



## STAFF REPORT

**Report To:** Board of Supervisors                      **Meeting Date:** November 4, 2021

**Staff Contact:** Darren Schulz, Public Works Director

**Agenda Title:** For Possible Action: Discussion and possible action regarding authorization to submit three grant applications to the Nevada Division of Emergency Management ("NDEM") for the Hazard Mitigation Grant Program ("HMGP") for flood control projects in Carson City, and authorization for the Chief Stormwater Engineer to sign the applications and all documents related to the application on behalf of the City. (Randall Rice, RRice@carson.org and Robb Fellows; RFellows@carson.org)

Staff Summary: The Carson City Public Works Department is requesting approval from the Board of Supervisors to submit three HMGP grant applications to NDEM for flood control projects in Carson City. The three grant applications would be for the planning, design, and construction of the Maxwell Detention Basin Project, Water Resource Recovery Facility ("WRRF") Flood Protection Project, and Upgrades to Emergency Alert Sites Project. The City's grant policy requires any grant application over \$50,000 be approved by the Board of Supervisors before submission of the grant application.

**Agenda Action:** Formal Action / Motion                      **Time Requested:** 5 minutes

### **Proposed Motion**

I move to authorize the Chief Stormwater Engineer to sign and submit the grant applications.

### **Board's Strategic Goal**

Sustainable Infrastructure

### **Previous Action**

The Board of Supervisors moved to approve submittal of an application for the Building Resilient Infrastructure and Communities ("BRIC") grant program for the Maxwell Detention Basin Project on September 17, 2020. The project was not selected by FEMA for the 2021 BRIC grant award; however, the Maxwell Basin project ranked high in the project decision matrix developed as part of the North Carson Area Drainage Plan in 2020 (see attached).

### **Background/Issues & Analysis**

On April 4, 2020, a major disaster was declared for the State of Nevada as a result of the COVID-19 pandemic. After a presidentially declared disaster, FEMA's HMGP provides funding for a wide variety of mitigation projects that reduce, or mitigate, future disaster losses in their communities. Funds for the COVID-19 disaster relief are available to communities through their State Division of Emergency Management, with a 75% federal funding, 25% local match ratio. NDEM was allocated \$13,584,381.

The Public Works Department proposes to submit three HMGP grant applications: one application for the design and construction of the Maxwell Basin in the Goni Watershed; one application for the design and construction of a floodwall extension along the northern side of the WRRF (adjacent to the floodway) and

subsequent completion of the flood map change process; and the other application would be for the purchase of equipment and services to upgrade the existing nine emergency ALERT sites throughout the City and installation of an additional site in the Goni area. See attached exhibits for details and cost estimates.

If the City is awarded the grants, the required grant match will come from the stormwater and wastewater capital accounts. If the Board approves this grant application submittal, City staff will begin working on the grant applications immediately for submittal to NDEM. Applications are due to NDEM between August 5, 2021 and August 5, 2022.

**Applicable Statute, Code, Policy, Rule or Regulation**

Carson City's Grant Policy

**Financial Information**

**Is there a fiscal impact?** Yes

**If yes, account name/number:** Stormwater Federal Grants (revenue) 5057582-431010, Stormwater Utility Fund- Capital Construction Account / 5053705-507010, Wastewater Federal Grants (revenue) 5108082-431010, and Wastewater Utility Fund - Capital Construction Account / 5103205-507010

**Is it currently budgeted?** Yes

**Explanation of Fiscal Impact:** If any of the grant applications are approved, the 25% local match required for each project is as follows:

Maxwell Detention Basin Project: \$481,250 from 5053705-507010

WRRF Flood Protection Project: \$250,000 from 5103205-507010

Upgrade to Emergency Alert Sites Project: \$25,000 from 5053705-507010

If all of the grant applications are approved, \$756,250 (\$506,250 from 5053705-507010 and \$250,000 from 5103205-507010) for the 25% local match will be required. If awarded revenue for grants would be augmented by \$1,518,750 for Stormwater and \$750,000 for Wastewater, and expenses would be budgeted at \$2,025,000 for Stormwater and \$1,000,000 for Wastewater. The local match would reduce total available undesignated amount in Stormwater of \$578,180 and in Wastewater of \$1,444,855, by \$506,250 and \$250,000, respectively.

**Alternatives**

Direct staff not to submit the grant applications and/or provide alternative direction to staff.

**Attachments:**

[1. Maxwell Basin Exhibit.pdf](#)

[NOI\\_Maxwell Basin.pdf](#)

[North Carson Area Drainage Plan-Maxwell.pdf](#)

[2. WRRF Exhibit.pdf](#)

[NOI\\_WWTP Flood Protection.pdf](#)

[3. Alert Sites Exhibit.pdf](#)

[NOI\\_Alert Systems.pdf](#)

**Board Action Taken:**

Motion: \_\_\_\_\_

1) \_\_\_\_\_

2) \_\_\_\_\_

*Aye/Nay*

\_\_\_\_\_

\_\_\_\_\_

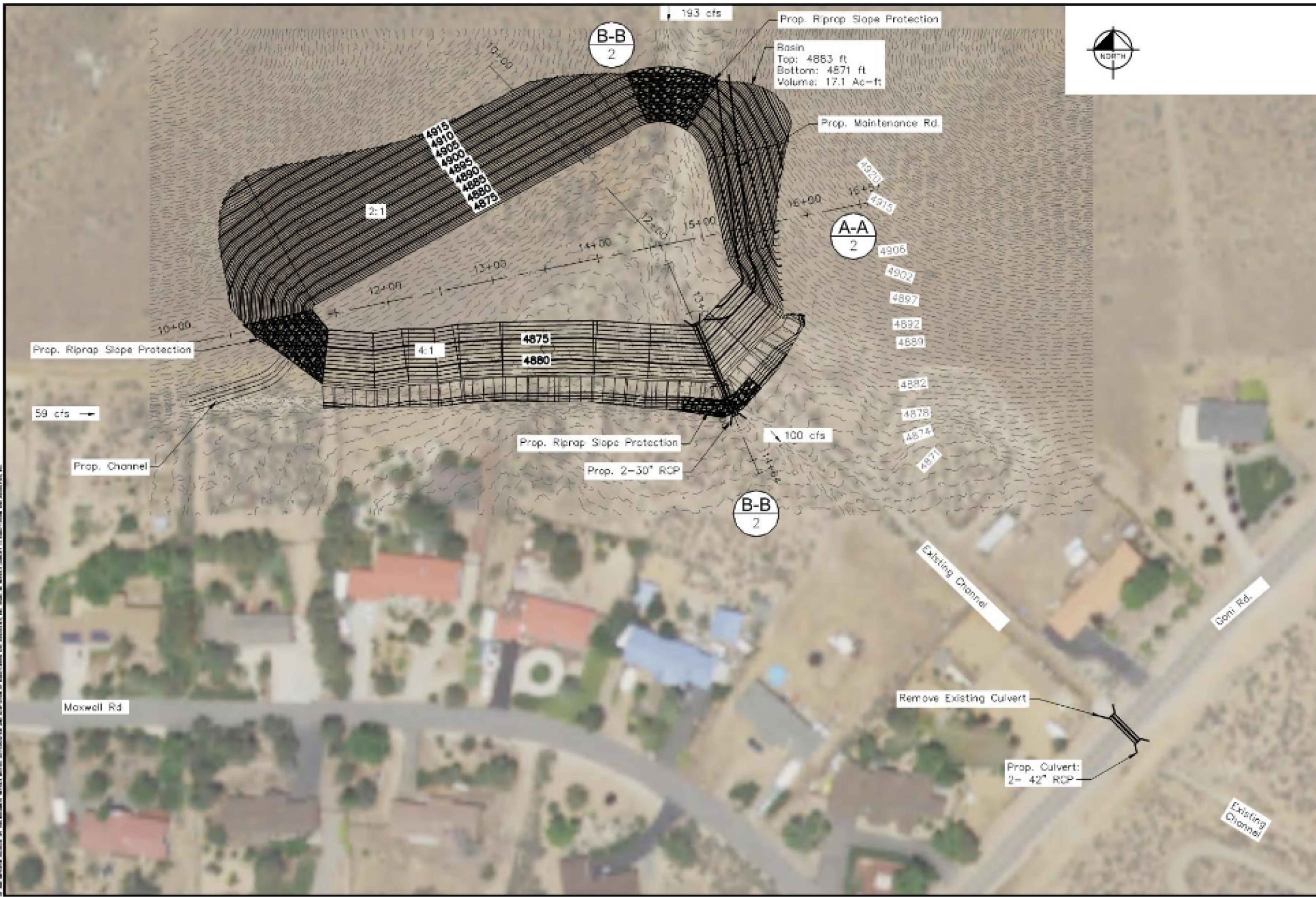
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(Vote Recorded By)

C:\Users\jacob\OneDrive\Projects\Carson City\Carson City\Drawings\4812375\004-238\0000\10-01-2020\001.dwg (10/19/21)  
 Drawing: 10/19/21



<p><b>Kimley»Horn</b></p> <p>©2020 KIMLEY-HORN AND ASSOCIATES, INC.        7700 South 39th Street, Suite 303        Phoenix, Arizona 85008 (602) 444-5900</p>	<p>SCALE: 1/4"=1'-00"</p> <p>DESIGNED BY: AITC</p> <p>DRAWN BY: CJI</p> <p>CHECKED BY: ESB</p> <p>DATE: 10/23/21</p>	<p>North Carson ADMP          Maxwell Basin          Proposed</p>	<p>PROJECT NO.          070006001</p> <p>DRAWING NAME</p>	<p>1 of 2</p>
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PROJECT COST: \$1,925,000
75% FUNDING: \$1,443,750
25% COST SHARE: \$481,250

<p>CARSON CITY DEPARTMENT          PUBLIC WORKS DEPARTMENT</p>	
<p>HMGP 2021          MAXWELL DETENTION BASIN PROJECT          EXHIBIT</p>	
<p>SHEET          1          OF          1</p>	
<p>3505 BUTTI WAY CARSON CITY, NEVADA 89701          PH: 887-2355 FAX: 887-2112</p>	



## Notice of Interest (NOI) Subgrantee to State of Nevada

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**\*\*Complete and return As Soon As Possible\*\***

**Return this form to:** Nevada Division of Emergency Management  
[mitigation@dps.state.nv.us](mailto:mitigation@dps.state.nv.us)

For questions on this NOI, please contact Janell Woodward at [jwoodward@dps.state.nv.us](mailto:jwoodward@dps.state.nv.us).

### Timeline

BRIC – (Total State Set-Aside for BRIC FY 2021: \$1,000,000.00)

FEMA GO Registration and Technical Assistance For Application: 9/30-12/03/21

**Full Application Due: 12/3/2021**

Review and ranking as needed 12/13/2021-1/13/2022

Final Application Due to FEMA 1/28/2021

HMGP – Post Fire (Total Funding Available for DR-5382: \$2,336,334.00)

**Full Application Due: February 1, 2022**

Final Applications due to FEMA: March 31, 2022

HMGP DR-4523 from Covid: (Total funding available \$13,584,381.00)

**Full Applications Due: June 30, 2022**

Application deadline to FEMA: August 5, 2022

**Applicant Agency: Carson City**  
**Point of Contact: Robb Fellows**  
**Telephone: 775-283-7370**  
**Email: rfellows@carson.org**  
**Street Address: 3505 Butti Way**  
**City, State, Zip: Carson City, NV 89701**

**Required Information:**

Funding Type: HMGP

FIPS #: **510**

DUNS #: **073787152**

Location of project type in Local or State Hazard Mitigation Plan (page #): Action Items 5A, page 8-17 and 5J, page 8-19

Estimated Grant Project Total: \$1,925,000

Federal Funding Amount (75%): \$1,443,750

Funding Cost Share Total (25%): \$481,250

Cost Share Source: Stormwater fund

How long is Cost Share Available? [Click or tap here to enter text.](#)

Activity Title: Maxwell Detention Basin

Brief Description of Project: The Maxwell basin and associated improvements would intercept runoff from the surrounding upland areas that contribute to Goni Canyon Creek flood hazard and upgrade the existing downstream drainage infrastructures. The basin would be designed to intercept 100-year runoff and to take advantage of City owned open space.



# North Carson Area Drainage Plan

## 7. Proposed Conditions Results

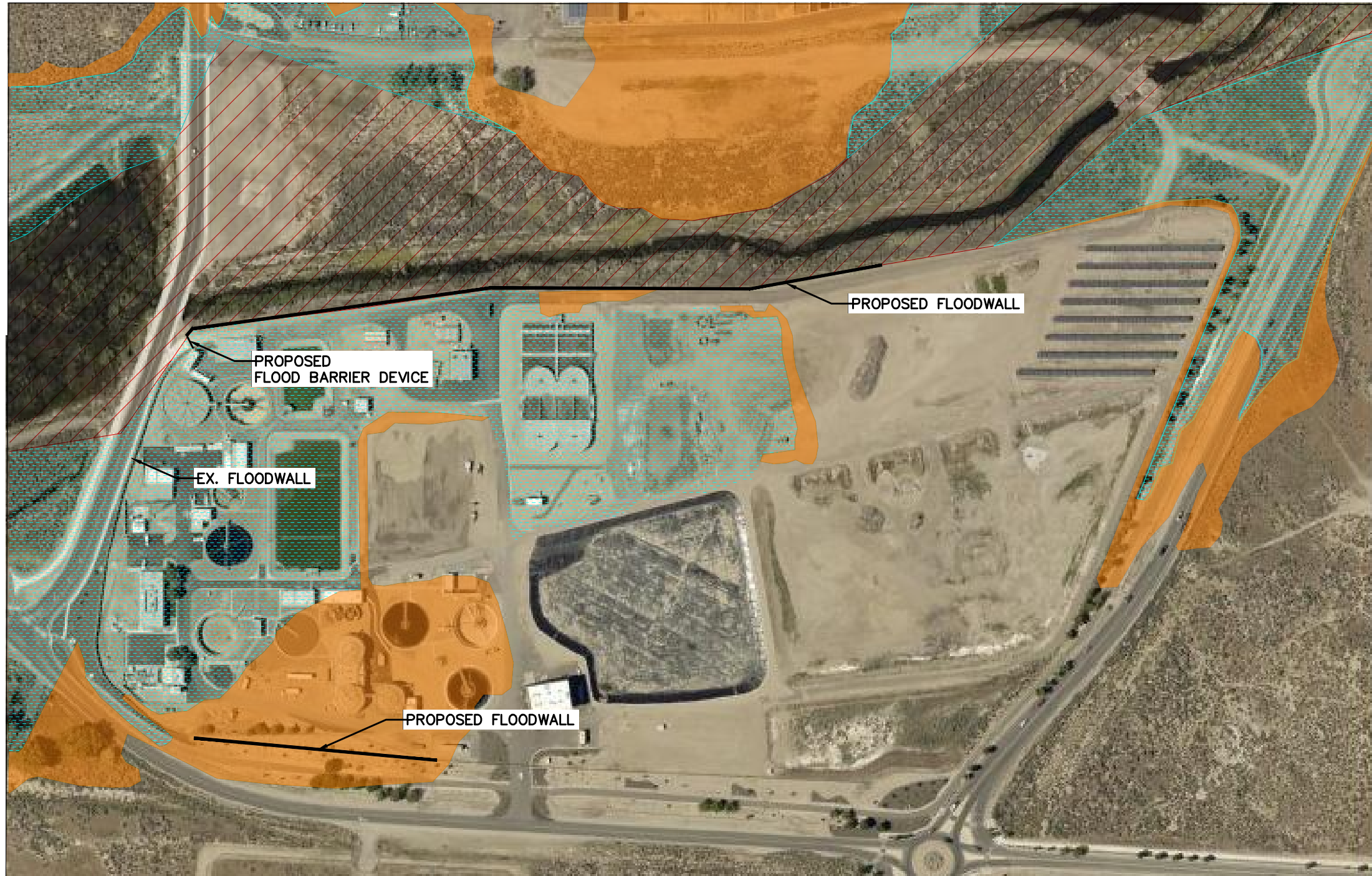
Table 6 shows the change in Probable BCR with the updated costs developed for the Preferred Alternatives. The overall costs increased mostly due to earthwork unit costs and a better understanding of quantities. The cost increases resulted in lower BCRs, pushing the Goni Canyon Creek and North Goni Road Basins below 1. It is important to note that the BCRs presented in this report and this table are preliminary in nature. It is anticipated that further refinement of the BCRs will be developed as part of follow-on work efforts while developing FEMA grant applications. These refinements should result in higher BCRs once all factors are considered but may not achieve BCRs above 1 for Goni Canyon Creek and North Goni Road Basins.

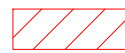



Table 6: Updated Decision Matrix

Ranking	AOI ID	Name	Level of Protection	Project's Initial Cost (\$)	No. of Potential Structures Benefited	No. Structures > 0.5 ft in the 100-year storm	No. Structures > 1 ft in the 100-year storm	No. of Structures in ex FEMA Floodplain	10-yr Potential Damage (\$)	25-yr Potential Damage (\$)	50-yr Potential Damage (\$)	100-yr Potential Damage (\$)	500-yr Potential Damage (\$)	Annualized Loss (\$)	Present Day Benefit Value (75 year service life)	Maximum Probable BCR*	Public Input No. of Dots	Removes SFHA?	Impacts Regional Traffic Flow?	Impacts Businesses ?	Impacts Critical Facilities?
1	7	Maxwell Basin	100-year	\$ 1,925,000	19	4	2	7	\$ 1,700,000	\$ 2,400,000	\$ 3,200,000	\$ 5,000,000	\$ 13,500,000	\$ 321,000	\$ 4,557,031	2.37	3	y	y	y	n
2	8	Sutro Terrace Storm Drain and Basins	10-year	\$ 3,326,000	166	16	6	0	\$ 2,300,000	\$ 3,000,000	\$ 3,600,000	\$ 4,200,000	\$ 5,700,000	\$ 315,000	\$ 4,471,853	1.34	9	n	n	n	n
3	2	Goni Canyon Creek Tiered Basins	100-year	\$ 10,907,000	59	11	3	20	\$ 3,600,000	\$ 4,500,000	\$ 6,100,000	\$ 8,100,000	\$ 16,200,000	\$ 549,600	\$ 7,802,319	0.72	4	y	y	y	n
4	6	North Goni Road Basin	100-year	\$ 1,880,000	22	4	2	0	\$ 600,000	\$ 700,000	\$ 900,000	\$ 1,300,000	\$ 2,100,000	\$ 83,800	\$ 1,189,655	0.63	8	y	y	y	n

The following figures for each preferred alternative show the before and after flow depth pre and post project. An additional figure is included that shows the change in flood depths. Since each of the preferred alternatives is designed to provide 100-year protection, only those results are shown.

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-  FLOODWAY (SPECIAL FLOOD HAZARD)
-  500-YEAR (SHADED X)
-  100-YEAR (SPECIAL FLOOD HAZARD)
-  PROPOSED FLOODWALL

PROJECT COST: \$1,000,000  
 75% FUNDING: \$750,000  
 25% COST SHARE: \$250,000

NOTE: APPROXIMATE FLOOD ZONES SHOWN FOR REFERENCE

CARSON CITY  
 PUBLIC WORKS DEPARTMENT  
 3505 BUTTI WAY CARSON CITY, NEVADA 89701  
 PH: 887-2355 FAX: 887-2112

HMGF 2021  
 WATER RESOURCE RECOVERY FACILITY  
 FLOOD PROTECTION PROJECT  
 EXHIBIT

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**Required Information:**

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FIPS #: **510**

DUNS #: **073787152**

Location of project type in Local or State Hazard Mitigation Plan (page #): Action Item 5I, page 8-19

Estimated Grant Project Total: \$1,000,000

Federal Funding Amount (75%): \$750,000

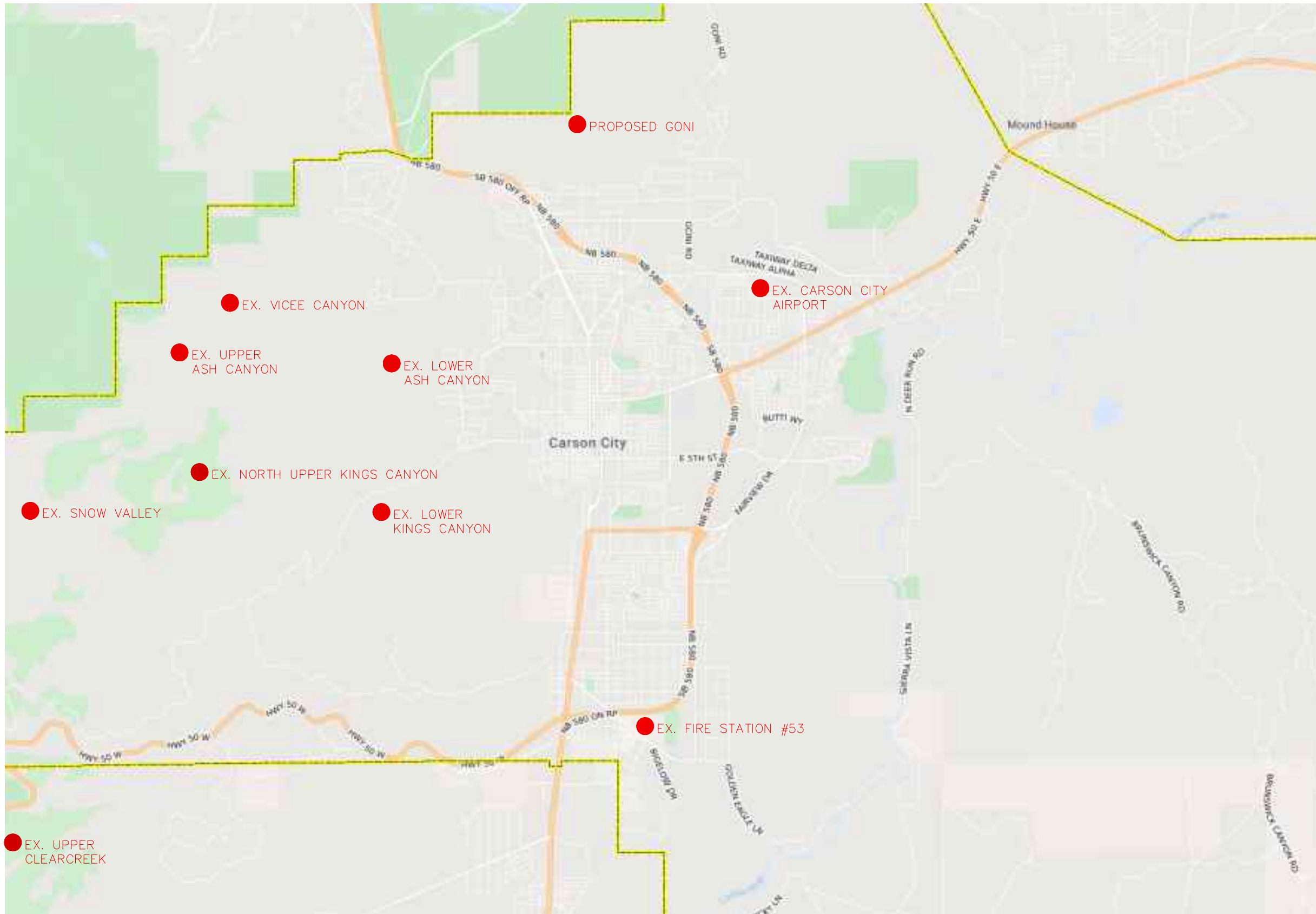
Funding Cost Share Total (25%): \$250,000

Cost Share Source: Stormwater fund

How long is Cost Share Available? [Click or tap here to enter text.](#)

Activity Title: Carson City Water Resource Recovery Facility Flood Protection

Brief Description of Project: The project includes extending the existing floodwall to the entrance off Airport Road and constructing a new floodwall on the adjacent side of the entrance, approximately 800 feet along the floodway, to provide freeboard for the 500-year flood event. Additionally, a 21-foot-long flood barrier device would be installed at the gate between the floodwalls to provide flood protection at this point.



**NOTE:** ALERT SITES WERE INSTALLED IN THE 1980'S THROUGH A GRANT. SITES ARE PERIODICALLY MAINTAINED BY CITY STAFF.

PROJECT COST: \$100,000  
 75% FUNDING: \$75,000  
 25% COST SHARE: \$25,000

**CARSON CITY DEPARTMENT  
 PUBLIC WORKS DEPARTMENT**  
 3505 BUTTI WAY CARSON CITY, NEVADA 89701  
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**HMGP 2021  
 UPGRADES TO EMERGENCY ALERT SITES  
 EXHIBIT**

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**Required Information:**

Funding Type: HMGP

FIPS #: **510**

DUNS #: **073787152**

Location of project type in Local or State Hazard Mitigation Plan (page #): State Goal 4A, page 4-10 and 4K, page 4-11

Estimated Grant Project Total: \$100,000

Federal Funding Amount (75%): \$75,000

Funding Cost Share Total (25%): \$25,000

Cost Share Source: Stormwater fund

How long is Cost Share Available? [Click or tap here to enter text.](#)

Activity Title: Upgrade Emergency Alert Sites

Brief Description of Project: This project would consist of upgrading the existing nine ALERT early warning sites throughout the City as well as adding another site in the upper Goni area. Upgrading the current technology to the ALERT2 products would provide enhanced warning and better opportunity for the City to respond accordingly.