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Memorandum

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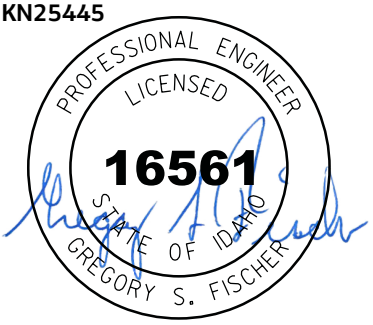
Subject	**Geotechnical Report Addendum for 1500 E Road over Low Line Canal, KN25445**
Project Name	Leading Idaho Local Bridge Program
Highway District	Buhl HD
Prepared By:	Ajith Hanagoodu
Reviewed By:	Greg Fischer, P.E.
Date	May 1, 2025



May 1, 2025

1. Introduction

This is an addendum to the final Geotechnical Report for 1500 E Road over Low Line Canal, submitted to Local Highway Technical Assistance Council (LHTAC) in April 2025. Specifically, this addendum has been prepared to include lateral earth pressure recommendations for granular subbase abutment wall backfill following recommendations provided in Section 3.2, Lateral Earth Pressures. The design team has requested Jacobs to provide revised lateral earth pressure values when geosynthetic reinforced abutment backfill (GRAB) is not utilized. GRAB or granular subbase abutment wall backfill is recommended to mitigate potential differential settlement of the approach embankments.

This addendum consists of the following:

- Rename the existing Table 4 "Unfactored Equivalent Fluid Densities" to "Unfactored Equivalent Fluid Densities for GRAB" in Section 3.2.
- Add Table 5 "Unfactored Equivalent Fluid Densities for Granular Subbase" in Section 3.2.
- Renumber the existing Table "5" (Seismic Response Criteria) to Table "6" in Section 3.6.

3.2 Lateral Earth Pressures

Add the following sentence in the last paragraph:

Lateral earth pressures are presented in Table 5 for granular subbase material (as specified in Section 301 of the standard specifications) with a moist unit weight of 130 pcf and internal friction angle of 32 degrees.

Rename Table 4 "Unfactored Equivalent Fluid Densities" to "Unfactored Equivalent Fluid Densities for GRAB".

Add Table 5 "Unfactored Equivalent Fluid Densities for Granular Subbase".

Table 5. Unfactored Equivalent Fluid Densities for Granular Subbase

Earth Pressure State	Horizontal Backfill Surface		
	Lateral Earth Coefficient	Equivalent Fluid Density (pcf) (Above Design Water Elevation)	Equivalent Fluid Density (pcf) (Undrained - Below Design Water Elevation)
Active	K_a = 0.27	36	81
At-Rest	K_o = 0.47	61	94
Passive	K_p = 3.19	415	278

3.6 Seismic Design

Renumber the existing Table "5" (Seismic Response Criteria) to Table "6".