



**LEGEND**

**OSB1** — SUB-BASIN DESIGNATION  
 87.2 ac — SUB-BASIN AREA  
 24 cfs — 5-YEAR SUB-BASIN RUNOFF  
 103 cfs — 100-YEAR SUB-BASIN RUNOFF

**C9** — SUB-BASIN DESIGNATION  
 4.7 cfs — 5-YEAR RUNOFF  
 7.6 cfs — 100-YEAR RUNOFF

▲ — DESIGN POINT

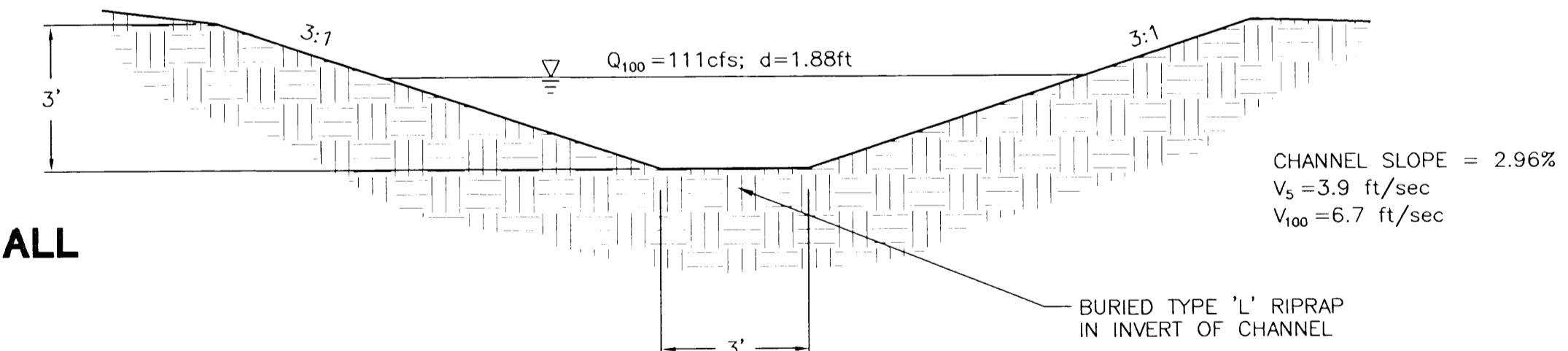
13 — DRAINAGE STRUCTURE

**HYDROLOGY TABLE**

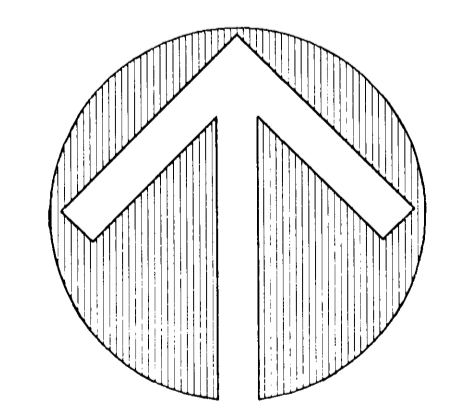
| BASIN | AREA    | Q <sub>5</sub> | Q <sub>100</sub> |
|-------|---------|----------------|------------------|
| A1    | 3.15ac  | 4.9cfs         | 9.7cfs           |
| A2    | 2.60ac  | 3.8cfs         | 7.6cfs           |
| A3    | 0.19ac  | 0.8cfs         | 1.4cfs           |
| A4    | 2.39ac  | 11.2cfs        | 20.2cfs          |
| A5    | 0.94ac  | 4.8cfs         | 8.6cfs           |
| A6    | 0.68ac  | 2.0cfs         | 3.7cfs           |
| B1    | 7.15ac  | 7.1cfs         | 15.3cfs          |
| B2    | 7.76ac  | 10.3cfs        | 21.6cfs          |
| B3    | 1.45ac  | 4.5cfs         | 8.6cfs           |
| B4    | 0.22ac  | 0.8cfs         | 1.5cfs           |
| B5    | 2.21ac  | 8.8cfs         | 16.4cfs          |
| B6    | 4.45ac  | 3.8cfs         | 8.7cfs           |
| B7    | 4.55ac  | 17.5cfs        | 32.3cfs          |
| B8    | 0.85ac  | 1.0cfs         | 2.4cfs           |
| B9    | 0.90ac  | 3.0cfs         | 5.7cfs           |
| B10   | 2.33ac  | 2.6cfs         | 5.8cfs           |
| B11   | 3.31ac  | 7.0cfs         | 14.1cfs          |
| C1    | 4.16ac  | 6.9cfs         | 13.7cfs          |
| C2    | 0.34ac  | 1.1cfs         | 2.0cfs           |
| C3    | 0.18ac  | 0.6cfs         | 1.2cfs           |
| C4    | 3.07ac  | 8.5cfs         | 16.1cfs          |
| C5    | 5.33ac  | 5.2cfs         | 11.3cfs          |
| C6    | 6.15ac  | 5.3cfs         | 12.6cfs          |
| ▲     | 2.79ac  | 4.3cfs         | 8.4cfs           |
| ▲     | 7.15ac  | 15.3cfs        | 27.5cfs          |
| ▲     | 9.94ac  | 18.8cfs        | 37.0cfs          |
| ▲     | 7.15ac  | 76cfs          | 186cfs           |
| ▲     | 8.81ac  | 79cfs          | 192cfs           |
| ▲     | 27.80ac | 101cfs         | 258cfs           |
| ▲     | 4.16ac  | 78cfs          | 169cfs           |
| ▲     | 7.75ac  | 87cfs          | 185cfs           |
| ▲     | 7.40ac  | 10.9cfs        | 23.1cfs          |
| ▲     | 13.91ac | 92cfs          | 198cfs           |

**HYDRAULICS TABLE**

| ID | EXISTING/<br>PROPOSED | DESCRIPTION      | CAPACITY | PIPE<br>LENGTH | MIN.<br>SLOPE |
|----|-----------------------|------------------|----------|----------------|---------------|
| 01 | EXISTING              | 1.25"x1.25"      | 4cfs     |                |               |
| 02 | EXISTING              | 1.5"x1.5"        | 4cfs     |                |               |
| 03 | EXISTING              | 2.5"x8"          | 33cfs    |                |               |
| 04 | EXISTING              | 2"x4"            | 15cfs    |                |               |
| 05 | EXISTING              | 1"x1"            | 2cfs     |                |               |
| 06 | EXISTING              | 1"x30"           | 4cfs     |                |               |
| 07 | EXISTING              | 2"x4"            | 15cfs    |                |               |
| 08 | EXISTING              | 18" CMP          | 10cfs    |                |               |
| 09 | EXISTING              | 2"x4"            | 12cfs    |                |               |
| 10 | EXISTING              | 18"x20"          | 3cfs     |                |               |
| 11 | EXISTING              | 15"x15"          | 2cfs     |                |               |
| 12 | EXISTING              | 1.5"x1.5"        | 5cfs     |                |               |
| 13 | EXISTING              | 2"x4"            | 4cfs     |                |               |
| 14 | EXISTING              | 6"0-10R          | 4cfs     |                |               |
| 15 | EXISTING              | 2-4"x100"        | 3cfs     |                |               |
| 16 | EXISTING              | 18" RND          | 3cfs     |                |               |
| 17 | EXISTING              | 4"x50"           | 7cfs     |                |               |
| 18 | EXISTING              | 18" RND          | 3cfs     |                |               |
| 19 | EXISTING              | 4"x50"           | 7cfs     |                |               |
| 20 | EXISTING              | 18" RND          | 3cfs     |                |               |
| 21 | EXISTING              | 18" RND          | 3cfs     |                |               |
| 22 | EXISTING              | 16" RADIAL INLET | 55cfs    |                |               |
| 23 | PROPOSED              | 36" RCP FES      | 49cfs    |                |               |
| 24 | PROPOSED              | 18" RCP FES      | 17cfs    |                |               |
| 25 | PROPOSED              | 36" RCP          | 76cfs    | 350'           | 1.3%          |
| 26 | PROPOSED              | 18" RCP          | 23cfs    | 200'           | 4.8%          |
| 27 | PROPOSED              | JUNCTION BOX     |          |                |               |
| 28 | PROPOSED              | 42" RCP FES      | 78cfs    |                |               |
| 29 | PROPOSED              | 42" RCP          | 101cfs   | 120'           | 1.0%          |
| 30 | PROPOSED              | 5' D10R          | 16cfs    |                |               |
| 31 | PROPOSED              | 42" RCP          | 101cfs   | 150'           | 1.0%          |
| 32 | PROPOSED              | 5' D10R          | 16cfs    |                |               |
| 33 | PROPOSED              | 42" RCP          | 110cfs   | 105'           | 1.2%          |
| 34 | PROPOSED              | 5' D10R          | 16cfs    |                |               |
| 35 | PROPOSED              | 42" RCP          | 126cfs   | 50'            | 1.6%          |
| 36 | PROPOSED              | MANHOLE          |          |                |               |
| 37 | PROPOSED              | 42" RCP          | 126cfs   | 150'           | 1.6%          |
| 38 | PROPOSED              | 5' D10R          | 16cfs    |                |               |
| 39 | PROPOSED              | 42" RCP          | 142cfs   | 230'           | 2.0%          |
| 40 | PROPOSED              | MANHOLE          |          |                |               |
| 41 | PROPOSED              | 42" RCP          | 142cfs   | 800'           | 2.0%          |
| 42 | PROPOSED              | 5' D10R          | 16cfs    |                |               |
| 43 | PROPOSED              | 24" RCP          | 23cfs    | 60'            | 1.0%          |
| 44 | PROPOSED              | 5' D10R          | 16cfs    |                |               |
| 45 | PROPOSED              | 24" RCP          | 23cfs    | 10'            | 1.0%          |
| 46 | PROPOSED              | 24" RCP          | 32cfs    | 45'            | 2.0%          |
| 47 | PROPOSED              | MANHOLE          |          |                |               |
| 48 | PROPOSED              | 24" RCP          | 32cfs    | 205'           | 2.0%          |
| 49 | PROPOSED              | 5' D10R          | 16cfs    |                |               |
| 50 | PROPOSED              | 24" RCP          | 23cfs    | 20'            | 1.0%          |
| 51 | PROPOSED              | MANHOLE          |          |                |               |
| 52 | PROPOSED              | 24" RCP          | 24cfs    | 160'           | 1.1%          |
| 53 | PROPOSED              | 24" RCP          | 37cfs    | 12'            | 2.7%          |
| 54 | EXISTING              | 18" RCP          | 21cfs    | 310'           |               |
| 55 | EXISTING              | 18" RCP          | 109cfs   | 1205'          |               |



**SECTION A-A SWALE CROSS-SECTION**



SCALE: 1" = 100'

**EXHIBIT 2  
 PROPOSED ON-SITE DRAINAGE  
 CHEYENNE MOUNTAIN HIGH SCHOOL  
 MASTER DEVELOPMENT DRAINAGE PLAN  
 CHEYENNE MOUNTAIN SCHOOL DISTRICT NO. 12  
 COLORADO SPRINGS, COLORADO**

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