

# WEF 2016 Service Project



**September 1, 2016**

# Presentation Agenda:

- About WEF
- Project Location
- Existing Conditions
- Proposed Improvements
- Construction Documents
- SW Calculation Estimates
- SW Products
- Cost & Maintenance



# WEF & Community Service Projects:

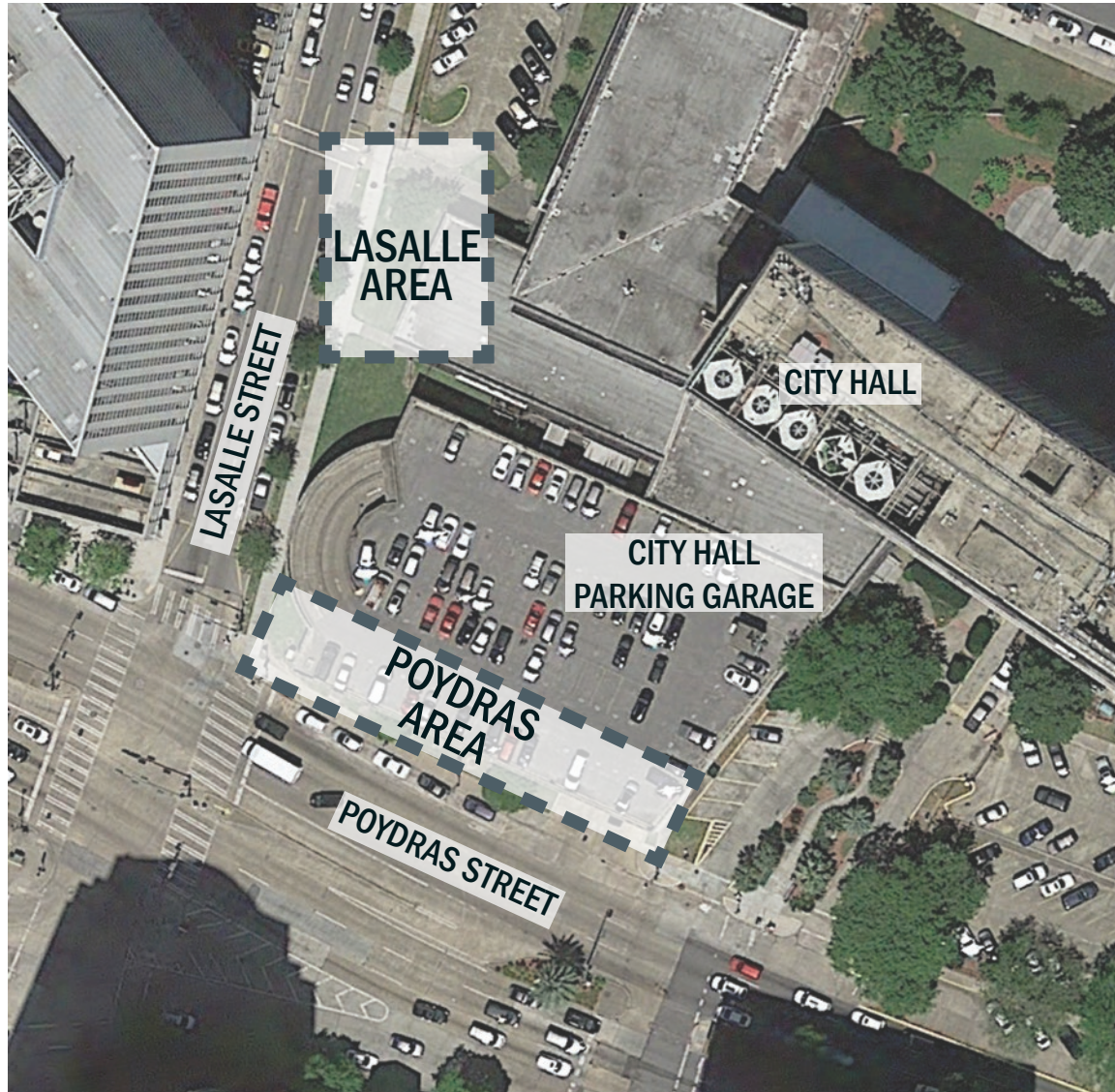
## Water Environment Federation

- Annual conference held in New Orleans every other year since 2010
- Students & Young Professionals
- Past projects in New Orleans:
  - 2010 - Bioswales in the Bayou
  - 2012 - City Park Wetlands
  - 2014 - Conrad Park





# 2016 Project Location:





# Existing Conditions:



POYDRAS STREET: Grassy space between parking garage and sidewalk



POYDRAS STREET: Flooded street



# Existing Conditions:



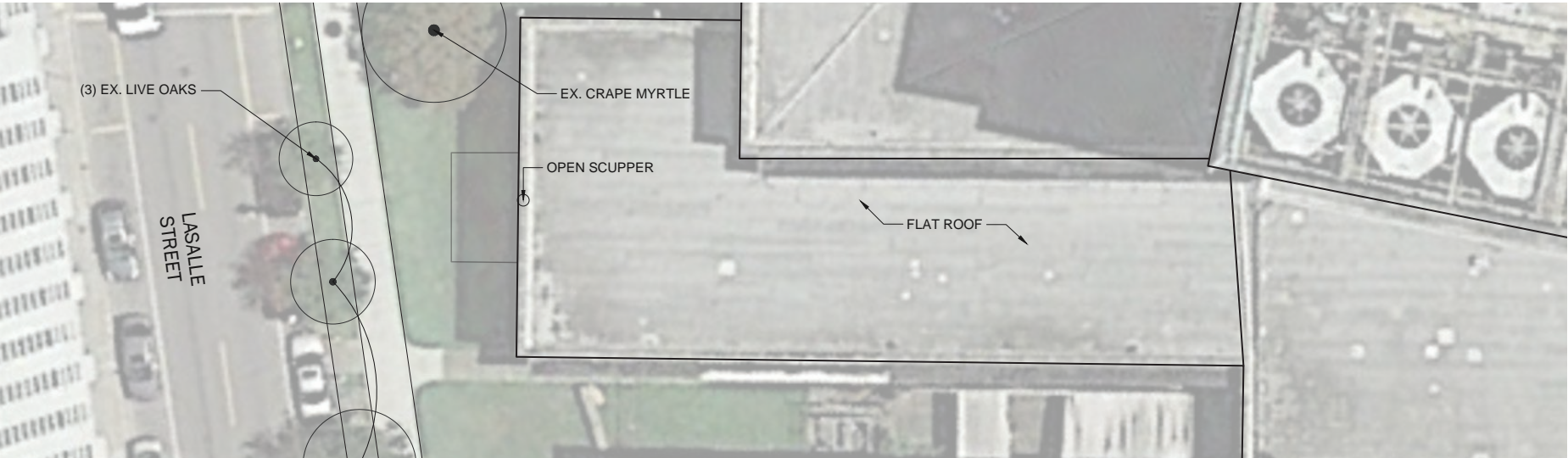
POYDRAS STREET: Water pouring from scupper



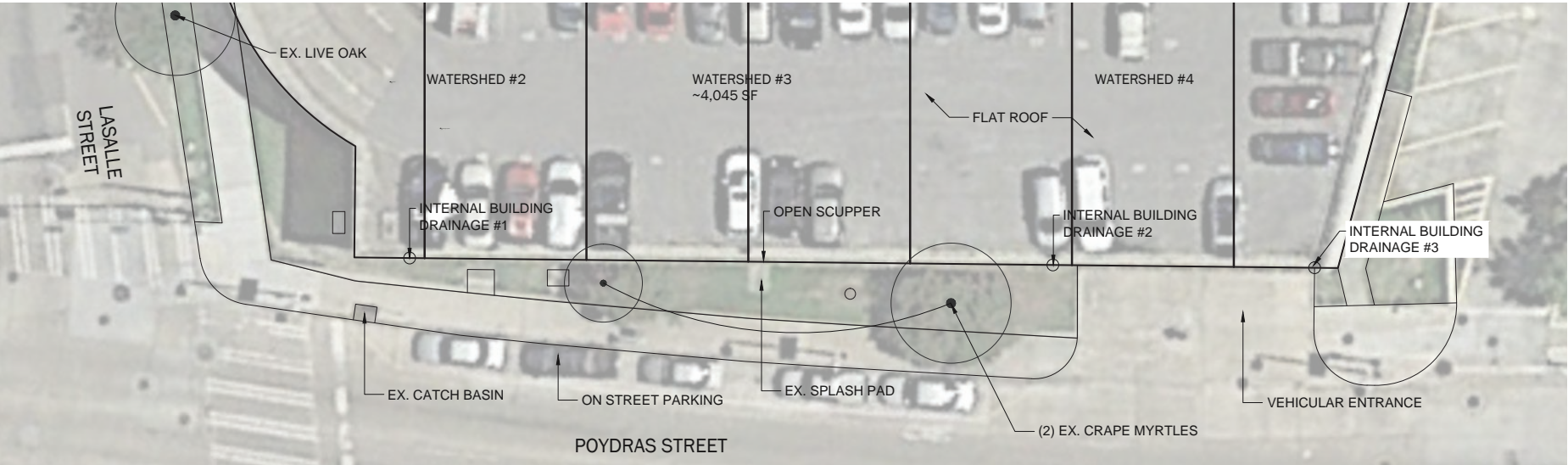
LASALLE STREET: Greenspace with open scupper



# Existing Conditions:



LaSalle Street



Poydras Street

# Proposed Site Improvements:



LaSalle Street



DANA BROWN & Associates



# Proposed Site Improvements:



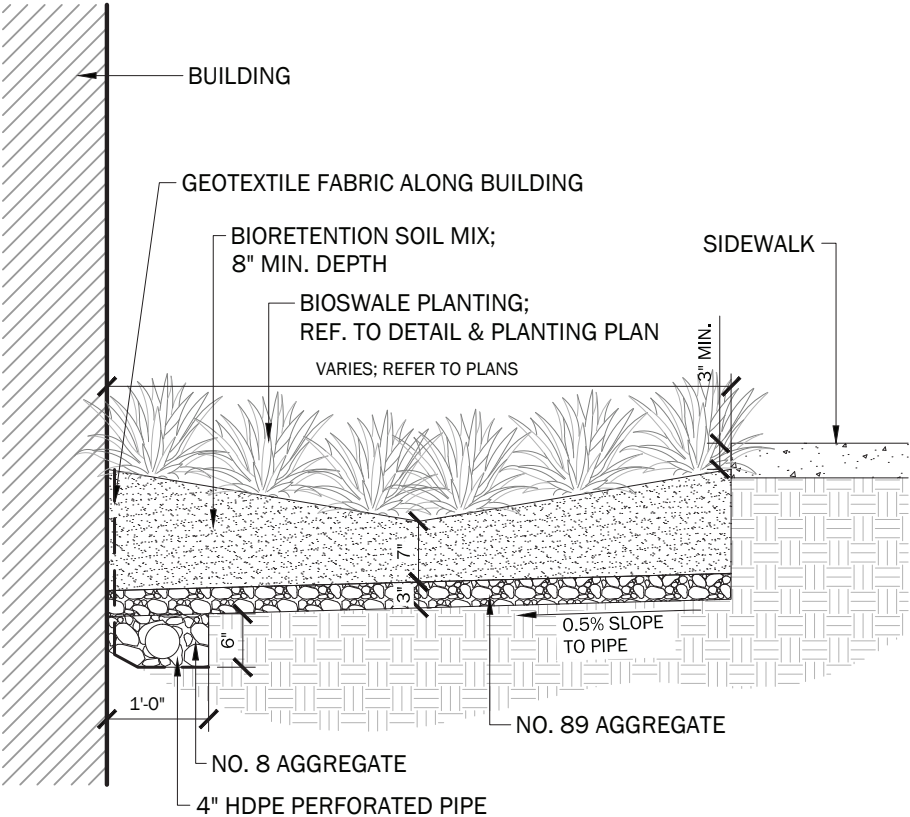
0 10 20 30 40 Feet



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Poydras Street

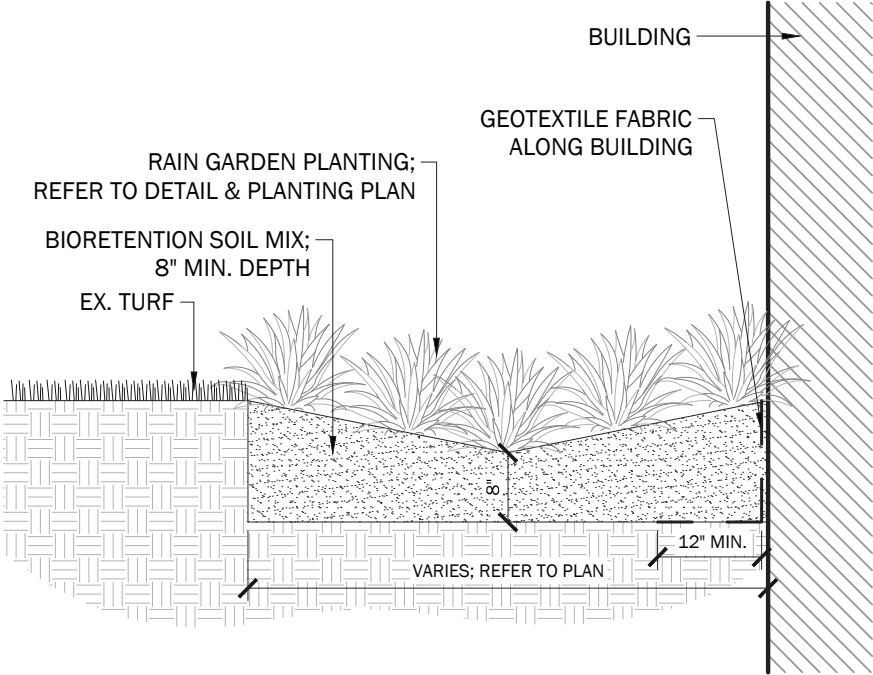
# Bioswale & Rain Garden Details:



1 CITY HALL BIOSWALE

3/4" = 1'-0"

326002-55



2 CITY HALL RAIN GARDEN

3/4" = 1'-0"

P-WEF-



# Plant Species:



Pink Muhly Grass



Louisiana Iris



African Iris



Dwarf Palmetto



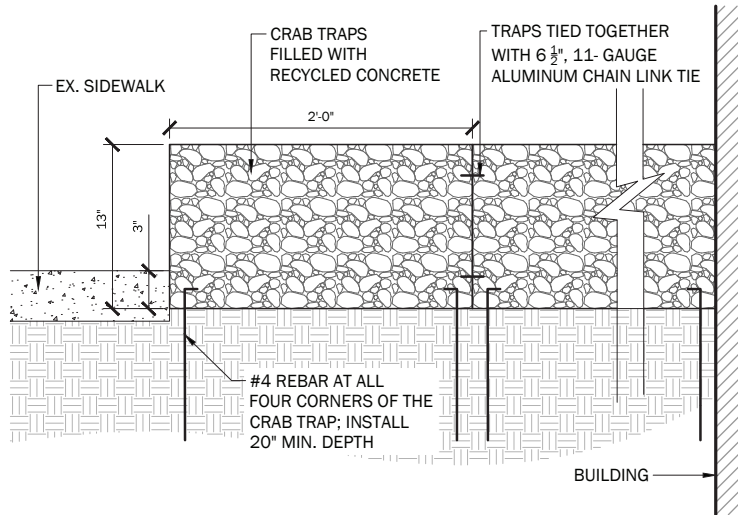
Spider Lily



Black Gum



# Energy Dissipation:





# SW Calculation Estimates:

## Poydras Street:

- Existing runoff volumes:
  - 1.25" of any storm - 343 CF
  - 1 Year, 24 hour storm - 1,701 CF
  - 2 Year, 24 hour storm - 2,349 CF
  - 10 Year, 24 hour storm - 3,653 CF
- Estimate of post installation runoff, 1,210 SF bioswale
  - 1.25" of any storm - 0 CF of runoff (1429% captured)
  - 1 Year, 24 hour storm - 0 CF of runoff (192% captured)
  - 2 Year, 24 hour storm - 0 CF of runoff (107% captured)
  - 10 Year, 24 hour storm - 961 CF (51% captured)

# SW Calculation Estimates:

## LaSalle Street:

- Existing runoff volumes:
  - 1.25" of any storm - 29 CF
  - 1 Year, 24 hour storm - 243 CF
  - 2 Year, 24 hour storm - 363 CF
  - 10 Year, 24 hour storm - 616 CF
- Estimate of post installation runoff, assumes 160 SF of bioswale
  - 1.25" of any storm - 0 CF of runoff (100% captured)
  - 1 Year, 24 hour storm - 0 CF of runoff (149% captured)
  - 2 Year, 24 hour storm - 32 CF of runoff (80% captured)
  - 10 Year, 24 hour storm - 231 CF (37% captured)



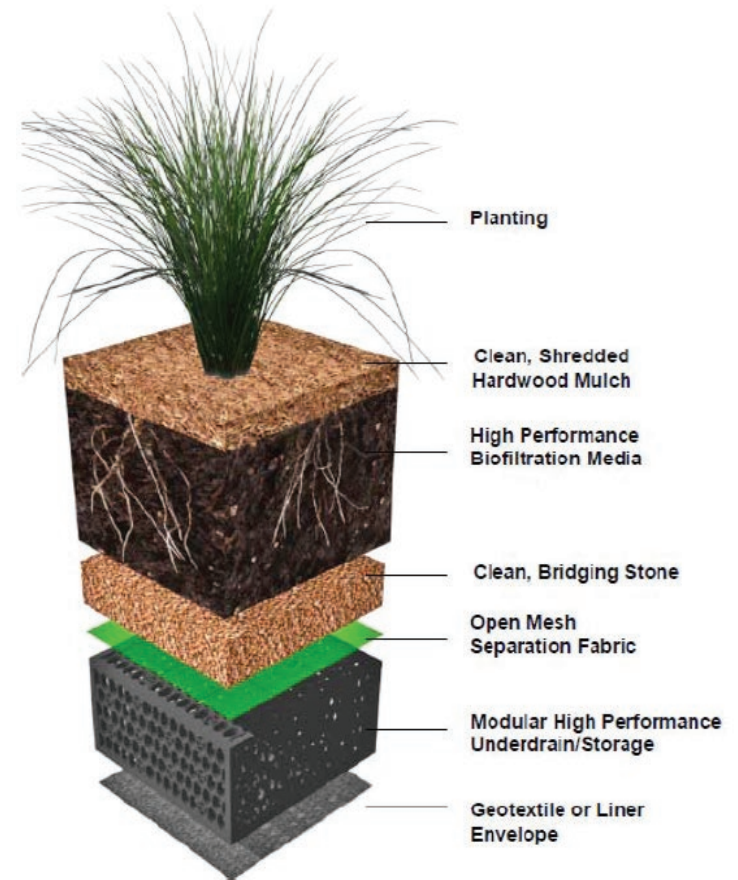
# EcoServices SW Products:

## FocalPoint High Performance Biofiltration System:

- High flow rates: ~ 100 inches/hour
- Removes pollutants: TSS (80%), Phosphorus (60%), Nitrogen (50%)

## Void Space Aggregate:

- Steel slag, byproduct of steel manufacturing
- Variety of sizes
- At least a 45% void ratio (typical limestone is ~30%)



# Construction, Volunteers, & Maintenance:

- Construction EcoServices: Focal Point
- Pre-Volunteer Day Construction:
  - Tree removal
  - Excavation
  - Concrete work
  - Pipe installation
- Volunteers
  - Backfill
  - Grading
  - Constructing Gabions
  - Planting
  - Mulching
- Maintenance by the DDD:
  - Agreement to provide on-going maintenance of the site
  - Funding from WEF will be available in the future



# Questions?

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