Chapter 13
PHASING & STAGING DRAWINGS AND DESIGN

SECTION 1301 – University Key Plan

1301.1 Background: The Project Manager will provide CAD background drawings for Consultant use in developing the University Key Plan.

1301.2 Site Access: The Consultant shall indicate routes the Contractor Personnel and the Contractor Delivery will be required to follow in order to access the work site.

1301.3 Haul Routes: Indicate haul routes for truck movements such as earth fill supply or removal, including borrow and waste locations.

1301.4 Trailer Site and Employee Parking: Include the location for the Contractors trailer and employee parking on the Key Plan as part of the drawing set.

1301.5 Vicinity Plan: Show a graphic map of major highway and arterial access to the campus with distances along the primary freight delivery route.

SECTION 1302 - STAGING PLAN - GENERAL

1302.1 Project Limits: Project limit lines shall be clearly shown on the drawings after consultation with the University Representative.

1302.2 Utility Access: Locate and define available utilities during construction including quality and capacity of the following: Communications, Fire suppression Water, Electrical Power, Potable Water, Non-Potable Water and Storage areas.

1302.3 Environmental Controls: Locate, dimension and define erosion control, storm water control, temporary drainage, security, spoils areas and locations of de-watering control areas.

1302.4 Temporary Facilities: Locate and define employee parking, delivery, pedestrian and construction barriers, contractor storage and laydown areas, security requirements, winter protection, signage, trailers, lighting, fencing, and other requirements as directed by the Project Manager. The Consultant shall provide guidelines for temporary structure orientation and appearance.

1302.5 Temporary Traffic Control: Show and dimension vehicle and pedestrian re-routing, including required temporary signage, signals, etc. See examples in the Drawings Appendix.

1302.6 Hazard Locations: Show setback of work and constraints.

1302.7 Landscape Protection: Show, dimension and define protection fence and setback and constraints of work, including trenching.

SECTION 1303 - SEQUENCING PLANS

1303.1 The Consultant shall provide construction sequencing plans where construction sequences must be controlled to assure proper safety and operations at CSU. Include sequencing of pedestrian or vehicular routing, signage, staging areas, etc. See examples in the Drawings Appendix.

SECTION 1304 DEMOLITION AND SITE PREPARATION PLANS
1304.1 **Civil Demolition Drawings**: Indicate altered, discontinued and removed work:

A. Location and size of existing utilities or other elements.
B. Extent of known conditions and materials and the extent to which these are to be maintained, modified or removed.
C. Location, size and type of existing vegetation and extent to which existing vegetation is to be removed, pruned or protected and maintained.
D. Location and extent of topsoil on-site or in stockpile, indications of directions for retention, stripping, stockpiling or spreading of topsoil.
E. Symbols used for the demolition work shall be the same as those used for new construction.

1304.2 **Structural and Architectural Demolition**: Indicate altered, discontinued and removed work:

A. Location and size of structural members
B. Methods of closing openings
C. Extent of known materials and conditions to be removed.
D. Symbols used for the demolition work shall be the same as those used for new construction.
E. Allowable loads on existing structures and constraints on loading.
F. Locations of dust or protection barriers, including type of barriers. Include drawings and constraints of barrier construction and protection of existing work.

1304.3 **Systems Demolition Drawings**:

A. Fire zone interruption
B. HVAC interruption and impact on other systems
C. Temporary heating inside occupied areas.
D. Freeze protection
E. Ice, snow and wind considerations
F. Emergency features - emergency shut-off locations
G. Emergency lighting and exiting requirements
H. Electrical lockout procedures
I. Lighting and Power systems interruptions
J. All interruptions to vehicle traffic, pedestrian movement or operational activities

1305 **STAGING AND PHASING DESIGN**

1305.1 **General**: Prior to commencing design, the Consultant shall study and be familiar with all parts of the CSU Construction Standards (Administrative, Design and Construction Standards), current edition, as posted on the Facilities Management website.

END OF CHAPTER 13