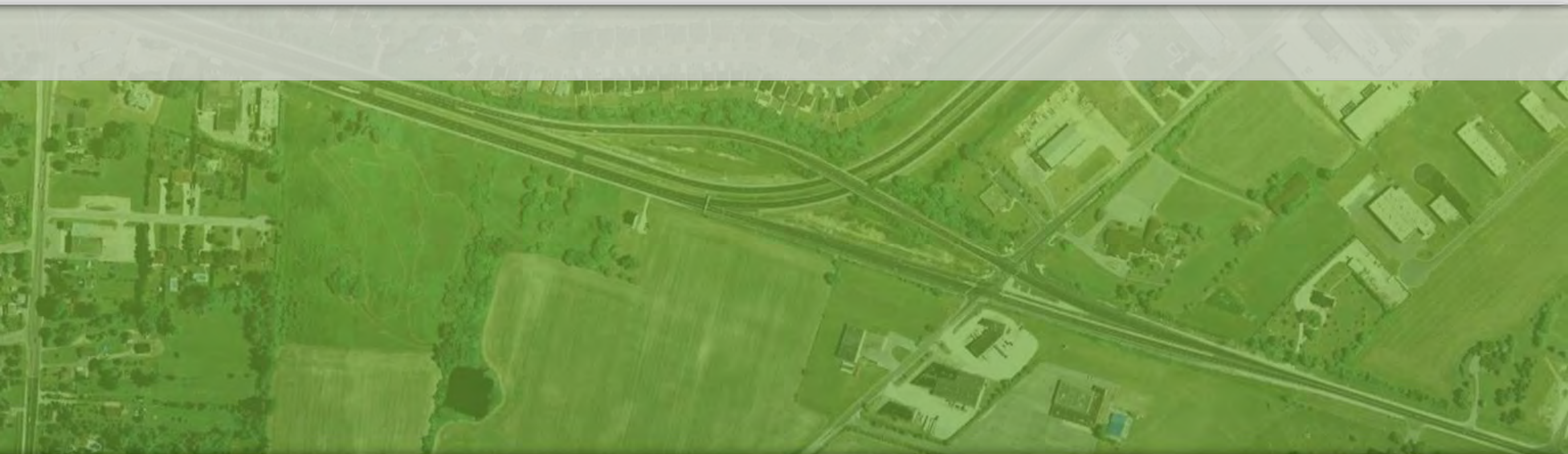
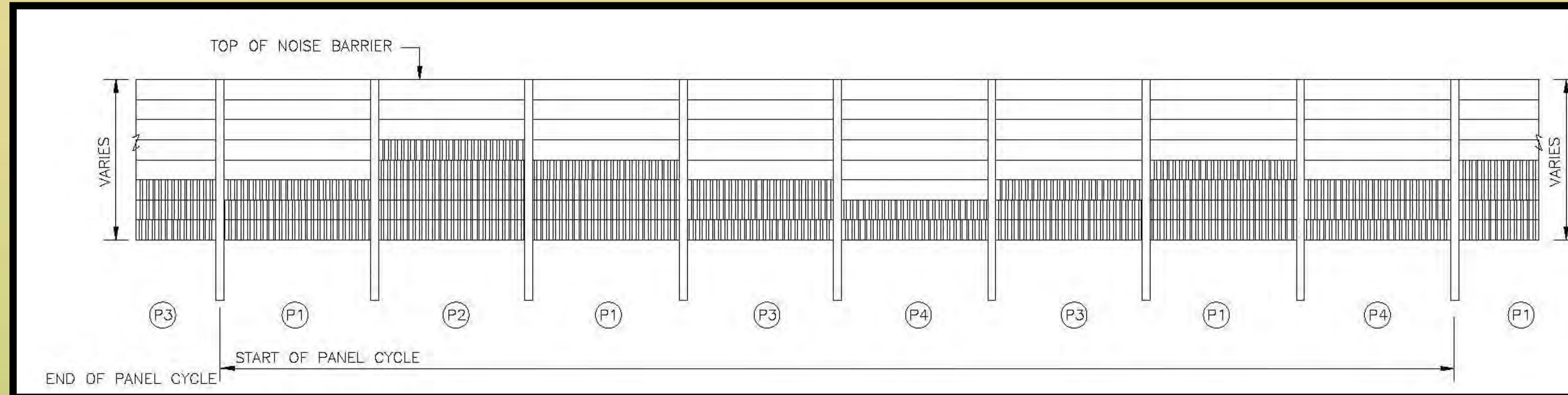


URBAN DESIGN ELEMENTS



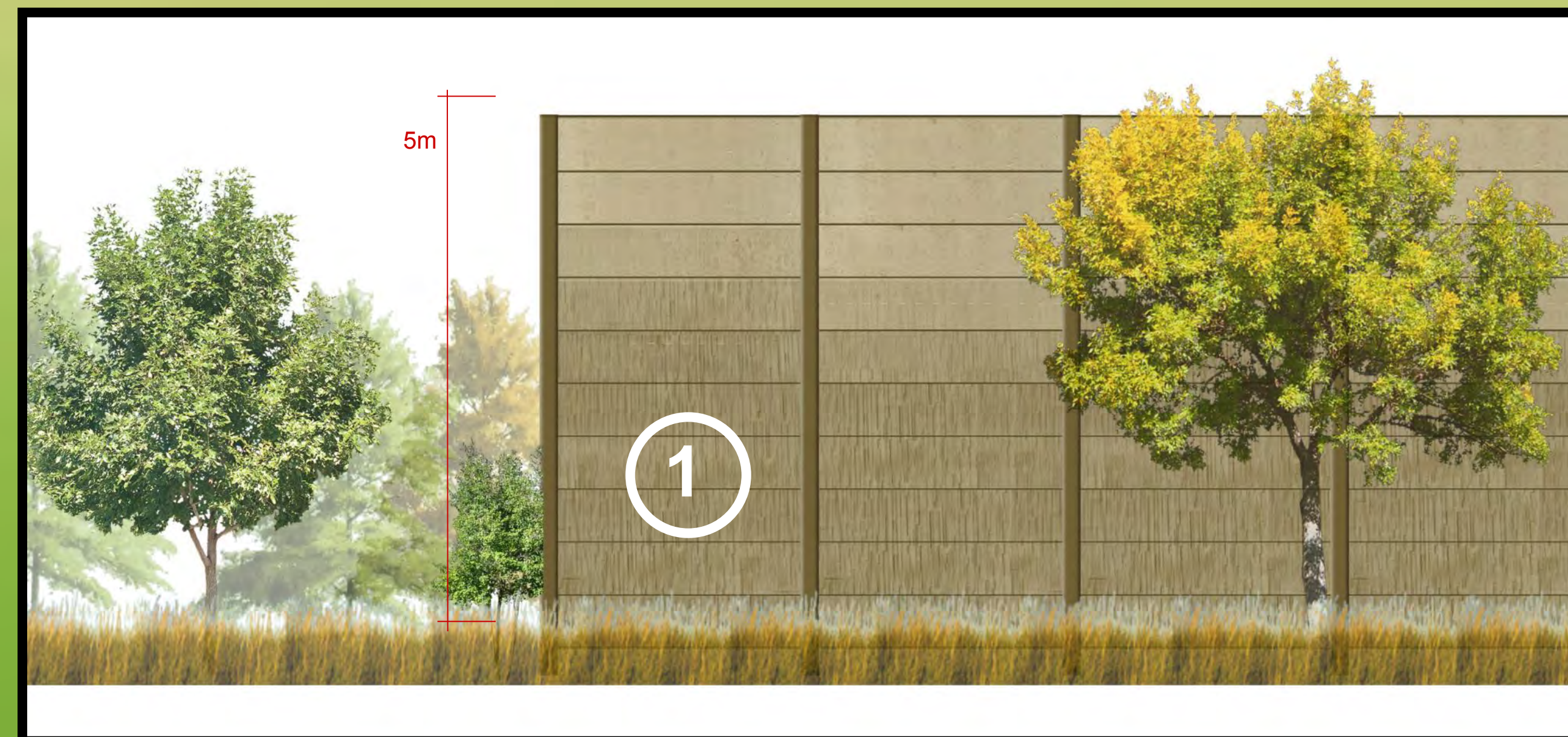
General Arrangement of Patterning Along Noise Wall to simulate Grassland



Noise Wall Colour

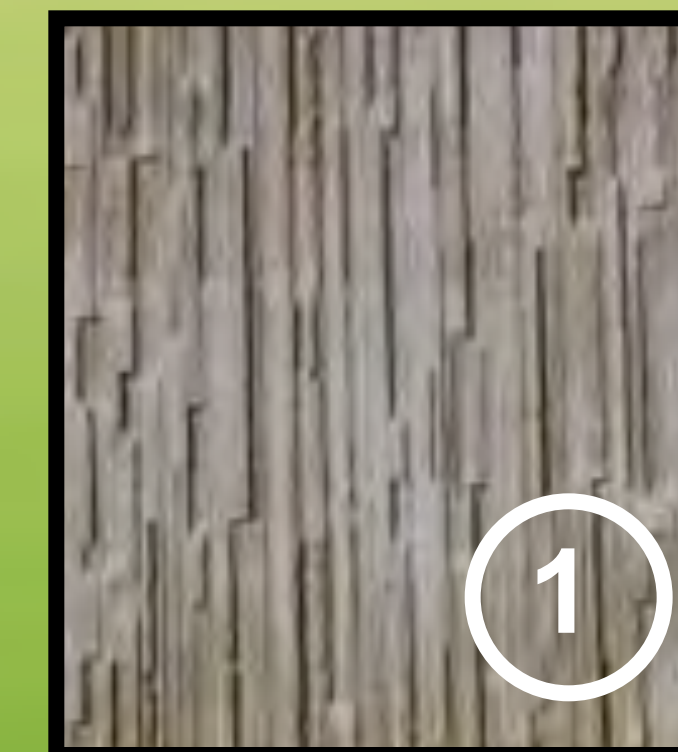


"Grassland" Patterning on Highway Side



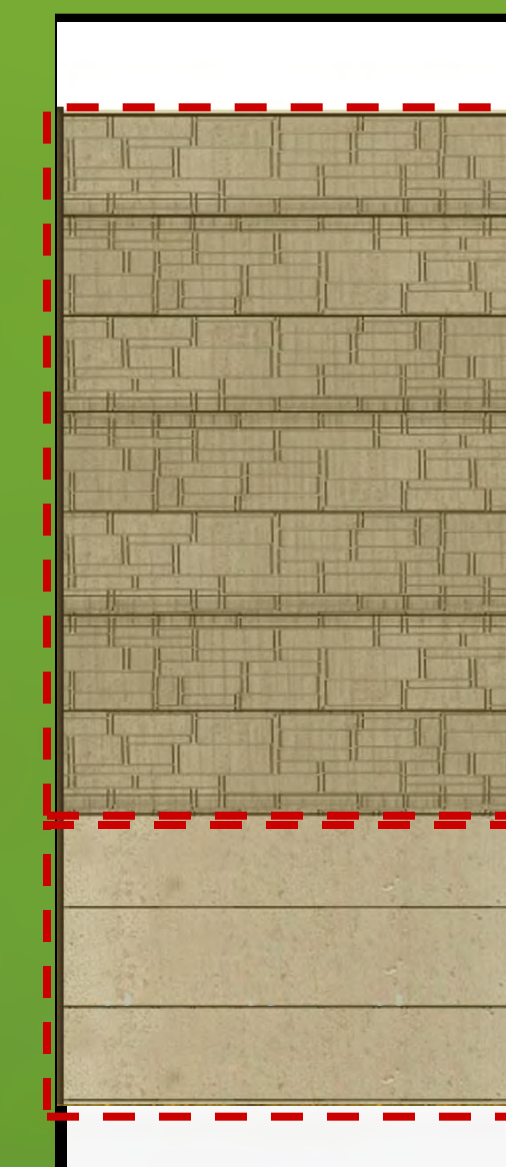
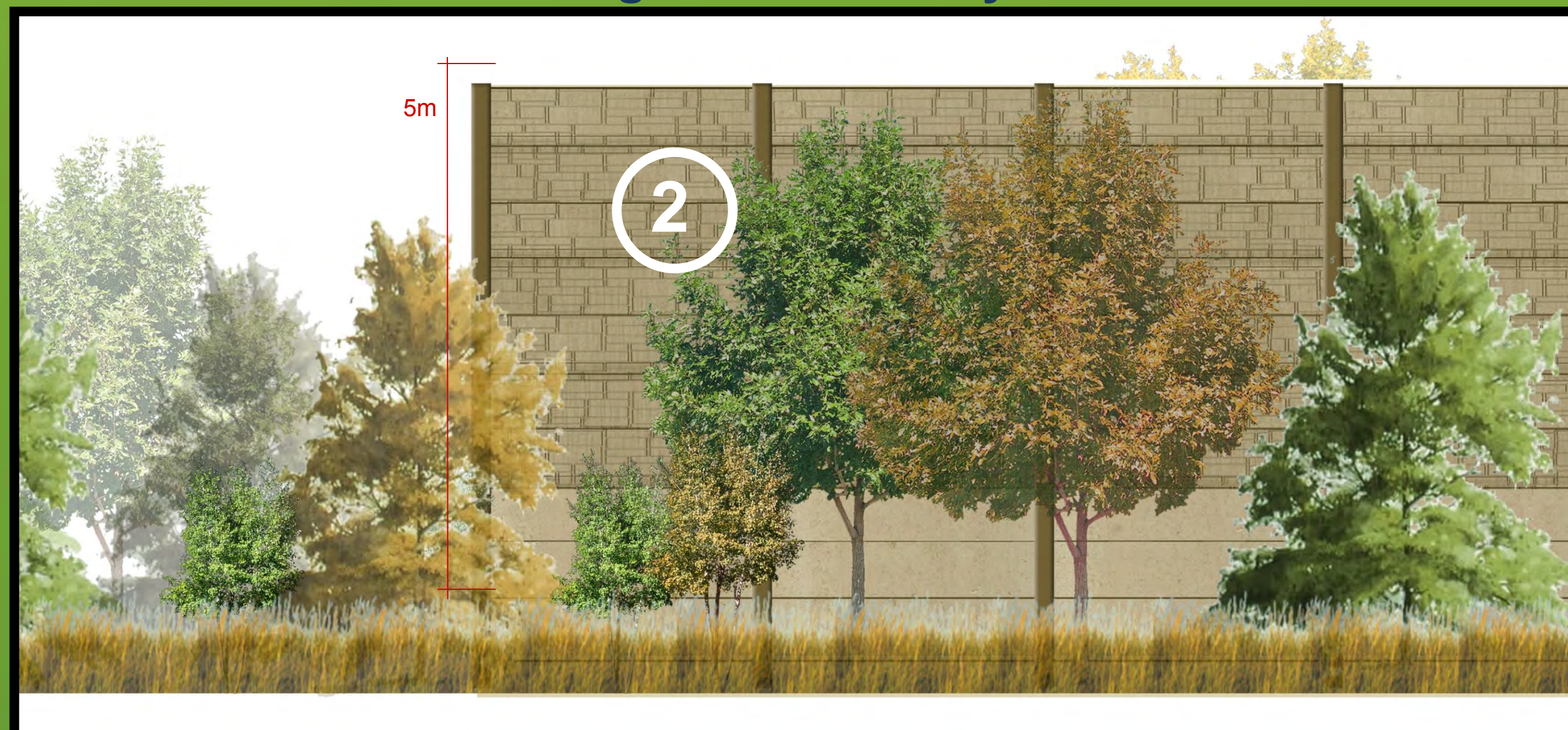
Unpatterned Panels (height varies)

"Fractured Fin" Patterning Panels
(grassland impression – height varies)



Fractured Fin Pattern

"Natural Stone" Patterning on Community Face of Walls



"Natural Stone" Pattern Panels
(height varies)

Unpatterned Panels

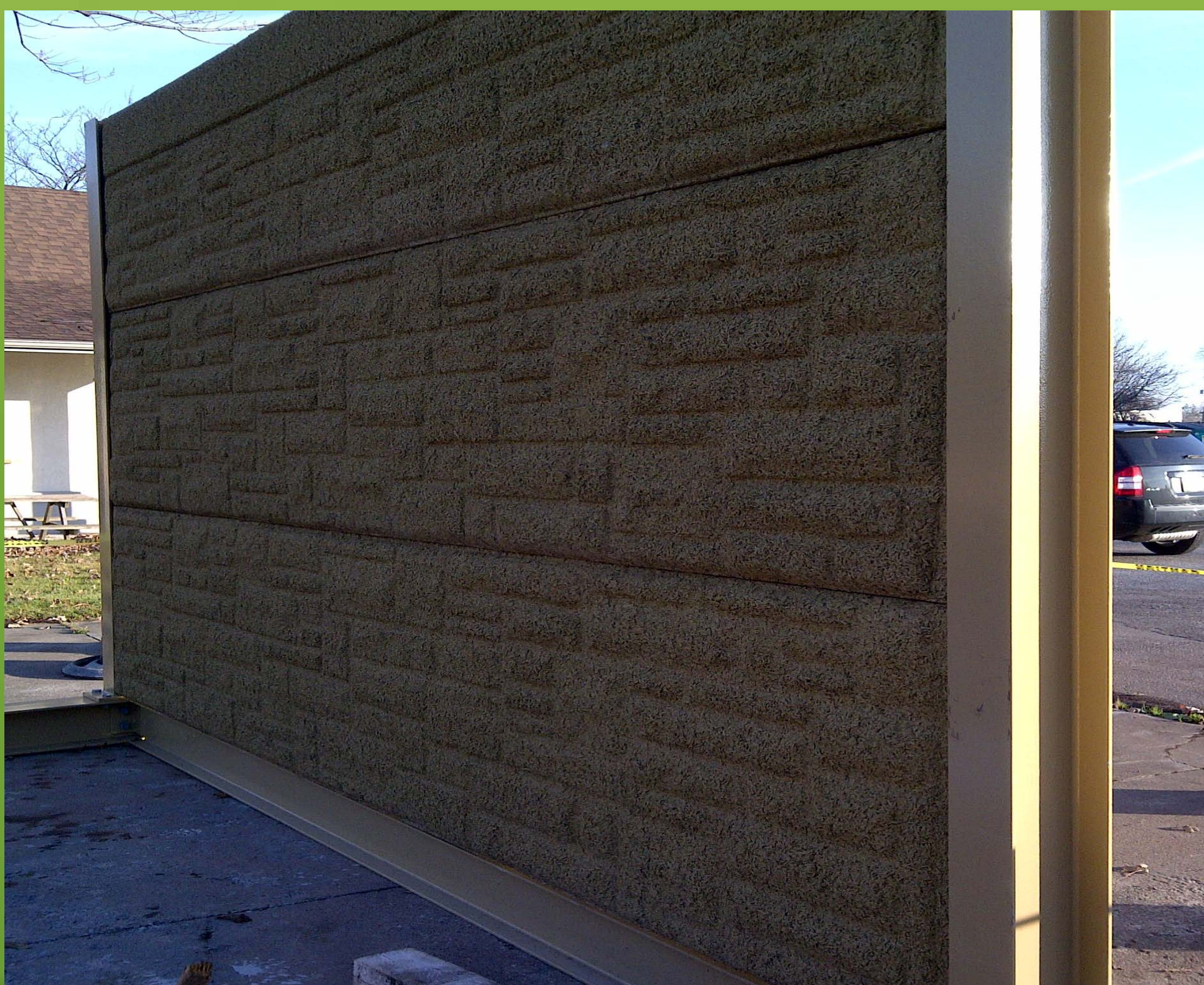
NOTE:
Min. 3 panels (1.5m) to provide a non climbable face for snakes



Natural Stone Pattern



Highway Side of the Noise Wall and
 Screening Landscape.
 Ledge Stone Pattern.
 To see the noise wall, please go to
 the parking lot in the back of the
 building.



Community Side of the Noise Wall.
 Natural Stone Pattern.
 Please go to the parking lot in the back of
 the building to see it.



The following types of **barriers** are located throughout the Parkway:

Property Line Fencing

- 1.8m (6ft) high chain link fencing
- Setback 0.3m (1ft) from the property line (no fence at public lands or local roads)

Security Fencing

- 1.8m (6ft) high chain link fencing
- Located near or at the top/toe of the slope along the highway, safely controls access

Noise Barriers

- Located in areas that have been identified in DRIC study
- Will be constructed as noise walls, landscaped earth berms, or combination
- Noise walls will have a decorative treatment

See Landscape Plan for location and height of fencing and barriers



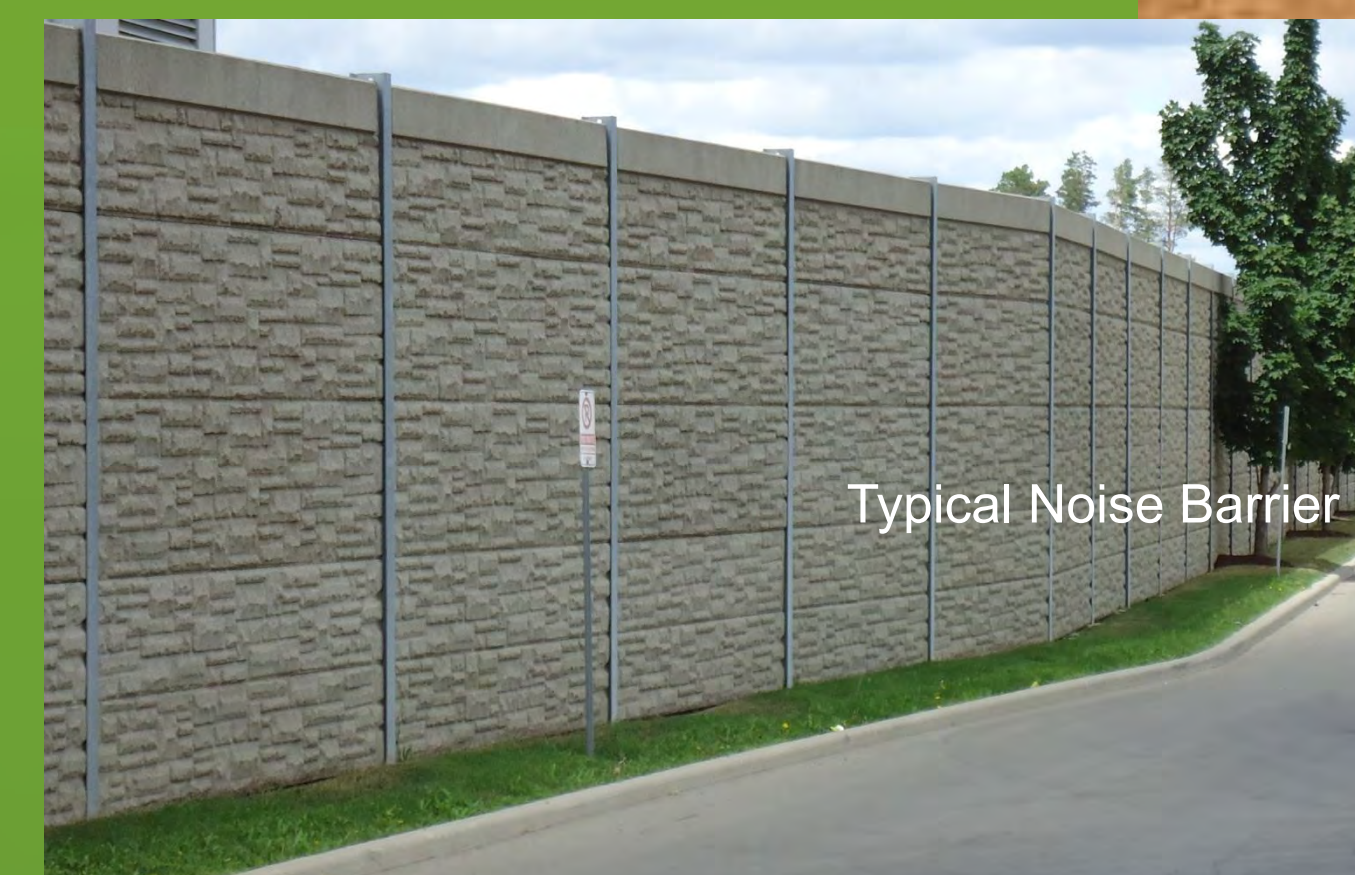
Property Line Fencing



Security Fencing



Noise Barrier on Berm

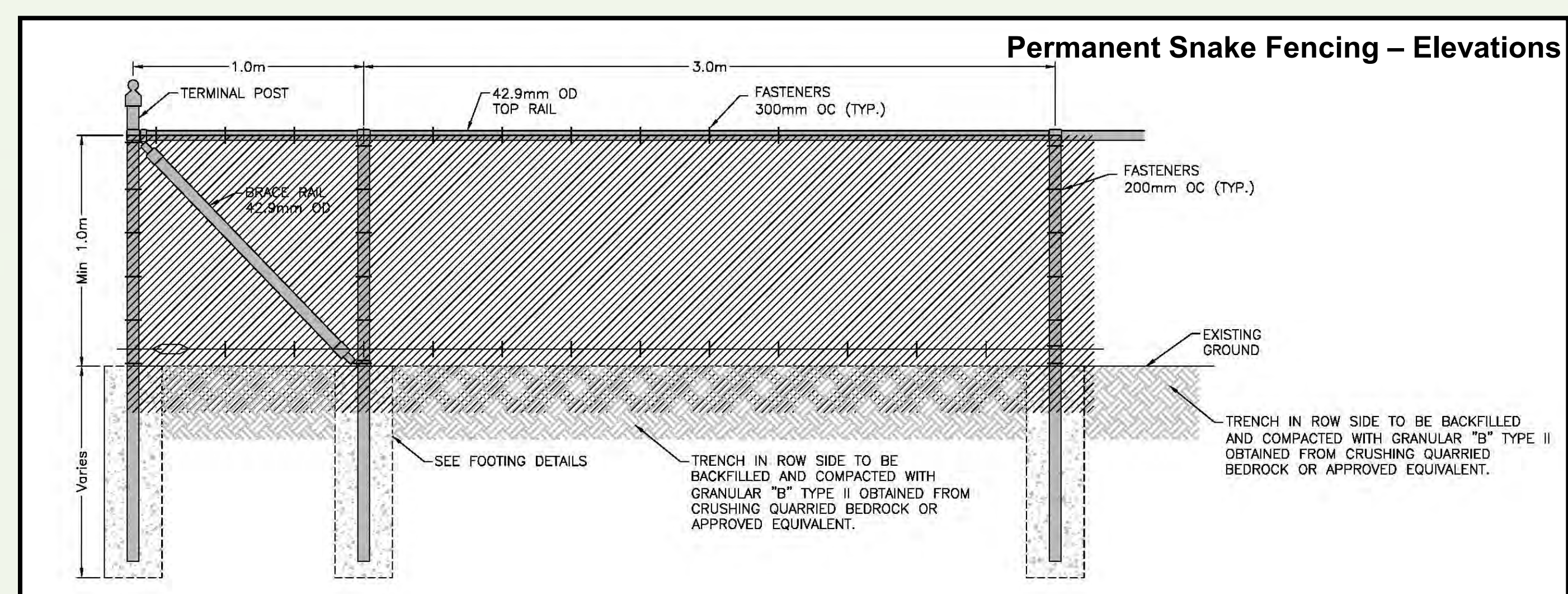
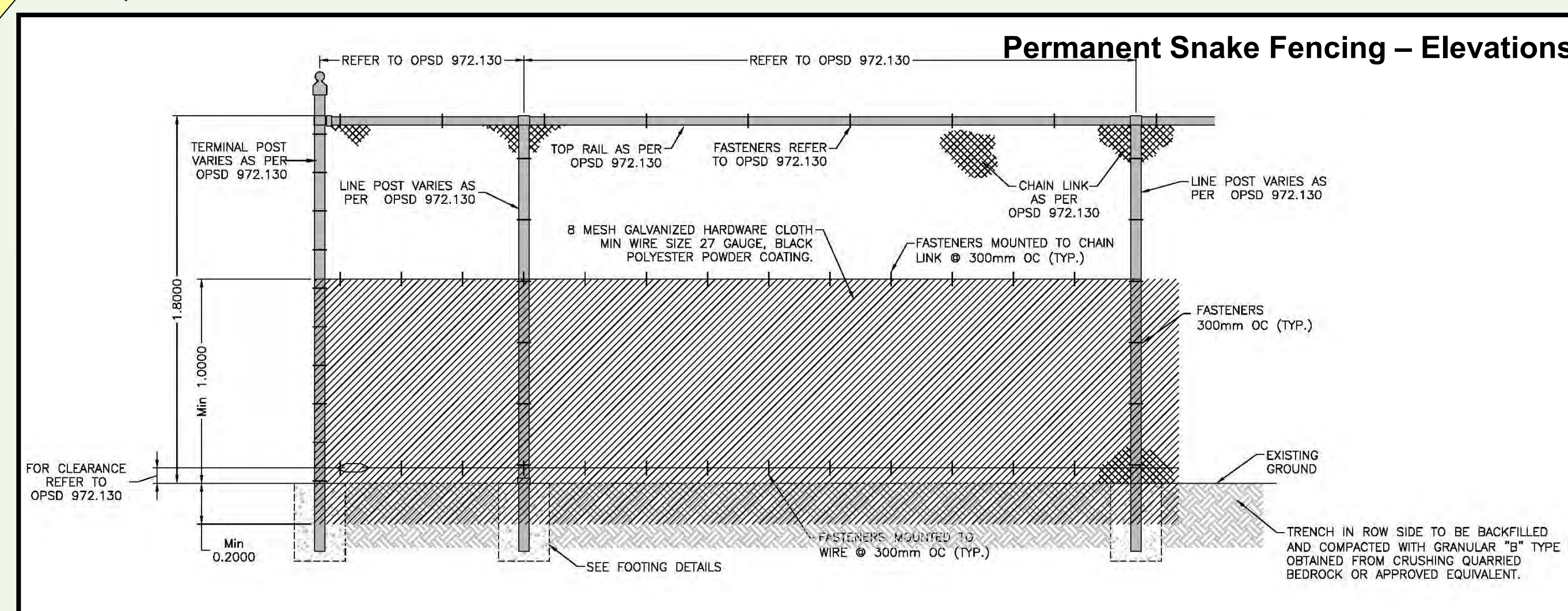


Typical Noise Barrier

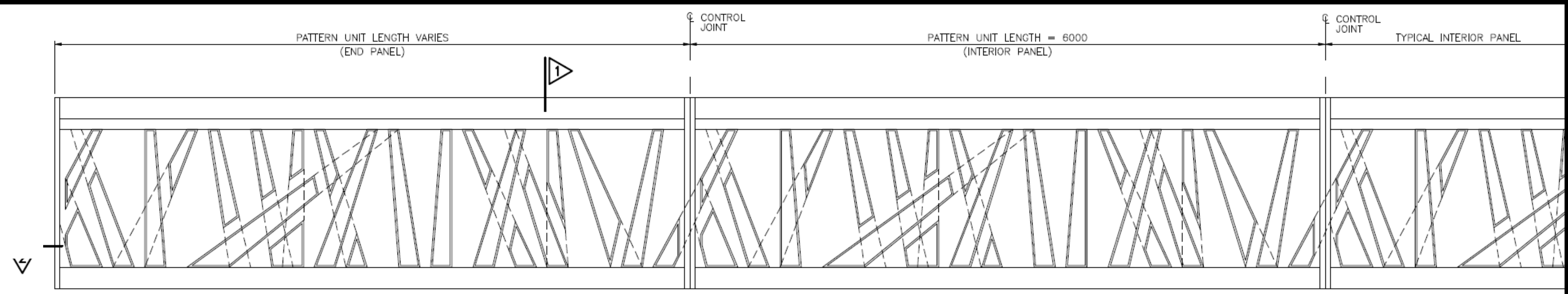
Permanent Snake Fencing

- West of Todd Lane, snake fencing will be strategically located to prevent snakes from getting onto Highway 401.
- The 1m high hardware cloth, used to prevent snakes from climbing, will be applied to a 1.8m high chain link fence.
- In some areas, the 1m high hardware cloth is applied to a 1.2m high fence.
- In some cases, noise walls with smooth bottom panel and/or permanent snake fencing will be placed instead of chain link fencing to serve a multiple purpose.

See Landscape Plan for location and height of fencing and barriers



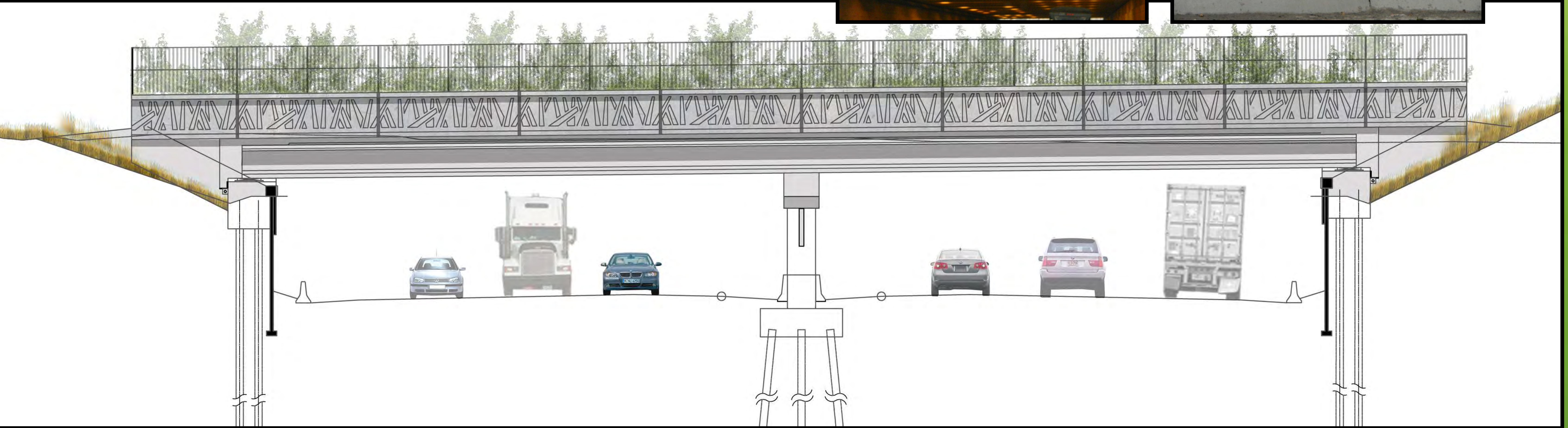
Application of Grassland Pattern Details across Tunnel Tops



Tallgrass / Prairie

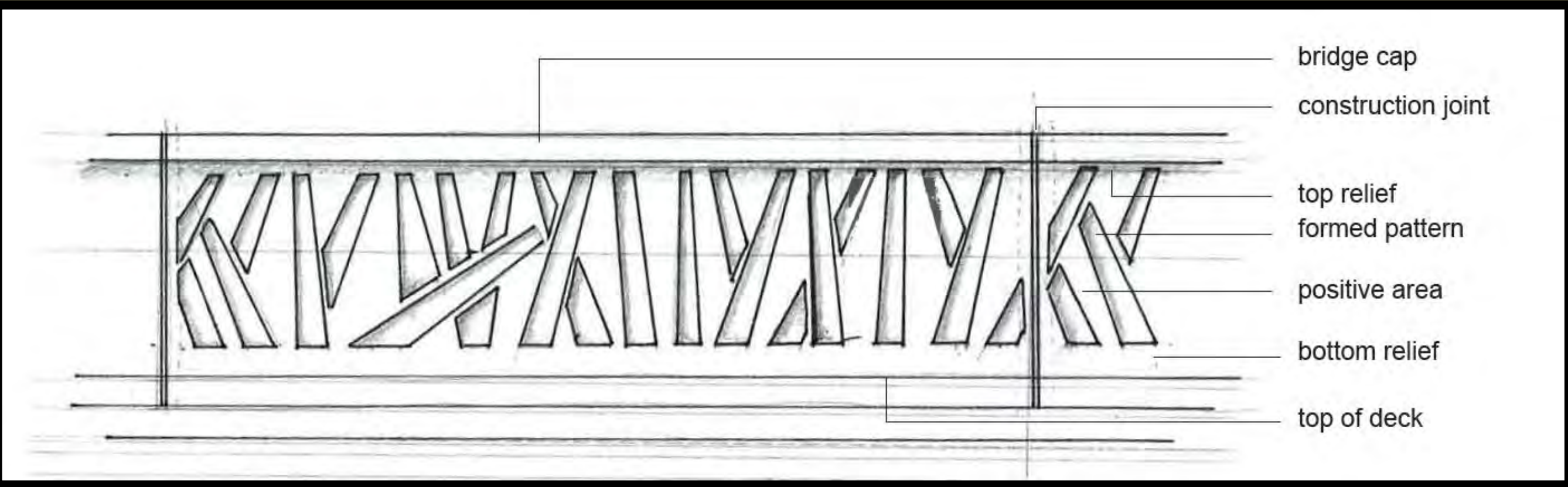


Rendering of Grassland Pattern on Gereadts Tunnel Top (T-8) Barrier Walls

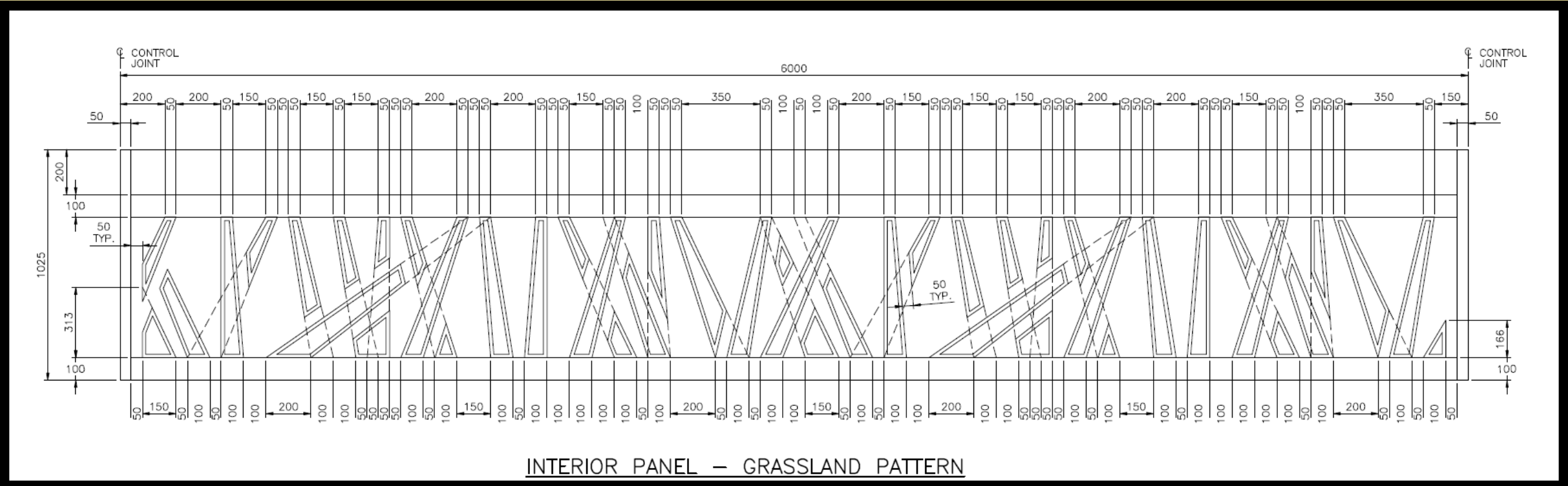


*All Drawings Not To Scale

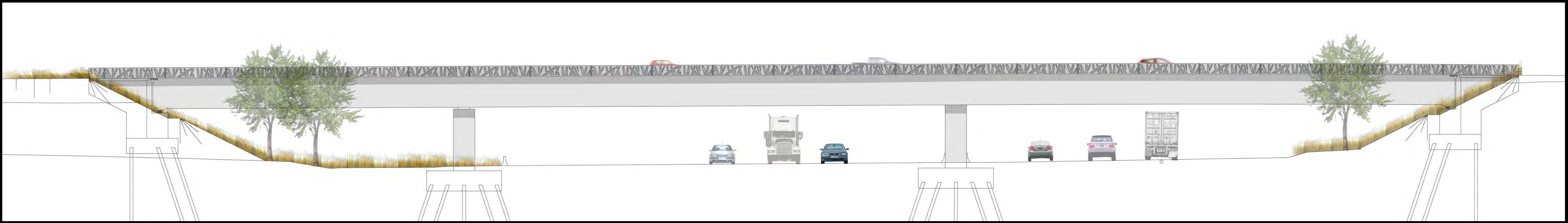
Grassland Concept Drawing



Technical Details of Grassland Pattern on Barrier Wall Panel

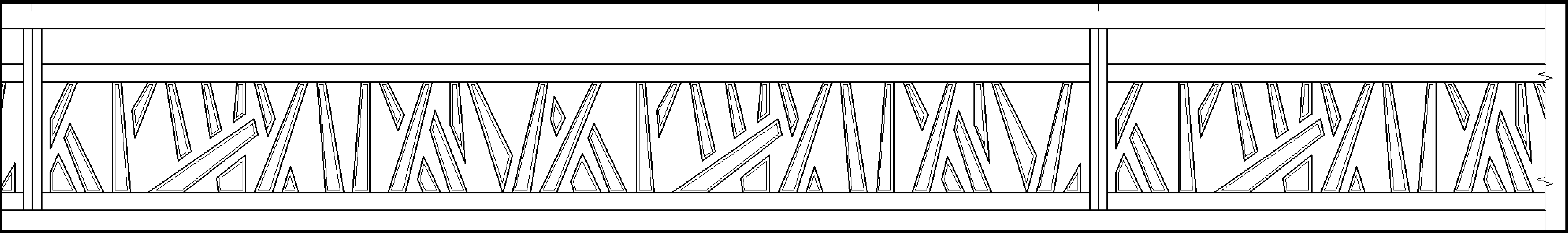


Rendering of Grassland Pattern on Bridge Barrier Walls example (future off ramp from HWY 401 westbound to HWY 3)

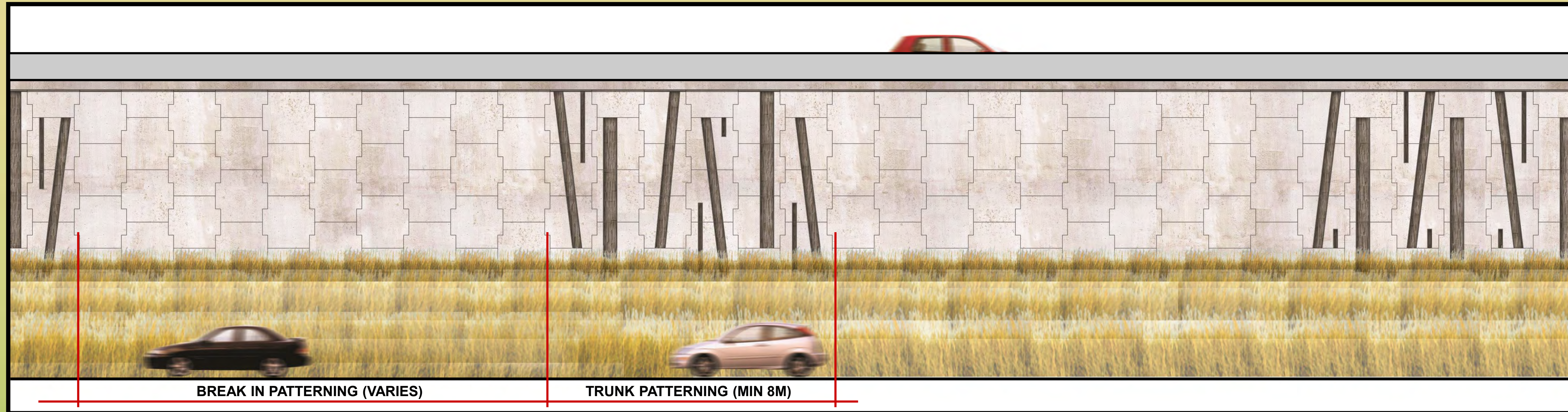


Detail of Grassland Pattern on Bridge Barrier Walls

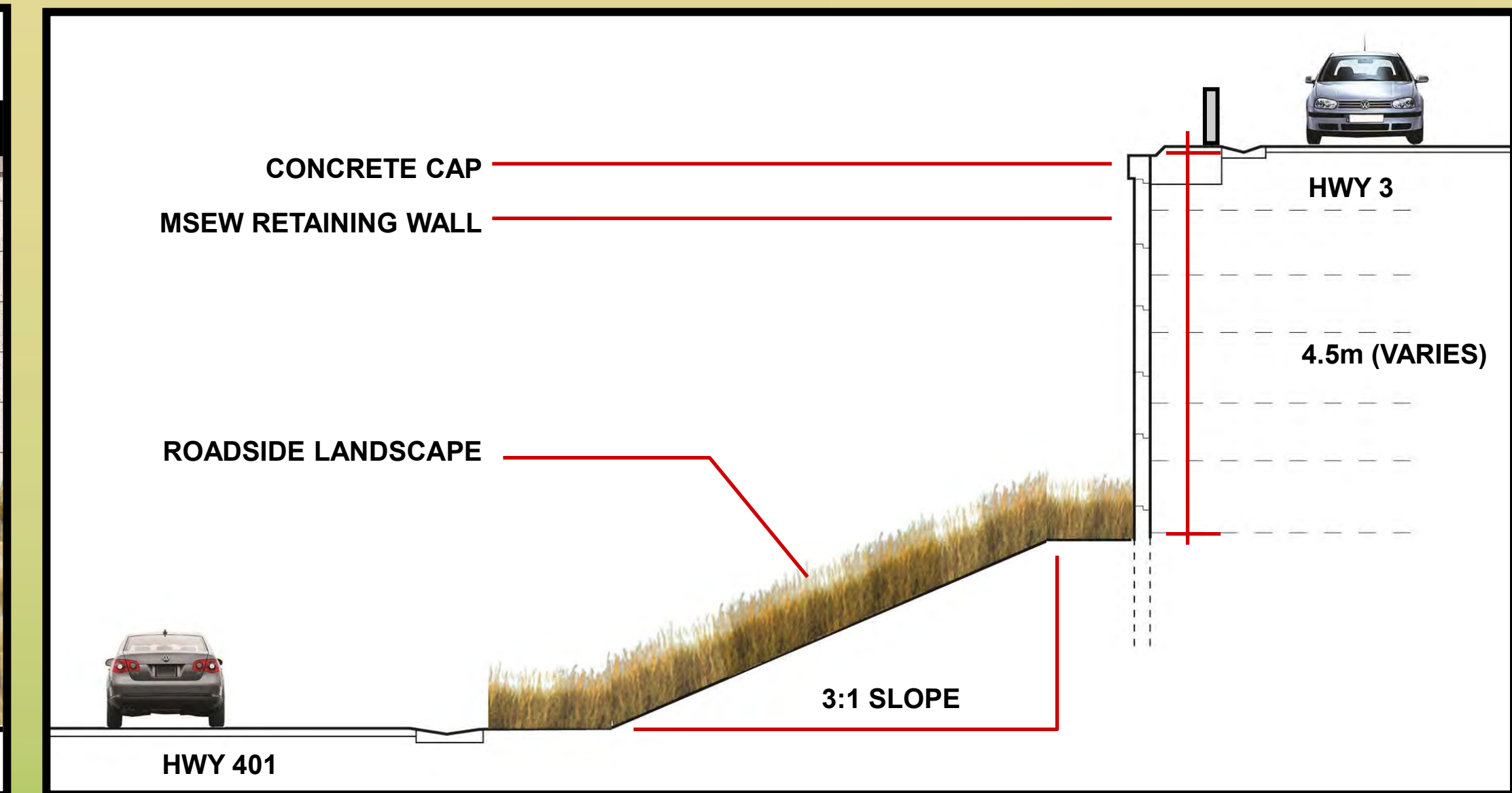
*All Drawings Not To Scale



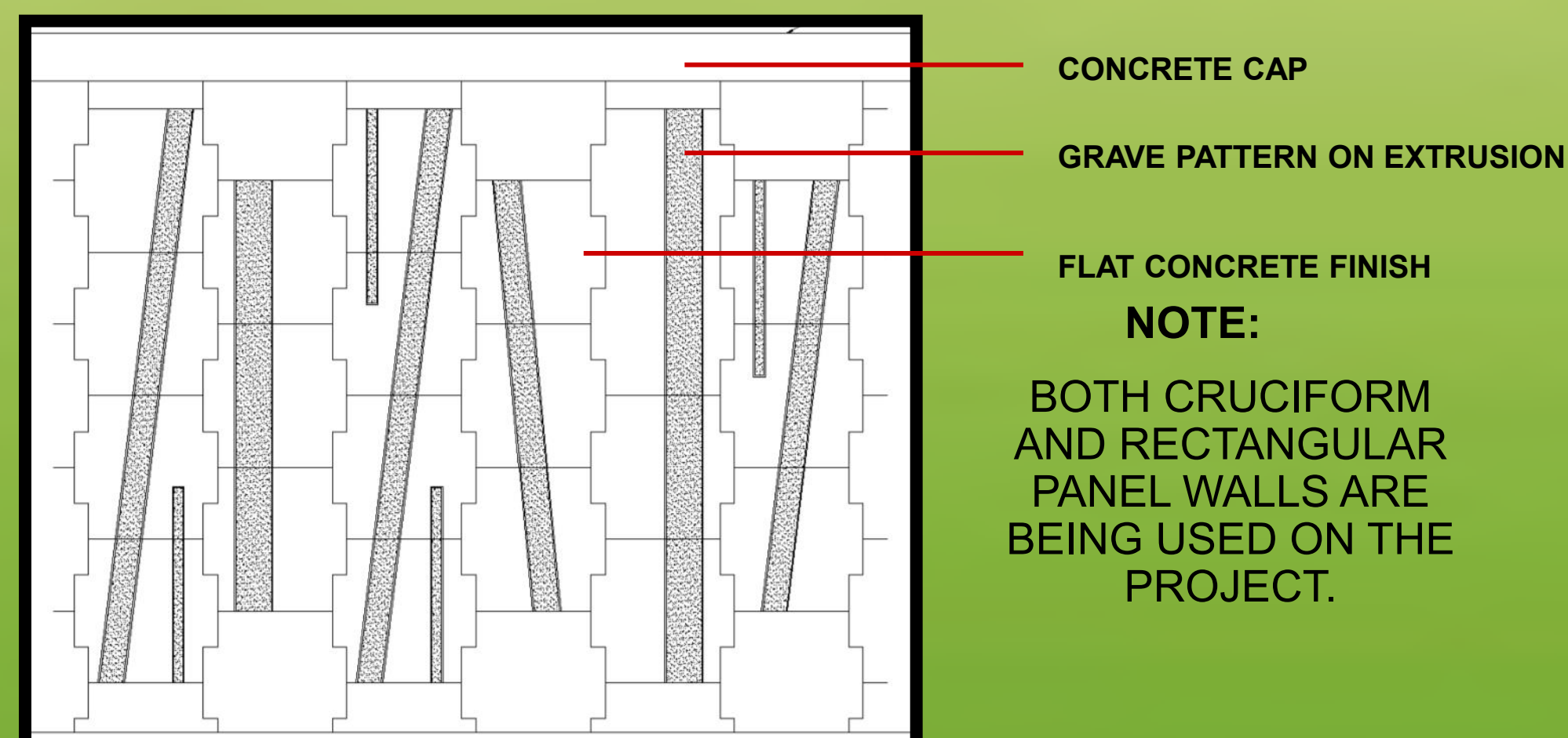
Retaining Wall – Typical Elevation with Trunk Patterning (Cruciform Example)



Retaining Wall – Section



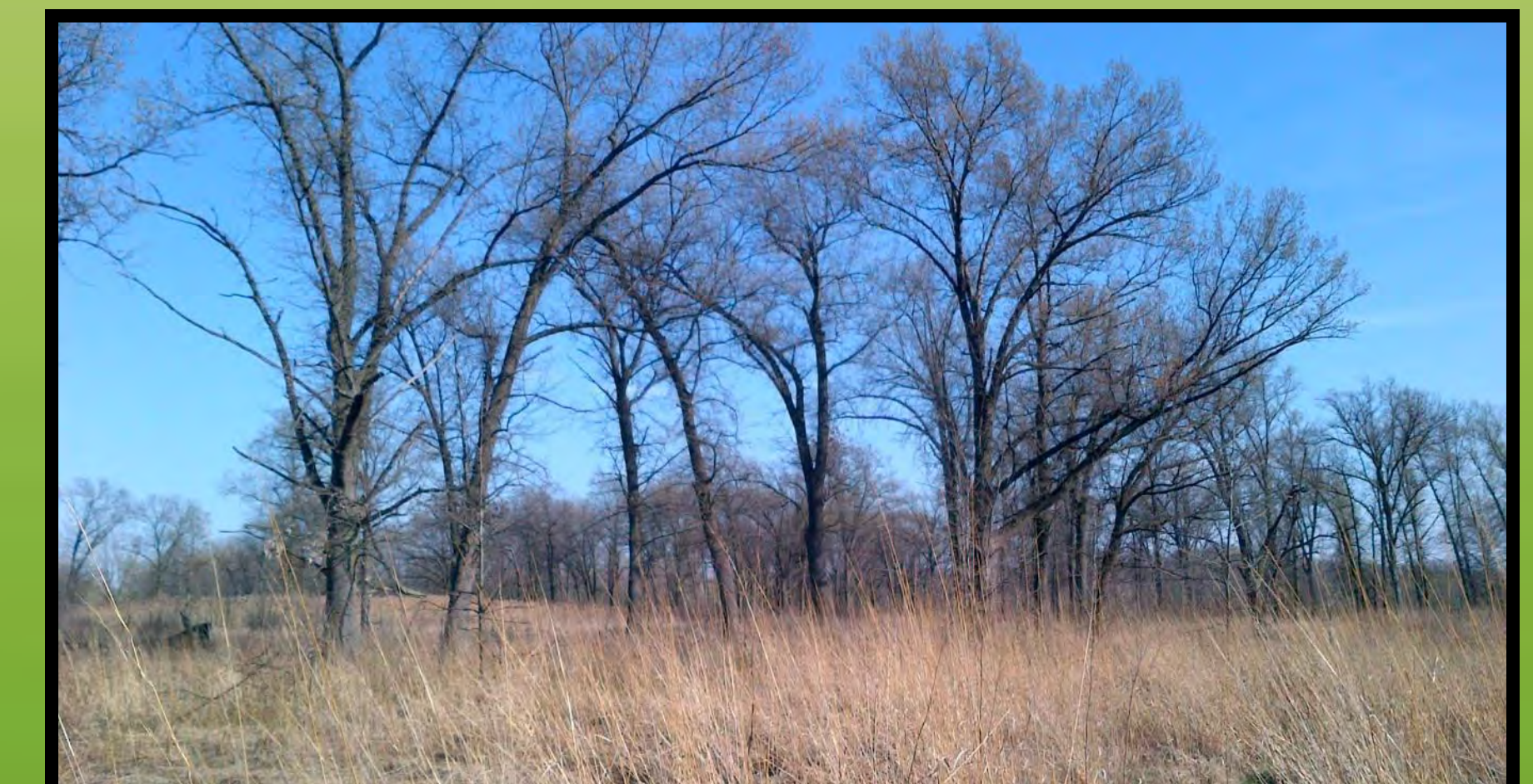
Retaining Wall Detail Elevation



Standard Texture (Grave) Finish



Oak Tree Trunks (background) and Grassland (foreground)



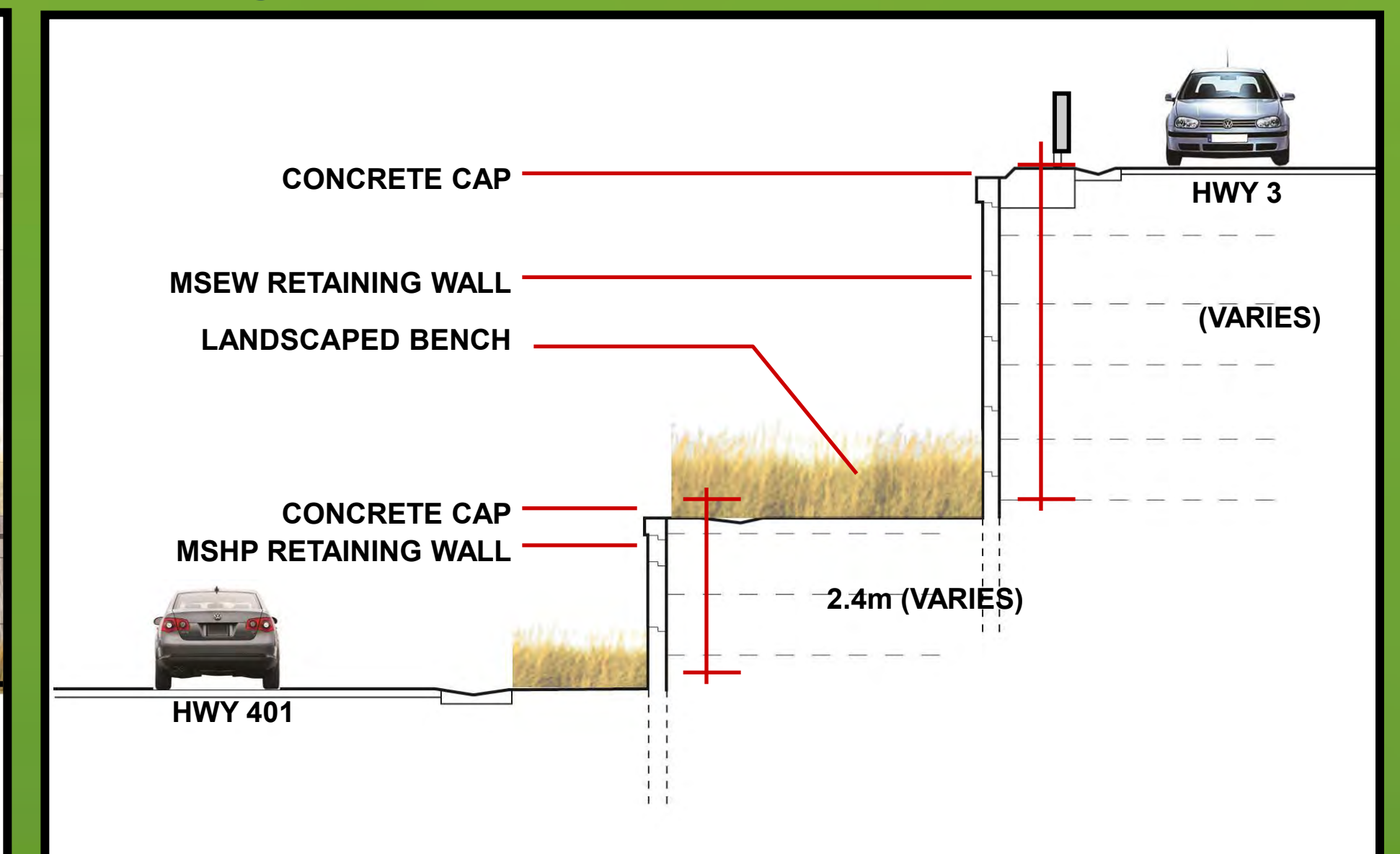
Retaining Wall – (Rectangular Panel Example) with Complete Grave Finish



Overall Elevation with Complete Grave Finish



Retaining Wall – Section



Pump stations are located beside the Highway in association with the Stormwater Management Ponds. Mechanical pumps are located below grade. Backup generators are contained within the pump house structure.



Examples of pump house design



Noise and exhaust screening vegetation

