

# CAPITAL Engineering & Consulting, LLC

## Civil Schematic Design Narrative

#### **Erosion Control**

Install erosion control measures, such as, but not limited to, a stabilized construction entrance, truck wheel wash, concrete washout area, storage and staging areas, bio bags, inlet protection and sediment fence, in order to meet the requirements of the City of Eugene Erosion Prevention permit.

### Stormwater Management

- Remove existing, private, on-site storm drain from under proposed building area:
  - O Approximately 100-feet of 4- or 6-inch pipe.
  - O Approximately 120-feet of 12-inch pipe.
- Remove four (4) existing inlets.
- Provide stormwater treatment, per City of Eugene Stormwater Management Manual, for new or replaced impervious surfaces, including proposed building roof area. Include approximately 1,500 square feet of stormwater filtration planter.
- Construct 4-inch perforated pipe foundation drainage system around proposed building. Assume one (1) connection to onsite stormwater system with one (1) backwater valve.
- Construct connections from proposed building roof drain downspout to south stormwater planter. Assume approximately 50-feet of 6- or 8-inch plastic pipe.
- Install three (3) cleanouts.
- Install one (1) new or relocated (existing) catch basin. Connect catch basin to existing Contech flow control manhole.
- Construct approximately 130-feet of 12-inch storm drain to reroute pipe, which will be displaced by proposed building, from existing Contech flow control manhole to existing manhole at southwest corner of the site. Include 12-inch pipe connections at both existing manholes.
- Install 22-feet of trench drain in driveway at 18th Avenue property line. Construct approximately 50-feet of 6-inch plastic pipe to connect trench drain to existing Contech flow control manhole.
- Assume new, repayed or reconfigured *pedestrian* pavement areas will surface sheet drain into adjacent stormwater treatment areas.
- Assume new, repayed or reconfigured *vehicular* pavement areas will surface sheet drain to new or relocated existing catch basin and trench drain in main driveway.

### Sanitary Sewer\*

- Connect to existing 6-inch sanitary sewer lateral at southwest corner of the site.
- Construct approximately 100-feet of 6-inch plastic sanitary sewer pipe for building connection on the south side of the building.

#### Domestic & Fire Protection Water\*

- Domestic Water:
  - Connect to public (EWEB) existing 6-inch water lateral at the site, on the east side
    of the driveway, immediately south of the existing water meter.
  - Construct approximately 200-feet of 2-inch plastic water pipe to mechanical room on west side of proposed building.
  - Install 2-inch double check backflow preventer in below-grade vault. Provide sump pump, high water alarm and connection to University Building Automation System (BAS). (Refer to electrical narrative or drawings for power to sump pump and high water alarm. CAPITAL and Glumac to further coordinate these items.)
  - EWEB will install 2-inch water meter and 2-inch gate valve at connection to existing lateral; contractor to coordinate with EWEB.
- Fire Protection:
  - O Connect to private (UO) existing 6-inch dedicated fire protection water main.
  - o Install 4-inch gate valve at main connection.
  - Construct approximately 200-feet of 4-inch plastic water pipe to mechanical room on west side of proposed building.
  - Meter not required on fire protection water line.
- Provide thrust blocks or mechanical joints, as required, and all fittings and appurtenances necessary for a complete system to building connections.
- Provide 1-inch water lines to two (2) assumed hose bibbs.
- Existing fire hydrants are adequate for the proposed development; therefore, new hydrants are not proposed.
- Install fire department connection (FDC) adjacent to new 4-inch water connection to existing 6-inch water line or on building. Connect FDC to 4-inch water line. (CAPITAL, Glumac, Hacker and Fire Marshal to further coordinate to determine final FDC location.)

#### **Natural Gas**

• Natural gas is not included in the project, at this time; however, an existing public natural gas main is located on the south side of 18<sup>th</sup> Avenue. The pipe size is currently unknown.

C:\Users\Tina\Dropbox (CAPITAL)\Projects - Active\UO School of Music and Dance - Oregon Bach Festival Addition\Drawings\Schematic Design\UO OBF - Civil Schematic Design Narrative by CAPITAL.doc

# **CAPITAL Engineering & Consulting, LLC**

Page 2

<sup>\*</sup>Sanitary sewer and water lines must maintain 10-foot minimum horizontal separation.