

ADDENDUM NO. 1



Engineering beyond.™

TO: All Holders of Plans and Contract Documents for Moniteau County, BRO-R068(05) Pilot Grove Road Bridge No. 1550021 Replacement Over Trib of N Moreau Creek

ISSUED: March 16, 2026

\_\_\_\_\_  
Name of Bidder

\_\_\_\_\_  
Receipt Acknowledged By

This Addendum is hereby made a part of the Contract Documents to the same extent as if it were originally included herein. This Addendum shall be inserted in the Contract Documents and submitted with the Bid, and includes the following items:

CONTRACT DOCUMENTS:

PLANS

- Sheet 02A
  - Addition of Sheet 02A
    - Sheet 02A provides details and estimated quantities in relation to Itemized Proposal "No. 7, 304-99.05, Integrated Approach, S.Y., 98.0"

Sincerely,

A handwritten signature in blue ink that reads "Mitch Gibler".

Mitch Gibler  
Project Manager

**DESIGN:**

DESIGN LOADS AND SOIL PROPERTIES  
ROAD BASE UNIT WEIGHT = 140 pcf, THICKNESS = 42-INCHES

**"POOR" SOIL CONDITIONS:**

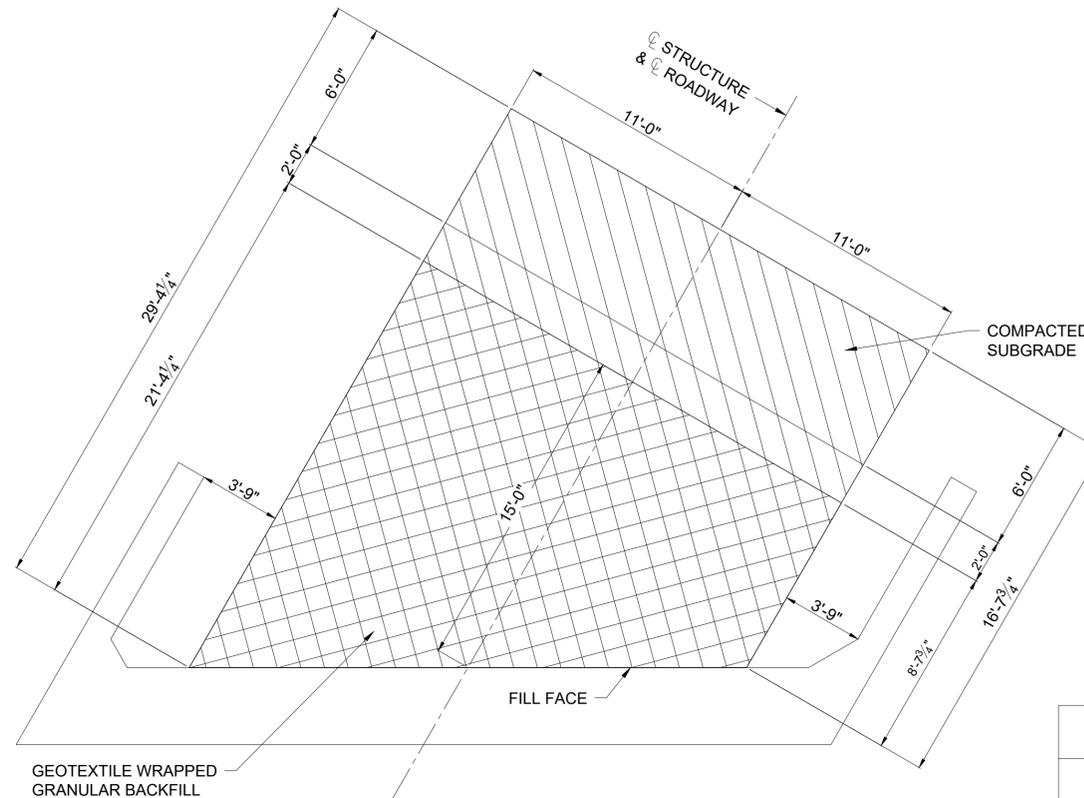
RETAINED BACKFILL: UNIT WEIGHT=125 pcf, FRICTION ANGLE = 34°, COHESION = 0 psf,  
(COHESION >= 200 psf ASSUMED FOR TEMPORARY BACK SLOPE CUT CONDITIONS DURING  
CONSTRUCTION.)  
dmax >= 1.0 INCHES  
GRANULAR BACKFILL: UNIT WEIGHT =115 pcf, FRICTION ANGLE= 38°, COHESION= 0 psf

**"FAVORABLE " SOIL CONDITIONS:**

RETAINED BACKFILL: UNIT WEIGHT = 125 pcf, FRICTION ANGLE = 40°, COHESION = 100 psf  
dmax >= 0.5 INCHES  
GRANULAR BACKFILL: UNIT WEIGHT = 120 pcf, FRICTION ANGLE = 42°, COHESION = 0 psf

**CONSTRUCTION SPECIFICATIONS:**

- EXCAVATION: COMPLY WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) FOR ALL EXCAVATIONS.
- COMPACTION: COMPACT BACKFILL TO A MINIMUM OF 95 PERCENT OF HE MAXIMUM DRY DENSITY ACCORDING TO AASHTO-T-99 AND ± 2 PERCENT OPTIMAL MOISTURE CONTENT, COMPACT TO 100 PERCENT OF THE MAXIMUM DRY DENSITY ACCORDING TO AASHTO-T-99. ONLY HAND-OPERATED COMPACTION EQUIPMENT IS ALLOWED WITHIN 3- FEET OF THE WALL FACE.
- GEOTEXTILE PLACEMENT: PULL THE GEOTEXTILE TAUGHT TO REMOVE ANY WRINKLES AND LAY FLAT PRIOR TO PLACING AND COMPACTING THE BACKFILL MATERIAL. SPLICES SHOULD BE STAGGERED AT LEAST 24-INCHES APART. NO EQUIPMENT IS ALLOWED DIRECTLY ON GEOTEXTILE. PLACE A MINIMUM 6 - INCHES LAYER OF GRANULAR FILL PRIOR TO OPERATING ONLY RUBBER-TIRED EQUIPMENT OVER THE GEOTEXTILE AT SPEEDS LESS THAN 5 MILES PER HOUR WITH NO SUDDEN BRAKING OR SHARP TURNING.
- INTEGRATED APPROACH PLACEMENT: FOLLOWING THE PLACEMENT OF THE SUPERSTRUCTURE, GEOTEXTILE REINFORCEMENT LAYERS ARE PLACED ALONG THE BACK OF THE SUPERSTRUCTURE, BUILT IN MAXIMUM LIFT HEIGHTS OF 6-INCHES(MAXIMUM VERTICAL SPACING OF REINFORCEMENT <= 6-INCHES). THE TOP OF THE FINAL WRAP SHOULD BE APPROXIMATELY 8-INCHES BELOW THE TOP OF THE SUPERSTRUCTURE TO ALLOW 4-INCHES OF ROADWAY AGGREGATE BASE COVER OVER THE GEOTEXTILE TO PROTECT FROM ROAD BED CONSTRUCTION.



**PLAN OF INTEGRATED APPROACH**

**TABLE 1. INTEGRATED APPROACH GRANULAR BACKFILL (MoDOT Type 7)**

Gradation (MoDOT Type 7)	U.S SIEVE SIZE	PERCENT PASSING
	Passing 1 1/2 - inch	100
	Passing 1 - inch	70-100
	Passing No. 8	15-50
	Passing No. 200	0-12
Plasticity Index (PI) (AASHTO T-90)	PI <= 6	

\*A maximum grain size of 1 1/2 inches is recommended for efficient compaction. The exact gradation is not required. As long as the maximum aggregate size is not exceeded, the amount of fines passing No. 200 sieve is not greater than 12 percent, and the friction angle is at least 38 degrees, the backfill material will be adequate.

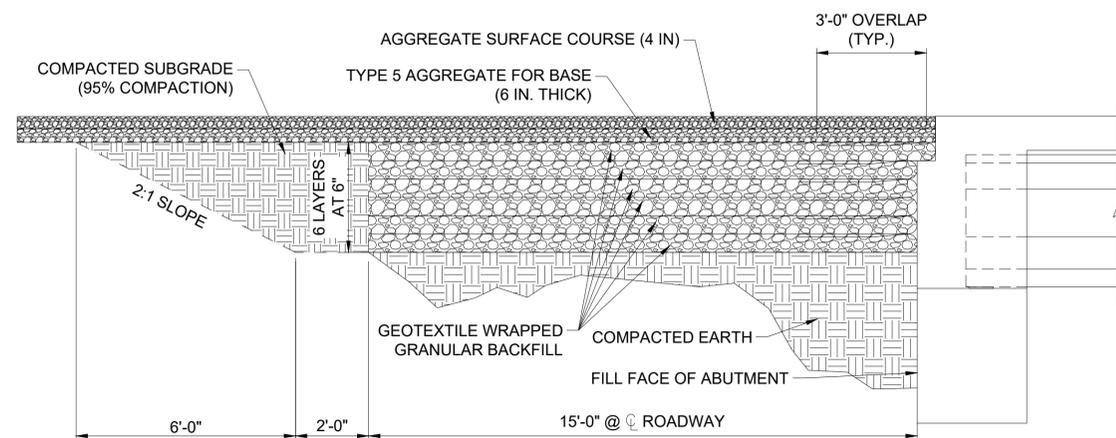
**REINFORCED BACKFILL GRADATION:**

REINFORCED BACKFILL GRADATION= SEE TABLE 1

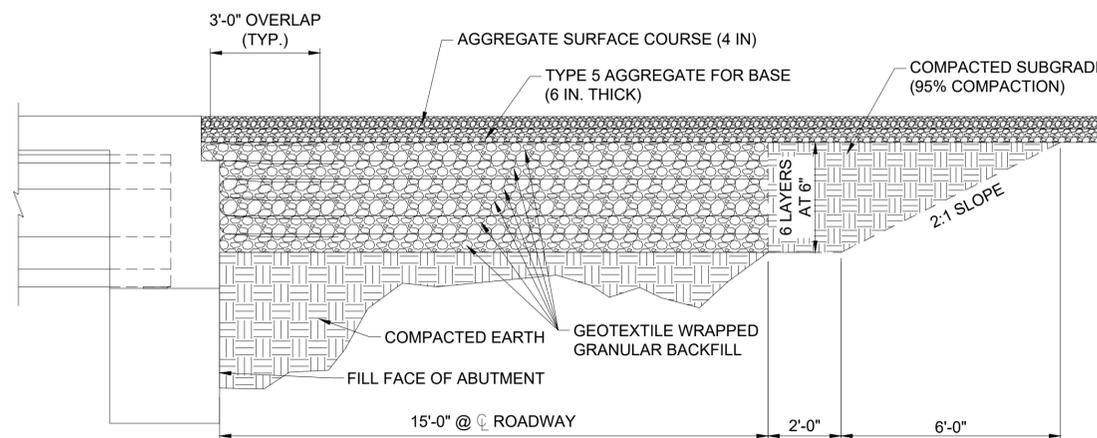
**GEOTEXTILE TENSILE PROPERTIES:**

REQUIRED ULTIMATE TENSILE STRENGTH = 4,800 lb/ft BY (ASTM D 4595 (GEOTEXTILES)  
TENSILE STRENGTH AT 2% STRAIN =1,370 lb/ft

ESTIMATED QUANTITIES FOR INTEGRATED APPROACH				
ITEM	UNIT	BENT #1	BENT #2	
COMPACTED SUBGRADE	C.Y.	12.5	12.5	
GRANULAR BACKFILL	C.Y.	36.8	36.8	
GEOTEXTILE	S.Y	290	290	



**ELEVATION OF INTEGRATED APPROACH BENT NO.1**



**ELEVATION OF INTEGRATED APPROACH BENT NO.2**



DRAWING INFO.		REVISIONS	
NO.	DESCRIPTION	DATE	BY
1	ADDITIONUM NO. 1		

FIELD BY:	MPG
DRAWN BY:	GOS
CHECK BY:	
DATE:	03/16/2026
FIELD BOOK:	
JOB NUMBER:	ERO-R068015

**DETAILS OF INTEGRATED APPROACH**  
PILOT GROVE BRIDGE REPLACEMENT  
BRO-R068015 BRIDGE # 1550021  
S 14 T 44N R 16W  
MONITEAU COUNTY MISSOURI