

# **Final Project**

## Landscape Performance in Site Engineering

### Assignment

LG101:

Complete a technical grading plan for the provided site (see L-SP.dwg on D2L). Place the building footprint and parking lot within the project boundary while considering the existing grades, constraints, and opportunities for landscape performance. Provide accessibility from the parking lot to the building entrance while allowing for surface drainage. Technically communicate proposed grades with appropriate spot elevations and contour lines.

LG801:

Respond to the following through calculations, narratives, and diagrams:

I. Create a soil/vegetation management plan:

Indicate locations of existing healthy soils on site and Vegetation and Soil Protection Zones (VSPZs)

Specify how construction activities are designed to minimize soil disturbance (Limit of construction - see slide 13 of Soils lecture, cut and fill estimates)

Identify disturbed soils that will be re-vegetated (due to current construction and disturbed by previous development)

II. Manage precipitation on site:

Calculate the precipitation volume from 60th, 80th, 90th, and 95th percentile precipitation event.

Calculate the total volume capacity of stormwater features.

Diagram to identify which impervious surfaces drain to which basins.

III. Optimize accessibility, safety and wayfinding:

Provide site access and usability as required by the Americans with Disabilities Act as a minimum.

Provide clear visibility and good sight lines, natural survellance at entrances and walkways, access control.

Provide Clear entrances and gateways, viewpoints and sight lines, decision points or nodes.

Diagram to illustrate how the site optimizes accessibility, safety, and wayfinding.

## Due

Tuesday December 6th @ 4:50pm

\*Please use the following name convention for all digital submissions: LAR554\_2016F\_FinalProject\_LASTNAME\_F

#### Deliverables

24x36 BW PDF submitted to D2L, and two (2) hard copy sets (one full-size 24x36, one half size12x18) - staple and roll separately with the title block information facing outward.

## Grading Policy

#### See Syllabus

LAR554 Site Engineering

#### Resources

SITES v2 Reference Guide Time Saver Standards for Landscape Architecture, 320-1 to 320-24 Site Engineering for Landscape Architects Intensity Rates: http://www.ncdc.noaa.gov/cdo-web/

Follow the problem solving approach:

- 1. Flow arrows (always perpendicular to contours)
- 2. Conceptual Contours (for visualization purposes)
- 3. Spot elevations (to interpolate between)
- 4. Final contours