



BID ITEMS AND UNIT TO BID  
 GRANULAR EMBANKMENT CUYD  
 STRUCTURE GRANULAR BACKFILL CUYD

**CONSTRUCTION SEQUENCE "A"**

1. CONSTRUCT EMBANKMENT TO SLOPES A, B, F, AND G SUCH THAT NO UNCOMPACTED OR LOOSE MATERIAL SHALL REMAIN.
2. EXCAVATE FOR END-BENT TO C, D, E, AND F.
3. INSTALL PILES (OR OTHER FOUNDATION).
4. PLACE 2" MORTAR BED OR ANY CLASS CONCRETE.
5. CONSTRUCT CONCRETE END-BENT.
6. INSTALL 4" PERFORATED UNDERDRAIN PIPE AND BACKFILL.
7. BACKFILL TO C, D, E, F, G, Z, AND J WITH COMPACTED STRUCTURE GRANULAR BACKFILL.

**① CONSTRUCTION SEQUENCE "B"**

1. CONSTRUCT EMBANKMENT TO TEMPORARY SLOPE ④.
2. INSTALL PILES (OR OTHER FOUNDATION).
3. PLACE 2" MORTAR BED OR ANY CLASS CONCRETE.
4. CONSTRUCT CONCRETE END-BENT.
5. INSTALL 4" PERFORATED UNDERDRAIN PIPE AND BACKFILL.
6. BACKFILL TO FINISHED GRADE IN ACCORDANCE WITH SPECIAL PROVISION NO. 69.

**~ NOTES ~**

- ① CONSTRUCTION SEQUENCE "B" IS A PERMITTED ALTERNATE ONLY WHEN GRANULAR OR ROCK EMBANKMENT IS UTILIZED.
- ② 2" MORTAR BED OR ANY CLASS CONCRETE.
- ③ 4" PERFORATED UNDERDRAIN PIPE WRAPPED WITH GEOTEXTILE FABRIC FOR DRAINING THE EXCAVATED TRENCH AND STRUCTURE GRANULAR BACKFILL.
- ④ ACCEPTABLE ALTERNATES FOR TEMPORARY SLOPE (CONSTRUCTION SEQUENCE "B").
5. SHADED PORTIONS AND REPRESENT LIMITS OF NON-ERODIBLE GRANULAR EMBANKMENT IN ACCORDANCE WITH SPECIAL PROVISION NO. 69.
- ⑥ SLOPES ARE EQUAL.
- ⑦ "H" = EMBANKMENT HEIGHT MEASURED FROM SUBGRADE ELEVATION AT POINT ② TO THE LOWEST ELEVATION AT THE TOE OF THE SLOPE.
- ⑧ LIMITS OF EMBANKMENT CONSTRUCTION (H/2 OR 50' MIN.) REQUIRING 2" MAXIMUM LIFT THICKNESS FOR GRANULAR OR ROCK EMBANKMENTS.
9. SEE CURRENT SPECIAL PROVISION NO. 69 FOR CONSTRUCTION AND MATERIAL REQUIREMENTS, METHOD OF MEASUREMENT AND BASIS OF PAYMENT.
10. STRUCTURE GRANULAR BACKFILL PLACED AS A COMPLETE SEPARATE OPERATION AFTER CONSTRUCTION OF ALL OTHER EMBANKMENT.
11. NO INDIVIDUAL FRAGMENTS LARGER THAN 4 INCHES IN ANY DIMENSION PERMITTED WITHIN 3'-0" OF THE STRUCTURE.
- ⑫ PLACE GEOTEXTILE FABRIC, CLASS 2 PRIOR TO PLACING STRUCTURE GRANULAR BACKFILL AND AGGREGATE BASE COURSE.

**LEGEND**

|  |                                     |
|--|-------------------------------------|
|  | SLOPE PROTECTION (SEE BRIDGE PLANS) |
|  | PILE CORE                           |
|  | STRUCTURE GRANULAR BACKFILL         |
|  | EMBANKMENT                          |

USE WITH CUR. STD. DWG. RGX-100

KENTUCKY DEPARTMENT OF HIGHWAYS

TREATMENT OF EMBANKMENTS AT END-BENTS - DETAILS

STANDARD DRAWING NO. RGX-105-09  
 SUBMITTED DATE 02-26-20  
 APPROVED ENGINEER DATE 02-26-20