MEETING AGENDA
PLANNING AND ZONING BOARD MEETING
CITY OF RIVIERA BEACH, FLORIDA

LOCAL PLANNING AGENCY
Development Services Department (561) 845-4060, www.rivierabeach.org

Commencement – 6:30 PM
Thursday, July 27, 2023

Meeting Location: **Marina Event Center**
190 East 13th Street, Riviera Beach, FL33404

Due to COVID-19, attendees must adhere to the City of Riviera Beach guidelines.

If you wish to speak on any item(s) on this agenda, please complete a public comment card and provide it to Planning and Zoning Staff. Cards must be submitted prior to Board discussion of an item. Thank you.

I. MOMENT OF SILENCE AND PLEDGE OF ALLEGIANCE

II. ROLL CALL

Frank Fernandez, Chairperson
Anthony Brown, Board Member
Rena Burgess, Board Member
Evelyn Harris Clark, Board Member
William Wyly, Vice-Chair
James Gallon, Board Member
Margaret Shepherd, Board Member
Russell Barnes, 1st Alternate
Vacant, 2nd Alternate

ACKNOWLEDGEMENT OF BOARD MEMBER ABSENCE NOTIFICATION

III. ADDITIONS AD DELETIONS TO THE AGENDA

IV. DISCLOSURE BY BOARD MEMBERS AND ADOPTION OF THE AGENDA

V. APPROVAL OF MINUTES – June 22, 2023

VI. UNFINISHED BUSINESS– None

VII. NEW BUSINESS

A. A RESOLUTION OF THE CITY COUNCIL, OF THE CITY OF RIVIERA BEACH, PALM BEACH COUNTY, FLORIDA, APPROVING PLAT APPLICATION (PA-23-0001) FROM EASTON GROUP COMPANIES, INC. TO ADD ONE ADDITIONAL RIGHT OF WAY (ROW) TRACT "B1" (+/- .03 ACRES); PROVIDING FOR CONDITIONS OF APPROVAL; AND PROVIDING FOR AN EFFECTIVE DATE.

B. A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RIVIERA BEACH, PALM BEACH COUNTY, FLORIDA, APPROVING REPLAT APPLICATION NUMBER (PA-22-0007) FROM THE COMMUNITY DEVELOPMENT CORPORATION (CDC) OF THE CITY OF RIVIERA BEACH (APPLICANT); TO ALLOW FOR A PROPOSED RESIDENTIAL DEVELOPMENT CONSISTING OF 28 RESIDENTIAL LOTS; AND PROVIDING FOR AN EFFECTIVE DATE AND FOR OTHER PURPOSES.

C. A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RIVIERA BEACH, PALM BEACH COUNTY, FLORIDA, APPROVING SITE PLAN APPLICATION NUMBER (SP-22-0022) FROM THE COMMUNITY DEVELOPMENT CORPORATION (CDC) OF THE CITY OF RIVIERA BEACH (APPLICANT); TO ALLOW FOR A PROPOSED RESIDENTIAL DEVELOPMENT CONSISTING OF 28 RESIDENTIAL UNITS WITH ASSOCIATED PARKING AND AMENITIES; WITH 26 OF THE PROPOSED UNITS CONSISTING OF 2-STORY TOWNHOMES, WITH ONE SINGLE STORY DUPLEX STRUCTURE ACCOUNTING FOR THE REMAINING TWO UNITS; THE PLAN INCLUDES 2 PARKING SPACES PER UNIT AND 11 GUEST SPACES; FOR A TOTAL OF 67 SPACES WITH A 2,416 SQUARE FOOT RECREATION AREA CENTRALLY LOCATED BETWEEN THE PROPOSED UNITS; AND PROVIDING FOR AN EFFECTIVE DATE AND FOR OTHER PURPOSES.

VIII. WORKSHOP ITEM(S) - None

IX. GENERAL DISCUSSION

A. PUBLIC COMMENTS

B STAFF UPDATES

- **Comprehensive Plan Update**

C. CORRESPONDENCE

D. PLANNING AND ZONING BOARD COMMENTS

1. Upcoming Planning and Zoning Board Meeting – August 10, 2023

X. ADJOURNMENT

NOTICE: In accordance with the Americans with Disabilities Act, persons in need of a special accommodation to participate in this proceeding shall, within a reasonable time prior to any proceeding, contact the City of Riviera Beach, 600 West Blue Heron Boulevard, Riviera Beach, Florida 33404, Telephone 561-845-4000 or TDD 561-840-3350, www.rivierabeach.org

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PLANNING AND ZONING BOARD
CITY OF RIVIERA BEACH, FLORIDA

MEETING

June 22, 2023
6:30 p.m.

Riviera Beach - Event Center
190 East 13th Street
Riviera Beach, Florida 33404

Nicolette Greco
Digital Reporter
Notary Commission No. HH 220848

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APPEARANCES:

FRANK FERNANDEZ, CHAIRPERSON
MARGARET SHEPHERD, BOARD MEMBER
JAMES GALLON, BOARD MEMBER
RENE BURGESS, BOARD MEMBER
EVELYN HARRIS CLARK, BOARD MEMBER
RUSSELL BARNES, 1ST ALTERNATE
SIMONE DAVIDSON, PLANNING AND ZONING, CITY OF RIVIERA BEACH

CURT THOMPSON, DEVELOPMENT SERVICES, CITY OF RIVIERA BEACH
LINDA MIA FRANCO, DEVELOPMENT SERVICES, CITY OF RIVIERA BEACH

SONIDE SIMON, DEVELOPMENT SERVICES, CITY OF RIVIERA BEACH

CHRISTY LYN GODDEAU, CITY ATTORNEY

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(The proceedings commenced at 6:30 p.m.)

CHAIRPERSON FERNANDEZ: Good evening. Welcome to the City of Riviera Beach Planning and Zoning Board meeting. It is approximately 6:30 p.m. on Thursday, June 22nd, 2023.

If you wish to speak on any items on this agenda, please complete a public comment card and provide it to the Planning and Zoning staff. Cards must be submitted prior to Board to discussion of an item. Thank you.

At this point, please let say a moment of silence.

(A moment of silence was observed.)

CHAIRPERSON FERNANDEZ: Stand for the Pledge of Allegiance.

(The Pledge of Allegiance was recited.)

CHAIRPERSON FERNANDEZ: Miss Davidson, roll call, please.

MS. DAVIDSON: Anthony Brown?

Rene Burgess?

BOARD MEMBER BURGESS: Here.

MS. DAVIDSON: Evelyn Harris Clark?

BOARD MEMBER HARRIS CLARK: Present.

MS. DAVIDSON: James Gallon?

BOARD MEMBER GALLON: Here.

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MS. DAVIDSON: Margaret Shepherd?

BOARD MEMBER SHEPHERD: Here.

MS. DAVIDSON: William Wyly?

Frank Fernandez?

CHAIRPERSON FERNANDEZ: Here.

MS. DAVIDSON: Russell Barnes?

1ST ALTERNATE BARNES: Here.

MS. DAVIDSON: You have a quorum.

CHAIRPERSON FERNANDEZ: Thank you. Do we have any Acknowledgement of Board Member Absence Notification?

MS. DAVIDSON: Yes, Mr. Chair. Board Member Brown did advise that he would not be present for this evening's meeting. In the absence of Mr. Brown, we may instill voting rights on the 1st Alternate, Mr. Barnes?

CHAIRPERSON FERNANDEZ: Thank you. Additions or Deletions to the Agenda?

MS. DAVIDSON: None, Mr. Chair.

CHAIRPERSON FERNANDEZ: Disclosure of Board Members for this upcoming – do you have any disclosures?

MS. DAVIDSON: None.

CHAIRPERSON FERNANDEZ: Can we move for the adoption of this agenda?

BOARD MEMBER BURGESS: So moved.

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BOARD MEMBER GALLON: Second.
MS. DAVIDSON: Rene Burgess?
BOARD MEMBER BURGESS: Yes.
MS. DAVIDSON: Evelyn Harris Clark.
BOARD MEMBER HARRIS CLARK: Yes.
MS. DAVIDSON: Russell Barnes?
1ST ALTERNATE BARNES: Yes.
MS. DAVIDSON: James Gallon?
BOARD MEMBER GALLON: Yes.
MS. DAVIDSON: Margaret Shepherd?
BOARD MEMBER SHEPHERD: Yes.
MS. DAVIDSON: Frank Fernandez.
CHAIRPERSON FERNANDEZ: Yes.
MS. DAVIDSON: Unanimous vote.
CHAIRPERSON FERNANDEZ: Now we move on to the Approval of the Meeting Minutes for May 25, 2023.
BOARD MEMBER GALLON: So move.
BOARD MEMBER HARRIS CLARK: Second.
MS. DAVIDSON: Rene Burgess?
BOARD MEMBER BURGESS: Yes.
MS. DAVIDSON: Evelyn Harris Clark?
BOARD MEMBER HARRIS CLARK: Yes.
MS. DAVIDSON: Russell Barnes?
1ST ALTERNATE BARNES: Yes.
MS. DAVIDSON: James Gallon?

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BOARD MEMBER GALLON: Yes.
MS. DAVIDSON: Margaret Shepherd?
BOARD MEMBER SHEPHERD: Yes.
MS. DAVIDSON: William – I'm sorry. Frank Fernandez?
CHAIRPERSON FERNANDEZ: Yes.
MS. DAVIDSON: Unanimous vote.
CHAIRPERSON FERNANDEZ: Thank you. Do we have any Unfinished Business, for the record?
MS. DAVIDSON: None, Mr. Chair.
CHAIRPERSON FERNANDEZ: Now we move on to New Business.
MS. DAVIDSON: Item VII A, a resolution of the City Council, of the City of Riviera Beach, Palm Beach County, Florida, approving Site Plan Application Number (SP-23-0009) from the City of Riviera Beach (Applicant); for the request of a major site plan approval; to allow for a proposed new 2-story fire station & emergency operation center for the City of Riviera Beach; to replace the existing Fire Station Number 87 located at the City Hall Complex; and providing for an effective date and for other purposes.
CHAIRPERSON FERNANDEZ: Thank you.
MR. THOMPSON: Okay. Thank you, Mr. Chairman. For the record, I'm Curt Thompson, Principal Planner for

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the City of Riviera Beach, and I will present this before you.
Ms. Davidson has already read that.
This is the site map showing the location of the subject property. Most of you, I'm sure, realize the location. It is 600 West Blue Heron Boulevard, which is the location of the municipal complex. The total acreage of the complex is just over 12 acres. The total acreage for the subject site is just over 3.3 acres.
The Applicant, which is the City of Riviera Beach, is to -- is to request to build a new two-story fire station and EOC center for the City. This is proposed Fire Station Number 87, is to replace the existing fire station, which is really Fire Station Number 1. We've got a little bit of a typo, but we'll fix that when it comes to the Town -- to the City Council, but it's replace Fire Station Number 1.
You have there, all of the information here. The zoning is Community Facilities and the future land use is also Community Facilities.
The proposed site plans, you see there, there are approximately 78 parking spaces, four of which will be ADA spaces. You'll see -- let's see. There -- oops. There is a -- there's a couple here and a couple more up

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there.
Okay. I don't want to zip through this, but if I may say, as your staff person, the City needs this, okay? I'm just going to cut right to the chase. I think Ms. Shepherd can appreciate that, having been here on the Board for almost 20 years -- 18, and so, this is -- this EOC building, this new fire station and EOC building will present a situation where, not only will we have a fire station, but we will also have an emergency operation center, which is one of the few in this county. Palm Beach County has one, the county. I don't know if any other cities have one, but I know that this area would benefit from it.
So having said that, here is the proposed landscape plan, which you all have a copy of. This, what you have here are the elevations, which is the top -- I'm sorry, I keep hitting that.
The top is the west elevation, and in this lower elevation is the north elevation of the subject property.
And on this next slide here you have the east elevation. The east elevation would be along H, H Street. In fact, let me kind of, let me go back just a, just a bit.
This is West 28th Street here to the north,

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and this is H, West H Street here to the east, and to the south here is additional municipal property, and then over here to the west is additional municipal property. What they're showing you here is the actual site itself, so I didn't want to go too fast and just skip over that aspect.

There's the elevations. Now, in terms of the staff application, this is a site plan approve -- a site plan review in Section 31-57 of the City's Zoning Code, and as you can see here by the points, we could ask the -- in order for this to be approved, we want to ascertain the proposed new development is in conformity with the Comprehensive Plan. Staff believe that it is. Is not detrimental to the neighboring land uses. Staff believe that it is not. That an efficient pedestrian vehicular traffic system, including proper means ingress and egress is provided for. Staff believe that it is because you have at least two in -- two ingress and egresses.

Let me go back to here, and you see here and here, okay? There will be four bays along in this area here that will service the station.

Go forward again. Okay. And lastly, that the proposed project shall be a viable addition to the community. On point number four is where I have

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emphasized, I don't mean to give any editorialization, but it is pretty clear the benefit that this could -- this station could provide.

And in staff's review of the application, this is -- this is a plus or minus 29,500 square foot square facility, four apparatus bays for the fire station and EOC center for the City. The proposed Fire Station 87 is to replace Fire Station Number 1 located at the City Hall Complex. The size of the site where this is to take place is just over 3.335 acres, and is enclosed by -- will be enclosed by a six-foot high precast high concrete wall along the west and south sides.

And if I could, I'll go back just quickly here. As I said, on the west and the south wall, south properties will be that wall, six-foot high. On the north, there will be three secured sides to the -- to the -- to be continuously landscape. There's, I'm sure some of you saw the landscape plan, continuous hedging and trees here and along here along the south side.

There are two signs, one up here and one here. Those signs, according to Section 28.107 of the sign regulations, it allows for uses that are driven by a city or a county. In this case, the city. It allows for signs to be 175 square feet per right-of-way. So this sign could actually be up to 175 feet, but it is

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not, it is approximately 76 feet from end to end, four foot high and 19 feet wide from, when I say end to end, from end to end like that, and then your other sign is going to be here, same type, four feet in height, 19 feet wide, total of 76 feet. So as you can tell, that will be a total of 152 square feet, and according to the regulations, you're allowed up to 175 per right-of-way. So it's going to be far smaller than 175 along this right-of-way, which is West 28th, and along this -- excuse me, along this right of way, which is West H, H as in Harry Street. I'm sorry, H as in Harry Avenue, right here. Okay.

CHAIRPERSON FERNANDEZ: I don't like to interrupt you. Real quick. So you're saying that it's less than the allowable?

MR. THOMPSON: It is less than the allowable.

CHAIRPERSON FERNANDEZ: So then are you requesting an exemption as well? I only saw a site plan approval.

MR. THOMPSON: No, they're not -- well, since the sign regulations allow it, allows that size, an exemption, I wouldn't say would not be necessary because it's -- they're going to be more than meet the regulation.

CHAIRPERSON FERNANDEZ: Okay, thank you.

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MR. THOMPSON: Okay. And if I may shoot, go forward again, if I may. So as I said, here, I talked about the -- the just over a third acre in size and how this new station will have vehicular access points, plus fire access, to West H, West Avenue H, similar to the current fire station, as I've said in -- earlier.

And then staff's review of the application, the main thing here that I want the Board to focus in on is the compliance with the Comprehensive Plan, and this objective, 1.1, public facilities availability, this comes -- this comes directly from the Comprehensive Plan, which states that the City shall continue to ensure that all development and redevelopment is coordinated with the available -- availability of facilities and services and is compatible with soil condition topography.

Well, the soil condition topography is pretty -- is pretty conducive because we already got a complex there of tremendous size on the 12-acre site, and as I've said earlier to the Board Members, I may look at Ms. Shepherd because, only because Ms. Shepherd has been here the longest. Ms. Shepherd, we need this. This is needed.

BOARD MEMBER SHEPHERD: I may be in competition with Ms. burgess now. I'm in competition

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with her. I think we kind of --
MR. THOMPSON: Oh, she's been here -- she's been here just as long?
BOARD MEMBER SHEPHERD: She's been here a long time.
MR. THOMPSON: Well, pardon me, ma'am.
BOARD MEMBER BURGESS: 2009.
MR. THOMPSON: But I will say, Ms. Burgess and Board Members, that the EOC building and the fire station, that is a unique type of situation that I haven't seen very often here in this county, and I've lived here for a few years. So this will be a very unique addition to the City and add the necessary public safety needs that I think the City needs and would bring the City into the 21st century.
And then, as the other last point I wanted to make here is the landscaping, as I said here, as you saw and on paper, but I want to say this verbally, there will be about 53 shade trees, 13 accent trees, and 28 palm trees for a total of 94 trees, and there will be over 3,000 quantities of strawberry ground cover and accents along the -- along with St. Augustine sod -- Palmetto sod, and non-cypress dark brown mulch at three inches in depth. So there's a lot of landscaping that's going to be used here to -- to dress up the site, if you

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will, and add to the -- well, give some attractiveness to the site because it's been, in my experience, that landscaping will always increase the value of a property. Plus, it leads to the beautification of the site with a new fire station and EOC building.
This, it was properly heard and noticed here, and at this point, I did not receive -- well, we did not receive any negative or -- positive or negative input from the general public regarding this petition. So I believe that, as I said earlier, that this is a project that will be -- that will be needed in now and the future.
So the staff recommends that the Planning and Zoning Board recommend approval of this application to the City Council based upon the following. The proposal is -- is consistent with the intent of the special exception definition. Well, I'm sorry, of the special exception definition and site plan. The proposal is consistent with the future land use element and the Comprehensive Plan, Objective 1.8.1., and lastly, there are site plan conditions of approval that will eliminate any adverse impact.
So has a -- in conclusion, Mr. Chairman and Board Members, this project is something that whose time has come, all right? Staff would like to recommend that

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you recommend to the Council to approve this, and that concludes staff's presentation. Thank you for listening.
CHAIRPERSON FERNANDEZ: Thank you. Ms. Davidson, we have no comment cards, public comment cards?
MS. DAVIDSON: No, Mr. Chair.
CHAIRPERSON FERNANDEZ: Okay. Let's start off. Ms. Shepherd, would you like to go first?
BOARD MEMBER SHEPHERD: I'll go last --
CHAIRPERSON FERNANDEZ: Absolutely.
BOARD MEMBER SHEPHERD: Mr. Chair. Thank you.
CHAIRPERSON FERNANDEZ: Absolutely. Mr. Gallon?
BOARD MEMBER GALLON: No comment.
CHAIRPERSON FERNANDEZ: Ms. Burgess?
BOARD MEMBER BURGESS: Can you pull the rendering back up? Oh, go -- no, not that one --
MR. THOMPSON: Back, the rendering.
BOARD MEMBER BURGESS: That's the technical rendering. The pre-picture.
MR. THOMPSON: Like those? This rendering?
BOARD MEMBER BURGESS: Yes. If you can just leave that up.
I don't have any questions right now. I do

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believe it's a good facility and it's basically going to model the one currently on Blue Heron?
MR. THOMPSON: Yeah, that particular rendering, Ms. Burgess --
BOARD MEMBER BURGESS: Station 88.
MR. THOMPSON: -- is the north -- I'm sorry, let me make sure I get it right. That was one of the earlier ones.
BOARD MEMBER BURGESS: So this one has a couple, what, remodeled upgrades?
MR. THOMPSON: Yeah, that one, this one is the -- oops.
BOARD MEMBER BURGESS: Oh yeah, it's much bigger.
MR. THOMPSON: This one is the west elevation and the one below is the north elevation. Okay.
1ST ALTERNATE BARNES: What's -- what's the eastern -- the one that's facing the street, what's the eastern elevation?
MR. THOMPSON: Okay, that's the east elevation, which --
1ST ALTERNATE BARNES: The one on the top.
MR. THOMPSON: Which would be --
1ST ALTERNATE BARNES: I had very similar thoughts because the one on the Blue Heron right now is

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a beautiful building, really, really, and there seems to be some differences between this one. And was it the same architect that did this building that did one on Blue -- Blue Heron? Because there seemed to be some nuances that are different and it would be, I think, really beneficial that the fire stations in Riviera Beach all look alike, that they were planned to be looked that way.

MR. THOMPSON: I think it's time for --

CHAIRPERSON FERNANDEZ: I guess the pros -- I guess the pros are up here. The cavalry.

CHIEF CURD: Hello. How are you all doing, Board? Thank you. John Curd, Fire Chief.

Agreed 150 percent, and a lot of the elements are identical. What is different is that front lobby area, and the intent behind that is this is more than just a fire station and an EOC. This is also going to be a museum piece to the history of Riviera Beach Fire Rescue. So that glass enclosure, that lobby that you see right here is going to house a museum based on the history and the people that contributed to build this organization.

We decided to make that this focal point and the centerpiece because, while the EOC is needed, I don't need to explain Hurricane Ian and the importance

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of an EOC, that's only a very small function of that space. That's actually going to be a community space where HOA meetings can be held, emergency council meetings can be held, training with Inlet Grove and their students across the street as part of their nursing program.

So we think it's going to attract the community into the station, and as they come in to do their business there, they also get to walk through the history of Riviera Beach Fire Rescue. The memorial up front will have the names embedded of each one of our retirees, and then, obviously, all of the beautiful artwork, murals, statues, and commemorative pieces that are on the inside will be part of it as well.

And this site was chosen for that because this site has historical significance to the firefighters in Riviera Beach. This is where many of them were hired, worked their whole careers. So you can see the elements of the 87 where it says Riviera Beach Fire Rescue, the signage out front, the gray and the red off-tones are all identical to the other station, but we wanted that focal point on that corner to accent what is going to be the museum piece, if that answers your question.

1ST ALTERNATE BARNES: Sorry to interrupt you.

BOARD MEMBER BURGESS: Oh no, not at all.

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It's beautiful.

Coming off of the road when the fire trucks exit, and I know you probably can't tell from here, I was just wondering where the, what do you guys call that, the lights like --

CHIEF CURD: Yes.

BOARD MEMBER BURGESS: -- to block off the traffic.

CHIEF CURD: So it is identical to the station we have now. So our preemption, our lighting, and our deployment won't change from the way it's been since 1972. So everything is going to be identical while the station is being shifted slightly on the property to get up more towards the corner to leave space for what's planned in the future for that site. But otherwise, it's going to be at the same exact location with the same exact deployment model that we've used for almost 50 years.

BOARD MEMBER BURGESS: Okay. Thank you, Chief.

CHIEF CURD: Absolutely.

CHAIRPERSON FERNANDEZ: I just have a few questions. You mentioned aluminum picket fence. Where is that aluminum? Is it aesthetically -- I mean, this is a beautiful --

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MR. BAILEY: Yeah, the aluminum fence goes on the north side along 28th Street. You can imagine, with our wonderful partner the School Board and Inlet Grove and the improvements that we anticipate there through the School Board's investment, we didn't want to put up a wall on 28th Street and have the school looking at a wall and hide this beautiful facility.

We do, although, need to provide security for the site because of the nature of the operation. So we elected to put a aluminum picket fence similar to what is on 88 right there at Congress and Blue Heron. You'll see the black, nice decorative fence that really accents the reds and the grays that are in the building's color palette. So the fence goes along 28th Street, so that the students, and again, this is all part of the recruitment, as well as our residents seeing an operation, seeing the building, seeing the comings and goings and wanting to aspire into the fire service.

So we intentionally didn't put a wall on the north side so that inlet Grove could see what's going on at the property, while still providing our needed security for the site.

MR. THOMPSON: See, that was -- that was -- Mr. Bailey makes a good point because the intent of aluminum picket fence is to allow visibility inside of

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the property. Plus, it allows the landscaping to grow, and eventually the landscaping will grow in such a way that the picket fence could be screened or concealed.

CHAIRPERSON FERNANDEZ: Going back to landscaping, the trees and the shrubs we're going to plant in there, we're going to make sure we don't do like one-foot shade trees that will grow in 30 years, correct?

MR. THOMPSON: Correct.

CHAIRPERSON FERNANDEZ: We're going to make sure that we -- we order the right stuff, not be cheap over here and order like, you know, those little 12-inch things at Home Depot or Lowe's --

MR. THOMPSON: Right. Okay. The Code --

CHAIRPERSON FERNANDEZ: – and then, 30 years from now, will grow.

MR. THOMPSON: Right. The Code requires a minimum of a 12-foot high shade tree. Accent trees, the code says minimum height at 10 feet at, you know, at planting. I mean, that -- I'm just quoting you the code. Of course, we can go higher, okay, it's just that the minimum is 12. They can go higher in terms of shade trees and -- or palms, and accent trees are 10 feet, but you can go higher. Don't have to be less. They cannot be less, but they can go -- they can be higher.

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CHAIRPERSON FERNANDEZ: Okay. And one last question. I hope the City's looking at, I'm a little biased towards my other brothers and sisters in blue, the law enforcement side of the family. I'm hoping that we're also looking to build nice facilities like that for them. Is that coming anywhere near the pike, lately?

MR. BAILEY: If you go back to the April 19th City Council meeting, myself and multiple other staff made a lengthy presentation on the situation in our police department right now. They're currently being relocated from this property to a temporary site, and we were authorized by the City Council to move forward with the necessary documentation and solicitation to provide them a new permanent headquarters.

CHAIRPERSON FERNANDEZ: So going back now, we did 88, we did 87, knowing full well of the issues with our police officers and their facilities. How come we didn't come up with a strategic plan for them as well, a couple years ago when we did 88?

MR. BAILEY: That is a – we would need to take that offline. That is a pretty complicated question that's not --

CHAIRPERSON FERNANDEZ: I was just asking. That's perfect.

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MR. BAILEY: Pretty complicated history and not necessarily related to the site plan before you, but --

CHAIRPERSON FERNANDEZ: Chief, no disrespect, I love my brother, my fire brothers, but --

CHIEF CURD: And we all do the same work, serving our community.

CHAIRPERSON FERNANDEZ: Absolutely.

CHIEF CURD: And they -- I've been involved in some of the conversations of what's to come for the police department. There's been a lot of different options that have been out there for them.

88 and 87 came about simply because of the shutdown of the stations and our firefighters living in trailers and not having showers and those type of things. So there was a little bit of a faster reaction on that end, but I could assure you, from what I'm seeing, you're going to be more than pleased with what they do for the police department.

CHAIRPERSON FERNANDEZ: We look forward to that. Ms. Clark?

BOARD MEMBER HARRIS CLARK: Sure.

CHAIRPERSON FERNANDEZ: Yes, I'm sorry --

BOARD MEMBER HARRIS CLARK: A couple questions.

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CHAIRPERSON FERNANDEZ: Hold oh, we've got Ms. –

BOARD MEMBER SHEPHERD: No, go ahead, let her talk.

CHAIRPERSON FERNANDEZ: Ms. Clark?

BOARD MEMBER HARRIS CLARK: Yes, a couple of questions. Could you elaborate more on the operation center? You were sharing that that is going to be unique to our municipality, so could you elaborate on that?

And I also would like to understand, too, because of it being a emergency operations center, are there other municipalities or towns that are also going to tap into this resource? And if they do, are they going to be required to help fund this operation?

That's two questions, and then I have a third one.

CHIEF CURD: Okay. Well, let's start with the first part of that question. No, we're not the only municipality to have an EOC. No, we are not the only municipality to have an EOC and a fire station combination. However, we've never had an EOC.

We are, right now, weathering every storm in a building that, quite frankly, I don't feel comfortable in. What this allows us to do is have a central

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operations center designed specifically to support operations within the City of Riviera Beach.

The hierarchy is obviously the feds, state, we have Palm Beach County's EOC, and then you have your municipal EOCs. We will now be able to function as a true freestanding EOC and not rely as much on Palm Beach County because, when we have a countywide event, we've been told you're going to be able to need to take care of yourself. So this is what this is preparing us for.

If we had an Ian or a coastal disaster, we're not going to get the support that we expect from our neighboring municipalities. Yes, a tornado, yes, a large fire, all the resources come in, but if they're tapped, we've got to have the facilities necessary to be able to sustain ourselves and our government here in the City of Riviera Beach.

BOARD MEMBER HARRIS CLARK: Okay. And the next, the other question was, are there other towns or municipalities that want to use the resources there, whether it's the building, the equipment, the staff, because it is an emergency operations center, and I guess that's up to council to decide that, but if they do, do they typically financially help support our municipality because we've done the heavy lifting?

CHIEF CURD: So what you would see in a

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scenario, and understand that we are part of the statewide mutual aid agreement, so we would provide support to any municipality who needed it. This may also be a fallback for another municipality, as we've partnered with them to fall back into their EOC, should ours become destroyed or what have you.

Usually, in that type of scenario, the money would come from a declaration of a disaster or an emergency, and the funding that we would seek to get reimbursed would come from the state and the federal government through us allowing them to use our EOC.

But as far as any financial contributions, we would not see that. We will see federal funds coming in. We received a grant for the demolition of the current existing station from the Solid Waste Authority. We got $125,000 grant. We also got $1 million in appropriation funding from the State of Florida for the design of this fire station and EOC. So the state part of that statewide mutual aid agreement that we're a part of has funneled some monies down to us to assist with the hardening of our, you know, municipal government and facilities, so that we can sustain, you know, what we hope to never see in the future.

BOARD MEMBER HARRIS CLARK: So if Palm Beach Shores, for example, does not have the facility or

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capability, because you will service them, but it's not necessarily that they as a municipality would not invest, they could just say, let us just tap into what Riviera Beach has because of the close proximity? Just in case of an emergency, we would support an area like that?

CHIEF CURD: I would think that think our government and their government would come to an agreement on supporting or providing support for each other, but I could assure we would not incur any undue burden or cost to basically allow them to say, oh, we don't need an EOC, we'll just go to Riviera. That -- that's not what this is. But in a time of tragedy or disaster, could an agreement be, you know, be met? I would think absolutely.

BOARD MEMBER HARRIS CLARK: Right. I'm okay with that. And last question, the new fire station, I guess the grand opening is on Saturday. Not that I've been to the top of it, but it's pretty flat, and I see that this facility is pretty flat.

What happens to the runoff of rain? How is that dissipated outside of the roof? For -- maybe of them, while I'm at it.

MR. BAILEY: So the term flat -- excuse me. The term "flat roof" is simply a term of art. You

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really have the, your standard house sort of pitched roofs and a roof with a parapet wall around the outside that merely looks flat. If you get up there and walk on it, it's still pitched ever so slightly.

And you know, if you're coming in on Blue Heron off of 95 or heading east, you'll see those little holes up at the top, they're called scuppers. That's – water can flow through the pipes, but if it stands up on the roof, it'll overflow and you'll see it coming down out there. So the roofs are not exactly flat, they're just called flat roofs.

BOARD MEMBER HARRIS CLARK: Okay, thank you. I was just curious.

1ST ALTERNATE BARNES: Yeah, a couple comments, questions. One, spectacular. I really, really like what you all have done on Blue Heron. Glad, glad to see this going on here.

As I went and looked through some of the backup material, it appears that we're setting the finished floor for an emergency operations center based on being about a foot or a little over a foot above the a hundred year flood storm, which is consistent with every other building that -- that's constructed around here.

With this being our EOC, I would suggest you

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all talk to your engineer and consider looking at maybe the 500 year storm because of the floods that just happened down in Fort Lauderdale and the way they impacted the airport down there. If this is going to be our EOC, it would -- I mean, dirt is cheap and it's a lot cheaper to build, to put in extra dirt now to raise the foundation of that up to above the 500 year flood now than to think about doing it if you're sitting on an island out there and you're ankle deep in water. So again, it's just an observation of mine.

A recommendation would really strongly consider that we maybe even put a -- put a recommendation into the approval that you all consider raising the finished floor a little higher, since this is going to be an EOC.

MR. BAILEY: I'd love to give you a response because I set the finished floor personally. I did, as your city engineer and the person who oversees the stormwater master plan and has access to all of the rainfall data, I personally decided on what the finished floor will be to the point where it was a foot above what the engineers thought it should be and it was some healthy discussion.

Luckily, the situation you're referring to happened the day that we were having the discussion

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about the elevation of the finished floor, and then there wasn't a discussion. So it is four to six inches above the 500 year floodplain. That --

1ST ALTERNATE BARNES: Oh, it is? Okay.

MR. BAILEY: Set it personally. Yes, intentionally. If you look actually, if you look at the plans in detail, that building finished floor is set three feet above the crown of the road, and that gives us an incredible amount of freeboard, and if there's three feet of water out in that road, the odds that you're going to submerge a truck are slim to none. So it is intentionally set to have that building be dry.

Please also keep in mind, the EOC is on the second floor of the building. There are stairs all the way around and those stairs are also set very high. So we have looked at it from about every angle and 360 degrees in circumference. As somebody who will probably be sleeping there personally, that building's not going anywhere.

1ST ALTERNATE BARNES: Where's the generator -- what's the elevation of your generator set at?

MR. BAILEY: All of them are up in -- all of them are at the -- the generator building is attached on the northwest corner, and it, too, is above the 500 year

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floodplain.

1ST ALTERNATE BARNES: So while the EOC is on the second floor, the generator is not, but it is above the 500 year flood?

MR. BAILEY: Yes.

1ST ALTERNATE BARNES: Perfect. That's -- the other, only other comment I have is just these buildings look really, really good. Is this going to be a totally separate site plan from the rest of the governmental center that's going to be going on here, is that the -- do you plan on coordinating the architecture of what else is going to happen on the rest of the site, or is this just going to be a standalone fire station and the City will take care of what that looks like later on?

MR. BAILEY: Yes, this site plan is standalone because of the nature, to your previous point, this needs to be an iconic building that looks similar and identifiable as a fire station. So what happens on the balance of the property is undetermined. So we'll sort of cross that bridge when we come to it down the road. But again, obviously, it will be before this Board at its appropriate time when it is ready.

1ST ALTERNATE BARNES: All right, thank you. Great job.

CHAIRPERSON FERNANDEZ: Question. Did you --

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did you identify yourself and your title before you started speaking? I know the Chief did, but if you don't mind, for the record.

MR. BAILEY: For the record, Terrence Bailey, City Engineer, Riviera Beach.

CHAIRPERSON FERNANDEZ: Thank you, Mr. Bailey. Ms. Shepherd?

BOARD MEMBER SHEPHERD: Yeah, Mr. Curd?

CHIEF CURD: Yes, ma'am.

BOARD MEMBER SHEPHERD: Chief Curd, thank you. So you say you're going to have a, like a museum --

CHIEF CURD: Yes.

BOARD MEMBER SHEPHERD: -- in that building, and you know I'm going to be happy about that because Chief Wester and of course Troy Perry --

CHIEF CURD: You should -- you should see what's planned.

BOARD MEMBER SHEPHERD: -- Reverend -- not Reverend -- Mr. Reginald Durham --

CHIEF CURD: Yep.

BOARD MEMBER SHEPHERD: -- when they left, I cried, and they kept reassuring me it was going to be okay, and when it came to you, Reginald Durham, I'll never forget, he said, you're in good hands. And I saw him and I said, Chief Durham, you didn't like, this is

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the best of the best, and I thank you for coming on board.

No questions, but I am enthused with Station 88. Somebody called me, they were talking about it was lighting up, it was lit. I had no clue because I don't go out at night, so I had no clue, but I came from Fort Pierce from seeing my daughter who was ill, and I came down, and when I looked to my left I said, oh my God, we're on top of the world. It was so beautiful, and I want to encourage people to come out for the ribbon cutting because I think this is going to be the exceptional lead for us and the City of Riviera Beach. So I am excited of this next station going up.

How long will it take to start building? Have you started thinking about when, Mr. Bailey, this is going to --

CHIEF CURD: Yeah, I'll -- we've got some good numbers on that.

MR. BAILEY: Yes. As you know, we anticipate your support here tonight. We've been assured that we will be going to City Council on July 12th. Once the Council approves it, we are looking to move expeditiously, i.e. approximately the beginning of August, for you to start seeing dust flying in the air.

We -- everybody is hotly anticipating this

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project. So there -- we're looking to have no space or opportunity for the start of construction, the demolition of the existing building, and then moving directly into construction for this project.

BOARD MEMBER SHEPHERD: Hold your thought there, because, across the street, you have transitioned it into a temporary station; is that right?

MR. BAILEY: Yes. We are currently building the temporary facility on the south side.

BOARD MEMBER SHEPHERD: It doesn't look temporary to me. That building looks -- well, I guess it has to be for the hurricane season.

MR. BAILEY: Our -- our first responders have to sleep there, so we still need to protect their interests, even though it is temporary. We did purchase all of that material, so we will be able to reallocate it for different purpose in the future, once we have this permanent Fire Station 87 online.

BOARD MEMBER SHEPHERD: Okay. So how long will it take? You said August?

MR. BAILEY: Yeah.

BOARD MEMBER SHEPHERD: How long will it take, really? Months, a year? Have you really gave it thought?

MR. BAILEY: It'll be -- it'll certainly be

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the first quarter of 2025. I mean, it's going to be a good 15, 16 months. I mean, if you look at the timeline for Fire Station 87, it should mirror that and we're in that 15, 16-month time horizon from when construction started to the grand opening.

And by the way, the grand opening is July 8th -- 11:00 a.m.?

CHIEF CURD: Yep.

MR. BAILEY: July 8th, 11:00 a.m. We really would love for everyone to come out and see the progress and what the first project in our Reimagine Riviera Beach. The manager said he wanted to put a flag in the ground so people believe in Reimagine Riviera Beach and that is the project. If you couldn't dream it, if you couldn't see it, you can certainly now reimagine Riviera Beach going forward, and this is our second project, and we were not allowed to have any dropoff or delay. It is coming as soon as we can get it out of the ground.

BOARD MEMBER SHEPHERD: While you're there, Mr. Bailey, you're going to tear down the building with the fire station. Now, are you going to tear down the building where the police are at or is that another phase? How does that go?

MR. BAILEY: That is not connected to this project.

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BOARD MEMBER SHEPHERD: It's not?

MR. BAILEY: No, because, again, this project is solely inside the four corners of the site plan before you.

But to answer your question, yes, police is currently being relocated. As I mentioned for that council meeting and I believe you were there --

BOARD MEMBER SHEPHERD: I was there.

MR. BAILEY: -- we are relocating the police department as we speak, and within the next 90 days, they will be completely out of that facility, and I have been tasked to get it on the ground as fast as reasonably possible.

BOARD MEMBER SHEPHERD: Okay. Going back to the plan, I know you said we're getting out early, but since you're questioning it, City Hall, because there's going to be a lot of dust and dirt, how do you kind of cut off the dust and the dirt from affecting people going into City Hall?

MR. BAILEY: That is an extremely, it's --

BOARD MEMBER SHEPHERD: It sounds like a tall project to me.

MR. BAILEY: Pardon?

BOARD MEMBER SHEPHERD: It sounds like a very tall project to me that you're going to --

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MR. BAILEY: Are you speaking of demolishing the police building or construction of this property?
BOARD MEMBER SHEPHERD: No, police and City Hall, because if you're going to tear down the fire station, wouldn't it be a lot of dust and dirt, or?
MR. BAILEY: No. These are very seasoned professionals. They also have a lot of liability insurance, and they have an interest in making sure that nothing like that happens. So I'm sure you have seen a house get demolished and they take a hose and they're hosing it down, lot of water in the air, that water's what suppresses any dust from flying up, and then they can collect all the material and take it off site. So they have very tried and true techniques to make sure there are no deleterious impacts to any neighboring properties or interest. But believe you me, if you know anybody who works at City Hall, it will not be an issue, and it will -- like the team here, they work at City Hall and they are going to make sure that nothing like that happens.
BOARD MEMBER SHEPHERD: Okay. Just questioning you. But thank you, Chief Curd. I'm anxious to see July 8th. I want to make sure I get a front row seat because I do want to see that fire station.

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CHIEF CURD: I do encourage each and every one of you to come out. We want to see the -- you to see the decisions that you make here, what that end result looks like. You know, you probably haven't toured the station or heard much about it, but we are providing tours to other fire chiefs from throughout the country on that fire station.
We had the National Firefighter Safety and Health Collaborative members there the other day, along with Firefighters Against the Cancer Epidemic, and this station is the first of its type in the State of Florida, and it's actually being looked at being used as a model for what all fire stations should be built like.
There are a lot of technological and engineering controls within the station to really keep our firefighters safe and healthy, so they're ready to perform for our community when called upon.
I urge you, please come out, so you can see the fruits of your labor and enjoy the day with us as we open up our fire station.
BOARD MEMBER SHEPHERD: Is this the same architect that's going to build it, the same --
CHIEF CURD: Yeah, same contractor, same -- what you see at 88. I think it's gorgeous, but I'm biased. I think this is going to be -- I think this is

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going to blow people's --
BOARD MEMBER SHEPHERD: It's one of the best.
CHIEF CURD: -- blow people away.
BOARD MEMBER SHEPHERD: Thank you. Thank you, Mr. Chair.
CHAIRPERSON FERNANDEZ: Ms. Clark, I know you had more questions.
BOARD MEMBER HARRIS CLARK: Yes. Just with the invitation, certainly appreciate it. Is it possible that we, as a board, could piggyback off of one of the invitations or tours? One that's not so high level that it's -- may involve staff, it may involve residents. Just include us as an invitation, you know, not that we have --
CHIEF CURD: You set the date and time and I would like to do something specific for the Board --
BOARD MEMBER HARRIS CLARK: Okay.
CHIEF CURD: -- because some of the things we'll talk about are different than things I talk about with -- whatever group it is, I kind of tailor that. You all tell me what works for you, if it's an evening you want to go by there, but I really, really would love for you all to come out and see what we've done. We're -- we're really changing the industry.
CHAIRPERSON FERNANDEZ: Ms. Davidson, Ms.

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Franco, can you -- can you please follow up with the Board for our scheduling and with the Chief, so we can schedule something?
MS. DAVIDSON: Yes, sir.
BOARD MEMBER HARRIS CLARK: Okay. Thank you.
BOARD MEMBER BURGESS: Chair?
CHAIRPERSON FERNANDEZ: One quick question, Mr. Bailey. Most of the EOCs, Cat 5, that I've seen built up in Florida, I believe the one, the last one I was at was the Cat 5, could withhold a Cat 5. What is this going to hold? What, far as hurricane.
MR. BAILEY: We -- we affectionately call it Cat 5-plus.
CHAIRPERSON FERNANDEZ: Good.
MR. BAILEY: You -- as you know, I believe that The Bahamas had 225, 225 mile hour wind gusts --
CHAIRPERSON FERNANDEZ: Good.
MR. BAILEY: -- that hit The Bahamas. This building, again, as I mentioned, I'm going to be sleeping there. I've got a 10-year-old and I'm going home. So we made sure that we all get to go home after this event in that building.
CHAIRPERSON FERNANDEZ: That was it. I just wanted to make sure they build it, build it right. I know the fire department has a great reputation all

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across the country for great food, beverages, sleeping accommodations. So we will -- we'll be visiting.

Now, Ms. Burgess.

BOARD MEMBER BURGESS: Oh, yes. This question is for the Chief. When you mentioned the museum, I want to make sure my dear friend will be included because she retired a couple years ago from Riviera Beach, Patricia Armour.

CHIEF CURD: Patricia Armour. We also have some very special things set up for Tanya Maxwell.

BOARD MEMBER BURGESS: Okay.

CHIEF CURD: We're doing some -- we have a committee that's actually set up of -- it's -- it's being run by Tiffany Williams, who is our departmental historian. We also have several retirees that are part of the committee.

We are collecting imagery and images from anybody and everybody that we can, and the committee is actually going to sift through and determine what's going to be used where, and we really hope to capture -- capture the essence of -- we hope, in this station, there will be a photograph or some type of monument or memorial to just about everybody who's ever worked there.

BOARD MEMBER BURGESS: Nice. Nice. Really

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love that.

CHAIRPERSON FERNANDEZ: If there's no further questions, could I have a motion to approve Site Plan Application Number SP-23-000 --

BOARD MEMBER HARRIS CLARK: One moment. As you approve, I believe it was said that that was the wrong number. That was --

CHAIRPERSON FERNANDEZ: No, Station Number 1 -- number, just the number is 80 --

MR. THOMPSON: 87.

CHAIRPERSON FERNANDEZ: 87 to 1, Station 1. Has nothing to do with it. There is no -- I was told it was going to be corrected.

MR. THOMPSON: Yes, sir. Yes. It's just a slight --

BOARD MEMBER HARRIS CLARK: I just want to make sure, in the motion, that the right number is being stated.

CHAIRPERSON FERNANDEZ: Yeah, it's 87 right here, the way --

MR. THOMPSON: This area, this 87 is going to replace existing Fire Station Number 1.

CHAIRPERSON FERNANDEZ: Perfect. Right. And it says 87 on the --

BOARD MEMBER HARRIS CLARK: Yeah, I just

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wanted to make sure the motion just had the right number because you had mentioned it was incorrect somewhere else.

MR. THOMPSON: Yes, ma'am.

BOARD MEMBER HARRIS CLARK: Okay.

CHAIRPERSON FERNANDEZ: Take care. Again, motion to approve Site Plan Application Number SP-23-0009, already read into the record by Ms. Davidson earlier. Do I have a motion?

BOARD MEMBER BURGESS: So moved.

BOARD MEMBER SHEPHERD: Second.

MS. DAVIDSON: Rene Burgess?

BOARD MEMBER BURGESS: Yes.

MS. DAVIDSON: Evelyn Harris Clark?

BOARD MEMBER HARRIS CLARK: Yes.

MS. DAVIDSON: Russell Barnes?

1ST ALTERNATE BARNES: Yes.

MS. DAVIDSON: James Gallon?

BOARD MEMBER GALLON: Yes.

MS. DAVIDSON: Margaret Shepherd?

BOARD MEMBER SHEPHERD: Yes.

MS. DAVIDSON: Frank Fernandez?

CHAIRPERSON FERNANDEZ: Yes.

MS. DAVIDSON: Unanimous vote.

CHAIRPERSON FERNANDEZ: Thank you. Workshop

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items, Ms. Davidson?

MS. DAVIDSON: None, Mr. Chair.

CHAIRPERSON FERNANDEZ: Public comments?

MS. DAVIDSON: None.

CHAIRPERSON FERNANDEZ: Staff Updates on the Comprehensive Plan update.

Mr. Bailey, if you can just hang in until we're done, I've got a couple questions for you, if you're available.

BOARD MEMBER SHEPHERD: Mr. Bailey done worked all day, he want to go home.

MS. SIMON: You'd think I'd remember how to use this.

Good evening, everyone. Sonide Simon, Principal Planner here with the Development Services, and today I'm going to give us our update for the month of June on our Comprehensive Plan.

All right. Let's try this again. It's just so close to me. I'll stand here. Here we go.

Okay. So for the month of June and May, so mid, mid-May to June, we've been doing -- we've been working. We've been working along and trudging along of looking through our Comprehensive Plan word by word in our different elements, and before I get into that, I'll talk about what our consultants have been delivering to

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us since we last spoke.
So, since we last spoke -- oh, I was hoping I could click. Is there a way to click onto this? I guess not.
Since we last spoke, our existing conditions for the City was provided to us to understand how our City looks. My goal with this first one, and I'm not sure if I'll be able to do that -- Ed, are you able to click on that? To click on that first one?
I wanted to show you -- oh, no, where it says, "Existing conditions." Yeah, we'll let it be.
So on our website, I wanted to show you our website. So on our website, we have everything listed there, and the importance of why I wanted to do that was for the mere fact of our community is able to look at what we're doing, whether we're in meetings, whether we're at activities, or whether we're going elsewhere, we're able to actually see -- there we go. Well, I actually wanted to click on it and actually go to the website, but we're able -- but I'll point at it.
We're actually able to see what's happening as we go along. So right now, on our website, we have our existing conditions, and then we'll start adding, and then our next one that we're adding up is just a summary of our last meeting to say what did the people say, what

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has the community been saying, and how are we, and where are we going from there? So my goal is to push our website and what's happening, so people are able to follow along.
BOARD MEMBER BURGESS: Chair? I'm sorry, Sonide.
MS. SIMON: That's okay.
BOARD MEMBER BURGESS: So, for working in the back, she wants to click on where it says, "Existing conditions," the hyperlink.
MS. SIMON: That's okay.
BOARD MEMBER BURGESS: Oh.
MS. SIMON: No worries. It's okay.
BOARD MEMBER BURGESS: Not working? Okay.
MS. SIMON: I was over ambitious. I'm good.
BOARD MEMBER BURGESS: Gotcha.
MS. SIMON: I'm good. I'm good with it. All righty.
So what else would we have? We have a summary of our past workshop as a group, and then we have our rough draft of our data inventory analysis, which is one of the -- it's two parts that we have of a Comp Plan.
What our past Comp Plan did -- was missing was what is the data? What are we looking at? How do we look as a city? Where are we going with all this data,

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meaning like how many people live here? Where do they live? What types of houses do they live in? How many, what's our commercial properties look like? Where do we have commercial? Do we have enough space? Do we need more?
All this information, we didn't have it on our last one because we were utilizing things, information from the year 2000, but now we are updating that, currently, and right now, we're looking at rough drafts of this. So this just happened in the past week where we were able to get some rough drafts for our -- for our Steering Committee to review and look at, to understand the conditions of our City, what's the data behind our different elements, in order for them to make more, how would you say that, more sound decisions as we look at our policies right now.
BOARD MEMBER SHEPHERD: Excuse me.
MS. SIMON: Yes, ma'am?
BOARD MEMBER SHEPHERD: Last question.
MS. SIMON: No, last question. You're fine.
BOARD MEMBER SHEPHERD: Who's -- who's the Steering Committee? Who's the Steering Committee?
MS. SIMON: This is our staff Steering Committee. So it's our different directors or appointed members of our staff that's reviewing these elements

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because they're the ones that work with it every day.
BOARD MEMBER SHEPHERD: So your staff members?
MS. SIMON: Yes, ma'am.
BOARD MEMBER SHEPHERD: That work -- okay.
MS. SIMON: Yes, ma'am.
BOARD MEMBER SHEPHERD: Okay. Okay.
MS. SIMON: Good question. Good question. So we'll talk a little bit about that staff and what we're -- and that staff Steering Committee and what's been happening.
So we had our last meeting with our Steering Committee, which was our third meeting with our Steering Committee, as a whole group, where we're working on developing the guiding principles.
The guiding principles are the principles that we'll be using, that will fashion how our -- how we look within the next 20 years, based off of these ideas where we start to talk about things like we want to, this is just an example, we want to be a place that's extremely livable, a place where we know where have places to live, places that allow us to have exercise, fun, open space, and places to shop, retail, places to eat at restaurants, right? So this is livable place where we want to be able to walk to different places within 15 minutes. These are just random examples, but that's

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based off of our community's input as well as your input that you guys have given us on our individual interviews, and our staff's input.

Yes, ma'am?

BOARD MEMBER HARRIS CLARK: You have land use transformed downtown to walkable entertainment, et cetera.

MS. SIMON: I'll get into that.

BOARD MEMBER HARRIS CLARK: And then it says, "Prevent non-residential uses from taking over current neighborhood," et cetera.

Now, we're in the process of updating this Comprehensive Plan.

MS. SIMON: Yes, ma'am.

BOARD MEMBER HARRIS CLARK: But, however, we have applications that are coming into the Planning and Zoning Department that will be contrary to what land use, for example, has delineated. So my question is, even though this has not been approved, it's not really complete, those applications are coming through, and I personally don't want to see these applications get approved, knowing that they're going to be contrary to this example of land use. So if I'm ahead of myself, okay, you can come to that, but that is my question. It just stuck out.

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MS. SIMON: Yeah, you're a little ahead of yourself, but I'm glad it stuck out. So right now, so what I'm showing you here at this table is some of the feedback that we've received, and I want us to remember, these are just feedback currently, okay? And so, the part, what you've been looking at, the first one where it says, "Community input," this is -- these are just kind of like whole -- what has the community said so far that we've heard? These are examples of what the community has said.

And then the next box, the next column that you see is some of the staff feedback that we've been going -- we've been seeing, based off of what we need to look at within our plan. What they're -- what our consultants will be doing is looking at that community's feedback, look at staff's feedback of how they've been working on it, look at our decision-makers feedback that we've received through our one-on-one interviews, and then they'll be able to put together some guiding principles that would help us get to that next step, okay? So right now, you are just seeing the input that they've given, but it's not necessary -- it's nothing that's on paper that says, this is what we are making sure is happening. This is just, this is how myself, as the resident, feels about how I look at when we look at

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land use or how I feel about when we look at parks. I want more parks or I think we have too much parks, but these are just their input that they've given as a whole group, is what we've seen.

BOARD MEMBER HARRIS CLARK: How can I get a copy of this? Is it on the website or this is your presentation? And if I could get a copy of it?

MS. SIMON: This is my presentation, but you can also get a copy of the community's input, if that's what you're requesting –

BOARD MEMBER HARRIS CLARK: No, just this one here.

MS. SIMON: Okay. I can send that to you.

BOARD MEMBER HARRIS CLARK: Okay, thank you.

MS. SIMON: No problem. But you'll also see these same -- same, if not similar comments, similar if not the same comments on our review of our last meetings and what we've been getting from the community thus far. That is on our website.

So overall update, so most of our teams, like I told you, we've been reviewing our Comp Plan and going through the elements line by line, trying to see what is it that we've already done since the last time we've talked about this, since the last time we reviewed our Comp Plan, what is it that still needs to continue to be

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done, and what is it that we need to add to our work? And so, that's what we've been working on for the last month-and-a-half, about two months. It's been a process. It's been a -- and it's been a fun process.

Oh, he left. Mr. Bailey has enjoyed this process, I believe, the most. And it's just been fun just to kind of go through and see what is it that we're feeling as a city. What are some of the things that we've seen come in before the Planning and Zoning Board that probably we need to relook at to see does it continue, is this the taste of the community today, still? So there's some of the ideas and thoughts that we go through as we look at these line by line.

Our consultants themselves, they utilize their expertise on what is -- what's been trending, what actually works in other places, because we're not reinventing this wheel, and then we look at what our staff has said, what our community has said, what our decisions have -- makers have said, and how do we collab -- how do we put those together so it can make sense, and so that would actually work to our advantage here as a city.

Next, in exciting news, Ms. Jenkins was amazing at the Palm Beach County Housing Plans Steering Committee where she was able to -- where she was able to

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advocate for the City of Riviera Beach to become the pilot program to be looked at for the housing for all plan that Palm Beach County is doing right now. So Palm Beach County has presented the housing plan, and they – and they have these action points that we are all looking at – as a county and as we've all been watching, the State has been some providing funding that will be going towards different types of housing initiatives, and we, as a city, have become the pilot program where they'll be looking at our policies, former policies, as well as those that we're thinking about adding for the future. They'll be looking at these policies and working with us for the next, I think it's about 12 months, 10 to 12 months, we'll be looking together as a -- as a group in order to ensure that our policies, we're able to implement or is it implementable the Housing for All plan that the county has. So this is a great endeavor, where we'll be working closely with them in order to make this happen, and I'll be that liaison for that particular project.

Yes?

BOARD MEMBER BURGESS: All right, Chair, I have a question for Sonide.

MS. SIMON: Sure.

BOARD MEMBER BURGESS: So the Housing for All, because that's -- I haven't previously heard of that. Is that for just new housing or existing housing as well, for Riviera Beach?

MS. SIMON: Well, this one is -- this one is for the County in general. How is the County approaching housing? How are we looking at housing for -- and it's -- it's not new housing, it's housing to house people, in general. So where can we live, where it's rent or ownership of housing? Do we have enough in our -- do we have enough in our stock? What type of housing do we have? Do we -- are they too old? Do we need to renew? Where are we looking at and are they affordable? Can we afford it? Based off of whatever, wherever you are in the range of income, is it affordable for your range? Whether it be, you know, our -- our very low or whether it be our market rates, is that affordable for folks to live in?

BOARD MEMBER BURGESS: Okay.

MS. SIMON: Anything else?

BOARD MEMBER BURGESS: No.

MS. SIMON: Okay. And then, lastly -- well, not lastly, but another thing that we participated in was the Palm Beach – palm Beach Transportation Agency's 561 Corridor project study. So right now they're working on their long range plan for the 561 corridors,

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and we were able to participate in that in order to ensure that what we're looking at as a city is aligning with what's happening in the County and that we are able to make sense of what they're trying to do and not randomly putting one in one area and we're like, no, no, no, no, our plans have it where we'll be adding this to 7th Street, random, random number I just chose.

But this was really important for us as a city in order to really ensure that we are working together and not against one another. No questions there? Okay.

Other updates. In the midst of writing, we've also been participating in -- ooh, this black is a little, how do you say, dark?

We've been participating in different community events that are happening here in the City. In the month of May, since I last saw you guys, we participated in the staff's Wellness Fair. We did some surveying of our residents and vendors at the Tiki Market, and then, in the month of June, we participated in the Seafood Fest, where we were able to get different community input, members' input.

We participated in a field trip that the children had at the Lindsey Davis Center, learning about food and producing their own food and getting feedback from them as to why is it important? What do we need it for? Where do we get our food? Understanding for the kids, where do we get our food and what's the importance of space in order for us to continue to have food.

BOARD MEMBER SHEPHERD: (Indiscernible.)

MS. SIMON: Yes.

BOARD MEMBER SHEPHERD: (Indiscernible.)

MS. SIMON: He was fabulous.

BOARD MEMBER SHEPHERD: And I just watched how he directed them with the plants and the grow -- it was just an amazing --

MS. SIMON: Can I say a little tidbit?

BOARD MEMBER SHEPHERD: – young people at Lindsey Davis. So I wanted to make sure you say Christopher McCall (phonetic), what a fabulous job he did with the children.

MS. SIMON: He even made, so I followed for the whole thing, and he even made – he even made landscaping interesting to me.

BOARD MEMBER SHEPHERD: Absolutely.

MS. SIMON: And he was -- and they were like, yeah. And I was like, really? It's a tree. But he just made it so much fun that the kids were asking, when it was time to go, they were like, we have to go?

BOARD MEMBER SHEPHERD: Yeah.

MS. SIMON: And I felt so bad, I was like,

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we've got nothing more. But he was phenomenal.
BOARD MEMBER SHEPHERD: Absolutely.
MS. SIMON: He was phenomenal with them.
BOARD MEMBER SHEPHERD: Absolutely.
MS. SIMON: Yes. That was great. And it was -- and it was important because, as he was showing them, like he would just say, what's this? Randomly pull something out and allow them to explore and feel comfortable to be around it all and just get excited about food. Yes, it was phenomenal.
We also participated in the Juneteenth Family Event. We were able to -- we were able to just randomly pick family -- moms that -- moms and grandmas that were actually there to support their kids, to kind of get their input, like what do you think about our city? So we were able to give them our surveys.
And then we did also -- we were supposed to have a senior sip and paint tomorrow, but unfortunately, we have a loss within our community, and so, in respect to that, we will not be having that sip and paint with our senior center tomorrow.
CHAIRPERSON FERNANDEZ: Sip? What kind of sips?
MS. SIMON: Juice. We're sipping juice.
BOARD MEMBER SHEPHERD:

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CHAIRPERSON FERNANDEZ: Oh.
MS. SIMON: (Laughing.) And so, our upcoming is we're going to participating with the Coffee with a Cop, where we'll be just listening in to understand our community's view with -- with safety and the work that our police, our fabulous police department is working on.
In the month of July, we'll be have -- we'll be meeting with the Black Merchants Association on the 10th, library Advisory Board on the 13th, and participate in Jazz on the Beach.
And if you have any other events that you guys know of, would like us to show up to, we want to be there, and so that is part of our plea. Oh, this is it. Need to get the word out. This is part of our plea for folks to invite us to what's happening here in the City, in order to ensure that we are getting input from everyone around.
And that is pretty much my presentation. Any other questions?
CHAIRPERSON FERNANDEZ: No questions?
BOARD MEMBER BURGESS: I have -- I have a question.
MS. SIMON: Yes.
BOARD MEMBER BURGESS: In the feedback that

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you're hearing about the current state of housing and Riviera Beach, because a lot of the rents here are just like out of control, and I know the Governor, there's new legislation going into effect July 1st, as far as, you know, some of those things, but it's just, it really saddens me with the state because, with the state of housing, and I know especially here, I have a son and a daughter-in-law who live behind the new fire station and they've been living independently.
It's going to be going on for three years, and that housing complex there, I believe it's called the Abbey, but second continuous year, their rent has increased. So now, it's basically unaffordable for two people, a two person income, no kids, who can't even afford to live on their own as young adults, who now have to move back home. So it is just really concerning to me. So it -- I'm kind of wondering, like, what has been the response from the community with the current housing situation here in our city?
MS. SIMON: So the reality of housing here in the States, as well in Florida, and locally here in Riviera, has been an increase that we've been observing and everyone has been talking about it. So a lot of things that we hear, the most of is affordability, affordability, affordability, and at the same time with

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affordability, that's gone hand in hand with it was how do we make sure we don't push out our residents --
BOARD MEMBER BURGESS: Right.
MS. SIMON: -- that live here? What is it that we can do in order to prevent that? And so that's -- that's been very much our focus, and this is part of why we're excited to be participating in this pilot, in order for us to kind of get a jump-start to be able to figure out how to really use this Housing for All in a meaningful way and not be behind the wheel, but actually be the ones that are leading this initiative, because this would allow us to lead it, which means that we'd be looking at our policy sooner than any other group, in order to try to counter these situations.
But that's as far as the Comp Plan really can come into it in that way is to, how do we set ourselves up in that way to look at what we invite into the City or look at what we have in the City in order to ensure that we still have housing for everyone here.
BOARD MEMBER BURGESS: Okay, thank you.
CHAIRPERSON FERNANDEZ: I believe, in the past, we've discussed this with Mr. Sirmons, and myself and others on the Board have asked, are there any empty lots, City owned properties in the City that we can look at for City sponsored workforce housing? There -- we've

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never received a response. So I'm not sure if there is such a property owned, vacant property, land in Riviera Beach that we can use or not. I mean, it's just a thought because it housing is out of control.

BOARD MEMBER HARRIS CLARK: Chair? We used to have that sort of a website where you can go and look at available land for sale by the City, and this is prior to me moving here to Riviera Beach, that was advertised, and pretty much most of the marine based industries bought up all of that land as well as some small developers.

The same thing with West Palm Beach, they had it as well, but this was actually depleted. The City gave it away for pennies on the dollar and didn't retain any for the purpose that you are talking about now. So here we are, and here is the feedback that Board Member Burgess talked about as well as members. So we're just really up a creek, and I just don't think that the City, when we have opportunity to buy land for that purpose, we never jump on it.

There's some prime land that should have been snatched up by the City right across from the marina where the marina Phase Two is going to happen, and we allowed someone else to come in and to buy it, and we could have had a beautiful downtown area, but we just

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give land away and never jump on any opportunities. So that website has been defunct. There's nothing there.

CHAIRPERSON FERNANDEZ: Yeah. That's a shame. Okay.

BOARD MEMBER BURGESS: Pretty much.

CHAIRPERSON FERNANDEZ: If there's nothing else, thank you.

1ST ALTERNATE BARNES: Thank you.

MS. SIMON: Thank you. Thank you very much. Have a great night.

CHAIRPERSON FERNANDEZ: You too.

If there's nothing further – does any Board Member have anything else to say before we move for a motion to adjourn?

BOARD MEMBER BURGESS: Just really quick, I just wanted to thank the Board, the City for sending a condolence card last month for me and my family. Much appreciated.

BOARD MEMBER SHEPHERD: Mr. Chair, I do ask you to pray for my family. The young lady that met her untimely death, it was my -- my cousin. So we're asking for prayer right now, so we can adjust to it, and I'm trying to adjust to it, and the one thing I know God will answer prayer. So right now, that family needs, our family needs prayer. Thank you.

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CHAIRPERSON FERNANDEZ: Condolences, Ms. Burgess --

BOARD MEMBER BURGESS: Thank you.

CHAIRPERSON FERNANDEZ: -- to your family, Ms. Shepherd.

Do you have a -- Ms. Davis?

BOARD MEMBER SHEPHERD: I do. If there's nothing else from the Board.

BOARD MEMBER HARRIS CLARK: Yes. Just one thing. I just want to give kudos to the Board here. There was a project not too long ago that took place at the port where the company came in from Chicago and they wanted to build the big giant vats right there at the port, and we did approve that project, and one of the stipulations that, at the time when I was Chair, that I suggested, as well as the Board agreeing upon that, that that was the gateway from Riviera -- West Palm Beach into Riviera Beach, and we wanted some fantastic signage welcoming our guests.

I drove by there. Let me tell you, that is absolutely lovely, and again, someone mentioned that we should -- oh, the Chief said we should come by and see the fruits of our decision. That was one of our visible fruits of our decision, and they don't really have to do anything else.

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I don't know if that company is ever looking, but I certainly appreciate what that company did, listen to us, followed up, and it is a really nice greeting into the City of Riviera Beach, and we all had contribution in putting that as a stipulation and they followed through, as well as with staff.

CHAIRPERSON FERNANDEZ: Thank you, Ms. Clark.

If there's nothing further, it is 7:43, do I have a --

MS. DAVIDSON: Chair, before adjourning, if I may?

CHAIRPERSON FERNANDEZ: Yes, ma'am.

MS. DAVIDSON: Chief Curd asked me to announce, before leaving, this coming Monday, June 26th, the City of Riviera Beach Fire Department will be hosting an interdepartmental chili cookoff. This event will be held from 11:00 to 2:00 at the new Fire Station 88 that was just discussed and all are invited.

BOARD MEMBER HARRIS CLARK: Can we get that in an email as a reminder –

MS. DAVIDSON: Okay, will do.

BOARD MEMBER HARRIS CLARK: -- Madam Clerk?

BOARD MEMBER BURGESS: You said June 26th. What time?

CHAIRPERSON FERNANDEZ: 11:00.

MS. DAVIDSON: 11:00 to 2:00.

1ST ALTERNATE BARNES: Motion to dismiss.

BOARD MEMBER BURGESS: Second.

CHAIRPERSON FERNANDEZ: All in favor?

(Ayes were heard.)

CHAIRPERSON FERNANDEZ: 7:43 p.m. Thank you very much. Great meeting.

(The proceedings concluded at 7:43 p.m.)

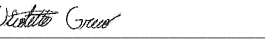
CERTIFICATE OF DIGITAL REPORTER

I, NICOLETTE GRECO, a Digital Reporter and Notary Public within and for the State of Florida, do hereby certify:

That the foregoing proceeding is accurately captured with annotations by me during the proceeding in the above-titled matter, all to the best of my skills and ability.

I further certify that I am not related to any of the parties to this action by blood or marriage and that I am in no way interested in the outcome of this matter.

IN WITNESS THEREOF, I have hereunto set my hand this 5th day of July 2023.



Nicolette Greco, Digital Reporter
Commission No.: HH 220848
Expiration Date: January 31, 2026

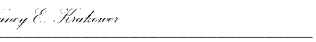
CERTIFICATE OF TRANSCRIPTIONIST

I, NANCY KRAKOWER, Legal Transcriptionist, do hereby certify:

That the foregoing is a complete and true transcription of the original digital audio recording of the testimony and proceedings captured in the above-entitled matter. As the transcriptionist, I have reviewed and transcribed the entirety of the original digital audio recording of the proceeding to ensure a verbatim record to the best of my ability.

I further certify that I am neither attorney for nor a relative or employee of any of the parties to the action; further, that I am not a relative or employee of any attorney employed by the parties hereto, nor financially or otherwise interested in the outcome of this matter.

IN WITNESS THEREOF, I have hereunto set my hand this 5th day of July 2023.



Nancy Krakower, Transcriptionist

CITY OF RIVIERA BEACH STAFF REPORT
CASE NUMBER PA-23-0001
A REPLAT REQUEST

A RESOLUTION OF THE CITY COUNCIL, OF THE CITY OF RIVIERA BEACH, PALM BEACH COUNTY, FLORIDA, APPROVING PLAT APPLICATION (PA-23-0001) FROM EASTON GROUP COMPANIES, INC. TO ADD ONE ADDITIONAL RIGHT OF WAY (ROW) TRACT "B1" (+/- .03 ACRES); PROVIDING FOR CONDITIONS OF APPROVAL;AND PROVIDING FOR AN EFFECTIVE DATE.

A. Applicant: Easton Group Companies, Inc.

B. Request
The applicant is requesting to add one additional right-of-way (ROW) tract "B1" (+/- .03 acres).

C. Location:
The subject property are vacant parcels of land, located on Doctor Martin Luther King Jr. Boulevard, immediately west of the Florida East Coast Railroad (FEC) tracks. (See also Location Map at end of document.)

D. Property Description and Uses:

Parcel Control Numbers:

56-43-42-32-43-001-000;

56-43-42-32-43-003-0000 and

56-43-42-32-43-004-0000

Parcel Size: +/- 390,685 Square Feet

Existing Use: Vacant

Zoning: General Industrial (IG)

Future Land Use: Industrial (IND)

E. Adjacent Property Description and Uses:

North: Road Right of Way; Industrial/Utility Land (IG – General Industrial)

South: Industrial/Rail Road ROW (IG – General Industrial)

East: Industrial/Rail Road ROW (IG – General Industrial)

West: Multi-Family Housing (RM-20, Residential) and Industrial uses (IG - General Industrial)

F. Background:

The Applicant (Easton Group Companies, Inc.) submitted Plat Application (PA-23-0001) for approval, to add one additional ROW tract "B1", (+/- .03 acres). The associated permits for Site Plan and Special Exception approvals will then facilitate the construction of a 34,500 square foot office/warehouse with associated landscape and parking, and as noted above, a dedication of +/- .03 acres for future right-of-way (ROW) expansion has been provided for in this replat.

G. Staff Analysis:

This Re-plat application has been reviewed by staff (Utilities Department, Public Works and Engineering, and the Development Services Department - Planning and Zoning) as well as our peer review consultant team. Staff comments have been addressed and this permit is ready for your consideration. Staff supports this proposed re-plat as it creates a larger developable parcel and also provides for potential expansion of the ROW in the future.

H. Recommendation:

Staff recommends approval of application (PA-23-0001) from Easton Group Companies, Inc., to add ROW tract "B1" (+/- .03 acres);providing for an effective date.

Location Map

Legal Description:
TRACTS A, C, AND D OF AVENUE S PROPERTIES PLAT, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 105, PAGES 193 THROUGH 195, OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA.

CONTAINING A TOTAL OF 390,685 SQUARE FEET OR 8.968 ACRES, MORE OR LESS.

AGENT AUTHORIZATION FORM

Owner(s) of Record: SFG ISF RIVIERA MLK, LLC

STATE OF FLORIDA
COUNTY OF PALM BEACH

BEFORE ME, the undersigned authority personally appeared Ryan Meehan
Vice President

who, being first duly sworn upon oath and personal knowledge say(s) that they are the owner(s) of record of the following described real property: TRACTS A, C AND D, AVENUE S PROPERTIES, PLAT BOOK 105, PAGE 193, PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA

the street address of which is:

and that we hereby appoint:

Name: DAVID C. LIDBERG, PSM
Address: 675 WEST INDIANTOWN ROAD
SUITE 200, JUPITER, FL. 33458
Telephone: 561-746-8454

as our authorized agent, to file applications and papers with the City of Riviera Beach, and to represent me (us) at any Hearing regarding my (our) interest.

(Seal)

(Seal)

(Seal)

Sworn to and subscribed before me this 31 day of January, 2023

Geraldine Harris
Notary Public

GERALDINE HARRIS NOTARY PUBLIC COBB COUNTY, GEORGIA MY COMMISSION EXPIRES JULY 27, 2025

JUSTIFICATION STATEMENT

This replat is been prepared as required by the site plan approval for Riviera Beach LTL.

CFN 20210586228
OR BK 33168 PG 1142
RECORDED 12/28/2021 09:22:41
Palm Beach County, Florida
AMT 6,500,000.00
DEED DOC 45,500.00
Joseph Abruzzo
Clerk
Pgs 1142-1146; (5Pgs)

Prepared By and Return To:

Robert J. Plotkowski, Esq.
Advisors LLP
11911 San Vicente Blvd., Suite 265
Los Angeles, CA 90049

Parcel Identification Nos.: 56-43-42-32-43-001-0000
56-43-42-32-43-003-0000
56-43-42-32-43-004-0000

SPECIAL WARRANTY DEED

For valuable consideration, the receipt of which is hereby acknowledged, MLK RIVIERA, LLC, a Florida limited liability company, having a mailing address of 9922 Jefferson Boulevard, Culver City, California 90232 ("**Grantor**"), grants and conveys to SFG ISF RIVIERA MLK, LLC, a Delaware limited liability company, having a mailing address of 10165 NW 19 Street, Miami, FL 33172 ("**Grantee**"), its successors and assigns, with covenant of SPECIAL WARRANTY, IN FEE SIMPLE, the real property located in Palm Beach County, Florida and more particularly described on **Exhibit A** attached hereto and made a part hereof (the "**Property**"), together with all improvements thereon and appurtenances thereto.

Grantor covenants specially that the Property conveyed hereby is free from all liens and encumbrances arising from the actions of Grantor and any persons claiming by, through or under Grantor. Grantor will defend the same against lawful claims of all persons claiming by, through or under Grantor, but against none others.

PROVIDED, HOWEVER, that notwithstanding that this deed is made with covenants of special warranty, there is excepted from such covenants and warranties, and the Property and this conveyance is made subject to: [i] any easements, restrictions, covenants and stipulations of record affecting the Property (including, without limitation, those items described on **Exhibit B** attached hereto and made a part hereof), [ii] applicable planning and zoning rules and regulations, [iii] real estate taxes and assessments, if any, assessed but not yet due and payable, which have been adjusted between Grantor and Grantee, and all real estate taxes and assessments due and payable thereafter, which real estate taxes and assessments Grantee hereby assumes and agrees to pay, and [iv] those matters that would be disclosed by an inspection and accurate survey of the Property.

The foregoing conveyance is made subject to the following restrictions (the "**Restrictions**"), and Grantee, by its acceptance of this Deed, agrees that at no time hereafter shall Grantee or any subsequent owner, tenant or occupant of the Property use the Property or any portion thereof (or permit the Property or any portion thereof to be used) (a) for residential purposes, whether single family, multi-family or otherwise, (b) as a used auto parts business (whether full or self-service), (c) for the purpose of purchasing or selling used cars for recycling or for an auto body purchasing and sales business, or (d) as a secondary metals recycling facility (which for such purposes shall be deemed to include, without limitation, the buying, selling or processing of ferrous or non-ferrous scrap metals). The foregoing Restrictions shall be a covenant running with the land, shall be binding upon Grantee and all successor owners and occupants of

NOT A CERTIFIED COPY

the Property and shall inure to the benefit of, and be enforceable by action at law or in equity, by Grantor and its successors and assigns. In the event of a legal proceeding to enforce the provisions of the Restrictions, the prevailing party shall be entitled to recover all reasonable legal fees and costs incurred by it in such proceeding.

The Restrictions hereunder shall be covenants running with the Property that shall be binding upon any and all successors or assigns in interest of Grantee and any other persons or entities who acquire any right or interest in the Property, and run to the benefit of Grantor and Grantor's Affiliated Entities and shall continue without limitation.

Grantee and any other persons or entities who acquire any right or interest in the Property, expressly acknowledge and agree that each such party is taking the Property (or any part or interest thereof) subject to the Restrictions set forth above.

This Deed may be executed in counterparts, each of which, when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same documents.

(remainder of page intentionally left blank)

NOT A CERTIFIED COPY

IN WITNESS WHEREOF, Grantor has executed and delivered this instrument as of the date of the acknowledgement below.

Signed, sealed and delivered in the presence of:

Witnesses:

Printed Name: MANAL BOULOS

Printed Name: J. Theodore Israel Benito

GRANTOR:
MLK RIVIERA, LLC,
a Florida limited liability company

By:
Printed Name: James E. Ho
Title: Manager

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of CALIFORNIA
County of LOS ANGELES

On DEC. 15, 2021 before me, J. THEODORE ISRAEL BENITO, Notary Public,
(insert name and title of the officer)
personally appeared JAMES E. HO, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity~~(ies)~~, and that by his/~~her/their~~ signature~~(s)~~ on the instrument the person~~(s)~~, or the entity upon behalf of which the person~~(s)~~ acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature J. Theodore Israel Benito (Seal)

J. THEODORE ISRAEL BENITO
Notary Public – California
Los Angeles County
Commission # 2232505
My Comm. Expires Feb 26, 2022

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EXHIBIT A TO DEED

Legal Description

Tracts A, C and D of Avenue S Properties Plat, according to the plat thereof, as recorded in Plat Book 105, Pages 193 through 195 of the Public Records of Palm Beach County, Florida.

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EXHIBIT B TO DEED

Specific Title Exceptions

1. Ad valorem taxes for the year 2022 and subsequent years.

2. Easements, restrictions, covenants and conditions as set forth on AVENUE S PROPERTIES PLAT, filed in Plat Book 105, Pages 193 through 195.

3. Terms, conditions, and restrictions as set forth in that certain Special Warranty Deed recorded September 18, 2019, in Official Records Book 30896, Page 329.

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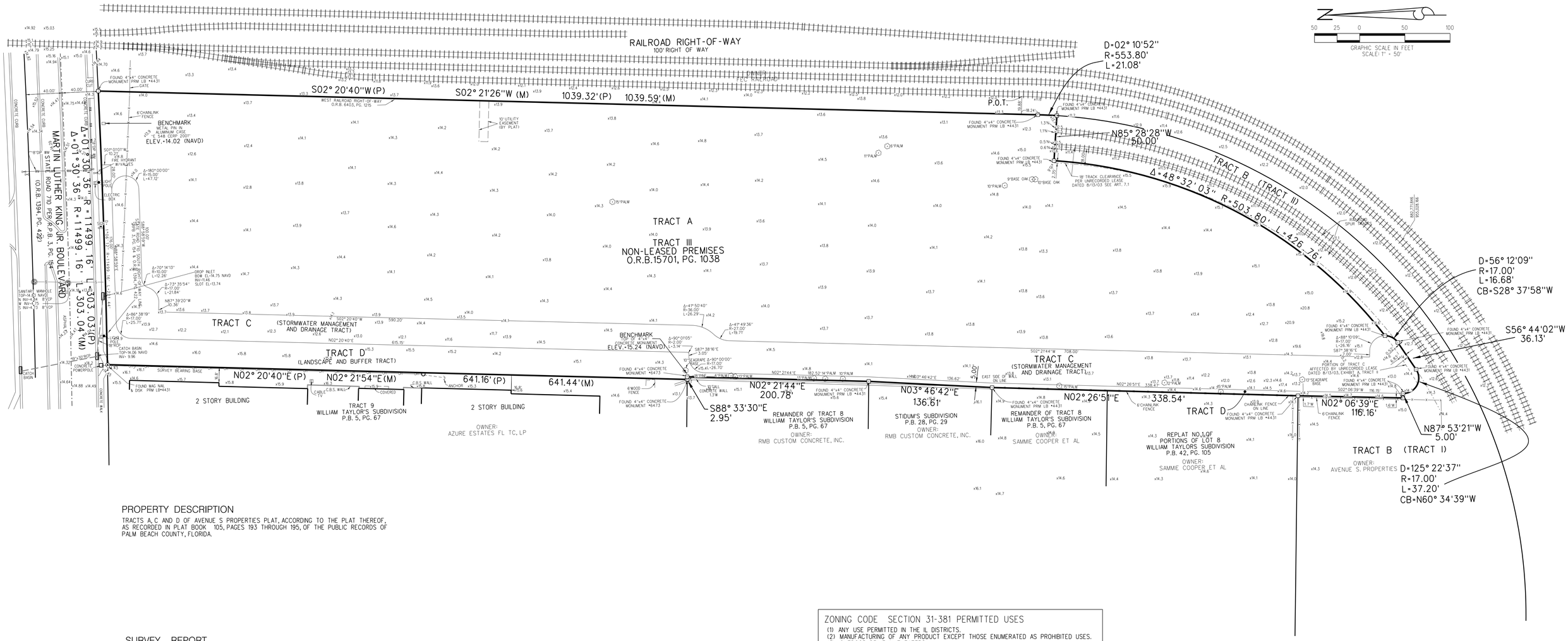
LEGAL DESCRIPTION:

TRACTS A, C AND D OF AVENUE S PROPERTIES PLAT, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 105, PAGES 193 THROUGH 195, OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA.

CONTAINING A TOTAL OF 390,685 SQUARE FEET OR 8.968 ACRES, MORE OR LESS.



PROPERTY DESCRIPTION

TRACTS A, C AND D OF AVENUE S PROPERTIES PLAT, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 105, PAGES 193 THROUGH 195, OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA.

SURVEY REPORT

1. THIS IS A BOUNDARY SURVEY AS DEFINED IN CHAPTER 5J-17.050, FLORIDA ADMINISTRATIVE CODE.
2. SURVEY BASED ON THE PLAT OF AVENUE S PROPERTIES.
3. LEGAL DESCRIPTION WAS PREPARED BY LIDBERG LAND SURVEYING, INC.
4. BEARING BASIS: N02° 20'40"E ALONG THE WEST LINE OF TRACT D
5. THE SUBJECT PROPERTY LIES WITHIN FLOOD ZONE X (AREA OF MINIMAL FLOOD HAZARD), PER FLOOD INSURANCE RATE MAP NO. 12099C0389F DATED OCTOBER 5, 2017. NO SEARCH FOR ANY MAP AMENDMENTS OR REVISIONS HAS BEEN MADE BY THIS OFFICE.
6. TOTAL AREA = 390,557 SQUARE FEET, MORE OR LESS.
7. EASEMENTS AND/OR RESTRICTIONS SHOWN ON THIS SURVEY PER FIDELITY NATIONAL TITLE INSURANCE COMPANY ORDER NUMBER: GLW2001565 EFFECTIVE DATE JANUARY 5, 2021 AT 8:00 A.M.
8. THIS SURVEY FALLS WITHIN THE SUBURBAN CATEGORY AS CLASSIFIED IN CHAPTER 5J-17.051, FLORIDA ADMINISTRATIVE CODE. ALL FIELD-MEASURED CONTROL MEASUREMENTS EXCEEDED THE ACCURACY REQUIREMENTS FOR THIS CLASSIFICATION.
9. ELEVATIONS SHOWN ARE BASED ON N.A.V.D. OF 1988
10. THIS SURVEY IS PREPARED ONLY FOR THE PARTIES LISTED BELOW AND IS NOT ASSIGNABLE.
    PREPARED FOR:
    ALLIANCE HP INVESTMENTS, LLC A DELAWARE LIMITED LIABILITY COMPANY
    MLK RIVIERA, LLC, A FLORIDA LIMITED LIABILITY COMPANY
    FIDELITY NATIONAL TITLE INSURANCE COMPANY
11. ©COPYRIGHT 2021 BY LIDBERG LAND SURVEYING, INC.
    THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES NO ITEMS OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON FEBRUARY 11, 2021 .

LIDBERG LAND SURVEYING, INC.

Digitally signed by David C Lidberg
DN: c=US, o=LIDBERG LAND SURVEYING, ou=A01410C000001761A803A4F0000DD94, cn=David C Lidberg
Date: 2021.02.16 10:21:27 -05'00'

DATE OF SURVEY: FEBRUARY 11, 2021

BY: _____
DAVID C. LIDBERG
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE No. 3613

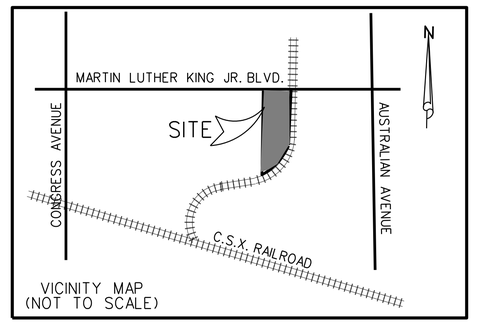
ABBREVIATIONS:
(C) - CALCULATED
C.B.S. - CONCRETE BLOCK STRUCTURE
C.M.B. - CONTRACTORS MINUTES BOOK
CMH - CONDUCT MANHOLE
CONC - CONCRETE
D.B. - DEED BOOK
F.H. - FIRE HYDRANT
FND. - FOUND
F.P.L. - FLORIDA POWER & LIGHT
ICV - IRRIGATION CONTROL VALVE
I.P. - IRON PIPE
INV. - INVERT
I.R. - IRON ROD
LB - LICENSE BUSINESS
L.E. - LAKE EASE
LS - LICENSE SURVEY
(M) - MEASURED
MH - MANHOLE
M.H.W. - MEAN HIGH WATER
MON. - MONUMENT
O.R.B. - OFFICIAL RECORD BOOK
(P) - PLAT
P.B. - PLAT BOOK
P.R.M. - PERMANENT REFERENCE MONUMENT
R.O.W. - RIGHT-OF-WAY
RCP - REINFORCED CONCRETE PIPE
R.P.B. - ROAD PLAT BOOK
SQ. - SQUARE
SLP - STOP LIGHT POLE
SMH - SANITARY MANHOLE
SBTMH - SOUTHERN BELL TELEPHONE MANHOLE
STMH - STORM MANHOLE
TB - TRAFFIC BOX
TLP - TRAFFIC LIGHT POLE
TV - TELEVISION
U.E. - UTILITY EASEMENT
WP - WOOD POLE
WUP - WOOD UTILITY POLE
WV - WATER VALVE

AFFECTS PROPERTY AS SHOWN	AFFECTS PROPERTY, NOT PLOTTABLE	DOES NOT AFFECT PROPERTY	FIDELITY NATIONAL TITLE INSURANCE COMPANY ORDER NUMBER: GLW2001565
●			EX. 7) PLAT BOOK 105, PAGES 193-195
	●		EX. 8) O.R.B. 30896, PG. 329

ZONING CODE SECTION 31-381 PERMITTED USES

(1) ANY USE PERMITTED IN THE IL DISTRICTS.
(2) MANUFACTURING OF ANY PRODUCT EXCEPT THOSE ENUMERATED AS PROHIBITED USES.
(3) OUTDOOR DRIVE-IN THEATERS.
(4) PUBLIC UTILITY STRUCTURES.
(5) RAILROAD SWITCHING AND MAKE-UP YARDS.
(6) PETROLEUM STORAGE BUT NOT IN EXCESS OF 50,000 GALLONS.
(7) LIQUID GAS STORAGE NOT IN EXCESS OF 15,000 GALLONS.
(8) ANY CUSTOMARY ACCESSORY USE TO ALL ABOVE FACILITIES.
(9) TEMPORARY LABOR EMPLOYMENT OFFICE.
(10) PAWN SHOP.

CONVERSION FROM NAVD 88 TO NGVD 29 ADD 1.553



DATE:	REVISIONS:	BY:
02/11/2021	UPDATE SURVEY 05-146-104C NOTES FILED K.F.	L.J.C.
11/25/19	UPDATE SURVEY 05-146-104B NOTES FILED J.P.	L.J.C.
09/26/16	ADD TITLE INFORMATION 05-146-415	L.J.C.
07/20/16	ADD ELEVATIONS & TREE LOCATIONS 05-146-105A F.B. 700/13 K.F.	L.J.C.
06/21/16	UPDATE SURVEY 05-146-104A F.B. 698/59 NOTES FILED K.F.	L.J.C.
02/21/07	ADD TOPOGRAPHY 05-146-105 F.B. 536/46 B.D.	L.J.C.
10/07/05	ADD ALTA REQUIREMENTS	L.J.C.

LIDBERG LAND SURVEYING, INC.
LB4431
675 West Indiantown Road, Suite 200,
Jupiter, Florida 33458 TEL. 561-746-8454

ALTA/NSPS LAND TITLE SURVEY
TRACTS A,C,&D, AVENUE S PROPERTIES
PREPARED FOR:
ALLIANCE HP INVESTMENTS, LLC
MLK RIVIERA, LLC

CAD.	K:\UST \ 324243 \ 105-193 \ 05-146-104C \ 05-146-104C.DGN		
REF.			
FLD. B.D.	FB. 473 PG. 40	JOB	05-146-104C
OFF. L.J.C.		DATE	09/22/05
CKD. D.C.L.	SHEET 1 OF 1	DWG.	D05-146C

K:\UST\324243\105-193\05-146-104C\05-146-104C.DGN 2/16/2021 9:46:33 AM

AVENUE S PROPERTIES - REPLAT OF TRACTS A, C AND D

BEING A REPLAT OF TRACTS A, C AND D, AS SHOWN ON THE PLAT OF AVENUE S PROPERTIES, AS RECORDED IN PLAT BOOK 105, PAGES 193 THROUGH 195, PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA LYING IN SECTION 32, TOWNSHIP 42 SOUTH, RANGE 43 EAST CITY OF RIVIERA BEACH, PALM BEACH COUNTY, FLORIDA

MAY 2023

DEDICATIONS AND RESERVATIONS

STATE OF FLORIDA)
COUNTY OF PALM BEACH)

KNOW ALL MEN BY THESE PRESENTS THAT SFG ISF RIVIERA MLK, LLC, A DELAWARE LIMITED LIABILITY COMPANY, AUTHORIZED TO DO BUSINESS IN FLORIDA, OWNER OF THE LAND SHOWN HEREON AS AVENUE S PROPERTIES - REPLAT OF TRACTS A, C AND D, BEING A REPLAT OF TRACTS A, C AND D, AS SHOWN ON THE PLAT OF AVENUE S PROPERTIES, AS RECORDED IN PLAT BOOK 105, PAGES 193 THROUGH 195, PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA. LYING IN SECTION 32, TOWNSHIP 42 SOUTH, RANGE 43 EAST, CITY OF RIVIERA BEACH, PALM BEACH COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

TRACTS A, C AND D OF AVENUE S PROPERTIES PLAT, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 105, PAGES 193 THROUGH 195, OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA.

CONTAINING A TOTAL OF 390,685 SQUARE FEET OR 8.968 ACRES, MORE OR LESS.

HAS CAUSED THE SAME TO BE SURVEYED AND PLATTED AS SHOWN HEREON AND DO HEREBY DEDICATE AS FOLLOWS:

1.) TRACT "A1" (DEVELOPMENT TRACT), AS SHOWN HEREON, IS HEREBY RESERVED BY SFG ISF RIVIERA MLK, LLC, A DELAWARE LIMITED LIABILITY COMPANY, AUTHORIZED TO DO BUSINESS IN FLORIDA FOR DEVELOPMENT PURPOSES AND IS THE PERPETUAL MAINTENANCE OBLIGATION OF SAID SFG ISF RIVIERA MLK, LLC, ITS SUCCESSORS AND ASSIGNS, WITHOUT RECOURSE TO THE CITY OF RIVIERA BEACH.

2.) TRACT "B1", (ADDITIONAL RIGHT OF WAY), AS SHOWN HEREON, IS HEREBY DEDICATED AND GRANTED IN FEE SIMPLE TO THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION FOR PERPETUAL USE OF THE PUBLIC FOR ROADWAY PURPOSES.

3.) THE CITY OF RIVIERA BEACH UTILITY EASEMENT, AS SHOWN HEREON, IS A EXCLUSIVE EASEMENT AND IS HEREBY DEDICATED IN PERPETUITY TO THE CITY OF RIVIERA BEACH UTILITY SPECIAL DISTRICT, ITS SUCCESSORS AND ASSIGNS, FOR THE INSTALLATION, OPERATION, MAINTENANCE, REPAIR, EXPANSION AND REPLACEMENT OF POTABLE WATER SUPPLY, WASTEWATER SUPPLY AND RELATED APPURTENANCES. IF OTHERWISE APPROVED, NO BUILDINGS, STRUCTURES, IMPROVEMENTS, TREES, WALLS OR FENCES SHALL BE INSTALLED WITHIN THIS EASEMENT WITHOUT THE PRIOR WRITTEN APPROVAL OF THE CITY OF RIVIERA BEACH UTILITY SPECIAL DISTRICT.

IN WITNESS WHEREOF, THE ABOVE-NAMED LIMITED LIABILITY COMPANY HAS CAUSED THESE PRESENTS TO BE SIGNED BY ITS VICE PRESIDENT, AND ITS CORPORATE SEAL TO BE AFFIXED HERETO BY AND WITH THE AUTHORITY OF ITS BOARD OF DIRECTORS, THIS _____ DAY OF _____, 2023.

SFG ISF RIVIERA MLK, LLC,
A DELAWARE LIMITED LIABILITY COMPANY

WITNESS: _____

PRINT NAME: _____

WITNESS: _____ BY: _____
RYAN MEEHAN
PRINT NAME: _____ VICE PRESIDENT

ACKNOWLEDGEMENT

STATE OF FLORIDA)
COUNTY OF PALM BEACH)

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY MEANS OF ☐ PHYSICAL PRESENCE OR ☐ ONLINE NOTARIZATION, THIS _____ DAY OF _____, 2023, BY RYAN MEEHAN AS VICE PRESIDENT FOR SFG ISF RIVIERA MLK, LLC, A DELAWARE LIMITED LIABILITY COMPANY, ON BEHALF OF THE COMPANY, WHO IS ☐ PERSONALLY KNOWN TO ME OR HAS PRODUCED _____ (TYPE OF IDENTIFICATION) AS IDENTIFICATION.

MY COMMISSION EXPIRES: _____

NOTARY PUBLIC

NOTARY SEAL

PRINT NAME: _____

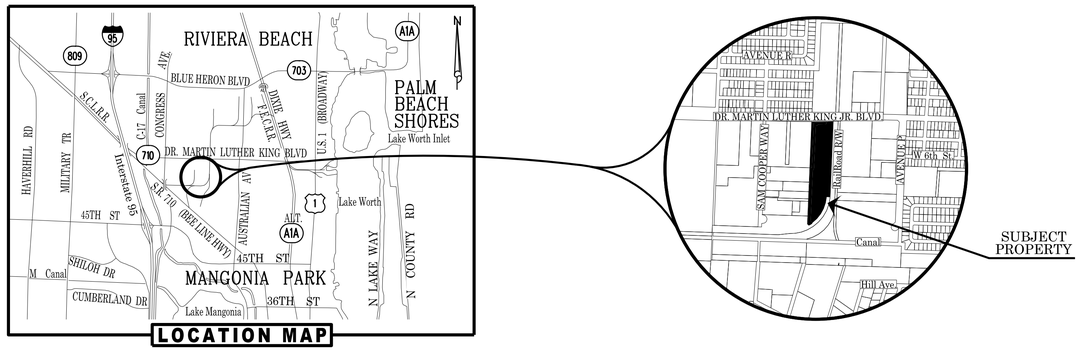
COMMISSION NUMBER: _____

TITLE CERTIFICATION

STATE OF FLORIDA)
COUNTY OF PALM BEACH)

I, BRANDON BIONDO, A DULY LICENSED ATTORNEY IN THE STATE OF FLORIDA, DO HEREBY CERTIFY THAT I HAVE EXAMINED THE TITLE TO THE HEREON DESCRIBED PROPERTY; THAT I FIND THE TITLE TO THE PROPERTY IS VESTED IN SFG ISF RIVIERA MLK, LLC, A DELAWARE LIMITED LIABILITY COMPANY; THAT THE CURRENT TAXES HAVE BEEN PAID; THAT ALL MORTGAGES NOT SATISFIED OR RELEASED OF RECORD NOR OTHERWISE TERMINATED BY LAW ARE SHOWN HEREON AND THAT THERE ARE ENCUMBRANCES OF RECORD BUT THOSE ENCUMBRANCES DO NOT PROHIBIT THE CREATION OF THE SUBDIVISION DEPICTED BY THIS PLAT.

DATE: _____ BY: _____
PRINT NAME: BRANDON BIONDO
FLORIDA BAR No. 588539



LOCATION MAP

MORTGAGEE'S JOINDER AND CONSENT

STATE OF FLORIDA)
COUNTY OF PALM BEACH)

THE UNDERSIGNED HEREBY CERTIFIES THAT IT IS A HOLDER OF A MORTGAGE, UPON THE PROPERTY DESCRIBED HEREON AND DOES HEREBY JOIN IN AND CONSENT TO THE DEDICATION OF THE LAND DESCRIBED IN SAID DEDICATION BY THE OWNER THEREOF AND AGREES THAT ITS MORTGAGE WHICH IS RECORDED IN OFFICIAL RECORD BOOK 34047, PAGE 1872, PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA, SHALL BE SUBORDINATED TO THE DEDICATION SHOWN HEREON.

IN WITNESS WHEREOF, THE SAID NATIONAL ASSOCIATION HAS CAUSED THESE PRESENTS TO BE SIGNED BY ITS _____ AND ITS CORPORATE SEAL TO BE AFFIXED HEREON BY AND WITH THE AUTHORITY OF ITS BOARD OF DIRECTORS THIS _____ DAY OF _____, 2023.

BY: VILLAGE BANK & TRUST, N.A.

WITNESS: _____

PRINT NAME: _____ BY: _____

WITNESS: _____ PRINT NAME: _____

PRINT NAME: _____ TITLE: _____

ACKNOWLEDGEMENT

STATE OF FLORIDA)
COUNTY OF PALM BEACH)

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY MEANS OF ☐ PHYSICAL PRESENCE OR ☐ ONLINE NOTARIZATION, THIS _____ DAY OF _____, 2023, BY _____ AS _____ FOR VILLAGE BANK & TRUST, N.A., ON BEHALF OF THE COMPANY, WHO IS ☐ PERSONALLY KNOWN TO ME OR HAS PRODUCED _____ TYPE OF IDENTIFICATION) AS IDENTIFICATION.

MY COMMISSION EXPIRES: _____

NOTARY PUBLIC

NOTARY SEAL

PRINT NAME: _____

COMMISSION NUMBER: _____

REVIEWING SURVEYOR

THIS RE-PLAT HAS BEEN REVIEWED FOR CONFORMITY IN ACCORDANCE WITH CHAPTER 177.081(1) OF THE FLORIDA STATUTES AND THE ORDINANCES OF THE CITY OF RIVIERA BEACH, FLORIDA. THIS REVIEW DOES NOT INCLUDE THE VERIFICATION OF THE GEOMETRIC DATA OR THE FIELD VERIFICATION OF PERMANENT REFERENCE MONUMENTS AND PARCEL CORNERS.

DATE: _____ BY: _____
C. ANDRE RAYMAN, P.S.M.
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE No. 4938

CITY OF RIVIERA BEACH APPROVALS:

IT IS HEREBY CERTIFIED THAT THIS PLAT "AVENUE S PROPERTIES - REPLAT OF TRACTS A, C AND D" HAS BEEN OFFICIALLY APPROVED FOR RECORD BY THE CITY OF RIVIERA BEACH, FLORIDA THIS _____ DAY OF _____, 2023.

BY: _____
RONNIE L. FELDER
MAYOR

BY: _____
TAWANNA SMITH, CMC, FCRM,
INTERIM CITY CLERK

BY: _____
TERRENCE N. BAILEY, P.E.
LICENSE No. 60706
CITY ENGINEER

AS APPROVED ON _____, 2023 VIA CITY OF RIVIERA BEACH RESOLUTION No. _____-22

ABBREVIATIONS:

CB	= CHORD BEARING
D	= CURVE'S DELTA ANGLE
L	= CURVE'S ARC LENGTH
MON.	= MONUMENT
O.R.B.	= OFFICIAL RECORD BOOK
P.B.	= PLAT BOOK
PG.	= PAGE
PGS.	= PAGES
PRM	= PERMANENT REFERENCE MONUMENT
R	= CURVE'S RADIUS
W/	= WITH

LEGEND:

■	DENOTES FOUND 4"X4" CONC. MON. W/ DISK STAMPED "PRM LB 4431" UNLESS OTHERWISE NOTED
⊡	DENOTES SET 4"X4" CONC. MON. W/ DISK STAMPED "PRM LB 4431"

SURVEYOR & MAPPER'S NOTES:

1.) BEARINGS SHOWN HEREON ARE GRID AND ARE BASED ON THE NATIONAL GEODETIC SURVEY, NORTH AMERICAN DATUM OF 1983, 1990 ADJUSTMENT (NAD83/90), FLORIDA STATE PLANE TRANSVERSE MERCATOR PROJECTION AND ARE CONSISTENT WITH THE UNDERLYING PLAT OF AVENUE S PROPERTIES, AS SHOWN ON PLAT BOOK 105, PAGES 193 THROUGH 195, PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA. THE WEST LINE OF TRACT D (LANDSCAPE AND BUFFER TRACT), AS SHOWN ON SAID PLAT OF AVENUE S PROPERTIES AND AS SHOWN HEREON, BEARS NORTH 02°20'40" EAST.

2.) NO STRUCTURE OR BUILDING OR ANY KIND OF LANDSCAPING SHALL BE PLACED ON OR WITHIN ANY EASEMENT WITHOUT PRIOR WRITTEN CONSENT OF ALL EASEMENT BENEFICIARIES AND THE TOWN ENGINEER.

3.) NOTICE: THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.

4.) IN THOSE CASES WHERE EASEMENTS OF DIFFERENT TYPES CROSS OR OTHERWISE COINCIDE, DRAINAGE EASEMENTS SHALL HAVE FIRST PRIORITY, UTILITY EASEMENTS SHALL HAVE SECOND PRIORITY, ACCESS EASEMENTS SHALL HAVE THIRD PRIORITY, AND ALL OTHER EASEMENTS SHALL BE SUBORDINATE TO THESE WITH THEIR PRIORITIES BEING DETERMINED BY USE RIGHTS GRANTED.

5.) THIS INSTRUMENT WAS PREPARED BY ERIC CASASUS P.S.M., IN AND FOR THE OFFICES OF LIDBERG LAND SURVEYING, INC., 675 WEST INDIANTOWN ROAD, SUITE 200, JUPITER, FLORIDA 33458. TELEPHONE (561) 746-8454.

SURVEYOR & MAPPER'S CERTIFICATE:

THIS IS TO CERTIFY THAT THE PLAT SHOWN HEREON IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY MADE UNDER MY RESPONSIBLE DIRECTION AND SUPERVISION; THAT SAID SURVEY IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT PERMANENT REFERENCE MONUMENTS ("P.R.M.'S") HAVE BEEN PLACED AS REQUIRED BY LAW, AND MONUMENTS ACCORDING TO SEC. 177.091(9) F.S., WILL BE SET, FURTHER, THAT THE SURVEY DATA COMPLIES WITH ALL THE REQUIREMENTS OF CHAPTER 177, FLORIDA STATUTES, AS AMENDED, AND THE ORDINANCES OF THE CITY OF RIVIERA BEACH, FLORIDA.

DATE: _____ BY: _____
DAVID C. LIDBERG, P.S.M.
LICENSE No. 3613
STATE OF FLORIDA

STATE OF FLORIDA)
COUNTY OF PALM BEACH)

THIS PLAT WAS FILED FOR RECORD AT _____ ____. M. THIS _____ DAY OF _____ 2023 AND DULY RECORDED IN PLAT BOOK _____ ON PAGES _____ THRU _____.

JOSEPH ABRUZZO
CLERK OF THE CIRCUIT COURT
AND COMPTROLLER OF PALM BEACH COUNTY

BY: _____ D.C.

CLERK OF THE CIRCUIT COURT AND COMPTROLLER OF PALM BEACH COUNTY

SHEET 1 OF 2

SFG ISF RIVIERA MLK, LLC
A DELAWARE LIMITED LIABILITY COMPANY

VILLAGE BANK & TRUST, N.A.

CITY OF RIVIERA BEACH ENGINEER
TERRENCE N. BAILEY
P.E. No. 60706

CITY OF RIVIERA BEACH CLERK

CITY OF RIVIERA BEACH
REVIEWING SURVEYOR
C. ANDRE RAYMAN, P.S.M.
P.S.M. No. 4938

DAVID C. LIDBERG
PROFESSIONAL SURVEYOR AND MAPPER

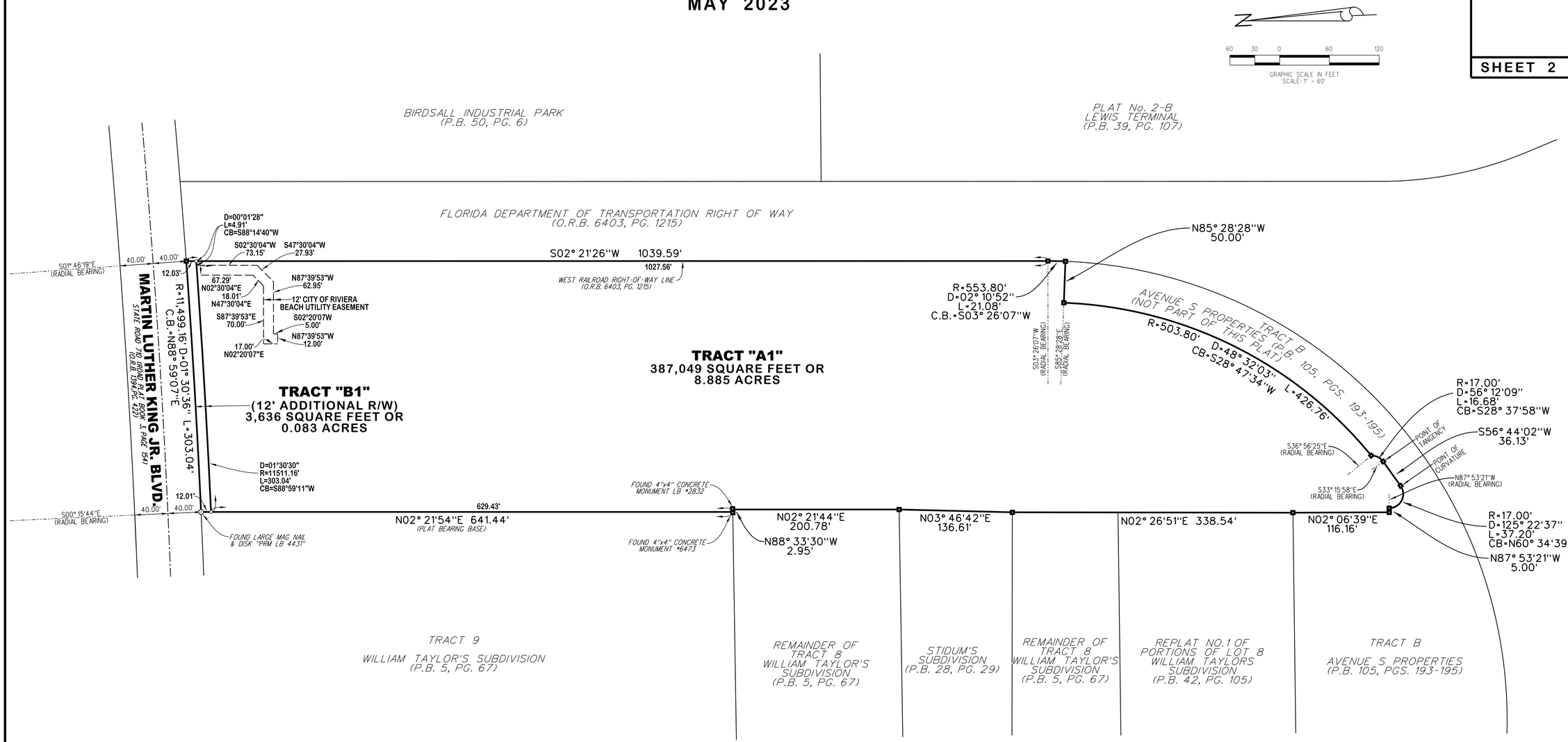
LIDBERG LAND SURVEYING, INC.
LB4431
675 West Indiantown Road, Suite 200,
Jupiter, Florida 33458 TEL. 561-746-8454

CAD. K:\UST \ 324243 \ 105-193 \ 05-146-306A \ 05-146-306A.DGN			
REF.			
FLD. _	FB. _	PG. _	JOB 05-146-306A
OFF. CASASUS			DATE JANUARY 2023
CKD. D.C.L.	SHEET 1 OF 2		DWG. D05-146P

AVENUE S PROPERTIES - REPLAT OF TRACTS A, C AND D

BEING A REPLAT OF TRACTS A, C AND D, AS SHOWN ON THE PLAT OF AVENUE S PROPERTIES,
AS RECORDED IN PLAT BOOK 105, PAGES 193 THROUGH 195, PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA
LYING IN SECTION 32, TOWNSHIP 42 SOUTH, RANGE 43 EAST
CITY OF RIVIERA BEACH, PALM BEACH COUNTY, FLORIDA

MAY 2023



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LEGEND:

- ■ DENOTES FOUND 4"X4" CONC. MON. W/ DISK STAMPED "PRM LB 4431" UNLESS OTHERWISE NOTED
- ⊡ DENOTES SET 4"X4" CONC. MON. W/ DISK STAMPED "PRM LB 4431"

LIDBERG LAND SURVEYING, INC.
LB4431
675 West Indiantown Road, Suite 200,
Jupiter, Florida 33458 TEL. 561-746-8454

CAD. K:\UST \ 324243 \ 105-193 \ 05-146-306A \ 05-146-306A.DGN			
REF.			
FLD. _	FB.	PG.	JOB 05-146-306A
OFF. CASASUS	_	_	DATE JANUARY 2023
CKD. D.C.L.	SHEET 2 OF 2		DWG. D05-146P

PRELIMINARY LAND DEVELOPMENT PLANS

RIVIERA BEACH LTL

FOR

1463-1481 DR MARTIN LUTHER KING JR BOULEVARD

RIVIERA BEACH, FL 33404

PARCEL ID NUMBER(S): 56434232430010000, 56434232430030000, 56434232430040000

REFERENCES AND CONTACTS

♦ TOPOGRAPHIC SURVEY:
BOHLER
1900 NW CORPORATE BOULEVARD
SUITE 101E
BOCA RATON, FL 33431
DATED: 10/27/2021
PROJECT #: FSB210066
ELEVATIONS: NAVD 1998

♦ ARCHITECTURAL PLAN:
2GHO
1907 COMMERCE LANE, SUITE 101
JUPITER, FL 33458
PHONE: (561) 575-9557
DAM SIEMSEN

GOVERNING AGENCIES

♦ CITY OF RIVIERA BEACH
ENGINEERING DIVISION
1481 W 15TH STREET
RIVIERA BEACH, FL 33404
PHONE: 561-845-4080

♦ SFWMD
3301 GUN CLUB ROAD
WEST PALM BEACH, FL 33406
PHONE: (561) 686-8800

UTILITIES

♦ WATER/SEWER
CITY OF RIVIERA BEACH UTILITY
SPECIAL DISTRICT
600 WEST BLUE HERON BLVD
RIVIERA BEACH, FL 33404
PHONE: 561-845-4185

♦ CABLE
COMCAST PBG
TONY SPRINGSTEEL
PHONE: (772) 321-3425

♦ TELEPHONE
AT&T
DINO FARUGGIO
PHONE: (561) 683-2729

♦ GAS
FLORIDA PUBLIC UTILITIES
BRAD COLLINS
PHONE: (561) 252-3308

* THE ABOVE REFERENCED DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THESE PLANS, HOWEVER, BOHLER ENGINEERING DOES NOT CERTIFY THE ACCURACY OF THE WORK REFERENCED OR DERIVED FROM THESE DOCUMENTS, BY OTHERS.

LOCATION MAP

SCALE: N.T.S.

DR MARTIN LUTHER KING JR BLVD POSTED SPEED LIMIT: 35 MPH

FDOT ACCESS APPLICATION NO: 2022-A-496-00014-93310

DEVELOPER/OWNER

EASTON GROUP COMPANIES, INC.
10165 NW 19TH STREET
MIAMI, FL 33172
DAVID WILF
(904) 716-1201

PREPARED BY

BOHLER

CONTACT: CLALL@BOHLERENG.COM

SHEET INDEX

SHEET TITLE	SHEET No.
COVER SHEET	C-101
GENERAL NOTES	C-102
GENERAL LEGENDS	C-103
SITE LAYOUT PLAN	C-301
PAVING, GRADING AND DRAINAGE PLAN	C-401
CROSS SECTIONS PLAN	C-402
UTILITY PLAN	C-501
PHASE 1 & 2 SOIL EROSION CONTROL PLAN	C-601
CONSTRUCTION DETAILS	C-901
CONSTRUCTION DETAILS	C-902
OFF-SITE IMPROVEMENT PLAN	OS-1

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

Oct 06, 2022
H:\2021\FSB210114\CAD\DRAWINGS\PLAN SETS\FLB210114 - CNDS - 0----LAYOUT C-101 COVER SHEET

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES
THE INFORMATION, DESIGN AND CONTENT OF THIS PLAN ARE PROPRIETARY AND SHALL NOT BE COPIED OR USED FOR ANY PURPOSE, WITHOUT PRIOR WRITTEN AUTHORIZATION FROM BOHLER. ONLY APPROVED PLANS SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES.
© BOHLER

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

811 Know what's below. Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: FLB210114
DRAWN BY: NH
CHECKED BY: CL
DATE: 12/13/2021
CAD I.D.: CNDS

PROJECT:

PROP. PERMITTING DOCUMENTS

FOR

TheEastonGroup

RIVIERA BEACH LTL

DR. MARTIN LUTHER KING JR BLVD
PALM BEACH COUNTY
RIVIERA BEACH, FL 33404

BOHLER
1900 NW CORPORATE BOULEVARD
SUITE 101E
BOCA RATON, FLORIDA 33431
Phone: (561) 571-0280
Fax: (561) 571-0281
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

This item has been digitally signed and sealed by Mohammed Merouane El Kaoussi, PE, on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

LICENSED MOHAMMED MEROUANE EL KAOUSSI No. 88591 STATE OF FLORIDA PROFESSIONAL ENGINEER

DN: c=US, st=Florida, l=Boca Raton, o=BOHLER ENGINEERING FL, LLC, cn=Merouane El Kaoussi, email=melkaoussi@bohlereng.com
Date: 2022.10.07 13:17:01 -04'00'

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

C-101

ORG. DATE - 12/13/2021

GENERAL NOTES (Rev. 2/2021)

1. THESE PLANS ARE SOLELY BASED ON INFORMATION THE OWNER AND OTHERS PROVIDED TO BOHLER ENGINEERING. FLORIDA, LLC (HEREIN "BOHLER") PRIOR TO THE DATE ON WHICH THE ENGINEER OF RECORD AND BOHLER PREPARED THESE PLANS. THE CONTRACTOR MUST FIELD VERIFY ALL EXISTING CONDITIONS AND IMMEDIATELY NOTIFY BOHLER , IN WRITING, IF ANY ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THESE PLANS, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.
2. THE CONTRACTOR MUST STRICTLY COMPLY WITH THESE NOTES AND ALL SPECIFICATIONS/REPORTS CONTAINED HEREIN. THE CONTRACTOR MUST ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS. THESE NOTES, AND THE REQUIREMENTS ARTICULATED IN THE NOTES CONTAINED IN ALL THE OTHER DRAWINGS THAT COMPRISE THE PLAN SET OF DRAWINGS. ADDITIONAL NOTES AND SPECIFIC PLAN NOTES MAY BE FOUND ON THE INDIVIDUAL PLANS. THESE GENERAL NOTES APPLY TO THIS ENTIRE DOCUMENT PACKAGE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE, PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION.
3. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM WITH THE ENGINEER OF RECORD AND BOHLER THAT THE LATEST EDITION OF THE DOCUMENTS AND/OR REPORTS REFERENCED WITHIN THE PLAN REFERENCES ARE BEING USED FOR CONSTRUCTION. THIS IS THE CONTRACTOR'S SOLE AND COMPLETE RESPONSIBILITY.
4. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION IS TO BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE COPY TO ALL APPROVALS OF APPLICABLE AUTHORITIES HAVING JURISDICTION AND UNTIL THE CONTRACTOR HAS ALSO CONFIRMED THAT ALL NECESSARY AND REQUIRED PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
5. THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS/REPORTS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES HAVING JURISDICTION OVER THE PROJECT SITE. THE CONTRACTOR MUST MAINTAIN COPIES OF THE CONSTRUCTION CONTRACT WITH THE OWNER/DEVELOPER INCLUDING ALL EXHIBITS, ATTACHMENTS AND ADDENDA TO SAME.
6. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFULLY REVIEWING THE MOST CURRENT ARCHITECTURAL, CIVIL AND STRUCTURAL CONSTRUCTION DOCUMENTS (INCLUDING, BUT NOT LIMITED TO, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLANS, WHERE APPLICABLE). THE CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND ENGINEER OF RECORD AND BOHLER, IN WRITING, OF ANY DISCREPANCIES OR AMBIGUITIES WHICH EXIST BETWEEN THESE PLANS AND ANY OTHER PLANS THAT COMPRISE THE CONSTRUCTION DOCUMENTS.
7. CONTRACTOR MUST REFER TO AND ENSURE COMPLIANCE WITH THE APPROVED ARCHITECTURAL/BUILDING PLANS OF RECORD FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
8. THE CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST IMMEDIATELY NOTIFY ENGINEER OF RECORD AND BOHLER, IN WRITING, IF ANY CONFLICTS OR DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE RE-DONE OR REPAIRED DUE TO DIMENSIONS, MEASUREMENTS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO BOHLER'S (A) THE CONTRACTOR GIVING ENGINEER OF RECORD AND BOHLER WRITTEN NOTIFICATION OF SAME AND (B) ENGINEER OF RECORD AND BOHLER, THEREAFTER, PROVIDING THE CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.
9. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND MEASUREMENTS INCLUDED ON DESIGN DOCUMENTS HEREIN AND MUST NOT SCALE OFF THE DRAWINGS DUE TO POTENTIAL PRINTING INACCURACIES. ALL DIMENSIONS AND MEASUREMENTS ARE TO BE CHECKED AND CONFIRMED BY THE GENERAL CONTRACTOR PRIOR TO PREPARATION OF SHOP DRAWINGS AND FABRICATION OF ANY STRUCTURAL COMPONENTS. FOR LAYOUT OF SITE WORK, SITE PLAN DRAWINGS ARE NOT INTENDED AS SURVEY DOCUMENTS. DIMENSIONS SUPERSEDE GRAPHICAL REPRESENTATIONS. THE CONTRACTOR MUST MAKE CONTRACTOR'S OWN MEASUREMENTS FOR LAYOUT OF IMPROVEMENTS.
10. THE OWNER AND CONTRACTOR MUST BE FAMILIAR WITH AND SATISFY THEMSELVES AS TO THE FORM AND EXTENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
11. WHEN INCLUDED AS ONE OF THE REFERENCED DOCUMENTS, THE GEOTECHNICAL REPORT, SPECIFICATIONS AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY, THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN: (A) THE PLANS; AND (B) THE GEOTECHNICAL REPORT AND RECOMMENDATIONS, MUST TAKE PRECEDENCE. UNLESS SPECIFICALLY STATED OTHERWISE, THE CONTRACTOR MUST NOTIFY THE ENGINEER OF RECORD AND BOHLER, IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORT AND PLANS AND SPECIFICATIONS PRIOR TO PROCEEDING WITH ANY CONSTRUCTION. IF A GEOTECHNICAL REPORT WAS NOT CREATED, THEN THE CONTRACTOR MUST FOLLOW AND COMPLY WITH ALL OF THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE SPECIFICATIONS WHICH HAVE JURISDICTION OVER THIS PROJECT.
12. ENGINEER OF RECORD AND BOHLER ARE NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, HAS NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOVE OR UNDER THE PROPERTY.
13. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN AND WHERE SHORING IS REQUIRED AND FOR ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES. ALL OF THIS WORK IS TO BE PERFORMED AT CONTRACTOR'S SOLE COST AND EXPENSE.
14. THE CONTRACTOR MUST EXERCISE EXTREME CAUTION WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN IN USE AS PART OF THE FINAL CONDITION. THE CONTRACTOR IS PART OF THE FINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, UTILITIES, BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT.
15. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION AND CONSTRUCTION WASTES, UNSUITABLE EXCAVATED MATERIAL, EXCESS SOIL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER THE CONTRACTOR.
16. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN RECORDS TO DEMONSTRATE PROPER AND FULLY COMPLIANT DISPOSAL ACTIVITIES, TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST.
17. THE CONTRACTOR MUST REPAIR, AT CONTRACTOR'S SOLE COST, ALL DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE CONSTRUCTION PROCESS, INCLUDING BUT NOT LIMITED TO, ROADWAYS, CURBS, SIDEWALKS, UTILITIES, PAVEMENT, LANDSCAPING, ETC. AND SHALL BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION. THE CONTRACTOR MUST REPAIR ALL DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION ACTIVITIES AND IN CONFORMANCE WITH ALL LAWS, RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE CONTRACTOR MUST, PROMPTLY, DOCUMENT ALL EXISTING DAMAGE AND NOTIFY, IN WRITING, THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
18. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL, LEGAL OR OTHER RESPONSIBILITIES FOR JOB SITE SAFETY OR ANY OTHER ACTIVITY ON THE SITE, OTHER THAN ANYTHING RELATED TO SAME, THE ENGINEER OF RECORD AND BOHLER'S ACTIVITIES ARE LIMITED TO THE PERFORM OR TO BE RESPONSIBLE FOR JOB SITE SAFETY, SAME BEING WHOLLY OUTSIDE OF ENGINEER OF RECORD'S AND BOHLER SERVICES AS RELATED TO THE PROJECT. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES OTHER THAN JOB SITE CONDITIONS, AT ANY TIME.
19. THE CONTRACTOR MUST IMMEDIATELY IDENTIFY IN WRITING, TO THE ENGINEER OF RECORD AND BOHLER , ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COST. IF THE CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER WRITTEN NOTIFICATION AS DESCRIBED ABOVE, IT WILL BE AT THE CONTRACTOR'S SOLE RISK AND, FURTHER, THE CONTRACTOR MUST INDEMNIFY, DEFEND AND HOLD HARMLESS THE ENGINEER OF RECORD AND BOHLER FOR ANY AND ALL DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND ANY OTHER RESULTANT LOSSES THAT MAY OCCUR AS A RESULT OF SUCH ACTIONS, INCLUDING, BUT NOT LIMITED TO, ANY THIRD PARTY AND FIRST PARTY CLAIMS.
20. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTORS FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS, ANY CURRENT CODES, RULES, STATUTES AND THE LIKE. IF THE CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, RULES, STATUTES, CODES AND THE LIKE, THE CONTRACTOR AND OWNER AGREE TO AND DO HEREBY AGREE TO INDEMNIFY, SEPARATELY AND SEVERALLY, AND HOLD HARMLESS FOR AND FROM THE ENGINEER OF RECORD AND BOHLER HARMLESS FOR AND FROM ALL INJURIES, CLAIMS AND DAMAGES THAT ENGINEER AND BOHLER SUFFER AND ANY AND ALL COSTS THAT ENGINEER AND BOHLER INCUR AS RELATED TO SAME.
21. ALL CONTRACTORS MUST CARRY AT LEAST THE AMOUNTS OF THE SPECIFIED AND COMMERCIALLY REASONABLE STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND COMMERCIAL GENERAL LIABILITY INSURANCE (CGL) INCLUDING ALSO ALL UMBRELLA COVERAGES. ALL CONTRACTORS MUST HAVE THESE POLICIES ENDORSED TO NAME BOHLER , AND THEIR PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSUREDS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE (DEFEND, IF APPLICABLE) AND HOLD HARMLESS BOHLER AND INDEMNITY OBLIGATIONS ASSUMED AND AGREED TO BY THE CONTRACTOR HEREIN. ALL CONTRACTORS MUST FURNISH BOHLER WITH CERTIFICATIONS OF INSURANCE OR CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE COVERAGES PRIOR TO COMMENCING ANY WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR TWO YEARS AFTER THE COMPLETION OF CONSTRUCTION AND AFTER ALL PERMITS ARE ISSUED, WHICHEVER DATE IS LATER. IN ADDITION, ALL CONTRACTORS AGREE THAT THEY WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, INJURIES, CLAIMS, ACTIONS, PENALTIES, EXPENSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CLAIMS, STATUTORY CAUSES OF ACTION, LOSSES, CAUSES OF ACTION, LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTOR(S), ALL CLAIMS BY THIRD PARTIES AND ALL CLAIMS RELATED TO THE PROJECT. THE CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO ANY TERMINATION, SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER.
22. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS, AND FOR ANY CONFLICTS IN SCOPE AND REVISIONS THAT RESULT FROM SAME. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK; PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
23. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER, NOR THE PRESENCE OF BOHLER AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE (HEREIN "BOHLER PARTIES"), RELIEVES OR WILL RELIEVE THE CONTRACTOR OF AND FROM CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ALL HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER PARTIES HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER (OR ANY RESPONSIBILITY FOR) ANY CONSTRUCTION, THE CONTRACTOR OR ITS EMPLOYEES RELATING TO THEIR WORK AND ANY AND ALL HEALTH AND SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR MUST INDEMNIFY, DEFEND, PROTECT AND HOLD HARMLESS BOHLER PARTIES FOR AND FROM ANY LIABILITY TO BOHLER PARTIES RESULTING FROM THE CONTRACTOR'S WORK, SERVICES AND/OR VIOLATIONS OF THIS NOTE. THESE NOTES AND NOTES IN THIS AS SET AND, FURTHER, THE CONTRACTOR MUST NAME BOHLER AS AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE.
24. WHEN IT IS CLEARLY AND SPECIFICALLY WITHIN BOHLER'S SCOPE OF SERVICES CONTRACT WITH THE OWNER/DEVELOPER, BOHLER WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF EVALUATING CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND METHODS AND CONSTRUCTION TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME. BOHLER WILL PERFORM ITS SHOP DRAWING REVIEW WITH REASONABLE PROMPTNESS, AS CONDITIONS PERMIT. ANY DOCUMENT, DOCUMENTING BOHLER'S REVIEW OF A SPECIFIC ITEM OR LIMITED SCOPE, MUST NOT INDICATE THAT BOHLER HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS THAT THE CONTRACTOR MUST, IN WRITING, PROMPTLY AND IMMEDIATELY BRING ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS TO BOHLER'S ATTENTION. BOHLER IS NOT REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.
25. IF THE CONTRACTOR DEVIATES FROM THESE PLANS AND/OR SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER OF RECORD AND BOHLER FOR ALL DEVIATIONS WITHIN ENGINEER'S SCOPE, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORKMANSHIP OR CONSTRUCTION DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, MUST DEFEND, INDEMNIFY, PROTECT, AND HOLD HARMLESS THE ENGINEER OF RECORD AND BOHLER PARTIES TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, CLAIMS, INJURIES, PENALTIES AND THE LIKE RELATED TO SAME.
26. THE CONTRACTOR IS RESPONSIBLE FOR A MAINTAINING AND PROTECTING THE TRAFFIC CONTROL PLAN AND ELEMENTS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS, FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE RIGHT OF WAY OR ON SITE. THE COST ASSOCIATED WITH THIS MUST BE INCLUDED IN THE CONTRACTOR'S BID PRICE FOR THE SITE WORK.
27. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS IN STRICT ACCORDANCE WITH THE APPROVED PLAN(S) AND DESIGN; AND, FURTHER, THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES. IF OWNER FAILS TO MAINTAIN OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD THE ENGINEER OF RECORD AND BOHLER HARMLESS FOR ALL INJURIES, DAMAGES AND COSTS THAT ENGINEER OF RECORD AND BOHLER INCUR AS A RESULT OF SAID FAILURE OR FAILURE TO PRESERVE.
28. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES AND MATERIALS COMPLY WITH AND CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS, LAWS, ORDINANCES, AND CODES, AND ALL APPLICABLE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 ET SEQ.) AS AMENDED, AND ANY MODIFICATIONS, AMENDMENTS OR REVISIONS TO SAME.
29. THE CONTRACTOR MUST STRICTLY COMPLY WITH THE LATEST AND CURRENT OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION OVER EXCAVATION AND TRENCHING PROCEDURES. ENGINEER OF RECORD AND BOHLER HAS NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES AND WORK.
30. THE CONTRACTOR AND THE OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT COMPLIANCE WITH AND IN ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA. IF THE CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY, INDEPENDENTLY, SEPARATELY, COLLECTIVELY, AND SEVERALLY INDEMNIFY, DEFEND, PROTECT AND HOLD ENGINEER OF RECORD AND BOHLER PARTIES HARMLESS FOR ALL INJURIES AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.
31. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS OR LOCAL GOVERNING AGENCY FOR SITES WHERE ONE (1) ACRE OR MORE IS DISTURBED BY CONSTRUCTION ACTIVITIES (UNLESS THE LOCAL JURISDICTION REQUIRES A DIFFERENT THRESHOLD). THE CONTRACTOR MUST ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF ALL SUBCONTRACTORS, ARE IN COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE AND FURTHER, THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR FAILING TO DO SO.
32. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED DOCUMENTS PREPARED BY THE ENGINEER OF RECORD AND BOHLER, THE USE OF THE WORDS 'CERTIFY' OR 'CERTIFICATION' CONSTITUTE(S) AN EXPRESSION ONLY OF PROFESSIONAL OPINION REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE ENGINEER OF RECORD'S AND BOHLER KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON AND ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF ANY NATURE OR TYPE, EITHER EXPRESSED OR IMPLIED, UNDER ANY CIRCUMSTANCES.

DEMOLITION NOTES (Rev. 2/2021)

1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.
2. THE CONTRACTOR MUST CONDUCT DEMOLITION/REMOVALS ACTIVITIES IN SUCH A MANNER AS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND ALL OTHER ADJACENT FACILITIES. THE CONTRACTOR MUST OBTAIN ALL PERMITS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY(IES) PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.
3. WHEN DEMOLITION-RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY, THE CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS.
4. THE DEMOLITION (AND/OR REMOVALS) PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO IDENTIFY ONLY CONDITIONS REGARDING ITEMS TO BE DEMOLISHED, REMOVED, AND/OR TO REMAIN.
   A. THE CONTRACTOR MUST ALSO DERIVE ALL CONSTRUCTION DOCUMENTS AND INCLUDE WITHIN THE DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
   B. THIS PLAN IS NOT INTENDED TO PROVIDE DIRECTIONS OR REQUIREMENTS FOR METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE EMPLOYED TO ACCOMPLISH THE WORK. ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE USED MUST BE IN STRICT ACCORDANCE AND CONFORMANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE FOR THE CONTRACTOR AND THE PUBLIC.
5. THE CONTRACTOR MUST PERFORM ALL METHODS AND PROCEDURES NECESSARY TO DEMOLISH, REMOVE, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR, AT THE CONTRACTOR'S SOLE COST, MUST REPAIR ALL DAMAGE TO ALL ITEMS AND FEATURES THAT ARE TO REMAIN, CONSTRUCTED AS PART OF THE PLANS AND ALL OF THE PLANS' SPECIFIC NOTES. THE CONTRACTOR MUST INCLUDE THE RESTORATION OF ALL ITEMS AND FEATURES REPAIRED TO THEIR PRE-DEMOLITION CONDITION, OR BETTER. CONTRACTOR MUST PERFORM ALL REPAIRS AT THE DIRECTION OF THE OWNER.
6. ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. THE CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, COMPLYING WITH ALL OSHA REQUIREMENTS, TO ENSURE THE PUBLIC AND CONTRACTOR SAFETY AND TO ENSURE PROTECTION OF PROPERTY ON AND ADJACENT PROPERTY TO THE SAME.
7. THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, OTHER SAFETY FEATURES AND/OR ITEMS AS REQUIRED BY LOCAL JURISDICTIONAL AUTHORITIES AND THE CONTRACTOR AND SUBCONTRACTOR ACTIVITIES. THE CONTRACTOR MUST SAFEGUARD THE SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ALL TIMES, DAY OR NIGHT AND WEEKENDS.
8. PRIOR TO THE COMMENCEMENT OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY, THE CONTRACTOR MUST, IN WRITING, RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS AND/OR SPECIFICATIONS, ALL CONCERNS OR QUESTIONS REGARDING THE PROPER USE OF THESE PLANS, STANDARDS, AND/OR THE SAFETY OF THE PROPERTY AND STRUCTURES TO BE DEMOLISHED AND/OR REMOVED. ANY SUCH CONCERNS MUST BE CONVEYED TO THE ENGINEER OF RECORD AND BOHLER, IN WRITING. ALL DEMOLITION ACTIVITIES MUST BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICAB

STANDARD DRAWING LEGEND

FOR ENTIRE PLAN SET

LIMIT OF WORK — LOW — LOW

LIMIT OF DISTURBANCE — LOD — LOD

EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
	ONSITE PROPERTY LINE / R.O.W. LINE	
	NEIGHBORING PROPERTY LINE / INTERIOR PARCEL LINE	
	EASEMENT LINE	
	SETBACK LINE	
	CONCRETE CURB & GUTTER	CURB AND GUTTER; SPILL; TRANSITION; DEPRESSED CURB AND GUTTER
	UTILITY POLE WITH LIGHT	
	POLE LIGHT	
	TRAFFIC LIGHT	
	UTILITY POLE	
	TYPICAL LIGHT	
	ACORN LIGHT	
	TYPICAL SIGN	
	PARKING COUNTS	
170 / 169	CONTOUR LINE	190 / 187
TC 516.4 OR 516.4	SPOT ELEVATIONS	TC 516.00; TC 516.00 BC 515.55; MATCH EX 518.02 ±
SAN #	SANITARY LABEL	SAN #
STM #	STORM LABEL	STM #
SL	SANITARY SEWER LATERAL	SL
W	UNDERGROUND WATER LINE	W
E	UNDERGROUND ELECTRIC LINE	E
G	UNDERGROUND GAS LINE	G
OH	OVERHEAD WIRE	OH
T	UNDERGROUND TELEPHONE LINE	T
C	UNDERGROUND CABLE LINE	C
	STORM SEWER	
S	SANITARY SEWER MAIN	S
	HYDRANT	
S	SANITARY MANHOLE	
D	STORM MANHOLE	
WM	WATER METER	
WV	WATER VALVE	
	GAS VALVE	
	GAS METER	
	TYPICAL END SECTION	
	HEADWALL OR ENDWALL	
	GRATE INLET	
	CURB INLET	
	CLEAN OUT	
E	ELECTRIC MANHOLE	
T	TELEPHONE MANHOLE	
EB	ELECTRIC BOX	
EP	ELECTRIC PEDESTAL	
	MONITORING WELL	
	TEST PIT	
	BENCHMARK	
	BORING	

STANDARD ABBREVIATIONS

FOR ENTIRE PLAN SET

AC	ACRES
ADA	AMERICANS WITH DISABILITY ACT
ARCH	ARCHITECTURAL
BC	BOTTOM OF CURB
BF	BASEMENT FLOOR
BK	BLOCK
BL	BASELINE
BLDG	BUILDING
BM	BUILDING BENCHMARK
BRL	BUILDING RESTRICTION LINE
CF	CUBIC FEET
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CONN	CONNECTION
CONC	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
CY	CUBIC YARDS
DEC	DECORATIVE
DEP	DEPRESSED
DIP	DUCTILE IRON PIPE
DOM	DOMESTIC
ELEC	ELECTRIC
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
ES	EDGE OF SHOULDER
EW	END WALL
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FH	FIRE HYDRANT
FG	FINISHED GRADE
G	GRADE
GF	GARAGE FLOOR (AT DOOR)
GH	GRADE HIGHER SIDE OF WALL
GL	GRADE LOWER SIDE OF WALL
GRT	GRATE
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HP	HIGH POINT
HOR	HORIZONTAL
HW	HEADWALL
INT	INTERSECTION
INV	INVERT
IP	INLET PROTECTION
LF	LINEAR FOOT
LOC	LIMITS OF CLEARING
LOD	LIMITS OF DISTURBANCE
LOS	LINE OF SIGHT
LP	LOW POINT
L/S	LANDSCAPE
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
MJ	MECHANICAL JOINT
OC	ON CENTER
PA	POINT OF ANALYSIS
PC	POINT CURVATURE
PCCR	POINT OF COMPOUND CURVATURE, CURB RETURN
PI	POINT OF INTERSECTION
POG	POINT OF GRADE
PROP	PROPOSED
PT	POINT OF TANGENCY
PTCR	POINT OF TANGENCY, CURB RETURN
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RET WALL	RETAINING WALL
R/W	RIGHT OF WAY
S	SLOPE
SAN	SANITARY SEWER
SF	SQUARE FEET
STA	STATION
STM	STORM
S/W	SIDEWALK
T	TRANSFORMER
TBR	TO BE REMOVED
TBRL	TO BE RELOCATED
TC	TOP OF CURB
TELE	TELEPHONE
TPF	TREE PROTECTION FENCE
TW	TOP OF WALL
TYP	TYPICAL
UG	UNDERGROUND
UP	UTILITY POLE
W	WIDE
W/L	WATER LINE
W/M	WATER METER
±	PLUS OR MINUS
°	DEGREE
Ø	DIAMETER
#	NUMBER

GRADING LEGEND

EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
120 / 125	CONTOUR LINE	120 / 125
TC 516.4 OR 516.4	SPOT ELEVATIONS	TC 516.00; TC 516.00 BC 515.55
SAN #	SANITARY LABEL	SAN #
STM #	STORM LABEL	STM #
	STORM SEWER	
D	STORM MANHOLE	D
	TYPICAL END SECTION	
	HEADWALL OR ENDWALL	
	YARD INLET	
	CURB INLET	
	MONITORING WELL	
	BORING	
	BENCHMARK	
	TEST PIT	

UTILITY LEGEND

EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
SAN #	SANITARY LABEL	SAN #
STM #	STORM LABEL	STM #
SL	SANITARY SEWER LATERAL	SL
W	UNDERGROUND WATER LINE	W
E	UNDERGROUND ELECTRIC LINE	E
G	UNDERGROUND GAS LINE	G
OH	OVERHEAD WIRE	OH
T	UNDERGROUND TELEPHONE LINE	T
C	UNDERGROUND CABLE LINE	C
	STORM SEWER	
S	SANITARY SEWER MAIN	S
	HYDRANT	
S	SANITARY MANHOLE	
D	STORM MANHOLE	D
WM	WATER METER	
WV	WATER VALVE	
	GAS VALVE	
	GAS METER	
	TYPICAL END SECTION	
	HEADWALL OR ENDWALL	
	YARD INLET	
	CURB INLET	
	CLEAN OUT	
E	ELECTRIC MANHOLE	E
T	TELEPHONE MANHOLE	T
EB	ELECTRIC BOX	EB
EP	ELECTRIC PEDESTAL	EP
	MONITORING WELL	
	TEST PIT	

PROPOSED EASEMENT LEGEND

CSE DIM	COMMON SHARED
IE DIM	INGRESS-EGRESS
PA DIM	PUBLIC ACCESS
PUL DIM	PUBLIC UTILITY
SAN DIM	SANITARY SEWER
SL DIM	SIGHT DISTANCE
STM DIM	STORM DRAIN
VAR	VARIABLE WIDTHS
W DIM	WATER

DEMOLITION / REMOVAL LEGEND

DEMOLITION/REMOVAL NOTE	TYPICAL NOTE TEXT
	EASEMENT LINE
	CONCRETE CURB & GUTTER
	UTILITY POLE WITH LIGHT
	POLE LIGHT
	TRAFFIC LIGHT
	UTILITY POLE
	TYPICAL LIGHT
	ACORN LIGHT
	TYPICAL SIGN
	PARKING COUNTS
TC 516.4 OR 516.4	SPOT ELEVATIONS
SAN #	SANITARY LABEL
STM #	STORM LABEL
SL	SANITARY SEWER LATERAL
W	UNDERGROUND WATER LINE
E	UNDERGROUND ELECTRIC LINE
G	UNDERGROUND GAS LINE
OH	OVERHEAD WIRE
T	UNDERGROUND TELEPHONE LINE
C	UNDERGROUND CABLE LINE
	STORM SEWER
S	SANITARY SEWER MAIN
	HYDRANT
S	SANITARY MANHOLE
D	STORM MANHOLE
WM	WATER METER
WV	WATER VALVE
	GAS VALVE
	GAS METER

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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SITE PLAN DOCUMENTS

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PROJECT No.:	FLB210114
DRAWN BY:	NH
CHECKED BY:	CL
DATE:	12/13/2021
CAD I.D.:	CNDS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

TheEastonGroup

RIVIERA BEACH LTL

DR. MARTIN LUTHER KING JR BLVD
PALM BEACH COUNTY
RIVIERA BEACH, FL 33404

BOHLER

1900 NW CORPORATE BOULEVARD
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FLORIDA BUSINESS CERT OF AUTH. No. 30780

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MOHAMMED MEROUANE EL KAOUSSI — LICENSE — No. 86591 — STATE OF FLORIDA — PROFESSIONAL ENGINEER

DN: c=US, st=Florida, l=Boca Raton, o=BOHLER ENGINEERING FL, LLC, cn=Merouane El Kaoussi, email=melkaoussi@bohlereng.com
Date: 2022.10.07 13:18:14 -04'00'

SHEET TITLE:

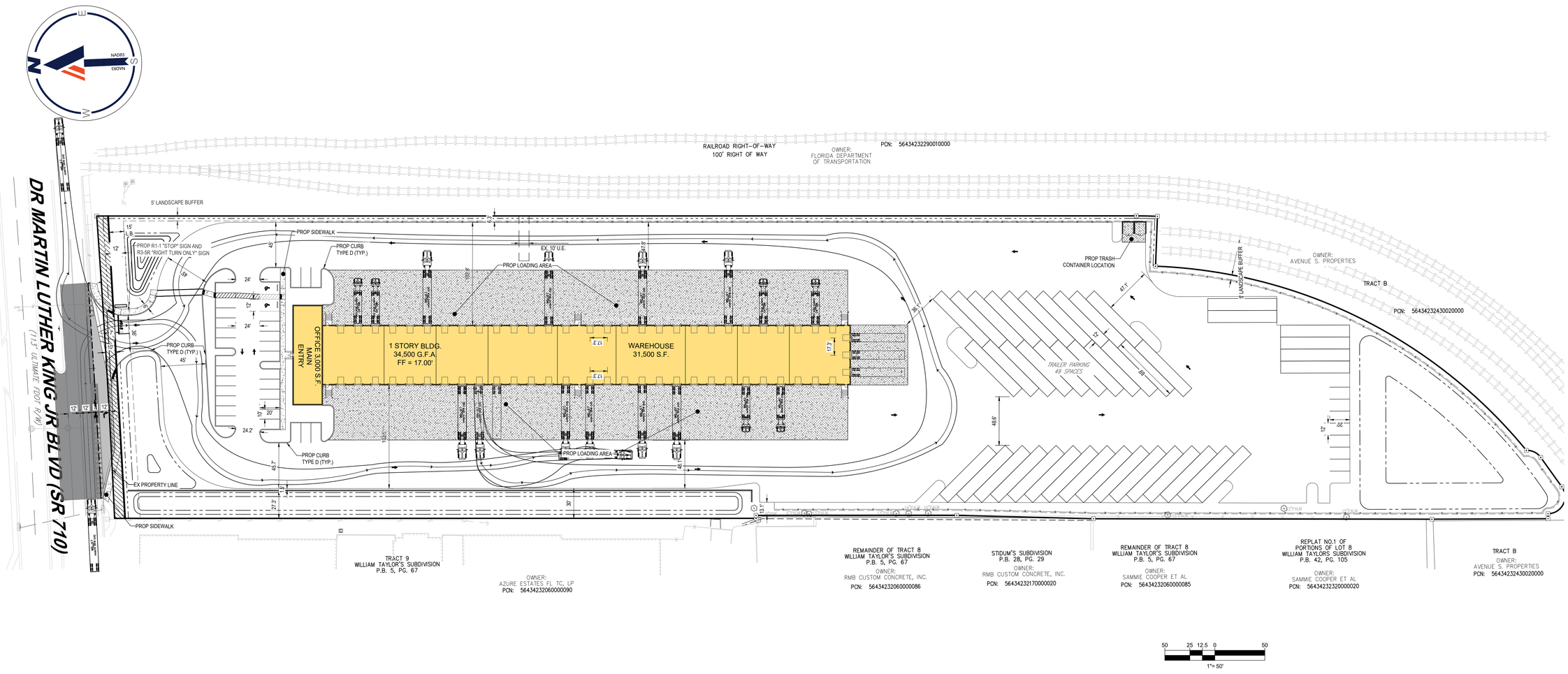
GENERAL LEGENDS

SHEET NUMBER:

C-103

ORG. DATE - 12/13/2021

Jul 29, 2022
11:22:19 I:\FLB\210114\CAD\DRAWINGS\PLAN SET\FLB210114 - CNDS - G---LAYOUT C-103 GENERAL LEGENDS
NH



LEGEND:

- EX PROPERTY BOUNDARY LINES
- PROP PROPERTY BOUNDARY LINES
- PROP STANDARD CONCRETE
- PROP HEAVY DUTY CONCRETE PAVING
- PROP FDOT RIGHT OF WAY DEDICATION

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PROJECT No.:	FLB210114
DRAWN BY:	NH
CHECKED BY:	CL
DATE:	12/13/2021
CAD I.D.:	SITE

PROJECT:

PROP. PERMITTING DOCUMENTS

FOR

TheEastonGroup

RIVIERA BEACH LTL

DR. MARTIN LUTHER KING JR BLVD
PALM BEACH COUNTY
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DN: c=US, st=Florida, l=Boca Raton, o=BOHLER ENGINEERING FL, LLC, cn=Merouane El Kaoussi, email=melkaoussi@bohlereng.com
Date: 2022.10.07 13:18:40 -04'00'

SHEET TITLE:

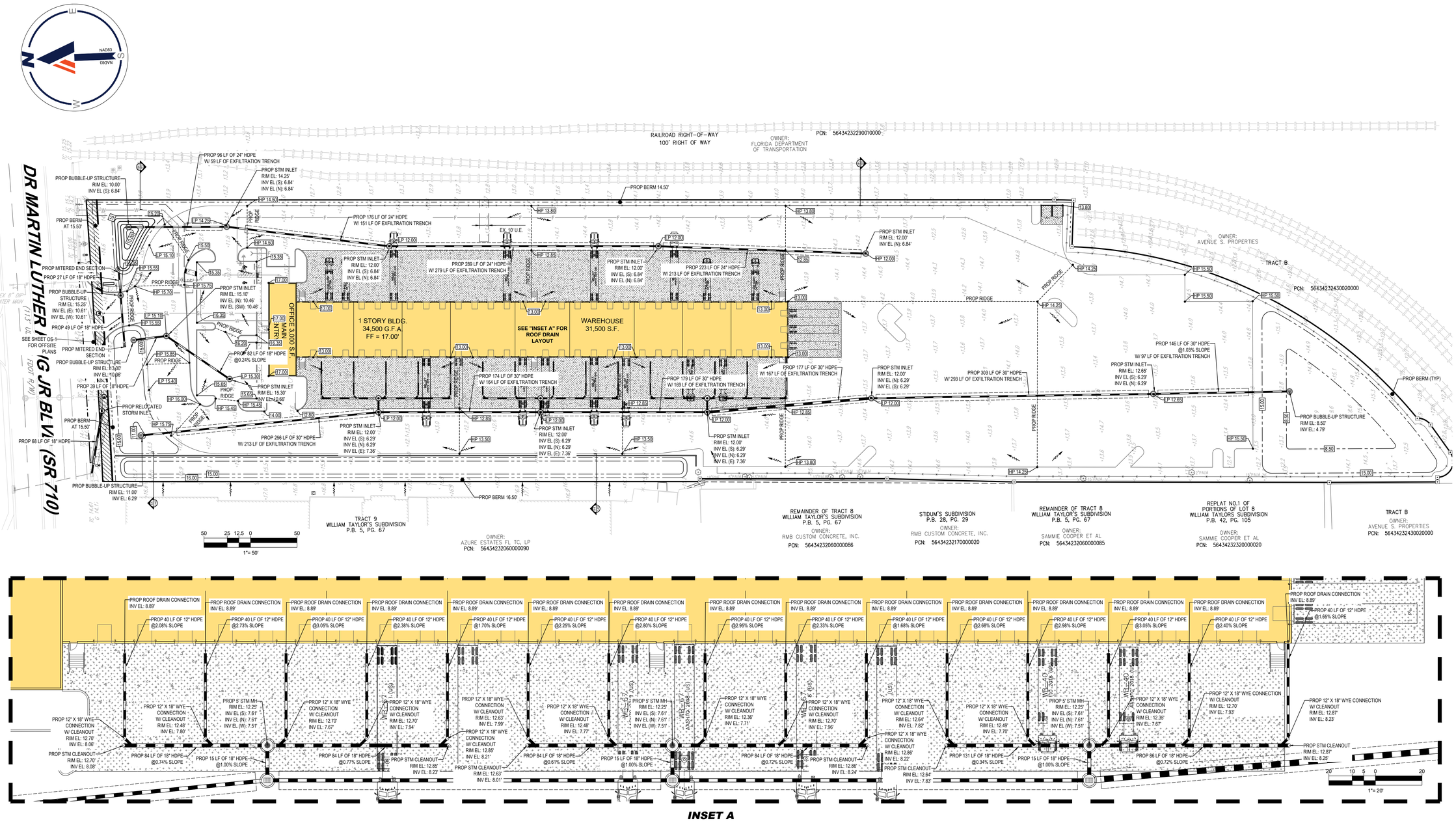
LAYOUT PLAN

SHEET NUMBER:

C-301

ORG. DATE - 12/13/2021

Oct 07, 2022
H:\2021\FLB210114\CAD\DRAWINGS\PLAN SETS\FLB210114 - SITE - 0----LAYOUT C-301 LAYOUT PLAN
NH



INSET A

PAVING AND GRADING NOTES:

1. GENERAL:
   - A. ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE SURVEYOR'S BENCHMARKS AND MUST BE VERIFIED BY THE GENERAL CONTRACTOR PRIOR TO GROUNDBREAK.
   - B. "TC" = TOP OF CURB ELEVATION; "BC" = BOTTOM OF CURB ELEVATION (EDGE OF PAVEMENT); "M.E." = PROPOSED GRADE TO MATCH EXISTING GRADE; T/W = TOP OF RETAINING WALL ELEVATION; B/W = BOTTOM OF RETAINING WALL ELEVATION; T.S. = TOP OF SIDEWALK ELEVATION.
   - C. THE ALTA/ACSM LAND TITLE SURVEY SHALL BE CONSIDERED A PART OF THESE PLANS.
   - D. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND IN CASE OF CONFLICT SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DISCREPANCY BETWEEN GEOTECHNICAL REPORT AND PLANS, ETC.
   - E. ALL UNDERGROUND UTILITIES SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF LIMEROCK BASE.
   - F. ALL EXISTING PAVEMENT, CUT OR DAMAGED BY CONSTRUCTION, SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.
   - G. WHERE ANY PROPOSED PAVEMENT IS TO BE CONNECTED TO EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE SAW CUT TO ENSURE A PROPER JOINT.
   - H. PRIOR TO THEIR CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY APPROVALS IF REQUIRED.
2. MATERIALS:
   - A. BASE COURSE SHALL BE COMPLIANT WITH LATEST F.D.O.T. FLEXIBLE PAVEMENT DESIGN MANUAL AND DESIGN STANDARDS.
   - B. ASPHALT SURFACES SHALL BE TYPE SUPER PAVE (SP), UNLESS OTHERWISE SPECIFIED ON THE PLANS, AND SHALL BE A MINIMUM OF 1-1/2" THICK, AND CONSTRUCTED IN TWO MINIMUM 3/4" LIFTS, WITH TACKCOAT BETWEEN LIFTS.
   - C. REINFORCED CONCRETE SLABS SHALL BE CONSTRUCTED OF CLASS I CONCRETE WITH A MINIMUM STRENGTH OF 3,000 PSI AND SHALL BE REINFORCED WITH A 6" x 6" NO. 6 GAUGE WIRE MESH.
3. INSTALLATION:
   - A. SUBGRADE FOR ROADWAY SHALL BE COMPACTED TO A MINIMUM OF 98% OF THE MAXIMUM DENSITY (AASHTO T-180), TO A MIN. 12" AND SHALL HAVE A MINIMUM LBR 40.
   - B. BASE COURSE MATERIAL FOR PAVED AREAS SHALL BE A MINIMUM THICKNESS OF 8" PLACED IN ONE LIFT. BASE COURSE MATERIAL SHALL HAVE A MINIMUM MARSHALL STABILITY OF 1000, UNLESS OTHERWISE INDICATED (OR LBR-100).
   - C. BASE COURSE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
   - D. INSTALLATION OF THE WEARING SURFACE SHALL CONFORM WITH THE REQUIREMENTS OF THE D.O.T. STANDARD SPECIFICATIONS FOR TYPE S-III ASPHALTIC CONCRETE OR THE LATEST REVISION.
4. TESTING
   - A. THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN 1/4" FROM THE TEMPLATE. ANY IRREGULARITIES EXCEEDING THIS LIMIT SHALL BE CORRECTED.
   - B. DENSITY TESTS SHALL BE TAKEN BY AN INDEPENDENT TESTING LABORATORY CERTIFIED BY THE STATE OF FLORIDA, WHERE DIRECTED BY THE ENGINEER.
   - C. ALL TESTING COSTS (PAVING) SHALL BE PAID FOR BY THE CONTRACTOR.
   - D. DENSITY TESTS ON THE STABILIZED SUBGRADE SHALL BE SUPPLIED TO THE ENGINEER OF RECORD AND GEOTECHNICAL ENGINEER, AND APPROVED BEFORE ANY BASE IS CONSTRUCTED.
   - E. DENSITY TESTS AND "AS-BUILTS" ON THE FINISHED BASE SHALL BE SUPPLIED TO THE GEOTECHNICAL ENGINEER, AND APPROVED BEFORE ANY ASPHALT PAVEMENT IS CONSTRUCTED.

DATUM NOTES:

ELEVATIONS SHOWN HERON ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 DETERMINED BY GPS OBSERVATIONS AND TIED IN TO THE NGS PALM BEACH COUNTY, RIVIERA BEACH, ES48, BENCHMARK #AJ8884 WITH A PUBLISHED ELEVATION OF 14.04'

FEMA MAP INFORMATION:

THE SITE APPEARS TO BE IN FLOOD ZONE X, ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY, AS SHOWN IN THE FLOOD INSURANCE RATE MAP, 12099C0389F MAP REVISED 10/5/2917 NATIONAL FLOOD INSURANCE PROGRAM.

PERMITTING NOTE:

ALL OFF-SITE WORK IS COVERED BY FDOT DRAINAGE PERMIT 2022-D-496-00008

DESIGN STORM MAXIMUM ZERO-DISCHARGE STAGE ELEVATIONS	
5-YEAR / 1-HOUR	11.15'
25-YEAR / 72-HOUR	14.21'
100-YEAR / 72-HOUR	14.55'

LEGEND:

- EX PROPERTY BOUNDARY LINES
- EX ADJACENT BOUNDARY LINES
- PROP PROPERTY BOUNDARY LINES
- EX STORM SEWER
- EX SPOT GRADE
- PROP SPOT GRADE
- PROP DRAINAGE ARROW
- PROP DRAINAGE PIPE
- PROP DRAINAGE STRUCTURES
- PROP STANDARD CONCRETE
- PROP HEAVY DUTY CONCRETE PAVING

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PROJECT No.:	FLB210114
DRAWN BY:	NH
CHECKED BY:	CL
DATE:	12/13/2021
CAD I.D.:	GRAD

PROJECT:

PROP. PERMITTING DOCUMENTS

FOR

TheEastonGroup

RIVIERA BEACH LTL

DR. MARTIN LUTHER KING JR BLVD
PALM BEACH COUNTY
RIVIERA BEACH, FL 33404

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Date: 2022.10.07 13:19:18 -04'00'

SHEET TITLE:

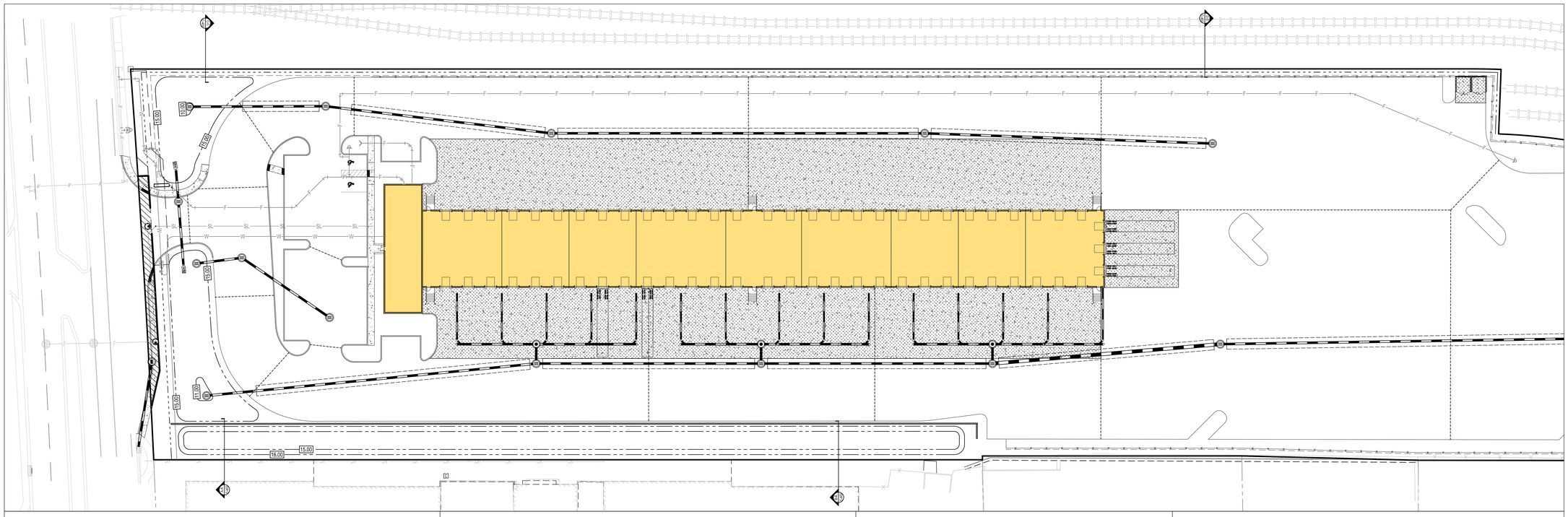
PAVING GRADING & DRAINAGE PLAN

SHEET NUMBER:

C-401

ORG. DATE - 12/13/2021

Oct 06, 2022
H:\2021\FLB210114\CAD\DRAWINGS\PLAN SET\FLB210114 - GRAD - D---LAYOUT C-401 PAVING GRADING & DRAINAGE PLAN


A
A
B
B
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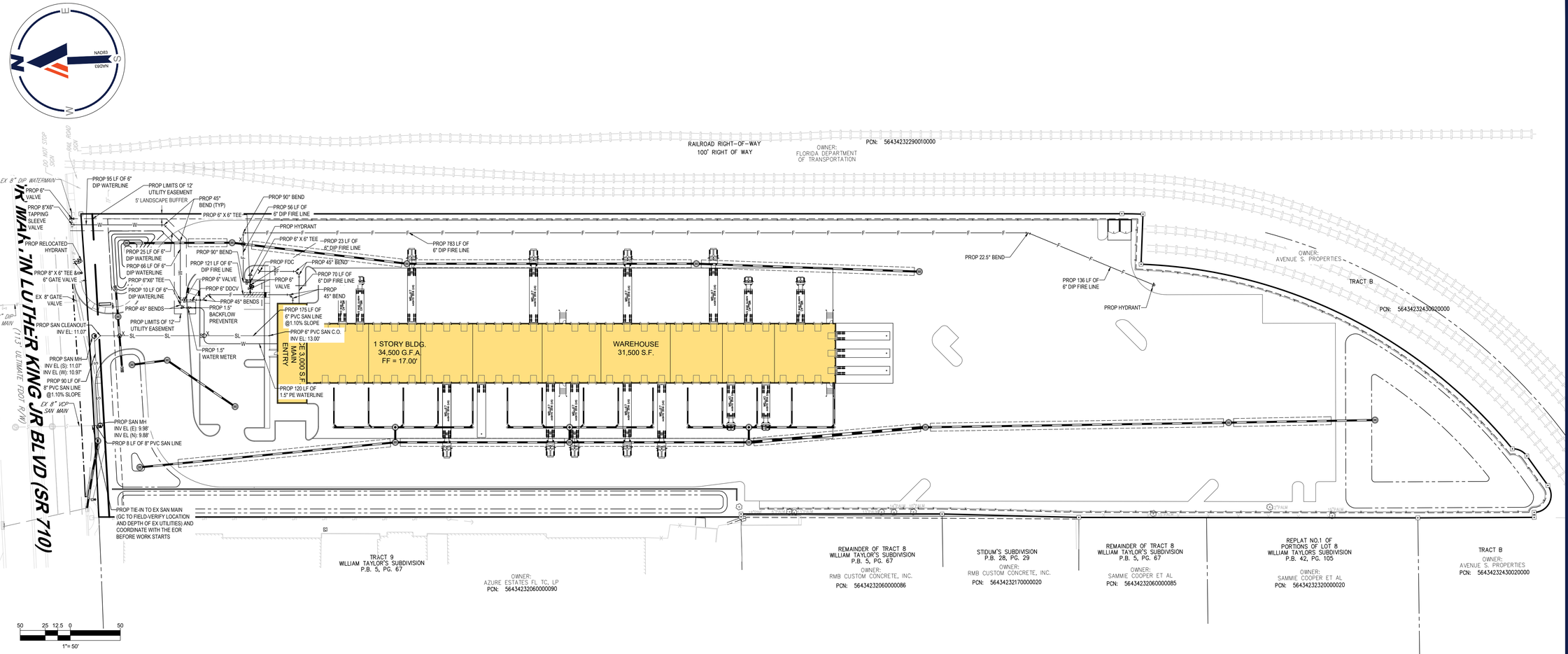
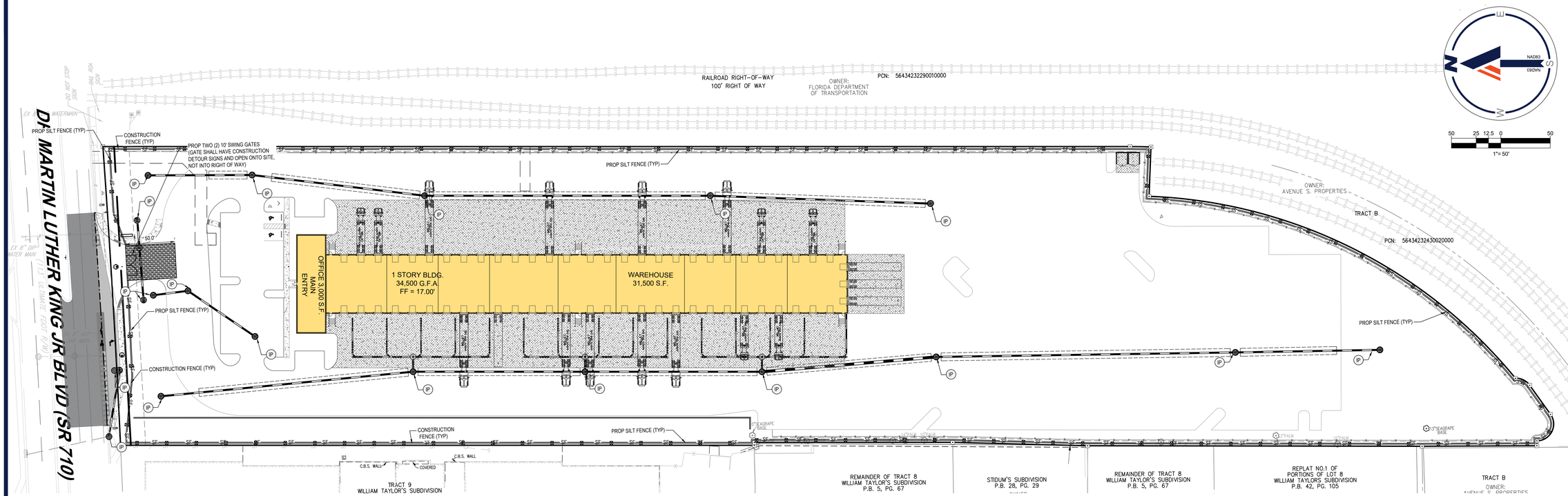

RAILROAD RIGHT-OF-WAY
100' RIGHT OF WAY
OWNER:
FLORIDA DEPARTMENT
OF TRANSPORTATION
PCN: 56434232290010000
DO NOT STOP ON RAIL ROAD
EX 8" DIP WATERMAIN
PROP 95 LF OF 6" DIP WATERLINE
PROP 6" VALVE
PROP 8"X6" TAPPING SLEEVE VALVE
PROP RELOCATED HYDRANT
PROP LIMITS OF 12' UTILITY EASEMENT
5' LANDSCAPE BUFFER
PROP 45° BEND (TYP)
PROP 6" X 6" TEE
PROP 90° BEND
PROP 56 LF OF 6" DIP FIRE LINE
PROP HYDRANT
PROP 6" X 6" TEE
PROP 23 LF OF 6" DIP FIRE LINE
PROP 783 LF OF 6" DIP FIRE LINE
PROP 25 LF OF 6" DIP WATERLINE
PROP 90° BEND
PROP 121 LF OF 6" DIP FIRE LINE
PROP FDC
PROP 45° BEND
PROP 22.5° BEND
PROP 8" X 6" TEE
6" GATE VALVE
PROP 6"X6" TEE
PROP 6" VALVE
PROP 70 LF OF 6" DIP FIRE LINE
PROP 136 LF OF 6" DIP FIRE LINE
EX 8" GATE VALVE
PROP 10 LF OF 6" DIP WATERLINE
PROP 6" DDCV
PROP 45° BEND
PROP 45° BENDS
PROP HYDRANT
EX 8" DIP WATER MAIN
PROP 45° BENDS
PROP 1.5" BACKFLOW PREVENTER
PROP 175 LF OF 6" PVC SAN LINE @1.10% SLOPE
PROP SAN CLEANOUT
INV EL: 11.07'
PROP 6" PVC SAN C.O.
INV EL: 13.00'
1 STORY BLDG.
34,500 G.F.A
FF = 17.00'
WAREHOUSE
31,500 S.F.
E-3,000 S.F.
MAIN ENTRY
PROP 1.5" WATER METER
PROP SAN MH
INV EL (S): 11.07'
INV EL (W): 10.97'
PROP 90 LF OF 8" PVC SAN LINE @1.10% SLOPE
PROP 120 LF OF 1.5" PE WATERLINE
EX 8" VCP SAN MAIN
PROP SAN MH
INV EL (E): 9.98'
INV EL (N): 9.88'
PROP 8 LF OF 8" PVC SAN LINE
PROP TIE-IN TO EX SAN MAIN (GC TO FIELD-VERIFY LOCATION AND DEPTH OF EX UTILITIES) AND COORDINATE WITH THE EOR BEFORE WORK STARTS
OWNER:
AVENUE S. PROPERTIES
TRACT B
PCN: 56434232430920000
W. 13TH ST
ULTIMATE RIGHT-OF-WAY
W. 13TH ST
ULTIMATE RIGHT-OF-WAY
W. 13TH ST
ULTIMATE RIGHT-OF-WAY



POLLUTION PREVENTION NOTES:

1. EROSION AND SEDIMENT CONTROL BMP'S IN ADDITION TO THOSE PRESENTED ON THESE PLANS SHALL BE IMPLEMENTED AS NECESSARY TO PREVENT TURBID DISCHARGES FROM FLOWING ONTO ADJACENT PROPERTIES OR ROADWAYS, OFF SITE STORMWATER CONVEYANCES OR RECEIVING WATERS, OR ON SITE WETLANDS AND SURFACE WATERS. BMP'S SHALL BE DESIGNED, INSTALLED, AND MAINTAINED BY THE SITE OPERATOR TO ENSURE THAT OFF SITE SURFACE WATER QUALITY REMAINS CONSISTENT WITH STATE AND LOCAL REGULATIONS. [THE OPERATOR IS THE ENTITY THAT OWNS OR OPERATES THE CONSTRUCTION ACTIVITY AND HAS AUTHORITY TO CONTROL THOSE ACTIVITIES AT THE PROJECT NECESSARY TO ENSURE COMPLIANCE.]
2. OFF SITE SURFACE WATER DISCHARGES, OR DISCHARGES TO ONSITE WETLANDS OR SURFACE WATERS WITH TURBIDITY IN EXCESS OF 29 NEPHELOMETRIC TURBIDITY UNITS (NTU'S) ABOVE BACKGROUND LEVEL SHALL BE IMMEDIATELY CORRECTED. SUCH INCIDENTS SHALL BE REPORTED TO WATER RESOURCES WITHIN 24 HOURS OF THE OCCURRENCE. THE REPORT SHALL INCLUDE THE CAUSE OF THE DISCHARGE AND CORRECTIVE ACTIONS TAKEN.
3. THE OPERATOR SHALL ENSURE THAT ADJACENT PROPERTIES ARE NOT IMPACTED BY WIND EROSION, OR EMISSIONS OF UNCONFINED PARTICULATE MATTER IN ACCORDANCE WITH RULE 62-296.320(4)(C)1, F.A.C., BY TAKING APPROPRIATE MEASURES TO STABILIZE AFFECTED AREAS.
4. FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ENTER STORMWATER DRAINS OR WATERBODIES, OR FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ARE IN EXCESS OF 25 GALLONS SHALL BE CONTAINED, CLEANED UP, AND IMMEDIATELY REPORTED TO WATER RESOURCES. SMALLER GROUND SURFACE SPILLS SHALL BE CLEANED UP AS SOON AS PRACTICAL.
5. IF CONTAMINATED SOIL AND/OR GROUNDWATER IS DISCOVERED DURING DEVELOPMENT OF THE SITE, ALL ACTIVITY IN THE VICINITY OF THE CONTAMINATION SHALL IMMEDIATELY CEASE, AND WATER RESOURCES SHALL BE CONTACTED.
6. PRIOR TO DEMOLITION OF EXISTING ON SITE STRUCTURES AN ASBESTOS SURVEY AND/OR ASBESTOS NOTIFICATION MAY BE REQUIRED.
7. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM:
   A. NPDES CONSTRUCTION GENERIC PERMIT COVERAGE SHALL BE OBTAINED AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION COMMENCEMENT IN ACCORDANCE WITH RULE 62-621.300(4)(a), F.A.C.
   B. A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE POSTED AT THE SITE IN ACCORDANCE WITH RULE 62-621.300(4)(A) PART III.C.2, F.A.C.
   C. A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE PROVIDED TO WATER RESOURCES IN ACCORDANCE WITH RULE 62-621.300(4)(a)PART III.D.1, F.A.C.
   D. THE SWPPP SHALL BE CERTIFIED IN ACCORDANCE WITH RULE 62-621.300(4)(a)PART V.D.6, F.A.C.
   E. A COPY OF THE SWPPP, AND COPIES OF THE INSPECTION AND MAINTENANCE RECORDS SHALL BE MAINTAINED AT THE PROJECT SITE, AND SHALL BE READILY AVAILABLE TO COUNTY OR STATE INSPECTORS.
8. THE DISCHARGE OF GROUNDWATER PRODUCED THROUGH DEWATERING, TO SURFACE WATERS, OR ANY PORTION OF THE MS4 WILL REQUIRE SEPARATE PERMITTING FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP). PERMIT(S) SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF DEWATERING.

FEMA MAP INFORMATION:

THE SITE APPEARS TO BE IN FLOOD ZONE X, ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY, AS SHOWN IN THE FLOOD INSURANCE RATE MAP, 12099C0389F MAP REVISED 10/05/2017 NATIONAL FLOOD INSURANCE PROGRAM.

MAINTENANCE NOTES:

N.P.D.E.S. PERMIT COMPLIANCE REQUIRES INSPECTIONS EVERY 7 CALENDAR DAYS BY A NPDES QUALIFIED INSPECTOR AND PERIODIC INSPECTIONS WITHIN 24 HOURS OF ANY RAINFALL EVENT OF 0.5 INCHES OR GREATER. THESE INSPECTIONS MAY RESULT IN RECOMMENDATIONS FOR ROUTINE MAINTENANCE OF THE SOIL EROSION CONTROL DEVICES, AS WELL AS FURTHER MAINTENANCE AS OUTLINED BELOW.

1. THROUGHOUT THE CONSTRUCTION PERIOD, ALL MUD/SILT TRACKED ONTO EXISTING FDOT ROADS FROM THE SITE DUE TO CONSTRUCTION SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR.
2. CATCH BASIN INLET AND CONCRETE FLUME FILTERS SHALL BE MAINTAINED CLEAN AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD. WEEKLY INSPECTIONS WILL BE PERFORMED EVERY 7 CALENDAR DAYS. IF A FILTER HAS HOLES OR IS INUNDATED WITH SEDIMENT, THE FILTER WILL REQUIRE REPLACEMENT.
3. CONSTRUCTION ACCESS AND TRACKING MAT MUST BE MAINTAINED AS NECESSARY. REPLENISH CRUSHED AGGREGATE IF PRESENT LAYER IS FILLED WITH SEDIMENT, POOLING WATER OR HAS RUTS. A NEW LAYER MAY BE ADDED IF OLD LAYERS BECOME COMPACTED.
4. SILT FENCE IS TO BE INSPECTED DAILY BY CONTRACTOR AND EVERY 7 CALENDAR DAYS BY NPDES QUALIFIED INSPECTOR. IF REPAIRS OR REPLACEMENT IS NECESSARY, IT SHALL BE PERFORMED IMMEDIATELY. THE SILT FENCE SHOULD BE TRENCHED IN, BACK-FILLED, AND STAPLED OR STAKED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. MAINTENANCE INCLUDES THE REMOVING OF BUILT-UP SEDIMENT. WHEN THE SEDIMENT ACCUMULATES TO 1/3 OF THE HEIGHT OF THE FENCE, CONTRACTOR MAY HAVE TO REMOVE, REPLACE, RETRENCH, OR RE-BACKFILL THE FENCE IF IT FAILS. IT WOULD ALSO BE NECESSARY TO REINSTALL IF ANY PORTION OF THE FENCING WAS DAMAGED BY CONSTRUCTION MACHINERY.
5. SEEDING OR RESEEDING MAY BE REQUIRED IMMEDIATELY TO AREAS WHICH HAVE BEEN DAMAGED BY RUNOFF.
6. REMOVE ANY VISIBLE SEDIMENT FROM THE POND BOTTOM TO KEEP THE BASIN DESIGNED INFILTRATION PERFORMANCE
7. THE CONTRACTOR SHALL CONTINUOUSLY ENSURE THAT THE PERIMETER OF THE SITE, INCLUDING CONSTRUCTION ENTRANCES, IS SECURED FROM ALLOWING DEBRIS TO LEAVE THE SITE DUE TO CONSTRUCTION ACTIVITY OR RAINFALL EVENTS. A WEEKLY LOG SHALL BE UPDATED AND KEPT ON-SITE IN ACCORDANCE WITH THE NPDES PERMIT. BY BIDDING DOCUMENTS CONTRACTOR ACKNOWLEDGES HE/SHE IS AWARE OF NPDES GUIDELINES AND POLICIES AS WELL AS BEST MANAGEMENT PRACTICES AND ASSUMES SOLE RESPONSIBILITY FOR FINES IMPOSED BY GOVERNMENTAL AGENCIES DUE TO VIOLATIONS.

PROJECT NAME AND LOCATION INFORMATION	MLK DISTRIBUTION CENTER
DESCRIBE THE NATURE OF THE CONSTRICTION ACTIVITY:	THE PROPOSED DEVELOPMENT CONSISTS OF A 34,500 SQ.-FT. BUILDING THAT WILL CONTAIN PARKING, ACCESS ROADWAYS, LIGHTING, LANDSCAPING, UTILITIES, AND STORMWATER MANAGEMENT FACILITIES.
DESCRIBE THE INTENDED SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES:	• 0-2 DAYS, SITE PREP AND STABILIZED CONST. ENTRANCE • 3-6 DAYS, INSTALL PERIMETER EROSION CONTROLS • 7-60 DAYS, INSTALL STORMWATER RETENTION BASIN • 7-10 DAYS, CLEARING/ GRUBBING OVER ALL AREAS • 11-90 DAYS, SITE GRADING • 90-150 DAYS, INSTALL STORM SEWER AND UTILITIES • 150-180 DAYS, STABILIZE SITE
TOTAL AREA OF THE SITE:	8.97 ACRES
TOTAL AREA OF THE SITE TO BE DISTURBED:	8.97 ACRES
EXISTING DATA DESCRIBING THE SOIL OR QUALITY OF ANY STORMWATER DISCHARGE FROM THE SITE:	EXISTING SOIL TYPE IS ARENTS-URBAN LAND COMPLEX. DEPTH TO WATE TABLE VARIES FROM 6.9 TO 8.3 FT BELOW SURFACE GRADES DEPENDING ON THE SEASON.
EXISTING DRAINAGE AREA SIZE FOR EACH DISCHARGE POINT.	8.97 ACRES
LATITUDE AND LONGITUDE OF EACH DISCHARGE POINT AND IDENTIFY THE RECEIVING WATER OR MS4 FOR EACH DISCHARGE POINT:	N/A
GIVE A DETAILED DESCRIPTION OF ALL CONTROLS, BEST MANAGEMENT PRACTICES (BMP'S) AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE FOR EACH ACTIVITY IDENTIFIED IN THE INTENDED SEQUENCE OF MAJOR SOIL DISTRIBUTING ACTIVITIES SECTION. PROVIDE TIME FRAMES IN WHICH THE CONTROLS WILL BE IMPLEMENTED. NOTE: ALL CONTROLS SHALL BE CONSISTENT WITH PERFORMANCE STANDARDS FOR EROSION AND SEDIMENT CONTROL AND STORMWATER TREATMENT SET FORTH IN S. 62-40-432 F.A.C., THE APPLICABLE STORMWATER OR ENVIRONMENTAL RESOURCE PERMITTING REQUIREMENTS OF THE DEPARTMENT OR A WATER MANAGEMENT DISTRICT, AND THE GUIDELINES CONTAINED IN THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, FDOT, FDEP (2013) AND ANY SUBSEQUENT AMENDMENTS.	
• PRIOR TO CLEANING, A SILT FENCE (TRENCHED 6 INCHES DEEP AND BACKFILLED ON THE UPHILL SIDE), SHALL BE INSTALLED AROUND THE PERIMETER OF THE SITE. A ROCK ENTRANCE ROAD (THAT IS 50 FT. LONG WITH A 12-INCH DEPTH OF FDOT #1 STONE AND LINED WITH FILTER FABRIC) SHALL BE CONSTRUCTED TO MINIMIZE THE EFFECTS OF TRUCK TRAFFIC AND SEDIMENTATION TRACKING BOTH ON AND OFF THE SITE. THERE WILL BE ONLY ONE CONSTRUCTION ENTRANCE AT THIS SITE. • AFTER THE INITIAL SITE GRADING WORK, ALL PROPOSED INLET(S)/ OUTFALLS, ONCE INSTALLED, SHALL BE PROTECTED FROM EROSION AND SEDIMENT RUNOFF BY THE USE OF FILTER FABRIC AND PROPERLY INSTALLED INLET FILTERS. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED SHALL BE STABILIZED WITH SOD OR OTHER PERMANENT STABILIZATION METHODS (IF OTHER METHODS ARE USED, THIS SWPPP WILL BE MODIFIED) NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. SEEDING SHALL BE THE SAME AS IN TEMPORARY SEEDING. ALL INSTALLATION SHALL BE COMMENCED AS DEPICTED ON THE ATTACHED SITE MAP AND INSTALLATION "TYPICALS" SHEET.	
DESCRIBE ALL TEMPORARY AND PERMANENT STABILIZATION PRACTICES. STABILIZATION PRACTICES INCLUDE TEMPORARY SEEDING, MULCHING, PERMANENT SEEDING, GEOTEXTILES, SOD STABILIZATION, VEGETATIVE BUFFER STRIPS, PROTECTION OF TREES, VEGETATIVE PRESERVATIONS, ETC.	
• TEMPORARY SEEDING SHALL BE THE GRASS OR OTHER APPROPRIATE GROUND COVERS DEPENDING UPON SEASON OF INSTALLATION THAT IS APPLIED AT MANUFACTURER'S RECOMMENDATIONS TO ANY DISTURBED AREAS THAT ARE INACTIVE MORE THAN 7 DAYS. • SOD SHALL BE USED TO STABILIZE THE SIDES OF THE DETENTION BASINS. • FILTER FABRIC SHALL BE PLACED UNDER THE ROCK ENTRANCE/EXIT. • VEGETATIVE BUFFERS SHALL BE LEFT UNDISTURBED ALONG THE BOUNDARIES OF THE PROPERTY, WITH THE EXCEPTION OF EXOTIC VEGETATION REMOVAL. • TURBIDITY BARRIERS TO PROTECT WETLAND. •SEDIMENT PONDS.	
DESCRIBE ALL STRUCTURAL CONTROLS TO BE IMPLEMENTED TO DIVERT STORMWATER, FLOW FROM EXPOSED SOILS AND STRUCTURAL PRACTICES TO STORE FLOWS, RETAIN SEDIMENT ON SITE OR IN ANY OTHER WAY LIMIT STORMWATER RUNOFF. THESE CONTROLS INCLUDE SILT FENCES, EARTH DIKES, DIVERSIONS, SWALES, SEDIMENT TRAPS, CHECK DAMS, SUBSURFACE DRAINS, PIPE SLOPE DRAINS, REINFORCED SOIL RETAINING SYSTEMS, GABIONS, COAGULATING AGENTS AND TEMPORARY OR PERMANENT SEDIMENT BASINS.	
• A SILT FENCE (WITH THE SAME INSTALLATION AS INDICATED UNDER THE BEST MANAGEMENT PRACTICES HEADING) SHALL BE PLACED AROUND THE ENTIRE PERIMETER OF EACH CONSTRUCTION PHASE. • THE SITE CONTAINS A PROPOSED STORMWATER SYSTEM WITH PIPES AND OVERLAND CONVEYANCES WHICH WILL BE PROTECTED DURING CONSTRUCTION. STORM WATER ULTIMATELY DISCHARGES TO THE EXISTING ADJACENT CANAL LOCATED ALONG THE WESTERN PORTION OF THE PROPERTY. INLET(S)/ OUTFALLS SHALL BE PROTECTED WITH FILTER FABRIC AND PROPERLY INSTALLED INLET FILTERS (WITH THE SAME INSTALLATION AS INDICATED UNDER THE BEST MANAGEMENT PRACTICES HEADING).	
DESCRIBE ALL SEDIMENT BASINS TO BE IMPLEMENTED FOR AREAS THAT WILL DISTURB 10 OR MORE ACRES AT ONE TIME. THE SEDIMENT BASINS (OR AN EQUIVALENT ALTERNATIVE) ARE RECOMMENDED FOR DRAINAGE AREAS UNDER 10 ACRES. N/A	
DESCRIBE ALL PERMANENT STORMWATER MANAGEMENT CONTROLS SUCH AS, BUT NOT LIMITED TO, DETENTION OR RETENTION SYSTEMS OR VEGETATED SWALES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS • STORMWATER MANAGEMENT CONTROLS PROVIDED WITH PHASE 1.	

WASTE DISPOSAL, THIS MAY INCLUDE CONSTRUCTION DEBRIS, CHEMICALS, LITTER, AND SANITARY WIPES.	ALL CONSTRUCTION MATERIALS AND DEBRIS WILL BE PLACED IN A DUMPSTER AND HAULED
OFFSITE VEHICLE TRACKING FROM CONSTRUCTION ENTRANCES/ EXITS:	OFFSITE VEHICLE TRACKING OF SEDIMENTS AND DUST GENERATION WILL BE MINIMIZED VIA A ROCK CONSTRUCTION ENTRANCE, STREET SWEEPING AND THE USE OF WATER TO KEEP DUST DOWN.
THE PROPER APPLICATION RATES OF ALL FERTILIZERS, HERBICIDES, AND PESTICIDES USED AT THE CONSTRUCTION SITE:	FLORIDA-FRIENDLY FERTILIZERS AND PESTICIDES WILL BE USED AT A MINIMUM AND IN ACCORDANCE WITH THE MANUFACTURER'S SUGGESTED APPLICATION RATES. NO FERTILIZERS AND PESTICIDES WILL BE STORED ON SITE.
THE STORAGE, APPLICATION, GENERATION AND MIGRATION OF ALL TOXIC SUBSTANCES:	ALL PAINTS AND OTHER CHEMICALS WILL BE STORED IN A LOCKED COVERED SHED.
OTHER:	PORT-O-LETS WILL BE PLACED AWAY FROM STORM SEWER SYSTEMS, STORM INLET(S), SURFACE WATERS AND WETLANDS. NO VEHICLE MAINTENANCE SHALL BE CONDUCTED ON-SITE. A WASHDOWN AREA SHALL BE DESIGNATED AT ALL TIMES AND WILL NOT BE LOCATED IN ANY AREA THAT WILL ALLOW FOR THE DISCHARGE OF POLLUTED RUNOFF. A SMALL-VEGETATED BERM SHALL BE PLACED AROUND THE WASHDOWN AREA.
PROVIDE A DETAILED DESCRIPTION OF MAINTENANCE PLAN FOR ALL STRUCTURAL AND NON-STRUCTURAL CONTROLS TO ASSURE THAT THEY REMAIN IN GOOD AND EFFECTIVE OPERATING CONDITION.	
CONTRACTOR SHALL PROVIDE ROUTINE MAINTENANCE OR PERMANENT AND TEMPORARY SEDIMENT AND EROSION CONTROL FEATURES IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS OR AS FOLLOWS, WHICHEVER IS MORE STRINGENT: • SILT FENCE SHALL BE INSPECTED AT LEAST WEEKLY. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH APPROXIMATELY ONE- HALF THE HEIGHT OF THE BARRIER. • MAINTENANCE SHALL BE PERFORMED ON THE ROCK ENTRANCE WHEN ANY VOID SPACES ARE FULL OF SEDIMENT. • INLET(S)/OUTFALLS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAIN EVENT AND ANY REQUIRED REPAIRS TO THE FILTER INLETS, SILT FENCE, OR FILTER FABRIC SHALL BE PERFORMED IMMEDIATELY. • BARE AREAS OF THE SITE THAT WERE PREVIOUSLY SEEDED SHALL BE RESEEDED PER MANUFACTURES' INSTRUCTIONS • MULCH AND SOD THAT HAS BEEN WASHED OUT SHALL BE REPLACED IMMEDIATELY. • MAINTAIN ALL OTHER AREAS OF THE SITE WITH PROPER CONTROLS AS NECESSARY. • ADDITIONAL MAINTENANCE INCLUDED IN URBAN STORMWATER MAINTENANCE PROGRAM.	
INSPECTIONS: DESCRIBE THE INSPECTION AND INSPECTION DOCUMENTATION PROCEDURES, AS REQUIRED BY PART V.D.4. OF THE PERMIT. INSPECTIONS MUST OCCUR AT LEAST ONCE EVERY 7 DAYS WITHIN 24 HOURS OF THE END OF A STORM EVENT THAT IS 0.50 INCHES OR GREATER (SEE ATTACHED FORM)	
QUALIFIED PERSONNEL WILL INSPECT ALL POINTS OF DISCHARGES, ALL DISTURBED AREAS OF CONSTRUCTION THAT HAVE NOT BEEN STABILIZED, CONSTRUCTED AREAS AND LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE, AND ALL BMP'S AT LEAST ONCE EVERY 7 CALENDAR DAYS OR WITHIN 24HOURS OF THE END OF A RAINFALL EVENT THAT IS 0.50 INCHES OR GREATER. WHERE SITES HAVE BEEN FINALLY STABILIZED, SAID INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH UNTIL THE NOTICE OF TERMINATION IS FILED.	
IDENTIFY AND DESCRIBE ALL SOURCES OF NON-STORMWATER DISCHARGES AS ALLOWED IN PART IV.A.3. OF THE PERMIT. FLOWS FROM FIREFIGHTING ACTIVITIES DO NOT HAVE TO BE LISTED OR DESCRIBED. N/A	
ALL CONTRACTOR(S) AND SUBCONTRACTOR(S) IDENTIFIED IN THE SWPPP MUST SIGN THE FOLLOWING CERTIFICATION:	
"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND, AND SHALL COMPLY WITH, THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED THEREUNDER."	

NAME	TITLE	COMPANY NAME, ADDRESS AND PHONE NUMBER	DATE
MOHAMED MEROUANE EL KAOUSSI, PE	SENIOR PROJECT MANAGER	BOHLER, 1900 NW CORPORATE BLVD, BOCA FL 33431, (561) 571-0280	7/30/2021

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL SERVICES
PERMITTING SERVICES
TRANSPORTATION SERVICES

THE WORK, CIVIL DESIGN AND CONTENT OF THIS PLAN IS THE PROPRIETARY AND EXCLUSIVE PROPERTY OF BOHLER AND SHALL NOT BE USED OR ALTERED IN ANY MANNER, WITHOUT EXPRESS WRITTEN AUTHORIZATION FROM BOHLER. ONLY APPROVED AND SEALED PLANS SHALL BE UTILIZED FOR CONSTRUCTION PURPOSES. © BOHLER, INC.

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

811 Know what's below. Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

PERMIT SET

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: FLB210114
DRAWN BY: NH
CHECKED BY: CL
DATE: 12/13/2021
CAD I.D.: EROS

PROJECT:

PROP. PERMITTING DOCUMENTS

FOR

TheEastonGroup

RIVIERA BEACH LTL

DR. MARTIN LUTHER KING JR BLVD
PALM BEACH COUNTY
RIVIERA BEACH, FL 33404

BOHLER
1900 NW CORPORATE BOULEVARD
SUITE 101E
BOCA RATON, FLORIDA 33431
Phone: (561) 571-0280
Fax: (561) 571-0281
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

This item has been digitally signed and sealed by Mohammed Merouane El Kaoussi, PE, on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

MOHAMED MEROUANE EL KAOUSSI LICENSE No. 88591 STATE OF FLORIDA PROFESSIONAL ENGINEER

DN: c=US, st=Florida, l=Boca Raton, o=BOHLER ENGINEERING FL, LLC, cn=Merouane El Kaoussi, email=melkaoussi@bohlereng.com
Date: 2022.10.07 13:24:51 -04'00'

SHEET TITLE:

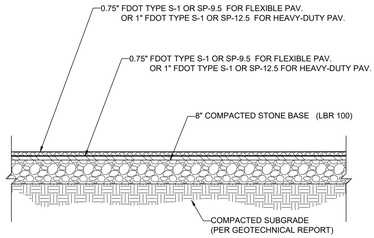
PHASE 1 & 2 SOIL EROSION CONTROL PLAN

SHEET NUMBER:

C-601

ORG. DATE - 12/13/2021

Oct 07, 2022
11:02:21 P:\BZ\101114\CAD\DRAWINGS\PLAN SET\FIS\B210114_EROS_0----LAYOUT C-601 PHASE 1 SOIL EROSION CONTROL PLAN NH

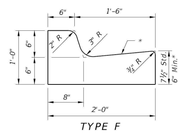


NOTE:

1. SECTION SHOWN IS BASED THE GEOTECHNICAL REPORT PREPARED BY ARDAMAN & ASSOCIATES, INC, ENTITLED SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION TRACTS A, C AND D - 1500 MARTIN LUTHER KING JR. BLVD, RIVIERA BEACH , DATED JULY 26, 2016. FINAL DESIGN TO BE PROVIDED ONCE FINAL CBR'S ARE AVAILABLE ON COMPACTED SUB-BASE.

STANDARD DUTY ASPHALT PAVEMENT SECTION

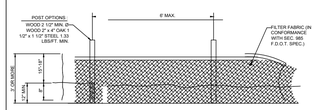
NOT TO SCALE



FDOT TYPE "F" CURB & GUTTER

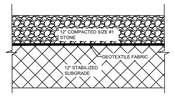
NOT TO SCALE

CURB INLET PROTECTION
DETAIL NOT TO SCALE



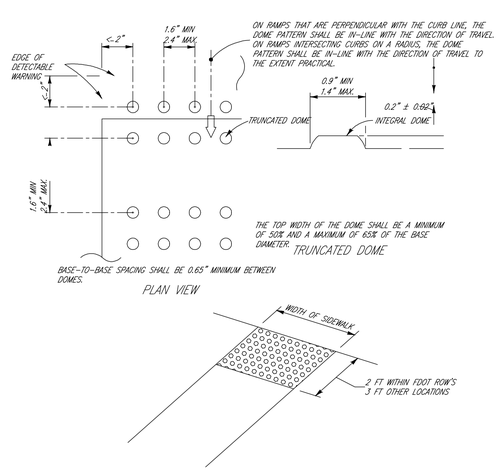
SILT FENCE DETAIL NOT TO
SCALE (PER FDOT INDEX #102)

SILT FENCE PROTECTION AROUND
DITCH BOTTOM INLETS



SOIL TRACKING PREVENTION
MAT DETAIL NOT TO SCALE (PER
FDOT INDEX #106)

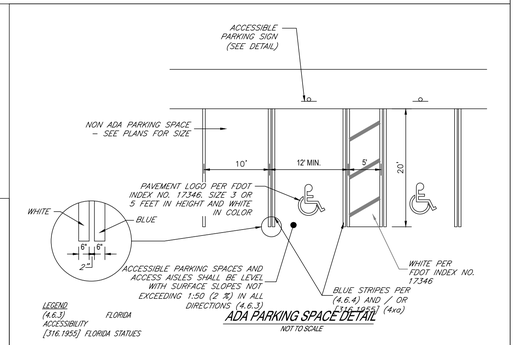
1. EROSION AND SEDIMENT CONTROL BMP'S IN ADDITION TO THOSE PRESENTED ON THESE PLANS SHALL BE IMPLEMENTED AS NECESSARY TO PREVENT TURBID DISCHARGES FROM FLOWING ONTO ADJACENT PROPERTIES OR ROADWAYS. OFF SITE STORMWATER CONVEYANCES OR RECEIVING WATERS. ALL EROSION AND SEDIMENT CONTROL BMP'S SHALL BE INSPECTED, MAINTAINED AND REPAIRED AS NEEDED BY THE SITE OPERATOR TO ENSURE THAT OFF SITE SURFACE WATER QUALITY REMAINS CONSISTENT WITH STATE AND LOCAL REGULATIONS. [THE OPERATOR IS THE ENTITY THAT OWNS OR OPERATES THE CONSTRUCTION ACTIVITY AND HAS AUTHORITY TO CONTROL THOSE ACTIVITIES AT THE PROJECT NECESSARY TO ENSURE COMPLIANCE.]
2. OFF SITE SURFACE WATER DISCHARGES, OR DISCHARGES TO ONSITE WETLANDS OR SURFACE WATERS WITH TURBIDITY IN EXCESS OF 29 NEPHELOMETRIC TURBIDITY UNITS (NTU'S) ABOVE BACKGROUND LEVEL SHALL BE IMMEDIATELY CORRECTED. SUCH INCIDENTS SHALL BE REPORTED TO WATER RESOURCES WITHIN 24 HOURS OF THE OCCURRENCE. THE REPORT SHALL INCLUDE THE CAUSE OF THE DISCHARGE AND CORRECTIVE ACTIONS TAKEN.
3. THE OPERATOR SHALL ENSURE THAT ADJACENT PROPERTIES ARE NOT IMPACTED BY WIND EROSION, OR EMISSIONS OF UNCONFINED PARTICULATE MATTER IN ACCORDANCE WITH RULE 62-296.320(4)(C), F.A.C., BY TAKING APPROPRIATE MEASURES TO STABILIZE AFFECTED AREAS.
4. FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ENTER STORMWATER DRAINS OR WATERBODIES, OR FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ARE IN EXCESS OF 25 GALLONS, OR SMALLER SPILLS THAT MAY BE HARMFUL TO WATER QUALITY OR WATER RESOURCES. SMALLER GROUND SURFACE SPILLS SHALL BE CLEANED UP AS SOON AS PRACTICAL.
5. IF CONTAMINATED SOIL AND/OR GROUNDWATER IS DISCOVERED DURING DEVELOPMENT OF THE SITE, ALL ACTIVITY IN THE VICINITY OF THE CONTAMINATION SHALL IMMEDIATELY CEASE, AND WATER RESOURCES SHALL BE CONTACTED.
6. PRIOR TO DEMOLITION OF EXISTING ON SITE STRUCTURES AN ASBESTOS SURVEY AND/OR ASBESTOS NOTIFICATION MAY BE REQUIRED.
7. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM:
   A. NPDES CONSTRUCTION GENERIC PERMIT COVERAGE SHALL BE OBTAINED AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION COMMENCEMENT IN ACCORDANCE WITH RULE 62-621.300(4)(a).
   B. A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE POSTED AT THE SITE IN ACCORDANCE WITH RULE 62-621.300(4)(A)1.PART III.C.2, F.A.C.
   C. A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE KEPT AT THE OFFICE OF WATER RESOURCES IN ACCORDANCE WITH RULE 62-621.300(4)(a)PART III.D.1, F.A.C.
   D. THE SWPPP SHALL BE CERTIFIED IN ACCORDANCE WITH RULE 62-621.300(4)(a)PART V.D.6, F.A.C.
   E. A COPY OF THE SWPPP, AND COPIES OF THE INSPECTION AND MAINTENANCE RECORDS SHALL BE MAINTAINED AT THE PROJECT SITE, AND SHALL BE READILY AVAILABLE TO COUNTY OR STATE INSPECTORS.
8. THE DISCHARGE OF GROUNDWATER PRODUCED THROUGH DEWATERING, TO SURFACE WATERS, OR ANY PORTION OF THE MS4 WILL REQUIRE SEPARATE PERMITTING FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP). PERMIT(S) SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF DEWATERING.



ALL SIDEWALK CURB RAMPS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24 INCHES (610 mm) FROM THE BACK OF CURB WITHIN FDOT ROW'S AND 30 INCHES (610 mm) FROM THE BACK OF CURB AT ALL OTHER LOCATIONS.

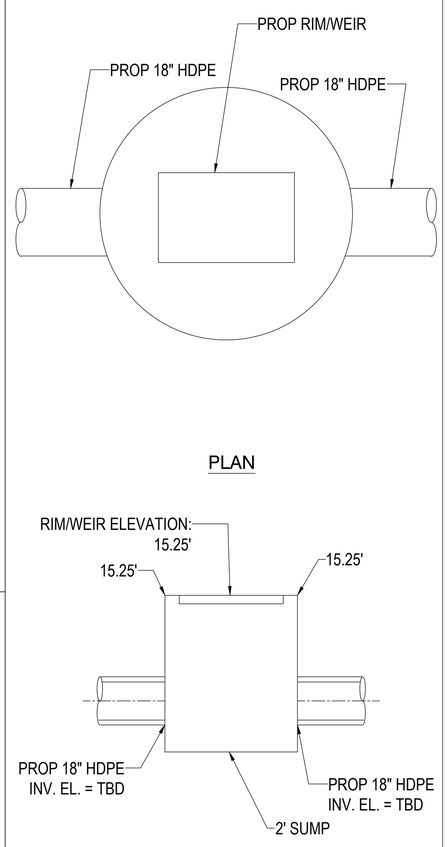
CURB RAMP DETECTABLE WARNING DETAIL

NOT TO SCALE
(PER FDOT INDEX #304)



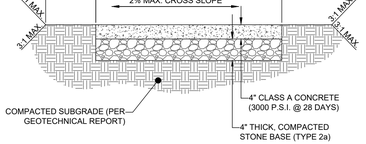
ADA PARKING SPACE DETAIL

NOT TO SCALE



MODIFIED STORM STRUCTURE CATCH BASIN CONTROL STRUCTURE WITH 2' SUMP DETAIL

NOT TO SCALE

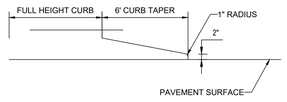


NOTE:

1. EXPANSION JOINTS 1/2" WIDE PREMOLDED BIT. MATERIAL SHALL BE INSTALLED AT 30' INTERVALS, CRACK CONTROL JOINTS TO BE SPACED AT INTERVALS EQUAL TO SIDEWALK WIDTH.

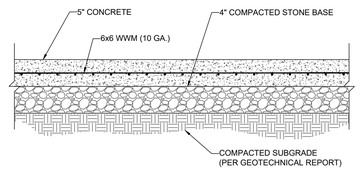
CONCRETE SIDEWALK DETAIL

NOT TO SCALE



CURB TAPER DETAIL

NOT TO SCALE

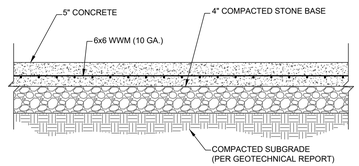


NOTE:

1. SECTION SHOWN IS BASED ON THE GEOTECHNICAL REPORT PREPARED BY ARDAMAN & ASSOCIATES, INC, ENTITLED SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION TRACTS A, C AND D - 1500 MARTIN LUTHER KING JR. BLVD, RIVIERA BEACH , DATED JULY 26, 2016. FINAL DESIGN TO BE PROVIDED ONCE FINAL CBR'S ARE AVAILABLE ON COMPACTED SUB-BASE.

HEAVY DUTY CONCRETE SECTION

NOT TO SCALE

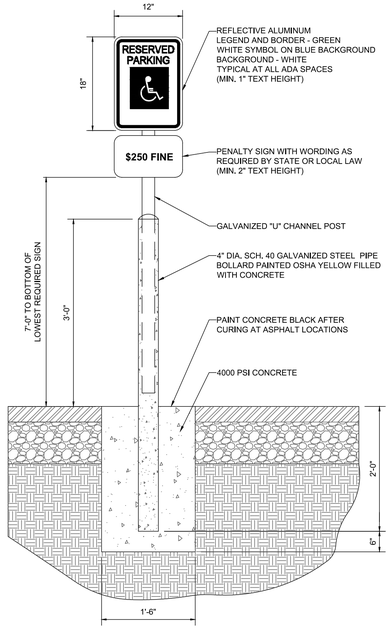


NOTE:

1. SECTION SHOWN IS BASED ON THE GEOTECHNICAL REPORT PREPARED BY ARDAMAN & ASSOCIATES, INC, ENTITLED SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION TRACTS A, C AND D - 1500 MARTIN LUTHER KING JR. BLVD, RIVIERA BEACH , DATED JULY 26, 2016. FINAL DESIGN TO BE PROVIDED ONCE FINAL CBR'S ARE AVAILABLE ON COMPACTED SUB-BASE.

STANDARD DUTY CONCRETE SECTION

NOT TO SCALE



NOTE:

ONE AT EACH ADA SPACE, WHERE ADA SPACES FACE EACH OTHER WITHOUT WALKWAY, THERE SHALL BE ONE POST WITH SIGNS MOUNTED BOTH SIDES

BOLLARD MOUNTED ADA PARKING SIGN DETAIL

NOT TO SCALE

BOHLER

SITE CIVIL AND CONSULTING ENGINEERING
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SITE PLAN DOCUMENTS

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PROJECT No.:	FLB210114
DRAWN BY:	NH
CHECKED BY:	CL
DATE:	12/13/2021
CAD I.D.:	CNDS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

TheEastonGroup

RIVIERA BEACH LTL

DR. MARTIN LUTHER KING JR BLVD
PALM BEACH COUNTY
RIVIERA BEACH, FL 33404

BOHLER

1900 NW CORPORATE BOULEVARD
SUITE 101E
BOCA RATON, FLORIDA 33431
Phone: (561) 571-0280
Fax: (561) 571-0281
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

This item has been digitally signed and sealed by Mohammed Merouane El Kaoussi, PE, on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

MOHAMMED MEROUANE EL KAOUSSI LICENSE No. 88591 STATE OF FLORIDA PROFESSIONAL ENGINEER

DN: c=US, st=Florida, l=Boca Raton, o=BOHLER ENGINEERING FL, LLC, cn=Merouane El Kaoussi, email=melkaoussi@bohlereng.com
Date: 2022.10.07 13:25:21 -04'00'

SHEET TITLE:

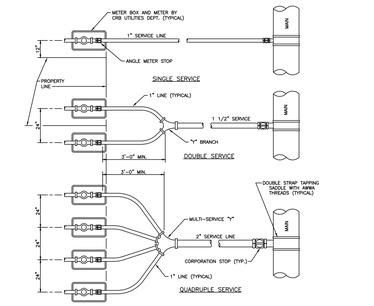
CONSTRUCTION DETAILS

SHEET NUMBER:

C-901

ORG. DATE - 12/13/2021

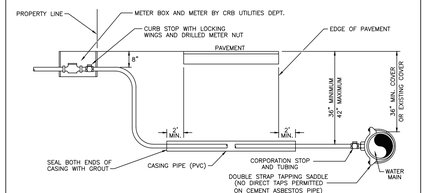
May 17, 2022
H:\2021\FLB210114\CAD\DRAWINGS\PLAN SETS\FLB210114 - CNDS - (I)-----LAYOUT C-901 CONSTRUCTION DETAILS
NH



NOTES:
1. AUTHORIZED SERVICE LINE MATERIAL:
   A) TYPE "K" COPPER TUBING WITH COMPRESSION FITTINGS.
   B) POLYETHYLENE TUBING SDR 9, COPPER TUBE SIZE.
2. ANGLE METER STOP SHALL BE 1" MINIMUM.
3. 1" ANGLE METER STOPS WITH 3/4" VALVES SHALL NOT BE PERMITTED.
4. MULTIPLE SERVICE/METER INSTALLATIONS OF MORE THAN 4 METERS PER SERVICE AND SERVICE LINES LARGER THAN 2" DIAMETER SHALL BE HANDLED ON AN INDIVIDUAL BASIS.
5. ANGLE METER STOPS 1 1/2" AND 2" IN SIZE SHALL BE PROVIDED WITH BOTH A LOCKING CAP AND METER FLANGE.
6. NO FITTINGS BETWEEN CORP STOP AND ANGLE METER STOP ALLOWED WHEN USING POLYETHYLENE TUBING.

TYPICAL WATER SERVICES
N.T.S. 05/27/05

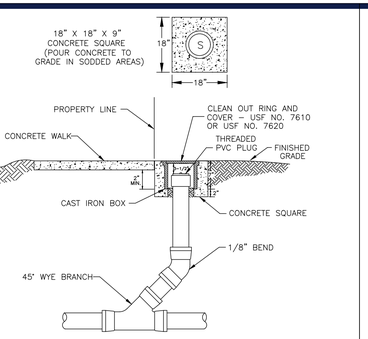
Water & Sewer Details
City of Riviera Beach Utility District



NOTES:
1. CASINGS SHALL BE REQUIRED FOR ALL LONG SIDE SERVICES.
2. SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" OFFSET.
3. WHERE NO SIDEWALK EXISTS, METER BOXES SHALL BE SET TO CONFORM TO FINISH GRADE.
4. COPPER TUBING SHALL BE TYPE "K" WITH COMPRESSION FITTINGS.
5. USE EMS MARKER #1252 COLOR BLUE DIRECTLY OVER THE CORPORATION STOP.
6. ALL SERVICE LINES SHALL BE EQUIPED WITH A CORPORATION STOP AT THE MAIN AND A CURB STOP (LOCKING CONNECTION TYPE) AT THE METER.
7. THE COPPER SERVICE LINE SHALL BE CONTINOUS FROM CORPORATION STOP TO CURB STOP WITH NO FITTINGS IN BETWEEN.
8. TAPPING SADDLES AND CORPORATION STOPS SHALL HAVE AWWA INLET THREADS.
9. ALL EXPOSED FITTINGS TO BE COATED WITH COLA TAR EPOXY.
10. GALVANIZED CASING REQUIRED FOR ANY INSTALLATION REQUIRING A JACK AND BORE, SCH. 40 PVC MAY BE USED FOR AN OPEN CUT INSTALLATION WITH THE APPROVAL OF THE CRB UTILITIES DEPT. CASING SHOULD EXTEND TWO (2) FEET BEYOND EDGE OF PAVEMENT AND SIZED AS FOLLOWS:
    A.) 1" SERVICE USE 2" CASING
    B.) 1 1/2" SERVICE USE 3" CASING
    C.) 2" SERVICE USE 4" CASING

3/4" – 2" TYPICAL WATER SERVICE INSTALLATION
N.T.S. 05/27/05

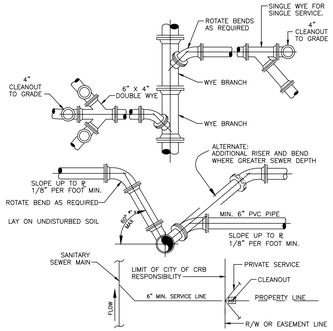
Water & Sewer Details
City of Riviera Beach Utility District



NOTES:
1. CLEAN OUTS TO BE LOCATED IN GRASS WHENEVER POSSIBLE.
2. CLEANOUTS SHALL NOT BE INSTALLED IN TRAFFIC LANES OR AREAS UNDER HEAVY TRAFFIC LOADS.
3. THE COVER TO BE MARKED "S".
4. CLEANOUTS TO BE INSTALLED PRIOR TO WATER METER RELEASE.
5. NO 90 BENDS SHALL BE USED FOR CLEANOUT INSTALLATION.

CLEAN OUT AT PROPERTY LINE
N.T.S. 05/27/05

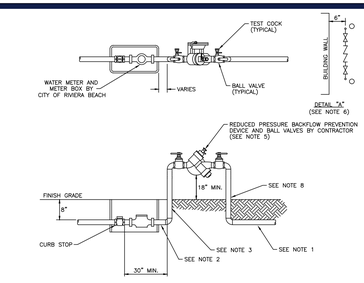
Water & Sewer Details
City of Riviera Beach Utility District



NOTES:
1. SERVICE LATERALS SHALL TERMINATE AT PROPERTY LINE AT A DEPTH OF 3 FEET.
2. CLEANOUT CONNECTION TO BE EXTENDED 3 FEET ABOVE GRADE PRIOR TO WATER METER INSTALLATION.
3. CLEANOUTS ARE TO BE SET TO GRADE PRIOR TO WATER METER ACTIVATION.
4. NO 90° BENDS SHALL BE PERMITTED FOR SEWER SERVICE AND CLEANOUT INSTALLATION.

TYPICAL LATERAL CONNECTIONS
N.T.S. 5/27/05

Water & Sewer Details
City of Riviera Beach Utility District



NOTES:
1. TYPE "K" COPPER TUBING (SOFT DRAWN) OR POLYETHYLENE TUBING SDR 9 COPPER TUBE SIZE.
2. IF THIS DISTANCE IS LESS THAN 3 FEET ONLY COPPER TUBING SHALL BE PERMITTED.
3. 3/4"–2" BOTH RISERS SHALL BE TYPE "K" COPPER TUBING (HARD DRAWN) WITH COPPER/BRASS SOLDER FITTINGS AND ADAPTERS. ONLY LEAD FREE SOLDER AND FLUX SHALL BE PERMITTED.
4. BOTH 1 1/2" AND 2" ANGLE METER STOPS SHALL BE EQUIPPED WITH LOCKING CAPS AND METER FLANGES.
5. ALL BACKFLOW PREVENTION DEVICES ASSEMBLY MUST BE USC APPROVED.
6. WHEN THE DEVICE IS INSTALLED PARALLEL TO A BUILDING WALL THERE SHALL BE A MIN. OF 6" BETWEEN THE EDGE OF THE DEVICE AND THE BUILDING WALL.
7. 2 1/2 "–10" THE RPZ BACKFLOW PREVENTION ASSEMBLY MUST BE INSTALLED DOWNSTREAM OF THE WATER SERVICE METER 18"–24" ABOVE FINISHED GRADE ON NON–GALVANIZED METAL PIPE. WORK DONE ON THIS DEVICE MUST BE PERFORMED BY A CERTIFIED BACKFLOW TECHNICIAN AND TEST REPORTS MUST BE SUBMITTED TO THE CITY OF RIVIERA BEACH – UTILITY DISTRICT.

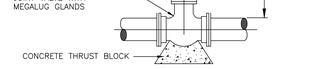
RPZ BACKFLOW PREVENTION DEVICE
05/27/05

Water & Sewer Details
City of Riviera Beach Utility District

NOTES:
1. ABOVE GROUND INSTALLATION OF 3" & ABOVE REQUIRE RISING STEM O.S. & Y. RESILIENT SEAT GATE VALVES WITH TEST COCKS.
2. INSTALLATION AND CERTIFICATION REQUIRED BY A CERTIFIED BACKFLOW TECHNICIAN PRIOR TO ACCEPTANCE.
3. AN RPZ BACKFLOW PREVENTION ASSEMBLY MUST BE INSTALLED DOWNSTREAM OF THE DOMESTIC AND IRRIGATION METER, 18" – 24" ABOVE FINISHED GRADE ON NON–GALVANIZED METALLIC PIPE. WORK DONE ON THIS DEVICE IS TO BE PERFORMED BY A CERTIFIED BACKFLOW TECHNICIAN AND TEST REPORTS MUST BE SUBMITTED TO THE CITY OF RIVIERA BEACH – UTILITY DISTRICT.

DOUBLE DETECTOR CHECK ASSEMBLY & METER INSTALLATION SIZES:3",4",6",8",10"
N.T.S. 05/27/05

Water & Sewer Details
City of Riviera Beach Utility District



NOTES:
1. WHEN OPERATING NUT IS DEEPER THAN 36" AN EXTENSION WILL BE REQUIRED TO BRING OPERATING NUT 24"–30" BELOW FINISHED GRADE. EXTENSION BOLTS & NUTS ARE TO BE STAINLESS STEEL. A STAINLESS STEEL CENTERING PLATE, WELDED TO THE EXTENSION, IS ALSO REQUIRED.
2. VALVE BOXES SHALL HAVE LOCKING COVERS IN HIGH TRAFFIC ROADWAY AREAS.

TYPICAL GATE VALVE SETTINGS
N.T.S. 05/31/05

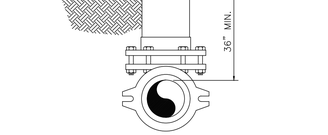
Water & Sewer Details
City of Riviera Beach Utility District

NOTES:
1. ABOVE GROUND INSTALLATION OF 3" & ABOVE REQUIRE RISING STEM O.S. & Y. RESILIENT SEAT GATE VALVES WITH TEST COCKS.
2. INSTALLATION AND CERTIFICATION REQUIRED BY A CERTIFIED BACKFLOW TECHNICIAN PRIOR TO ACCEPTANCE.
3. AN RPZ BACKFLOW PREVENTION ASSEMBLY MUST BE INSTALLED DOWNSTREAM OF THE DOMESTIC AND IRRIGATION METER, 18" – 24" ABOVE FINSHED GRADE ON NON–GALVANIZED METALLIC PIPE. WORK DONE ON THIS DEVICE IS TO BE PERFORMED BY A CERTIFIED BACKFLOW TECHNICIAN.

4. TEST REPORTS MUST BE SUBMITTED TO THE CITY OF RIVIERA BEACH – UTILITY DISTRICT AFTER INSTALLATION

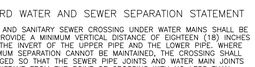
REDUCED PRESSURE DETECTOR ASSEMBLY SIZES – 3",4",6",8", & 10"
N.T.S. 5/26/05

Water & Sewer Details
City of Riviera Beach Utility District



SAMPLE POINT (HYDRANT)
N.T.S. 05/27/05

Water & Sewer Details
City of Riviera Beach Utility District

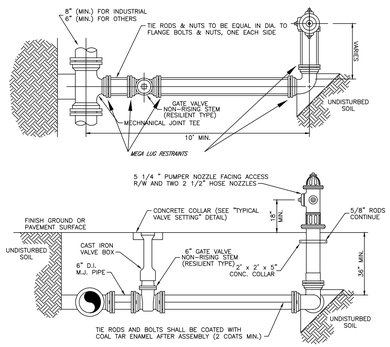


SEWER–WATER MAIN CROSSING DETAIL

STANDARD WATER AND SEWER SEPARATION STATEMENT

1. STORM AND SANITARY SEWER CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF EIGHTEEN (18) INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN TEN (10) FEET BETWEEN ANY TWO JOINTS AND BOTH PIPES SHALL BE D.I.P. WHERE THERE IS NOT ALTERNATIVE TO SEWER PIPES CROSSING OVER A WATER MAIN, THE CRITERIA FOR MINIMUM SEPARTION BETWEEN LINES AND JOINTS IN THE ABOVE, SHALL BE REQUIRED AND BOTH PIPES SHALL BE D.I.P. IRRESPECTIVE OF SEPARATION.
2. MAINTAIN TEN (10) FEET HORIZONTAL DISTANCE BETWEEN WATER MAIN AND STORM OR SANITARY SEWER MAIN, AS A MINIMUM.
3. FORCE MAIN CROSSING WATER MAIN SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF EIGHTEEN (18) INCHES BETWEEN THE OUTSIDE OF THE FORCE MAIN AND OUTSIDE OF THE WATER MAIN WITH WATER MAIN CROSSING OVER THE FORCE MAIN.
05/27/05

Water & Sewer Details
City of Riviera Beach Utility District



NOTES:
1. HYDRANTS SHALL BE INSTALLED PLUMB AND TRUE.
2. HYDRANTS SHALL BE PAINTED PER CITY OF RIVIERA BEACH STANDARDS:
   RED BODY REFLECTIVE AND WHITE CAP REFLECTIVE
3. HEEL AND THRUST BLOCKS TO REST IN UNDISTURBED SOIL.
4. THE ONLY FIRE HYDRANTS ACCEPTABLE ARE:
   A) KENNEDY
   B) AMERICAN–DARLING
   C) MUELLER BREAK–A–WAY

5.MUST USE MEGA LUG RESTRAINTS

FIRE HYDRANT INSTALLATION DETAIL
NTS 05/27/05

Water & Sewer Details
City of Riviera Beach Utility District

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SITE PLAN DOCUMENTS

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PROJECT No.: FLB210114
DRAWN BY: NH
CHECKED BY: CL
DATE: 12/13/2021
CAD I.D.: CNDS

PROJECT:

PROP. SITE PLAN DOCUMENTS

FOR

TheEastonGroup

RIVIERA BEACH LTL

DR. MARTIN LUTHER KING JR BLVD
PALM BEACH COUNTY
RIVIERA BEACH, FL 33404

BOHLER
1900 NW CORPORATE BOULEVARD
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Fax: (561) 571-0281
FLORIDA BUSINESS CERT OF AUTH. No. 30780

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DN: c=US, st=Florida, l=Boca Raton, o=BOHLER ENGINEERING FL, LLC, cn=Merouane El Kaoussi, email=melkaoussi@bohlereng.com
Date: 2022.10.07 13:25:56 -04'00'

SHEET TITLE:

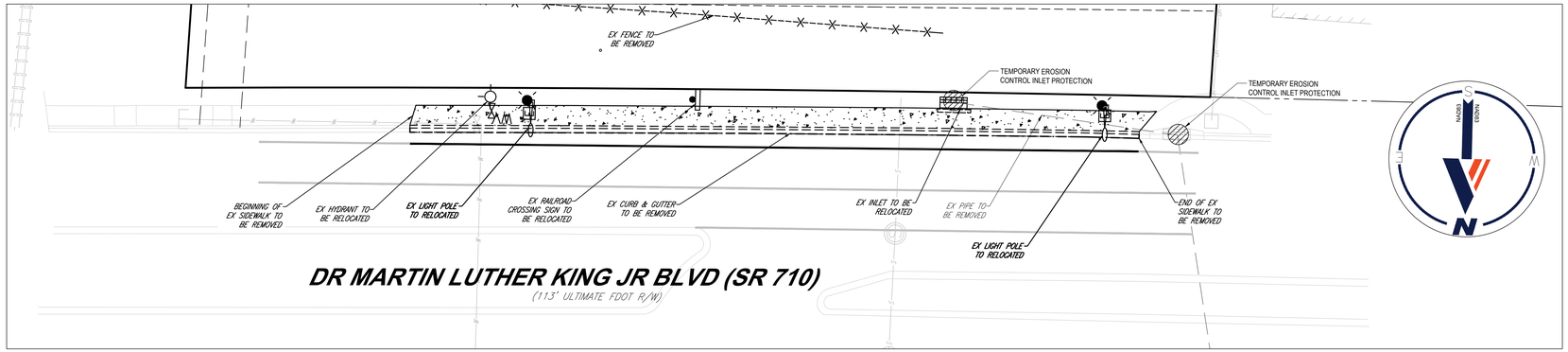
CONSTRUCTION DETAILS

SHEET NUMBER:

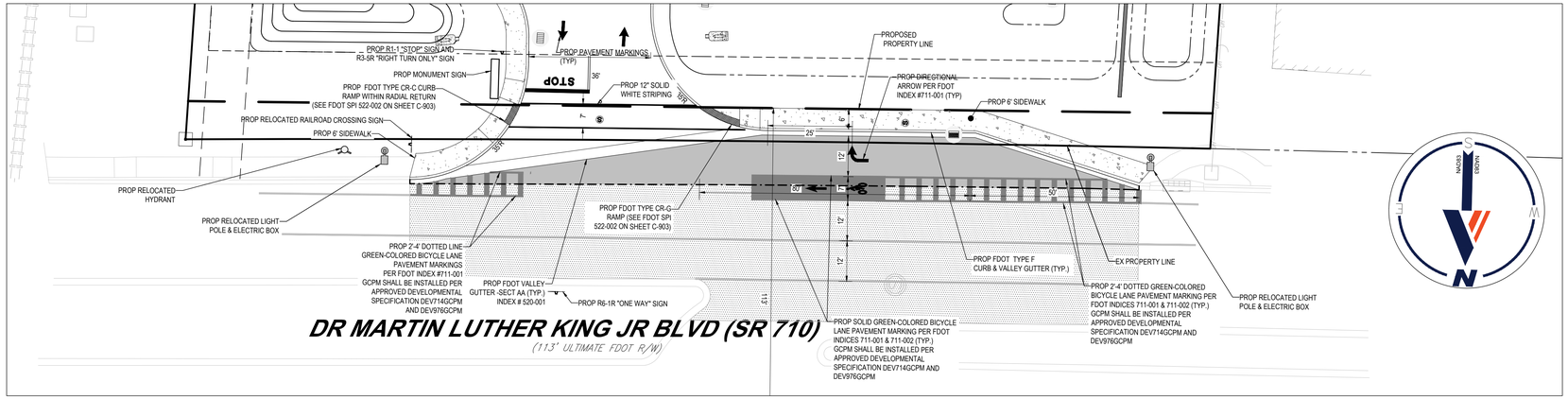
C-902

ORG. DATE - 12/13/2021

May 17, 2022
11:25:01 P:\FLB2101114\CAD\DRAWINGS\PLAN SET\FLB210114 - CNDS - D---A-LAYOUT C-902 CONSTRUCTION DETAILS.DWG NH



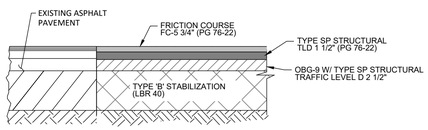
OFFSITE DEMOLITION & PHASE I EROSION CONTROL PLAN



OFFSITE PAVEMENT MARKING & SIGNAGE & LAYOUT PLAN

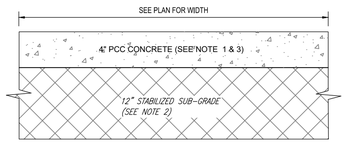
LANE CLOSURE NOTE:

CONTRACTOR TO ENSURE THAT FDOT LANE CLOSURE RESTRICTIONS AND STANDARDS ARE FOLLOWED. SEE FDOT STANDARD PLAN INDEX 102-613.



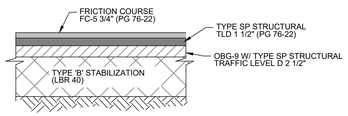
EXISTING ASPHALT TO PROPOSED ASPHALT TRANSITION DETAIL

NTS

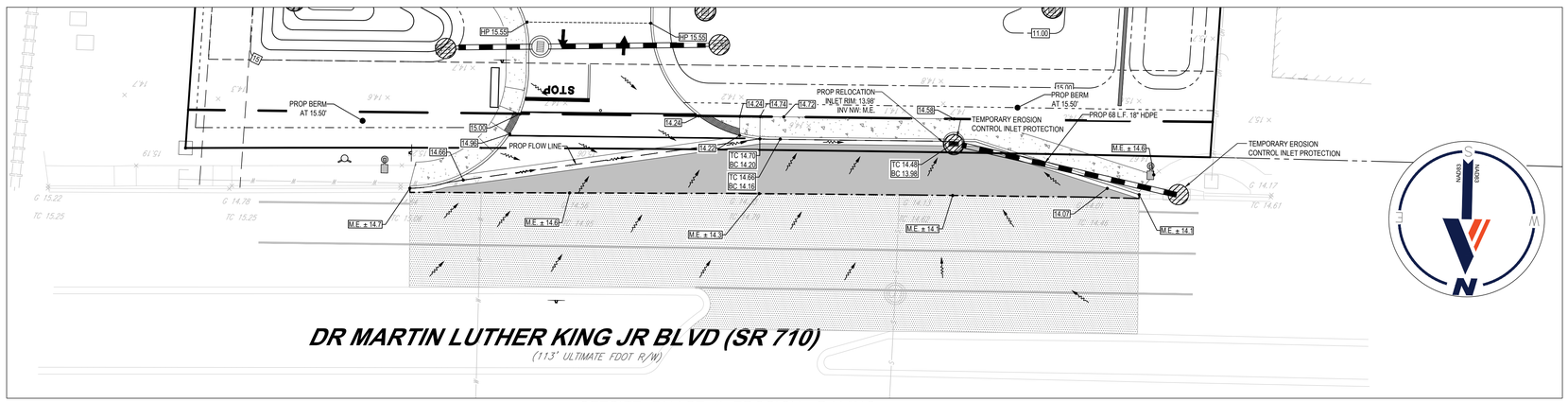


NOTES:
1. SIDEWALK SHALL BE 4" THICK EXCEPT IN DRIVEWAYS WHERE THE THICKNESS SHALL BE 6".
2. SUBGRADE BELOW SIDEWALK SHALL BE COMPACTED TO 98% OF MAX. DENSITY PER A.A.S.H.T.O. T-180.
3. CONCRETE STRENGTH SHALL BE MIN. 3000 PSI @ 28 DAYS.
4. SIDEWALK REMOVAL & REPLACEMENTS TO CONSIST OF FULL FLAGS.
5. PROVIDE EXPANSION JOINT (TYPE 'A') AT CONNECTIONS BETWEEN NEW AND EX. SIDEWALK.
6. PROVIDE FIBEROUS JOINTS 20' O.C.

CONCRETE SIDEWALK DETAIL
NOT TO SCALE



FDOT TURN LANE PAVEMENT SECTION WITHIN FDOT ROW
NOT TO SCALE



OFFSITE PHASE II EROSION, PAVING, GRADING, AND DRAINAGE PLAN

PERMITTING NOTE:

ALL OFF-SITE WORK IS COVERED BY FDOT DRAINAGE PERMIT 2022-D-496-00008

20 10 5 0 20
1"= 20'

Oct 07, 2022
H:\2021\FLB210114\CAD\DRAWINGS\PLAN SETS\FLB210114-OFFSI...—LAYOUT: OS-1 OFFSITE IMPROVEMENT PLAN
NH

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SITE CIVIL AND CONSULTING ENGINEERING
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PROJECT No.:	FLB210114
DRAWN BY:	NH
CHECKED BY:	CL
DATE:	12/13/2021
CAD I.D.:	OIMP

PROJECT:

PROP. PERMITTING DOCUMENTS

FOR

TheEastonGroup

RIVIERA BEACH LTL

DR. MARTIN LUTHER KING JR BLVD
PALM BEACH COUNTY
RIVIERA BEACH, FL 33404

BOHLER
1900 NW CORPORATE BOULEVARD
SUITE 101E
BOCA RATON, FLORIDA 33431
Phone: (561) 571-0280
Fax: (561) 571-0281
FLORIDA BUSINESS CERT. OF AUTH. No. 30780

This item has been digitally signed and sealed by Mohammed Merouane El Kaoussi, PE, on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

DN: c=US, st=Florida, l=Boca Raton, o=BOHLER ENGINEERING FL, LLC, cn=Merouane El Kaoussi, email=melkaoussi@bohlereng.com
Date: 2022.10.07 13:26:35 -04'00'

SHEET TITLE:

OFFSITE IMPROVEMENT PLAN

SHEET NUMBER:

OS-1

ORG. DATE - 12/13/2021

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C. ANDRE RAYMAN, P.S.M.
KEITH B. JACKSON, P.E.
LISA A. TROPEPE, P.E.
ADAM SWANEY, P.E., LEED AP
JENNIFER MALIN, P.S.M.

June 14, 2023

Clarence Sirmons, AICP
Director of Development Services
City of Riviera Beach
600 West Blue Heron Blvd.
Riviera Beach, Florida, FL 33404
(Via E-Mail: CSirmons@rivierabeach.org)

Re: Avenue S Properties- Replat of Tracts A, C and D
Fourth Plat Review
Engenuity Group Project No. 14151.37

Dear Mr. Sirmons:

This is the fourth review of this plat. All of our previous have been adequately addressed. The plat is now in compliance with Chapter 177 Florida Statutes, and the city of Riviera Beach's requirements.

We can therefore recommend that the city of Riviera Beach approve the plat for recording.

If you have any questions, please do not hesitate to contact me.

Sincerely,

John J. Rice, P.S.M.
Senior Project Manager

CITY OF RIVIERA BEACH STAFF REPORT
VILLAS OF SOLANA
CASE BUMBER PA-22-0007, A REPLAT
CASE NUMBER SP-22-0022 SITE PLAN,
PLANNING AND ZONING BOARD – JULY, 2023

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RIVIERA BEACH, PALM BEACH COUNTY, FLORIDA, APPROVING REPLAT APPLICATION NUMBER (PA-22-0007) FROM THE COMMUNITY DEVELOPMENT CORPORATION (CDC) OF THE CITY OF RIVIERA BEACH (APPLICANT); TO ALLOW FOR A PROPOSED RESIDENTIAL DEVELOPMENT CONSISTING OF 28 RESIDENTIAL LOTS; AND PROVIDING FOR AN EFFECTIVE DATE AND FOR OTHER PURPOSES.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RIVIERA BEACH, PALM BEACH COUNTY, FLORIDA, APPROVING SITE PLAN APPLICATION NUMBER (SP-22-0022) FROM THE COMMUNITY DEVELOPMENT CORPORATION (CDC) OF THE CITY OF RIVIERA BEACH (APPLICANT); TO ALLOW FOR A PROPOSED RESIDENTIAL DEVELOPMENT CONSISTING OF 28 RESIDENTIAL UNITS WITH ASSOCIATED PARKING AND AMENITIES; WITH 26 OF THE PROPOSED UNITS CONSISTING OF 2-STORY TOWNHOMES, WITH ONE SINGLE STORY DUPLEX STRUCTURE ACCOUNTING FOR THE REMAINING TWO UNITS; THE PLAN INCLUDES 2 PARKING SPACES PER UNIT AND 11 GUEST SPACES; FOR A TOTAL OF 67 SPACES WITH A 2,416 SQUARE FOOT RECREATION AREA CENTRALLY LOCATED BETWEEN THE PROPOSED UNITS; AND PROVIDING FOR AN EFFECTIVE DATE AND FOR OTHER PURPOSES.

A. **Applicant:** The Riviera Beach Community Development Corporation (CDC), Inc. 1229 East Blue Heron Blvd. Riviera Beach, FL 33404

B. **Request:** The petitioner has submitted this application to request a Site Plan and Re-Plat approval. The proposed plan consists of 28 residential units with associated parking and amenities. 26 of the proposed units will be two story-townhomes, with one single-story duplex structure accounting for the remaining two units. The plan includes 2 parking spaces per unit and 11 guest spaces, for a total of 67 spaces on site. A 2,416 square foot recreation area is provided and centrally located between the proposed units.

   The site plan proposes a 33-foot-wide private ROW with a sidewalk on both sides of the road, as well as a 7,879 square foot retention area located at the rear (west) portion of the property. The petitioner is also requesting Re-plat approval concurrent to the Site Plan

request. The preliminary plat included in this application depicts the combination of the two subject properties and the creation of 28 individual lots for the associated residential units.

C. Location: The subject property is located at 3201 and 3211 Avenue J in Riviera Beach, generally located approximately 0.3 miles southeast of the intersection of President Barack Obama Highway and Silver Beach Road.

D. Property Description and Uses: The subject property description and uses are as follows:

Parcel Control Numbers: 56-43-42- 29-24-000-0180 and 56-43-42-29-24-000-0170

Parcel Size:	2.01 Acres (87,555.6 square feet)
Existing Use:	The site is partially developed with two 2-story duplex structures and associated parking located on the easternmost portion of the property. The site contains an existing centered asphalt drive that runs east to west, as well as four stem walls for the foundations of residential buildings that were never constructed, with the majority of the site remaining vacant,
Zoning:	Multiple Family Dwelling District (RM-15) Zoning District
Future Land Use:	Medium Density Multiple Family Residential: Up to 15 dwelling units per acre (MF-15)

E. Adjacent Property Description and Uses:

North: Multiple Family Dwelling (RM-15) Zoning District: Residential Uses and a vacant lot

South: Multiple Family Dwelling (RM-15) Zoning District: Multifamily Residential Units

East: Multiple Family Dwelling (RM-15) Zoning District: Currently consisting of vacant properties.

West: General Commercial (CG) Zoning District: Various Commercial Uses.

F. Background:

The subject site has a Medium Density Multiple Family (MF-15) Future Land Use designation within the Multiple Family Dwelling (RM-15) Zoning District. The site is partially developed with two 2-story duplex structures and associated parking located on the easternmost portion of the property. The site contains an existing centered asphalt drive that runs east to west, with the majority of the site remaining vacant. The neighboring properties to the north and south consist of existing multifamily residential uses, while the east and west boundaries are adjacent to Avenue J and President Barack Obama Highway, respectively.

This site plan application if approved by Council will cause this site plan to be the controlling document to remain on record and must be adhere to or amended for any future redevelopment in accordance with the Land Development Regulations.

G. Staff Analysis:

Plan Review Standards: Staff's responses are in **bold.**

Land Development Regulations Section 31-198.

Pursuant to Section 31-198, the applicant shall demonstrate that the approval of the proposed site plan adheres to the property development regulations for the Multiple Family Dwelling (RM-15) Zoning District and the following criteria:

a. Minimum property size: Five or more units shall be density based, and shall be expressed in terms of maximum number of residential dwelling units permitted per acre of land. Maximum permitted density shall be 15 dwelling units per acre. Staff response in **bold**.

Response: The subject property adheres to this requirement, as the total lot size is 87,555.6 square feet or 2.01 acres. The site plan proposes 28 residential units for a gross density of 13.9 dwelling units per acre.

b. Minimum property width: 70 feet at the building line.

Response: The width of the property is 165 feet.

c. Maximum building height: 35 feet or three stories.

Response: The proposed plan adheres to this requirement by providing 1 one-story and 7 two-story buildings, with a maximum height of 32 feet.

d. Minimum building setbacks:
a. Front: 20 feet.
b. Side: 7 feet; 12.5 feet on street side.
c. Rear: 15 percent of the length of the lot or 20 feet, whichever is less.

According to the applicant, the proposed development shall comply with the minimum setbacks required for properties within the RM-15 Multifamily Dwelling Zoning District, as demonstrated below.

Setbacks		
	Required	**Proposed**
Front	20'	24'
Side	7'	11'
Rear	20'	82'

e. Minimum floor area:

a. One-bedroom apartments: 650 square feet.
b. Two-bedroom apartments: 750 square feet.
c. For each additional bedroom, total square footage shall increase by 100 square feet.

The applicant indicates that the proposed development complies with the minimum floor area standards noted above. The architectural plans provide 11 two-bedroom units with a typical square footage of 1,216 and 17 three-bedroom units with an average square footage of 1,557 square feet.

Off-Street Parking Regulations Section 31-577. As outlined in Section 31-577, the plan adheres to the parking requirements for the proposed multifamily residential use.

Parking Standards		
Required		
Residential Uses	2 spaces per unit	56 spaces
Total Required		**56 spaces**
Provided		
Standard Parking		56 spaces
Guest Parking		11 spaces
Total Provided		**67 Spaces**

According to the Site Plan Requirement Section of the Uniform Land Use Application, the applicant shall indicate compliance with the following standards. The staff's responses are indicated in **bold.**

1. Demonstrate that proposed use is appropriate to site.

Staff Response: The proposed multifamily development consisting of 28 residential units is an appropriate use for the subject site. The property has a MF-15 Future Land Use designation within the Multifamily Dwelling Zoning District, which permits 15 dwelling units per acre. The maximum allowed density is approximately 30 dwelling units for the entire site. The applicant is proposing to adhere to this regulation with a gross density of 13.9 dwelling units per acre.

The proposal is also consistent with the purpose of the Comprehensive Plan's Housing Element as stated accordingly,

PURPOSE: The purpose of the Housing Element is to:

1) identify existing and projected deficits or surpluses in the supply of housing to meet the needs of the City's population, particularly the very-low and low-income families;

2) analyze housing trends and nature of any housing problems;

3) develop appropriate plans, programs and policies to bring about the accomplishment of the necessary housing, whether through private-sector efforts, non-profit, public/private partnerships or the public sector; and

4) to guide and coordinate all housing activities to increase efficiency of the housing delivery system.

In addition, the overall goal is "to assure the availability of safe, sanity, decent and affordable housing for all residents of Riviera Beach with special attention paid to diversifying the housing stock through increasing the supply of work force housing, single-family and homeownership opportunities…."

2. Demonstrate how drainage and paving requirement will be met:

Staff Response: The subject site contains existing residential units that are currently served with potable water and sewer. The applicant has submitted a drainage statement with preliminary civil drawings which depict the proposed methods and systems to provide sufficient drainage and paving for the proposed development. The site plan also includes a 7,879 square foot retention area at the west end of the property.

3. Demonstrate any landscaping techniques to visually screen use from adjacent uses:

Staff Response: The proposed plan includes landscape buffers along the entire property line, including the front property boundary to the east. The proposed landscape material includes trees and shrubs that will provide screening from adjacent uses. The landscape plan submitted with this application details the proposed landscaping with the Florida Friendly Landscape Regulations, as noted in Article VIII of the City's Code of Ordinances. Please see the landscape tables below:

LANDSCAPE REQUIREMENT CHART

LOCATION/ AREA	CODE REQUIREMENT	REQUIRED	PROVIDED
TOTAL SITE AREA: 87,296 SF	1 TREE OR PALM PER 1,500 SF OF TOTAL SITE AREA	58 TREES OR PALMS	219 TREES
REQUIRED SHADE TREES:	60% OF REQUIRED TREES	35 TREES	209 TREES
SHADE TREE DIVERSITY REQUIREMENT:	A SINGLE SPECIES WILL NOT EXCEED 65% OF TREES	65%	63/219 = 29%
REQUIRED NATIVE ACCENT TREES:	10% OF REQUIRED TREES	6 TREES	27 TREES
MAXIMUM PALM REQUIREMENTS:	20% MAX. OF REQUIRED TREES	12 PALMS MAX	117 NEW / 219=53%
REQUIRED SHADE TREE SPECIES MIX:	6 SPECIES FOR OVER 75 REQUIRED SHADE TREES	6 SPECIES	6 SPECIES
REQUIRED NATIVE SPECIES:	70% OF ALL SPECIES	153	155 = 71%
REQUIRED ECOLOGICAL SIGNIFICANT FOOD PLANTS:	25% OF REQUIRED PLANTINGS	15	55 = 25%
SIGNAGE PLANTINGS:	5' WIDE AROUND SIGNAGE	N/A	N/A
TREES BETWEEN PARKING AND BUILDING WALLS	1 TREE PER 20' OF REQUIRED LANDSCAPE PERIMETER	3	3
HEDGES BETWEEN PARKING AND BUILDING WALLS	A 24" MINIMUM TALL HEDGE ALONG WALLS	31'	31'
TREES BETWEEN R.O.W. AND PARKING AREAS	1 TREE PER 20' OF REQUIRED LANDSCAPE PERIMETER	4	6
HEDGES BETWEEN R.O.W. AND PARKING AREAS	A 36" MINIMUM TALL HEDGE ALONG THE LANDSCAPE STRIP	85'	85'

Also included is the following plant schedule

PLANT SCHEDULE				
TREES	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
AM	54	Adonidia merrillii	Christmas Palm	12-16` O.A. HT, Double Trunk
BS	24	Bursera simaruba	Gumbo Limbo	12` Ht. x 5` Spr. 2.5" Cal.
CU	27	Coccoloba uvifera	Sea Grape	16` HT X 10` SPR., 6" CAL
CO	19	Cordia sebestena	Orange Geiger Tree	12` Ht. Min./ 2" Cal. Min.
JI	8	Jatropha integerrima	Spicy Jatropha	8-10' 4-5' SPR.
PD	22	Pinus elliotti `Densa`	Slash Pine	14` Ht. Min. x 6` Spr. Min.
SP	63	Sabal palmetto	Cabbage Palmetto	18-22` O.A. HT, BOOTED, 6" MIN DIA.
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
AEC	9	Aechmea blanchetiana	Orange Bromeliad	36" HT X 30" SPR.
CLU2	427	Clusia guttifera	Small Leaf Clusia	6` HT X 36" SPR.
CON	318	Conocarpus erectus `Senceus`	Silver Buttonwood	36" HT. X 24" SPR.
SHRUB AREAS	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
CHR	209	Chrysobalanus icaco `Red Tip`	Red Tip Cocoplum	18" HT X 18" SPR @ 30" O.C.
COD	123	Codiaeum variegatum	Croton	36"HT X 24" SPR @ 24" O.C.
TRA	1,573	Trachelospermum asiaticum	Asian Jasmine	12" HT X 12" SPR. @ 12" O.C.
TRI	31	Tripsacum dactyloides nana	Dwarf Fakahatchee Grass	18" HT. X 18" SPR. @ 24" O.C.
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
AC	513	Aptenia cordifolia	Baby Sunrose	12" HT X 12" SPR. @ 12" O.C.

NOTE: AREAS LABELED "SOD" TO BE ST. AUGUSTINE SOD

Therefore, new landscaping will be installed according to the landscape plan consistent with the City's landscape code requirements. The landscape plan has been reviewed and is generally sufficient. A landscape bond will be required in the amount of 110% of the cost of the improvements to be submitted prior to the issuance of a certificate of use.

4. Demonstrate what is proposed to reduce the impact of any potential hazards, problems, public nuisances generated by use;

Staff Response: The proposed development will not have a negative impact on the surrounding area or create public nuisances. Due to the residential nature of the proposed project, the use shall be consistent with the existing residential uses and compatible with the surrounding properties that also have residential land use designations. The proposed landscape plan is designed to screen and minimize impacts to adjacent uses.

5. Demonstrate how utilities and other service requirements of the use can be met:

Staff Response: The subject site is developed with residential units which are currently served by local utilities. The proposed development will connect to existing services and ensure sufficient and compatible infrastructure to tie into the existing lines. The

preliminary engineering plans submitted with this application details the proposed construction.

6. Demonstrate how the impact of traffic generated will be handled:

Staff Response: Traffic will be handled via West J Avenue with entrance and exit handled via this right-of-way.

Replat Request:

Proposed Use: The applicant is proposing to re-plat two separate parcels of properties into 28 parcels of property in order to accommodate 26 two-story multi-family residential townhomes and one (1) single story duplex. In addition, the proposed re-plat includes four (4) tracts of land to be used as follows:

Tract A: Right-of-Way tract for entering and exiting the development and includes a 12-foot wide utility easement.
Tract B-1 and B-2: Are reserved for landscaped open space.
Tract C: Water Retention/Drainage Area; and
Tract D: Recreation Area

Review for Compliance: The proposed replat was reviewed for compliance with the State and City's ordinance requirements by a third-party consulting firm – Engenuity Group, Inc.

H. Recommendation:

Staff recommends **approval** of Site Plan application number (SP-22-0022) from the City of Riviera Beach (Applicant) and Replat application number (PA-22-0007); of a request for site plan approval and a replat; to allow for a plan consisting of 28 residential units with associated parking and amenities; with 26 of the proposed units shall be townhomes, with one duplex structure accounting for the remaining two units; the plan includes 2 parking spaces per unit and 11 guest spaces; for a total of 67 spaces with a 2,416 square foot recreation area centrally located between the proposed units. The proposed site size shall be +/- 2.01 acres, per application number SP-22-0022, identified by parcel control numbers 56-43-42- 29-24-000-0180 and 56-43-42-29-24-000-0170, with the following conditions of approval:

1. A two-year landscaping performance bond for 110% of the value of landscaping and irrigation shall be required before a Certificate of Occupancy or Certificate of Completion is issued.

2. Construction and landscaping improvements must be initiated within 18 months of the effective date of this Resolution in accordance with Section 31-60(b), of the City Code of Ordinances. Demolition, site preparation and/or land clearing shall not be considered construction. Building permit application and associated plans and documents shall be

submitted in its entirety and shall not be accepted by City staff in a partial or incomplete manner.

3. City Council authorizes City staff to approve future amendments to this site plan administratively so long as the site plan does not deviate greater than 5% from the originally approved site plan.

4. This development must receive final Certificate of Occupancy from the City for all buildings approved within five years of the approval of the adopting resolution or the adopting resolution shall be considered null and void, requiring the applicant to resubmit application for site plan and special exception approval and re-initiate the site plan approval process.

5. All future advertising must state that the development is located in the City of Riviera Beach. Fees and penalties in accordance with City Code Sec. 31-554 will be levied against the property owner and/or business for violation of this condition.

6. Once approved, this resolution shall supersede any previous site plan approval resolutions associated with this property, causing previous site plan approval resolutions to be null and void.

7. Lastly, staff recommends a second ADA parking space, since there is only one (1) ADA space for this project and a second ADA space would be appropriate.

Location Map (N.T.S.)

Villas of Solana
Site Plan and Plat Application
Intake Date: September 8, 2022

Owner/Applicant:	Riviera Beach Community Development Corporation, Inc. 1229 E Blue Heron Blvd. Riviera Beach, FL 33404
Agent / Planner:	Insite Studio, Inc. 8144 Okeechobee Blvd, Suite A West Palm Beach, FL 33411
Architect:	D&Q Studio Architects 8245 S.W. 42nd Street Miami, FL 33155
Engineer:	Civil Design, Inc. 1400 Centrepark Blvd, Suite 905 West Palm Beach, FL 33401

Property Location

The subject property is located at 3201 and 3211 Avenue J in Riviera Beach, generally located approximately 0.3 miles southeast of the intersection of President Barack Obama Highway and Silver Beach Road. The site is identified by property control numbers 56-43-42-29-24-000-0180 and 56-43-42-29-24-000-0170 and consists of approximately 2.01 acres.

Property History

The subject site has a Medium Density Multiple Family (MF-15) Future Land Use designation within the Multiple Family Dwelling (RM-15) Zoning District. The site is partially developed with two 2-story duplex structures and associated parking located on the easternmost portion of the property. The site contains an existing centered asphalt drive that runs east to west, with the majority of the site remaining vacant. The neighboring properties to the north and south consist of existing multifamily residential uses, while the east and west boundaries are adjacent to Avenue J and President Barack Obama Highway, respectively. Notably, the property shown above is the site subject to this request.

Application Request

The petitioner has submitted this application to request Major Site Plan and Plat approval. The proposed plan consists of 28 residential units with associated parking and amenities. 26 of the proposed units will be townhomes, with one traditional duplex structure accounting for the remaining two units. The plan includes 2 parking spaces per unit and 11 guest spaces, for a total of 67 spaces on site. A 2,416 SF recreation area is provided and centrally located between the proposed units. The site plan proposes a 33' wide private ROW with a sidewalk on both sides of the road, as well as a 7,879 SF retention area located on the rear (west) portion of the property.

The petitioner is also requesting Plat approval concurrent to the Site Plan request. The preliminary plat included in this application depicts the combination of the two subject properties and the creation of 28 individual lots for the associated residential units.

Surrounding Uses

Below are descriptions of the zoning and land uses of the adjacent properties:

North: The northern property boundary borders two parcels identified by parcel control numbers 56-43-42-29-24-000-0191 and 56-43-42-29-24-000-0192, located in the City of Riviera Beach. The

properties have a Medium Density Multiple Family (MF-15) Future Land Use designation within the Multiple Family Dwelling (RM-15) Zoning District. The property identified by 56-43-42-29-24-000-0191 contains multifamily residential units, while 56-43-42-29-24-000-0192 is vacant.

South: Identified by parcel control number 56-43-42-29-24-000-0160, located in the City of Riviera Beach. The property is currently developed with multifamily residential units. The property has a Medium Density Multiple Family (MF-15) Future Land Use designation within the Multiple Family Dwelling (RM-15) Zoning District.

East: The property is bounded by Avenue J to the east. The property across Avenue J is identified by parcel control number 56-43-42-29-24-000-0031 and is located in the City of Riviera Beach. The property is currently vacant with a Medium Density Multiple Family (MF-15) Future Land Use designation within the Multiple Family Dwelling (RM-15) Zoning District.

West: The property is bound to the west by President Barack Obama Highway. Multiple properties are located across the highway, identified by parcel control numbers 56-43-42-29-05-003-0010, 56-43-42-29-05-003-0030, and 56-43-42-29-05-003-0050, under the jurisdiction of the City of Riviera Beach. The parcels are developed with various commercial uses, including a barber shop, real estate office, and place of worship. The properties have Commercial (COM) Future Land Use designations within the General Commercial (CG) Zoning District.

Plan Review Standards

Land Development Regulations Section 31-198.

Pursuant to Section 31-198, the applicant shall demonstrate that the approval of the proposed site plan adheres to the property development regulations for the Multiple Family Dwelling (RM-15) Zoning District and the following criteria:

a. Minimum property size: Five or more units shall be density based, and shall be expressed in terms of maximum number of residential dwelling units permitted per acre of land. Maximum permitted density shall be 15 dwelling units per acre.

The subject property adheres to this requirement, as the total lot size is 87,382 SF or 2.01 AC. The site plan proposes 28 residential units for a gross density of 13.9 dwelling units per acre.

b. Minimum property width: 70 feet at the building line.

The width of the property is 165 feet.

c. Maximum building height: 35 feet or three stories.

The proposed plan adheres to this requirement by providing 1 one-story and 7 two-story buildings, with a maximum height of 32'.

d. Minimum building setbacks:

a. Front: 20 feet.
b. Side: 7 feet; 12.5 feet on street side.
c. Rear: 15 percent of the length of the lot or 20 feet, whichever is less.

The proposed development shall comply with the minimum setbacks required for properties within the RM-15 Multifamily Dwelling Zoning District, as demonstrated below.

Setbacks		
	Required	**Proposed**
Front	20'	24'
Side	7'	11'
Rear	20'	82'

e. Minimum floor area:

a. One-bedroom apartments: 650 square feet.
b. Two-bedroom apartments: 750 square feet.
c. For each additional bedroom, total square footage shall increase by 100 square feet.

The proposed development complies with the minimum floor area standards noted above. The architectural plans provide 11 two-bedroom units with a typical square footage of 1,216 and 17 three-bedroom units with a typical square footage of 1,557.

Off-Street Parking Regulations Section 31-577.

As outlined in Section 31-577, the plan adheres to the parking requirements for the proposed multifamily residential use.

Parking Standards		
Required		
Residential Uses	2 spaces per unit	56 spaces
Total Required		**56 spaces**
Provided		
Standard Parking		56 spaces
Guest Parking		11 spaces
Total Provided		**67 Spaces**

Demonstrate that proposed use is appropriate to the site.

The proposed multifamily development consisting of 28 residential units is an appropriate use for the subject site. The property has a MF-15 Future Land Use designation within the Multifamily Dwelling Zoning District, which permits 15 dwelling units per acre. The proposed plan adheres to this regulation with a gross density of 13.9 du/ac. In addition, the surrounding area is primarily residential uses. Specifically, the properties directly adjacent to the north and south have consistent FLU and Zoning designations and contain multifamily residential units. The subject site's location on Avenue J is lined almost exclusively with residential land use designations.

The property has two existing residential buildings, the result of a partially completed development. The proposed townhomes and duplex will provide an affordable housing opportunity within Riviera Beach. The proposed plan complies with all applicable land development regulations set forth in the Code, as well as the maximum density of 15 units per acre determined by the Future Land Use Element of the Comprehensive Plan.

Demonstrate how drainage and paving requirement will be met.

The subject site contains existing residential units that are currently served with potable water and sewer. The applicant has submitted a drainage statement with preliminary civil drawings which depict the proposed methods and systems to provide sufficient drainage and paving for the proposed development. The site plan also includes a 7,879 SF retention area on the west end of the property.

Demonstrate any landscaping techniques to visually screen use from adjacent uses.

The proposed plan includes landscape buffers along the entire property line, including the front property boundary to the east. The proposed landscape material includes trees and shrubs that will provide sufficient screening from adjacent uses. The landscape plan submitted with this application details the proposed landscaping and complies with the Florida Friendly Landscape Regulations, as noted in Article VIII of the City's Code of Ordinances.

Demonstrate what is proposed to reduce the impact of any potential hazards, problems, public nuisances generated by use.

The proposed development will not have a negative impact on the surrounding area or create public nuisances. The use is consistent with the existing residential structures and compatible with the surrounding properties that also have residential land use designations.

Demonstrate how utilities and other service requirements of the use can be met.

The subject site is developed with residential units which are currently served by local utilities. The proposed development will connect to existing services and ensure sufficient and compatible infrastructure to tie into the existing lines. The preliminary engineering plans submitted with this application details the proposed construction.

Environmental Statement

The proposed site plan will have no negative environmental impacts on the site. The subject site was previously cleared for the existing development and the design of the new plan does not impact any naturally sensitive environment. The site is partially developed with two existing two-story residential buildings on the east portion of the property, as well as four stemwalls for the foundations of residential buildings that were never constructed. There is an existing asphalt drive that runs east to west in the center of the site. The remaining area is vacant with little to no existing vegetation, excluding natural grass. A 7,879 SF Retention Area is also proposed on the rear (west) side of the property, adjacent to President Barack Obama Highway.

A Phase II Environmental Site Assessment was performed on the property in June of 2016. The scope of the assessment included borings for soil screening and the collection of shallow groundwater samples, both for analysis of volatile organic compounds, semi-volatile organic (petroleum hydrocarbon) compounds, the 8 RCRA metals, and organochlorine pesticides. The subsurface results revealed that no samples exhibited impacts above the cleanup criteria.

Thank you for your consideration of this application. If you have any questions regarding this application, please do not hesitate to contact our office at 561-249-0940.

Sincerely,

Brian Terry, PLA
Principal
Insite Studio, Inc.

AGENT AUTHORIZATION FORM

Owner(s) of Record: Riviera Beach Community Development Corporation, Inc.

STATE OF FLORIDA
COUNTY OF PALM BEACH

BEFORE ME the undersigned authority personally appeared Arnetta Jenkins

who, being first duly sworn upon oath and personal knowledge say(s) that they are the owner(s) of record of the following described real property:

LOT 17 AND 18, SILVER BEACH ACRES PLAT NO. 2, ACCORDING TO THE PLAT THEREOF ON FILE ON THE OFFICE OF THE CLERK OF THE CIRCUIT COURT IN AND FOR PALM BEACH COUNTY, FLORIDA, AS RECORDED IN PLAT BOOK 20, PAGE 15.

the street address of which is: 3201 & 3211 Avenue J, Riviera Beach, FL 33404

and that we hereby appoint:

Name: Brian Terry - Insite Studio, Inc.
Address: 8144 Okeechobee Blvd, Suite A
West Palm Beach, FL 33411
Telephone: 561-365-5131

as our authorized agent, to file applications and papers with the City of Riviera Beach, and to represent me (us) at any Hearing regarding my (our) interest.

SHERLEY DESIR
Notary Public - State of Florida
Commission # HH 095729
My Comm. Expires May 8, 2025
Bonded through National Notary Assn.

Arnetta Jenkins (Seal)

(Seal)

(Seal)

Sworn to and subscribed before me this 1st day of September, 2022.

Notary Public

CFN 20180045870
OR BK 29632 PG 0012
RECORDED 02/05/2018 14:00:04
AMT 1,050,000.00
Doc Stamp 7,350.00
Palm Beach County, Florida
Sharon R. Bock,CLERK & COMPTROLLER
Pgs 0012 - 13; (2pgs)

Prepared by and return to:

J. MICHAEL HAYGOOD PA
701 Northpoint Parkway Suite 209
West Palm Beach, FL 33407
561-684-8311
File Number: **J B Chart**
Will Call No.: **190**

[Space Above This Line For Recording Data]

Special Warranty Deed

This Special Warranty Deed made this **26th** day of **January, 2018** between **JB Chart Development Co., Inc., a Florida corporation** whose post office address is **691 North High Street, Columbus, OH 43215**, grantor, and **Riviera Beach Community Development Corporation, a Florida not for profit corporation** whose post office address is **2001 Broadway Road, Suite 300, Riviera Beach, FL 33404**, grantee:

(Whenever used herein the terms grantor and grantee include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in **Palm Beach County**, **Florida**, to-wit:

Lot 17, Silver Beach Acres Plat No.2, according to the plat thereof on file in the Office f the Clerk of the Circuit Court in and for Palm Beach County, Florida, as recorded in Plat Book 20, Page 15.

Parcel Identification Number: 56-43-42-29-24-000-0170

and

Lot 18, Silver Beach Acres Plat No.2, according to the plat thereof on file in the Office f the Clerk of the Circuit Court in and for Palm Beach County, Florida, as recorded in Plat Book 20, Page 15.

Parcel Identification Number: 56-43-42-29-24-000-0180

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons claiming by, through or under grantors.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

NOT A CERTIFIED COPY

Signed, sealed and delivered in our presence:

Witness Name: Diane M. Lambert

Witness Name: Eric R. Cope

JB Chart Development Co., Inc., a Florida corporation

By: Curtis T. Jewell, Pres.
Curtis T. Jewell, President

(Corporate Seal)

State of ~~Florida~~ Ohio
County of ~~Palm Beach~~ Franklin

The foregoing instrument was acknowledged before me this ~~26th~~ 25th day of January, 2018 by Curtis T. Jewell, President of JB Chart Development Co., Inc., a Florida corporation, on behalf of the corporation. He/she [_] is personally known to me or [X] has produced a driver's license as identification.

[Notary Seal]

DIANE M. LAMBERT - NOTARY PUBLIC
MY COMMISSION EXPIRES 08/29/19
STATE OF OHIO

Notary Public

Printed Name: Diane M. Lambert

My Commission Expires: 8/29/19

NOT A CERTIFIED COPY

DoubleTime®

LEGAL DESCRIPTION

LOT 17 AND 18, SILVER BEACH ACRES PLAT NO 2, ACCORDING TO THE PLAT THEREOF ON FILE ON THE OFFICE OF THE CLERK OF THE CIRCUIT COURT IN AND FOR PALM BEACH COUNTY, FLORIDA, AS RECORDED IN PLAT BOOK 20, PAGE 15.

LEGEND:

LP	LIGHT POLE
CB	CATCH BASIN
MH	MANHOLE
WV	WATER VALVE
WM	WATER METER
WPP	WOOD POWER POLE
BFP	BACKFLOW PREVENTER
SSMH	SANITARY SEWER MANHOLE
SDMH	SEWER DRAINAGE MANHOLE
EM	ELECTRIC METER
WLP	WOOD LIGHT POLE
GV	GAS VALVE
FH	FIRE HYDRANT
ES	ELECTRIC SERVICE
CE	COVERED ENTRY

#1 =SET MAG NAIL & DISK / LB 8261 SITE BENCHMARK ELEVATION = 13.82'

#2 =SET MAG NAIL & DISK / LB 8261 SITE BENCHMARK ELEVATION = 15.32'

TOTAL AREA = 87382 sq ft - 201 ACRES

FOUND 5/8" IRON ROD & CAP / LB 7232

N88°28'27"W 563.20'

S20°56'53"E 178.56'

SET 1/2" IRON ROD & CAP / LB 8261

FOUND MAG NAIL & DISK / LB 8261

CURB INLET NW COR OF INLET 13.52' W I/E (15" RCP) 9.43' BOT. EL 9.02'

FOUND 2"x2" CONCRETE MONUMENT

FOUND 1/2" IRON ROD & CAP (ILLEGIBLE) 0.3' WEST

SET 1/2" IRON ROD & CAP / LB 8261

WEST RIGHT OF WAY LINE

S01°09'33"W 165.00'

ASSUMED BEARING BASE

AVENUE J

CENTERLINE PLATTED 40' RIGHT OF WAY

ASPHALT

LOT 19

LOT 18

LOT 17

LOT 16

ASPHALT DRIVEWAY

CONCRETE WALK

CONCRETE

TOP OF BANK

TOE OF SLOPE

CENTERLINE OF F.E.C. RAIL ROAD

RAIL ROAD TRACK

FIBER OPTIC

UTILITY

CONCRETE WALL

6' CHAINLINK FENCE

OVERHEAD UTILITY LINE

WALL

EXISTING RESIDENCE

TWO STORY BUILDING

STEMWALL

WOOD DECK

A/C PAD

8" CLAY

2' VALLEY GUTTER

6' CONCRETE SIDEWALK

15" RCP

8" PVC

15" HDPE

SSMH #1

SSMH #2

SSMH #3

SSMH #4

CB #1

CB #2

CB #3

CB #4

MES I/E 11.16'

FH

GV

WELL 8" PVC

COLUMN 12"x12" (TYP)

EBO

LP

BFP

EM

WM

WV

WPP

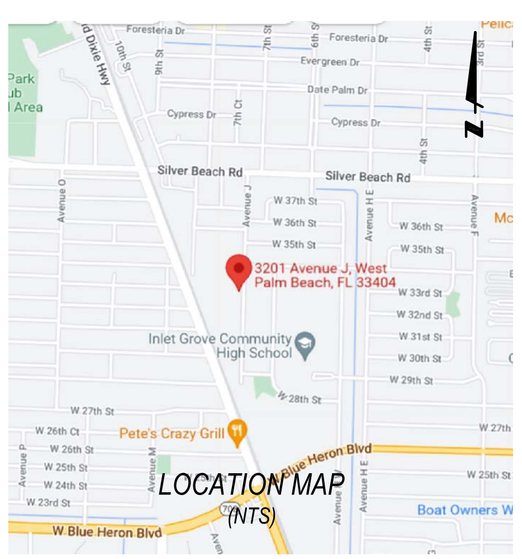
ES

GRAPHIC SCALE

0 10 20 40

1 inch = 20 ft.

1"=20'



LOCATION MAP (NTS)

PROPERTY ADDRESS:
3201 AND 3211 AVENUE J
RIVIERA BEACH, FLORIDA 33404

FLOOD ZONE: *'X'*
PANEL NO: *12099C 0387F*
DATE: *OCTOBER 5, 2017*

CERTIFIED TO:

1. *FLORIDA HOUSING FINANCE CORPORATION, 227 N. BRONOUGH STREET, SUITE 5000 TALLAHASSEE, FLORIDA 32301*

LEGAL DESCRIPTION:
LOT 17 AND 18, SILVER BEACH ACRES PLAT NO. 2, ACCORDING TO THE PLAT THEREOF ON FILE ON THE OFFICE OF THE CLERK OF THE CIRCUIT COURT IN AND FOR PALM BEACH COUNTY, FLORIDA, AS RECORDED IN PLAT BOOK 20, PAGE 15..

SURVEYORS' NOTES:

1. *I HEREBY CERTIFY THIS SURVEY MEETS STANDARDS OF PRACTICE SET FORTH IN RULE 5J-17.050-.052, OF THE FLORIDA ADMINISTRATIVE CODE, ADOPTED BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS, PURSUANT TO CHAPTER 472.027 OF THE FLORIDA STATUTES.*
2. *THE SURVEY MAP AND REPORT AND THE COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OR VERIFIED ELECTRONIC SIGNATURE OF A FLORIDA LICENSED SURVEYOR AND MAPPER..*
3. *UNDERGROUND OR OBSCURED IMPROVEMENTS WERE NOT LOCATED.*
4. *DIMENSIONS ARE RECORD AND FIELD UNLESS OTHERWISE NOTED.*
5. *STATED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.*
6. *THIS FIRM'S CERTIFICATE OF AUTHORIZATION NUMBER IS LB 8261.*
7. *ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.*
8. *SURVEY SUBJECT TO RESERVATIONS, RESTRICTIONS, EASEMENTS AND RIGHTS-OF-WAY OF RECORD. (UNLESS A TITLE REVIEW, COMMITMENT REVIEW, OR OWNERSHIP AND ENCUMBRANCE REVIEW IS PRESENT ON THE FACE OF THIS DOCUMENT, THIS SURVEY HAS BEEN COMPLETED IN THE ABSENCE OF A TITLE INSURANCE POLICY).*
9. *LOCATION MAP IS GLEANED FROM ONLINE MAPPING SITES AND AND IS ONLY APPROXIMATE.*
10. *ELEVATIONS SHOWN HEREON ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. (NAVD'88)*

STRUCTURE INVERTS / DEPTHS

SSMH #1:
RIM ELEV.: 16.31'
BOTTOM: 13.13'
INVERT EAST: 12.82' (8" PVC)

SSMH #2:
RIM ELEV.: 16.26'
BOTTOM: 12.50'
INVERT EAST: 12.28' (8" PVC)
INVERT WEST: 12.37' (8" PVC)

SSMH #3:
RIM ELEV.: 15.32'
BOTTOM: 9.35'
INVERT NORTH - NORTHEAST: 12.10' (8" PVC)
INVERT WEST: 12.30' (8" PVC)

SSMH #4:
RIM ELEV.: 14.19'
BOTTOM: 7.38'
INVERT SOUTH-SOUTHWEST: 8.46' (8" PVC)
INVERT NORTH: 7.40' (8" CLAY)
INVERT SOUTH: 7.04' (8" CLAY)
INVERT EAST: 10.54' (8" CAST IRON)

SDMH1:
RIM ELEV.: 13.71'
BOTTOM: 7.85'
INVERT NORTH: 8.31 (15" RCP)
INVERT EAST: 9.06' (15" RCP)
INVERT WEST: 9.02' (15" RCP)

SDMH2:
RIM EL: 12.68'
BOTTOM: 5.19'
INVERT SOUTH: 7.27' (15" RCP)
INVERT WEST: 7.83' (15" RCP)
INVERT EAST: 5.61' (15" RCP)
INVERT NORTH: 5.59' (15" RCP)

CB#1:
NORTHEAST CORNER ELEV.: 14.87'
BOTTOM: 9.63'
INVERT EAST: 11.85 (15" HDPE)
INVERT WEST: 11.70' (15" HDPE)

CB #2:
NORTHEAST CORNER ELEV:15.60'
BOTTOM: 11.99'
INVERT WEST: 12.57" (15" HDPE)
INVERT EAST: 12.38" (15" HDPE)

CB #3:
NORTHEAST CORNER ELEV: 15.71'
BOTTOM: 11.23'
INVERT WEST: 12.48' (15" HDPE)
INVERT EAST: 12.62' (15" HDPE)

CB#4:
NORTHEAST CORNER ELEV.: 15.25'
BOTTOM: 11.69'
INVERT WEST: 12.14' (15" HDPE)

CB #5:
NORTHEAST CORNER ELEV:13.51'
BOTTOM: 9.16'
INVERT EAST: 9.44 (15" HDPE)

CB #6:
NORTHEAST CORNER ELEV:13.52'
BOTTOM: 9.02'
INVERT WEST: 9.43' (15" HDPE)

22-0136	JOB#
BOUNDARY SURVEY	PURPOSE
KN	FIELD
CD	DRAFT
03-10-22	DATE

SIGNED: DOUG WALKER
DOUG WALKER PROFESSIONAL LAND SURVEYOR AND MAPPER FLORIDA CERTIFICATE No. 7211

BOUNDARY AND TOPOGRAPHIC SURVEY

PRINCIPAL MERIDIAN SURVEYING, Inc.
LICENSED BUSINESS No. 8261
4546 CAMBRIDGE STREET
WEST PALM BEACH, FL 33415
OFFICE 561-478-7764

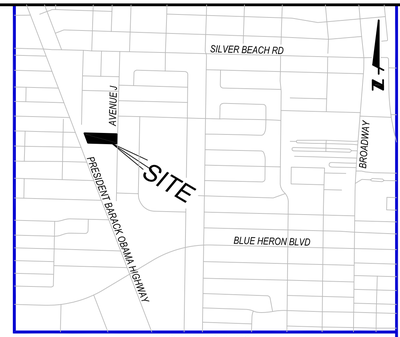
VILLAS OF SOLANA

A TOWNHOUSE PROJECT

BEING A REPLAT OF LOTS 17 AND 18, SILVER BEACH ACRES PLAT NO. 2, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 20, PAGE 15, PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA.

LYING AND BEING IN SECTION 29, TOWNSHIP 42 SOUTH, RANGE 43 EAST, PALM BEACH COUNTY, THE CITY OF RIVIERA BEACH, FLORIDA.

SHEET 1 OF 2



VICINITY SKETCH
NOT TO SCALE

STATE OF FLORIDA
COUNTY OF PALM BEACH
THIS PLAT HAS BEEN FILED FOR RECORD AT _____
THIS _____ DAY OF _____, 2022
AND DULY RECORDED IN PLAT BOOK _____
ON PAGE _____
JOSEPH ABRUZZO, CLERK OF THE CIRCUIT COURT & COMPTROLLER PALM BEACH COUNTY
BY: _____

CLERK OF THE CIRCUIT COURT & COMPTROLLER

AS APPROVED ON _____, 2022 VIA CITY OF RIVIERA BEACH RESOLUTION NO. _____-22

DESCRIPTION AND DEDICATION:
KNOW ALL MEN BY THESE PRESENTS, RIVIERA BEACH COMMUNITY REDEVELOPMENT AGENCY, A BODY CORPORATE AND POLITIC CREATED PURSUANT TO PART II, CHAPTER 163, FLORIDA STATUTES, OWNER OF THE LANDS SHOWN HEREON AS "VILLAS OF SOLANA", A TOWNHOUSE PROJECT, BEING A REPLAT OF LOTS 17 AND 18, SILVER BEACH ACRES PLAT NO. 2, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 20, PAGE 15, PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA.

SITUATE LYING AND BEING IN THE CITY OF RIVIERA BEACH, FLORIDA, HAS CAUSED THE SAME TO BE SURVEYED AND REPLATTED AS SHOWN HEREON.

IN WITNESS WHEREOF, THE ABOVE NAMED OWNER HAS CAUSED THESE PRESENTS TO BE SIGNED BY_____
THIS ____ DAY OF _____, 20_____.

_____
_____

BY: _____
SIGNATURE: _____

WITNESS: _____
PRINT NAME: _____

WITNESS: _____
PRINT NAME: _____

ACKNOWLEDGEMENT

STATE OF _____)
COUNTY OF _____)

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY MEANS OF ( ) PHYSICAL PRESENCE OR ( ) ONLINE NOTARIZATION, THIS ____ DAY OF _____, 2022, BY _____ AS _____ FOR _____, ON BEHALF OF THE CORPORATION, WHO IS ( ) PERSONALLY KNOWN TO ME OR HAS PRODUCED _____(TYPE OF IDENTIFICATION) AS IDENTIFICATION.

MY COMMISSION EXPIRES:

_____
SIGNATURE OF NOTARY PUBLIC

_____
PRINTED NAME OF NOTARY PUBLIC

NOTARY'S SEAL

TITLE CERTIFICATION

I, J. MICHAEL HAYGOOD, A DULY LICENSED ATTORNEY IN THE STATE OF FLORIDA, DO HEREBY CERTIFY THAT I HAVE EXAMINED THE TITLE TO THE HEREON DESCRIBED PROPERTY; THAT I FIND THE TITLE TO THE PROPERTY IS VESTED IN RIVIERA BEACH COMMUNITY REDEVELOPMENT AGENCY, A BODY CORPORATE AND POLITIC CREATED PURSUANT TO PART II, CHAPTER 163, FLORIDA STATUTES; THAT THE CURRENT TAXES HAVE BEEN PAID; THAT ALL MORTGAGES NOT SATISFIED OR RELEASED OF RECORD NOR OTHERWISE TERMINATED BY LAW ARE SHOWN HEREON; AND THAT THERE ARE EASEMENTS AND ENCUMBRANCES OF RECORD, BUT THOSE EASEMENTS AND ENCUMBRANCES DO NOT PROHIBIT THE SUBDIVISION CREATED BY THIS PLAT.

DATED THIS _____ DAY OF _____ 20___.

BY:_____
SIGNATURE _____
FLORIDA BAR NO._____

APPROVAL- CITY OF RIVIERA BEACH

CITY OF RIVIERA BEACH
COUNTY OF PALM BEACH
STATE OF FLORIDA

IT IS HEREBY CERTIFIED THAT THIS PLAT ENTITLED "VILLAS OF SOLANA", HAS BEEN OFFICIALLY APPROVED FOR RECORD BY THE CITY OF RIVIERA BEACH, FLORIDA, THIS _____ DAY OF _____, 20___.

BY:_____
RONNIE L. FELDER, MAYOR

BY:_____
CLAUDINE L ANTHONY, CMC, CITY CLERK

BY:_____
TERRENCE N. BAILEY, P.E. # 60706
CITY ENGINEER

ACCEPTANCE OF RESERVATIONS

STATE OF _____)
COUNTY OF _____)

VILLAS OF SOLANA H.O.A. HEREBY ACCEPTS THE DEDICATIONS AND/OR RESERVATIONS TO SAID ASSOCIATION AS STATED AND SHOWN HEREON, AND HEREBY ACCEPTS ITS MAINTENANCE OBLIGATIONS FOR SAME AS STATED HEREON, DATED THIS _____DAY OF _____, 2022.

VILLAS OF SOLANA H.O.A.
A FLORIDA CORPORATION NOT FOR PROFIT

_____
SIGNATURE

_____
PRINTED NAME AND TITLE

WITNESS: _____
PRINT NAME: _____

WITNESS: _____
PRINT NAME: _____

ACKNOWLEDGEMENT

STATE OF _____)
COUNTY OF _____)

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME BY MEANS OF ( ) PHYSICAL PRESENCE OR ( ) ONLINE NOTARIZATION, THIS ____ DAY OF _____, 2022, BY _____ AS _____ FOR _____, ON BEHALF OF _____, WHO IS ( ) PERSONALLY KNOWN TO ME OR HAS PRODUCED _____(TYPE OF IDENTIFICATION) AS IDENTIFICATION.

MY COMMISSION EXPIRES:

_____
SIGNATURE OF NOTARY PUBLIC

_____
PRINTED NAME OF NOTARY PUBLIC

NOTARY'S SEAL

REVIEWING SURVEYORS CERTIFICATE

ON BEHALF OF THE CITY OF RIVIERA BEACH, FLORIDA, IN ACCORDANCE WITH CHAPTER 177.081(1), FLORIDA STATUTES, THIS PLAT HAS BEEN REVIEWED FOR CONFORMITY TO CHAPTER 177, PART 1, PLATTING, FLORIDA STATUTES, AND THE ORDINANCES OF THE CITY OF RIVIERA BEACH, FLORIDA, THIS DOES NOT INCLUDE THE VERIFICATION OF THE GEOMETRIC DATA OR FIELD VERIFICATION OF THE PERMANENT CONTROL POINTS (P.C.P.'s) AND MONUMENTS AT LOT/TRACT CORNERS.

DATED THIS _____ DAY OF _____ 20___.

BY_____
GARY M. RAYMAN, P.S.M.
SENIOR PROJECT MANAGER
FLORIDA CERTIFICATE NO. LS 2633

SURVEYOR'S NOTES:

* ALL BEARINGS SHOWN HEREON ARE GRID NORTH, NAD '83, 1990 ADJUSTMENT WITH A REFERENCE BEARING OF S01°09'33"W ALONG THE WEST RIGHT-OF-WAY OF AVENUE J.

* NOTICE: THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN, AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY."

* RESTRICTION ON OBSTRUCTION OF EASEMENTS:
NO BUILDINGS OR ANY KIND OF CONSTRUCTION OR TREES OR SHRUBS SHALL BE PLACED ON ANY EASEMENT WITHOUT THE PRIOR WRITTEN APPROVAL OF ALL EASEMENT BENEFICIARIES AND ALL APPLICABLE CITY APPROVALS OR PERMITS AS REQUIRED FOR SUCH ENCROACHMENT.

* TABULAR AREA:
TOTAL = 87,382 SQUARE FEET 2.01 ACRES

* DISTANCES ARE IN U.S. SURVEY FOOT 1' x 3.2808333= 1 METER

THIS IS TO CERTIFY THAT THE PLAT SHOWN HEREON IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY MADE UNDER MY RESPONSIBLE DIRECTION AND SUPERVISION; THAT SAID SURVEY IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT THE PERMANENT REFERENCE MONUMENTS (P.R.M.'S) AND MONUMENTS ACCORDING TO SECTION 177.091 (9), FLORIDA STATUTES,HAVE BEEN PLACED AS REQUIRED BY LAW; AND, FURTHER, THAT THE SURVEY DATA COMPLIES WITH ALL THE REQUIREMENTS OF CHAPTER 177, PART 1, FLORIDA STATUTES, AS AMENDED, AND THE ORDINANCES OF THE CITY OF RIVIERA BEACH, FLORIDA.

DATED THIS _____ DAY OF _____ 20___.

_____
DOUG WALKER, PSM
FLORIDA CERTIFICATE NO. LS 7211

* PREPARING SURVEYOR & MAPPER STATEMENT:
THIS INSTRUMENT WAS PREPARED BY DOUG WALKER, P.S.M. # 7211, STATE OF FLORIDA,
IN AND FOR THE OFFICES OF PRINCIPAL MERIDIAN SURVEYING, INC., AT 4546 CAMBRIDGE STREET, WEST PALM BEACH, FLORIDA, 33415.
CERTIFICATE OF AUTHORIZATION # 8261

TERRENCE N. BAILEY
P.E. # 60706
CITY ENGINEER SEAL
DATE:_____, 2022

GARY M. RAYMAN
LS #2633
REVIEWING SURVEYORS SEAL
DATE:_____, 2022

CITY OF RIVIERA BEACH SEAL

DOUG WALKER
LS #7211
SURVEYOR'S SEAL
DATE:_____, 2022

PRINCIPAL MERIDIAN SURVEYING INC.
4546 CAMBRIDGE STREET
WEST PALM BEACH, FL 33415
PHONE 833.478.7764 / FAX 561.478.1094
WWW.PMSURVEYING.NET

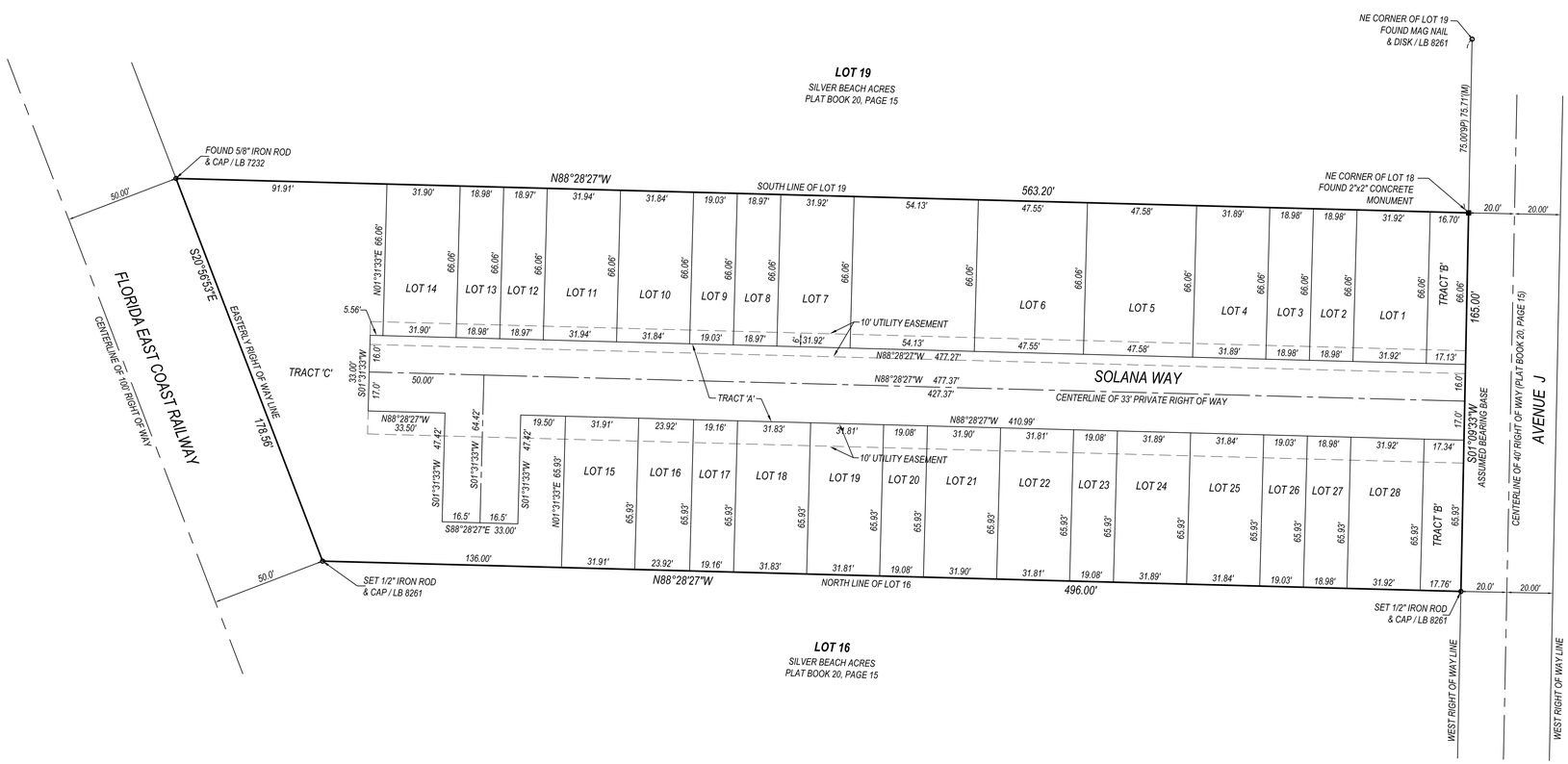
JOB # 22-0136

VILLAS OF SOLANA

A TOWNHOUSE PROJECT

BEING A REPLAT OF LOTS 17 AND 18, SILVER BEACH ACRES PLAT NO. 2, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 20, PAGE 15, PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA.

LYING AND BEING IN SECTION 29, TOWNSHIP 42 SOUTH, RANGE 43 EAST, PALM BEACH COUNTY, THE CITY OF RIVIERA BEACH, FLORIDA.



GRAPHIC SCALE

30 0 15 30

1 INCH = 30 FT.

LEGEND

- ■ SET 4"x 4" CONCRETE MONUMENT AND BRASS DISK "LB 8261"
- ◉ SET 1/2" IRON ROD AND CAP "LB 8261" OR NAIL AND DISK "LB 8261"
- ⊡ FOUND 4"x 4" CONCRETE MONUMENT (PERMANANT REFERENCE MONUMENT)
- ○ FOUND NAIL AND DISK , IRON ROD AND CAP

* ABBREVIATIONS:
LB = LICENSED BUSINESS

PRINCIPAL MERIDIAN SURVEYING INC.
4546 CAMBRIDGE STREET
WEST PALM BEACH, FL 33415
PHONE 833.478.7764
WWW.PMSURVEYING.NET
JOB # 22-0136

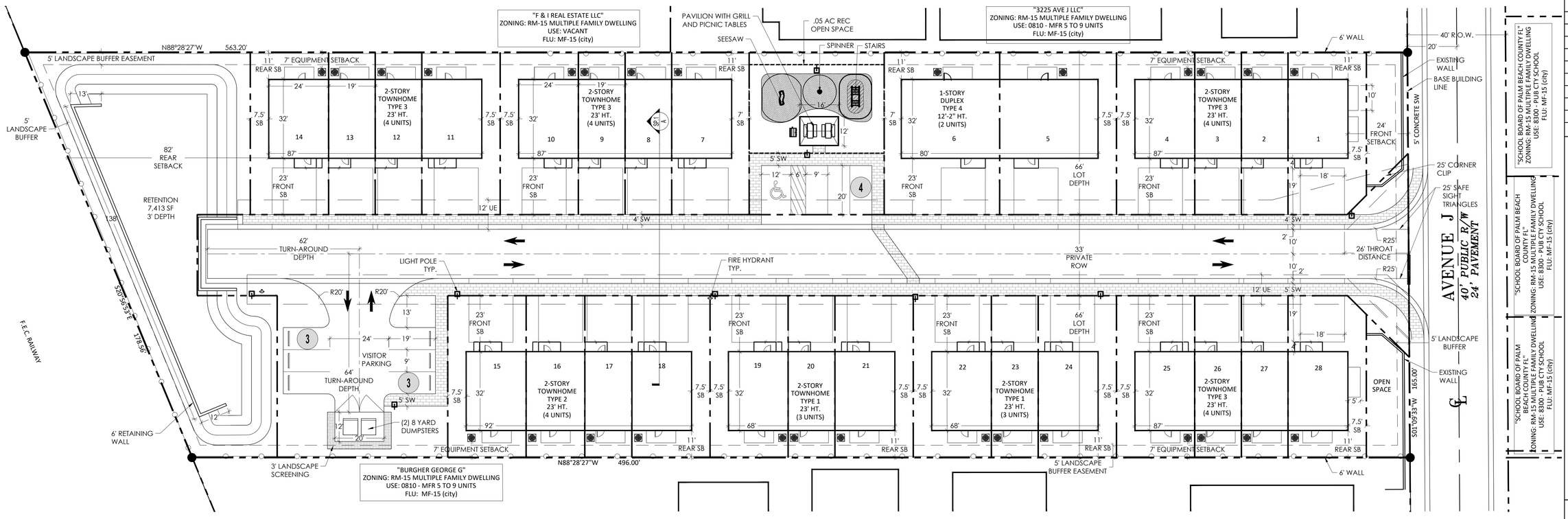
FOUNDATION PLANTINGS			
LENGTH:	WIDTH REQUIRED:	S.F. REQUIRED:	S.F. PROVIDED:
1,824 L.F.	2 FEET	3,648 S.F.	4,263 S.F.

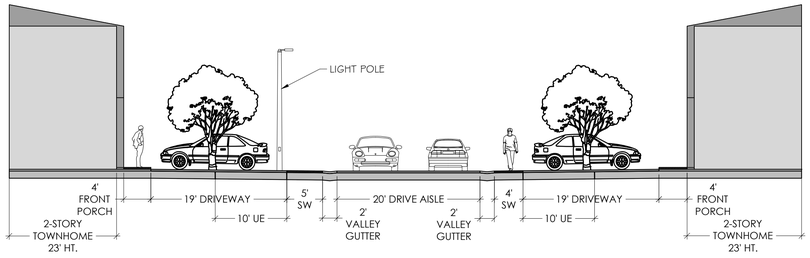
PROPERTY DEVELOPMENT STANDARDS						
2-UNIT	ZONING DISTRICT	F.L.U. DESIGNATIONS	LOT WIDTH DIMENSIONS	SETBACKS		
				FRONT	SIDE	REAR
REQUIRED	(RM-15)	MF-15	50 LF	20'	7'	10'
PROVIDED	(RM-15)	MF-15	95 LF	23'	7	11'
3-UNIT	ZONING DISTRICT	F.L.U. DESIGNATIONS	LOT WIDTH DIMENSIONS	SETBACKS		
				FRONT	SIDE	REAR
REQUIRED	(RM-15)	MF-15	60 LF	20'	7'	10'
PROVIDED	(RM-15)	MF-15	83 LF	23'	7.5'	11'
4-UNIT	ZONING DISTRICT	F.L.U. DESIGNATIONS	LOT WIDTH DIMENSIONS	SETBACKS		
				FRONT	SIDE	REAR
REQUIRED	(RM-15)	MF-15	60 LF	20'	7'	10'
PROVIDED	(RM-15)	MF-15	101 LF	23'	11'	11'

NOTES:
-REAR SETBACK IS 15% OF TYPICAL LOT DEPTH OF 66'

SITE DATA	
APPLICATION NAME	Villas of Solana
APPLICATION NUMBER	SP-22-0022
ADDRESS	3211 Avenue J, Riviera Beach, FL 33404
PROPERTY CONTROL NUMBER (S)	56-43-42-29-24-000-0180
	56-43-42-29-24-000-0170
RANGE/TOWNSHIP/SECTION	43/42/29
ZONING DISTRICT	RM-15
LAND USE	Multifamily Residential
FUTURE LAND USE (FLU)	MF-15
TRAFFIC ANALYSIS ZONE	128
GROSS AREA	2.01 AC (87,382 SF)
AFFECTED SITE AREA	2.01 AC (87,382 SF)
IMPERVIOUS AREA (%)	53,389 SF (61.1%)
TOTAL RETENTION AREA	7,413 SF
GROSS FLOOR AREA	39,270 SF
PROPOSED FLOOR AREA RATIO	.45
MAX BUILDING COVERAGE	70%
PROPOSED BUILDING COVERAGE	39%
MAX BUILDING HEIGHT	35' or 3 stories
PROPOSED BUILDING HEIGHT	12'-2" HT (1 story) and 23' HT (2 story)
TOTAL DWELLING UNITS	28 DU
MAX DENSITY	15 DU/AC
PROPOSED DENSITY	13.9 DU/AC
REQUIRED PARKING	28
HANDICAP PARKING	1
PROVIDED PARKING	61
HANDICAP PARKING	1

NOTES:
- WATER AND WASTEWATER UTILITIES WILL BE MAINTAINED BY THE CITY OF RIVIERA BEACH UTILITY SPECIAL DISTRICT





A TYPICAL STREET CROSS SECTION SCALE: 1" = 10' - 0"

LOCATION MAP

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Consultants:

Revisions:
2/24/23- Comments

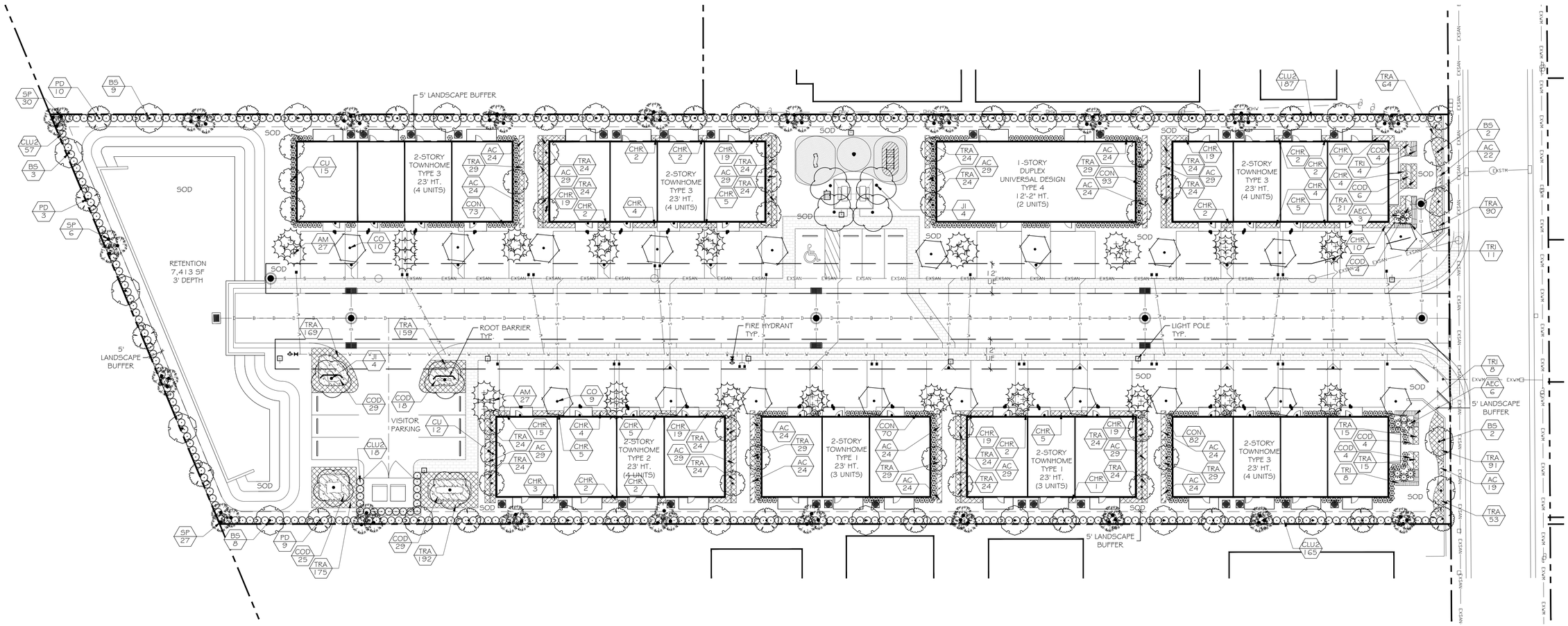
VILLAS OF SOLANA
RIVIERA BEACH, FL

NORTH
0 10' 20' 40'
SCALE: 1" = 20'-0"

Drawn By:	AC
Drawing #:	1256
Date:	09/07/2022

SITE PLAN

SHEET # SP.1



LANDSCAPE REQUIREMENT CHART

LOCATION/ AREA	CODE REQUIREMENT	REQUIRED	PROVIDED
TOTAL SITE AREA: 87,286 SF	1 TREE OR PALM PER 1,500 SF OF TOTAL SITE AREA	58 TREES OR PALMS	219 TREES
REQUIRED SHADE TREES:	60% OF REQUIRED TREES	35 TREES	209 TREES
SHADE TREE DIVERSITY REQUIREMENT:	A SINGLE SPECIES WILL NOT EXCEED 65% OF TREES	65%	63/219 = 29%
REQUIRED NATIVE ACCENT TREES:	10% OF REQUIRED TREES	6 TREES	27 TREES
MAXIMUM PALM REQUIREMENTS:	20% MAX. OF REQUIRED TREES	12 PALMS MAX	117 NEW / 219=53%
REQUIRED SHADE TREE SPECIES MIX:	6 SPECIES FOR OVER 75 REQUIRED SHADE TREES	6 SPECIES	6 SPECIES
REQUIRED NATIVE SPECIES:	70% OF ALL SPECIES	153	155 = 71%
REQUIRED ECOLOGICAL SIGNIFICANT FOOD PLANTS:	25% OF REQUIRED PLANTINGS	15	55 = 25%
SIGNAGE PLANTINGS:	5' WIDE AROUND SIGNAGE	N/A	N/A
TREES BETWEEN PARKING AND BUILDING WALLS	1 TREE PER 20' OF REQUIRED LANDSCAPE PERIMETER	3	3
HEDGES BETWEEN PARKING AND BUILDING WALLS	A 24" MINIMUM TALL HEDGE ALONG WALLS	31'	31'
TREES BETWEEN R.O.W. AND PARKING AREAS	1 TREE PER 20' OF REQUIRED LANDSCAPE PERIMETER	4	6
HEDGES BETWEEN R.O.W. AND PARKING AREAS	A 36" MINIMUM TALL HEDGE ALONG THE LANDSCAPE STRIP	85'	85'

PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
AM	54	Adonidia merrillii	Christmas Palm	12-16` O.A. HT, Double Trunk
BS	24	Bursera simaruba	Gumbo Limbo	12` Ht. x 5` Spr. 2.5" Cal.
CU	27	Coccoloba uvifera	Sea Grape	16` HT X 10` SPR., 6" CAL
CO	19	Cordia sebestena	Orange Geiger Tree	12` Ht. Min./ 2" Cal. Min.
JI	8	Jatropha integernma	Spicy Jatropha	8-10' 4-5' SPR.
PD	22	Pinus elliotti `Densa`	Slash Pine	14` Ht. Min. x 6` Spr. Min.
SP	63	Sabal palmetto	Cabbage Palmetto	18-22` O.A. HT, BOOTED, 6" MIN DIA.
SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
AEC	9	Aechmea blanchetiana	Orange Bromeliad	36" HT X 30" SPR.
CLU2	427	Clusia guttifera	Small Leaf Clusia	6` HT X 36" SPR.
CON	318	Conocarpus erectus `Sericeus`	Silver Buttonwood	36" HT. X 24" SPR.
SHRUB AREAS	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
CHR	209	Chrysobalanus icaco `Red Tip`	Red Tip Cocoplum	18" HT X 18" SPR @ 30" O.C.
COD	123	Codiaeum variegatum	Croton	36"HT X 24" SPR @ 24" O.C.
TRA	1,573	Trachelospermum asiaticum	Asian Jasmine	12" HT X 12" SPR. @ 12" O.C.
TRI	31	Tripsacum dactyloides nana	Dwarf Fakahatchee Grass	18" HT. X 18" SPR. @ 24" O.C.
GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
AC	513	Aptenia cordifolia	Baby Sunrose	12" HT X 12" SPR. @ 12" O.C.

NOTE: AREAS LABELED "SOD" TO BE ST. AUGUSTINE SOD

LOCATION MAP

NORTH
0 10' 20' 40'
SCALE: 1/20" = 1'-0"

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Consultants:

Revisions:
2/24/23- Comments

VILLAS OF SOLANA
RIVIERA BEACH, Florida

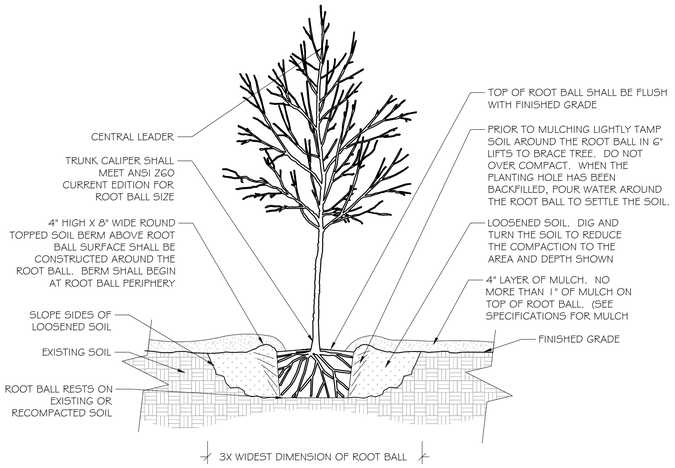
Brian Terry
LA 6666978
Digitally signed by Brian Terry LA 6666978
Date: 2023.02.26 09:19:41 -05'00'

ALWAYS CALL 811 TWO FULL BUSINESS DAYS BEFORE YOU DIG TO HAVE UNDERGROUND UTILITIES LOCATED AND MARKED.
Sunshine811.com

Drawn By:	AC
Drawing #:	1256
Date:	08/29/2022

LANDSCAPE PLAN

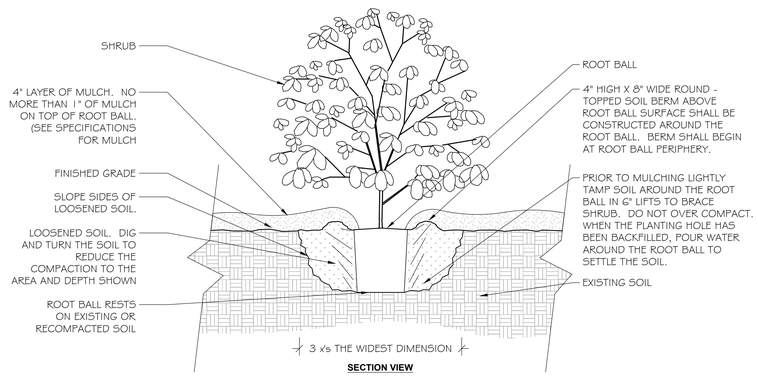
SHEET # LP.1



1 TREE PLANTING DETAIL

1/2" = 1'-0"

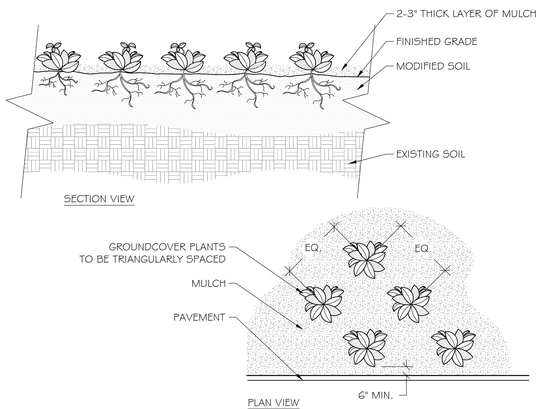
NOTES:
1. TREES SHALL BE OF QUALITY PRESCRIBED IN CROWN OBSERVATIONS AND ROOT OBSERVATIONS DETAILS AND SPECIFICATIONS.
2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.



2 SHRUB PLANTING DETAIL

3/4" = 1'-0"

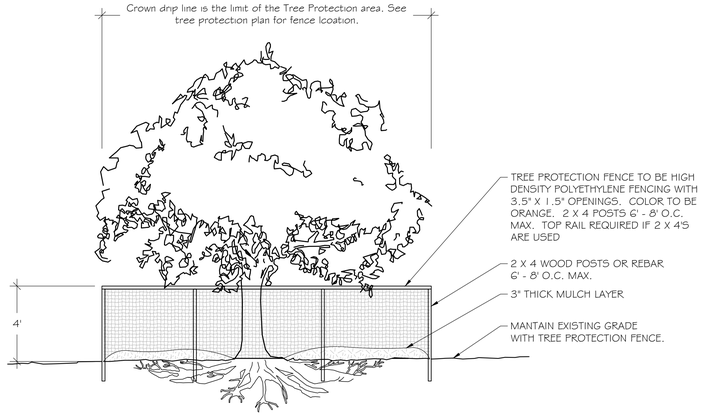
NOTES:
1. SHRUB SHALL BE OF QUALITY PRESCRIBED IN THE ROOT OBSERVATIONS DETAIL AND SPECIFICATIONS
2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.



3 GROUNDCOVER

3/4" = 1'-0"

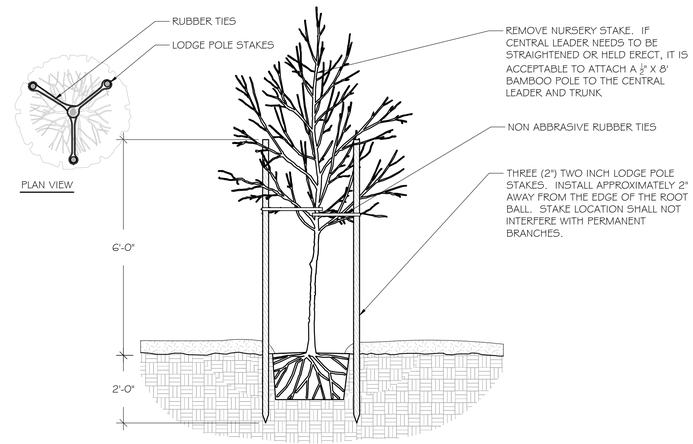
NOTES:
1- SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION.
2- SMALL ROOTS (¼" OR LESS) THAT GROW AROUND, UP, OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A
NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE HOWEVER THEY SHOULD BE ELIMINATED AT THE
TIME OF PLANTING. ROOTS ON THE PERIPERHY CAN BE REMOVED AT THE TIME OF PLANTING.
3- SETTLE SOIL AROUND ROOT BALL OF EACH GROUNDCOVER PRIOR TO MULCHING.



4 TREE PROTECTION DETAIL

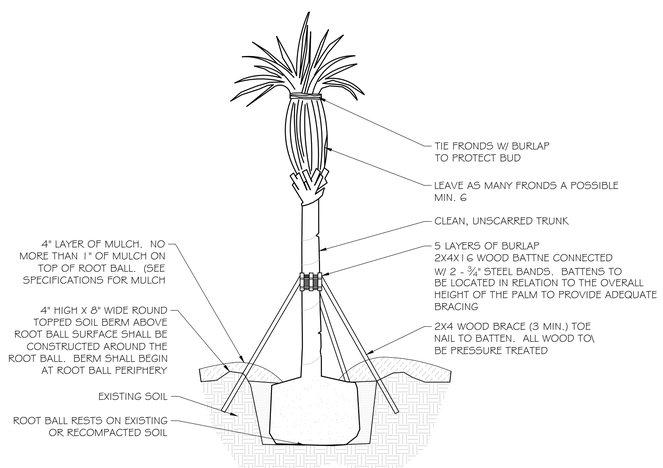
SCALE : 1/4" = 1'-0"

NOTES:
1. KEEP OUT OF TREE PROTECTION AREA
2. FENCE TO BE INSTALLED ALONG DRIPLINE OF EXISTING TREES
3. NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.



5 TREE STAKING DETAIL

1/2" = 1'-0"



6 PALM STAKING DETAIL

SCALE : 1/4" = 1'-0"

LANDSCAPE NOTES:

1. ALL PLANTS TO BE FLORIDA #1 QUALITY OR BETTER AS DEFINED IN THE LATEST EDITION OF THE FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS, UNLESS OTHERWISE NOTED.
2. ALL PLANTING AND SOD AREAS SHALL RECEIVE 100% IRRIGATION COVERAGE FROM AN AUTOMATIC IRRIGATION SYSTEM WITH A RAIN SENSOR.
3. ALL PLANTING BEDS/ ISLANDS SHALL BE FREE OF SHELLROCK, CONSTRUCTION DEBRIS, OR OTHER MISCELLANEOUS DEBRIS, EXCAVATED TO A DEPTH OF 30" OR TO CLEAN NATIVE SOILS, AND BACKFILLED WITH THE SPECIFIED SOIL MIXTURE.
4. ROOT BARRIERS ARE REQUIRED FOR ALL TREES LOCATED WITHIN 10' OF UNDERGROUND UTILITIES.
5. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED APPROVALS AND PERMITS FROM LOCAL MUNICIPALITY AND GOVERNING AGENCIES PRIOR TO REMOVAL OF ANY EXISTING VEGETATION OR BEGINNING INSTALLATION.
6. IN THE EVENT OF A CONFLICT BETWEEN THE QUANTITIES SHOWN IN THE PLANT SCHEDULE AND GRAPHICALLY DEPICTED AND LABELED ON THE PLAN, THE PLAN WILL PREVAIL. IF SUCH CONFLICT IS DISCOVERED, CONTRACTOR SHALL CONSULT WITH LANDSCAPE ARCHITECT.
7. ALL TREES PLANTED UNDER OR NEAR OVERHEAD POWER LINES SHALL COMPLY WITH FPL RIGHT TREE, RIGHT PLACE REQUIREMENTS.
8. CONTRACTOR IS REQUIRED TO CALL SUNSHINE 811 TO HAVE ALL UNDERGROUND UTILITIES LOCATED PRIOR TO ANY DIGGING, EXCAVATION, OR UNDERGROUND WORK. IF PROPOSED DESIGN CONFLICTS WITH EXISTING OR PROPOSED UTILITY LOCATIONS, CONTRACTOR SHALL IMMEDIATELY CONTACT LANDSCAPE ARCHITECT TO DEVELOP A SOLUTION FOR THE CONFLICT.

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Sunshine811.com

Drawn By:	AC
Drawing #:	1256
Date:	08/29/2022

LANDSCAPE DETAILS

SHEET # LP.2

GENERAL CONDITIONS

A. CONTRACT DOCUMENTS: Shall consist of specifications and its general conditions and the drawings. The intent of these documents is to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as one. Whatever is called for by any parts shall be as binding as if called for in all parts.

B. VERIFICATION: The Contractor shall verify measurements on the drawings before beginning work. In case of error or discrepancy in the drawings or specifications or in the work of others affecting his/her work, he/she shall notify the Owner's Representative immediately. The Contractor shall be held responsible for any damages or loss due to his/her failure to observe these instructions.

C. MATERIALS, MACHINERY, EMPLOYEES: Except as otherwise noted, the Contractor shall provide and pay for all materials, labor, tools, and other items necessary and incidental to the completion of his/her work.

D. SURVEYS, PERMITS, REGULATIONS: The Owner shall furnish an adequate survey of the property. The Contractor shall obtain and pay for all permits and comply with all laws and ordinances bearing on the operation or conduct of the work as drawn and specified. If the Contractor observes that a variance exists therewith he/she shall promptly notify the Owner's Representative in writing and any necessary changes shall be adjusted as provided in the contract for changes in the work.

E. PROTECTION OF WORK, PROPERTY AND PERSON: The Contractor shall adequately protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his/her actions.

F. CHANGES IN THE WORK: The owner may order changes in the work, and the contract sum being adjusted accordingly. All such orders and adjustments plus claims by the Contractor for extras must be made in writing before executing the work involved.

G. CORRECTION OF WORK: The Contractor shall re-execute any work that fails to conform to the requirements of the contract and shall remedy defects due to faulty materials or workmanship upon written notice from the Owner's Representative for a period of ninety (90) days from the date of completion of the contract.

H. Owner's Authorized Representative: The Owner's authorized representative acts as the authorized representative of the Owner in conjunction with the project manager, and has authority to accept or reject materials or workmanship and to make minor changes in the work not involving extra cost. He will also interpret the meaning of the contract documents and may stop the work if necessary to ensure its proper execution.

I. CLARIFICATION OF DRAWINGS BEFORE BIDDING: After reviewing the drawings thoroughly it is the Contractor's responsibility to clarify with the Owner's Representative any questions the Contractor may have regarding the method of construction, quantities, or quality of materials included or called out. If the Contractor cannot contact the Owner's Representative, the Contractor must qualify his/her bid or accept the interpretation of the Owner's Representative on the questionable areas as they develop during construction.

J. SAMPLES: The Owner's Representative reserves the right to take and analyze samples of materials for conformity to specifications at any time. The Contractor shall furnish samples upon request by the Owner's Representative. Rejected materials shall be immediately removed from the site and replaced at the Contractor's expense. The cost of testing materials not meeting specifications shall be paid by the Contractor.

K. PRE-CONSTRUCTION CONFERENCE: Schedule a pre-construction meeting with the Owner's Representative at least seven (7) days before beginning work. The purpose of this conference is to review any questions the Contractor may have regarding the work, administrative procedures during construction and project work schedule.

015639

Tree and Plant Protection

PART 1 GENERAL

1.1 SUMMARY

The scope of work includes all labor, materials, tools, equipment, facilities, transportation and services necessary for, and incidental to performing all operations in connection with protection of existing trees and other plants as shown on the drawings and as specified herein.

1. Provide preconstruction evaluations
2. Provide tree and plant protection fencing.
3. Provide protection of root zones and above ground tree and plants
4. Provide pruning of existing trees and plants.
5. Coordinate with the requirements of Section Planting Soil for modifications to the soil within the root zone of existing trees and plants.
6. Provide all insect and disease control.
7. Provide maintenance of existing trees and plants including irrigation during the construction period as recommended by the arborist report.
8. Provide maintenance of existing trees and plants including irrigation during the post construction plant maintenance period.
9. Remove tree protection fencing and other protection from around and under trees and plants.
10. Clean up and disposal of all excess and surplus material.

1.2 CONTRACT DOCUMENTS

A. Shall consist of specifications and general conditions and the drawings. The intent of these documents is to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as one. Whatever is called for by any parts shall be as binding as if called for in all parts.

B. It is the intent of this section that the requirements apply to all sections of the project specification such that any subcontractor must comply with the restrictions on work within designated Tree and Plant Protection Areas.

1.3 RELATED DOCUMENTS AND REFERENCES

A. Related Documents:

1. Drawings and general provisions of contract including general and supplementary conditions and Division I specifications apply to work of this section.
2. Section - Planting

B. References: The following specifications and standards of the organizations and documents listed in this paragraph form a part of the specification to the extent required by the references thereto. In the event that the requirements of the following referenced standards and specification conflict with this specification section the requirements of this specification shall prevail. In the event that the requirements of any of the following referenced standards and specifications conflict with each other the more stringent requirement shall prevail.

1. ANSI A 300 (Part 5) - Standard Practices for Tree, Shrub and other Woody Plant Maintenance, most current editions.
2. Pruning practices shall conform with recommendations "Structural Pruning: A Guide For The Green Industry"; Published by Urban Tree Foundation, Visalia, California; most current edition.
3. Glossary of Arboricultural Terms, International Society of Arboriculture, Champaign IL, most current edition.

1.4 VERIFICATION

A. All scaled dimensions on the drawings are approximate. Before proceeding with any work, the Contractor shall carefully check and verify all dimensions and quantities, and shall immediately inform the Owner's Representative of any discrepancies between the information on the drawings and the actual conditions, refraining from doing any work in said areas until given approval to do so by the Owner's Representative.

1.5 PERMITS AND REGULATIONS

A. The Contractor shall obtain and pay for all permits related to this section of the work unless previously excluded under provision of the contract or general conditions. The Contractor shall comply with all laws and ordinances bearing on the operation or conduct of the work as drawn and specified. If the Contractor observes that a conflict exists between permit requirements and the work outlined in the contract documents, the Contractor shall promptly notify the Owner's Representative in writing including a description of any necessary changes and changes to the contract price resulting from changes in the work.

B. Wherever references are made to standards or codes in accordance with which work is to be performed or tested, the edition or revision of the standards and codes current on the effective date of this contract shall apply, unless otherwise expressly set forth.

C. In case of conflict among any referenced standards or codes or between any referenced standards and codes and the specifications, the more restrictive standard shall apply or Owner's Representative shall determine which shall govern.

1.6 PROTECTION OF WORK, PROPERTY AND PERSON

A. The Contractor shall protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his/her actions.

1.7 CHANGES IN THE WORK

A. The Owner's Representative may order changes in the work, and the contract sum should be adjusted accordingly. All such orders and adjustments plus claims by the Contractor for extra compensation must be made and approved in writing before executing the work involved.

1.8 CORRECTION OF WORK

A. The Contractor shall re-execute any work that fails to conform to the requirements of the contract and shall remedy defects due to faulty materials or workmanship upon written notice from the Owner's Representative, at the soonest possible time that can be coordinated with other work and seasonal weather demands.

1.9 DEFINITIONS

All terms in this specification shall be as defined in the "Glossary of Arboricultural Terms" or as modified below.

Owner's Representative: The person appointed by the Owner to represent their interest in the review and approval of the work and to serve as the contracting authority with the Contractor. The Owner's Representative or Owner may appoint other persons to review and approve any aspects of the work, such as the landscape architect who prepared the plans.

B. Reasonable and reasonably: When used in this specification is intended to mean that the conditions cited will not affect the establishment or long term stability, health or growth of the plant. This specification recognizes that plants are not free of defects, and that plant conditions change with time. This specification also recognizes that some decisions cannot be totally based on measured findings and that profession judgment is required. In cases of differing opinion, the Owner's Representative expert shall determine when conditions within the plant are judged as reasonable.

C. Shrub: Woody plants with mature height approximately less than 25 feet.

D. Tree and Plant Protection Area: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction, and defined by a circle centered on the trunk with each tree with a radius equal to the clown dripline unless otherwise indicated by the owner's representative.

E. Tree: Single and multi-stemmed plants, including palms with anticipated mature height approximately greater than 25 feet or any plant identified on the plans as a tree.

1.10 SUBMITTALS

A. PRODUCT DATA: Submit manufacturer product data and literature describing all products required by this section to the Owner's Representative for approval. Provide submittal four weeks before the start of any work at the site.

1.11 OBSERVATION of the work

A. The Owner's Representative may inspect the work at any time.

1.12 PRE-CONSTRUCTION CONFERENCE

A. Schedule a pre - construction meeting with the Owner's Representative at least seven (7) days before beginning work to review any questions the Contractor may have regarding the work, administrative procedures during construction and project work schedule.

1. The following Contractors shall attend the preconstruction conference:
   a. General Contractor.
   b. Consulting Arborist.
   c. Subcontractor assigned to install Tree and Plant Protection measures.
   d. Earthwork Contractor.
   e. All site utility Contractors that may be required to dig or trench into the soil.
   f. Landscape subcontractor.
   g. Irrigation subcontractor

B. Prior to this meeting, mark all trees and plants to remain and or be removed as described in this specification for review and approval by the Owner's Representative.

1.13 QUALITY ASSURANCE

A. Contractor qualifications:

1. All pruning, branch tie back, tree removal, root pruning, and fertilizing required by this section shall be performed by or under the direct supervision of ISA Certified Arborist Submit aforementioned individual's qualifications for approval by the Owner's Representative.
2. All applications of pesticide or herbicide shall be performed by a person maintaining a current state license to apply chemical pesticides valid in the jurisdiction of the project. Submit copies of all required state licensing certificates including applicable chemical applicator licenses.

PART 2 PRODUCTS

2.3 TREE PROTECTION FENCING:

B. PLASTIC MESH FENCE: Heavy - duty orange plastic mesh fencing fabric 48 inches wide. Fencing shall be attached to metal "U" or "T" post or wooden post driven into the ground of sufficient depth to hold the fabric solidly in place with out sagging. The fabric shall be attached to the post using attachment ties of sufficient number and strength to hold up the fabric without sagging. The Owner's Representative may request, at any time, additional post, deeper post depths and or additional fabric attachments if the fabric begins to sag, lean or otherwise not present a sufficient barrier to access.

C. GATES: For each fence type and in each separate fenced area, provide a minimum of one 3 foot wide gate. Gates shall be lockable. The location of the gates shall be approved by the Owner's Representative.

D. Submit suppliers product data that product meets the requirements for approval.

2.4 tree protection sign:

A. Heavy-duty cardboard signs, 8.5 inches x 11 inches, white colored background with black 2 inch high or larger letters block letters. The signs shall be attached to the tree protection fence every 50 feet o.c. The tree protection sign shall read "Tree and Plant Protection Area- Keep Out".

2.5 TREE GROWTH REGULATOR (TGR)

A. Cambistat 25C.

B. Submit suppliers product data that product meets the requirements for approval.

2.6 MATTING

A. Matting for vehicle and work protection shall be heavy duty matting designed for vehicle loading over tree roots, Alturnamats as manufactured by Alturnamats, Inc. Franklin, PA 16323 or approved equal.

B. Submit suppliers product data that product meets the requirements for approval.

2.7 GEOGRID

A. Geogrid shall be woven polyester fabric with PVC coating, Uni-axial or biaxial geogrid, inert to biological degradation, resistant to naturally occurring chemicals, alkalis, acids.

1. Geogrid shall be Miragrid 2XT as manufactured by Ten Cate Nicolon, Norcross, GA. http://www.tencate.com or approved equal.

B. Submit suppliers product data that product meets the requirements for approval.

2.8 FILTER FABRIC

A. Filter Fabric shall be nonwoven polypropylene fibers, inert to biological degradation and resistant of naturally occurring chemicals, alkalis and acids.

1. Mirafi 135 N as manufactured by Ten Cate Nicolon, Norcross, GA. http://www.tencate.com or approved equal.

B. Submit suppliers product data that product meets the requirements for approval.

PART 3 EXECUTION

3.1 SITE EXAMINATION

A. Examine the site, tree, plant and soil conditions. Notify the Owner's Representative in writing of any conditions that may impact the successful Tree and Plant Protections that is the intent of this section.

3.2 COORDINATION WITH PROJECT WORK

A. The Contractor shall coordinate with all other work that may impact the completion of the work.

B. Prior to the start of Work, prepare a detailed schedule of the work for coordination with other trades.

C. Coordinate the relocation of any irrigation lines currently present on the irrigation plan, heads or the conduits of other utility lines or structures that are in conflict with tree locations. Root balls shall not be altered to fit around lines. Notify the Owner's Representative of any conflicts encountered.

3.3 TREE AND PLANT PROTECTION AREA: The Tree and Plant Protection Area is defined as all areas indicated on the tree protection plan. Where no limit of the Tree and Plant Protection area is defined on the drawings, the limit shall be the drip line (outer edge of the branch crown) of each tree.

3.4 Preparation:

A. Prior to the preconstruction meeting, layout the limits of the Tree and Plant Protection Area and then alignments of required Tree and Plant Protection Fencing and root pruning. Obtain the Owner's Representative's approval of the limits of the protection area and the alignment of all fencing and root pruning.

B. Flag all trees and shrubs to be removed by wrapping orange plastic ribbon around the trunk and obtain the Owner's Representative's approval of all trees and shrubs to be removed prior to the start of tree and shrub removal. After approval, mark all trees and shrubs to be removed with orange paint in a band completely around the base of the tree or shrub 4.5 feet above the ground.

C. Flag all trees and shrubs to remain with white plastic ribbon tied completely around the trunk or each tree and on a prominent branch for each shrub. Obtain the Owner's Representative's approval of all trees and shrubs to be remain prior to the start of tree and shrub removal.

D. Prior to any construction activity at the site including utility work, grading, storage of materials, or installation of temporary construction facilities, install all tree protection fencing, Filter Fabric, silt fence, tree protection signs, Geogrid, Mulch and or Wood Chips as shown on the drawings.

3.5 SOIL MOISTURE

A. Volumetric soil moisture level, in all soils within the Tree and Plant Protection Area shall be maintained above permanent wilt point to a depth of at least 8 inches. No soil work or other activity shall be permitted within the Tree and Plant Protection Area when the volumetric soil moisture is above field capacity. The permanent wilt point and field capacity for each type of soil texture shall be defined as follows (numbers indicate percentage volumetric soil moisture).

Soil type	Permanent wilt point v/v	Field capacity v/v
Sand, Loamy sand, Sandy loam	5 - 8%	12 - 18%
Loam, Sandy clay, Sandy clay loam	14 - 25%	27 - 36%
Clay loam, Silt loam	11 - 22%	31 - 36%
Silty clay, Silty clay loam	22 - 27%	38 - 41%

1. Volumetric soil moisture shall be measured with a digital, electric conductivity meter. The meter shall be the Digital Soil Moisture Meter, DSMM500 by General Specialty Tools and Instruments, or approved equivalent meter.

B. The Contractor shall confirm the soil moisture levels with a moisture meter. If the moisture is too high, suspend operations until the soil moisture drains to below field capacity.

3.6 ROOT PRUNING:

A. Prior to any excavating into the existing soil grade within 25 feet of the limit of the Tree and Plant Protection Area or trees to remain, root prune all existing trees to a depth of 24 inches below existing grade in alignments following the edges of the Tree and Plant Protection Area or as directed by the Owner's Representative. Root pruning shall be in conformance with ANSI A300 (part 8) latest edition.

1. Using a rock saw, chain trencher or similar trenching device, make a vertical cut within 2 feet of the limit of grading.
2. After completion of the cut, make clean cuts with a lopper, saw or pruner to remove all torn root ends on the tree side of the excavation, and backfill the trench immediately with existing soil, filling all voids.

3.7 INSTALLATION OF GEOGRIDS, FILTER FABRIC, MATTING, WOOD CHIPS AND OR MULCH

A. Install Geogrids, Filter Fabric, matting, Wood Chips and or Mulch in areas and depths shown on the plans and details or as directed by the Owner's representative. In general it is the intent of this specification to provide the following levels of protection:

1. All areas within the Tree and Plant Protection area provide a minimum of 5 inches of Wood Chips or Mulch.
2. Areas where foot traffic or storage of lightweight materials is anticipated to be unavoidable provide a layer of Filter Fabric under the 5 inches of Wood Chips or Mulch.
3. Areas where occasional light vehicle traffic is anticipated to be unavoidable provide a layer of Geogrids under 8 inches of Wood Chips or Mulch.
4. Areas where heavy vehicle traffic is unavoidable provide a layer of Geogrids under 8 - 12 inches of Wood Chips or Mulch and a layer of matting over the Wood Chips or Mulch.

B. The Owner's Representative shall approve the appropriate level of protection.

C. In the above requirements, light vehicle is defined as a track skid steer with a ground pressure of 4 psi or lighter. A heavy vehicle is any vehicle with a tire or track pressure of greater than 4 psi. Lightweight materials are any packaged materials that can be physically moved by hand into the location. Bulk materials such as soil, or aggregate shall never be stored within the Tree and Plant Protection Area.

3.8 PROTECTION:

A. Protect the Tree and Plant Protection Area at all times from compaction of the soil; damage of any kind to trunks, bark, branches, leaves and roots of all plants; and contamination of the soil, bark or leaves with construction materials, debris, silt, fuels, oils, and any chemicals substance. Notify the Owner's Representative of any spills, compaction or damage and take corrective action immediately using methods approved by the Owner's Representative.

3.9 GENERAL REQUIREMENTS AND LIMITATIONS FOR OPERATIONS WITHIN THE TREE AND PLANT PROTECTION AREA:

A. The Contractor shall not engage in any construction activity within the Tree and Plant Protection Area without the approval of the Owner's Representative including: operating, moving or storing equipment; storing supplies or materials; locating temporary facilities including trailers or portable toilets and shall not permit employees to traverse the area to access adjacent areas of the project or use the area for lunch or any other work breaks. Permitted activity, if any, within the Tree and Plant Protection Area maybe indicated on the drawings along with any required remedial activity as listed below.

B. In the event that construction activity is unavoidable within the Tree and Plant Protection Area, notify the Owner's Representative and submit a detailed written plan of action for approval. The plan shall include: a statement detailing the reason for the activity including why other areas are not suited; a description of the proposed activity; the time period for the activity, and a list of remedial actions that will reduce the impact on the Tree and Plant Protection Area from the activity. Remedial actions shall include but shall not be limited to the following:

1. In general, demolition and excavation within the drip line of trees and shrubs shall proceed with extreme care either by the use of hand tools, directional boring and or Air Knife excavation where indicated or with other low impact equipment that will not cause damage to the tree, roots or soil.
2. When encountered, exposed roots, 1 inches and larger in diameter shall be worked around in a manner that does not break the outer layer of the root surface (bark). These roots shall be covered in Wood Chips and shall be maintained above permanent wilt point at all times. Roots one inch and larger in diameter shall not be cut with out the approval of the owners representative. Excavation shall be tunneled under these roots without cutting them. In the areas where roots are encountered, work shall be performed and scheduled to close excavations as quickly as possible over exposed roots.
3. Tree branches that interfere with the construction may be tied back or pruned to clear only to the point necessary to complete the work. Other branches shall only be removed when specifically indicated by the Owner's Representative. Tying back or trimming of all branches and the cutting of roots shall be in accordance with accepted arboricultural practices (ANSI A300, part 8) and be performed under supervision of the arborist.
4. Matting: Install temporary matting over the Wood Chips or Mulch to the extent indicated. Do not permit foot traffic, scaffolding or the storage of materials within the Tree and Plant Protection Area to occur off of the temporary matting.
5. Trunk Protection: Protect the trunk of each tree to remain by covering it with a ring of 8 foot long 2 inch x 6 - inch planks loosely banded onto the tree with 3 steel bands. Staple the bands to the planks as necessary to hold them securely in place. Trunk protection must by kept in place no longer than 12 months. If construction requires work near a particular tree to continue longer than 12 months, the steel bands shall be inspected every six months and loosened if they are found to have become tight.
6. Air Excavation Tool: If excavation for footings or utilities is required within the Tree and Plant Protection Area, air excavation tool techniques shall be used where practical or as designed on the drawings.
   a. Remove the Wood Chips from an area approximately 18 inches beyond the limits of the hole or trench to be excavated. Cover the Wood Chips for a distance of not less than 15 feet around the limit of the excavation area with Filter Fabric or plastic sheeting to protect the Wood Chips from silt. Mound the Wood Chips so that the plastic slopes towards the excavation.
   b. Using a sprinkler or soaker hose, apply water slowly to the area of the excavation for a period of at least 4 hours, approximately 12 hours prior to the work so that the ground water level is at or near field capacity at the beginning of the work. For excavations that go beyond the damp soil, rewet the soil as necessary to keep soil moisture near field capacity.
   c. Using an air excavation tool specifically designed and manufactured for the intended purpose, and at pressures recommended by the manufacturer of the equipment, fracture the existing soil to the shape and the depths required. Work at rates and using techniques that do not harm tree roots. Air pressure shall be a maximum of 90-100 psi.
      1.) The air excavation tool shall be "Air-Spade" as manufactured by Concept Engineering Group, Inc., Verona, PA (412) 826-8800, or Air Knife as manufactured by Easy Use Air Tools, Inc. Allison Park, Pa (866) 328-5723 or approved equal.
   d. Using a commercial, high-powered vacuum truck if required, remove the soil from the excavation produced by the Air Knife excavation. The vacuum truck should generally operate simultaneously with the hose operator, such that the soil produced is picked up from the excavation hole, and the exposed roots can be observed and not damaged by the ongoing operation. Do not drive the vacuum truck into the Tree and Plant Protection Area unless the area is protected from compaction as approved in advance by the Owner's Representative.
   e. Remove all excavated soil and excavated Wood Chips, and contaminated soil at the end of the excavation.
   f. Schedule the work so that foundations or utility work is completed immediately after the excavation. Do not let the roots dry out. Mist the roots several times during the day. If the excavated area must remain open over night, mist the roots and cover the excavation with black plastic.
   g. Dispose of all soil in a manner that meets local laws and regulations.
   h. Restore soil within the trench as soon as the work is completed. Utilize soil of similar texture to the removed soil and lightly compact with hand tools. Leave soil mounded over the trench to a height of approximately 10% of the trench depth to account for settlement.
   i. Restore any Geogrids, Filter Fabric, Wood Chips or Mulch and or matting that was previously required for the area.

3.10 TREE REMOVAL:

A. Remove all trees indicated by the drawings and specifications, as requiring removal, in a manner that will not damage adjacent trees or structures or compacts the soil.

B. Remove trees that are adjacent to trees or structures to remain, in sections, to limit the opportunity of damage to adjacent crowns, trunks, ground plane elements and structures.

C. Do not drop trees with a single cut unless the tree will fall in an area not included in the Tree and Plant Protection Area. No tree to be removed within 50 feet of the Tree and Plant Protection Area shall be pushed over or up-rooted using a piece of grading equipment.

D. Protect adjacent paving, soil, trees, shrubs, ground cover plantings and understory plants to remain from damage during all tree removal operations, and from construction operations. Protection shall include the root system, trunk, limbs, and crown from breakage or scarring, and the soil from compaction.

E. Remove stumps and immediate root plate from existing trees to be removed. Grind trunk bases and large buttress roots to a depth of the largest buttress root or at least 18 inches below the top most roots which ever is less and over the area of three times the diameter of the trunk (DBH).

1. For trees where the stump will fall under new paved areas, grind roots to a total depth of 18 inches below the existing grade. If the sides of the stump hole still have greater than approximately 20% wood visible, continue grinding operation deeper and or wider until the resulting hole has less than 20% wood. Remove all wood chips produced by the grinding operation and back fill in 8 inch layers with controlled fill of a quality acceptable to the site engineer for fill material under structures, compacted to 95% of the maximum dry density standard proctor. The Owner's Representative shall approve each hole at the end of the grinding operation.
2. In areas where the tree location is to be a planting bed or lawn, remove all woodchips and backfill stump holes with planting soil as defined in Specification Section Planting Soil, in maximum of 12 inch layers and compact to 80 - 85% of the maximum dry density standard proctor.

3.11 PRUNING:

A. Within six months of the estimated date of substantial completion, prune all dead or hazardous branches larger than 2 inch in diameter from all trees to remain.

B. Implement all pruning recommendations found in the arborist report.

C. Prune any low, hanging branches and vines from existing trees and shrubs that overhang walks, streets and drives, or parking areas as follows:

1. Walks - within 8 feet vertically of the proposed walk elevation.
2. Parking areas - within 12 feet vertically of the proposed parking surface elevation.
3. Streets and drives - within 14 feet vertically of the proposed driving surface elevation.

D. All pruning shall be done in accordance with ANSI A300 (part 1), ISA BMP Tree Pruning (latest edition, and the "Structural Pruning: A Guide for the Green Industry", Edward Gilman, Brian Kempf, Nelda Matheny and Jim Clark, 2013 Urban Tree Foundation, Visalia CA.

E. Perform other pruning task as indicated on the drawings or requested by the Owner's Representative.

F. Where tree specific disease vectors require, sterilize all pruning tools between the work in individual trees.

3.13 WATERING

A. The Contractor shall be fully responsible to ensure that adequate water is provided to all plants to be preserved during the entire construction period. Adequate water is defined to be maintaining soil moisture above the permanent wilt point to a depth of 8 inches or greater.

B. The Contractor shall adjust the automatic irrigation system, if available, and apply additional water, using hoses or water tanks as required.

C. Periodically test the moisture content in the soil within the root zone to determine the water content.

3.14 WEED REMOVAL

A. During the construction period, control any plants that seed in and around the fenced Tree and Plant Protection area at least three times a year.

1. All plants that are not shown on the planting plan or on the Tree and Plant Protection Plan to remain shall be considered as weeds.

B. At the end of the construction period provide one final weeding of the Tree and Plant Protection Area.

3.15 INSECT AND DISEASE CONTROLLER

A. Monitor all plants to remain for disease and insect infestations during the entire construction period. Provide all disease and insect control required to keep the plants in a healthy state using the principles of Integrated Plant Management (IPM). All pesticides shall be applied by a certified pesticide applicator.

3.16 CLEAN-UP

A. During tree and plant protection work, keep the site free of trash, pavements reasonably clean and work area in an orderly condition at the end of each day. Remove trash and debris in containers from the site no less than once a week.

1. Immediately clean up any spilled or tracked soil, fuel, oil, trash or debris deposited by the Contractor from all surfaces within the project or on public right of ways and neighboring property.

B. Once tree protection work is complete, wash all soil from pavements and other structures. Ensure that Mulch is confined to planting beds.

C. Make all repairs to grades, ruts, and damage to the work or other work at the site.

D. Remove and dispose of all excess Mulch, Wood Chips, packaging, and other material brought to the site by the Contractor.

3.17 Removal of fencing and other Tree and plant protection

A. At the end of the construction period or when requested by the Owner's Representative remove all fencing, Wood Chips or Mulch, Geogrids and Filter Fabric, trunk protection and or any other Tree and Plant Protection material.

3.18 DAMAGE OR LOSS TO EXISTING Plants TO REMAIN

B. Any trees or plants designated to remain and which are damaged by the Contractor shall be replaced in kind by the Contractor at their own expense. Trees shall be replaced with a tree of similar species and of equal size or 6 inch caliper which ever is less. Shrubs shall be replaced with a plant of similar species and equal size or the largest size plants reasonably available which ever is less. Where replacement plants are to be less than the size of the plant that is damaged, the Owner's Representative shall approve the size and quality of the replacement plant.

1. All trees and plants shall be installed per the requirements of Specification Section Planting.

C. Plants that are damaged shall be considered as requiring replacement or appraisal in the event that the damage affects more than 25 % of the crown, 25% of the trunk circumference, or root protection area, or the tree is damaged in such a manner that the tree could develop into a potential hazard. Trees and shrubs to be replaced shall be removed by the Contractor at his own expense.

1. The Owner's Representative may engage an independent arborist to assess any tree or plant that appears to have been damaged to determine their health or condition.

C. Any tree that is determined to be dead, damaged or potentially hazardous by the Owner's arborist and upon the request of the Owner's Representative shall be immediately removed by the Contractor at no additional expense to the owner. Tree removal shall include all clean up of all wood parts and grinding of the stump to a depth sufficient to plant the replacement tree or plant, removal of all chips from the stump site and filling the resulting hole with topsoil.

D. Any remedial work on damaged existing plants recommended by the consulting arborist shall be completed by the Contractor at no cost to the owner. Remedial work shall include but is not limited to: soil compaction remediation and vertical mulching, pruning and or cabling, insect and disease control including injections, compensatory watering, additional mulching, and could include application tree growth regulators (TGR).

E. Remedial work may extend up to two years following the completion of construction to allow for any requirements of multiple applications or the need to undertake applications at required seasons of the year.

END OF SECTION 015639

SECTION 32 9300

PLANTING

PART 1 GENERAL

1.1 SUMMARY

A. The scope of work includes all labor, materials, appliances, tools, equipment, facilities, transportation and services necessary for, and incidental to performing all operations in connection with furnishing, delivery, and installation of plant (also known as "landscaping") complete as shown on the drawings and as specified herein.

B. The scope of work in this section includes, but is not limited to, the following:

1. Locate, purchase, deliver and install all specified plants.
2. Water all specified plants.
3. Mulch, fertilize, stake, and prune all specified plants.
4. Maintenance of all specified plants until the beginning of the warranty period.
5. Plant warranty.
6. Clean up and disposal of all excess and surplus material.
7. Maintenance of all specified plants during the warranty period.

1.2 CONTRACT DOCUMENTS

A. Shall consist of specifications and general conditions and the construction drawings. The intent of these documents is to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as one. Whatever is called for by any parts shall be as binding as if called for in all parts.

1.3 RELATED DOCUMENTS AND REFERENCES

A. Related Documents:

1. Drawings and general provisions of contract including general and supplementary conditions and Division I specifications apply to work of this section
2. Related Specification Sections
   a. Section - Tree Protection and Plant Protection

B. References: The following specifications and standards of the organizations and documents listed in this paragraph form a part of the specification to the extent required by the references thereto. In the event that the requirements of the following referenced standards and specification conflict with this specification section the requirements of this specification shall prevail. In the event that the requirements of any of the following referenced standards and specifications conflict with each other the more stringent requirement shall prevail or as determined by the Owners Representative.

1. State of California, Department of Food and Agriculture, Regulations for Nursery Inspections, Rules and Grading.
2. ANSI Z60.1 American Standard for Nursery Stock, most current edition.
3. ANSI A 300 - Standard Practices for Tree, Shrub and other Woody Plant Maintenance, most current edition and parts.
4. Florida Grades and Standards for Nursery Stock, current edition (Florida Department of Agriculture, Tallahassee FL).
5. Interpretation of plant names and descriptions shall reference the following documents. Where the names or plant descriptions disagree between the several documents, the most current document shall prevail.
   a. USDA - The Germplasm Resources Information Network (GRIN) http://www.ars-grin.gov/npgs/searchgrin.html
   b. Manual of Woody Landscape Plants; Michael Dirr; Stipes Publishing, Champaign, Illinois; Most Current Edition.
   c. The New Sunset Western Garden Book, Oxmoor House, most current edition.
6. Pruning practices shall conform to recommendations "Structural Pruning: A Guide For The Green Industry" most current edition; published by Urban Tree Foundation, Visalia, California.
7. Glossary of Arboricultural Terms, International Society of Arboriculture, Champaign IL, most current edition.

1.4 VERIFICATION

A. All scaled dimensions on the drawings are approximate. Before proceeding with any work, the Contractor shall carefully check and verify all dimensions and quantities, and shall immediately inform the Owner's Representative of any discrepancies between the information on the drawings and the actual conditions, refraining from doing any work in said areas until given approval to do so by the Owner's Representative.

B. In the case of a discrepancy in the plant quantities between the plan drawings and the plant call outs, list or plant schedule, the number of plants or square footage of the planting bed actually drawn on the plan drawings shall be deemed correct and prevail.

1.5 PERMITS AND REGULATIONS

A. The Contractor shall obtain and pay for all permits related to this section of the work unless previously excluded under provision of the contract or general conditions. The Contractor shall comply with all laws and ordinances bearing on the operation or conduct of the work as drawn and specified. If the Contractor observes that a conflict exists between permit requirements and the work outlined in the contract documents, the Contractor shall promptly notify the Owner's Representative in writing including a description of any necessary changes and changes to the contract price resulting from changes in the work.

B. Wherever references are made to standards or codes in accordance with which work is to be performed or tested, the edition or revision of the standards and codes current on the effective date of this contract shall apply, unless otherwise expressly set forth.

C. In case of conflict among any referenced standards or codes or between any referenced standards and codes and the specifications, the more restrictive standard shall apply or Owner's Representative shall determine which shall govern.

1.6 PROTECTION OF WORK, PROPERTY AND PERSON

A. The Contractor shall adequately protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his/her actions.

1.7 CHANGES IN THE WORK

A. The Owner's Representative may order changes in the work, and the contract sum should be adjusted accordingly. All such orders and adjustments plus claims by the Contractor for extra compensation must be made and approved in writing before executing the work involved.

B. All changes in the work, notifications and contractor's request for information (RFI) shall conform to the contract general condition requirements.

1.8 CORRECTION OF WORK

A. The Contractor, at their own cost, shall re-execute any work that fails to conform to the requirements of the contract and shall remedy defects due to faulty materials or workmanship upon written notice from the Owner's Representative, at the soonest as possible time that can be coordinated with other work and seasonal weather demands.

1.9 DEFINITIONS

All terms in this specification shall be as defined in the "Glossary of Arboricultural Terms" or as modified below.

A. Boxed trees: A container root ball package made of wood in the shape of a four-sided box.

B. Container plant: Plants that are grown in and/or are currently in a container including boxed trees.

C. Defective plant: Any plant that fails to meet the plant quality requirement of this specification.

D. End of Warranty Final Acceptance: The date when the Owner's Representative accepts that the plants and work in this section meet all the requirements of the warranty. It is intended that the materials and workmanship warranty for Planting, Planting Soil, and Irrigation work run concurrent with each other.

E. Field grown trees (B&B): Trees growing in field soil for at least 12 months prior to harvest.

F. Healthy: Plants that are growing in a condition that expresses leaf size, crown density, color; and with annual growth rates typical of the species and cultivar's horticultural description, adjusted for the planting site soil, drainage and weather conditions.

G. Kinked root: A root within the root package that bends more than 90 degrees.

H. Maintenance: Actions that preserve the health of plants after installation and as defined in this specification.

I. Maintenance period: The time period, as defined in this specification, which the Contractor is to provide maintenance.

J. Normal: the prevailing protocol of industry standard(s).

K. Owner's Representative: The person appointed by the Owner to represent their interest in the review and approval of the work and to serve as the contracting authority with the Contractor. The Owner's Representative or Owner may appoint other persons to review and approve any aspects of the work, such as the landscape architect who prepared the plans.

L. Reasonable and reasonably: When used in this specification relative to plant quality, it is intended to mean that the conditions cited will not affect the establishment or long term stability, health or growth of the plant. This specification recognizes that it is not possible to produce plants free of all defects, but that some accepted industry protocols and standards result in plants unacceptable to this project.

When reasonable or reasonably is used in relation to other issues such as weeds, diseased, insects, it shall mean at levels low enough that no treatment would be required when applying recognized Integrated Plant Management practices.

This specification recognizes that some decisions cannot be totally based on measured findings and that professional judgment is required. In cases of differing opinion, the Owner's Representative's expert shall determine when conditions are judged as reasonable.

M. Root ball: The mass of roots including any soil or substrate that is shipped with the tree within the root ball package.

N. Root ball package. The material that surrounds the root ball during shipping. The root package may include the material in which the plant was grown, or new packaging placed around the root ball for shipping.

O. Root collar (root crown, root flare, trunk flare, flare): The region at the base of the trunk where the majority of the structural roots join the plant stem, usually at or near ground level.

P. Shrub: Woody plants with mature height approximately less than 15 feet.

Q. Spade harvested and transplanted: Field grown trees that are mechanically harvested and immediately transplanted to the final growing site without being removed from the digging machine.

R. Stem: The trunk of the tree.

S. Substantial Completion Acceptance: The date at the end of the Planting, Planting Soil, and Irrigation installation where the Owner's Representative accepts that all work in these sections is complete and the Warranty period has begun. This date may be different than the date of substantial completion for the other sections of the project.

T. Stem girdling root: Any root more than ¼ inch diameter currently touching the trunk, or with the potential to touch the trunk, above the root collar approximately tangent to the trunk circumference or circling the trunk. Roots shall be considered as Stem Girdling that have, or are likely to have in the future, root to trunk bark contact.

U. Structural root: One of the largest roots emerging from the root collar.

V. Tree: Single and multi-stemmed plants with mature height approximately greater than 15 feet.

1.10 SUBMITTALS

A. See contract general conditions for policy and procedure related to submittals.

B. Submit all product submittals 4 weeks prior to installation of plantings.

C. Product data: Submit manufacturer product data and literature describing all products required by this section to the Owner's Representative for approval. Provide submittal four weeks before the installation of plants.

D. Plant growers' certificates: Submit plant growers' certificates for all plants indicating that each meets the requirements of the specification, including the requirements of tree quality, to the Owner's Representative for approval. Provide submittal four weeks before the installation of plants.

E. Samples: Submit samples of each product and material where required by the specification to the Owner's Representative for approval. Label samples to indicate product, characteristics, and locations in the work. Samples will be reviewed for appearance only. Compliance with all other requirements is the exclusive responsibility of the Contractor.

F. Plant sources: Submit sources of all plants as required by Article - "Selection of Plants" to the Owner's Representative for approval.

G. Close out submittals: Submit to the Owner's Representative for approval.

1. Plant maintenance data and requirements.

H. Warranty period site visit record: If there is no maintenance during the warranty period, after each site visit during the warranty period, by the Contractor, as required by this specification, submit a written record of the visit, including any problems, potential problems, and any recommended corrective action to the Owner's Representative for approval.

1.11 OBSERVATION OF THE WORK

A. The Owner's Representative may observe the work at any time. They may remove samples of materials for conformity to specifications. Rejected materials shall be immediately removed from the site and replaced at the Contractor's expense. The cost of testing materials not meeting specifications shall be paid by the Contractor.

B. The Owner's Representative shall be informed of the progress of the work so the work may be observed at the following key

1.15 SELECTION AND OBSERVATION OF PLANTS

A. The Owner's Representative may review all plants subject to approval of size, health, quality, character, etc. Review or approval of any plant during the process of selection, delivery, installation and establishment period shall not prevent that plant from later rejection in the event that the plant quality changes or previously existing defects become apparent that were not observed.

B. Plant Selection: The Owner's Representative reserves the right to select and observe all plants at the nursery prior to delivery and to reject plants that do not meet specifications as set forth in this specification. If a particular defect or substandard element can be corrected at the nursery, as determined by the Owner's Representative, the agreed upon remedy may be applied by the nursery or the Contractor provided that the correction allows the plant to meet the requirements set forth in this specification. Any work to correct plant defects shall be at the contractor's expense.

1. The Owner's Representative may make invasive observation of the plant's root system in the area of the root collar and the top of the root ball in general in order to determine that the plant meets the quality requirements for depth of the root collar and presence of roots above the root collar. Such observations will not harm the plant.
2. Corrections are to be undertaken at the nursery prior to shipping.

C. The Contractor shall bear all cost related to plant corrections.

D. All plants that are rejected shall be immediately removed from the site and acceptable replacement plants provided at no cost to the Owner.

E. Submit to the Owner's Representative, for approval, plant sources including the names and locations of nurseries proposed as sources of acceptable plants, and a list of the plants they will provide. The plant list shall include the botanical and common name and the size at the time of selection. Observe all nursery materials to determine that the materials meet the requirements of this section.

F. The Contractor shall require the grower or re-wholesale supplier to permit the Owner's Representative to observe the root system of all plants at the nursery or job site prior to planting including random removal of soil or substrate around the base of the plant. Observation may be as frequent and as extensive as needed to verify that the plants meet the requirements of the specifications and conform to requirements.

G. Where requested by the Owner's Representative, submit photographs of plants or representative samples of plants. Photographs shall be legible and clearly depict the plant specimen. Each submitted image shall contain a height reference, such as a measuring stick. The approval of plants by the Owner's Representative via photograph does not preclude the Owner's Representative's right to reject material while on site.

1.16 PLANT SUBSTITUTIONS FOR PLANTS NOT AVAILABLE

A. Submit all requests for substitutions of plant species, or size to the Owner's Representative, for approval, prior to purchasing the proposed substitution. Request for substitution shall be accompanied with a list of nurseries contacted in the search for the required plant and a record of other attempts to locate the required material. Requests shall also include sources of plants found that may be of a smaller or larger size, or a different shape or habit than specified, or plants of the same genus and species but different cultivar origin, or which may otherwise not meet the requirements of the specifications, but which may be available for substitution.

1.17 SITE CONDITIONS

A. It is the responsibility of the Contractor to be aware of all surface and sub-surface conditions, and to notify the Owner's Representative, in writing, of any circumstances that would negatively impact the health of plantings. Do not proceed with work until unsatisfactory conditions have been corrected.

1. Should subsurface drainage or soil conditions be encountered which would be detrimental to growth or survival of plant material, the Contractor shall notify the Owner's Representative in writing, stating the conditions and submit a proposal covering cost of corrections. If the Contractor fails to notify the Owner's Representative of such conditions, he/she shall remain responsible for plant material under the warranty clause of the specifications.

B. It is the responsibility of the Contractor to be familiar with the local growing conditions, and if any specified plants will be in conflict with these conditions. Report any potential conflicts, in writing, to the Owner's Representative.

C. This specification requires that all Planting Soil and Irrigation (if applicable) work be completed and accepted prior to the installation of any plants.

1. Planting operations shall not begin until such time that the irrigation system is completely operational for the area(s) to be planted, and the irrigation system for that area has been preliminarily observed and approved by the Owner's Representative.

D. Actual planting shall be performed during those periods when weather and soil conditions are suitable in accordance with locally accepted horticultural practices.

1. Do not install plants into saturated or frozen soils. Do not install plants during inclement weather, such as rain or snow or during extremely hot, cold or windy conditions.

1.18 PLANTING AROUND UTILITIES

A. Contractor shall carefully examine the civil, record, and survey drawings to become familiar with the existing underground conditions before digging.

B. Determine location of underground utilities and perform work in a manner that will avoid possible damage. Hand excavate, as required. Maintain grade stakes set by others until parties concerned mutually agree upon removal.

C. Notification of Local Utility Locator Service, Sunshine 811, is required for all planting areas: The Contractor is responsible for knowing the location and avoiding utilities that are not covered by Sunshine 811.

PART 2 PRODUCTS

2.1 PLANTS: GENERAL

A. Standards and measurement: Provide plants of quantity, size, genus, species, and variety or cultivars as shown and scheduled in contract documents.

1. All plants including the root ball dimensions or container size to trunk caliper ratio shall conform to ANSI Z60.1 "American Standard for Nursery Stock' latest edition, unless modified by provisions in this specification. When there is a conflict between this specification and ANSI Z60.1, this specification section shall be considered correct.
2. Plants larger than specified may be used if acceptable to the Owner's Representative. Use of such plants shall not increase the contract price. If larger plants are accepted the root ball size shall be in accordance with ANSI Z-60.1. Larger plants may not be acceptable if the resulting root ball cannot be fit into the required planting space.
3. If a range of size is given, no plant shall be less than the minimum size and not less than 50 percent of the plants shall be as large as the maximum size specified. The measurements specified are the minimum and maximum size acceptable and are the measurements after pruning, where pruning is required.

B. Proper Identification: All trees shall be true to name as ordered or shown on planting plans.

C. Compliance: All trees shall comply with federal and state laws and regulations requiring observation for plant disease, pests, and weeds. Observation certificates required by law shall accompany each shipment of plants.

D. Plant Quality:

1. **General**: Provide healthy stock, grown in a nursery and reasonably free of die-back, disease, insects, eggs, bores, and larvae. At the time of planting all plants shall have a root system, stem, and branch form that will not restrict normal growth, stability and health for the expected life of the plant
2. **Plant quality above the soil line:**
   a. Plants shall be healthy with the color, shape, size and distribution of trunk, stems, branches, buds and leaves normal to the plant type specified. Tree quality above the soil line shall comply with the Florida Grades and Standards tree grade Florida Fancy or Florida #1 and the following:
      1.) Crown: The form and density of the crown shall be typical for a young specimen of the species or cultivar pruned to a central and dominant leader.
         a.) Crown specifications do not apply to plants that have been specifically trained in the nursery as topiary, espalier, multi-stem, clump, or unique selections such as contorted or weeping cultivars.
      2.) Leaves: The size, color, and appearance of leaves shall be typical for the time of year and stage of growth of the species or cultivar. Trees shall not show signs of prolonged moisture stress or over watering as indicated by wilted, shriveled, or dead leaves.
      3.) Branches: Shoot growth (length and diameter) throughout the crown should be appropriate for the age and size of the species or cultivar. Trees shall not have dead, diseased, broken, distorted, or otherwise injured branches.
         a.) Main branches shall be distributed along the central leader not clustered together. They shall form a balanced crown appropriate for the cultivar/species.
         b.) Branch diameter shall be no larger than two-thirds (one-half is preferred) the diameter of the central leader measured 1 inch above the branch union.
         c.) The attachment of the largest branches (scaffold branches) shall be free of included bark.
      4.) Trunk: The tree trunk shall be relatively straight, vertical, and free of wounds that penetrate to the wood (properly made pruning cuts, closed or not, are acceptable and are not considered wounds), sunburned areas, conks (fungal fruiting bodies), wood cracks, sap leakage, signs of boring insects, galls, cankers, girdling ties, or lesions (mechanical injury).
3. Trees shall have one central leader. If the leader was headed, a new leader (with a live terminal bud) at least one-half the diameter of the pruning cut shall be present.
   1.) All trees are assumed to have one central leader trees unless a different form is specified in the plant list or drawings.
4. All graft unions, where applicable, shall be completely closed without visible sign of graft rejection. All grafts shall be visible above the soil line.
5. Trunk caliper and taper shall be sufficient so that the lower five feet of the trunk remains vertical without a stake. Auxiliary stake may be used to maintain a straight leader in the upper half of the tree.
3. **Plant quality at or below the soil line:**
   a. Plant roots shall be normal to the plant type specified. Root observations shall take place without impacting tree health. Root quality at or below the soil line shall comply with the project Root Acceptance details and the following:
      1.) The roots shall be reasonably free of scrapes, broken or split wood.
      2.) The root system shall be reasonably free of injury from biotic (e.g., insects and pathogens) and abiotic (e.g., herbicide toxicity and salt injury) agents. Wounds resulting from root pruning used to produce a high quality root system are not considered injuries.
      3.) A minimum of three structural roots reasonably distributed around the trunk (not clustered on one side) shall be found in each plant. Root distribution shall be uniform throughout the root ball, and growth shall be appropriate for the species.
         a.) Plants with structural roots on only one side of the trunk (J roots) shall be rejected.
      4.) The root collar shall be within the upper 2 inches of the substrate/soil. Two structural roots shall reach the side of the root ball near the top surface of the root ball. The grower may request a modification to this requirement for species with roots that rapidly descend, provided that the grower removes all stem girdling roots above the structural roots across the top of the root ball.
      5.) The root system shall be reasonably free of stem girdling roots over the root collar or kinked roots from nursery production practices.
      6.) At time of observations and delivery, the root ball shall be moist throughout. Roots shall not show signs of excess soil moisture conditions as indicated by stunted, discolored, distorted, or dead roots.

E. Submittals: Submit for approval the required plant quality certifications from the grower where plants are to be purchased, for each plant type. The certification must state that each plant meets all the above plant quality requirements.

1. The grower's certification of plant quality does not prohibit the Owner's Representative from observing any plant or rejecting the plant if it is found to not meet the specification requirements.

2.2 ROOT BALL PACKAGE OPTIONS: The following root ball packages are permitted. Specific root ball packages shall be required where indicated on the plant list or in this specification. Any type of root ball packages that is not specifically defined in this specification shall not be permitted.

A. BALLED AND BURLAPPED PLANTS

2. All Balled and Burlapped Plants shall be field grown, and the root ball packaged in a burlap and twine and/or burlap and wire basket package.
3. Plants shall be harvested with the following modifications to standard nursery practices.
   a. Prior to digging any tree that fails to meet the requirement for maximum soil and roots above the root collar, carefully removed the soil from the top of the root ball of each plant, using hand tools, water or an air spade, to locate the root collar and attain the soil depth over the structural roots requirements. Remove all stem girdling roots above the root collar. Care must be exercised not to damage the surface of the root collar and the top of the structural roots.
   b. Trees shall be dug for a minimum of 4 weeks and a maximum of 52 weeks prior to shipping. Trees dug 4 to 52 weeks prior to shipping are defined as hardened-off. Digging is defined as cutting all roots and lifting the tree out of the ground and either moving it to a new location in the nursery or placing it back into the same hole. Tress that are stored out of the ground shall be placed in a holding area protected from extremes of wind and sun with the root ball protected by covering with mulch or straw and irrigated sufficiently to keep moisture in the root ball above wilt point and below saturation
   c. If wire baskets are used to support the root ball, a "low profile" basket shall be used. A low profile basket is defined as having the top of the highest loops on the basket no less than 4 inches and no greater than 8 inches below the shoulder of the root ball package. The basket shall be removed completely at time of planting.
      1.) At nurseries where sandy soils prevent the use of "low profile baskets", baskets that support the entire root ball, including the top, are allowable.
   d. Twine and burlap used for wrapping the root ball package shall be natural, biodegradable material. If the burlap decomposes after digging the tree then the root ball shall be re-wrapped prior to shipping if roots have not yet grown to keep root ball intact during shipping.

SPADE HARVESTED AND TRANSPLANTED

1. Spade Harvested and Transplanted Plants shall meet all the requirements for field grown trees. Root ball diameters shall be of similar size as the ANSI Z60.1 requirements for Balled and Burlapped plants.
2. Trees shall be harvested prior to leafing out (bud break) in the spring or during the fall planting period except for plants know to be considered as fall planting hazards. Plants that are fall planting hazards shall only be harvested prior to leafing out in the spring.
3. Trees shall be moved and planted within 48 hours of the initial harvesting and shall remain in the spade machine until planted.

C. CONTAINER (INCLUDING ABOVE-GROUND FABRIC CONTAINERS AND BOXES) PLANTS

4. Container plants may be permitted only when indicated on the drawing, in this specification, or approved by the Owner's Representative.
5. Provide plants shall be established and well rooted in removable containers.
6. Container class size shall conform to ANSI Z60.1 for container plants for each size and type of plant.

D. BARE ROOT PLANTS

7. Harvest bare root plants while the plant is dormant and a minimum of 4 weeks prior to leaf out (bud break).
8. The root spread dimensions of the harvested plants shall conform to ANSI Z60.1 for nursery grown bare root plants for each size and type of plant. Just prior to shipping to the job site, dip the root system into a slurry of hydrogel (cross linked polyacrylamide) and water mixed at a rate of 15 oz. of hydrogel in 25 gallons of water. Do not shake off the excess hydrogel. Place the root system in a pleated black plastic bag and tie the bag snugly around the trunk. Bundle and tie the upper branches together.
9. Keep the trees in a cool dark space for storage and delivery. If daytime outside temperatures exceeds 70 degrees F, utilize a refrigerated storage area with temperature between 35 and 50 degrees.
10. Where possible, plan time of planting to be before bud break. For trees to be planted after bud break, place the trees before bud break in an irrigated bed of pea gravel.
    a. The pea gravel bed shall be 18 inches deep over a sheet of plastic.
    b. Space trees to allow the unbundled branches to grow without shading each other.
    c. Once stored in pea gravel, allow the trees sufficient time for the new root system to flush and spring growth of leaves to fully develop before planting.
    d. Pea gravel stored trees may be kept for up to one growing season.
    e. Pea gravel stored trees shall be dipped, packaged and shipped similar to the requirements for freshly dug bare root trees above.

2.3 ANNUAL FLOWERING AND SEASONAL COLOR PLANTS

E. Container or flat-grown plants should be sized as noted in the planting plan. Plants shall be well-rooted and healthy.

2.4 PALMS

F. Except as modified below or where the requirements are not appropriate to the specification of palms, palms shall meet all the requirements of the plant quality section above.

G. Defronding, tying, and hedging:

5. In preparing palm trees for relocation, all dead fronds shall be removed.
6. All remaining fronds above horizontal shall be lifted up and tied together around the crown in an upright position. Do not tie too tightly, bind or injure the bud. Jute binder twine shall be used in tying up the fronds; wire will not be permitted. Fronds shall be untied immediately after planting.

C. Digging the root ball:

1. When digging out the root ball, no evacuation shall be done closer than 24 Inches to the trunk at ground level and the excavation shall extend below the major root system to a minimum depth of 3.5 feet. The bottom of the root ball shall be cut off square and perpendicular to the trunk below the major root system.

D. The Contractor shall not free-fall, drag, roll or abuse the tree or put a strain on the crown (bud area) at any time. A protective device shall be used around the trunk of the tree while lifting and relocating so as not to injure the bud, or scar or skin the trunk in any way.

2.5 PLANTING SOIL

Planting Soil shall contain a mixture of 1/3 sand, ⅓ topsoil and ⅓ peat humus. Sand shll be clean, salt-free and containing no extraneous matter. Topsoil shall be friable fertile soil with representative characteristics of area soils. it should be free of heacy silt, stone, excess lime, shell rock, plant roots, debris or other foreign matter. It shall not contain noxious plant growth (such as bermuda, torpedo or nut grass). it shall test between the ph range of 5.0 to 7.0 unless otherwise specified and contain no toxic residue or substances that would endanger plant growth. if topsoil is not available on site, it shall be imported from local sources with similar soil characteristics to that found at project site. obtain topsoil only from naturally, well-drained sites where topsoil occurs in a depth not less than 4". Peat humus shall be decomposed peat with no identifiable fibers or if available, muck may be substituted and shall be free from stones, excessive plant roots, debris or other foreign matter. muck shall not be overly saturated with water.

2.6 MULCH

A. Mulch shall be Melaleuca or Eucalyptus and shall cover all landscape bed areas in a 3" minimum layer. Do not let mulch pile up on root ball or around trunks of trees plants. Submit supplier's product specification data sheet and a one gallon sample for approval.

2.7 TREE STAKING AND GUYING MATERIAL

A. Tree guying to be flat woven polypropylene material, 3/4 inch wide, and 900 lb. break strength. Color to be Green. Product to be ArborTie manufactured by Deep Root Partners, L.P. or approved equal.

B. Stakes shall be lodge pole stakes free of knots and of diameters and lengths appropriate to the size of plant as required to adequately support the plant.

C. Below ground anchorage systems to be constructed of 2 x 2 dimensional untreated wood securing (using 3 inch long screws) horizontal portions to 4 feet long vertical stakes driven straight into the ground outside the root ball.

D. Submit manufacturer's product data for approval.

2.9 WATERING BAGS

E. Plastic tree watering bags holding a minimum of 15 gallons of water and with a slow drip hole(s) water release system, specifically designed to water establishing trees. Water should release over a several day period, not within a few hours

F. Watering bags shall be:

1. Treegator Irrigation Bags sized to the appropriate model for the requirements of the plant, manufactured by Spectrum Products, Inc., Youngsville, NC 27596.
2. Ooze Tube sized to the appropriate model for the requirements of the plant, manufactured by Engineered Water Solutions, Atlanta, GA.
3. Or approved equal.

C. Submit manufacturer's product data for approval.

PART 3 EXECUTION

3.1 DELIVERY, STORAGE AND HANDLING

A. Protect materials from deterioration during delivery and storage. Adequately protect plants from drying out, exposure of roots to sun, wind or extremes of heat and cold temperatures. If planting is delayed more than 24 hours after delivery, set plants in a location protected from sun and wind. Provide adequate water to the root ball package during the shipping and storage period.

1. All plant materials must be available for observation prior to planting.
2. Using a soil moisture meter, periodically check the soil moisture in the root balls of all plants to assure that the plants are being adequately watered. Volumetric soil moisture shall be maintained above wilting point and below field capacity for the root ball substrate or soil.

B. Do not deliver more plants to the site than there is space with adequate storage conditions. Provide a suitable remote staging area for plants and other supplies.

1. The Owner's Representative or Contractor shall approve the duration, method and location of storage of plants.

C. Provide protective covering over all plants during transporting.

3.2 ADVERSE WEATHER CONDITIONS

A. No planting shall take place during extremely hot, dry, windy or freezing weather.

3.3 COORDINATION WITH PROJECT WORK

A. The Contractor shall coordinate with all other work that may impact the completion of the work.

B. Prior to the start of work, prepare a detailed schedule of the work for coordination with other trades.

C. Coordinate the relocation of any irrigation lines, heads or the conduits of other utility lines that are in conflict with tree locations. Root balls shall not be altered to fit around lines. Notify the Owner's Representative of any conflicts encountered.

3.4 LAYOUT AND PLANTING SEQUENCE

A. Relative positions of all plants and trees are subject to approval of the Owner's Representative.

B. Notify the Owner's Representative, one (1) week prior to layout. Layout all individual tree and shrub locations. Place plants above surface at planting location or place a labeled stake at planting location. Layout bed lines with paint for the Owner's Representative's approval. Secure the Owner's Representative's acceptance before digging and start of planting work.

C. When applicable, plant trees before other plants are installed.

D. It is understood that plants are not precise objects and that minor adjustments in the layout will be required as the planting plan is constructed. These adjustments may not be apparent until some or all of the plants are installed. Make adjustments as required by the Owner's Representative including relocating previously installed plants.

3.5 SOIL PROTECTION DURING PLANT DELIVERY AND INSTALLATION

A. Protect soil from compaction during the delivery of plants to the planting locations, digging of planting holes and installing plants.

1. Where possible deliver and plant trees that require the use of heavy mechanized equipment prior to final soil preparation and tilling. Where possible, restrict the driving lanes to one area instead of driving over and compacting a large area of soil.
2. Till to a depth of 6 inches, all soil that has been driven over during the installation of plants.

3.6 SOIL MOISTURE

A. Volumetric soil moisture level, in both the planting soil and the root balls of all plants, prior to, during and after planting shall be above permanent wilting point and below field capacity for each type of soil texture within the following ranges.

Soil type	Permanent wilting point	Field capacity
Sand, Loamy sand, Sandy loam	5 - 8%	12-18%
Loam, Sandy clay, Sandy clay loam	14 - 25%	27-36%
Clay loam, Silt loam	11 - 22%	31 - 36%
Silty clay, Silty clay loam	22 - 27%	38 - 41%

1. Volumetric soil moisture shall be measured with a digital moisture meter. The meter shall be the Digital Soil Moisture Meter, DSMM500 by General Specialty Tools and Instruments, or approved equivalent.

B. The Contractor shall confirm the soil moisture levels with a moisture meter. If the moisture is too high, suspend planting operations until the soil moisture drains to below field capacity.

3.7 INSTALLATION OF PLANTS: GENERAL

C. Observe each plant after delivery and prior to installation for damage of other characteristics that may cause rejection of the plant. Notify the Owner's Representative of any condition observed.

D. No more plants shall be distributed about the planting bed area than can be planted and watered on the same day.

E. The root system of each plant, regardless of root ball package type, shall be observed by the Contractor, at the time of planting to confirm that the roots meet the requirements for plant root quality in Part 2 Products: Plants General: Plant Quality. The Contractor shall undertake at the time of planting, all modifications to the root system required by the Owner's Representative to meet these quality standards.

1. Modifications, at the time of planting, to meet the specifications for the depth of the root collar and removal of stem girdling roots and circling roots may make the plant unstable or stress the plant to the point that the Owner's Representative may choose to reject the plant rather than permitting the modification.
2. Any modifications required by the Owner's Representative to make the root system conform to the plant quality standards outlined in Part 2 Products: Plants General: Quality, or other requirements related to the permitted root ball package, shall not be considered as grounds to modify or void the plant warranty.
3. The resulting root ball may need additional staking and water after planting. The Owner's Representative may reject the plant if the root modification process makes the tree unstable or if the tree is not healthy at the end of the warranty period. Such plants shall still be covered under the warranty
4. The Contractor remains responsible to confirm that the grower has made all required root modifications noted during any nursery observations.

F. Container and Boxed Root Ball Shaving: The outer surfaces of ALL plants in containers and boxes, including the top, sides and bottom of the root ball shall be shaved to remove all circling, descending, and matted roots. Shaving shall be performed using saws, knives, sharp shovels or other suitable equipment that is capable of making clean cuts on the roots. Shaving shall remove a minimum of one inch of root mat or up to 2 inches as required to remove all root segments that are not growing reasonably radial to the trunk.

G. Exposed Stem Tissue after Modification: The required root ball modifications may result in stem tissue that has not formed trunk bark being exposed above the soil line. If such condition occurs, wrap the exposed portion of the stem in a protective wrapping with a white filter fabric. Secure the fabric with biodegradable masking tape. DO NOT USE string, twine, green nursery ties or any other material that may girdle the trunk if not removed.

H. Excavation of the Planting Space: Using hand tools or tracked mini-excavator, excavate the planting hole into the Planting Soil to the depth of the root ball measured after any root ball modification to correct root problems, and wide enough for working room around the root ball or to the size indicated on the drawing or as noted below.

1. For trees and shrubs planted in soil areas that are NOT tilled or otherwise modified to a depth of at least 12 inches over a distance of more than 10 feet radius from each tree, or 5 feet radius from each shrub, the soil around the root ball shall be loosened as defined below or as indicated on the drawings.
   a. The area of loosening shall be a minimum of 3 times the diameter of the root ball at the surface sloping to 2 times the diameter of the root ball at the depth of the root ball.
   b. Loosening is defined as digging into the soil and turning the soil to reduce the compaction. The soil does not have to be removed from the hole, just dug, lifted and turned. Lifting and turning may be accomplished with a tracked mini excavator, or hand shovels.
2. If an auger is used to dig the initial planting hole, the soil around the auger hole shall be loosened as defined above for trees and shrubs planted in soil areas that are NOT tilled or otherwise modified.
3. The measuring point for root ball depth shall be the average height of the outer edge of the root ball after any required root ball modification.
4. If motorized equipment is used to deliver plants to the planting area over exposed planting beds, or used to loosen the soil or dig the planting holes, all soil that has been driven over shall be tilled to a depth of 6 inches.

H. For trees to be planted in prepared Planting Soil that is deeper than the root ball depth, compact the soil under the root ball using a mechanical tamper to assure a firm bedding for the root ball. If there is more than 12 inches of planting soil under the root ball excavate and tamp the planting soil in lifts not to exceed 12 inches.

I. Set top outer edge of the root ball at the average elevation of the proposed finish. Set the plant plumb and upright in the center of the planting hole. The tree graft, if applicable, shall be visible above the grade. Do not place soil on top of the root ball.

J. The Owner's Representative may request that plants orientation be rotated when planted based on the form of the plant.

K. Backfill the space around the root ball with the same planting soil or existing soil that was excavated for the planting space. See Specification Section Planting Soil, for requirements to modify the soil within the planting bed.

L. Brace root ball by tamping Planting Soil around the lower portion of the root ball. Place additional Planting Soil around base and sides of ball in six-inch (6") lifts. Lightly tamp each lift using foot pressure or hand tools to settle backfill, support the tree and eliminate voids. DO NOT over compact the backfill or use mechanical or pneumatic tamping equipment. Over compaction shall be defined as greater than 85% of maximum dry density, standard proctor or greater than 250 psi as measured by a cone penetrometer when the volumetric soil moisture is lower than field capacity.

1. When the planting hole has been backfilled to three quarters of its depth, water shall be poured around the root ball and allowed to soak into the soil to settle the soil. Do not flood the planting space. If the soil is above field capacity, allow the soil to drain to below field capacity before finishing the planting. Air pockets shall be eliminated and backfill continued until the planting soil is brought to grade level.

M. Where indicated on the drawings, build a 4 inch high, level berm of Planting Soil around the outside of the root ball to retain water. Tamp the berm to reduce leaking and erosion of the saucer.

N. Thoroughly water the Planting Soil and root ball immediately after planting.

O. Remove all nursery plant identification tags and ribbons as per Owner's Representative instructions. The Owner's Representative's seals are to remain on plants until the end of the warranty period.

P. Remove corrugated cardboard trunk protection after planting.

Q. Follow additional requirements for the permitted root ball packages.

3.8 Permitted Root ball packages and Special planting requirements

A. The following are permitted root ball packages and special planting requirements that shall be followed during the planting process in addition to the above General planting requirements.

B. BALLED AND BURLAPPED PLANTS

1. After the root ball has been backfilled, remove all twine and burlap from the top of the root ball. Cut the burlap away; do not fold down onto the Planting Soil.
2. If the plant is shipped with a wire basket that does not meet the requirements of a "Low Rise" basket, remove the top 6 - 8 inches of the basket wires just before the final backfilling of the tree.
3. Earth root balls shall be kept intact except for any modifications required by the Owner's Representative to make root package comply with the requirement in Part 2 Products.

C. SPADE HARVESTED AND TRANSPLANTED PLANTS

1. After installing the tree, loosen the soil along the seam between the root ball and the surrounding soil out to a radius from the root ball edge equal to the diameter of the root ball to a depth of 8 - 10 inches by hand digging to disturb the soil interface.
2. Fill any gaps below this level with loose soil.

D. CONTAINER (INCLUDES BOXED AND ABOVE-GROUND FABRIC CONTAINERS) PLANTS

1. This specification assumes that most container plants have significant stem girdling and circling roots, and that the root collar is too low in the root ball.
2. Remove the container.
3. Perform root ball shaving as defined in Installation of Plants: General above.
4. Remove all roots and substrate above the root collar and the main structural roots according to root correction details so root system conforms to root observations detail.
5. Remove all substrate at the bottom of the root ball that does not contain roots.
6. Using a hose, power washer or air excavation device, wash out the substrate from around the trunk and top of the remaining root ball and find and remove all stem girdling roots within the root ball above the top of the structural roots.

E. BARE ROOT PLANTS

1. Dig the planting hole to the diameter of the spread of the roots to a depth in the center that maintains the root collar at the elevation of the surrounding finished grade and slightly deeper along the edges of the hole.
2. Spread all roots out radial to the trunk in the prepared hole making the hole wider where needed to accommodate long roots. Root tips shall be directed away from the trunk. Prune any broken roots removing the least amount of tissue possible.
3. Maintain the trunk plumb while backfilling soil around the roots.
4. Lightly tamp the soil around the roots to eliminate voids and reduce settlement.

3.9 GROUND COVER, PERENNIAL AND ANNUAL PLANTS

A. Assure that soil moisture is within the required levels prior to planting. Irrigation, if required, shall be applied at least 12 hours prior to planting to avoid planting in muddy soils.

B. Assure that soil grades in the beds are smooth and as shown on the plans.

C. Plants shall be planted in even, triangularly spaced rows, at the intervals called out for on the drawings, unless otherwise noted. The first row of Annual flower plants shall be 6 inches from the bed edge unless otherwise directed.

D. Dig planting holes sufficiently large enough to insert the root system without deforming the roots. Set the top of the root system at the grade of the soil.

E. Schedule the planting to occur prior to application of the mulch. If the bed is already mulched, pull the mulch from around the hole and plant into the soil. Do not plant the root system in the mulch. Pull mulch back so it is not on the root ball surface.

F. Press soil to bring the root system in contact with the soil.

G. Spread any excess soil around in the spaces between plants.

H. Apply mulch to the bed being sure not to cover the tops of the plants with or the tops of the root ball with mulch.

I. Water each planting area as soon as the planting is completed. Apply additional water to keep the soil moisture at the required levels. Do not over water.

3.10 PALM PLANTING

A. Palm trees shall be placed at grade making sure not to plant the tree any deeper in the ground than the palm trees originally stood.

B. The trees shall be placed with their vertical axis in a plumb position.

C. All backfill shall be native soil except in cases where planting in rock. Water-settle the back fill.

D. Do not cover root ball with mulch or topsoil.

E. Provide a watering berm at each palm. Berms shall extend a minimum of 18 inches out from the trunk all around and shall be a minimum of (6) inches high.

F. Remove twine which ties fronds together after placing palm in planting hole and securing it in the upright position.

3.11 STAKING AND GUYING

A. Do not stake or guy trees unless specifically required by the Contract Documents, or in the event that the Contractor feels that staking is the only alternative way to keep particular trees plumb.

6. The Owner's Representative shall have the authority to require that trees are staked or to reject staking as an alternative way to stabilize the tree.
7. Trees that required heavily modified root balls to meet the root quality standards may become unstable. The Owner's Representative may choose to reject these trees rather than utilize staking to temporarily support the tree.

B. Trees that are guyed shall have their guys and stakes removed after one full growing season or at other times as required by the Owner's Representative.

C. Tree guying shall utilize the tree staking and guying materials specified. Guying to be tied in such a manner as to create a minimum 12-inch loop to prevent girdling. Refer to manufacturer's recommendations and the planting detail for installation.

1. Plants shall stand plumb after staking or guying.
2. Stakes shall be driven to sufficient depth to hold the tree rigid.

D. For trees planted in planting mix over waterproofed membrane, use dead men buried 24 inches to the top of the dead man, in the soil. Tie the guy to the dead man with a double wrap of line around the dead man followed by a double half hitch. When guys are removed, leave the dead men in place and cut the guy tape 12 inches above the ground, leaving the tape end covered in mulch.

3.12 STRAIGHTENING PLANTS

A. Maintain all plants in a plumb position throughout the warranty period. Straighten all trees that move out of plumb including those not staked. Plants to be straightened shall be excavated and the root ball moved to a plumb position, and then re-backfilled.

B. Do not straighten plants by pulling the trunk with guys.

3.13 INSTALLATION OF FERTILIZER AND OTHER CHEMICAL ADDITIVES

A. Do not apply any soluble fertilizer to plantings during the first year after transplanting unless soil test determines that fertilizer or other chemical additives is required. Apply chemical additives only upon the approval of the Owner's Representative.

B. Controlled release fertilizers shall be applied according to the manufacturer's instructions and standard horticultural practices.

3.14 PRUNING OF TREES AND SHRUBS

A. Prune plants as directed by the Owner's Representative. Pruning trees shall be limited to addressing structural defects as shown in details; follow recommendations in "Structural Pruning: A Guide For The Green Industry" published by Urban Tree Foundation, Visalia CA.

B. All pruning shall be performed by a person experienced in structural tree pruning.

C. Except for plants specified as multi-stemmed or as otherwise instructed by the Owner's Representative, preserve or create a central leader.

D. Pruning of large trees shall be done using pole pruners or if needed, from a ladder or hydraulic lift to gain access to the top of the tree. Do not climb in newly planted trees. Small trees can be structurally pruned by laying them over before planting. Pruning may also be performed at the nursery prior to shipping.

E. Remove and replace excessively pruned or malformed stock resulting from improper pruning that occurred in the nursery or after.

F. Pruning shall be done with clean, sharp tools.

G. No tree paint or sealants shall be used.

3.15 MULCHING OF PLANTS

A. Apply 3 inches of mulch before settlement, covering the entire planting bed area. Install no more than 1 inch of mulch over the top of the root balls of all plants. Taper to 2 inches when abutting pavement.

B. For trees planted in lawn areas the mulch shall extend to a 5 foot radius around the tree or to the extent indicated on the plans.

C. Lift all leaves, low hanging stems and other green portions of small plants out of the mulch if covered.

3.16 PLANTING BED FINISHING

A. After planting, smooth out all grades between plants before mulching.

B. Separate the edges of planting beds and lawn areas with a smooth, formed edge cut into the turf with the bed mulch level slightly lower, 1 and 2 inches, than the adjacent turf sod or as directed by the Owner's Representative. Bed edge lines shall be a depicted on the drawings.

3.17 WATERING

A. The Contractor shall be fully responsible to ensure that adequate water is provided to all plants from the point of installation until the date of Substantial Completion Acceptance. The Contractor shall adjust the automatic irrigation system, if available, and apply additional or adjust for less water using hoses as required.

B. Hand water root balls of all plants to assure that the root balls have moisture above wilt point and below field capacity. Test the moisture content in each root ball and the soil outside the root ball to determine the water content.

3.18 CLEAN-UP

A. During installation, keep the site free of trash, pavements reasonably clean and work area in an orderly condition at the end of each day. Remove trash and debris in containers from the site no less than once a week.

1. Immediately clean up any spilled or tracked soil, fuel, oil, trash or debris deposited by the Contractor from all surfaces within the project or on public right of ways and neighboring property.

B. Once installation is complete, wash all soil from pavements and other structures. Ensure that mulch is confined to planting beds and that all tags and flagging tape are removed from the site. The Owner's Representative's seals are to remain on the trees and removed at the end of the warranty period.

C. Make all repairs to grades, ruts, and damage by the plant installer to the work or other work at the site.

D. Remove and dispose of all excess planting soil, subsoil, mulch, plants, packaging, and other material brought to the site by the Contractor.

3.19 PROTECTION DURING CONSTRUCTION

A. The Contractor shall protect planting and related work and other site work from damage due to planting operations, operations by other Contractors or trespassers. Maintain protection during installation until Substantial Completion Acceptance. Treat, repair or replace damaged work immediately.

B. Damage done by the Contractor, or any of their sub-contractors to existing or installed plants, or any other parts of the work or existing features to remain, including roots, trunk or branches of large existing trees, soil, paving, utilities, lighting, irrigation, other finished work and surfaces including those on adjacent property, shall be cleaned, repaired or replaced by the Contractor at no expense to the Owner. The Owner's Representative shall determine when such cleaning, replacement or repair is satisfactory.

3.20 PLANT MAINTENANCE PRIOR TO SUBSTANTIAL COMPLETION ACCEPTANCE

A. During the project work period and prior to Substantial Completion Acceptance, the Contractor shall maintain all plants.

B. Maintenance during the period prior to Substantial Completion Acceptance shall consist of pruning, watering, cultivating, weeding, mulching, removal of dead material, repairing and replacing of tree stakes, tightening and repairing of guys, repairing and replacing of damaged tree wrap material, resetting plants to proper grades and upright position, and furnishing and applying such sprays as are necessary to keep plantings reasonably free of damaging insects and disease, and in healthy condition. The threshold for applying insecticides and herbicide shall follow established Integrated Pest Management (IPM) procedures. Mulch areas shall be kept reasonably free of weeds, grass.

3.21 SUBSTANTIAL COMPLETION ACCEPTANCE

A. Upon written notice from the Contractor, the Owners Representative shall review the work and make a determination if the work is substantially complete.

1. Notification shall be at least 7 days prior to the date the contractor is requesting the review.

B. The date of substantial completion of the planting shall be the date when the Owner's Representative accepts that all work in Planting, Planting Soil, and Irrigation installation sections is complete.

C. The Plant Warranty period begins at date of written notification of substantial completion from the Owner's Representative. The date of substantial completion may be different than the date of substantial completion for the other sections of the project.

3.22 MAINTENANCE DURING THE WARRANTY PERIOD by others

A. After Substantial Completion Acceptance, the Contractor shall make sufficient site visits to observe the Owner's maintenance and become aware of problems with the maintenance in time to request changes, until the date of End of Warranty Final Acceptance.

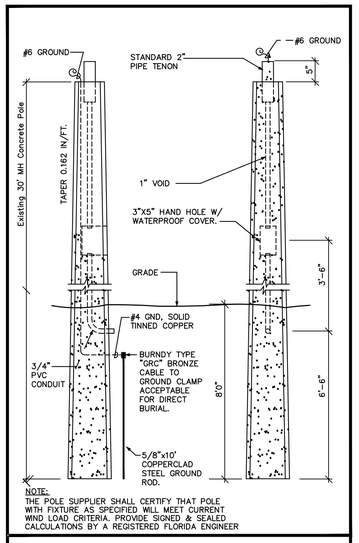
1. Notify the Owner's Representative in writing if maintenance, including watering, is not sufficient to maintain plants in a healthy condition. Such notification must be made in a timely period so that the Owner's Representative may take corrective action.
   a. Notification must define the maintenance needs and describe any corrective action required.
2. In the event that the Contractor fails to visit the site and or notify, in writing, the Owner's Representative of maintenance needs, lack of maintenance shall not be used as grounds for voiding or modifying the provisions of the warranty.

3.23 MAINTENANCE DURING THE WARRANTY PERIOD by the plant installer

A. During the warranty period, provide all maintenance for all plantings to keep the plants in a healthy state and the planting areas clean and neat.

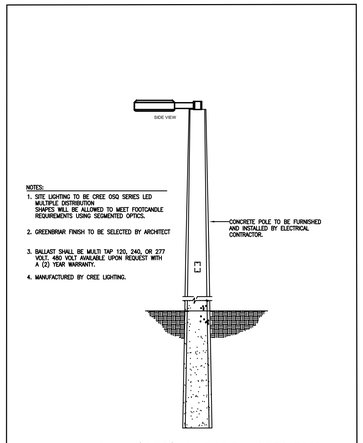
B. General requirements:

1. All work shall be undertaken by trained planting crews under the supervision of a foreman with a minimum of 5 years experience supervising commercial plant maintenance crews.
2. All chemical and fertilizer applications shall be made by licensed applicators for the type of chemicals to be used. All work and chemical use shall comply with all applicable local, provincial and federal requirements.
3. Assure that hoses and watering equipment and other maintenance equipment does not block paths or be placed in a manner that may create tripping hazards. Use standard safety warning barriers and other procedures to maintain the site in a safe manner for visitors at all times.
4. All workers shall wear required safety equipment and apparel appropriate for the tasks being undertaken.
5. The Contractor shall not store maintenance equipment at the site at times when they are not in use unless authorized in writing by the Owner's Representative.
6. Maintenance vehicles shall not park on the site including walks and lawn areas at any time without the Owner's Representative's written permission.
7. Maintain a detailed log of all maintenance activities including types of tasks, date of task,



POLE DETAIL

NOT TO SCALE

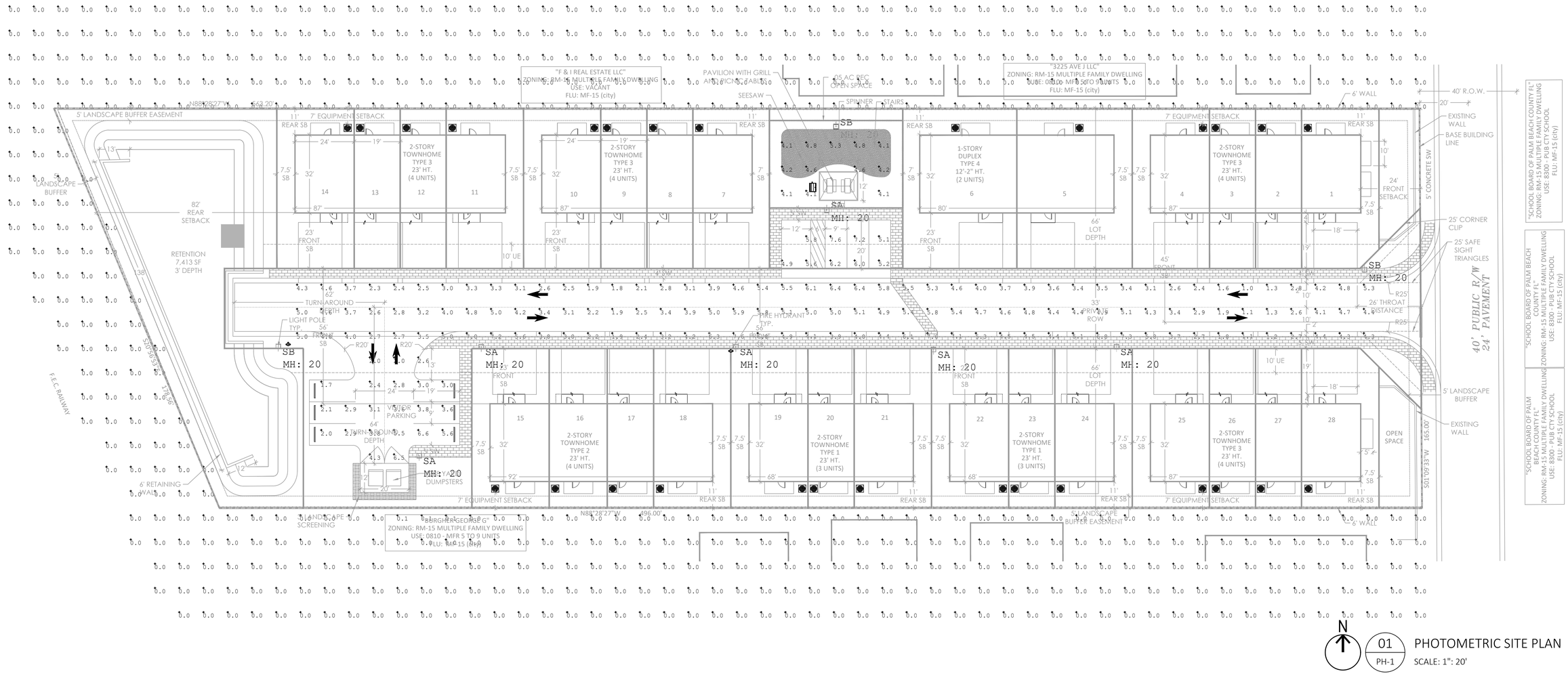


Cree 'OSQ' & POLE ASSEMBLY

NOT TO SCALE

Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	6	SA	Single	Cree Lighting OSQL-B-22L-40K7-3M-XX-NM-XX / OSQ-BLSLF	0.900	17500	132	792
	3	SB	Single	Cree Lighting OSQL-B-22L-40K7-4M-XX-NM-XX / OSQ-BLSLF	0.900	17000	132	264

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Roadway and Parking	Illuminance	Fc	4.07	7.6	1.0	4.07	7.60
Spill	Illuminance	Fc	0.00	0.1	0.0	N.A.	N.A.



N

01 PH-1

PHOTOMETRIC SITE PLAN

SCALE: 1": 20'

D&Q STUDIO ARCHITECTS
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SEAL

PROJECT

VILLAS OF SOLANA

3211 AVE J
RIVIERA BEACH, FL 33404

RBCDC
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REVISIONS		
NO.	DATE	DESCRIPTION
1	12.09.22	ZONING COMMENTS

DQ PROJECT NO. : 2030
CHECKED BY : DD
DRAWN BY : DD
DATE : 08.31.22

PHASE

SITE PLAN APPLICATION

SHEET TITLE

SITE PLAN PHOTOMETRIC

SHEET NUMBER

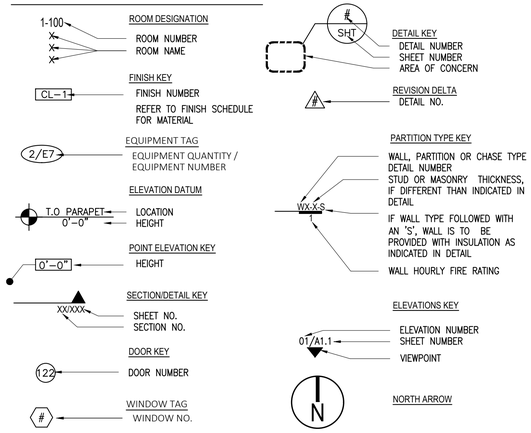
PH100

D:\ D Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings

ARCHITECTURAL ABBREVIATIONS

∠	Angle	L	Length
℄	Center line	LAV	Lavatory
Ø	Diameter or round	LBS	Pounds
±	Plus or minus	LD	Linear Diffuser
₹	Plate or property line	LF	Linear Feet
c/c	Center to Center	LH	Left Hand
		LOC	Location
A/C	Air Conditioner/ing	LT	Light
AC	Acoustical	LVR	Louver
ACC	Accessible	LVT	Luxury Vinyl Tile
ACFL	Access Floor		
ACT	Acoustical Ceiling Tile	MAX	Maximum
AD	Area Drain	MECH	Mechanical
ADDM	Addendum	MFR	Manufactory
ADJ	Adjacent	MIN	Minimum
ADJT	Adjustable	MISC	Miscellaneous
AFF	Above Finished Floor	MO	Masonry Opening
AFR	Above Finished Roof	MCT	Linoleum/Marmoleum Composite Tile
AHU	Air Handling Unit	MTD	Mount (ed) (ing)
A.L.	Arc Length	MTL	Metal
ALUM	Aluminum	MULL	Mullion
ALT	Alternate		
ANOD	Anodized	N	North
AP	Access Panel	NAT	Natural
APPROX	Approximate	NGVD	National Geodetic Vertical Datum
		NIC	Not in Contract
BD	Board	NO/ #	Number
BDR	Bedroom	NOM	Nominal
BFF	Below Finish Floor	NRC	Noise Reduction Coefficient
BTWN	Between	NTS	Not to Scale
BLDG	Building		
BLK	Block	OA	Overall
BM	Beam	OC	On Center
BOB	Bottom of Beam	OD	Outside Dimension
BOP	Bottom of Pipe	OFF	Office
BR	Bathroom	OH	Overhead
BS	Both Sides	OPNG	Opening
BTU	British Thermal Unit	OPP	Opposite
		OS	Occupancy Sensor
CAB	Cabinet		
CAS	Casement	PBD	Particle Board
CEM	Cement	PCF	Pounds Per Cubic Foot
CHR	Chair rail	PLAS	Plaster
CUFT	Cubic Foot (Feet)	PED	Pedestal
CG	Corner Guard	PERIM	Perimeter
CIR	Circle	PLAM	Plastic Laminate
C.I.P.	Cast in Place	PLBG	Plumbing
CJ	Control Joint	PLWD	Plywood
CL	Center Line	PIV	Point indication Valve
CLF	Chain Link Fence	PNL	Panel
CLR	Clear	PNT	Paint
CLG	Ceiling	PREFAB	Prefabricated
CLR	Clear	PROP	Proposed
CMU	Concrete Masonry Unit	PSF	Pounds Per Square Foot
CO	Clean Out	PSI	Pound Per Square Inch
COL	Column	PTN	Partition
CONC	Concrete	PT	Porcelain Tile
COMB	Combination	PTL	Pressure Treated Lumber
CONT	Continuous	PTW	Pressure Treated Wood
COOR	Coordination	PVC	Polyvinyl Chloride Pipe
CPT	Carpet		
CPTT	Carpet Tile	QT	Quarry Tile
CS	Cast Stone		
CSMT	Casement	R	Rise
CT	Ceramic Tile	R/W	Right-of-Way
CTR	Counter	RA	Return Air
CU	Condensing Unit	RAD/ R	Radius
		RD	Roof Drain
DIA	Diameter	RE	Relocated
DIAG	Diagonal	REINF	Reinforced/ Reinforcing
DIFF	Diffuser	REQ'D	Required
DIM	Dimension	RM	Room
DW	Dishwasher	RUB	Rubber Wall Base
DR	Door or Dining Room	RUBTR	Rubber Stair Tread
DN	Down	RCP	Reflected Ceiling Plan
DET	Detail	REC	Recessed
DWG	Drawing	RECPT	Receptacle
		RLG	Railing
E	East	RO	Rough Opening
EA	Each	RTU	Rooftop Air Handling Unit
EC	Eased Corner		
EL	Elevation	S	South
ELEC	Electric	SAN	Sanitary
ELEV	Elevator	SCHED	Schedule
ENCL	Enclose	SF	Square Feet
ENGR	Engineer (ing)	SHT	Sheet
EQ	Equal	SIM	Similar
EQUIP	Equipment	SP	Space
EWC	Electric Water Cooler	SPEC(S)	Specifications(s)
EXTG	Existing	STD	Standard
EXP	Exposed, Expansion	STL	Steel
EXT	Exterior	STR	Structural
		SUP	Support
FD	Floor Drain / Fire Damper	SUSP	Suspended
FE	Fire Extinguisher	SW	Sidewalk
FEC	Fire Extinguisher Cabinet	T	Thickness / Tread
FF	Finished Floor	TOB	Top of Beam
FIN	Finish	TOC	Top of Concrete
FLR	Floor	TOF	Top of Footing
FS	Floor Sink	TOI	Top of Insulation
FT	Feet	TOP	Top of Parapet
		TOS	Top of Slab
GA	Gauge	TOW	Top of Wall
GALV	Galvanized	TYP	Typical
GB	Grab Bar		
GL	Glass	UNO	Unless Noted Otherwise
GUM	Glass Unit Masonry	UE	Utility Easement
GWB	Gypsum Wallboard		
GYP	Gypsum	VCT	Vinyl Composition Tile
		VERT	Vertical
H/HT	Height	VTR	Vent thru Roof
HB	Hose Bib		
HDW	Hardware	W	Width / West
HDWD	Hardwood	W/	With
HORZ	Horizontal	WCO	Wall Cleanout
		WD	Wood
ID	Inside Diameter	WP	Weatherproof
IN	Inch / Inches		
INSUL	Insulation		
INT	Interior		
JB	Joint Bearing		
JT	Joint		
JBOX	Junction Box		

SYMBOLS AND NOTES



GENERAL NOTES:

1. CONTRACTOR SHALL COMPLY WITH ALL APPROVED APPLICABLE LOCAL, STATE AND FEDERAL BUILDING CODES, LAWS, REGULATIONS AND ORDINANCES.
2. ALL MATERIALS AND EQUIPMENT UTILIZED IN THIS PROJECT SHALL BE UTILIZED AND INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
3. ALL WORK DONE UNDER THE SUPERVISION OF THE CONTRACTOR SHALL BE DONE IN A NEAT AND WORKMAN-LIKE MANNER IN ACCORDANCE WITH ALL GOVERNING AGENCIES, RULES AND REPUTATIONS HAVING JURISDICTION.
4. UNDER NO CIRCUMSTANCES SHALL ASSUMPTIONS BY THE CONTRACTOR BE CONSIDERED THE DESIGN INTENT NOR THE APPROVAL OF ARCHITECT OR ENGINEER WITHOUT THEIR WRITTEN APPROVAL.
5. CONTRACTOR SHALL MAINTAIN ALL EXISTS CLEAR AND UNOBSTRUCTED DURING CONSTRUCTION ACTIVITIES.
6. ALL SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT AND/OR ENGINEER FOR REVIEW PRIOR TO FABRICATION.
7. ALL SHOP DRAWINGS DIMENSIONS SHALL BE FIELD VERIFIED AND SHALL BEAR THE REVIEW STAMP, DATE AND SIGNATURE OF THE CONTRACTOR BEFORE SUBMITTAL TO ARCHITECT AND/OR ENGINEER.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL DEBRIS DAILY FROM THE SITE AND FOR PROPERLY CLEANING ALL AREAS PRIOR TO FINAL ACCEPTANCE BY THE OWNER, INCLUDING BUT NOT LIMITED TO WINDOW, STOREFRONTS, FLOORS, CONSTRUCTION MATERIAL FROM THE SITE AND SHALL ALSO BE RESPONSIBLE FOR WALLS, DOORS, ETC. CONTRACTOR SHALL PROVIDE ITS OWN TRASH CONTAINER AT THE LOCATION SELECTED BY THE OWNER. ALL DEMOLITION AND CONSTRUCTION AREAS SHALL HAVE "NO SMOKING" SIGNS POSTED.
9. UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL GIVE THE OWNER A COMPLETED SET OF RECORD DRAWINGS ("AS-BUILT") ALONG WITH THE WRITTEN GUARANTEES, AND ALL OPERATION AND MAINTENANCE MANUAL OF ALL EQUIPMENT AND FINISHES INSTALLED.
10. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXCEPTED TO FURNISH AND INSTALL ALL ITEMS TO COMPLETE ALL BUILDING SYSTEMS AND PROVIDE ALL APPURTENANCES FOR EQUIPMENT TO BE PLACED IN WORKING ORDER.
11. CONTRACTOR SHALL AVOID INTERFERENCE WITH THE NORMAL WORK FLOW AND PROPER FUNCTIONING OF ALL AREAS WITH THE BUILDING. CONTRACTOR SHALL COORDINATE WITH THE OWNER'S SECURITY PROGRAM METHODS TO AVOID UNAUTHORIZED ENTRY, VANDALISM AND THEFT.
12. CONTRACTOR SHALL BE REQUIRED TO CONTINUOUSLY MAINTAIN ALL NECESSARY UTILITIES TO THE OCCUPIED FACILITIES DURING CONSTRUCTION. TEMPORARY PROVISIONS SHALL BE MADE.
13. FIRE PROTECTION SYSTEM (IF APPLICABLE) SHALL REMAIN ACTIVE DURING DEMOLITION AND RENOVATION ACTIVITIES IN THE EVENT OF A FIRE PROTECTION CUT-OFF OF SERVICE FOR MORE THAN 4 HOURS IN A 24 HOURS PERIOD. THE BUILDING SHALL BE PLACED UNDER FIRE WATCH. ALL FIRE WATCH REQUESTS MUST BE SUBMITTED IN WRITING TO THE OFFICE AND APPROVED BY THE OFFICE OF THE FIRE MARSHALL.
14. THE ARCHITECT AND ENGINEER ACCEPTS NO RESPONSIBILITY FOR WORK WHICH IS NOT IN COMPLIANCE WITH THE INTENT AND REQUIREMENTS OF THE DRAWINGS, OR WHICH HAS BEEN PERFORMED BASED UPON THE INTERPRETATION OF INTENT OF THE DRAWINGS BY PARTIES OTHER THAN THE ARCHITECT OR ENGINEER.
15. CONTRACTOR TO FIELD VERIFY (F.V.) ALL DIMENSIONS AND EXTG. CONDITIONS PRIOR TO BIDDING AND STARTING CONSTRUCTION. NOTIFY ARCHITECT OF ANY DISCREPANCIES OR INCONSISTENCIES.
16. ALL DIMENSION ARE NOMINAL AND TO FACE OF FINISH SURFACE.
17. CONTRACTOR TO FIELD VERIFY AND REPORT ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND FIELD CONDITIONS TO THE DESIGN TEAM PRIOR TO START OF ANY DEMOLITION.
18. CONTRACTOR SHALL COORDINATE WITH ALL DISCIPLINES.

RIVIERA BEACH COMMUNITY DEVELOPMENT CORPORATION
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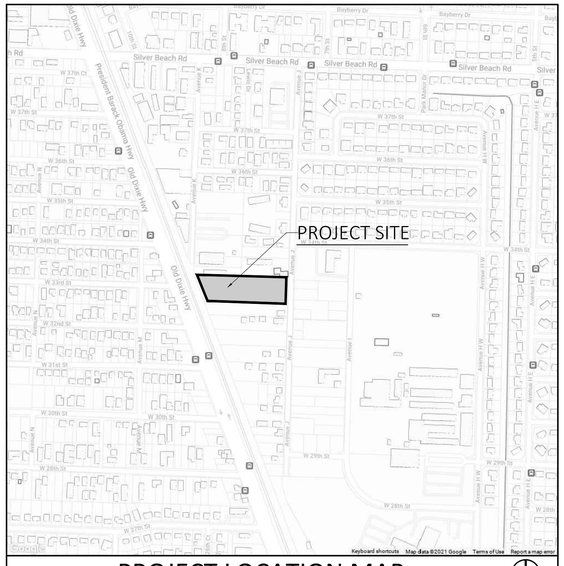
VILLAS OF SOLANA

TOWNHOMES

SITE PLAN APPLICATION

*ARTISTIC PERSPECTIVE FOR CONCEPTUAL DESIGN



PROJECT LOCATION MAP

DRAWING INDEX

SHEET #	SHEET TITLE	ISSUE DATE	REV. #	REV. DATE
GENERAL				
CS-1	COVER SHEET	08.31.22		
ARCHITECTURAL				
AS-1	ARCHITECTURAL SITE PLAN	08.31.22		
AS-3	SITE RENDERING	08.31.22		
AS-4	SITE RENDERING	08.31.22		
AS-5	SITE RENDERING	08.31.22		
A1.1.1	BUILDING TYPE 1, 1ST FLOOR PLAN	08.31.22		
A1.1.2	BUILDING TYPE 1, 2ND FLOOR PLAN	08.31.22		
A1.2.1	BUILDING TYPE 2, 1ST FLOOR PLAN	08.31.22		
A1.2.2	BUILDING TYPE 2, 2ND FLOOR PLAN	08.31.22		
A1.3.1	BUILDING TYPE 3, 1ST FLOOR PLAN	08.31.22		
A1.3.2	BUILDING TYPE 3, 2ND FLOOR PLAN	08.31.22		
A1.4.1	FLOOR PLAN BUILDING TYPE 4	08.31.22		
A3.1	EXTERIOR ELEVATIONS BUILDING TYPE 1	08.31.22		
A3.2	EXTERIOR ELEVATIONS BUILDING TYPE 2	08.31.22		
A3.3	EXTERIOR ELEVATIONS BUILDING TYPE 3	08.31.22		
A3.4	EXTERIOR ELEVATIONS BUILDING TYPE 4	08.31.22		
PH-1	EXTERIOR ELEVATIONS BUILDING TYPE 4	08.31.22		

ARCHITECT:

D & Q STUDIO
8245 S.W. 42ND STREET
MIAMI, FL 33155
TEL: 786.239.1322
EMAIL: DDIAZ@D-Q-S.COM

SCOPE OF WORK

SUMMARY:
REFER TO PROJECT NARRATIVE PROVIDED WITH SPA SUBMITTAL PACKAGE, BY OTHER.

D&Q STUDIO ARCHITECTS
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MIAMI, FLORIDA 33155
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STATE OF FLORIDA
DANIEL DIAZ
AR 97839
REGISTERED ARCHITECT

DANIEL DIAZ
AR # 97839

VILLAS OF SOLANA
3211 AVE J
RIVIERA BEACH, FL 33404

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NO.	DATE	DESCRIPTION

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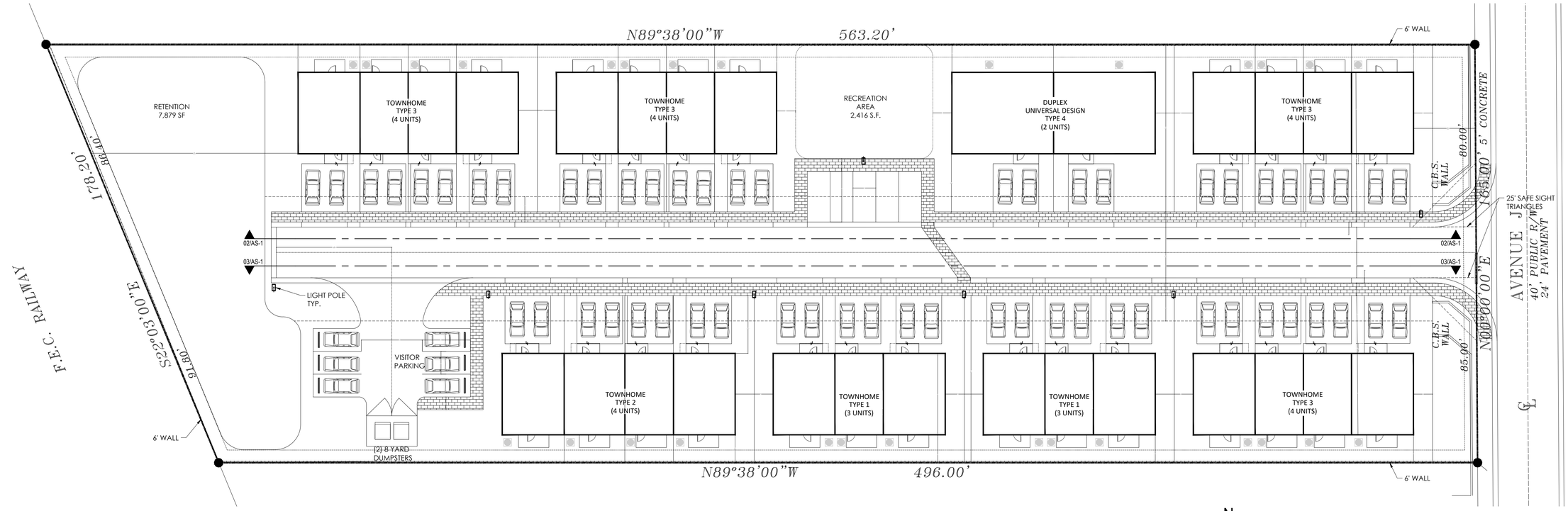
PHASE
SITE PLAN APPLICATION

SHEET TITLE
COVER SHEET

SHEET NUMBER
CS-1

D & Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings



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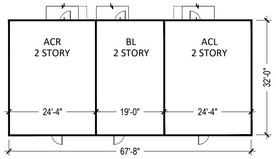
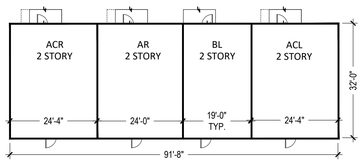
01 / AS-1 ARCHITECURAL SITE PLAN

SCALE: 1": 20'



TOWNHOME TYPE 1 (3 UNITS)



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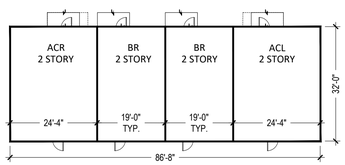
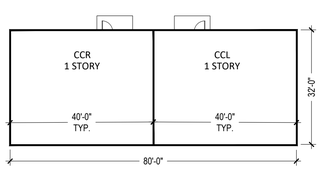
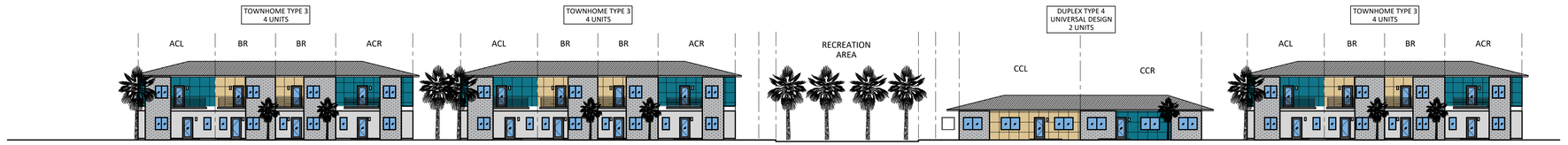


TOWNHOME TYPE 3 (4 UNITS)

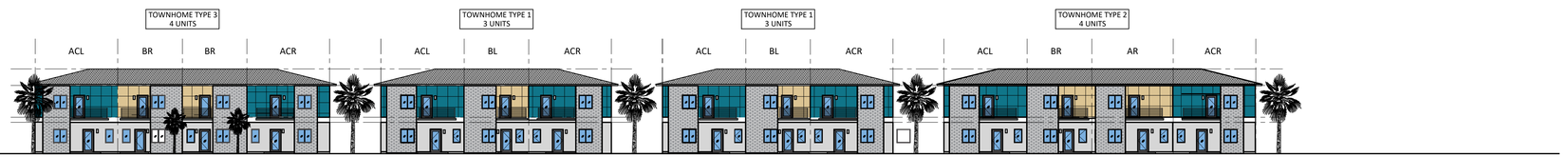


TOWNHOME TYPE 4 (2 UNITS)



02 / AS-1 OVERALL SITE NORTH STREETSCAPE ELEVATION

SCALE: 1": 20'



03 / AS-1 OVERALL SITE SOUTH STREETSCAPE ELEVATION

SCALE: 1": 20'

NOTES

1. STREETSCAPE ARCHITECTURAL ELEVATIONS SHOWN ARE CONCEPTUAL AND PROVIDED FOR GRAPHIC PURPOSED TO ILLUSTRATE MASSING
2. REFER TO LAND PLANNER SITE PLAN (SP-1) FOR SITE/BUILDING DATA TABLE.
3. REFER TO LANDSCAPE ARCHITECT DWGS. FOR PLANTING AND LANDSCAPING INFORMATION.
4. REFER TO CIVIL ENGINEERING DWGS. FOR SPOT ELEVATIONS, SITE PAVEMENT STRIPING, FURTHER SITE DETAIL AND DRAINAGE.

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DATE : 08.31.22

PHASE

SITE PLAN APPLICATION

SHEET TITLE

ARCHITECTURAL SITE PLAN

SHEET NUMBER

AS-1.0

D & Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings

PROPOSED SOUTH EAST ELEVATION PERSPECTIVE

D&Q STUDIO ARCHITECTS
8245 S.W. 42ND STREET
MIAMI, FLORIDA 33155
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SEAL

STATE OF FLORIDA
DANIEL DIAZ
AR 97839
REGISTERED ARCHITECT

DANIEL DIAZ
AR # 97839

PROJECT

VILLAS OF SOLANA
3211 AVE J
RIVIERA BEACH, FL 33404

RBCDC
RIVIERA BEACH COMMUNITY DEVELOPMENT CORPORATION
Innovation. Restoration. Beautification.®

REVISIONS		
NO.	DATE	DESCRIPTION

DQ PROJECT NO. : 2030
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PHASE
SITE PLAN APPLICATION

SHEET TITLE
SITE RENDERING

SHEET NUMBER
AS-3

D:\D Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings

PROPOSED NORTH WEST ELEVATION PERSPECTIVE

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REVISIONS		
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PHASE
SITE PLAN APPLICATION

SHEET TITLE
SITE RENDERING

SHEET NUMBER
AS-4

D:\D Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings

PROPOSED ELEVATION PERSPECTIVE

PROPOSED NORTH EAST ELEVATION PERSPECTIVE

PROPOSED ELEVATION PERSPECTIVE

PROPOSED NORTH EAST ELEVATION PERSPECTIVE

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DANIEL DIAZ
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DANIEL DIAZ
AR # 97839

PROJECT

VILLAS OF SOLANA

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REVISIONS

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PHASE

SITE PLAN APPLICATION

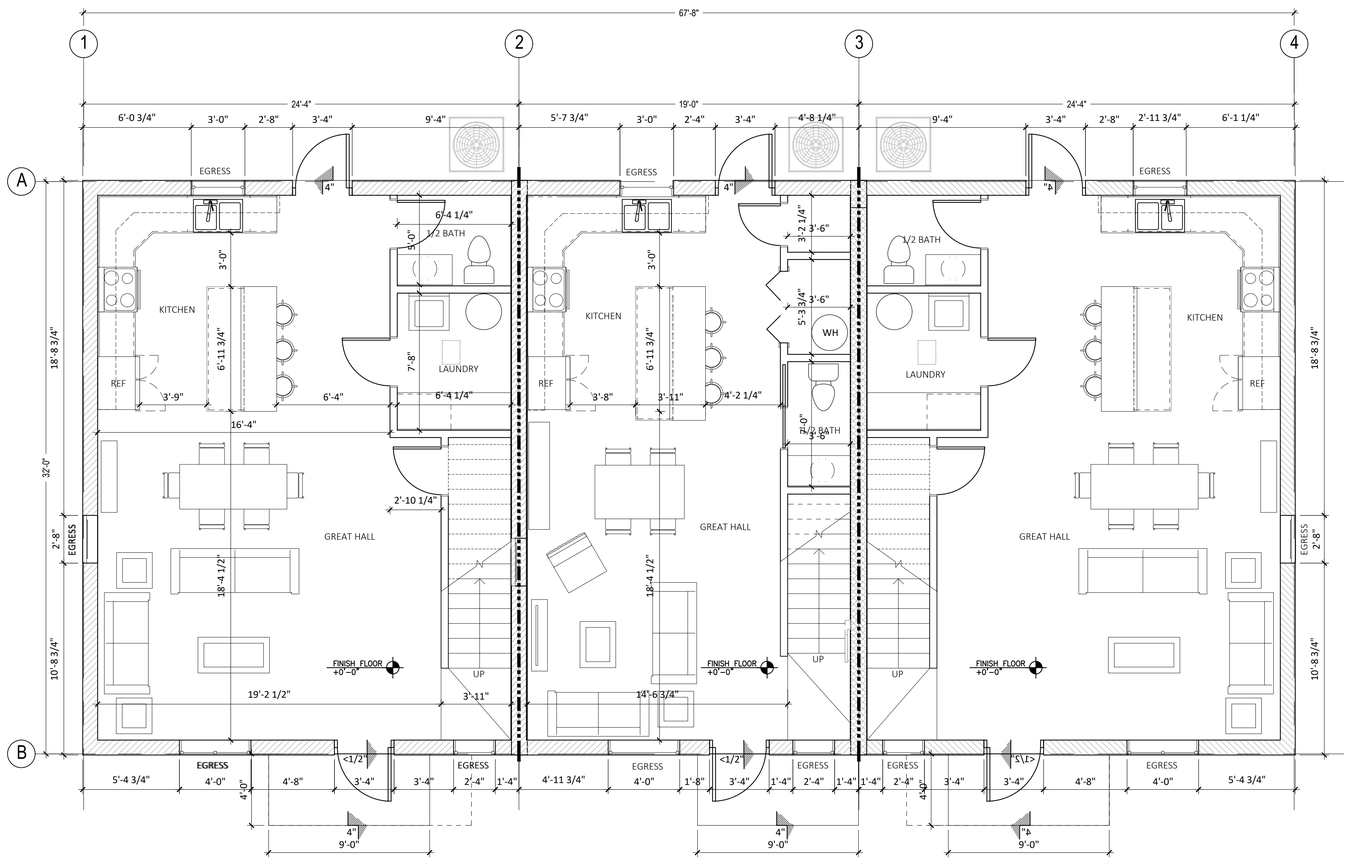
SHEET TITLE

SITE RENDERING

SHEET NUMBER

AS-5

D:\D & Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings



01 / A-1.1.1

BUILDING TYPE 1
1ST FLOOR PLAN
SCALE: 1/4" = 1'-0"

FLOOR PLAN LEGEND

SYMBOL	DESCRIPTION
	CMU EXTERIOR WALL: 8" CONCRETE MASONRY UNIT(R-3 MIN.) WITH SMOOTH STUCCO FINISH ON EXTERIOR AND (1) 1/2" GYPSUM OVER 7/8" FURRING INTERIOR SIDE.
	4 HOUR FIRE RATED DEMISING WALL: (1) LAYER 5/8" TYPE-X GYPSUM WALLBOARD FASTENED TO BOTH SIDES OF CMU WALL TO BE CONSTRUCTED PER ASSEMBLY REQUIREMENT
	INTERIOR PARTITION: (1) LAYER 1/2" GYPSUM WALLBOARD FASTENED TO BOTH SIDES OF MTL STUD PARTITION.

PLAN NOTES

1. MEDICINE CABINETS:
MEDICINE CABINETS & MIRRORS BY OWNER
2. CLOSETS:
SHELVING BY OWNER & G.C. TO PROVIDE PROPER BACKING IN ALL CLOSETS FOR SHELVING.
3. SHOWERS:
SHOWERS TO HAVE IMPERVIOUS MATERIALS TO BOTTOM OF CEILING PROVIDE MINIMUM 22" CLEAR WIDTH AT SHOWER/TUB ACESS IN COMPLIANCE WITH SECTION R307.1
4. WASHER AND DRYER:
PROVIDE 4" RECESSED FOR WASHER & DRYER HOOK-UPS & DRYER VENT IN LAUNDRY CLOSET
5. GLAZING NOTES :
GLAZING WITHIN 5' -0" AFF (TUBS AND SHOWERS) MUST BE CAT.II SAFETY GLASS

GLASS DOORS, SIDELIGHTS & GLAZING WITHIN 48" OF DOORS TO BE MIN. CAT II SAFETY GLASS
6. PLENUM & SEALED ATTIC SPACE
NOTE:
ALL MECHANICAL, ELECTRICAL, PLUMBING, LIGHTING DISCIPLINES SHALL PROVIDE THE FOLLOWING:
(AT) AIR TIGHT PLENUMS
(IC) INSULATION CONTACT

1. BARS, SCREENS, COVERS + GRILLS
AS PER R310.4 FBC MEANS OF ESCAPE MUST BE CAPABLE OF WITHSTANDING WIND AND IMPACT FORCES WITHOUT THE USE OF SHUTTERS AND MUST BE READILY OPENABLE FROM THE INSIDE WITHOUT THE USE OF KEYS OR SPECIAL EFFORT AT ALL EMERGENCY EGRESS WINDOW + DOORS
2. EGRESS WINDOWS
ALL EGRESS WINDOW WILL COMPLY WITH FFPC 101 CHAPTER 24 EGRESS REQUIREMENT. 5.7 SQUARE FEET CLEAR OPENING, NOT LESS THAN 20" WIDTH, NOT LESS THAN 24" HEIGHT, AND NOT MORE THAN 44" FROM THE BOTTOM OPENING (TYP THRU OUT)
3. A/C CONDENSER UNIT:
COORDINATE SIZES OF A/C CONDENSER UNIT INCLUDING CLEARANCES. ELEVATION SHALL BE AT F.F.E., ABOVE BASE FLOOD ELEVATION.
4. A.H.U. CLEARANCE:
A.H.U.'S MUST BE IN CLOSET WITH 4" MIN. CLEARANCE AROUND UNIT.
5. SMOKE DETECTORS
SMOKE DETECTORS ARE TO BE AT LEAST 3 FEET AWAY FROM THE A/C SUPPLY GRILLS
6. FLOOD MATERIAL:
ALL CONSTRUCTION AND FINISH MATERIAL BELOW BASE FLOOD ELEVATION SHALL BE FLOOD DAMAGE-RESISTANT MATERIAL. (ASCE 24-05 CH. 5.0.)

ADDITIONAL NOTE:

1. COORDINATE ALL CASEWORK, APPLIANCES & PLUMBING FIXTURES EXACT DIMENSIONS (WIDTH, HEIGHT & LENGHT) & LOCATIONS PRIOR TO ANY INSTALLATION. PROVIDE SHOP DWGS AS NEEDED.

INTERIOR FINISHES

INTERIOR FINISH CLASSIFICATION: CLASS C

1. ALL INTERIOR FINISHES SHALL COMPLY WITH FFPC 101, 7TH EDITION 10.2.2.

2. FFPC 101-30.3.3.2 INTERIOR WALL AND CEILING
INTERIOR WALL AND CEILING FINISH MATERIALS COMPLYING WITH SECTION 10.2 SHALL BE PERMITTED AS FOLLOWS:

A. FFPC 101-10.2.7.1 CARPET AND CARPET-LIKE INTERIOR FLOOR FINISHES SHALL COMPLY WITH ASTM D 2859.

B. FFPC 101-10.2.7.2* FLOOR COVERING, OTHER THAN CARPET FOR WHICH 10.2.2.2 ESTABLISHES REQUIREMENTS FOR FIRE PERFORMANCE, SHALL HAVE A MINIMUN CRITICAL RADIANT FLUX OF 0.1 W/CM2.

C. FFPC 101-10.2.7.3* INTRIOR FLOOR FINISHES SHALL BE CLASSIFIED AS CLASS I OR CLASS II BASED ON TEST RESULTS FROM NFPA 253, STANDARD METHOD OF TEST FOR CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEM USING A RADIANT HEAT ENERGY SOURCE.

3. ANY INTERIOR WOOD FINISH WILL BE INHERENTLY FIRE RETARDANT.

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DANIEL DIAZ
AR # 97839

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REVISIONS

NO	DATE	DESCRIPTION

DQ PROJECT NO. : 2030
CHECKED BY : DD
DRAWN BY : DD
DATE : 08.31.22

PHASE

SITE PLAN APPLICATION

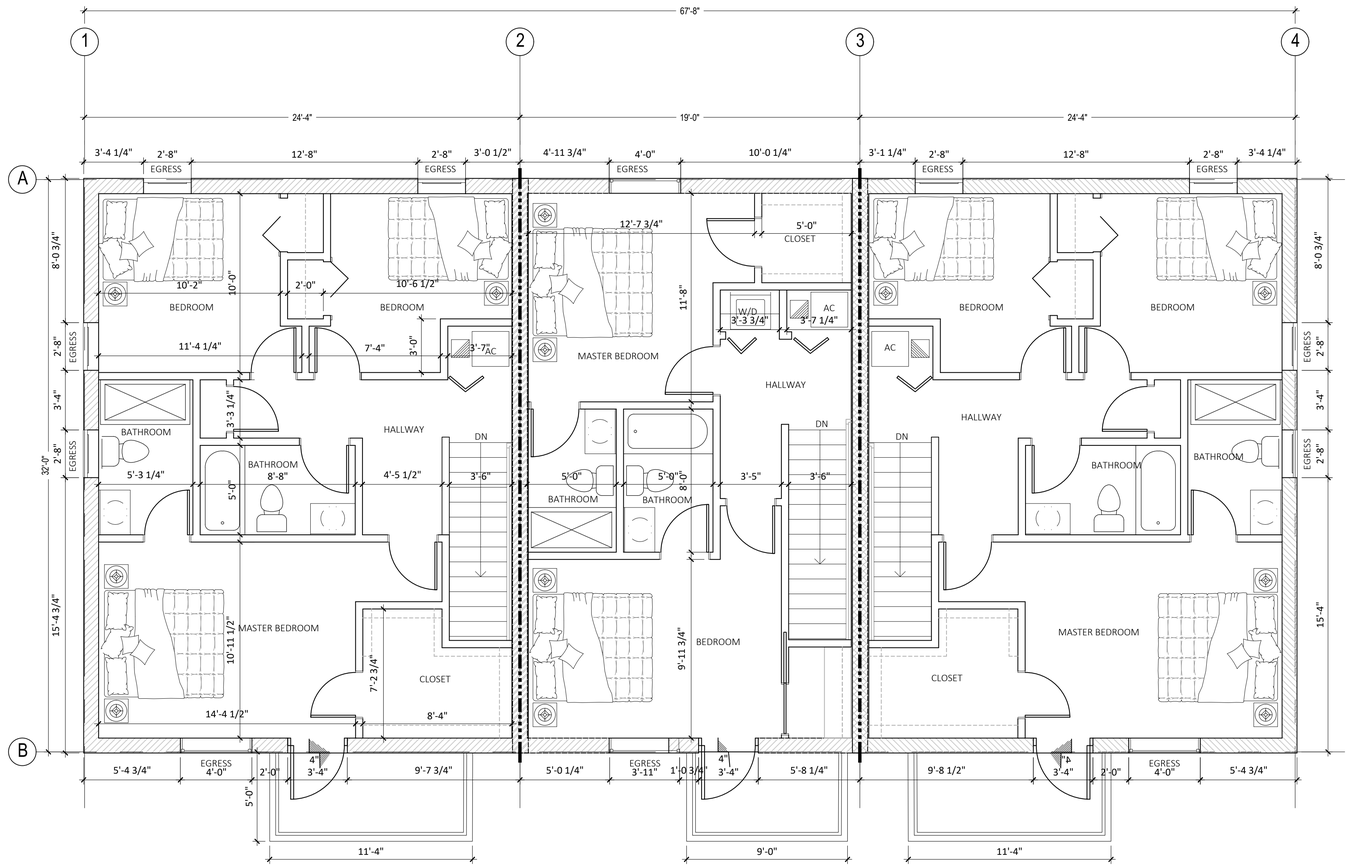
SHEET TITLE

FLOOR PLAN BUILDING TYPE 1

SHEET NUMBER

A-1.1.1

D & Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings



01 / A-1.1.2

BUILDING TYPE 1
2ND FLOOR PLAN
SCALE: 1/4" = 1'-0"

FLOOR PLAN LEGEND

SYMBOL	DESCRIPTION
	CMU EXTERIOR WALL: 8" CONCRETE MASONRY UNIT(R-3 MIN.) WITH SMOOTH STUCCO FINISH ON EXTERIOR AND (1) 1/2" GYPSUM OVER 7/8" FURRING INTERIOR SIDE.
	4 HOUR FIRE RATED DEMISING WALL: (1) LAYER 5/8" TYPE-X GYPSUM WALLBOARD FASTENED TO BOTH SIDES OF CMU WALL TO BE CONSTRUCTED PER ASSEMBLY REQUIREMENT
	INTERIOR PARTITION: (1) LAYER 1/2" GYPSUM WALLBOARD FASTENED TO BOTH SIDES OF MTL STUD PARTITION.

PLAN NOTES

1. MEDICINE CABINETS:
MEDICINE CABINETS & MIRRORS BY OWNER

2. CLOSETS:
SHELVING BY OWNER & G.C. TO PROVIDE PROPER BACKING IN ALL CLOSETS FOR SHELVING.

3. SHOWERS:
SHOWERS TO HAVE IMPERVIOUS MATERIALS TO BOTTOM OF CEILING
PROVIDE MINIMUM 22" CLEAR WIDTH AT SHOWER/TUB ACESS IN COMPLIANCE WITH SECTION R307.1

4. WASHER AND DRYER:
PROVIDE 4" RECESSED FOR WASHER & DRYER HOOK-UPS & DRYER VENT IN LAUNDRY CLOSET

5. GLAZING NOTES :
GLAZING WITHIN 5' -0" AFF (TUBS AND SHOWERS) MUST BE CAT.II SAFETY GLASS

GLASS DOORS, SIDELIGHTS & GLAZING WITHIN 48" OF DOORS TO BE MIN. CAT II SAFETY GLASS

6. PLENUM & SEALED ATTIC SPACE
NOTE:
ALL MECHANICAL, ELECTRICAL, PLUMBING, LIGHTING DISCIPLINES SHALL PROVIDE THE FOLLOWING:
(AT) AIR TIGHT PLENUMS
(IC) INSULATION CONTACT

1. BARS, SCREENS, COVERS + GRILLS
AS PER R310.4 FBC MEANS OF ESCAPE MUST BE CAPABLE OF WITHSTANDING WIND AND IMPACT FORCES WITHOUT THE USE OF SHUTTERS AND MUST BE READILY OPENABLE FROM THE INSIDE WITHOUT THE USE OF KEYS OR SPECIAL EFFORT AT ALL EMERGENCY EGRESS WINDOW + DOORS

2. EGRESS WINDOWS
ALL EGRESS WINDOW WILL COMPLY WITH FFPC 101 CHAPTER 24 EGRESS REQUIREMENT. 5.7 SQUARE FEET CLEAR OPENING, NOT LESS THAN 20" WIDTH, NOT LESS THAN 24" HEIGHT, AND NOT MORE THAN 44" FROM THE BOTTOM OPENING (TYP THRU OUT)

3. A/C CONDENSER UNIT:
COORDINATE SIZES OF A/C CONDENSER UNIT INCLUDING CLEARANCES.
ELEVATION SHALL BE AT F.F.E., ABOVE BASE FLOOD ELEVATION.

4. A.H.U. CLEARANCE:
A.H.U.'S MUST BE IN CLOSET WITH 4" MIN. CLEARANCE AROUND UNIT.

5. SMOKE DETECTORS
SMOKE DETECTORS ARE TO BE AT LEAST 3 FEET AWAY FROM THE A/C SUPPLY GRILLS

6. FLOOD MATERIAL:
ALL CONSTRUCTION AND FINISH MATERIAL BELOW BASE FLOOD ELEVATION SHALL BE FLOOD DAMAGE-RESISTANT MATERIAL. (ASCE 24-05 CH. 5.0.)

ADDITIONAL NOTE:

1. COORDINATE ALL CASEWORK, APPLIANCES & PLUMBING FIXTURES EXACT DIMENSIONS (WIDTH, HEIGHT & LENGHT) & LOCATIONS PRIOR TO ANY INSTALLATION. PROVIDE SHOP DWGS AS NEEDED.

INTERIOR FINISHES

INTERIOR FINISH CLASSIFICATION: CLASS C

1. ALL INTERIOR FINISHES SHALL COMPLY WITH FFPC 101, 7TH EDITION 10.2.2.

2. FFPC 101-30.3.3.2 INTERIOR WALL AND CEILING
INTERIOR WALL AND CEILING FINISH MATERIALS COMPLYING WITH SECTION 10.2 SHALL BE PERMITTED AS FOLLOWS:

A. FFPC 101-10.2.7.1 CARPET AND CARPET-LIKE INTERIOR FLOOR FINISHES SHALL COMPLY WITH ASTM D 2859.

B. FFPC 101-10.2.7.2* FLOOR COVERING, OTHER THAN CARPET FOR WHICH 10.2.2.2 ESTABLISHES REQUIREMENTS FOR FIRE PERFORMANCE, SHALL HAVE A MINIMUN CRITICAL RADIANT FLUX OF 0.1 W/CM2.

C. FFPC 101-10.2.7.3* INTRIOR FLOOR FINISHES SHALL BE CLASSIFIED AS CLASS I OR CLASS II BASED ON TEST RESULTS FROM NFPA 253, STANDARD METHOD OF TEST FOR CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEM USING A RADIANT HEAT ENERGY SOURCE.

3. ANY INTERIOR WOOD FINISH WILL BE INHERENTLY FIRE RETARDANT.

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SEAL

STATE OF FLORIDA
DANIEL DIAZ
AR 97839
REGISTERED ARCHITECT

DANIEL DIAZ
AR # 97839

PROJECT

VILLAS OF SOLANA

3211 AVE J
RIVIERA BEACH, FL 33404

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REVISIONS

NO.	DATE	DESCRIPTION

DQ PROJECT NO. : 2030
CHECKED BY : DD
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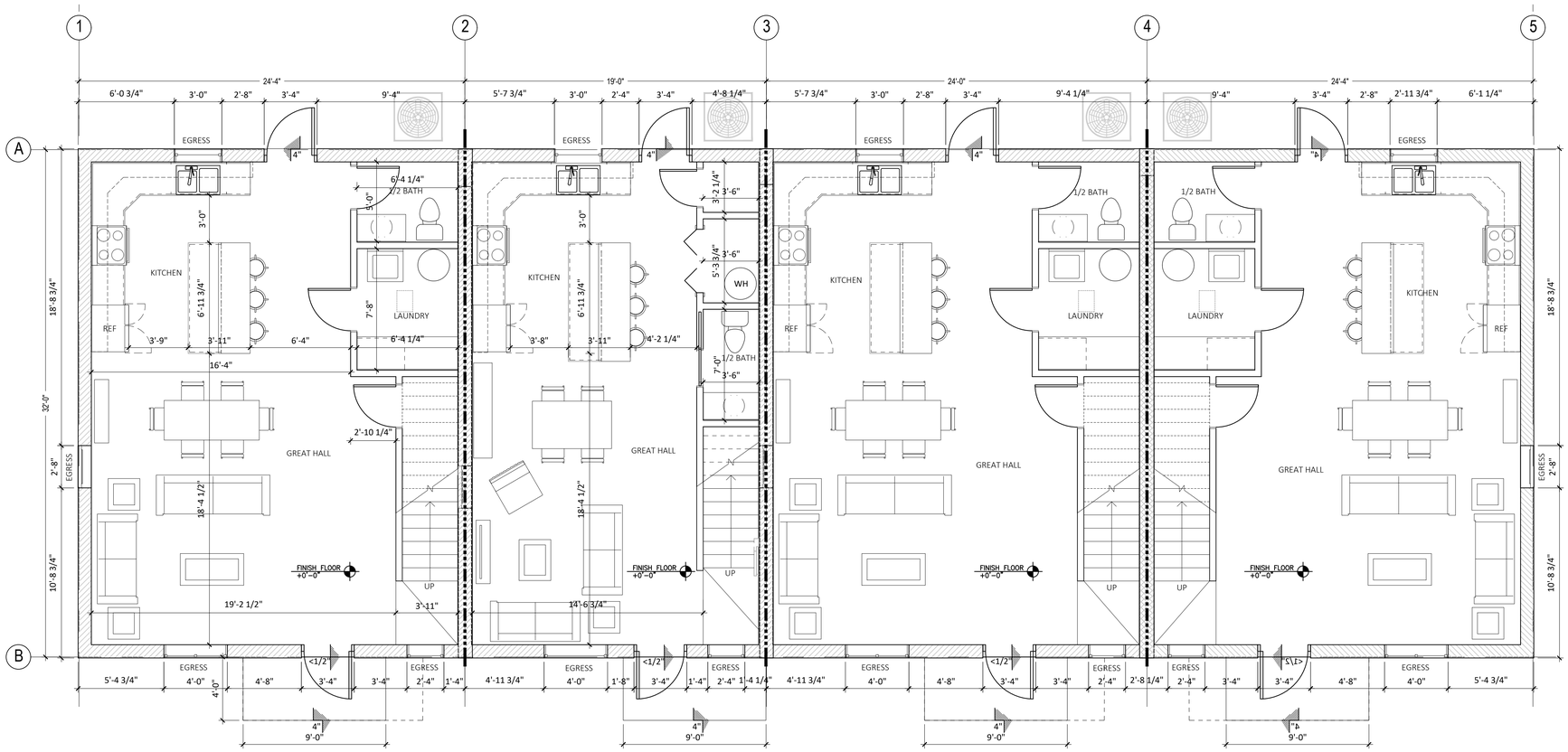
DATE : 08.31.22

PHASE
SITE PLAN APPLICATION

SHEET TITLE
FLOOR PLAN BUILDING TYPE 1

SHEET NUMBER
A-1.1.2

D & Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings



01
A-1.2.1

BUILDING TYPE 2
1ST FLOOR PLAN
SCALE: 1/4" = 1'-0"

FLOOR PLAN LEGEND

SYMBOL	DESCRIPTION
	CMU EXTERIOR WALL: 8" CONCRETE MASONRY UNIT(R-3 MIN.) WITH SMOOTH STUCCO FINISH ON EXTERIOR AND (1) 1/2" GYPSUM OVER 7/8" FURRING INTERIOR SIDE.
	4 HOUR FIRE RATED DEMISING WALL: (1) LAYER 5/8" TYPE-X GYPSUM WALLBOARD FASTENED TO BOTH SIDES OF CMU WALL TO BE CONSTRUCTED PER ASSEMBLY REQUIREMENT
	INTERIOR PARTITION: (1) LAYER 1/2" GYPSUM WALLBOARD FASTENED TO BOTH SIDES OF MTL STUD PARTITION.

PLAN NOTES

1. MEDICINE CABINETS:
MEDICINE CABINETS & MIRRORS BY OWNER

2. CLOSETS:
SHELVING BY OWNER & G.C. TO PROVIDE PROPER BACKING IN ALL CLOSETS FOR SHELVING.

3. SHOWERS:
SHOWERS TO HAVE IMPERVIOUS MATERIALS TO BOTTOM OF CEILING
PROVIDE MINIMUM 22" CLEAR WIDTH AT SHOWER/TUB ACESS IN COMPLIANCE WITH SECTION R307.1

4. WASHER AND DRYER:
PROVIDE 4" RECESSED FOR WASHER & DRYER HOOK-UPS & DRYER VENT IN LAUNDRY CLOSET

5. GLAZING NOTES :
GLAZING WITHIN 5' -0" AFF (TUBS AND SHOWERS) MUST BE CAT.II SAFETY GLASS

GLASS DOORS, SIDELIGHTS & GLAZING WITHIN 48" OF DOORS TO BE MIN. CAT II SAFETY GLASS

6. PLENUM & SEALED ATTIC SPACE
NOTE:
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3. A/C CONDENSER UNIT:
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ADDITIONAL NOTE:

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INTERIOR FINISHES

INTERIOR FINISH CLASSIFICATION: CLASS C

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3. ANY INTERIOR WOOD FINISH WILL BE INHERENTLY FIRE RETARDANT.

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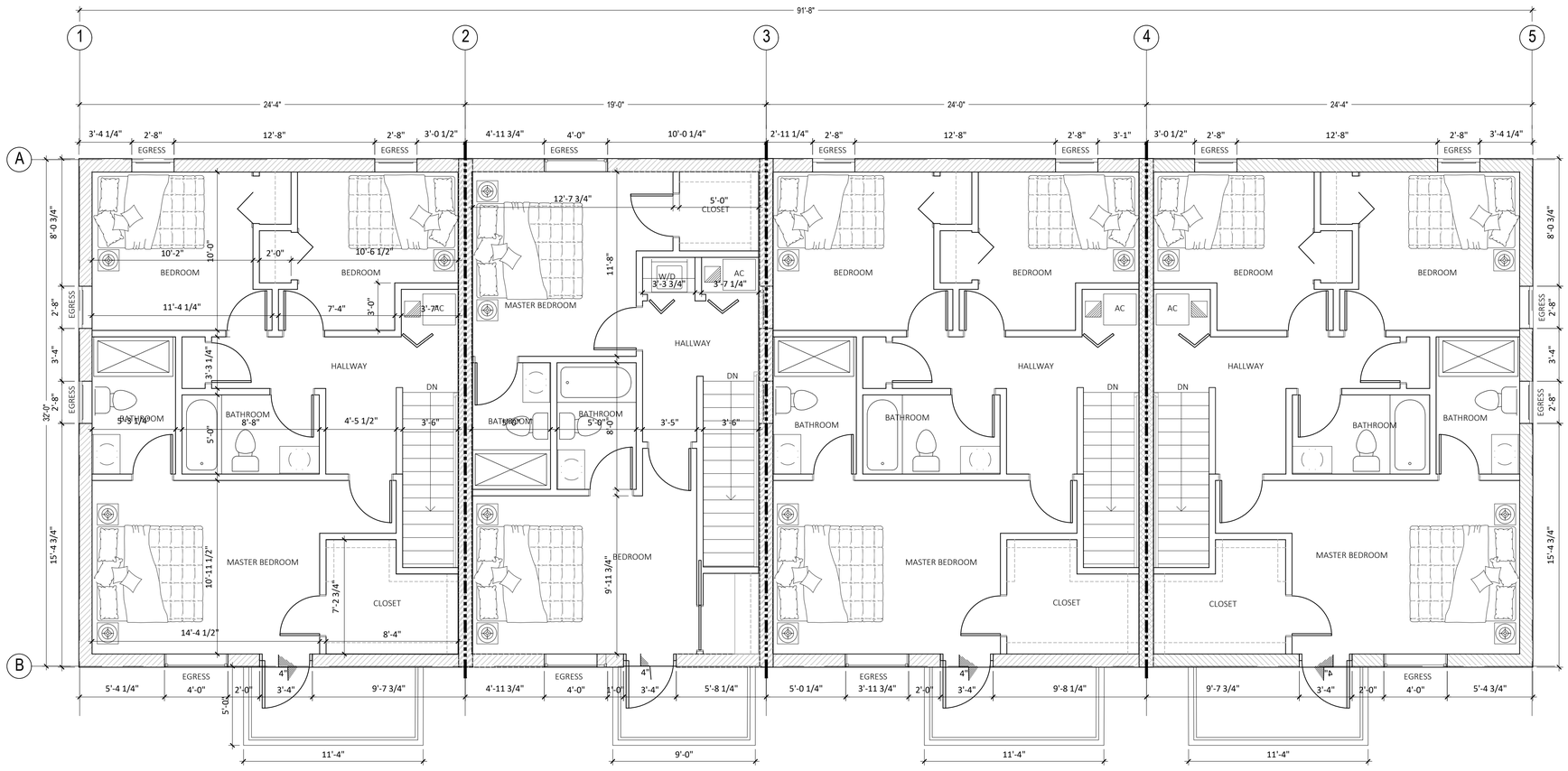
PHASE
SITE PLAN APPLICATION

SHEET TITLE
FLOOR PLAN BUILDING TYPE 2

SHEET NUMBER
A-1.2.1

D & Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings



01
A-1.2.2

BUILDING TYPE 2
2ND FLOOR PLAN
SCALE: 1/4" = 1'-0"

FLOOR PLAN LEGEND

SYMBOL	DESCRIPTION
	CMU EXTERIOR WALL: 8" CONCRETE MASONRY UNIT(R-3 MIN.) WITH SMOOTH STUCCO FINISH ON EXTERIOR AND (1) 1/2" GYPSUM OVER 7/8" FURRING INTERIOR SIDE.
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	INTERIOR PARTITION: (1) LAYER 1/2" GYPSUM WALLBOARD FASTENED TO BOTH SIDES OF MTL STUD PARTITION.

PLAN NOTES

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NOTE:
ALL MECHANICAL, ELECTRICAL, PLUMBING, LIGHTING DISCIPLINES SHALL PROVIDE THE FOLLOWING:
(AT) AIR TIGHT PLENUMS
(IC) INSULATION CONTACT

1. BARS, SCREENS, COVERS + GRILLS
AS PER R310.4 FBC MEANS OF ESCAPE MUST BE CAPABLE OF WITHSTANDING WIND AND IMPACT FORCES WITHOUT THE USE OF SHUTTERS AND MUST BE READILY OPENABLE FROM THE INSIDE WITHOUT THE USE OF KEYS OR SPECIAL EFFORT AT ALL EMERGENCY EGRESS WINDOW + DOORS

2. EGRESS WINDOWS
ALL EGRESS WINDOW WILL COMPLY WITH FFPC 101 CHAPTER 24 EGRESS REQUIREMENT. 5.7 SQUARE FEET CLEAR OPENING, NOT LESS THAN 20" WIDTH, NOT LESS THAN 24" HEIGHT, AND NOT MORE THAN 44" FROM THE BOTTOM OPENING (TYP THRU OUT)

3. A/C CONDENSER UNIT:
COORDINATE SIZES OF A/C CONDENSER UNIT INCLUDING CLEARANCES.
ELEVATION SHALL BE AT F.F.E., ABOVE BASE FLOOD ELEVATION.

4. A.H.U. CLEARANCE:
A.H.U.S MUST BE IN CLOSET WITH 4" MIN. CLEARANCE AROUND UNIT.

5. SMOKE DETECTORS
SMOKE DETECTORS ARE TO BE AT LEAST 3 FEET AWAY FROM THE A/C SUPPLY GRILLS

6. FLOOD MATERIAL:
ALL CONSTRUCTION AND FINISH MATERIAL BELOW BASE FLOOD ELEVATION SHALL BE FLOOD DAMAGE-RESISTANT MATERIAL. (ASCE 24-05 CH. 5.0.)

ADDITIONAL NOTE:

1. COORDINATE ALL CASEWORK, APPLIANCES & PLUMBING FIXTURES EXACT DIMENSIONS (WIDTH, HEIGHT & LENGHT) & LOCATIONS PRIOR TO ANY INSTALLATION. PROVIDE SHOP DWGS AS NEEDED.

INTERIOR FINISHES

INTERIOR FINISH CLASSIFICATION: CLASS C

1. ALL INTERIOR FINISHES SHALL COMPLY WITH FFPC 101, 7TH EDITION 10.2.2.

2. FFPC 101-30.3.3.2 INTERIOR WALL AND CEILING
INTERIOR WALL AND CEILING FINISH MATERIALS COMPLYING WITH SECTION 10.2 SHALL BE PERMITTED AS FOLLOWS:

A. FFPC 101-10.2.7.1 CARPET AND CARPET-LIKE INTERIOR FLOOR FINISHES SHALL COMPLY WITH ASTM D 2859.

B. FFPC 101-10.2.7.2* FLOOR COVERING, OTHER THAN CARPET FOR WHICH 10.2.2.2 ESTABLISHES REQUIREMENTS FOR FIRE PERFORMANCE, SHALL HAVE A MINIMUM CRITICAL RADIANT FLUX OF 0.1 W/CM2.

C. FFPC 101-10.2.7.3* INTRIOR FLOOR FINISHES SHALL BE CLASSIFIED AS CLASS I OR CLASS II BASED ON TEST RESULTS FROM NFPA 253, STANDARD METHOD OF TEST FOR CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEM USING A RADIANT HEAT ENERGY SOURCE.

3. ANY INTERIOR WOOD FINISH WILL BE INHERENTLY FIRE RETARDANT.

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SEAL

STATE OF FLORIDA
DANIEL DIAZ
AR 97839
REGISTERED ARCHITECT

DANIEL DIAZ
AR # 97839

PROJECT

VILLAS OF SOLANA

3211 AVE J
RIVIERA BEACH, FL 33404

RBCDC
RIVIERA BEACH COMMUNITY DEVELOPMENT CORPORATION
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REVISIONS

NO	DATE	DESCRIPTION

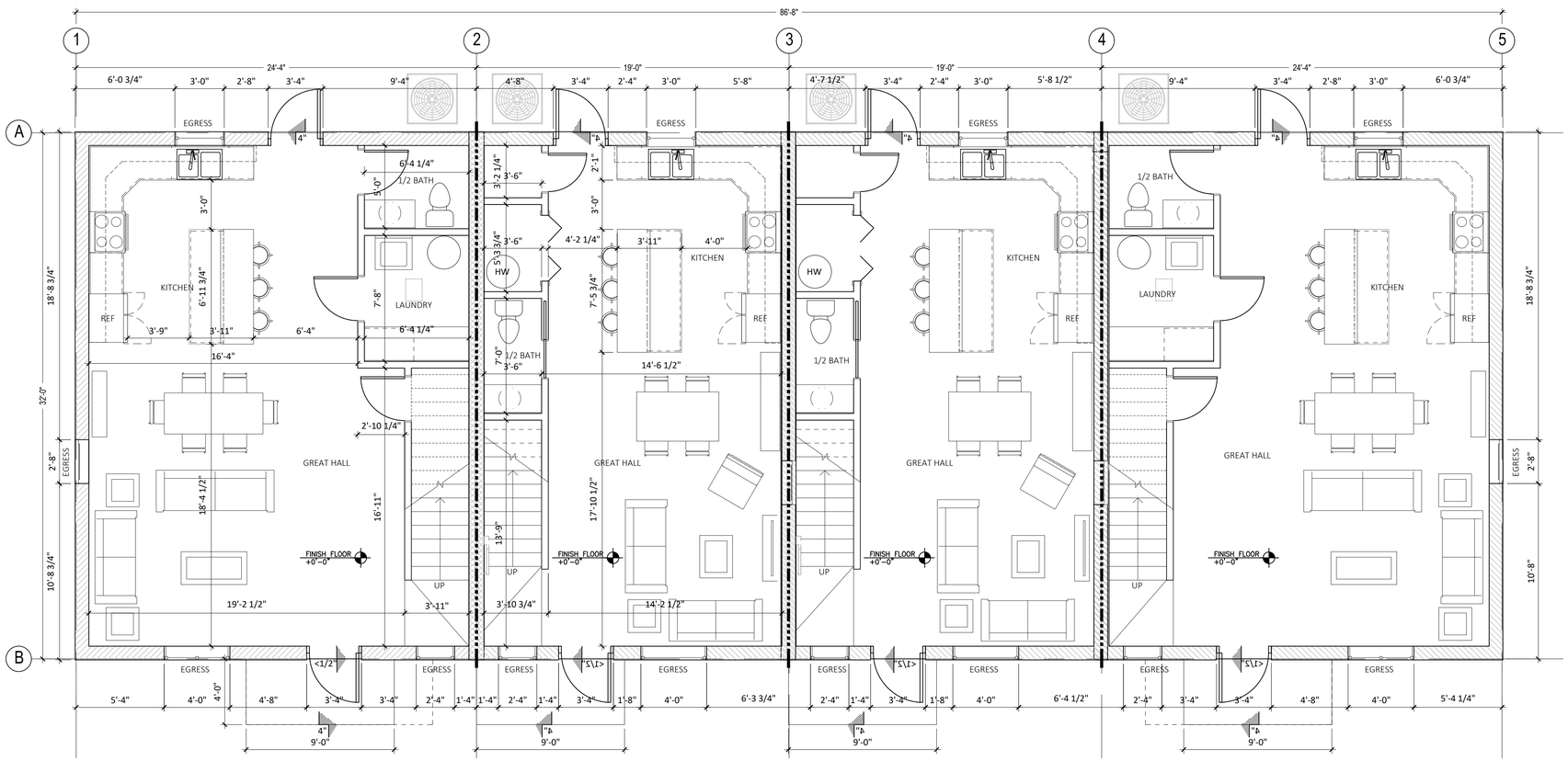
DQ PROJECT NO. : 2030
CHECKED BY : DD
DRAWN BY : DD
DATE : 08.31.22

PHASE
SITE PLAN APPLICATION

SHEET TITLE
FLOOR PLAN BUILDING TYPE 2

SHEET NUMBER
A-1.2.2

D & Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings



BUILDING TYPE 3
1ST FLOOR PLAN
SCALE: 1/4" = 1'-0"

01
A-1.3.1

FLOOR PLAN LEGEND

SYMBOL	DESCRIPTION
	CMU EXTERIOR WALL: 8" CONCRETE MASONRY UNIT(R-3 MIN.) WITH SMOOTH STUCCO FINISH ON EXTERIOR AND (1) 1/2" GYPSUM OVER 7/8" FURRING INTERIOR SIDE.
	4 HOUR FIRE RATED DEMISING WALL: (1) LAYER 5/8" TYPE-X GYPSUM WALLBOARD FASTENED TO BOTH SIDES OF CMU WALL TO BE CONSTRUCTED PER ASSEMBLY REQUIREMENT
	INTERIOR PARTITION: (1) LAYER 1/2" GYPSUM WALLBOARD FASTENED TO BOTH SIDES OF MTL STUD PARTITION.

PLAN NOTES

1. MEDICINE CABINETS:
MEDICINE CABINETS & MIRRORS BY OWNER
2. CLOSETS:
SHELVING BY OWNER & G.C. TO PROVIDE PROPER BACKING IN ALL CLOSETS FOR SHELVING.
3. SHOWERS:
SHOWERS TO HAVE IMPERVIOUS MATERIALS TO BOTTOM OF CEILING PROVIDE MINIMUM 22" CLEAR WIDTH AT SHOWER/TUB ACESS IN COMPLIANCE WITH SECTION R307.1
4. WASHER AND DRYER:
PROVIDE 4" RECESSED FOR WASHER & DRYER HOOK-UPS & DRYER VENT IN LAUNDRY CLOSET
5. GLAZING NOTES :
GLAZING WITHIN 5' -0" AFF (TUBS AND SHOWERS) MUST BE CAT.II SAFETY GLASS

GLASS DOORS, SIDELIGHTS & GLAZING WITHIN 48" OF DOORS TO BE MIN. CAT II SAFETY GLASS
6. PLENUM & SEALED ATTIC SPACE
NOTE:
ALL MECHANICAL, ELECTRICAL, PLUMBING, LIGHTING DISCIPLINES SHALL PROVIDE THE FOLLOWING:
(AT) AIR TIGHT PLENUMS
(IC) INSULATION CONTACT

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3. A/C CONDENSER UNIT:
COORDINATE SIZES OF A/C CONDENSER UNIT INCLUDING CLEARANCES. ELEVATION SHALL BE AT F.F.E., ABOVE BASE FLOOD ELEVATION.
4. A.H.U. CLEARANCE:
A.H.U.'S MUST BE IN CLOSET WITH 4" MIN. CLEARANCE AROUND UNIT.
5. SMOKE DETECTORS
SMOKE DETECTORS ARE TO BE AT LEAST 3 FEET AWAY FROM THE A/C SUPPLY GRILLS
6. FLOOD MATERIAL:
ALL CONSTRUCTION AND FINISH MATERIAL BELOW BASE FLOOD ELEVATION SHALL BE FLOOD DAMAGE-RESISTANT MATERIAL. (ASCE 24-05 CH. 5.0.)

ADDITIONAL NOTE:

1. COORDINATE ALL CASEWORK, APPLIANCES & PLUMBING FIXTURES EXACT DIMENSIONS (WIDTH, HEIGHT & LENGHT) & LOCATIONS PRIOR TO ANY INSTALLATION. PROVIDE SHOP DWGS AS NEEDED.

INTERIOR FINISHES

INTERIOR FINISH CLASSIFICATION: CLASS C

1. ALL INTERIOR FINISHES SHALL COMPLY WITH FFPC 101, 7TH EDITION 10.2.2.

2. FFPC 101-30.3.3.2 INTERIOR WALL AND CEILING
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C. FFPC 101-10.2.7.3* INTRIOR FLOOR FINISHES SHALL BE CLASSIFIED AS CLASS I OR CLASS II BASED ON TEST RESULTS FROM NFPA 253, STANDARD METHOD OF TEST FOR CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEM USING A RADIANT HEAT ENERGY SOURCE.

3. ANY INTERIOR WOOD FINISH WILL BE INHERENTLY FIRE RETARDANT.

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REVISIONS		
NO.	DATE	DESCRIPTION

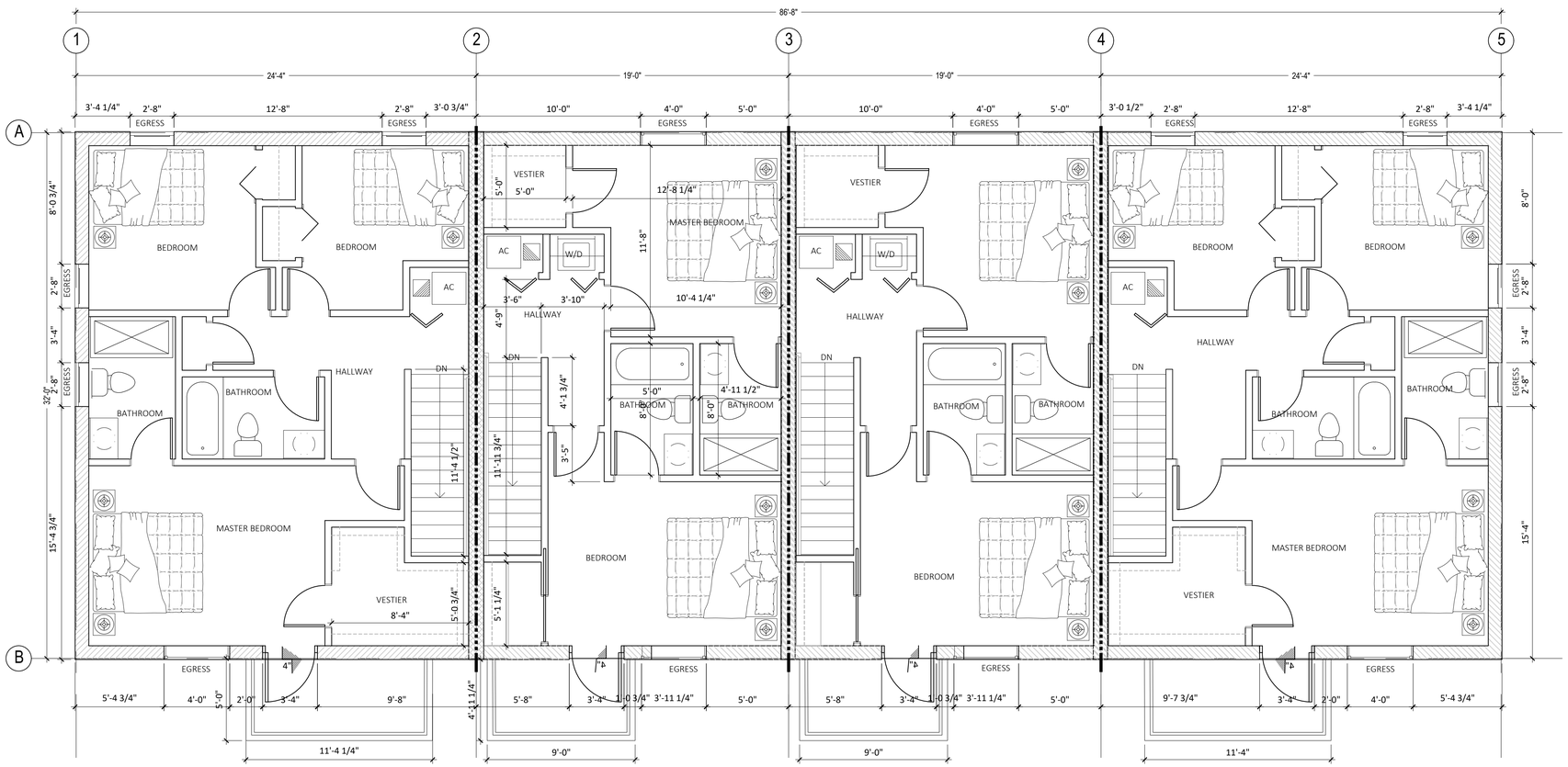
DQ PROJECT NO. : 2030
CHECKED BY : DD
DRAWN BY : DD
DATE : 08.31.22

PHASE
SITE PLAN APPLICATION

SHEET TITLE
FLOOR PLAN BUILDING TYPE 3

SHEET NUMBER
A-1.3.1

D & Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings



01
A-1.3.2

BUILDING TYPE 3
2ND FLOOR PLAN
SCALE: 1/4" = 1'-0"

FLOOR PLAN LEGEND

SYMBOL	DESCRIPTION
	CMU EXTERIOR WALL: 8" CONCRETE MASONRY UNIT(R-3 MIN.) WITH SMOOTH STUCCO FINISH ON EXTERIOR AND (1) 1/2" GYPSUM OVER 7/8" FURRING INTERIOR SIDE.
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	INTERIOR PARTITION: (1) LAYER 1/2" GYPSUM WALLBOARD FASTENED TO BOTH SIDES OF MTL STUD PARTITION.

PLAN NOTES

1. MEDICINE CABINETS:
MEDICINE CABINETS & MIRRORS BY OWNER

2. CLOSETS:
SHELVING BY OWNER & G.C. TO PROVIDE PROPER BACKING IN ALL CLOSETS FOR SHELVING.

3. SHOWERS:
SHOWERS TO HAVE IMPERVIOUS MATERIALS TO BOTTOM OF CEILING
PROVIDE MINIMUM 22" CLEAR WIDTH AT SHOWER/TUB ACESS IN COMPLIANCE WITH SECTION R307.1

4. WASHER AND DRYER:
PROVIDE 4" RECESSED FOR WASHER & DRYER HOOK-UPS & DRYER VENT IN LAUNDRY CLOSET

5. GLAZING NOTES :
GLAZING WITHIN 5' -0" AFF (TUBS AND SHOWERS) MUST BE CAT.II SAFETY GLASS

GLASS DOORS, SIDELIGHTS & GLAZING WITHIN 48" OF DOORS TO BE MIN. CAT II SAFETY GLASS

6. PLENUM & SEALED ATTIC SPACE
NOTE:
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(IC) INSULATION CONTACT

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3. A/C CONDENSER UNIT:
COORDINATE SIZES OF A/C CONDENSER UNIT INCLUDING CLEARANCES.
ELEVATION SHALL BE AT F.F.E., ABOVE BASE FLOOD ELEVATION.

4. A.H.U. CLEARANCE:
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PROJECT

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REVISIONS

NO.	DATE	DESCRIPTION

DQ PROJECT NO. : 2030
CHECKED BY : DD
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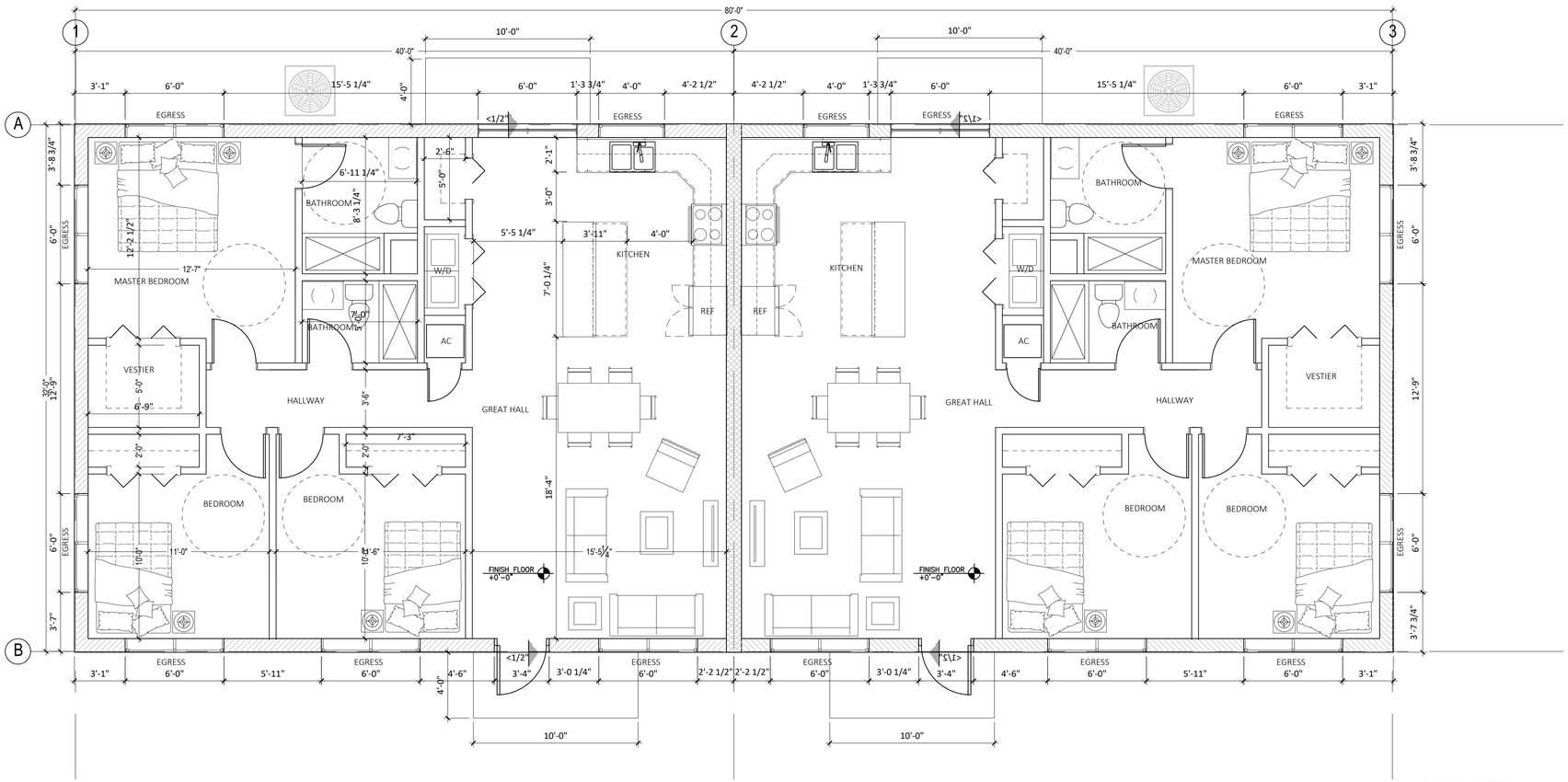
DATE : 08.31.22

PHASE
SITE PLAN APPLICATION

SHEET TITLE
FLOOR PLAN BUILDING TYPE 3

SHEET NUMBER
A-1.3.2

D & Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings



01 / A-1.4.1

BUILDING TYPE 4
1ST FLOOR PLAN
SCALE: 1/4" = 1'-0"

FLOOR PLAN LEGEND

SYMBOL	DESCRIPTION
	CMU EXTERIOR WALL: 8" CONCRETE MASONRY UNIT(R-3 MIN.) WITH SMOOTH STUCCO FINISH ON EXTERIOR AND (1) 1/2" GYPSUM OVER 7/8" FURRING INTERIOR SIDE.
	4 HOUR FIRE RATED DEMISING WALL: (1) LAYER 5/8" TYPE-X GYPSUM WALLBOARD FASTENED TO BOTH SIDES OF CMU WALL TO BE CONSTRUCTED PER ASSEMBLY REQUIREMENT
	INTERIOR PARTITION: (1) LAYER 1/2" GYPSUM WALLBOARD FASTENED TO BOTH SIDES OF MTL STUD PARTITION.

PLAN NOTES

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MEDICINE CABINETS & MIRRORS BY OWNER
2. CLOSETS:
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4. WASHER AND DRYER:
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5. GLAZING NOTES :
GLAZING WITHIN 5' -0" AFF (TUBS AND SHOWERS) MUST BE CAT.II SAFETY GLASS

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6. PLENUM & SEALED ATTIC SPACE
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3. A/C CONDENSER UNIT:
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NO.	DATE	DESCRIPTION

DQ PROJECT NO. : 2030
CHECKED BY : DD
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DATE : 08.31.22

PHASE
SITE PLAN APPLICATION

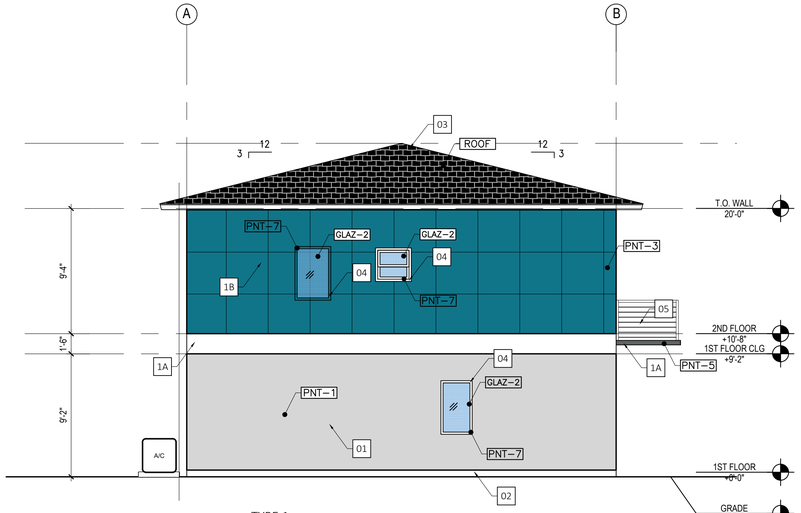
SHEET TITLE
FLOOR PLAN BUILDING TYPE 4

SHEET NUMBER
A-1.4.1

D & Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings

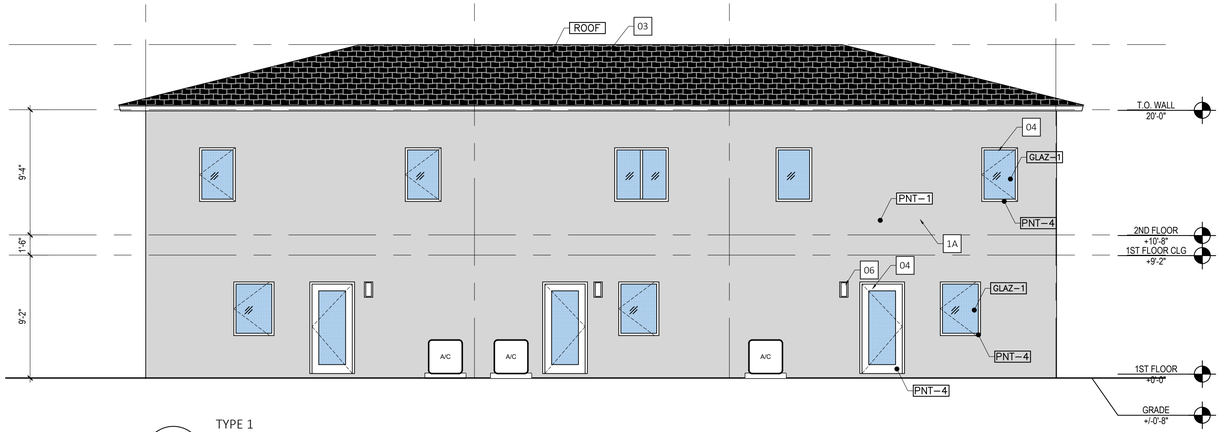
01 A-3.1

TYPE 1
FRONT ELEVATION
SCALE: 3/16" = 1'-0"



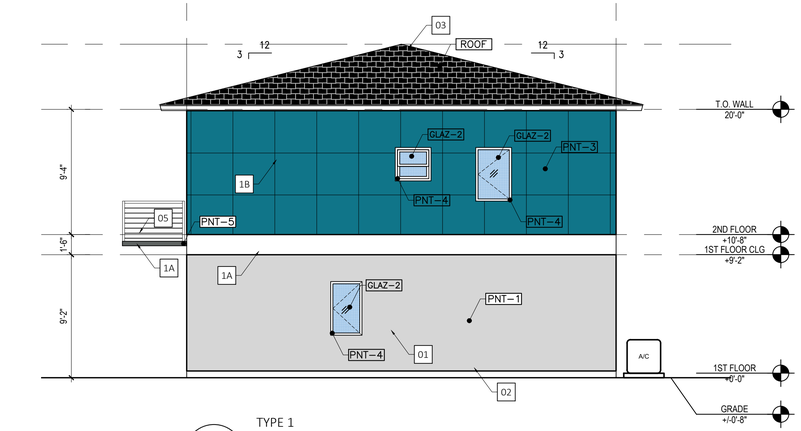
02 A-3.1

TYPE 1
LEFT ELEVATION
SCALE: 3/16" = 1'-0"



03 A-3.1

TYPE 1
REAR ELEVATION
SCALE: 3/16" = 1'-0"



04 A-3.1

TYPE 1
RIGHT ELEVATION
SCALE: 3/16" = 1'-0"

ELEVATION KEY NOTES

ITEM #	DESCRIPTION
01	MASONRY WALL W/LAP SLIDING STUCCO FINISH
1A	MASONRY WALL W/SMOOTH STUCCO FINISH
1B	MASONRY WALL W/SQUARED STUCCO FINISH
1C	STONE ACCENT FEATURE WALL
02	STUCCO W/ 1/2" REVEAL
03	DIMENSIONAL ASPHALT SHINGLE ROOFING SYSTEM
04	IMPACT RESISTANT ALUMINUM WINDOW AND DOORS
05	DECORATIVE ALUMINUM RAILING SYSTEM
06	DECORATIVE LIGHTING FIXTURE

EXTERIOR COLOR/FINISH LEGEND

SYMBOL	DESCRIPTION
PNT – 1	FIELD COLOR #1: COLOR: ALABASTER SW 7008
PNT – 2	FIELD COLOR #2 COLOR: LIGHT YELLOW SW XXXXX, TBD)
PNT – 3	FIELD COLOR #3 COLOR: TEAL GREEN (SW XXXXX, TBD)
PNT – 4	EXTERIOR DOOR, DOOR FRAMES, WINDOW FRAMES AND LOUVERS: COLOR: BRONZE FINISH (MFR)
PNT – 5	FIELD COLOR #4 COLOR: DARK GRAY SW XX

SYMBOL	DESCRIPTION
GLAZ – 1	IMPACT RATED GLAZING IN ALUMINUM FRAMES. COLOR: LOW E 'BLUE-GREEN' TINT
GLAZ – 2	IMPACT RATED GLAZING IN ALUMINUM FRAMES. COLOR: LOW E 'PRIVACY' TINT
ROOF	SHINGLE ROOFING COLOR: CHARCOAL
STONE	ACCENT FEATURE TEXTURE COLOR: STONE ACCENT

D&Q STUDIO ARCHITECTS
8245 S.W. 42ND STREET
MIAMI, FLORIDA 33155
P: 786.239.1322
LICENSE AA 26003190
WWW.D-Q-S.COM

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SEAL

STATE OF FLORIDA
DANIEL DIAZ
AR 97839
REGISTERED ARCHITECT

DANIEL DIAZ
AR # 97839

PROJECT

VILLAS OF SOLANA
3211 AVE J
RIVIERA BEACH, FL 33404

RBCDC
RIVIERA BEACH COMMUNITY DEVELOPMENT CORPORATION
Innovation. Restoration. Beautification.®

REVISIONS

NO.	DATE	DESCRIPTION

DQ PROJECT NO. : 2030
CHECKED BY : DD
DRAWN BY : DD
DATE : 08.31.22

PHASE
SITE PLAN APPLICATION

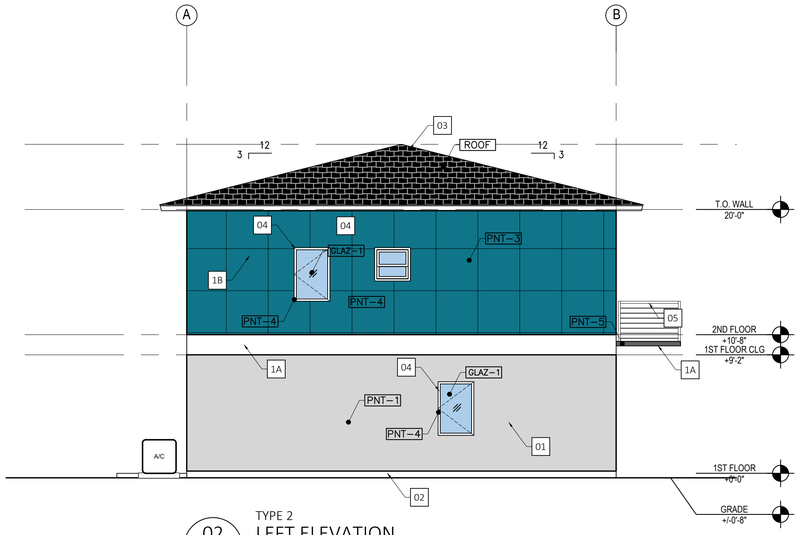
SHEET TITLE
EXTERIOR ELEVATIONS BUILDING TYPE 1

SHEET NUMBER
A-3.1

D & Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings

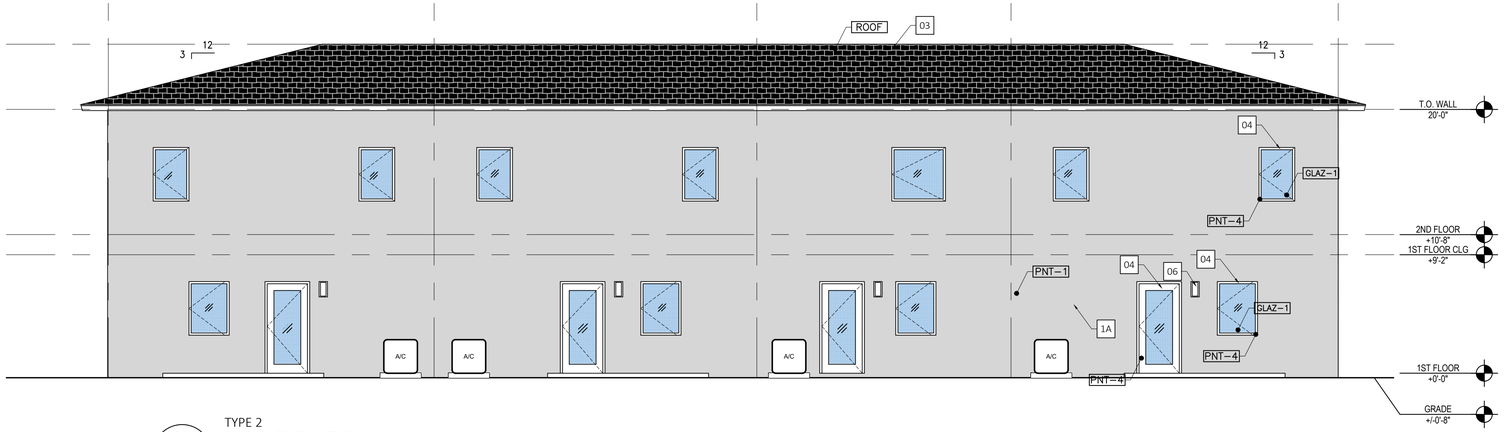
01 A-3.2

TYPE 2
FRONT ELEVATION
SCALE: 3/16" = 1'-0"



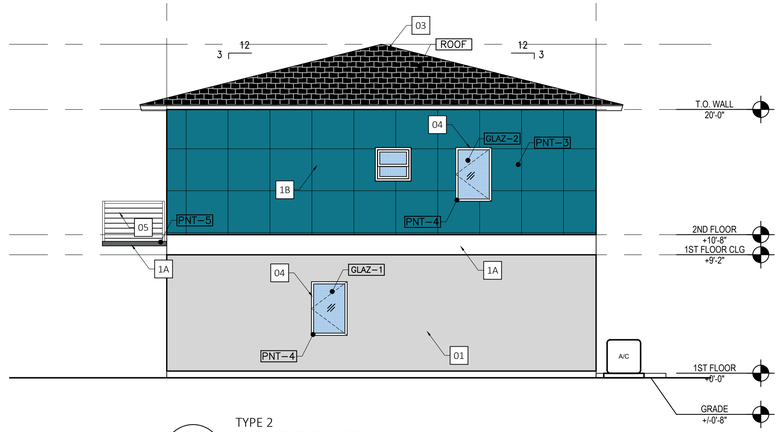
02 A-3.2

TYPE 2
LEFT ELEVATION
SCALE: 3/16" = 1'-0"



03 A-3.2

TYPE 2
REAR ELEVATION
SCALE: 3/16" = 1'-0"



04 A-3.2

TYPE 2
RIGHT ELEVATION
SCALE: 3/16" = 1'-0"

ELEVATION KEY NOTES

ITEM #	DESCRIPTION
01	MASONRY WALL W/LAP SLIDING STUCCO FINISH
1A	MASONRY WALL W/SMOOTH STUCCO FINISH
1B	MASONRY WALL W/SQUARED STUCCO FINISH
1C	STONE ACCENT FEATURE WALL
02	STUCCO W/ 1/2" REVEAL
03	DIMENSIONAL ASPHALT SHINGLE ROOFING SYSTEM
04	IMPACT RESISTANT ALUMINUM WINDOW AND DOORS
05	DECORATIVE ALUMINUM RAILING SYSTEM
06	DECORATIVE LIGHTING FIXTURE

EXTERIOR COLOR/FINISH LEGEND

SYMBOL	DESCRIPTION
PNT–1	FIELD COLOR #1: COLOR: ALABASTER SW 7008
PNT–2	FIELD COLOR #2 COLOR: LIGHT YELLOW SW XXXXX, TBD)
PNT–3	FIELD COLOR #3 COLOR: TEAL GREEN (SW XXXXX, TBD)
PNT–4	EXTERIOR DOOR, DOOR FRAMES, WINDOW FRAMES AND LOUVERS: COLOR: BRONZE FINISH (MFR)
PNT–5	FIELD COLOR #4 COLOR: DARK GRAY SW XX

SYMBOL	DESCRIPTION
GLAZ–1	IMPACT RATED GLAZING IN ALUMINUM FRAMES. COLOR: LOW E 'BLUE-GREEN' TINT
GLAZ–2	IMPACT RATED GLAZING IN ALUMINUM FRAMES. COLOR: LOW E 'PRIVACY' TINT
ROOF	SHINGLE ROOFING COLOR: CHARCOAL
STONE	ACCENT FEATURE TEXTURE COLOR: STONE ACCENT

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MIAMI, FLORIDA 33155
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SEAL

STATE OF FLORIDA
DANIEL DIAZ
AR 97839
REGISTERED ARCHITECT

DANIEL DIAZ
AR # 97839

PROJECT

VILLAS OF SOLANA
3211 AVE J
RIVIERA BEACH, FL 33404

RBCDC
RIVIERA BEACH COMMUNITY DEVELOPMENT CORPORATION
Innovation. Restoration. Beautification.®

REVISIONS

NO	DATE	DESCRIPTION

DQ PROJECT NO. : 2030
CHECKED BY : DD
DRAWN BY : DD
DATE : 08.31.22

PHASE
SITE PLAN APPLICATION

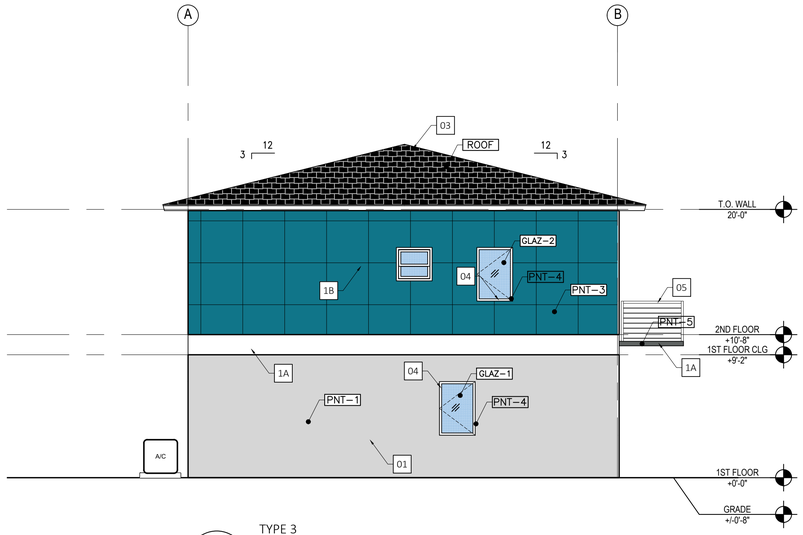
SHEET TITLE
EXTERIOR ELEVATIONS BUILDING TYPE 2

SHEET NUMBER
A-3.2

D & Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings

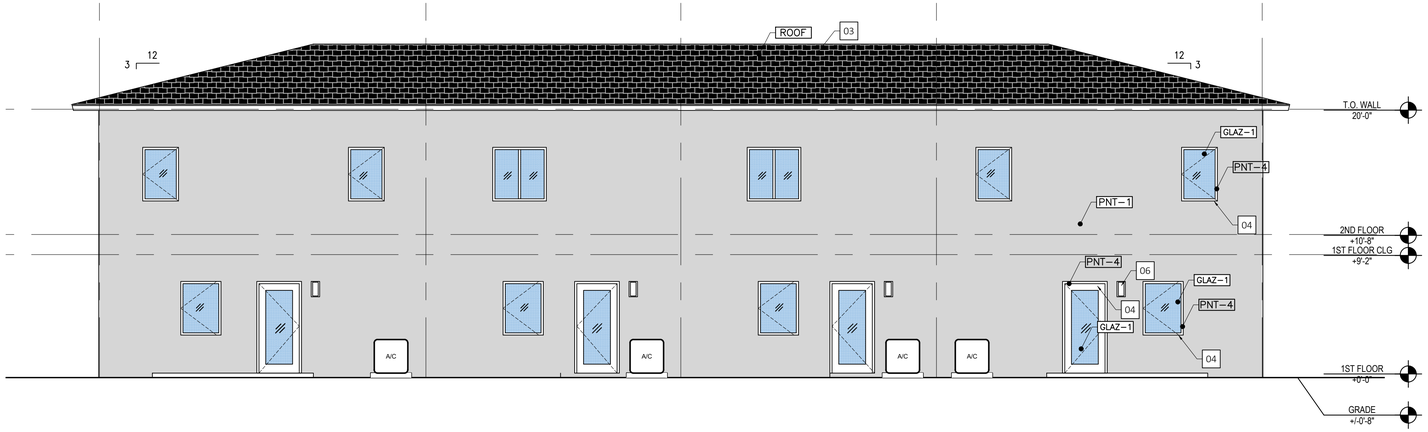
01 / A-3.3

TYPE 3
FRONT ELEVATION
SCALE: 3/16" = 1'-0"



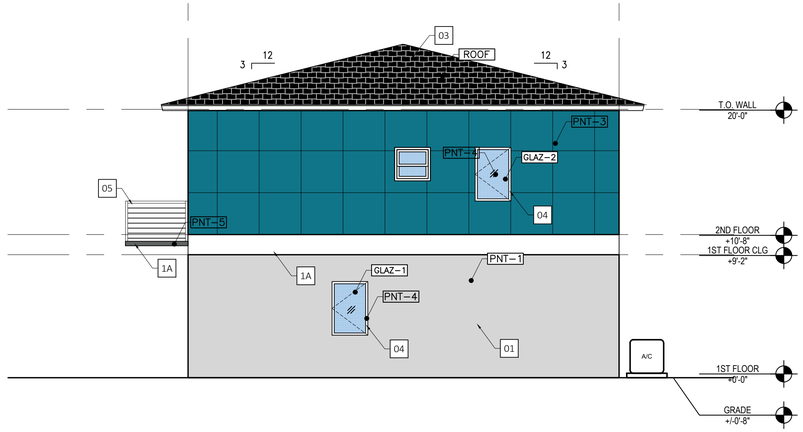
02 / A-3.3

TYPE 3
LEFT ELEVATION
SCALE: 3/16" = 1'-0"



03 / A-3.3

TYPE 3
REAR ELEVATION
SCALE: 3/16" = 1'-0"



04 / A-3.3

TYPE 3
RIGHT ELEVATION
SCALE: 3/16" = 1'-0"

ELEVATION KEY NOTES

ITEM #	DESCRIPTION
01	MASONRY WALL W/LAP SLIDING STUCCO FINISH
1A	MASONRY WALL W/SMOOTH STUCCO FINISH
1B	MASONRY WALL W/SQUARED STUCCO FINISH
1C	STONE ACCENT FEATURE WALL
02	STUCCO W/ 1/2" REVEAL
03	DIMENSIONAL ASPHALT SHINGLE ROOFING SYSTEM
04	IMPACT RESISTANT ALUMINUM WINDOW AND DOORS
05	DECORATIVE ALUMINUM RAILING SYSTEM
06	DECORATIVE LIGHTING FIXTURE

EXTERIOR COLOR/FINISH LEGEND

SYMBOL	DESCRIPTION
PNT–1	FIELD COLOR #1: COLOR: ALABASTER SW 7008
PNT–2	FIELD COLOR #2 COLOR: LIGHT YELLOW SW XXXXX, TBD)
PNT–3	FIELD COLOR #3 COLOR: TEAL GREEN (SW XXXXX, TBD)
PNT–4	EXTERIOR DOOR, DOOR FRAMES, WINDOW FRAMES AND LOUVERS: COLOR: BRONZE FINISH (MFR)
PNT–5	FIELD COLOR #4 COLOR: DARK GRAY SW XX

SYMBOL	DESCRIPTION
GLAZ–1	IMPACT RATED GLAZING IN ALUMINUM FRAMES. COLOR: LOW E 'BLUE-GREEN' TINT
GLAZ–2	IMPACT RATED GLAZING IN ALUMINUM FRAMES. COLOR: LOW E 'PRIVACY' TINT
ROOF	SHINGLE ROOFING COLOR: CHARCOAL
STONE	ACCENT FEATURE TEXTURE COLOR: STONE ACCENT

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SEAL
STATE OF FLORIDA · REGISTERED ARCHITECT · DANIEL DIAZ · AR 97839
DANIEL DIAZ
AR # 97839

PROJECT
VILLAS OF SOLANA
3211 AVE J
RIVIERA BEACH, FL 33404

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REVISIONS

NO.	DATE	DESCRIPTION

DQ PROJECT NO. : 2030
CHECKED BY : DD
DRAWN BY : DD
DATE : 08.31.22

PHASE
SITE PLAN APPLICATION

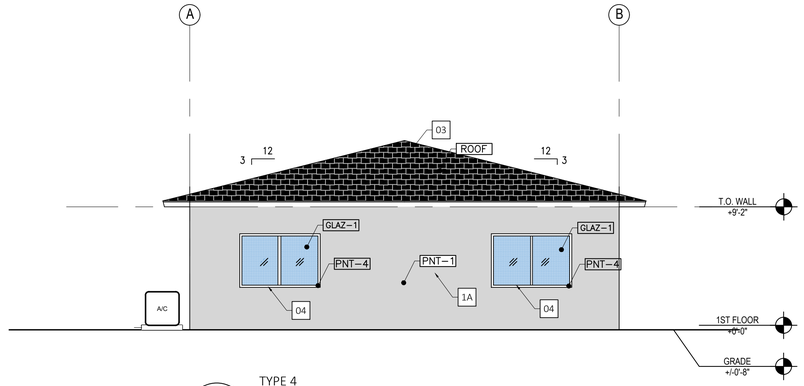
SHEET TITLE
EXTERIOR ELEVATIONS BUILDING TYPE 3

SHEET NUMBER
A-3.3

D & Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings

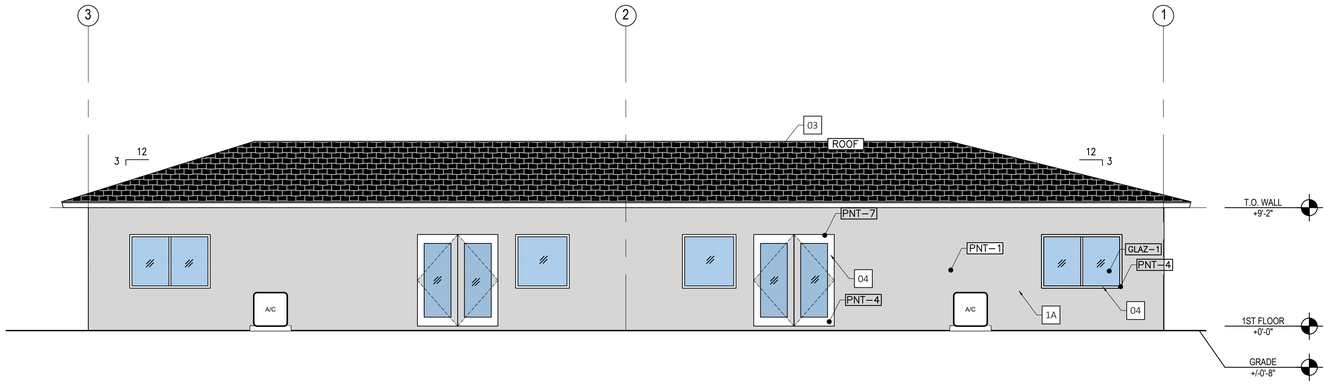
01 / A-3.4

TYPE 4
FRONT ELEVATION
SCALE: 3/16" = 1'-0"



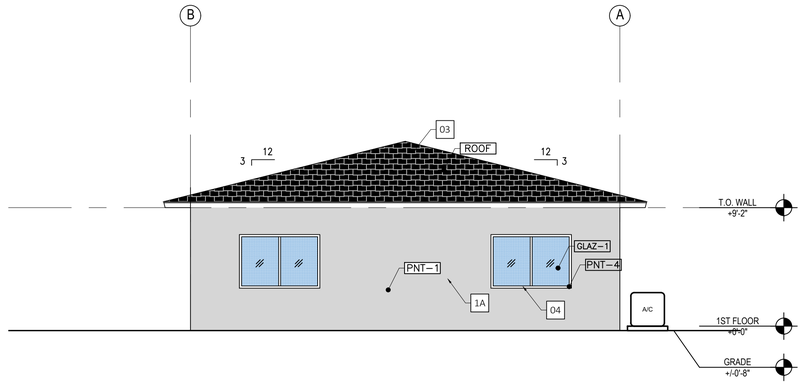
02 / A-3.4

TYPE 4
LEFT ELEVATION
SCALE: 3/16" = 1'-0"



03 / A-3.4

TYPE 4
REAR ELEVATION
SCALE: 3/16" = 1'-0"



04 / A-3.4

TYPE 4
RIGHT ELEVATION
SCALE: 3/16" = 1'-0"

ELEVATION KEY NOTES

ITEM #	DESCRIPTION
01	MASONRY WALL W/LAP SLIDING STUCCO FINISH
1A	MASONRY WALL W/SMOOTH STUCCO FINISH
1B	MASONRY WALL W/SQUARED STUCCO FINISH
1C	STONE ACCENT FEATURE WALL
02	STUCCO W/ 1/2" REVEAL
03	DIMENSIONAL ASPHALT SHINGLE ROOFING SYSTEM
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06	DECORATIVE LIGHTING FIXTURE

EXTERIOR COLOR/FINISH LEGEND

SYMBOL	DESCRIPTION
PNT–1	FIELD COLOR #1: COLOR: ALABASTER SW 7008
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SYMBOL	DESCRIPTION
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STONE	ACCENT FEATURE TEXTURE COLOR: STONE ACCENT

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SEAL
STATE OF FLORIDA
DANIEL DIAZ
AR 97839
REGISTERED ARCHITECT
DANIEL DIAZ
AR # 97839

PROJECT
VILLAS OF SOLANA
3211 AVE J
RIVIERA BEACH, FL 33404

RBCDC
RIVIERA BEACH COMMUNITY DEVELOPMENT CORPORATION
Innovation. Restoration. Beautification.®

REVISIONS

NO.	DATE	DESCRIPTION

DQ PROJECT NO. : 2030
CHECKED BY : DD
DRAWN BY : DD
DATE : 08.31.22

PHASE
SITE PLAN APPLICATION

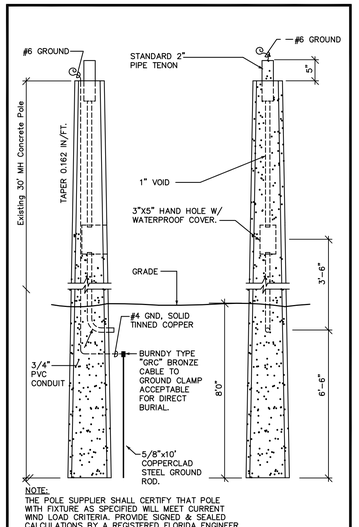
SHEET TITLE
EXTERIOR ELEVATIONS BUILDING TYPE 4

SHEET NUMBER
A-3.4

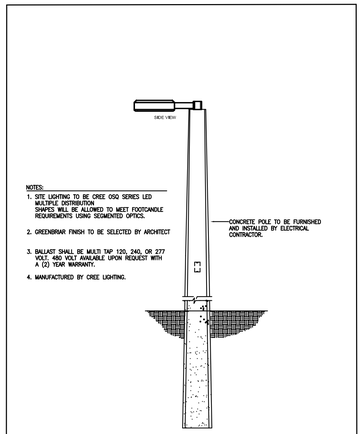
D & Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings

Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	6	SA	Single	Cree Lighting OSQL-B-22L-40K7-3M-XX-NM-XX / OSQ-BLSLF	0.900	17500	132	792
	2	SB	Single	Cree Lighting OSQL-B-22L-40K7-4M-XX-NM-XX / OSQ-BLSLF	0.900	17000	132	264

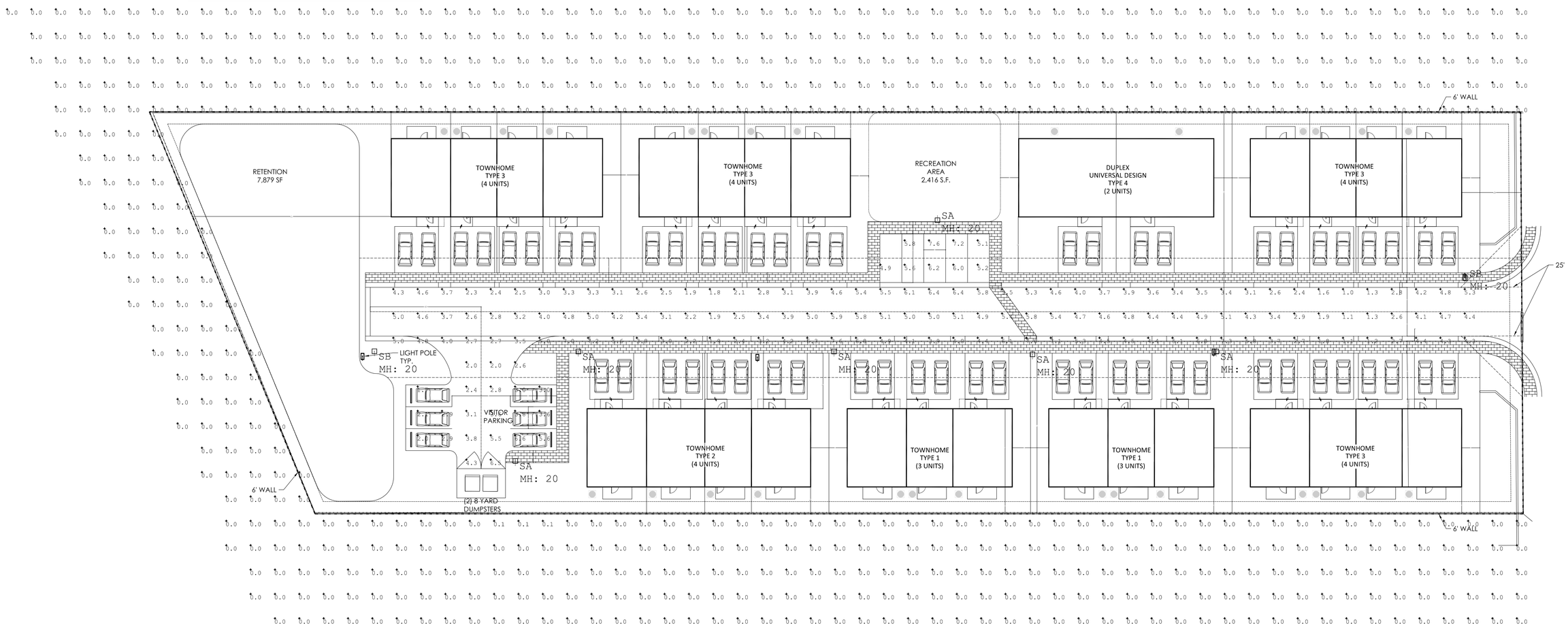
Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Roadway and Parking	Illuminance	Fc	4.07	7.6	1.0	4.07	7.60
Spill	Illuminance	Fc	0.00	0.1	0.0	N.A.	N.A.



POLE DETAIL
NOT TO SCALE



Cree 'OSQ' & POLE ASSEMBLY
NOT TO SCALE



N

01 / PH-1 PHOTOMETRIC SITE PLAN
SCALE: 1": 20'

D&Q STUDIO ARCHITECTS
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REVISIONS		
NO.	DATE	DESCRIPTION

DQ PROJECT NO. : 2030
CHECKED BY : DD
DRAWN BY : DD
DATE : 08.31.22

PHASE
SITE PLAN APPLICATION

SHEET TITLE
SITE PLAN PHOTOMETRIC

SHEET NUMBER
PH100

D & Q Studio Server\03_Projects\02_Drawings & Specs\01_CAD or Revit Drawings

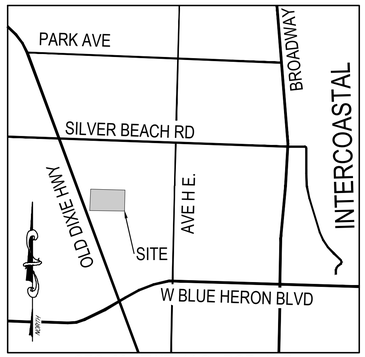
CIVIL ENGINEERING PLANS

FOR

VILLAS OF SOLANA

RIVIERA BEACH, FLORIDA

DEVELOPER: RIVIERA BEACH COMMUNITY DEVELOPMENT CORPORATION, INC.
2001 BROADWAY, SUITE 300
RIVIERA BEACH, FL 33404



SEC. 30 - TWP. 44 S - RGE. 43 E

LOCATION MAP
N.T.S.

INDEX OF SHEETS

SHEET No.	DESCRIPTION
C0.0	COVER SHEET
C0.1-C0.2	GENERAL NOTES
C1.1	DEMOLITION & EROSION CONTROL PLAN
C2.1	SIGNING, STRIPING & GEOMETRIC PLAN
C3.1	PAVING, GRADING & DRAINAGE PLAN
C4.1-C4.2	PAVING, GRADING, & DRAINAGE DETAILS
C5.1	POTABLE WATER & SANITARY SEWER PLAN
C6.1-C6.2	POTABLE WATER & SANITARY SEWER DETAILS

SURVEY PREPARED BY:
PRINCIPAL MERIDIAN SURVEYING, INC.
LICENSED BUSINESS No. 8261
4546 CAMBRIDGE STREET
WEST PALM BEACH, FL 33415
TEL: 561-478-7764

CIVIL DESIGN, INC.
Service Driven Design – Engineered Results
1400 Centrepark Blvd, Suite 905
West Palm Beach, FL 33401
T: 561.659.5760 F: 561.659.5772
www.civil-design.com
Registry No. 9664

VILLAS OF SOLANA

3211 AVENUE J
RIVIERA BEACH, FL 33404

APPROVED BY:

GABRIEL BURDEN LICENSE NO. 75425 STATE OF FLORIDA PROFESSIONAL ENGINEER

Gabriel D Burden

Digitally signed by Gabriel Burden
Date: 2022.08.29 09:59:16 -04'00'

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY GABRIEL BURDEN, P.E. ON USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

Gabriel Burden, P.E.
Florida License No. 75425

CDI PROJECT NO.
22740-01

DATE:	08/29/2022
DESIGNED:	CDI
DRAWN:	CDI

NO.	DATE	REVISION DESCRIPTION

COVER

C0.0

GENERAL NOTES:

1. COORDINATION OF DRAWINGS AND DISCIPLINES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL DRAWINGS AND SPECIFICATIONS FOR COMPLETENESS AND ACCURACY. FURTHER CONTRACTOR IS TO COORDINATE ALL TRADES AND DISCIPLINES PROPERLY. ANY DISCREPANCIES IN PLANS OR SPECIFICATIONS ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING.

2. BUILDINGS. CONTRACTOR IS ADVISED THAT THE BUILDINGS AND ASSOCIATED SYSTEMS MAY STILL BE UNDER DESIGN AND/OR REVIEW. AS SUCH, THERE MAY BE MODIFICATIONS TO SERVICE LINES (MATERIALS, SIZES, LOCATIONS, DEPTHS, ETC.) AS THE BUILDING DOCUMENTS ARE FINALIZED AND PERMITTED.

3. SAFETY. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO TAKE THE NECESSARY PRECAUTIONS TO ENSURE PROPER SAFETY AND WORKMANSHIP WHEN WORKING IN THE VICINITY OF EXISTING UTILITY LINES. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE RESPECTIVE UTILITY PROVIDER ON ANY WORK IN THE VICINITY OF OVERHEAD OR UNDERGROUND LINES. CONTRACTOR SHALL VERIFY PROPER CLEARANCE BELOW EXISTING OVERHEAD LINES PRIOR TO WORKING WITHIN THE VICINITY OF THE LINES.

4. FAMILIARITY WITH SITE CONDITIONS. THE CONTRACTOR SHALL VISIT THE SITE AND ACQUAINT HIMSELF WITH ALL EXISTING CONDITIONS. MAKE HIS OWN SUBSURFACE INVESTIGATION TO SATISFY HIMSELF AS TO THE SITE AND SUBSURFACE CONDITIONS, BUT SUCH SUBSURFACE INVESTIGATIONS SHALL BE PERFORMED ONLY UNDER TIME SCHEDULES AND ARRANGEMENTS APPROVED IN ADVANCE BY THE OWNER'S REPRESENTATIVE AND ENGINEER. THE EXISTING GRADES SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY AND NO REPRESENTATION IS MADE AS TO THEIR ACCURACY OR CONSISTENCY. THE CONTRACTOR SHALL VERIFY ALL EXISTING GRADES TO THE EXTENT NECESSARY TO INSURE COMPLETION OF THE JOB TO THE PROPOSED GRADES INDICATED ON THE DRAWINGS.

5. WORKMANSHIP. ALL WORK SHALL BE PERFORMED IN A WORKMANSHIP-LIKE MANNER AND SHALL CONFORM WITH ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL REGULATIONS AND/OR CODES, INCLUDING OSHA.

6. ELEVATIONS. ALL ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD'88).

7. SITE PLAN. REFER TO SITE PLAN PREPARED BY INSITE STUDIO FOR ADDITIONAL INFORMATION.

8. SURVEY. REFER TO SURVEY PREPARED BY PRINCIPAL MERIDIAN SURVEYING, INC. FOR ADDITIONAL INFORMATION.

9. BENCHMARK. REFER TO SURVEY BY PRINCIPAL MERIDIAN SURVEYING, INC. FOR BENCHMARK LOCATIONS AND ELEVATIONS.

10. FIELD LOCATIONS. THE CONTRACTOR SHALL CONTACT "SUNSHINE STATE ONE CALL OF FLORIDA, INC. (1-800-432-4770)" AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION. THE CONTRACTOR SHALL GIVE ADEQUATE NOTIFICATION TO ALL AFFECTED UTILITY OWNERS FOR REMOVAL, RELOCATION AND ALTERATION OF THEIR EXISTING FACILITIES.

11. PROTECTION OF UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION FOR THE PROTECTION OF ALL EXISTING AND NEWLY INSTALLED ABOVE GROUND, UNDERGROUND, AND ON THE SURFACE STRUCTURES AND UTILITIES FROM DAMAGE OR SERVICE DISRUPTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING SUCH MEASURES AS NECESSARY TO PROTECT THE HEALTH, SAFETY, AND WELFARE OF THOSE PERSONS HAVING ACCESS TO THE WORK SITE.

12. EXISTING UTILITIES. EXISTING UTILITY LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE EXISTING UTILITIES SHOWN ON THE PLANS OR FOR ANY EXISTING UTILITIES THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ARRANGEMENTS FOR FIELD LOCATIONS OF EXISTING UTILITIES. ANY RELOCATIONS OF THE VARIOUS EXISTING UTILITIES SHALL BE COORDINATED WITH THE RESPECTIVE UTILITY PROVIDER IN A TIMELY MANNER TO MINIMIZE IMPACT ON THE CONSTRUCTION SCHEDULE. ANY DELAY CAUSED DUE TO THE RELOCATION OF UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED. ALL COSTS ASSOCIATED WITH VERIFICATION, PROTECTION OF EXISTING SYSTEMS OR CONNECTION TO THOSE SYSTEMS AS IDENTIFIED ON THE PLANS SHALL BE INCLUDED IN THE CONTRACTOR'S BID.

13. EXISTING UTILITIES. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE SIZE, LOCATION, ELEVATION, AND MATERIAL OF ALL EXISTING UTILITIES WITHIN THE AREA OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL EXISTING UTILITIES AND SOILS CONDITIONS AND SHALL NOTIFY THE ENGINEER IN THE EVENT OF ANY DISCREPANCIES WITH THE PLANS.

14. EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES FOR WHICH IT FAILS TO REQUEST LOCATIONS FROM THE UTILITY OWNER. THE CONTRACTOR IS RESPONSIBLE AS WELL FOR DAMAGE TO ANY EXISTING UTILITIES WHICH ARE PROPERLY LOCATED.

15. EXISTING UTILITIES. IF UPON EXCAVATION, AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION OR TO BE OF A SIZE OR MATERIAL DIFFERENT FROM THAT SHOWN ON THE PLANS; THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.

16. FIELD REVIEWS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 48 HOURS PRIOR TO ANY REQUIRED FIELD REVIEWS OR INSPECTIONS AND SHALL SUPPLY ALL EQUIPMENT NECESSARY, LABOR AND MATERIALS FOR INSPECTION AND/OR TEST. ALL WORK SHALL BE OPEN AND SUBJECT TO REVIEW AND/OR INSPECTION BY AUTHORIZED PERSONNEL OF THE COUNTY, OWNER, INVOLVED UTILITY COMPANIES, PROJECT ENGINEER, AND REGULATORY AGENCIES. ALL RECOMMENDATIONS AND REQUIREMENTS OF INSPECTION PERSONNEL OTHER THAN THE OWNER'S SHALL BE REPORTED TO THE ENGINEER PRIOR TO IMPLEMENTATION. COMPENSATION WILL NOT BE ALLOWED FOR WORK WHICH IS NOT AUTHORIZED BY THE ENGINEER OR OWNER.

17. DIFFERING SITE CONDITIONS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES FOUND BETWEEN THE DRAWINGS AND THE FIELD CONDITIONS PRIOR TO CONSTRUCTION IN THE AREA OF CONFLICT. ANY DIFFERING SITE CONDITIONS FROM THAT WHICH ARE REPRESENTED ON THE PLANS, WHETHER ABOVE, ON OR BELOW THE SURFACE OF THE GROUND, ARE TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND THE OWNER IN WRITING.

18. REQUIRED PERMITS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR(S) TO ENSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND AT THE JOB SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL ABIDE BY ALL PERMIT CONDITIONS.

19. DEWATERING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ANY DEWATERING PERMITS AND/OR APPROVALS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED FACILITIES AND SYSTEMS.

20. PERMITS. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND/OR LICENSES TO COMMENCE CONSTRUCTION.

21. USE OF EXISTING MATERIALS. NO EXISTING MATERIAL SHALL BE USED IN NEW CONSTRUCTION UNLESS APPROVED DURING THE SHOP DRAWING APPROVAL PROCESS.

22. EXISTING LANDSCAPE. CONTRACTOR SHALL BE EXTREMELY CAUTIOUS WHEN WORKING NEAR TREES WHICH ARE TO BE SAVED, WHETHER SHOWN ON THE PLAN OR DESIGNATED IN THE FIELD.

23. SHOP DRAWINGS. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS, PRODUCT DATA, MATERIAL SPECIFICATIONS AND OTHER INFORMATION REGARDING CONSTRUCTION MATERIALS AND STRUCTURES AS REQUESTED BY THE OWNER, ENGINEER OR JURISDICTIONAL AGENCY. SHOP DRAWINGS MUST BE NEWLY PREPARED INFORMATION, DRAWN TO ACCURATE SCALE. DO NOT REPRODUCE CONTRACT DOCUMENTS OR COPY STANDARD INFORMATION AS THE BASIS OF SHOP DRAWINGS. STANDARD INFORMATION PREPARED WITHOUT SPECIFIC REFERENCE TO THE PROJECT WILL NOT BE CONSIDERED A SHOP DRAWING.

    A. BY SUBMITTAL OF ANY SHOP DRAWING OR CATALOG DATA, BEARING AN APPROVAL STAMP, THE CONTRACTOR REPRESENTS THAT IT HAS DETERMINED AND VERIFIED ALL FIELD MEASUREMENTS, FIELD CONSTRUCTION CRITERIA, MATERIALS, DIMENSIONS, CATALOG NUMBERS AND SIMILAR DATA, OR WILL DO SO, AND THAT IT HAS CHECKED AND COORDINATED EACH ITEM WITH OTHER APPLICABLE APPROVED SHOP DRAWINGS AND THE CONTRACT REQUIREMENTS.

    B. SHOP DRAWINGS AND CATALOG DATA SUBMITTED WITHOUT THE CONTRACTOR'S STAMP OF APPROVAL WILL BE RETURNED TO THE CONTRACTOR WITHOUT REVIEW. APPROVAL OF SHOP DRAWINGS, SAMPLES, OR CATALOG DATA BY THE ENGINEER SHALL NOT AUTHORIZE ANY DEVIATION FROM THE REQUIREMENT OF THE CONTRACT DOCUMENTS.

    C. ANY PROPOSED SUBSTITUTE OR EQUAL TO THAT SHOWN ON THE CONTRACT DOCUMENTS SHALL BE ACCOMPANIED BY CALCULATIONS SUBSTANTIATING EQUIVALENCY. SHOP DRAWINGS WITH SUBSTITUTE MATERIALS NOT ACCOMPANIED BY CALCULATIONS WILL BE RETURNED WITHOUT REVIEW.

    D. THE CONTRACTOR SHALL CONFIRM COMPATIBILITY OF PIPE SLOPES AND INVERTS DURING SHOP DRAWING AND MATERIALS ORDERING PHASE OF THE PROJECT AND ADVISE THE ENGINEER IN WRITING OF ANY DISCREPANCIES.

    E. INDIVIDUAL SHOP DRAWINGS FOR ALL PRECAST STRUCTURES ARE REQUIRED. CATALOG LITERATURE WILL NOT BE ACCEPTED FOR PRECAST STRUCTURES.

24. TESTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED TESTS TO BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY APPROVED BY THE ENGINEER. THE CONTRACTOR UNDERSTANDS THAT ANY AND ALL TESTS, INSPECTIONS, PROCEDURES INCLUDING ALL LABOR, MATERIALS, TIME AND EFFORT IN ORDER TO HAVE ALL WORK DESIGNATED AS FINAL BY THE RESPECTIVE JURISDICTIONAL AUTHORITIES AND THAT SUCH TESTS, INSPECTIONS AND PROCEDURES ARE INCLUDED IN THE BID.

25. RECORD DRAWINGS. RECORD DRAWINGS SHALL BE SUBMITTED IN SUFFICIENT QUANTITIES AS REQUIRED BY THE OWNER, ENGINEER AND JURISDICTIONAL AGENCIES TO COMPLETE THE CLOSE-OUT OF THE PROJECT. THE CONTRACTOR SHALL PROVIDE THE ENGINEER OF RECORD WITH ADEQUATE RECORD DRAWING INFORMATION, WHICH HAS BEEN PREPARED BY A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA. THE SURVEYOR SHALL SIGN AND SEAL THE RECORD DRAWINGS. THE FOLLOWING SHALL BE THE MINIMUM REQUIREMENTS FOR RECORD DRAWING INFORMATION:

    A. THE WORDS "RECORD DRAWINGS" SHALL BE WRITTEN IN BOLD LETTERS IN A CONSPICUOUS PLACE. NO RUBBER STAMP ON PLANS OR MYLARS SHALL BE ACCEPTED.

    B. ANY SIGNIFICANT CHANGES IN ALIGNMENT, PIPE CONFLICTS, LOCATION OF STORM MANHOLES, CATCH BASINS, ETC. SHALL BE SHOWN TO SCALE ON RECORD DRAWINGS. THE "PROPOSED" ALIGNMENT, ETC. SHALL BE CROSSED OUT.

    C. THE DRAWINGS SHALL BE LEGIBLE AND THE AS-BUILT DIMENSIONS EASY TO IDENTIFY.

    D. DATA FOR STORM STRUCTURES (RIM, INVERTS), PIPE SLOPES, AND PIPE LENGTHS AS CONSTRUCTED SHALL BE SHOWN ON THE PLAN SHEET NEXT TO "PROPOSED" DIMENSIONS. THE "PROPOSED" NUMBERS SHALL BE CROSSED OUT. IF THE ASBUILT CONDITION IS THE SAME AS THE PROPOSED INFORMATION, THEN THE PROPOSED INFORMATION WILL BE CROSSED OUT AND THE ASBUILT DATA WRITTEN.

    E. PERIMETER BERM ELEVATIONS ADJACENT TO THE PROPERTY LINES SHALL BE PROVIDED EVERY 200 LINEAR FEET MINIMUM.

26. FINAL UTILITY ADJUSTMENTS. ALL UTILITIES SHALL BE ADJUSTED TO NEW FINISH GRADES AND PROPERLY SET TO PAVEMENT CROSS SLOPE AS REQUIRED.

SITE DEMOLITION AND EROSION CONTROL NOTES:

1. SITE ACCESS. SUITABLE STABILIZED ROADS ARE TO BE PROVIDED DURING CONSTRUCTION FOR FIRE AND PARAMEDICAL ACCESS.

2. SITE. CONTRACTOR ACCEPTS THE SITE AS IS. ANY REPAIRS TO EXISTING SITE ELEMENTS INCLUDING PAVEMENT, SIDEWALKS, CURBING, DRAINAGE, SANITARY SEWER, WATER, SIGNAGE & STRIPING SHALL BE INCLUDED IN THE BID PRICE.

3. EROSION CONTROL. THE CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION AND TURBIDITY BARRIERS PRIOR TO AND DURING CONSTRUCTION TO PREVENT VIOLATION OF STATE WATER QUALITY STANDARDS FOR OFFSITE DISCHARGES THESE BARRIERS SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETED, SOILS ARE STABILIZED, AND VEGETATION HAS BEEN ESTABLISHED. REFERENCE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS INDICES 102, 103 AND 106 FOR TYPICAL INSTALLATION DETAILS.

4. FILTER FABRIC. FILTER FABRIC SHALL BE INSTALLED ON ALL CATCH BASIN GRATES AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETE.

5. ADJACENT IMPACTS. CONTRACTOR SHALL PROTECT ADJACENT WATER BODIES, WETLANDS AND PROPERTIES FROM DAMAGE BY SEDIMENTATION OR OTHER POTENTIAL CONSTRUCTION RELATED CAUSES.

6. SILT FENCES. SILT FENCES SHALL BE INSTALLED AND MAINTAINED AROUND ALL CLEARING PERIMETERS.

7. SITE CLEARING. CLEAR AREAS INDICATED SHALL BE COMPLETELY CLEAR OF ALL TIMBER, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND ALL OTHER DEBRIS AND OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE GROUND. THIS DEBRIS SHALL BE DISPOSED OF IN A LEGAL MANNER. BURNING OF THIS MATERIAL IS NOT PERMITTED UNLESS THE CONTRACTOR OBTAINS SPECIFIC PERMITS ALLOWING SUCH ACTIVITY.

GEOMETRIC, SIGNING, AND STRIPING NOTES:

1. DIMENSIONS. ALL DIMENSIONS TO EDGE OF PAVEMENT OR FACE OF CURB UNLESS OTHERWISE NOTED.

2. REFERENCES. WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), FDOT TRAFFIC DESIGN STANDARDS (LATEST EDITION), MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) (LATEST EDITION) AND THE PALM BEACH COUNTY TYPICALS FOR PAVEMENT MARKINGS, SIGNING & GEOMETRICS, LATEST EDITION. ALL REFERENCES ARE INCORPORATED INTO THE PLAN DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING COMPLETE COPIES OF THE LATEST EDITION OF THE REFERENCES.

3. ROADWAY STRIPING. ALL ROADWAY STRIPING SHALL BE THERMOPLASTIC IN ACCORDANCE WITH THE RESPECTIVE JURISDICTIONAL AUTHORITY REQUIREMENTS.

4. BUILDING TIES AND DIMENSIONS. BUILDING TIES SHOWN ARE APPROXIMATE. CONTRACTOR TO VERIFY WITH ARCHITECTURAL PLANS. BUILDINGS SHOWN ON THESE DRAWINGS MAY NOT REFLECT MINOR ARCHITECTURAL REVISIONS AND SHOULD NOT BE RELIED UPON FOR STAKING OF BUILDINGS. CONTRACTOR SHOULD OBTAIN LATEST ARCHITECTURAL INFORMATION AND ESTABLISH GEOMETRIC DATA FOR STAKING. SHOULD THE CONTRACTOR IDENTIFY A CONFLICT BETWEEN THE ARCHITECTURAL INFORMATION AND THESE DRAWINGS, NOTIFY THE ENGINEER IN WRITING.

5. MAINTENANCE OF TRAFFIC. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING A PROPER TRAFFIC MAINTENANCE AND CONTROL PLAN IN ACCORDANCE WITH REGULATORY STANDARDS. INCLUDED WILL BE THE LABOR, EQUIPMENT AND MATERIALS REQUIRED TO IMPLEMENT THAT PLAN. ALL WORK MUST BE DONE IN ACCORDANCE WITH AGENCY REQUIREMENTS AND ANY REQUIRED PERMITS OR APPROVALS MUST BE APPLIED FOR AND OBTAINED BY THE CONTRACTOR.

PAVING, GRADING, AND DRAINAGE NOTES:

1. REFERENCES. WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, AND FDOT ROADWAY TRAFFIC DESIGN STANDARDS, LATEST EDITION. ALL FDOT INDICES ARE INCORPORATED AS PLAN REFERENCES. CONTRACTOR IS RESPONSIBLE FOR OBTAINING COMPLETE COPIES OF THE LATEST EDITION OF THE FDOT INDICES.

2. SITE FAMILIARIZATION. PRIOR TO BID PREPARATION, THE CONTRACTOR MUST BECOME FAMILIAR WITH THE OVERALL SITE CONDITIONS AND PERFORM ADDITIONAL INVESTIGATIONS AS DETERMINED NECESSARY TO UNDERSTAND THE LIMIT AND DEPTH OF EXPECTED ORGANIC MATERIAL, ADEQUACY OF EXISTING MATERIALS AS FILL, DEWATERING REQUIREMENTS, CLEAN FILL REQUIRED FROM OFFSITE AND MATERIALS TO BE DISPOSED OF OFFSITE. ANY DELAY, INCONVENIENCE OR EXPENSE CAUSED TO THE CONTRACTOR DUE TO INADEQUATE INVESTIGATION OF EXISTING CONDITIONS SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED. THE MATERIALS ANTICIPATED TO BE ENCOUNTERED DURING CONSTRUCTION MAY REQUIRE DRYING PRIOR TO USE AS BACKFILL AND THE CONTRACTOR MAY HAVE TO IMPORT MATERIALS, AT NO EXTRA COST, FROM OFFSITE TO MEET THE REQUIREMENTS FOR COMPACTION AND PROPER FILL.

3. SITE FILL BALANCE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE EXISTING SITE CONDITIONS OF SOIL DURING THE BID PREPARATION TO DETERMINE IF ANY OFF SITE MATERIALS WILL NEED TO BE IMPORTED TO ACHIEVE THE GRADES SPECIFIED ON THE PLANS.

4. RESTORATION. ALL DISTURBED AREAS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITION OR BETTER AS DETERMINED BY THE ENGINEER, OWNER AND RESPECTIVE JURISDICTIONAL AUTHORITY.

5. HORIZONTAL CONTROL AND LAYOUT. CONTRACTOR/OWNER SHALL COORDINATE WITH A REGISTERED SURVEYOR TO LAY OUT LINE, GRADES, STRUCTURES, LOT CORNERS, ETC. AS NECESSARY TO CONSTRUCT THE PROPOSED FACILITIES IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. BENCH MARKS SHALL BE ESTABLISHED BY A REGISTERED SURVEYOR. BENCH MARKS SHALL BE PERMANENT AND EASILY ACCESSIBLE AND MAINTAINED AND REPLACED IF DISTURBED OR DESTROYED. HORIZONTAL CONTROL SHALL SIMILARLY BE ESTABLISHED AND MAINTAINED.

6. CLEARING, GRADING AND DISPOSAL. CLEARING AND GRADING SHALL CONFORM TO SECTION 110 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. CLEARING SHALL BE CONTAINED TO THE CONSTRUCTION AREA AND/OR AS DIRECTED BY THE OWNER AND/OR HIS REPRESENTATIVE. ALL ROOTS, STUMPS, OR OTHER OBSTRUCTIONS SHALL BE REMOVED TO A DEPTH OF 18" BELOW NATURAL GRADE OR DESIGN GRADE WHICHEVER IS LOWER. ALL DEBRIS SHALL BE REMOVED FROM THE AREA AND BE DISPOSED OF LEGALLY.

7. EXCAVATION AND EMBANKMENT. ALL EXCAVATION AND EMBANKMENT SHALL CONFORM TO THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

8. EARTHWORK. NO SEPARATE PAYMENT SHALL BE PROVIDED TO THE CONTRACTOR FOR EARTHWORK ASSOCIATED WITH THIS CONTRACT. ALL COSTS ASSOCIATED WITH SITE PREPARATION NECESSARY TO EXECUTE THE WORK SET FORTH IN THE CONTRACT SHALL BE INCLUDED IN THE BID.

9. EXCESS MATERIAL. ANY EXCESS MATERIAL REMAINING UPON COMPLETION OF CONSTRUCTION SHALL BE REMOVED TO AN ACCEPTABLE LOCATION AT THE EXPENSE OF THE CONTRACTOR. AT THE OWNER'S OPTION, A LOCATION MAY BE IDENTIFIED FOR MATERIAL STOCK PILING OR THE OWNER MAY INSTRUCT THE CONTRACTOR TO REMOVE THE EXCESS MATERIAL IN WHICH CASE THE CONTRACTOR IS TO LEGALLY DISPOSE OF ALL MATERIALS OFFSITE.

10. FINISHED SITE GRADING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL GRADING OF THE SITE TO WITHIN ±0.1 FOOT OF ALL THE PROPOSED FINISHED GRADE ELEVATIONS THROUGHOUT THE PROJECT SITE AS DEPICTED ON THE PLANS. ELEVATIONS OF CONSTRUCTED FACILITIES, I.E. ROADWAYS, DRAINAGE, ETC. ARE TO BE AS INDICATED ON THE PLANS UNLESS APPROVED DIFFERENTLY IN WRITING.

11. BUILDING AREAS. ALL ORGANIC AND OTHER UNSUITABLE MATERIAL IN BUILDING OR PAVEMENT AREAS SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT RECOMMENDATIONS AND SOUND CONSTRUCTION PRACTICES.

12. LANDSCAPE AREAS. ALL LANDSCAPE AREAS SHALL CONTAIN SUITABLE LANDSCAPE MATERIAL FOR LANDSCAPE INSTALLATION. ALL LANDSCAPE AREAS SHALL BE SUITABLY SLOPED TO PROVIDE POSITIVE DRAINAGE.

13. SOD AREAS. ELEVATIONS OF GRASSED AREAS ARE GIVEN AT FINISHED SOD/SEED GRADE. CONTRACTOR TO GRADE AREAS RECEIVING SOD LOWER TO ACCOMMODATE SOD THICKNESS.

14. UNSUITABLE MATERIALS. WHERE ENCOUNTERED, UNSUITABLE MATERIAL SHALL BE REMOVED TO A DEPTH AND AREA DETERMINED BY THE ENGINEER. BACKFILLING SHALL BE IN LAYERS NOT GREATER THAN 8" THICKNESS AND COMPACTED TO 98 PERCENT OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. ANY UNSTABLE SOIL AND/OR SOIL CONTAINING ORGANIC MATERIAL ENCOUNTERED DURING CONSTRUCTION, INCLUDING BET NOT LIMITED TO MUCK, SILT, SLUDGE, AND MARL SHALL BE REMOVED AND SHALL BE REPLACED BY MATERIAL ACCEPTABLE TO THE ENGINEER. IF ANY ROCK, HARDPAN, ETC. IS ENCOUNTERED DURING CONSTRUCTION OF ANY ITEMS, THE REMOVAL AND BACKFILL REQUIRED SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OF THAT ITEM AND NO SEPARATE PAYMENT WILL BE MADE.

PAVING, GRADING, AND DRAINAGE NOTES CONTINUED:

15. GRADING. GRADING FROM PROPOSED TO EXISTING CONDITIONS SHALL NOT BE STEEPER THAN 3H:1V NOR FLATTER THAN 20H:1V. ALL SWALES AND SLOPES SHALL BE SODDED AFTER GRADING.

16. ELEVATIONS. ELEVATIONS GIVEN ADJACENT TO CURB OR FRONT OF SIDEWALK ARE CONSIDERED EDGE OF PAVEMENT GRADES UNLESS OTHERWISE NOTED.

17. POSITIVE DRAINAGE. CONTRACTOR IS RESPONSIBLE FOR GRADING ALL PAVEMENT TO DRAIN POSITIVELY. INTERSECTIONS SHALL BE TRANSITIONED TO PROVIDE A SMOOTH DRIVING SURFACE WHILE MAINTAINING POSITIVE DRAINAGE. SHOULD AREAS OF POOR DRAINAGE BE OBSERVED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO PLACEMENT OF CURBS OR PAVEMENT COURSES, SO THAT RECOMMENDATIONS FOR CORRECTION CAN BE MADE.

18. DRAINAGE STRUCTURES. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED AS PER THE PLANS AND IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION). ALL GRATES SHALL BE SECURED TO THE DRAINAGE STRUCTURE WITH A CHAIN AND EYEBOLT.

19. PIPE LENGTHS. PIPE LENGTHS SHOWN ON THE PLANS REPRESENT SCALED DISTANCES BETWEEN CENTERLINES OF DRAINAGE STRUCTURES AND FROM INVERTS OF ENDWALLS AND/OR MITERED END SECTIONS.

20. PIPE INSTALLATION. PIPE TRENCH SHALL BE DRY WHILE PIPE IS BEING LAID AND TO BE BEDDED PER DETAIL AND IN CONFORMANCE WITH THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION). ALL CORRUGATED PIES SHALL BE INSTALLED WITH MAXIMUM LENGTHS IN ORDER TO MINIMIZE JOINTS.

21. PIPE TRENCHES. PIPE TRENCHES TO BE EXCAVATED AND BACKFILLED IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION).

22. DRAINAGE PIPING. ALL DRAINAGE PIPES TO BE REINFORCED CONCRETE (RCP) UNLESS NOTED OTHERWISE ON THE PLANS. REQUIRED PIPE THICKNESS IN COMPLIANCE WITH ACPA STANDARDS AND ACTM C76.

23. DRAINAGE CONNECTIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF DEBRIS AND SILT WHERE CONNECTIONS TO EXISTING DRAINAGE STRUCTURES OR SWALES ARE TO BE PERFORMED. SWALES, DITCHES, LAKES, ETC. SHALL BE RESTORED TO THEIR ORIGINAL DESIGN SECTION AND SODDED. SUCH REMOVAL AND RESTORATION SHALL BE TO THE POINT OF LEGAL POSITIVE OUTFALL.

24. DRAINAGE JOINT WRAPPING. ALL DRAINAGE PIPE JOINTS TO BE WRAPPED IN FILTER FABRIC PER FDOT INDEX 280. THE FIRST JOINT OF PIPE ENTERING OR LEAVING A DRAINAGE STRUCTURE SHALL BE WRAPPED WITH FILTER FABRIC PER FDOT SPECIFICATIONS.

25. DRAINAGE LAMPING. ALL DRAINAGE SYSTEMS SHALL BE PUMPED DOWN BELOW ONE-THIRD OF THE DIAMETER OF THE PIPE (FROM THE INVERT) AND LAMPED AS A REQUIREMENT OF THE FINAL DRAINAGE INSPECTION.

26. SUBGRADE. SUBBASE SHALL BE FREE OF MUCK, STUMPS, ROOTS, UNDERBRUSH, VEGETATIVE MATTER, GARBAGE, TRASH OR ANY MATERIAL THAT WILL NOT PROVIDE A SUITABLE STABLE, CLEAN SUBGRADE. SUBGRADE SHALL BE AS SHOWN ON THE PLANS AND TO BE COMPACTED TO 98 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 UNLESS OTHERWISE NOTED ON THE PLANS.

27. UNDER PAVEMENT UTILITIES AND CONDUITS. THE SEQUENCE OF CONSTRUCTION SHALL BE SUCH THAT ALL UNDERGROUND INSTALLATIONS OF ANY KIND, INCLUDING IRRIGATION AND ELECTRICAL CONDUITS, THAT WILL REMAIN UNDER THE PROPOSED PAVEMENT OR WITHIN 10 FEET OF ITS EDGES SHALL BE INSTALLED PRIOR TO CONSTRUCTION OF THE BASE.

28. SOIL STABILIZATION. THE SOILS REQUIRE PROPER SOIL STABILIZATION MIX DESIGNS AND STRINGENT QUALITY CONTROL OF FIELD MIXING APPLICATION ON THE DESIGN MIX IN ORDER TO OBTAIN AN EFFECTIVE STABILIZED SOIL. CONSTRUCTION SPECIFICATIONS SHOULD REQUIRE THAT THE SOIL BE SAMPLED AND MIX DESIGN(S) PREPARED AND TESTED BY A CERTIFIED TESTING LAB. THE MIX DESIGN SHOULD BE SPECIFIED OR OTHERWISE PREPARED AND TESTED BY A TESTING LAB. THE MIX DESIGN SHOULD BE SPECIFIED OR OTHERWISE ADMINISTERED CLOSELY DURING FIELD INSTALLATIONS OR CONSTRUCTION, INCLUDING PERFORMANCE OF FREQUENT LBR TESTS. STABILIZED SUBGRADE SHALL, AT A MINIMUM, BE TESTED TO MEET A MINIMUM OF LBR 40 VALUE.

29. UTILITIES BY OTHERS. AT NO ADDITIONAL COST TO THE OWNER, THE CONTRACTOR SHALL PROVIDE ACCESS AND ALLOW FOR COORDINATION SERVICES TO ACCOMMODATE UTILITIES, CONDUIT AND/OR SLEEVE CONSTRUCTION BY OTHERS. ANY UTILITIES, CONDUITS AND/OR SLEEVES INSTALLED BY OTHERS AND DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

30. CONCRETE. ALL CONCRETE SHALL BE 3,000 PSI CONCRETE (MINIMUM 28 DAY COMPRESSIVE STRENGTH) UNLESS OTHERWISE SPECIFIED.

31. REINFORCING STEEL. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A-615 AND HAVE A TENSILE STRENGTH OF 60,000 PSI OR AS OTHERWISE NOTED.

32. FIELD REVIEWS. FIELD REVIEWS OF CONSTRUCTED FACILITIES WILL BE REQUIRED DURING THE CONSTRUCTION PROCESS. THE CONTRACTOR IS TO NOTIFY THE ENGINEER A MINIMUM OF 48 HOURS PRIOR TO THE REQUESTED TIME FOR REVIEW OF THE COMPLETED ITEMS. CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO ACCOMMODATE THE FIELD REVIEW. THESE REVIEWS INCLUDE BUT ARE NOT LIMITED TO:

    A. DRAINAGE PIPE AND STRUCTURE REVIEW
    B. SUBGRADE REVIEW
    C. CURB REVIEWS
    D. BASE REVIEWS
    E. PUMP OUT AND LAMPING OF DRAINAGE SYSTEM
    F. ASPHALT REVIEWS
    G. SEMI-FINAL AND FINAL REVIEWS

33. COMPLETENESS FOR REVIEW. FACILITIES MUST BE COMPL

POTABLE WATER & SANITARY SEWER NOTES:

1. AVAILABILITY OF SYSTEMS FOR ASBUILT MEASUREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL UTILITIES AVAILABLE TO FACILITATE DIRECT PHYSICAL MEASUREMENT OF RECORD DRAWING INFORMATION. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER, ENGINEER, AND SURVEYOR TO OBTAIN RECORD DRAWING MEASUREMENTS SO AS NOT TO ENDANGER THE GENERAL PUBLIC OR CREATE DELAY IN THE PROGRESS OF THE PROJECT. CONTRACTOR SHALL PROVIDE 48 HOURS MINIMUM WRITTEN NOTICE.

2. SYSTEM CLEANING. CONTRACTOR SHALL THOROUGHLY CLEAN ALL SANITARY AND DRAINAGE GRAVITY SYSTEMS TO FACILITATE MEASUREMENT OF RECORD DRAWING INFORMATION. CLEANING SHALL BE PERFORMED PRIOR TO "PRE-LAMPING" INSPECTIONS BY ENGINEER. CONTRACTOR SHALL ALSO HAVE ALL MANHOLE RIMS INSTALLED PRIOR TO PRE-LAMPING.

3. WATER MAINS. ALL WATER MAINS TO BE PVC C-900 UNLESS OTHERWISE NOTED ON THE PLANS. ALL LINES FROM THE WATER MAIN TO A FIRE HYDRANT TO BE DUCTILE IRON PIPE (DIP) UNLESS OTHERWISE NOTED ON THE PLANS.

4. WATER SERVICE LINES. ALL WATER SERVICE LINES TO BE PVC SCHEDULE 40 UNLESS NOTED OTHERWISE ON THE PLANS.

5. VALVES. ALL VALVES ARE TO BE CONSTRUCTED COMPLETELY IN GRASSED AREAS UNLESS SHOWN OTHERWISE ON THE PLANS. NO VALVES SHALL BE CONSTRUCTED WITHIN THE SIDEWALK, CURB OR PARKING STALLS.

6. SANITARY SEWER LINES. ALL SANITARY SEWER GRAVITY MAINS LESS THAN 12' IN DEPTH TO BE PVC SDR 26 UNLESS NOTED OTHERWISE ON PLANS.

7. MAGNETIC TAPE. MAGNETIC TAPE IS REQUIRED FOR PVC WATER MAINS, FORCE MAINS, AND RECLAIM WATER MAINS AND SHALL BE 6" WIDE, IMPRINTED WITH 2" HIGH LETTERING READING "CAUTION - WATER MAIN BURIED BELOW", "CAUTION - FORCE MAIN BURIED BELOW" OR "CAUTION - RECLAIM WATER MAIN BURIED BELOW", AS REQUIRED.

8. MINIMUM PIPE DEPTHS. ALL PRESSURE PIPE TO BE INSTALLED AT MIN. 36" COVER FROM FINISHED GRADE.

9. FIRE HYDRANTS. ALL FIRE HYDRANTS SHALL BE CONSTRUCTED COMPLETELY IN GRASSED AREAS WITH NO LESS THAN 3' FROM THE EDGE OF PAVEMENT (PROTECTIVE BOLLARDS REQUIRED FOR FIRE HYDRANTS CLOSER THAN 7' FROM EDGE OF PAVEMENT OR AS SHOWN ON THE DRAWINGS).

10. FIRE HYDRANTS. ALL FIRE HYDRANT FLANGE GRADES ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. CONTRACTOR TO FIELD ADJUST AS REQUIRED TO MEET UTILITY DEPARTMENT CRITERIA.

11. EXISTING UTILITIES IMPACTED. ALL EXISTING VALVES AND MANHOLES IMPACTED BY CONSTRUCTION OF THIS PROJECT SHALL BE ADJUSTED IN ACCORDANCE WITH THE UTILITY SPECIFICATIONS.

12. FIELD VERIFICATION. PRIOR TO CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY (ELEVATION & LOCATION) ALL EXISTING UTILITIES. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONTINUATION OF WORK.

13. HORIZONTAL SEPARATION FROM DRAINAGE. ALL WATER AND SANITARY SERVICES SHALL BE CONSTRUCTED A MINIMUM OF 5' FROM DRAINAGE STRUCTURES.

14. TESTING. PRESSURE TESTING AND CERTIFICATION SHALL FOLLOW THE UTILITIES DEPARTMENT MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS LATEST EDITION.

15. VERTICAL PIPE SEPARATIONS. ALL WATER MAINS TO CROSS OVER SANITARY SEWER SERVICES. WHERE 12" MINIMUM CLEARANCE CANNOT BE MAINTAINED, 20 LINEAR FEET OF DUCTILE IRON WATER MAIN SHALL BE CENTERED ON THE CROSSING AND THE SEWER SERVICE SHALL BE C-900, SDR-18. IN NO CASE SHALL THERE BE LESS THAN 6" CLEARANCE.

16. RECORD DRAWING NOTE. RECORD DRAWINGS SHALL INCLUDE ALL UTILITY OBJECTS AND ASSOCIATED LOCATIONS IDENTIFIED AS REQUIRED BY THE UTILITIES DEPARTMENT AND SHOWN IN THE AS-BUILT LOCATION.

17. STATE PLANE COORDINATES FOR RECORD DRAWINGS. ALL RECORD DRAWINGS SHALL BE DRAWN IN THE STATE PLANE COORDINATE SYSTEM. STATE PLANE COORDINATES ARE REQUIRED FOR ALL AS-BUILT UTILITY OBJECTS AS REQUIRED BY THE UTILITIES DEPARTMENT.

18. WATER MAIN DUCTILE IRON PIPE (DIP). ALL WATER MAIN DUCTILE IRON PIPE AND PIPE FITTINGS SHALL BE PAINTED WITH A 4" WIDE CONTINUOUS BLUE LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE. APPROVED PAINT: INDURON, AQUANAUT 5082 ALASKAN BLUE (ONE COAT, 3 MILS DRY FILM THICKNESS APPLIED WITH 1/2" NAP MEDIUM ROLLER).

19. PIPE COLOR INFUSION. ALL WATER MAINS (BLUE), FORCE MAINS (GREEN), AND RECLAIM WATER MAINS (PURPLE) SHALL BE P.V.C. (C-900) COLORED DURING INFUSION PROCESS, UNLESS A DIFFERENT MATERIAL IS OTHERWISE NOTED.

20. PIPE COLORS. ALL WATER MAIN PIPE, INCLUDING FITTINGS, INSTALLED ON OR AFTER AUGUST 28, 2003, EXCEPT PIPE INSTALLED UNDER A CONSTRUCTION PERMIT FOR WHICH THE DEPARTMENT RECEIVED A COMPLETE APPLICATION BEFORE AUGUST 28, 2003, SHALL BE COLOR CODED OR MARKED USING BLUE AS A PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM RECLAIMED OR OTHER WATER. UNDERGROUND PLASTIC PIPE SHALL BE SOLID-WALL BLUE PIPE, SHALL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR SHALL BE WHITE OR BLACK WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF PIPE; FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE AT DRINKING WATER TREATMENT PLANTS SHALL BE COLOR CODED AND LABELED IN ACCORDANCE WITH SUBSECTION 62-555.320(10), F.A.C., AND ALL OTHER ABOVEGROUND PIPE SHALL BE PAINTED BLUE OR COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.

21. DOUBLE CHECK DETECTOR ASSEMBLIES. THE DOUBLE CHECK DETECTOR ASSEMBLIES ARE REQUIRED TO HAVE TAMPER SWITCHES PER THE PALM BEACH COUNTY FIRE MARSHAL. CONTRACTOR TO COORDINATE DISCIPLINES TO PROVIDE FULLY FUNCTIONAL SYSTEM INCLUDING ELECTRICAL REQUIREMENTS.

ABBREVIATIONS

BUFFER EASEMENT	B.E.
CLEANOUT	CO
CONCRETE	CONC.
CONTROL WATER ELEVATION	C.W.E.
DOUBLE CHECK DETECTOR ASSEMBLY	DCDA
EDGE OF PAVEMENT	E.O.P.
EXISTING	EXIST. / EX
FIRE HYDRANT	FH
FORCE MAIN	FM
GATE VALVE	GV
HIGH POINT	HP
LIGHT POLE	LP
LOW POINT	LOP
MANHOLE	MH
MINIMUM	MIN.
POLYVINYL CHLORIDE	PVC
PROPOSED	PROP.
PROPERTY LINE	P/L
REDUCED PRESSURE ZONE	RPZ
REINFORCED CONCRETE PIPE	RCP
RAINWATER LEADER	RWL
RIGHT-OF-WAY	R/W
SANITARY	SAN
SIZE DIAMETER RATIO	SDR
STORM MANHOLE	SMH
STORM	STM
SERVICE	SVC
TAP AND SLEEVE	T.S.
TYPICAL	TYP
UTILITY EASEMENT	U.E.
UNKNOWN	UNK
WATER MAIN	WM
WATER	WTR

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VILLAS OF SOLANA

3211 AVENUE J
RIVIERA BEACH, FL 33404

APPROVED BY:

GABRIEL BURDEN LICENSE NO. 75425 STATE OF FLORIDA PROFESSIONAL ENGINEER

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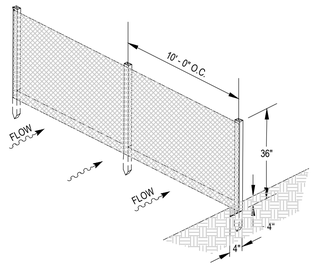
CDI PROJECT NO.
22740-01

DATE:	08/29/2022
DESIGNED:	CDI
DRAWN:	CDI

NO.	DATE	REVISION DESCRIPTION

GENERAL NOTES

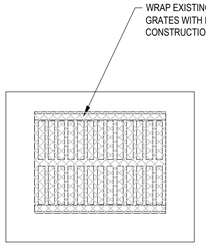
C0.2



NOTES

1. MESH TO BE BENT, LAID FLAT ON BOTTOM OF TRENCH AND BACKFILLED.
2. POSTS TO BE DRIVEN A MINIMUM OF TWO (2) FEET INTO THE GROUND.
3. SILT FENCE TO BE PLACED ALL AROUND CLEARING PERIMETERS.

N.T.S.	DETAIL
TYPICAL FILTER FABRIC FENCE	1



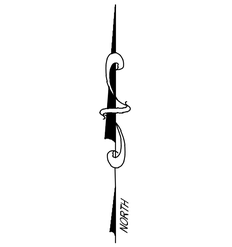
NOTES:

1. PROTECT ALL EXISTING AND PROPOSED INLETS DURING CONSTRUCTION.
2. SWEEP ROADS AND CONSTRUCTION SITE PERIODICALLY TO REMOVE CONSTRUCTION DEBRIS AND SEDIMENT.
3. STORM DRAINAGE TO BE SEDIMENT AND SILT FREE DURING CONSTRUCTION AND AT FINAL SITE WALK THROUGH.

N.T.S.	DETAIL
INLET PROTECTION	2

LEGEND

- EXISTING WATERMAIN — EX-WSVC — EX-WSVC
- EXISTING SANITARY SEWER — EXSAN — EXSAN — EXSAN
- EXISTING FORCEMAIN — EXFM — EXFM — EXFM
- EXISTING STORM DRAINAGE — EXSTM — EXSTM — EXSTM
- EXISTING EDGE OF PAVEMENT TO BE REMOVED
- EXISTING CURB TO BE REMOVED
- EXISTING CONCRETE TO BE REMOVED
- EXISTING UTILITIES TO BE REMOVED
- PROPOSED SILT FENCE
- EXISTING PAVEMENT TO BE REMOVED
- EXISTING CONCRETE TO BE REMOVED
- EXISTING BUILDING TO BE REMOVED



SCALE: 1" = 20'

SEC. 30 - TWP. 44 S - RGE. 43 E

LOCATION MAP
N.T.S.

DATUM = NAVD '88
ADD 1.51' FOR NGVD '29

NOTES:

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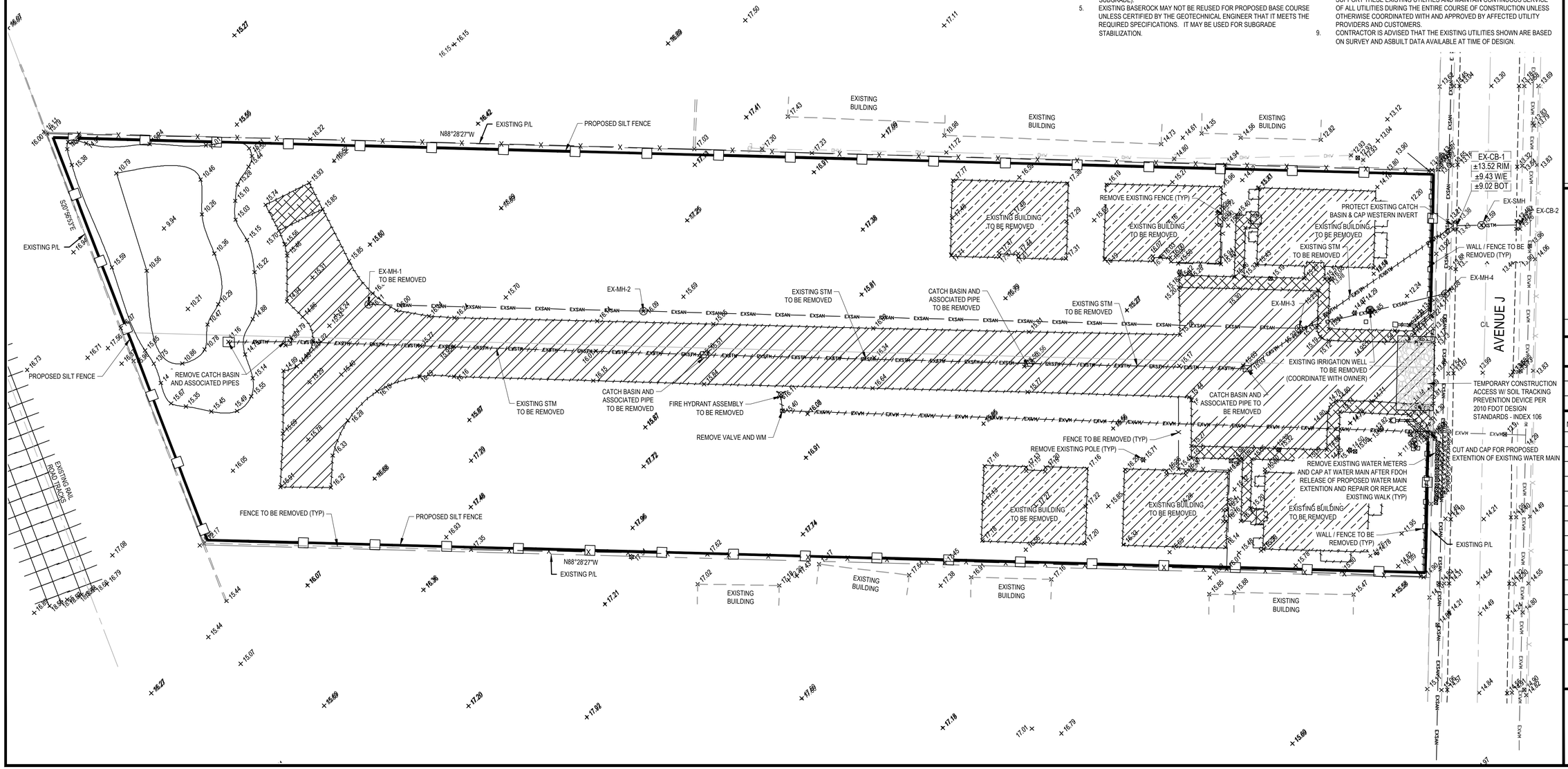
5. EXISTING BASEROCK MAY NOT BE REUSED FOR PROPOSED BASE COURSE UNLESS CERTIFIED BY THE GEOTECHNICAL ENGINEER THAT IT MEETS THE REQUIRED SPECIFICATIONS. IT MAY BE USED FOR SUBGRADE STABILIZATION.
6. REFER TO LANDSCAPE PLANS FOR ALL RELOCATION/REMOVAL OF LANDSCAPING AND TREES.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION, DEPTH AND CONDITION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO SHOP DRAWING SUBMITTAL AND/OR COMMENCEMENT OF CONSTRUCTION. PROVIDE WRITTEN CONFIRMATION/DIAGRAMS OF ALL UTILITIES WITHIN THE LIMITS OF CONSTRUCTION OR ANTICIPATED CONSTRUCTION (HORIZONTAL & VERTICAL LOCATIONS, PIPE SIZES, ETC.)
8. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND SUPPORT THESE EXISTING UTILITIES AND MAINTAIN CONTINUOUS SERVICE OF ALL UTILITIES DURING THE ENTIRE COURSE OF CONSTRUCTION UNLESS OTHERWISE COORDINATED WITH AND APPROVED BY AFFECTED UTILITY PROVIDERS AND CUSTOMERS.
9. CONTRACTOR IS ADVISED THAT THE EXISTING UTILITIES SHOWN ARE BASED ON SURVEY AND ASBUILT DATA AVAILABLE AT TIME OF DESIGN.



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CDI PROJECT NO.
22740-01

DATE: 08/29/2022
DESIGNED: CDI
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NO.	DATE	REVISION DESCRIPTION

SITE DEMOLITION & EROSION CONTROL PLAN

C1.1

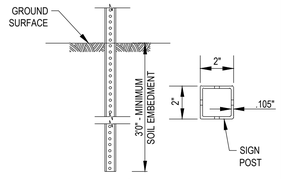
GENERAL SPECIFICATIONS:

POST: SQUARE POST PER FDOT INDEX 700-010

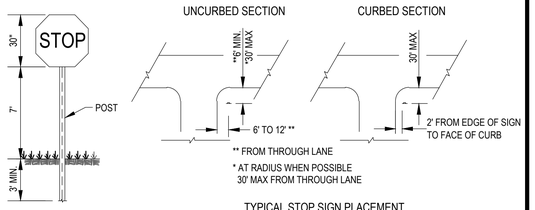
BRACKETS SHALL BE ATTACHED FIRMLY ON STANDARD SQUARE TUBE POSTS BY MEANS OF (2) 3/8" GALVANIZED BOLTS, LOCK WASHER, NUTS, PER ASTM A 307.

STOP SIGN: R1-1 MUTCD - (DIAMOND GRADE)

LOCATION: ONE PER INTERSECTION AS INDICATED ON THE PLANS.



STEEL SQUARE TUBE POST DETAILS



TYPICAL STOP SIGN PLACEMENT

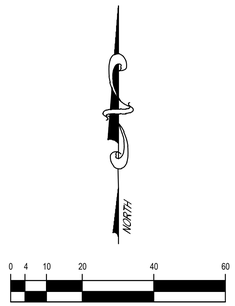
N.T.S.	DETAIL
TYPICAL STOP SIGN	2

LEGEND

PROPOSED PAVEMENT	
PROPOSED CONCRETE	4" 6"
PROPOSED PAVERS	
UTILITY EASEMENT	U.E.
BUFFER EASEMENT	B.E.
STOP SIGN & 2' STOP BAR (THERMO.)	
STOP SIGN (R1-1)	STOP R1-1
HANDICAP (FTP-20-06) & $250 FINE SIGN (FTP-22-06)	

NOTES:

1. ALL DIMENSIONS TO EDGE OF PAVEMENT OR FACE OF CURB UNLESS OTHERWISE NOTED.
2. WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST EDITION), FDOT TRAFFIC DESIGN STANDARDS (LATEST EDITION), MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) (LATEST EDITION) AND THE PALM BEACH COUNTY TYPICALS FOR PAVEMENT MARKINGS, SIGNING & GEOMETRICS, LATEST EDITION. ALL REFERENCES ARE INCORPORATED INTO THE PLAN DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR OBTAINING COMPLETE COPIES OF THE LATEST EDITION OF THE REFERENCES.
3. ALL STRIPING SHALL BE THERMOPLASTIC IN ACCORDANCE WITH THE RESPECTIVE JURISDICTIONAL AUTHORITY REQUIREMENTS AND MUST COMPLY WITH PBC PPM# FDO-079 RELATIVE TO COEFFICIENT OF FRICTION FOR PARKING AND WALK AREAS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING A PROPER TRAFFIC MAINTENANCE AND CONTROL PLAN IN ACCORDANCE WITH REGULATORY STANDARDS. INCLUDED WILL BE THE LABOR, EQUIPMENT AND MATERIALS REQUIRED TO IMPLEMENT THAT PLAN. ALL WORK MUST BE DONE IN ACCORDANCE WITH AGENCY REQUIREMENTS AND ANY REQUIRED PERMITS OR APPROVALS MUST BE APPLIED FOR AND OBTAINED BY THE CONTRACTOR.

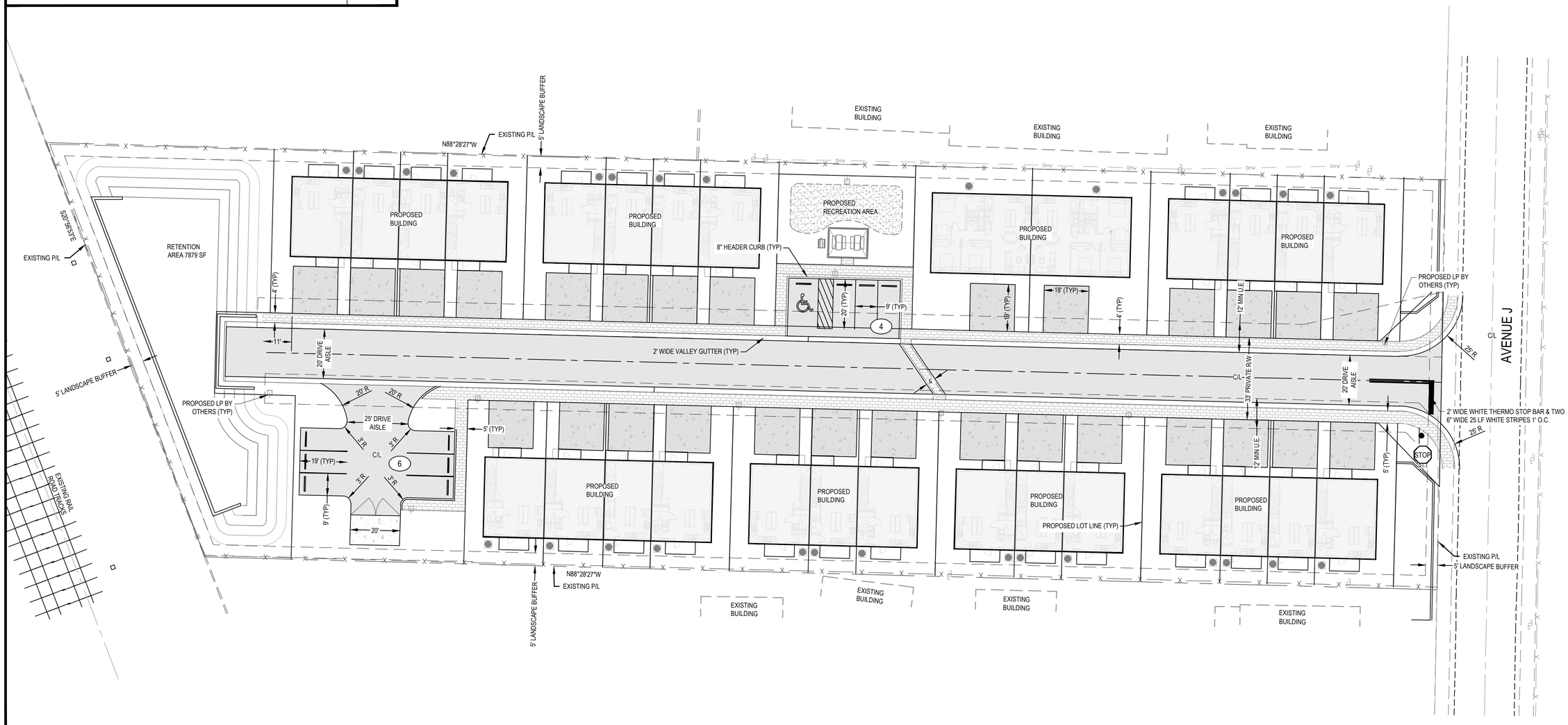


SCALE: 1" = 20'

SEC. 30 - TWP. 44 S - RGE. 43 E

LOCATION MAP
N.T.S.

DATUM = NAVD '88
ADD 1.51' FOR NGVD '29



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SIGNING, STRIPING, & GEOMETRIC PLAN

C2.1

LEGEND

EXISTING WATERMAIN — EXWM

EXISTING FORCEMAIN — EXFM

EXISTING SANITARY SEWER — EXSAN

EXISTING STORM DRAINAGE — EXSTM

STRUCTURE NUMBER	S-100
RIM ELEVATION	00.00 RIM
INVERT	0.00
STRUCTURE BOTTOM	0.00 BOT

PROPOSED STORM DRAINAGE LINE W/ STORM STRUCTURE — D

PROPOSED WATERMAIN — W

PROPOSED PAVEMENT

PROPOSED CONCRETE — 4" 6"

PROPOSED PAVERS

EXISTING ELEVATION — 0.00

PROPOSED ELEVATION — 0.00

DIRECTION OF FLOW

NOTES:

1. PROTECT ALL EXISTING AND PROPOSED INLETS DURING CONSTRUCTION.
2. SWEEP ROADS AND CONSTRUCTION SITE PERIODICALLY TO REMOVE CONSTRUCTION DEBRIS AND SEDIMENT.
3. STORM DRAINAGE TO BE SEDIMENT AND SILT FREE DURING CONSTRUCTION AND AT FINAL SITE WALK THROUGH.
4. ALL AREAS TO BE DEMOLISHED ARE TO BE REMOVED IN THEIR ENTIRETY. BACKFILL WITH CLEAN, SUITABLE MATERIAL APPROPRIATE TO THE FUTURE APPLICATION AND IN COMPLIANCE WITH THE RESPECTIVE REQUIREMENTS (i.e. STRUCTURAL BUILDING FILL, LANDSCAPE FILL, PARKING LOT SUBGRADE).
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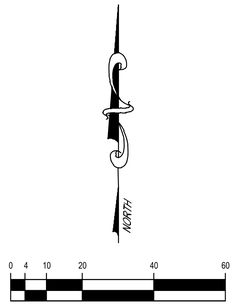
9. CONTRACTOR IS ADVISED THAT THE EXISTING UTILITIES SHOWN ARE BASED ON SURVEY AND ASBUILT DATA AVAILABLE AT TIME OF DESIGN.
10. SITE LIGHTING POLES STRUCTURAL TO BE COMPLETED BY ELECTRICAL VENDOR.



SCALE: 1" = 20'

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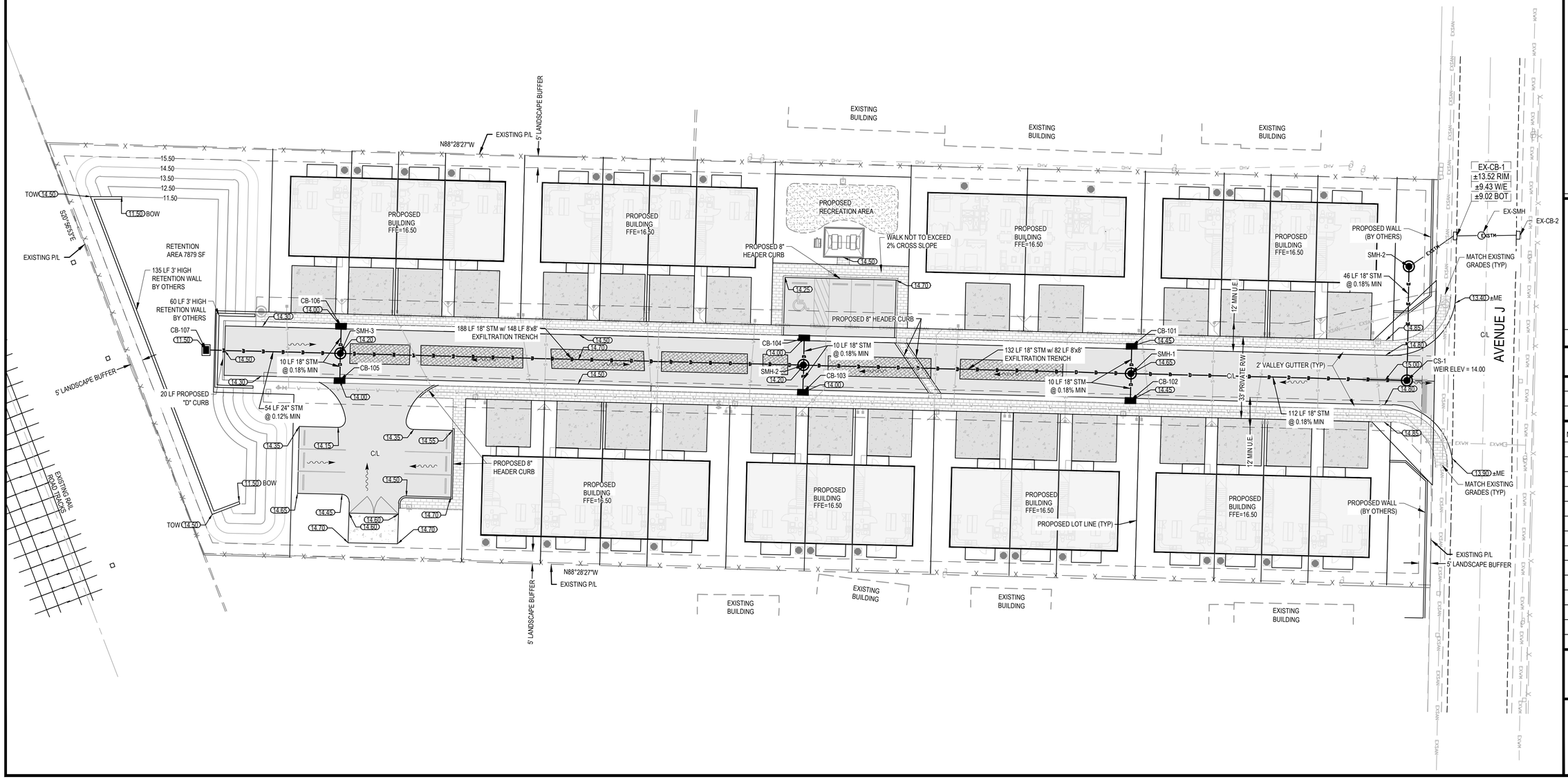
LOCATION MAP
N.T.S.

DATUM = NAVD '88
ADD 1.51' FOR NGVD '29



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PAVING, GRADING, & DRAINAGE PLAN

C3.1

GENERAL NOTES

BEVELED EDGES: ALL EXPOSED CORNERS AND EDGES TO BE CHAMFERED ¾".

FOUNDATION MATERIAL: WHERE MATERIAL UNSATISFACTORY FOR FOUNDATION IS ENCOUNTERED AT FLOW LINE, OMIT FLOOR AND CARRY WALLS DOWN TO SATISFACTORY FOUNDATION. BACKFILL TO FLOW LINE WITH CLEAN SAND.

GRATES: CAST IRON GRATES IN ACCORDANCE WITH F.D.O.T. SPECS.

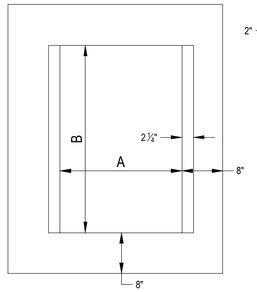
*INLETS TYPES: INLETS ARE TO BE AS SHOWN HEREON. TYPE "E MOD" IS A TYPE "E" TURNED 90° TO RECEIVE R.C.P. UP TO 48" DIA. INLETS RECEIVING R.C.P. LARGER THAN 48" DIA. SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARDS.

MATERIAL: INLET WALLS AND FOOTING MAY EITHER POURED-IN-PLACE 2500 LB. CONC.; OR PRECAST CLASS "A" 3000 LB. CONC.

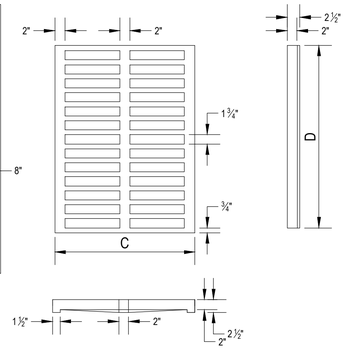
ALL INLET CONSTRUCTION IS IN ACCORDANCE WITH THE CURRENT F.D.O.T. STANDARDS INDEX NO. 201 & 232.

ALL INLET GRATES TO BE SECURED WITH A LOCKING CHAIN PER F.D.O.T. INDEX 201

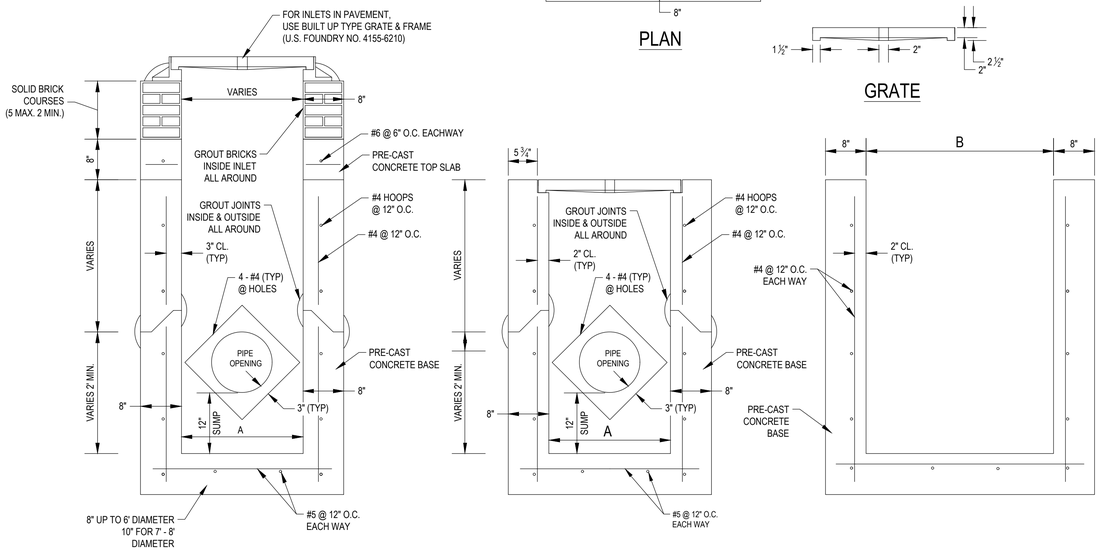
TYPE INLET					MAX. PIPE SIZE	
	"A"	"B"	"C"	"D"	SHORT SIDE	LONG SIDE
"C"	2'-0"	3'-1"	2'-4"	3'-0"	18"	24"
"D"	4'-1"	3'-1"	3'-4"	4'-4"	24"	36"
"E"	3'-0"	4'-6"	3'-4"	4'-4"	48"	48"
"G"	3'-0"	4'-6"	3'-4"	4'-4"	48"	48"
"E MOD"*	3'-0"	4'-6"	3'-4"	4'-4"	48"	48"



PLAN



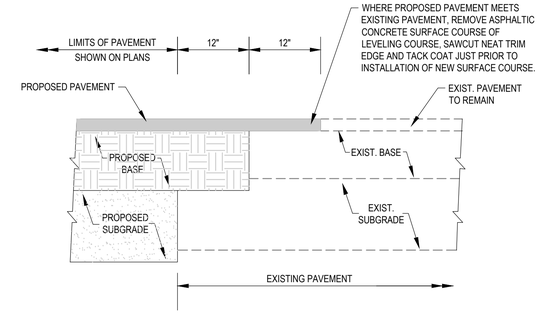
GRATE



TYPICAL INLET AND GRATE — N.T.S. — DETAIL 1

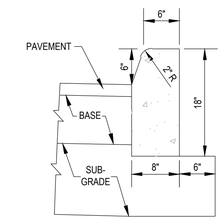
ON-SITE PAVING & CONCRETE SPECIFICATIONS			
TYPE	WEARING SURFACE	BASE	SUB-GRADE
ASPHALT	2" THICK, TYPE S-III A.C.S.C. OR SP 9.5 - TWO LIFTS (FIRST LIFT TO BE 1" AND 2ND LIFT TO BE 1")	8" THICK, BASEROCK COMPACTED IN TWO EQUAL LIFTS TO 98% MAXIMUM DRY DENSITY A.A.S.H.T.O. T-180 (LBR 100)	12" THICK, COMPACTED TO 98% MAXIMUM DRY DENSITY A.A.S.H.T.O. T-180

PAVING SPECIFICATIONS — N.T.S. — DETAIL 2

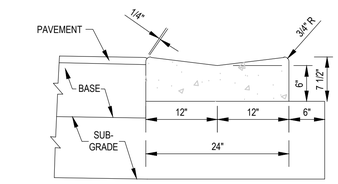


NOTE:
REFER TO PAVEMENT SECTIONS FOR MATERIAL THICKNESS

TYPICAL PAVEMENT MATCH SECTION — N.T.S. — DETAIL 3

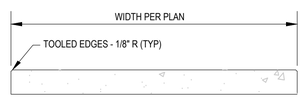


TYPICAL TYPE "D" CURB — N.T.S. — DETAIL 4

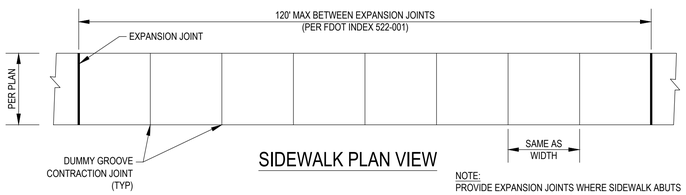


NOTE:
SAWCUTS REQUIRED AT 10' CENTERS

TYPICAL CONCRETE VALLEY GUTTER — N.T.S. — DETAIL 5



SIDEWALK CROSS SECTION

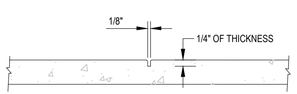


SIDEWALK PLAN VIEW

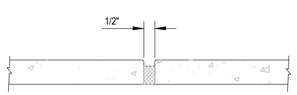
NOTE:
PROVIDE EXPANSION JOINTS WHERE SIDEWALK ABUTS STRUCTURES OR OTHER SIDEWALKS. EXPANSION JOINTS REQUIRED EVERY 120 LF.

NOTES:

1. 4" THICK CONCRETE (3,000 PSI) ON 12" THICK COMPACTED SUBGRADE (98% AASHTO T-180). SIDEWALKS SHALL BE 6" THICK AT DRIVEWAYS & TRAFFIC AREAS.
2. SIDEWALKS TO BE BROOM FINISHED WITH EVEN, DUSTLESS SURFACE. CONTROL JOINTS TO BE SPACED EQUALLY ON CENTER PER ACI 330. JOINTS TO BE CUT WITHIN 4 TO 12 HOURS OF PLACEMENT. JOINTS TO BE NO FURTHER APART THAN 30 TIMES SLAB THICKNESS.
3. EXPANSION JOINTS REQUIRED EVERY 50 FEET (120 LF MAX), AT EACH CHANGE OF DIRECTION, AND WHEN SIDEWALK ABUTS BUILDING.

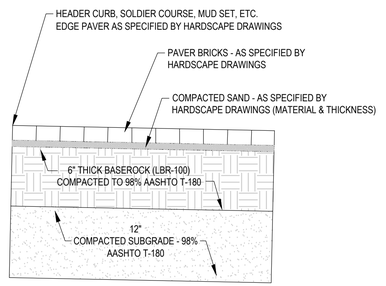


CONTRACTION JOINT



EXPANSION JOINT

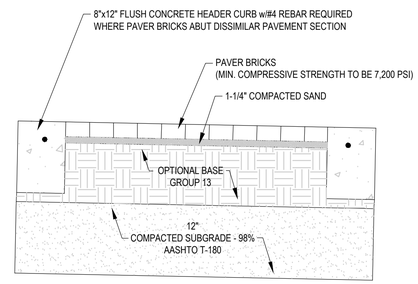
TYPICAL CONCRETE SIDEWALK — N.T.S. — DETAIL 6



NOTES:

1. PAVERS, SAND AND GROUT TO PER AS SPECIFIED BY HARDSCAPE DOCUMENTS.
2. EDGE TREATMENT AS SPECIFIED BY HARDSCAPE DESIGNER - MUD SET, HEADER CURB, SOLDIER COURSE, ETC.
3. SECTION PROVIDED FOR SUBGRADE AND BASEROCK UNDER NON-VEHICULAR AREAS ONLY.
4. VEHICULAR AREAS TO FOLLOW TYPICAL PAVER BRICK - TRAFFIC RATED DETAIL.

TYPICAL PAVER BRICK - PEDESTRIAN RATED — N.T.S. — DETAIL 7



NOTE:

1. PAVER BRICK TO MANUFACTURED BY PAVER SYSTEMS, INC. OR APPROVED EQUAL.
2. INSTALLATION OF PAVER BRICKS SHALL BE IN CONFORMANCE WITH MANUFACTURE'S INSTALLATION CRITERIA. PAVER BRICK THICKNESS SHALL BE MINIMUM 3-1/8". THE SAND BEDDING COURSE SHALL BE WELL GRADED, CLEAN, WASHED LIMESTONE SCREENING WITH 100% PASSING A 3/8" SIEVE SIZE AND MAXIMUM 3% PASSING A No. 200 SIEVE SIZE. DO NOT USE MASON SAND.
3. ALL EDGES OF THE PAVER BRICK SHALL BE RESTRAINED BY CONCRETE HEADER CURB AND/OR GUTTER.
4. REFER TO PBC ENGINEERING DRAWINGS 1000.4A & 1000.4B FOR ADDITIONAL INFORMATION.

CONCRETE PAVER	OPTIONAL GROUP BASE 13	COMPACTED SUBGRADE
3.125" x 0.00 = 0.00	2.35 MIN, 2.43 TYP.	12" x 0.00 = 0.00

PROVIDED STRUCTURAL NUMBER = 2.43

TYPICAL PAVER BRICK - TRAFFIC RATED — N.T.S. — DETAIL 8

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Registry No. 9664

VILLAS OF SOLANA

3211 AVENUE J
RIVIERA BEACH, FL 33404

APPROVED BY:

GABRIEL BURDEN LICENSE NO. 75425 STATE OF FLORIDA PROFESSIONAL ENGINEER

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22740-01

DATE: 08/29/2022
DESIGNED: CDI
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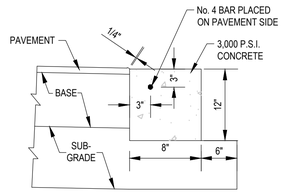
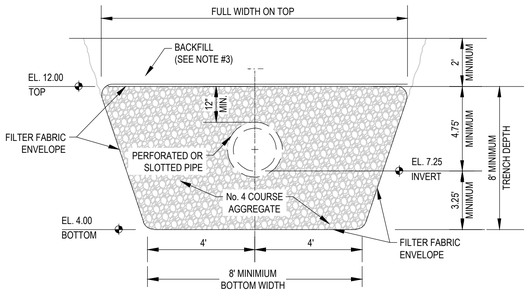
PAVING, GRADING, & DRAINAGE DETAILS

C4.1

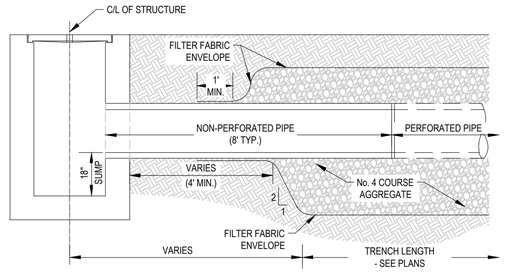


N.T.S.	DETAIL
TYPICAL HEADER CURB	9



CROSS SECTION

N.T.S



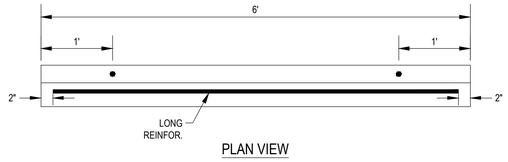
LONGITUDINAL SECTION

N.T.S

GENERAL NOTES:

1. CONFORM WITH ALL REQUIREMENTS OF FDOT INDEX NO. 285 EXCEPT AS SHOWN ON OR MODIFIED BY THIS DETAIL AND THESE GENERAL NOTES.
2. FILTER FABRIC SHALL BE "MIRAFI" TYPE 160N, AND SHALL CONFORM WITH SECTION 985 OF THE FDOT SPECIFICATIONS. ALL FILTER FABRIC JOINTS SHALL LAP A MINIMUM OF TWO (2) FEET.
3. PROVIDE CLEAN SAND BACKFILL ABOVE EXFILTRATION TRENCH LOCATED UNDER GRASSED AREAS. PROVIDE SELECT BACKFILL IN ACCORDANCE WITH SECTION 443 OF THE FDOT SPECIFICATIONS ABOVE EXFILTRATION TRENCH LOCATED UNDER ROADWAY PAVEMENT OR DRIVEWAY PAVEMENT.

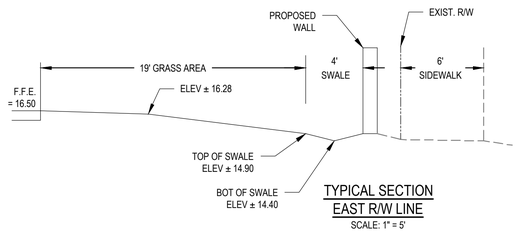
N.T.S.	DETAIL
EXFILTRATION TRENCH	11



PROFILE VIEW

(ENLARGED)

PLAN VIEW



TYPICAL SECTION
EAST R/W LINE

SCALE: 1" = 5'

N.T.S.	DETAIL
CONCRETE WHEEL STOP DETAIL	10

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PAVING, GRADING, & DRAINAGE DETAILS

C4.2

LEGEND

- EXISTING WATERMAIN — EXWM
- EXISTING FORCEMAIN — EXFM
- EXISTING SANITARY SEWER — EXSAN
- EXISTING STORM DRAINAGE — EXSTM
- PROPOSED STORM DRAINAGE LINE W/ STORM STRUCTURE — D
- PROPOSED WATERMAIN — W
- PROPOSED PAVEMENT
- PROPOSED PAVERS
- PROPOSED CONCRETE — 4" / 6"

NOTES:

1. CONTRACTOR IS ADVISED THAT THE EXISTING UTILITIES SHOWN ARE BASED ON SURVEY AND ASBUILT DATA AVAILABLE AT TIME OF DESIGN.
2. FIELD VERIFY LOCATION OF EXISTING UTILITIES PRIOR TO SHOP DRAWING SUBMITTAL AND/OR COMMENCEMENT OF CONSTRUCTION.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION, DEPTH AND CONDITION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO SHOP DRAWING SUBMITTAL AND/OR COMMENCEMENT OF CONSTRUCTION.
4. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND SUPPORT THESE EXISTING UTILITIES AND MAINTAIN CONTINUOUS SERVICE OF ALL UTILITIES DURING THE ENTIRE COURSE OF CONSTRUCTION UNLESS OTHERWISE COORDINATED WITH AND APPROVED BY AFFECTED UTILITY PROVIDERS AND CUSTOMERS.
5. CONTRACTOR TO POTHOLE & LOCATE ALL EXISTING UTILITIES PRIOR TO SUBMITTAL OF SHOP DRAWINGS AND/OR COMMENCEMENCE OF CONSTRUCTION. PROVIDE WRITTEN CONFIRMATION/DIAGRAMS OF ALL UTILITIES WITHIN THE LIMITS OF CONSTRUCTION OR ANTICIPATED CONSTRUCTION (HORIZONTAL & VERTICAL LOCATIONS, PIPE SIZES, ETC.)

NORTH

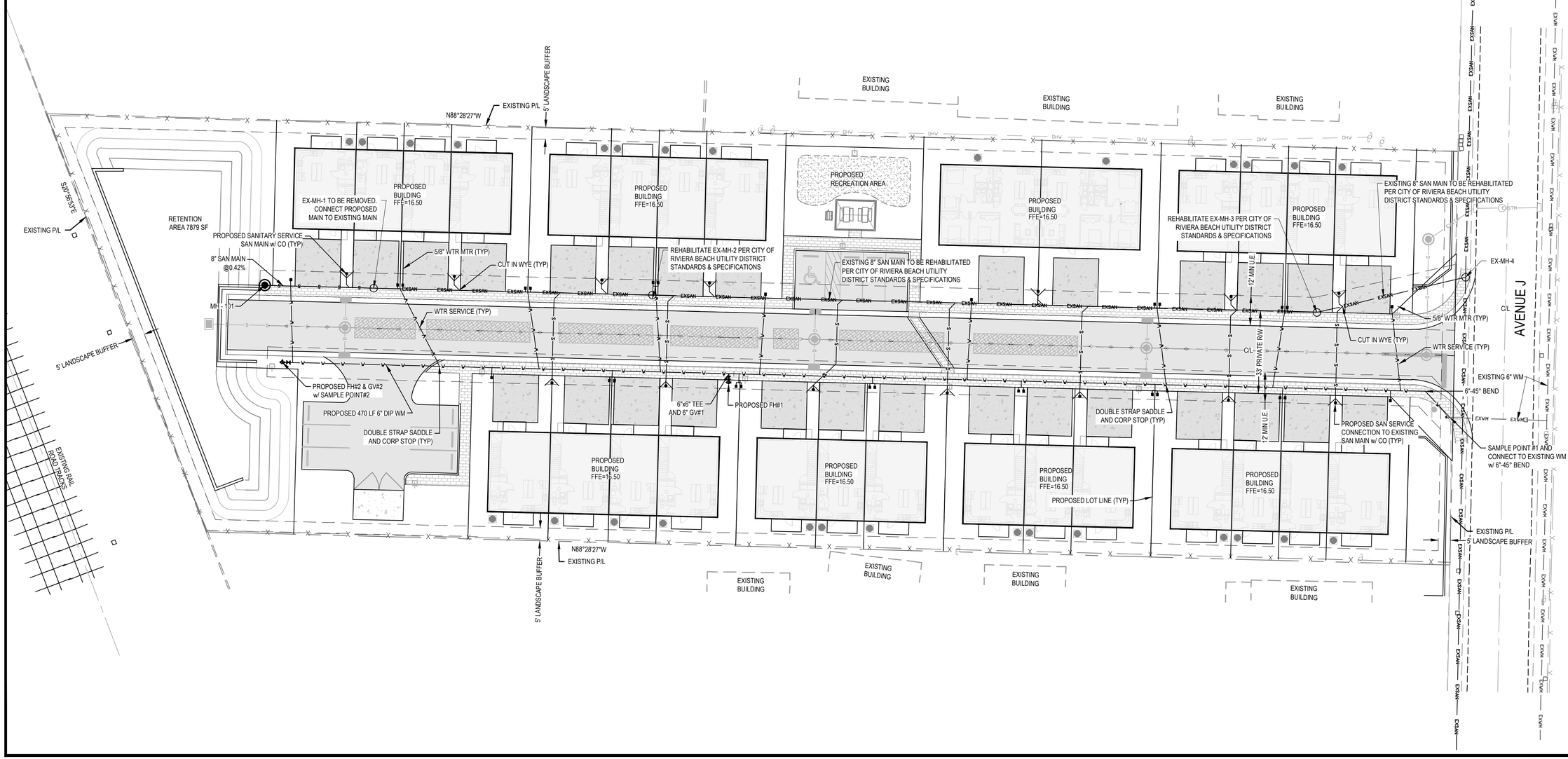
0 4 10 20 40 60

SCALE: 1" = 20'

SEC. 30 - TWP. 44 S - RGE. 43 E

LOCATION MAP
N.T.S.

DATUM = NAVD '88
ADD 1.51' FOR NGVD '29



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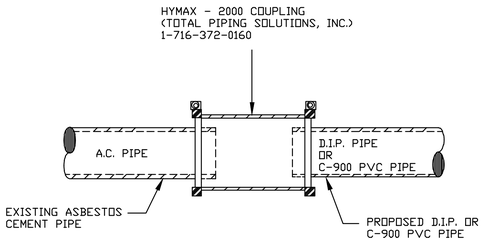
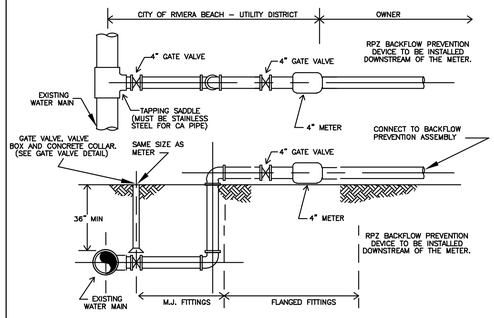
POTABLE WATER & SANITARY SEWER PLAN

C5.1



PIPE TRANSITION DETAIL

5/19/05
COUPLING



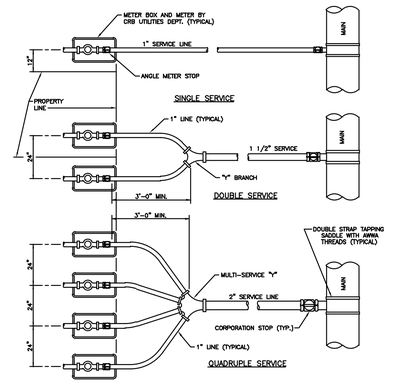
NOTES:

1. ALL SERVICE PIPING SHALL BE DI PIPE THE SAME SIZE AS METER.
2. ALL FITTINGS FLANGED WITH MEGALUGS OR EQUAL.
3. METER SERVICE SHALL NOT BE INSTALLED UNTIL:
   A - FORM BOARDS FOR DRIVEWAY AND/OR SIDEWALK ARE IN PLACE, OR
   - DIRVEWAY OR SIDEWALK IS IN PLACE, OR
   - "FINISHED GRADE" STAKE IS SET ADJACENT TO PROPOSED METER BOX LOCATION.
   B - THE REQUIRED BACKFLOW PREVENTION DEVICE IS INSTALLED.
4. INSTALLATION OF THE DOMESTIC SERVICE METER AND METER BOX WILL BE PERFORMED BY THE CITY OF RIVIERA BEACH-UTILITY DISTRICT.
   THE DOMESTIC TAP ON TH EXISTING MAIN HAS TO BE DONE BY THE CONTRACTOR IF THE TAP IS 4 " AND ABOVE .THE OWNER SHALL BE RESPONSIBLE FOR ALL INSTALLATION AND MAINTAINANCE DOWNSTREAM OF THE DOMESTIC METER.

3",4",6",8",10" WATER METER DETAIL

N.T.S

5/26/05



NOTES:

1. AUTHORIZED SERVICE LINE MATERIAL:
   A) TYPE "K" COPPER TUBING WITH COMPRESSION FITTINGS.
   B) POLYETHYLENE TUBING SDR 9, COPPER TUBE SIZE.
2. ANGLE METER STOP SHALL BE 1" MINIMUM.
3. 1" ANGLE METER STOPS WITH 3/4" VALVES SHALL NOT BE PERMITTED.
4. MULTIPLE SERVICE/METER INSTALLATIONS OF MORE THAN 4 METERS PER SERVICE AND SERVICE LINES LARGER THAN 2" DIAMETER SHALL BE HANDLED ON AN INDIVIDUAL BASIS.
5. ANGLE METER STOPS 1 1/2" AND 2" IN SIZE SHALL BE PROVIDED WITH BOTH A LOCKING CAP AND METER FLANGE.
6. NO FITTINGS BETWEEN CORP STOP AND ANGLE METER STOP ALLOWED WHEN USING POLYETHYLENE TUBING.

TYPICAL WATER SERVICES

N.T.S

05/27/05

Water & Sewer Details
City of Riviera Beach
Utilities Department

Water & Sewer Details
City of Riviera Beach
Utility District

Water & Sewer Details
City of Riviera Beach
Utility District

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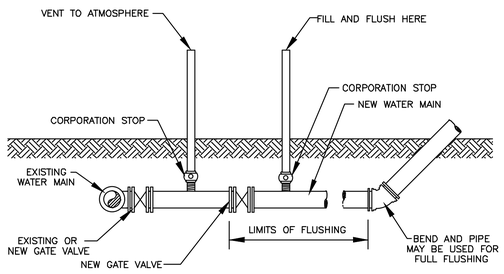
PAVING, GRADING, & DRAINAGE PLAN

C6.2



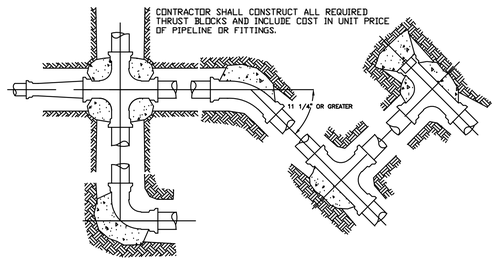
NOTES:

1. DO NOT REMOVE TEMPORARY CONNECTION AT CORPORATION STOPS ON NEW MAIN UNTIL FILLING AND FLUSHING AND TESTING HAS BEEN COMPLETED.
2. PLUG CORPORATION STOP WITH A P.V.C. PLUG WHEN ABANDONED.
3. PROVIDE ALL NECESSARY THRUST BLOCKS AND/OR OTHER RESTRAINTS.
4. THIS IS THE ONLY FLUSHING METHOD APPROVED BY THE CITY OF RIVIERA BEACH UTILITY DISTRICT. SINCE OTHER METHODS DO NOT REMOVE LARGE OBJECTS SUCH AS ROCKS, CANS, BOTTLES AND OTHER DEBRIS FROM MAINS. ALL FIRE HYDRANTS AND DETECTOR CHECK VALVES MUST BE INSPECTED AND TESTED TO ASSURE NO SUCH FOREIGN OBJECTS ARE IN THE FIRE FLOW.
5. THE GENERAL CONTRACTOR MUST RENT A FIRE HYDRANT METER FROM THE CITY OF RIVIERA BEACH UTILITY DISTRICT FOR USE OF POTABLE WATER FROM A CITY OWNED SOURCE.

FILLING & FLUSHING DETAIL

N.T.S 05/26/05

TYPICAL LOCATIONS WHICH REQUIRE CONCRETE REACTION (THRUST) BLOCKS, FOR PRESSURE MAINS 4"SIZE AND GREATER CONCRETE SHALL HAVE 2500 PSI MINIMUM STRENGTH AT 28 DAYS AND BEAR AGAINST UNDISTURBED STABLE SOILS. AREA OF CONTACT SHALL BE GOVERNED BY PIPE SIZE, MAX. PRESSURE IN PIPE AND BEARING CAPACITY OF SOIL.



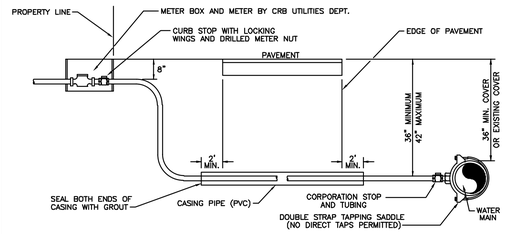
PIPE	THRUST BLOCK AREA REQ'D	PIPE	THRUST BLOCK AREA REQ'D	REMARKS
4"	2.0 SQ. FT.	18"	30.0 SQ. FT.	VALUES ARE FOR 90° BEND, BASED ON 2000 PSF SAFE BEARING LOAD AND PIPE PRESSURE OF 150 PSI PLUS 33% SAFETY FACTOR FOR OTHER SOILS & PRESSURES THE AREA REQUIRED IS IN DIRECT PROPORTION
6"	4.0 SQ. FT.	20"	37.0 SQ. FT.	
8"	6.6 SQ. FT.	24"	53.0 SQ. FT.	
10"	10.0 SQ. FT.	27"	80.0 SQ. FT.	
12"	14.0 SQ. FT.	30"	98.0 SQ. FT.	
14"	18.6 SQ. FT.	36"	127.0 SQ. FT.	
16"	24.0 SQ. FT.			

NOTE: FOR OTHER FITTINGS USE FOLLOWING FACTORS

TEE 100%
45° BEND 76%
22 1/2° BEND 39%
11 1/4° BEND 20%
DEAD END 100%

CONCRETE THRUST BLOCKS

N.T.S. 05/27/05

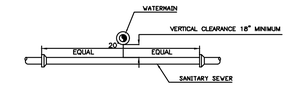


NOTES:

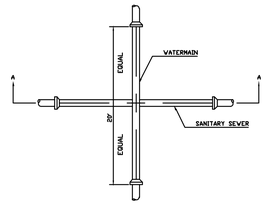
1. CASINGS SHALL BE REQUIRED FOR ALL LONG SIDE SERVICES.
2. SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" OFFSET.
3. WHERE NO SIDEWALK EXISTS, METER BOXES SHALL BE SET TO CONFORM TO FINISH GRADE.
4. COPPER TUBING SHALL BE TYPE "K" WITH COMPRESSION FITTINGS.
5. USE EMS MARKER #1252 COLOR BLUE DIRECTLY OVER THE CORPORATION STOP.
6. ALL SERVICE LINES SHALL BE EQUIPED WITH A CORPORATION STOP AT THE MAIN AND A CURB STOP (LOCKING CONNECTION TYPE) AT THE METER.
7. THE COPPER SERVICE LINE SHALL BE CONTINOUS FROM CORPORATION STOP TO CURB STOP WITH NO FITTINGS IN BETWEEN.
8. TAPPING SADDLES AND CORPORATION STOPS SHALL HAVE AWWA INLET THREADS.
9. ALL EXPOSED FITTINGS TO BE COATED WITH COLA TAR EPOXY.
10. GALVANIZED CASING REQUIRED FOR ANY INSTALLATION REQUIRING A JACK AND BORE, SCH. 40 PVC MAY BE USED FOR AN OPEN CUT INSTALLATION WITH THE APPROVAL OF THE CRB UTILITIES DEPT. CASING SHOULD EXTEND TWO (2) FEET BEYOND EDGE OF PAVEMENT AND SIZED AS FOLLOWS:
    A.) 1" SERVICE USE 2" CASING
    B.) 1 1/2" SERVICE USE 3" CASING
    C.) 2" SERVICE USE 4" CASING

3/4" – 2" TYPICAL WATER SERVICE INSTALLATION

N.T.S. 05/27/05



SECTION A-A



SEWER-WATER MAIN CROSSING DETAIL

STANDARD WATER AND SEWER SEPARATION STATEMENT

1. STORM AND SANITARY SEWER CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF EIGHTEEN (18) INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN TEN (10) FEET BETWEEN ANY TWO JOINTS AND BOTH PIPES SHALL BE D.I.P. WHERE THERE IS NOT ALTERNATIVE TO SEWER PIPES CROSSING OVER A WATER MAIN, THE CRITERIA FOR MINIMUM SEPARTION BETWEEN LINES AND JOINTS IN THE ABOVE, SHALL BE REQUIRED AND BOTH PIPES SHALL BE D.I.P. IRRESPECTIVE OF SEPARATION.
2. MAINTAIN TEN (10) FEET HORIZONTAL DISTANCE BETWEEN WATER MAIN AND STORM OR SANITARY SEWER MAIN, AS A MINIMUM.
3. FORCE MAIN CROSSING WATER MAIN SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF EIGHTEEN (18) INCHES BETWEEN THE OUTSIDE OF THE FORCE MAIN AND OUTSIDE OF THE WATER MAIN WITH WATER MAIN CROSSING OVER THE FORCE MAIN.

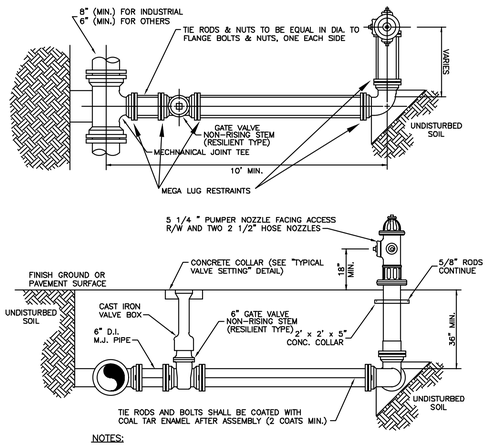
05/27/05

Water & Sewer Details
City of Riviera Beach Utility District

Water & Sewer Details
City of Riviera Beach Utility District

Water & Sewer Details
City of Riviera Beach Utility District

Water & Sewer Details
City of Riviera Beach Utility District

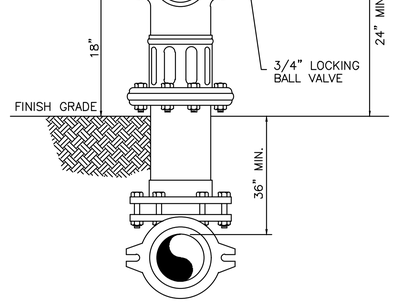


NOTES:

1. HYDRANTS SHALL BE INSTALLED PLUMB AND TRUE.
2. HYDRANTS SHALL BE PAINTED PER CITY OF RIVIERA BEACH STANDARDS: RED BODY REFLECTIVE AND WHITE CAP REFLECTIVE
3. HEEL AND THRUST BLOCKS TO REST IN UNDISTURBED SOIL.
4. THE ONLY FIRE HYDRANTS ACCEPTABLE ARE:
    A) KENNEDY
    B) AMERICAN-DARLING
    C) MUELLER BREAK-A-WAY
5. MUST USE MEGA LUG RESTRAINTS

FIRE HYDRANT INSTALLATION DETAIL

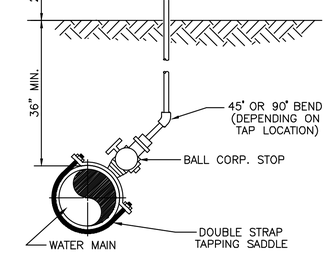
NTS 05/27/05



SAMPLE POINT (HYDRANT)

N.T.S. 05/27/05

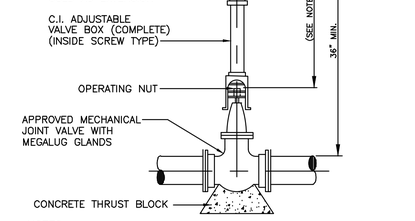
AFTER SATISFACTORY BACTERIOLOGICAL TESTING, REMOVE THE TUBING AND CORPORATION AND PLUG THE MAIN. TUBING IS TO BE REMOVED.



NOTE:
WHENEVER POSSIBLE, SERVICE TAPS SHALL BE USED AS SOMPLE POINTS.

SAMPLE POINT (ON MAIN)

N.T.S. 05/31/05



NOTES:

1. WHEN OPERATING NUT IS DEEPER THAN 36" AN EXTENSION WILL BE REQUIRED TO BRING OPERATING NUT 24"-30" BELOW FINISHED GRADE. EXTENSION BOLTS & NUTS ARE TO BE STAINLESS STEEL. A STAINLESS STEEL CENTERING PLATE, WELDED TO THE EXTENSION, IS ALSO REQUIRED.
2. VALVE BOXES SHALL HAVE LOCKING COVERS IN HIGH TRAFFIC ROADWAY AREAS.

TYPICAL GATE VALVE SETTINGS

N.T.S. 05/31/05

Water & Sewer Details
City of Riviera Beach Utility District

Water & Sewer Details
City of Riviera Beach Utility District

Water & Sewer Details
City of Riviera Beach Utility District

Water & Sewer Details
City of Riviera Beach Utility District

CDI
CIVIL DESIGN, INC.
Service Driven Design – Engineered Results
1400 Centrepark Blvd, Suite 905
West Palm Beach, FL 33401
T: 561.659.5760 F: 561.659.5772
www.civil-design.com
Registry No. 9664

VILLAS OF SOLANA

3211 AVENUE J
RIVIERA BEACH, FL 33404

APPROVED BY:

GABRIEL BURDEN LICENSE NO. 75425 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY GABRIEL BURDEN, P.E. ON USING A DIGITAL SIGNATURE.

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Gabriel Burden, P.E.
Florida License No. 75425

CDI PROJECT NO.
22740-01

DATE: 08/29/2022
DESIGNED: CDI
DRAWN: CDI

NO.	DATE	REVISION DESCRIPTION

PAVING, GRADING, & DRAINAGE PLAN

C6.1

CIVIL DESIGN, INC.
Service Driven Design ~ Engineered Results

August 30, 2022

Re: **Sewer Flows Statement for:**
Villas of Solana
3211 Avenue J
Riviera Beach, FL 33404
Section 30, Township 44S, Range 43E

Proposed Sewer Flows:

3 Bedrooms w/ 1201-2250 SF 28 Units@ 315 GPD/ Per Unit = 8,820 GPD

Net Flow = 8,820 GPD

This flow is only for the proposed. The buildings onsite will eventually be demolished so this is the proposed flow for the site.

Flows based on code "Single Family House" for the combined building block under residential from the City of Riviera Beach Code Sec. 31-717.

GABRIEL BURDEN LICENSE NO. 75425 STATE OF FLORIDA PROFESSIONAL ENGINEER

Gabriel D Burden
Digitally signed by Gabriel D Burden
Date: 2022.08.30 07:21:16 -04'00'

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August 30, 2022
Gabriel Burden, P.E.
Florida License No. 75425

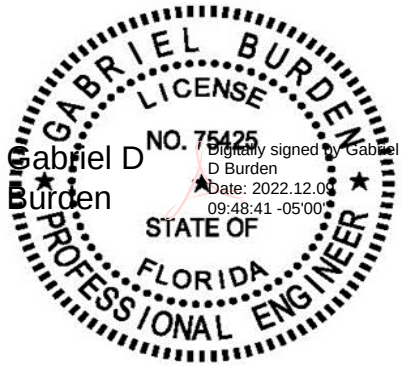
STORM WATER MANAGEMENT CALCULATIONS
FOR

VILLAS OF SOLANA

3201 & 3211 AVENUE J, RIVIERA BEACH, FLORIDA 33404
CDI PROJECT NO. 22740-01

July 26, 2022
Revised:

HIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY GABRIEL BURDEN, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.



1400 Centrepark Blvd, Suite 905
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www.civil-design.com

Gabriel Burden, P.E.
Florida License No. 75425

12/9/2022
Date

CIVIL DESIGN, INC.
Service Driven Design ~ Engineered Results

STORM WATER MANAGEMENT CALCULATIONS

Project Name: VILLAS OF SOLANA
CDI Project #: CDI PROJECT NO. 22740-01

LAND USE BREAKDOWN

EXISTING

Site Area =	**2.00 ac**
Non-Contributing Area =	**0.00 ac**
Offsite Area =	**0.00 ac**
Basin Area =	**2.00 ac**

	Acres	%	Grading From	Grading To
Impervious Area				
Buildings	0.19 ac	(10%)	16.50	16.50
Pavement Lot	0.36 ac	(18%)	13.81	16.64
Walks & Curbs	0.04 ac	(2%)	14.20	15.40
Pervious Area				
Green Space	1.27 ac	(64%)	14.89	17.96
Detention	0.14 ac	(7%)	10.26	15.82
Subtotal Impervious Areas	0.59 ac	(30%)		
Subtotal Pervious Areas	1.41 ac	(71%)		

Find Curve Number:

Avg. Pervious Ground El. =	16.1
Control Elevation =	3.0
Depth to Water Table =	13.1
Soil Type =	Coastal

Soil Storage Table

(SFWMD's Vol. IV, Basis of Review, page E-2)

Depth to W.T. (ft)	Coastal Storage (in)	Flatwoods Storage (in)	Depressi on
1.0	0.6	0.6	0.6
2.0	2.5	2.5	2.1
3.0	6.6	5.4	4.4
4.0	10.9	9.0	6.8

Pervious Area =	1.41 ac	
Storage from Table =	8.18 in	(w/ 25% compaction)
Available Soil Storage =	0.96 af	
Soil Moisture Storage (S) =	5.76 in	
Curve Number =	**63**	

STORM WATER MANAGEMENT CALCULATIONS

Project Name: VILLAS OF SOLANA
CDI Project #: CDI PROJECT NO. 22740-01

LAND USE BREAKDOWN

PROPOSED

Site Area =	**2.00 ac**
R/W Dedication	**0.00 ac**
Offsite Area =	**0.00 ac**
Basin Area =	**2.00 ac**

	Acres	%	Grading From	Grading To
Impervious Area				
Buildings	0.49 ac	(25%)	16.50	16.50
Pavement	0.29 ac	(15%)	13.80	15.00
Walks & Curbing	0.33 ac	(17%)	13.80	16.50
Pervious Area				
Green Space	0.70 ac	(35%)	13.00	16.00
Det Bot.	0.08 ac	(4%)	11.00	
Det Sides	0.11 ac	(6%)	11.00	15.00
Subtotal Impervious Areas	1.11 ac	(56%)		
Subtotal Pervious Areas	0.89 ac	(45%)		

Therefore, 0.52 ac New Impervious Area

Find Curve Number:

Avg. Pervious Ground El. =	14.0
Control Elevation =	3.0
Depth to Water Table =	11.0
Soil Type =	Coastal

Soil Storage Table

(SFWMD's Vol. IV, Basis of Review, page E-2)

Depth to W.T. (ft)	Coastal Storage (in)	Flatwoods Storage (in)	Depression
1.0	0.6	0.6	0.6
2.0	2.5	2.5	2.1
3.0	6.6	5.4	4.4
4.0	10.9	9.0	6.8

Pervious Area =	0.89	
Storage from Table =	8.18 in	(w/ 25% compaction)
Avail Soil Storage =	0.61	
Soil Moisture Storage (S) =	3.64 in	
Curve Number =	**73**	

STORM WATER MANAGEMENT CALCULATIONS

Project Name: VILLAS OF SOLANA
CDI Project #: CDI PROJECT NO. 22740-01

STAGE -STORAGE CALCULATIONS

EXISTING

Starting Stage	**10.00**
Ending Stage	**20.00**
Stage Increment	**0.50**

Name	Pavement Lot	Walks & Curbs	Green Space	Detention
Area	0.36	0.04	1.27	0.14
Start Elev	13.81	14.20	14.89	10.26
End Elev	16.64	15.40	17.96	15.82

Stage Feet NAVD	Linear Storage Ac-ft	Linear Storage Ac-ft	Linear Storage Ac-ft	Linear Storage Ac-ft	Total Storage Ac-ft
10.00	0.00	0.00	0.00	0.00	0.00
10.50	0.00	0.00	0.00	0.00	0.00
11.00	0.00	0.00	0.00	0.01	0.01
11.50	0.00	0.00	0.00	0.02	0.02
12.00	0.00	0.00	0.00	0.04	0.04
12.50	0.00	0.00	0.00	0.06	0.06
13.00	0.00	0.00	0.00	0.09	0.09
13.50	0.00	0.00	0.00	0.13	0.13
14.00	0.00	0.00	0.00	0.18	0.18
14.50	0.03	0.00	0.00	0.23	0.26
15.00	0.09	0.01	0.00	0.28	0.39
15.50	0.18	0.03	0.08	0.35	0.63
16.00	0.31	0.05	0.25	0.42	1.03
16.50	0.46	0.07	0.54	0.49	1.55
17.00	0.64	0.09	0.92	0.56	2.21
17.50	0.82	0.11	1.41	0.63	2.97
18.00	1.00	0.13	2.04	0.70	3.87
18.50	1.18	0.15	2.68	0.77	4.78
19.00	1.36	0.17	3.31	0.84	5.68
19.50	1.54	0.19	3.95	0.91	6.59
20.00	1.72	0.21	4.58	0.98	7.49

STORM WATER MANAGEMENT CALCULATIONS

	0
Project Name: **VILLAS OF SOLANA**	**07/26/22**
CDI Project #: **CDI PROJECT NO. 22740-01**	**01/00/00**

STAGE -STORAGE CALCULATIONS

PROPOSED

Starting Stage	**10.00**
Ending Stage	**20.00**
Stage Increment	**0.50**

Name	**Pavement**	**Walks & Curbing**	**Green Space**	**Det Bot.**	**Det Sides**	**Trench**
Area	0.29	0.33	0.70	0.08	0.11	0.31 AF
Start Elev	13.80	13.80	13.00	11.00	11.00	3.00
End Elev	15.00	16.50	16.00	0.00	15.00	12.00

Stage Feet NAVD	Linear Storage Ac-ft	Linear Storage Ac-ft	Linear Storage Ac-ft	Vert Storage Ac-ft	Linear Storage Ac-ft	Linear Storage Ac-ft	**Prop Total Storage Ac-ft**	*Exist Storage Ac-ft*	Diff Ac-ft
10.00	0.00	0.00	0.00	0.00	0.00	0.24	**0.24**	*0.00*	0.24
10.50	0.00	0.00	0.00	0.00	0.00	0.26	**0.26**	*0.00*	0.26
11.00	0.00	0.00	0.00	0.00	0.00	0.28	**0.28**	*0.01*	0.27
11.50	0.00	0.00	0.00	0.04	0.00	0.30	**0.34**	*0.02*	0.32
12.00	0.00	0.00	0.00	0.08	0.01	0.31	**0.41**	*0.04*	0.37
12.50	0.00	0.00	0.00	0.12	0.03	0.31	**0.46**	*0.06*	0.40
13.00	0.00	0.00	0.00	0.16	0.06	0.31	**0.53**	*0.09*	0.43
13.50	0.00	0.00	0.03	0.20	0.09	0.31	**0.63**	*0.13*	0.50
14.00	0.00	0.00	0.12	0.24	0.12	0.31	**0.80**	*0.18*	0.62
14.50	0.06	0.03	0.26	0.28	0.17	0.31	**1.11**	*0.26*	0.86
15.00	0.17	0.09	0.47	0.32	0.22	0.31	**1.58**	*0.39*	1.20
15.50	0.32	0.18	0.73	0.36	0.28	0.31	**2.17**	*0.63*	1.54
16.00	0.46	0.30	1.05	0.40	0.33	0.31	**2.85**	*1.03*	1.83
16.50	0.61	0.45	1.40	0.44	0.39	0.31	**3.59**	*1.55*	2.04
17.00	0.75	0.61	1.75	0.48	0.44	0.31	**4.35**	*2.21*	2.14
17.50	0.90	0.78	2.10	0.52	0.50	0.31	**5.10**	*2.97*	2.14
18.00	1.04	0.94	2.45	0.56	0.55	0.31	**5.86**	*3.87*	1.99
18.50	1.19	1.11	2.80	0.60	0.61	0.31	**6.61**	*4.78*	1.84
19.00	1.33	1.27	3.15	0.64	0.66	0.31	**7.37**	*5.68*	1.69
19.50	1.48	1.44	3.50	0.68	0.72	0.31	**8.12**	*6.59*	1.54
20.00	1.62	1.60	3.85	0.72	0.77	0.31	**8.88**	*7.49*	1.39

STORM WATER MANAGEMENT CALCULATIONS

Project Name: VILLAS OF SOLANA
CDI Project #: CDI PROJECT NO. 22740-01

POST-DEVELOPMENT RUNOFF (ZERO DISCHARGE CALCULATIONS)

Soil Moisture Storage (S_{exist})	5.8 in
Soil Moisture Storage (S_{prop})	3.6 in

10 Year, 1 Day Rainfall Amount (P):	9.0 in	Figure C-4
25 Year, 3 Day Rainfall Amount (P):	12.0 in	Figure C-8
100 Year, 3 Day Rainfall Amount (P):	14.0 in	Figure C-9

ALLOWABLE DISCHARGE: 10-YEAR, 3-DAY RUNOFF CALCULATIONS (PER SFWMD):

Existing:
Q = (P-(0.2XS))2 / (P+(0.8*S))
= 4.5 in

Volume = Q x Site Area x 1'/12"
= 4.5 in X 2 X 1'/12" = **0.75 AF**

Proposed:
Q = (P-(0.2XS))2 / (P+(0.8*S))
= 5.7 in

Volume = Q x Site Area x 1'/12"
= 5.7 in X 2 X 1'/12" = **0.96 AF**

Pre- vs. Post- = 0.20 AF of storage required - therefore OK

25-YEAR, 3-DAY RUNOFF CALCULATIONS:

Existing:
Q = (P-(0.2XS))2 / (P+(0.8*S))
= 7.1 in

Volume = Q x Site Area x 1'/12"
= 7.1 in X 2 X 1'/12" = **1.18 AF**

Proposed:
Q = (P-(0.2XS))2 / (P+(0.8*S))
= 8.5 in

Volume = Q x Site Area x 1'/12"
= 8.5 in X 2 X 1'/12" = **1.42 AF**

Pre- vs. Post- = 0.24 AF of storage required - therefore OK

100-YEAR, 3-DAY RUNOFF CALCULATIONS:

Existing:
Q = (P-(0.2XS))2 / (P+(0.8*S))
= 8.9 in

Volume = Q x Site Area x 1'/12"
= 8.9 in X 2 X 1'/12" = **1.48 AF**

Proposed:
Q = (P-(0.2XS))2 / (P+(0.8*S))
= 10.4 in

Volume = Q x Site Area x 1'/12"
= 10.4 in X 2 X 1'/12" = **1.74 AF**

Pre- vs. Post- = 0.26 AF of storage required - therefore OK

SFWMD Drainage Basin: Intracoastal

Storm Event	Rainfall (in)	Peak Stage (ft-NGVD)		Design Criteria	Prop Stage (ft-NGVD)
10-yr, 1-day =	9.0	12.83		Road Crown	
25-yr, 3-day =	12.0	13.67		Perimiter Elevation	
100-yr, 3-day =	14.0	15.13		Finish Floors - Zero Discharge	

Recovery Times Shown on the Cascade Attached. All recover the 9.16/9.17 which is the invert of the outgoing pipe. Therefore the system fully recovers in the 360 hours required.

STORM WATER MANAGEMENT CALCULATIONS

Project Name: VILLAS OF SOLANA

CDI Project #: CDI PROJECT NO. 22740-01

WATER QUALITY CALCULATIONS

1-inch Over the Project Area

(Treated Volume) 1-inch * 1-ft/12-in * 2.00 (PROJECT AREA (AC)) = **0.17** (TREATED VOLUME) ac-ft

2.5-inches Times the Percent Impervious

(Site Area) 2.00 (PROJECT AREA (AC)) - (0.00 (LAKES (AC)) + 0.49 (ROOFS (AC))) = 1.51 (SITE AREA) ac

(Impervious Area) 1.51 (SITE AREA (AC)) - 0.89 (PERVIOUS AREA (AC)) = 0.62 (IMPERVIOUS AREA) ac

(% Impervious) IMPERVIOUS AREA * 100% / SITE AREA (AC) = 41.06%

(2.5-in * % Imp.) 2.5-inches * 41.06% (PERCENT IMPERVIOUS) = 1.03 (INCHES TO BE TREATED) in

(Treated Volume) 1.03 (TREATED (IN)) * 1-ft/12-in * 2.00 (PROJECT AREA - LAKES (AC)) = **0.18** (TREATED VOLUME) ac-ft

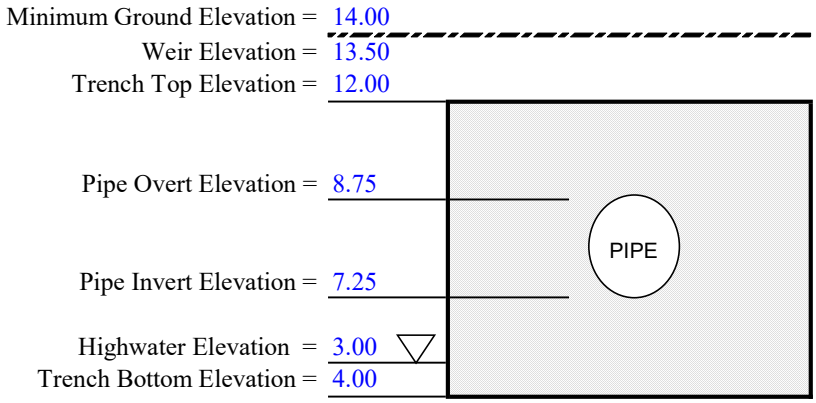
THEREFORE 2.5-INCHES X %IMP GOVERNS

Required WQ Treatment = **0.18** ac-ft

Provided WQ Treatment @ Elev 4.20 (exfiltration trench) = **0.31** ac-ft

Project Name: VILLAS OF SOLANA
CDI Project #: CDI PROJECT NO. 22740-01

EXFILTRATION TRENCH DESIGN



Standard Formula

$$L = \frac{FS[(\%WQ)(Vwq)+Vadd]}{(K(H2*W+2*H2*Du-Du^2+2*H2*Ds)+(1.39*10^-4)*W*Du)}$$

<=== INPUT ONLY IN GRAY CELLS

FS	Factor of Safety	2	
%WQ	Water Quality Reduction	50%	
V	Volume Treated (acre-in)	6.40	<=== WQ retention volume
W	Trench Width (feet)	8	
K	Hydraulic Conductivity (cfs/ft^2-ft.head)	1.46E-04	SFWMD Permit No.
H_2	Depth to Water Table (feet)	9.50	<=== H_2 can extend no lower than the trench bottom
Du	Non Saturated Trench Depth (feet)	8.00	
Ds	Saturated Trench Depth (feet)	0.00	

L **Trench Length for WQ Volume** **195**

$V = L*(K(H_2*W+2*H_2*Du-Du^2+2*H_2*Ds)+(1.39*10^-4)*W*Du)$

<=== INPUT ONLY IN GRAY CELLS

L	Length of Trench Provided	230	+ 0 LF additional (area only)
W	Trench Width (feet)	8	
K	Hydraulic Conductivity (cfs/ft^2-ft.head)	1.46E-04	
H_2	Depth to Water Table (feet)	9.50	<=== H_2 can extend no lower than the trench bottom
Du	Non Saturated Trench Depth (feet)	8	
Ds	Saturated Trench Depth (feet)	0	

V **Volume Treated (acre-in)** **3.77** (Assumes FS of 2.0)
Volume Treated (acre-ft) **0.31** (Assumes FS of 2.0)

Project Name: Villas of Solana
Reviewer: GB
Project Number: 22740
  Period Begin: Jan 01, 2019;0000 hr End: Jan 16, 2019;0000 hr Duration: 360 hr
  Time Step: 0.2 hr, Iterations: 100

Basin 1: Villas of Solana

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 24 hr
  Design Frequency: 10 year
  1 Day Rainfall: 9 inches
  Area: 2 acres
  Ground Storage: 3.6 inches
  Time of Concentration: 0.5 hours
  Initial Stage: 3 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
3.00	0.00
4.00	0.03
5.00	0.07
6.00	0.10
7.00	0.14
8.00	0.17
9.00	0.21
10.00	0.24
11.00	0.28
12.00	0.41
13.00	0.53
14.00	0.80
15.00	1.58
16.00	2.85
17.00	4.36
18.00	5.87

Offsite Receiving Body: Offsite1

Time (hr)	Stage (ft NGVD)
0.00	3.00
24.00	3.00
72.00	3.00
288.00	3.00
360.00	3.00

Structure: 1

  From Basin: Villas of Solana
  To Basin: Offsite1
  Structure Type: Gravity
    Weir: Broad Crested, Crest Elev = 14 ft NGVD, Length = 3 ft, Weir Coef = 3.13
    Bleeder: V-Notch, Invert Elev = 9.16 ft NGVD, Top Elev = 9.66 ft NGVD
      Angle = 53.1301 deg
      Default Coefs: Weir Coef = 2.5, Orifice Coef = 0.6
    Pipe: Diameter = 1.25 ft, Manning's n = 0.012, Length = 50 ft
      US Invert Elev = 10 ft NGVD, DS Invert Elev = 9.16 ft NGVD, no flap gate

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	3.00	3.00
1.00	0.09	0.00	0.00	0.00	3.00	3.00
2.00	0.18	0.00	0.00	0.00	3.00	3.00
3.00	0.29	0.00	0.00	0.00	3.00	3.00
4.00	0.41	0.00	0.00	0.00	3.00	3.00
5.00	0.56	0.00	0.00	0.00	3.00	3.00
6.00	0.75	0.00	0.00	0.00	3.00	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
7.00	0.97	0.04	0.00	0.00	3.04	3.00
8.00	1.23	0.10	0.00	0.00	3.22	3.00
9.00	1.54	0.18	0.00	0.00	3.59	3.00
10.00	1.92	0.30	0.00	0.00	4.18	3.00
11.00	2.42	0.51	0.00	0.00	4.99	3.00
12.00	5.90	6.12	0.51	0.01	10.23	3.00
13.00	6.90	2.11	1.06	0.09	12.61	3.00
14.00	7.36	0.95	1.10	0.18	12.82	3.00
15.00	7.65	0.56	1.05	0.27	12.56	3.00
16.00	7.92	0.49	0.99	0.35	12.21	3.00
17.00	8.08	0.32	0.92	0.43	11.83	3.00
18.00	8.24	0.30	0.84	0.50	11.46	3.00
19.00	8.41	0.29	0.77	0.57	11.14	3.00
20.00	8.57	0.29	0.63	0.63	10.57	3.00
21.00	8.68	0.21	0.42	0.67	9.98	3.00
22.00	8.78	0.20	0.22	0.69	9.67	3.00
23.00	8.89	0.20	0.20	0.71	9.64	3.00
24.00	9.00	0.20	0.20	0.73	9.64	3.00
25.00	9.00	0.03	0.08	0.74	9.49	3.00
26.00	9.00	0.00	0.03	0.74	9.39	3.00
27.00	9.00	0.00	0.02	0.74	9.33	3.00
28.00	9.00	0.00	0.01	0.74	9.30	3.00
29.00	9.00	0.00	0.01	0.74	9.28	3.00
30.00	9.00	0.00	0.00	0.74	9.26	3.00
31.00	9.00	0.00	0.00	0.74	9.25	3.00
32.00	9.00	0.00	0.00	0.74	9.25	3.00
33.00	9.00	0.00	0.00	0.74	9.24	3.00
34.00	9.00	0.00	0.00	0.74	9.23	3.00
35.00	9.00	0.00	0.00	0.74	9.23	3.00
36.00	9.00	0.00	0.00	0.74	9.22	3.00
37.00	9.00	0.00	0.00	0.74	9.22	3.00
38.00	9.00	0.00	0.00	0.75	9.22	3.00
39.00	9.00	0.00	0.00	0.75	9.22	3.00
40.00	9.00	0.00	0.00	0.75	9.21	3.00
41.00	9.00	0.00	0.00	0.75	9.21	3.00
42.00	9.00	0.00	0.00	0.75	9.21	3.00
43.00	9.00	0.00	0.00	0.75	9.21	3.00
44.00	9.00	0.00	0.00	0.75	9.21	3.00
45.00	9.00	0.00	0.00	0.75	9.20	3.00
46.00	9.00	0.00	0.00	0.75	9.20	3.00
47.00	9.00	0.00	0.00	0.75	9.20	3.00
48.00	9.00	0.00	0.00	0.75	9.20	3.00
49.00	9.00	0.00	0.00	0.75	9.20	3.00
50.00	9.00	0.00	0.00	0.75	9.20	3.00
51.00	9.00	0.00	0.00	0.75	9.20	3.00
52.00	9.00	0.00	0.00	0.75	9.20	3.00
53.00	9.00	0.00	0.00	0.75	9.20	3.00
54.00	9.00	0.00	0.00	0.75	9.19	3.00
55.00	9.00	0.00	0.00	0.75	9.19	3.00
56.00	9.00	0.00	0.00	0.75	9.19	3.00
57.00	9.00	0.00	0.00	0.75	9.19	3.00
58.00	9.00	0.00	0.00	0.75	9.19	3.00
59.00	9.00	0.00	0.00	0.75	9.19	3.00
60.00	9.00	0.00	0.00	0.75	9.19	3.00
61.00	9.00	0.00	0.00	0.75	9.19	3.00
62.00	9.00	0.00	0.00	0.75	9.19	3.00
63.00	9.00	0.00	0.00	0.75	9.19	3.00
64.00	9.00	0.00	0.00	0.75	9.19	3.00
65.00	9.00	0.00	0.00	0.75	9.19	3.00
66.00	9.00	0.00	0.00	0.75	9.19	3.00
67.00	9.00	0.00	0.00	0.75	9.19	3.00
68.00	9.00	0.00	0.00	0.75	9.19	3.00
69.00	9.00	0.00	0.00	0.75	9.19	3.00
70.00	9.00	0.00	0.00	0.75	9.19	3.00
71.00	9.00	0.00	0.00	0.75	9.19	3.00
72.00	9.00	0.00	0.00	0.75	9.19	3.00
73.00	9.00	0.00	0.00	0.75	9.19	3.00
74.00	9.00	0.00	0.00	0.75	9.18	3.00
75.00	9.00	0.00	0.00	0.75	9.18	3.00
76.00	9.00	0.00	0.00	0.75	9.18	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
77.00	9.00	0.00	0.00	0.75	9.18	3.00
78.00	9.00	0.00	0.00	0.75	9.18	3.00
79.00	9.00	0.00	0.00	0.75	9.18	3.00
80.00	9.00	0.00	0.00	0.75	9.18	3.00
81.00	9.00	0.00	0.00	0.75	9.18	3.00
82.00	9.00	0.00	0.00	0.75	9.18	3.00
83.00	9.00	0.00	0.00	0.75	9.18	3.00
84.00	9.00	0.00	0.00	0.75	9.18	3.00
85.00	9.00	0.00	0.00	0.75	9.18	3.00
86.00	9.00	0.00	0.00	0.75	9.18	3.00
87.00	9.00	0.00	0.00	0.75	9.18	3.00
88.00	9.00	0.00	0.00	0.75	9.18	3.00
89.00	9.00	0.00	0.00	0.75	9.18	3.00
90.00	9.00	0.00	0.00	0.75	9.18	3.00
91.00	9.00	0.00	0.00	0.75	9.18	3.00
92.00	9.00	0.00	0.00	0.75	9.18	3.00
93.00	9.00	0.00	0.00	0.75	9.18	3.00
94.00	9.00	0.00	0.00	0.75	9.18	3.00
95.00	9.00	0.00	0.00	0.75	9.18	3.00
96.00	9.00	0.00	0.00	0.75	9.18	3.00
97.00	9.00	0.00	0.00	0.75	9.18	3.00
98.00	9.00	0.00	0.00	0.75	9.18	3.00
99.00	9.00	0.00	0.00	0.75	9.18	3.00
100.00	9.00	0.00	0.00	0.75	9.18	3.00
101.00	9.00	0.00	0.00	0.75	9.18	3.00
102.00	9.00	0.00	0.00	0.75	9.18	3.00
103.00	9.00	0.00	0.00	0.75	9.18	3.00
104.00	9.00	0.00	0.00	0.75	9.18	3.00
105.00	9.00	0.00	0.00	0.75	9.18	3.00
106.00	9.00	0.00	0.00	0.75	9.18	3.00
107.00	9.00	0.00	0.00	0.75	9.18	3.00
108.00	9.00	0.00	0.00	0.75	9.18	3.00
109.00	9.00	0.00	0.00	0.75	9.18	3.00
110.00	9.00	0.00	0.00	0.75	9.18	3.00
111.00	9.00	0.00	0.00	0.75	9.18	3.00
112.00	9.00	0.00	0.00	0.75	9.18	3.00
113.00	9.00	0.00	0.00	0.75	9.18	3.00
114.00	9.00	0.00	0.00	0.75	9.18	3.00
115.00	9.00	0.00	0.00	0.75	9.18	3.00
116.00	9.00	0.00	0.00	0.75	9.18	3.00
117.00	9.00	0.00	0.00	0.75	9.18	3.00
118.00	9.00	0.00	0.00	0.75	9.18	3.00
119.00	9.00	0.00	0.00	0.75	9.18	3.00
120.00	9.00	0.00	0.00	0.75	9.18	3.00
121.00	9.00	0.00	0.00	0.75	9.18	3.00
122.00	9.00	0.00	0.00	0.75	9.18	3.00
123.00	9.00	0.00	0.00	0.75	9.18	3.00
124.00	9.00	0.00	0.00	0.75	9.18	3.00
125.00	9.00	0.00	0.00	0.75	9.18	3.00
126.00	9.00	0.00	0.00	0.75	9.18	3.00
127.00	9.00	0.00	0.00	0.75	9.18	3.00
128.00	9.00	0.00	0.00	0.75	9.18	3.00
129.00	9.00	0.00	0.00	0.75	9.18	3.00
130.00	9.00	0.00	0.00	0.75	9.17	3.00
131.00	9.00	0.00	0.00	0.75	9.17	3.00
132.00	9.00	0.00	0.00	0.75	9.17	3.00
133.00	9.00	0.00	0.00	0.75	9.17	3.00
134.00	9.00	0.00	0.00	0.75	9.17	3.00
135.00	9.00	0.00	0.00	0.75	9.17	3.00
136.00	9.00	0.00	0.00	0.75	9.17	3.00
137.00	9.00	0.00	0.00	0.75	9.17	3.00
138.00	9.00	0.00	0.00	0.75	9.17	3.00
139.00	9.00	0.00	0.00	0.75	9.17	3.00
140.00	9.00	0.00	0.00	0.75	9.17	3.00
141.00	9.00	0.00	0.00	0.75	9.17	3.00
142.00	9.00	0.00	0.00	0.75	9.17	3.00
143.00	9.00	0.00	0.00	0.75	9.17	3.00
144.00	9.00	0.00	0.00	0.75	9.17	3.00
145.00	9.00	0.00	0.00	0.75	9.17	3.00
146.00	9.00	0.00	0.00	0.75	9.17	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
147.00	9.00	0.00	0.00	0.75	9.17	3.00
148.00	9.00	0.00	0.00	0.75	9.17	3.00
149.00	9.00	0.00	0.00	0.75	9.17	3.00
150.00	9.00	0.00	0.00	0.75	9.17	3.00
151.00	9.00	0.00	0.00	0.75	9.17	3.00
152.00	9.00	0.00	0.00	0.75	9.17	3.00
153.00	9.00	0.00	0.00	0.75	9.17	3.00
154.00	9.00	0.00	0.00	0.75	9.17	3.00
155.00	9.00	0.00	0.00	0.75	9.17	3.00
156.00	9.00	0.00	0.00	0.75	9.17	3.00
157.00	9.00	0.00	0.00	0.75	9.17	3.00
158.00	9.00	0.00	0.00	0.75	9.17	3.00
159.00	9.00	0.00	0.00	0.75	9.17	3.00
160.00	9.00	0.00	0.00	0.75	9.17	3.00
161.00	9.00	0.00	0.00	0.75	9.17	3.00
162.00	9.00	0.00	0.00	0.75	9.17	3.00
163.00	9.00	0.00	0.00	0.75	9.17	3.00
164.00	9.00	0.00	0.00	0.75	9.17	3.00
165.00	9.00	0.00	0.00	0.75	9.17	3.00
166.00	9.00	0.00	0.00	0.75	9.17	3.00
167.00	9.00	0.00	0.00	0.75	9.17	3.00
168.00	9.00	0.00	0.00	0.75	9.17	3.00
169.00	9.00	0.00	0.00	0.75	9.17	3.00
170.00	9.00	0.00	0.00	0.75	9.17	3.00
171.00	9.00	0.00	0.00	0.75	9.17	3.00
172.00	9.00	0.00	0.00	0.75	9.17	3.00
173.00	9.00	0.00	0.00	0.75	9.17	3.00
174.00	9.00	0.00	0.00	0.75	9.17	3.00
175.00	9.00	0.00	0.00	0.75	9.17	3.00
176.00	9.00	0.00	0.00	0.75	9.17	3.00
177.00	9.00	0.00	0.00	0.75	9.17	3.00
178.00	9.00	0.00	0.00	0.75	9.17	3.00
179.00	9.00	0.00	0.00	0.75	9.17	3.00
180.00	9.00	0.00	0.00	0.75	9.17	3.00
181.00	9.00	0.00	0.00	0.75	9.17	3.00
182.00	9.00	0.00	0.00	0.75	9.17	3.00
183.00	9.00	0.00	0.00	0.75	9.17	3.00
184.00	9.00	0.00	0.00	0.75	9.17	3.00
185.00	9.00	0.00	0.00	0.75	9.17	3.00
186.00	9.00	0.00	0.00	0.75	9.17	3.00
187.00	9.00	0.00	0.00	0.75	9.17	3.00
188.00	9.00	0.00	0.00	0.75	9.17	3.00
189.00	9.00	0.00	0.00	0.75	9.17	3.00
190.00	9.00	0.00	0.00	0.75	9.17	3.00
191.00	9.00	0.00	0.00	0.75	9.17	3.00
192.00	9.00	0.00	0.00	0.75	9.17	3.00
193.00	9.00	0.00	0.00	0.75	9.17	3.00
194.00	9.00	0.00	0.00	0.75	9.17	3.00
195.00	9.00	0.00	0.00	0.75	9.17	3.00
196.00	9.00	0.00	0.00	0.75	9.17	3.00
197.00	9.00	0.00	0.00	0.75	9.17	3.00
198.00	9.00	0.00	0.00	0.75	9.17	3.00
199.00	9.00	0.00	0.00	0.75	9.17	3.00
200.00	9.00	0.00	0.00	0.75	9.17	3.00
201.00	9.00	0.00	0.00	0.75	9.17	3.00
202.00	9.00	0.00	0.00	0.75	9.17	3.00
203.00	9.00	0.00	0.00	0.75	9.17	3.00
204.00	9.00	0.00	0.00	0.75	9.17	3.00
205.00	9.00	0.00	0.00	0.75	9.17	3.00
206.00	9.00	0.00	0.00	0.75	9.17	3.00
207.00	9.00	0.00	0.00	0.75	9.17	3.00
208.00	9.00	0.00	0.00	0.75	9.17	3.00
209.00	9.00	0.00	0.00	0.75	9.17	3.00
210.00	9.00	0.00	0.00	0.75	9.17	3.00
211.00	9.00	0.00	0.00	0.75	9.17	3.00
212.00	9.00	0.00	0.00	0.75	9.17	3.00
213.00	9.00	0.00	0.00	0.75	9.17	3.00
214.00	9.00	0.00	0.00	0.75	9.17	3.00
215.00	9.00	0.00	0.00	0.75	9.17	3.00
216.00	9.00	0.00	0.00	0.75	9.17	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
217.00	9.00	0.00	0.00	0.75	9.17	3.00
218.00	9.00	0.00	0.00	0.75	9.17	3.00
219.00	9.00	0.00	0.00	0.75	9.17	3.00
220.00	9.00	0.00	0.00	0.75	9.17	3.00
221.00	9.00	0.00	0.00	0.75	9.17	3.00
222.00	9.00	0.00	0.00	0.75	9.17	3.00
223.00	9.00	0.00	0.00	0.75	9.17	3.00
224.00	9.00	0.00	0.00	0.75	9.17	3.00
225.00	9.00	0.00	0.00	0.75	9.17	3.00
226.00	9.00	0.00	0.00	0.75	9.17	3.00
227.00	9.00	0.00	0.00	0.75	9.17	3.00
228.00	9.00	0.00	0.00	0.75	9.17	3.00
229.00	9.00	0.00	0.00	0.75	9.17	3.00
230.00	9.00	0.00	0.00	0.75	9.17	3.00
231.00	9.00	0.00	0.00	0.75	9.17	3.00
232.00	9.00	0.00	0.00	0.75	9.17	3.00
233.00	9.00	0.00	0.00	0.75	9.17	3.00
234.00	9.00	0.00	0.00	0.75	9.17	3.00
235.00	9.00	0.00	0.00	0.75	9.17	3.00
236.00	9.00	0.00	0.00	0.75	9.17	3.00
237.00	9.00	0.00	0.00	0.75	9.17	3.00
238.00	9.00	0.00	0.00	0.75	9.17	3.00
239.00	9.00	0.00	0.00	0.75	9.17	3.00
240.00	9.00	0.00	0.00	0.75	9.17	3.00
241.00	9.00	0.00	0.00	0.75	9.17	3.00
242.00	9.00	0.00	0.00	0.75	9.17	3.00
243.00	9.00	0.00	0.00	0.75	9.17	3.00
244.00	9.00	0.00	0.00	0.75	9.17	3.00
245.00	9.00	0.00	0.00	0.75	9.17	3.00
246.00	9.00	0.00	0.00	0.75	9.17	3.00
247.00	9.00	0.00	0.00	0.75	9.17	3.00
248.00	9.00	0.00	0.00	0.75	9.17	3.00
249.00	9.00	0.00	0.00	0.75	9.17	3.00
250.00	9.00	0.00	0.00	0.75	9.17	3.00
251.00	9.00	0.00	0.00	0.75	9.17	3.00
252.00	9.00	0.00	0.00	0.75	9.17	3.00
253.00	9.00	0.00	0.00	0.75	9.17	3.00
254.00	9.00	0.00	0.00	0.75	9.17	3.00
255.00	9.00	0.00	0.00	0.75	9.17	3.00
256.00	9.00	0.00	0.00	0.75	9.17	3.00
257.00	9.00	0.00	0.00	0.75	9.17	3.00
258.00	9.00	0.00	0.00	0.75	9.17	3.00
259.00	9.00	0.00	0.00	0.75	9.17	3.00
260.00	9.00	0.00	0.00	0.75	9.17	3.00
261.00	9.00	0.00	0.00	0.75	9.17	3.00
262.00	9.00	0.00	0.00	0.75	9.17	3.00
263.00	9.00	0.00	0.00	0.75	9.17	3.00
264.00	9.00	0.00	0.00	0.75	9.17	3.00
265.00	9.00	0.00	0.00	0.75	9.17	3.00
266.00	9.00	0.00	0.00	0.75	9.17	3.00
267.00	9.00	0.00	0.00	0.75	9.17	3.00
268.00	9.00	0.00	0.00	0.75	9.17	3.00
269.00	9.00	0.00	0.00	0.75	9.17	3.00
270.00	9.00	0.00	0.00	0.75	9.17	3.00
271.00	9.00	0.00	0.00	0.75	9.17	3.00
272.00	9.00	0.00	0.00	0.75	9.17	3.00
273.00	9.00	0.00	0.00	0.75	9.17	3.00
274.00	9.00	0.00	0.00	0.75	9.17	3.00
275.00	9.00	0.00	0.00	0.75	9.17	3.00
276.00	9.00	0.00	0.00	0.75	9.17	3.00
277.00	9.00	0.00	0.00	0.75	9.17	3.00
278.00	9.00	0.00	0.00	0.75	9.17	3.00
279.00	9.00	0.00	0.00	0.75	9.17	3.00
280.00	9.00	0.00	0.00	0.75	9.17	3.00
281.00	9.00	0.00	0.00	0.75	9.17	3.00
282.00	9.00	0.00	0.00	0.75	9.17	3.00
283.00	9.00	0.00	0.00	0.75	9.17	3.00
284.00	9.00	0.00	0.00	0.75	9.17	3.00
285.00	9.00	0.00	0.00	0.75	9.17	3.00
286.00	9.00	0.00	0.00	0.75	9.17	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
287.00	9.00	0.00	0.00	0.75	9.17	3.00
288.00	9.00	0.00	0.00	0.75	9.17	3.00
289.00	9.00	0.00	0.00	0.75	9.17	3.00
290.00	9.00	0.00	0.00	0.75	9.17	3.00
291.00	9.00	0.00	0.00	0.75	9.17	3.00
292.00	9.00	0.00	0.00	0.75	9.17	3.00
293.00	9.00	0.00	0.00	0.75	9.17	3.00
294.00	9.00	0.00	0.00	0.75	9.17	3.00
295.00	9.00	0.00	0.00	0.75	9.17	3.00
296.00	9.00	0.00	0.00	0.75	9.17	3.00
297.00	9.00	0.00	0.00	0.75	9.17	3.00
298.00	9.00	0.00	0.00	0.75	9.17	3.00
299.00	9.00	0.00	0.00	0.75	9.17	3.00
300.00	9.00	0.00	0.00	0.75	9.17	3.00
301.00	9.00	0.00	0.00	0.75	9.17	3.00
302.00	9.00	0.00	0.00	0.75	9.17	3.00
303.00	9.00	0.00	0.00	0.75	9.17	3.00
304.00	9.00	0.00	0.00	0.75	9.17	3.00
305.00	9.00	0.00	0.00	0.75	9.17	3.00
306.00	9.00	0.00	0.00	0.75	9.17	3.00
307.00	9.00	0.00	0.00	0.75	9.17	3.00
308.00	9.00	0.00	0.00	0.75	9.17	3.00
309.00	9.00	0.00	0.00	0.75	9.17	3.00
310.00	9.00	0.00	0.00	0.75	9.17	3.00
311.00	9.00	0.00	0.00	0.75	9.17	3.00
312.00	9.00	0.00	0.00	0.75	9.17	3.00
313.00	9.00	0.00	0.00	0.75	9.17	3.00
314.00	9.00	0.00	0.00	0.75	9.17	3.00
315.00	9.00	0.00	0.00	0.75	9.17	3.00
316.00	9.00	0.00	0.00	0.75	9.17	3.00
317.00	9.00	0.00	0.00	0.75	9.17	3.00
318.00	9.00	0.00	0.00	0.75	9.17	3.00
319.00	9.00	0.00	0.00	0.75	9.17	3.00
320.00	9.00	0.00	0.00	0.75	9.17	3.00
321.00	9.00	0.00	0.00	0.75	9.17	3.00
322.00	9.00	0.00	0.00	0.75	9.17	3.00
323.00	9.00	0.00	0.00	0.75	9.17	3.00
324.00	9.00	0.00	0.00	0.75	9.17	3.00
325.00	9.00	0.00	0.00	0.75	9.17	3.00
326.00	9.00	0.00	0.00	0.75	9.17	3.00
327.00	9.00	0.00	0.00	0.75	9.17	3.00
328.00	9.00	0.00	0.00	0.75	9.17	3.00
329.00	9.00	0.00	0.00	0.75	9.17	3.00
330.00	9.00	0.00	0.00	0.75	9.17	3.00
331.00	9.00	0.00	0.00	0.75	9.17	3.00
332.00	9.00	0.00	0.00	0.75	9.17	3.00
333.00	9.00	0.00	0.00	0.75	9.17	3.00
334.00	9.00	0.00	0.00	0.75	9.17	3.00
335.00	9.00	0.00	0.00	0.75	9.17	3.00
336.00	9.00	0.00	0.00	0.75	9.17	3.00
337.00	9.00	0.00	0.00	0.75	9.17	3.00
338.00	9.00	0.00	0.00	0.75	9.17	3.00
339.00	9.00	0.00	0.00	0.75	9.17	3.00
340.00	9.00	0.00	0.00	0.75	9.17	3.00
341.00	9.00	0.00	0.00	0.75	9.17	3.00
342.00	9.00	0.00	0.00	0.75	9.17	3.00
343.00	9.00	0.00	0.00	0.75	9.17	3.00
344.00	9.00	0.00	0.00	0.75	9.17	3.00
345.00	9.00	0.00	0.00	0.75	9.17	3.00
346.00	9.00	0.00	0.00	0.75	9.17	3.00
347.00	9.00	0.00	0.00	0.75	9.17	3.00
348.00	9.00	0.00	0.00	0.75	9.17	3.00
349.00	9.00	0.00	0.00	0.75	9.17	3.00
350.00	9.00	0.00	0.00	0.75	9.17	3.00
351.00	9.00	0.00	0.00	0.75	9.17	3.00
352.00	9.00	0.00	0.00	0.75	9.17	3.00
353.00	9.00	0.00	0.00	0.75	9.17	3.00
354.00	9.00	0.00	0.00	0.75	9.17	3.00
355.00	9.00	0.00	0.00	0.75	9.17	3.00
356.00	9.00	0.00	0.00	0.75	9.17	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
357.00	9.00	0.00	0.00	0.75	9.17	3.00
358.00	9.00	0.00	0.00	0.75	9.17	3.00
359.00	9.00	0.00	0.00	0.75	9.17	3.00
360.00	9.00	0.00	0.00	0.75	9.17	3.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	1.10	13.80	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Villas of Sola	12.83	13.80	3.00	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Villas of Sola	0.96	0.00	0.75	0.00	0.22	0.00

Project Name: Villas of Solana
Reviewer: GB
Project Number: 22740
  Period Begin: Jan 01, 2019;0000 hr End: Jan 16, 2019;0000 hr Duration: 360 hr
  Time Step: 0.2 hr, Iterations: 100

Basin 1: Villas of Solana

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 3day
  Design Frequency: 25 year
  3 Day Rainfall: 12 inches
  Area: 2 acres
  Ground Storage: 3.6 inches
  Time of Concentration: 0.5 hours
  Initial Stage: 3 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
3.00	0.00
4.00	0.03
5.00	0.07
6.00	0.10
7.00	0.14
8.00	0.17
9.00	0.21
10.00	0.24
11.00	0.28
12.00	0.41
13.00	0.53
14.00	0.80
15.00	1.58
16.00	2.85
17.00	4.36
18.00	5.87

Offsite Receiving Body: Offsite1

Time (hr)	Stage (ft NGVD)
0.00	3.00
24.00	3.00
72.00	3.00
288.00	3.00
360.00	3.00

Structure: 1

  From Basin: Villas of Solana
  To Basin: Offsite1
  Structure Type: Gravity
    Weir: Broad Crested, Crest Elev = 14 ft NGVD, Length = 3 ft, Weir Coef = 3.13
    Bleeder: V-Notch, Invert Elev = 9.16 ft NGVD, Top Elev = 9.66 ft NGVD
      Angle = 53.1301 deg
      Default Coefs: Weir Coef = 2.5, Orifice Coef = 0.6
    Pipe: Diameter = 1.25 ft, Manning's n = 0.012, Length = 50 ft
      US Invert Elev = 10 ft NGVD, DS Invert Elev = 9.16 ft NGVD, no flap gate

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	3.00	3.00
1.00	0.05	0.00	0.00	0.00	3.00	3.00
2.00	0.11	0.00	0.00	0.00	3.00	3.00
3.00	0.16	0.00	0.00	0.00	3.00	3.00
4.00	0.21	0.00	0.00	0.00	3.00	3.00
5.00	0.27	0.00	0.00	0.00	3.00	3.00
6.00	0.32	0.00	0.00	0.00	3.00	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
7.00	0.38	0.00	0.00	0.00	3.00	3.00
8.00	0.43	0.00	0.00	0.00	3.00	3.00
9.00	0.48	0.00	0.00	0.00	3.00	3.00
10.00	0.54	0.00	0.00	0.00	3.00	3.00
11.00	0.59	0.00	0.00	0.00	3.00	3.00
12.00	0.64	0.00	0.00	0.00	3.00	3.00
13.00	0.70	0.00	0.00	0.00	3.00	3.00
14.00	0.75	0.00	0.00	0.00	3.00	3.00
15.00	0.81	0.00	0.00	0.00	3.01	3.00
16.00	0.86	0.01	0.00	0.00	3.02	3.00
17.00	0.91	0.01	0.00	0.00	3.04	3.00
18.00	0.97	0.01	0.00	0.00	3.07	3.00
19.00	1.02	0.01	0.00	0.00	3.11	3.00
20.00	1.07	0.02	0.00	0.00	3.15	3.00
21.00	1.13	0.02	0.00	0.00	3.20	3.00
22.00	1.18	0.02	0.00	0.00	3.26	3.00
23.00	1.24	0.02	0.00	0.00	3.32	3.00
24.00	1.29	0.03	0.00	0.00	3.39	3.00
25.00	1.37	0.04	0.00	0.00	3.49	3.00
26.00	1.45	0.05	0.00	0.00	3.61	3.00
27.00	1.52	0.05	0.00	0.00	3.75	3.00
28.00	1.60	0.05	0.00	0.00	3.89	3.00
29.00	1.68	0.06	0.00	0.00	4.03	3.00
30.00	1.76	0.06	0.00	0.00	4.16	3.00
31.00	1.84	0.06	0.00	0.00	4.29	3.00
32.00	1.92	0.07	0.00	0.00	4.42	3.00
33.00	1.99	0.07	0.00	0.00	4.56	3.00
34.00	2.07	0.07	0.00	0.00	4.71	3.00
35.00	2.15	0.08	0.00	0.00	4.87	3.00
36.00	2.23	0.08	0.00	0.00	5.03	3.00
37.00	2.31	0.08	0.00	0.00	5.25	3.00
38.00	2.39	0.08	0.00	0.00	5.48	3.00
39.00	2.46	0.09	0.00	0.00	5.71	3.00
40.00	2.54	0.09	0.00	0.00	5.95	3.00
41.00	2.62	0.09	0.00	0.00	6.14	3.00
42.00	2.70	0.09	0.00	0.00	6.33	3.00
43.00	2.78	0.09	0.00	0.00	6.52	3.00
44.00	2.86	0.09	0.00	0.00	6.72	3.00
45.00	2.93	0.10	0.00	0.00	6.91	3.00
46.00	3.01	0.10	0.00	0.00	7.15	3.00
47.00	3.09	0.10	0.00	0.00	7.43	3.00
48.00	3.17	0.10	0.00	0.00	7.70	3.00
49.00	3.26	0.11	0.00	0.00	8.00	3.00
50.00	3.35	0.12	0.00	0.00	8.24	3.00
51.00	3.45	0.14	0.00	0.00	8.51	3.00
52.00	3.57	0.16	0.00	0.00	8.82	3.00
53.00	3.72	0.21	0.01	0.00	9.27	3.00
54.00	3.90	0.26	0.21	0.01	9.65	3.00
55.00	4.12	0.32	0.29	0.03	9.73	3.00
56.00	4.38	0.38	0.35	0.06	9.83	3.00
57.00	4.68	0.46	0.41	0.09	9.95	3.00
58.00	5.05	0.58	0.48	0.13	10.13	3.00
59.00	5.55	0.82	0.59	0.17	10.45	3.00
60.00	8.96	7.08	0.98	0.24	12.17	3.00
61.00	9.94	2.30	1.22	0.33	13.57	3.00
62.00	10.39	1.01	1.23	0.44	13.65	3.00
63.00	10.68	0.58	1.21	0.54	13.51	3.00
64.00	10.94	0.51	1.18	0.63	13.31	3.00
65.00	11.10	0.33	1.14	0.73	13.07	3.00
66.00	11.26	0.30	1.06	0.82	12.62	3.00
67.00	11.42	0.30	0.98	0.90	12.12	3.00
68.00	11.58	0.30	0.90	0.98	11.71	3.00
69.00	11.68	0.21	0.81	1.05	11.32	3.00
70.00	11.79	0.20	0.71	1.11	10.89	3.00
71.00	11.89	0.20	0.47	1.16	10.10	3.00
72.00	12.00	0.20	0.27	1.19	9.69	3.00
73.00	12.00	0.03	0.08	1.20	9.50	3.00
74.00	12.00	0.00	0.03	1.20	9.39	3.00
75.00	12.00	0.00	0.02	1.21	9.33	3.00
76.00	12.00	0.00	0.01	1.21	9.30	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
77.00	12.00	0.00	0.01	1.21	9.28	3.00
78.00	12.00	0.00	0.00	1.21	9.26	3.00
79.00	12.00	0.00	0.00	1.21	9.25	3.00
80.00	12.00	0.00	0.00	1.21	9.25	3.00
81.00	12.00	0.00	0.00	1.21	9.24	3.00
82.00	12.00	0.00	0.00	1.21	9.23	3.00
83.00	12.00	0.00	0.00	1.21	9.23	3.00
84.00	12.00	0.00	0.00	1.21	9.22	3.00
85.00	12.00	0.00	0.00	1.21	9.22	3.00
86.00	12.00	0.00	0.00	1.21	9.22	3.00
87.00	12.00	0.00	0.00	1.21	9.22	3.00
88.00	12.00	0.00	0.00	1.21	9.21	3.00
89.00	12.00	0.00	0.00	1.21	9.21	3.00
90.00	12.00	0.00	0.00	1.21	9.21	3.00
91.00	12.00	0.00	0.00	1.21	9.21	3.00
92.00	12.00	0.00	0.00	1.21	9.21	3.00
93.00	12.00	0.00	0.00	1.21	9.20	3.00
94.00	12.00	0.00	0.00	1.21	9.20	3.00
95.00	12.00	0.00	0.00	1.21	9.20	3.00
96.00	12.00	0.00	0.00	1.21	9.20	3.00
97.00	12.00	0.00	0.00	1.21	9.20	3.00
98.00	12.00	0.00	0.00	1.21	9.20	3.00
99.00	12.00	0.00	0.00	1.21	9.20	3.00
100.00	12.00	0.00	0.00	1.21	9.20	3.00
101.00	12.00	0.00	0.00	1.21	9.20	3.00
102.00	12.00	0.00	0.00	1.21	9.19	3.00
103.00	12.00	0.00	0.00	1.21	9.19	3.00
104.00	12.00	0.00	0.00	1.21	9.19	3.00
105.00	12.00	0.00	0.00	1.21	9.19	3.00
106.00	12.00	0.00	0.00	1.21	9.19	3.00
107.00	12.00	0.00	0.00	1.21	9.19	3.00
108.00	12.00	0.00	0.00	1.21	9.19	3.00
109.00	12.00	0.00	0.00	1.21	9.19	3.00
110.00	12.00	0.00	0.00	1.21	9.19	3.00
111.00	12.00	0.00	0.00	1.21	9.19	3.00
112.00	12.00	0.00	0.00	1.21	9.19	3.00
113.00	12.00	0.00	0.00	1.21	9.19	3.00
114.00	12.00	0.00	0.00	1.21	9.19	3.00
115.00	12.00	0.00	0.00	1.21	9.19	3.00
116.00	12.00	0.00	0.00	1.21	9.19	3.00
117.00	12.00	0.00	0.00	1.21	9.19	3.00
118.00	12.00	0.00	0.00	1.21	9.19	3.00
119.00	12.00	0.00	0.00	1.21	9.19	3.00
120.00	12.00	0.00	0.00	1.21	9.19	3.00
121.00	12.00	0.00	0.00	1.21	9.19	3.00
122.00	12.00	0.00	0.00	1.21	9.18	3.00
123.00	12.00	0.00	0.00	1.21	9.18	3.00
124.00	12.00	0.00	0.00	1.21	9.18	3.00
125.00	12.00	0.00	0.00	1.21	9.18	3.00
126.00	12.00	0.00	0.00	1.21	9.18	3.00
127.00	12.00	0.00	0.00	1.21	9.18	3.00
128.00	12.00	0.00	0.00	1.21	9.18	3.00
129.00	12.00	0.00	0.00	1.21	9.18	3.00
130.00	12.00	0.00	0.00	1.21	9.18	3.00
131.00	12.00	0.00	0.00	1.21	9.18	3.00
132.00	12.00	0.00	0.00	1.21	9.18	3.00
133.00	12.00	0.00	0.00	1.21	9.18	3.00
134.00	12.00	0.00	0.00	1.21	9.18	3.00
135.00	12.00	0.00	0.00	1.21	9.18	3.00
136.00	12.00	0.00	0.00	1.21	9.18	3.00
137.00	12.00	0.00	0.00	1.21	9.18	3.00
138.00	12.00	0.00	0.00	1.21	9.18	3.00
139.00	12.00	0.00	0.00	1.21	9.18	3.00
140.00	12.00	0.00	0.00	1.21	9.18	3.00
141.00	12.00	0.00	0.00	1.21	9.18	3.00
142.00	12.00	0.00	0.00	1.21	9.18	3.00
143.00	12.00	0.00	0.00	1.21	9.18	3.00
144.00	12.00	0.00	0.00	1.21	9.18	3.00
145.00	12.00	0.00	0.00	1.21	9.18	3.00
146.00	12.00	0.00	0.00	1.21	9.18	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
147.00	12.00	0.00	0.00	1.21	9.18	3.00
148.00	12.00	0.00	0.00	1.21	9.18	3.00
149.00	12.00	0.00	0.00	1.21	9.18	3.00
150.00	12.00	0.00	0.00	1.21	9.18	3.00
151.00	12.00	0.00	0.00	1.21	9.18	3.00
152.00	12.00	0.00	0.00	1.21	9.18	3.00
153.00	12.00	0.00	0.00	1.21	9.18	3.00
154.00	12.00	0.00	0.00	1.21	9.18	3.00
155.00	12.00	0.00	0.00	1.21	9.18	3.00
156.00	12.00	0.00	0.00	1.21	9.18	3.00
157.00	12.00	0.00	0.00	1.21	9.18	3.00
158.00	12.00	0.00	0.00	1.21	9.18	3.00
159.00	12.00	0.00	0.00	1.21	9.18	3.00
160.00	12.00	0.00	0.00	1.21	9.18	3.00
161.00	12.00	0.00	0.00	1.21	9.18	3.00
162.00	12.00	0.00	0.00	1.21	9.18	3.00
163.00	12.00	0.00	0.00	1.21	9.18	3.00
164.00	12.00	0.00	0.00	1.21	9.18	3.00
165.00	12.00	0.00	0.00	1.21	9.18	3.00
166.00	12.00	0.00	0.00	1.21	9.18	3.00
167.00	12.00	0.00	0.00	1.21	9.18	3.00
168.00	12.00	0.00	0.00	1.21	9.18	3.00
169.00	12.00	0.00	0.00	1.21	9.18	3.00
170.00	12.00	0.00	0.00	1.21	9.18	3.00
171.00	12.00	0.00	0.00	1.21	9.18	3.00
172.00	12.00	0.00	0.00	1.21	9.18	3.00
173.00	12.00	0.00	0.00	1.21	9.18	3.00
174.00	12.00	0.00	0.00	1.21	9.18	3.00
175.00	12.00	0.00	0.00	1.21	9.18	3.00
176.00	12.00	0.00	0.00	1.21	9.18	3.00
177.00	12.00	0.00	0.00	1.21	9.18	3.00
178.00	12.00	0.00	0.00	1.21	9.17	3.00
179.00	12.00	0.00	0.00	1.21	9.17	3.00
180.00	12.00	0.00	0.00	1.21	9.17	3.00
181.00	12.00	0.00	0.00	1.21	9.17	3.00
182.00	12.00	0.00	0.00	1.21	9.17	3.00
183.00	12.00	0.00	0.00	1.21	9.17	3.00
184.00	12.00	0.00	0.00	1.21	9.17	3.00
185.00	12.00	0.00	0.00	1.21	9.17	3.00
186.00	12.00	0.00	0.00	1.21	9.17	3.00
187.00	12.00	0.00	0.00	1.21	9.17	3.00
188.00	12.00	0.00	0.00	1.21	9.17	3.00
189.00	12.00	0.00	0.00	1.21	9.17	3.00
190.00	12.00	0.00	0.00	1.21	9.17	3.00
191.00	12.00	0.00	0.00	1.21	9.17	3.00
192.00	12.00	0.00	0.00	1.21	9.17	3.00
193.00	12.00	0.00	0.00	1.21	9.17	3.00
194.00	12.00	0.00	0.00	1.21	9.17	3.00
195.00	12.00	0.00	0.00	1.21	9.17	3.00
196.00	12.00	0.00	0.00	1.21	9.17	3.00
197.00	12.00	0.00	0.00	1.21	9.17	3.00
198.00	12.00	0.00	0.00	1.21	9.17	3.00
199.00	12.00	0.00	0.00	1.21	9.17	3.00
200.00	12.00	0.00	0.00	1.21	9.17	3.00
201.00	12.00	0.00	0.00	1.21	9.17	3.00
202.00	12.00	0.00	0.00	1.21	9.17	3.00
203.00	12.00	0.00	0.00	1.21	9.17	3.00
204.00	12.00	0.00	0.00	1.21	9.17	3.00
205.00	12.00	0.00	0.00	1.21	9.17	3.00
206.00	12.00	0.00	0.00	1.21	9.17	3.00
207.00	12.00	0.00	0.00	1.21	9.17	3.00
208.00	12.00	0.00	0.00	1.21	9.17	3.00
209.00	12.00	0.00	0.00	1.21	9.17	3.00
210.00	12.00	0.00	0.00	1.21	9.17	3.00
211.00	12.00	0.00	0.00	1.21	9.17	3.00
212.00	12.00	0.00	0.00	1.21	9.17	3.00
213.00	12.00	0.00	0.00	1.21	9.17	3.00
214.00	12.00	0.00	0.00	1.21	9.17	3.00
215.00	12.00	0.00	0.00	1.21	9.17	3.00
216.00	12.00	0.00	0.00	1.21	9.17	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
217.00	12.00	0.00	0.00	1.21	9.17	3.00
218.00	12.00	0.00	0.00	1.21	9.17	3.00
219.00	12.00	0.00	0.00	1.21	9.17	3.00
220.00	12.00	0.00	0.00	1.21	9.17	3.00
221.00	12.00	0.00	0.00	1.21	9.17	3.00
222.00	12.00	0.00	0.00	1.21	9.17	3.00
223.00	12.00	0.00	0.00	1.21	9.17	3.00
224.00	12.00	0.00	0.00	1.21	9.17	3.00
225.00	12.00	0.00	0.00	1.21	9.17	3.00
226.00	12.00	0.00	0.00	1.21	9.17	3.00
227.00	12.00	0.00	0.00	1.21	9.17	3.00
228.00	12.00	0.00	0.00	1.21	9.17	3.00
229.00	12.00	0.00	0.00	1.21	9.17	3.00
230.00	12.00	0.00	0.00	1.21	9.17	3.00
231.00	12.00	0.00	0.00	1.21	9.17	3.00
232.00	12.00	0.00	0.00	1.21	9.17	3.00
233.00	12.00	0.00	0.00	1.21	9.17	3.00
234.00	12.00	0.00	0.00	1.21	9.17	3.00
235.00	12.00	0.00	0.00	1.21	9.17	3.00
236.00	12.00	0.00	0.00	1.21	9.17	3.00
237.00	12.00	0.00	0.00	1.21	9.17	3.00
238.00	12.00	0.00	0.00	1.21	9.17	3.00
239.00	12.00	0.00	0.00	1.21	9.17	3.00
240.00	12.00	0.00	0.00	1.21	9.17	3.00
241.00	12.00	0.00	0.00	1.21	9.17	3.00
242.00	12.00	0.00	0.00	1.21	9.17	3.00
243.00	12.00	0.00	0.00	1.21	9.17	3.00
244.00	12.00	0.00	0.00	1.21	9.17	3.00
245.00	12.00	0.00	0.00	1.21	9.17	3.00
246.00	12.00	0.00	0.00	1.21	9.17	3.00
247.00	12.00	0.00	0.00	1.21	9.17	3.00
248.00	12.00	0.00	0.00	1.21	9.17	3.00
249.00	12.00	0.00	0.00	1.21	9.17	3.00
250.00	12.00	0.00	0.00	1.21	9.17	3.00
251.00	12.00	0.00	0.00	1.21	9.17	3.00
252.00	12.00	0.00	0.00	1.21	9.17	3.00
253.00	12.00	0.00	0.00	1.21	9.17	3.00
254.00	12.00	0.00	0.00	1.21	9.17	3.00
255.00	12.00	0.00	0.00	1.21	9.17	3.00
256.00	12.00	0.00	0.00	1.21	9.17	3.00
257.00	12.00	0.00	0.00	1.21	9.17	3.00
258.00	12.00	0.00	0.00	1.21	9.17	3.00
259.00	12.00	0.00	0.00	1.21	9.17	3.00
260.00	12.00	0.00	0.00	1.21	9.17	3.00
261.00	12.00	0.00	0.00	1.21	9.17	3.00
262.00	12.00	0.00	0.00	1.21	9.17	3.00
263.00	12.00	0.00	0.00	1.21	9.17	3.00
264.00	12.00	0.00	0.00	1.21	9.17	3.00
265.00	12.00	0.00	0.00	1.21	9.17	3.00
266.00	12.00	0.00	0.00	1.21	9.17	3.00
267.00	12.00	0.00	0.00	1.21	9.17	3.00
268.00	12.00	0.00	0.00	1.21	9.17	3.00
269.00	12.00	0.00	0.00	1.21	9.17	3.00
270.00	12.00	0.00	0.00	1.21	9.17	3.00
271.00	12.00	0.00	0.00	1.21	9.17	3.00
272.00	12.00	0.00	0.00	1.21	9.17	3.00
273.00	12.00	0.00	0.00	1.21	9.17	3.00
274.00	12.00	0.00	0.00	1.21	9.17	3.00
275.00	12.00	0.00	0.00	1.21	9.17	3.00
276.00	12.00	0.00	0.00	1.21	9.17	3.00
277.00	12.00	0.00	0.00	1.21	9.17	3.00
278.00	12.00	0.00	0.00	1.21	9.17	3.00
279.00	12.00	0.00	0.00	1.21	9.17	3.00
280.00	12.00	0.00	0.00	1.21	9.17	3.00
281.00	12.00	0.00	0.00	1.21	9.17	3.00
282.00	12.00	0.00	0.00	1.21	9.17	3.00
283.00	12.00	0.00	0.00	1.21	9.17	3.00
284.00	12.00	0.00	0.00	1.21	9.17	3.00
285.00	12.00	0.00	0.00	1.21	9.17	3.00
286.00	12.00	0.00	0.00	1.21	9.17	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
287.00	12.00	0.00	0.00	1.21	9.17	3.00
288.00	12.00	0.00	0.00	1.21	9.17	3.00
289.00	12.00	0.00	0.00	1.21	9.17	3.00
290.00	12.00	0.00	0.00	1.21	9.17	3.00
291.00	12.00	0.00	0.00	1.21	9.17	3.00
292.00	12.00	0.00	0.00	1.21	9.17	3.00
293.00	12.00	0.00	0.00	1.21	9.17	3.00
294.00	12.00	0.00	0.00	1.21	9.17	3.00
295.00	12.00	0.00	0.00	1.21	9.17	3.00
296.00	12.00	0.00	0.00	1.21	9.17	3.00
297.00	12.00	0.00	0.00	1.21	9.17	3.00
298.00	12.00	0.00	0.00	1.21	9.17	3.00
299.00	12.00	0.00	0.00	1.21	9.17	3.00
300.00	12.00	0.00	0.00	1.21	9.17	3.00
301.00	12.00	0.00	0.00	1.21	9.17	3.00
302.00	12.00	0.00	0.00	1.21	9.17	3.00
303.00	12.00	0.00	0.00	1.21	9.17	3.00
304.00	12.00	0.00	0.00	1.21	9.17	3.00
305.00	12.00	0.00	0.00	1.21	9.17	3.00
306.00	12.00	0.00	0.00	1.21	9.17	3.00
307.00	12.00	0.00	0.00	1.21	9.17	3.00
308.00	12.00	0.00	0.00	1.21	9.17	3.00
309.00	12.00	0.00	0.00	1.21	9.17	3.00
310.00	12.00	0.00	0.00	1.21	9.17	3.00
311.00	12.00	0.00	0.00	1.21	9.17	3.00
312.00	12.00	0.00	0.00	1.21	9.17	3.00
313.00	12.00	0.00	0.00	1.21	9.17	3.00
314.00	12.00	0.00	0.00	1.21	9.17	3.00
315.00	12.00	0.00	0.00	1.21	9.17	3.00
316.00	12.00	0.00	0.00	1.21	9.17	3.00
317.00	12.00	0.00	0.00	1.21	9.17	3.00
318.00	12.00	0.00	0.00	1.21	9.17	3.00
319.00	12.00	0.00	0.00	1.21	9.17	3.00
320.00	12.00	0.00	0.00	1.21	9.17	3.00
321.00	12.00	0.00	0.00	1.21	9.17	3.00
322.00	12.00	0.00	0.00	1.21	9.17	3.00
323.00	12.00	0.00	0.00	1.21	9.17	3.00
324.00	12.00	0.00	0.00	1.21	9.17	3.00
325.00	12.00	0.00	0.00	1.21	9.17	3.00
326.00	12.00	0.00	0.00	1.21	9.17	3.00
327.00	12.00	0.00	0.00	1.21	9.17	3.00
328.00	12.00	0.00	0.00	1.21	9.17	3.00
329.00	12.00	0.00	0.00	1.21	9.17	3.00
330.00	12.00	0.00	0.00	1.21	9.17	3.00
331.00	12.00	0.00	0.00	1.21	9.17	3.00
332.00	12.00	0.00	0.00	1.21	9.17	3.00
333.00	12.00	0.00	0.00	1.21	9.17	3.00
334.00	12.00	0.00	0.00	1.21	9.17	3.00
335.00	12.00	0.00	0.00	1.21	9.17	3.00
336.00	12.00	0.00	0.00	1.21	9.17	3.00
337.00	12.00	0.00	0.00	1.21	9.17	3.00
338.00	12.00	0.00	0.00	1.21	9.17	3.00
339.00	12.00	0.00	0.00	1.21	9.17	3.00
340.00	12.00	0.00	0.00	1.21	9.17	3.00
341.00	12.00	0.00	0.00	1.21	9.17	3.00
342.00	12.00	0.00	0.00	1.21	9.17	3.00
343.00	12.00	0.00	0.00	1.21	9.17	3.00
344.00	12.00	0.00	0.00	1.21	9.17	3.00
345.00	12.00	0.00	0.00	1.21	9.17	3.00
346.00	12.00	0.00	0.00	1.21	9.17	3.00
347.00	12.00	0.00	0.00	1.21	9.17	3.00
348.00	12.00	0.00	0.00	1.21	9.17	3.00
349.00	12.00	0.00	0.00	1.21	9.17	3.00
350.00	12.00	0.00	0.00	1.21	9.17	3.00
351.00	12.00	0.00	0.00	1.21	9.17	3.00
352.00	12.00	0.00	0.00	1.21	9.17	3.00
353.00	12.00	0.00	0.00	1.21	9.17	3.00
354.00	12.00	0.00	0.00	1.21	9.17	3.00
355.00	12.00	0.00	0.00	1.21	9.17	3.00
356.00	12.00	0.00	0.00	1.21	9.17	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
357.00	12.00	0.00	0.00	1.21	9.17	3.00
358.00	12.00	0.00	0.00	1.21	9.17	3.00
359.00	12.00	0.00	0.00	1.21	9.17	3.00
360.00	12.00	0.00	0.00	1.21	9.17	3.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	1.23	61.60	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Villas of Sola	13.67	61.60	3.00	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Villas of Sola	1.42	0.00	1.21	0.00	0.22	0.00

Project Name: Villas of Solana
Reviewer: GB
Project Number: 22740
  Period Begin: Jan 01, 2019;0000 hr End: Jan 16, 2019;0000 hr Duration: 360 hr
  Time Step: 0.2 hr, Iterations: 100

Basin 1: Villas of Solana

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 3day
  Design Frequency: 100 year
  3 Day Rainfall: 14 inches
  Area: 2 acres
  Ground Storage: 3.6 inches
  Time of Concentration: 0.5 hours
  Initial Stage: 3 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
3.00	0.00
4.00	0.03
5.00	0.07
6.00	0.10
7.00	0.14
8.00	0.17
9.00	0.21
10.00	0.24
11.00	0.28
12.00	0.41
13.00	0.53
14.00	0.80
15.00	1.58
16.00	2.85
17.00	4.36
18.00	5.87

Offsite Receiving Body: Offsite1

Time (hr)	Stage (ft NGVD)
0.00	3.00
24.00	3.00
72.00	3.00
288.00	3.00
360.00	3.00

Structure: 1

  From Basin: Villas of Solana
  To Basin: Offsite1
  Structure Type: Gravity
    Weir: Broad Crested, Crest Elev = 100 ft NGVD, Length = 2 ft, Weir Coef = 3.13
    Bleeder: None
    Pipe: Diameter = 1.25 ft, Manning's n = 0.012, Length = 50 ft
      US Invert Elev = 10 ft NGVD, DS Invert Elev = 9.44 ft NGVD, no flap gate

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	3.00	3.00
1.00	0.06	0.00	0.00	0.00	3.00	3.00
2.00	0.13	0.00	0.00	0.00	3.00	3.00
3.00	0.19	0.00	0.00	0.00	3.00	3.00
4.00	0.25	0.00	0.00	0.00	3.00	3.00
5.00	0.31	0.00	0.00	0.00	3.00	3.00
6.00	0.38	0.00	0.00	0.00	3.00	3.00
7.00	0.44	0.00	0.00	0.00	3.00	3.00
8.00	0.50	0.00	0.00	0.00	3.00	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
9.00	0.56	0.00	0.00	0.00	3.00	3.00
10.00	0.63	0.00	0.00	0.00	3.00	3.00
11.00	0.69	0.00	0.00	0.00	3.00	3.00
12.00	0.75	0.00	0.00	0.00	3.00	3.00
13.00	0.81	0.00	0.00	0.00	3.01	3.00
14.00	0.88	0.01	0.00	0.00	3.02	3.00
15.00	0.94	0.01	0.00	0.00	3.05	3.00
16.00	1.00	0.02	0.00	0.00	3.09	3.00
17.00	1.07	0.02	0.00	0.00	3.14	3.00
18.00	1.13	0.02	0.00	0.00	3.20	3.00
19.00	1.19	0.03	0.00	0.00	3.27	3.00
20.00	1.25	0.03	0.00	0.00	3.34	3.00
21.00	1.32	0.03	0.00	0.00	3.43	3.00
22.00	1.38	0.03	0.00	0.00	3.52	3.00
23.00	1.44	0.04	0.00	0.00	3.62	3.00
24.00	1.50	0.04	0.00	0.00	3.72	3.00
25.00	1.60	0.06	0.00	0.00	3.87	3.00
26.00	1.69	0.07	0.00	0.00	4.03	3.00
27.00	1.78	0.07	0.00	0.00	4.18	3.00
28.00	1.87	0.08	0.00	0.00	4.33	3.00
29.00	1.96	0.08	0.00	0.00	4.49	3.00
30.00	2.05	0.08	0.00	0.00	4.66	3.00
31.00	2.14	0.09	0.00	0.00	4.84	3.00
32.00	2.24	0.09	0.00	0.00	5.03	3.00
33.00	2.33	0.09	0.00	0.00	5.29	3.00
34.00	2.42	0.10	0.00	0.00	5.55	3.00
35.00	2.51	0.10	0.00	0.00	5.83	3.00
36.00	2.60	0.10	0.00	0.00	6.08	3.00
37.00	2.69	0.11	0.00	0.00	6.30	3.00
38.00	2.78	0.11	0.00	0.00	6.52	3.00
39.00	2.88	0.11	0.00	0.00	6.75	3.00
40.00	2.97	0.11	0.00	0.00	6.98	3.00
41.00	3.06	0.12	0.00	0.00	7.29	3.00
42.00	3.15	0.12	0.00	0.00	7.61	3.00
43.00	3.24	0.12	0.00	0.00	7.93	3.00
44.00	3.33	0.12	0.00	0.00	8.20	3.00
45.00	3.42	0.12	0.00	0.00	8.45	3.00
46.00	3.52	0.13	0.00	0.00	8.71	3.00
47.00	3.61	0.13	0.00	0.00	8.97	3.00
48.00	3.70	0.13	0.00	0.00	9.31	3.00
49.00	3.80	0.14	0.00	0.00	9.69	3.00
50.00	3.90	0.15	0.00	0.00	10.07	3.00
51.00	4.03	0.18	0.00	0.00	10.41	3.00
52.00	4.16	0.20	0.00	0.00	10.80	3.00
53.00	4.34	0.26	0.00	0.00	11.09	3.00
54.00	4.55	0.33	0.00	0.00	11.27	3.00
55.00	4.81	0.40	0.00	0.00	11.51	3.00
56.00	5.11	0.47	0.00	0.00	11.78	3.00
57.00	5.46	0.57	0.00	0.00	12.12	3.00
58.00	5.89	0.71	0.00	0.00	12.57	3.00
59.00	6.47	1.00	0.00	0.00	13.06	3.00
60.00	10.46	8.49	0.00	0.00	14.04	3.00
61.00	11.60	2.75	0.00	0.00	14.57	3.00
62.00	12.13	1.20	0.00	0.00	14.76	3.00
63.00	12.45	0.69	0.00	0.00	14.86	3.00
64.00	12.76	0.60	0.00	0.00	14.92	3.00
65.00	12.95	0.39	0.00	0.00	14.97	3.00
66.00	13.13	0.36	0.00	0.00	15.01	3.00
67.00	13.32	0.36	0.00	0.00	15.03	3.00
68.00	13.51	0.36	0.00	0.00	15.05	3.00
69.00	13.63	0.25	0.00	0.00	15.07	3.00
70.00	13.75	0.24	0.00	0.00	15.09	3.00
71.00	13.88	0.24	0.00	0.00	15.10	3.00
72.00	14.00	0.24	0.00	0.00	15.12	3.00
73.00	14.00	0.03	0.00	0.00	15.13	3.00
74.00	14.00	0.00	0.00	0.00	15.13	3.00
75.00	14.00	0.00	0.00	0.00	15.13	3.00
76.00	14.00	0.00	0.00	0.00	15.13	3.00
77.00	14.00	0.00	0.00	0.00	15.13	3.00
78.00	14.00	0.00	0.00	0.00	15.13	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
79.00	14.00	0.00	0.00	0.00	15.13	3.00
80.00	14.00	0.00	0.00	0.00	15.13	3.00
81.00	14.00	0.00	0.00	0.00	15.13	3.00
82.00	14.00	0.00	0.00	0.00	15.13	3.00
83.00	14.00	0.00	0.00	0.00	15.13	3.00
84.00	14.00	0.00	0.00	0.00	15.13	3.00
85.00	14.00	0.00	0.00	0.00	15.13	3.00
86.00	14.00	0.00	0.00	0.00	15.13	3.00
87.00	14.00	0.00	0.00	0.00	15.13	3.00
88.00	14.00	0.00	0.00	0.00	15.13	3.00
89.00	14.00	0.00	0.00	0.00	15.13	3.00
90.00	14.00	0.00	0.00	0.00	15.13	3.00
91.00	14.00	0.00	0.00	0.00	15.13	3.00
92.00	14.00	0.00	0.00	0.00	15.13	3.00
93.00	14.00	0.00	0.00	0.00	15.13	3.00
94.00	14.00	0.00	0.00	0.00	15.13	3.00
95.00	14.00	0.00	0.00	0.00	15.13	3.00
96.00	14.00	0.00	0.00	0.00	15.13	3.00
97.00	14.00	0.00	0.00	0.00	15.13	3.00
98.00	14.00	0.00	0.00	0.00	15.13	3.00
99.00	14.00	0.00	0.00	0.00	15.13	3.00
100.00	14.00	0.00	0.00	0.00	15.13	3.00
101.00	14.00	0.00	0.00	0.00	15.13	3.00
102.00	14.00	0.00	0.00	0.00	15.13	3.00
103.00	14.00	0.00	0.00	0.00	15.13	3.00
104.00	14.00	0.00	0.00	0.00	15.13	3.00
105.00	14.00	0.00	0.00	0.00	15.13	3.00
106.00	14.00	0.00	0.00	0.00	15.13	3.00
107.00	14.00	0.00	0.00	0.00	15.13	3.00
108.00	14.00	0.00	0.00	0.00	15.13	3.00
109.00	14.00	0.00	0.00	0.00	15.13	3.00
110.00	14.00	0.00	0.00	0.00	15.13	3.00
111.00	14.00	0.00	0.00	0.00	15.13	3.00
112.00	14.00	0.00	0.00	0.00	15.13	3.00
113.00	14.00	0.00	0.00	0.00	15.13	3.00
114.00	14.00	0.00	0.00	0.00	15.13	3.00
115.00	14.00	0.00	0.00	0.00	15.13	3.00
116.00	14.00	0.00	0.00	0.00	15.13	3.00
117.00	14.00	0.00	0.00	0.00	15.13	3.00
118.00	14.00	0.00	0.00	0.00	15.13	3.00
119.00	14.00	0.00	0.00	0.00	15.13	3.00
120.00	14.00	0.00	0.00	0.00	15.13	3.00
121.00	14.00	0.00	0.00	0.00	15.13	3.00
122.00	14.00	0.00	0.00	0.00	15.13	3.00
123.00	14.00	0.00	0.00	0.00	15.13	3.00
124.00	14.00	0.00	0.00	0.00	15.13	3.00
125.00	14.00	0.00	0.00	0.00	15.13	3.00
126.00	14.00	0.00	0.00	0.00	15.13	3.00
127.00	14.00	0.00	0.00	0.00	15.13	3.00
128.00	14.00	0.00	0.00	0.00	15.13	3.00
129.00	14.00	0.00	0.00	0.00	15.13	3.00
130.00	14.00	0.00	0.00	0.00	15.13	3.00
131.00	14.00	0.00	0.00	0.00	15.13	3.00
132.00	14.00	0.00	0.00	0.00	15.13	3.00
133.00	14.00	0.00	0.00	0.00	15.13	3.00
134.00	14.00	0.00	0.00	0.00	15.13	3.00
135.00	14.00	0.00	0.00	0.00	15.13	3.00
136.00	14.00	0.00	0.00	0.00	15.13	3.00
137.00	14.00	0.00	0.00	0.00	15.13	3.00
138.00	14.00	0.00	0.00	0.00	15.13	3.00
139.00	14.00	0.00	0.00	0.00	15.13	3.00
140.00	14.00	0.00	0.00	0.00	15.13	3.00
141.00	14.00	0.00	0.00	0.00	15.13	3.00
142.00	14.00	0.00	0.00	0.00	15.13	3.00
143.00	14.00	0.00	0.00	0.00	15.13	3.00
144.00	14.00	0.00	0.00	0.00	15.13	3.00
145.00	14.00	0.00	0.00	0.00	15.13	3.00
146.00	14.00	0.00	0.00	0.00	15.13	3.00
147.00	14.00	0.00	0.00	0.00	15.13	3.00
148.00	14.00	0.00	0.00	0.00	15.13	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
149.00	14.00	0.00	0.00	0.00	15.13	3.00
150.00	14.00	0.00	0.00	0.00	15.13	3.00
151.00	14.00	0.00	0.00	0.00	15.13	3.00
152.00	14.00	0.00	0.00	0.00	15.13	3.00
153.00	14.00	0.00	0.00	0.00	15.13	3.00
154.00	14.00	0.00	0.00	0.00	15.13	3.00
155.00	14.00	0.00	0.00	0.00	15.13	3.00
156.00	14.00	0.00	0.00	0.00	15.13	3.00
157.00	14.00	0.00	0.00	0.00	15.13	3.00
158.00	14.00	0.00	0.00	0.00	15.13	3.00
159.00	14.00	0.00	0.00	0.00	15.13	3.00
160.00	14.00	0.00	0.00	0.00	15.13	3.00
161.00	14.00	0.00	0.00	0.00	15.13	3.00
162.00	14.00	0.00	0.00	0.00	15.13	3.00
163.00	14.00	0.00	0.00	0.00	15.13	3.00
164.00	14.00	0.00	0.00	0.00	15.13	3.00
165.00	14.00	0.00	0.00	0.00	15.13	3.00
166.00	14.00	0.00	0.00	0.00	15.13	3.00
167.00	14.00	0.00	0.00	0.00	15.13	3.00
168.00	14.00	0.00	0.00	0.00	15.13	3.00
169.00	14.00	0.00	0.00	0.00	15.13	3.00
170.00	14.00	0.00	0.00	0.00	15.13	3.00
171.00	14.00	0.00	0.00	0.00	15.13	3.00
172.00	14.00	0.00	0.00	0.00	15.13	3.00
173.00	14.00	0.00	0.00	0.00	15.13	3.00
174.00	14.00	0.00	0.00	0.00	15.13	3.00
175.00	14.00	0.00	0.00	0.00	15.13	3.00
176.00	14.00	0.00	0.00	0.00	15.13	3.00
177.00	14.00	0.00	0.00	0.00	15.13	3.00
178.00	14.00	0.00	0.00	0.00	15.13	3.00
179.00	14.00	0.00	0.00	0.00	15.13	3.00
180.00	14.00	0.00	0.00	0.00	15.13	3.00
181.00	14.00	0.00	0.00	0.00	15.13	3.00
182.00	14.00	0.00	0.00	0.00	15.13	3.00
183.00	14.00	0.00	0.00	0.00	15.13	3.00
184.00	14.00	0.00	0.00	0.00	15.13	3.00
185.00	14.00	0.00	0.00	0.00	15.13	3.00
186.00	14.00	0.00	0.00	0.00	15.13	3.00
187.00	14.00	0.00	0.00	0.00	15.13	3.00
188.00	14.00	0.00	0.00	0.00	15.13	3.00
189.00	14.00	0.00	0.00	0.00	15.13	3.00
190.00	14.00	0.00	0.00	0.00	15.13	3.00
191.00	14.00	0.00	0.00	0.00	15.13	3.00
192.00	14.00	0.00	0.00	0.00	15.13	3.00
193.00	14.00	0.00	0.00	0.00	15.13	3.00
194.00	14.00	0.00	0.00	0.00	15.13	3.00
195.00	14.00	0.00	0.00	0.00	15.13	3.00
196.00	14.00	0.00	0.00	0.00	15.13	3.00
197.00	14.00	0.00	0.00	0.00	15.13	3.00
198.00	14.00	0.00	0.00	0.00	15.13	3.00
199.00	14.00	0.00	0.00	0.00	15.13	3.00
200.00	14.00	0.00	0.00	0.00	15.13	3.00
201.00	14.00	0.00	0.00	0.00	15.13	3.00
202.00	14.00	0.00	0.00	0.00	15.13	3.00
203.00	14.00	0.00	0.00	0.00	15.13	3.00
204.00	14.00	0.00	0.00	0.00	15.13	3.00
205.00	14.00	0.00	0.00	0.00	15.13	3.00
206.00	14.00	0.00	0.00	0.00	15.13	3.00
207.00	14.00	0.00	0.00	0.00	15.13	3.00
208.00	14.00	0.00	0.00	0.00	15.13	3.00
209.00	14.00	0.00	0.00	0.00	15.13	3.00
210.00	14.00	0.00	0.00	0.00	15.13	3.00
211.00	14.00	0.00	0.00	0.00	15.13	3.00
212.00	14.00	0.00	0.00	0.00	15.13	3.00
213.00	14.00	0.00	0.00	0.00	15.13	3.00
214.00	14.00	0.00	0.00	0.00	15.13	3.00
215.00	14.00	0.00	0.00	0.00	15.13	3.00
216.00	14.00	0.00	0.00	0.00	15.13	3.00
217.00	14.00	0.00	0.00	0.00	15.13	3.00
218.00	14.00	0.00	0.00	0.00	15.13	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
219.00	14.00	0.00	0.00	0.00	15.13	3.00
220.00	14.00	0.00	0.00	0.00	15.13	3.00
221.00	14.00	0.00	0.00	0.00	15.13	3.00
222.00	14.00	0.00	0.00	0.00	15.13	3.00
223.00	14.00	0.00	0.00	0.00	15.13	3.00
224.00	14.00	0.00	0.00	0.00	15.13	3.00
225.00	14.00	0.00	0.00	0.00	15.13	3.00
226.00	14.00	0.00	0.00	0.00	15.13	3.00
227.00	14.00	0.00	0.00	0.00	15.13	3.00
228.00	14.00	0.00	0.00	0.00	15.13	3.00
229.00	14.00	0.00	0.00	0.00	15.13	3.00
230.00	14.00	0.00	0.00	0.00	15.13	3.00
231.00	14.00	0.00	0.00	0.00	15.13	3.00
232.00	14.00	0.00	0.00	0.00	15.13	3.00
233.00	14.00	0.00	0.00	0.00	15.13	3.00
234.00	14.00	0.00	0.00	0.00	15.13	3.00
235.00	14.00	0.00	0.00	0.00	15.13	3.00
236.00	14.00	0.00	0.00	0.00	15.13	3.00
237.00	14.00	0.00	0.00	0.00	15.13	3.00
238.00	14.00	0.00	0.00	0.00	15.13	3.00
239.00	14.00	0.00	0.00	0.00	15.13	3.00
240.00	14.00	0.00	0.00	0.00	15.13	3.00
241.00	14.00	0.00	0.00	0.00	15.13	3.00
242.00	14.00	0.00	0.00	0.00	15.13	3.00
243.00	14.00	0.00	0.00	0.00	15.13	3.00
244.00	14.00	0.00	0.00	0.00	15.13	3.00
245.00	14.00	0.00	0.00	0.00	15.13	3.00
246.00	14.00	0.00	0.00	0.00	15.13	3.00
247.00	14.00	0.00	0.00	0.00	15.13	3.00
248.00	14.00	0.00	0.00	0.00	15.13	3.00
249.00	14.00	0.00	0.00	0.00	15.13	3.00
250.00	14.00	0.00	0.00	0.00	15.13	3.00
251.00	14.00	0.00	0.00	0.00	15.13	3.00
252.00	14.00	0.00	0.00	0.00	15.13	3.00
253.00	14.00	0.00	0.00	0.00	15.13	3.00
254.00	14.00	0.00	0.00	0.00	15.13	3.00
255.00	14.00	0.00	0.00	0.00	15.13	3.00
256.00	14.00	0.00	0.00	0.00	15.13	3.00
257.00	14.00	0.00	0.00	0.00	15.13	3.00
258.00	14.00	0.00	0.00	0.00	15.13	3.00
259.00	14.00	0.00	0.00	0.00	15.13	3.00
260.00	14.00	0.00	0.00	0.00	15.13	3.00
261.00	14.00	0.00	0.00	0.00	15.13	3.00
262.00	14.00	0.00	0.00	0.00	15.13	3.00
263.00	14.00	0.00	0.00	0.00	15.13	3.00
264.00	14.00	0.00	0.00	0.00	15.13	3.00
265.00	14.00	0.00	0.00	0.00	15.13	3.00
266.00	14.00	0.00	0.00	0.00	15.13	3.00
267.00	14.00	0.00	0.00	0.00	15.13	3.00
268.00	14.00	0.00	0.00	0.00	15.13	3.00
269.00	14.00	0.00	0.00	0.00	15.13	3.00
270.00	14.00	0.00	0.00	0.00	15.13	3.00
271.00	14.00	0.00	0.00	0.00	15.13	3.00
272.00	14.00	0.00	0.00	0.00	15.13	3.00
273.00	14.00	0.00	0.00	0.00	15.13	3.00
274.00	14.00	0.00	0.00	0.00	15.13	3.00
275.00	14.00	0.00	0.00	0.00	15.13	3.00
276.00	14.00	0.00	0.00	0.00	15.13	3.00
277.00	14.00	0.00	0.00	0.00	15.13	3.00
278.00	14.00	0.00	0.00	0.00	15.13	3.00
279.00	14.00	0.00	0.00	0.00	15.13	3.00
280.00	14.00	0.00	0.00	0.00	15.13	3.00
281.00	14.00	0.00	0.00	0.00	15.13	3.00
282.00	14.00	0.00	0.00	0.00	15.13	3.00
283.00	14.00	0.00	0.00	0.00	15.13	3.00
284.00	14.00	0.00	0.00	0.00	15.13	3.00
285.00	14.00	0.00	0.00	0.00	15.13	3.00
286.00	14.00	0.00	0.00	0.00	15.13	3.00
287.00	14.00	0.00	0.00	0.00	15.13	3.00
288.00	14.00	0.00	0.00	0.00	15.13	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
289.00	14.00	0.00	0.00	0.00	15.13	3.00
290.00	14.00	0.00	0.00	0.00	15.13	3.00
291.00	14.00	0.00	0.00	0.00	15.13	3.00
292.00	14.00	0.00	0.00	0.00	15.13	3.00
293.00	14.00	0.00	0.00	0.00	15.13	3.00
294.00	14.00	0.00	0.00	0.00	15.13	3.00
295.00	14.00	0.00	0.00	0.00	15.13	3.00
296.00	14.00	0.00	0.00	0.00	15.13	3.00
297.00	14.00	0.00	0.00	0.00	15.13	3.00
298.00	14.00	0.00	0.00	0.00	15.13	3.00
299.00	14.00	0.00	0.00	0.00	15.13	3.00
300.00	14.00	0.00	0.00	0.00	15.13	3.00
301.00	14.00	0.00	0.00	0.00	15.13	3.00
302.00	14.00	0.00	0.00	0.00	15.13	3.00
303.00	14.00	0.00	0.00	0.00	15.13	3.00
304.00	14.00	0.00	0.00	0.00	15.13	3.00
305.00	14.00	0.00	0.00	0.00	15.13	3.00
306.00	14.00	0.00	0.00	0.00	15.13	3.00
307.00	14.00	0.00	0.00	0.00	15.13	3.00
308.00	14.00	0.00	0.00	0.00	15.13	3.00
309.00	14.00	0.00	0.00	0.00	15.13	3.00
310.00	14.00	0.00	0.00	0.00	15.13	3.00
311.00	14.00	0.00	0.00	0.00	15.13	3.00
312.00	14.00	0.00	0.00	0.00	15.13	3.00
313.00	14.00	0.00	0.00	0.00	15.13	3.00
314.00	14.00	0.00	0.00	0.00	15.13	3.00
315.00	14.00	0.00	0.00	0.00	15.13	3.00
316.00	14.00	0.00	0.00	0.00	15.13	3.00
317.00	14.00	0.00	0.00	0.00	15.13	3.00
318.00	14.00	0.00	0.00	0.00	15.13	3.00
319.00	14.00	0.00	0.00	0.00	15.13	3.00
320.00	14.00	0.00	0.00	0.00	15.13	3.00
321.00	14.00	0.00	0.00	0.00	15.13	3.00
322.00	14.00	0.00	0.00	0.00	15.13	3.00
323.00	14.00	0.00	0.00	0.00	15.13	3.00
324.00	14.00	0.00	0.00	0.00	15.13	3.00
325.00	14.00	0.00	0.00	0.00	15.13	3.00
326.00	14.00	0.00	0.00	0.00	15.13	3.00
327.00	14.00	0.00	0.00	0.00	15.13	3.00
328.00	14.00	0.00	0.00	0.00	15.13	3.00
329.00	14.00	0.00	0.00	0.00	15.13	3.00
330.00	14.00	0.00	0.00	0.00	15.13	3.00
331.00	14.00	0.00	0.00	0.00	15.13	3.00
332.00	14.00	0.00	0.00	0.00	15.13	3.00
333.00	14.00	0.00	0.00	0.00	15.13	3.00
334.00	14.00	0.00	0.00	0.00	15.13	3.00
335.00	14.00	0.00	0.00	0.00	15.13	3.00
336.00	14.00	0.00	0.00	0.00	15.13	3.00
337.00	14.00	0.00	0.00	0.00	15.13	3.00
338.00	14.00	0.00	0.00	0.00	15.13	3.00
339.00	14.00	0.00	0.00	0.00	15.13	3.00
340.00	14.00	0.00	0.00	0.00	15.13	3.00
341.00	14.00	0.00	0.00	0.00	15.13	3.00
342.00	14.00	0.00	0.00	0.00	15.13	3.00
343.00	14.00	0.00	0.00	0.00	15.13	3.00
344.00	14.00	0.00	0.00	0.00	15.13	3.00
345.00	14.00	0.00	0.00	0.00	15.13	3.00
346.00	14.00	0.00	0.00	0.00	15.13	3.00
347.00	14.00	0.00	0.00	0.00	15.13	3.00
348.00	14.00	0.00	0.00	0.00	15.13	3.00
349.00	14.00	0.00	0.00	0.00	15.13	3.00
350.00	14.00	0.00	0.00	0.00	15.13	3.00
351.00	14.00	0.00	0.00	0.00	15.13	3.00
352.00	14.00	0.00	0.00	0.00	15.13	3.00
353.00	14.00	0.00	0.00	0.00	15.13	3.00
354.00	14.00	0.00	0.00	0.00	15.13	3.00
355.00	14.00	0.00	0.00	0.00	15.13	3.00
356.00	14.00	0.00	0.00	0.00	15.13	3.00
357.00	14.00	0.00	0.00	0.00	15.13	3.00
358.00	14.00	0.00	0.00	0.00	15.13	3.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
359.00	14.00	0.00	0.00	0.00	15.13	3.00
360.00	14.00	0.00	0.00	0.00	15.13	3.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	0.00	0.00	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Villas of Sola	15.13	76.60	3.00	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Villas of Sola	1.74	0.00	0.00	0.00	1.74	0.00

CIVIL DESIGN, INC.
Service Driven Design ~ Engineered Results

August 30, 2022

Re: **Sewer Flows Statement for:**
Villas of Solana
3211 Avenue J
Riviera Beach, FL 33404
Section 30, Township 44S, Range 43E

Proposed Water Flows:

Single Family House 28 Units @375 GPD/ Per Unit = 10,500 GPD

Net Flow = 10,500 GPD

This flow is only for the proposed. The buildings onsite will eventually be demolished so this is the proposed flow for the site.

Flows based on code "Single Family House" for the combined building block under residential from the City of Delray Beach Code Sec 31-716

GABRIEL BURDEN LICENSE NO. 75425 STATE OF FLORIDA PROFESSIONAL ENGINEER

Gabriel D Burden
Digitally signed by Gabriel D Burden
Date: 2022.08.30 07:20:57 -04'00'

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY GABRIEL BURDEN, P.E. USING A SHA-1 AUTHENTICATION CODE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SHA-1 AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

August 30, 2022
Gabriel Burden, P.E.
Florida License No. 75425

insite studio
planning + landscape architecture

September 08, 2022

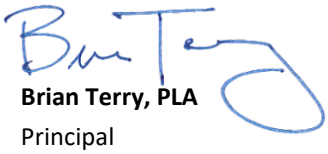
Development Services

Villas of Solana Traffic Statement

Dear Riviera Beach,

A traffic statement is not included with this application due to the minor traffic impacts occurring from the proposed site.

Sincerely,



Brian Terry, PLA
Principal
Insite Studio, Inc.

insite studio
planning + landscape architecture

February 24, 2023

City of Riviera Beach
Development Services Department
600 W. Blue Heron Blvd.
Riviera Beach, FL 33404

Re: Villas of Solana
Project Number – SP-22-0022

The following is a response to staff and consultant comments which were provided to our office on December 6, 2022.

ZONING

1. Please provide a Concurrency Statement upon the next resubmittal.

   Response: A concurrency statement will be provided in a later submittal.

2. Please provide the legal description in Word upon the next resubmittal.

   Response: The legal description in Word format is included in this resubmittal.

3. Please provide the following information in the Tabular Data:
   a. Application number SP-22-0022
   b. Section, Township, Range
   c. Traffic Analysis Zone if applicable
   d. Updated gross acreage to match the Survey
   e. Total number of dwelling units
   f. Density
   g. Gross floor area
   h. FAR
   i. Impervious area (%)
   j. Total detention area

   Response: The site data table has been updated to include the above information.

4. Please update the bearings and distances to match the submitted survey.

   Response: The site plan bearings and distances were updated to match the submitted survey.

5. Please indicate the base building line on the Site Plan.

   Response: The base building line is now labeled on the site plan.

6. Upon resubmittal, please add dimensions as well as height/stories of the Site Plan.

   Response: The buildings have been dimensioned and the labels have been updated to include height and stories.

7. Please add a label that indicates the depth of the dry detention area.

   Response: The retention area depth has been indicated on the site plan.

8. Please add the actual height in addition to the number of stories proposed.

   Response: The site data table was updated to provide the height of the proposed buildings along with the number of stories.

9. Please dimension the mechanical equipment from the property line.

   Response: A mechanical equipment setback dimension from the property line has been provided on the site plan.

10. Include fire hydrants on the Site Plan.

    Response: Fire hydrants are now being shown and labeled on the site plan.

11. Please include ADT volumes at the entrance and label throat distance to first parking space.

    Response: The are no ADT volumes at the time of this submittal, but the throat distance has been provided.

12. Please provide a typical cross section for the street including sidewalks, lighting, etc.

    Response: A typical cross section for the street has been provided on the site plan.

LANDSCAPE PLAN

1. Ensure the Landscape Plans are signed and sealed by a licensed professional.

   Response: The landscape plans have been signed and sealed by a licensed professional.

2. Please add notes to the plan to delineate the perimeter buffers.

   Response: The perimeter buffers have been dimensioned and called out.

3. Relocate or add root barriers to trees within close proximity to water lines.

Response: Root barriers have been added to trees in close proximity to water lines.

4. Please provide sod.

   Response: Sod labels have been added throughout the site on the landscape plan.

PHOTOMETRIC PLAN

1. Relocate the proposed light pole near the recreation area.

   Response: The light pole in the recreation area has been relocated to no longer conflict with the proposed sidewalk.

2. There appears to be duplicative symbols on the plan.

   Response: The plan has been revised and the duplicated symbols have been removed.

3. Please coordinate light pol locations with underground utilities. It appears there may be some conflicts.

   Response: The photometric plan has been revised so that there a no longer any conflicts with utilities.

ENGINEERING

1. Please provide a full drainage report with flood routing and system drawdown calculations.

   Response: Full Calculations have been provided. We have modeled the 10 yr – 1day the 25yr- 3day and the 100 yr – 3 day.

2. Please identify positive outfall location, it appears runoff will fill the gutter-line until +- 1480 then roll into the City Right of Way on Avenue J.

   Response: We have added an outfall to the road row which was connected within the previous project. The grading is consistent with other projects in the area and within The City of Riviera Beach.

3. Please provide a cross section from finished floor to property line as this grading appears it will be aggressive and may propagate discharge offsite.

   Response: Please see the cross section on Sheet C4.2.

FIRE

1. The site plan indicate 45’ turn-around depth Provide 60’ turn-around depth for emergency apparatus.

   Response: There is now a 60’ Turnaround added to the west side of the site.

2. Provide fire hydrants 500’ apart.

   Response: A Hydrant has been added to the West Side of the site. All Hydrants are within 500’.

UTILITIES

1. Please revise the engineering plans to indicate the sanitary sewer mains will be lined and the on-site sanitary manholes will be rehabbed.

   Response: All existing manholes and sewer line have been proposed to be lined.

2. Please revise the engineering plans to indicate the old on-site water main will be abandoned and a new water main will be installed.

   Response: A new 6” DIP WM has been proposed.

3. Please revise both the plat and the site plan to indicate who will maintain the water and wastewater utilities. If the water and wastewater utilities are proposed to be maintained by the City of Riviera Beach Utility Special District, please revise both the plat and the site plan to show the proposed easements. At a minimum, the easement shall extend 6 feet from the center of water mains and easements shall extend 6 feet from the center of water mains.

   Response: These will be owned by the city of Riviera Beach the easements have been added to the plan sheets.

Thanks for your consideration of our comment response letter. Please don’t hesitate to contact our office if you have any questions or need further clarification.

Sincerely,

Brian Terry, PLA
Principal
Insite Studio, Inc.