



HAZARD MITIGATION GRANTS

Joint Federal, State, Local Public Notice

The Federal emergency Management Agency (FEMA) and South Carolina Emergency Management Division (SCEMD) have received an application for Federal grant funding through the Hazard Mitigation Grant Program (HMGP). Funding for this grant was made available after the 4241 Presidential declaration was made regarding the flood of October 2015. This historic flooding event affected the state of South Carolina from October 1 to October 5. A stalled front offshore combined with deep tropical moisture streaming northwest into the area, ahead of a strong upper-level, low-pressure system to the west and Hurricane Joaquin to the east. This storm caused severe flooding to the City of Sumter area.

Funding for the proposed project listed below will be conditional upon compliance with all applicable federal, tribal, state, and local laws, regulations, floodplain standards, permit requirements and conditions. Under the National Environmental Policy Act (NEPA), federal actions must be reviewed and evaluated for feasible alternatives and for social, economic, historic, environmental, legal, and safety considerations. Under Executive Order (EO) 11988 and EO 11990 FEMA is required to consider alternatives to and to provide public notice of any proposed actions in or affecting floodplains and wetlands. EO 12898 also requires FEMA to provide the opportunity for public participation in the planning process and to consider potential impacts to minority or low-income populations.

Applicant: City of Sumter
Project Title: Crosswell Drainage Improvements
Project Location: Crosswell Neighborhood

This project will include the upgrading and installation of storm drainage improvements along Bagnal Drive, D'Ancona Drive, Loring Drive, Robney Drive and Dogwood Drive. These improvements include the upgrading of the outfall ditch and pipe system draining to Turkey Creek along D'Arcona Drive. There are no anticipated wetland impacts associated with this project.

PROJECT DESCRIPTION:

As the first phase to improve drainage and relieve flooding within the Crosswell neighborhood, the City intends to complete the following activities along Bagnal, the eastern side of Dogwood, eastern side of Robney, eastern side of Loring and portions of E Wen-Le Court, and all of D'Ancona Drive from Bagnal to the discharge point to Turkey Creek. These activities will

improve conveyance and reduce localized flooding throughout the eastern side of the neighborhood. The second phase of the project will be to address the drainage system to the west of Phase I. This project has been broken into these two phases based on the drainage areas, frequency of localized flooding and cost considerations associated with each phase of the project. The following represents the scope of Phase I of the project under the scope of FEMA HMGP funding.

- Add/replace additional catch basins along Robney Drive, and Loring Drive. These catch basins will intercept overland flow from surrounding areas along secondary lines and direct water toward main storm drain lines along Bagnal Drive.
- Add/replace catch basins along Bagnal Drive, and D'Ancona Drive. These catch basins will intercept overland flow from surrounding areas along the main storm drain line.
- Rehabilitate existing 48" RCP main storm drain line along the east side of Bagnal Drive. A survey would need to be completed to collect invert elevations at each catch basin along the 48" RCP. This survey would determine if sections of the drain line are set at reverse grade thus impeding flow. Sections of the drain line at reverse grade would be replaced to ensure positive flow in the downstream direction. Catch basins along this drain line may be rehabbed or replaced depending on condition.
- Replace and regrade existing main storm drain lines along south side of D'Ancona Drive. Replace the existing 60" RCP and 48" elliptical pipes with 60" RCP.
- Replace, upsize, and regrade existing main storm drain lines along the north side of D'Ancona Drive. Replace the existing 24" RCP with 48" RCP.
- Add an additional main storm drain line along the west side of Bagnal Drive. Replace the existing storm drain lines with 42" RCP from intersection of Bagnal Drive and D'Ancona Drive to north of Dogwood Drive.
- Add two storm drainage ponds south of Loring Drive. The ponds would be sized approximately 1 acre and 0.5 acres and would receive stormwater runoff from Loring Drive, Cecil Street, and E. Wen-Le Court. The ponds would temporarily detain water and outfall to Turkey Creek near D'Ancona Drive.
- Add/replace approximately 12 catch basins along Loring Drive and Robney Drive to collect overland flow from surrounding areas and direct water toward the stormwater ponds south of Loring Drive.
- Regrade and rehabilitate existing ditches along D'ancona Drive and Bagnal Drive.

The above recommendations would result in significant improvements to the storm drainage within Crosswell neighborhood. Based on modeling efforts, these improvements are anticipated to effectively drain the 2-year storm. The 10-year storm would result in minor local flooding in low lying areas such as Loring Street. Pooling water would not be anticipated to remain for more than 30 minutes. The 25-year storm would result in similar conditions to the 10-year storm event and result in pooling water for periods less than 1 hour. These conditions would represent significant drainage improvements in the Crosswell neighborhood.

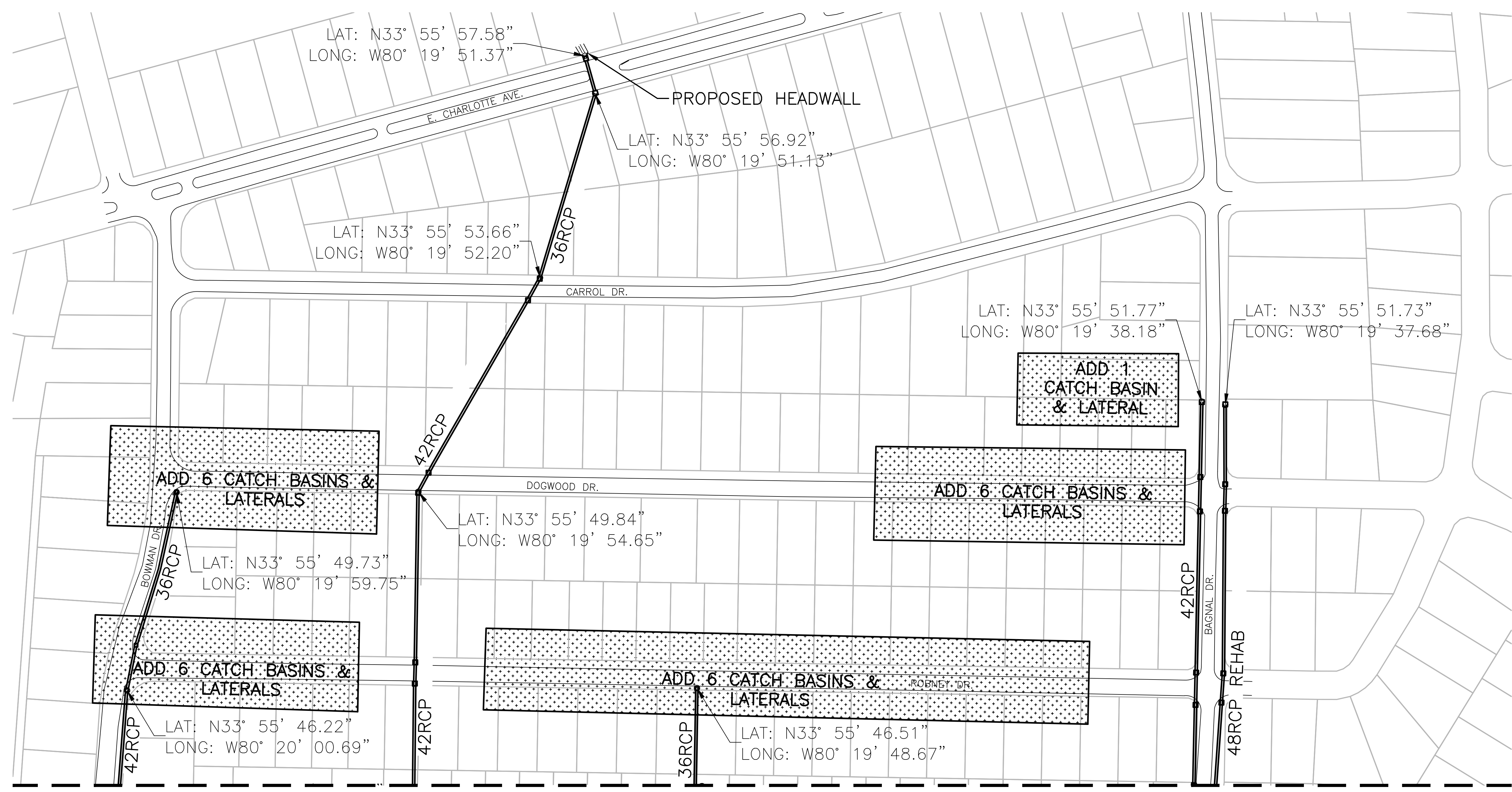
ALTERNATIVES CONSIDERED:

The feasibility assessment of this project included an analysis of the downstream receiving waters and adjacent neighborhoods. The potential to modify Turkey Creek is limited in that it is a regulated conveyance by the USACE. Extension or modification of this drainage way is limited by those regulations as well as private property. Thus, extension of the canal was deemed not feasible. Adjacent neighborhoods have limited capacity to receive additional flow from this neighborhood as well. This portion of the City of Sumter is very flat, and the length of system to drain to ditch systems in adjacent neighborhoods is limited by topography. There is an existing culvert down Bagnal Drive that could be utilized and can handle additional flow. One alternative considered was to run catch basins and smaller pipes through the neighborhood to that main system on Bagnal. However, hydraulically that's not feasible from a capacity issue.

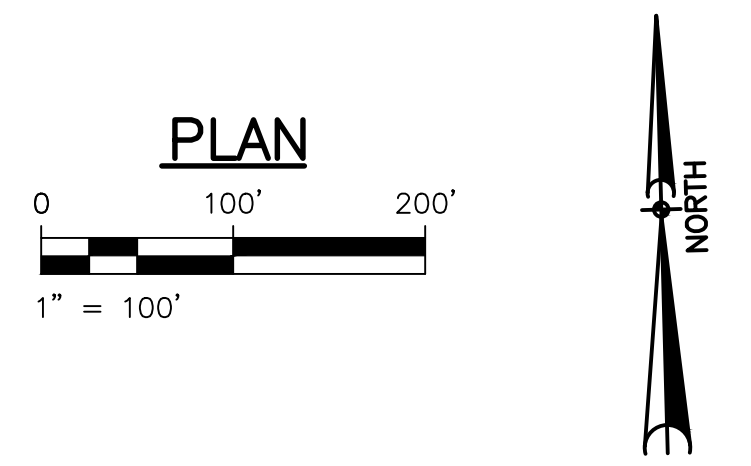
The only reasonable alternative would involve the installation of a stormwater pump station at Bagnal and Loring Drive. This could improve drainage by using smaller pipes throughout the neighborhood. However, the overall cost reduction in the conveyance system would be offset by the cost of the pump station and wet well.

COMMENTS PERIOD:

The City of Sumter will be responsible for facilitating and monitoring the proposed project. Interested persons may direct any comments or questions to Teige Elliott at telliott@sumter-sc.com. These are due within 30 days of this notice.



MATCHLINE - SHEET SEE PROPOSED CONCEPT SOUTH



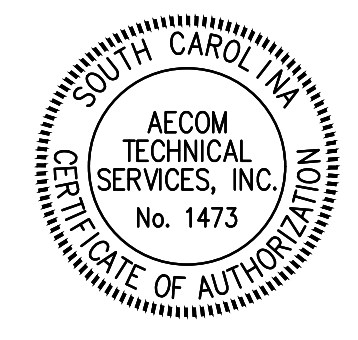
PROJECT
 Crosswell Neighborhood
 Drainage Improvements

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CONSULTANTS

REGISTRATION



ISSUE/REVISION

I/R	DATE	DESCRIPTION

KEY PLAN

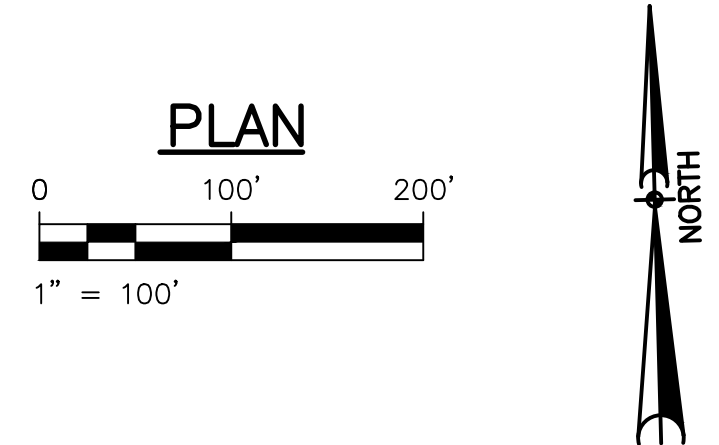
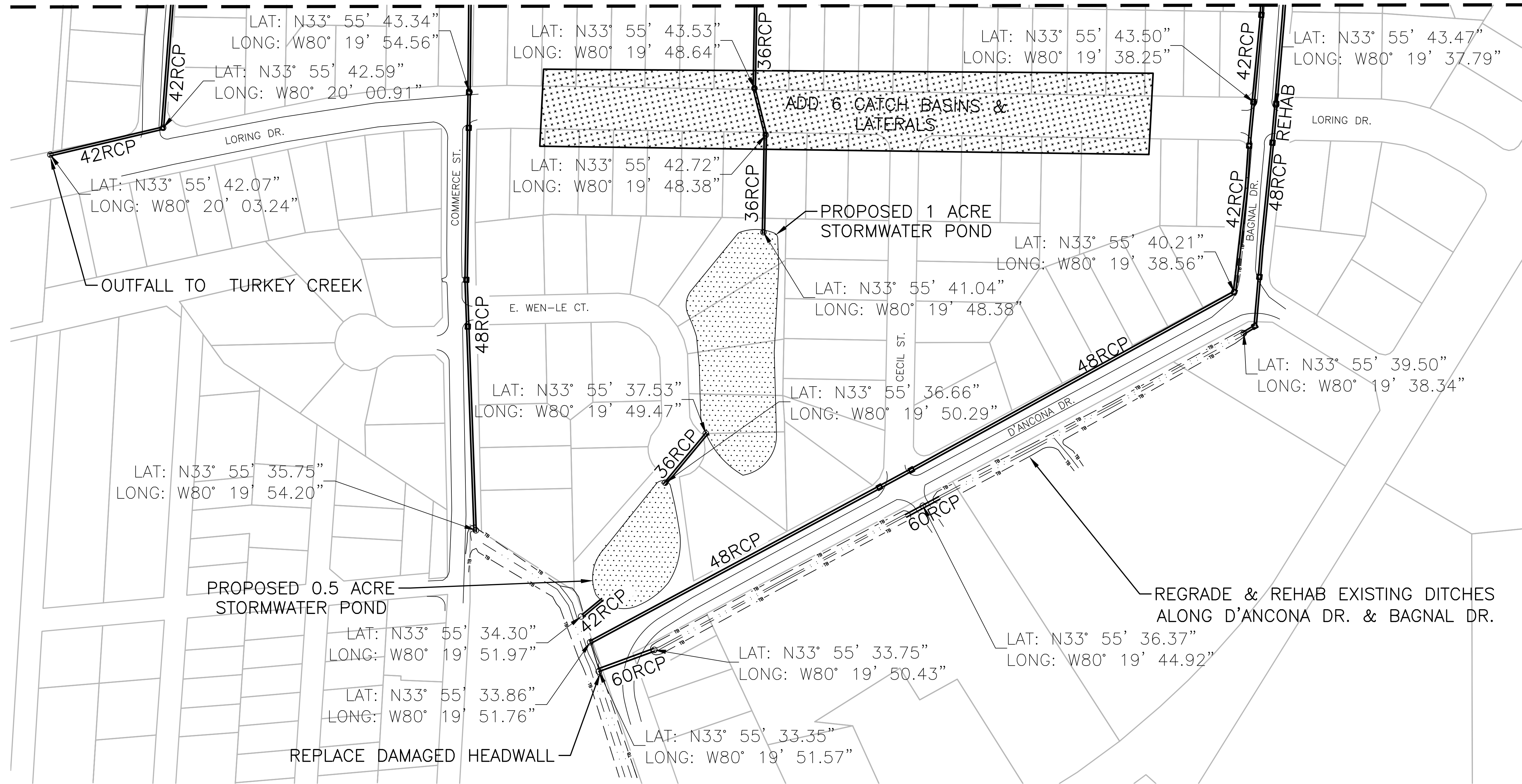
PROJECT NUMBER
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SHEET TITLE
 PROPOSED CONCEPT
 NORTH WITH COORDINATES

SHEET NUMBER

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MATCHLINE – SEE PROPOSED CONCEPT NORTH



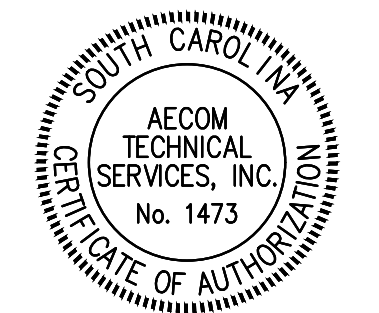
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