

rate into the public storm sewer system along public Frontside Drive is 27.36 cfs. This includes runoff generated from sub-basins EX1, EX3, and OS1. The proposed private stormwater system is designed to provide a controlled maximum release of 5.5 cfs into the existing public storm sewer system along public Frontside Drive and ultimately West Fork of Jimmy Camp Creek. This includes flows from sub-basins A1 to A16, A23, A24, and A25. The existing maximum release rate into the existing grass swale along Powers Boulevard is 22.34 cfs. This includes runoff generated from sub-basin EX2. The proposed private stormwater system is designed to provide a controlled maximum release of 20.22 cfs into the existing ditch along Powers Boulevard and ultimately the Big Johnson drainage basin. This includes flows from sub-basins A17 to A21, A 22, and A26 to OS1. Therefore, the Site produces a controlled release rate into the existing system that is less than the undeveloped major design storm rate.

The proposed development is not anticipated to have negative impacts to downstream infrastructure. Implementation of landscaping throughout the Site will help slow runoff and encourage infiltration. Stormwater runoff reduction techniques will be used to promote stormwater infiltration and reduce the amount of developed runoff exiting the Site. As documented in the runoff reduction calculations and exhibit found in the **Appendix C**, the site was divided into Upstream Impervious Areas (UIA), Receiving Pervious Area (RPA), Directly Connected Impervious Area (DCIA), and Separate Pervious Area (SPA) per the City of Colorado Springs Green Infrastructure Manual. Where feasible, developed stormwater runoff from the Site will be directed over the various RPA's. Reference **Appendix C** for Green Infrastructure Exhibit. The resulting total WQCV reduction is 28%, which is greater than the minimum required reduction of 10%.

#### **Step 2. Implement BMPs That Provide a Water Quality Capture Volume with Slow Release**

– Water quality treatment will be provided through infiltration and the use of a proposed private extended detention basins. Water quality will be provided through infiltration for sub-basins A17 to A21, A 22, and A26 to OS1. Reference the runoff reduction spreadsheet and exhibit in the **Appendix C**. Water quality will be provided through extended detention for flows from sub-basins A1 to A16, A23, A24, and A25. The sub-basins treated for water quality via extended detention basins account for 14.24 acres or 64.43% of the total disturbed area. Sub-basins treated for water quality account for 22.1 acres or 100% of the total disturbed area. Thus, over 95% of the total disturbed area is treated for water quality.

**Step 3 Stabilize Drainageways**– Stabilizing proposed roadside ditches, swales, and channels by designing them with slopes that control the flow rates. Placement of riprap upstream and downstream of culverts to help reduce erosion of the roadside ditches. Check dams will be used in areas with steeper grades to slow the runoff. We anticipate this will minimize erosion. Existing drainage ways will be graded to reduce the velocity of the water to minimize erosion.

**Step 4. Implement Site Specific and Other Source Control BMPs** – The Site does not require “Covering of Storage/Handling Areas” or “Spill Containment and Control” (specialized BMPs) in the final constructed condition. There is no proposed material storage or other Site operations that would introduce contaminants to the City’s MS4 that would require Site specific control or source control BMP for the proposed project.

All flows leaving the Site will be released at or below historic rates and will cause no impact to downstream facilities and additional off-site improvements are not required by this Project. Reference the Downstream Infrastructure Capacity section of this report for details.