Creek Channel Stabilization Project Starts Soon,
Will Maintain Natural Look, Feel of Garden of the Gods Park

One of the key elements of the multi-phase 2014 Camp Creek Improvement Plan developed with the help of the community was the stabilization of the creek channel through the Garden of the Gods Park and Rock Ledge Ranch. That phase of the project is soon to be realized, with work slated to begin in the next few weeks.

A contractor has been hired by the City of Colorado Springs to construct naturalistic channel stabilization structures, shape banks, and plant vegetation along portions of Camp Creek. The purpose of the structures is to mitigate erosion that has been occurring at an accelerated pace along the Creek since the Waldo Canyon fire in 2012. The wildfire burned a large percentage of the Camp Creek watershed, resulting in larger and more frequent water flows in the Creek, leading to increased erosion.

Runoff from significant rainstorms in 2015 caused serious erosion along the Creek. That led the City of Colorado Springs to request and receive financial support from the Natural Resource Conservation Service (NRCS) to assist with mitigation. The project will be funded by the City and by NRCS through its Emergency Watershed Protection program.

The majority of the project work will be located north of Gateway Road between the Gateway Trail and the future Garden of the Gods Detention Facility (pond) site near the northern boundary of the park. Structures will also be constructed at four locations in Rock Ledge Ranch that are particularly prone to damage from erosion. The general locations of areas of the creek that will be included in the project are shown on the map to the right.

The stabilization structures, known as “cross vanes,” will be constructed with large boulders. They will look similar to the structure shown in the photo on page 3. The structures will serve as small steps in the channel. They will add stability to the channel by limiting the depth that erosion can occur downward. They will also reduce the amount of erosive flow that is directed at the creek’s banks in critical locations, such as curves.

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Many Property Owners Will Benefit from Floodplain Boundary Revision Set to Take Effect in October

There’s good news for many with property located near Camp Creek. The Federal Emergency Management Agency (FEMA) floodplain boundaries shown in the Flood Insurance Rate Maps (FIRMS) along Camp Creek are being revised.

A Letter of Map Revision (LOMR) for Camp Creek was issued by FEMA on June 14, 2016. The LOMR revises the floodplain boundaries along Camp Creek between the southern portion of Glen Eyrie and Fountain Creek. The LOMR will become effective for use in the FEMA Flood Insurance Program on October 27, 2016. A copy of the LOMR is posted on the project web page: https://coloradosprings.gov/public-works/page/camp-creek.

The City of Colorado Springs requested the LOMR to revise the floodplain boundary to reflect a recent hydraulic analysis based on detailed topographic mapping and lower 100-year flow rates than the FEMA FIRMs that became effective in 1997 were are based on. The lower 100-year flow rates were determined through a detailed hydrologic study that was completed during the Camp Creek Drainage Improvement Planning process in 2013-14.

FEMA’s regulatory floodplain designates the approximate area that would be flooded in a storm event that has a 1 percent chance of occurring in a one-year time period (100-year storm). If a property falls within the FEMA regulatory floodplain, federal law requires property owners to purchase flood insurance if their property is mortgaged.

The LOMR designates a narrower 100-year regulatory floodplain throughout most of the Camp Creek corridor due to the revised flow rates. However, there are some areas along the corridor that the revised floodplain is mapped at a higher elevation based on the results of the recent hydraulic modeling. These increases can generally be attributed to existing conditions in the corridor that were not reflected in the previous hydraulic model. These conditions include channel and street elevations that are higher than previously reflected and the two pedestrian bridges across the channel that restrict water flow in the 31st Street channel.

The LOMR removes 57 properties from and adds six properties to the regulatory floodplain. Owners of property near the Creek may want to review the LOMR and contact their flood insurance and mortgage companies if they believe that the FEMA Regulatory Status of their property will be changed by the LOMR.

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Areas Disturbed by Creek Channel Stabilization Will be Restored

Vegetation can play a key role in the stability of natural channels and can also enhance wildlife habitat and aesthetic appeal. An important part of this channel stabilization project is the restoration of disturbed areas by re-seeding grasses and planting shrubs along the channel. In addition, some native vegetation will be transplanted from the area where the future Garden of the Gods Detention Facility will be located to the areas disturbed by the stabilization project in an effort to reduce project costs and maintain the integrity of the park’s vegetation.

Large trucks and construction equipment will be needed for construction of the project. However, the construction contract requires that the contractor minimize disturbances to the natural areas of the Park and Ranch to the extent practical. The contractor will be allowed to utilize the area where the future Garden of the Gods Detention Facility will be located to store equipment and materials needed for the project. There will be minimal impact on park operations and traffic.

The portion of the Creek located in the southern portion of Rock Ledge Ranch will not be included in the 2016 channel stabilization project due limited funding and the ultimate plan of relocating that portion of the Creek to better align with the portion of the channel located in 31st Street. The City plans to do some work on the channel near Chambers Way through a separate maintenance project.

Damage to 31st Street Channel Gets Interim Repairs

Heavy rains and the resulting runoff in the spring and summer of 2015 added damage to the concrete lining of the Camp Creek channel located in the median of 31st Street.

The City has recently completed repair of the concrete lining at the entrance to the long Camp Creek culvert that begins at the north side of Bijou Street. In addition, a contractor will soon be selected by the City to repair a portion of the damaged concrete bank lining located just upstream from Westmoor Drive. The bank lining repair is expected to begin in late September or October of this year.

The repairs serve as interim fixes to help the channel last until funding for reconstruction of the 31st Street corridor called for in the 2014 Camp Creek Improvement Plan can be secured.
The project will be funded by the City of Colorado Springs, the State of Colorado, and FEMA through its Hazard Mitigation Grant Program. The detention facility is the initial significant project of the 2014 Camp Creek Improvement Plan.

The City applied for the FEMA grant for the facility in late summer of 2014 and FEMA requested that the City prepare an Environmental Assessment (EA) as a final step in the funding process. The EA was prepared in late 2015 and reviewed by FEMA and the public in early 2016. FEMA issued a Finding of No Significant Impact (FONSI) for the project in March 2016. The EA and FONSI are posted on the City’s project web site: https://coloradosprings.gov/resident-services/public-works/city-engineering/camp-creek.

Completion of the facility will significantly reduce the potential for downstream flood damage and life safety hazards from flooding along the Camp Creek corridor. The project will also pave the way for downstream projects and reduction of the FEMA regulatory floodplain along Camp Creek through a LOMR that will be requested following construction of the facility.

Final design and plan preparation are almost complete for the large stormwater Detention and Sediment Collection Facility to be constructed adjacent to 30th Street in the northeastern portion of Garden of the Gods Park.

Once plans are complete the City will request approval from the State of Colorado Dam Safety Engineer for approval to construct the facility. Due to its location in the FEMA regulatory floodplain, FEMA’s approval of a Conditional Letter of Map Revision (CLOMR) is also needed prior to construction. Review of the request for the CLOMR is already underway at FEMA.

Upon obtaining these approvals, the City plans to select a contractor through its procurement process and get construction underway on the detention facility. If approvals can be obtained, the procurement process is expected to start before the end of 2016 with completion expected by the end of 2017. The general location of the area that will be disturbed during construction of the facility is shown on the map on page 1. The area will be planted with native vegetation once construction is complete.

(Story continued from page 2)

Next Floodplain Revision Planned Once Detention Facility Is Complete

The next FEMA floodplain map revision planned for Camp Creek will be done to reflect the impact of construction of the Garden of the Gods Detention Facility. This facility will significantly reduce the 100-year depth and width of the floodplain in 31st Street. After construction of the detention facility is complete, it is expected that all but about 30 of the properties along the 31st Street corridor can be removed from the regulatory floodplain with a LOMR processed through FEMA. The City has requested a Conditional Letter of Map Revision (CLOMR) based on the effects of the planned detention facility. The CLOMR is currently under review by FEMA.