

Proposed Hydrology

Prepared by {enter your company name here}

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Type III 24-hr 25-Year Rainfall=6.15"

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Pond U/G2: Underground Detention/Infiltration System 2 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

13 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 94.18' Row Length +12.0" End Stone x 2 = 96.18' Base Length

17 Rows x 51.0" Wide + 6.0" Spacing x 16 + 12.0" Side Stone x 2 = 82.25' Base Width

6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

221 Chambers x 45.9 cf = 10,152.7 cf Chamber Storage

27,686.9 cf Field - 10,152.7 cf Chambers = 17,534.1 cf Stone x 40.0% Voids = 7,013.6 cf Stone Storage

Chamber Storage + Stone Storage = 17,166.4 cf = 0.394 af

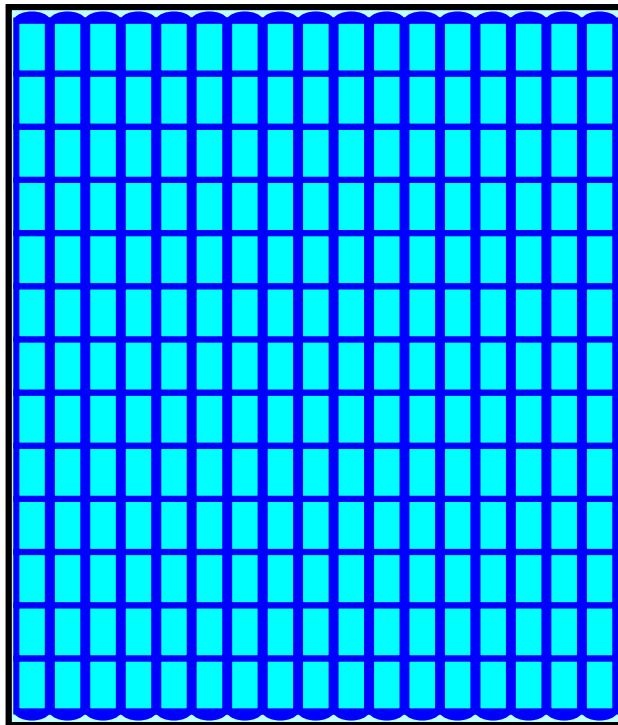
Overall Storage Efficiency = 62.0%

Overall System Size = 96.18' x 82.25' x 3.50'

221 Chambers

1,025.4 cy Field

649.4 cy Stone



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Stage-Area-Storage for Pond U/G2: Underground Detention/Infiltration System 2

| Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) | Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) |
|---------------------|--------------------|-------------------------|---------------------|--------------------|-------------------------|
| 72.50 | 7,911 | 0 | 75.15 | 7,911 | 14,307 |
| 72.55 | 7,911 | 158 | 75.20 | 7,911 | 14,519 |
| 72.60 | 7,911 | 316 | 75.25 | 7,911 | 14,719 |
| 72.65 | 7,911 | 475 | 75.30 | 7,911 | 14,907 |
| 72.70 | 7,911 | 633 | 75.35 | 7,911 | 15,086 |
| 72.75 | 7,911 | 791 | 75.40 | 7,911 | 15,257 |
| 72.80 | 7,911 | 949 | 75.45 | 7,911 | 15,423 |
| 72.85 | 7,911 | 1,107 | 75.50 | 7,911 | 15,584 |
| 72.90 | 7,911 | 1,266 | 75.55 | 7,911 | 15,742 |
| 72.95 | 7,911 | 1,424 | 75.60 | 7,911 | 15,901 |
| 73.00 | 7,911 | 1,582 | 75.65 | 7,911 | 16,059 |
| 73.05 | 7,911 | 1,916 | 75.70 | 7,911 | 16,217 |
| 73.10 | 7,911 | 2,249 | 75.75 | 7,911 | 16,375 |
| 73.15 | 7,911 | 2,582 | 75.80 | 7,911 | 16,534 |
| 73.20 | 7,911 | 2,915 | 75.85 | 7,911 | 16,692 |
| 73.25 | 7,911 | 3,246 | 75.90 | 7,911 | 16,850 |
| 73.30 | 7,911 | 3,576 | 75.95 | 7,911 | 17,008 |
| 73.35 | 7,911 | 3,905 | 76.00 | 7,911 | 17,166 |
| 73.40 | 7,911 | 4,233 | | | |
| 73.45 | 7,911 | 4,559 | | | |
| 73.50 | 7,911 | 4,884 | | | |
| 73.55 | 7,911 | 5,208 | | | |
| 73.60 | 7,911 | 5,530 | | | |
| 73.65 | 7,911 | 5,851 | | | |
| 73.70 | 7,911 | 6,170 | | | |
| 73.75 | 7,911 | 6,487 | | | |
| 73.80 | 7,911 | 6,803 | | | |
| 73.85 | 7,911 | 7,117 | | | |
| 73.90 | 7,911 | 7,429 | | | |
| 73.95 | 7,911 | 7,739 | | | |
| 74.00 | 7,911 | 8,048 | | | |
| 74.05 | 7,911 | 8,354 | | | |
| 74.10 | 7,911 | 8,658 | | | |
| 74.15 | 7,911 | 8,960 | | | |
| 74.20 | 7,911 | 9,259 | | | |
| 74.25 | 7,911 | 9,556 | | | |
| 74.30 | 7,911 | 9,850 | | | |
| 74.35 | 7,911 | 10,142 | | | |
| 74.40 | 7,911 | 10,431 | | | |
| 74.45 | 7,911 | 10,717 | | | |
| 74.50 | 7,911 | 11,000 | | | |
| 74.55 | 7,911 | 11,280 | | | |
| 74.60 | 7,911 | 11,557 | | | |
| 74.65 | 7,911 | 11,830 | | | |
| 74.70 | 7,911 | 12,099 | | | |
| 74.75 | 7,911 | 12,364 | | | |
| 74.80 | 7,911 | 12,624 | | | |
| 74.85 | 7,911 | 12,881 | | | |
| 74.90 | 7,911 | 13,133 | | | |
| 74.95 | 7,911 | 13,380 | | | |
| 75.00 | 7,911 | 13,621 | | | |
| 75.05 | 7,911 | 13,857 | | | |
| 75.10 | 7,911 | 14,086 | | | |

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Summary for Pond U/G3: Underground Detention/Infiltration System 3

Inflow Area = 1.243 ac, 68.38% Impervious, Inflow Depth = 4.42" for 25-Year event
 Inflow = 6.51 cfs @ 12.07 hrs, Volume= 0.458 af
 Outflow = 3.45 cfs @ 12.19 hrs, Volume= 0.458 af, Atten= 47%, Lag= 7.1 min
 Discarded = 0.50 cfs @ 11.50 hrs, Volume= 0.318 af
 Primary = 2.95 cfs @ 12.19 hrs, Volume= 0.139 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 72.07' @ 12.19 hrs Surf.Area= 4,328 sf Storage= 4,156 cf

Plug-Flow detention time= 21.4 min calculated for 0.458 af (100% of inflow)
 Center-of-Mass det. time= 21.4 min (819.3 - 797.9)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|--------|---------------|---|
| #1A | 70.50' | 3,037 cf | 58.17'W x 74.40'L x 2.33'H Field A - Volume of Voids 10,098 cf Overall - 2,506 cf Embedded = 7,592 cf x 40.0% Voids |
| #2A | 71.00' | 2,506 cf | ADS_StormTech SC-310 +Cap x 170 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 170 Chambers in 17 Rows |
| | | 5,543 cf | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|--------|-----------|--------|--|
| #1 | Primary | 71.10' | 18.0" Round Culvert L= 20.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 71.10' / 71.00' S= 0.0050 ' S= 0.0050 ' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf |
| #2 | Discarded | 70.50' | 5.000 in/hr Exfiltration over Surface area Phase-In= 0.01' |

Discarded OutFlow Max=0.50 cfs @ 11.50 hrs HW=70.52' (Free Discharge)
 ↳ **2=Exfiltration** (Exfiltration Controls 0.50 cfs)

Primary OutFlow Max=2.95 cfs @ 12.19 hrs HW=72.07' TW=71.37' (Dynamic Tailwater)
 ↳ **1=Culvert** (Barrel Controls 2.95 cfs @ 3.48 fps)

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Pond U/G3: Underground Detention/Infiltration System 3 - Chamber Wizard Field A - Volume of Voids

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)

Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf

Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

10 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 72.40' Row Length +12.0" End Stone x 2 = 74.40' Base Length

17 Rows x 34.0" Wide + 6.0" Spacing x 16 + 12.0" Side Stone x 2 = 58.17' Base Width

6.0" Base + 16.0" Chamber Height + 6.0" Cover = 2.33' Field Height

170 Chambers x 14.7 cf = 2,506.1 cf Chamber Storage

10,097.7 cf Field - 2,506.1 cf Chambers = 7,591.6 cf Stone x 40.0% Voids = 3,036.6 cf Stone Storage

Chamber Storage + Stone Storage = 5,542.8 cf = 0.127 af

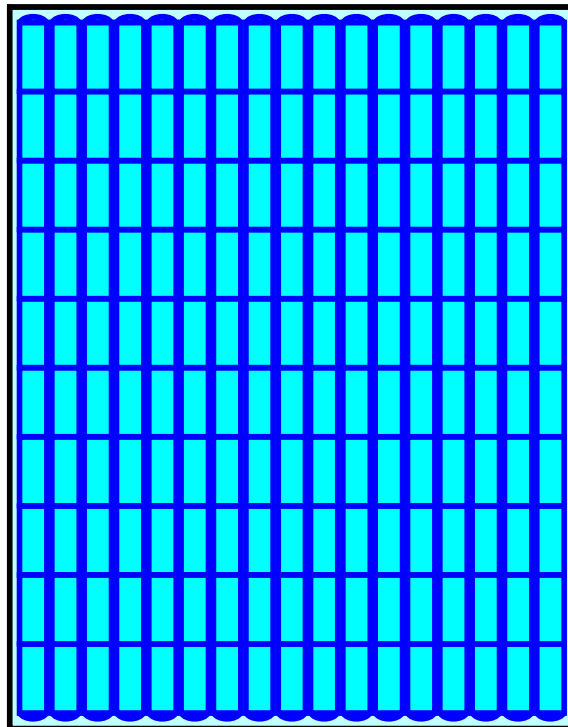
Overall Storage Efficiency = 54.9%

Overall System Size = 74.40' x 58.17' x 2.33'

170 Chambers

374.0 cy Field

281.2 cy Stone



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Stage-Area-Storage for Pond U/G3: Underground Detention/Infiltration System 3

| Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) |
|---------------------|--------------------|-------------------------|
| 70.50 | 4,328 | 0 |
| 70.55 | 4,328 | 87 |
| 70.60 | 4,328 | 173 |
| 70.65 | 4,328 | 260 |
| 70.70 | 4,328 | 346 |
| 70.75 | 4,328 | 433 |
| 70.80 | 4,328 | 519 |
| 70.85 | 4,328 | 606 |
| 70.90 | 4,328 | 692 |
| 70.95 | 4,328 | 779 |
| 71.00 | 4,328 | 866 |
| 71.05 | 4,328 | 1,039 |
| 71.10 | 4,328 | 1,213 |
| 71.15 | 4,328 | 1,385 |
| 71.20 | 4,328 | 1,556 |
| 71.25 | 4,328 | 1,726 |
| 71.30 | 4,328 | 1,894 |
| 71.35 | 4,328 | 2,060 |
| 71.40 | 4,328 | 2,225 |
| 71.45 | 4,328 | 2,387 |
| 71.50 | 4,328 | 2,547 |
| 71.55 | 4,328 | 2,705 |
| 71.60 | 4,328 | 2,861 |
| 71.65 | 4,328 | 3,014 |
| 71.70 | 4,328 | 3,165 |
| 71.75 | 4,328 | 3,313 |
| 71.80 | 4,328 | 3,457 |
| 71.85 | 4,328 | 3,598 |
| 71.90 | 4,328 | 3,734 |
| 71.95 | 4,328 | 3,867 |
| 72.00 | 4,328 | 3,994 |
| 72.05 | 4,328 | 4,115 |
| 72.10 | 4,328 | 4,228 |
| 72.15 | 4,328 | 4,333 |
| 72.20 | 4,328 | 4,432 |
| 72.25 | 4,328 | 4,527 |
| 72.30 | 4,328 | 4,618 |
| 72.35 | 4,328 | 4,706 |
| 72.40 | 4,328 | 4,793 |
| 72.45 | 4,328 | 4,879 |
| 72.50 | 4,328 | 4,966 |
| 72.55 | 4,328 | 5,052 |
| 72.60 | 4,328 | 5,139 |
| 72.65 | 4,328 | 5,225 |
| 72.70 | 4,328 | 5,312 |
| 72.75 | 4,328 | 5,399 |
| 72.80 | 4,328 | 5,485 |

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Summary for Pond YD1: YD-1

Inflow Area = 1.010 ac, 7.23% Impervious, Inflow Depth = 1.37" for 25-Year event
 Inflow = 0.93 cfs @ 12.31 hrs, Volume= 0.115 af
 Outflow = 0.93 cfs @ 12.31 hrs, Volume= 0.115 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.93 cfs @ 12.31 hrs, Volume= 0.115 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 76.95' @ 12.31 hrs
 Flood Elev= 78.00'

| Device | Routing | Invert | Outlet Devices |
|--------|---------|--------|---|
| #1 | Primary | 76.40' | 12.0" Round Culvert L= 221.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 76.40' / 75.30' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf |

Primary OutFlow Max=0.93 cfs @ 12.31 hrs HW=76.95' TW=74.42' (Dynamic Tailwater)
 ↑**1=Culvert** (Barrel Controls 0.93 cfs @ 3.05 fps)

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Stage-Area-Storage for Pond YD1: YD-1

| Elevation (feet) | Storage (cubic-feet) | Elevation (feet) | Storage (cubic-feet) |
|---------------------|-------------------------|---------------------|-------------------------|
| 76.40 | 0 | 77.46 | 0 |
| 76.42 | 0 | 77.48 | 0 |
| 76.44 | 0 | 77.50 | 0 |
| 76.46 | 0 | 77.52 | 0 |
| 76.48 | 0 | 77.54 | 0 |
| 76.50 | 0 | 77.56 | 0 |
| 76.52 | 0 | 77.58 | 0 |
| 76.54 | 0 | 77.60 | 0 |
| 76.56 | 0 | 77.62 | 0 |
| 76.58 | 0 | 77.64 | 0 |
| 76.60 | 0 | 77.66 | 0 |
| 76.62 | 0 | 77.68 | 0 |
| 76.64 | 0 | 77.70 | 0 |
| 76.66 | 0 | 77.72 | 0 |
| 76.68 | 0 | 77.74 | 0 |
| 76.70 | 0 | 77.76 | 0 |
| 76.72 | 0 | 77.78 | 0 |
| 76.74 | 0 | 77.80 | 0 |
| 76.76 | 0 | 77.82 | 0 |
| 76.78 | 0 | 77.84 | 0 |
| 76.80 | 0 | 77.86 | 0 |
| 76.82 | 0 | 77.88 | 0 |
| 76.84 | 0 | 77.90 | 0 |
| 76.86 | 0 | 77.92 | 0 |
| 76.88 | 0 | 77.94 | 0 |
| 76.90 | 0 | 77.96 | 0 |
| 76.92 | 0 | 77.98 | 0 |
| 76.94 | 0 | 78.00 | 0 |
| 76.96 | 0 | | |
| 76.98 | 0 | | |
| 77.00 | 0 | | |
| 77.02 | 0 | | |
| 77.04 | 0 | | |
| 77.06 | 0 | | |
| 77.08 | 0 | | |
| 77.10 | 0 | | |
| 77.12 | 0 | | |
| 77.14 | 0 | | |
| 77.16 | 0 | | |
| 77.18 | 0 | | |
| 77.20 | 0 | | |
| 77.22 | 0 | | |
| 77.24 | 0 | | |
| 77.26 | 0 | | |
| 77.28 | 0 | | |
| 77.30 | 0 | | |
| 77.32 | 0 | | |
| 77.34 | 0 | | |
| 77.36 | 0 | | |
| 77.38 | 0 | | |
| 77.40 | 0 | | |
| 77.42 | 0 | | |
| 77.44 | 0 | | |

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Summary for Link AP1: Analysis Point 1 - Edge of Wetlands

Inflow Area = 6.932 ac, 50.01% Impervious, Inflow Depth = 0.65" for 25-Year event
Inflow = 4.03 cfs @ 12.35 hrs, Volume= 0.378 af
Primary = 4.03 cfs @ 12.35 hrs, Volume= 0.378 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Summary for Link AP2: Analysis Point 2 - Downstream End of 36" RCP Culvert

Inflow Area = 1.416 ac, 68.29% Impervious, Inflow Depth = 3.81" for 25-Year event
Inflow = 6.54 cfs @ 12.07 hrs, Volume= 0.450 af
Primary = 6.54 cfs @ 12.07 hrs, Volume= 0.450 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Proposed Hydrology

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Summary for Link AP3: Analysis Point 3 - Southeast PL

Inflow Area = 0.147 ac, 0.00% Impervious, Inflow Depth = 0.49" for 25-Year event
Inflow = 0.03 cfs @ 12.31 hrs, Volume= 0.006 af
Primary = 0.03 cfs @ 12.31 hrs, Volume= 0.006 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Summary for Link AP4: Analysis Point 4 - East PL

Inflow Area = 0.032 ac, 0.00% Impervious, Inflow Depth = 0.49" for 25-Year event
Inflow = 0.01 cfs @ 12.39 hrs, Volume= 0.001 af
Primary = 0.01 cfs @ 12.39 hrs, Volume= 0.001 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Proposed Hydrology

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Summary for Link AP5: Analysis Point 5 - PL along Jerome Ave

Inflow Area = 2.819 ac, 33.03% Impervious, Inflow Depth = 0.38" for 25-Year event
Inflow = 0.31 cfs @ 13.50 hrs, Volume= 0.090 af
Primary = 0.31 cfs @ 13.50 hrs, Volume= 0.090 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Type III 24-hr 25-Year Rainfall=6.15"

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Summary for Link WL: Wetlands

Inflow Area = 8.348 ac, 53.11% Impervious, Inflow Depth = 1.19" for 25-Year event
Inflow = 8.23 cfs @ 12.10 hrs, Volume= 0.828 af
Primary = 8.23 cfs @ 12.10 hrs, Volume= 0.828 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Type III 24-hr 100-Year Rainfall=7.75"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

| | |
|--------------------------------------|---|
| Subcatchment DA1.1: DA1.1 | Runoff Area=2.026 ac 0.10% Impervious Runoff Depth=1.23" Flow Length=557' Tc=28.7 min CN=41 Runoff=1.24 cfs 0.208 af |
| Subcatchment DA1.2: DA1.2 | Runoff Area=3.062 ac 68.71% Impervious Runoff Depth=6.09" Flow Length=899' Tc=20.3 min CN=86 Runoff=14.18 cfs 1.554 af |
| Subcatchment DA1.3: DA1.3 | Runoff Area=0.418 ac 84.93% Impervious Runoff Depth=6.56" Tc=5.0 min CN=90 Runoff=3.12 cfs 0.228 af |
| Subcatchment DA2.1: DA2.1 | Runoff Area=0.825 ac 60.00% Impervious Runoff Depth=5.62" Tc=5.0 min CN=82 Runoff=5.52 cfs 0.387 af |
| Subcatchment DA2.2: DA2.2 | Runoff Area=1.416 ac 68.29% Impervious Runoff Depth=5.28" Tc=5.0 min CN=79 Runoff=8.97 cfs 0.623 af |
| Subcatchment DA3.1: DA3.1 | Runoff Area=1.010 ac 7.23% Impervious Runoff Depth=2.30" Flow Length=416' Tc=19.1 min CN=52 Runoff=1.73 cfs 0.194 af |
| Subcatchment DA3.2: DA3.2 | Runoff Area=0.147 ac 0.00% Impervious Runoff Depth=1.05" Tc=5.0 min CN=39 Runoff=0.12 cfs 0.013 af |
| Subcatchment DA3.3: DA3.3 | Runoff Area=0.815 ac 75.71% Impervious Runoff Depth=5.86" Tc=5.0 min CN=84 Runoff=5.63 cfs 0.398 af |
| Subcatchment DA3.4: DA3.4 | Runoff Area=0.601 ac 85.02% Impervious Runoff Depth=6.68" Tc=5.0 min CN=91 Runoff=4.53 cfs 0.334 af |
| Subcatchment DA4: DA4 | Runoff Area=0.032 ac 0.00% Impervious Runoff Depth=1.05" Tc=10.0 min CN=39 Runoff=0.02 cfs 0.003 af |
| Subcatchment DA5.1: DA5.1 | Runoff Area=0.922 ac 24.84% Impervious Runoff Depth=2.72" Tc=10.0 min CN=56 Runoff=2.46 cfs 0.209 af |
| Subcatchment DA5.2: DA5.2 | Runoff Area=0.072 ac 16.67% Impervious Runoff Depth=2.00" Tc=5.0 min CN=49 Runoff=0.16 cfs 0.012 af |
| Pond B1: Bioretention Basin 1 | Peak Elev=73.98' Storage=5,879 cf Inflow=2.81 cfs 0.326 af Discarded=0.09 cfs 0.101 af Primary=0.72 cfs 0.226 af Outflow=0.81 cfs 0.326 af |
| Pond CB17: CB17 | Peak Elev=71.74' Inflow=6.49 cfs 0.519 af 24.0" Round Culvert n=0.012 L=120.0' S=0.0050 '/' Outflow=6.49 cfs 0.519 af |
| Pond U/G1: Underground | Peak Elev=75.78' Storage=6,729 cf Inflow=6.35 cfs 0.592 af Discarded=0.82 cfs 0.474 af Primary=0.96 cfs 0.117 af Outflow=1.79 cfs 0.592 af |
| Pond U/G2: Underground | Peak Elev=75.78' Storage=16,483 cf Inflow=16.04 cfs 1.888 af Discarded=3.94 cfs 1.601 af Primary=4.58 cfs 0.287 af Outflow=8.52 cfs 1.888 af |

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Type III 24-hr 100-Year Rainfall=7.75"

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Pond U/G3: Underground Peak Elev=72.52' Storage=4,997 cf Inflow=8.64 cfs 0.615 af
Discarded=0.50 cfs 0.384 af Primary=5.48 cfs 0.231 af Outflow=5.98 cfs 0.615 af

Pond YD1: YD-1 Peak Elev=77.19' Inflow=1.73 cfs 0.194 af
12.0" Round Culvert n=0.012 L=221.0' S=0.0050 ' / ' Outflow=1.73 cfs 0.194 af

Link AP1: Analysis Point 1 - Edge of Wetlands Inflow=7.31 cfs 0.727 af
Primary=7.31 cfs 0.727 af

Link AP2: Analysis Point 2 - Downstream End of 36" RCP Culvert Inflow=8.97 cfs 0.623 af
Primary=8.97 cfs 0.623 af

Link AP3: Analysis Point 3 - Southeast PL Inflow=0.12 cfs 0.013 af
Primary=0.12 cfs 0.013 af

Link AP4: Analysis Point 4 - East PL Inflow=0.02 cfs 0.003 af
Primary=0.02 cfs 0.003 af

Link AP5: Analysis Point 5 - PL along Jerome Ave Inflow=0.74 cfs 0.238 af
Primary=0.74 cfs 0.238 af

Link WL: Wetlands Inflow=13.83 cfs 1.349 af
Primary=13.83 cfs 1.349 af

Total Runoff Area = 11.346 ac Runoff Volume = 4.162 af Average Runoff Depth = 4.40"
52.71% Pervious = 5.981 ac 47.29% Impervious = 5.365 ac

Proposed Hydrology

Type III 24-hr 100-Year Rainfall=7.75"

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Summary for Subcatchment DA1.1: DA1.1

Runoff = 1.24 cfs @ 12.53 hrs, Volume= 0.208 af, Depth= 1.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.75"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| * 0.729 | 30 | Woods, Good HSG A |
| * 0.021 | 77 | Woods, Good HSG D |
| * 0.125 | 55 | Woods, Good HSG B |
| * 0.001 | 98 | Paved parking HSG A |
| * 0.001 | 98 | Paved parking HSG B |
| * 0.813 | 39 | >75% Grass cover, Good HSG A |
| * 0.335 | 61 | >75% Grass cover, Good HSG B |
| * 0.001 | 80 | >75% Grass cover, Good HSG D |
| 2.026 | 41 | Weighted Average |
| 2.024 | | 99.90% Pervious Area |
| 0.002 | | 0.10% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|---|
| 18.3 | 100 | 0.1082 | 0.09 | | Sheet Flow, Sheet Flow Woods: Dense underbrush n= 0.800 P2= 3.46" |
| 10.4 | 457 | 0.0854 | 0.73 | | Shallow Concentrated Flow, Shallow Conc. Flow Forest w/Heavy Litter Kv= 2.5 fps |
| 28.7 | 557 | Total | | | |

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Summary for Subcatchment DA1.2: DA1.2

Runoff = 14.18 cfs @ 12.27 hrs, Volume= 1.554 af, Depth= 6.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.75"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| * 0.228 | 98 | Roofs HSG A |
| * 0.744 | 98 | Roofs HSG B |
| * 0.095 | 55 | Woods, Good HSG B |
| * 0.034 | 98 | Paved parking HSG A |
| * 1.098 | 98 | Paved parking HSG B |
| * 0.011 | 39 | >75% Grass cover, Good HSG A |
| * 0.852 | 61 | >75% Grass cover, Good HSG B |
| 3.062 | 86 | Weighted Average |
| 0.958 | | 31.29% Pervious Area |
| 2.104 | | 68.71% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|--|
| 17.6 | 90 | 0.0968 | 0.09 | | Sheet Flow, Sheet Flow Woods: Dense underbrush n= 0.800 P2= 3.46" |
| 0.5 | 10 | 0.2845 | 0.32 | | Sheet Flow, Sheet Flow Grass: Short n= 0.150 P2= 3.46" |
| 0.3 | 54 | 0.2455 | 3.47 | | Shallow Concentrated Flow, Shallow Conc. Short Grass Pasture Kv= 7.0 fps |
| 0.7 | 115 | 0.0183 | 2.75 | | Shallow Concentrated Flow, Shallow Conc. Paved Kv= 20.3 fps |
| 1.2 | 630 | 0.0200 | 9.11 | 16.09 | Pipe Channel, Pipe Flow 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012 Corrugated PP, smooth interior |
| 20.3 | 899 | Total | | | |

Proposed Hydrology

Type III 24-hr 100-Year Rainfall=7.75"

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Summary for Subcatchment DA1.3: DA1.3

Runoff = 3.12 cfs @ 12.07 hrs, Volume= 0.228 af, Depth= 6.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.75"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.298 | 98 | Paved parking HSG A |
| 0.057 | 98 | Paved parking HSG B |
| 0.040 | 39 | >75% Grass cover, Good HSG A |
| 0.023 | 61 | >75% Grass cover, Good HSG B |
| 0.418 | 90 | Weighted Average |
| 0.063 | | 15.07% Pervious Area |
| 0.355 | | 84.93% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 5.0 | | | | | Direct Entry, |

Proposed Hydrology

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Summary for Subcatchment DA2.1: DA2.1

Runoff = 5.52 cfs @ 12.07 hrs, Volume= 0.387 af, Depth= 5.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.75"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.059 | 98 | Roofs HSG A |
| 0.124 | 98 | Paved parking HSG B |
| 0.155 | 98 | Paved parking HSG A |
| 0.157 | 98 | Roofs HSG B |
| 0.060 | 39 | >75% Grass cover, Good HSG A |
| 0.270 | 61 | >75% Grass cover, Good HSG B |
| 0.825 | 82 | Weighted Average |
| 0.330 | | 40.00% Pervious Area |
| 0.495 | | 60.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 5.0 | | | | | Direct Entry, |

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Summary for Subcatchment DA2.2: DA2.2

Runoff = 8.97 cfs @ 12.07 hrs, Volume= 0.623 af, Depth= 5.28"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.75"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.768 | 98 | Paved parking HSG A |
| 0.199 | 98 | Roofs HSG A |
| 0.113 | 30 | Woods, Good HSG A |
| 0.336 | 39 | >75% Grass cover, Good HSG A |
| 1.416 | 79 | Weighted Average |
| 0.449 | | 31.71% Pervious Area |
| 0.967 | | 68.29% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 5.0 | | | | | Direct Entry, |

Proposed Hydrology

Type III 24-hr 100-Year Rainfall=7.75"

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Summary for Subcatchment DA3.1: DA3.1

Runoff = 1.73 cfs @ 12.29 hrs, Volume= 0.194 af, Depth= 2.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.75"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| * 0.064 | 30 | Woods, Good HSG A |
| * 0.273 | 55 | Woods, Good HSG B |
| * 0.001 | 98 | Paved parking HSG B |
| * 0.048 | 98 | Paved parking HSG A |
| * 0.024 | 98 | Roofs HSG A |
| * 0.349 | 39 | >75% Grass cover, Good HSG A |
| * 0.251 | 61 | >75% Grass cover, Good HSG B |
| 1.010 | 52 | Weighted Average |
| 0.937 | | 92.77% Pervious Area |
| 0.073 | | 7.23% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|---|
| 3.9 | 57 | 0.0572 | 0.24 | | Sheet Flow, Sheet Flow Grass: Short n= 0.150 P2= 3.46" |
| 10.9 | 43 | 0.0724 | 0.07 | | Sheet Flow, Sheet Flow Woods: Dense underbrush n= 0.800 P2= 3.46" |
| 2.2 | 74 | 0.0492 | 0.55 | | Shallow Concentrated Flow, Shallow Conc. Flow Forest w/Heavy Litter Kv= 2.5 fps |
| 1.1 | 87 | 0.0359 | 1.33 | | Shallow Concentrated Flow, Shallow Conc. Short Grass Pasture Kv= 7.0 fps |
| 0.2 | 50 | 0.0285 | 3.43 | | Shallow Concentrated Flow, Shallow Conc. Paved Kv= 20.3 fps |
| 0.8 | 105 | 0.0906 | 2.11 | | Shallow Concentrated Flow, Shallow Conc. Short Grass Pasture Kv= 7.0 fps |
| 19.1 | 416 | Total | | | |

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Type III 24-hr 100-Year Rainfall=7.75"

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Summary for Subcatchment DA3.2: DA3.2

Runoff = 0.12 cfs @ 12.11 hrs, Volume= 0.013 af, Depth= 1.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.75"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.000 | 98 | Paved parking HSG A |
| 0.147 | 39 | >75% Grass cover, Good HSG A |
| 0.147 | 39 | Weighted Average |
| 0.147 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 5.0 | | | | | Direct Entry, |

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Summary for Subcatchment DA3.3: DA3.3

Runoff = 5.63 cfs @ 12.07 hrs, Volume= 0.398 af, Depth= 5.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.75"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.617 | 98 | Paved parking HSG A |
| 0.198 | 39 | >75% Grass cover, Good HSG A |
| 0.815 | 84 | Weighted Average |
| 0.198 | | 24.29% Pervious Area |
| 0.617 | | 75.71% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 5.0 | | | | | Direct Entry, |

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Summary for Subcatchment DA3.4: DA3.4

Runoff = 4.53 cfs @ 12.07 hrs, Volume= 0.334 af, Depth= 6.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.75"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.154 | 98 | Paved parking HSG A |
| 0.357 | 98 | Paved parking HSG B |
| 0.042 | 39 | >75% Grass cover, Good HSG A |
| 0.048 | 61 | >75% Grass cover, Good HSG B |
| 0.601 | 91 | Weighted Average |
| 0.090 | | 14.98% Pervious Area |
| 0.511 | | 85.02% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 5.0 | | | | | Direct Entry, |

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Summary for Subcatchment DA4: DA4

Runoff = 0.02 cfs @ 12.19 hrs, Volume= 0.003 af, Depth= 1.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.75"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| * 0.000 | 98 | Paved parking HSG A |
| * 0.032 | 39 | >75% Grass cover, Good HSG A |
| 0.032 | 39 | Weighted Average |
| 0.032 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 10.0 | | | | | Direct Entry, |

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Summary for Subcatchment DA5.1: DA5.1

Runoff = 2.46 cfs @ 12.15 hrs, Volume= 0.209 af, Depth= 2.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.75"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.001 | 98 | Roofs HSG B |
| 0.066 | 98 | Roofs HSG A |
| 0.161 | 98 | Paved parking HSG A |
| 0.001 | 98 | Paved parking HSG B |
| 0.608 | 39 | >75% Grass cover, Good HSG A |
| 0.085 | 61 | >75% Grass cover, Good HSG B |
| 0.922 | 56 | Weighted Average |
| 0.693 | | 75.16% Pervious Area |
| 0.229 | | 24.84% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 10.0 | | | | | Direct Entry, |

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Summary for Subcatchment DA5.2: DA5.2

Runoff = 0.16 cfs @ 12.09 hrs, Volume= 0.012 af, Depth= 2.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=7.75"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.012 | 98 | Paved parking HSG A |
| 0.060 | 39 | >75% Grass cover, Good HSG A |
| 0.072 | 49 | Weighted Average |
| 0.060 | | 83.33% Pervious Area |
| 0.012 | | 16.67% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 5.0 | | | | | Direct Entry, |

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Summary for Pond B1: Bioretention Basin 1

Inflow Area = 2.747 ac, 33.45% Impervious, Inflow Depth = 1.43" for 100-Year event
 Inflow = 2.81 cfs @ 12.15 hrs, Volume= 0.326 af
 Outflow = 0.81 cfs @ 13.40 hrs, Volume= 0.326 af, Atten= 71%, Lag= 74.8 min
 Discarded = 0.09 cfs @ 13.40 hrs, Volume= 0.101 af
 Primary = 0.72 cfs @ 13.40 hrs, Volume= 0.226 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 73.98' @ 13.40 hrs Surf.Area= 3,891 sf Storage= 5,879 cf

Plug-Flow detention time= 152.4 min calculated for 0.326 af (100% of inflow)
 Center-of-Mass det. time= 152.5 min (986.5 - 834.0)

| Volume | Invert | Avail.Storage | Storage Description |
|---------------------|----------------------|---------------------------|--|
| #1 | 72.00' | 10,356 cf | Custom Stage Data (Prismatic) Listed below (Recalc) |
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
| 72.00 | 2,067 | 0 | 0 |
| 73.00 | 2,957 | 2,512 | 2,512 |
| 74.00 | 3,907 | 3,432 | 5,944 |
| 75.00 | 4,917 | 4,412 | 10,356 |

| Device | Routing | Invert | Outlet Devices |
|--------|-----------|--------|--|
| #1 | Primary | 72.50' | 12.0" Round Culvert L= 71.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 72.50' / 72.14' S= 0.0051 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf |
| #2 | Device 1 | 72.50' | 4.0" Vert. Orifice/Grate C= 0.600 |
| #3 | Device 1 | 73.50' | 4.0" Vert. Orifice/Grate C= 0.600 |
| #4 | Device 1 | 74.75' | 24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads |
| #5 | Discarded | 72.00' | 1.000 in/hr Exfiltration over Surface area Phase-In= 0.01' |

Discarded OutFlow Max=0.09 cfs @ 13.40 hrs HW=73.98' (Free Discharge)

↳ **5=Exfiltration** (Exfiltration Controls 0.09 cfs)

Primary OutFlow Max=0.72 cfs @ 13.40 hrs HW=73.98' TW=0.00' (Dynamic Tailwater)

↳ **1=Culvert** (Passes 0.72 cfs of 3.14 cfs potential flow)
 ↳ **2=Orifice/Grate** (Orifice Controls 0.48 cfs @ 5.53 fps)
 ↳ **3=Orifice/Grate** (Orifice Controls 0.24 cfs @ 2.71 fps)
 ↳ **4=Orifice/Grate** (Controls 0.00 cfs)

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Stage-Area-Storage for Pond B1: Bioretention Basin 1

| Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) | Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) |
|---------------------|--------------------|-------------------------|---------------------|--------------------|-------------------------|
| 72.00 | 2,067 | 0 | 74.65 | 4,564 | 8,697 |
| 72.05 | 2,111 | 104 | 74.70 | 4,614 | 8,926 |
| 72.10 | 2,156 | 211 | 74.75 | 4,665 | 9,158 |
| 72.15 | 2,201 | 320 | 74.80 | 4,715 | 9,393 |
| 72.20 | 2,245 | 431 | 74.85 | 4,765 | 9,630 |
| 72.25 | 2,290 | 545 | 74.90 | 4,816 | 9,869 |
| 72.30 | 2,334 | 660 | 74.95 | 4,867 | 10,111 |
| 72.35 | 2,378 | 778 | 75.00 | 4,917 | 10,356 |
| 72.40 | 2,423 | 898 | | | |
| 72.45 | 2,468 | 1,020 | | | |
| 72.50 | 2,512 | 1,145 | | | |
| 72.55 | 2,556 | 1,271 | | | |
| 72.60 | 2,601 | 1,400 | | | |
| 72.65 | 2,646 | 1,532 | | | |
| 72.70 | 2,690 | 1,665 | | | |
| 72.75 | 2,735 | 1,801 | | | |
| 72.80 | 2,779 | 1,938 | | | |
| 72.85 | 2,823 | 2,078 | | | |
| 72.90 | 2,868 | 2,221 | | | |
| 72.95 | 2,913 | 2,365 | | | |
| 73.00 | 2,957 | 2,512 | | | |
| 73.05 | 3,004 | 2,661 | | | |
| 73.10 | 3,052 | 2,812 | | | |
| 73.15 | 3,100 | 2,966 | | | |
| 73.20 | 3,147 | 3,122 | | | |
| 73.25 | 3,195 | 3,281 | | | |
| 73.30 | 3,242 | 3,442 | | | |
| 73.35 | 3,289 | 3,605 | | | |
| 73.40 | 3,337 | 3,771 | | | |
| 73.45 | 3,385 | 3,939 | | | |
| 73.50 | 3,432 | 4,109 | | | |
| 73.55 | 3,479 | 4,282 | | | |
| 73.60 | 3,527 | 4,457 | | | |
| 73.65 | 3,575 | 4,635 | | | |
| 73.70 | 3,622 | 4,815 | | | |
| 73.75 | 3,670 | 4,997 | | | |
| 73.80 | 3,717 | 5,182 | | | |
| 73.85 | 3,764 | 5,369 | | | |
| 73.90 | 3,812 | 5,558 | | | |
| 73.95 | 3,860 | 5,750 | | | |
| 74.00 | 3,907 | 5,944 | | | |
| 74.05 | 3,957 | 6,141 | | | |
| 74.10 | 4,008 | 6,340 | | | |
| 74.15 | 4,059 | 6,541 | | | |
| 74.20 | 4,109 | 6,746 | | | |
| 74.25 | 4,160 | 6,952 | | | |
| 74.30 | 4,210 | 7,162 | | | |
| 74.35 | 4,260 | 7,373 | | | |
| 74.40 | 4,311 | 7,588 | | | |
| 74.45 | 4,362 | 7,804 | | | |
| 74.50 | 4,412 | 8,024 | | | |
| 74.55 | 4,462 | 8,246 | | | |
| 74.60 | 4,513 | 8,470 | | | |

Proposed Hydrology

Type III 24-hr 100-Year Rainfall=7.75"

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Summary for Pond CB17: CB17

Inflow Area = 4.906 ac, 70.63% Impervious, Inflow Depth = 1.27" for 100-Year event
 Inflow = 6.49 cfs @ 12.16 hrs, Volume= 0.519 af
 Outflow = 6.49 cfs @ 12.16 hrs, Volume= 0.519 af, Atten= 0%, Lag= 0.0 min
 Primary = 6.49 cfs @ 12.16 hrs, Volume= 0.519 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 71.74' @ 12.16 hrs
 Flood Elev= 80.00'

| Device | Routing | Invert | Outlet Devices |
|--------|---------|--------|---|
| #1 | Primary | 70.50' | 24.0" Round Culvert L= 120.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 70.50' / 69.90' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf |

Primary OutFlow Max=6.49 cfs @ 12.16 hrs HW=71.74' TW=0.00' (Dynamic Tailwater)
 ↑1=Culvert (Barrel Controls 6.49 cfs @ 4.53 fps)

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Stage-Area-Storage for Pond CB17: CB17

| Elevation (feet) | Storage (cubic-feet) | Elevation (feet) | Storage (cubic-feet) |
|---------------------|-------------------------|---------------------|-------------------------|
| 70.50 | 0 | 75.80 | 0 |
| 70.60 | 0 | 75.90 | 0 |
| 70.70 | 0 | 76.00 | 0 |
| 70.80 | 0 | 76.10 | 0 |
| 70.90 | 0 | 76.20 | 0 |
| 71.00 | 0 | 76.30 | 0 |
| 71.10 | 0 | 76.40 | 0 |
| 71.20 | 0 | 76.50 | 0 |
| 71.30 | 0 | 76.60 | 0 |
| 71.40 | 0 | 76.70 | 0 |
| 71.50 | 0 | 76.80 | 0 |
| 71.60 | 0 | 76.90 | 0 |
| 71.70 | 0 | 77.00 | 0 |
| 71.80 | 0 | 77.10 | 0 |
| 71.90 | 0 | 77.20 | 0 |
| 72.00 | 0 | 77.30 | 0 |
| 72.10 | 0 | 77.40 | 0 |
| 72.20 | 0 | 77.50 | 0 |
| 72.30 | 0 | 77.60 | 0 |
| 72.40 | 0 | 77.70 | 0 |
| 72.50 | 0 | 77.80 | 0 |
| 72.60 | 0 | 77.90 | 0 |
| 72.70 | 0 | 78.00 | 0 |
| 72.80 | 0 | 78.10 | 0 |
| 72.90 | 0 | 78.20 | 0 |
| 73.00 | 0 | 78.30 | 0 |
| 73.10 | 0 | 78.40 | 0 |
| 73.20 | 0 | 78.50 | 0 |
| 73.30 | 0 | 78.60 | 0 |
| 73.40 | 0 | 78.70 | 0 |
| 73.50 | 0 | 78.80 | 0 |
| 73.60 | 0 | 78.90 | 0 |
| 73.70 | 0 | 79.00 | 0 |
| 73.80 | 0 | 79.10 | 0 |
| 73.90 | 0 | 79.20 | 0 |
| 74.00 | 0 | 79.30 | 0 |
| 74.10 | 0 | 79.40 | 0 |
| 74.20 | 0 | 79.50 | 0 |
| 74.30 | 0 | 79.60 | 0 |
| 74.40 | 0 | 79.70 | 0 |
| 74.50 | 0 | 79.80 | 0 |
| 74.60 | 0 | 79.90 | 0 |
| 74.70 | 0 | 80.00 | 0 |
| 74.80 | 0 | | |
| 74.90 | 0 | | |
| 75.00 | 0 | | |
| 75.10 | 0 | | |
| 75.20 | 0 | | |
| 75.30 | 0 | | |
| 75.40 | 0 | | |
| 75.50 | 0 | | |
| 75.60 | 0 | | |
| 75.70 | 0 | | |

Proposed Hydrology

Type III 24-hr 100-Year Rainfall=7.75"

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Summary for Pond U/G1: Underground Detention/Infiltration System 1

Inflow Area = 1.825 ac, 37.81% Impervious, Inflow Depth = 3.89" for 100-Year event
 Inflow = 6.35 cfs @ 12.08 hrs, Volume= 0.592 af
 Outflow = 1.79 cfs @ 12.59 hrs, Volume= 0.592 af, Atten= 72%, Lag= 30.9 min
 Discarded = 0.82 cfs @ 11.69 hrs, Volume= 0.474 af
 Primary = 0.96 cfs @ 12.59 hrs, Volume= 0.117 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 75.78' @ 12.59 hrs Surf.Area= 3,626 sf Storage= 6,729 cf

Plug-Flow detention time= 33.0 min calculated for 0.591 af (100% of inflow)
 Center-of-Mass det. time= 33.0 min (854.5 - 821.5)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|--------|---------------|--|
| #1A | 73.00' | 3,257 cf | 44.25'W x 81.94'L x 3.50'H Field A 12,690 cf Overall - 4,548 cf Embedded = 8,142 cf x 40.0% Voids |
| #2A | 73.50' | 4,548 cf | ADS_StormTech SC-740 +Cap x 99 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 99 Chambers in 9 Rows |
| | | 7,805 cf | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|--------|-----------|--------|---|
| #1 | Primary | 73.50' | 12.0" Round Culvert L= 125.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 73.50' / 72.00' S= 0.0120 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf |
| #2 | Device 1 | 73.75' | 4.0" Vert. Orifice/Grate C= 0.600 |
| #3 | Device 1 | 74.75' | 4.0" Vert. Orifice/Grate C= 0.600 |
| #4 | Device 1 | 76.00' | 4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s) |
| #5 | Discarded | 73.00' | 9.800 in/hr Exfiltration over Surface area Phase-In= 0.01' |

Discarded OutFlow Max=0.82 cfs @ 11.69 hrs HW=73.04' (Free Discharge)

↳ **5=Exfiltration** (Exfiltration Controls 0.82 cfs)

Primary OutFlow Max=0.96 cfs @ 12.59 hrs HW=75.78' TW=73.64' (Dynamic Tailwater)

↳ **1=Culvert** (Passes 0.96 cfs of 4.19 cfs potential flow)
 ↳ **2=Orifice/Grate** (Orifice Controls 0.57 cfs @ 6.57 fps)
 ↳ **3=Orifice/Grate** (Orifice Controls 0.39 cfs @ 4.46 fps)
 ↳ **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

Proposed Hydrology

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Pond U/G1: Underground Detention/Infiltration System 1 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

11 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 79.94' Row Length +12.0" End Stone x 2 = 81.94' Base Length

9 Rows x 51.0" Wide + 6.0" Spacing x 8 + 12.0" Side Stone x 2 = 44.25' Base Width

6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

99 Chambers x 45.9 cf = 4,548.1 cf Chamber Storage

12,689.9 cf Field - 4,548.1 cf Chambers = 8,141.9 cf Stone x 40.0% Voids = 3,256.8 cf Stone Storage

Chamber Storage + Stone Storage = 7,804.8 cf = 0.179 af

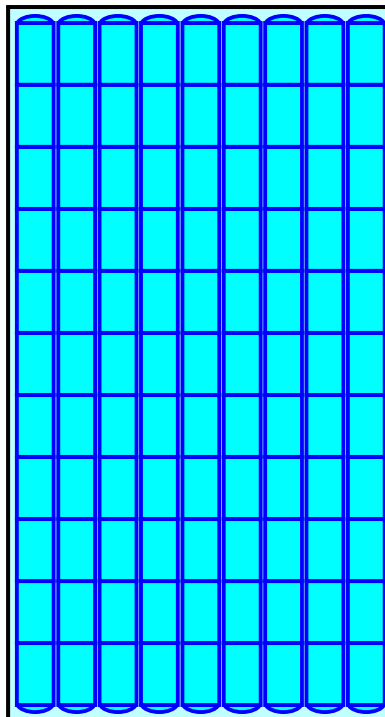
Overall Storage Efficiency = 61.5%

Overall System Size = 81.94' x 44.25' x 3.50'

99 Chambers

470.0 cy Field

301.6 cy Stone



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Stage-Area-Storage for Pond U/G1: Underground Detention/Infiltration System 1

| Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) | Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) |
|---------------------|--------------------|-------------------------|---------------------|--------------------|-------------------------|
| 73.00 | 3,626 | 0 | 75.65 | 3,626 | 6,496 |
| 73.05 | 3,626 | 73 | 75.70 | 3,626 | 6,593 |
| 73.10 | 3,626 | 145 | 75.75 | 3,626 | 6,684 |
| 73.15 | 3,626 | 218 | 75.80 | 3,626 | 6,770 |
| 73.20 | 3,626 | 290 | 75.85 | 3,626 | 6,851 |
| 73.25 | 3,626 | 363 | 75.90 | 3,626 | 6,930 |
| 73.30 | 3,626 | 435 | 75.95 | 3,626 | 7,006 |
| 73.35 | 3,626 | 508 | 76.00 | 3,626 | 7,080 |
| 73.40 | 3,626 | 580 | 76.05 | 3,626 | 7,152 |
| 73.45 | 3,626 | 653 | 76.10 | 3,626 | 7,225 |
| 73.50 | 3,626 | 725 | 76.15 | 3,626 | 7,297 |
| 73.55 | 3,626 | 876 | 76.20 | 3,626 | 7,370 |
| 73.60 | 3,626 | 1,027 | 76.25 | 3,626 | 7,442 |
| 73.65 | 3,626 | 1,178 | 76.30 | 3,626 | 7,515 |
| 73.70 | 3,626 | 1,329 | 76.35 | 3,626 | 7,587 |
| 73.75 | 3,626 | 1,479 | 76.40 | 3,626 | 7,660 |
| 73.80 | 3,626 | 1,628 | 76.45 | 3,626 | 7,732 |
| 73.85 | 3,626 | 1,777 | 76.50 | 3,626 | 7,805 |
| 73.90 | 3,626 | 1,926 | | | |
| 73.95 | 3,626 | 2,073 | | | |
| 74.00 | 3,626 | 2,221 | | | |
| 74.05 | 3,626 | 2,367 | | | |
| 74.10 | 3,626 | 2,513 | | | |
| 74.15 | 3,626 | 2,659 | | | |
| 74.20 | 3,626 | 2,803 | | | |
| 74.25 | 3,626 | 2,947 | | | |
| 74.30 | 3,626 | 3,090 | | | |
| 74.35 | 3,626 | 3,232 | | | |
| 74.40 | 3,626 | 3,374 | | | |
| 74.45 | 3,626 | 3,514 | | | |
| 74.50 | 3,626 | 3,654 | | | |
| 74.55 | 3,626 | 3,793 | | | |
| 74.60 | 3,626 | 3,931 | | | |
| 74.65 | 3,626 | 4,068 | | | |
| 74.70 | 3,626 | 4,203 | | | |
| 74.75 | 3,626 | 4,338 | | | |
| 74.80 | 3,626 | 4,472 | | | |
| 74.85 | 3,626 | 4,604 | | | |
| 74.90 | 3,626 | 4,735 | | | |
| 74.95 | 3,626 | 4,865 | | | |
| 75.00 | 3,626 | 4,993 | | | |
| 75.05 | 3,626 | 5,120 | | | |
| 75.10 | 3,626 | 5,246 | | | |
| 75.15 | 3,626 | 5,370 | | | |
| 75.20 | 3,626 | 5,492 | | | |
| 75.25 | 3,626 | 5,612 | | | |
| 75.30 | 3,626 | 5,731 | | | |
| 75.35 | 3,626 | 5,847 | | | |
| 75.40 | 3,626 | 5,962 | | | |
| 75.45 | 3,626 | 6,074 | | | |
| 75.50 | 3,626 | 6,184 | | | |
| 75.55 | 3,626 | 6,291 | | | |
| 75.60 | 3,626 | 6,395 | | | |

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Summary for Pond U/G2: Underground Detention/Infiltration System 2

Inflow Area = 3.663 ac, 71.39% Impervious, Inflow Depth = 6.19" for 100-Year event
 Inflow = 16.04 cfs @ 12.25 hrs, Volume= 1.888 af
 Outflow = 8.52 cfs @ 12.56 hrs, Volume= 1.888 af, Atten= 47%, Lag= 18.7 min
 Discarded = 3.94 cfs @ 11.83 hrs, Volume= 1.601 af
 Primary = 4.58 cfs @ 12.56 hrs, Volume= 0.287 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 75.78' @ 12.56 hrs Surf.Area= 7,911 sf Storage= 16,483 cf

Plug-Flow detention time= 14.9 min calculated for 1.888 af (100% of inflow)
 Center-of-Mass det. time= 14.9 min (811.8 - 796.9)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|--------|---------------|---|
| #1A | 72.50' | 7,014 cf | 82.25'W x 96.18'L x 3.50'H Field A 27,687 cf Overall - 10,153 cf Embedded = 17,534 cf x 40.0% Voids |
| #2A | 73.00' | 10,153 cf | ADS_StormTech SC-740 +Cap x 221 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 221 Chambers in 17 Rows |
| | | 17,166 cf | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|--------|-----------|--------|--|
| #1 | Primary | 73.00' | 15.0" Round Culvert L= 251.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 73.00' / 71.75' S= 0.0050 ' /' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf |
| #2 | Device 1 | 73.00' | 8.0" Vert. Orifice/Grate C= 0.600 |
| #3 | Device 1 | 75.50' | 4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s) |
| #4 | Discarded | 72.50' | 21.500 in/hr Exfiltration over Surface area Phase-In= 0.01' |

Discarded OutFlow Max=3.94 cfs @ 11.83 hrs HW=72.54' (Free Discharge)
 ↳ **4=Exfiltration** (Exfiltration Controls 3.94 cfs)

Primary OutFlow Max=4.58 cfs @ 12.56 hrs HW=75.78' TW=71.69' (Dynamic Tailwater)
 ↳ **1=Culvert** (Passes 4.58 cfs of 6.45 cfs potential flow)
 ↳ **2=Orifice/Grate** (Orifice Controls 2.63 cfs @ 7.54 fps)
 ↳ **3=Sharp-Crested Rectangular Weir** (Weir Controls 1.95 cfs @ 1.74 fps)

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Pond U/G2: Underground Detention/Infiltration System 2 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

13 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 94.18' Row Length +12.0" End Stone x 2 = 96.18' Base Length

17 Rows x 51.0" Wide + 6.0" Spacing x 16 + 12.0" Side Stone x 2 = 82.25' Base Width

6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

221 Chambers x 45.9 cf = 10,152.7 cf Chamber Storage

27,686.9 cf Field - 10,152.7 cf Chambers = 17,534.1 cf Stone x 40.0% Voids = 7,013.6 cf Stone Storage

Chamber Storage + Stone Storage = 17,166.4 cf = 0.394 af

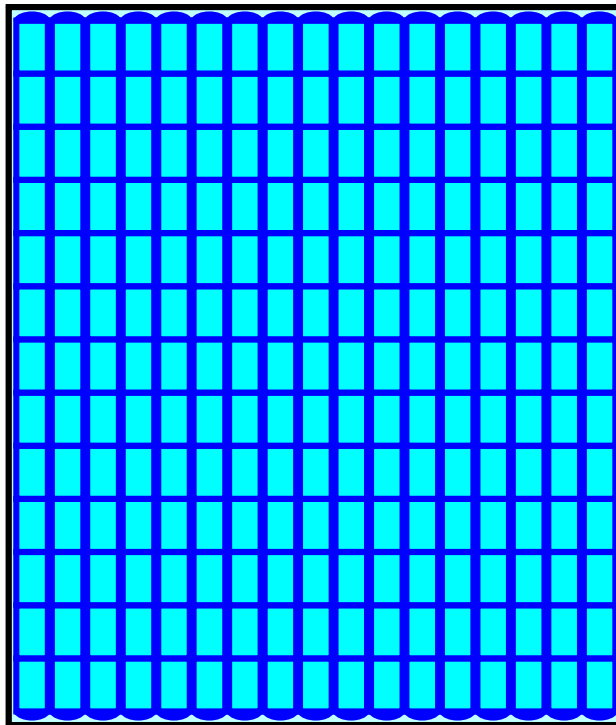
Overall Storage Efficiency = 62.0%

Overall System Size = 96.18' x 82.25' x 3.50'

221 Chambers

1,025.4 cy Field

649.4 cy Stone



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Stage-Area-Storage for Pond U/G2: Underground Detention/Infiltration System 2

| Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) | Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) |
|---------------------|--------------------|-------------------------|---------------------|--------------------|-------------------------|
| 72.50 | 7,911 | 0 | 75.15 | 7,911 | 14,307 |
| 72.55 | 7,911 | 158 | 75.20 | 7,911 | 14,519 |
| 72.60 | 7,911 | 316 | 75.25 | 7,911 | 14,719 |
| 72.65 | 7,911 | 475 | 75.30 | 7,911 | 14,907 |
| 72.70 | 7,911 | 633 | 75.35 | 7,911 | 15,086 |
| 72.75 | 7,911 | 791 | 75.40 | 7,911 | 15,257 |
| 72.80 | 7,911 | 949 | 75.45 | 7,911 | 15,423 |
| 72.85 | 7,911 | 1,107 | 75.50 | 7,911 | 15,584 |
| 72.90 | 7,911 | 1,266 | 75.55 | 7,911 | 15,742 |
| 72.95 | 7,911 | 1,424 | 75.60 | 7,911 | 15,901 |
| 73.00 | 7,911 | 1,582 | 75.65 | 7,911 | 16,059 |
| 73.05 | 7,911 | 1,916 | 75.70 | 7,911 | 16,217 |
| 73.10 | 7,911 | 2,249 | 75.75 | 7,911 | 16,375 |
| 73.15 | 7,911 | 2,582 | 75.80 | 7,911 | 16,534 |
| 73.20 | 7,911 | 2,915 | 75.85 | 7,911 | 16,692 |
| 73.25 | 7,911 | 3,246 | 75.90 | 7,911 | 16,850 |
| 73.30 | 7,911 | 3,576 | 75.95 | 7,911 | 17,008 |
| 73.35 | 7,911 | 3,905 | 76.00 | 7,911 | 17,166 |
| 73.40 | 7,911 | 4,233 | | | |
| 73.45 | 7,911 | 4,559 | | | |
| 73.50 | 7,911 | 4,884 | | | |
| 73.55 | 7,911 | 5,208 | | | |
| 73.60 | 7,911 | 5,530 | | | |
| 73.65 | 7,911 | 5,851 | | | |
| 73.70 | 7,911 | 6,170 | | | |
| 73.75 | 7,911 | 6,487 | | | |
| 73.80 | 7,911 | 6,803 | | | |
| 73.85 | 7,911 | 7,117 | | | |
| 73.90 | 7,911 | 7,429 | | | |
| 73.95 | 7,911 | 7,739 | | | |
| 74.00 | 7,911 | 8,048 | | | |
| 74.05 | 7,911 | 8,354 | | | |
| 74.10 | 7,911 | 8,658 | | | |
| 74.15 | 7,911 | 8,960 | | | |
| 74.20 | 7,911 | 9,259 | | | |
| 74.25 | 7,911 | 9,556 | | | |
| 74.30 | 7,911 | 9,850 | | | |
| 74.35 | 7,911 | 10,142 | | | |
| 74.40 | 7,911 | 10,431 | | | |
| 74.45 | 7,911 | 10,717 | | | |
| 74.50 | 7,911 | 11,000 | | | |
| 74.55 | 7,911 | 11,280 | | | |
| 74.60 | 7,911 | 11,557 | | | |
| 74.65 | 7,911 | 11,830 | | | |
| 74.70 | 7,911 | 12,099 | | | |
| 74.75 | 7,911 | 12,364 | | | |
| 74.80 | 7,911 | 12,624 | | | |
| 74.85 | 7,911 | 12,881 | | | |
| 74.90 | 7,911 | 13,133 | | | |
| 74.95 | 7,911 | 13,380 | | | |
| 75.00 | 7,911 | 13,621 | | | |
| 75.05 | 7,911 | 13,857 | | | |
| 75.10 | 7,911 | 14,086 | | | |

Proposed Hydrology

Type III 24-hr 100-Year Rainfall=7.75"

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Summary for Pond U/G3: Underground Detention/Infiltration System 3

Inflow Area = 1.243 ac, 68.38% Impervious, Inflow Depth = 5.94" for 100-Year event
 Inflow = 8.64 cfs @ 12.07 hrs, Volume= 0.615 af
 Outflow = 5.98 cfs @ 12.15 hrs, Volume= 0.615 af, Atten= 31%, Lag= 4.5 min
 Discarded = 0.50 cfs @ 11.21 hrs, Volume= 0.384 af
 Primary = 5.48 cfs @ 12.15 hrs, Volume= 0.231 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 72.52' @ 12.15 hrs Surf.Area= 4,328 sf Storage= 4,997 cf

Plug-Flow detention time= 20.9 min calculated for 0.615 af (100% of inflow)
 Center-of-Mass det. time= 20.9 min (810.9 - 790.0)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|--------|---------------|---|
| #1A | 70.50' | 3,037 cf | 58.17'W x 74.40'L x 2.33'H Field A - Volume of Voids 10,098 cf Overall - 2,506 cf Embedded = 7,592 cf x 40.0% Voids |
| #2A | 71.00' | 2,506 cf | ADS_StormTech SC-310 +Cap x 170 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 170 Chambers in 17 Rows |
| | | 5,543 cf | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|--------|-----------|--------|--|
| #1 | Primary | 71.10' | 18.0" Round Culvert L= 20.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 71.10' / 71.00' S= 0.0050 ' S= 0.0050 ' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf |
| #2 | Discarded | 70.50' | 5.000 in/hr Exfiltration over Surface area Phase-In= 0.01' |

Discarded OutFlow Max=0.50 cfs @ 11.21 hrs HW=70.53' (Free Discharge)
 ↑**2=Exfiltration** (Exfiltration Controls 0.50 cfs)

Primary OutFlow Max=5.48 cfs @ 12.15 hrs HW=72.52' TW=71.73' (Dynamic Tailwater)
 ↑**1=Culvert** (Barrel Controls 5.48 cfs @ 4.09 fps)

Proposed Hydrology

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Type III 24-hr 100-Year Rainfall=7.75"

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Pond U/G3: Underground Detention/Infiltration System 3 - Chamber Wizard Field A - Volume of Voids

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)

Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf

Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

10 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 72.40' Row Length +12.0" End Stone x 2 = 74.40' Base Length

17 Rows x 34.0" Wide + 6.0" Spacing x 16 + 12.0" Side Stone x 2 = 58.17' Base Width

6.0" Base + 16.0" Chamber Height + 6.0" Cover = 2.33' Field Height

170 Chambers x 14.7 cf = 2,506.1 cf Chamber Storage

10,097.7 cf Field - 2,506.1 cf Chambers = 7,591.6 cf Stone x 40.0% Voids = 3,036.6 cf Stone Storage

Chamber Storage + Stone Storage = 5,542.8 cf = 0.127 af

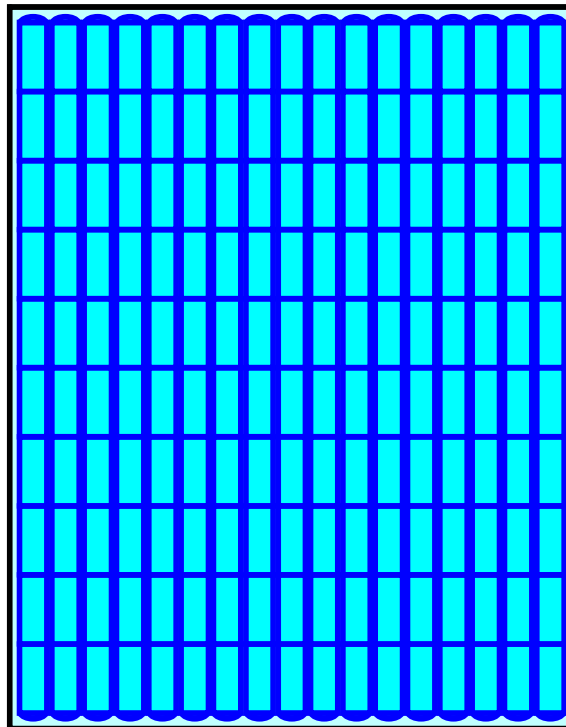
Overall Storage Efficiency = 54.9%

Overall System Size = 74.40' x 58.17' x 2.33'

170 Chambers

374.0 cy Field

281.2 cy Stone



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Type III 24-hr 100-Year Rainfall=7.75"

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Stage-Area-Storage for Pond U/G3: Underground Detention/Infiltration System 3

| Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) |
|---------------------|--------------------|-------------------------|
| 70.50 | 4,328 | 0 |
| 70.55 | 4,328 | 87 |
| 70.60 | 4,328 | 173 |
| 70.65 | 4,328 | 260 |
| 70.70 | 4,328 | 346 |
| 70.75 | 4,328 | 433 |
| 70.80 | 4,328 | 519 |
| 70.85 | 4,328 | 606 |
| 70.90 | 4,328 | 692 |
| 70.95 | 4,328 | 779 |
| 71.00 | 4,328 | 866 |
| 71.05 | 4,328 | 1,039 |
| 71.10 | 4,328 | 1,213 |
| 71.15 | 4,328 | 1,385 |
| 71.20 | 4,328 | 1,556 |
| 71.25 | 4,328 | 1,726 |
| 71.30 | 4,328 | 1,894 |
| 71.35 | 4,328 | 2,060 |
| 71.40 | 4,328 | 2,225 |
| 71.45 | 4,328 | 2,387 |
| 71.50 | 4,328 | 2,547 |
| 71.55 | 4,328 | 2,705 |
| 71.60 | 4,328 | 2,861 |
| 71.65 | 4,328 | 3,014 |
| 71.70 | 4,328 | 3,165 |
| 71.75 | 4,328 | 3,313 |
| 71.80 | 4,328 | 3,457 |
| 71.85 | 4,328 | 3,598 |
| 71.90 | 4,328 | 3,734 |
| 71.95 | 4,328 | 3,867 |
| 72.00 | 4,328 | 3,994 |
| 72.05 | 4,328 | 4,115 |
| 72.10 | 4,328 | 4,228 |
| 72.15 | 4,328 | 4,333 |
| 72.20 | 4,328 | 4,432 |
| 72.25 | 4,328 | 4,527 |
| 72.30 | 4,328 | 4,618 |
| 72.35 | 4,328 | 4,706 |
| 72.40 | 4,328 | 4,793 |
| 72.45 | 4,328 | 4,879 |
| 72.50 | 4,328 | 4,966 |
| 72.55 | 4,328 | 5,052 |
| 72.60 | 4,328 | 5,139 |
| 72.65 | 4,328 | 5,225 |
| 72.70 | 4,328 | 5,312 |
| 72.75 | 4,328 | 5,399 |
| 72.80 | 4,328 | 5,485 |

Proposed Hydrology

Type III 24-hr 100-Year Rainfall=7.75"

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Summary for Pond YD1: YD-1

Inflow Area = 1.010 ac, 7.23% Impervious, Inflow Depth = 2.30" for 100-Year event
 Inflow = 1.73 cfs @ 12.29 hrs, Volume= 0.194 af
 Outflow = 1.73 cfs @ 12.29 hrs, Volume= 0.194 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.73 cfs @ 12.29 hrs, Volume= 0.194 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 77.19' @ 12.29 hrs
 Flood Elev= 78.00'

| Device | Routing | Invert | Outlet Devices |
|--------|---------|--------|---|
| #1 | Primary | 76.40' | 12.0" Round Culvert L= 221.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 76.40' / 75.30' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf |

Primary OutFlow Max=1.73 cfs @ 12.29 hrs HW=77.19' TW=75.20' (Dynamic Tailwater)
 ↑1=Culvert (Barrel Controls 1.73 cfs @ 3.54 fps)

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Stage-Area-Storage for Pond YD1: YD-1

| Elevation (feet) | Storage (cubic-feet) | Elevation (feet) | Storage (cubic-feet) |
|---------------------|-------------------------|---------------------|-------------------------|
| 76.40 | 0 | 77.46 | 0 |
| 76.42 | 0 | 77.48 | 0 |
| 76.44 | 0 | 77.50 | 0 |
| 76.46 | 0 | 77.52 | 0 |
| 76.48 | 0 | 77.54 | 0 |
| 76.50 | 0 | 77.56 | 0 |
| 76.52 | 0 | 77.58 | 0 |
| 76.54 | 0 | 77.60 | 0 |
| 76.56 | 0 | 77.62 | 0 |
| 76.58 | 0 | 77.64 | 0 |
| 76.60 | 0 | 77.66 | 0 |
| 76.62 | 0 | 77.68 | 0 |
| 76.64 | 0 | 77.70 | 0 |
| 76.66 | 0 | 77.72 | 0 |
| 76.68 | 0 | 77.74 | 0 |
| 76.70 | 0 | 77.76 | 0 |
| 76.72 | 0 | 77.78 | 0 |
| 76.74 | 0 | 77.80 | 0 |
| 76.76 | 0 | 77.82 | 0 |
| 76.78 | 0 | 77.84 | 0 |
| 76.80 | 0 | 77.86 | 0 |
| 76.82 | 0 | 77.88 | 0 |
| 76.84 | 0 | 77.90 | 0 |
| 76.86 | 0 | 77.92 | 0 |
| 76.88 | 0 | 77.94 | 0 |
| 76.90 | 0 | 77.96 | 0 |
| 76.92 | 0 | 77.98 | 0 |
| 76.94 | 0 | 78.00 | 0 |
| 76.96 | 0 | | |
| 76.98 | 0 | | |
| 77.00 | 0 | | |
| 77.02 | 0 | | |
| 77.04 | 0 | | |
| 77.06 | 0 | | |
| 77.08 | 0 | | |
| 77.10 | 0 | | |
| 77.12 | 0 | | |
| 77.14 | 0 | | |
| 77.16 | 0 | | |
| 77.18 | 0 | | |
| 77.20 | 0 | | |
| 77.22 | 0 | | |
| 77.24 | 0 | | |
| 77.26 | 0 | | |
| 77.28 | 0 | | |
| 77.30 | 0 | | |
| 77.32 | 0 | | |
| 77.34 | 0 | | |
| 77.36 | 0 | | |
| 77.38 | 0 | | |
| 77.40 | 0 | | |
| 77.42 | 0 | | |
| 77.44 | 0 | | |

Proposed Hydrology

Type III 24-hr 100-Year Rainfall=7.75"

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Summary for Link AP1: Analysis Point 1 - Edge of Wetlands

Inflow Area = 6.932 ac, 50.01% Impervious, Inflow Depth = 1.26" for 100-Year event
Inflow = 7.31 cfs @ 12.54 hrs, Volume= 0.727 af
Primary = 7.31 cfs @ 12.54 hrs, Volume= 0.727 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Proposed Hydrology

Type III 24-hr 100-Year Rainfall=7.75"

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Summary for Link AP2: Analysis Point 2 - Downstream End of 36" RCP Culvert

Inflow Area = 1.416 ac, 68.29% Impervious, Inflow Depth = 5.28" for 100-Year event
Inflow = 8.97 cfs @ 12.07 hrs, Volume= 0.623 af
Primary = 8.97 cfs @ 12.07 hrs, Volume= 0.623 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Proposed Hydrology

Type III 24-hr 100-Year Rainfall=7.75"

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Summary for Link AP3: Analysis Point 3 - Southeast PL

Inflow Area = 0.147 ac, 0.00% Impervious, Inflow Depth = 1.05" for 100-Year event
Inflow = 0.12 cfs @ 12.11 hrs, Volume= 0.013 af
Primary = 0.12 cfs @ 12.11 hrs, Volume= 0.013 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Proposed Hydrology

Type III 24-hr 100-Year Rainfall=7.75"

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Summary for Link AP4: Analysis Point 4 - East PL

Inflow Area = 0.032 ac, 0.00% Impervious, Inflow Depth = 1.05" for 100-Year event
Inflow = 0.02 cfs @ 12.19 hrs, Volume= 0.003 af
Primary = 0.02 cfs @ 12.19 hrs, Volume= 0.003 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Proposed Hydrology

Type III 24-hr 100-Year Rainfall=7.75"

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Summary for Link AP5: Analysis Point 5 - PL along Jerome Ave

Inflow Area = 2.819 ac, 33.03% Impervious, Inflow Depth = 1.01" for 100-Year event
Inflow = 0.74 cfs @ 13.39 hrs, Volume= 0.238 af
Primary = 0.74 cfs @ 13.39 hrs, Volume= 0.238 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Proposed Hydrology

Type III 24-hr 100-Year Rainfall=7.75"

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Summary for Link WL: Wetlands

Inflow Area = 8.348 ac, 53.11% Impervious, Inflow Depth = 1.94" for 100-Year event
Inflow = 13.83 cfs @ 12.11 hrs, Volume= 1.349 af
Primary = 13.83 cfs @ 12.11 hrs, Volume= 1.349 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Type III 24-hr WQV Rainfall=1.95"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

| | |
|--|--|
| Subcatchment DA1.1: DA1.1 | Runoff Area=2.026 ac 0.10% Impervious Runoff Depth=0.00" Flow Length=557' Tc=28.7 min CN=41 Runoff=0.00 cfs 0.000 af |
| Subcatchment DA1.2: DA1.2 | Runoff Area=3.062 ac 68.71% Impervious Runoff Depth=0.81" Flow Length=899' Tc=20.3 min CN=86 Runoff=1.92 cfs 0.207 af |
| Subcatchment DA1.3: DA1.3 | Runoff Area=0.418 ac 84.93% Impervious Runoff Depth=1.05" Tc=5.0 min CN=90 Runoff=0.53 cfs 0.037 af |
| Subcatchment DA2.1: DA2.1 | Runoff Area=0.825 ac 60.00% Impervious Runoff Depth=0.62" Tc=5.0 min CN=82 Runoff=0.58 cfs 0.042 af |
| Subcatchment DA2.2: DA2.2 | Runoff Area=1.416 ac 68.29% Impervious Runoff Depth=0.49" Tc=5.0 min CN=79 Runoff=0.76 cfs 0.058 af |
| Subcatchment DA3.1: DA3.1 | Runoff Area=1.010 ac 7.23% Impervious Runoff Depth=0.00" Flow Length=416' Tc=19.1 min CN=52 Runoff=0.00 cfs 0.000 af |
| Subcatchment DA3.2: DA3.2 | Runoff Area=0.147 ac 0.00% Impervious Runoff Depth=0.00" Tc=5.0 min CN=39 Runoff=0.00 cfs 0.000 af |
| Subcatchment DA3.3: DA3.3 | Runoff Area=0.815 ac 75.71% Impervious Runoff Depth=0.71" Tc=5.0 min CN=84 Runoff=0.68 cfs 0.048 af |
| Subcatchment DA3.4: DA3.4 | Runoff Area=0.601 ac 85.02% Impervious Runoff Depth=1.12" Tc=5.0 min CN=91 Runoff=0.82 cfs 0.056 af |
| Subcatchment DA4: DA4 | Runoff Area=0.032 ac 0.00% Impervious Runoff Depth=0.00" Tc=10.0 min CN=39 Runoff=0.00 cfs 0.000 af |
| Subcatchment DA5.1: DA5.1 | Runoff Area=0.922 ac 24.84% Impervious Runoff Depth=0.02" Tc=10.0 min CN=56 Runoff=0.00 cfs 0.001 af |
| Subcatchment DA5.2: DA5.2 | Runoff Area=0.072 ac 16.67% Impervious Runoff Depth=0.00" Tc=5.0 min CN=49 Runoff=0.00 cfs 0.000 af |
| Pond B1: Bioretention Basin 1 | Peak Elev=72.00' Storage=1 cf Inflow=0.00 cfs 0.001 af Discarded=0.00 cfs 0.001 af Primary=0.00 cfs 0.000 af Outflow=0.00 cfs 0.001 af |
| Pond CB17: CB17 | Peak Elev=70.50' Inflow=0.00 cfs 0.000 af 24.0" Round Culvert n=0.012 L=120.0' S=0.0050 '/' Outflow=0.00 cfs 0.000 af |
| Pond U/G1: Underground Detention/Infiltration | Peak Elev=73.01' Storage=12 cf Inflow=0.68 cfs 0.048 af Discarded=0.68 cfs 0.048 af Primary=0.00 cfs 0.000 af Outflow=0.68 cfs 0.048 af |
| Pond U/G2: Underground Detention/Infiltration | Peak Elev=72.51' Storage=18 cf Inflow=2.25 cfs 0.263 af Discarded=2.25 cfs 0.263 af Primary=0.00 cfs 0.000 af Outflow=2.25 cfs 0.263 af |

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Type III 24-hr WQV Rainfall=1.95"

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Pond U/G3: Underground Detention/Infiltration Peak Elev=70.69' Storage=329 cf Inflow=1.12 cfs 0.079 af
Discarded=0.50 cfs 0.079 af Primary=0.00 cfs 0.000 af Outflow=0.50 cfs 0.079 af

Pond YD1: YD-1 Peak Elev=76.41' Inflow=0.00 cfs 0.000 af
12.0" Round Culvert n=0.012 L=221.0' S=0.0050 '/' Outflow=0.00 cfs 0.000 af

Link AP1: Analysis Point 1 - Edge of Wetlands Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link AP2: Analysis Point 2 - Downstream End of 36" RCP Culvert Inflow=0.76 cfs 0.058 af
Primary=0.76 cfs 0.058 af

Link AP3: Analysis Point 3 - Southeast PL Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link AP4: Analysis Point 4 - East PL Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link AP5: Analysis Point 5 - PL along Jerome Ave Inflow=0.00 cfs 0.000 af
Primary=0.00 cfs 0.000 af

Link WL: Wetlands Inflow=0.76 cfs 0.058 af
Primary=0.76 cfs 0.058 af

Total Runoff Area = 11.346 ac Runoff Volume = 0.450 af Average Runoff Depth = 0.48"
52.71% Pervious = 5.981 ac 47.29% Impervious = 5.365 ac

Proposed Hydrology

Type III 24-hr WQV Rainfall=1.95"

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Summary for Subcatchment DA1.1: DA1.1

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr WQV Rainfall=1.95"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| * 0.729 | 30 | Woods, Good HSG A |
| * 0.021 | 77 | Woods, Good HSG D |
| * 0.125 | 55 | Woods, Good HSG B |
| * 0.001 | 98 | Paved parking HSG A |
| * 0.001 | 98 | Paved parking HSG B |
| * 0.813 | 39 | >75% Grass cover, Good HSG A |
| * 0.335 | 61 | >75% Grass cover, Good HSG B |
| * 0.001 | 80 | >75% Grass cover, Good HSG D |
| 2.026 | 41 | Weighted Average |
| 2.024 | | 99.90% Pervious Area |
| 0.002 | | 0.10% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|---|
| 18.3 | 100 | 0.1082 | 0.09 | | Sheet Flow, Sheet Flow Woods: Dense underbrush n= 0.800 P2= 3.46" |
| 10.4 | 457 | 0.0854 | 0.73 | | Shallow Concentrated Flow, Shallow Conc. Flow Forest w/Heavy Litter Kv= 2.5 fps |
| 28.7 | 557 | Total | | | |

Proposed Hydrology

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Summary for Subcatchment DA1.2: DA1.2

Runoff = 1.92 cfs @ 12.29 hrs, Volume= 0.207 af, Depth= 0.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr WQV Rainfall=1.95"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| * 0.228 | 98 | Roofs HSG A |
| * 0.744 | 98 | Roofs HSG B |
| * 0.095 | 55 | Woods, Good HSG B |
| * 0.034 | 98 | Paved parking HSG A |
| * 1.098 | 98 | Paved parking HSG B |
| * 0.011 | 39 | >75% Grass cover, Good HSG A |
| * 0.852 | 61 | >75% Grass cover, Good HSG B |
| 3.062 | 86 | Weighted Average |
| 0.958 | | 31.29% Pervious Area |
| 2.104 | | 68.71% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|--|
| 17.6 | 90 | 0.0968 | 0.09 | | Sheet Flow, Sheet Flow Woods: Dense underbrush n= 0.800 P2= 3.46" |
| 0.5 | 10 | 0.2845 | 0.32 | | Sheet Flow, Sheet Flow Grass: Short n= 0.150 P2= 3.46" |
| 0.3 | 54 | 0.2455 | 3.47 | | Shallow Concentrated Flow, Shallow Conc. Short Grass Pasture Kv= 7.0 fps |
| 0.7 | 115 | 0.0183 | 2.75 | | Shallow Concentrated Flow, Shallow Conc. Paved Kv= 20.3 fps |
| 1.2 | 630 | 0.0200 | 9.11 | 16.09 | Pipe Channel, Pipe Flow 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.012 Corrugated PP, smooth interior |
| 20.3 | 899 | Total | | | |

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Summary for Subcatchment DA1.3: DA1.3

Runoff = 0.53 cfs @ 12.08 hrs, Volume= 0.037 af, Depth= 1.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr WQV Rainfall=1.95"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.298 | 98 | Paved parking HSG A |
| 0.057 | 98 | Paved parking HSG B |
| 0.040 | 39 | >75% Grass cover, Good HSG A |
| 0.023 | 61 | >75% Grass cover, Good HSG B |
| 0.418 | 90 | Weighted Average |
| 0.063 | | 15.07% Pervious Area |
| 0.355 | | 84.93% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 5.0 | | | | | Direct Entry, |

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Summary for Subcatchment DA2.1: DA2.1

Runoff = 0.58 cfs @ 12.08 hrs, Volume= 0.042 af, Depth= 0.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr WQV Rainfall=1.95"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.059 | 98 | Roofs HSG A |
| 0.124 | 98 | Paved parking HSG B |
| 0.155 | 98 | Paved parking HSG A |
| 0.157 | 98 | Roofs HSG B |
| 0.060 | 39 | >75% Grass cover, Good HSG A |
| 0.270 | 61 | >75% Grass cover, Good HSG B |
| 0.825 | 82 | Weighted Average |
| 0.330 | | 40.00% Pervious Area |
| 0.495 | | 60.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 5.0 | | | | | Direct Entry, |

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Summary for Subcatchment DA2.2: DA2.2

Runoff = 0.76 cfs @ 12.09 hrs, Volume= 0.058 af, Depth= 0.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr WQV Rainfall=1.95"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.768 | 98 | Paved parking HSG A |
| 0.199 | 98 | Roofs HSG A |
| 0.113 | 30 | Woods, Good HSG A |
| 0.336 | 39 | >75% Grass cover, Good HSG A |
| 1.416 | 79 | Weighted Average |
| 0.449 | | 31.71% Pervious Area |
| 0.967 | | 68.29% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 5.0 | | | | | Direct Entry, |

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Summary for Subcatchment DA3.1: DA3.1

Runoff = 0.00 cfs @ 24.01 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr WQV Rainfall=1.95"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| * 0.064 | 30 | Woods, Good HSG A |
| * 0.273 | 55 | Woods, Good HSG B |
| * 0.001 | 98 | Paved parking HSG B |
| * 0.048 | 98 | Paved parking HSG A |
| * 0.024 | 98 | Roofs HSG A |
| * 0.349 | 39 | >75% Grass cover, Good HSG A |
| * 0.251 | 61 | >75% Grass cover, Good HSG B |
| 1.010 | 52 | Weighted Average |
| 0.937 | | 92.77% Pervious Area |
| 0.073 | | 7.23% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|---|
| 3.9 | 57 | 0.0572 | 0.24 | | Sheet Flow, Sheet Flow Grass: Short n= 0.150 P2= 3.46" |
| 10.9 | 43 | 0.0724 | 0.07 | | Sheet Flow, Sheet Flow Woods: Dense underbrush n= 0.800 P2= 3.46" |
| 2.2 | 74 | 0.0492 | 0.55 | | Shallow Concentrated Flow, Shallow Conc. Flow Forest w/Heavy Litter Kv= 2.5 fps |
| 1.1 | 87 | 0.0359 | 1.33 | | Shallow Concentrated Flow, Shallow Conc. Short Grass Pasture Kv= 7.0 fps |
| 0.2 | 50 | 0.0285 | 3.43 | | Shallow Concentrated Flow, Shallow Conc. Paved Kv= 20.3 fps |
| 0.8 | 105 | 0.0906 | 2.11 | | Shallow Concentrated Flow, Shallow Conc. Short Grass Pasture Kv= 7.0 fps |
| 19.1 | 416 | Total | | | |

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Summary for Subcatchment DA3.2: DA3.2

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr WQV Rainfall=1.95"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.000 | 98 | Paved parking HSG A |
| 0.147 | 39 | >75% Grass cover, Good HSG A |
| 0.147 | 39 | Weighted Average |
| 0.147 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 5.0 | | | | | Direct Entry, |

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Summary for Subcatchment DA3.3: DA3.3

Runoff = 0.68 cfs @ 12.08 hrs, Volume= 0.048 af, Depth= 0.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr WQV Rainfall=1.95"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.617 | 98 | Paved parking HSG A |
| 0.198 | 39 | >75% Grass cover, Good HSG A |
| 0.815 | 84 | Weighted Average |
| 0.198 | | 24.29% Pervious Area |
| 0.617 | | 75.71% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 5.0 | | | | | Direct Entry, |

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Type III 24-hr WQV Rainfall=1.95"

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Summary for Subcatchment DA3.4: DA3.4

Runoff = 0.82 cfs @ 12.07 hrs, Volume= 0.056 af, Depth= 1.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr WQV Rainfall=1.95"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.154 | 98 | Paved parking HSG A |
| 0.357 | 98 | Paved parking HSG B |
| 0.042 | 39 | >75% Grass cover, Good HSG A |
| 0.048 | 61 | >75% Grass cover, Good HSG B |
| 0.601 | 91 | Weighted Average |
| 0.090 | | 14.98% Pervious Area |
| 0.511 | | 85.02% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 5.0 | | | | | Direct Entry, |

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Summary for Subcatchment DA4: DA4

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr WQV Rainfall=1.95"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| * 0.000 | 98 | Paved parking HSG A |
| * 0.032 | 39 | >75% Grass cover, Good HSG A |
| 0.032 | 39 | Weighted Average |
| 0.032 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 10.0 | | | | | Direct Entry, |

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Summary for Subcatchment DA5.1: DA5.1

Runoff = 0.00 cfs @ 16.88 hrs, Volume= 0.001 af, Depth= 0.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr WQV Rainfall=1.95"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.001 | 98 | Roofs HSG B |
| 0.066 | 98 | Roofs HSG A |
| 0.161 | 98 | Paved parking HSG A |
| 0.001 | 98 | Paved parking HSG B |
| 0.608 | 39 | >75% Grass cover, Good HSG A |
| 0.085 | 61 | >75% Grass cover, Good HSG B |
| 0.922 | 56 | Weighted Average |
| 0.693 | | 75.16% Pervious Area |
| 0.229 | | 24.84% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 10.0 | | | | | Direct Entry, |

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Summary for Subcatchment DA5.2: DA5.2

Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr WQV Rainfall=1.95"

| Area (ac) | CN | Description |
|-----------|----|------------------------------|
| 0.012 | 98 | Paved parking HSG A |
| 0.060 | 39 | >75% Grass cover, Good HSG A |
| 0.072 | 49 | Weighted Average |
| 0.060 | | 83.33% Pervious Area |
| 0.012 | | 16.67% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|----------|---------------|---------------|-------------------|----------------|----------------------|
| 5.0 | | | | | Direct Entry, |

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Type III 24-hr WQV Rainfall=1.95"

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Summary for Pond B1: Bioretention Basin 1

Inflow Area = 2.747 ac, 33.45% Impervious, Inflow Depth = 0.01" for WQV event
 Inflow = 0.00 cfs @ 16.88 hrs, Volume= 0.001 af
 Outflow = 0.00 cfs @ 16.99 hrs, Volume= 0.001 af, Atten= 0%, Lag= 6.3 min
 Discarded = 0.00 cfs @ 16.99 hrs, Volume= 0.001 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 72.00' @ 16.99 hrs Surf.Area= 2,067 sf Storage= 1 cf

Plug-Flow detention time= 7.2 min calculated for 0.001 af (100% of inflow)
 Center-of-Mass det. time= 7.2 min (1,157.1 - 1,149.9)

| Volume | Invert | Avail.Storage | Storage Description |
|---------------------|----------------------|---------------------------|--|
| #1 | 72.00' | 10,356 cf | Custom Stage Data (Prismatic) Listed below (Recalc) |
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
| 72.00 | 2,067 | 0 | 0 |
| 73.00 | 2,957 | 2,512 | 2,512 |
| 74.00 | 3,907 | 3,432 | 5,944 |
| 75.00 | 4,917 | 4,412 | 10,356 |

| Device | Routing | Invert | Outlet Devices |
|--------|-----------|--------|--|
| #1 | Primary | 72.50' | 12.0" Round Culvert L= 71.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 72.50' / 72.14' S= 0.0051 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf |
| #2 | Device 1 | 72.50' | 4.0" Vert. Orifice/Grate C= 0.600 |
| #3 | Device 1 | 73.50' | 4.0" Vert. Orifice/Grate C= 0.600 |
| #4 | Device 1 | 74.75' | 24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads |
| #5 | Discarded | 72.00' | 1.000 in/hr Exfiltration over Surface area Phase-In= 0.01' |

Discarded OutFlow Max=0.00 cfs @ 16.99 hrs HW=72.00' (Free Discharge)

↳ **5=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=72.00' TW=0.00' (Dynamic Tailwater)

↳ **1=Culvert** (Controls 0.00 cfs)
 ↳ **2=Orifice/Grate** (Controls 0.00 cfs)
 ↳ **3=Orifice/Grate** (Controls 0.00 cfs)
 ↳ **4=Orifice/Grate** (Controls 0.00 cfs)

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Type III 24-hr WQV Rainfall=1.95"

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Stage-Area-Storage for Pond B1: Bioretention Basin 1

| Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) | Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) |
|---------------------|--------------------|-------------------------|---------------------|--------------------|-------------------------|
| 72.00 | 2,067 | 0 | 74.65 | 4,564 | 8,697 |
| 72.05 | 2,111 | 104 | 74.70 | 4,614 | 8,926 |
| 72.10 | 2,156 | 211 | 74.75 | 4,665 | 9,158 |
| 72.15 | 2,201 | 320 | 74.80 | 4,715 | 9,393 |
| 72.20 | 2,245 | 431 | 74.85 | 4,765 | 9,630 |
| 72.25 | 2,290 | 545 | 74.90 | 4,816 | 9,869 |
| 72.30 | 2,334 | 660 | 74.95 | 4,867 | 10,111 |
| 72.35 | 2,378 | 778 | 75.00 | 4,917 | 10,356 |
| 72.40 | 2,423 | 898 | | | |
| 72.45 | 2,468 | 1,020 | | | |
| 72.50 | 2,512 | 1,145 | | | |
| 72.55 | 2,556 | 1,271 | | | |
| 72.60 | 2,601 | 1,400 | | | |
| 72.65 | 2,646 | 1,532 | | | |
| 72.70 | 2,690 | 1,665 | | | |
| 72.75 | 2,735 | 1,801 | | | |
| 72.80 | 2,779 | 1,938 | | | |
| 72.85 | 2,823 | 2,078 | | | |
| 72.90 | 2,868 | 2,221 | | | |
| 72.95 | 2,913 | 2,365 | | | |
| 73.00 | 2,957 | 2,512 | | | |
| 73.05 | 3,004 | 2,661 | | | |
| 73.10 | 3,052 | 2,812 | | | |
| 73.15 | 3,100 | 2,966 | | | |
| 73.20 | 3,147 | 3,122 | | | |
| 73.25 | 3,195 | 3,281 | | | |
| 73.30 | 3,242 | 3,442 | | | |
| 73.35 | 3,289 | 3,605 | | | |
| 73.40 | 3,337 | 3,771 | | | |
| 73.45 | 3,385 | 3,939 | | | |
| 73.50 | 3,432 | 4,109 | | | |
| 73.55 | 3,479 | 4,282 | | | |
| 73.60 | 3,527 | 4,457 | | | |
| 73.65 | 3,575 | 4,635 | | | |
| 73.70 | 3,622 | 4,815 | | | |
| 73.75 | 3,670 | 4,997 | | | |
| 73.80 | 3,717 | 5,182 | | | |
| 73.85 | 3,764 | 5,369 | | | |
| 73.90 | 3,812 | 5,558 | | | |
| 73.95 | 3,860 | 5,750 | | | |
| 74.00 | 3,907 | 5,944 | | | |
| 74.05 | 3,957 | 6,141 | | | |
| 74.10 | 4,008 | 6,340 | | | |
| 74.15 | 4,059 | 6,541 | | | |
| 74.20 | 4,109 | 6,746 | | | |
| 74.25 | 4,160 | 6,952 | | | |
| 74.30 | 4,210 | 7,162 | | | |
| 74.35 | 4,260 | 7,373 | | | |
| 74.40 | 4,311 | 7,588 | | | |
| 74.45 | 4,362 | 7,804 | | | |
| 74.50 | 4,412 | 8,024 | | | |
| 74.55 | 4,462 | 8,246 | | | |
| 74.60 | 4,513 | 8,470 | | | |

Proposed Hydrology

Type III 24-hr WQV Rainfall=1.95"

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Summary for Pond CB17: CB17

Inflow Area = 4.906 ac, 70.63% Impervious, Inflow Depth = 0.00" for WQV event
 Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 70.50' @ 0.00 hrs
 Flood Elev= 80.00'

| Device | Routing | Invert | Outlet Devices |
|--------|---------|--------|--|
| #1 | Primary | 70.50' | 24.0" Round Culvert L= 120.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 70.50' / 69.90' S= 0.0050 '/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf |

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=70.50' TW=0.00' (Dynamic Tailwater)
 ↑1=Culvert (Controls 0.00 cfs)

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Stage-Area-Storage for Pond CB17: CB17

| Elevation (feet) | Storage (cubic-feet) | Elevation (feet) | Storage (cubic-feet) |
|---------------------|-------------------------|---------------------|-------------------------|
| 70.50 | 0 | 75.80 | 0 |
| 70.60 | 0 | 75.90 | 0 |
| 70.70 | 0 | 76.00 | 0 |
| 70.80 | 0 | 76.10 | 0 |
| 70.90 | 0 | 76.20 | 0 |
| 71.00 | 0 | 76.30 | 0 |
| 71.10 | 0 | 76.40 | 0 |
| 71.20 | 0 | 76.50 | 0 |
| 71.30 | 0 | 76.60 | 0 |
| 71.40 | 0 | 76.70 | 0 |
| 71.50 | 0 | 76.80 | 0 |
| 71.60 | 0 | 76.90 | 0 |
| 71.70 | 0 | 77.00 | 0 |
| 71.80 | 0 | 77.10 | 0 |
| 71.90 | 0 | 77.20 | 0 |
| 72.00 | 0 | 77.30 | 0 |
| 72.10 | 0 | 77.40 | 0 |
| 72.20 | 0 | 77.50 | 0 |
| 72.30 | 0 | 77.60 | 0 |
| 72.40 | 0 | 77.70 | 0 |
| 72.50 | 0 | 77.80 | 0 |
| 72.60 | 0 | 77.90 | 0 |
| 72.70 | 0 | 78.00 | 0 |
| 72.80 | 0 | 78.10 | 0 |
| 72.90 | 0 | 78.20 | 0 |
| 73.00 | 0 | 78.30 | 0 |
| 73.10 | 0 | 78.40 | 0 |
| 73.20 | 0 | 78.50 | 0 |
| 73.30 | 0 | 78.60 | 0 |
| 73.40 | 0 | 78.70 | 0 |
| 73.50 | 0 | 78.80 | 0 |
| 73.60 | 0 | 78.90 | 0 |
| 73.70 | 0 | 79.00 | 0 |
| 73.80 | 0 | 79.10 | 0 |
| 73.90 | 0 | 79.20 | 0 |
| 74.00 | 0 | 79.30 | 0 |
| 74.10 | 0 | 79.40 | 0 |
| 74.20 | 0 | 79.50 | 0 |
| 74.30 | 0 | 79.60 | 0 |
| 74.40 | 0 | 79.70 | 0 |
| 74.50 | 0 | 79.80 | 0 |
| 74.60 | 0 | 79.90 | 0 |
| 74.70 | 0 | 80.00 | 0 |
| 74.80 | 0 | | |
| 74.90 | 0 | | |
| 75.00 | 0 | | |
| 75.10 | 0 | | |
| 75.20 | 0 | | |
| 75.30 | 0 | | |
| 75.40 | 0 | | |
| 75.50 | 0 | | |
| 75.60 | 0 | | |
| 75.70 | 0 | | |

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Summary for Pond U/G1: Underground Detention/Infiltration System 1

Inflow Area = 1.825 ac, 37.81% Impervious, Inflow Depth = 0.32" for WQV event
 Inflow = 0.68 cfs @ 12.08 hrs, Volume= 0.048 af
 Outflow = 0.68 cfs @ 12.08 hrs, Volume= 0.048 af, Atten= 0%, Lag= 0.3 min
 Discarded = 0.68 cfs @ 12.08 hrs, Volume= 0.048 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 73.01' @ 12.08 hrs Surf.Area= 3,626 sf Storage= 12 cf

Plug-Flow detention time= 0.3 min calculated for 0.048 af (100% of inflow)
 Center-of-Mass det. time= 0.3 min (855.3 - 855.1)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|--------|---------------|--|
| #1A | 73.00' | 3,257 cf | 44.25'W x 81.94'L x 3.50'H Field A 12,690 cf Overall - 4,548 cf Embedded = 8,142 cf x 40.0% Voids |
| #2A | 73.50' | 4,548 cf | ADS_StormTech SC-740 +Cap x 99 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 99 Chambers in 9 Rows |
| | | 7,805 cf | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|--------|-----------|--------|---|
| #1 | Primary | 73.50' | 12.0" Round Culvert L= 125.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 73.50' / 72.00' S= 0.0120 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf |
| #2 | Device 1 | 73.75' | 4.0" Vert. Orifice/Grate C= 0.600 |
| #3 | Device 1 | 74.75' | 4.0" Vert. Orifice/Grate C= 0.600 |
| #4 | Device 1 | 76.00' | 4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s) |
| #5 | Discarded | 73.00' | 9.800 in/hr Exfiltration over Surface area Phase-In= 0.01' |

Discarded OutFlow Max=0.68 cfs @ 12.08 hrs HW=73.01' (Free Discharge)

↳ **5=Exfiltration** (Exfiltration Controls 0.68 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=73.00' TW=72.00' (Dynamic Tailwater)

↳ **1=Culvert** (Controls 0.00 cfs)

↳ **2=Orifice/Grate** (Controls 0.00 cfs)

↳ **3=Orifice/Grate** (Controls 0.00 cfs)

↳ **4=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

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Type III 24-hr WQV Rainfall=1.95"

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Pond U/G1: Underground Detention/Infiltration System 1 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

11 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 79.94' Row Length +12.0" End Stone x 2 = 81.94' Base Length

9 Rows x 51.0" Wide + 6.0" Spacing x 8 + 12.0" Side Stone x 2 = 44.25' Base Width

6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

99 Chambers x 45.9 cf = 4,548.1 cf Chamber Storage

12,689.9 cf Field - 4,548.1 cf Chambers = 8,141.9 cf Stone x 40.0% Voids = 3,256.8 cf Stone Storage

Chamber Storage + Stone Storage = 7,804.8 cf = 0.179 af

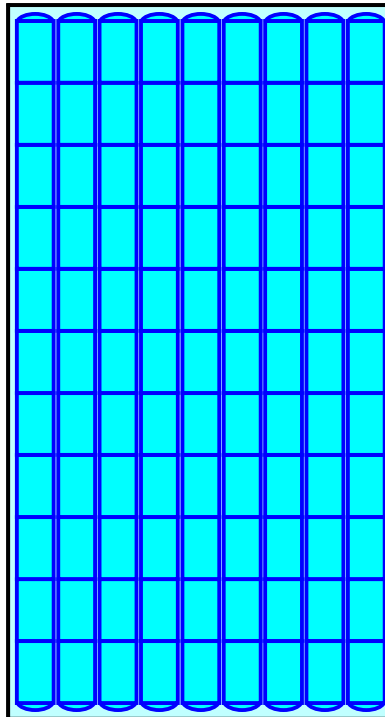
Overall Storage Efficiency = 61.5%

Overall System Size = 81.94' x 44.25' x 3.50'

99 Chambers

470.0 cy Field

301.6 cy Stone



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Stage-Area-Storage for Pond U/G1: Underground Detention/Infiltration System 1

| Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) | Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) |
|---------------------|--------------------|-------------------------|---------------------|--------------------|-------------------------|
| 73.00 | 3,626 | 0 | 75.65 | 3,626 | 6,496 |
| 73.05 | 3,626 | 73 | 75.70 | 3,626 | 6,593 |
| 73.10 | 3,626 | 145 | 75.75 | 3,626 | 6,684 |
| 73.15 | 3,626 | 218 | 75.80 | 3,626 | 6,770 |
| 73.20 | 3,626 | 290 | 75.85 | 3,626 | 6,851 |
| 73.25 | 3,626 | 363 | 75.90 | 3,626 | 6,930 |
| 73.30 | 3,626 | 435 | 75.95 | 3,626 | 7,006 |
| 73.35 | 3,626 | 508 | 76.00 | 3,626 | 7,080 |
| 73.40 | 3,626 | 580 | 76.05 | 3,626 | 7,152 |
| 73.45 | 3,626 | 653 | 76.10 | 3,626 | 7,225 |
| 73.50 | 3,626 | 725 | 76.15 | 3,626 | 7,297 |
| 73.55 | 3,626 | 796 | 76.20 | 3,626 | 7,370 |
| 73.60 | 3,626 | 1,027 | 76.25 | 3,626 | 7,442 |
| 73.65 | 3,626 | 1,178 | 76.30 | 3,626 | 7,515 |
| 73.70 | 3,626 | 1,329 | 76.35 | 3,626 | 7,587 |
| 73.75 | 3,626 | 1,479 | 76.40 | 3,626 | 7,660 |
| 73.80 | 3,626 | 1,628 | 76.45 | 3,626 | 7,732 |
| 73.85 | 3,626 | 1,777 | 76.50 | 3,626 | 7,805 |
| 73.90 | 3,626 | 1,926 | | | |
| 73.95 | 3,626 | 2,073 | | | |
| 74.00 | 3,626 | 2,221 | | | |
| 74.05 | 3,626 | 2,367 | | | |
| 74.10 | 3,626 | 2,513 | | | |
| 74.15 | 3,626 | 2,659 | | | |
| 74.20 | 3,626 | 2,803 | | | |
| 74.25 | 3,626 | 2,947 | | | |
| 74.30 | 3,626 | 3,090 | | | |
| 74.35 | 3,626 | 3,232 | | | |
| 74.40 | 3,626 | 3,374 | | | |
| 74.45 | 3,626 | 3,514 | | | |
| 74.50 | 3,626 | 3,654 | | | |
| 74.55 | 3,626 | 3,793 | | | |
| 74.60 | 3,626 | 3,931 | | | |
| 74.65 | 3,626 | 4,068 | | | |
| 74.70 | 3,626 | 4,203 | | | |
| 74.75 | 3,626 | 4,338 | | | |
| 74.80 | 3,626 | 4,472 | | | |
| 74.85 | 3,626 | 4,604 | | | |
| 74.90 | 3,626 | 4,735 | | | |
| 74.95 | 3,626 | 4,865 | | | |
| 75.00 | 3,626 | 4,993 | | | |
| 75.05 | 3,626 | 5,120 | | | |
| 75.10 | 3,626 | 5,246 | | | |
| 75.15 | 3,626 | 5,370 | | | |
| 75.20 | 3,626 | 5,492 | | | |
| 75.25 | 3,626 | 5,612 | | | |
| 75.30 | 3,626 | 5,731 | | | |
| 75.35 | 3,626 | 5,847 | | | |
| 75.40 | 3,626 | 5,962 | | | |
| 75.45 | 3,626 | 6,074 | | | |
| 75.50 | 3,626 | 6,184 | | | |
| 75.55 | 3,626 | 6,291 | | | |
| 75.60 | 3,626 | 6,395 | | | |

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Type III 24-hr WQV Rainfall=1.95"

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Summary for Pond U/G2: Underground Detention/Infiltration System 2

Inflow Area = 3.663 ac, 71.39% Impervious, Inflow Depth = 0.86" for WQV event
 Inflow = 2.25 cfs @ 12.27 hrs, Volume= 0.263 af
 Outflow = 2.25 cfs @ 12.28 hrs, Volume= 0.263 af, Atten= 0%, Lag= 0.3 min
 Discarded = 2.25 cfs @ 12.28 hrs, Volume= 0.263 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 72.51' @ 12.28 hrs Surf.Area= 7,911 sf Storage= 18 cf

Plug-Flow detention time= 0.1 min calculated for 0.263 af (100% of inflow)
 Center-of-Mass det. time= 0.1 min (851.5 - 851.4)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|--------|---------------|---|
| #1A | 72.50' | 7,014 cf | 82.25'W x 96.18'L x 3.50'H Field A 27,687 cf Overall - 10,153 cf Embedded = 17,534 cf x 40.0% Voids |
| #2A | 73.00' | 10,153 cf | ADS_StormTech SC-740 +Cap x 221 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 221 Chambers in 17 Rows |
| | | 17,166 cf | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|--------|-----------|--------|--|
| #1 | Primary | 73.00' | 15.0" Round Culvert L= 251.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 73.00' / 71.75' S= 0.0050 ' /' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf |
| #2 | Device 1 | 73.00' | 8.0" Vert. Orifice/Grate C= 0.600 |
| #3 | Device 1 | 75.50' | 4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s) |
| #4 | Discarded | 72.50' | 21.500 in/hr Exfiltration over Surface area Phase-In= 0.01' |

Discarded OutFlow Max=2.25 cfs @ 12.28 hrs HW=72.51' (Free Discharge)

↳ **4=Exfiltration** (Exfiltration Controls 2.25 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=72.50' TW=70.50' (Dynamic Tailwater)

↳ **1=Culvert** (Controls 0.00 cfs)

↳ **2=Orifice/Grate** (Controls 0.00 cfs)

↳ **3=Sharp-Crested Rectangular Weir** (Controls 0.00 cfs)

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Pond U/G2: Underground Detention/Infiltration System 2 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

13 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 94.18' Row Length +12.0" End Stone x 2 = 96.18' Base Length

17 Rows x 51.0" Wide + 6.0" Spacing x 16 + 12.0" Side Stone x 2 = 82.25' Base Width

6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

221 Chambers x 45.9 cf = 10,152.7 cf Chamber Storage

27,686.9 cf Field - 10,152.7 cf Chambers = 17,534.1 cf Stone x 40.0% Voids = 7,013.6 cf Stone Storage

Chamber Storage + Stone Storage = 17,166.4 cf = 0.394 af

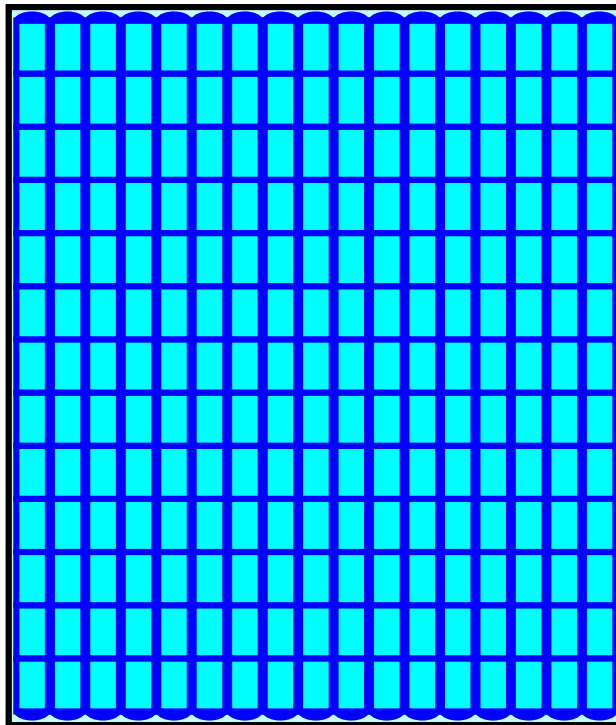
Overall Storage Efficiency = 62.0%

Overall System Size = 96.18' x 82.25' x 3.50'

221 Chambers

1,025.4 cy Field

649.4 cy Stone



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Stage-Area-Storage for Pond U/G2: Underground Detention/Infiltration System 2

| Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) | Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) |
|---------------------|--------------------|-------------------------|---------------------|--------------------|-------------------------|
| 72.50 | 7,911 | 0 | 75.15 | 7,911 | 14,307 |
| 72.55 | 7,911 | 158 | 75.20 | 7,911 | 14,519 |
| 72.60 | 7,911 | 316 | 75.25 | 7,911 | 14,719 |
| 72.65 | 7,911 | 475 | 75.30 | 7,911 | 14,907 |
| 72.70 | 7,911 | 633 | 75.35 | 7,911 | 15,086 |
| 72.75 | 7,911 | 791 | 75.40 | 7,911 | 15,257 |
| 72.80 | 7,911 | 949 | 75.45 | 7,911 | 15,423 |
| 72.85 | 7,911 | 1,107 | 75.50 | 7,911 | 15,584 |
| 72.90 | 7,911 | 1,266 | 75.55 | 7,911 | 15,742 |
| 72.95 | 7,911 | 1,424 | 75.60 | 7,911 | 15,901 |
| 73.00 | 7,911 | 1,582 | 75.65 | 7,911 | 16,059 |
| 73.05 | 7,911 | 1,916 | 75.70 | 7,911 | 16,217 |
| 73.10 | 7,911 | 2,249 | 75.75 | 7,911 | 16,375 |
| 73.15 | 7,911 | 2,582 | 75.80 | 7,911 | 16,534 |
| 73.20 | 7,911 | 2,915 | 75.85 | 7,911 | 16,692 |
| 73.25 | 7,911 | 3,246 | 75.90 | 7,911 | 16,850 |
| 73.30 | 7,911 | 3,576 | 75.95 | 7,911 | 17,008 |
| 73.35 | 7,911 | 3,905 | 76.00 | 7,911 | 17,166 |
| 73.40 | 7,911 | 4,233 | | | |
| 73.45 | 7,911 | 4,559 | | | |
| 73.50 | 7,911 | 4,884 | | | |
| 73.55 | 7,911 | 5,208 | | | |
| 73.60 | 7,911 | 5,530 | | | |
| 73.65 | 7,911 | 5,851 | | | |
| 73.70 | 7,911 | 6,170 | | | |
| 73.75 | 7,911 | 6,487 | | | |
| 73.80 | 7,911 | 6,803 | | | |
| 73.85 | 7,911 | 7,117 | | | |
| 73.90 | 7,911 | 7,429 | | | |
| 73.95 | 7,911 | 7,739 | | | |
| 74.00 | 7,911 | 8,048 | | | |
| 74.05 | 7,911 | 8,354 | | | |
| 74.10 | 7,911 | 8,658 | | | |
| 74.15 | 7,911 | 8,960 | | | |
| 74.20 | 7,911 | 9,259 | | | |
| 74.25 | 7,911 | 9,556 | | | |
| 74.30 | 7,911 | 9,850 | | | |
| 74.35 | 7,911 | 10,142 | | | |
| 74.40 | 7,911 | 10,431 | | | |
| 74.45 | 7,911 | 10,717 | | | |
| 74.50 | 7,911 | 11,000 | | | |
| 74.55 | 7,911 | 11,280 | | | |
| 74.60 | 7,911 | 11,557 | | | |
| 74.65 | 7,911 | 11,830 | | | |
| 74.70 | 7,911 | 12,099 | | | |
| 74.75 | 7,911 | 12,364 | | | |
| 74.80 | 7,911 | 12,624 | | | |
| 74.85 | 7,911 | 12,881 | | | |
| 74.90 | 7,911 | 13,133 | | | |
| 74.95 | 7,911 | 13,380 | | | |
| 75.00 | 7,911 | 13,621 | | | |
| 75.05 | 7,911 | 13,857 | | | |
| 75.10 | 7,911 | 14,086 | | | |

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Summary for Pond U/G3: Underground Detention/Infiltration System 3

Inflow Area = 1.243 ac, 68.38% Impervious, Inflow Depth = 0.76" for WQV event
Inflow = 1.12 cfs @ 12.08 hrs, Volume= 0.079 af
Outflow = 0.50 cfs @ 12.02 hrs, Volume= 0.079 af, Atten= 55%, Lag= 0.0 min
Discarded = 0.50 cfs @ 12.02 hrs, Volume= 0.079 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 70.69' @ 12.29 hrs Surf.Area= 4,328 sf Storage= 329 cf

Plug-Flow detention time= 3.1 min calculated for 0.079 af (100% of inflow)
Center-of-Mass det. time= 3.1 min (849.1 - 846.0)

| Volume | Invert | Avail.Storage | Storage Description |
|--------|--------|---------------|---|
| #1A | 70.50' | 3,037 cf | 58.17'W x 74.40'L x 2.33'H Field A - Volume of Voids 10,098 cf Overall - 2,506 cf Embedded = 7,592 cf x 40.0% Voids |
| #2A | 71.00' | 2,506 cf | ADS_StormTech SC-310 +Cap x 170 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 170 Chambers in 17 Rows |
| | | 5,543 cf | Total Available Storage |

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|--------|-----------|--------|--|
| #1 | Primary | 71.10' | 18.0" Round Culvert L= 20.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 71.10' / 71.00' S= 0.0050 ' S= 0.0050 ' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.77 sf |
| #2 | Discarded | 70.50' | 5.000 in/hr Exfiltration over Surface area Phase-In= 0.01' |

Discarded OutFlow Max=0.50 cfs @ 12.02 hrs HW=70.52' (Free Discharge)
↑**2=Exfiltration** (Exfiltration Controls 0.50 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=70.50' TW=70.50' (Dynamic Tailwater)
↑**1=Culvert** (Controls 0.00 cfs)

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Type III 24-hr WQV Rainfall=1.95"

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Pond U/G3: Underground Detention/Infiltration System 3 - Chamber Wizard Field A - Volume of Voids

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)

Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf

Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

10 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 72.40' Row Length +12.0" End Stone x 2 = 74.40' Base Length

17 Rows x 34.0" Wide + 6.0" Spacing x 16 + 12.0" Side Stone x 2 = 58.17' Base Width

6.0" Base + 16.0" Chamber Height + 6.0" Cover = 2.33' Field Height

170 Chambers x 14.7 cf = 2,506.1 cf Chamber Storage

10,097.7 cf Field - 2,506.1 cf Chambers = 7,591.6 cf Stone x 40.0% Voids = 3,036.6 cf Stone Storage

Chamber Storage + Stone Storage = 5,542.8 cf = 0.127 af

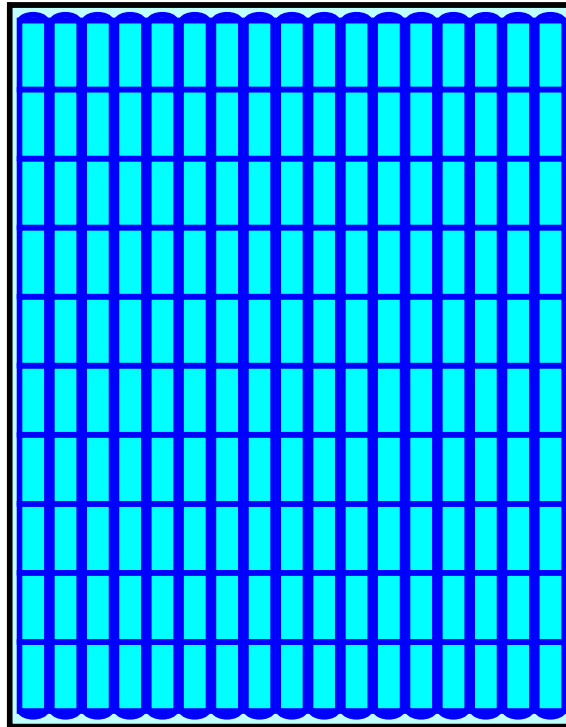
Overall Storage Efficiency = 54.9%

Overall System Size = 74.40' x 58.17' x 2.33'

170 Chambers

374.0 cy Field

281.2 cy Stone



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Stage-Area-Storage for Pond U/G3: Underground Detention/Infiltration System 3

| Elevation (feet) | Surface (sq-ft) | Storage (cubic-feet) |
|---------------------|--------------------|-------------------------|
| 70.50 | 4,328 | 0 |
| 70.55 | 4,328 | 87 |
| 70.60 | 4,328 | 173 |
| 70.65 | 4,328 | 260 |
| 70.70 | 4,328 | 346 |
| 70.75 | 4,328 | 433 |
| 70.80 | 4,328 | 519 |
| 70.85 | 4,328 | 606 |
| 70.90 | 4,328 | 692 |
| 70.95 | 4,328 | 779 |
| 71.00 | 4,328 | 866 |
| 71.05 | 4,328 | 1,039 |
| 71.10 | 4,328 | 1,213 |
| 71.15 | 4,328 | 1,385 |
| 71.20 | 4,328 | 1,556 |
| 71.25 | 4,328 | 1,726 |
| 71.30 | 4,328 | 1,894 |
| 71.35 | 4,328 | 2,060 |
| 71.40 | 4,328 | 2,225 |
| 71.45 | 4,328 | 2,387 |
| 71.50 | 4,328 | 2,547 |
| 71.55 | 4,328 | 2,705 |
| 71.60 | 4,328 | 2,861 |
| 71.65 | 4,328 | 3,014 |
| 71.70 | 4,328 | 3,165 |
| 71.75 | 4,328 | 3,313 |
| 71.80 | 4,328 | 3,457 |
| 71.85 | 4,328 | 3,598 |
| 71.90 | 4,328 | 3,734 |
| 71.95 | 4,328 | 3,867 |
| 72.00 | 4,328 | 3,994 |
| 72.05 | 4,328 | 4,115 |
| 72.10 | 4,328 | 4,228 |
| 72.15 | 4,328 | 4,333 |
| 72.20 | 4,328 | 4,432 |
| 72.25 | 4,328 | 4,527 |
| 72.30 | 4,328 | 4,618 |
| 72.35 | 4,328 | 4,706 |
| 72.40 | 4,328 | 4,793 |
| 72.45 | 4,328 | 4,879 |
| 72.50 | 4,328 | 4,966 |
| 72.55 | 4,328 | 5,052 |
| 72.60 | 4,328 | 5,139 |
| 72.65 | 4,328 | 5,225 |
| 72.70 | 4,328 | 5,312 |
| 72.75 | 4,328 | 5,399 |
| 72.80 | 4,328 | 5,485 |

Proposed Hydrology

Type III 24-hr WQV Rainfall=1.95"

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Summary for Pond YD1: YD-1

Inflow Area = 1.010 ac, 7.23% Impervious, Inflow Depth = 0.00" for WQV event
 Inflow = 0.00 cfs @ 24.01 hrs, Volume= 0.000 af
 Outflow = 0.00 cfs @ 24.01 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.00 cfs @ 24.01 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 76.41' @ 24.01 hrs
 Flood Elev= 78.00'

| Device | Routing | Invert | Outlet Devices |
|--------|---------|--------|---|
| #1 | Primary | 76.40' | 12.0" Round Culvert L= 221.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 76.40' / 75.30' S= 0.0050 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf |

Primary OutFlow Max=0.00 cfs @ 24.01 hrs HW=76.41' TW=73.00' (Dynamic Tailwater)
 ↑**1=Culvert** (Barrel Controls 0.00 cfs @ 0.30 fps)

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Stage-Area-Storage for Pond YD1: YD-1

| Elevation (feet) | Storage (cubic-feet) | Elevation (feet) | Storage (cubic-feet) |
|---------------------|-------------------------|---------------------|-------------------------|
| 76.40 | 0 | 77.46 | 0 |
| 76.42 | 0 | 77.48 | 0 |
| 76.44 | 0 | 77.50 | 0 |
| 76.46 | 0 | 77.52 | 0 |
| 76.48 | 0 | 77.54 | 0 |
| 76.50 | 0 | 77.56 | 0 |
| 76.52 | 0 | 77.58 | 0 |
| 76.54 | 0 | 77.60 | 0 |
| 76.56 | 0 | 77.62 | 0 |
| 76.58 | 0 | 77.64 | 0 |
| 76.60 | 0 | 77.66 | 0 |
| 76.62 | 0 | 77.68 | 0 |
| 76.64 | 0 | 77.70 | 0 |
| 76.66 | 0 | 77.72 | 0 |
| 76.68 | 0 | 77.74 | 0 |
| 76.70 | 0 | 77.76 | 0 |
| 76.72 | 0 | 77.78 | 0 |
| 76.74 | 0 | 77.80 | 0 |
| 76.76 | 0 | 77.82 | 0 |
| 76.78 | 0 | 77.84 | 0 |
| 76.80 | 0 | 77.86 | 0 |
| 76.82 | 0 | 77.88 | 0 |
| 76.84 | 0 | 77.90 | 0 |
| 76.86 | 0 | 77.92 | 0 |
| 76.88 | 0 | 77.94 | 0 |
| 76.90 | 0 | 77.96 | 0 |
| 76.92 | 0 | 77.98 | 0 |
| 76.94 | 0 | 78.00 | 0 |
| 76.96 | 0 | | |
| 76.98 | 0 | | |
| 77.00 | 0 | | |
| 77.02 | 0 | | |
| 77.04 | 0 | | |
| 77.06 | 0 | | |
| 77.08 | 0 | | |
| 77.10 | 0 | | |
| 77.12 | 0 | | |
| 77.14 | 0 | | |
| 77.16 | 0 | | |
| 77.18 | 0 | | |
| 77.20 | 0 | | |
| 77.22 | 0 | | |
| 77.24 | 0 | | |
| 77.26 | 0 | | |
| 77.28 | 0 | | |
| 77.30 | 0 | | |
| 77.32 | 0 | | |
| 77.34 | 0 | | |
| 77.36 | 0 | | |
| 77.38 | 0 | | |
| 77.40 | 0 | | |
| 77.42 | 0 | | |
| 77.44 | 0 | | |

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Summary for Link AP1: Analysis Point 1 - Edge of Wetlands

Inflow Area = 6.932 ac, 50.01% Impervious, Inflow Depth = 0.00" for WQV event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Summary for Link AP2: Analysis Point 2 - Downstream End of 36" RCP Culvert

Inflow Area = 1.416 ac, 68.29% Impervious, Inflow Depth = 0.49" for WQV event
Inflow = 0.76 cfs @ 12.09 hrs, Volume= 0.058 af
Primary = 0.76 cfs @ 12.09 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Summary for Link AP3: Analysis Point 3 - Southeast PL

Inflow Area = 0.147 ac, 0.00% Impervious, Inflow Depth = 0.00" for WQV event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Summary for Link AP4: Analysis Point 4 - East PL

Inflow Area = 0.032 ac, 0.00% Impervious, Inflow Depth = 0.00" for WQV event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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Summary for Link AP5: Analysis Point 5 - PL along Jerome Ave

Inflow Area = 2.819 ac, 33.03% Impervious, Inflow Depth = 0.00" for WQV event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

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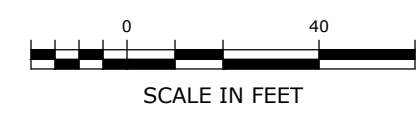
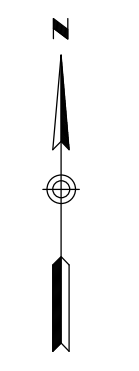
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Summary for Link WL: Wetlands

Inflow Area = 8.348 ac, 53.11% Impervious, Inflow Depth = 0.08" for WQV event
Inflow = 0.76 cfs @ 12.09 hrs, Volume= 0.058 af
Primary = 0.76 cfs @ 12.09 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

STORMCAD PRINTOUTS



| | | | |
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| STORMCAD MODEL SCHEMATIC VILLAGE APARTMENTS PHASE III JEROME ROAD & JEROME AVENUE, MONTVILLE, CT VILLAGE APARTMENTS LLC AND CONNECTICUT MULTIFAMILY EQUITIES II, LLC <small>31 COSSWELL LANE, STAMFORD, CT</small> | | SCALE | 1" = 40' |
| | | DATE | 3/11/2021 |
| DRAWN BY | BJM | DATE | 3/11/2021 |
| APPROVED BY | PB | DATE | 3/11/2021 |
| Loureiro Engineering Associates, Inc. <small>Water • Facility Services • Laboratory</small> Loureiro Construction • LLC • Energy <small>An Employee Owned Company • www.loureiro.com</small> Phone: 860-448-0400 • Fax: 860-448-0899 © Loureiro Engineering Associates, Inc. All rights reserved 2019 | | STAMP | |
| SHEET NO. _____ NO. OF SHEETS _____ | | DESCRIPTION OF REVISION | DATE |
| | | REV. | DATE |
| | | | APPR. |

10-YR
CatchBasin Table - Time: 0.00 hours

| ID | Label | Elevation (Ground) (ft) | Elevation (Rim) (ft) | Elevation (Invert) (ft) | Length (ft) | Width (ft) | Inlet Type | Inlet | Inlet Location | Inflow-Capture Curve | Capture Efficiency (Calculated) (%) | Flow (Captured) (cfs) | Hydraulic Grade Line (In) (ft) | Spread / Top Width (ft) |
|-----|-------|-------------------------|----------------------|-------------------------|-------------|------------|---------------|--|----------------|-----------------------|-------------------------------------|-----------------------|--------------------------------|-------------------------|
| 46 | CB-1 | 82.00 | 82.00 | 77.76 | 4.00 | 3.00 | Catalog Inlet | Combination Type C Single Grate - Grate Type A - Plain Curb | In Sag | <Collection: 0 items> | 100.0 | 2.40 | 78.57 | 10.8 |
| 41 | CB-2 | 80.00 | 80.00 | 76.50 | 4.00 | 4.72 | Catalog Inlet | Grate Type C-L Double Grate - Type I - Grate Type A | On Grade | <Collection: 0 items> | 98.7 | 0.50 | 76.87 | 4.1 |
| 288 | CB-3 | 77.10 | 77.10 | 74.10 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 99.8 | 0.30 | 74.43 | 3.6 |
| 291 | CB-4 | 77.10 | 77.10 | 74.00 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 98.7 | 0.41 | 74.42 | 4.1 |
| 57 | CB-5 | 75.10 | 75.10 | 72.24 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 100.0 | 0.19 | 73.03 | 3.1 |
| 58 | CB-6 | 75.10 | 75.10 | 72.14 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 100.0 | 0.18 | 72.97 | 3.0 |
| 63 | CB-7 | 78.55 | 78.55 | 74.63 | 6.53 | 3.00 | Catalog Inlet | Grate Type C-L Double Grate - Type II - Grate Type A | On Grade | <Collection: 0 items> | 76.9 | 0.89 | 75.10 | 5.3 |
| 64 | CB-8 | 77.36 | 77.36 | 73.80 | 6.53 | 3.00 | Catalog Inlet | Grate Type C-L Double Grate - Type II - Grate Type A | In Sag | <Collection: 0 items> | 100.0 | 2.69 | 74.85 | 11.9 |
| 77 | CB-9 | 89.40 | 89.40 | 85.90 | 4.00 | 3.00 | Catalog Inlet | Combination Type C Single Grate - Grate Type A - Plain Curb | In Sag | <Collection: 0 items> | 100.0 | 2.23 | 86.68 | 10.2 |
| 79 | CB-10 | 88.20 | 88.20 | 77.76 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 90.2 | 1.42 | 78.83 | 5.7 |

10-YR
CatchBasin Table - Time: 0.00 hours

| ID | Label | Elevation (Ground) (ft) | Elevation (Rim) (ft) | Elevation (Invert) (ft) | Length (ft) | Width (ft) | Inlet Type | Inlet | Inlet Location | Inflow-Capture Curve | Capture Efficiency (Calculated) (%) | Flow (Captured) (cfs) | Hydraulic Grade Line (In) (ft) | Spread / Top Width (ft) |
|-----|-------|-------------------------|----------------------|-------------------------|-------------|------------|---------------|--|----------------|-----------------------|-------------------------------------|-----------------------|--------------------------------|-------------------------|
| 78 | CB-11 | 88.10 | 88.10 | 77.00 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 91.6 | 1.29 | 78.25 | 5.4 |
| 80 | CB-12 | 81.90 | 81.90 | 78.40 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 99.5 | 0.52 | 78.75 | 3.8 |
| 161 | CB-13 | 82.65 | 82.65 | 75.75 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 100.0 | 0.42 | 77.06 | 3.2 |
| 87 | CB-14 | 78.60 | 78.60 | 74.55 | 4.00 | 3.00 | Catalog Inlet | Grate Type C-L Single Grate - Grate Type A | In Sag | <Collection: 0 items> | 100.0 | 1.38 | 76.00 | 7.2 |
| 99 | CB-15 | 75.76 | 75.76 | 72.70 | 6.53 | 3.00 | Catalog Inlet | Grate Type C-L Double Grate - Type II - Grate Type A | In Sag | <Collection: 0 items> | 100.0 | 1.67 | 73.29 | 9.0 |
| 98 | CB-16 | 76.85 | 76.85 | 73.35 | 4.00 | 3.00 | Catalog Inlet | Grate Type C-L Single Grate - Grate Type A | In Sag | <Collection: 0 items> | 100.0 | 0.86 | 73.82 | 7.6 |
| 72 | CB-17 | 78.35 | 78.35 | 70.50 | 5.30 | 4.30 | Full Capture | TYPE C COMBO SINGLE GRATE | In Sag | <Collection: 0 items> | 100.0 | 0.16 | 71.29 | 0.0 |
| 133 | CDS-1 | 78.60 | 78.60 | 74.88 | 4.00 | 3.00 | Catalog Inlet | Combination Type C Single Grate - Grate Type A - Plain Curb | In Sag | <Collection: 0 items> | 100.0 | 1.40 | 75.99 | 7.3 |
| 146 | CDS-2 | 80.00 | 80.00 | 76.35 | 4.00 | 3.00 | Catalog Inlet | Combination Type C Single Grate - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 92.3 | 0.17 | 76.85 | 2.8 |
| 31 | YD-1 | 77.90 | 77.90 | 76.40 | 3.79 | 4.79 | Full Capture | <None> | In Sag | <Collection: 0 items> | 100.0 | 1.21 | 76.95 | 0.0 |
| 56 | YD-2 | 73.80 | 73.80 | 72.30 | 4.79 | 3.79 | Full Capture | <None> | In Sag | <Collection: 0 items> | 100.0 | 0.61 | 73.04 | 0.0 |
| 218 | YD-3 | 82.50 | 82.50 | 79.00 | 3.79 | 4.79 | Full Capture | <None> | In Sag | <Collection: 0 items> | 100.0 | 0.22 | 79.24 | 0.0 |

10-YR

Combined Pipe/Node Report - Time: 0.00 hours

| Label | Start Node | Stop Node | Branch ID | Branch Element ID | Length (Unified) (ft) | Flow (cfs) | Rise (Unified) (ft) | Capacity (Full Flow) (cfs) | Velocity (ft/s) | Invert (Start) (ft) | Invert (Stop) (ft) | Slope (Calculated) (ft/ft) |
|-------|------------|-----------|-----------|-------------------|-----------------------|------------|---------------------|----------------------------|-----------------|---------------------|--------------------|----------------------------|
| CO-1 | YD-1 | DMH-1 | 16 | 1 | 186.0 | 1.21 | 1.00 | 2.73 | 3.37 | 76.40 | 75.47 | 0.005 |
| CO-2 | DMH-1 | CDS-1 | 16 | 2 | 18.0 | 1.16 | 1.50 | 8.05 | 3.24 | 74.97 | 74.88 | 0.005 |
| CO-3 | CB-1 | CDS-1 | 17 | 1 | 119.0 | 2.40 | 1.00 | 5.46 | 6.73 | 77.76 | 75.38 | 0.020 |
| CO-4 | CDS-1 | ICS-1 | 16 | 3 | 10.0 | 3.74 | 1.50 | 15.27 | 7.14 | 74.88 | 74.70 | 0.018 |
| CO-5 | CB-2 | CDS-2 | 18 | 1 | 19.0 | 0.50 | 1.00 | 3.43 | 3.12 | 76.50 | 76.35 | 0.008 |
| CO-6 | CDS-2 | ICS-2 | 18 | 2 | 39.0 | 0.67 | 1.00 | 2.76 | 2.90 | 76.35 | 76.15 | 0.005 |
| CO-7 | OCS-1 | O-1 | 5 | 1 | 125.0 | 0.19 | 1.00 | 4.88 | 3.01 | 74.00 | 72.00 | 0.016 |
| CO-8 | CB-3 | CB-4 | 7 | 1 | 19.0 | 0.30 | 1.00 | 2.80 | 2.34 | 74.10 | 74.00 | 0.005 |
| CO-9 | CB-4 | CB-5 | 7 | 2 | 96.0 | 0.71 | 1.00 | 5.23 | 4.66 | 74.00 | 72.24 | 0.018 |
| CO-10 | YD-2 | CB-5 | 6 | 1 | 12.0 | 0.61 | 1.00 | 2.73 | 2.80 | 72.30 | 72.24 | 0.005 |
| CO-11 | CB-5 | CB-6 | 6 | 2 | 19.0 | 1.48 | 1.00 | 2.80 | 3.62 | 72.24 | 72.14 | 0.005 |
| CO-12 | CB-6 | CDS-3 | 6 | 3 | 11.0 | 1.65 | 1.00 | 2.95 | 3.86 | 72.14 | 72.08 | 0.006 |
| CO-13 | CDS-3 | O-2 | 6 | 4 | 15.0 | 1.65 | 1.00 | 2.74 | 3.65 | 72.08 | 72.00 | 0.005 |
| CO-14 | CB-7 | CB-8 | 15 | 1 | 66.0 | 0.89 | 1.00 | 2.73 | 3.10 | 74.63 | 74.30 | 0.005 |
| CO-15 | CB-8 | CDS-4 | 15 | 2 | 18.0 | 3.51 | 1.50 | 7.92 | 4.35 | 73.80 | 73.71 | 0.005 |
| CO-16 | CDS-4 | ICS-3 | 15 | 3 | 13.0 | 3.50 | 1.50 | 7.92 | 4.34 | 73.71 | 73.65 | 0.005 |
| CO-17 | CB-9 | CB-10 | 13 | 1 | 235.0 | 2.23 | 1.00 | 4.02 | 5.25 | 85.90 | 83.35 | 0.011 |
| CO-18 | DB-2 | CB-10 | 12 | 2 | 35.0 | 2.14 | 1.25 | 5.02 | 3.92 | 77.94 | 77.76 | 0.005 |
| CO-19 | CB-10 | CB-11 | 12 | 3 | 45.0 | 4.60 | 1.25 | 7.45 | 6.39 | 77.76 | 77.25 | 0.011 |
| CO-20 | DB-1 | CB-11 | 11 | 2 | 32.0 | 2.13 | 1.00 | 3.86 | 5.04 | 81.79 | 81.47 | 0.010 |
| CO-21 | CB-11 | CB-13 | 11 | 3 | 83.0 | 6.92 | 1.50 | 13.96 | 7.89 | 77.00 | 75.75 | 0.015 |
| CO-22 | CB-12 | CB-13 | 14 | 1 | 40.0 | 0.52 | 1.00 | 2.73 | 2.68 | 78.40 | 78.20 | 0.005 |
| CO-23 | CB-13 | CB-14 | 11 | 4 | 69.0 | 7.50 | 1.50 | 13.97 | 8.05 | 75.75 | 74.71 | 0.015 |
| CO-24 | YD-3 | CB-14 | 10 | 1 | 62.0 | 0.22 | 0.83 | 5.56 | 4.94 | 79.00 | 75.60 | 0.055 |
| CO-25 | CB-14 | DMH-2 | 10 | 2 | 25.0 | 8.96 | 1.50 | 14.03 | 8.42 | 74.55 | 74.17 | 0.015 |
| CO-26 | DMH-2 | CDS-5 | 9 | 2 | 94.0 | 10.36 | 2.00 | 17.33 | 5.76 | 73.67 | 73.20 | 0.005 |
| CO-27 | CDS-5 | ICS-4 | 9 | 3 | 39.0 | 10.23 | 2.00 | 17.55 | 5.80 | 73.20 | 73.00 | 0.005 |
| CO-28 | OCS-2 | DMH-3 | 1 | 1 | 121.0 | 1.20 | 1.25 | 4.59 | 3.15 | 73.00 | 72.39 | 0.005 |
| CO-29 | DMH-3 | DMH-6 | 1 | 2 | 35.0 | 1.20 | 1.25 | 4.63 | 3.17 | 72.39 | 72.21 | 0.005 |
| CO-30 | DMH-6 | CB-17 | 1 | 3 | 95.0 | 1.20 | 1.25 | 4.82 | 3.26 | 72.21 | 71.76 | 0.005 |
| CO-31 | CB-15 | CDS-6 | 3 | 1 | 93.0 | 1.67 | 1.00 | 2.53 | 3.44 | 72.70 | 72.23 | 0.005 |
| CO-32 | CB-16 | CDS-6 | 4 | 1 | 88.0 | 0.86 | 1.00 | 2.43 | 2.83 | 73.35 | 72.94 | 0.005 |
| CO-33 | CDS-6 | ICS-5 | 3 | 2 | 6.0 | 2.46 | 1.25 | 8.08 | 5.78 | 71.98 | 71.90 | 0.013 |
| CO-34 | EX-MH1 | ICS-6 | 8 | 1 | 32.0 | 3.19 | 1.25 | 5.10 | 4.39 | 72.57 | 72.40 | 0.005 |
| CO-35 | OCS-4 | CB-17 | 2 | 1 | 10.0 | 1.69 | 1.25 | 6.46 | 4.43 | 71.10 | 71.00 | 0.010 |
| CO-36 | CB-17 | O-3 | 1 | 4 | 120.0 | 3.05 | 1.50 | 7.43 | 4.00 | 70.50 | 69.90 | 0.005 |
| RL-A | T-A | DB-2 | 12 | 1 | 6.0 | 2.14 | 1.00 | 3.86 | 5.04 | 78.00 | 77.94 | 0.010 |
| RL-B | T-B | DB-1 | 11 | 1 | 18.0 | 2.14 | 0.83 | 4.11 | 7.61 | 82.50 | 81.96 | 0.030 |
| RL-C | T-C | DMH-2 | 9 | 1 | 29.0 | 2.12 | 0.83 | 3.36 | 6.51 | 76.70 | 76.12 | 0.020 |

10-YR

DOT Report - Time: 0.00 hours

| Label | -Node- Upstream Downstream | -Depth- Upstream Downstream | -EGL- Upstream Downstream | -Ground- Upstream Downstream | -HGL- Upstream Downstream | -Invert- Upstream Downstream | Section Discharge Capacity | -X- Upstream Downstream | -Y- Upstream Downstream |
|-------|----------------------------------|-----------------------------------|---------------------------------|------------------------------------|---------------------------------|------------------------------------|----------------------------------|----------------------------|----------------------------|
| CO-1 | 31 | 0.55 | 77.04 | 77.90 | 76.87 | 76.40 | 1.21 | 1,175,202.53 | 719,118.77 |
| | 32 | 1.02 | 76.13 | 78.00 | 76.00 | 74.97 | 2.73 | 1,175,206.68 | 718,929.56 |
| CO-7 | 38 | 0.18 | 74.24 | 80.10 | 74.18 | 74.00 | 0.19 | 1,175,093.10 | 718,887.71 |
| | 42 | (N/A) | (N/A) | 72.00 | 72.72 | 72.00 | 4.88 | 1,175,026.39 | 718,781.82 |
| CO-10 | 56 | 0.74 | 73.05 | 73.80 | 73.03 | 72.30 | 0.61 | 1,175,113.72 | 718,650.96 |
| | 57 | 0.75 | 73.04 | 75.10 | 73.03 | 72.24 | 2.73 | 1,175,097.91 | 718,651.33 |
| CO-11 | 57 | 0.79 | 73.07 | 75.10 | 72.99 | 72.24 | 1.48 | 1,175,097.91 | 718,651.33 |
| | 58 | 0.79 | 73.04 | 75.10 | 72.97 | 72.14 | 2.80 | 1,175,076.01 | 718,647.57 |
| CO-14 | 63 | 0.47 | 75.17 | 78.55 | 75.02 | 74.63 | 0.89 | 1,174,984.11 | 718,849.77 |
| | 64 | 0.99 | 74.92 | 77.36 | 74.85 | 73.80 | 2.73 | 1,174,926.71 | 718,803.07 |
| CO-17 | 77 | 0.78 | 86.81 | 89.40 | 86.54 | 85.90 | 2.23 | 1,174,683.41 | 719,349.27 |
| | 79 | 0.87 | 78.88 | 88.20 | 83.88 | 77.76 | 4.02 | 1,174,718.39 | 719,113.49 |
| CO-19 | 79 | 1.07 | 79.03 | 88.20 | 78.63 | 77.76 | 4.60 | 1,174,718.39 | 719,113.49 |
| | 78 | 1.02 | 78.55 | 88.10 | 78.25 | 77.00 | 7.45 | 1,174,767.00 | 719,116.42 |
| CO-28 | 68 | 0.44 | 73.59 | 79.60 | 73.44 | 73.00 | 1.20 | 1,174,871.80 | 718,928.80 |
| | 69 | 0.43 | 73.00 | 81.40 | 72.90 | 72.39 | 4.59 | 1,174,767.82 | 718,997.85 |
| CO-29 | 69 | 0.51 | 72.98 | 81.40 | 72.82 | 72.39 | 1.20 | 1,174,767.82 | 718,997.85 |
| | 70 | 0.43 | 72.82 | 81.40 | 72.72 | 72.21 | 4.63 | 1,174,729.19 | 719,003.28 |
| CO-36 | 72 | 0.79 | 71.42 | 78.35 | 71.17 | 70.50 | 3.05 | 1,174,651.98 | 719,065.44 |
| | 73 | (N/A) | (N/A) | 69.90 | 70.56 | 69.90 | 7.43 | 1,174,540.43 | 719,115.25 |
| CO-31 | 99 | 0.59 | 73.48 | 75.76 | 73.29 | 72.70 | 1.67 | 1,174,619.08 | 718,884.39 |
| | 100 | 0.63 | 73.06 | 77.50 | 72.93 | 71.98 | 2.53 | 1,174,588.70 | 718,975.68 |
| CO-32 | 98 | 0.47 | 73.89 | 76.85 | 73.76 | 73.35 | 0.86 | 1,174,540.24 | 719,051.92 |
| | 100 | 0.63 | 73.06 | 77.50 | 73.33 | 71.98 | 2.43 | 1,174,588.70 | 718,975.68 |
| CO-35 | 97 | 0.52 | 71.81 | 78.45 | 71.62 | 71.10 | 1.69 | 1,174,645.40 | 719,053.37 |
| | 72 | 0.67 | 71.58 | 78.35 | 71.45 | 70.50 | 6.46 | 1,174,651.98 | 719,065.44 |
| CO-3 | 46 | 0.81 | 78.72 | 82.00 | 78.42 | 77.76 | 2.40 | 1,175,145.14 | 719,024.79 |
| | 133 | 0.74 | 76.70 | 78.60 | 75.84 | 74.88 | 5.46 | 1,175,195.17 | 718,912.58 |
| CO-2 | 32 | 1.03 | 76.01 | 78.00 | 75.99 | 74.97 | 1.16 | 1,175,206.68 | 718,929.56 |
| | 133 | 0.74 | 76.70 | 78.60 | 75.99 | 74.88 | 8.05 | 1,175,195.17 | 718,912.58 |
| CO-5 | 41 | 0.37 | 76.91 | 80.00 | 76.83 | 76.50 | 0.50 | 1,175,035.88 | 718,879.60 |
| | 146 | 0.34 | 76.88 | 80.00 | 76.85 | 76.35 | 3.43 | 1,175,056.91 | 718,886.80 |
| CO-18 | 162 | 0.94 | 78.92 | 87.00 | 78.84 | 77.94 | 2.14 | 1,174,680.83 | 719,104.65 |
| | 79 | 0.87 | 78.88 | 88.20 | 78.83 | 77.76 | 5.02 | 1,174,718.39 | 719,113.49 |
| CO-20 | 163 | 0.76 | 82.68 | 86.00 | 82.41 | 81.79 | 2.13 | 1,174,801.56 | 719,106.59 |
| | 78 | 1.02 | 78.55 | 88.10 | 82.00 | 77.00 | 3.86 | 1,174,767.00 | 719,116.42 |
| CO-22 | 80 | 0.35 | 78.81 | 81.90 | 78.70 | 78.40 | 0.52 | 1,174,731.44 | 719,011.41 |
| | 161 | 1.06 | 77.33 | 82.65 | 78.50 | 75.75 | 2.73 | 1,174,769.40 | 719,030.18 |
| CO-23 | 161 | 1.31 | 77.30 | 82.65 | 76.81 | 75.75 | 7.50 | 1,174,769.40 | 719,030.18 |
| | 87 | 1.16 | 76.01 | 78.60 | 76.00 | 74.55 | 13.97 | 1,174,839.03 | 719,007.48 |
| CO-30 | 70 | 0.51 | 72.80 | 81.40 | 72.64 | 72.21 | 1.20 | 1,174,729.19 | 719,003.28 |
| | 72 | 0.67 | 71.58 | 78.35 | 72.19 | 70.50 | 4.82 | 1,174,651.98 | 719,065.44 |
| CO-4 | 133 | 1.11 | 75.91 | 78.60 | 75.62 | 74.88 | 3.74 | 1,175,195.17 | 718,912.58 |
| | 126 | (N/A) | (N/A) | 79.00 | 75.28 | 74.70 | 15.27 | 1,175,181.50 | 718,908.24 |
| CO-27 | 85 | 1.76 | 74.82 | 83.50 | 74.35 | 73.20 | 10.23 | 1,174,963.68 | 718,981.79 |
| | 139 | (N/A) | (N/A) | 81.70 | 74.10 | 73.00 | 17.55 | 1,174,976.71 | 718,946.36 |
| CO-33 | 100 | 0.95 | 72.86 | 77.50 | 72.61 | 71.98 | 2.46 | 1,174,588.70 | 718,975.68 |

10-YR

DOT Report - Time: 0.00 hours

| Label | -Node- Upstream Downstream | -Depth- Upstream Downstream | -EGL- Upstream Downstream | -Ground- Upstream Downstream | -HGL- Upstream Downstream | -Invert- Upstream Downstream | Section Discharge Capacity | -X- Upstream Downstream | -Y- Upstream Downstream |
|-------|----------------------------------|-----------------------------------|---------------------------------|------------------------------------|---------------------------------|------------------------------------|----------------------------------|----------------------------|----------------------------|
| CO-6 | 144 | (N/A) | (N/A) | 77.40 | 72.43 | 71.90 | 8.08 | 1,174,598.66 | 718,974.80 |
| | 146 | 0.50 | 76.82 | 80.00 | 76.69 | 76.35 | 0.67 | 1,175,056.91 | 718,886.80 |
| | 127 | (N/A) | (N/A) | 80.00 | 76.49 | 76.15 | 2.76 | 1,175,083.89 | 718,919.66 |
| RL-A | 214 | 0.89 | 79.02 | 86.00 | 78.89 | 78.00 | 2.14 | 1,174,677.66 | 719,112.00 |
| | 162 | 0.90 | 79.00 | 87.00 | 78.88 | 77.94 | 3.86 | 1,174,680.83 | 719,104.65 |
| RL-B | 213 | 0.65 | 83.49 | 91.00 | 83.15 | 82.50 | 2.14 | 1,174,807.00 | 719,125.70 |
| | 163 | 0.62 | 83.29 | 86.00 | 82.42 | 81.79 | 4.11 | 1,174,801.56 | 719,106.59 |
| CO-34 | 102 | 0.87 | 73.59 | 77.05 | 73.29 | 72.57 | 3.19 | 1,174,650.44 | 718,942.17 |
| | 239 | (N/A) | (N/A) | 77.20 | 73.12 | 72.40 | 5.10 | 1,174,631.87 | 718,971.88 |
| CO-21 | 78 | 1.25 | 78.47 | 88.10 | 78.02 | 77.00 | 6.92 | 1,174,767.00 | 719,116.42 |
| | 161 | 1.06 | 77.33 | 82.65 | 77.06 | 75.75 | 13.96 | 1,174,769.40 | 719,030.18 |
| CO-24 | 218 | 0.24 | 79.27 | 82.50 | 79.20 | 79.00 | 0.22 | 1,174,821.63 | 719,069.28 |
| | 87 | 1.16 | 76.01 | 78.60 | 76.00 | 74.55 | 5.56 | 1,174,839.03 | 719,007.48 |
| CO-25 | 87 | 1.45 | 76.29 | 78.60 | 75.71 | 74.55 | 8.96 | 1,174,839.03 | 719,007.48 |
| | 243 | 1.35 | 76.10 | 79.73 | 75.11 | 73.67 | 14.03 | 1,174,867.67 | 719,001.51 |
| CO-26 | 243 | 1.51 | 75.35 | 79.73 | 75.02 | 73.67 | 10.36 | 1,174,867.67 | 719,001.51 |
| | 85 | 1.15 | 75.15 | 83.50 | 74.96 | 73.20 | 17.33 | 1,174,963.68 | 718,981.79 |
| RL-C | 212 | 0.65 | 77.68 | 81.00 | 77.35 | 76.70 | 2.12 | 1,174,871.43 | 719,031.73 |
| | 243 | 1.35 | 76.10 | 79.73 | 76.61 | 73.67 | 3.36 | 1,174,867.67 | 719,001.51 |
| CO-12 | 58 | 0.83 | 73.02 | 75.10 | 72.93 | 72.14 | 1.65 | 1,175,076.01 | 718,647.57 |
| | 285 | 0.66 | 73.00 | 75.00 | 72.92 | 72.08 | 2.95 | 1,175,065.06 | 718,656.17 |
| CO-13 | 285 | 0.84 | 72.88 | 75.00 | 72.74 | 72.08 | 1.65 | 1,175,065.06 | 718,656.17 |
| | 59 | (N/A) | (N/A) | 72.00 | 72.72 | 72.00 | 2.74 | 1,175,051.70 | 718,665.73 |
| CO-8 | 288 | 0.33 | 74.45 | 77.10 | 74.42 | 74.10 | 0.30 | 1,175,059.21 | 718,746.15 |
| | 291 | 0.35 | 74.43 | 77.10 | 74.42 | 74.00 | 2.80 | 1,175,081.35 | 718,749.95 |
| CO-9 | 291 | 0.42 | 74.48 | 77.10 | 74.35 | 74.00 | 0.71 | 1,175,081.35 | 718,749.95 |
| | 57 | 0.75 | 73.04 | 75.10 | 73.03 | 72.24 | 5.23 | 1,175,097.91 | 718,651.33 |
| CO-15 | 64 | 1.05 | 74.92 | 77.36 | 74.79 | 73.80 | 3.51 | 1,174,926.71 | 718,803.07 |
| | 297 | 0.71 | 74.89 | 77.73 | 74.79 | 73.71 | 7.92 | 1,174,910.35 | 718,821.67 |
| CO-16 | 297 | 1.07 | 74.70 | 77.73 | 74.43 | 73.71 | 3.50 | 1,174,910.35 | 718,821.67 |
| | 140 | (N/A) | (N/A) | 78.00 | 74.35 | 73.65 | 7.92 | 1,174,906.33 | 718,834.48 |

25-YR
CatchBasin Table - Time: 0.00 hours

| ID | Label | Elevation (Ground) (ft) | Elevation (Rim) (ft) | Elevation (Invert) (ft) | Length (ft) | Width (ft) | Inlet Type | Inlet | Inlet Location | Inflow-Capture Curve | Capture Efficiency (Calculated) (%) | Flow (Captured) (cfs) | Hydraulic Grade Line (In) (ft) | Spread / Top Width (ft) |
|-----|-------|-------------------------|----------------------|-------------------------|-------------|------------|---------------|--|----------------|-----------------------|-------------------------------------|-----------------------|--------------------------------|-------------------------|
| 46 | CB-1 | 82.00 | 82.00 | 77.76 | 4.00 | 3.00 | Catalog Inlet | Combination Type C Single Grate - Grate Type A - Plain Curb | In Sag | <Collection: 0 items> | 100.0 | 2.89 | 78.66 | 12.2 |
| 41 | CB-2 | 80.00 | 80.00 | 76.50 | 4.00 | 4.72 | Catalog Inlet | Grate Type C-L Double Grate - Type I - Grate Type A | On Grade | <Collection: 0 items> | 97.6 | 0.60 | 76.92 | 4.4 |
| 288 | CB-3 | 77.10 | 77.10 | 74.10 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 99.2 | 0.37 | 74.48 | 3.9 |
| 291 | CB-4 | 77.10 | 77.10 | 74.00 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 97.6 | 0.50 | 74.46 | 4.4 |
| 57 | CB-5 | 75.10 | 75.10 | 72.24 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 100.0 | 0.24 | 73.52 | 3.3 |
| 58 | CB-6 | 75.10 | 75.10 | 72.14 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 100.0 | 0.22 | 73.44 | 3.2 |
| 63 | CB-7 | 78.55 | 78.55 | 74.63 | 6.53 | 3.00 | Catalog Inlet | Grate Type C-L Double Grate - Type II - Grate Type A | On Grade | <Collection: 0 items> | 74.2 | 1.03 | 75.14 | 5.6 |
| 64 | CB-8 | 77.36 | 77.36 | 73.80 | 6.53 | 3.00 | Catalog Inlet | Grate Type C-L Double Grate - Type II - Grate Type A | In Sag | <Collection: 0 items> | 100.0 | 3.28 | 74.99 | 13.4 |
| 77 | CB-9 | 89.40 | 89.40 | 85.90 | 4.00 | 3.00 | Catalog Inlet | Combination Type C Single Grate - Grate Type A - Plain Curb | In Sag | <Collection: 0 items> | 100.0 | 2.68 | 86.76 | 11.6 |
| 79 | CB-10 | 88.20 | 88.20 | 77.76 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 87.7 | 1.66 | 78.95 | 6.1 |

25-YR
CatchBasin Table - Time: 0.00 hours

| ID | Label | Elevation (Ground) (ft) | Elevation (Rim) (ft) | Elevation (Invert) (ft) | Length (ft) | Width (ft) | Inlet Type | Inlet | Inlet Location | Inflow-Capture Curve | Capture Efficiency (Calculated) (%) | Flow (Captured) (cfs) | Hydraulic Grade Line (In) (ft) | Spread / Top Width (ft) |
|-----|-------|-------------------------|----------------------|-------------------------|-------------|------------|---------------|--|----------------|-----------------------|-------------------------------------|-----------------------|--------------------------------|-------------------------|
| 78 | CB-11 | 88.10 | 88.10 | 77.00 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 89.2 | 1.52 | 78.38 | 5.8 |
| 80 | CB-12 | 81.90 | 81.90 | 78.40 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 98.4 | 0.67 | 78.80 | 4.1 |
| 161 | CB-13 | 82.65 | 82.65 | 75.75 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 99.9 | 0.54 | 77.21 | 3.5 |
| 87 | CB-14 | 78.60 | 78.60 | 74.55 | 4.00 | 3.00 | Catalog Inlet | Grate Type C-L Single Grate - Grate Type A | In Sag | <Collection: 0 items> | 100.0 | 1.66 | 76.17 | 11.1 |
| 99 | CB-15 | 75.76 | 75.76 | 72.70 | 6.53 | 3.00 | Catalog Inlet | Grate Type C-L Double Grate - Type II - Grate Type A | In Sag | <Collection: 0 items> | 100.0 | 2.01 | 73.37 | 10.0 |
| 98 | CB-16 | 76.85 | 76.85 | 73.35 | 4.00 | 3.00 | Catalog Inlet | Grate Type C-L Single Grate - Grate Type A | In Sag | <Collection: 0 items> | 100.0 | 1.04 | 73.87 | 8.5 |
| 72 | CB-17 | 78.35 | 78.35 | 70.50 | 5.30 | 4.30 | Full Capture | TYPE C COMBO SINGLE GRATE | In Sag | <Collection: 0 items> | 100.0 | 0.19 | 71.55 | 0.0 |
| 133 | CDS-1 | 78.60 | 78.60 | 74.88 | 4.00 | 3.00 | Catalog Inlet | Combination Type C Single Grate - Grate Type A - Plain Curb | In Sag | <Collection: 0 items> | 100.0 | 1.68 | 76.12 | 8.4 |
| 146 | CDS-2 | 80.00 | 80.00 | 76.35 | 4.00 | 3.00 | Catalog Inlet | Combination Type C Single Grate - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 90.1 | 0.20 | 76.90 | 3.0 |
| 31 | YD-1 | 77.90 | 77.90 | 76.40 | 3.79 | 4.79 | Full Capture | <None> | In Sag | <Collection: 0 items> | 100.0 | 1.45 | 77.02 | 0.0 |
| 56 | YD-2 | 73.80 | 73.80 | 72.30 | 4.79 | 3.79 | Full Capture | <None> | In Sag | <Collection: 0 items> | 100.0 | 0.74 | 73.53 | 0.0 |
| 218 | YD-3 | 82.50 | 82.50 | 79.00 | 3.79 | 4.79 | Full Capture | <None> | In Sag | <Collection: 0 items> | 100.0 | 0.26 | 79.26 | 0.0 |

25-YR

Combined Pipe/Node Report - Time: 0.00 hours

| Label | Start Node | Stop Node | Branch ID | Branch Element ID | Length (Unified) (ft) | Flow (cfs) | Rise (Unified) (ft) | Capacity (Full Flow) (cfs) | Velocity (ft/s) | Invert (Start) (ft) | Invert (Stop) (ft) | Slope (Calculated) (ft/ft) |
|-------|------------|-----------|-----------|-------------------|-----------------------|------------|---------------------|----------------------------|-----------------|---------------------|--------------------|----------------------------|
| CO-1 | YD-1 | DMH-1 | 16 | 1 | 186.0 | 1.45 | 1.00 | 2.73 | 3.53 | 76.40 | 75.47 | 0.005 |
| CO-2 | DMH-1 | CDS-1 | 16 | 2 | 18.0 | 1.40 | 1.50 | 8.05 | 3.42 | 74.97 | 74.88 | 0.005 |
| CO-3 | CB-1 | CDS-1 | 17 | 1 | 119.0 | 2.89 | 1.00 | 5.46 | 7.05 | 77.76 | 75.38 | 0.020 |
| CO-4 | CDS-1 | ICS-1 | 16 | 3 | 10.0 | 4.50 | 1.50 | 15.27 | 7.52 | 74.88 | 74.70 | 0.018 |
| CO-5 | CB-2 | CDS-2 | 18 | 1 | 19.0 | 0.60 | 1.00 | 3.43 | 3.28 | 76.50 | 76.35 | 0.008 |
| CO-6 | CDS-2 | ICS-2 | 18 | 2 | 39.0 | 0.80 | 1.00 | 2.76 | 3.04 | 76.35 | 76.15 | 0.005 |
| CO-7 | OCS-1 | O-1 | 5 | 1 | 125.0 | 0.37 | 1.00 | 4.88 | 3.67 | 74.00 | 72.00 | 0.016 |
| CO-8 | CB-3 | CB-4 | 7 | 1 | 19.0 | 0.37 | 1.00 | 2.80 | 2.47 | 74.10 | 74.00 | 0.005 |
| CO-9 | CB-4 | CB-5 | 7 | 2 | 96.0 | 0.86 | 1.00 | 5.23 | 4.92 | 74.00 | 72.24 | 0.018 |
| CO-10 | YD-2 | CB-5 | 6 | 1 | 12.0 | 0.74 | 1.00 | 2.73 | 0.94 | 72.30 | 72.24 | 0.005 |
| CO-11 | CB-5 | CB-6 | 6 | 2 | 19.0 | 1.79 | 1.00 | 2.80 | 2.28 | 72.24 | 72.14 | 0.005 |
| CO-12 | CB-6 | CDS-3 | 6 | 3 | 11.0 | 1.99 | 1.00 | 2.95 | 2.54 | 72.14 | 72.08 | 0.006 |
| CO-13 | CDS-3 | O-2 | 6 | 4 | 15.0 | 1.99 | 1.00 | 2.74 | 2.53 | 72.08 | 72.00 | 0.005 |
| CO-14 | CB-7 | CB-8 | 15 | 1 | 66.0 | 1.03 | 1.00 | 2.73 | 3.23 | 74.63 | 74.30 | 0.005 |
| CO-15 | CB-8 | CDS-4 | 15 | 2 | 18.0 | 4.23 | 1.50 | 7.92 | 4.55 | 73.80 | 73.71 | 0.005 |
| CO-16 | CDS-4 | ICS-3 | 15 | 3 | 13.0 | 4.21 | 1.50 | 7.92 | 4.55 | 73.71 | 73.65 | 0.005 |
| CO-17 | CB-9 | CB-10 | 13 | 1 | 235.0 | 2.68 | 1.00 | 4.02 | 5.48 | 85.90 | 83.35 | 0.011 |
| CO-18 | DB-2 | CB-10 | 12 | 2 | 35.0 | 2.57 | 1.25 | 5.02 | 4.12 | 77.94 | 77.76 | 0.005 |
| CO-19 | CB-10 | CB-11 | 12 | 3 | 45.0 | 5.51 | 1.25 | 7.45 | 6.64 | 77.76 | 77.25 | 0.011 |
| CO-20 | DB-1 | CB-11 | 11 | 2 | 32.0 | 2.57 | 1.00 | 3.86 | 5.26 | 81.79 | 81.47 | 0.010 |
| CO-21 | CB-11 | CB-13 | 11 | 3 | 83.0 | 8.28 | 1.50 | 13.96 | 8.24 | 77.00 | 75.75 | 0.015 |
| CO-22 | CB-12 | CB-13 | 14 | 1 | 40.0 | 0.67 | 1.00 | 2.73 | 2.87 | 78.40 | 78.20 | 0.005 |
| CO-23 | CB-13 | CB-14 | 11 | 4 | 69.0 | 9.03 | 1.50 | 13.97 | 8.41 | 75.75 | 74.71 | 0.015 |
| CO-24 | YD-3 | CB-14 | 10 | 1 | 62.0 | 0.26 | 0.83 | 5.56 | 5.22 | 79.00 | 75.60 | 0.055 |
| CO-25 | CB-14 | DMH-2 | 10 | 2 | 25.0 | 10.80 | 1.50 | 14.03 | 8.76 | 74.55 | 74.17 | 0.015 |
| CO-26 | DMH-2 | CDS-5 | 9 | 2 | 94.0 | 12.49 | 2.00 | 17.33 | 6.01 | 73.67 | 73.20 | 0.005 |
| CO-27 | CDS-5 | ICS-4 | 9 | 3 | 39.0 | 12.34 | 2.00 | 17.55 | 6.05 | 73.20 | 73.00 | 0.005 |
| CO-28 | OCS-2 | DMH-3 | 1 | 1 | 121.0 | 1.80 | 1.25 | 4.59 | 3.51 | 73.00 | 72.39 | 0.005 |
| CO-29 | DMH-3 | DMH-6 | 1 | 2 | 35.0 | 1.80 | 1.25 | 4.63 | 3.54 | 72.39 | 72.21 | 0.005 |
| CO-30 | DMH-6 | CB-17 | 1 | 3 | 95.0 | 1.80 | 1.25 | 4.82 | 3.64 | 72.21 | 71.76 | 0.005 |
| CO-31 | CB-15 | CDS-6 | 3 | 1 | 93.0 | 2.01 | 1.00 | 2.53 | 3.58 | 72.70 | 72.23 | 0.005 |
| CO-32 | CB-16 | CDS-6 | 4 | 1 | 88.0 | 1.04 | 1.00 | 2.43 | 2.97 | 73.35 | 72.94 | 0.005 |
| CO-33 | CDS-6 | ICS-5 | 3 | 2 | 6.0 | 2.96 | 1.25 | 8.08 | 6.08 | 71.98 | 71.90 | 0.013 |
| CO-34 | EX-MH1 | ICS-6 | 8 | 1 | 32.0 | 4.10 | 1.25 | 5.10 | 4.62 | 72.57 | 72.40 | 0.005 |
| CO-35 | OCS-4 | CB-17 | 2 | 1 | 10.0 | 2.95 | 1.25 | 6.46 | 5.15 | 71.10 | 71.00 | 0.010 |
| CO-36 | CB-17 | O-3 | 1 | 4 | 120.0 | 4.94 | 1.50 | 7.43 | 4.50 | 70.50 | 69.90 | 0.005 |
| RL-A | T-A | DB-2 | 12 | 1 | 6.0 | 2.57 | 1.00 | 3.86 | 3.28 | 78.00 | 77.94 | 0.010 |
| RL-B | T-B | DB-1 | 11 | 1 | 18.0 | 2.57 | 0.83 | 4.11 | 7.95 | 82.50 | 81.96 | 0.030 |
| RL-C | T-C | DMH-2 | 9 | 1 | 29.0 | 2.54 | 0.83 | 3.36 | 6.77 | 76.70 | 76.12 | 0.020 |

25-YR

DOT Report - Time: 0.00 hours

| Label | -Node- Upstream Downstream | -Depth- Upstream Downstream | -EGL- Upstream Downstream | -Ground- Upstream Downstream | -HGL- Upstream Downstream | -Invert- Upstream Downstream | Section Discharge Capacity | -X- Upstream Downstream | -Y- Upstream Downstream |
|-------|----------------------------------|-----------------------------------|---------------------------------|------------------------------------|---------------------------------|------------------------------------|----------------------------------|----------------------------|----------------------------|
| CO-1 | 31 | 0.62 | 77.11 | 77.90 | 76.92 | 76.40 | 1.45 | 1,175,202.53 | 719,118.77 |
| | 32 | 1.15 | 76.24 | 78.00 | 76.13 | 74.97 | 2.73 | 1,175,206.68 | 718,929.56 |
| CO-7 | 38 | 0.25 | 74.34 | 80.10 | 74.25 | 74.00 | 0.37 | 1,175,093.10 | 718,887.71 |
| | 42 | (N/A) | (N/A) | 72.00 | 73.19 | 72.00 | 4.88 | 1,175,026.39 | 718,781.82 |
| CO-10 | 56 | 1.23 | 73.54 | 73.80 | 73.52 | 72.30 | 0.74 | 1,175,113.72 | 718,650.96 |
| | 57 | 1.24 | 73.53 | 75.10 | 73.52 | 72.24 | 2.73 | 1,175,097.91 | 718,651.33 |
| CO-11 | 57 | 1.28 | 73.56 | 75.10 | 73.48 | 72.24 | 1.79 | 1,175,097.91 | 718,651.33 |
| | 58 | 1.25 | 73.52 | 75.10 | 73.44 | 72.14 | 2.80 | 1,175,076.01 | 718,647.57 |
| CO-14 | 63 | 0.51 | 75.22 | 78.55 | 75.06 | 74.63 | 1.03 | 1,174,984.11 | 718,849.77 |
| | 64 | 1.12 | 75.04 | 77.36 | 74.99 | 73.80 | 2.73 | 1,174,926.71 | 718,803.07 |
| CO-17 | 77 | 0.86 | 86.92 | 89.40 | 86.60 | 85.90 | 2.68 | 1,174,683.41 | 719,349.27 |
| | 79 | 0.95 | 79.02 | 88.20 | 83.95 | 77.76 | 4.02 | 1,174,718.39 | 719,113.49 |
| CO-19 | 79 | 1.19 | 79.18 | 88.20 | 78.71 | 77.76 | 5.51 | 1,174,718.39 | 719,113.49 |
| | 78 | 1.11 | 78.73 | 88.10 | 78.38 | 77.00 | 7.45 | 1,174,767.00 | 719,116.42 |
| CO-28 | 68 | 0.54 | 73.74 | 79.60 | 73.54 | 73.00 | 1.80 | 1,174,871.80 | 718,928.80 |
| | 69 | 0.54 | 73.16 | 81.40 | 73.03 | 72.39 | 4.59 | 1,174,767.82 | 718,997.85 |
| CO-29 | 69 | 0.64 | 73.13 | 81.40 | 72.93 | 72.39 | 1.80 | 1,174,767.82 | 718,997.85 |
| | 70 | 0.53 | 72.97 | 81.40 | 72.84 | 72.21 | 4.63 | 1,174,729.19 | 719,003.28 |
| CO-36 | 72 | 1.05 | 71.71 | 78.35 | 71.39 | 70.50 | 4.94 | 1,174,651.98 | 719,065.44 |
| | 73 | (N/A) | (N/A) | 69.90 | 70.76 | 69.90 | 7.43 | 1,174,540.43 | 719,115.25 |
| CO-31 | 99 | 0.67 | 73.57 | 75.76 | 73.37 | 72.70 | 2.01 | 1,174,619.08 | 718,884.39 |
| | 100 | 0.69 | 73.17 | 77.50 | 73.04 | 71.98 | 2.53 | 1,174,588.70 | 718,975.68 |
| CO-32 | 98 | 0.52 | 73.94 | 76.85 | 73.81 | 73.35 | 1.04 | 1,174,540.24 | 719,051.92 |
| | 100 | 0.69 | 73.17 | 77.50 | 73.37 | 71.98 | 2.43 | 1,174,588.70 | 718,975.68 |
| CO-35 | 97 | 0.69 | 72.07 | 78.45 | 71.79 | 71.10 | 2.95 | 1,174,645.40 | 719,053.37 |
| | 72 | 0.89 | 71.93 | 78.35 | 71.61 | 70.50 | 6.46 | 1,174,651.98 | 719,065.44 |
| CO-3 | 46 | 0.90 | 78.83 | 82.00 | 78.49 | 77.76 | 2.89 | 1,175,145.14 | 719,024.79 |
| | 133 | 0.81 | 76.13 | 78.60 | 76.12 | 74.88 | 5.46 | 1,175,195.17 | 718,912.58 |
| CO-2 | 32 | 1.16 | 76.14 | 78.00 | 76.12 | 74.97 | 1.40 | 1,175,206.68 | 718,929.56 |
| | 133 | 0.81 | 76.13 | 78.60 | 76.12 | 74.88 | 8.05 | 1,175,195.17 | 718,912.58 |
| CO-5 | 41 | 0.42 | 76.96 | 80.00 | 76.88 | 76.50 | 0.60 | 1,175,035.88 | 718,879.60 |
| | 146 | 0.37 | 76.93 | 80.00 | 76.90 | 76.35 | 3.43 | 1,175,056.91 | 718,886.80 |
| CO-18 | 162 | 1.08 | 79.06 | 87.00 | 78.97 | 77.94 | 2.57 | 1,174,680.83 | 719,104.65 |
| | 79 | 0.95 | 79.02 | 88.20 | 78.95 | 77.76 | 5.02 | 1,174,718.39 | 719,113.49 |
| CO-20 | 163 | 0.84 | 82.79 | 86.00 | 82.48 | 81.79 | 2.57 | 1,174,801.56 | 719,106.59 |
| | 78 | 1.11 | 78.73 | 88.10 | 82.07 | 77.00 | 3.86 | 1,174,767.00 | 719,116.42 |
| CO-22 | 80 | 0.40 | 78.86 | 81.90 | 78.74 | 78.40 | 0.67 | 1,174,731.44 | 719,011.41 |
| | 161 | 1.16 | 77.55 | 82.65 | 78.54 | 75.75 | 2.73 | 1,174,769.40 | 719,030.18 |
| CO-23 | 161 | 1.46 | 77.50 | 82.65 | 76.91 | 75.75 | 9.03 | 1,174,769.40 | 719,030.18 |
| | 87 | 1.26 | 76.18 | 78.60 | 76.17 | 74.55 | 13.97 | 1,174,839.03 | 719,007.48 |
| CO-30 | 70 | 0.63 | 72.95 | 81.40 | 72.74 | 72.21 | 1.80 | 1,174,729.19 | 719,003.28 |
| | 72 | 0.89 | 71.93 | 78.35 | 72.29 | 70.50 | 4.82 | 1,174,651.98 | 719,065.44 |
| CO-4 | 133 | 1.24 | 76.02 | 78.60 | 75.69 | 74.88 | 4.50 | 1,175,195.17 | 718,912.58 |
| | 126 | (N/A) | (N/A) | 79.00 | 75.35 | 74.70 | 15.27 | 1,175,181.50 | 718,908.24 |
| CO-27 | 85 | 1.96 | 75.01 | 83.50 | 74.49 | 73.20 | 12.34 | 1,174,963.68 | 718,981.79 |
| | 139 | (N/A) | (N/A) | 81.70 | 74.48 | 73.00 | 17.55 | 1,174,976.71 | 718,946.36 |
| CO-33 | 100 | 1.06 | 72.95 | 77.50 | 72.67 | 71.98 | 2.96 | 1,174,588.70 | 718,975.68 |

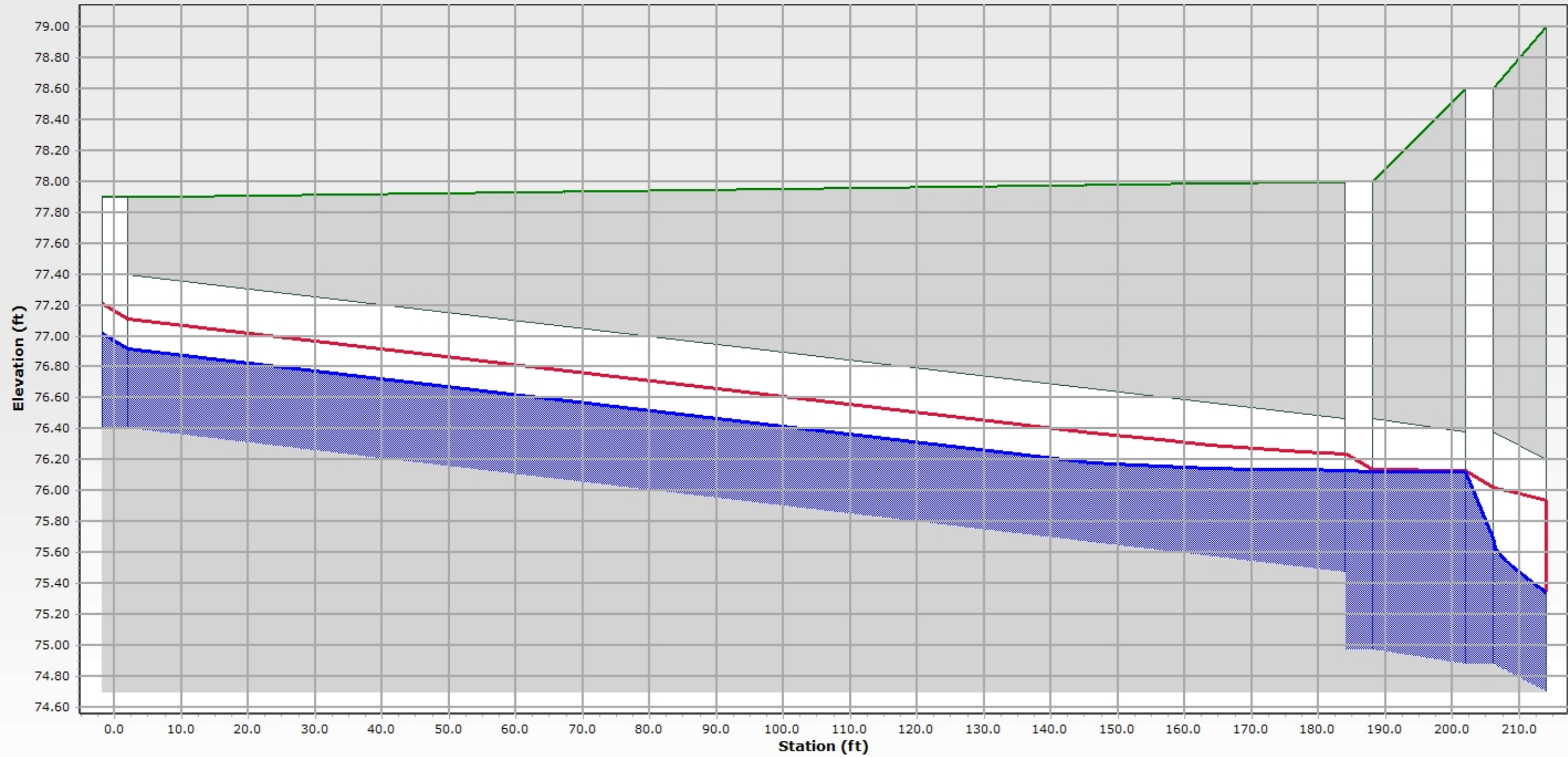
25-YR

DOT Report - Time: 0.00 hours

| Label | -Node- Upstream Downstream | -Depth- Upstream Downstream | -EGL- Upstream Downstream | -Ground- Upstream Downstream | -HGL- Upstream Downstream | -Invert- Upstream Downstream | Section Discharge Capacity | -X- Upstream Downstream | -Y- Upstream Downstream |
|-------|----------------------------------|-----------------------------------|---------------------------------|------------------------------------|---------------------------------|------------------------------------|----------------------------------|----------------------------|----------------------------|
| CO-6 | 144 | (N/A) | (N/A) | 77.40 | 72.49 | 71.90 | 8.08 | 1,174,598.66 | 718,974.80 |
| | 146 | 0.55 | 76.86 | 80.00 | 76.72 | 76.35 | 0.80 | 1,175,056.91 | 718,886.80 |
| | 127 | (N/A) | (N/A) | 80.00 | 76.52 | 76.15 | 2.76 | 1,175,083.89 | 718,919.66 |
| RL-A | 214 | 1.04 | 79.21 | 86.00 | 79.04 | 78.00 | 2.57 | 1,174,677.66 | 719,112.00 |
| | 162 | 1.03 | 79.18 | 87.00 | 79.02 | 77.94 | 3.86 | 1,174,680.83 | 719,104.65 |
| RL-B | 213 | 0.71 | 83.63 | 91.00 | 83.21 | 82.50 | 2.57 | 1,174,807.00 | 719,125.70 |
| | 163 | 0.69 | 83.44 | 86.00 | 82.48 | 81.79 | 4.11 | 1,174,801.56 | 719,106.59 |
| CO-34 | 102 | 1.01 | 73.75 | 77.05 | 73.42 | 72.57 | 4.10 | 1,174,650.44 | 718,942.17 |
| | 239 | (N/A) | (N/A) | 77.20 | 73.22 | 72.40 | 5.10 | 1,174,631.87 | 718,971.88 |
| CO-21 | 78 | 1.38 | 78.65 | 88.10 | 78.11 | 77.00 | 8.28 | 1,174,767.00 | 719,116.42 |
| | 161 | 1.16 | 77.55 | 82.65 | 77.21 | 75.75 | 13.96 | 1,174,769.40 | 719,030.18 |
| CO-24 | 218 | 0.26 | 79.30 | 82.50 | 79.22 | 79.00 | 0.26 | 1,174,821.63 | 719,069.28 |
| | 87 | 1.26 | 76.18 | 78.60 | 76.17 | 74.55 | 5.56 | 1,174,839.03 | 719,007.48 |
| CO-25 | 87 | 1.62 | 76.53 | 78.60 | 75.81 | 74.55 | 10.80 | 1,174,839.03 | 719,007.48 |
| | 243 | 1.64 | 76.16 | 79.73 | 75.47 | 73.67 | 14.03 | 1,174,867.67 | 719,001.51 |
| CO-26 | 243 | 1.80 | 75.63 | 79.73 | 75.31 | 73.67 | 12.49 | 1,174,867.67 | 719,001.51 |
| | 85 | 1.29 | 75.41 | 83.50 | 75.16 | 73.20 | 17.33 | 1,174,963.68 | 718,981.79 |
| RL-C | 212 | 0.71 | 77.82 | 81.00 | 77.41 | 76.70 | 2.54 | 1,174,871.43 | 719,031.73 |
| | 243 | 1.64 | 76.16 | 79.73 | 76.68 | 73.67 | 3.36 | 1,174,867.67 | 719,001.51 |
| CO-12 | 58 | 1.30 | 73.49 | 75.10 | 73.39 | 72.14 | 1.99 | 1,175,076.01 | 718,647.57 |
| | 285 | 1.15 | 73.46 | 75.00 | 73.36 | 72.08 | 2.95 | 1,175,065.06 | 718,656.17 |
| CO-13 | 285 | 1.28 | 73.33 | 75.00 | 73.23 | 72.08 | 1.99 | 1,175,065.06 | 718,656.17 |
| | 59 | (N/A) | (N/A) | 72.00 | 73.19 | 72.00 | 2.74 | 1,175,051.70 | 718,665.73 |
| CO-8 | 288 | 0.38 | 74.49 | 77.10 | 74.46 | 74.10 | 0.37 | 1,175,059.21 | 718,746.15 |
| | 291 | 0.39 | 74.48 | 77.10 | 74.46 | 74.00 | 2.80 | 1,175,081.35 | 718,749.95 |
| CO-9 | 291 | 0.46 | 74.53 | 77.10 | 74.39 | 74.00 | 0.86 | 1,175,081.35 | 718,749.95 |
| | 57 | 1.24 | 73.53 | 75.10 | 73.52 | 72.24 | 5.23 | 1,175,097.91 | 718,651.33 |
| CO-15 | 64 | 1.19 | 75.06 | 77.36 | 74.92 | 73.80 | 4.23 | 1,174,926.71 | 718,803.07 |
| | 297 | 0.79 | 75.03 | 77.73 | 74.91 | 73.71 | 7.92 | 1,174,910.35 | 718,821.67 |
| CO-16 | 297 | 1.19 | 74.81 | 77.73 | 74.50 | 73.71 | 4.21 | 1,174,910.35 | 718,821.67 |
| | 140 | (N/A) | (N/A) | 78.00 | 74.48 | 73.65 | 7.92 | 1,174,906.33 | 718,834.48 |

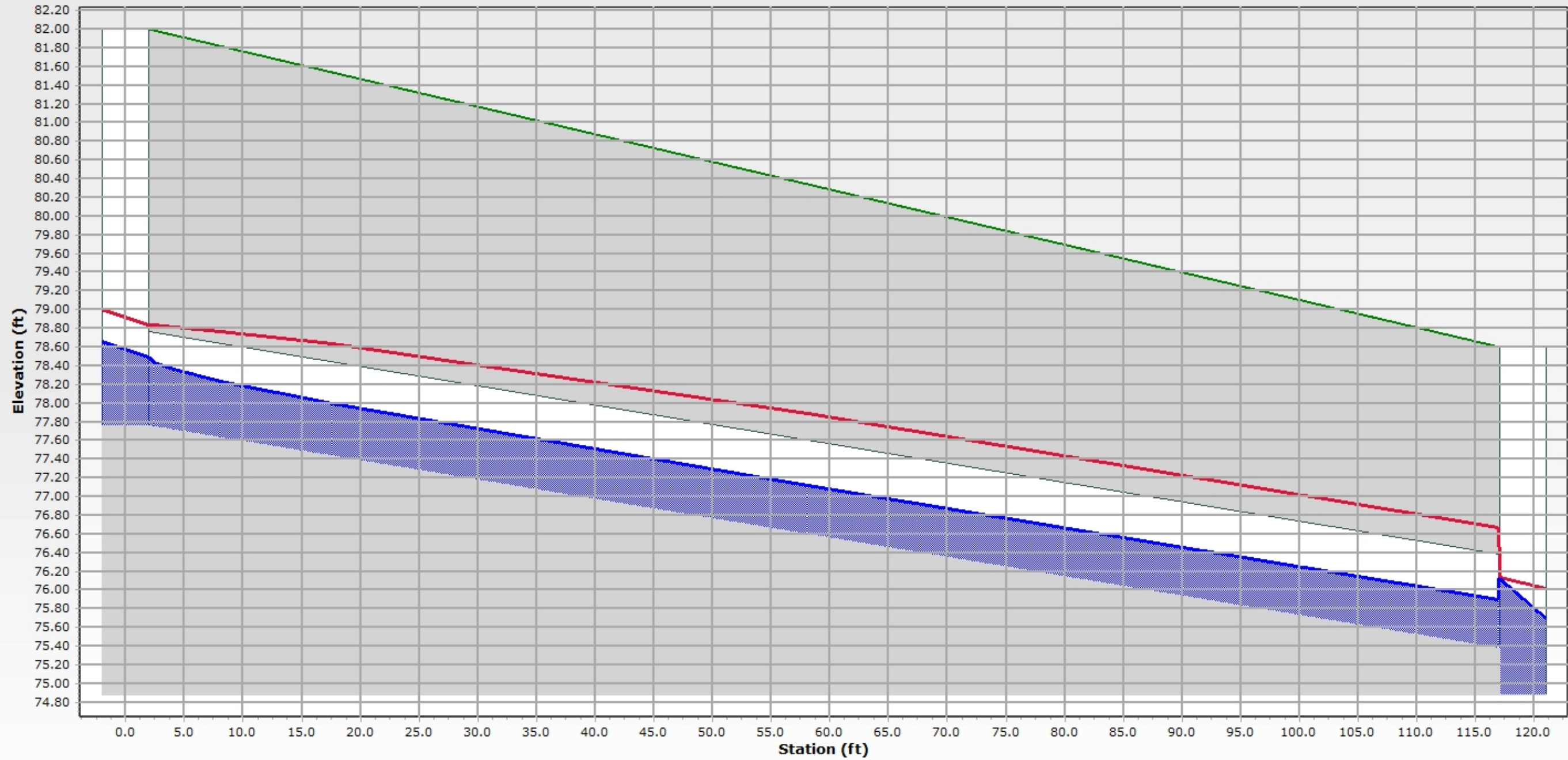
25-YR

VD-1 to ICS-1



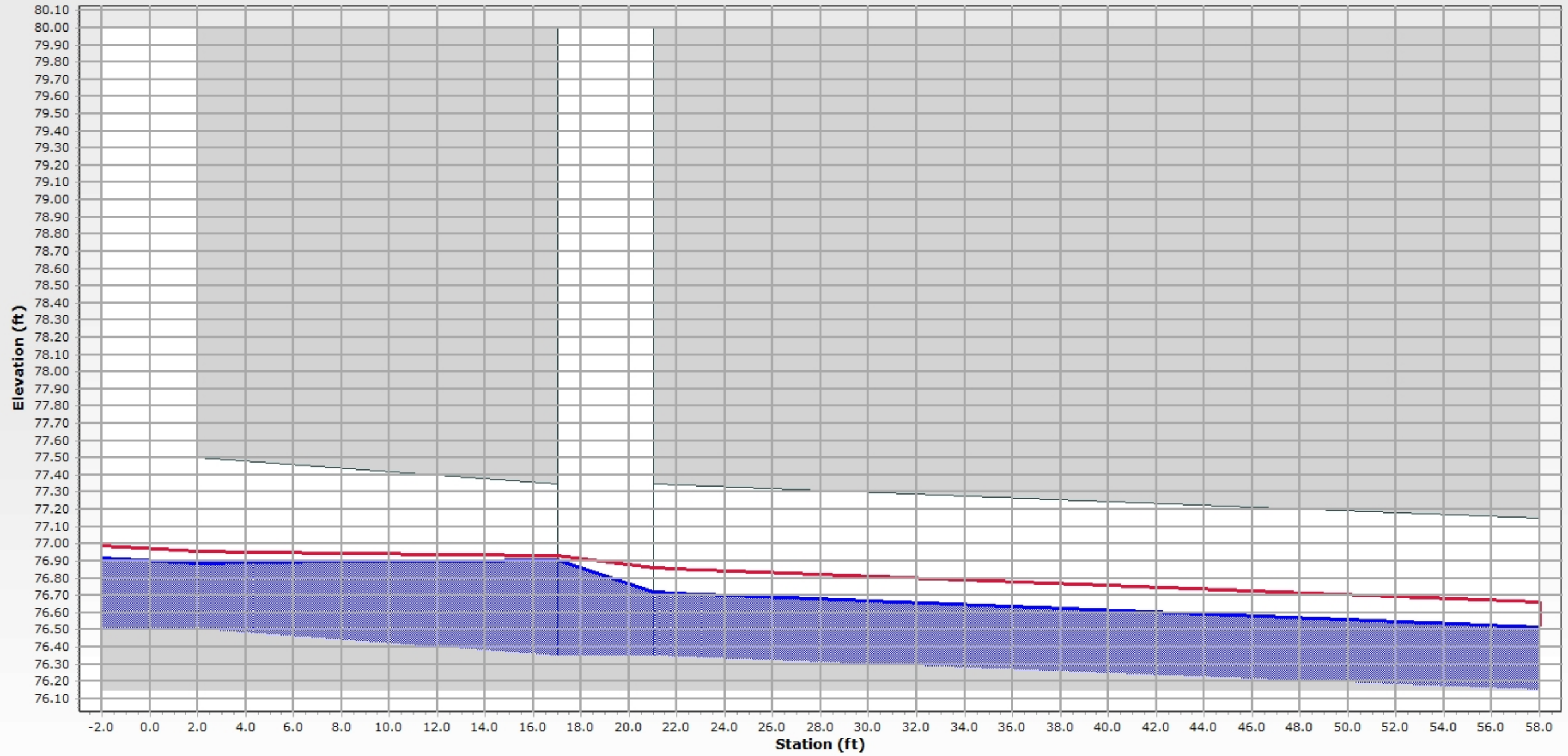
25-YR

CB-1 to CDS-1



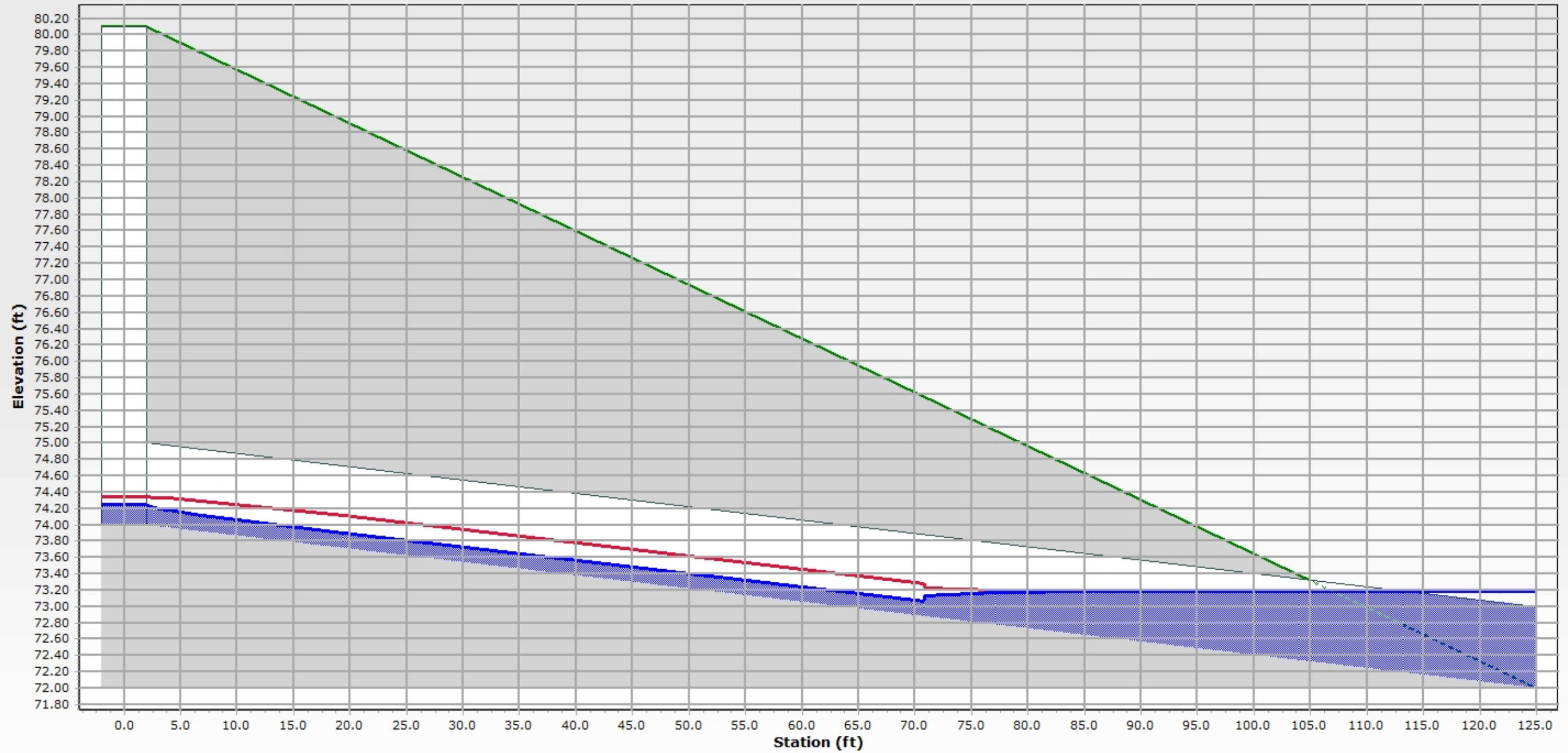
25-YR

CB-2 to ICS-2



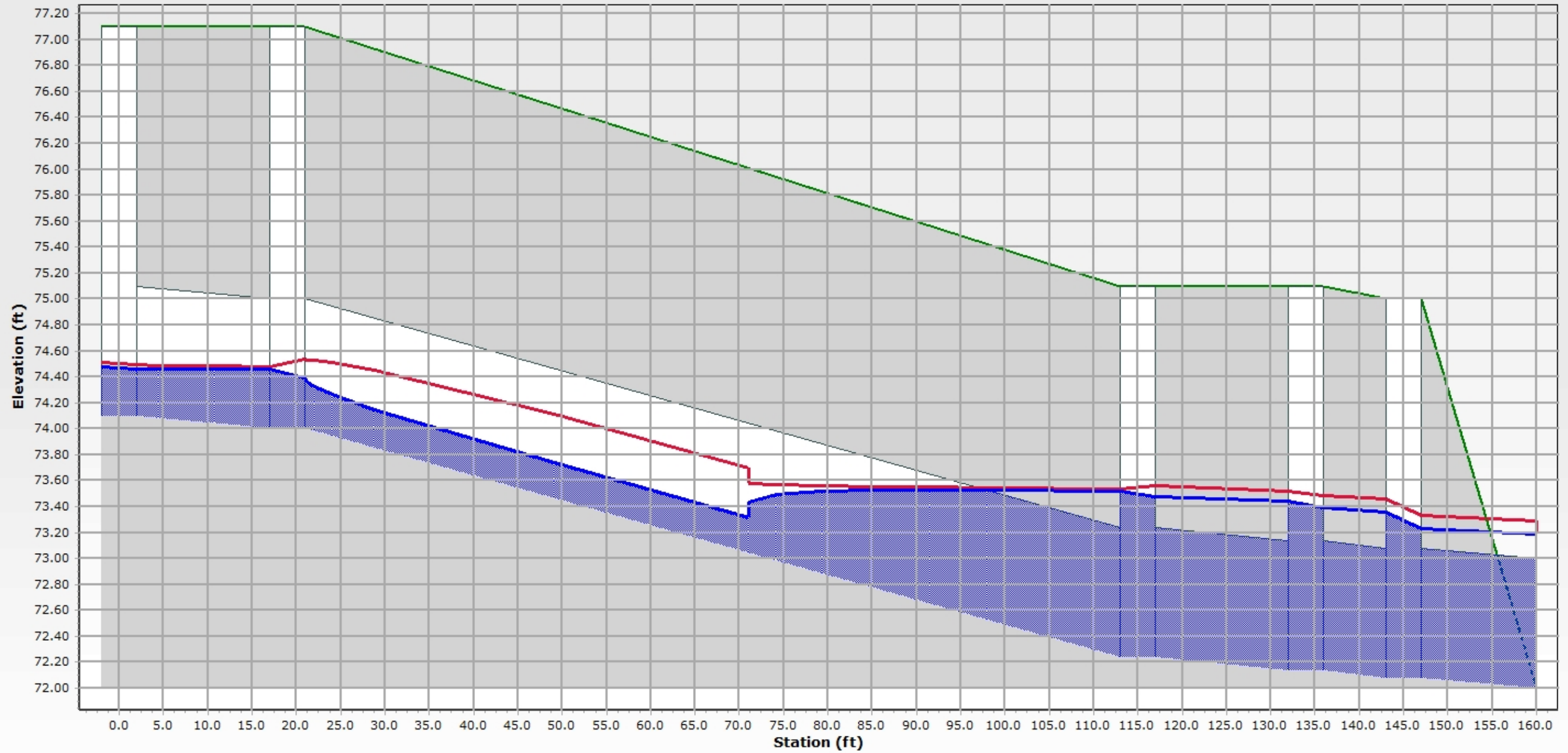
25-YR

OCS-1 to O-1



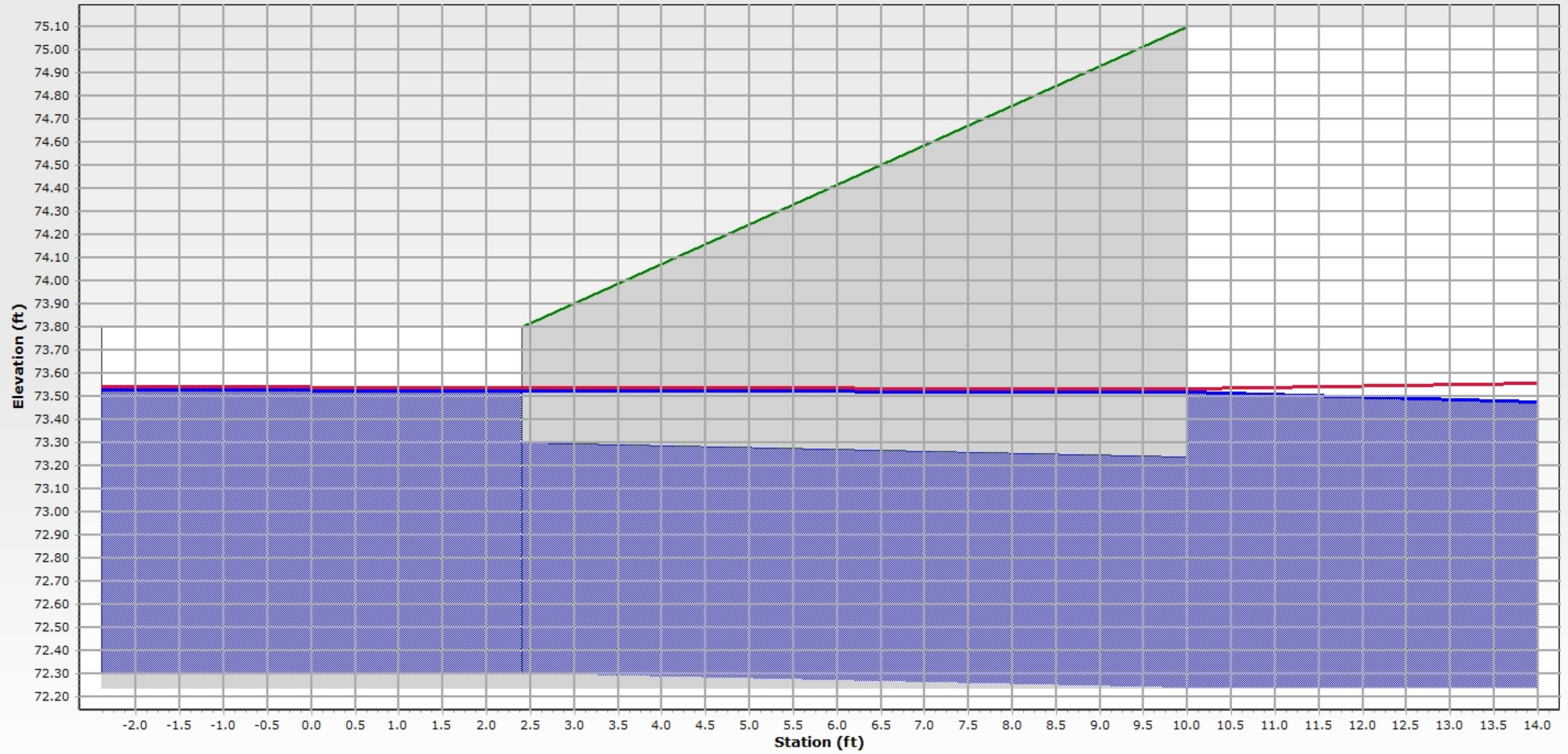
25-YR

CB-3 to O-2



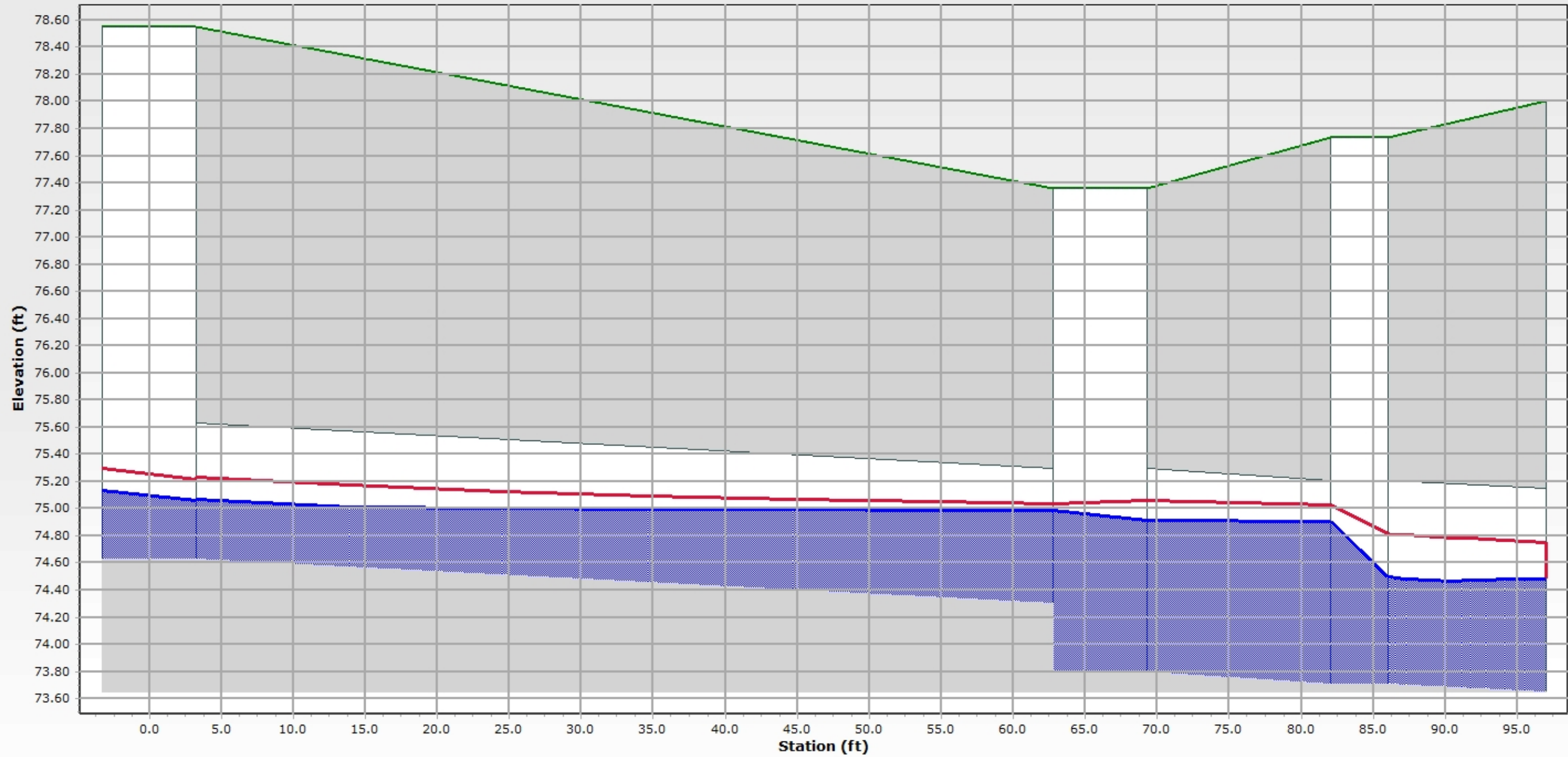
25-YR

YD-2 to CB-5



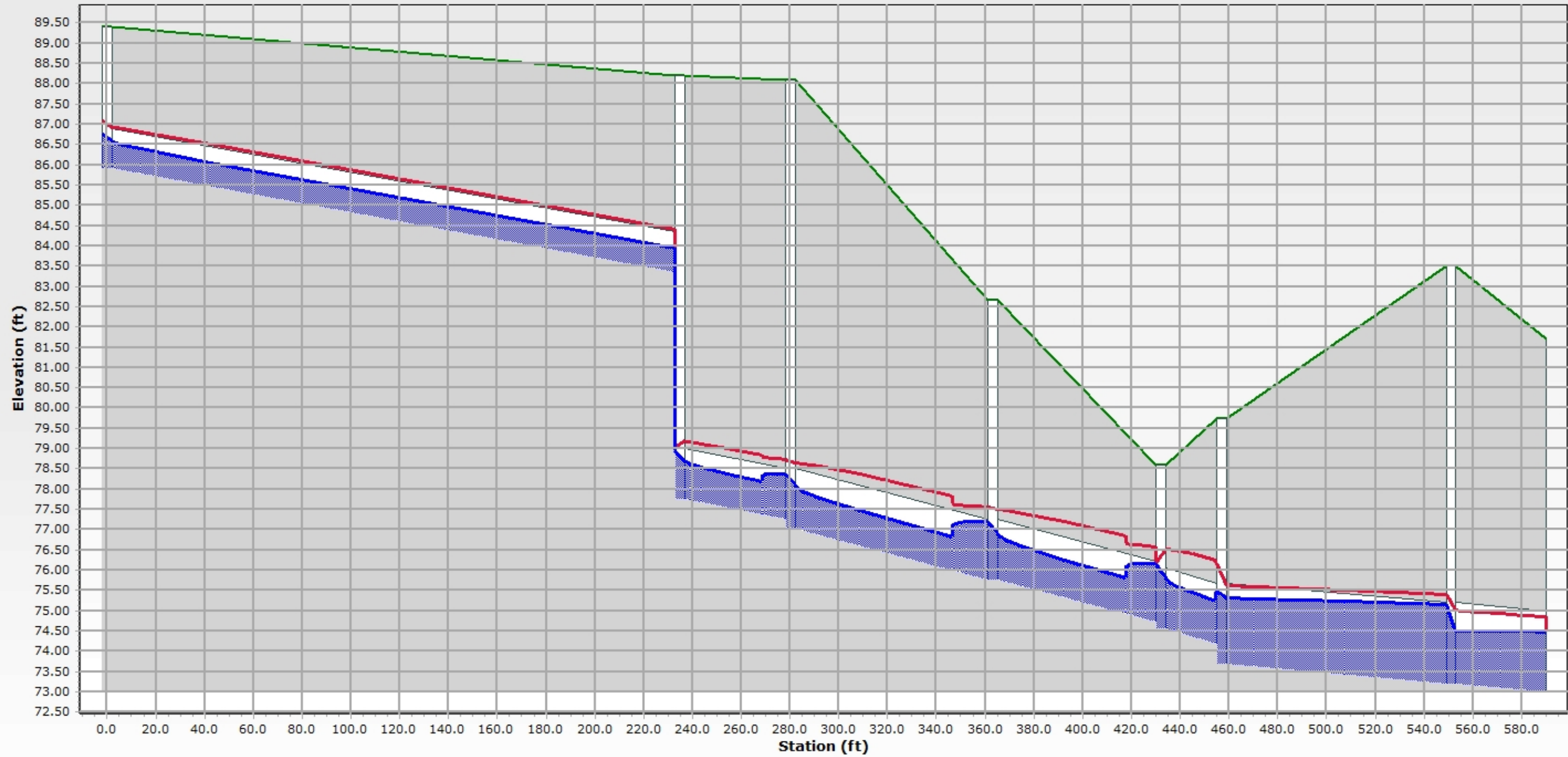
25-YR

CB-7 to ICS-3



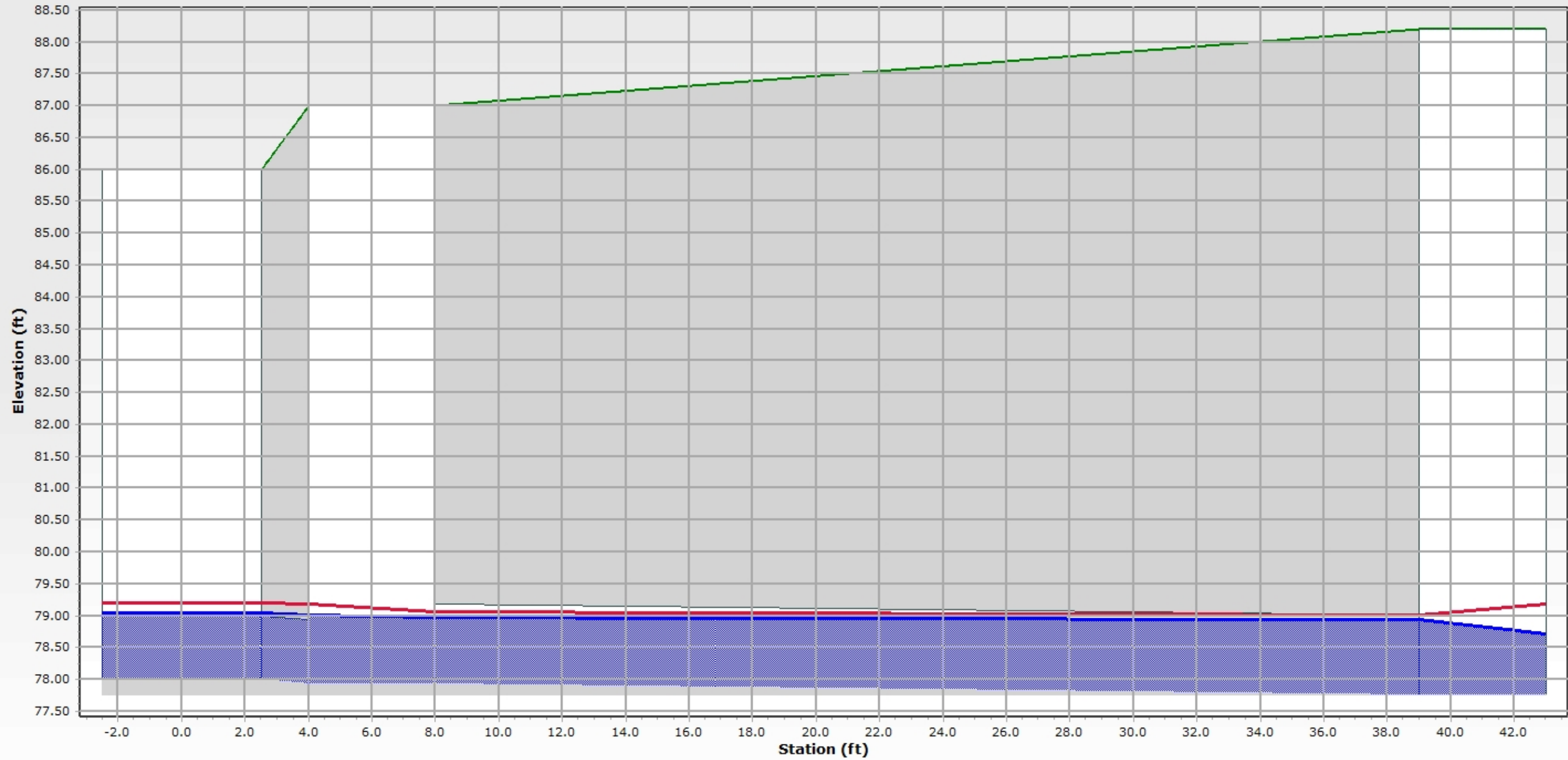
25-YR

CB-9 to ICS-4



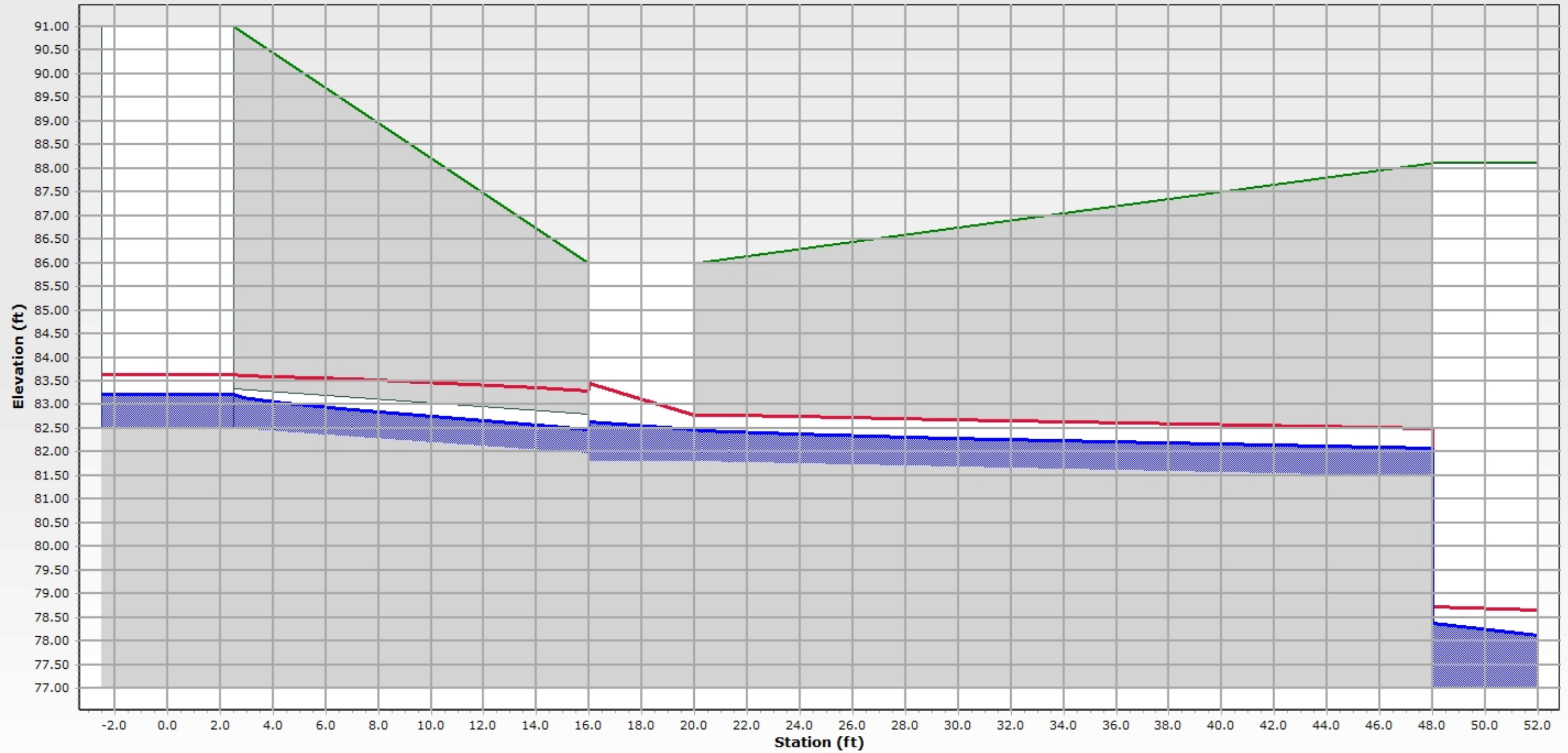
25-YR

T-A to CB-10



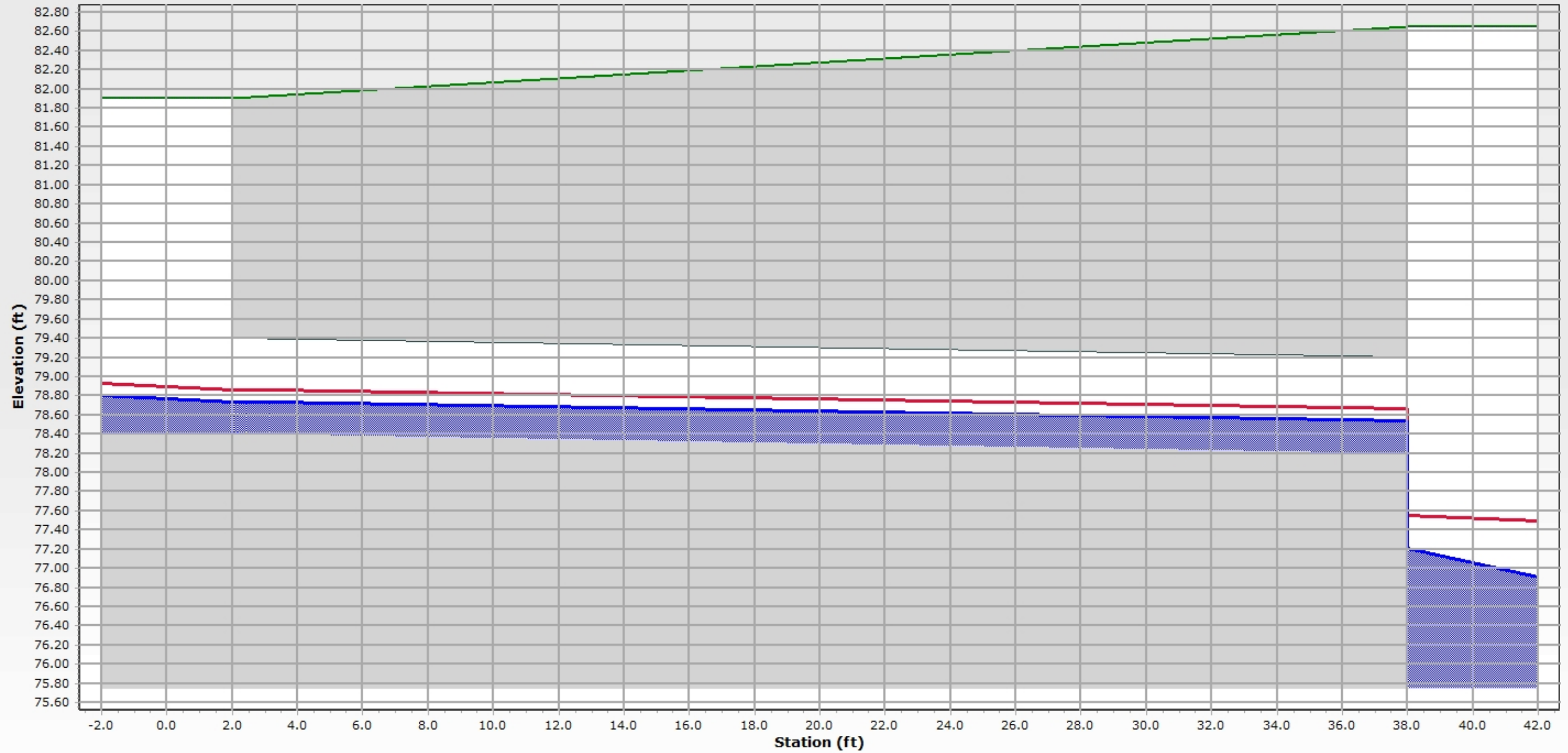
25-YR

T-B to CB-11



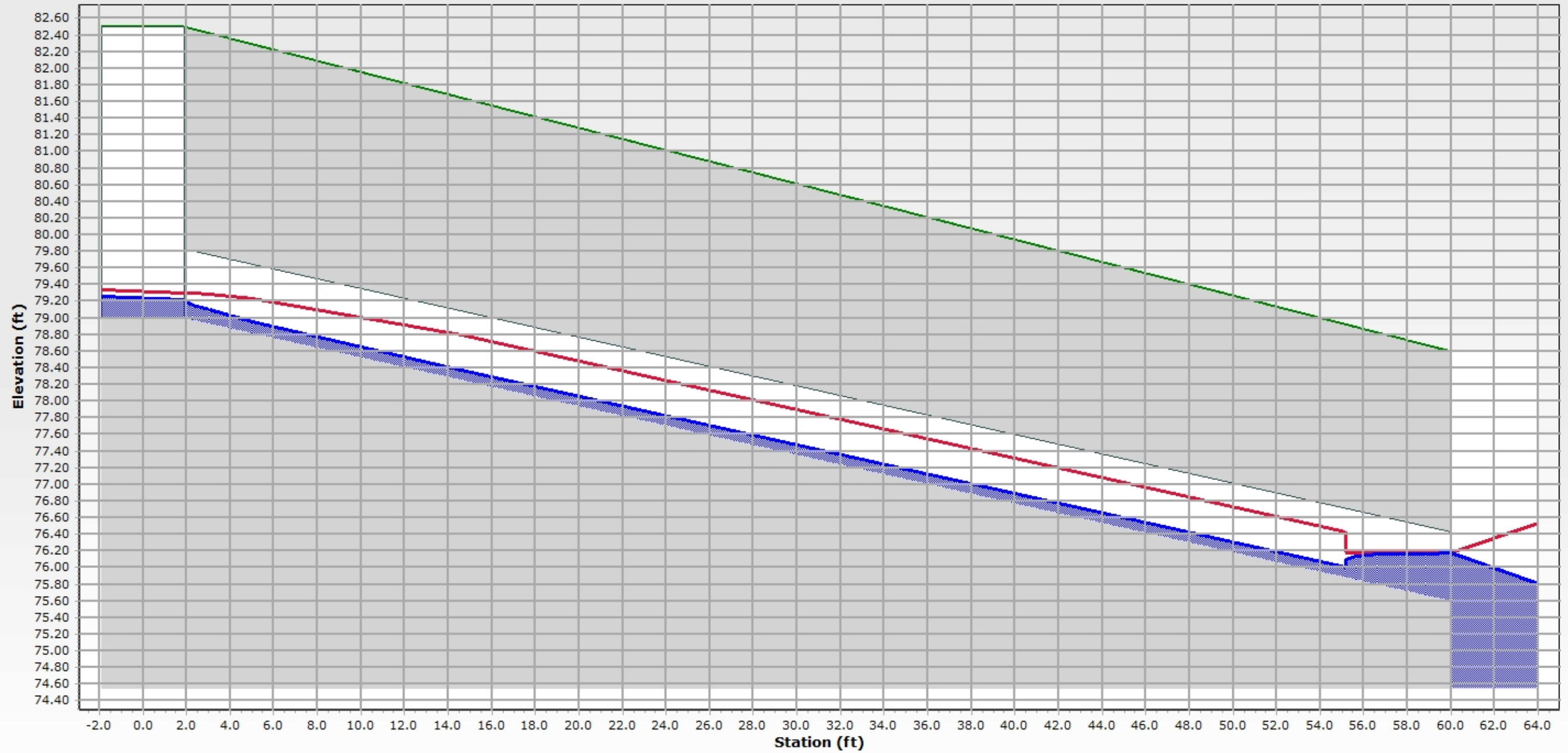
25-YR

CB-12 to CB-13



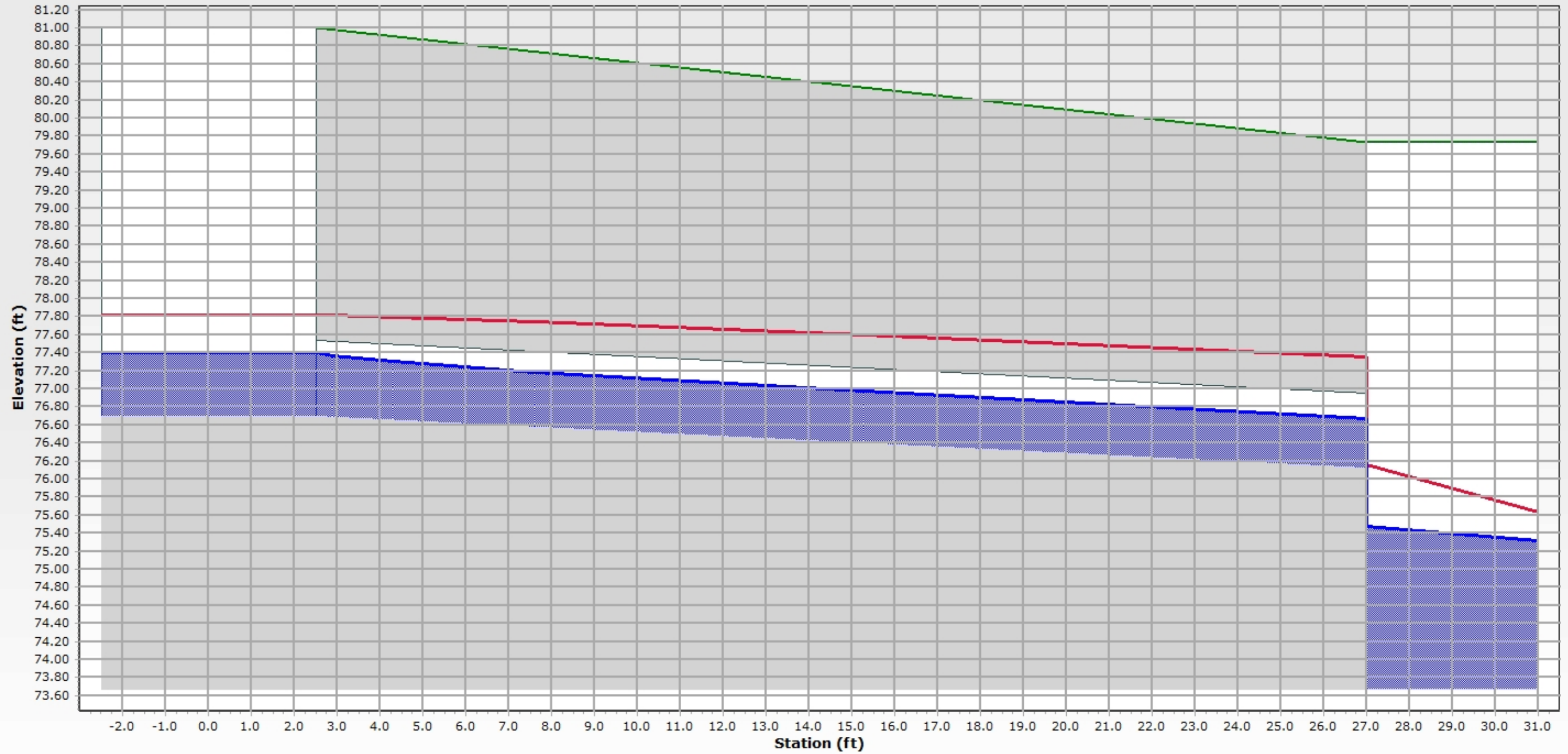
25-YR

YD-3 to CB-14



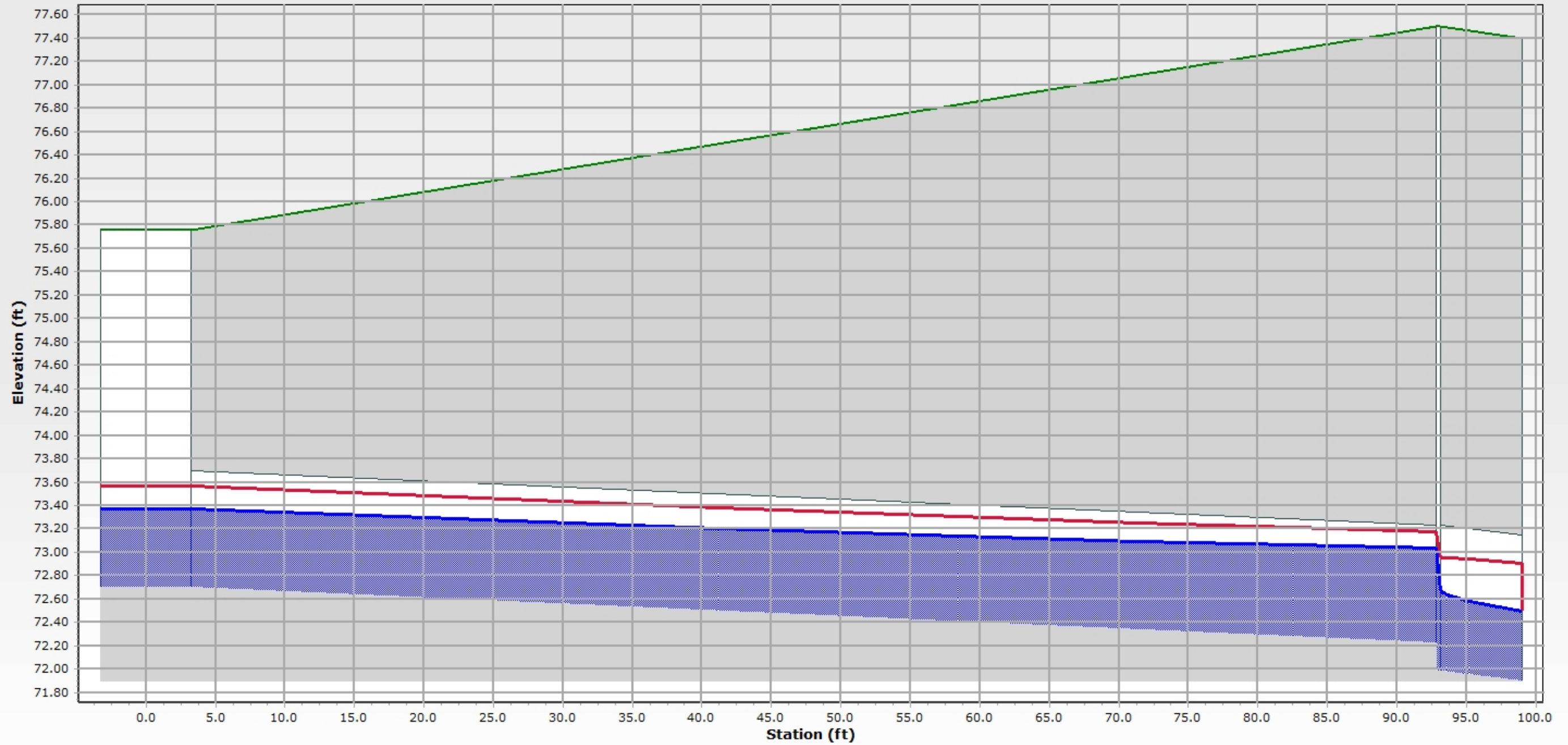
25-YR

T-C to DMH-2



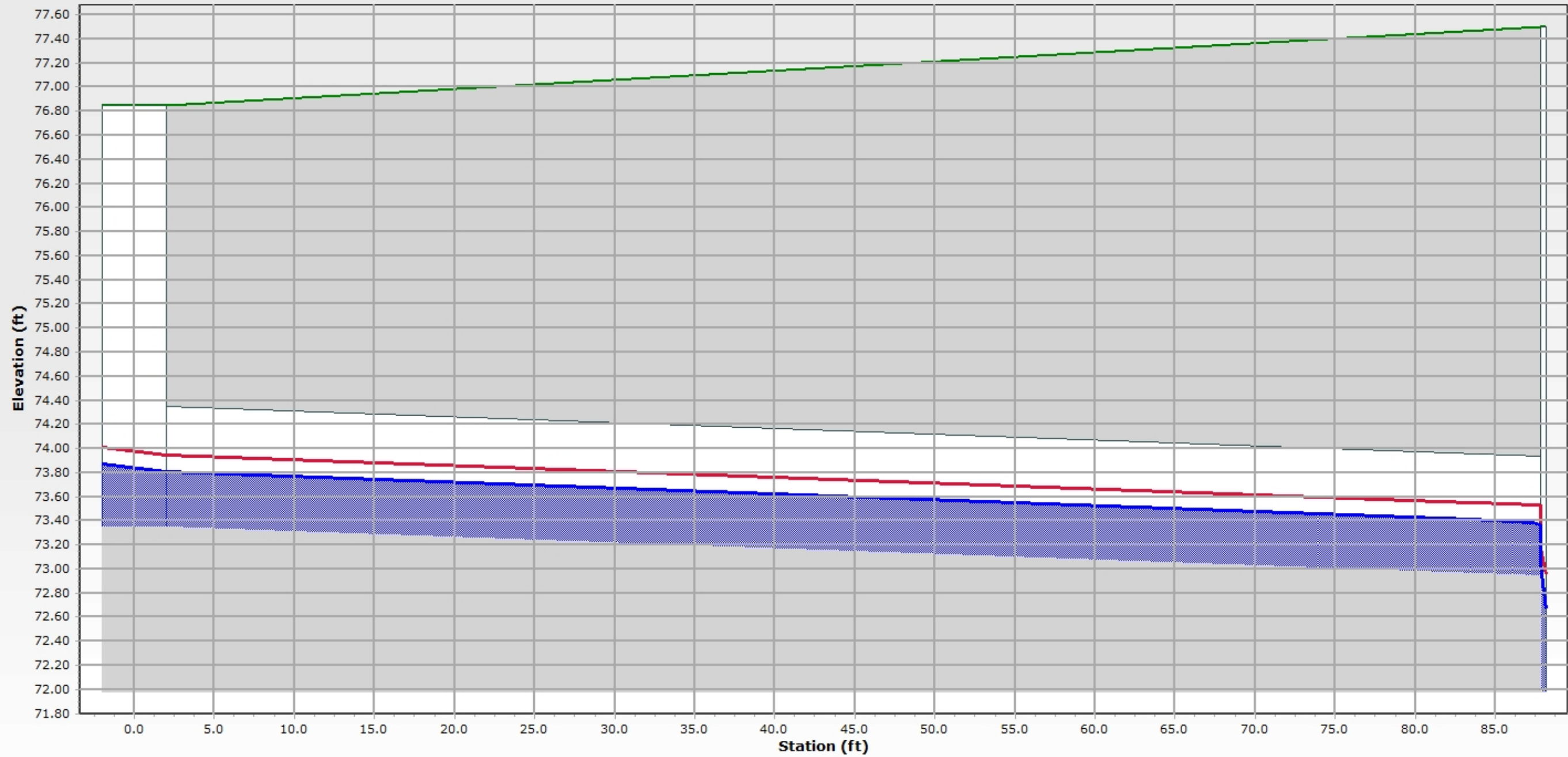
25-YR

CB-15 to ICS-5



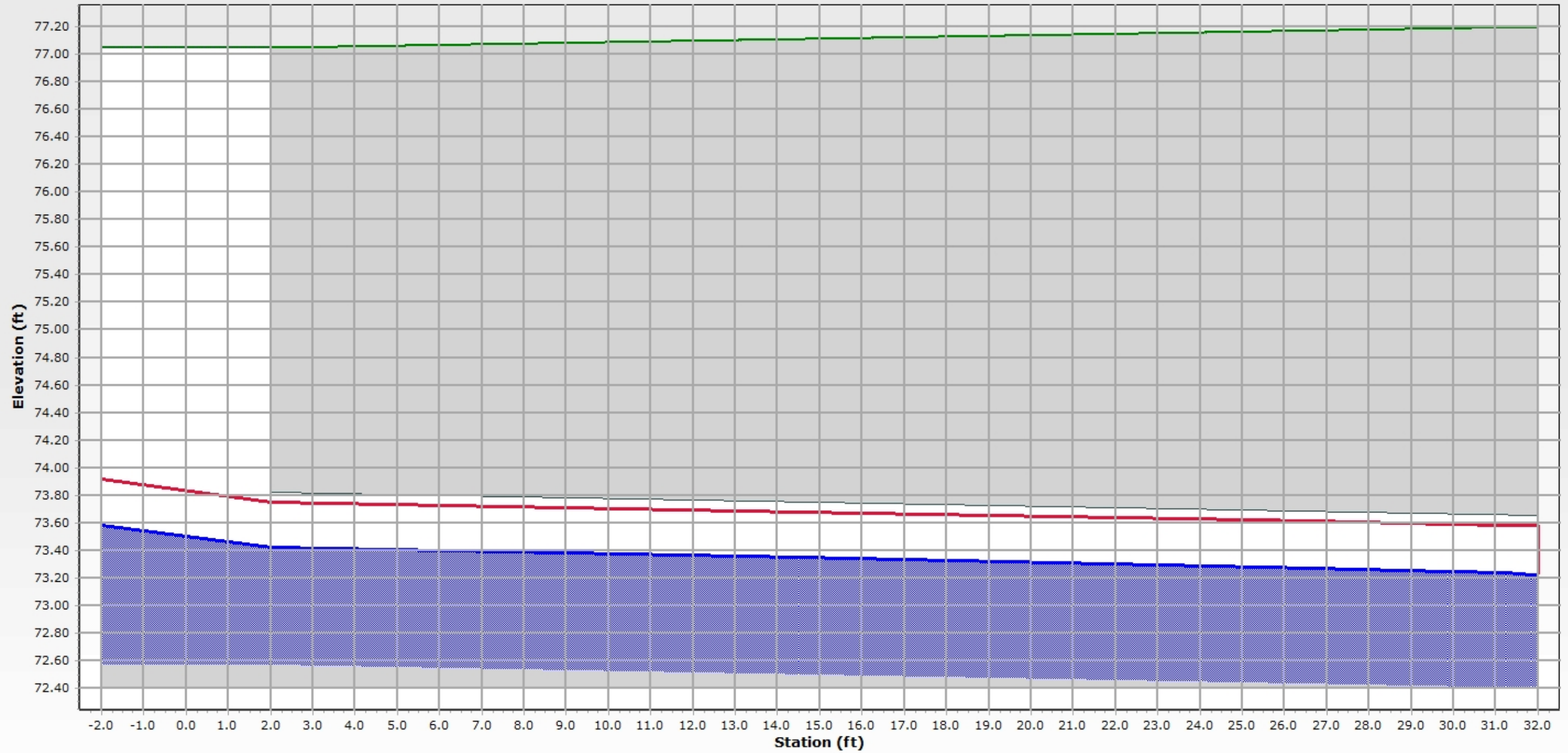
25-YR

CB-16 to CDS-6



25-YR

EX-MH1 to ICS-6



100-YR

CatchBasin Table - Time: 0.00 hours

100-YR
CatchBasin Table - Time: 0.00 hours

| ID | Label | Elevation (Ground) (ft) | Elevation (Rim) (ft) | Elevation (Invert) (ft) | Length (ft) | Width (ft) | Inlet Type | Inlet | Inlet Location | Inflow-Capture Curve | Capture Efficiency (Calculated) (%) | Flow (Captured) (cfs) | Hydraulic Grade Line (In) (ft) | Spread / Top Width (ft) |
|-----|-------|-------------------------|----------------------|-------------------------|-------------|------------|---------------|--|----------------|-----------------------|-------------------------------------|-----------------------|--------------------------------|-------------------------|
| 46 | CB-1 | 82.00 | 82.00 | 77.76 | 4.00 | 3.00 | Catalog Inlet | Combination Type C Single Grate - Grate Type A - Plain Curb | In Sag | <Collection: 0 items> | 100.0 | 3.65 | 78.80 | 14.3 |
| 41 | CB-2 | 80.00 | 80.00 | 76.50 | 4.00 | 4.72 | Catalog Inlet | Grate Type C-L Double Grate - Type I - Grate Type A | On Grade | <Collection: 0 items> | 95.7 | 0.74 | 76.99 | 4.8 |
| 288 | CB-3 | 77.10 | 77.10 | 74.10 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 97.9 | 0.48 | 74.60 | 4.3 |
| 291 | CB-4 | 77.10 | 77.10 | 74.00 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 95.7 | 0.62 | 74.59 | 4.8 |
| 57 | CB-5 | 75.10 | 75.10 | 72.24 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 99.7 | 0.31 | 74.53 | 3.7 |
| 58 | CB-6 | 75.10 | 75.10 | 72.14 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 99.9 | 0.29 | 74.40 | 3.6 |
| 63 | CB-7 | 78.55 | 78.55 | 74.63 | 6.53 | 3.00 | Catalog Inlet | Grate Type C-L Double Grate - Type II - Grate Type A | On Grade | <Collection: 0 items> | 70.8 | 1.24 | 76.17 | 6.2 |
| 64 | CB-8 | 77.36 | 77.36 | 73.80 | 6.53 | 3.00 | Catalog Inlet | Grate Type C-L Double Grate - Type II - Grate Type A | In Sag | <Collection: 0 items> | 100.0 | 4.19 | 76.09 | 15.5 |
| 77 | CB-9 | 89.40 | 89.40 | 85.90 | 4.00 | 3.00 | Catalog Inlet | Combination Type C Single Grate - Grate Type A - Plain Curb | In Sag | <Collection: 0 items> | 100.0 | 3.39 | 86.89 | 13.6 |
| 79 | CB-10 | 88.20 | 88.20 | 77.76 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 84.2 | 2.01 | 80.46 | 6.6 |

100-YR
CatchBasin Table - Time: 0.00 hours

| ID | Label | Elevation (Ground) (ft) | Elevation (Rim) (ft) | Elevation (Invert) (ft) | Length (ft) | Width (ft) | Inlet Type | Inlet | Inlet Location | Inflow-Capture Curve | Capture Efficiency (Calculated) (%) | Flow (Captured) (cfs) | Hydraulic Grade Line (In) (ft) | Spread / Top Width (ft) |
|-----|-------|-------------------------|----------------------|-------------------------|-------------|------------|---------------|--|----------------|-----------------------|-------------------------------------|-----------------------|--------------------------------|-------------------------|
| 78 | CB-11 | 88.10 | 88.10 | 77.00 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 85.8 | 1.84 | 79.77 | 6.4 |
| 80 | CB-12 | 81.90 | 81.90 | 78.40 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 96.0 | 0.90 | 78.89 | 4.7 |
| 161 | CB-13 | 82.65 | 82.65 | 75.75 | 4.00 | 4.43 | Catalog Inlet | Combination Type C Double Grate - Type I - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 99.0 | 0.75 | 78.82 | 3.9 |
| 87 | CB-14 | 78.60 | 78.60 | 74.55 | 4.00 | 3.00 | Catalog Inlet | Grate Type C-L Single Grate - Grate Type A | In Sag | <Collection: 0 items> | 100.0 | 2.09 | 77.81 | 9.8 |
| 99 | CB-15 | 75.76 | 75.76 | 72.70 | 6.53 | 3.00 | Catalog Inlet | Grate Type C-L Double Grate - Type II - Grate Type A | In Sag | <Collection: 0 items> | 100.0 | 2.54 | 73.59 | 11.5 |
| 98 | CB-16 | 76.85 | 76.85 | 73.35 | 4.00 | 3.00 | Catalog Inlet | Grate Type C-L Single Grate - Grate Type A | In Sag | <Collection: 0 items> | 100.0 | 1.31 | 73.95 | 9.7 |
| 72 | CB-17 | 78.35 | 78.35 | 70.50 | 5.30 | 4.30 | Full Capture | TYPE C COMBO SINGLE GRATE | In Sag | <Collection: 0 items> | 100.0 | 0.24 | 72.84 | 0.0 |
| 133 | CDS-1 | 78.60 | 78.60 | 74.88 | 4.00 | 3.00 | Catalog Inlet | Combination Type C Single Grate - Grate Type A - Plain Curb | In Sag | <Collection: 0 items> | 100.0 | 2.12 | 76.31 | 9.9 |
| 146 | CDS-2 | 80.00 | 80.00 | 76.35 | 4.00 | 3.00 | Catalog Inlet | Combination Type C Single Grate - Grate Type A - Plain Curb | On Grade | <Collection: 0 items> | 87.1 | 0.25 | 76.97 | 3.3 |
| 31 | YD-1 | 77.90 | 77.90 | 76.40 | 3.79 | 4.79 | Full Capture | <None> | In Sag | <Collection: 0 items> | 100.0 | 1.84 | 77.11 | 0.0 |
| 56 | YD-2 | 73.80 | 73.80 | 72.30 | 4.79 | 3.79 | Full Capture | <None> | In Sag | <Collection: 0 items> | 100.0 | 0.93 | 73.81 | 0.0 |
| 218 | YD-3 | 82.50 | 82.50 | 79.00 | 3.79 | 4.79 | Full Capture | <None> | In Sag | <Collection: 0 items> | 100.0 | 0.33 | 79.30 | 0.0 |

100-YR

Combined Pipe/Node Report - Time: 0.00 hours

| Label | Start Node | Stop Node | Branch ID | Branch Element ID | Length (Unified) (ft) | Flow (cfs) | Rise (Unified) (ft) | Capacity (Full Flow) (cfs) | Velocity (ft/s) | Invert (Start) (ft) | Invert (Stop) (ft) | Slope (Calculated) (ft/ft) |
|-------|------------|-----------|-----------|-------------------|-----------------------|------------|---------------------|----------------------------|-----------------|---------------------|--------------------|----------------------------|
| CO-1 | YD-1 | DMH-1 | 16 | 1 | 186.0 | 1.84 | 1.00 | 2.73 | 3.73 | 76.40 | 75.47 | 0.005 |
| CO-2 | DMH-1 | CDS-1 | 16 | 2 | 18.0 | 1.77 | 1.50 | 8.05 | 3.65 | 74.97 | 74.88 | 0.005 |
| CO-3 | CB-1 | CDS-1 | 17 | 1 | 119.0 | 3.65 | 1.00 | 5.46 | 7.44 | 77.76 | 75.38 | 0.020 |
| CO-4 | CDS-1 | ICS-1 | 16 | 3 | 10.0 | 5.70 | 1.50 | 15.27 | 8.01 | 74.88 | 74.70 | 0.018 |
| CO-5 | CB-2 | CDS-2 | 18 | 1 | 19.0 | 0.74 | 1.00 | 3.43 | 3.48 | 76.50 | 76.35 | 0.008 |
| CO-6 | CDS-2 | ICS-2 | 18 | 2 | 39.0 | 0.98 | 1.00 | 2.76 | 3.22 | 76.35 | 76.15 | 0.005 |
| CO-7 | OCS-1 | O-1 | 5 | 1 | 125.0 | 0.97 | 1.00 | 4.88 | 4.84 | 74.00 | 72.00 | 0.016 |
| CO-8 | CB-3 | CB-4 | 7 | 1 | 19.0 | 0.48 | 1.00 | 2.80 | 2.66 | 74.10 | 74.00 | 0.005 |
| CO-9 | CB-4 | CB-5 | 7 | 2 | 96.0 | 1.09 | 1.00 | 5.23 | 5.26 | 74.00 | 72.24 | 0.018 |
| CO-10 | YD-2 | CB-5 | 6 | 1 | 12.0 | 0.93 | 1.00 | 2.73 | 1.18 | 72.30 | 72.24 | 0.005 |
| CO-11 | CB-5 | CB-6 | 6 | 2 | 19.0 | 2.28 | 1.00 | 2.80 | 2.91 | 72.24 | 72.14 | 0.005 |
| CO-12 | CB-6 | CDS-3 | 6 | 3 | 11.0 | 2.55 | 1.00 | 2.95 | 3.24 | 72.14 | 72.08 | 0.006 |
| CO-13 | CDS-3 | O-2 | 6 | 4 | 15.0 | 2.54 | 1.00 | 2.74 | 3.23 | 72.08 | 72.00 | 0.005 |
| CO-14 | CB-7 | CB-8 | 15 | 1 | 66.0 | 1.24 | 1.00 | 2.73 | 1.58 | 74.63 | 74.30 | 0.005 |
| CO-15 | CB-8 | CDS-4 | 15 | 2 | 18.0 | 5.22 | 1.50 | 7.92 | 2.95 | 73.80 | 73.71 | 0.005 |
| CO-16 | CDS-4 | ICS-3 | 15 | 3 | 13.0 | 5.19 | 1.50 | 7.92 | 2.94 | 73.71 | 73.65 | 0.005 |
| CO-17 | CB-9 | CB-10 | 13 | 1 | 235.0 | 3.39 | 1.00 | 4.02 | 5.74 | 85.90 | 83.35 | 0.011 |
| CO-18 | DB-2 | CB-10 | 12 | 2 | 35.0 | 3.24 | 1.25 | 5.02 | 2.64 | 77.94 | 77.76 | 0.005 |
| CO-19 | CB-10 | CB-11 | 12 | 3 | 45.0 | 6.91 | 1.25 | 7.45 | 5.63 | 77.76 | 77.25 | 0.011 |
| CO-20 | DB-1 | CB-11 | 11 | 2 | 32.0 | 3.24 | 1.00 | 3.86 | 5.50 | 81.79 | 81.47 | 0.010 |
| CO-21 | CB-11 | CB-13 | 11 | 3 | 83.0 | 10.35 | 1.50 | 13.96 | 5.85 | 77.00 | 75.75 | 0.015 |
| CO-22 | CB-12 | CB-13 | 14 | 1 | 40.0 | 0.90 | 1.00 | 2.73 | 3.11 | 78.40 | 78.20 | 0.005 |
| CO-23 | CB-13 | CB-14 | 11 | 4 | 69.0 | 11.35 | 1.50 | 13.97 | 6.42 | 75.75 | 74.71 | 0.015 |
| CO-24 | YD-3 | CB-14 | 10 | 1 | 62.0 | 0.33 | 0.83 | 5.56 | 5.59 | 79.00 | 75.60 | 0.055 |
| CO-25 | CB-14 | DMH-2 | 10 | 2 | 25.0 | 13.56 | 1.50 | 14.03 | 7.67 | 74.55 | 74.17 | 0.015 |
| CO-26 | DMH-2 | CDS-5 | 9 | 2 | 94.0 | 15.67 | 2.00 | 17.33 | 4.99 | 73.67 | 73.20 | 0.005 |
| CO-27 | CDS-5 | ICS-4 | 9 | 3 | 39.0 | 15.45 | 2.00 | 17.55 | 4.92 | 73.20 | 73.00 | 0.005 |
| CO-28 | OCS-2 | DMH-3 | 1 | 1 | 121.0 | 4.58 | 1.25 | 4.59 | 4.26 | 73.00 | 72.39 | 0.005 |
| CO-29 | DMH-3 | DMH-6 | 1 | 2 | 35.0 | 4.58 | 1.25 | 4.63 | 4.30 | 72.39 | 72.21 | 0.005 |
| CO-30 | DMH-6 | CB-17 | 1 | 3 | 95.0 | 4.58 | 1.25 | 4.82 | 4.47 | 72.21 | 71.76 | 0.005 |
| CO-31 | CB-15 | CDS-6 | 3 | 1 | 93.0 | 2.54 | 1.00 | 2.53 | 3.68 | 72.70 | 72.23 | 0.005 |
| CO-32 | CB-16 | CDS-6 | 4 | 1 | 88.0 | 1.31 | 1.00 | 2.43 | 3.15 | 73.35 | 72.94 | 0.005 |
| CO-33 | CDS-6 | ICS-5 | 3 | 2 | 6.0 | 3.75 | 1.25 | 8.08 | 6.46 | 71.98 | 71.90 | 0.013 |
| CO-34 | EX-MH1 | ICS-6 | 8 | 1 | 32.0 | 5.52 | 1.25 | 5.10 | 4.50 | 72.57 | 72.40 | 0.005 |
| CO-35 | OCS-4 | CB-17 | 2 | 1 | 10.0 | 5.98 | 1.25 | 6.46 | 4.87 | 71.10 | 71.00 | 0.010 |
| CO-36 | CB-17 | O-3 | 1 | 4 | 120.0 | 10.80 | 1.50 | 7.43 | 6.11 | 70.50 | 69.90 | 0.005 |
| RL-A | T-A | DB-2 | 12 | 1 | 6.0 | 3.25 | 1.00 | 3.86 | 2.64 | 78.00 | 77.94 | 0.010 |
| RL-B | T-B | DB-1 | 11 | 1 | 18.0 | 3.24 | 0.83 | 4.11 | 8.35 | 82.50 | 81.96 | 0.030 |
| RL-C | T-C | DMH-2 | 9 | 1 | 29.0 | 3.21 | 0.83 | 3.36 | 7.01 | 76.70 | 76.12 | 0.020 |

100-YR

DOT Report - Time: 0.00 hours

| Label | -Node- Upstream Downstream | -Depth- Upstream Downstream | -EGL- Upstream Downstream | -Ground- Upstream Downstream | -HGL- Upstream Downstream | -Invert- Upstream Downstream | Section Discharge Capacity | -X- Upstream Downstream | -Y- Upstream Downstream |
|-------|----------------------------------|-----------------------------------|---------------------------------|------------------------------------|---------------------------------|------------------------------------|----------------------------------|----------------------------|----------------------------|
| CO-1 | 31 | 0.71 | 77.22 | 77.90 | 77.00 | 76.40 | 1.84 | 1,175,202.53 | 719,118.77 |
| | 32 | 1.34 | 76.42 | 78.00 | 76.32 | 74.97 | 2.73 | 1,175,206.68 | 718,929.56 |
| CO-7 | 38 | 0.41 | 74.57 | 80.10 | 74.41 | 74.00 | 0.97 | 1,175,093.10 | 718,887.71 |
| | 42 | (N/A) | (N/A) | 72.00 | 73.99 | 72.00 | 4.88 | 1,175,026.39 | 718,781.82 |
| CO-10 | 56 | 1.51 | 73.82 | 73.80 | 74.53 | 72.30 | 0.93 | 1,175,113.72 | 718,650.96 |
| | 57 | 2.22 | 74.55 | 75.10 | 74.53 | 72.24 | 2.73 | 1,175,097.91 | 718,651.33 |
| CO-11 | 57 | 2.29 | 74.59 | 75.10 | 74.46 | 72.24 | 2.28 | 1,175,097.91 | 718,651.33 |
| | 58 | 2.17 | 74.53 | 75.10 | 74.40 | 72.14 | 2.80 | 1,175,076.01 | 718,647.57 |
| CO-14 | 63 | 1.54 | 76.19 | 78.55 | 76.15 | 74.63 | 1.24 | 1,174,984.11 | 718,849.77 |
| | 64 | 2.22 | 76.13 | 77.36 | 76.09 | 73.80 | 2.73 | 1,174,926.71 | 718,803.07 |
| CO-17 | 77 | 0.99 | 87.09 | 89.40 | 86.69 | 85.90 | 3.39 | 1,174,683.41 | 719,349.27 |
| | 79 | 2.45 | 80.57 | 88.20 | 84.05 | 77.76 | 4.02 | 1,174,718.39 | 719,113.49 |
| CO-19 | 79 | 2.70 | 80.70 | 88.20 | 80.21 | 77.76 | 6.91 | 1,174,718.39 | 719,113.49 |
| | 78 | 2.51 | 80.27 | 88.10 | 79.77 | 77.00 | 7.45 | 1,174,767.00 | 719,116.42 |
| CO-28 | 68 | 1.13 | 74.37 | 79.60 | 74.13 | 73.00 | 4.58 | 1,174,871.80 | 718,928.80 |
| | 69 | 1.11 | 73.84 | 81.40 | 73.62 | 72.39 | 4.59 | 1,174,767.82 | 718,997.85 |
| CO-29 | 69 | 1.23 | 73.74 | 81.40 | 73.50 | 72.39 | 4.58 | 1,174,767.82 | 718,997.85 |
| | 70 | 0.99 | 73.59 | 81.40 | 73.35 | 72.21 | 4.63 | 1,174,729.19 | 719,003.28 |
| CO-36 | 72 | 2.34 | 73.13 | 78.35 | 72.55 | 70.50 | 10.80 | 1,174,651.98 | 719,065.44 |
| | 73 | (N/A) | (N/A) | 69.90 | 71.16 | 69.90 | 7.43 | 1,174,540.43 | 719,115.25 |
| CO-31 | 99 | 0.89 | 73.77 | 75.76 | 73.59 | 72.70 | 2.54 | 1,174,619.08 | 718,884.39 |
| | 100 | 0.78 | 73.36 | 77.50 | 73.20 | 71.98 | 2.53 | 1,174,588.70 | 718,975.68 |
| CO-32 | 98 | 0.60 | 74.03 | 76.85 | 73.87 | 73.35 | 1.31 | 1,174,540.24 | 719,051.92 |
| | 100 | 0.78 | 73.36 | 77.50 | 73.42 | 71.98 | 2.43 | 1,174,588.70 | 718,975.68 |
| CO-35 | 97 | 1.82 | 73.29 | 78.45 | 72.92 | 71.10 | 5.98 | 1,174,645.40 | 719,053.37 |
| | 72 | 2.05 | 73.10 | 78.35 | 72.84 | 70.50 | 6.46 | 1,174,651.98 | 719,065.44 |
| CO-3 | 46 | 1.04 | 79.02 | 82.00 | 78.57 | 77.76 | 3.65 | 1,175,145.14 | 719,024.79 |
| | 133 | 0.92 | 76.32 | 78.60 | 76.31 | 74.88 | 5.46 | 1,175,195.17 | 718,912.58 |
| CO-2 | 32 | 1.35 | 76.33 | 78.00 | 76.31 | 74.97 | 1.77 | 1,175,206.68 | 718,929.56 |
| | 133 | 0.92 | 76.32 | 78.60 | 76.31 | 74.88 | 8.05 | 1,175,195.17 | 718,912.58 |
| CO-5 | 41 | 0.49 | 77.03 | 80.00 | 76.96 | 76.50 | 0.74 | 1,175,035.88 | 718,879.60 |
| | 146 | 0.42 | 77.00 | 80.00 | 76.97 | 76.35 | 3.43 | 1,175,056.91 | 718,886.80 |
| CO-18 | 162 | 2.65 | 80.64 | 87.00 | 80.53 | 77.94 | 3.24 | 1,174,680.83 | 719,104.65 |
| | 79 | 2.45 | 80.57 | 88.20 | 80.46 | 77.76 | 5.02 | 1,174,718.39 | 719,113.49 |
| CO-20 | 163 | 0.96 | 82.95 | 86.00 | 82.56 | 81.79 | 3.24 | 1,174,801.56 | 719,106.59 |
| | 78 | 2.51 | 80.27 | 88.10 | 82.17 | 77.00 | 3.86 | 1,174,767.00 | 719,116.42 |
| CO-22 | 80 | 0.49 | 78.95 | 81.90 | 78.83 | 78.40 | 0.90 | 1,174,731.44 | 719,011.41 |
| | 161 | 2.75 | 79.35 | 82.65 | 78.82 | 75.75 | 2.73 | 1,174,769.40 | 719,030.18 |
| CO-23 | 161 | 3.07 | 79.14 | 82.65 | 78.50 | 75.75 | 11.35 | 1,174,769.40 | 719,030.18 |
| | 87 | 2.81 | 77.82 | 78.60 | 77.81 | 74.55 | 13.97 | 1,174,839.03 | 719,007.48 |
| CO-30 | 70 | 1.14 | 73.50 | 81.40 | 73.20 | 72.21 | 4.58 | 1,174,729.19 | 719,003.28 |
| | 72 | 2.05 | 73.10 | 78.35 | 72.84 | 70.50 | 4.82 | 1,174,651.98 | 719,065.44 |
| CO-4 | 133 | 1.43 | 76.19 | 78.60 | 75.80 | 74.88 | 5.70 | 1,175,195.17 | 718,912.58 |
| | 126 | (N/A) | (N/A) | 79.00 | 75.80 | 74.70 | 15.27 | 1,175,181.50 | 718,908.24 |
| CO-27 | 85 | 3.22 | 76.31 | 83.50 | 75.93 | 73.20 | 15.45 | 1,174,963.68 | 718,981.79 |
| | 139 | (N/A) | (N/A) | 81.70 | 75.78 | 73.00 | 17.55 | 1,174,976.71 | 718,946.36 |
| CO-33 | 100 | 1.22 | 73.10 | 77.50 | 72.76 | 71.98 | 3.75 | 1,174,588.70 | 718,975.68 |

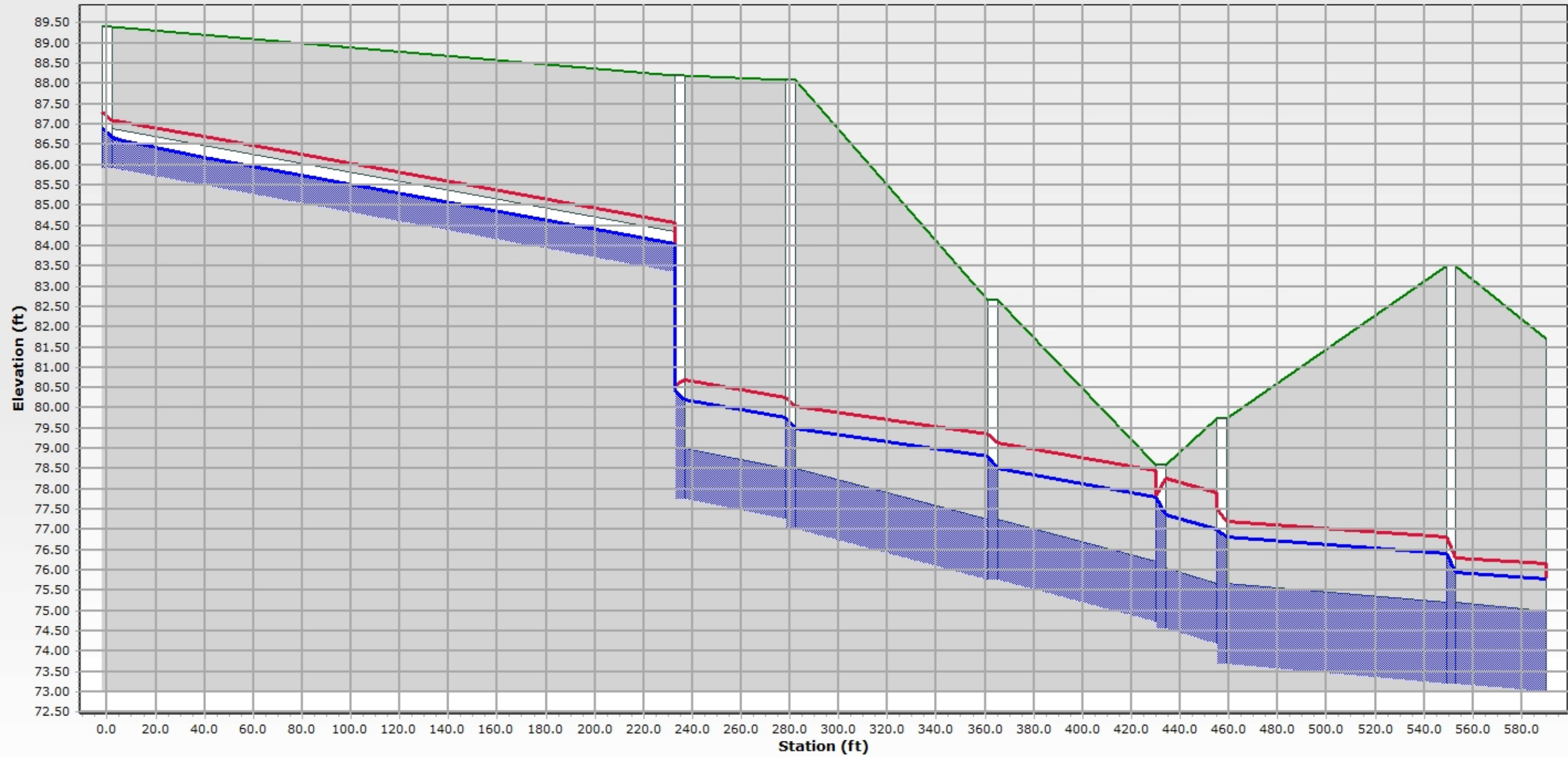
100-YR

DOT Report - Time: 0.00 hours

| Label | -Node- Upstream Downstream | -Depth- Upstream Downstream | -EGL- Upstream Downstream | -Ground- Upstream Downstream | -HGL- Upstream Downstream | -Invert- Upstream Downstream | Section Discharge Capacity | -X- Upstream Downstream | -Y- Upstream Downstream |
|-------|----------------------------------|-----------------------------------|---------------------------------|------------------------------------|---------------------------------|------------------------------------|----------------------------------|----------------------------|----------------------------|
| CO-6 | 144 | (N/A) | (N/A) | 77.40 | 72.58 | 71.90 | 8.08 | 1,174,598.66 | 718,974.80 |
| | 146 | 0.62 | 76.92 | 80.00 | 76.77 | 76.35 | 0.98 | 1,175,056.91 | 718,886.80 |
| | 127 | (N/A) | (N/A) | 80.00 | 76.56 | 76.15 | 2.76 | 1,175,083.89 | 718,919.66 |
| RL-A | 214 | 2.60 | 80.71 | 86.00 | 80.60 | 78.00 | 3.25 | 1,174,677.66 | 719,112.00 |
| | 162 | 2.59 | 80.70 | 87.00 | 80.59 | 77.94 | 3.86 | 1,174,680.83 | 719,104.65 |
| RL-B | 213 | 0.77 | 83.86 | 91.00 | 83.27 | 82.50 | 3.24 | 1,174,807.00 | 719,125.70 |
| | 163 | 0.77 | 83.32 | 86.00 | 82.75 | 81.79 | 4.11 | 1,174,801.56 | 719,106.59 |
| CO-34 | 102 | 1.26 | 74.02 | 77.05 | 73.64 | 72.57 | 5.52 | 1,174,650.44 | 718,942.17 |
| | 239 | (N/A) | (N/A) | 77.20 | 73.35 | 72.40 | 5.10 | 1,174,631.87 | 718,971.88 |
| CO-21 | 78 | 2.77 | 80.04 | 88.10 | 79.51 | 77.00 | 10.35 | 1,174,767.00 | 719,116.42 |
| | 161 | 2.75 | 79.35 | 82.65 | 78.82 | 75.75 | 13.96 | 1,174,769.40 | 719,030.18 |
| CO-24 | 218 | 0.30 | 79.34 | 82.50 | 79.25 | 79.00 | 0.33 | 1,174,821.63 | 719,069.28 |
| | 87 | 2.81 | 77.82 | 78.60 | 77.81 | 74.55 | 5.56 | 1,174,839.03 | 719,007.48 |
| CO-25 | 87 | 3.26 | 78.27 | 78.60 | 77.36 | 74.55 | 13.56 | 1,174,839.03 | 719,007.48 |
| | 243 | 3.14 | 77.54 | 79.73 | 77.00 | 73.67 | 14.03 | 1,174,867.67 | 719,001.51 |
| CO-26 | 243 | 3.33 | 77.19 | 79.73 | 76.81 | 73.67 | 15.67 | 1,174,867.67 | 719,001.51 |
| | 85 | 2.73 | 76.81 | 83.50 | 76.42 | 73.20 | 17.33 | 1,174,963.68 | 718,981.79 |
| RL-C | 212 | 0.83 | 78.07 | 81.00 | 77.53 | 76.70 | 3.21 | 1,174,871.43 | 719,031.73 |
| | 243 | 3.14 | 77.54 | 79.73 | 77.00 | 73.67 | 3.36 | 1,174,867.67 | 719,001.51 |
| CO-12 | 58 | 2.26 | 74.48 | 75.10 | 74.31 | 72.14 | 2.55 | 1,175,076.01 | 718,647.57 |
| | 285 | 1.98 | 74.43 | 75.00 | 74.27 | 72.08 | 2.95 | 1,175,065.06 | 718,656.17 |
| CO-13 | 285 | 2.19 | 74.22 | 75.00 | 74.05 | 72.08 | 2.54 | 1,175,065.06 | 718,656.17 |
| | 59 | (N/A) | (N/A) | 72.00 | 73.99 | 72.00 | 2.74 | 1,175,051.70 | 718,665.73 |
| CO-8 | 288 | 0.50 | 74.62 | 77.10 | 74.59 | 74.10 | 0.48 | 1,175,059.21 | 718,746.15 |
| | 291 | 0.54 | 74.61 | 77.10 | 74.59 | 74.00 | 2.80 | 1,175,081.35 | 718,749.95 |
| CO-9 | 291 | 0.59 | 74.64 | 77.10 | 74.54 | 74.00 | 1.09 | 1,175,081.35 | 718,749.95 |
| | 57 | 2.22 | 74.55 | 75.10 | 74.53 | 72.24 | 5.23 | 1,175,097.91 | 718,651.33 |
| CO-15 | 64 | 2.29 | 76.15 | 77.36 | 76.02 | 73.80 | 5.22 | 1,174,926.71 | 718,803.07 |
| | 297 | 2.09 | 76.12 | 77.73 | 75.98 | 73.71 | 7.92 | 1,174,910.35 | 718,821.67 |
| CO-16 | 297 | 2.27 | 75.94 | 77.73 | 75.81 | 73.71 | 5.19 | 1,174,910.35 | 718,821.67 |
| | 140 | (N/A) | (N/A) | 78.00 | 75.78 | 73.65 | 7.92 | 1,174,906.33 | 718,834.48 |

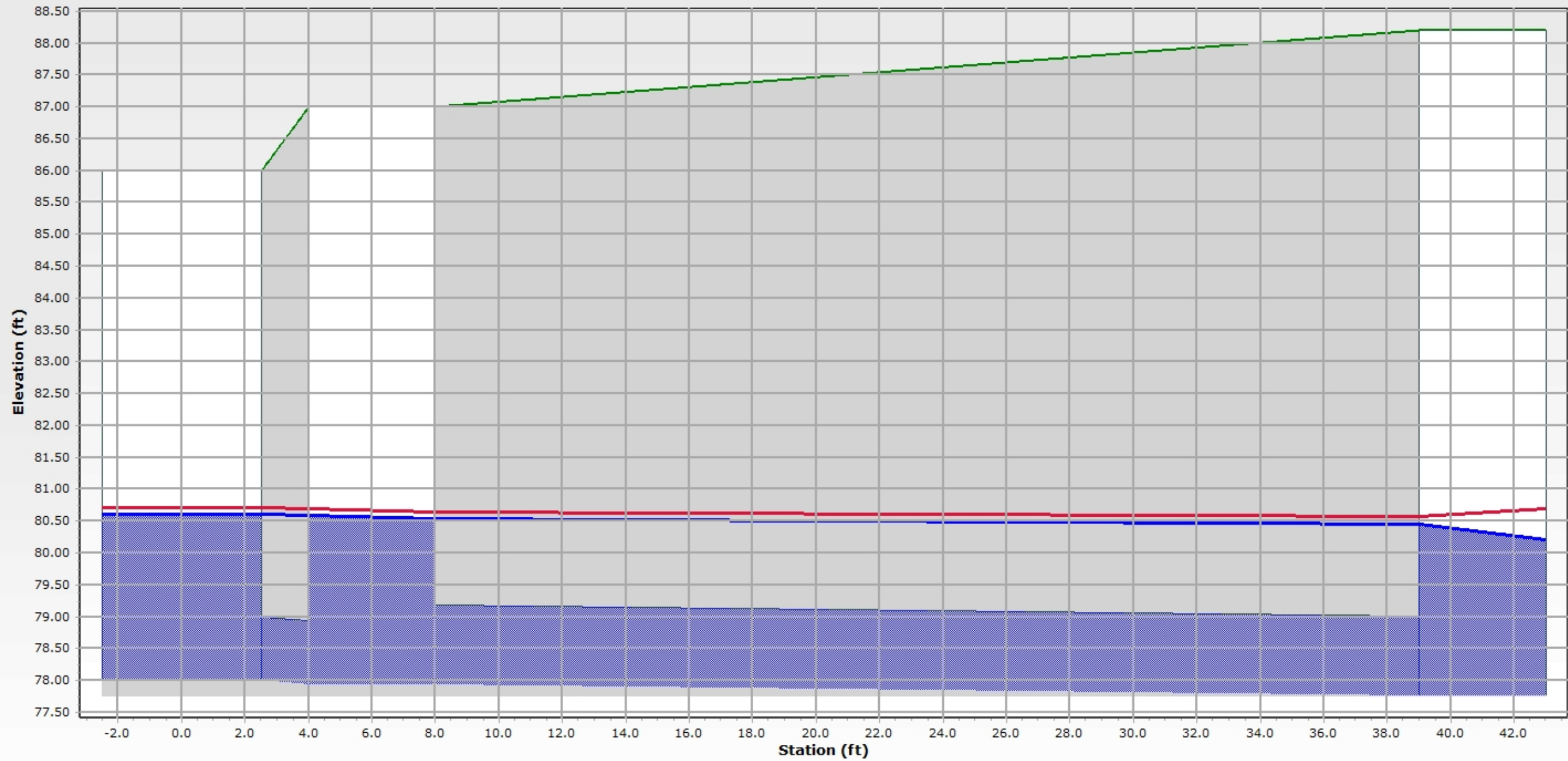
100-YR

CB-9 to ICS-4



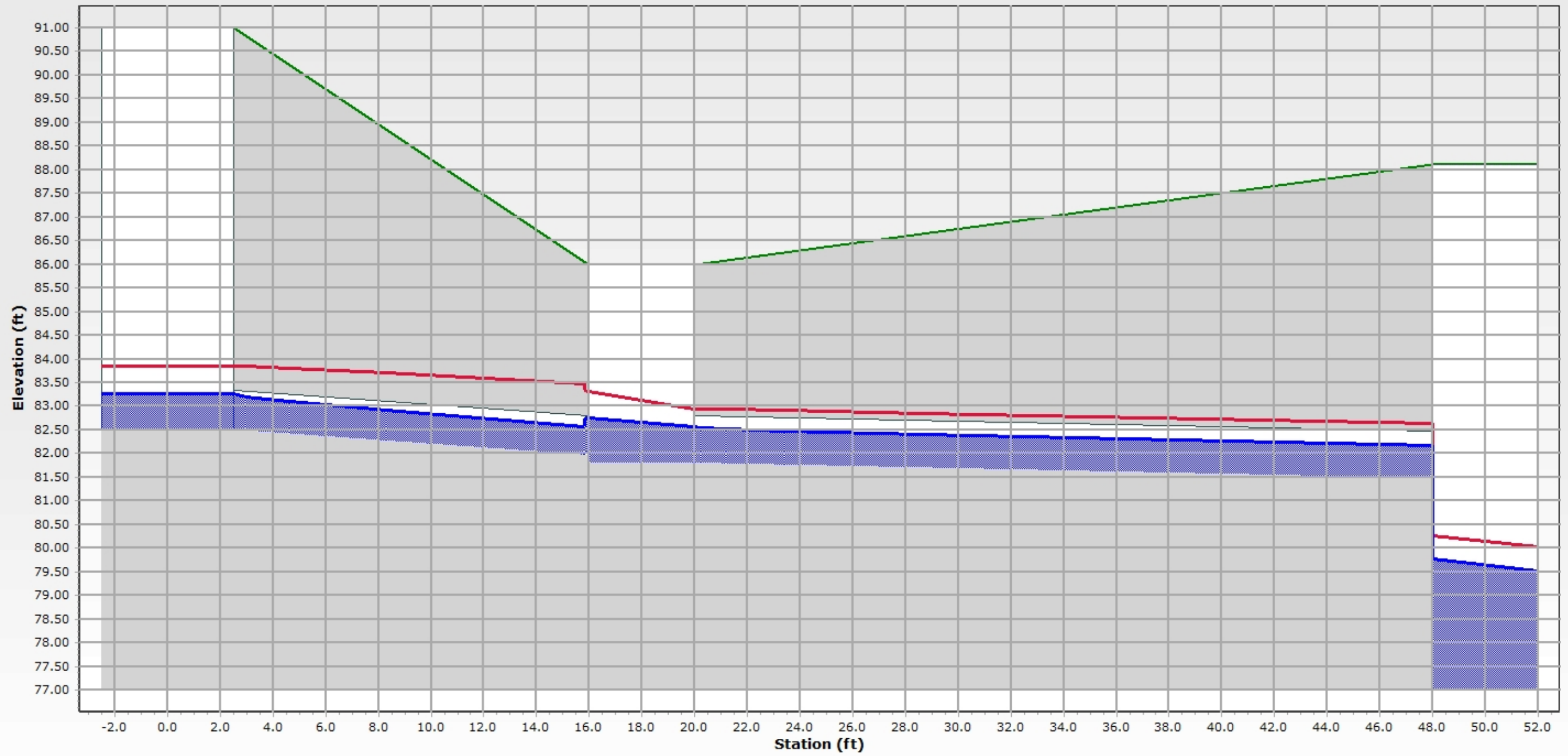
100-YR

T-A to CB-10



100-YR

T-B to CB-11



100-YR

T-C to DMH-2

