CEILINGS, ETC.
- WATER PIPING SHALL BE WIRSBO AQUAPEX OR EQUAL ABOVE SLAB IN WALLS AND BELOW SLAB.
- 18. INSTALL 4" BACK WATER VALVE ON SEWER LINE IF REQUIRED.
- 19. EVAP COOLER DRAIN PIPING TO BE TYPE "M" HARD DRAWN COPPER.
- 20. OUTSIDE CONDENSATE DRAINS TO BE TYPE "M" HARD DRAWN COPPER. DOMESTIC HOT WATER PIPE & RECIRC LOOP TO BE INSULATED WITH 1/2"
- WALL ARMORFLEX INSULATION. PROVIDE ACCESS PANELS FOR ALL VALVES IN WALLS & ABOVE GYP.
- BOARD CEILINGS.
- 23. ALL PLUMBING EQUIPMENT, VALVES, PUMPS, FIXTURES, ETC. SHALL BE INSTALLED AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

#### **KEYED NOTES**

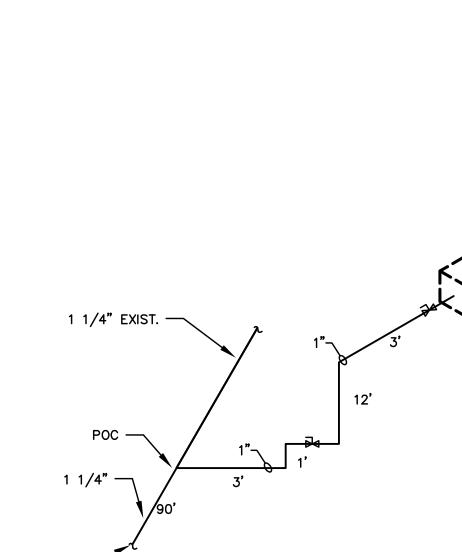
- (1.) EVC-1 IS LOCATED ON THE FIRST FLOOR.
- (2.) EVC-1 SWITCH.
- (3.) MOUNT UH-1 & EVC-1 10 FT ABOVE FLOOR
- (4.) SPRINKLER RISER
- (5.) CONNECT TO EXISTING WASTELINE.
- (6.) ALL EQUIPMENT SELECTED BY OWNER.

# DESIGN ENGINEERING OPERATIONS

LOUVER

EVC-1

3/4" DRAIN



PLUMBING EQUIPMENT

MS-1 - MOSTEE 24"X24"

DF-1 -ELKAY EZ5TL8LC

6. MECHANICAL EQUIPMENT

PLUMBIN LOAD CALC.

DF-1 - 0.75 GPM - 2 FU

MS-1 - 3 GPM - 2 FU

EVC-1 - 1 GPM - 0 4.75 GPM 4 FU

1ø, 8" FILTER

EVC-1- AREO COOL 10,000 CFM, 2HP

UH-1- REZNOR UDAS 125,00 BTUH

EXISTING UH.= 200 MBH UH-1 - 125 MBH TOTAL = 325 MBH

TOT. DEVELOPED LENGTH TO UH-1 IS

SCALE: 1/8" - 1'-0"

UH-1

-EXIT AIR UNDER DOOR

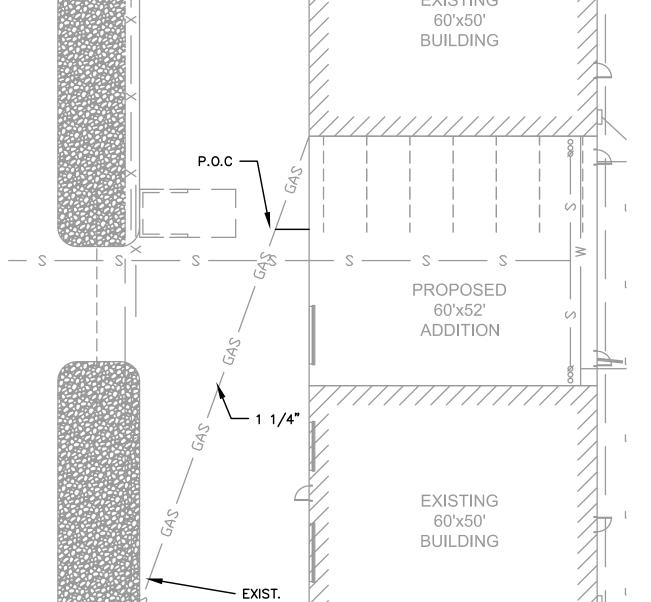
- EXISTING BUILDING:

PLUMBING AND HVAC FLOOR PLAN

TOT. DEVELOPED LENHTH TO EXISTING

EXISTING TO

NATURAL GAS SCHEMATIC



SCALE: N.T.S.

EXISTING

2929 E. MAIN ST. #426 MESA, AZ 85213 928-713-4953 whrbe@msn.com

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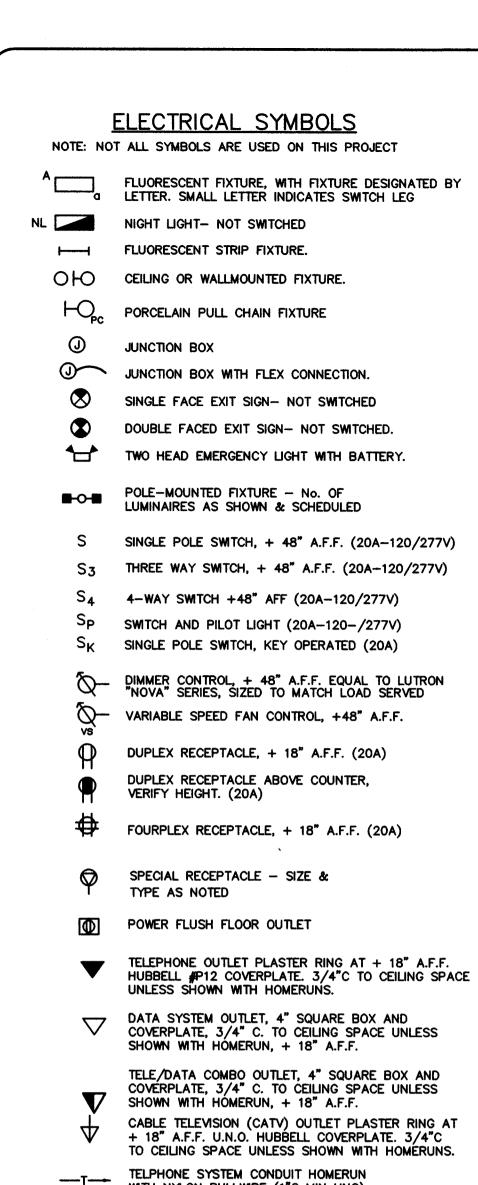
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WTW CHECKED BY CMW **DATE**March 25th, 2019 SHEET

**MP-1** 



WITH NYLON PULLWIRE (1"C MIN UNO) CLOSED CIRCUIT TV (CCTV) OUTLET SAME AS CATV OUTLET DOOR CHIME

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

**EQUIPMENT TERMINATION CONNECTION** POINT VERIFY EXACT LOCATION LOAD AND VOLTAGE AS NOTED

✓✓ MOTOR

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, NEUTRAL AND PHASE WIRING DESIGNATION (SEE GROUNDING NOTE)

CONDUIT TURNING UP

CONDUIT STUB-OUT, MARK AND CAP AS DIRECTED GROUND WIRE (SIZE AS NOTED) EXTENDED

AND CONNECTED TO APP'D GROUND

## **ABBREVIATIONS**

CONDUIT TURNING DOWN

ABOVE FINISHED FLOOR ( ¢ OF OUTLET ) ABOVE FINISHED GRADE ( ¢ OF OUTLET )

TELEPHONE MOUNTING BOARD

EMPTY CONDUIT GROUND FAULT INTERRUPTER

WEATHERPROOF UNLESS OTHERWISE NOTED

NIGHT LIGHT

TYP TYPICAL EDF ELECTRIC DRINKING FOUNTAIN TMB

OUTLET MOUNTING HEIGHTS PER AMERICAN DISABILITY ACT

+48" (MAX) RECEPTACLES +18" (MAX) TELEPHONE +18" (MAX) SIDE REACH +54" (MAX)

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

OUTLETS, (SWITCHES, RECEPTACLES, ETC.), MOUNTED IN FIRE RATED WALLS SHALL NOT OCCUPY THE SAME WALL CAVITY WITH OTHER OUTLES WHETHER ON SAME SIDE OR BACK—TO—BACK. RECOMMENDED SPACING IS 24 INCHES HORIZONTAL (MIN).

#### **SPECIFICATIONS**

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.

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.

SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS, ELEVATIONS AND BUILDING DETAILS. VERIFY LOCATION OF ALL OUTLETS, SWITCHES, AND WALL MOUNTED LIGHTING FIXTURES WITH ARCHITECTURAL DRAWNGS AND ACTUAL CONDITIONS. VERIFY ALL CEILING TYPES WITH ARCHITECTURAL DRAWINGS

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.

BRANCH CIRCUIT WIRING SHALL BE THHN/THWN INSULATION. PANEL FEEDERS SHALL BE TYPE XHHW. ALL WIRE SHALL BE COPPER. MINIMUM WIRE SIZE SHALL

7. ALL WRING 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, OR

9. ALL ELECTRICAL EQUIPMENT SHALL BE NEW, U.L. APPROVED AND COMMERCIAL

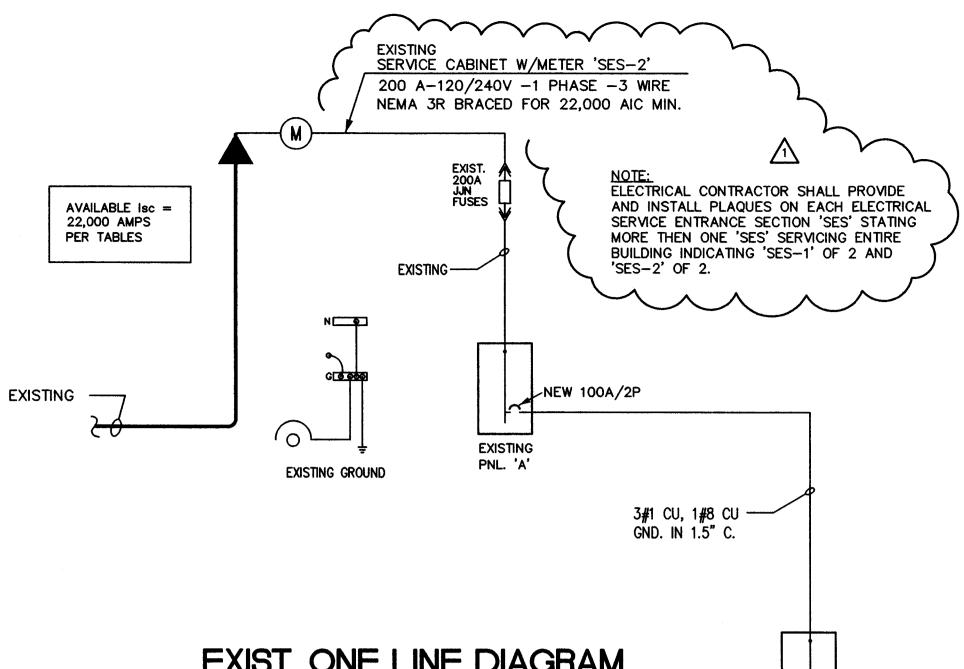
10. WRE RATED FOR 150° CENTIGRADE SHALL BE USED FOR ALL INCANDESCENT

11. ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST NATIONAL CODE, (N.E.C.), AND ALL APPLICABLE FEDERAL, STATE AND LOCAL

12. PROVIDE TYPEWRITTEN DESCRIPTIVE PANEL DIRECTORIES

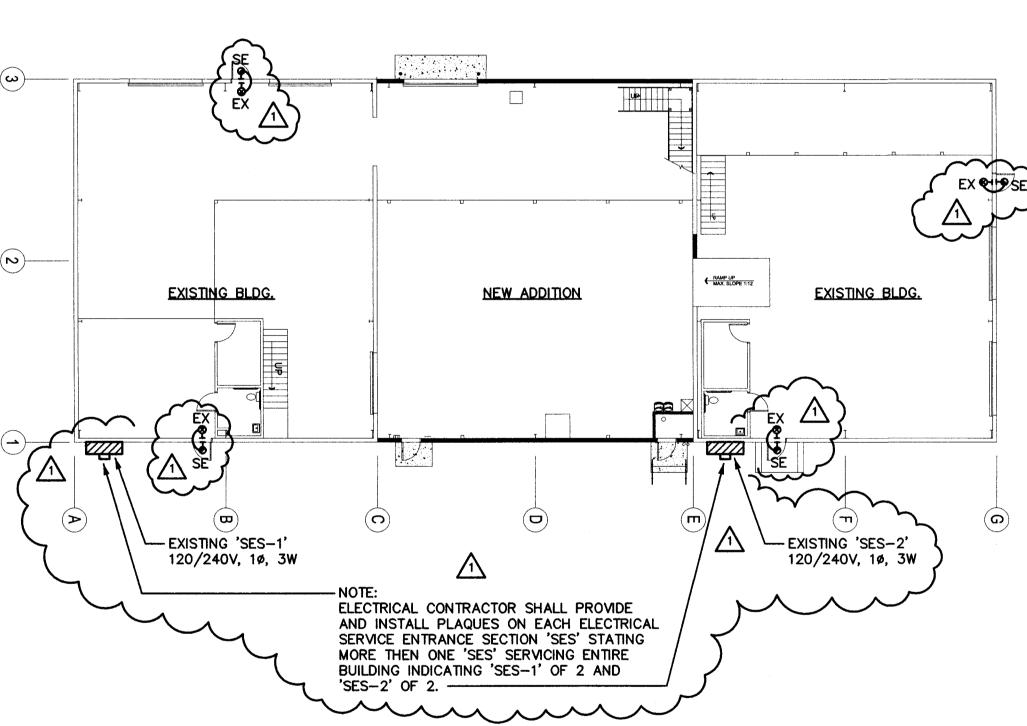
#### FIRE WALL/FLOOR PENETRATION

ALL PENETRATIONS OF FIRE RESISTIVE FLOORS OR SHAFT WALLS SHALL BE PROTECTED BY MATERIALS AND INSTALL-ATION DETAIL THAT CONFORM TO UNDERWRITERS LABOR-ATORY'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.



EXIST. ONE LINE DIAGRAM N.T.S.





First Floor Emergency Lighting Plan
Scale: 1/16"=1'-0"
Plan



Symbol	Label	Manufacture	er	Catalog Nur	nber	Description		Lamp	Lumens Per Lamp	Light Loss Factor	Wattage
<b>├</b> ─ <b>○</b> ─┤	Α	Lithonia Lig	Ū	4	OLM SEF FDL MVOLT 8' LED STR OCRI (FINISH)		IP LIGHT	LED	2813	0.91	40.32
<b></b>	В	Lithonia Lig	•		OCRI (FINISH)	4' LED STR	IP LIGHT	LED	2813	0.91	20.32
0	С	Lithonia Ligh	ting	IBG 2ft 150 35K 80CRI	OOLM SEF GND ACL	IBG 2ft 15000LM SEF GND ACL 35K 80CRI			IBG_2ft_12000LM_SE F_GND_ACL_35K_80C RI.ies	11782	97.28
\$	SE	Lithonia Ligi	hting	AFN (FINIS	H) PREM WL	LIGHT WIT	ARCHITECTURAL EMERGENCY IH CAST ALUMINUM HOUSING, PS, POLYCARBONATE PRISMATIC D STANDARD WIDE-THROW	TWO 6-WATT FROSTED T3-1/4 WEDGE BASE XEN	104 ON	0	12
Ā	t page a series de situation de s		Lithonia	Lighting	LHQM LED R HO		QUANTUM LED EMERGENCY COMBO	LED			
<b>A</b>			Lithonia	Lighting	ELMLT W LP06VS LT	P	QUANTUM LED EMERGENCY TWIN-H UNIT WALL MOUNT	IEAD			

#### PANELBOARD SYMBOLS

- \* CONTINUOUS DUTY/LARGEST MOTOR 125%
- PROVIDE BREAKER W/ HANDLE "LOCK-ON" DEVICE
- CIRCUIT VIA TIMECLOCK A CIRCUIT VIA PHOTOCELL

PANELBOARD

MAINS: 200A MCB

EXISTING EQUIPMENT

VOLTAGE: 120/240V, 1ø, 3W

EXISTING

CIRCUIT DESCRIPTION

HACR TYPE CIRCUIT BREAKER

TOTAL LOAD PER PHASE: EXISTING ESTIMATED LOAD:

**PANELBOARD** 

CIRCUIT DESCRIPTION

EATON, SQ. D OR EQUAL

MAINS: 100A MCB

TYPE:

LIGHTS

SPARE

SPACE

LIGHTS - EXTERIOR

FIRE ALARM PANEL

TOTAL LOAD PER PHASE:

WALL HEATER

VOLTAGE: 120/240V, 1ø, 3W

NEW ADDED LOAD:

TOTAL LOAD:

ELECTRICAL DESIGN & CADD SERVICES INC. 1600 LAMB LANE PH. (928) 776-4900 FAX (928) 776-7800

MOUNTING: SURFACE (FIELD VERIFY WITH OWNER)

EXISTING EQUIPMENT

CIRCUIT DESCRIPTION

LOCATION: SEE PLAN

MIN. A.I.C.: 10,000

4

6

10

20

16

24

36

13500

18522

5 600

9 200

15

27

5022

5112

720

500

5022

LOAD-VA

13500

18612

Øв

SUB-PANEL 'B'

HI# 13500 / 120V = 112.5 AMPS

HIØ 19599 / 120V = 155.1 AMPS

**SCHEDULE** 

CIRCUIT DESCRIPTION

MOUNTING: SURFACE (FIELD VERIFY WITH OWNER)

EVAP COOLER

2 2 HP, 240V, 1ø

SPACE

HIØ 5112 / 120V # 42.6 AMPS

5112 | HIØ 5112 / 120V = 42.6 AMPS

LOCATION: SEE PLAN

MIN. A.I.C.: 10,000

2 1 RECEPT'S.

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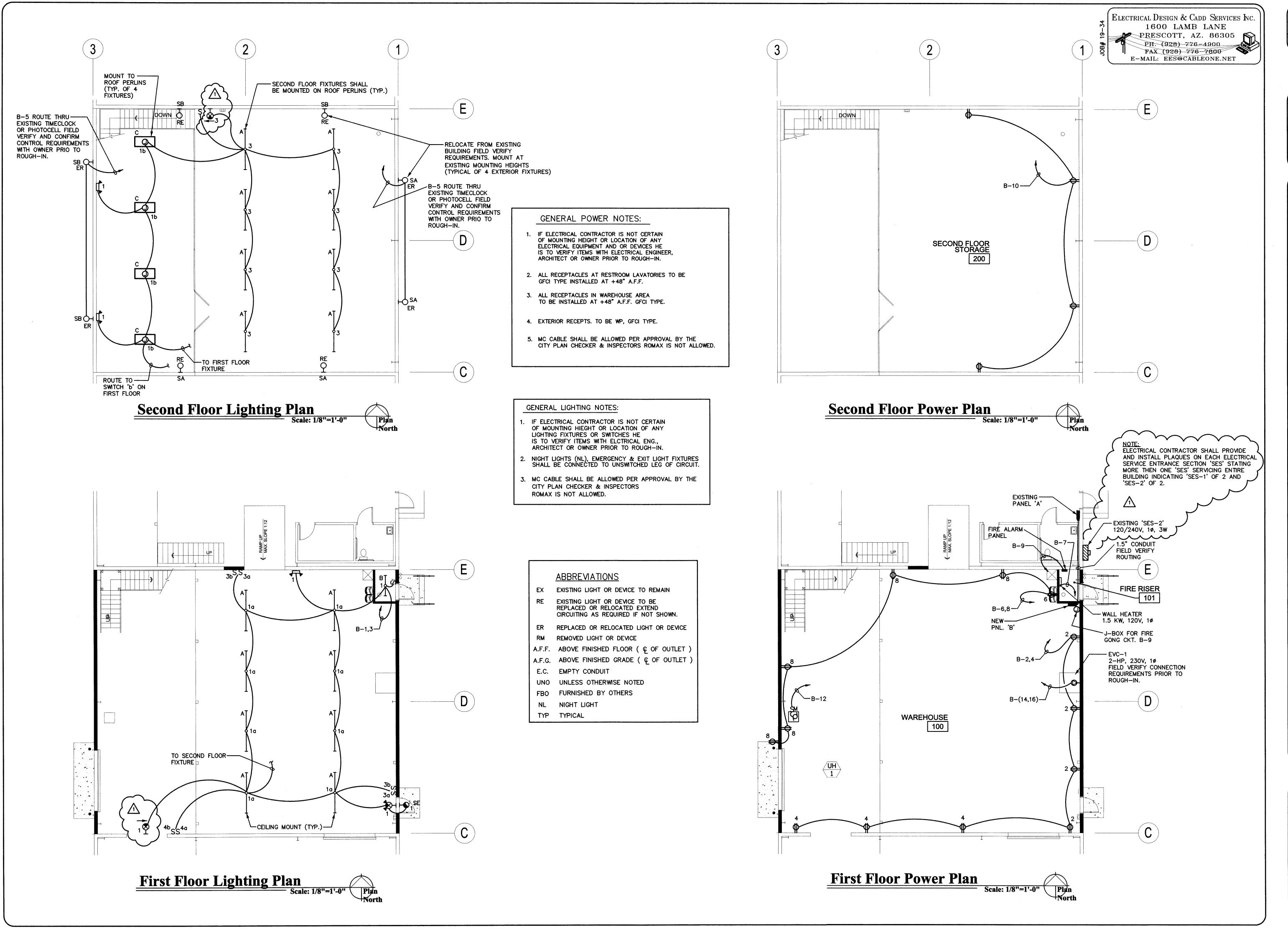
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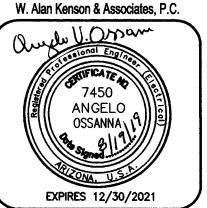


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