

# ENG-CDR21013-R2-GEO.pdf Markup Summary

4 (1)

2.0 PROJE  
recommend updating to  
final language for the  
final bridge type  
It is Entech's understanding that the prop-  
spanning Sand Creek with driven H-pile  
time of drilling, the site for the proposed  
Briargate Boulevard had been graded a

**Subject:** COMMENT  
**Page Index:** 4  
**Date:** 1/28/2022 10:19:00 AM  
**Author:** Alivia Plankis  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 4

recommend updating to add language for the final bridge type

7 (1)

with Engineering, Inc. should be noted so that the as-  
not presented can be reviewed and revised if necessary.  
developed by constructing a bridge over Sand Creek and a  
at the Briargate Boulevard Crossing. The proposed bridge is expected  
conditions encountered in the test borings drilled for the planned  
grain size to the sand overlying interbedded silt/clay sandstone  
was encountered at depths of 4 to 5 feet in the test borings  
encountered in dense states. The underlying sandstone was a  
sandstone, and the underlying siltstone was encountered at least 4

**Subject:** COMMENT  
**Page Index:** 7  
**Date:** 1/28/2022 10:19:13 AM  
**Author:** Alivia Plankis  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 7

this is not the foundation type used at the bridge. Recommend the report is updated.

9 (2)

removal and replacement with non-expansive structural fill con-  
usual. Fill paragraph. Any new fill should be placed to the regular  
granular sand may be used as structural fill  
performance should be approved by CDOT prior to loading to it  
CDOT REQUIRES LRFD DESIGN  
the above recommendations and follow an allowable base  
the native sands. For recomacted sands or fill  
allowable bearing capacity of 5000 psf is recommended. An a  
and is recommended for undisturbed sandstone. Footings sh-  
be below the adjacent existing surface grade for footings  
from subgrade preparation recommendations, and adhering  
with allowable bearing pressure. It is expected to result in 0

**Subject:** COMMENT  
**Page Index:** 9  
**Date:** 1/28/2022 10:19:32 AM  
**Author:** Alivia Plankis  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 9

CDOT REQUIRES BASE OF FOOTING TO BE 36 INCHES BELOW FINISHED GRADE FOR FROST PROTECTION.

11 (1)

as a non-expansive fill or as a replacement for the original material or  
is available in place. (2) materials of the proper bearing capacity to  
or placed, and (3) the soil, being, compacted fill means, expansion and  
performance and soil to increase bearing capacity, the driving  
early closer embankment or rebar. Plus should be driven 10 feet or  
CDOT REQUIRES LRFD DESIGN  
the above recommendations and follow an allowable base  
the native sands. For recomacted sands or fill  
allowable bearing capacity of 5000 psf is recommended. An a  
and is recommended for undisturbed sandstone. Footings sh-  
be below the adjacent existing surface grade for footings  
from subgrade preparation recommendations, and adhering  
with allowable bearing pressure. It is expected to result in 0

**Subject:** COMMENT  
**Page Index:** 11  
**Date:** 1/28/2022 10:19:45 AM  
**Author:** Alivia Plankis  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 11

BE AWARE THAT FOR H-PILES, CDOT SPECIFICATION REQUIRES WAVE EQUATION ANALYSIS, PDA, OR STATIC LOAD TEST TO DETERMINE NOMINAL DRIVING RESISTANCE.