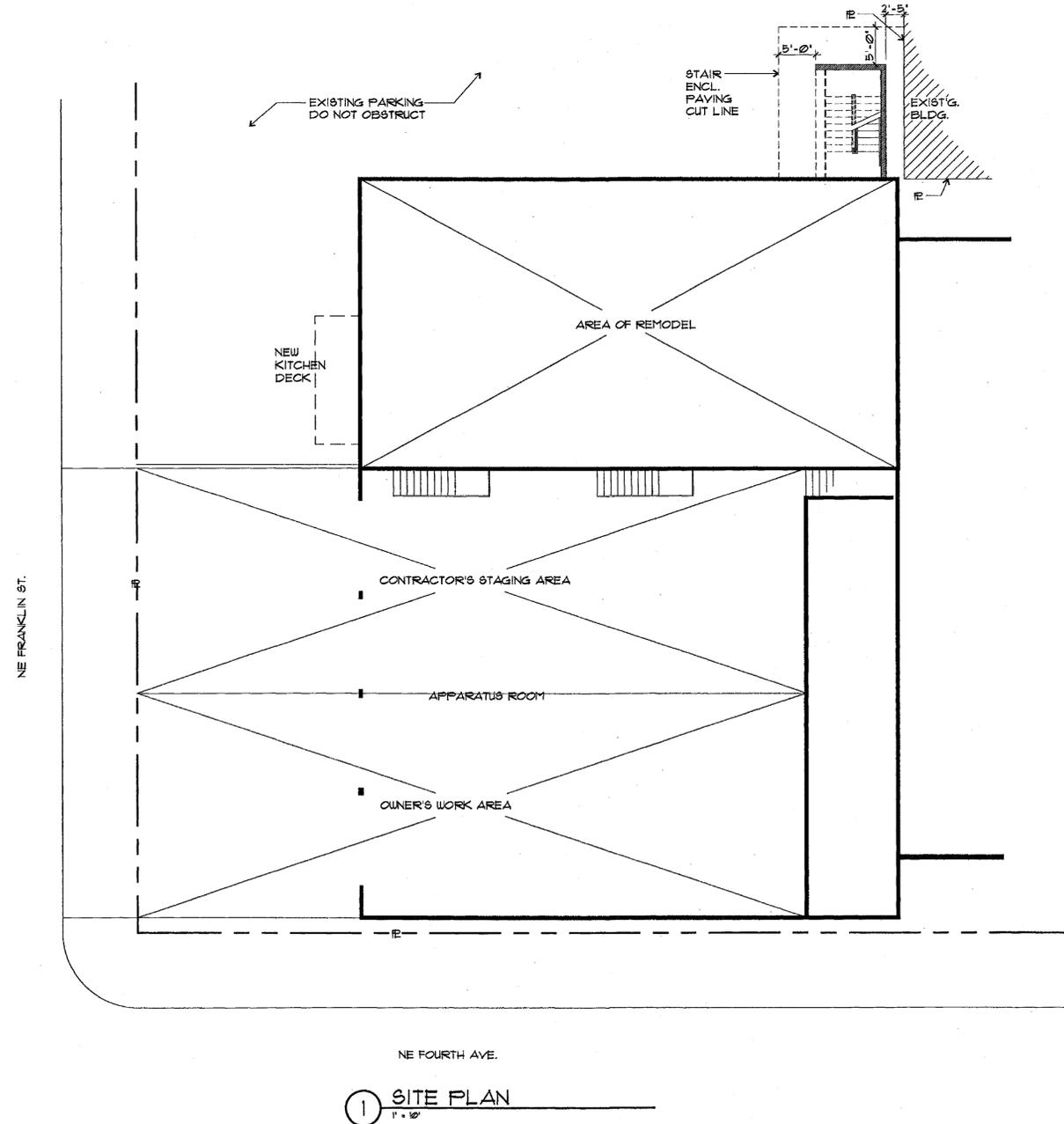


CITY OF CAMAS 2008 FIRE STATION 41 REMODEL CAMAS, WASHINGTON



DRAWING NO.	DRAWING TITLE
A 0	COVER SHEET, SITE PLAN
A 1	DEMOLITION & NEW FLOOR PLANS
A 2	SCHEDULES, DETAILS
A 3	EXTERIOR ELEVATIONS, DETAILS
A 4	INTERIOR ELEVATIONS
A 5	DEMOLITION & NEW CEILING PLANS
S 1	STAIR ENCLOSURE
S 2	DETAILS
S 3	KITCHEN DECK - ADD ALT. #1
FS 1	FIRE SPRINKLER SYSTEM
P 1	PLUMBING FLOOR PLAN
M 0	DESIGN CRITERIA, SCHEDULES
M 1	HVAC DEMOLITION & NEW FLOOR PLANS
E 1	DEMOLITION PLAN, DIAGRAMS
E 2	SCHEDULES
E 3	LIGHTING FLOOR PLAN
E 4	POWER & SIGNAL FLOOR PLAN

OWNER:
CITY OF CAMAS
CAMAS, WASHINGTON

ARCHITECT:
IVARS LAZDINS ARCHITECTURE AND PLANNERS
3004 SW Bennington Dr.
Portland, OR 97205
Tel. (503) 291-8238 Fax (503) 291-5280

STRUCTURAL ENGINEER:
CASCADE ENGINEERING, INC.
2459 SE T.V. Hwy, PMB #202
Hillsboro, OR 97123
Tel. (503) 846-1131 Fax (503) 846-1190

MECHANICAL ENGINEERS
ATP ENGINEERING, INC.
14310 SW Rupert Dr.
Milwaukie, OR 97267
Tel. (503) 794-0434 Fax (503) 794-0435

ELECTRICAL ENGINEER:
ATHAY & ASSOCIATES, INC.
9013 NE Highway 99, Ste. R
Vancouver, WA 98665
Tel. 360-574-0199 Fax (360) 574-0209
Tel. (503) 285-2456

ABBREVIATIONS

AL.	ALUMINUM	NOM.	NOMINAL
ADJ.	ADJUSTABLE	N.T.S.	NOT TO SCALE
AFF.	ABOVE FINISHED FLOOR	O.C.	ON CENTER
A.P.	ACOUSTIC PANEL	O.H.	OVERHEAD
ALT.	ALTERNATE	OPP.	OPPOSITE
BM.	BEAM	P. LAM.	PLASTIC LAMINATE
B.O.	BY OWNER / BOTTOM OF	PLYWD.	PLYWOOD
CB.	CATCH BASIN	FR.	PAIR
C.C.	CENTER TO CENTER	FRUND.	PARTICLE BOARD UNDERLAYMENT
C.J.	CONSTRUCTION JOINT	P.T.	PRESSURE TREATED
COL.	COLUMN	P.T.D.	PAFER TOWEL DISPENSER
CLR.	CLEAR	PLUND.	PLYWOOD UNDERLAYMENT
CPT.	CARPET	R.	RISER
CMU.	CONCRETE MASONRY UNIT	R.D.	ROOF DRAIN
CONC.	CONCRETE	REINF.	REINFORCING
CONC. BD.	CONCRETE BOARD	REQ'D.	REQUIRED
CONT.	CONTINUOUS	RS.	ROUGH SAUN
CONST.	CONSTRUCTION	RUB.	RUBBER
d.	DIAMETER	S.E.	SATIN ENAMEL
DISP.	DISPENSER	S.G.E.	SEMI-GLOSS ENAMEL
EA.	EACH	SH.	SHelf
ELEV.	ELEVATION	SIM.	SIMILAR
EP.	ELECTRIC PANEL	STD.	STANDARD
EQ.	EQUAL	STL.	STEEL
EX.	EXISTING	STRCT.	STRUCTURAL
EXIST'G.	EXISTING	T.	TREAD
FD.	FLOOR DRAIN	TEMP.	TEMPERED
F.E.C.	FIRE EXTINGUISHER CABINET	T.O.	TOP OF
F.O.	FACE OF	T.P.	TOILET PAPER
F.O.S.	FACE OF STUD	TYP.	TYPICAL
F.O.S.H.	FACE OF SHEATHING	U.ON.	UNLESS OTHERWISE NOTED
FIN.	FINISH	V.C.T.	VINYL COMPOSITION TILE
FL.	FLOOR	VEN.	VENEER
GA.	GAUGE	V. FL.	VENEER PLASTER
GALV.	GALVANIZED	V.FY.	VERIFY
G.B.	GYPSUM BOARD	V.G.	VERTICAL GRAIN
GL.	GLUE LAMINATED	VIN.	SHEET VINYL
GL.	GLASS	WD.	WOOD
HC.	HOLLOW CORE	WRGB	WATER RESISTANT GYPSUM BOARD
H.D.F.	HIGH DENSITY FINISH	W.	WITH
H.M.	HOLLOW METAL	•	AT
HT.	HEIGHT	•	FOUND / NUMBER
INSUL.	INSULATION		
INT.	INTEGRAL		
MAT'L.	MATERIAL		
MAX.	MAXIMUM		
MFR.	MANUFACTURER		
MIN.	MINIMUM		
MTD.	MOUNTED		
N.I.C.	NOT IN CONTRACT		

Special Inspection Required
As per Chapter 17 IBC

All existing openings/penetrations @ walls, & areas above ceiling between truck bays, & B occupancy to be sealed all with approved construction

Ivars Lazdins
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 503.297.8238
 FAX 297.5280
 3004 SW BENNINGTON DR. PORTLAND, OR 97205

CITY OF CAMAS
 2008 FIRE STATION 41 REMODEL
 CAMAS, WASHINGTON

REVISIONS

NO.	DATE	DESCRIPTION
1	4-14-09	
2		
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DATE 4-14-09
JOB NO. P-824
DRAWN DH
APPR'D. IL

COVER SHEET & SITE PLAN

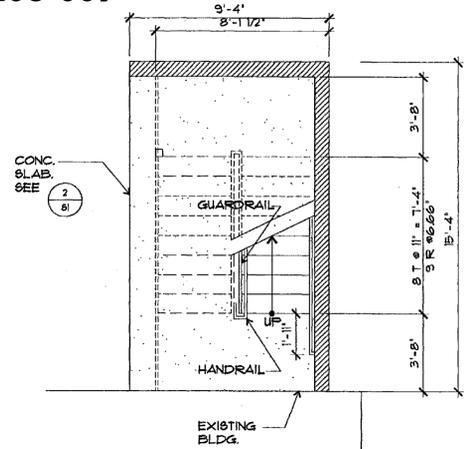


2900 REGISTERED ARCHITECT
IVARS LAZDINS
STATE OF WASHINGTON

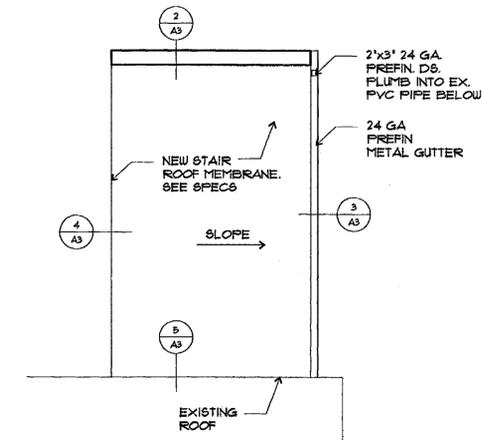
JOB SITE COPY

REVIEWED FOR CODE COMPLIANCE
Plan approval shall not prevent the building Official from requiring correction of work. Stopping construction that is in violation of City of Camas code or ordinance. City of Camas Building Dept. Rev. _____ Date 6/20/09

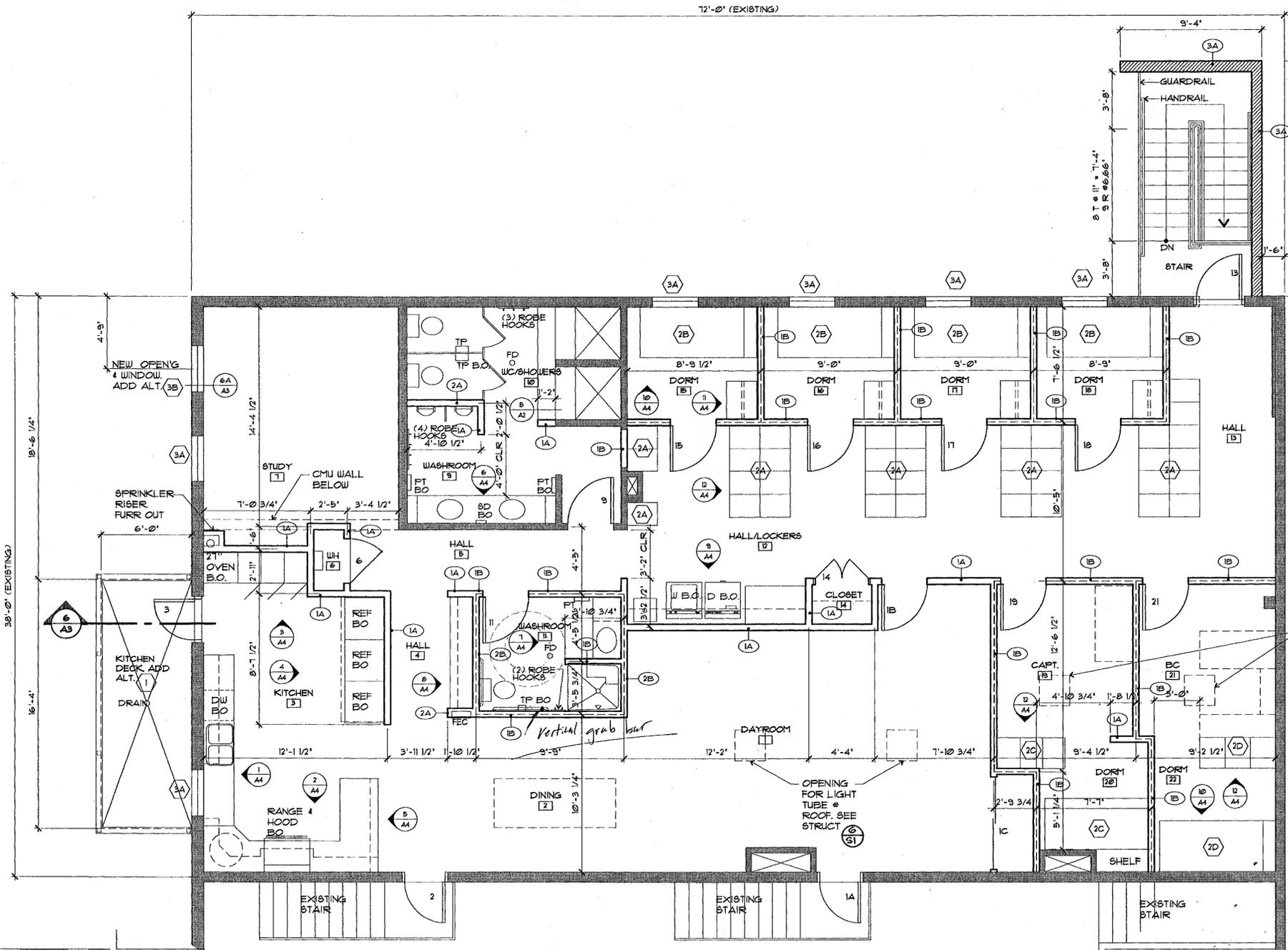
A0



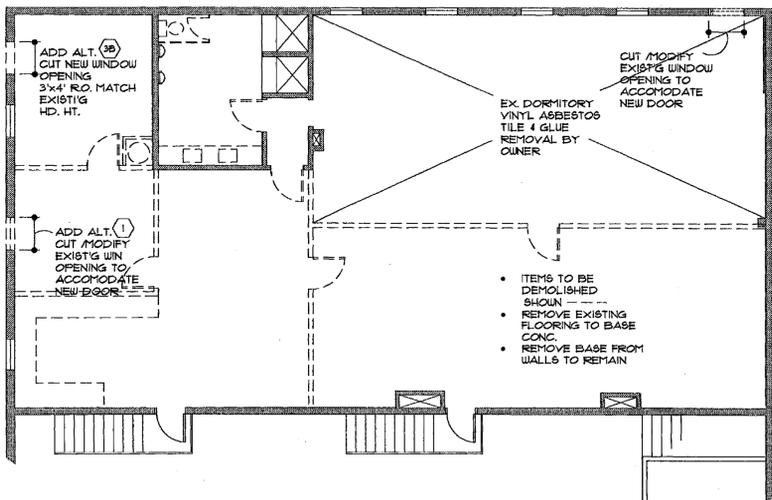
3 STAIR GROUND FLOOR PLAN
1/4" = 1'-0"



4 STAIR ROOF PLAN
1/4" = 1'-0"



2 FLOOR PLAN
1/4" = 1'-0"



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

BID ALTERNATES

- 1. ALTERNATE NO. 1 KITCHEN DECK
ADD FOR DECK CONSTRUCTION, RAILING ENCLOSURE, WINDOW MODIFICATION TO DOOR OPENING, DOOR, FLOOR DRAIN, NATURAL GAS LINE FOR BBQ AND WALL LIGHTS
- 2. ALTERNATE NO. 2 CABINET WORK
2A: ADD FOR 31 LOCKERS IN HALL/LOCKERS 12 AND HALL 13
2B: ADD FOR (4) BED PLATFORMS/HEADBOARDS IN DORM 15, 16, 17 & 18
2C: ADD FOR LOCKERS, BED PLATFORM/HEADBOARD IN CAPTAIN 19 AND DORM 20
2D: ADD FOR LOCKERS, BED PLATFORM/HEADBOARD IN BC 21 AND DORM 22
- 3. ALTERNATE NO. 3 WINDOWS
3A: ADD FOR REPLACEMENT OF EXISTING WINDOWS
3B: ADD FOR OPENING CUTTING AND WINDOW IN EAST WALL OF STUDY 1
- 4. ALTERNATE NO. 4 FIRE SPRINKLERS
ADD FOR SPRINKLERING APPARATUS ROOM AND ONE AUXILIARY SPACE

WALL SYMBOLS

- EXISTING WALL
- NEW INTERIOR PARTITION. SEE WALL TYPES SCHEDULE FOR MATERIALS AND THICKNESS
- NEW INTERIOR PARTITION WITH ACOUSTIC INSULATION. RUN INSULATION AND GYP. BD. TO BOTTOM OF EXISTING ROOF DECK
- NEW 8" CMU WALL

SCHEDULE OF WALL TYPES FOR TYPICAL WALL BRACING DETAIL, SEE (6) (42)

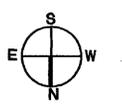
- 1A: 1-LAYER 5/8" GYPSUM BOARD EACH SIDE ON 2 x 4 STUDS AT 16" OC, TOTAL WALL THICKNESS = 4 1/4"
- 1B: 1-LAYER 5/8" GYPSUM BOARD EACH SIDE ON 2 x 4 STUDS AT 16" OC, WITH ACOUSTIC BATT INSULATION, TOTAL WALL THICKNESS = 4 1/4"
- 2A: 1-LAYER 5/8" GYPSUM BOARD EACH SIDE ON 2 x 6 STUDS AT 16" OC, TOTAL WALL THICKNESS = 6 1/4"
- 2B: 1-LAYER 5/8" GYPSUM BOARD EACH SIDE ON 2 x 6 STUDS AT 16" OC, WITH ACOUSTIC BATT INSULATION, TOTAL WALL THICKNESS = 6 1/4"
- 3A: 8" CMU

3 Showers
3 Toilets
3 Urinals
3 L.O.S
1 Sink
1 Dishwasher
1 Washer
1 Laundry table

REVISIONS	
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DATE 4-14-08
JOB NO. P-824
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APPR'D. IL

DEMOLITION & FLOOR PLANS

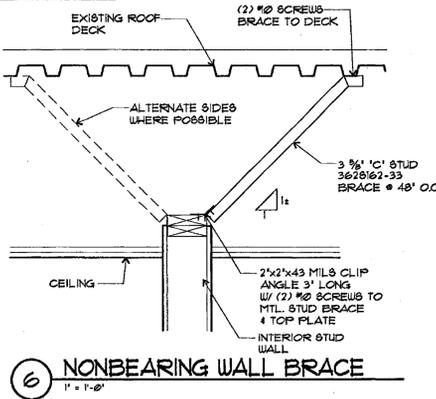
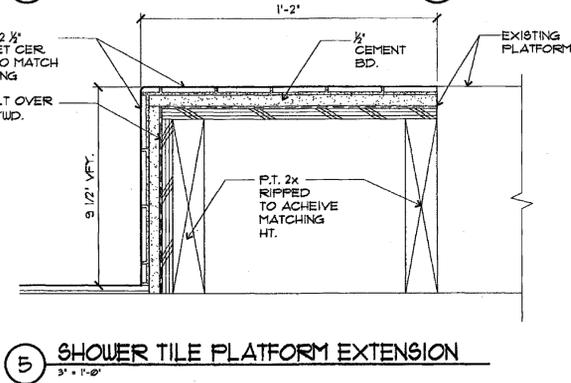
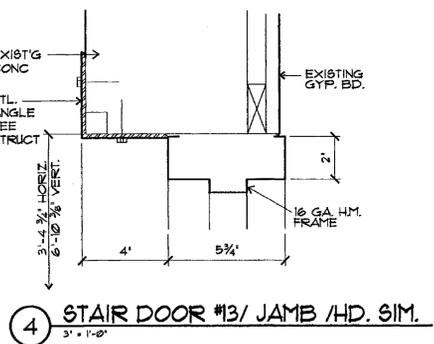
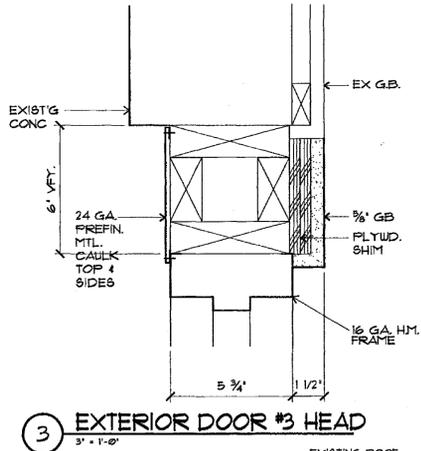
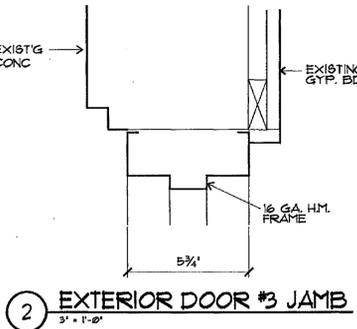
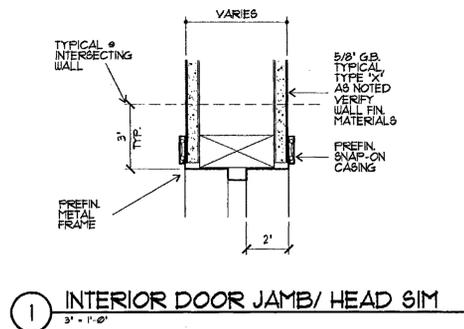
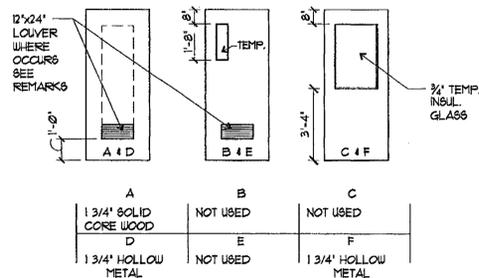


DOOR SCHEDULE

No.	SIZE	TYPE	HEAD	JAMB	DOOR	GLASS	REMARKS
1A	EXIST. 2'-8" x 6'-8"	D	EX	EX	EX	Ø1	①
1B	3'-0" x 6'-8"	A	1/2 SIM	1/2	----	Ø3	
1C	FR 3'-0" x 6'-8" x 1 3/8"	A	BI PASS		----	Ø	
2	2'-8" x 6'-8"	D	EX	EX	EX	Ø1	①
3	2'-8" x 1'-0"	F	3/2	2/2	YES	Ø2	
6	3'-0" x 6'-8"	A	1/2 SIM	1/2	----	Ø3	12"x24" LOUVER TOP & BOTTOM
9	3'-0" x 6'-8"	A	1/2 SIM	1/2	----	Ø4	
11	3'-0" x 6'-8"	A	1/2 SIM	1/2	----	Ø5	
13	3'-0" x 6'-8"	F	4/2	4/2	YES	Ø6	
14	FR 1'-3" x 6'-8" x 1 3/8"	A	1/2 SIM	1/2	----	Ø7	
15	3'-0" x 6'-8"	A	1/2 SIM	1/2	----	Ø8	
16	3'-0" x 6'-8"	A	1/2 SIM	1/2	----	Ø8	
17	3'-0" x 6'-8"	A	1/2 SIM	1/2	----	Ø8	
18	3'-0" x 6'-8"	A	1/2 SIM	1/2	----	Ø8	
19	3'-0" x 6'-8"	A	1/2 SIM	1/2	----	Ø9	
21	3'-0" x 6'-8"	A	1/2 SIM	1/2	----	Ø3	

DOOR SCHEDULE NOTES

① REFINISH EXISTING DOOR & FRAME. SEE HARDWARE SCHEDULE FOR NEW HARDWARE.



ROOM FINISH SCHEDULE

No.	ROOM NAME	FLOOR		BASE	NORTH WALL		EAST WALL		SOUTH WALL		WEST WALL		CEILING		HT. (2)	REMARKS
		MATL	FIN		MATL	FINISH	MATL	FINISH	MATL	FINISH	MATL	FINISH	MATL	FINISH		
1	DAYROOM	EX CONC	VIN	RUB	EX CMU	SGE	GB	SE	GB	SE	GB	SE	AP	---	11'-6"	
2	DINING	EX CONC	VIN	RUB	EX CMU	SGE	---	---	GB	SE	---	---	AP	---	11'-6"	
3	KITCHEN	EX CONC	VIN	RUB	EX CMU	SGE	GB	SE	GB	SE	GB	SE	AP	---	11'-6"	
4	HALL	EX CONC	VIN	RUB	GB	SE	GB	SE	GB	SE	GB	SE	AP	---	11'-6"	
5	HALL	EX CONC	VIN	RUB	GB	SE	GB	SE	GB	SE	GB	SE	AP	---	11'-6"	
6	WATER HTR	EX CONC	VIN	RUB	GB	SE	GB	SE	GB	SE	GB	SE	AP	---	11'-6"	
7	STUDY	EX CONC	VIN	RUB	GB	SE	EX GB	SE	EX GB	SE	EX GB	SE	AP	---	11'-6"	
8	NOT USED															
9	WASHROOM	EX CONC	VIN	8\"/>												
10	WC/SHOWERS	EX CONC	VIN	8\"/>												
11	WASHROOM	EX CONC	VIN	8\"/>												
12	HALL/LOCKERS	EX CONC	VIN	RUB	GB	SE	EX GB	SE	GB	SE	---	---	AP	---	11'-6"	
13	HALL	EX CONC	VIN	RUB	GB	SE	---	---	EX GB	SE	EX GB	SE	AP	---	11'-6"	
14	CLOSET	EX CONC	VIN	RUB	GB	SE	GB	SE	GB	SE	GB	SE	AP	---	11'-6"	
15	DORM	EX CONC	VIN	RUB *	GB	SE	EX GB	SE	EX GB	SE	GB	SE	AP	---	11'-6"	#2 1/2\"/>
16	DORM	EX CONC	VIN	RUB *	GB	SE	GB	SE	EX GB	SE	GB	SE	AP	---	11'-6"	#2 1/2\"/>
17	DORM	EX CONC	VIN	RUB *	GB	SE	GB	SE	EX GB	SE	GB	SE	AP	---	11'-6"	#2 1/2\"/>
18	DORM	EX CONC	VIN	RUB *	GB	SE	GB	SE	EX GB	SE	GB	SE	AP	---	11'-6"	#2 1/2\"/>
19	CAPT.	EX CONC	VIN	RUB	GB	SE	GB	SE	GB	SE	GB	SE	AP	---	11'-6"	
20	DORM	EX CONC	VIN	RUB *	EX GB EX CMU	SE	GB	SE	GB	SE	GB	SE	AP	---	11'-6"	#2 1/2\"/>
21	BC	EX CONC	VIN	RUB	---	---	GB	SE	GB	SE	EX GB	SE	AP	---	11'-6"	
22	DORM	EX CONC	VIN	RUB *	EX CMU	SE	GB	SE	---	---	GB	SE	AP	---	11'-6"	#2 1/2\"/>

ROOM FINISH SCHEDULE NOTES

① AT EXISTING WALL AND CEILING MATERIALS TO REMAIN, PATCH TO ADJACENT WHERE DISTURBED

② CEILING HEIGHT GOVERNED BY BOTTOM CHORDS OF ROOF BAR JOISTS. INSTALL T-BAR AS HIGH AS POSSIBLE TO ACCOMMODATE PANELS.

Ivars Lazdins
ARCHITECTURE & PLANNING
503.297.8238
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3004 SW BENNINGTON DR. PORTLAND, OR 97205

CITY OF CAMAS
FIRE STATION 41 REMODEL
CAMAS, WASHINGTON

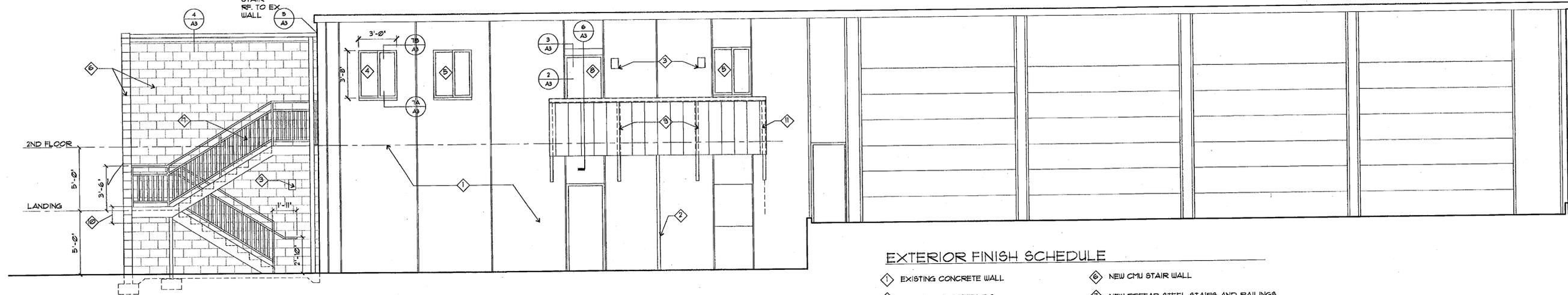
REVISIONS
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DATE 4-14-09
JOB NO. P-824
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APPRD. IL

SCHEDULES AND DETAILS



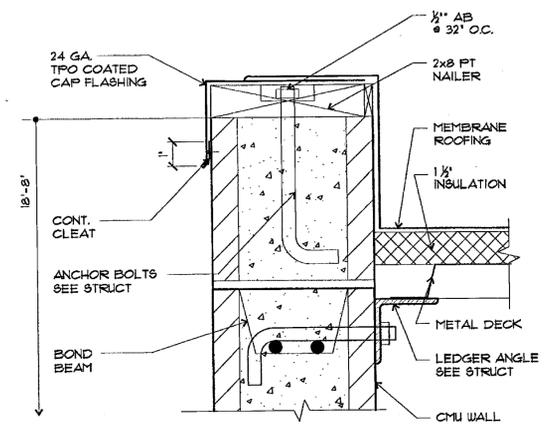
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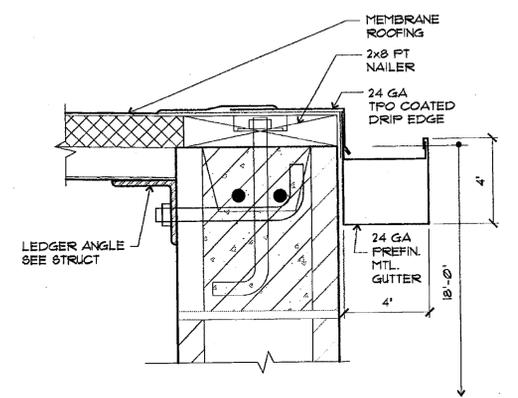
1 EAST ELEVATION
1/4" = 1'-0"

EXTERIOR FINISH SCHEDULE

- 1 EXISTING CONCRETE WALL
- 2 2"x3' 26 GA. PREFIN. D.S. ADD ALT. #
- 3 NEW LIGHT FIXTURE. SEE ELEC. DUGS. ADD ALT. # AT KITCHEN DECK
- 4 NEW ALUM. FRAME SLIDER WINDOW CUT NEW OPENING ADD ALT. #25
- 5 EXISTING WINDOW REPLACE UNDER ADD ALT. #3A, INCLUDING 4 WINDOWS ON SOUTH WALL
- 6 NEW CMU STAIR WALL
- 7 NEW PREFAB STEEL STAIRS AND RAILINGS
- 8 NEW H-1 DOOR & FRAME CUT TO EXPAND EXIST'G WINDOW OPENING ADD ALT. #
- 9 NEW STEEL FRAMED DECK & RAILING ADD ALT. #
- 10 SOLID GROUTED CMU CELLS. COORDINATE FOR EMBEDS WITH STAIR FABRICATOR
- 11 H88 3x3x3/16 RAILING SUPPORT FRAME ADD ALT. #

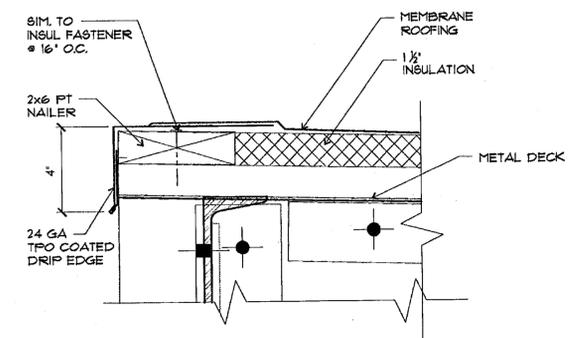


2 STAIR REF. - SOUTH EDGE
3' = 1'-0"

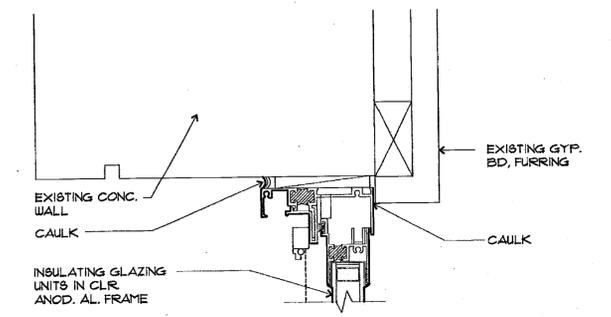


3 STAIR REF. - WEST EDGE
3' = 1'-0"

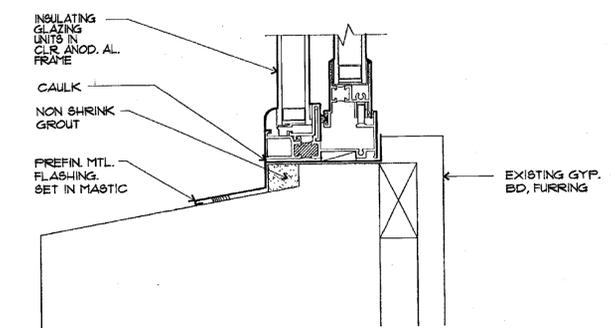
NOTE: ALL METAL WITH ADHERED ROOFING MEMBRANE TO BE TPO COATED



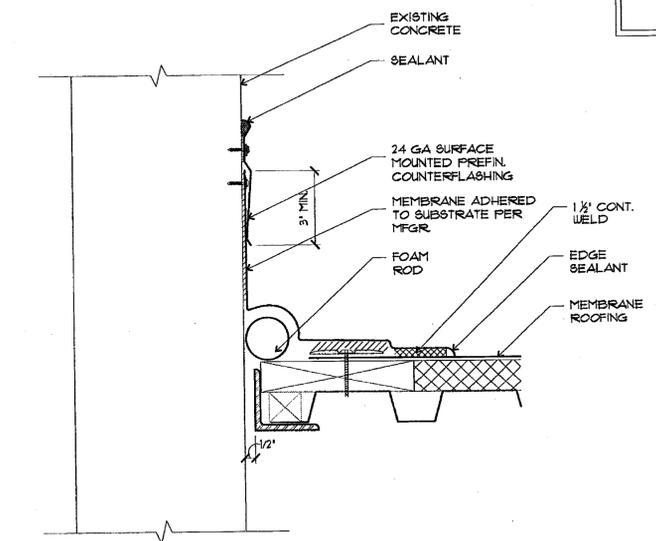
4 STAIR REF. - EAST EDGE
3' = 1'-0"



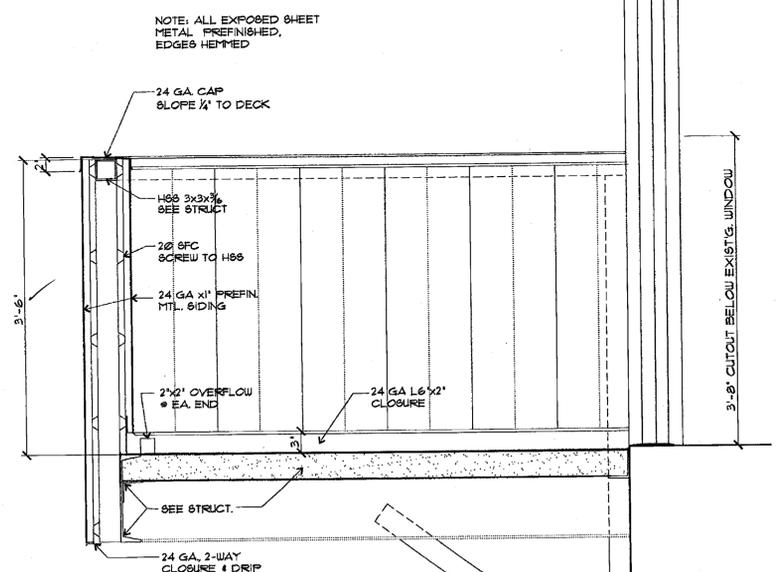
B HEAD



A SILL



5 STAIR REF. - NORTH EDGE
3' = 1'-0"



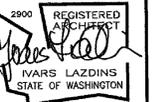
6 KITCHEN DECK SECTION
1\"/>

7 WINDOW DETAIL
6' = 1'-0"

REVISIONS	
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DATE 4-14-09
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EXTERIOR ELEVATIONS, DETAILS



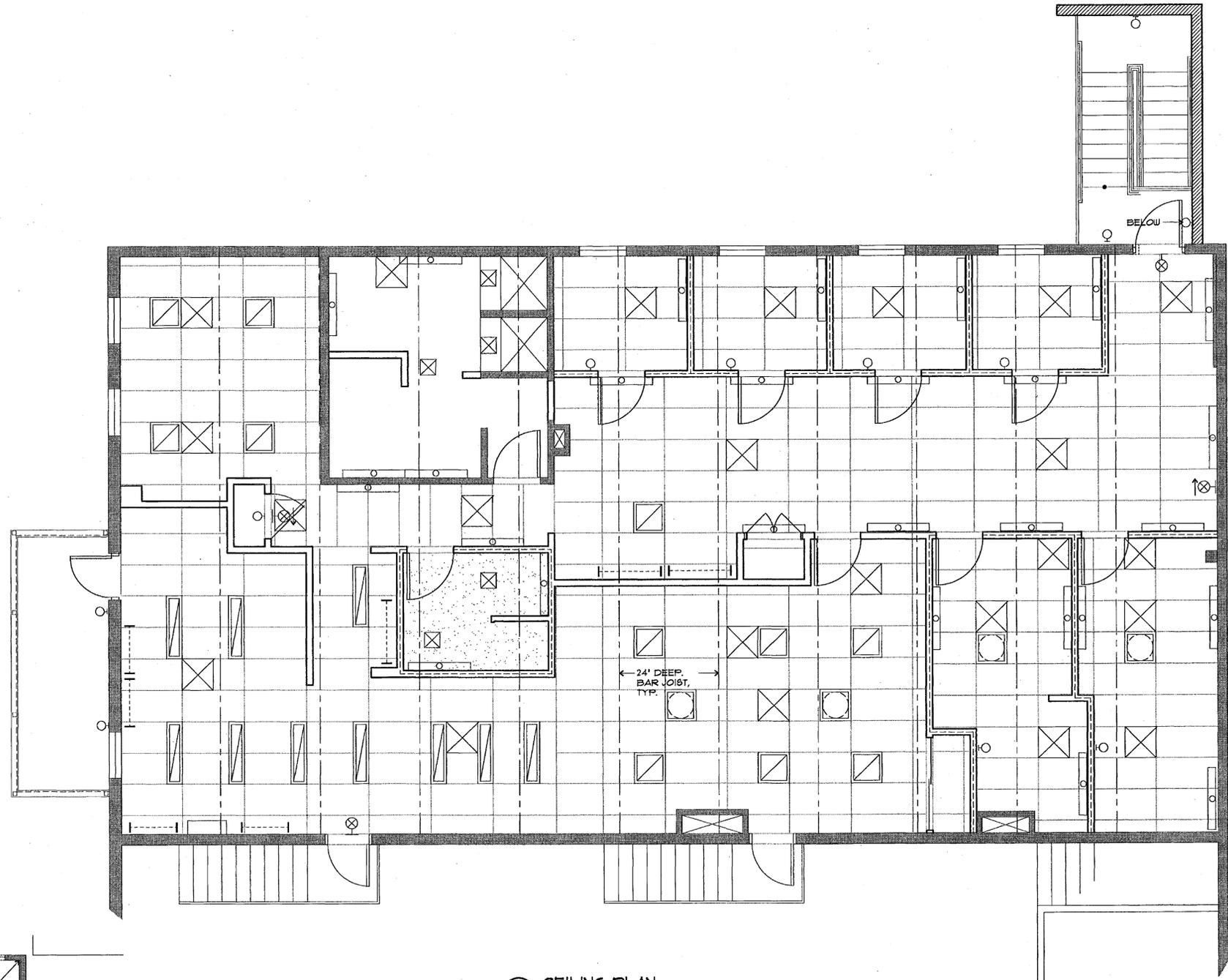
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DEMOLITION & CEILING PLANS



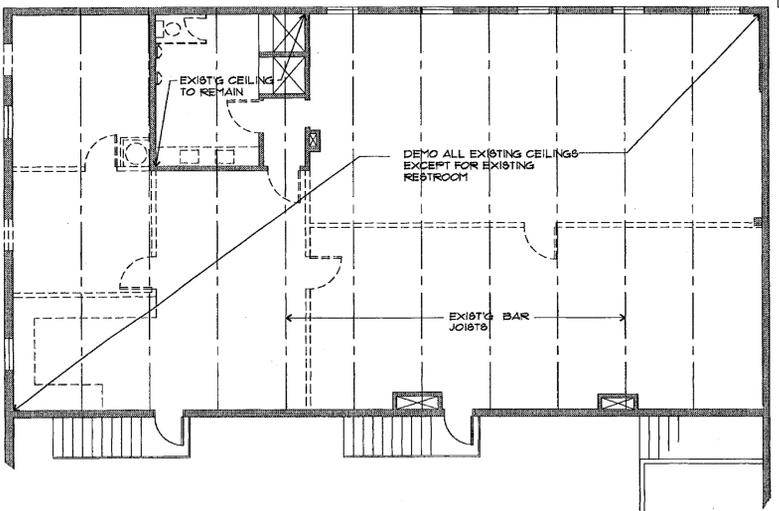
A5



2 CEILING PLAN
 1/4" = 1'-0"

LEGEND

- 2x2 RECESSED FLOURESCENT
- 1x4 RECESSED FLOURESCENT
- SURFACE MOUNTED FLOURESCENT
- WALL MOUNTED FLOURESCENT
- WALL MOUNTED
- RECESSED LIGHT FIXTURE
- EXIT SIGN
- 5/8" GYP. BD. CLG. SUSPENDED
- HVAC GRILLE SEE MECHANICAL DRAWINGS
- 2x4' ACOUSTIC PANEL (AP) T-BAR CLG.
2x4' SEE NOTE 3
- UNDER CABINET LIGHT STRIP
- LIGHT TUBE



1 DEMOLITION CEILING PLAN
 1/8" = 1'-0"

ELECTRICAL SYMBOLS

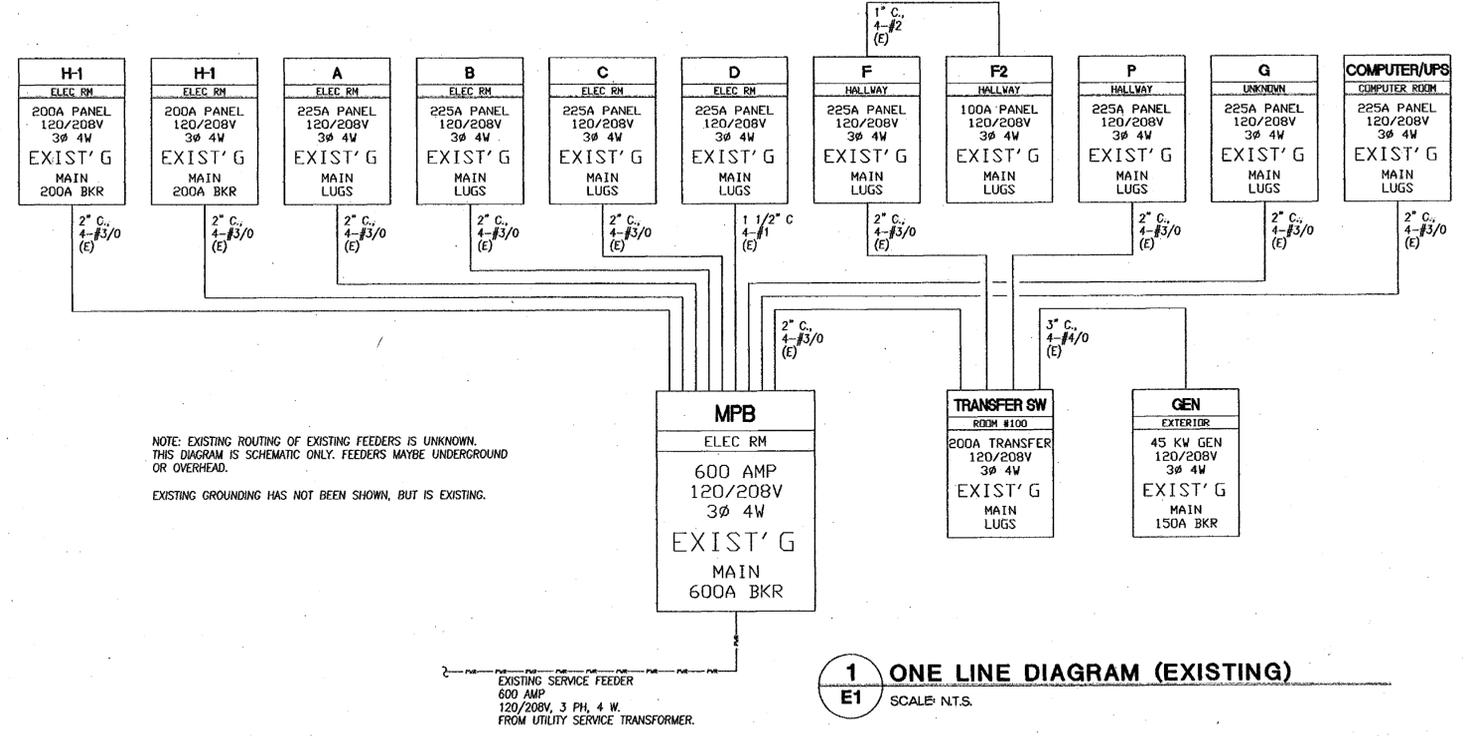
SOME SYMBOLS MAY NOT APPEAR ON DRAWINGS
DASHED SYMBOLS INDICATE EXISTING DEVICE

---	BRANCH CIRCUIT IN WALL OR CEILING
---	BRANCH CIRCUIT EXPOSED
---	BRANCH CIRCUIT IN FLOOR OR EARTH
---	BRANCH CIRCUIT EXISTING
---	UNDERGROUND PRIMARY
---	POWER LINE
---	EMERGENCY CIRCUIT
---	TELEPHONE LINE
---	WIRED/D
---	DATA LINE
---	DARKER LINES INDICATE NEW
---	LIGHTER LINES INDICATE EXISTING

---	HASH MARKS = # OF WIRES (NO HASH MARKS = 2 WIRES + 1 GRND)
---	HASH MARKS = # OF WIRES W/ HARD WIRED GROUND
---	LIGHTING FIXTURE-FLUORESCENT-RECESSED MOUNT
---	LIGHTING FIXTURE-FLUORESCENT-SURFACE MOUNT
---	LIGHTING FIXTURE-FLUORESCENT-W/ EMERGENCY BATTERY INVERTER
---	LIGHTING FIXTURE-FLUORESCENT-ON EMERGENCY CIRCUIT
---	LIGHTING FIXTURE-EXISTING SHOWN DOTTED (TYPICAL TO REMOVE)
---	LIGHTING FIXTURE-EXISTING SHOWN LIGHT LINED (TYPICAL TO REMAIN)
---	LIGHTING FIXTURE-WALL MOUNT
---	LIGHTING FIXTURE-RECESSED
---	LIGHT/FAN FIXTURE-RECESSED
---	LIGHTING FIXTURE-CEILING MOUNT
---	LIGHTING FIXTURE-CEILING MOUNT
---	LIGHTING FIXTURE-WALL SCOFF
---	LIGHTING FIXTURE-BRACKET MOUNT
---	LIGHTING FIXTURE-EMERGENCY BATTERY PACK
---	POLE MOUNTED LIGHTING FIXTURE AS TYPED REFER TO POLE BASE DETAIL 'PB'
---	LIGHTING FIXTURE- BALLARD
---	LIGHTING FIXTURE-EXIT LIGHT
---	OCCUPANCY SENSOR
---	OCCUPANCY SENSOR RELAY
---	DUPLX CONVENIENCE OUTLET (DCO)
---	SAFETY TYPE DCO
---	DCO 120V W/ GROUND FAULT PROTECTION
---	DCO 120V W/ ARC FAULT PROTECTION
---	QUADPLEX CONVENIENCE OUTLET
---	DEDICATED DCO (HARD WIRE GROUND)
---	DEDICATED DCO (SPECIFIC EQUIPMENT)
---	OUTLET 208V - AS NOTED
---	JUNCTION BOX
---	FLOOR MOUNTED OUTLET - AS NOTED
---	CONNECTION TO EQUIPMENT
---	MOTOR DRIVEN DEVICE
---	• = DEVICE OVER COUNTER
---	LIGHTING SWITCH - SINGLE POLE
---	LIGHTING SWITCH - SECTION AS NOTED
---	LIGHTING SWITCH - THREE WAY
---	LIGHTING SWITCH - FOUR WAY
---	LIGHTING SWITCH - DIMMER
---	LIGHTING SWITCH - KEYED
---	LIGHTING SWITCH - PILOT LIGHTED
---	LIGHTING SWITCH - MOMENTARY CONTACT
---	MR SWITCH - MOTOR RATED
---	OC SWITCH - WITH OCCUPANCY SENSOR
---	1" CONDUIT FROM DEVICE BOX TO ACCESSIBLE CEILING SPACE OR AS NOTED.

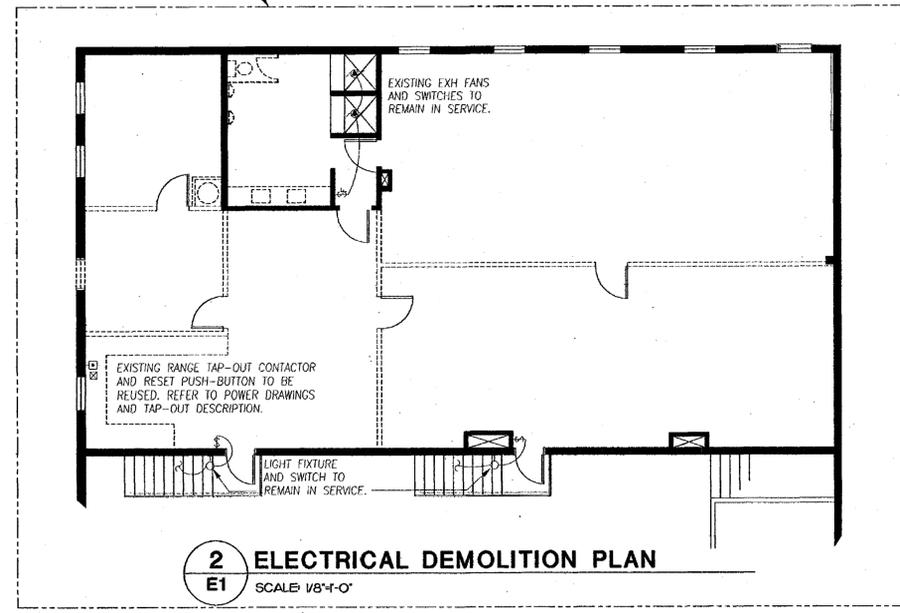
?	ELECTRICAL PANEL W/NAME (TYPICAL TO NEW)
?	ELECTRICAL PANEL EXISTING W/NAME (TYPICAL TO REMOVE)
?	ELECTRICAL PANEL EXISTING W/NAME (TYPICAL TO REMAIN)
?	FIRE ALARM SIGNAL LIGHT AND HORN (MINI HORN STROBE LOWER db)
?	FIRE ALARM SIGNAL LIGHT AND HORN ('pezzio' sound)
?	FIRE ALARM PULL STATION
?	FIRE ALARM HORN
?	FIRE ALARM SIGNAL LIGHT
?	FIRE ALARM SIGNAL LIGHT AND HORN
?	FIRE ALARM SMOKE DETECTOR
?	FIRE ALARM DUCT DETECTOR
?	FIRE ALARM HEAT DETECTOR
?	FIRE ALARM DETECTOR W/ A = AUX. CONTACTS
?	FIRE ALARM MAGNETIC DOOR HOLDER
?	FIRE ALARM EQUIPMENT CONNECTION
?	FIRE SMOKE DAMPER
?	FIRE ALARM DETECTOR CARBON MONOXIDE
?	FIRE ALARM DETECTOR W/ AB = ALARM BASE
?	KEY PAD OUTLET
?	COMMUNICATIONS OUTLET
?	VOLUME CONTROL OUTLET
?	CLOCK
?	CLOCK-SPEAKER COMBINATION
?	CLASS BELL
?	SPEAKER
?	PUSH BUTTON / CALL BACK SWITCH/WITH SPEAKER
?	PUSH BUTTON / CALL BACK SWITCH
?	PUSH BUTTON / START-STOP
?	DATA OUTLET
?	TELEPHONE/DATA OUTLET
?	PRINTER OUTLET
?	TELEVISION OUTLET
?	VIDEO JACK OUTLET
?	AUDIO JACK OUTLET
?	TELEPHONE OUTLET
?	INTERCOM OUTLET
?	DISCONNECT W/FUSES
?	DISCONNECT
?	PHOTO ELECTRIC CELL
?	TIME CLOCK
?	NIGHT LIGHT
?	WEATHER PROOF
?	WIRE GUARD
?	E. C. ELECTRICAL CONTRACTOR
?	BKR CIRCUIT BREAKER
?	PEC PHOTO ELECTRIC CELL
?	NEC NATIONAL ELECTRICAL CODE
?	W/ WITH
?	DCO DUPLEX CONVENIENCE OUTLET
?	CKT CIRCUIT
?	AFF ABOVE FINISH FLOOR
?	BFG BELOW FINISHED GRADE
?	st CIRCUIT BREAKER ENCLOSURE st = SHUNT TRIP
?	K INSTALLED IN THE KICK AREA
?	A FIXTURE TYPE - LETTER UNDERLINED
?	# NUMBERED HEX SYMBOLS: REFER TO MECHANICAL EQUIPMENT CONNECTION SCHEDULE
?	A LETTERED HEX SYMBOLS: REFER TO SHEET NOTES
?	OTHER SYMBOL SHAPES: REFER TO OTHER EQUIPMENT CONNECTION SCHEDULES AS NEEDED.

NOTE:
DOTTED SYMBOLS REFER TO DEVICES TO BE
REMOVED. DASHED OR DOTTED CONDUIT LINES
ON DEMO SHEETS ARE TO BE VERIFIED BEFORE
REMOVAL. THESE ARE USUALLY INDICATIONS OF
SURFACE OR UNDERGROUND RAN CONDUIT.



ELECTRICAL DEMOLITION NOTES.

- THIS IS A REMODEL OF AN EXISTING SPACE. THE EXACT DETAILS OF THE EXISTING ELECTRICAL SYSTEMS ARE NOT KNOWN. VISIT THE SITE AND DETERMINE EXISTING CONDITIONS AS BEST POSSIBLE (DEMOLITION OF EXISTING SITE IS NOT REQUIRED FOR THIS DETERMINATION).
- DISCONNECT AND REMOVE ALL ELECTRICAL EQUIPMENT WITHIN THE MARKED AREA, EXCEPT AS NOTED BELOW.
- EXISTING TAP-OUT EQUIPMENT (AT RANGE, CONTACTOR, PUSH-BUTTON AND ASSOCIATED EQUIPMENT) SHALL BE REMOVED AND CAREFULLY STORED FOR REUSE. INSTALL TO CONTROL NEW OVEN AS INDICATED ON DRAWINGS. PUSHBUTTON SHALL CONTROL BOTH OVEN CONTACTORS AND GAS SHUT-OFF SOLINOID). VERIFY AND COORDINATE AS NECESSARY.
- HOME-RUN CONDUITS (EXISTING) MAY BE REUSED AS AVAILABILITY PERMITS. VERIFY ON SITE PRIOR TO BID. THIS STATEMENT IS NOT TO BE INTERPRETED AS STATING THAT ANY PARTICULAR CONDUIT IS AVAILABLE OR APPROPRIATE TO USE. THE CONTRACTOR SHALL DETERMINE THE USABILITY OF THE EXISTING CONDUIT. EXISTING CONDUIT MAY BE USED IN PLACE. IT MAY NOT BE REMOVED AND REINSTALLED.
- CONCEALED CONDUIT AND BOXES (EXISTING) NOT BEING REUSED MAY BE LEFT CONCEALED (EXISTING WALLS DO NOT NEED TO BE DEMOLISHED TO REMOVE ABANDONED CONDUIT). PROVIDE NEW BLANK COVERS ON EXISTING UNUSED BOXES. PAINT TO MATCH ADJACENT WALLS.
- EXISTING FIRE ALARM DEVICES ARE TO BE REUSED WHERE APPLICABLE WITH NEW DESIGN. MODIFY (ENHANCE) EXISTING FIRE ALARM SYSTEM AS NECESSARY TO SUPPORT NEW FIRE ALARM DEVICES. VERIFY REQUIREMENTS ON SITE.



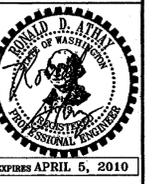
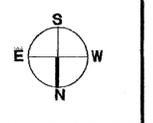
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CITY OF CAMAS
FIRE STATION 41 REMODEL
CAMAS, WASHINGTON

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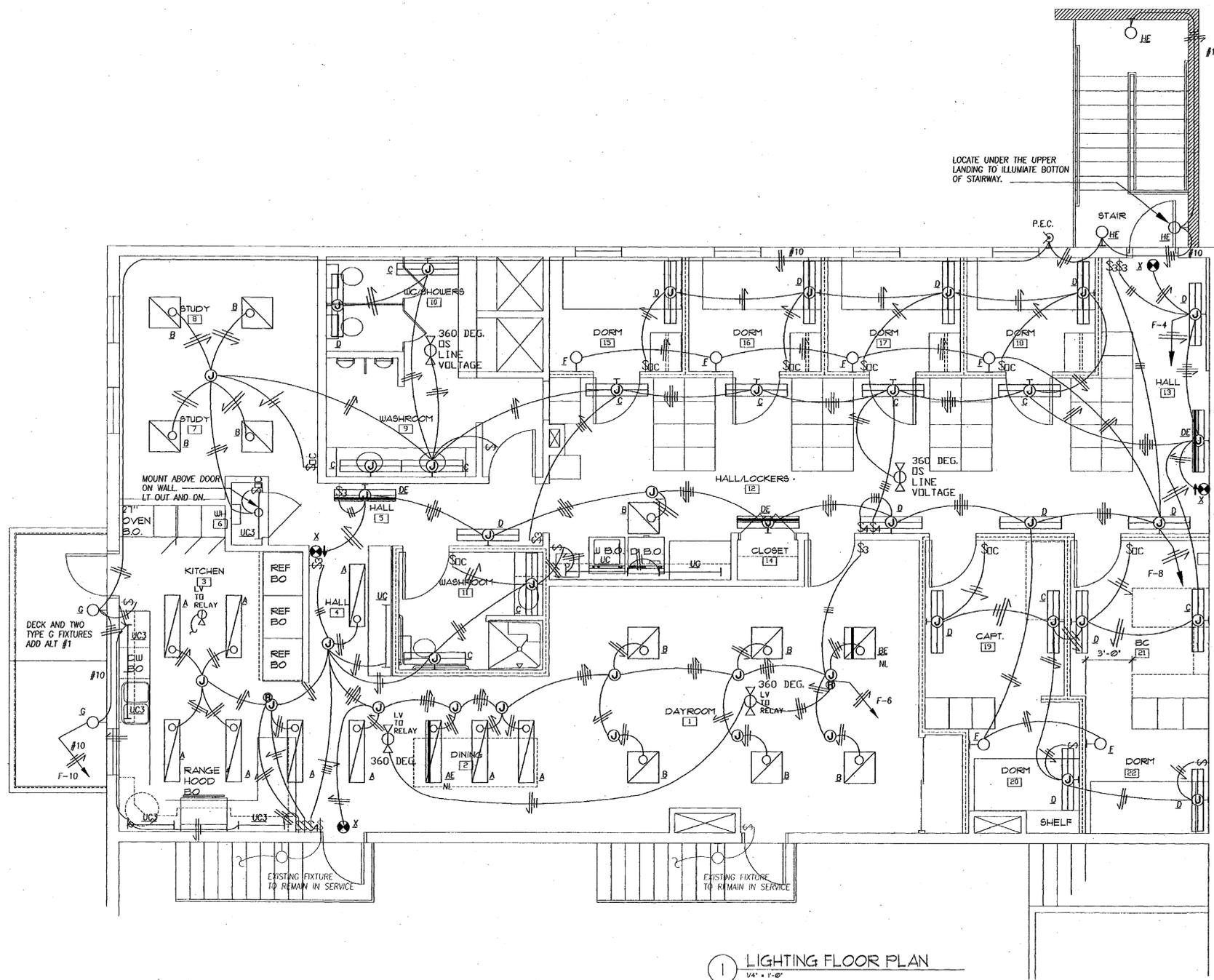
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JOB NO.: P-824
DRAWN: RDA
APPRD.: RDA

DEMOLITION PLAN, DIAGRAMS



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E1



1 LIGHTING FLOOR PLAN
1/4" = 1'-0"

LIGHTING FIXTURE SCHEDULE:

ALTERNATE APPROVED MANUFACTURERS: LIGHTOLIER, HEWILLIAMS, HUBBELL, COLUMBIA, PRESCOLITE, METALUX, DAYBRITE, OR AS APPROVED. ALTERNATE FIXTURES SHALL MATCH SPECIFIED FIXTURES FOR STYLE, SIZE, MOUNTING, COLOR, FINISH, QUALITY, APPEARANCE, LAMPING, BALLASTING, AND FUNCTION.

FIXTURE TYPE	FIXTURE DESCRIPTION
A	2 LAMP, 1' X 4', LAYIN FLUORESCENT FIXTURE WITH 0.125" A12 LENS. LITHONIA #07B 232 A12125 MVOLT GEB10IS
AE	SIMILAR TO TYPE A, EXCEPT WITH A ONE LAMP, 1400 LUMEN, EMERGENCY BATTERY INVERTER BALLAST UNIT.
B	2 LAMP, 2' X 2', LAYIN FLUORESCENT FIXTURE WITH 0.125" A12 LENS, TWO 1 5/8 LEC T8 LAMPS. LITHONIA #207B 2U31 A12125 MVOLT GEB10IS
BE	SIMILAR TO TYPE B, EXCEPT WITH A ONE LAMP, 1400 LUMEN, EMERGENCY BATTERY INVERTER BALLAST UNIT.
C	48" LONG, TWO T8 LAMP, WALL MOUNTED FIXTURE, MOUNTED AT CEILING. DOWN LIGHT ONLY. LITHONIA #WP 232 MVOLT GEB10IS DO.
D	48" LONG, ONE T8 LAMP, WALL MOUNTED FIXTURE, MOUNTED AT CEILING. DOWN LIGHT ONLY. LITHONIA #WP 132 MVOLT GEB10IS DO.
DE	SIMILAR TO TYPE D, EXCEPT WITH A ONE LAMP, 1400 LUMEN, EMERGENCY BATTERY INVERTER BALLAST UNIT.
E	NOT USED.
F	RED TAPE OUT LIGHT, 13 WATT FL FLUORESCENT FIXTURE. NULITE #ADA20-113-ELB-120, LAMP #ATR 13W QUAD-DIM G24Q-1 13W/835/4P/ALTO/RED TOUGH COAT
G	WALL MOUNTED, VANDAL RESISTANT, UL WET LABELED, 42 WATT FLUORESCENT FIXTURE WITH 42 WATT TRT LAMP. LITHONIA #TWL 42TRT MVOLT LPI DWI
HE	WALL MOUNTED, VANDAL RESISTANT, UL WET LABELED, 42 WATT FLUORESCENT FIXTURE WITH 42 WATT TRT LAMP AND EMERGENCY BATTERY BACKUP. LITHONIA #VGR2C 42TRT 120 DWHC ELDW SF LPI
UC	48" LONG, ONE T8 LAMP UNDERCOUNTER FIXTURE WITH FORWARD AND DOWN LIGHT. LITHONIA # UC8 48 120 SWR GEB
UC3	36" LONG, ONE T8 LAMP UNDERCOUNTER FIXTURE WITH FORWARD AND DOWN LIGHT. LITHONIA # UC8 36 120 SWR GEB
X	LED BATTERY BACKED UP EXIT SIGN, RED LETTER, STENCIL FACE THERMOPLASTIC, WHITE HOUSING. LITHONIA #LQM S W 1 R 120/277 EL N
X2	SIMILAR TO TYPE X, EXCEPT CEILING MOUNTED, DOUBLE FACED.

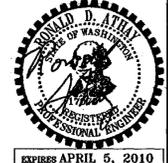
LIGHTING TAPOUT CIRCUITRY SCHEDULE:

- THE EXISTING TAPOUT CONTROLS ARE TO REMAIN IN SERVICE WITH THE FOLLOWING MODIFICATIONS. REVISE, SUPPLEMENT AND RE-CIRCUIT THE TAPOUT SYSTEM TO PROVIDE THE DESCRIBED FUNCTIONS. VERIFY EXISTING SYSTEM ON SITE.
- CIRCUIT F-4 IS TO BE REMOVED FROM THE TAPOUT CONTROLS (STANDARD DORM, TOILET ROOM AND STUDY ROOM LIGHTING DOES NOT COME ON WITH TAPOUT).
- CIRCUITS F-6 AND F-8 ARE TO REMAIN ON THE TAPOUT SYSTEM. PROVIDE CIRCUITRY REVISIONS AS NECESSARY TO PARALLEL LOCAL CONTROLS AND TAPOUT CONTROLS, I.E. TAPOUT TURNS ON LIGHTING REGARDLESS OF LOCAL SWITCH STATUS. TAPOUT OFF FUNCTION RETURNS LIGHTING TO ITS PREVIOUS STATE.
- CIRCUITS F-10 AND F-12 ARE TO BE DELETED FROM THE TAPOUT SYSTEM IF THEY ARE ON IT TO START.
- TAPOUT SYSTEM SHALL CONTINUE TO FUNCTION (ON-OFF CONTROLS) AS EXISTING.

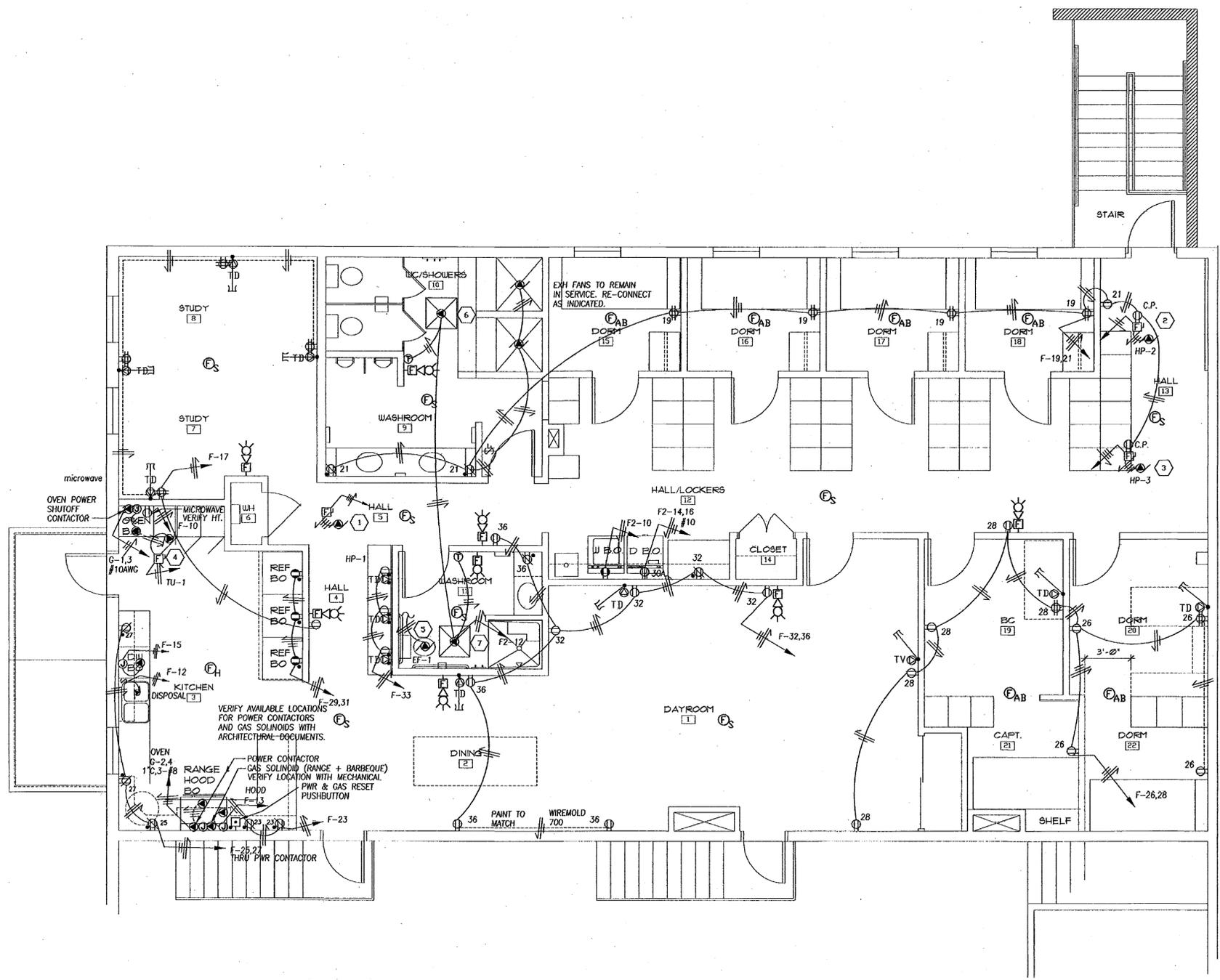
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LIGHTING FLOOR PLAN



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TAPOUT DETAILS AND SEQUENCES:

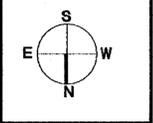
1. THE TAPOUT SYSTEM IS EXISTING. VERIFY EXISTING CONDITIONS AND EQUIPMENT ON SITE. MODIFY AND SUPPLEMENT EXISTING SYSTEM AS NECESSARY TO PROVIDE THE DESCRIBED FUNCTIONS.
2. UPON TAPOUT SIGNAL DE-ENERGIZE RANGE OVEN AND WALL OVEN. REUSE EXISTING RANGE CONTACTOR, RESET PUSHBUTTON AND PROVIDE NEW CONTACTOR FOR WALL OVEN.
3. CLOSE (SHUT-OFF) GAS UPLY TO RANGE AND BARBEQUE. PROVIDE GAS SOLINOID AS NECESSARY. CONNECT (CONTROL FROM) SOLINOID TO KITCHEN RESET PUSH BUTTON. ONE PUSHBUTTON TO CONTROL POWER AND GAS. VERIFY AND ADD CONTACTS AS NECESSARY.
4. PROVIDE CONTACTOR AND DE-ENERGIZE KITCHEN CIRCUITS F-25,27. RESET WITH KITCHEN RESET PUSHBUTTON. SEE ITEM 3 ABOVE. THIS ALLOWS TAPOUT TO DE-ENERGIZE ABOVE COUNTER OUTLETS IN THE KITCHEN ON THE EAST WALL AND NE CORNER.

POWER & SIGNAL FLOOR PLAN
1/4" = 1'-0"

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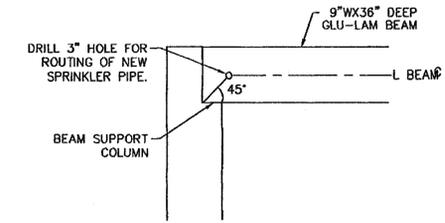
POWER & SIGNAL FLOOR PLAN



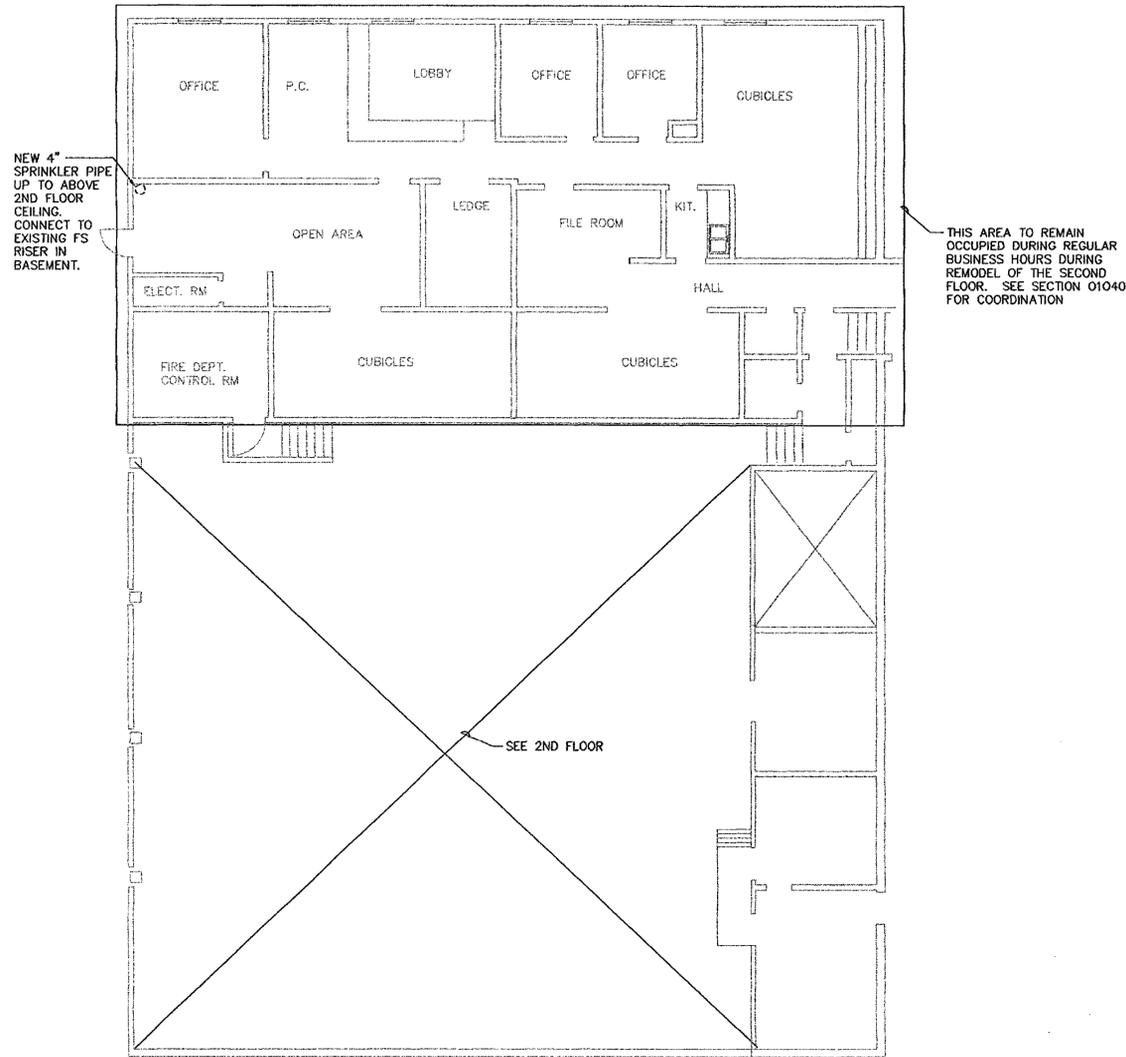
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**FIRE PROTECTION
DESIGN CRITERIA**

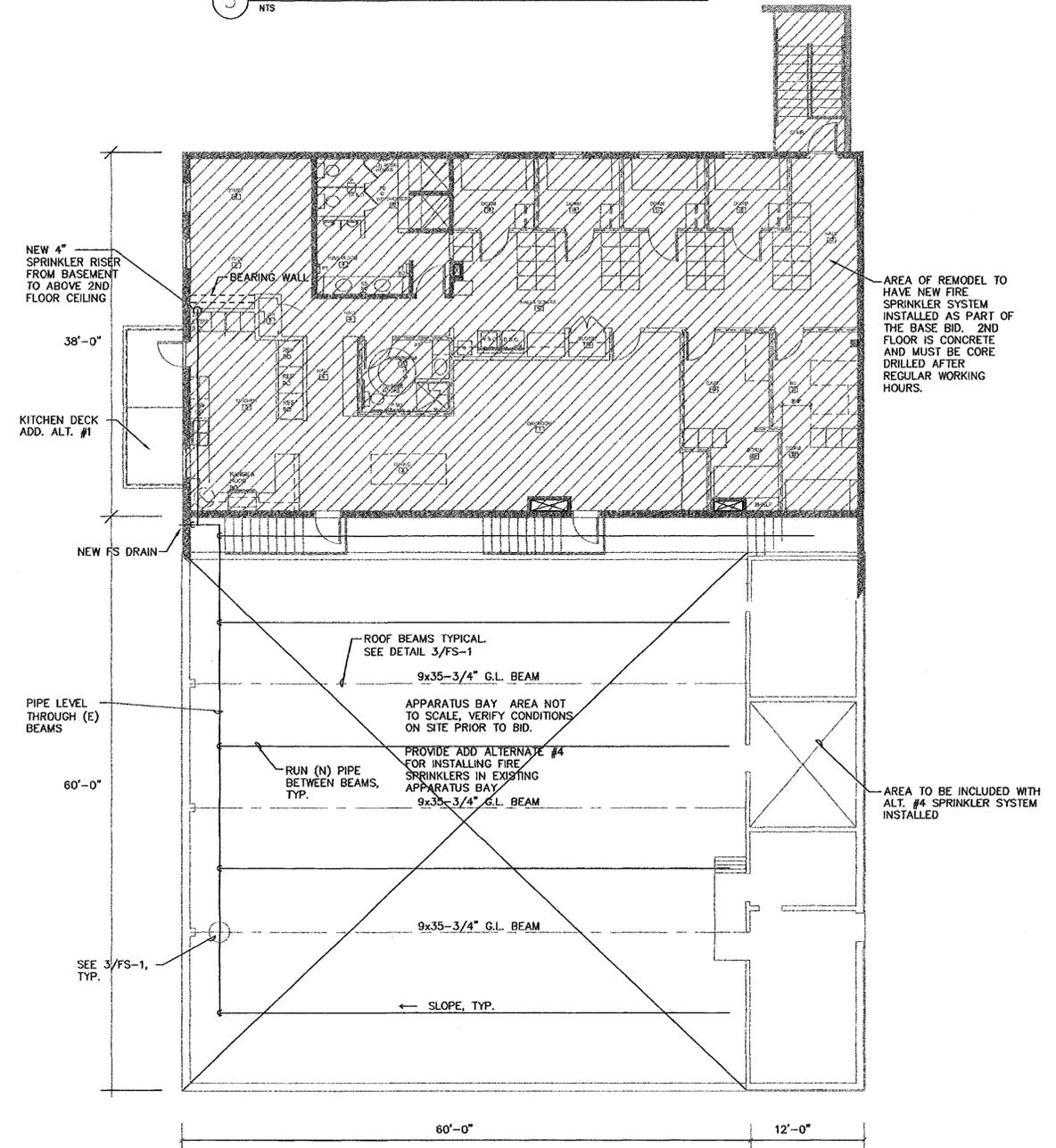
- A. Automatic Wet Fire Protection System:**
1. A complete automatic wet system will be specified per NFPA 13 for the second floor base bid and the Apparatus Bay Alt. #4.
 2. Piping design and layout drawings are to be prepared by the fire sprinkler subcontractor.



3 APPARATUS BAY ROOM BEAM DETAIL
NTS



1 FIRST FLOOR APPARATUS BAY AND OFFICES
1/8"=1'-0"



2 SECOND FLOOR AND UPPER APPARATUS BAY
1/8"=1'-0"

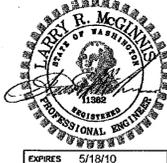
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CITY OF CAMAS
2008 FIRE STATION 41 REMODEL
CAMAS, WASHINGTON

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APPR'D. LRM

**FIRE SPRINKLER
SYSTEM**



EXPIRES 5/18/10

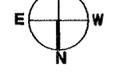
FS-1

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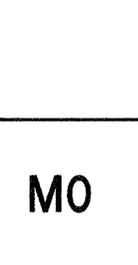
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DRAWN JS
APPR'D. LM

DESIGN CRITERIA,
SCHEDULES



EXPIRES 5/18/10

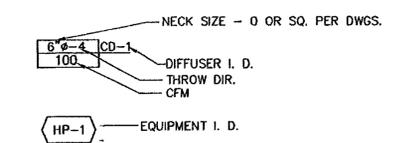


GENERAL NOTES

- A PROVIDE PIPING, EQUIPMENT, AND MATERIALS IN ACCORDANCE WITH APPLICABLE MECHANICAL CODE REGULATIONS AND STANDARDS, AND PER THE MANUFACTURERS' INSTALLATION INSTRUCTIONS.
- B CONDITIONS SHOWN ON THE PLANS RELATIVE TO THE WORK TO BE PERFORMED ARE BASED ON THE BEST INFORMATION AVAILABLE BUT ARE SUBJECT TO VERIFICATION BY THE CONTRACTOR. VERIFY AND COORDINATE LOCATIONS AND ELEVATIONS OF DUCTWORK AND PIPING CORRECT DEFICIENCIES CAUSED BY FAILURE TO PERFORM SUCH VERIFICATION AND COORDINATION AT NO EXPENSE TO THE OWNER. IMMEDIATELY NOTIFY ARCHITECT OF FIELD CONDITIONS IN CONFLICT WITH THE PLANS.
- C SAW CUTTING OF ANY FLOOR, AND CORE DRILLING HOLES (NOT SHOWN ON THE ARCHITECTURAL DRAWINGS) LARGER THAN EIGHT INCHES DIAMETER IN STRUCTURAL WALLS, FLOOR OR ROOF REQUIRES THE APPROVAL OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON. CONTRACTOR TO RETAIN THE SERVICES OF THE STRUCTURAL ENGINEER AND FORWARD WET STAMPED STRUCTURAL CALCULATIONS TO THE ARCHITECT PRIOR TO BEGINNING WORK. HOLES SMALLER THAN EIGHT INCHES IN DIAMETER IN STRUCTURAL WALLS, FLOOR OR ROOF SHALL BE REVIEWED AND AUTHORIZED BY THE ARCHITECT IN WRITING PRIOR TO BEGINNING OF WORK.

HVAC SYMBOLS

- SUPPLY AIR DUCT (UP & DN)
- RETURN AIR DUCT (UP & DN)
- EXHAUST AIR DUCT (UP & DN)
- THERMOSTAT
- SENSOR, REMOTE



EQUIPMENT I. D.

DIFFUSERS AND GRILLES SCHEDULE					
TITUS					
SYMBOL	DESCRIPTION	Color	Model	Barter	REMARKS
A	MODULAR CORE CEILING DIFFUSER (DAY IN)	Standard White	MCD	Type 2	24 x 24 Face
B	MODULAR CORE CEILING DIFFUSER (PLUSH FACTORY)	Standard White	MCD	Type 1	18 x 24 x 2 1/2"
J	EGG-CRIBE CEILING RETURN (DAY IN)	Standard White	SGR	Type 2	24 x 24 Face
K	EGG-CRIBE CEILING RETURN (PLUSH FACTORY)	Standard White	SGR	Type 1	1 1/2" Flange
RV	ROOF VENT	Aluminum	RS	-	COOK

* Check out ceiling tile (tile in cut by sheet metal worker, verify ceiling type).

HVAC DESIGN CRITERIA

A. APPLICABLE CODES

- 2008 IRC, with WA Amendments
- 2008 UPC, with WA Amendments
- 2008 IMC, with WA Amendments
- 2006 Edition 1 WASHINGTON STATE VENTILATION & INDOOR AIR QUALITY CODE (WSVIMAQ)
- 2008 IRC, with WA Amendments

B. HEATING, VENTILATING AND AIR CONDITIONING (HVAC)

1. HEATING/COOLING LOADS
 - a. CALCULATIONS PER FRAME LOAD CALCULATION PROGRAM, TRACE 700, BASED ON ASHRAE CLIMATE AT, CAMAS, WASHINGTON, (PORTLAND WEATHER USES).
 - b. CALCULATIONS TO COMPLY WITH 2008 IMA ENERGY CODE.
 - c. SUMMER DESIGN: 75F DEGREES INDOORS, 95F DEGREES DRY BULB AND 67F DEGREES WET BULB OUTDOORS.
 - d. WINTER DESIGN: 72F DEGREES INDOORS, 28F DEGREES DRY BULB OUTDOORS.
 - e. ELEVATION: 800ft
2. INTERIOR LOADS (FOR SIZING COOLING EQUIPMENT)

	LIGHTS WATTS SOFT(T)	MISC. EQUIP. SEMI BTU/H	LAT. BTU/H SOFT	NUMBER PEOPLE	PEOPLE PERSON	LAT. BTU/H PERSON	SENS. CFM
FIRST FLOOR							
BED ROOM	0.75	0	0	1	250	200	300cfm/room
DAY ROOM	1.2	3	0	0	250	200	15
DINING	1.2	4	0	6	250	200	20
EXT	1.2	3.4	0	-	250	200	050cfm
HALL	1.2	3.4	0	-	250	200	050cfm
KITCHEN	1.2	6	4	2	250	200	20
LOCKERS	1.2	0	0	2	250	200	15
RESTROOMS, MEN	0.8	0	0	1	250	200	Exhaust
RESTROOMS, WOMEN	0.8	0	0	1	250	200	Exhaust
STUDY	1.2	4	0	1	250	200	20

3. VENTILATION

a. WASHINGTON STATE VENTILATION & INDOOR AIR QUALITY CODE (WSVIMAQ), 2006 Edition

1. Section 303, Residential 4 stories & less
2. 303.2, Whole House Ventilation, for size see Table 3-2
Public Conditions ventilated per 303 Section 103
3. 303.3.1 Exhaust required, kitchen (100cfm @ 0.25"/ft), bath room (50cfm @ 0.25"/ft), laundry room (50cfm @ 0.25"/ft), other rooms with water vapor or cooking odors
4. 303.2.4 Outdoor Air Intake:
 - A. Appliances vented, 100 away
 - B. Where air will not pick up objectionable odors, fumes or flammable vapors.
 - C. A hazardous or unsanitary location.
 - D. A room or space having any fast-burning appliance therein.
 - E. Plumbing vent, 100 away or vent is 3ft above

b. Section 304, Other Occupancies

1. Ventilation per Table 3-4, Table 3-4 information is tabular in the above table.
Public Rest Rooms, 50CFM/room or 100cfm
Lockers & dressing rooms, 60 CFM/room
Janitor rooms, not toilet, ATPC recommends 15 air changes per hour exhausted
2. Condition Air per IMC chapter 7.

MC Exhaust Air Termination Point, (MC does not distinguish between Residential and other Occupancies)

1. 401.5 Opening Location. Exhaust and intake openings 19ft from lot line and from other buildings on the same lot. Exception: Openings
2. 401.5.2 Exhaust openings. Outdoor exhaust openings shall be located so as not to create a nuisance. Exhaust air shall not be directed onto the walkways.
3. 402.2.8, 3. For environmental air duct exhaust, 3ft from property line, 3ft from openings into the building.
4. Clothes Dryer Exhaust
5. 4.1 Installation. Clothes Dryers shall be exhausted in accordance with the manufacturer's instructions. Clothes exhaust systems shall be independent of all other systems and shall convey the moisture and any products of combustion to the outside of the building.

c. Per ASHRAE 62-1989 Outside Ventilation Air can be reduced by 50% where Occupants are occupying the space for an 8 hours or less.

4. NOISE CRITERIA: THE MECHANICAL SYSTEM SHALL BE DESIGNED SUCH THAT THE SYSTEM WILL NOT PRODUCE NOISE LEVELS IN THE SPACE HIGHER THAN INDICATED. RECOMMENDED INDOOR DESIGN GOALS FROM THE ASHRAE HANDBOOK

INDOOR AREA	dB(A)	OR	dB(C)
BED ROOM	35		30
DAY ROOM	40		35
DINING	40		35
HALL	45		40
KITCHEN	50		45
LOCKERS	45		40
REST ROOM	45		40
STUDY	35		30

* This recommended criteria is for unoccupied spaces with all mechanical systems operating.
** Design goals can be increased by 5 db when dictated by budget constraints or when noise intrusion from other sources represents a limiting condition.

5. THERMOSTAT ZONES

HP-1, KITCHEN (S) & STUDY (S)
HP-2, DINING, DAY ROOM (S), LOCKERS, CAPT (S)
HP-3, MENS, BED ROOMS (4-Sensors)

(S), TEMPERATURE SENSOR LOCATIONS

AIR QUALITY SCHEDULE PER WAC 2006 Edition

Syst	Room #	Setting	Exhaust Fan	Area sqft	Table 3-4 Person/1000sqft	Outside Air CFM/Person	Outside Air CFM/Person	# People	Minimum OA Cfm	Design OA Cfm	% OA*	Total Cfm	MT Degree F		
HP-1	STUDY 1 STUDY 2 HALL 1 HALL 2 KITCHEN WOMENS			117	7		20	1	20	125	100	110			
				40	7	0.05	20	1	20	192	40				
				75			4		5.0	70					
				228	10		15	2	30	8.8	575				
				300			71		21	21	8.8	330			
				248			78		78	78	100%	785	67.1		
HP-2	DINING CAPT. DAYROOM BAT. CH LOCKERS			180	70		20	6	120	120	37.5	200			
				153			30	30	20.0	150					
				300			30	30	5.0	600					
				153			30	30	20.0	150					
				414			21	21	8.8	330					
TOTAL HP-2			1,240		0.05	221	221	221	1,500	64.7					
HP-3	EXIT MEN B ROOM#1 B ROOM#2 B ROOM#3 B ROOM#4			123		0.05	Exhaust		6	6	10.0	60			
				136			15	15	0.0	100					
				60			15	15	18.8	80					
				60			15	15	18.8	80					
				60			15	15	18.8	80					
TOTAL HP-3			600			60	60	60	1,500	65.2					

Indicates thermostat location (T)
* Minimum percentage of outside air at the Heat Pump (HP) must be set to the average percent of outside air to the spaces served.
** Washington State Ventilation Code, Mechanical Ventilation.

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FAX: (503) 794-0435
CONTACT: Larry R. McGinnis, P.E.

CEILING EXHAUST FAN SCHEDULE

Unit Symbol/Setting:	EP-1 / Motors RR	Remarks
Manufacturer	Coak Ceiling	
Type	GC-140	
Model Number		
Exhaust		
- Air Flow (CFM):	75	
- TSP (lb. Water):	6.15	
- Wheel Max RPM:	1000	
- Noise (SoundwA):	1.1/33	
Size (Inches) (W x L x H):	12-3/4 x 12-3/4 x 6-1/16	
Weight (Lbs.):	18	
Vibration Isolation	*	
Electrical		
- Motor (Watt):	45	
- Volts:	115	
- Phase:	1	
Controls	**	
Options		
- Backdraft Damper	Yes	
- Speed Control #:	Yes	
Quantity	1	

NOTE:

1. All fans with 1/2 HP and smaller motors to have LxTrol add-to-the variable speed control (50 - 100% air flow) located above ceiling at fan speed control adjustment by air balancer and maintenance personnel only. Switch provided by HVAC sub-contractor and installed and wired by electrical sub-contractor.
2. HVAC contractor to provide a combination light & exhaust fan switch with an adjustable time delay for the exhaust fan. Electrical sub-contractor to install switch and connect wiring.

* Rubber and steel by equipment manufacturer.
** Light Switch.

HORIZONTAL WATER-AIR HEAT PUMP (HHP) SCHEDULE

Cooling Tons: Symbol / Setting:	Trane		
	1 HP-2 / Bed Rooms	2 HP-1 / Kitchen & Study	3 HP-3 / Dining & Day Room
Type:	Horizontal	Horizontal	Horizontal
Model #:	GEHE 0121	GEHE 0243	GEHE 0363
Supply Fan CFM:	400	500	1200
E.S.P. (Inches Water):	0.5	0.5	0.5
EER:	14.0	13.4	13.7
Cooling			
- Total (MBH):	11.5	22.48	35.7
- Sensible (MBH):	9.5	17.31	27.63
Cooling Maximum CFM:	2.8	3.5	8.2
Water Pressure Drop (PSI):	3.9	12.8	8.8
Water Conn. Size S & R:	3/4"	3/4"	3/4"
Self Balancing Hose Kit, Press. Drop (psi):	2.5	2.5	2.5
Self Balancing Hose Kit, Line Size (Inch):	3/4"	3/4"	1 1/4"
Drain Size:	3/4"	3/4"	3/4"
Heating (MBH):	15.02	30.28	38.5
Heating - C.O.P.:	4.3	4.2	4.2
No. Compressors:	1	1	1
Refrigerant Type:	R-410a	R-410a	R-410a
Sound:			
Weight (Lbs.):	173	253	288
Size (Inches)			
- Height:	19"	18	19
- Width:	20"	23	25
- Length:	40"	46	50
- Discharge:	10 x 7	11 x 9	13 1/2 x 10 1/2
Electrical			
- Blower Motor (FLA):	0.70	1.53	3.00
- Compressor (RLA):	6.3	7.8	11.5
- Volts:	208	208	208
- Phase:	1	3	3
- Unit Total FLA:	7.0	9.33	15.1
- MCA/ODP:	8.58 / 15	11.28 / 15	17.88 / 25
Control:	Option 3	Option 3	Option 3
OPTIONS:	Yes, 1, 2, 3, & 4	Yes, 1, 2, & 3	Yes, 1, 2, 3, & 4
Quantity:	1	1	1

Note:
Entering water - 86F cooling, 66F heating.
Entering air - 80.8F db/68.2F wb cooling, 68F db heating.
Filter: Included in external static.
Selection @ R elevation.

OPTIONS:

1. Self Balancing Hose Kit with Strainer. Max Pressure Drop listed Above.
2. Antistatic cycle liner.
3. Programmable Thermostat with remote sensors.
4. Condensate Pump, See Spec. section 15140

TERMINAL UNIT WT (WD) SCHEDULE

Symbol	SERVING	Air Model, Unit / Size Type	Design Cooling Airflow Mac Cfm	Design Heating Airflow Min Cfm	Downstream sp @ 150'	Heat 120V 1 KW	Number/Heating Stages	Sound Symbol	Sound Symbol Change	Opening weight lb	Unit Length x Width x Height inch	Discharge Outlet With inch
WD-1, exhaust	Study #1 MR	VP5F	300	100	0.25	1.0	1	A	B	33	15.5 x 11.5 x 12-1/2	14 x 12-1/2

Notes:

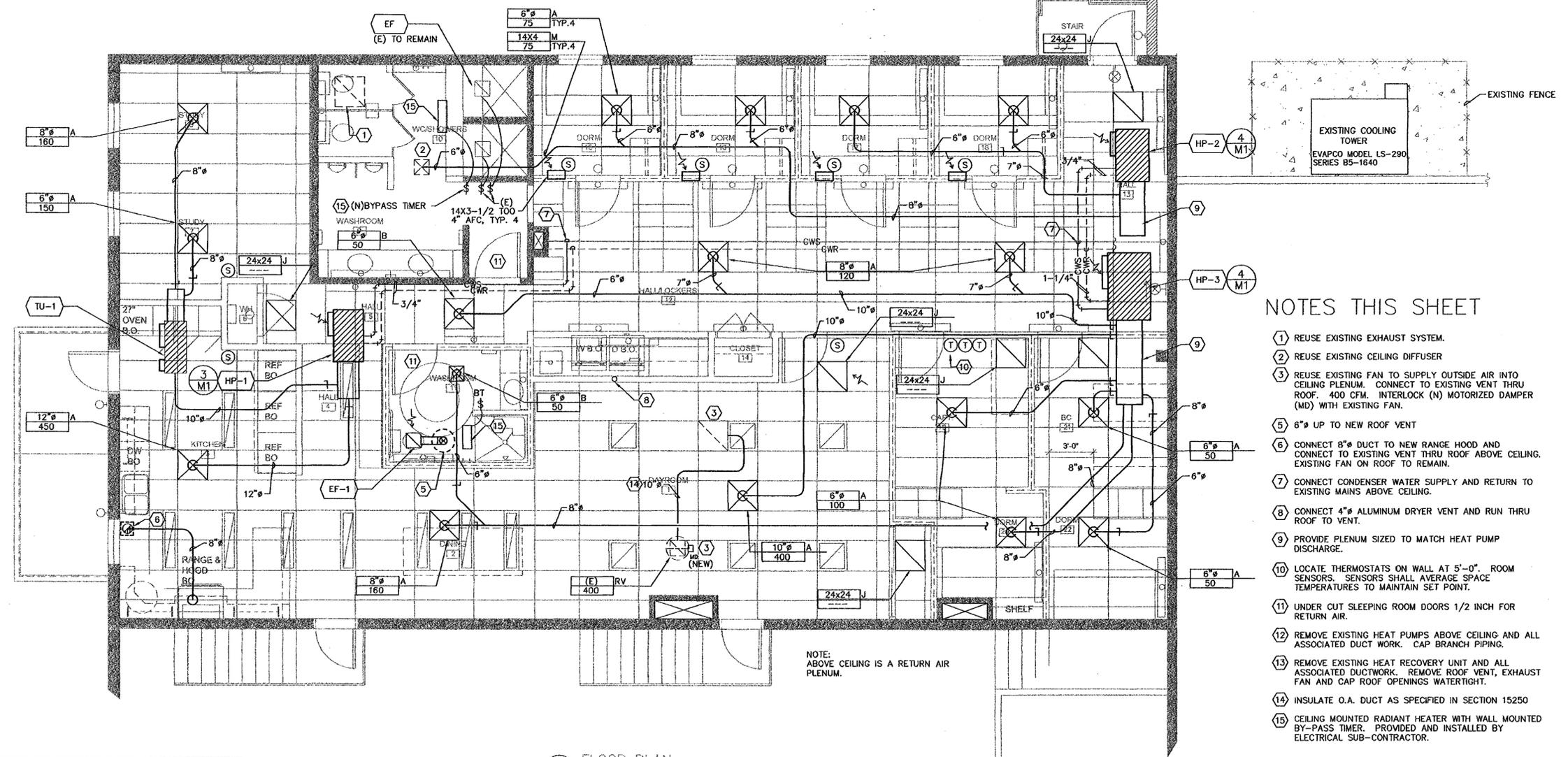
1. Unit Control Type, DDC, WT with modulating damper operator, stand alone with duct sensor to reverse action of thermostat.
2. Unit Insulation 1/2" multi board.
3. Pressure Independent.

Maximum Radiated Sound Power Ratings (Pic. 10 to the -12 power watts)

Active Band Center Freq. Band Symbol	2	3	4	5	6	7
-A	82	58	50	44	42	38
-B	89	69	64	61	60	58

NOTES:

1. Sound power levels expressed in decibels - Lw @ 10 to the -12 power watts.
2. Tested in accordance with ISO 3741 Standard ISO.
3. Above data does not include ceiling transmission loss, absorption, room absorption, or duct attenuation.
4. All static pressures in inches w.g.

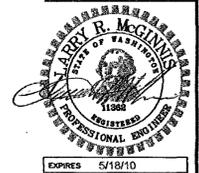
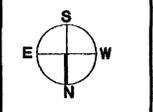


- ### NOTES THIS SHEET
- REUSE EXISTING EXHAUST SYSTEM.
 - REUSE EXISTING CEILING DIFFUSER
 - REUSE EXISTING FAN TO SUPPLY OUTSIDE AIR INTO CEILING PLENUM. CONNECT TO EXISTING VENT THRU ROOF. 400 CFM. INTERLOCK (N) MOTORIZED DAMPER (MD) WITH EXISTING FAN.
 - 6" Ø UP TO NEW ROOF VENT
 - CONNECT 8" Ø DUCT TO NEW RANGE HOOD AND CONNECT TO EXISTING VENT THRU ROOF ABOVE CEILING. EXISTING FAN ON ROOF TO REMAIN.
 - CONNECT CONDENSER WATER SUPPLY AND RETURN TO EXISTING MAINS ABOVE CEILING.
 - CONNECT 4" Ø ALUMINUM DRYER VENT AND RUN THRU ROOF TO VENT.
 - PROVIDE PLENUM SIZED TO MATCH HEAT PUMP DISCHARGE.
 - LOCATE THERMOSTATS ON WALL AT 5'-0". ROOM SENSORS. SENSORS SHALL AVERAGE SPACE TEMPERATURES TO MAINTAIN SET POINT.
 - UNDER CUT SLEEPING ROOM DOORS 1/2 INCH FOR RETURN AIR.
 - REMOVE EXISTING HEAT PUMPS ABOVE CEILING AND ALL ASSOCIATED DUCT WORK. CAP BRANCH PIPING.
 - REMOVE EXISTING HEAT RECOVERY UNIT AND ALL ASSOCIATED DUCTWORK. REMOVE ROOF VENT, EXHAUST FAN AND CAP ROOF OPENINGS WATERTIGHT.
 - INSULATE O.A. DUCT AS SPECIFIED IN SECTION 15250
 - CEILING MOUNTED RADIANT HEATER WITH WALL MOUNTED BY-PASS TIMER. PROVIDED AND INSTALLED BY ELECTRICAL SUB-CONTRACTOR.

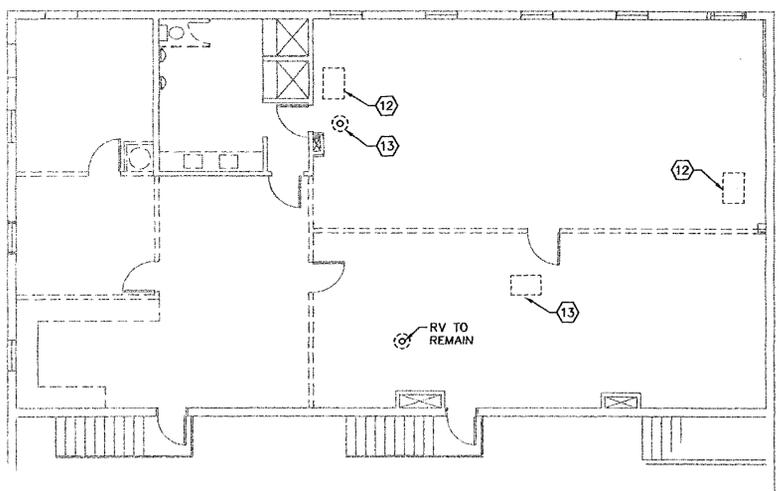
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JOB NO. P-824
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APPR'D. LRM

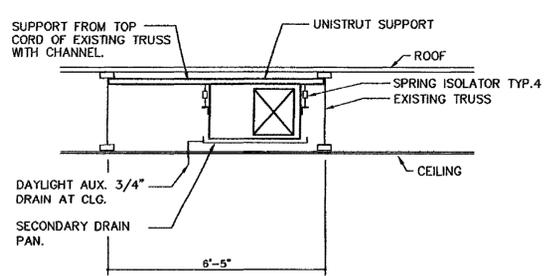
HVAC DEMOLITION & NEW FLOOR PLANS



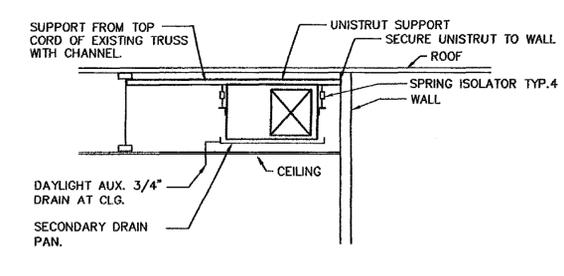
1 FLOOR PLAN
1/4" = 1'-0"



2 DEMO PLAN
1/8" = 1'-0"



3 HEAT PUMP DETAIL
NTS

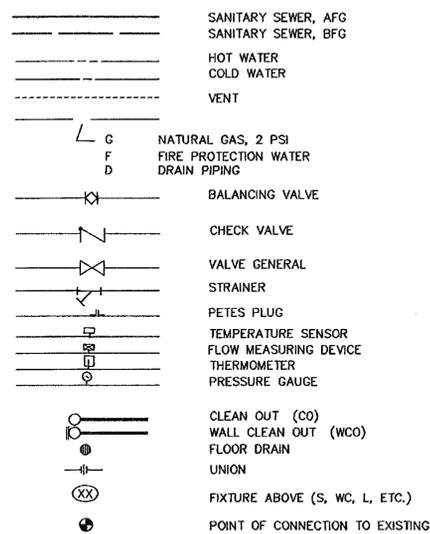


4 HEAT PUMP DETAIL
NTS

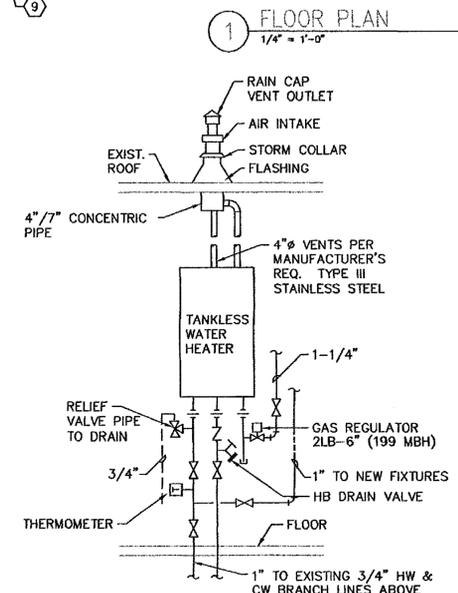
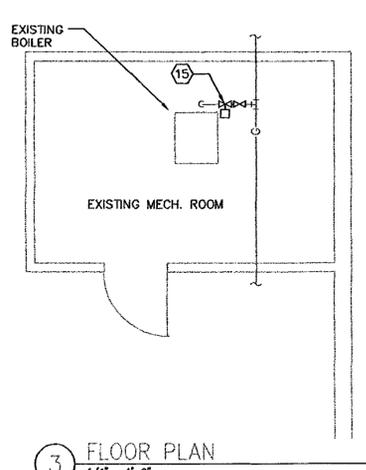
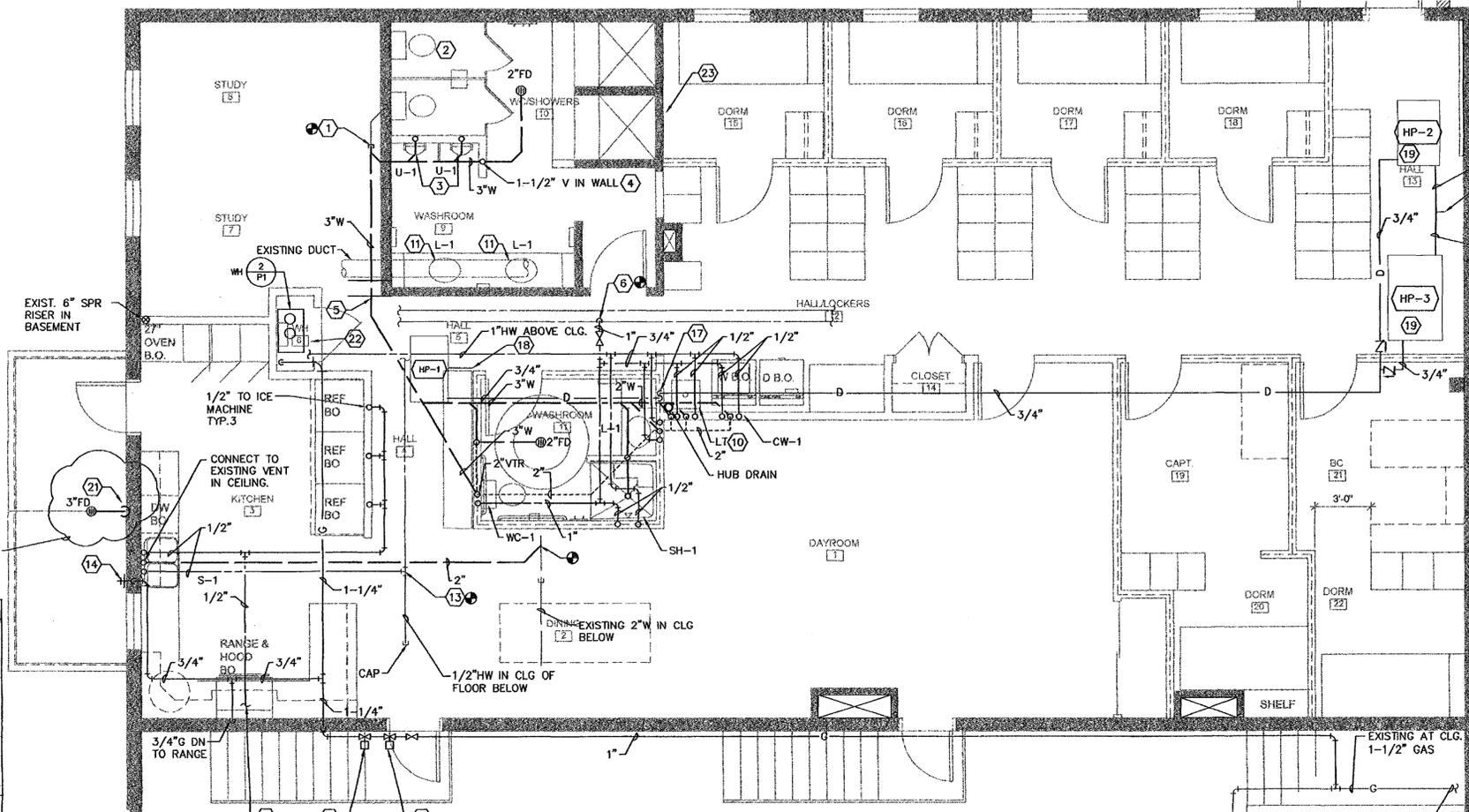
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M1

PLUMBING SYMBOLS



PLUMBING EQUIPMENT SCHEDULE		
Shower: Symbol: SH-1 Type: Fiberglass Color: White Mfg.: Fiberglass Model No.: 38-H1 LP Model Name: Terrazzo-Ware Dimensions L x W x H: 38"x42" Strainer: Shower Valve Mfg.: Moen Model Name: Posi-Temp Shower Valve Model No.: 6349 Shower Head Model: Hand Held P-Trap: Yes Stop & Supply: Yes	Pressure Balancing required 2.5 gpm maximum	
Clothes Washer: Symbol: CW-1 Connection Mfg.: Gray-Guy Connection Model No.: F6200	Remarks: Clothes Washers provided by owner, rough-in and make final connections.	
Floor Drain: Symbol: FD-1 Model: 2006YA 2 NH Grate: NB	Remarks: JR Smith JR Smith	
Lavatory: Symbol: L-1 Type: Countertop Model No.: 0476 028 Color: White Faucet Mfg.: Moen Faucet Model: L-6021 Strainer: Pop-up Wall Carrier: No P-Trap: Yes Angle Valve: Yes	Remarks: American Standard 2.5 gpm maximum aerators 17 gauge	
Sink: Symbol: S-1 Type: Stainless Manufacture: Elkay Model No.: LR3321 Number of Compartments: 2 Bowl Size (inch): 33" x 21.25" Depth (inches): 9 1/2 Strainer Mfg.: Elkay Model: Moen Faucet: 7500 P-Trap: Yes Stop and Supply: Yes Garbage Disposal: In-Sink-Erator Model No.: Badger 5 HP: 1/2 Volts: 120 Amp: 6.9	Remarks: Moen/ 2.5 gpm maximum aerators 17 gauge	
Urinal: Symbol: U-1 Type: Existing Flash Valve: 9186	Remarks: Sloan Battery Powered.	
Water Closet: Symbol: WC-1 Type: Floor Mounted Model: 2325 101 Color: White Carrier: No Flush Valve: No Stop & Supply: Yes Seat: 9500C	Remarks: ADA Height/ BACK-OUTLET American Standard/ 1.6gpm maximum Pressure Assst. Speedway or Brasscraft Church, White Seat	
Water Heater: Symbol: WH-1 Type: Nat. Gas Manufacture: Rheem-Road Model: GT-1990DV Input (MBH): 199 Heat Water from - to (F): 45 - 190 Size H x W (inches): 28.38 x 14.78 Weight dry (lbs): 55		



EXISTING EQUIPMENT GAS REGULATOR SCHEDULE		
EQUIPMENT	MBH	LOCATION
BOILER	325	MECH. ROOM
UNIT-2 HEATERS	200 EA	APPARATUS ROOM

NOTE: PROVIDE SHUT-OFF VALVE UPSTREAM OF NEW REGULATOR VALVES. REGULATORS TO BE 6" W.C. - 2LB. PRESSURE

GENERAL NOTES

- A FIRST FLOOR TO REMAIN OCCUPIED DURING REGULAR BUSINESS HOURS 8:00AM TO 5:00PM. SEE SPECIFICATION SECTION 01040 FOR COORDINATION OF THE SECOND FLOOR REMODEL.
- B 2ND FLOOR IS CONCRETE AND MUST BE CORE DRILLED AFTER REGULAR WORKING HOURS.
- C PROVIDE PIPING, EQUIPMENT, AND MATERIALS IN ACCORDANCE WITH APPLICABLE MECHANICAL CODE REGULATIONS AND STANDARDS. AND PER THE MANUFACTURERS INSTALLATION INSTRUCTIONS.
- D CONDITIONS SHOWN ON THE PLANS RELATIVE TO THE WORK TO BE PERFORMED ARE BASED ON THE BEST INFORMATION AVAILABLE BUT ARE SUBJECT TO VERIFICATION BY THE CONTRACTOR. VERIFY AND COORDINATE LOCATIONS AND ELEVATIONS OF DUCTWORK AND PIPING. CORRECT DEFICIENCIES CAUSED BY FAILURE TO PERFORM SUCH VERIFICATION AND COORDINATION AT NO EXPENSE TO THE OWNER.
- E COORDINATE INSTALLATION OF PIPING BELOW GRADE WITH STRUCTURAL COMPONENTS AND OTHER SYSTEM INSTALLATIONS.
- F PROVIDE CLEANOUTS FOR SANITARY WASTE AND STORM DRAINAGE SYSTEMS WHERE SHOWN AND AS OTHERWISE REQUIRED BY CODE.

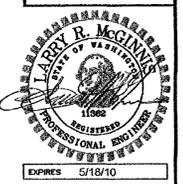
NOTES THIS SHEET

- 1 CONNECT TO EXISTING 4" WASTE IN CEILING SPACE BELOW.
- 2 REUSE EXISTING WATER CLOSET AND INSTALL NEW SEAT
- 3 RELOCATE EXISTING URINALS AND INSTALL NEW BATTERY OPERATED FLUSH VALVE ASSEMBLY.
- 4 CONNECT TO EXISTING VENT ABOVE CEILING.
- 5 ROUTE WASTE PIPING AT A SLOPE OF 1/8 INCH PER FOOT IN ORDER TO MAKE CONNECTION TO EXISTING, 8" CMU WALL PENETRATION REQUIRED. VERIFY INVERT OF EXISTING PRIOR TO STARTING ROUGH-IN.
- 6 CONNECT TO EXISTING 2 INCH COLD WATER IN CEILING SPACE BELOW.
- 7 CONNECT TO EXISTING 1 / 2 INCH COLD WATER SERVING EXISTING SINK AND RUN BELOW FLOOR IN CEILING SPACE.
- 8 1 INCH GAS SOLENOID VALVE.
- 9 GAS PRESSURE REGULATOR 6"WC-2LB 300 MBH INPUT.
- 10 RELOCATED EXISTING STAINLESS STEEL LAUNDRY TRAY.
- 11 REMOVE EXISTING LAVATORIES AND INSTALL 2 NEW LAVATORIES IN NEW COUNTER. CONNECT TO EXISTING WASTE, HOT AND COLD WATER AND VENT. LINES IN WALL AND/OR CEILING AS REQUIRED.
- 12 CONNECT TO EXISTING 1-1/2 INCH GAS AT CEILING.
- 13 CONNECT TO HOT WATER LINE IN CEILING SPACE BELOW.
- 14 UNDER ADD ALT. #1 ROUGH-IN 3/4 INCH GAS LINE WITH SHUT-OFF VALVE 24" ABOVE FLOOR.
- 15 PROVIDE NEW GAS REGULATOR TO REDUCE THE PRESSURE FROM 2LB TO 6" WC. PROVIDE CODE APPROVED VENTLESS TYPE REGULATOR, MAXITROL 325-5AL W/12A39 VENT LIMITER OR APPROVED EQUAL.
- 16 DISCONNECT EXISTING UNIT HEATER AND CAP BRANCH PIPING.
- 17 ROUTE 3/4" CONDENSATE DRAIN DOWN IN WALL TO INDIRECT INTO NEW HUB DRAIN.
- 18 PROVIDE 3/4" SECONDARY CONDENSATE DRAIN FROM DRAIN PAN. PENETRATE THROUGH CEILING 1".
- 19 COORDINATE WITH HVAC CONTRACTOR FOR CONDENSATE CONNECTION. HVAC CONTRACTOR TO PROVIDE CONDENSATE PUMPS.
- 20 COORDINATE WITH EXISTING GAS UTILITY COMPANY TO CHANGE THE HOUSELINE PRESSURE FROM 6"WC TO 2LB PRESSURE AFTER PRESSURE REGULATORS ARE INSTALLED.
- 21 UNDER ADD ALT. #1 ROUTE 3" PIPE OVER TO WALL THEN TRANSITION TO A 2"x3" 26 GAUGE DOWN SPOUT. ROUTE DOWN SPOUT DOWN ALONG WALL TO DRAIN INTO EXISTING TRENCH BELOW.
- 22 REMOVE EXISTING ELEC. WATER HEATER, REROUTE AS REQUIRED TO MAKE CONNECTION TO NEW WATER HEATER. COORDINATE WITH ELECTRICAL.
- 23 DISCONNECT EXISTING CLOTHES WASHER, CAP EXISTING PIPING IN WALL.

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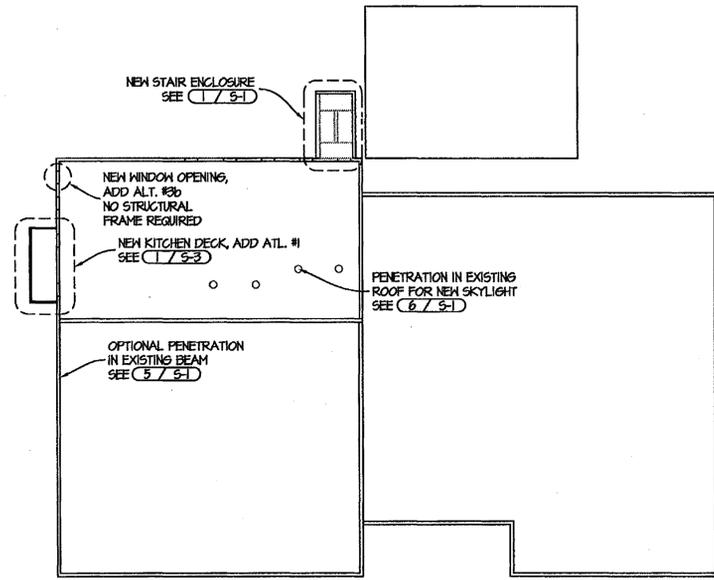
CITY OF CAMAS
 2008 FIRE STATION 41 REMODEL
 CAMAS, WASHINGTON

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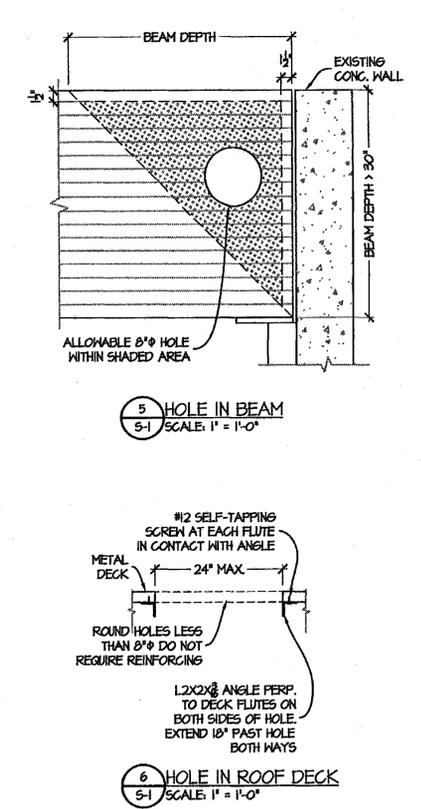
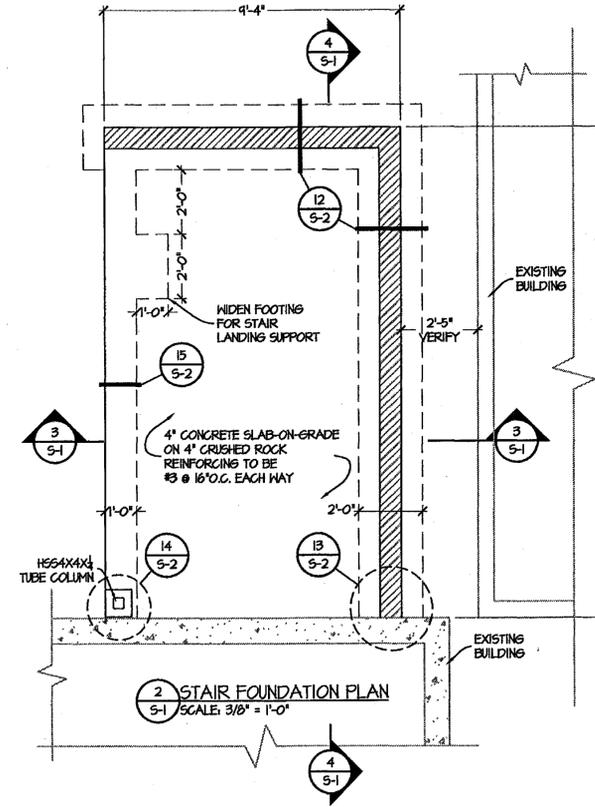
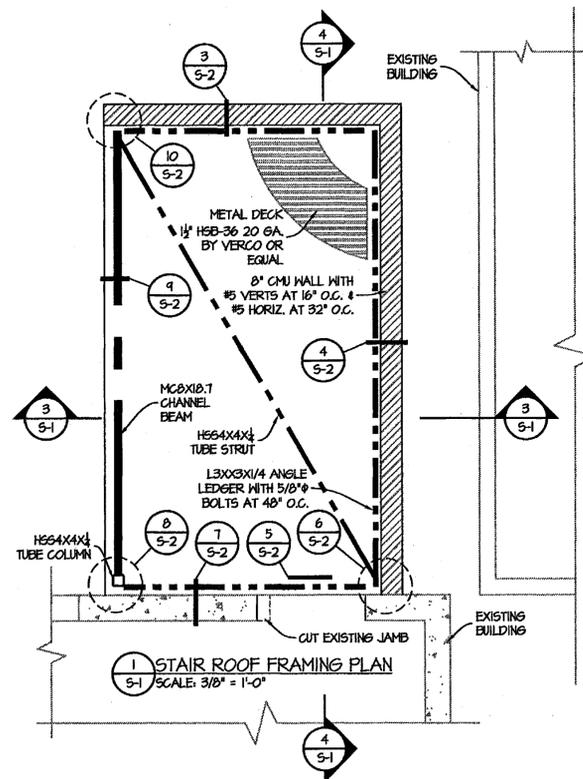


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P1



KEY PLAN
SCALE: NTS



GENERAL STRUCTURAL NOTES

General Conditions:

- 1) GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS BEFORE STARTING ANY WORK. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE DRAWINGS. IN CASE OF ANY DISCREPANCY, NOTIFY THE ENGINEER BEFORE FURTHER WORK IS DONE.
- 2) UNLESS OTHERWISE NOTED, ALL MATERIAL AND DESIGN SPECIFICATIONS CITED HEREIN SHALL CONFORM TO THE MOST RECENTLY ADOPTED SPECIFICATION OR CODE.
- 3) ALL PRODUCTS AND MATERIALS USED BY THE CONTRACTOR SHALL BE APPLIED, PLACED, ERECTED OR INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

Foundations:

- 1) ALL FOUNDATIONS TO BEAR ON CLEAN, FIRM, VISUALLY INSPECTED AND UNDISTURBED SOIL, 18 IN. MINIMUM BELOW LOWEST ADJACENT FINISHED GRADE.

Steel Reinforcing:

- 1) MATERIALS:

Rebar:	ASTM A615, Grade 60	Fy psi	60,000	Fu psi	
Rebar (to be welded):	ASTM A706, Grade 60		60,000		
Welded Wire Fabric:	ASTM A 185		60,000		
Anchors Bolts:	A307, Grade A, (Headed or J) Galvanized		35,000		60,000
	A36 (Threaded Rod)		36,000		58,000
- 2) ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI DETAILING MANUAL 315.
- 3) ALL REINFORCING STEEL SHALL BE ACCURATELY PLACED AND ADEQUATELY SUPPORTED BEFORE CONCRETE IS PLACED, AND SHALL BE SECURED AGAINST DISPLACEMENT DURING CONCRETE PLACEMENT.
- 4) DO NOT TACK WELD, WELD, HEAT, OR TORCH CUT REINFORCING BARS UNLESS INDICATED ON THE CONTRACT DOCUMENTS OR APPROVED BY THE STRUCTURAL ENGINEER.
- 5) LAP ALL BARS A MINIMUM OF 36 DIAMETERS IN CONCRETE AND 48 DIAMETERS IN MASONRY, EXCEPT AS OTHERWISE NOTED.
- 6) ANCHOR BOLTS SHALL HAVE EMBEDMENT DEPTHS AS NOTED ON THE PLANS WITH A MINIMUM OF 7" AND SHALL BE GALVANIZED.
- 7) POST-INSTALLED ADHESIVE (EPOXY) ANCHORS (IF USED) SHALL USE "SET - HIGH STRENGTH EPOXY" BY SIMPSON, OR APPROVED EQUAL.

Concrete:

- 1) MATERIALS:

Foundations, Slabs:	fc' psi	2500
---------------------	---------	------
- 2) CONCRETE, FORMS, MIXING, PLACING AND CURING SHALL CONFORM TO ACI MANUAL OF CONCRETE PRACTICE, AND ITS SPECIFICATIONS.

Masonry: (Hollow concrete units)

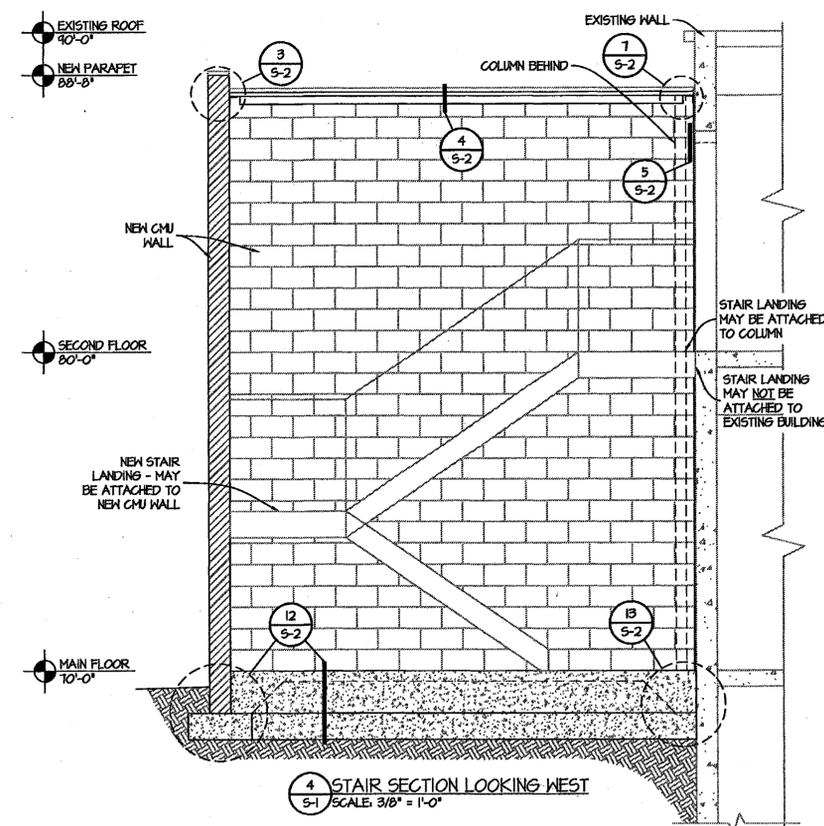
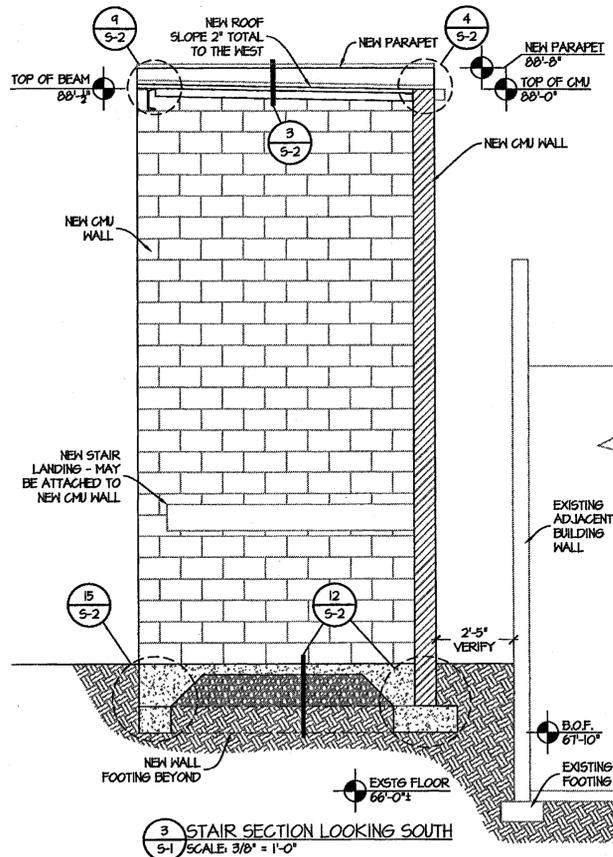
- 1) MATERIALS:

Exterior walls:	Block Grade N, Mortar Type S	fm' psi	1500
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- 2) SPECIAL INSPECTION IS REQUIRED FOR MASONRY CONSTRUCTION.
- 3) ALL MASONRY CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE 2006 INTERNATIONAL BUILDING CODE CHAPTER 21.
- 4) MASONRY UNITS TO HOLLOW CONCRETE BLOCK, GRADE N, PER ASTM C-90.
- 5) MORTAR TO BE TYPE S, PER ASTM C-270.
- 6) GROUT TO BE FINE GROUT, MIN. Fc' = 2000 PSI, PER ASTM C-476.

Structural Steel:

- 1) MATERIALS:

Structural Shapes:	A36	Fy psi	36,000	Fu psi	58,000
Structural Tubes:	A500 Gr. B		46,000		58,000
Structural Plates:	A36		36,000		58,000
Bolts:	A307, Gr. A, Galvanized		35,000		60,000
Welding:	E70 XX Electrodes		60,000		72,000
- 2) ALL FABRICATION, ERECTION, IDENTIFICATION AND PAINTING OF STRUCTURAL STEEL SHALL CONFORM TO AISC SPECIFICATIONS.
- 3) ALL WELDING SHALL BE MADE BY CERTIFIED WELDERS AND SHALL CONFORM TO AWS SPECIFICATIONS.
- 4) BOLTS SHALL BE SEMI-FINISHED MACHINE BOLTS UNLESS NOTED OTHERWISE AND SHALL BE GALVANIZED WHERE EXPOSED TO WEATHER.
- 5) ALL STRUCTURAL STEEL SHALL BE DELIVERED WITH A MINIMUM OF ONE SHOP COAT OF PRIMER AND ONE FINISH COAT. TOUCH UP ALL FIELD WELDING WITH ZINC-RICH PRIMER AND ONE FINISH COAT.



Special Inspection Required
As per Chapter 17 IBC



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CITY OF CAMAS
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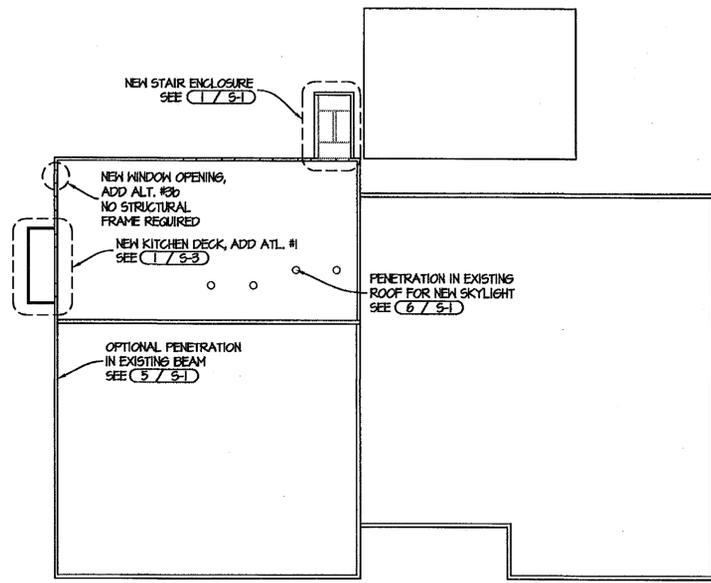
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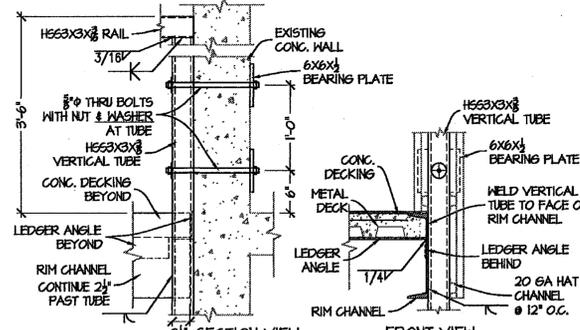
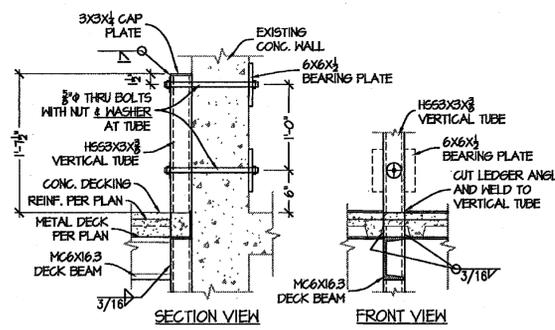
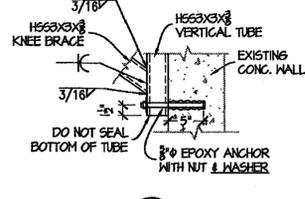
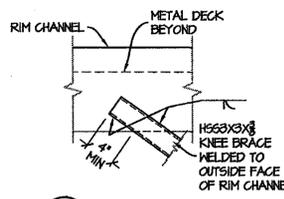
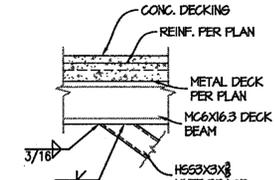
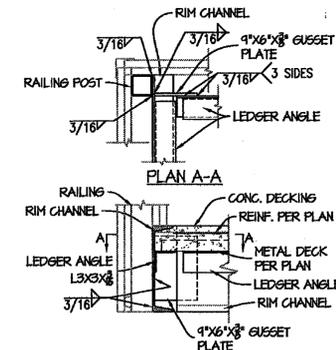
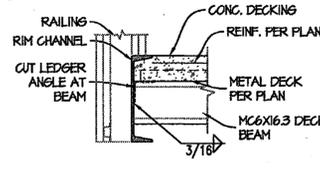
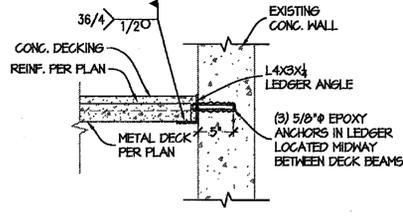
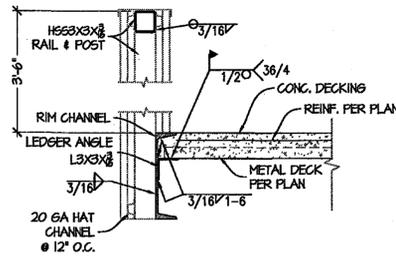
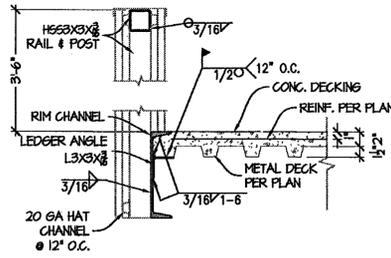
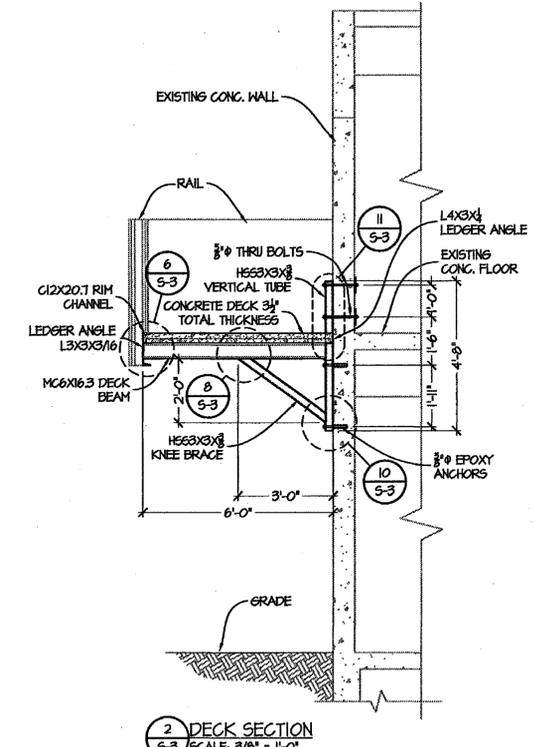
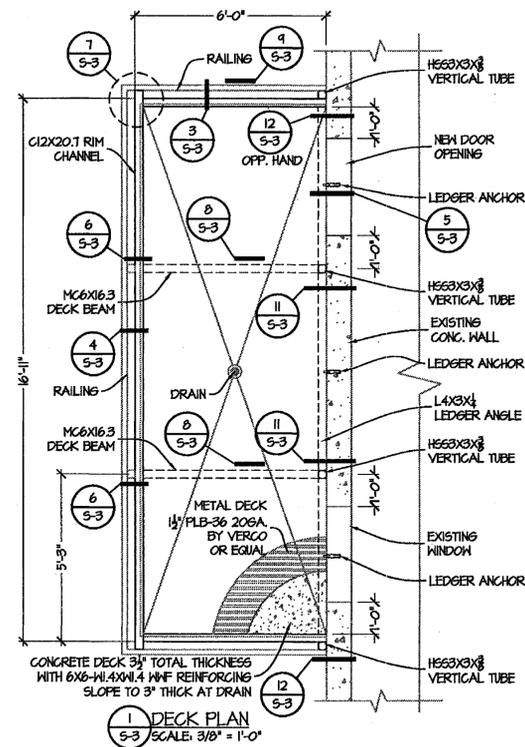
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DATE 4-2-04
JOB NO. P-824
DRAWN DSM
APPRD. IL

STAIR ENCLOSURE



KEY PLAN
SCALE: NTS



Ivars Lazdins
ARCHITECTURE & PLANNING
503.297.8288
FAX 297.5280
3004 SW BENNINGTON DR. PORTLAND, OR 97205

CITY OF CAMAS
2008 FIRE STATION 41 REMODEL
CAMAS, WASHINGTON

REVISIONS	
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2	
3	
4	
5	

DATE 4-2-04
JOB NO. P-024
DRAWN DSW
APPRD. IL

KITCHEN DECK-
ADD ALT. #1

CASCADE
ENGINEERING, INC.
245 SE 4th Ave, Suite A
Hillsboro, OR 97123-4033
503-848-1131 fax 503-848-1190



S-3