

# BURGESS & NIPLE, INC. - COMPUTATION SHEET

JOB NO. 62450 JOB NAME Cemetery Road SUP  
 SUBJECT Cemetery Road SUP Tunnel Quantity Calcs

SHEET 1 OF 2  
 PREPARED BY BWC 12/16/2025  
 CHECKED BY JFM 12/26/2025

**503 21300 UNCLASSIFIED EXCAVATION** **LS LS**

**South Footing**

Area Per Microstation = 690 SF *BS001 Scratch* = BWC updated for stage 3  
 Average Ground Elevation = 871 *Estimated*  
 Btm Footing Elevation = 870.12  
 Delta = 0.88 FT  
 Volume of North Exc = 607.2 CF

**North Footing**

Area Per Microstation = 668.93 SF *BS001 Scratch*  
 Average Ground Elevation = 872 *Estimated*  
 Btm Footing Elevation = 871.27  
 Delta = 0.73 FT  
 Volume of North Exc = 488.3189 CF

Total = 41 CY  
 Total = LS LS

**509 10001 EPOXY COATED REINFORCING STEEL, AS PER PLAN** **13183 POUND**

Total = 13183 POUND

**511 46510 CLASS QC1 CONCRETE, FOOTING** **82 CY**

|                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rear Inlet Area = 551.48 SF <i>SP001</i><br>Thickness = 2 FT <i>SP001</i><br>Subtotal = 1102.96 CF<br><br>Sloped Rear Inlet Footing Length = 18 FT<br>Sloped Footing Width = 8 FT<br>Sloped Footing Avg Add'l Height = 0.09 FT<br>Subtotal = 12.96 CF | Fwd Inlet Area = 533.23 SF <i>SP001</i><br>Thickness = 2 FT <i>SP001</i><br>Subtotal = 1066.46 CF<br><br>Sloped Fwd Inlet Footing Length = 18 FT<br>Sloped Footing Width = 9.5 FT<br>Sloped Footing Avg Add'l Height = 0.09 FT<br>Subtotal = 15.39 CF |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Total = 82 CY

**511 46010 CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING** **42 CY**

|                                                                                                                          |                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| SW WW Avg Height = 10.94 ft<br>SE WW Avg Height = 10.50 ft<br>NW WW Avg Height = 10.83 ft<br>NE WW Avg Height = 11.03 ft | SW WW Area = 28.25 SF<br>SE WW Area = 24.50 SF<br>NW WW Area = 25.94 SF<br>NE WW Area = 23.80 SF |
|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|

Total = 42 CY

**511 46610 CLASS QC1 CONCRETE, HEADWALL** **2 CY**

Rear Inlet Length = 18 ft  
 Fwd Inlet Length = 18 ft  
 HW Height = 1.5 ft  
 HW Thickness = 1 ft

Total = 2 CY

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SUBJECT Cemetery Road SUP Tunnel Quantity CalcsSHEET 2 OF 2  
PREPARED BY BWC 2/21/2025  
CHECKED BY JFM 2/27/2025**512 10101 SEALING OF CONCRETE SURFACES (EPOXY-URETHANE), AS PER PLAN 341 SY**  
*All CAD measurements from SM001*Rear Inlet Headwall  
Front Area = 19.5 SF  
Top Area = 18.00 SF  
Back Area = 10.17 SFForward Inlet Headwall  
Front Area = 19.5 SF  
Top Area = 18.00 SF  
Back Area = 19.96 SFFace of Culvert  
Rear Area = 58 SF  
Rear Area = 58 SFInside Culvert  
Perimeter = 35.66 FT  
Culvert Length = 61 FT  
Area = 2175.07 SFSW Wingwall Areas  
Top (CAD) = 28.24 SF  
Back (CAD) = 6.03 SF  
Front (CAD) = 129.67 SF  
Side (CAD) = 1.31 SF  
Subtotal = 165.25 SFNW Wingwall Areas  
Top (CAD) = 23.7969 SF  
Back (CAD) = 13.15 SF  
Front (CAD) = 109.4157 SF  
Side (CAD) = 1.31 SF  
Subtotal = 147.68 SFSE Wingwall Areas  
Top (CAD) = 24.50 SF  
Back (CAD) = 11.91 SF  
Front (CAD) = 113.02 SF  
Side (CAD) = 1.31 SF  
Subtotal = 150.73 SFNE Wingwall Areas  
Top (CAD) = 25.936 SF  
Back (CAD) = 13.4937 SF  
Front (CAD) = 119.4709 SF  
Side (CAD) = 1.31 SF  
Subtotal = 160.21 SFTotal = 336 SY  
Total = 341 SY

JFM - Because so close to mine use higher value; same for below

**512 10001 SEALING OF CONCRETE SURFACES, AS PER PLAN 341 SY**  
*Applied in same locations traditional sealant*Total = 341 SY**512 33000 TYPE 2 WATERPROOFING 181 SY**SW WW Max Height = 13.5 ft  
SE WW Max Height = 13.5 ft  
NW WW Max Height = 13.72 ft  
NE WW Max Height = 13.72 ft  
Waterproofing Length = 3 ft  
Subtotal = 163.32 SFCulvert Length = 61 ft  
Culvert Wall Height = 12 ft  
# of Sides = 2 EA  
Sides of Culvert = 1464 SFTotal = 181 SY**512 33010 TYPE 3 WATERPROOFING 132 SY**Waterproofing Width = 20 ft *Includes additional 1' on both sides for overlap*  
Culvert Length = 61 ft  
Headwall Width = 1 ft *Subtracted 1' from both sides for headwall*Total = 132 SY**516 13600 1" PREFORMED EXPANSION JOINT FILLER 82 SF**Total WW Height = 54.44 ft  
PEJF Width = 1.5 ftTotal = 82 SF**518 21200 POROUS BACKFILL WITH GEOTEXTILE FABRIC 28 CY**  
*Developed scratch elevations views located in SM001*SW WW Area (CAD) = 107.2088 SF  
SE WW Area (CAD) = 87.05 SF  
NW WW Area (CAD) = 82.89 SF  
NE WW Area (CAD) = 90.95 SF  
Thickness = 2 FTTotal = 28 CY**607 98000 FENCE, MISC.: WOOD FENCE AS PER PLAN 19 FT**Length = 19 FT**611 96457 16' X 10' CONDUIT, TYPE A, 706.05, AS PER PLAN 61 FT**Length = 61 FT