

CITY MANAGER



Meeting Date: May 24, 2024

To: Honorable Mayor & Council Members

From: George Garrett, City Manager

Subject: Update On Progress With Sombrero Boulevard Improvements

INTRODUCTION & STATUS:

For as long as any of us have been here, the section on Sombrero Boulevard from roughly 53rd Street to the west end of Skip Jack's has flooded during heavy rains and king tide events. This is a stretch of Sombrero Boulevard that is approximately 750 yards long.

Multiple things have changed in the past year which have magnified the impacts of the flooding events:

1. The Country Club installed a required stormwater berm whose intent is to contain stormwater on the country club property
2. King Tides are a regular concern
3. El Nino weather patterns through this past year and this winter
4. Heavier than average rain events have occurred

The berm has clearly restricted the flow of stormwater containing it entirely to the Sombrero Boulevard right-of-way. The berm also tells a story about the topography of the area. After extensive survey work over the past several months, City engineers determined that the north side of Sombrero Boulevard is uniformly higher than the south side. Thus, stormwater flows from the condominiums and Skip Jack resort and collects against the berm now in place ultimately covering the road as well.

Historically, the stormwater flowed in the same way but was not impeded by the berm. Thus, the stormwater flooded onto the golf course with minimal visual or physical impact to Sombrero Boulevard. As now, extreme rain events did create a ponding effect on the road, but typically not as bad.

With the obvious impacts of the current flooding two things have happened.

1. We currently manage the flooding by actively pumping the water down a stormwater well located in the immediate area.
 - a. We typically begin pumping the stormwater immediately as a storm begins and will not cease pumping until the water is gone. This effort is currently manually managed by the City's Public Works staff.

b. In the worst case, it has taken staff a little over a day and a half to eliminate the water covering the road (eg 11:00 AM, 052024 through 4:00 AM 052224)

2. The City Council directed staff to initiate a project to eliminate the problem. That effort has been underway since earlier this year (February-March). Initially, the effort required extensive survey work. It then requires engineering design ultimately to creating 100% permittable plans. Once plans are complete, they must be submitted to the South Florida Water Management District for necessary permits. Once permitted, the project is bid for construction. The City Council will approve necessary contracts and construction will begin through to project completion.

a. See the attached projected timeline for the completion of the Sombrero Stormwater Improvement Project

LESSONS LEARNED / PLAN FOR FUTURE EVENTS:

1. Applicable to the Section of Sombrero Boulevard from 53rd Street and Manor Lane to the west end of Skip Jack Resort only (not the active golf course).
2. Through efforts and lessons earlier this year, the City now has a four-inch pump on hand, and we are able to immediately pump stormwater under the force of the pump pressure down our stormwater wells.
3. The City is acquiring a second pump set-up as back-up in case pumps break down or there is more than one area requiring stormwater water displacement.
4. The City is now able to have the pump and necessary hose in place before the onset of an anticipated storm.
5. City staff will begin pumping water down our stormwater wells before the start of a significant rain event.
6. For future rain events, the following will occur:
 - a. Pumps and necessary well piping will remain in place and be maintain on a continual basis in place.
 - b. Pumps will be started immediately under virtually any rain event.
 - c. The City will establish lane closures, if necessary. to ensure that all traffic may travel safely through the shallowest part of flooded areas on Sombrero Boulevard
 - d. The City will maintain traffic control on-site using City staff until both flooded lanes of Sombrero Boulevard are clear.



MEMORANDUM

To: George Garrett, City Manager
From: Steve Suggs P.E., Project Manager
Date: May 24th, 2024
Re: COM Sombrero Blvd Drainage - Schedule
CC: Jared Weaver, Dan Saus

Project Schedule: Sombrero Blvd Drainage

Design Phase:

1. Design Kick-off (Completed)
2. 30% Design (Completed)
3. Potential Design Directions Report with Estimated Construction Cost (Completed)
4. 60% Design & Initial Permit Applications (0 - 4 weeks):
 - 60% Design Completion: [Date: Week 4]
 - Initial Permits Application (SFWMD & FDEP):[Concurrent with 60% Design, Date: Week 4]
 - Technical Specifications Start: [Date: Week 4]
5. 90% Design (5 - 6 weeks):
 - 90% Design Completion: [Date: Week 6]
- 6.100% Design (7 weeks):
 - 100% Design Completion: [Date: Week 7]

Permitting Phase:

7. Permit Review Process (12 weeks):
 - Initial Review by SFWMD & FDEP: [June 1, 2024 - June 30, 2024, Date: Week 5-9]
 - Update Plans Based on RAI: [July 1, 2024 - July 5, 2024, Date: Week 10]
 - Re-review by SFWMD & FDEP: [July 6, 2024 - August 4, 2024, Date: Week 11-14]
 - Permit Issuance: [August 5, 2024 - September 4, 2024, Date: Week 15-18]

Bidding Phase:

8. Prepare Bid Documents:
 - Bid Documents Preparation: [Start at 60% Design Completion, Date: Week 4-6]
9. Competitive Procurement:

- Bids Out: [July 21, 2024, Date: Week 7]
- Bids Evaluation: [September 4, 2024 - September 11, 2024, Duration: 45 days for bids, 1 week for evaluation]

10. City Council Approval:

- Recommendation of Award: [Next City Council Meeting, typically 2nd Tuesday after bid evaluation, Date: September 17, 2024]

Post-Approval Phase:

11. Contract Finalization:

- Insurance, P&P Bonds, Agreement Signed: [Date: September 18, 2024 - October 1, 2024, Duration: 2 weeks]

12. Notice to Proceed (NTP) & Pre-Construction Meeting:

- NTP Issued: [Date: October 2, 2024]
- Pre-Construction Meeting: [Within 14 days of NTP, Date: October 3, 2024 - October 16, 2024]

Construction Phase:

13. Construction Start:

- Start of Construction: [Date: October 17, 2024]

14. Construction Duration:

- Estimated Construction Duration: [8-12 months, Date: October 17, 2024 - October 17, 2025]

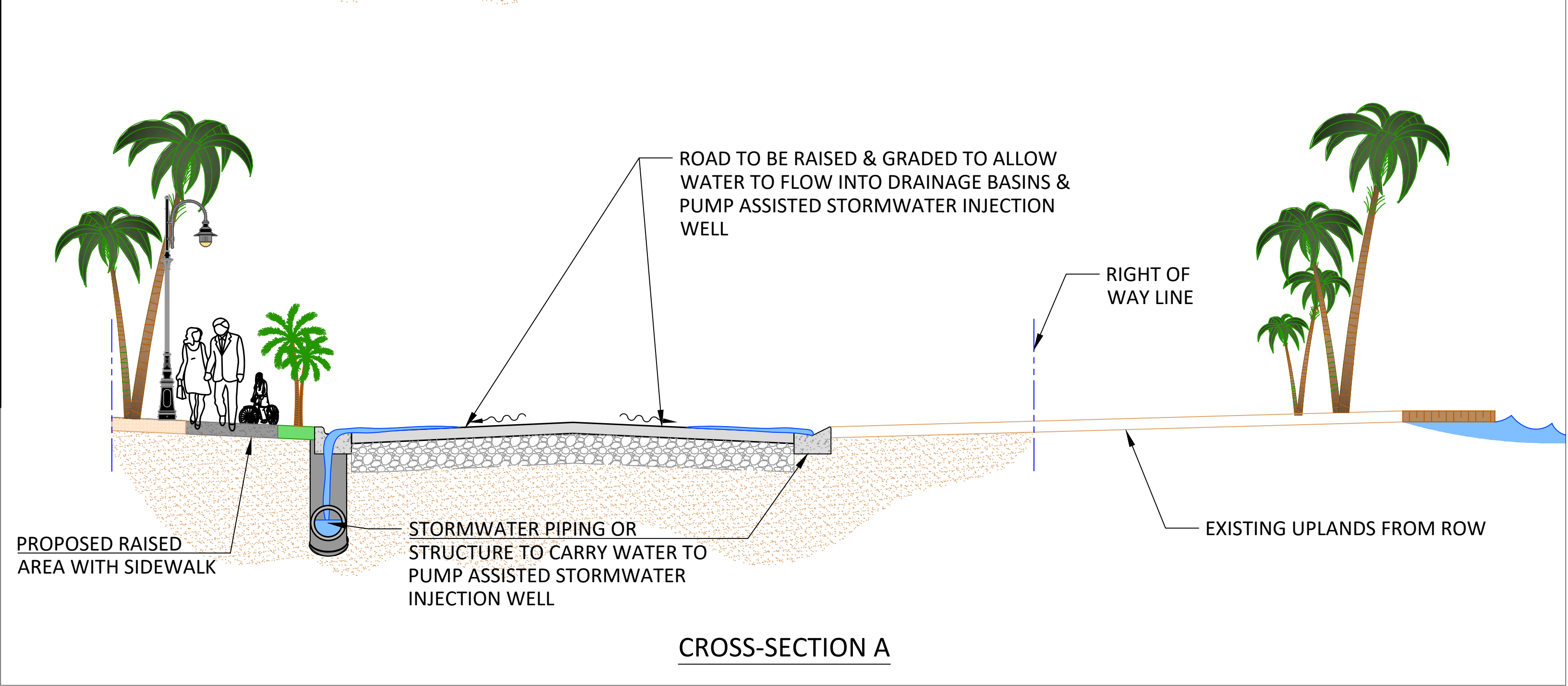
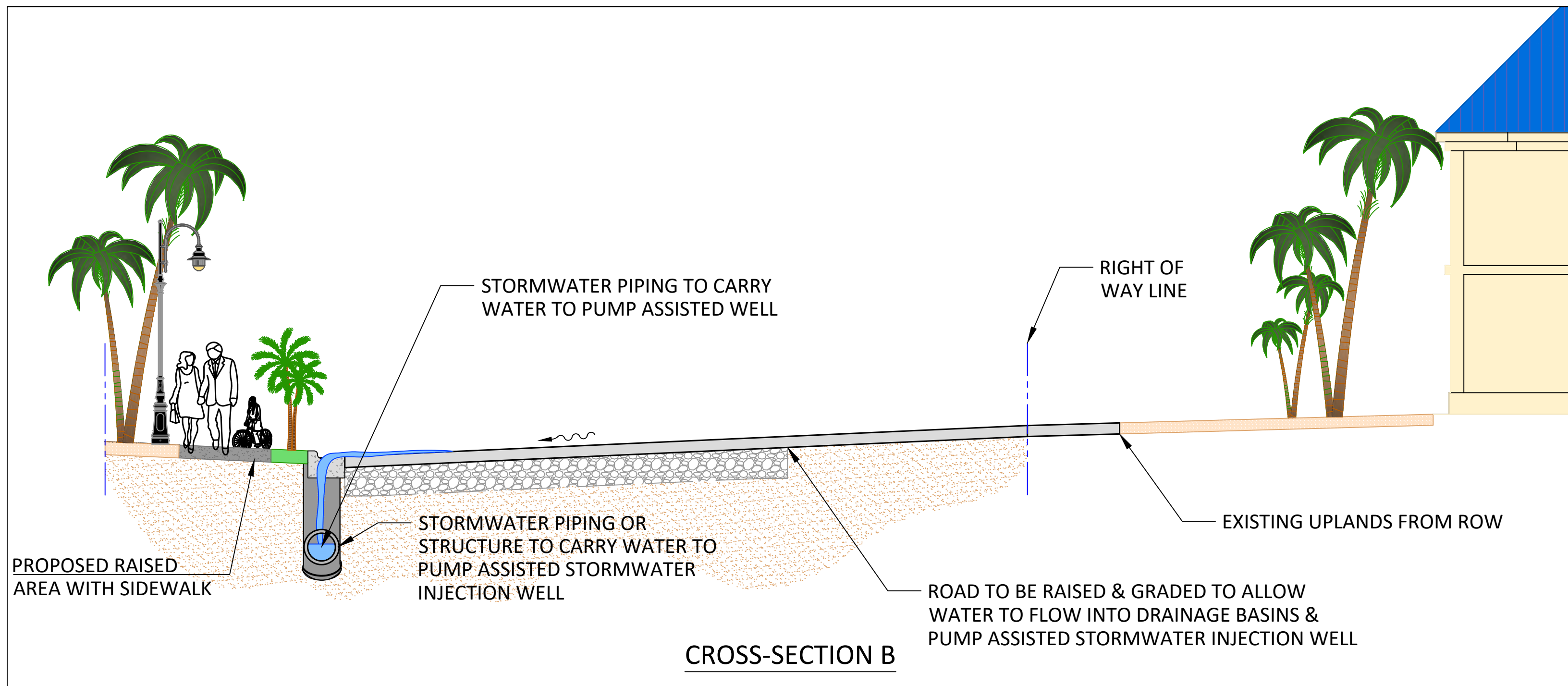
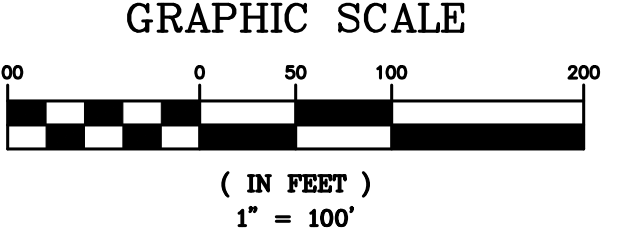
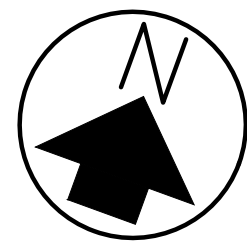
Detailed Timeline (Dates based on project start date):

1. 60% Design & Initial Permits Application: [June 1, 2024 - June 29, 2024]
2. 90% Design: [June 30, 2024 - July 13, 2024]
3. 100% Design: [July 14, 2024 - July 20, 2024]
4. Permit Review Process: [June 1, 2024 - September 4, 2024]
5. Bids Out: [July 21, 2024]
6. Bids Evaluation: [September 4, 2024 - September 11, 2024]
7. City Council Meeting for Award: [September 17, 2024]
8. Insurance, Bonds, and Agreement Signed: [September 18, 2024 - October 1, 2024]
9. NTP Issued: [October 2, 2024]
10. Pre-Construction Meeting: [October 3, 2024 - October 16, 2024]
11. Construction Start: [October 17, 2024]
12. Construction Completion (8-12 months): [June 2025 - October 2025]

This schedule is tentative and is shown as what WEC will try to achieve however, permitting may take longer than described and some items may change depending on how the design progresses. Please realize this is a rough draft at an accelerated timeline.

**PRELIMINARY DESIGN SUBJECT
TO CHANGE AS ENGINEERING
DESIGN ADVANCES**

WEC
WILLIAMS ENGINEERING CORPORATION
30 Years of Excellence in engineering
MAY 2024



- GENERAL NOTES:
1. ELEVATE THE ROAD SURFACE IN THE DESIGNATED PORTIONS OF AREA "B" & "A" TO ENSURE ROAD WILL PROPERLY DRAIN DURING TIMES OF HIGH RAINFALL.
 2. BOTH SECTIONS A AND B OF THE ROAD WILL UNDERGO RE-GRADING AS WELL AS RESURFACING TO ENSURE PROPER DRAINAGE TO STORM BASINS.
 3. ADDITIONAL STORMWATER CATCH BASINS AND INFRASTRUCTURE SHALL BE INSTALLED TO ROUTE WATER AWAY FROM ROADWAYS TO A PUMP ASSISTED STORMWATER INJECTION WELL WHERE THE RUNOFF WILL BE INJECTED INTO THE SUBSURFACE
 4. A SIDEWALK WITH LIGHTING WILL BE INSTALLED ON THE SOUTH SIDE OF THE ROAD IN ORDER TO PREVENT FLOODING IN THIS REA AS WELL AS PROVIDE PEDESTRIANS A SAFE ROUTE OF TRAVEL TO INTERCONNECT TO THE SOMBRERO BEACH RD WALKING PATH.