



CITY OF ATLANTA

Atlanta's Green Infrastructure Design Challenge

Southeast Stormwater Association 2021 Annual Conference



CITY OF ATLANTA DEPARTMENT OF
**watershed
management**

Mikita K. Browning, Commissioner

Department of Watershed Management
9/24/2021



Atlanta's Green Infrastructure Design Challenge

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Why a Green Infrastructure (GI) Design Challenge?

- Spark creative solutions to the City's water quality and infrastructure challenges.
- Construct projects
 - Successful proponent wins a design contract.
- Highlight good work.
- Continue the City's commitment to implementing innovative solutions to stormwater challenges.



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Other GI/LID Design Challenges – Build on the good work of others.



- US EPA Campus RainWorks Challenge
 - Design competition for colleges and universities through Demonstration Projects and Master Plans.



- Oklahoma State University/Tulsa/Green Country Oklahoma Low Impact Design
 - Multiple categories for stormwater integrated with developments.



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Other GI/LID Design Challenges:



- DC Water Green Infrastructure Design Challenge
 - Resulted in two design contracts for streetscape and park Green Infrastructure.



- Chattanooga, Resource Rain Chattanooga: Low Impact Development (LID) Design Challenge
 - Innovative, cost-effective, sustainable site designs.



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Competition Format:

- Design presentation
 - Judges or voting for selected designs.
 - Design boards, presentations, reports.
- Quantitatively judged
 - How much volume can be stored onsite?
- Full procurement competition
 - Formal Request for Proposal Competition.



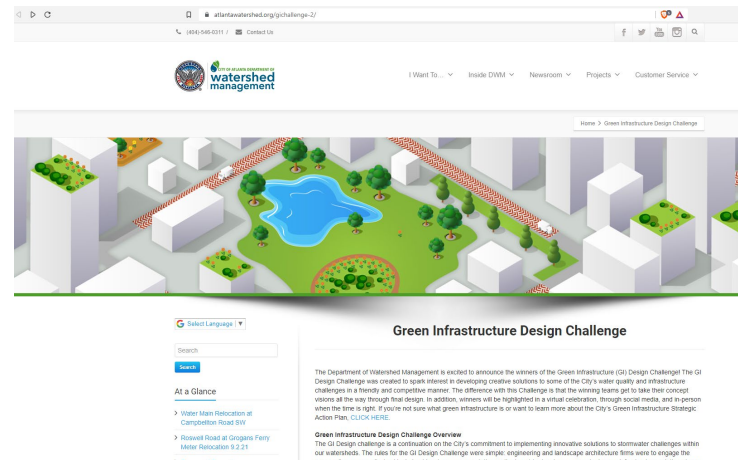


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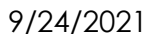
Prizes: How to handle?

- Monetary prizes (US EPA Rainworks)
- Recognition (Everyone)
 - Events
 - Press
- Contracts (DC Water, Atlanta DWM)
 - Build the “dream” concept





- Flooding Complaints
- GI Opportunity
- Park areas/DWM-owned
- Opportunity for Partnership
 - Public School
- Equity through the City





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- Scope:
 - Maximize infiltration and storage of stormwater runoff;
 - Maintain construction feasibility and reducing long-term maintenance costs.
 - Integrate into the overall landscape.
- Multidisciplinary Team Structure:
 - Engineer
 - Landscape Architect
 - Community Representative
 - Student Member (encouraged)
- Schedule considerations:
 - Milestone deliverables
 - Community Outreach
 - Review periods





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Procurement Process:

- Announcement:
 - G.I. Design Challenge Kick Off Meeting, Social Media.
- Assemble Pkg for Each Project: Process to review and finalize.
- Advertisement Period: 60-Day
- Review Period and Evaluating Proposals:
 - Evaluated on innovation, creativity.
 - How well the project integrates into the surrounding community.
- Recommendations/Award Contracts: Value and budget.

DEPARTMENTS

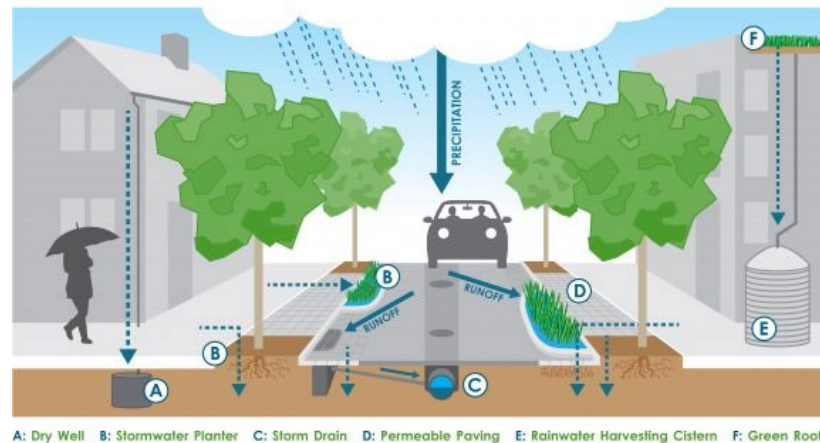
Department of Procurement



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Successfully Manage Design Phase Process:

- Project Kick Off: Maintaining City expectations and requirements.
- Schedule:
 - 90-Day schedule with time extensions.
 - Public Community Outreach: Impacts of COVID-19.
 - Permitting.
- Milestone Deliverables: 30/60/100
- Collaboration and Reviews: A/E teams were responsive to Watershed.





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Methods of Public Community Outreach:

- Department of Watershed G.I. Project Websites:
 - [Green Infrastructure Design Challenge \(atlantawatershed.org\)](https://atlantawatershed.org)
- Social Media
- Councilmember's Office
 - Engage community via Councilmember's website(s), social media, etc.
- Neighborhood Associations/Neighborhood Planning Units (NPU's)



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Examples of Public Community Outreach:



PROJECT OVERVIEW

stormwater runoff from Hunter Place, Morris Brown Drive, and along MLK Jr. Drive drains to a low point, routinely flooding the street and nearby properties. Much of the existing storm sewer inlets are partially or completely clogged. In addition, the existing grade of the road does not align with the existing infrastructure. The low point in the road does not have a catch basin, and the road routinely floods during small storm events. The street, adjacent residences, businesses, and high school are impacted by flooding, which results in the in the closing of the eastbound lanes due to safety concerns.

COMMUNITY IMPACTS

Green infrastructure (GI) will be utilized to address the flooding issues. A separate project will modify stormwater retention and conveyance to the site and will be coordinated with the GI design on a DWM-owned parcel along the north side of MLK Jr. Drive SW. Infiltration

and storage will also be maximized on the DWM parcel, for overflow management, as well as manage flooding by expanding or enhancing existing infrastructure while minimizing the relocation of existing utilities.



Chastain Park

Green Infrastructure Design Challenge

Give Us Your Feedback - Take A Quick Survey!



Join Us!

City of Atlanta • Department of Watershed Management
Virtual Community Meeting
Continental Colony Elementary School Green
Infrastructure (GI) Project

Join the Department of Watershed Management (DWM) and the winning team for a virtual community meeting via zoom to discuss the Continental Colony Elementary School green infrastructure (GI) project. Representatives from DWM and Starr Whitehouse team will discuss details and updates of the project. Residents will also have the opportunity to ask questions and offer feedback.

Wednesday, July 14, 2021
6:00 P.M.

Click the link below to register:
<https://atlantaga-gov.zoom.us/join/register/tZUvc--ariwtG9cS4lxvEcCGa675d02JKnAr>

After completing the registration process, you will receive a confirmation email with information about joining the meeting

For more information contact Public Information Officer
Josanne Kennedy at 678- 577- 4392 or via email
at jkennedy@atlantaga.gov.





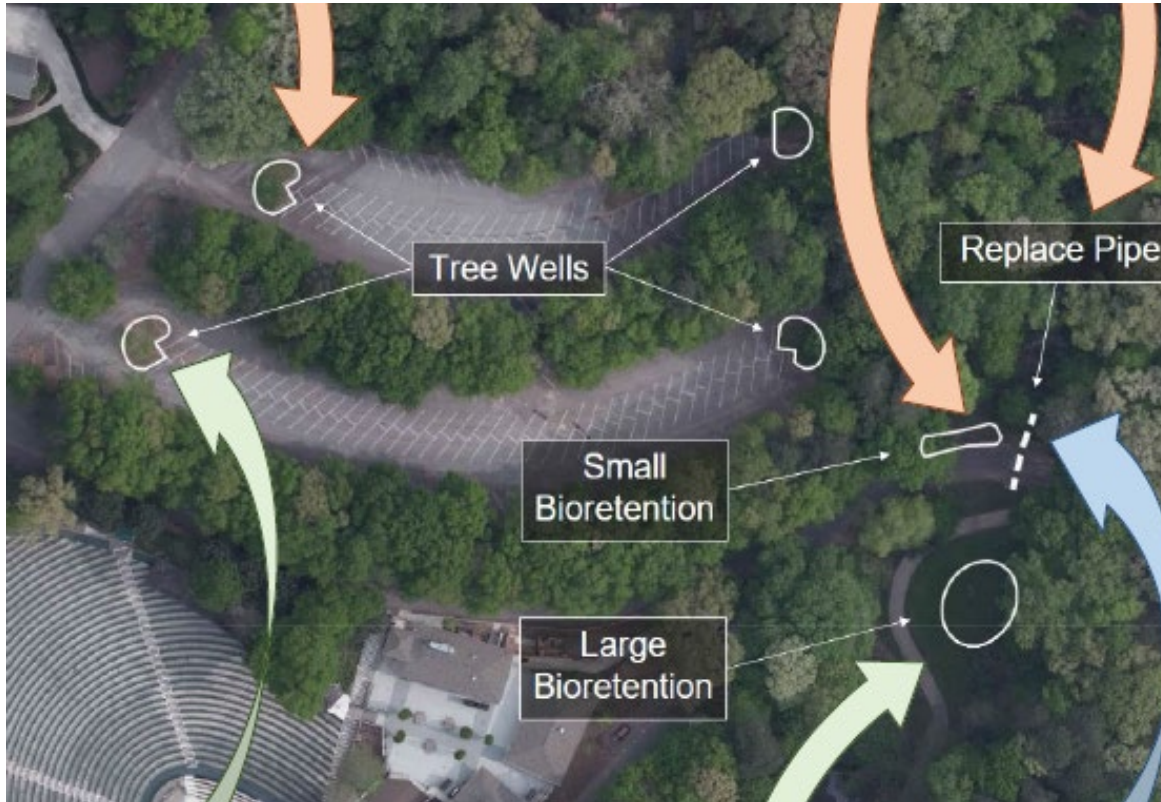
Atlanta's Green Infrastructure Design Challenge - Chastain Park Southeast Stormwater Association 2021 Annual Conference

- Design Team: River 2 Tap, Inc.
- Project Scope and Benefits:
 - Maximize infiltration and storage upstream of Hamburger pond.
 - Convey stormwater runoff via bioretention.
 - Bioswale that uses vegetation to retain and treat the water.
- Integrating GI with a Park and Concert Venue.
- Schedule: 100% Design Submittal – January 31, 2022.





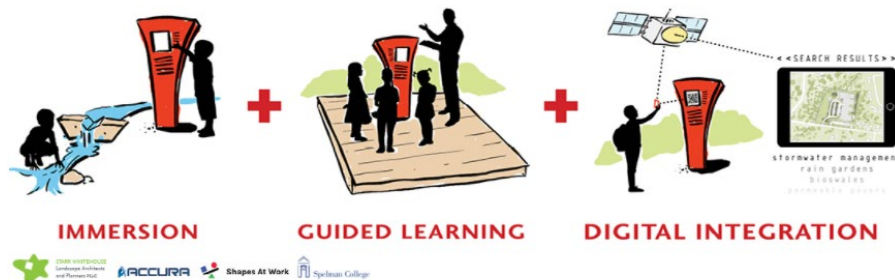
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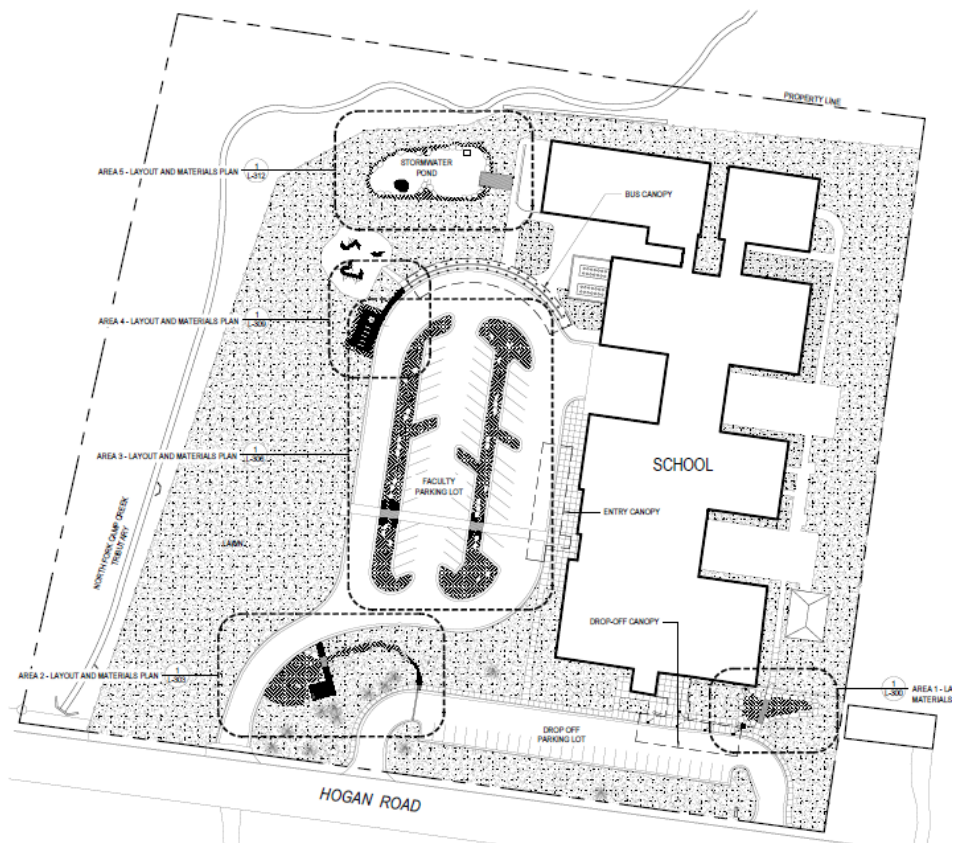
Atlanta's Green Infrastructure Design Challenge – Continental Colony Elementary Southeast Stormwater Association 2021 Annual Conference

- Design Team: Starr Whitehouse Landscape Architects Planners PLLC.
- Project Scope and Benefits:
 - Maximize infiltration and storage from the parking lot.
 - Green infrastructure features provide public education opportunities.
 - Minimize impacts to parking use by the school.
- Blend GI into an existing school campus and integrating with the school educational experience.
- Schedule: 100% Design Submittal – February 16, 2022.





Atlanta's Green Infrastructure Design Challenge – Continental Colony Elementary Southeast Stormwater Association 2021 Annual Conference





Atlanta's Green Infrastructure Design Challenge – MLK @ Hunter Place Southeast Stormwater Association 2021 Annual Conference

- Design Team: Starr Whitehouse Landscape Architects Planners PLLC
- Project Scope and Benefits:
 - Address ROW Flooding and provide stormwater green infrastructure solutions for a DWM owned vacant lot.
 - Maximize infiltration and storage parcel.
 - Reconnect to the existing storm sewer for overflow management and, manage on-street flooding.
- Integrated Gray / Green approach
- Schedule: 100% Design Submittal – January 31, 2022.



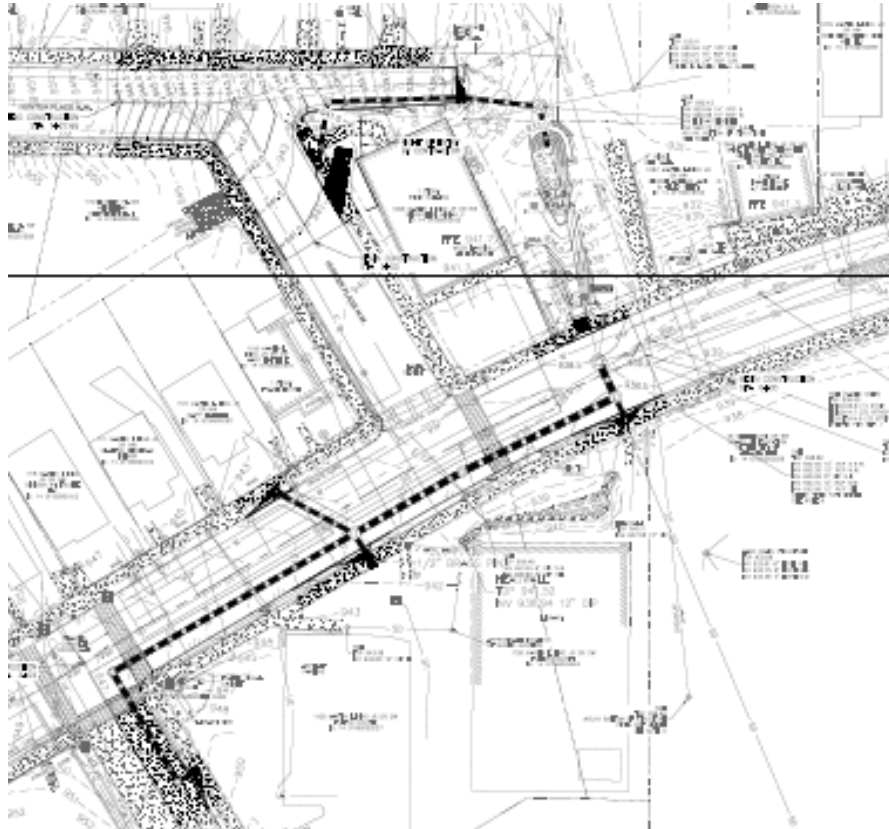


Atlanta's Green Infrastructure Design Challenge – MLK @ Hunter Place Southeast Stormwater Association 2021 Annual Conference





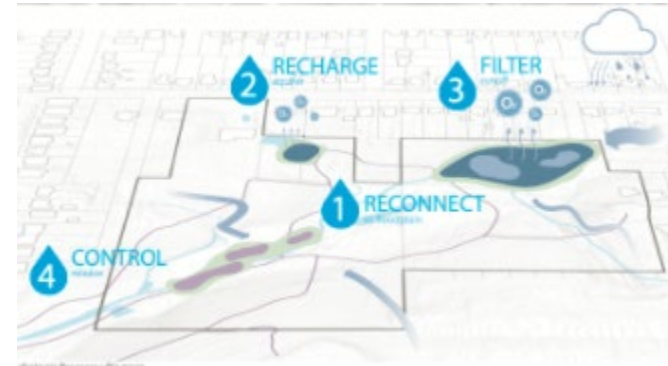
Atlanta's Green Infrastructure Design Challenge – MLK @ Hunter Place Southeast Stormwater Association 2021 Annual Conference





Atlanta's Green Infrastructure Design Challenge – Outdoor Activity Center Southeast Stormwater Association 2021 Annual Conference

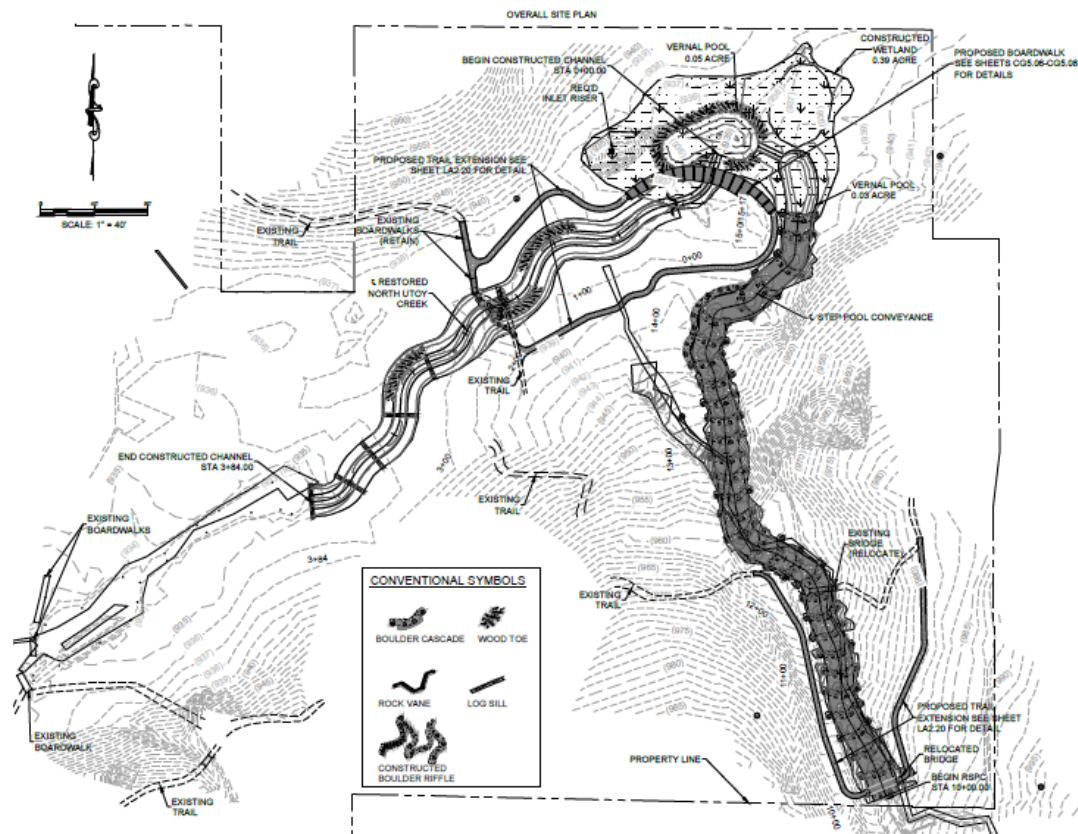
- Design Team: Volkert Inc.
- Project Scope and Benefits:
 - Nature-based design solutions to enhance site and water quality.
 - Restore stormwater and natural seep surface flows to a remnant stream channel.
 - Stabilize eroding gully through installation of a regenerative step pool conveyance.
 - Connect the restored stream to a constructed floodplain.
- Restoration in a historically underserved area.
- Schedule: 100% Design Submittal
 - November 1, 2021.





Atlanta's Green Infrastructure Design Challenge – Outdoor Activity Center

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Atlanta's Green Infrastructure Design Challenge – West Manor Park Southeast Stormwater Association 2021 Annual Conference

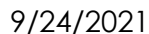
- Design Team: River 2 Tap, Inc.
- Project Scope and Benefits:
 - Use of green infrastructure to relieve flooding while protecting and improving water quality with an aesthetic that blends with park amenities.
 - Restore existing drainage network at the park.
- Addressing quantity and quality of stormwater by using GI in a Park setting.
- Schedule: 100% Design Submittal – November 1, 2021.



A. Enhanced dry swale



B. Bioretention between play areas





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Challenges and Lessons Learned:

- Allow time for internal Departmental changes.
- COVID-19 Impacts:
 - Schedule
 - Community Engagement
- Develop External Partnerships Early.
- Flexibility and Reprioritization - Essential to success.
- Stakeholder Feedback and Evaluation - Timely feedback loops.



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Questions?

<https://www.atlantawatershed.org/greeninfrastructure/>

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