

# Zilker Park - Stratford Lane Landfill Redevelopment

## Environmental Commission Presentation

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# Purpose

- Protect the Butler landfill clay cap
- Minimize erosion
- Improve drainage flow
- Improve water quality
- Non-permanent improvements that address current operational logistics and allows for future considerations
- Provide all weather \ year round surface material to improve park operations for:
  - Event staging for large events including Austin City Limits and Trail of Lights
  - Overflow parking space for events at Zilker Botanical Garden Center and Austin Nature and Science Center



# Partnering and Public Involvement

- **C-3 Presents through Austin Parks Foundation (APF) is providing funding to PARD**
- **The Trail Foundation has been involved to**
  - Improve trailhead connections, beautify the area around the trail head
- **Community and Stakeholder input and feedback include -**
  - Parkland Events Task Force per Council Resolution
  - Parks Department operations and maintenance, PARD Reservations Office, Zilker Botanical Garden, Austin Nature Center, Planning and Development PARD staff
  - Watershed Protection Department, Texas Commission of Environmental Quality Landfill and Water Quality Staff
  - City of Austin, Development Services Division staff
  - City of Austin Solid Waste Services staff
- **News release was sent out by APF and C-3 Presents, April 25, 2018**
- **Parks and Recreation Board May 22, 2018**



# Site Conditions and Current uses

- **Site is an area of parkland over a landfill**
  - ❑ Landfill is located on the waterfront overlay secondary set back of Lady Bird Lake
  - ❑ State law requires the COA to maintain the clay cap
  - ❑ This soil condition has proven difficult to maintain as a green space
- **Minimal options for development due to landfill requirements**
  - ❑ Cannot disturb (dig into or damage) the clay cap
  - ❑ Cannot build structures due to settling habit of landfill condition
- **Primarily a staging/overflow parking space for special events at Zilker Park including events at Austin Botanical Garden, Austin Nature and Science Center**



# Landfill Boundary



**Zilker  
Metropolitan  
Park**

**Legend**

0 1250 500 750 Feet  
Date: 2/16/2017

# Concerns to Resolve

The cap area has been used during wet and dry periods causing various issues such as ruts and depressions when wet and dusty conditions when dry.

## Project Issues

### ■ Protection of clay cap

- Existing depth of clay cap ranges from 3 to 4 feet
- Erosion caused by existing on and off site drainage conditions

### ■ Offsite runoff flows across the cap

- Clay cap must shed water quickly to keep it from percolating into the landfill
- Percolation may create hazardous and environmentally unsafe conditions.

## Design Solution

- Improve underlying cap conditions by re-grading surface for positive drainage flow
- Improve surface material to correct erosion and provide stable and effective surface and drainage conditions
- Re-grading & Improve underlying cap materials & create a self-draining surface
- Capture offsite drainage and pipe across the cap into a water quality structure



# Concerns to Resolve (cont.)

## Project Issues

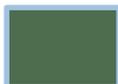
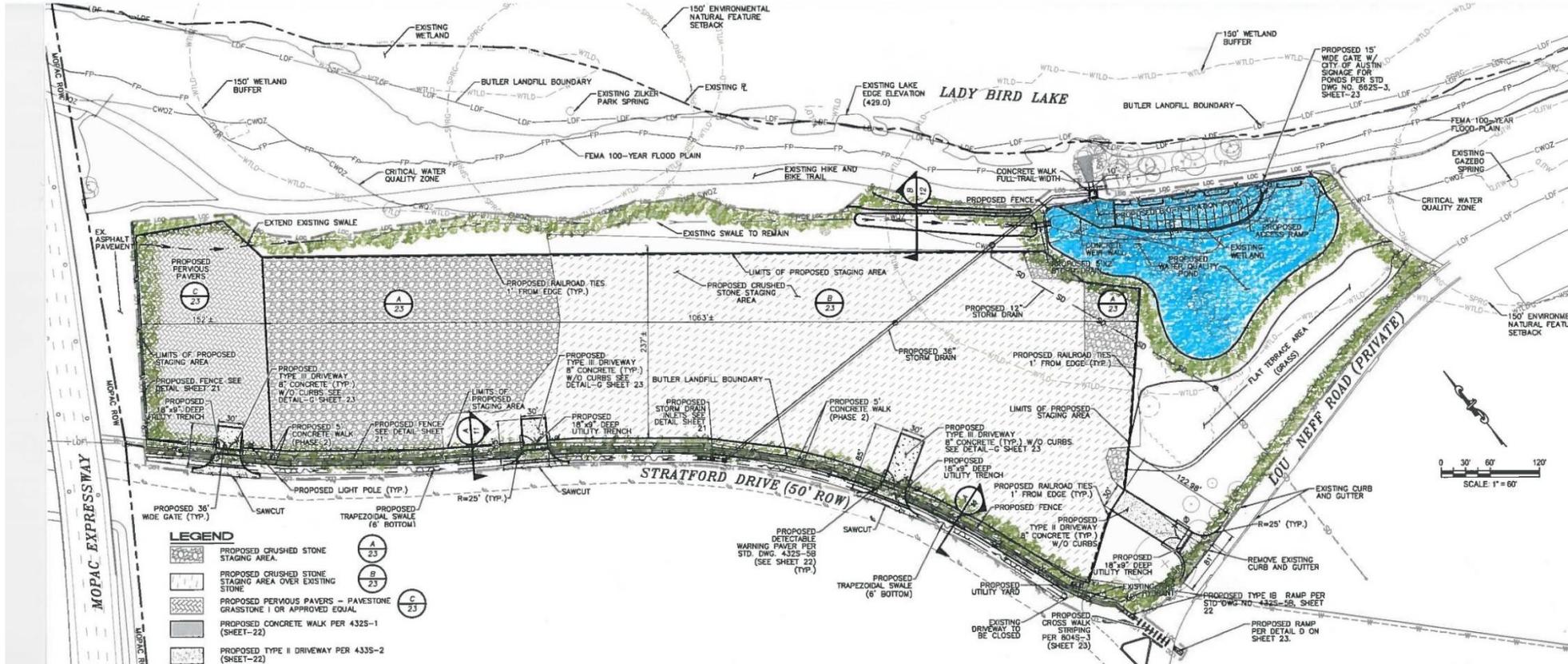
- **Trees have grown into the cap and landfill areas**
  - Does not meet TCEQ Cap requirements
  - High potential exist to disrupt the cap and expose the landfill
- **Pond area has developed on the clay cap**
  - Ponds are not allowed on landfill clay caps per TCEQ standards
- **Current outfall structure is a potential erosion problem**
  - could discharge significant material into the lake potentially eroding out the trail

## Designed Solutions

- Removal of existing trees to meet TCEQ Rules and City of Austin ordinances
- Plant new trees to enhance trail connection to the adjacent hike and bike trail
- Remove pond and replace with a double lined water quality pond
- Create new berm adjacent to the hike and bike trail to direct and increase water quality concerns
- Replace with appropriately sized outlet pipe to deter erosion and trail over topping



# Phasing Plan



Phase 1 – Lot Improvements



Phase 2 – Water Quality Control Structure

# Site Improvement Benefits

- Measures to capture and redirect drainage and minimize erosion
- Water quality pond
- Pedestrian circulation improvements with the addition of walkway along Stratford Dr
- Entry driveways off Lou Neff Road and Stratford Drive
- Crushed stone and pervious 'Grasstone' pavers installation
- Dust control
- Enhanced access to the hike and bike trail
- Overall beautification of the park grounds with new landscaping and trees
- Allows for removal of overflow parking at the Polo Grounds thereby increasing park green space use



# Tentative Schedule

- Site Development Permit: June 2018
- TCEQ permit: June 2018
  
- Phase 1: Late June – early Sept 2018  
allows for use of the staging area by ACL and the Trail of Lights
  
- Phase 2: Mid January – March 2019

# Thank You!

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