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FOOD SERVICE

PROJECT EXPERIENCE

Food Service

Grand Hyatt and Convention Center – Restaurant and Banquet Kitchens Seattle, Washington

Mechanical engineering services for new 20-story, 440-room hotel located over an eight-story base structure in downtown Seattle. Base structure includes hotel support spaces such as fitness center, laundry, banquet kitchens, restaurant, multi-media conference theater, ballrooms, meeting rooms, and multiple retail spaces for a total of 445,400 s.f. Restaurant is currently Ruth's Chris Steak House. Mechanical design for restaurant included individual chilled water air conditioning units and grease exhaust hoods in kitchen with indirect gas-fired makeup air units. Banquet kitchens included commercial kitchen plumbing, grease exhaust hoods ducted to rooftop grease exhaust fans, makeup air units with heat recovery, and natural gas to kitchen equipment. Exterior grease vault sized for banquet kitchens and restaurant located at food service loading dock.



PROJECT EXPERIENCE

Mt. Roberts Aerial Tramway and Visitors Center

Juneau, Alaska



Food Service

Mechanical engineering services for the preparation of design-build criteria for the design of the lower and upper terminal buildings at the Mt. Roberts Tram in Juneau. Lower portion of the tram is located on the waterfront in Juneau and travels 3,000 feet to an elevation of 1,700 feet at the upper terminal on Mt. Roberts.

The 8,300 s.f. lower terminal building includes a large exhibition area, public restrooms, tram equipment location and storage, food storage coolers



and freezers, administration offices, and emergency generators. Upper terminal building has 18,000 s.f. and includes a theater, restaurant, retail spaces, conference areas, lobby/exhibit space, food storage, domestic water storage tanks, fire protection water storage tanks and fire pumps, and a skybridge connection to the lower terminal building with the tram loading platform. Mechanical

design-build criteria consisted of ventilation and heating requirements, fire protection system requirements, general plumbing, and kitchen plumbing and ventilation requirements.



PROJECT EXPERIENCE

Food Service

Northgate Mall – Renovation and Food Court Addition Seattle, Washington

Mechanical engineering services for the renovation of 120,000 s.f. for food court and common areas at the Northgate Mall. Mechanical work included surveys of existing mechanical and electrical systems to determine the condition and spare capacity of the equipment. Packaged rooftop air conditioning units with gas-fired heaters were added and the existing rooftop units were replaced to accommodate the new renovation of the Mall. Food court design included air conditioning, commercial kitchen plumbing and fire protection systems for new 15,000 s.f. addition for restaurants, food vendor tenants, seating area, and public restrooms. Restaurants are currently Red Robin and Azteca Mexican Restaurant. Food court tenants are currently Panda Express, Edo Japan, Sbarro, Taco Time, Thai Go, California Pizza Kitchen, Auntie Anne's Pretzels, and Dairy Queen/Orange Julius.



PROJECT EXPERIENCE

River Park Square Mall, Theater Complex and Parking Garage – Restaurants and Food Court Spokane, Washington



Mechanical engineering services for a new fully-enclosed, five-story mall which covers two city blocks of downtown Spokane. This high-rise structure includes a 20-theater AMC complex on the fourth and fifth levels, a Nordstrom store, a fully-enclosed four-

story glass atrium, upscale food court, and underground parking structure. Project included incorporating an existing mall section inside historic buildings within the same two city block area, three pedestrian skybridges that connect to adjacent Spokane City Hall and department stores located across the streets and the renovation and expansion of an existing aboveground parking structure. Mechanical design included rooftop packaged air conditioning units with gas-fired heaters sized and zoned for the common areas and the restaurant tenant spaces, grease exhaust hoods ducted to sidewall exhaust fans discharging vertically to



the atmosphere, natural gas-fired makeup air units, and exterior grease vault located in the alley behind the restaurants. Plumbing for commercial kitchen equipment provided by the tenants with points of connection to the building mains coordinated with the shell and core package. Restaurant tenants are currently Rock City and Sawtooth Grill. Food court tenants are currently Edo Japan, Panda Express, Pizza Rita, Subway, D. Lish's Hamburgers, Wetzels Pretzels.

Food Service



PROJECT EXPERIENCE

Food Service

Microsoft Corporation Buildings 34, 35 & Cafeteria/Kitchen (St. Andrews Office Complex)

Redmond, Washington

Mechanical engineering services for shell and core and tenant improvement designs and construction administration for a new office building complex consisting of 465,000 s.f. of office and 34,000 s.f. of cafeteria/kitchen spaces plus underground and above grade parking structures to accommodate 2,100 vehicles. Cafeteria/kitchen building is a separate structure from the office buildings and was provided as a showcase architectural with 23-ft. high ceilings, all-glass exterior walls, and one full-height art wall for murals and artwork displays. Mechanical systems include an exterior grease vault, grease exhaust hoods ducted to a roof-mounted grease exhaust fan located in a camouflaged well, dedicated multizone air handling unit, and unique air distribution terminal devices that were hidden within the architecture of the ceiling above the dining area. Project consists of multiple office buildings, ranging in height from three to five stories, a 525-person capacity cafeteria, and a new 3,480-ton central chiller plant for campus style distribution to the office buildings and cafeteria.

Microsoft Corporation Buildings 8, 9 & 10 Complex Cafeteria/ Kitchen

Redmond, Washington

Mechanical engineering services for 360,000 total s.f. of renovations to three office buildings at Microsoft's corporate headquarters campus. Each building has an underground parking garage; one building includes the addition of a cafeteria/serving area. Cafeteria/kitchen includes an exterior grease vault located inside parking structure with vehicle access. Grease exhaust hoods are ducted to exhaust fans located on the roof of the cafeteria addition. Indirect gas-fired makeup air units provide the offset air to the exhaust fans. Project includes a complete remodel of the HVAC system with the addition of six new roof-top package air handling units for each building with ties to the new Building 10P central plant. Additionally, a new complete ductwork system and chilled water distribution within the building was retrofitted into the existing facility.



PROJECT EXPERIENCE

Food Service

Microsoft Corporation
Cedar Court
Cafeteria/Kitchen
Redmond, Washington

Mechanical engineering services for tenant improvements and shell and core infrastructure upgrades to a 430,000 s.f. four building office complex. Project included a 25,000 s.f. full-service cafeteria/kitchen as a tenant improvement upgrade to the shell and core design. Special review and coordination with the AHJ was required to gain approval for grease vault design and layout. With a small roof area available for rooftop equipment, exhaust fan serving grease exhaust hoods in kitchen required being located on the top floor of the building within a soundproof room. Cafeteria was supplied relief air from the other floors of the building to balance the air flow to the kitchen as makeup for the exhaust air. Complete air flow analysis was performed to determine the ideal locations of exhaust terminations to eliminate reintroduction of food odors into the office portions of the building. Water-cooled chiller of 260-ton capacity was provided on the roof of each building to supply chilled water to remote fan coils of densely populated equipment rooms, labs, and cable rooms.

Microsoft Corporation
Sammamish
Cafeteria/Kitchen
Issaquah, Washington

Mechanical engineering services for tenant improvements and shell and core infrastructure upgrades to an 180,000 s.f. five-story office building. Project included a 15,000 s.f. full-service cafeteria as a tenant improvement upgrade to the shell and core design. Cafeteria was supplied relief air from the other floors of the building via transfer ducts to balance the air flow to the kitchen as makeup for the exhaust air. Complete air flow analysis was performed to determine the ideal locations of exhaust terminations to eliminate reintroduction of food odors into the office portions of the building. Exterior grease vault was provided for kitchen floor drains, dishwasher, and sinks. Air-cooled chillers of 170-ton capacity were provided on the roof of the building to supply chilled water to remote fan coils of densely populated equipment rooms, labs, and cable rooms.

PROJECT EXPERIENCE

Safeco Insurance Company – Aliso Viejo Office

Aliso Viejo, California

Mechanical engineering services for tenant improvements of approximately 110,400 s.f. in a new office building in Aliso Viejo, California. Project was on the first three floors of a five-story building and included a full-service kitchen/ cafeteria, large training rooms, and locker/shower facilities on the first floor. Lighting design included indirect fixtures in work areas with daylight controls and art lighting in dining area, cafeteria lobby, and common areas by training rooms. Mechanical design consisted of single-duct variable air volume terminal units and roof-mounted grease exhaust fan with welded ductwork from first floor to roof. Exterior grease vault provided for kitchen sinks, floor drains and dishwashing machine waste pipes.



PROJECT EXPERIENCE

Food Service

Capital One – Call Center, Building B Federal Way, Washington

Mechanical engineering services for a 105,000 s.f. two-story call center in second building located on Capital One's East Campus Corporate Park. Building includes 20,000 s.f. full-service cafeteria, 1,500 s.f. data center, battery room, static UPS system, and critical systems standby generator as utility power backup. Indirect gas-fired makeup air unit provided to the kitchen to offset the air through the exhaust hoods. Cafeteria was supplied relief air from the other floors of the building to supplement the makeup air flow to the kitchen. Complete air flow analysis was performed to determine the ideal locations of exhaust terminations to eliminate reintroduction of food odors into the office portions of the building. Exterior grease vault was provided for the kitchen floor drains, sinks and dishwashing machine. Rooftop air conditioning units provided with variable-air volume distribution system.