#### **BASIN: SOUTH ENGLEWOOD**

| _  | S1 - SOUTH  |            | ER TO NAVAJO ST | 7           |
|--|-------------|------------|-----------------|-------------|
| 10-YR DESIGN PRELIMINARY COS                 |             |            |                 | ·           |
| ITEM   | QUANTITY    | UNITS      | UNIT COST       | TOTAL COST  |
| 11'x7' RCBC (Precast)                        | 1089        | LF         | \$1,195         | \$1,302,000 |
| 96-inch RCP                                  | 1904        | LF         | \$514           | \$978,000   |
| Removal of Pipe (92" dia.)                   | 1854        | LF         | \$54            | \$99,000    |
| Removal of Pipe (78" dia.)                   | 1139        | LF         | \$54            | \$61,000    |
| Removal of Manhole                           | 3           | EA         | \$931           | \$3,000     |
| Removal of Asphalt Mat                       | 9980        | SY         | \$7             | \$70,000    |
| Asphalt Patching/Paving                      | 9980        | SY         | \$26            | \$259,000   |
| Manhole Special (Large Junction Box)         | 2           | EA         | \$46,759        | \$94,000    |
| SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS: |             |            |                 |             |
| MOBILIZATION                                 |             |            | 10%             | \$287,000   |
| DEWATERING                                   |             |            | 5%              | \$143,000   |
| TRAFFIC CONTROL                              |             |            | 10%             | \$287,000   |
| UTILITY COORDINATION/RELOCATION 10%          |             |            | \$287,000       |             |
| STORMWATER MANAGEMENT/EROSION CONTROL        |             |            | 5%              | \$143,000   |
| SUBTOTAL FOR ADD                             | ITIONAL CAP | ITAL IMPRO | VEMENT COSTS:   | \$1,147,000 |
| SUBTOTAL FO                                  | R TOTAL CAP | ITAL IMPRO | VEMENT COSTS:   | \$4,013,000 |
| CONTINGENCIES                                |             |            | 25%             | \$1,003,000 |
| ENGINEERING DESIGN SERVICES                  |             |            | 15%             | \$602,000   |
| LEGAL AND ADMINISTRATIVE SERVICES            |             |            | 5%              | \$201,000   |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT       |             |            | 10%             | \$401,000   |
| SUBTOTAL FOR OTHER COSTS: \$2,207,0          |             |            |                 | \$2,207,000 |
| TOTAL ESTIMATED CONSTRUCTION COST:           |             |            |                 | \$6,220,000 |

#### **BASIN: SOUTH ENGLEWOOD**

|   | SOUTH ENG   |             |               | _            |
|---|-------------|-------------|---------------|--------------|
| SEGMENT: S1 - SOUTH PLATTE RIVER TO NAVAJO ST 25-YR DESIGN PRELIMINARY COST ESTIMATE (AVERAGE INSTALLATION) |             |             |               |              |
| 25-YR DESIGN PRELIMINARY COS  | TESTIMATE   | (AVERAGE II | NSTALLATION)  |              |
| ITEM  | QUANTITY    | UNITS       | UNIT COST     | TOTAL COST   |
| 2-12'x7' RCBC (Precast)   | 2178        | LF          | \$1,195       | \$2,603,000  |
| 2-10'x6' RCBC (Precast)   | 3808        | LF          | \$1,195       | \$4,551,000  |
| Removal of Pipe (92" dia.)  | 1854        | LF          | \$54          | \$99,000     |
| Removal of Pipe (78" dia.)  | 1139        | LF          | \$54          | \$61,000     |
| Removal of Manhole  | 3           | EA          | \$931         | \$3,000      |
| Removal of Asphalt Mat  | 9980        | SY          | \$7           | \$70,000     |
| Asphalt Patching/Paving   | 9980        | SY          | \$26          | \$259,000    |
| Manhole Special (Large Junction Box)  | 2           | EA          | \$46,759      | \$94,000     |
| SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS:  |             |             |               |              |
| MOBILIZATION  |             |             | 10%           | 774,000      |
| DEWATERING  |             |             | 5%            | 387,000      |
| TRAFFIC CONTROL 10%   |             |             | 774,000       |              |
| UTILITY COORDINATION/RELOCATION 10%   |             |             | 774,000       |              |
| STORMWATER MANAGEMENT/EROSION CONTROL   |             |             | 5%            | 387,000      |
| SUBTOTAL FOR ADD  | ITIONAL CAP | ITAL IMPRO  | VEMENT COSTS: | 3,096,000    |
| SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:   |             |             | 10,836,000    |              |
| CONTINGENCIES   |             |             | 25%           | 2,709,000    |
| ENGINEERING DESIGN SERVICES   |             |             | 15%           | 1,625,000    |
| LEGAL AND ADMINISTRATIVE SERVICES   |             |             | 5%            | 542,000      |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT 1  |             |             | 10%           | 1,084,000    |
| SUBTOTAL FOR OTHER COSTS:   |             |             |               | \$5,960,000  |
| To  | OTAL ESTIMA | ATED CONST  | RUCTION COST: | \$16,796,000 |

#### **BASIN: SOUTH ENGLEWOOD**

# SEGMENT: S2 - OXFORD ST TO ROTOLO PARK

| 10-YR DESIGN PRELIMINARY COST ESTIMATE (AVERAGE INSTALLATION) |             |            |               |             |
|---|-------------|------------|---------------|-------------|
| ITEM  | QUANTITY    | UNITS      | UNIT COST     | TOTAL COST  |
| 78-inch RCP   | 2025        | LF         | \$417         | \$845,000   |
| 72-inch RCP   | 453         | LF         | \$385         | \$174,000   |
| 42-inch RCP   | 2608        | LF         | \$135         | \$352,000   |
| 36-inch RCP   | 1331        | LF         | \$116         | \$154,000   |
| Rotolo Park Demolition  | 2.6         | AC         | \$2,000       | \$5,000     |
| Rotolo Park Excavation  | 8075        | CY         | \$31          | \$250,000   |
| Jason Park Detention Facility Demolition                      | 4           | AC         | \$2,000       | \$8,000     |
| Jason Park Detention Facility Excavation                      | 28021       | CY         | \$31          | \$869,000   |
| Detention Facility Outlet Structure                           | 2           | EA         | \$19,814      | \$40,000    |
| Reclamation and Seeding (Native Grass)                        | 6.6         | AC         | \$1,310       | \$9,000     |
| Removal of Pipe (84" dia.)                                    | 2025        | LF         | \$54          | \$108,000   |
| Removal of Pipe (76" dia.)                                    | 737         | LF         | \$54          | \$39,000    |
| Removal of Pipe (60" dia.)                                    | 594         | LF         | \$54          | \$32,000    |
| Removal of Pipe (33" dia.)                                    | 453         | LF         | \$21          | \$10,000    |
| Removal of Manhole  | 8           | EA         | \$931         | \$7,000     |
| Removal of Asphalt Mat  | 4667        | SY         | \$7           | \$33,000    |
| Asphalt Patching/Paving                                       | 4667        | SY         | \$26          | \$121,000   |
| Manhole Special (Large Junction Box)                          | 4           | EA         | \$46,759      | \$187,000   |
| SUBTOTAL F  | OR BASE CAP | ITAL IMPRO | VEMENT COSTS: | \$3,243,000 |
| MOBILIZATION  |             |            | 10%           | \$324,000   |
| DEWATERING  |             |            | 5%            | \$162,000   |
| TRAFFIC CONTROL   |             |            | 10%           | \$324,000   |
| UTILITY COORDINATION/RELOCATION                               |             |            | 10%           | \$324,000   |
| STORMWATER MANAGEMENT/EROSION CONTROL                         |             |            | 5%            | \$162,000   |
| SUBTOTAL FOR ADD  | ITIONAL CAP | ITAL IMPRO | VEMENT COSTS: | \$1,296,000 |
| SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:                 |             |            |               | \$4,539,000 |
| CONTINGENCIES 25%   |             |            | \$1,135,000   |             |
| ENGINEERING DESIGN SERVICES                                   |             |            | 15%           | \$681,000   |
| LEGAL AND ADMINISTRATIVE SERVICES 5%                          |             |            | 5%            | \$227,000   |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT                        |             |            | 10%           | \$454,000   |
| SUBTOTAL FOR OTHER COSTS:                                     |             |            |               | \$2,497,000 |
| TOTAL ESTIMATED CONSTRUCTION COST:                            |             |            |               | \$7,036,000 |

### **BASIN: SOUTH ENGLEWOOD**

# SEGMENT: S2 - OXFORD ST TO ROTOLO PARK

| SEGIVIENT: 52 - OXI OND ST TO NOTCEOT ANN                     |             |             |               |              |
|---|-------------|-------------|---------------|--------------|
| 25-YR DESIGN PRELIMINARY COST ESTIMATE (AVERAGE INSTALLATION) |             |             |               |              |
| ITEM  | QUANTITY    | UNITS       | UNIT COST     | TOTAL COST   |
| 11'x6' RCBC (Precast)   | 2025        | LF          | \$1,195       | \$2,420,000  |
| 96-inch RCP   | 1331        | LF          | \$514         | \$684,000    |
| 72-inch RCP   | 406         | LF          | \$385         | \$156,000    |
| 42-inch RCP   | 2608        | LF          | \$135         | \$352,000    |
| 36-inch RCP   | 453         | LF          | \$116         | \$52,000     |
| Rotolo Park Detention Facility Demolition                     | 2.6         | AC          | \$2,000       | \$5,000      |
| Rotolo Park Detention Facility Excavation                     | 8075        | CY          | \$31          | \$250,000    |
| Jason Park Detention Facility Demolition                      | 4           | AC          | \$2,000       | \$8,000      |
| Jason Park Detention Facility Excavation                      | 28021       | CY          | \$31          | \$869,000    |
| Detention Facility Outlet Structure                           | 2           | EA          | \$19,814      | \$40,000     |
| Reclamation and Seeding (Native Grass)                        | 6.6         | AC          | \$1,310       | \$9,000      |
| Removal of Pipe (84" dia.)                                    | 2025        | LF          | \$54          | \$108,000    |
| Removal of Pipe (76" dia.)                                    | 737         | LF          | \$54          | \$39,000     |
| Removal of Pipe (60" dia.)                                    | 1000        | LF          | \$54          | \$54,000     |
| Removal of Pipe (33" dia.)                                    | 453         | LF          | \$21          | \$10,000     |
| Removal of Manhole  | 8           | EA          | \$931         | \$7,000      |
| Removal of Asphalt Mat  | 11895       | SY          | \$7           | \$83,000     |
| Asphalt Patching/Paving                                       | 11895       | SY          | \$26          | \$309,000    |
| Manhole Special (Large Junction Box)                          | 4           | EA          | \$46,759      | \$187,000    |
| SUBTOTAL F  | OR BASE CAP | PITAL IMPRO | VEMENT COSTS: | \$5,642,000  |
| MOBILIZATION  |             |             | 10%           | 564,000      |
| DEWATERING  |             |             | 5%            | 282,000      |
| TRAFFIC CONTROL   |             |             | 10%           | 564,000      |
| UTILITY COORDINATION/RELOCATION                               |             |             | 10%           | 564,000      |
| STORMWATER MANAGEMENT/EROSION CONTROL                         |             |             | 5%            | 282,000      |
| SUBTOTAL FOR ADD  | ITIONAL CAP | ITAL IMPRO  | VEMENT COSTS: | 2,256,000    |
| SUBTOTAL FO   | R TOTAL CAP | PITAL IMPRO | VEMENT COSTS: | 7,898,000    |
| CONTINGENCIES   |             |             | 25%           | 1,975,000    |
| ENGINEERING DESIGN SERVICES                                   |             |             | 15%           | 1,185,000    |
| LEGAL AND ADMINISTRATIVE SERVICES                             |             |             | 5%            | 395,000      |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT 10%                    |             |             | 10%           | 790,000      |
| SUBTOTAL FOR OTHER COSTS:                                     |             |             |               |              |
| T   | OTAL ESTIMA | ATED CONST  | RUCTION COST: | \$12,243,000 |

#### **BASIN: SOUTH ENGLEWOOD**

SEGMENT: S3 - CHEROKEE ST TO CLARKSON ST

| SEGMENT: S3 - CHEROKEE ST TO CLARKSON ST  10-YR DESIGN PRELIMINARY COST ESTIMATE (AVERAGE INSTALLATION) |               |             |                |             |
|---|---------------|-------------|----------------|-------------|
| 10-YR DESIGN PRELIMINARY COS  | SI ESTIIVIATE | (AVERAGE II | NSTALLATION)   |             |
| ITEM  | QUANTITY      | UNITS       | UNIT COST      | TOTAL COST  |
| 84-inch RCP   | 923           | LF          | \$449          | \$415,000   |
| 72-inch RCP   | 2439          | LF          | \$385          | \$940,000   |
| 60-inch RCP   | 992           | LF          | \$257          | \$255,000   |
| 54-inch RCP   | 612           | LF          | \$231          | \$141,000   |
| 42-inch RCP   | 831           | LF          | \$135          | \$112,000   |
| 36-inch RCP   | 1008          | LF          | \$116          | \$116,000   |
| Clayton Detention Facility Demolition   | 1.8           | AC          | \$2,000        | \$4,000     |
| Clayton Detention Facility Excavation   | 21522         | CY          | \$31           | \$667,000   |
| Cherrelyn Detention Facility Demolition   | 0.4           | AC          | \$2,000        | \$1,000     |
| Cherrelyn Detention Facility Excavation   | 2579          | CY          | \$31           | \$80,000    |
| Duncan Park Detention Facility Demolition   | 0.8           | AC          | \$2,000        | \$2,000     |
| Duncan Park Detention Facility Excavation   | 5346          | CY          | \$31           | \$166,000   |
| Chenango Detention Facility Demolition  | 3.5           | AC          | \$2,000        | \$7,000     |
| Chenango Detention Facility Excavation  | 25740         | CY          | \$31           | \$798,000   |
| Detention Facility Outlet Structure   | 4             | EA          | \$19,814       | \$79,000    |
| Reclamation and Seeding (Native Grass)  | 9.5           | AC          | \$1,310        | \$12,000    |
| Removal of Pipe (76" dia.)  | 923           | LF          | \$54           | \$49,000    |
| Removal of Pipe (60" dia.)  | 692           | LF          | \$54           | \$37,000    |
| Removal of Pipe (54" dia.)  | 1484          | LF          | \$54           | \$79,000    |
| Removal of Pipe (48" dia.)  | 1455          | LF          | \$54           | \$78,000    |
| Removal of Pipe (42" dia.)  | 612           | LF          | \$21           | \$13,000    |
| Removal of Pipe (36" dia.)  | 219           | LF          | \$21           | \$5,000     |
| Removal of Pipe (33" dia.)  | 1008          | LF          | \$21           | \$22,000    |
| Removal of Manhole  | 8             | EA          | \$931          | \$7,000     |
| Removal of Asphalt Mat  | 5845          | SY          | \$7            | \$41,000    |
| Asphalt Patching/Paving   | 5845          | SY          | \$26           | \$152,000   |
| Manhole, Type B (Pipe Dia. > 48")   | 5             | EA          | \$12,840       | \$64,000    |
| Manhole Special (Large Junction Box)  | 1             | EA          | \$46,759       | \$47,000    |
| SUBTOTAL F  | OR BASE CAP   | ITAL IMPRO  | VEMENT COSTS:  | \$4,389,000 |
| MOBILIZATION  |               |             | 10%            | \$439,000   |
| DEWATERING  |               |             | 5%             | \$219,000   |
| TRAFFIC CONTROL   |               |             | 10%            | \$439,000   |
| UTILITY COORDINATION/RELOCATION   |               |             | 10%            | \$439,000   |
| STORMWATER MANAGEMENT/EROSION CONTROL   |               |             | 5%             | \$219,000   |
| SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COS   |               |             | VEMENT COSTS:  | \$1,755,000 |
| SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COS  |               |             | VEMENT COSTS:  | \$6,144,000 |
| CONTINGENCIES   |               |             | 25%            | \$1,536,000 |
| ENGINEERING DESIGN SERVICES   |               |             | 15%            | \$922,000   |
| LEGAL AND ADMINISTRATIVE SERVICES   |               |             | 5%             | \$307,000   |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMEN   | Γ             |             | 10%            | \$614,000   |
|   |               |             | R OTHER COSTS: | \$3,379,000 |
| TOTAL ESTIMATED CONSTRUCTION COST:  |               |             |                | \$9,523,000 |

### **BASIN: SOUTH ENGLEWOOD**

SEGMENT: S3 - CHEROKEE ST TO CLARKSON ST

|   | S3 - CHEROI |            |               |              |
|---|-------------|------------|---------------|--------------|
| 25-YR DESIGN PRELIMINARY COST ESTIMATE (AVERAGE INSTALLATION) |             |            |               |              |
| ITEM  | QUANTITY    | UNITS      | UNIT COST     | TOTAL COST   |
| 11'x6' RCBC (Precast)   | 923         | LF         | \$1,195       | \$1,103,000  |
| 90-inch RCP   | 2637        | LF         | \$482         | \$1,270,000  |
| 78-inch RCP   | 992         | LF         | \$417         | \$414,000    |
| 72-inch RCP   | 612         | LF         | \$385         | \$236,000    |
| 48-inch RCP   | 618         | LF         | \$154         | \$95,000     |
| 42-inch RCP   | 1008        | LF         | \$135         | \$136,000    |
| 36-inch RCP   | 484         | LF         | \$116         | \$56,000     |
| Clayton Detention Facility Demolition                         | 1.8         | AC         | \$2,000       | \$4,000      |
| Clayton Detention Facility Excavation                         | 21522       | CY         | \$31          | \$667,000    |
| Cherrelyn Detention Facility Demolition                       | 0.4         | AC         | \$2,000       | \$1,000      |
| Cherrelyn Detention Facility Excavation                       | 2579        | CY         | \$31          | \$80,000     |
| Duncan Park Detention Facility Demolition                     | 0.8         | AC         | \$2,000       | \$2,000      |
| Duncan Park Detention Facility Excavation                     | 5346        | CY         | \$31          | \$166,000    |
| Chenango Detention Facility Demolition                        | 3.5         | AC         | \$2,000       | \$7,000      |
| Chenango Detention Facility Excavation                        | 25740       | CY         | \$31          | \$798,000    |
| Detention Facility Outlet Structure                           | 4           | EA         | \$19,814      | \$79,000     |
| Reclamation and Seeding (Native Grass)                        | 9.5         | AC         | \$1,310       | \$12,000     |
| Removal of Pipe (76" dia.)                                    | 923         | LF         | \$54          | \$49,000     |
| Removal of Pipe (60" dia.)                                    | 692         | LF         | \$54          | \$37,000     |
| Removal of Pipe (54" dia.)                                    | 1484        | LF         | \$54          | \$79,000     |
| Removal of Pipe (48" dia.)                                    | 1455        | LF         | \$54          | \$78,000     |
| Removal of Pipe (42" dia.)                                    | 1011        | LF         | \$21          | \$22,000     |
| Removal of Pipe (36" dia.)                                    | 219         | LF         | \$21          | \$5,000      |
| Removal of Pipe (33" dia.)                                    | 1008        | LF         | \$21          | \$22,000     |
| Removal of Manhole  | 8           | EA         | \$931         | \$7,000      |
| Removal of Asphalt Mat  | 8034        | SY         | \$7           | \$56,000     |
| Asphalt Patching/Paving                                       | 8034        | SY         | \$26          | \$209,000    |
| Manhole, Type B (Pipe Dia. > 48")                             | 1           | EA         | \$12,840      | \$13,000     |
| Manhole Special (Large Junction Box)                          | 5           | EA         | \$46,759      | \$234,000    |
| SUBTOTAL F  | OR BASE CAP | ITAL IMPRO | VEMENT COSTS: | \$5,937,000  |
| MOBILIZATION  |             |            | 10%           | 594,000      |
| DEWATERING  |             |            | 5%            | 297,000      |
| TRAFFIC CONTROL   |             |            | 10%           | 594,000      |
| UTILITY COORDINATION/RELOCATION                               |             |            | 10%           | 594,000      |
| STORMWATER MANAGEMENT/EROSION CONTROL                         |             |            | 5%            | 297,000      |
| SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COST              |             |            |               | 2,376,000    |
| SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS                  |             |            |               | 8,313,000    |
| CONTINGENCIES   |             |            | 25%           | 2,078,000    |
| ENGINEERING DESIGN SERVICES                                   |             |            | 15%           | 1,247,000    |
| LEGAL AND ADMINISTRATIVE SERVICES                             |             |            | 5%            | 416,000      |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT 10%                    |             |            |               | 831,000      |
| SUBTOTAL FOR OTHER COSTS:                                     |             |            |               | \$4,572,000  |
| TOTAL ESTIMATED CONSTRUCTION COST:                            |             |            |               | \$12,885,000 |

#### **BASIN: SOUTH ENGLEWOOD**

| BASIN:   | SOUTH ENG                                     | LEWOOD      |               |            |
|--|---|-------------|---------------|------------|
| SEGMENT: S4 - UNION AVE TO CHENANGO AVE        |   |             |               |            |
| 10-YR DESIGN PRELIMINARY COS                   | ST ESTIMATE                                   | (AVERAGE II | NSTALLATION)  |            |
| ITEM   | QUANTITY                                      | UNITS       | UNIT COST     | TOTAL COST |
| 42-inch RCP                                    | 219   | LF          | \$135         | \$30,000   |
| 36-inch RCP                                    | 1008  | LF          | \$116         | \$116,000  |
| Removal of Pipe (36" dia.)                     | 219   | LF          | \$21          | \$5,000    |
| Removal of Pipe (33" dia.)                     | 1008  | LF          | \$21          | \$22,000   |
| Removal of Manhole                             | 4   | EA          | \$931         | \$4,000    |
| Removal of Asphalt Mat                         | 682   | SY          | \$7           | \$5,000    |
| Asphalt Patching/Paving                        | 682   | SY          | \$26          | \$18,000   |
| Manhole, 5' Dia (Pipe Dia 36-42", Depth > 15') | 2   | EA          | \$4,173       | \$8,000    |
| SUBTOTAL F                                     | OR BASE CAP                                   | PITAL IMPRO | VEMENT COSTS: | \$208,000  |
| MOBILIZATION                                   |   |             | 10%           | \$21,000   |
| DEWATERING                                     |   |             | 5%            | \$10,000   |
| TRAFFIC CONTROL                                | TRAFFIC CONTROL 10%                           |             |               | \$21,000   |
| UTILITY COORDINATION/RELOCATION                |   |             | 10%           | \$21,000   |
| STORMWATER MANAGEMENT/EROSION CONTROL          |   |             | 5%            | \$10,000   |
| SUBTOTAL FOR ADI                               | DITIONAL CAP                                  | PITAL IMPRO | VEMENT COSTS: | \$83,000   |
| SUBTOTAL FO                                    | SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS: |             |               | \$291,000  |
| CONTINGENCIES                                  |   | 25%         | \$73,000      |            |
| ENGINEERING DESIGN SERVICES                    |   | 15%         | \$44,000      |            |
| LEGAL AND ADMINISTRATIVE SERVICES              |   |             | 5%            | \$15,000   |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT         |   |             | 10%           | \$29,000   |
| SUBTOTAL FOR OTHER COSTS: \$161,000            |   |             |               |            |
| TOTAL ESTIMATED CONSTRUCTION COST: \$452,000   |   |             |               | \$452,000  |

#### **BASIN: SOUTH ENGLEWOOD**

| SEGMENT  | SEGMENT: S4 - UNION AVE TO CHENANGO AVE                       |             |                |            |  |  |
|--|---|-------------|----------------|------------|--|--|
| 25-YR DESIGN PRELIMINARY CO                    | 25-YR DESIGN PRELIMINARY COST ESTIMATE (AVERAGE INSTALLATION) |             |                |            |  |  |
| ITEM   | QUANTITY  | UNITS       | UNIT COST      | TOTAL COST |  |  |
| 48-inch RCP                                    | 618   | LF          | \$154          | \$95,000   |  |  |
| 42-inch RCP                                    | 1008  | LF          | \$135          | \$136,000  |  |  |
| Removal of Pipe (42" dia.)                     | 399   | LF          | \$21           | \$9,000    |  |  |
| Removal of Pipe (36" dia.)                     | 219   | LF          | \$21           | \$5,000    |  |  |
| Removal of Pipe (33" dia.)                     | 1008  | LF          | \$21           | \$22,000   |  |  |
| Removal of Manhole                             | 4   | EA          | \$931          | \$4,000    |  |  |
| Removal of Asphalt Mat                         | 1084  | SY          | \$7            | \$8,000    |  |  |
| Asphalt Patching/Paving                        | 1084  | SY          | \$26           | \$28,000   |  |  |
| Manhole, 5' Dia (Pipe Dia 36-42", Depth > 15') | 1   | EA          | \$4,173        | \$4,000    |  |  |
| Manhole, 6' Dia (Pipe Dia, Depth > 15')        | 1   | EA          | \$4,601        | \$5,000    |  |  |
| SUBTOTAL                                       | FOR BASE CAP  | PITAL IMPRO | VEMENT COSTS:  | \$316,000  |  |  |
| MOBILIZATION                                   |   |             | 10%            | 32,000     |  |  |
| DEWATERING                                     |   |             | 5%             | 16,000     |  |  |
| TRAFFIC CONTROL                                |   |             | 10%            | 32,000     |  |  |
| UTILITY COORDINATION/RELOCATION                |   |             | 10%            | 32,000     |  |  |
| STORMWATER MANAGEMENT/EROSION CONTROL          | _   |             | 5%             | 16,000     |  |  |
| SUBTOTAL FOR AD                                | DITIONAL CAP  | PITAL IMPRO | VEMENT COSTS:  | 128,000    |  |  |
| SUBTOTAL F                                     | OR TOTAL CAP  | PITAL IMPRO | VEMENT COSTS:  | 444,000    |  |  |
| CONTINGENCIES                                  |   |             | 25%            | 111,000    |  |  |
| ENGINEERING DESIGN SERVICES                    |   |             | 15%            | 67,000     |  |  |
| LEGAL AND ADMINISTRATIVE SERVICES              |   |             | 5%             | 22,000     |  |  |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMEN          | Т   |             | 10%            | 44,000     |  |  |
|  | SU  | JBTOTAL FOI | R OTHER COSTS: | \$244,000  |  |  |
|  | TOTAL ESTIMATED CONSTRUCTION COST: \$688,000                  |             |                |            |  |  |

# BASIN: SOUTH-CENTRAL ENGLEWOOD SEGMENT: SC1 - NAVAJO ST TO BANNOCK ST

| 10-1K DESIGN FREEIMINAKT COS           | I LJIIIVIAIL                | (AVLINAGE II | NOTALLATION)  |             |
|--|-----------------------------|--------------|---------------|-------------|
| ITEM                                   | QUANTITY                    | UNITS        | UNIT COST     | TOTAL COST  |
| 66-inch RCP                            | 496                         | LF           | \$282         | \$140,000   |
| Oxford Detention Facility Demolition   | 0.5                         | AC           | \$2,000       | \$1,000     |
| Oxford Detention Facility Excavation   | 4600                        | CY           | \$31          | \$143,000   |
| Detention Facility Outlet Structure    | 1                           | EA           | \$19,814      | \$20,000    |
| Underground Storage Vault              | 61525                       | CF           | \$7           | \$431,000   |
| Reclamation and Seeding (Native Grass) | 0.5                         | AC           | \$1,310       | \$1,000     |
| Removal of Pipe (60" dia.)             | 496                         | LF           | \$54          | \$27,000    |
| Removal of Manhole                     | 2                           | EA           | \$931         | \$2,000     |
| Removal of Asphalt Mat                 | 2142                        | SY           | \$7           | \$15,000    |
| Asphalt Patching/Paving                | 2142                        | SY           | \$26          | \$56,000    |
| Manhole, Type B (Pipe Dia. > 48")      | 1                           | EA           | \$4,601       | \$5,000     |
| SUBTOTAL F                             | OR BASE CAP                 | PITAL IMPRO  | VEMENT COSTS: | \$841,000   |
| MOBILIZATION                           |                             |              | 10%           | \$84,000    |
| DEWATERING                             |                             |              | 5%            | \$42,000    |
| TRAFFIC CONTROL                        |                             |              | 10%           | \$84,000    |
| UTILITY COORDINATION/RELOCATION 10%    |                             |              | 10%           | \$84,000    |
| STORMWATER MANAGEMENT/EROSION CONTROL  |                             |              | 5%            | \$42,000    |
| SUBTOTAL FOR ADD                       | ITIONAL CAP                 | ITAL IMPRO   | VEMENT COSTS: | \$336,000   |
| SUBTOTAL FO                            | R TOTAL CAP                 | ITAL IMPRO   | VEMENT COSTS: | \$1,177,000 |
| CONTINGENCIES                          |                             | 25%          | \$294,000     |             |
| ENGINEERING DESIGN SERVICES            | ENGINEERING DESIGN SERVICES |              | 15%           | \$177,000   |
| LEGAL AND ADMINISTRATIVE SERVICES      |                             |              | 5%            | \$59,000    |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT |                             | 10%          | \$118,000     |             |
| SUBTOTAL FOR OTHER COSTS:              |                             |              |               | \$648,000   |
| TOTAL ESTIMATED CONSTRUCTION COST:     |                             |              |               | \$1,825,000 |

# BASIN: SOUTH-CENTRAL ENGLEWOOD SEGMENT: SC1 - NAVAJO ST TO BANNOCK ST

| T2-inch RCP  | 25-YR DESIGN PRELIMINARY COS                  | I ESTIMATE  | (AVERAGE II | NSTALLATION)   |             |
|--|---|-------------|-------------|----------------|-------------|
| 1298   | ITEM  | QUANTITY    | UNITS       | UNIT COST      | TOTAL COST  |
| Section   Sect   | 84-inch RCP                                   | 1660        | LF          | \$449          | \$746,000   |
| 30-inch RCP   353  | 72-inch RCP                                   | 1298        | LF          | \$385          | \$500,000   |
| Oxford Detention Facility Demolition         0.5         AC         \$2,000         \$1,000           Oxford Detention Facility Excavation         4600         CY         \$31         \$143,000           Detention Facility Outlet Structure         1         EA         \$19,814         \$20,000           Underground Storage Vault         61525         CF         \$7         \$431,000           Reclamation and Seeding (Native Grass)         0.5         AC         \$1,310         \$1,000           Removal of Pipe (76" dia.)         1164         LF         \$54         \$62,000           Removal of Pipe (60" dia.)         496         LF         \$54         \$52,000           Removal of Pipe (54" dia.)         1298         LF         \$54         \$69,000           Removal of Pipe (48" dia.)         653         LF         \$54         \$35,000           Removal of Pipe (21" dia.)         353         LF         \$21         \$8,000           Removal of Asphalt Mat         5291         SY         \$7         \$37,000           Asphalt Patching/Paving         5291         SY         \$26         \$138,000           Manhole, Type B (Pipe Dia. > 48")         2         EA         \$4,601         \$9,000           Manhole Special (Lar  | 60-inch RCP                                   | 653         | LF          | \$257          | \$168,000   |
| Oxford Detention Facility Excavation         4600         CY         \$31         \$143,000           Detention Facility Outlet Structure         1         EA         \$19,814         \$20,000           Underground Storage Vault         61525         CF         \$7         \$431,000           Reclamation and Seeding (Native Grass)         0.5         AC         \$1,310         \$1,000           Removal of Pipe (76" dia.)         1164         LF         \$54         \$62,000           Removal of Pipe (60" dia.)         496         LF         \$54         \$27,000           Removal of Pipe (54" dia.)         1298         LF         \$54         \$69,000           Removal of Pipe (24" dia.)         653         LF         \$54         \$35,000           Removal of Pipe (21" dia.)         353         LF         \$21         \$8,000           Removal of Manhole         5         EA         \$931         \$5,000           Removal of Asphalt Mat         5291         SY         \$7         \$37,000           Asphalt Patching/Paving         5291         SY         \$26         \$138,000           Manhole, Type B (Pipe Dia. > 48")         2         EA         \$4,601         \$9,000           Manhole Special (Large Junction Box)  | 30-inch RCP                                   | 353         | LF          | \$96           | \$34,000    |
| Detention Facility Outlet Structure  | Oxford Detention Facility Demolition          | 0.5         | AC          | \$2,000        | \$1,000     |
| Underground Storage Vault Reclamation and Seeding (Native Grass)  Removal of Pipe (76" dia.)  Removal of Pipe (60" dia.)  Removal of Pipe (60" dia.)  Removal of Pipe (54" dia.)  Removal of Pipe (48" dia.)  Removal of Pipe (48" dia.)  Removal of Pipe (21" dia.)  Removal of Asphalt Mat  South Sout | Oxford Detention Facility Excavation          | 4600        | CY          | \$31           | \$143,000   |
| Reclamation and Seeding (Native Grass)   0.5   | Detention Facility Outlet Structure           | 1           | EA          | \$19,814       | \$20,000    |
| Removal of Pipe (76" dia.)   | Underground Storage Vault                     | 61525       | CF          | \$7            | \$431,000   |
| Removal of Pipe (60" dia.)         496         LF         \$54         \$27,000           Removal of Pipe (54" dia.)         1298         LF         \$54         \$69,000           Removal of Pipe (48" dia.)         653         LF         \$54         \$35,000           Removal of Pipe (21" dia.)         353         LF         \$21         \$8,000           Removal of Manhole         5         EA         \$931         \$5,000           Removal of Asphalt Mat         5291         SY         \$7         \$37,000           Asphalt Patching/Paving         5291         SY         \$26         \$138,000           Manhole, Type B (Pipe Dia. > 48")         2         EA         \$4,601         \$9,000           Manhole Special (Large Junction Box)         3         EA         \$46,759         \$140,000           SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS:         \$2,574,000           MOBILIZATION         10%         \$257,000           TRAFFIC CONTROL         10%         \$257,000           TRAFFIC CONTROL         10%         \$257,000           SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS:         \$1,029,000           SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:         \$3,603,000  | Reclamation and Seeding (Native Grass)        | 0.5         | AC          | \$1,310        | \$1,000     |
| Removal of Pipe (54" dia.)   1298  | Removal of Pipe (76" dia.)                    | 1164        | LF          | \$54           | \$62,000    |
| Removal of Pipe (48" dia.)         653         LF         \$54         \$35,000           Removal of Pipe (21" dia.)         353         LF         \$21         \$8,000           Removal of Manhole         5         EA         \$931         \$5,000           Removal of Asphalt Mat         5291         SY         \$7         \$37,000           Asphalt Patching/Paving         5291         SY         \$26         \$138,000           Manhole, Type B (Pipe Dia. > 48")         2         EA         \$4,601         \$9,000           Manhole Special (Large Junction Box)         3         EA         \$46,759         \$140,000           MOBILIZATION         10%         \$257,000           DEWATERING         10%         \$257,000           TRAFFIC CONTROL         10%         \$257,000           UTILITY COORDINATION/RELOCATION         10%         \$257,000           STORMWATER MANAGEMENT/EROSION CONTROL         5%         \$129,000           SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS:         \$1,029,000           CONTINGENCIES         25%         \$901,000           ENGINEERING DESIGN SERVICES         15%         \$540,000           LEGAL AND ADMINISTRATIVE SERVICES         5%         \$180,000           CONTRA  | Removal of Pipe (60" dia.)                    | 496         | LF          | \$54           | \$27,000    |
| Removal of Pipe (21" dia.)         353         LF         \$21         \$8,000           Removal of Manhole         5         EA         \$931         \$5,000           Removal of Asphalt Mat         5291         SY         \$7         \$37,000           Asphalt Patching/Paving         5291         SY         \$26         \$138,000           Manhole, Type B (Pipe Dia. > 48")         2         EA         \$4,601         \$9,000           Manhole Special (Large Junction Box)         3         EA         \$46,759         \$140,000           Mobilization         SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS:         \$2,574,000           MOBILIZATION         10%         \$257,000           DEWATERING         5%         \$129,000           TRAFFIC CONTROL         10%         \$257,000           UTILITY COORDINATION/RELOCATION         10%         \$257,000           STORMWATER MANAGEMENT/EROSION CONTROL         5%         \$129,000           SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS:         \$1,029,000           SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:         \$3,603,000           CONTINGENCIES         25%         \$901,000           ENGINEERING DESIGN SERVICES         5%         \$180,000           CONTRACT ADMIN/CONSTRUCTI  | Removal of Pipe (54" dia.)                    | 1298        | LF          | \$54           | \$69,000    |
| Removal of Manhole         5         EA         \$931         \$5,000           Removal of Asphalt Mat         5291         SY         \$7         \$37,000           Asphalt Patching/Paving         5291         SY         \$26         \$138,000           Manhole, Type B (Pipe Dia. > 48")         2         EA         \$4,601         \$9,000           Manhole Special (Large Junction Box)         3         EA         \$46,759         \$140,000           SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS:         \$2,574,000           MOBILIZATION         10%         \$257,000           DEWATERING         5%         \$129,000           TRAFFIC CONTROL         10%         \$257,000           UTILITY COORDINATION/RELOCATION         10%         \$257,000           STORMWATER MANAGEMENT/EROSION CONTROL         5%         \$129,000           SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS:         \$1,029,000           SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:         \$3,603,000           CONTINGENCIES         25%         \$901,000           ENGINEERING DESIGN SERVICES         15%         \$540,000           LEGAL AND ADMINISTRATIVE SERVICES         5%         \$180,000           CONTRACT ADMIN/CONSTRUCTION MANAGEMENT         10%         \$360,000 </td <td>Removal of Pipe (48" dia.)</td> <td>653</td> <td>LF</td> <td>\$54</td> <td>\$35,000</td>   | Removal of Pipe (48" dia.)                    | 653         | LF          | \$54           | \$35,000    |
| Removal of Asphalt Mat         5291         SY         \$7         \$37,000           Asphalt Patching/Paving         5291         SY         \$26         \$138,000           Manhole, Type B (Pipe Dia. > 48")         2         EA         \$4,601         \$9,000           Manhole Special (Large Junction Box)         3         EA         \$46,759         \$140,000           SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS:         \$2,574,000           MOBILIZATION         10%         \$257,000           DEWATERING         5%         \$129,000           TRAFFIC CONTROL         10%         \$257,000           UTILITY COORDINATION/RELOCATION         10%         \$257,000           STORMWATER MANAGEMENT/EROSION CONTROL         5%         \$129,000           SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS:         \$1,029,000           SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:         \$3,603,000           CONTINGENCIES         25%         \$901,000           ENGINEERING DESIGN SERVICES         15%         \$540,000           LEGAL AND ADMINISTRATIVE SERVICES5%         \$180,000           CONTRACT ADMIN/CONSTRUCTION MANAGEMENT         10%         \$360,000           SUBTOTAL FOR OTHER COSTS:         \$1,981,000<   | Removal of Pipe (21" dia.)                    | 353         | LF          | \$21           | \$8,000     |
| Asphalt Patching/Paving         5291         SY         \$26         \$138,000           Manhole, Type B (Pipe Dia. > 48")         2         EA         \$4,601         \$9,000           Manhole Special (Large Junction Box)         3         EA         \$46,759         \$140,000           SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS:         \$2,574,000           MOBILIZATION         10%         \$257,000           DEWATERING         5%         \$129,000           TRAFFIC CONTROL         10%         \$257,000           UTILITY COORDINATION/RELOCATION         10%         \$257,000           STORMWATER MANAGEMENT/EROSION CONTROL         5%         \$129,000           SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS:         \$1,029,000           SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:         \$3,603,000           CONTINGENCIES         25%         \$901,000           ENGINEERING DESIGN SERVICES         15%         \$540,000           LEGAL AND ADMINISTRATIVE SERVICES         5%         \$180,000           CONTRACT ADMIN/CONSTRUCTION MANAGEMENT         10%         \$360,000           SUBTOTAL FOR OTHER COSTS:         \$1,981,000   | Removal of Manhole                            | 5           | EA          | \$931          | \$5,000     |
| Manhole, Type B (Pipe Dia. > 48")         2         EA         \$4,601         \$9,000           Manhole Special (Large Junction Box)         3         EA         \$46,759         \$140,000           SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS:         \$2,574,000           MOBILIZATION         10%         \$257,000           DEWATERING         5%         \$129,000           TRAFFIC CONTROL         10%         \$257,000           UTILITY COORDINATION/RELOCATION         10%         \$257,000           STORMWATER MANAGEMENT/EROSION CONTROL         5%         \$129,000           SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS:         \$1,029,000           SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:         \$3,603,000           CONTINGENCIES         25%         \$901,000           ENGINEERING DESIGN SERVICES         15%         \$540,000           LEGAL AND ADMINISTRATIVE SERVICES         5%         \$180,000           CONTRACT ADMIN/CONSTRUCTION MANAGEMENT         10%         \$360,000  | Removal of Asphalt Mat                        | 5291        | SY          | \$7            | \$37,000    |
| Manhole Special (Large Junction Box)         3         EA         \$46,759         \$140,000           SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS:         \$2,574,000           MOBILIZATION         10%         \$257,000           DEWATERING         5%         \$129,000           TRAFFIC CONTROL         10%         \$257,000           UTILITY COORDINATION/RELOCATION         10%         \$257,000           STORMWATER MANAGEMENT/EROSION CONTROL         5%         \$129,000           SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS:         \$1,029,000           CONTINGENCIES         25%         \$901,000           ENGINEERING DESIGN SERVICES         15%         \$540,000           LEGAL AND ADMINISTRATIVE SERVICES         5%         \$180,000           CONTRACT ADMIN/CONSTRUCTION MANAGEMENT         10%         \$360,000           SUBTOTAL FOR OTHER COSTS:         \$1,981,000   | Asphalt Patching/Paving                       | 5291        | SY          | \$26           | \$138,000   |
| SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS: \$2,574,000  MOBILIZATION 10% \$257,000  DEWATERING 5% \$129,000  TRAFFIC CONTROL 10% \$257,000  UTILITY COORDINATION/RELOCATION 10% \$257,000  STORMWATER MANAGEMENT/EROSION CONTROL 5% \$129,000  SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS: \$1,029,000  SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS: \$3,603,000  CONTINGENCIES 25% \$901,000  ENGINEERING DESIGN SERVICES 15% \$540,000  LEGAL AND ADMINISTRATIVE SERVICES 5% \$180,000  CONTRACT ADMIN/CONSTRUCTION MANAGEMENT 10% \$360,000  SUBTOTAL FOR OTHER COSTS: \$1,981,000  | Manhole, Type B (Pipe Dia. > 48")             | 2           | EA          | \$4,601        | \$9,000     |
| MOBILIZATION         10%         \$257,000           DEWATERING         5%         \$129,000           TRAFFIC CONTROL         10%         \$257,000           UTILITY COORDINATION/RELOCATION         10%         \$257,000           STORMWATER MANAGEMENT/EROSION CONTROL         5%         \$129,000           SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS:         \$1,029,000           SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:         \$3,603,000           CONTINGENCIES         25%         \$901,000           ENGINEERING DESIGN SERVICES         15%         \$540,000           LEGAL AND ADMINISTRATIVE SERVICES         5%         \$180,000           CONTRACT ADMIN/CONSTRUCTION MANAGEMENT         10%         \$360,000           SUBTOTAL FOR OTHER COSTS:         \$1,981,000   | Manhole Special (Large Junction Box)          | 3           | EA          | \$46,759       | \$140,000   |
| DEWATERING         5%         \$129,000           TRAFFIC CONTROL         10%         \$257,000           UTILITY COORDINATION/RELOCATION         10%         \$257,000           STORMWATER MANAGEMENT/EROSION CONTROL         5%         \$129,000           SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS:         \$1,029,000           SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:         \$3,603,000           CONTINGENCIES         25%         \$901,000           ENGINEERING DESIGN SERVICES         15%         \$540,000           LEGAL AND ADMINISTRATIVE SERVICES         5%         \$180,000           CONTRACT ADMIN/CONSTRUCTION MANAGEMENT         10%         \$360,000           SUBTOTAL FOR OTHER COSTS:         \$1,981,000  | SUBTOTAL F                                    | OR BASE CAP | ITAL IMPRO  | VEMENT COSTS:  | \$2,574,000 |
| TRAFFIC CONTROL UTILITY COORDINATION/RELOCATION STORMWATER MANAGEMENT/EROSION CONTROL SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS: \$1,029,000 SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS: \$3,603,000 CONTINGENCIES 25% \$901,000 ENGINEERING DESIGN SERVICES 15% \$540,000 LEGAL AND ADMINISTRATIVE SERVICES 5% \$180,000 CONTRACT ADMIN/CONSTRUCTION MANAGEMENT 5UBTOTAL FOR OTHER COSTS: \$1,981,000   | MOBILIZATION                                  |             |             | 10%            | \$257,000   |
| UTILITY COORDINATION/RELOCATION  STORMWATER MANAGEMENT/EROSION CONTROL  SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS: \$1,029,000  SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS: \$3,603,000  CONTINGENCIES  ENGINEERING DESIGN SERVICES  EGAL AND ADMINISTRATIVE SERVICES  CONTRACT ADMIN/CONSTRUCTION MANAGEMENT  SUBTOTAL FOR OTHER COSTS: \$1,981,000   | DEWATERING                                    |             |             | 5%             | \$129,000   |
| STORMWATER MANAGEMENT/EROSION CONTROL  SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS: \$1,029,000  SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS: \$3,603,000  CONTINGENCIES  ENGINEERING DESIGN SERVICES  LEGAL AND ADMINISTRATIVE SERVICES  CONTRACT ADMIN/CONSTRUCTION MANAGEMENT  SUBTOTAL FOR OTHER COSTS: \$1,981,000   | TRAFFIC CONTROL                               |             |             | 10%            | \$257,000   |
| SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS: \$1,029,000  SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS: \$3,603,000  CONTINGENCIES 25% \$901,000  ENGINEERING DESIGN SERVICES 15% \$540,000  LEGAL AND ADMINISTRATIVE SERVICES 5% \$180,000  CONTRACT ADMIN/CONSTRUCTION MANAGEMENT 10% \$360,000  SUBTOTAL FOR OTHER COSTS: \$1,981,000   | UTILITY COORDINATION/RELOCATION               |             |             | 10%            | \$257,000   |
| SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS: \$3,603,000  CONTINGENCIES 25% \$901,000  ENGINEERING DESIGN SERVICES 15% \$540,000  LEGAL AND ADMINISTRATIVE SERVICES 5% \$180,000  CONTRACT ADMIN/CONSTRUCTION MANAGEMENT 10% \$360,000  SUBTOTAL FOR OTHER COSTS: \$1,981,000   | STORMWATER MANAGEMENT/EROSION CONTROL 5%      |             |             | 5%             | \$129,000   |
| CONTINGENCIES         25%         \$901,000           ENGINEERING DESIGN SERVICES         15%         \$540,000           LEGAL AND ADMINISTRATIVE SERVICES         5%         \$180,000           CONTRACT ADMIN/CONSTRUCTION MANAGEMENT         10%         \$360,000           SUBTOTAL FOR OTHER COSTS:         \$1,981,000  | SUBTOTAL FOR ADD                              | ITIONAL CAP | ITAL IMPRO  | VEMENT COSTS:  | \$1,029,000 |
| ENGINEERING DESIGN SERVICES  LEGAL AND ADMINISTRATIVE SERVICES  CONTRACT ADMIN/CONSTRUCTION MANAGEMENT  SUBTOTAL FOR OTHER COSTS: \$1,981,000  | SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS: |             |             |                | \$3,603,000 |
| LEGAL AND ADMINISTRATIVE SERVICES 5% \$180,000 CONTRACT ADMIN/CONSTRUCTION MANAGEMENT 10% \$360,000 SUBTOTAL FOR OTHER COSTS: \$1,981,000  | CONTINGENCIES                                 |             |             | 25%            | \$901,000   |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT 10% \$360,000 SUBTOTAL FOR OTHER COSTS: \$1,981,000   | ENGINEERING DESIGN SERVICES                   |             |             | 15%            | \$540,000   |
| SUBTOTAL FOR OTHER COSTS: \$1,981,000  | LEGAL AND ADMINISTRATIVE SERVICES             |             |             | 5%             | \$180,000   |
| •  | CONTRACT ADMIN/CONSTRUCTION MANAGEMENT 10%    |             |             | \$360,000      |             |
| TOTAL ESTIMATED CONSTRUCTION COST: \$5,584,000   |   | SU          | JBTOTAL FOI | R OTHER COSTS: | \$1,981,000 |
|  | TOTAL ESTIMATED CONSTRUCTION COST:            |             |             |                | \$5,584,000 |

# BASIN: SOUTH-CENTRAL ENGLEWOOD SEGMENT: SC2 - OXFORD ST TO CLARKSON ST

| 10 11( D25(6)( ) (1(22)(0)(0)(1)( )            | 31 L311111711E | (7 TO E 13 TOE 11 | 1517 (EE/ (11011) |             |
|--|----------------|-------------------|-------------------|-------------|
| ITEM   | QUANTITY       | UNITS             | UNIT COST         | TOTAL COST  |
| 48-inch RCP                                    | 962            | LF                | \$154             | \$148,000   |
| 42-inch RCP                                    | 306            | LF                | \$135             | \$41,000    |
| 36-inch RCP                                    | 1637           | LF                | \$116             | \$189,000   |
| Removal of Pipe (36" dia.)                     | 962            | LF                | \$21              | \$21,000    |
| Removal of Pipe (30" dia.)                     | 306            | LF                | \$21              | \$7,000     |
| Removal of Pipe (15" dia.)                     | 1637           | LF                | \$21              | \$35,000    |
| Removal of Manhole                             | 5              | EA                | \$931             | \$5,000     |
| Removal of Asphalt Mat                         | 1937           | SY                | \$7               | \$14,000    |
| Asphalt Patching/Paving                        | 1937           | SY                | \$26              | \$50,000    |
| Manhole, 5' Dia (Pipe Dia 36-42", Depth > 15') | 3              | EA                | \$4,173           | \$13,000    |
| Manhole, 6' Dia (Pipe Dia, Depth > 15')        | 4              | EA                | \$4,601           | \$18,000    |
| SUBTOTAL                                       | OR BASE CAP    | ITAL IMPRO        | VEMENT COSTS:     | \$541,000   |
| MOBILIZATION                                   |                |                   | 10%               | \$54,000    |
| DEWATERING                                     |                |                   | 5%                | \$27,000    |
| TRAFFIC CONTROL                                |                |                   | 10%               | \$54,000    |
| UTILITY COORDINATION/RELOCATION                |                |                   | 10%               | \$54,000    |
| STORMWATER MANAGEMENT/EROSION CONTROL          | =              |                   | 5%                | \$27,000    |
| SUBTOTAL FOR AD                                | DITIONAL CAP   | ITAL IMPRO        | VEMENT COSTS:     | \$216,000   |
| SUBTOTAL FO                                    | OR TOTAL CAP   | ITAL IMPRO        | VEMENT COSTS:     | \$757,000   |
| CONTINGENCIES                                  |                |                   | 25%               | \$189,000   |
| ENGINEERING DESIGN SERVICES                    |                |                   | 15%               | \$114,000   |
| LEGAL AND ADMINISTRATIVE SERVICES              |                |                   | 5%                | \$38,000    |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMEN          | Т              |                   | 10%               | \$76,000    |
| SUBTOTAL FOR OTHER COSTS: \$417,000            |                |                   |                   |             |
| TOTAL ESTIMATED CONSTRUCTION COST:             |                |                   |                   | \$1,174,000 |

BASIN: SOUTH-CENTRAL ENGLEWOOD SEGMENT: SC2 - OXFORD ST TO CLARKSON ST

| 25-11 DESIGN I RELIMINARII CO                  | 31 ESTIMATE  | (AVENAGE II | 131ALLATION)  |             |
|--|--------------|-------------|---------------|-------------|
| ITEM   | QUANTITY     | UNITS       | UNIT COST     | TOTAL COST  |
| 60-inch RCP                                    | 412          | LF          | \$257         | \$106,000   |
| 54-inch RCP                                    | 2908         | LF          | \$231         | \$672,000   |
| 48-inch RCP                                    | 306          | LF          | \$154         | \$47,000    |
| 42-inch RCP                                    | 1637         | LF          | \$135         | \$221,000   |
| Removal of Pipe (48" dia.)                     | 2299         | LF          | \$54          | \$123,000   |
| Removal of Pipe (42" dia.)                     | 1021         | LF          | \$21          | \$22,000    |
| Removal of Pipe (36" dia.)                     | 962          | LF          | \$21          | \$21,000    |
| Removal of Pipe (30" dia.)                     | 306          | LF          | \$21          | \$7,000     |
| Removal of Pipe (15" dia.)                     | 1637         | LF          | \$21          | \$35,000    |
| Removal of Manhole                             | 10           | EA          | \$931         | \$9,000     |
| Removal of Asphalt Mat                         | 3878         | SY          | \$7           | \$27,000    |
| Asphalt Patching/Paving                        | 3878         | SY          | \$26          | \$101,000   |
| Manhole, 5' Dia (Pipe Dia 36-42", Depth > 15') | 1            | EA          | \$4,173       | \$4,000     |
| Manhole, 6' Dia (Pipe Dia, Depth > 15')        | 1            | EA          | \$4,601       | \$5,000     |
| Manhole, Type B (Pipe Dia. > 48")              | 5            | EA          | \$12,840      | \$64,000    |
| SUBTOTAL                                       | FOR BASE CAP | ITAL IMPRO  | VEMENT COSTS: | \$1,464,000 |
| MOBILIZATION                                   |              |             | 10%           | 146,000     |
| DEWATERING                                     |              |             | 5%            | 73,000      |
| TRAFFIC CONTROL                                |              |             | 10%           | 146,000     |
| UTILITY COORDINATION/RELOCATION                |              |             | 10%           | 146,000     |
| STORMWATER MANAGEMENT/EROSION CONTROL          | -            |             | 5%            | 73,000      |
| SUBTOTAL FOR AD                                | DITIONAL CAP | ITAL IMPRO  | VEMENT COSTS: | 584,000     |
| SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:  |              |             |               | 2,048,000   |
| CONTINGENCIES                                  |              |             | 25%           | 512,000     |
| ENGINEERING DESIGN SERVICES                    |              |             | 15%           | 307,000     |
| LEGAL AND ADMINISTRATIVE SERVICES              |              |             | 5%            | 102,000     |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT 10%     |              |             | 205,000       |             |
| SUBTOTAL FOR OTHER COSTS:                      |              |             |               | \$1,126,000 |
| TOTAL ESTIMATED CONSTRUCTION COST:             |              |             |               | \$3,174,000 |

#### **BASIN: CENTRAL ENGLEWOOD**

# SEGMENT: C1 - HAMPDEN AVE TO MANSFIELD AVE

| SEGMENT: C1 - HAMPDEN AVE TO MANSFIELD AVE                    |                                      |       |           |            |  |
|---|--------------------------------------|-------|-----------|------------|--|
| 10-YR DESIGN PRELIMINARY COST ESTIMATE (AVERAGE INSTALLATION) |                                      |       |           |            |  |
| ITEM  | QUANTITY                             | UNITS | UNIT COST | TOTAL COST |  |
| 78-inch RCP   | 744                                  | LF    | \$417     | \$310,000  |  |
| 60-inch RCP   | 1135                                 | LF    | \$257     | \$291,000  |  |
| 54-inch RCP   | 656                                  | LF    | \$231     | \$152,000  |  |
| 48-inch RCP   | 800                                  | LF    | \$154     | \$123,000  |  |
| Removal of Pipe (48" dia.)                                    | 744                                  | LF    | \$21      | \$16,000   |  |
| Removal of Pipe (36" dia.)                                    | 1135                                 | LF    | \$21      | \$24,000   |  |
| Removal of Pipe (30" dia.)                                    | 656                                  | LF    | \$21      | \$14,000   |  |
| Removal of Pipe (24" dia.)                                    | 481                                  | LF    | \$21      | \$10,000   |  |
| Removal of Pipe (18" dia.)                                    | 319                                  | LF    | \$21      | \$7,000    |  |
| Removal of Manhole  | 7                                    | EA    | \$931     | \$7,000    |  |
| Removal of Asphalt Mat  | 2714                                 | SY    | \$7       | \$19,000   |  |
| Asphalt Patching/Paving                                       | 2714                                 | SY    | \$26      | \$71,000   |  |
| Manhole, Type B (Pipe Dia. > 48")                             | 5                                    | EA    | \$12,840  | \$64,000   |  |
| SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS:                  |                                      |       |           |            |  |
| MOBILIZATION 10%  |                                      |       |           |            |  |
| DEWATERING 5%   |                                      |       |           |            |  |
| TRAFFIC CONTROL   |                                      |       | 10%       | \$111,000  |  |
| UTILITY COORDINATION/RELOCATION 10%                           |                                      |       |           |            |  |
| STORMWATER MANAGEMENT/EROSION CONTROL 5%                      |                                      |       |           | \$55,000   |  |
| SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS:            |                                      |       |           |            |  |
| SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:                 |                                      |       |           |            |  |
| CONTINGENCIES 25%   |                                      |       |           | \$388,000  |  |
| ENGINEERING DESIGN SERVICES 15%                               |                                      |       |           | \$233,000  |  |
| LEGAL AND ADMINISTRATIVE SERVICES                             | LEGAL AND ADMINISTRATIVE SERVICES 5% |       |           |            |  |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT                        |                                      |       | 10%       | \$155,000  |  |
| SUBTOTAL FOR OTHER COSTS: \$854,0                             |                                      |       |           |            |  |
| TOTAL ESTIMATED CONSTRUCTION COST:                            |                                      |       |           |            |  |

#### **BASIN: CENTRAL ENGLEWOOD**

# SEGMENT: C1 - HAMPDEN AVE TO MANSFIELD AVE

| SEGMENT: C1 - HAMPDEN AVE TO MANSFIELD AVE            |             |             |                |             |
|---|-------------|-------------|----------------|-------------|
| 25-YR DESIGN PRELIMINARY COS                          | T ESTIMATE  | (AVERAGE II | NSTALLATION)   |             |
| ITEM  | QUANTITY    | UNITS       | UNIT COST      | TOTAL COST  |
| 90-inch RCP   | 1501        | LF          | \$482          | \$723,000   |
| 72-inch RCP   | 309         | LF          | \$385          | \$119,000   |
| 66-inch RCP   | 826         | LF          | \$282          | \$233,000   |
| 60-inch RCP   | 656         | LF          | \$257          | \$168,000   |
| 54-inch RCP   | 800         | LF          | \$231          | \$185,000   |
| Removal of Pipe (66" dia.)                            | 757         | LF          | \$54           | \$40,000    |
| Removal of Pipe (48" dia.)                            | 744         | LF          | \$21           | \$16,000    |
| Removal of Pipe (36" dia.)                            | 1135        | LF          | \$21           | \$24,000    |
| Removal of Pipe (30" dia.)                            | 656         | LF          | \$21           | \$14,000    |
| Removal of Pipe (24" dia.)                            | 481         | LF          | \$21           | \$10,000    |
| Removal of Pipe (18" dia.)                            | 319         | LF          | \$21           | \$7,000     |
| Removal of Manhole                                    | 8           | EA          | \$931          | \$7,000     |
| Removal of Asphalt Mat                                | 3809        | SY          | \$7            | \$27,000    |
| Asphalt Patching/Paving                               | 3809        | SY          | \$26           | \$99,000    |
| Manhole, Type B (Pipe Dia. > 48")                     | 4           | EA          | \$12,840       | \$51,000    |
| Manhole Special (Large Junction Box)                  | 1           | EA          | \$46,759       | \$47,000    |
| SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS: \$1,770, |             |             |                |             |
| MOBILIZATION 10%                                      |             |             |                |             |
| DEWATERING  |             |             | 5%             | 89,000      |
| TRAFFIC CONTROL                                       |             |             | 10%            | 177,000     |
| UTILITY COORDINATION/RELOCATION                       |             |             | 10%            | 177,000     |
| STORMWATER MANAGEMENT/EROSION CONTROL                 |             |             | 5%             | 89,000      |
| SUBTOTAL FOR ADD                                      | ITIONAL CAP | PITAL IMPRO | VEMENT COSTS:  | 709,000     |
| SUBTOTAL FO   | R TOTAL CAP | PITAL IMPRO | VEMENT COSTS:  | 2,479,000   |
| CONTINGENCIES 25%                                     |             |             | 25%            | 620,000     |
| ENGINEERING DESIGN SERVICES 15                        |             |             | 15%            | 372,000     |
| LEGAL AND ADMINISTRATIVE SERVICES                     |             |             | 5%             | 124,000     |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT                |             |             | 10%            | 248,000     |
|   | SU          | JBTOTAL FO  | R OTHER COSTS: | \$1,364,000 |
| TOTAL ESTIMATED CONSTRUCTION COST:                    |             |             |                | \$3,843,000 |

| BASIN: NORTH ENGLEWOOD                        |             |             |                |            |  |
|---|-------------|-------------|----------------|------------|--|
| SEGMENT: N1 - DARTMOUTH AVE TO BATES AVE      |             |             |                |            |  |
| 10-YR DESIGN PRELIMINARY COS                  | T ESTIMATE  | (AVERAGE II | NSTALLATION)   |            |  |
| ITEM  | QUANTITY    | UNITS       | UNIT COST      | TOTAL COST |  |
| 66-inch RCP                                   | 1338        | LF          | \$282          | \$378,000  |  |
| Removal of Pipe (60" dia.)                    | 1338        | LF          | \$54           | \$72,000   |  |
| Removal of Manhole                            | 3           | EA          | \$931          | \$3,000    |  |
| Removal of Asphalt Mat                        | 1189        | SY          | \$7            | \$8,000    |  |
| Asphalt Patching/Paving                       | 1189        | SY          | \$26           | \$31,000   |  |
| Manhole, Type B (Pipe Dia. > 48")             | 2           | EA          | \$12,840       | \$26,000   |  |
| SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS:  |             |             |                | \$518,000  |  |
| MOBILIZATION                                  |             |             | 10%            | \$52,000   |  |
| DEWATERING                                    |             |             | 5%             | \$26,000   |  |
| TRAFFIC CONTROL :                             |             |             | 10%            | \$52,000   |  |
| UTILITY COORDINATION/RELOCATION 10%           |             |             | 10%            | \$52,000   |  |
| STORMWATER MANAGEMENT/EROSION CONTROL         |             |             | 5%             | \$26,000   |  |
| SUBTOTAL FOR ADD                              | ITIONAL CAP | ITAL IMPRO  | VEMENT COSTS:  | \$208,000  |  |
| SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS: |             |             |                | \$726,000  |  |
| CONTINGENCIES                                 |             |             | 25%            | \$182,000  |  |
| ENGINEERING DESIGN SERVICES                   |             |             | 15%            | \$109,000  |  |
| LEGAL AND ADMINISTRATIVE SERVICES             |             |             | 5%             | \$36,000   |  |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT        | •           |             | 10%            | \$73,000   |  |
|   | SL          | JBTOTAL FO  | R OTHER COSTS: | \$400,000  |  |

TOTAL ESTIMATED CONSTRUCTION COST: \$1,126,000

#### **BASIN: NORTH ENGLEWOOD**

| SEGMENT: N1 - DARTMOUTH AVE TO BATES AVE           |  |             |                |            |
|--|--|-------------|----------------|------------|
| 25-YR DESIGN PRELIMINARY CO                        |  |             |                |            |
| ITEM   | QUANTITY                                 | UNITS       | UNIT COST      | TOTAL COST |
| 84-inch RCP  | 320                                      | LF          | \$449          | \$144,000  |
| 78-inch RCP  | 1018                                     | LF          | \$417          | \$425,000  |
| Removal of Pipe (60" dia.)                         | 1338                                     | LF          | \$54           | \$72,000   |
| Removal of Manhole                                 | 3  | EA          | \$931          | \$3,000    |
| Removal of Asphalt Mat                             | 1487                                     | SY          | \$7            | \$10,000   |
| Asphalt Patching/Paving                            | 1487                                     | SY          | \$26           | \$39,000   |
| Manhole, Type B (Pipe Dia. > 48")                  | 1  | EA          | \$12,840       | \$13,000   |
| Manhole Special (Large Junction Box)               | 1  | EA          | \$46,759       | \$47,000   |
| SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS:       |  |             |                |            |
| MOBILIZATION                                       |  |             | 10%            | \$75,000   |
| DEWATERING 5%                                      |  |             |                | \$38,000   |
| TRAFFIC CONTROL 10%                                |  |             |                |            |
| UTILITY COORDINATION/RELOCATION 10%                |  |             |                |            |
| STORMWATER MANAGEMENT/EROSION CONTROL              | STORMWATER MANAGEMENT/EROSION CONTROL 5% |             |                | \$38,000   |
| SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS: |  |             |                |            |
| SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:      |  |             |                |            |
| CONTINGENCIES                                      |  |             | 25%            | \$264,000  |
| ENGINEERING DESIGN SERVICES 15%                    |  |             | \$158,000      |            |
| LEGAL AND ADMINISTRATIVE SERVICES 5%               |  |             | 5%             | \$53,000   |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT             | Γ  |             | 10%            | \$105,000  |
|  | SU                                       | JBTOTAL FOI | R OTHER COSTS: | \$580,000  |
| TOTAL ESTIMATED CONSTRUCTION COST: \$1,634,000     |  |             |                |            |

| BASIN: NORTH ENGLEWOOD SEGMENT: N2 - ELATI ST TO ACOMA ST (BATES AVE) |             |             |                |            |  |
|---|-------------|-------------|----------------|------------|--|
| 10-YR DESIGN PRELIMINARY COS  | T ESTIMATE  | (AVERAGE II | NSTALLATION)   |            |  |
| ITEM  | QUANTITY    | UNITS       | UNIT COST      | TOTAL COST |  |
| (No proposed improvements)  |             |             |                | \$0        |  |
|   |             |             |                | \$0        |  |
| SUBTOTAL F  | OR BASE CAP | ITAL IMPRO  | VEMENT COSTS:  | \$0        |  |
| MOBILIZATION  |             |             | 10%            | \$0        |  |
| DEWATERING  |             |             | 5%             | \$0        |  |
| TRAFFIC CONTROL   |             |             | 10%            | \$0        |  |
| UTILITY COORDINATION/RELOCATION                                       |             |             | 10%            | \$0        |  |
| STORMWATER MANAGEMENT/EROSION CONTROL                                 |             |             | 5%             | \$0        |  |
| SUBTOTAL FOR ADD  | ITIONAL CAP | ITAL IMPRO  | VEMENT COSTS:  | \$0        |  |
| SUBTOTAL FO   | R TOTAL CAP | ITAL IMPRO  | VEMENT COSTS:  | \$0        |  |
| CONTINGENCIES   |             |             | 25%            | \$0        |  |
| ENGINEERING DESIGN SERVICES   |             | 15%         | \$0            |            |  |
| LEGAL AND ADMINISTRATIVE SERVICES                                     |             | 5%          | \$0            |            |  |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT                                |             |             | 10%            | \$0        |  |
|   | SU          | JBTOTAL FO  | R OTHER COSTS: | \$0        |  |
| Т   | OTAL ESTIMA | ATED CONST  | RUCTION COST:  | <b>\$0</b> |  |

#### **BASIN: NORTH ENGLEWOOD**

#### SEGMENT: N2 - ELATI ST TO ACOMA ST (BATES AVE)

| 25-YR DESIGN PRELIMINARY COST ESTIMATE (AVERAGE INSTALLATION) |             |             |                |            |  |
|---|-------------|-------------|----------------|------------|--|
| ITEM  | QUANTITY    | UNITS       | UNIT COST      | TOTAL COST |  |
| 66-inch RCP   | 1260        | LF          | \$282          | \$356,000  |  |
| 36-inch RCP   | 650         | LF          | \$116          | \$75,000   |  |
| Removal of Pipe (60" dia.)                                    | 1260        | LF          | \$54           | \$67,000   |  |
| Removal of Pipe (30" dia.)                                    | 650         | LF          | \$21           | \$14,000   |  |
| Removal of Asphalt Mat  | 1481        | SY          | \$7            | \$10,000   |  |
| Asphalt Patching/Paving                                       | 1481        | SY          | \$26           | \$39,000   |  |
| SUBTOTAL FO   | OR BASE CAP | PITAL IMPRO | VEMENT COSTS:  | \$561,000  |  |
| MOBILIZATION  |             |             | 10%            | 56,000     |  |
| DEWATERING  |             |             | 5%             | 28,000     |  |
| TRAFFIC CONTROL   |             |             | 10%            | 56,000     |  |
| UTILITY COORDINATION/RELOCATION                               |             |             | 10%            | 56,000     |  |
| STORMWATER MANAGEMENT/EROSION CONTROL                         |             |             | 5%             | 28,000     |  |
| SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS:            |             |             |                | 224,000    |  |
| SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:                 |             |             | 785,000        |            |  |
| CONTINGENCIES   |             | 25%         | 196,000        |            |  |
| ENGINEERING DESIGN SERVICES                                   |             | 15%         | 118,000        |            |  |
| LEGAL AND ADMINISTRATIVE SERVICES                             |             | 5%          | 39,000         |            |  |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT                        |             | 10%         | 79,000         |            |  |
|   | Sl          | JBTOTAL FOI | R OTHER COSTS: | \$432,000  |  |
| TOTAL ESTIMATED CONSTRUCTION COST: \$1,217,00                 |             |             |                |            |  |

#### **BASIN: NORTH ENGLEWOOD**

| SEGMENT: N3 - LINCOLN ST TO EMERSON ST                        |  |            |                |            |  |
|---|--|------------|----------------|------------|--|
| 10-YR DESIGN PRELIMINARY COST ESTIMATE (AVERAGE INSTALLATION) |  |            |                |            |  |
| ITEM  | QUANTITY   | UNITS      | UNIT COST      | TOTAL COST |  |
| 48-inch RCP   | 912  | LF         | \$154          | \$141,000  |  |
| 42-inch RCP   | 1363   | LF         | \$135          | \$184,000  |  |
| 18-inch RCP   | 157  | LF         | \$77           | \$12,000   |  |
| Bates Logan Detention Facility Demolition                     | 2.8  | AC         | \$2,000        | \$6,000    |  |
| Bates Logan Detention Facility Excavation                     | 6028   | CY         | \$31           | \$187,000  |  |
| Detention Facility Outlet Structure                           | 1  | EA         | \$19,814       | \$20,000   |  |
| Reclamation and Seeding (Native Grass)                        | 2.8  | AC         | \$1,310        | \$4,000    |  |
| Removal of Pipe (42" dia.)                                    | 581  | LF         | \$21           | \$12,000   |  |
| Removal of Pipe (36" dia.)                                    | 332  | LF         | \$21           | \$7,000    |  |
| Removal of Pipe (30" dia.)                                    | 1363   | LF         | \$21           | \$29,000   |  |
| Removal of Pipe (15" dia.)                                    | 157  | LF         | \$21           | \$3,000    |  |
| Removal of Manhole  | 8  | EA         | \$931          | \$7,000    |  |
| Removal of Asphalt Mat  | 1586   | SY         | \$7            | \$11,000   |  |
| Asphalt Patching/Paving                                       | 1586   | SY         | \$26           | \$41,000   |  |
| Manhole, 5' Dia (Pipe Dia 36-42", Depth > 15')                | 1  | EA         | \$4,173        | \$4,000    |  |
| Manhole, 6' Dia (Pipe Dia, Depth > 15')                       | 4  | EA         | \$4,601        | \$18,000   |  |
| SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS: \$               |  |            |                |            |  |
| MOBILIZATION 10%  |  |            |                |            |  |
| DEWATERING 5%   |  |            |                |            |  |
| TRAFFIC CONTROL   |  |            | 10%            | \$69,000   |  |
| UTILITY COORDINATION/RELOCATION 10%                           |  |            |                | \$69,000   |  |
| STORMWATER MANAGEMENT/EROSION CONTROL 5%                      |  |            |                | \$34,000   |  |
| SUBTOTAL FOR ADD  | SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS: |            |                |            |  |
| SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:                 |  |            |                |            |  |
| CONTINGENCIES 25%   |  |            |                | \$240,000  |  |
| ENGINEERING DESIGN SERVICES 15%                               |  |            |                | \$144,000  |  |
| LEGAL AND ADMINISTRATIVE SERVICES 5%                          |  |            |                | \$48,000   |  |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT                        |  |            | 10%            | \$96,000   |  |
|   | SU   | JBTOTAL FO | R OTHER COSTS: | \$528,000  |  |
| T   | TOTAL ESTIMATED CONSTRUCTION COST:                 |            |                |            |  |

#### **BASIN: NORTH ENGLEWOOD**

| SEGMENT: N3 - LINCOLN ST TO EMERSON ST        |   |            |                |             |  |  |
|---|---|------------|----------------|-------------|--|--|
| 25-YR DESIGN PRELIMINARY CO                   | 25-YR DESIGN PRELIMINARY COST ESTIMATE (AVERAGE INSTALLATION) |            |                |             |  |  |
| ITEM  | QUANTITY  | UNITS      | UNIT COST      | TOTAL COST  |  |  |
| 54-inch RCP                                   | 913   | LF         | \$231          | \$211,000   |  |  |
| 48-inch RCP                                   | 1363  | LF         | \$154          | \$210,000   |  |  |
| 30-inch RCP                                   | 1116  | LF         | \$96           | \$107,000   |  |  |
| Bates Logan Detention Facility Demolition     | 2.8   | AC         | \$2,000        | \$6,000     |  |  |
| Bates Logan Detention Facility Excavation     | 6028  | CY         | \$31           | \$187,000   |  |  |
| Detention Facility Outlet Structure           | 1   | EA         | \$19,814       | \$20,000    |  |  |
| Reclamation and Seeding (Native Grass)        | 2.8   | AC         | \$1,310        | \$4,000     |  |  |
| Removal of Pipe (24" dia.)                    | 959   | AC         | \$21           | \$21,000    |  |  |
| Removal of Pipe (15" dia.)                    | 157   | AC         | \$1,310        | \$206,000   |  |  |
| Removal of Manhole                            | 10  | EA         | \$931          | \$9,000     |  |  |
| Removal of Asphalt Mat                        | 2216  | SY         | \$7            | \$16,000    |  |  |
| Asphalt Patching/Paving                       | 2216  | SY         | \$26           | \$58,000    |  |  |
| Manhole, 6' Dia (Pipe Dia, Depth > 15')       | 1   | EA         | \$4,601        | \$5,000     |  |  |
| Manhole, Type B (Pipe Dia. > 48")             | 4   | EA         | \$12,840       | \$51,000    |  |  |
| SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS:  |   |            |                |             |  |  |
| MOBILIZATION 10%                              |   |            |                |             |  |  |
| DEWATERING                                    |   |            | 5%             | 56,000      |  |  |
| TRAFFIC CONTROL                               | TRAFFIC CONTROL 10%   |            |                |             |  |  |
| UTILITY COORDINATION/RELOCATION               | UTILITY COORDINATION/RELOCATION 10%                           |            |                |             |  |  |
| STORMWATER MANAGEMENT/EROSION CONTROL 5%      |   |            |                | 56,000      |  |  |
| SUBTOTAL FOR AI                               | DDITIONAL CAP   | ITAL IMPRO | VEMENT COSTS:  | 445,000     |  |  |
| SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS: |   |            |                |             |  |  |
| CONTINGENCIES 25%                             |   |            | 389,000        |             |  |  |
| ENGINEERING DESIGN SERVICES 15%               |   |            | 15%            | 233,000     |  |  |
| LEGAL AND ADMINISTRATIVE SERVICES             |   |            | 5%             | 78,000      |  |  |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT        | TV  |            | 10%            | 156,000     |  |  |
|   | Sl  | JBTOTAL FO | R OTHER COSTS: | \$856,000   |  |  |
| TOTAL ESTIMATED CONSTRUCTION COST:            |   |            |                | \$2,412,000 |  |  |

#### **BASIN: NORTH ENGLEWOOD**

### SEGMENT: N4 - ELATI ST TO ACOMA ST (DARTMOUTH AVE)

| 10-11 DESIGN TREENVINGART COST ESTIMATE (AVERAGE INSTALLATION) |  |             |                |            |  |
|--|--|-------------|----------------|------------|--|
| ITEM   | QUANTITY                               | UNITS       | UNIT COST      | TOTAL COST |  |
| (No proposed improvements)                                     |  |             |                | \$0        |  |
|  |  |             |                | \$0        |  |
| SUBTOTAL F   | OR BASE CAP                            | PITAL IMPRO | VEMENT COSTS:  | \$0        |  |
| MOBILIZATION   |  |             | 10%            | \$0        |  |
| DEWATERING   |  |             | 5%             | \$0        |  |
| TRAFFIC CONTROL  |  |             | 10%            | \$0        |  |
| UTILITY COORDINATION/RELOCATION                                |  |             | 10%            | \$0        |  |
| STORMWATER MANAGEMENT/EROSION CONTROL                          |  |             | 5%             | \$0        |  |
| SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS:             |  |             |                | \$0        |  |
| SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS: \$0              |  |             |                |            |  |
| CONTINGENCIES  |  | 25%         | \$0            |            |  |
| ENGINEERING DESIGN SERVICES                                    |  |             | 15%            | \$0        |  |
| LEGAL AND ADMINISTRATIVE SERVICES                              |  |             | 5%             | \$0        |  |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT                         |  |             | 10%            | \$0        |  |
|  | Sl                                     | JBTOTAL FO  | R OTHER COSTS: | \$0        |  |
| TO   | TOTAL ESTIMATED CONSTRUCTION COST: \$0 |             |                |            |  |

#### **BASIN: NORTH ENGLEWOOD**

### **SEGMENT: N4 - ELATI ST TO ACOMA ST (DARTMOUTH AVE)**

| 25-YR DESIGN PRELIMINARY COST ESTIMATE (AVERAGE INSTALLATION) |                                   |             |               |            |  |
|---|-----------------------------------|-------------|---------------|------------|--|
| ITEM  | QUANTITY                          | UNITS       | UNIT COST     | TOTAL COST |  |
| 60-inch RCP   | 670                               | LF          | \$257         | \$172,000  |  |
| 54-inch RCP   | 632                               | LF          | \$231         | \$146,000  |  |
| Removal of Pipe (54" dia.)                                    | 670                               | LF          | \$54          | \$36,000   |  |
| Removal of Pipe (48" dia.)                                    | 632                               | LF          | \$54          | \$34,000   |  |
| Removal of Asphalt Mat  | 1087                              | SY          | \$7           | \$8,000    |  |
| Asphalt Patching/Paving                                       | 1087                              | SY          | \$26          | \$28,000   |  |
| SUBTOTAL F  | OR BASE CAP                       | PITAL IMPRO | VEMENT COSTS: | \$424,000  |  |
| MOBILIZATION  |                                   |             | 10%           | 42,000     |  |
| DEWATERING  |                                   |             | 5%            | 21,000     |  |
| TRAFFIC CONTROL   |                                   |             | 10%           | 42,000     |  |
| UTILITY COORDINATION/RELOCATION                               |                                   |             | 10%           | 42,000     |  |
| STORMWATER MANAGEMENT/EROSION CONTROL                         |                                   |             | 5%            | 21,000     |  |
| SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS:            |                                   |             |               | 168,000    |  |
| SUBTOTAL FO   | R TOTAL CAP                       | PITAL IMPRO | VEMENT COSTS: | 592,000    |  |
| CONTINGENCIES   |                                   | 25%         | 148,000       |            |  |
| ENGINEERING DESIGN SERVICES                                   |                                   | 15%         | 89,000        |            |  |
| LEGAL AND ADMINISTRATIVE SERVICES                             |                                   | 5%          | 30,000        |            |  |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT                        |                                   | 10%         | 59,000        |            |  |
|   | SUBTOTAL FOR OTHER COSTS: \$326,0 |             |               |            |  |
| T(  | OTAL ESTIMA                       | ATED CONST  | RUCTION COST: | \$918,000  |  |

#### **BASIN: NORTH ENGLEWOOD**

| BASIN: NORTH ENGLEWOOD  |          |       |           |            |  |
|---|----------|-------|-----------|------------|--|
| SEGMENT: N5 - LINCOLN ST TO LOGAN ST                          |          |       |           |            |  |
| 10-YR DESIGN PRELIMINARY COST ESTIMATE (AVERAGE INSTALLATION) |          |       |           |            |  |
| ITEM  | QUANTITY | UNITS | UNIT COST | TOTAL COST |  |
| 30-inch RCP   | 981      | LF    | \$96      | \$94,000   |  |
| Removal of Pipe (24" dia.)                                    | 981      | LF    | \$21      | \$21,000   |  |
| Removal of Manhole  | 1        | EA    | \$931     | \$1,000    |  |
| Removal of Asphalt Mat  | 545      | SY    | \$7       | \$4,000    |  |
| Asphalt Patching/Paving                                       | 545      | SY    | \$26      | \$14,000   |  |
| SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS: \$134,00         |          |       |           |            |  |
| MOBILIZATION  |          |       | 10%       | \$13,000   |  |
| DEWATERING  |          |       | 5%        | \$7,000    |  |
| TRAFFIC CONTROL   |          |       | 10%       | \$13,000   |  |
| UTILITY COORDINATION/RELOCATION                               |          |       | 10%       | \$13,000   |  |
| STORMWATER MANAGEMENT/EROSION CONTROL                         |          |       | 5%        | \$7,000    |  |
| SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS: \$53,000   |          |       |           |            |  |
| SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS:                 |          |       | \$187,000 |            |  |
| CONTINGENCIES   |          | 25%   | \$47,000  |            |  |
| ENGINEERING DESIGN SERVICES                                   |          |       | 15%       | \$28,000   |  |
| LEGAL AND ADMINISTRATIVE SERVICES                             |          | 5%    | \$9,000   |            |  |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT                        |          | 10%   | \$19,000  |            |  |
| SUBTOTAL FOR OTHER COSTS: \$103                               |          |       |           | \$103,000  |  |
| TOTAL ESTIMATED CONSTRUCTION COST: \$290                      |          |       |           | \$290,000  |  |

| BASIN: NORTH ENGLEWOOD  |          |       |               |            |  |
|---|----------|-------|---------------|------------|--|
| SEGMENT: N5 - LINCOLN ST TO LOGAN ST                          |          |       |               |            |  |
| 25-YR DESIGN PRELIMINARY COST ESTIMATE (AVERAGE INSTALLATION) |          |       |               |            |  |
| ITEM  | QUANTITY | UNITS | UNIT COST     | TOTAL COST |  |
| 36-inch RCP   | 981      | LF    | \$116         | \$113,000  |  |
| Removal of Pipe (24" dia.)                                    | 981      | LF    | \$21          | \$21,000   |  |
| Removal of Manhole  | 1        | EA    | \$931         | \$1,000    |  |
| Removal of Asphalt Mat  | 545      | SY    | \$7           | \$4,000    |  |
| Asphalt Patching/Paving                                       | 545      | SY    | \$26          | \$14,000   |  |
| SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS: \$153,000        |          |       |               |            |  |
| MOBILIZATION  |          |       | 10%           | 15,000     |  |
| DEWATERING  |          |       | 5%            | 8,000      |  |
| TRAFFIC CONTROL   |          |       | 10%           | 15,000     |  |
| UTILITY COORDINATION/RELOCATION                               |          |       | 10%           | 15,000     |  |
| STORMWATER MANAGEMENT/EROSION CONTROL                         |          |       | 5%            | 8,000      |  |
| SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS: 61,000     |          |       |               |            |  |
| SUBTOTAL FOR TOTAL CAPITAL IMPRO                              |          |       | VEMENT COSTS: | 214,000    |  |
| CONTINGENCIES   |          |       | 25%           | 54,000     |  |
| ENGINEERING DESIGN SERVICES                                   |          |       | 15%           | 32,000     |  |
| LEGAL AND ADMINISTRATIVE SERVICES                             |          |       | 5%            | 11,000     |  |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT                        |          | 10%   | 21,000        |            |  |
| SUBTOTAL FOR OTHER COSTS: \$118,000                           |          |       |               | \$118,000  |  |

TOTAL ESTIMATED CONSTRUCTION COST:

\$332,000

#### **BASIN: YALE AVENUE**

| SEGMENT: Y1 - SOUTH PLATTE RIVER TO AMHERST AVE               |          |       |               |             |
|---|----------|-------|---------------|-------------|
| 10-YR DESIGN PRELIMINARY COST ESTIMATE (AVERAGE INSTALLATION) |          |       |               |             |
| ITEM  | QUANTITY | UNITS | UNIT COST     | TOTAL COST  |
| 54-inch RCP   | 1245     | LF    | \$231         | \$288,000   |
| 42-inch RCP   | 2033     | LF    | \$135         | \$274,000   |
| Removal of Pipe (33" dia.)                                    | 3278     | LF    | \$21          | \$70,000    |
| Removal of Manhole  | 3        | EA    | \$931         | \$3,000     |
| Removal of Asphalt Mat  | 2324     | SY    | \$7           | \$16,000    |
| Asphalt Patching/Paving                                       | 2324     | SY    | \$26          | \$60,000    |
| Manhole, 5' Dia (Pipe Dia 36-42", Depth > 15')                | 4        | EA    | \$4,173       | \$17,000    |
| Manhole, Type B (Pipe Dia. > 48")                             | 2        | EA    | \$12,840      | \$26,000    |
| SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS: \$754,000        |          |       |               |             |
| MOBILIZATION  |          | 10%   | \$75,000      |             |
| DEWATERING  |          |       | 5%            | \$38,000    |
| TRAFFIC CONTROL   |          |       | 10%           | \$75,000    |
| UTILITY COORDINATION/RELOCATION                               |          |       | 10%           | \$75,000    |
| STORMWATER MANAGEMENT/EROSION CONTROL                         |          |       | 5%            | \$38,000    |
| SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS: \$301,00   |          |       |               | \$301,000   |
| SUBTOTAL FOR TOTAL CAPITAL IMPROVEMENT COSTS                  |          |       | VEMENT COSTS: | \$1,055,000 |
| CONTINGENCIES   |          |       | 25%           | \$264,000   |
| ENGINEERING DESIGN SERVICES                                   |          |       | 15%           | \$158,000   |
| LEGAL AND ADMINISTRATIVE SERVICES                             |          | 5%    | \$53,000      |             |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT                        |          | 10%   | \$106,000     |             |
| SUBTOTAL FOR OTHER COSTS: \$58:                               |          |       |               | \$581,000   |

TOTAL ESTIMATED CONSTRUCTION COST:

\$1,636,000

#### **BASIN: YALE AVENUE**

| SEGMENT: Y1 - SOUTH PLATTE RIVER TO AMHERST AVE               |          |       |               |            |
|---|----------|-------|---------------|------------|
| 25-YR DESIGN PRELIMINARY COST ESTIMATE (AVERAGE INSTALLATION) |          |       |               |            |
| ITEM  | QUANTITY | UNITS | UNIT COST     | TOTAL COST |
| 66-inch RCP   | 1245     | LF    | \$282         | \$352,000  |
| 54-inch RCP   | 1387     | LF    | \$231         | \$321,000  |
| 48-inch RCP   | 646      | LF    | \$154         | \$100,000  |
| 36-inch RCP   | 650      | LF    | \$116         | \$75,000   |
| Removal of Pipe (33" dia.)                                    | 3278     | LF    | \$21          | \$70,000   |
| Removal of Pipe (30" dia.)                                    | 650      | LF    | \$21          | \$14,000   |
| Removal of Manhole  | 4        | EA    | \$931         | \$4,000    |
| Removal of Asphalt Mat  | 2977     | SY    | \$7           | \$21,000   |
| Asphalt Patching/Paving                                       | 2977     | SY    | \$26          | \$77,000   |
| Manhole, 6' Dia (Pipe Dia, Depth > 15')                       | 1        | EA    | \$4,601       | \$5,000    |
| Manhole, Type B (Pipe Dia. > 48")                             | 5        | EA    | \$12,840      | \$64,000   |
| SUBTOTAL FOR BASE CAPITAL IMPROVEMENT COSTS: \$1,103,00       |          |       |               |            |
| MOBILIZATION  |          | 10%   | 110,000       |            |
| DEWATERING  |          |       | 5%            | 55,000     |
| TRAFFIC CONTROL   |          |       | 10%           | 110,000    |
| UTILITY COORDINATION/RELOCATION                               |          |       | 10%           | 110,000    |
| STORMWATER MANAGEMENT/EROSION CONTROL                         |          |       | 5%            | 55,000     |
| SUBTOTAL FOR ADDITIONAL CAPITAL IMPROVEMENT COSTS: 440,000    |          |       |               |            |
| SUBTOTAL FOR TOTAL CAPITAL IMPRO                              |          |       | VEMENT COSTS: | 1,543,000  |
| CONTINGENCIES   |          | 25%   | 386,000       |            |
| ENGINEERING DESIGN SERVICES                                   |          | 15%   | 231,000       |            |
| LEGAL AND ADMINISTRATIVE SERVICES                             |          | 5%    | 77,000        |            |
| CONTRACT ADMIN/CONSTRUCTION MANAGEMENT                        |          | 10%   | 154,000       |            |
| SUBTOTAL FOR OTHER COSTS: \$848,000                           |          |       |               | \$848,000  |

TOTAL ESTIMATED CONSTRUCTION COST: \$2,391,000