



DISTRICT 4 COUNCILMAN: REY SALDAÑA

PROJECT MANAGER: ALMA NUNEZ

PRESENTER: TROY DORMAN, PhD, P.E., CFM
TETRA TECH

ABSTRACT:

The Lackland Corridor Gateway Monument project is centered on a sculpture honoring the Air Force basic training rmission at Lackland AFB in San Antonio, Texas. The site, partially owned by TxDOT and partially by the Joint Base San Antonio (Air Force), will be transformed into a park setting by a City of San Antonio capital improvements project. The transformation starts with removing 900 ft. of existing poor functioning concrete stormwater drainage channel and lifting it to a higher functioning ecological state through stream restoration. The restoration will reduce stream velocity and reconnect the stream to its floodplain to reduce downstream flooding. Runoff from all new onsite parking areas will be managed through a bioretention area sized to capture the 90th percentile storm and then slowly released into the stream to provide high quality base flow. Two additional bioretention areas will capture the 90th percentile storm from adjacent roadways that drain through the site reducing pollutant loads, erosion, and mitigating the peak flow effects from impervious cover. The integration of native and site appropriate vegetation including riparian, upland, and grassland species improves viability of the site and reduces water usage. The proposed tree canopy includes 161 native trees, carefully selected vegetation and also a butterfly habitat for the endangered Monarch Butterfly. The site will include interpretive signage to inform visitors of the LID features and their benefits to human habitat. The project is currently in final negotiation with the contractor and will complete construction within 6 months. The City of San Antonio Parks department will assume maintenance of the project after the contractors 1 year warranty period ends. The San Antonio River Authority, who selected the project for a competitive \$100,000 LID grant, will also verify performance and viability of the BMPs for up to two years after construction is completed.

MASTER PLAN:

The vision of District 4 City Councilman Rey Saldaña is to recognize the value of Joint Base San Antonio-Lackland as part of the history and future of San Antonio as Military City USA. The design intentions of the streetscape enhancement conceptual master plan are two-fold:

- Leave a lasting first impression on the thousands of family members of freshly-minted Air Force Cadets and
- Integrate vehicular traffic into an efficient and complete street that supports pedestrians, bicyclists, and users of public transportation.

CORRIDOR GATEWAY PHASE 1:

In October 2014, the City Council allocated funding for Phase 1, the Lackland Corridor Gateway, to serve as a catalyst to stimulate the urban vitality of the community surrounding JBSA-Lackland. To provide a place of 'lasting impression' in a well-designed environment, the corner of US Hwy. 90 and SW Military Drive—the most visible location along the Corridor as the gateway to Lackland Air Force Base- was chosen as the site. The site, partially owned by TxDOT and partially by the Joint Base San Antonio (Air Force), will be transformed into a park setting by a City of San Antonio capital improvements project. In November 2015, the Council accelerated funding for the complete site design and construction with an aggressive 6-month design schedule. The project is currently in final negotiation with the contractor with an anticipated construction schedule of 6 months. Construction is slated to begin in November 2016. The City of San Antonio Parks department will assume maintenance of the project after the contractors 1 year warranty period ends. Total project funding has been allocated at \$6.1 million.

Site Enhancements - Consistent with the Lackland Corridor Streetscape Conceptual Master Plan (2014 RVK), the development of the most visible location along the corridor known as the Gateway Project. A five acre parcel at the intersection of U.S. Highway 90 and SW Military Drive accepts and carries drainage from a larger watershed west and north of the site. A paved channel bottom transitions to a full concrete channel southeast of the site and northeast of JBSA Lackland proper. Design enhancements include but are not limited to the following:

- Storm water improvements to existing channel – stream naturalization
- Storm water management including area planted LID features in its final configuration 161 Trees with automatic bubbler irrigation system for establishment
- 161 Trees with automatic bubbler irrigation system for establishment Picnic unit with shade canopy
- Area Parking (19 spaces)
- Picnic unit with shade canopy
- Restroom Port a Unit with its enclosure
- 75' Monument (Tribute) by local artist George Schroeder, lit at night with LED light fixtures
- Walkways with Two architectural pedestrian bridges Sidewalks
- Three overlook nodes with interpretative graphic panel and seating area
- Entry Wayfinding Sign

DESIGN PRINCIPLES:

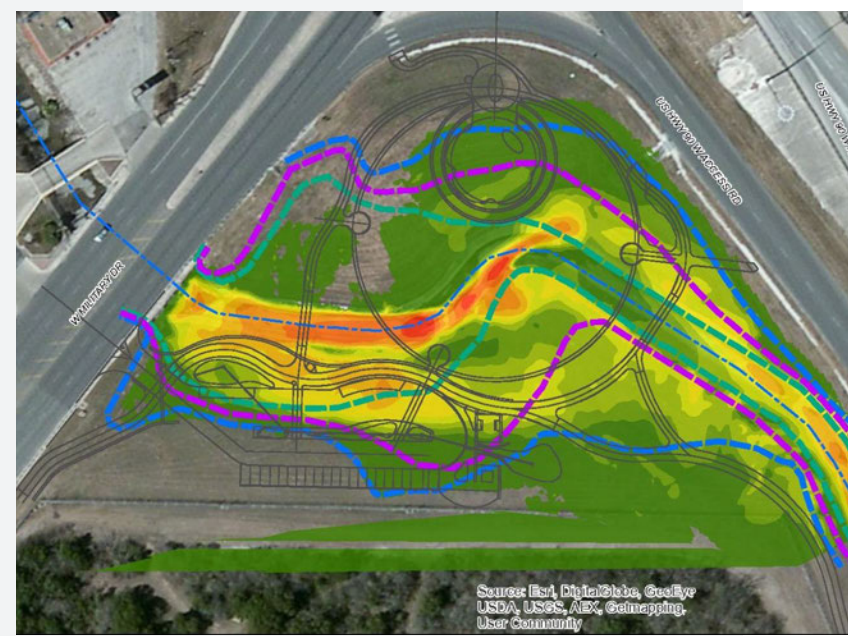
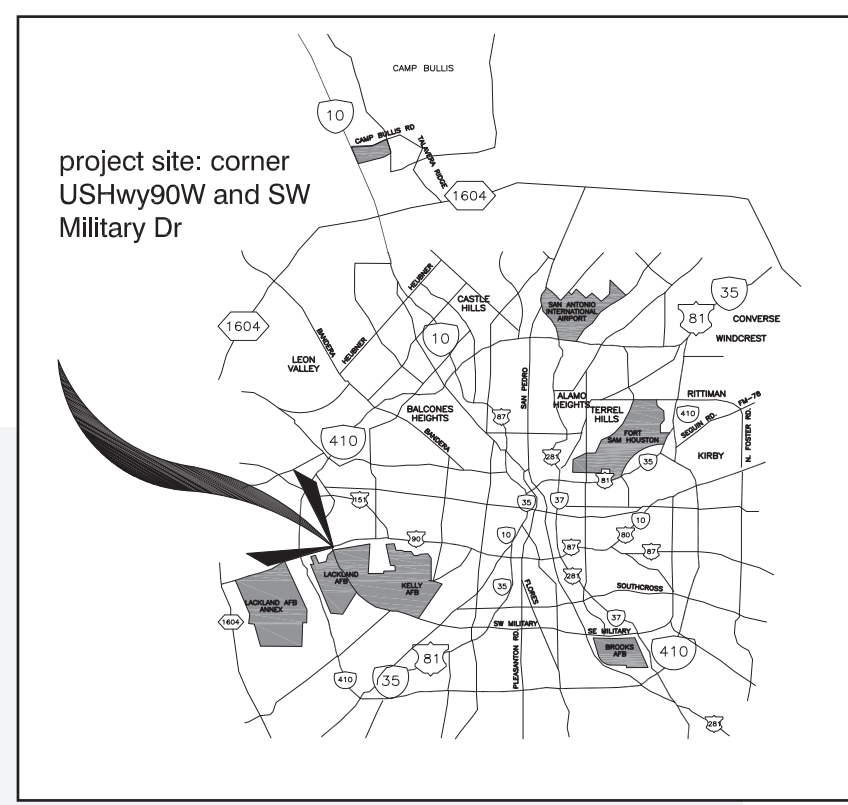
The central guiding objectives for the design include:

- Increase levels of safety and enhance the perception of safety,
- Highlight pedestrian and bicycle connections,
- Enhance and generate memorable places,
- Create an environmentally sound urban space using low impact techniques, facilitate ecosystem services
- Lay the foundation for a future corridor streetscape to mature and last the test of time
- Improve economic vitality of the area.

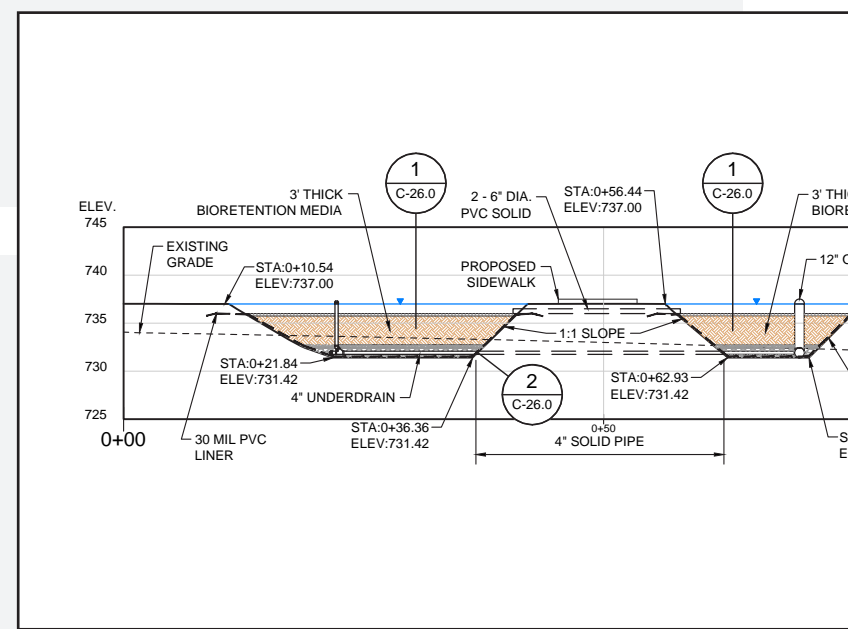
GRANT:

The design team submitted a LID grant application to the San Antonio River Authority on behalf of the City of San Antonio. The project was awarded a \$100,000 grant through a competitive process. SARA will also verify performance and viability of the BMPs for up to two years after construction is completed.

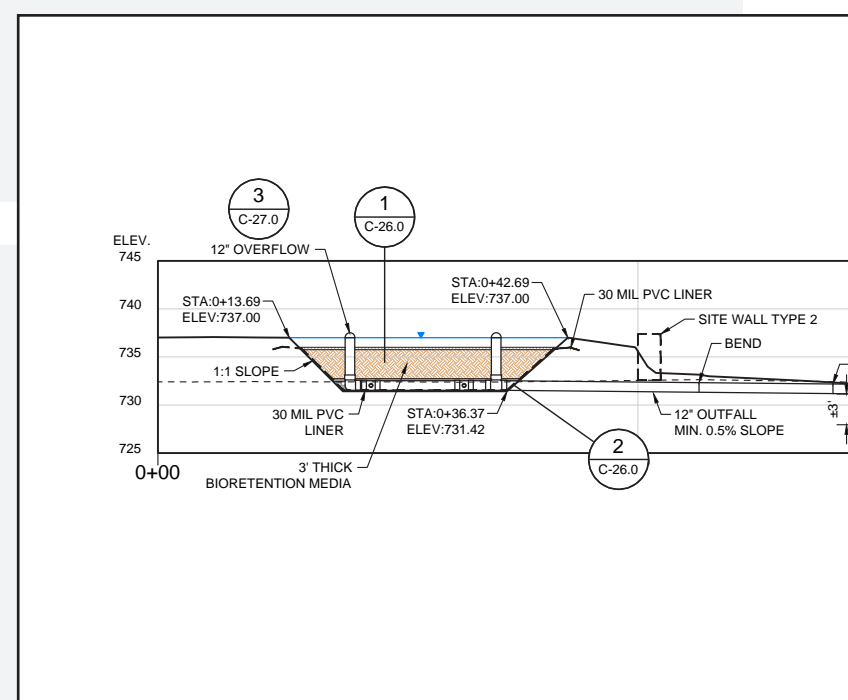
LACKLAND CORRIDOR GATEWAY



EXISTING FLOOD PLAIN 3D MODEL



BIORETENTION SECTION A



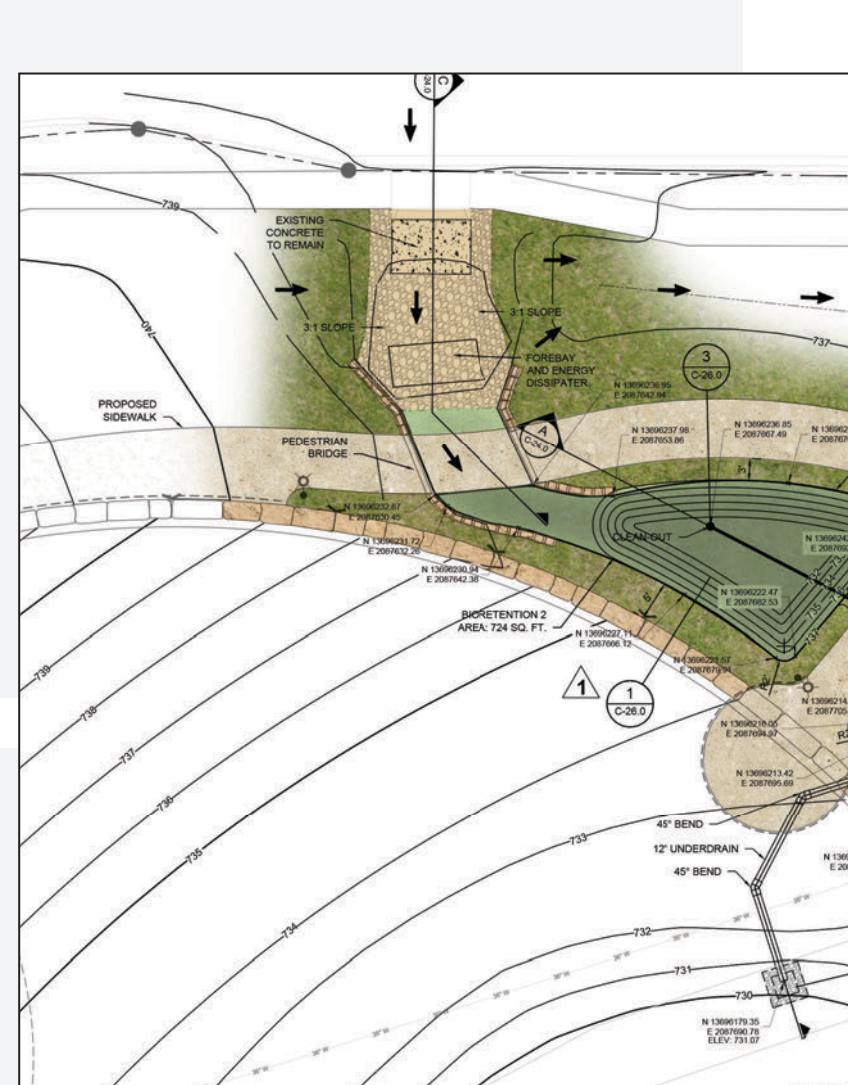
BIORETENTION SECTION B



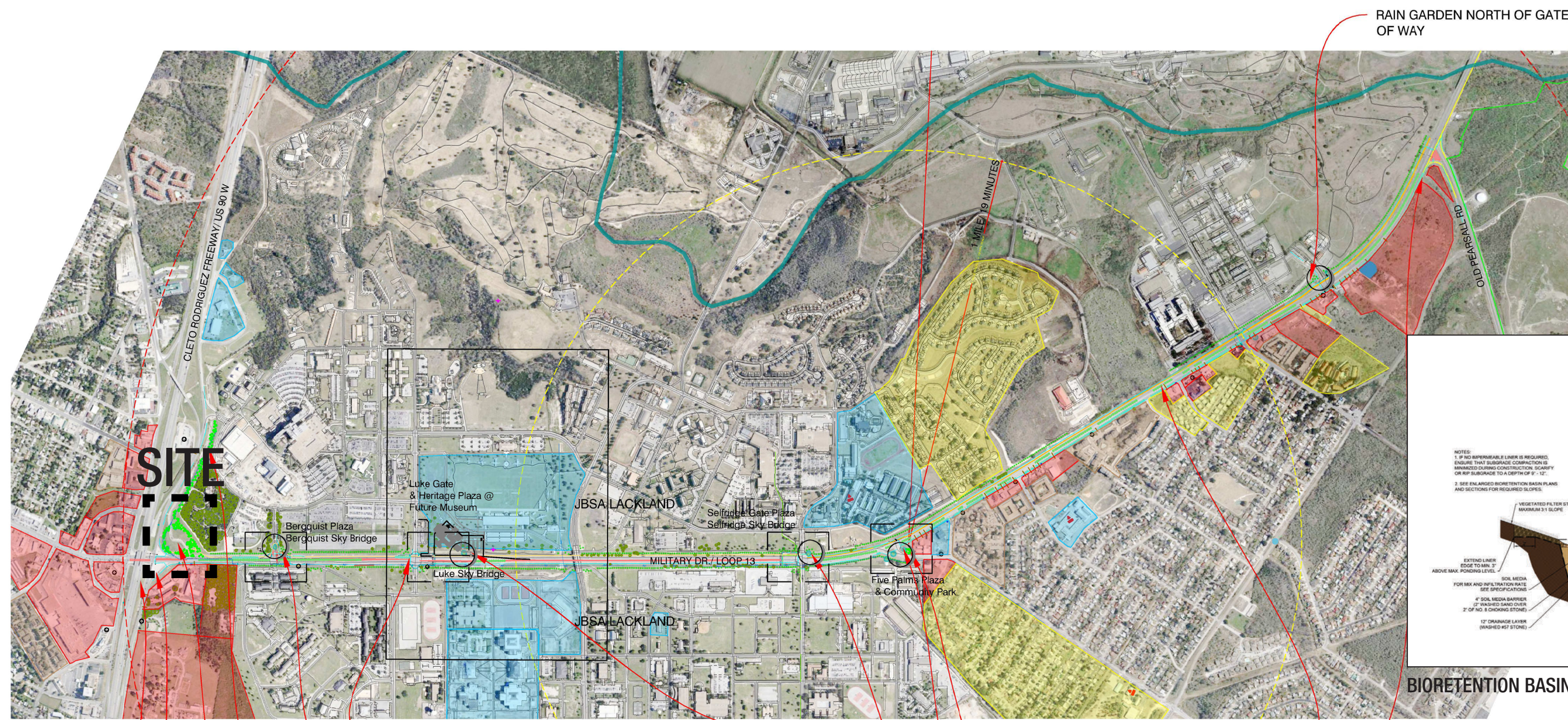
BMP - PARK SITE



STREAM RESTORATION



INTERACTIVE BIORETENTION PLAN



RAIN GARDEN NORTH OF GATE DRIVE WITHIN RIGHT OF WAY

RAIN GARDEN @ PLAZA. REFER TO PROPOSED TRANSIT STOPS (FIGURE 4-12) FOR LID FEATURES AT VIA NEXT GEN SHELTERS

CONVERT CONCRETE CHANNELS TO VEGETATION

BIORETENTION SURROUNDING GATEWAY MONUMENT

NEW MASSES OF VEGETATION SIMILAR TO JBSA MILITARY DRIVE INTERSECTION, ALL SLOPES FLANKING US90

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