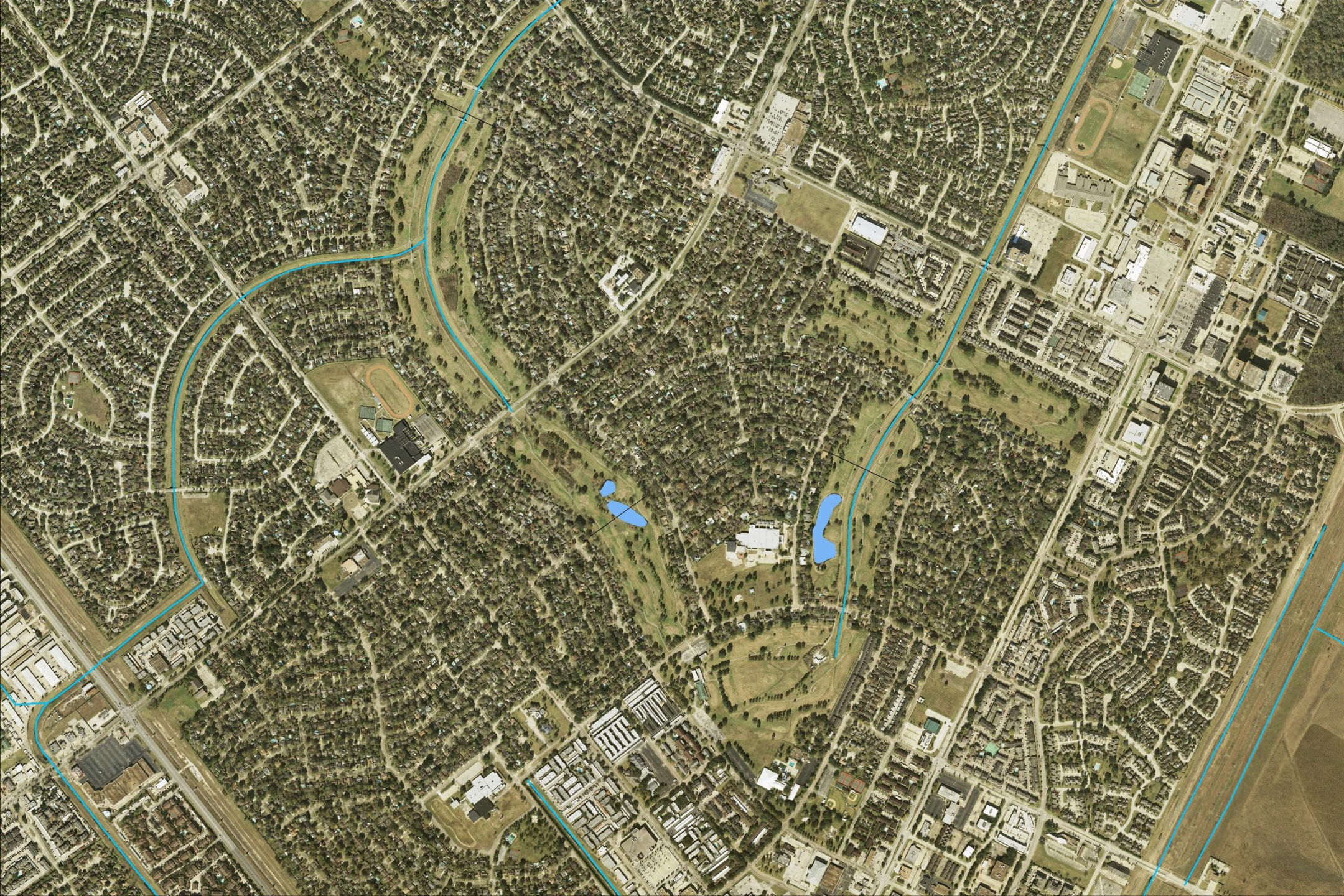


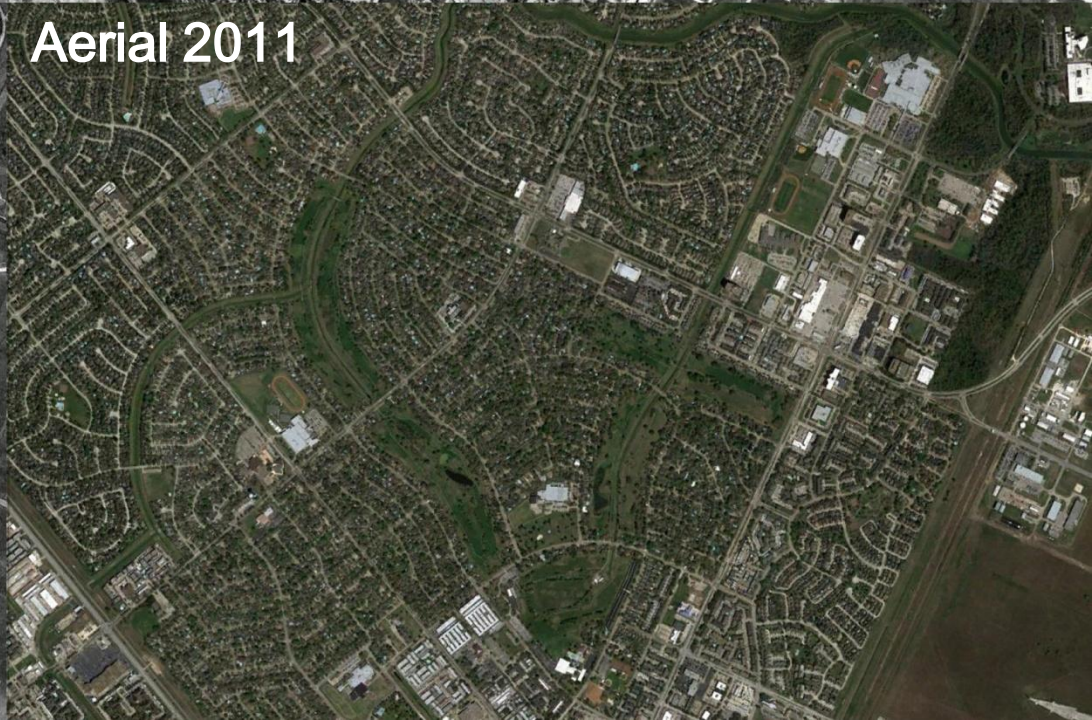
# CLCWA Detention Facilities And Associated Open Space & Park Plan













# BACKGROUND I

## Upper Gulf Coast

- Past - Native Prairie / Prairie Pot Holes
- Present - Created Landscapes
  - Homes & Business
  - Front Lawns, Ornamental Gardens & Golf Courses

## Old Development Standards

- Drainage = “Flood Control”
  - -“4 x 4” – four foot wide
  - and four foot deep!  
(“...like draining a pool table to the corner pocket without tilting the table!”)
- “What’s Water Quality?!”



# BACKGROUND II

## New Development Standards

- Drainage = “Flood Damage Reduction”
  - Amenitized storm water features
- Water Quality Improvements

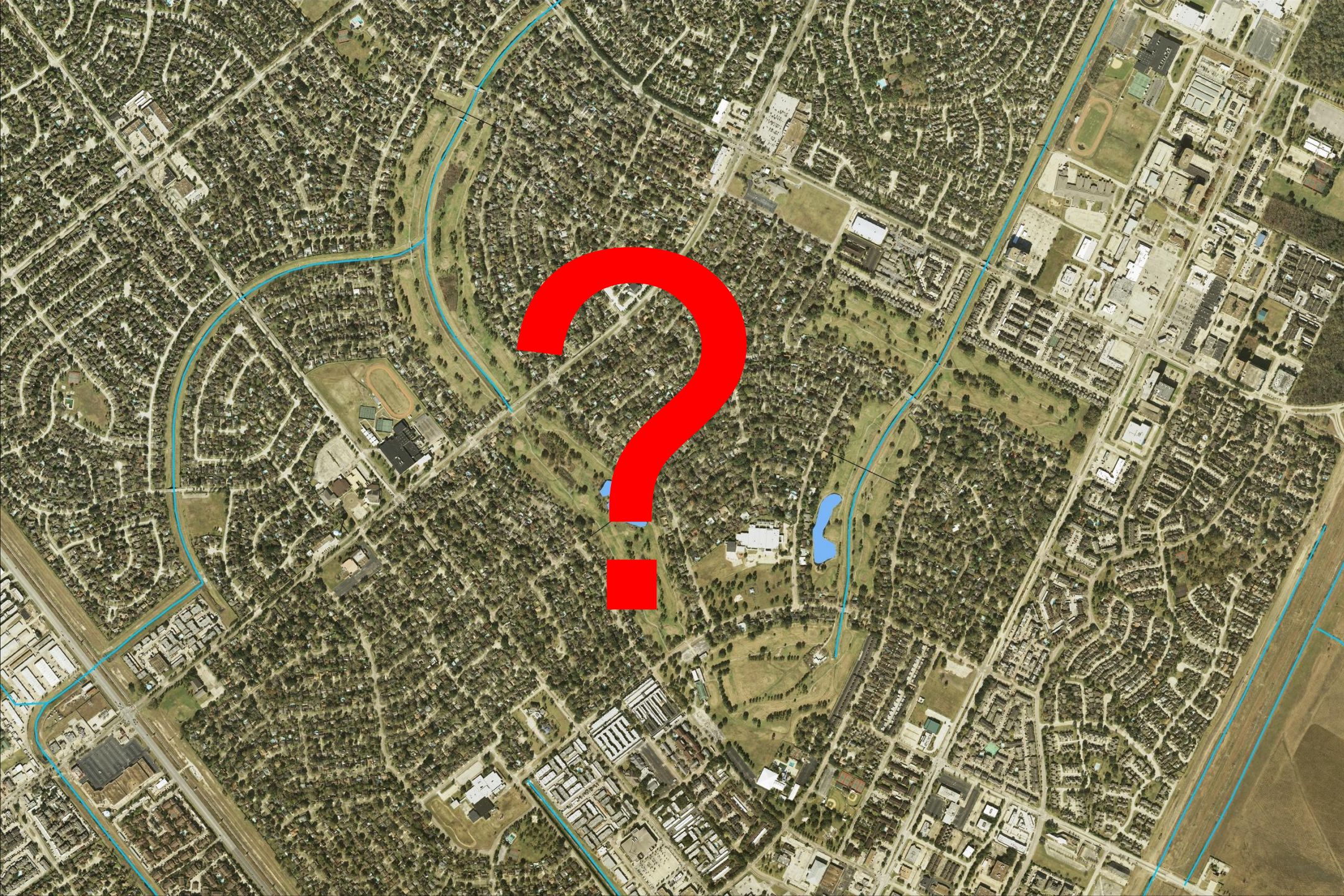
## New Development Paradigm

- Multi-purpose Facilities (FDR, Water Quality, Open Space, Habitat)













El Dorado Blvd

Space Center Blvd

Diana Ln

El Camino Real

Torry Pines Rd

Reseda Dr

Ramada Dr

Bay Area Blvd

Fairwind Rd



0 200 500 1000



# CLCWA Detention Facilities

## Master Plan Metrics

- a. 178 acres
- b. 1,680-acre feet of storm water storage
- c. FDR Excavation - 3.0 million cubic yards
- d. Water storage depth - 13'
- e. Permanent water depth - 6'
- e. Permanent surface water area – 38 acres
- f. Water Quality Wetland area – 39 acres
- g. Upland / island areas – 101 acres



# CLCWA Golf Course Detention

## Master Plan Features

### Water Quality Features

- Emergent wetland fringe
- Trash Interceptor baskets
- Tree canopy
- Return water flow polishing

### Water Quality and Habitat Features

- Land forming with variable slopes to create a natural character
- Wet bottom basin
- Reforestation
- Islands (habitat areas)
- Nature-friendly habitat areas

### Recreation Features

- Athletic Sports Fields – 2 x 150' x 250'
- Entrance plaza / water feature
- Parking – 352 car spaces
- Picnic and open game areas
- Hike and bike trails – 6 miles





Space Center Blvd

El Dorado Blvd

Diana Ln

El Camino Real

Reseda Dr

Torry Pines Rd

Fairwind Rd

Ramada Dr

Bay Area Blvd



0 200 500 1000



Permanent water area – 38 acres

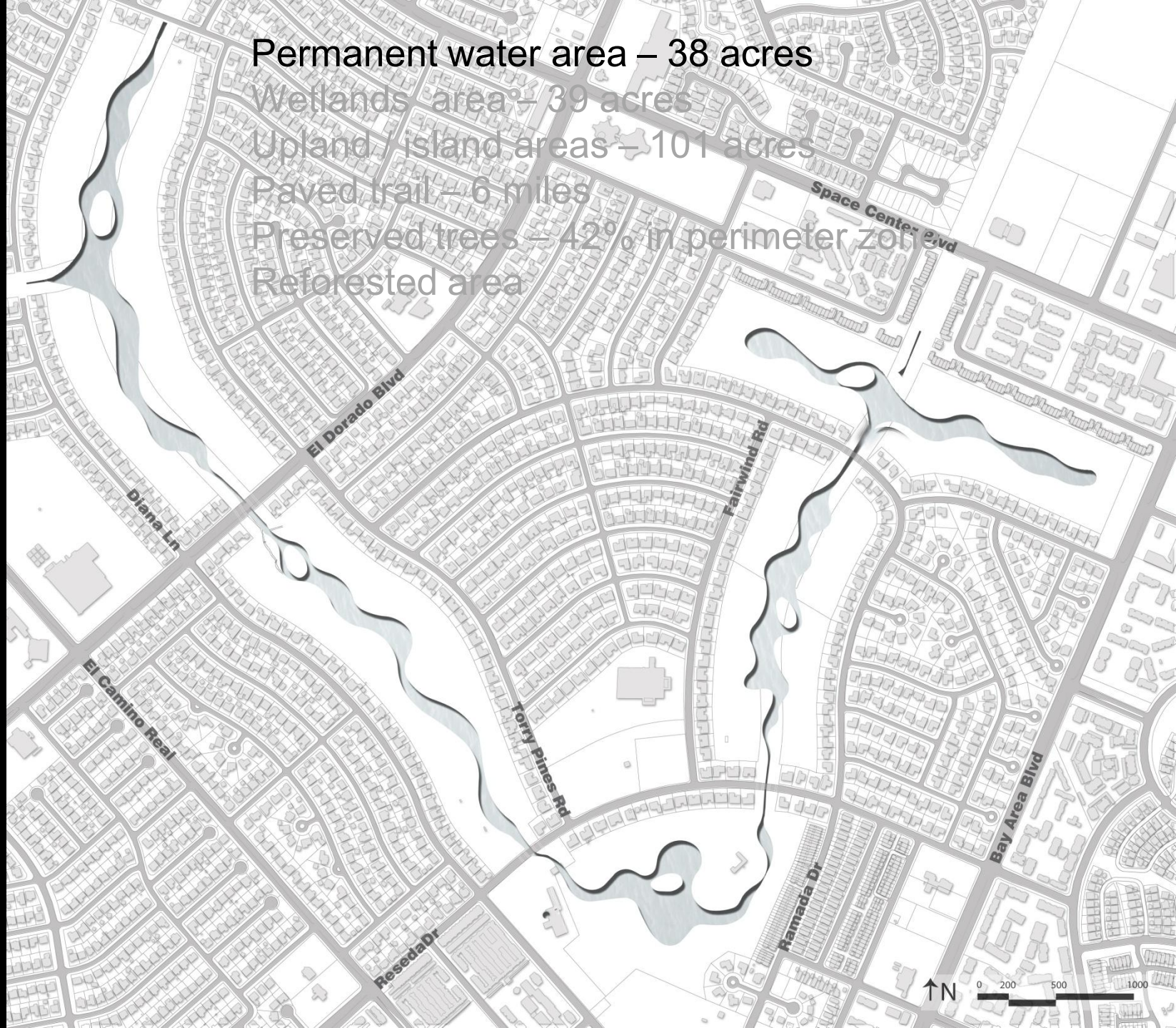
Wetlands area – 39 acres

Upland / island areas – 101 acres

Paved trail – 6 miles

Preserved trees – 42% in perimeter zone

Reforested area





Permanent water area – 38 acres

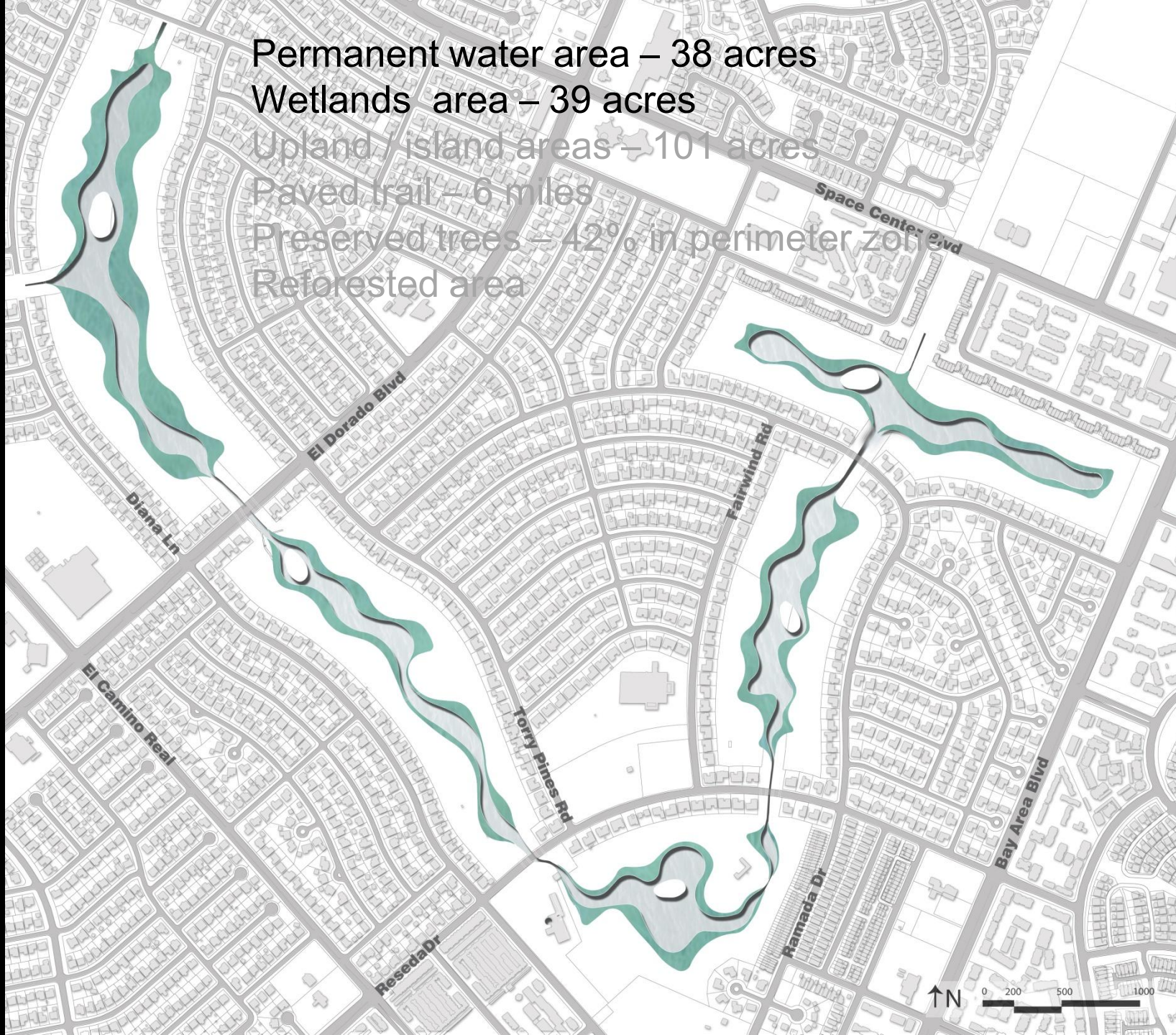
Wetlands area – 39 acres

Upland / island areas – 101 acres

Paved trail – 6 miles

Preserved trees – 42% in perimeter zone

Reforested area





Permanent water area – 38 acres  
Wetlands area – 39 acres  
Upland / island areas – 101 acres  
Paved trail – 6 miles  
Preserved trees – 42% in perimeter zone  
Reforested area





Permanent water area – 38 acres

Wetlands area – 39 acres

Upland / island areas – 101 acres

Paved Trail – 6 miles

Preserved trees - 42% of the existing trees

Reforested area





Permanent water area – 38 acres  
Wetlands area – 39 acres  
Upland / island areas – 101 acres  
Paved Trail – 6 miles  
Preserved trees – 42% in perimeter zone  
Reforested area

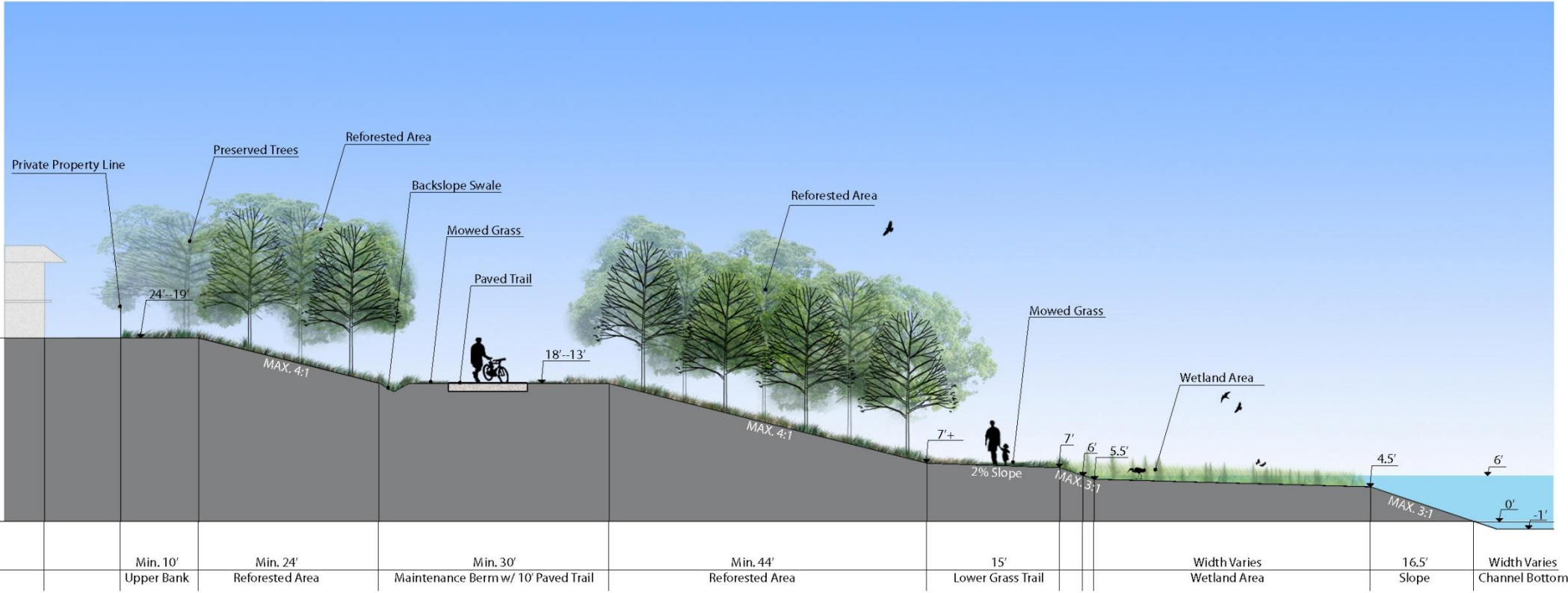




Permanent water area – 38 acres  
Wetlands area – 39 acres  
Upland / island areas – 101 acres  
Paved trail – 6 miles  
Preserved trees - 42% in perimeter zone  
Reforested area







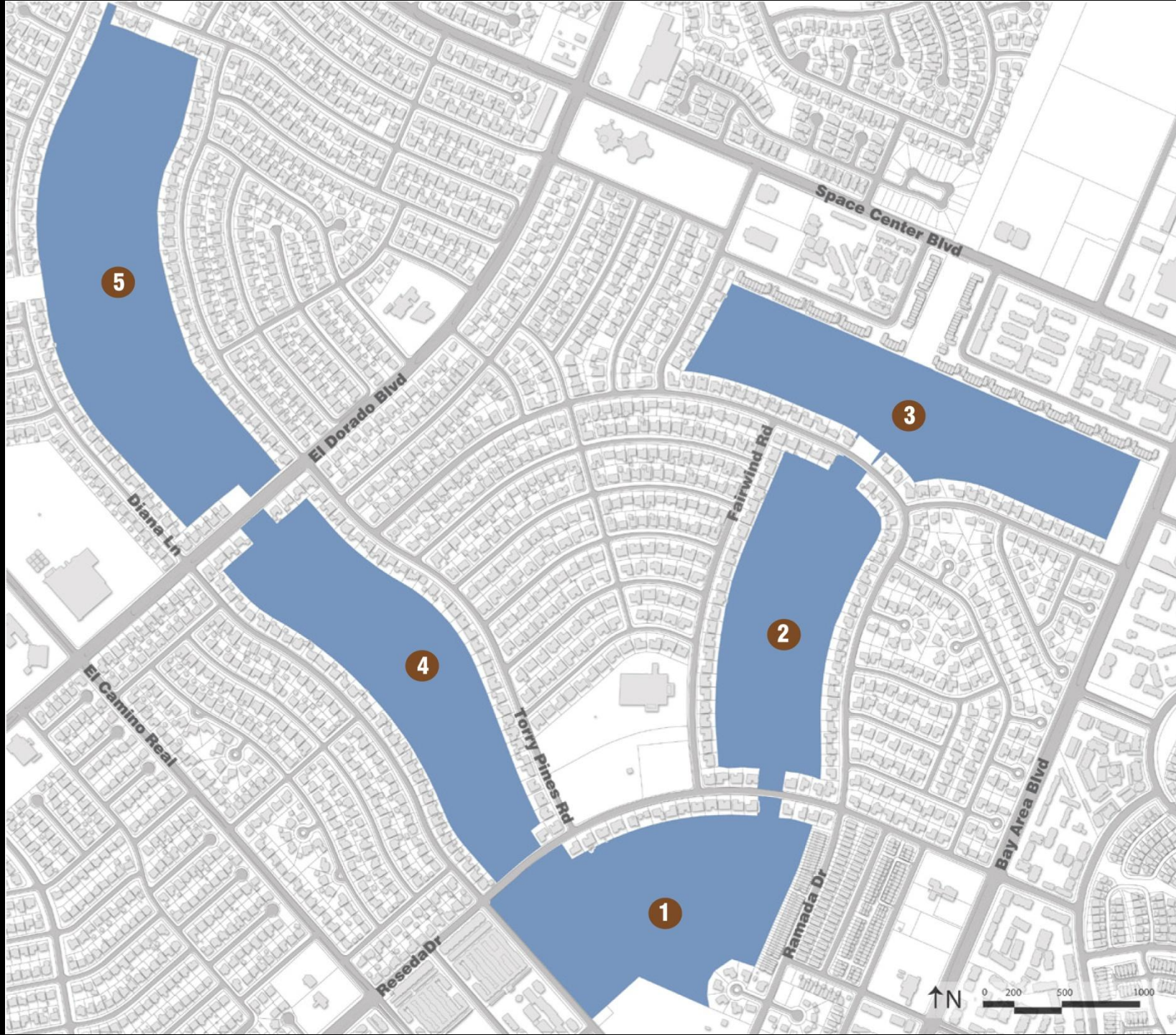
Typical Section



# CLCWA Detention Facilities (Possible Phasing)

- a. Phase 1                      1 - 5 years
- b. Phase 2                      4 - 7 years
- c. Phase 3                      7 - 9 years
- d. Phase 4                      9 - 12 years
- e. Phase 5                      12 - 15 years





5

3

2

4

1

El Dorado Blvd

Space Center Blvd

Diana Ln

El Camino Real

Reseda Dr

Torry Pines Rd

Fairwind Rd

Ramada Dr

Bay Area Blvd



0 200 500 1000



# Phase I Base Plan

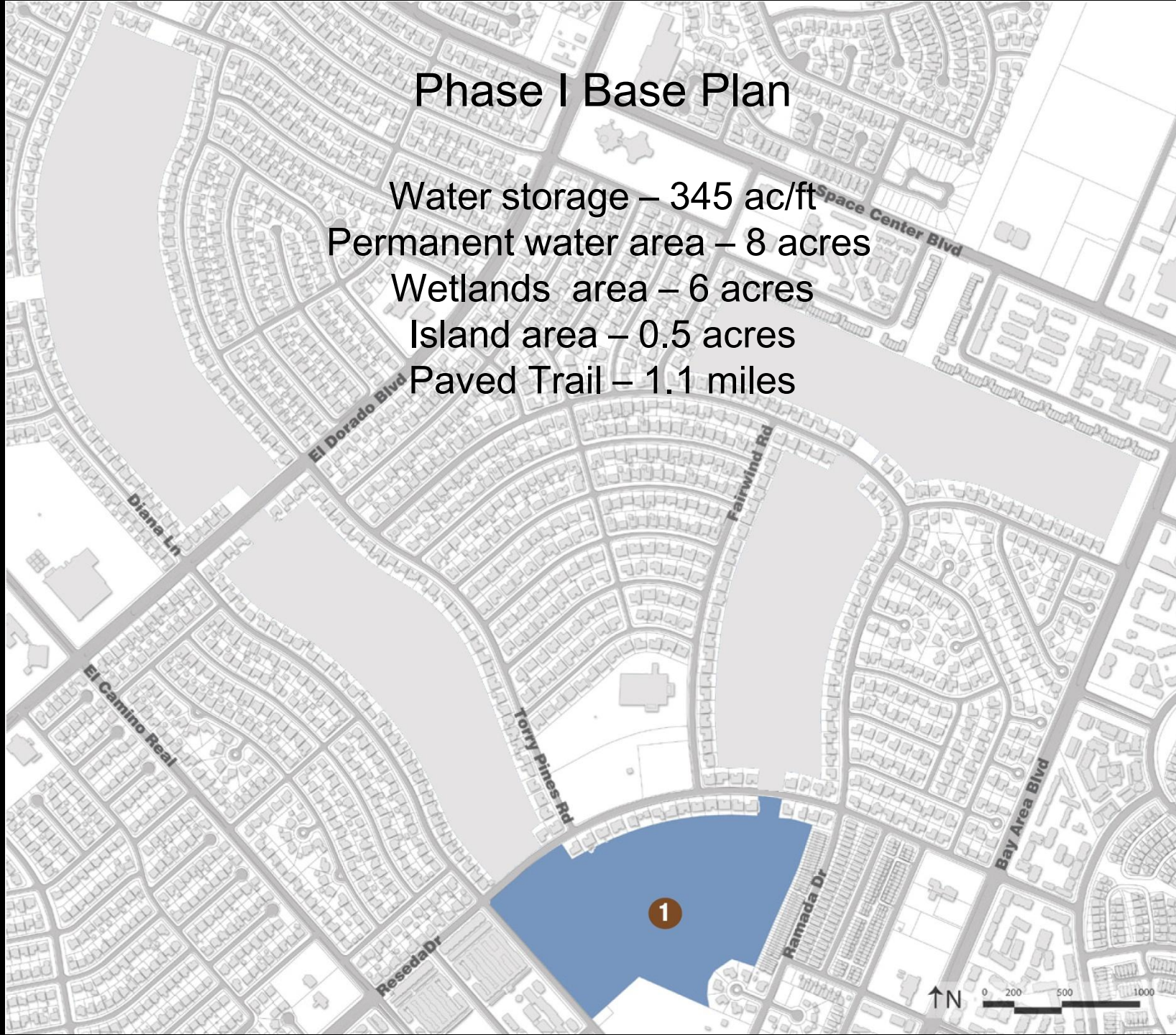
Water storage – 345 ac/ft

Permanent water area – 8 acres

Wetlands area – 6 acres

Island area – 0.5 acres

Paved Trail – 1.1 miles







Reseda Dr

Diana Ln

Ramada Dr

Recreation Center

100ft 200ft

600ft



1

5

3

2

4

8

6

11

9

7

12

14

10

13



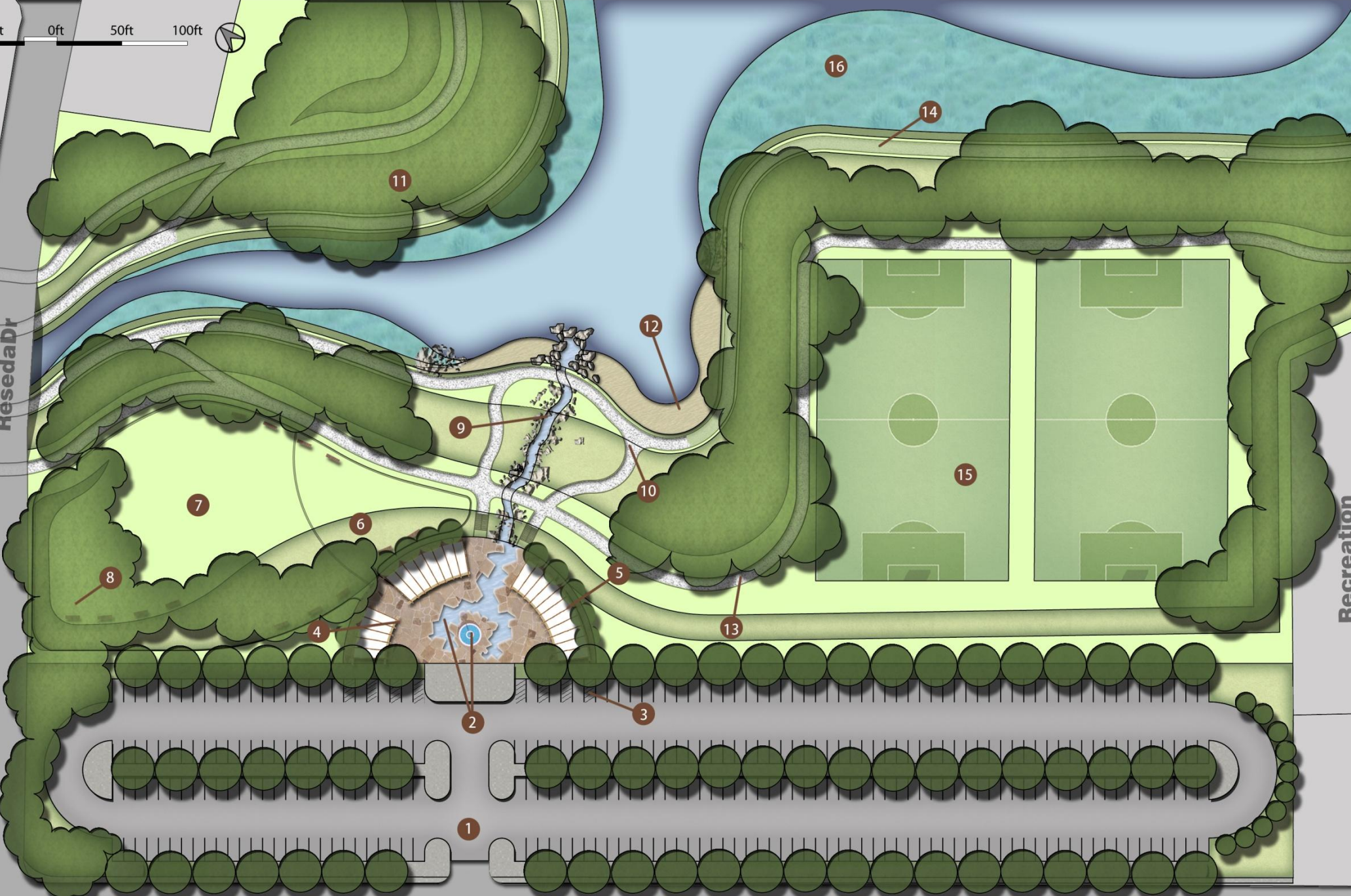
50ft 0ft 50ft 100ft



ResedaDr

Recreation Center

Diana Ln



11

16

14

12

9

15

7

6

10

8

5

13

4

2

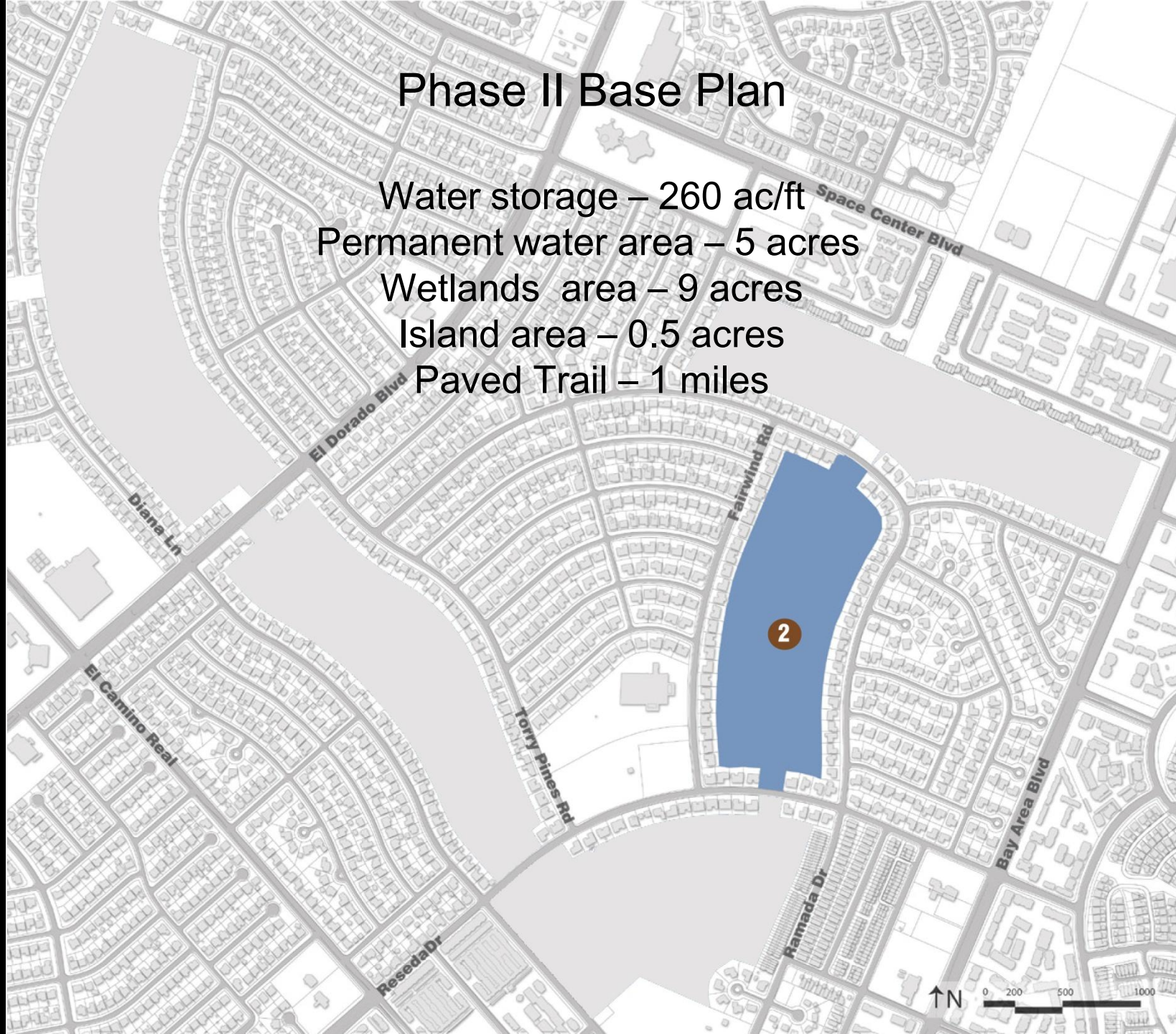
3

1



# Phase II Base Plan

Water storage – 260 ac/ft  
Permanent water area – 5 acres  
Wetlands area – 9 acres  
Island area – 0.5 acres  
Paved Trail – 1 miles







Neptune Ln

Ramada Dr

Reseda Dr

Fairwind Rd

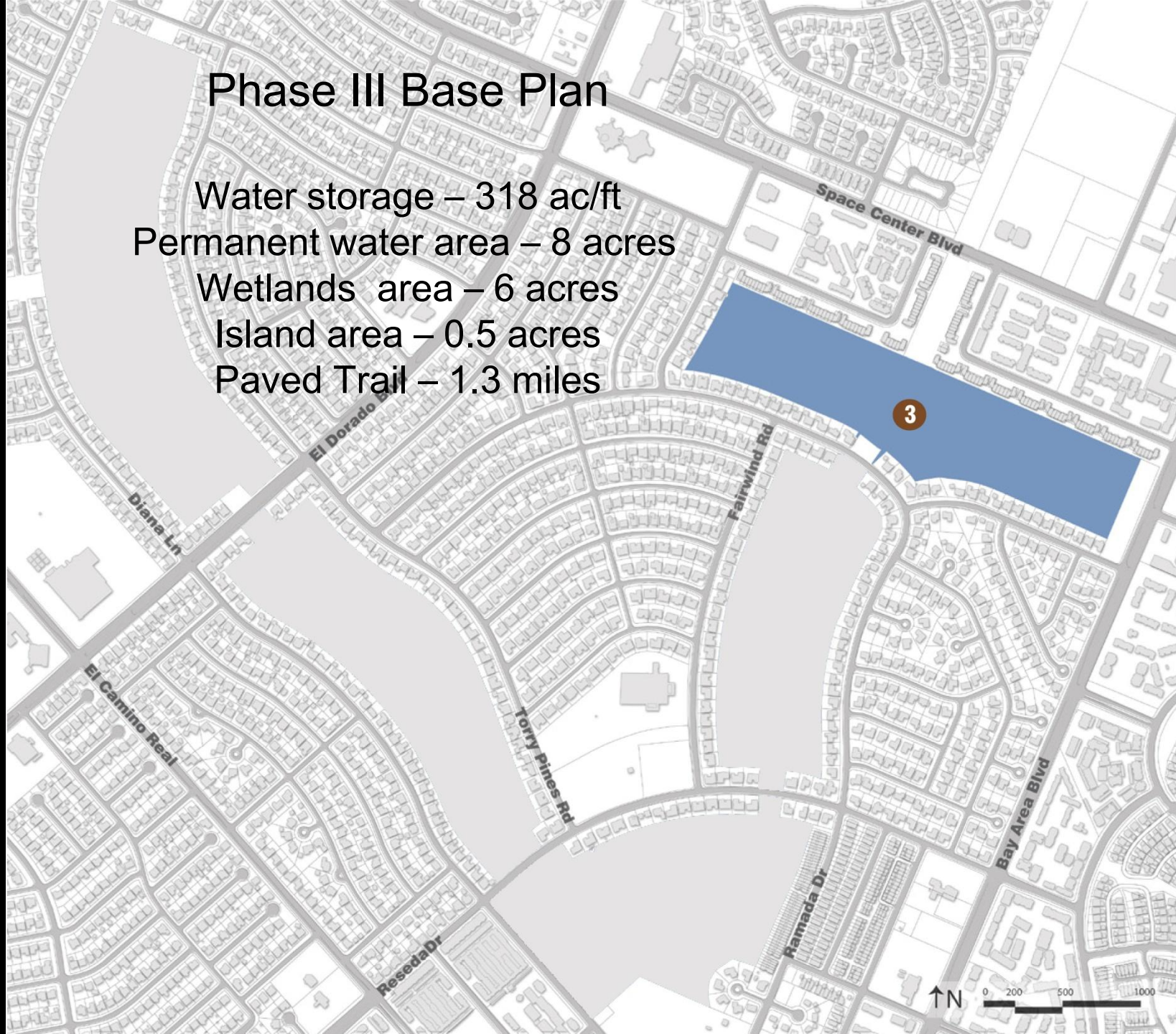
Clear Lake City  
Elementary





# Phase III Base Plan

Water storage – 318 ac/ft  
Permanent water area – 8 acres  
Wetlands area – 6 acres  
Island area – 0.5 acres  
Paved Trail – 1.3 miles







Seahorse Dr

Gunwale Rd

Seahorse Dr

Neptune Ln

Fairwind Rd

Ramada Dr

Seakale Ln

Bay Area Blvd

100ft 200ft 600ft





# Phase IV Base Plan

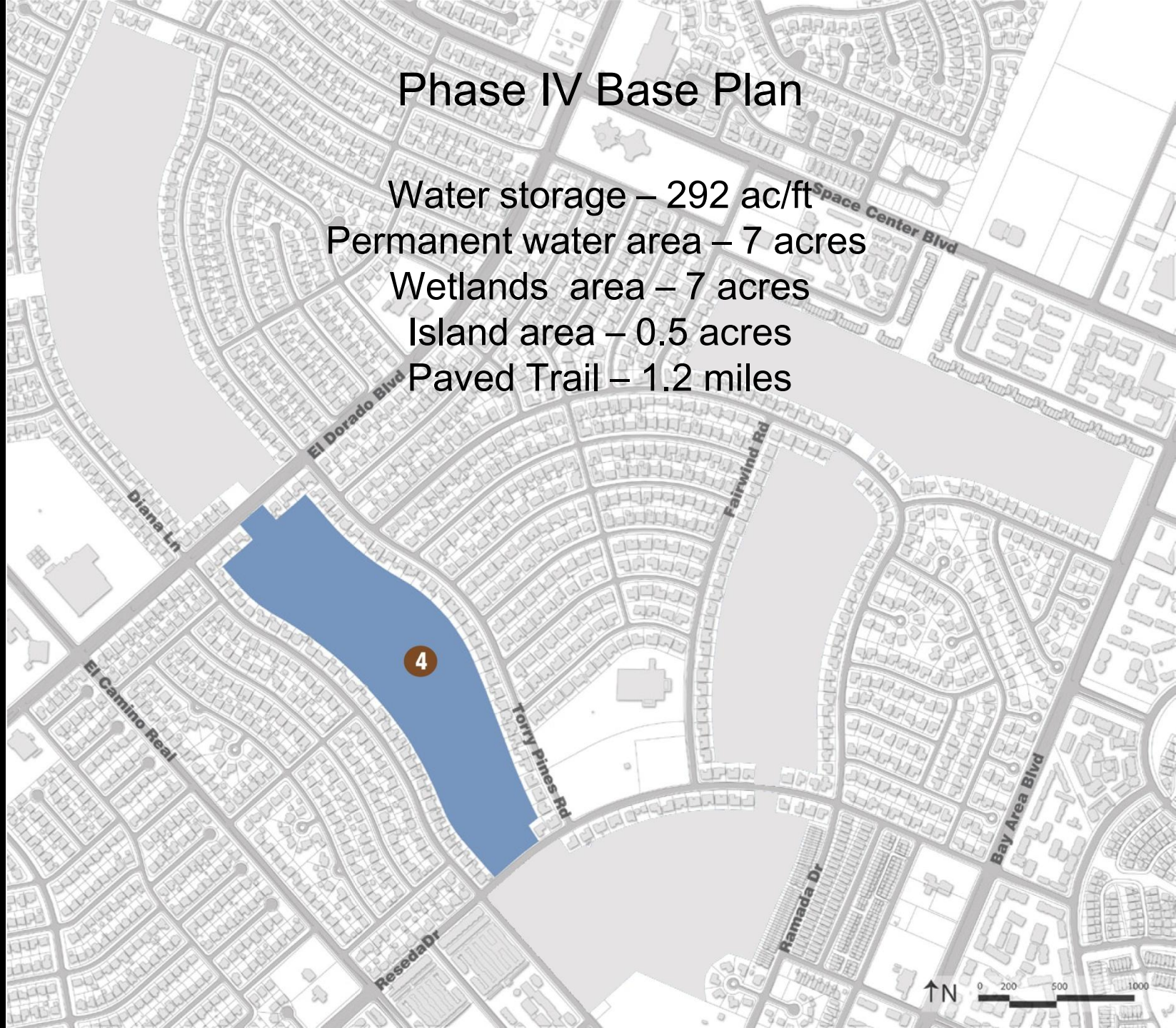
Water storage – 292 ac/ft

Permanent water area – 7 acres

Wetlands area – 7 acres

Island area – 0.5 acres

Paved Trail – 1.2 miles







Clear Lake City  
Elementary

Torry Pines Rd

El Dorado Blvd

Reseda Dr

Diana Ln

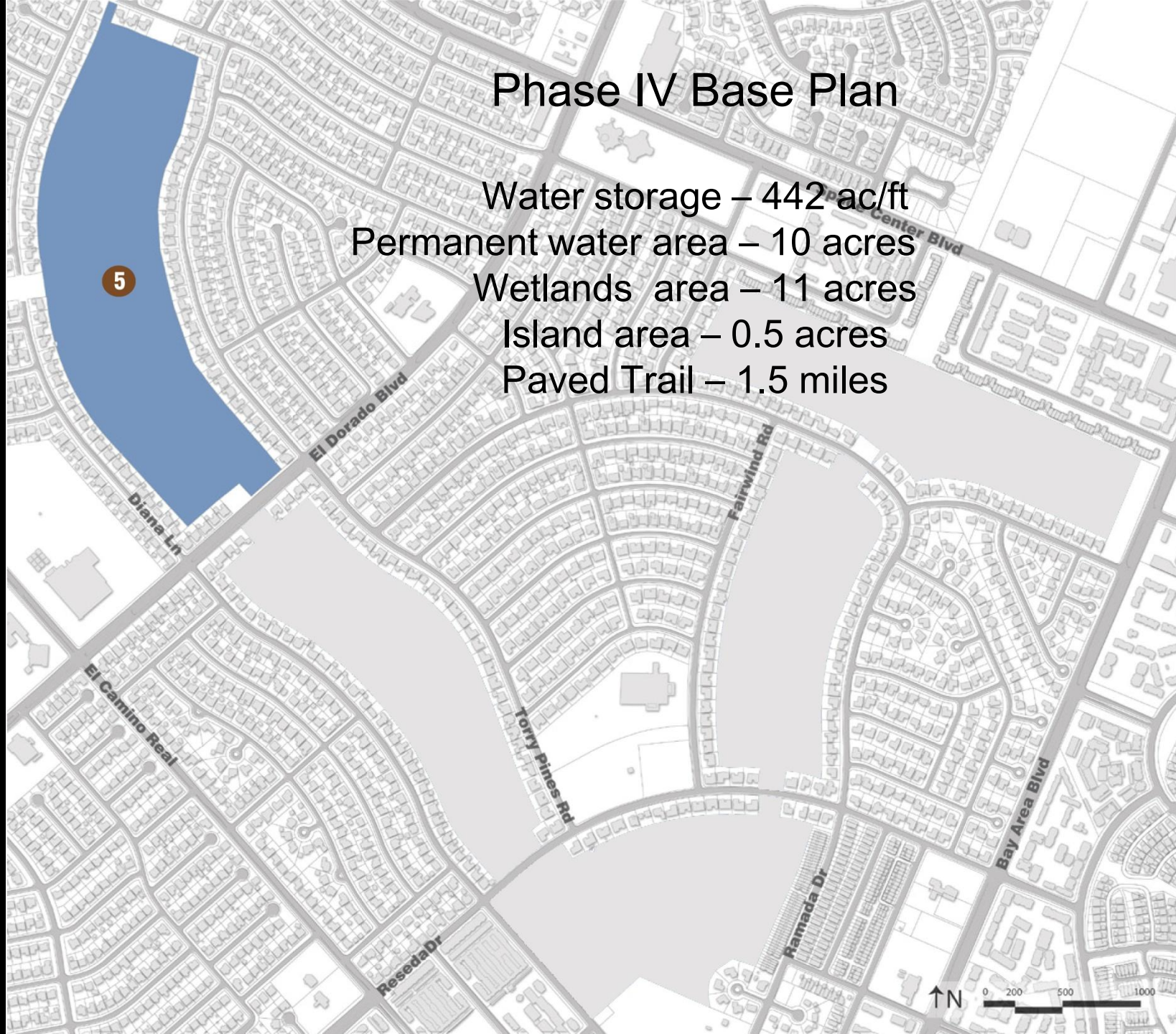
Clear Lake City  
Intermediate





# Phase IV Base Plan

Water storage – 442 ac/ft  
Permanent water area – 10 acres  
Wetlands area – 11 acres  
Island area – 0.5 acres  
Paved Trail – 1.5 miles







Penn Hills Ln

Torry Pines Rd

Diana Ln

Diana Ln





# CLCWA Detention Facilities

*“Making It Multi-Purpose”*

- a. Flood Damage Reduction
- b. Water Quality Improvements
- c. Habitat Creation
- d. Recreation











Thank You

