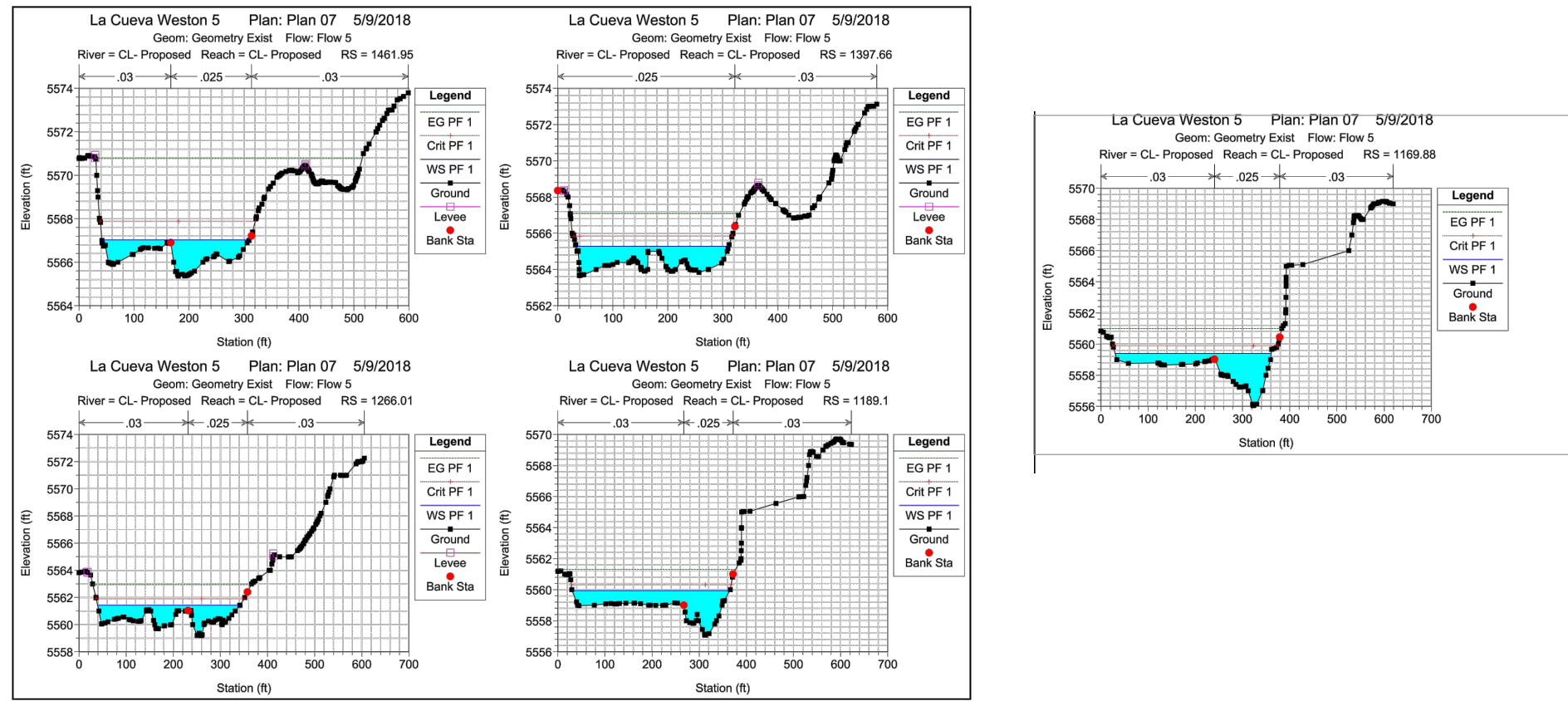


HEC-RAS SIMULATION RESULTS

EXISTING CONDITION SUMMARY TABLE

| HEC-RAS Plan: Plan 07 River: CL-Proposed Reach: CL-Proposed Profile: PF 1 | Reach   | River Sta | Profile | Q Total (cfs) | Min Ch El (ft) | W.S. Elev (ft) | Crit W.S. (ft) | E.G. Elev (ft) | E.G. Slope (ft/ft) | Vel Chnl (ft/s) | Flow Area (sq ft) | Top Width (ft) | Froude # Chl |
|---------------------------------------------------------------------------|---------|-----------|---------|---------------|----------------|----------------|----------------|----------------|--------------------|-----------------|-------------------|----------------|--------------|
| CL-Proposed                                                               | 1898.09 | PF 1      |         | 3090.00       | 5577.99        | 5580.65        | 5580.65        | 5581.38        | 0.007715           | 7.39            | 479.51            | 374.14         | 1.00         |
| CL-Proposed                                                               | 1809.98 | PF 1      |         | 3090.00       | 5575.28        | 5577.35        | 5578.17        | 5579.96        | 0.032091           | 13.68           | 254.20            | 215.25         | 2.00         |
| CL-Proposed                                                               | 1674.96 | PF 1      |         | 3090.00       | 5571.00        | 5573.57        | 5574.26        | 5576.02        | 0.026031           | 13.80           | 287.68            | 280.66         | 1.85         |
| CL-Proposed                                                               | 1587.58 | PF 1      |         | 3090.00       | 5568.68        | 5570.87        | 5571.86        | 5573.49        | 0.032034           | 13.16           | 250.89            | 239.02         | 1.98         |
| CL-Proposed                                                               | 1516.47 | PF 1      |         | 3090.00       | 5567.37        | 5569.65        | 5570.45        | 5572.21        | 0.011340           | 12.83           | 240.83            | 179.45         | 1.95         |
| CL-Proposed                                                               | 1461.95 | PF 1      |         | 3090.00       | 5565.36        | 5567.02        | 5567.88        | 5570.78        | 0.080994           | 16.87           | 213.69            | 268.21         | 2.98         |
| CL-Proposed                                                               | 1397.66 | PF 1      |         | 3090.00       | 5563.66        | 5565.28        | 5565.84        | 5567.10        | 0.031934           | 10.80           | 286.16            | 277.83         | 1.88         |
| CL-Proposed                                                               | 1266.01 | PF 1      |         | 3090.00       | 5559.18        | 5561.43        | 5561.91        | 5562.95        | 0.029779           | 11.23           | 320.54            | 301.91         | 1.85         |
| CL-Proposed                                                               | 1189.1  | PF 1      |         | 3090.00       | 5557.07        | 5559.94        | 5560.32        | 5561.31        | 0.015431           | 11.02           | 381.39            | 334.41         | 1.44         |
| CL-Proposed                                                               | 1169.88 | PF 1      |         | 3090.00       | 5556.05        | 5559.40        | 5559.89        | 5561.00        | 0.014511           | 11.02           | 389.35            | 330.45         | 1.40         |
| CL-Proposed                                                               | 1089.9  | PF 1      |         | 3090.00       | 5552.94        | 5556.04        | 5557.05        | 5559.33        | 0.025238           | 14.80           | 213.15            | 109.92         | 1.75         |
| CL-Proposed                                                               | 1047.92 | PF 1      |         | 3090.00       | 5551.93        | 5554.52        | 5555.56        | 5557.98        | 0.040798           | 14.92           | 207.16            | 117.73         | 1.98         |
| CL-Proposed                                                               | 999.95  | PF 1      |         | 3090.00       | 5550.58        | 5553.20        | 5554.20        | 5556.25        | 0.028170           | 14.00           | 220.64            | 103.33         | 1.69         |
| CL-Proposed                                                               | 873.91  | PF 1      |         | 3090.00       | 5546.55        | 5549.76        | 5550.84        | 5552.90        | 0.025066           | 16.08           | 235.07            | 127.80         | 1.67         |
| CL-Proposed                                                               | 788.25  | PF 1      |         | 3090.00       | 5543.91        | 5547.07        | 5548.24        | 5550.70        | 0.024909           | 16.34           | 212.17            | 93.49          | 1.69         |
| CL-Proposed                                                               | 683.29  | PF 1      |         | 3090.00       | 5540.94        | 5544.22        | 5545.12        | 5547.94        | 0.027672           | 15.48           | 200.85            | 96.62          | 1.83         |
| CL-Proposed                                                               | 616.82  | PF 1      |         | 3090.00       | 5538.98        | 5542.77        | 5543.44        | 5546.02        | 0.025826           | 14.73           | 231.73            | 180.18         | 1.69         |
| CL-Proposed                                                               | 561.38  | PF 1      |         | 3090.00       | 5537.04        | 5540.38        | 5541.59        | 5544.19        | 0.040485           | 15.90           | 206.53            | 148.17         | 2.06         |
| CL-Proposed                                                               | 490.06  | PF 1      |         | 3090.00       | 5535.37        | 5538.95        | 5539.90        | 5541.67        | 0.024100           | 13.27           | 238.67            | 157.13         | 1.60         |
| CL-Proposed                                                               | 457.16  | PF 1      |         | 3090.00       | 5534.94        | 5538.06        | 5539.03        | 5540.87        | 0.023726           | 13.73           | 253.39            | 237.29         | 1.78         |
| CL-Proposed                                                               | 392.85  | PF 1      |         | 3090.00       | 5531.00        | 5535.71        | 5536.22        | 5538.75        | 0.047133           | 14.48           | 242.86            | 302.18         | 2.33         |
| CL-Proposed                                                               | 374.73  | PF 1      |         | 3090.00       | 5530.98        | 5535.13        | 5535.85        | 5537.93        | 0.036938           | 14.53           | 274.87            | 387.66         | 2.13         |
| CL-Proposed                                                               | 346.75  | PF 1      |         | 3090.00       | 5530.95        | 5534.44        | 5535.15        | 5536.92        | 0.028874           | 14.26           | 304.10            | 364.22         | 1.94         |
| CL-Proposed                                                               | 299.48  | PF 1      |         | 3090.00       | 5528.97        | 5532.82        | 5533.61        | 5535.54        | 0.028645           | 15.15           | 291.57            | 329.29         | 1.95         |
| CL-Proposed                                                               | 249.63  | PF 1      |         | 3090.00       | 5528.04        | 5531.67        | 5532.32        | 5534.19        | 0.022554           | 14.84           | 322.35            | 387.62         | 1.79         |
| CL-Proposed                                                               | 189.79  | PF 1      |         | 3090.00       | 5526.53        | 5529.98        | 5530.75        | 5532.78        | 0.023053           | 14.86           | 288.53            | 300.26         | 1.80         |
| CL-Proposed                                                               | 151.07  | PF 1      |         | 3090.00       | 5525.00        | 5528.72        | 5529.71        | 5531.67        | 0.035347           | 13.79           | 224.01            | 162.77         | 2.07         |
| CL-Proposed                                                               | 115.47  | PF 1      |         | 3090.00       | 5524.97        | 5528.15        | 5528.94        | 5530.64        | 0.018636           | 13.70           | 276.94            | 192.82         | 1.63         |
| CL-Proposed                                                               | 41.45   | PF 1      |         | 3090.00       | 5521.88        | 5525.06        | 5526.17        | 5528.86        | 0.027068           | 16.47           | 216.80            | 139.65         | 1.96         |

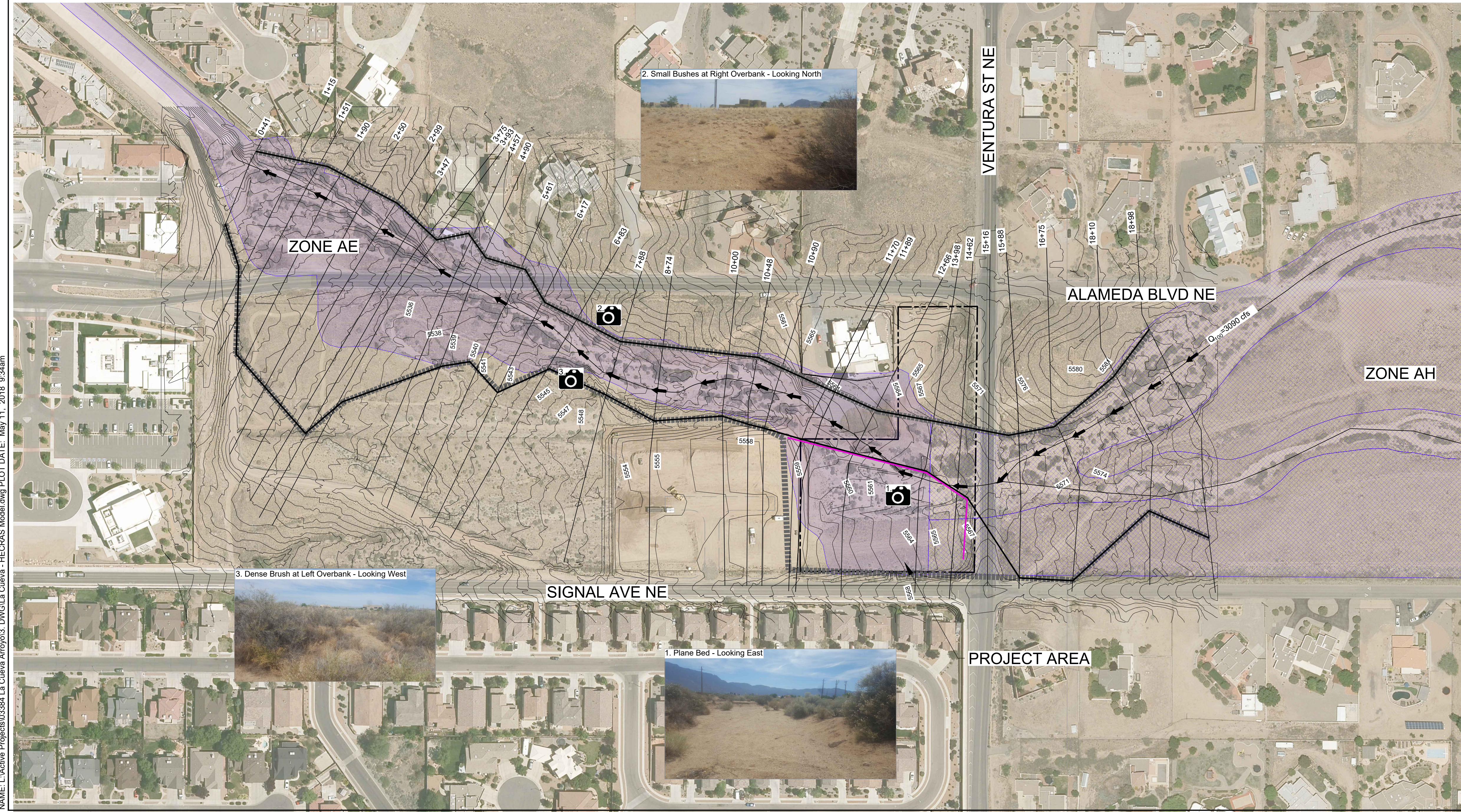
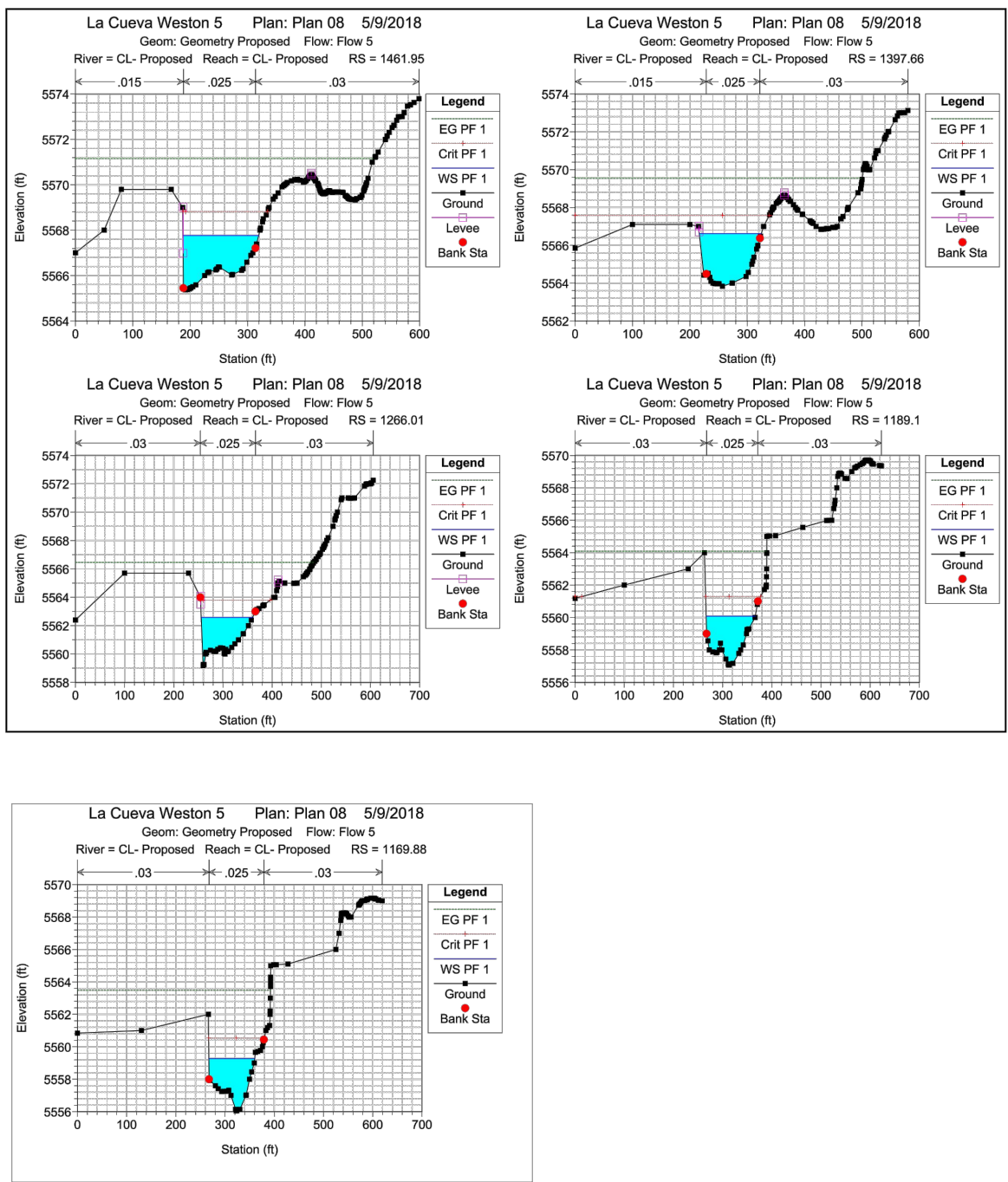
EXISTING XS



PROPOSED CONDITION SUMMARY TABLE

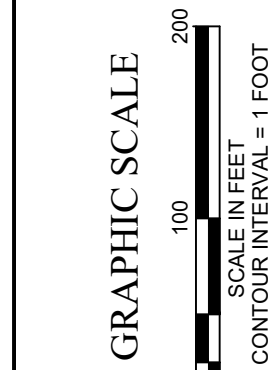
| HEC-RAS Plan: Plan 06 River: CL-Proposed Reach: CL-Proposed Profile: PF 1 | Reach   | River Sta | Profile | Q Total (cfs) | Min Ch El (ft) | W.S. Elev (ft) | Crit W.S. (ft) | E.G. Elev (ft) | E.G. Slope (ft/ft) | Vel Chnl (ft/s) | Flow Area (sq ft) | Top Width (ft) | Froude # Chl |
|---------------------------------------------------------------------------|---------|-----------|---------|---------------|----------------|----------------|----------------|----------------|--------------------|-----------------|-------------------|----------------|--------------|
| CL-Proposed                                                               | 1898.09 | PF 1      |         | 3090.00       | 5577.99        | 5580.65        | 5580.65        | 5581.38        | 0.007715           | 7.39            | 479.51            | 374.14         | 1.00         |
| CL-Proposed                                                               | 1809.98 | PF 1      |         | 3090.00       | 5575.28        | 5577.35        | 5578.17        | 5579.96        | 0.032091           | 13.68           | 254.20            | 215.25         | 2.00         |
| CL-Proposed                                                               | 1674.96 | PF 1      |         | 3090.00       | 5571.00        | 5573.57        | 5574.26        | 5576.02        | 0.026031           | 13.80           | 287.68            | 280.66         | 1.85         |
| CL-Proposed                                                               | 1587.58 | PF 1      |         | 3090.00       | 5568.68        | 5570.87        | 5571.86        | 5573.49        | 0.032034           | 13.16           | 250.89            | 239.02         | 1.98         |
| CL-Proposed                                                               | 1516.47 | PF 1      |         | 3090.00       | 5567.37        | 5569.65        | 5570.45        | 5572.21        | 0.011340           | 12.83           | 240.83            | 179.45         | 1.95         |
| CL-Proposed                                                               | 1461.95 | PF 1      |         | 3090.00       | 5565.37        | 5567.77        | 5568.82        | 5571.15        | 0.031601           | 14.79           | 210.49            | 131.82         | 2.03         |
| CL-Proposed                                                               | 1397.66 | PF 1      |         | 3090.00       | 5563.84        | 5566.62        | 5567.58        | 5569.54        | 0.017349           | 13.37           | 226.99            | 108.15         | 1.58         |
| CL-Proposed                                                               | 1266.01 | PF 1      |         | 3090.00       | 5559.18        | 5562.58        | 5563.80        | 5566.45        | 0.031123           | 15.79           | 195.66            | 104.38         | 2.03         |
| CL-Proposed                                                               | 1189.1  | PF 1      |         | 3090.00       | 5557.07        | 5560.08        | 5561.29        | 5564.09        | 0.030174           | 16.05           | 192.85            | 99.83          | 2.03         |
| CL-Proposed                                                               | 1169.88 | PF 1      |         | 3090.00       | 5556.05        | 5559.27        | 5560.54        | 5563.48        | 0.030119           | 16.47           | 187.89            | 93.21          | 2.04         |
| CL-Proposed                                                               | 1089.9  | PF 1      |         | 3090.00       | 5552.94        | 5555.69        | 5557.05        | 5560.49        | 0.045734           | 17.62           | 176.14            | 104.50         | 2.30         |
| CL-Proposed                                                               | 1047.92 | PF 1      |         | 3090.00       | 5551.93        | 5554.44        | 5555.56        | 5558.24        | 0.047301           | 15.63           | 197.72            | 116.70         | 2.12         |
| CL-Proposed                                                               | 999.95  | PF 1      |         | 3090.00       | 5550.58        | 5553.16        | 5554.20        | 5556.28        | 0.028901           | 14.12           | 218.78            | 102.97         | 1.71         |
| CL-Proposed                                                               | 873.91  | PF 1      |         | 3090.00       | 5546.55        | 5549.76        | 5550.84        | 5552.90        | 0.025048           | 16.08           | 235.14            | 127.82         | 1.67         |
| CL-Proposed                                                               | 788.25  | PF 1      |         | 3090.00       | 5543.91        | 5547.07        | 5548.24        | 5550.70        | 0.024925           | 16.34           | 212.13            | 93.48          | 1.69         |
| CL-Proposed                                                               | 683.29  | PF 1      |         | 3090.00       | 5540.94        | 5544.22        | 5545.12        | 5547.94        | 0.027690           | 15.48           | 200.80            | 96.61          | 1.83         |
| CL-Proposed                                                               | 616.82  | PF 1      |         | 3090.00       | 5538.98        | 5542.77        | 5543.44        | 5546.02        | 0.025826           | 14.73           | 231.73            | 180.18         | 1.69         |
| CL-Proposed                                                               | 561.38  | PF 1      |         | 3090.00       | 5537.04        | 5540.38        | 5541.59        | 5544.19        | 0.040485           | 15.90           | 206.53            | 148.17         | 2.06         |
| CL-Proposed                                                               | 490.06  | PF 1      |         | 3090.00       | 5535.37        | 5538.95        | 5539.90        | 5541.67        | 0.024100           | 13.27           | 238.67            | 157.13         | 1.60         |
| CL-Proposed                                                               | 457.16  | PF 1      |         | 3090.00       | 5534.94        | 5538.06        | 5539.03        | 5540.87        | 0.023726           | 13.73           | 253.39            | 237.29         | 1.78         |
| CL-Proposed                                                               | 392.85  | PF 1      |         | 3090.00       | 5531.00        | 5535.71        | 5536.22        | 5538.75        | 0.047133           | 14.48           | 242.86            | 302.18         | 2.33         |
| CL-Proposed                                                               | 374.73  | PF 1      |         | 3090.00       | 5530.98        | 5535.13        | 5535.85        | 5537.93        | 0.036938           | 14.53           | 274.87            | 387.66         | 2.13         |
| CL-Proposed                                                               | 346.75  | PF 1      |         | 3090.00       | 5530.95        | 5534.44        | 5535.15        | 5536.92        | 0.028874           | 14.26           | 304.10            | 364.22         | 1.94         |
| CL-Proposed                                                               | 299.48  | PF 1      |         | 3090.00       | 5528.97        | 5532.82        | 5533.61        | 5535.54        | 0.028645           | 15.15           | 291.57            | 329.29         | 1.95         |
| CL-Proposed                                                               | 249.63  | PF 1      |         | 3090.00       | 5528.04        | 5531.67        | 5532.32        | 5534.19        | 0.022554           | 14.84           | 322.35            | 387.62         | 1.79         |
| CL-Proposed                                                               | 189.79  | PF 1      |         | 3090.00       | 5526.53        | 5529.98        | 5530.75        | 5532.78        | 0.023053           | 14.86           | 288.53            | 300.26         | 1.80         |
| CL-Proposed                                                               | 151.07  | PF 1      |         | 3090.00       | 5525.00        | 5528.72        | 5529.71        | 5531.67        | 0.035347           | 13.79           | 224.01            | 162.77         | 2.07         |
| CL-Proposed                                                               | 115.47  | PF 1      |         | 3090.00       | 5524.97        | 5528.15        | 5528.94        | 5530.64        | 0.018636           | 13.70           | 276.94            | 192.82         | 1.63         |
| CL-Proposed                                                               | 41.45   | PF 1      |         | 3090.00       | 5521.88        | 5525.06        | 5526.17        | 5528.86        | 0.027068           | 16.47           | 216.80            | 139.65         | 1.96         |

PROPOSED XS



DATE: 05.10.2018

LA CUEVA ARROYO  
FLOODPLAIN ANALYSIS  
EXHIBIT A



SHEET NUMBER:

1 OF 1

Thompson Engineering Consultants, Inc.

STAMP

5-10-18