



# City of Seattle Department of Planning and Development (DPD) PLAN COVERSHEET

Updated  
09/07/12

INSTRUCTIONS: Complete all areas of sections 1 - 7 that pertain to your project. Please note that sections 8 - 14 are to be completed by DPD staff.

### 1. APPLICANT INFORMATION

PROJECT ADDRESS: 809 Olive Way (first floor tenant corner of Olive Way and 9th) PROJECT #

DESCRIPTION OF WORK: Fab and install two chilled water fan coil systems and exhaust typical to other areas of the building.

OWNER: Olive Way High Rise LP ADDRESS: 809 Olive Way

PHONE: E-MAIL:

CONTACT PERSON: Bill Alept ADDRESS: 3903 Smith Ave Everett, WA 98201

PHONE: 425 754 8759 FAX: 425 339 9244 E-MAIL: bill@williams-mechanical.com

PREVIOUS RELATED MUPS:

RELATED STANDARD PLANS:

### 2. LAND USE CODE INFORMATION

ZONE: ASSESSOR'S PARCEL NO.: 066000-0835 DESIGN REVIEW? Yes No

OVERLAY ZONING: none If yes, please provide: Planner: Planner's phone no.:

HISTORIC OR LANDMARK DISTRICT: N/A

SHORELINE ZONE: N/A Exempt Requires Shoreline review

SEPA: Exempt Requires review

EXISTING USE	SQ. FT.	PROPOSED USE	SQ. FT.

DEPARTMENT OF NEIGHBORHOODS CERTIFICATE OF APPROVAL REQUIRED? Yes No

STREET/ALLEY IMPROVEMENTS OR WORK IN THE RIGHT OF WAY REQUIRED? Yes No

PARKING SPACES: NUMBER OF DWELLING UNITS

Existing	Onsite	Offsite	Accessible	Existing	Proposed New
Proposed	Onsite	Offsite	Accessible	Demolished	Live/Work

Offsite Location: TOTAL:

### 3. HOUSING UNIT OCCUPANCY

DEFINITION: Housing unit means any dwelling unit, housekeeping unit, guest room, dormitory, or single room occupancy unit, and may include a residential unit in a commercial building, an artist's studio dwelling unit, or a live/work unit.

CHECK ONLY ONE BOX BELOW TO INDICATE HOUSING OCCUPANCY AT DATE OF PERMIT APPLICATION.

☐ Unit(s) unoccupied  
☐ Unit occupied by property owner  
☐ No units on property  
☐ Unit(s) on property not affected by permit scope

☐ Do not know  
☐ Refer to property owner/tenant assistance

I certify, under penalty of perjury under the laws of the State of Washington, that the above information is true and correct.

Owner/Applicant Signature: Bill Alept Printed Name: Date: Place:

### 4. GROUND DISTURBANCE

GROUND DISTURBANCE: Yes No Excavation - cubic yards: Maximum height:

DISPOSAL SITE: Outside City of Seattle Fill - cubic yards: Maximum height:

Inside City of Seattle Address and/or permit #:

Erosion control is required PRIOR to any ground disturbance. Please refer to Temporary Erosion and Sediment Control (TESC) Plan.

### CUSTOMER ALERT!

Site Inspection Required Prior to First Ground Disturbance - Call (206) 684-8900  
A DPD site inspection is required prior to any ground disturbance related to this permit, including clearing, grubbing or grading.

Preconstruction Conferences, When Required - Call (206) 684-8860  
A DPD preconstruction conference should be scheduled prior to beginning work. A conference is required for the following types of work:  
1. When any special inspections are indicated on the plan  
2. When land use or design review conditions are indicated on the plan  
3. When a DPD plans examiner specifies on plans unusual or complex inspection or occupancy requirements

Rules for Ufer Grounds - Call (206) 684-5383  
If you have any questions or concerns regarding the rules (2005 NEC) for installation of ufer grounds, please contact DPD's Electrical Technical Backup Monday - Friday, 7:00 a.m. to 4:30 p.m.

Required SDOT Permits and Inspections  
Street Tree Inspections  
Protection and/or planting/pruning/removal of street trees requires Seattle Department of Transportation (SDOT) inspection and approval. Call prior to construction.  
Commercial/Multifamily Zones, (206) 684-5693  
Single Family Zones, (206) 684-7997

Street Use Permits  
Call prior to construction: (206) 684-5283

Water Service Inspection by SPU Required  
All water service piping on property must be inspected prior to backfilling trench. For information and inspection, call Seattle Public Utilities (SPU) at (206) 684-5800. For water quality backflow protection information and inspection, call SPU at (206) 684-3536.

### 5. BUILDING CODE INFORMATION

MULTIPLE BUILDINGS IN THIS PROJECT? Yes No  
If yes, fill out separate sheets and attach. Shown on plan sheet:

PROVIDE THIS INFORMATION FOR EVERY BUILDING IN YOUR PROJECT

DPD building ID: (see building data sheet)

Existing # of above-grade stories: Proposed # of above-grade stories: Mezzanines? Yes No

Existing # of below-grade stories: Proposed # of below-grade stories: Location:

Building code type of construction:

FLOOR LEVEL	GROUP	OCCUPANCY/USE	FLOOR AREA	SPRINKLER (Y/N)	OTHER FIRE PROTECTION
one					

Remodel: Construction project value \$:

Sprinklers: NFPA 13 NFPA 13 R Partial system Fire alarm Other system Type:

Change of occupancy: Yes No From: Empty space To: Pet day care

Posted occupancy:

EMERGENCY SYSTEMS PROVIDED  
☐ Elevator pressurization ☐ Exit and pathway lighting ☐ Stairway pressurization ☐ Smoke removal system ☐ Emergency generator

### 6. ENERGY/MECHANICAL CODE

SCOPE OF MECHANICAL WORK DESCRIPTION: Fab and install two chilled water fan coil systems and exhaust typical to other areas of the building.

RELATED BUILDING PERMIT PROJECT # ?

LOCATION OF DUCTWORK OR MECHANICAL EQUIPMENT  
Interior: Yes No Exterior wall: Yes No Rooftop: Yes No

MECHANICAL-ONLY PERMIT Project value \$29,950

APPLICABLE OCCUPANCY  
☐ Single-family/duplex ☐ Multi-family ☒ Non-residential

BUILDING ENVELOPE COMPLIANCE  
☐ Existing envelope - no change ☒ Existing envelope - altered ☐ New envelope

HEATED SEMI-HEATED UNHEATED SPACE

Compliance method: ☐ System analysis ☐ Target UA/SHGCA/VT ☐ Prescriptive - Group R Provide option #:

HVAC MECHANICAL SYSTEM  
☐ Not included with this application (if mech drawings are included with plans, please stamp "for reference only")  
☒ Included with this application (see scope description for detail)

Heating fuel type: Single-family/duplex Electric Other  
Multi-family Electric Other  
Non-residential Electric Other

OTHER MECHANICAL EQUIPMENT INCLUDED IN THIS APPLICATION  
☐ Commercial kitchen hood exhaust system ☐ Fume hood  
☐ Spray paint booth ☒ Other Specify: Exhaust and supply Fans

DOCUMENTS INCLUDED  
☐ Residential equipment sizing calc (unit by unit) ☐ Noise compliance report (for mechanical equipment)  
☒ Non-residential cooling and heating load (for other than Group R) ☐ Commercial kitchen hood worksheet  
☐ Target UA/SHGCA/VT calculation ☐ Other  
☐ Structural load calculation (for mechanical equipment)

SINGLE-FAMILY/DUPLEX  
Min equipment size: Max equipment size: Gas or oil heating AFUE: Table 9-1 option:

Separate permits are required for lighting, plumbing, gas piping, boiler, and refrigeration systems.

### 7. PRIORITY GREEN (www.seattle.gov/dpd/prioritygreen)

PRIORITY GREEN EXPEDITED  
Screening required prior to building permit intake appointment.

Rating anticipated:  
Built Green  
☐ 4 star  
☐ 5 star  
LEED  
☐ Gold  
☐ Platinum  
DPD Alternative Path for Single Family  
☐ Using 3 credits for SEC Table 9-1

PRIORITY GREEN FACILITATED  
Screening required prior to building permit or MUP intake appointment.

Rating anticipated:  
☐ Priority Green Building Matrix - 10 points  
☐ Living Building Challenge  
☐ Built Green 5 Star + 2030 Challenge  
☐ LEED Platinum + 2030 Challenge

### 8. LAND USE CONDITIONS (DPD staff use only)

Assigned planner: Phone:

NEW CURB CUT REQUIRED: Yes No Residential Commercial

### 9. SPECIAL INSPECTIONS (DPD staff use only)

### 10. DRAINAGE & SEWER REVIEW (DPD staff use only)

DPD SEWER AND DRAINAGE REVIEW DESK: (206) 684-5362

DRAINAGE REVIEW REQUIRED? Yes No  
☐ Flow control required  
☐ No flow control required  
☐ Impervious surface this project (new or replaced) in sq. ft.:

NOTE: The drainage system shown in these plans may be changed at the time of side sewer permit issuance to meet standard plans and methods.

Route for drainage review:

SIDE SEWER REVIEW REQUIRED? Yes No  
☐ No conflict with side sewer  
☐ Construction conflicts with applicant's side sewer. Contact Public Health Department at (206) 233-7914  
☐ Construction conflicts with side sewer serving another property. Contact DPD Sewer and Drainage Review Desk at (206) 684-5362  
☐ Construction conflicts with public utility main (requires buildover). Contact SPU at (206) 684-7563

Reviewed by: Date:

NOTE: A separate side sewer permit is required from DPD for ALL new drainage and sewer installations. For more information, call the Sewer and Drainage Review Desk at (206) 684-5362.

### 11. ENVIRONMENTALLY CRITICAL AREAS INFO (DPD staff use only)

ENVIRONMENTALLY CRITICAL AREAS (ECA)

☐ Site is not located in ECA  
☐ Mapped ECA designation: 1 2 3 4 5 6 7 8 9 10 11  
☐ ECA identified by pre-application site visit report as:  
☐ ECA exemption (see review details in Hansen)

Reviewed by: Date:

☐ Denied ☐ Granted Type:  
☐ Small project waiver

New development coverage this permit (sq. ft.):

Previous development coverage (after 10/31/02): Permit # Sq. ft. Permit # Sq. ft. Total:

### 12. SHOP DRAWINGS, KEY AREA INSPECTION & BUILDING CONDITIONS (DPD staff use only)

Sprinkler drawings required for: NFPA 13 NFPA 13 R Partial system Location: Fire alarm

Required shop drawings/key area inspections:

### 13. PERMIT ISSUANCE AUTHORIZATION (DPD staff use only)

REVIEW LOCATION	APPROVAL INITIALS	DATE	NOTES
ZONING (incl. street improvements)			
CURB CUT			
ORDINANCE			
STRUCTURAL			
ENERGY			
MECHANICAL	BP	10/1/13	
DRAINAGE			
ECA			
GRADING			
WATER (SPU)			
FIRE			
HEALTH (King County)			
NOISE			
CONVEYANCE/ELEVATOR			
SHORING (SDOT)			
STREET IMPROVEMENT (SDOT)			
PARKS			
PROTECTED DISTRICTS (DON)			
SEPA EXEMPTION			
LAND USE			

### 14. DEPARTMENT SIGN OFFS (DPD staff use only)

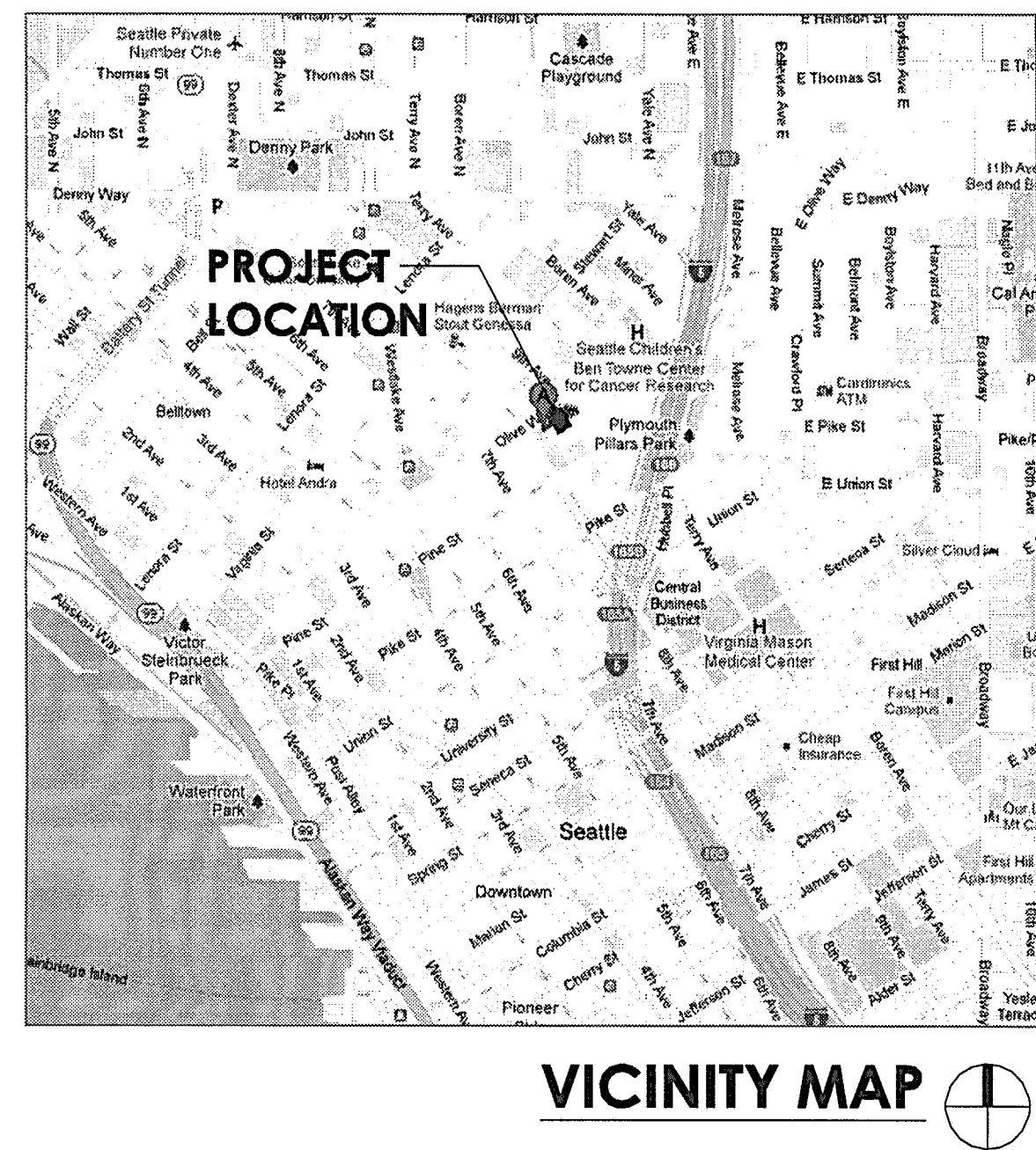
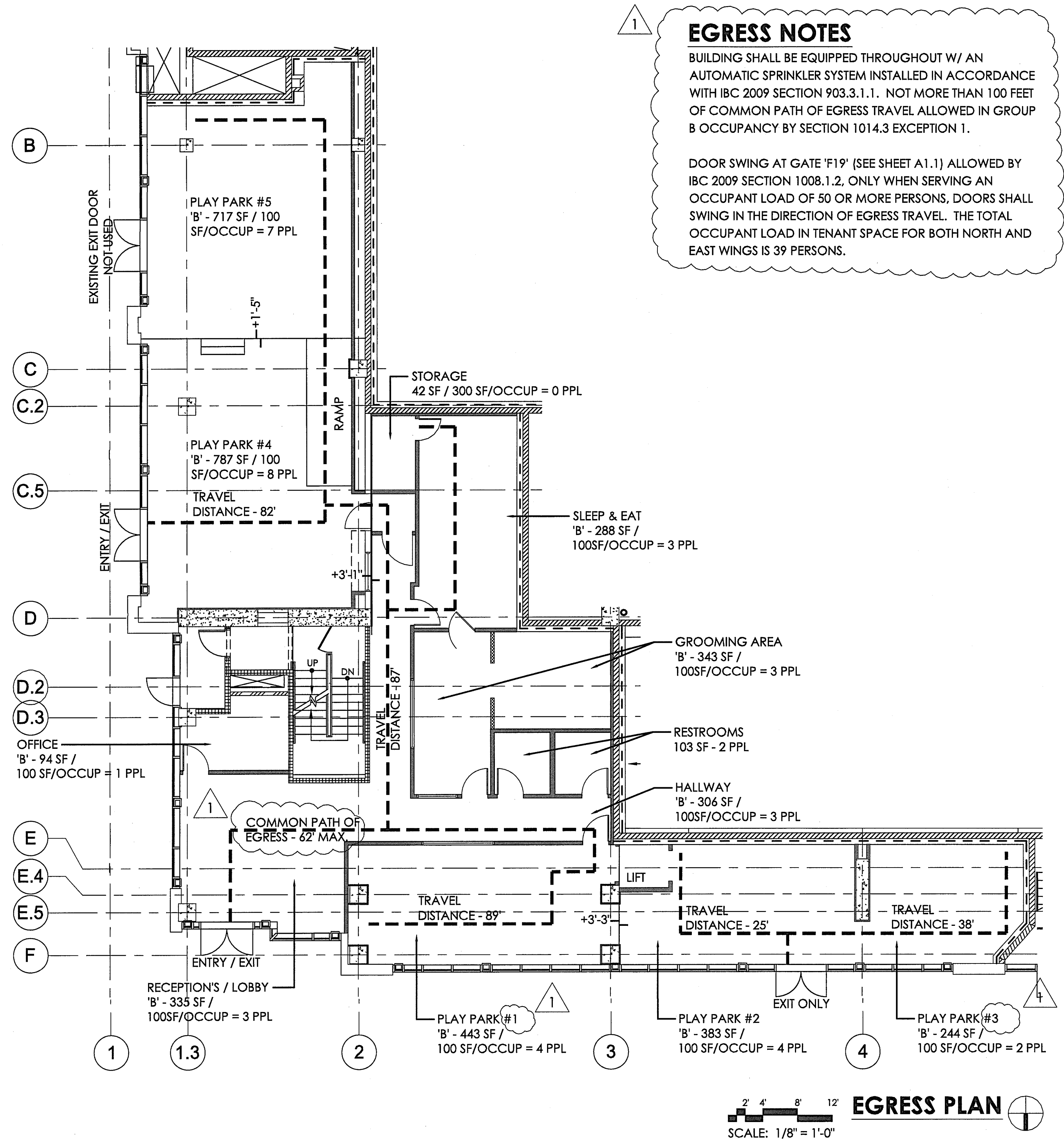
ISSUED BY: DATE: 10/1/13

APPROVED Subject to Errors and Omissions: By: Mechanical/Energy Section

SEP 26 2013

DATE RECEIVED AT INTAKE

BUILDING PLANS EXAMINER MECHANICAL PLANS EXAMINER



City of Seattle  
Department of Planning and  
Development  
Issued for Permit

**PROJECT DATA**

ADDRESS: THE OLIVIAN  
809 OLIVE WAY  
CITY OF SEATTLE  
ZONING: DOC2 500/300-500  
BUILDING CODE: 2009 SBC, SMC, SFC, UPC, 2008 SEC (AS AMENDED BY WA STATE)  
TYPE OF CONSTRUCTION: I-A (FULLY SPRINKLERED)  
BUILDING AREA: 269,758 NSF (EXISTING / NO CHANGE)  
LOT AREA: 13,160 SF (EXISTING / NO CHANGE)  
TI AREA (THIS PERMIT APP): 4,115 SF (FULLY SPRINKLERED)  
OCCUPANCY GROUP: BUSINESS  
OCCUPANT LOAD: 41 OCCUPANTS  
PARKING PROVIDED: EXISTING / NO CHANGE

**SCOPE OF WORK**

TENANT IMPROVEMENT IN GROUND FLOOR TENANT SPACE OF EXISTING HIGH RISE BUILDING. CONSTRUCT INTERIOR NON-BEARING PARTITIONS, RELATED FINISHES & CASEWORKS.

**ASSESSOR'S PARCEL NUMBER**

066000-0835

**LEGAL DESCRIPTION**

BELL HEIRS OF S A 2ND ADD LESS STS TGW POR ALLEY ADJ AS DESC IN DEED REC #20050420001651  
Plat Block: 29  
Plat Lot: 5-6

PARCEL B, LOT BOUNDARY ADJUSTMENT #9806987; TOGETHER WITH LOTS 5-6, BLK 29, HEIRS OF SARAH A. BELL 2ND ADDN, LESS PORTION OF SAID LOTS FOR 8TH AV (CO #10066); TOGETHER WITH AERIAL AND SUBTERRANIAN PORTIONS OF THE ALLEY ADJACENT AS DESCRIBED UNDER VO#114579

**DESIGN TEAM INFORMATION**

CONTACT PERSON: SUE SHANGGUAN  
WOODMAN CONSTRUCTION  
3 LAKE BELLEVUE DR, #201  
BELLEVUE, WA 98005  
P.425.454.3621; FAX.425.454.6918  
sue@woodmanconstruction.com

GENERAL CONTRACTOR: JOE McLAUGHLIN  
WOODMAN CONSTRUCTION  
3 LAKE BELLEVUE DR, #201  
BELLEVUE, WA 98005  
P.425.454.3621; FAX.425.454.6918

PROJECT OWNER: citydog!Club  
MARK SPINO  
11151 MISSOURI AVE  
LOS ANGELES, CA 90025

PROPERTY OWNER: OLIVE WAY HIGH RISE LP  
809 OLIVE WAY  
SEATTLE, WA 98101

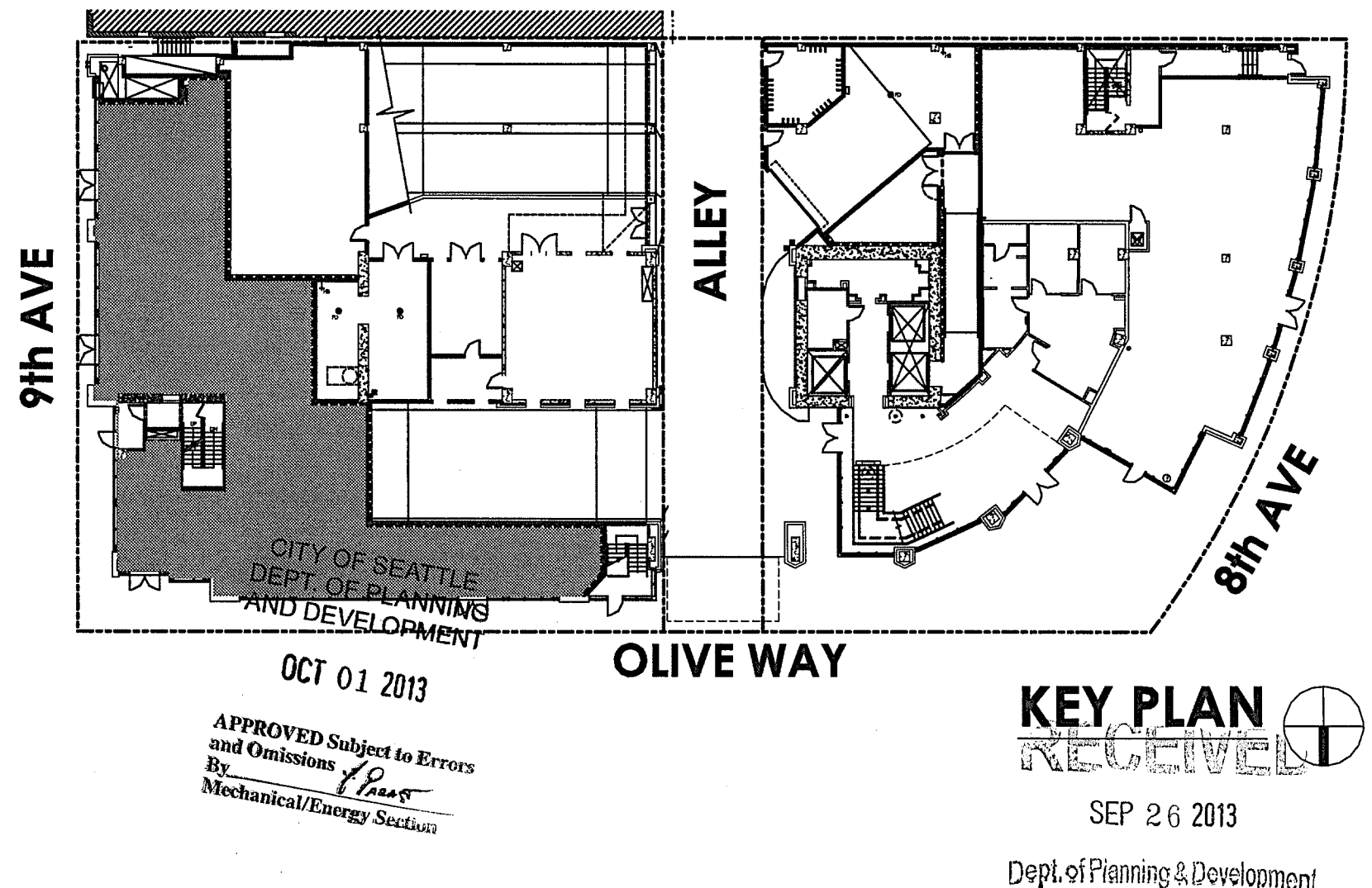
**DEFERRED SUBMITTALS**

MECHANICAL  
ELECTRICAL  
PLUMBING  
FIRE PROTECTION  
CONVEYANCE  
SIGNAGE

**DRAWING INDEX**

A0.1 PROJECT INFO  
A1.1 FLOOR PLAN / FIXTURE LAYOUT PLAN  
A2.1 REFLECTED CEILING PLAN  
A2.3 EXISTING FLOOR PLAN (REFERENCE)  
A3.1 FLOOR FINISH PLAN  
A4.1 DOORS & WINDOWS SCHEDULES  
A5.1 ENLARGED PLANS / DETAILS

THE CITY OF SEATTLE  
DEPARTMENT OF PLANNING AND DEVELOPMENT  
APPROVED  
Subject to Errors and Omissions  
8/1/2013 Dean D. Greenleaf



ARCHITECT / ENGINEER:  
Lawrence Houston, Architect  
1719 1st Ave N  
Seattle, WA 98109  
P.206.819.1279  
lawrencehouston@comcast.net

PERMIT SET  
4.18.2013

citydog!CLUB  
TENANT IMPROVEMENT  
809 OLIVE WAY STE #TBD  
SEATTLE, WA 98101

PROJECT  
INFO

A0.1  
MECHANICAL



GENERAL HVAC NOTES

- 1 THE FOLLOWING NOTES APPLY TO ALL MECHANICAL DRAWINGS. ADDITIONAL MECHANICAL NOTES MAY BE INDICATED ON EACH MECHANICAL DRAWING. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 2 REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR GENERAL CONSTRUCTION INCLUDING LOUVERS, CONCRETE EQUIPMENT PADS, FLASHING DETAILS, ETC.
- 3 REFER TO ARCHITECTURAL DRAWING FOR ROOM ELEVATIONS. LOCATE MECHANICAL DEVICES SUCH AS TEMPERATURE SENSORS, HUMIDISTATS, PANELS, ETC. SO THAT THEY DO NOT CONFLICT WITH GENERAL CONSTRUCTION (WAINSCOT, DOOR HARDWARE, ETC.) NOR WITH ELECTRICAL SYSTEM (LIGHT SWITCHES, SPEAKERS, OUTLETS, ETC.). MOUNT THERMOSTATS 48" AFF UNO.
- 4 MECHANICAL DRAWINGS SHOW APPROXIMATE LOCATIONS FOR GRILLES AND DIFFUSERS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS OF GRILLES, REGISTERS, DIFFUSERS, AND OTHER CEILING OR SURFACE MOUNTED DEVICES. INSTALL EQUIPMENT IN CONFORMANCE WITH ARCHITECTURAL FEATURES IN THE CENTER OF CEILING TILES, IN THE CENTER OF ROOMS, OR WHERE INDICATED ON ARCHITECTURAL DRAWINGS. WHERE EQUIPMENT IS NOT INDICATED ON ARCHITECTURAL DRAWINGS, OBTAIN DIRECTION FROM ARCHITECT PRIOR TO INSTALLATION.
- 5 SEE ARCH. DRAWINGS FOR EXACT SIZE AND LOCATION OF LOUVERS. COORDINATE EXACT SIZE OF ATTACHED DUCTWORK/PLENUM AND/OR MOTORIZED DAMPERS WITH ARCH. DRAWINGS.
- 6 GENERALLY DUCTWORK PLANNED TO BE TIGHT TO STRUCTURE WITH PIPING BELOW DUCTWORK AND BETWEEN LIGHT FIXTURES. ADJUST AS NECESSARY.
- 7 COORDINATE LOCATIONS OF MECHANICAL EQUIPMENT AND DUCTWORK TO PROVIDE CLEARANCES OVER LIGHTING FIXTURES FOR REMOVAL AND SERVICE ACCESS DUE TO EQUIPMENT MAINTENANCE.
- 8 ARRANGE HVAC EQUIPMENT SO THAT ACCESS CLEARANCES INDICATED BY DRAWINGS, REQUIRED BY CODES AND RECOMMENDED BY MANUFACTURER ARE PROVIDED. PROVIDE 42" CLEAR AT DISCONNECT SWITCH ON TERMINAL UNITS WITH ELECTRIC HEATING COIL.
- 9 REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL ELECTRICAL CHARACTERISTICS OF MECHANICAL EQUIPMENT (VOLTAGES, ETC.).
- 10 DUCTWORK AND PIPING INSTALLED ADJACENT TO ELECTRICAL CABLE TRAYS SHALL ALLOW MINIMUM ACCESS OF 6" IF RUNNING PARALLEL AND ABOVE CABLE TRAYS, ALLOW 18" TO THE SIDE OF CABLE TRAYS.
- 11 ELECTRICAL CHARACTERISTICS OF LISTED EQUIPMENT SHALL BE VERIFIED BY CONTRACTOR DURING SUBMITTAL PROCESS. ANY ELECTRICAL CHARACTERISTICS THAT DEVIATE FROM THOSE LISTED SHALL BE IDENTIFIED BY THE CONTRACTOR, SUBMITTED TO THE ENGINEER FOR APPROVAL AND COORDINATED WITH DIVISION 26 ELECTRICAL PRIOR TO INSTALLATION OF EQUIPMENT AS REQUIRED TO PROPERLY SERVE EQUIPMENT.
- 12 DRAWINGS ARE SCHEMATIC IN SOME AREAS AND MAY NOT SHOW OFFSETS WHICH MAY BE REQUIRED. PROVIDE OFFSETS AS REQUIRED AT NOT ADDITIONAL COST.
- 13 REFER TO PIPING DIAGRAMS AND DETAILS FOR REQUIRED FITTINGS, VALVES, ETC. FLOOR PLANS AND SECTIONS INDICATE EQUIPMENT LOCATIONS AND GENERAL PIPE ROUTING ONLY.
- 14 DUCTS AND PIPES INDICATED WITHOUT DIMENSIONS SHALL BE SIZED PER PRECEDING UPSTREAM DUCT AND PIPE SECTIONS.
- 15 DUCTWORK SIZES SHOWN ARE CLEAR INSIDE DIMENSION.
- 16 PROVIDE FABRICATED STEEL MEMBER SUPPORTS AS REQUIRED BY MANUFACTURER'S INSTALLATION INSTRUCTIONS, AS INDICATED ON DRAWINGS, OR IN SPECIFICATIONS FOR INSTALLATION OF EQUIPMENT. REQUIRED STRUCTURAL MEMBERS, BOLTS, AND WELDS SHALL BE IN ACCORDANCE WITH AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL.
- 17 IF REQUIRED FOR INSTALLATION OF PIPES, DUCTS, AND EQUIPMENT, PROVIDE ADDITIONAL STRUCTURAL MEMBERS BETWEEN COLUMNS, JOISTS, AND STRUCTURAL FRAME TO MEET SUPPORT REACTIONS (FORCES, MOMENTS, DEFLECTIONS). STRUCTURAL MEMBERS SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER.
- 18 DO NOT CORE DRILL OR DRILL THROUGH BEAMS, COLUMNS, AND SHEAR WALLS, UNLESS INDICATED ON STRUCTURAL DRAWINGS OR AS APPROVED BY THE STRUCTURAL ENGINEER.
- 19 PROVIDE A VOLUME DAMPER FOR EACH SUPPLY BRANCH, RETURN BRANCH (DUCTED ONLY), & EXHAUST BRANCH WHERE THREE OR MORE OPENINGS ARE ASSOCIATED WITH THE BRANCH, AND ELSEWHERE AS NOTED ON DRAWINGS OR IN SPECIFICATIONS.
- 20 PROVIDE CONICAL SPIN-IN FITTINGS FOR ALL 90 DEGREE ROUND DUCT BRANCHES FROM RECTANGULAR SUPPLY DUCTWORK. DO NOT USE STRAIGHT TEE FITTINGS.
- 21 DUCTWORK STATIC PRESSURE AND SEAL CLASS, BASED UPON SMACNA:
- 22 REFER TO WASHINGTON STATE NREAC COMPLIANCE REQUIREMENTS ON DRAWING SCHEDULE SHEETS FOR ADDITIONAL MECHANICAL PROVISIONS
- 23 ECONOMIZERS SHALL MODULATE OUTSIDE AIR FROM MINIMUM TO 100% PER WSEC 1413.1
- 24 SEAL AND LEAK TEST DUCTWORK PER WSEC 1414.1.
- 25 BALANCE HVAC SYSTEM PER WSEC 1416.3.2.
- 26 COMMISSION HVAC SYSTEM PER WSEC 1416.
- 27 PROVIDE COMPLETION/RECORD DRAWINGS PER WSEC 1416.
- 28 THERMOSTATS SHALL BE INTERLOCKED TO PREVENT SIMULTANEOUS HEATING AND COOLING PER WSEC 1423, WSEC 1435.
- 29 INSULATE DUCTWORK PER WSEC 1414.2 AND TABLE 14-5.
- 30 INSULATE PIPING PER WSEC, TABLE 14-6.

SHEET NOTES

- 1 EXPOSED DUCTWORK TO BE SPIRAL WOUND WHERE ROUND SIZE INDICATED.
- 2 PROVIDE SOUND LINING FOR ACOUSTICAL PURPOSES UPSTREAM AND DOWNSTREAM OF HEATING COIL WITH MINIMUM CLEARANCE AS ALLOWED BY DUCT HEATER MANUFACTURER.
- 3 PROVIDE INSULATION AROUND LOUVER PLENUMS AS REQUIRED BY ENERGY CODE.
- 4 PROVIDE ACCESS CLEARANCE AT EQUIPMENT PER DASHED LINE.
- 5 MAINTAIN 10"-0" MINIMUM CLEARANCE BETWEEN EXHAUST AND OA LOUVER DISCHARGE PLENUMS.
- 6 FILTER MIXING BOX WITH RA ON TOP OF BOX.

ABBREVIATIONS									
AAV	AIR ADMITTANCE VALVE	FH	FAHRENHEIT	MCC	MOTOR CONTROL CENTER	S.I.O.	SUPPLIED AND INSTALLED BY OWNER/ (OTHER)		
AC	AIR CONDITIONING	FD	FIRE DAMPER OR FLOOR DRAIN	MCA	MAXIMUM CIRCUIT AMPS	SHT	SHEET		
ABV	ABOVE	FT	FINISHED FLOOR	MAT	MIXED AIR TEMPERATURE	SP	STATIC PRESSURE		
AD	ACCESS DOOR	FLGD	FLANGED	MAX	MAXIMUM	SPEC	SPECIFICATION		
AV	ACID VENT	FLR	FLOOR	MECH	MECHANICAL	SR	SUPPLY REGISTER		
AW	ACID WASTE	FCO	FLOOR CLEAN OUT	MFR	MANUFACTURER	SS	STAINLESS STEEL		
AFC	ABOVE FINISHED CEILING	FLTR	FILTER	MED	MEDIUM	SYS	SYSTEM		
AFF	ABOVE FINISHED FLOOR	FOF	FACE OF FLANGE	MIN	MINIMUM, MINUTE	STAT	THERMOSTAT		
AFG	ABOVE FINISHED GRADE	FPI	FINS PER INCH	MISC	MISCELLANEOUS				
AFUE	ANNUALIZED FUEL EFFICIENCY	FSK	FOIL SKIRM KRAFT LINED	MV	MED VACUUM	TEMP	TEMPERATURE		
AHU	AIR HANDLING UNIT		DUCT (SPUNSTRAND)			TD	TEMPERATURE DIFFERENTIAL		
AL	ALUMINUM					TDH	TOTAL DYNAMIC HEAD		
APPROX	APPROXIMATELY	FT	FEET, FOOT	N	NORTH, NEUTRAL	TEMP	TEMPORARY		
ARCH	ARCHITECTURAL	FU	FIXTURE UNITS	NA	NOT APPLICABLE	THRU	THROUGH		
ATMOS	ATMOSPHERE	FV	FACE VELOCITY	NC	NORMALLY CLOSED	TI	TENANT IMPROVEMENT		
		FW	FEED WATER	NIC	NOT IN CONTRACT	TSTAT	THERMOSTAT		
BATT	BATTERY	FTPU	FAN POWERED TERMINAL UNIT	NO	NUMBER OR NORMALLY OPEN	TYP	TYPICAL		
BDD	BACK DRAFT DAMPER			NTS	NOT TO SCALE	TRU	TERMINAL REHEAT UNIT		
BF	BLIND FLANGE	G	GAS						
BFC	BELOW FINISHED CEILING	GALV	GALVANIZED	O2	OXYGEN	UL	UNDERWRITER'S LABORATORY		
BHP	BRAKE HORSE POWER	GEN	GENERATOR	OC	ON CENTER	UNO	UNLESS NOTED OTHERWISE		
BI	BACKWARD INCLINED	GFI	GROUND FAULT CIRCUIT INTERRUPTER	OSA	OUTSIDE AIR	UV	UNIT VENTILATOR		
BLDG	BUILDING	GR	GRILLE	OAT	OUTSIDE AIR TEMPERATURE	UMC	UNIFORM MECHANICAL CODE		
BOD	BOTTOM OF DUCT	GPM	GALLONS PER MINUTE	OA	OUTSIDE AIR	UP	UNIFORM PLUMBING CODE		
BTU	BRITISH THERMAL UNIT	GV	GATE VALVE	OD	OUTSIDE DIMENSION	UBC	UNIFORM BUILDING CODE		
BTUH	BRITISH THERMAL UNIT PER HOUR	GW	GRAY WATER (NON POTABLE)	OPP	OPPOSITE	UPC	UNIFORM PLUMBING CODE		
		GWR	GLYCOL WATER RETURN	OV	OUTLET VELOCITY	UG	UNDERGROUND		
		GWS	GLYCOL WATER SUPPLY	OCF	OVER CURRENT PROTECTION				
CFM	CUBIC FEET PER MINUTE					V	VOLT		
CHAR	CHARACTERISTICS	HP	HORSE POWER	P	PUMP	VAC	VOLTS AC		
CHEM	CHEMICAL INJECTION	HPFS	HIGH POINT FINISHED SURFACE	P	PRESSURE DROP	VDC	VOLTS DC		
CHWS	CHILLED WATER SUPPLY	HR	HOUR	PERF	PERFORATED	VD	VOLUME DAMPER		
CHWR	CHILLED WATER RETURN	HTG	HEATING	PF	PRE FILTER	VAC	VACUUM		
CLG	CLEAN OUT	HT	HEIGHT	PH	PHASE	VAV	VARIABLE AIR VOLUME		
CO	CLEAN OUT	HVAC	HEATING, VENTILATION AND AIR CONDITIONING	PJ	PUSH ON JOINTS	VEL	VELOCITY		
CONC	CONCRETE			PLCS	PLACES	VF	VENTILATION FAN		
CONN	CONNECT OR CONNECTION	HW	HOT WATER	PNL	PANEL	VTR	VENT THROUGH ROOF		
CPLG	COUPLING	HWC	HOT WATER CIRCULATING	POC	POINT OF CONNECTION	VOL	VOLUME		
CS	CARBON STEEL	HWS	HOT WATER HEATING SUPPLY	PRV	PRESSURE REDUCING VALVE	V/PH/HZ	VOLTS/PHASE/HERTZ		
CSC	CARSEALED CLOSED	HWR	HOT WATER HEATING RETURN	PS	PIPE SUPPORT				
CSO	CARSEALED OPEN			PSV	PRESSURE SAFETY (RELIEF) VALVE				
CV	CONSTANT VOLUME	IA	INSTRUMENT AIR			W/	WITH		
CW	COLD WATER	ID	INSIDE DIMENSION	W/O	WITHOUT	W	WASTE		
CRD	CEILING RADIATION DAMPER	IE	INVERT ELEVATION	WB	WET BULB	WC	WATER CLOSET		
		IH	INSULATION HOT	WCO	WALL CLEAN OUT	WG	WATER GAUGE		
DET	DETAIL	IN	INCH, INCHES	WGT	WATER HAMMER ARRESTOR	WHA	WATER TANK		
DFU	DRAINAGE FIXTURE UNITS	INFO	INFORMATION	WT	WEIGHT	WTR, W	WATER		
DIA	DIAMETER	INST	INSTRUMENT	R	RELIEF				
DIM	DIMENSION	INSUL	INSULATE, INSULATION	RA	RETURN AIR				
DISCH	DISCHARGE	INV	INVERT	RED	REDUCER				
DI	DUCTILE IRON	IRR	IRRIGATION (NON POTABLE)	REQD	REQUIRED				
DMPR	DAMPER	IW	INDIRECT WASTE	RR	REMOVE AND RELOCATE				
DN	DOWN			RJ	RESTRAINED JOINTS				
DP	DIFFERENTIAL PRESSURE			RET	RETURN				
DR	DRAIN	JAN	JANITOR	RG	RETURN GRILLE				
DWG	DRAWING			RPM	REVOLUTIONS PER MINUTE				
				RWL	RAINWATER LEADER				
EA	EACH	KW	KILOWATT	SS	SANITARY SEWER OR STAINLESS STEEL				
EAT	ENTERING AIR TEMPERATURE	KWH	KILOWATT HOUR	SA	SUPPLY AIR				
ECC	ECCENTRIC	LAT	LEAVING AIR TEMPERATURE	SCHED	SCHEDULE				
ECON	ECONOMIZER	LB	POUND	SECT	SECTION				
EER	ENERGY EFFICIENCY RATIO	LC	LOCKED CLOSED	SEER	SEASONAL ENERGY EFF. RATIO				
EF	EXHAUST FAN	LF	LINEAL FEET	SVC	SERVICE				
EFF	EFFICIENT, EFFICIENCY	LL	LANDLORD	SHT	SHEET				
EG	EXHAUST GRILLE	LOC	LOCATION	SD	SMOKE DETECTOR				
EL	ELEVATION	LVG	LEAVING	SL	SOUND LINING				
ELEC	ELECTRICAL	MA	MED GAS	SV	SOLENOID VALVE				
EQUIP	EQUIPMENT	MATL	MATERIAL	SW	SOCKET WELD				
ET	ELECTRIC TRACED	MAX	MAXIMUM	STA	STATION				
EXIST, (E)	EXISTING	MPG	MEDIUM PRESSURE GAS	STD	STANDARD				
EXH	EXHAUST	MA	MIXED AIR	SF	SUPPLY FAN				
EXT	EXTERIOR	MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR	SFD	SMOKE/FIRE DAMPER				

SEQUENCE OF OPERATION

FAN COILS SHALL BE PROVIDED WITH A ECONOMIZER / MIXED AIR CONTROLLER TO PROVIDE THE FOLLOWING OPERATION OF THE MIXED AIR DAMPERS DURING OCCUPIED MODE:

- ? OPEN OA DAMPER TO MINIMUM POSITION (AS LISTED IN FC SCHEDULE)
- ? MAINTAIN MIXED AIR MINIMUM TEMPERATURE (INITIALLY SET FOR 34F)
- ? PROVIDE AIRSIDE ECONOMIZER WHENEVER OUTDOOR CONDITIONS ALLOW AND COOLING IS REQUIRED.

FAN COILS SHALL BE PROVIDED WITH A MANUAL RESET FREEZE PROTECTION THERMOSTAT TO PROTECT THE HYDRONIC COOLING COIL AGAINST FREEZING CONDITIONS (INITIALLY SET FREEZE STAT TO 28F).

- ? TURN OFF FAN COIL AND ASSOCIATED EXHAUST FAN (S).
- ? SHUT OUTSIDE AIR DAMPERS.

FAN COILS SHALL MAINTAIN 70F HEATING SETPOINT DURING OCCUPIED CYCLE BY ENERGIZING A DUCT MOUNTED ELECTRIC HEATING COIL. COIL DISCHARGE TEMPERATURE SHALL MODULATE TO MAINTAIN OPTIMAL HEATING TEMPERATURE TO MEET ROOM THERMOSTAT REQUIREMENTS.

FAN COILS SHALL PROVIDE COOLING USING FIRST STAGE AIRSIDE ECONOMIZER AND THEN BACK OFF TO MINIMUM OUTSIDE AIR SETPOINT AND MODULATE THE COOLING COIL CONTROL VALVE TO MEET THE ROOM THERMOSTAT REQUIREMENTS.

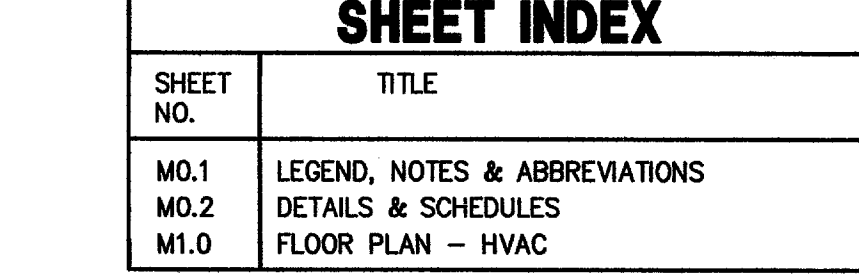
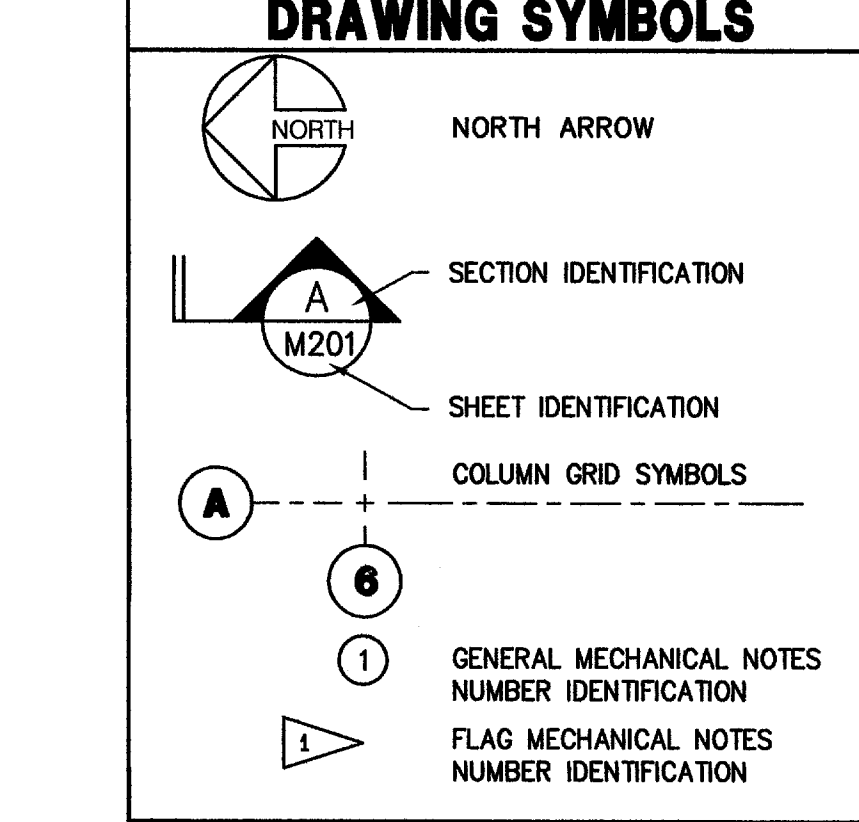
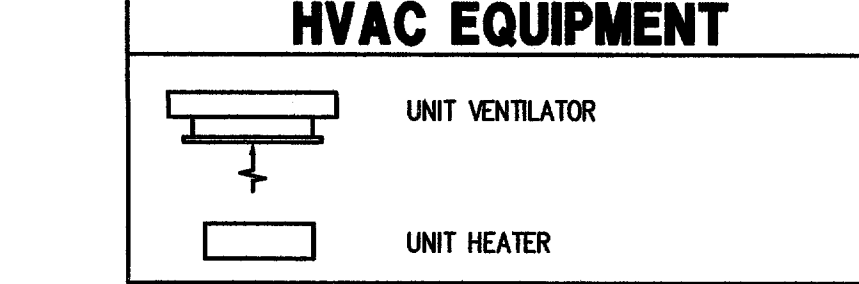
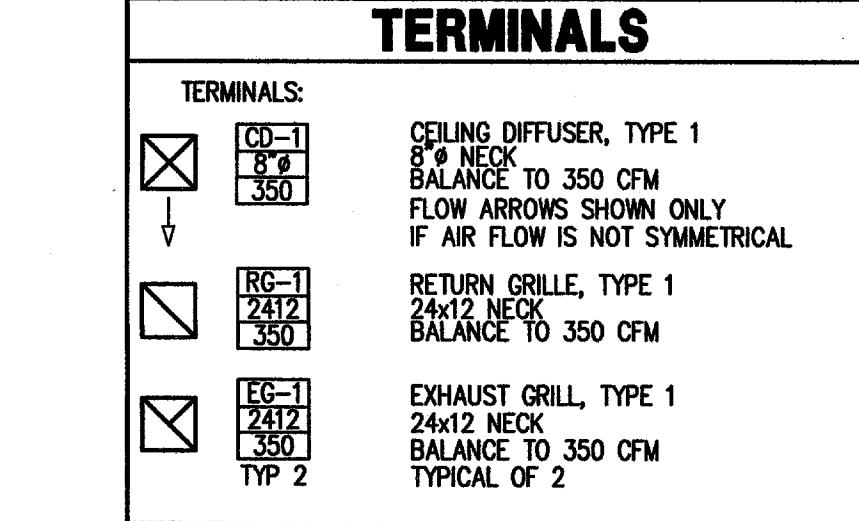
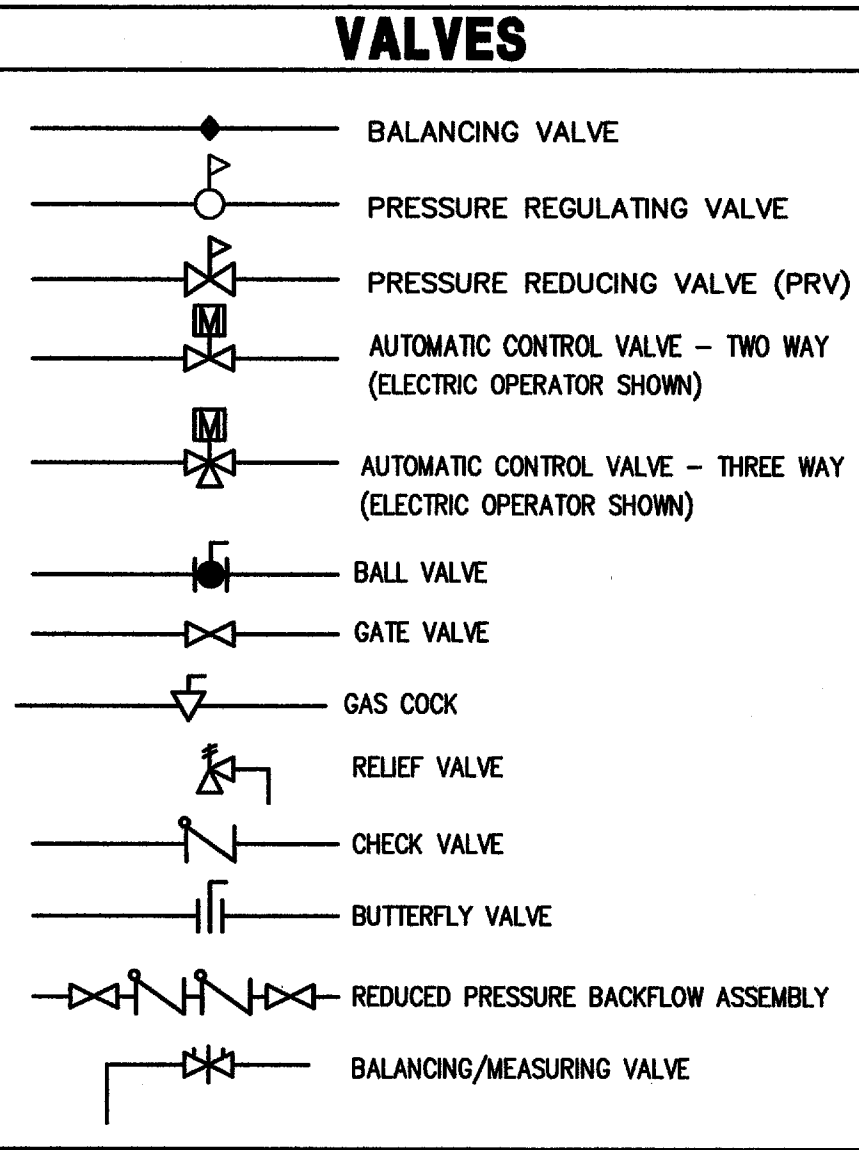
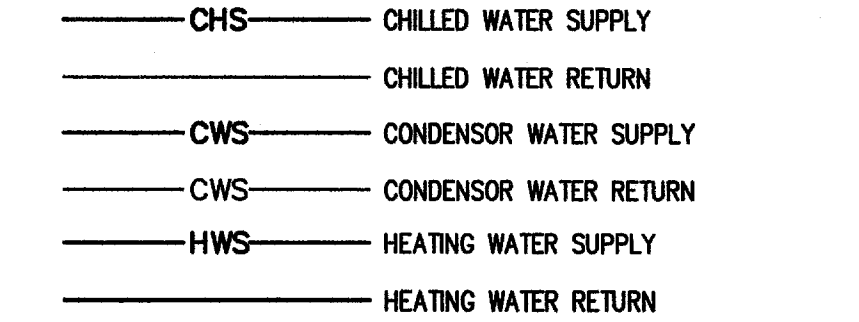
EF-1 TO BE INTERLOCKED WITH FC-1 AND EF-2 TO BE INTERLOCKED WITH FC-2 SUCH THAT WHEN THE FC IS IN THE OCCUPIED MODE, THE EXHAUST FAN MOTORIZED DAMPER WILL OPEN AND THE FAN WILL BE ENERGIZED (ON SAIL SWITCH CONFIRMATION OF OPEN DAMPER). DURING THE FAN COIL UNOCCUPIED CYCLE, THE EXHAUST FAN WILL BE OFF AND THE ASSOCIATED EXHAUST DAMPER WILL CLOSE.

EF-3 WILL RUN CONTINUOUSLY.

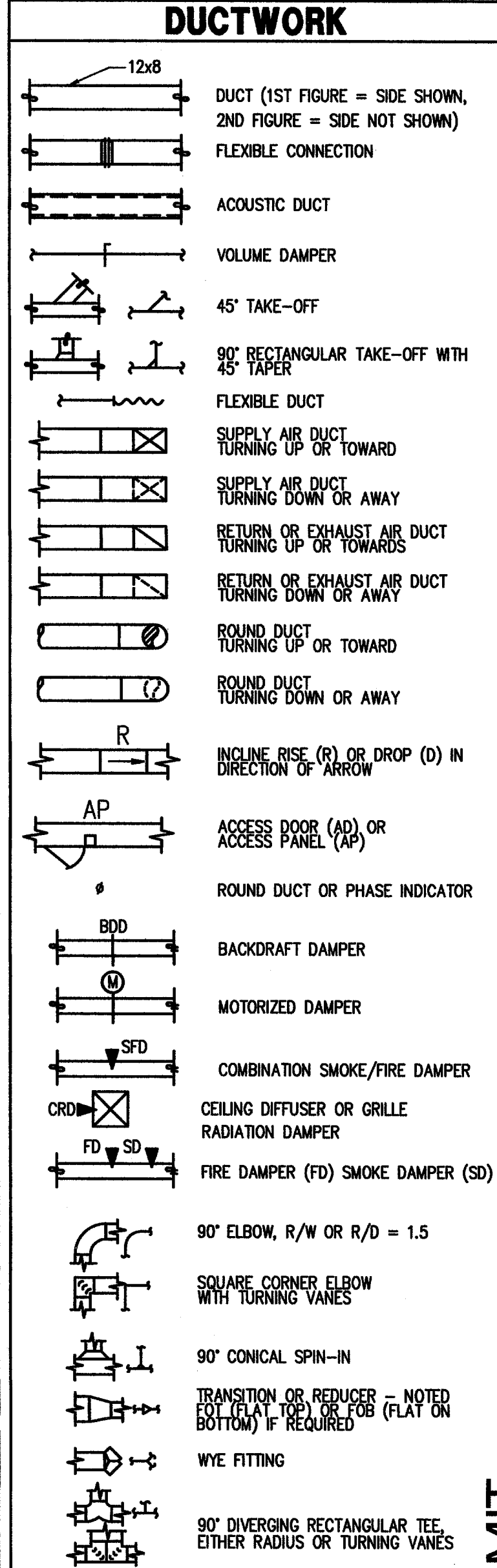
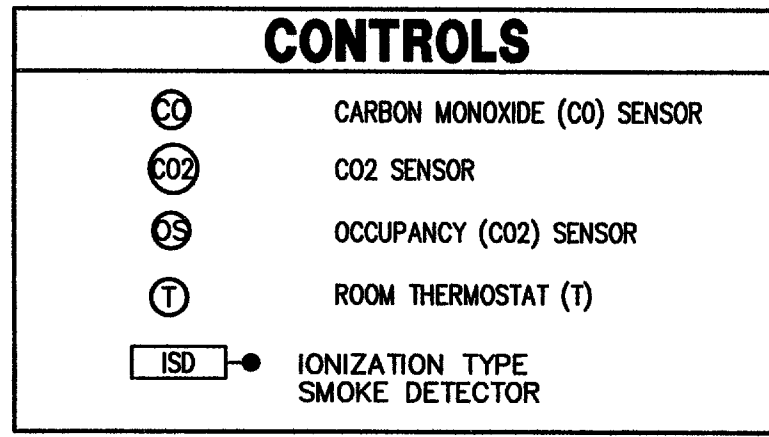
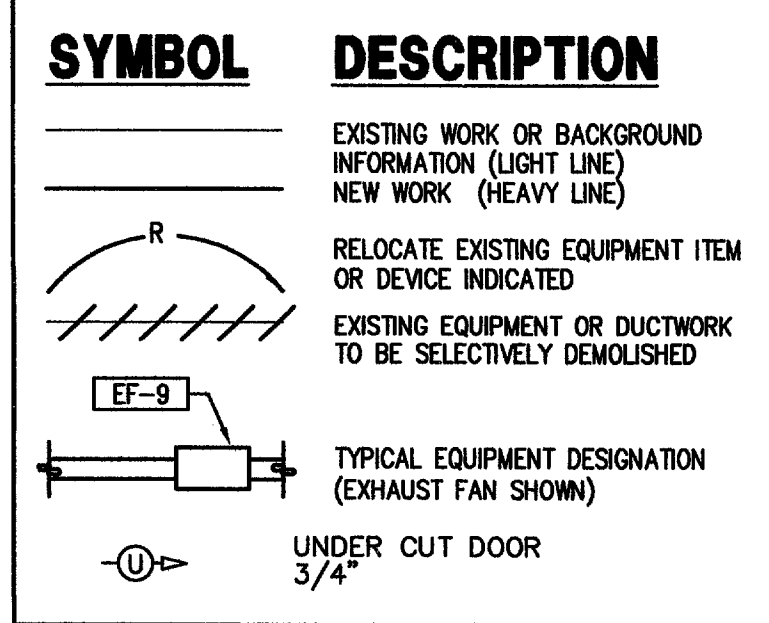
FAN COILS AND ASSOCIATED HEATING COIL WILL BE CYCLED TO MAINTAIN UNOCCUPIED ROOM THERMOSTAT REQUIREMENTS. RA DAMPER WILL BE OPEN AND OA DAMPER WILL BE CLOSED.

EXHAUST FANS WILL BE PROVIDED WITH A VELOCITY PRESSURE CONTROLLER AND SPEED CONTROLLER THAT WILL BE SET UPSTREAM OF EACH FAN'S FILTER BOX TO MAINTAIN CONSTANT AIR VOLUME ON SYSTEM AS FILTERS LOAD.

HYDRONIC HVAC PIPING SYSTEMS



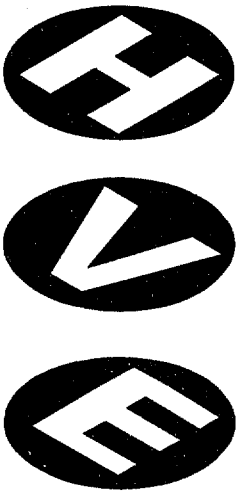
MECHANICAL LEGEND



CITY OF SEATTLE  
DEPT. OF PLANNING  
AND DEVELOPMENT  
OCT 01 2013

APPROVED Subject to Errors  
and Omissions  
By: [Signature]  
Mechanical/Energy Section

REUSE OF DOCUMENTS	VERIFY SCALE
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF HV ENGINEERING, INC. AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF HV ENGINEERING. COPYRIGHT, HV ENGINEERING, INC.	BAR MEASURES ONE INCH ON ORIGINAL DRAWING OR 1" IF NOT ONE INCH ON THIS DRAWING, ADJUST SCALES ACCORDINGLY.



HV Engineering, Inc.  
Consulting Engineers  
7100 Linden Ave. N., Suite 1  
Seattle, Washington, 98108  
Phone: (206) 706-0669  
Fax: (206) 706-1650  
www.hvengineering.biz

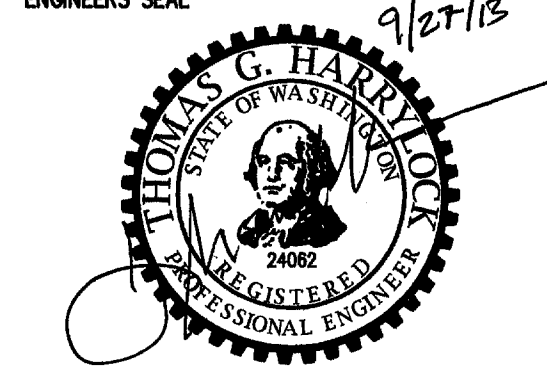
Project  
**CITY DOG CLUB**

Location  
809 OLIVE WAY  
STE #TBD  
SEATTLE, WA 98101  
Prepared For  
**WILLIAMS MECHANICAL**

3903 Smith Ave.  
Everett, WA 98201

THESE DRAWINGS WERE DEVELOPED FOR EXCLUSIVE USE BY WILLIAMS MECHANICAL ON A DESIGN BUILD CONCEPT. THEY ARE TO BE USED ONLY WITH WRITTEN PERMISSION OF WILLIAMS MECHANICAL. FOR INFORMATION CONTACT: BILL ALSEPT.

NO.	DATE	REVISION



TITLE  
**LEGEND, NOTES, & ABBREVIATIONS**

PROJECT NO. 2013-077  
DATE SEPTEMBER 26, 2013  
PROJECT NETWORK PATH

SHEET NUMBER  
**MO.1**  
SEP 26 2013

Dept. of Planning & Development







