GMA ARCHITECTS

18 March 2020

ADDENDUM #1

PROJECT: Kelly Middle School Improvements & North Eugene High School Improvements

PROJECT NUMBERS: District CIP# 461.524.003

The following deletions and additions are
hereby made a part of Bidding and Contract Documents, effective this date.

PROJECT MANUAL

Item

1. Reference Document 00 01 10, Project Manual Table of Contents, Kelly Middle School Improvements, Division 07:

   Delete: 07 31 00 Asphalt Shingle Roofing.
   Add: 07 31 13 Asphalt Shingle Roofing.

2. Reference Document 00 01 10, Project Manual Table of Contents, Kelly Middle School Improvements, Division 23:

   Add: 23 82 00 Convection Heating and Cooling Units.

3. Reference Document 00 01 10, Project Manual Table of Contents, North Eugene High School Improvements, Division 23:

   Delete: Section 23 05 14 Variable Frequency Drives for HVAC Equipment

   Add: Section 23 05 48 Vibration and Seismic Controls for HVAC Piping and Equipment

4. Reference Document 00 01 10, Project Manual Table of Contents, Drawings:

   Add: COV, Cover.

   Kelly Middle School Improvements Drawings

   Add: Sheet ED.2, Partial Demolition Plans – Electrical.
   Add: Sheet E1.5, Enlarged Partial Electrical Floor Plan.

   North Eugene High School Drawings

Add: Sheet M1.3, Enlarged Partial Floor Plan – Mechanical.
Add: Sheet E8.01, Panel Schedules.

5. Reference Document 00 11 13, Invitation to Bid:

Delete: "Sealed bids will be received […] Late Bids will not be considered." in entirety.
Add: "Bids will be received by 4J Facilities and Capital Improvement Program (CIP) staff for the Kelly Middle School Improvements and North Eugene High School Improvements project on Tuesday, April 7, 2020 until the Deadline for Bid Submission at 2:00pm. Due to the current environment, staff will be working remotely, and the Facilities Office will not be open to receive Bids. Required Bid Documents must be submitted electronically as one (1) pdf file (maximum file size 10 MB) by e-mail to: CIP@4j.lane.edu. Late Bids will not be considered."

6. Reference Document 00 41 13, Bid Form, Bid Deadline:

Delete: March 26th, 2020.
Add: April 7th, 2020.

7. Reference Section 01 60 00, Product Requirements, Substitution Request Form, Deadline:

Delete: March 14th, 2020.
Add: March 28th, 2020.

8. Reference Document 01 11 00, Summary of Work, 1.6 Work Under Separate Contracts, A:

Add: 7. Smart Boards and Projectors.

9. Reference Document 01 11 00, Summary of Work, 1.6 Work Under Separate Contracts:

Add: C. Site work for Playgrounds must be complete by July 20th for Playground work by Others. Engineered wood fiber installation shall occur after Playground work by Others is complete.

10. Reference Document 01 11 00, Summary of Work, 1.8 Owner-Furnished Products, 3:

Delete: Smart Boards and Projectors.

KELLY MIDDLE SCHOOL IMPROVEMENTS

11. Reference Section 07 62 00, Flashing and General Sheet Metal, 2.1 Sheet Materials:

Add: E. Stainless Steel: ASTM A167 Type 304, 16 gauge, 2-inch minimum leg each side. Height as indicated in Drawings.

12. Reference Section 07 72 00, Roof Accessories, 1.1.B Related Requirements:

    Delete: Section 07 62 00 – Sheet Metal Flashing and Trim.
    Add: Section 07 60 00 – Flashing and General Sheet Metal.

13. Reference Section 08 71 00, Door Hardware, 2.1 Acceptable Manufacturers, C:

    Add: Lock Sets: Schlage ND Series, Rhodes Lever.

14. Reference Section 08 73 01, Door Hardware Types:

    Delete: Section in entirety.
    Add: Revised Section 08 73 01, Door Hardware Types, attached.

15. Reference 10 28 13, Toilet Accessories, 2.4.A.4:

    Add: Dyson AirBlade V.

16. Reference Section 22 40 00, Plumbing Fixtures:

    Delete: Section in entirety.
    Add: Revised Section 22 40 00, Plumbing Fixtures, attached.

17. Reference Section 23 05 48, Vibration and Seismic Controls for HVAC Piping and Equipment:

    Delete: Section in entirety.
    Add: Revised Section 23 05 48, Vibration and Seismic Controls for HVAC Piping and Equipment, attached.

18. Reference Section 23 34 00, HVAC Fans:

    Delete: Section in entirety.
    Add: Revised Section 23 34 00, HVAC Fans, attached.

19. Reference Section 23 81 00, Decentralized Unitary HVAC Equipment:

    Delete: Section in entirety.
    Add: Revised Section 23 81 00, Decentralized Unitary HVAC Equipment, attached.

20. Reference Section 23 82 00, Convection Heating and Cooling Units:

    Delete: Section in entirety.
    Add: Revised Section 23 82 00, Convection Heating and Cooling Units, attached.

21. Reference Section 05 50 00, Fabricated Steel, Part 2 – Products:

Add: 2.7 STEEL PIPE HANDRAILS

A. General: Fabricate pipe handrails to comply with requirements indicated for dimensions, details, finish, and member sizes, including wall thickness of pipe, post spacings, and anchorage.

B. Interconnect handrail members by butt-welding or welding with internal connectors, at fabricator's option, unless otherwise indicated. At tee and cross intersections, cope ends of intersecting members to fit contour of pipe to which end is joined, weld all around and grind smooth.

C. Form changes in directions of railing members as follows:

1. By use of welded prefabricated steel elbow fittings.
2. By bending, of radius indicated.
3. By mitering at elbow bends.

D. Form simple and compound curves by bending pipe in jigs to produce uniform curvature for each repetitive configuration required; maintain cylindrical cross-section of pipe throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of pipe.

E. Returns: Return ends to adjacent wall or nearest vertical support unless otherwise indicated on drawings.

F. Close exposed ends of pipe by welding 3/16 inch thick steel plate in place or by use of prefabricated fittings, except where clearance of end of pipe and adjoining wall surface is ¼ inch or less.

G. Toe Boards: Where indicated, provide toe boards at railings around openings and at edge of open-sided floors and platforms. Fabricate to dimensions and details indicated, or if not indicated, use 4 inches high x ¼ inch steel bar welded to each railing post.

H. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, end closures, flanges, miscellaneous fittings, and anchors for interconnections of pipe and attachment of guardrails and handrails to other work. Furnish inserts and other anchorage devices for connecting guardrails and handrails to concrete or masonry work.

J. Fillers: Provide steel sheet or plate fillers of thickness and size indicated or required to support structural loads of handrails where needed to transfer wall bracket loads through wall finishes to structural supports. Size fillers to suit wall finish thicknesses. Size fills to produce adequate bearing to prevent bracket rotation and overstressing of substrate.

22. Reference Section 07 62 00, Flashing and General Sheet Metal, 2.1 Sheet Materials:

Add: E. Stainless Steel: ASTM A167 Type 304, 16 gauge, 2-inch minimum leg each side. Height as indicated in Drawings.

23. Reference Section 07 72 00, Roof Accessories, 1.1.B Related Requirements:

Delete: Section 07 62 00 – Sheet Metal Flashing and Trim.
Add: Section 07 60 00 – Flashing and General Sheet Metal.

24. Reference Section 08 73 01, Door Hardware Types:

HARDWARE SET 1, LOCKSET

Delete: ND75PD.
Add: ND95PD.

HARDWARE SET 2, LOCKSET

Delete: ND75PD.
Add: ND95PD.

HARDWARE SET 3, LOCKSET

Delete: ND50PD.
Add: ND91PD.

25. Reference Section 08 73 01, Door Hardware Types:

Add: HARDWARE SET 5: DOOR E302A

Qty	Description	Catalog Number	Finish	Mfr
1	EXTERIOR TRIM	V4908A	626	PHI

Add: HARDWARE SET 6: DOOR E304A

Qty	Description	Catalog Number	Finish	Mfr
1	LOCKSET	ND95PD	626	SCH

26. Reference 09 51 00, Acoustical Ceilings, 2.2 Acoustical Ceiling Units:

Add: ACT-3: Glue On 12” x 12” Perforated Wood Fiber Acoustic Ceiling Tiles, Silent Source #58780 Bevel Butt Joint Random Drill, or approved.

27. Reference 10 28 13, Toilet Accessories, 2.4.A.4:

Add: Dyson AirBlade V.

28. Reference Section 22 40 00, Plumbing Fixtures:

Delete: Section in entirety.
Add: Revised Section 22 40 00, Plumbing Fixtures, attached.

29. Reference Section 23 05 14, Variable Frequency Drives for HVAC Equipment:

Delete: Section in entirety.

30. Reference Section 23 05 48, Vibration and Seismic Controls for HVAC Piping and Equipment:

Add: 23 05 48, Vibration and Seismic Controls for HVAC Piping and Equipment, attached.

31. Reference Section 23 81 00, Decentralized Unitary HVAC Equipment:

Delete: Section in entirety.
Add: Revised Section 23 81 00, Decentralized Unitary HVAC Equipment, attached.

DRAWINGS

Item

1. Reference Drawings:

Delete: Kelly Middle School Improvements and North Eugene High School Improvements Drawing Set in entirety.
Add: Kelly Middle School Improvements and North Eugene High School Improvements Drawing Set with Revision 1, attached.

CLARIFICATIONS

Item

1. While adequate supervision is expected at both sites to complete the Work as specified, one Superintendent is acceptable for both sites.
2. Bid Submission deadline is now 2:00pm, April 7, 2020. Bids must be received electronically as noted above under Section 00 11 13.

PRODUCT APPROVALS

Add the following to the list of acceptable manufacturers and products as noted: None at this time.

Attachments:

1. *Mandatory Pre-Bid Sign-In Sheet (for reference)*
2. *Revised KMS Specification Sections 08 73 01, 22 40 00, 23 05 48, 23 34 00, 23 81 00, and 23 82 00*
3. *Revised NEHS Specification Sections 22 40 00, 23 05 48, and 23 81 00*
4. *Revised Drawing Set with Revision 1*

END OF ADDENDUM ONE

Mandatory Pre-Bid Sign-In Sheet
Eugene School District 4J
Kelly MS and NEHS Improvements

Mandatory Pre-Bid Conference March ~~12~~ 13, 2020 3:00 p.m.

	Company	Name	E-mail	Phone
1	Luna Design and Construction	Scott Savage	Scott@Lunadesignandconstruction.com	541-514-1901
2	Bridgeway Contracting	Jerry Valencia	jerry@bridgewaycontracting.com	541-606-2571
3	Bineham Construction Inc.	TREVOR BINEHAM	trevor bineham@bineham construction.com	541-514-4126
4	Hermanson	Leonard Madison	lmadison@hermanson.com	541-225-8098 503-258-6088
5	2G CONSTRUCTION	DOUG JOST	djost@2gconstruction.com	(541)689-3850
6	GBC CONSTRUCTION	Joel Freeman	Joel@GBCConstruct.com	541 224 1501
7	Andersen Construction	Ryan Knox	rknox@andersen-const.com	541-231-9631

	Company	Name	E-mail	Phone
8	FM Sheet Metal	Zack Tillotson	ZTillotson@FMSheetmetal.com	541 726 3000
9	Bridgeway Contractors	Bob Buss	bobb@Bridgeway contracting.com	541.501.9020
10	CHAMBERS CONSTRUCTION	BRIAN ANDERSON	bids@chambers-gc.com	(541)868.8519
11	HATHAWAYS INC	KEVIN DAVIS	KEVIND@HATHAWAYSINC	541 736-8001
12	Northwest Community Builders	Marcy Gustafson	ericg@nwcbuilders.com	541-8029245
13	WILDISH BUILDING CO	ALEX KING	ALEX K @ WILDISH.COM	541-255-7755
14	ESSEX GENERAL CONST. INC.	CHUCK CONDIT	CHUCK.CONDIT@ ESSEXGC.COM	503-421-7548

	Company	Name	E-mail	Phone
15	L. R. Brabham, Inc.	Jordan Brabham	jordan@lrbrabham.com	541-747-6635
16	Prestige Concrete	Yair Buendia	prestigeconcrete14@gmail.com	541-505-6118
17	Dorman Construction	Brad Anderson	brad@dormanconstruction.com	5419535872
18				
19				
20				
21				

SECTION 08 73 01
DOOR HARDWARE TYPES

MANUFACTURERS
SEL – SELECT
CAM – CAMDEN
GLY – GLYNN JOHNSON
PHI – PRECISION
LCN – LCN
SCH – SCHLAGE
PEM – PEMKO
VD – VON DUPRIN
IVE – IVES
MCK – MCKINNEY
HES – HES
ALV – AIR LOUVERS
RIX – RIXSON

HARDWARE SET 1: DOOR NRR1A

Qty	Description	Catalog Number	Finish	Mfr
3	HINGE	T4B3386 5½X4 NRP	606	MCK
1	MORTISE LOCKSET	L9496	606	SCH
1	ADA THUMBTURN	09-509XL583-363	606	SCH
1	CLOSER	4111 EDA WMS	606	LCN
1	KICKPLATE	8400 10”X2”LDW B4E CS	606	IVE
1	WALL STOP	WS407CCV	606	IVE
1	SEAL	S88	GRAY	PEM

HARDWARE SET 2: CLASSROOM DOORS – N1A, N4A, N6A, N8A, N9A, N9AA

Qty	Description	Catalog Number	Finish	Mfr
3	HINGE	T4B3386 5½X4 NRP	626	MCK
1	LOCKSET	ND95PD	626	SCH
1	KICKPLATE	8400 10”X2”LDW B4E CS	626	IVE
1	WALL STOP	WS407CCV	626	IVE
3	SILENCERS	SR 64	GR	IVE

HARDWARE SET 3: OFFICE DOORS – NTECHA, NLIBBA, NLIBAA, N35A

Qty	Description	Catalog Number	Finish	Mfr
3	HINGE	T4B3386 5½X4 NRP	626	MCK
1	LOCKSET	ND91PD	626	SCH
1	WALL STOP	WS407CCV	626	IVE
3	SILENCERS	SR 64	GRAY	IVE

HARDWARE SET 4: DOOR NRR4A, NRR8A

Qty	Description	Catalog Number	Finish	Mfr
3	HINGE	T4B3386 5½X4 NRP	626	MCK
1	PUSH PLATE	8200	626	IVE
1	PULL BAR	8302	626	IVE
1	CLOSER	4111 EDA WMS	ALUM	LCN
1	KICKPLATE	8400 10”X2”LDW B4E CS	626	IVE
1	WALL STOP	WS407CCV	626	IVE
1	SEAL	S88	GRAY	PEM

KMS

HARDWARE SET 4A: DOOR NLKR1A

Qty	Description	Catalog Number	Finish	Mfr
3	HINGE	T4B3386 5½X4 NRP	626	MCK
1	PUSH PLATE	8200	626	IVE
1	PULL BAR	8302	626	IVE
1	CLOSER	4111 EDA WMS	ALUM	LCN
1	KICKPLATE	8400 10”X2”LDW B4E CS	626	IVE
1	OVERHEAD STOP	100S ADJ	626	GLY
1	SEAL	S88	GRAY	PEM

HARDWARE SET 5: DOOR ERR5A

Qty	Description	Catalog Number	Finish	Mfr
1	LOCKSET	L9496	606	SCH
1	ADA THUMBTURN	09-509XL583-363	606	SCH

KMS

SECTION 22 40 00

PLUMBING FIXTURES

PART 1 GENERAL

1.1 SUMMARY

A. This Section includes:
   1. Fixture Trim
   2. Plumbing Fixtures
   3. Drainage Products
   4. related sections

B. Division 01, General Requirements

C. Division 22, Plumbing

1.2 QUALITY ASSURANCE

A. Water Closets: Maximum Performance (MaP) score of no less than 800

B. Faucets: Certify to NSF/ANSI 61 and California AB1953

C. Electric Water Coolers and Drinking Fountains: Certified to NSF/ANSI 61 and California AB1953

D. SUBMITTALS

E. Submit the following:
   1. Product data for each item specified.
   2. Operating and Maintenance Data:
      a. Mounting heights for fixtures.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers are stated for each fixture specified. The following manufacturers are also acceptable, except when indicated only.

B. Fixture Trim:
   1. Supply Stops:
      a. Chicago
      b. NPT McGuire (LK series)
      c. Brasscraft (SCR series)
   2. Traps:
      a. McGuire
      b. Kenney
      c. Brasscraft

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3. Support Rims:
    a. Hudee
4. Vacuum Breakers:
    a. Chicago Faucet
    b. A.W. Cash
    c. Febco, chrome plated

C. Drainage Products and Carrier Products:
1. J.R. Smith
2. Josam
3. Sioux Chief
4. Zurn
5. Wade
6. Watts Drainage
7. Woodford
8. Mifab

D. Fixtures:
1. American Standard
2. Kohler
3. Sloan
4. Toto

E. Seats:
1. Olsonite
2. Church
3. Beneke
4. Bemis

F. Mixing Valves:
1. Powers
2. Leonard
3. Symmons
4. Chicago

G. Faucets:
1. Chicago
2. Delta Commercial
3. Kohler
4. Symmons
5. Moen Commercial

H. Flush Valves:
1. Sloan
~~2. Zurn~~

I. Shock Arrestors:
1. PPP
2. J.R. Smith

KMS

J. Trap Primer Stations:
   1. PPP

K. Exposed Waste and Supply Piping Insulation Kits:
   1. Truebro
   2. McGuire

L. Other Manufacturers: Submit substitution request.

2.2 FIXTURE TRIM

A. Supply Stops: Chicago cast brass rigid riser supplies with loose key angle stops, wall flanges, NPT female inlet, chrome plate finish; equivalent NPT McGuire (LK series), Brasscraft (SCR series), or NPT stops by fixture supplier.

B. Traps:
   1. For floor drains, provide coated cast iron P-trap; recessed, screw jointed or bell and spigot.
   2. For other fixtures, provide 17 gauge, chrome plated cast brass P-Traps with solder bushings, and clean-out.

C. Support Rims: Hudee stainless steel rims, if sink not furnished with integral rim.

D. Vacuum Breakers:
   1. Chicago Faucet
   2. A.W. Cash
   3. Febco, chrome plated

2.3 PLUMBING FIXTURES

A. WC-1 Water Closet:
   1. ~~Kohler Kingston~~**American Standard AFWALL with Everclean surface**, vitreous china, wall hung, elongated bowl, siphon jet action, 1-1/2-inch top spud, white color finish.
   2. Complete with Sloan Royal manual flush valve with dual filtered fixed bypass diaphragm. (1.28 GPF).
   3. Bemis 1600 series white open-front seat, less cover with external check hinge including 300 series stainless steel post and pintles to stop seat at 11 degrees beyond vertical.
   4. J.R. Smith Series 200 chair carrier.

B. WC-2 Water Closet (ADA): Same at WC-1, except mounted at ADA mounting height.

C. U-1 Urinal **(ADA)**:
   1. Kohler Bardon, vitreous china, wall mounted wash down urinal with ¾-inch top spud, white color finish.
   2. Complete with Sloan Royal manual flush valve with dual filtered fixed bypass diaphragm. (0.5 GPF)
   3. J. R. Smith Series 600 floor mounted urinal support.

~~D. U-2 Urinal: Same as U-1, except mounted with rim at ADA mounting height.~~

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~~E.~~**D.** L-1 Lavatory (Commercial - ADA):

1. Kohler Kingston 21-1/4-inch by 18-1/8-inch, vitreous china, self-draining deck, backsplash, 4-inch centers, wall hung, concealed arm support, grid drain, white color finish. Holes as required for faucet.
2. Chicago 802-V665ABCP faucet with polished chrome plated solid brass body construction, 4-inch spout, vandal proof metering push handles, 2.2 gpm pressure compensating aerator, adjustable cycle time closure cartridge, vandal resistant complete.

~~F.~~**E.** WS-1 Wash Station (ADA):

1. Bradley~~, Model MG series~~ **Express Deck EXD-2N**, 2 station, wall-hung, equipped with Chicago 802-V665ABCP faucets with polished chrome plated solid brass body construction, 4-inch spout, vandal proof metering push handles, 2.2 gpm pressure compensating aerator, adjustable cycle time closure cartridge, vandal resistant complete.
2. Mixing Valve (Point-of-Use):
3. Leonard 270 series thermostatic point-of-use mixing valve.
4. ASSE 1070 certified.
5. Bronze body.
6. Locked temperature adjustment cap (vandal resistant).
7. Integral check valves on hot and cold inlets.
8. Minimum flow 0.5 GPM.
9. Maximum flow 3.5 GPM at 5 PSI loss.

~~G.~~**F.** Exposed Waste and Supply Piping Insulation Kits: McGuire Prowrap insulation kit for exposed supplies and waste piping below ADA lavatories and ADA sinks.

2.4 DRAINAGE PRODUCTS

A. FD-1 Floor Drain: J.R. Smith 2005 Series, round nickel bronze vandal resistant grate, cast iron body with flashing collar and adjustable strainer head and no-hub outlet.

B. WCO Wall Cleanout: J.R. Smith 4530 Series, round stainless steel vandal resistant cover and screw.

C. FCO Floor Cleanout: J.R. Smith 4020 Series, round vandal resistant, nickel bronze top.

D. Trap Priming Valves:

1. Sioux Chief Prime-Perfect mechanical automatic trap primer valve.

~~D.~~**2. Activates with a 10 psig pressure drop between 30-150psig.**

~~1. Precision Plumbing Products Prime-time electronic trap priming manifold including but not limited to: atmospheric vacuum breaker, pre-set 24 hour clock, manual over ride, 120V slow closing solenoid valve, calibrated manifold for equal water distribution.~~

~~2. Components pre-installed in recessed steel cabinet with SS access door.~~

E. Water Hammer Arrester: Precision Plumbing Products Model SC (Maintenance-Free).

PART 3 EXECUTION

3.1 FIXTURE TRIM

A. Provide plumbing fixture trim where applicable on fixtures, including but not limited to supply stops, traps, support rims, flush valve, and vacuum breakers.

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B. Provide rough-in and final piping connection to fixtures. Carefully review all construction documents to assure that all fixtures are provided with necessary services for a complete operating system.

C. Rigidly secure rough-in piping, carriers and supports, and other service piping to structure.

3.2 PLUMBING FIXTURES

A. Americans with Disabilities Act:
   1. Those fixtures indicated by ADA complies with and be installed in accordance with Americans with Disabilities Act Guidelines (ADAAG). Where applicable building code requirements are more stringent than ADAAG guidelines, building code requirements followed.
   2. Water Closets:
      a. Mounting height of ADA water closet 17-inches to 19-inches from floor to top of the toilet seat.
      b. Mount flush valve for ADA water closets on wide side of enclosure.
   3. Lavatories:
      a. Mounting height of ADA lavatories at a maximum height of 34 inches from floor to rim.
      b. Provide insulation kits on exposed hot water and waste piping beneath ADA lavatories.
   4. Urinals: Mounting height of ADA water closet at a maximum height of 17-inches from floor to top rim.

B. Fixture Mounting Heights: Fixtures standard rough-in catalogued heights unless shown otherwise on the Architectural Drawings.

C. Water Supplies: When both hot and cold water to a fixture is required, connect the hot on the left and the cold on the right.

D. Floor Mounted Supports and Chair Carriers:
   1. Secure floor mounted supports and chair carriers to slab with a minimum of 1/2-inch bolts.
   2. Install supports and carriers per manufacturer's installation instructions.

E. Lavatories:
   1. Public Toilet Room: Grid strainers.
   ~~2. Private Toilet Room: Pop-up waste assemblies.~~
   ~~3.~~2. Those lavatories indicated as ADA are ADA compatible. Coordinate with Architect to verify if all wall hung lavatories are to be installed at ADA height.

F. Floor Drain and Floor Sinks:
   1. Set top flush with finished floor.
   2. Provide flashing clamp for all drain bodies installed in floors provided with waterproof membranes.

G. Cleanout:
   1. Where shown or required.
   2. Cover set flush with finished surface.

H. Water Hammer Arresters: Provide where shown and where recommended by Plumbing Drainage Institute (PDI).

I. Mixing Valves: Provide piping connections per manufacturer's installation instructions.

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J. Wall hung lavatories with pop-up waste assemblies: Verify there is no vertical pull rod assembly conflict with lavatory backsplash prior to submitting product data.

3.3 PRIMING VALVES

A. All floor drains, floor sinks, and similar traps primed. Use minimum 3/8-inch type K annealed copper tubing. Primer line to be continuous and without joints.

B. Where priming valves are installed in finished rooms, conceal in wall and provide access panel.

~~C. Coordinate locations of electronic trap primer stations with electrical contractor for 120V service.~~

END OF SECTION

KMS

SECTION 23 05 48

VIBRATION AND SEISMIC CONTROLS FOR HVAC

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01, General Requirements Specification Sections, apply to this Section.

B. The provisions of Division 23, Heating, Ventilation and Air Conditioning (HVAC) Section 23 05 00, Common Work Results for HVAC, apply to work specified in this Section.

1.2 SUMMARY

A. This Section includes:
   1. Neoprene Waffle Pad
   2. Restrained Neoprene Mount
   3. Spring Isolators
   4. Springs with Restraints
   5. Base with Springs
   6. Inertia Base
   7. Isolating Spring Hangers
   8. Isolating Neoprene Hangers
   9. Rooftop Air Handling Unit Isolation Curb
   10. Isolating Sleeves
   11. Seismic Restraints
   12. Flexible Sphere Connector
   13. Flexible Hose Connector

B. Isolation of mechanical equipment as indicated on the Drawings and specified herein.

C. Seismic restraint of equipment, piping, and ductwork.

1.3 RELATED SECTIONS:

A. Division 01, General Requirements

B. Division 23, Heating, Ventilating, and Air Conditioning (HVAC)

C. Section 23 05 29, Hangers, Supports and Anchors for HVAC

D. Section 23 31 01, HVAC Ducts and Casing-Low Pressure

E. Section 23 31 02, HVAC Ducts and Casing-Medium Pressure

1.4 QUALITY ASSURANCE

A. Single manufacturer select and furnish isolation required, except packaged equipment with integral isolators meeting all the isolation and seismic requirements of this Specification.

B. System of vibration isolators and seismic controls designed, detailed, and bear the seal of a professional engineer registered in the State having jurisdiction.

C. Isolation performance requirements are indicated in the specifications. Deflections indicated are nominal static deflections for specific equipment supported.

D. Seismic snubbers, restrained isolator housings, and cable system components have anchorage preapproval OPM number from OSHPD in the State of California verifying the maximum certified load ratings.

E. Isolator Stability and Rated Capacity:
1. Spring diameters not less than 0.8 of the compressed height of the spring at rated load.
2. Springs have a minimum additional travel to solid equal to 50 percent of the rated deflection.

F. Seismic Restraints:
1. Restraint of equipment, piping, and ductwork to be in accordance with the current state and local Building Code.
2. Calculations in accordance with current state and local Building Code.

1.5 SUBMITTALS

A. Submit the following:
1. Submit Shop Drawings showing complete details of construction for steel and concrete bases including:
   a. Equipment mounting holes.
   b. Dimensions
   c. Isolation selected for each support point.
   d. Details of mounting brackets for isolator.
   e. Weight distribution for each isolator.
   f. Code number assigned to each isolator.
2. Submit product data and calculation sheets for isolators, showing:
   a. Size, type, load rating, and rated deflection of each required isolator.
   b. Percent of vibration transmitted based on the lowest disturbing frequency of the equipment.
3. Structural Details and Calculations substantiating that building structure, anchorages, and fabricated steel braces can safely withstand maximum calculated loads stamped and signed by a registered structural engineer.
4. Installation report as specified in PART 3 of this Section.
5. Operation and maintenance data.

1.6 EQUIPMENT VIBRATION ISOLATION

A. Provide a balanced set of vibration isolators for each piece of equipment listed in the Equipment Schedules.

B. Isolation work to include, but not necessarily be limited to, the following:
1. Isolation support of motor-driven equipment.
2. Inertia base frames in conjunction with isolation.

3. Isolation support of air-handling housings.
4. Isolation support of piping, piping risers, and ductwork.
5. Penetration isolation of pipework, ductwork, and conduits through walls, floors, or ceilings.
6. Flexible connections of ductwork and piping to equipment.

C. Each piece of rotating equipment must meet a reasonable criterion for maximum vibration levels at each bearing, while in operation. The criteria for varying operating speeds are given as follows:
1. Rotating equipment operating at peak vibration velocities must not exceed 0.08-inch/second.
2. If it is discovered that the operating vibration velocities exceed this criteria, the equipment repaired or replaced at no expense to the owner until approval of the equipment is given by the Engineer.

D. Provide components or materials not specially mentioned herein, but necessary to the proper vibration isolation of the equipment.

1.7 CONTRACTOR RESPONSIBILITY

A. Vibration isolation devices, including auxiliary steel bases and pouring forms, design and furnish by a single manufacturer or supplier.

B. Adequately restrain all equipment, piping, and ductwork to resist seismic forces. Design and select restraint devices to meet seismic requirements as defined in the latest issue of the International Building Code under Earthquake Loads and applicable state and local codes.

C. Have the following responsibilities:
1. Selection, installation, adjustment, and performance of vibration isolators which will meet the requirements given on the plans or in the Specifications.
2. Provide Engineering drawings, details, supervision, and instruction to assure proper installation and performance.
3. Provide whatever assistance necessary to ensure correct installation and adjustment of the isolators.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Type 1 – Neoprene Waffle Pad:
1. Mason Type Super W or Super WM and HG Grommet
2. Kinetics Noise Control

~~A. Type 7 – Isolating Spring Hangers:~~
~~1. Mason 30N, similar Amber-Booth~~
~~2. Kinetics Noise Control~~
~~3. Vibrex~~

2.2 TYPE 1 - NEOPRENE WAFFLE PAD

A. 3/4-inch thick neoprene waffle pads with pattern repeating on 1/2-inch centers.

B. Select Duro rating for recommended deflection at average load rating.

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C. Include load distribution steel plate as required.

D. Include anchor bolt grommet as required.

~~2.2~~**2.3** TYPE 7 - ISOLATING SPRING HANGERS

A. Combination rubber-in shear and steel spring isolators installed on the hanger rods.

B. Isolators shall have the proper deflection to allow the piping to deflect as a unit with the equipment isolators.

C. Neoprene element and the cup shall have neoprene bushing bushings projecting through the steel box.

D. Hangers designed for 30 degree angular movement.

E. Minimum Deflection: 1-inch

~~2.3~~**2.4** SEISMIC RESTRAINTS

A. General Requirements:
   1. Provided for equipment, piping and ductwork, both supported and suspended.
   2. Bracing of piping shall be in accordance with state and local code requirements and ASCE 7 Seismic Design Requirements for Nonstructural Components, whichever is most stringent.
   3. Bracing of ductwork shall be in accordance with the state and local code requirements, ASCE 7 Seismic Design Requirements for Nonstructural Components, and with the provisions set forth in the SMACNA seismic restraint manual.
   4. The structural requirements for the restraints, including their attachment to the building structure, shall be reviewed and approved by the Structural Engineer.
   5. Attachments to supported or suspended equipment must be coordinated with the equipment manufacturer.

B. Supported Equipment:
   1. All-directional Seismic Rubbers: Interlocking steel members restrained by a one-piece molded neoprene bushing of bridge bearing neoprene.
   2. Replaceable bushing and minimum of 1/4-inch thick. Rated loadings not to exceed 1000 psi.
   3. An air gap of 1/4-inch shall be incorporated in the snubber design in all directions before contact is made between the rigid and resilient surfaces.
   4. Snubber End Caps:
      a. Removable to allow inspection of internal clearances.
      b. Rotated neoprene bushings be rotated to ensure no short circuits exist before systems are activated.
   5. Snubber: Mason Industries, Inc. Type Z-1225

C. Bracing of Pipes:
   1. Provide seismic bracing of piping as detailed below to meet the building code requirements:
      a. Exception: Piping suspended by individual hangers need not be braced where the following criteria are met.
         1) Distance between the top of the pipe to the bottom of the support structure is 12-inches or less.

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2) Seismic braces are not required on high deformability piping when the Ip=1.0 and provisions are made to avoid impact with larger pipe or mechanical components or to protect the pipe in the event of such impact and the nominal pipe size is 3-inch diameter or less.
3) Seismic braces are not required on high deformability piping when the Ip=1.5 and provisions are made to avoid impact with larger pipe or mechanical components or to protect the pipe in the event of such impact and the nominal pipe size is 1-inch diameter or less.

2. Seismic braces for pipes on trapeze hangers may be used.
3. Provide flexibility in joints where pipes pass through building seismic joints or expansion joints, or where pipes connect to equipment.
4. Cast iron pipe of all types, glass pipe, and any other pipe joined with a shield and clamp assembly, where the top of the pipe is 12-inches or more from the supporting structure, shall be braced on each side of a change in direction of 90 degrees or more. Riser joints on unsupported sections of piping shall be braced or stabilized between floors.
5. Vertical risers shall be laterally supported with a riser clamp at each floor. For buildings greater than six stories high or for piping subject to thermal change all risers shall be engineered individually.

D. Bracing of Ductwork:
1. Brace rectangular ducts with cross sectional areas of 6 square feet and larger. Brace flat oval ducts in the same manner as rectangular ducts. Brace round ducts with diameters of 28-inches and larger. Brace flat oval ducts the same as rectangular ducts of the same nominal size.
2. Exception: No bracing is required if the duct is suspended by hangers 12-inches or less in length, as measured from the top of the duct to the bottom of the support where the hanger is attached.
3. Transverse bracing shall occur at the interval specified in the SMACNA tables or at both ends if the duct run is less than the specified interval. Transverse bracing shall be installed at each duct turn and at each end of a duct run, with a minimum of one brace at each end.
4. Longitudinal bracing shall occur at the interval specified in the SMACNA tables with at least one brace per duct run. Transverse bracing for one duct section may also act as longitudinal bracing for a duct section connected perpendicular to it if the bracing is installed within four feet of the intersection of the ducts and if the bracing is sized for the larger duct. Duct joints shall conform to SMACNA duct construction standards.
5. Install duct flex connections at equipment connections to accept expected differential displacement and protect the equipment connection from damage.

E. Suspended Equipment and Piping and Ductwork:
1. Seismic cable restraints shall consist of galvanized steel aircraft cables sized to resist seismic loads with a minimum safety factor of two and arranged to provide all-directional restraint.
2. Cable must be pre-stretched to achieve a certified minimum modulus of elasticity. Cable end connections shall be steel assemblies that swivel to final installation angle and utilize two clamping bolts to provide proper cable engagement.
3. Cable assemblies shall be type SCB at the ceiling and at the clevis bolt, SCBH between the hanger rod and the clevis or SCBV if clamped to a beam, all as manufactured by Mason Industries, Inc.
4. Steel angles or strut, sized to prevent buckling, shall be clamped to pipe or equipment rods utilizing a minimum of three ductile iron clamps at each restraint location when required. Welding of a minimum of three ductile iron clamps at each restraint location when required. Welding of support rods is not acceptable. Rod clamp assemblies shall be type SRC or UCC as manufactured by Mason Industries, Inc.
5. Pipe clevis cross-bolt braces are required in all restraint locations. They shall be special purpose preformed channels deep enough to be held in place by bolts passing over the cross bolt. Clevis cross brace shall be type CCB as manufactured by Mason Industries, Inc.

PART 3 EXECUTION

3.1 GENERAL

A. Do not install any equipment or pipe which makes rigid contact with the building.

B. The installation or use of vibration isolators must not cause any change of position of equipment or piping which would result in stresses in piping connections or misalignment of shafts or bearings. In order to meet this objective, equipment and piping shall be maintained in a rigid position during installation. The load shall not be transferred to the isolator until the installation is complete and under full operational load.

C. Correct, at no additional cost, all installations which are defective in workmanship or materials.

3.2 PREPARATION

A. Treat all isolators, including springs, hardware, and housing, with a corrosion protective coating of epoxy powder or electro galvanizing.

B. Coat steel frames exposed to weather with a rustproof metal primer.

C. Provide hot dipped galvanizing on steel frames as indicated on the plans for corrosion protection in severe conditions.

3.3 INSTALLATION

A. General:
1. Install isolation where indicated on the Drawings by type and location and where indicated below.
2. The assigned code number shall be marked on the isolators and bases to assure placement in the proper location.
3. Anchor isolator seismic housing baseplate to floor.
4. Rubber grommets and washers shall be provided to isolate the bolt from the building structure. Under no circumstances shall the isolation efficiency be destroyed when bolting the isolators to the building structure.

B. Type 1 - Neoprene Waffle Pad:
1. Service:
a. Floor Mounted Indoor Heating and Ventilation Units

~~B.~~**C.** Type 7 – Isolating Spring Hangers:
1. Service:
a. Inline Centrifugal Fans
~~a. Fan Coil Units~~

3.4 SEISMIC RESTRAINTS

A. General:
1. Install and adjust seismic restraints so that the equipment, piping, and ductwork support is not degraded by the restraints.

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2. Restraints must not short circuit vibration isolation systems or transmit objectionable vibration or noise.

B. Supported Equipment:
1. Each vibration isolation frame for supported equipment shall have a minimum of four seismic snubbers mounted as close as possible to the vibration isolators and/or the frame extremities.
2. Care must be taken so that the 1/4-inch air gap in the seismic restraint snubber is preserved on all sides in order that the vibration isolation potential of the isolator is not compromised. This requires that the final snubber adjustment be completed after the vibration isolators are properly installed and the installation approved.

C. Bracing of Pipes:
1. Branch lines may not be used to brace main lines.
2. Transverse bracing shall be at 40-feet maximum, except where a lesser spacing is indicated in the SMACNA Seismic Restraint Manual for bracing of pipes.
3. Longitudinal bracing shall be at 80-feet maximum except where a lesser spacing is indicated in the tables. In pipes where thermal expansion is a consideration, an anchor point may be used as the specified longitudinal brace provided that it has a capacity to resist both the seismic load and the additional force induced by expansion and contraction.
4. Fuel oil, gas, cast iron pipe of all types, glass pipe and any other pipes joined with four band shield and clamp assembly shall be braced at 1/2 the spacings shown above.
5. A rigid piping system shall not be braced to dissimilar parts of the building or to two dissimilar building systems that may respond differently during an earthquake.
6. Transverse bracing for one pipe section may also act as longitudinal bracing for a pipe section of the same size connected perpendicular to it if the bracing is installed within 24-inches of the elbow or tee.
7. Branch lines may not be used to restrain main lines.
8. Where thermal expansion is a consideration, guides and anchors may be used as transverse and longitudinal restraints provided they have a capacity equal to or greater than the restraint loads in addition to the loads induced by expansion or contraction.
9. Subject to confirmation by field inspection, seismic bracing is not required on piping when the piping is supported by rod hangers and the hangers in the entire run are 12-inches or less in length from the top of the pipe to the supporting structure, hangers are detailed to avoid bending of the hangers and their attachments and provisions are made for piping to accommodate expected deflections.

D. Bracing of Ductwork:
1. Transverse restraints shall occur at 30-foot intervals or at both ends of the duct run if less than the specified interval. Transverse restraints shall be installed at each duct turn and at each end of a duct run.
2. Longitudinal restraints shall occur at 60-foot intervals with at least one restraint per duct run. Transverse restraints for one duct section may also act as a longitudinal restraint for a duct section connected perpendicular to it if the restraints are installed within 4-feet of the intersection of the ducts and if the restraints are sized for the larger duct. Duct joints shall conform to SMACNA duct construction standards.
3. Hanger straps must be positively attached to the duct within 2-inches of the top of the duct with a minimum of two number 10 sheet metal screws.
4. A group of ducts may be combined in a larger frame so that the combined weights and dimensions of the ducts are less than or equal to the maximum weight and dimensions of the duct for which bracing details are selected.

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5. Walls, including gypsum board nonbearing partitions, which have ducts running through them, may replace a typical transverse brace. Provide solid blocking around duct penetrations at stud wall construction.
6. Unbraced ducts shall be installed with a 6-inch minimum clearance to vertical ceiling hanger wires.

E. Suspended Equipment, Piping, and Ductwork Cable Method:
1. The cables shall be adjusted to a degree of slackness approved by the Structural Engineer.
2. The uplift and downward restraint nuts and Mason type RW neoprene covered steel rebound washers for the Type 6 hangers adjusted so there is a maximum 1/4-inch clearance.
3. C-clamps for attachment to the bottom of I-beams must incorporate a restraining strap.

3.5 FIELD QUALITY CONTROL

A. Installation Report: Isolation manufacturer's representative shall confirm that all isolation is installed correctly and submit report stating that isolators are installed as shown on Shop Drawings, isolators are free to work properly, and that installed deflections are as scheduled and as specified.

END OF SECTION

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SECTION 23 34 00

HVAC FANS

PART 1 GENERAL

1.1 SUMMARY

A. This Section includes:
   1. Inline Centrifugal Fans
   ~~2. related sections~~

B. Division 01, General Requirements

C. Division 23, Heating, Ventilating, and Air Conditioning (HVAC)

1.2 SUBMITTALS

A. Submit the following:
   1. Shop Drawings: Showing dimensions, details of construction.
   2. Product Data: Showing performance of fans.
   3. Operation and Maintenance Data
   4. Submit certified sound power ratings for each fan.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Inline Centrifugal Fans:
   1. Greenheck
   2. Penn
   3. Cook
   4. Acme
   5. Carnes
   6. Twin City
   7. Other Manufacturers: Submit substitution request.

B. INLINE CENTRIFUGAL FANS
   1. General Description: Inline centrifugal, belt driven, cabinet fan, AMCA rated, backward inclined wheel, heavy gauge steel housing adequately braced with edges sealed, externally mounted 1800 rpm motor, hinged access doors.
   2. Refer to Section 23 05 00, Common Work Results for HVAC for energy efficient motor requirements.

~~C. Smoke Control Fans: Provide UL listing as "Power Ventilators for Smoke Control Systems" where used as a smoke control fan.~~

~~D.~~**C.** Drive:
   1. Direct: Beltless, with EC motor as scheduled.
   ~~1. Multiple belt with fixed sheave and OSHA approved metal guard.~~

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~~2. Size drive for 150 percent of motor horsepower.~~

~~3. Fans used as part of a life safety system, provide 1-1/2- times the number of belts required, with a minimum of 2.~~

~~E.~~**D.** Vibration Isolation: Provide vibration isolation as indicated on drawings and in accordance with Section 23 05 48, Vibration and Seismic Controls for HVAC Piping and Equipment.

PART 3 EXECUTION

3.1 INSTALLATION, GENERAL

A. Provide flexible connections on inlet and discharge duct connection. Flexible connection for vane axial fans to be barium loaded vinyl.

3.2 INLINE CENTRIFUGAL FAN

A. Mount in ductwork using Vibration Isolation as specified in Section 23 05 48 Vibration and Seismic Controls for HVAC Piping and Equipment, and as indicated on drawings.

B. Connect ductwork using flexible connections.

C. Arrange for unobstructed access to access door.

END OF SECTION

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SECTION 23 81 00

DECENTRALIZED UNITARY HVAC EQUIPMENT

PART 1 GENERAL

1.1 SUMMARY

A. This Section includes:
   1. Fan Coil Unit
   2. Related Sections

B. Division 01, General Requirements

C. Division 23, Heating, Ventilating, and Air Conditioning (HVAC)

D. Section 23 05 48, Vibration and Seismic Controls for HVAC Piping and Equipment

E. Section 23 82 00, Convection and Heating and Cooling Units

F. SUBMITTALS

G. Submit the following:
   1. Shop drawings showing details of construction, dimensions, arrangement of components, isolation, filters, etc.
   2. Product data showing performance data, standard items, and accessories, operating weight.
   3. Flow diagrams and pipe sizing for refrigerant systems.
   4. Operating and maintenance data.
   5. Testing Submittals:
      a. Provide test plan and test procedures for approval.
      b. Explain in detail, step-by-step, actions and expected results to demonstrate compliance with the requirements of this specification and methods for simulating necessary conditions of operation to demonstrate performance of the system.
      c. Test plan and test procedures demonstrate capability of system to monitor and control equipment and to accomplish control and monitoring specified.

1.2 ACCEPTANCE TESTING AND TRAINING

A. Site Testing:
   1. General:
      a. Provide personnel, equipment, instrumentation, and supplies necessary to perform testing by a representative authorized by the manufacturer.
      b. Owner or Owner's representative will witness and sign off on acceptance testing.
   2. Acceptance Test:
      a. Demonstrate compliance of completed control system with contract documents.
      b. Use approved test plan, physical and functional requirements of project

B. Training:
   1. General:

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a. A representative authorized by the manufacturer conduct training courses for designated personnel in operation and maintenance of system.
b. Orient training to specific system being installed under this contract.
c. Provide training manuals for each trainee, with two additional copies provided for archival at project site.
d. Manuals include detailed description of the subject matter for each lesson.
e. Copies of audiovisuals delivered to Owner.
f. Training day is defined as 8 hours of classroom instruction, including two 15-minute breaks and excluding lunchtime, Monday through Friday, during normal first shift in effect at training facility.
g. Notification of planned training given to the Owner's representative at least 15 days prior to the training.

2. Operator's Training I:
   a. Teach at a convenient location for a period of one training day.
   b. Upon completion, each student, using appropriate documentation, should be able to perform elementary operations with guidance and describe general hardware architecture and functionality of system.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Fan Coil Unit:
   1. Daikin
   2. Trane
   3. Carrier
   4. York
   ~~5. Enviro-Tech~~
   5. Other Manufacturers: Submit substitution request.

2.2 HEATING AND VENTILATION UNIT (HV-20, 21)

A. Description:
   1. Furnish complete unit including cabinet, fan, and motor assembly, heating water coil and filter.
   2. Unit UL approved for application and wired per NEC.

B. Cabinet: 18 gauge steel, removable panels for access to components.

C. Fan and Motor: Centrifugal type, direct drive, brushless DC electronically commutated motor.

D. Filters: 2" Pleated MERV 11.

E. Heating Coil: Non-ferrous construction with aluminum fins mechanically bonded to seamless copper tubing with brazed joints.

F. Configuration: Horizontal unit, ducted inlet, and outlet connection.

G. Electrical:
   1. Furnish magnetic contactors.
   2. Arrange for single point electrical connection.

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3. Provide field wiring.
4. Provide internal control panel to accept low voltage and power. Adequate space shall be provided for the DDC controller to be field installed in the panel.
5. Factory install 24V control circuit transformer.
6. ~~—~~

~~B. FAN COIL UNIT~~

~~C. Description:~~
~~1. Furnish complete unit including cabinet, fan, and motor assembly, electric heating, cooling coil and filter.~~
~~2. Unit UL approved for application and wired per NEC.~~

~~D. Cabinet: 18 gauge steel, removable panels for access to components.~~

~~E. Fan and Motor: Centrifugal type, belt driven, permanently lubricated motor.~~

~~F. Filters: Throwaway type, 1-inch thick fiberglass.~~

~~G. Heating Coil: Non-ferrous construction with aluminum fins mechanically bonded to seamless copper tubing with brazed joints.~~

~~H. Drain Pan:~~
~~1. Galvanized steel drain pan with copper drain connection.~~
~~2. Pan to extend under coil for proper drainage of condensate.~~

~~I. Configuration: Horizontal unit, ducted inlet, and outlet connection.~~

~~J. Electrical:~~
~~1. Furnish magnetic contactors.~~
~~2. Arrange for single point electrical connection.~~
~~3. Provide field wiring.~~

PART 3 EXECUTION

3.1 HEATING AND VENTILATION UNIT

A. Installation:
1. Install in location shown on the Drawings. Level unit and secure to structure via two six-inch-high 12-gauge sheet metal sleepers secured to floor.
2. Make piping connection and unit installation per manufacturer's recommendations and installation guides.

B. Flexible Connections:
1. Provide flexible duct connections, with accurate alignment between fan and duct.

C. Start-Up:
1. General: Comply with manufacturer's instructions.
2. Install filters before operating unit.

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~~3.1 FAN COIL UNIT~~

~~A. Installation:~~

~~1. Install in location shown on the Drawings. Level unit and secure to structure.~~

~~2. Make piping connection and unit installation per manufacturer's recommendations and installation guides.~~

~~3. Pipe condensate pan to floor drain per manufacturer's installation guide. Provide minimum 2-inch trap seal on condensate drain connections.~~

~~B. Start-Up:~~

~~1. General: Comply with manufacturer's instructions.~~

~~2. Install filters before operating unit.~~

~~3. Ensure proper refrigerant and airflow before operating unit compressor.~~

END OF SECTION

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SECTION 23 82 00

CONVECTION HEATING AND COOLING UNITS

PART 1 GENERAL

1.1 SUMMARY

A. This Section includes:
1. ~~Panel Radiator~~**Finned Tube Radiator**

1.2 RELATED SECTIONS

A. Division 01, General Requirements

B. Division 23, Heating, Ventilating, and Air Conditioning (HVAC)

1.3 SUBMITTALS

A. Submit the following:
1. Catalog data showing dimensions and performance.
~~2. Computer calculations for coil performance.~~
~~3.~~**2.** Operation and Maintenance Data~~: radiant panels~~.

PART 2 PRODUCTS

2.1 MANUFACTURERS

1. Finned Tube Radiator:
a. Jaga
b. Other Manufacturers: Submit substitution request.

~~1.~~ **Finned tube radiator (ftr-1)**~~Panel Radiators:~~
~~a. Jaga~~
~~b. Runtal~~
~~c. Rittling~~
~~d. Other Manufacturers: Submit substitution request.~~

2.2 FINNED TUBE RADIATORS (FTR-1)

A. Jaga Brizza 22 – Model 55 Wall Mount 2-pipe radiator. Length and capacity as indicated on drawings.

B. Cabinet:
1. 16-guage electrolytic galvanized steel, coated epoxy baked finish. Architect to select from manufacturer's standard colors.
2. Top grille supply and bottom grille return.

C. Provide ¾" pipe connections, locations as indicated on mechanical drawings.

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~~2.2 PANEL RADIATORS (PR)~~

~~A. Panel radiator. Length, height and depth as indicated on drawings. Minimum Capacity in Btuh per lineal foot at 135°F average water temperature as scheduled.~~

~~B. Mounts: Wall mounting brackets.~~

~~C. Provide 12" side cover plate to conceal piping connections at side of radiator. Cover shall conceal piping from front view as well as from above. Cover piece shall be adjustable from side to side to provide varying lengths of cover.~~

~~D. Provide ¾" pipe connections. Connection locations as indicated on mechanical drawings.~~

~~E. Finish: Gloss powder coat finish of color to be selected by Architect. Architect to select from manufacturer's standard colors.~~

PART 3 EXECUTION

3.1 INSTALLATION

A. Finned Tube Radiator: Mount according to manufacturer's recommendations and architectural details.

~~A. Panel Radiators: Mount according to manufacturer's recommendations and architectural details.~~

END OF SECTION

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SECTION 22 40 00

PLUMBING FIXTURES

PART 1 GENERAL

1.1 SUMMARY

A. This Section includes:
   1. Fixture Trim
   2. Plumbing Fixtures
   3. Drainage Products
   4. related sections

B. Division 01, General Requirements

C. Division 22, Plumbing

1.2 QUALITY ASSURANCE

A. Water Closets: Maximum Performance (MaP) score of no less than 800

B. Faucets: Certify to NSF/ANSI 61 and California AB1953

C. Electric Water Coolers and Drinking Fountains: Certified to NSF/ANSI 61 and California AB1953

D. SUBMITTALS

E. Submit the following:
   1. Product data for each item specified.
   2. Operating and Maintenance Data:
      a. Mounting heights for fixtures.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers are stated for each fixture specified. The following manufacturers are also acceptable, except when indicated only.

B. Fixture Trim:
   1. Supply Stops:
      a. Chicago
      b. NPT McGuire (LK series)
      c. Brasscraft (SCR series)
   2. Traps:
      a. McGuire
      b. Kenney
      c. Brasscraft

3. Support Rims:
   a. Hudee
4. Vacuum Breakers:
   a. Chicago Faucet
   b. A.W. Cash
   c. Febco, chrome plated

C. Fixtures:
1. Bradley
2. ~~American Standard~~
3. ~~Kohler~~
4. ~~Sloan~~
5. ~~Toto~~

D. Mixing Valves:
1. Powers
2. Leonard
3. Symmons
4. Chicago

E. Faucets:
1. Chicago
2. Delta Commercial
3. Kohler
4. Symmons
5. Moen Commercial

F. Shock Arrestors:
1. PPP
2. J.R. Smith

G. Trap Primer Stations:
1. PPP

H. Exposed Waste and Supply Piping Insulation Kits:
1. Truebro
2. McGuire

I. Other Manufacturers: Submit substitution request.

2.2 FIXTURE TRIM

A. Supply Stops: Chicago cast brass rigid riser supplies with loose key angle stops, wall flanges, NPT female inlet, chrome plate finish; equivalent NPT McGuire (LK series), Brasscraft (SCR series), or NPT stops by fixture supplier.

B. Traps:
1. For floor drains, provide coated cast iron P-trap; recessed, screw jointed or bell and spigot.

2. For other fixtures, provide 17 gauge, chrome plated cast brass P-Traps with solder bushings, and clean-out.

C. Support Rims: Hudee stainless steel rims, if sink not furnished with integral rim.

D. Vacuum Breakers:
1. Chicago Faucet
2. A.W. Cash
3. Febco, chrome plated

2.3 PLUMBING FIXTURES

A. WS-1 Wash Station (ADA):
1. Bradley **Express Deck EXD-2N,** ~~, Model MG series, 2 station, wall hung,~~ equipped with Chicago 802-V665ABCP faucets with polished chrome plated solid brass body construction, 4-inch spout, vandal proof metering push handles, 2.2 gpm pressure compensating aerator, adjustable cycle time closure cartridge, vandal resistant complete.
2. Mixing Valve (Point-of-Use):
3. Leonard 270 series thermostatic point-of-use mixing valve.
4. ASSE 1070 certified.
5. Bronze body.
6. Locked temperature adjustment cap (vandal resistant).
7. Integral check valves on hot and cold inlets.
8. Minimum flow 0.5 GPM.
9. Maximum flow 3.5 GPM at 5 PSI loss.

B. Exposed Waste and Supply Piping Insulation Kits: McGuire Prowrap insulation kit for exposed supplies and waste piping below ADA lavatories and ADA sinks.

PART 3 EXECUTION

3.1 FIXTURE TRIM

A. Provide plumbing fixture trim where applicable on fixtures, including but not limited to supply stops, traps, support rims, flush valve, and vacuum breakers.

B. Provide rough-in and final piping connection to fixtures. Carefully review all construction documents to assure that all fixtures are provided with necessary services for a complete operating system.

C. Rigidly secure rough-in piping, carriers and supports, and other service piping to structure.

3.2 PLUMBING FIXTURES

A. Americans with Disabilities Act:
1. Those fixtures indicated by ADA complies with and be installed in accordance with Americans with Disabilities Act Guidelines (ADAAG). Where applicable building code requirements are more stringent than ADAAG guidelines, building code requirements followed.
2. Lavatories:
   a. Mounting height of ADA lavatories at a maximum height of 34 inches from floor to rim.
   b. Provide insulation kits on exposed hot water and waste piping beneath ADA lavatories.

NEHS

B. Fixture Mounting Heights: Fixtures standard rough-in catalogued heights unless shown otherwise on the Architectural Drawings.

C. Water Supplies: When both hot and cold water to a fixture is required, connect the hot on the left and the cold on the right.

D. Floor Mounted Supports and Chair Carriers:
   1. Secure floor mounted supports and chair carriers to slab with a minimum of 1/2-inch bolts.
   2. Install supports and carriers per manufacturer's installation instructions.

E. Mixing Valves: Provide piping connections per manufacturer's installation instructions.

END OF SECTION

SECTION 23 05 48

VIBRATION AND SEISMIC CONTROLS FOR HVAC

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01, General Requirements Specification Sections, apply to this Section.

B. The provisions of Division 23, Heating, Ventilation and Air Conditioning (HVAC) Section 23 05 00, Common Work Results for HVAC, apply to work specified in this Section.

1.2 SUMMARY

A. This Section includes:
   1. Neoprene Waffle Pad
   2. Restrained Neoprene Mount
   3. Spring Isolators
   4. Springs with Restraints
   5. Base with Springs
   6. Inertia Base
   7. Isolating Spring Hangers
   8. Isolating Neoprene Hangers
   9. Rooftop Air Handling Unit Isolation Curb
   10. Isolating Sleeves
   11. Seismic Restraints
   12. Flexible Sphere Connector
   13. Flexible Hose Connector

B. Isolation of mechanical equipment as indicated on the Drawings and specified herein.

C. Seismic restraint of equipment, piping, and ductwork.

1.3 RELATED SECTIONS:

A. Division 01, General Requirements

B. Division 23, Heating, Ventilating, and Air Conditioning (HVAC)

C. Section 23 05 29, Hangers, Supports and Anchors for HVAC

D. Section 23 31 01, HVAC Ducts and Casing-Low Pressure

E. Section 23 31 02, HVAC Ducts and Casing-Medium Pressure

1.4 QUALITY ASSURANCE

A. Single manufacturer select and furnish isolation required, except packaged equipment with integral isolators meeting all the isolation and seismic requirements of this Specification.

B. System of vibration isolators and seismic controls designed, detailed, and bear the seal of a professional engineer registered in the State having jurisdiction.

C. Isolation performance requirements are indicated in the specifications. Deflections indicated are nominal static deflections for specific equipment supported.

D. Seismic snubbers, restrained isolator housings, and cable system components have anchorage preapproval OPM number from OSHPD in the State of California verifying the maximum certified load ratings.

E. Isolator Stability and Rated Capacity:
1. Spring diameters not less than 0.8 of the compressed height of the spring at rated load.
2. Springs have a minimum additional travel to solid equal to 50 percent of the rated deflection.

F. Seismic Restraints:
1. Restraint of equipment, piping, and ductwork to be in accordance with the current state and local Building Code.
2. Calculations in accordance with current state and local Building Code.

1.5 SUBMITTALS

A. Submit the following:
1. Submit Shop Drawings showing complete details of construction for steel and concrete bases including:
   a. Equipment mounting holes.
   b. Dimensions
   c. Isolation selected for each support point.
   d. Details of mounting brackets for isolator.
   e. Weight distribution for each isolator.
   f. Code number assigned to each isolator.
2. Submit product data and calculation sheets for isolators, showing:
   a. Size, type, load rating, and rated deflection of each required isolator.
   b. Percent of vibration transmitted based on the lowest disturbing frequency of the equipment.
3. Structural Details and Calculations substantiating that building structure, anchorages, and fabricated steel braces can safely withstand maximum calculated loads stamped and signed by a registered structural engineer.
4. Installation report as specified in PART 3 of this Section.
5. Operation and maintenance data.

1.6 EQUIPMENT VIBRATION ISOLATION

A. Provide a balanced set of vibration isolators for each piece of equipment listed in the Equipment Schedules.

B. Isolation work to include, but not necessarily be limited to, the following:
1. Isolation support of motor-driven equipment.
2. Inertia base frames in conjunction with isolation.

3. Isolation support of air-handling housings.
4. Isolation support of piping, piping risers, and ductwork.
5. Penetration isolation of pipework, ductwork, and conduits through walls, floors, or ceilings.
6. Flexible connections of ductwork and piping to equipment.

C. Each piece of rotating equipment must meet a reasonable criterion for maximum vibration levels at each bearing, while in operation. The criteria for varying operating speeds are given as follows:
   1. Rotating equipment operating at peak vibration velocities must not exceed 0.08-inch/second.
   2. If it is discovered that the operating vibration velocities exceed this criteria, the equipment repaired or replaced at no expense to the owner until approval of the equipment is given by the Engineer.

D. Provide components or materials not specially mentioned herein, but necessary to the proper vibration isolation of the equipment.

1.7 CONTRACTOR RESPONSIBILITY

A. Vibration isolation devices, including auxiliary steel bases and pouring forms, design and furnish by a single manufacturer or supplier.

B. Adequately restrain all equipment, piping, and ductwork to resist seismic forces. Design and select restraint devices to meet seismic requirements as defined in the latest issue of the International Building Code under Earthquake Loads and applicable state and local codes.

C. Have the following responsibilities:
   1. Selection, installation, adjustment, and performance of vibration isolators which will meet the requirements given on the plans or in the Specifications.
   2. Provide Engineering drawings, details, supervision, and instruction to assure proper installation and performance.
   3. Provide whatever assistance necessary to ensure correct installation and adjustment of the isolators.

PART 2 PRODUCTS

~~2.1 MANUFACTURERS~~

~~A. Type 7 – Isolating Spring Hangers:~~
   ~~1. Mason 30N, similar Amber-Booth~~
   ~~2. Kinetics Noise Control~~
   ~~3. Vibrex~~

~~2.2 TYPE 7 - ISOLATING SPRING HANGERS~~

~~A. Combination rubber-in-shear and steel spring isolators installed on the hanger rods.~~

~~B. Isolators shall have the proper deflection to allow the piping to deflect as a unit with the equipment isolators.~~

~~C. Neoprene element and the cup shall have neoprene bushing bushings projecting through the steel box.~~

~~D. Hangers designed for 30 degree angular movement.~~

NEHS

~~E. Minimum Deflection: 1-inch~~

~~2.3~~2.1 SEISMIC RESTRAINTS

A. General Requirements:
   1. Provided for equipment, piping and ductwork, both supported and suspended.
   2. Bracing of piping shall be in accordance with state and local code requirements and ASCE 7 Seismic Design Requirements for Nonstructural Components, whichever is most stringent.
   3. Bracing of ductwork shall be in accordance with the state and local code requirements, ASCE 7 Seismic Design Requirements for Nonstructural Components, and with the provisions set forth in the SMACNA seismic restraint manual.
   4. The structural requirements for the restraints, including their attachment to the building structure, shall be reviewed and approved by the Structural Engineer.
   5. Attachments to supported or suspended equipment must be coordinated with the equipment manufacturer.

B. Supported Equipment:
   1. All-directional Seismic Rubbers: Interlocking steel members restrained by a one-piece molded neoprene bushing of bridge bearing neoprene.
   2. Replaceable bushing and minimum of 1/4-inch thick. Rated loadings not to exceed 1000 psi.
   3. An air gap of 1/4-inch shall be incorporated in the snubber design in all directions before contact is made between the rigid and resilient surfaces.
   4. Snubber End Caps:
      a. Removable to allow inspection of internal clearances.
      b. Rotated neoprene bushings be rotated to ensure no short circuits exist before systems are activated.
   5. Snubber: Mason Industries, Inc. Type Z-1225

C. Bracing of Pipes:
   1. Provide seismic bracing of piping as detailed below to meet the building code requirements:
      a. Exception: Piping suspended by individual hangers need not be braced where the following criteria are met.
         1) Distance between the top of the pipe to the bottom of the support structure is 12-inches or less.
         2) Seismic braces are not required on high deformability piping when the Ip=1.0 and provisions are made to avoid impact with larger pipe or mechanical components or to protect the pipe in the event of such impact and the nominal pipe size is 3-inch diameter or less.
         3) Seismic braces are not required on high deformability piping when the Ip=1.5 and provisions are made to avoid impact with larger pipe or mechanical components or to protect the pipe in the event of such impact and the nominal pipe size is 1-inch diameter or less.
   2. Seismic braces for pipes on trapeze hangers may be used.
   3. Provide flexibility in joints where pipes pass through building seismic joints or expansion joints, or where pipes connect to equipment.
   4. Cast iron pipe of all types, glass pipe, and any other pipe joined with a shield and clamp assembly, where the top of the pipe is 12-inches or more from the supporting structure, shall be braced on each side of a change in direction of 90 degrees or more. Riser joints on unsupported sections of piping shall be braced or stabilized between floors.
   5. Vertical risers shall be laterally supported with a riser clamp at each floor. For buildings greater than six stories high or for piping subject to thermal change all risers shall be engineered individually.

D. Bracing of Ductwork:
   1. Brace rectangular ducts with cross sectional areas of 6 square feet and larger. Brace flat oval ducts in the same manner as rectangular ducts. Brace round ducts with diameters of 28-inches and larger. Brace flat oval ducts the same as rectangular ducts of the same nominal size.
   2. Exception: No bracing is required if the duct is suspended by hangers 12-inches or less in length, as measured from the top of the duct to the bottom of the support where the hanger is attached.
   3. Transverse bracing shall occur at the interval specified in the SMACNA tables or at both ends if the duct run is less than the specified interval. Transverse bracing shall be installed at each duct turn and at each end of a duct run, with a minimum of one brace at each end.
   4. Longitudinal bracing shall occur at the interval specified in the SMACNA tables with at least one brace per duct run. Transverse bracing for one duct section may also act as longitudinal bracing for a duct section connected perpendicular to it if the bracing is installed within four feet of the intersection of the ducts and if the bracing is sized for the larger duct. Duct joints shall conform to SMACNA duct construction standards.
   5. Install duct flex connections at equipment connections to accept expected differential displacement and protect the equipment connection from damage.

E. Suspended Equipment and Piping and Ductwork:
   1. Seismic cable restraints shall consist of galvanized steel aircraft cables sized to resist seismic loads with a minimum safety factor of two and arranged to provide all-directional restraint.
   2. Cable must be pre-stretched to achieve a certified minimum modulus of elasticity. Cable end connections shall be steel assemblies that swivel to final installation angle and utilize two clamping bolts to provide proper cable engagement.
   3. Cable assemblies shall be type SCB at the ceiling and at the clevis bolt, SCBH between the hanger rod and the clevis or SCBV if clamped to a beam, all as manufactured by Mason Industries, Inc.
   4. Steel angles or strut, sized to prevent buckling, shall be clamped to pipe or equipment rods utilizing a minimum of three ductile iron clamps at each restraint location when required. Welding of a minimum of three ductile iron clamps at each restraint location when required. Welding of support rods is not acceptable. Rod clamp assemblies shall be type SRC or UCC as manufactured by Mason Industries, Inc.
   5. Pipe clevis cross-bolt braces are required in all restraint locations. They shall be special purpose preformed channels deep enough to be held in place by bolts passing over the cross bolt. Clevis cross brace shall be type CCB as manufactured by Mason Industries, Inc.

PART 3 EXECUTION

3.1 GENERAL

A. Do not install any equipment or pipe which makes rigid contact with the building.

B. The installation or use of vibration isolators must not cause any change of position of equipment or piping which would result in stresses in piping connections or misalignment of shafts or bearings. In order to meet this objective, equipment and piping shall be maintained in a rigid position during installation. The load shall not be transferred to the isolator until the installation is complete and under full operational load.

C. Correct, at no additional cost, all installations which are defective in workmanship or materials.

3.2 PREPARATION

A. Treat all isolators, including springs, hardware, and housing, with a corrosion protective coating of epoxy powder or electro galvanizing.

B. Coat steel frames exposed to weather with a rustproof metal primer.

C. Provide hot dipped galvanizing on steel frames as indicated on the plans for corrosion protection in severe conditions.

3.3 INSTALLATION

A. General:
1. Install isolation where indicated on the Drawings by type and location and where indicated below.
2. The assigned code number shall be marked on the isolators and bases to assure placement in the proper location.
3. Anchor isolator seismic housing baseplate to floor.
4. Rubber grommets and washers shall be provided to isolate the bolt from the building structure. Under no circumstances shall the isolation efficiency be destroyed when bolting the isolators to the building structure.

~~B. Type 7 – Isolating Spring Hangers:~~
~~1. Service:~~
~~a. Fan Coil Units~~

3.4 SEISMIC RESTRAINTS

A. General:
1. Install and adjust seismic restraints so that the equipment, piping, and ductwork support is not degraded by the restraints.
2. Restraints must not short circuit vibration isolation systems or transmit objectionable vibration or noise.

B. Supported Equipment:
1. Each vibration isolation frame for supported equipment shall have a minimum of four seismic snubbers mounted as close as possible to the vibration isolators and/or the frame extremities.
2. Care must be taken so that the 1/4-inch air gap in the seismic restraint snubber is preserved on all sides in order that the vibration isolation potential of the isolator is not compromised. This requires that the final snubber adjustment be completed after the vibration isolators are properly installed and the installation approved.

C. Bracing of Pipes:
1. Branch lines may not be used to brace main lines.
2. Transverse bracing shall be at 40-feet maximum, except where a lesser spacing is indicated in the SMACNA Seismic Restraint Manual for bracing of pipes.
3. Longitudinal bracing shall be at 80-feet maximum except where a lesser spacing is indicated in the tables. In pipes where thermal expansion is a consideration, an anchor point may be used as the specified longitudinal brace provided that it has a capacity to resist both the seismic load and the additional force induced by expansion and contraction.

4. Fuel oil, gas, cast iron pipe of all types, glass pipe and any other pipes joined with four band shield and clamp assembly shall be braced at 1/2 the spacings shown above.
5. A rigid piping system shall not be braced to dissimilar parts of the building or to two dissimilar building systems that may respond differently during an earthquake.
6. Transverse bracing for one pipe section may also act as longitudinal bracing for a pipe section of the same size connected perpendicular to it if the bracing is installed within 24-inches of the elbow or tee.
7. Branch lines may not be used to restrain main lines.
8. Where thermal expansion is a consideration, guides and anchors may be used as transverse and longitudinal restraints provided they have a capacity equal to or greater than the restraint loads in addition to the loads induced by expansion or contraction.
9. Subject to confirmation by field inspection, seismic bracing is not required on piping when the piping is supported by rod hangers and the hangers in the entire run are 12-inches or less in length from the top of the pipe to the supporting structure, hangers are detailed to avoid bending of the hangers and their attachments and provisions are made for piping to accommodate expected deflections.

D. Bracing of Ductwork:
1. Transverse restraints shall occur at 30-foot intervals or at both ends of the duct run if less than the specified interval. Transverse restraints shall be installed at each duct turn and at each end of a duct run.
2. Longitudinal restraints shall occur at 60-foot intervals with at least one restraint per duct run. Transverse restraints for one duct section may also act as a longitudinal restraint for a duct section connected perpendicular to it if the restraints are installed within 4-feet of the intersection of the ducts and if the restraints are sized for the larger duct. Duct joints shall conform to SMACNA duct construction standards.
3. Hanger straps must be positively attached to the duct within 2-inches of the top of the duct with a minimum of two number 10 sheet metal screws.
4. A group of ducts may be combined in a larger frame so that the combined weights and dimensions of the ducts are less than or equal to the maximum weight and dimensions of the duct for which bracing details are selected.
5. Walls, including gypsum board nonbearing partitions, which have ducts running through them, may replace a typical transverse brace. Provide solid blocking around duct penetrations at stud wall construction.
6. Unbraced ducts shall be installed with a 6-inch minimum clearance to vertical ceiling hanger wires.

E. Suspended Equipment, Piping, and Ductwork Cable Method:
1. The cables shall be adjusted to a degree of slackness approved by the Structural Engineer.
2. The uplift and downward restraint nuts and Mason type RW neoprene covered steel rebound washers for the Type 6 hangers adjusted so there is a maximum 1/4-inch clearance.
3. C-clamps for attachment to the bottom of I-beams must incorporate a restraining strap.

3.5 FIELD QUALITY CONTROL

A. Installation Report: Isolation manufacturer's representative shall confirm that all isolation is installed correctly and submit report stating that isolators are installed as shown on Shop Drawings, isolators are free to work properly, and that installed deflections are as scheduled and as specified.

END OF SECTION

SECTION 23 81 00

DECENTRALIZED UNITARY HVAC EQUIPMENT

PART 1 GENERAL

1.1 SUMMARY

A. This Section includes:
   1. Rooftop Mounted Packaged HVAC Unit

1.2 RELATED SECTIONS

A. Division 01, General Requirements

B. Division 23, Heating, Ventilating, and Air Conditioning (HVAC)

C. Section 23 05 48, Vibration and Seismic Controls for HVAC Piping and Equipment

1.3 SUBMITTALS

A. Submit the following:
   1. Shop drawings showing details of construction, dimensions, arrangement of components, isolation, filters, etc.
   2. Product data showing performance data, standard items, and accessories, operating weight.
   3. Flow diagrams and pipe sizing for refrigerant systems.
   4. Operating and maintenance data.
   5. Testing Submittals:
      a. Provide test plan and test procedures for approval.
      b. Explain in detail, step-by-step, actions and expected results to demonstrate compliance with the requirements of this specification and methods for simulating necessary conditions of operation to demonstrate performance of the system.
      c. Test plan and test procedures demonstrate capability of system to monitor and control equipment and to accomplish control and monitoring specified.

1.4 ACCEPTANCE TESTING AND TRAINING

A. Site Testing:
   1. General:
      a. Provide personnel, equipment, instrumentation, and supplies necessary to perform testing by a representative authorized by the manufacturer.
      b. Owner or Owner's representative will witness and sign off on acceptance testing.
   2. Acceptance Test:
      a. Demonstrate compliance of completed control system with contract documents.
      b. Use approved test plan, physical and functional requirements of project

B. Training:
   1. General:

a. A representative authorized by the manufacturer conduct training courses for designated personnel in operation and maintenance of system.
b. Orient training to specific system being installed under this contract.
c. Provide training manuals for each trainee, with two additional copies provided for archival at project site.
d. Manuals include detailed description of the subject matter for each lesson.
e. Copies of audiovisuals delivered to Owner.
f. Training day is defined as 8 hours of classroom instruction, including two 15-minute breaks and excluding lunchtime, Monday through Friday, during normal first shift in effect at training facility.
g. Notification of planned training given to the Owner's representative at least 15 days prior to the training.

2. Operator's Training I:
   a. Teach at a convenient location for a period of one training day.
   b. Upon completion, each student, using appropriate documentation, should be able to perform elementary operations with guidance and describe general hardware architecture and functionality of system.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Rooftop Mounted Packaged HVAC Unit:
   1. Trane
   2. Daikin
   3. Carrier
   4. York
   5. AAON
   6. Other Manufacturers: Submit substitution request.

2.2 ROOFTOP MOUNTED PACKAGED HVAC UNIT (RTU-305, 600, 600A)

A. Description (RTU-305): Roof-mounted, single zone packaged heat pump designed for full curb mounting, electric auxiliary heat, capacities as indicated, factory assembled, wired, piped, tested and shipped in one piece with UL listing.

B. Description (RTU-600, 600A): Roof-mounted, single zone packaged air conditioning unit, natural gas heat, capacities as indicated, factory assembled, wired, piped, tested and shipped in one piece with UL listing.

C. Unit Casing:
   1. Heavy gauge galvanized steel, phosphatized and coated with baked enamel finish, gasketed and insulated with 1-inch 1 pound density glass fiber insulation.

D. Air Conditioning Refrigeration:
   1. Air-cooled with refrigerant line filter drier, thermostatic expansion valve, factory refrigerant charge, high and low pressure cutouts, and loss of charge protection.
   2. Low ambient operation to 40 degrees F.
   3. Provide refrigerant sight glass.

E. Heat Pump Refrigeration (RTU-305):
   1. Air-cooled with heating and cooling refrigerant line filter driers, dual thermostatic expansion valves, factory refrigerant charge, high and low pressure cutouts, loss of charge protection.
   2. Suction line accumulator, refrigerant check valves, heavy duty, high capacity, four-way reversing valve.
   3. Low ambient operation to 20 degrees F.
   4. Activate defrost cycle upon demand only.

F. Compressors:
   1. Hermetic type compressor with positive constant pressure lubrication, current and thermal overloads, crankcase heater, time delay, and anti-recycle relays.
   2. Provide compressor isolation valves.

G. Cooling Coils:
   1. Provide indoor and outdoor coils of non-ferrous construction with aluminum fins mechanically bonded to seamless copper tubing with joints brazed.
   2. Protect coils with plywood covers during shipment and installation.
   3. Evaporator Coil Drain Pan: Stainless steel internally sealed and insulated.

H. Natural Gas Heating (RTU-600, 600A):
   1. AGA approved for intended application and fuel, completely assembled, wired, piped, and tested with threaded gas connections.
   2. Provide stainless steel heat exchanger and burners, forced draft combustion blower, and electronic ignition.
   3. Provide 2 stages of heating.

I. Electric Heating (RTU-305): Factory installed, with capacity and stages as indicated on the drawings, heavy duty nickel chromium elements, internally delta connected on three phase units, automatically resetting high limit controls on each heating unit contactor, individual fusing, conforming to NEC requirements.

J. Fans:
   1. Indoor Fan: Centrifugal type, permanently lubricated, belt driven by a permanently lubricated motor.
   2. Outdoor Fan: Propeller type direct driven by a permanently lubricated motor.

K. Filters:
   1. Provide medium efficiency pleated filters.
   2. Provide one extra set of filters for each unit.

L. Dampers:
   1. Provide motor-operated outside air and return air dampers with spring-return actuators, capable of supplying 0 percent-100 percent outside air.
   2. Outside air damper minimum position adjustable independently of return damper position.

M. Economizer:
   1. Dry bulb controlled type.
   2. Outside air and return air dampers modulate to maintain discharge temperature on call for cooling.
   3. Provide adjustable minimum outside air damper position.
   4. Outside air and relief air dampers, close when indoor fan shuts down.
   5. Provide relief capability equal to 100 percent of supply air with barometric relief damper and weather hood.

~~N. Powered Exhaust: Provide relief air capability equal to 100 percent of supply air with exhaust fan, counterbalanced backdraft damper, and weather hood.~~

~~O.~~**N.** Controls: Configure unit for field installation of DDC control panel and sensors as follows:

1. Provide valves and dampers, actuators, variable frequency drives, starters, compressor capacity controllers, condenser capacity controllers, gas furnace controllers, electric heat staging controllers, and other operating and safety controls for each component. Wire to terminal strip for connection to DDC control panel.
2. Temperature and pressure sensors will be owner furnished, owner installed.

~~P.~~**O.** Electrical:

1. Furnish magnetic contactors (starters), separate fusing for compressors, condenser fans, evaporator fans and exhaust fans, and control transformer.
2. Arrange unit for single point electrical connection with integral unit mounted disconnect.

~~Q.~~**P.** Service Outlet:

1. Provide 115 VAC circuit with ground fault interrupter electrical outlet mounted in the unit controls cabinet.
2. Outlet circuit rated at 15A and factory wired to a step down transformer, fuse block, and 115V disconnect.
3. Wire circuit to line side of power block or power switch permitting use of the outlet while power to the unit is shut off.

~~R.~~**Q.** Roof Curb:

1. Formed, 16 gauge galvanized steel with wood nailer strip capable of supporting entire unit weight.
2. Account for roof slope to provide level mounting service for equipment.
3. Provide spring isolated roof curbs where indicated or if fans and compressors are not internally isolated.
4. Curb height accounts for roof insulation depth and flashing requirements.

~~S.~~**R.** Warranty: One-year on parts.

PART 3 EXECUTION

3.1 ROOFTOP MOUNTED AIR CONDITIONING UNIT AND HEAT PUMP

A. Installation:

1. Coordinate roof penetration with others.
2. Install curb.
3. Furnish 2-inch thick, 2 pcf density insulation along inside of curb. Installation per Section 23 07 00, Insulation for HVAC.
4. Install unit where shown, with air filters in place before operating unit. Comply with manufacturer's recommendation.
5. Provide minimum of 3-inch trap seal on condensate drain connections.
6. Keep access door to roof mounted equipment closed to prevent wind and weather damage.

B. Start-Up:

1. General: Comply with manufacturer's instructions.
2. Start-up of units provided under the direct supervision of the manufacturer's representative with factory-trained personnel.

C. Testing and Adjusting/Performance Test:
   1. Except where initial unit operation clearly shows the performance meets or exceeds the requirements, test to show compliance.
   2. Perform tests by the manufacturer's representative in the presence of the Engineer.

END OF SECTION

EUGENE SCHOOL DISTRICT 4J

KELLY MIDDLE SCHOOL IMPROVEMENTS
&
NORTH EUGENE HIGH SCHOOL IMPROVEMENTS

1

PROJECT INFORMATION

SITE ADDRESS
KELLY MIDDLE SCHOOL
850 HOWARD AVE
EUGENE, OR 97404

NORTH EUGENE HIGH SCHOOL
200 SILVER LANE
EUGENE, OR 97404

MAP + TAXLOT
KELLY MIDDLE SCHOOL
MAP: 17041434
TAX LOT: 00100

NORTH EUGENE HIGH SCHOOL
MAP: 17041434
TAX LOT: 00100

OWNER
EUGENE SCHOOL DISTRICT 4J
200 N MONROE ST
EUGENE, OR 97402
UNITED STATES

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CIVIL
KPFF CONSULTING ENGINEERS
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MEP
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STRUCTURAL ENGINEER
MORTIER ANG ENGINEERS
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EUGENE, OREGON 97401
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PROJECT SHEET INDEX

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860 West Park Street / Ste 300
Eugene / Oregon / 97401
p 541.344.9157
gma-arch.com

REGISTERED ARCHITECT
JOSEPH E. MOORE
EUGENE-SALEM
6033
STATE OF OREGON

REVISIONS
1 3/17/2020 ADD. 1

CIP#: 461524003

EUGENE SCHOOL DISTRICT 4J
YUJIN GAKUEN RELOCATION TO KELLY MIDDLE SCHOOL
CORRIDOR ELEMENTARY RELOCATION TO NORTH EUGENE HS
CONSTRUCTION DOCUMENTS - BID SET

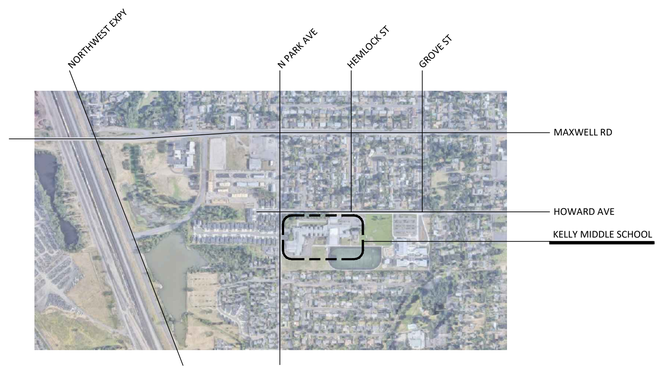
JOB NO: 19188 & 19189
ISSUE DATE: 3/3/2020

COVER

COV

EUGENE SCHOOL DISTRICT 4J

KELLY MIDDLE SCHOOL IMPROVEMENTS



VICINITY MAP
NTS

NORTH

GENERAL NOTES

SUMMARY OF WORK

1. PROTECT (E) ITEMS TO REMAIN & SALVAGED ITEMS DURING CONSTRUCTION
2. DEMOLISH FINISHED AS REQUIRED BY (N) WORK
3. DEMOLISH WALL MOUNT ITEMS, FIXTURES, PIPING, CONDUIT, & CABLING AT WALLS SCHEDULED FOR DEMOLITION, UON
4. DIMENSIONS TO FACE OF FINISH UON - FIELD VFY, (E) ITEMS SHOWN IN APPROX. LOCATION
5. PREP & PATCH (E) SURFACES TO REMAIN AS REQUIRED TO MATCH (N) PROJECT STANDARDS WHERE DEMOLITION OCCURS & AS REQ'D FOR (N) WORK
6. CLEAN CONSTRUCTION CAVITIES PRIOR TO ENCLOSING W/ (N) MATERIALS, INCLUDING ABOVE CEILING & W/IN STUD CAVITIES
7. CLEAN WORK AREA AS REQUIRED FOR (N) WORK PER INDUSTRY STDS
8. PATCH SURFACES AS REQ'D FOR (N) FINISHES WHERE ELECTRICAL ITEMS DEMOLISHED
9. FURNISHINGS & EQUIPMENT BY OWNER, TYP UON
10. CASEWORK NOTED AS (R) TO BE DELIVERED BY 4J TO SITE PRIOR TO CONSTRUCTION, VERIFY (N) LOCATION W/ ARCHITECT PRIOR TO INSTALLATION
11. REFER TO MECH, ELECT, PLUMB'G FOR COMPREHENSIVE SYMBOL LEGEND & ADD'L SCOPE OF WORK
12. ITEMS EXISTING UNLESS OTHERWISE NOTED

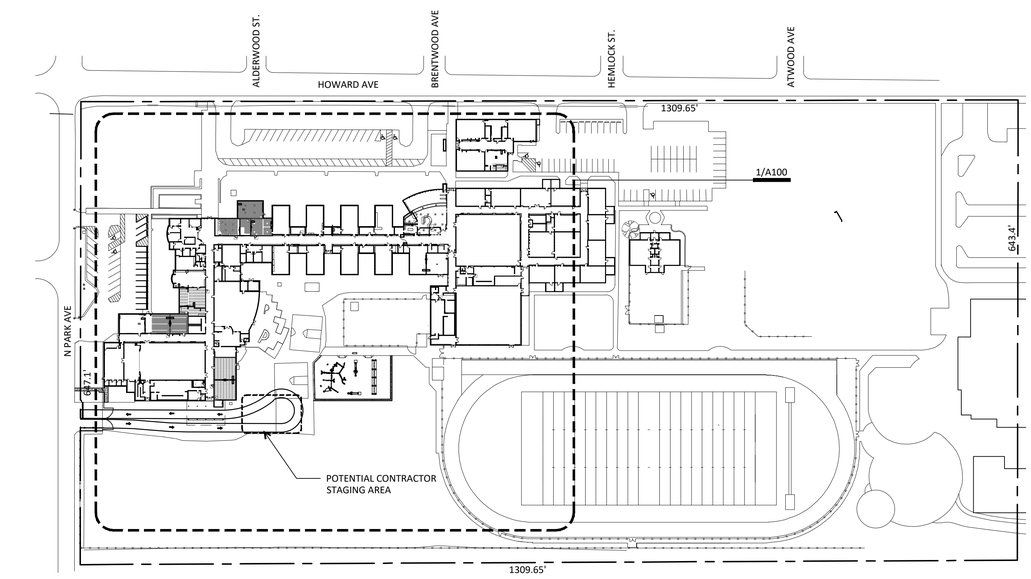
DEMOLITION LEGEND

- DEMOLISH WALL
- DEMOLISH DOOR, FRAME, & HARDWARE
- DEMOLISH SINK, SEE PLUMB'G
- DEMOLISH URINAL, SEE PLUMB'G
- DEMOLISH TOILET, SEE PLUMB'G
- DEMOLISH HVAC DIFFUSER/GRILLE - SEE MECH
- DEMOLISH 2x4 LAY-IN LIGHT FIXTURE
- DEMOLISH 1x4 SUSPENDED LIGHT FIXTURE
- DEMOLISH 1x4 SURFACE MOUNT LIGHT FIXTURE
- DEMOLISH THERMOSTAT
- DEMOLISH CAN LIGHT FIXTURE

LEGEND

- (E) WALL TO REMAIN
- (N) WALL
- (N) PARTIAL HEIGHT WALL, SEE ELEVATIONS & SECTIONS FOR ADDITIONAL INFORMATION
- (E) SINK, UON, SEE PLUMB'G
- (E) URINAL, UON, SEE PLUMB'G
- (E) TOILET, UON, SEE PLUMB'G
- (E) DOOR TO REMAIN
- (N) DOOR W/ LEVER HARDWARE TO MATCH BUILDING STANDARDS, INDICATED BY NUMBER
- OCCUPANCY SENSOR
- (N) GYPSUM BOARD CEILING ASSEMBLY
- 12" x 12" GLUE ON CEILING TILE FINISH
- 2'x4' SUSPENDED ACOUSTIC CEILING ASSEMBLY
- SUSPENDED LIGHT FIXTURE, UON, SEE ALSO ELECTRICAL
- 1x4 SURFACE MOUNT LIGHT FIXTURE,UON, SEE ALSO ELECTRICAL
- 2x4 LAY IN LIGHT FIXTURE, SEE ALSO ELECTRICAL
- SURFACE MOUNT VANITY LIGHT FIXTURE, UON, SEE ALSO ELECTRICAL
- EXHAUST FAN, SEE MECHANICAL
- HVAC DIFFUSER/GRILLE SEE ALSO MECHANICAL

(N) NEW
(E) EXISTING
(R) RELOCATE
UON UNLESS OTHERWISE NOTED



1 SITE PLAN
1" = 100'

0 25' 50' 100' 200'

NORTH

SUMMARY OF WORK & CODE ANALYSIS

SUMMARY OF WORK
RELOCATE YUJIN GAKUEN ELEMENTARY SCHOOL PROGRAM TO KELLY MIDDLE SCHOOL. RECONFIGURE CLASSROOMS AND SUPPORT SPACES TO ACCOMMODATE PROGRAM AND OPERATIONAL CHANGES. WORK INCLUDES SELECTIVE DEMOLITION, EARTHWORK, PAVING, CONCRETE & CONCRETE REINFORCING, METALWORK, ROUGH CARPENTRY, FINISH CARPENTRY, CASEWORK, FLASHING, ROOF PATCHING, INSULATION, OPENINGS, FINISHES, SIGNAGE, PLUMBING, MECHANICAL, ELECTRICAL, AND PAVEMENT MARKINGS.

NO CHANGE OF USE
NO BUILDING ADDITION
NO NEW IMPERVIOUS SURFACE

DEFERRED SUBMITTALS
FIRE ALARM SYSTEM
FIRE SPRINKLER SYSTEM
STRUCTURAL ENGINEERING

SCHOOL CAPACITY
CURRENT KELLY MIDDLE SCHOOL CAPACITY: 840 STUDENTS
POST-ALTERATION:
KELLY MIDDLE SCHOOL CAPACITY = 600 STUDENTS
YUJIN GAKUEN CAPACITY = 324 STUDENTS
TOTAL PROPOSED STUDENT CAPACITY = 924. INCREASE OF 84 STUDENTS TO SCHOOL CAPACITY

2018 INTERNATIONAL EXISTING BUILDING CODE

CHAPTER 3 - PROVISIONS FOR ALL COMPLIANCE METHODS
301.3.1 PRESCRIPTIVE COMPLIANCE METHOD: CHAPTER 5 OF THIS CODE
305.6 ALTERATIONS
A FACILITY THAT IS ALTERED SHALL COMPLY WITH THE APPLICABLE PROVISIONS IN OSSC CH 11, UNLESS TECHNICALLY INFEASIBLE.
EXCEPTIONS: THE ALTERED ELEMENT OR SPACE IS NOT REQUIRED TO BE ON AN ACCESSIBLE ROUTE, UNLESS IT IS A PRIMARY FUNCTION.
ACCESSIBLE MEANS OF EGRESS REQ'D BY OSSC CH 10 ARE NOT REQUIRED TO BE PROVIDED IN EXISTING FACILITIES.
305.8.10 TOILET ROOMS
ALTERATION OF EXISTING TOILET AND BATHING ROOMS TO BE ACCESSIBLE IN ACCORDANCE WITH OSSC CH 11. AND ANSI

CHAPTER 5 PRESCRIPTIVE COMPLIANCE METHOD
503.1, ALTERATION TO ANY BUILDING OR STRUCTURE SHALL COMPLY WITH THE REQUIREMENTS OF THE OSSC FOR NEW CONSTRUCTION. ALTERATIONS SHALL BE SUCH THAT THE EXISTING BUILDING OR STRUCTURE IS NOT LESS COMPLYING WITH THE PROVISIONS OF THE OSSC THAN THE EXISTING BUILDING OR STRUCTURE WAS PRIOR TO THE ALTERATIONS

2019 OREGON STRUCTURAL SPECIALTY CODE FOR NEW CONSTRUCTION WITHIN ALTERATION

CHAPTER 1 - SCOPE AND ADMINISTRATION
PER 102.6 EXISTING STRUCTURES, 102.6.1 COMPLIANCE, THE REPAIR, ALTERATION, CHANGE OF OCCUPANCY, AND ADDITION TO EXISTING BUILDINGS SHALL COMPLY WITH THE INTERNATIONAL EXISTING BUILDING CODE AS AMENDED BY CHAPTER 34 OF THIS CODE.

CHAPTER 34 EXISTING BUILDINGS
PER 3401.4, REFERENCES TO THE *INTERNATIONAL BUILDING CODE* OR THE *BUILDING CODE* SHALL MEAN THE *OREGON STRUCTURAL SPECIALTY CODE* AS ADOPTED BY OAR 918-460-0010

CHAPTER 3 - USE & OCCUPANCY
EXISTING OCCUPANCY: GROUP E, EDUCATION USE. NO PROPOSED CHANGE TO USE/OCCUPANCY

CHAPTER 5 - GENERAL BUILDING HEIGHTS & AREAS
TYPE VB CONSTRUCTION, FIRE SPRINKLED
NO CHANGE TO EXISTING BUILDING HEIGHT
NO CHANGE TO EXISTING BUILDING NUMBER OF STORIES
NO CHANGE TO EXISTING BUILDING AREA

CHAPTER 6 - TYPES OF CONSTRUCTION
PER 602 - Vb CONSTRUCTION, FIRE SPRINKLED

CHAPTER 8 - INTERIOR FINISHES
CLASS C FINISHES ALLOWED PER TABLE 803.13

CHAPTER 9 - FIRE PROTECTION SYSTEMS
EXISTING FIRE SPRINKLERS THROUGHOUT, FIRE ALARM THROUGHOUT, TYPE 2A10BC FIRE EXTINGUISHERS AT 75' INTERVALS MAX, SEE FLOOR PLAN FOR LOCATIONS

CHAPTER 10 - MEANS OF EGRESS
NO CHANGE TO BUILDING OCCUPANT LOAD
PER 1006.2.1, MAX COMMON PATH OF EGRESS TRAVEL 75 MAX @ (N) ALTERATIONS
NUMBER OF EXITS PROVIDED PER TABLE 1006.3.3(2) PER OCCUPANCY OF SPACE
EMERGENCY EGRESS LIGHTING PROVIDED @ (N) ALTERATIONS
EGRESS LIGHTING AND EXIT SIGNS WITH EMERGENCY BATTERY BACKUP PROVIDED @ (N) ALTERATIONS

PER 1016.2, EXIT ACCESS DOES NOT PASS THROUGH ADJOINING OR INTERVENING ROOMS

PER 1017.2, MAX EXIT ACCESS TRAVEL DISTANCE 250'
NO CHANGE TO MAX EXIT ACCESS TRAVEL DISTANCE IN (N) ALTERATIONS, EXCEPT CLASSROOM 5. CLASSROOM 5 (N) MAX EXIT ACCESS TRAVEL DISTANCE = ±110'-0"

PER TABLE 1020.1, 0 HOUR FIRE RATED CORRIDOR WALL REQUIRED AT E AND A OCCUPANCIES

CHAPTER 11 - ACCESSIBILITY
SEE PLANS FOR ACCESSIBILITY COMPLIANCE @ (N) ALTERATION SCOPE

1 CHAPTER 29 - PLUMBING SYSTEMS
SEE TABLE BELOW FOR NUMBER/PLUMBING FIXTURES REQ'D AND PROVIDED POST ALTERATION

CHAPTER 34 - ACCESSIBILITY FOR EXISTING STRUCTURES
PER 3411.6, ALTERATIONS SHALL COMPLY W/ CURRENT OSSC & ANSI PROVISIONS FOR ACCESSIBILITY. IN ADDITION, UP TO 25% OF THE COST OF CONSTRUCTION HAS BEEN IDENTIFIED TO REMOVE ARCHITECTURAL BARRIERS AS FOLLOWS, UNLESS OTHERWISE NOTED AS EXISTING:
a. ACCESSIBLE PARKING - EXISTING
b. ACCESSIBLE ENTRANCE - EXISTING
c. ACCESSIBLE ROUTE TO ALTERED AREA - PROVIDED
d. ACCESSIBLE RESTROOMS - EXISTING/ PROVIDED
e. ACCESSIBLE TELEPHONES - NOT REQUIRED PER USE
f. ACCESSIBLE DRINKING FOUNTAINS - EXISTING
g. ACCESSIBLE STORAGE - EXISTING

1 CITY OF EUGENE LAND USE CODE & ZONING REQUIREMENTS
ZONE:PL PUBLIC LAND
OVERLAY/ SPECIAL AREA ZONE: NONE

NO PROPOSED CHANGE TO BICYCLE PARKING

VEHICLE PARKING PER TABLE 9.6410
324 ELEMENTARY STUDENTS/8 = 41 SPACES REQ'D
600 MIDDLE SCHOOL STUDENTS/9 = 67 SPACES REQ'D
108 TOTAL SPACES REQ'D * LESS 25% REDUCTION = 81 TOTAL SPACES REQ'D
98 SPACES PROVIDED, SEE SITE PLAN
PER OSSC 1106.1, 4 ACCESSIBLE SPACES INCLUDING 1 VAN ACCESSIBLE SPACE REQ'D
7 ACCESSIBLE SPACES PROVIDED
PER TRAFFIC ENGINEER MEMO, PEAK HOUR TRAFFIC INCREASE OF 78 TRIPS. THRESHOLD OF 100 INCREASED TRIPS TO REQUIRE T.I.A. NOT MET, THEREFORE NO T.I.A. REQ'D.

PLUMBING FIXTURE REQUIREMENTS KELLY MIDDLE SCHOOL

DESCRIPTION	OCCUPANT LOAD	WATER CLOSETS						LAVATORIES						DRINKING FOUNTAINS
		MALE			FEMALE			MALE			FEMALE			
		OCC LOAD	OCC FACTOR	FIXT REQ	OCC LOAD	OCC FACTOR	FIXT REQ	OCC LOAD	OCC FACTOR	FIXT REQ	OCC LOAD	OCC FACTOR	FIXT REQ	
ASSEMBLY A-3, GYM, CAFETERIA, LIBRARY	946	473	1 PER 125	3.78	473	1 PER 65	7.27	473	1 PER 250 FOR THE FIRST 750 AND 1 PER 500 FOR THE REMAINDER EXCEEDING 750	1.89	473	1 PER 250 FOR THE FIRST 750 AND 1 PER 500 FOR THE REMAINDER EXCEEDING 750	1.89	1 EACH FLOOR EXISTING
STAFF USE: ADMIN, WORKROOMS, KITCHEN	105	53	1 PER 50	1.06	53	1 PER 50	1.06	53	1 PER 50	1.06	53	1 PER 50	1.06	
EDUCATIONAL USE	924 (SCHOOL CAPACITY)	462	1 PER 50	9.24	462	1 PER 50	9.24	462	1 PER 50	9.24	462	1 PER 50	9.24	
TOTAL REQUIRED				15			18			13			13	
ACTUAL PROVIDED	**UP TO 2/3 OF W/C CAN BE SUBSTITUDED FOR URINIALS; 11 URINALS PROVIDED = 7 W/C**			**20**			**22**			**15**			**17**	

NOTE: FIXTURE CALCULATIONS DO NOT INCLUDED SINGLE USER RESTROOMS. TOTAL SINGLE USER RESTROOMS PROVIDED = 8

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REGISTERED ARCHITECT
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OREGON
EUGENE, OREGON
6033
STATE OF OREGON

REVISIONS
1 3/17/2020 ADD. 1

ESD 4J KELLY MIDDLE SCHOOL IMPROVEMENTS

850 HOWARD AVE, EUGENE OR 97404
CONSTRUCTION DOCUMENTS

JOB NO: 19189
ISSUE DATE: 3/3/2020

GENERAL INFORMATION

KMS

G100

P:\19189 ESD 4J YG Relocation COVA\D2_Production\AutoCAD\19189 ESD 4J YG Relocation_Phase 06.dwg, 3/17/2020 11:42:18 AM

GENERAL NOTES

1. SURVEY PROVIDED BY BALZHISER & HUBBARD ENGINEERS, DATED 9/18/2013. ELEVATIONS ARE BASED ON EUGENE VERTICAL DATUM ESTABLISHED PER BENCH MARK NO. RR0499 LOCATED CITY OF EUGENE BENCHMARK WITH AN ELEVATION OF 395.68'.
2. CONSTRUCTION LAYOUT (ALL ACTUAL LINES AND GRADES) SHALL BE STAKED BY A PROFESSIONAL SURVEYOR, REGISTERED IN THE STATE OF OREGON, BASED ON COORDINATES, DIMENSIONS, BEARINGS, AND ELEVATIONS, AS SHOWN, ON THE PLANS.
3. PROJECT CONTROL SHALL BE FIELD VERIFIED AND CHECKED FOR RELATIVE HORIZONTAL POSITION PRIOR TO BEGINNING CONSTRUCTION LAYOUT. SEE SHEET C1.1 FOR PROJECT CONTROL INFORMATION.
4. PROJECT CONTROL SHALL BE FIELD VERIFIED AND CHECKED FOR RELATIVE VERTICAL POSITION BASED ON THE BENCHMARK STATED HEREON, PRIOR TO BEGINNING CONSTRUCTION LAYOUT.
5. WHEN DIMENSIONS AND COORDINATE LOCATIONS ARE REPRESENTED - DIMENSIONS SHALL HOLD OVER COORDINATE LOCATION. NOTIFY THE CIVIL ENGINEER OF RECORD IMMEDIATELY UPON DISCOVERY OF ANY DISCREPANCIES.
6. BUILDING SETBACK DIMENSIONS FROM PROPERTY LINES SHALL HOLD OVER ALL OTHER CALLOUTS. PROPERTY LINES AND ASSOCIATED BUILDING SETBACKS SHALL BE VERIFIED PRIOR TO CONSTRUCTION LAYOUT.
7. CONTRACTOR SHALL PRESERVE AND PROTECT FROM DAMAGE ALL EXISTING MONUMENTATION DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PAYING FOR THE REPLACEMENT OF ANY MONUMENTS DAMAGED OR REMOVED DURING CONSTRUCTION. NEW MONUMENTS SHALL BE REESTABLISHED BY A LICENSED SURVEYOR.
8. SOME SITE DEMOLITION AND UTILITY RELOCATION HAS BEEN PERFORMED. SURVEY MAY NOT BE COMPLETE OR ACCURATE. CONTRACTOR TO VERIFY EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.
9. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THESE PLANS, THE PROJECT SPECIFICATIONS AND THE APPLICABLE REQUIREMENTS OF THE 2018 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE 2017 OREGON PLUMBING SPECIALTY CODE AND REQUIREMENTS OF THE CITY OF EUGENE.
10. THE COMPLETED INSTALLATION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS. ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED BY THE GOVERNING AUTHORITIES FOR THE EXECUTION AND COMPLETION OF WORK SHALL BE SECURED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION.
11. ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1987). EXCAVATORS MUST NOTIFY ALL PERTINENT COMPANIES OR AGENCIES WITH UNDERGROUND UTILITIES IN THE PROJECT AREA AT LEAST 48 BUSINESS-DAY HOURS, BUT NOT MORE THAN 10 BUSINESS DAYS PRIOR TO COMMENCING AN EXCAVATION, SO UTILITIES MAY BE ACCURATELY LOCATED.
12. THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE. CONTRACTOR SHALL VERIFY ELEVATIONS, PIPE SIZE, AND MATERIAL TYPES OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WITH CONSTRUCTION AND SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF KPFF CONSULTING ENGINEERS, 72 HOURS PRIOR TO START OF CONSTRUCTION TO PREVENT GRADE AND ALIGNMENT CONFLICTS.
13. THE ENGINEER OR OWNER IS NOT RESPONSIBLE FOR THE SAFETY OF THE CONTRACTOR OR HIS CREW. ALL O.S.H.A. REGULATIONS SHALL BE STRICTLY ADHERED TO IN THE PERFORMANCE OF THE WORK.
14. TEMPORARY AND PERMANENT EROSION CONTROL MEASURES SHALL BE IMPLEMENTED. THE CONTRACTOR SHALL ADHERE TO CITY OF EUGENE FOR MINIMUM EROSION CONTROL MEASURES. THE ESC FACILITIES SHOWN IN THESE PLANS ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT LEAVE THE SITE.
15. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL ROADWAYS, KEEPING THEM CLEAN AND FREE OF CONSTRUCTION MATERIALS AND DEBRIS, AND PROVIDING DUST CONTROL AS REQUIRED.
16. TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN TO CITY OF EUGENE AND 4J SCHOOL DISTRICT FOR REVIEW AND APPROVAL PRIOR TO COMMENCING CONSTRUCTION.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING ALL WORK WITH THE OWNER.

CONSTRUCTION NOTES

GENERAL

1. CONSTRUCTION LAYOUT (ALL ACTUAL LINES AND GRADES) SHALL BE STAKED BY A PROFESSIONAL SURVEYOR, REGISTERED IN THE STATE OF OREGON, BASED ON COORDINATES, DIMENSIONS, BEARINGS, AND ELEVATIONS, AS SHOWN, ON THE PLANS.
2. SUBGRADE AND TRENCH BACKFILL SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698. FLOODING OR JETTING THE BACKFILLED TRENCHES WITH WATER IS NOT PERMITTED.
3. SPECIAL INSPECTION REQUIRED FOR ALL COMPACTION TESTING.

DEMOLITION

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND DISPOSAL OF EXISTING AC, CURBS, SIDEWALKS AND OTHER SITE ELEMENTS WITHIN THE SITE AREA IDENTIFIED IN THE PLANS.
2. EXCEPT FOR MATERIALS INDICATED TO BE STOCKPILED OR TO REMAIN ON OWNER'S PROPERTY, CLEARED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY, REMOVED FROM THE SITE, AND DISPOSED OF PROPERLY.
3. ITEMS INDICATED TO BE SALVAGED SHALL BE CAREFULLY REMOVED AND DELIVERED STORED AT THE PROJECT SITE AS DIRECTED BY THE OWNER.
4. ALL LANDSCAPING, PAVEMENT, CURBS AND SIDEWALKS, BEYOND THE IDENTIFIED SITE AREA, DAMAGED DURING THE CONSTRUCTION SHALL BE REPLACED TO THEIR ORIGINAL CONDITION OR BETTER.
5. CONCRETE SIDEWALKS SHOWN FOR DEMOLITION SHALL BE REMOVED TO THE NEAREST EXISTING CONSTRUCTION JOINT.
6. SAWCUT STRAIGHT MATCHLINES TO CREATE A BUTT JOINT BETWEEN THE EXISTING AND NEW PAVEMENT.

UTILITIES

1. ADJUST ALL INCIDENTAL STRUCTURES, MANHOLES, VALVE BOXES, CATCH BASINS, FRAMES AND COVERS, ETC. TO FINISHED GRADE.
2. CONTRACTOR SHALL ADJUST ALL EXISTING AND/OR NEW FLEXIBLE UTILITIES (WATER, TV, TELEPHONE, ELEC., ETC.) TO CLEAR ANY EXISTING OR NEW GRAVITY DRAIN UTILITIES (STORM DRAIN, SANITARY SEWER, ETC.) IF CONFLICT OCCURS.
3. CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES FOR THE INSTALLATION OF OR ADJUSTMENT TO GAS, ELECTRICAL, POWER AND TELEPHONE SERVICE.
4. BEFORE BACKFILLING ANY SUBGRADE UTILITY IMPROVEMENTS CONTRACTOR SHALL SURVEY AND RECORD MEASUREMENTS OF EXACT LOCATION AND DEPTH AND SUBMIT TO ENGINEER AND OWNER.
5. ALL WORK TO CONFORM TO THE 2017 OREGON PLUMBING SPECIALTY CODE

STORM AND SANITARY

1. CONNECTIONS TO EXISTING STORM AND SANITARY SEWERS SHALL CONFORM TO THE 2018 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, SECTION 00490, "WORK ON EXISTING SEWERS AND STRUCTURES".
2. BEGIN LAYING STORM DRAIN AND SANITARY SEWER PIPE AT THE LOW POINT OF THE SYSTEM, TRUE TO GRADE AND ALIGNMENT INDICATED WITH UNBROKEN CONTINUITY OF INVERT. THE CONTRACTOR SHALL ESTABLISH LINE AND GRADE FOR THE STORM AND SANITARY SEWER PIPE USING A LASER.
3. ALL ROOF DRAIN AND CATCH BASIN LEADERS SHALL HAVE A MINIMUM SLOPE OF 2 PERCENT UNLESS NOTED OTHERWISE IN THE PLANS.
4. ALL HORIZONTAL CONNECTIONS TO THE SANITARY OR STORM SEWERS SHALL BE OF THE 'WYE' BRANCH TYPE.

EARTHWORKS

1. CONTRACTOR SHALL PREVENT SEDIMENTS AND SEDIMENT LADEN WATER FROM ENTERING THE STORM DRAINAGE SYSTEM.
2. TRENCH BEDDING AND BACKFILL SHALL BE AS SHOWN ON THE PIPE BEDDING AND BACKFILL DETAIL, THE PROJECT SPECIFICATIONS AND AS REQUIRED IN THE SOILS REPORT. FLOODING OR JETTING THE BACKFILLED TRENCHES WITH WATER WILL NOT BE PERMITTED.

SEPARATION STATEMENT

ALL WATER MAIN CROSSINGS SHALL CONFORM TO THE OREGON STATE HEALTH DEPARTMENT, CHAPTER 333. WATER MAINS SHALL CROSS OVER SANITARY SEWERS WITH A 18" MINIMUM CLEARANCE BETWEEN OUTSIDE DIAMETERS OF PIPE WITH ALL PIPE JOINTS EQUIDISTANT FROM CROSSING. HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SANITARY SEWERS IN PARALLEL INSTALLATIONS SHALL BE 10'. MAINTAIN 12" MINIMUM VERTICAL DISTANCE FOR ALL OTHER UTILITY CROSSINGS AND 12" HORIZONTAL PARALLEL DISTANCE. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN THE MINIMUM 10' HORIZONTAL SEPARATION, THE WATER MAIN SHALL BE LAID ON A SEPARATE SHELF IN THE TRENCH 18" INCHES ABOVE THE SEWER.

MATERIAL NOTES

1. GENERAL: MATERIALS SHALL BE NEW. THE USE OF MANUFACTURER'S NAMES, MODELS, AND NUMBERS IS INTENDED TO ESTABLISH STYLE, QUALITY, APPEARANCE, AND USEFULNESS. PROPOSED SUBSTITUTIONS WILL REQUIRE WRITTEN APPROVAL FROM ARCHITECT PRIOR TO INSTALLATION.
2. STORM AND SANITARY SEWER PIPING SHALL BE 3034 SDR 35 PVC PIPE.
3. CONCRETE FOR CURBS, SIDEWALK AND DRIVEWAYS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,300 PSI AT 28 DAYS.

ABBREVIATIONS

AC	ASPHALT CONCRETE	OVH/OH	OVERHEAD
AD	AREA DRAIN	P/L	PROPERTY LINE
APPROX	APPROXIMATE	PED	PEDESTRIAN
BLDG	BUILDING	PIV	POST INDICATOR VALVE
CB	CATCH BASIN	PM	PARKING METER
CL	CENTERLINE	POC	POINT ON CURVE
CO	CLEANOUT	PP	POWER POLE
CONC.	CONCRETE	PRC	POINT OF REVERSE CURVATURE
COTG	CLEANOUT TO GRADE	PT	POINT OF TANGENT
CP	CONTROL POINT	P.U.E	PUBLIC UTILITY EASEMENT
Δ	DELTA	PVC	POLYVINYL CHLORIDE
D/W	DRIVEWAY	PVMT	PAVEMENT
DIA.,Ø	DIAMETER	PVT	PRIVATE
DIP	DUCTILE IRON PIPE	R	RIM
E	EASTING	RD	ROOF DRAIN
EXIST./EX	EXISTING	R.O.W	RIGHT-OF-WAY
FG	FINISH GRADE	SD	STORM DRAIN
FH	FIRE HYDRANT	SDMH	STORM DRAIN MANHOLE
FL	FLOWLINE	SHT	SHEET
G	GUTTER	SS	SANITARY SEWER
GB	GRADE BREAK	SSMH	SANITARY SEWER MANHOLE
GL	GAS LINE	ST	STREET
GV	GATE VALVE	STD	STANDARD
H	HEIGHT	S/W	SIDEWALK
HCP	HANDICAP PARKING SPACE	TC	TOP OF CURB
HP	HIGH POINT	TG	TOP OF GROUND
ID	INSIDE DIAMETER	TP	TOP OF PAVEMENT
IE	INVERT ELEVATION	TRANS.	TRANSFORMER
INV	INVERT	TS	TOP OF STAIR
IRR.	IRRIGATION	TYP	TYPICAL
LP	LIGHT POLE	W	WATER
MH	MANHOLE	W/	WITH
MIN	MINIMUM	WCR	WHEEL CHAIR RAMP
N	NORTHING	WM	WATER METER
O.D	OUTSIDE DIAMETER	WV	WATER VALVE
OF	OUTFALL		

NOTICE TO EXCAVATORS:
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(NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503)-232-1987).

POTENTIAL UNDERGROUND FACILITY OWNERS

Dig Safely.

Call the Oregon One-Call Center
1-800-332-2344

SHEET INDEX

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REGISTERED PROFESSIONAL ENGINEER
56481
DIGITALLY SIGNED
OREGON
JULY 19, 2002
MATTHEW M. KEENAN

EXPIRATION DATE: 6/30/2021

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800 Willamette Street, Suite 400
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REVISIONS
1 17 MARCH 2020

KELLY MIDDLE SCHOOL IMPROVEMENTS

200 SILVER LN, EUGENE, OR 97404
RENOVATIONS

JOB NO: 19189
ISSUE DATE: 3/13/2020

CIVIL NOTES AND ABBREVIATIONS

KMS

C1.0

ADDENDUM 1

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CONSTRUCTION SPECIFICATIONS

1

EARTH MOVING

SOIL MATERIALS

A. GENERAL: PROVIDE BORROW SOIL MATERIALS WHEN SUFFICIENT SATISFACTORY SOIL MATERIALS ARE NOT AVAILABLE FROM EXCAVATIONS.

B. SATISFACTORY SOILS: SOIL CLASSIFICATION GROUPS GW, GP, GM, SW, SP, AND SM ACCORDING TO ASTM D 2487, OR A COMBINATION OF THESE GROUPS; FREE OF ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATTER.

C. UNSATISFACTORY SOILS: SOIL CLASSIFICATION GROUPS GC, SC, CL, ML, OL, CH, MH, OH, AND PT ACCORDING TO ASTM D 2487, OR A COMBINATION OF THESE GROUPS.

1. UNSATISFACTORY SOILS ALSO INCLUDE SATISFACTORY SOILS NOT MAINTAINED WITHIN 2 PERCENT OF OPTIMUM MOISTURE CONTENT AT TIME OF COMPACTION.

D. BASE COURSE: USE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION 3/4-INCH-0-INCH BASE AGGREGATE.

E. ENGINEERED FILL: NATURALLY OR ARTIFICIALLY GRADED MIXTURE OF NATURAL OR CRUSHED GRAVEL, CRUSHED STONE, AND NATURAL OR CRUSHED SAND; ASTM D 2940; WITH AT LEAST 90 PERCENT PASSING A 3-INCH SIEVE AND NOT MORE THAN 12 PERCENT PASSING A NO. 200 SIEVE.

1 F. BEDDING COURSE AND PIPE ZONE BACKFILL: USE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION 3/4-INCH-0-INCH BASE AGGREGATE.

G. BACKFILL AND FILL:

1. SATISFACTORY SOIL MATERIALS

2. INITIAL TRENCH BACKFILL:USE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION 3/4-INCH-0-INCH BASE AGGREGATE.

H. ENGINEERED WOOD FIBER FOR SOFTPLAY: PROVIDE GT IMPAX ENGINEERED WOOD FIBER OR APPROVED EQUAL.

ACCESSORIES

A. DETECTABLE WARNING TAPE: ACID- AND ALKALI-RESISTANT, POLYETHYLENE FILM WARNING TAPE MANUFACTURED FOR MARKING AND IDENTIFYING UNDERGROUND UTILITIES, A MINIMUM OF 6 INCHES WIDE AND 4 MILS THICK, CONTINUOUSLY INSCRIBED WITH A DESCRIPTION OF THE UTILITY, WITH METALLIC CORE ENCASED IN A PROTECTIVE JACKET FOR CORROSION PROTECTION, DETECTABLE BY METAL DETECTOR WHEN TAPE IS BURIED UP TO 30 INCHES DEEP; COLORED TO COMPLY WITH LOCAL PRACTICE OR REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION OR AS FOLLOWS:

1. RED: ELECTRIC.

2. YELLOW: GAS, OIL, STEAM, AND DANGEROUS MATERIALS.

3. ORANGE: TELEPHONE AND OTHER COMMUNICATIONS.

4. BLUE: WATER SYSTEMS.

5. GREEN: SEWER SYSTEMS.

B. TRACER WIRE: 12 AWG MINIMUM SOLID COPPER INSULATED HIGH MOLECULAR WEIGHT POLYETHYLENE (HMWPE) TRACER WIRE OR APPROVED EQUAL. THE TRACER WIRE INSULATION SHALL BE GREEN FOR SEWER PIPE AND BLUE FOR WATERLINES AND BE A MINIMUM OF 45 MIL. THICK. JOINTS OR SPLICES SHALL BE WATERPROOF. THE WIRE SHALL BE RATED FOR 30 VOLT.

C. DRAINAGE FABRIC: NONWOVEN GEOTEXTILE, SPECIFICALLY MANUFACTURED AS A DRAINAGE GEOTEXTILE, MADE FROM POLYOLEFINS, POLYESTERS, OR POLYAMIDES; AND WITH THE FOLLOWING MINIMUM PROPERTIES DETERMINED ACCORDING TO ASTM D 4759 AND REFERENCED STANDARD TEST METHODS:

1. GRAB TENSILE STRENGTH: 110 LBF (490N); ASTM D 4632.

2. TEAR STRENGTH: 40 LBF (178 N); ASTM D 4533.

3. PUNCTURE STRENGTH: 220 LBF (979 N); ASTM D 4833.

4. APPARENT OPENING SIZE: NO. 40 (??MM); ASTM D 4751.

5. PERMATIVITY (MINIMUM): .5 SEC-1; ASTM D 4491.

E. SEPARATION FABRIC: WOVEN GEOTEXTILE, SPECIFICALLY MANUFACTURED AS A SEPARATION GEOTEXTILE, MADE FROM POLYOLEFINS, POLYESTERS, OR POLYAMIDES; AND WITH THE FOLLOWING MINIMUM PROPERTIES DETERMINED ACCORDING TO ASTM D 4759 AND REFERENCED STANDARD TEST METHODS:

1. GRAB TENSILE STRENGTH: 180 LBF (800 N); ASTM D 4632.

2. TEAR STRENGTH: 68 LBF (302 N); ASTM D 4533.

3. PUNCTURE STRENGTH: 371 LBF (1650 N); ASTM D 4833.

4. APPARENT OPENING SIZE: NO. 30; ASTM D 4751.

CONCRETE PAVING

1.1 FORMS

A. FORM MATERIALS: PLYWOOD, METAL, METAL-FRAMED PLYWOOD, OR OTHER APPROVED PANEL-TYPE MATERIALS TO PROVIDE FULL-DEPTH, CONTINUOUS, STRAIGHT, SMOOTH EXPOSED SURFACES.

1. USE FLEXIBLE OR CURVED FORMS FOR CURVES WITH A RADIUS 100 FEET OR LESS.

B. FORM-RELEASE AGENT: COMMERCIALLY FORMULATED FORM-RELEASE AGENT THAT WILL NOT BOND WITH, STAIN, OR ADVERSELY AFFECT CONCRETE SURFACES AND WILL NOT IMPAIR SUBSEQUENT TREATMENTS OF CONCRETE SURFACES.

1.2 CONCRETE MATERIALS

A. CEMENTITIOUS MATERIAL: USE THE FOLLOWING CEMENTITIOUS MATERIALS, OF SAME TYPE, BRAND, AND SOURCE THROUGHOUT PROJECT:

1. PORTLAND CEMENT: ASTM C 150, GRAY PORTLAND CEMENT TYPE I

a. FLY ASH: ASTM C 618, CLASS C.

B. NORMAL-WEIGHT AGGREGATES: ASTM C 33, CLASS 4M, UNIFORMLY GRADED. PROVIDE AGGREGATES FROM A SINGLE SOURCE.

1. MAXIMUM COARSE-AGGREGATE SIZE: 1 INCH NOMINAL.

2. FINE AGGREGATE: FREE OF MATERIALS WITH DELETERIOUS REACTIVITY TO ALKALI IN CEMENT.

C. WATER: POTABLE AND COMPLYING WITH ASTM C 94/C 94M.

D. AIR-ENTRAINING ADMIXTURE: ASTM C 260.

E. CHEMICAL ADMIXTURES: ADMIXTURES CERTIFIED BY MANUFACTURER TO BE COMPATIBLE WITH OTHER ADMIXTURES AND TO CONTAIN NOT MORE THAN 0.1 PERCENT WATER-SOLUBLE CHLORIDE IONS BY MASS OF CEMENTITIOUS MATERIAL.

1. WATER-REDUCING ADMIXTURE: ASTM C 494/C 494M, TYPE A.

2. WATER-REDUCING AND RETARDING ADMIXTURE: ASTM C 494/C 494M, TYPE D.

3. HIGH-RANGE, WATER-REDUCING ADMIXTURE: ASTM C 494/C 494M, TYPE F.

1.4 CURING MATERIALS

A. ABSORPTIVE COVER: AASHTO M 182, CLASS 3, BURLAP CLOTH MADE FROM JUTE OR KENAF, WEIGHING APPROXIMATELY 9 OZ./SQ. YD. DRY.

B. MOISTURE-RETAINING COVER: ASTM C 171, POLYETHYLENE FILM OR WHITE BURLAP-POLYETHYLENE SHEET.

C. WATER: POTABLE.

D. EVAPORATION RETARDER: WATERBORNE, MONOMOLECULAR, FILM FORMING, MANUFACTURED FOR APPLICATION TO FRESH CONCRETE.

E. CLEAR, WATERBORNE, MEMBRANE-FORMING CURING COMPOUND: ASTM C 309, TYPE 1, CLASS B.

F. WHITE, WATERBORNE, MEMBRANE-FORMING CURING COMPOUND: ASTM C 309, TYPE 2, CLASS B.

1.5 RELATED MATERIALS

A. JOINT FILLERS: ASTM D 1751, ASPHALT-SATURATED CELLULOSIC FIBER IN PREFORMED STRIPS.

C. EPOXY BONDING ADHESIVE: ASTM C 881, TWO-COMPONENT EPOXY RESIN, CAPABLE OF HUMID CURING AND BONDING TO DAMP SURFACES, OF CLASS SUITABLE FOR APPLICATION TEMPERATURE AND OF GRADE TO REQUIREMENTS.

1.6 CONCRETE MIXTURES

A. PREPARE DESIGN MIXTURES, PROPORTIONED ACCORDING TO ACI 301, WITH THE FOLLOWING PROPERTIES:

1. COMPRESSIVE STRENGTH (28 DAYS): 3300 PSI .

2. MAXIMUM WATER-CEMENTITIOUS MATERIALS RATIO AT POINT OF PLACEMENT: 0.50.

3. SLUMP LIMIT: 4 INCHES, PLUS OR MINUS 1 INCH.

4. AIR CONTENT: 4-1/2]PERCENT PLUS OR MINUS 1.5 PERCENT FOR 1-INCH NOMINAL MAXIMUM AGGREGATE SIZE.

B. CHEMICAL ADMIXTURES: USE ADMIXTURES ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

1.7 CONCRETE MIXING

A. READY-MIXED CONCRETE: MEASURE, BATCH, AND MIX CONCRETE MATERIALS AND CONCRETE ACCORDING TO ASTM C 94/C 94M. FURNISH BATCH CERTIFICATES FOR EACH BATCH DISCHARGED AND USED IN THE WORK.

1. WHEN TEMPERATURE IS BETWEEN 85 DEG F AND 90 DEG F, REDUCE MIXING AND DELIVERY TIME FROM 1-1/2 HOURS TO 75 MINUTES; WHEN AIR TEMPERATURE IS ABOVE 90 DEG F, REDUCE MIXING AND DELIVERY TIME TO 60 MINUTES.

1.8 PAVEMENT MARKINGS

A. PAVEMENT-MARKING PAINT: ALKYD-RESIN TYPE, LEAD AND CHROMATE FREE, READY MIXED, COMPLYING WITH FS TT-P-115, TYPE I OR AASHTO M 248, TYPE N.

1. COLOR: AS INDICATED.

B. PAVEMENT-MARKING PAINT: LATEX, WATERBORNE EMULSION, LEAD AND CHROMATE FREE, READY MIXED, COMPLYING WITH FS TT-P-1952, TYPE II, WITH DRYING TIME OF LESS THAN 45 MINUTES.

1. COLOR: AS INDICATED.

C. PAVEMENT-MARKING PAINT: MPI #97 LATEX TRAFFIC MARKING PAINT.

1. COLOR: AS INDICATED.

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REGISTERED PROFESSIONAL ENGINEER
56481
DIGITALLY SIGNED
OREGON
JULY 19, 2002
MATTHEW M. KEENAN

EXPIRATION DATE: 6/30/2021

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REVISIONS

1 17 MARCH 2020

KELLY MIDDLE SCHOOL IMPROVEMENTS

200 SILVER LN, EUGENE, OR 97404

RENOVATIONS

JOB NO: 19189

ISSUE DATE: 3/13/2020

CIVIL
MATERIAL
SPECIFICATIONS

KMS

C1.1

ADDENDUM 1

File: O:\p\2019\900422-4.SD-YG-Reloc\CAD\PLOT\900422-01CV.dwg TAB:C1.1
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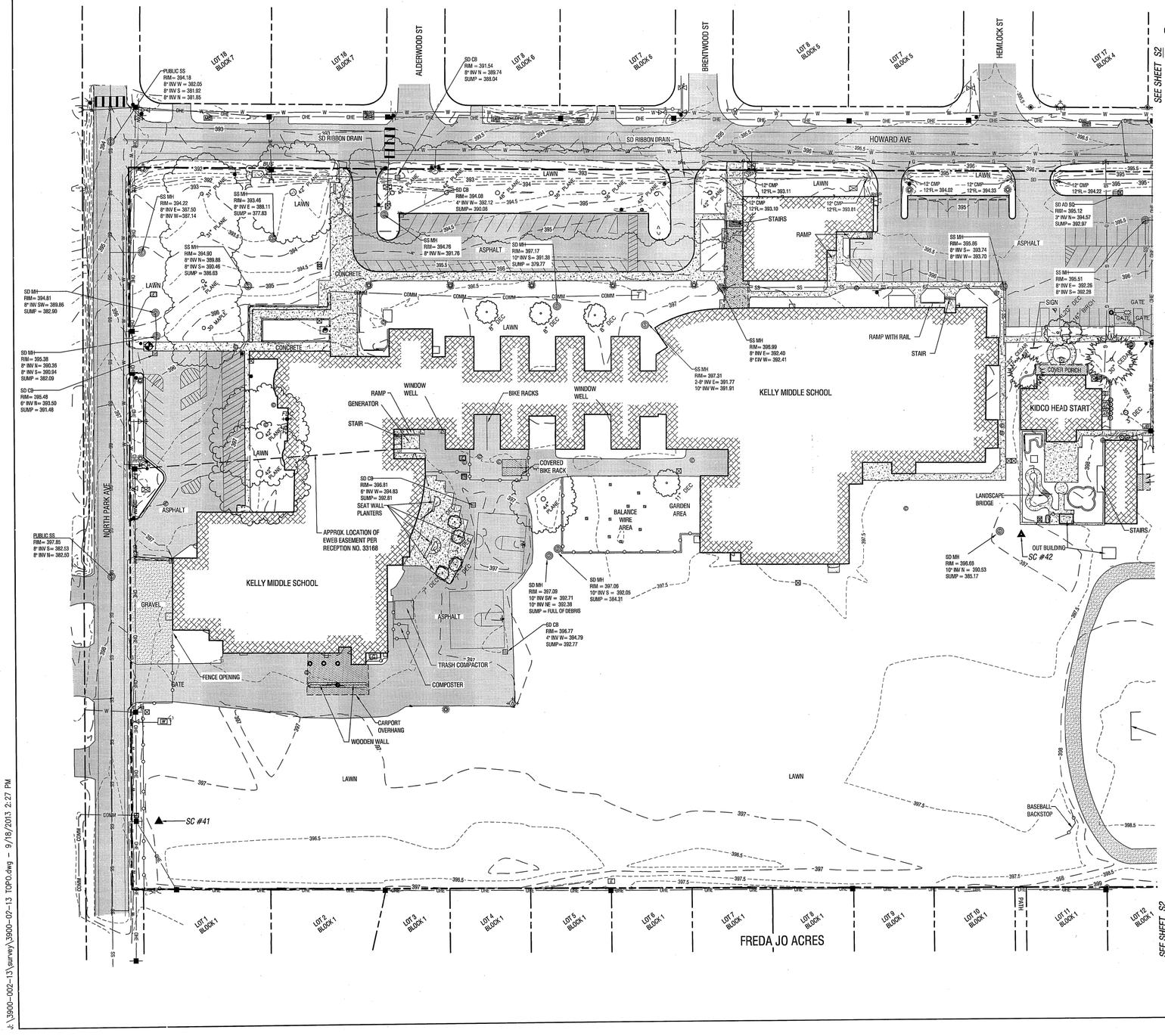

TOPOGRAPHIC SURVEY
FOR
4J SCHOOL DISTRICT

LYING IN
SW 1/4 OF SEC. 14
TOWNSHIP 17S, RANGE 4W, W.M.
CITY OF EUGENE
LANE COUNTY, OREGON
SEPT 2013

SITE CONTROL (SC)

Point #	Northing	Easting	Elevation	Description
41	122646.33	170005.57	396.77	SET BRASS CAP
42	122889.35	170754.67	396.19	SET BRASS CAP
43	122818.47	171604.16	395.63	SET BRASS CAP

NOTE: NOT ALL CONTROL POINTS SHOWN ON THIS SHEET

4J SCHOOL DISTRICT 2013 SURVEY CONTROL BHE

SITE CONTROL (SC) SET 2" BRASS CAP SEE CONTROL TABLE FOR LOCATION & ELEVATION

PLAN SCALE
0 40' 80'
SCALE: 1"= 40'

NOTES:

1. THE BENCHMARK USED FOR THIS SURVEY WAS CITY OF EUGENE BENCHMARK RR0899 WITH A PUBLISHED ELEVATION OF 395.68' (NAVD 88 DATUM).
2. THIS SURVEY IS BASED UPON THE OREGON COORDINATE REFERENCE SYSTEM, EUGENE ZONE. ALL DISTANCES ARE GROUND DISTANCES AND ARE EXPRESSED IN INTERNATIONAL FEET. SEE SURVEY METADATA FOR MORE INFORMATION.
3. THE EXTERNAL BOUNDARY WAS HELD AS SHOWN ON LANE COUNTY SURVEY NO. 31670.
4. UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON ABOVE GROUND VISIBLE EVIDENCE ALONG WITH LOCATE MARKS AND RECORD INFORMATION. RECORD INFORMATION IS NOTED AS SUCH ON THE DRAWING. THE ACCURACY OF UNDERGROUND LOCATES AND RECORD INFORMATION MAY VARY. CRITICAL UTILITY LOCATIONS SHOULD BE EXPOSED AND LOCATED FOR HIGHEST ACCURACY.
5. THE SUBJECT PROPERTY IS SUBJECT TO THE FOLLOWING DEED MATTERS LISTED IN A TITLE REPORT FROM FIRST AMERICAN TITLE COMPANY OF OREGON , WITH A DATE OF AUGUST 2, 2013, ORDER No. 7199-2132015:
   A. EASEMENT INCLUDING THE TERMS AND PROVISIONS THEREOF, IN FAVOR OF THE CITY OF EUGENE, AS RECORDED ON JULY 26, 1968, AS RECEPTION No. 33168. **THIS EASEMENT IS SHOWN HEREON .**

SITE INFO

OWNER: SCHOOL DISTRICT 4J, LANE COUNTY, OREGON, A MUNICIPAL CORPORATION

MAP: 17-04-14-34

TAX LOT: 100

DEED: LANE COUNTY DEED BOOK 291, PAGE 366

ADDRESS:
KELLEY MIDDLE SCHOOL
850 HOWARD AVE, EUGENE OR 97404

HOWARD ELEMENTARY SCHOOL
700 HOWARD AVE.
EUGENE OR 97404

SURVEY METADATA

LINEAR UNIT:	INTERNATIONAL FOOT
GEODETIC DATUM:	NORTH AMERICAN DATUM OF 1983 (2011) EPOCH2010
SYSTEM:	OREGON COORDINATE REFERENCE SYSTEM
ZONE:	EUGENE
PROJECTION:	TRANSVERSE MERCATOR
LATITUDE OF GRID ORIGIN:	43°45'00" N
CENTRAL MERIDIAN:	123°10'00" W
FALSE NORTHING:	0.000 m
FALSE EASTING:	50000.000 m
CENTRAL MERIDIAN SCALE:	1.000015 (EXACT)

ALL DISTANCES AND BEARINGS SHOWN HEREON ARE GRID VALUES BASED ON THE PROCEEDING PROJECTION DEFINITION.

THE BASIS OF BEARINGS IS GEODETIC NORTH. NOTE THAT THE GRID BEARINGS SHOWN HEREON (OR IMPLIED BY GRID COORDINATES) DO NOT EQUAL GEODETIC BEARINGS DUE TO MERIDIAN CONVERGENCE.

BALZHISER & HUBBARD ENGINEERS
MECHANICAL
ELECTRICAL
CIVIL
SURVEYORS
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EUGENE, OR 97401
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F: 541-345-5303

REGISTERED PROFESSIONAL LAND SURVEYOR
OREGON
JANUARY 9, 2007
JAMES S. MONTOYA
75508
EXPIRES DECEMBER 31, 2014

PROJECT TITLE
EUGENE SCHOOL DISTRICT 4J
HOWARD MIDDLE & KELLEY ELEMENTARY SCHOOL CAMPUS
700 & 850 HOWARD AVE, EUGENE, OR

SHEET TITLE
TOPOGRAPHY SURVEY

DATE ISSUED: 09/10/2013
LAST REVISION: 09/18/2013

DRAFTING: JSM / ASD
FIELD: APD / HDM

PROJECT: 3900-002-13

FILENAME: 3900-02-13 TOPO.dwg

SHEET No. S1
SHEET 1 OF 2

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FOR INFORMATION ONLY

REVISIONS

ESD 4J YUJIN GAKUEN RELOCATION
200 SILVER LN, EUGENE, OR 97404
RENOVATIONS

JOB NO: 19189
ISSUE DATE: 3/2/2020

EXISTING CONDITIONS

KMS

C1.2

100% CD

J:\3900-002-13\survey\3900-02-13 TOPO.dwg - 9/18/2013 2:27 PM

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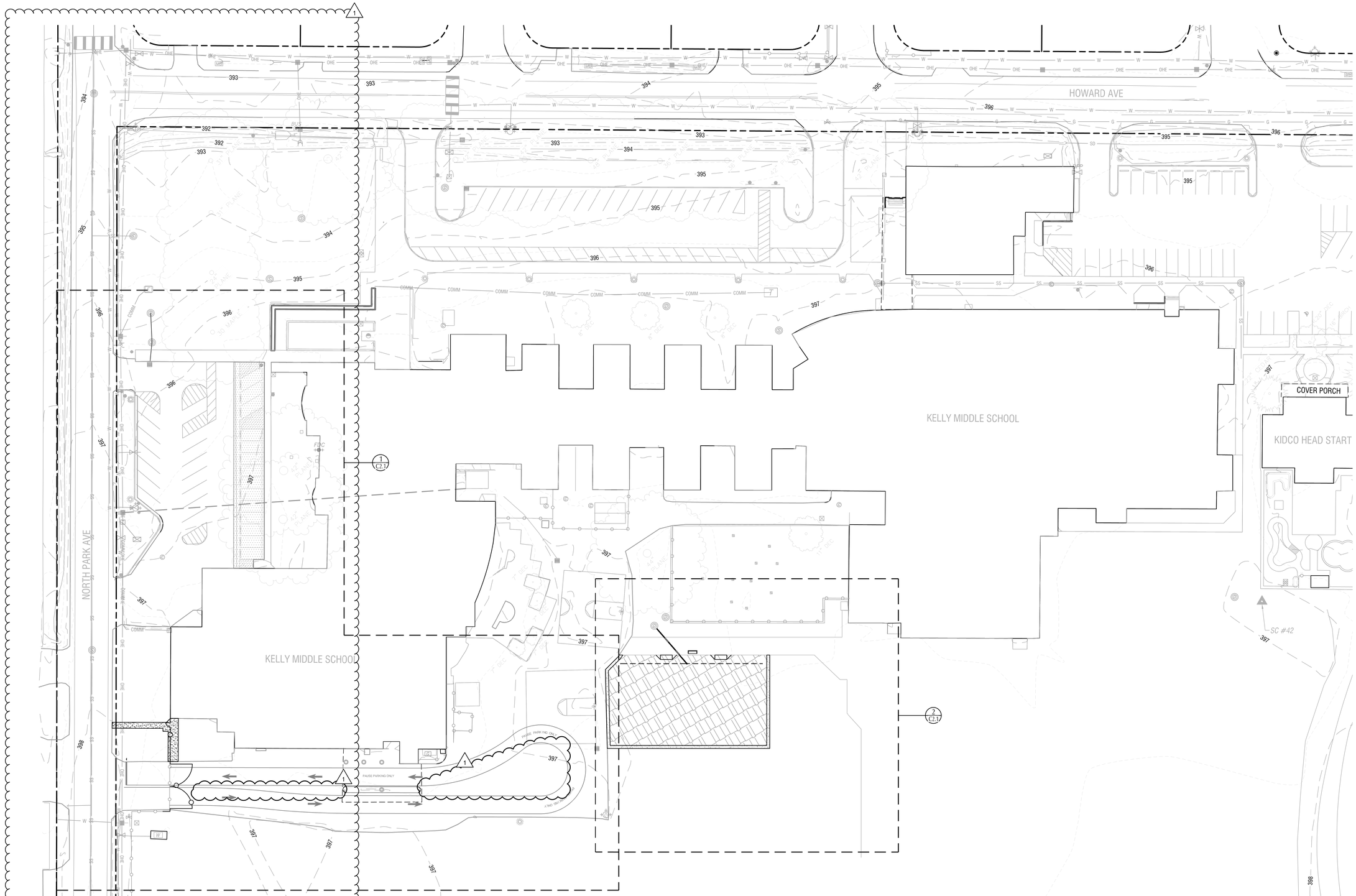

SCALE 1 INCH = 30 FEET
30 0 30 60

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MATTHEW M. KEENAN

EXPIRATION DATE: 6/30/2021

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REVISIONS
1 17 MARCH 2020

KELLY MIDDLE SCHOOL IMPROVEMENTS

200 SILVER LN, EUGENE, OR 97404
RENOVATIONS

JOB NO: 19189
ISSUE DATE: 3/13/2020

CIVIL SITE PLANS

KMS

C2.0

ADDENDUM 1

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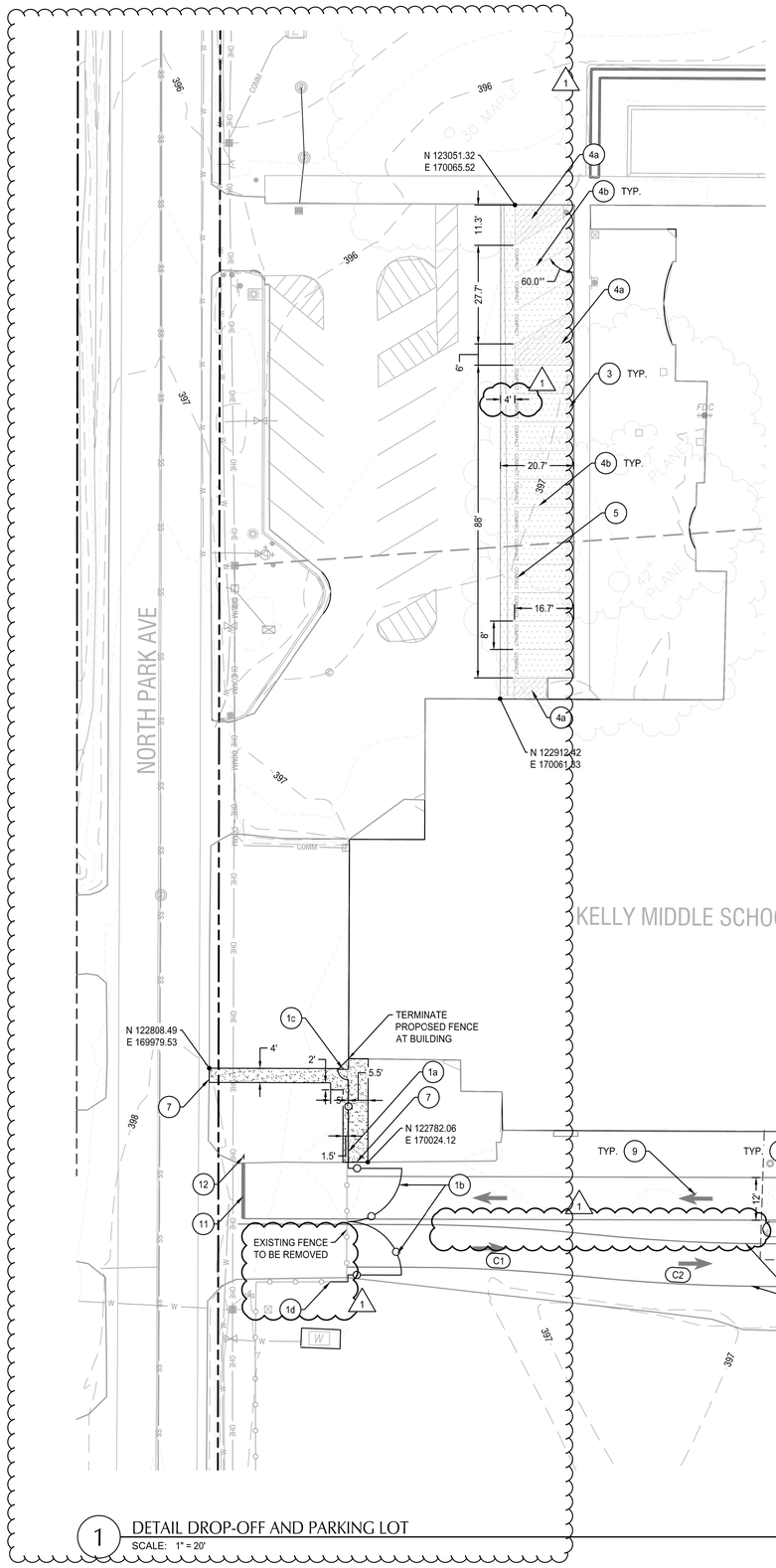
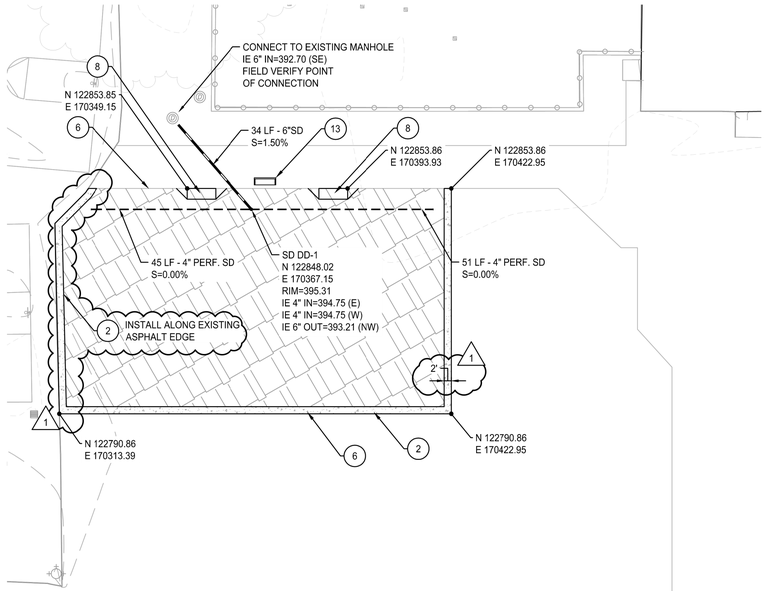


1 DETAIL DROP-OFF AND PARKING LOT
SCALE: 1" = 20'



2 DETAIL PLAYGROUND
SCALE: 1" = 20'

SHEET NOTES

1. ALL DIMENSIONS ARE TO FACE OF CURB OR FACE OF WALL.
2. PIPE BEDDING AND BACKFILL FOR ALL UTILITIES SHALL BE DONE PER DETAIL 1/C3.1.
3. EMULSIFIED ASPHALT FOG COAT WITHOUT AGGREGATE. MATERIALS INSTALLATION TO BE PER SECTION 705 OF THE ODOT STANDARD SPECIFICATIONS.

KEY NOTES

#	DESCRIPTION	DETAIL REF.
1a	CHAIN LINK FENCE. REMOVE EXISTING AND REPLACE AS SHOWN	3./C3.0
1b	16' SWING GATE	
1c	3' SWING GATE	
1d	CONNECT TO EXISTING FENCE	
2	MOW STRIP	4/C3.1
3	WHEEL STOP	2/C3.0
4a	'NO PARKING' ZONE STRIPING	1/C3.0
4b	4" WIDE WHITE STRIPE	1/C3.0
5	COMPACT STRIPING	4/C3.0
6	MATCH EXISTING GRADE AT EDGE OF PLAY AREA	
7	MATCH EXISTING GRADE AT EDGE OF SIDEWALK	
8	INSTALL RAMPS INTO SOFTPLAY AREA	5/C3.1
9	DIRECTIIONAL ARROW	5/C3.0
10	"PAUSE PARKING ONLY" STRIPING	
11	STOP BAR: 12" WIDE WHITE THERMOPLASTIC BAR	
12	STOP SIGN	6/C3.0
13	BENCH. SEE ARCHITECTURAL	
14	PAINT BLACK OVER EXISTING STRIPING WITHIN PROPOSED DRIVE LOOP	

SHEET LEGEND

- PROPERTY LINE
- EMULSIFIED ASPHALT FOG COAT. SEE NOTE 3
- SIDEWALK. CROSS-SLOPE TO BE LESS THAN 1.8%. — 2/C4.1
- SOFTPLAY AREA — 3/C3.1

UTILITY LABEL LEGEND

STRUCTURE LABEL

- UTILITY TYPE (SD=STORM DRAINAGE)
- STRUCTURE TYPE CALLOUT
- ID NUMBER (WHERE APPLICABLE)

XX XX-XX
X+XX.X RT X.X' — LOCATION (WHERE APPLICABLE)
RIM=
IE IN = XX.X
IE OUT = XX.X — STRUCTURE INFO (WHERE APPLICABLE)

PIPE LABEL

- UTILITY LENGTH
- UTILITY SIZE
- UTILITY TYPE

XXLF - XX" XX
S=X.XX% — SLOPE (WHERE APPLICABLE)

STRUCTURE TYPE

CALLOUT	DESCRIPTION	DETAIL REF.
DD	SUBGRADE DECK DRAIN	3/C3.1

Curve Table					
Curve #	Length	Radius	Delta	Start Location	End Location
C1	49.289	488.000	005.7870	N 122752.50 E 170036.03	N 122749.86 E 170085.23
C2	52.036	512.000	005.8232	N 122749.86 E 170085.23	N 122747.10 E 170137.17
C3	114.830	30.000	219.3087	N 122746.78 E 170268.63	N 122800.04 E 170249.76
C4	68.667	100.000	039.3431	N 122800.04 E 170249.76	N 122777.57 E 170186.29

SCALE 1 INCH = 20 FEET
20 0 20 40

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REVISIONS
1 17 MARCH 2020

KELLY MIDDLE SCHOOL IMPROVEMENTS

200 SILVER LN, EUGENE, OR 97404
RENOVATIONS

JOB NO: 19189
ISSUE DATE: 3/13/2020

CIVIL SITE PLANS

KMS

C2.1

ADDENDUM 1

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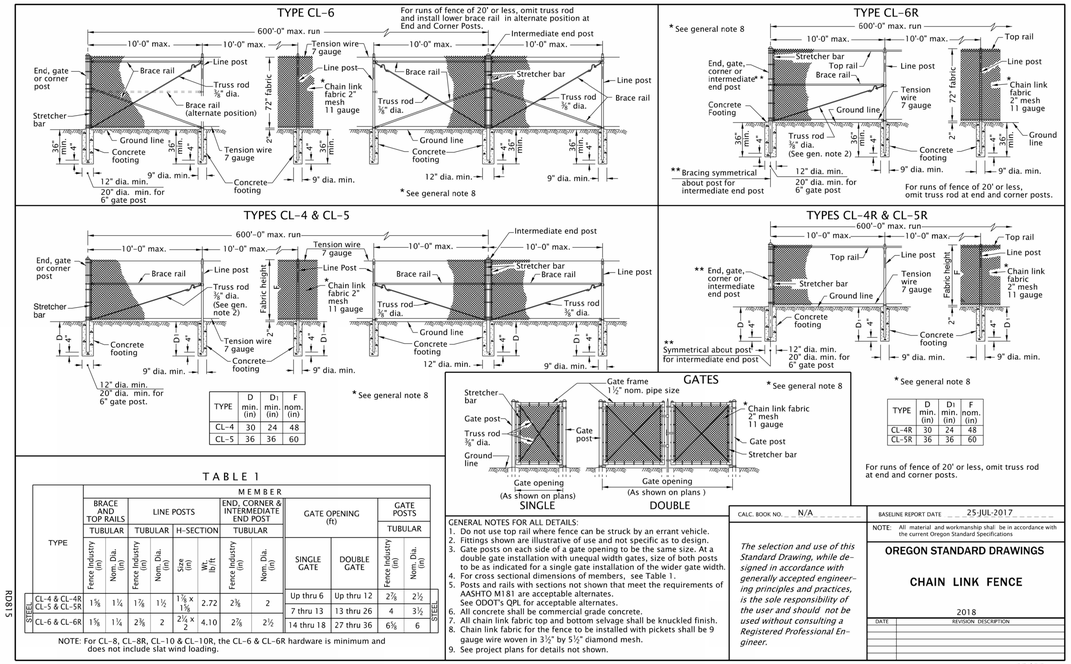


TABLE 1

	TYPE	MEMBER: BRACE AND TOP RAILS		LINE POSTS				END, CORNER & INTERMEDIATE END POST		GATE OPENING (ft)		GATE POSTS	
		TUBULAR		TUBULAR		H-SECTION		TUBULAR				TUBULAR	
		Fence Industry (in)	Nom. Dia. (in)	Fence Industry (in)	Nom. Dia. (in)	Size (in)	Wt. lb/ft	Fence Industry (in)	Nom. Dia. (in)	SINGLE GATE	DOUBLE GATE	Fence Industry (in)	Nom. Dia. (in)
STEEL	CL-4 & CL-4R	1⅝	1¼	1⅝	1½	1⅝ x 1⅝	2.72	2⅜	2	Up thru 6	Up thru 12	2⅜	2½
STEEL	CL-5 & CL-5R	1⅝	1¼	1⅝	1½	1⅝ x 1⅝	2.72	2⅜	2	7 thru 13	13 thru 26	4	3½
STEEL	CL-6 & CL-6R	1⅝	1¼	2⅜	2	2½ x 2	4.10	2⅜	2½	14 thru 18	27 thru 36	6⅝	6

NOTE: For CL-8, CL-8R, CL-10 & CL-10R, the CL-6 & CL-6R hardware is minimum and does not include slat wind loading.

GENERAL NOTES FOR ALL DETAILS:
1. Do not use top rail where fence can be struck by an errant vehicle.
2. Fittings shown are illustrative of use and not specific as to design.
3. Gate posts on each side of a gate opening to be the same size. At a double gate installation with unequal width gates, size of both posts to be as indicated for a single gate installation of the wider gate width.
4. For cross sectional dimensions of members, see Table 1.
5. Posts and rails with sections not shown that meet the requirements of AASHTO M181 are acceptable alternates. See ODOT's QPL for acceptable alternates.
6. All concrete shall be commercial grade concrete.
7. All chain link fabric top and bottom selvage shall be knuckled finish.
8. Chain link fabric for the fence to be installed with pickets shall be 9 gauge wire woven in 3½" by 5½" diamond mesh.
9. See project plans for details not shown.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

CALC. BOOK NO. N/A

BASELINE REPORT DATE 25-JUL-2017

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

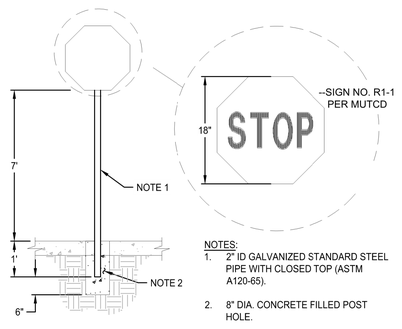
CHAIN LINK FENCE

2018

DATE	REVISION DESCRIPTION

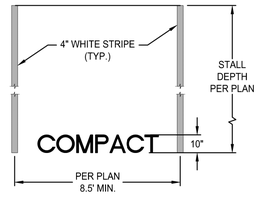
RD815

3 CHAIN LINK FENCE
SCALE: NTS



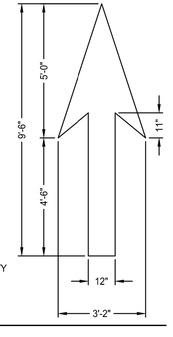
NOTES:
1. 2" ID GALVANIZED STANDARD STEEL PIPE WITH CLOSED TOP (ASTM A120-65).
2. 8" DIA. CONCRETE FILLED POST HOLE.

6 STOP SIGN
SCALE: NTS



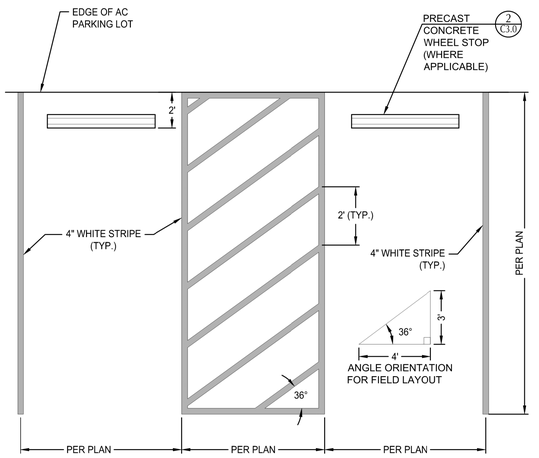
NOTES:
1. STRIPING MATERIAL TO BE THERMAL PLASTIC OR OTHER HEAVY-DUTY MATERIAL THAT WILL HAVE RELATIVELY LITTLE MAINTENANCE.

4 COMPACT STRIPING
SCALE: NTS

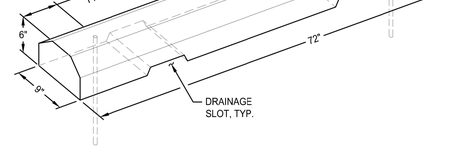


NOTES:
1. DIMENSIONS ARE NOMINAL AND MAY VARY TO CONFORM TO MANUFACTURER'S PRODUCTS APPROVED BY ENGINEER
2. STRIPING MATERIAL TO BE THERMAL PLASTIC OR OTHER HEAVY-DUTY MATERIAL THAT WILL HAVE RELATIVELY LITTLE MAINTENANCE.

5 DIRECTIONAL ARROWS
SCALE: NTS



1 TYPICAL PARKING LAYOUT
SCALE: NTS



NOTES:
1. DIMENSIONS ARE NOMINAL AND MAY VARY TO CONFORM TO MANUFACTURER'S PRODUCTS APPROVED BY ENGINEER.

2 PRECAST CONCRETE WHEEL STOP
SCALE: NTS

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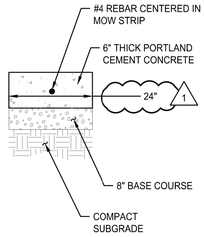
CIVIL DETAILS

KMS

C3.0

ADDENDUM 1

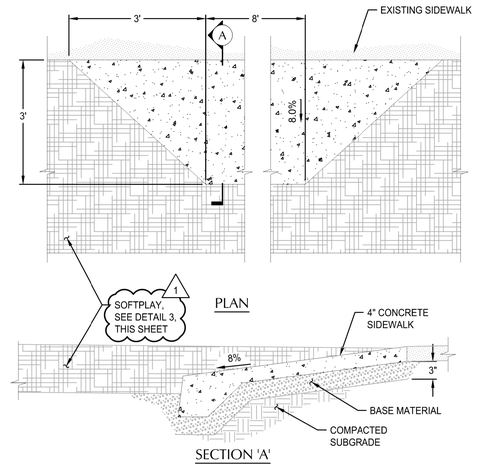


MOW BAND

NOTES:
1. JOINTS:
   - CONSTRUCT SCORE JOINTS AT 3' MAX. SPACING AND CONTRACTION JOINTS AT 12' MAX. SPACING.
2. PROVIDE MEDIUM TO COARSE BROOM FINISH.
3. SLOPE AT 2% MINIMUM AWAY FROM BUILDING.

4 MOW BAND & WOODCHIP CONTAINMENT EDGE

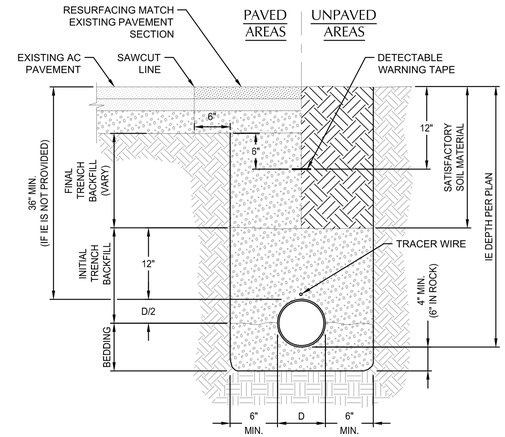
SCALE: NTS



NOTES:
1. PROVIDE RAMP TEXTURING WITH AN EXPANDED METAL GRATE PLACED ON AND REMOVED FROM WET CONCRETE TO LEAVE A DIAMOND PATTERN. EACH DIAMOND SHALL BE 1½" LONG BY ½" WIDE WITH THE LONG SECTION AXIS ORIENTED PERPENDICULAR TO THE CURB. THE GROOVES SHALL BE ½" DEEP BY ½" WIDE.

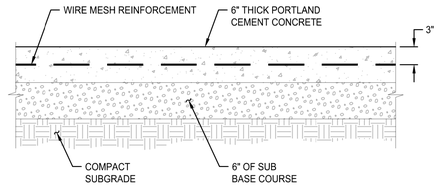
5 SOFTPLAY RAMP

SCALE: NTS



1 TYPICAL PIPE BEDDING AND BACKFILL

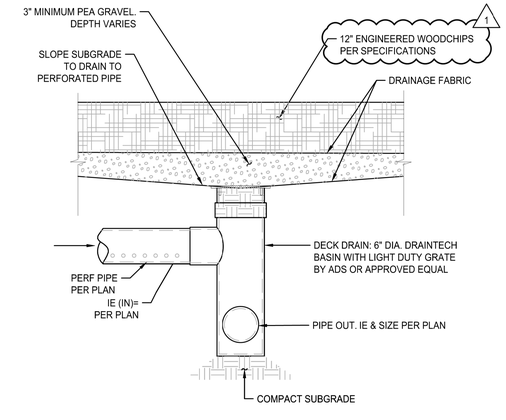
SCALE: NTS



NOTES:
1. JOINTS:
   - CONSTRUCT CONTRACTION JOINTS AT 15' MAX. SPACING AND AT RAMPS.
   - CONSTRUCT EXPANSION JOINTS AT 200' MAX. SPACING AT POINTS OF TANGENCY AND AT ENDS OF EACH DRIVEWAY.
2. PROVIDE MEDIUM TO COARSE BROOM FINISH.

2 REINFORCED SIDEWALK SECTION

SCALE: NTS



3 SOFTPLAY

SCALE: NTS

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56481
DIGITALLY SIGNED
OREGON
JUL. 19, 2002
MATTHEW M. KEENAN
EXPIRATION DATE: 6/30/2021

kpff
800 Willamette Street, Suite 400
Eugene, OR 97401
O: 541.684.4902
F: 541.684.4909
www.kpff.com

REVISIONS
1 17 MARCH 2020

KELLY MIDDLE SCHOOL IMPROVEMENTS

200 SILVER LN, EUGENE, OR 97404
RENOVATIONS

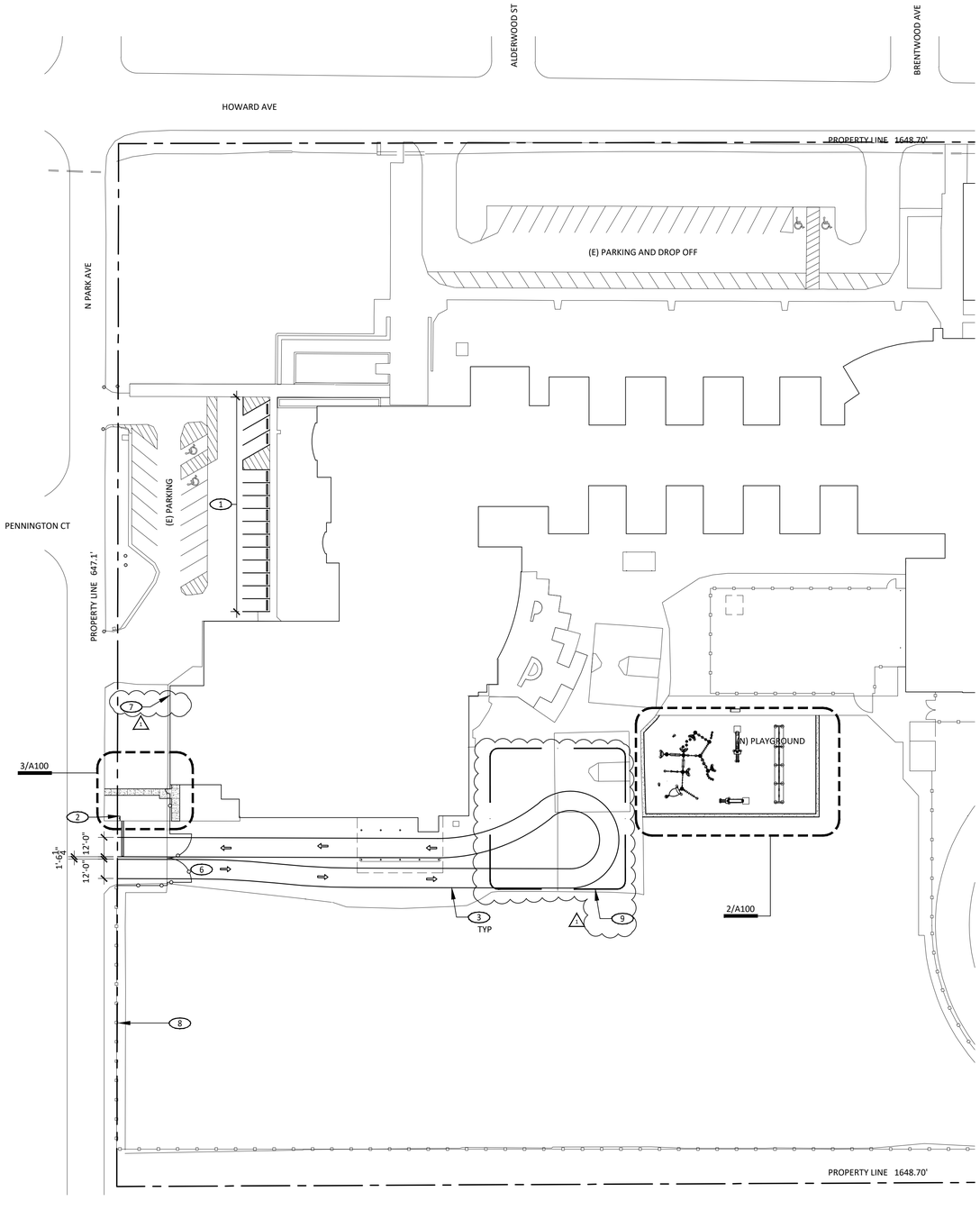
JOB NO: 19189
ISSUE DATE: 3/13/2020

CIVIL DETAILS

KMS

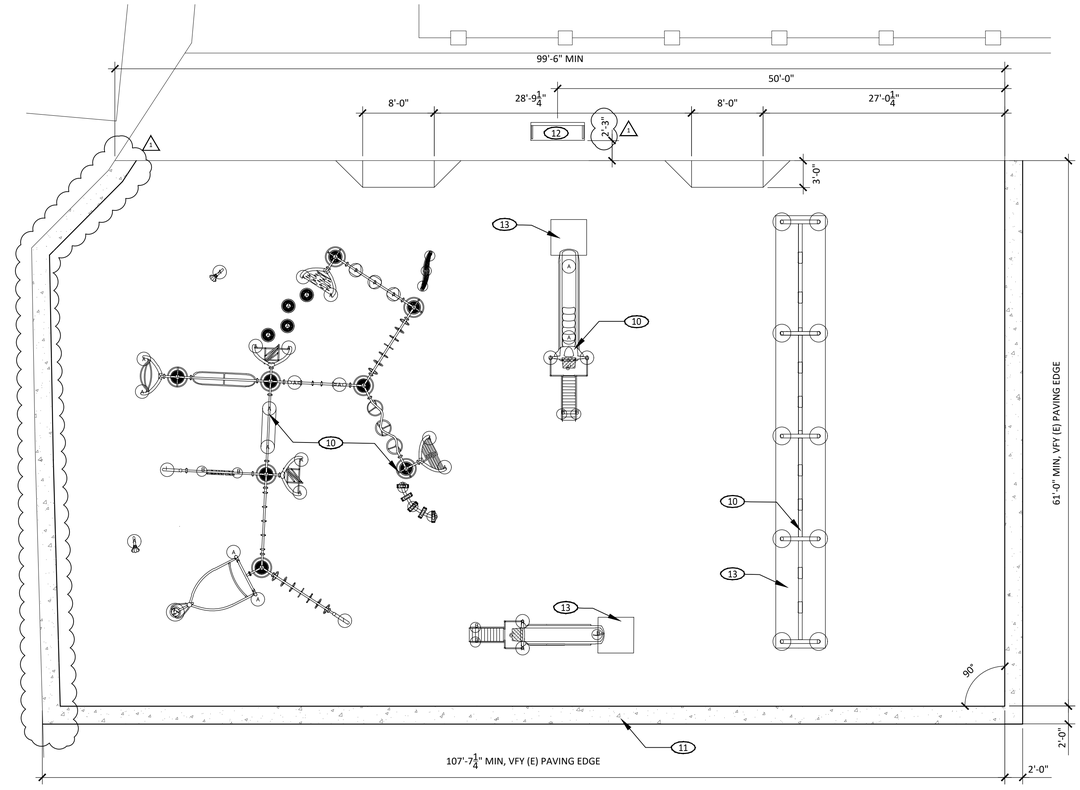
C3.1

ADDENDUM 1



1 ARCHITECTURAL SITE PLAN
1" = 40'

0 10 20 40 80 NORTH

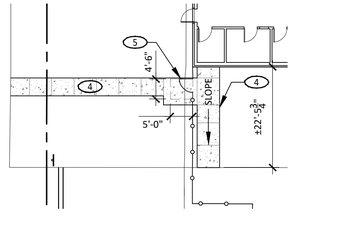


2 ARCHITECTURAL SITE PLAN
1/8" = 1'-0"

0 2 4 8 16 NORTH

KEY NOTES

1. (N) STRIPING @ (E) PARKING AREA, SEE ALSO CIVIL
2. (N) POLE MOUNTED STOP SIGN, SEE ALSO CIVIL
3. (N) STRIPING, DIRECTIONAL ARROWS, & 'PAUSE PARKING ONLY' AT (E) PAVING, SEE ALSO CIVIL
4. (N) CONCRETE WALKWAY, SEE ALSO CIVIL
5. GATE W/ LATCH AND PADLOCK, SEE ALSO CIVIL
6. (N) CHAIN LINK SWINGING GATE, SEE ALSO CIVIL
7. YUJIN GAKUEN WALL MOUNT EXTERIOR SIGN & READERBOARD (1)
   -RELOCATE FROM EXISTING SCHOOL LOCATION
   -PROVIDE POWER AS REQ'D
   -SEAL PENETRATIONS WATER TIGHT
   -VERIFY HT & LOCATION W/ OWNER
8. INDICATES (E) FENCING, UON
9. POTENTIAL CONTRACTOR STAGING AREA - VFY W/OWNER (1)
10. PLAYGROUND EQUIPMENT BY OTHERS
11. (N) CONCRETE MOW STRIP, SEE ALSO CIVIL
12. (N) BENCH, ANCHOR TO (E) CONCRETE WALKWAY
13. PLAYGROUND EQUIPMENT RUBBER MAT, BY OTHERS (1)



3 ARCHITECTURAL SITE PLAN
1/16" = 1'-0"

0 4 8 16 32 NORTH

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JOB NO: 19189
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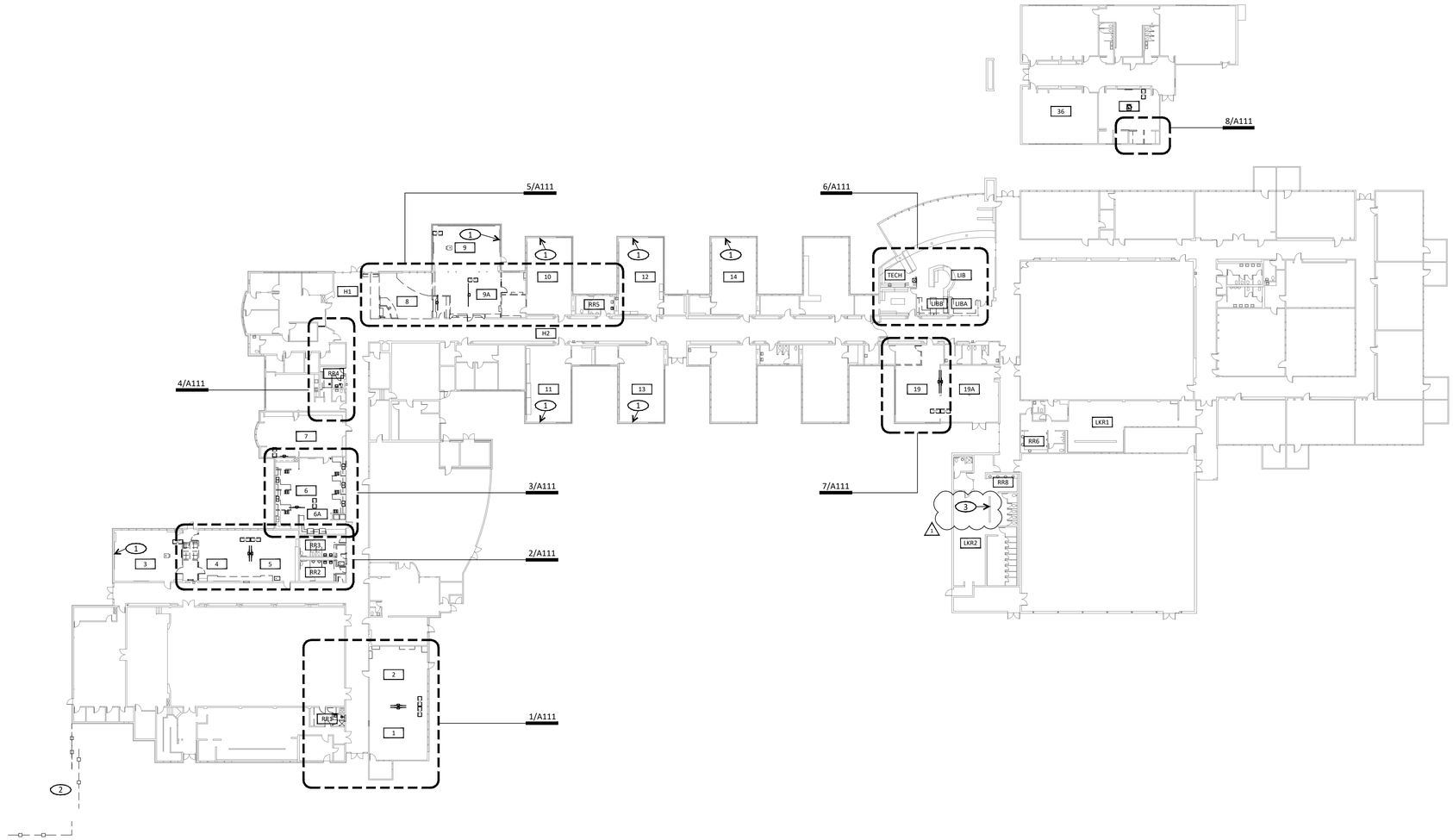
ARCHITECTURAL SITE PLAN

KMS

A100

KEY NOTES

1. DEMOLISH MARKER BOARD, PATCH WALL TO MATCH (N) PROJECT STANDARD
2. DEMOLISH FENCE & GATE AS REQ'D BY (N) WORK
3. DEMOLISH WOOD WALL CAP



1 OVERALL DEMOLITION PLAN
1/32" = 1'-0"

0 4 8 16 32 64 NORTH

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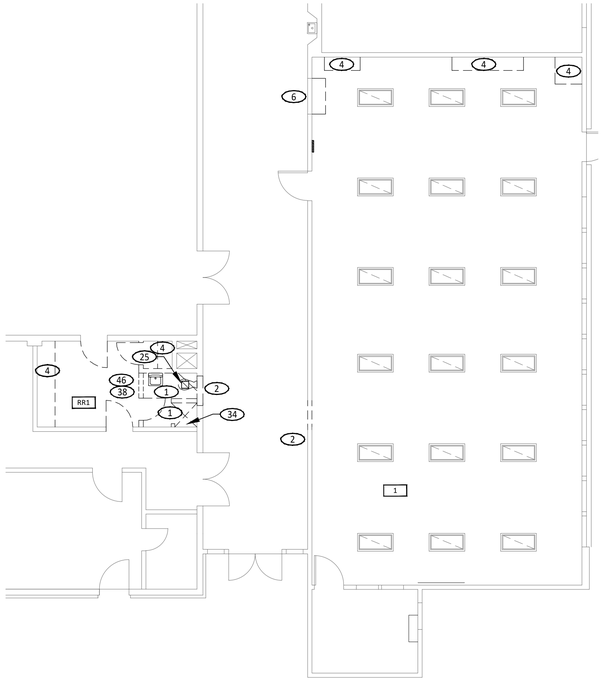
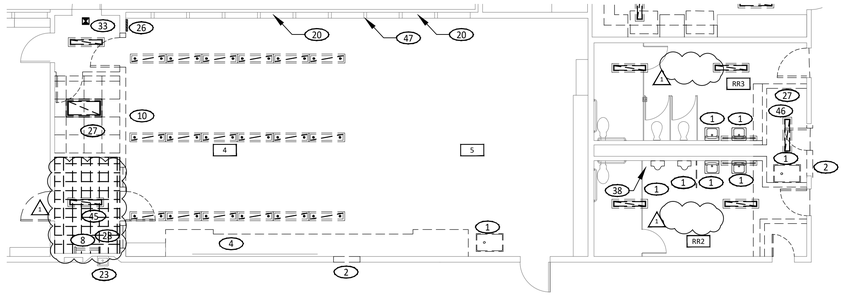
DEMOLITION

KMS

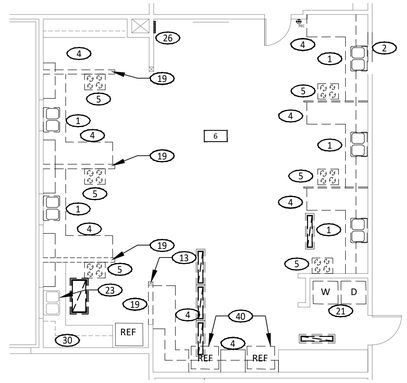
A110



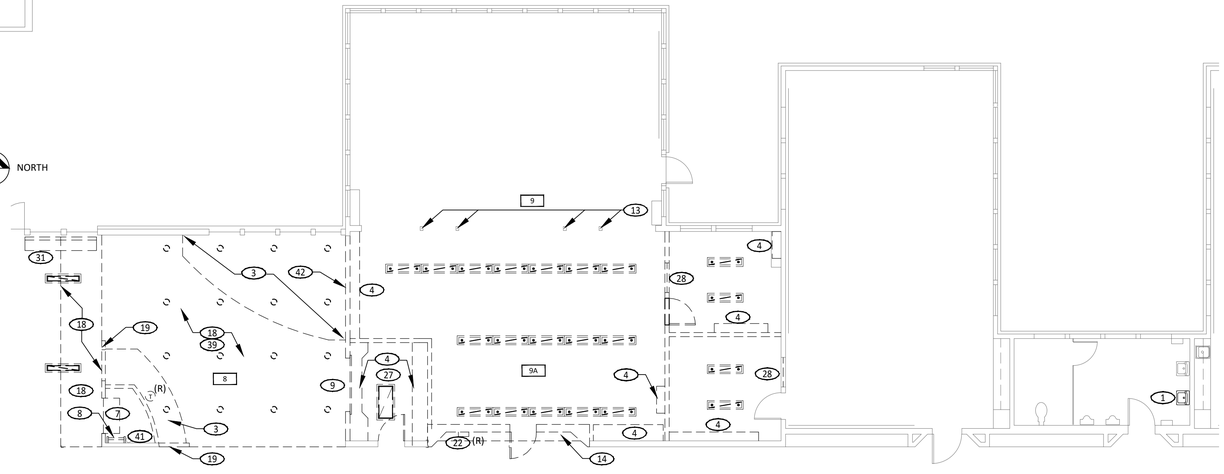
1 PARTIAL DEMOLITION PLAN
1/8" = 1'-0"
NORTH



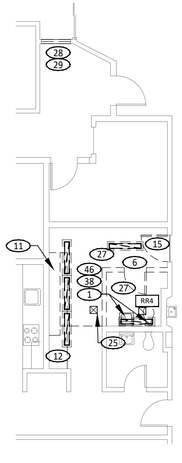
2 PARTIAL DEMOLITION PLAN
1/8" = 1'-0"
NORTH



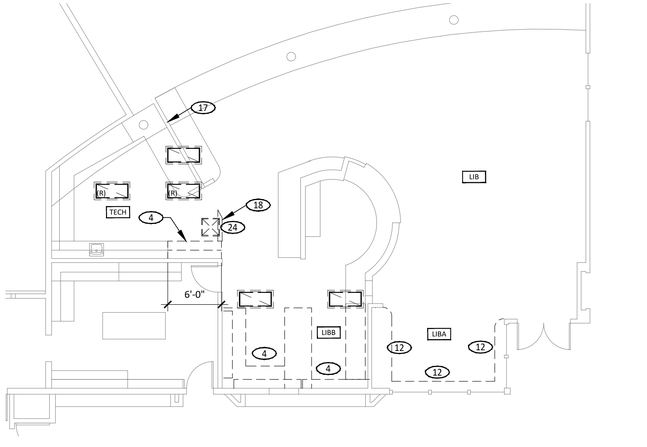
3 PARTIAL DEMOLITION PLAN
1/8" = 1'-0"
NORTH
0 2 4 8 16



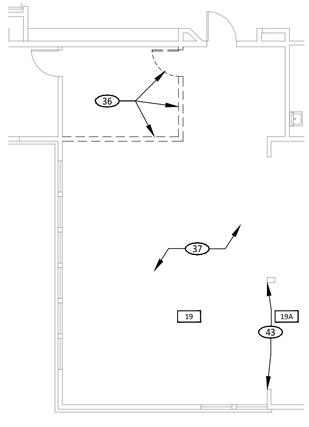
5 PARTIAL DEMOLITION PLAN
1/8" = 1'-0"
NORTH



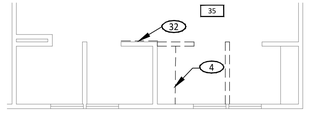
4 PARTIAL DEMOLITION PLAN
1/8" = 1'-0"
NORTH
0 2 4 8 16



6 PARTIAL DEMOLITION PLAN
1/8" = 1'-0"
NORTH



7 PARTIAL DEMOLITION PLAN
1/8" = 1'-0"
NORTH



8 PARTIAL DEMOLITION PLAN
1/8" = 1'-0"
NORTH

KEY NOTES

1. DEMOLISH PLUMBING FIXTURE, SEE PLUMB'G
2. DEMOLISH WALL, RB/WD BASE, & WD PICTURE RAIL AS REQ'D FOR (N) OPENING
3. DEMOLISH PLATFORM WOOD FRAMING AND FINISHES
4. DEMOLISH CASEWORK
5. DEMOLISH ELECTRIC OVEN & STOVETOP, SALVAGE TO OWNER
6. DEMOLISH TROPHY CASE & CLR FINISH WD TRIM, PAINTED WD TRIM TO REMAIN
7. DEMOLISH DISPLAY CASE & MONITOR, SALVAGE MONITOR TO OWNER
8. DEMOLISH ACCESS LADDER, HATCH TO REMAIN (NOTE: ATTIC ACCESS IS REDUNDANT, NOT REQ'D THIS LOCATION)
9. DEMOLISH OVERHEAD DOOR
10. DEMOLISH MARKER BOARD AND SMART BOARD, SALVAGE FOR RELOCATION
11. DEMOLISH MAILBOXES & CTOP, SALVAGE FOR RELOCATION
12. DEMOLISH COUNTERTOP & SUPPORT BRACKETS
13. (E) COLUMN TO REMAIN
14. DEMOLISH SOFFIT, HEADWALL TO REMAIN
15. DEMOLISH DOOR, (E) FRAME TO REMAIN
16. DEMOLISH SOFFIT
17. DEMOLISH WALL CAP, (E) WALL ASSY BELOW TO REMAIN
18. DEMOLISH FLOOR COVERING & BASE, THIS AREA
19. DEMOLISH LOW WALL
20. DEMOLISH WINDOW MOUNTED FAN
21. DEMOLISH (E) WASHER/DRYER, SALVAGE TO OWNER
22. DEMOLISH FIRE EXTINGUISHER CABINET, SALVAGE FOR RELOCATION
23. (E) PLUMBING FIXTURE TO REMAIN
24. DEMOLISH HVAC SALVAGE FOR RELOCATION, SEE MECHANICAL
25. DEMOLISH EXHAUST FAN, SEE MECHANICAL
26. (E) ELECTRICAL PANEL TO REMAIN
27. DEMOLISH ACT SUSPENDED CEILING ASSY, THIS ROOM -VERIFY EXTENT/DEMO W/ (N) WORK
28. DEMOLISH RELITE FRAME & GLAZING
29. DEMOLISH WALL BELOW RELITE AS REQ'D FOR (N) OPENING, HEADWALL TO REMAIN
30. (E) UPPER CABINETS TO REMAIN
31. DEMOLISH BENCH, SALVAGE TO OWNER'S ATTIC STOCK, COORD W/ OWNER
32. WOOD WALL FINISH DEMOLITION BY OTHERS
33. DEMOLISH GYP BD SOFFIT FINISH & FRAMING TO UNDERSIDE /(E) ROOF STRUCTURE
34. DEMOLISH TILE WALL FINISH @ (E) SHOWER
35. DEMOLISH WALL TO 8'-0" AFF
36. WALL AND DOOR DEMOLITION BY OTHERS
37. FLOOR FINISH DEMOLITION BY OTHERS, THIS ROOM
38. DEMOLISH FLOOR SLAB AS REQ'D FOR (N) PLUMBING
39. DEMOLISH WD TRIM @ WALL THIS RM
40. DEMOLISH REFRIGERATOR, SALVAGE TO OWNER
41. (E) HSS COL TO REMAIN
42. DEMOLISH MONITOR, SALVAGE TO OWNER
43. DEMOLISH WOOD TRIM & BASE AT OPENING
44. DEMOLISH PROJECTOR, SALVAGE TO OWNER
45. DEMOLISH CLG TILES
46. DEMOLISH FLOOR SLAB AS REQ'D FOR (N) FLOOR FINISH
47. DEMOLISH GAS PIPE @ (N) WALL LOCATION, SEE MECH

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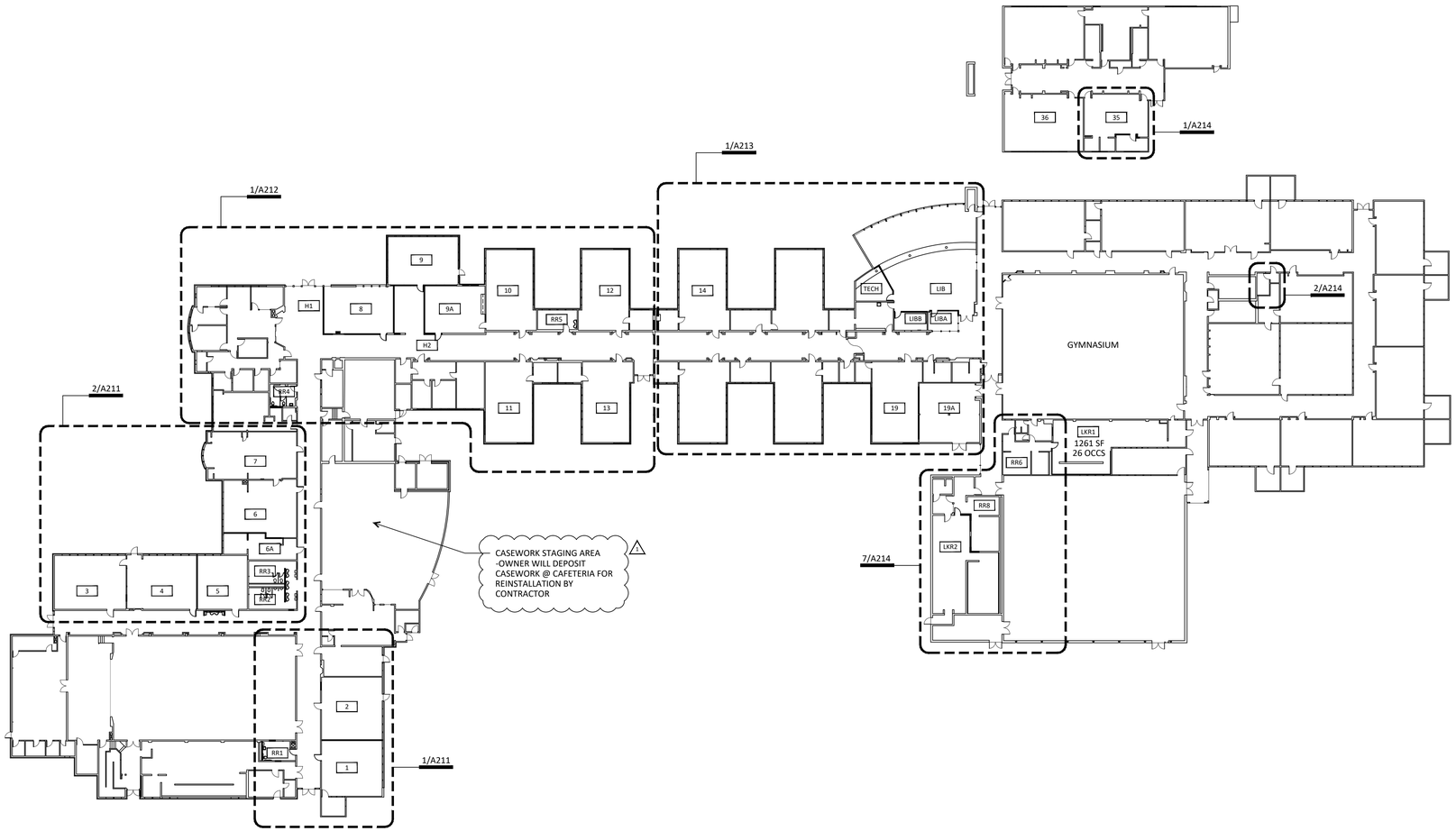
PARTIAL DEMOLITION

KMS

A111



1 OVERALL FLOOR PLAN
1/32" = 1'-0"

0 4 8 16 32 64

NORTH

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850 HOWARD AVE, EUGENE OR 97404
CONSTRUCTION DOCUMENTS

JOB NO: 19189
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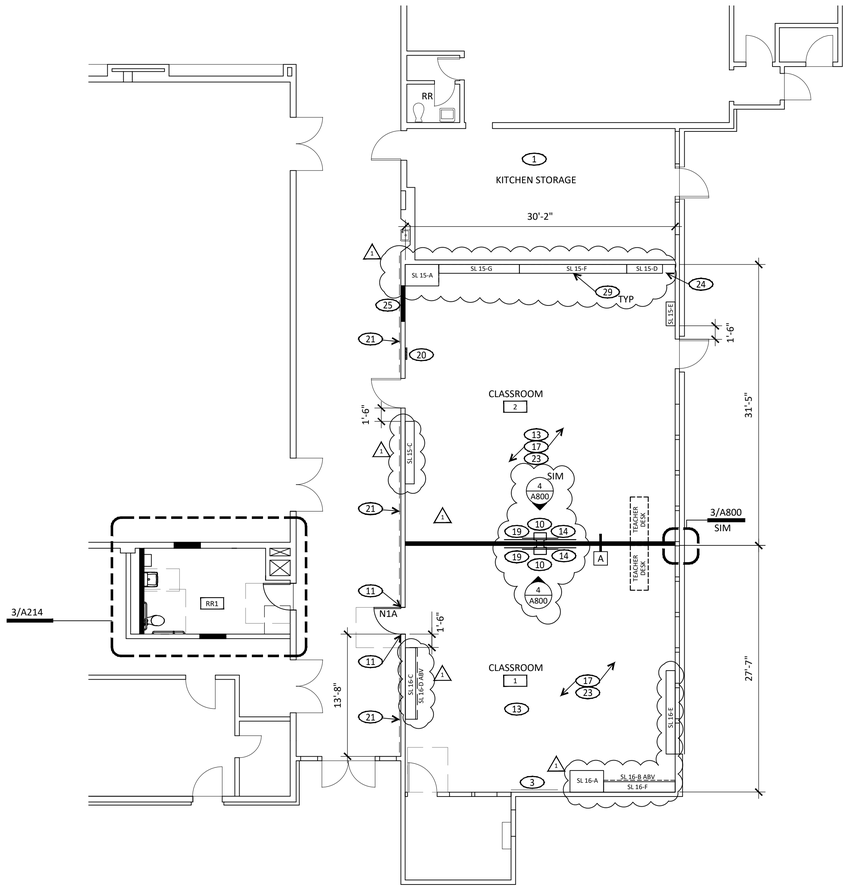
OVERALL
FLOOR PLAN

KMS

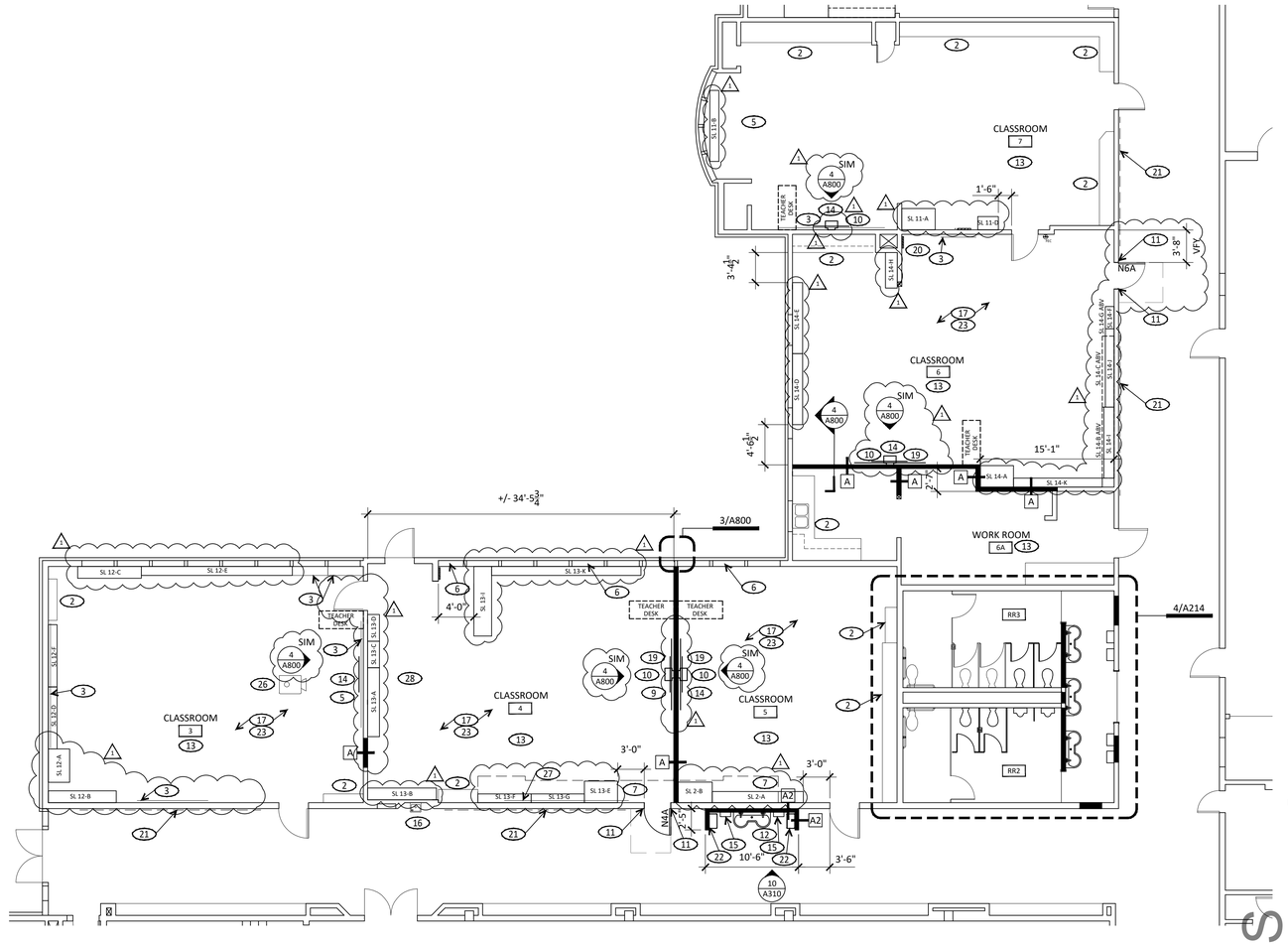
A210

KEY NOTES

1. NO WORK THIS ROOM
2. (E) CASEWORK
3. (E) MARKER BOARD TO REMAIN
4. (E) SMART BOARD
5. (E) PROJECTOR SCREEN
6. (N) 1" INSULATED GLAZING W/ WD STOPS, PS FINISH
7. DASHED LINE INDICATES EXTENT/VCT FLOOR FINISH PATCH WHERE CASEWORK DEMOLISHED
8. (N) CPT-1 FLOOR FINISH & RB-1 BASE
9. (R) SMART BOARD
10. (N) WALL MOUNT SHORT THROW PROJECTOR
11. CHAMFER & PAINT EXPOSED ENDS OF WD BASE & WD PICTURE RAIL TO MATCH EXISTING
12. (N) PLUMBING FIXTURE, SEE PLUMBING
13. PROVIDE (N) PAINT SYSTEM THIS ROOM, SEE ALSO FINISH SCHEDULE
14. (N) WALL MOUNTED SMART BOARD
15. (N) PAPER TOWEL DISPENSER
16. (E) DRINKING FOUNTAIN
17. FURR OUT ELECTRICAL DEVICES TO BACK/CASEWORK WHERE CASEWORK RELOCATE OCCURS, SEE ALSO SCHEDULE
18. (E) CEILING MOUNTED PROJECTOR
19. (N) MARKER BOARD, SEE 5/A800 FOR TYP DIMENSIONS & MOUNTING
20. (E) ELECTRICAL PANEL
21. (R) WD RAIL W/ COAT HOOKS -VFY HEIGHT & LOCATION W/ OWNER
22. (N) OWNER FURNISHED SLIM JIM RESIN TYPE TRASH CAN -PROVIDE PAINTED METAL FRENCH CLEAT ATTACHMENT BAR W/ CONCEALED FASTENERS
23. PROVIDE BACKING AS REQ'D TO FURR CASEWORK BEYOND (E) ELECTRICAL RACEWAY WHERE CASEWORK RELOCATE OCCURS, SEE ALSO ELECTRICAL AND SCHEDULE
24. PATCH FLOOR & BASE WHERE CASEWORK DEMOLISHED
25. INFILL WALL WHERE TROPHY CASE DEMOLISHED -PAINTED TRIM TO REMAIN
26. (N) CLG MOUNT PROJECTOR @ (E) POLE MOUNT
27. (E) TACK BOARD
28. (N) FLOOR FINISH AS REQ'D BY DEMOLITION, SEE ALSO FINISH SCHEDULE
29. (R) OFCI CASEWORK, SEE SCHEDULE - REFER TO DETAIL 4-A800 FOR TYP INSTALLATION REQ'S



1 ENLARGED PARTIAL FLOOR PLAN
1/8" = 1'-0"



2 ENLARGED PARTIAL FLOOR PLAN
1/8" = 1'-0"

0 2 4 8 16 NORTH

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CONSTRUCTION DOCUMENTS

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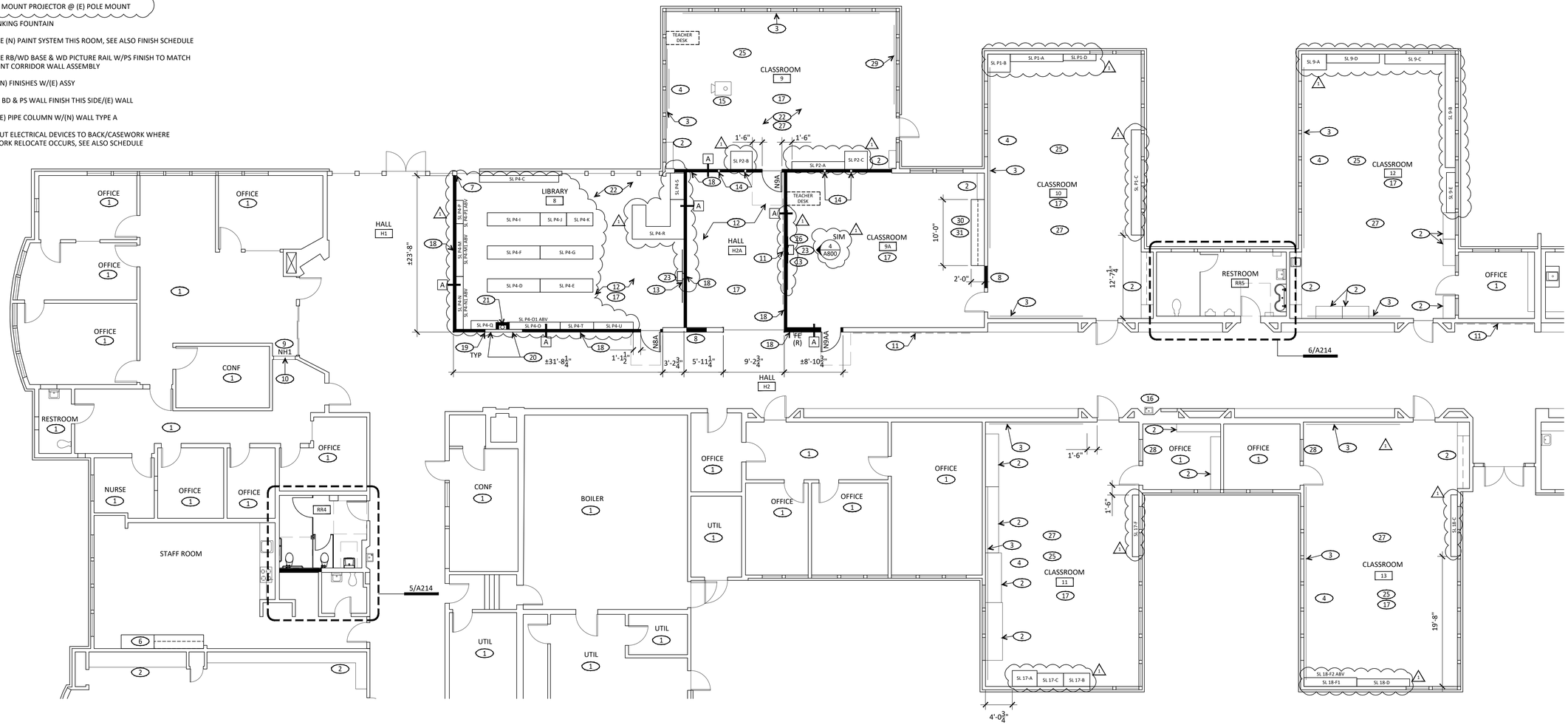
PARTIAL FLOOR PLAN

A211

KMS

KEY NOTES

1. NO WORK THIS ROOM
2. (E) CASEWORK
3. (E) MARKER BOARD
4. (E) SMART BOARD
5. (E) PROJECTOR SCREEN
6. (R) MAILBOXES & CTOP
   -PROVIDE (N) HEAVY DUTY ANGLE BRACKET @ 36" OC MAX
7. CENTER (N) WALL ASSY ON (E) MULLION
8. INFILL WALL WHERE OPENING DEMOLISHED TO MATCH ADJACENT ASSEMBLY
9. (N) HM CASED OPENING, SEE ALSO DOOR SCHEDULE
10. PATCH FLOOR AS REQ'D BY DEMOLITION
11. (R) WD RAIL W/ COAT HOOKS
    -VFY HEIGHT & LOCATION W/ OWNER
12. (N) CPT FLOOR FINISH & RB THIS ROOM, SEE ALSO FINISH SCHEDULE
13. (N) MARKER BOARD
14. (E) COLUMN TO REMAIN, ALIGN FINISHES THIS SIDE/COLUMN
15. (N) CLG MOUNT PROJECTOR @ (E) POLE MOUNT
16. (E) DRINKING FOUNTAIN
17. PROVIDE (N) PAINT SYSTEM THIS ROOM, SEE ALSO FINISH SCHEDULE
18. PROVIDE RB/WD BASE & WD PICTURE RAIL W/PS FINISH TO MATCH ADJACENT CORRIDOR WALL ASSEMBLY
19. ALIGN (N) FINISHES W/(E) ASSY
20. (N) GYP BD & PS WALL FINISH THIS SIDE/(E) WALL
21. WRAP (E) PIPE COLUMN W/(N) WALL TYPE A
22. FURR OUT ELECTRICAL DEVICES TO BACK/CASEWORK WHERE CASEWORK RELOCATE OCCURS, SEE ALSO SCHEDULE
23. (N) WALL MOUNTED SHORT THROW PROJECTOR
24. (N) 5'-0" X 8'-0" MARKER BOARD
25. (E) CEILING MOUNT PROJECTOR
26. (N) WALL MOUNT SMART BOARD
27. PROVIDE BACKING AS REQ'D TO FURR CASEWORK BEYOND (E) ELECTRICAL RACEWAY WHERE CASEWORK RELOCATE OCCURS, SEE ALSO ELECTRICAL AND SCHEDULE
28. (E) RELITE TO REMAIN
29. (E) TACKBOARD TO REMAIN
30. (N) WD VENEER CASEWORK W/ ADJUSTABLE SHELVES & PLAM CLAD CTOP & BACKSPLASH
31. (N) WD VENEER UPPER CABINETS W/ ADJUSTABLE SHELVES



1 ENLARGED PARTIAL FLOOR PLAN
1/8" = 1'-0"

NORTH
0 2 4 8 16

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CONSTRUCTION DOCUMENTS

JOB NO: 19189
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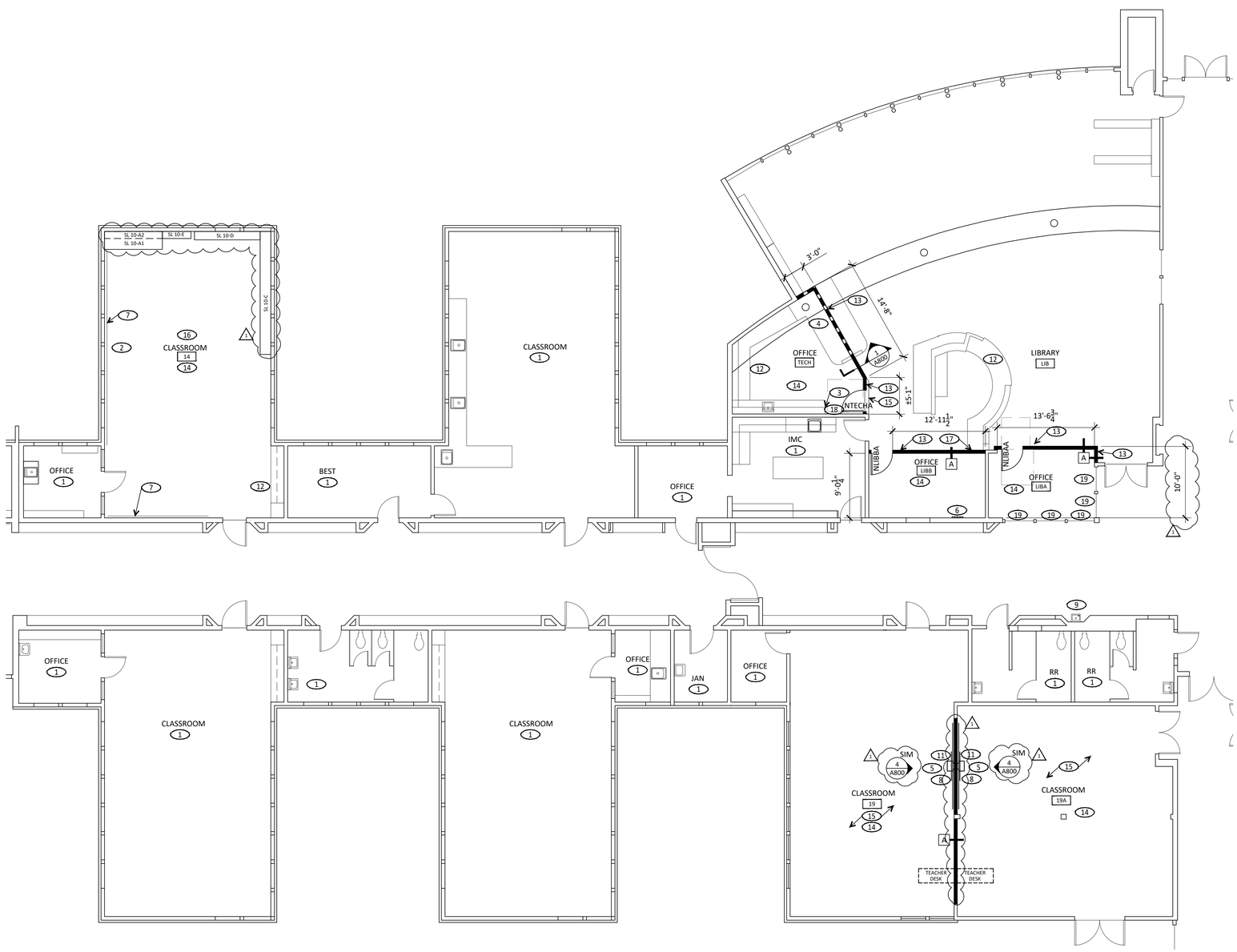
PARTIAL FLOOR PLAN

KMS

A212

KEY NOTES

1. NO WORK THIS ROOM
2. (E) SMART BOARD
3. PROVIDE PLAM CLAD END PANEL WHERE CASEWORK DEMOLISHED -MODIFY CTOP & BACKSPLASH AS REQ'D
4. EXTEND (E) LOW WALL TO UNDERSIDE/CEILING, SEE ALSO ELEVATIONS & DETAILS
5. (N) WALL MOUNT SHORT THROW PROJECTOR
6. (E) ELEC PANEL
7. (E) MARKER BOARD
8. (N) MARKER BOARD
9. (E) DRINKING FOUNTAIN
10. NOT USED
11. (N) WALL MOUNT SMART BOARD
12. (E) CASEWORK
13. PROVIDE (N) PAINT SYSTEM & RESILIENT BASE TO MATCH (E) THIS WALL
14. PROVIDE (N) PAINT SYSTEM THIS ROOM, SEE ALSO FINISH SCHEDULE
15. (N) FLOOR COVERING & BASE, SEE FINISH SCHEDULE
16. (E) CEILING MOUNT PROJECTOR
17. SUPPORT CUT END/CTOP @ (N) WALL W/ (N) WD LEDGER
18. PATCH WALL WHERE CASEWORK DEMOLISHED
19. (N) HORIZONTAL LOUVER BLINDS



1 ENLARGED PARTIAL FLOOR PLAN
1/8" = 1'-0"

NORTH
0 2 4 8 16

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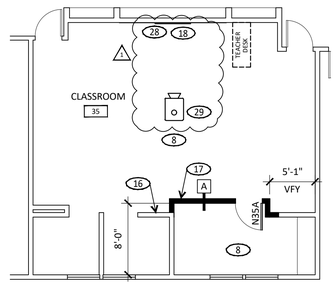
PARTIAL FLOOR PLAN

KMS

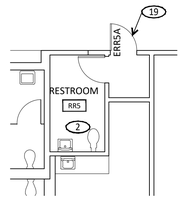
A213

KEY NOTES

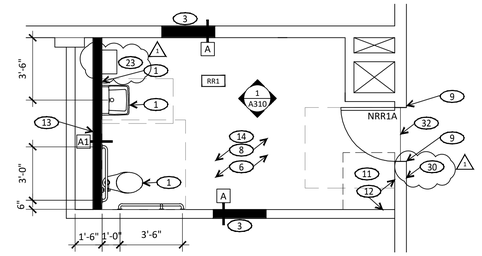
1. (N) PLUMBING FIXTURE, SEE PLUMB'G
2. NO WORK THIS ROOM
3. (N) INFILL WALL WHERE OPENING DEMOLISHED -PROVIDE RB/WD BASE & WD PICTURE RAIL W/PS FINISH TO MATCH ADJACENT CORRIDOR WALL ASSEMBLY
4. (N) TOILET COMPARTMENT, SEE ELEVATIONS
5. (N) FLOOR DRAIN, SEE PLUMB'G
6. (N) FLOOR COVERING & BASE, SEE FINISH SCHEDULE
7. (N) ELECTRIC HAND DRYER, SEE ALSO ELEVATIONS
8. PROVIDE (N) PAINT SYSTEM THIS ROOM, SEE ALSO FINISH SCHEDULE
9. CHAMFER & PAINT EXPOSED ENDS OF WD BASE & WD PICTURE RAIL TO MATCH EXISTING
10. (N) 18" DEEP URINAL PARTITION, SEE ALSO ELEVATIONS
11. PATCH SUBFLOOR WHERE SHOWER DEMOLISHED
12. PATCH GYP BD WHERE TILE DEMOLISHED
13. OMIT GYP BD AND RC CHANNEL THIS SIDE/WALL
14. WHERE CONCRETE DEMOLITION OCCURS FOR (N) TRENCHING, INFILL SLAB OVER VAPOR BARRIER TO MATCH EXISTING DEPTH, 12" LONG #4 DOWELS TO (E) SLAB 24" OC, 6" EMBED TO (E)
15. PATCH FLOOR TILING FINISH WHERE DEMOLITION OCCURS
16. PATCH WALL WHERE WD FINISH DEMOLISHED
17. (N) MARKER BOARD
18. (N) WALL MOUNT SMART BOARD
19. (N) MORTISE LOCKSET W/ OCCUPANCY INDICATOR -PREP (E) SCWD AS REQ'D, SEE ALSO DOOR SCHEDULE
20. INFILL TO UNDERSIDE OF CEILING ABOVE CMU LOW WALL
21. PROVIDE (N) PAINT SYSTEM EA SIDE/THIS WALL, SEE FINISH SCHEDULE
22. (N) ACCESS PANEL
23. (N) PAPER TOWEL DISPENSER
24. RE-ESTABLISH MORTAR BED AS REQ'D BY FLOOR DEMOLITION
25. (N) HEAVY DUTY ANGLE BRACKETS @ 36" MAX OC @ (E) CTOP -REGLUE PLAM FACE/(E) CTOP
26. (E) TEMPERED GLAZING TO REMAIN
27. (E) HAND DRYER TO REMAIN
28. (E) MARKER BOARD
29. (N) POLE MOUNT CLG PROJECTOR
30. PROVIDE RESTROOM SIGNAGE W/BRAILLE & UNIVERSAL SYMBOL FOR ACCESSIBILITY 48" MIN A.F.F & 9" OFF DOOR JAMB
31. FULL HEIGHT STAINLESS STEEL CORNER GUARD
32. FLUSH TRANSITION TO (E) FLR FINISH



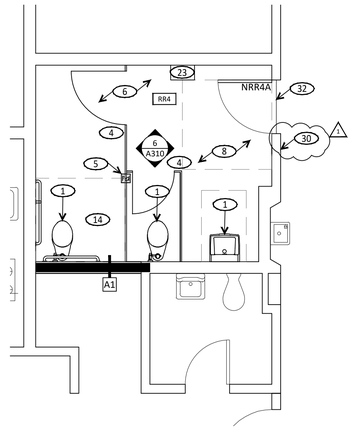
1 ROOM 35 ENLARGED PARTIAL FLOOR PLAN
1/8" = 1'-0"



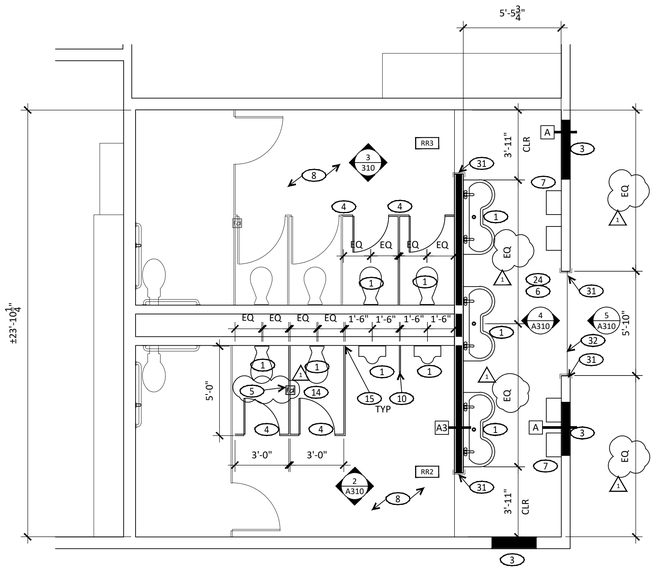
2 ENLARGED PARTIAL FLOOR PLAN
1/8" = 1'-0"



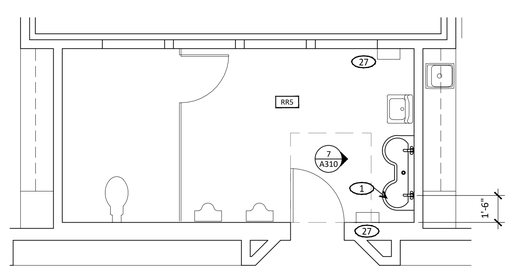
3 RESTROOM 1 ENLARGED FLOOR PLAN
1/4" = 1'-0"



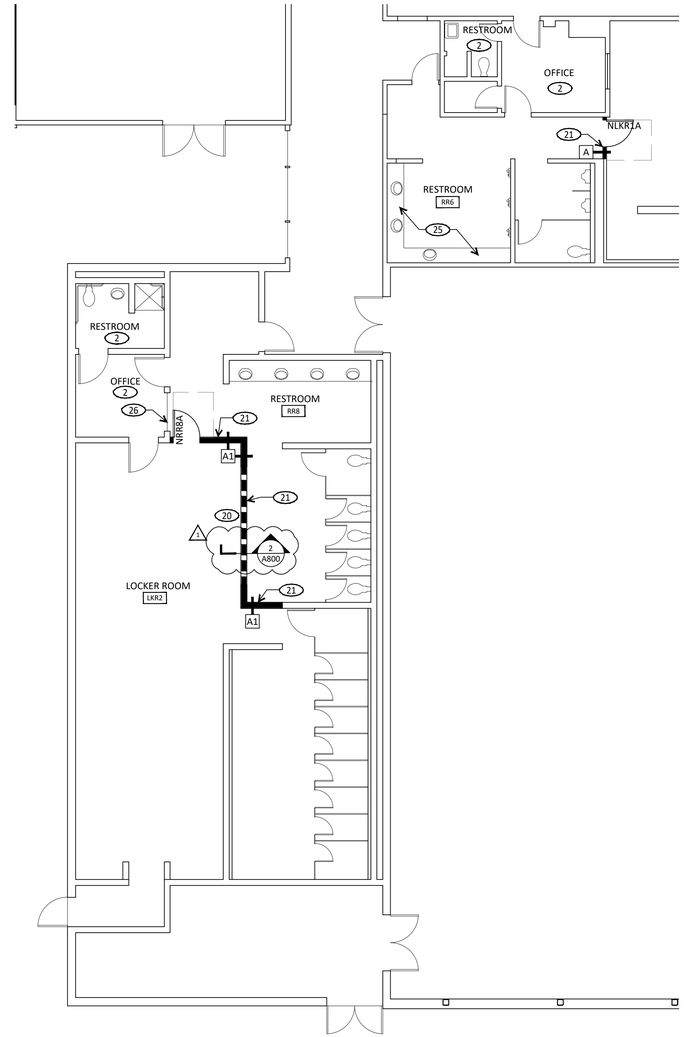
5 RESTROOM 4 ENLARGED FLOOR PLAN
1/4" = 1'-0"



4 RESTROOM 2 & 3 ENLARGED FLOOR PLAN
1/4" = 1'-0"



6 RESTROOM 5 ENLARGED FLOOR PLAN
1/4" = 1'-0"



7 ENLARGED PARTIAL FLOOR PLAN
1/8" = 1'-0"

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REVISIONS
1 3/17/2020 ADD. 1

ESD 4J KELLY MIDDLE SCHOOL IMPROVEMENTS

850 HOWARD AVE, EUGENE OR 97404
CONSTRUCTION DOCUMENTS

JOB NO: 19189
ISSUE DATE: 3/3/2020

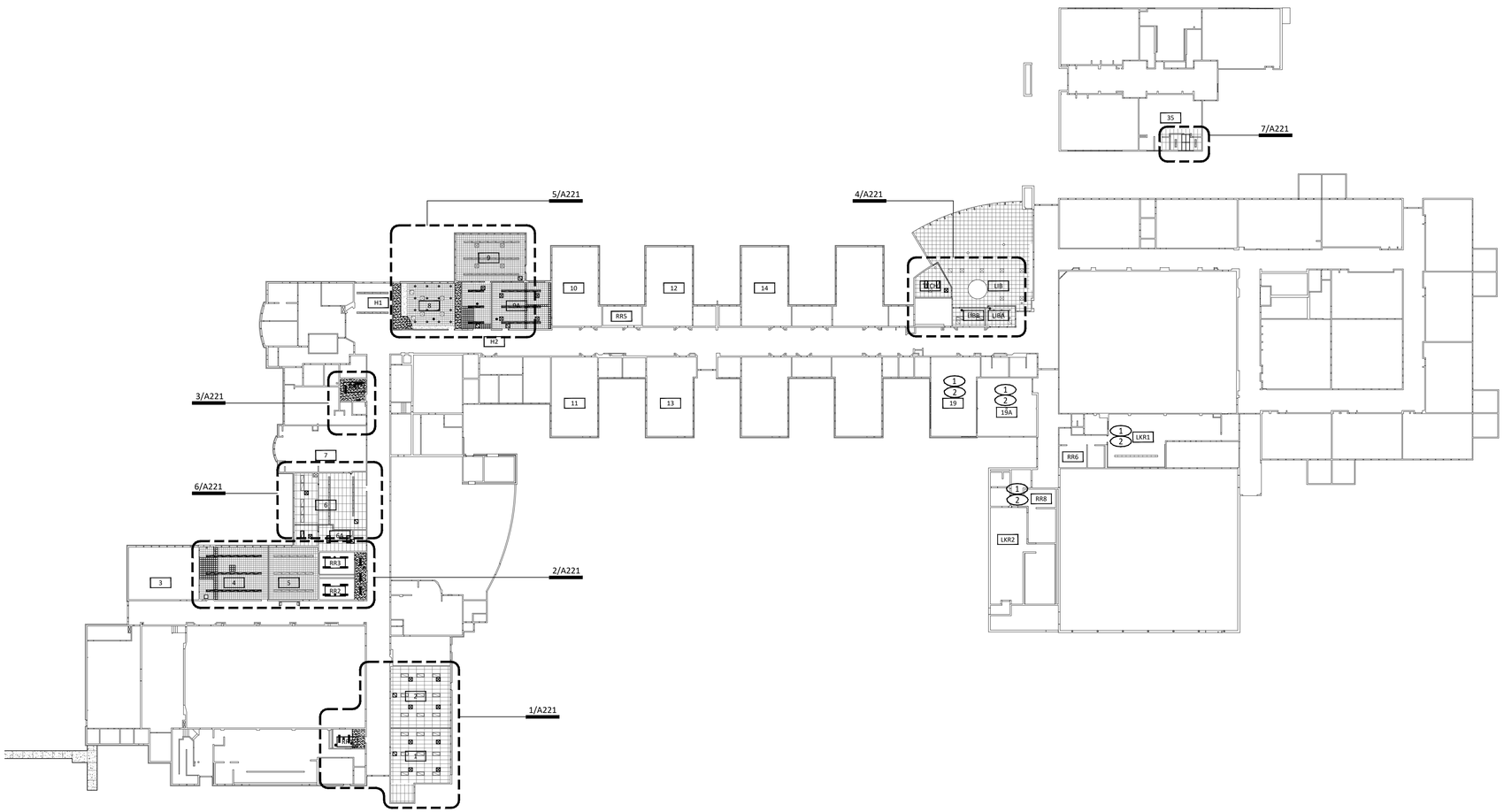
PARTIAL FLOOR PLAN

KMS

A214

KEY NOTES

1. PATCH CEILING TILE AS REQ'D FOR (N) WORK, MATCH (E)
2. MODIFY (E) HVAC SYSTEM AS REQ'D BY (N) WORK THIS AREA



1 OVERALL REFLECTED CEILING PLAN
1/32" = 1'-0"

0 4 8 16 32 64 NORTH

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REVISIONS

ESD 4J KELLY MIDDLE SCHOOL IMPROVEMENTS

850 HOWARD AVE, EUGENE OR 97404
CONSTRUCTION DOCUMENTS

JOB NO: 19189
ISSUE DATE: 3/3/2020

REFLECTED CEILING PLAN

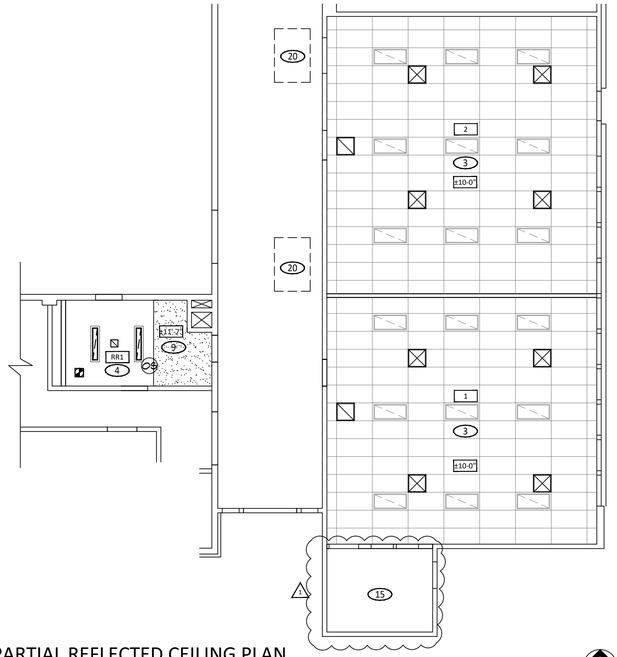
KMS

A220

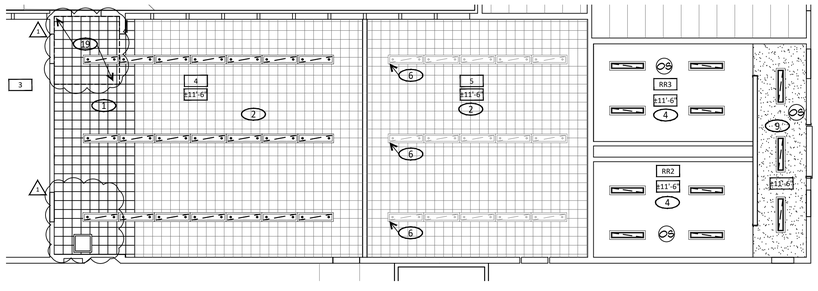
P:\19189 ESD 4J YG Relocation CDOA\02_Production\AutoCAD\19189 ESD 4J YG Relocation_Phase 05.dwg, 3/3/2020 1:45:44 PM

KEY NOTES

1. BOLD HATCH INDICATES EXTENT/(N) 12"X12" ACT-2 GLUE-ON CLG TILE TO MATCH ADJACENT ASSEMBLY
2. (E) 12" X 12" GLUE ON ACOUSTIC CEILING TILE THIS ROOM
3. (E) 2' - 0" X 4' - 0" SUSPENDED ACOUSTIC CEILING TILE AND GRID THIS ROOM
4. (E) GYPSUM BOARD CEILING THIS ROOM
5. (E) 2'-0" X 2'-0" SUSPENDED ACOUSTIC CEILING AND GRID THIS ROOM
6. (N) ENDCAP TRIM AT (E)/(R) LIGHT FIXTURE WHERE ADJACENT FIXTURE DEMOLISHED/RELOCATED
7. PATCH (E) GB SOFFIT WHERE DISPLAY DEMOLISHED
8. PATCH CLG TILE WHERE PROJECTOR DEMOLISHED
9. (N) GYP BD CEILING @ UNDERSIDE/(E) STRUCTURE
10. (E) SKYLIGHT
11. (N) GB FINISH @ HEADWALL WHERE SOFFIT DEMOLISHED, SEE 7-A800
12. (E) HEADWALL TO REMAIN
13. PATCH ACOUSTIC SUSPENDED CEILING ASSY AS REQ'D BY DEMOLITION
14. COPE (N) WALL AROUND (E) BEAM
15. (E) CLG TO REMAIN
16. (N) SUSPENDED GYP BD CLG ASSY
17. (N) SM FRAMED SOFFIT W/ GYP BD FINISH
18. ATTACH (N) WALL TO UNDERSIDE (E) SOFFIT FRAMING WHERE OCCURS -PROVIDE BLOCKING AS REQ'D
19. PROVIDE NEW GYP BD AT UNDERSIDE OF (E) FRAMING THIS LOCATION
20. DASH LINE INDICATES APPROX LOCATION/(N) HVAC EQUIPMENT @ (E) ATTIC MECHANICAL PLATFORM ABV CLG, SEE ALSO MECHANICAL -FASTEN TO (E) MECHANICAL PLATFORM W/ (4) ½ SDS @ EACH EQUIPMENT LEG W/ MIN 4" EMBED TO (E) JOIST

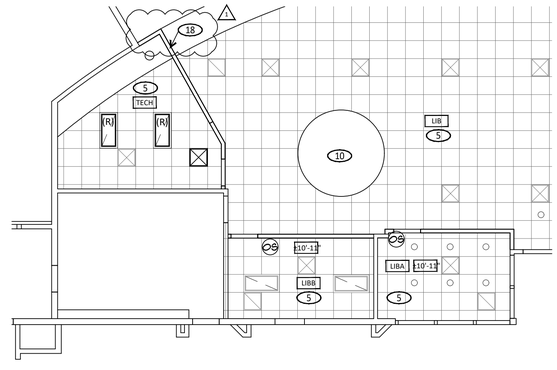


1 PARTIAL REFLECTED CEILING PLAN
1/8" = 1'-0"
NORTH
0 2 4 8 16

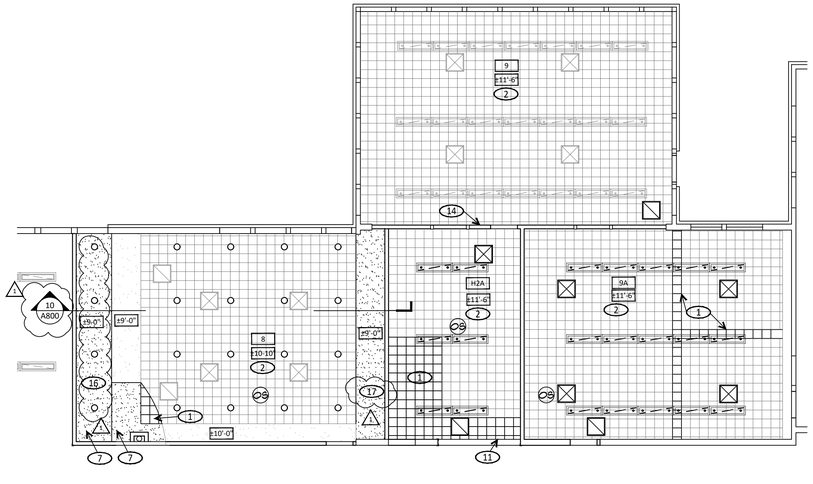


2 PARTIAL REFLECTED CEILING PLAN
1/8" = 1'-0"
NORTH

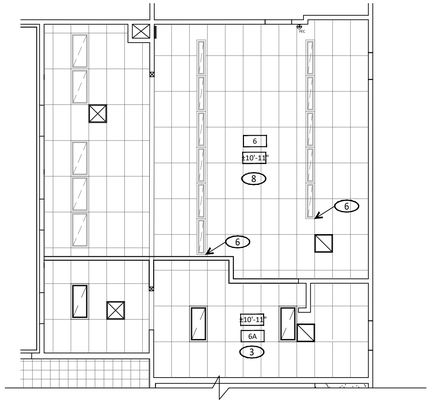
3 PARTIAL REFLECTED CEILING PLAN
1/8" = 1'-0"
NORTH



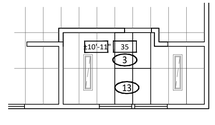
4 PARTIAL REFLECTED CEILING PLAN
1/8" = 1'-0"
NORTH



5 PARTIAL REFLECTED CEILING PLAN
1/8" = 1'-0"
NORTH



6 PARTIAL REFLECTED CEILING PLAN
1/8" = 1'-0"
NORTH



7 PARTIAL REFLECTED CEILING PLAN
1/8" = 1'-0"
NORTH

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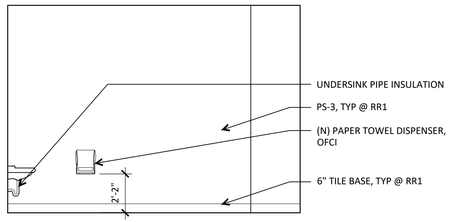
PARTIAL REFLECTED CEILING PLAN

KMS

A221



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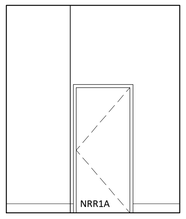
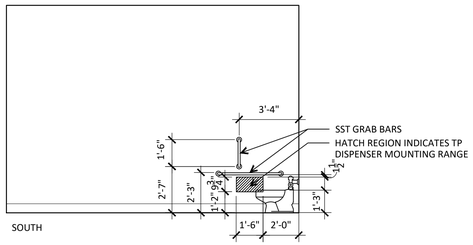
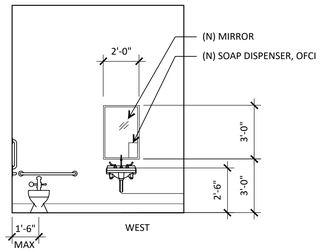


EAST



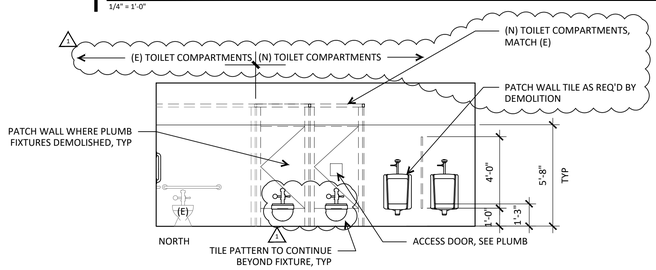
SOUTH



WEST

1 RESTROOM RR1

1/4" = 1'-0"



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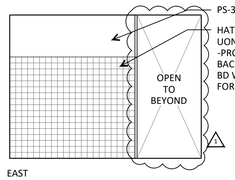

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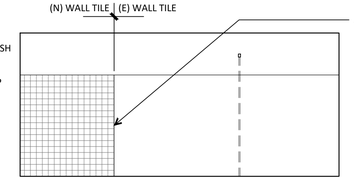

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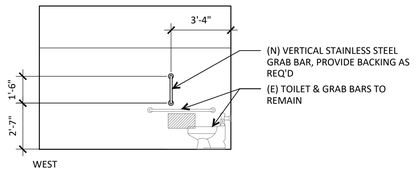
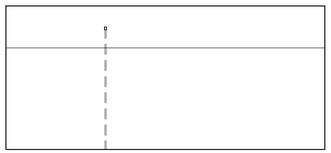


WEST

2 RESTROOM RR2

1/4" = 1'-0"

PROVIDE EACH RESTROOM STALL @ RR2: TOILET PAPER DISPENSER, OFCI
SEAT PROTECTOR DISPENSER, OFCI



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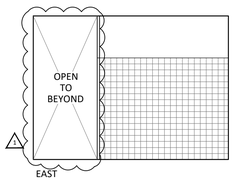
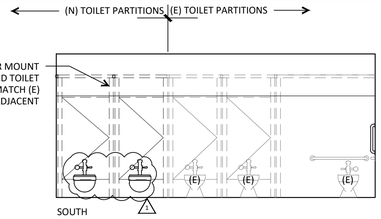
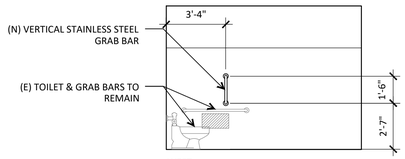


EAST



SOUTH

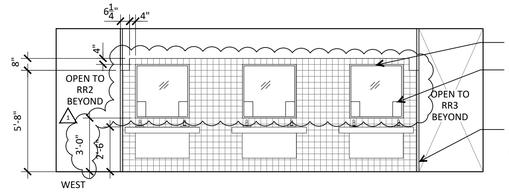


WEST

3 RESTROOM RR3

1/4" = 1'-0"

PROVIDE EACH RESTROOM STALL @ RR3: TOILET PAPER DISPENSER, OFCI
SEAT PROTECTOR DISPENSER, OFCI
SANITARY NAPKIN DISPOSAL, OFCI



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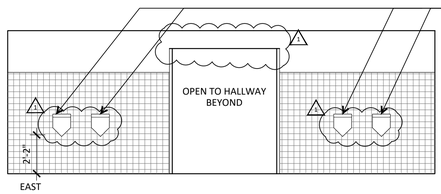
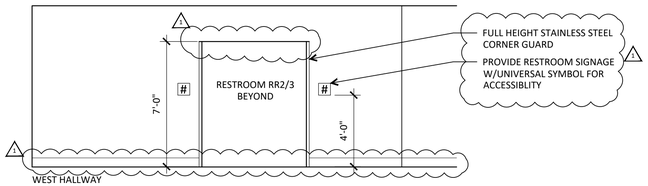


EAST

4 RESTROOM RR2/3 WASH

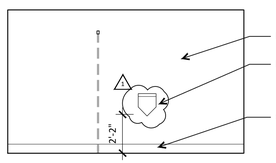
1/4" = 1'-0"



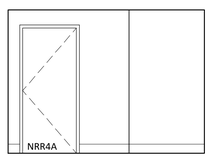
WEST HALLWAY

5 RESTROOM RR2/3 ENTRY

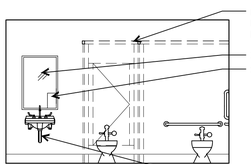
1/4" = 1'-0"



NORTH



EAST



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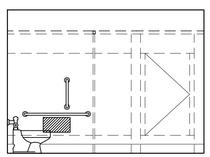
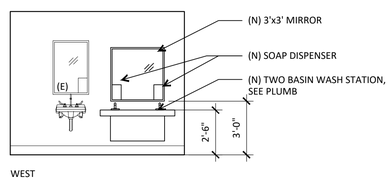


WEST

6 RESTROOM RR4

1/4" = 1'-0"

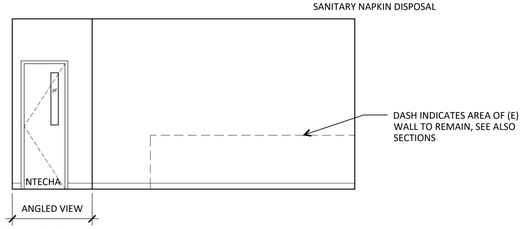


WEST

7 RESTROOM RR5

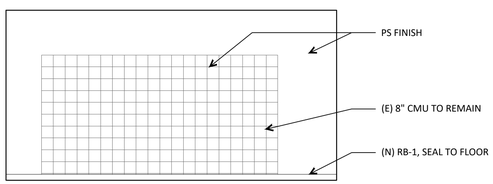
1/4" = 1'-0"

PROVIDE EACH RESTROOM STALL @ RR4: TOILET PAPER DISPENSER
SEAT PROTECTOR DISPENSER
SANITARY NAPKIN DISPOSAL



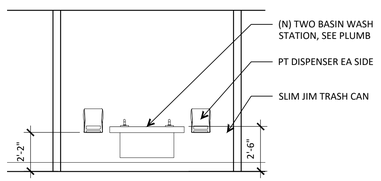
8 TECH ROOM

1/4" = 1'-0"



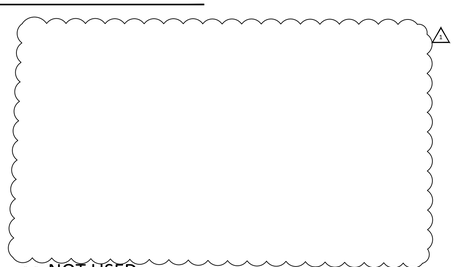
9 RR8

1/4" = 1'-0"



10 HALL, CLASSROOM 5

1/4" = 1'-0"



11 NOT USED

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850 HOWARD AVE, EUGENE OR 97404
CONSTRUCTION DOCUMENTS

JOB NO: 19189
ISSUE DATE: 3/3/2020

INTERIOR ELEVATIONS

KMS

A310

Casework ID		Size (LxDxH)	NOTES
SL 2	A	10'-3" x 1'-3" x 6'-7"	
	B	3'-10" x 2'-4" x 6'-8"	
SL 9	A	3'-9" x 2'-5" x 6'-7"	
	B	17'-2" x 1'-6" x 2'-3"	
	C	9'-2" x 1'-6" x 2'-3"	
	D	8'-0" x 1'-4" x 4'-11"	
	E	6'-1" x 1'-4" x 6'-0"	
SL 10	A1	8'-1" x 2'-6" x 3'-0"	
	A2	8'-1" x 1'-0" x 2'-8"	2
	B1	8'-1" x 2'-6" x 3'-0"	
	B2	8'-1" x 1'-0" x 2'-8"	2
	C	17'-2" x 1'-2" x 2'-4"	
	D	9'-2" x 1'-2" x 2'-4"	
	E	4'-0" x 1'-0" x 4'-9"	
SL 11	A	3'-9" x 2'-5" x 6'-7"	
	B	8'-0" x 1'-0" x 3'-0"	
	D	2'-4" x 1'-6" x 6'-0"	
SL 12	A	3'-9" x 2'-5" x 6'-7"	5
	B	7'-8" x 1'-4" x 5'-0"	5
	C	7'-2" x 1'-4" x 3'-2"	5
	D	7'-0" x 1'-0" x 4'-0"	5
	E	17'-0" x 1'-0" x 2'-4"	5
	F	7'-0" x 1'-0" x 4'-0"	5
SL 13	A	7'-9" x 1'-4" x 5'-0"	4
	B	7'-9" x 1'-4" x 3'-0"	
	C	3'-0" x 1'-4" x 8'-0"	
	D	3'-0" x 1'-4" x 8'-0"	
	E	3'-9" x 2'-5" x 6'-7"	
	F	6'-0" x 1'-0" x 2'-6"	
	G	6'-0" x 1'-0" x 2'-6"	
	I	7'-10" x 2'-0" x 2'-6"	
	J	7'-9" x 1'-4" x 5'-6"	
SL 14	A	3'-9" x 2'-5" x 6'-7"	
	B	8'-0" x 1'-4" x 3'-3"	2
	C	8'-0" x 1'-4" x 3'-3"	2
	D	8'-0" x 1'-2" x 3'-2"	4
	E	8'-0" x 1'-2" x 3'-2"	4
	F	2'-6" x 1'-0" x 4'-0"	
	G	2'-6" x 1'-0" x 4'-0"	
	H	4'-0" x 1'-4" x 6'-9"	
	I	8'-0" x 1'-2" x 3'-4"	
	J	8'-10" x 1'-0" x 2'-4"	
	K	10'-0" x 1'-0" x 2'-4"	4
	L	8'-0" x 1'-0" x 3'-4"	6
SL 15	A	3'-9" x 2'-5" x 6'-7"	
	C	7'-0" x 1'-0" x 4'-0"	
	D	4'-0" x 1'-0" x 5'-0"	
	E	2'-8" x 1'-0" x 5'-0"	
	F	12'-0" x 1'-0" x 2'-4"	
	G	9'-0" x 1'-0" x 2'-4"	
SL 16	A	3'-9" x 2'-5" x 6'-7"	
	B	8'-0" x 1'-4" x 3'-4"	2
	C	8'-0" x 1'-2" x 3'-4"	
	D	8'-0" x 1'-4" x 3'-4"	
	E	9'-4" x 1'-0" x 2'-4"	
	F	8'-0" x 1'-2" x 3'-4"	
SL 17	A	3'-9" x 2'-5" x 6'-7"	
	B	4'-0" x 2'-0" x 6'-9"	
	C	4'-0" x 2'-0" x 6'-9"	
	E	10'-6" x 1'-3" x 3'-8"	
	F	9'-4" x 1'-0" x 2'-4"	
SL 18	A	3'-9" x 2'-5" x 6'-7"	
	C	9'-4" x 1'-0" x 2'-4"	
	D	8'-0" x 1'-2" x 3'-4"	
	E1	8'-0" x 1'-4" x 6'-0"	
	E2	8'-0" x 1'-4" x 2'-1"	
	F1	8'-0" x 1'-4" x 6'-0"	
	F2	8'-0" x 1'-4" x 2'-1"	

Casework ID		Size (LxDxH)	NOTES
SL P1	A	8'-0" x 1'-2" x 3'4"	
	B	3'-5" x 2'-9" x 2'-9"	
	C	15'-11" x 1'6" x 2'-6"	
	D	5'-0" x 1'-0" x 4'-0"	
SL P2	A	8'-0" x 1'-2" x 3'-4"	
	B	3'-3" x 2'-5" x 6'-2"	
	C	3'-5" x 2'-9" x 2'-9"	
SL P4	A	8'-0" x 10" x 2'-8"	
	C	12'-0" x 1'-0" x 3'-0"	
	D	8'-0" x 2'-0" x 4'-4"	
	E	8'-0" x 2'-0" x 4'-4"	
	F	8'-0" x 2'-0" x 4'-4"	
	G	8'-0" x 2'-0" x 4'-4"	
	I	8'-0" x 2'-0" x 4'-4"	
	J	4'-0" x 2'-0" x 4'-4"	
	K	4'-0" x 2'-0" x 4'-4"	
	M	8'-0" x 1'-1" x 4'-4"	4
	M1	8'-0" x 1'-1" x 2'-0"	2
	N	8'-0" x 1'-1" x 4'-4"	
	N1	8'-0" x 1'-1" x 2'-0"	2
	O	8'-0" x 1'-1" x 4'-4"	
	O1	8'-0" x 1'-1" x 2'-0"	2
	P	3'-6" x 1'-1" x 4'-4"	
	P1	8'-0" x 1'-1" x 2'-0"	2
	Q	4'-1" x 1'-4" x 7'-1"	4
	R	SEE PLAN	4
	S	4'-0" x 2'-1" x 7'-3"	
	T	5'-1" x 1'-1" x 2'-8"	
	U	6'-0" x 1'-1" x 2'-8"	4

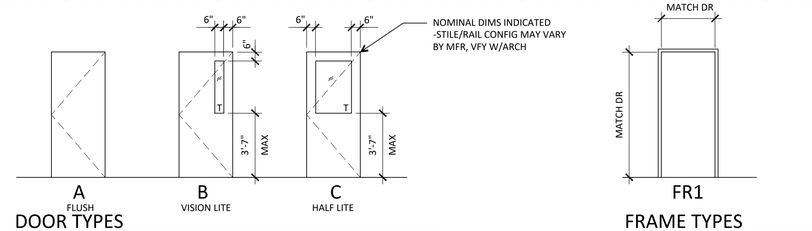
NOTES:
1. SEE PLAN FOR CASEWORK DIMENSIONS
2. UPPER CABINET
3. NURSE BED
4. FURR OUT ELECTRICAL DEVICE TO BACK/CABINET
5. CASEWORK FURRING DETAIL B/A700

FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR		WALLS								CEILING		NOTES
				NORTH		EAST		SOUTH		WEST				
		FLOOR	BASE	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	
RR1	RESTROOM	CT-1	CT-1	GB	PS-3	GB	PS-3	GB	PS-3	GB	PS-3	GB	PS-3	
1	CLASSROOM	-	-	GB	PS-2	(E)	PS-2	(E)	PS-2	(E)	PS-2	-	-	
2	CLASSROOM	-	-	(E)	PS-2	(E)	PS-2	GB	PS-2	(E)	PS-2	-	-	
3	CLASSROOM	-	-	(E)	PS-2	(E)	PS-2	(E)	PS-2	(E)	PS-2	-	-	
4	CLASSROOM	VCT-1	RB-1	(E)	PS-2	GB	PS-2	(E)	PS-2	(E)	PS-2	-	-	PATCH FLOORING AS REQ'D BY DEMOLITION
5	CLASSROOM	VCT-1	RB-1	(E)	PS-2	(E)	PS-2	(E)	PS-2	GB	PS-2	-	-	
RR2	RESTROOM	CT-4	CT-4	(E)	PS-3	TBB / GB	CT-1,2,3 / PS-3	(E) / TBB	CT-1,2,3 / PS-3	(E)	PS-3	(E)	PS-3	SEE ELEVATIONS, MATCH EXISTING TILE COLOR MIX
RR3	RESTROOM	CT-4	CT-4	(E)	PS-3	TBB / GB	CT-1,2,3 / PS-3	(E)	PS-3	(E)	PS-3	(E)	PS-3	SEE ELEVATIONS, MATCH EXISTING TILE COLOR MIX
6A	WORK ROOM	-	-	GB	PS-2	(E)	PS-2	GB	PS-2	(E)	PS-2	-	-	
6	CLASSROOM	-	-	(E)	PS-2	(E)	PS-2	GB	PS-2	(E)	PS-2	-	-	
7	CLASSROOM	-	-	(E)	PS-2	(E)	PS-2	(E)	PS-2	(E)	PS-2	-	-	
RR4	RESTROOM	CT-4	CT-4	GB	PS-3	GB	PS-3	GB	PS-3	GB	PS-3	GB	PS-3	
RR5	RESTROOM	-	-	-	-	TBB/GB	CT-1,2,3 / PS-3	-	-	-	-	-	-	PATCH WALL AS REQ'D BY DEMOLITION, MATCH EXISTING TILE COLOR MIX
8	LIBRARY	CPT-1	RB-1	(E)	PS-2	GB	PS-3	GB	PS-2	GB	PS-2	GB	PS-2	PATCH FLOORING, CEILING, & WALLS AS REQ'D BY DEMOLITION
9A	CLASSROOM	-	-	GB	PS-2	(E)	PS-2	(E)	PS-2	GB	PS-2	-	-	
9	CLASSROOM	CPT-1	RB-1	(E)	PS-2	GB	PS-2	GB	PS-2	(E)	PS-2	-	-	PATCH FLOORING @ CLASSROOM ENTRY
10	CLASSROOM	-	-	(E)	PS-2	(E)	PS-2	(E)	PS-2	(E)	PS-2	-	-	
11	CLASSROOM	-	-	(E)	PS-2	(E)	PS-2	(E)	PS-2	(E)	PS-2	-	-	
12	CLASSROOM	-	-	(E)	PS-2	(E)	PS-2	(E)	PS-2	(E)	PS-2	-	-	
13	CLASSROOM	-	-	(E)	PS-2	(E)	PS-2	(E)	PS-2	(E)	PS-2	-	-	
LIB	LIBRARY	CPT-1	RB-2	(E)	PS-2	(E)	PS-2	GB	PS-2	GB	PS-2	-	-	PATCH CPT-2 @ (N) TECH OFFICE WALL ASSY
LIBA	OFFICE	-	-	GB	PS-2	(E)	PS-2	(E)	PS-2	(E)	PS-2	-	-	
LIBB	OFFICE	-	-	GB	PS-2	(E)	PS-2	(E)	PS-2	(E)	PS-2	-	-	
TECH	OFFICE	(E)	RB-1	GB	PS-2	(E)	PS-2	(E)	PS-2	GB	PS-2	ACT-1	-	PATCH ACT-1 AS REQ'D BY LIGHT FIXTURE & DIFFUSER RELOCATION
19	CLASSROOM	CPT-1	RB-1	(E)	PS-2	GB	PS-2	(E)	PS-2	(E)	PS-2	-	-	
19A	CLASSROOM	CPT-1	RB-1	(E)	PS-2	(E)	PS-2	(E)	PS-2	GB	PS-2	-	-	
35	CLASSROOM	-	-	(E)	PS-2	(E)	PS-2	GB	PS-2	(E)	PS-2	-	-	
RR8	RESTROOM	-	-	(E)	PS-3	(E)	PS-3	GB	PS-3	GB	PS-3	-	-	
LKR2	LOCKER ROOM	-	-	GB	PS-3	GB	PS-3	(E)	PS-3	(E)	PS-3	-	-	
H1	HALL	-	-	-	-	GB	PS-2	-	-	-	-	-	-	FINISH SCOPE @ NEW WALL ASSY
H2	HALL	-	-	GB	PS-2	-	-	-	-	-	-	-	-	FINISH SCOPE @ NEW WALL ASSY
H2A	HALL	CPT-1	RB-1	GB	PS-2	GB	PS-2	GB	PS-2	GB	PS-2	GB	PS-2	

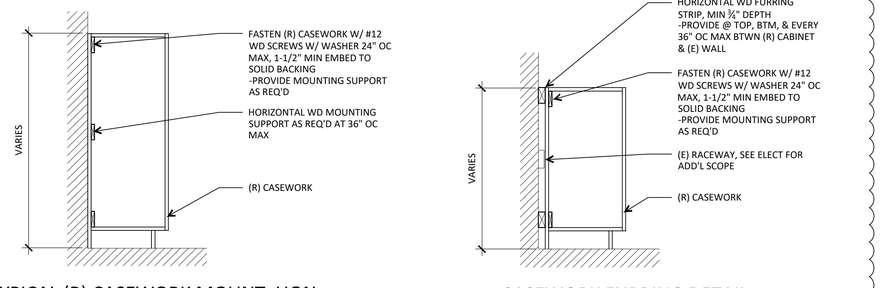
DOOR SCHEDULE

MARK	DOOR SIZE WIDTH	SIZE HEIGHT	SIZE THICKNESS	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	FIRE RATING	HARDWARE SET	COMMENTS
N1A	3'-0"	7'-0"	1-3/4"	C	SCWD	FF	FR1	HM	PS		2	
NRR1A	3'-0"	7'-0"	1-3/4"	A	SCWD	FF	FR1	HM	PS		1	
N4A	3'-0"	6'-8"	1-3/4"	C	SCWD	FF	FR1	HM	PS		2	
NRR4A	3'-0"	7'-0"	1-3/4"	A	SCWD	FF	FR1	HM	PS		4	
N6A	3'-0"	6'-8"	1-3/4"	C	SCWD	FF	FR1	HM	PS		2	
N8A	3'-0"	7'-0"	1-3/4"	C	SCWD	FF	FR1	HM	PS		2	
N9A	3'-0"	7'-0"	1-3/4"	C	SCWD	FF	FR1	HM	PS		2	
N9AA	3'-0"	7'-0"	1-3/4"	C	SCWD	FF	FR1	HM	PS		2	
NTECHA	3'-0"	7'-0"	1-3/4"	B	SCWD	FF	FR1	HM	PS		3	
NLIBAA	3'-0"	7'-0"	1-3/4"	C	SCWD	FF	FR1	HM	PS		3	
NLIBBA	3'-0"	7'-0"	1-3/4"	C	SCWD	FF	FR1	HM	PS		3	
NLKR1A	3'-0"	7'-0"	1-3/4"	C	SCWD	FF	FR1	HM	PS		4A	
NRR8A	3'-0"	7'-0"	1-3/4"	A	SCWD	FF	FR1	HM	PS		4	
ERR5A	E	E	E	E	E	E	E	E	E		5	
N35A	3'-0"	7'-0"	1-3/4"	C	SCWD	FF	FR1	HM	PS		3	
NH1	-	-	-	-	-	-	FR1	HM	PS		-	HM CASED OPENING, VFY DIMS



DOOR TYPES
1/4" = 1'-0"

FRAME TYPES
1/4" = 1'-0"



A TYPICAL (R) CASEWORK MOUNT, UON
3/4" = 1'-0"

B CASEWORK FURRING DETAIL
3/4" = 1'-0"

GMA ARCHITECTS
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REGISTERED ARCHITECT
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6033
STATE OF OREGON

REVISIONS
1 3/17/2020 ADD. 1

ESD 4J KELLY MIDDLE SCHOOL IMPROVEMENTS

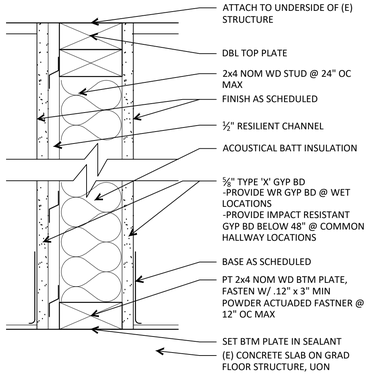
850 HOWARD AVE, EUGENE OR 97404
CONSTRUCTION DOCUMENTS

JOB NO: 19189
ISSUE DATE: 3/3/2020

DOOR SCHEDULE

KMS

A700



A TYPICAL WALL TYPE, UON

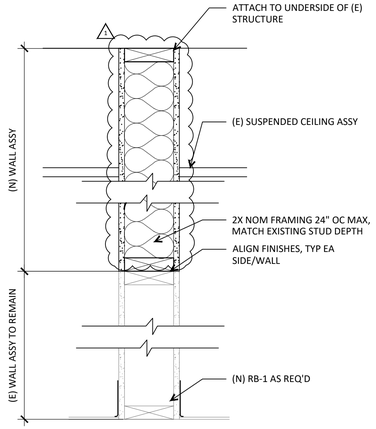
3"=1'-0"

A1 — 2x6 NOM WD STUDS IN LIEU OF 2x4

A2 — -OMIT RC CHANNEL
-OMIT ACOUSTIC BATT INSULATION

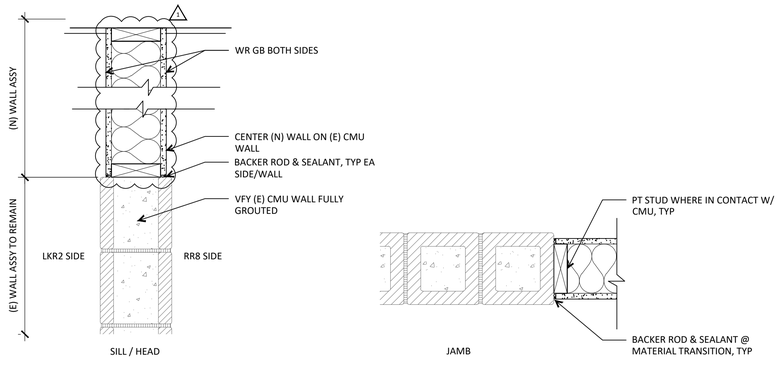
A3 — -2x6 WD STUDS @ 16" OC MAX
-OMIT RC CHANNEL
-TILE BACKER BOARD IN LIEU OF GYP WHERE WALL TILE SCHEDULED

NOTE: 20 GAUGE SM STUDS ACCEPTABLE IN LIEU OF WOOD FRAMING, PROVIDE HEAVIER GAUGE IF REQ'D FOR SPAN & DEFLECTION TOLERANCES



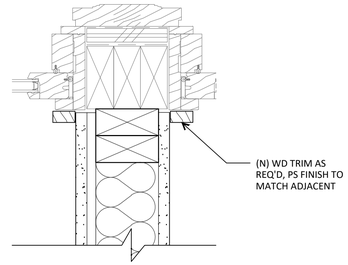
1 LIBRARY / TECH WALL

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



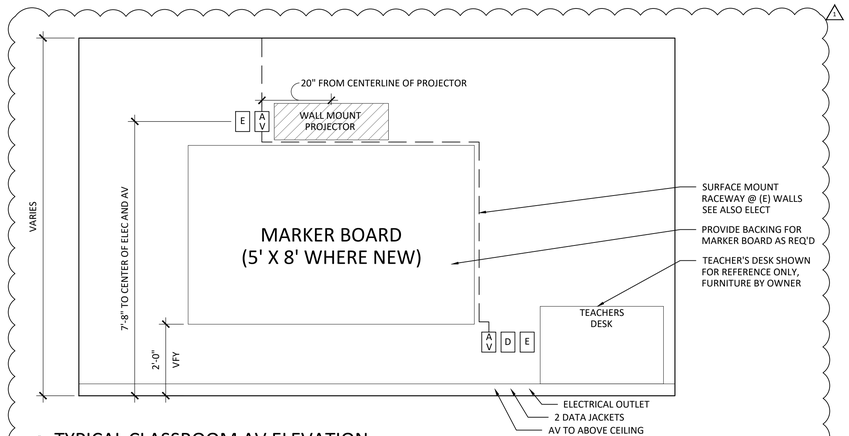
2 LOCKER ROOM WALL

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



3 WALL CONNECTION

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



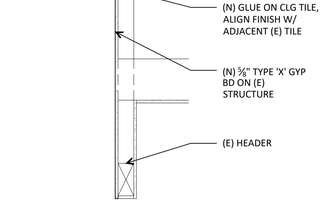
4 TYPICAL CLASSROOM AV ELEVATION

1/2" = 1'-0"

5 NOT USED

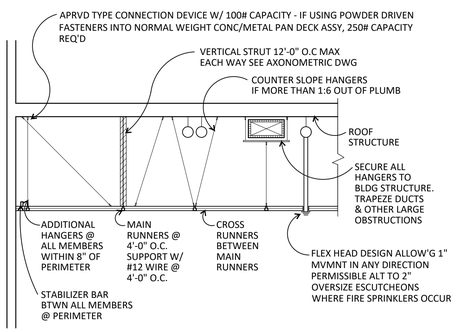
1-1/2" = 1'-0"

6 NOT USED



7 HALL 2A SOFFIT DETAIL

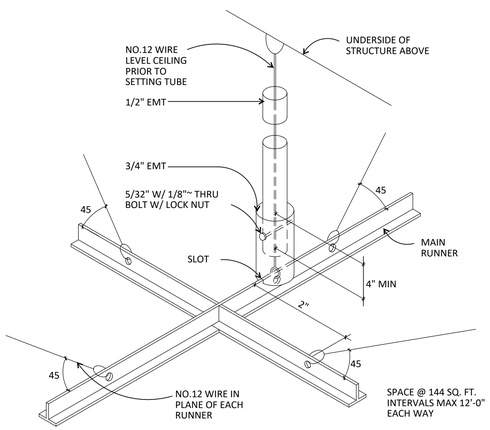
1-1/2" = 1'-0"



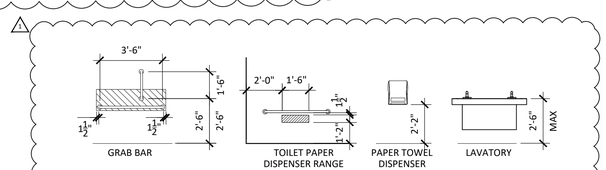
SUSPENDED CEILINGS SHALL BE FURNISHED AND INSTALLED PER CISCA STANDARDS AND THE ADDITIONAL REQUIREMENTS LISTED IN ASCE 7-10. UNLESS CEILING CLOUD DESIGN PROPOSED, SECURE GRID @ (2) SIDES MIN. TO WALLS OR HEADWALLS & INTERRUPT AREAS GREATER THAN 2,500 SQ FT W/ SEISMIC SEPARATION JT OR WALL/SOFFIT AS INDICATED IN PLANS. FOR CLOUD ASSY'S, PROVIDE ADD'L DESIGN DETAILING & ENGINEERING AS REQ'D BY AUTHORITIES HAVING JURISDICTION

8 TYPICAL SUSPENDED CEILING ASSY

1/4" = 1'-0"

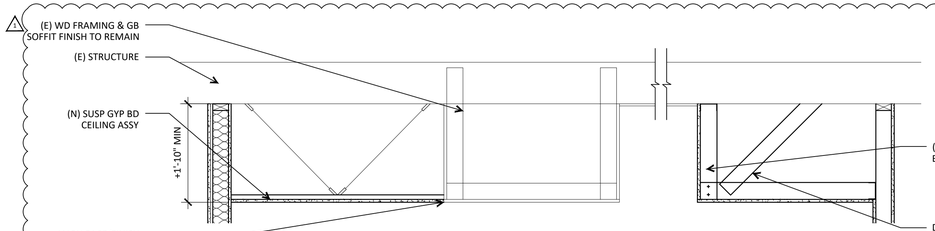


NOTE: SET TUBE STRUT TIGHT TO CEILING GRID & STRUCTURE. INSTALL THRU BOLT TO SECURE TUBES LAP 4" MIN IN FULLY EXTENDED POSITION



9 TYPICAL MOUNTING HEIGHTS

1/4" = 1'-0"



10 CLASSROOM 8 SOFFIT DETAIL

3/4" = 1'-0"

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DETAILS

A800

KMS

STANDARD PLUMBING ABBREVIATIONS

AF	AIRFOIL	IE	INVERT ELEVATION
AFF	ABOVE FINISHED FLOOR	IN	INCH(ES)
AHP	APPARATUS HOUSING PLENUM	INSUL	INSULATION
ALT	ALTERNATIVE	ISOL	ISOLAT(OR)(ION)
AL	ALUMINUM	KW	KILOWATT
APD	AIR PRESSURE DROP	KWH	KILOWATT HOUR
APPROX	APPROXIMATELY	L	LENGTH
ARCH	ARCHITECT(URAL)	LAT	LEAVING AIR TEMP
AUTO	AUTOMATIC	LB	POUND
BDD	BACKDRAFT DAMPER	LDB	LEAVING DRY BULB
BI	BACKWARD INCLINED	LF	LINEAR FEET
BLDG	BUILDING	LFT	LEAVING FLUID TEMPERATURE
BSMT	BASEMENT	LVG	LEAVING
BTU	BRITISH THERMAL UNIT	LWB	LEAVING WET BULB
BTUH	BRITISH THERMAL UNITS PER HOUR	LWT	LEAVING WATER TEMPERATURE
CFH	CUBIC FEET PER HOUR	MAX	MAXIMUM
CFM	CUBIC FEET PER MINUTE	MBH	THOUSAND BTU PER HOUR
CFS	CUBIC FEET PER SECOND	MECH	MECHANICAL
CLG	CEILING OR COOLING	MFR	MANUFACTURER
CONC	CONCRETE	MIN	MINIMUM
CONN	CONNECT(ION)	MISC	MISCELLANEOUS
CONT	CONTINUE(ED)(UATION)	MTD	MOUNTED
CL	CENTERLINE	NC	NORMALLY CLOSED
DDC	DIRECT DIGITAL CONTROL	NIC	NOT IN CONTRACT
DEFL	DEFLECTION	NO	NORMALLY OPEN
DN	DOWN	OAD	OUTSIDE AIR DAMPER
DP	DEW POINT	OC	ON CENTER DISTANCE
DWDI	DOUBLE WIDTH DOUBLE INLET	OSA	OUTSIDE AIR
DWG	DRAWING	PH	PHASE
EA	EXHAUST AIR	PP	POLYPROPYLENE
EAD	EXHAUST AIR DAMPER	PSI	POUNDS PER SQUARE INCH
EAT	ENTERING AIR TEMPERATURE	PVC	POLYVINYL CHLORIDE
EDB	ENTERING DRY BULB	PVS	PVC COATED STEEL
EFF	EFFICIENCY	R (RAD)	RADIUS
EFT	ENTERING FLUID TEMPERATURE	RA	RETURN AIR
ELEC	ELECTRIC(AL)	RAD	RETURN AIR DAMPER
ELEV	ELEVATION	REV	REVISION
ENGR	ENGINEER	RH	RELATIVE HUMIDITY
EQ	EQUAL	RPM	REVOLUTIONS PER MINUTE
EQUIP	EQUIPMENT	SA	SUPPLY AIR
ESP	EXTERNAL STATIC PRESSURE	SCFM	STANDARD CUBIC FEET PER MINUTE
EWB	ENTERING WET BULB	SD	SMOKE DAMPER
EWT	ENTERING WATER TEMPERATURE	SECT	SECTION
EX	EXTRACTOR	SENS	SENSIBLE
EXH	EXHAUST	SIM	SIMILAR
EXIST	EXISTING	SP	STATIC PRESSURE
EXP	EXPANSION	SPEC	SPECIFICATION
F	DEGREES FAHRENHEIT	SQ	SQUARE
FC	FORWARD CURVED	SF	SQUARE FOOT(FEET)
FIG	FIGURE	SQ IN	SQUARE INCH(ES)
FILT	FILTER	SS	STAINLESS STEEL
FLEX	FLEXIBLE	STL	STEEL
FPD	FLUID PRESSURE DROP	STRUCT	STRUCTUR(E)(AL)
FPM	FEET PER MINUTE	SWP	SINGLE WALL PLENUM
FPS	FEET PER SECOND	SWSI	SINGLE WIDTH SINGLE INLET
FT	FEET/FOOT	TEMP	TEMPERATURE
FTR	FINNED TUBE RADIATOR	TSP	TOTAL STATIC PRESSURE
FU	FIXTURE UNIT	TYP	TYPICAL
FUT	FUTURE	V	VOLTS
FV	FACE VELOCITY	VD	VOLUME DAMPER
GA	GAGE/GAUGE	VEL	VELOCITY
GAL	GALLON	VERT	VERTICAL
GALV	GALVANIZED	VFD	VARIABLE FREQUENCY DRIVE
GLY	GLYCOL	VTR	VENT THROUGH ROOF
GPH	GALLONS PER HOUR	W	WIDTH
GPM	GALLONS PER MINUTE	WG	WATER GAUGE
H	HEIGHT	WPD	WATER PRESSURE DROP
HORIZ	HORIZONTAL	WTD	WATER TEMPERATURE DROP
HP	HORSEPOWER	WTR	WATER TEMPERATURE RISE
HTG	HEATING	W/	WITH
ID	INSIDE(DIAMETER/DIMENSION)	W/O	WITHOUT

MISC. FITTINGS & SYMBOLS

- DIRECTION OF FLOW
- DIRECTION OF SLOPE
- PIPE SLEEVE
- REDUCER
- ANCHOR
- ELBOW (90°)
- ELBOW (45°)
- TEE
- CROSS
- PIPING CONNECTIONS
- JOINT OR COUPLING POINT
- UNION
- FLANGED CONNECTION
- CAP
- PLUG OR BLIND FLANGE
- RISER
- ELBOW UP
- ELBOW DOWN
- TEE UP
- TEE DOWN
- HORIZONTAL TEE
- FLEXIBLE CONNECTION
- BALL JOINT
- MC — MECHANICAL COUPLING

PLUMBING SYMBOLS

- TB — THRUST BLOCK
- CO — CLEANOUT
- WCO — WALL CLEANOUT
- FCO — FLOOR CLEANOUT
- CTG — CLEANOUT TO GRADE
- FD — FLOOR DRAIN
- AD — AREA DRAIN
- CB — CATCH BASIN
- FS — FLOOR SINK
- RD — ROOF DRAIN
- OD — OVERFLOW DRAIN
- DOWNSPOUT NOZZLE
- TD — TRENCH DRAIN
- MH — MANHOLE (INVERTS IN & OUT)

I.E. _____ I.E. _____

DEMOLITION LEGEND

- REMOVE EXISTING PIPE

NEW AND EXISTING WORK

- EXISTING WASTE (BELOW GRADE OR FLOOR)
- EXISTING COLD WATER
- NEW WASTE (BELOW GRADE OR FLOOR)
- NEW COLD WATER

GENERAL NOTE

THIS IS A STANDARD LEGEND SHEET, THEREFORE, SOME SYMBOLS MAY APPEAR ON THIS SHEET THAT DO NOT APPEAR ON THE DRAWINGS.

PLUMBING PIPING

W	W	WASTE (ABOVE GRADE OR FLOOR)
W	W	WASTE (BELOW GRADE OR FLOOR)
D	D	DRAIN (CONDENSATE/INDIRECT)
	V	VENT
	CW	COLD WATER
	HW	HOT WATER
	RHW	RECIRCULATING HOT WATER

FIRE PROTECTION SYMBOLS

F	FIRE PROTECTION
SPR	FIRE SPRINKLER
DP	DRY PIPE SPRINKLER
PA	PRE-ACTION SYSTEM
WSP	WET STANDPIPE
DSP	DRY STANDPIPE
CSP	COMBINATION STANDPIPE
FDC	FIRE DEPARTMENT CONNECTION
SRC	STANDPIPE ROOF CONNECTION
SO	STANDPIPE OUTLET
	UPRIGHT SPRINKLER HEAD
	PENDANT SPRINKLER HEAD
	SIDEWALL SPRINKLER HEAD
F	FLOW SWITCH
S	SUPERVISED SHUT-OFF VALVE
DPV	DRY PIPE VALVE ASSEMBLY
PAV	PRE-ACTION VALVE ASSEMBLY

SYMBOLS

A	ACCESS PANEL	K	CAP EXISTING / CAP FOR FUTURE
B	BELOW GRADE / FLOOR	R	RELOCATE EXISTING
C	CONNECT TO EXISTING	X	REMOVE EXISTING
E	EXISTING TO REMAIN	1	NOTE

FIRE PROTECTION DESIGN CRITERIA

NFPA 13 SHALL BE USED FOR THE LOCATION, SIZING, & INSTALLATION OF PIPING & SPRINKLER SYSTEMS UNLESS LOCAL FIRE MARSHAL OR OWNER'S INSURANCE UNDERWRITER REQUIREMENTS ARE MORE STRINGENT.

FIRE PROTECTION SPRINKLER DESIGN CRITERIA: (NFPA)
PROVIDE THE FOLLOWING HAZARD CLASSIFICATIONS AND DENSITIES PER CURRENT NFPA 13 STANDARDS:
- LIGHT HAZARD OCCUPANCIES: 0.10 GPM/FT2 DENSITY AT MOST REMOTE 1500 SQUARE FEET FOR PUBLIC AREAS.

DESIGN CUSHION: PROVIDE AN EXCESS OF 10 PSI ADDITIONAL PRESSURE REQUIREMENTS INCORPORATED INTO THE DESIGN OVER SPECIFIED PRESSURE REQUIREMENTS.

REFER TO DRAWINGS FOR ZONE TYPES, CALLOUTS AND ADDITIONAL SCOPE ITEMS.

PLUMBING DESIGN CRITERIA

DOMESTIC WATER PIPING SYSTEM:
BASIS OF DESIGN: 2017 OREGON PLUMBING SPECIALTY CODE, APPENDIX A 'RECOMMENDED RULES FOR SIZING THE WATER SUPPLY SYSTEM'. PIPING SIZED ON 4 PSI/100 FT. DROP, VELOCITIES NOT TO EXCEED 8 FT./SEC. (COLD WATER) AND NOT TO EXCEED 5 FT./SEC. (HOT WATER).

WASTE AND VENT PIPING SYSTEM:
BASIS OF DESIGN: 2017 OREGON PLUMBING SPECIALTY CODE, CHAPTER 7, 'SANITARY DRAINAGE'.
ALL WASTE PIPING SIZED AT 1/4"/FT. SLOPE UNLESS OTHERWISE NOTED.

ROOF DRAIN/STORM DRAIN PIPING SYSTEM:
BASIS OF DESIGN: 2017 OREGON PLUMBING SPECIALTY CODE, CHAPTER 11, 'STORM DRAINAGE'.
STORM DRAIN PIPING SIZED AT 1/8"/FT. SLOPE UNLESS OTHERWISE NOTED AND A RAINFALL RATE OF 1.3"/HR.

PLUMBING FIXTURE SCHEDULE

TAG NUMBER	FIXTURE TYPE	ROUGH-IN SIZE (INCHES) W	V	CW	HW	GPM/GPF	ELEC. CONNECTION	DESCRIPTION	NOTES
WC-1	WATER CLOSET	4	2	1-1/2	-	1.28	N	WALL HUNG, MANUAL FLUSH VALVE	
WC-2	WATER CLOSET	4	2	1-1/2	-	1.28	N	WALL HUNG, MANUAL FLUSH VALVE, ADA	
U-1	URINAL	2	1-1/2	1-1/4	-	0.5	N	WALL HUNG, MANUAL FLUSH VALVE, ADA	
L-1	LAVATORY	2	1-1/2	1/2	1/2	0.5	N	WALL HUNG, 20-1/2" x 18-1/4", MANUAL FAUCET ADA	
WS-1	WASH STATION	2	1-1/2	1/2	1/2	1.0	N	WALL HUNG, TWO STATION 0.5GPM, ADA	1

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REVISIONS
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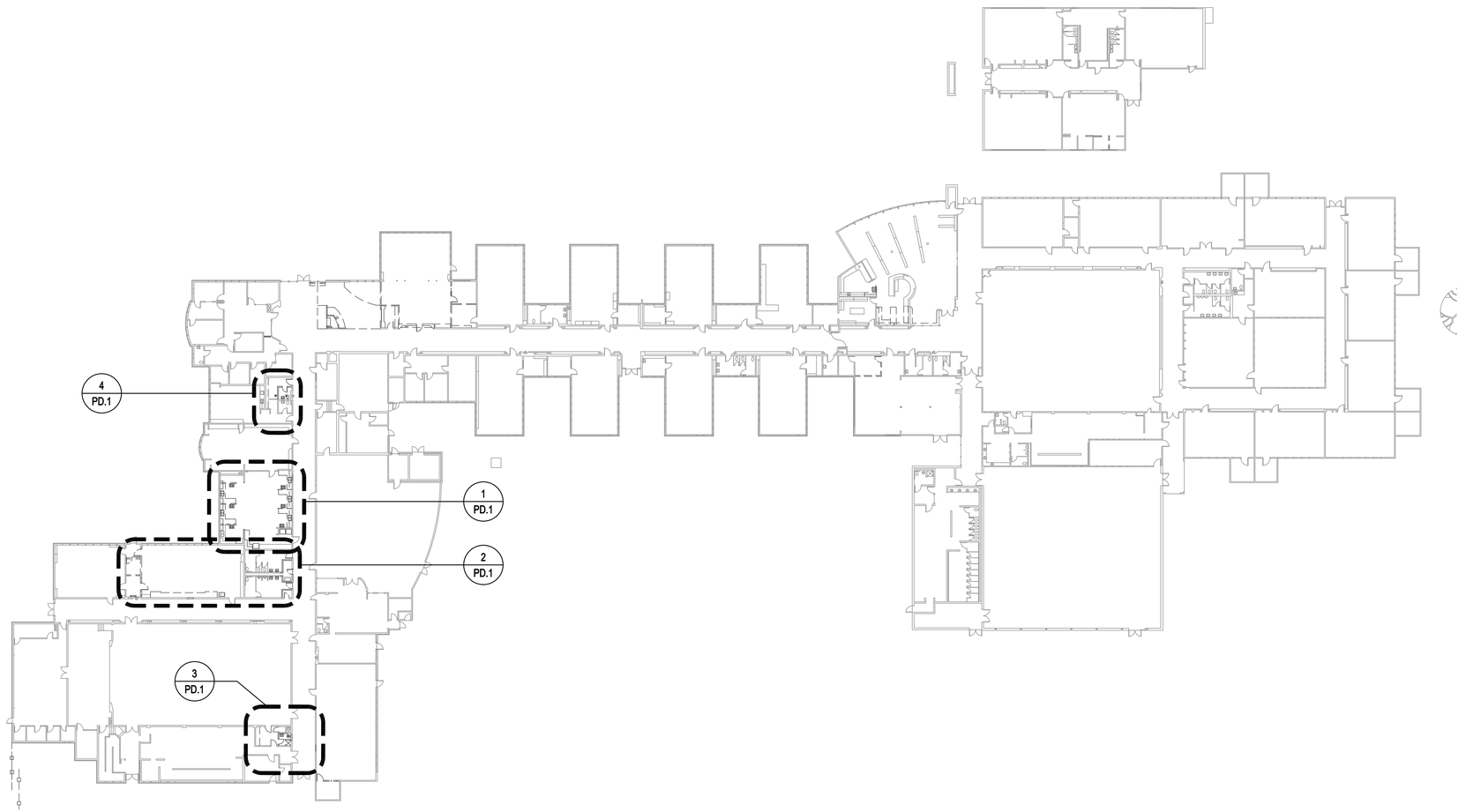
SYMBOLS, LEGENDS AND ABBREVIATIONS - PLUMBING

P0.0

KMS



1 PD.0 OVERALL DEMOLITION PLAN - PLUMBING
1/32" = 1'-0"

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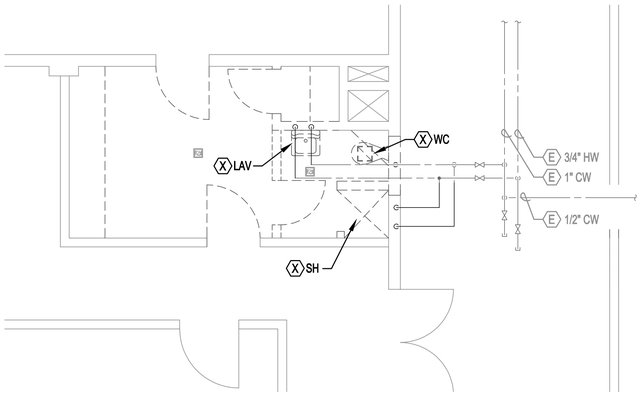
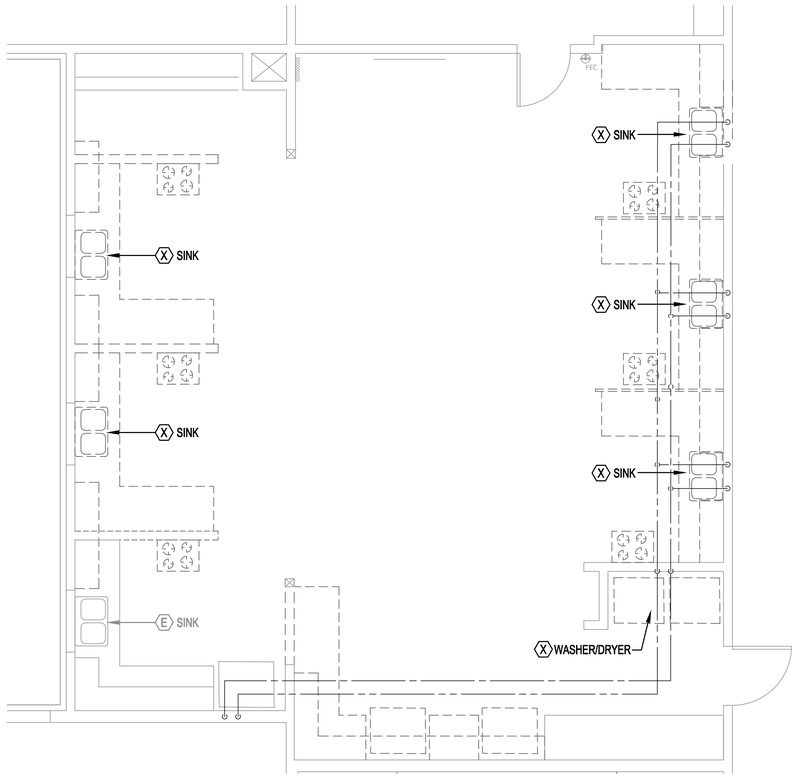
OVERALL DEMOLITION PLAN - PLUMBING

KMS

PD.0



3 PD.1 PARTIAL DEMOLITION - MECHANICAL
1/4" = 1'-0"



1 PD.1 PARTIAL DEMOLITION - MECHANICAL
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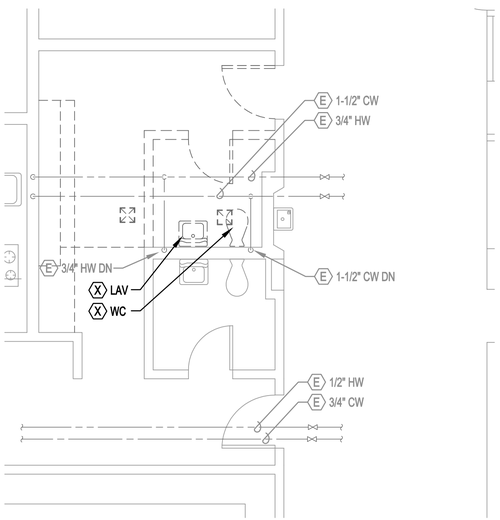
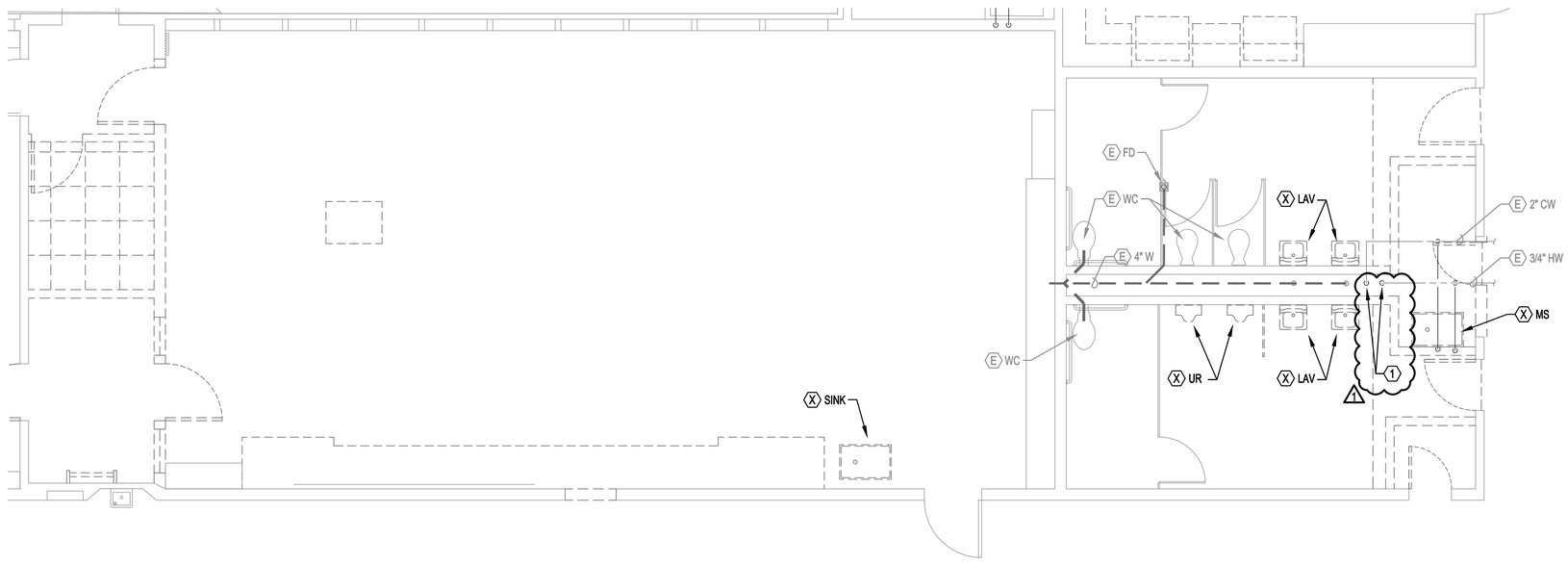


4 PD.1 PARTIAL DEMOLITION - MECHANICAL
1/4" = 1'-0"



2 PD.1 PARTIAL DEMOLITION - MECHANICAL
1/4" = 1'-0"

GENERAL NOTES:

A. VERIFY EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES BETWEEN DESIGN DOCUMENTS AND FIELD CONDITIONS.

B. REMOVE EQUIPMENT, PIPING AND ASSOCIATED ITEMS AS SHOWN OR RELATED TO EQUIPMENT TO BE REMOVED. CAP PIPING AT NEAREST LIVE BRANCH.

NOTES:

1. EXTEND DOMESTIC WATER PIPING INTO EXISTING PLUMBING CHASE. JANITOR SINK DELETED, CAP WASTE PIPING IN FLOOR AND CUT VENT PIPING BACK TO MAIN IN PLUMBING CHASE FOR NEW TIE-IN TO WASH STATIONS.

1

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PARTIAL DEMOLITION - PLUMBING

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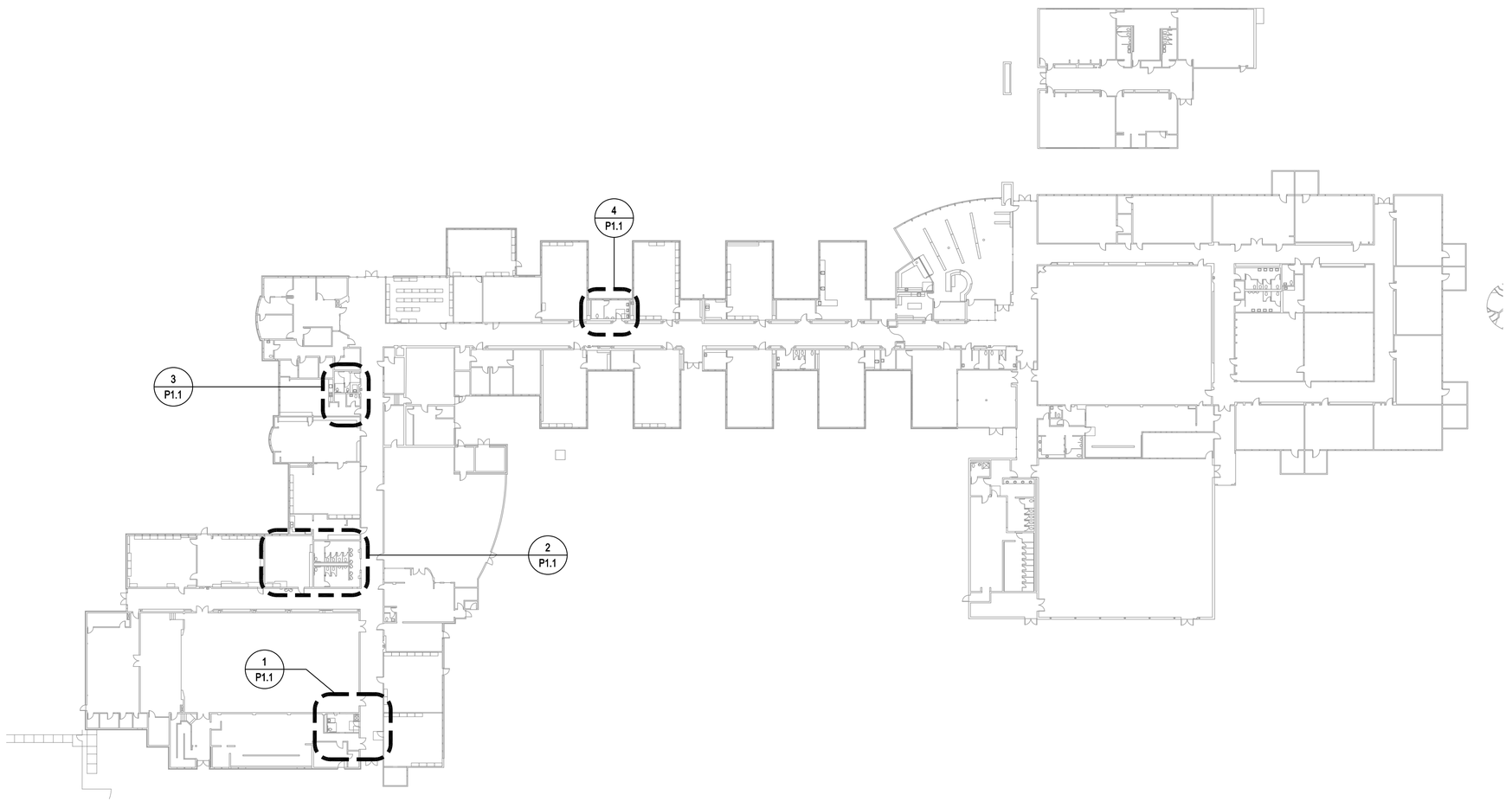
PD.1

GENERAL NOTES:

A. VERIFY EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES BETWEEN DESIGN DOCUMENTS AND FIELD CONDITIONS.

B. MODIFY EXISTING FIRE SPRINKLER SYSTEM WITH NEW SPRINKLER HEAD COVERAGE IN ACCORDANCE WITH NFPA 13 AND OREGON FIRE CODE REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR FULL EXTENT OF CEILING REMODEL SCOPE AREAS.



1 P1.0 OVERALL FLOOR PLAN - PLUMBING
1/32" = 1'-0"

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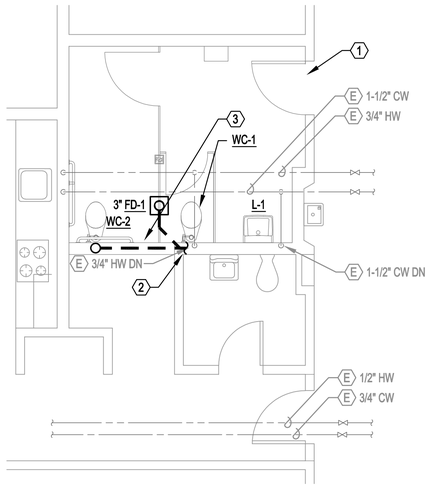
OVERALL FLOOR PLAN - PLUMBING

KMS

P1.0



3 P1.1 ENLARGED PARTIAL FLOOR PLAN - PLUMBING
1/4" = 1'-0"

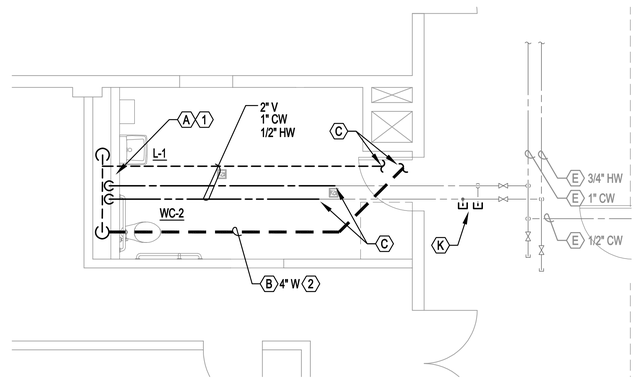
NORTH

NOTES:

1. NEW RESTROOM PLUMBING FIXTURES TO BE INSTALLED AS INDICATED, PROVIDE TIE-IN TO EXISTING PIPING ROUGH-INS IN PLUMBING WALL. PROVIDE NEW WALL CARRIERS FOR WALL MOUNTED FIXTURES. REFER TO PLUMBING FIXTURE SCHEDULE FOR CONNECTION SIZES.

2. PROVIDE TIE-IN TO EXISTING WASTE PIPING BELOW FLOOR SLAB. VERIFY WASTE PIPING LOCATION PRIOR TO SAWCUTTING. REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR SAWCUTTING AND CONCRETE PATCHING REQUIREMENTS.

3. PROVIDE MECHANICAL TRAP PRIMER IN WALL FOR NEW FLOOR DRAIN, PRESSURE DROP ACTIVATED, BASIS OF DESIGN SIOUX CHIEF PRIME PERFECT.



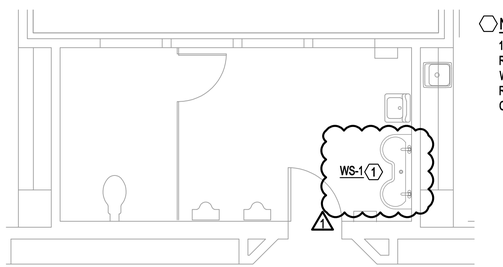
1 P1.1 ENLARGED PARTIAL FLOOR PLAN - PLUMBING
1/4" = 1'-0"

NORTH

NOTES:

1. PROVIDE WATER HAMMER ARRESTOR WITH ACCESS PANEL.

2. PROVIDE TIE-IN TO EXISTING WASTE PIPING CONNECTIONS BELOW FLOOR SLAB. VERIFY WASTE PIPING LOCATION PRIOR TO SAWCUTTING. REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR SAWCUTTING AND CONCRETE PATCHING REQUIREMENTS.

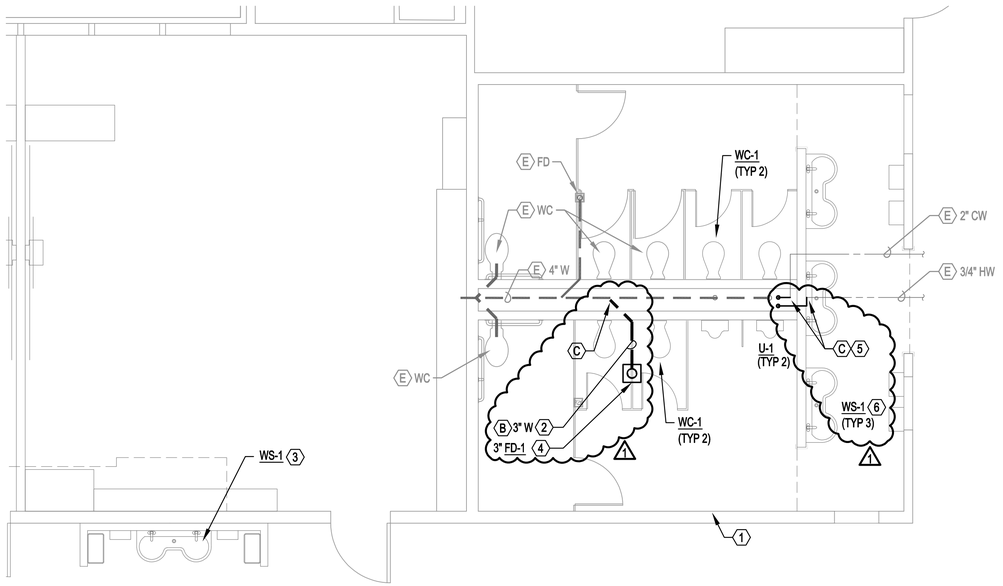


4 P1.1 ENLARGED PARTIAL FLOOR PLAN - PLUMBING
1/4" = 1'-0"

NORTH

NOTES:

1. PROVIDE TIE-IN TO EXISTING PIPING ROUGH-INS IN PLUMBING WALL. PROVIDE NEW WALL CARRIERS FOR WALL MOUNTED FIXTURE. REFER TO PLUMBING FIXTURE SCHEDULE FOR CONNECTION SIZES.



2 P1.1 ENLARGED PARTIAL FLOOR PLAN - PLUMBING
1/4" = 1'-0"

NORTH

NOTES:

1. NEW RESTROOM PLUMBING FIXTURES TO BE INSTALLED AS INDICATED, PROVIDE TIE-IN TO EXISTING PIPING ROUGH-INS IN PLUMBING WALL. PROVIDE NEW WALL CARRIERS FOR WALL MOUNTED FIXTURES. REFER TO PLUMBING FIXTURE SCHEDULE FOR CONNECTION SIZES.

2. PROVIDE TIE-IN TO EXISTING WASTE PIPING BELOW FLOOR SLAB. VERIFY WASTE PIPING LOCATION PRIOR TO SAWCUTTING. REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR SAWCUTTING AND CONCRETE PATCHING REQUIREMENTS.

3. CONNECT TO EXISTING DOMESTIC WATER, SANITARY WASTE AND VENT IN WALL.

4. PROVIDE MECHANICAL TRAP PRIMER IN WALL FOR NEW FLOOR DRAIN, PRESSURE DROP ACTIVATED, BASIS OF DESIGN SIOUX CHIEF PRIME PERFECT.

5. EXTEND EXISTING DOMESTIC WATER PIPING INTO PLUMBING CHASE WITH ISOLATION VALVES AND ACCESS PANELS. PROVIDE RUNOUTS TO FIXTURES.

6. ROUTE WASTE AND VENT PIPING ABOVE FLOOR IN WALL TO NEW WASH STATIONS. CONNECT TO EXISTING MAINS IN PLUMBING CHASE.

1

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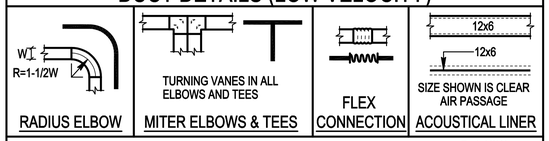
ENLARGED PARTIAL FLOOR PLAN - PLUMBING

KMS

P1.1

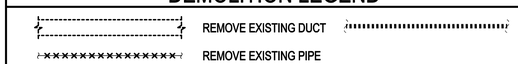
DUCT DETAILS (LOW VELOCITY)



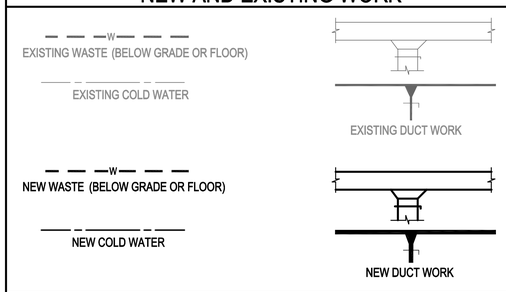
STANDARD MECHANICAL ABBREVIATIONS

AF	AIRFOIL	IE	INVERT ELEVATION
AFF	ABOVE FINISHED FLOOR	IN	INCH(ES)
AHP	APPARATUS HOUSING PLENUM	INSUL	INSULATION
ALT	ALTERNATIVE	ISOL	ISOLAT(OR)(ION)
AL	ALUMINUM	KW	KILOWATT
APD	AIR PRESSURE DROP	KWH	KILOWATT HOUR
APPROX	APPROXIMATELY	L	LENGTH
ARCH	ARCHITECT(URAL)	LAT	LEAVING AIR TEMP
AUTO	AUTOMATIC	LB	POUND
BDD	BACKDRAFT DAMPER	LDB	LEAVING DRY BULB
BI	BACKWARD INCLINED	LF	LINEAR FEET
BLDG	BUILDING	LFT	LEAVING FLUID TEMPERATURE
BSMT	BASEMENT	LVG	LEAVING
BTU	BRITISH THERMAL UNIT	LWB	LEAVING WET BULB
BTUH	BRITISH THERMAL UNITS PER HOUR	LWT	LEAVING WATER TEMPERATURE
CFH	CUBIC FEET PER HOUR	MAX	MAXIMUM
CFM	CUBIC FEET PER MINUTE	MBH	THOUSAND BTU PER HOUR
CFS	CUBIC FEET PER SECOND	MECH	MECHANICAL
CLG	CEILING OR COOLING	MFR	MANUFACTURER
CONC	CONCRETE	MIN	MINIMUM
CONN	CONNECT(ION)	MISC	MISCELLANEOUS
CONT	CONTINUE(ED)(UATION)	MTD	MOUNTED
CL	CENTERLINE	NC	NORMALLY CLOSED
DDC	DIRECT DIGITAL CONTROL	NIC	NOT IN CONTRACT
DEFL	DEFLECTION	NO	NORMALLY OPEN
DN	DOWN	OAD	OUTSIDE AIR DAMPER
DP	DEW POINT	OC	ON CENTER DISTANCE
DWDI	DOUBLE WIDTH DOUBLE INLET	OSA	OUTSIDE AIR
DWG	DRAWING	PH	PHASE
EA	EXHAUST AIR	PP	POLYPROPYLENE
EAD	EXHAUST AIR DAMPER	PSI	POUNDS PER SQUARE INCH
EAT	ENTERING AIR TEMPERATURE	PVC	POLYVINYL CHLORIDE
EDB	ENTERING DRY BULB	PVS	PVC COATED STEEL
EFF	EFFICIENCY	R (RAD)	RADIUS
EFT	ENTERING FLUID TEMPERATURE	RA	RETURN AIR
ELEC	ELECTRIC(AL)	RAD	RETURN AIR DAMPER
ELEV	ELEVATION	REV	REVISION
ENGR	ENGINEER	RH	RELATIVE HUMIDITY
EQ	EQUAL	RPM	REVOLUTIONS PER MINUTE
EQUIP	EQUIPMENT	SA	SUPPLY AIR
ESP	EXTERNAL STATIC PRESSURE	SCFM	STANDARD CUBIC FEET PER MINUTE
EWB	ENTERING WET BULB	SD	SMOKE DAMPER
EWT	ENTERING WATER TEMPERATURE	SECT	SECTION
EX	EXTRACTOR	SENS	SENSIBLE
EXH	EXHAUST	SIM	SIMILAR
EXIST	EXISTING	SP	STATIC PRESSURE
EXP	EXPANSION	SPEC	SPECIFICATION
F	DEGREES FAHRENHEIT	SQ	SQUARE
FC	FORWARD CURVED	SF	SQUARE FOOT(FEET)
FIG	FIGURE	SQ IN	SQUARE INCH(ES)
FILT	FILTER	SS	STAINLESS STEEL
FLEX	FLEXIBLE	STL	STEEL
FPD	FLUID PRESSURE DROP	STRUCT	STRUCTUR(E)(AL)
FPM	FEET PER MINUTE	SWP	SINGLE WALL PLENUM
FPS	FEET PER SECOND	SWSI	SINGLE WIDTH SINGLE INLET
FT	FEET/FOOT	TEMP	TEMPERATURE
FTR	FINNED TUBE RADIATOR	TSP	TOTAL STATIC PRESSURE
FU	FIXTURE UNIT	TYP	TYPICAL
FUT	FUTURE	V	VOLTS
FV	FACE VELOCITY	VD	VOLUME DAMPER
GA	GAGE/GAUGE	VEL	VELOCITY
GAL	GALLON	VERT	VERTICAL
GALV	GALVANIZED	VFD	VARIABLE FREQUENCY DRIVE
GLY	GLYCOL	VTR	VENT THROUGH ROOF
GPH	GALLONS PER HOUR	W	WIDTH
GPM	GALLONS PER MINUTE	WG	WATER GAUGE
H	HEIGHT	WPD	WATER PRESSURE DROP
HORIZ	HORIZONTAL	WTD	WATER TEMPERATURE DROP
HP	HORSEPOWER	WTR	WATER TEMPERATURE RISE
HTG	HEATING	W/	WITH
ID	INSIDE(DIAMETER/DIMENSION)	W/O	WITHOUT

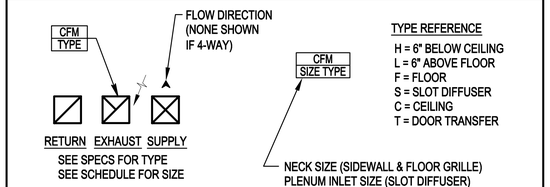
DEMOLITION LEGEND



NEW AND EXISTING WORK



DUCT LEGEND



GENERAL NOTE

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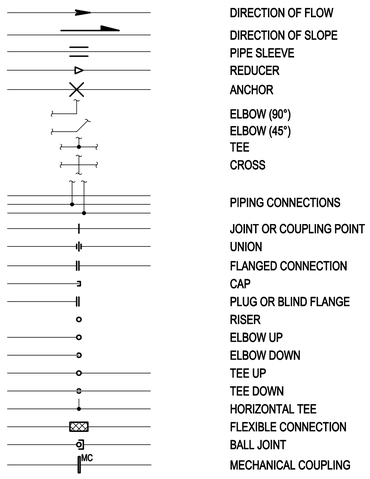
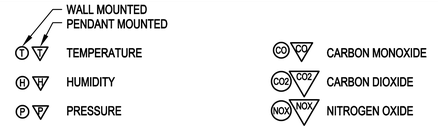
MISC. FITTINGS & SYMBOLS



SYMBOLS

A	ACCESS PANEL	K	CAP EXISTING / CAP FOR FUTURE
B	BELOW GRADE / FLOOR	R	RELOCATE EXISTING
C	CONNECT TO EXISTING	X	REMOVE EXISTING
E	EXISTING TO REMAIN	1	NOTE

CALL OUT SYMBOLS



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SYMBOLS, LEGENDS AND ABBREVIATIONS - MECHANICAL

KMS

M0.0

DIFFUSERS AND GRILLES

TAG	TYPE	DESCRIPTION	AIRFLOW RANGE MIN (CFM)	AIRFLOW RANGE MAX (CFM)	INLET SIZE (IN)	FACE SIZE T-BAR (IN)	FACE SIZE HARD LID (IN)	MAX NC	THROW (FT)	MANUFACTURER & MODEL
C-1	CEILING SUPPLY DIFFUSER	PERFORATED FACE, MODULAR CORE, ADJUSTABLE 4-WAY THROW	0	125	6x6	24x24	13x13	12	2-2-5	TITUS PMC
			126	220	8x8	24x24	15x15	17	2-3-6	
			221	345	10x10	24x24	17x17	21	3-4-8	
			346	500	12x12	24x24	19x19	24	3-5-9	
			501	780	16x16	24x24	23x23	28	4-6-11	
C-2	CEILING RETURN/ EXHAUST GRILLE	PERFORATED FACE, STEEL, ROUND DUCT CONNECTION	0	340	10x10	24x24	12x12	17	-	TITUS PAR
			341	780	15x15	24x24	17x17	22	-	
			781	1,125	18x18	24x24	20x20	24	-	
			1,129	1,670	22x22	24x24	24x24	26	-	
			1,671	3,500	22x46	24x48	24x48	25	-	

GENERAL NOTES:

A. NOISE CRITERIA (NC) BASED ON ROOM ABSORPTION OF 10 dB, MEASURED PER ANSI/ASHRAE STANDARD 70.

B. THROW VALUES GIVEN FOR TERMINAL VELOCITIES 150, 100, AND 50 FPM FOR ISOTHERMAL CONDITIONS.

C. ADJUST THROW DIRECTION AND QUANTITY PRIOR TO AIR BALANCING.

D. REFER TO SPECIFICATION 233700 FOR SIDEWALL GRILLES, SIZING AND MOUNTING HEIGHTS AS INDICATED ON FLOORPLANS

DESIGN CONDITIONS - EUGENE, OR

SPACE	WINTER TEMPERATURE	WINTER HUMIDITY	SUMMER TEMPERATURE	SUMMER HUMIDITY
OUTDOOR	23.4° F DB	16.1° F DP / 12.6 HR / 26.9 ° F MCDB	91.7° F DB / 66.5° F MCWB	62.2° F DP / 84.8 HR / 74.6° F MCDB
INDOOR	70° F ± 2° F DB	50% RH MAX, NO MINIMUM	75° F ± 2° F DB	50% RH MAX, NO MINIMUM

GENERAL NOTES:

A. OUTDOOR CONDITIONS BASED ON ASHRAE FUNDAMENTALS 2013 99.6% AND 0.4% DATA.

HEATING VENTILATION UNIT SCHEDULE

TAG	LOCATION	SERVICE	DESIGN AIRFLOW (CFM)	MAX OSA (CFM)	CODE MIN OSA (CFM)	FILTER (MERV)	VOLT/ PHASE	HYDRONIC HEATING COIL EAT (°F)	HYDRONIC HEATING COIL LAT (°F)	HYDRONIC HEATING COIL GPM	HYDRONIC HEATING COIL EWT (°F)	HYDRONIC HEATING COIL MIN WTD (°F)	APPROX. WEIGHT (LBS)	MANUFACTURER & MODEL
HV-20	SOUTH STORAGE	NEW CLASSROOM 4A	800	800	430	11	208/1	45	85	1.8	180	40	150	TRANE BCHD024
HV-21	SOUTH STORAGE	NEW CLASSROOM 4B	800	800	385	11	208/1	45	85	1.8	180	40	150	TRANE BCHD024

GENERAL NOTES:

A. PROVIDE EC MOTOR ON FAN.

B. PROVIDE STARTER AND DISCONNECT WITH UNIT.

ROOF VENTILATOR SCHEDULE

TAG	LOCATION	SERVICE	TYPE	AIRFLOW TYPE	AIRFLOW FLOW (CFM)	AIRFLOW TSP (IN WG)	THROAT SIZE (IN)	APPROX. WEIGHT (LBS)	MANUFACTURER & MODEL	NOTES
RV-1	ROOF	HV-20	GRAVITY	INTAKE	800	0.05	16	20	GREENHECK GRSI	
RV-2	ROOF	HV-21	GRAVITY	INTAKE	800	0.05	16	20	GREENHECK GRSI	
RV-3	ROOF	HV-20/21	GRAVITY	RELIEF	1,600	0.07	20	30	GREENHECK GRSR	
RV-4	ROOF	RR1	GRAVITY	RELIEF	300	0.07	8	20	GREENHECK GRSR	1
RV-5	ROOF	RR4	GRAVITY	RELIEF	350	0.05	10	20	GREENHECK GRSR	1

NOTES:

1. PROVIDE MOTORIZED AUTO DAMPER AT INLET TO ROOF VENTILATOR LOCATED IN ATTIC, 24V CONTROL ACTUATOR PROVIDED OFOI.

FAN SCHEDULE

TAG	LOCATION	SERVICE	TYPE	DRIVE	AIRFLOW (CFM)	AIRFLOW TSP (IN WG)	AIRFLOW FAN SPEED (RPM)	ELECTRICAL VOLT/ PHASE	ELECTRICAL POWER (BHP)	ELECTRICAL RATING (HP)	ELECTRICAL GEN. POWER (Y/N)	APPROX. WEIGHT (LBS)	MANUFACTURER & MODEL	NOTES
EF-7	MECH ATTIC PLATFORM	RR1	INLINE	DIRECT	300	0.5	1,550	115/1	0.10	1/8	NO	50	GREENHECK SQ-95	1
EF-8	MECH ATTIC PLATFORM	RR4	INLINE	DIRECT	350	0.5	1,550	115/1	0.10	1/8	NO	50	GREENHECK SQ-95	1

NOTES:

1. PROVIDE MOTORIZED DAMPER AT DISCHARGE THROUGH ROOF, 24V CONTROL ACTUATOR PROVIDED OFOI.

FINNED TUBE RADIATOR

TAG NUMBER	LOCATION	SERVICE	OUTPUT BTUH	LENGTH (IN)	EWT (°F)	WTD (°F)	FLOW (GPM)	MANUFACTURER & MODEL	NOTES
FTR-1	LOBBY	LOBBY	12745	55	180	10	2.5	JAGA BRIZA 22 HYBRID 55	

GENERAL NOTES:

A. EAT = 65°F. 22" HEIGHT.

VENTILATION SCHEDULE - MULTIPLE SPACES

LOCATION	FLOOR AREA (SF)	PRIMARY AIRFLOW RATE (CFM)	OCCUPANCY CLASSIFICATION	PEOPLE OUTDOOR AIRFLOW RATE Rp (CFM/PERSON)	AREA OUTDOOR AIRFLOW RATE Ra (CFM/SF)	DEFAULT OCCUPANT DENSITY (PEOPLE/1000SF)	CODE POPULATION	DESIGN POPULATION	OUTDOOR AIRFLOW RATE Vbz (CFM)	ZONE AIR DISTRIBUTION EFFECTIVENESS Ez	OUTDOOR AIR INTAKE Voz (CFM)	NOTES
CLASSROOM 1	832	800	Classrooms (age 5-8)	10	0.12	25	20.8	20.8	307.8	0.8	385	
CLASSROOM 2	923	800	Classrooms (age 5-8)	10	0.12	25	23.1	23.1	341.5	0.8	427	
CLASSROOM 3	921	700	Classrooms (age 5-8)	10	0.12	25	23.0	23.0	340.8	0.8	426	
CLASSROOM 4	656	560	Classrooms (age 5-8)	10	0.12	25	16.4	16.4	242.7	0.8	304	
CLASSROOM 5	412	300	Classrooms (age 5-8)	10	0.12	25	10.3	10.3	152.4	0.8	191	
CLASSROOM 6	965	900	Classrooms (age 5-8)	10	0.12	25	24.1	24.1	357.1	0.8	447	
LIBRARY 7	821	920	Libraries	5	0.12	10	8.2	8.2	139.6	0.8	175	
CORRIDOR/BREAK OUT 8	346	450	Conference rooms	5	0.06	50	17.3	17.3	107.3	0.8	135	
CLASSROOM 9	701	1070	Classrooms (age 5-8)	10	0.12	25	17.5	17.5	259.4	0.8	325	
CLASSROOM 10	825	1420	Classrooms (age 5-8)	10	0.12	25	20.6	20.6	305.3	0.8	382	
LIB OFFICE 11	233	600	Office spaces	5	0.06	5	1.2	1.2	19.8	0.8	25	
LIB OFFICE 12	147	300	Office spaces	5	0.06	5	0.7	1.0	13.8	0.8	18	
LIB OFFICE 13	147	300	Office spaces	5	0.06	5	0.7	1.0	13.8	0.8	18	

GENERAL NOTES:

A. SYSTEM OUTDOOR AIR CALCULATION IS BASED ON THE SECTION 403 OF THE 2014 OREGON MECHANICAL SPECIALTY CODE.

B. REFER TO AIR HANDLING UNIT SCHEDULE FOR ACTUAL OUTDOOR AIR FLOW RATE.

NOTES:

1. DESIGN OCCUPANCY REPRESENTS THE AVERAGE OCCUPANCY, WHICH IS NOT LESS THAN 1/2 THE CODE OCCUPANCY.

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JOB NO: 19189
ISSUE DATE: 3/3/2020

EQUIPMENT SCHEDULE - MECHANICAL

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M0.1

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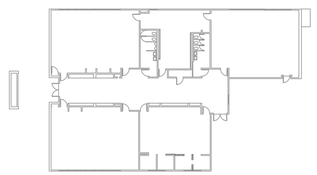

1 MD.0 OVERALL DEMOLITION PLAN - MECHANICAL
1/32" = 1'-0"

NORTH

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OVERALL DEMOLITION PLAN - MECHANICAL

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MD.0

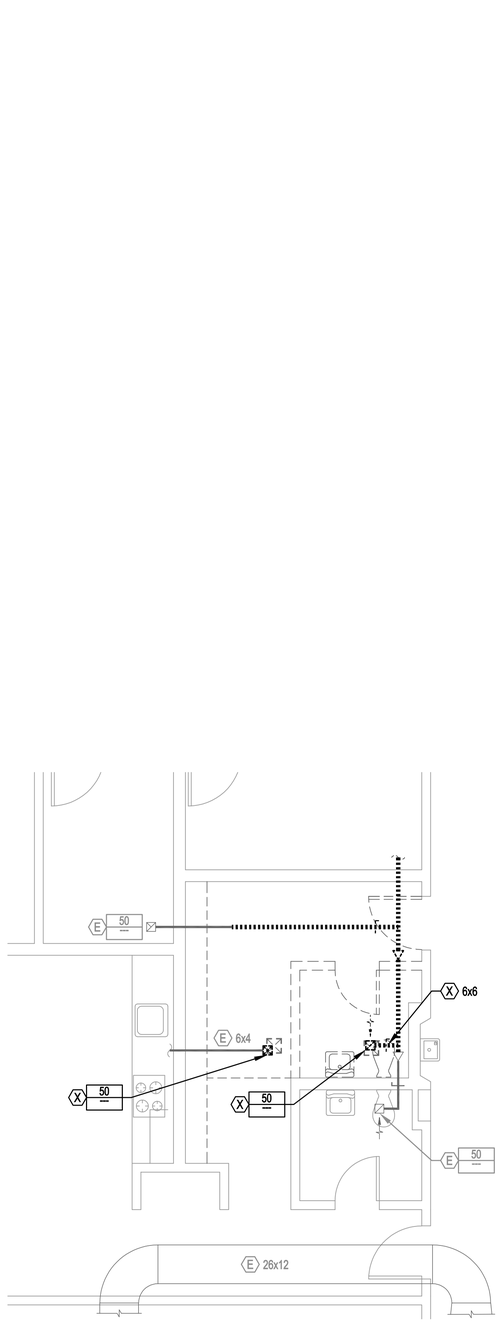
GENERAL NOTES:

A. ALL EXISTING CONDITIONS TO BE FIELD VERIFIED BY THE CONTRACTOR.

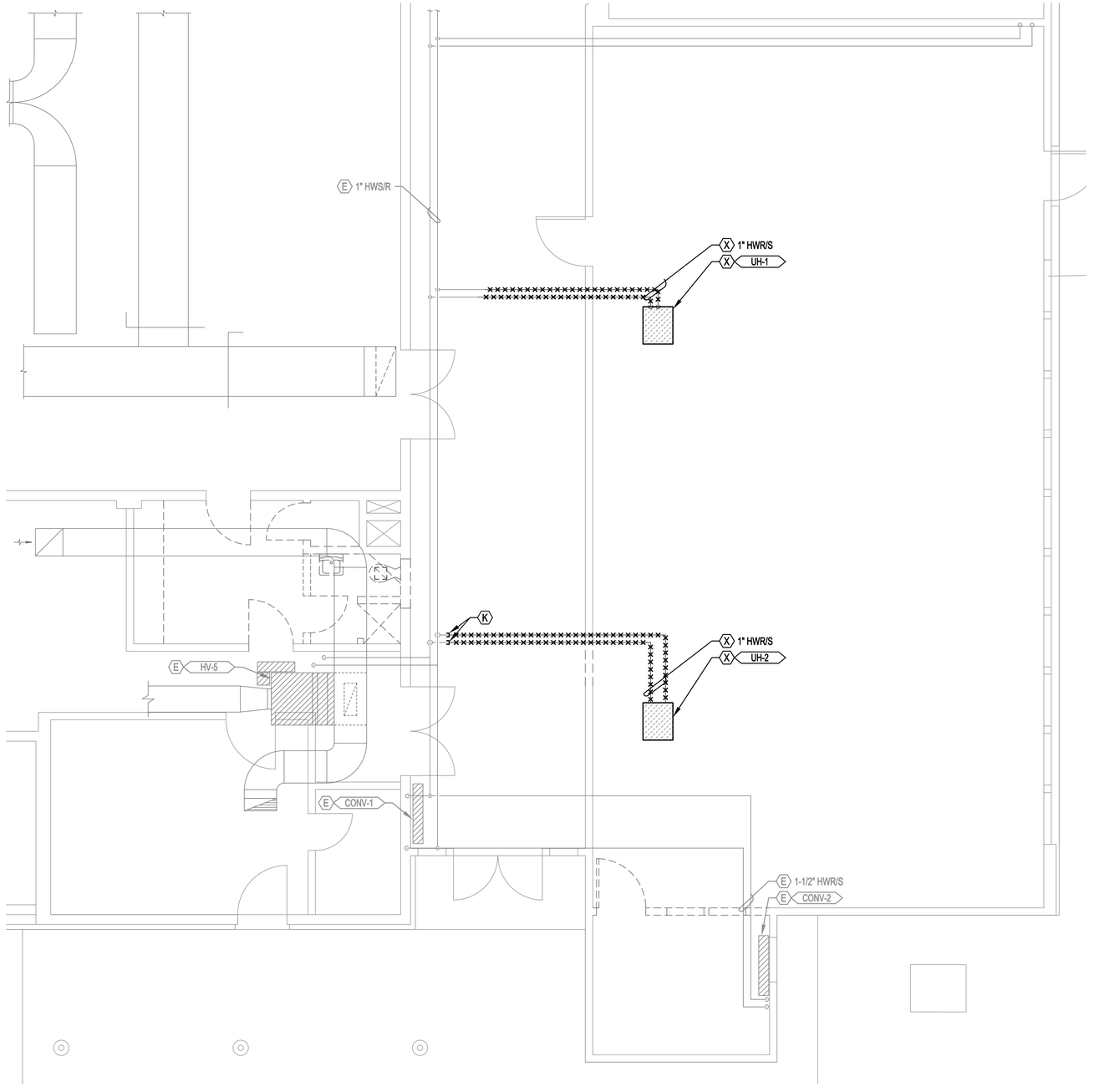
B. PATCH AND REPAIR ALL OPENINGS MADE BY REMOVALS.

C. DEMOLITION WORK SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING: REMOVAL OF EQUIPMENT, SUPPORTS, ANCHORS, PIPING, DUCTWORK AND ALL APPURTENANCES WHERE INDICATED ON PLANS.

D. DEMO MECHANICAL EQUIPMENT, DUCTS AND ASSOCIATED ITEMS AS SHOWN OR RELATED TO EQUIPMENT TO BE REMOVED. CAP DUCTWORK AND PIPING AT NEAREST LIVE BRANCH. PROVIDE SHUTOFF VALVE AND CAP AT TERMINATION.



2 MD.1 PARTIAL DEMOLITION - MECHANICAL
1/4" = 1'-0"



1 MD.2 PARTIAL DEMOLITION - MECHANICAL
1/4" = 1'-0"

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PARTIAL DEMOLITION - MECHANICAL

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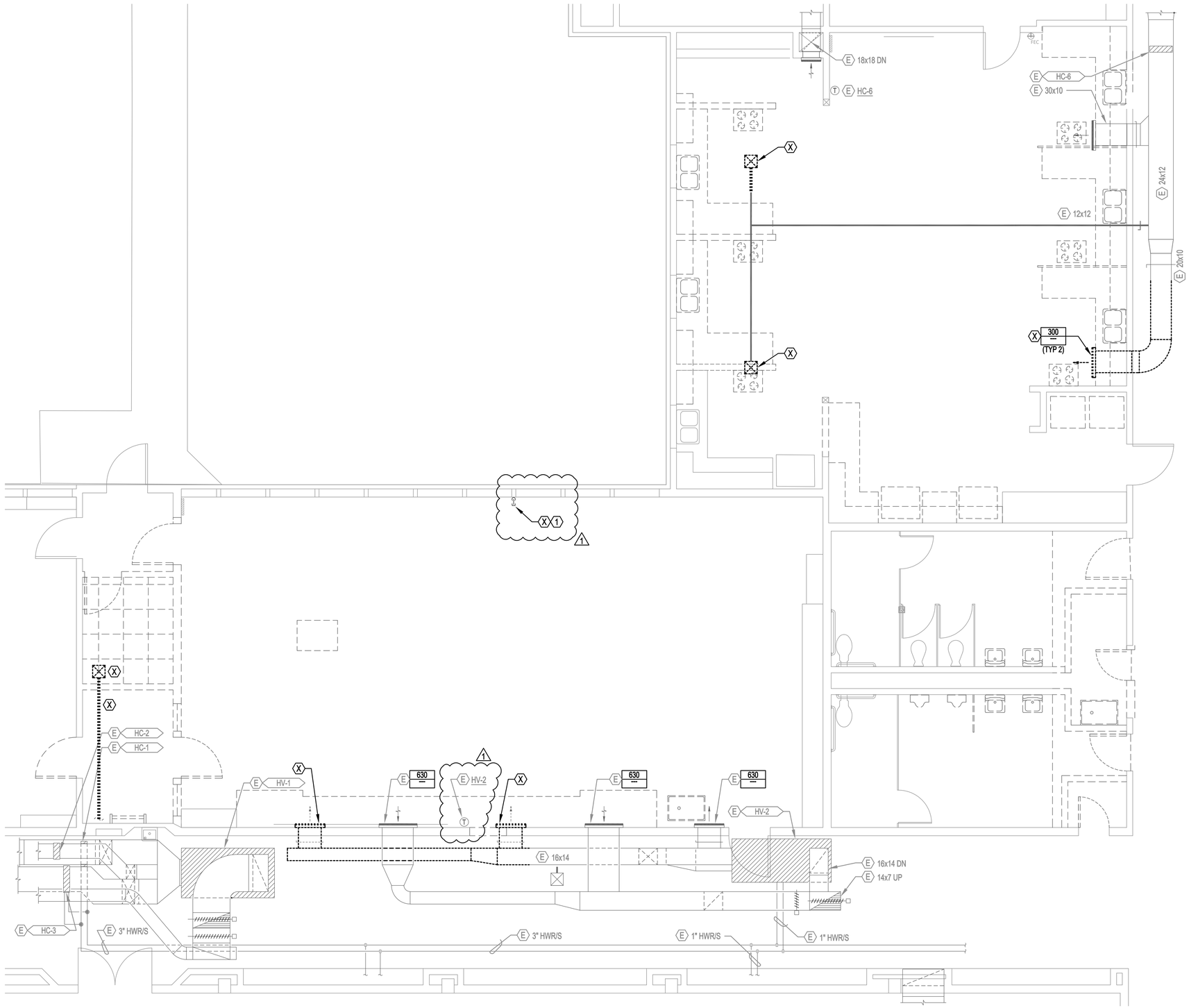

1 MD.2 ENLARGED PARTIAL FLOOR PLAN - MECHANICAL
1/4" = 1'-0"

NORTH

GENERAL NOTES:

A. ALL EXISTING CONDITIONS TO BE FIELD VERIFIED BY THE CONTRACTOR.

B. PATCH AND REPAIR ALL OPENINGS MADE BY REMOVALS.

C. DEMOLITION WORK SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING: REMOVAL OF EQUIPMENT, SUPPORTS, ANCHORS, PIPING, DUCTWORK AND ALL APPURTENANCES WHERE INDICATED ON PLANS.

D. DEMO MECHANICAL EQUIPMENT, DUCTS AND ASSOCIATED ITEMS AS SHOWN OR RELATED TO EQUIPMENT TO BE REMOVED. CAP DUCTWORK AT NEAREST LIVE BRANCH.

NOTES:

1. DEMO GAS PIPE AND CAP ABOVE CEILING. (1)

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PARTIAL DEMOLITION - MECHANICAL

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MD.2

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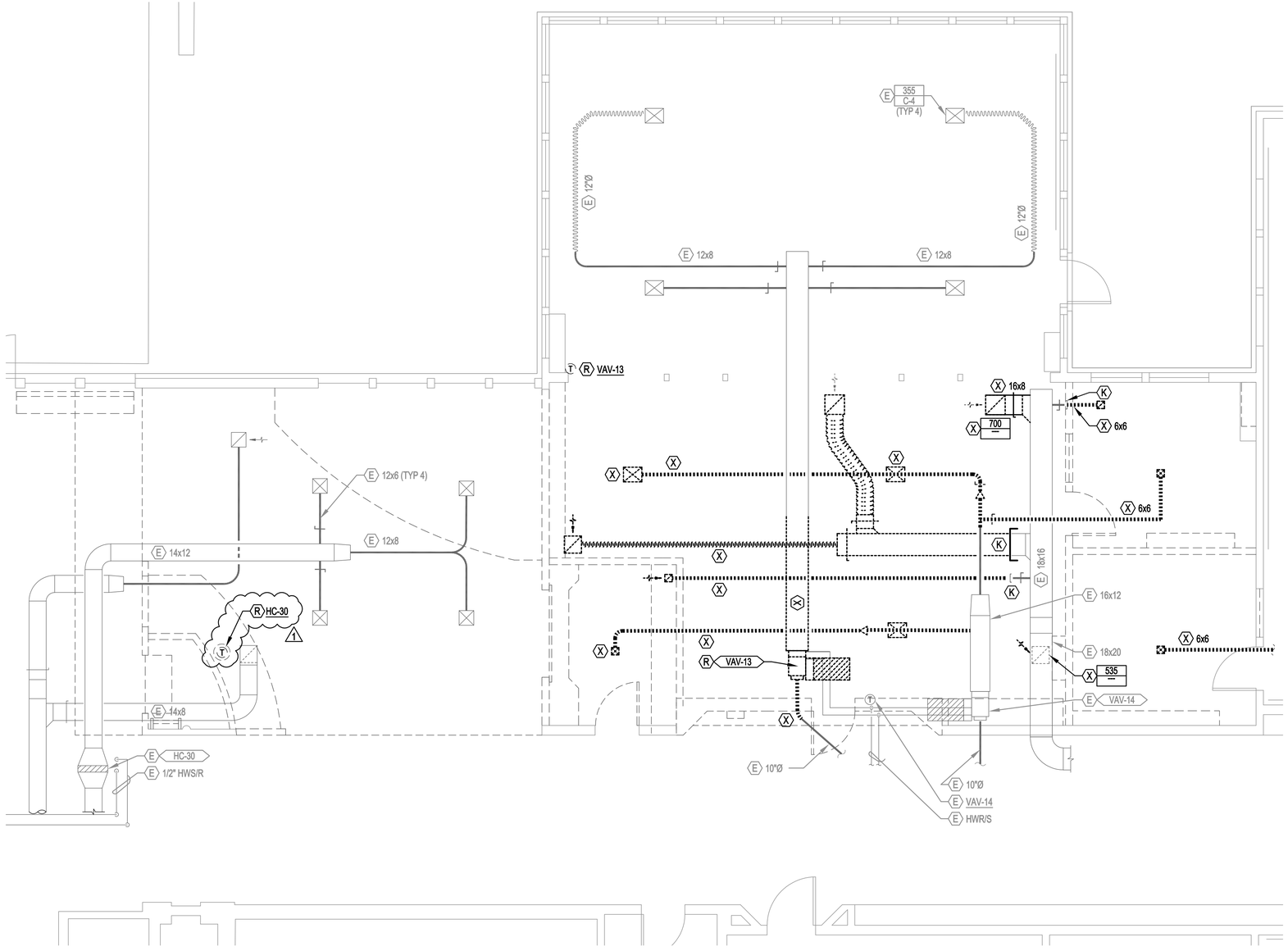
GENERAL NOTES:

A. ALL EXISTING CONDITIONS TO BE FIELD VERIFIED BY THE CONTRACTOR.

B. PATCH AND REPAIR ALL OPENINGS MADE BY REMOVALS.

C. DEMOLITION WORK SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING: REMOVAL OF EQUIPMENT, SUPPORTS, ANCHORS, PIPING, DUCTWORK AND ALL APPURTENANCES WHERE INDICATED ON PLANS.

D. DEMO MECHANICAL EQUIPMENT, DUCTS AND ASSOCIATED ITEMS AS SHOWN OR RELATED TO EQUIPMENT TO BE REMOVED. CAP DUCTWORK AT NEAREST LIVE BRANCH.



1 MD.3 PARTIAL DEMOLITION - MECHANICAL

1/4" = 1'-0"

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PARTIAL DEMOLITION - MECHANICAL

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MD.3

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OVERALL FLOOR PLAN - HVAC

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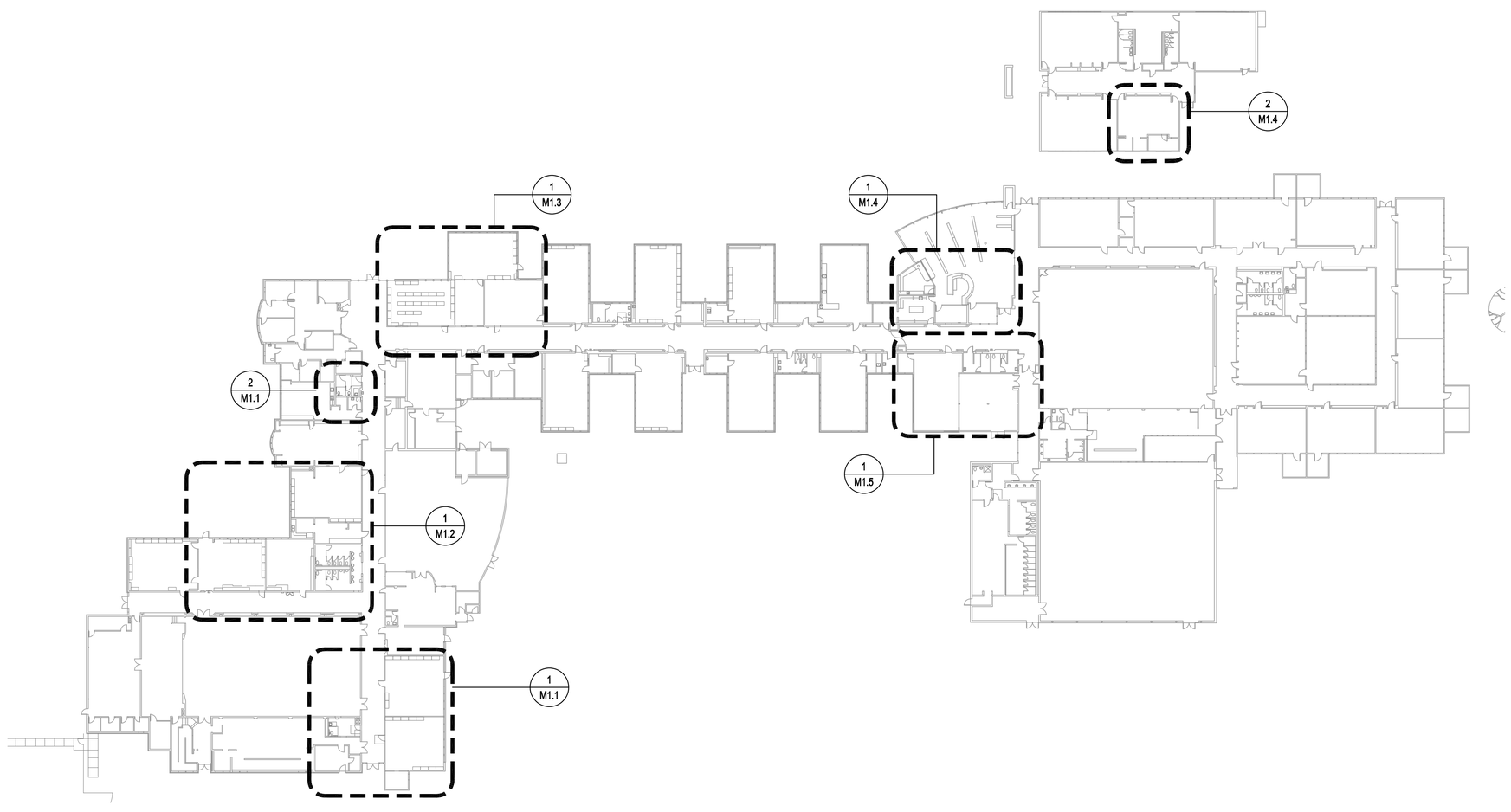
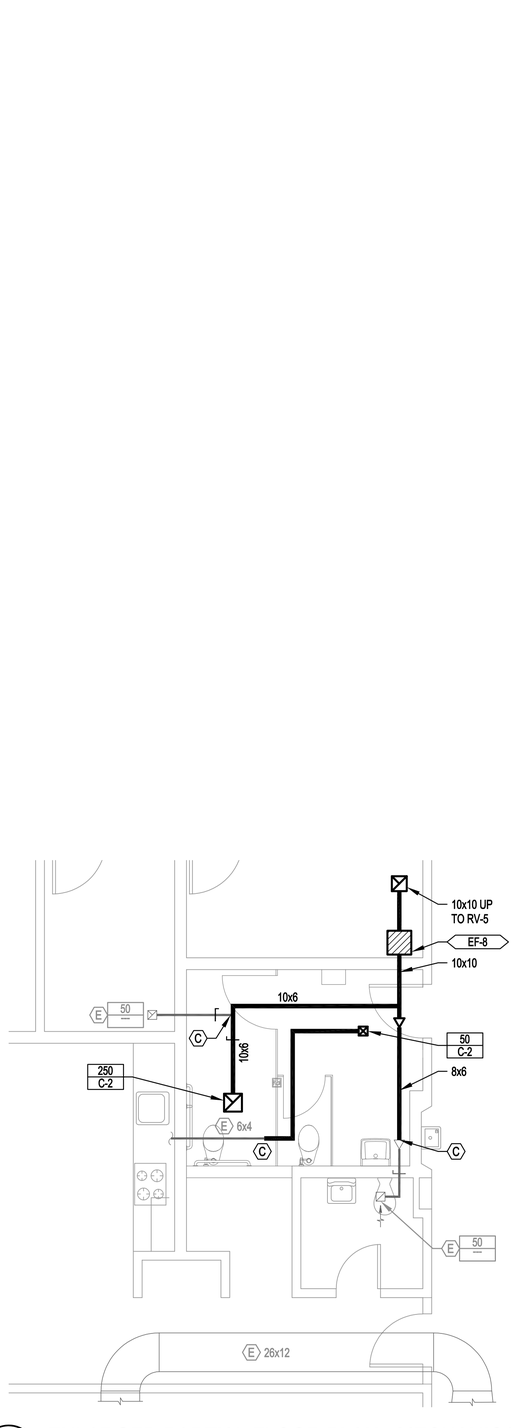
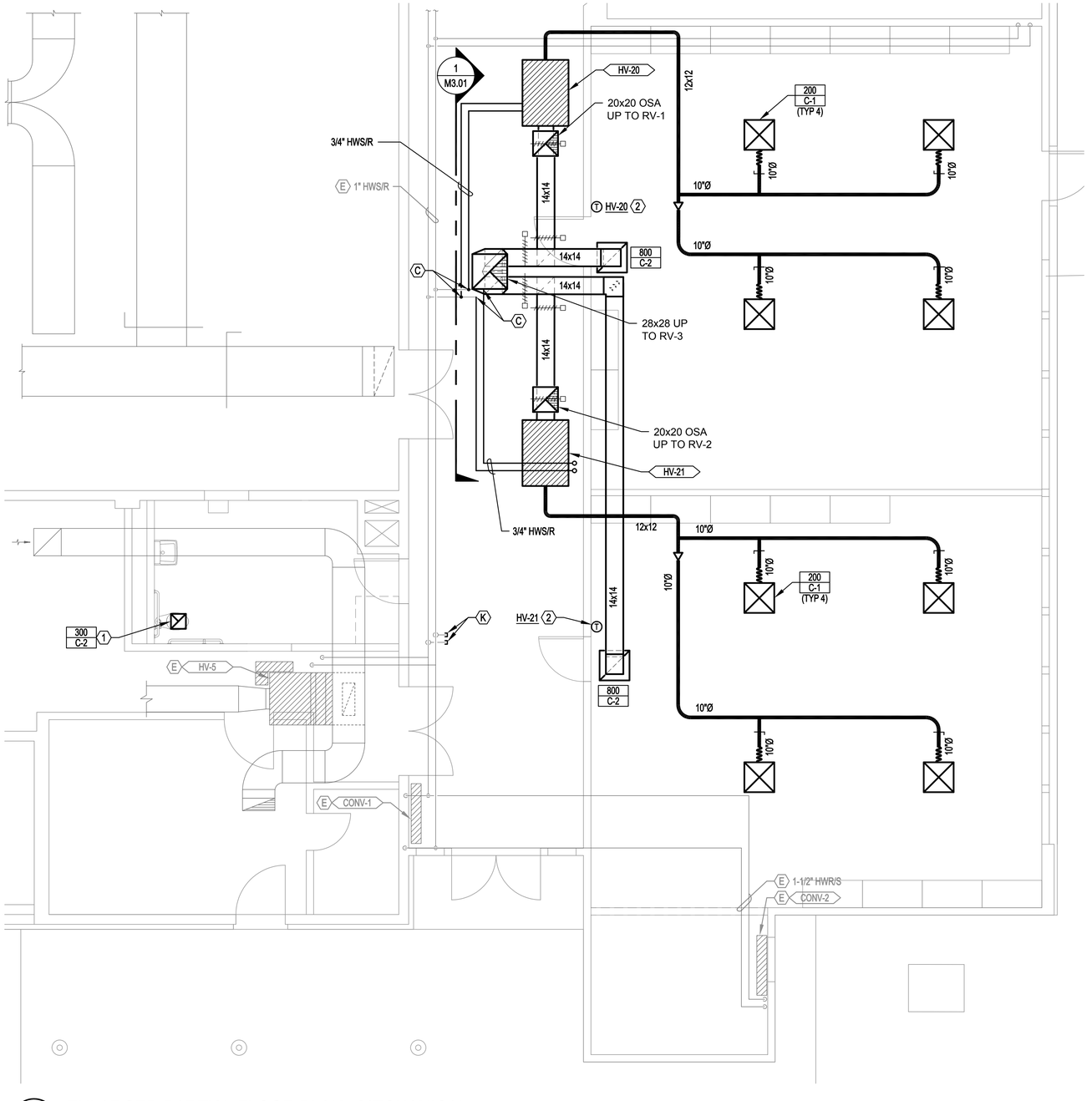


1 / M1.0 OVERALL FLOOR PLAN - HVAC
1/32" = 1'-0"



2 M1.1 ENLARGED PARTIAL FLOOR PLAN - MECHANICAL
1/4" = 1'-0"

NORTH



1 M1.1 ENLARGED PARTIAL FLOOR PLAN - MECHANICAL
1/4" = 1'-0"

NORTH

GENERAL NOTES:

A. INSTALL DUCTS CONCEALED, UNLESS SPECIFIED OTHERWISE, AND CLEAR OF CEILING INSERTS. ALL DUCTWORK TO BE INSTALLED AS CLOSE AS POSSIBLE TO WALL AND UNDERSIDE OF BEAMS AND JOISTS.

B. COORDINATE WORK WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS AND TRANSITIONS AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

C. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS PRIOR TO FABRICATION.

D. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF AIR DEVICES.

E. THERMOSTATS ARE SHOWN FOR REFERENCE LOCATION ONLY, TO BE OF/OI.

NOTES:

1. 10x10 EXH UP TO EF-7 IN MECH PLATFORM. COORDINATE FAN LOCATION AROUND EXISTING HV SYSTEM TO MAINTAIN SERVICE CLEARANCE. EF-7 DISCHARGE EXH TO TERMINATE AT NEW RV-4 IN ROOF. RV-4 EXHAUST VENTILATOR TO BE LOCATED ON ROOF TO MAINTAIN MINIMUM 10'-0" FROM OSA INTAKES ON ROOF.

2. PROVIDE CONDUIT AND WALL BOX FOR DDC SPACE SENSOR. PROVIDE CONDUIT BACK TO EXISTING DDC CONTROLLER LOCATION AT FAN. COORDINATE FINAL LOCATION OF WALL BOX WITH OWNER.

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ENLARGED PARTIAL FLOOR PLAN - MECHANICAL

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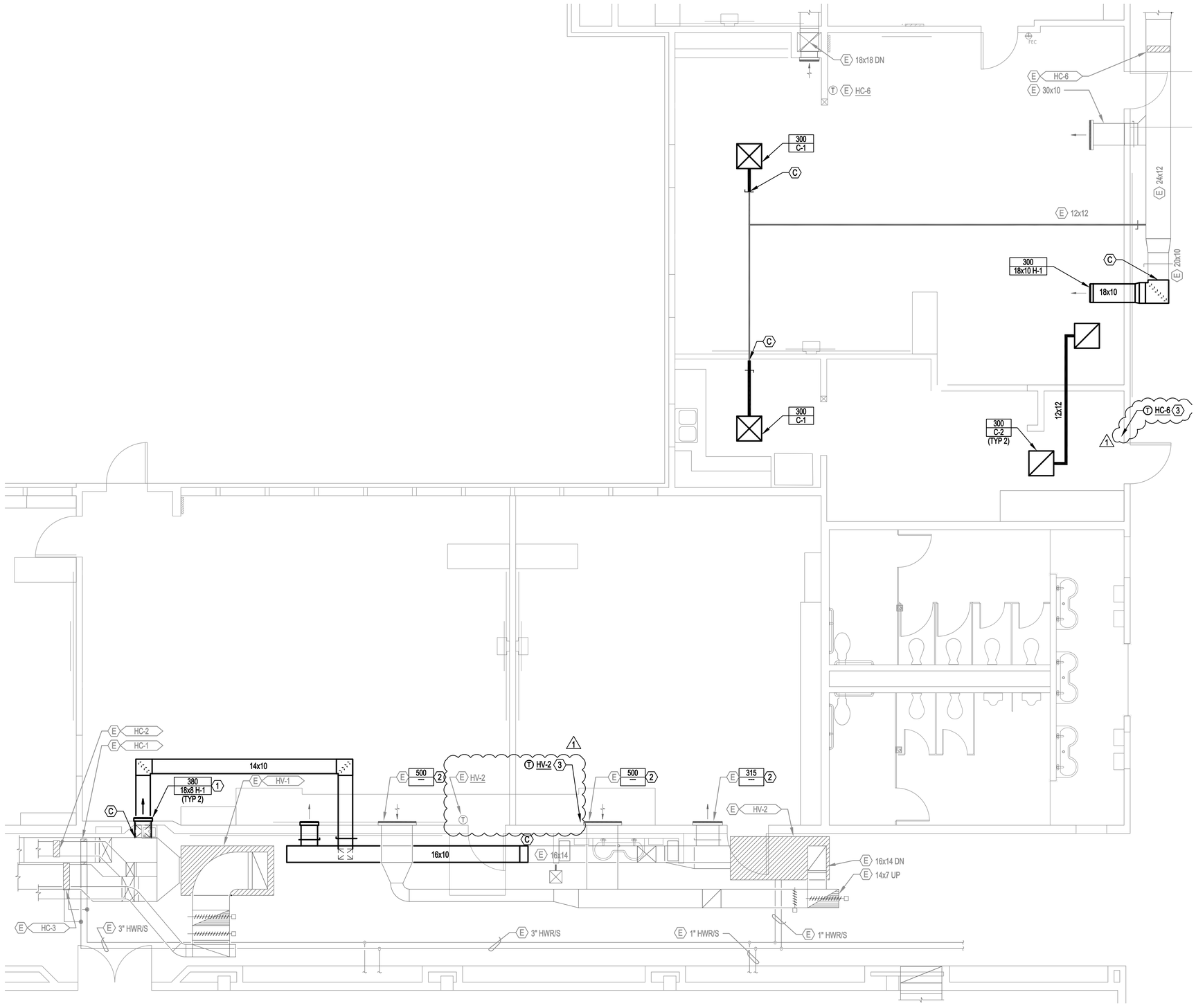

1 / M1.2 ENLARGED PARTIAL FLOOR PLAN - MECHANICAL

1/4" = 1'-0"

NORTH

GENERAL NOTES:

A. INSTALL DUCTS CONCEALED, UNLESS SPECIFIED OTHERWISE, AND CLEAR OF CEILING INSERTS. ALL DUCTWORK TO BE INSTALLED AS CLOSE AS POSSIBLE TO WALL AND UNDERSIDE OF BEAMS AND JOISTS.

B. COORDINATE WORK WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS AND TRANSITIONS AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

C. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS PRIOR TO FABRICATION.

D. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF AIR DEVICES.

E. THERMOSTATS ARE SHOWN FOR REFERENCE LOCATION ONLY, TO BE OF/OI.

NOTES:

1. SIDEWALL GRILLE MOUNTING HEIGHT TO MATCH EXISTING SIDEWALL GRILLES IN SPACE.

2. REBALANCE GRILLE TO AIRFLOW AS INDICATED.

3. PROVIDE CONDUIT AND WALL BOX FOR DDC SPACE SENSOR. PROVIDE CONDUIT BACK TO EXISTING DDC CONTROLLER LOCATION AT FAN. COORDINATE FINAL LOCATION OF WALL BOX WITH OWNER.

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ENLARGED PARTIAL FLOOR PLAN - MECHANICAL

KMS

M1.2

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GENERAL NOTES:

A. INSTALL DUCTS CONCEALED, UNLESS SPECIFIED OTHERWISE, AND CLEAR OF CEILING INSERTS. ALL DUCTWORK TO BE INSTALLED AS CLOSE AS POSSIBLE TO WALL AND UNDERSIDE OF BEAMS AND JOISTS.

B. COORDINATE WORK WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS AND TRANSITIONS AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

C. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS PRIOR TO FABRICATION.

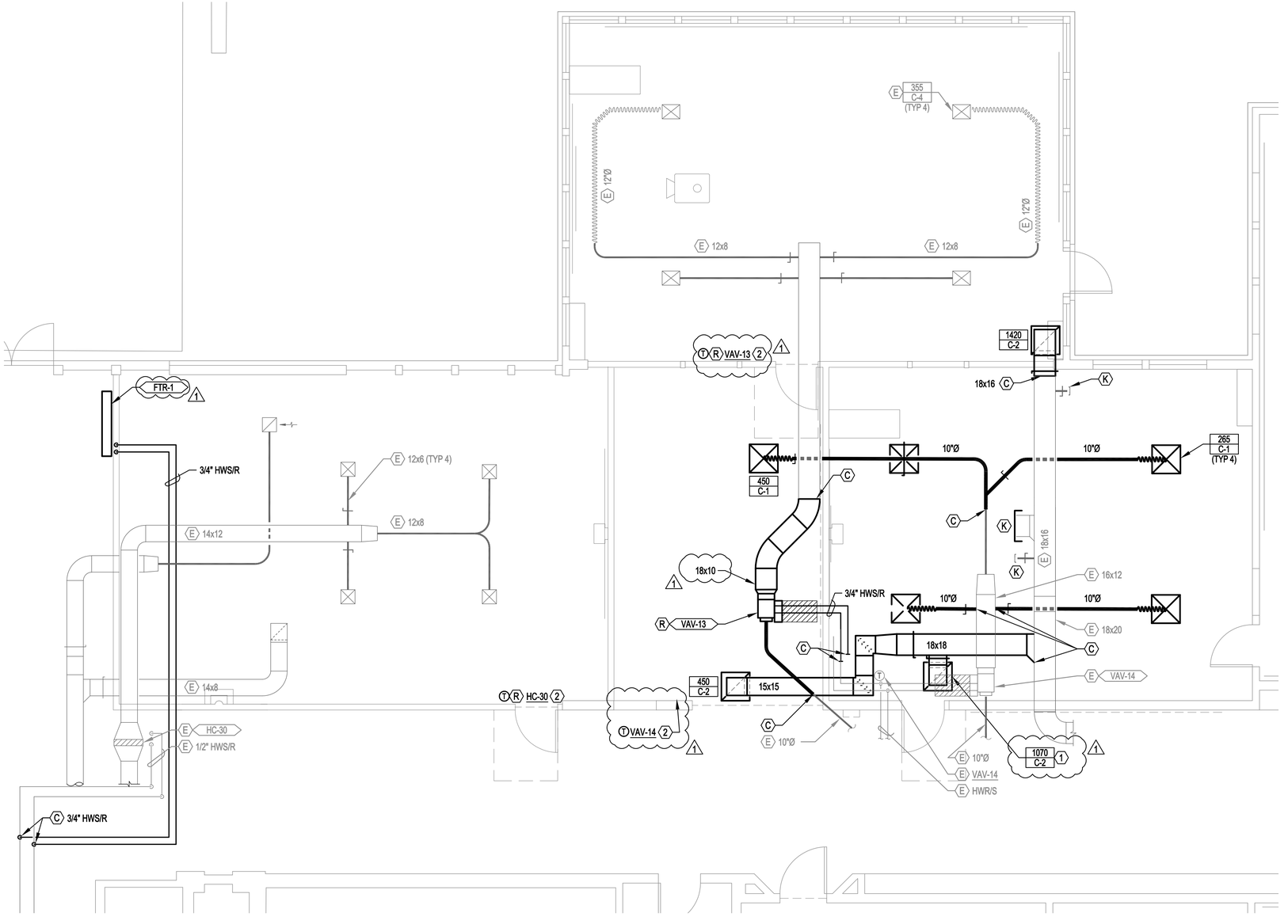
D. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF AIR DEVICES.

E. THERMOSTATS ARE SHOWN FOR REFERENCE LOCATION ONLY, TO BE OF/OI.

NOTES:

1. LOCATE RA GRILLE IN CEILING SUCH THAT MINIMUM 3'-0" SERVICE CLEARANCE TO NEARBY TERMINAL UNIT IS MAINTAINED. (1)

2. PROVIDE CONDUIT AND WALL BOX FOR DDC SPACE SENSOR. PROVIDE CONDUIT BACK TO EXISTING DDC CONTROLLER LOCATION AT FAN. COORDINATE FINAL LOCATION OF WALL BOX WITH OWNER.



1 M1.3 ENLARGED PARTIAL FLOOR PLAN - MECHANICAL

1/4" = 1'-0"

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ENLARGED PARTIAL FLOOR PLAN - MECHANICAL

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M1.3

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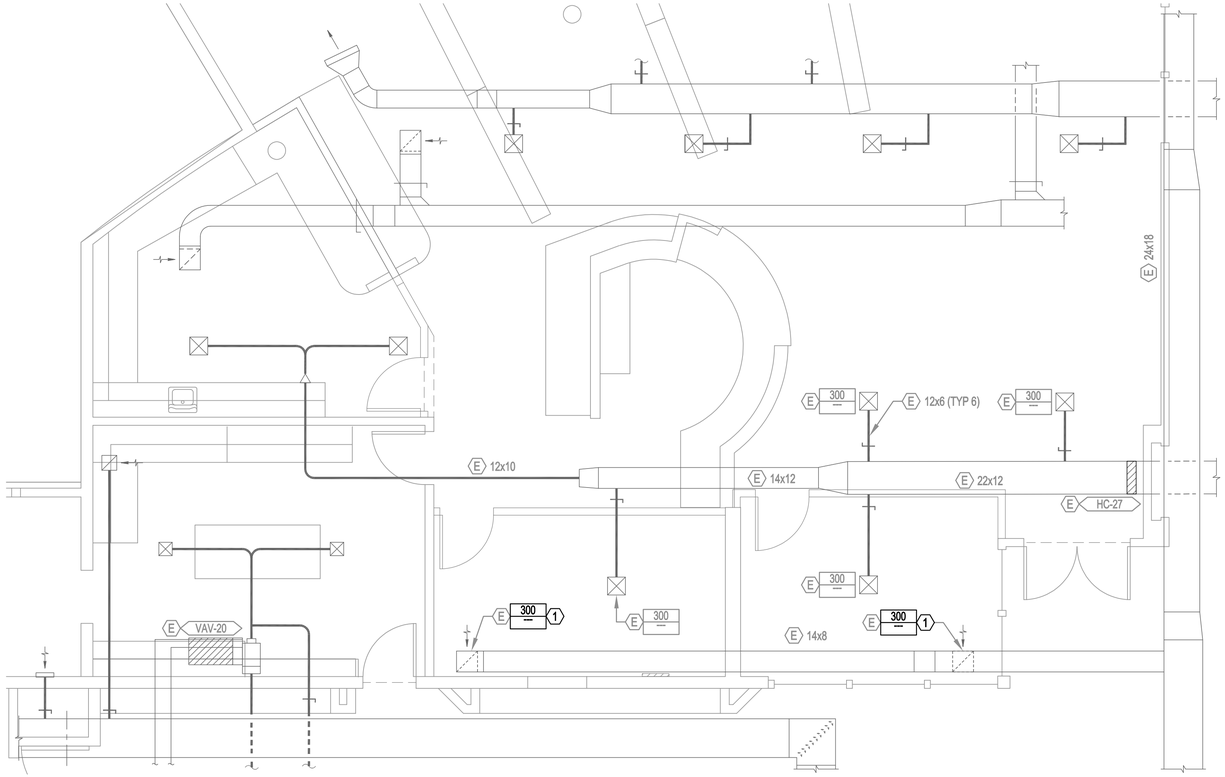


1 M1.4 **ENLARGED PARTIAL FLOOR PLAN - MECHANICAL**
1/4" = 1'-0"

NORTH

GENERAL NOTES:

A. INSTALL DUCTS CONCEALED, UNLESS SPECIFIED OTHERWISE, AND CLEAR OF CEILING INSERTS. ALL DUCTWORK TO BE INSTALLED AS CLOSE AS POSSIBLE TO WALL AND UNDERSIDE OF BEAMS AND JOISTS.

B. COORDINATE WORK WITH ALL TRADES INVOLVED. OFFSETS IN DUCTS AND TRANSITIONS AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

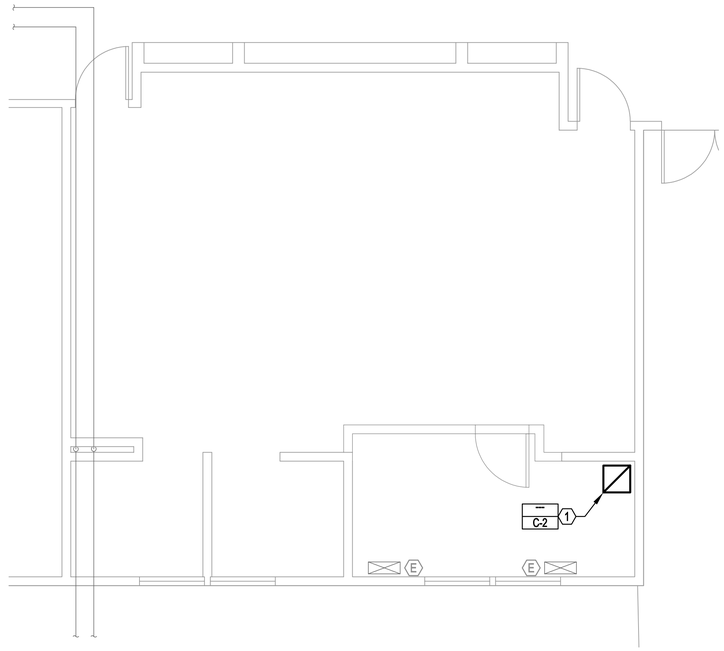
C. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS PRIOR TO FABRICATION.

D. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF AIR DEVICES.

E. THERMOSTATS ARE SHOWN FOR REFERENCE LOCATION ONLY, TO BE OF/OI.

NOTES:

1. REBALANCE EXISTING GRILLE TO AIR FLOW AS INDICATED, PROVIDE VOLUME DAMPER AS NEEDED FOR BALANCING.



2 M1.4 **PARTIAL DEMOLITION - MECHANICAL**
1/4" = 1'-0"

NORTH

NOTES:

1. REPLACE CEILING RETURN AIR GRILLE TO MATCH EXISTING GRILLE SIZE.

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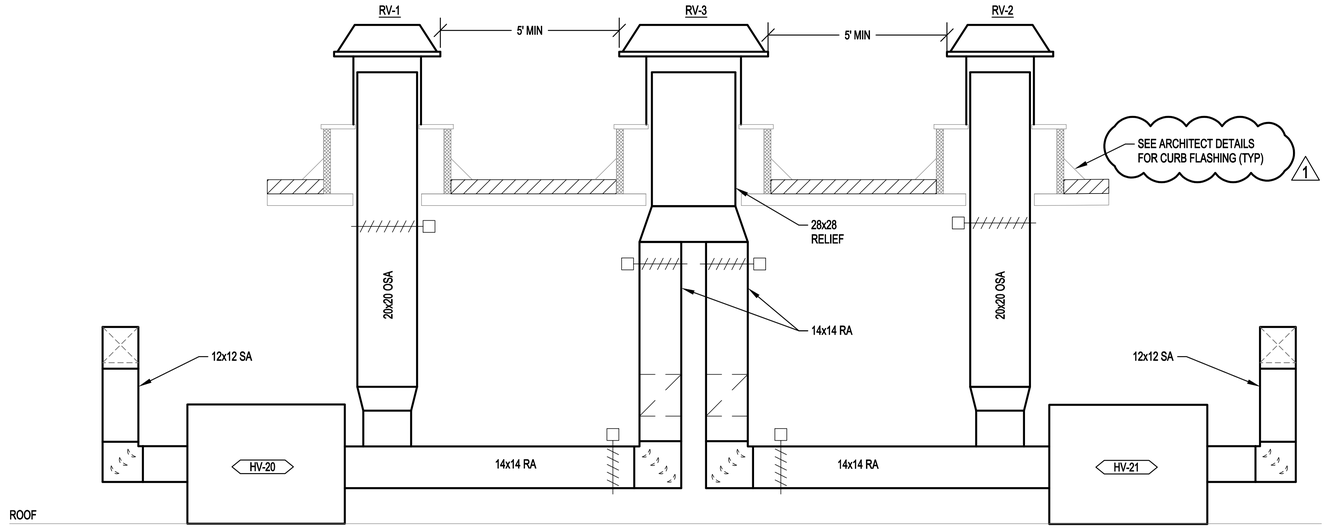
ENLARGED PARTIAL FLOOR PLAN - MECHANICAL

M1.4



GENERAL NOTES:

A. FEILD INSTALLED ECONOMIZER VIA DUCTED MOTORIZED DAMPERS. DAMPERS BY DIV 23, ACTUATORS AND CONTROL WIRING OFOI.

B. LOCATE OSA INTAKES TO MAINTAIN MINIMUM 10FT FROM ANY EXISTING EXHAUST OR ROOF VENTS.

1 / M3.01 HV-20/21 SECTION

SCALE: NONE

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SECTIONS - MECHANICAL

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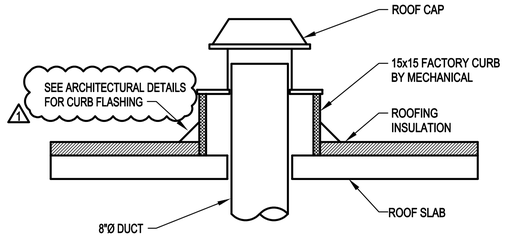
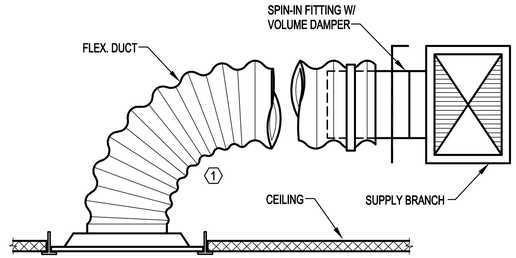
M3.01

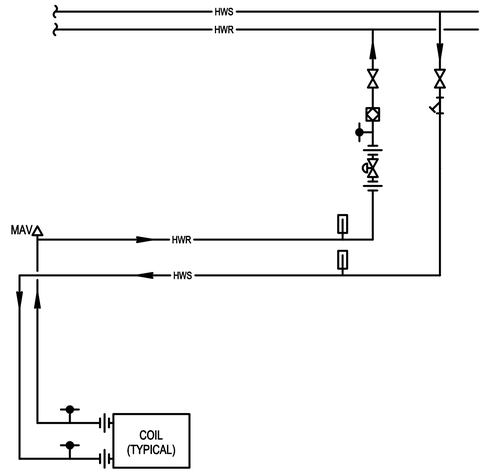


4 M5.01 **ROOF CURB**
SCALE: NONE



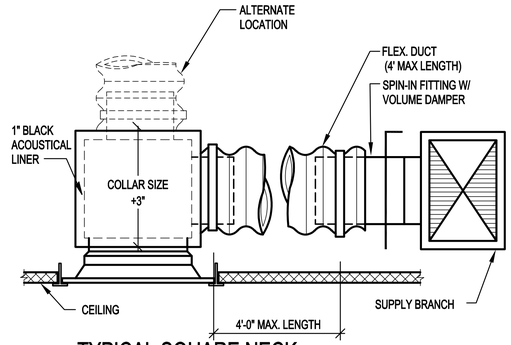
NOTES:
1. 1.5 DIA. MINIMUM FLEX DUCT RADIUS (4' MAX LENGTH).
WHERE 1.5 DIA. TURN CAN NOT BE MET USE DETAIL 2/M6.01

1 M5.01 **TYPICAL ROUND NECK T-BAR DIFFUSER**
SCALE: NONE

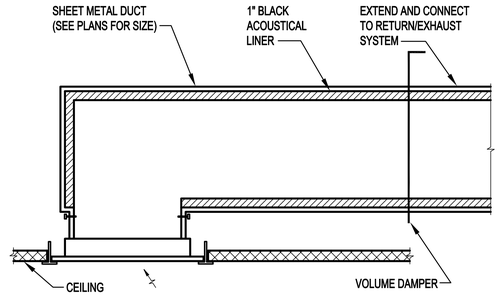


GENERAL NOTES:
A. OFFSET PIPING AT COIL ENDS TO ALLOW REMOVAL OF COILS.

5 M501 **HEATING COIL PIPING DETAIL**
SCALE: NONE



2 M5.01 **TYPICAL SQUARE NECK T-BAR DIFFUSER**
SCALE: NONE



3 M5.01 **DUCTED RETURN/EXHAUST GRILLE**
SCALE: NONE

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DETAILS - MECHANICAL

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M5.01

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ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	KVAR	KILOVOLT AMPS REACTIVE
A	AMPERE (AMP)	LA	LIGHTNING ARRESTOR
AL	ALUMINUM	LTG	LIGHTING
ARCH	ARCHITECT / ARCHITECTURAL	LV	LOW VOLTAGE
ATS	AUTOMATIC TRANSFER SWITCH	MATV	MASTER ANTENNA TELEVISION
CB	CIRCUIT BREAKER	MCA	MINIMUM CIRCUIT AMPS
C	CONDUIT	MCB	MAIN CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION	MCC	MOTOR CONTROL CENTER
CKT	CIRCUIT	MDP	MAIN DISTRIBUTION PANEL
CLG	CEILING	MECH	MECHANICAL
CT	CURRENT TRANSFORMER	MH	METAL HALIDE
CU	COPPER	MLO	MAIN LUGS ONLY
DN	DOWN	MV	MERCURY VAPOR
EMERG	EMERGENCY	MTS	MANUAL TRANSFER SWITCH
EMT	ELECTRIC METALLIC TUBING	NIC	NOT IN CONTRACT
EP	EXPLOSION PROOF	NL	NIGHT LIGHT CIRCUIT
EPO	EMERGENCY POWER OFF	PA	PUBLIC ADDRESS
EWC	ELECTRIC WATER COOLER	PDZ	PRIMARY DAYLIGHT ZONE
FA	FIRE ALARM	PE	PHOTO ELECTRIC CELL
FLA	FULL LOAD AMPS	PF	POWER FACTOR
FLUOR	FLUORESCENT	PNL	PANELBOARD
FCIC	FURNISHED BY CONTRACTOR INSTALLED BY CONTRACTOR	PVC	POLYVINYL CHLORIDE CONDUIT
		PWR	POWER
FOIC	FURNISHED BY OWNER INSTALLED BY CONTRACTOR	SDP	SUB-DISTRIBUTION PANEL
		SDZ	SECONDARY DAYLIGHT ZONE
FOIO	FURNISHED BY OWNER INSTALLED BY OWNER	STR	STARTER
		SV	SOLENOID VALVE
GFP	GROUND FAULT PROTECTION	SW	SWITCH
GFI	GROUND FAULT INTERRUPTER	TD	TIME DELAY
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	TP	TAMPERPROOF
GRC	GALVANIZED RIGID CONDUIT	TTB	TELEPHONE TERMINAL BOARD
GRD	GROUND	TTC	TELEPHONE TERMINAL CABINET
HP	HORSEPOWER	TV	TELEVISION
HPS	HIGH PRESSURE SODIUM	TYP	TYPICAL
HV	HIGH VOLTAGE	UG	UNDERGROUND
HZ	HERTZ	UPS	UNINTERRUPTABLE POWER SUPPLY
IG	ISOLATED GROUND	V	VOLTAGE
INC	INCANDESCENT	VA	VOLT AMPERES
JB	JUNCTION BOX	VP	VAPOR PROOF
KW	KILOWATT	W	WATTS
KWH	KILOWATT HOUR	WP	WEATHER PROOF
KV	KILOVOLT	XFMR	TRANSFORMER
KVA	KILOVOLT AMP	XFSW	TRANSFER SWITCH

LIGHTING

- CEILING LUMINAIRE: SURFACE, RECESSED
- CEILING LUMINAIRE: PENDANT MOUNTED
- CEILING LUMINAIRE: PENDANT LINEAR
- WALL LUMINAIRE: SURFACE, RECESSED
- WALL WASHER: SURFACE, RECESSED
- TRACK WITH HEADS LOCATED
- FLUORESCENT LUMINAIRE: SURFACE, RECESSED
- FLUORESCENT LUMINAIRE: WALL MOUNTED
- FLUORESCENT LUMINAIRE: BARE LAMP
- POLE LIGHT: LUMINAIRES AS SHOWN
- DESIGNATES LIGHT ON EMERGENCY CIRCUIT
- EXIT LIGHT: CEILING, WALL (ARROWS AS SHOWN)
- BOLLARD
- EMERGENCY BATTERY LIGHT: HEADS AS SHOWN
- $, $2 — WALL SWITCH: 1 POLE, 2 POLE
- $3, $4 — WALL SWITCH: 3 WAY, 4 WAY
- $K, $M — WALL SWITCH: KEY LOCK, MOMENTARY
- $LV, $P — WALL SWITCH: LOW VOLTAGE, PILOT
- $T, $D — WALL SWITCH: TIMER, MANUAL DIMMER
- A — DESIGNATES LUMINAIRE TYPE (SEE LUMINAIRE SCHEDULE)
- NL — DESIGNATES NIGHT LIGHT CIRCUIT
- PE, PE — PHOTOELECTRIC CELL: WALL MOUNTED, CEILING MOUNTED
- OS, OS — OCCUPANCY SENSOR: CEILING OR WALL MOUNTED
  "X" DESIGNATES DEVICE TYPE:
  S: IN COMBINATION WITH WALL SWITCH
  U: ULTRASONIC
  R: INFRARED
  UR: DUAL TECHNOLOGY, ULTRASONIC/INFRARED

DESIGNATION SYMBOLS

- 123 — EQUIPMENT DESIGNATOR SEE SCHEDULE.
- DARK LINE WEIGHT INDICATES NEW WORK
- DARK AND DASHED LINE WEIGHT INDICATES DEMO WORK
- LIGHT LINE WEIGHT INDICATES EXISTING TO REMAIN
- 1 — NOTE

POWER

- WALL RECEPTACLE: SINGLE, DUPLEX
- WALL RECEPTACLE: EMERGENCY, 4-PLEX
- WALL RECEPTACLE: ISOLATED GROUND
- CEILING RECEPTACLE: DUPLEX
- FIRE RATED FLOOR POKE-THRU
- CONNECTION TO EQUIPMENT PROVIDED BY OTHERS
- DENOTES RECEPTACLE ABOVE COUNTER
- SPECIAL PURPOSE OUTLET AS NOTED, EMERGENCY
- CLOCK HANGER RECEPTACLE
- FLUSH IN-FLOOR OUTLET: DUPLEX, COMBINATION
- PEDESTAL OUTLET: POWER, SIGNAL, COMBINATION
- SURFACE OUTLET STRIP: DIMENSION AS SHOWN
- TELEPOWER POLE, POWER, COMBINATION
- J — JUNCTION BOX
- 60A 45F — DISCONNECT SWITCH: FUSED, NON-FUSED
- $OL — MOTOR STARTER: MANUAL, MAGNETIC, COMBINATION
- MOTOR CONNECTION
- C R S — CONTACTOR, RELAY, SOLENOID
- PUSH BUTTON STATION
- WIRING CONCEALED IN CEILING OR WALL
- WIRING CONCEALED IN FLOOR OR UNDERGROUND
- INDICATES INSULATED GREEN GROUND WIRE
- HOME RUN DESTINATION SHOWN
- CONDUIT ELL: UP, DN.

TELECOMMUNICATIONS ALTERNATE

- WALL SINGLE VOICE JACK OUTLET. MOUNT 44" AFF UON
- WALL QUAD JACK OUTLET-2 VOICE JACKS, 2 CAPPED DATA JACKS SPARE: FLUSH, SURFACE. MOUNT 18" AFF UON
- WALL QUAD JACK OUTLET-2 VOICE JACKS, 2 DATA JACKS: FLUSH, SURFACE. MOUNT 18" AFF UON
- WALL QUAD JACK OUTLET-2 VOICE JACKS, 1 DATA JACK, 1 CAPPED SPARE: FLUSH, SURFACE. MOUNT 18" AFF UON
- WALL QUAD JACK OUTLET-2 CAPPED VOICE JACKS SPARE, 2 DATA JACKS: FLUSH, SURFACE. MOUNT 18" AFF UON
- WALL QUAD JACK OUTLET-1 VOICE JACK, 1 DATA JACK, 1 CAPPED VOICE SPARE, 1 CAPPED DATA SPARE: FLUSH, SURFACE. MOUNT 18" AFF UON

EQUIPMENT

- ELECTRICAL EQUIPMENT
- PANELBOARD: SURFACE, RECESSED
- CABINET: SURFACE, RECESSED
- T — TRANSFORMER
- GROUND ROD, IN TEST WELL
- GROUND PAD
- EQUIPMENT WITH DERIVED GROUND
- V, A — VOLTMETER, AMMETER
- VS, AS — SELECTOR SWITCH: VOLTMETER, AMMETER
- KWH, PF — METER: KILOWATT HOUR, POWER FACTOR
- PT — POTENTIAL TRANSFORMER
- CT — CURRENT TRANSFORMER
- CABLE TRAY: CENTER SUPPORT, OUTER SUPPORTS

ONE-LINE

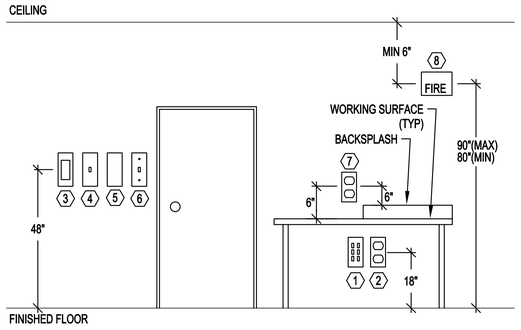
- CIRCUIT BREAKER
- SWITCH, FUSED SWITCH
- BUSS
- AUTOMATIC SWITCH
- M — METER
- XXX XX — PANEL
- FEEDER CALLOUT
- XXX — FAULT CURRENT CALLOUT
- G — GENERATOR

NOTE

THIS IS A STANDARD LEGEND SHEET, THEREFORE, SOME SYMBOLS MAY APPEAR ON THIS SHEET THAT DO NOT APPEAR ON THE DRAWINGS.

SHEET LIST

DEVICE MOUNTING HEIGHTS



GENERAL NOTES:

1. LOCATE ALL FIRE ALARM DEVICES PER CODE.
2. LOCATE ALL ACCESSIBLE SWITCHES PER ADA GUIDELINES.
3. FIELD COORDINATE ALL ABOVE COUNTER DEVICES WITH MILLWORK CONTRACTOR.
4. IF APPLICABLE, TELCOM CONSULTANTS DRAWINGS TAKE PRECEDENCE OVER THIS DETAIL FOR TELCOM DEVICES.

NOTES:

1. TELECOM OUTLET
2. RECEPTACLE
3. FIRE ALARM PULL STATION
4. LIGHT SWITCH
5. CARD READER
6. WALL PHONE
7. ABOVE COUNTER DEVICE MAINTAIN A CONSISTANT HEIGHT THROUGHOUT SPACE
8. FIRE ALARM STROBE

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SYMBOLS, LEGENDS AND ABBREVIATIONS - ELECTRICAL

KMS

E0.01

LUMINAIRE SCHEDULE

FIXTURE TYPE	PRODUCT DESCRIPTION	BASIS OF DESIGN MANUFACTURER	SIZE	INPUT WATTS	LAMP SOURCE	DRIVER / BALLAST	INPUT VOLTAGE	FINISH	MOUNTING	NOTES
L1	SUSPENDED LED	LITHONIA - GRAD LINEAR	4'	25	LED, 4000K 3401 LM	INTEGRAL ELECTRONIC 0-10V	120	PER ARCHITECT	SUSPENDED 3' FROM CEILING	
L2	LINEAR VANITY	HE WILLIAMS - SLF	2'	10.1	LED, 4000K 1338 LM	INTEGRAL ELECTRONIC 0-10V	120	PER ARCHITECT	SURFACE MOUNTED ABOVE MIRROR	
L3	LED RECESSED DOWNLIGHT	EATON PORTFOLIO	8"D	10	LED, 4000K 1000 LM	INTEGRAL ELECTRONIC 0-10V DIM	120	PER ARCHITECT	CEILING RECESSED	
L4	SURFACE LINEAR	LITHONIA - SB	4'	25	LED, 4000K 3236 LM/LF	INTEGRAL ELECTRONIC 0-10V DIM	120	PER ARCHITECT	CEILING SURFACE	
L5	LED RECESSED FLAT PANEL	TCP	2' X 4'	36	LED, 4000K 3600LM	INTEGRAL ELECTRONIC 0-10V DM	120	PER ARCHITECT	CEILING RECESSED	

MECHANICAL EQUIPMENT CONNECTION SCHEDULE

EQUIPMENT DESCRIPTIONS			ELECTRICAL CHARACTERISTICS						CONNECTION CHARACTERISTICS				FEEDER CHARACTERISTICS			PANEL INFORMATION	NOTES
TAG	DESCRIPTION	LOCATION	KW	HP	FLA	MOCP	VOLTS	PHASE	VFD	1-POINT CONNECT	STARTER DIVISION	DISCONNECT DIVISION	CONDUIT DIA (INCH)	PHASE CONDUCTORS	GROUND CONDUCTOR	PANEL NAME	
HV-20	NEW CLASSROOM 4A	MECH PLATFORM		1/2			208	1	NO	YES	23	26	3/4"	12 AWG	12 AWG	M	
HV-21	NEWCLASSROOM 4B	MECH PLATFORM		1/2			208	1	NO	YES	23	26	3/4"	12 AWG	12 AWG	M	
EF-7	GREENHECK SQ-95	TOILET G1.5 EXPANSION		1/8			120	1	NO	YES	23	26	3/4"	12 AWG	12 AWG	M	
EF-8	GREENHECK SQ-95	MAILROOM->TOILET 8.1/8.2		1/8			120	1	NO	YES	23	26	3/4"	12 AWG	12 AWG	EXISTING	
FTR-1	WALL CONVECTOR	LOBBY	0.04				120	1	NO	YES	-	26	3/4"	12 AWG	12 AWG	F	1

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LUMINAIRE AND MECHANICAL EQUIPMENT SCHEDULE

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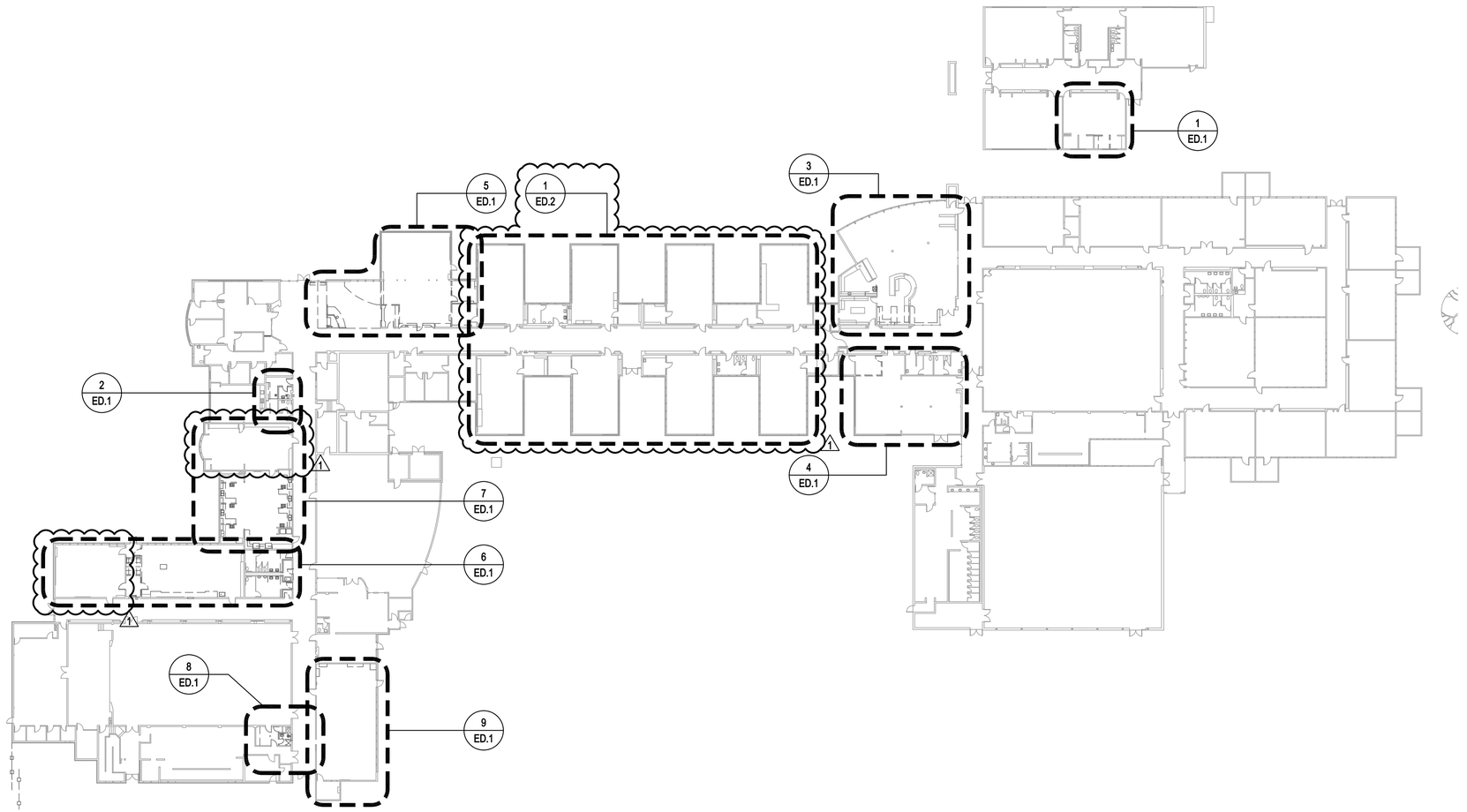
E0.02



1 ED.0 OVERALL DEMOLITION PLAN - ELECTRICAL
1/32" = 1'-0"

NORTH

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OVERALL DEMOLITION PLAN - ELECTRICAL

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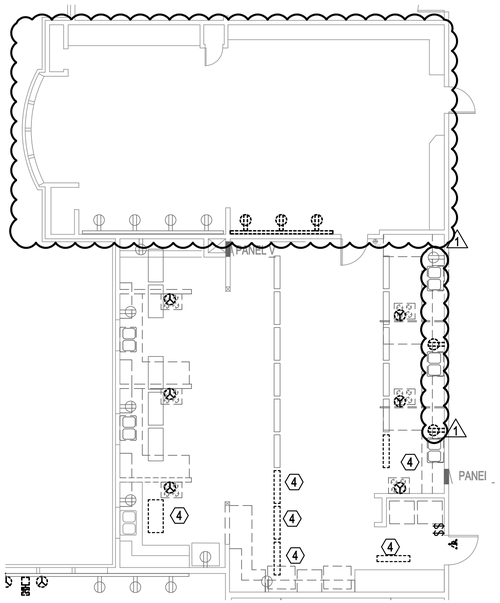
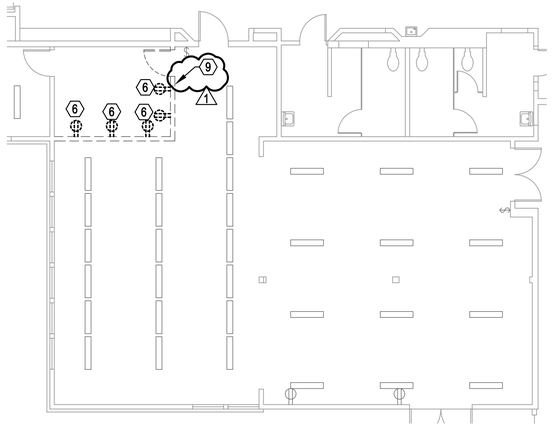
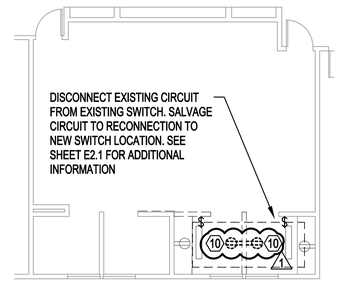
ED.0



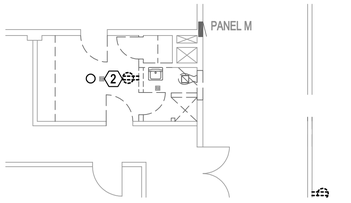
7 ED.1 PARTIAL DEMOLITION - ELECTRICAL
1/8" = 1'-0"



4 ED.1 PARTIAL DEMOLITION - ELECTRICAL
1/8" = 1'-0"



1 ED.1 PARTIAL DEMOLITION - ELECTRICAL
1/8" = 1'-0"



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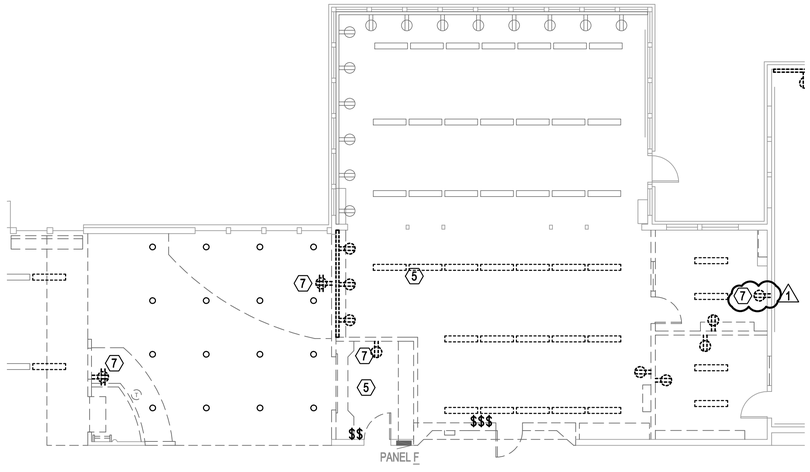
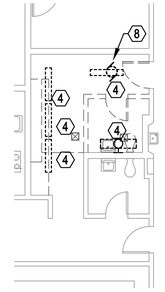
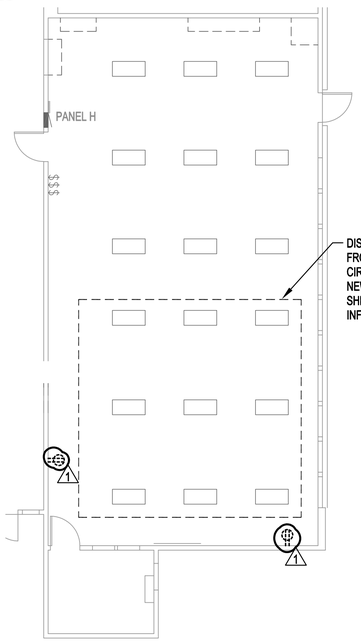
1/8" = 1'-0"



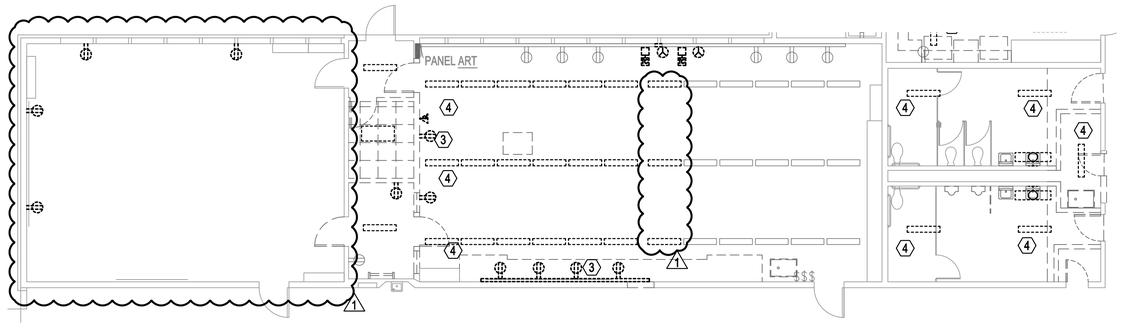
5 ED.1 PARTIAL DEMOLITION - ELECTRICAL
1/8" = 1'-0"



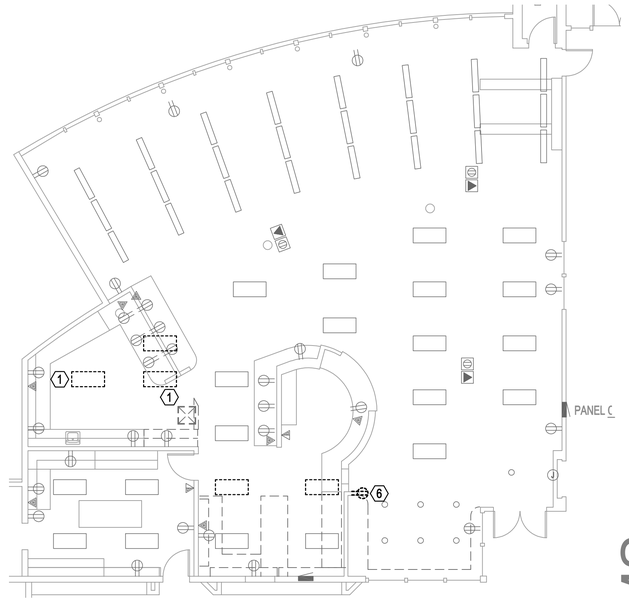
2 ED.1 PARTIAL DEMOLITION - ELECTRICAL
1/8" = 1'-0"



9 ED.1 PARTIAL DEMOLITION - ELECTRICAL
1/8" = 1'-0"



6 ED.1 PARTIAL DEMOLITION - ELECTRICAL
1/8" = 1'-0"



3 ED.1 PARTIAL DEMOLITION - ELECTRICAL
1/8" = 1'-0"

GENERAL NOTES:

A. CAREFULLY REMOVE AND OFFER TO THE OWNER ALL ELECTRICAL EQUIPMENT THAT IS TO BE REMOVED AND IN GOOD WORKING ORDER. REMOVE FROM PROJECT SITE AND PROPERLY DISPOSE ALL EQUIPMENT REJECTED BY THE OWNER.

B. THE LOCATIONS OF ALL EQUIPMENT AND DEVICES MAY NOT BE SHOWN AND THESE PLANS DO NOT SHOW ALL OF THE DEMOLITION CONDITIONS. DEMOLITION INCLUDES THE REMOVAL OF ALL RACEWAY, CONDUCTORS, COMMUNICATION CABLING, LIGHT FIXTURES, DEVICES, ELECTRICAL EQUIPMENT, FIRE ALARM DEVICES, CABLES, HANGERS, AND SUPPORTS THAT ARE MADE OBSOLETE BY THE NEW WORK OR ARE ABANDONED AND NO LONGER IN USE.

NOTES:

1. SALVAGE FIXTURE AND CIRCUIT FOR RELOCATION DURING NEW CONSTRUCTION PHASE. LOCATE PER E2.4.

2. SALVAGE CIRCUIT AND EXTEND TO NEW RECEPTACLE LOCATION. SEE SHEET E1.1 FOR ADDITIONAL INFORMATION.

3.SALVAGE CIRCUIT AND EXTEND TO NEW RECEPTACLE LOCATION. SEE SHEET E1.2 FOR ADDITIONAL INFORMATION.

4. SALVAGE CIRCUIT AND EXTEND TO NEW FIXTURE LOCATION. SEE SHEET E2.X SERIES FOR ADDITIONAL INFORMATION.

5. SALVAGE FIXTURE AND CIRCUIT FOR RELOCATION DURING NEW CONSTRUCTION PHASE. LOCATE PER E2.3.

6. SALVAGE CIRCUIT AND EXTEND TO NEW RECEPTACLE LOCATION. SEE SHEET E1.4 FOR ADDITIONAL INFORMATION.

7. SALVAGE CIRCUIT AND EXTEND TO NEW RECEPTACLE LOCATION. SEE SHEET E1.3 FOR ADDITIONAL INFORMATION.

8. SALVAGE CIRCUIT AND EXTEND TO NEW EXHAUST FAN LOCATION. SEE SHEET E1.4 FOR ADDITIONAL INFORMATION.

9. WALL DEMOLISHED BY ABATEMENT CONTRACTOR. CONTRACTOR TO COORDINATE EXISTING CIRCUITS TERMINATION LOCATION WITH ABATEMENT CONTRACTOR.

10. SALVAGE CIRCUIT AND EXTEND TO NEW RECEPTACLE LOCATION. SEE SHEET E1.5 FOR ADDITIONAL INFORMATION.

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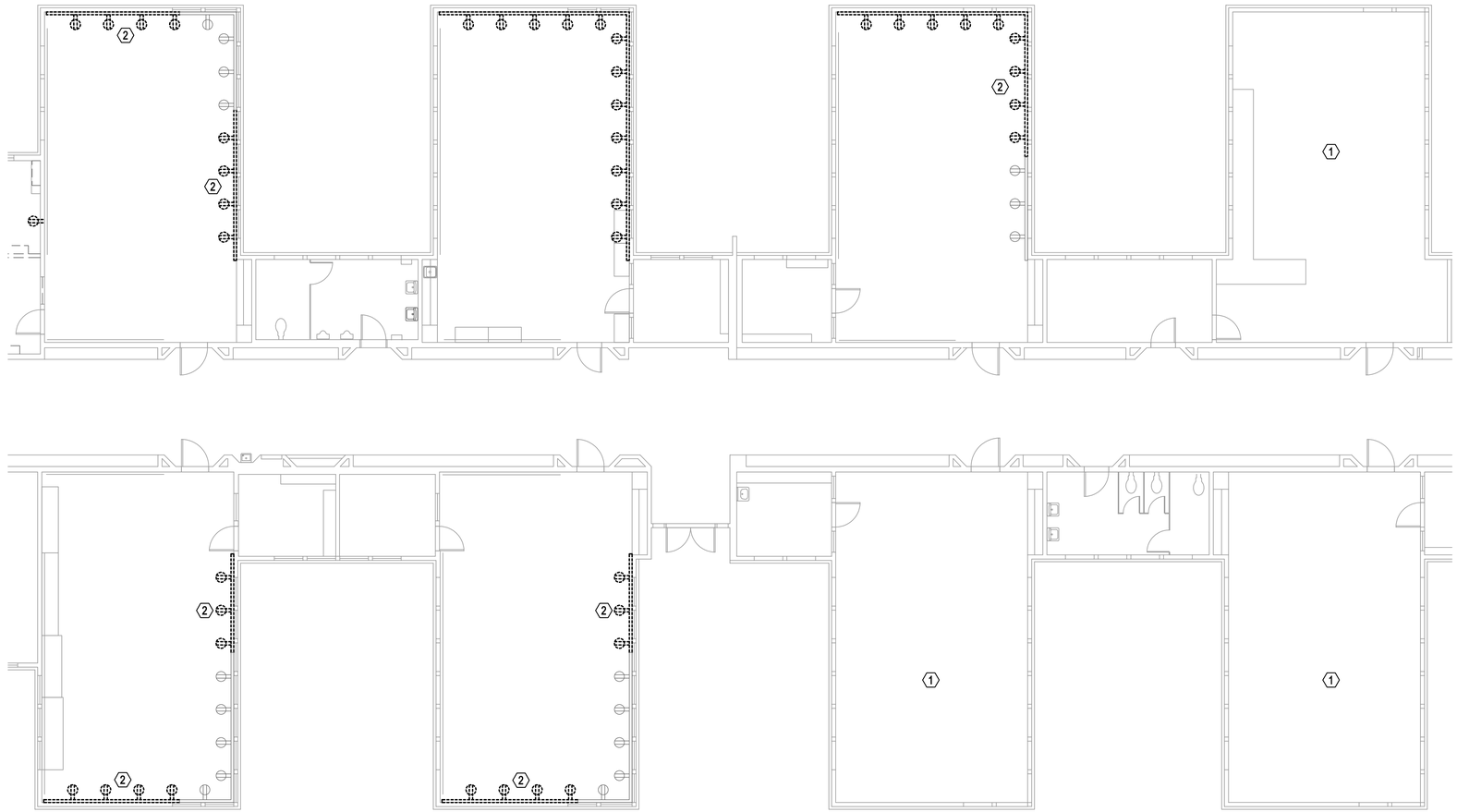
PARTIAL DEMOLITION PLANS - ELECTRICAL

KMS

ED.1



1 ED.2 PARTIAL DEMOLITION - ELECTRICAL
1/8" = 1'-0"

GENERAL NOTES:

A. CAREFULLY REMOVE AND OFFER TO THE OWNER ALL ELECTRICAL EQUIPMENT THAT IS TO BE REMOVED AND IN GOOD WORKING ORDER. REMOVE FROM PROJECT SITE AND PROPERLY DISPOSE ALL EQUIPMENT REJECTED BY THE OWNER.

B. THE LOCATIONS OF ALL EQUIPMENT AND DEVICES MAY NOT BE SHOWN AND THESE PLANS DO NOT SHOW ALL OF THE DEMOLITION CONDITIONS. DEMOLITION INCLUDES THE REMOVAL OF ALL RACEWAY, CONDUCTORS, COMMUNICATION CABLING, LIGHT FIXTURES, DEVICES, ELECTRICAL EQUIPMENT, FIRE ALARM DEVICES, CABLES, HANGERS, AND SUPPORTS THAT ARE MADE OBSOLETE BY THE NEW WORK OR ARE ABANDONED AND NO LONGER IN USE.

⬡ NOTES:

1. NO DEMOLITION SCOPE IN THIS AREA.

2. DEMOLISH RECEPTACLE AND BACKBOX AND REMOVE CONDUIT AND CONDUCTORS TO ABOVE ACCESSIBLE CEILING. SALVAGE CIRCUIT FOR EXTENSION TO EXISTING TO REMAINING RACEWAY. SEE SHEET E1.3 FOR ADDITIONAL INFORMATION

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PARTIAL DEMOLITION PLANS - ELECTRICAL

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ED.2 1

GENERAL NOTES:

A. ALL MECHANICAL AND PLUMBING EQUIPMENT SHOWN IS FOR REFERENCE ONLY. REFER TO MECHANICAL AND PLUMBING SHEETS FOR EXACT LOCATIONS OF ALL EQUIPMENT. SEE MECHANICAL EQUIPMENT CONNECTION SCHEDULE ON E0.02 FOR CIRCUITING INFORMATION.

B. REFERENCE M0.01 FOR MECHANICAL SYMBOLS AND M0.02 FOR MECHANICAL SCHEDULES.

C. ALL INTERIOR RACEWAY TO BE CONCEALED WHEN LOCATED WITHIN FINISHED SPACES UNLESS OTHERWISE NOTED.

D. REFER TO ARCHITECTURAL CEILING PLANS, ELEVATIONS, AND FLOOR PLANS FOR ACTUAL LOCATIONS OF ALL CEILING, WALL, AND FLOOR MOUNTED DEVICES AND EQUIPMENT. WHERE INTERIOR ELEVATIONS DIFFER BETWEEN ARCHITECTURAL AND ENGINEERING DRAWINGS, CONTRACTOR TO NOTIFY ENGINEER.

E. TELECOM SCOPE SHALL INCLUDE BACK BOX, CONDUIT AND RACEWAY. PROVIDE BACKBOX ROUGH-IN AT DATA DEVICE LOCATION AND 1-1/4" CONDUIT ROUTED TO TELECOM CLOSET. DATA DEVICE, CABLING AND CONNECTION TO TELECOMMUNICATIONS SYSTEM SHALL BE BY OWNER'S TELECOMMUNICATIONS CONTRACTOR.

F. THE FIRE ALARM SYSTEM IS SHOWN FOR GUIDANCE AND IS INTENDED TO BE USED TO PROVIDE INFORMATION FOR A FIRE ALARM DESIGN-BUILD SYSTEM. EQUIPMENT AND DEVICE ARRANGEMENT SHOWN IS TO AID IN ESTABLISHING A BASIS OF DESIGN. CONTRACTOR SHALL BE RESPONSIBLE FOR CREATION OF SHOP DRAWINGS, AND TO PROVIDE FULL DESIGN, PERMITTING, INSTALLATION, TESTING, AND COORDINATION WITH OTHER TRADES. PROVIDE A COMPLETE SYSTEM THAT MEETS CURRENT CODE AND FUNCTIONALITY REQUIREMENTS.

NOTES:

1. CONNECT SALVAGED CIRCUIT TO NEW RECEPTACLE.

2. MOTOR CONNECTIONS LOCATED IN ATTIC.

3. PROVIDE BACKBOX AND RACEWAY FOR WIRELESS ACCESS POINT.

4. COORDINATE ELEVATION WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN.

5. PROVIDE BACK-BOX AND CONDUIT PATHWAY FOR PROJECTOR AV CONNECTION.

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MATCH LINE - SEE E1.2

MATCH LINE - SEE E1.1

PROVIDE CONNECTION FOR SIGNAGE COORDINATE LOCATION AND REQUIREMENTS WITH OWNER/ARCHITECT PRIOR TO ROUGH-IN

ART/21

H:17,19

HV-20

PANEL H

PROJECTOR

H:21,23

HV-21

PANEL M

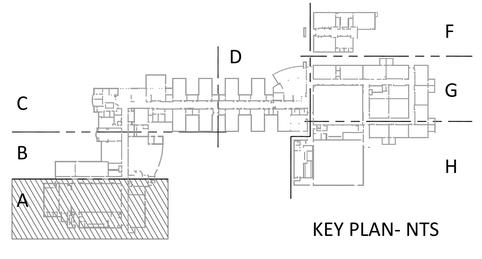
H:7.

H:9.

G

M:31.

EF-7



KEY PLAN- NTS

1 E1.1 ENLARGED PARTIAL ELECTRICAL FLOOR PLAN - A
1/8" = 1'-0"

NORTH

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ENLARGED PARTIAL ELECTRICAL FLOOR PLAN - A

E1.1

GENERAL NOTES:

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B. REFERENCE M0.01 FOR MECHANICAL SYMBOLS AND M0.02 FOR MECHANICAL SCHEDULES.

C. ALL INTERIOR RACEWAY TO BE CONCEALED WHEN LOCATED WITHIN FINISHED SPACES UNLESS OTHERWISE NOTED.

D. REFER TO ARCHITECTURAL CEILING PLANS, ELEVATIONS, AND FLOOR PLANS FOR ACTUAL LOCATIONS OF ALL CEILING, WALL, AND FLOOR MOUNTED DEVICES AND EQUIPMENT. WHERE INTERIOR ELEVATIONS DIFFER BETWEEN ARCHITECTURAL AND ENGINEERING DRAWINGS, CONTRACTOR TO NOTIFY ENGINEER.

E. TELECOM SCOPE SHALL INCLUDE BACK BOX, CONDUIT AND RACEWAY. PROVIDE BACKBOX ROUGH-IN AT DATA DEVICE LOCATION AND 1-1/4" CONDUIT ROUTED TO TELECOM CLOSET. DATA DEVICE, CABLING AND CONNECTION TO TELECOMMUNICATIONS SYSTEM SHALL BE BY OWNER'S TELECOMMUNICATIONS CONTRACTOR.

F. THE FIRE ALARM SYSTEM IS SHOWN FOR GUIDANCE AND IS INTENDED TO BE USED TO PROVIDE INFORMATION FOR A FIRE ALARM DESIGN-BUILD SYSTEM. EQUIPMENT AND DEVICE ARRANGEMENT SHOWN IS TO AID IN ESTABLISHING A BASIS OF DESIGN. CONTRACTOR SHALL BE RESPONSIBLE FOR CREATION OF SHOP DRAWINGS, AND TO PROVIDE FULL DESIGN, PERMITTING, INSTALLATION, TESTING, AND COORDINATION WITH OTHER TRADES. PROVIDE A COMPLETE SYSTEM THAT MEETS CURRENT CODE AND FUNCTIONALITY REQUIREMENTS. 1

NOTES:

1. CONNECT SALVAGED CIRCUIT TO NEW RECEPTACLE.

2. COORDINATE ELEVATION WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN.

3. PROVIDE BACK-BOX AND CONDUIT PATHWAY FOR PROJECTOR AV CONNECTION. 1

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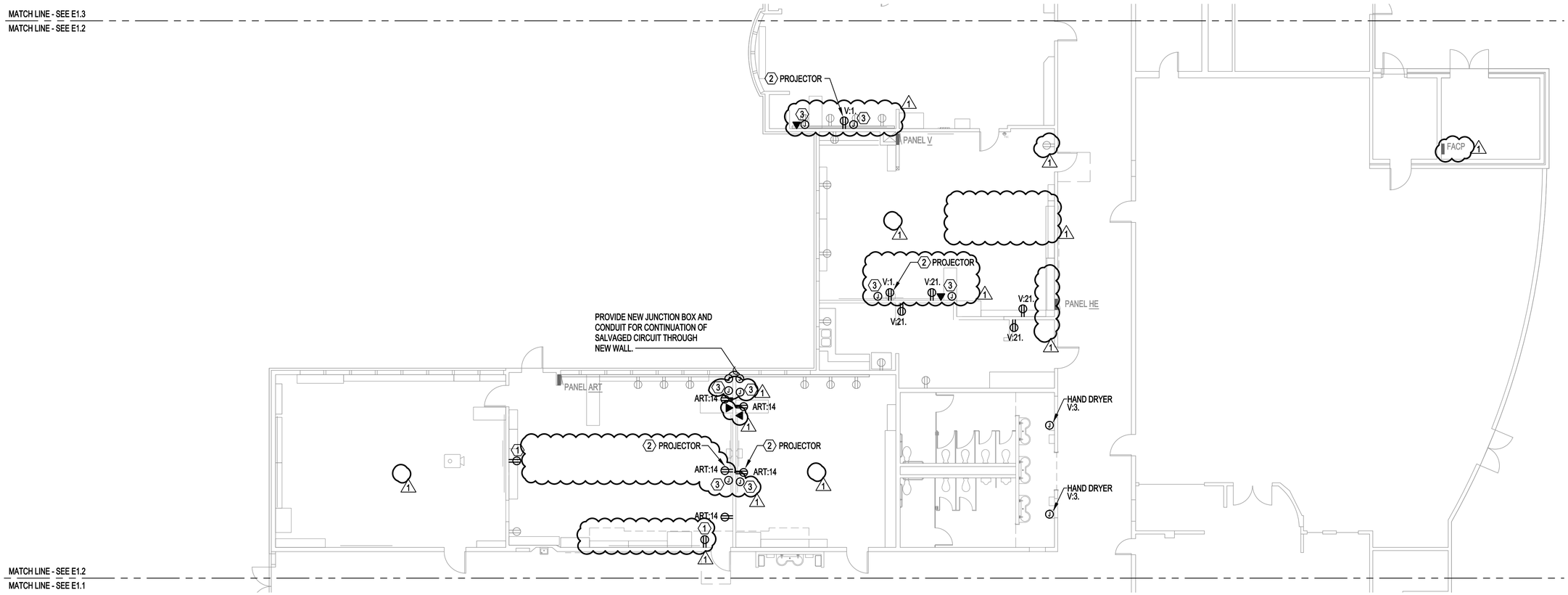
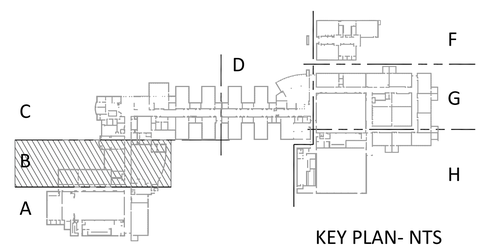


1 E1.2 ENLARGED PARTIAL ELECTRICAL FLOOR PLAN - B
1/8" = 1'-0"

NORTH



KEY PLAN- NTS

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ENLARGED PARTIAL ELECTRICAL FLOOR PLAN - B

E1.2

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GENERAL NOTES:

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B. REFERENCE M0.01 FOR MECHANICAL SYMBOLS AND M0.02 FOR MECHANICAL SCHEDULES.

C. ALL INTERIOR RACEWAY TO BE CONCEALED WHEN LOCATED WITHIN FINISHED SPACES UNLESS OTHERWISE NOTED.

D. REFER TO ARCHITECTURAL CEILING PLANS, ELEVATIONS, AND FLOOR PLANS FOR ACTUAL LOCATIONS OF ALL CEILING, WALL, AND FLOOR MOUNTED DEVICES AND EQUIPMENT. WHERE INTERIOR ELEVATIONS DIFFER BETWEEN ARCHITECTURAL AND ENGINEERING DRAWINGS, CONTRACTOR TO NOTIFY ENGINEER.

E. TELECOM SCOPE SHALL INCLUDE BACK BOX, CONDUIT AND RACEWAY. PROVIDE BACKBOX ROUGH-IN AT DATA DEVICE LOCATION AND 1-1/4" CONDUIT ROUTED TO TELECOM CLOSET. DATA DEVICE, CABLING AND CONNECTION TO TELECOMMUNICATIONS SYSTEM SHALL BE BY OWNER'S TELECOMMUNICATIONS CONTRACTOR.

F. THE FIRE ALARM SYSTEM IS SHOWN FOR GUIDANCE AND IS INTENDED TO BE USED TO PROVIDE INFORMATION FOR A FIRE ALARM DESIGN-BUILD SYSTEM. EQUIPMENT AND DEVICE ARRANGEMENT SHOWN IS TO AID IN ESTABLISHING A BASIS OF DESIGN. CONTRACTOR SHALL BE RESPONSIBLE FOR CREATION OF SHOP DRAWINGS, AND TO PROVIDE FULL DESIGN, PERMITTING, INSTALLATION, TESTING, AND COORDINATION WITH OTHER TRADES. PROVIDE A COMPLETE SYSTEM THAT MEETS CURRENT CODE AND FUNCTIONALITY REQUIREMENTS. 1

NOTES:

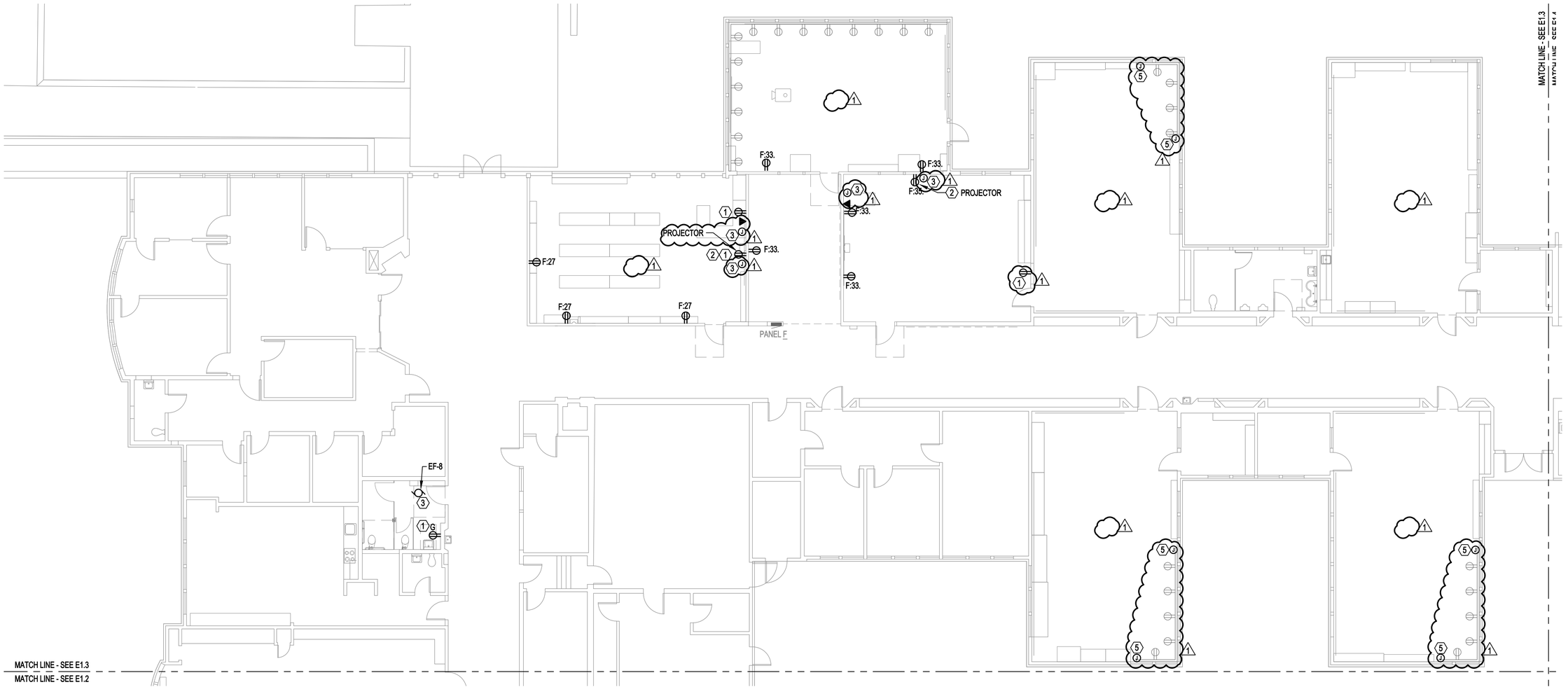
1. CONNECT SALVAGED CIRCUIT TO NEW RECEPTACLE.

2. COORDINATE ELEVATION WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN.

3. CONNECT SALVAGED CIRCUIT TO NEW EXHAUST FAN.

4. PROVIDE BACK-BOX AND CONDUIT PATHWAY FOR PROJECTOR AV CONNECTION.

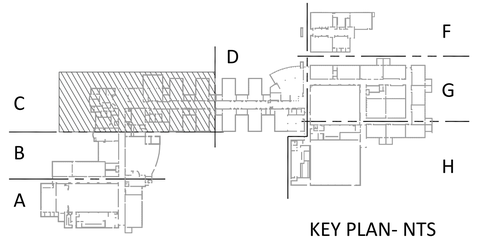
5. PROVIDE SURFACE MOUNTED CONDUIT TO EXTEND SALVAGED CIRCUIT TO NEW JUNTION BOX FOR RECONNECTION OF EXISTING SURFACE MOUNTED RACEWAY. 1



1 / E1.3 ENLARGED PARTIAL ELECTRICAL FLOOR PLAN - C

1/8" = 1'-0"

NORTH



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ENLARGED PARTIAL ELECTRICAL FLOOR PLAN - C

E1.3

KMS

Date: 3/16/20 Time: 1:11pm File: \\pae-engineers.com\Projects\2019\19-1866 – Eugene 4J – YC Relocation\01 Production\02 CAD\19-1866 E1.3.dwg User: daniel.wirtala

GENERAL NOTES:

A. ALL MECHANICAL AND PLUMBING EQUIPMENT SHOWN IS FOR REFERENCE ONLY. REFER TO MECHANICAL AND PLUMBING SHEETS FOR EXACT LOCATIONS OF ALL EQUIPMENT. SEE MECHANICAL EQUIPMENT CONNECTION SCHEDULE ON E0.02 FOR CIRCUITING INFORMATION.

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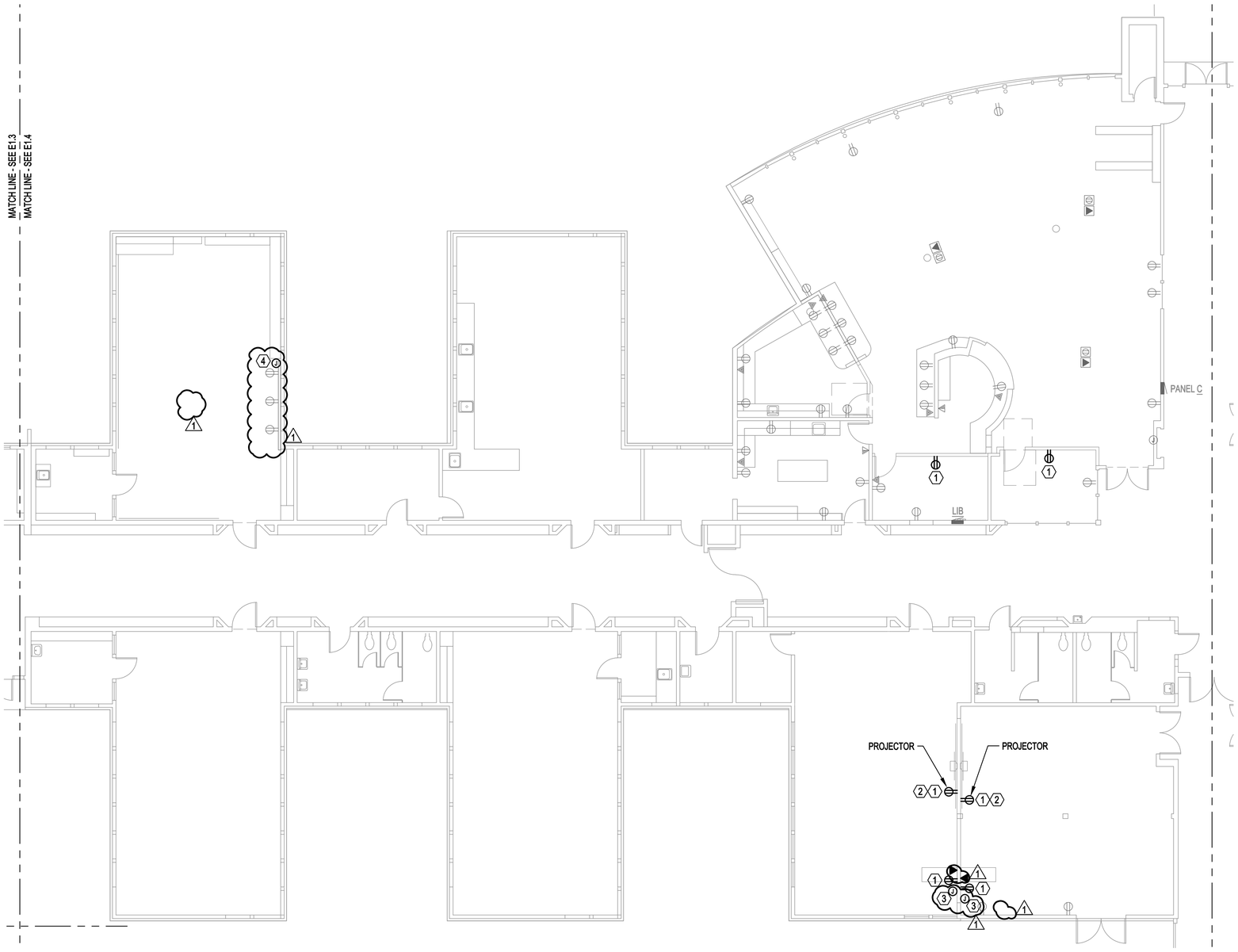
NOTES:

1. CONNECT SALVAGED CIRCUIT TO NEW RECEPTACLE.

2. COORDINATE ELEVATION WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN.

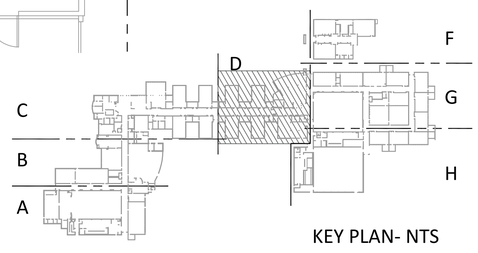
3. PROVIDE BACK-BOX AND CONDUIT PATHWAY FOR PROJECTOR AV CONNECTION.

4. PROVIDE SURFACE MOUNTED CONDUIT TO EXTEND SALVAGED CIRCUIT TO NEW JUNTION BOX FOR RECONNECTION OF EXISTING SURFACE MOUNTED RACEWAY. (1)



1 / E1.4 ENLARGED PARTIAL ELECTRICAL FLOOR PLAN - D
1/8" = 1'-0"

NORTH



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ENLARGED PARTIAL ELECTRICAL FLOOR PLAN - D

E1.4

KMS

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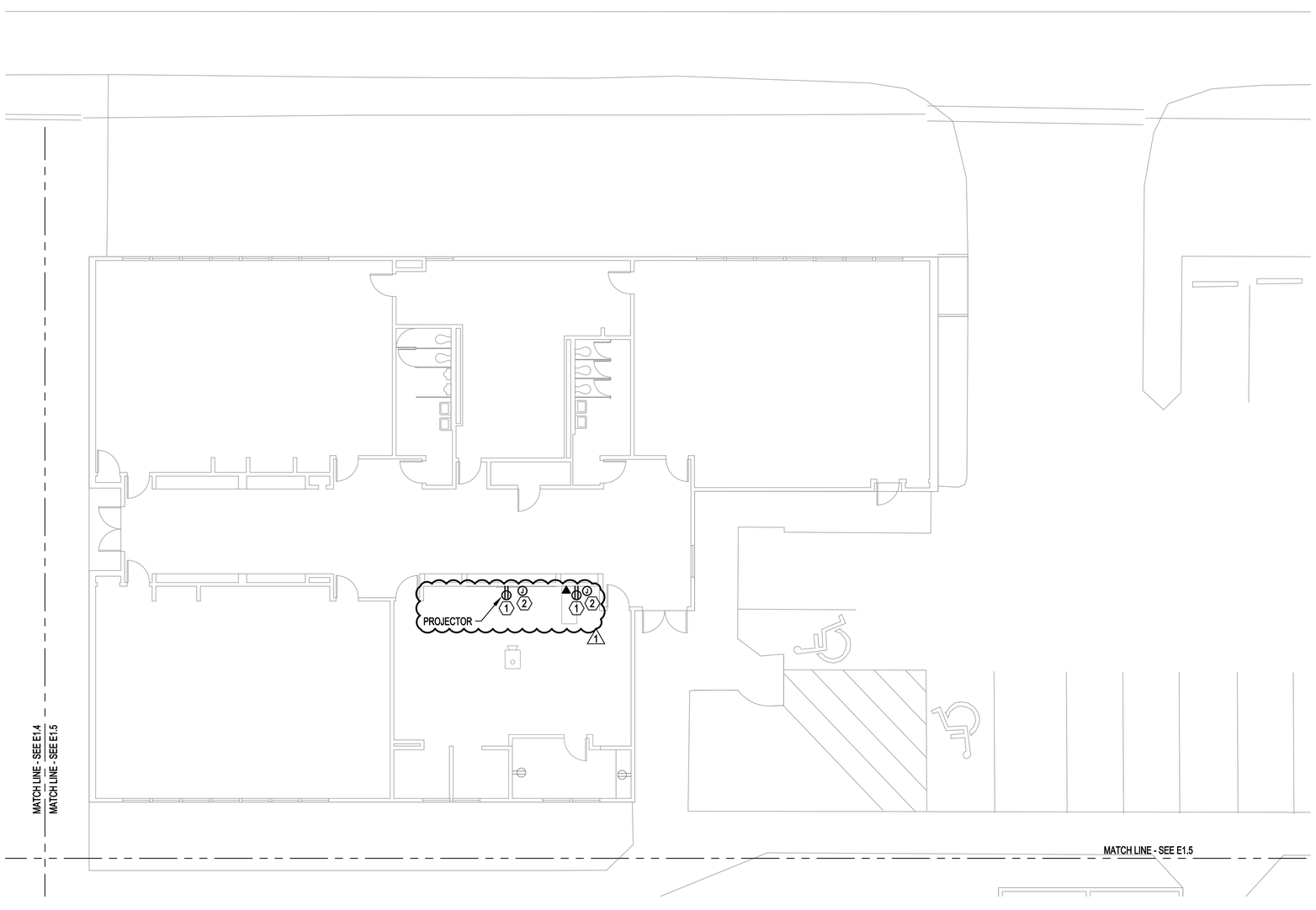
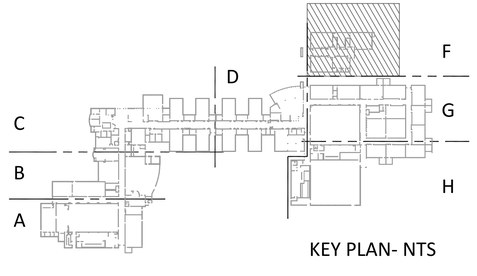
NOTES:

1. CONNECT SALVAGED CIRCUIT TO NEW RECEPTACLE.
2. PROVIDE BACK-BOX AND CONDUIT PATHWAY FOR PROJECTOR AV CONNECTION. (1)



1 / E1.4 ENLARGED PARTIAL ELECTRICAL FLOOR PLAN - F
1/8" = 1'-0"

NORTH



KEY PLAN- NTS

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ENLARGED PARTIAL ELECTRICAL FLOOR PLAN - F

E1.5

KMS

GENERAL NOTES:

A. PROVIDE #10 AWG CONDUCTORS TO 120V BRANCH CIRCUITS OVER 100FT FROM BRANCH PANEL.

B. COORDINATE ROUTING OF CONDUIT WITH ALL OTHER TRADES. WHERE POSSIBLE, ROUTE CONDUIT TIGHT TO DECK STRUCTURE. CONDUIT SHALL BE ROUTED SO AS NOT TO OBSTRUCT ACCESS TO VALVES, DAMPERS, CONTROL PANELS, ACCESS PANELS AND EQUIPMENT COMPONENTS.

C. LUMINAIRE LOCATIONS SHOWN ARE APPROXIMATE AND DIAGRAMMATIC. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS AND ELEVATIONS FOR EXACT LUMINAIRE/CONTROLS LOCATIONS AND MOUNTING HEIGHTS.

⬡ NOTES:

1. CONNECT SALVAGED CIRCUIT TO NEW FIXTURE LOCATIONS.

2. CONNECT SALVALED CIRCUIT TO NEW SWITCH LOCATION.

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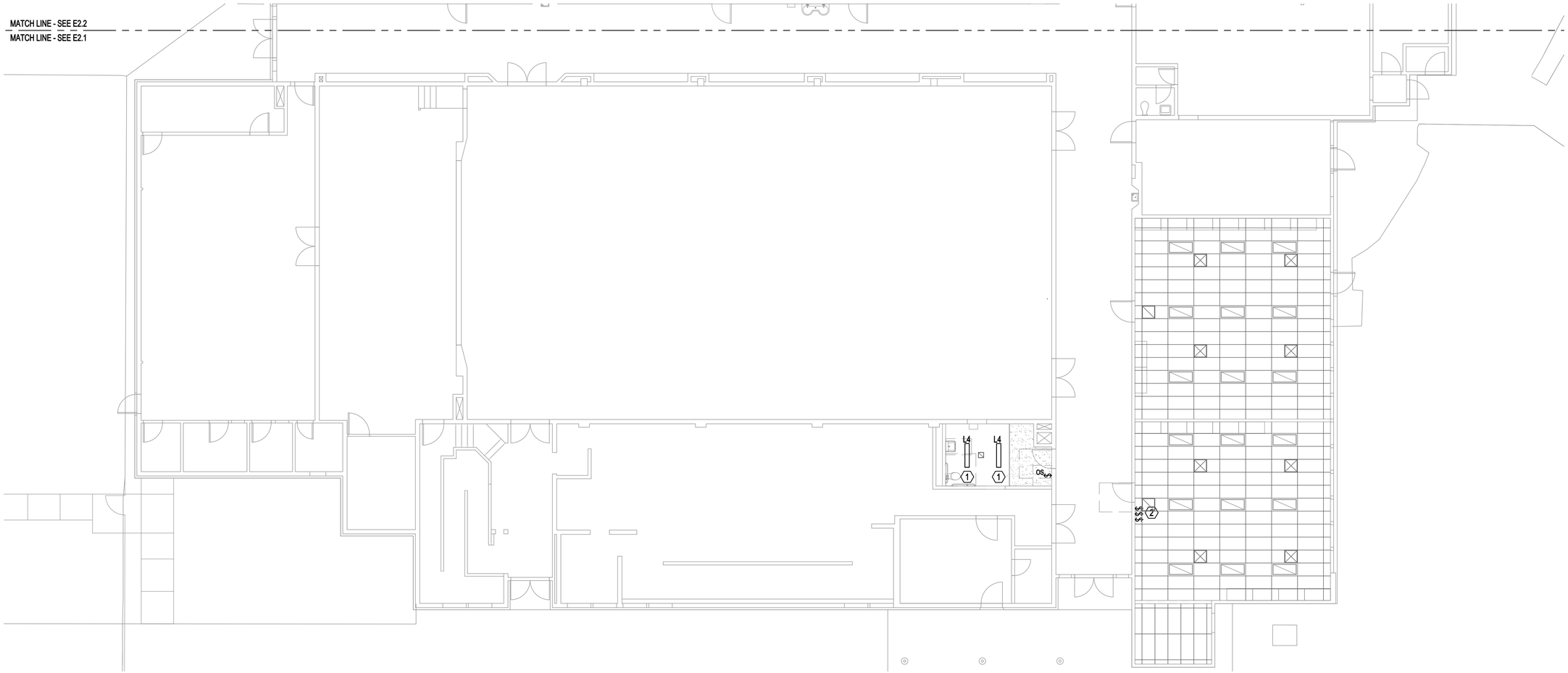
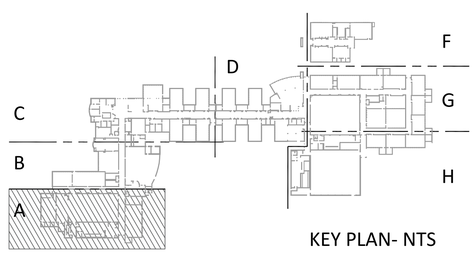
MATCH LINE - SEE E2.2
MATCH LINE - SEE E2.1



1 E2.1 ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN - A
1/8" = 1'-0"

NORTH



KEY PLAN- NTS

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ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN - A

E2.1

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CONTROL STATION SCHEDULE		
CONTROL STATION ID	ZONES	DIMMING
CS1	1	YES
CS2	2	YES
CS3	3	YES

NOTE:

A. PROVIVE ALL ON/OFF AND INDIVIDUAL ON/OFF AND DIMMING CONTROL PER ZONE.

GENERAL NOTES:

A. PROVIDE #10 AWG CONDUCTORS TO 120V BRANCH CIRCUITS OVER 100FT FROM BRANCH PANEL.

B. COORDINATE ROUTING OF CONDUIT WITH ALL OTHER TRADES. WHERE POSSIBLE, ROUTE CONDUIT TIGHT TO DECK STRUCTURE. CONDUIT SHALL BE ROUTED SO AS NOT TO OBSTRUCT ACCESS TO VALVES, DAMPERS, CONTROL PANELS, ACCESS PANELS AND EQUIPMENT COMPONENTS.

C. LUMINAIRE LOCATIONS SHOWN ARE APPROXIMATE AND DIAGRAMMATIC. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS AND ELEVATIONS FOR EXACT LUMINAIRE/CONTROLS LOCATIONS AND MOUNTING HEIGHTS.

NOTES:

1. CONNECT SALVAGED CIRCUIT TO NEW FIXTURE LOCATIONS.

2. PROVIDE NEW SWITCH TO CONTROL EXISTING FIXTURES.

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93884PE
OREGON
DEPT 11, 2018
ROBERT A. MILLS
03/16/20
EXPIRES 12-31-2020

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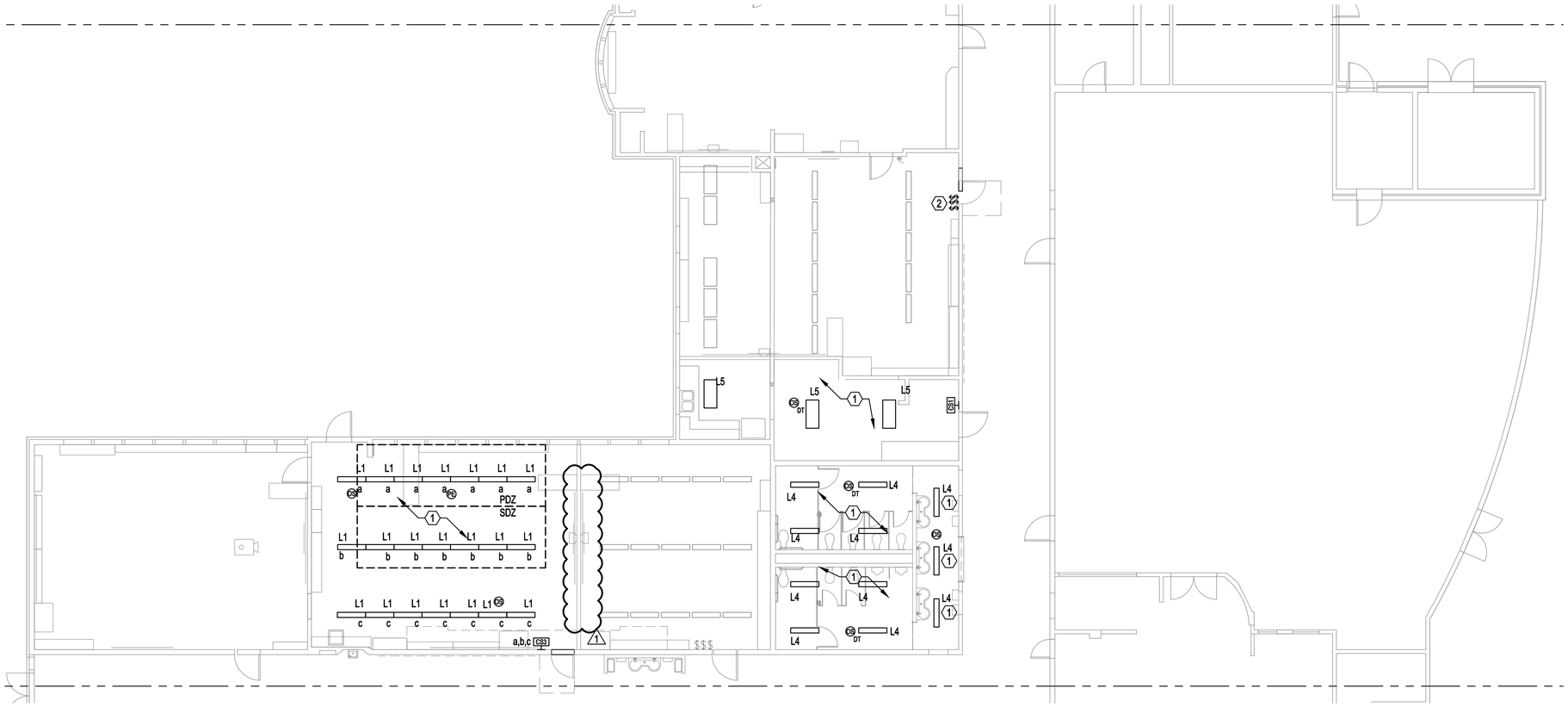
REVISIONS
1 3/17/2020 ADD. 1

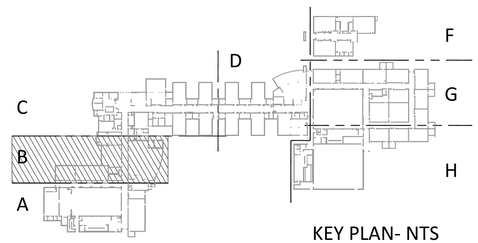
MATCH LINE - SEE E2.3
MATCH LINE - SEE E2.2



MATCH LINE - SEE E2.2
MATCH LINE - SEE E2.1

1 E2.2 ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN - B
1/8" = 1'-0"

NORTH



KEY PLAN- NTS

ESD 4J KELLY MIDDLE SCHOOL IMPROVEMENTS

850 HOWARD AVE, EUGENE, OR 97404
RENOVATIONS

JOB NO: 19189
ISSUE DATE: 3/3/2020

ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN - B

E2.2

KMS

CONTROL STATION SCHEDULE		
CONTROL STATION ID	ZONES	DIMMING
CS1	1	YES
CS2	2	YES
CS3	3	YES

NOTE:

A. PROVIVE ALL ON/OFF AND INDIVIDUAL ON/OFF AND DIMMING CONTROL PER ZONE.

GENERAL NOTES:

A. PROVIDE #10 AWG CONDUCTORS TO 120V BRANCH CIRCUITS OVER 100FT FROM BRANCH PANEL.

B. COORDINATE ROUTING OF CONDUIT WITH ALL OTHER TRADES. WHERE POSSIBLE, ROUTE CONDUIT TIGHT TO DECK STRUCTURE. CONDUIT SHALL BE ROUTED SO AS NOT TO OBSTRUCT ACCESS TO VALVES, DAMPERS, CONTROL PANELS, ACCESS PANELS AND EQUIPMENT COMPONENTS.

C. LUMINAIRE LOCATIONS SHOWN ARE APPROXIMATE AND DIAGRAMMATIC. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS AND ELEVATIONS FOR EXACT LUMINAIRE/CONTROLS LOCATIONS AND MOUNTING HEIGHTS.

NOTES:

1. CONNECT SALVAGED CIRCUIT TO NEW FIXTURE LOCATIONS.

2. LOCATED NEW FIXTURES IN EXISTING FIXTURE LOCATION.

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OREGON
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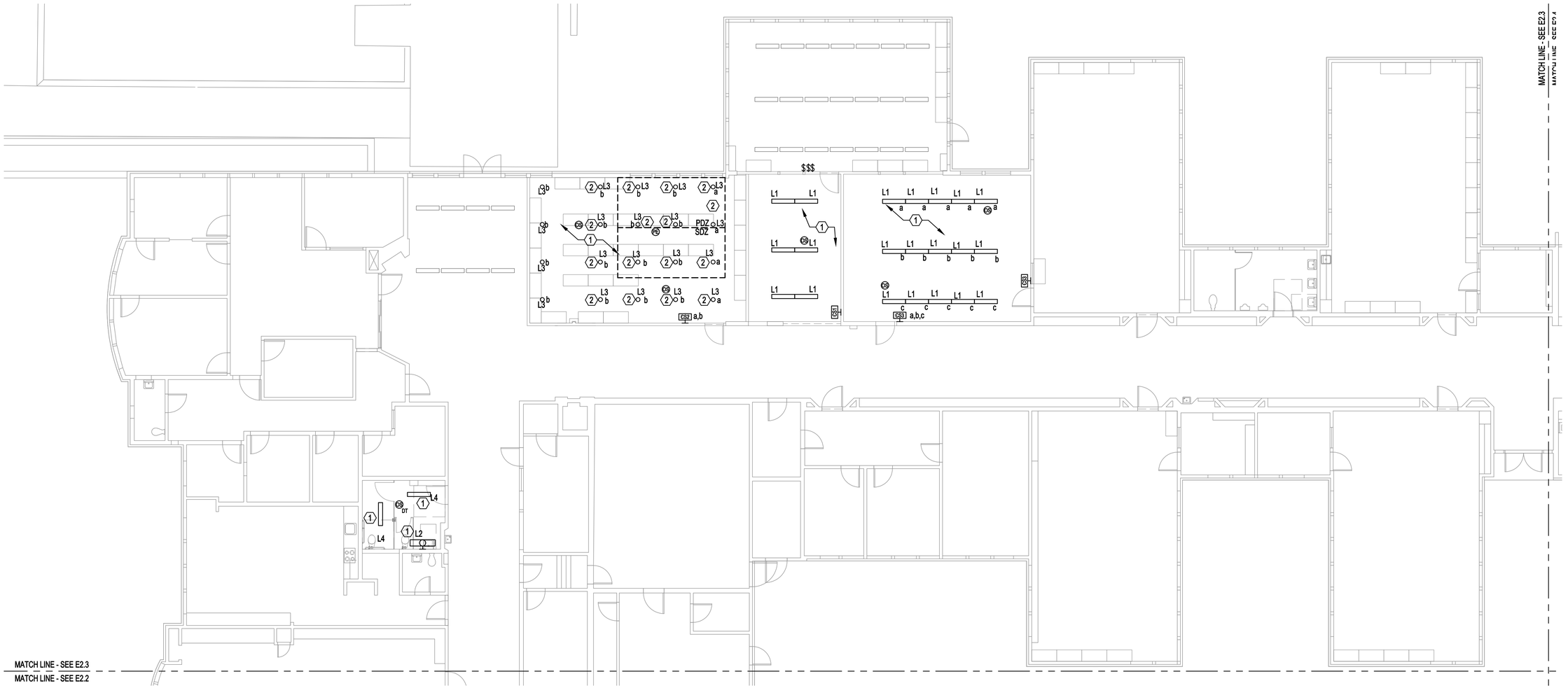
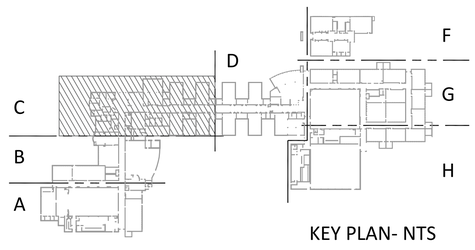
ROBERT A. MILLS
EXPIRES 12-31-2020
05/22/20



1 E2.3 ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN - C
1/8" = 1'-0"

NORTH



KEY PLAN- NTS

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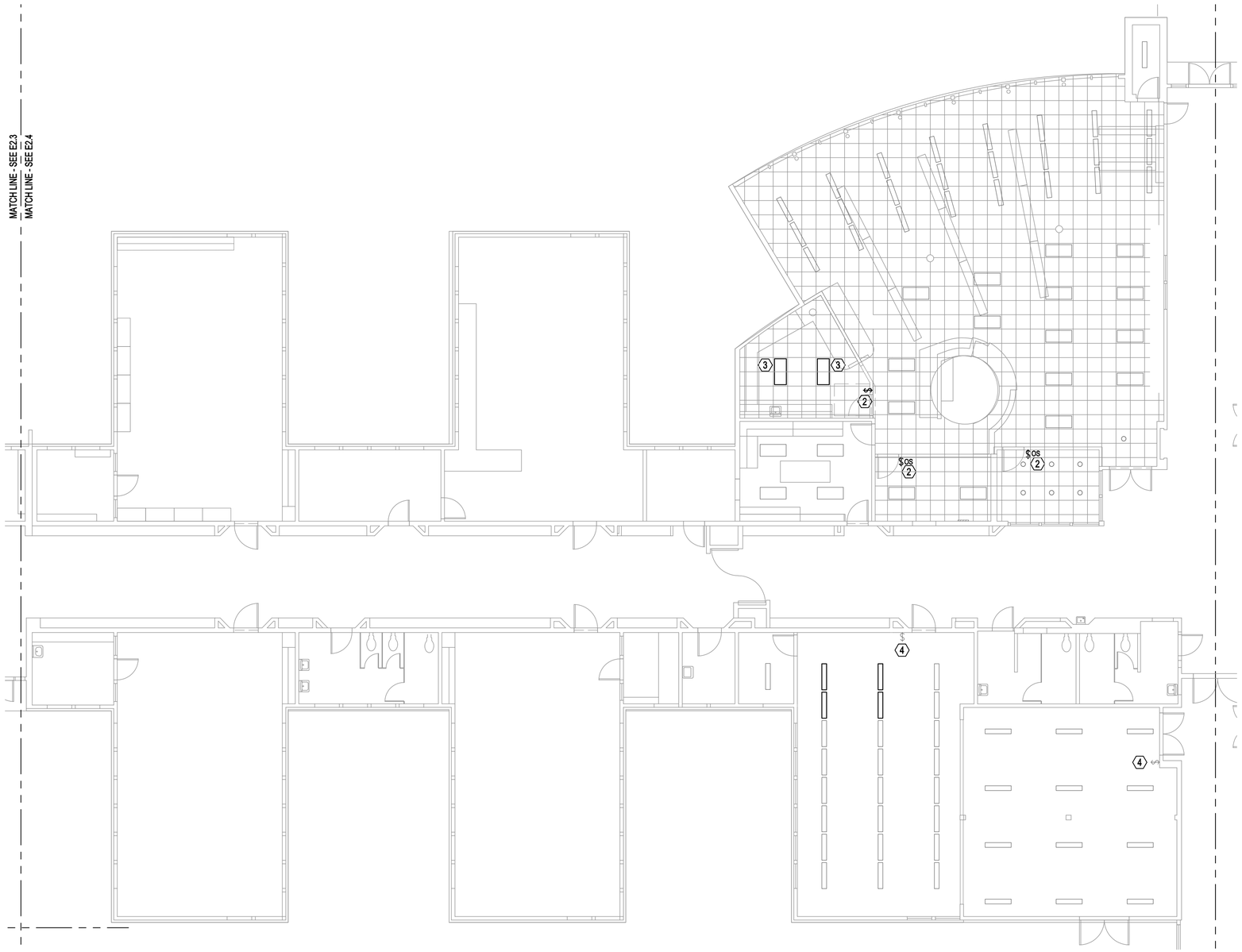
ISSUE DATE: 3 MARCH 2020

ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN - C

E2.3

KMS

Date: 3/2/20 Time: 12:28pm File: \\pae-engineers.com\Projects\2019\19-1866 - Eugene 4J - YG Relocation\01 Production\02 CAD\19-1866 E2.3.dwg User: daniel.wirtala



1 E2.4 ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN - D

1/8" = 1'-0"

NORTH

GENERAL NOTES:

A. PROVIDE #10 AWG CONDUCTORS TO 120V BRANCH CIRCUITS OVER 100FT FROM BRANCH PANEL.

B. COORDINATE ROUTING OF CONDUIT WITH ALL OTHER TRADES. WHERE POSSIBLE, ROUTE CONDUIT TIGHT TO DECK STRUCTURE. CONDUIT SHALL BE ROUTED SO AS NOT TO OBSTRUCT ACCESS TO VALVES, DAMPERS, CONTROL PANELS, ACCESS PANELS AND EQUIPMENT COMPONENTS.

C. LUMINAIRE LOCATIONS SHOWN ARE APPROXIMATE AND DIAGRAMMATIC. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS AND ELEVATIONS FOR EXACT LUMINAIRE/CONTROLS LOCATIONS AND MOUNTING HEIGHTS.

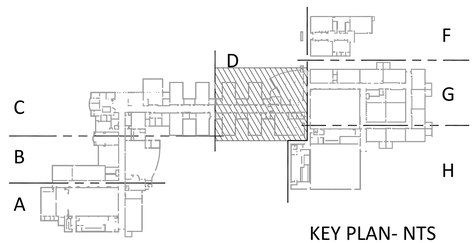
NOTES:

1. CONNECT SALVAGED CIRCUIT TO NEW FIXTURE LOCATIONS.

2. PROVIDE NEW SWITCH TO CONTROL EXISTING FIXTURES.

3. RELOCATE EXISTING FIXTURE TO NEW LOCATION.

4. REWIRE FIXTURES IN THIS SPACE SUCH THAT THE EXISTING SWITCH CONTROLS ONLY THE EXISTING FIXTURES LOCAL TO THE NEW CLASSROOM.



KEY PLAN- NTS

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JOB NO: 19189
ISSUE DATE: 3 MARCH 2020

ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN - D

E2.4

KMS

Date: 3/2/20 Time: 12:28pm File: \\pae-engineers.com\Projects\2019\19-1866 – Eugene 4J – YG Relocation\01 Production\02 CAD\19-1866 E2.4.dwg User: daniel.wirtala

GENERAL NOTES:

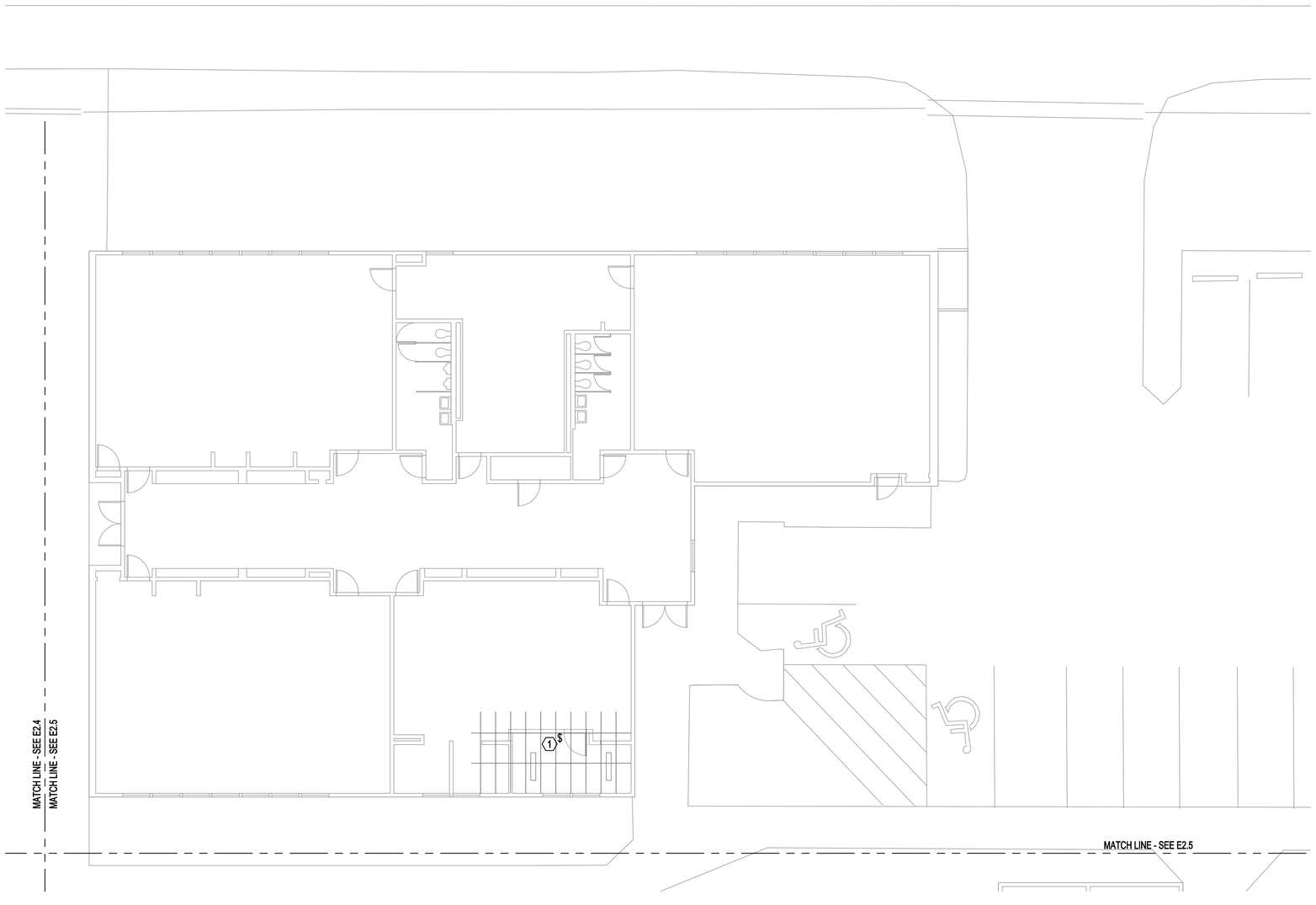
A. PROVIDE #10 AWG CONDUCTORS TO 120V BRANCH CIRCUITS OVER 100FT FROM BRANCH PANEL.

B. COORDINATE ROUTING OF CONDUIT WITH ALL OTHER TRADES. WHERE POSSIBLE, ROUTE CONDUIT TIGHT TO DECK STRUCTURE. CONDUIT SHALL BE ROUTED SO AS NOT TO OBSTRUCT ACCESS TO VALVES, DAMPERS, CONTROL PANELS, ACCESS PANELS AND EQUIPMENT COMPONENTS.

C. LUMINAIRE LOCATIONS SHOWN ARE APPROXIMATE AND DIAGRAMMATIC. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS AND ELEVATIONS FOR EXACT LUMINAIRE/CONTROLS LOCATIONS AND MOUNTING HEIGHTS.

⬡ NOTES:

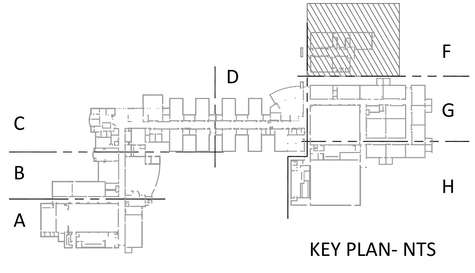
1. RECONNECT SALVAGED CIRCUIT TO NEW SWITCH LOCATION.



1 / E2.4 ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN - F

1/8" = 1'-0"

NORTH



KEY PLAN- NTS

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RENOVATIONS

JOB NO: 19189
ISSUE DATE: 3 MARCH 2020

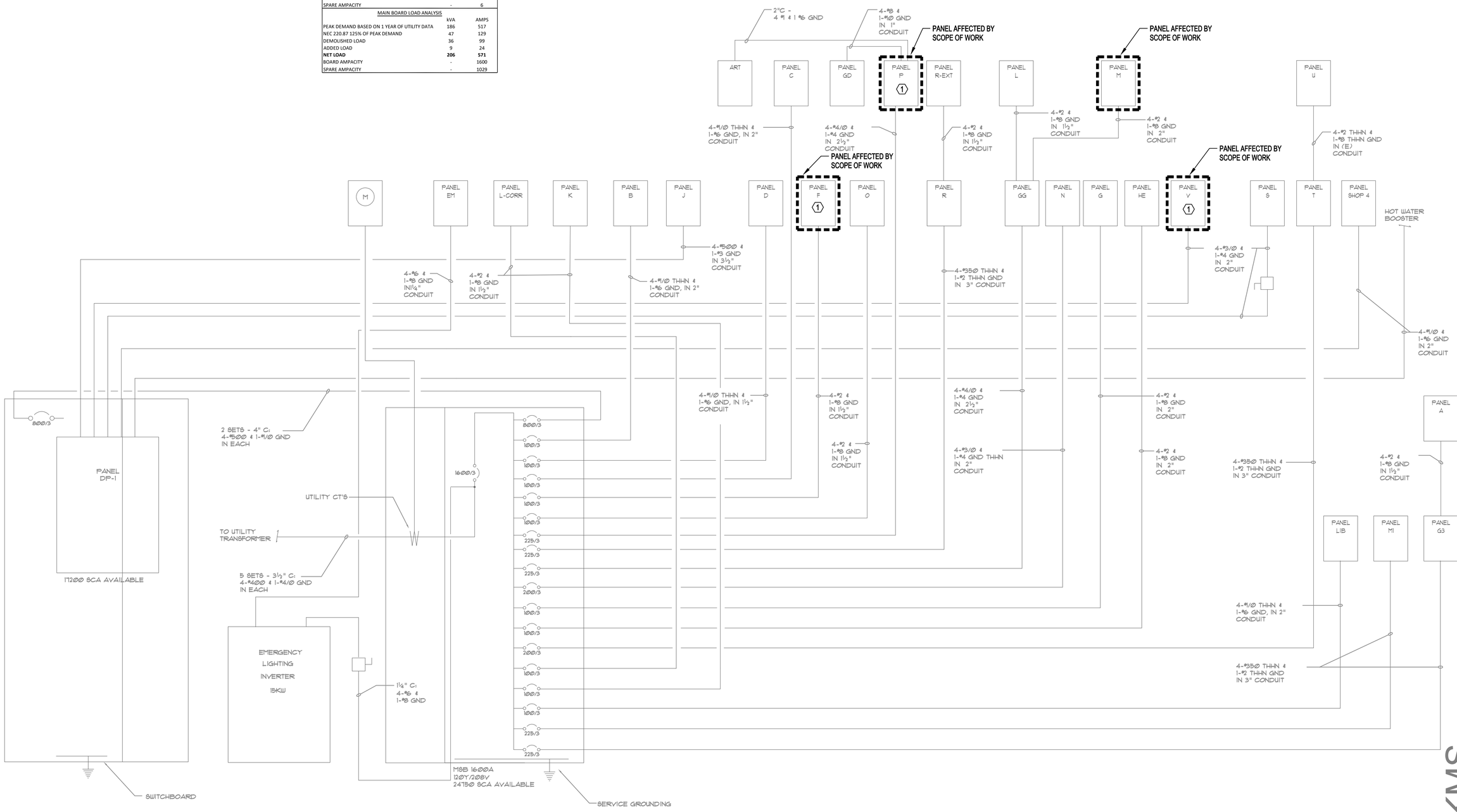
ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN - F

E2.5

PANEL M LOAD ANALYSIS	kVA	AMPS
PEAK DEMAND BASED ON LOAD CALCULATIONS	25	69
NEC 220.87 125% OF PEAK DEMAND	6	17
DEMOLISHED LOAD	0	0
ADDED LOAD	3	8
NET LOAD	**34**	**95**
BOARD AMPACITY	-	100
SPARE AMPACITY	-	5

PANEL GG LOAD ANALYSIS	kVA	AMPS
PEAK DEMAND BASED ON LOAD CALCULATIONS	61	169
NEC 220.87 125% OF PEAK DEMAND	15	42
DEMOLISHED LOAD	0	0
ADDED LOAD	3	8
NET LOAD	**79**	**220**
BOARD AMPACITY	-	225
SPARE AMPACITY	-	6

MAIN BOARD LOAD ANALYSIS	kVA	AMPS
PEAK DEMAND BASED ON 1 YEAR OF UTILITY DATA	186	517
NEC 220.87 125% OF PEAK DEMAND	47	129
DEMOLISHED LOAD	36	99
ADDED LOAD	9	24
NET LOAD	**206**	**571**
BOARD AMPACITY	-	1600
SPARE AMPACITY	-	1029



NOTES:

1. SCOPE OF WORK RESULTS IN A NET REDUCTION IN LOAD ON PANEL.

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DIAGRAMS - ELECTRICAL

KMS

E7.01

Date: 3/2/20 Time: 12:28pm File: \\pae-engineers.com\Projects\2019\19-1866 - Eugene 4J - YG Relocation\01 Production\02 CAD\19-1866 E7.01.dwg User: daniel.wirtala

PANEL SCHEDULE

PANEL: M LOCATION: MAIN ELECTRICAL ROOM VOLTAGE: 208 Y/ 120 P: 3 W: 4 AIC RATING:
AMP: 225 MLO [X] MCB [ ] MOUNTING: [ ] SURFACE [X] FLUSH
TYPE: EXISTING [X] NEW [ ] STYLE: NEUTRAL: 100% FED FROM: PANEL GG

CIRCUIT DESCRIPTION	LOAD TYPE	LOAD KVA	CKT BKR	P	CIR #	P H	CIR #	P	CKT BKR	LOAD KVA	LOAD TYPE	CIRCUIT DESCRIPTION
(E) EXISTING LOAD	MISC	1.92	20	1	1	A	2	1	20			(E) SPARE
(E) EXISTING LOAD	MISC	1.92	20	1	3	B	4	1	20			(E) SPARE
(E) EXISTING LOAD	MISC	**1.92**	20	1	5	C	6	1	20	1.92	MISC	(E) EXISTING LOAD
(E) EXISTING LOAD	MISC	**1.92**	20	1	7	A	8	1	20	1.92	MISC	(E) EXISTING LOAD
(E) EXISTING LOAD	MISC	1.92	20	1	9	B	10	1	20	1.92	MISC	(E) EXISTING LOAD
(E) EXISTING LOAD	MISC	**1.92**	20	1	11	C	12	1	20	1.92	MISC	(E) EXISTING LOAD
(E) EXISTING LOAD	MISC	**1.92**	20	1	13	A	14	1	20	1.92	MISC	(E) EXISTING LOAD
(E) EXISTING LOAD	MISC	**1.92**	20	1	15	B	16	1	20			(E) SPARE
(N) HV-20	**MISC**	**0.44**	**15**	**2**	17	C	18	1	20			(E) SPARE
-	**MISC**	**0.44**	-	-	19	A	20	1	20			(E) SPARE
(N) HV-21	**MISC**	**0.44**	**15**	**2**	21	B	22	1	20			(E) SPARE
-	**MISC**	**0.44**	-	-	23	C	24	1	20			(E) SPARE
(E) SPACE					25	A	26	3	15			(E) EXISTING LOAD
(N) RECEPTACLES ROOMS 4A/4B	REC	**0.72**	20	1	27	B	28	-	-			
(N) SMART BOARD ROOMS 4A/4B	REC	**0.36**	20	1	29	C	30	-	-			
(N) EF-7	MTR	0.04	20	1	31	A	32	1	20			(E) SPARE
(E) SPARE			20	1	33	B	34	1	20			(E) SPARE
(E) SPARE			20	1	35	C	36	1	20			(E) SPARE
(E) SPACE					37	A	38	3	20			(E) SPARE
(E) SPACE					39	B	40	-	-			
(E) SPACE					41	C	42	-	-			

ESTIMATED MAXIMUM DEMAND (EMD) CALCULATIONS

LOAD SUMMARY:	LOAD TYPE	CONNECTED	NEC DEMAND
LIGHTING	LTG	0.0 KVA	0.0 KVA (125%)
RESIDENT LTG/REC	RES	0.0 KVA	0.0 KVA (100/35/25 %)
SMALL APPLIANCE	RES	0.0 KVA	0.0 KVA (100/35/25 %)
LARGEST MOTOR	MTR	KVA	0.0 KVA (125%)
REMAINING MOTORS	MTR	0.0 KVA	0.0 KVA (100%)
GEN PURPOSE REC	REC	1.1 KVA	1.1 KVA (50% > 10KVA)
COMPUTER REC	MISC	0.0 KVA	0.0 KVA (100%)
EQUIP/OTHER	MISC	26.7 KVA	26.7 KVA (100%)
HEATING	MISC	0.0 KVA	0.0 KVA (100%)
ELEVATOR	ELEV	0.0 KVA	0.0 KVA (100%)
KITCHEN EQPT	KITCH	0.0 KVA	0.0 KVA (.65)
TOTALS:		27.9 KVA	27.9 KVA
		77.3 AMP	77.3 AMP

CONNECTED PHASE LOADING
PHASE A: 10.08 KVA
PHASE B: 8.84 KVA
PHASE C: 8.93 KVA

NOTES:
1. LIGHT LINEWEIGHT PREFACED WITH (E) INDICATES EXISTING TO REMIAN.
2. BOLD LINEWEIGHT PREFACED WITH (N) INDICATES NEW

PANEL SCHEDULE

PANEL: L LOCATION: STAGE VOLTAGE: 208 Y/ 120 P: 3 W: 4 AIC RATING:
AMP: 225 MLO [X] MCB [ ] MOUNTING: [ ] SURFACE [X] FLUSH
TYPE: EXISTING [X] NEW [ ] STYLE: NEUTRAL: 100% FED FROM: PANEL GG

CIRCUIT DESCRIPTION	LOAD TYPE	LOAD KVA	CKT BKR	P	CIR #	P H	CIR #	P	CKT BKR	LOAD KVA	LOAD TYPE	CIRCUIT DESCRIPTION
(E) EXISTING LOAD	MISC	1.92	20	1	1	A	2	1	20	1.92		(E) EXISTING LOAD
(E) EXISTING LOAD	MISC	1.92	20	1	3	B	4	1	20			(E) SPARE
(E) EXISTING LOAD	MISC	**1.92**	20	1	5	C	6	1	20			(E) SPARE
(E) EXISTING LOAD	MISC	**1.92**	20	1	7	A	8	1	20			(E) SPARE
(E) SPARE			20	1	9	B	10	1	20			(E) SPARE
(E) EXISTING LOAD	MISC	**1.92**	20	1	11	C	12	1	20			(E) SPARE
(E) EXISTING LOAD	MISC	**1.92**	20	1	13	A	14	3	20	0.80	MISC	(E) EXISTING LOAD
(E) SPARE			20	1	15	B	16	-	-	0.80	MISC	-
(E) SPARE			20	1	17	C	18	-	-	0.80	MISC	-
(E) SPARE			20	1	19	A	20	1	20			(E) SPARE
(E) SPARE			20	1	21	B	22	1	20			(E) SPARE
(E) SPARE			20	1	23	C	24	1	20			(E) SPARE
(E) SPARE			20	2	25	A	26	1	20			(E) SPARE
(E) SPARE			20	1	27	B	28	1	20			(E) SPARE
(E) SPARE			20	2	29	C	30					(E) SPACE
(E) SPARE			20	1	31	A	32					(E) SPACE
(E) SPARE			20	2	33	B	34					(E) SPACE
(E) SPARE			20	1	35	C	36					(E) SPACE
(E) SPACE					37	A	38					(E) SPACE
(E) SPACE					39	B	40					(E) SPACE
(E) SPACE					41	C	42					(E) SPACE

ESTIMATED MAXIMUM DEMAND (EMD) CALCULATIONS

LOAD SUMMARY:	LOAD TYPE	CONNECTED	NEC DEMAND
LIGHTING	LTG	0.0 KVA	0.0 KVA (125%)
RESIDENT LTG/REC	RES	0.0 KVA	0.0 KVA (100/35/25 %)
SMALL APPLIANCE	RES	0.0 KVA	0.0 KVA (100/35/25 %)
LARGEST MOTOR	MTR	KVA	0.0 KVA (125%)
REMAINING MOTORS	MTR	0.0 KVA	0.0 KVA (100%)
GEN PURPOSE REC	REC	0.0 KVA	0.0 KVA (50% > 10KVA)
COMPUTER REC	MISC	0.0 KVA	0.0 KVA (100%)
EQUIP/OTHER	MISC	15.8 KVA	15.8 KVA (100%)
HEATING	MISC	0.0 KVA	0.0 KVA (100%)
ELEVATOR	ELEV	0.0 KVA	0.0 KVA (100%)
KITCHEN EQPT	KITCH	0.0 KVA	0.0 KVA (.65)
TOTALS:		15.8 KVA	15.8 KVA
		44.0 AMP	44.0 AMP

CONNECTED PHASE LOADING
PHASE A: 8.48 KVA
PHASE B: 2.72 KVA
PHASE C: 4.64 KVA

NOTES:
1. LIGHT LINEWEIGHT PREFACED WITH (E) INDICATES EXISTING TO REMIAN.
2. BOLD LINEWEIGHT PREFACED WITH (N) INDICATES NEW

PANEL SCHEDULE

PANEL: GG LOCATION: MAIN ELECTRICAL ROOM VOLTAGE: 208 Y/ 120 P: 3 W: 4 AIC RATING:
AMP: 225 MLO [X] MCB [ ] MOUNTING: [ ] SURFACE [X] FLUSH
TYPE: EXISTING [X] NEW [ ] STYLE: NEUTRAL: 100% FED FROM: MSB

CIRCUIT DESCRIPTION	LOAD TYPE	LOAD KVA	CKT BKR	P	CIR #	P H	CIR #	P	CKT BKR	LOAD KVA	LOAD TYPE	CIRCUIT DESCRIPTION
(E) SPARE			20	1	1	A	2	1	20	1.92		(E) EXISTING LOAD
(E) EXISTING LOAD	MISC	1.92	20	1	3	B	4	1	20	1.92	MISC	(E) EXISTING LOAD
(E) EXISTING LOAD	MISC	1.92	20	1	5	C	6	1	20	1.92	MISC	(E) EXISTING LOAD
(E) SPARE			20	1	7	A	8	1	20	1.92	MISC	(E) EXISTING LOAD
(E) EXISTING LOAD	MISC	1.92	20	1	9	B	10	1	20			(E) SPARE
(E) SPARE			20	1	11	C	12	1	20	1.92	MISC	(E) EXISTING LOAD
(E) SPARE			20	1	13	A	14	1	20			(E) SPARE
(E) SPARE			20	1	15	B	16	1	20			(E) SPARE
(E) SPARE			20	1	17	C	18	1	20			(E) SPARE
(E) SPARE			20	1	19	A	20	3	20	0.80	MISC	(E) EXISTING LOAD
(E) SPARE			20	1	21	B	22	-	-	0.80	MISC	-
(E) EXISTING LOAD	MISC	0.80	20	3	23	C	24	-	-	0.80	MISC	-
-	MISC	0.80	-	-	25	A	26	3	100	10.08	COMB	PANEL M
-	MISC	0.80	-	-	27	B	28	-	-	8.84	COMB	-
PANEL L	COMB	8.48	100	3	29	C	30	-	-	8.93	COMB	-
-	COMB	2.72	-	-	31	A	32					
-	COMB	4.64	-	-	33	B	34					
(E) SPACE					35	C	36					(E) SPACE
(E) SPACE					37	A	38					(E) SPACE
(E) SPACE					39	B	40					(E) SPACE
(E) SPACE					41	C	42					(E) SPACE

ESTIMATED MAXIMUM DEMAND (EMD) CALCULATIONS

LOAD SUMMARY:	LOAD TYPE	CONNECTED	NEC DEMAND
LIGHTING	LTG	0.0 KVA	0.0 KVA (125%)
RESIDENT LTG/REC	RES	0.0 KVA	0.0 KVA (100/35/25 %)
SMALL APPLIANCE	RES	0.0 KVA	0.0 KVA (100/35/25 %)
LARGEST MOTOR	MTR	KVA	0.0 KVA (125%)
REMAINING MOTORS	MTR	0.0 KVA	0.0 KVA (100%)
GEN PURPOSE REC	REC	1.1 KVA	1.1 KVA (50% > 10KVA)
COMPUTER REC	MISC	0.0 KVA	0.0 KVA (100%)
EQUIP/OTHER	MISC	62.7 KVA	62.7 KVA (100%)
HEATING	MISC	0.0 KVA	0.0 KVA (100%)
ELEVATOR	ELEV	0.0 KVA	0.0 KVA (100%)
KITCHEN EQPT	KITCH	0.0 KVA	0.0 KVA (.65)
TOTALS:		63.9 KVA	63.9 KVA
		177.3 AMP	177.3 AMP

CONNECTED PHASE LOADING
PHASE A: 18.25 KVA
PHASE B: 20.85 KVA
PHASE C: 24.77 KVA

NOTES:
1. LIGHT LINEWEIGHT PREFACED WITH (E) INDICATES EXISTING TO REMIAN.
2. BOLD LINEWEIGHT PREFACED WITH (N) INDICATES NEW

PANEL SCHEDULE

PANEL: ART LOCATION: MAIN ELECTRICAL ROOM VOLTAGE: 208 Y/ 120 P: 3 W: 4 AIC RATING:
AMP: 225 MLO [X] MCB [ ] MOUNTING: [X] SURFACE [ ] FLUSH
TYPE: EXISTING [X] NEW [ ] STYLE: NEUTRAL: 100% FED FROM: PANEL P

CIRCUIT DESCRIPTION	LOAD TYPE	LOAD KVA	CKT BKR	P	CIR #	P H	CIR #	P	CKT BKR	LOAD KVA	LOAD TYPE	CIRCUIT DESCRIPTION
(E) SPACE					1	A	2					(E) SPACE
SPARE			50	1	3	B	4	1	50			(E) SPARE
-			-	-	5	C	6	-	-			
(E) SPACE					7	A	8					(E) SPACE
(E) EXISTING LOAD			20	1	9	B	10	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	11	C	12	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	13	A	14					(E) SPACE
(E) SPACE					15	B	16	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	17	C	18					(E) SPACE
(N) RECEPTACLES RMS 4/5	REC	**0.72**	**20**	**1**	19	A	20					(E) SPACE
(N) SIGNAGE	MISC	**0.50**	**20**	**1**	21	B	22					(E) SPACE
(E) SPACE					23	C	24					(E) SPACE
(E) SPACE					25	A	26					(E) SPACE
(E) SPACE					27	B	28					(E) SPACE
(E) SPACE					29	C	30					(E) SPACE
(E) SPACE					31	A	32					(E) SPACE
(E) SPACE					33	B	34					(E) SPACE
(E) SPACE					35	C	36					(E) SPACE
(E) SPACE					37	A	38					(E) SPACE
(E) SPACE					39	B	40					(E) SPACE
(E) SPACE					41	C	42					(E) SPACE

ESTIMATED MAXIMUM DEMAND (EMD) CALCULATIONS

LOAD SUMMARY:	LOAD TYPE	CONNECTED	NEC DEMAND
LIGHTING	LTG	0.0 KVA	0.0 KVA (125%)
RESIDENT LTG/REC	RES	0.0 KVA	0.0 KVA (100/35/25 %)
SMALL APPLIANCE	RES	0.0 KVA	0.0 KVA (100/35/25 %)
LARGEST MOTOR	MTR	KVA	0.0 KVA (125%)
REMAINING MOTORS	MTR	0.0 KVA	0.0 KVA (100%)
GEN PURPOSE REC	REC	0.7 KVA	0.7 KVA (50% > 10KVA)
COMPUTER REC	MISC	0.0 KVA	0.0 KVA (100%)
EQUIP/OTHER	MISC	0.5 KVA	0.5 KVA (100%)
HEATING	MISC	0.0 KVA	0.0 KVA (100%)
ELEVATOR	ELEV	0.0 KVA	0.0 KVA (100%)
KITCHEN EQPT	KITCH	0.0 KVA	0.0 KVA (.65)
TOTALS:		1.2 KVA	1.2 KVA
		3.4 AMP	3.4 AMP

CONNECTED PHASE LOADING
PHASE A: 0.72 KVA
PHASE B: 0.50 KVA
PHASE C: 0.00 KVA

NOTES:
1. LIGHT LINEWEIGHT PREFACED WITH (E) INDICATES EXISTING TO REMIAN.
2. BOLD LINEWEIGHT PREFACED WITH (N) INDICATES NEW

PANEL SCHEDULE

PANEL: F LOCATION: MAIN ELECTRICAL ROOM VOLTAGE: 208 Y/ 120 P: 3 W: 4 AIC RATING:
AMP: 225 MLO [X] MCB [ ] MOUNTING: [ ] SURFACE [X] FLUSH
TYPE: EXISTING [X] NEW [ ] STYLE: NEUTRAL: 100% FED FROM: MSB

CIRCUIT DESCRIPTION	LOAD TYPE	LOAD KVA	CKT BKR	P	CIR #	P H	CIR #	P	CKT BKR	LOAD KVA	LOAD TYPE	CIRCUIT DESCRIPTION
(E) LTS RM 11 E. ROW			20	1	1	A	2	1	20			(E) LTS RM 10
(E) LTS RM 11 W. ROW			20	1	3	B	4	1	20			(E) LTS RM 10
(E) RECEPT. RM 10 S. WALL			20	1	5	C	6	1	20			(E) RECEPT RM 11
(E) LTS RM 8 S. ROW			20	1	7	A	8	1	20			(E) LTS COUNSELING CTR.
(E) LTS RM 8 TWO CTR ROWS			20	1	9	B	10	1	20			(E) LTS COUNSELING CTR.
(E) LTS RM 8 TWO N. ROWS			20	1	11	C	12	1	20			(E) LTS COUNSELING CTR.
(E) RECEPT TO HV-10			20	1	13	A	14	1	20			(E) RECEPT RM 8 S. WALL
(E) SPARE			20	1	15	B	16	1	20			(E) RECEPT RM 10
(E) TECH BAND RM 10			20	1	17	C	18	1	20			(E) TECH BAND RM 8
(E) TECH BAND RM 10			20	1	19	A	20	1	20			(E) TECH BAND RM 8
(E) TECH BAND RM 10			20	1	21	B	22	1	20			(E) TECH BAND RM 8
(E) LTS RM 8&10 OFFICES			20	1	23	C	24	1	20			(E) SPARE
(E) RECEPT BELOW PLN "F"			20	1	25	A	26	1	20			(E) TECH BAND RM 11
(N) RECEPTS ROOM 8	**REC**	**0.54**	20	1	27	B	28	1	20			(E) TECH BAND RM 11
(E) SCHOOL STORE OUTLETS			20	1	29	C	30	1	20			(E) TECH BAND RM 11
(E) RECPT COUNCILING CTR N. WALL			20	1	31	A	32	1	20			(E) RECEPT RM 8 & 10
(N) RECEPTS ROOM 9 AND 9A	**REC**	**0.90**	20	1	33	B	34	1	20			(E) RECEPT RM 8 & 10
(N) SMARTBOARD 9A	**REC**	**0.18**	20	1	35	C	36	1	20	0.04	MISC	**(N) FTR-1**
(E) SPARE			20	1	37	A	38					(E) SPACE
(E) RECEPT ABOVE SINK RM 9			20	1	39	B	40					(E) SPACE
(E) SPACE					41	C	42	1	20			(E) CONTROLS HW UNITS

ESTIMATED MAXIMUM DEMAND (EMD) CALCULATIONS

LOAD SUMMARY:	LOAD TYPE	CONNECTED	NEC DEMAND
LIGHTING	LTG	0.0 KVA	0.0 KVA (125%)
RESIDENT LTG/REC	RES	0.0 KVA	0.0 KVA (100/35/25 %)
SMALL APPLIANCE	RES	0.0 KVA	0.0 KVA (100/35/25 %)
LARGEST MOTOR	MTR	KVA	0.0 KVA (125%)
REMAINING MOTORS	MTR	0.0 KVA	0.0 KVA (100%)
GEN PURPOSE REC	REC	1.6 KVA	1.6 KVA (50% > 10KVA)
COMPUTER REC	MISC	0.0 KVA	0.0 KVA (100%)
EQUIP/OTHER	MISC	0.0 KVA	0.0 KVA (100%)
HEATING	MISC	0.0 KVA	0.0 KVA (100%)
ELEVATOR	ELEV	0.0 KVA	0.0 KVA (100%)
KITCHEN EQPT	KITCH	0.0 KVA	0.0 KVA (.65)
TOTALS:		1.7 KVA	1.7 KVA
		4.6 AMP	4.6 AMP

CONNECTED PHASE LOADING
PHASE A: 0.00 KVA
PHASE B: 1.44 KVA
PHASE C: 0.22 KVA

NOTES:
1. LIGHT LINEWEIGHT PREFACED WITH (E) INDICATES EXISTING TO REMIAN.
2. BOLD LINEWEIGHT PREFACED WITH (N) INDICATES NEW

PANEL SCHEDULE

PANEL: V LOCATION: MAIN ELECTRICAL ROOM VOLTAGE: 208 Y/ 120 P: 3 W: 4 AIC RATING:
AMP: 225 MLO [X] MCB [ ] MOUNTING: [ ] SURFACE [X] FLUSH
TYPE: EXISTING [X] NEW [ ] STYLE: NEUTRAL: 100% FED FROM: PNL DP-1

CIRCUIT DESCRIPTION	LOAD TYPE	LOAD KVA	CKT BKR	P	CIR #	P H	CIR #	P	CKT BKR	LOAD KVA	LOAD TYPE	CIRCUIT DESCRIPTION
(N) SMARTBOARD RMS 6/7	**MISC**	**0.36**	**20**	**1**	1	A	2	**2**	**50**			**(N) SPARE**
(N) REST ROOM HAND DRYERS	**MISC**	**1.00**	**20**	**1**	3	B	4	-	-			
(N) SPARE			**50**	**2**	5	C	6	2	30			(E) EXISTING LOAD
			-	-	7	A	8	-	-			
(E) EXISTING LOAD			20	1	9	B	10	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	11	C	12	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	13	A	14	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	15	B	16	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	17	C	18	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	19	A	20	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	21	B	22	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	23	C	24	1	20			(E) EXISTING LOAD
RECEPTACLES RMS 6/6A	REC	0.72	20	1	25	A	26	1	20			(E) SPARE
(E) EXISTING LOAD			20	2	27	B	28	2	20			(E) EXISTING LOAD
			-	-	29	C	30	-	-			
(E) SPACE					31	A	32					(E) SPACE
(E) SPACE					33	B	34					(E) SPACE
(E) SPACE					35	C	36					(E) SPACE
(E) SPACE					37	A	38					(E) SPACE
(E) SPACE					39	B	40					(E) SPACE
(E) SPACE					41	C	42					(E) SPACE

ESTIMATED MAXIMUM DEMAND (EMD) CALCULATIONS

LOAD SUMMARY:	LOAD TYPE	CONNECTED	NEC DEMAND
LIGHTING	LTG	0.0 KVA	0.0 KVA (125%)
RESIDENT LTG/REC	RES	0.0 KVA	0.0 KVA (100/35/25 %)
SMALL APPLIANCE	RES	0.0 KVA	0.0 KVA (100/35/25 %)
LARGEST MOTOR	MTR	KVA	0.0 KVA (125%)
REMAINING MOTORS	MTR	0.0 KVA	0.0 KVA (100%)
GEN PURPOSE REC	REC	0.7 KVA	0.7 KVA (50% > 10KVA)
COMPUTER REC	MISC	0.0 KVA	0.0 KVA (100%)
EQUIP/OTHER	MISC	1.4 KVA	1.4 KVA (100%)
HEATING	MISC	0.0 KVA	0.0 KVA (100%)
ELEVATOR	ELEV	0.0 KVA	0.0 KVA (100%)
KITCHEN EQPT	KITCH	0.0 KVA	0.0 KVA (.65)
TOTALS:		2.1 KVA	2.1 KVA
		5.8 AMP	5.8 AMP

CONNECTED PHASE LOADING
PHASE A: 1.08 KVA
PHASE B: 1.00 KVA
PHASE C: 0.00 KVA

NOTES:
1. LIGHT LINEWEIGHT PREFACED WITH (E) INDICATES EXISTING TO REMIAN.
2. BOLD LINEWEIGHT PREFACED WITH (N) INDICATES NEW

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REGISTERED PROFESSIONAL ENGINEER 9388PE OREGON SEPT 11, 2018 ROBERT A. MILLS 03/16/20
EXPIRES 12-31-2020

PAE
pae-engineers.com

REVISIONS
1 3/17/2020 ADD. 1

ESD 4J KELLY MIDDLE SCHOOL IMPROVEMENTS

850 HOWARD AVE, EUGENE, OR 97404
RENOVATIONS

JOB NO: 19189
ISSUE DATE: 3/3/2020

PANEL SCHEDULES

KMS

E8.01

EUGENE SCHOOL DISTRICT 4J

NORTH EUGENE HIGH SCHOOL IMPROVEMENTS

VICINITY MAP

NTS

NORTH

GENERAL NOTES

1. PROTECT (E) TIMES TO REMAIN & SALVAGED ITEMS DURING CONSTRUCTION.

2. DEMOLISH (E) FINISHES AS REQUIRED BY (N) WORK

3. DEMOLISH WALL MOUNT ITEMS, FIXTURES, PIPING, CONDUIT, CABLING AT WALLS SCHEDULED FOR DEMOLITION, UON

4. DIMENSIONS TO FACE OF FINISH UON - FIELD VFY, (E) ITEMS SHOWN IN APROX. LOCATION

5. PREP & PATCH (E) SURFACES TO REMAIN AS REQUIRED TO MATCH (N)PROJECT STANDARDS WHERE DEMOLITION OCCURS & AS REQ'D FOR (N) WORK.

6. CLEAN CONSTRUCTION CAVITIES PRIOR TO ENCLOSING W/(N) MATERIALS, INCLUDING ABOVE CEILING & W/IN STUD CAVITIES.

7. CLEAN (E) RESTROOM LAVATORIES PER MANUFACTURER REQUIREMENTS AT RESTROOMS SCHEDULED FOR NEW WORK.

8. WHERE ELECTRICAL ITEMS DEMOLISHED PATCH SURFACES AS REQUIRED FOR (N) FINISHES

9. PROVIDE (N) PAINT SYSTEM AT ROOMS SCHEDULED FOR NEW WORK

10. FURNISHINGS AND EQUIPMENT BY OWNER, TYPICAL

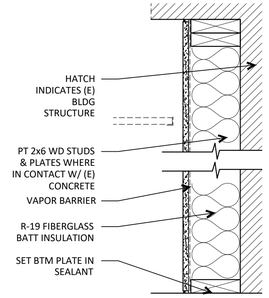
11. RELOCATE CASEWORK FROM SILVER LEA AS NOTED ON PLANS.

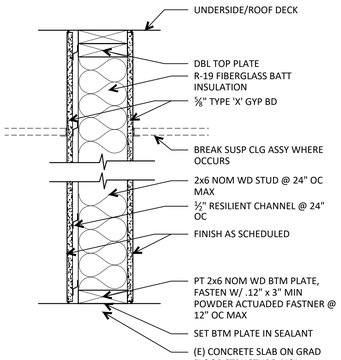
DEMOLITION LEGEND

- DEMOLISH WALL
- DEMOLISH DOOR, FRAME, & HARDWARE
- DEMOLISH SINK, SEE PLUMB'G
- DEMOLISH URINAL, SEE PLUMB'G
- DEMOLISH TOILET, SEE PLUMB'G
- DEMOLISH HVAC DIFFUSER/GRILLE - SEE MECH
- DEMOLISH 2x4 LAY-IN LIGHT FIXTURE
- DEMOLISH 1x4 SUSPENDED LIGHT FIXTURE
- DEMOLISH 1x4 SURFACE MOUNT LIGHT FIXTURE
- DEMOLISH THERMOSTAT
- DEMOLISH CAN LIGHT FIXTURE

LEGEND

- (E) WALL TO REMAIN
- (N) WALL
- (N) LOW WALL
- (E) SINK, UON
- (E) URINAL, UON
- (E) TOILET, UON
- (E) DOOR TO REMAIN
- N101A (N) DOOR W/ LEVER HARDWARE TO MATCH BUILDING STANDARDS, INDICATED BY NUMBER
- (N) SUSPENDED LIGHT FIXTURE, SEE ALSO ELECTRICAL
- (N) 1x4 SURFACE MOUNT LIGHT FIXTURE, SEE ALSO ELECTRICAL
- (N) 2x4 LAY IN LIGHT FIXTURE, SEE ALSO ELECTRICAL
- (N) WALL MOUNT LIGHT FIXTURE
- (N) NEW
- (E) EXISTING
- (R) RELOCATE
- UON UNLESS OTHERWISE NOTED



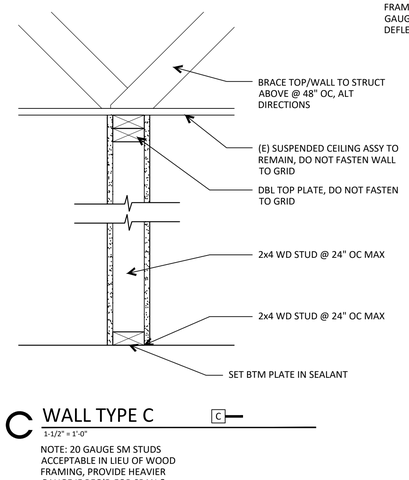


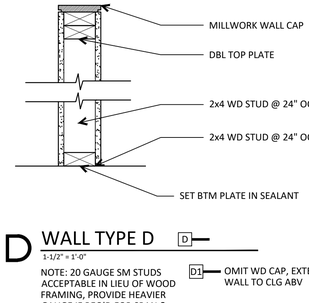
A WALL TYPE A

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

NOTE: 20 GAUGE SM STUDS ACCEPTABLE IN LIEU OF WOOD FRAMING, PROVIDE HEAVIER GAUGE IF REQ'D FOR SPAN & DEFLECTION TOLERANCES

A
- A1 -2x4 WD STUD AND PLATES IN LIEU OF 2x6 -ACOUSTICAL BATT INSULATION IN LIEU OF R-19 FIBERGLASS BATT INSULATION
- A2 -2x8 WD STUD AND PLATES IN LIEU OF 2x6 -ACOUSTICAL BATT INSULATION IN LIEU OF R-19 FIBERGLASS BATT INSULATION
- A3 -2x8 WD STUD AND PLATES IN LIEU OF 2x6





B WALL TYPE B

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

NOTE: 20 GAUGE SM STUDS ACCEPTABLE IN LIEU OF WOOD FRAMING, PROVIDE HEAVIER GAUGE IF REQ'D FOR SPAN & DEFLECTION TOLERANCES

C WALL TYPE C

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

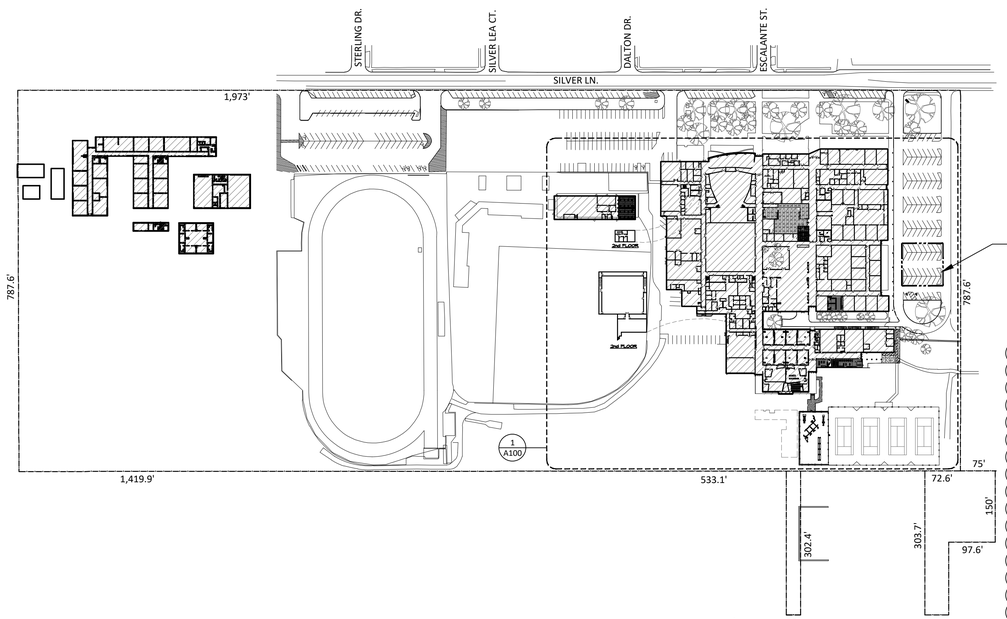
NOTE: 20 GAUGE SM STUDS ACCEPTABLE IN LIEU OF WOOD FRAMING, PROVIDE HEAVIER GAUGE IF REQ'D FOR SPAN & DEFLECTION TOLERANCES

D WALL TYPE D

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

NOTE: 20 GAUGE SM STUDS ACCEPTABLE IN LIEU OF WOOD FRAMING, PROVIDE HEAVIER GAUGE IF REQ'D FOR SPAN & DEFLECTION TOLERANCES

D1 OMIT WD CAP, EXTEND WALL TO CLG ABV



1 SITE PLAN

1" = 100'

NORTH

SUMMARY OF WORK & CODE ANALYSIS

1 SUMMARY OF WORK

RELOCATE CORRIDOR ELEMENTARY SCHOOL PROGRAM TO NORTH EUGENE HIGH SCHOOL. RECONFIGURE CLASSROOMS AND SUPPORT SPACES TO ACCOMMODATE PROGRAM AND OPERATIONAL CHANGES. WORK INCLUDES SELECTIVE DEMOLITION, EARTHWORK, PAVING, CONCRETE & CONCRETE REINFORCING, METALWORK, ROUGH CARPENTRY, FINISH CARPENTRY, CASEWORK, FLASHING, ROOF PATCHING, INSULATION, OPENINGS, FINISHES, SIGNAGE, PLUMBING, MECHANICAL, ELECTRICAL, AND PAVEMENT MARKINGS.

NO CHANGE OF USE
NO BUILDING ADDITION
NEW IMPERVIOUS PAVING SURFACE LESS THAN 1,000 SQ. FT.
NEW PARTITIONS CONSIST OF NON LOAD BEARING, NON FIRE RATED CONSTRUCTION

DEFERRED SUBMITTALS
FIRE ALARM SYSTEM

SCHOOL CAPACITY
CURRENT NORTH EUGENE HIGH SCHOOL CAPACITY: 1,504 STUDENTS
POST-ALTERATION:
- NORTH EUGENE HIGH SCHOOL CAPACITY: 1,504 STUDENTS
- CORRIDOR ELEMENTARY CAPACITY = 189 STUDENTS
- TOTAL PROPOSED STUDENT CAPACITY = 1,693 STUDENTS. INCREASE OF 189 STUDENTS TO SCHOOL CAPACITY

2018 INTERNATIONAL EXISTING BUILDING CODE

CHAPTER 3 - PROVISIONS FOR ALL COMPLIANCE METHODS
301.3.1 PRESCRIPTIVE COMPLIANCE METHOD: CHAPTER 5 OF THIS CODE
305.6 ALTERATIONS
A FACILITY THAT IS ALTERED SHALL COMPLY WITH THE APPLICABLE PROVISIONS IN OSSC CH 11, UNLESS TECHNICALLY INFEASIBLE.
EXCEPTIONS: THE ALTERED ELEMENT OR SPACE IS NOT REQUIRED TO BE ON AN ACCESSIBLE ROUTE, UNLESS IT IS A PRIMARY FUNCTION.
ACCESSIBLE MEANS OF EGRESS REQ'D BY OSSC CH 10 ARE NOT REQUIRED TO BE PROVIDED IN EXISTING FACILITIES.
305.8.10 TOILET ROOMS
ALTERATION OF EXISTING TOILET AND BATHING ROOMS TO BE ACCESSIBLE IN ACCORDANCE WITH OSSC CH 11. AND ANSI

CHAPTER 5 PRESCRIPTIVE COMPLIANCE METHOD
503.1, ALTERATION TO ANY BUILDING OR STRUCTURE SHALL COMPLY WITH THE REQUIREMENTS OF THE OSSC FOR NEW CONSTRUCTION. ALTERATIONS SHALL BE SUCH THAT THE EXISTING BUILDING OR STRUCTURE IS NOT LESS COMPLYING WITH THE PROVISIONS OF THE OSSC THAN THE EXISTING BUILDING OR STRUCTURE WAS PRIOR TO THE ALTERATIONS

2019 OREGON STRUCTURAL SPECIALTY CODE FOR NEW CONSTRUCTION WITHIN ALTERATION

CHAPTER 1 - SCOPE AND ADMINISTRATION
PER 102.6 EXISTING STRUCTURES, 102.6.1 COMPLIANCE, THE REPAIR, ALTERATION, CHANGE OF OCCUPANCY, AND ADDITION TO EXISTING BUILDINGS SHALL COMPLY WITH THE INTERNATIONAL EXISTING BUILDING CODE AS AMENDED BY CHAPTER 34 OF THIS CODE.

CHAPTER 34 EXISTING BUILDINGS
PER 3401.4, REFERENCES TO THE *INTERNATIONAL BUILDING CODE* OR THE *BUILDING CODE* SHALL MEAN THE *OREGON STRUCTURAL SPECIALTY CODE* AS ADOPTED BY OAR 918-460-0010

CHAPTER 3 - USE & OCCUPANCY
EXISTING OCCUPANCY: GROUP E, EDUCATION USE. NO PROPOSED CHANGE TO USE/OCCUPANCY

CHAPTER 5 - GENERAL BUILDING HEIGHTS & AREAS
TYPE VB CONSTRUCTION, NON-SPRINKLED
NO CHANGE TO EXISTING BUILDING HEIGHT
NO CHANGE TO EXISTING BUILDING NUMBER OF STORIES
NO CHANGE TO EXISTING BUILDING AREA

CHAPTER 6 - TYPES OF CONSTRUCTION
CONSTRUCTION TYPE VB NON-SPRINKLED

CHAPTER 7 - FIRE & SMOKE PROTECTION FEATURES
PER TABLE 716.1(2), NEW DOORS PROPOSED IN (E) 2-HR RATED WALL ASSEMBLY TO BE 1-1/2 HR RATING

CHAPTER 8 - INTERIOR FINISHES
CLASS C FINISHES ALLOWED PER TABLE 803.13

CHAPTER 9 - FIRE PROTECTION SYSTEMS
EXISTING FIRE ALARM THROUGHOUT, TYPE 2A10BC FIRE EXTINGUISHERS AT 75' INTERVALS MAX, SEE FLOOR PLAN FOR LOCATIONS

CHAPTER 10 - MEANS OF EGRESS
PER TABLE 1004.5, CHANGE IN OCCUPANTS IN (N) ALTERATION AREA IS AS FOLLOWS:
NO CHANGE TO OCCUPANT LOAD
EXCEPTION: CLASSROOM 305 PREVIOUS OCCUPANTS = 1021 SF/20 = 51 OCCS
PROPOSED OCCUPANTS IN ALTERATION OF CLASSROOM 305 AREA TO BUSINESS AREA = 1021 SF/150 = 7 OCCS. NET -44 OCCS

PER 1006.2.1, MAX COMMON PATH OF EGRESS TRAVEL 75 MAX @ (N) ALTERATIONS
NUMBER OF EXITS PROVIDED PER TABLE 1006.3.3(2) PER OCCUPANCY OF SPACE
EMERGENCY EGRESS LIGHTING PROVIDED @ (N) ALTERATIONS
EGRESS LIGHTING AND EXIT SIGNS WITH EMERGENCY BATTERY BACKUP PROVIDED @ (N) ALTERATIONS

PER 1016.2, EXIT ACCESS DOES NOT PASS THROUGH ADJOINING OR INTERVENING ROOMS

PER 1017.2, MAX EXIT ACCESS TRAVEL DISTANCE 250'
NO CHANGE TO MAX EXIT ACCESS TRAVEL DISTANCE IN (N) ALTERATIONS

EGRESS LIGHTING AND EXIT SIGNS W/EMERGENCY BATTERY BACK UP REQ'D

CHAPTER 11 - ACCESSIBILITY
SEE PLANS FOR ACCESSIBILITY COMPLIANCE @ (N) ALTERATION SCOPE

1 CHAPTER 29 - PLUMBING SYSTEMS
SEE TABLE BELOW FOR NUMBER/PLUMBING FIXTURES REQ'D AND PROVIDED POST ALTERATION

CHAPTER 34 - EXISTING STRUCTURES
PER 3411.6, ALTERATIONS SHALL COMPLY W/CURRENT
OSSC & ANSI PROVISIONS FOR ACCESSIBILITY. IN ADDITION, UP TO 25% OF THE COST OF CONSTRUCTION HAS BEEN IDENTIFIED TO REMOVE ARCHITECTURAL BARRIERS AS FOLLOWS, UNLESS OTHERWISE NOTED AS EXISTING:
A. ACCESSIBLE PARKING - PROVIDED
B. ACCESSIBLE ENTRANCE - EXISTING
C. ACCESSIBLE ROUTE TO ALTERED AREA - EXISTING / PROVIDED
D. ACCESSIBLE RESTROOMS - EXISTING / PROVIDED
E. ACCESSIBLE TELEPHONES - NOT REQ'D PER USE
F. ACCESSIBLE DRINKING FOUNTAINS - EXISTING
G. ACCESSIBLE STORAGE - EXISTING

LAND USE CODE & ZONING REQUIREMENTS
ZONE:PL PUBLIC LAND
OVERLAY/ SPECIAL AREA ZONE: NONE

1 VEHICLE PARKING PER TABLE 9.6410
1,504 HIGH SCHOOL STUDENTS/3.5 = 430 SPACES REQ'D
189 ELEMENTARY STUDENTS/8 = 24 SPACES REQ'D
454 TOTAL SPACES REQ'D * LESS 25% REDUCTION = 341 TOTAL SPACES REQ'D
427 SPACES PROVIDED, SEE SITE PLAN
PER OSSC 1106.1, 9 ACCESSIBLE SPACES INCLUDING 2 "WHEEL CHAIR USER ONLY" SPACES REQ'D
12 ACCESSIBLE SPACES PROVIDED
PER TRAFFIC ENGINEER MEMO, DEMOLITION OF ADJACENT SILVER LEA SCHOOL RESULTS IN THE ELIMINATION OF 648 STUDENTS, THEREFORE THE REDUCTION IN NUMBER OF PEAK HOUR TRIPS IS REDUCED AND A T.I.A. IS NOT REQ'D

PLUMBING FIXTURE REQUIREMENTS NORTH EUGENE HIGH SCHOOL

DESCRIPTION	OCCUPANT LOAD	WATER CLOSETS						LAVATORIES						DRINKING FOUNTAINS
		MALE			FEMALE			MALE			FEMALE			
		OCC LOAD	OCC FACTOR	FIXT REQ	OCC LOAD	OCC FACTOR	FIXT REQ	OCC LOAD	OCC FACTOR	FIXT REQ	OCC LOAD	OCC FACTOR	FIXT REQ	
ASSEMBLY A-3, GYM, CAFETERIA, LIBRARY	916	458	1 PER 125	3.67	458	1 PER 65	7.05	458	1 PER 250 FOR THE FIRST 750 AND 1 PER 500 FOR THE REMAINDER EXCEEDING 750	1.83	458	1 PER 250 FOR THE FIRST 750 AND 1 PER 500 FOR THE REMAINDER EXCEEDING 750	1.83	1 EACH FLOOR EXISTING
STAFF USE: ADMIN, WORKROOMS, KITCHEN	102	51	1 PER 50	1.02	51	1 PER 50	1.02	51	1 PER 50	1.02	51	1 PER 50	1.02	
EDUCATIONAL USE	1,693 (SCHOOL CAPACITY)	847	1 PER 50	16.94	847	1 PER 50	16.94	847	1 PER 50	16.94	462	1 PER 50	16.94	
TOTAL REQUIRED				22			25			20			20	
ACTUAL PROVIDED	**UP TO 2/3 OF W/C CAN BE SUBSTITUTED FOR URNIALS 21; URINALS PROVIDED = 14 W/C**			**27**			**25**			**20**			**29**	

NOTES:
1. 6 SINGLE USER RESTROOMS INCLUDED IN CALCULATION TO SATISFY REQUIREMENTS. 9 ADDITIONAL SINGLE USER RESTROOMS PROVIDED.
2. NO CHANGE TO AUDITORIUM OR AUDITORIUM CAPACITY. AUDITORIUM RESTROOMS NOT INCLUDED IN THIS CALCULATION

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REGISTERED ARCHITECT
JOSEPH E. MOORE
EUGENE OREGON
6033
STATE OF OREGON

REVISIONS
1 3/17/2020 ADD. 1

ESD 4J NORTH EUGENE HIGH SCHOOL
200 SILVER LN, EUGENE OR
RENOVATIONS
IMPROVEMENTS
NEHS

JOB NO: 19188
ISSUE DATE: 03 MAR 2020

GENERAL INFORMATION

G100

GENERAL NOTES

1. SURVEY PROVIDED BY BAKER & ASSOCIATES, DATED AUGUST 15, 2019. ELEVATIONS ARE BASED ON CITY OF EUGENE VERTICAL DATUM ESTABLISHED PER BENCH MARK NO. RR-014-1 WITH AN ELEVATION OF 392.90 (NAVD88).
2. CONSTRUCTION LAYOUT (ALL ACTUAL LINES AND GRADES) SHALL BE STAKED BY A PROFESSIONAL SURVEYOR, REGISTERED IN THE STATE OF OREGON, BASED ON COORDINATES, DIMENSIONS, BEARINGS, AND ELEVATIONS, AS SHOWN, ON THE PLANS.
3. PROJECT CONTROL SHALL BE FIELD VERIFIED AND CHECKED FOR RELATIVE VERTICAL POSITION BASED ON THE BENCHMARK STATED HEREON, PRIOR TO BEGINNING CONSTRUCTION LAYOUT.
4. WHEN DIMENSIONS AND COORDINATE LOCATIONS ARE REPRESENTED - DIMENSIONS SHALL HOLD OVER COORDINATE LOCATION. NOTIFY THE CIVIL ENGINEER OF RECORD IMMEDIATELY UPON DISCOVERY OF ANY DISCREPANCIES.
5. BUILDING SETBACK DIMENSIONS FROM PROPERTY LINES SHALL HOLD OVER ALL OTHER CALLOUTS. PROPERTY LINES AND ASSOCIATED BUILDING SETBACKS SHALL BE VERIFIED PRIOR TO CONSTRUCTION LAYOUT.
6. CONTRACTOR SHALL PRESERVE AND PROTECT FROM DAMAGE ALL EXISTING MONUMENTATION DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PAYING FOR THE REPLACEMENT OF ANY MONUMENTS DAMAGED OR REMOVED DURING CONSTRUCTION. NEW MONUMENTS SHALL BE REESTABLISHED BY A LICENSED SURVEYOR.
7. SOME SITE DEMOLITION AND UTILITY RELOCATION HAS BEEN PERFORMED. SURVEY MAY NOT BE COMPLETE OR ACCURATE. CONTRACTOR TO VERIFY EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.
8. CONTRACTOR TO REFERENCE SOILS REPORT BY FOUNDATION ENGINEERING, INC. DATED DECEMBER 9, 2019 FOR THE SITE SOILS CONDITIONS.
9. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THESE PLANS, THE PROJECT SPECIFICATIONS AND THE APPLICABLE REQUIREMENTS OF THE 2018 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE 2017 OREGON PLUMBING SPECIALTY CODE AND REQUIREMENTS OF THE CITY OF EUGENE.
10. THE COMPLETED INSTALLATION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS. ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED BY THE GOVERNING AUTHORITIES FOR THE EXECUTION AND COMPLETION OF WORK SHALL BE SECURED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION.
11. ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1987). EXCAVATORS MUST NOTIFY ALL PERTINENT COMPANIES OR AGENCIES WITH UNDERGROUND UTILITIES IN THE PROJECT AREA AT LEAST 48 BUSINESS-DAY HOURS, BUT NOT MORE THAN 10 BUSINESS DAYS PRIOR TO COMMENCING AN EXCAVATION, SO UTILITIES MAY BE ACCURATELY LOCATED.
12. THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE. CONTRACTOR SHALL VERIFY ELEVATIONS, PIPE SIZE, AND MATERIAL TYPES OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WITH CONSTRUCTION AND SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF KPFF CONSULTING ENGINEERS, 72 HOURS PRIOR TO START OF CONSTRUCTION TO PREVENT GRADE AND ALIGNMENT CONFLICTS.
13. THE ENGINEER OR OWNER IS NOT RESPONSIBLE FOR THE SAFETY OF THE CONTRACTOR OR HIS CREW. ALL O.S.H.A. REGULATIONS SHALL BE STRICTLY ADHERED TO IN THE PERFORMANCE OF THE WORK.
14. TEMPORARY AND PERMANENT EROSION CONTROL MEASURES SHALL BE IMPLEMENTED. THE CONTRACTOR SHALL ADHERE TO CITY OF EUGENE FOR MINIMUM EROSION CONTROL MEASURES. THE ESC FACILITIES SHOWN IN THESE PLANS ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT LEAVE THE SITE.
15. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL ROADWAYS, KEEPING THEM CLEAN AND FREE OF CONSTRUCTION MATERIALS AND DEBRIS, AND PROVIDING DUST CONTROL AS REQUIRED.
16. CONTRACTOR SHALL MAINTAIN ALL UTILITIES TO EXISTING BUILDING AT ALL TIMES DURING CONSTRUCTION.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING ALL WORK WITH THE OWNER.

CONSTRUCTION NOTES

GENERAL

1. SUBGRADE AND TRENCH BACKFILL SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698. FLOODING OR JETTING THE BACKFILLED TRENCHES WITH WATER IS NOT PERMITTED.
2. SPECIAL INSPECTION REQUIRED FOR ALL COMPACTION TESTING.

DEMOLITION

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND DISPOSAL OF EXISTING AC, CURBS, SIDEWALKS AND OTHER SITE ELEMENTS WITHIN THE SITE AREA IDENTIFIED IN THE PLANS.
2. EXCEPT FOR MATERIALS INDICATED TO BE STOCKPILED OR TO REMAIN ON OWNER'S PROPERTY, CLEARED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY, REMOVED FROM THE SITE, AND DISPOSED OF PROPERLY.
3. ITEMS INDICATED TO BE SALVAGED SHALL BE CAREFULLY REMOVED AND DELIVERED STORED AT THE PROJECT SITE AS DIRECTED BY THE OWNER.
4. ALL LANDSCAPING, PAVEMENT, CURBS AND SIDEWALKS, BEYOND THE IDENTIFIED SITE AREA, DAMAGED DURING THE CONSTRUCTION SHALL BE REPLACED TO THEIR ORIGINAL CONDITION OR BETTER.
5. CONCRETE SIDEWALKS SHOWN FOR DEMOLITION SHALL BE REMOVED TO THE NEAREST EXISTING CONSTRUCTION JOINT.
6. SAWCUT STRAIGHT MATCHLINES TO CREATE A BUTT JOINT BETWEEN THE EXISTING AND NEW PAVEMENT.

UTILITIES

1. ADJUST ALL INCIDENTAL STRUCTURES, MANHOLES, VALVE BOXES, CATCH BASINS, FRAMES AND COVERS, ETC. TO FINISHED GRADE.
2. CONTRACTOR SHALL ADJUST ALL EXISTING AND/OR NEW FLEXIBLE UTILITIES (WATER, TV, TELEPHONE, ELEC., ETC.) TO CLEAR ANY EXISTING OR NEW GRAVITY DRAIN UTILITIES (STORM DRAIN, SANITARY SEWER, ETC.) IF CONFLICT OCCURS.
3. CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES FOR THE INSTALLATION OF OR ADJUSTMENT TO GAS, ELECTRICAL, POWER AND TELEPHONE SERVICE.
4. BEFORE BACKFILLING ANY SUBGRADE UTILITY IMPROVEMENTS CONTRACTOR SHALL SURVEY AND RECORD MEASUREMENTS OF EXACT LOCATION AND DEPTH AND SUBMIT TO ENGINEER AND OWNER.
5. ALL WORK TO CONFORM TO THE 2017 OREGON PLUMBING SPECIALTY CODE

EARTHWORKS

1. CONTRACTOR SHALL PREVENT SEDIMENTS AND SEDIMENT LADEN WATER FROM ENTERING THE STORM DRAINAGE SYSTEM.
2. TRENCH BEDDING AND BACKFILL SHALL BE AS SHOWN ON THE PIPE BEDDING AND BACKFILL DETAIL, THE PROJECT SPECIFICATIONS AND AS REQUIRED IN THE SOILS REPORT. FLOODING OR JETTING THE BACKFILLED TRENCHES WITH WATER WILL NOT BE PERMITTED.

ABBREVIATIONS

AC	ASPHALT CONCRETE
AD	AREA DRAIN
APPROX	APPROXIMATE
B	BOLLARD
BLDG	BUILDING
BOW	BACK OF WALK
BS	BOTTOM OF SWALE
	BOTTOM OF STAIR
BW	BOTTOM OF WALL
CB	CATCH BASIN
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
CONC.	CONCRETE
COTG	CLEANOUT TO GRADE
CP	CONTROL POINT
Δ	DELTA
D/W	DRIVEWAY
DIA.,Ø	DIAMETER
DIP	DUCTILE IRON PIPE
E	EASTING
EXIST./EX	EXISTING
FDC	FIRE DEPARTMENT CONNECTION
FF	FINISH FLOOR ELEVATION
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FND	FOUNDATION
G	GUTTER
GB	GRADE BREAK
GL	GAS LINE
GV	GATE VALVE
H	HEIGHT
HCP	HANDICAP PARKING SPACE
HP	HIGH POINT
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
INV	INVERT
IRR.	IRRIGATION
LP	LIGHT POLE
MH	MANHOLE
MIN	MINIMUM
N	NORTHING
O.D	OUTSIDE DIAMETER
OF	OUTFALL
OVH/OH	OVERHEAD
P/L	PROPERTY LINE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURB RETURN
PED	PEDESTRIAN
PIV	POST INDICATOR VALVE
PM	PARKING METER
POC	POINT ON CURVE
PP	POWER POLE
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENT
P.U.E	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
PVT	PRIVATE
R	RIM
RD	ROOF DRAIN
R.O.W	RIGHT-OF-WAY
S	SLOPE (FT/FT)
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SHT	SHEET
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
ST	STREET
STA	STATION
STD	STANDARD
S/W	SIDEWALK
TC	TOP OF CURB
TD	TRENCH DRAIN
TG	TOP OF GROUND
TP	TOP OF PAVEMENT
TRANS.	TRANSFORMER
TS	TOP OF STAIR
TW	TOP OF WALL
	TOP OF WALK
TYP	TYPICAL
UG	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
W	WATER
W/	WITH
WCR	WHEEL CHAIR RAMP
WM	WATER METER
WV	WATER VALVE

NOTICE TO EXCAVATORS:
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(NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503)-232-1987).

POTENTIAL UNDERGROUND FACILITY OWNERS

Dig Safely.

Call the Oregon One-Call Center
1-800-332-2344

SHEET INDEX

GMA ARCHITECTS
860 West Park Street / Ste 300
Eugene / Oregon / 97401
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REGISTERED PROFESSIONAL ENGINEER
56481
DIGITALLY SIGNED
OREGON
12-19-2003
MATTHEW M. KEEHAN
EXPIRATION DATE: 6/30/2021

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REVISIONS
1 17 MARCH 2020

NORTH EUGENE HIGH SCHOOL IMPROVEMENTS
200 SILVER LN, EUGENE, OR 97404
RENOVATIONS

JOB NO: 19126
ISSUE DATE: 03/13/20

CIVIL NOTES & ABBREVIATIONS

NEHS

C1.0

100% CD

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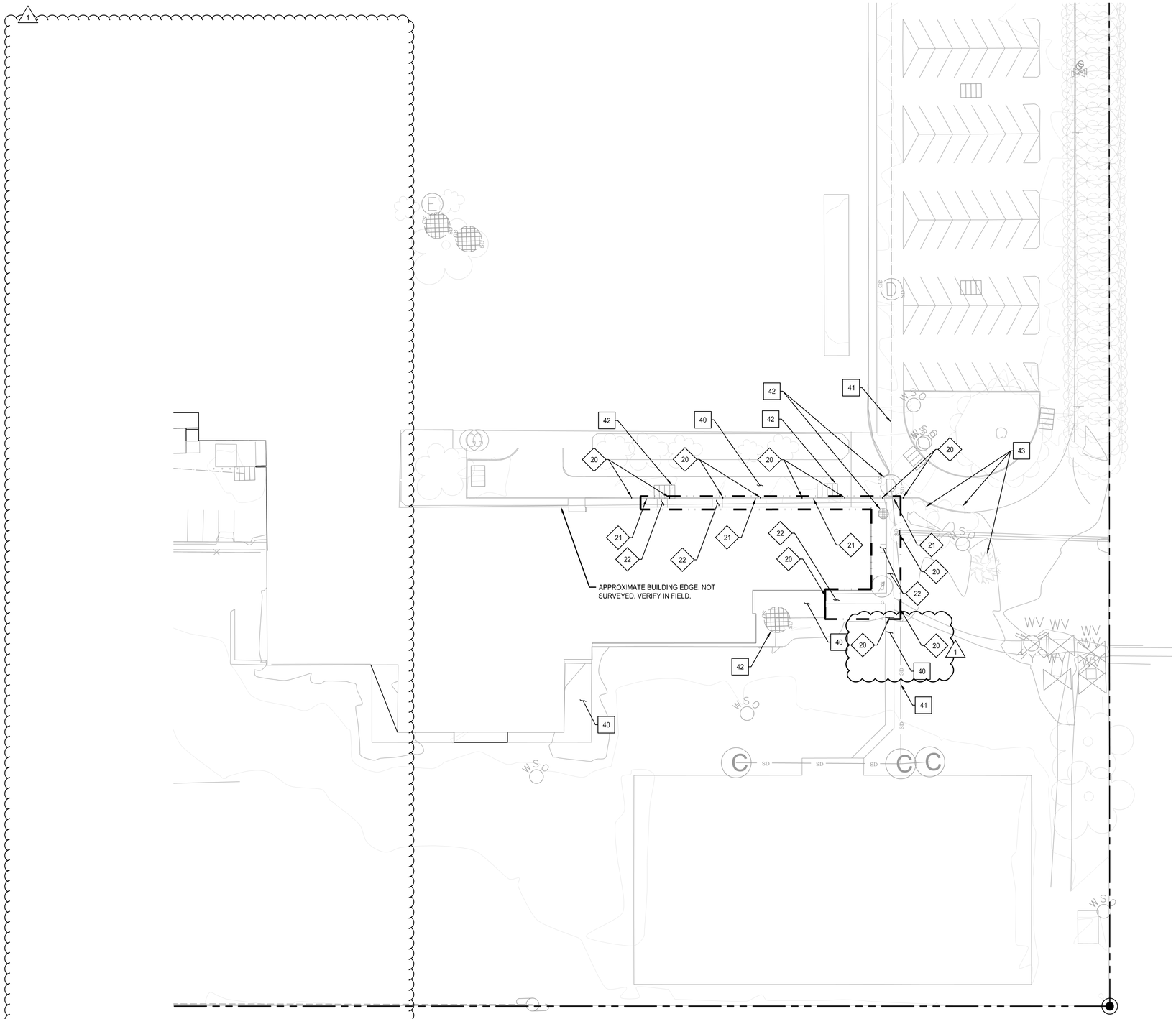

SHEET NOTES

1. CONTRACTOR MAY STAGE WITHIN LIMITS OF DEMOLITION.
2. REMOVE ALL SITE COMPONENTS AND RECYCLE COMPONENTS AS REQUIRED IN THE SPECIFICATIONS.
3. GENERAL DEMOLITION PERMIT SHALL BE SECURED BY THE CONTRACTOR.
4. ALL TRADE LICENSES AND PERMITS NECESSARY FOR THE PROCUREMENT AND COMPLETION OF THE WORK SHALL BE SECURED BY THE CONTRACTOR PRIOR TO COMMENCING DEMOLITION.
5. THE CONTRACTOR SHALL PRESERVE AND PROTECT FROM DAMAGE ALL EXISTING RIGHT-OF-WAY SURVEY MONUMENTATION DURING DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PAYING FOR THE REPLACEMENT BY A LICENSED SURVEYOR OF ANY DAMAGED OR REMOVED MONUMENTS.
6. PROTECT ALL ITEMS ON ADJACENT PROPERTIES AND IN THE RIGHT OF WAY INCLUDING BUT NOT LIMITED TO SIGNAL EQUIPMENT, PARKING METERS, SIDEWALKS, STREET TREES, STREET LIGHTS, CURBS, PAVEMENT AND SIGNS. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ANY DAMAGED ITEMS TO ORIGINAL CONDITION.
7. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, AND OTHER FACILITIES IMMEDIATELY ADJACENT TO EXCAVATIONS FROM DAMAGES CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS.
8. SAWCUT STRAIGHT LINES IN SIDEWALK, AS NECESSARY.
9. CONTRACTOR IS RESPONSIBLE TO CONTROL DUST AND MUD DURING THE DEMOLITION PERIOD, AND DURING TRANSPORTATION OF DEMOLITION DEBRIS. ALL STREET SURFACES OUTSIDE THE CONSTRUCTION ZONE MUST BE KEPT CLEAN.
10. ALL EXPOSED PORTIONS OF UNDERGROUND UTILITIES TO BE ABANDONED SHALL BE PLUGGED WITH A MECHANICAL PLUG AND CAPPED WITH CONCRETE.
11. SEE DEMOLITION NOTES ON SHEET C1.0.

DEMOLITION KEY NOTES

20 SAWCUT LINE. SEE SHEETS C2.0 & C2.1 FOR LOCATION INFORMATION.

21 REMOVE CONCRETE CURB.

22 REMOVE CONCRETE SIDEWALK.

PROTECTION KEY NOTES

40 PROTECT CURB AND SIDEWALK.

41 PROTECT UNDERGROUND UTILITIES.

42 PROTECT UTILITY STRUCTURE.

43 PROTECT TREE.

SHEET LEGEND

PROPERTY LINE

SAWCUT LINE

LIMITS OF DEMOLITION, SHOWN OFFSET FOR CLARITY. REMOVE ALL PAVEMENT WITHIN DEMOLITION LIMITS.

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SITE DEMOLITION PLAN

SCALE 1 INCH = 30 FEET
30 0 30 60

NTS

C1.1

100% CD

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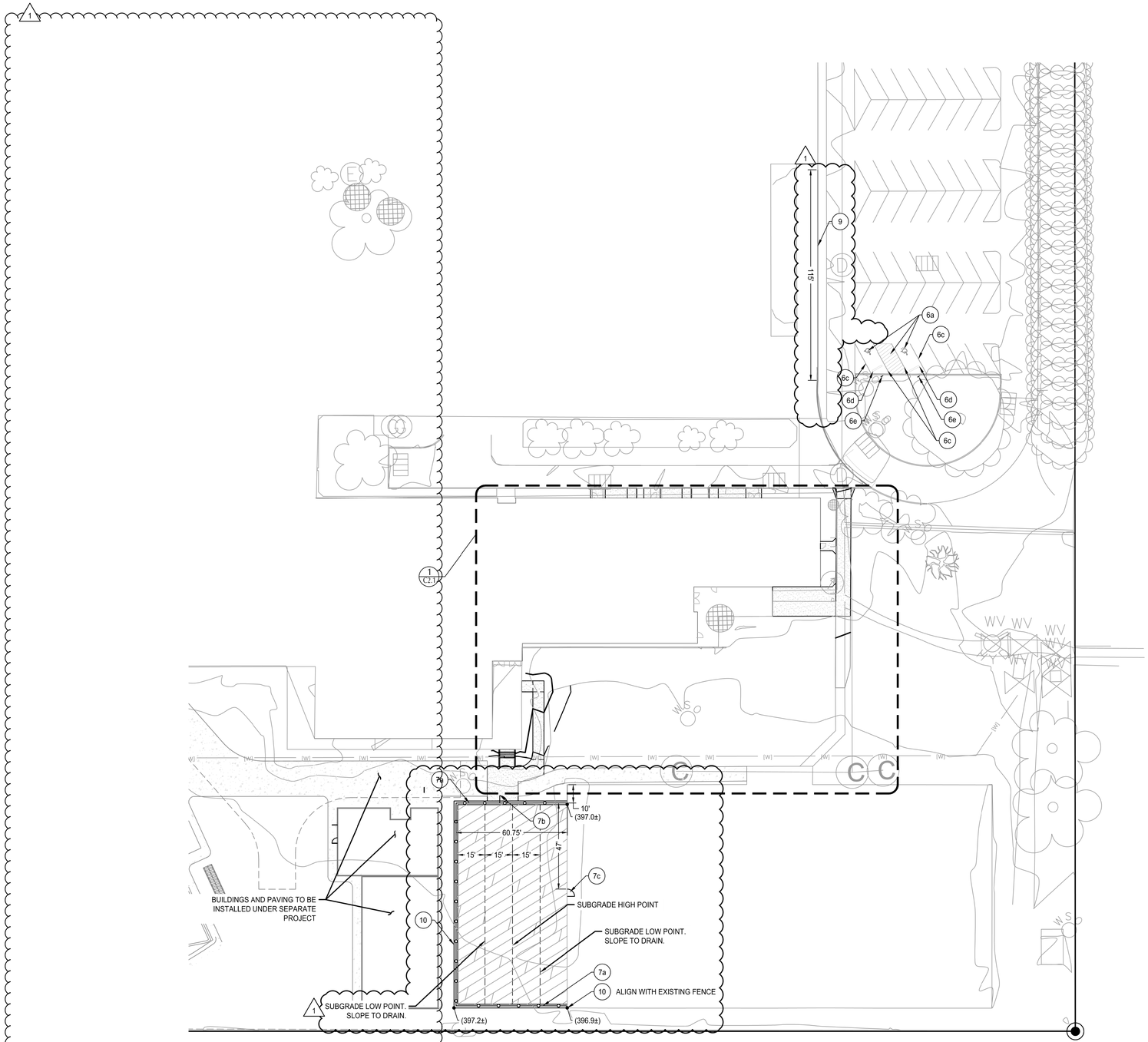

SHEET NOTES

1. ALL DIMENSIONS ARE TO FACE OF CURB OR FACE OF WALL.
2. ALL SIDEWALK PAVEMENT JOINTS SHALL BE CONSTRUCTED PER DETAIL 1/C3.0.
3. BUILDING OUTLINE AND DOORS NOT SURVEYED. FIELD VERIFY ALL POINTS OF CONNECTION TO BUILDING.

(X) KEY NOTES

#	DESCRIPTION	DETAIL REF.
1	SAWCUT LINE, MATCH EXISTING	
2	STANDARD CURB. SLOPE WITH SIDEWALK ELEVATION.	2/C3.0
3	INSTALL LANDING AT DOOR. DO NOT EXCEED 1.8% IN EITHER DIRECTION. DOOR LOCATION NOT SURVEYED. LOCATE LANDING BASED ON DOORWAY LOCATION PER DIMENSIONS ON PLAN. CONTRACTOR TO VERIFY GRADES AND EXACT LOCATIONS PRIOR TO CONSTRUCTION AND REPORT TO KPFF.	
4	INSTALL SIDEWALK AT 7.8% MAX. LONGITUDINAL SLOPE FROM DOOR ELEVATION TO EXISTING PAVEMENT ELEVATION. CROSS SLOPE TO BE 1.5%. SEE ARCHITECTURAL FOR HANDRAILS. CONTRACTOR TO VERIFY GRADES AND DOOR LOCATIONS PRIOR TO DEMOLITION AND REPORT TO KPFF.	
5	INSTALL LANDING AT END OF SIDEWALK WITH FLUSH CURB. DO NOT EXCEED 1.8% IN EITHER DIRECTION. MATCH EXISTING PAVEMENT ELEVATION.	
6a	ADA PARKING STALLS, STRIPING, AND SIGNAGE	1/C3.1
6b	"NO PARKING" ZONE STRIPING	1/C3.1
6c	4" WIDE WHITE STRIPE. REPAINT EXISTING STRIPING	1/C3.1
6d	WHEEL STOP	1/C3.1
6e	ADA PARKING SIGN	1/C3.1
7a	4' CHAIN LINK FENCE	6/C3.0
7b	4' WIDE, 4' TALL CHAIN LINK GATE	6/C3.0
7c	4' WIDE, 8' TALL CHAIN LINK GATE. INSTALL IN EXISTING 8' TENNIS COURT FENCE	
8	CONCRETE STAIRS WITH (4) RISERS OF EQUAL HEIGHT	5/C3.0
9	PAINT CURB GREEN & INSTALL 18" WHITE REFLECTIVE "PAUSE PARKING ONLY" SIGNS ON EXISTING STEEL COLUMNS	
10	MOW STRIP	7/C3.0

SHEET LEGEND

- PROPERTY LINE
- CONCRETE SIDEWALK — 3/C3.0
- SOFTPLAY — 4/C3.0

GRADING CALLOUT LEGEND

CALLOUT	DESCRIPTION
X.X%	GRADING SLOPE AND DIRECTION (DOWNHILL)
XX.XX	SPOT ELEVATION, SHOWN IN () INDICATES EX. ELEV. TO MATCH
XX	DESCRIPTION LISTED BELOW. -NO DESCRIPTION MEANS TP OR TG

BS	BOTTOM OF STEP
BW	BOTTOM OF WALL
EG	EXISTING GRADE
GB	GRADE BREAK
HP	HIGH POINT
LP	LOW POINT
RIM	RIM OF STRUCTURE
TC	TOP OF CURB
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TP	TOP OF PAVEMENT
TS	TOP OF STEP
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SITE & GRADING PLAN

SCALE 1 INCH = 30 FEET
30 0 30 60

NEHS

C2.0

100% CD

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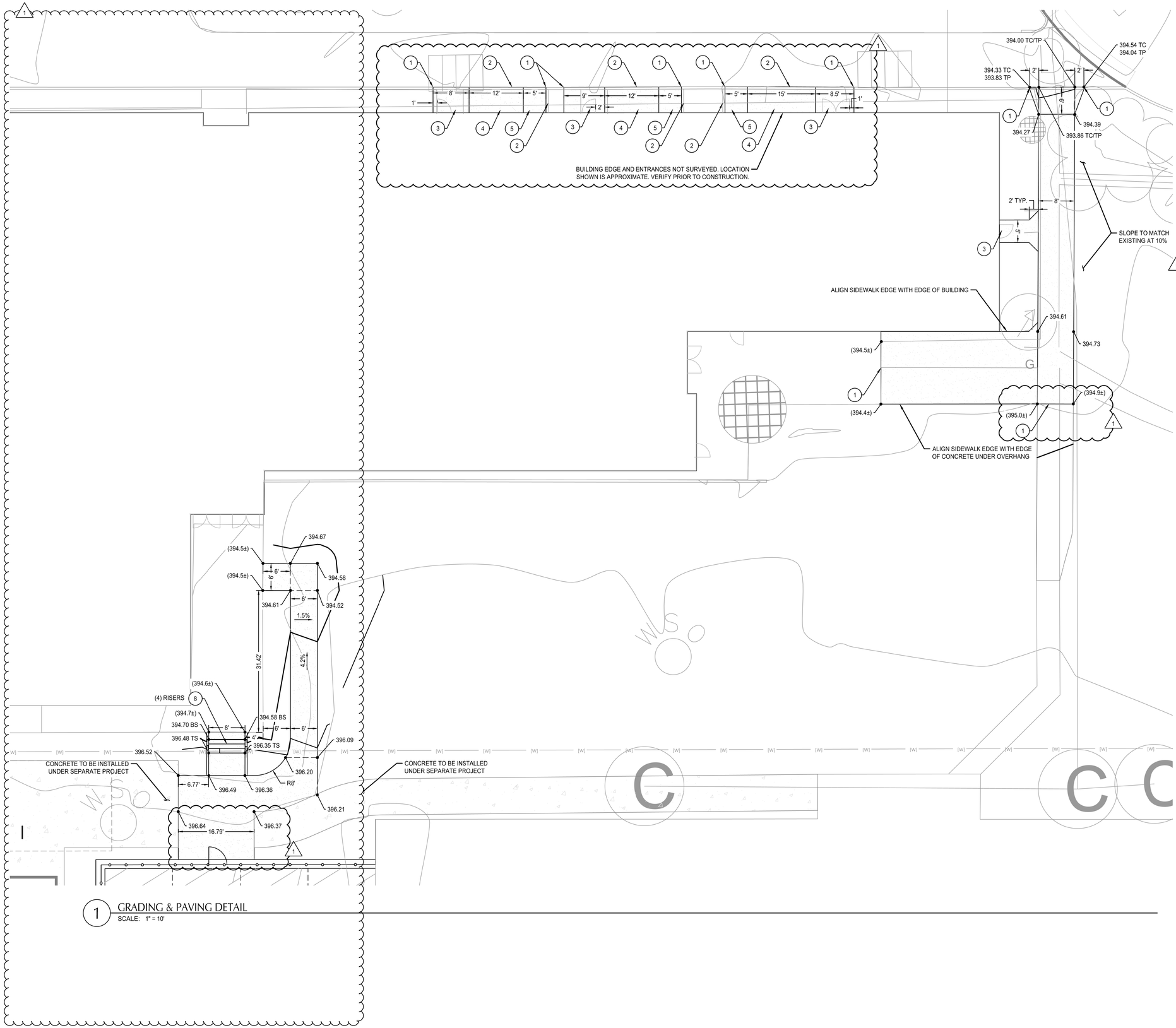

1 GRADING & PAVING DETAIL

SCALE: 1" = 10'

SHEET NOTES

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2. ALL SIDEWALK PAVEMENT JOINTS SHALL BE CONSTRUCTED PER DETAIL 1/C3.0.
3. BUILDING OUTLINE AND DOORS NOT SURVEYED. FIELD VERIFY ALL POINTS OF CONNECTION TO BUILDING.

KEY NOTES

#	DESCRIPTION	DETAIL REF.
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2	STANDARD CURB. SLOPE WITH SIDEWALK ELEVATION.	2/C3.0
3	INSTALL LANDING AT DOOR. DO NOT EXCEED 1.8% IN EITHER DIRECTION. DOOR LOCATION NOT SURVEYED. LOCATE LANDING BASED ON DOORWAY LOCATION PER DIMENSIONS ON PLAN. CONTRACTOR TO VERIFY GRADES AND EXACT LOCATIONS PRIOR TO CONSTRUCTION AND REPORT TO KPFF.	
4	INSTALL SIDEWALK AT 7.8% MAX. LONGITUDINAL SLOPE FROM DOOR ELEVATION TO EXISTING PAVEMENT ELEVATION. CROSS SLOPE TO BE 1.5%. SEE ARCHITECTURAL FOR HANDRAILS. CONTRACTOR TO VERIFY GRADES AND DOOR LOCATIONS PRIOR TO DEMOLITION AND REPORT TO KPFF.	
5	INSTALL LANDING AT END OF SIDEWALK WITH FLUSH CURB. DO NOT EXCEED 1.8% IN EITHER DIRECTION. MATCH EXISTING PAVEMENT ELEVATION.	
6a	ADA PARKING STALLS, STRIPING, AND SIGNAGE	1/C3.1
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10	MOW STRIP	7/C3.0

SHEET LEGEND

- PROPERTY LINE
- CONCRETE SIDEWALK — 3/C3.0
- SOFTPLAY — 4/C3.0

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SITE & GRADING PLAN DETAIL

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10 0 10 20

NEHS

C2.1

100% CD

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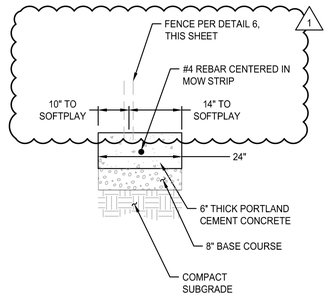
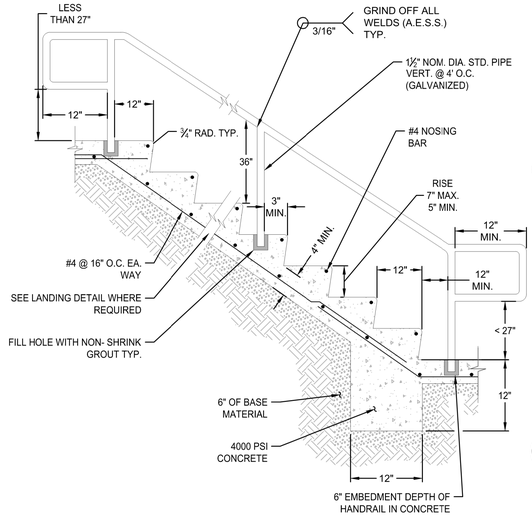


MOW BAND

NOTES:
1. JOINTS:
   - CONSTRUCT SCORE JOINTS AT 3' MAX. SPACING AND CONTRACTION JOINTS AT 12' MAX. SPACING.
2. PROVIDE MEDIUM TO COARSE BROOM FINISH.
3. SLOPE AT 2% MINIMUM AWAY FROM BUILDING.

7 MOW BAND & WOODCHIP CONTAINMENT EDGE

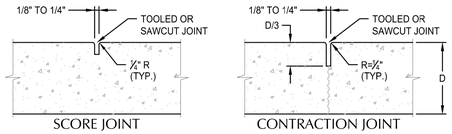
SCALE: NTS

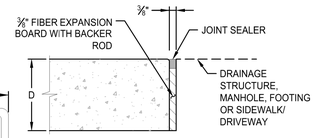


NOTE:
1. STEEL PIPE SHALL CONFORM TO ASTM A501.

5 STAIR AND HANDRAIL

SCALE: NTS





JOINT INTERVALS TABLE

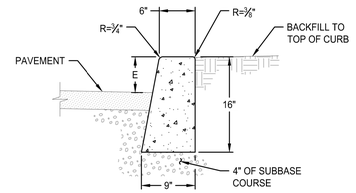
TYPE	SPACING	OR AT...
SCORE	5' TYP.	LOCATIONS SHOWN ON PLANS
CONTRACTION	15' MAX.	END OF RAMPS AND DRIVEWAYS
EXPANSION/ ISOLATION	200' *	POINTS OF TANGENCY AND AT ENDS OF EACH DRIVEWAY OR OTHER FIXED OBJECTS

* MONOLITHIC CURB AND SIDEWALK SHALL BE 45' MAX.

NOTES:
1. CONTRACTION JOINTS MAY BE USED IN PLACE OF SCORE JOINTS.
2. CONSTRUCTION COLD JOINTS MAY BE USED IN PLACE OF CONTRACTION JOINTS.
3. PROVIDE MEDIUM BROOM FINISH WITH NO TOOL MARKS.

1 SIDEWALK JOINTS

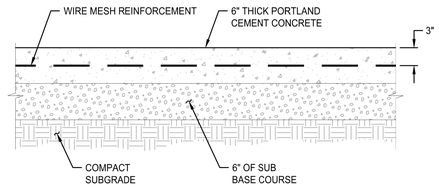
SCALE: NTS



NOTES:
1. CURB EXPOSURE 'E' = 6", TYP. VARY AS SHOWN ON PLANS OR AS DIRECTED.
2. CONSTRUCT CONTRACTION JOINTS AT 15' MAX. SPACING AND AT RAMPS. CONSTRUCT EXPANSION JOINTS AT 200' MAX SPACING AT POINTS OF TANGENCY AND AT ENDS OF EACH DRIVEWAY.
3. TOPS OF ALL CURBS SHALL SLOPE TOWARD THE ROADWAY AT 2% UNLESS OTHERWISE SHOWN OR AS DIRECTED.
4. DIMENSIONS ARE NOMINAL AND MAY VARY TO CONFORM WITH CURB MACHINE AS APPROVED BY THE ENGINEER.

2 CONCRETE CURB - STANDARD

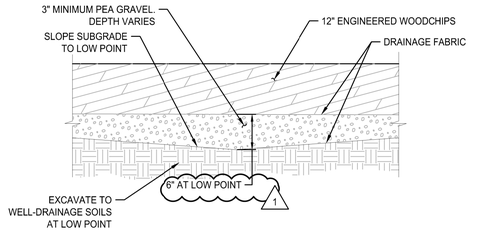
SCALE: NTS



NOTES:
1. JOINTS:
   - CONSTRUCT CONTRACTION JOINTS AT 15' MAX. SPACING AND AT RAMPS.
   - CONSTRUCT EXPANSION JOINTS AT 200' MAX. SPACING AT POINTS OF TANGENCY AND AT ENDS OF EACH DRIVEWAY.
2. PROVIDE MEDIUM TO COARSE BROOM FINISH.

3 REINFORCED SIDEWALK SECTION

SCALE: NTS



4 SOFTPLAY

SCALE: NTS

TYPE	D min. (in)	D1 min. (in)	F nom. (in)
CL-4	30	24	48
CL-5	36	36	60

TYPE	D min. (in)	D1 min. (in)	F nom. (in)
CL-4R	30	24	48
CL-5R	36	36	60

TABLE 1

	TYPE	MEMBER: BRACE AND TOP RAIL	LINE POSTS		END, CORNER & INTERMEDIATE END POST		GATE OPENING (ft)		GATE POSTS	
		TUBULAR	TUBULAR	H-SECTION	TUBULAR				TUBULAR	
		Fence Industry Std.	Nom. Dia. (in)	Size (in) x Wt. lb/ft	Fence Industry Std.	Nom. Dia. (in)	SINGLE GATE	DOUBLE GATE	Fence Industry Std.	Nom. Dia. (in)
STEEL	CL-4 & CL-4R CL-5 & CL-5R	1⅜	1½	1⅞ x 1⅜ 2.72	2⅜	2	Up thru 6	Up thru 12	2½	2½
							7 thru 13	13 thru 26	4	3½
STEEL	CL-6 & CL-6R	1⅜	1⅞	2⅜ x 2 4.10	2⅜	2½	14 thru 18	27 thru 36	6⅝	6

NOTE: For CL-8, CL-8R, CL-10 & CL-10R, the CL-6 & CL-6R hardware is minimum and does not include slat wind loading.

GENERAL NOTES FOR ALL DETAILS:
1. Do not use top rail where fence can be struck by an errant vehicle.
2. Fittings shown are illustrative of use and not specific as to design.
3. Gate posts on each side of a gate opening to be the same size. At a double gate installation with unequal width gates, size of both posts to be as indicated for a single gate installation of the wider gate width.
4. For cross sectional dimensions of members, see Table 1.
5. Posts and rails with sections not shown that meet the requirements of AASHTO M181 are acceptable alternates. See ODOT's QPL for acceptable alternates.
6. All concrete shall be commercial grade concrete.
7. All chain link fabric for the fence to be installed with pickets shall be 9 gauge wire woven in 3½" by 5½" diamond mesh.
8. Chain link fabric for the fence to be installed with pickets shall be knuckled finish.
9. See project plans for details not shown.

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

CALC. BOOK NO. N/A

BASELINE REPORT DATE 25-JUL-2017

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

CHAIN LINK FENCE

2018

DATE	REVISION DESCRIPTION

RD815

6 FENCE

SCALE: NTS

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OREGON
JULY 19, 2005
MATTHEW M. KEEHAN
EXPIRATION DATE: 6/30/2021

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1 17 MARCH 2020

NORTH EUGENE HIGH SCHOOL IMPROVEMENTS

200 SILVER LN, EUGENE, OR 97404

RENOVATIONS

JOB NO: 19126

ISSUE DATE: 03/13/20

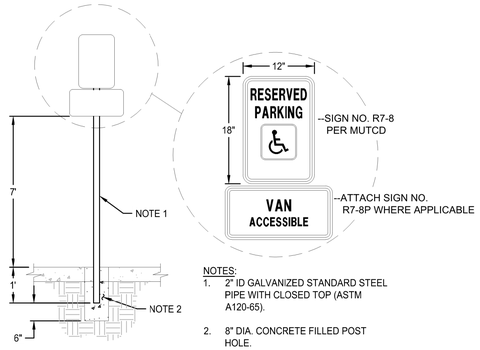
CIVIL DETAILS

NEHS

C3.0

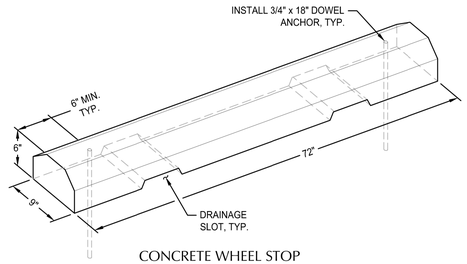
100% CD

1

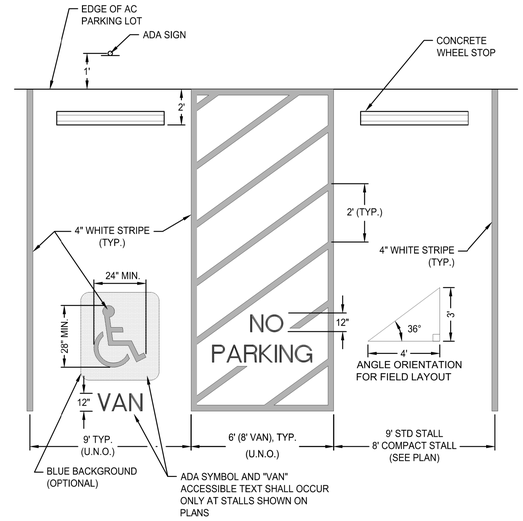


NOTES:
1. 2" ID GALVANIZED STANDARD STEEL PIPE WITH CLOSED TOP (ASTM A120-65).
2. 8" DIA. CONCRETE FILLED POST HOLE.

ADA SIGN



CONCRETE WHEEL STOP



1 ADA PARKING LAYOUT
SCALE: NTS

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ISSUE DATE: 03/13/20

CIVIL DETAILS

NEHS

C3.1

100% CD

File: O:\c\p\2019\1900421-4.ISD-Corridor-Reloc\CAD\PLOT\1900421-0301.dwg TAB:C3.1
Plotted: 3/17/20 at 10:46am By: ABackus

SILVER LN.

CASEWORK STAGING AREA
-OWNER WILL DEPOSIT CASEWORK @ CAFETERIA FOR REINSTALLATION BY CONTRACTOR

1 ARCHITECTURAL SITE PLAN
1" = 40'

0 10 20 40 80

NORTH

KEY NOTES

1. PAINT (E) CURB W/ PAVEMENT MARKING PAINT SYSTEM, SEE CIVIL
2. SOFTBALL FIELD, EQUIPMENT BLDG, AND DASHED PATHWAY BY OTHERS - SHOWN FOR REFERENCE
3. (R) 'CORRIDOR' BUILDING SIGN, SEE 5:A201 - VFY LOCATION W/ ARCH PRIOR TO WORK
4. POTENTIAL CONTRACTOR STAGING AREA, VFY W/ OWNER
5. (N) DROP OFF PARKING SIGN @ (E) COLUMN, SEE CIVIL
6. (N) CONCRETE WALKWAY, SEE CIVIL
   -45° CHAMFER @ INSIDE CORNERS
7. (N) CONCRETE PATHWAY ACCESS RAMP, MAX SLOPE 1:12, SEE CIVIL

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JOB NO: 19188
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SITE PLAN

NEHS

A100

1 DEMOLITION FLOOR PLAN
1/16" = 1'-0"

0 2 4 8 16 32

NORTH

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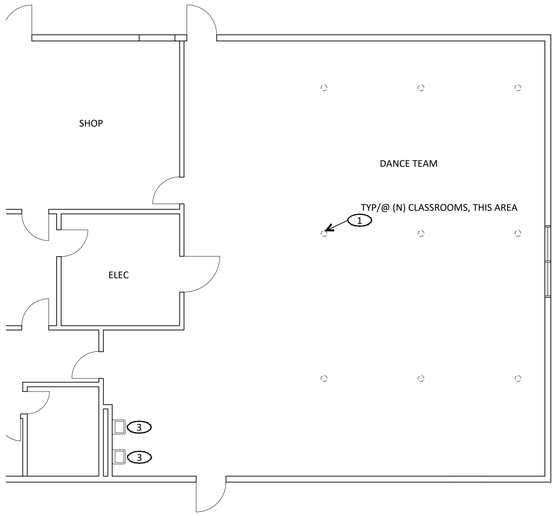
OVERALL
DEMOLITION

NEHS

A110

KEY NOTES

1. DEMOLISH LIGHT FIXTURE
2. CIRCULATION DESK CASEWORK, LOW WALL DEMOLITION BY OTHERS
3. (E) SINK TO REMAIN
4. DEMOLISH WALL FRAMING AS REQUIRED FOR (N) DOOR
   -WALL FINISH DEMOLITION BY OTHERS
5. EXISTING ELECTRICAL PANEL TO REMAIN
6. LIGHTING CONTROLS & WALL FINSIH DEMOLISHED BY OTHERS
7. GB SOFFIT DEMOLISHED BY OTHERS
8. (E) STEEL PIPE COLUMN
9. DEMOLISH CEILING GRID
10. DEMOLISH CASEWORK
11. DEMOLISH BOOK RETURN
12. CEILING, FLOOR, CASEWORK, LIGHTING DEMOLITION BY OTHERS
13. (E) PROJECTOR SCREEN
14. (E) CASEWORK TO REMAIN
15. (E) FLOOR MOUNT HVAC TO REMAIN
16. WALL DEMOLITION BY OTHERS
    -COORD W/ OWNER



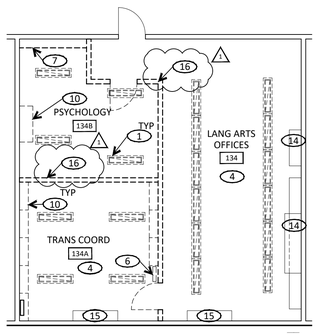
1 ROOM 600 DEMOLITON PLAN
1/8" = 1'-0"

NORTH

2 LIBRARY 209H DEMOLITION FLOOR PLAN
1/8" = 1'-0"

NORTH

0 1 2 4 8



3 ROOM 134 DEMOLITION PLAN
1/8" = 1'-0"

NORTH

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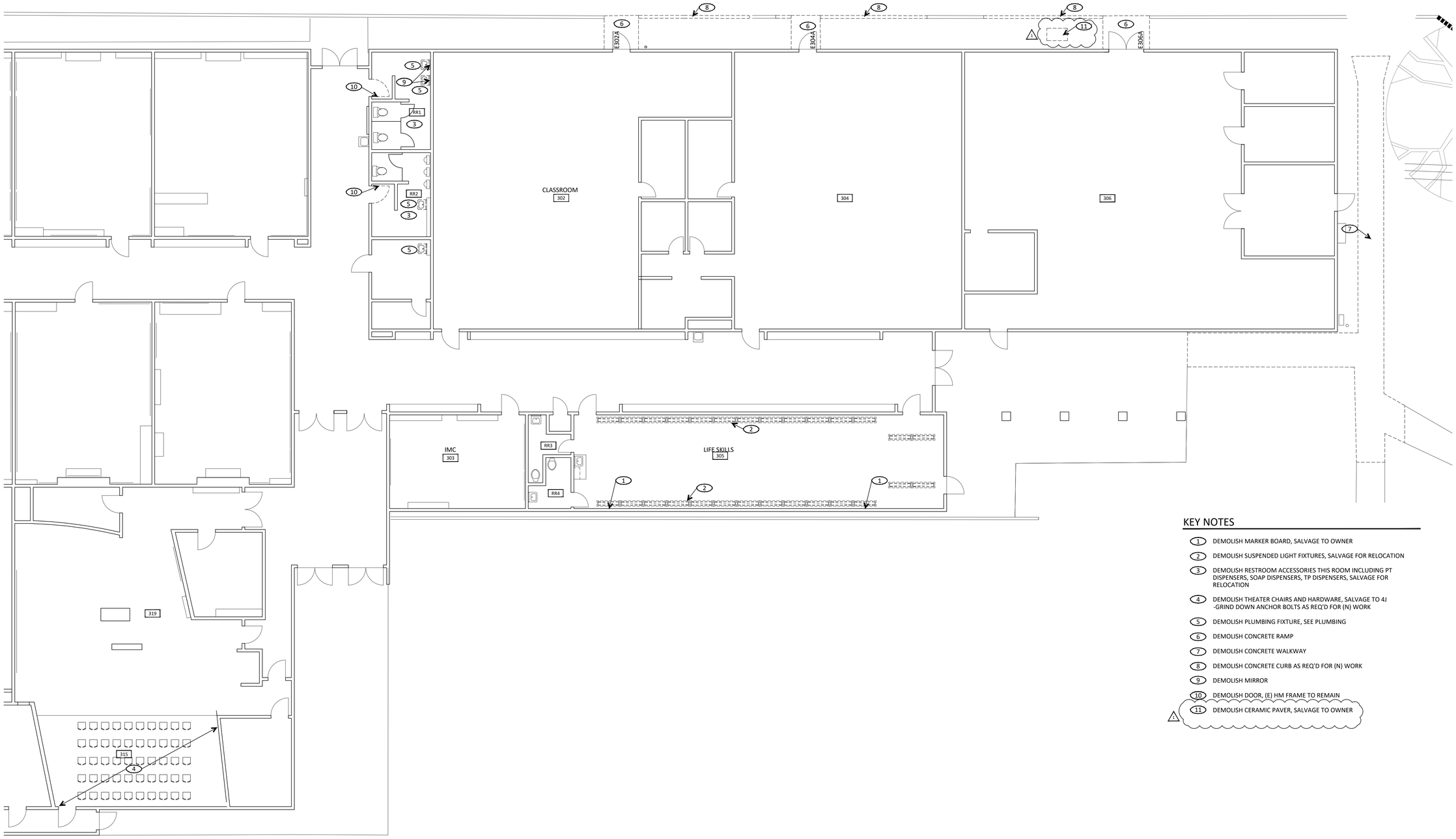
PARTIAL DEMOLITION

NEHS

A111



KEY NOTES

1. DEMOLISH MARKER BOARD, SALVAGE TO OWNER
2. DEMOLISH SUSPENDED LIGHT FIXTURES, SALVAGE FOR RELOCATION
3. DEMOLISH RESTROOM ACCESSORIES THIS ROOM INCLUDING PT DISPENSERS, SOAP DISPENSERS, TP DISPENSERS, SALVAGE FOR RELOCATION
4. DEMOLISH THEATER CHAIRS AND HARDWARE, SALVAGE TO 4J
   -GRIND DOWN ANCHOR BOLTS AS REQ'D FOR (N) WORK
5. DEMOLISH PLUMBING FIXTURE, SEE PLUMBING
6. DEMOLISH CONCRETE RAMP
7. DEMOLISH CONCRETE WALKWAY
8. DEMOLISH CONCRETE CURB AS REQ'D FOR (N) WORK
9. DEMOLISH MIRROR
10. DEMOLISH DOOR, (E) HM FRAME TO REMAIN
11. DEMOLISH CERAMIC PAVER, SALVAGE TO OWNER

1 ENLARGED DEMOLITION PLAN
1/8" = 1'-0"

NORTH
0 2 4 8 16

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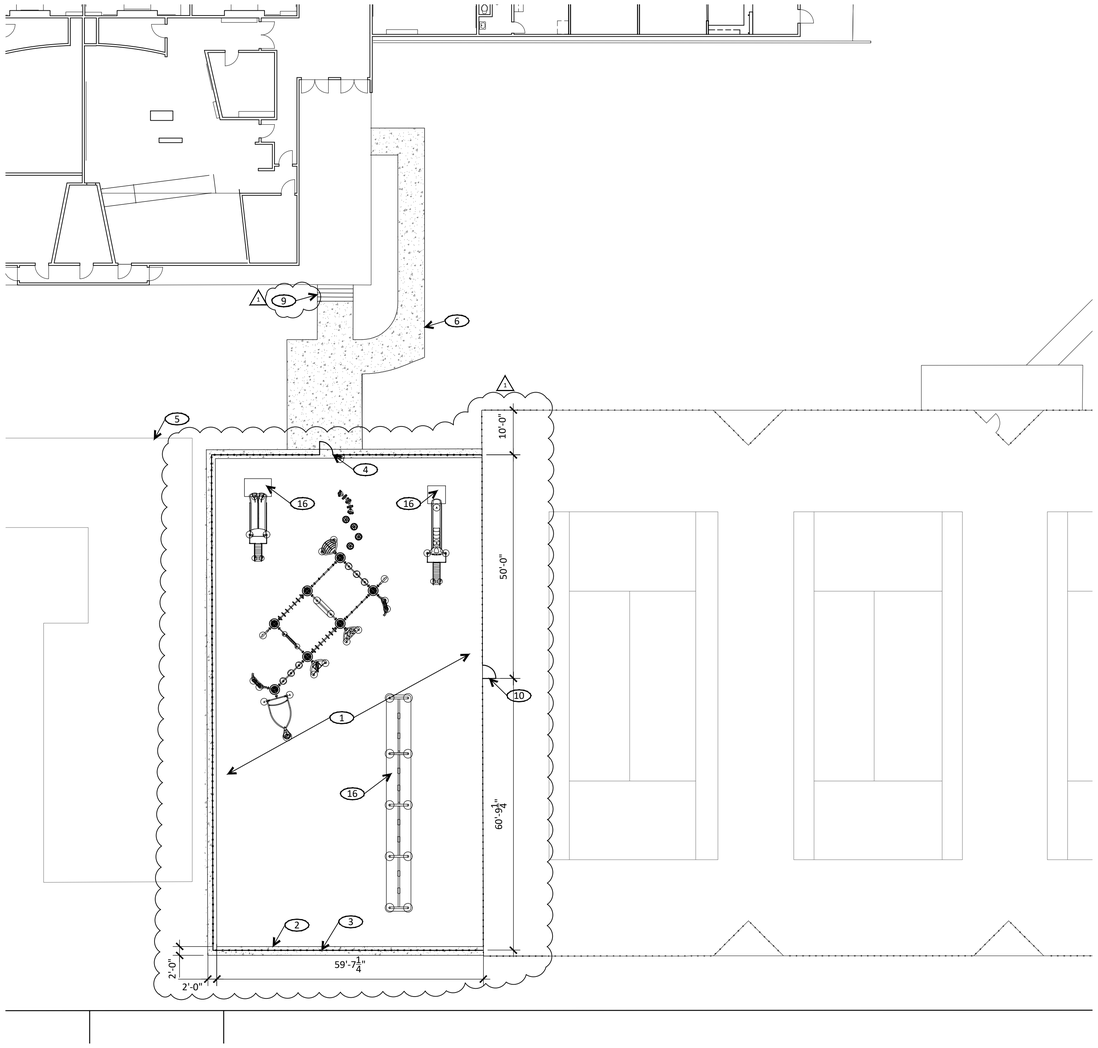
PARTIAL DEMOLITION

NEHS

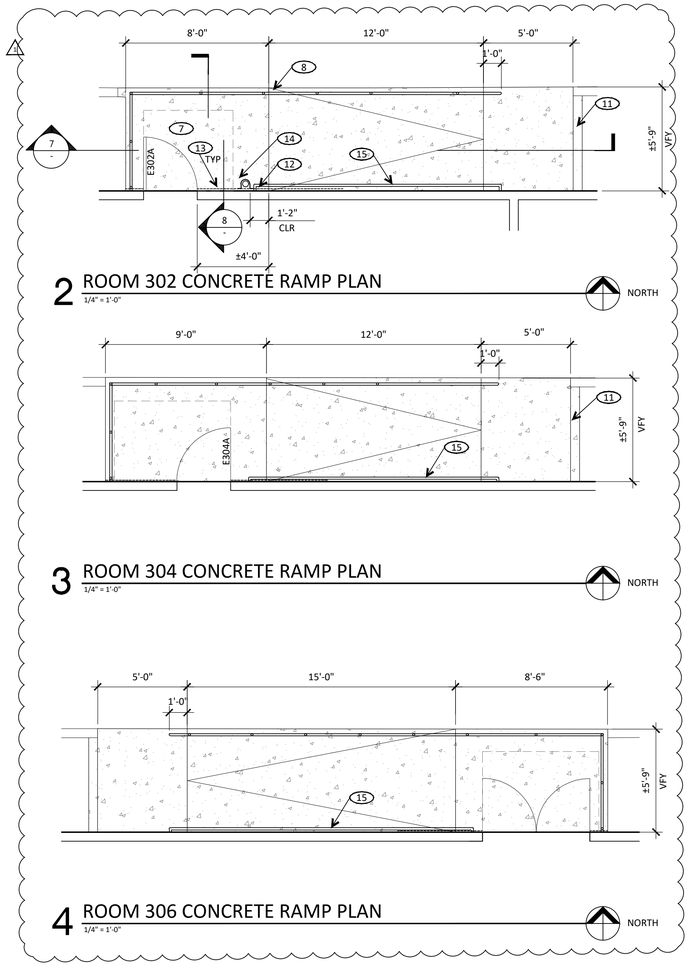
A112



1 ARCHITECTURAL SITE PLAN
1/16" = 1'-0"

NORTH

0 2 4 8 16 32



2 ROOM 302 CONCRETE RAMP PLAN
1/4" = 1'-0"

NORTH

3 ROOM 304 CONCRETE RAMP PLAN
1/4" = 1'-0"

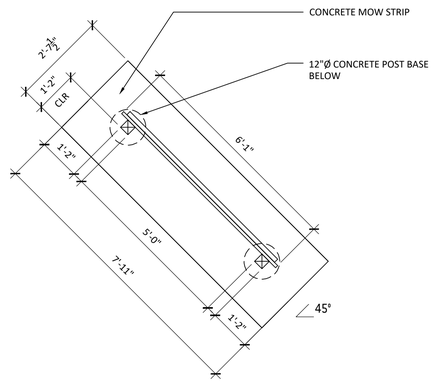
NORTH

4 ROOM 306 CONCRETE RAMP PLAN
1/4" = 1'-0"

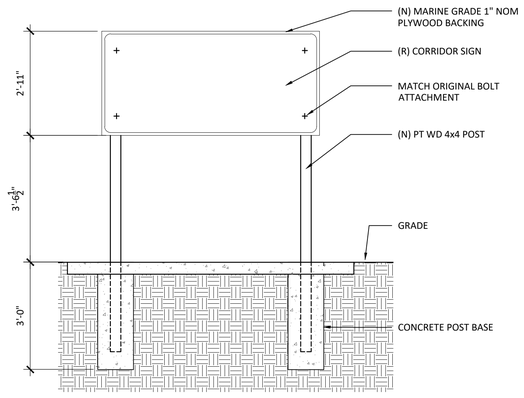
NORTH

KEY NOTES

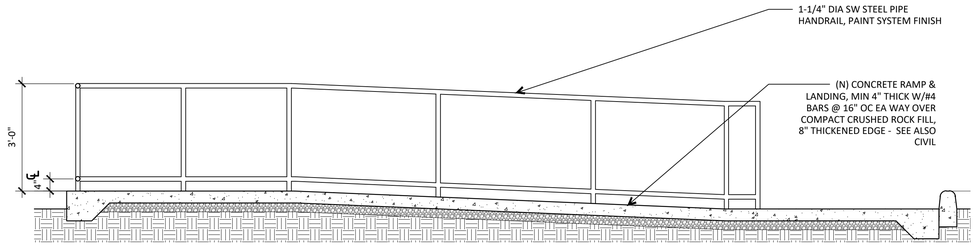
1. (N) PLAYGROUND EQUIPMENT BY OTHERS W/NEW FENCING, CURBS, WOODCHIPS, SITE PREP, ADA PATH, AND GATE
2. (N) CONCRETE MOW STRIP, SEE ALSO CIVIL
3. (N) 4' HIGH COATED CHAIN LINK FENCE, SEE ALSO CIVIL
4. (N) 3'-0" WIDE CHAIN LINK GATE, SEE ALSO CIVIL
5. SOFTBALL FIELD HOUSE WORK BY OTHERS, COORDINATE ACCESS TO WORK AREA
6. (N) CONCRETE WALKWAY & RAMP, SEE CIVIL
7. (N) CONCRETE LANDING & RAMP, SEE ALSO CIVIL
8. (N) STEEL PIPE HAND RAIL
9. (N) STAIRS & HANDRAIL, SEE CIVIL
10. (N) 3'-0" WIDE CHAIN LINK GATE, MOUNT TO (E) FENCE POST, SEE ALSO CIVIL
11. (N) 6" CONCRETE CURB
12. ALIGN TOP/RAMP @ BLDG SIDING MATERIAL TRANSITION
13. PROVIDE 22 GA. GALV SM FLASHING BETWEEN BUILDING SIDING & (N) CONC W/ SEALANT POCKET @ TOP, EXTEND DOWN PAST WALKWAY MIN 3", CONTIN. UNTIL WALKWAY MORE THAN 2" DOWN PAST BTM/SIDING
    -SEAL TOP/FLASHING WATERTIGHT, NO SHARP CORNERS
14. (N) 16 GA. GALV SM SHROUD @ (E) VENT
    -84" HT, PROVIDE WEEPS @ BTM/SHROUD
    -FASTEN TO WALL @ 16" OC MAX EA. SIDE W/ NEOPRENE WASHERED FASTENERS
15. STEEL PIPE HANDRAIL @ (E) BLDG W/ HR BRACKET 60" OC MAX TO SOLID BACKING, ½" MIN LAGSCREW 2" EMBED, SEAL PENETRATIONS WATERTIGHT - RETURN ENDS TO BUILDING
16. PLAYGROUND EQUIPMENT RUBBER MAT, BY OTHERS



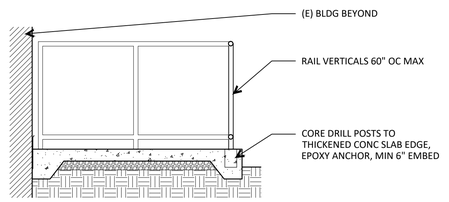
5 SIGN PLAN
1/2" = 1'-0"



6 SIGN ELEVATION
1/2" = 1'-0"



7 RAMP SECTION
1/2" = 1'-0"



8 RAMP SECTION
1/2" = 1'-0"

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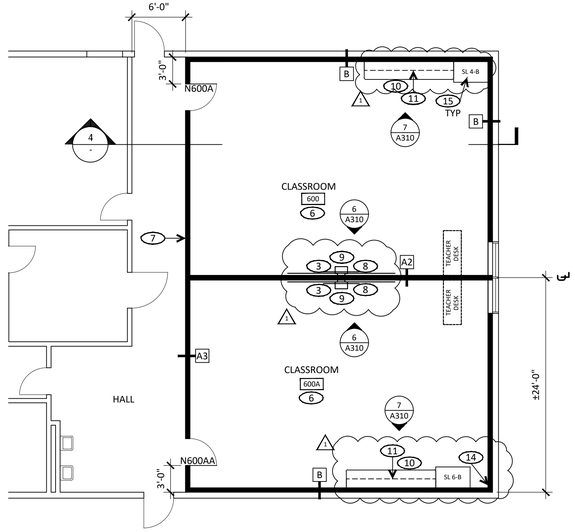
200 SILVER LN, EUGENE OR
RENOVATIONS

JOB NO:	19188
ISSUE DATE:	03 MAR 2020

ENLARGED SITE PLAN

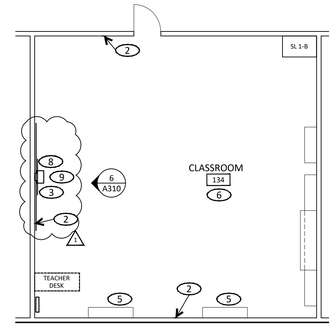
NEHS

A201



1 ROOM 600 & 600A ENLARGED FLOORPLAN
1/8" = 1'-0"

NORTH

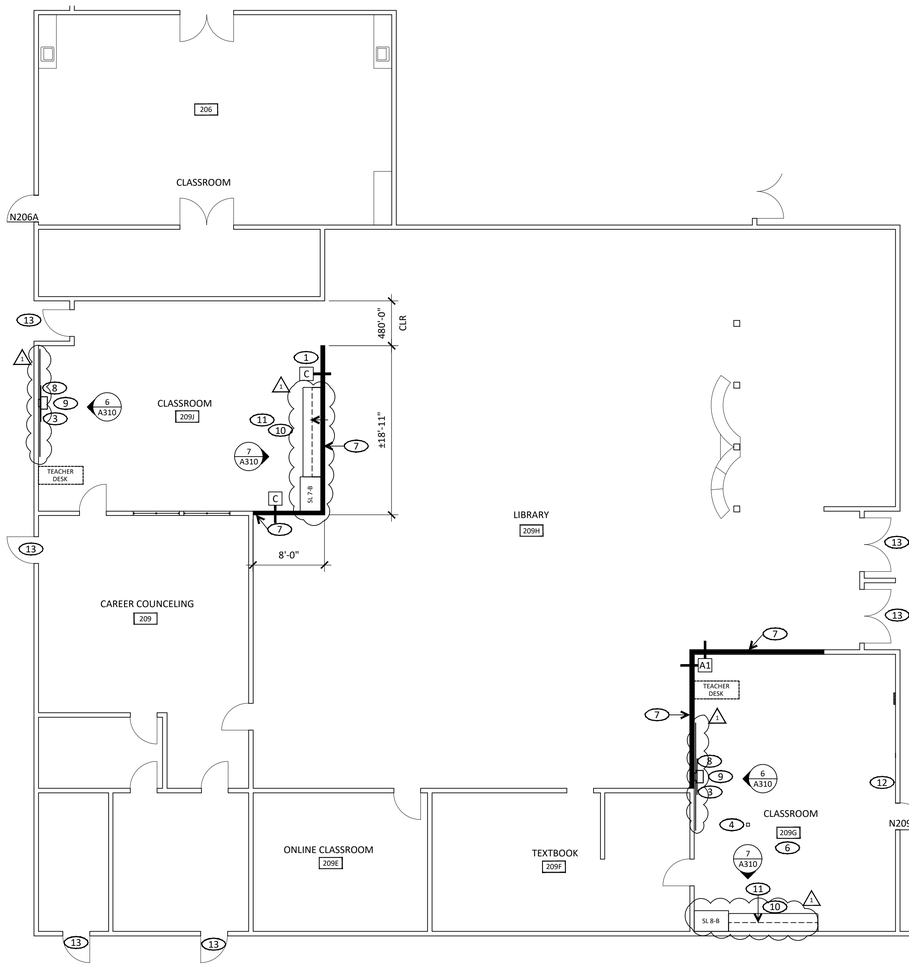


2 ROOM 134 ENLARGED FLOORPLAN
1/8" = 1'-0"

NORTH

KEY NOTES

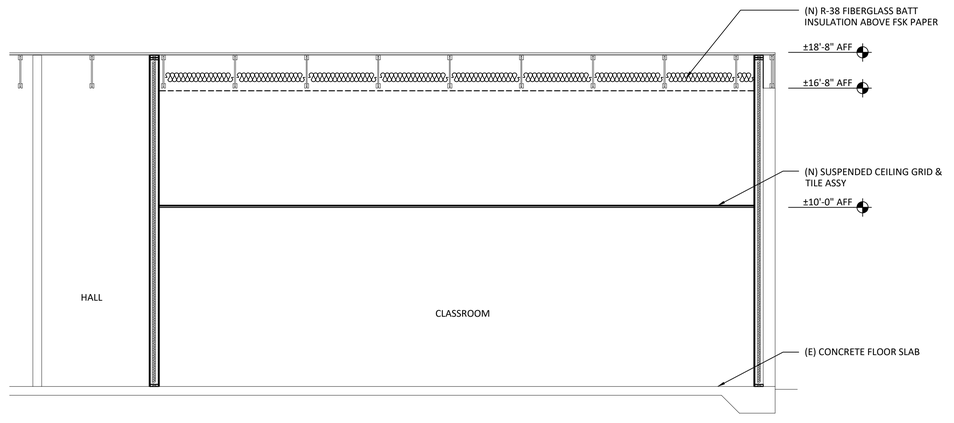
1. (N) 8'-0" HIGH WALL
2. PATCH WALL AS REQ'D WHERE WALL DEMOLISHED
3. (N) MARKERBOARD
4. (E) STEEL PIPE COLUMN
5. (N) FLOOR MOUNT HVAC UNIT TO REMAIN
6. PROVIDE (N) PAINT SYSTEM @ WALLS & BEAMS THIS ROOM, SEE ALSO FINISH SCHEDULE
7. PS FINISH @ (N) WALL ASSEMBLY, SEE ALSO FINISH SCHEDULE
8. (N) SMARTBOARD
9. (N) WALL MOUNT SHORT THROW PROJECTOR
10. (N) WD VENEER CASEWORK W/PLAM CLAD COUNTERTOP & BACKSPLASH
11. (N) WD VENEER UPPER CABINETS
12. INFILL BOOK RETURN, MATCH ADJACENT WALL ASSEMBLY
13. (E) 1.5 HR FIRE RATED DOORS TO REMAIN
14. PROVIDE ACCESS PANEL TO (E) WATER SUPPLY SHUT OFF
15. (R) OFCI CASEWORK, SEE SCHEDULE - REFER TO DETAIL 8/A310 FOR TYP INSTALLATION REQ'S



3 LIBRARY ENLARGED FLOORPLAN
1/8" = 1'-0"

NORTH

0 2 4 8 16



4 ROOM 600 SECTION
1/4" = 1'-0"

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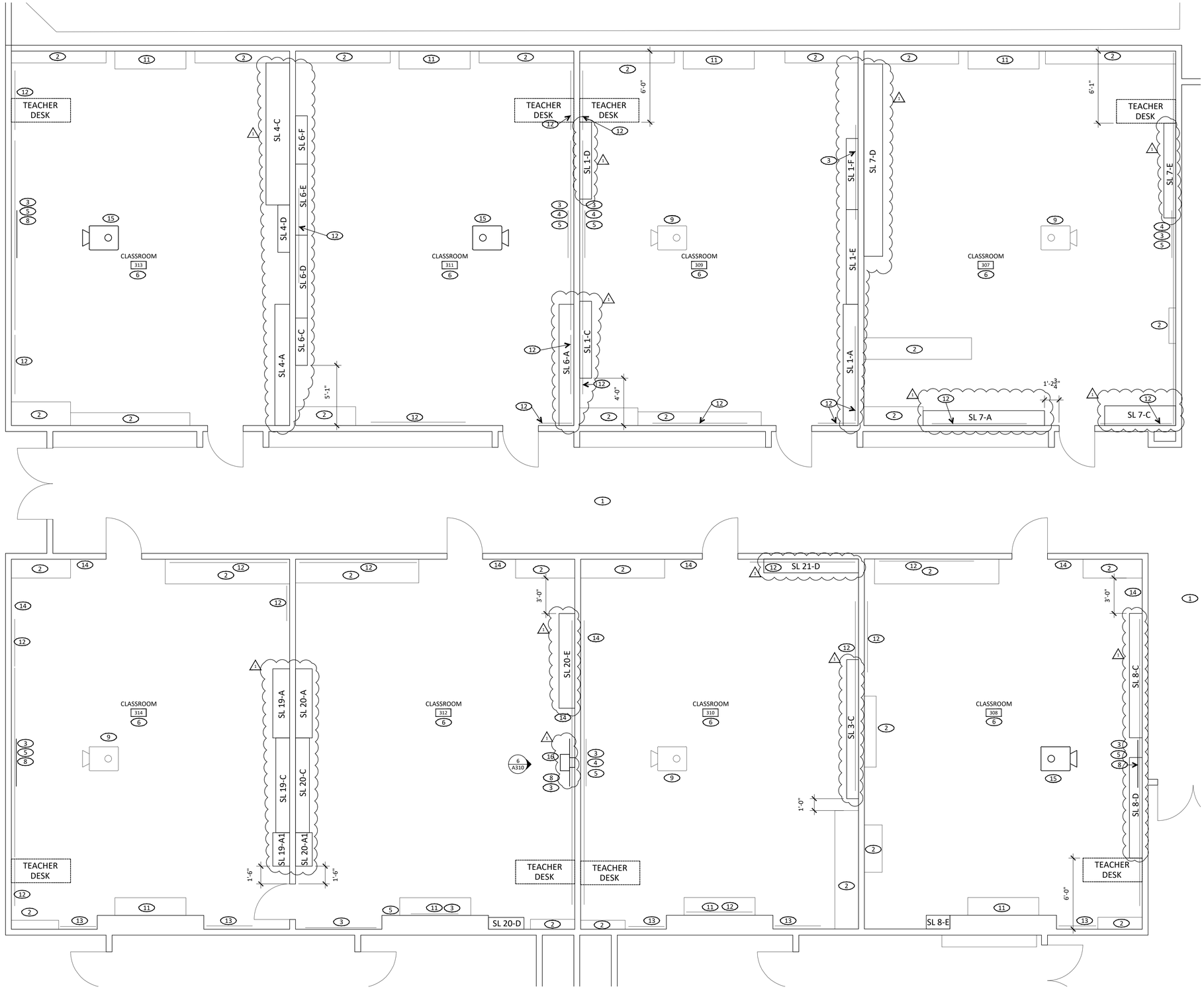
FLOOR PLAN

NEHS

A210



1 FLOOR PLAN
1/4" = 1'-0"

KEY NOTES

1. NO WORK AT EXISTING HALL
2. EXISTING CASEWORK
3. EXISTING MARKER BOARD
4. EXISTING SMART BOARD
5. EXISTING PROJECTOR SCREEN
6. PROVIDE (N) PAINT SYSTEM @ WALLS & BEAMS THIS ROOM, SEE ALSO FINISH SCHEDULE
7. NOT USED
8. (N) SMART BOARD
9. (E) CLG MOUNT PROJECTOR TO REMAIN
10. (N) CEILING MOUNTED PROJECTOR
11. (E) FLR MNT HVAC UNIT
12. (E) TACK BOARD
13. (E) PEG BOARD, (N) PAINT SYSTEM FINISH
14. (E) WAINSCOT TO REMAIN, NO PAINT SCOPE
15. (N) CLG MOUNT PROJECTOR @ (E) POLE MOUNT
16. (N) WALL MOUNT SHORT THROW PROJECTOR

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REGISTERED ARCHITECT
JOSEPH E. MOORE
EUGENE OREGON
6033
STATE OF OREGON

REVISIONS
1 3/17/2020 ADD. 1

ESD 4J NORTH EUGENE HIGH SCHOOL IMPROVEMENTS

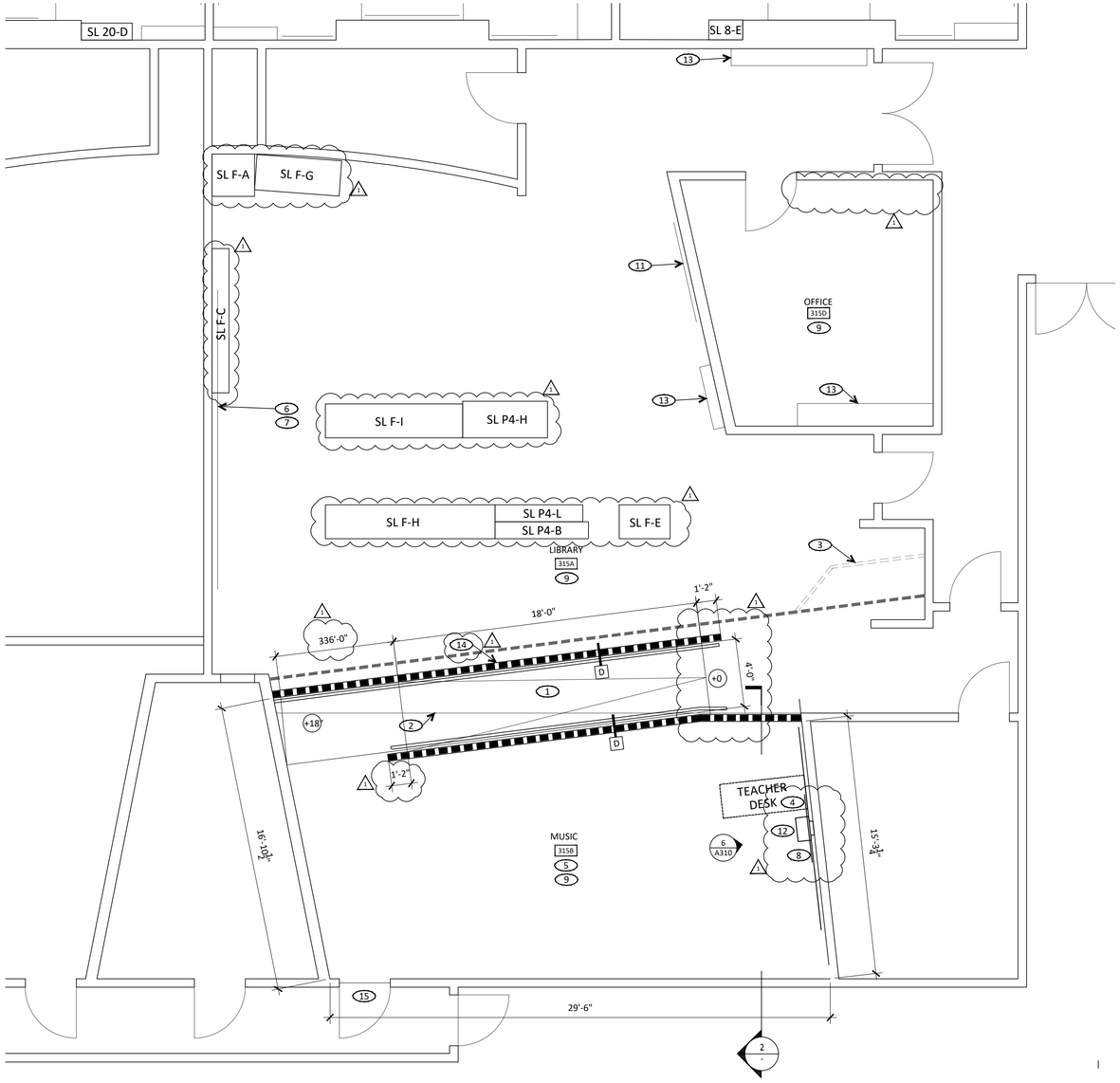
200 SILVER LN, EUGENE OR
RENOVATIONS

JOB NO: 19188
ISSUE DATE: 03 MAR 2020

PARTIAL FLOOR PLAN

NEHS

A211



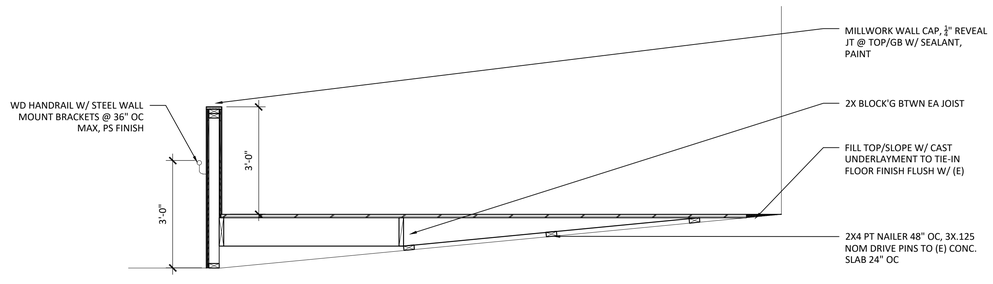
KEY NOTES

1. (N) WOOD FRAMED RAMP AND PLATFORM OVER EXISTING SLOPED FLOOR
2. DASH INDICATES EDGE OF SLOPED SLAB BELOW
3. (E) OPERABLE PARTITION TRACK ABOVE
4. (N) MARKER BOARD
5. (N) OVERFRAMING ABOVE SLOPED FLOOR SLAB, 2X10 16" OC W/1-1/8" PLYWD T&G DECKING
6. (E) MARKER BOARD
7. (E) PROJECTOR SCREEN
8. (N) SMART BOARD
9. PROVIDE (N) PAINT SYSTEM THIS ROOM, SEE ALSO FINISH SCHEDULE
10. NEW STEEL PIPE HANDRAIL @ 36" AFF W/HANDRAIL BRACKETS 60" OC, 12" EXTENSIONS TOP & BOTTOM W/RETURN TO WALL
11. (E) TACK BOARD
12. (N) WALL MOUNT SHORT THROW PROJECTOR
13. (E) CASEWORK
14. (N) SCAFCO OR SIM PONY WALL SUPPORT @ 60" OC & @ END/WALL, ANCHOR TO (E) CONC SLAB PER MFR RECOMMENDATIONS
15. FLUSH TRANSITION @ (E) FLR

1 ROOM 315 ENLARGED FLOOR PLAN

1/4" = 1'-0"

0 1 2 4 8 NORTH



2 FLOOR SECTION

1/2" = 1'-0"

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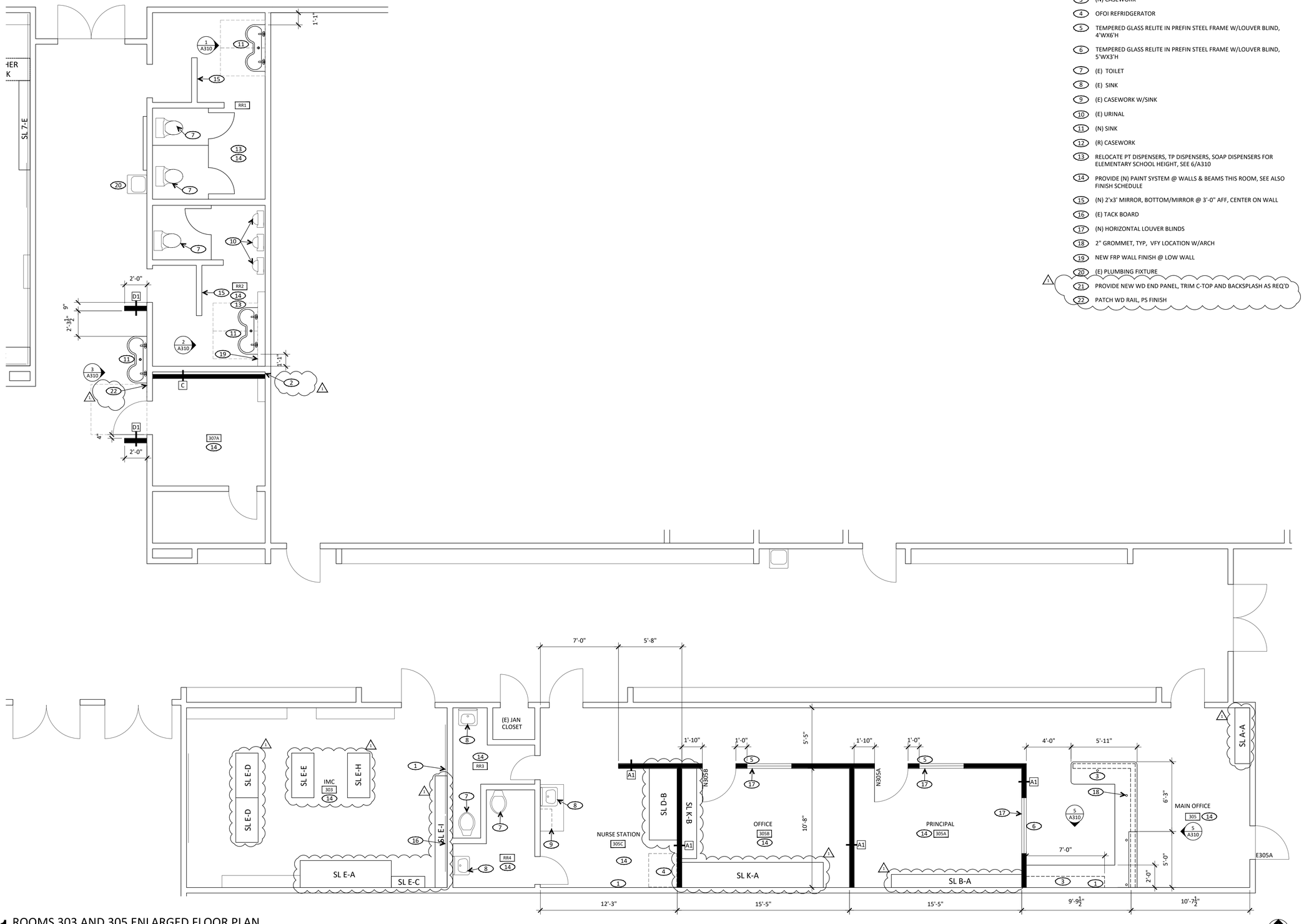
ENLARGED FLOOR PLAN

NEHS

A212



1 ROOMS 303 AND 305 ENLARGED FLOOR PLAN
1/4" = 1'-0"

FLOOR PLAN KEY NOTES

1. SALVAGE MARKER BOARDS THIS ROOM, DELIVER TO 4J
2. LOCATE (N) WALL ASSY +2" OFF WALL AS REQ'D BY (N) PLUMBING
3. (N) CASEWORK
4. OFOI REFRIDGERATOR
5. TEMPERED GLASS RELITE IN PREFIN STEEL FRAME W/LOUVER BLIND, 4'WX6'H
6. TEMPERED GLASS RELITE IN PREFIN STEEL FRAME W/LOUVER BLIND, 5'WX3'H
7. (E) TOILET
8. (E) SINK
9. (E) CASEWORK W/SINK
10. (E) URINAL
11. (N) SINK
12. (R) CASEWORK
13. RELOCATE PT DISPENSERS, TP DISPENSERS, SOAP DISPENSERS FOR ELEMENTARY SCHOOL HEIGHT, SEE 6/A310
14. PROVIDE (N) PAINT SYSTEM @ WALLS & BEAMS THIS ROOM, SEE ALSO FINISH SCHEDULE
15. (N) 2'x3' MIRROR, BOTTOM/MIRROR @ 3'-0" AFF, CENTER ON WALL
16. (E) TACK BOARD
17. (N) HORIZONTAL LOUVER BLINDS
18. 2" GROMMET, TYP, VFY LOCATION W/ARCH
19. NEW FRP WALL FINISH @ LOW WALL
20. (E) PLUMBING FIXTURE
21. PROVIDE NEW WD END PANEL, TRIM C-TOP AND BACKSPLASH AS REQ'D
22. PATCH WD RAIL, PS FINISH

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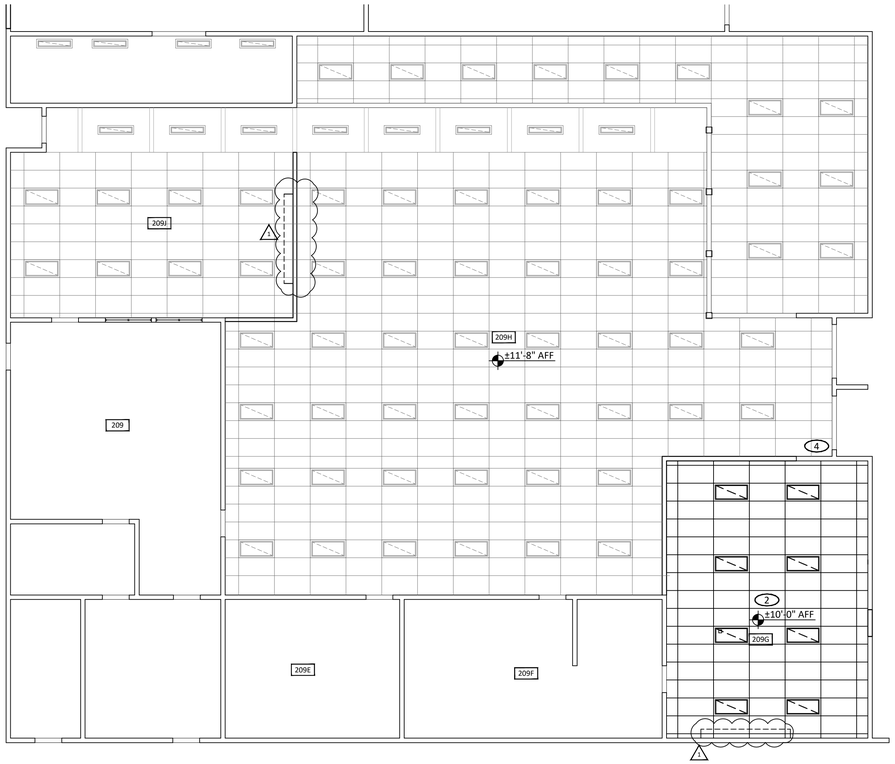
JOB NO: 19188
ISSUE DATE: 03 MAR 2020

PARTIAL FLOOR PLAN

NEHS

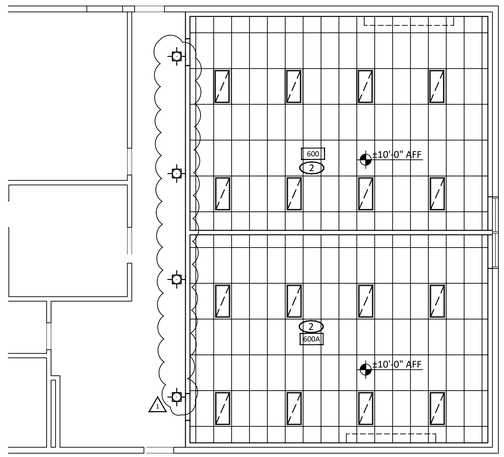
A213



1 LIBRARY ENLARGED FLOORPLAN
1/8" = 1'-0"

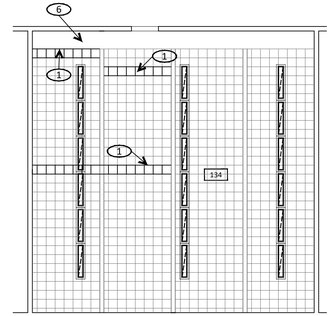
NORTH

0 2 4 8 16



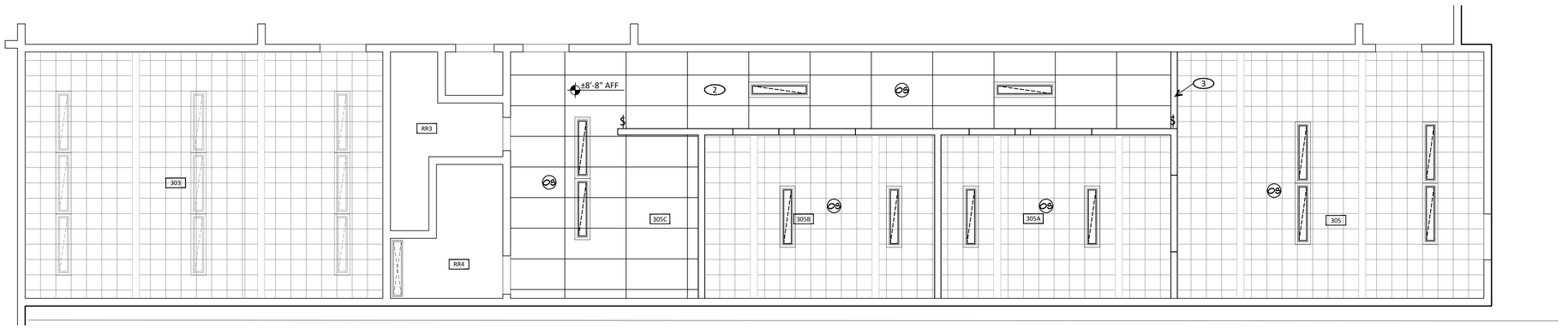
2 ROOM 600/A REFLECTED CEILING PLAN
1/8" = 1'-0"

NORTH



3 ROOM 134 ENLARGED FLOORPLAN
1/8" = 1'-0"

NORTH



4 ROOMS 303 AND 305 REFLECTED CEILING PLAN
1/4" = 1'-0"

NORTH

0 1 2 4 8

KEY NOTES

1. PATCH GLUE-ON TILE ASSY WHERE WALL DEMOLISHED, MATCH ADJACENT TILE ASSY
2. (N) SUSPENDED ACOUSTIC CEILING TILE AND GRID ASSY, SEE A/A310 FOR TYP DETAILS
3. (N) GYP BD WRAPPED HEADWALL @ 8'-0" AFF
4. (R) LIGHTING CONTROLS, SEE ELECT
5. MATCH ADJACENT CEILING HEIGHT
6. (E) GYP BD SOFFIT TO REMAIN

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200 SILVER LN, EUGENE OR
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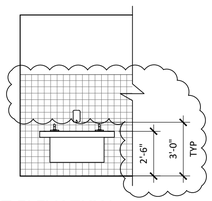
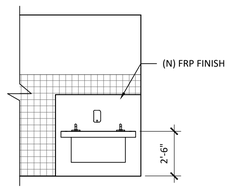
PARTIAL REFLECTED CEILING

NEHS

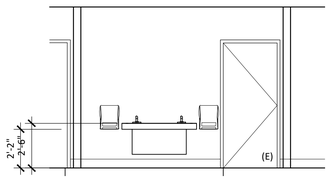
A220



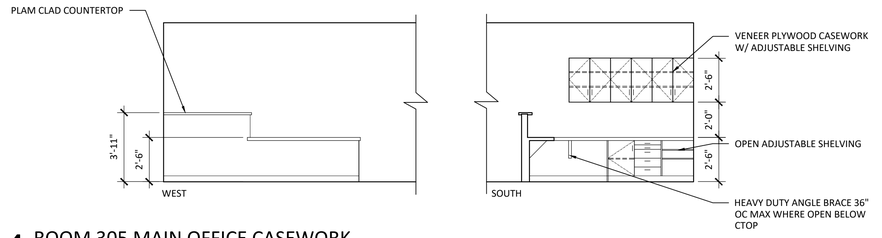
1 RR1 EAST ELEVATION
1/4" = 1'-0"



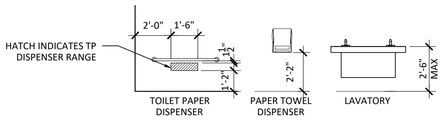
2 RR2 EAST ELEVATION
1/4" = 1'-0"



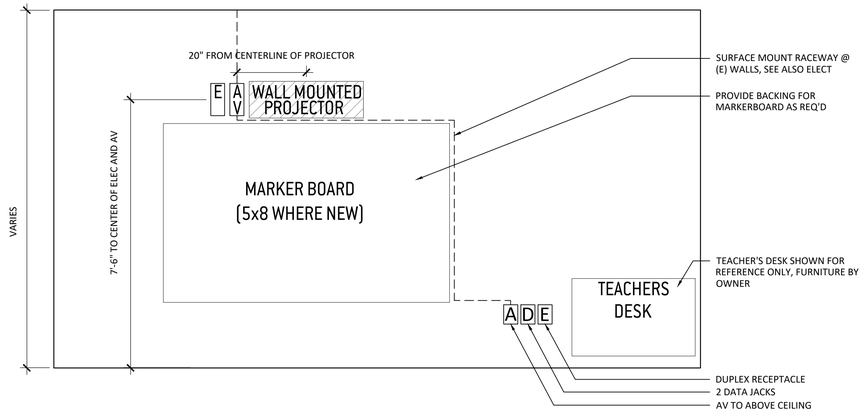
3 HALL SINK ELEVATION
1/4" = 1'-0"



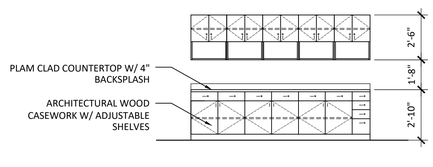
4 ROOM 305 MAIN OFFICE CASEWORK
1/4" = 1'-0"



5 TYPICAL MOUNTING HEIGHTS
1/4" = 1'-0"

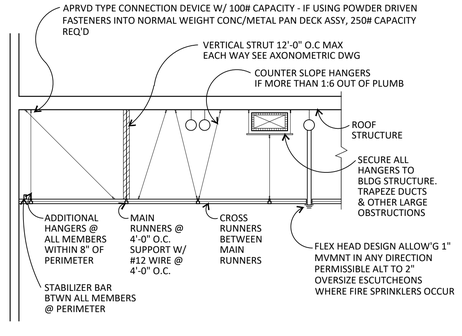


6 TYPICAL CLASSROOM AV ELEVATION
1/2" = 1'-0"



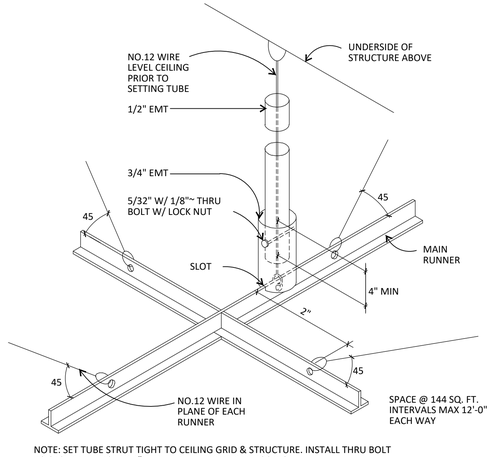
7 TYPICAL (N) CASEWORK ELEVATION
1/4" = 1'-0"

7 CASEWORK DETAILS
1/2" = 1'-0"



SUSPENDED CEILINGS SHALL BE FURNISHED AND INSTALLED PER CISCA STANDARDS AND THE ADDITIONAL REQUIREMENTS LISTED IN ASCE 7-10. UNLESS CEILING CLOUD DESIGN PROPOSED, SECURE GRID @ (2) SIDES MIN. TO WALLS OR HEADWALLS & INTERRUPT AREAS GREATER THAN 2,500 SQ FT W/ SEISMIC SEPARATION JT OR WALL/SOFFIT AS INDICATED IN PLANS. FOR CLOUD ASSY'S, PROVIDE ADD'L DESIGN DETAILING & ENGINEERING AS REQ'D BY AUTHORITIES HAVING JURISDICTION

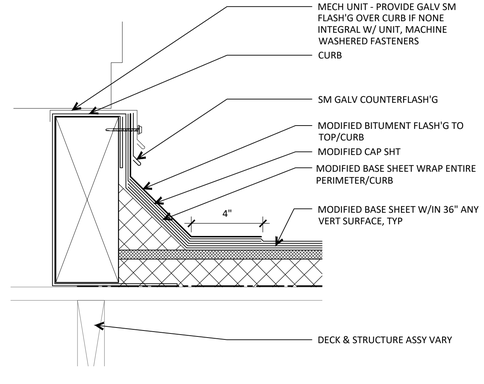
SECTION



NOTE: SET TUBE STRUT TIGHT TO CEILING GRID & STRUCTURE. INSTALL THRU BOLT TO SECURE TUBES LAP 4" MIN IN FULLY EXTENDED POSITION

AXONOMETRIC

A SUSPENDED CEILING GRID DETAILS
NOT TO SCALE



11 ROOF TOP MECHANICAL UNIT CURB, TYPICAL
1-1/2" = 1'-0"

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ESD 4J NORTH EUGENE HIGH SCHOOL IMPROVEMENTS

200 SILVER LN, EUGENE OR
RENOVATIONS

JOB NO: 19188
ISSUE DATE: 03 MAR 2020

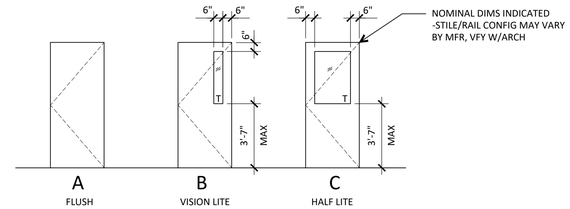
INTERIOR ELEVATIONS & SECTIONS

NEHS

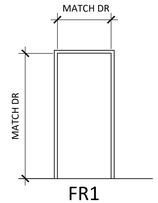
A310

Casework ID		Size (LxDxH)	Notes
SL 1	A	10'-3" x 1'-3" x 6'-7"	5
	B	3'-9" x 2'-5" x 6'-7"	4
	C	6'-6" x 1'-0" x 2'-3"	5
	D	6'-6" x 1'-0" x 2'-3"	5
	E	8'-0" x 1'-0" x 2'-3"	5
	F	6'-0" x 1'-0" x 2'-2"	5
SL3	C	11'-9" x 1'-0" x 2'-6"	5
S L4	A	10'-3" x 1'-3" x 6'-7"	5
	B	3'-10" x 2'-4" x 6'-9"	
	C	12'-0" x 2'-0" x 4'-6"	5
	D	4'-0" x 1'-0" x 5'-0"	5
SL 6	A	10'-3" x 1'-3" x 6'-7"	5
	B	3'-10" x 2'-3" x 6'-7"	4
	C	4'-0" x 1'-0" x 2'-2"	5
	D	7'-0" x 1'-0" x 2'-2"	5
	E	6'-0" x 1'-0" x 2'-2"	5
	F	4'-1" x 1'-0" x 2'-2"	5
SL7	A	10'-3" x 1'-3" x 6'-7"	5
	B	3'-10" x 2'-4" x 6'-9"	
	C	6'-0" x 1'-8" x 6'-8"	5
	D	16'-3" x 1'-7" x 2'-4"	5
	E	8'-0" x 1'-0" x 2'-4"	5
SL 8	B	3'-9" x 2'-5" x 6'-7"	
	C	10'-6" x 1'-1" x 2'-3"	5
	D	8'-6" x 1'-1" x 2'-3"	5
	E	2'-0" x 1'-2" x 3'-11"	5
SL 19	A1	2'-10" x 1'-5" x 6'-0"	5
	A	5'-10" x 1'-5" x 5'-9"	5
	C	8'-0" x 1'-2" x 3'-4"	5
SL 20	A1	2'-10" x 1'-5" x 6'-0"	5
	A	5'-10" x 1'-5" x 5'-9"	5
	C	8'-0" x 1'-2" x 3'-4"	5
	D	3'-0" x 1'-0" x 5'-6"	5
	E	8'-0" x 1'-4" x 3'-0"	5
	F	4'-0" x 1'-0" x 6'-7"	5
SL 21	D	8'-0" x 1'-0" x 2'-4"	5
SLA	A	5'-0" x 1'4" x 7'-0"	
SL B	A	11'-8" x 1'-2" - 2'-5"	4
SL D	A	4'-8" x 1'-4" x 2'-0"	2
	B	6'-5" x 2'-6" x 1'-11"	3
	C	9'-2" x 1'-4" x 2'-7"	2
SL E	A	8'-2" x 2'-5" x 3'-4"	5
	C	3'-0" x 1'-0" x 6'-6"	5
	D	(2X) 4'-0" x 2'-0" x 6'-6"	
	E	(2X) 4'-0" x 2'-0" x 6'-6"	
	F	(2X) 4'-0" x 2'-0" x 6'-6"	
	G	7'-6" x 2'-7" x 5'-7"	
	H	4'-0" x 2'-0" x 6'-6"	
	I	10'-0" x 1'-1" x 2'-4"	2
	J	4'-8" x 1'-5" x 2'-0"	2
SL F	A	2'-6" x 2'-6" x 6'-8"	5
	B	27'-0" x 1'-0" x 4'-6"	
	C	8'-6" x 1'-0" x 2'-5"	5
	D	16'-7" x 1'-0" x 2'-5"	
	E	3'-0" x 2'-0" x 3'-6"	
	F	16'-0" x 1'-0" x 4'-6"	
	G	5'-0" x 2'-1" x 6'-8"	
	H	10'-0" x 2'-0" x 4'-7"	
	I	8'-1" x 2'-0" x 4'-6"	
SL K SHOP	A	15'-8" x 2'-3" x 2'7"	4
	B	8'-1" x 1'-4" x 6'-3"	4

NOTES:
1. SEE PLAN FOR CASEWORK DIMENSIONS
2. UPPER CABINET
3. NURSE BED
4. FURR OUT ELECTRICAL DEVICE TO BACK/CABINET
5. CASEWORK FURRING DETAIL B/A700



DOOR TYPES
1/4" = 1'-0"



FR1

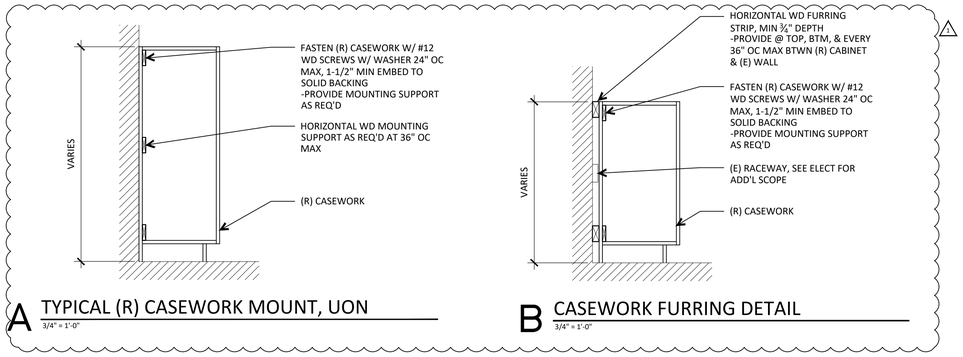
FRAME TYPES
1/4" = 1'-0"

FINISH SCHEDULE														
ROOM NO.	ROOM NAME	FLOOR		WALLS								CEILING		NOTES
				NORTH		EAST		SOUTH		WEST				
		FLOOR	BASE	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	
134	CLASSROOM	-	-	-	PS-2	-	PS-2	-	PS-2	-	PS-2	ACT-3	-	1.
206A	CLASSROOM	-	-	-	-	GB	PS-2	GB	PS-2	-	-	-	-	
209G	CLASSROOM	-	-	GB	PS-2	-	-	-	-	GB	PS-2	ACT-1	-	
209H	LIBRARY	-	-	-	-	-	-	-	-	-	-	-	-	
RR1	RESTROOM	-	-	-	PS-3	-	PS-3	-	PS-3	-	PS-3	-	-	
RR2	RESTROOM	-	-	-	PS-3	-	PS-3	-	PS-3	-	PS-3	-	-	
303	IMC	-	-	-	PS-2	-	PS-2	-	PS-2	-	PS-2	-	-	
RR3	RESTROOM	-	-	-	PS-3	-	PS-3	-	PS-3	-	PS-3	-	-	
RR4	RESTROOM	-	-	-	PS-3	-	PS-3	-	PS-3	-	PS-3	-	-	
305	MAIN OFFICE	-	-	-	PS-2	-	PS-2	-	PS-2	GB	PS-2	-	-	
305A	PRINCIPAL	-	-	GB	PS-2	GB	PS-2	-	PS-2	GB	PS-2	-	-	
305B	OFFICE	-	-	GB	PS-2	GB	PS-2	-	PS-2	GB	PS-2	-	-	
305C	NURSE STATION	-	-	GB	PS-2	GB	PS-2	-	PS-2	-	PS-2	ACT-1	-	
307A	SPEECH	-	-	GB	PS-2	-	PS-2	-	PS-2	-	PS-2	-	-	
307	CLASSROOM	-	-	-	PS-2	-	PS-2	-	PS-2	-	PS-2	-	-	
308	CLASSROOM	-	-	-	PS-2	-	PS-2	-	PS-2	-	PS-2	-	-	
309	CLASSROOM	-	-	-	PS-2	-	PS-2	-	PS-2	-	PS-2	-	-	
310	CLASSROOM	-	-	-	PS-2	-	PS-2	-	PS-2	-	PS-2	-	-	
311	CLASSROOM	-	-	-	PS-2	-	PS-2	-	PS-2	-	PS-2	-	-	
312	CLASSROOM	-	-	-	PS-2	-	PS-2	-	PS-2	-	PS-2	-	-	
313	CLASSROOM	-	-	-	PS-2	-	PS-2	-	PS-2	-	PS-2	-	-	
314	CLASSROOM	-	-	-	PS-2	-	PS-2	-	PS-2	-	PS-2	-	-	
315A	LIBRARY	-	-	-	PS-2	-	PS-2	GB	PS-2	-	PS-2	-	-	
315B	MUSIC	CONC	RB-1	GB	PS-2	-	PS-2	-	PS-2	-	PS-2	-	-	
315D	OFFICE	-	-	-	PS-2	-	PS-2	-	PS-2	-	PS-2	-	-	
600	CLASSROOM	-	-	GB	PS-2	GB	PS-2	GB	PS-2	GB	PS-2	ACT-1	-	
600A	CLASSROOM	-	-	GB	PS-2	GB	PS-2	GB	PS-2	GB	PS-2	ACT-1	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

NOTES:
1. PATCH CLG TILE ASSY WHERE DEMOLITION OCCURS
2.

DOOR SCHEDULE

MARK	DOOR SIZE WIDTH	DOOR SIZE HEIGHT	DOOR SIZE THICKNESS	DOOR TYPE	DOOR MATERIAL	DOOR FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	FIRE RATING	HARDWARE SET	COMMENTS
N206A	3'-0"	7'-0"	1-3/4"	B	SCWD	FF	FR1	HM	PS	1-1/2 HR	2	
~~N209GA~~	~~3'-0"~~	~~7'-0"~~	~~1-3/4"~~	~~B~~	~~SCWD~~	~~FF~~	~~FR1~~	~~HM~~	~~PS~~	~~1-1/2 HR~~	~~2~~	
E302A	E	E	E	E	E	E	E	E	E		5	Prep exterior side/door for new trim
E304A	E	E	E	E	E	E	E	E	E		6	
E305A	E	E	E	E	E	E	E	E	E		4	
N305A	3'-0"	7'-0"	1-3/4"	C	SCWD	FF	FR1	HM	PS		3	
N305B	3'-0"	7'-0"	1-3/4"	C	SCWD	FF	FR1	HM	PS		3	
N600A	3'-0"	7'-0"	1-3/4"	C	SCWD	FF	FR1	HM	PS		1	1/4" tempered glazing, insulated
N600AA	3'-0"	7'-0"	1-3/4"	C	SCWD	FF	FR1	HM	PS		1	1/4" tempered glazing, insulated



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REVISIONS
1 3/17/2020 ADD. 1

ESD 4J NORTH EUGENE HIGH SCHOOL IMPROVEMENTS

200 SILVER LN, EUGENE OR
RENOVATIONS

JOB NO: 19188
ISSUE DATE: 03 MAR 2020

DOOR & FINISH SCHEDULE

NEHS

A700

STANDARD MECHANICAL ABBREVIATIONS

AF	AIRFOIL	IE	INVERT ELEVATION
AFF	ABOVE FINISHED FLOOR	IN	INCH(ES)
AHP	APPARATUS HOUSING PLENUM	INSUL	INSULATION
ALT	ALTERNATIVE	ISOL	ISOLAT(OR)(ION)
AL	ALUMINUM	KW	KILOWATT
APD	AIR PRESSURE DROP	KWH	KILOWATT HOUR
APPROX	APPROXIMATELY	L	LENGTH
ARCH	ARCHITECT(URAL)	LAT	LEAVING AIR TEMP
AUTO	AUTOMATIC	LB	POUND
BDD	BACKDRAFT DAMPER	LDB	LEAVING DRY BULB
BI	BACKWARD INCLINED	LF	LINEAR FEET
BLDG	BUILDING	LFT	LEAVING FLUID TEMPERATURE
BSMT	BASEMENT	LVG	LEAVING
BTU	BRITISH THERMAL UNIT	LWB	LEAVING WET BULB
BTUH	BRITISH THERMAL UNITS PER HOUR	LWT	LEAVING WATER TEMPERATURE
CFH	CUBIC FEET PER HOUR	MAX	MAXIMUM
CFM	CUBIC FEET PER MINUTE	MBH	THOUSAND BTU PER HOUR
CFS	CUBIC FEET PER SECOND	MECH	MECHANICAL
CLG	CEILING OR COOLING	MFR	MANUFACTURER
CONC	CONCRETE	MIN	MINIMUM
CONN	CONNECT(ION)	MISC	MISCELLANEOUS
CONT	CONTINUE(ED)(UATION)	MTD	MOUNTED
CL	CENTERLINE	NC	NORMALLY CLOSED
DDC	DIRECT DIGITAL CONTROL	NIC	NOT IN CONTRACT
DEFL	DEFLECTION	NO	NORMALLY OPEN
DN	DOWN	OAD	OUTSIDE AIR DAMPER
DP	DEW POINT	OC	ON CENTER DISTANCE
DWDI	DOUBLE WIDTH DOUBLE INLET	OSA	OUTSIDE AIR
DWG	DRAWING	PH	PHASE
EA	EXHAUST AIR	PP	POLYPROPYLENE
EAD	EXHAUST AIR DAMPER	PSI	POUNDS PER SQUARE INCH
EAT	ENTERING AIR TEMPERATURE	PVC	POLYVINYL CHLORIDE
EDB	ENTERING DRY BULB	PVS	PVC COATED STEEL
EFF	EFFICIENCY	R (RAD)	RADIUS
EFT	ENTERING FLUID TEMPERATURE	RA	RETURN AIR
ELEC	ELECTRIC(AL)	RAD	RETURN AIR DAMPER
ELEV	ELEVATION	REV	REVISION
ENGR	ENGINEER	RH	RELATIVE HUMIDITY
EQ	EQUAL	RPM	REVOLUTIONS PER MINUTE
EQUIP	EQUIPMENT	SA	SUPPLY AIR
ESP	EXTERNAL STATIC PRESSURE	SCFM	STANDARD CUBIC FEET PER MINUTE
EWB	ENTERING WET BULB	SD	SMOKE DAMPER
EWT	ENTERING WATER TEMPERATURE	SECT	SECTION
EX	EXTRACTOR	SENS	SENSIBLE
EXH	EXHAUST	SIM	SIMILAR
EXIST	EXISTING	SP	STATIC PRESSURE
EXP	EXPANSION	SPEC	SPECIFICATION
F	DEGREES FAHRENHEIT	SQ	SQUARE
FC	FORWARD CURVED	SF	SQUARE FOOT(FEET)
FIG	FIGURE	SQ IN	SQUARE INCH(ES)
FILT	FILTER	SS	STAINLESS STEEL
FLEX	FLEXIBLE	STL	STEEL
FPD	FLUID PRESSURE DROP	STRUCT	STRUCTUR(E)(AL)
FPM	FEET PER MINUTE	SWP	SINGLE WALL PLENUM
FPS	FEET PER SECOND	SWSI	SINGLE WIDTH SINGLE INLET
FT	FEET/FOOT	TEMP	TEMPERATURE
FTR	FINNED TUBE RADIATOR	TSP	TOTAL STATIC PRESSURE
FU	FIXTURE UNIT	TYP	TYPICAL
FUT	FUTURE	V	VOLTS
FV	FACE VELOCITY	VD	VOLUME DAMPER
GA	GAGE/GAUGE	VEL	VELOCITY
GAL	GALLON	VERT	VERTICAL
GALV	GALVANIZED	VFD	VARIABLE FREQUENCY DRIVE
GLY	GLYCOL	VTR	VENT THROUGH ROOF
GPH	GALLONS PER HOUR	W	WIDTH
GPM	GALLONS PER MINUTE	WG	WATER GAUGE
H	HEIGHT	WPD	WATER PRESSURE DROP
HORIZ	HORIZONTAL	WTD	WATER TEMPERATURE DROP
HP	HORSEPOWER	WTR	WATER TEMPERATURE RISE
HTG	HEATING	W/	WITH
ID	INSIDE(DIAMETER/DIMENSION)	W/O	WITHOUT

DEMOLITION LEGEND

REMOVE EXISTING DUCT

REMOVE EXISTING PIPE

NEW AND EXISTING WORK

EXISTING WASTE (BELOW GRADE OR FLOOR)

EXISTING COLD WATER

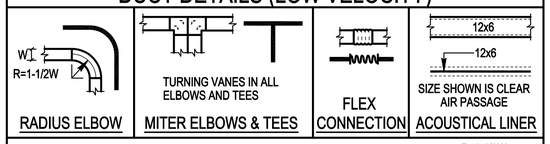
EXISTING DUCT WORK

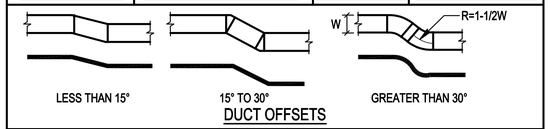
NEW WASTE (BELOW GRADE OR FLOOR)

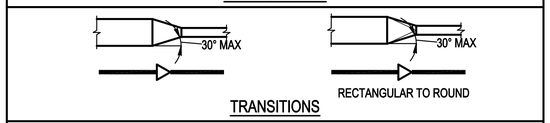
NEW COLD WATER

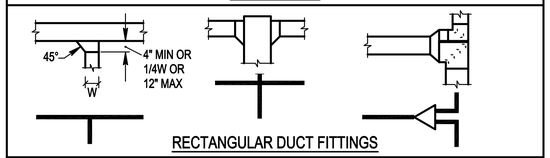
NEW DUCT WORK

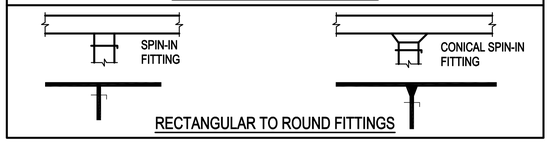
DUCT DETAILS (LOW VELOCITY)











SYMBOLS

A	ACCESS PANEL	K	CAP EXISTING / CAP FOR FUTURE
B	BELOW GRADE / FLOOR	R	RELOCATE EXISTING
C	CONNECT TO EXISTING	X	REMOVE EXISTING
E	EXISTING TO REMAIN	1	NOTE

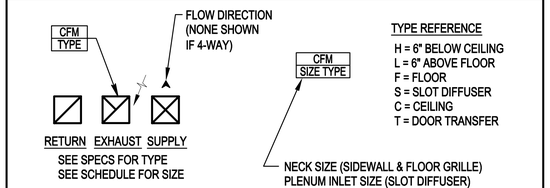
CALL OUT SYMBOLS

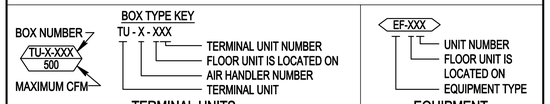
WALL MOUNTED
PENDANT MOUNTED

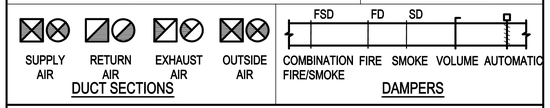
T	TEMPERATURE	CO	CARBON MONOXIDE
H	HUMIDITY	CO2	CARBON DIOXIDE
P	PRESSURE	NOX	NITROGEN OXIDE

ROOM SENSORS

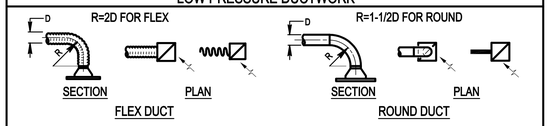
DUCT LEGEND

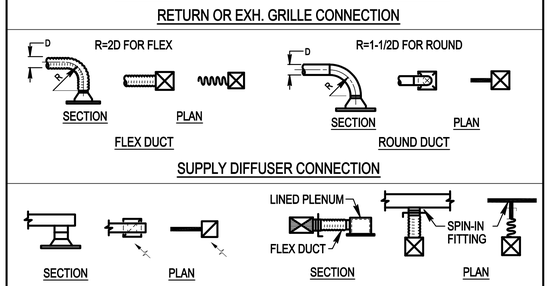




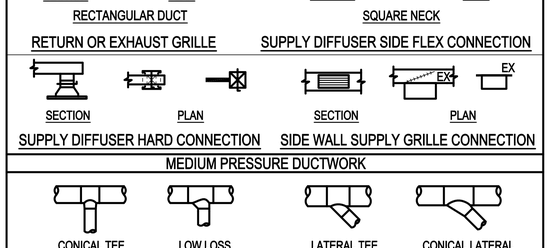


LOW PRESSURE DUCTWORK





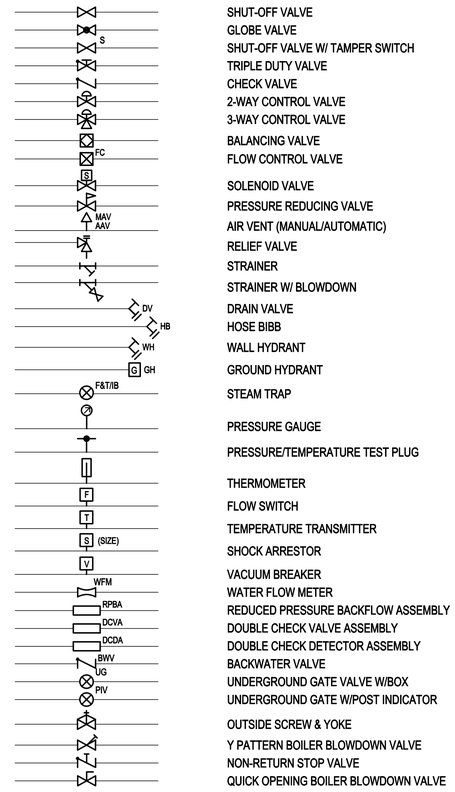
MEDIUM PRESSURE DUCTWORK



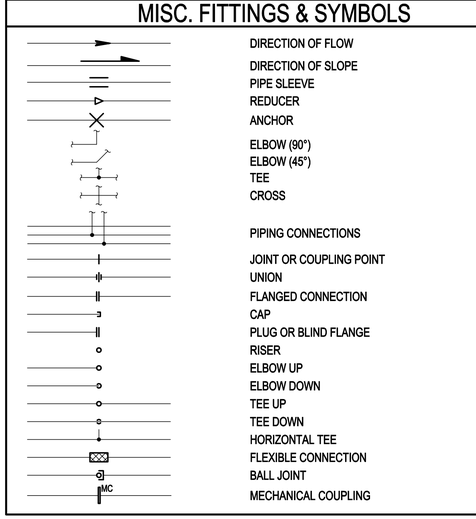
GENERAL NOTE

THIS IS A STANDARD LEGEND SHEET, THEREFORE, SOME SYMBOLS MAY APPEAR ON THIS SHEET THAT DO NOT APPEAR ON THE DRAWINGS.

MISC. VALVES & COCKS



MISC. FITTINGS & SYMBOLS



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REVISIONS

ESD 4J NORTH EUGENE HIGH SCHOOL IMPROVEMENTS

200 SILVER LN, EUGENE, OR 97404
RENOVATIONS

JOB NO: 19188
ISSUE DATE: 3 MAR 2020

SYMBOLS, LEGENDS AND ABBREVIATIONS - MECHANICAL

NEHS

M0.0

PLUMBING DESIGN CRITERIA

DOMESTIC WATER PIPING SYSTEM:

BASIS OF DESIGN: 2017 OREGON PLUMBING SPECIALTY CODE, APPENDIX A 'RECOMMENDED RULES FOR SIZING THE WATER SUPPLY SYSTEM'. PIPING SIZED ON 4 PSI/100 FT. DROP, VELOCITIES NOT TO EXCEED 8 FT./SEC. (COLD WATER) AND NOT TO EXCEED 5 FT./SEC. (HOT WATER).

WASTE AND VENT PIPING SYSTEM:

BASIS OF DESIGN: 2017 OREGON PLUMBING SPECIALTY CODE, CHAPTER 7, 'SANITARY DRAINAGE'.

ALL WASTE PIPING SIZED AT 1/4"/FT. SLOPE UNLESS OTHERWISE NOTED.

DESIGN CONDITIONS - EUGENE, OR

SPACE	WINTER		SUMMER	
	TEMPERATURE	HUMIDITY	TEMPERATURE	HUMIDITY
OUTDOOR	23.4° F DB	16.1° F DP / 12.6 HR / 26.9 ° F MCDB	91.7° F DB / 66.5° F MCWB	62.2° F DP / 84.8 HR / 74.6° F MCDB
INDOOR	70° F ± 2° F DB	50% RH MAX, NO MINIMUM	75° F ± 2° F DB	50% RH MAX, NO MINIMUM

GENERAL NOTES:

A. OUTDOOR CONDITIONS BASED ON ASHRAE FUNDAMENTALS 2013 99.6% AND 0.4% DATA.

ROOF TOP UNITS

			MIXING BOX		FILTERS	SUPPLY FAN				AIR COOLED CONDENSER FAN		GAS FIRED FURNACE					REFRIGERANT COIL						AUXILIARY ELECTIC HEAT		ELECTRICAL					
												CAPACITY					DX COOLING			HEAT PUMP HEATING										
TAG	LOCATION	SERVICE	MAX OSA (CFM)	CODE MIN OSA (CFM)	(MERV)	AIRFLOW (CFM)	FAN TYPE	ESP (IN WG)	RATING (HP)	FAN TYPE	MOTOR HP	INPUT (MBH)	MIN AFUE (%)	EAT (°F)	LAT (°F)	CONTROL	MBH	EAT (°F DB/WB)	LAT (°F DB)	MBH	EAT (°F DB)	LAT (°F DB)	CAPACITY (KW)	CONTROL	VOLT/ PHASE	MCA (A)	MOCP (A)	(S)EER	APPROX. WEIGHT (LBS)	MANF. & MODEL
RTU-600	ROOF	CLASSROOM 600	1,220	450	11	1,220	CENTRIFUGAL	0.5	0.5	PROP	1/6	56	80	45	90	2-STAGE	36	82/64	55	-	-	-	-	-	208/3	19	30	16.6	372	TRANE-4YCZ
RTU-600A	ROOF	CLASSROOM 600A	1,520	490	11	1,520	CENTRIFUGAL	0.5	0.5	PROP	1/6	60	80	45	90	2-STAGE	48	80/64	55	-	-	-	-	-	208/3	25	35	16.0	394	TRANE-4YCZ
RTU-305	ROOF	OFFICES	1,000	90	11	1,000	CENTRIFUGAL	0.5	0.5	PROP	1/6	-	-	-	-	-	24	76/62	55	20.2	63	90	3.75	1-STAGE	208/1	46	50	16.0	531	TRANE-4WCZ

GENERAL NOTES:

A. UNITS MOUNTED ON ROOF CURB.

B. MINIMUM OSA CALCULATED BASED ON OMSC-2019 AND ASHRAE STANDARD 62.1

C. ARRANGE UNIT FOR SINGLE POINT POWER CONNECTION.

D. PROVIDE FLEXIBLE CONNECTORS AT DUCT CONNECTIONS

DIFFUSERS AND GRILLES

TAG	TYPE	DESCRIPTION	AIRFLOW RANGE MIN (CFM)	AIRFLOW RANGE MAX (CFM)	INLET SIZE (IN)	FACE SIZE T-BAR (IN)	FACE SIZE HARD LID (IN)	MAX NC	THROW (FT)	MANUFACTURER & MODEL	NOTES
C-1	CEILING SUPPLY DIFFUSER	PERFORATED FACE, MODULAR CORE, ADJUSTABLE 4-WAY THROW	0	125	6x6	24x24	13x13	12	2-2-5	TITUS PMC	
			126	220	8x8	24x24	15x15	17	2-3-6		
			221	345	10x10	24x24	17x17	21	3-4-8		
			346	500	12x12	24x24	19x19	24	3-5-9		
			501	780	16x16	24x24	23x23	28	4-6-11		
C-2	CEILING RETURN/ EXHAUST GRILLE	PERFORATED FACE, STEEL, ROUND DUCT CONNECTION	0	340	10x10	24x24	12x12	17	-	TITUS PAR	
			341	780	15x15	24x24	17x17	22	-		
			781	1,220	18x18	24x24	20x20	26	-		
			1,221	1,670	22x22	24x24	24x24	26	-		
			1,671	3,500	22x46	24x48	24x48	25	-		

GENERAL NOTES:

A. NOISE CRITERIA (NC) BASED ON ROOM ABSORPTION OF 10 dB, MEASURED PER ANSI/ASHRAE STANDARD 70.

B. THROW VALUES GIVEN FOR TERMINAL VELOCITIES 150, 100, AND 50 FPM FOR ISOTHERMAL CONDITIONS.

C. ADJUST THROW DIRECTION AND QUANTITY PRIOR TO AIR BALANCING.

PLUMBING FIXTURE SCHEDULE

TAG NUMBER	FIXTURE TYPE	ROUGH-IN SIZE (INCHES) W	V	CW	HW	GPM/GPF	ELEC. CONNECTION	DESCRIPTION	NOTES
WS-1	WASH STATION	2	1-1/2	1/2	1/2	1.0	N	WALL HUNG, TWO STATION 0.5GPM, ADA	

FIRE PROTECTION DESIGN CRITERIA

NFPA 13 SHALL BE USED FOR THE LOCATION, SIZING, & INSTALLATION OF PIPING & SPRINKLER SYSTEMS UNLESS LOCAL FIRE MARSHAL OR OWNER'S INSURANCE UNDERWRITER REQUIREMENTS ARE MORE STRINGENT.

FIRE PROTECTION SPRINKLER DESIGN CRITERIA: (NFPA)
PROVIDE THE FOLLOWING HAZARD CLASSIFICATIONS AND DENSITIES PER CURRENT NFPA 13 STANDARDS:
- LIGHT HAZARD OCCUPANCIES: 0.10 GPM/FT2 DENSITY AT MOST REMOTE 1500 SQUARE FEET FOR PUBLIC AREAS.

DESIGN CUSHION: PROVIDE AN EXCESS OF 10 PSI ADDITIONAL PRESSURE REQUIREMENTS INCORPORATED INTO THE DESIGN OVER SPECIFIED PRESSURE REQUIREMENTS.

REFER TO DRAWINGS FOR ZONE TYPES, CALLOUTS AND ADDITIONAL SCOPE ITEMS.

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ESD 4J NORTH EUGENE HIGH SCHOOL IMPROVEMENTS

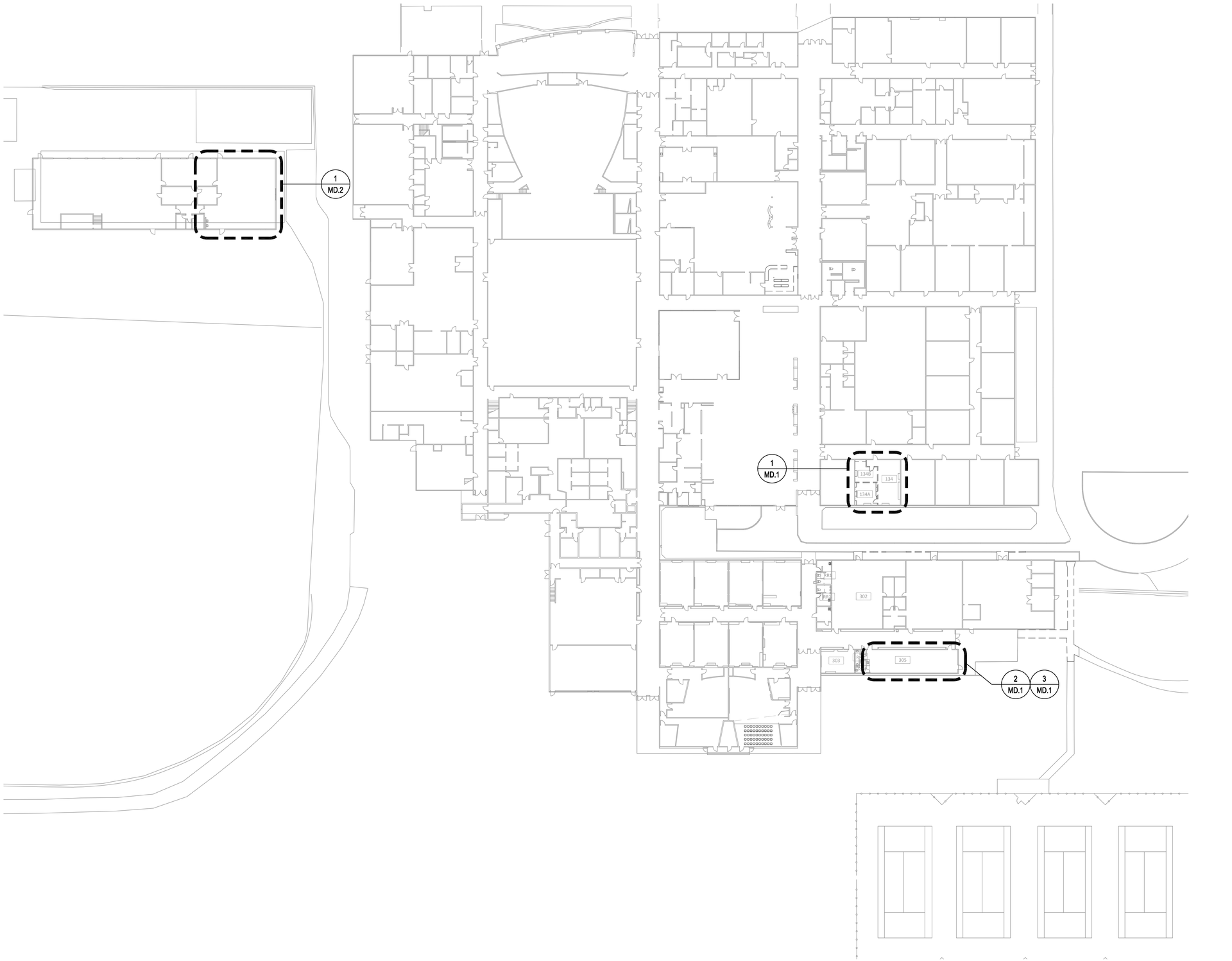
200 SILVER LN, EUGENE, OR 97404
RENOVATIONS

JOB NO: 19188
ISSUE DATE: 3 MAR 2020

EQUIPMENT SCHEDULE - MECHANICAL

NEHS

M0.1



1 MD.0 OVERALL DEMOLITION PLAN - MECHANICAL
1/32" = 1'-0"

NORTH

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OVERALL DEMOLITION PLAN - MECHANICAL

NEHS

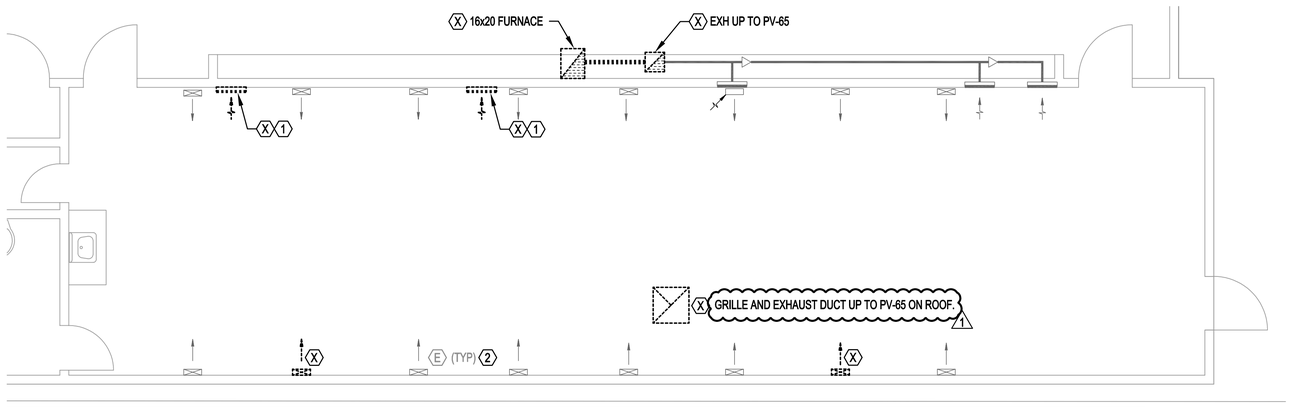
MD.0

Date: 3/16/20 Time: 5:13pm File: \\pae-engineers.com\Projects\2019\19-1867 - Eugene 4J - Corridor Relocation\01 Production\02 CAD\19-1867 MD.0.dwg User: daniel.wirtala

NOTES:

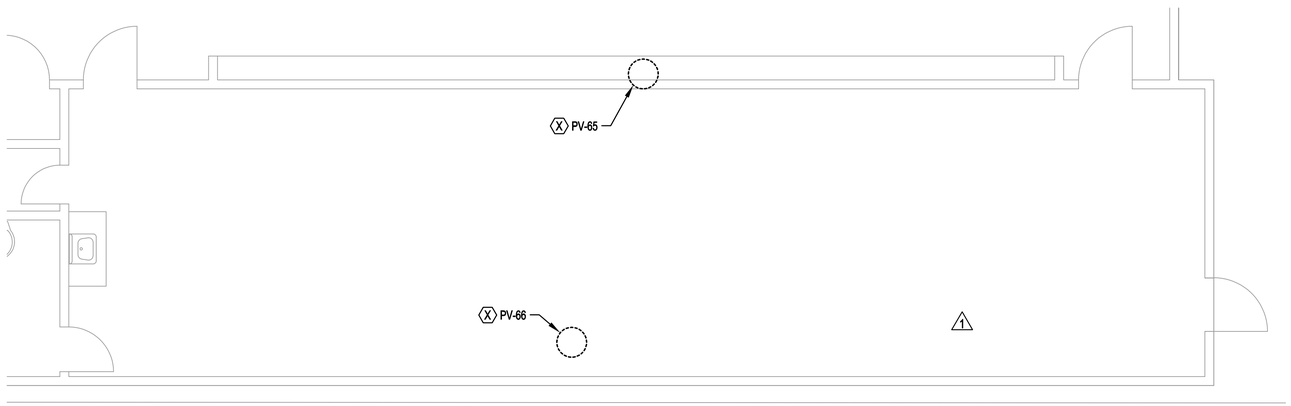
1. DEMOLISH WALL GRILLE, CAP DUCT, AND PATCH WALL TO MATCH. ABANDON DUCT IN WALL.

2. EXISTING FLOOR REGISTER TO REMAIN.



2 MD.1 **PARTIAL DEMOLITION - MECHANICAL**
1/4" = 1'-0"

NORTH



3 MD.1 **PARTIAL DEMOLITION ROOF PLAN - MECHANICAL**
1/4" = 1'-0"

NORTH

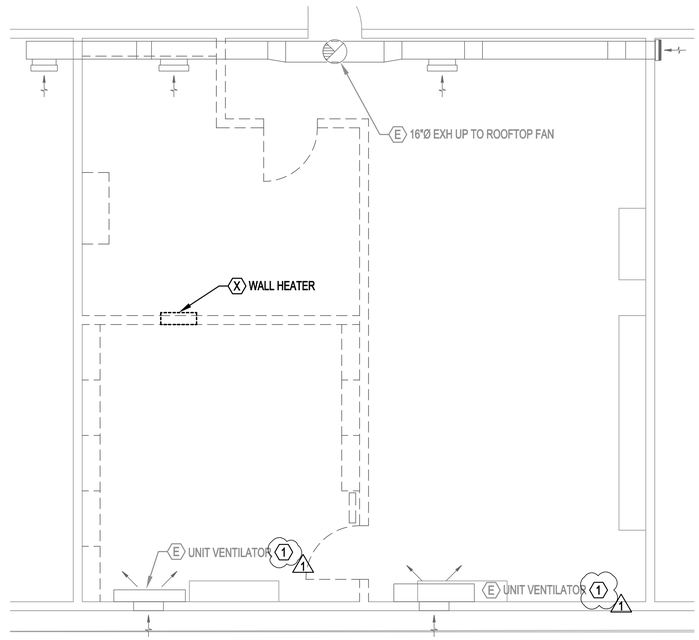
GENERAL NOTES:

A. ALL EXISTING CONDITIONS TO BE FIELD VERIFIED BY THE CONTRACTOR.

B. PATCH AND REPAIR ALL OPENINGS MADE BY REMOVALS.

C. DEMOLITION WORK SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING: REMOVAL OF EQUIPMENT, SUPPORTS, ANCHORS, PIPING, DUCTWORK AND ALL APPURTENANCES WHERE INDICATED ON THE PLANS.

D. DEMO MECHANICAL EQUIPMENT, DUCTS AND ASSOCIATED ITEMS AS SHOWN OR RELATED TO EQUIPMENT TO BE REMOVED. CAP DUCTWORK AT NEAREST LIVE BRANCH.



1 MD.1 **PARTIAL DEMOLITION - MECHANICAL**
1/4" = 1'-0"

NORTH

NOTES:
1. UNIT TO REMAIN.
1

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ESD 4J NORTH EUGENE HIGH SCHOOL

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RENOVATIONS

JOB NO: 19188
ISSUE DATE: 3 MAR 2020

PARTIAL DEMOLITION - MECHANICAL

MD.1

Date: 3/16/20 Time: 5:43pm File: \\pae-engineers.com\Projects\2019\19-1867 – Eugene 4J – Corridor Relocation\01 Production\02 CAD\19-1867 MD.1.dwg User: daniel.wirtala

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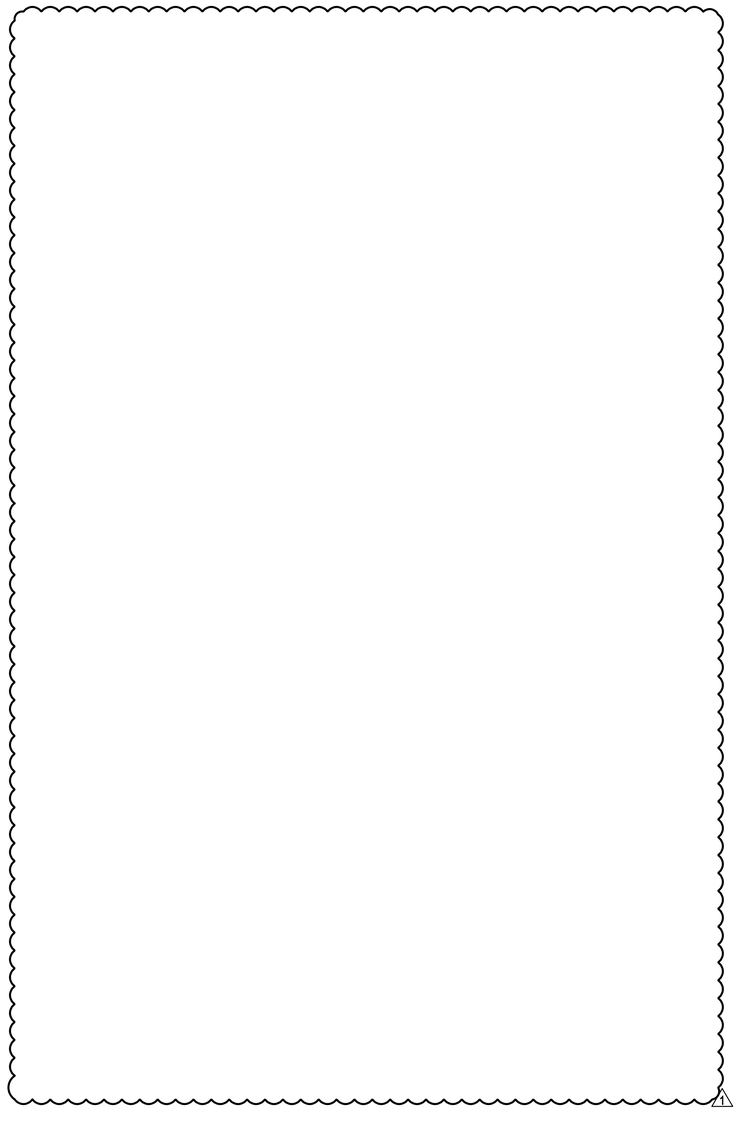

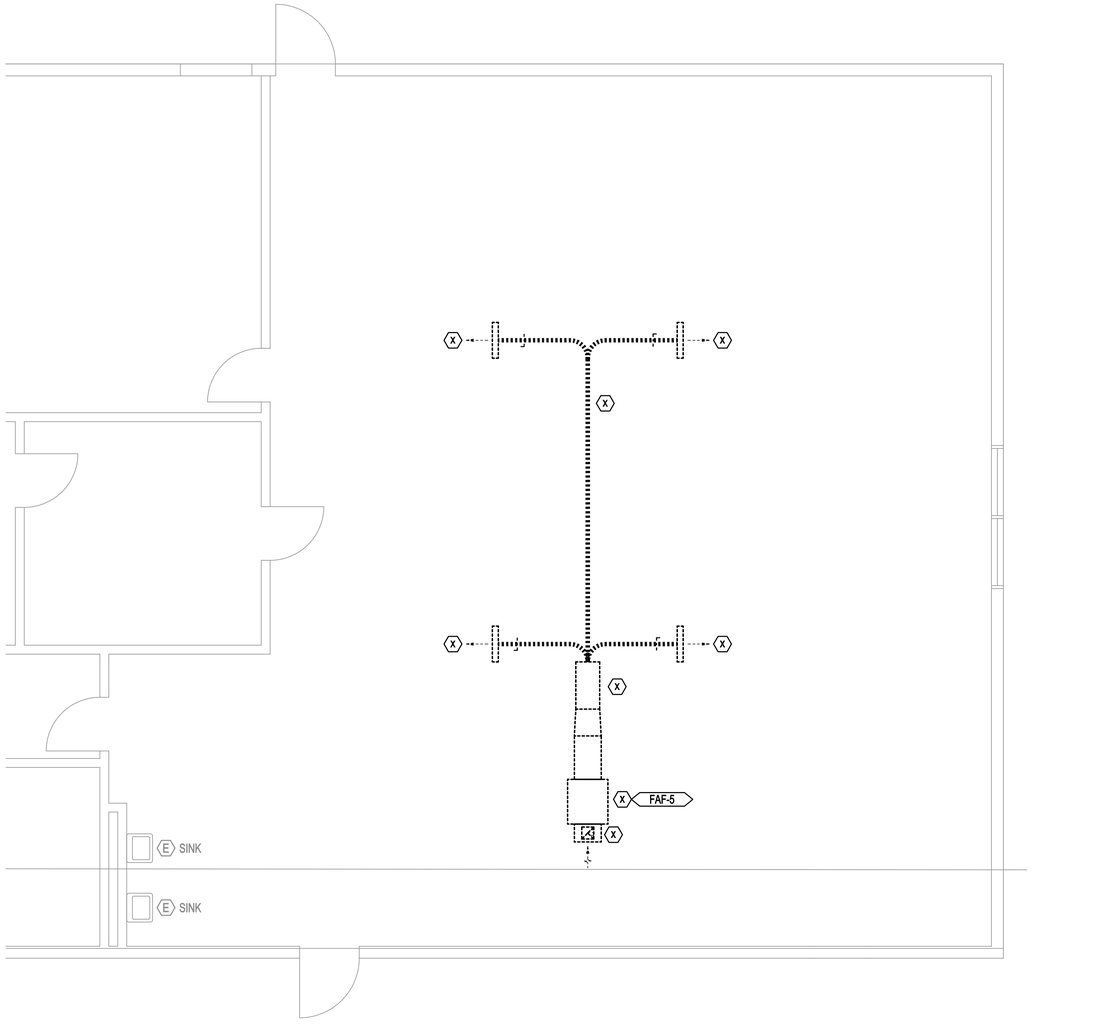

1 MD.2 PARTIAL DEMOLITION - MECHANICAL
1/4" = 1'-0"

NORTH

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1 3/17/2020 ADD. 1

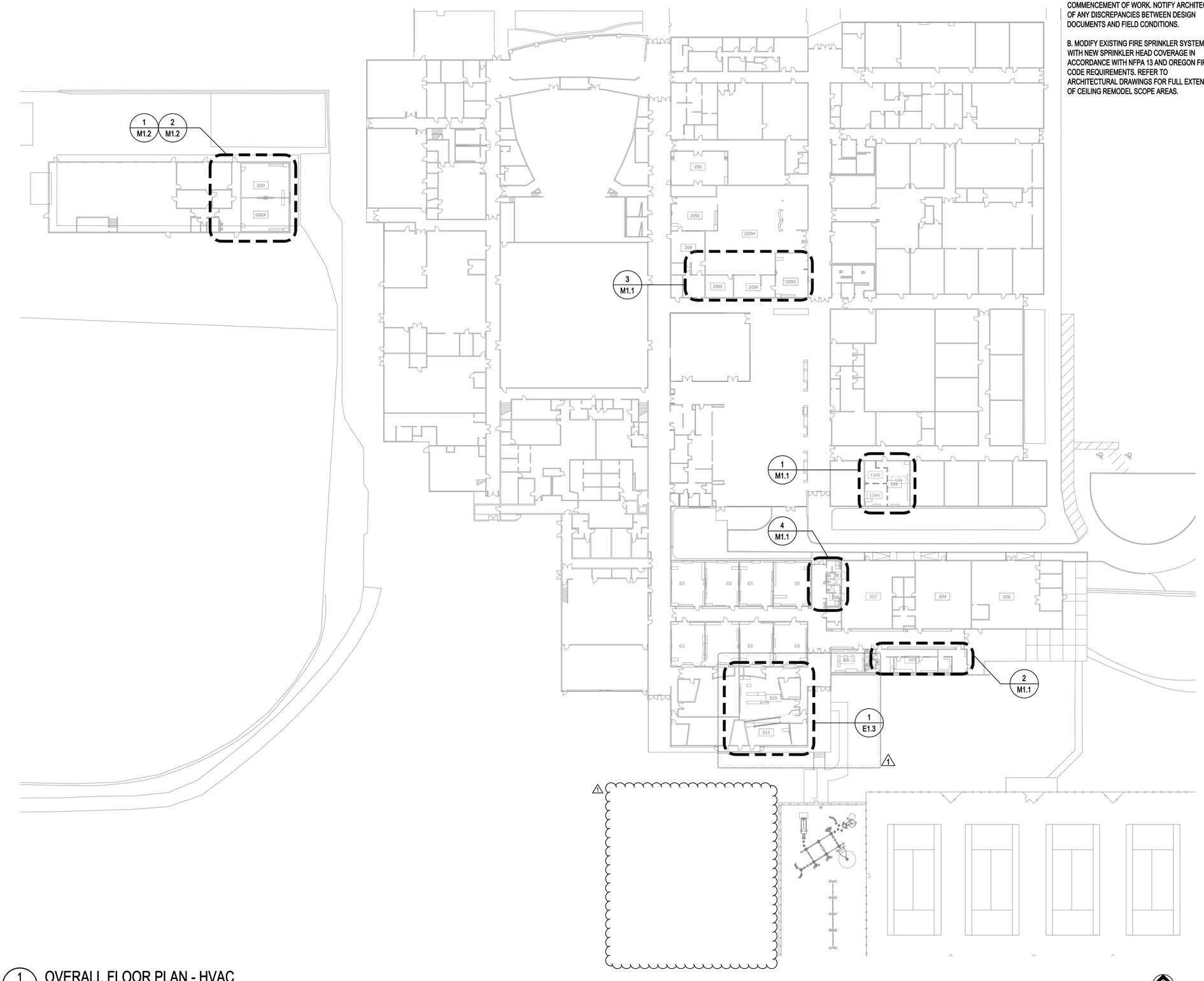
NEHS ESD 4J NORTH EUGENE HIGH SCHOOL IMPROVEMENTS

200 SILVER LN, EUGENE, OR 97404
RENOVATIONS

JOB NO: 19188
ISSUE DATE: 3 MAR 2020

PARTIAL DEMOLITION - MECHANICAL

MD.2



1 M1.0 OVERALL FLOOR PLAN - HVAC
1/32" = 1'-0"

NORTH

GENERAL NOTES:

A. VERIFY EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK. NOTIFY ARCHITECT OF ANY DISCREPANCIES BETWEEN DESIGN DOCUMENTS AND FIELD CONDITIONS.

B. MODIFY EXISTING FIRE SPRINKLER SYSTEM WITH NEW SPRINKLER HEAD COVERAGE IN ACCORDANCE WITH NFPA 13 AND OREGON FIRE CODE REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR FULL EXTENT OF CEILING REMODEL SCOPE AREAS.

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ESD 4J NORTH EUGENE HIGH SCHOOL IMPROVEMENTS

200 SILVER LN, EUGENE, OR 97404
RENOVATIONS

JOB NO: 19188
ISSUE DATE: 3 MAR 2020

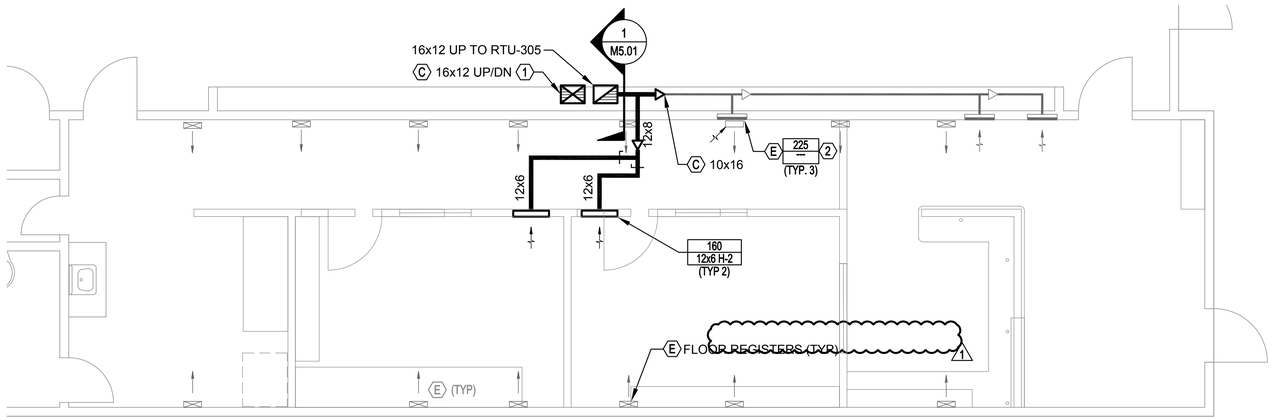
OVERALL FLOOR PLAN - HVAC

NEHS

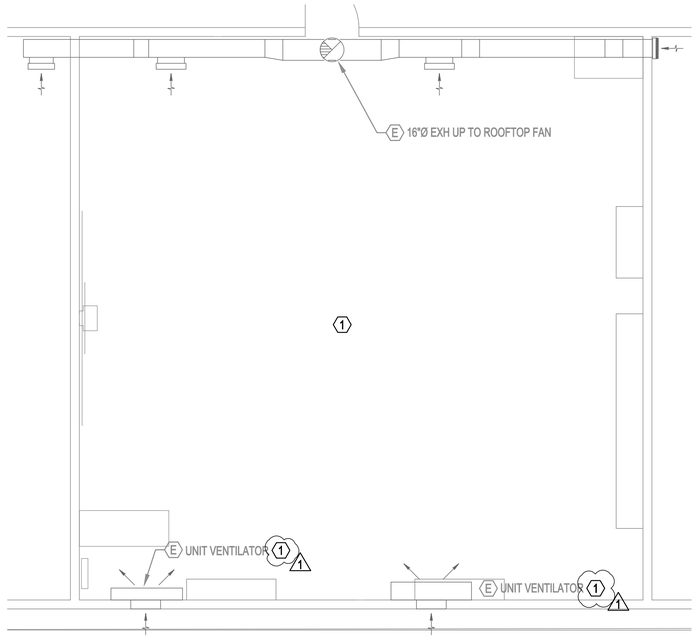
M1.0

Date: 3/16/20 Time: 5:44pm File: \\pae-engineers.com\Projects\2019\19-1867 – Eugene 4J – Corridor Relocation\01 Production\02 CAD\19-1867 M1.0.dwg User: daniel.wirtala

NOTES:
1. CONNECT SUPPLY DUCT TO UNDERFLOOR DUCT.
2. REBALANCE EXISTING GRILLES TO INDICATED CFM.



2 M1.1 ENLARGED PARTIAL FLOOR PLAN - MECHANICAL
1/4" = 1'-0"
NORTH



1 M1.1 ENLARGED PARTIAL FLOOR PLAN - MECHANICAL
1/4" = 1'-0"
NORTH

NOTES:
1. NO MECHANICAL SCOPE, SHOWN FOR REFERENCE ONLY.

GENERAL NOTES:
A. CONTROL WIRING AND THERMOSTATS OWNER FURNISHED AND OWNER INSTALLED
B. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF AIR DEVICES
C. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.

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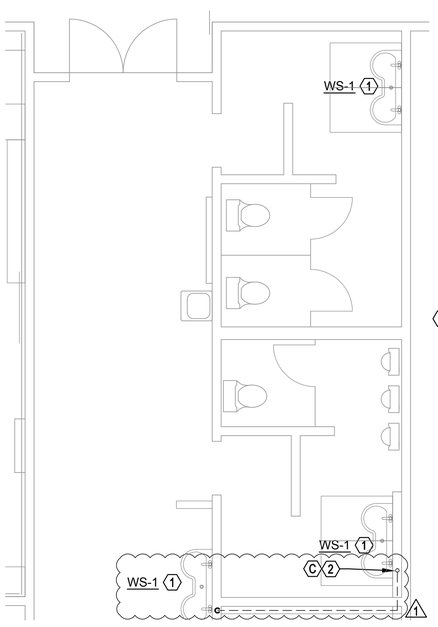
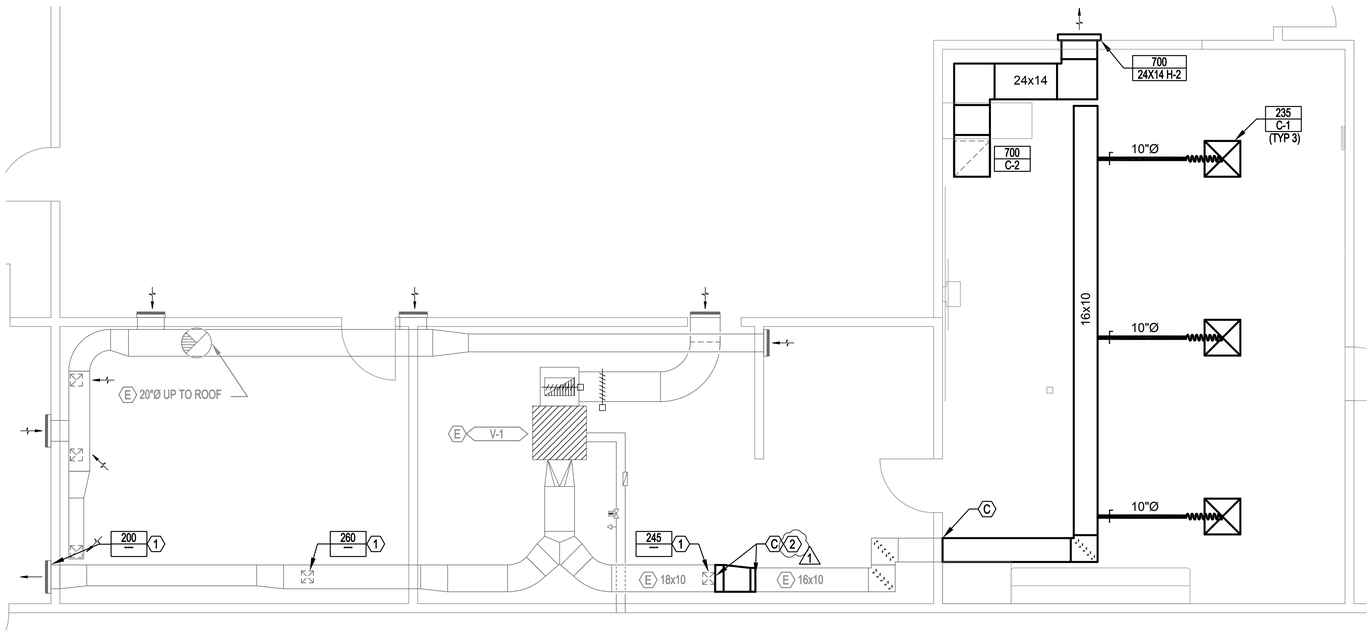


NOTES:
1. REFER TO ARCHITECTURAL DRAWINGS FOR FINAL LOCATION OF WASH STATION FIXTURES. PROVIDE TIE-IN TO EXISTING PLUMBING PIPING IN ADJACENT PLUMBING RESTROOM WALLS. REFER TO PLUMBING FIXTURE SCHEDULE FOR CONNECTION SIZES.
2. CONNECT TO EXISTING WASTE, VENT, CW, HW PIPING IN WALL. 1

4 M1.1 ENLARGED PARTIAL FLOOR PLAN - PLUMBING
1/4" = 1'-0"
NORTH



3 M1.1 ENLARGED PARTIAL FLOOR PLAN - MECHANICAL
1/4" = 1'-0"
NORTH

NOTES:
1. REBALANCE EXISTING DIFFUSER AS NOTED.
2. CONNECT CAPPED EXISTING 18X10 SUPPLY BRANCH TO EXISTING 16X10. 1

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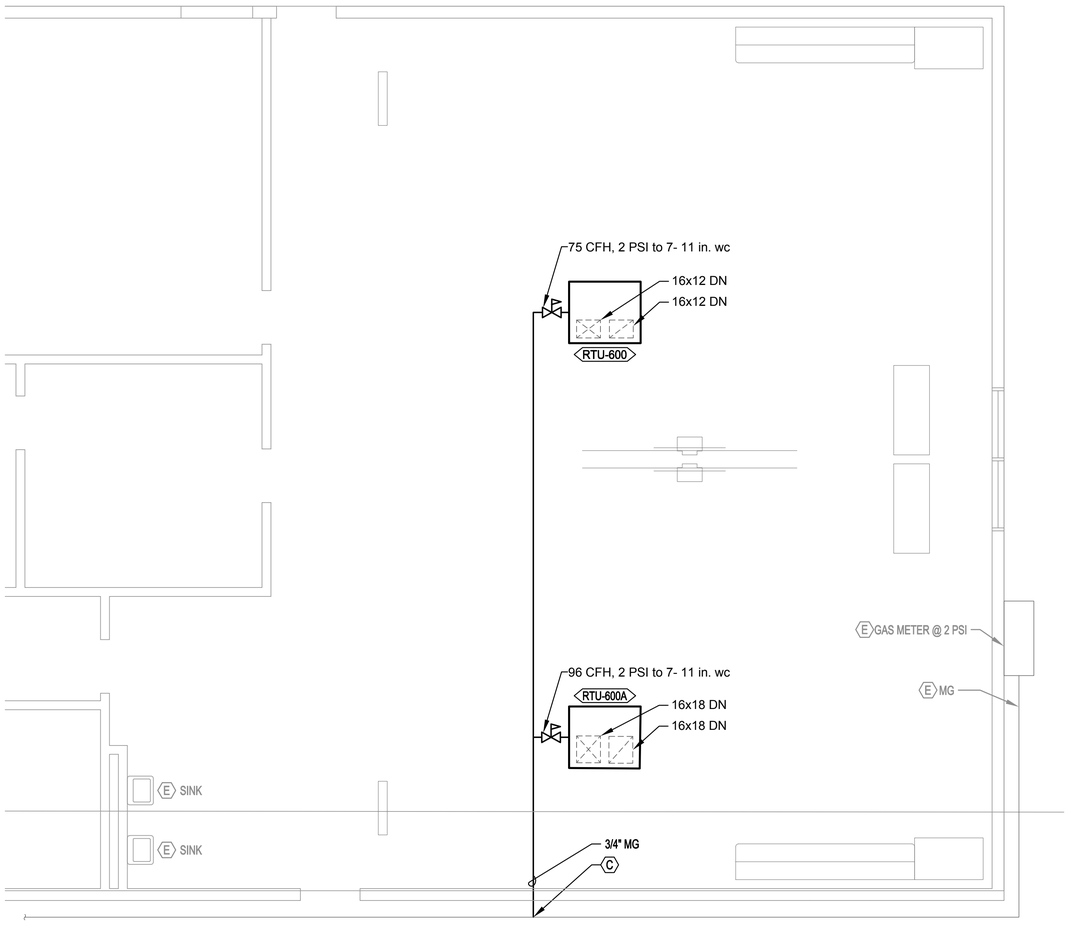
ENLARGED PARTIAL FLOOR PLAN - MECHANICAL

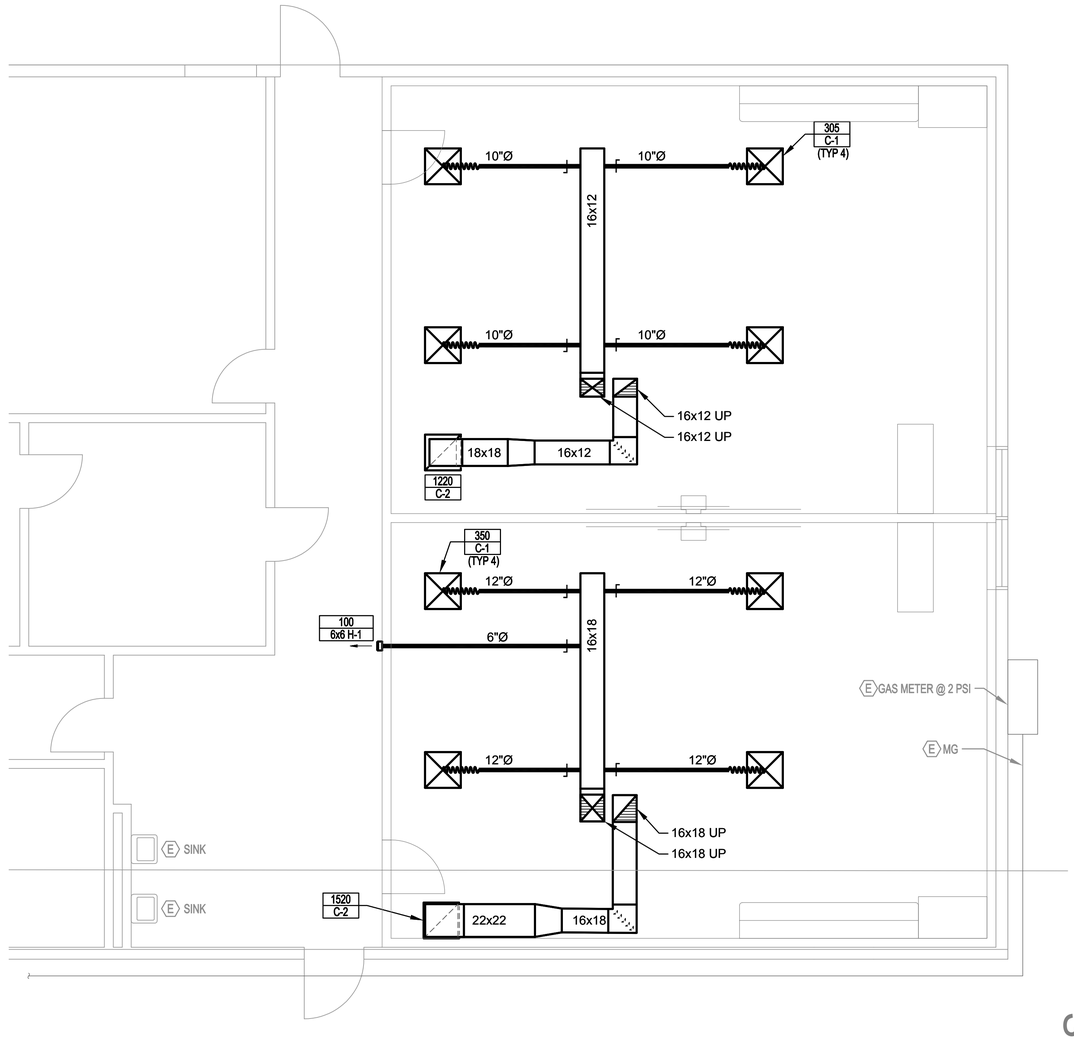
NEHS

M1.1



2 M1.2 ENLARGED PARTIAL ROOF PLAN - MECHANICAL
1/4" = 1'-0"

NORTH



1 M1.2 ENLARGED PARTIAL FLOOR PLAN - MECHANICAL
1/4" = 1'-0"

NORTH

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REVISIONS

GENERAL NOTES:

A. CONTROL WIRING AND THERMOSTATS OWNER FURNISHED AND OWNER INSTALLED

B. PROVIDE CURB AND FLASH FOR ROOF MOUNTED UNITS

C. PROVIDE PIPE SUPPORTS FOR GAS PIPING ON ROOF.

D. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF AIR DEVICES

F. VERIFY ALL EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS. VERIFY AND PROVIDE DUCT TRANSITIONS TO FURNISHED EQUIPMENT. FIELD VERIFY AND COORDINATE ALL DIMENSIONS BEFORE FABRICATION.

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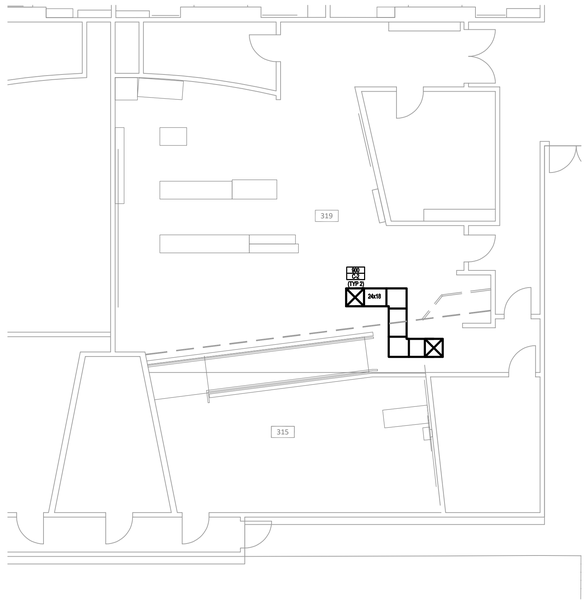
ENLARGED PARTIAL FLOOR PLAN - MECHANICAL

M1.2



1 M1.3 ENLARGED PARTIAL FLOOR PLAN - MECHANICAL

1/4" = 1'-0"

NORTH

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ENLARGED PARTIAL FLOOR PLAN - MECHANICAL

NEHS

M1.3 1

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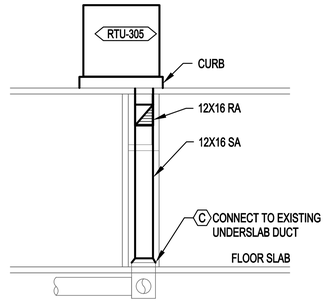
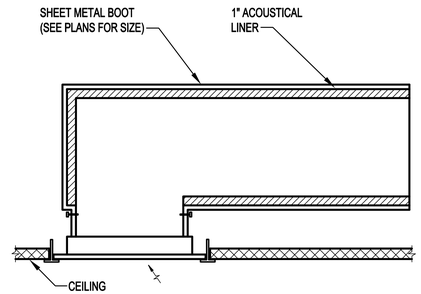
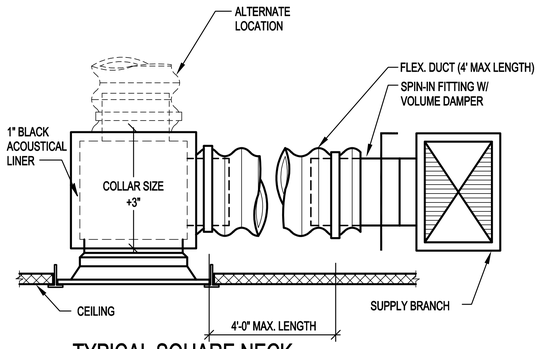


1 M5.01 **RTU-305 SECTION**
SCALE: NONE



2 M501 **RETURN AIR BOOT**
SCALE: NONE



3 M501 **TYPICAL SQUARE NECK T-BAR DIFFUSER**
SCALE: NONE

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DETAILS - MECHANICAL

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ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	KVAR	KILOVOLT AMPS REACTIVE
A	AMPERE (AMP)	LA	LIGHTNING ARRESTOR
AL	ALUMINUM	LTG	LIGHTING
ARCH	ARCHITECT / ARCHITECTURAL	LV	LOW VOLTAGE
ATS	AUTOMATIC TRANSFER SWITCH	MATV	MASTER ANTENNA TELEVISION
CB	CIRCUIT BREAKER	MCA	MINIMUM CIRCUIT AMPS
C	CONDUIT	MCB	MAIN CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION	MCC	MOTOR CONTROL CENTER
CKT	CIRCUIT	MDP	MAIN DISTRIBUTION PANEL
CLG	CEILING	MECH	MECHANICAL
CT	CURRENT TRANSFORMER	MH	METAL HALIDE
CU	COPPER	MLO	MAIN LUGS ONLY
DN	DOWN	MV	MERCURY VAPOR
EMERG	EMERGENCY	MTS	MANUAL TRANSFER SWITCH
EMT	ELECTRIC METALLIC TUBING	NIC	NOT IN CONTRACT
EP	EXPLOSION PROOF	NL	NIGHT LIGHT CIRCUIT
EPO	EMERGENCY POWER OFF	PA	PUBLIC ADDRESS
EWC	ELECTRIC WATER COOLER	PDZ	PRIMARY DAYLIGHT ZONE
FA	FIRE ALARM	PE	PHOTO ELECTRIC CELL
FLA	FULL LOAD AMPS	PF	POWER FACTOR
FLUOR	FLUORESCENT	PNL	PANELBOARD
FCIC	FURNISHED BY CONTRACTOR INSTALLED BY CONTRACTOR	PVC	POLYVINYL CHLORIDE CONDUIT
		PWR	POWER
FOIC	FURNISHED BY OWNER INSTALLED BY CONTRACTOR	SDP	SUB-DISTRIBUTION PANEL
		SDZ	SECONDARY DAYLIGHT ZONE
FOIO	FURNISHED BY OWNER INSTALLED BY OWNER	STR	STARTER
		SV	SOLENOID VALVE
GFP	GROUND FAULT PROTECTION	SW	SWITCH
GFI	GROUND FAULT INTERRUPTER	TD	TIME DELAY
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	TP	TAMPERPROOF
GRC	GALVANIZED RIGID CONDUIT	TTB	TELEPHONE TERMINAL BOARD
GRD	GROUND	TTC	TELEPHONE TERMINAL CABINET
HP	HORSEPOWER	TV	TELEVISION
HPS	HIGH PRESSURE SODIUM	TYP	TYPICAL
HV	HIGH VOLTAGE	UG	UNDERGROUND
HZ	HERTZ	UPS	UNINTERRUPTABLE POWER SUPPLY
IG	ISOLATED GROUND	V	VOLTAGE
INC	INCANDESCENT	VA	VOLT AMPERES
JB	JUNCTION BOX	VP	VAPOR PROOF
KW	KILOWATT	W	WATTS
KWH	KILOWATT HOUR	WP	WEATHER PROOF
KV	KILOVOLT	XFMR	TRANSFORMER
KVA	KILOVOLT AMP	XFSW	TRANSFER SWITCH

LIGHTING

- CEILING LUMINAIRE: SURFACE, RECESSED
- CEILING LUMINAIRE: PENDANT MOUNTED
- CEILING LUMINAIRE: PENDANT LINEAR
- WALL LUMINAIRE: SURFACE, RECESSED
- WALL WASHER: SURFACE, RECESSED
- TRACK WITH HEADS LOCATED
- FLUORESCENT LUMINAIRE: SURFACE, RECESSED
- FLUORESCENT LUMINAIRE: WALL MOUNTED
- FLUORESCENT LUMINAIRE: BARE LAMP
- POLE LIGHT: LUMINAIRES AS SHOWN
- DESIGNATES LIGHT ON EMERGENCY CIRCUIT
- EXIT LIGHT: CEILING, WALL (ARROWS AS SHOWN)
- BOLLARD
- EMERGENCY BATTERY LIGHT: HEADS AS SHOWN
- $ / $2: WALL SWITCH: 1 POLE, 2 POLE
- $3 / $4: WALL SWITCH: 3 WAY, 4 WAY
- $K / $M: WALL SWITCH: KEY LOCK, MOMENTARY
- $LV / $P: WALL SWITCH: LOW VOLTAGE, PILOT
- $T / $D: WALL SWITCH: TIMER, MANUAL DIMMER
- A: DESIGNATES LUMINAIRE TYPE (SEE LUMINAIRE SCHEDULE)
- NL: DESIGNATES NIGHT LIGHT CIRCUIT
- PE / PE: PHOTOELECTRIC CELL: WALL MOUNTED, CEILING MOUNTED
- OS / OS: OCCUPANCY SENSOR: CEILING OR WALL MOUNTED
  "X" DESIGNATES DEVICE TYPE:
  S: IN COMBINATION WITH WALL SWITCH
  U: ULTRASONIC
  R: INFRARED
  UR: DUAL TECHNOLOGY, ULTRASONIC/INFRARED

DESIGNATION SYMBOLS

- 123: EQUIPMENT DESIGNATOR SEE SCHEDULE.
- DARK LINE WEIGHT INDICATES NEW WORK
- DARK AND DASHED LINE WEIGHT INDICATES DEMO WORK
- LIGHT LINE WEIGHT INDICATES EXISTING TO REMAIN
- 1: NOTE

POWER

- WALL RECEPTACLE: SINGLE, DUPLEX
- WALL RECEPTACLE: EMERGENCY, 4-PLEX
- WALL RECEPTACLE: ISOLATED GROUND
- CEILING RECEPTACLE: DUPLEX
- FIRE RATED FLOOR POKE-THRU
- CONNECTION TO EQUIPMENT PROVIDED BY OTHERS
- DENOTES RECEPTACLE ABOVE COUNTER
- SPECIAL PURPOSE OUTLET AS NOTED, EMERGENCY
- CLOCK HANGER RECEPTACLE
- FLUSH IN-FLOOR OUTLET: DUPLEX, COMBINATION
- PEDESTAL OUTLET: POWER, SIGNAL, COMBINATION
- SURFACE OUTLET STRIP: DIMENSION AS SHOWN
- TELEPOWER POLE, POWER, COMBINATION
- J: JUNCTION BOX
- 60A 45F F: DISCONNECT SWITCH: FUSED, NON-FUSED
- $OL: MOTOR STARTER: MANUAL, MAGNETIC, COMBINATION
- MOTOR CONNECTION
- C R S: CONTACTOR, RELAY, SOLENOID
- PUSH BUTTON STATION
- WIRING CONCEALED IN CEILING OR WALL
- WIRING CONCEALED IN FLOOR OR UNDERGROUND
- INDICATES INSULATED GREEN GROUND WIRE
- HOME RUN DESTINATION SHOWN
- CONDUIT ELL: UP, DN.

EQUIPMENT

- ELECTRICAL EQUIPMENT
- PANELBOARD: SURFACE, RECESSED
- CABINET: SURFACE, RECESSED
- T: TRANSFORMER
- GROUND ROD, IN TEST WELL
- GROUND PAD
- EQUIPMENT WITH DERIVED GROUND
- V A: VOLTMETER, AMMETER
- VS AS: SELECTOR SWITCH: VOLTMETER, AMMETER
- KWH PF: METER: KILOWATT HOUR, POWER FACTOR
- PT: POTENTIAL TRANSFORMER
- CT: CURRENT TRANSFORMER
- CABLE TRAY: CENTER SUPPORT, OUTER SUPPORTS

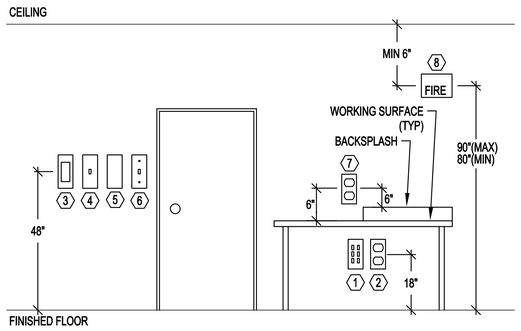
ONE-LINE

- CIRCUIT BREAKER
- SWITCH, FUSED SWITCH
- BUSS
- AUTOMATIC SWITCH
- M: METER
- XXX XX: PANEL
- X: FEEDER CALLOUT
- XXX: FAULT CURRENT CALLOUT
- G: GENERATOR

NOTE

THIS IS A STANDARD LEGEND SHEET, THEREFORE, SOME SYMBOLS MAY APPEAR ON THIS SHEET THAT DO NOT APPEAR ON THE DRAWINGS.

DEVICE MOUNTING HEIGHTS



GENERAL NOTES:

1. LOCATE ALL FIRE ALARM DEVICES PER CODE.
2. LOCATE ALL ACCESSIBLE SWITCHES PER ADA GUIDELINES.
3. FIELD COORDINATE ALL ABOVE COUNTER DEVICES WITH MILLWORK CONTRACTOR.
4. IF APPLICABLE, TELCOM CONSULTANTS DRAWINGS TAKE PRECEDENCE OVER THIS DETAIL FOR TELCOM DEVICES.

NOTES:

1. TELECOM OUTLET
2. RECEPTACLE
3. FIRE ALARM PULL STATION
4. LIGHT SWITCH
5. CARD READER
6. WALL PHONE
7. ABOVE COUNTER DEVICE MAINTAIN A CONSISTANT HEIGHT THROUGHOUT SPACE
8. FIRE ALARM STRONE

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SYMBOLS, LEGENDS AND ABBREVIATIONS - ELECTRICAL

NEHS

E0.01

EQUIPMENT CONNECTION SCHEDULE

EQUIPMENT DESCRIPTIONS			ELECTRICAL CHARACTERISTICS						CONNECTION CHARACTERISTICS				FEEDER CHARACTERISTICS			PANEL INFORMATION	NOTES
TAG	DESCRIPTION	LOCATION	KW	HP	FLA	MOCP	VOLTS	PHASE	VFD	1-POINT CONNECT	STARTER DIVISION	DISCONNECT DIVISION	CONDUIT DIA (INCH)	PHASE CONDUCTORS	GROUND CONDUCTOR	PANEL NAME	
MECHANCIAL																	
RTU-600	PACKAGED ROOFTOP UNIT W/GAS	600 CLASSROOM ROOF			16.40	30	208	3	NO	YES	-	26	3/4"	10AWG	10 AWG	B	
RTU-600A	PACKAGED ROOFTOP UNIT W/GAS	600A CLASSROOM ROOF			21.70	35	208	3	NO	YES	-	26	3/4"	10AWG	10 AWG	B	
RTU-305	PACKAGED ROOFTOP UNIT W/HEAT PUMP	305 MAIN OFFICE ROOF			34.54	50	208	1	NO	YES	-	26	3/4"	6 AWG	10 AWG	DD2	

GENERAL NOTES: (SOME MAY NOT BE USED ON THIS SHEET)

A. REFER TO ONE-LINE DIAGRAM OR PANEL SCHEDULES FOR OVERCURRENT PROTECTION CHARACTERISTICS AND CIRCUIT NUMBERS.
B. COORDINATE ALL EQUIPMENT CONNECTION REQUIREMENTS WITH INSTALLING CONTRACTOR PRIOR TO THE INSTALLATION OF ANY ELECTRICAL WORK.
C. VFD'S ARE FURNISHED BY DIVISION 23. INSTALL VFD AND PROVIDE PROVIDE LINE AND LOAD SIDE FEEDERS IN ELECTRICAL WORK.
D. COMBINATION STARTER/DISCONNECTS AND DISCONNECT SWITCHES SHALL BE LOCATED WITHIN SIGHT OF AND ADJACENT TO EQUIPMENT SERVED. COORDINATE DISCONNECT INSTALLATION AND LOCATION WITH EQUIPMENT INSTALLER.
E. NOT ALL EQUIPMENT IDENTIFIED HERE IS SHOWN ON FLOOR PLANS. REFER TO DRAWINGS IN OTHER DISCIPLINES FOR EQUIPMENT LOCATIONS.

LUMINAIRE SCHEDULE

FIXTURE TYPE	PRODUCT DESCRIPTION	BASIS OF DESIGN MANUFACTURER	SIZE	INPUT WATTS	LAMP SOURCE	DRIVER / BALLAST	INPUT VOLTAGE	FINISH	MOUNTING	NOTES
L1	SUSPENDED LED	LITHONIA - GRAD LINEAR	4'	25	LED, 4000K 3401 LM	INTEGRAL ELECTRONIC 0-10V	120	PER ARCHITECT	SUSPENDED 3' FROM CEILING	
L5	LED RECESSED FLATPANEL	TCP	2' X 4'	36	LED, 4000K 3600 LM	INTEGRAL ELECTRONIC 0-10V DIM	120	PER ARCHITECT	CEILING RECESSED	
L6	LED SURFACE MOUNT	LA LIGHTING COR200 SERIES	2' X 4'	32	LED, 4000K 2900 LM	INTEGRAL ELECTRONIC 0-10V DIM	120	PER ARCHITECT	WALL MOUNTED	*TLED READY MOUNTED AT 10'*

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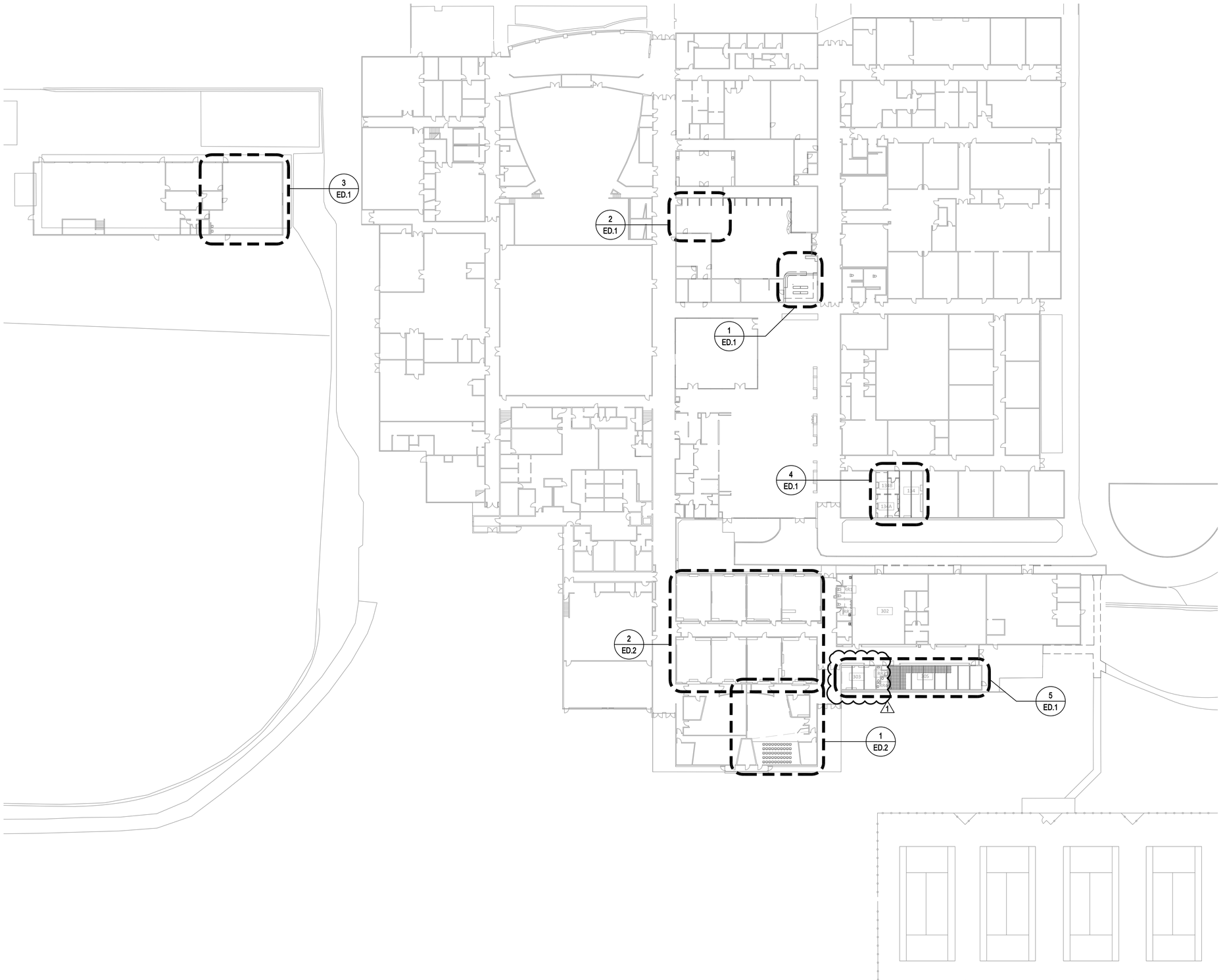
LUMINAIRE AND MECHANICAL EQUIPMENT SCHEDULE

NEHS

E0.02



1 ED.0 OVERALL DEMOLITION PLAN
1/32" = 1'-0"

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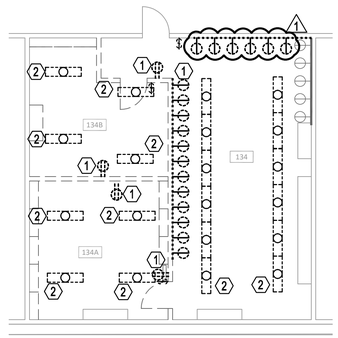
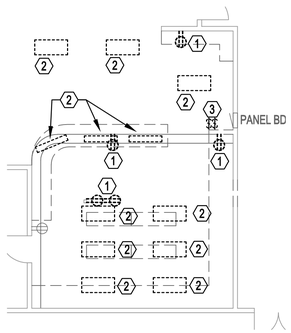


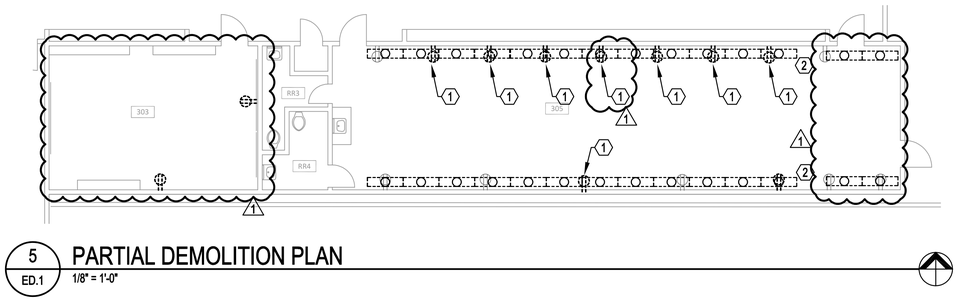
4 ED.1 PARTIAL DEMOLITION PLAN
1/8" = 1'-0"

NORTH



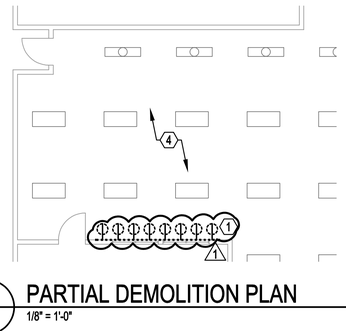
1 ED.1 PARTIAL DEMOLITION PLAN
1/8" = 1'-0"

NORTH



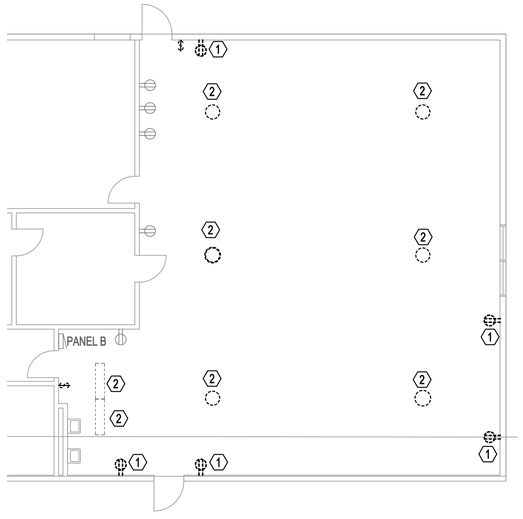
5 ED.1 PARTIAL DEMOLITION PLAN
1/8" = 1'-0"

NORTH



2 ED.1 PARTIAL DEMOLITION PLAN
1/8" = 1'-0"

NORTH



3 ED.1 PARTIAL DEMOLITION PLAN
1/8" = 1'-0"

NORTH

GENERAL NOTES:

A. CAREFULLY REMOVE AND OFFER TO THE OWNER ALL ELECTRICAL EQUIPMENT THAT IS TO BE REMOVED AND IN GOOD WORKING ORDER. REMOVE FROM PROJECT SITE AND PROPERLY DISPOSE ALL EQUIPMENT REJECTED BY THE OWNER.

B. THE LOCATIONS OF ALL EQUIPMENT AND DEVICES MAY NOT BE SHOWN AND THESE PLANS DO NOT SHOW ALL OF THE DEMOLITION CONDITIONS. DEMOLITION INCLUDES THE REMOVAL OF ALL RACEWAY, CONDUCTORS, COMMUNICATION CABLING, LIGHT FIXTURES, DEVICES, ELECTRICAL EQUIPMENT, FIRE ALARM DEVICES, CABLES, HANGERS, AND SUPPORTS THAT ARE MADE OBSOLETE BY THE NEW WORK OR ARE ABANDONED AND NO LONGER IN USE.

NOTES:

1. DEMOLISH RECEPTACLE AND BACKBOX AND REMOVE CONDUIT AND CONDUCTORS TO ABOVE ACCESSIBLE CEILING. SALVAGE CIRCUIT FOR EXTENSION TO NEW RECEPTACLE LOCATION. SEE SHEET E1.1 FOR ADDITIONAL INFORMATION.

2. DEMOLISH FIXTURE AND REMOVE CONDUIT AND CONDUCTORS TO JUNCTION BOX. SALVAGE CIRCUIT FOR EXTENSION TO NEW FIXTURE LOCATION. SEE SHEET E2.1 FOR ADDITIONAL INFORMATION.

3. DEMOLISH SWITCHES AND BACKBOX AND REMOVE CONDUIT AND CONDUCTORS TO ABOVE ACCESSIBLE CEILING. SALVAGE CIRCUIT FOR EXTENSION TO NEW SWITCH LOCATION. SEE SHEET E2.1 FOR ADDITIONAL INFORMATION.

4. NO ELECTRICAL DEMOLITION SCOPE IN THIS AREA.

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ESD 4J NORTH EUGENE HIGH SCHOOL IMPROVEMENTS

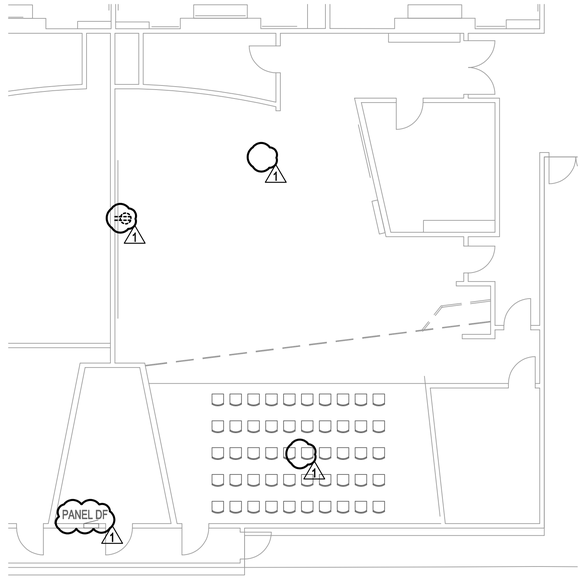
200 SILVER LN, EUGENE, OR 97404
RENOVATIONS

JOB NO: 19188
ISSUE DATE: 3 MAR 2020

PARTIAL DEMOLITION PLANS

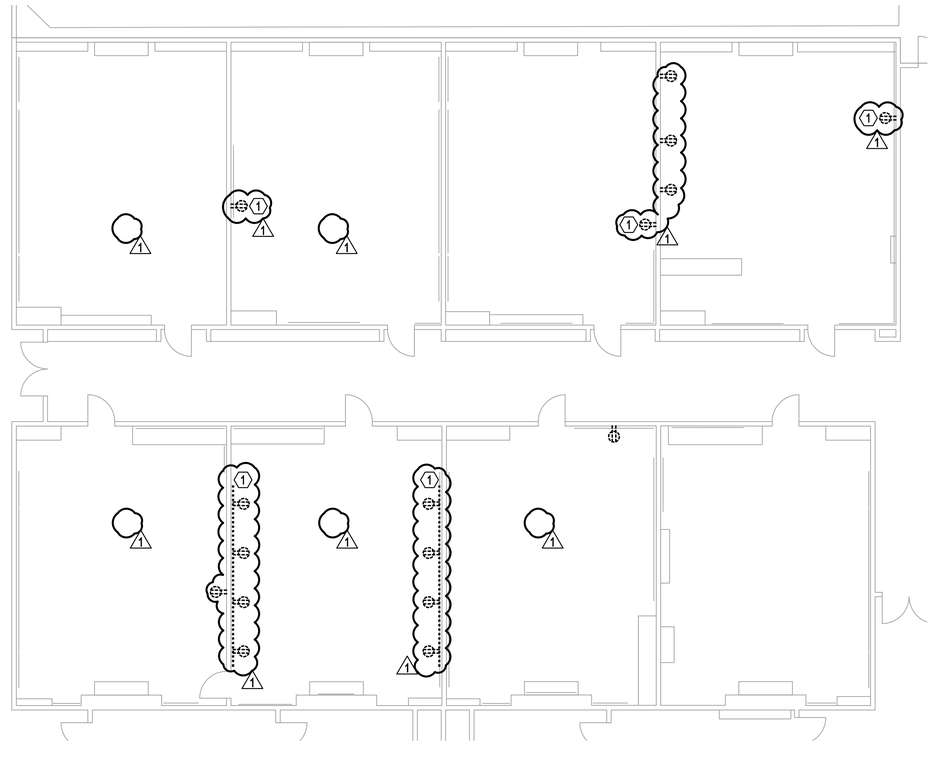
NEHS

ED.1



1 ED.2 PARTIAL DEMOLITION PLAN
1/8" = 1'-0"

NORTH



2 ED.2 PARTIAL DEMOLITION PLAN
1/8" = 1'-0"

NORTH

GENERAL NOTES:

A. CAREFULLY REMOVE AND OFFER TO THE OWNER ALL ELECTRICAL EQUIPMENT THAT IS TO BE REMOVED AND IN GOOD WORKING ORDER. REMOVE FROM PROJECT SITE AND PROPERLY DISPOSE ALL EQUIPMENT REJECTED BY THE OWNER.

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NOTES:

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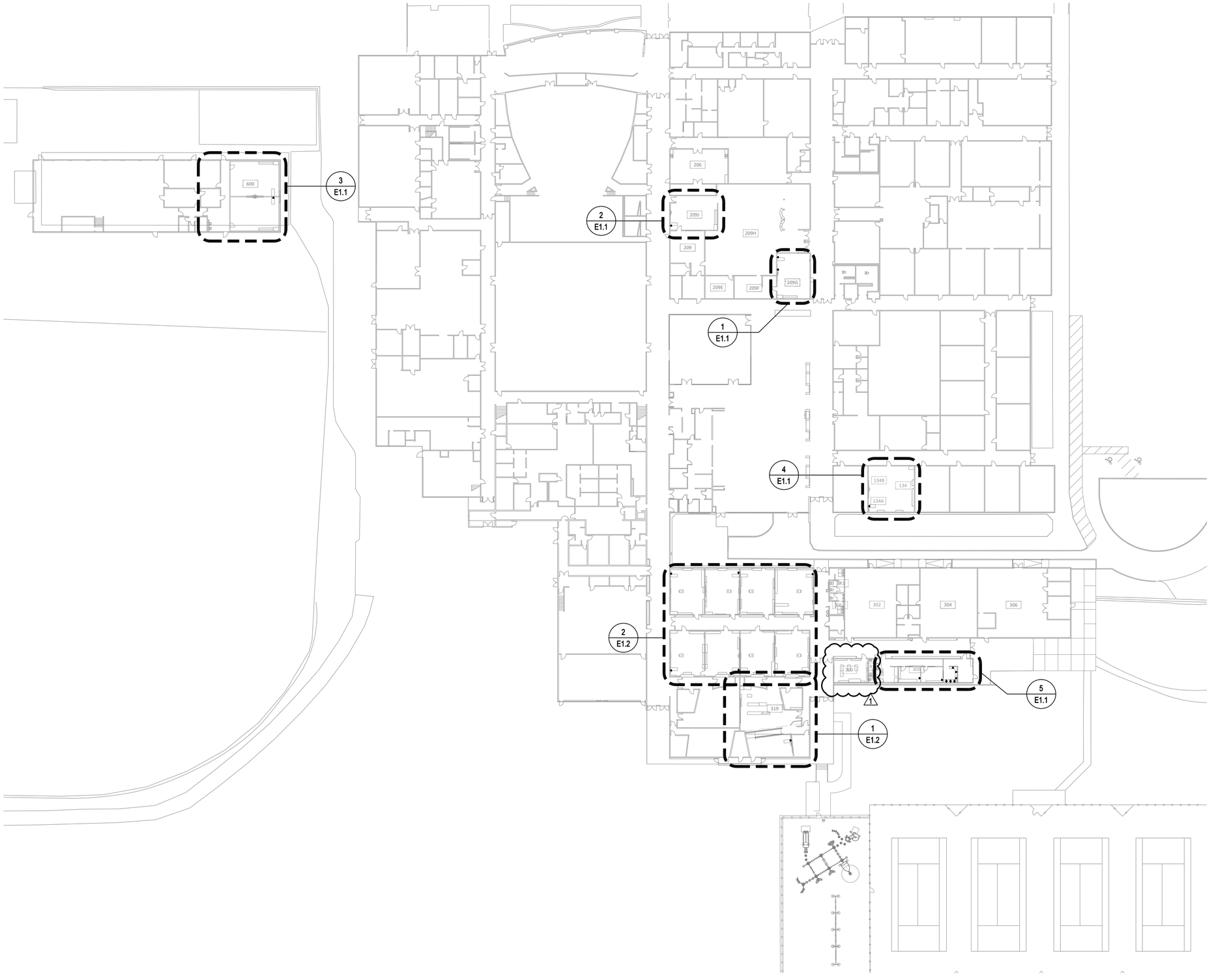
PARTIAL DEMOLITION PLANS

NEHS

ED.2



1 E1.0 OVERALL ELECTRICAL PLAN
1/32" = 1'-0"

NORTH

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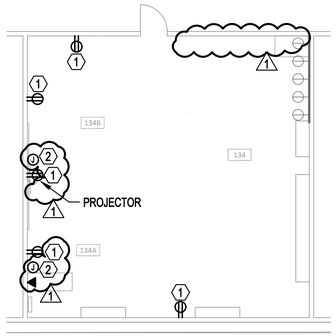
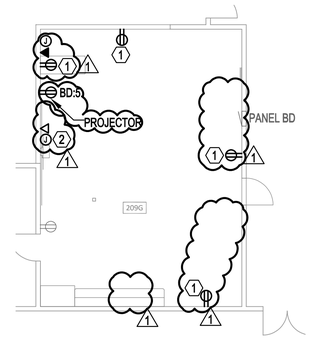
OVERALL
ELECTRICAL PLAN

NEHS

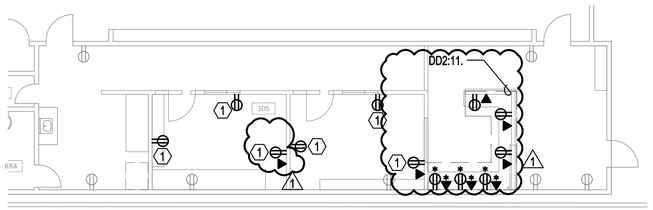
E1.0



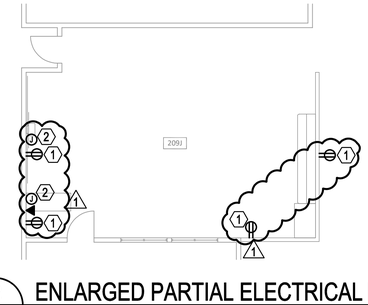
4 E1.1 ENLARGED PARTIAL ELECTRICAL FLOOR PLAN
1/8" = 1'-0"
NORTH



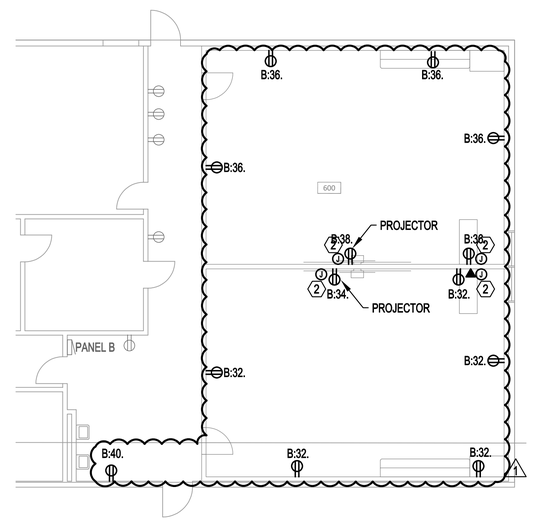
1 E1.1 ENLARGED PARTIAL ELECTRICAL FLOOR PLAN
1/8" = 1'-0"
NORTH



5 E1.1 ENLARGED PARTIAL ELECTRICAL FLOOR PLAN
1/8" = 1'-0"
NORTH



2 E1.1 ENLARGED PARTIAL ELECTRICAL FLOOR PLAN
1/8" = 1'-0"
NORTH



3 E1.1 ENLARGED PARTIAL ELECTRICAL FLOOR PLAN
1/8" = 1'-0"
NORTH

GENERAL NOTES:

A. TELECOM SCOPE SHALL INCLUDE BACKBOX CONDUIT AND RACEWAY. PROVIDE BACKBOX ROUGH-IN AT DATA DEVICE LOCATION AND 1-1/4" CONDUIT ROUTED TO THE TELECOM CLOSET. DATA DEVICE, CABLING AND CONNECTION TO TELECOMMUNICATIONS SYSTEM SHALL BE BY OWNERS TELECOMMUNICATIONS CONTRACTOR.

B. THE FIRE ALARM SYSTEM IS SHOWN FOR GUIDANCE AND IS INTENDED TO BE USED TO PROVIDE INFORMATION FOR A FIRE ALARM DESIGN-BUILD SYSTEM. EQUIPMENT AND DEVICE ARRANGEMENT SHOWN IS TO AID IN ESTABLISHING A BASIS OF DESIGN. CONTRACTOR SHALL BE RESPONSIBLE FOR CREATION OF SHOP DRAWINGS, AND TO PROVIDE FULL DESIGN, PERMITTING, INSTALLATION, TESTING, AND COORDINATION WITH OTHER TRADES. PROVIDE A COMPLETE SYSTEM THAT MEETS CURRENT CODE AND FUNCTIONALITY REQUIREMENTS.

NOTES:

1. CONNECT SALVAGED CIRCUIT TO NEW RECEPTACLE.

2. PROVIDE BACK-BOX AND CONDUIT PATHWAY FOR PROJECTOR AV CONNECTION. (1)

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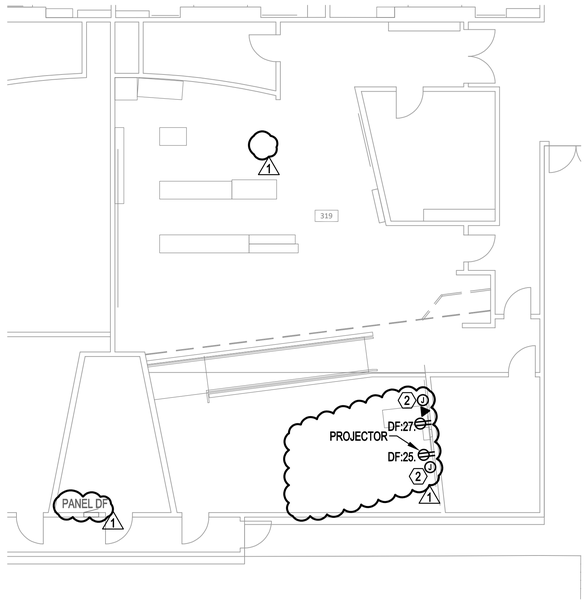
ENLARGED PARTIAL ELECTRICAL FLOOR PLAN

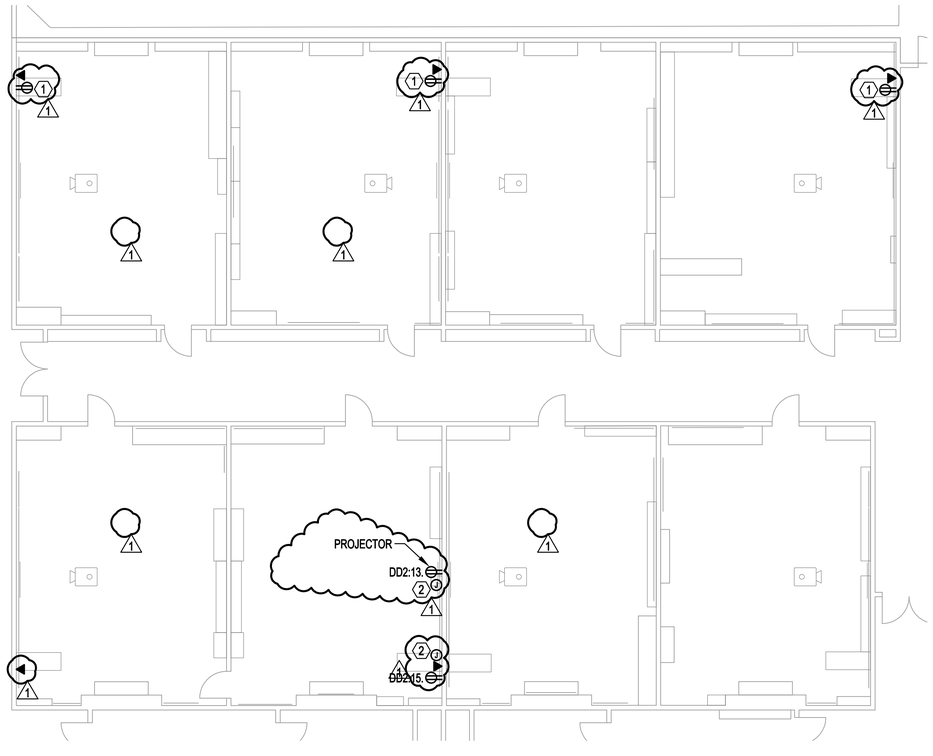
E1.1

Date: 3/16/20 Time: 2:59pm File: \\pae-engineers.com\Projects\2019\19-1867 - Eugene 4J - Corridor Relocation\01 Production\02 CAD\19-1867 E1.1.dwg User: daniel.wirtala



1 E1.2 ENLARGED PARTIAL ELECTRICAL FLOOR PLAN
1/8" = 1'-0"

NORTH



2 E1.2 ENLARGED PARTIAL ELECTRICAL FLOOR PLAN
1/8" = 1'-0"

NORTH

GENERAL NOTES:

A. TELECOM SCOPE SHALL INCLUDE BACKBOX CONDUIT AND RACEWAY. PROVIDE BACKBOX ROUGH-IN AT DATA DEVICE LOCATION AND 1-1/4" CONDUIT ROUTED TO THE TELECOM CLOSET. DATA DEVICE, CABLING AND CONNECTION TO TELECOMMUNICATIONS SYSTEM SHALL BE BY OWNERS TELECOMMUNICATIONS CONTRACTOR.

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NOTES:

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2. PROVIDE BACK-BOX AND CONDUIT PATHWAY FOR PROJECTOR AV CONNECTION.

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RENOVATIONS

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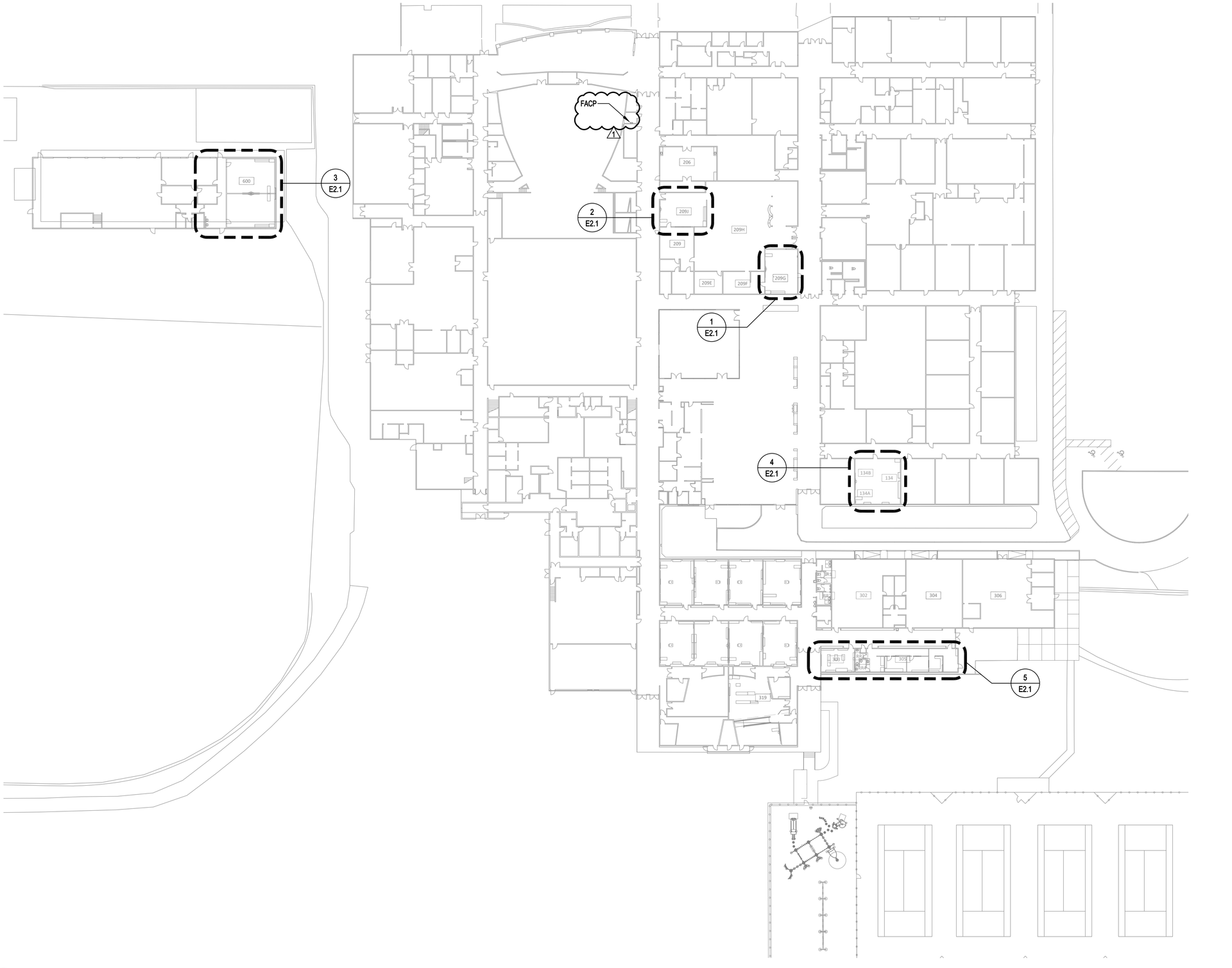
ENLARGED PARTIAL ELECTRICAL FLOOR PLAN

NEHS

E1.2



1 E2.0 **OVERALL LIGHTING PLAN**
1/32" = 1'-0"

NORTH

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OVERALL
LIGHTING PLAN

NEHS

E2.0

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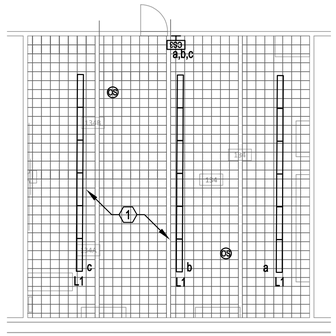
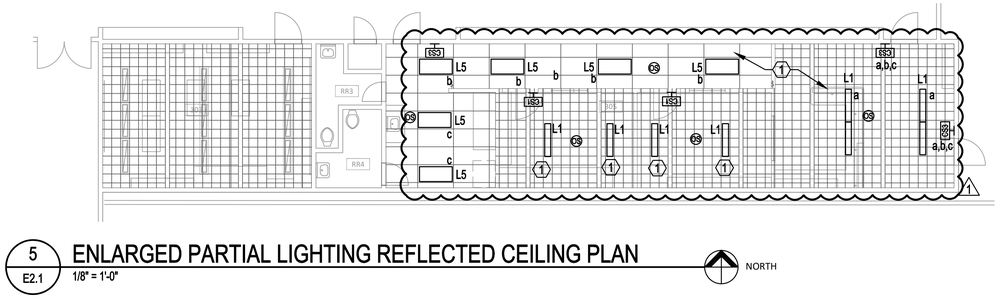
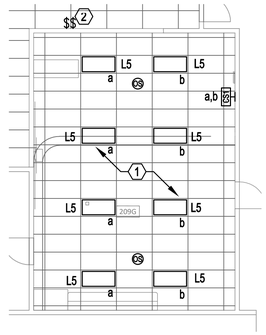


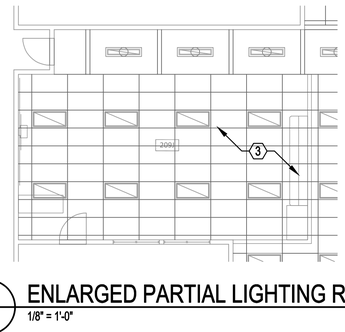
4 E2.1 ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN
1/8" = 1'-0"
NORTH



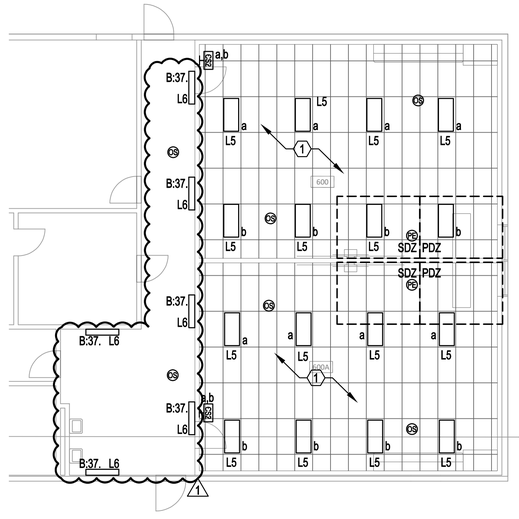
5 E2.1 ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN
1/8" = 1'-0"
NORTH



1 E2.1 ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN
1/8" = 1'-0"
NORTH



2 E2.1 ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN
1/8" = 1'-0"
NORTH



3 E2.1 ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN
1/8" = 1'-0"
NORTH

CONTROL STATION SCHEDULE		
CONTROL STATION ID	ZONES	DIMMING
CS1	1	YES
CS2	2	YES
CS3	3	YES

NOTE:

A. PROVIVE ALL ON/OFF AND INDIVIDUAL ON/OFF AND DIMMING CONTROL PER ZONE.

GENERAL NOTES:

A. PROVIDE #10 AWG CONDUCTORS TO 120V BRANCH CIRCUITS OVER 100FT FROM BRANCH PANEL.

B. COORDINATE ROUTING OF CONDUIT WITH ALL OTHER TRADES. WHERE POSSIBLE, ROUTE CONDUIT TIGHT TO DECK STRUCTURE. CONDUIT SHALL BE ROUTED SO AS NOT TO OBSTRUCT ACCESS TO VALVES, DAMPERS, CONTROL PANELS, ACCESS PANELS AND EQUIPMENT COMPONENTS.

C. LUMINAIRE LOCATIONS SHOWN ARE APPROXIMATE AND DIAGRAMMATIC. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS AND ELEVATIONS FOR EXACT LUMINAIRE/CONTROLS LOCATIONS AND MOUNTING HEIGHTS.

NOTES:

1. CONNECT SALVAGED CIRCUIT TO NEW FIXTURE LOCATIONS.
2. CONNECT SALVAGED SWITCHES AND CIRCUIT TO NEW SWITCH LOCATION.
3. NO LIGHTING SCOPE IN THIS AREA.

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ENLARGED PARTIAL LIGHTING REFLECTED CEILING PLAN

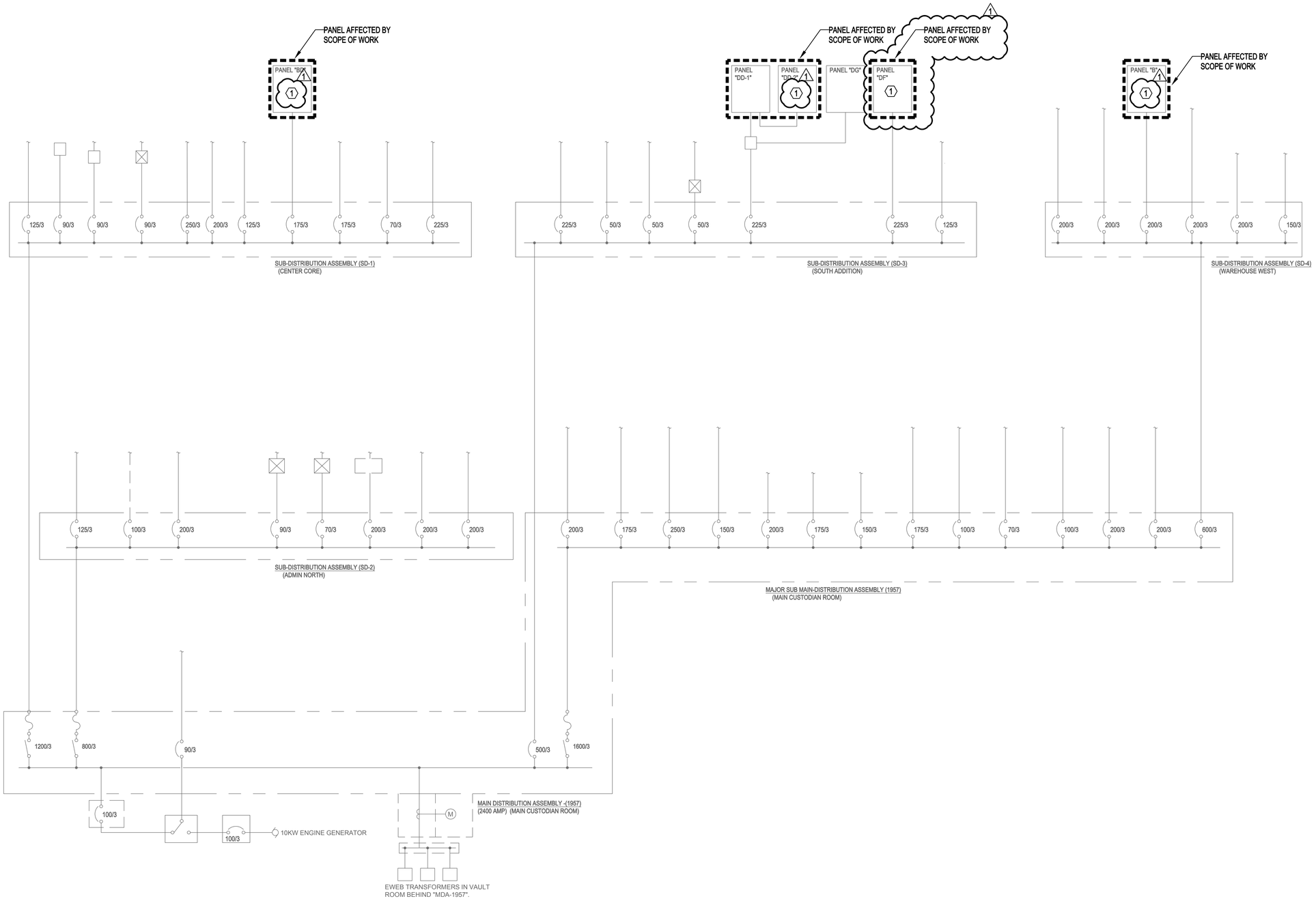
E2.1

MAIN BOARD LOAD ANALYSIS	kVA	AMPS
PEAK DEMAND BASED ON 1 YEAR OF UTILITY DATA	318	884
NEC 220.87 125% OF PEAK DEMAND	80	221
DEMOLISHED LOAD	38	106
ADDED LOAD	34	93
NET LOAD	**393**	**208**
BOARD AMPACITY	-	2500
SPARE AMPACITY	-	2292

1

NOTES:

1. SCOPE OF WORK RESULTS IN A NET REDUCTION IN LOAD ON PANEL.



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DIAGRAMS - ELECTRICAL

NEHS

E7.01

PANEL SCHEDULE

PANEL: BD LOCATION: MAIN ELECTRICAL ROOM VOLTAGE: 208 Y/ 120 P: 3 W: 4 AIC RATING:
AMP: 225 MLO [X] MCB [ ] MOUNTING: [ ] SURFACE [X] FLUSH
TYPE: EXISTING [X] NEW [ ] STYLE: NEUTRAL: 100% FED FROM: PNL DP-1

CIRCUIT DESCRIPTION	LOAD TYPE	LOAD KVA	CKT BKR	P	CIR #	P H	CIR #	P	CKT BKR	LOAD KVA	LOAD TYPE	CIRCUIT DESCRIPTION
(E) EXISTING LOAD			20	1	1	A	2	20	1			(E) SPACE
(E) EXISTING LOAD			20	1	3	B	4	20	1			(E) EXISTING LOAD
(N) CLASSROOM 209G - PROJECTOR	**MISC**	**0.90**	**20**	**1**	5	C	6	20	1			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	7	A	8	20	1			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	9	B	10	20	1			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	11	C	12	20	1			(E) SPACE
(E) SPACE			20	1	13	A	14	20	1			(E) SPACE
(E) EXISTING LOAD			20	1	15	B	16	20	1			(E) SPACE
(E) SPACE			20	1	17	C	18	20	1			(E) SPACE
(E) EXISTING LOAD			20	1	19	A	20	20	1			(E) SPACE
(E) EXISTING LOAD			20	1	21	B	22	20	1			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	23	C	24	20	1			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	25	A	26	20	1			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	27	B	28	20	1			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	29	C	30	20	1			(E) SPACE
(E) EXISTING LOAD			20	1	31	A	32	20	1			(E) SPACE
(E) EXISTING LOAD			20	1	33	B	34	20	1			(E) SPACE
(E) SPACE			20	1	35	C	36	20	1			(E) SPACE
(E) SPACE			20	1	37	A	38	20	1			(E) SPACE
(E) SPACE			20	1	39	B	40					(E) SPACE
(E) SPACE					41	C	42					(E) SPACE

ESTIMATED MAXIMUM DEMAND (EMD) CALCULATIONS

LOAD SUMMARY:	LOAD TYPE	CONNECTED	NEC DEMAND
LIGHTING	LTG	0.0 KVA	0.0 KVA (125%)
RESIDENT LTG/REC	RES	0.0 KVA	0.0 KVA (100/35/25 %)
SMALL APPLIANCE	RES	0.0 KVA	0.0 KVA (100/35/25 %)
LARGEST MOTOR	MTR	KVA	0.0 KVA (125%)
REMAINING MOTORS	MTR	0.0 KVA	0.0 KVA (100%)
GEN PURPOSE REC	REC	0.0 KVA	0.0 KVA (50% > 10KVA)
COMPUTER REC	MISC	0.0 KVA	0.0 KVA (100%)
EQUIP/OTHER	MISC	0.9 KVA	0.9 KVA (100%)
HEATING	MISC	0.0 KVA	0.0 KVA (100%)
ELEVATOR	ELEV	0.0 KVA	0.0 KVA (100%)
KITCHEN EQPT	KITCH	0.0 KVA	0.0 KVA (.65)
TOTALS:		0.9 KVA	0.9 KVA
		2.5 AMP	2.5 AMP

CONNECTED PHASE LOADING
PHASE A: 0.00 KVA
PHASE B: 0.00 KVA
PHASE C: 0.90 KVA

NOTES:
1. LIGHT LINEWEIGHT PREFACED WITH (E) INDICATES EXISTING TO REMIAN.
2. BOLD LINEWEIGHT PREFACED WITH (N) INDICATES NEW

PANEL SCHEDULE

PANEL: B LOCATION: MAIN ELECTRICAL ROOM VOLTAGE: 208 Y/ 120 P: 3 W: 4 AIC RATING:
AMP: 225 MLO [X] MCB [ ] MOUNTING: [ ] SURFACE [X] FLUSH
TYPE: EXISTING [X] NEW [ ] STYLE: NEUTRAL: 100% FED FROM: MSB

CIRCUIT DESCRIPTION	LOAD TYPE	LOAD KVA	CKT BKR	P	CIR #	P H	CIR #	P	CKT BKR	LOAD KVA	LOAD TYPE	CIRCUIT DESCRIPTION
(E) EXISTING LOAD			20	1	1	A	2	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	3	B	4	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	5	C	6	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	7	A	8	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	9	B	10	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	11	C	12	1	20			(E) SPACE
(E) EXISTING LOAD			20	1	13	A	14	1	20			(E) SPACE
(E) EXISTING LOAD			20	1	15	B	16	1	20			(E) SPACE
(E) EXISTING LOAD			20	1	17	C	18	1	20			(E) SPACE
(E) EXISTING LOAD			20	1	19	A	20	3	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	21	B	22					
(E) EXISTING LOAD			20	1	23	C	24					
(N) RTU - 600	**MTR**	**1.13**	**30**	**3**	25	A	26	3	50			(E) EXISTING LOAD
	MTR	**1.13**			27	B	28					
	MTR	**1.13**			29	C	30					
(N) RTU - 600A	**MTR**	**1.50**	**35**	**3**	31	A	32	**1**	**20**	**0.90**	**REC**	**(N) CLASSROOM 600A - REC**
	MTR	**1.50**			33	B	34	**1**	**20**	**0.90**	**MISC**	**(N) CLASSROOM 600A - PROJECTOR**
	MTR	**1.50**			35	C	36	**1**	**20**	**0.90**	**REC**	**(N) CLASSROOM 600 - REC**
(N) CORRIDOR - LIGHTS	**LTG**	**0.19**	**20**	**1**	37	A	38	**1**	**20**	**0.90**	**MISC**	**(N) CLASSROOM 600 - REC**
(E) SPACE					39	B	40	**1**	**20**	**0.18**	**REC**	**(N) HALLWAY - REC**
(E) SPACE					41	C	42					(E) SPACE

ESTIMATED MAXIMUM DEMAND (EMD) CALCULATIONS

LOAD SUMMARY:	LOAD TYPE	CONNECTED	NEC DEMAND
LIGHTING	LTG	0.2 KVA	0.2 KVA (125%)
RESIDENT LTG/REC	RES	0.0 KVA	0.0 KVA (100/35/25 %)
SMALL APPLIANCE	RES	0.0 KVA	0.0 KVA (100/35/25 %)
LARGEST MOTOR	MTR	KVA	0.0 KVA (125%)
REMAINING MOTORS	MTR	7.9 KVA	7.9 KVA (100%)
GEN PURPOSE REC	REC	2.0 KVA	2.0 KVA (50% > 10KVA)
COMPUTER REC	MISC	0.0 KVA	0.0 KVA (100%)
EQUIP/OTHER	MISC	1.8 KVA	1.8 KVA (100%)
HEATING	MISC	0.0 KVA	0.0 KVA (100%)
ELEVATOR	ELEV	0.0 KVA	0.0 KVA (100%)
KITCHEN EQPT	KITCH	0.0 KVA	0.0 KVA (.65)
TOTALS:		11.9 KVA	11.9 KVA
		32.9 AMP	33.1 AMP

CONNECTED PHASE LOADING
PHASE A: 4.62 KVA
PHASE B: 3.71 KVA
PHASE C: 3.53 KVA

NOTES:
1. LIGHT LINEWEIGHT PREFACED WITH (E) INDICATES EXISTING TO REMIAN.
2. BOLD LINEWEIGHT PREFACED WITH (N) INDICATES NEW

PANEL SCHEDULE

PANEL: DD2 LOCATION: MAIN ELECTRICAL ROOM VOLTAGE: 208 Y/ 120 P: 3 W: 4 AIC RATING:
AMP: 100 MLO [X] MCB [ ] MOUNTING: [ ] SURFACE [X] FLUSH
TYPE: EXISTING [X] NEW [ ] STYLE: NEUTRAL: 100% FED FROM: MSB

CIRCUIT DESCRIPTION	LOAD TYPE	LOAD KVA	CKT BKR	P	CIR #	P H	CIR #	P	CKT BKR	LOAD KVA	LOAD TYPE	CIRCUIT DESCRIPTION
(E) ROOM 302 POWER POLE			20	1	1	A	2	1	20			(E) SPARE
(E) ROOM 302 POWER POLE			20	1	3	B	4	1	20			(E) SPARE
(E) ALARM - TRANSLATOR			20	1	5	C	6	1	20			(E) SPARE
(E) OS LIGHTS - NORTH, SOUTH, EAST			20	1	7	A	8	1	20			(E) SPARE
(E) RM 302 GALLERY TRACK LIGHTS			20	1	9	B	10	1	20			(E) SPARE
(N) RECEPTION - REC	**REC**	**1.08**	**20**	**1**	11	C	12	1	20			(E) SPARE
(N) CLASSROOM 312 - PROJECTOR	**MISC**	**0.90**	**20**	**1**	13	A	14	1	20			(E) SPARE
(N) CLASSROOM 312 - REC	**REC**	**0.18**	**20**	**1**	15	B	16	1	20			(E) SPARE
(E) SPARE			20	1	17	C	18	1	20			(E) SPARE
(E) SPARE			20	1	19	A	20	2	20			(E) HEAT RM 301
(E) POWER POLE			20	2	21	B	22	-	-			(E) HEAT RM 301
(E) PROJECTOR OUTLETS					23	C	24	2	20			(E) SPK RM 302 IN BOX ON CEILING
(E) SPARE			20	2	25	A	26					(E) SPK RM 302 IN BOX ON CEILING
(E) SPARE			-	-	27	B	28	1	20			(E) SPARE
(E) SPARE			30	2	29	C	30	3	50	4.14	MISC	**(N) RTU 305**
(E) SPARE			-	-	31	A	32	-	-	4.14	MISC	-
(E) WATER HEATER			20	1	33	B	34	-	-	4.14	MISC	-
(E) WATER HEATER			20	1	35	C	36	1	20			(E) SPACE
(E) EXISTING LOAD			20	1	37	A	38	1	20			(E) SPACE
(E) BASEBOARD HEATERS			20	2	39	B	40	1	20			(E) SPACE
(E) OFFICE AT EAST END HEATER			-	-	41	C	42	1	20			(E) SPARE

ESTIMATED MAXIMUM DEMAND (EMD) CALCULATIONS

LOAD SUMMARY:	LOAD TYPE	CONNECTED	NEC DEMAND
LIGHTING	LTG	0.0 KVA	0.0 KVA (125%)
RESIDENT LTG/REC	RES	0.0 KVA	0.0 KVA (100/35/25 %)
SMALL APPLIANCE	RES	0.0 KVA	0.0 KVA (100/35/25 %)
LARGEST MOTOR	MTR	KVA	0.0 KVA (125%)
REMAINING MOTORS	MTR	0.0 KVA	0.0 KVA (100%)
GEN PURPOSE REC	REC	1.3 KVA	1.3 KVA (50% > 10KVA)
COMPUTER REC	MISC	0.0 KVA	0.0 KVA (100%)
EQUIP/OTHER	MISC	0.9 KVA	0.9 KVA (100%)
HEATING	MISC	12.4 KVA	12.4 KVA (100%)
ELEVATOR	ELEV	0.0 KVA	0.0 KVA (100%)
KITCHEN EQPT	KITCH	0.0 KVA	0.0 KVA (.65)
TOTALS:		14.6 KVA	14.6 KVA
		40.5 AMP	40.5 AMP

CONNECTED PHASE LOADING
PHASE A: 5.04 KVA
PHASE B: 4.32 KVA
PHASE C: 5.22 KVA

NOTES:
1. LIGHT LINEWEIGHT PREFACED WITH (E) INDICATES EXISTING TO REMIAN.
2. BOLD LINEWEIGHT PREFACED WITH (N) INDICATES NEW

PANEL SCHEDULE

PANEL: DF LOCATION: MAIN ELECTRICAL ROOM VOLTAGE: 208 Y/ 120 P: 3 W: 4 AIC RATING:
AMP: 100 MLO [X] MCB [ ] MOUNTING: [ ] SURFACE [X] FLUSH
TYPE: EXISTING [X] NEW [ ] STYLE: NEUTRAL: 100% FED FROM: MSB

CIRCUIT DESCRIPTION	LOAD TYPE	LOAD KVA	CKT BKR	P	CIR #	P H	CIR #	P	CKT BKR	LOAD KVA	LOAD TYPE	CIRCUIT DESCRIPTION
(E) EXISTING LOAD			20	1	1	A	2	3	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	3	B	4					(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	5	C	6					(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	7	A	8	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	9	B	10	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	11	C	12	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	13	A	14	1	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	15	B	16	1	20			(E) SPACE
(E) EXISTING LOAD			20	1	17	C	18	1	20			(E) SPACE
(E) EXISTING LOAD			20	1	19	A	20	3	20			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	21	B	22	-	-			(E) EXISTING LOAD
(E) EXISTING LOAD			20	1	23	C	24					(E) EXISTING LOAD
(N) RM 315 - PROJECTOR	MISC	0.90	20	1	25	A	26	3	20			(E) EXISTING LOAD
(N) RM 315 - REC	REC	0.18	20	1	27	B	28					(E) EXISTING LOAD
(E) SPACE			20	1	29	C	30					(E) EXISTING LOAD
(E) SPACE			20	1	31	A	32	2	20			(E) EXISTING LOAD
(E) SPACE			20	1	33	B	34	-	-			(E) EXISTING LOAD
(E) SPACE			20	1	35	C	36					(E) SPACE
(E) SPACE			20	1	37	A	38					(E) SPACE
(E) SPACE			20	2	39	B	40					(E) SPACE
(E) SPACE			-	-	41	C	42					(E) SPACE

ESTIMATED MAXIMUM DEMAND (EMD) CALCULATIONS

LOAD SUMMARY:	LOAD TYPE	CONNECTED	NEC DEMAND
LIGHTING	LTG	0.0 KVA	0.0 KVA (125%)
RESIDENT LTG/REC	RES	0.0 KVA	0.0 KVA (100/35/25 %)
SMALL APPLIANCE	RES	0.0 KVA	0.0 KVA (100/35/25 %)
LARGEST MOTOR	MTR	KVA	0.0 KVA (125%)
REMAINING MOTORS	MTR	0.0 KVA	0.0 KVA (100%)
GEN PURPOSE REC	REC	0.2 KVA	0.2 KVA (50% > 10KVA)
COMPUTER REC	MISC	0.0 KVA	0.0 KVA (100%)
EQUIP/OTHER	MISC	0.9 KVA	0.9 KVA (100%)
HEATING	MISC	0.0 KVA	0.0 KVA (100%)
ELEVATOR	ELEV	0.0 KVA	0.0 KVA (100%)
KITCHEN EQPT	KITCH	0.0 KVA	0.0 KVA (.65)
TOTALS:		1.1 KVA	1.1 KVA
		3.0 AMP	3.0 AMP

CONNECTED PHASE LOADING
PHASE A: 0.90 KVA
PHASE B: 0.18 KVA
PHASE C: 0.00 KVA

NOTES:
1. LIGHT LINEWEIGHT PREFACED WITH (E) INDICATES EXISTING TO REMIAN.
2. BOLD LINEWEIGHT PREFACED WITH (N) INDICATES NEW

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EXPIRES 12-31-2020

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REVISIONS
1 3/17/2020 ADD. 1

ESD 4J NORTH EUGENE HIGH SCHOOL IMPROVEMENTS

200 SILVER LN, EUGENE, OR 97404
RENOVATIONS

JOB NO: 19188
ISSUE DATE: 3 MAR 2020

PANEL SCHEDULES

NEHS E8.01