

STRUCTURE ESTIMATED QUANTITIES

Bridge No. FRA-70-1357A
RAMP C5 OVER ELECTRICAL VAULT

FRA-70/71-12.68/14.86
PID No. 105523

Franklin County, Ohio

Prepared For:

The Ohio Department of Transportation
District 6



1801 Watermark Drive, Suite 210
Columbus, Ohio 43215
(614) 210-0751
www.gpdgroup.com

February 28, 2019
Revised May 31, 2019

Project: **Bridge No. FRA-70-1357A**
Subject: Estimated Quantities - FINAL
Date: 5/31/2019

Design: RFV
Check: DJC

ITEM 203 - GRANULAR MATERIAL, TYPE C

depth = 2.00 ft
area southwest = 414.86 sf
area northwest = 150.00 sf
area east = 651.11 sf

Total = **91 cy**

ITEM 503 - UNCLASSIFIED EXCAVATION

avg. existing grade = 713.5 ft
bottom/excavation = 707.00 ft
area southwest = 414.86 sf
area northwest = 150.00 sf
area east = 651.11 sf

Total = **293 cy**

ITEM 509 - EPOXY COATED REINFORCING STEEL

Culvert & Walls = 59,153 lbs
Footing = 5,889 lbs

Total = **65,042 lbs**

ITEM 511 - CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING

southwest wingwall

thickness = 1.5 ft
surface area = 455.00 sf

in between piece = 3.19 sf
height = 21.90 ft

southeast wingwall

thickness = 1.5 ft
surface area = 371.88 sf

in between piece = 3.19 sf
height = 21.00 ft

Total = **52 cy**

ITEM 511 - CLASS QC1 CONCRETE, WITH QC/QA, FOOTING

southwest area = 317.98 sf
northwest area = 99.00 sf
east area = 491.23 sf
height = 2.00 ft

Total = **68 cy**

ITEM 511 - CLASS QC1 CONCRETE WITH QC/QA, CULVERT

headwall area =	56.55 sf
thickness =	1.50 ft
wall height =	19.50 ft
wall thickness =	1.50 ft
wall total length =	94.00 ft
duct cutout (subtract) =	16.50 cf
chamfer area =	2.00 sf
chamfer total length =	86.75 ft
top slab area =	845.00 sf (inside walls)
thickness =	1.50 ft
Total =	158 cy

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

southwest wingwall area =	338.24 sf
southeast wingwall area =	316.50 sf
culvert perimeter =	59.67 ft
depth =	2.00 ft
south exposed end =	101.50 sf
headwall south face =	56.55 sf
top & back of headwall =	58.00 sf
Total =	111 sy

ITEM 512 - TYPE 2 WATERPROOFING

ww heights =	42.9 ft
width =	2 ft
culvert area top =	971.5 sf
overlap =	97 sf
sides =	1267.5 sf
Total =	270 sy

ITEM 516 - 1" PREFORMED EXPANSION JOINT FILLER

length =	42.90 ft
width =	1.50 ft
Total =	65 sf

ITEM 518 - POROUS BACKFILL WITH FILTER FABRIC

southwest wingwall	
surface area of ww =	515.23 sf
depth to top backfill	2.00 ft
length of backfill	28.83 ft
total area =	457.56 sf
thickness =	2.00 ft
subtotal =	915.12 cf
southeast wingwall	
surface area of ww =	429.63 sf
depth to top backfill	2.00 ft
length of backfill	30.58 ft

total area = 368.46 sf
thickness = 2.00 ft
subtotal = 736.92 cf

Total = 62 cy

ITEM 518 - 6" PERFORATED CORRUGATED PLASTIC PIPE

length = 60.00 ft

Total = 60 ft

ITEM 518 - 6" NON-PERFORATED CORRUGATED PLASTIC PIPE

length = 20 ft

Total = 20 ft