



*Resilient Houston*  
**Green Stormwater Infrastructure  
Expedited Permitting Pilot Program**

The Resilient Houston Green Stormwater Infrastructure (GSI) Expedited Permitting Pilot Program, led by the Mayor's Office and the Houston Permitting Center seeks to expedite some of Houston's most innovative green stormwater infrastructure projects that demonstrate a specific focus on green stormwater infrastructure and effectively advance the goals of Resilient Houston, the City's Resilience strategy. Our vision is to draw public attention to resilience-oriented development projects, remove barriers toward implementation that exist in the development of these systems, and incentivize the further development of such in the city of Houston.

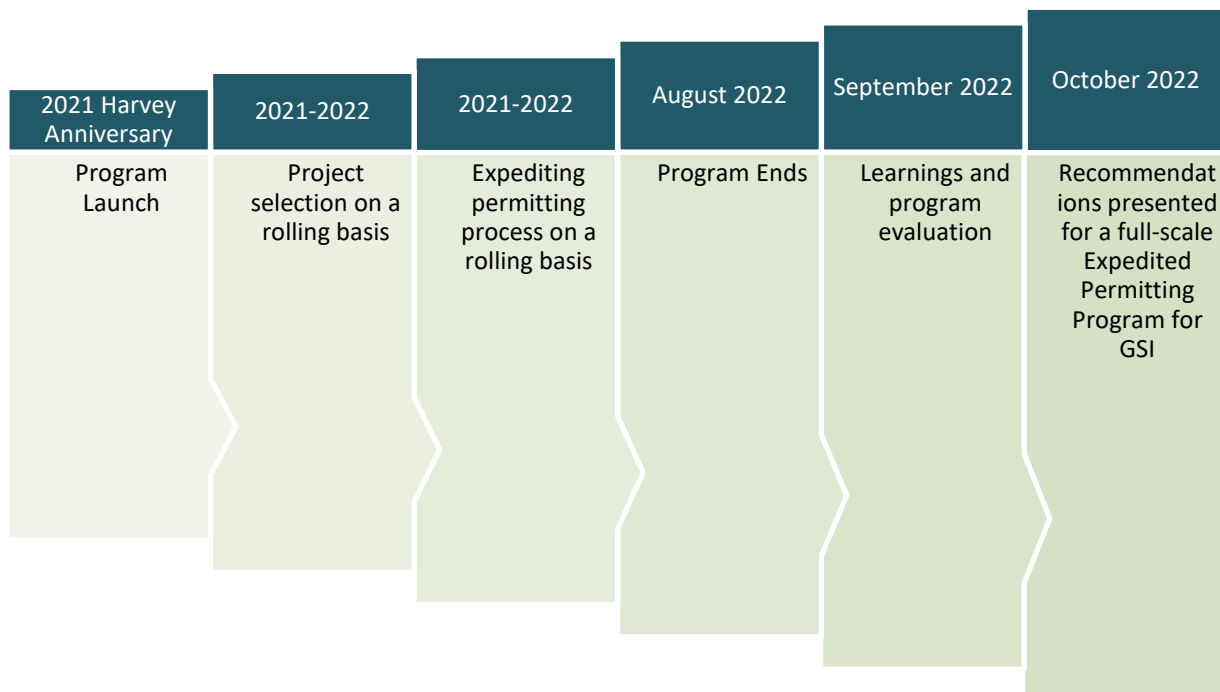
## Objective

The Increased Permitting Certainty and Speed Incentive is part of the green stormwater infrastructure (GSI) incentive program to increase implementation of private green stormwater infrastructure projects in the City of Houston, while removing barriers to implementation of such projects. This pilot program aims to utilize several projects to understand alternative review and permitting pathways for projects that incorporate GSI, to confirm the effectiveness of an expedited process as incentive while identifying opportunities for improvement. During the development of the GSI incentives program, developers indicated that they would be incentivized to implement GSI projects if they're able to obtain a faster and more consistent permitting process. While this includes revision to design criteria, rules and regulations, it also includes revisiting the permitting process to establish an expedited review team for qualifying projects. This program will establish the criteria and guidelines through a pilot expedited GSI review program.

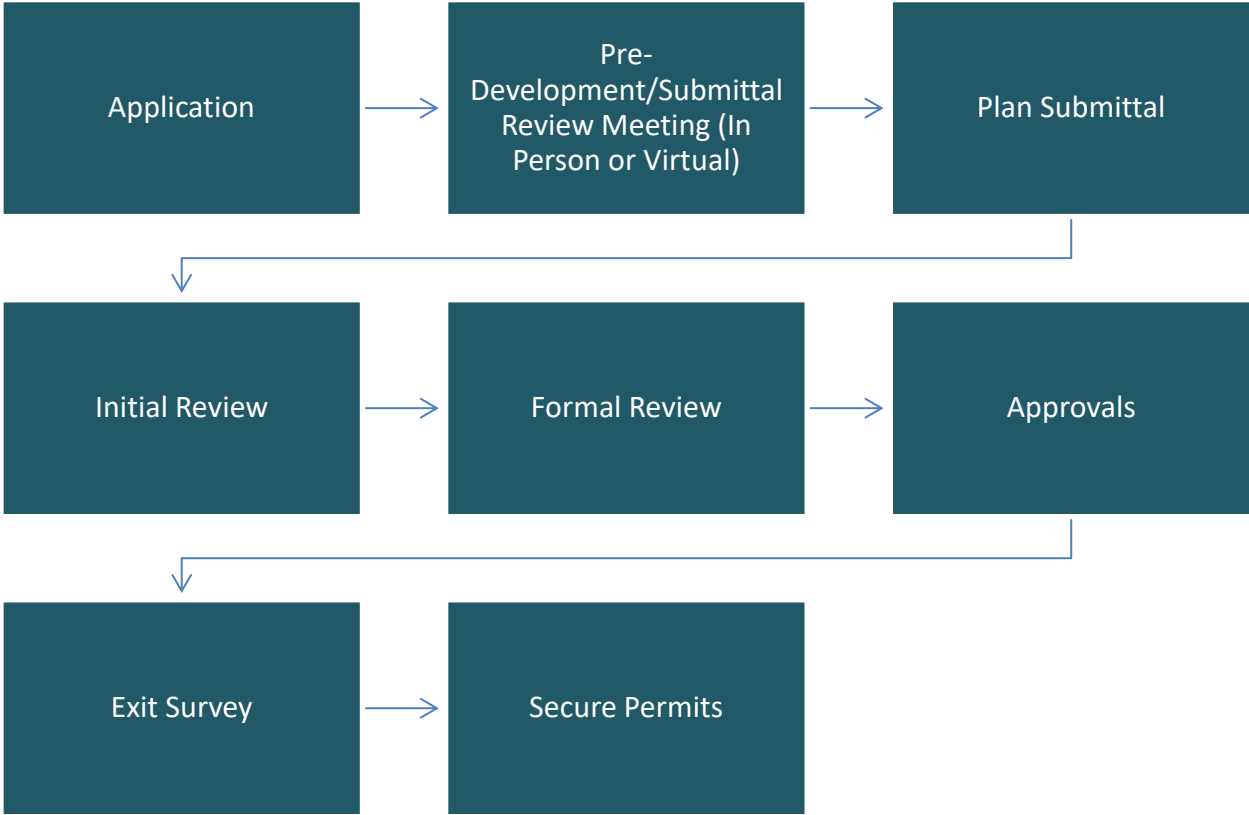
## Target

Pilot a minimum of 10 projects between August 2021 through August 2022 to develop an expedited review and permitting process for projects involving GSI. This will allow city staff to acquire data and validate assumptions required to establish an expedited review program.

## Program Milestones



**GSI Expedited Permitting Pilot Program**



## I. Application

A letter of intent is to be submitted indicating interest in participating in the expedited GSI review program. Letter must contain the following:

- ❖ Applicant information
  - Name of applicant
  - Project focal point
  - Contact information – email and phone
- ❖ Description of project
  - Type of development
  - Location
  - Anticipated completion date
- ❖ List of proposed GSI features to be included in the development
- ❖ Estimated investment in GSI (\$) and total investment (\$)
- ❖ Use of Resilient Houston GSI Resource Matrix that indicates impact of project and how project advances GSI (appendix 2)
- ❖ Anticipated submission date
- ❖ Desired approvals date
- ❖ Statement describing the participants commitment to the expedited process. This includes commitment to expedite responses to reviewers.

Invitation to participate is given on a case by case basis and determined by an interdepartmental working group comprised of Houston Permitting Center, Planning Department, and the Mayor's Office of Resilience Office staff. The working group will evaluate project to determine whether project will be a suitable case study for inclusion in the expedited pilot program. This will help determine the types of projects that need to be expedited and acquire data to further establish a full-scale program, develop thresholds, etc.

Notification will be provided within 5 business days.

Submit to [GSIHouston@houstontx.gov](mailto:GSIHouston@houstontx.gov)

## II. Pre-development/Submittal Review Meeting

Meeting is to be conducted in Person or Virtual and it is by invitation only.

- ❖ Objective: Discussion on eligibility of project, thresholds, project elements and permitting and expediting needs. This meeting will inform the developer what information needs to be included in order to be considered for the expedited review program. Project eligibility is determined at this meeting.
- ❖ City Participants/Planning committee: Code Enforcement, OCE, FIRE, HPARD, JRC, Planning Department, Mayor's Office of Resilience, Economic Development, Health, Infrastructure Design Analysis
- ❖ Developer participants: Developer, architects, engineers, developer team

## Topics Discussed:

- ❖ Presentation of project by applicant
- ❖ Permitting and expediting needs
- ❖ Expedited Permitting Pilot Program requirements
- ❖ Checklist overview (appendix 1)
- ❖ Co-Benefits Valuation Tool (appendix 3)
- ❖ Time required for expedited review
- ❖ Commitments from each party to expedite responses
- ❖ Other questions

### III. Plan Submittal

Upon completion of full set of plans and construction documents, checklists, and program requirements, applicant will notify that project is being submitted to permitting. The package shall include:

- ❖ Completed Checklists
- ❖ Full set of plans to be included for intake and eligibility (projects will only be expedited when full set of plans are included not in piece-meal approach)
- ❖ Completed Co-Benefits Valuation Tool
- ❖ Additional documents as requested in pre-development meeting
- ❖ Notification to be submitted to [GSIHouston@houstontx.gov](mailto:GSIHouston@houstontx.gov)

### IV. Pre-Screening

- ❖ The initial review will consist of:
  - A pre-screening of different elements, conducted by HPC, to ensure all documentation is included and all elements for an expedited review process are met – checklist is complete, all necessary variances are obtained, etc. Resilience Office will assist in the review to ensure all resilience elements for an expedited review process are met.
- ❖ Objective: This review will not be expedited and will serve as verification of all documentation that is required to move forward in expedited review process. This consists of review of materials submitted to ensure that the proposed project is ready to undergo the expedited review process. If materials are considered incomplete, (key missing information from checklist, variances not obtained), then applicant will be requested to provide additional information to be eligible for the program and project will be placed on hold until such information is provided.

### V. Formal Review (simultaneous electronic review)

If initial review is successful and applicant is ready to proceed, project will be prioritized for expedited review. City teams receive notification to expedite within the day and provide comments immediately. These team would have been determined in the previous steps. The estimated date for review will be provided in advance in order to applicant to be able to provide expedited responses and clarification to reviewers, if needed.

- ❖ City Participants/Planning committee: Code Enforcement, OCE, FIRE, HPARD, JRC, Planning Department, Mayor's Office of Resilience, Economic Development, Health, Infrastructure Design Analysis
- ❖ Developer participants: Developer, architects, engineers, developer team

## VI. Approvals

Formal approvals for permits will be granted within the agreed review timeframe. Should modifications need to be made, or additional approvals required beyond capacity of the team, the timeline for these changes will be established in communication with the applicant to make necessary changes.

## VII. Survey

Post-review survey to be completed by applicant to gather data for our pilot program evaluation process (appendix 4)

## VIII. Secure Permits

Participants will be eligible to secure permits, once exit survey is received.

### Caveats:

- Inter-departmental coordination
- Submittals for all reviews, permits, approvals must be given in a complete package.
- HPC led program, supported by Resilience Office in 1<sup>st</sup> year of pilot program.
- Participants must also be willing to have clear lines of communication and expedite their responses in return. This program is only as successful as applicant's commitment to the expedited process.

# Appendix 1 – GSI Expedited Permitting Pilot Program Checklist

## Expedited GSI Permitting Pilot Program Checklist:

Does the project contain Green Stormwater Infrastructure features?

Yes  No

Have you established the project's direct linkages to *Resilient Houston*?

Yes  No

Have you completed and attached the Co-Benefits Valuation?

Yes  No

Will you be submitting the complete plan set, ready for construction?

Yes  No

Have you obtained all variances and/or special exception applications related to the project and obtained all required approvals including from Planning Commission?

Yes  No

Please indicate variance and/or special exception requests that are needed and have been obtained:

**Chapter 26: Article VIII & VII (parking)**

Yes  No

**Chapter 33 (landscaping) Tree & Shrub Article V, Protection of Certain Trees VI, Historic Preservation Article VII**

Yes  No

**Chapter 42**

Yes  No

\*Please note that should a variance and/or special exemption request is needed and has not been obtained, project will not be considered for expedited review. Only projects with all approved documentation will be eligible to participate.

**For Residential Projects, please complete the Residential Pre-Requisite Checklist.**

<https://www.houstonpermittingcenter.org/media/1786/download>

**For Commercial Projects, please complete the Commercial Pre-Requisite Checklist.**

<https://www.houstonpermittingcenter.org/media/1811/download>

## Appendix 2 – Resilient Houston GSI Resource Matrix (for project eligibility to be utilized by interested applicant)

Resilient Houston Areas of Focus / Chapters	All Resilient Houston Goals	RH Actions Related to GSI	RH Sub-Actions Related to GSI	You may use this matrix to further explain how the project meets the RH goals.														
<b>PREPARED &amp; THRIVING HOUSTONIANS</b>	<b>GOAL 1:</b> We will support Houstonians to be prepared for an uncertain future	2 Mobilize Houstonians to adapt in the face of climate change	2.1 Grow climate risk awareness.															
			2.2 Weatherize existing homes and properties.															
			2.3 Advance green stormwater infrastructure.															
	<b>GOAL 2:</b> We will expand access to wealth-building and employment opportunities	4 Encourage community leadership, stewardship, and participation																
						<b>GOAL 3:</b> We will improve safety and a well-being for all Houstonians	7 Prepare Houston’s workforce and all young Houstonians for the jobs of the future											
											8 Make our streets 100% safe for all Houstonians							
															10 Proactively care for Houstonians’ mental health			
<b>GOAL 4:</b> We will ensure that all neighborhoods have equitably resourced plans																		
					<b>GOAL 5:</b> We will invest in arts and culture to strengthen community resilience													
									<b>GOAL 6:</b> We will ensure all neighborhoods are healthy, safe, and climate ready	16 Make Houston neighborhoods greener and cooler to combat extreme heat	16.2 Accelerate tree planting and prairie restoration. Target: adding 4.6 million new native trees by 2030 and accelerating prairie restoration							



			16.3 Expand cool and green roofs	
			16.4 Pilot cool pavement	
			16.5 Develop innovative shade structures	
		18 Ensure all neighborhoods have access to quality parks and nature	18.3 Increase access to nature for young Houstonians	
		19 Grow equitable access to quality food to nourish Houston's status as a culinary capital		
		20 Prevent, mitigate, and recover from the effects of environmental injustice in our communities.	20.1 Coordinate with environmental justice partners	
			20.3 Increase air and water monitoring capacity.	
<b>GOAL 7:</b> We will build up, not out, to promote smart growth as Houston's population increases				
<b>HEALTHY &amp; CONNECTED BAYOUS</b>	<b>GOAL 8:</b> We will live safely with water	25 Make room for water	25.2 Hold water where it falls, before it enters the bayou.	
			25.3 Expand the detention capacity of bayou corridors.	
			25.5 Increase water storage ambition over time to adapt as the climate changes	
		26 Clean Houston's bayous and waterways	26.2 Advance sedimentation management.	
			26.3 Promote natural infiltration and treatment of stormwater by wetlands, prairies, and woodlands	

	<b>GOAL 9:</b> We will embrace the role of our bayous as Houston's front yard	28 Respect bayous and natural floodplains as an integral part of Houston's urban nature	28.2 Enhance ecological patches and corridors using restoration in city parks as model	
			28.3 Support the Headwaters to Bay Initiative	
		29 Increase access to our bayous for recreational, health, and other community benefits	29.3 Leverage investment for multi-purpose flood mitigation, recreation, transportation, and community health benefits	
		30 Encourage inclusive growth and economic development along bayou corridors	30.1 Promote trail-oriented development	
			30.2 Combine floodway retrofits with neighborhood-scale planning and public and private investment opportunities.	
		<b>ACCESSIBLE &amp; ADAPTIVE CITY</b>	<b>GOAL 10:</b> We will demonstrate leadership on climate change through action	31 Adopt and implement the Climate Action Plan Goals and Actions
31.7 Lead by example through sustainable materials management				
33 Holistically manage our water resources to be climate ready	33.3 Implement the City's Water Conservation Plan and Drought Contingency Plan			
<b>GOAL 11:</b> We will modernize Houston's infrastructure to address the challenges of the future	34 Integrate green stormwater infrastructure into Houston's built environment		34.1 Advance comprehensive construction and maintenance of green stormwater infrastructure.	
		34.2 Build capacity for the design, construction, and maintenance of green stormwater infrastructure.		

	<b>GOAL 12:</b> We will advance equity and inclusion for all			
	<b>GOAL 13:</b> We will transform city government to operationalize resilience and build trust			
<b>INNOVATIVE &amp; INTEGRATED REGION</b>	<b>GOAL 14:</b> We will continue to invest in the region's diverse economy			
	<b>GOAL 15:</b> We will increase regional transportation choice			
	<b>GOAL 16:</b> We will manage our land and water resources from prairie to bay	51 Conserve regional undeveloped land for flood mitigation, environmental health, and recreation	51.2 Support regional land conservation and discourage development in sensitive upstream areas. Target: Conserve 24% of undeveloped regional lands as natural spaces by 2040	
			51.3 Restore land to native prairie, wetlands, and woodlands	
	<b>GOAL 17:</b> We will enhance regional emergency preparedness and response			
	<b>GOAL 18:</b> We will leverage existing and new investments and partnerships	58 Leverage disaster recovery efforts to accelerate the implementation of resilient measures	58 Prioritize and invest in resilient infrastructure	
		59 Leverage planned and proposed transformative regional projects to maximize resilience benefits	59.3 Integrate nature-based solutions and coastal protection infrastructure to provide greater storm surge protection.	

## Appendix 3 – Co-Benefits Valuation Tool (for project eligibility to be utilized by interested applicant)

- The Green Infrastructure Co-benefits Valuation Tool is intended to provide a framework, methods, and values to support rapid screening-level analysis of the costs and benefits associated with a range of GI investments. It was developed by Earth Economics with guidance from Exchange members.
- Below are links to the most current version of the valuation tool and additional resources:
  - <https://giexchange.org/green-infrastructure-co-benefits-valuation-tool/>
  - Fact Sheet: [GreenStormwaterInfrastructure Handout](#)
  - Valuation Tool: [Green-Infrastructure-Valuation-Tool -Version-1.01](#)  
(save as new file to avoid overwriting template)
  - User Guide: [Green-Infrastructure-Valuation-Tool-User-Guide-Version 1.01](#)
  - Please submit completed spreadsheet electronically, as part of the application.
- Applicants may also utilize [Ecosystem Services of Regional Native Trees Species](#) as an additional reference tool for ecosystem services valuation of trees.

## Appendix 4 – Participant Feedback Survey

**Participant Name:**

**Project Name:**

**Project Location:**

**GSI Type:**

Did the Expedited GSI Permitting Review Pilot Program accelerate your estimated project delivery timeline?

Would you use this service for another future project, if offered by the City of Houston?

What types of projects do you foresee utilizing this process for?

Are there any specific modifications to the Checklists that you recommend?

Do you feel the Department had appropriate level of communication? How can we improve?

Are there any other recommendations for improving the process or to consider when expanding the program?

Would you be willing to pay an upcharge for the expedited permit fee?

## Appendix 5 – Electronic Plan Review Guides

Please see the following link for our web services page:

<https://www.houstonpermittingcenter.org/our-services/eservices>

The customer should download the appropriate user guide from this web page for general instructions for navigating iPermits and Project Dox:

RESIDENTIAL GUIDES	COMMERCIAL GUIDES	OCE GUIDE
User guides for residential projects	User guides for commercial projects	User guide for Office of the City Engineer projects
<a href="#">Residential Guide</a>	<a href="#">Commercial Guide</a>	<a href="#">OCE Guide</a>
<a href="#">Solar Panel Only Guide</a>	<a href="#">Electronic locks Guide</a>	
	<a href="#">Sign Guide</a>	

**(NOTE: the residential guide, solar panel guide, and commercial guide are all similar to 1-stop projects with the only difference being the type, number and location of files being uploaded.)**

**1. Customers apply for a project number through iPermits and select the appropriate type of application as listed. For Commercial Repairs, Commercial Re-Roof, or Driveways the customer must select the “Other” button and add the description as Repair, Re-Roof, or driveway.**

[https://www.pdinet.pd.houstontx.gov/ILMS\\_Online\\_Permits/default.asp](https://www.pdinet.pd.houstontx.gov/ILMS_Online_Permits/default.asp)

**2. The customer downloads the required paperwork from our website, such as Repair Spec List. Following are examples for the repair spec list, reroof, and driveway.**

<https://www.houstonpermittingcenter.org/resources?keys=commercial+repair+spec+list&=Find>

<https://www.houstonpermittingcenter.org/resources?keys=residential+repair+spec+list>

<https://www.houstonpermittingcenter.org/resources?keys=commercial+reroof+only&=Find>

<https://www.houstonpermittingcenter.org/resources?keys=residential+reroof+only&=Find>

<https://www.houstonpermittingcenter.org/resources?keys=sidewalk+permit&=Find>

**3. The customer uploads the completed paperwork and any associated drawings into ProjectDox for review and completes the applicant submit task.**

<https://projectdox.houstonelectronicplanreview.org/ProjectDox/index.aspx>

**4. Following is a list of commonly used documents related to One Stop review:**

Residential One Stop:

<https://www.houstonpermittingcenter.org/resources?keys=residential+one-stop+guidelines>

Commercial One Stop:

<https://www.houstonpermittingcenter.org/resources?keys=commercial+one-stop+guidelines&=Find>

Residential Impervious Cover Form:

<https://www.houstonpermittingcenter.org/resources?keys=calculation+of+impervious+percentage&=Find>

Commercial Impervious Cover Form:

<https://www.houstonpermittingcenter.org/resources?keys=commercial+impervious+cover&=Find>

Fill and Grade:

<https://www.houstonpermittingcenter.org/resources?keys=fill+and+grade&=Find>

Stormwater Information Form:

<https://www.houstonpermittingcenter.org/resources?keys=stormwater+information%27&=Find>

Pools:

<https://www.houstonpermittingcenter.org/resources?keys=pool&=Find>

Driveways:

<https://www.houstonpermittingcenter.org/resources?keys=driveway&=Find>

<https://www.houstonpermittingcenter.org/resources?keys=driveway+with+open+ditch&=Find>

<https://www.houstonpermittingcenter.org/resources?keys=driveway+bond&=Find>

**5. Following is the link to the Houston Permitting Resource page with search function.**

<https://www.houstonpermittingcenter.org/resources?keys=>