groundworkstudio

Pueblo Alto / Mile Hi GSI Pilot Project Conceptual Design FAQ's

QUESTIONS ABOUT FUNDING

1. What is the estimated cost for the proposed project?

   Current (concept-level) project cost estimate for the Pueblo Alto/Mile Hi GSI Pilot Project locations is approximately $9.4 million. Estimated cost for proposed improvements in the Pueblo Alto neighborhood is approximately $7.4 million. Estimated cost for proposed improvements in the Mile Hi neighborhood is approximately $2.0 million.

2. Are all portions/phases of the proposed pilot project funded?

   The City of Albuquerque (City) is actively pursuing funding to support all of the proposed pilot installations. Funds deposited into City accounts for this project have primarily come from City General Obligation Bonds appropriated by the City Council, with some funding from 2022 and 2023 State Capital Outlay. The phasing of pilot project implementation will be determined after conclusion of the current Concept Design Phase based on funding availability.

3. Can the City get funding from IIJA?

   For the purposes of funding, the City is reviewing the potential for securing monies from multiple potential sources in the local, state, and federal funding programs, including the Infrastructure, Investment and Jobs Act (IIJA).

4. Have you tried to get funding or discounts from utility companies (Water Authority (ABCWUA), NM Gas, and PNM)?

   Any construction costs for relocating or replacing lines owned by the Water Authority, NM Gas, or PNM will be borne by those firms.

5. Will any entities profit unfairly from the project?

   No. Both the design engineering firm and the future construction contractor are private firms selected through either a public RFP process or public competitive bid for the entity best able to provide these types of design and construction services, just as firms would be chosen to upsize a conventional storm drain system.

QUESTIONS ABOUT PILOT PROJECT SCOPE

6. What criteria was used to select the street locations for the pilot project?

   The Pueblo Alto neighborhood has experienced recurring flooding for decades, especially on the 800 blocks of Adams and Jefferson Streets. About a decade ago, the City installed water blocks along Mountain Avenue to prevent some street flows from entering the 800 blocks of Adams and Jefferson Streets. Subsequently, the City improved the storm drain system through the replacement of storm drain inlets. In addition, the City committed to continue to pursue drainage improvements to reduce the persistent, recurring flooding. The City commenced with

One Park Square
6501 Americas Pkwy NE, Ste. 350
Albuquerque, NM 87110

T 505-212-9126
W groundworkstudionm.com

studies that reviewed installing a storm drain from Pueblo Alto to the North Diversion Channel, though this was prohibitively expensive. The City also reviewed constructing underground storage at the Del Sol Twin Parks, but that was concerning to the neighborhood. In 2021, the City chose to pursue a different strategy and work on a solution that could be constructed in the public rights-of-way and easements in the Pueblo Alto and Mile Hi neighborhoods and could quickly address the frequent spot flooding in these areas at a lower cost. The 2022 study phase of the current Green Stormwater Infrastructure (GSI) pilot project was an outgrowth of that commitment. Adams Street was identified through the study phase of this project as a feasible pilot project location, partly because the 800 block is one of many locations across the neighborhood that flood regularly. Jefferson Street and Madison Street are not part of the GSI pilot project currently in the Concept Design Phase but will need to be considered as part of future projects. GSI interventions will need to be installed on streets throughout the neighborhood in order to offer a complete solution that addresses flooding issues.

7. Why isn't a detention pond at Fair Plaza being considered in this phase of the pilot project?

   As shown by the 100-year Existing Conditions Flooding Extents map (available here: https://fbtcloud.com/s/miE5gTQjkxUFbn3), the main source of runoff affecting the Mile Hi and Pueblo Alto neighborhoods comes from the east across San Pedro. Stormwater detention at Fair Plaza would have minimal impact to flooding, where there are the most severe flooding issues and in proposed project locations.

8. Were there studies conducted by the City to address up-sizing the storm drain system in the Pueblo Alto & Mile Hi neighborhoods?

   When the City first began investigating drainage improvement needs in the Pueblo Alto Neighborhood in 2012, the thought was to expand the storm drain pipes. However, it was determined to bring the lines to capacity would require expanding the lines from the Pueblo Alto Neighborhood to the section of the Embudo Arroyo on the north side of the Green Jeans development at Carlisle and Interstate 40. This would be prohibitively expensive. To obtain better cost efficiency, the City is developing a suite of projects that will reduce stormwater peaks. The first of these projects is the Pueblo Alto/Mile Hi GSI Project, which will reduce the nearly annual flooding that impacts the homes at the low area on the 800 blocks of Adams and Jefferson. This will include building green stormwater infiltration and storage facilities that can remove stormwater from the street during a storm and detain it in underground storage until space becomes available in the existing storm drains to transport the water to the Embudo Arroyo. (See answer to question 18 for additional information on the strategy for addressing flooding in the Mile Hi and Pueblo Alto neighborhoods.)

Stormwater Bumpouts

9. Why are 9-foot-wide bump outs recommended as opposed to another width?

   Nine (9) feet is the optimal bumpout width for the low volume residential roadways where they are proposed for this project.

The 9-foot width provides traffic calming benefits while also allowing for two-way traffic and the addition of street trees. The recommended roadway typical section, with 9-foot wide bumpouts, will be evaluated further during the next phase of design.

10. How will the bumpouts be designed to make sure they are not breeding grounds for mosquitos?

    Stormwater bumpouts will be designed using the following criteria and process:
    - The depth of stored/retained stormwater will be limited (6-inch to 9-inch maximum).
    - Soil infiltration rates will be evaluated based on site specific infiltration testing to ensure stormwater will infiltrate within 12 hours.
    - Plantings and soil preparation will be specified to maximize infiltration capacity.

11. Why do stormwater bumpouts clean stormwater and thus are an important part of meeting the EPA water quality requirements for the City of Albuquerque?

    Stormwater bumpouts capture debris and trash, providing a location where it can be collected through City maintenance operations and preventing it from discharging to the Rio Grande. The plants within stormwater bumpouts, which are an integral part of the system, provide biofiltration.

12. Will the design ensure that drivers', cyclists', and walkers' vision is not impaired by the bumpout plantings, especially at intersections?

    Yes. Vehicular and pedestrian safety will be accounted for by the design team, which includes experienced roadway engineers and streetscape designers, by ensuring the clear site triangles are maintained free of obstructions at each intersection and driveway. In addition, the project will be reviewed by the City Design Review Committee (DRC), which includes transportation and traffic engineering staff, to verify that the designs do not impair the visions of motorists, cyclists, and pedestrians.

13. Will making driving lanes narrower, because of the bumpouts, make our streets more dangerous?

    No. Bumpouts, or chicanes, are a Federal Highway Administration (FHWA) adopted safety measure that are widely used to reduce speeds, thus increasing safety for pedestrians and bicyclists. Also, the ADA sidewalk improvements will encourage pedestrians to use the sidewalk, rather than walking in the drive lanes.

Underground Storage

14. Where are the underground storage systems proposed?

    Underground storage systems are proposed to be installed in combination with most of the stormwater bumpouts and the alley pilot project location. The location of underground storage systems within each street segment will vary depending on the presence of existing utilities and the existing topography.

15. Are the underground storage systems going to be self-contained and thus drain via infiltration, or will they outlet to the storm drain system? If they will outlet to the storm drain system, what is the expected storage period before they are completely emptied into the system?

    Proposed underground storage systems will outlet to adjacent, existing storm drain systems. The underground storage system proposed for the Mile Hi neighborhood (along La Veta Drive north of Summer Avenue) may be self-contained as it is not located immediately adjacent to an existing storm drain. In either case, underground storage systems will be designed to drain completely within 24 to 48 hours.

16. What is the benefit of underground tanks (i.e., underground storage systems)? Do they allow infiltration?

    Underground storage systems can reduce stormwater peak flow rates, which means storm drain pipes do not need to be as big to manage a given amount of rainfall or a particular storm event. They can be designed to allow for infiltration. The current concept, which will be further evaluated during the final design phase based on additional infiltration testing, is to allow infiltration and provide an outlet to existing storm drains where possible.

Landscaping

17. Because trees and shrubs are being considered for the bumpouts, will supplemental irrigation be required to keep them healthy?

    Yes. Supplemental irrigation will be required and provided by the City as a part of the project.

QUESTIONS ABOUT THE PROJECT'S IMPACT ON FLOODING

18. Will the GSI Pilot Project eliminate the two-year rainstorm flooding in Pueblo Alto or Mile Hi?

    The primary goal of this project, including the proposed Green Stormwater Infrastructure (GSI), is not to eliminate flooding but to find a means by which to quickly fund and implement measures that will reduce the chances of the nearly annual spot flooding from normal intense monsoon storms. The completed modeling suggests that during a 2-year storm event, the amount of water captured in the currently proposed stormwater bumpouts and underground storage would reduce the depth of flooding by 3-6 inches in some places and 6-9 inches in others. Please reference the "Depth Comparison – Existing to Proposed" board here: https://fbtcloud.com/s/miE5gTQjkxUFbn3. To remove the neighborhoods from the risk of 100-year storm floods, the City is working to design and fund a suite of large projects east and south of the neighborhoods. This would require large projects and many years to design and fund. The proposed GSI and underground storage will help mitigate local neighborhood flooding and can be funded and constructed within several years, addressing local flooding that homes have experienced for many decades.

19. Is there analysis or modeling supporting the statement that the magnitude of runoff to the major ponding areas from the 900 blocks of Adams Street, Jefferson Street, and Madison Street is similar?

    These streets and associated drainage areas are incorporated into the hydrologic/hydraulic model prepared for the current concept design phase. The drainage areas and development density of those blocks are effectively the same, thus the runoff volume from each are effectively the same.

20. Would stormwater capture above (to the north and east of) the start of the ponding area near Madison and Summer be more beneficial in reducing ponding issues to the west and into the west side of 800 Adams?

    Additional stormwater bumpouts north of Summer Avenue along Madison Street or other streets to the east would reduce runoff volume in Summer Avenue, but additional ponding depth reductions in Summer and the 800 block of Adams would likely be minimal when compared to the benefit of a similar number/size of stormwater bumpouts elsewhere.

21. Is it possible that the rainfall will be heavy enough to wash out the dirt and plants in the bumpouts?

    Bumpouts and other proposed GSI improvements (mulch, plants, etc.) will be designed to withstand flow velocities associated with a 100-year design storm.

22. What is the difference, in terms of stormwater collection efficiency and storage capacity, between the pocket park and the bumpout considered on La Veta?

    There is essentially no difference in stormwater capacity and flood reduction benefits between the pocket park and bumpout concepts. The underground stormwater storage volume, which will provide most of the flood reduction benefits, would be effectively the same for each concept.

QUESTIONS ABOUT CONSIDERATIONS FOR RESIDENTS

23. Will homeowners be compensated for any damage done to yards within the public right-of-way because of the project construction?

    During the next phase of design, the City and the design team will evaluate how proposed improvements will affect individual homeowners and will work with the City Forester to identify how to protect and preserve mature trees. The design team will work closely with homeowners to identify and mitigate conflicts between the design and existing sidewalks, fencing, landscaping (including trees and bushes), irrigation systems, etc. During the next phase of design, the City plans to hold a public meeting to allow the residents to review and provide input on the 30% concept plans. The City will continue to work with the public and keep them informed as the project progresses.

24. How will the ADA sidewalk improvements impact my yard or my driveway?

    Improvements behind the existing sidewalk impacted by the proposed project for universal accessibility will be evaluated on a case-by-case basis. Impacts to existing private improvements will be minimized as much as practicable. Improvements will be made within the existing City right-of-way (ROW).

25. Will my water bill increase? Is the ABCWUA (Water Authority) likely to assess each property for increased water usage/irrigation for the bumpout plantings?

    No. Water bills will not increase due to this project. Irrigation water usage will be paid for by the City and will likely be included in the City's Annual Citywide budget.

26. Will my property taxes increase overall?

    No. The project will not have a direct impact on property taxes.

27. Will I be assessed for any of the changes to my curb, sidewalk, and my yard's landscaping?

    No. The City maintains responsibility for costs associated with the project.

28. How will existing utility infrastructure be impacted?

    During the next phase of design, the Albuquerque Bernalillo County Water Utility Authority (ABCWUA) and New Mexico Gas Company (NM Gas Co.) will conduct an inventory of their pipes in the area. The Pueblo Alto/Mile Hi design team will either design the project so as not to impact the pipelines or, if necessary, work with these utilities to relocate the lines. During the next phase of design, the project team will coordinate with utility owners (ABCWUA and NM Gas Co.) to determine which utilities intend to replace their underground piping/infrastructure in conjunction with, or in advance of, the drainage improvements. Water meters and hydrants will be moved in conjunction with the drainage and sidewalk improvements as needed. The construction contractor will be responsible for damage to existing utility infrastructure and if not considered as a part of the project, they will be required to repair it at their cost.

29. Will insufficient utility infrastructure be replaced as part of the project?

    The ABCWUA and NM Gas Co. will inventory their lines and if they need to be replaced, this project will be used as an opportunity to replace the lines with improved infrastructure that more appropriately addresses the needs of the neighborhood.

30. How will emergency vehicle access be affected with the bumpouts?

    The bumpouts will still allow for two-way traffic. There will be room for paramedic trucks and fire trucks to park in front of homes, as they can also park in front of the driveway and the yard. If needed, a fire truck may park on the outside of a bumpout as they are authorized to park in the middle of the street. For fire calls, it is standard procedure for fire apparatus to park in the middle of the street and close the street to provide appropriate clear space to deploy hoses and for firefighters to move equipment on and off the trucks.

One Park Square
6501 Americas Pkwy NE, Ste. 350
Albuquerque, NM 87110

T 505-212-9126
W groundworkstudionm.com

QUESTIONS ABOUT MAINTENANCE

31. How will long-term funding for maintenance (upkeep, repairs, problems, etc.) be contracted and/or achieved?

    After construction of the project, the contractor who constructed the project will maintain bumpouts and underground storage systems for a period of 3 to 5 years. The exact time will be determined near the end of the design process. Following this contractor warranty period, the City Storm Drain Maintenance staff will maintain storm drain infrastructure and underground structures, and Clean Cities staff of the Solid Waste Management Department will maintain the landscaping.

QUESTIONS ABOUT SCHEDULE

32. Is there a cutoff date for community input before you move forward on the chosen project?

    There is no cutoff date for community input. This stage of the project, which is referred to as "pilot project concept design" will conclude in October of this year, but community engagement will continue to be an important part of the project as additional funding sources are secured and it moves forward into the next phase of design.

33. When do you break ground on this project?

    A schedule for implementation/construction has not been developed yet, and will be dependent on several factors, including funding and project phasing.

One Park Square
6501 Americas Pkwy NE, Ste. 350
Albuquerque, NM 87110

T 505-212-9126
W groundworkstudionm.com