

U.S. Department of the Interior  
National Park Service



ENVIRONMENTAL ASSESSMENT & SECTION 106 FOR THE

# Turf and Soil Reconstruction

ON THE NATIONAL MALL



THE Louis Berger Group, INC.

# Agenda

5:30 – 6:00pm

Open House

6:00 – 6:45pm

Project Background

NEPA and Section 106 Process

Proposed Actions

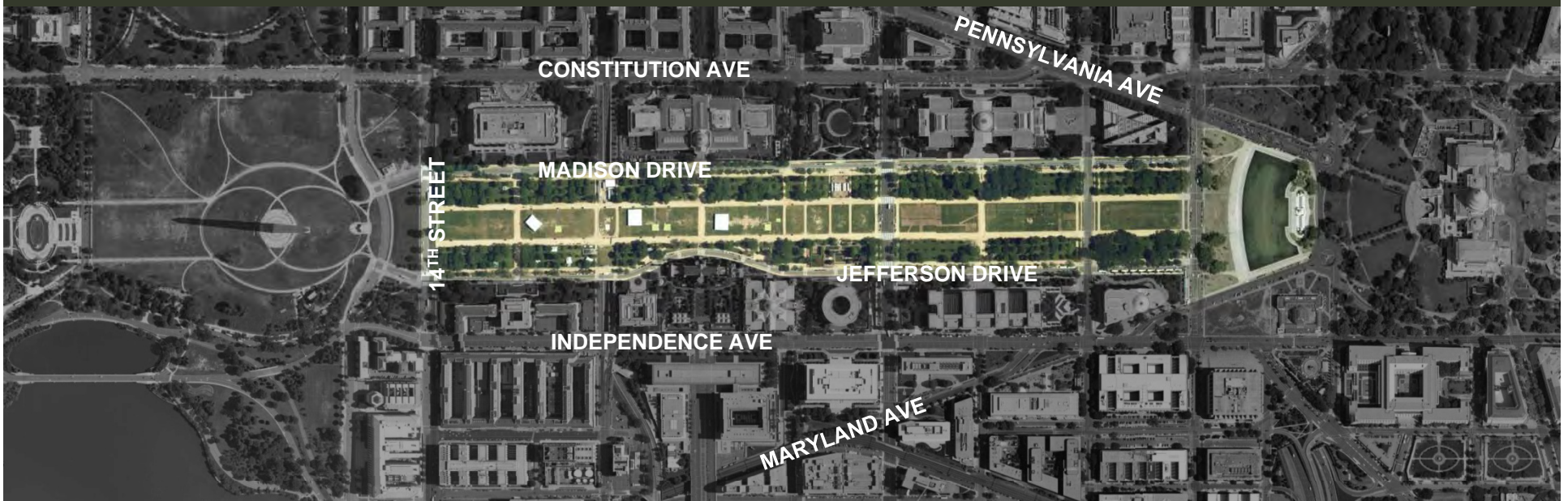
Opportunities to Comment

6:45: 7:30pm

Open House



# Project Background



The project area is located between **Madison Drive NW** and **Jefferson Drive SW** and between **1st Street SW** to **14th Street NW**



THE Louis Berger Group, INC.





# Project Background



THE Louis Berger Group, INC.



# Project Background



2009 Inauguration





# Project Background



THE Louis Berger Group, INC.



# Project Timeline

## 2010

SEP

JAN

MAR

JUN

SEP

## 2011

JAN

MAR

JUN

## 2012

SEP

JAN

CONCEPTUAL DESIGN

HISTORIC  
MALL MAPPING

EA + SECTION 106

CFA / NCPC APPROVAL  
PROCESS

CONSTRUCTION



THE Louis Berger Group, INC.



# Regulations and Procedures

NEPA

National  
Environmental  
Policy Act

NHPA

National  
Historic  
Preservation  
Act





## Regulations

### NEPA National Environmental Policy Act

The National Environmental Policy Act of 1969, as amended

(42 U.S.C. 4321 et seq. )

### CEQ Council on Environmental Quality

"Regulations for Implementing the Procedural Provisions of NEPA"  
(40 CFR 1500-1508).

### DO-12 Department of the Interior, Director's Order 12

Director's Order #12:  
Conservation Planning,  
Environmental Impact Analysis,  
and Decision-making

## Process

1. Notice of Intent
2. Define Purpose & Need
3. Define Preliminary Alternatives
4. **Scoping to introduce project and identify issues**
5. Public Scoping meeting to introduce alternatives
6. Finalize Alternatives
7. Existing Conditions and Impact Analysis
8. Public Review of Draft Environmental Assessment
9. 30 day Public Comment Period
10. Decision Document



# Impact Topics



Visitor Use and Experience

Public Safety

Park Management and Operations

Utilities and Infrastructure

Traffic and Transportation

Soils

Topography

Vegetation

Visual Resources

Cultural Resources



THE Louis Berger Group, INC.



# Section 106

## Regulations

**NHPA** National Historic Preservation Act

Section 106 regulations,  
36 CFR Part 800

## Process

1. Define Undertaking/ Initiate Sec 106
2. Identify Consulting Parties
3. **Involve the Public**
4. Define Area of Potential Effect (APE)
5. Identify Significant Cultural Resources in APE
6. Assess Effects on Significant Resources
7. Apply Criteria Of Adverse Effect
8. Continue Consultation
9. Draft Agreement Document, if needed





# Draft Area of Potential Effect





# Section 106

NATIONAL REGISTER HISTORIC DISTRICTS



THE Louis Berger Group, INC.





# Section 106

## CULTURAL LANDSCAPES



THE Louis Berger Group, INC.





# Proposed Actions

This EA will analyze a range of alternatives to improve the vegetation and soils on the Mall by removing and replacing the existing soil on the grass panels, better defining the edges of the grass panels, enhancing the tree panels and street trees, and reconfiguring the irrigation system.

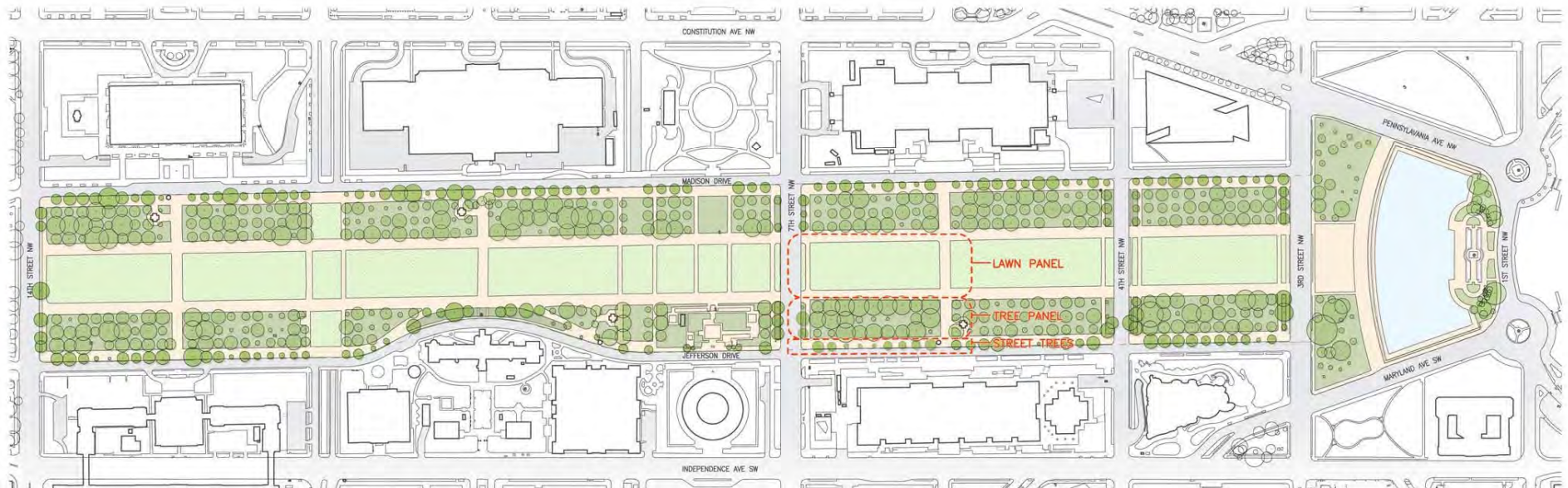




# Background + Overview



# Key Plan







# Aerials + Preferred Mall Plan

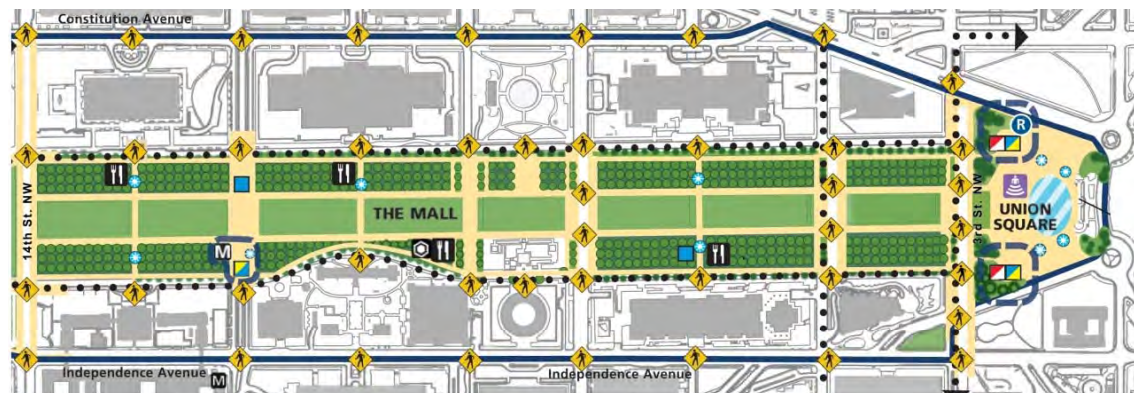
1936 Aerial



Present Day  
Aerial

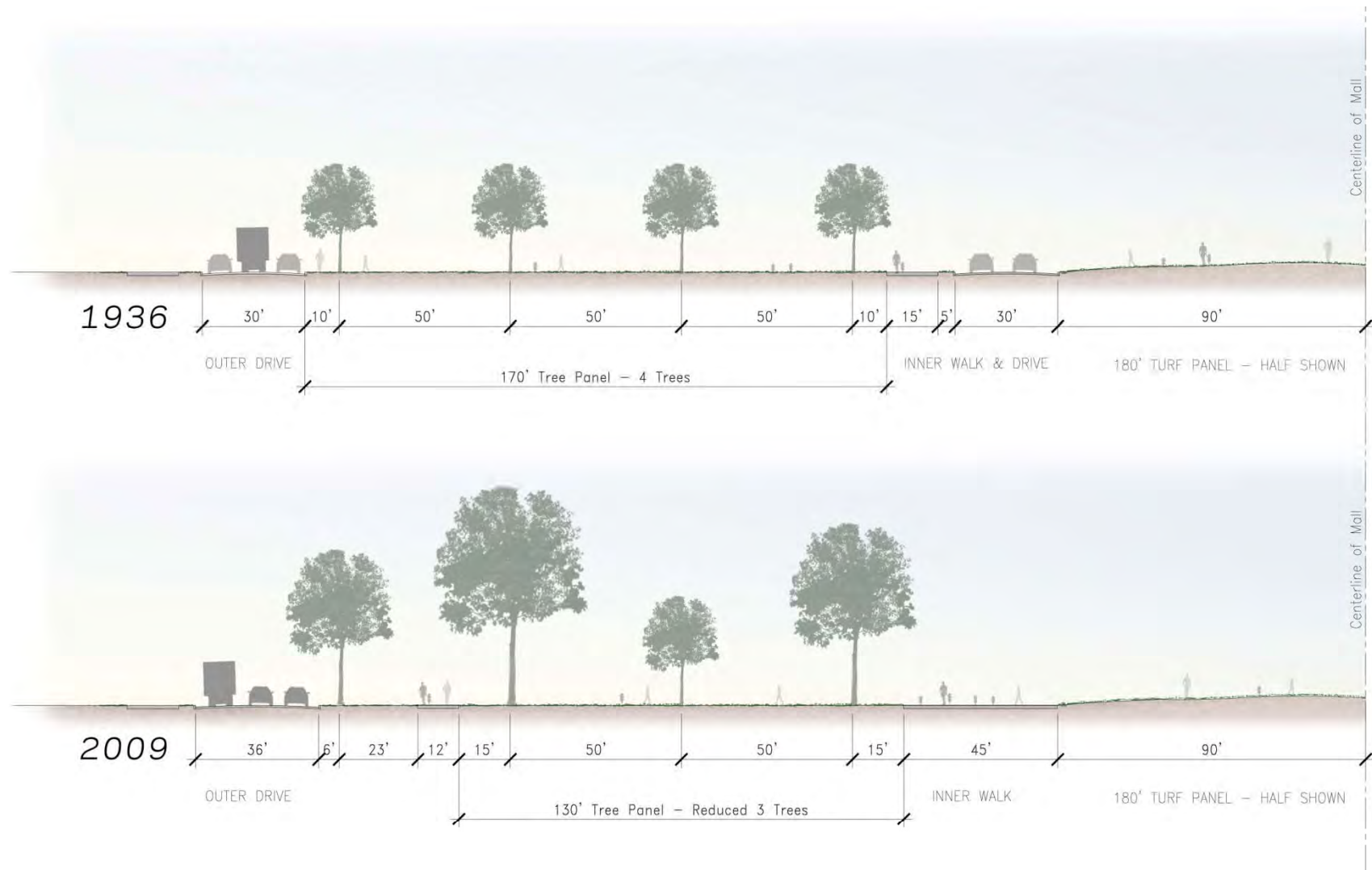


EIS Preferred  
Alternative





# Cross-Sections





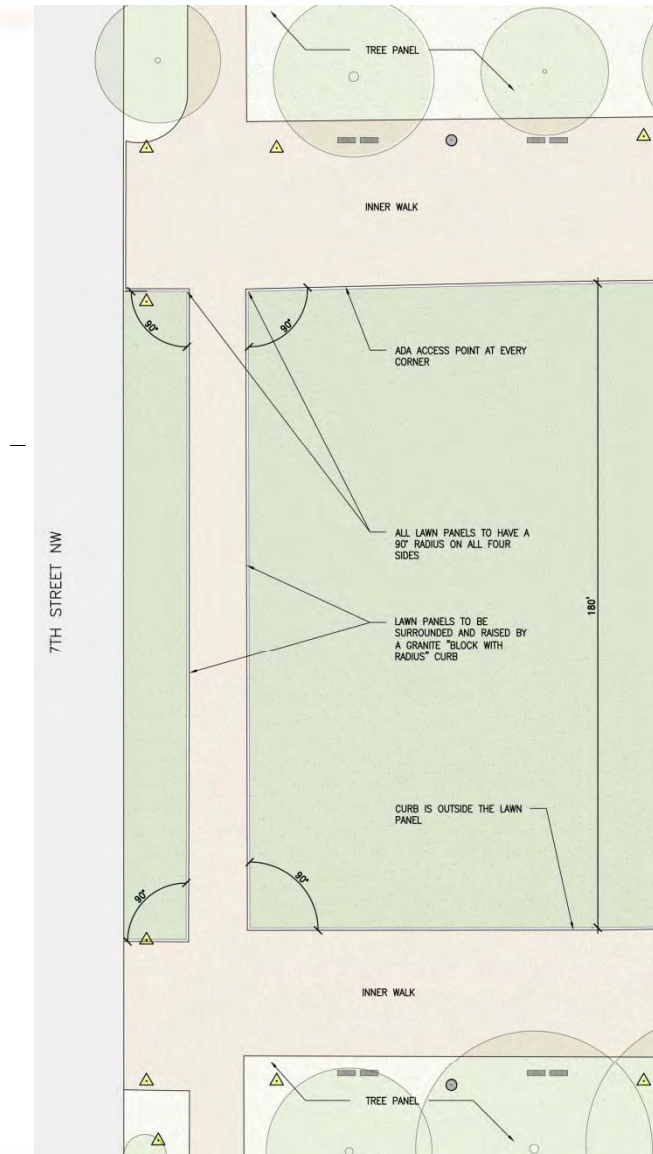


# Lawn Panels

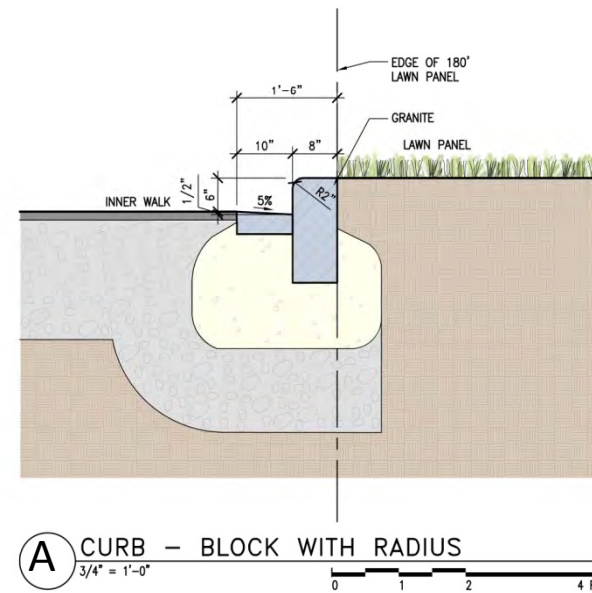




# Lawn Panels Plan Option 1

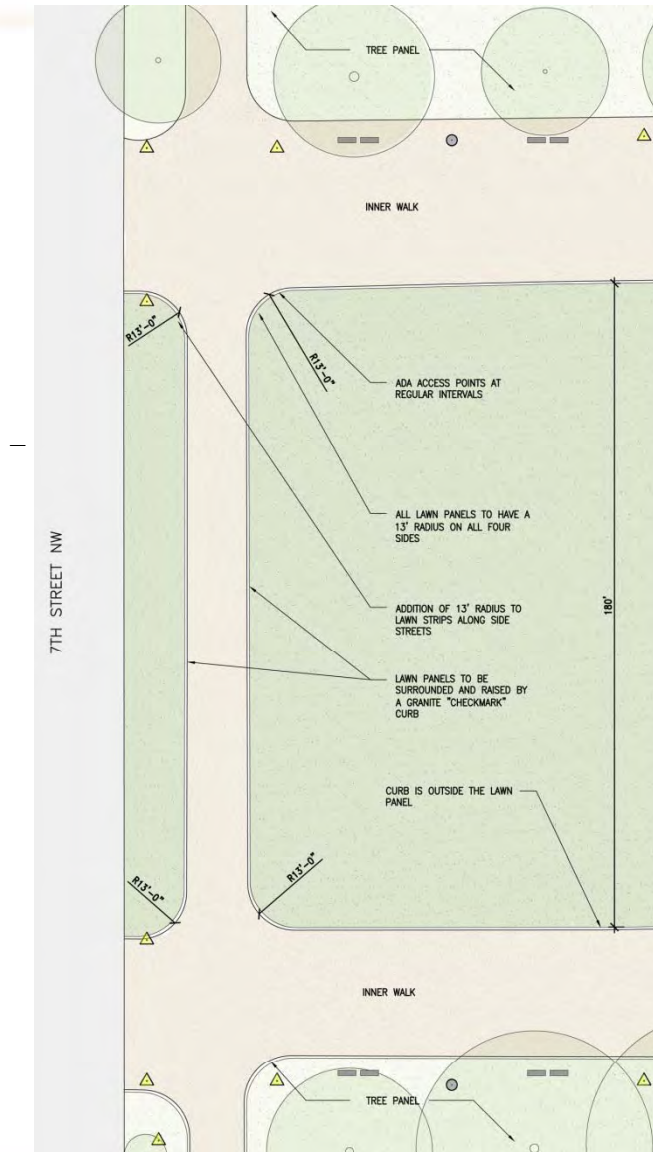


- 90 degree corners
- Typical DC standard granite curbs
- Granite gutters
- Raises the Lawn Panels 6 inches

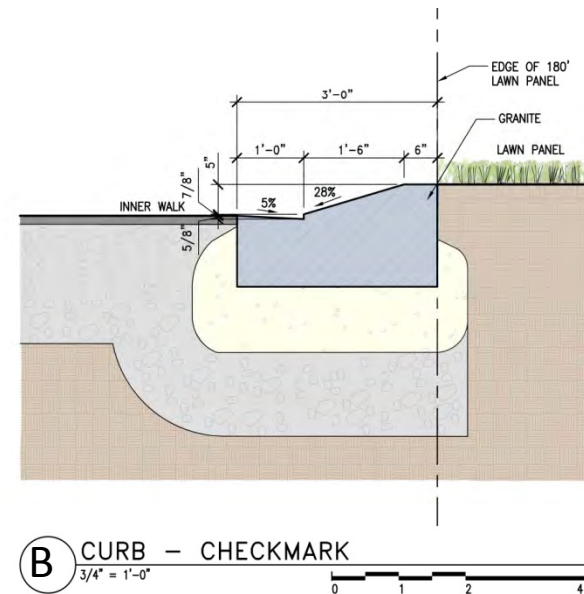




# Lawn Panels Plan Option 2

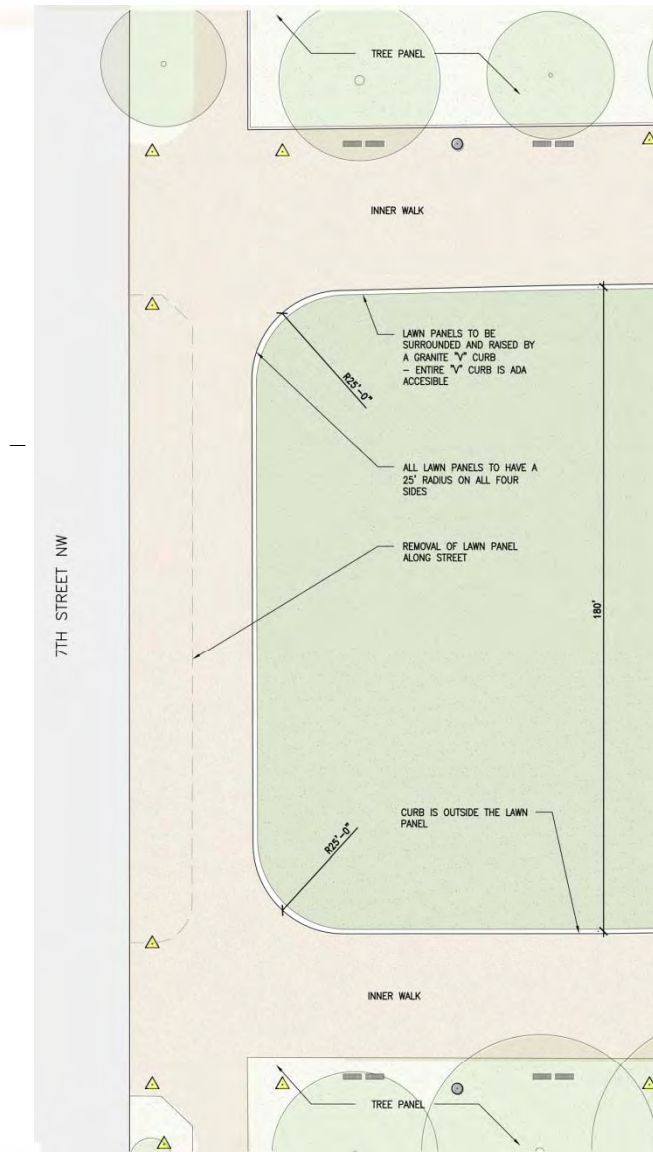


- 13 foot radius corners
- 3 foot wide granite "checkmark" curb with gutter
- Raises the Lawn Panels 5 inches

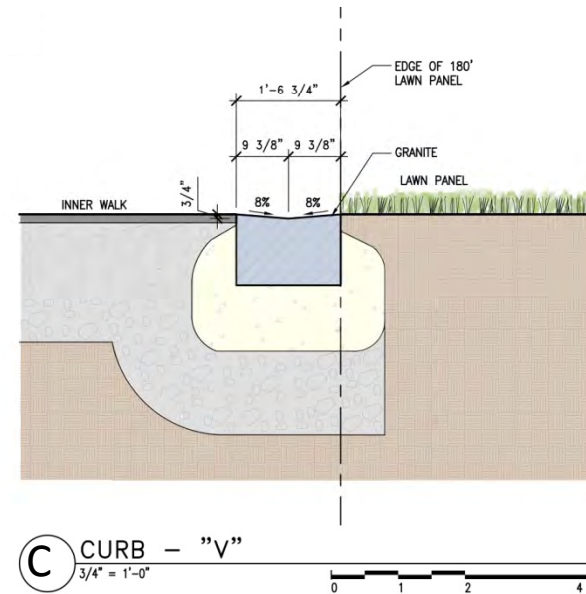




# Lawn Panels Plan Option 3



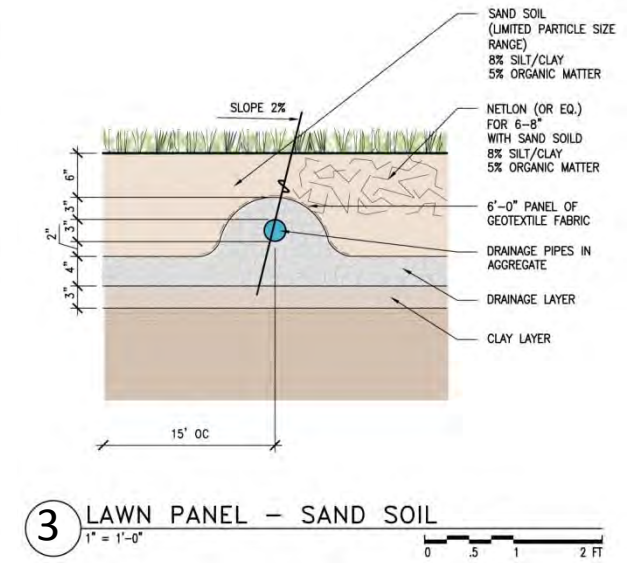
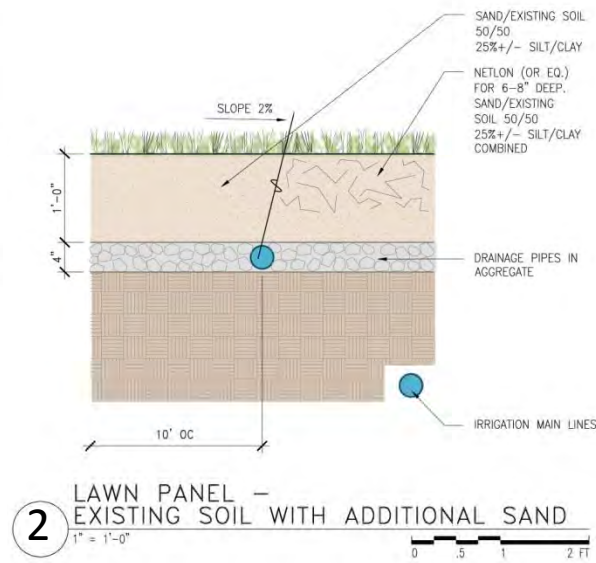
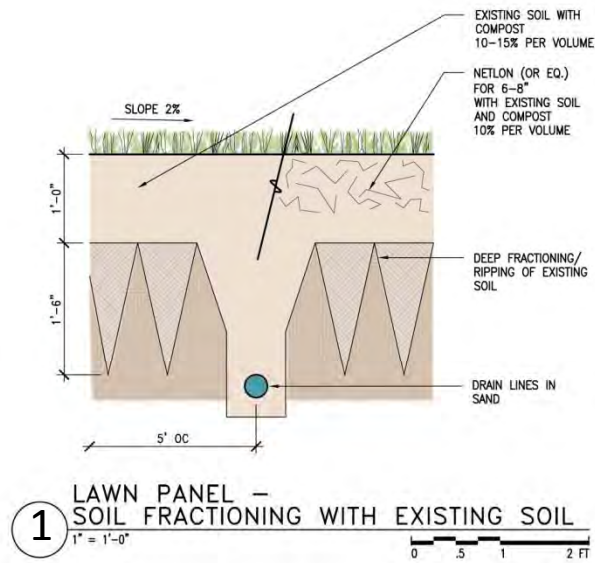
- 25 foot radius corners
- "V" granite curb/gutter/edge
- Does not raise the Lawn Panels







# Lawn Panels Soil Profile Alternatives



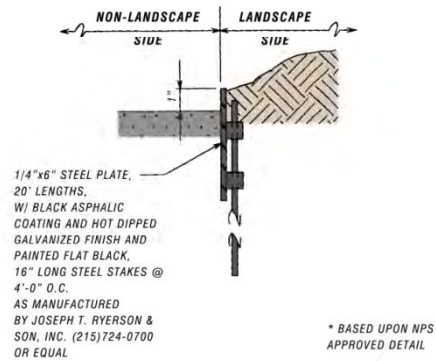




# Tree Panels



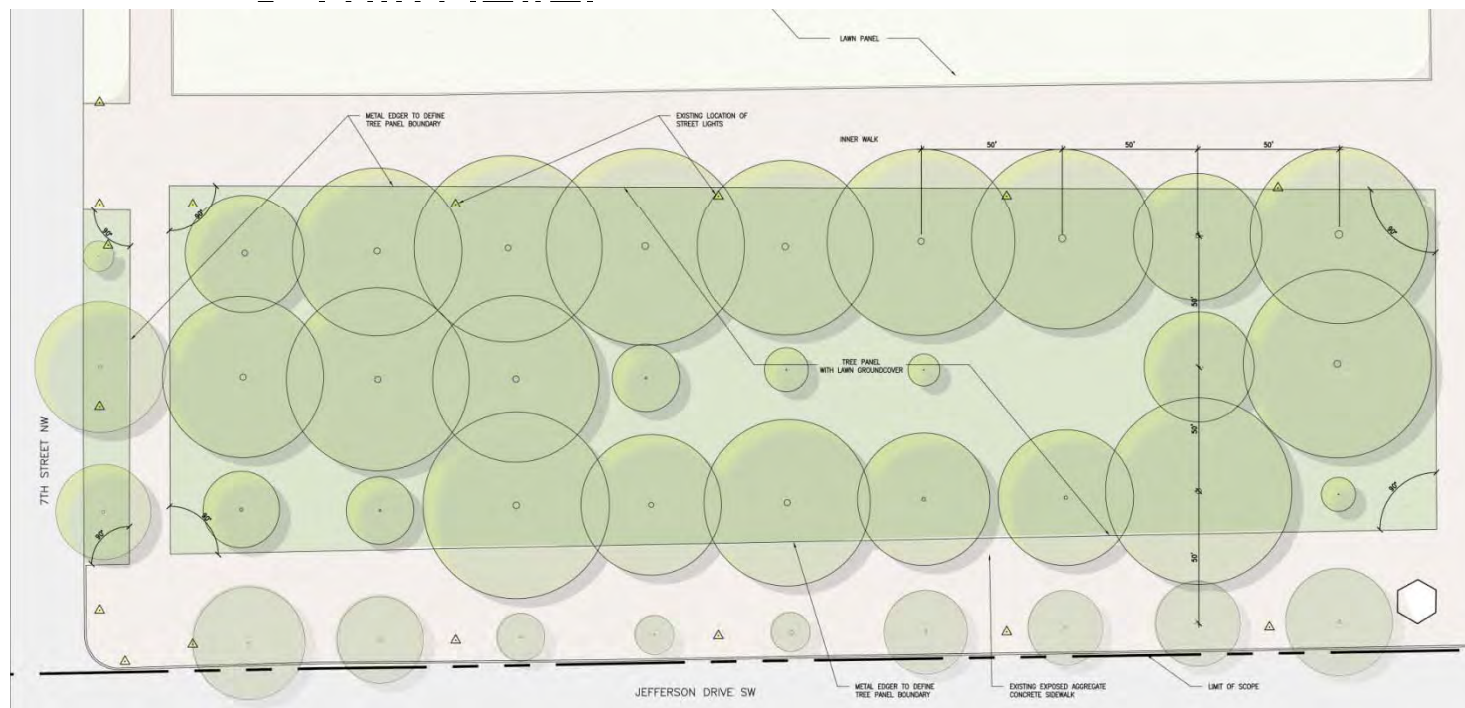
# Tree Panels Plan Option 1



- 90 degree corners
- Maintain existing metal edging
- Least disturbance to the trees and their root area

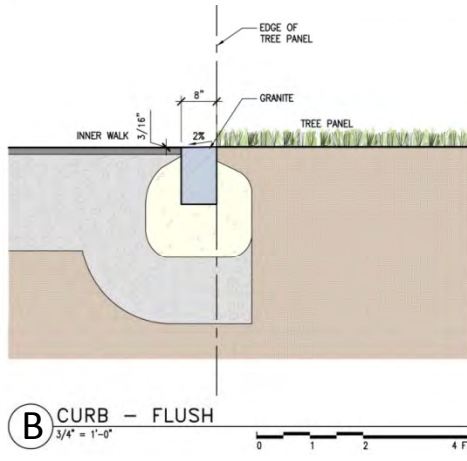
A

## STEEL LANDSCAPE EDGING SCALE: 3" = 1'-0"

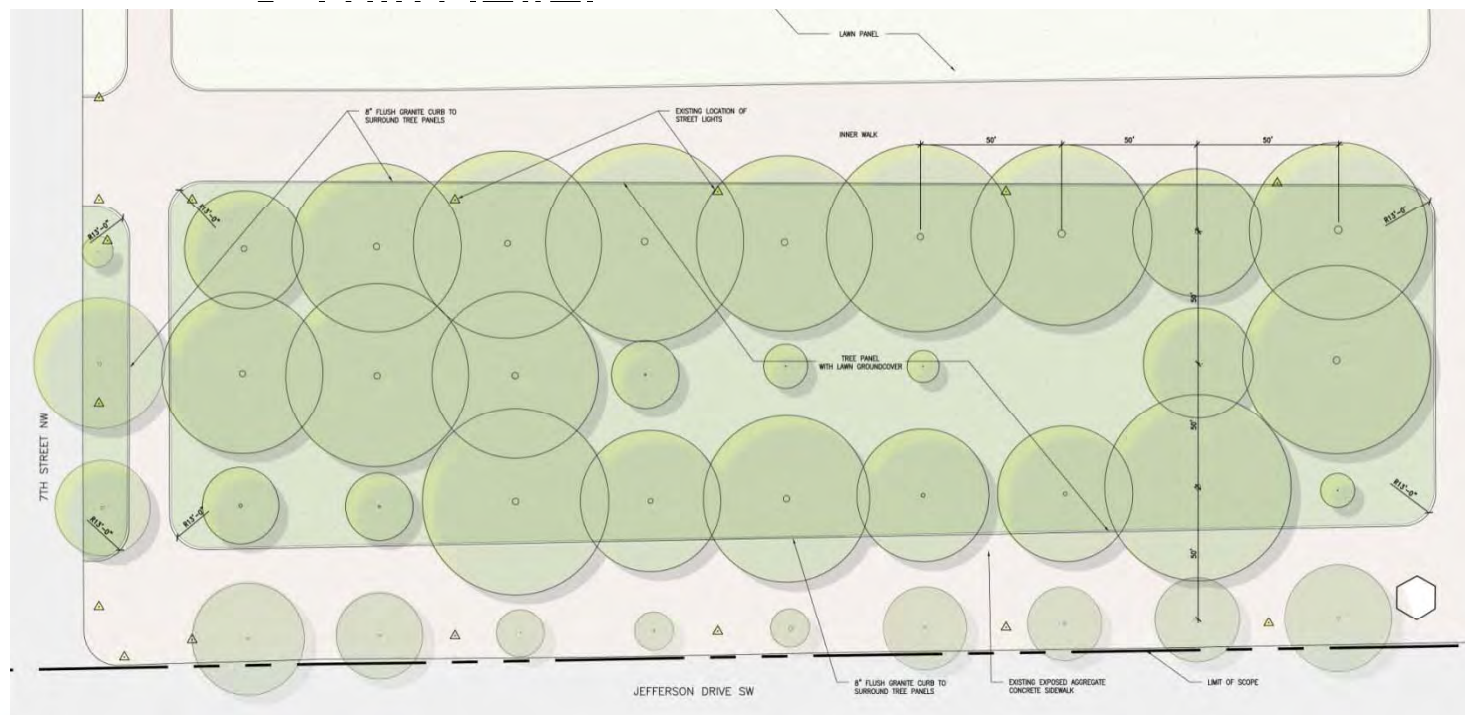




## Tree Panels Plan Option 2



- 13 foot radius corners
- Flush curb/edge with 2% pitch
- Minimal disturbance to the trees and their root area

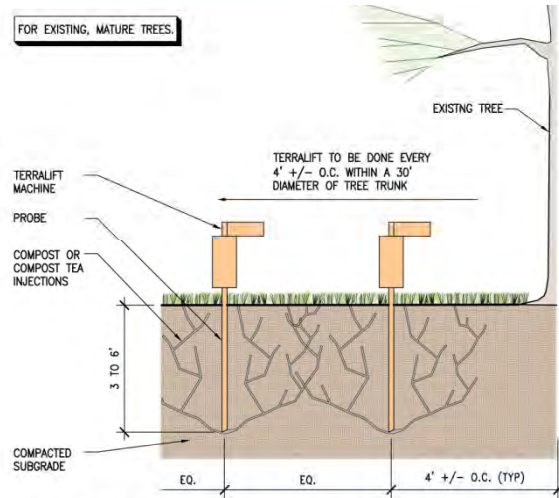






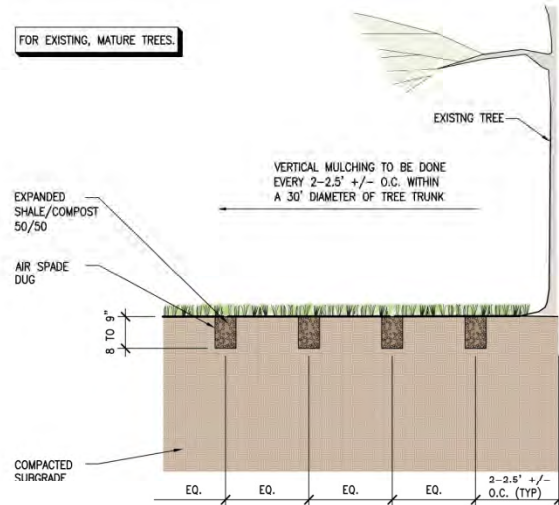
# Tree Panels Soil Profile Alternatives

FOR EXISTING, MATURE TREES



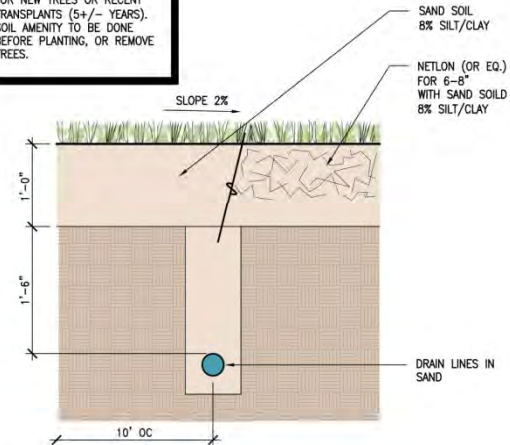
**4 TREE PANEL - TERRALIFT**  
1/2" = 1'-0"

FOR EXISTING, MATURE TREES



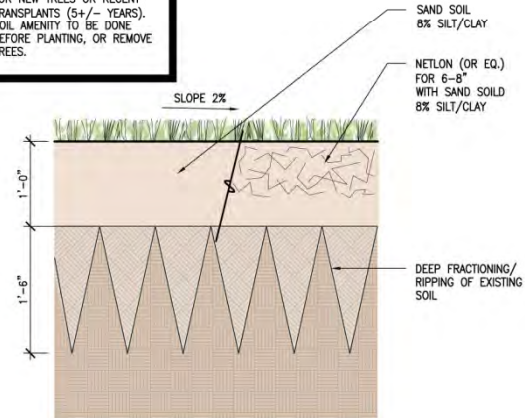
**3 TREE PANEL - VERTICAL MULCH**  
1/2" = 1'-0"

FOR NEW TREES OR RECENT TRANSPLANTS (5+/- YEARS). SOIL AMENITY TO BE DONE BEFORE PLANTING, OR REMOVE TREES.



**2 TREE PANEL - DRAIN LINES IN SAND**  
1" = 1'-0"

FOR NEW TREES OR RECENT TRANSPLANTS (5+/- YEARS). SOIL AMENITY TO BE DONE BEFORE PLANTING, OR REMOVE TREES.



**1 TREE PANEL - SOIL FRACTIONING AND SAND SOIL**  
1" = 1'-0"

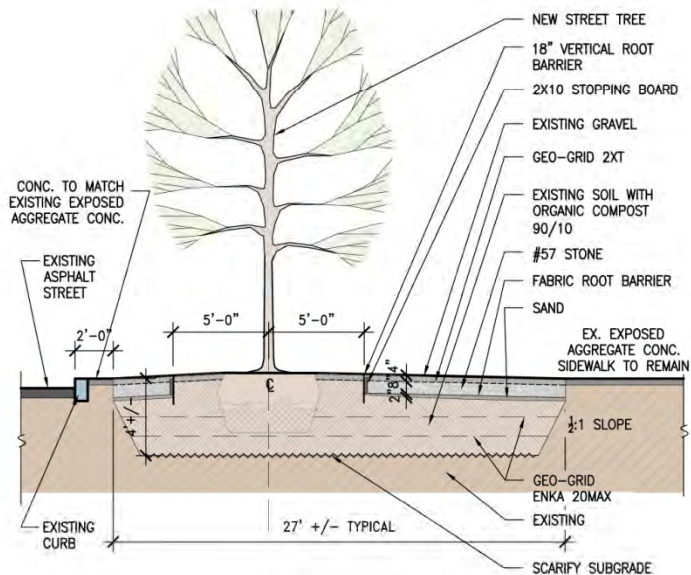
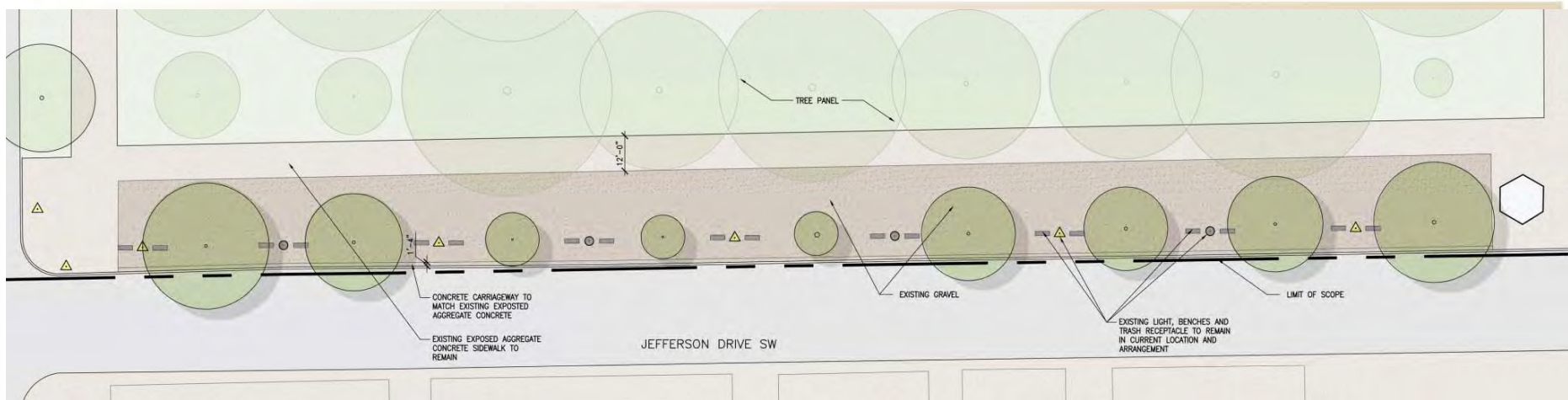


# Street Trees





# Street Trees Option 1

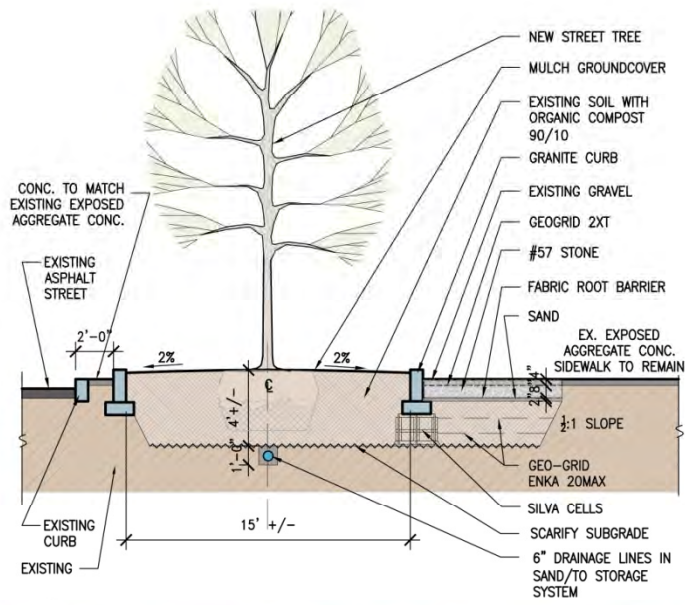


- Maximum gravel surface
- Continuous tree trench

- No protection at base of tree

- No aesthetic relieve trench





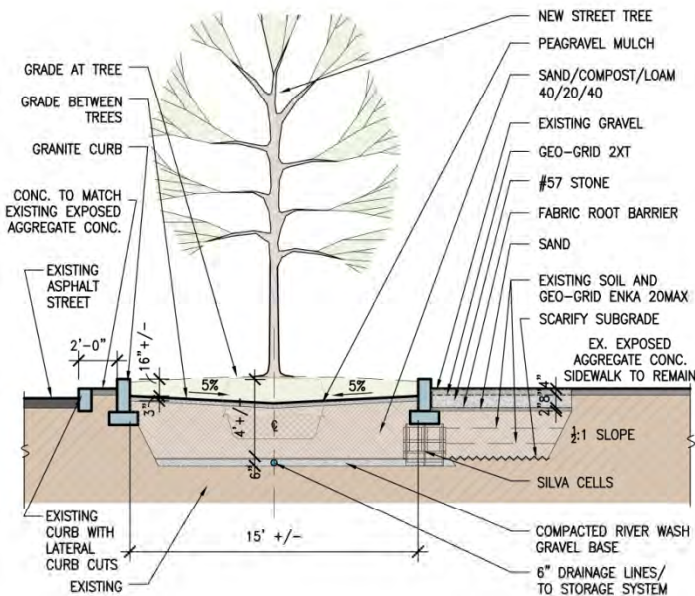
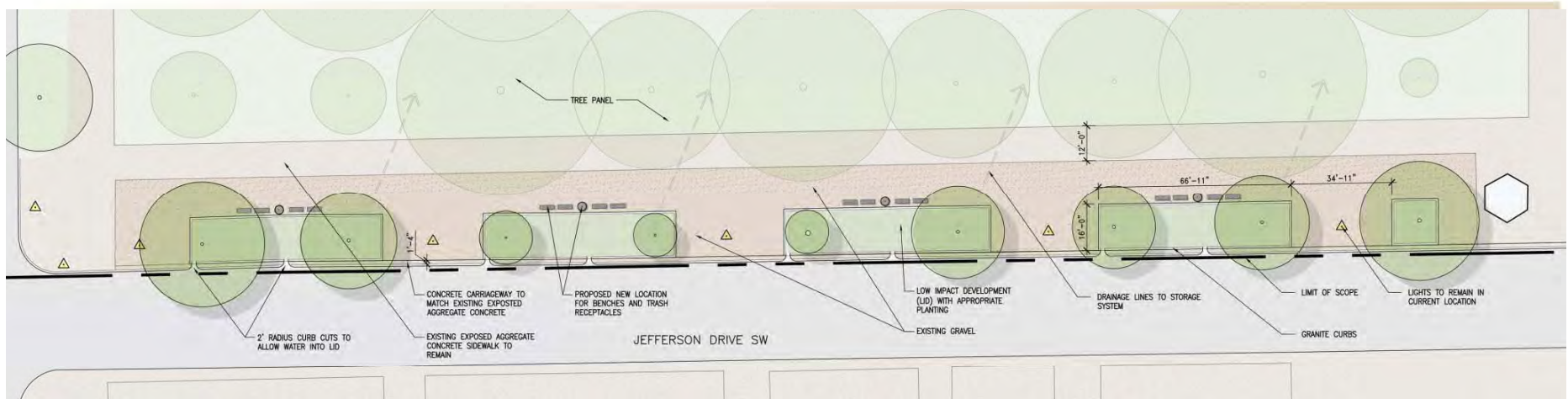
- Reintroduces softscape
- Continuous tree trench
- 6 inch raised granite curbs
- Physical deterrent to protect base of tree







# Street Tree Alternatives Option 2



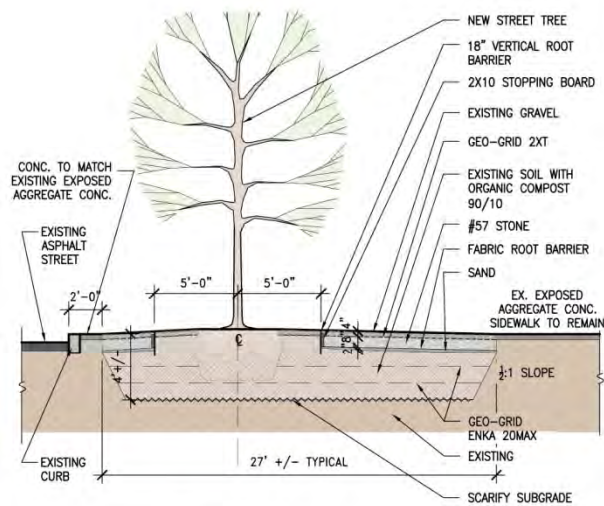
- LID - Most sustainable practice
- Reintroduces plant material

- Visible display of sustainable practice
- 6 inch granite curbs

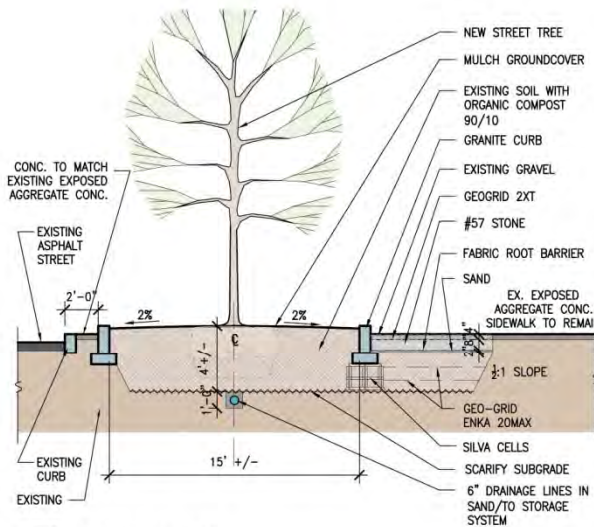
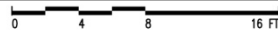




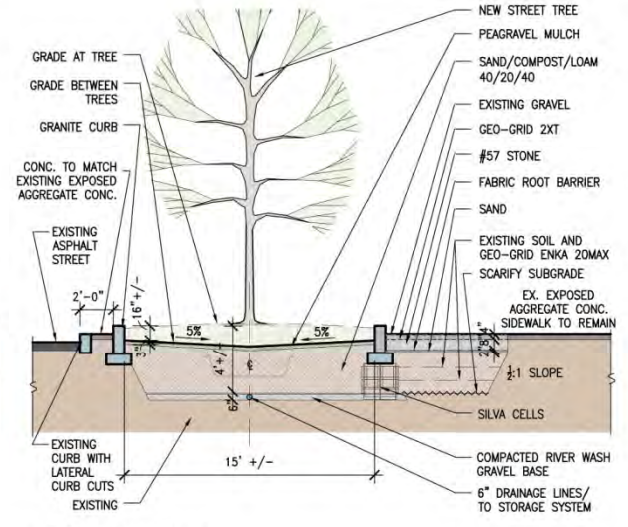
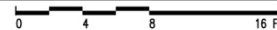
# Street Trees



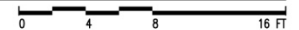
1 OPTION 1  
3/16" = 1'-0"



1A OPTION 1A  
3/16" = 1'-0"



2 OPTION 2  
3/16" = 1'-0"



Alternatives Considered Soil Profile Alternatives





# Opportunities to Comment

Your comments are essential to this process.

Please submit comments by **April 8, 2010** at:

<http://parkplanning.nps.gov/NAMA>

or mail to:

Jennifer Talken-Spaulling at

**Mall\_Turf\_Soil@nps.gov**

900 Ohio Drive SW  
Washington DC 20024

