1. This information provides guidelines for cast-in-place concrete including materials. Temporary facilities and controls are covered in other parts of these standards or are available from the Facilities Management (FM) project representative.

2. FM project representative and Environmental Health and Safety Office shall approve selection of materials, means, and methods. Unless otherwise approved, design intent requires means and methods that provide minimal disruption to adjacent building activities and operations.

3. Reference WWU Division 1 Specifications, which will be provided by the project manager for safety procedures about cutting concrete.

4. When working on or adjacent to occupied buildings, require means and methods that protect occupants from exposure to noise, dust, odors, traffic and other hazards.

5. Architectural concrete:
   a. Surfaces exposed to public view:
      i. White cement Type 1, ASTM C 150.
      ii. Use one brand for the same source throughout the project.

6. Formwork:
   a. Surfaces exposed to view form per project representative requirements.
   b. Match adjacent existing custom formwork textures and patterns

7. Provide form ties designed to prevent spalling of concrete upon removal.

8. When concrete is exposed to public view, use ties that leave no metal closer than 1½" to the plane of the exposed concrete, and leave holes no larger than 1" in diameter in the concrete surface.

9. All CIP use reinforcement bars: Steel, 60,000 psi minimum yield point.

10. Provide expansion joints, construction joints, and contraction (control) joints.

11. Provide broom finish on exterior walking surfaces.

12. Provide concrete no less than 5.75 sacks cement per c.y., producing 3,000 psi minimum at 28 days.

13. Admixtures permitted (containing no more than 0.1% chloride ions):
    a. Air entraining admixtures (for all concrete to be exposed to weather).
    b. High range water-reducing admixture (Super Plasticizer).

End