ADOPT-AN-ESPLANADE

AN ESPLANADE BEAUTIFICATION AND PLANTING GUIDE



A project of Keep Houston Beautiful Houston Parks and Recreation Department & Texas Forest Service





Adopt-An-Esplanade Guide

Keep Houston Beautiful

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INTRODUCTION

Beautiful, well-maintained public spaces reflect community pride, enhance the urban environment, provide incentives to revitalize core neighborhoods and promote economic redevelopment. The City of Houston Adopt-An-Esplanade program plays a key role in this effort.

Adopt-An-Esplanade is a program designed to bring Houston neighborhoods together in committed, collaborative partnerships to improve and maintain city esplanades. Houston Parks and Recreation Department administers the program and Keep Houston Beautiful provides volunteer coordination, community education, training, planning assistance, and loans tools and equipment for beautification and cleanup projects. Participants include civic groups, garden clubs, business owners, city and state agencies and corporate sponsors.

This step-by-step guide is designed to assist neighborhood organizations through the process of esplanade adoption and maintenance. Funding for the publication of this guide was provided by a grant from Texas Forest Service. Texas Forest Service provides financial and technical assistance for urban forestry projects in Houston as well as the State of Texas.

Keep Houston Beautiful Landscape Committee in collaboration with Houston Parks and Recreation Department has completed this guide. Members of the committee and contributors to this guide are:

Keiji Asakura, Landscape Architecture Studio Robin Blut, Keep Houston Beautiful Grace Heckler, H&H Design Kathy Lord, Trees for Houston Salle' Morse, Bio Landscape and Maintenance Michael West, MetroNational

Established in 1979, Keep Houston Beautiful is an award-winning affiliate of Keep America Beautiful, Inc. dedicated to making Houston one of the cleanest and most beautiful metropolitan cities in America. Keep Houston Beautiful partners with community groups, youth organizations, city and state agencies, business and corporate sponsors and thousands of volunteers annually to organize neighborhood cleanup and beautification activities and community education programs to improve our quality of life and build pride in our community.

Houston Parks and Recreation Department manages more than 38,945 acres of land that includes 350 parks, 200 open spaces and 780 miles of esplanades. Each year more than 14 million visitors take advantage of the various recreational opportunities offered at Houston's parks including golf courses, swimming pools, picnic areas, playgrounds and ball fields. Special attractions include Miller Outdoor Theatre, Houston Garden Center, Houston Zoological Gardens, Alkek Velodrome, and historic Sam Houston Park.





GETTING STARTED

Group commitment is essential to the long-term success of any neighborhood beautification effort. The first step is to identify individuals, civic and neighborhood organizations and corporate partners to serve on a planning committee to guide the project to completion and help ensure continued involvement.

It is recommended that you secure a local landscape architect to design your esplanade landscape plan and irrigation system. Once the esplanade is planted, it is the responsibility of the adopting organization to maintain the esplanade including watering, mowing, edging, trimming, pruning, weeding, plant replacement, litter removal and any irrigation system maintenance, repair or adjustment. If the adopting organization ceases to maintain the esplanade, the Houston Parks and Recreation Department will resume its standard maintenance (based on resource availability) and seasonal color may resort to bushes and grass.

Begin with a simple, manageable project, or divide a major project into several manageable segments to be completed in phases as time and resources allow. Create a project timeline, including a communications schedule to inform your neighbors, encourage participation, recruit volunteers and assist with soliciting financial support. Enlist a community newspaper and newsletters to help tell the story. As you proceed, maintain a photographic record to document the process and support fund-raising efforts.

Prepare a detailed budget. To estimate the total cost of your project, be sure to include in-kind donations and services. Of prime consideration in any landscape program is the cost and commitment to on-going maintenance. Far too many beautification projects are initiated, only to be neglected or totally abandoned because of inadequate maintenance or lack of continued interest. From the very inception of the design process, the level of commitment in terms of dollars and/or labor needs to be considered. This understanding at the beginning of the design process can be useful in selecting plant material, quantity or complexity of design.

LANDSCAPE DESIGN

Once the scope of the project is determined, landscape design and site plan drawings must be prepared and submitted to the city for approval. The approval process may take up to six weeks. Allow enough lead time to ensure planting occurs mid-October through mid-February. If at all possible, avoid planting in Houston's severe summer heat!

To prepare the esplanade project site plan drawings, the planning committee must purchase copies of City of Houston street plans from the Public Works Department. These engineered street drawings provide accurate dimensions of esplanades, including location of underground utilities.





SPECIAL CONSIDERATIONS

Trees and shrubs may not be planted on esplanades that are less than 12 feet wide. Visibility around esplanade plantings is a primary consideration for traffic safety. Other concerns are the height and density of shrubs, tree trunk diameter and branch overhang. Trees and shrubs that block a driver's view or create a traffic hazard are not allowed in esplanades.

Select plants and trees well suited for your chosen site, taking into consideration the physical shape of the esplanade, immediate surroundings, maintenance and water requirements, litter control, foot traffic or any other special conditions.

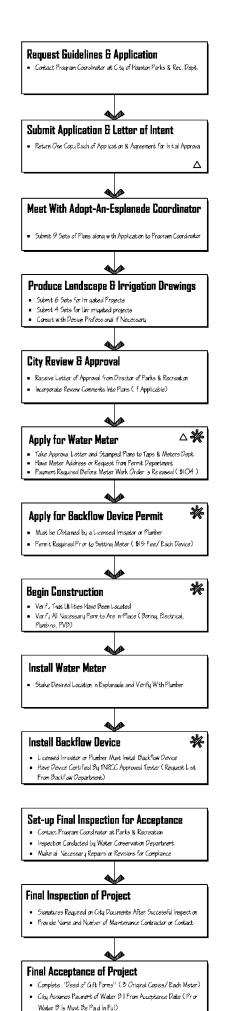
Keep in mind that although the Houston climate is subtropical most of the year, harsh winter weather can damage tender plants. A nurseryman, landscape architect, or urban forester can recommend appropriate plant material and a planting schedule for your site.

Water is a critical element for the survival of plants in esplanades. Consider the use of hardy, drought tolerant plants and trees. Be water-wise.

High pH or alkaline soil is often found in esplanades on Houston streets. This soil condition is stressful to plant growth. Good soil preparation and the use of alkaline-tolerant plants are critical. You may wish to obtain soil tests from the Agricultural Extension Service.



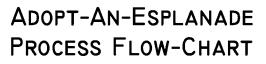




This diagram is a quideline to the process involved in the "Adopt-an-Esplanade" program. Individual cases may vary but it is advised that any variation should be done only under the direction of the Program Coordinator.

Permit Required At This Stage

🛆 Form Submittal



STEPS TO ADOPT-AN-ESPLANADE

• SELECT PLANNING COMMITTEE

Identify individuals, civic and neighborhood organizations and corporate partners to serve on a planning committee.

• SELECT SITE

An esplanade is defined as an open stretch of ground in the middle of a city roadway separating two (2) or more lanes of traffic. Keep in mind that trees and shrubs may not be planted on esplanades that are less than 12 feet wide. Visibility around esplanade plantings is a primary consideration for traffic safety.

• REQUEST ADOPT-AN-ESPLANADE GUIDE

Contact City of Houston Parks and Recreation Department (HPARD) Adopt-An-Esplanade Program Coordinator at (832) 395-7029 or Keep Houston Beautiful at 713-839-8855 to request an Adopt-An-Esplanade Guide.

• **REVIEW ADOPT-AN-ESPLANADE GUIDE**

Review Adopt-An-Esplanade Guide thoroughly. It is the responsibility of the adopting organization to maintain the esplanade, including watering, mowing, edging, trimming, pruning, weeding, plant replacement, litter removal and irrigation system maintenance, repair or adjustment.

• MAKE APPLICATION TO ADOPT-AN-ESPLANADE

Submit your Letter of Intent and Application and Maintenance Agreement form to Adopt-An-Esplanade (refer to Sample Forms) to:

Adopt-An-Esplanade Houston Parks and Recreation Department 2999 South Wayside Houston, Texas 77023

• MEET WITH ADOPT-AN-ESPLANADE COORDINATOR

The Adopt-An-Esplanade Coordinator will contact the adopting organization to set up an on-site meeting for site assessment and application review.

• RECRUIT SPONSORS AND COMMUNITY PARTNERS

Involve community stakeholders, such as area residents, small business owners, corporations, neighborhood associations, civic organizations, schools, senior citizens groups, churches, garden clubs and/or nonprofit organizations.





CREATE PROJECT TIMELINE

After careful review of the Adopt-An-Esplanade Guide, create a project timeline allowing sufficient time for the approval process, scheduling of contractors and work to be completed, plant delivery, day for planting (optimal planting time is from mid-October through mid-February), inspection, etc. Include a communications schedule to inform your neighbors, encourage participation, recruit volunteers and assist with soliciting financial support.

OBTAIN ENGINEERED STREET DRAWINGS

Obtain engineered street drawings of proposed esplanade site(s) from:

City of Houston File Room 611 Walker (basement level) Houston, Texas 77002 713-837-0569

Bring Key Map coordinates, street names and street numbers, and be prepared to search through several files. Original drawings may not be removed from the File Room, but you may purchase copies for a nominal fee with cash or check. Bring quarters for parking meters.

The specific reference pages or sheet numbers of the street plan drawings used to render the landscape plan should be listed on the landscape plan.

You may also reference information found at the City of Houston Geographic Information & Management System Website: http://pwegis.pwe.ci.houston.tx.us/

CONSULT A LANDSCAPE ARCHITECT

Consult a landscape architect to determine scope and cost of project. Determine if your project will include an automatic irrigation system (preferred) or an alternate watering method.

• PREPARE BUDGET

Develop budget for landscape design, irrigation system, construction, plant material, maintenance and water usage (if non-irrigated). Secure donations from sponsors and include in-kind donations and services.

PRODUCE LANDSCAPE AND IRRIGATION PLAN DRAWINGS

Have your landscape architect produce esplanade landscape plan drawings (including irrigation, planting and tree plan/design) in accordance with City of Houston guidelines. (Refer to Irrigation, Planting and Maintenance).

Section 40-7 and Section 28-39 of the Code of ordinances prohibits placement of neighborhood markers or other signs in esplanades.





The proposed landscape plan, drawn to scale, should include:

- -Street names
- -North directional arrow
- -Length and width of esplanades
- -Quantities, sizes and locations of plant materials
- -Distance between trees and other plants
- -Location of traffic signs and left turn lanes
- -Utility Poles
- -Physical landmarks
- -Pipes, meters, fire hydrants, manholes
- -Proposed Irrigation system, and
- -Water meters
- SUBMIT PLAN DRAWINGS AND APPLICATION FOR DONATING AN IRRIGATION SYSTEM FORM FOR REVIEW AND APPROVAL Submit the following items to HPARD:
 - Esplanade plan drawings (depending on scope of project)
 For irrigated projects, submit six (6) sets of drawings
 For non-irrigated projects, submit four (4) sets of drawings
 - Application for Donating an Irrigation System to City of Houston (refer to Sample Forms)

Various City of Houston departments must review the plans and a minimum of six weeks is requested for response.

 WAIT FOR APPROVAL LETTER Once approved, applicant will receive a letter of approval from the HPARD Director, along with officially "stamped" approved plan drawings.

MAKE APPLICATION FOR WATER METER

Contact and secure a licensed plumber from the City's List of Approved Taps and Meters Contractors (refer to Resources).

Make application for Water Meter, in person, to: Public Works Department Taps and Meters/Waste Water 3300 Main Street (at Frances) Houston, Texas 77002 713-535-7675

Refer to Sample Forms or download a copy of the City's Water Meter Application and New Meter Installation Agreement form at: <u>www.publicworks.cityofhouston.gov/utilities/planning.htm</u>





When applying for the water meter, take the following:

- -HPARD Letter of Approval
- -Stamped Approved Plan Drawings
- -Completed Water Meter Application Form
- -Completed Informal Contract Agreement for New Meter Installation

Application fees vary depending on meter size (maximum meter size allowed in esplanade is 1-inch). Payment may be made by personal or company check or money order. Permits and meter installation costs are additional.

If street cuts or bores are required for the project, Taps and Meters will refer the applicant to:

Public Works Department Street Cut Permit Section 611 Walker, 19th Floor Houston, Texas 77002 713-837-0455

Additional information may be found at: <u>www.publicworks.cityofhouston.gov/traffic/streetcut.htm</u>

• APPLY FOR PERMITS

Secure required permits (plumbing, road boring, backflow prevention device and electrical, as needed) from the City Planning and Development Permit Office, Code Enforcement Building, 3330 Main, First Floor, 77002. Fees vary. Permits are normally secured by the contractor but ultimately are the responsibility of the adopting organization.

If traffic lanes are to be blocked due to construction, lane closure permits must be obtained in writing via facsimile or e-mail from:

Public Works Department Traffic Engineering Branch Phone: 713-837-7262 Fax: 713-837-7290

Refer to Forms or you may download a copy of the City's Lane Closure Permit at: <u>www.publicworks.cityofhouston.gov/traffic/docs/laneclosure-app.pdf</u>

The city does not allow lanes to be closed between the hours of 7-9 a.m. and 4-6 p.m. weekdays.

LOCATE UNDERGROUND UTILITIES

Before digging in the esplanade, the contractor must also notify a utility locating service at least 48 hours prior to construction to locate underground utilities and receive permission to dig. The locating service will require the address, nearest intersection, key map location and work start date. A work order or number will be assigned and should be kept for future reference.





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Representatives from the utilities companies will mark locations of all lines and cables to avoid damage. The following companies provide utility locating services:

Lone Star Notification Center, 713-223-4567 Texas One Call, 1-800-245-4545

Note: Some utilities may not be contacted by the locating services above, and the contractor is ultimately responsible for notifying all underground utilities prior to construction.

• INSTALL WATER METER

Tapping of public water mains and the installation of water meters must be performed by a City-approved taps and meters contractor (refer to Resources). The adopting organization may stake the desired meter location in the esplanade and verify location with its plumber.

NOTE: If construction includes street cuts or boring or disturbs any part of the street, curb or sidewalk, the contractor must return the site to its original condition. Otherwise, the project will not pass inspection. Before any construction begins, the applicant should take detailed photos of the site to verify its original condition.

INSTALL BACKFLOW PREVENTER

All irrigation systems must be equipped with an approved testable backflow prevention assembly that meets City specifications (refer to Irrigation). A licensed irrigator must install the backflow preventer. In accordance with state law, all backflow prevention assemblies shall be tested upon installation and certified to be operating within certain specifications by a licensed Backflow Prevention Assembly Tester (BPAT). Two original copies of the test report should be requested from the BPAT, one to remain on site for the City's Plumbing Inspector and the other is required at time of final inspection by the City's Water Production Branch.

INSTALL IRRIGATION SYSTEM

(refer to Irrigation)

If traffic lanes are to be blocked due to construction (refer to "Apply for Permits" page 7), secure lane closure permits (refer to Forms).

Damages to any water lines, its appurtenances and service connections during the progress of this project shall be repaired at the adopting organization's expense.

• SET DATE(S) TO PREPARE BEDS AND PLANT ESPLANADE





MOBILIZE VOLUNTEERS

Mobilize a volunteer corps for the esplanade preparation, planting and kick off of your Adopt-An-Esplanade project. CAUTION! Esplanade work is not for children! Hire a police officer for volunteer safety and traffic control. Secure permits to close lanes with safety cones and use appropriate signage. Remember to use volunteers wisely. Prior to workday, provide volunteers with complete instructions and an overview of the tasks to be completed. On workday, provide a volunteer orientation, specific job assignments and give a planting demonstration.

• SELECT PLANTS AND SCHEDULE DELIVERY (refer to Planting)

Note: High pH or alkaline soil is often found in esplanades on Houston streets. This soil condition is stressful to plant growth. Good soil preparation and the use of alkaline-tolerant plants are critical. You may wish to obtain soil tests from the Agricultural Extension Service. (refer to Resources)

• PLANT ESPLANADE

(refer to Planting)

If traffic lanes are to be blocked due to construction (refer to "Apply for Permits," page 7), secure lane closure permits (refer to Forms).

• FINAL INSPECTION

-Contact HPARD Adopt-An-Esplanade Program Coordinator to schedule final inspection of the project with City departments. -Receive "sign-off" by inspectors.

-Once approved, request contractor to design an "as-built" plan and submit the plan to HPARD along with three (3) signed Deed of Gift forms (refer to Forms).

Important: Adopting organization should inspect all work for completion and wait for final inspection/approval by the City before making payment to contractor(s).

• FINAL ACCEPTANCE OF PROJECT

Once the project has been inspected and approved, HPARD will notify the adopting organization in writing and return one original Deed of Gift form with all signatures in place.

The City of Houston will assume payment of water bill from project acceptance date. (Bills for water usage at site prior to project acceptance date must be paid in full before City can assume payment.)

Provide HPARD Adopt-An-Esplanade Program Coordinator the name, address and telephone number of the maintenance contractor or contact person who will maintain the plant material and irrigation system. If this information changes, it is the responsibility of the applicant to report changes within 30 days. Failure to do so could result in the disruption of water service and removal of plant materials.





• MAINTAIN IT

Once the esplanade is planted, it is the responsibility of the adopting organization to maintain the esplanade including watering, mowing, edging, trimming, pruning, weeding, plant replacement, litter removal and any irrigation system maintenance, repair or adjustment.

The City will perform random water audits to determine excess water usage. A mandatory watering schedule may need to be implemented depending on audit results.

The City reserves the right to discontinue service to any irrigation system located within its esplanades for the following reasons:

- Time clock control(s) not working
- Water spraying on to paved areas or street
- Spray heads leaking
- Broken spray heads or rotors
- Main irrigation service line leaking
- Watering right-of-ways
- Failure to provide controller box key
- Control valves not working
- Any additions or changes to system, without approval from City of Houston Water Conservation Branch

The City also reserves the right to remove plant materials if the adopting organization ceases to maintain the esplanade.

• CELEBRATE YOUR SUCCESS

Upon completion of your esplanade project, hold a partnership/volunteer ceremony with appropriate recognition. Write thank you notes to sponsors and participating groups and individuals. Share the news of your success through your organization newsletter, neighborhood newspaper or through a special letter.

Create enthusiasm for other neighborhood projects. Esplanades are a logical first step to neighborhood renewal, anti-litter and recycling campaigns and the cleaning of vacant lots.

KEEP HOUSTON BEAUTIFUL PROUD PARTNER AWARD

Document the project by keeping accurate records including an overview of the project, budget, before-and-after photos, volunteer involvement and positive community impact. Consider submitting the project to the Keep Houston Beautiful Proud Partners Awards Program. This awards competition is open to all community organizations, youth groups, businesses, institutions and individuals who demonstrate their commitment to the city through beautification projects.

Contact Keep Houston Beautiful for information on submitting your project for a Mayor's Proud Partners Award. Visit: <u>www.houstonbeautiful.org</u>.





PROJECT CHECK LIST CHECK IT OUT!

- Select Planning Committee
- □ Select Site
- □ Request Adopt-An-Esplanade Guide
- **D** Review Adopt-An-Esplanade Guide
- □ Make application to Adopt-An-Esplanade
- Meet with Adopt-An-Esplanade Coordinator
- Recruit Sponsors and Community partners
- Create Project Timeline
- Obtain Engineered Street Drawings
- Consult a landscape architect
- Prepare budget
- **D** Produce Landscape and Irrigation Plan Drawings
- Submit plan drawings and Application for Donating an Irrigation System for review and approval
- □ Wait for approval letter
- □ Make application for water meter
- □ Apply for permits
- Locate underground utilities
- Install water meter
- □ Install backflow preventer
- Install irrigation system
- □ Set date(s) to prepare beds and plant esplanade
- Mobilize volunteers
- Select plants and schedule delivery
- Plant esplanade
- □ Final inspection
- □ Final acceptance of project
- Maintain it
- **D** Celebrate your success
- Keep Houston Beautiful Proud Partner Award





IRRIGATION

SELECTING A WATERING METHOD

Before planting, determine the cost and feasibility of an irrigation system or consider an alternate watering method. First, locate the water source. If there is no water line or hose bib nearby, consult a licensed irrigator or plumber for cost estimates and installation. A new water meter may be required. Costs are the responsibility of the sponsoring organization. The City will pay for water usage of approved, automatic irrigation systems.

An automatic irrigation system is the preferred system for watering esplanades. A licensed irrigator or landscape architect should prepare plans for the irrigation system. The installing contractor secures permits and ensures compliance with all applicable codes. A conventional spray-type irrigation system or a low-volume system such as a drip emitter may be considered. A controller or a timer device must operate the irrigation system.

Alternate watering methods include a hand-held hose, soaker hose or oscillating sprinkler. It is important to note that water usage costs by these methods will not be paid by the City of Houston and must be assumed by the adopting organization. Keep in mind, maintenance volunteers will require access to the hose bib key to turn the water on and off. As a final alternative, a watering service may be contracted to water the site.

DEED OF GIFT

When a group or organization purchases and installs an irrigation system within an esplanade, the sponsoring organization must complete a "Deed of Gift" form to formally donate the irrigation system to the City. It is the City's intent to accept donation of irrigation systems located in esplanades of City roadways which meet the specifications contained in these procedures. Once the deed is accepted, the City will pay for water usage. The City reserves the right to discontinue service to any irrigation system located within its esplanades.

For irrigation systems already in existence, HPARD requires that the system meet the City's acceptance requirements and the adopting organization provide receipt of ownership of the irrigation system.

Visit: <u>www.publicworks.cityofhouston.gov/utilities/conservation/esplanade.html</u> for the City's general policy on procedures and specifications for acceptance of deeds to newly constructed and/or existing irrigation systems.





SPECIFICATIONS FOR IRRIGATION SYSTEMS IN A CITY OF HOUSTON ESPLANADE

IRRIGATION DRAWINGS

Drawings of the irrigation system must indicate the location (and type) of:

- Water meter
- Rain sensor
- Backflow preventer
- Lines/connections
- Manual/automatic control valves
- Timers
- Individual spray heads
- Street name, block number and street intersection names where irrigation is located

If the irrigation system is already in existence, the drawings must represent the system as it currently exists.

WATER METER

A. Meter size must not be greater than 1 inch.

- **B.** The meter must be installed within the esplanade.
- C. All meters must have a box and lid.
- **D.** Any portion of the irrigation system which is subject to responsibility for operation and maintenance by a different person, group, or organization must be separately metered.
- E. The use of an individual meter for each esplanade segment is recommended. No individual meter shall serve a continuous "run" of greater than one thousand (1,000) foot of irrigated esplanade. Not more than three (3) pavement segments may be crossed by any continuous run.
- **F.** Where systems cross paved segments of the roadway, the following rules apply:
 - Gate valves shall be provided on both sides of the pavement crossing to allow isolation and/or replacement of any damaged segment.
 - Water lines, control conduits, and any other appurtenances shall be placed in a continuous casing (maximum diameter 6 inches).
 - Gravel backfill shall be placed at the end of the sleeves and around all gate valves in order to allow a path for water to escape in the event of any leaks.

BACK FLOW PREVENTER

A. All irrigation systems must be equipped with a testable backflow preventer or air gap that meets the City's specifications.





- **B.** Backflow preventers must be installed 2-3 feet from water meter.
- **C.** Backflow preventers will be tested upon installation, repair, or relocation and on an annual schedule thereafter.
- **D.** Field testing of these assemblies shall be done by the approved persons from the City's Certified Tester's list.
- **E.** Visit: <u>www.publicworks.cityofhouston.gov/utilities/waterprod.htm</u> for a list of State certified backflow assembly testers registered with the City of Houston.
- **F.** The adopting organization is responsible to retain the records of testing and maintenance for a minimum of three (3) years, and shall forward a copy of the test records to the City's Water Quality Control Branch (713-842-4013).
- **G.** All other water lines and/or connections between the meter and the backflow preventer are prohibited.
- **H.** The backflow preventer is required to be wrapped with a suitable insulation and taped to protect against freezing.

IRRIGATION SYSTEM

- A. The irrigation system, controls and timer must be contained entirely within the esplanade. Controls and timers must be enclosed in a box with a lid. The City must have uninterrupted access to all controls and timers. A key must be provided if the control box is locked.
- **B.** All automatic irrigation systems must be equipped with a rain sensor shut-off device or soil moisture sensor.
- **C.** Irrigation system must be a "Closed Loop System." Hose bibs, quick couplers or other devices that permit extraction of water for the approved system other than through the sprinkler heads are NOT permitted.
- D. Watering esplanades is prohibited between the hours of 10 a.m. and
 7 p.m. (When drought conditions exist, as determined by the Water Conservation Department, water use may be restricted.)
- **E.** Sprinkler head spacing must be designed for head-to-head coverage or head spaced per manufacturer's directions and adjusted for prevailing winds. The system must be designed for minimum run-off and minimum over-spray onto non-irrigated areas (i.e., paving and structures.)
- **F.** It is suggested that all sprinkler heads should be installed on flexible pipe joints to help prevent breakage.
- **G.** Above ground sprinkler heads are prohibited in esplanades with a width of less than twelve (12) feet.
- **H.** Spray heads will be located and maintained so as to avoid water spraying on paved areas or structures. Spray heads next to paved areas must be flush with the grade.





SPECIAL NOTES

Irrigation System Rejection

After performing an inspection on an esplanade irrigation system, the City of Houston Water Conservation Branch may deny the request for acceptance of a Deed of Gift and/or terminate water service for any of the following reasons:

- Meter size greater than one inch
- Manually controlled system
- Quick coupler valves or hose bibs
- Meter serves a continuous "run" of more than 1,000 feet
- Interconnection of water meters
- No isolation gate valves provided at end of esplanades
- No rain sensor shut-off device or soil moisture sensor
- Time clock control(s) not working
- Battery operating control(s) not working
- No backflow preventer's test report was provided
- Backflow preventer is not near water meter
- Spray heads not set 12" from curb
- Water spraying on to paved areas or street
- Spray heads leaking
- Main irrigation service line leaking
- Water bill has outstanding balance
- Other_____ (as deemed necessary by City)

Esplanade Meter Cut Off

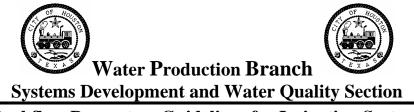
The City of Houston Water Conservation Branch performs periodic inspections on esplanade water meters. Water service may be disconnected for any of the following reasons:

- Time clock control(s) not working
- Water spraying on to paved areas or street
- Spray heads leaking
- Broken spray heads or rotors
- Main irrigation service line leaking
- Watering right-of-ways
- Failure to provide controller box key
- Control valves not working
- Other _____ (as deemed necessary by City)

City of Houston/Water Conservation Branch Contacts: Tommie Lewis, 713-837-0422; Ruben Gutierrez, 713-837-0418







Backflow Preventers Guidelines for Irrigation Systems

Irrigation systems make watering lawns and gardens easier. They save time, but water may be contaminated by weed killers, fungicides; pesticides, soil conditioners and/or fertilizers can be backsiphoned (backflow) into drinking water system. Irrigation systems not protected by approved backflow prevention assemblies could endanger the health of a household, neighborhood or community.

All irrigation systems must be equipped with an approved testable backflow prevention assembly. The assembly shall be installed on any water connection, which is dedicated to an irrigation system. The irrigation system can create a direct or potential health hazard. The hazards include cross-connection between the water supply and an irrigation system that may be equipped with pumps, injectors, pressurized tanks or vessels, or other facilities for injecting or aspirating chemicals. An irrigation system is also subject to contamination from submerged inlet, like sprinkler heads. Contamination may also occur on a system supplied from an auxiliary water supply, like on-site water well.

The two mechanical backflow prevention assemblies, to be installed on irrigation systems are:

- **P**ressure Vacuum **B**reaker Type Assembly (**PVB**)
- **R**educed-Pressure **P**rinciple **B**ackflow-Prevention Assembly (**RPBA**)

The acceptable specific installation criteria for the above backflow preventers are:

Pressure Vacuum Breaker (PVB) (See Figure 1):

- It must be installed in an upright position after the meter. Control valves can be located downstream of the PVB.
- PVB must be installed a minimum of one foot (12") above any downstream piping and the highest downstream opening.
- Where local topography effectively prohibits such installation, the alternative acceptable installation criterion is the RPBA.
- No injection device can be used to introduce chemical or fertilizer into the irrigation system.
- PVB is designed to prevent backsiphonage, *not backpressure*, and can operate under continuous pressure.
- PVB is to be tested upon installation, repair, or relocation and on an annual schedule thereafter, by a certified backflow prevention assembly tester.
- There should be no connections or by-pass between the meter and backflow prevention assembly.

Reduced-pressure Principle Backflow-prevention Assembly (RPBA) (See Figure 2):

- It must be installed in a horizontal position after the meter. Control valves can be located downstream of the RPBA.
- RPBA must be installed with a minimum clearance of one foot (12") at bottom of relief valve from grade level.
- Injection device can be used to introduce chemical or fertilizer into the irrigation system.
- RPBA is designed to prevent backpressure, backsiphonage, and can operate under continuous pressure.
- RPBA is to be tested upon installation, repair, or relocation and on an annual schedule thereafter, by a certified backflow prevention assembly tester.
- There should be no connections or by-pass between the meter and backflow prevention assembly.

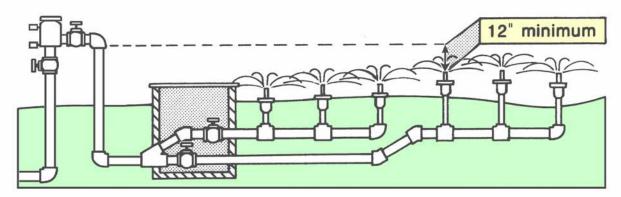


Figure 1 Typical installation – **P**ressure Vacuum Breaker (**PVB**)

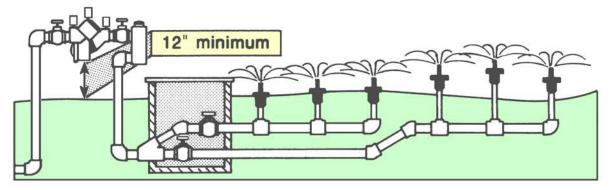
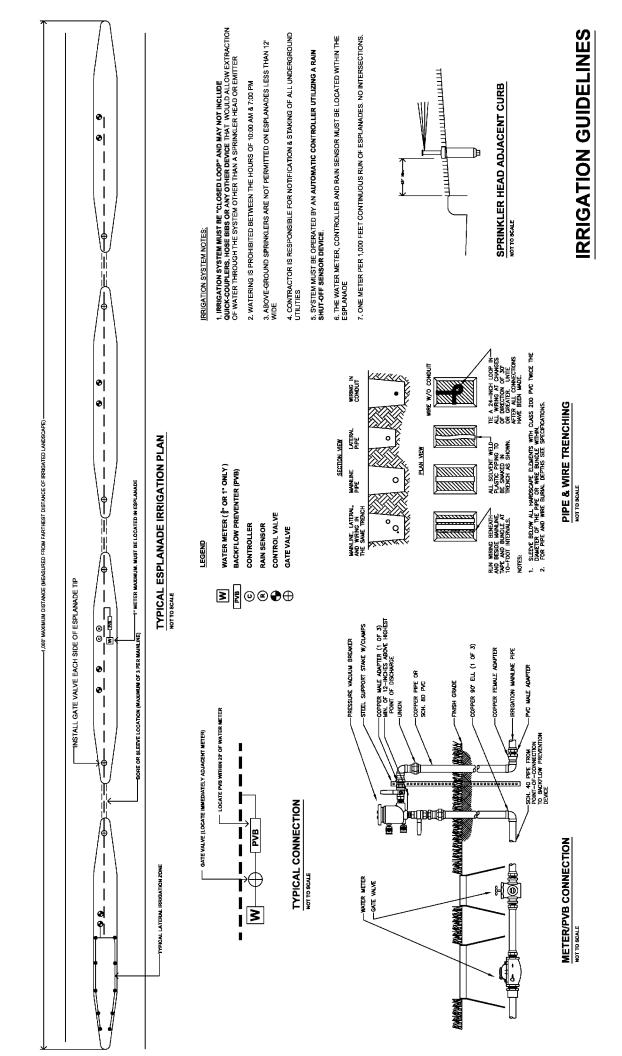


Figure 2 Typical installation – Reduced-Pressure Principle Backflow-Prevention Assembly (RPBA)

For more information or answers to your questions on particular situations, please contact: Water Production Branch / Systems Development and Water Quality Section 7000 Ardmore St, 2nd Floor Houston, Texas 77054-2302 ☎ (713) 842-4000 / Fax (713) 842-6903/04



PLANTING

PLANTING TIPS

After installing the irrigation system, prepare the esplanade bed by removing existing sod and weeds manually with a hoe or sod cutter (which can be obtained from a rental company). To make the job easier, treat sod or weeds with a chemical herbicide. Use herbicides in the morning, when it is less windy and always follow manufacturer's instructions.

Till soil additives (sand, composted soil, etc.) into the top 6-12 inches of the soil. A power tiller makes this job easier. Trees are planted first, then shrubbery and groundcover or seasonal flowers. Consider edging materials such as metal or plastic to define planting areas. Don't forget to include these costs in your budget estimate.

To retain moisture, trees and shrubs may be treated with soil-moist polymers. These water-absorbing/releasing crystals are available at most garden supply stores.

The optimal planting season is from mid-October to mid-February; however, with careful monitoring of plant, soil and weather conditions, planting can be done throughout the year.

TREE SPACING

Houston Parks and Recreation Department requires trees to be planted in either the "formal" or "natural" design.

The **formal** design for tree planting requires that trees be spaced with intervals of at least 40 feet.

The **natural** design allows trees to be planted in clusters, creating a forest-like setting. Trees are randomly planted at least two-feet apart, with a minimum five-foot mowing strip around the cluster. The planted area should be mulched and kept weeded, but requires no mowing. This planting design encourages natural regeneration and requires less maintenance.

PLANTING GUIDELINES FOR TREES

- A. Only container grown trees will be approved for esplanade planting.
- **B.** Trees must be planted at least 75 feet from the esplanade "nose" at an intersection and at least 50 feet from esplanade "nose" at a mid-block opening.
- **C.** Trees may not be planted closer than five (5) feet from the edge of an esplanade curb.
- **D.** Holes for the trees should be excavated one and one-half (1 ¹/₂) to two (2) feet greater in width than the diameter of the soil ball. The sides of the hole should be vertical and the bottom horizontal.





- **E.** Trees should be planted with the top of the root ball two (2) inches above existing grade. Care should be taken as not to injure the root system, trunk, or foliage. The trunk should not be used as a lever in positioning or moving the tree in the planting hole. No holes should be left uncovered overnight.
- F. Replace the soil removed from the hole, but do not add organic matter to this backfill. To help retain water, use excess dirt to build a small dam six (6) feet in diameter and six (6) to eight (8) inches above soil grade around the tree.
- **G.** Use treated pine or metal pole stakes to support young trees. Use two (2) or three (3) eight-foot stakes (depending upon tree size) pounded into the ground outside the root ball area. One-hundred-gallon trees should be tri-staked.
- H. Use wide nylon webbing (tree chain) to attach the tree to the stakes. Allow the tree enough freedom to sway in the wind so that it can develop strength. Remove the supports after the first growing season.
- Mulch should be placed loosely around trees planted within twenty-four (24) hours after planting to a uniform depth of three (3) to four (4) inches and to a diameter of six (6) feet. No leaves, branches, roots or other foreign material may be used as mulch. This area should be maintained free of weeds and grass vegetation with a three (3) to four (4) inch mulch cover for a minimum of one (1) year.
- J. Pruning should be done according to the standards of the National Arborist Association. The tree should be maintained in a shape appropriate to its species. Street trees should be pruned in accordance with the standards for hazard pruning contained in class III.
- **K.** When located in the visibility triangle, trees shall be headed to a minimum height of seven feet. There may be additional restrictions on planting trees on esplanades or busy major thoroughfares where excessive tree planting could create a traffic hazard by impairing the vision of motorists.
- L. Structural improvements such as planters are generally not permitted on esplanades and irrigation piping and electrical conduits are prohibited from being located over storm sewers.





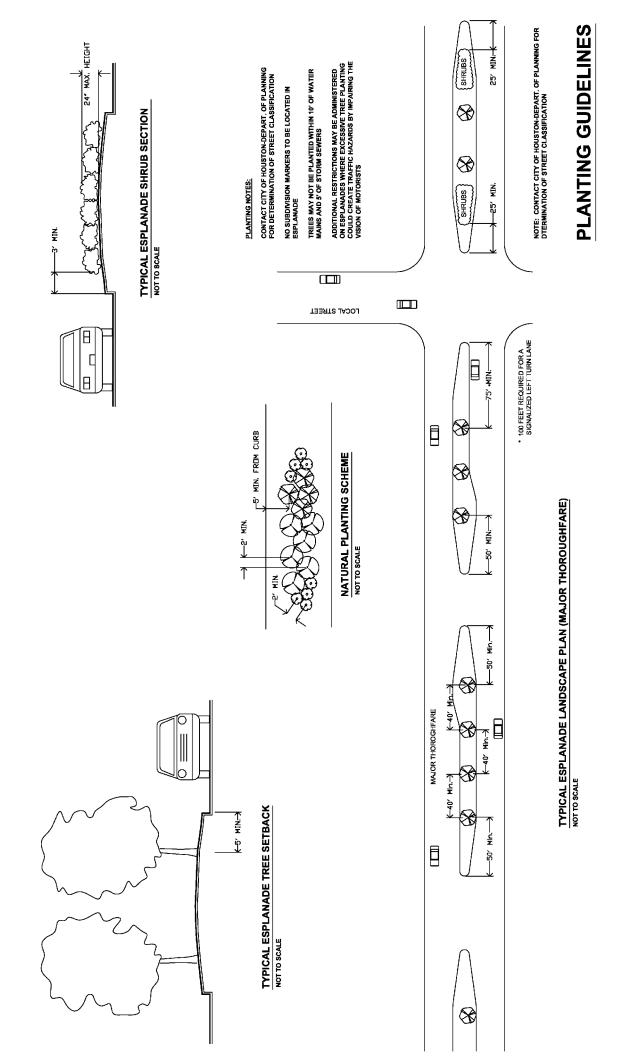
PLANTING GUIDELINES FOR SHRUBS

- **A.** Shrubs planted in an esplanade shall not be planted closer than 25 feet to the end of the esplanade or closer than three feet from the back of the curb or the final approved design line for the curb of any public street. Use of ground covers or annuals and perennials conforming to the height restrictions of a visibility triangle shall not be restricted.
- **B.** When located in the visibility triangle, shrubs shall be maintained at a maximum height of 24 inches as measured from the surrounding soil line.
- C. Holes for shrubs should be excavated six (6) inches greater in width than the diameter of the soil ball. The sides of the hole should be vertical and the bottom horizontal. Shrubs should be planted with top of root ball slightly above existing grade. No holes should be left uncovered overnight.
- **D.** Shrubs should be set in an upright plumb position at a depth slightly higher than grown in the container. Care should be taken not to injure the root system, trunk, or foliage. The trunk should not be used as a lever in positioning or moving the shrub in the planting hole.
- **E.** Holes should be backfilled with soil and tapped lightly and carefully so as not to damage roots. The shrub should be watered to settle soil around the roots and remove air pockets.
- F. All damaged branches shall be removed.
- **G.** A minimum three-inch layer of mulch shall be placed loosely at the base to retard weed growth and conserve moisture.









SUGGESTED PLANTS FOR ESPLANADES

The following plant list takes into consideration the difficult growing conditions often found on Houston's esplanades. Drought conditions and difficult soils (high pH, low organic matter, poor aeration, etc.) are frequently encountered on these sites. Reflective heat, noxious fumes, strong winds and other urban stresses also add to the challenges that beset esplanade plantings.

Not all esplanades are inhospitable, and the plant options on sites with optimum growing conditions may be rather numerous. Regardless of conditions encountered, neighborhood groups utilizing the following selections should have a reasonable degree of success. This list is in no way inclusive of all suitable plants for esplanade planting but is instead intended as a basic guide.

LARGE TREES Allee' Elm Ulmus parvifolia 'Emer II' American Elm Ulmus americana American Holly Ilex opaca Anacua Ehretia anacua Nyssa sylvatica var sylvatica Blackgum Cedar Elm Ulmus crassifolia Chinese Elm Ulmus parvifolia Ulmus parvifolia var drakii Drake Elm Evergreen Elm Ulmus parvifolia sempervirens Ulmus alata Winged Elm Montezuma Baldcypress Taxodium distichum mucronatum Baldcypress Taxodium distichum Bur Oak Quercus macrocarpa Quercus muehlenbergii Chinkapin Oak Laurel Oak Quercus laurifolia Live Oak Quercus virginiana Monterrey Oak Quercus polymorpha (a.k.a. Mexican White Oak) Overcup Oak Quercus lyrata Quercus acutissima Sawtooth Oak Southern Red Oak Quercus falcata Nutall Oak Ouercus nuttallii Water Oak Quercus nigra Shumard Oak Quercus shumardii Carya illinoensis Pecan Chinese Pistache Pistacia chinensis Green Ash Fraxinus pennsylvanica Eastern Redcedar Juniperus virginiana Western Soapberry Sapindus drummondii Southern Magnolia Magnolia grandiflora Liquidambar styraciflua Sweetgum Loblolly Pine Pinus taeda Drummond Red Maple Acer rubrum 'Drummondii' Mexican Sycamore Platanus mexicana





SMALL TO MEDIUM TREES

East Palatka Holly Mexican Plum Texas Redbud Texas Persimmon Crepe Myrtle Hawthorns Yaupon Holly Possumhaw Chinese fringe Mexican Buckeye Eve's Necklace

SHRUBS

Dwarf Nandina Dwarf Yaupon Indian Hawthorn Dwarf Bottlebrush Littleleaf Boxwood Junipers Crepe Myrtle Carissa Holly

GROUNDCOVERS

Asian Jasmine Trailing Junipers Liriope Mondo Grass Wedelia Japanese Ardisia

GRASSES

Mexican Feather Grass Bamboo Muhly Cassian Dwarf Maiden Grass Dwarf Fountain Grass Purple Fountain Grass Gulf Coast Muhly Blue Sedge

PERENNIALS

Plumbago Rosemary Lousiana Iris Coreopsis Purple Coneflower Daylily Antique Rose Lantana

- Ilex x attenuata 'East Palatka' Prunus mexicana Cercis canadensis var. texensis Diospyros texana Lagerstroemia sp. Crataegus sp. Ilex vomitoria Ilex decidua Chionanthus retusus Ungnadia speciosa Sophora affinis
- Nandina domestica 'compacta' Ilex vomitoria Raphiolepis indica Callistemon citrinus Buxus microphylla Juniper species Lagerstroemia indica Ilex cornuta 'Carissa'
- Trachaelospermum asiaticum Juniperus species Liriope muscari Ophiopogon japonieus Wedelia trilobata Ardisia japonica
- Stipa tenuissima Muhlenbergia dumosa Pennisetum alopecuroides 'Cassian' Miscanthus sinensis 'Yakushima' Pennisetum alopecuroides 'Hamelin' Pennisetum setaceum 'Rubrum' Muhlenbergia capillaries Carex glauca
- Ceratostigma plumbaginoides Rosmarinus officinalis Iris hybrids Coreopsis grandiflora Echinacea purpurea Hemeroeallis sp. Rosa sp. Lantana camara





ESPLANADE MAINTENANCE

The first-two years are critical for plants as they establish root systems. In the summer especially, you may choose to water twice a week. It is necessary to monitor the top 3-4 inches of soil for moisture content as water is of primary importance to plant health. Maintaining ample soil moisture levels, especially during time of drought, is necessary for at least the first three years of a project. Barring natural rainfall, a good general rule is to provide 5-10 gallons of water per caliper inch of tree per week during the growing season. Control weeds and maintain an adequate mulch layer to help retain soil moisture.

To maintain healthy plant growth, fertilize in mid-to-late fall and again in spring with a balanced fertilizer. Consult your local nursery for information on types of fertilizer, pesticides, and application methods.

Regular pruning provides good air circulation and maximum exposure to sunlight and diminishes problems. Maintain a regimen of pruning during winter to early spring when trees are dormant, being careful not to remove more than 25% of the foliage. Remove dead and injured branches as well as cross branches in order to accent the natural form of the tree or shrub. Always cut just above the bud or stem. Make sure cuts are sharp and clean using strong, sharp lopping shears or a pruning saw. Unless lower branches are topping out higher branches, don't prune the lower branches for several years. This will aid in trunk development. Call on professional arborists or tree trimmers to prune over 10-15 feet tall. Wounds and cuts on oak trees should be treated with a light-colored latex paint immediately. When-pruning diseased trees, blades and cutting surfaces should be treated with alcohol between cuts.

Weed eaters and lawnmowers can cause considerable damage to tree and shrub plantings. Any injury to a tree or shrub exposes it to insect and disease problems, and severe "girdling" injuries can kill the plant. Lawn equipment should be kept 2-3 feet away from newly planted trees and shrubs. Therefore manually weed around trees and maintain mulch cover at least twice during the growing season.

It may be necessary to replant trees, shrubs or groundcover due to unusual weather conditions or traffic damage. Include these normal replacement costs in your cost estimate. Providing continuous maintenance of a landscaped area is perhaps the most important part of the project. There are several options: the committee, an individual, or professional maintenance companies are capable of assuming this responsibility. Your decision will depend on funding and volunteer resources. Prepare a maintenance schedule to ensure that all necessary tasks are accomplished at appropriate intervals. Basic tasks include mowing, edging, trimming, weeding, pruning and litter pick-up. Don't forget to schedule fertilizing, watering, mulching and plant replacement.





GENERAL LANDSCAPE MAINTENANCE SCHEDULE

The following chart provides a suggested maintenance program. A program should be developed to best suit the requirements of the esplanade(s) in your area.

MAINTENANCE TASK	JAN	FEB	MAR	APR	МАҮ	ллг	JUL	AUG	SEP	ост	NOV	DEC	TOTAL
MOW, EDGE TRIM, DELITTER	2	2	3	4	5	4	4	4	4	4	3	3	42
TRIM SHRUBS			1	1	2	2	2	2	2	1			13
PRUNE TREES	1												1
FERTILIZE TURF & SHRUBS		1					1		1				3
FERTILIZE TREES											1		1
TURF PEST CONTROL		1			1					1			3
INSPECT IRRIGATION			1	1	2	2	2	2	2	1	1		14

SUGGESTED WATERING SCHEDULE FOR TREES AND SHRUBS

The following watering schedule may be utilized and revised during prolonged periods of rain.

Month	Water Schedule
November – February	Drench root zone once every 21 days
October, March and April	Drench root zone once every 14 days
May – September	Drench root zone once every 7 days

MAINTENANCE COSTS

Consult a landscape architect or landscape maintenance company for a bid on estimated costs to maintain the esplanade. Costs vary depending on turf or plant types, bed area, quality and frequency of service.





SAMPLE LETTER OF INTENT FOR ADOPT-AN-ESPLANADE PROGRAM

[Date]

Joe Turner Director Houston Parks and Recreation Department 2999 S. Wayside Drive Houston, TX 77023

Dear Mr. Turner:

[Name of organization] hereby submits its letter of intent to adopt a City of Houston esplanade(s) beginning at [Block number and street name] to [Block number and street name]. The intersecting streets are: [List intersecting street names].

Our proposed project includes [List all that apply]:

- 1. Landscaping additions and/or improvements
- 2. Irrigation system purchase, installation and donation to the City of Houston
- 3. Donation of existing irrigation system
- 4. Alternate watering method
- 5. Maintenance plan
- 6. Other

Enclosed is our Adopt-An-Esplanade application form and maintenance agreement for initial review. By submitting this information, **[Name of organization]** understands that all elements must meet the City's guidelines for approval and acceptance. **[Name of organization]** also agrees to accept full responsibility for this project, including its perpetual maintenance of the esplanade(s), proposed landscaping, and proposed irrigation system or alternate watering method.

It is our hope that we have met the guidelines set forth through the Adopt-An-Esplanade Program. Please contact me at **[Contact person's phone number]** if you have questions about our project, or to set up our on site meeting. We look forward to your response.

Sincerely,

[Name of contact person] [Title] [Name of organization]

Encl.

ADOPT-AN-ESPLANADE <u>Program Application and Maintenance Agreement</u>

Thank you for your interest in the Adopt-An-Esplanade Program. We value your commitment to help beautify and maintain Houston's green space. Please tell us more about your organization and your plans for the esplanade you wish to adopt.

splanade/Median Address:
otal linear miles of esplanade(s) to be adopted:
ach esplanade segment to be adopted has a width of 12 feet or more: Yes No
lame of Adopting Organization:
ddress of Organization:ZIP
hone: () Fax: ()
mail:
Project Manager: Project Manager:
Home Address: ZIP
Email:
Updates to this information must be provided to the Parks and Recreation Department within 0 days of a change. Failure to report changes to the Department may result in the lisconnection of water service.
lease describe your plan for the esplanade(s) listed above.
ROJECT TIMELINE roposed dates for esplanade construction (installation of irrigation and plant material):
ANDSCAPING Description of plant material:



ADOPT-AN-ESPLANADE <u>Program Application and Maintenance Agreement</u>

IRRIGATION

An automatic irrigation system is the preferred system for watering esplanades. All design, plan, installation, new water meter, operation and maintenance costs are the responsibility of the adopting organization.

The City will only pay for water usage when the adopting organization purchases and installs an approved, automatic irrigation system that meets City specs. The adopting organization must also deed the irrigation system over to the City and pay for any prior water usage.

[Complete A or B Below]

A)	Type of irrigation system:	
	Name of bonded plumber/qualified contractor:	
	Name of person/company responsible for maintenance to has been approved and installed.	o the irrigation system once it
	Name: Phone: _	
	Will you be applying for a new water meter and tap? YE	S NO
	List existing meter locations if known:	
B)	Type of alternate watering method (Check one):	
	Oscillating/soaker nose sprinkler Watering Se	rvice
	Hand-held hose Other (Describe):	

MAINTENANCE AGREEMENT

Once the esplanade is planted, it is the responsibility of the adopting organization to maintain the esplanade to include:

- Watering and fertilizing
- Mowing, edging and de-littering
- Weeding, trimming and pruning
- Seasonal plant replacement
- Irrigation system maintenance, repair or adjustment
- Other (Describe):_____

By signing below, ________ association/organization agrees to perform all necessary and required maintenance to the esplanade from the point of approval and acceptance. The Parks and Recreation Department reserves the right to remove all plant material within the esplanade if maintenance under this adoption agreement ends.



DDO1ECT#	
PROJECT#:	

ADOPT-AN-ESPLANADE Program Application and Maintenance Agreement

Agreed and accepted:

Project Manager Signature

Date

Completion of this form does not constitute approval to proceed with planned projects. Your application will be reviewed and you will receive instructions to submit proposed plans within 30 days. Adoption of an esplanade shall not connote the transfer of public spaces to any community, corporation or individual, for private or commercial use.

Please submit this completed application and maintenance agreement, along with your organization's letter of intent to:

Adopt-An-Esplanade Program Houston Parks and Recreation Department 2999 S. Wayside Dr. Houston, TX 77023

Information: (832) 395-7029





Application for Donating an Irrigation System to the City of Houston

Name of Organization					
Address of Organization					
City State _TX ZIP					
Phone: () Fax: ()					
Name of Responsible Person:					
Title: Email:					
Address of Responsible Person:					
City State _TX ZIP					
Phone: () Fax: ()					
Updates to this information must be provided to the Parks and Recreation Department within a days of a change. Failure to report changes to the Department may result in the disconnection water service.					
Location(s) of Irrigation System:					
Description of Irrigation System:					
Description of Plant Material:					
Signature of Responsible Person Date					
Acct. #	<u>NLY</u>				
1. Inspected:/ Water Conservation Employee# Approved: Rejected:	_				
2. Inspected:// Water Quality Employee# Approved: Rejected:					
3. Inspected:/ UCS Employee# Approved: Rejected:	-				



TAPS AND METERS SECTION 3300 MAIN STREET FIRST FLOOR HOUSTON, TEXAS 77002 PH: (713) 535-7675 FAX: (713) 535-7941

WATER METER APPLICATION

CLASS OF SERVICE:	RESIDENTIA	LCOMMERC	IALOTH	ER
OWNER'S NAME:		PHONE #:_		
SECOND PHONE #:		FAX #:		
SERVICE ADDRESS				
BILLING ADDRESS		CITY	STATE	ZIP
		CITY	STATE	ZIP
AGENT:		PHONE #:		
PLUMBER FROM LIST:				
	LARGEMENT SEF	PARATE RELOC		SATION
SEPARATION ADDRESS				
METER SIZE & PRICE:	5/8"-INCH	\$ 82.00		
	1"-INCH	\$ 102.00		
	1.5"-INCH	\$ 163.00		
	2"-INCH	\$ 211.00		
NOTE:				
SIGNATURE:				



City of Houston Department of Public Works and Engineering Informal Contract Agreement For New Meter Installation: 2-inch Meters and Smaller

This agreement between the City of Houston and the property owner reflects the owner's decision to be responsible for the installation of the water service line and meter described below. This agreement will help coordinate the proper setting of the water meter and service line.

Owner Name:		Owner's Phon	e: <u>()</u>	Owner's Mailing
Address:				City:
_State	Zip			
Contractor's Name	(Company):	Contracto	r's Phone: ()	Contractor's
Mailing Address				City:
State	Zip			
M	ater Address	Meter Size	Tap Size	Short/Long
1				
2				

Work Order Number

The Owner or Contractor, as representative of the Owner, Understands and Agrees With the Following:

The Contractor shall notify all applicable utility companies by calling (713) 223-4567 and will identify all underground utilities prior to any excavation. The Contractor shall make no tap or set a meter until inspection and meter fees have been paid by the owner/contractor to Utility Customer Service and the City of Houston has issued a Letter of Authorization. The Letter of Authorization will be issued after inspection and meter fees have been received and posted to your account by Utility Customer Service. The Contractor must contact the Water Maintenance Inspection Supervisor or the City Inspector assigned to that project and schedule an inspection of the installation. This must be done at least two (2) working days prior to the meter installation.

In the event that the Contractor cuts any utility company underground lines, it is expressly agreed and understood that the Contractors insurance company or bonding surety shall hold harmless the City of Houston from any liability, loss, cost, expense and/or damage arising out of/or in connection with the work done by the Contractor.

Violation of these guidelines will result in the contractor's immediate removal from the City's approved contractor list and a recommendation to red tag the project (stop work) until a new City-approved contractor is selected by the customer.

The Owner Understands and Agrees With the Following:

- No work will be initiated until inspection and meter fees have been paid by the owner/contractor to Utility Customer Service. Fees will not be considered as paid until Utility Customer Service has received the fees and posted them to the owner's account.
- The Owner's Contractor shall make no tap or set a meter until a Letter of Authorization has been issued. The contractor will contact the Water Maintenance Inspection Supervisor at (713) 641-7826 to have an inspector assigned and to schedule the installation.
- 3. The City of Houston will furnish the meter and meter box only; the Owner or the Owner's contractor will furnish all materials and labor required for complete installation.
- 4. All work will be inspected by the City of Houston Water Maintenance Inspector.
- 5. The contractual relationship, if any, between the Owner and the Owner's Contractor shall not impose any burden on the City of Houston with respect to payments due the Contractor.

- 6. All meters or meter boxes which are connected to the City of Houston's water distribution system will become and remain the sole property of the City.
- 7. Requests for refunds shall not be approved if a Water Main Extension project has been initiated based on this application.
- All existing service taps and service lines that will not be used to provide water service for the tract(s) being developed will be cut plugged and abandoned by the owner/contractor at their expense. Meters and final inspection approval will not be issued until all services have been cut, plugged and abandoned.

Expiration: All contract agreements will expire by limitation and become null and void if the work authorized by the contract agreement has not commenced within 360 days from the date of the agreement or if work authorized is suspended or abandoned within 360 days.

The Utility official may extend the time for action by the owner/contractor for a period not to exceed 180 days on written request by the owner/contractor showing that circumstances beyond the control of the owner/contractor to complete the work specified. Written request for extension should be addressed to Utility Customer Service, 4200 Leeland, Houston, Texas, 77023, Attn.: New Service Section. **No agreement may be extended more than once**. If extension request is not made and posted on or prior to the contract agreement expiration date, the agreement will be considered expired by limitation. Upon the expiration and/or termination of this contract agreement the City will retain the first twenty-five dollars (\$25.00) and ten (10) percent thereof and refund the balance to the applicant. To reestablish service, customers must reapply and pay appropriate fees.

	1	
Owner's Signature		Date
	_ /	
Agent's Signature		Date
	1	
Administrative Assistant/ Utility Customer Service		Date



CITY OF HOUSTON Public Works & Engineering Department Traffic Engineering Branch Right-Of-Way Occupancy Permit Application



To contact us: Traffic Engineering Branch City of Houston, P.O. Box 1562, Houston, TX 77251-1562 Attention: R.O.W. Occupancy Permit Application Phone: 713-837-7262, Fax: 713-837-7290, E-Mail-TrafficPermits@cityofhouston.net For an online application, please visit <u>www.ci.houston.tx.us/pwe/eccred/laneclosure.htm</u>

Please provide the following information to process your request for lane closures. *** <u>USE ONE FORM FOR EACH STREET.</u> A MINIMUM OF THREE BUSINESS DAYS' NOTICE IS REQUIRED ***

Street Name & Block Number:				
Keymap Page & Number:				
Requested Dates:	From:		То:	
Requested Time of Day:	From:		То:	
Affected Side of the Street: (Ch	neck One OR Explain Below		E 🗌 W	
Number of Lanes Requested:		-	for parking vehicles?	Yes No
Total Number of Existing Lane	s:	Number of Lan	es Currently Open:	
City of Houston APPROVED Stro	eet Cut Permit No. (if applic	able):		
City of Houston Issued Drawing	g No. (if applicable):			
(A traffic control plan (TCP) is required Traffic Engineering Branch.)	for closures affecting two or more	anes. Other situations m	ay require the submittal of a T	CP at the sole discretion of the
Will requested work and/or par	king be behind other contra	ctor barricades?	Yes No	
Briefly explain the scope of the	project (include license plate	e numbers if parking	g vehicles):	
Is sidewalk or crosswalk affecte If answering NO to either of the 1. Will the pedestrian way imp 2. Will a hard surfaced 3' pede provided at all times? Yes	se questions, please request a airment (sidewalk or crossw	alk) be less than 14 o	<i>airment Application.</i> lays?	requirements be
Applicant's Name:				
Company's Name:				
Company Address:		City:	State:	Zip:
Company Phone No:	Fax N	0:	Alt. No:	
E-Mail Address:				

This application provides the Traffic Engineering Branch necessary information to process your request. Additional information may be required. Submission of an application does not provide to the applicant authority or permission to occupy any portion of the street or right-of-way; only an approved permit resulting from the submittal of a complete application enables such action to occur. To ensure safe and efficient flow of traffic and pedestrians, the application may be modified or rejected, or any previously issued permits may be modified or revoked at the sole discretion of the Traffic Engineering Branch.

Date

COUNTY OF HARRIS

δ δ

δ

DEED OF GIFT

, A_____

_____, ("Grantor") hereby conveys and grants to the City of Houston ("City") certain items of personal property comprising an irrigation system located in public rights-of-way, described more particularly as follows ("System"):

All pipes, sprinklers, metering devices, backflow preventive devices, controls and other equipment located in the _____

Houston Harris County, Texas

The Grantor represents that is has free and clear title to the System and that there are not outstanding debts associated with the purchase, installation or repair of the System.

This conveyance shall not be effective until delivered to the City of Houston and accepted by the Director of Public Works and Engineering of the City.

DATE				
Phone				
Ву:				
Title:				
ACCEPTED:				
Director of Public Works and Engineering				
_				

RESOURCE LIST

TO MAKE APPLICATION TO ADOPT-AN-ESPLANADE:

CITY OF HOUSTON PARKS & RECREATION DEPARTMENT ADOPT-AN-ESPLANADE COORDINATOR 2999 SOUTH WAYSIDE DRIVE, HOUSTON, TX 77023 (832) 395-7029

TO OBTAIN ENGINEERED STREET DRAWINGS:

CITY OF HOUSTON PUBLIC WORKS FILE ROOM City of Houston File Room, 611 Walker (basement level) Houston, Texas 77002 (713) 837-0569 OR: online at <u>http://pwegis.pwe.ci.houston.tx.us/</u>

TO APPLY FOR PERMIT TO INSTALL A WATER METER:

CITY OF HOUSTON TAPS & METERS 3300 MAIN, FIRST FLOOR, HOUSTON, TX 77002 (713) 535-7675

TO LOCATE UNDERGROUND UTILITIES OR BURIED CABLES:

LONE STAR NOTIFICATION CENTER(713) 223-4567TEXAS ONE CALL1-800-245-4545

TO LOCATE A LANDSCAPE ARCHITECT:

AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS-GULF COAST CHAPTER (713) 787-0719 http://asla.org/nonmembers/sewin.cfm

TO LOCATE A LICENSED IRRIGATOR: HOUSTON GULF COAST IRRIGATION ASSOCIATION P.O. BOX 19511 (281) 983-0112 http://www.hgcia.org/

INFORMATION ON PLANTS:

TEXAS COOPERATIVE EXTENSION HARRIS COUNTY (URBAN PROGRAM) #2 ABERCROMBIE DRIVE, HOUSTON, TEXAS 77084 (281) 855-5600 <u>http://harristaex.tamu.edu/</u>

TEXAS A&M HORTICULTURAL PROGRAM <u>http://aggie-horticulture.tamu.edu/tamuhort.html</u>





FOR TECHNICAL ASSISTANCE AND INFORMATION REGARDING TREE PLANTING: TEXAS FOREST SERVICE, THE TEXAS A&M UNIVERSITY SYSTEM 713-688-8931 http://txforestservice.tamu.edu/

TREES FOR HOUSTON P.O. BOX 130096 HOUSTON, TX 77219-0096 713-840-8733 http://www.treesforhouston.org/

FOR SOIL TESTING PACKET: (\$10 FEE) TEXAS COOPERATIVE EXTENSION HARRIS COUNTY (MASTER GARDNER PROGRAM) #2 ABERCROMBIE DRIVE, HOUSTON, TX 77084 281-855-5600 http://www.harris-tx.tamu.edu

FOR INFORMATION REGARDING HOW TO PARTICIPATE IN THE KEEP HOUSTON BEAUTIFUL PROUD PARTNERS AWARD, VOLUNTEER ORIENTATION AND SUPERVISION TIPS, WAIVERS, SAMPLE WORKDAY PLANNING CHART AND AGENDA AND FOR PROBATIONERS TO HELP WITH PHYSICAL LABOR:

KEEP HOUSTON BEAUTIFUL, INC. 5909 WEST LOOP SOUTH SUITE 670 P.O. BOX 460648 HOUSTON, TX 77056-8648 713-839-8855 http://www.houstonbeautiful.org/





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Department of Public Works and Engineering Planning and Operations Support Division

3300 Main Street, First Floor

(713) 535-7676

LIST OF APPROVED TAPS AND METERS CONTRACTORS

(713) 535-7941 (Fax)

This is a list of contractors who have met the City's bond ing/i nsurance requirements for the tapping of public water mains and the installation of water meters. This list includes all bonded contractors who have asked the City to be placed on the list. Contractors must appear on this list in order to provide these services. However, no recommendation to use a particular contractor on this list is implied by the City. The Contractual Relationship, if any, between the Owner and the Owner's Contractor shall not impose any burden on the City of Houston with respect to payments due the Contractor or Contractor's Obligations to Owners. The City of Houston shall be and is hereby released and relieved from any and all liability from damages occasioned by maintaining the list of contractors. This list is maintained by the City of Houston Department of Public Works and Engineering, Taps and Meters, for the convenience of the general public.

THIS LIST SHALL BE REVISED EVERY THIRTY (30) DAYS

REVISED: 03-01-2004

NAME	ADDRESS	ZIP	TELEPHONE	FAX NO.		
All-Phase Plumbing	5934 Allison Road	77048	(713) 991-4879	(713) 987-1569		
RR Beck Professional Service, Inc.	7123 Apache	77028	(713) 491-8399	(713) 491-8226		**
Modern Plumbing	4828 Pine Street	77503	(281) 487-8172	(110) 401-0220		**
Vicon Services	P.O. Box 1227, Katy	77492	(281) 391-8601		*	**
Dial One Plumbing Inc.	19491 N. Hwy 35 Alvin, Tx	77511	(281) 331-6868	(713) 331-1917		
Bethlehem Plumbing Co.	9267 Friendship	77080	(713) 462-7689	(115) 551-1517		**
Cardinal Utilities	5919 Bellaire Blvd.	77081	(713) 666-9977			**
Blue Sky Plumbing	13709 Candleshade	77045	(713) 433-6998	(713) 433-3989	*	**
Jimerson Underground, Inc	P.O. Box 2066 Sugar Land, Tx	77487	(281) 261-0976	(281) 499-5336		**
Central Texas Equipment	20543 1-45 North # 126 Spring, Tx	77383	(832) 661-3397	(281) 651-7305		**
Aaron Plumbing & Utilities	11026 Montverde	77099	(281) 879-1646	(201) 031-1303		**
Burks & Burk Inc.	3618 Briley	77004	(713) 748-5340			**
Sanchez Plumbing	9119 Lake Park	77078	(713) 635-5459	(713) 631-0578	*	**
Tower Plumbing	14818 Joan Rd	77085	(713) 726-0601			
Safe Flow Utility	P.O. Box 193 Simonton, Tx	77476		(713) 723-3676		**
E & A Utilities	3920 Anderson Rd	77053	(713) 413-3774	(281) 346-2923		**
E. Fobbs Plumbing Company	4001 Vaughn Street	77093	(713) 413-9004	(713) 413-9008		**
Clardy Plumbing Company	1620 Peachleaf		(713) 631-0969	(204) 440 0044	÷	**
B & B Contractors	Rt. 5 Box 320	77039	(281) 449-4401	(281) 449-0844		**
Jackson Plumbing Co.		77327	(281) 723-4427	(281) 324-9299		
Pace Plumbing Company	P.O. Box 21141, Houston 3115 Scott Street	77226 77004	(281) 541-3127	(713) 528-3011		**
			(713) 659-7669	(740) 000 7400	•	
Big G Plumbing & Utilities W.C. Bell, Inc.	P. 0. Box 920712 Houston, Tx	77292	(713) 864-8836	(713) 863-7189		**
National Plumbing & Utilities	131 S. Trade Center Pkwy, Conroe, Tx	77385	(936) 273-4440	(936) 273-4601	<u> </u>	**
	8343 Howard Dr	77017	(713) 643-0889	(713) 847-0154		**
Backup, Inc. Blanco Co.	P.O. Box 362 Richmond,Tx	77406	(281) 238-8699	(281) 238-8717	2	**
Venados Plumbing	P.O. Box 681	77588	(713) 733-6666	(713) 733-3404	2	
Caribbean Contractors	1010 Paul Pasadena, Tx 1012 Haddking Suite F	77506	(713) 472-5749	(713) 472-4045	-	**
	1013 Hodgkins Suite F 6901 Raton Road	77032	(281) 987-2000	(281) 442-6888		**
Mickie Service Company General Plumbing Contractors	244 East Helms	77055	(713) 682-7454			
Burks Water Services & Utility Co.		77037	(281) 820-4747			**
L-D Backhoe Service	301 Adams, Unit B 12403 River Trail Dr	77011	(713) 928-8000	(004) 500 0040		
Bic's Plumbing Services Co.	3131 Roe	77050 77061	(281) 590-9242	(281) 590-9249		**
Strutton Plumbing Company	5805 Cypress Street	77074	(713) 947-7229	(713) 641-3061		222
Jason Underground Utilities			(713) 774-9197	(004) 050 0770		**
Ace Utility Service	555 Normandy #1412	77015	(281) 358-7007	(281) 358-0770		
Mahadeo Plumbing Company	7710 T Cherry Park #249	77095	(281) 859-4099	(281) 859-2689	1	**
	6705 Loma Vista	77085	(713) 721-8330		0.00	
ST Environmental Services	16337 Park Row	77084	(281) 578-4200			***
Dana Dhumbing Inc	3928 Kingwood Drive	77339	(281) 358-2828	(001) 101 1011		
Dans Plumbing, Inc.	5519 East Road, Baytown	77521	(281) 421-7598	(281) 421-1841		**
John Leonardo Plumbing	6119 Allison Rd	77048	(832) 372-5179			**
Elite Plumbing Corporation	13645 Westland Blvd	77041	(281) 469-6766	(281) 469-2724		**
B-K Plumbing	8410 Quailcrest, Missouri City	77489	(281) 835-0483	(281) 835-0132		**
Alpha 1 Service, Inc.	P.O. Box 907, Missouri City	77459	(281) 438-1494	(281) 437-8838		**
Hernandez Monreal Plumbing The Aggie Plumber	P.O. Box 16854 5738 Luce Street	77022	(713) 699-1782			**
I DO AGGIO DILIMBOR	b (as I line Street	77087	(713) 643-8600	(713) 643-4640		

*5/8-inch through 2-inch water meter installations **3-inch and larger water meter installations and other contract work

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Kingwood Area Only *Commercial Only