

AN ORDINANCE BY CITY UTILITIES COMMITTEE AUTHORIZING THE CHIEF FINANCIAL OFFICER TO AMEND THE FY 2014 WATER AND WASTWATER RENEWAL AND EXTENSION FUND (5052) BUDGET IN THE AMOUNT OF NINETEEN MILLION, ONE HUNDRED EIGHTEEN THOUSAND, SIX HUNDRED TWENTY-EIGHT DOLLARS AND ZERO CENTS (\$19,118,628.00) TO TRANSFER FUNDS FROM THE WATER AND WASTWATER RENEWAL AND EXTENSION FUND AND ADD TO APPROPRIATIONS FOR THE SOUTHEAST ATLANTA GREEN INFRASTRUCTURE INITIATIVE-PHASE IIA PROJECT; AND FOR OTHER PURPOSES.

Review List:

Jo Ann Macrina	Completed	07/11/2013 12:48 PM
Pamela Holmes	Completed	07/12/2013 9:10 AM
Patrick McShane	Completed	07/15/2013 2:12 PM
Mayor's Office	Completed	07/18/2013 4:45 PM
Office of Research and Policy Analysis	Completed	07/23/2013 8:52 AM
City Utilities Committee	Pending	
Atlanta City Council	Pending	

Certified by Presiding Officer	Certified by Clerk
<p>Mayor's Action</p> <p><i>See Authentication Page Attachment</i></p>	

**AN ORDINANCE
BY CITY UTILITIES COMMITTEE**

AN ORDINANCE BY CITY UTILITIES COMMITTEE AUTHORIZING THE CHIEF FINANCIAL OFFICER TO AMEND THE FY 2014 WATER AND WASTEWATER RENEWAL AND EXTENSION FUND (5052) BUDGET IN THE AMOUNT OF NINETEEN MILLION, ONE HUNDRED EIGHTEEN THOUSAND, SIX HUNDRED TWENTY-EIGHT DOLLARS AND ZERO CENTS (\$19,118,628.00) TO TRANSFER FUNDS FROM THE WATER AND WASTEWATER RENEWAL AND EXTENSION FUND AND ADD TO APPROPRIATIONS FOR THE SOUTHEAST ATLANTA GREEN INFRASTRUCTURE INITIATIVE-PHASE IIA PROJECT; AND FOR OTHER PURPOSES.

WHEREAS, the City of Atlanta owns and operates a water and wastewater system; and

WHEREAS, the City of Atlanta, Department of Watershed Management has identified, in connection with the Southeast Atlanta Green Infrastructure Initiative-Phase IIA Project, the need to fund certain costs from the Water and Wastewater Renewal and Extension Fund; and

WHEREAS, the purpose of the Southeast Atlanta Green Infrastructure Initiative-Phase IIA Project is to design and construct permeable pavers, bio-swales, detention ponds and hydraulic storage vaults to capture storm water related to the Turner Field Media Lot at the Atlanta Fulton County Stadium site and Southeast Atlanta; and

WHEREAS, these funds should be transferred from the Water and Wastewater Renewal and Extension Fund to facilitate the use of the funds for the Southeast Atlanta Green Infrastructure Initiative-Phase IIA Project.

THE CITY COUNCIL OF THE CITY OF ATLANTA, GEORGIA, HEREBY ORDAINS *as follows*:

Section 1: That the Chief Financial Officer is authorized to amend the FY 2014 Water and Wastewater Renewal and Extension Fund (5052) Budget as follows:

TRANSFER FROM APPROPRIATIONS

The amount of:	\$19,118,628.00			
FDOA:				
Water and Wastewater R&E Fund	NDP Reservation Fund Appropriations	Reserve Conversion Account	Accounting	
5052	200101	5999901	1512000	

ADD TO APPROPRIATIONS

The amount of:	\$19,118,628.00			
PTAEO:				
Custer Ave. CSO Capacity Relief	Southeast Atlanta Green Infrastructure Initiative-Phase IIA Project TASK	Water and Wastewater R&E Fund	Facilities O/T Buildings	<u>City of Atlanta</u>
17111415	104	505221391	5414002	COA
FDOA:				
Water and Wastewater R&E Fund	DWM Sewage Linear Maintenance/Repair	Projects and Grants Budget	Sewage Collection & Disposal	
5052	171002	5999999	4330000	
Custer Ave. CSO Capacity Relief	Water and Wastewater R&E Fund			
111415	21391			

Section 2: That those appropriations in the Water and Wastewater Renewal & Extension Fund (5052) Budget are transferred as follows:

ADD TO AWARD INSTALLMENT

The amount of:	\$19,118,628.00	Water and Wastewater R&E Fund		
		505221391		

Section 3: That all ordinances and parts of ordinances that are in conflict with the provisions of this ordinance are waived to the extent of the conflict.



Kasim Reed
MAYOR

CITY OF ATLANTA

Jo Ann J. Macrina, PI
COMMISSIONER

DEPARTMENT OF WATERSHED MANAGEMENT
55 TRINITY AVENUE SW, SUITE 5400, SOUTH BLDG.
ATLANTA, GEORGIA 30303-3544
OFFICE 404-330-6081 FAX 404-658-7194

MEMORANDUM

TO: Tamika Gray, Watershed Manager, Sr.,
DWM – Bureau of Administration

FROM: Demetris Johnson, Financial Manager 
DWM, Office of Engineering Service

DATE: July 1st, 2013

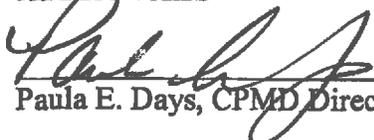
SUBJECT: SOUTHEAST ATLANTA GREEN INFRASTRUCTURE INITIATIVE -
PHASE IIA

This serves as a formal request to fund Southeast Atlanta Green Infrastructure Initiative Phase IIA capital project from funding source (TBD). The deemed amount is a total of \$19,118,628.00.00 for the project listed below.

PROJECT NAME	SOUTHEAST ATLANTA GREEN INFRASTRUCTURE INITIATIVE- PHASE 11A
Funding Total	\$19,118,628.00 – Construction
Funding Source	TBD
Start/Finish Time	November 2013 – February 2014
Project Details	The City performed flood mapping work for an updated model that depicts an improved simulation of flows. This work consisted of locating areas in the City for design and use of permeable pavers, bio-swales, detention ponds and a storage vaults to capture approx 10-30 million gallons of storm water. The second phase (2A), relates to the Atlanta Fulton County Stadium site and southeast Atlanta, hydraulic storage at the Turner Field Media Lot as determined by the City within the subject project boundary. (See Attached Fact Sheet)

Should you need additional information to precede with this request, please contact me at 404-546-1249. Thanks.

APPROVALS


Paula E. Days, CPMD Director


Eric L. Glover, PE, DC, OES

Cc: Mike Geisler, DC, Bureau of Financial Administration
Nicole Wilson, OES, Project Manager

Attachment: Southeast Atlanta Green Infrastructure Initiative-Phase IIA Project backup (13-O-1206 : Southeast Atlanta Green Infrastructure

OES- CAPITAL PROJECTS MANAGEMENT DIVISION

PROJECT INFORMATION OVERVIEW

WBS #: W.01.01.0196

PROJECT MANAGER NAME: Nicole Wilson

ESTIMATED BUDGET: \$19,118,628

PROJECT SCOPE:

This project is selected for implementation to alleviate capacity limitations and flooding in the Custer Avenue Combined Sewer Basin. The City performed flood mapping work for an updated model that depicts an improved simulation of flows. This work consisted of locating areas in the City for design and use of permeable pavers, bio-swailes, detention ponds and a storage vaults to capture approximately 10-30 million gallons of storm water.

The second phase (2A), relates to the Atlanta Fulton County Stadium site and southeast Atlanta, hydraulic storage at the Turner Field Media Lot as determined by the CITY within the subject project boundary. The long-term solution to the observed flooding in project area will require the installation of storage features to intercept, attenuate, and slowly release stormwater and/or combined sewer in the downstream collection system. The following scope describes the work to be performed at the CITY's request;

Construction of underground pipe and In-line storage involves the installation of weirs or baffles to detain stormwater in existing pipes. Based on locations provided by CITY the weirs will be installed for up to four pipes. Hydraulic and hydrologic modeling of the collection system and prediction of system behavior after modifications are the responsibility of CITY. *Turner Field Media Lot Combined Sewage Storage Facility:* Site I includes an approximate 1-2 MG underground storage facility considering gravity in, gravity out operation. A second option will consider the use of pumping to fill and drain the structure. The structure options include concrete cast in place, caisson, or cavern pump station configuration. Final sizing requirements will be modeled and confirmed by the City.

PROJECT JUSTIFICATION:

The purpose of this project is necessary to meet the requirements of the First Amended Consent Decree (FACD) and mitigate extensive flooding and SSO in the City. The City performed an evaluation and determined that several major trunks and outfall sewers in the Custer Avenue Combined Sewer Basin required capacity relief under specific storm conditions and that flow attenuation is needed.

DESIGN ANALYSIS/CONCERNS:

Residents of Peoplestown are currently in litigation with the City due to flooding and damages.

- The City Hydraulic modeling has indicated that there is insufficient storm water capacity to handle a 25 year/24 hour storm event.
- The initiative is designed to mitigate recurring flooding issues that impact Peoplestown, Mechanicville and Summerhill.
- Based on the City's modeling report flooding occurs in the Custer Avenue area because there is insufficient hydraulic capacity in the combined sewer collection system downstream of the two basins (Lloyd and Connelly).
- Additional storm water capacity to reduce flooding.
- Runoff reductions relieve flooding in storm sewers operating at capacity and relieve sewage treatment plants receiving combined storm and sanitary waste flows.
- Reduced runoff can reduce sewer overflows and stream bank erosion.

CONSTRUCTION ANALYSIS/CONCERNS:

Procurement process (timeline concerns) for initiation of construction services based on Mayor's initiative for Long-term project completion by December 2014

- Timeline for completion based on the Braves baseball season



OES- CAPITAL PROJECTS MANAGEMENT DIVISION

COMMUNICATION HIGHLIGHTS:

Council District(s): 3, 9 and 10 NPU(s): W, V
Counsel woman Carla Smith holds monthly meetings with the community association. The next meeting is on 07/22/13.
Locations include Peopletown, Mechanicsville, Grant Park and Summerhill

PROJECT STATUS:

Phase 2A – Long Term (Media Lot)

- Vault(s), Wet Detention Pond, In-line baffles, Junction Structure; areas and recommendations to be provided for best results based on modeling and research.
- 03/29/13, Technical Memo due from BGR with recommendations for Long Term solutions
- 03/15/13, BGR began design work
- 04/24/13, Workshop #3 COA modeling session
- 06/01/13, BGR performs GeoTech work on site
- 08/01/13, BGR complete 50% design
- 08/01/13, DOP review for bidding

PROJECT SCHEDULE:

See attached schedule provided by the A/E firm.

PROJECT COSTS:

<u>Cost by Category/Phase</u>	<u>Cost</u>
Planning	\$92,209
Design	\$0.00
Land Acquisition	\$0.00
Construction Bid and Award	\$19,026,419
Construction Management	\$0.00



Storage Vault

The City of Atlanta's Department of Watershed Management has identified the need for an underground vault to increase the storage capacity of the existing combined sewer system in the Lloyd and Connally Basins. This section presents the conceptual design of the underground storage vault (vault) and examines the feasibility of implementing the design.

1.0 Description

The proposed location for the storage vault is the Media Lot just south of Turner Field between Hank Aaron Drive and Crew Street just north of Little Street, shown in Figure 1. The current design concept features a gravity fill and drain system eliminating the need for high capacity pumps. The vault will capture, detain, and slowly release the combined wastewater back into the collection system. Installation of this vault will have the effect of reducing the peak flow rate through the collection system by increasing the duration of flow. A flushing/cleaning system is recommended to prevent debris buildup, odors and corrosion. Allowances for such provisions will be included in the preliminary construction costs.

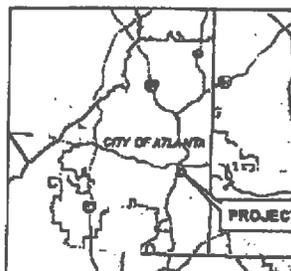


Figure 1. Site location map for the underground storage vault.





The vault storage volume capacity of 1-2 million gallons (MG) was determined based on preliminary findings from the ongoing hydraulic modeling effort conducted by the City.

The conceptual layout of the vault is presented in Figure 2. The structure is 290 feet wide and 375 feet long and is approximately 15 feet deep. The existing 9-foot (ft) diameter pipe located within the footprint of the proposed site will be demolished. It is assumed that flows can be diverted to the existing 60-inch x 90-inch pipe on Crew Street during construction. BGR recommends that the City perform additional hydraulic modeling to confirm that this line has adequate capacity.

The City's hydraulic analysis indicated that flow can be intercepted from the existing 12-ft x 12-ft box culvert located near the intersection of Bill Lucas Drive and Crew Street and diverted to the new storage vault via an new branch 12-ft x 12-ft box culvert. The existing box culvert will be modified with a diversion wall to allow dry weather flow to continue forward through the bottom of the existing box culvert. Stormwater flows will be diverted to the new vault via an overflow weir at the tie-in location for the new box culvert shown in Figures 2 and 3.

Once construction of the vault has been completed the area above the vault will be returned to its original use as the Turner Field Media Lot. Preliminary structural analysis indicates that several columns will be required in the vault. A conceptual layout drawing is presented in Figure No. 5.



2.0 Duration

Design, permitting and construction of the underground storage vault has been categorized as a long-term project. The vault should be in service by the end of 2015. Detailed design is expected to take approximately six months and permitting is expected to take approximately four months. BGR has estimated that the City procurement process can be completed in approximately six months.

Construction of the vault is estimated to take approximately 20 months and can begin in spring of 2014. It is important to note that this will require spanning through the 2014 and 2015 baseball seasons. Alternate parking for media crews will be required during this phase of the project. It is recommended that the City coordinate with Turner Field prior to construction.

3.0 Cost

A range of costs were developed for this structure to estimate the best case and worse case geotechnical conditions. For the best case conditions the following assumptions were made:

- Competent soil or rock bearing right at the bearing level.
- No rock excavation required.
- Ground water not a factor in design or construction i.e. no ground water to at least 5 ft below the bearing level considering any seasonal fluctuations.
- Existing soils are suitable for use as wall backfill

This results in the following items related to structural and geotechnical issues for estimating (does not include things like civil works, piping, valves, equipment, land acquisition, and other similar items):

- Excavation (all in soil)
- Excavation support system of tied back sheetpiling extending 35 ft below existing grade
- Subgrade proofrolling
- Reinforced concrete
- Backfill and grading
- Hauling of excess excavated material off site

The estimated costs for the best-case scenario is approximately \$21.9M, Table 1 lists a summary of costs.

Table 1. Cost estimate for best-case geotechnical conditions.

DESCRIPTION	SUB-TOTAL
Demolition and structure moving	\$69,028
General concrete	\$2,692,532
Concrete reinforcing	\$1,491,344
Mat/block pours	\$55,610



DESCRIPTION	SUB-TOTAL
Grade beams	\$1,286,643
Spread footings	\$103,474
Slabs on grade	\$68,826
Sidewalks & ramps	\$5,973
Walls	\$352,282
Columns	\$94,281
Slabs	\$1,102,815
Wire & cable	\$3,012
Conduit & wireway	\$5,779
Raceway supports & hardware	\$32
Lighting	\$8,334
Site clearing	\$3,279
Earth moving	\$2,875,125
Shoring and underpinning	\$1,496,925
Excavation support and protection	\$360,000
Paving & surfacing	\$808,908
Site improvements	\$66,000
Landscaping	\$37,473
Quality requirements	\$1,453,195
Temporary facilities and controls	\$24,048
Sub-total	\$14,464,918
Project insurance	\$150,000
Sales tax - material	\$441,231
Express freight	\$52,043
Contingency (10%)	\$1,510,819
Payment & performance bond	\$190,264
Energy cost recovery G & A	\$487,469
General contractor profit	\$1,729,675
TOTAL Construction costs:	\$19,026,419
Engineering fee:	\$2,853,963
Total cost:	\$21,880,382

* REMOVED DUE TO i
SUBMITTED FUN
z

The assumptions made for the worse case analysis are as followed:

- Bedrock a few ft below ground surface requiring 75% rock excavation
- Ground water level near the ground surface
- Excavated rock unsuitable for use as backfill (crushing required or materials imported from offsite)



Part II: Legislative White Paper: (This portion of the Legislative Request Form will be shared with City Council members and staff)

A. To be completed by Legislative Counsel:

Committee of Purview: City Utilities

Caption: AN ORDINANCE AUTHORIZING THE CHIEF FINANCIAL OFFICER TO AMEND THE FY 2014 WATER AND WASTEWATER RENEWAL AND EXTENSION FUND (5052) BUDGET IN THE AMOUNT OF SEVEN MILLION, THREE HUNDRED EIGHTY-FOUR THOUSAND, FOUR HUNDRED FIFTY-FOUR DOLLARS AND NO CENTS (\$19,118,628.00); TO TRANSFER FUNDS FROM THE WATER AND WASTEWATER RENEWAL AND EXTENSION FUND GENERAL RESERVE AND ADD TO APPROPRIATIONS FOR THE SOUTHEAST ATLANTA GREEN INFRASTRUCTURE INITIATIVE-PHASE IIA; AND FOR OTHER PURPOSES.

Council Meeting Date: August 19, 2013

Requesting Dept.: Watershed Department

B. To be completed by the department:

1. Please provide a summary of the purpose of this legislation (Justification Statement).

Example: The purpose of this legislation is to anticipate funds from a local assistance grant to purchase child safety seats.

The purpose of this legislation is to authorize the CFO to amend the FY 2014 Budget Water and Wastewater Renewal and Extension Fund (5052) in the amount of \$19,118,628.00 to transfer funds from General Reserve for Appropriation and add to Appropriation funds for the Southeast Atlanta Green Infrastructure Initiative-Phase IIA Project. The scope of work entails the construction of Permeable Pavers, Bio-swales, Detention Ponds and Storage Vaults to capture approximately 10-30 million gallons of storm water relating to the Atlanta Fulton County Stadium site and Southeast Atlanta, hydraulic storage at the Turner Field Media Lot as determined by the City within the subject project boundary; and for other purposes.

2. Please provide background information regarding this legislation.

Example: The task force of homelessness conducted a study regarding homelessness, its impact and consequences on the City. This resolution reflects the Mayor's desire to open a twenty-four hour center that will respond to the needs of the homelessness in Atlanta.

The City of Atlanta Department of Watershed Management has identified, in connection with the Capital Improvement Program (CIP), the need to fund certain costs from the Water and Wastewater Renewal and Extension Fund (5052) to facilitate projects.

3. If Applicable/Known:

- (a) **Contract Type (e.g. Professional Services, Construction Agreement, etc):** N/A
- (b) **Source Selection:** N/A
- (c) **Bids/Proposals Due:** N/A
- (d) **Invitations Issued:** N/A
- (e) **Number of Bids:** N/A
- (f) **Proposals Received:** N/A
- (g) **Bidders/Proponents:** N/A
- (h) **Term of Contract:** N/A

4. Fund Account Center (Ex. Name and number): Various

Fund: _____ Account: _____ Center: _____

5. Source of Funds: Example: Local Assistance Grant

FDOA: \$19,118,628.00; 5052 (DWM Water & Wastewater RNE Fund) 200101 (NDP Reservation of Funds Appropriations) 5999901 (Reserve Conversion Account) 1512000 (Accounting)

6. Fiscal Impact: N/A

Example: This legislation will result in a reduction in the amount of _____ to Fund Account Center Number _____.

7. Method of Cost Recovery: N/A

Examples:

- a. **Revenues generated from the permits required under this legislation will be used to fund the personnel needed to carry out the permitting process.**
- b. **Money obtained from a local assistance grant will be used to cover the costs of this Summer Food Program.**

This Legislative Request Form Was Prepared By: Tamika Gray

TRANSMITTAL FORM FOR LEGISLATION

TO: MAYOR'S OFFICE

ATTN: CANDACE L. BYRD

Dept.'s Legislative Liaison: Maisha L. Wood

Contact Number: 404-330-6887

Originating Department: Watershed Management

Committee(s) of Purview: City Utilities Committee

Chief of Staff Deadline: July 5, 2013

Anticipated Committee Meeting Date(s): July 31, 2013

Anticipated Full Council Date: September 3, 2013

Legislative Counsel's Signature: [Signature]

Commissioner's Signature: [Signature]

Chief Financial Officer: n/a

Chief Information Officer Signature (for IT Procurements) n/a

Chief Procurement Officer Signature: n/a

CAPTION

AN ORDINANCE AUTHORIZING THE CHIEF FINANCIAL OFFICER TO AMEND THE FY 2014 WATER AND WASTEWATER RENEWAL AND EXTENSION FUND (5052) BUDGET IN THE AMOUNT OF NINETEEN MILLION, ONE HUNDRED EIGHTEEN THOUSAND, SIX HUNDRED TWENTY-EIGHT DOLLARS; AND ZERO CENTS (\$19,118,628.00); TO TRANSFER FUNDS FROM THE WATER AND WASTEWATER RENEWAL AND EXTENSION FUND GENERAL RESERVE AND ADD TO APPROPRIATIONS FOR THE SOUTHEAST ATLANTA GREEN INFRASTRUCTURE INITIATIVE-PHASE IIA; AND FOR OTHER PURPOSES.

FINANCIAL IMPACT: (if any) (\$19,118,628.00)

Mayor's Staff Only

Received by CPO: _____
(date)

Received by LC from CPO: _____
(date)

Received by Mayor's Office: [Signature] 7-3-13
(date)

Reviewed by: [Signature] DCOS
(date) 7/9/13

Submitted to Council: _____ (date)

First Reading

FINAL COUNCIL ACTION
 2nd 1st & 2nd 3rd

Readings

Consent V Vote RC Vote

CERTIFIED

MAYOR'S ACTION

Committee

Date _____
Chair _____
Referred To _____

Committee

Date _____
Chair _____
Action
Fav, Adv, Hold (see rev. side)
Other _____
Members _____

Committee

Date _____
Chair _____
Action
Fav, Adv, Hold (see rev. side)
Other _____
Members _____

Refer To

Refer To

Committee

Date _____
Chair _____
Action
Fav, Adv, Hold (see rev. side)
Other _____
Members _____

Committee

Date _____
Chair _____
Action
Fav, Adv, Hold (see rev. side)
Other _____
Members _____

Refer To

Refer To

AN ORDINANCE
BY CITY UTILITIES COMMITTEE

AN ORDINANCE AUTHORIZING THE CHIEF FINANCIAL OFFICER TO AMEND THE FY 2014 WATER AND WASTEWATER RENEWAL AND EXTENSION FUND (5052) BUDGET IN THE AMOUNT OF NINETEEN MILLION, ONE HUNDRED EIGHTEEN THOUSAND, SIX HUNDRED TWENTY-EIGHT DOLLARS AND ZERO CENTS (\$19,118,628.00) TO TRANSFER FUNDS FROM THE WATER AND WASTEWATER RENEWAL AND EXTENSION FUND AND ADD TO APPROPRIATIONS FOR THE SOUTHEAST ATLANTA GREEN INFRASTRUCTURE INITIATIVE-PHASE IIA PROJECT; AND FOR OTHER PURPOSES.

- CONSENT REFER
- REGULAR REPORT REFER
- ADVERTISE & REFER
- 1ST ADOPT 2ND READ & REFER
- PERSONAL PAPER REFER

Date Referred: _____

Referred To: _____

Date Referred: _____

Referred To: _____

Date Referred: _____

Referred To: _____