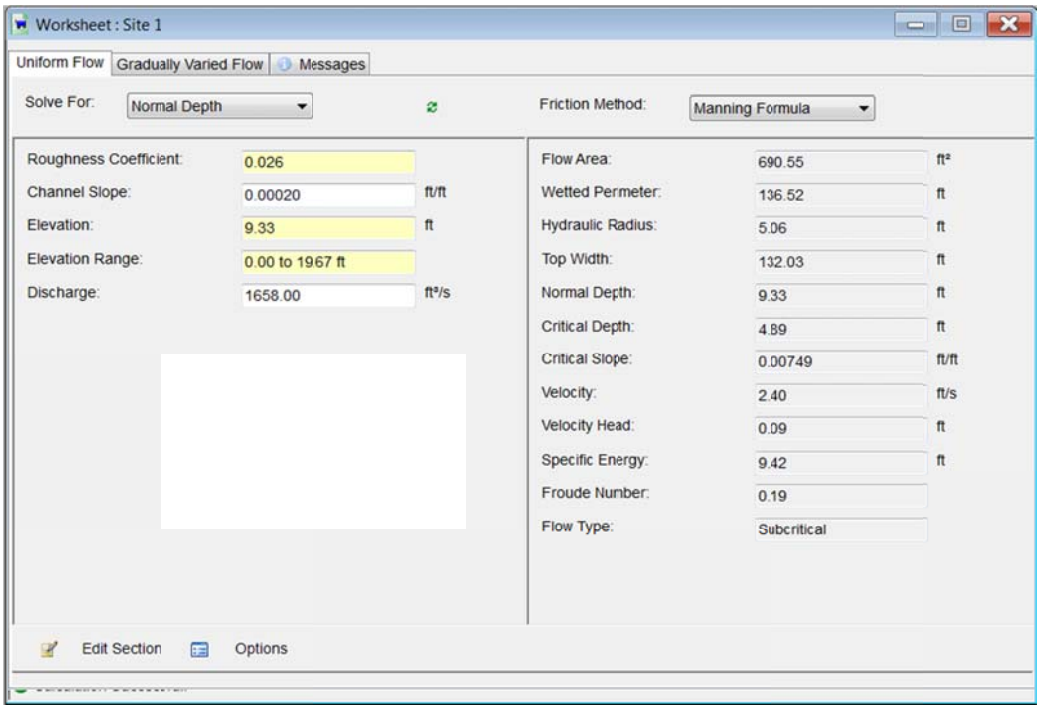
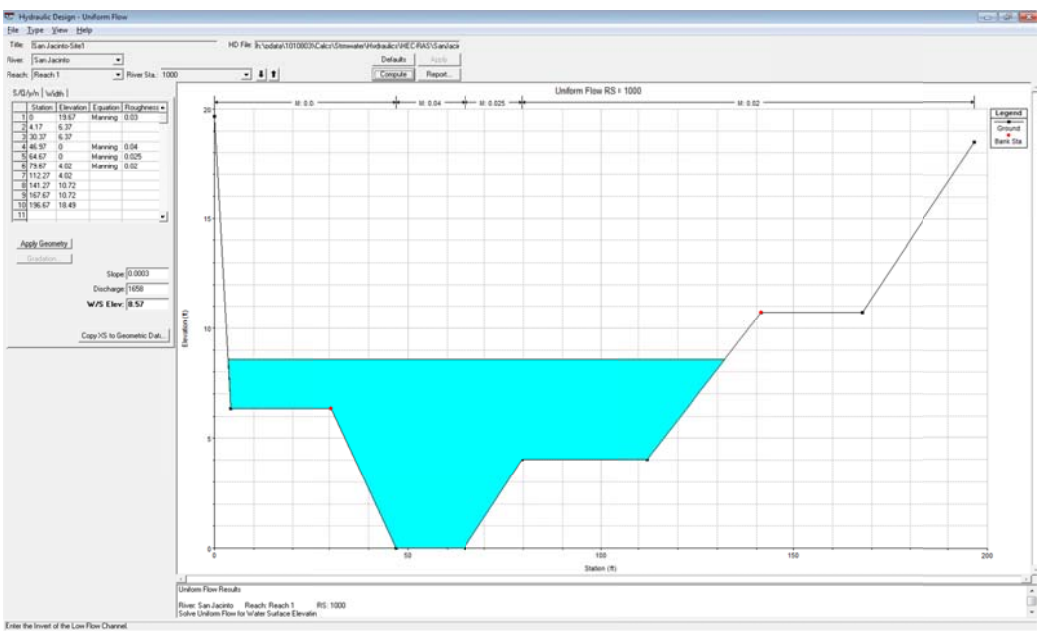
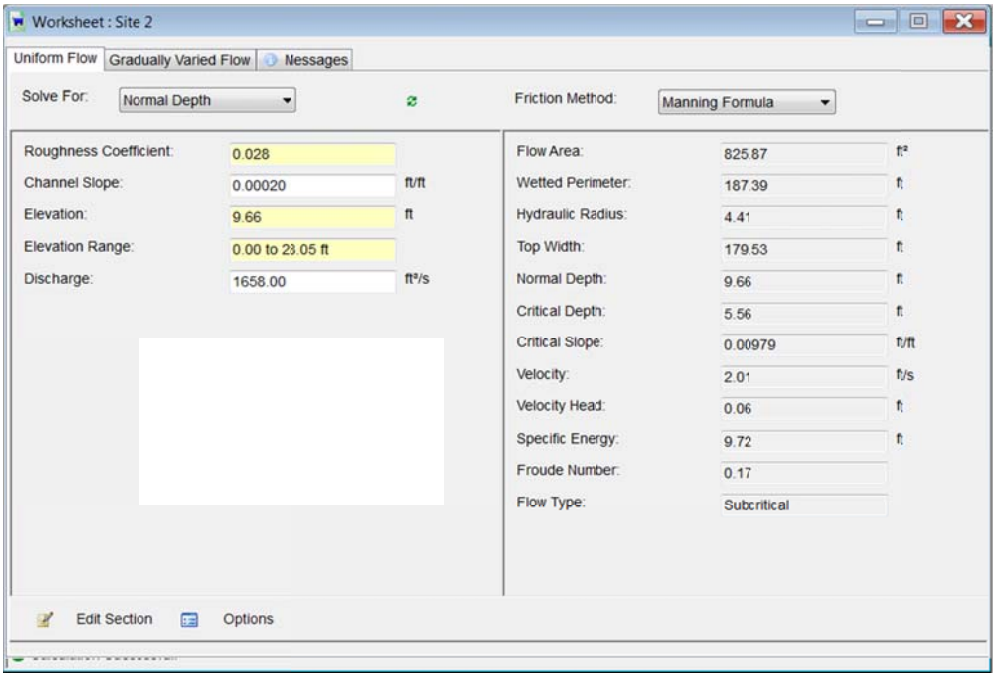
Appendix B – Uniform Depth Computations (HEC-RAS) and Normal Depth Computations (Flowmaster)

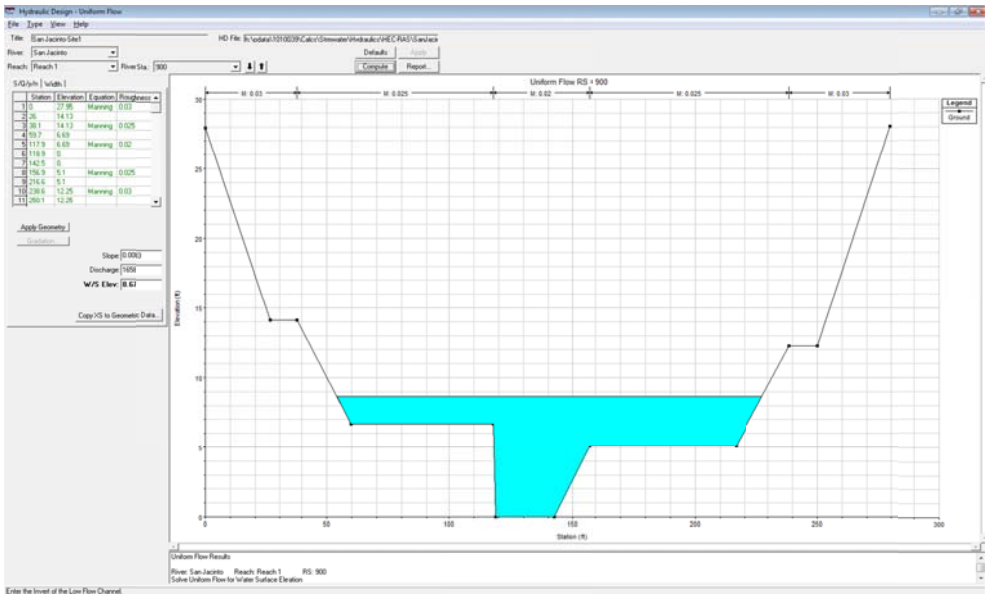
Location #1



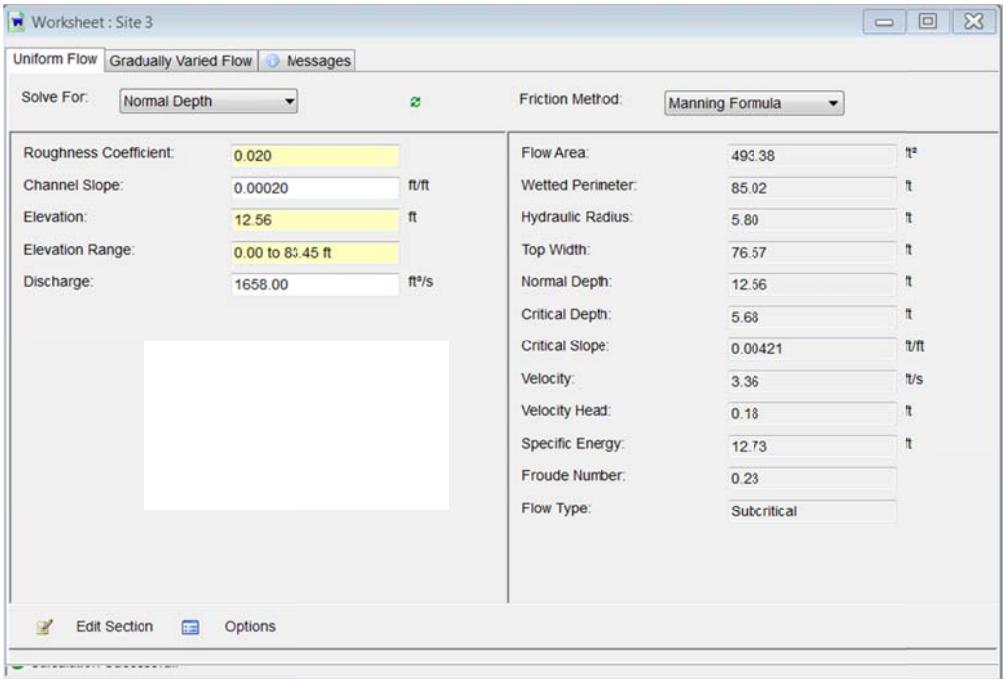


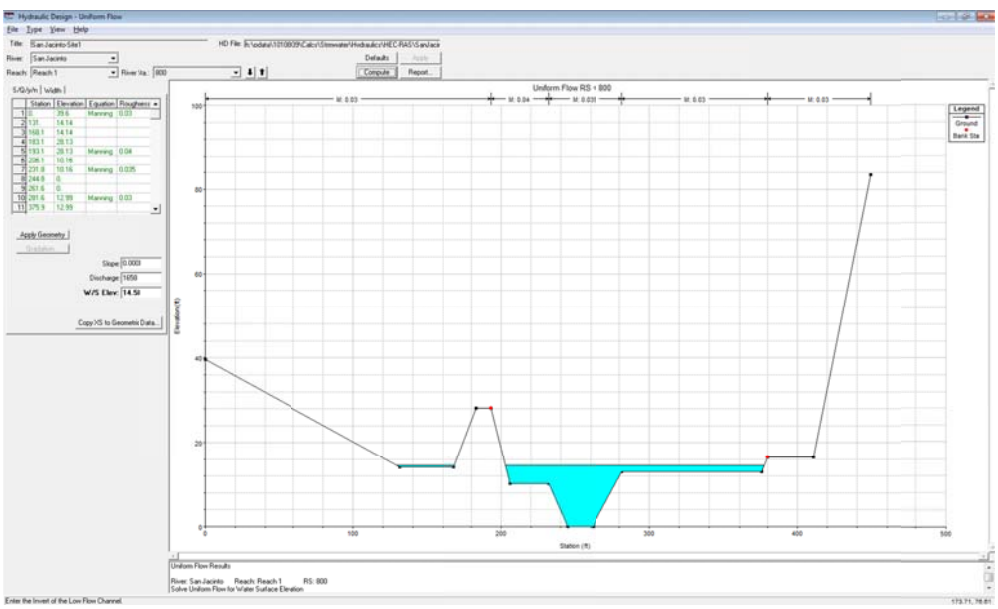
Location #2


Worksheet : Site 2
Uniform Flow
Gradually Varied Flow
Messages
Solve For:
Normal Depth
Friction Method:
Manning Formula
Roughness Coefficient: 0.028
Channel Slope: 0.00020 ft/ft
Elevation: 9.66 ft
Elevation Range: 0.00 to 23.05 ft
Discharge: 1658.00 ft³/s
Flow Area: 825.87 ft²
Wetted Perimeter: 187.39 ft
Hydraulic Radius: 4.41 ft
Top Width: 179.53 ft
Normal Depth: 9.66 ft
Critical Depth: 5.56 ft
Critical Slope: 0.00979 ft/ft
Velocity: 2.01 ft/s
Velocity Head: 0.06 ft
Specific Energy: 9.72 ft
Froude Number: 0.17
Flow Type: Subcritical
Edit Section
Options


Hydraulic Design - Uniform Flow
Uniform Flow RS = 900
Station (ft)
Elevation (ft)
Legend
Ground
Uniform Flow Results
Enter the Invert of the Low Flow Channel

Location #3


Worksheet : Site 3
Uniform Flow
Gradually Varied Flow
Messages
Solve For:
Normal Depth
Friction Method:
Manning Formula
Roughness Coefficient: 0.020
Channel Slope: 0.00020 ft/ft
Elevation: 12.56 ft
Elevation Range: 0.00 to 83.45 ft
Discharge: 1658.00 ft³/s
Flow Area: 493.38 ft²
Wetted Perimeter: 85.02 ft
Hydraulic Radius: 5.80 ft
Top Width: 76.57 ft
Normal Depth: 12.56 ft
Critical Depth: 5.68 ft
Critical Slope: 0.00421 ft/ft
Velocity: 3.36 ft/s
Velocity Head: 0.18 ft
Specific Energy: 12.73 ft
Froude Number: 0.23
Flow Type: Subcritical
Edit Section
Options


Hydraulic Design - Uniform Flow
Uniform Flow RS = 800
Station (ft)
Elevation (ft)
Legend
Ground
Bank Sta
Uniform Flow Results
River: San Jacinto Reach: Reach 1 RS: 800
Solve Uniform Flow for Water Surface Elevation
Enter the Invert of the Low Flow Channel