



DJRM ENGINEERING

Directions • Connections • Solutions

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YUKON DRIVE PEDESTRIAN ACCESS IMPROVEMENTS for the University of Alaska Fairbanks

Draft Design Proposal
to the
Master Planning Committee

Presented by DJRM Engineering
March 26, 2015



Overview

As shown in the 2010 Campus Master Plan, the University of Alaska Fairbanks intends to work toward the goal of transforming Yukon Drive into a "campus main street." Ultimately, this goal will result in limitations on public vehicle access between the Police Station and Reichardt.

As the next step in this process, the University engaged DJRM Engineering to complete a set of plans to improve Yukon Drive pedestrian access between the Wood Center bus pullout and Sheenjek Drive. The designs included in this package address issues brought to light in discussions with UAF Facility Services, students, and faculty.

Priorities for this project include:

- channeling pedestrians to safe and attractive pathways that integrate components of the natural and developed environments;
- incorporating deferred maintenance and ease of future operations by designing a corridor compatible with current snow and ice removal practices at UAF;
- meeting ADA requirements;
- incorporating user input;
- compliance with UAF Design Standards, Board of Regents policy, State and Federal Law, and UAF policies; and
- offering a useable platform for UAF project fundraising.

The purpose of this document is to present the University with a set of design alternatives from which to choose for each section of the roadway. Accordingly, the corridor has been broken into geographical zones of interest, divided on the basis of pedestrian flow.



Zone Descriptions

Working with University staff, DJRM broke the corridor into seven zones, numbered sequentially from west to east.

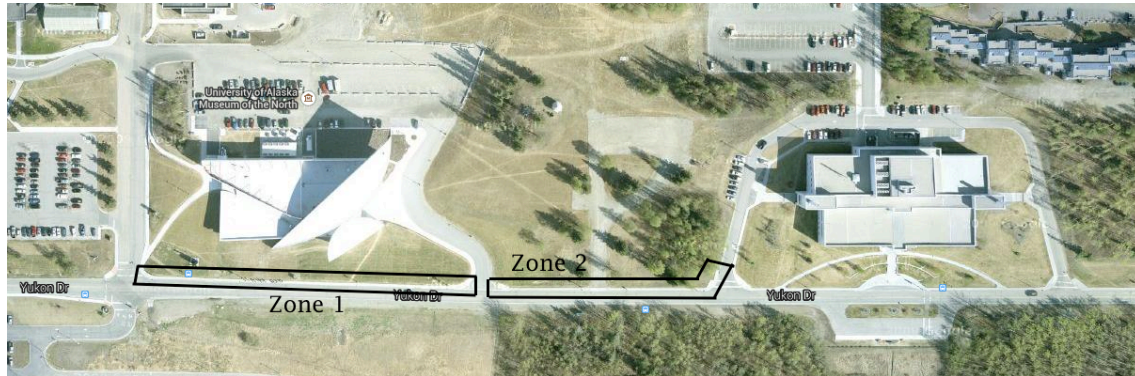


Figure 1: Zones 1 - 2; Sheenjek Drive to the Reichardt Building.

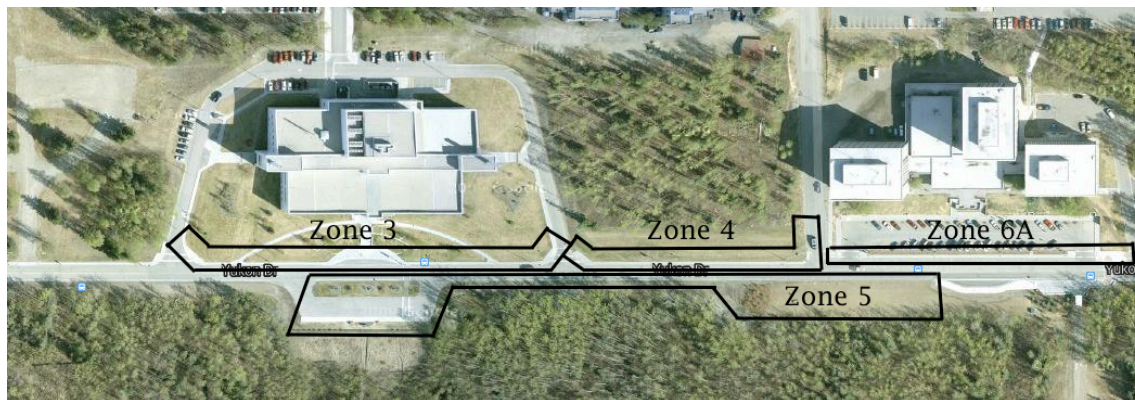


Figure 2: Zones 3 - 6; Reichardt Building to MBS.

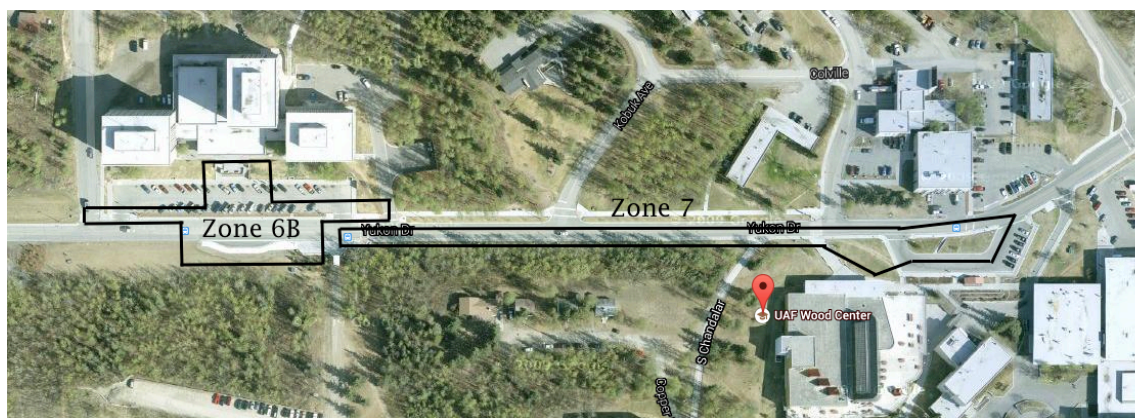


Figure 3: Zones 6 - 7; MBS to Wood Center bus pullout.



Design Concepts

Analysis of the Yukon Drive corridor and conversations with user groups identified some recurring issues, including:

- lack of a modern curb and gutter system,
- abrupt sidewalk terminations at intersections,
- differential settlement and frost heaving,
- jarring shifts in the path between Reichardt Building and MBS,
- plow damage to concrete,
- ice buildup associated with sidewalk overflow, and
- lack of controlled pedestrian crosswalks.

These items resulted in four overall design considerations:

- safety and ease of pedestrian access,
- anticipation of phasing,
- ease of maintenance, and
- ADA compliance.



Design Solutions

The following design alternatives resolve the issues discussed above. DJRM Engineering proposes the implementation of a base design for all Yukon Drive. The base plan establishes a unifying theme that promotes the Master Plan goal of a consistent campus streetscape.

Base Design Components

- New curb and gutter.
- Minimum sidewalk width of 6 feet.
- Landscape buffer with a minimum width of 4 feet.
- At-grade access ramps compliant with ADA design standards.

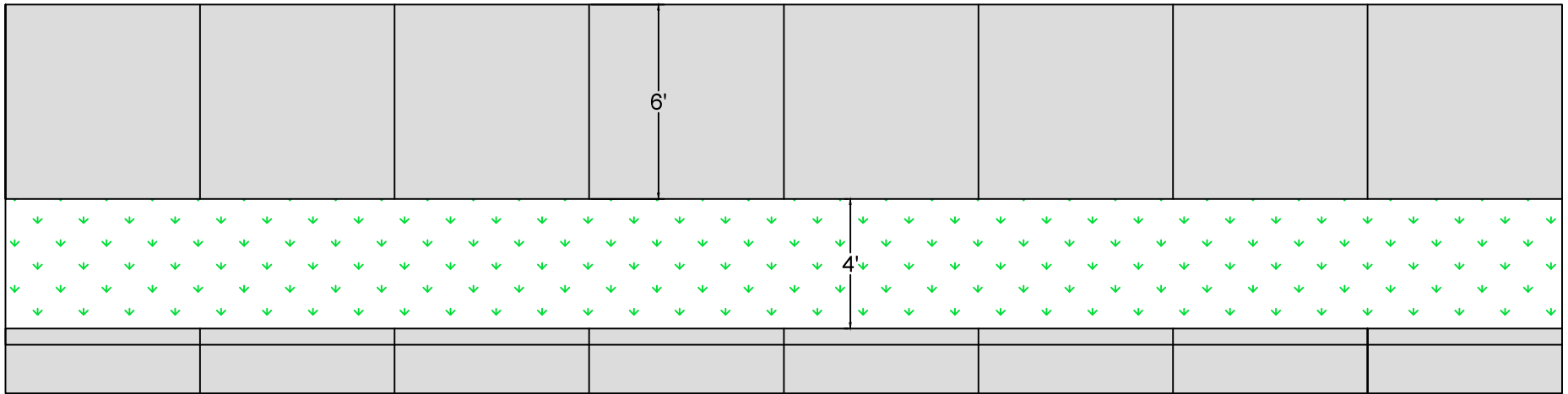
This plan is the basis of all work to be implemented along the north side of Yukon drive, ranging from the MBS dormitories to Sheenjek Drive. Limited space on the south side (Zone 7) prevents installation of the 4 foot landscape buffer, but the visual impact of this change is minimized due to its separation from the uniform layout on the north side.

Zone Specific Design Components

- Zone 4: Install drainage swale and storm drain catch basin North of the sidewalk stretching between the dormitories and the Reichhardt building.
- Zone 4: Install retaining wall between dormitories and Reichhardt building to assist in the routing of water.
- Zone 5: Collaborate with UAF Residence Life to appropriately utilize green space across from dormitories.
- Zone 6: Reduce posted speed limit in front of MBS dormitories, and install crosswalk the full length of the sidewalk in front of the dormitories.
- Zone 7: Widen the sidewalk on the south side of the roadway from the Wood Center bus pullout to the MBS dormitories.



TYPICAL PROPOSED SIDEWALK



SHEENJEK DRIVE

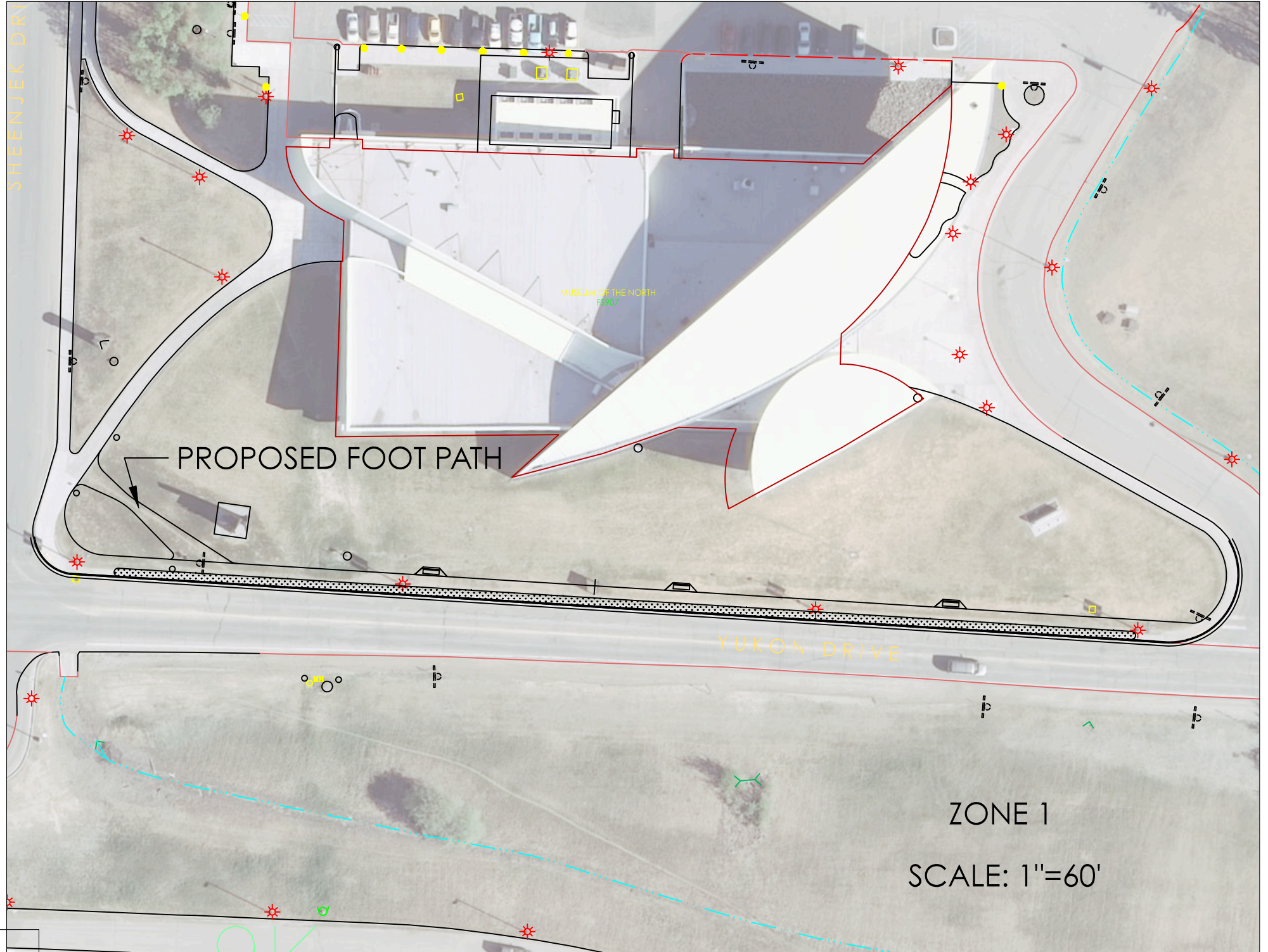
MUSEUM OF THE NORTH
FS907

PROPOSED FOOT PATH

YUKON DRIVE

ZONE 1

SCALE: 1"=60'





ZONE 2

SCALE: 1"=50'

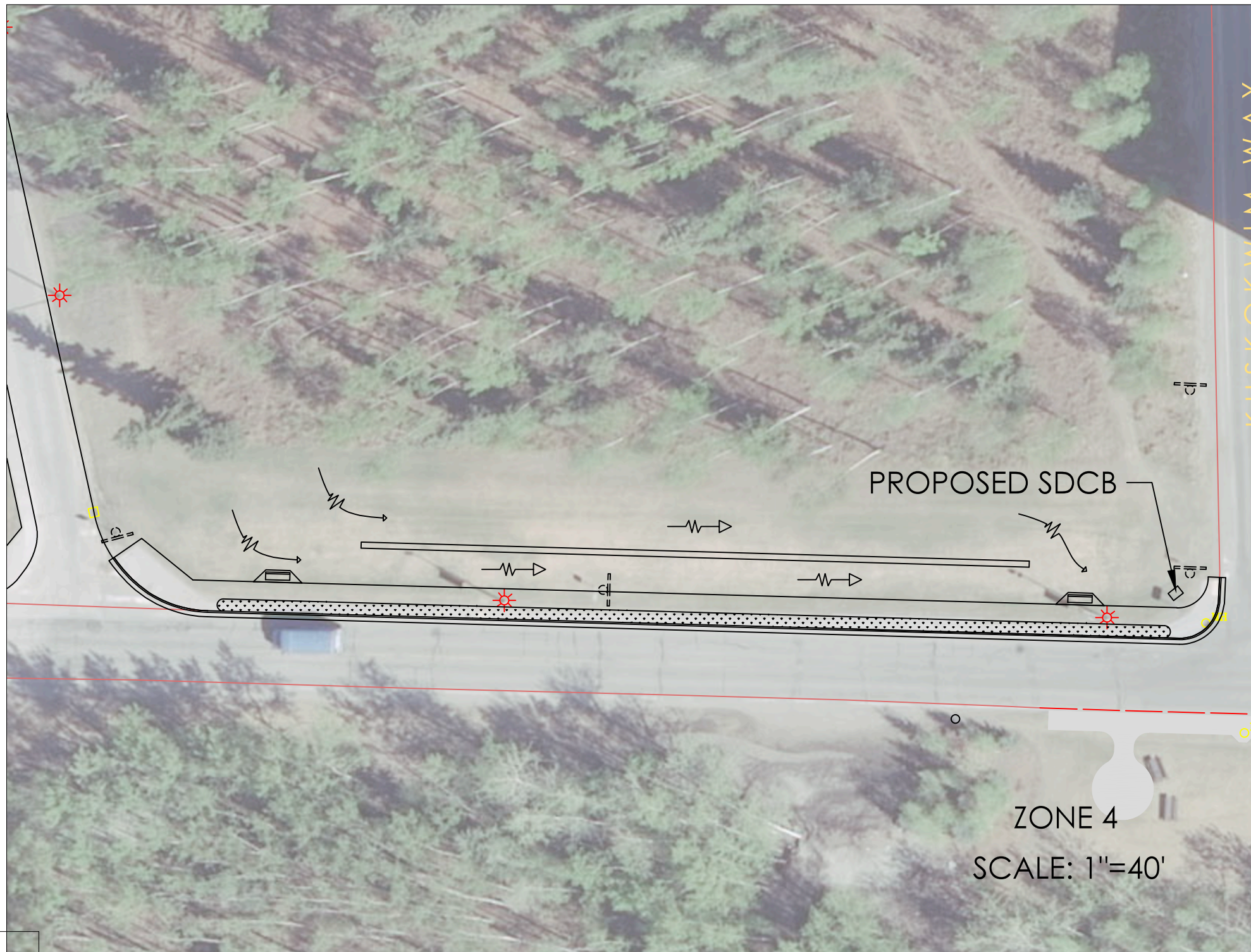


YUKON DRIVE

90

ZONE 3

SCALE: 1"=60'



MOORE HALL
FS733

HESS COMMONS
FS741

SKARLAND HALL
FS731

ZONE 6
SCALE: 1"=40'

