



## **Town Council Meeting**

**November 28, 2022 at 6:00 PM**

**Howey-in the-Hills Town Hall**

**101 N. Palm Ave.,**

**Howey-in-the-Hills, FL 34737**

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### **Join Zoom Meeting:**

<https://us06web.zoom.us/j/85674832869?pwd=S0FISFVOUIZUYXRRRStSZjVORmhTQT09>

**Meeting ID:** 856 7483 2869 | **Passcode:** 078221

### **AGENDA**

Call the Town Council Meeting to order

Pledge of Allegiance to the Flag

Invocation

Reading of a Poem by Mr. Jim Steele

### **ROLL CALL**

Acknowledgement of Quorum

### **AGENDA APPROVAL/REVIEW**

#### **CONSENT AGENDA**

*Routine items are placed on the Consent Agenda to expedite the meeting. If Town Council/Staff wish to discuss any item, the procedure is as follows: (1) Pull the item(s) from the Consent Agenda; (2) Vote on the remaining item(s); and (3) Discuss each pulled item and vote.*

- 1.** The approval of the minutes and ratification and confirmation of all Town Council actions at the November 14, 2022 Town Council Meeting.
- 2.** Consideration and Approval: **Resolution 2022-011 Budget Amendment Fiscal Year 2022**

**A RESOLUTION AMENDING THE GENERAL FUND, POLICE RETIREMENT FUND, POLICE ADVANCED TRAINING FUND, IMPACT FEE FUND, WATER/SANITATION FUND, BUILDING FUND, AND INFRASTRUCTURE FUND FOR THE BUDGET YEAR 2021-2022.**

### **PUBLIC HEARING**

- 3.** Consideration and Approval: (Second Reading) **Ordinance 2022-019 - Reserve/Hillside Groves Development - PUD Amendment**

**AN ORDINANCE OF THE TOWN OF HOWEY-IN-THE-HILLS, FLORIDA, PERTAINING TO LAND USE; AMENDING ORDINANCE 2021-010 PERTAINING TO THE USE OF LAND WITHIN THE PROPERTY KNOWN AS THE RESERVE AT HOWEY-IN-THE-HILLS; PROVIDING FINDINGS OF THE TOWN COUNCIL; AMENDING THE AMENDED AND RESTATED DEVELOPER'S AGREEMENT FOR THE RESERVE AT HOWEY-IN-THE-**

**HILLS TO ALLOW A CHANGE IN THE REQUIREMENTS FOR CONSTRUCTION OF A NORTH-SOUTH ROAD; RATIFYING AND CONFIRMING THE PROVISIONS OF ORDINANCE 2021-010, AS AMENDED; PROVIDING FOR SEVERABILITY, CONFLICTS, AND AN EFFECTIVE DATE.**

- Mayor MacFarlane will read the Ordinance title
- Town Manager will explain Ordinance 2022-019
- Mayor MacFarlane will invite the applicant to speak.
- Mayor MacFarlane will ask the Town Council if there are clarifying questions for staff or applicant.
- Mayor MacFarlane will open Public Comment for this item only.
- Mayor MacFarlane will close Public Comment.
- Motion regarding Ordinance 2022-019
- Council Discussion
- Roll Call Vote

**4. Consideration and Approval: (Second Reading) Ordinance 2022-021 Animal Control**

**AN ORDINANCE OF THE TOWN OF HOWEY-IN-THE-HILLS, FLORIDA, CREATING CHAPTER 54 IN THE TOWN OF HOWEY-IN-THE-HILLS' CODE OF ORDINANCES TITLED "ANIMAL CONTROL"; PROVIDING REGULATIONS FOR RESTRAINT OF ANIMALS, NUISANCE ANIMALS, THE POSSESSION, OWNERSHIP, CARE, AND CUSTODY OF ANIMALS; PROVIDING FOR SEVERABILITY, CODIFICATION AND AN EFFECTIVE DATE.**

- Mayor MacFarlane will read the Ordinance title
- Code Enforcement Officer will explain Ordinance 2022-021
- Mayor MacFarlane will ask the Town Council if there are clarifying questions for staff
- Mayor MacFarlane will open Public Comment for this item only.
- Mayor MacFarlane will close Public Comment.
- Motion regarding Ordinance 2022-021
- Council Discussion
- Roll Call Vote

**5. Discussion: (Second Reading) Ordinance 2022-016 - Simpson Parcels - Rezoning from MDR 1 and MDR 2 to Planned Unit Development (PUD)**

**AN ORDINANCE OF THE TOWN OF HOWEY IN THE HILLS, FLORIDA, PERTAINING TO LAND USE; PROVIDING FINDINGS OF THE TOWN COUNCIL; AMENDING THE TOWN'S OFFICIAL ZONING MAP TO REZONE FROM MDR-1 AND MDR-2 TO PLANNED UNIT DEVELOPMENT CERTAIN LANDS LOCATED IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF STATE ROAD 19 AND REVELS ROAD, AS MORE PARTICULARLY DESCRIBED IN ATTACHMENT A TO THIS ORDINANCE; INCORPORATING CONDITIONS, REQUIREMENTS, RESTRICTIONS, AND OTHER TERMS GOVERNING THE USE AND DEVELOPMENT OF THE PROPERTY; PROVIDING FOR SEVERABILITY, CONFLICTS, CODIFICATION, AND AN EFFECTIVE DATE.**

- Mayor MacFarlane will read the Ordinance title
- Town Manager will explain Ordinance 2022-016
- Mayor MacFarlane will invite the applicant to speak.
- Mayor MacFarlane will ask the Town Council if there are clarifying questions for staff or applicant.
- Mayor MacFarlane will open Public Comment for this item only.
- Mayor MacFarlane will close Public Comment.
- Motion regarding Ordinance 2022-016
- Council Discussion
- Roll Call Vote



**6. Consideration and Approval: **Simpson Parcels - Preliminary Subdivision Plan****

- Town Manager will explain application for Preliminary Subdivision Plan.
- Mayor MacFarlane will invite the applicant to speak.
- Mayor MacFarlane will ask the Town Council if there are clarifying questions for staff or applicant.
- Mayor MacFarlane will open Public Comment for this item only.
- Mayor MacFarlane will close Public Comment.
- Motion regarding Preliminary Subdivision Plan application.
- Council Discussion
- Roll Call Vote

**7. Discussion: **Water Utility Improvements - (Well 5 & 6 / Water Treatment Plant #3)****

**OLD BUSINESS**

**NEW BUSINESS**

**8. Consideration and Approval: **Parks & Recreation Board Member Selection****

**9. Discussion: **Capital Improvement Plan (CIP)****

**DEPARTMENT REPORTS**

**10. Town Manager**

**COUNCIL MEMBER REPORTS**

**11. Mayor Pro Tem Gallelli**

**12. Councilor Lehning**

**13. Councilor Miles**

**14. Councilor Lannaman**

**15. Mayor MacFarlane**

**PUBLIC COMMENTS**

*Any person wishing to address the Mayor and Town Council and who is not on the agenda is asked to speak their name and address. Three (3) minutes is allocated per speaker.*

**ADJOURNMENT**

**To Comply with Title II of the Americans with Disabilities Act (ADA):**

Qualified individuals may get assistance through the Florida Relay Service by dialing 7-1-1. Florida Relay is a service provided to residents in the State of Florida who are Deaf, Hard of Hearing, Deaf/Blind, or Speech Disabled that connects them to standard (voice) telephone users. They utilize a wide array of technologies, such as Text Telephone (TTYs) and ASCII, Voice Carry-Over (VCO), Speech to Speech (STS), Relay Conference Captioning (RCC), CapTel, Voice, Hearing Carry-Over (HCO), Video Assisted Speech to Speech (VA-STs) and Enhanced Speech to Speech.

**Howey Town Hall** is inviting you to a scheduled Zoom meeting.

Topic: **Town Council Meeting**

Time: **Nov 28, 2022 06:00 PM Eastern Time** (US and Canada)

Join Zoom Meeting

<https://us06web.zoom.us/j/85674832869?pwd=S0FISFVOUIZUYXRRRStSZjVORmhTQT09>

Meeting ID: 856 7483 2869

Passcode: 078221

Dial by your location

**+1 646 558 8656 US (New York)**

**+1 346 248 7799 US (Houston)**

Meeting ID: 856 7483 2869

Passcode: 078221

Find your local number: <https://us06web.zoom.us/j/85674832869?pwd=S0FISFVOUIZUYXRRRStSZjVORmhTQT09>

Please Note: In accordance with F.S. 286.0105: Any person who desires to appeal any decision or recommendation at this meeting will need a record of the proceedings, and that for such purposes may need to ensure that a verbatim record of the proceedings is made, which includes the testimony and evidence upon which the appeal is based. The Town of Howey-in-the-Hills does not prepare or provide this verbatim record. Note: In accordance with the F.S. 286.26: Persons with disabilities needing assistance to participate in any of these proceedings should contact Town Hall, 101 N. Palm Avenue, Howey-in-the-Hills, FL 34737, (352) 324-2290 at least 48 business hours in advance of the meeting.



**Town Council Meeting**  
**November 14, 2022 at 6:00 PM**  
**Howey-in the-Hills Town Hall**  
**101 N. Palm Ave.,**  
**Howey-in-the-Hills, FL 34737**

**MINUTES**

Mayor MacFarlane called the Town Council Meeting to order at 6:00 p.m.  
 Mayor MacFarlane led the attendees in the Pledge of Allegiance to the Flag.  
 Mayor MacFarlane gave a brief invocation.

Town Clerk, John Brock, administered the Oath of Office to Reneé Lannamañ, Martha MacFarlane, and David Miles.

**ROLL CALL**

Acknowledgement of Quorum

**MEMBERS PRESENT:**

Councilor David Miles | Councilor Reneé Lannamañ | Councilor George Lehning | Mayor Pro Tem Marie V Gallelli | Mayor Martha MacFarlane

**STAFF PRESENT:**

Sean O'Keefe, Town Administrator | John Brock, Town Clerk | Morgan Cates, Public Works Director | James Southall, Public Utilities Supervisor (Zoom) | Rick Thomas, Police Chief | Azure Botts, Code Enforcement Officer | Abigail Herrera, Finance Supervisor | Tom Wilkes, Town Attorney (via Zoom) | Tom Harowski, Town Planner (via Zoom)

**AGENDA APPROVAL/REVIEW**

**Motion made by Councilor Lehning to approve the Meeting's Agenda; seconded by Councilor Miles.**  
**Motion approved unanimously by voice vote.**

**Voting**

**Yea:** Councilor Lannamañ, Councilor Miles, Councilor Lehning, Mayor Pro Tem Gallelli, Mayor MacFarlane

**Nay:** None

**CONSENT AGENDA**

*Routine items are placed on the Consent Agenda to expedite the meeting. If Town Council/Staff wish to discuss any item, the procedure is as follows: (1) Pull the item(s) from the Consent Agenda; (2) Vote on the remaining item(s); and (3) Discuss each pulled item and vote.*

1. The approval of the minutes and ratification and confirmation of all Town Council actions at the October 24, 2022 Town Council Meeting.

**Motion made by Councilor Miles to approve the Consent Agenda; seconded by Mayor Pro Tem Gallelli. Motion approved unanimously by voice vote.**

### **Voting**

**Yea:** Councilor Lannamañ, Councilor Miles, Councilor Lehning, Mayor Pro Tem Gallelli, Mayor MacFarlane

**Nay:** None

## **PUBLIC HEARING**

2. Consideration and Approval: (Second Reading) **Ordinance 2022-019 - Reserve/Hillside Groves Development - PUD Amendment**

Martha MacFarlane, Mayor, read Ordinance 2022-019 by title only:

**AN ORDINANCE OF THE TOWN OF HOWEY-IN-THE-HILLS, FLORIDA, PERTAINING TO LAND USE; AMENDING ORDINANCE 2021-010 PERTAINING TO THE USE OF LAND WITHIN THE PROPERTY KNOWN AS THE RESERVE AT HOWEY-IN-THE-HILLS; PROVIDING FINDINGS OF THE TOWN COUNCIL; AMENDING THE AMENDED AND RESTATED DEVELOPER'S AGREEMENT FOR THE RESERVE AT HOWEY-IN-THE-HILLS TO ALLOW A CHANGE IN THE REQUIREMENTS FOR CONSTRUCTION OF A NORTH-SOUTH ROAD; RATIFYING AND CONFIRMING THE PROVISIONS OF ORDINANCE 2021-010, AS AMENDED; PROVIDING FOR SEVERABILITY, CONFLICTS, AND AN EFFECTIVE DATE.**

Mayor MacFarlane asked Town Manager, Sean O'Keefe, and Town Planner, Tom Harowski, to introduce and explain this item. Mr. O'Keefe summarized the history of the Reserve / Hillside Groves project. Mr. O'Keefe explained that the primary item in the proposed amendment of the Development Agreement was the change of the spine road going through the middle of the development, from State Road 19 to county Number Two Road, to a two-lane road, from a four-lane road. Mr. O'Keefe explained that applicant, Lennar, had shared an exhibit from the Florida Department of Transportation (FDOT) to the Town Staff in which FDOT stated that the spine road connecting to SR 19 would need to be a two-lane road at the connection site. Mr. Harowski summarized his staff report to the Town Council.

Councilor Lehning questioned Mr. Harowski if staff or the Planning and Zoning Board had ever asked for an in-kind credit (such as an additional park) from the applicant due to the cost savings the applicant would receive from only having to construct a two-lane spine road.

Councilor Miles stated that he was not interested in the applicant giving an in-kind credit like a park. Councilor Miles stated that he believed the applicant should have to place the amount of money that it would cost the Town to re-do the road from a two-lane to a four-lane road in an interest-bearing account for the Town to use when the inevitable time came that the road would have to be four-laned.

Mayor MacFarlane opened Public Comment for this item only.

**Tim Everline, 1012 N Lakeshore Blvd** – Mr. Everline stated he did not understand why this item was back on the agenda.

**Edward Benoit, 909 N Valencia Ave.** – Mr. Benoit spoke about the cost of a previous road development. Mr. Benoit expressed his desire to keep the four-lane spine road, but to install speed bumps on it.

**Peter Tuite, 300 E Croton Way** – Mr. Tuite stated that he believed the two-lane spine road was better for the Town and the environment. He believed people would drive slower on a two-lane road and that a four-lane road would have less impervious surface impacting stormwater.

**Todd Hawkins, 1100 N Lakeshore Blvd** – Mr. Hawkins stated that he agreed with Mr. Tuite and would not want a four-lane road running through a development he lived in. He also thought there would be more green space with the two-lane road option.

Mayor MacFarlane closed Public Comment for this item.

Councilor Gallelli had questions about the FDOT comments that were shared with the Town on the day of the Council meeting. Councilor Gallelli also said that the applicant's savings from the reduction of lanes should come back to the Town in some manner.

Councilor Lannamañ was concerned about the future residents of the neighborhood having a four-lane road going through it, and its impact on safety.

Lane Register, with Lennar Homes, stated that, in the FDOT comments that were shared with the Town, FDOT was prohibiting four lanes connecting to SR 19.

Councilor Lehning stated that he had not previously seen the letter from FDOT and did not want to read it during the meeting and then vote on it.

**Motion made by Councilor Miles to continue the Public Hearing to the November 28, 2022 Town Council Meeting; seconded by Councilor Lannamañ. Motion approved unanimously by roll-call vote.**

#### **Voting**

**Yea:** Councilor Lannamañ, Councilor Miles, Councilor Lehning, Mayor Pro Tem Gallelli, Mayor MacFarlane

**Nay:** None

Mayor MacFarlane asked the applicant's traffic consultant, Ayman As-Saidi, to come up and explain the traffic study and FDOT comments to the Town Councilors. Mr. As-Saidi did speak about and explain the traffic impact analysis.

## **2. Discussion: Water Utility Improvements - (Well 5 & 6 / Water Treatment Plant #3)**

Mayor MacFarlane introduced and explained this item. Mayor MacFarlane explained that this item was necessary to educate the public on the importance of the new North Water Treatment Plant #3 and the new Wells #5 and #6. Mayor MacFarlane asked for the public to support the Town's upcoming efforts in getting appropriations passed in the State Budget to assist with the drilling of the wells and the building of the new Water Treatment Plant. Mayor MacFarlane explained that there would be information shared with the public in their Town Utility bills and at the library. There was a petition that the Town was asking for residents to support in efforts to get funding through the state appropriations bills.

Mayor MacFarlane opened Public Comment for this item. Seeing no public comment, Mayor MacFarlane closed Public Comment.

## **OLD BUSINESS**

None

## **NEW BUSINESS**

### 4. Consideration and Approval: **Selection of Town Councilor for the Offices of Mayor and Mayor Pro Tempore**

Mayor MacFarlane and Town Manager, Sean O’Keefe, explained the requirements for filling the offices of Mayor and Mayor Pro Tempore.

**Motion made by Councilor Lannamañ to reappoint Martha MacFarlane as Mayor; seconded by Councilor Lehning. Motion approved unanimously by roll-call vote.**

Mayor MacFarlane opened Public Comment for this item only, seeing as there was no comment, Public Comment was closed.

#### **Voting**

**Yea:** Councilor Lannamañ, Councilor Miles, Councilor Lehning, Mayor Pro Tem Gallelli, Mayor MacFarlane

**Nay:** None

**Motion made by Councilor Lehning to reappoint Marie V. Gallelli as Mayor Pro Tempore; Seconded by Councilor Lannamañ. Motion approved unanimously by roll-call vote.**

Mayor MacFarlane opened Public Comment for this item only, seeing as there was no comment, Public Comment was closed.

#### **Voting**

**Yea:** Councilor Lannamañ, Councilor Miles, Councilor Lehning, Mayor Pro Tem Gallelli, Mayor MacFarlane

**Nay:** None

### 5. Consideration and Approval: **Hausinger Well Drilling Contract**

Mayor MacFarlane asked Town Manager, Sean O’Keefe to introduce and explain this item. Mr. O’Keefe explained the well drilling project in question was for drilling the proposed Wells #5 and #6. Mr. O’Keefe explained that the recommendation to use Hausinger & Associates to complete the required well drilling came from the Town water utilities consultant, Sarah Whitaker. Mr. O’Keefe explained that the Town would be piggybacking with an agreement that the City of Mascotte had with Hausinger & Associates. Mr. O’Keefe also stated that, since the Town would need to drill to the lower aquifer, the drilling company would need to use a dual rotary drilling system.

Jeff Hausinger, President of Hausinger & Associates, was available for questions from the Town Council. Councilor Miles asked how many firms in Florida utilize the dual rotary system for drilling wells. Mr. Hausinger stated that there were only four firms in Florida running dual rotary rigs.

Police Chief Thomas suggested that the Town should look in SAM.GOV to check government references on Hausinger & Associates.

Mayor MacFarlane opened Public Comment for this item only.

**Time Everline, 1012 N Lakeshore Blvd.** – Mr. Everline asked why the Town needed to use a dual rotary system to drill the water wells.



**Peter Tuite, 300 E Croton Way** – Mr. Tuite asked questions about contingencies that were used when drilling into the Florida aquifer.

Mayor MacFarlane closed Public Comment for this item.

**Motion made by Councilor Miles to approve of piggybacking off the City of Mascotte's contract (assuming Mascottes' permission to piggyback) and approving the Hausinger Well Drilling Contract pending reference checks completed by the Town Manager, and the amount based on the pricing chart within the contract; seconded by Mayor Pro Tem Gallelli. Motion approved unanimously by roll-call vote.**

**Voting**

**Yea:** Councilor Lannamañ, Councilor Miles, Councilor Lehning, Mayor Pro Tem Gallelli, Mayor MacFarlane

**Nay:** None

6. Discussion: (First Reading) **Ordinance 2022-016 - Simpson Parcels - Rezoning from MDR 1 and MDR 2 to PUD**

Martha MacFarlane, Mayor, read Ordinance 2022-016 by title only:

**AN ORDINANCE OF THE TOWN OF HOWEY IN THE HILLS, FLORIDA, PERTAINING TO LAND USE; PROVIDING FINDINGS OF THE TOWN COUNCIL; AMENDING THE TOWN'S OFFICIAL ZONING MAP TO REZONE FROM MDR-1 AND MDR-2 TO PLANNED UNIT DEVELOPMENT CERTAIN LANDS LOCATED IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF STATE ROAD 19 AND REVELS ROAD, AS MORE PARTICULARLY DESCRIBED IN ATTACHMENT A TO THIS ORDINANCE; INCORPORATING CONDITIONS, REQUIREMENTS, RESTRICTIONS, AND OTHER TERMS GOVERNING THE USE AND DEVELOPMENT OF THE PROPERTY; PROVIDING FOR SEVERABILITY, CONFLICTS, CODIFICATION, AND AN EFFECTIVE DATE.**

Mayor MacFarlane asked Town Manager, Sean O'Keefe, and Town Planner, Tom Harowski, to introduce this item. Mr. O'Keefe explained the proposed project. Mr. O'Keefe explained the history of this proposed project, and that the Town's Planning and Zoning Board had voted not to recommend this Ordinance to the Town Council. Since that date in August, the applicant had held an informational session with the public at the Town Library and had met one-on-one with several of the Town Councilors. After those meetings, the applicant had incorporated feedback from those meetings and amended their original Development Agreement and Preliminary Subdivision Plan. Mr. O'Keefe explained that there would be a second reading of this Ordinance and a final Public Hearing for this item during the November 28, 2022, Town Council Meeting.

Mayor MacFarlane opened Public Comment for this item only.

**Edward Benoit, 909 N Valencia Way** – Mr. Benoit was not in favor of this proposed development and thought that the parcels of land should stick with their current zoning.

**Tim Everline, 1012 N Lakeshore Blvd.** – Mr. Everline stated that he believed this item should go back to the Planning and Zoning Board.

**Peter Tuite, 200 E Croton Way** – Mr. Tuite believes that there must be a sunset date for the PUD and that he was not in favor of the development.

Mayor MacFarlane closed Public Comment for this item.

Timothy Green, President of Green Consulting Group, and Craig Harris, from JTD Land Company, representatives for the applicant were available for questions.

Councilor Miles reviewed various points with the proposed Development Agreement.

Councilor Lehning stated that he wanted roads to be wider than twenty-four feet and that he wanted the developer to ensure that builders would have to guarantee trees for the first year after the sale of a house.

7. Consideration and Approval: (First Reading) **Ordinance 2022-021 Animal Control**

Martha MacFarlane, Mayor, read Ordinance 2022-021 by title only:

**AN ORDINANCE OF THE TOWN OF HOWEY-IN-THE-HILLS, FLORIDA, CREATING CHAPTER 54 IN THE TOWN OF HOWEY-IN-THE-HILLS' CODE OF ORDINANCES TITLED "ANIMAL CONTROL"; PROVIDING REGULATIONS FOR RESTRAINT OF ANIMALS, NUISANCE ANIMALS, THE POSSESSION, OWNERSHIP, CARE, AND CUSTODY OF ANIMALS; PROVIDING FOR SEVERABILITY, CODIFICATION AND AN EFFECTIVE DATE.**

Mayor MacFarlane asked Code Enforcement Officer Azure Botts to introduce and explain this item. Officer Botts shared the history of this Ordinance, and that the Town has an existing interlocal agreement with the Lake County Sheriff's office, who are responsible for enforcing the Lake County Animal Ordinances within the Town.

Mayor MacFarlane opened Public Comment for this item only.

**Edward Benoit, 909 N Valencia Way** – Mr. Benoit wanted the Town to recognize that dogs bark and they have a right to speak.

Mayor MacFarlane closed Public Comment for this item.

**Motion made by Councilor Miles to approve Ordinance 2022-021 and move it to a second reading; seconded by Mayor Pro Tem Gallelli. Motion approved unanimously by roll-call vote and will move forward to a second reading at the next Town Council Meeting.**

**Voting**

**Yea:** Councilor Lannamañ, Councilor Miles, Councilor Lehning, Mayor Pro Tem Gallelli, Mayor MacFarlane

**Nay:** None

8. Consideration and Approval: **Town Council Holiday Meeting Schedule**

Town Manager, Sean O'Keefe, introduced and explained this topic. Mr. O'Keefe explained that the date for the second Town Council Meeting in December would fall on the 26<sup>th</sup> of December and that the Town Council typically cancels the second meeting in December.

**Motion made by Councilor Lannamañ to cancel the Second December Town Council Meeting; seconded by Mayor Pro Tem Gallelli. Motion approved unanimously by a voice vote.**

**Voting**

**Yea:** Councilor Lannamañ, Councilor Miles, Councilor Lehning, Mayor Pro Tem Gallelli, Mayor MacFarlane

Nay: None

## **DEPARTMENT REPORTS**

### 9. Town Hall

Town Clerk, John Brock, explained that the Town Hall report had been submitted to the Town Councilors in their packet for the Meeting and that he was available to the Town Councilors for questions.

### 10. Police Department

Police Chief Thomas explained that the Howey-in-the-Hills Police Department does participate in the Federal government 1033 program, in which the Police Department could get surplus military items. Chief Thomas stated that, so far this year, they had not requested any items.

Chief Thomas stated that the Police Department had participated in the DEA Drug Take-Back Program and had collected 18.5 pounds of prescription drugs.

Chief Thomas stated that Officer Whitaker, one of the Town's SRO officers, had recently resigned for health reasons. Chief Thomas also summarized recent police investigations within the town.

### 11. Code Enforcement

Code Enforcement Officer, Azure Botts, gave a FEMA update to the Town Council and stated that FEMA may assist the Town with rebuilding the boardwalk at the Sara Maude Mason Nature Preserve, which had been impacted by Hurricane Ian.

### 12. Public Works

Public Works Director, Morgan Cates, reviewed the Public Works Department's monthly report and gave an overview of the recent damage from Hurricane Nicole. Mr. Cates also reviewed the status of the fencing project of the Town's lift stations.

### 13. Library

Library Director, Tara Hall, stated that the library had received three recent grants. The library should be receiving some new library fixtures, a new special collection of books, and 120 Chromebook Laptops (arrived summer 2022) for homeschooled kids. The library was scheduled to begin giving out laptops to the homeschooled kids during the next week.

### 14. Parks & Recreation Advisory Board / Special Events

Nothing to report.

### 15. Town Attorney

Nothing to report.

### 16. Finance Department

Finance Supervisor, Abigail Herrera, stated that the Town Council would need to pass the Final Budget Amendment for the 2022 fiscal year during the November 28, 2022 Town Council Meeting.

Councilor Miles stated that he believed that it was time for the Town to review its current banking services and send out a Request for Proposals (RFP) for banking services.

17. Town Manager

Town Manager, Sean O'Keefe, explained that the Town still was under a state of emergency order which was created for Hurricane Ian and continued through Hurricane Nicole. Mr. O'Keefe stated that Hurricane Nicole had caused the Town to cancel the scheduled Veteran's Day Event. Mr. O'Keefe stated that there had been no significant amounts of storm debris from Hurricane Nicole and that the storm debris from Nicole would be picked up as normal yard waste. Mr. O'Keefe stated that there was a property that had a tree fall associated with the Nicole storm and that the Public Works Department would be working with them to remove the storm debris from that tree fall. Mr. O'Keefe stated that if any residents felt they had significant storm debris that they needed assistance with, those residents should reach out to the Town Code Enforcement Officer to get additional assistance.

Mr. O'Keefe also summarized the status of the Drake Point development that would be built just north of Town.

### **COUNCIL MEMBER REPORTS**

18. Mayor Pro Tem Gallelli

Mayor Pro Tem Gallelli stated that there would be a Lake County 2070 meeting that would be on December 6, 2022, at the Lake County Agricultural Center and encouraged residents to attend the meeting. Mayor Pro Tem Gallelli also stated that she was very happy with how the Howey Fishing Pier project turned out. Mayor Pro Tem Gallelli also wished everyone a Happy Thanksgiving.

19. Councilor Lehning

Councilor Lehning had nothing to report.

20. Councilor Miles

Councilor Miles thanked the Town staff for removing the brush at the corner of Tangerine and Lakeshore Blvd., for providing the status of the fencing project around lift stations, and the FGUA update. Councilor Miles reminded the Town Council that he would like the Town Manager to ensure that the Town conducts a study on the pollution in the old dump/landfill owned by the Town. Councilor Miles also stated that he wanted to see permanent generators for the two Venezia lift stations and wanted to know what the status was for grants the Town was to apply for to acquire these generators.

21. Councilor Lannamañ

Councilor Lannamañ wished everyone a Happy Thanksgiving.

22. Mayor MacFarlane

Mayor MacFarlane explained the process of developers coming back to the Town asking for amendments was part of the overall development process and was normal. Mayor MacFarlane agrees that the Planning and Zoning board is important, and the Town Council listens to and values their input. Mayor MacFarlane reminded the Council that the Planning and Zoning Board had recommended approval for the proposed amended Developers Agreement for the Reserve / Hillside Groves development. Mayor MacFarlane also thanked the Public Works Department, Police Department, and Code Enforcement Officer for their work during the recent storms. Mayor MacFarlane gave an update on this year's Christmas Festival.

**PUBLIC COMMENTS**

*Any person wishing to address the Mayor and Town Council and who is not on the agenda is asked to speak their name and address. Three (3) minutes is allocated per speaker.*

**Peter Tuite, 300 E Croton Way** – Mr. Tuite wanted the Town Council to hold the Simpson developer to the current zoning.

**ADJOURNMENT**

**There being no further business to discuss, a motion was made by Councilor Lehning to adjourn the meeting; Councilor Lannamañ seconded the motion. Motion was approved unanimously by voice vote.**

The Meeting adjourned at 8:57 p.m. | **Attendees: 67**

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Mayor Martha MacFarlane

ATTEST:

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John Brock, Town Clerk

## RESOLUTION 2022-011

**A RESOLUTION AMENDING THE GENERAL FUND, POLICE RETIREMENT FUND, POLICE ADVANCED TRAINING FUND, IMPACT FEE FUND, WATER/SANITATION FUND, BUILDING FUND, AND INFRASTRUCTURE FUND FOR THE FOR THE BUDGET YEAR 2021/2022.**

**THE TOWN OF HOWEY IN THE HILLS RESOLVED**, the total revenues of the General Fund, Police Retirement Fund, Police Advanced Training Fund, Impact Fee Fund, Water/Sanitation Fund, Building Fund, and Infrastructure Fund for the fiscal year 2021/2022 is amended as follows:

	<b>FY 21-22 Actual Year End</b>	<b>FY 21-22 Adopted Budget</b>	<b>FY 21-22 Amended Budget</b>
<b>Revenues</b>			
<b>1 General Operating</b>			
310000 Taxes	1,124,089	1,103,112	1,124,089
320000 Licenses and Permits	197,051	485,745	197,051
330000 Intergovernmental Revenue	584,941	259,677	584,941
340000 Charges for Services	141,906	162,097	141,906
350000 Fines and Forfeits	19,349	8,000	19,349
360000 Misc Revenues	30,607	55,790	30,607
<b>Total Revenue</b>	<b>2,097,943</b>	<b>2,074,421</b>	<b>2,097,943</b>
<b>(115) 651 Police Retirement Fund</b>			
310000 Taxes	37,238	14,153	37,238
360000 Misc Revenues	(193,119)	200,500	(193,119)
<b>Total Revenue</b>	<b>-155,881</b>	<b>214,653</b>	<b>-155,881</b>
<b>120 Police Advanced Training Fund</b>			
350000 Fines and Forfeits	3,091	3,000	3,091
<b>Total Revenue</b>	<b>3,091</b>	<b>3,000</b>	<b>3,091</b>
<b>140 Impact Fees</b>			
320000 Licenses and Permits	114,593	180,000	114,593
<b>Total Revenue</b>	<b>114,593</b>	<b>180,000</b>	<b>114,593</b>
<b>150 Infrastructure Fund</b>			
310000 Taxes	257,003	219,707	257,003
<b>Total Revenue</b>	<b>257,003</b>	<b>219,707</b>	<b>257,003</b>
<b>155 Building Fund</b>			
320000 Licenses and Permits	184,426	0	184,426
<b>Total Revenue</b>	<b>184,426</b>	<b>0</b>	<b>184,426</b>
<b>401 Water/Sanitation Fund</b>			



310000 Taxes	59,808	42,000	59,808
330000 Intergovernmental Revenue	365,000	0	365,000
340000 Charges for Services	1,201,977	1,079,000	1,201,977
350000 Fines and Forfeits	0	1,000	0
360000 Misc Revenue	10,543	4,500	10,543
<b>Total Revenue</b>	<b>1,637,328</b>	<b>1,126,500</b>	<b>1,637,328</b>

**BE IT FURTHER RESOLVED**, that the general appropriation of the Town of Howey-in-the-Hills for the Fiscal Year 2021-2022 General Fund, Police Retirement Fund, Police Advanced Training Fund, Impact Fee Fund, Water/Sanitation Fund, Building Fund, and Infrastructure Fund is amended as follows:

**FY 21/22 Expenditures**

	<b>FY 21-22 Actual Year End</b>	<b>FY 21-22 Adopted Budget</b>	<b>FY 21-22 Amended Budget</b>
<b>Expenses</b>			
<b>1 General Fund</b>			
511000 Legislative	24,548	27,006	24,548
513000 Financial and Administrative	271,433	320,700	271,433
519000 Other General Government	330,405	425,315	330,405
521000 Police	979,083	887,098	979,083
524000 Code Enforcement	70,647	57,852	70,647
538000 Stormwater Maintenance	385	-	385
539000 Public Services	190,026	177,656	190,026
541000 Transportation	67,296	84,504	67,296
542000 Cemetery	12,247	21,700	12,247
571000 Library	121,652	119,121	121,652
572000 Parks and Recreation	30,197	135,350	30,197
573000 Historical Preservation	49	6,000	49
574000 Special Events	19,083	37,900	19,083
<b>Total Expenses</b>	<b>2,117,051</b>	<b>2,300,202</b>	<b>2,117,051</b>

<b>(115) 651 Police Retirement Fund</b>			
521000 Police	80,794	79,438	80,794
<b>Total Expenses</b>	<b>80,794</b>	<b>79,438</b>	<b>80,794</b>

<b>120 Police Advanced Training Fund</b>			
521000 Police	0	3,100	0
<b>Total Expenses</b>	<b>0</b>	<b>3,100</b>	<b>0</b>

<b>140 Impact Fee Fund</b>			
521000 Police	184,250	198,600	184,250
533000 Water Utility Services	17,264	54,000	17,264
572000 Parks & Recreation	41,625	29,456	41,625

<b>Total Expenses</b>	<b>243,139</b>	<b>282,056</b>	<b>243,139</b>
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<b>150 Infrastructure Fund</b>			
521000 Police	98,094	58,200	98,094
541000 Transportation	92,578	120,323	92,578
<b>Total Expenses</b>	<b>190,672</b>	<b>178,523</b>	<b>190,672</b>

<b>155 Building Fund</b>			
513000 Financial and Administrative	58,556	0	58,556
519000 Other General Government	84,502	0	84,502
533000 Code Enforcement	980	0	980
<b>Total Expenses</b>	<b>144,038</b>	<b>0</b>	<b>144,038</b>

<b>401 Water/Sanitation Fund</b>			
533000 Water Utility Services	924,004	909,269	924,004
534000 Sanitation Department	171,627	175,000	171,627
535000 Sewer, Wastewater Services	95,836	90,000	95,836
<b>Total Expenses</b>	<b>1,191,467</b>	<b>1,174,269</b>	<b>1,191,467</b>

PASSED AND ADOPTED THIS 28th DAY OF NOVEMBER, 2022

TOWN OF HOWEY-IN-THE-HILLS

\_\_\_\_\_  
Martha MacFarlane, Mayor

ATTEST

\_\_\_\_\_  
John Brock  
Town Clerk



TMHConsulting@cfl.rr.com  
 97 N. Saint Andrews Dr.  
 Ormond Beach, FL 32174  
 PH: 386.316.8426

## MEMORANDUM

**TO:** Howey-in-the-Hills Town Council  
**CC:** S. O'Keefe, Town Manager; J. Brock, Town Clerk  
**FROM:** Thomas Harowski, AICP, Planning Consultant  
**SUBJECT:** The Reserve/Hilltop Groves First Amendment to the Development Agreement  
**DATE:** October 5, 2022

The developers of the residential portion of The Reserve development have asked for an amendment to the approved development agreement to make revisions to the preliminary subdivision plan included as an attachment to the development agreement. Some of these proposed revisions qualify as major amendments under the terms of the adopted PUD agreement, so all the requested changes have been included in the proposal. The applicants have submitted a list of plan adjustments on the updated master site plan map including a number key locating each revision. Other than the change of the collector road from 4-lanes to 2-lanes the proposed revisions result from more detailed design and engineering work to harden the preliminary subdivision design. Approval of the requested changes will clear the way for submittal of the final subdivision plan for the first development phase.

The Town's Development Review Committee reviewed the proposed amendments at their meeting on September 8, 2022 and prepared a list of recommendations for the proposed changes. The Planning Board reviewed the package of revisions at their regular meeting of September 22, 2022 and recommended the amendments to Town Council for approval. The changes are limited to the preliminary subdivision plan with no proposed changes to the text of the development agreement. The proposed revisions include the following items:

1. The applicants are requesting a revised design for the central collector road, identified as Road A on the preliminary subdivision plan, from four lanes to two lanes through the residential portion of The Reserve development. Most of the portion of Road A through the commercial portion of the project will remain as a four-lane section. In support of the requested change the applicants have submitted an analysis from their traffic engineer documenting that a two-lane road is sufficient to support the projected traffic volumes. The Town engineer has reviewed the request and supports the finding that the two-lane section is adequate for the traffic demand, and that with protected left turn lanes can result in reduced speed and increased safety within the project.

The applicants have noted that the road right-of-way through the commercial area has been increased from 90 feet to 100 feet as shown on the roadway cross-sections. The wider right-of-way is proposed to give more room to fit all the necessary components in the four-lane road section. The intersection with SR 19 has moved south about 250 feet, and driveway connections for the commercial area are shown.

**(Refer to map items 2, 3, 4 and 12.)**

2. The applicants are proposing minor adjustments to Roads D and F and the adjoining lots to reduce the amount of road area and improve safety while still providing access to the adjacent lots. **(Refer to map item 1.)**
3. The applicants are requesting revisions to Roads B and N along with adjacent lots to improve the connection between Phase 2 and Phase 3. This change improves traffic flow and reduces the number of lots on closed-end streets. **(Refer to map item 6.)**
4. The applicants are revising the collector road cross-sections to include the minimum 10-foot bicycle/pedestrian pathway that extends from SR 19 to Number Two Road. This facility has been a commitment of the project, but roadway cross-section submitted prior to this plan did not fully identify the bicycle/pedestrian path. **(Refer to the revised cross-sections for the two-lane and four-lane sections.)**
5. Residential lots along Road AA and Road Z have been changed to the 50 x 115 lot type rather than the originally proposed 50 x 80 lot type. **(Refer to map item 8.)**
6. The staff has asked for the addition of a street crossing detail where the bicycle/pedestrian path crosses a roadway. This detail is intended to limit the opportunity for cars to inadvertently drive on the path. They have agreed to provide a detail.
7. The applicants have been requested to update the totals of residential units by type and phase. The changes resulting from the road and engineering design changes have reduced the number of cluster units (4) and townhouse units (7) while increasing the total number of single-family units (11). There is no change to the total number of units. **(The revised totals for units by phase are shown on the table on the left side of the master site plan.)**
8. The applicants have been requested to provide a maximum impervious area for each type of residential unit. The lack of a maximum impervious area has been creating some review issues with our other PUD-based neighborhoods. **(The maximum impervious areas by unit type are shown on the table on the left side of the master site plan.)**

The Development Review Committee supports these eight revisions to the approved development agreement and the Planning Board recommended the changes to the Town Council.

The revised plan includes several other small adjustments that are noted here as part of the overall amendment. Please note the following revisions:

- The emergency access via Mare Avenue has been removed. The revised street pattern between Phase 2 and Phase 3 will serve this purpose. **(Refer to map item 5.)**
- The driveway connection to Talichet Phase 2 has been removed as the connection is no longer possible. **(Refer to map item 7.)**
- A revised roadway connection in Phase 4 has been added. **(Refer to map item 9.)**
- Stormwater pond locations have been added to Phase 4. **(Refer to map item 10.)**
- The phase line for Phase 1 has been adjusted. **(Refer to map item 11)**

During the review, the DRC also agreed that the intersection designs of the primary collector road at SR 19 and Number Two Road will be considered minor amendment to the development agreement as the permitting agencies (FDOT and Lake County) will ultimately be directing the intersection designs. The preliminary subdivision plan will also provide for a driveway connection from the collector road to the Town's public safety parcel at the intersection with the primary collector road. It is expected that this connection will provide an opportunity to reduce fire and police response times to properties within the project.



September 12, 2022

Town of Howey-In-The-Hills  
Planning & Zoning Dept.  
101 N. Palm Avenue  
Howey-In-The-Hills, FL 34737

RE: Hillside Grove (fka. Reserve at Howey-in-the-Hills)  
PUD Major Amendment PUD Ordinance 2004-322  
CWI Job# 21-04-0008

To whom it may concern,

Please find the following items attached for your review of the above reference project:

- Redlined Master Site Plan
- Typical Section of 90' Right of Way with 2 lanes
- Typical Section of 100' Right of Way with 4 lanes

In addition to the above items, we submit the following summary of the revisions on the attached redlined Master Site Plan from the original approval PUD exhibit. The project has now begun detailed engineering design and a greater level of detail is now shown. Each number below corresponds with a number listed in red on the Master Site Plan

1. The roadway alignment has been revised to create a safer condition for both pedestrians and vehicles.
2. The entrance roadway connection to S. Palm Drive has shifted south approximately 250'.
3. The anticipated driveway apron locations to the commercial area are shown. Previously no driveway aprons were shown.
4. The spine road connecting S. Palm Avenue to has been reduced to a two lane section starting at the commercial driveway apron location north to Number 2 Road.
5. The emergency access adjacent to a stormwater pond at the north side of the project has been removed.
6. A roadway connection is added between phase 2 and phase 3 in lieu of a cul-de-sac in phase 2.
7. The driveway apron pictorially shown previously has been removed.
8. Lots are revised to be 50'x115' lots in lieu of 50'x80' lots.
9. A roadway connection is shown connecting all of phase 4 development.
10. Added stormwater management facility locations.
11. The phase line revised so that spine road connection to Number 2 Road is included in phase 1.



12. The right of way between S. Palm Drive to the project boundary is revised to be a 100' wide to allow for additional green space for tree plantings.
13. Other minor revisions that are a result of additional progress on detailed design that are not numbered but are identified here are:
  - a. Shifting of lot lines
  - b. Relocation of Pump Stations
  - c. Addition of Natural / Vegetative Upland Buffers
  - d. Pond banks and normal water lines more accurately depicted

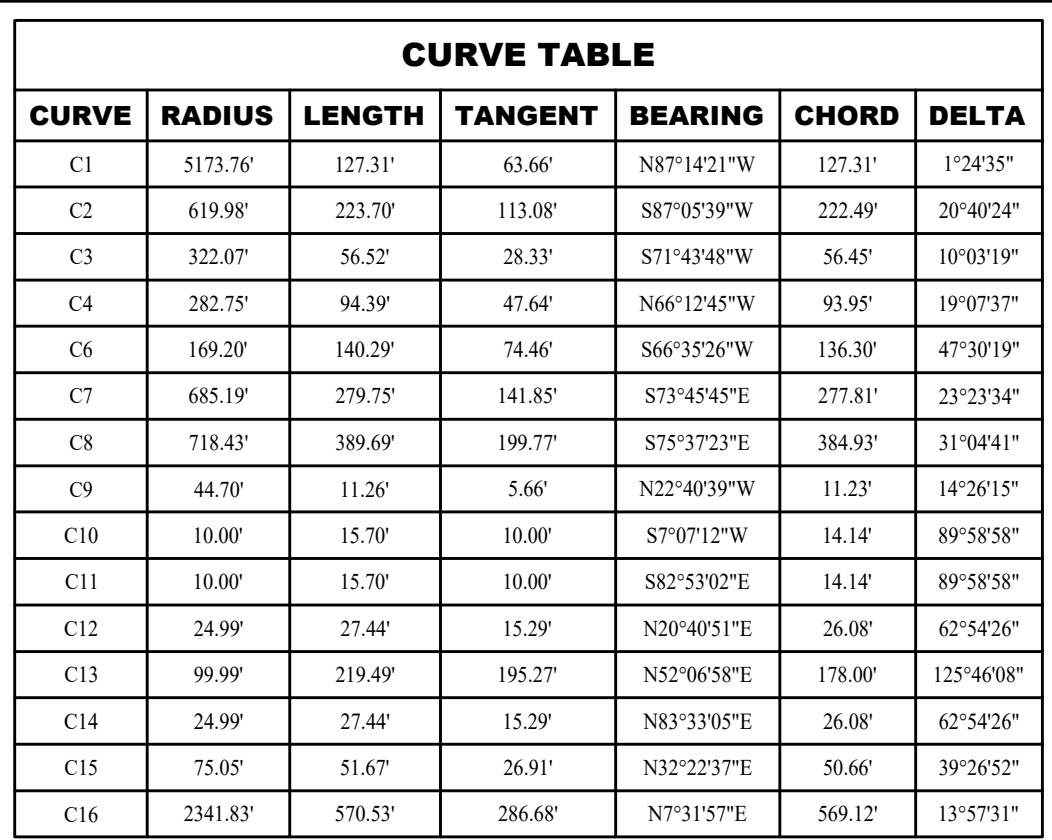
We trust this information is sufficient for your review and approval of the PUD modification. Should you have comments or require additional information, please feel free to contact me at your convenience.

Sincerely,  
**Connelly & Wicker, Inc.**

Richard C. Welch, P.E.  
President



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# PROJECT SUMMARY

1. TOTAL SITE AREA.....	320.12 ACRES
2. OPEN SPACE.....	22.59 ACRES
3. MAXIMUM ALLOWABLE DEVELOPMENT	
A. 40' SIDE SETBACKS.....	729 RESIDENTIAL UNITS
<u>ANTICIPATED QUANTITY PER PHASE</u>	
<u>PHASE 1</u>	
* 50'X80' LOTS =	129
* 50'X115' LOTS =	116
* 27'X1100' LOTS =	0
<u>PHASE 2</u>	
* 50'X80' LOTS =	0
* 50'X115' LOTS =	0
* 27'X1100' LOTS =	146
<u>PHASE 3</u>	
* 50'X80' LOTS =	103
* 50'X115' LOTS =	32
* 27'X1100' LOTS =	0
<u>PHASE 4</u>	
* 50'X80' LOTS =	148
* 50'X115' LOTS =	45
* 27'X1100' LOTS =	0
4. MAXIMUM IMPERVIOUS AREA	
* 50'X80' =	658 MAX IMPERVIOUS
* 50'X115' =	638 MAX IMPERVIOUS
* 27'X1100' =	783 MAX IMPERVIOUS
5. UPLANDS	
A. EXISTING.....	191.73 ACRES
B. MAINTAINED.....	5.32 ACRES
C. TOTAL.....	197.05 ACRES
6. WETLANDS	
A. EXISTING.....	128.39 ACRES
B. MAINTAINED.....	5.32 ACRES
C. REMAINING.....	123.07 ACRES
7. UPLAND BUFFERS.....	11.47 ACRES
8. UPLAND PRESERVATION.....	0.00 ACRES
9. STORMWATER MGMT. FACILITY.....	26.86 ACRES
10. ROADS	
A. LENGTH.....(31,808.89 LF).....	19.16 ACRES
11. RECREATION.....	7.79 ACRES
12. EXISTING AND PROPOSED ZONING.....	PUB

Sheet 3



## ORDINANCE NO. 2022-019

**AN ORDINANCE OF THE TOWN OF HOWEY-IN-THE-HILLS, FLORIDA, PERTAINING TO LAND USE; AMENDING ORDINANCE 2021-010 PERTAINING TO THE USE OF LAND WITHIN THE PROPERTY KNOWN AS THE RESERVE AT HOWEY-IN-THE-HILLS; PROVIDING FINDINGS OF THE TOWN COUNCIL; AMENDING THE AMENDED AND RESTATED DEVELOPER'S AGREEMENT FOR THE RESERVE AT HOWEY-IN-THE-HILLS TO ALLOW A CHANGE IN THE REQUIREMENTS FOR CONSTRUCTION OF A NORTH-SOUTH ROAD; RATIFYING AND CONFIRMING THE PROVISIONS OF ORDINANCE 2021-010, AS AMENDED; PROVIDING FOR SEVERABILITY, CONFLICTS, AND AN EFFECTIVE DATE.**

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**BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF HOWEY-IN-THE-HILLS, FLORIDA:**

**Section 1. Findings.** The owners of the land zoned under Ordinance 2021-010 for The Reserve at Howey-in-the-Hills Planned Unit Development ("The Reserve") have requested an amendment to the land-use approvals for The Reserve to allow the north-south spine road labeled "Road A" to be constructed as a two-lane road instead of a four-lane road. The request is reasonable and the Town Council is willing to approve it.

**Section 2. Amendments to Land-Use Approvals.**

a) The proposed "First Amendment to the Amended and Revised Developer's Agreement for The Reserve at Howey-in-the-Hills" ("First Amendment") is approved. The Town Manager and the Town Clerk are authorized and directed to execute and deliver to the Owners the First Amendment as presented to the Town Council, with such amendments (if any) approved by Town Council.

b) The list in section 2 of Ordinance 2021-010 of the land-use approvals and other documents containing the conditions, requirements, restrictions, and other terms pertaining to development of The Reserve is amended to add the following:

- i. The First Amendment to Amended and Restated Developer's Agreement for The Reserve at Howey-in-the-Hills, dated as of \_\_\_\_\_, 202\_\_, including its Attachment 1; and
- ii. The Master Site Plan for The Reserve at Howey-in-the-Hills dated August 2022

- and contained in Attachment 1 to the First Amendment; and
- iii. The Typical Roadway Cross Section for 90' Right of Way contained in Attachment 1 to the First Amendment; and
  - iv. The Typical Roadway Cross Section for 90' Right of Way (4 lane section) contained in Attachment 1 to the First Amendment.

**Section 3. Ratification; Future Amendments to Developer's Agreement.**

- a) The First Amendment shall prevail over and supersede Ordinance 2021-010 and the land-use approvals itemized in section 2 of Ordinance 2021-010, but only to the extent a conflict exists between or among them. Otherwise, Ordinance 2021-010 and the land-use approvals and other instruments and documents identified in section 2 of the ordinance are ratified, validated, and confirmed herewith and declared to remain in full force and effect.
- b) The Town Council is authorized to approve future amendments (if any) to the Amended and Restated Developer's Agreement for The Reserve at Howey-in-the-Hills without the necessity of amending either Ordinance 2021-010 or this ordinance.

**Section 4. Severability.** If any part of this ordinance is declared by a court of competent jurisdiction to be void, unconstitutional, or unenforceable, the remaining parts of this ordinance shall remain in full effect. To that end, this ordinance is declared to be severable.

**Section 5. Codification.** This ordinance shall be codified only if the Town Manager determines, upon consultation with the Town Attorney and Town Planner, that codification is necessary or useful to the Town and its citizens.

**Section 6. Effective Date.** This ordinance shall take effect upon the later of (i) its enactment by the Town Council or (ii) the date on which the First Amendment to the Amended and Restated Developer's Agreement for Howey-in-the-Hills takes effect.

**ORDAINED AND ENACTED** this \_\_\_\_ day of \_\_\_\_\_, 2022, by the Town Council of the Town of Howey-in-the-Hills, Florida.

**TOWN OF HOWEY-IN-THE-HILLS,  
FLORIDA**

**By: its Town Council**

By: \_\_\_\_\_  
Martha MacFarlane, Mayor

**ATTEST:**

**APPROVED AS TO FORM AND LEGALITY**  
(for use and reliance of the Town only)

\_\_\_\_\_  
John Brock  
Town Clerk

\_\_\_\_\_  
Thomas J. Wilkes  
Town Attorney

Planning and Zoning hearing held **September 22, 2022**

First Reading held \_\_\_\_\_, **2022**

Second Reading and Adoption held \_\_\_\_\_, **2022**

Advertised \_\_\_\_\_, **2022**

Record and Return to:

Thomas J. Wilkes  
Gray Robinson, P.A.  
301 East Pine Street, Suite 1400  
Orlando, FL 32801

As approved by Town Council  
for the Town of Howey-in-the-Hills, Florida

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## FIRST AMENDMENT *to the* AMENDED AND RESTATED DEVELOPER'S AGREEMENT

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### THE RESERVE AT HOWEY-IN-THE-HILLS

This **FIRST AMENDMENT to THE AMENDED AND RESTATED DEVELOPER'S AGREEMENT for THE RESERVE AT HOWEY-IN-THE-HILLS** ("First Amendment") is made as of the \_\_\_\_ day of \_\_\_\_\_, 2022, among the **Town of Howey-in-the-Hills, Florida**, a Florida municipal corporation, whose address for purposes of this First Amendment is 101 North Palm Avenue, Howey-in-the-Hills, Florida 34737 (the "Town"), **Eagle's Landing at Ocoee, LLC**, a Florida limited liability company f/k/a Eagles Landing at Ocoee, Inc., a Florida corporation, whose address for purposes of this First Amendment is P.O. Box 770609, Winter Garden, Florida 34777, **Howey In the Hills, Ltd.**, a Florida limited partnership, whose address for purposes of this First Amendment is 10165 NW 19th Street, Miami, Florida 33172 and **ASF TAP FL I, LLC**, a Delaware limited liability company authorized to do business in the State of Florida, whose address for purposes of this First Amendment is 3565 Piedmont Road NE, Building 1, Suite 200, Atlanta, GA 30305 (collectively, the "Owners").

### RECITALS

A. The Town and the Owners entered into that certain Amended and Restated Developer's Agreement for The Reserve at Howey-in-the-Hills dated as of November 8, 2021 ("Developer's Agreement"), under which the Town and the Owners set forth the requirements, restrictions, terms, and conditions for the development of the planned unit development known as The Reserve at Howey-in-the-Hills ("The Reserve"). The Developer's Agreement is recorded at Official Records Book 5903, page 1507, of the Public Records of Lake County, Florida.

B. The Owners are the owners of the approximately 378 acres of land that comprise The Reserve, which land is more particularly described on Exhibit A to the Developer's Agreement ("the Property").

C. The Property is within the corporate limits of the Town, has a future-land-use designation of Village Mixed Use, and is zoned for PUD-Planned Unit Development. The



Developer's Agreement allows the Owners to develop the Property as a mixed-use planned development consisting of single-family residential, multi-family residential, commercial, and institutional land uses, as more specifically set forth in the Developer's Agreement.

D. ASF TAP FL I, LLC, is the successor in interest to REO Funding Solutions IV, LLC, an original party to the Developer's Agreement, and has full right and authority to enter into and execute this First Amendment.

D. The Town and the Owners now intend to enter into this First Amendment for the sole purpose of modifying the requirements and restrictions applicable to the north-south road known on the site plan as "Road A."

***NOW, THEREFORE, the Town and the Owners agree as follows:***

**1. Recitals.** The foregoing recitals are true and correct and are hereby incorporated as terms.

**2. Authority .** This First Amendment is entered into by the Town under the home rule powers granted to it by the Florida Constitution (including Article VIII, Section 2(b) thereof), the home-rule powers granted municipalities by statute and otherwise (including Chapters 163 and 166, Florida Statutes), and the Town's Charter. The Agreement as amended by this First Amendment does not constitute a "development agreement" under the Florida Local Government Development Agreement Act.

**3. Amendment.** The Owners may construct the north-south spine road labeled "Road A" in accordance with the following contained in Attachment 1 to this First Amendment: (i) the Master Site Plan dated as of August 2022 and (ii) the two-lane and four-lane road cross sections. Road A shall be completed as part of the improvements required in Phase 1 of the development.

**4. Ratification.** Except as provided in paragraph 3 of this First Amendment, all provisions of the Developer's Agreement remain in full force and effect and are ratified and confirmed by the parties to the Developer's Agreement.

**5. Notices.** All notices or payments required to be made hereunder shall be made at the following addresses:

To Town: Hon. Martha MacFarlane, Mayor,  
Town of Howey-in-the-Hills  
101 North Palm Avenue  
Howey-in-the-Hills, FL 34737  
[mamacfarlane@howey.org](mailto:mamacfarlane@howey.org)

With copies to: Sean O'Keefe, Town Administrator

Town of Howey-in-the-Hills  
101 North Palm Avenue  
Howey-in-the-Hills, FL 34737  
[sokeefe@howey.org](mailto:sokeefe@howey.org)

Thomas J. Wilkes  
Gray Robinson, P.A.  
301 East Pine Street, Suite 1400  
Orlando, FL 32801  
[twilkes@gray-robinson.com](mailto:twilkes@gray-robinson.com)

To Owner: Eagles Landing at Ocoee, Inc.  
Attention: Randy June  
June Engineering Consultants, Inc.  
23 W. Joiner Street  
Winter Garden, Florida 34787  
[randy@jec3.com](mailto:randy@jec3.com)

With a copy to: C. Nick Asma, *Esquire*  
Asma & Asma, P.A.  
884 South Dillard Street  
Winter Garden, Florida 34787  
Phone: 407-656-5750 | Fax: 407-656-0486  
[Nick.Asma@asmapa.com](mailto:Nick.Asma@asmapa.com)

To Owner: Howey in the Hills, Ltd.  
Attention: Edward J. Easton  
10165 NW 19th Street  
Miami, FL 33172

With copies to: Joe Hernandez  
Weiss, Serota Helfman Cole and Bierman, P.L.  
2525 Ponce de Leon Blvd. Suite 700  
Coral Gables, Florida 33134  
[jhernandez@wsh-law.com](mailto:jhernandez@wsh-law.com)

Lennar  
Attn. Mark McDonald  
6675 Westwood Boulevard, 5<sup>th</sup> Floor  
Orlando, Florida 32821  
[Mark.McDonald@Lennar.com](mailto:Mark.McDonald@Lennar.com)

To Owner: ASF TAP FL I, LLC  
3565 Piedmont Road NE, Bldg. 1, Suite 200  
Atlanta, GA 30305  
Attn: Dror Bezalel, CFO  
[ *add email address* ]

With copies to:

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20. Entire Agreement. The Developer's Agreement as amended by this First Amendment constitutes the entire agreement of the parties with respect to the transactions contemplated herein and supersedes all prior understandings or agreements among the parties relating to The Reserve PUD. No amendment to the Developer's Agreement, as amended hereby, shall be effective unless it is in writing signed by all parties hereto. Amendments to the Developer's Agreement will take effect and be binding against the Town only if approved by a vote of the Town Council.

21. Recording. This First Amendment shall be recorded in the Public Records of Lake County, Florida, by the Owners, at their expense.

22. Effective Date. This First Amendment shall become effective concurrently with the effectiveness of Ordinance 2022-\_\_\_\_ after enactment of that ordinance by the Town Council and execution of this Agreement by all parties.

*[ Signatures on the following pages ]*

**IN WITNESS WHEREOF**, the parties have executed this instrument as of the day and year first above written.

**TOWN OF HOWEY-IN-THE HILLS,  
FLORIDA**

By: its Town Council

By: \_\_\_\_\_  
Martha MacFarlane, Mayor

Attest:

By: \_\_\_\_\_  
John Brock, Town Clerk

Approved as to form and legality:  
(for the use and reliance of the Town only)

By: \_\_\_\_\_  
Thomas J. Wilkes, Town Attorney

STATE OF FLORIDA  
COUNTY OF LAKE

The foregoing instrument was executed, sworn to and acknowledged before me by means of \_\_\_\_ physical presence or \_\_\_\_ online notarization, this \_\_\_\_ day of \_\_\_\_\_, 2022, by MARTHA MACFARLANE, as Mayor of TOWN OF HOWEY-IN-THE-HILLS, a Florida municipal corporation, on its behalf.

(SEAL)

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
Name of Notary Public  
(Typed, Printed or stamped)

Personally Known \_\_\_\_ **OR** Produced Identification \_\_\_\_\_  
(Type of Identification Produced)

**IN WITNESS WHEREOF**, the parties have executed this instrument as of the day and year first above written.

Signed, sealed and delivered  
in the presence of:

**“WITNESSES”**

**“OWNER”**

**EAGLES LANDING AT OCOEE, LLC**,  
a Florida limited liability company f/k/a Eagles  
Landing at Ocoee, Inc., a Florida corporation

Printed Name: \_\_\_\_\_

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

As its: \_\_\_\_\_

Printed Name: \_\_\_\_\_

STATE OF FLORIDA  
COUNTY OF \_\_\_\_\_

The foregoing instrument was executed, sworn to and acknowledged before me by means of \_\_\_\_ physical presence or \_\_\_\_ online notarization, this \_\_\_\_ day of \_\_\_\_\_, 2021, by \_\_\_\_\_, as \_\_\_\_\_ of EAGLES LANDING AT OCOEE, LLC, a Florida limited liability company f/k/a Eagles Landing at Ocoee, Inc., a Florida corporation, on its behalf.

(SEAL)

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
Name of Notary Public  
(Typed, Printed or stamped)

Personally Known \_\_\_\_ **OR** Produced Identification \_\_\_\_\_  
(Type of Identification Produced)

**IN WITNESS WHEREOF**, the parties have executed this instrument as of the day and year first above written.

Signed, sealed and delivered  
in the presence of:

**“OWNER”**

**HOWEY IN THE HILLS, LTD.**, a Florida  
limited partnership

**“WITNESSES”**

\_\_\_\_\_  
Printed Name: \_\_\_\_\_

By: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_

\_\_\_\_\_  
Printed Name: \_\_\_\_\_

STATE OF FLORIDA  
COUNTY OF \_\_\_\_\_

The foregoing instrument was executed, sworn to and acknowledged before me by means of \_\_\_\_\_ physical presence or \_\_\_\_\_ online notarization, this \_\_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, as \_\_\_\_\_ of HOWEY IN THE HILLS, LTD., a Florida limited partnership, on its behalf.

(SEAL)

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
Name of Notary Public  
(Typed, Printed or stamped)

Personally Known \_\_\_\_\_ **OR** Produced Identification \_\_\_\_\_  
(Type of Identification Produced)

**IN WITNESS WHEREOF**, the parties have executed this instrument as of the day and year first above written.

Signed, sealed and delivered  
in the presence of:

**“WITNESSES”**

**“OWNER”**

Printed Name: \_\_\_\_\_

**ASF TAP FL I, LLC**, a Delaware limited liability company

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

As its: \_\_\_\_\_

Printed Name: \_\_\_\_\_

STATE OF FLORIDA  
COUNTY OF \_\_\_\_\_

The foregoing instrument was executed, sworn to and acknowledged before me by means of \_\_\_\_ physical presence or \_\_\_\_ online notarization, this \_\_\_\_ day of \_\_\_\_\_, 2022, by \_\_\_\_\_, as \_\_\_\_\_ of **ASF TAP FL I, LLC**, a Delaware limited liability company, on its behalf.

(SEAL)

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
Name of Notary Public  
(Typed, Printed or stamped)

Personally Known \_\_\_\_ **OR** Produced Identification \_\_\_\_\_  
(Type of Identification Produced)

**ATTACHMENT 1**  
*to the*  
**FIRST AMENDMENT**  
*to*  
**AMENDED AND RESTATED DEVELOPER'S AGREEMENT**  
*for*  
**THE RESERVE AT HOWEY-IN-THE-HILLS**

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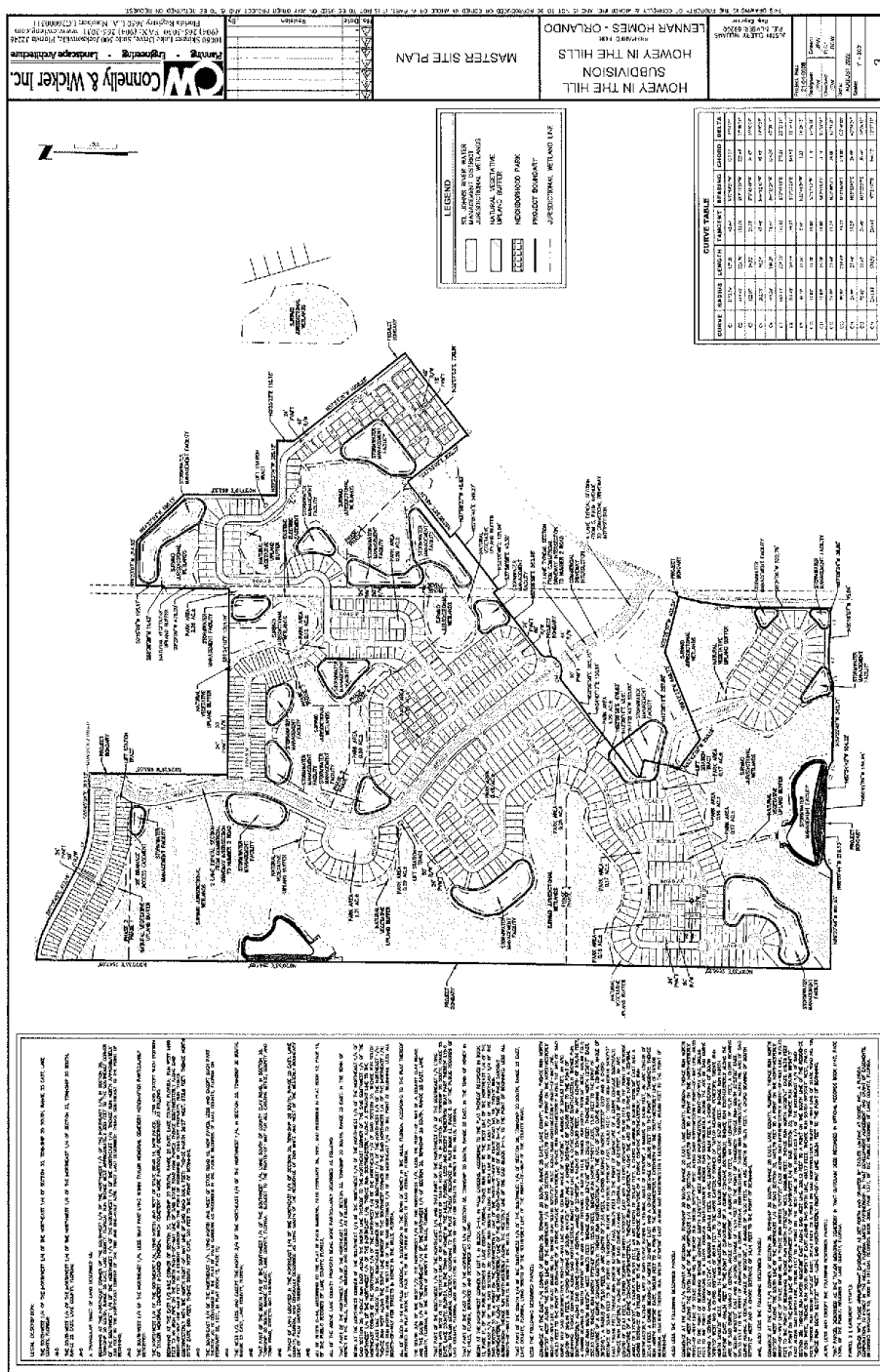
Master Site Plan dated August 2022

Typical Roadway Cross Section for 90' Right of Way

And

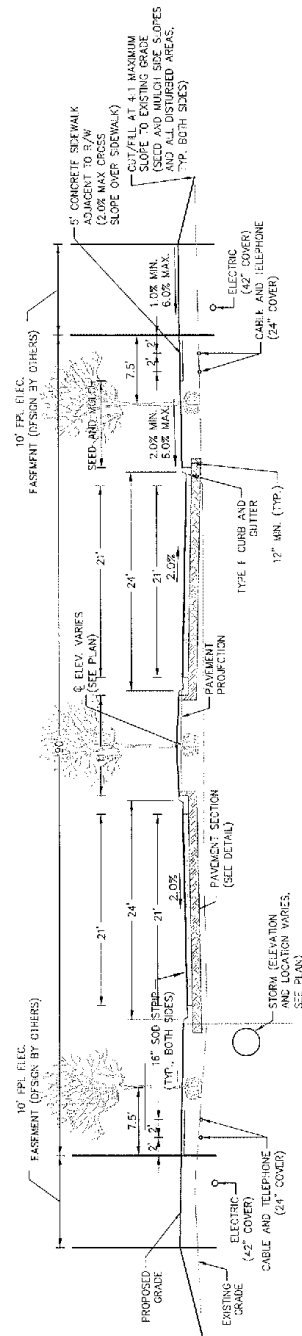
Typical Roadway Cross Section for 90' Right of Way  
(4 lane section)







TYPICAL ROADWAY CROSS SECTION FOR 90' RIGHT OF WAY



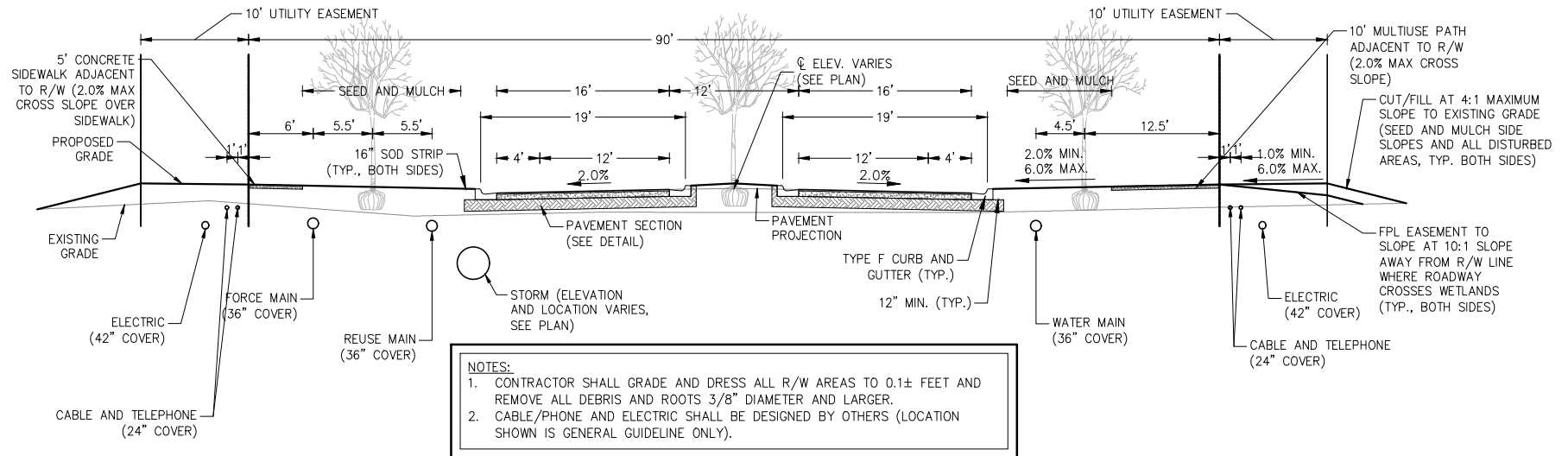
- NOTES:
1. CONTRACTOR SHALL GRADE AND DRESS ALL R/W AREAS TO 0.1% FIFT AND REMOVE ALL TREES AND ROOTS 3/8\" DIAMETER AND LARGER.
  2. CABLE/PHONE AND ELEC. INC. SHALL BE DESIGNED BY OTHERS (LOCATION SHOWN IS GENERAL GUIDELINE ONLY).

TYPICAL ROADWAY CROSS SECTION FOR 90' RIGHT OF WAY  
(4 LANE SECTION)

NTS

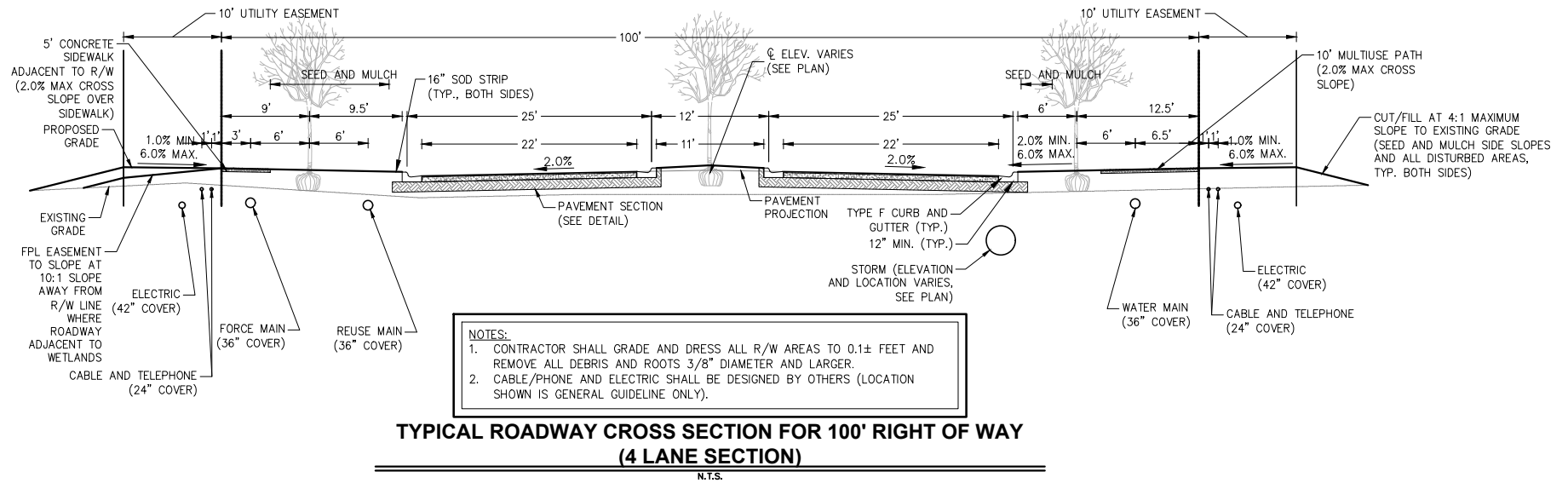
#48304220 v2

48304220v1



### TYPICAL ROADWAY CROSS SECTION FOR 90' RIGHT OF WAY

N.T.S.



## MEMORANDUM

September 12, 2022

**Re: The Reserve at Howey in the Hills**  
Internal Spine Road Capacity Analysis  
Town of Howey in the Hills, Florida  
Project № 21082, v1.1

---

Traffic & Mobility Consultants (TMC) prepared a Traffic Impact Analysis (TIA) for The Reserve at Howey in the Hills project in November 2021. The TIA was reviewed and approved by the Town of Howey in the Hills early 2022. The approved TIA was based on a Site Plan that included a 4-lane divided boulevard, which serves as the main internal roadway (Road A in the PUD Plan) to the development. The spine road connects the main project entrance on SR 19 to the south and the secondary project entrance on Number 2 Road to the north.

The Developer of this project is proposing to modify the configuration of the internal spine road to have the 4-lane divided section that extends from SR 19 to the commercial driveway intersection, then dropping the road section to a 2-lane divided roadway from the commercial driveway intersection to Number 2 Road.

The purpose of this Technical Memorandum is to examine the capacity of the internal spine road (Road A) to ensure that the road can accommodate the projected traffic generated by the proposed development with the proposed change in the cross-section.

The peak hour directional capacity used in the traffic study for the internal spine road is 612 vehicles/hour for the 2-lane roadway section. The capacity of the 4-lane divided roadway section for the same roadway would be 1,314 vehicles/hour for a 4-lane divided roadway section. The traffic study prepared for this development shows a peak hour directional volume of 201 vehicles/hour in the westbound direction (traffic entering the site during the PM peak hour period) of the 2-lane internal divided roadway section of the spine road (Road A). Excerpts of the TIA report showing the projected AM and PM peak hour volumes are provided in the **Attachments**. Since the capacity of the 2-lane section is 612 vehicles/hour, it is evident that the roadway will have sufficient capacity to accommodate the projected traffic generated by the residential portion of the project.

As for the 4-lane divided section of the internal spine road (Road A) from SR 19 to the commercial driveway intersection, the projected traffic volume generated by the commercial outparcels had to be calculated, since it was not included in the TIA report.

### Trip Generation Analysis

A trip generation analysis was conducted for the northern and southern commercial outparcels. Based on the developable land area for the commercial outparcels, it was assumed that the total buildings will be 230,000 square feet. The trip generation analysis was conducted using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*, and the resulting trip generation of the two (2) commercial outparcels are presented in **Table 1**.

**Table 1**  
**Trip Generation Summary (Commercial Outparcels)**

ITE Code	Land Use	Size	Daily		AM Peak Hour				PM Peak Hour			
			Rate	Trips	Rate	Total	Enter	Exit	Rate	Total	Enter	Exit
820	Shopping Center (>150k)	230 KSF	37.01	8,512	0.84	193	120	73	3.40	782	375	407

Source: Trip generation analysis based on ITE Trip Generation Manual, 11th Edition  
\* ITE regression equations are used when R-squared is greater than 0.75

As shown above, the proposed commercial outparcels are projected to generate 8,512 daily trips, of which 193 trips occur during AM peak hour, and 782 trips occur during the PM peak hour.

Assuming all the commercial trips entering the site during the PM peak hour period will use the main spine road (Road A), which would be 375 vehicles/hour. Accordingly, the total peak hour directional traffic entering the site during the PM peak hour period would be 576 vehicles/hour (201 trips from the residential land uses + 375 trips from the commercial land uses). Since the capacity of the 4-lane divided roadway section is 1,314 vehicles/hour; therefore, the 4-lane section of the internal spine road (Road A) will have sufficient capacity to accommodate the projected traffic for The Reserve at Howey in the Hills development.

### Queueing & Turn Lane Analysis

The maximum queue length was calculated at the left turn lane into the southern commercial tract was calculated to determine if there would be sufficient distance between SR 19 and the commercial entrance along Road A (Internal Spine Road). Based on the size of the southern commercial parcel proportionate to the total commercial parcels (northern & southern parcels), it was assumed that 40% of the entering commercial traffic during the PM peak hour period would turn left at the commercial entrance on Road A, which is calculated to be 150 vehicles/hour (375 vehicles/hour x 0.40). Based on roadway design speed of 35 mph, the required length of the westbound left turn lane at the intersection of Road A and Commercial Entrance was calculated as the total of the Deceleration Length plus the Queue Length as shown below:

Left Turn Lane = Deceleration Length + Queue Length  
Deceleration Length @ 35 mph design speed = 145 feet (using FDM Exhibit 212-1)  
Queue length =  $2 \times 25 \times \text{Left Turn Volume (150 vehicles)}/60 = 125$  feet  
**Left Turn Lane = 145+ 125 = 270 feet (including a 50-foot taper)**






### Summary & Recommendations

This technical memorandum supports the proposed modification of the Boulevard section through the residential area of the PUD to be a 2-lane divided roadway. Furthermore, with a maximum queue length for the westbound left turn calculated at 125 feet, a 270-foot left turn lane would be sufficient to accommodate the commercial traffic turning left into the southern outparcel. Since the distance between the main entrance on SR 19 and the commercial entrance on Road A (internal Spine Road) is approximately 500 feet, it is recommended to accept the proposed internal roadway design as shown on the latest site plan attached.



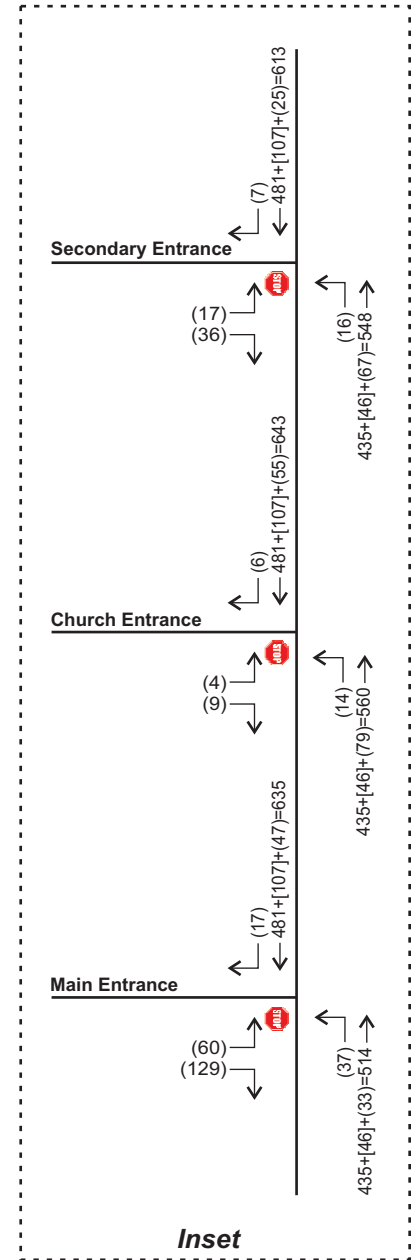
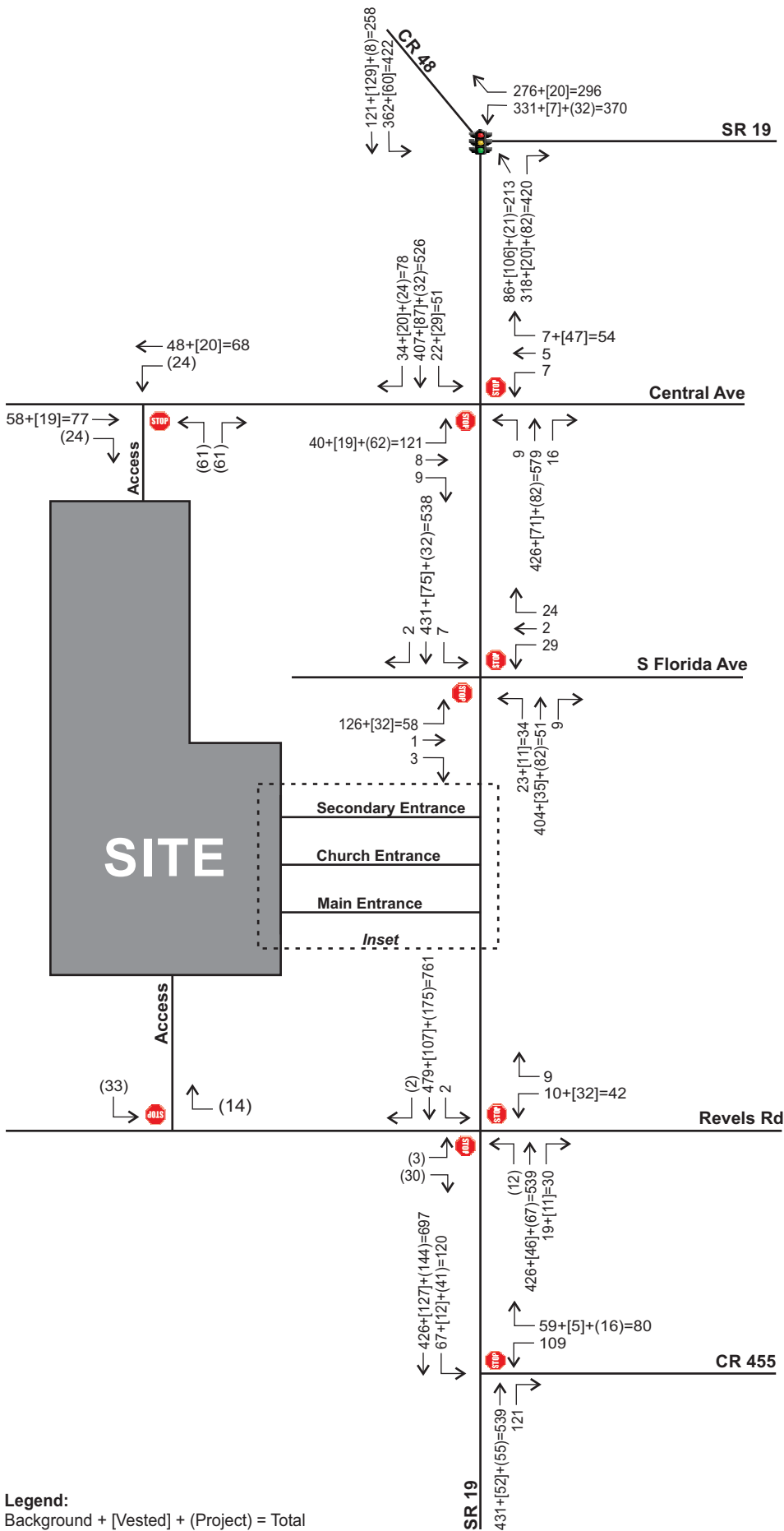
## Attachments

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LEGEND	
	ST. JOHNS RIVER WATER MANAGEMENT DISTRICT JURISDICTIONAL WETLANDS
	NATURAL VEGETATIVE UPLAND BUFFER
	NEIGHBORHOOD PARK
	PROJECT BOUNDARY
	JURISDICTIONAL WETLAND LINE

CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	BEARING	CHORD	DELTA
C1	5173.76	127.31	63.66	N87°1421"W	127.31	1°24'35"
C2	6198.98	223.70	113.08	S87°0530"W	222.49	20°40'24"
C3	322.07	56.52	28.33	S71°4348"W	56.45	10°03'19"
C4	282.75	94.39	47.64	N66°1245"W	93.95	19°07'37"
C6	169.20	140.29	74.46	S66°3526"W	136.30	47°30'19"
C7	685.19	279.75	141.85	S73°5445"W	277.81	23°23'34"
C8	718.43	389.69	199.77	S75°3723"E	384.93	31°04'41"
C9	44.70	11.26	5.66	N22°4039"W	11.23	14°26'05"
C10	10.00	15.70	10.00	S70°7122"E	14.14	89°58'58"
C11	10.00	15.70	10.00	S82°5302"E	14.14	89°58'58"
C12	24.99	27.44	15.29	N20°4051"E	26.08	62°54'26"
C13	99.99	219.49	195.27	N52°0658"E	178.00	125°46'08"
C14	24.99	27.44	15.29	N83°3705"E	26.08	62°54'26"
C15	75.05	51.67	26.91	N32°2237"E	50.66	39°26'52"
C16	234.83	570.53	286.68	N7°3157"E	569.12	13°57'31"

Sheet 3



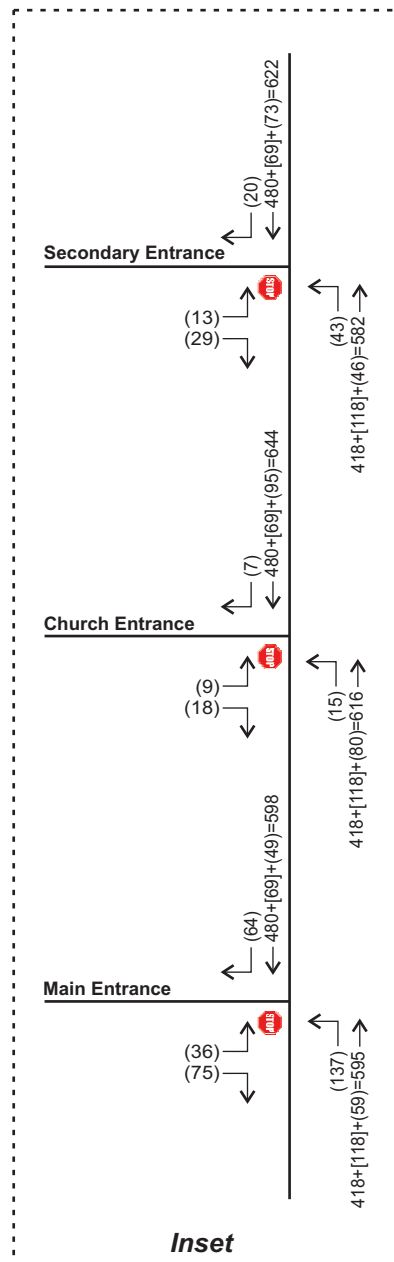
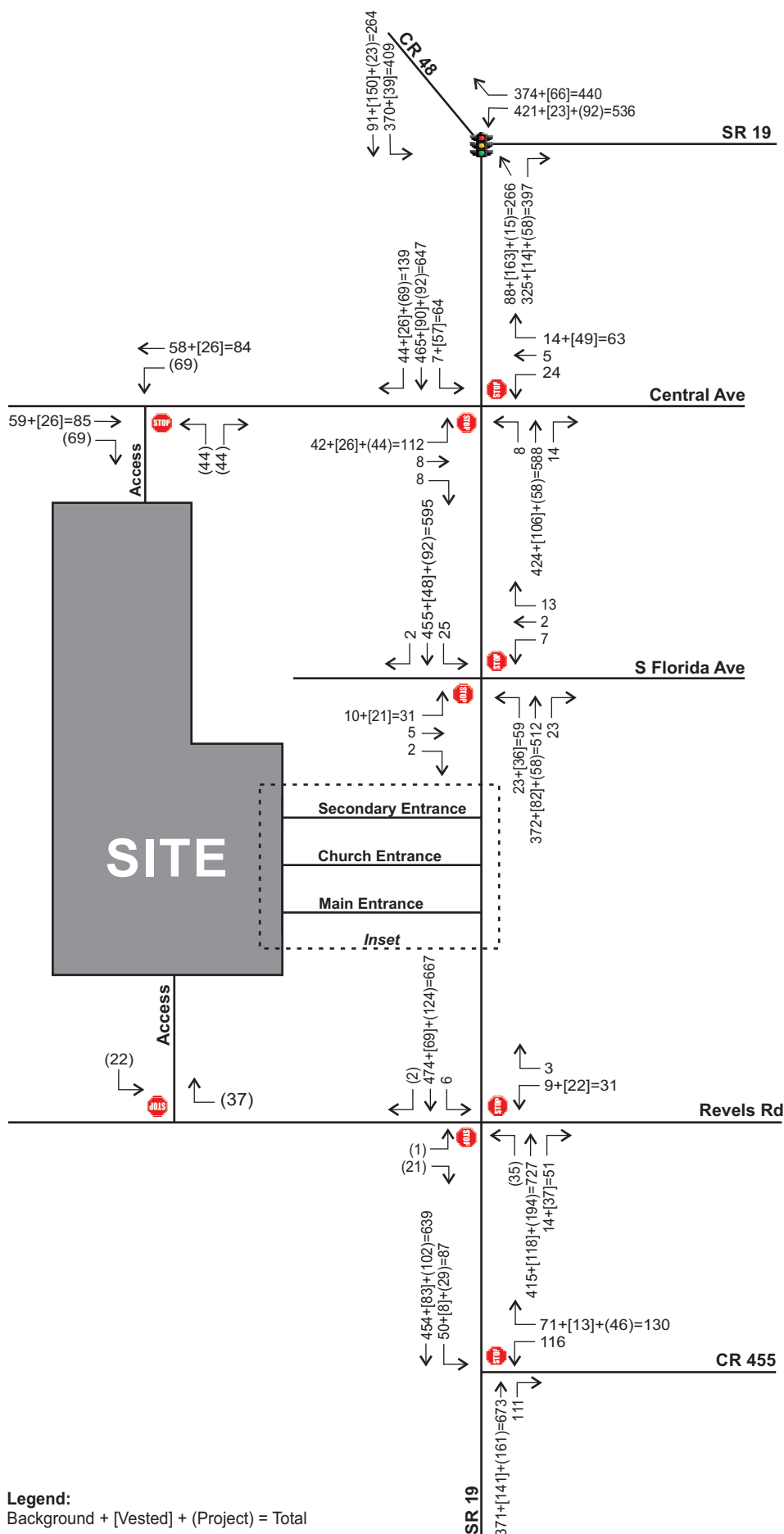
## Projected AM Peak Intersection Volumes

The Reserve at Howey in the Hills  
21082

Figure

5  
45





## Projected PM Peak Intersection Volumes

The Reserve at Howey in the Hills  
21082

Figure

6

46



**TOWN OF HOWEY-IN-THE-HILLS, FLORIDA**  
**GENERAL LAND DEVELOPMENT APPLICATION**

101 N. Palm Avenue, Howey-in-the-Hills, Florida 34737

Phone: (352) 324-2290 • Fax: (352) 324-2126

Date Received:

Application ID:

Received By:

**REQUESTED ACTION**

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> Comp Plan Amendment        | <input type="checkbox"/> Variance          | <input type="checkbox"/> Site Plan (check one below)   |
| <input checked="" type="checkbox"/> PUD             | <input type="checkbox"/> Rezoning          | <input type="checkbox"/> Preliminary                   |
| <input type="checkbox"/> Conditional Use            | <input type="checkbox"/> Subdivision Minor | <input type="checkbox"/> Final                         |
| <input type="checkbox"/> Land Development Code Text | <input type="checkbox"/> Other             | <input type="checkbox"/> Subdivision (check one below) |
|   |  | <input type="checkbox"/> Preliminary Subdivision       |
|   |  | <input type="checkbox"/> Final Subdivision             |
|   |  | <input type="checkbox"/> Final Plat                    |

Describe Request: PUD Major Amendment to Modify Boulevard Typical Section

**APPLICANT INFORMATION:**

Name: \_\_\_\_\_

E-Mail: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

☐ Owner

☐ Agent for Owner

☐ Attorney for Owner

**OWNER INFORMATION:**

Name: HOWEY IN THE HILLS LTD

E-Mail: \_\_\_\_\_

Address: \_\_\_\_\_ C/O EASTON & ASSOC

Phone: 786-437-5806

\_\_\_\_\_ 10165 NW 19TH ST

Fax: \_\_\_\_\_

MIAMI FL 33172

**PROPERTY INFORMATION:**

Address: \_\_\_\_\_

General Location: SOUTH OF #2 ROAD, NORTH OF SR19Current Zoning: PUDCurrent Land Use: VMUParcel Size: 375.2 AC +/-Tax Parcel #: ATTACHEDLegal Description Attached ☒ Yes ☐ NoSurvey Attached ☒ Yes ☐ NoPre-Application Meeting Date: ATTACHED*(Attach Pre-Application Form)*Application Fee: \$ 3,000

Applicant's Signature: \_\_\_\_\_

*(Signature)**(Date)*Rob Bonin  
*(Print)*

Owner's Signature: \_\_\_\_\_

*(Provide letter of  
Authorization)**(Signature)**(Date)*\_\_\_\_\_  
*(Print)***Applications must be complete to initiate the review process.**



HOWEY IN THE HILLS, LTD.  
10165 NW 19th Street  
Miami, Florida 33172  
(786)437-5806  
EWEaston@TheEastonGroup.com

April 14, 2021

TOWN OF HOWEY-IN-THE-HILLS  
101 N. Palm Avenue  
Howey-in-the-Hills, FL 34737

Re: Letter of Authorization

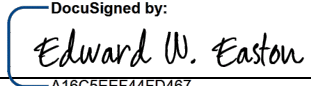
To Whom it may Concern:

The purpose of this letter is to provide notice that Howey in the Hills LTD as owner of The Reserve at Howey in the Hills, hereby authorizes Lennar Homes, LLC. as the applicant for the attached Modification to PUD Ordinance 2004-322 and to act on our behalf in regard to amending the PUD and any related approvals.

If you have any question or concerns, please do not hesitate to contact me.

Respectfully,

**HOWEY IN THE HILLS, LTD.,**  
a Florida limited liability company

DocuSigned by:  
  
By: \_\_\_\_\_  
Print Name: Edward W. Easton



August 26, 2022

Town of Howey-In-The-Hills  
Planning & Zoning Dept.  
101 N. Palm Avenue  
Howey-In-The-Hills, FL 34737

RE: Reserve at Howey-in-the-Hills  
PUD Major Amendment PUD Ordinance 2004-322  
CWI Job # 21-04-0008

Dear Town of Howey in the Hills,

Please find the following items attached for the Major Amendment to the PUD to modify the Boulevard Section through the residential area of the PUD:

- Completed Application
- Letter of Authorization from the owner to Lennar
- 2 copies PUD Plans and supporting Roadway Section Drawings
- Flashdrive with Digital Copies
- \$3,000.00 Fee

Please let me know if you need anything else to be scheduled on the September 22, 2022 Planning and Zoning agenda and the following Town Council Meeting on October 10, 2022 and October 24, 2022.

Sincerely,  
**Connelly & Wicker Inc.**

Richard C. Welch, P.E.  
Project Manager





TMHConsulting@cfl.rr.com  
97 N. Saint Andrews Dr.  
Ormond Beach, FL 32174  
PH: 386.316.8426

## MEMORANDUM

**TO:** Town of Howey-in-the-Hills Planning Board  
**CC:** J. Brock, Town Clerk  
**FROM:** Thomas Harowski, AICP, Planning Consultant  
**SUBJECT:** The Reserve/Hilltop Groves First Amendment to the Development Agreement  
**DATE:** September 12, 2022

---

The developers of the residential portion of The Reserve development have asked for an amendment to the approved development agreement to make some revisions to the preliminary subdivision plan that qualify as major amendments under the terms of the adopted PUD agreement. The applicants have submitted a list of plan adjustments on the updated master site plan map including a number key locating each revision. Some of these adjustments could be considered minor amendments, but since the plan was undergoing a major amendment review, we elected to include all the revisions in the proposed update.

The Town's Development Review Committee reviewed the proposed amendments at their meeting on September 8, 2022 and have prepared the following recommendations for the Planning Board's consideration.

1. The applicants are requesting a revised design for the central collector road, identified as Road A on the preliminary subdivision plan, from four lanes to two lanes through the residential portion of The Reserve development. Most of the portion of Road A through the commercial portion of the project will remain as a four-lane section. In support of the requested change the applicants have submitted an analysis from their traffic engineer documenting that a two-lane road is sufficient to support the projected traffic volumes. The Town engineer has reviewed the request and supports the finding that the two-lane section is adequate for the traffic demand, and that with protected left turn lanes can result in reduced speed and increased safety within the project.

The applicants have noted that the road through the commercial area has been increased the right-of-way from 90 feet to 100 feet as shown on the roadway cross-sections. The wider right-of-way is proposed to give more room to fit all the necessary components in the four-lane road section. The intersection with SR 19 has moved south about 250 feet, and driveway connections for the commercial area are shown.

(Refer to map items 2, 3, 4 and 12.)

2. The applicants are proposing minor adjustments to Roads D and F and the adjoining lots to reduce the amount of road area and improve safety while still providing access to the adjacent lots. **(Refer to map item 1.)**
3. The applicants are requesting revisions to Roads B and N along with adjacent lots to improve the connection between Phase 2 and Phase 3. This change improves traffic flow and reduces the number of lots on closed-end streets. **(Refer to map item 6.)**
4. The applicants are revising the collector road cross-sections to include the minimum 10-foot bicycle/pedestrian pathway that extends from SR 19 to Number Two Road. This facility has been a commitment of the project, but roadway cross-section submitted prior to this plan did not fully identify the bicycle/pedestrian path. **(Refer to the revised cross-sections for the two-lane and four-lane sections.)**
5. Residential lots along Road AA and Road Z have been changed to the 50 x 115 lot type rather than the originally proposed 50 x 80 lot type. **(Refer to map item 8.)**
6. The staff has asked for the addition of a street crossing detail where the bicycle/pedestrian path crosses a roadway. This detail is intended to limit the opportunity for cars to inadvertently drive on the path. They have agreed to provide a detail.
7. The applicants have been requested to update the totals of residential units by type and phase. **(The revised totals for units by phase are shown on the table on the left side of the master site plan.)**
8. The applicants have been requested to provide a maximum impervious area for each type of residential unit. The lack of a maximum impervious area has been creating some review issues with our other PUD-based neighborhoods. **(The maximum impervious areas by unit type are shown on the table on the left side of the master site plan.)**

The Development Review Committee supports these eight revisions to the approved development agreement.

The revised plan includes several other small adjustments that are noted here as part of the overall amendment. Please note the following revisions:

- The emergency access via Mare Avenue has been removed. The revised street pattern between Phase 2 and Phase 3 will serve this purpose. **(Refer to map item 5.)**

- The driveway connection to Talichet Phase 2 has been removed as the connection is no longer possible. **(Refer to map item 7.)**
- A revised roadway connection in Phase 4 has been added. **(Refer to map item 9.)**
- Stormwater pond locations have been added to Phase 4. **(Refer to map item 10.)**
- The phase line for Phase 1 has been adjusted. **(Refer to map item 11)**

During the review, the DRC also agreed that the intersection designs of the primary collector road at SR 19 and Number Two Road will be considered minor amendment to the development agreement as the permitting agencies (FDOT and Lake County) will ultimately be directing the intersection designs. The preliminary subdivision plan will also provide for a driveway connection from the collector road to the Town's public safety parcel at the intersection with the primary collector road. It is expected that this connection will provide an opportunity to reduce fire and police response times to properties within the project.



TMHConsulting@cfl.rr.com  
97 N. Saint Andrews Dr.  
Ormond Beach, FL 32174  
PH: 386.316.8426

## MEMORANDUM

**TO:** Howey-in-the-Hills Development Review Committee  
**CC:** J. Brock, Town Clerk  
**FROM:** Thomas Harowski, AICP, Planning Consultant  
**SUBJECT:** The Reserve/Hilltop Groves First Major Amendment  
**DATE:** August 30, 2022

---

The development team has submitted an application to amend the approved development agreement. This is the first major amendment to the adopted development agreement. The amendment has been triggered by the proposal to reduce the central collector road from four lanes to two lanes for most of the project length, but there are other revisions to the approved development plan that will need to be addressed and included as part of the amendment.

The Town will be adopting a revised preliminary subdivision plan as part of the amendment, but the adopting ordinance should include a list of all amendment items, so it is clear to all parties what is being approved. Once final action is taken by the Town Council, the adopting ordinance needs to be recorded in the public records to provide a document trail of the fully approved project. The planning comments are as follows:

1. The applicant should present a list of all revisions from the original approved preliminary subdivision plan so that the Town can be sure all items have been reviewed and included in the amending ordinance.
2. The applicant should review the text portions of the adopting ordinance to determine if there are other revisions that are needed or desired.
3. As one example, the plan set needs to include a maximum impervious area for each lot type. The lack of an impervious area number has been an issue with other new developments and needs to be added. The maximum impervious area then needs to be used as an input into the stormwater system design or an explanation needs to be provided as to why a different number is used. This number can be added to the plan set if desired rather than included in the text of the agreement. The maximum impervious area might be different for each of the housing types.

4. The revised roads D and F and the revised lot adjustments are recognized and acceptable. These changes could be considered a minor amendment, but we will include them in the overall amendment since other items are needed.
5. The reduction in the width of the central collector road from 4-lanes to 2-lanes with left turn lanes is acceptable from a speed control and safety perspective, but the applicant's traffic engineer needs to submit an analysis demonstrating that the reduced facility will still accommodate the projected traffic.
6. The transition from the 4-lane segment in the commercial area to the 2-lane segment in the residential area should be moved further north to allow more flexibility in locating access points to the commercial parcel.
7. The intersection designs at SR 19 and Number 2 Road are not fully detailed in the approved plan set. These intersection designs will be directed by FDOT and Lake County through their respective permit processes. When permitting is completed, these will be considered minor amendments to the development agreement.
8. The proposed amendment includes a revised road connection between Phase 2 and Phase 3 with the new alignment following Road B and Road N. The revised road alignment and associated adjustment to the residential lots is recommended for approval.
9. The new plan proposes a revision to the road network within the townhouse area adjacent to Number 2 Road. The approved plan shows a connection Number 2 Road at the west end of this road and not a terminal point. This area has 78 units and therefore requires a second access point. The applicant needs to provide for a second access point or reduce the number of units in the area below 50 units.
10. The revised plan proposes to eliminate the connection to the Town parcel at the intersection of the collector road and Number 2 Road. The Town still needs to retain the option to include a driveway connection. An access at this point could reduce emergency services response times to the project. To facilitate future driveway options, the collector road right-of-way needs to abut the Town parcel for the full length of the parcel if possible.
11. The revised plan proposes to eliminate the connection from Road EE/FF to Revels Road. This deletion is not acceptable. The approved design needs to be retained.
12. The applicant needs to revise the unit totals by type of unit and phase to reflect the current plan.
13. The proposed lot pattern along Road AA and Road Z appears to be different than the currently approved plan. The Town needs to verify that the unit totals by type remain unchanged or approve any revision to the product mix.

14. The revised cross-section for the collector road (Road A) shows 4-foot bicycle lanes on the 2-lane segment and no bicycle lane on the 4-lane segment. The agreement and the cross-section in the approved plan set shows a separate bicycle path. Both cross-sections need to be revised to reflect the bicycle path. Adding the two bicycle lane areas to one of the sidewalks will allow for a 12-foot-wide bicycle/pedestrian facility on one side of the road and save one foot of paved area. A decision should be made as to which side of Road A the bicycle path is to be located.
15. An intersection detail needs to be added where the bicycle path crosses intersection. The bicycle path should have some type of divider to make it clear automotive traffic is not permitted. Some type of pavement markings are appropriate as well.
16. With the 2-lane design, the central median has been reduced from 14-feet for the approved design to about 9 feet with the proposed design. This dimension seems a little skimpy for a quality landscape program and might be less than the minimum width needed for a protected left turn bay. The median in the 2-lane and 4-lane segments should be retained at 14 feet.

September 5, 2022  
Hillside Groves – PUD Amendment  
Engineering Review Comments  
Page 1

1. Provide a volume and capacity evaluation to show that the 2-lane boulevard will be able to handle the projected future traffic.
2. The master site plan shows the multiuse trail on the east side of the spine road, but the cross-sections don't. Add the trail to the cross-sections, and label the trail on the site plan. Both cross-sections should call out a 5' sidewalk on the west side and a 10' trail on the east side.
3. The cross-section for the 4-lane boulevard needs to show 24' pavement width, not 21'.
4. Move the commercial driveway intersection further north to provide additional left turn lane decal & storage length for northbound vehicles.
5. All legs of all intersections need to provide full pedestrian accommodation including ADA curb ramps & crosswalks. Crosswalks are to be per FDOT Design Standards 2017-18 Index 17346 Sheet 12 of 17. The crosswalks at stop conditions should be standard crosswalks. The crosswalks not at a stop condition should be special emphasis.

# **HILLSIDE GROVE**

LIFT STATION #1

DESIGN REPORT

FOR

Lennar Homes - Orlando  
6750 Forum Drive, Suite 310  
Orlando, FL 32821  
(904) 431-6499

PREPARED BY:



## **Connelly & Wicker, Inc.**

10060 Skinner Lake Drive, Suite 500  
Jacksonville, Florida 32246

Florida Registry: 3650 L.A. Number: LC26000311

Phone: (904) 265-3030 Fax: (904) 265-3031

[www.cwieng.com](http://www.cwieng.com)

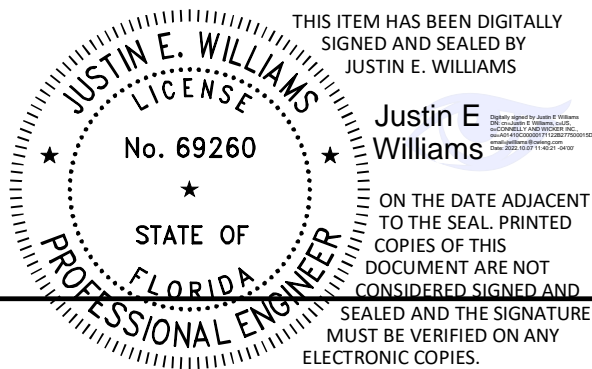
DATE: 10/7/2022

CWI Project No.: 21-04-0008



## HILLSIDE GROVE Index Sheet

Table of Contents	Pages
A Cover Sheet	1
B Index Sheet	2
C Project Summary	3
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Justin E Williams

Prepared under the direction of

Justin E. Williams, P.E.  
PE # 69260

## GENERAL SITE DESCRIPTION

### **THE PROJECT**

The proposed development is located within Lake County, Florida (Town of Howey in the Hills) within the Town of Howey in the Hills service area. The project is located west of State Road 19 (South Palm Avenue) and Taylor Memorial Cemetery, north of Revels Road, and south of Number 2 Road. The proposed development will be constructed in 4 phases and include up to 728 single family units. Lift Station #1 will serve up to 640 of the proposed residential units.

### **PUMP STATION**

The pump station is located on the western side of the property and more specifically is located south of Road "K", North of Road "C" and west of Road "A". The effluent will pump through a 6" force main to Road A where the forcemain will increase to 10" and extend to Number 2 Road right of way where it will connect to an existing 10" force main, and will ultimately connect to an existing wastewater treatment facility. (Refer CWI 21-04-0008 Water and Sewer Plans for connection details).

### **EXISTING CONDITIONS MODELING DATA**

The connection head condition was determined by modeling the existing wastewater system based on data provided by Griffey Engineering, Inc. to Connelly and Wicker on September 23<sup>rd</sup>, 2022, Construction Plans obtained from the SJRWMD and Lidar data for existing grades. Information obtained from those documents are the basis for the existing conditions modeling.

A summary of the peak flow requirements from each of the existing system pump stations and the anticipated flows modeled as part of these calculations is included.

### **DESIGN ANALYSIS**

The modeling for this system was accomplished using Bentley OpenFlows WaterCad CONNECT Edition Update 3.

# DESIGN OF SANITARY LIFT STATION

## Connelly & Wicker, Inc.

Project Name: HILLSIDE GROVE  
 Project No: 21-04-0008  
 Date: October 7, 2022

### COMPUTATION OF AVERAGE DAILY FLOW

Type of Development	Units	Average Flow (GPD)	/ Unit	G.P.D.	G.P.M.
Phase 1			/ Unit	0	0.00
Single Family Residential	245	300	/ Unit	73500	51.04
			/ Unit	0	0.00
Phase 2			/ Unit	0	0.00
Single Family Townhomes	146	300	/ Unit	43800	30.42
Phase 3 (Portion)			/ Unit	0	0.00
Single Family Residential	47	300	/ Unit	14100	9.79
Phase 4			/ Unit	0	0.00
Single Family Residential	202	300	/ Unit	60600	42.08
			/ Unit	0	0.00

Average Daily Flow = 192000 G.P.D. = 133.33 G.P.M.

Runout Peaking Factor = (Per CSM Section 17 Part 1.03.C) 3.00

Total Peak Flow = (A.D.F.)\*(P.F.) = 400 G.P.M.

Use Total Peak Flow = Q = 400 G.P.M.

### FORCE MAIN SIZE

Maximum Flow in Pipe =  $Q(\text{G.P.M.}) * \left( \frac{1 \text{ Cu.Ft.}}{7.48 \text{ Gal.}} \right) * \left( \frac{1 \text{ Min.}}{60 \text{ Sec.}} \right) = \underline{0.891} \text{ Cfs.}$

Pipe Diameter	Cross-Sectional Area	Flow (Cfs.)	Flow Velocity
1. Use 4.27 Inch Pipe	0.099 Sq. Ft.	0.891	8.96 Ft/Sec.
2. Use 6.13 Inch Pipe	0.205 Sq. Ft.	0.891	4.35 Ft/Sec.
3. Use 8.04 Inch Pipe	0.353 Sq. Ft.	0.891	2.53 Ft/Sec.
4. Use 9.87 Inch Pipe	0.531 Sq. Ft.	0.891	1.68 Ft/Sec.
5. Use 11.73 Inch Pipe	0.750 Sq. Ft.	0.891	1.19 Ft/Sec.

Use Force Main of Diameter = 6.13 Inches

LIFT STATION FOR: HILLSIDE GROVE

PROJECT NO.: 21-04-0008

Connelly &amp; Wicker, Inc.

**DESIGN OF WET WELL**

Use a cycle time (T) = 10 Minutes

$$\text{Storage Required (Vr)} = (T \cdot Q) / 4 = 10 \text{ Min.} \cdot \left( \frac{400 \text{ G.P.M.}}{4} \right) \cdot \left( \frac{1 \text{ Cu.Ft.}}{7.48 \text{ Gal.}} \right) = 133.69 \text{ Cu.Ft.}$$

**Storage Height Required for Each Size Wet Well**

Diameter of Wet Well (Ft.)	4.00	5.00	6.00	8.00	10.00	12.00
Storage Height (Ft.)	10.64	6.81	4.73	2.66	1.70	1.18

Provide Wet Well Diameter = 8.00 Ft. Storage Height Required (Vr) = 2.66 Ft.

Provide Storage Height = 2.70 Ft. Actual Cycle Time = 10 Min.

Volume Provide (Vp) = 135.72 Cu.Ft.

Since Vr &lt; Vp , Then, Adequate Storage is Provided

**WET WELL INFORMATION**

Wet Well Diameter = 8.00 Ft.  
 Wall Thickness (t) = 0.75 Ft.  
 Over Hang (L) = 1.00 Ft.

Refer To Construction Plans For Actual Pump Station Configuration

Top El. 88.40  
 Grade El. 87.90

Effluent El. (Force Main) 85.40

Control El. 69.60

Alarm El. 69.10

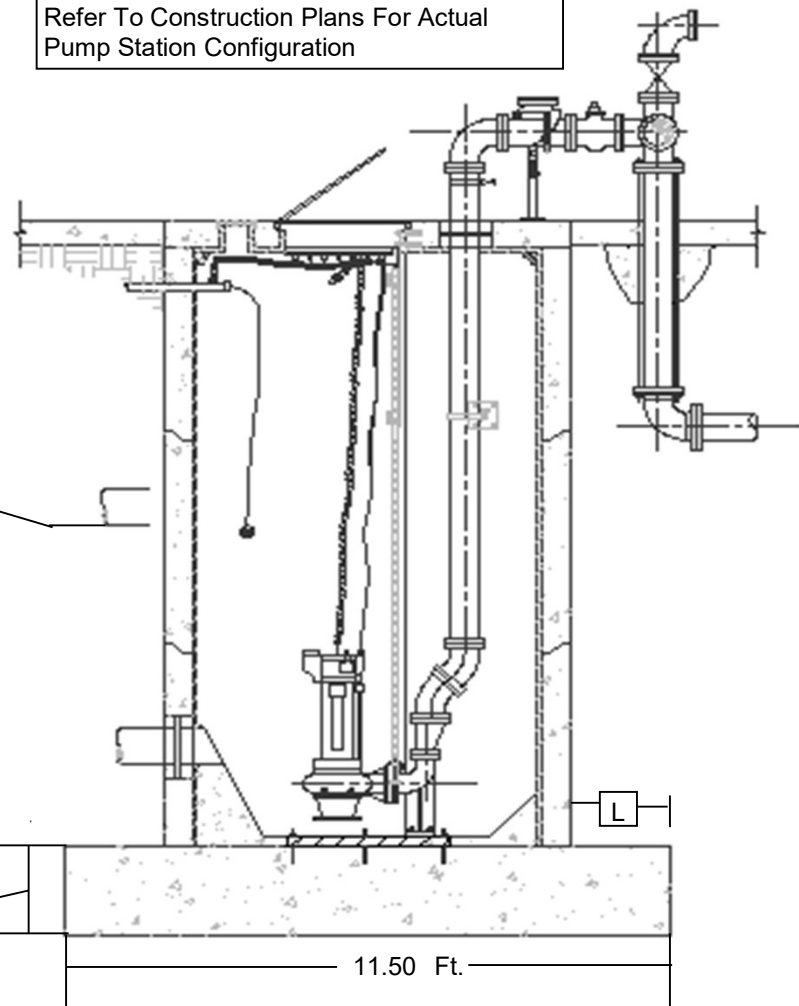
Lag Pump On El. 68.60

Lead Pump On El. 68.10

All Pumps Off El. 65.40

Bottom El. 63.40

Bottom Pad Thickness 1.00



LIFT STATION FOR: HILLSIDE GROVE

PROJECT NO.: 21-04-0008

**Connelly & Wicker, Inc.****VERIFY THE STABILITY OF THE WET WELL****Assume:**

Submerged Unit Weight of Soil	=	60	Lbs. Per Cu.Ft.
Unit Weight of Fiberglass	=	110	Lbs. Per Cu.Ft.
Unit Weight of Concrete	=	150	Lbs. Per Cu.Ft.
Angle of Repose $\phi$	=	5	Degrees

**Wet Well:**

Outer Diameter of Wet Well ( $D_{WW}$ )	=	9.50	Ft.
Diameter of Base	=	11.50	Ft.
Thickness of Top Cover	=	0.83	Ft.
Thickness of Walls (t)	=	0.75	Ft.
Thickness of Bottom Pad	=	1.00	Ft.
Depth of Wetwell below Grade (H)	=	24.50	Ft.
Width of Collar	=	1.00	Ft.
Depth of Collar (if any)	=	0.00	Ft.
Hatch Size	=	36" X 60"	

**Assume Saturated Conditions**

Ground Water Elevation	=	87.90	
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**SELF WEIGHT OF WET WELL**

Self Weight of Slabs (Lbs.) = (Volume) \* (Unit Weight)

Weight of Soil Acting on Wet Well\* (Lbs.) = ( $V_s$ )\*(Unit Weight) Based on Angle of Repose ( $\phi$ )

$$V_s = \left[ \pi * (H) * \left( (L)^2 + 2 \left( \frac{D_{WW}}{2} \right) (L) + \left( \frac{D_{WW}}{2} \right) (H) (\tan(\phi)) + (L) (H) (\tan(\phi)) + \left( \frac{((H)(\tan(\phi)))^2}{3} \right) \right) \right]$$

	<u>Volume (CF)</u>	*	<u>Unit Weight (lb/CF)</u>	=	<u>Force</u>	<u>Lbs.</u>
Top Cover :	46.38	*	150	=	6957.33	Lbs.
Bottom Pad :	103.87	*	150	=	15580.34	Lbs.
Collar	0.00	*	150	=	0.00	Lbs.
Walls :	498.31	*	150	=	74745.85	Lbs.
Soil :	1874.69	*	60	=	<u>112481.56</u>	Lbs.

Total Downward Force: 209765.08 Lbs.

**UPLIFT FORCE**

Uplift Force = (Volume Displaced) \* (Unit Weight of Water)

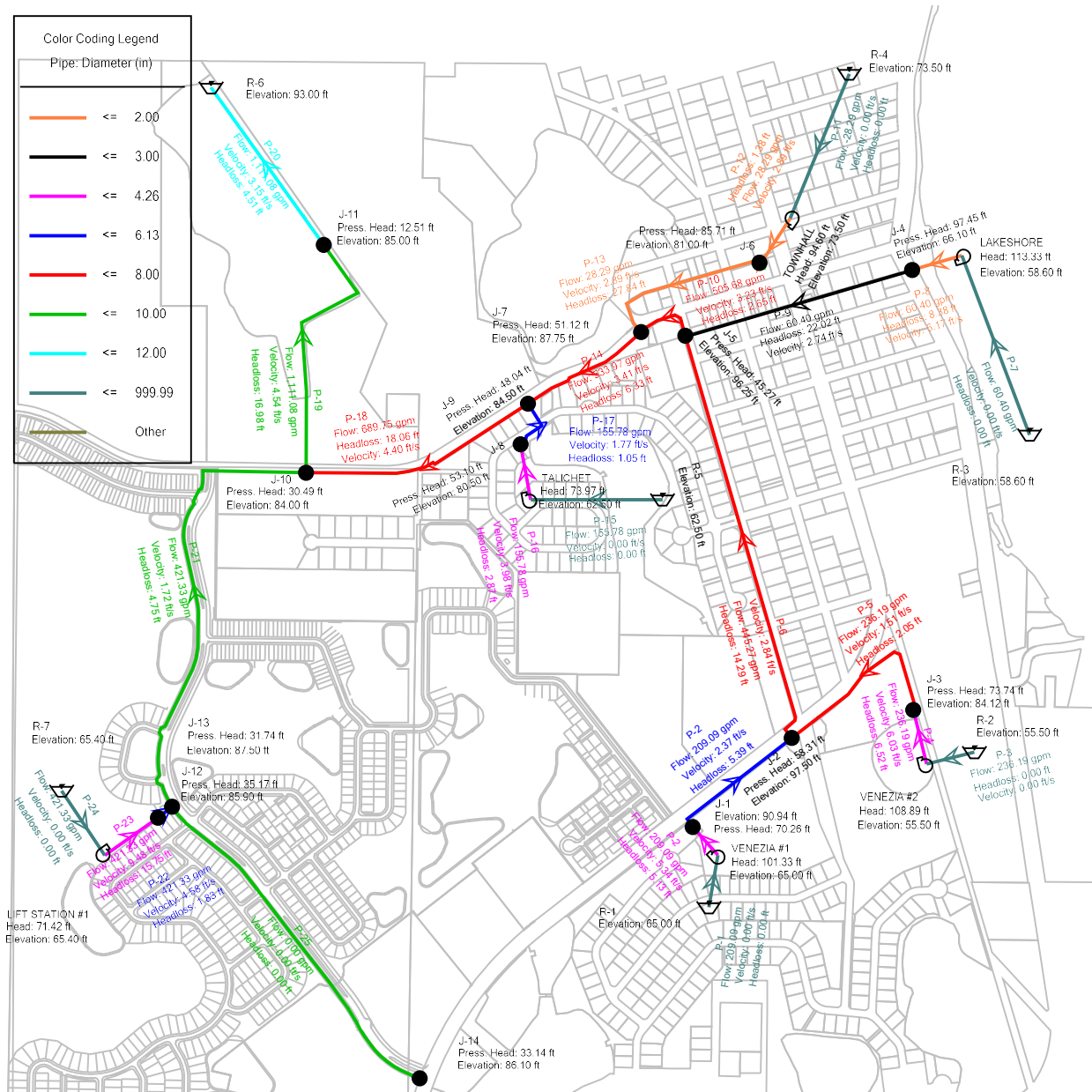
Uplift Force	=	1840.48	*	62.4	=	114846.10	Lbs.
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**FACTOR OF SAFETY**

$$\text{Factor of Safety} = \frac{\text{Downward Force}}{\text{Uplift Force}} = \frac{209765.08}{114846.10} = 1.83$$

<b>Pump Information - Flygt</b>				
Pump Type	2 Submersible Pumps			
Pump Model	NP 3153 HT 3~ 456			
Motor	N3153.660 21-15-4AA-W 15hp			
H.P. / Voltage / Phases / Amps	15 HP / 230V / 3 Phase / 32 A			
RPM	1755		R.P.M.	
Impeller Diameter	229		mm	
Discharge Pipe Size	4		Inches	
Force Main Size	4		Inches	
Design Point	400.00	GPM @	72.00	TDH
Operating Point - Manifold Condition	421.33	GPM @	71.42	TDH
Operating Point - Runout Condition	515.45	GPM @	65.78	TDH

## Scenario: Base (MANIFOLD CONDITIONS)



**FlexTable: Junction Table (MANIFOLD CONDITIONS)**

Label	Demand (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)
J-1	0.00	90.94	30.4	70.26
J-2	0.00	97.50	25.2	58.31
J-3	0.00	84.12	31.9	73.74
J-4	0.00	66.10	42.2	97.45
J-5	0.00	96.25	19.6	45.27
J-6	0.00	81.00	37.1	85.71
J-7	0.00	87.75	22.1	51.12
J-8	0.00	80.50	23.0	53.10
J-9	0.00	84.50	20.8	48.04
J-10	0.00	84.00	13.2	30.49
J-11	0.00	85.00	5.4	12.51
J-12	0.00	85.90	15.2	35.17
J-13	0.00	87.50	13.7	31.74
J-14	0.00	86.10	14.3	33.14



**FlexTable: Pipe Table (MANIFOLD CONDITIONS)**

Label	Diameter (in)	Length (User Defined) (ft)	Length (ft)	Material	Hazen- Williams C	Minor Loss Coefficient (Unified)	Flow (gpm)	Velocity (ft/s)	Headloss (Friction) (ft)	Headloss (Minor) (ft)	Headloss (ft)
P-1	999.00	1	1	PVC	120.0	0.000	209.09	0.00	0.00	0.00	0.00
P-2	4.00	28	28	PVC	120.0	9.430	209.09	5.34	0.95	4.18	5.13
P-2	6.00	0	927	PVC	110.0	2.580	209.09	2.37	5.16	0.23	5.39
P-3	999.00	1	1	PVC	120.0	0.000	236.19	0.00	0.00	0.00	0.00
P-4	4.00	28	28	PVC	120.0	9.430	236.19	6.03	1.19	5.33	6.52
P-5	8.00	0	1,310	PVC	120.0	3.770	236.19	1.51	1.92	0.13	2.05
P-6	8.00	0	2,771	PVC	120.0	9.340	445.27	2.84	13.12	1.17	14.29
P-7	999.00	1	1	PVC	120.0	0.000	60.40	0.00	0.00	0.00	0.00
P-8	2.00	28	28	PVC	120.0	9.430	60.40	6.17	2.80	5.58	8.38
P-9	3.00	0	1,548	PVC	120.0	4.170	60.40	2.74	21.54	0.49	22.02
P-10	8.00	0	411	PVC	120.0	1.190	505.68	3.23	2.46	0.19	2.65
P-11	999.00	1	1	PVC	120.0	0.000	-28.29	0.00	0.00	0.00	0.00
P-12	2.00	18	18	PVC	120.0	7.270	28.29	2.89	0.44	0.94	1.38
P-13	2.00	0	1,132	HDPE	120.0	0.000	28.29	2.89	27.84	0.00	27.84
P-14	8.00	0	884	PVC	120.0	2.580	533.97	3.41	5.86	0.47	6.33
P-15	999.00	1	1	PVC	120.0	0.000	155.78	0.00	0.00	0.00	0.00
P-16	4.00	28	28	PVC	120.0	9.430	155.78	3.98	0.55	2.32	2.87
P-17	6.00	0	362	PVC	120.0	1.190	155.78	1.77	0.99	0.06	1.05
P-18	8.00	0	1,578	PVC	120.0	4.170	689.75	4.40	16.80	1.26	18.06
P-19	10.00	0	1,779	PVC	120.0	4.770	1,111.08	4.54	15.45	1.53	16.98
P-20	12.00	0	1,262	PVC	120.0	0.000	1,111.08	3.15	4.51	0.00	4.51
P-21	10.00	0	3,027	PVC	120.0	8.490	421.33	1.72	4.36	0.39	4.75
P-22	6.13	0	117	PVC	120.0	0.000	421.33	4.58	1.83	0.00	1.83
P-23	4.26	28	28	PVC	120.0	9.430	421.33	9.48	2.56	13.18	15.75
P-24	999.00	1	1	PVC	120.0	0.000	421.33	0.00	0.00	0.00	0.00
P-25	10.00	0	2,429	PVC	120.0	3.900	0.00	0.00	0.00	0.00	0.00

**FlexTable: Pump Table (MANIFOLD CONDITIONS)**

Label	Pump Definition	Elevation (ft)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
LAKESHORE	LAKESHORE	58.60	58.60	171.93	60.40	113.33
LIFT STATION #1	Flygt Pump	65.40	65.40	136.82	421.33	71.42
TALICHET	TALICHET	62.50	62.50	136.47	155.78	73.97
TOWNHALL	TOWNHALL	73.50	73.50	168.10	28.29	94.60
VENEZIA #1	VENEZIA #1	65.00	65.00	166.33	209.09	101.33
VENEZIA #2	VENEZIA #2	55.50	55.50	164.39	236.19	108.89

## Pump Definition Detailed Report: LAKESHORE (MANIFOLD CONDITIONS)

### Element Details

ID	173	Notes
Label	LAKESHORE	

### Pump Curve

Flow (gpm)	Head (ft)
0.00	157.00
3.00	155.00
9.00	150.00
17.00	145.00
24.00	140.00
32.00	135.00
39.00	130.00
47.00	125.00
53.00	120.00
61.00	115.00
65.00	110.00
69.00	105.00
73.00	100.00
77.00	95.00
81.00	90.00
84.00	85.00
87.50	80.00
90.00	75.00
93.00	70.00
97.00	65.00
99.00	60.00
102.50	55.00
105.00	50.00
108.00	45.00

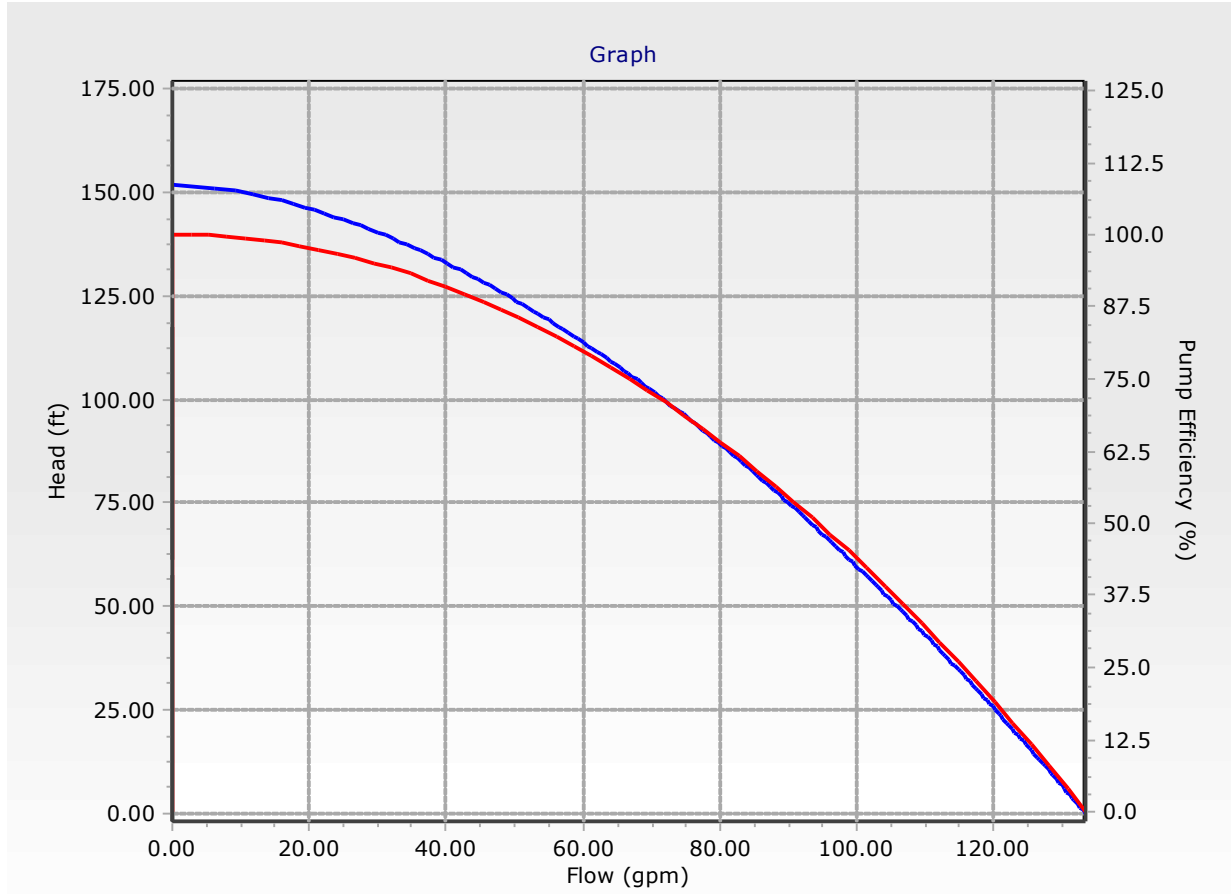
### Pump Efficiency Type

Pump Efficiency Type	Best Efficiency Point	Motor Efficiency	100.0 %
BEP Efficiency	100.0 %	Is Variable Speed Drive?	False
BEP Flow	0.00 gpm		

### Transient (Physical)

Inertia (Pump and Motor)	0.000 lb·ft <sup>2</sup>	Specific Speed	SI=25, US=1280
Speed (Full)	0 rpm	Reverse Spin Allowed?	True

## Pump Definition Detailed Report: LAKESHORE (MANIFOLD CONDITIONS)



## Pump Definition Detailed Report: TALICHET (MANIFOLD CONDITIONS)

### Element Details

ID	183	Notes
Label	TALICHET	

### Pump Curve

Flow (gpm)	Head (ft)
0.04	104.92
18.66	100.40
37.27	96.18
55.88	92.18
74.50	88.34
93.11	84.65
111.73	81.08
130.34	77.63
148.95	74.27
167.57	70.98
186.18	67.73
204.79	64.49
223.41	61.22
242.02	57.88
260.63	54.44
279.25	50.89
297.86	47.22
316.47	43.43
335.09	39.54
353.00	35.56
372.31	31.51
390.93	27.40
409.54	23.22
428.15	18.97
446.77	14.65
480.45	6.91

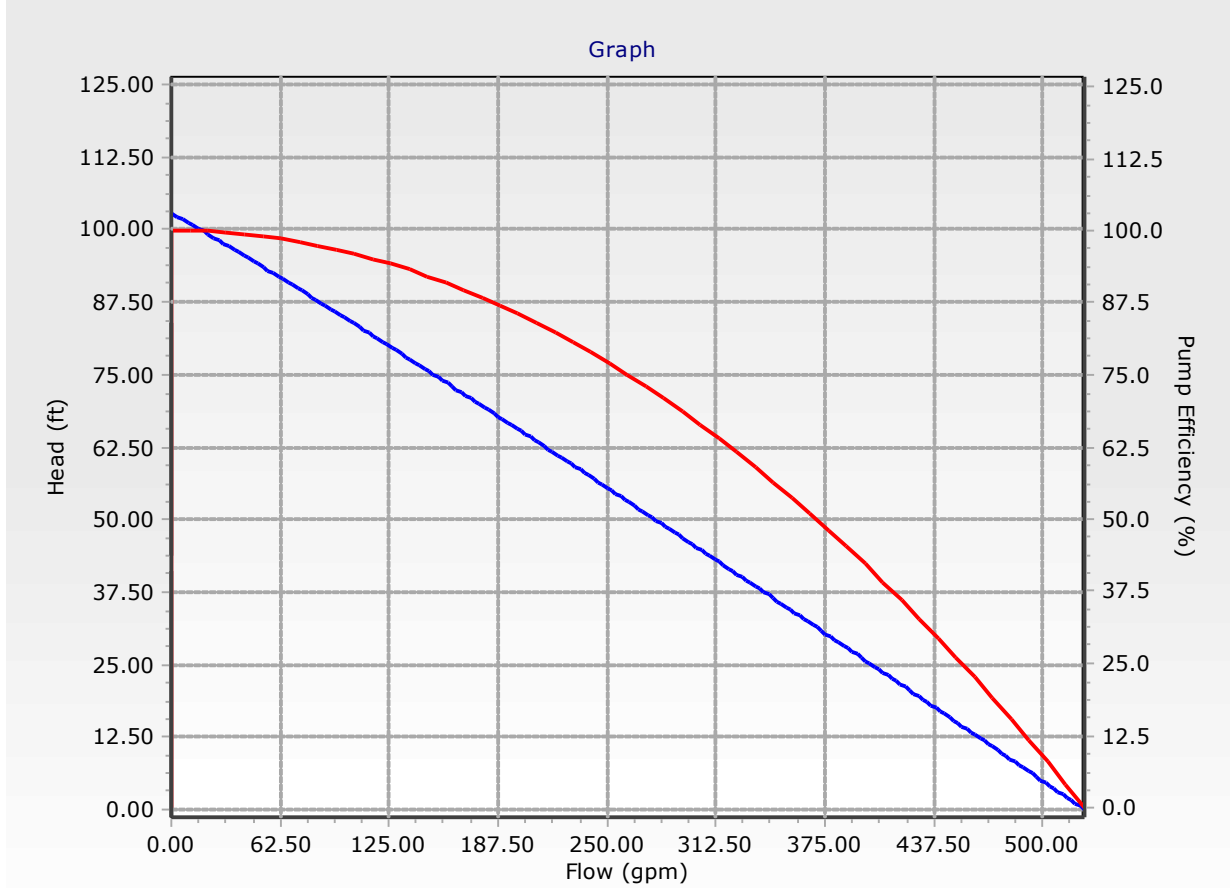
### Pump Efficiency Type

Pump Efficiency Type	Best Efficiency Point	Motor Efficiency	100.0 %
BEP Efficiency	100.0 %	Is Variable Speed Drive?	False
BEP Flow	0.00 gpm		

### Transient (Physical)

Inertia (Pump and Motor)	0.000 lb·ft <sup>2</sup>	Specific Speed	SI=25, US=1280
Speed (Full)	0 rpm	Reverse Spin Allowed?	True

## Pump Definition Detailed Report: TALICHET (MANIFOLD CONDITIONS)



## Pump Definition Detailed Report: TOWNHALL (MANIFOLD CONDITIONS)

### Element Details

ID	178	Notes
Label	TOWNHALL	

### Pump Curve

Flow (gpm)	Head (ft)
0.00	114.20
5.60	111.00
11.40	108.00
15.90	105.00
20.00	102.00
23.80	99.00
27.10	96.00
30.10	93.00
33.00	90.00
35.60	87.00
38.10	84.00
40.50	81.00
42.90	78.00
45.00	75.00
47.70	72.00
49.50	69.00
51.80	66.00

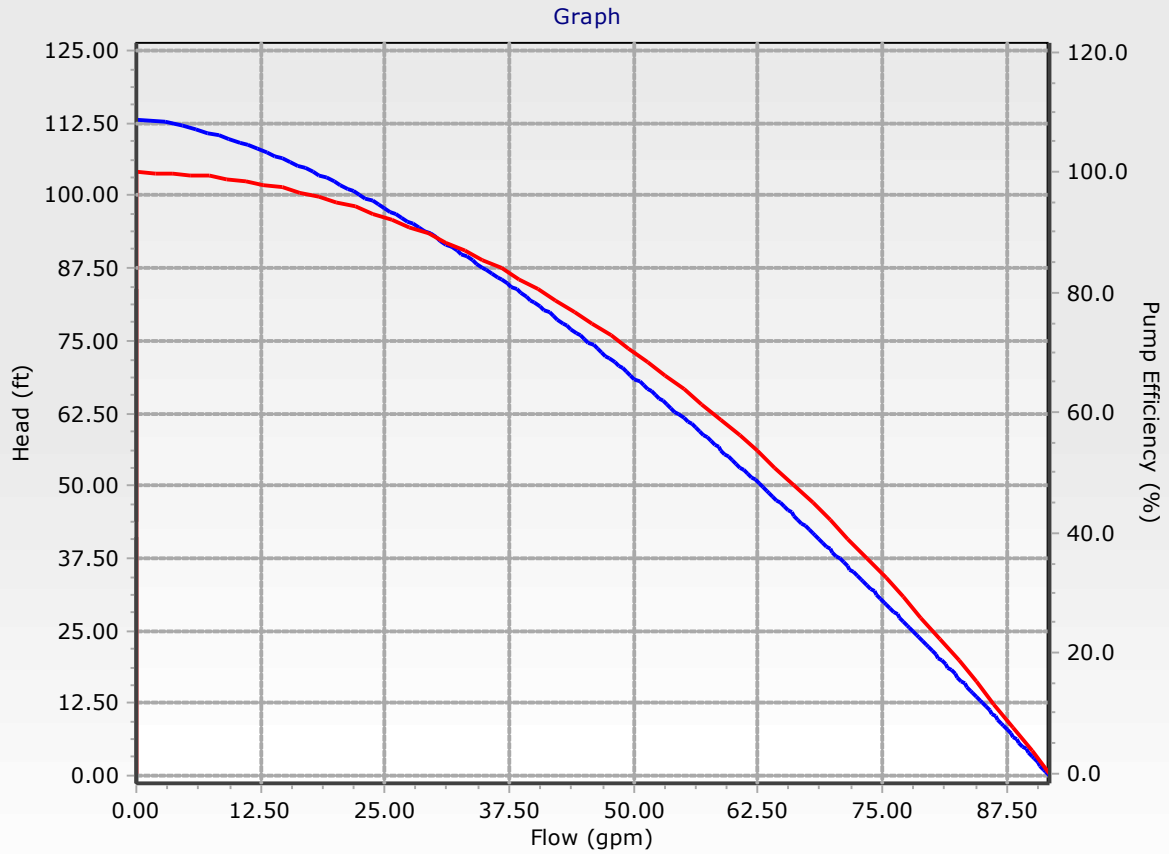
### Pump Efficiency Type

Pump Efficiency Type	Best Efficiency Point	Motor Efficiency	100.0 %
BEP Efficiency	100.0 %	Is Variable Speed Drive?	False
BEP Flow	0.00 gpm		

### Transient (Physical)

Inertia (Pump and Motor)	0.000 lb·ft <sup>2</sup>	Specific Speed	SI=25, US=1280
Speed (Full)	0 rpm	Reverse Spin Allowed?	True

## Pump Definition Detailed Report: TOWNHALL (MANIFOLD CONDITIONS)

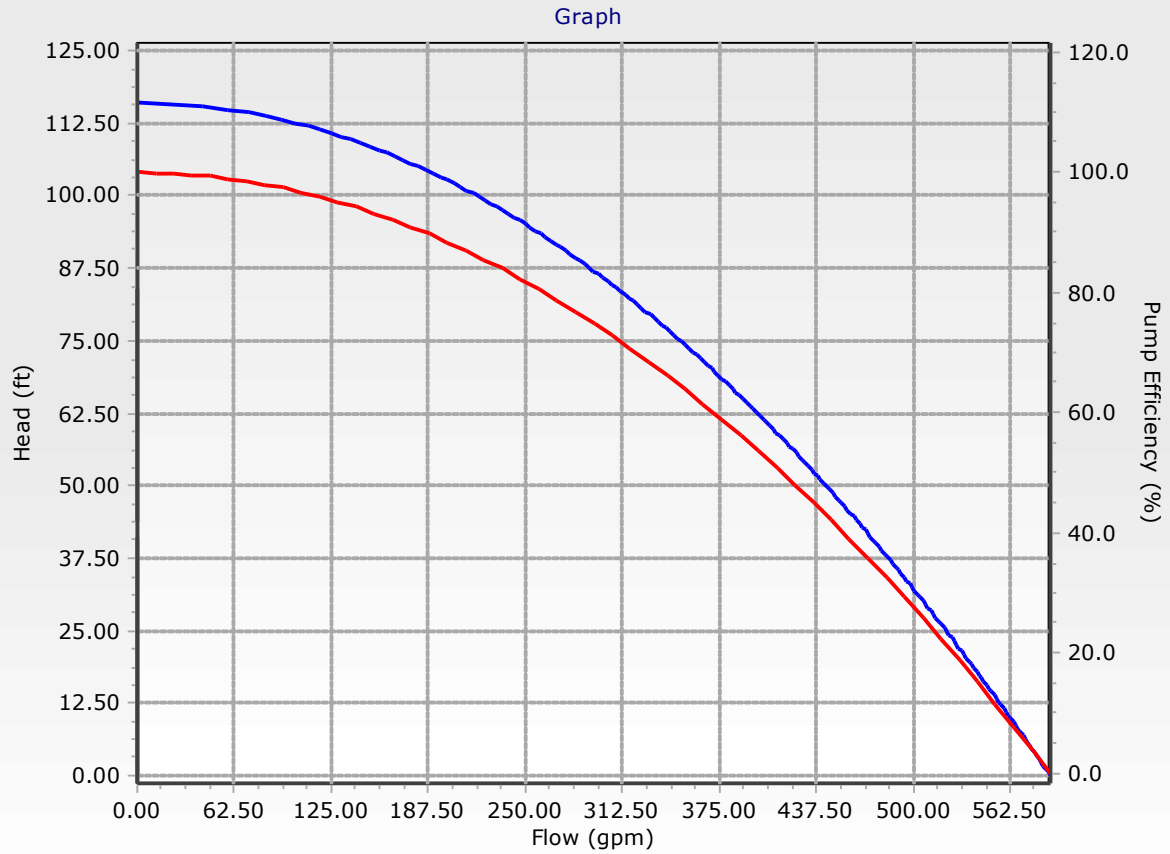




## Pump Definition Detailed Report: VENEZIA #1 (MANIFOLD CONDITIONS)

Element Details			
ID	59	Notes	
Label	VENEZIA #1		
Pump Definition Type			
Pump Definition Type	Design Point (1 Point)	Design Head	87.00 ft
Shutoff Flow	0.00 gpm	Maximum Operating Flow	0.00 gpm
Shutoff Head	0.00 ft	Maximum Operating Head	0.00 ft
Design Flow	294.00 gpm		
Pump Efficiency Type			
Pump Efficiency Type	Best Efficiency Point	Motor Efficiency	100.0 %
BEP Efficiency	100.0 %	Is Variable Speed Drive?	False
BEP Flow	0.00 gpm		
Transient (Physical)			
Inertia (Pump and Motor)	0.000 lb·ft²	Specific Speed	SI=25, US=1280
Speed (Full)	0 rpm	Reverse Spin Allowed?	True

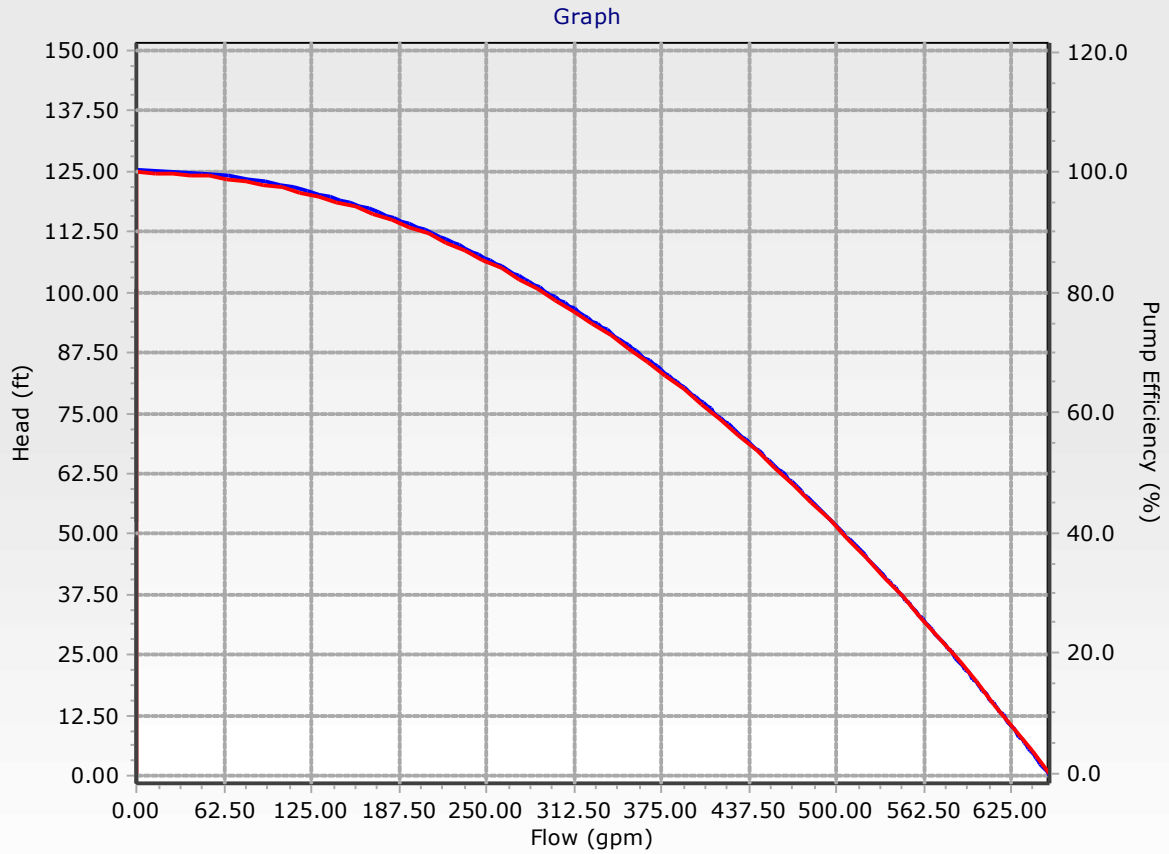
## Pump Definition Detailed Report: VENEZIA #1 (MANIFOLD CONDITIONS)



## Pump Definition Detailed Report: VENEZIA #2 (MANIFOLD CONDITIONS)

Element Details			
ID	163	Notes	
Label	VENEZIA #2		
Pump Definition Type			
Pump Definition Type	Design Point (1 Point)	Design Head	94.00 ft
Shutoff Flow	0.00 gpm	Maximum Operating Flow	0.00 gpm
Shutoff Head	0.00 ft	Maximum Operating Head	0.00 ft
Design Flow	326.00 gpm		
Pump Efficiency Type			
Pump Efficiency Type	Best Efficiency Point	Motor Efficiency	100.0 %
BEP Efficiency	100.0 %	Is Variable Speed Drive?	False
BEP Flow	0.00 gpm		
Transient (Physical)			
Inertia (Pump and Motor)	0.000 lb·ft²	Specific Speed	SI=25, US=1280
Speed (Full)	0 rpm	Reverse Spin Allowed?	True

## Pump Definition Detailed Report: VENEZIA #2 (MANIFOLD CONDITIONS)



## Pump Definition Detailed Report: Flygt Pump (MANIFOLD CONDITIONS)

### Element Details

ID	86	Notes
Label	Flygt Pump	

### Pump Curve

Flow (gpm)	Head (ft)
0.10	98.68
48.71	95.04
97.33	91.49
145.95	88.07
194.57	84.78
243.19	81.63
291.80	78.62
340.42	75.72
389.04	72.91
437.66	70.16
486.28	67.45
534.90	64.75
583.51	62.05
632.13	59.34
680.75	56.59
729.37	53.81
777.99	50.99
826.61	48.12
875.22	45.19
923.84	42.17
972.46	39.08
1,021.08	35.89
1,069.70	32.64
1,132.07	28.43

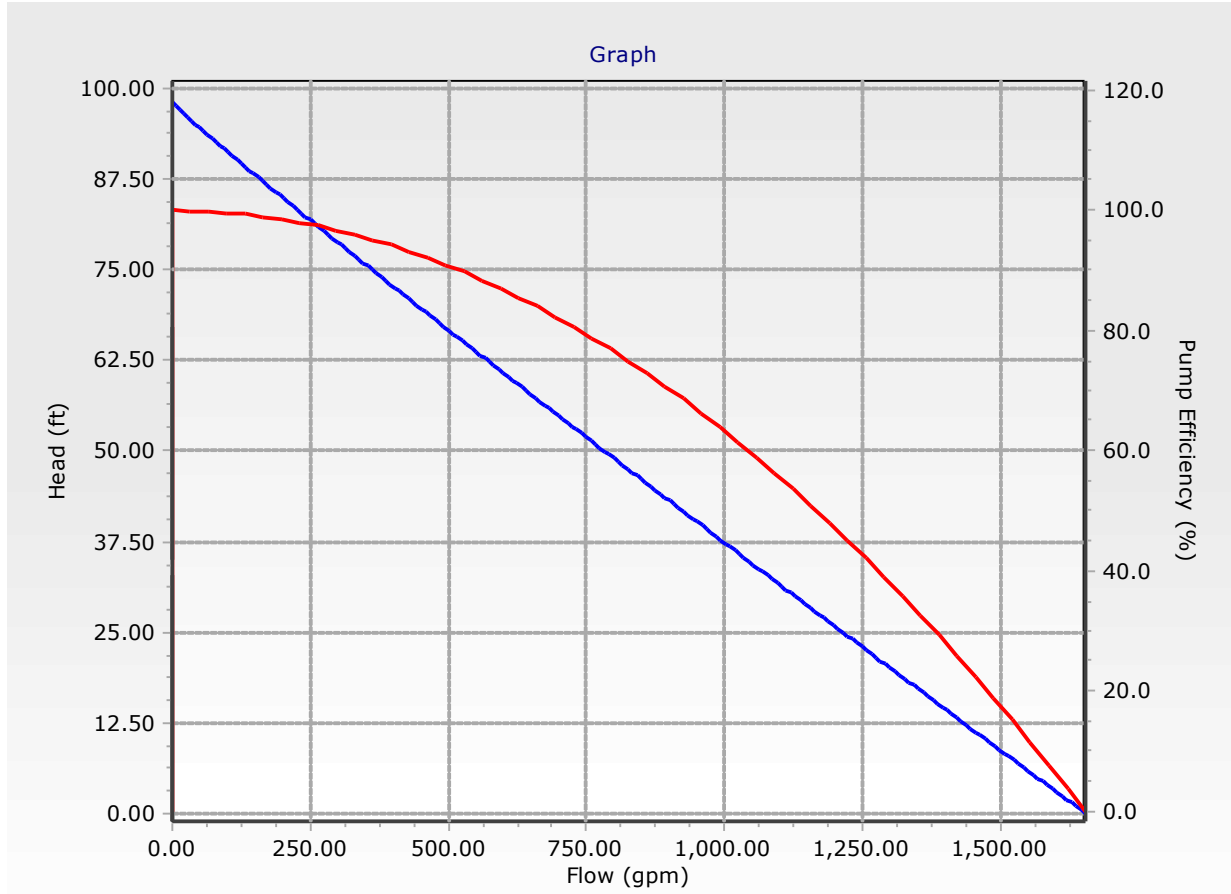
### Pump Efficiency Type

Pump Efficiency Type	Best Efficiency Point	Motor Efficiency	100.0 %
BEP Efficiency	100.0 %	Is Variable Speed Drive?	False
BEP Flow	0.00 gpm		

### Transient (Physical)

Inertia (Pump and Motor)	0.000 lb·ft <sup>2</sup>	Specific Speed	SI=25, US=1280
Speed (Full)	0 rpm	Reverse Spin Allowed?	True

## Pump Definition Detailed Report: Flygt Pump (MANIFOLD CONDITIONS)



**FlexTable: Reservoir Table (MANIFOLD CONDITIONS)**

Label	Elevation (ft)	Flow (Out net) (gpm)
R-1	65.00	209.09
R-2	55.50	236.19
R-3	58.60	60.40
R-4	73.50	28.29
R-5	62.50	155.78
R-6	93.00	-1,111.08
R-7	65.40	421.33

## System Head Curve Detailed Report - System Head Curve - 1 (MANIFOLD CONDITIONS)

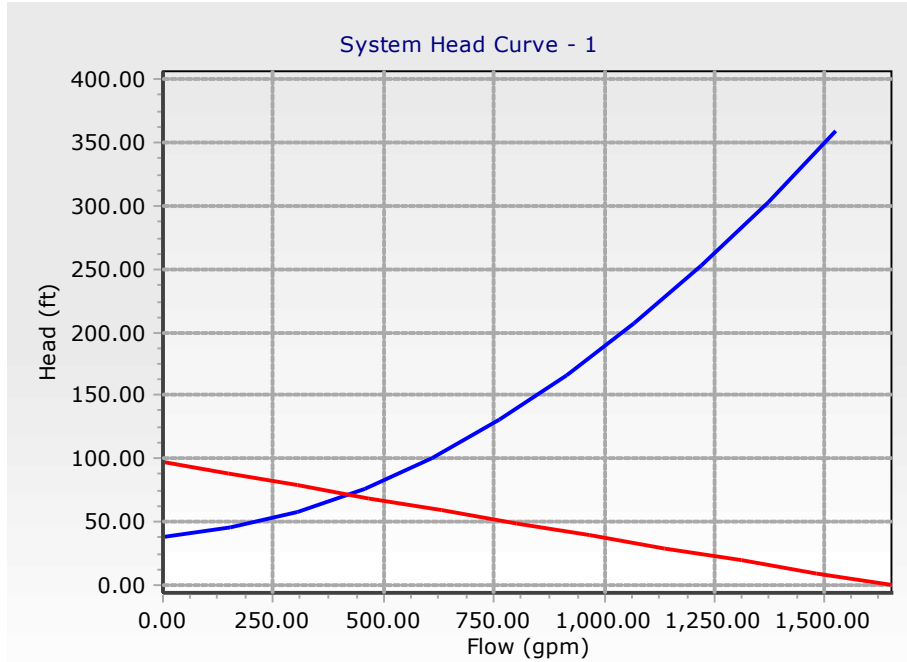
Element Details			
Label	System Head Curve - 1	Number of Intervals	10
Pump	LIFT STATION #1	Specify vertical axis limits	False
Maximum Flow	1,523.97 gpm		

Time (hours)
0.000

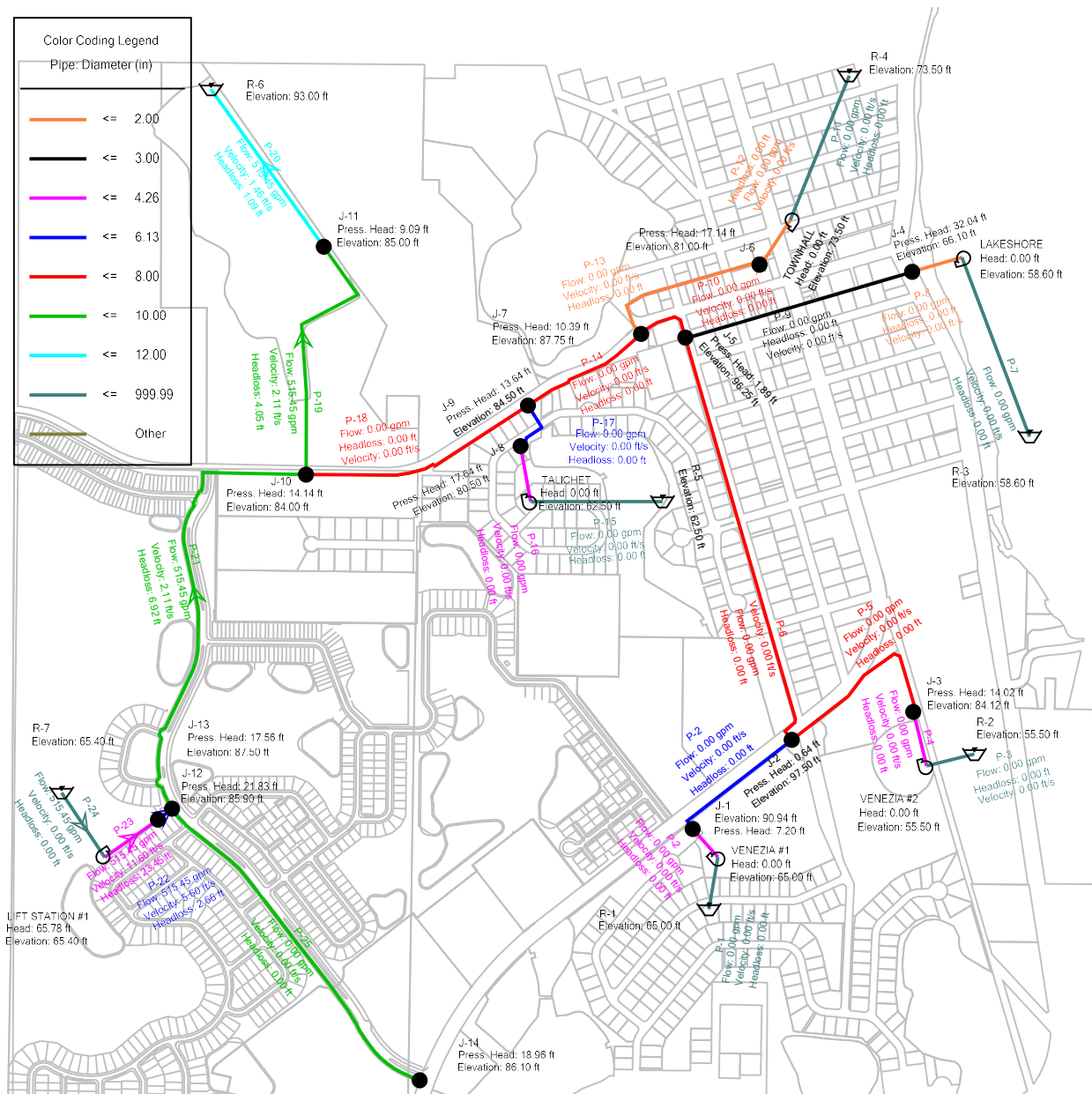
System Head Curve @ 0.000 hours Flow (gpm)	System Head Curve @ 0.000 hours Head (ft)	Flygt Pump Flow (gpm)	Flygt Pump Head (ft)
0.00	38.24	1,654.66	0.00
152.40	44.89	1,481.54	9.80
304.79	57.70	1,309.36	19.60
457.19	76.31	1,138.23	29.41
609.59	100.58	968.29	39.21
761.99	130.38	799.75	49.01
914.38	165.63	632.85	58.81
1,066.78	206.24	468.00	68.62
1,219.18	252.13	305.88	78.42
1,371.57	303.23	147.84	88.22
1,523.97	359.46	0.00	98.02



## System Head Curve Detailed Report - System Head Curve - 1 (MANIFOLD CONDITIONS)



### Scenario: Base (RUNOUT CONDITIONS)



### FlexTable: Junction Table (RUNOUT CONDITIONS)

Label	Demand (gpm)	Elevation (ft)	Pressure (psi)	Pressure Head (ft)
J-1	0.00	90.94	3.1	7.20
J-2	0.00	97.50	0.3	0.64
J-3	0.00	84.12	6.1	14.02
J-4	0.00	66.10	13.9	32.04
J-5	0.00	96.25	0.8	1.89
J-6	0.00	81.00	7.4	17.14
J-7	0.00	87.75	4.5	10.39
J-8	0.00	80.50	7.6	17.64
J-9	0.00	84.50	5.9	13.64
J-10	0.00	84.00	6.1	14.14
J-11	0.00	85.00	3.9	9.09
J-12	0.00	85.90	9.4	21.83
J-13	0.00	87.50	7.6	17.56
J-14	0.00	86.10	8.2	18.96

**FlexTable: Pipe Table (RUNOUT CONDITIONS)**

Label	Diameter (in)	Length (User Defined) (ft)	Length (ft)	Material	Hazen- Williams C	Minor Loss Coefficient (Unified)	Flow (gpm)	Velocity (ft/s)	Headloss (Friction) (ft)	Headloss (Minor) (ft)	Headloss (ft)
P-1	999.00	1	1	PVC	120.0	0.000	0.00	0.00	0.00	0.00	0.00
P-2	4.00	28	28	PVC	120.0	9.430	0.00	0.00	0.00	0.00	0.00
P-2	6.00	0	927	PVC	110.0	2.580	0.00	0.00	0.00	0.00	0.00
P-3	999.00	1	1	PVC	120.0	0.000	0.00	0.00	0.00	0.00	0.00
P-4	4.00	28	28	PVC	120.0	9.430	0.00	0.00	0.00	0.00	0.00
P-5	8.00	0	1,310	PVC	120.0	3.770	0.00	0.00	0.00	0.00	0.00
P-6	8.00	0	2,771	PVC	120.0	9.340	0.00	0.00	0.00	0.00	0.00
P-7	999.00	1	1	PVC	120.0	0.000	0.00	0.00	0.00	0.00	0.00
P-8	2.00	28	28	PVC	120.0	9.430	0.00	0.00	0.00	0.00	0.00
P-9	3.00	0	1,548	PVC	120.0	4.170	0.00	0.00	0.00	0.00	0.00
P-10	8.00	0	411	PVC	120.0	1.190	0.00	0.00	0.00	0.00	0.00
P-11	999.00	1	1	PVC	120.0	0.000	0.00	0.00	0.00	0.00	0.00
P-12	2.00	18	18	PVC	120.0	7.270	0.00	0.00	0.00	0.00	0.00
P-13	2.00	0	1,132	HDPE	120.0	0.000	0.00	0.00	0.00	0.00	0.00
P-14	8.00	0	884	PVC	120.0	2.580	0.00	0.00	0.00	0.00	0.00
P-15	999.00	1	1	PVC	120.0	0.000	0.00	0.00	0.00	0.00	0.00
P-16	4.00	28	28	PVC	120.0	9.430	0.00	0.00	0.00	0.00	0.00
P-17	6.00	0	362	PVC	120.0	1.190	0.00	0.00	0.00	0.00	0.00
P-18	8.00	0	1,578	PVC	120.0	4.170	0.00	0.00	0.00	0.00	0.00
P-19	10.00	0	1,779	PVC	120.0	4.770	515.45	2.11	3.73	0.33	4.05
P-20	12.00	0	1,262	PVC	120.0	0.000	515.45	1.46	1.09	0.00	1.09
P-21	10.00	0	3,027	PVC	120.0	8.490	515.45	2.11	6.34	0.58	6.92
P-22	6.13	0	117	PVC	120.0	0.000	515.45	5.60	2.66	0.00	2.66
P-23	4.26	28	28	PVC	120.0	9.430	515.45	11.60	3.72	19.73	23.45
P-24	999.00	1	1	PVC	120.0	0.000	515.45	0.00	0.00	0.00	0.00
P-25	10.00	0	2,429	PVC	120.0	3.900	0.00	0.00	0.00	0.00	0.00

## Pump Definition Detailed Report: Flygt Pump (RUNOUT CONDITIONS)

### Element Details

ID	86	Notes
Label	Flygt Pump	

### Pump Curve

Flow (gpm)	Head (ft)
0.10	98.68
48.71	95.04
97.33	91.49
145.95	88.07
194.57	84.78
243.19	81.63
291.80	78.62
340.42	75.72
389.04	72.91
437.66	70.16
486.28	67.45
534.90	64.75
583.51	62.05
632.13	59.34
680.75	56.59
729.37	53.81
777.99	50.99
826.61	48.12
875.22	45.19
923.84	42.17
972.46	39.08
1,021.08	35.89
1,069.70	32.64
1,132.07	28.43

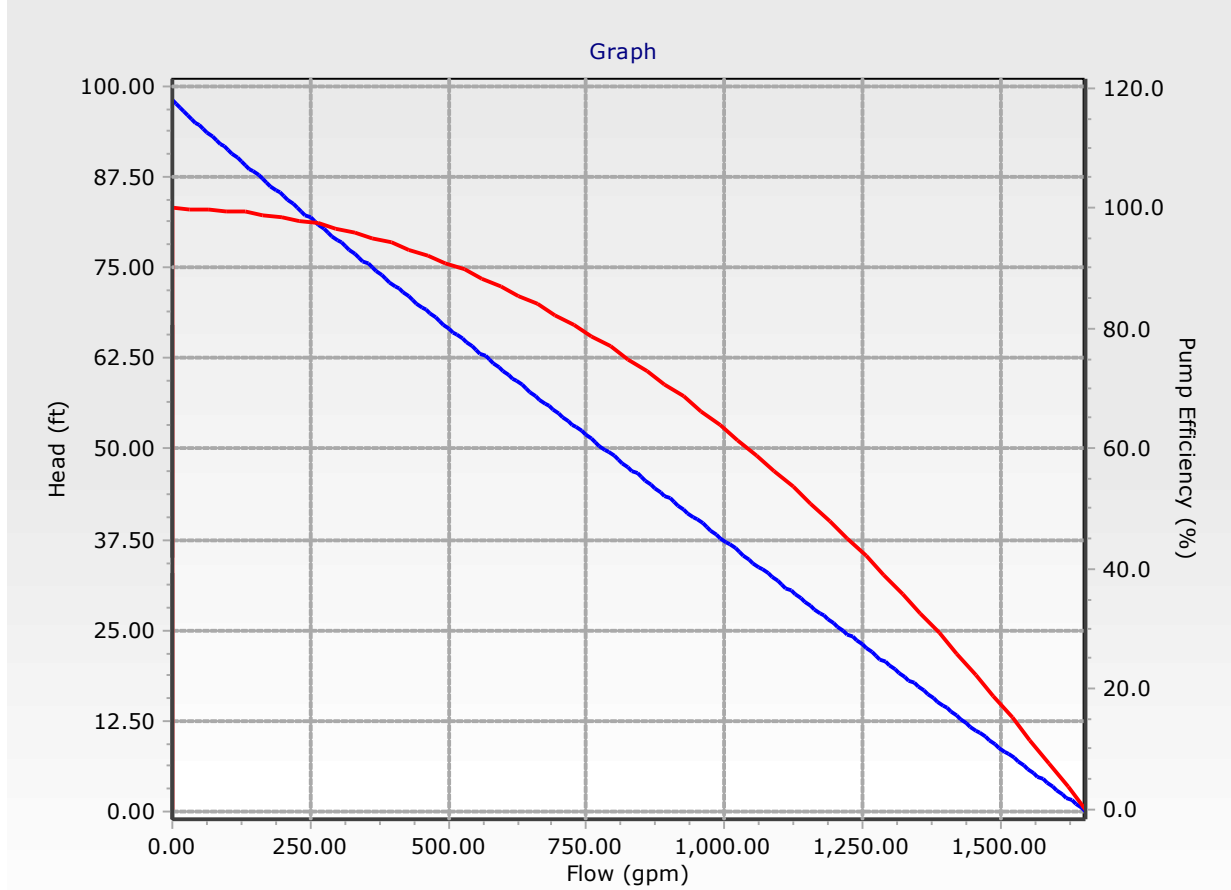
### Pump Efficiency Type

Pump Efficiency Type	Best Efficiency Point	Motor Efficiency	100.0 %
BEP Efficiency	100.0 %	Is Variable Speed Drive?	False
BEP Flow	0.00 gpm		

### Transient (Physical)

Inertia (Pump and Motor)	0.000 lb·ft <sup>2</sup>	Specific Speed	SI=25, US=1280
Speed (Full)	0 rpm	Reverse Spin Allowed?	True

## Pump Definition Detailed Report: Flygt Pump (RUNOUT CONDITIONS)



**FlexTable: Pump Table (RUNOUT CONDITIONS)**

Label	Pump Definition	Elevation (ft)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
LAKESHORE	LAKESHORE	58.60	58.60	98.14	0.00	0.00
LIFT STATION #1	Flygt Pump	65.40	65.40	131.18	515.45	65.78
TALICHET	TALICHET	62.50	62.50	98.14	0.00	0.00
TOWNHALL	TOWNHALL	73.50	73.50	98.14	0.00	0.00
VENEZIA #1	VENEZIA #1	65.00	65.00	98.14	0.00	0.00
VENEZIA #2	VENEZIA #2	55.50	55.50	98.14	0.00	0.00

**FlexTable: Reservoir Table (RUNOUT CONDITIONS)**

Label	Elevation (ft)	Flow (Out net) (gpm)
R-1	65.00	0.00
R-2	55.50	0.00
R-3	58.60	0.00
R-4	73.50	0.00
R-5	62.50	0.00
R-6	93.00	-515.45
R-7	65.40	515.45



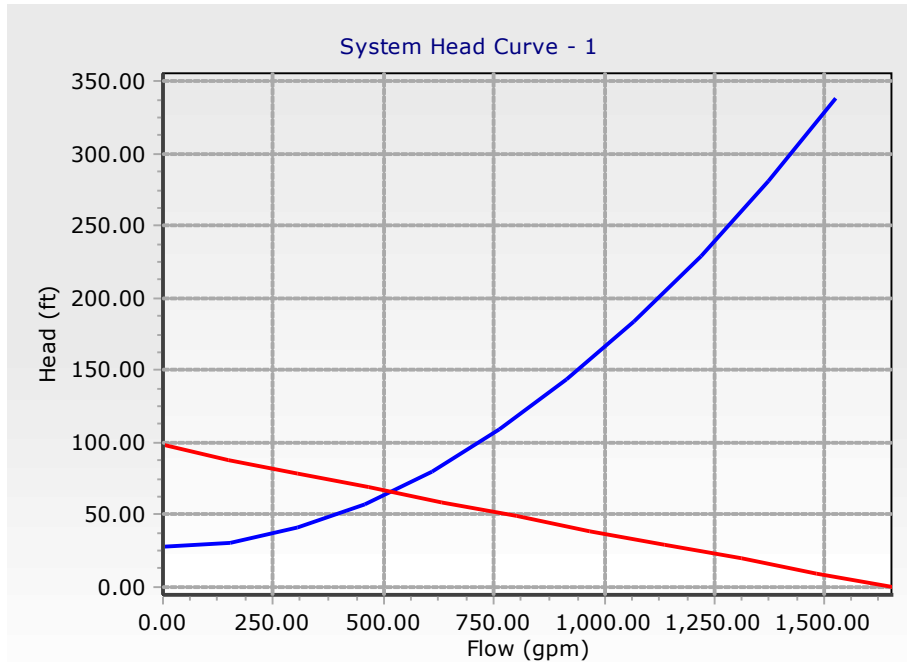
## System Head Curve Detailed Report - System Head Curve - 1 (RUNOUT CONDITIONS)

Element Details			
Label	System Head Curve - 1	Number of Intervals	10
Pump	LIFT STATION #1	Specify vertical axis limits	False
Maximum Flow	1,523.97 gpm		

Time (hours)
0.000

System Head Curve @ 0.000 hours Flow (gpm)	System Head Curve @ 0.000 hours Head (ft)	Flygt Pump Flow (gpm)	Flygt Pump Head (ft)
0.00	27.60	1,654.66	0.00
152.40	31.24	1,481.54	9.80
304.79	41.45	1,309.36	19.60
457.19	57.89	1,138.23	29.41
609.59	80.40	968.29	39.21
761.99	108.88	799.75	49.01
914.38	143.26	632.85	58.81
1,066.78	183.47	468.00	68.62
1,219.18	229.46	305.88	78.42
1,371.57	281.18	147.84	88.22
1,523.97	338.61	0.00	98.02

## System Head Curve Detailed Report - System Head Curve - 1 (RUNOUT CONDITIONS)



## SUMMARY OF REQUIRED VS MODELED FLOWS

### Connelly & Wicker, Inc.

Project Name: HILLSIDE GROVE

Project No: 21-04-0008

Date: October 6, 2022

### COMPUTATION OF EXISTING SYSTEM FLOWS

Talichet Pump Station	Quantity	ADF	Unit	ADF (GPD)	ADF (GPM)	Peaking Factor	Peak Flow (GPM)
Single Family Residential	93	300	/ Unit	27900	19.4	3.72	72.1
* Data taken from Construction Plans for Venezia North Subdivision obtained from the SJRWMD							

### SUMMARY OF EXISTING PUMP STATION REQUIRED VS MODELED FLOWS

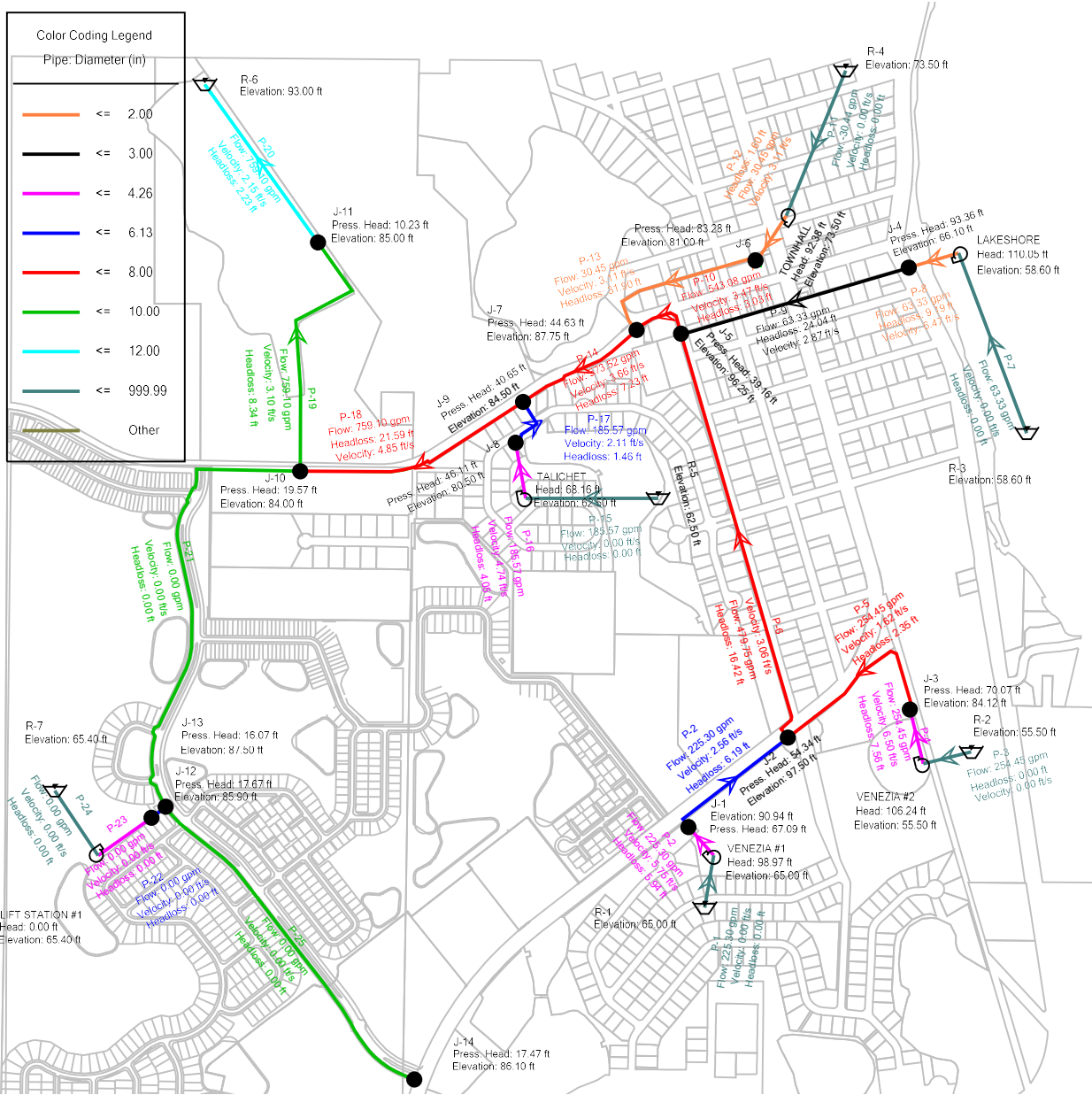
Pump Station Name	Required Peak Flow (GPM)	Peak Flow at Manifold Condition per Watercad Modeling (GPM)
Venezia Pump Station #1	133	209
* Data taken from Howey-In-The-Hills Wastewater Master Plan dated October 2018		
Venezia Pump Station #2	204	236
* Data taken from Howey-In-The-Hills Wastewater Master Plan dated October 2018		
Talichet Pump Station	72	156
* Data calculated above		
Lakeshore Pump Station	59	60
* Data taken Pump Station Engineering Plan provided by Griffey Engineering, Inc.		
Townhall Pump Station	26	28
* Data taken Pump Station Engineering Plan provided by Griffey Engineering, Inc.		

### HILLSIDE GROVE PUMP STATION REQUIRED VS PROVIDED FLOWS

Pump Station Name	Required Peak Flow (GPM)	Flow at Manifold Condition per Watercad Modeling (GPM)	Flow at Runout Condition per Watercad Modeling (GPM)
Pump Station #1	400	421	515

# APPENDIX

## Scenario: Base (EXISTING NETWORK CONDITIONS)



**FlexTable: Pump Table (EXISTING NETWORK CONDITIONS)**

Label	Pump Definition	Elevation (ft)	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
LAKESHORE	LAKESHORE	58.60	58.60	168.65	63.33	110.05
LIFT STATION #1	Flygt Pump	65.40	65.40	103.57	0.00	0.00
TALICHET	TALICHET	62.50	62.50	130.66	185.57	68.16
TOWNHALL	TOWNHALL	73.50	73.50	165.88	30.45	92.38
VENEZIA #1	VENEZIA #1	65.00	65.00	163.97	225.30	98.97
VENEZIA #2	VENEZIA #2	55.50	55.50	161.74	254.45	106.24

# NP 3153 HT 3~ 456

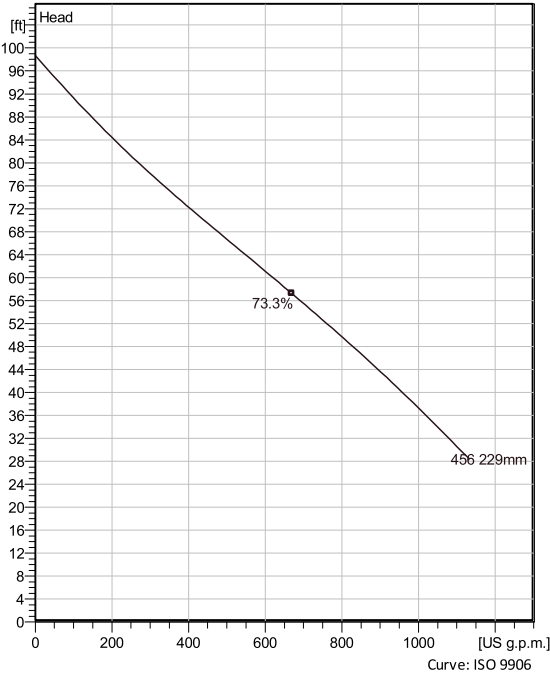
Patented self cleaning semi-open channel impeller, ideal for pumping in waste water applications. Modular based design with high adaptation grade.



## Technical specification



Curves according to: Water, pure Water, pure [100%], 39.2 °F, 62.43 lb/ft³, 1.6888E-5 ft²/s



## Configuration

<b>Motor number</b>	<b>Installation type</b>
N3153.660 21-15-4AA-W 15hp	P - Semi permanent, Wet
<b>Impeller diameter</b>	<b>Discharge diameter</b>
229 mm	4 inch

## Pump information

<b>Impeller diameter</b>
229 mm
<b>Discharge diameter</b>
4 inch
<b>Inlet diameter</b>
150 mm
<b>Maximum operating speed</b>
1755 rpm
<b>Number of blades</b>
2
<b>Max. fluid temperature</b>
40 °C

## Materials

<b>Impeller</b>
Stainless steel

<b>Project</b>	<b>Created by</b>	Garrett Queener
<b>Block</b>	<b>Created on</b>	10/7/2022
0	<b>Last update</b>	10/7/2022

## NP 3153 HT 3~ 456

### Technical specification



#### Motor - General

<b>Motor number</b> N3153.660 21-15-4AA-W 15hp	<b>Phases</b> 3~	<b>Rated speed</b> 1755 rpm	<b>Rated power</b> 15 hp
<b>ATEX approved</b> No	<b>Number of poles</b> 4	<b>Rated current</b> 39 A	<b>Stator variant</b> 5
<b>Frequency</b> 60 Hz	<b>Rated voltage</b> 230 V	<b>Insulation class</b> H	<b>Type of Duty</b> S1
<b>Version code</b> 660			

#### Motor - Technical

<b>Power factor - 1/1 Load</b> 0.82	<b>Motor efficiency - 1/1 Load</b> 87.8 %	<b>Total moment of inertia</b> 1.76 lb ft <sup>2</sup>	<b>Starts per hour max.</b> 30
<b>Power factor - 3/4 Load</b> 0.77	<b>Motor efficiency - 3/4 Load</b> 88.7 %	<b>Starting current, direct starting</b> 228 A	
<b>Power factor - 1/2 Load</b> 0.65	<b>Motor efficiency - 1/2 Load</b> 88.3 %	<b>Starting current, star-delta</b> 76 A	

Project

Block 0

Created by

Garrett Queener

Created on

10/7/2022

Last update

10/7/2022



# NP 3153 HT 3~ 456

## Performance curve

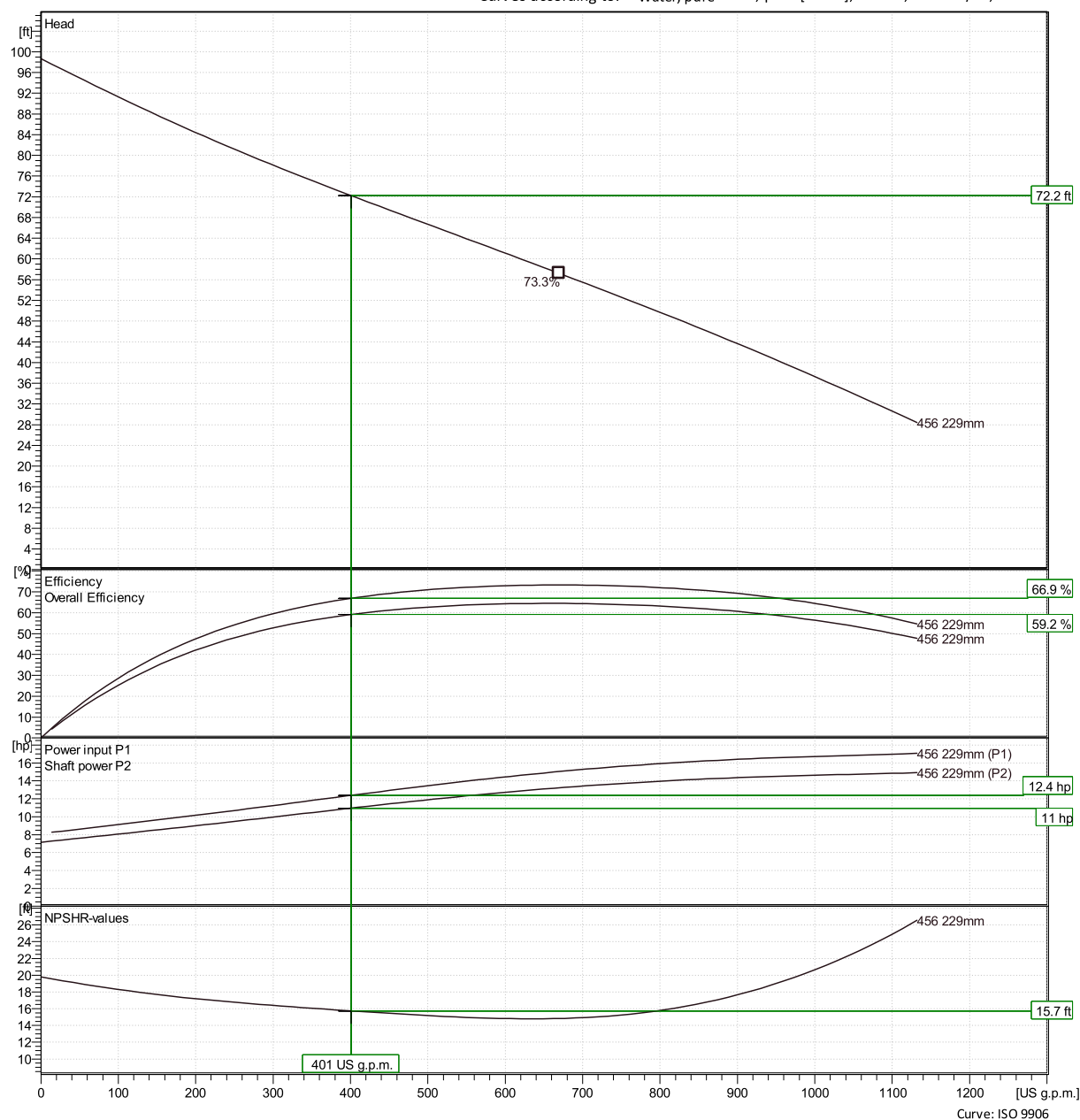


### Duty point

**Flow**  
401 US g.p.m.

**Head**  
72.2 ft

Curves according to: Water, pure Water, pure [100%], 39.2 °F, 62.43 lb/ft³, 1.6888E-5 ft²/s



0

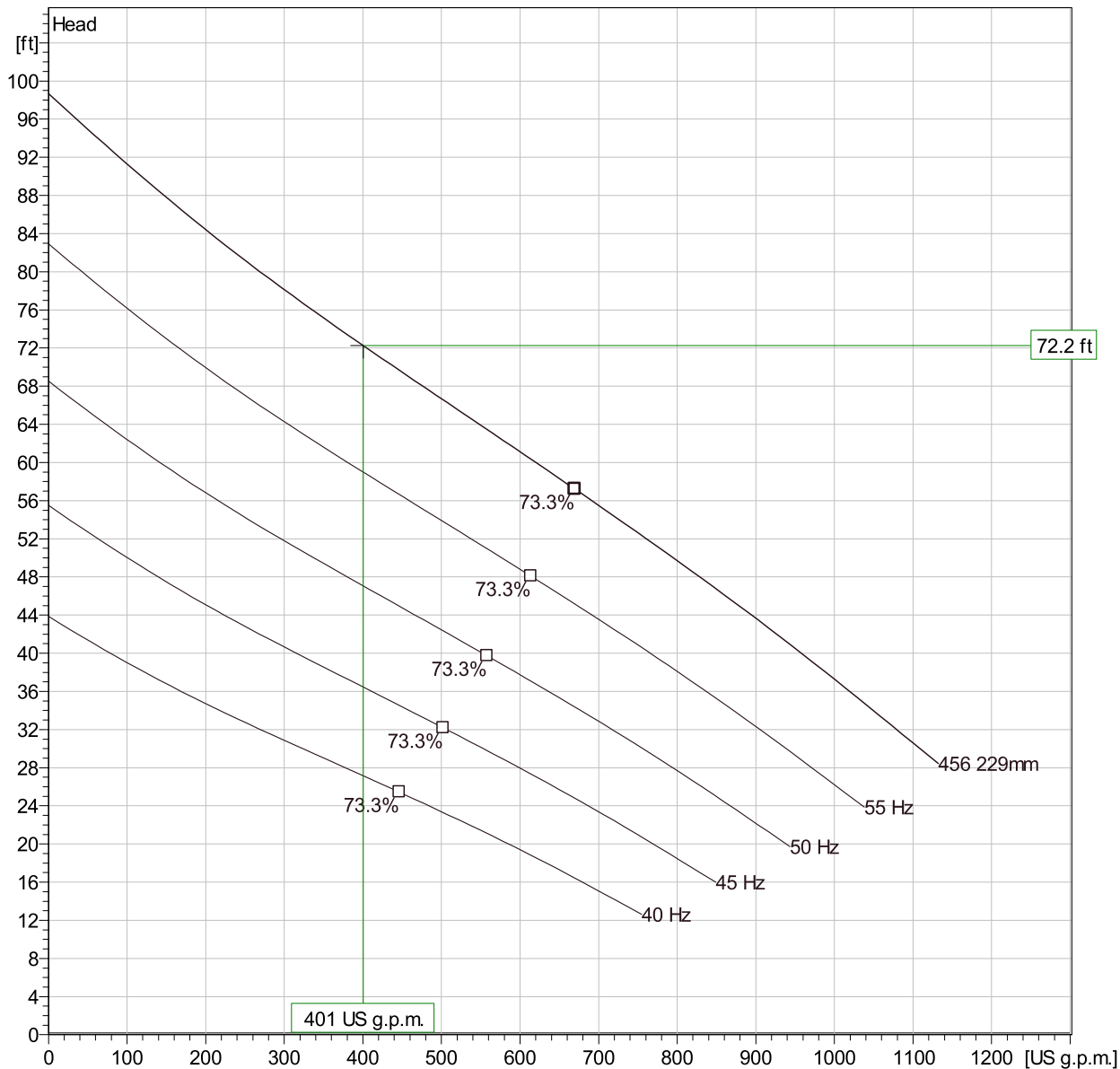
Garrett Queener  
Created on 10/7/2022 Last update 10/7/2022

# NP 3153 HT 3~ 456

## Duty Analysis



Curves according to: Water, pure [100%] ; 39.2°F; 62.43lb/ft³; 1.6888E-5ft²/s



### Operating characteristics

Pumps / Systems	Flow US g.p.m.	Head ft	Shaft power hp	Flow US g.p.m.	Head ft	Shaft power hp	Hydr.eff.	Spec. Energy kWh/US MG	NPSHre ft
1	401	72.2	11	401	72.2	11	66.9 %	384	15.7

Project

Created by

Garrett Queener

Block

Created on

10/7/2022

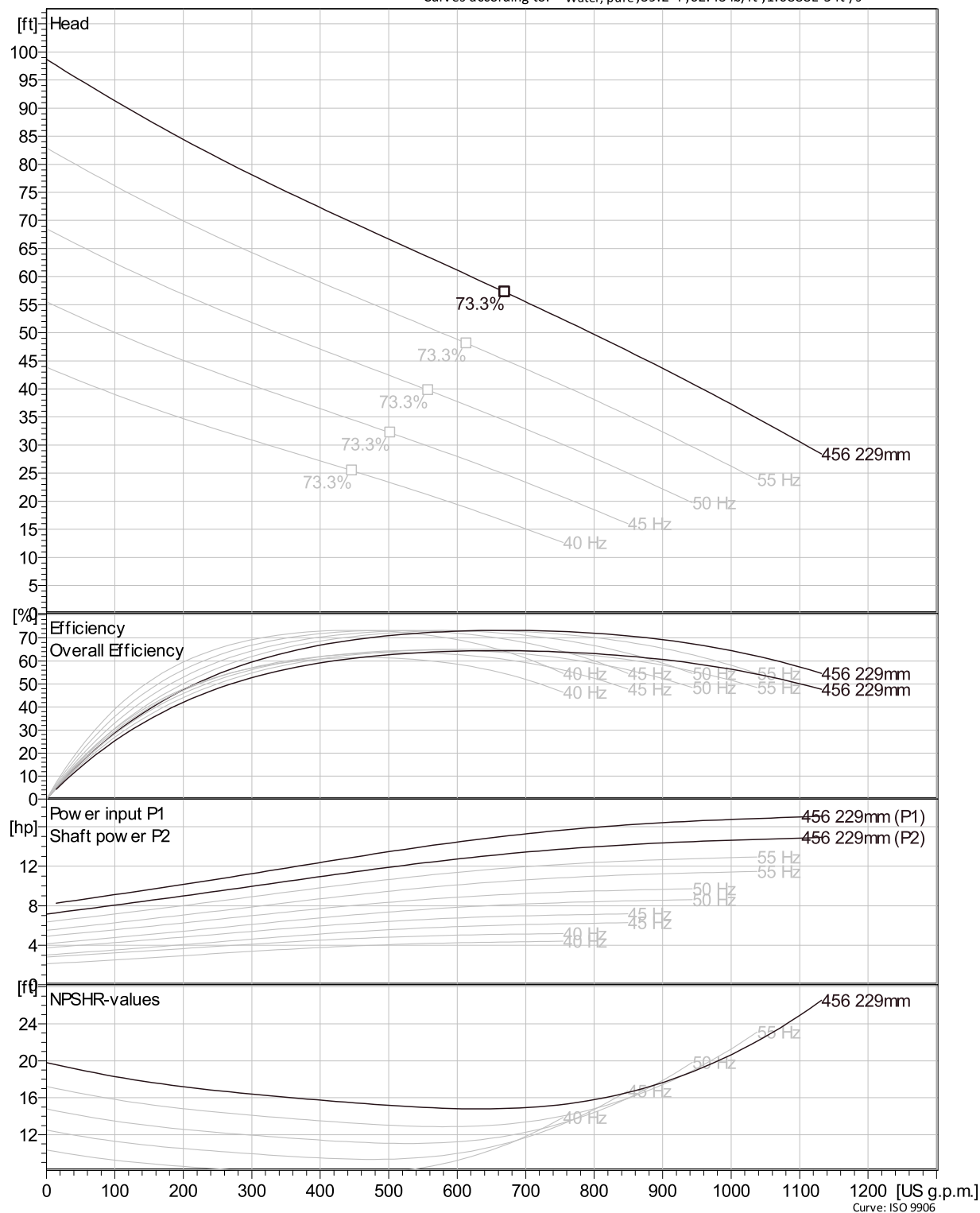
Last update

10/7/2022

### VFD Curve



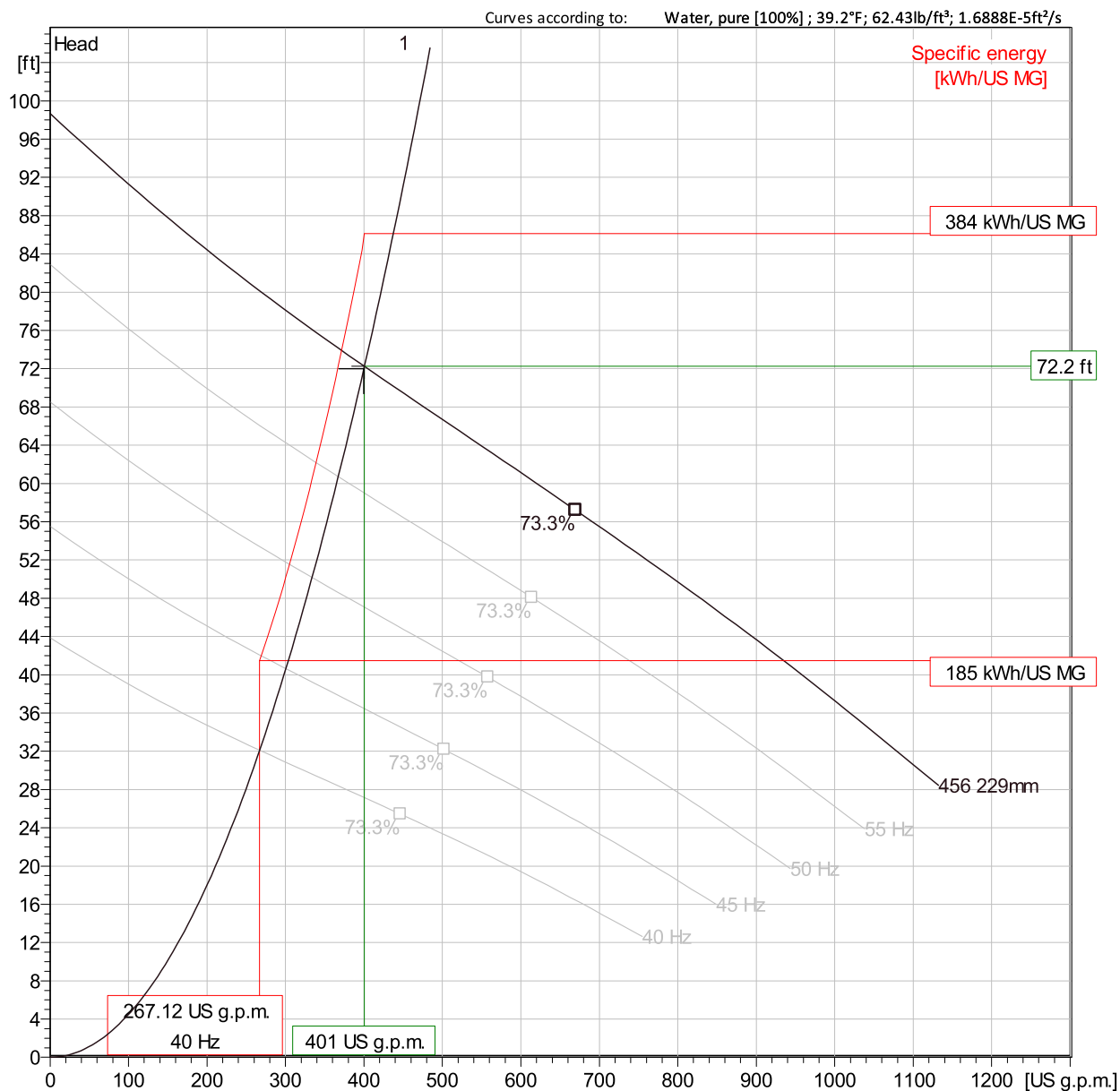
Curves according to: Water, pure, 39.2 °F, 62.43 lb/ft<sup>3</sup>, 1.6888E-5 ft<sup>2</sup>/s



Project		Created by	Garrett Queener	
Block	0	Created on	10/7/2022	Last update 10/7/2022

# NP 3153 HT 3~ 456

## VFD Analysis



### Operating Characteristics

Pumps / Systems	Frequency	Flow	Head	Shaft power	Flow	Head	Shaft power	Hydr. eff.	Specific energy	NPSH <sub>re</sub>
		US g.p.m.	ft	hp	US g.p.m.	ft	hp		kWh/US MG	
1	60 Hz	401	72.2	11	401	72.2	11	66.9 %	384	15.7
1	55 Hz	367	60.7	8.44	367	60.7	8.44	66.9 %	322	13.7
1	50 Hz	334	50.2	6.34	334	50.2	6.34	66.9 %	269	11.8
1	45 Hz	301	40.6	4.62	301	40.6	4.62	66.9 %	224	9.93

Project

Block 0

Created by

Garrett Queener

Created on

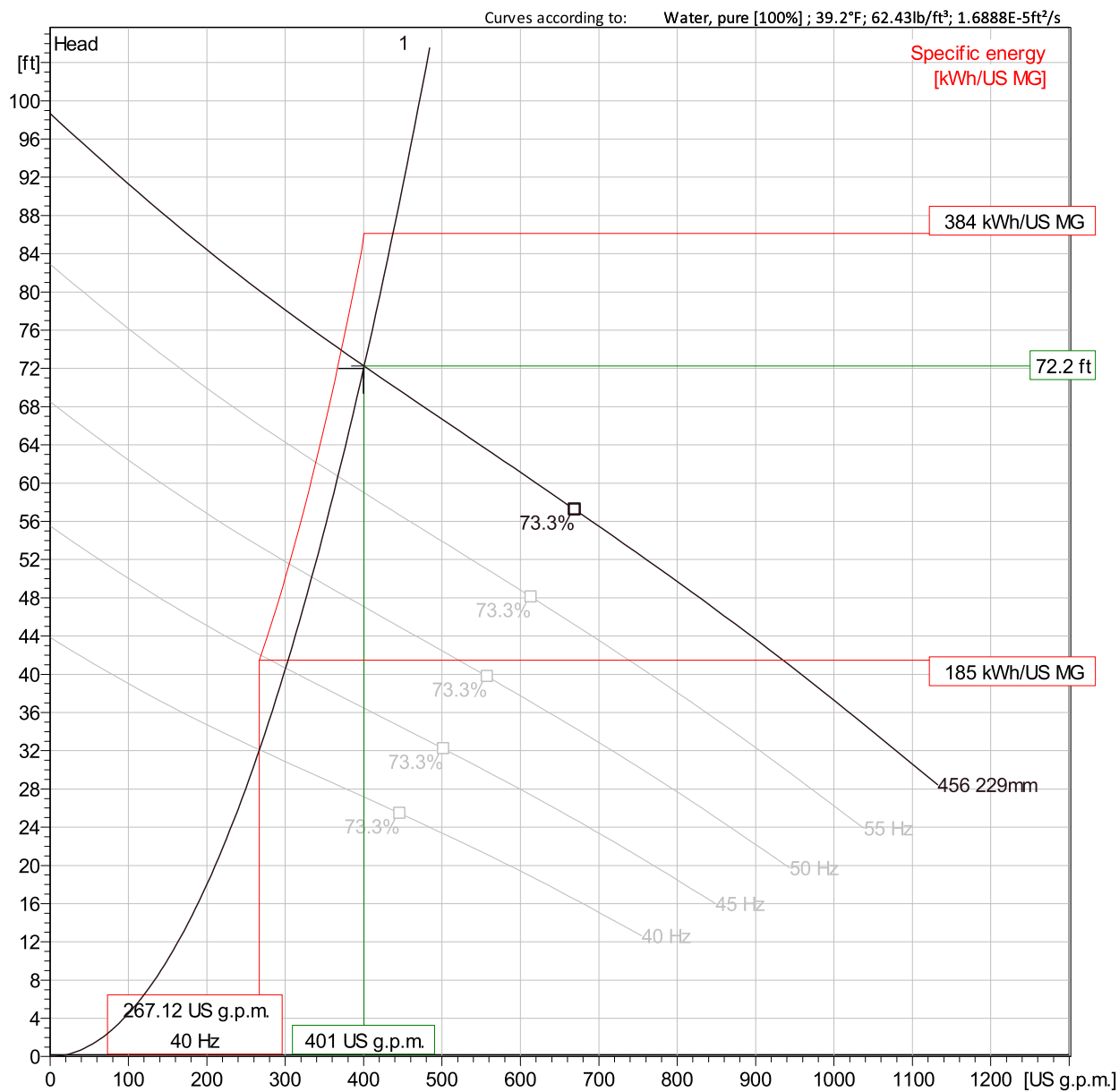
10/7/2022

Last update

10/7/2022

# NP 3153 HT 3~ 456

## VFD Analysis



### Operating Characteristics

Pumps / Systems	Frequency	Flow US g.p.m.	Head ft	Shaft power hp	Flow US g.p.m.	Head ft	Shaft power hp	Hydr. eff.	Specific energy kWh/US MG	NPSHre ft
1	40 Hz	267	32.1	3.25	267	32.1	3.25	66.9 %	185	8.23

Project

Block 0

Created by

Garrett Queener

Created on

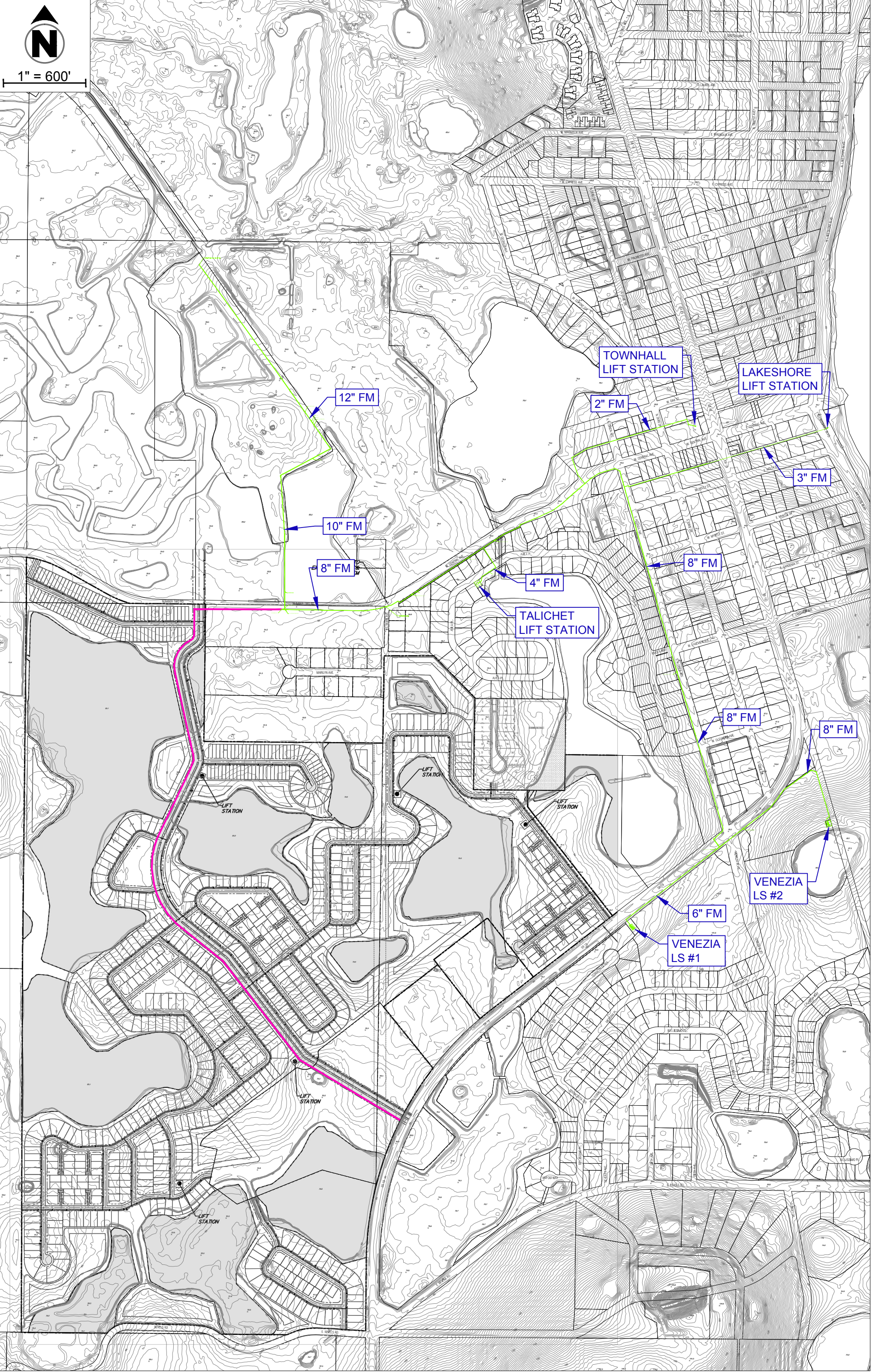
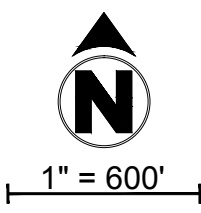
10/7/2022

Last update

10/7/2022









# WASTEWATER MASTER PLAN

## Town of Howey in the Hills Public Wastewater System

Prepared For:



Prepared By:



October 2018



# APPENDIX C

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## Venezia's Existing Lift Station Calculations

## LIFT STATION CALCULATIONS

## Venezia Lift Station #1

## I. Design Flow Rates:

Parcel ID	Land Use Description	Unit Description	Units	Unit Flow (GPD/Unit)	Average Daily Flow (GPD)	Average Daily Flow (GPM)	Minimum Daily Flow (GPM)	Maximum Daily Flow (GPM)	Peak Daily Flow (GPM)
1	Residential - SF (detached)	dwelling unit	94	300	28,200	20	10	39	78
2	Commercial - Shopping Center	square feet	70,000	0.1	7,000	5	2	10	19
3	Commercial - Shopping Center - Deli	square feet	500	0.4	200	0.1	0.1	0.3	0.6
4	Commercial - Shopping Center - Bakery	square feet	500	0.4	200	0.1	0.1	0.3	0.6
5	Commercial - Shopping Center - Meat	square feet	500	0.75	375	0.3	0.1	0.5	1.0
6	Commercial - Restaurant <16 hrs	seat	300	40	12,000	8	4	17	33
7					0	0	0	0	0
8					0	0	0	0	0
9					0	0	0	0	0
10					0	0	0	0	0
Total					47,975	33	17	67	133
Design Peaking Factors:							F <sub>min</sub>	F <sub>max</sub>	F <sub>peak</sub>
							0.5	2.0	4.0

## II. Wet Well Dimensions:

<u>Wet Well Configuration:</u>		<b>Duplex</b>
No. of Wet Wells:		<b>1</b>
Layout:		<b>Circular</b>
Inner Diameter =	8.00	feet
Volume =	376	gallons/foot
<b>Total Volume =</b>	<b>376</b>	<b>gallons/foot</b>
Wall Thickness =	8	inches
Outer Diameter =	9.33	feet
Slab Lip =	18	inches
Slab Diameter =	12.33	feet
Slab Thickness =	12	inches

## III. Minimum Cycle Time &amp; Storage Volume:

$$T = (V / (Q - S)) + (V / S)$$

Where: T = Cycle Time (Min.)  
 S = Peak Inflow (gpm)  
 Q = Pump Discharge (gpm)  
 V = Req. Storage Vol. (gal.)

Note:  $T_{min}$  occurs when  $S = 1/2Q$  (Duplex)  
 $V = (QT) / 4$

For Minimum T = 10 Min.  
 S = 147 GPM

Q = 294 GPM (per pump)  
 Then V = 735 Gallons  
**Min. Storage Depth = 1.95 Feet (Pump ON - Pump OFF)**

Cycle Time for Peak Flow Condition, T = 10 Minutes > 5 minutes, OK

Note: Allow an additional 50% Storage Depth for Triplex and 100% for Quadplex  
 Note: Rule of Thumb: Min. Q = 150 gpm

## IV. Wet Well Control Levels:

<b>Wet Well Top Elevation</b>	<b>89.00</b>
Assume Ground Water Table @ Elevation	88.50
Influent Gravity Sewer Invert Elev.	71.54
Freeboard =	0.54 Feet
Audible Alarm ON Elevation	71.00
Freeboard =	1.00 Feet
4 <sup>TH</sup> Pump & Alarm Light ON Elev.	0.00
Freeboard =	0.00 Feet
3 <sup>RD</sup> Pump & Alarm Light ON Elev.	0.00
Freeboard =	0.00 Feet
2 <sup>ND</sup> Pump & Alarm Light ON Elev.	70.00
Freeboard =	1.00 Feet
Lead Pump ON Elev.	69.00
Storage Depth =	4.00 Feet
Both Pumps OFF Elev.	65.00
Sump Depth =	1.50 Feet
<b>Wet Well Bottom Elevation</b>	<b>63.50</b>
Total Depth of Wet Well =	25.50 Feet
Station Yard Finish Grade Elevation =	88.50
Minimum Station Yard Width =	25.0 Feet
Min. Station Easement Length & Width =	59.3 Feet
Forcemain High Point Elevation =	125.00 ft
Connection Point Elevation =	0.00 ft
Connection Pressure =	0.00 psi
Static Head for Pumps =	60.00 Feet

## V. Buoyancy Calculation:

Structure Rim El. =	89.00	feet
Structure Base El. =	63.50	feet
Structure Depth =	25.50	feet
Structure Volume =	1,282	CF
Wall Volume =	463	CF
Slab Volume =	119	CF
Volume of Concrete =	582	CF
Density of Concrete =	144	lbs/CF
Weight of Concrete =	83,855	lbs.
Volume of Soil Above Slab =	1,302	CF
Density of Soil =	47	lbs/CF
Weight of Soil Above Slab =	61,184	lbs.
<b>Total Resistance Force =</b>	<b>145,040</b>	<b>lbs.</b>
<u>Ground Water Table @ Elevation</u>	88.50	feet
Volume of Water Displaced =	1,830	CF
Density of Water =	62.4	lbs/CF
<b>Total Uplift Force =</b>	<b>114,185</b>	<b>lbs.</b>
<b>Factor of Safety =</b>	<b>1.3</b>	

# LIFT STATION CALCULATIONS (Cont'd) Venezia Lift Station #1

## VI. Calculation of System Head Curve:

Total Static Head = 60.00 Feet

Pump Selection *Flygt* 15 hp

Model: NP3151. Curve: 63-464-00-4550

Impeller: 253 mm

No. Pumps in Parallel = 1 Duplex

Operating Point = 294 gpm @ 87 ft TDH

OP 2 Pumps = gpm @ ft TDH

OP 3 pumps = gpm @ ft TDH

Wet Well Area = 50.3 sf per wet well

Pump On El. = 66.00 ft

Pump Off El. = 65.00 ft

Storage Volume = 201 cf

1,504 gallons per wet well

Pump On Time = Storage Volume / (Outflow - Inflow)

= 9.4 minutes (Peak)

= 5.8 minutes (Average)

Pump Off Time = Storage Volume / (Inflow)

= 11.3 minutes (Peak)

= 45.1 minutes (Average)

Inflow = 33 gpm (Average)

Inflow = 193 gpm (Peak)

Outflow = 294 gpm

	Station Piping	Force Main Piping						N/A	
		New On-Site		New On-Site		New Off-Site			
		No.	Total	No.	Total	No.	Total	No.	Total
Pipe Length (feet)	27	947		5,600		3,140		0	
Pipe Inside Dia. (inches)	6	6		8		10		12	
Pipe Area (Sq.-Ft.)	0.196	0.196		0.349		0.545		0.785	
Pipe Material	DIP	PVC		PVC		PVC		PVC	
Roughness C	100	120		120		120		120	
Fittings:	K-Value	No.	Total	No.	Total	No.	Total	No.	Total
Discharge	1.0	1	1.0	0	0.0	0	0.0	0	0.0
90° Bend	0.6	2	1.2	0	0.0	0	0.0	0	0.0
45° Bend	0.4	2	0.8	4	1.6	4	1.6	0	0.0
22.5° Bend	0.25	0	0.0	4	1.0	4	1.0	0	0.0
11.25° Bend	0.15	0	0.0	0	0.0	0	0.0	0	0.0
Expansion	0.5	0	0.0	1	0.5	0	0.0	0	0.0
Plug Valve	0.4	1	0.4	6	2.4	3	1.2	0	0.0
Check Valve	2.5	1	2.5	0	0.0	0	0.0	0	0.0
Wye Branch	0.5	1	0.5	0	0.0	0	0.0	0	0.0
Contraction	0.5	0	0.0	0	0.0	0	0.0	0	0.0
Total K-Value		6.4		3.5		5.5		6.0	

Step Interval = 25 gpm Add. Manifold Flows (gpm): 6 8 10 12

	Q (gpm)	Pipe & Fitting Friction Losses in Feet - Velocity in Feet per Second															Friction Head (feet)	TDH (feet)
		6			8			10			12							
		Pipe (ft)	Fittings (ft)	Velocity (fps)	Pipe (ft)	Fittings (ft)	Velocity (fps)	Pipe (ft)	Fittings (ft)	Velocity (fps)	Pipe (ft)	Fittings (ft)	Velocity (fps)					
System Head Curve	0	0.00	0.00	0.0	0.00	0.00	0.0	0.00	0.00	0.0	0.00	0.00	0.0	0.00	0.00	0.0	0.00	60.00
	25	0.00	0.01	0.3	0.09	0.00	0.3	0.13	0.00	0.2	0.02	0.00	0.1	0.00	0.00	0.0	0.27	60.27
	50	0.02	0.03	0.6	0.33	0.02	0.6	0.47	0.01	0.3	0.09	0.00	0.2	0.00	0.00	0.0	0.96	60.96
	75	0.04	0.07	0.9	0.69	0.04	0.9	0.99	0.02	0.5	0.19	0.01	0.3	0.00	0.00	0.0	2.05	62.05
	100	0.07	0.13	1.1	1.17	0.07	1.1	1.69	0.03	0.6	0.32	0.02	0.4	0.00	0.00	0.0	3.50	63.50
	125	0.10	0.20	1.4	1.78	0.11	1.4	2.55	0.05	0.8	0.49	0.02	0.5	0.00	0.00	0.0	5.31	65.31
	150	0.14	0.29	1.7	2.49	0.16	1.7	3.58	0.08	1.0	0.68	0.03	0.6	0.00	0.00	0.0	7.45	67.45
	175	0.19	0.39	2.0	3.31	0.21	2.0	4.76	0.11	1.1	0.91	0.05	0.7	0.00	0.00	0.0	9.93	69.93
	200	0.25	0.51	2.3	4.24	0.28	2.3	6.10	0.14	1.3	1.16	0.06	0.8	0.00	0.00	0.0	12.74	72.74
	225	0.31	0.65	2.6	5.28	0.35	2.6	7.58	0.18	1.4	1.44	0.08	0.9	0.00	0.00	0.0	15.87	75.87
	250	0.38	0.80	2.8	6.42	0.44	2.8	9.21	0.22	1.6	1.75	0.10	1.0	0.00	0.00	0.0	19.31	79.31
	275	0.45	0.97	3.1	7.65	0.53	3.1	10.99	0.26	1.8	2.09	0.12	1.1	0.00	0.00	0.0	23.07	83.07
	294	0.51	1.11	3.3	8.66	0.60	3.3	12.44	0.30	1.9	2.37	0.13	1.2	0.00	0.00	0.0	26.13	86.13
	300	0.53	1.15	3.4	8.99	0.63	3.4	12.91	0.31	1.9	2.46	0.14	1.2	0.00	0.00	0.0	27.13	87.13
	325	0.62	1.35	3.7	10.43	0.74	3.7	14.97	0.37	2.1	2.85	0.16	1.3	0.00	0.00	0.0	31.50	91.50
	350	0.71	1.57	4.0	11.97	0.86	4.0	17.18	0.43	2.2	3.27	0.19	1.4	0.00	0.00	0.0	36.17	96.17
	375	0.81	1.80	4.3	13.60	0.98	4.3	19.51	0.49	2.4	3.71	0.22	1.5	0.00	0.00	0.0	41.13	101.13
	400	0.92	2.05	4.5	15.33	1.12	4.5	21.99	0.56	2.6	4.19	0.25	1.6	0.00	0.00	0.0	46.39	106.39
	425	1.03	2.31	4.8	17.15	1.26	4.8	24.60	0.63	2.7	4.68	0.28	1.7	0.00	0.00	0.0	51.95	111.95
	450	1.15	2.59	5.1	19.06	1.42	5.1	27.35	0.70	2.9	5.21	0.31	1.8	0.00	0.00	0.0	57.79	117.79
	475	1.27	2.89	5.4	21.07	1.58	5.4	30.22	0.78	3.0	5.75	0.35	1.9	0.00	0.00	0.0	63.93	123.93
	500	1.41	3.20	5.7	23.18	1.75	5.7	33.23	0.87	3.2	6.33	0.39	2.0	0.00	0.00	0.0	70.35	130.35
	525	1.54	3.53	6.0	25.37	1.93	6.0	36.37	0.96	3.4	6.93	0.43	2.1	0.00	0.00	0.0	77.05	137.05
	550	1.69	3.87	6.2	27.65	2.12	6.2	39.65	1.05	3.5	7.55	0.47	2.2	0.00	0.00	0.0	84.04	144.04
575	1.83	4.23	6.5	30.03	2.31	6.5	43.04	1.15	3.7	8.20	0.51	2.3	0.00	0.00	0.0	91.31	151.31	
600	1.99	4.61	6.8	32.49	2.52	6.8	46.57	1.25	3.8	8.87	0.56	2.5	0.00	0.00	0.0	98.86	158.86	
625	2.15	5.00	7.1	35.05	2.73	7.1	50.23	1.36	4.0	9.56	0.61	2.6	0.00	0.00	0.0	106.68	166.68	
650	2.32	5.41	7.4	37.69	2.96	7.4	54.01	1.47	4.1	10.28	0.66	2.7	0.00	0.00	0.0	114.79	174.79	
675	2.49	5.83	7.7	40.42	3.19	7.7	57.92	1.59	4.3	11.03	0.71	2.8	0.00	0.00	0.0	123.16	183.16	
700	2.67	6.27	7.9	43.24	3.43	7.9	61.95	1.70	4.5	11.80	0.76	2.9	0.00	0.00	0.0	131.81	191.81	
725	2.85	6.72	8.2	46.14	3.68	8.2	66.10	1.83	4.6	12.59	0.82	3.0	0.00	0.00	0.0	140.74	200.74	
750	3.04	7.20	8.5	49.13	3.94	8.5	70.39	1.96	4.8	13.40	0.87	3.1	0.00	0.00	0.0	149.93	209.93	

## LIFT STATION CALCULATIONS

## Venezia Lift Station #2

## I. Design Flow Rates:

Parcel ID	Land Use Description	Unit Description	Units	Unit Flow (GPD/Unit)	Average Daily Flow (GPD)	Average Daily Flow (GPM)	Minimum Daily Flow (GPM)	Maximum Daily Flow (GPM)	Peak Daily Flow (GPM)
1	Residential - SF (detached)	dwelling unit	77	300	23,100	16	8	32	64
2	Residential - SF (attached)	dwelling unit	113	300	33,900	24	12	47	94
3	Institutional - School	student	494	33	16,302	11	6	23	45
4				0	0	0	0	0	0
5				0	0	0	0	0	0
6				0	0	0	0	0	0
7				0	0	0	0	0	0
8				0	0	0	0	0	0
9				0	0	0	0	0	0
10				0	0	0	0	0	0
Total					73,302	51	25	102	204
Design Peaking Factors:							F <sub>min</sub>	F <sub>max</sub>	F <sub>peak</sub>
							0.5	2.0	4.0

## II. Wet Well Dimensions:

<u>Wet Well Configuration:</u>		<b>Duplex</b>
No. of Wet Wells:		<b>1</b>
Layout:		<b>Circular</b>
Inner Diameter =	8.00	feet
Volume =	376	gallons/foot
<b>Total Volume =</b>	<b>376</b>	<b>gallons/foot</b>
Wall Thickness =	8	inches
Outer Diameter =	9.33	feet
Slab Lip =	18	inches
Slab Diameter =	12.33	feet
Slab Thickness =	12	inches

## III. Minimum Cycle Time &amp; Storage Volume:

$$T = (V / (Q - S)) + (V / S)$$

Note:  $T_{min}$  occurs when  $S = 1/2Q$  (Duplex)

$$V = (QT / 4)$$

Where: T = Cycle Time (Min.)  
S = Peak Inflow (gpm)  
Q = Pump Discharge (gpm)  
V = Req. Storage Vol. (gal.)

For Minimum T = 10 Min.  
S = 163 GPM

Q = 326 GPM (per pump)  
Then V = 815 Gallons  
Min. Storage Depth = 2.17 Feet (Pump ON - Pump OFF)

Cycle Time for Peak Flow Condition, T = 10 Minutes > 5 minutes, OK

Note: Allow an additional 50% Storage Depth for Triplex and 100% for Quadplex  
Note: Rule of Thumb: Min. Q = 150 gpm

## IV. Wet Well Control Levels:

Wet Well Top Elevation	82.00
Assume Ground Water Table @ Elevation	81.50
Influent Gravity Sewer Invert Elev.	61.72
Freeboard =	0.72 Feet
Audible Alarm ON Elevation	61.00
Freeboard =	1.00 Feet
4 <sup>TH</sup> Pump & Alarm Light ON Elev.	0.00
Freeboard =	0.00 Feet
3 <sup>RD</sup> Pump & Alarm Light ON Elev.	0.00
Freeboard =	0.00 Feet
2 <sup>ND</sup> Pump & Alarm Light ON Elev.	60.00
Freeboard =	1.00 Feet
Lead Pump ON Elev.	59.00
Storage Depth =	3.00 Feet
Both Pumps OFF Elev.	56.00
Sump Depth =	1.50 Feet
Wet Well Bottom Elevation	54.50
Total Depth of Wet Well =	27.50 Feet
Station Yard Finish Grade Elevation =	81.50
Minimum Station Yard Width =	27.0 Feet
Min. Station Easement Length & Width =	63.3 Feet
Forcemain High Point Elevation =	125.00 ft
Connection Point Elevation =	0.00 ft
Connection Pressure =	0.00 psi
Static Head for Pumps =	69.00 Feet

## V. Buoyancy Calculation:

Structure Rim El. =	82.00	feet
Structure Base El. =	54.50	feet
Structure Depth =	27.50	feet
Structure Volume =	1,382	CF
Wall Volume =	499	CF
Slab Volume =	119	CF
Volume of Concrete =	619	CF
Density of Concrete =	144	lbs/CF
Weight of Concrete =	89,083	lbs.
Volume of Soil Above Slab =	1,404	CF
Density of Soil =	47	lbs/CF
Weight of Soil Above Slab =	65,983	lbs.
Total Resistance Force =	155,066	lbs.
Ground Water Table @ Elevation	81.50	feet
Volume of Water Displaced =	1,967	CF
Density of Water =	62.4	lbs/CF
Total Uplift Force =	122,724	lbs.
Factor of Safety =	1.3	

# **LIFT STATION CALCULATIONS (Cont'd)** **Venezia Lift Station #2**

## **VI. Calculation of System Head Curve:**

Total Static Head = 69.00 Feet

	Station Piping		Force Main Piping							
			New On-Site		New On-Site		New Off-Site		N/A	
Pipe Length (feet)	30		1,260		5,600		3,140		0	
Pipe Inside Dia. (inches)	6		8		8		10		12	
Pipe Area (Sq.-ft.)	0.196		0.349		0.349		0.545		0.785	
Pipe Material	DIP		PVC		PVC		PVC		PVC	
Roughness C	100		120		120		120		120	
Fittings:	K-Value	No.	Tot.K	No.	Tot.K	No.	Tot.K	No.	Tot.K	No.
Discharge	1.0	1	1.0	0	0.0	0	0.0	1	1.0	0
90° Bend	0.6	2	1.2	0	0.0	0	0.0	2	1.2	0
45° Bend	0.4	2	0.8	4	1.6	4	1.6	4	1.6	0
22.5° Bend	0.25	0	0.0	4	1.0	4	1.0	4	1.0	0
11.25° Bend	0.15	0	0.0	0	0.0	0	0.0	0	0.0	0
Expansion	0.5	0	0.0	1	0.5	1	0.5	0	0.0	0
Plug Valve	0.4	1	0.4	2	0.8	6	2.4	3	1.2	0
Check Valve	2.5	1	2.5	0	0.0	0	0.0	0	0.0	0
Wye Branch	0.5	1	0.5	0	0.0	0	0.0	0	0.0	0
Contraction	0.5	0	0.0	0	0.0	0	0.0	0	0.0	0
Total K-Value			6.4		3.9		5.5		6.0	

Pump Selection *Flygt* 15 hp  
 Model: CP3152. Curve: 63-487-00-3855  
 Impeller: 265 mm  
 No. Pumps in Parallel = 1 Duplex  
 Operating Point = 326 gpm @ 94 ft TDH  
 OF 2 Pumps = gpm @ ft TDH  
 OP 3 pumps = gpm @ ft TDH

Wet Well Area = 50.3 sq per wet well  
 Pump On El. = 59.00 ft  
 Pump Off El. = 56.00 ft  
 Storage Volume = 151 cf  
 1,128 gallons per wet well

Pump On Time = Storage Volume / (Outflow - Inflow)  
 = 9.2 minutes (Peak)  
 = 4.1 minutes (Average)  
 Pump Off Time = Storage Volume / (Inflow)  
 = 5.5 minutes (Peak)  
 = 22.2 minutes (Average)

Inflow = 51 gpm (Average)  
 Inflow = 204 gpm (Peak)  
 Outflow = 326 gpm

Step Interval = 25 gpm Add. Manifold Flows (gpm): 

8	8	10	12
0	0	0	0

System Head Curve	Pipe & Fitting Friction Losses in Feet - Velocity in Feet per Second																	
	Q (gpm)	6			8			8			10			12			Friction Head (feet)	TDH
		Pipe (ft)	Fittings (ft)	Velocity (fps)	Pipe (ft)	Fittings (ft)	Velocity (fps)	Pipe (ft)	Fittings (ft)	Velocity (fps)	Pipe (ft)	Fittings (ft)	Velocity (fps)	Pipe (ft)	Fittings (ft)	Velocity (fps)		
	0	0.00	0.00	0.0	0.00	0.00	0.0	0.00	0.00	0.0	0.00	0.00	0.0	0.00	0.00	0.0	0.00	69.00
	25	0.01	0.01	0.3	0.03	0.00	0.2	0.13	0.00	0.2	0.02	0.00	0.1	0.00	0.00	0.0	0.20	69.20
	50	0.02	0.03	0.6	0.11	0.01	0.3	0.47	0.01	0.3	0.09	0.00	0.2	0.00	0.00	0.0	0.73	69.73
	75	0.04	0.07	0.9	0.23	0.01	0.5	0.99	0.02	0.5	0.19	0.01	0.3	0.00	0.00	0.0	1.56	70.56
	100	0.07	0.13	1.1	0.39	0.02	0.6	1.69	0.03	0.6	0.32	0.02	0.4	0.00	0.00	0.0	2.67	71.67
	125	0.11	0.20	1.4	0.58	0.04	0.8	2.55	0.05	0.8	0.49	0.02	0.5	0.00	0.00	0.0	4.05	73.05
	150	0.15	0.29	1.7	0.82	0.06	1.0	3.58	0.08	1.0	0.68	0.03	0.6	0.00	0.00	0.0	5.69	74.69
175	0.21	0.39	2.0	1.09	0.08	1.1	4.76	0.11	1.1	0.91	0.05	0.7	0.00	0.00	0.0	7.58	76.58	
200	0.26	0.51	2.3	1.39	0.10	1.3	6.10	0.14	1.3	1.16	0.06	0.8	0.00	0.00	0.0	9.73	78.73	
225	0.33	0.65	2.6	1.73	0.12	1.4	7.58	0.18	1.4	1.44	0.08	0.9	0.00	0.00	0.0	12.11	81.11	
250	0.40	0.80	2.8	2.10	0.15	1.6	9.21	0.22	1.6	1.75	0.10	1.0	0.00	0.00	0.0	14.74	83.74	
275	0.48	0.97	3.1	2.51	0.19	1.8	10.99	0.26	1.8	2.09	0.12	1.1	0.00	0.00	0.0	17.61	86.61	
300	0.57	1.15	3.4	2.95	0.22	1.9	12.91	0.31	1.9	2.46	0.14	1.2	0.00	0.00	0.0	20.72	89.72	
325	0.66	1.35	3.7	3.42	0.26	2.1	14.97	0.37	2.1	2.85	0.16	1.3	0.00	0.00	0.0	24.05	93.05	
350	0.77	1.56	3.7	3.44	0.26	2.1	15.06	0.37	2.1	2.87	0.17	1.3	0.00	0.00	0.0	24.19	93.19	
375	0.87	1.57	4.0	3.92	0.30	2.2	17.16	0.43	2.2	3.27	0.19	1.4	0.00	0.00	0.0	27.62	96.62	
400	0.99	1.80	4.3	4.46	0.35	2.4	19.51	0.49	2.4	3.71	0.22	1.5	0.00	0.00	0.0	31.41	100.41	
425	1.11	2.05	4.5	5.03	0.39	2.6	21.99	0.56	2.6	4.19	0.25	1.6	0.00	0.00	0.0	35.44	104.44	
450	1.23	2.31	4.8	5.62	0.45	2.7	24.60	0.63	2.7	4.68	0.28	1.7	0.00	0.00	0.0	39.68	108.68	
475	1.37	2.59	5.1	6.25	0.50	2.9	27.35	0.70	2.9	5.21	0.31	1.8	0.00	0.00	0.0	44.15	113.15	
500	1.51	2.89	5.4	6.91	0.56	3.0	30.22	0.78	3.0	5.75	0.35	1.9	0.00	0.00	0.0	48.83	117.83	
525	1.65	3.20	5.7	7.60	0.62	3.2	33.23	0.87	3.2	6.33	0.39	2.0	0.00	0.00	0.0	53.74	122.74	
550	1.81	3.53	6.0	8.32	0.68	3.4	36.37	0.96	3.4	6.93	0.43	2.1	0.00	0.00	0.0	58.87	127.87	
575	1.96	3.87	6.2	9.07	0.75	3.5	39.65	1.05	3.5	7.55	0.47	2.2	0.00	0.00	0.0	64.21	133.21	
600	2.13	4.23	6.5	9.85	0.82	3.7	43.04	1.15	3.7	8.20	0.51	2.3	0.00	0.00	0.0	69.76	138.76	
625	2.30	4.61	6.8	10.66	0.89	3.8	46.57	1.25	3.8	8.87	0.56	2.5	0.00	0.00	0.0	75.53	144.53	
650	2.48	5.00	7.1	11.49	0.96	4.0	50.23	1.36	4.0	9.56	0.61	2.6	0.00	0.00	0.0	81.51	150.51	
675	2.66	5.41	7.4	12.36	1.04	4.1	54.01	1.47	4.1	10.28	0.66	2.7	0.00	0.00	0.0	87.71	156.71	
700	2.86	5.83	7.7	13.25	1.12	4.3	57.92	1.59	4.3	11.03	0.71	2.8	0.00	0.00	0.0	94.11	163.11	
725	3.05	6.27	7.9	14.18	1.21	4.5	61.95	1.70	4.5	11.80	0.76	2.9	0.00	0.00	0.0	100.72	169.72	
750	3.26	6.72	8.2	15.13	1.30	4.6	66.10	1.83	4.6	12.59	0.82	3.0	0.00	0.00	0.0	107.54	176.54	
		3.26	7.20	8.5	16.11	1.39	4.8	70.39	1.96	4.8	13.40	0.87	3.1	0.00	0.00	0.0	114.57	183.57

# APPENDIX D

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## Venezia's Existing Lift Station Record Drawings

RTU SYSTEM SPECIFICATIONS:

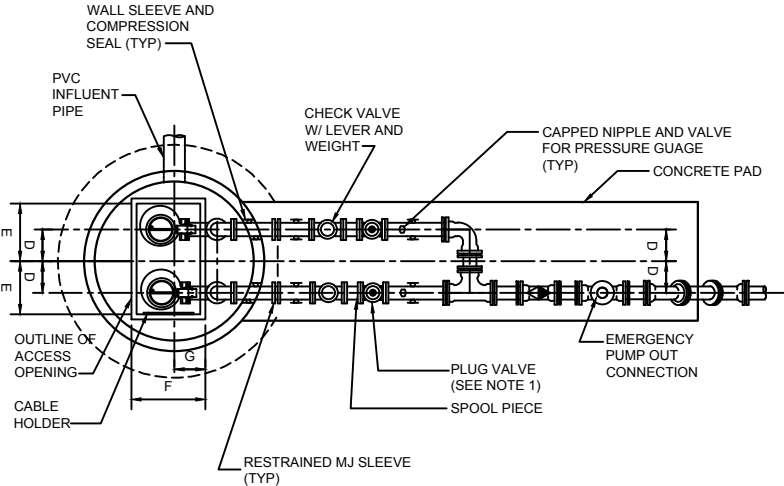
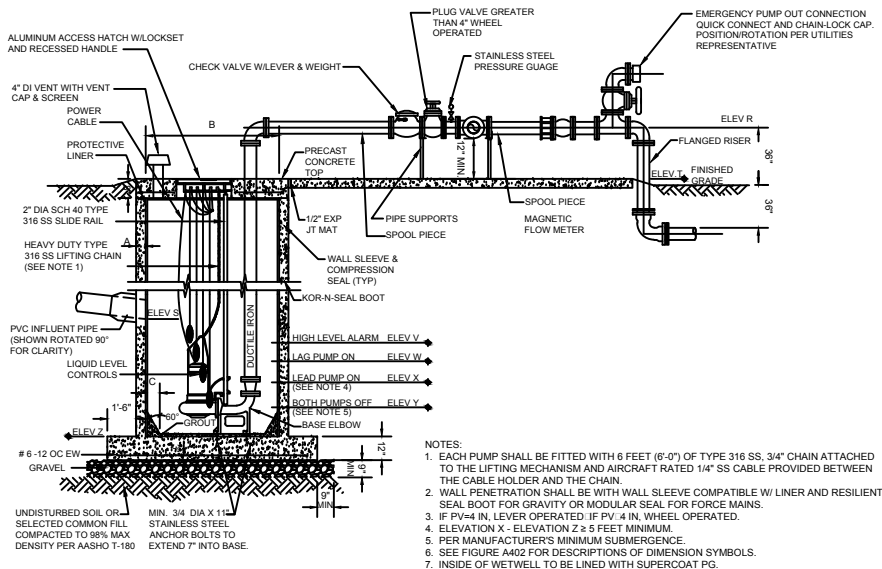
- A MICROPROCESSOR-BASED PUMP CONTROLLER/TRANSCIEVER (CC) MODEL SIEMENS WATER TECHNOLOGIES LC-150 SHALL BE PROVIDED.
- THE RTU SHALL BE MOUNTED IN A NEMA 3R 316 STAINLESS STEEL ENCLOSURE ADJACENT TO THE PUMP CONTROL PANEL AND SHALL BE PROVIDED WITH A CLASS II UL LISTED TRANSFORMER/POWER SUPPLY.
- STANDARDS:
  - FCC PART 15, SUBPART J, CLASS A - RADIO EMISSIONS
  - ANSI/IEEE C37.90 - SURGE WITHSTAND CAPABILITY
  - ANSI/IPC-S815A - QUALITY CONTROL
- APPROVED SYSTEM SUPPLIER IS SIEMENS WATER TECHNOLOGIES. CONTACT RON ROBINETTE 800-247-0880.

GENERAL NOTES:

- COATING SHALL BE AS SCHEDULED IN TABLE BELOW.
- ALL LOCATIONS WHERE GRAVITY PIPES ENTER OR LEAVE THE WET WELL SHALL BE MADE WATERTIGHT WITH AN APPROVED BOOT.
- ALL LOCATIONS WHERE PRESSURE PIPES ENTER THE WET WELL SHALL BE MADE WATERTIGHT WITH A WALL SLEEVE AND SEAL.
- THERE SHALL BE NO VALVES OR ELECTRICAL JUNCTION BOXES IN THE WET WELL.
- WET WELL COVERS SHALL BE ALUMINUM WITH 316 STAINLESS STEEL HARDWARE WITH LOCK BRACKET.
- ALL HARDWARE IN WET WELL SHALL BE 316 STAINLESS STEEL.
- PUMP SUBMERGENCE REQUIREMENTS SHALL BE MET AS MINIMUM.
- ALL CONNECTIONS IN THE WET WELL SHALL BE FLANGED JOINTS. ALL REMAINING CONNECTIONS BETWEEN THE WET WELL AND THE CONNECTION TO THE FORCE MAIN SHALL BE RESTRAINED MECHANICAL JOINTS.
- CHECK VALVE ARM SHALL BE LOCATED WITH THE SAME ORIENTATION (ALL ARMS ON THE LEFT SIDE OF VALVE).

PUMP STATION COATING SCHEDULE		
AREA	APPLICABLE COATING	NOTES
Outside Wet Well	Standard Coating System	Consult CS-S5
Inside Wet Well	Waterproofing System	See PG 1000-1000
Finished Bottom of Wet Well	100% Solid Epoxy Coating	Minimum 2 coats
Wet Well Piping	Double End Pipe Coating and Liner (or 100% Solid Epoxy Coating)	Protect 401 Corrosion Protection
Electric Motor Enclosure	Protective Finish Paint (Field Paint) and Protective Finish (Factory)	Protect 37-77 H Coating-Protect 2000 G-2H Finish

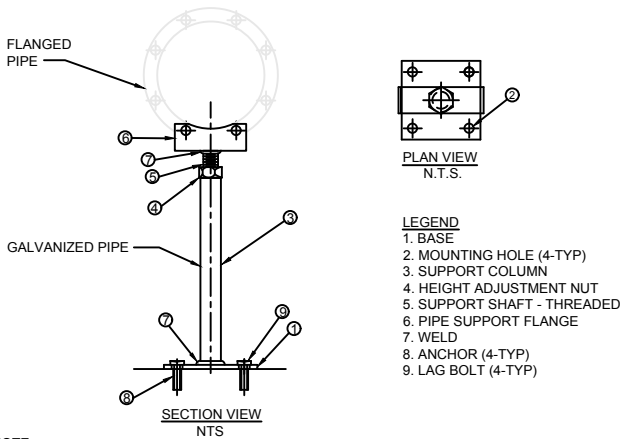
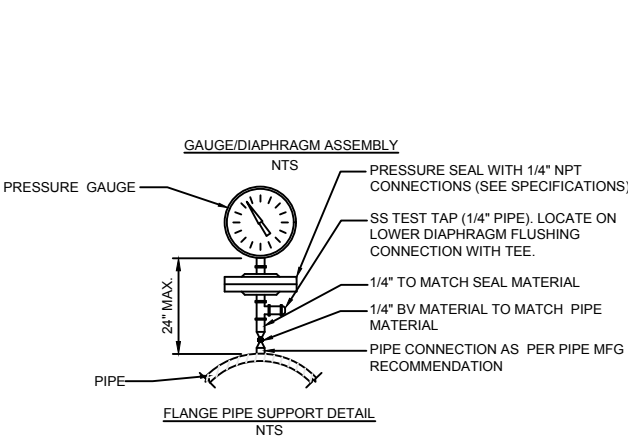
PUMP STATION GENERAL NOTES



- NOTES:
- IF PV=4 IN, LEVER OPERATED; IF PV=4 IN, WHEEL OPERATED.
  - SEE FIGURE A402 FOR DESCRIPTIONS OF DIMENSION SYMBOLS.

DUPLEX PUMP STATION PLAN

FIGURE A404-2



- NOTE:
- ALL PIPING TO BE 316 SS OR BRASS

PUMP DATA	
WETWELL INSIDE DIA.	8"0"
FLYGT	SUBMERSIBLE PUMPS
MODEL NUMBER	NP3153.181
IMPELLER	253
HORSE POWER	15
G.P.M.	294
T.D.H.	87.0
ELECTRICAL REQUIREMENTS	230 V
3 PHASE	

- NOTE: ELECTRICAL REQUIREMENT TO BE VERIFIED BY CONTRACTOR.

PUMP DATA	
WETWELL INSIDE DIA.	8"0"
FLYGT	SUBMERSIBLE PUMPS
MODEL NUMBER	CP3152.181
IMPELLER	265
HORSE POWER	15
G.P.M.	326
T.D.H.	94.0
ELECTRICAL REQUIREMENTS	480 V
3 PHASE	

- NOTE: ELECTRICAL REQUIREMENT TO BE VERIFIED BY CONTRACTOR.

PUMP DATA	
WETWELL INSIDE DIA.	8"0"
FLYGT	SUBMERSIBLE PUMPS
MODEL NUMBER	NP3102
IMPELLER	135
HORSE POWER	6.5
G.P.M.	200
T.D.H.	65.0
ELECTRICAL REQUIREMENTS	230 V
3 PHASE	

- NOTE: ELECTRICAL REQUIREMENT TO BE VERIFIED BY CONTRACTOR.

DESCRIPTION	SYMBOL	DIMENSION	ELEVATION
THICKNESS OF WALL	A	8"	—
DIAMETER OF WET WELL	B	8'	—
WIDTH OF BOTTOM FILLET	C	SEE NOTE 1	—
C/L TO C/L OF PUMPS	D	SEE NOTE 1	—
LENGTH OF PUMP ACCESS OPENING	E	SEE NOTE 1	—
WIDTH OF PUMP ACCESS OPENING	F	SEE NOTE 1	—
BASE ELBOW TO EDGE OF PIT	G	SEE NOTE 1	—
VALVE BOX HATCH OPENING	H	5.0'	—
VALVE BOX HATCH OPENING	I	7.0'	—
TOP OF WET WELL	T	—	88.94'
FINISHED GRADE	U	—	88.50'
HIGH LEVEL ALARM	V	—	71.00'
LAG PUMP ON	W	—	70.00'
LEAD PUMP ON	X	SEE NOTE 2	69.00'
PUMPS OFF (TOP OF PUMP VOLUTE)	Y	—	65.00'
FLOOR OF WET WELL	Z	—	63.33'

- NOTE:
- PER PUMP MANUFACTURER'S REQUIREMENTS
  - ELEVATION X - ELEVATION Z ≥ 5 FEET MINIMUM
  - TOP ELEVATION OF WET WELL SHALL BE A MINIMUM OF 1' ABOVE THE 100 YEAR FLOOD ELEVATION AND THE ELEVATION OF THE CROWN OF THE ROAD.

LIFT STATION #1

DESCRIPTION	SYMBOL	DIMENSION	ELEVATION
THICKNESS OF WALL	A	8"	—
DIAMETER OF WET WELL	B	8'	—
WIDTH OF BOTTOM FILLET	C	SEE NOTE 1	—
C/L TO C/L OF PUMPS	D	SEE NOTE 1	—
LENGTH OF PUMP ACCESS OPENING	E	SEE NOTE 1	—
WIDTH OF PUMP ACCESS OPENING	F	SEE NOTE 1	—
BASE ELBOW TO EDGE OF PIT	G	SEE NOTE 1	—
VALVE BOX HATCH OPENING	H	5.0'	—
VALVE BOX HATCH OPENING	I	7.0'	—
TOP OF WET WELL	T	—	82.12'
FINISHED GRADE	U	—	81.50'
HIGH LEVEL ALARM	V	—	61.00'
LAG PUMP ON	W	—	60.00'
LEAD PUMP ON	X	SEE NOTE 2	59.00'
PUMPS OFF (TOP OF PUMP VOLUTE)	Y	—	55.50'
FLOOR OF WET WELL	Z	—	54.29'

- NOTE:
- PER PUMP MANUFACTURER'S REQUIREMENTS
  - ELEVATION X - ELEVATION Z ≥ 5 FEET MINIMUM
  - TOP ELEVATION OF WET WELL SHALL BE A MINIMUM OF 1' ABOVE THE 100 YEAR FLOOD ELEVATION AND THE ELEVATION OF THE CROWN OF THE ROAD.

LIFT STATION #2

DESCRIPTION	SYMBOL	DIMENSION	ELEVATION
THICKNESS OF WALL	A	8"	—
DIAMETER OF WET WELL	B	8'	—
WIDTH OF BOTTOM FILLET	C	SEE NOTE 1	—
C/L TO C/L OF PUMPS	D	SEE NOTE 1	—
LENGTH OF PUMP ACCESS OPENING	E	SEE NOTE 1	—
WIDTH OF PUMP ACCESS OPENING	F	SEE NOTE 1	—
BASE ELBOW TO EDGE OF PIT	G	SEE NOTE 1	—
VALVE BOX HATCH OPENING	H	5.0'	—
VALVE BOX HATCH OPENING	I	7.0'	—
TOP OF WET WELL	T	—	82.00'
FINISHED GRADE	U	—	81.50'
HIGH LEVEL ALARM	V	—	69.00'
LAG PUMP ON	W	—	68.00'
LEAD PUMP ON	X	SEE NOTE 2	67.00'
PUMPS OFF (TOP OF PUMP VOLUTE)	Y	—	65.50'
FLOOR OF WET WELL	Z	—	64.00'

- NOTE:
- PER PUMP MANUFACTURER'S REQUIREMENTS
  - ELEVATION X - ELEVATION Z ≥ 5 FEET MINIMUM
  - TOP ELEVATION OF WET WELL SHALL BE A MINIMUM OF 1' ABOVE THE 100 YEAR FLOOD ELEVATION AND THE ELEVATION OF THE CROWN OF THE ROAD.

LIFT STATION #3

Item 3.

REVISIONS

DATE	DESCRIPTION	BY	CHKD	APP'D
1	6-29-07			
2	7-8-08			
3	4-29-09			
4				
5				
6				
7				

BOOTH ERN STRAUGHAN HOTT  
ENGINEERS • SURVEYORS • LAND PLANNERS

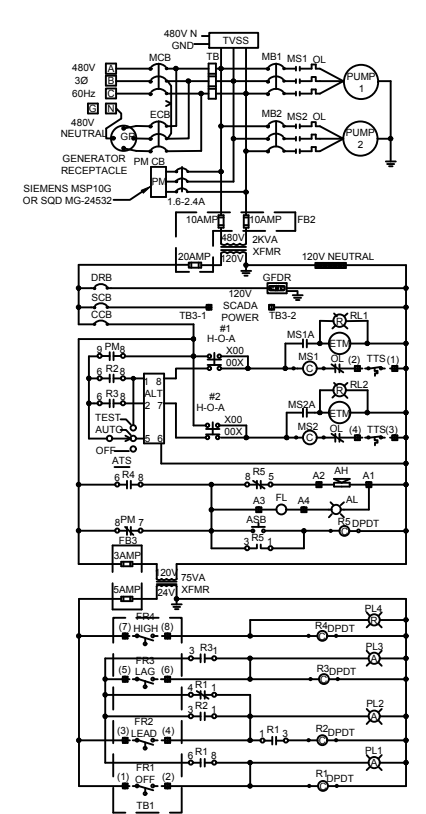
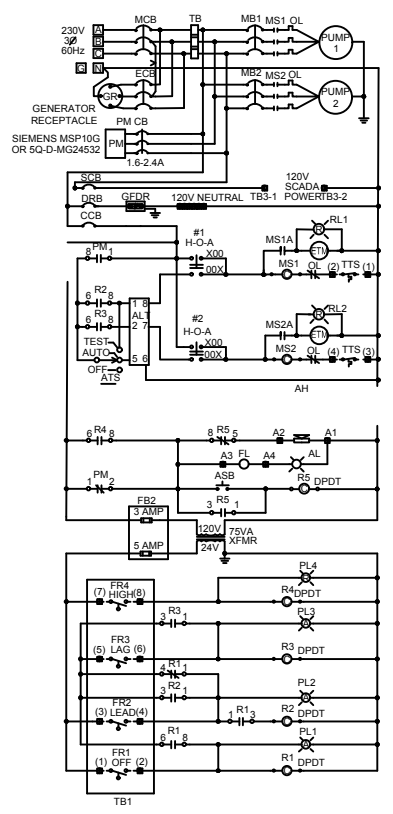
Office: 852.343.8881  
350 North Singlar Ave.  
Greenville, SC 29607  
www.bsandh.com  
Fax: 852.343.8885  
Certificate of Authorization Number: 27029

VENEZIA NORTH & SOUTH  
RESIDENTIAL SUBDIVISION  
LIFT STATION DETAILS

DESIGNED BY: CHN  
PROJECT NO.: 000000000  
DATE: MAY 2007  
REVISION/REASON BY: CHN  
REV. 47 OF 52

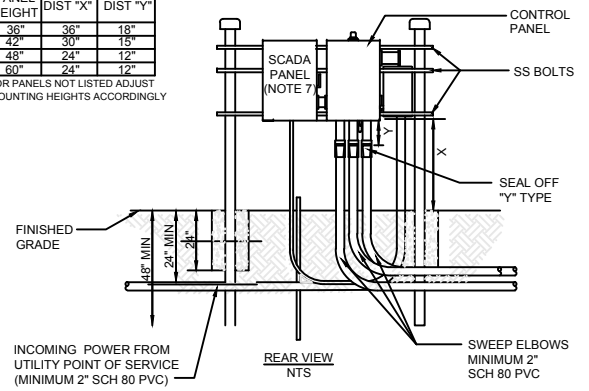
AS-BUILT DRAWING  
CHARLES C. HOTT, P.E.  
PROFESSIONAL ENGINEER 54813

113

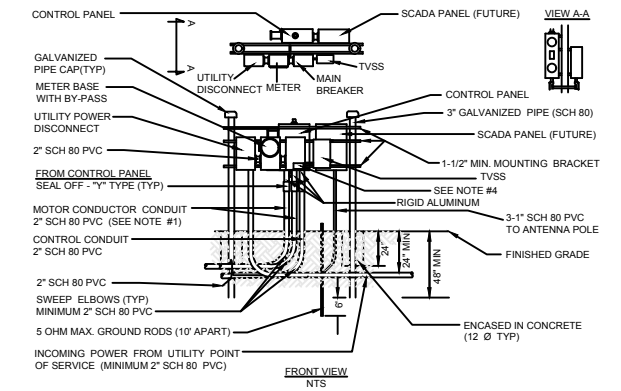


PANEL & SEAL-OFF MOUNTING HEIGHTS		
PANEL HEIGHT	DIST "X"	DIST "Y"
36"	36"	18"
42"	30"	15"
48"	24"	12"
60"	24"	12"

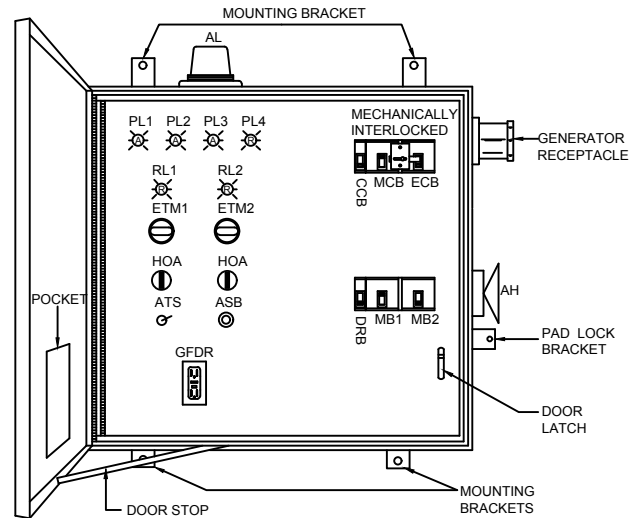
FOR PANELS NOT LISTED ADJUST MOUNTING HEIGHTS ACCORDINGLY



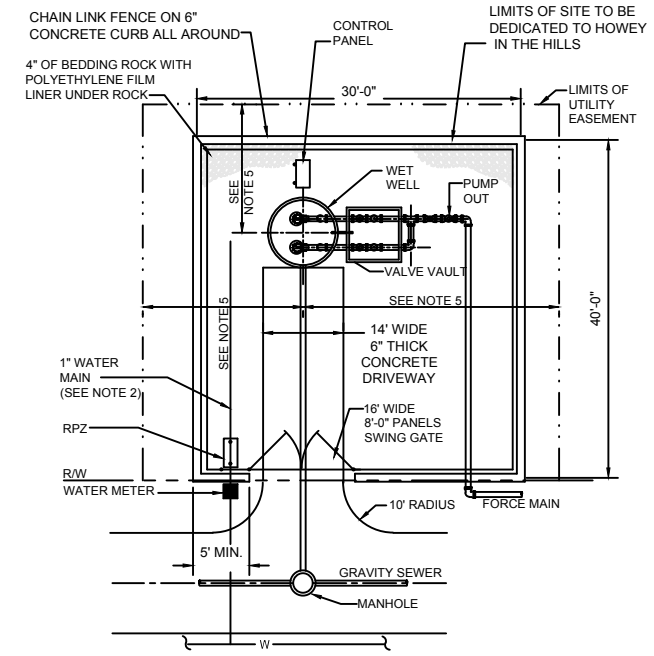
- PANEL INSTALLATION NOTES:**
- PUMP MOTOR CONDUIT SHALL BE SIZE TO ACCOMMODATE 40% CONDUIT FILL. MINIMUM CONDUIT SIZE TO BE 2" SCH 80 PVC.
  - POWER SUPPLY SHALL BE UNDERGROUND ON THE LIFT STATION SITE AND SHALL BE 3-PHASE, FROM A 3-PHASE SOURCE ONLY.
  - AN ELECTRICAL GROUNDING SYSTEM SHALL BE INSTALLED AS PER THE NATIONAL ELECTRICAL CODE, LOCAL CODES AND ORDINANCES. AN UNDERGROUND PERIMETER CABLE GROUNDING SYSTEM SHALL BE INSTALLED WITH CONNECTIONS TO AT LEAST WET WELL COVER, VALVE VAULT COVER, CONTROL PANELS, GENERATOR, UTILITY COMPANY TRANSFORMER, MANUAL DISCONNECT SWITCH, AND METAL FENCE. REFER TO GROUNDING DETAILS.
  - THE STATION NAME, UTILITIES ID NUMBER, AND ADDRESS SHALL BE AFFIXED TO THE FRONT OF THE METER CABINET.
  - ALL MOUNTING HARDWARE AND BRACKETS SHALL BE 316 STAINLESS STEEL.
  - ON A 4-WIRE, DELTA SYSTEM, THE HIGH-LEG SHALL BE IDENTIFIED WITH ORANGE COLOR TAPE AT ALL CONNECTION POINTS AND SHALL BE LOCATED ON THE "B" PHASE AT THE LINE SIDE OF THE MAIN DISCONNECT.
  - THE SCADA PANEL IS TO SHOWN FOR INFORMATION ONLY AND WILL BE INSTALLED IN THE FUTURE (BY OTHERS).



- PANEL INSTALLATION NOTES:**
- PUMP MOTOR CONDUIT SHALL BE SIZE TO ACCOMMODATE 40% CONDUIT FILL. MINIMUM CONDUIT SIZE TO BE 2" SCH 80 PVC.
  - POWER SUPPLY SHALL BE UNDERGROUND ON THE LIFT STATION SITE AND SHALL BE 3-PHASE, FROM A 3-PHASE SOURCE ONLY.
  - AN ELECTRICAL GROUNDING SYSTEM SHALL BE INSTALLED AS PER THE NATIONAL ELECTRICAL CODE, LOCAL CODES AND ORDINANCES, AN UNDERGROUND PERIMETER CABLE GROUNDING SYSTEM SHALL BE INSTALLED WITH CONNECTIONS TO AT LEAST WET WELL COVER, VALVE VAULT COVER, CONTROL PANELS, GENERATOR, UTILITY COMPANY TRANSFORMER, MANUAL DISCONNECT SWITCH, AND METAL FENCE. SEE GROUNDING DETAILS.
  - THE STATION NAME, HOWEY IN THE HILLS I.D. NUMBER, AND ADDRESS SHALL BE AFFIXED TO THE FRONT OF THE METER CABINET.
  - ALL MOUNTING HARDWARE & BRACKETS SHALL BE 316 STAINLESS STEEL.
  - ON A 4-WIRE, DELTA SYSTEM, THE HIGH-LEG SHALL BE IDENTIFIED WITH ORANGE COLOR TAPE AT ALL CONNECTION POINTS AND SHALL BE LOCATED ON THE "B" PHASE AT THE LINE SIDE OF THE MAIN DISCONNECT.
  - THE SCADA PANEL IS SHOWN FOR INFORMATION ONLY AND WILL BE INSTALLED IN THE FUTURE (BY OTHERS).

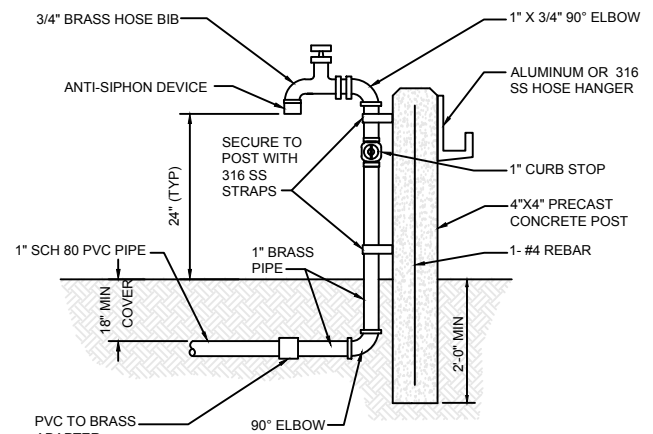


- NOTES:**
- DEADFRONT LAYOUT NEMA TYPE 3R SS ENCLOSURE W/CONTINUOUS HINGE. ALL HARDWARE TYPE 316 SS TYPICAL. ACTUAL LAYOUT MAY VARY WITH HORSEPOWER.
  - THIS CONTROL PANEL, INCLUDING THE GENERATOR RECEPTACLE, COMPLIES WITH THE STANDARD LIST OF COMPONENTS REQUIRED BY UTILITIES.
  - ALL CONTROL WIRE TO BE #14 AWG MINIMUM.
  - CONTROL PANEL SHALL BE UL LISTED AND LABELED.
  - 30 SPARE TERMINALS (TB2).
  - PHASE MONITOR CIRCUIT BREAKER TO BE SEIMENS P/N: MSP10G, OR SQ-D P/N: MG24532.



- NOTES:**
- MINIMUM 20' ACCESS DRIVEWAY FROM EDGE OF PAVEMENT TO THE GATE SHALL BE PROVIDED ON NON-RESIDENTIAL ROADS.
  - WASHDOWN WATER SOURCE SHALL BE CONNECTED TO THE POTABLE WATER MAIN.
  - ENGINEER SHALL PROVIDE A SCALED (1" = 20' MIN.) SITE SPECIFIC DETAIL.
  - MINIMUM DISTANCE BETWEEN FENCE AND ALL INSTALLED EQUIPMENT SHALL BE 5'.
  - THIS DIMENSION SHALL BE AT LEAST EQUAL TO THE DEPTH OF THE WET WELL WHEN MEASURED FROM THE CENTER OF THE WET WELL.

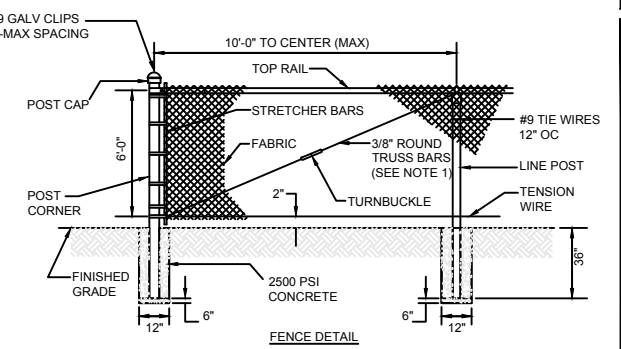
SITE PLAN



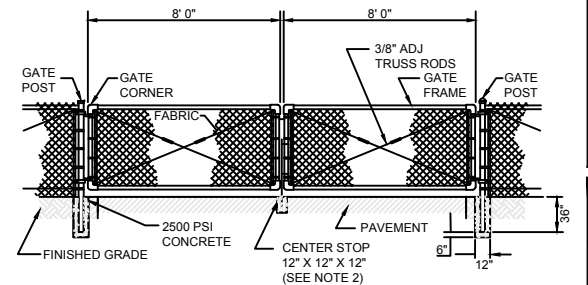
LIFT STATION POTABLE WATER SERVICE

**LEGEND**

- AH - ALARM HORN
- AL - ALARM LIGHT
- ASB - ALARM SILENCE BUTTON
- ATS - ALTERNATOR TEST SWITCH
- CCB - CONTROL CIRCUIT BREAKER
- DPDT - DOUBLE POLE DOUBLE THROW
- DRB - DUPLEX RECEPTACLE BREAKER
- ECB - EMERGENCY CIRCUIT BREAKER
- ETM - ELAPSED TIME METER
- F - FUSE
- FB - FUSE BLOCK
- FL - FLASHER
- FR - FLOAT REGULATOR
- GFDR - GROUND FAULT DUPLEX RECEPTACLE
- GR - GENERATOR RECEPTACLE
- HOA - HAND-OFF-AUTO SELECTOR SWITCH
- MB - MOTOR BREAKER
- MCB - MAIN CIRCUIT BREAKER
- MS - MOTOR STARTER
- OL - OVERLOAD
- PL - PILOT LIGHT
- PM - PHASE MONITOR
- R - RELAY
- RL - RUNNING LIGHT
- SCB - SCADA CIRCUIT BREAKER
- TB - TERMINAL BLOCK
- TTS - THERMAL TERMINAL STRIP
- TVSS - TRANSIENT VOLTAGE SURGE SUPPRESSOR
- XFMR - TRANSFORMER



FENCE DETAIL



DOUBLE SWING GATE DETAIL

- NOTES:**
- TRUSS BARS ARE REQUIRED FOR EACH GATE SECTION AND THE FIRST SPAN ON EACH SIDE OF A CORNER POST ONLY.
  - PROVIDE CHAIN AND LOCK FOR SECURING GATE.
  - FENCING SHALL BE BLACK, VINYL CLAD.



**VENEZIA NORTH & SOUTH  
RESIDENTIAL SUBDIVISION  
LIFT STATION DETAILS**

DESIGNED BY: CSH  
PROJECT NO.: 201500000  
DATE: MAY 2017  
REVISION/REASON BY: CSH  
**REV. 48 & 52**



# CONSTRUCTION PLANS FOR Venezia South Subdivision

*Section 35 & 36, Township 22 South, Range 25 East  
Town of Howey in the Hills, Lake County, Florida*

WAIVER REQUEST:  
REQUEST WAIVER FOR LENGTH OF CUL - DE- SACs  
TERRACOTTA TERRACE TO BE 1410' LF  
CALABRIA WAY TO BE 1088' LF  
INSTEAD OF THE REQUIRED 600' LF.

## SHEET INDEX

1. Cover Sheet
2. Aerial Overlay
3. Master Site Plan Sheet A
4. Master Site Plan Sheet B
5. Boundary & Topographic Survey
6. Boundary & Topographic Survey
7. Boundary & Topographic Survey
8. Land Use Summary Sheet A
9. Land Use Summary Sheet B
10. Utility Plan Sheet A
11. Utility Plan Sheet B
12. Grading Plan Sheet A
13. Grading Plan Sheet B
14. Intersection Details Sheet A
15. Intersection Details Sheet B
16. Erosion Control/S.W.P.P.P. Sheet A
17. Erosion Control/S.W.P.P.P. Sheet B
18. Drainage Plan Sheet A
19. Drainage Plan Sheet B
20. Venezia Boulevard (Sta. 100+00 to 113+50) Plan & Profile
21. Venezia Boulevard (Sta. 113+50 to 119+36.07) Plan & Profile
22. Bellissimo Place (Sta. 200+00 to 214+50) Plan & Profile
23. Bellissimo Place (Sta. 214+50 to 226+50) Plan & Profile
24. Bellissimo Place (Sta. 226+50 to 232+21.41) Plan & Profile
25. Napoli Way Plan & Profile
26. Terracotta Terrace Plan & Profile
27. Messina Place (Sta. 500+00 to 510+00) Plan & Profile
28. Messina Place (Sta. 510+00 to 519+00) Plan & Profile
29. Calabria Way Plan & Profile
30. Tree Location Plan
31. Drainage Cross-Sections
32. Sanitary Sewer Details
33. Lift Station Details
34. Potable Water Details
35. Reclaimed Water Details
36. Paving & Drainage Details
37. General Project Details

### OWNER:

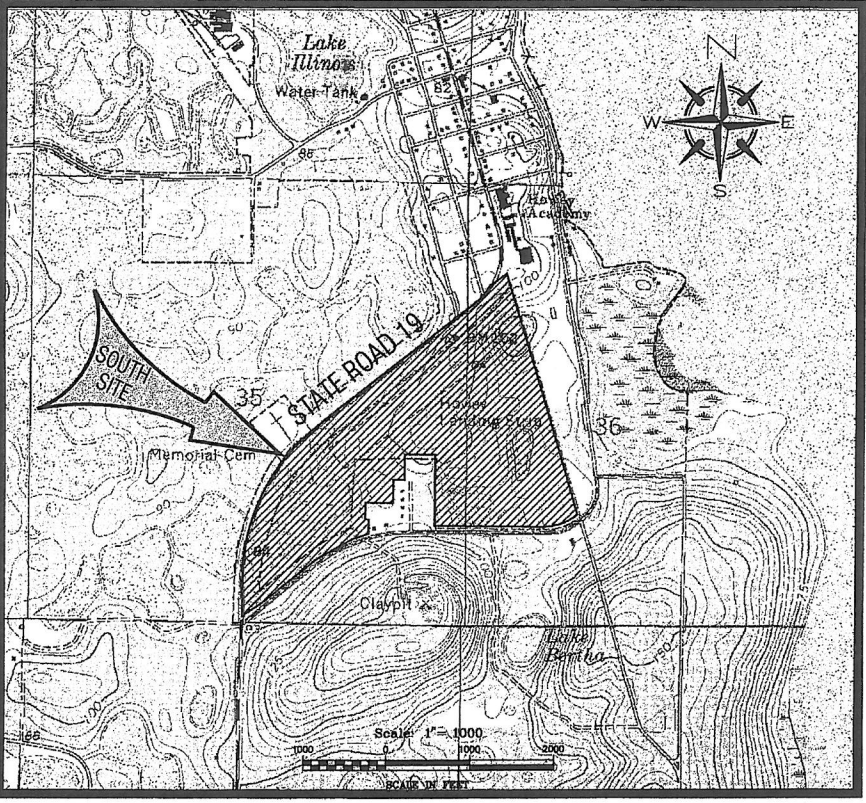
FRED BENNETT  
LYKES BROTHERS, INC.  
400 NORTH TAMPA STREET  
TAMPA, FLORIDA 33601  
(813) 470-5509  
(813) 470-5020 FAX

### DEVELOPER:

FLAGSHIP HARB, LLC  
916 HIGHLAND AVENUE  
ORLANDO, FLORIDA 32803  
(407) 246-1144  
(407) 246-1155 FAX  
CONTACT: TED BOLIN

### ENGINEER:

BOOTH, ERN, STRAUGHAN & HIOTT, INC.  
350 NORTH SINCLAIR AVENUE  
TAVARES, FLORIDA 32778  
(352) 343-8481  
CONTACT: CHARLES HIOTT, P.E.



VICINITY MAP

### LEGAL DESCRIPTION:

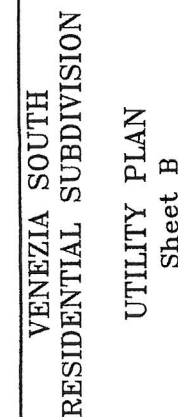
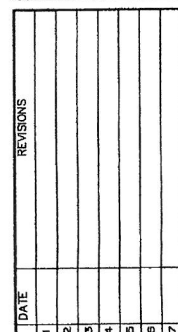
SOUTH PARCEL.  
A PARCEL OF LAND BEING A PORTION OF "HOWEY-IN-THE-HILLS" (AN UNRECORDED PLAT) LYING IN SECTIONS 35 AND 36, TOWNSHIP 22 SOUTH, RANGE 25 EAST, LAKE COUNTY, FLORIDA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
COMMENCE AT THE SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 35, TOWNSHIP 22 SOUTH, RANGE 25 EAST, LAKE COUNTY, FLORIDA; THENCE ALONG THE WEST BOUNDARY OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 35 80°02'16"W, A DISTANCE OF 1208.95 FEET TO A POINT OF INTERSECTION WITH THE SOUTHERLY RIGHT OF WAY LINE OF PALM AVENUE (STATE ROAD NO. 19) SAID POINT BEING THE POINT OF BEGINNING; THENCE ALONG SAID RIGHT OF WAY N51°23'37"E, A DISTANCE OF 1787.45 FEET TO A POINT OF CURVATURE; THENCE ALONG THE ARC OF SAID CURVE 303.86 FEET, CONCAVE NORTHEASTERLY AND HAVING A RADIUS OF 783.56 FEET, A CENTRAL ANGLE OF 22°04'40" AND A CHORD BEARING AND DISTANCE OF N40°08'15"E, 304.84 FEET; THENCE DEPARTING SAID RIGHT OF WAY N52°02'15"E, A DISTANCE OF 248.38 FEET; THENCE N72°56'00"E, A DISTANCE OF 7.90 FEET; THENCE S17°04'35"E, A DISTANCE OF 2208.95 FEET TO A POINT OF INTERSECTION WITH THE NORTHERLY RIGHT OF WAY LINE OF COUNTY ROAD, (A.K.A. REVELS ROAD), SAID POINT BEING A POINT OF CURVATURE; THENCE ALONG SAID RIGHT OF WAY AND THE ARC OF SAID CURVE 440.81 FEET, CONCAVE NORTHERLY, HAVING A RADIUS OF 810.22 FEET, A CENTRAL ANGLE OF 41°40'17" AND A CHORD BEARING AND DISTANCE OF S89°14'52"W, 434.19 FEET TO A POINT OF TANGENCY; THENCE S89°48'55"W, A DISTANCE OF 1287.88 FEET; THENCE DEPART SAID RIGHT OF WAY N03°12'10"W, A DISTANCE OF 849.40 FEET; THENCE S89°48'55"W, A DISTANCE OF 968.14 FEET; THENCE S89°07'50"E, A DISTANCE OF 305.15 FEET; THENCE S89°58'00"W, A DISTANCE OF 135.00 FEET; THENCE S89°08'07"E, A DISTANCE OF 275.35 FEET; THENCE S89°48'55"W, A DISTANCE OF 208.16 FEET; THENCE S89°37'45"W, A DISTANCE OF 200.21 FEET; THENCE N89°47'38"E, A DISTANCE OF 45.00 FEET; THENCE S00°12'22"W, A DISTANCE OF 168.45 FEET TO A POINT OF INTERSECTION WITH THE NORTHERLY RIGHT OF WAY LINE OF SAID COUNTY ROAD, SAID POINT BEING A POINT ON A CURVE; THENCE ALONG SAID RIGHT OF WAY AND THE ARC OF SAID CURVE 189.84 FEET, CONCAVE SOUTHERLY, HAVING A RADIUS OF 3270.02 FEET, A CENTRAL ANGLE OF 9°10'41" AND A CHORD BEARING AND DISTANCE OF S77°29'23"W, 189.81 FEET; THENCE DEPART SAID RIGHT OF WAY LINE S89°21'50"W, A DISTANCE OF 531.55 FEET; THENCE S51°11'58"W, A DISTANCE OF 785.55 FEET; THENCE S52°04'40"W, A DISTANCE OF 308.80 FEET TO THE EASTERLY RIGHT OF WAY LINE OF STATE ROAD NO. 19, SAID RIGHT OF WAY BEING COMPRISED IN PART BY PORTIONS OF MARIE AVENUE AND PALM AVENUE; THENCE ALONG SAID RIGHT OF WAY N00°05'35"E, A DISTANCE OF 488.11 FEET TO A POINT OF CURVATURE; THENCE ALONG THE ARC OF SAID CURVE 2911.24 FEET, CONCAVE SOUTHEASTERLY, HAVING A RADIUS OF 2241.83 FEET, A CENTRAL ANGLE OF 51°33'39" AND A CHORD BEARING AND DISTANCE OF N25°36'52"E, 1849.96 FEET TO A POINT OF TANGENCY; THENCE N51°23'37"E, A DISTANCE OF 601.65 FEET TO THE POINT OF BEGINNING.  
THENCE S89°50'24"W, A DISTANCE OF 232.67 FEET TO THE POINT OF BEGINNING.

STATE OF FLORIDA CERTIFICATION OF AUTHORIZATION NO. 27029

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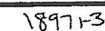


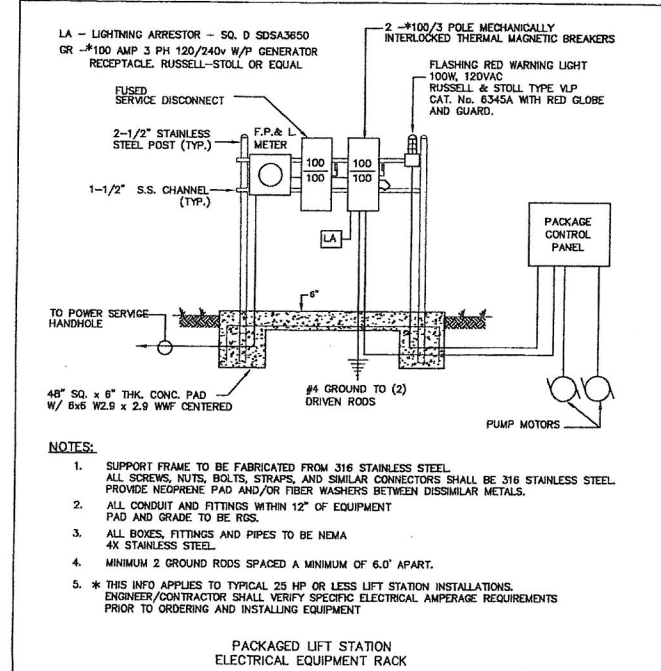




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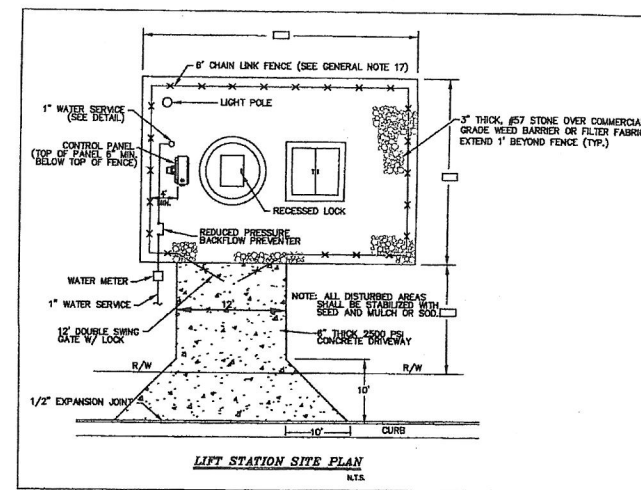
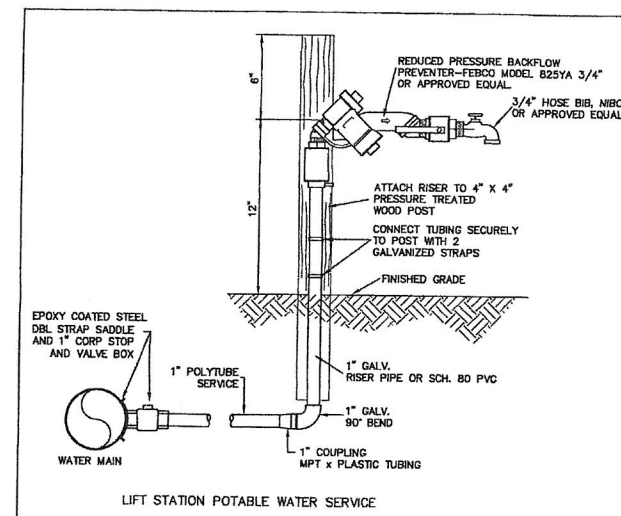
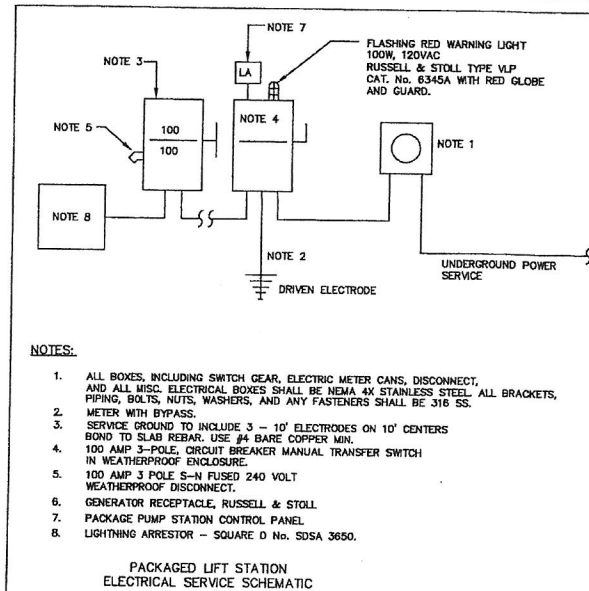
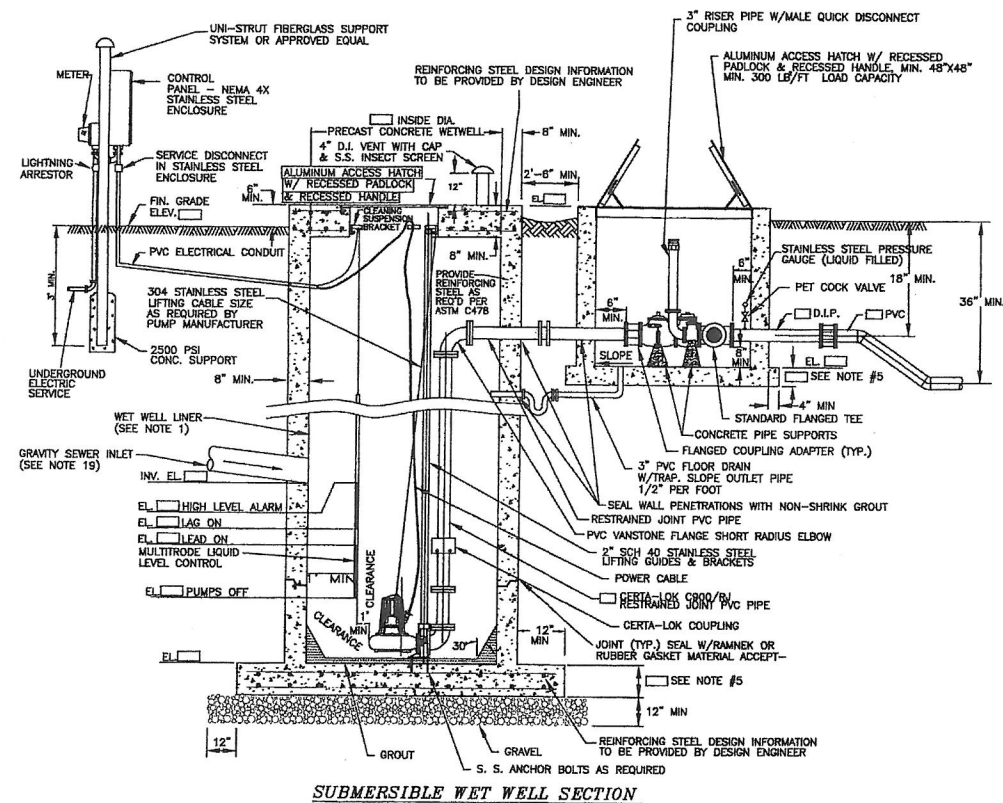
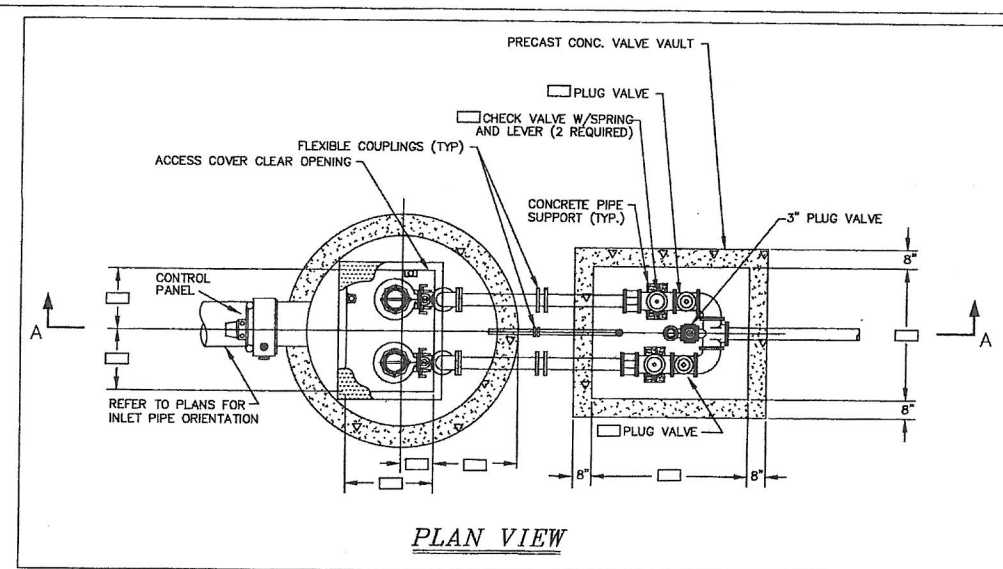
CHARLES C. HOTT, P.E.  
PROFESSIONAL ENGINEER 548





#### GENERAL NOTES SUBMERSIBLE PUMP STATION:

- WET WELL SHALL BE LINED WITH "AGRI SURE GRIP" CONCRETE PROTECTIVE LINER OR APPROVED EQUAL. WET WELL EXTERIOR SHALL BE COATED WITH COAL TAR EPOXY.
- BASE AND FIRST RISER UNIT TO BE CAST MONOLITHIC.
- VALVE VAULT AND ACCESS COVERS SHALL BE SIZED TO PERMIT EASY REMOVAL OF CHECK VALVE.
- VALVE VAULT SHALL HAVE SEALED FLOOR W/ DRAIN TO WET WELL - TRAP REQUIRED.
- ALL LOCATIONS WHERE PIPES ENTER OR LEAVE THE WET WELL OR VALVE VAULT SHALL BE MADE WATERTIGHT WITH WALL SLEEVE OR NON-SHRINK GROUT.
- PUMP LIFTING DEVICE SHALL BE 304 SS LIFTING CABLE.
- THERE SHALL BE NO ELECTRICAL JUNCTION BOXES IN WET WELL OR VALVE VAULT.
- CHECK VALVES SHALL BE OUTSIDE WEIGHT & LEVER.
- WET WELL & VALVE VAULT COVERS SHALL BE ALUMINUM WITH 304SS HARDWARE, AS RECOMMENDED AND REQUIRED BY PUMP MANUFACTURER (LOADING 300 P.S.F.) AND PROVIDED WITH RECESSED LOCKS.
- CONTROL PANEL SHALL BE AS MANUFACTURED BY THE PUMP SUPPLIER OR APPROVED EQUAL.
- WET WELL DIAMETER SHALL BE 6' NOMINAL.
- ACCESS HATCH DIMENSIONS ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE PUMPING EQUIPMENT, PIPING AND CONCRETE STRUCTURES TO ENSURE ADEQUATE ACCESS OPENINGS FOR INSTALLATION, OPERATION AND MAINTENANCE OF ALL EQUIPMENT.
- FURNISH AND INSTALL GENERATOR RECEPTACLE.
- VALVE VAULT AND WET WELLS SHALL BE PRECAST CONCRETE. SUBMIT SHOP DRAWINGS WITH REINFORCING DETAILS FOR APPROVAL PRIOR TO FABRICATION.
- CHAIN LINK FENCE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:
  - POSTS SHALL BE SCHEDULE 40, GALVANIZED STEEL (2" OUTSIDE DIAMETER MIN.), MAXIMUM 10 FOOT SPACING.
  - FABRIC FOR FENCING AND GATES SHALL BE 9 GAUGE 2" MESH, CLASS 1, CONFORMING TO A.S.T.M. A-3920, 1.2 OZ. GALVANIZED COATING.
  - POSTS SHALL BE SET IN 2500 PSI CONCRETE IN AN 8" DIAMETER HOLE WITH A DEPTH OF 36 INCHES.
  - FENCING SHALL BE SCREENED WITH PVC SLATS, FEATHERLOCK OR APPROVED EQUAL. COLOR SHALL BE GREEN OR BLACK.
- AUXILIARY POWER CONNECTION:
  - FOR PUMPS < 10HP - RUSSELL & STOLL CAT. NO. FCF 3134-W-72, 100 AMP, 230 VOLT OR APPROVED EQUAL.
  - FOR PUMPS ≥ 10HP - RUSSELL & STOLL CAT. NO. FCF 3134-W-72, 200 AMP, 230 VOLT AR2042 - CROUSE-HINDS, OR APPROVED EQUAL.
- HAND - (ON-OFF) - AUTOMATIC SWITCHES ON ALL PUMPS.
  - MANUAL - (ON-OFF) - SWITCH ON ALL ALTERNATORS.
  - ONE ELAPSED TIME METER FOR EACH PUMP.
  - 120 VOLT RECEPTACLE INSIDE CONTROL BOX.
  - 3 PHASE CURRENT (WILL NOT ACCEPT ADD A PHASE OR CAPACITOR PHASE CHANGERS).
  - POWER CABLE TO PUMPS RUN IN CONDUIT SEPARATE FROM FLOAT SWITCH CONDUIT.
  - LIQUID FILLED PRESSURE GAUGE ON FORCE MAIN.
- FLOAT SWITCHES, MUST BE TRANSFORMER ISOLATED-24 VOLT MAX. ALL CONNECTIONS MUST TERMINATE IN CONTROL PANEL OUTSIDE OF WET WELL.
- KNIFE SWITCH DISCONNECT BETWEEN POWER SUPPLY AND LIFT STATION CONTROL PANEL.
- SHAKESPEARE FIBERGLASS LIGHT POLE CATALOG #B520 OR #B524 OR APPROVED EQUAL.
- RUDD LIGHT 250W #FS3425-M OR APPROVED EQUAL.
- SEAL GRAVITY PIPE AT WETWELL WITH RUBBER BOOT SEAL.
- PUMP CONTROLLERS SHALL BE MULTI-TRODE MODEL MTPC CONTROLLER AND MITS-5 SUPPRESSOR.



### VENEZIA SOUTH RESIDENTIAL SUBDIVISION LIFT STATION DETAILS

CHECKED BY: CCH  
PROJECT NO.: 051373.0000  
DATE: JUNE 2006  
DRAWN BY: LCS  
DESIGNED BY: LCS

SHT. 33 OF 37

JUN 19 2007  
CHARLES C. HOTT, P.E.  
PROFESSIONAL ENGINEER 34615

REVISIONS

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# CONSTRUCTION PLANS FOR Venezia North Subdivision

*Section 35 & 36, Township 22 South, Range 25 East  
Town of Howey in the Hills, Lake County, Florida*

**OWNER:**

FRED BENNETT  
LYKES BROTHERS, INC.  
400 NORTH TAMPA STREET  
TAMPA, FLORIDA 33601  
(813) 470-5509  
(813) 470-5020 FAX

**DEVELOPER:**

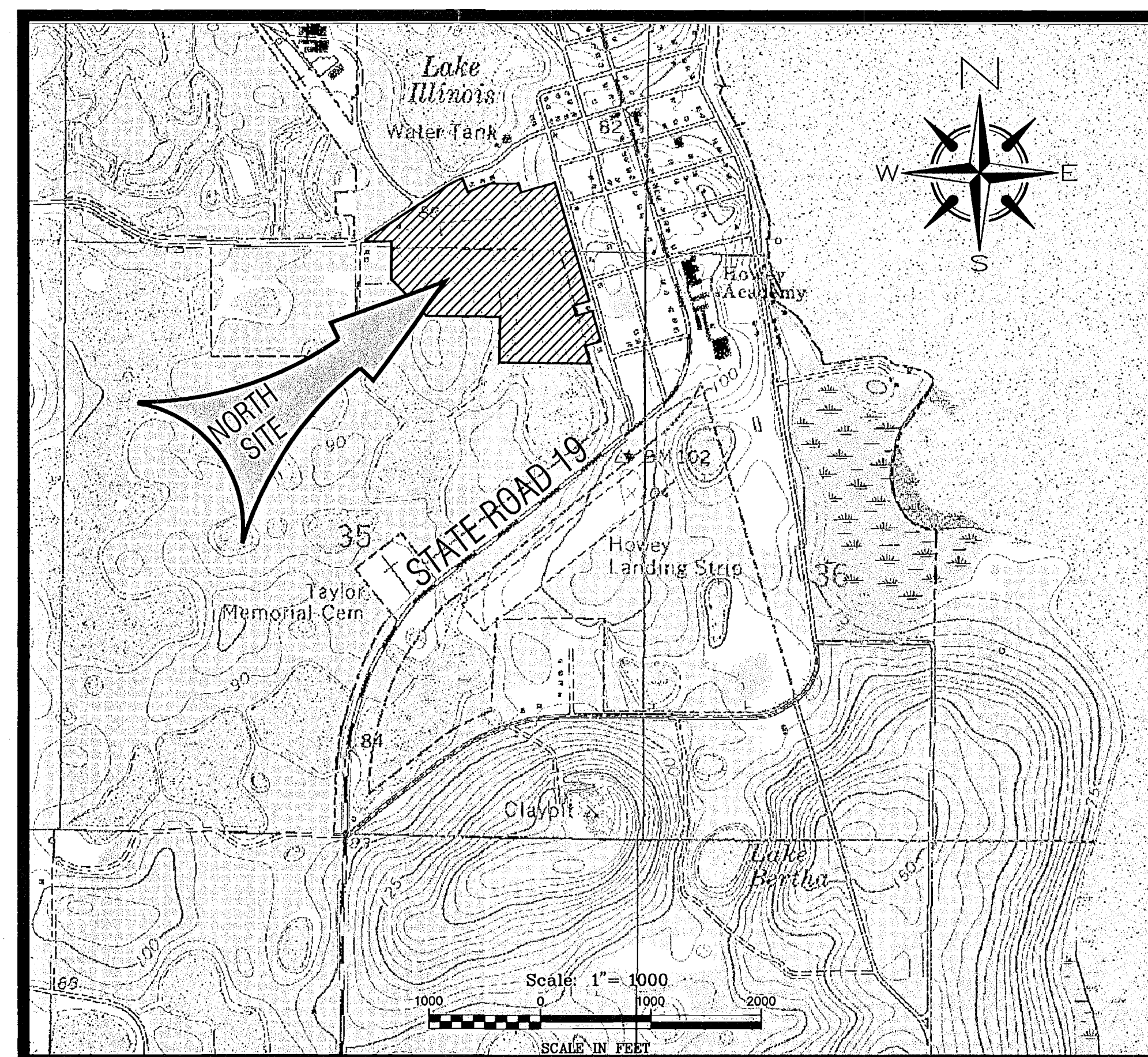
FLAGSHIP HARB, LLC  
916 HIGHLAND AVENUE  
ORLANDO, FLORIDA 32803  
(407) 246-1144  
(407) 246-1155 FAX  
CONTACT: TED BOLIN

**ENGINEER:**

BOOTH, ERN, STRAUGHAN & HIOTT, INC.  
350 NORTH SINCLAIR AVENUE  
TAVARES, FLORIDA-32778  
(352) 343-8481  
CONTACT: CHARLES HIOTT, P.E.

**LEGAL DESCRIPTION:**

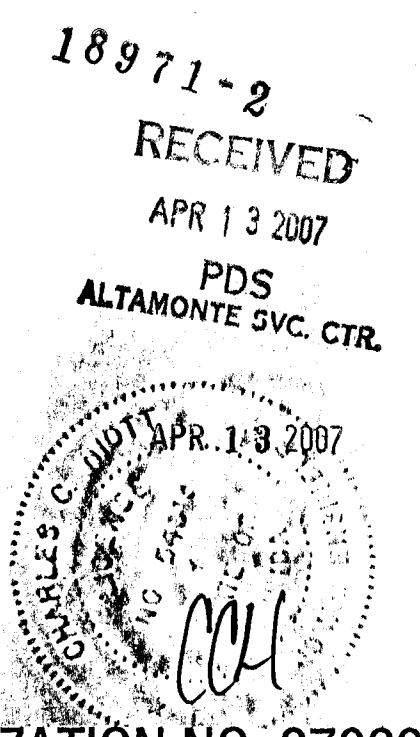
NORTH PARCEL  
A PARCEL OF LAND BEING A PORTION OF "GROVE GARDENS" (PLAT BOOK 17, PAGE 2) AND "HOWEY-IN-THE-HILLS" (AN UNRECORDED PLAT) LYING IN SECTIONS 26 AND 35, TOWNSHIP 20 SOUTH, RANGE 25 EAST, LAKE COUNTY, FLORIDA AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
COMMENCE AT THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF SECTION 35, TOWNSHIP 20 SOUTH, RANGE 25 EAST, LAKE COUNTY, FLORIDA; THENCE ALONG THE NORTH BOUNDARY OF SAID SECTION N89°49'22"E, A DISTANCE OF 97.92 FEET TO THE POINT OF BEGINNING; THENCE DEPART SAID SECTION BOUNDARY N00°00'00"E, A DISTANCE OF 29.70 FEET TO A POINT ON THE SOUTHERLY RIGHT OF WAY LINE OF GRANT STREET; THENCE ALONG SAID RIGHT OF WAY N66°00'00"E, A DISTANCE OF 821.20 FEET; THENCE N64°54'03"E, A DISTANCE OF 134.15 FEET; THENCE DEPART SAID RIGHT OF WAY LINE S22°46'58"E, A DISTANCE OF 134.90 FEET; THENCE N67°23'46"E, A DISTANCE OF 249.96 FEET; THENCE S06°03'40"E, A DISTANCE OF 12.16 FEET; THENCE N89°52'29"E, A DISTANCE OF 222.15 FEET; THENCE S17°01'37"E, A DISTANCE OF 79.32 FEET; THENCE N72°54'16"E, A DISTANCE OF 315.08 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF FLORIDA AVENUE; THENCE ALONG SAID RIGHT OF WAY S17°04'04"E, A DISTANCE OF 1132.61 FEET; THENCE DEPART SAID RIGHT OF WAY S72°57'30"W, A DISTANCE OF 149.84 FEET; THENCE S17°10'01"E, A DISTANCE OF 74.94 FEET; THENCE N72°58'13"E, A DISTANCE OF 149.30 FEET TO A POINT ON THE WEST RIGHT OF WAY LINE OF FLORIDA AVENUE; THENCE ALONG SAID RIGHT OF WAY S17°02'44"E, A DISTANCE OF 300.03 FEET; THENCE DEPART SAID RIGHT OF WAY S72°58'07"W, A DISTANCE OF 149.83 FEET; THENCE S17°02'42"E, A DISTANCE OF 164.96 FEET; THENCE N00°00'00"W, A DISTANCE OF 835.94 FEET TO A POINT ON THE WEST BOUNDARY OF THE NORTHEAST 1/4 OF SAID SECTION 35; THENCE ALONG SAID SECTION BOUNDARY N00°19'41"W, A DISTANCE OF 404.92 FEET; THENCE DEPARTING SAID SECTION BOUNDARY S89°51'12"W, A DISTANCE OF 659.75 FEET; THENCE N45°09'29"W, A DISTANCE OF 468.37 FEET; THENCE N00°06'38"W, A DISTANCE OF 331.44 FEET; THENCE S89°50'24"W, A DISTANCE OF 232.87 FEET TO THE POINT OF BEGINNING.



VICINITY MAP

**SHEET INDEX**

1. Cover Sheet
2. Aerial Overlay
3. Master Site Plan
4. Boundary & Topographic Survey
5. Land Use Summary
6. Utility Plan
7. Grading Plan
8. Intersection Details
9. Erosion Control/S.W.P.P.P.
10. Drainage Plan
11. Amola Way Plan & Profile
12. Avila Place Cul-de-Sac Plan & Profile
13. Avila Place (Sta. 30+00 to 42+50) Plan & Profile
14. Avila Place (Sta. 42+50 to 56+50) Plan & Profile
15. Avila Place (Sta. 56+50 to 70+11.63) Plan & Profile
16. Drainage Cross-Sections
17. Sanitary Sewer Details
18. Lift Station Details
19. Potable Water Details
20. Reclaimed Water Details
21. Paving & Drainage Details
22. General Project Details



STATE OF FLORIDA CERTIFICATION OF AUTHORIZATION NO. 27029

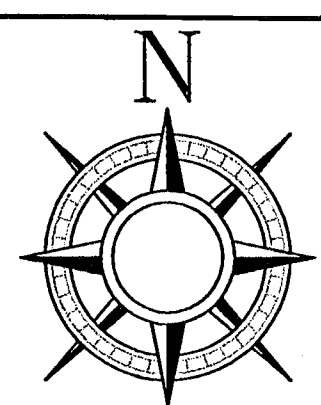
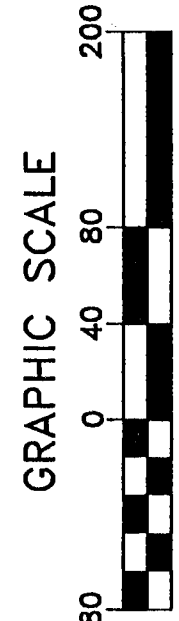


# SANITARY PIPE CHART

MANHOLE ID	STATION	RIM	INV	TO	INV	PIPE	LENGTH	SLOPE
MH #18	64+54.35	84.68	78.83	MH #17	77.59	8" SDR-35	309LF	0.40%
MH #17	67+63.37	86.88	77.49	MH #14	76.49	8" SDR-35	249LF	0.40%
MH #16	60+71.72	85.09	78.86	MH #15	77.34	8" SDR-35	380LF	0.40%
MH #15	56+89.57	88.56	77.24	MH #14	76.66	8" SDR-35	145LF	0.40%
MH #14	55+42.88	89.47	76.39	MH #13	75.62	8" SDR-35	193LF	0.40%
MH #13	53+48.70	89.36	75.52	MH #12	74.09	8" SDR-35	358LF	0.40%
MH #12	49+90.52	86.02	73.99	MH #11	73.25	8" SDR-35	186LF	0.40%
MH #11	13+85.83	85.24	81.24	MH #8	80.33	8" SDR-35	227LF	0.40%
MH #10	25+29.01	93.29	89.41	MH #9	88.52	8" SDR-35	223LF	0.40%
MH #9	23+01.41	91.99	88.42	MH #8	87.22	8" SDR-35	299LF	0.40%
MH #8	11+57.71	95.00	80.23	MH #7	77.10	8" SDR-35	240LF	0.40%
MH #7	32+40.66	87.39	77.00	MH #6	75.92	8" SDR-35	271LF	0.40%
MH #6	35+12.71	87.45	75.82	MH #5	74.70	8" SDR-35	280LF	0.40%
MH #5	37+93.82	86.87	74.60	MH #4	73.91	8" SDR-35	173LF	0.40%
MH #4	39+67.93	84.92	73.81	MH #3	72.95	8" SDR-35	215LF	0.40%
MH #3	41+83.97	84.36	72.85	MH #2	71.64	8" SDR-35	302LF	0.40%
MH #2	44+86.36	87.35	71.54	MH #1	70.27	8" SDR-35	318LF	0.40%
MH #1	48+05.39	88.24	70.17	LS	70.02	8" SDR-35	37LF	0.40%

## GENERAL NOTES:

1. ALL PIPE LENGTHS ARE APPROXIMATE AND ROUNDED OFF TO THE NEAREST FOOT.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL MATERIALS PRIOR TO FINAL BIDDING.
3. ALL STRUCTURE INVERTS SHALL BE POURED AND SHAPED TO PROMOTE FLOW AND TO PREVENT STANDING WATER.
4. ALL CONSTRUCTION MATERIALS SHALL CONFORM TO THE LATEST TOWN OF HOWEY-IN-THE-HILLS STANDARDS AND SPECIFICATIONS.
5. ALL CONSTRUCTION SHALL BE SUBJECT TO INSPECTIONS AND APPROVALS BY THE PROJECT ENGINEER AND THE TOWN OF HOWEY-IN-THE-HILLS.



## UTILITY LEGEND

- Gate Valve & Box
- Pipe Elbow
- Tee
- Fire Hydrant Assembly
- Double Water Service
- Single Water Service
- Water Main
- Double Re-use Water Service
- Single Re-use Water Service
- Re-use Water Main
- Sanitary Sewer Service
- Sanitary Manhole
- Sanitary Gravity Main
- Sanitary Force Main
- Drainage Easement
- Utility Easement

NOTE: ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF HOWEY-IN-THE-HILLS CONSTRUCTION SPECIFICATIONS.



## VENEZIA NORTH RESIDENTIAL SUBDIVISION UTILITY PLAN

CHECKED BY: CGH

PROJECT NO: 051373.0000

DATE: JUNE 2008

DESIGNED/DRAWN BY: LCS

SHEET 6 OF 22

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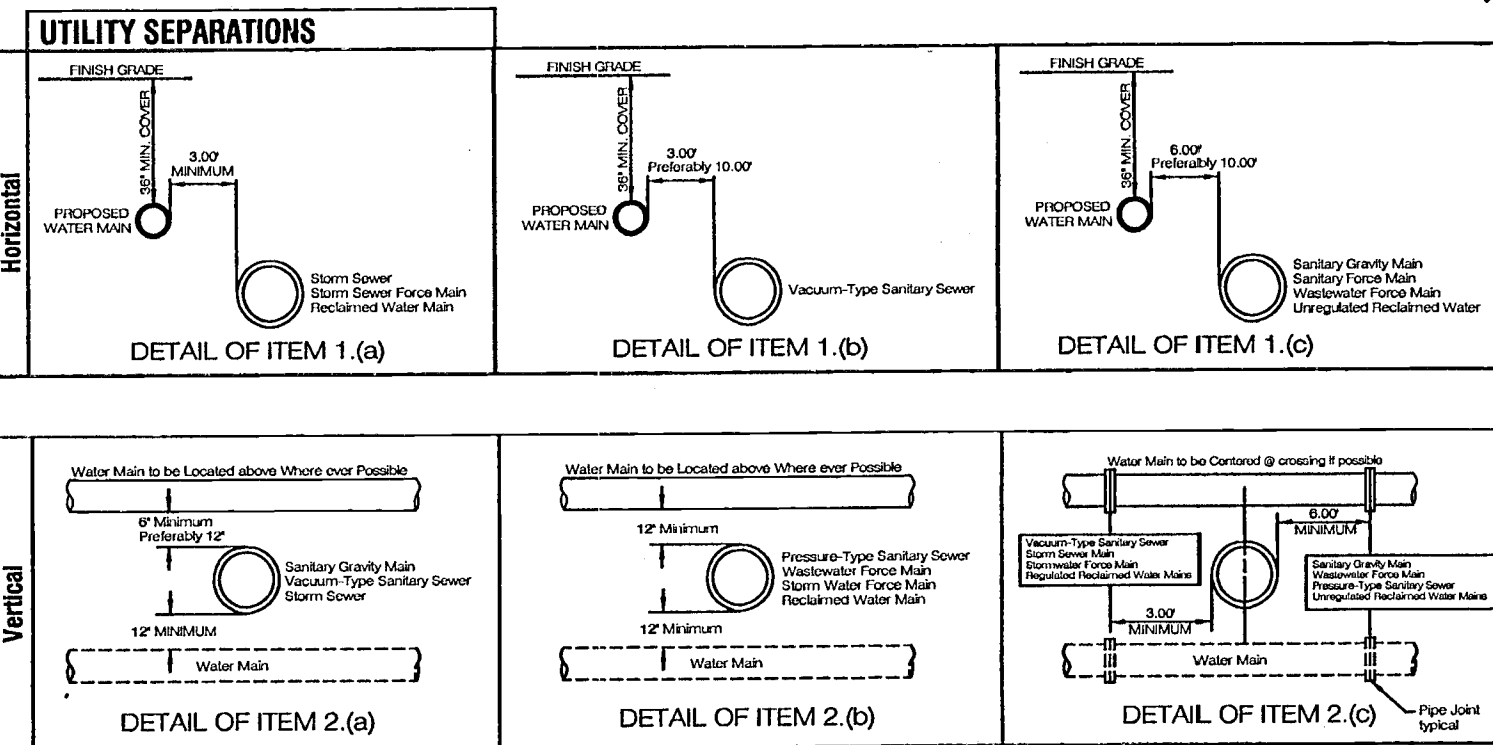
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PDS

ALTA MONTE CVC. CTR.

CHARLES C. HOIT, P.E.

PROFESSIONAL ENGINEER 54813



- 62-555.314 Location of Public Water System Mains: For the purpose of this section, the phrase "Water Mains" shall mean Mains, including Treatment Plant process piping, conveying either raw, partially treated, or finished drinking water; Fire Hydrantless; and service lines that are under the control of a Public Water System and that have an inside diameter of three (3) inches or greater.
- (1) Horizontal Separation Between Water Mains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, Reclaimed Water Pipelines, and On-site Sewage Treatment and Disposal Systems:
- (a) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least (3) three feet, and preferably (10) Ten feet, between the outside of the water main and the outside of any existing or proposed vacuum-type Sanitary Sewer, Stormwater Force Main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C.
- (b) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least (6) Six feet, and preferably (10) Ten feet, between the outside of the water main and the outside of any existing or proposed gravity- or pressure-type Sanitary Sewer, Stormwater Force Main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C. The minimum horizontal separation distance between water mains and gravity-type Sanitary Sewers shall be reduced to (3) Three feet where the bottom of the water main is laid at least (6) Six inches above the top of the sewer.
- (c) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least (10) Ten feet between the outside of the water main and all parts of any existing or proposed "on-site Sewage Treatment and Disposal System" as defined in Section 381.006(2), F.S. and Rule 64E-6.002, F.A.C.
- (2) Vertical Separation Between Water Mains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, Reclaimed Water Pipelines:
- (a) New or relocated, underground water mains crossing any existing or proposed gravity- or vacuum-type sanitary sewer or storm sewer shall be laid so the outside of the water main is at least (6) Six inches, and preferably 12 inches above, or at least 12 inches below the outside of the other pipeline. However, it is preferable to lay the water main above the other pipeline.
- (b) New or relocated, underground water mains crossing any existing or proposed pressure-type sanitary sewer, wastewater or stormwater Force Main, or pipeline conveying reclaimed water shall be laid so the outside of the water main is at least (12) inches ABOVE or BELOW the Outside of the other pipeline. However, it is preferable to lay the water main above the other pipeline.
- (c) At the utility crossings described in paragraphs (a) & (b) Above, one full length of Water Main Pipe shall be centered above or below the other pipeline so the water main joints will be as far as possible from the other pipeline. Alternatively, at such crossings, the pipes shall be arranged so that all water main joints are at least (3) Three feet from all joints in Vacuum-type Sanitary Sewers, Storm Sewers, Stormwater Force Mains, or pipelines conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C., and at least (6) Six feet from all joints in Gravity- or Pressure-type Sanitary Sewers, Wastewater Force mains, or pipelines conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.
- (3) Separation Between Water Mains and Sanitary or Storm Sewer Manholes:
- (a) No water main shall pass thru, or come into contact with any part of a Sanitary Manhole or a Storm Sewer Manhole.
- (b) Separation Between Fire Hydrant Drains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, Reclaimed Water Pipelines, and On-site Sewage Treatment and Disposal Systems: New or relocated Fire Hydrants with underground Drains that are located so that the drains are at least (3) Three feet from any existing or proposed storm sewer, stormwater Force Main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C.; at least (3) Three feet, and preferably (10) Ten feet, from any existing or proposed gravity- or Pressure-type Sanitary Sewer, Wastewater Force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.; and at least (10) Ten feet from any existing or proposed "on-site sewage treatment and disposal system" as defined in Section 381.006(2), F.S. and Rule 64E-6.002, F.A.C.
- (c) Exceptions/Relief: Adherence to the above constraints and separations in Items 1. through 4. shall be permitted, "WITHOUT EXCEPTION", if for some reason where it is not technically feasible or economically sensible that Items 1 through 4 cannot be complied with, Contractor will Stop Work and Notify the Engineer or record for the appropriate solution, which will be submitted to "The Department of Environmental Protection" for APPROVAL, prior to work commencement.

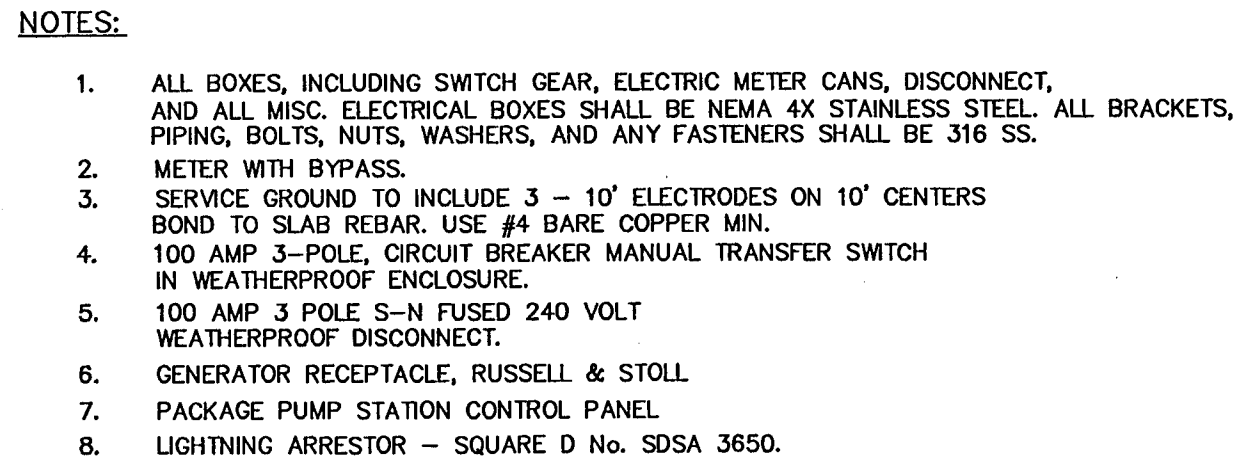
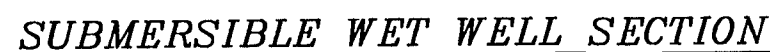
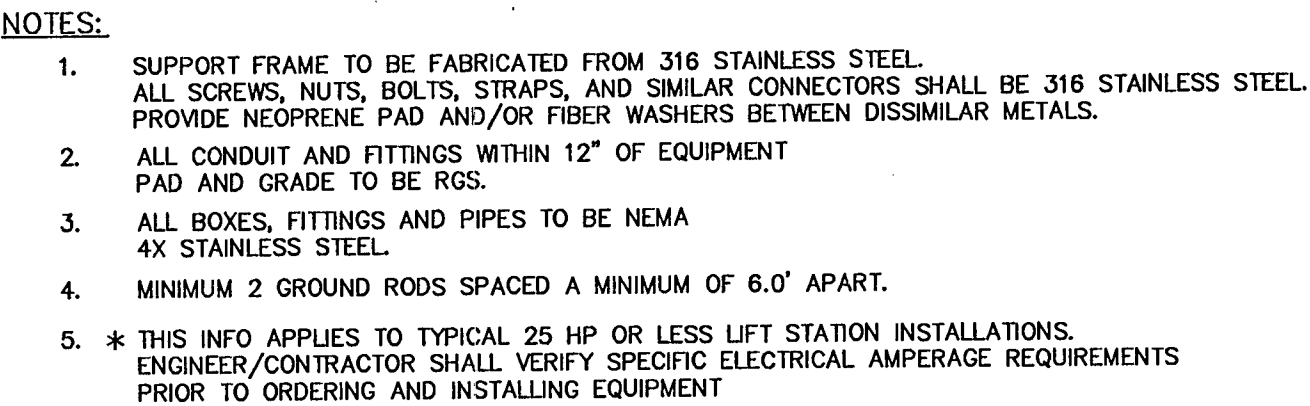
## COLOR CODING

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 complete application before August 28, 2003, shall be color coded or marked using blue as a predominate color to differentiate drinking water from reclaimed or other water. Under-ground plastic pipe shall be solid-wall blue pipe, shall have a co-extruded blue external ring, or shall be white or black pipe with blue stripes incorporated into, or 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" intervals around 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 the 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. Above-ground pipe as drinking water treatment plants shall be color coded and labeled in accordance with subsection 62-555.320(10), F.A.C., and all other above-ground pipe shall be color coded or marked like underground pipe.

## GENERAL WATER NOTES

1. Water system components shall be installed in strict accordance with all local codes and regulations, cleaned, disinfected and bacteriologically cleared for service in accordance with the latest ANMA Standards and Chapter 62-555 Florida Administrative Code.
2. All piping shall bear the "NSF" seal for Potable Water.
3. Water mains shall be PVC conforming to ANMA C-900, DR 18 for all pipe sizes 4" - 12". Pipes 14" or larger shall be ANMA C-905, DR 18. All couplings, clearing compounds, solvents, lubricants, and pipe preparation, for laying, shall be in accordance with the pipe manufacturers latest recommendations.
4. Depth of water lines to be 30" minimum cover from finish grade.
5. Water mains to be located 6.00' from curb or edge of pavement unless otherwise noted.
6. All sleeves under pavement shall extend 5' beyond the back of curb.
7. Disinfecting: Following the pressure testing, the Contractor shall disinfect all sections of the water distribution system. Disinfection shall be in accordance with the applicable provisions of ANMA Standard C651 "Disinfecting Water Mains", and all appropriate agency approval.
8. All hydrostatic tests shall be in accordance with ANMA C600 for Ductile Iron Pipe and C608/C623 for PVC pipe.
9. All water mains shall be installed, pressure and leak tested in accordance with ANMA C600, (62-555.320(1)) and 62-555.330, F.A.C. All installation, testing and field procedures must be provided and must conform to the applicable ANMA Standards.
10. All piping materials and specifications covering pipes, joints and packing materials, internal coatings and linings, fittings, appurtenances shall all be in accordance with the corresponding ANMA Standards and be conforming to NSF requirements, as may be applicable, with exceptions allowed only if documentation and assurances are provided in compliance with Paragraphs 62-555.320(3) (d) 62-555.320 (3) (b), and 62-555.320 (2) (c), F.A.C. The Lead Use Prohibition in Rule 62-555.322, F.A.C. shall also apply. Polyethylene tubing shall be per ANMA C601. Underground service lines and valves shall be per ANMA C600.
11. All existing wells on site to be abandoned in accordance with all applicable FDEP and SWMD requirements.



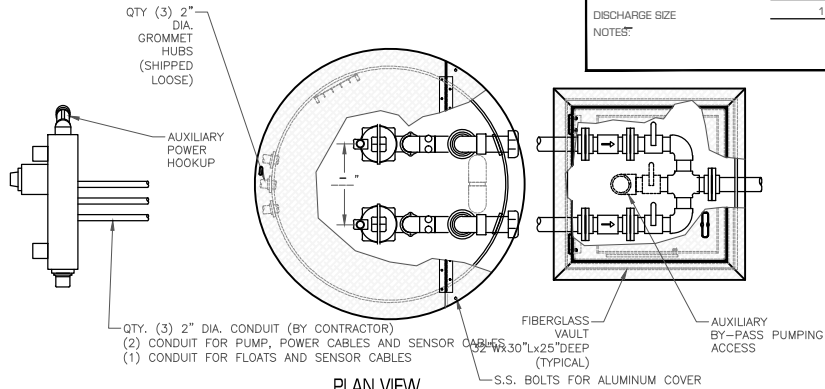
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VENEZIA NORTH  
RESIDENTIAL SUBDIVISION  
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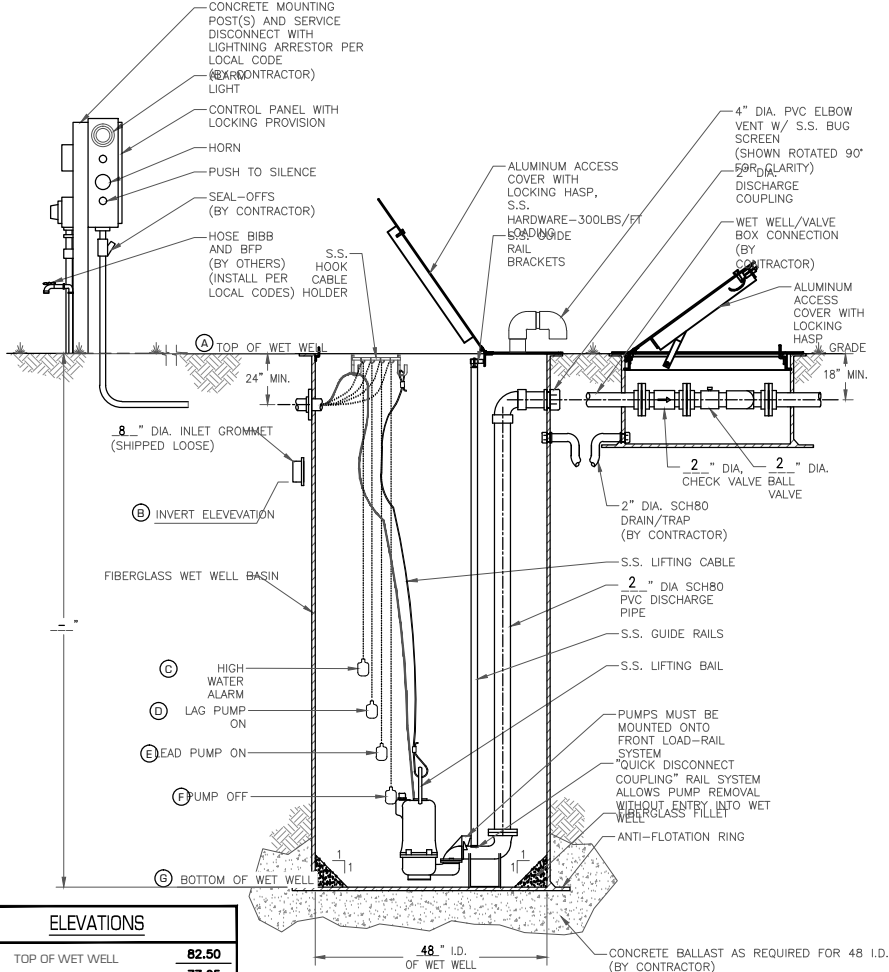
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RECEIVED  
APR 13 2007  
PDS  
ALTAMONTE, J.C.

LIFT STATION #1

WET WELL/VALVE BOX LAYOUT



PLAN VIEW



ELEVATIONS

A	TOP OF WET WELL	82.50
B	INLET INVERT	77.25
C	HIGH WATER ALARM	76.75
D	LAG PUMP ON	76.25
E	LEAD PUMP ON	75.75
F	PUMP OFF	73.50
G	BOTTOM OF WET WELL	72.50

SECTION VIEW

PUMP DATA TABLE

PUMP MODEL	HPG200
IMPELLER DIAMETER	5.25"
PUMP DESIGN CAPACITY	28 GPM
PUMP DESIGN TDH	97 FT
SECONDARY CAPACITY	33 GPM
SECONDARY TDH	89 FT
HORSEPOWER	2 HP
VOLTAGE	230 V
PHASE	3 PH
DISCHARGE SIZE	1 1/4"
NOTES:	

GENERAL NOTES

PUMPS SHALL BE OF THE SUBMERSIBLE TYPE (MANUFACTURED BY HYDRAMOTIC OR HOMA). EACH PUMP SHALL BE MOUNTED ON A 82" RAIL SYSTEM. THE RAIL SYSTEM SHALL BE SELF ENGAGING RESULTING IN A LEAKPROOF COUPLING. THE RAIL SYSTEM SHALL INCLUDE THE BASE ELBOW, DISCHARGE FLANGE ASSEMBLY, 304SS GUIDE RAILS, 316SS UPPER GUIDE BRACKET, 316SS LIFTING BAIL AND CABLE, AND A SIX-HOOK 316SS CABLE HOLDER. THE RAIL SYSTEM SHALL BE MOUNTED AND PRE-PIPED BY THE PUMP SUPPLIER.

PUMP CONSTRUCTION

THE PUMP VOLUTE, MOTOR AND SEAL HOUSING SHALL BE CONSTRUCTED OF CAST IRON. ALL EXTERNAL FASTENERS SHALL BE SERIES 300 STAINLESS STEEL. THE PUMP SHAFT SHALL BE CONSTRUCTED OF SERIES 416 STAINLESS STEEL.

IMPELLER

THE IMPELLER SHALL BE OF MULTI-VANE, SEMI-OPEN CONSTRUCTION. THE IMPELLER SHALL BE STATICALLY AND HYDRAULICALLY BALANCED.

CUTTERS

A CUTTER ASSEMBLY SHALL BE MOUNTED ON THE SUCTION SIDE OF THE PUMP WITH DIRECT DISCHARGE INTO THE PUMP IMPELLER. THE GRINDER SHALL BE CAPABLE OF GRINDING MATERIALS FOUND IN NORMAL, DOMESTIC SEWAGE. BOTH THE STATIONARY AND ROTATING CUTTERS SHALL BE CONSTRUCTED OF HARDENED STEEL.

MOTOR

THE MOTOR SHALL BE MOUNTED IN A SEALED, SUBMERSIBLE TYPE HOUSING. THE STATOR SHALL BE SECURELY HELD IN PLACE WITH A REMOVABLE END RING AND THREADED FASTENERS FOR EASE OF REMOVAL WITHOUT THE USE OF HEAT OR A PRESS. THE MOTOR WILL HAVE TWO HEAVY-DUTY BALL BEARINGS; ONE UPPER (RADIAL) AND ONE LOWER (THRUST), TO SUPPORT THE SHAFT. THE MOTOR SHALL BE EQUIPPED WITH A WINDING THERMOSTAT THAT IS WIRED TO SHUT THE MOTOR OFF IN CASE OF MOTOR OVERHEATING.

SEAL CHAMBER

THE PUMP SHALL HAVE TWO MECHANICAL SEALS, MOUNTED IN TANDEM WITH AN OIL CHAMBER BETWEEN THE SEALS. THE PUMP SHALL BE EQUIPPED WITH A SEAL LEAK DETECTION PROBE AND WARNING SYSTEM BY USING A SEAL FAILURE SENSOR INSTALLED IN THE SEAL CHAMBER.

WET WELL

THE PUMP SUPPLIER SHALL PROVIDE THE WET WELL. THIS GLASS FIBER-REINFORCED POLYESTER BASIN SHALL BE CONSTRUCTED OF A COMMERCIAL GRADE OF GLASS FIBER AND SHALL BE PROVIDED WITH FILLET AND AN ANTI-FLOTATION RING WITH A MINIMUM DIAMETER OF THREE INCHES LARGER THAN THE BASIN DIAMETER. THE RAIL SYSTEM, INTERNAL PIPING AND DISCHARGE CONNECTIONS SHALL BE PRE-INSTALLED BY THE PUMP SUPPLIER.

HATCH COVER

THE HATCH COVER SHALL BE 2/3 HINGED TO ALLOW FOR MAXIMUM ACCESS TO THE WET WELL. THE HATCH COVER SHALL BE ALUMINUM WITH STAINLESS STEEL FASTENERS, RATED FOR 300 PSF OR GREATER. THE HATCH COVER SHALL INCLUDE A SINGLE OR DUAL DOOR OF DIMENSIONS SPECIFIED BY THE PUMP MANUFACTURER FOR PROPER PUMP CLEARANCE. THE COVER SHALL BE MANUFACTURED BY US FABRICATION, OR EQUAL.

VALVE BOX

THE VALVE BOX IS FIBERGLASS WITH ALUMINUM LOCKABLE COVER. STANDARD SIZE VALVE BOX IS 32"x30"x25".

VALVES

VALVES SHALL BE SEWAGE SWING CHECK WITH CLEAN-OUT PORTS AND BRASS GATE VALVES.

FLOATS

FLOATS SHALL BE ANCHOR SCIENTIFIC ROTO-FLOATS OR EQUAL.

CONTROLS

THE CONTROL PANEL SHALL BE UL508 LISTED. A NEMA 3R ENCLOSURE SHALL BE PROVIDED IN 4X FIBERGLASS. THE PANEL SHALL INCLUDE AN ALTERNATING CONTROL SCHEME (DUPEX AND ABOVE), MAIN CIRCUIT BREAKER, GENERATOR RECEPTACLE, HIGH LEVEL ALARM LIGHT AND HORN, ELAPSED TIME METERS, VOLTAGE OR PHASE MONITOR, SEAL FAILURE AND OVERLOAD SENSORS. THE LIGHTNING ARRESTOR SHALL BE PROVIDED BY CONTRACTOR.

ELECTRICAL

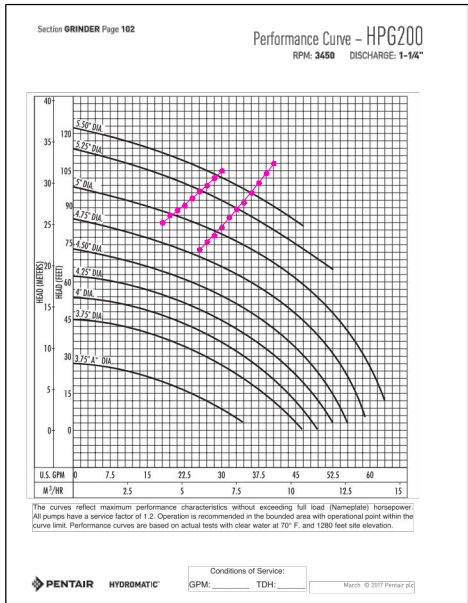
ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.

SUPPLIER

PUMP SUPPLIER SHALL PROVIDE SUBMERSIBLE PUMPS, SLIDE RAIL ASSEMBLIES, FIBERGLASS BASIN AND VALVE BOX, CONTROL PANEL, FLOAT SWITCHES, ALUMINUM HATCHES AND ACCESSORIES TO INSURE PROPER OPERATIONS AND WARRANTY. THE COMPLETE PACKAGE PUMPING STATION SHALL HAVE PUMP BASINS, RAIL ASSEMBLIES, AND DISCHARGE PIPING ASSEMBLED BY BARNEY'S PUMPS INC. READY FOR FIELD INSTALLATION.

PUMP PACKAGE SHALL BE SUPPLIED BY BARNEY'S PUMPS INC. IN LAKELAND (863-665-8500), CORAL SPRINGS (954-346-0669), OR JACKSONVILLE (904-260-0669), FL.

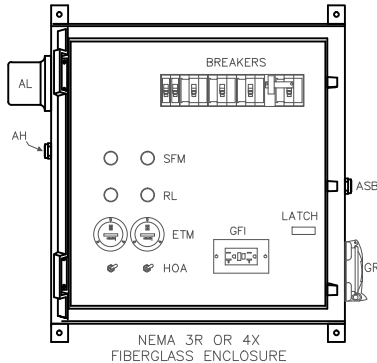
PUMP PERFORMANCE CURVE



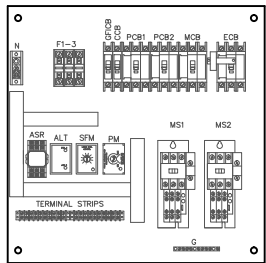
ELECTRICAL

INCOMING POWER: \_\_\_\_\_ V \_\_\_\_\_ Ø  
(CONTRACTOR TO VERIFY)

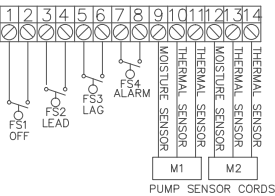
ENCLOSURE AND DEADFRONT LAYOUT (TYPICAL)  
(OUTER DOOR REMOVED)



BASE PLATE LAYOUT (TYPICAL)



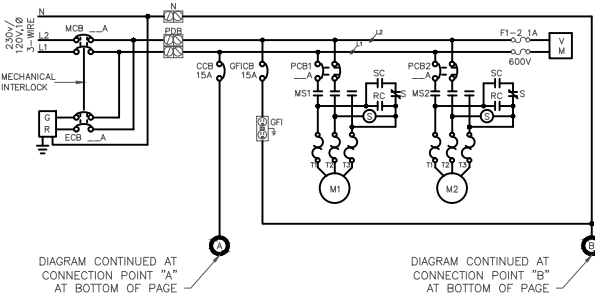
FIELD TERMINALS



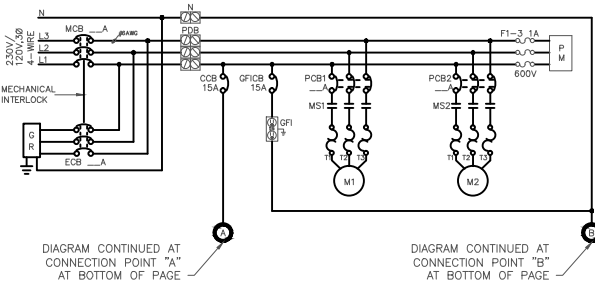
LEGEND

ABBR.	DESCRIPTION
ENC	ENCLOSURE, 4X, NEMA 4X
MCB	MAIN CIRCUIT BREAKER
ECB	EMERGENCY CIRCUIT BREAKER
N	NEUTRAL BLOCK
PDB	POWER DISTRIBUTION BLOCK
PCB1,2	PUMP CIRCUIT BREAKER
CCB	CONTROL CIRCUIT BREAKER
GFCB	GFI CIRCUIT BREAKER
MS1,2	MOTOR STARTER
OL	OVERLOAD HEATER
S	START RELAY
SC	START CAPACITOR
RC	RUN CAPACITOR
GR	GENERATOR RECEPTACLE
F	FUSE, 1A, 600V
VM	VOLTAGE MONITOR
PM	PHASE MONITOR
XFMR	TRANSFORMER
GFI	GFI RECEPTACLE
AL	ALARM LIGHT
AH	ALARM HORN
ASB	ALARM SILENCE BUTTON
ASR	ALARM SILENCE RELAY
SFM	SEAL FAIL MODULE
IL	INDICATING LIGHT, RED
ALT	ALTERNATOR
HOA	HAND OFF AUTO SWITCH
RL	RUN LIGHT, GREEN
ETM	ELAPSED TIME METER

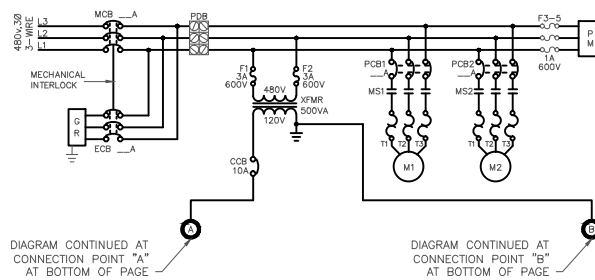
230V SINGLE PHASE WIRING DIAGRAM



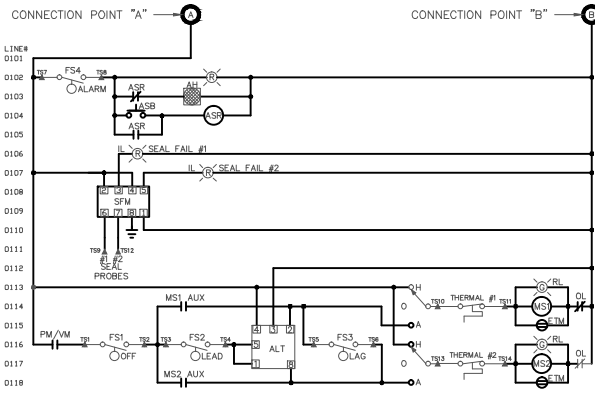
230V THREE PHASE WIRING DIAGRAM



480V THREE PHASE WIRING DIAGRAM



CONTINUATION OF WIRING DIAGRAMS FROM ABOVE



PANEL MANUFACTURER SHALL BE UL 508 AND UL 698A LISTED.



BARNEY'S PUMPS, INC.  
PO BOX 3529, LAKELAND, FL 33802  
PHONE: (863) 665-8500 FAX: (863) 666-3858

PROJECT

CUSTOMER

TITLE  
GRINDER DUPLEX FIBERGLASS LIFT STATION

DATE  
04/26/2018

SALESPERSON

DWG. #  
WW2GTFM

DRAWN BY:  
R.R.B.

REV.

0

Item 3.

DONALD A. GR  
FLORIDA 036799

GRFFEY ENGINEERING, INC.  
36202 East Eldorado Lake Dr.  
EUSTIS, FLORIDA 32736  
(352) 589-2368

Town of Howey-In-The-Hills  
101 N. Palm Avenue  
P.O. Box 128  
Howey-In-The-Hills, FL 34737  
(352) 324-2290

HOWEY-IN-THE-HILLS  
DOWNTOWN SEWER

LIFT STATION 1

Date

04-06-21

03-08-21

Drawn By:

DAG

Drawing #:

DWTN SEWER

Project #:

15028

Scale:

1"=10'

SHEET 19

122





<b>Account Number:</b>	532726
<b>Customer Name:</b>	Town Of Howie In The Hills
<b>Customer Address:</b>	Town Of Howey-In-The-Hills 101 N Palm AVE Howey In The Hills FL 34737-3418
<b>Contact Name:</b>	John Brock
<b>Contact Phone:</b>	352-324-2290
<b>Contact Email:</b>	jbrock@howey.org
<b>PO Number:</b>	

<b>Date:</b>	11/01/2022
<b>Order Number:</b>	8008387
<b>Prepayment Amount:</b>	\$ 0.00

<b>Column Count:</b>	1.0000
<b>Line Count:</b>	72.0000
<b>Height in Inches:</b>	0.0000

**Print**

Product	#Insertions	Start - End	Category
LEE Daily Commercial	1	11/04/2022 - 11/04/2022	Govt Public Notices
LEE dailycommercial.com	1	11/04/2022 - 11/04/2022	Govt Public Notices

**Total Order Confirmation** **\$123.76**

NOTICE OF TOWN OF HOWEY-IN-THE-HILLS, FLORIDA

Item 3.

RINGS THE-

Ordinance No. 2022-019

AN ORDINANCE OF THE TOWN OF HOWEY-IN-THE-HILLS, FLORIDA, PERTAINING TO LAND USE; AMENDING ORDINANCE 2021-010 PERTAINING TO THE USE OF LAND WITHIN THE PROPERTY KNOWN AS THE RESERVE AT HOWEY-IN-THE-HILLS; PROVIDING FINDINGS OF THE TOWN COUNCIL; AMENDING THE AMENDED AND RESTATED DEVELOPER'S AGREEMENT FOR THE RESERVE AT HOWEY-IN-THE-HILLS TO ALLOW A CHANGE IN THE REQUIREMENTS FOR CONSTRUCTION OF A NORTH-SOUTH ROAD; RATIFYING AND CONFIRMING THE PROVISIONS OF ORDINANCE 2021-010, AS AMENDED; PROVIDING FOR SEVERABILITY, CONFLICTS, AND AN EFFECTIVE DATE.

The Town Council for the Town of Howey-in-the-Hills will hold a second and final public hearing for Ordinance 2022-019 on November 14, 2022, at 06:00 P.M. (or as soon thereafter as the matter may be considered).

All public hearings will be held in Town Hall at 101 North Palm Avenue, Howey-in-the-Hills, Florida.

NOTE: A condition of approval (if granted) of the PUD zoning will be compliance by the land developer with the requirements of a proposed "Developer's Agreement".

All parties in interest and persons for or against the proposed ordinance shall have an opportunity to be heard at said public hearings. Copies of Ordinance 2022-019 and its proposed Developer's Agreement are available in the Town Clerks Office, 101 N. Palm Ave., Howey-in-the-Hills, FL 34737 for inspection during normal business hours of Mon-Thurs 8 a.m. – 5 p.m. In compliance with the Americans with Disabilities Act (ADA) anyone who needs a special accommodation for this meeting should contact the Town Clerk at least 48 hours before the meeting.

Persons are advised that if they decide to appeal any decision made at this meeting, they will need a record of the proceeding, and for such purposes, they may need to ensure that a verbatim record of the proceeding is made which includes testimony and evidence upon which the appeal is based per Section 286.0105 of the Florida Statutes.

John Brock, Town Clerk  
Town of Howey-in-the-Hills

Publish Date: Nov. 4, 2022

8008387 11/4/22

fwa

## 2022-A-593-00041 Hillside Groves SR 19 Improvements

**Comments**

1	General Comment - There is a planned RRR project (FPID 432332-1) currently under design along this section of US 19, 60% plans are due in October 2022 with letting in October 2023. The Department's PM is Kevin Powell and the consultant is GAI. From the concept plans, there do not appear to be any planned improvements within the area of this project other than milling and resurfacing but coordination is encouraged.
2	Sheet 3 - Please show the design and posted speeds for SR 19 (55 MPH for both) on this sheet. Also, how will the contractor lay out the alignment shown, especially since (from the typical sections) it appears to differ from the center of the existing roadway.
3	Sheet 3 - FPID 424711-1 placed audible/vibratory edge lines, please replace in kind with these improvements. Per RDB 22-04 (10/26/22) ground-in rumble strips are the preferred method of lane departure warning, please refer to Index 546-020.
4	Sheet 3 - Please call out the guardrail proposed along the right side of the roadway as TL-3 per Index 536-001. Will the roadway widening place any of the overhead electric poles south of the culvert in the clear zone as well, requiring extension of the guardrail provided?
5	Sheet 3 - The CRT system is intended to be used with guardrail installed on radial returns per Index 536-001 Sheet 12. The appropriate anchor for use in this situation (both ends) is a parallel approach terminal per Index 536-001 Sheet 7.
6	Sheet 3 - Please provide a station/offset for the 12' dimension near station 18+10 RT which appears to signify the end of the median taper and the beginning of the left turn taper.
7	Sheet 3 - Please show left turn control radii at the intersection of SR 19 and the subdivision access road. As currently laid out it appears the intersection is more spread out than it should be and could be tightened up.
8	Sheet 3 - The crosswalk across the subdivision access road needs to be moved closer to SR 19 to improve sight distance to pedestrians using the crosswalk, especially with the NB LT set as far back as currently shown. Please also consider reworking the multi-use path ramp on the north side because it directs trail users across SR 19 instead of across the subdivision entrance.
9	Sheet 3 - Is the intent to mill & resurface the LT paved shoulder as well? The entire existing roadway should be milled and resurfaced.
10	Sheet 3 - Is the callout '24+89.39/12.83'R' correct? The offset should be 12' R unless the median continues to get wider across the intersection.
11	Sheet 3 - Please make sure both the LT and RT lanes show the correct clearance distance for 55 MPH (L1 - 125') per FDM Exhibit 21.1.
12	Sheet 5A/5B - Utility work within FDOT R/W will require a Utility Permit as well, assume one has already been applied for.
13	Sheet 7 - SR 19 Typical Section, all disturbed areas within FDOT R/W shall be sodded not seeded & mulched. Also, please refer to 'Optional Base Group' not 'Alternate Base Option' to be consistent with the Standard Specifications.

14	Sheet 7 - Typical roadway cross-sections, please differentiate between widening and milling & resurfacing. As shown the implication is that the entire roadway will be reconstructed. Also, assume the intent is to construct the paved shoulders full-depth (i.e. same pavement design as the mainline widening).
15	Cross-sections - general comment, is the intent for the cross-slope of the widening to match existing? Otherwise, how is the widening cross-slope being set?
16	Sheet 9 - Please review the TTC notes, many of them need to be updated or are not applicable. For example, there are references to 'Index 600' and the 'Plans Preparation Manual'. Also, the first couple of notes reference flagging operations when the proposed TTCP is utilizing a traffic shift and temporary pavement.
17	Maintenance of Traffic - General comment, was the use of asphalt base considered to shorten the duration of construction?
18	Sheets 10A/10B - Will the proposed traffic shift create clear zone issues on the west side of the roadway with existing power poles and the two box culverts?
19	Sheet 11A - Please show the proposed guardrail as having been constructed in the previous phase to protect the box culvert extension.
20	Sheet 11B - Same issue as with the traffic shift on Sheets 10A/10B, will the shift shown here create clear zone issues with the box culvert at station 36+60 +/-?
21	
22	
23	
24	
25	





## Fleming, Justin

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**From:** Fleming, Justin  
**Sent:** Tuesday, September 27, 2022 7:14 AM  
**To:** Gulley, Dennis  
**Cc:** Lingenfelter, Chad; Labud, Richard; Tefft, Clipper; Sanders, Michael  
**Subject:** Permit No. 2022-A-592-00041 SR 19 1400' N of Revels Rd - Turn Lane Improvements  
**Attachments:** 11170 2022-A-592-00041 SR 19 1400' N of Revels Rd. - Turn Lane Improvements.pdf

Dennis,

**Please note these comments will be uploaded into One-Stop as well.**

Below are Traffic Ops' comments for the subject permit. Please pass these along to the permit applicant. Once the comments are reviewed and resubmitted, please ensure that they have been satisfactorily addressed. In the event another review is necessary, please send the package to Traffic Ops' via OSP.

---

Section: 11170 / SR 19 / MP 11.224 / Class 4 / 55 mph  
 Permit No. 2022-A-592-00041 / Turn Lane Improvements  
 Applicant: Eric Evans  
 Scope of Work: New Driveway  
 Daily Trip Estimate: 7312  
 Location: SR 19 at 1400' N of Revels Rd.  
 Lake County

### Connelly & Wicker Inc Plans Signed and Sealed Dated 06/2022

#### General Comments:

1. It should be noted that these review comments are to be considered preliminary in nature and do not constitute endorsement or certification of the design. A final acceptance of the design should be given in writing before any construction begins. All relocations, modifications, or closures of connections to the State Road System will be ruled by F.A.C. (Florida Administrative Code) 14-96. The Department shall not be obligated to permit or approve any connection, traffic control feature or device, or any other site related improvement that has been specified in a development approval process separate from the official connection approval process described in F.A.C.
2. Please note and confirm that the EOR understands that they will be fully responsible to update/add/remove any signs and pavement markings that need to be updated/added/removed in the field with the proposed changes even if the FDOT comments below are not comprehensive and do not cover every one of the changes required.
3. Please note: If the permitted connection poses a current, potential safety, or operational problem that endangers the health, safety, or welfare of the public, the owner / permittee, will be responsible for any and all costs associated with the required modification per FAC guidelines.
4. **Please provide written responses to these comments. If a revision has been made, please point out where the correction has been addressed (Sheet No.) to avoid further undue delay.**
5. A truck turn analysis with template will be needed that clearly shows a graphic layout of how delivery vehicles will enter, circulate, stage for deliveries, and exit the site. Truck paths should be on clean sheets and preferably no overlapping paths in a scale that is reviewable on paper plans.
6. If a Landscape plan is available, please provide it for our review.

7. Sightlines per FDOT Design Manual 212.11 will need to be shown on landscape plans. **If no landscape plans are available, a separate plan sheet will need to be provided showing sightlines for review.**
8. Please confirm and note in the plans, all affected sidewalks, ramps, and crosswalks, will be built and inspected to meet current ADA requirements.
9. Confirm the turn lane lengths are per Standard Plans / FDM guidelines.
10. Has a review for current or future FDOT projects been completed?
11. Please provide local agency's comments on the proposed development.
12. Ensure that current **2022-23** FDOT Standard Plans Index designations are used for all references to FDOT Design Standards throughout the plan set.
13. Place sidewalk within the SR 19 right-of-way along the entire frontage.

**Sheet 3 (SR -19 Signing & Striping Plan):**

1. The proposed connection width (**62'**) at SR 19 needs to be reduced not to exceed the 36 feet maximum. The traffic separator does not serve a transportation purpose but is contributing to the excessive driveway width. Due to the only stop control (**Stop Sign**) being proposed at this connection, allowing 2 ingress and 2 egress lanes with limited sight distance at a posted speed limit of **55mph** is a huge safety concern and cannot be approved for permit. This driveway connection width should be **24** feet or the width necessary to accommodate the prevailing fire apparatus, whichever is greater.

**Please apply the following:**

**a.** Reduce the driveway connection to **24'** or the width necessary to accommodate the prevailing fire apparatus, whichever is greater. Please consider using **35'** ingress / **25'** egress radii. Determining the results of the AutoTurn, driveway width and radii may need to be adjusted (+/-) to the minimum turning vehicle wheel swept path.

**b.** Please continue the existing width of shoulder around the radii to State ROW.

**c.** Include Dimension Lines on both Turn Lanes. Please show distance including Taper and total length.

**d.** A skip stripe bike slot across the opening of the driveway will need to be shown on plans.

**e.** The Stop bar should be no more than **30** feet from the nearest edge of the intersecting roadway per **MUTCD**

**Section 3B.16 Stop and Yield Lines #10.** Please include dimension line on plans to ensure compliance with MUTCD.

**f.** Crosswalk needs to be a minimum of **4 foot** from the Stop Bar. Please show dimension line to insure a minimum of **4 foot** per **MUTCD Section 3B.16 Stop and Yield Lines.**

**Traffic & Mobility Consultants (TMC) Study Signed and Sealed Dated 11/04/2021**

**Page 16:**

1. Identify when the following improvements will be necessary:

- The intersection of SR 19 and Revels Road should be improved by the addition of a northbound left turn lane and the recommended turn lane length is 455 feet (including a 50-foot taper).
- A northbound left turn lane is warranted at SR 19 and the church entrance, and the recommended turn lane length is 430 feet (including a 50-foot taper).
- A northbound left turn lane is warranted at SR 19 and the secondary entrance, and the recommended turn lane length is 455 feet (including a 50-foot taper).

**A separate access permit will be required for each of these improvements if they are not added to this permit.**

**END OF TRAFFIC OPERATIONS COMMENTS**

\*Screen shots used in this email are for comment clarification only and should not be used as a substitute for engineering judgment.



## 131



THIS DOCUMENT HAS BEEN DIGITALLY SIGN AND SEALED BY:

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED. THE SIGNATURE MUST BE VERIFIED ON THE ELECTRONIC DOCUMENTS.

CONNELLY & WICKER INC.  
10060 SKINNER LAKE DR., SUITE 500  
JACKSONVILLE, FL 32246  
PHONE 904.265.3030 FAX 904.265.3031  
CA NO. 3650 LA NO. LC26000311  
ERIC DANIEL EVANS, P.E. NO. 93585

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

DRAWING INDEX	
DRAWING NO.	DRAWING TITLE
1	COVER SHEET
2	SIGNATURE SHEET
3	SR-19 SIGNING AND STRIPING PLAN
4	SR-19 PAVING AND DRAINAGE PLAN
5A - 5B	SR-19 WATER AND SEWER PLAN
6	PAVING AND DRAINAGE DETAILS
7A - 7E	SR-19 CROSS SECTIONS
7G	FDOT BOX CULVERT EXTENSION SECTION
8	STORMWATER POLLUTION PREVENTION PLAN
9	MAINTENANCE OF TRAFFIC PLAN (NOTES AND LEGEND)
10A - 10C	MAINTENANCE OF TRAFFIC PLAN (SR-19 EAST WIDENING)
11A - 11B	MAINTENANCE OF TRAFFIC PLAN (SR-19 WEST WIDENING)

Project No:  
21-04-0008

Designed:  
E.D.E.

Checked:  
J.E.W.

Date:  
JUNE, 2022

Scale:

Drawn:  
G.R.O.

O.C.

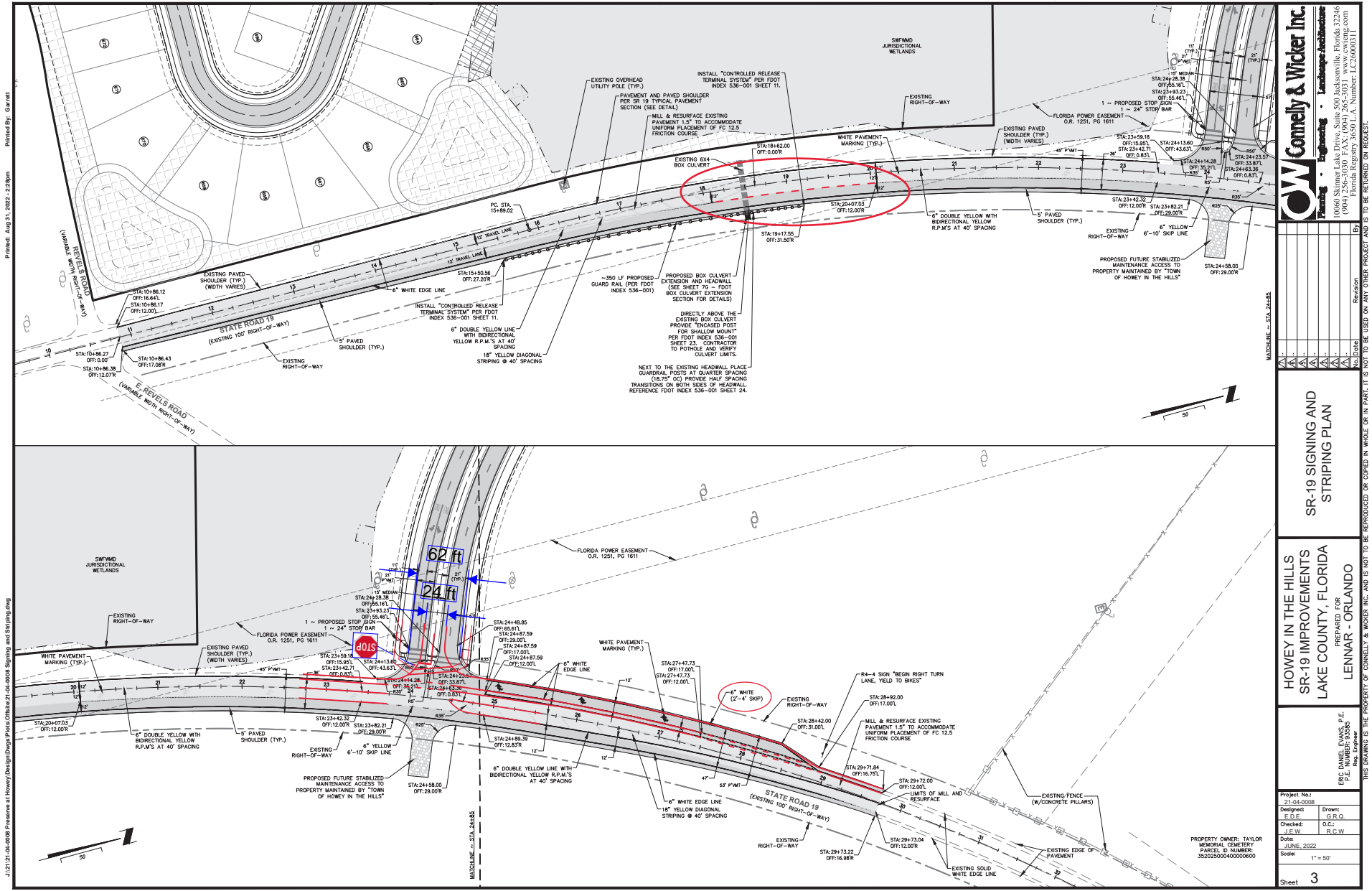
R.G.W.

Sheet 2

HOWEY IN THE HILLS  
SR-19 IMPROVEMENTS  
LAKE COUNTY, FLORIDA  
PREPARED FOR  
LENNAR - ORLANDO

SIGNATURE SHEET

Planning • Engineering • Landscape Architecture  
10060 Skinner Lake Drive, Suite 500 Jacksonville, Florida 32246  
(904) 265-3030 Fax (904) 265-3031  
Florida Registry 3650 L.A. Number: LC26000311



**OW Connelly & Wicker Inc.**  
Planning • Engineering • Landscape Architecture  
10060 Skimmer Lake Drive, Suite 500 Jacksonville, Florida 32246  
(904) 444-0000 Fax: (904) 444-0001  
Florida Registry 36501 A, Number: LC26000311

Rev	Description	By	Date
1	Issue for Review	AW	08/31/2022
2	Revised	AW	09/01/2022
3	Revised	AW	09/01/2022
4	Revised	AW	09/01/2022
5	Revised	AW	09/01/2022
6	Revised	AW	09/01/2022
7	Revised	AW	09/01/2022
8	Revised	AW	09/01/2022
9	Revised	AW	09/01/2022
10	Revised	AW	09/01/2022
11	Revised	AW	09/01/2022
12	Revised	AW	09/01/2022
13	Revised	AW	09/01/2022
14	Revised	AW	09/01/2022
15	Revised	AW	09/01/2022
16	Revised	AW	09/01/2022
17	Revised	AW	09/01/2022
18	Revised	AW	09/01/2022
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30	Revised	AW	09/01/2022
31	Revised	AW	09/01/2022
32	Revised	AW	09/01/2022
33	Revised	AW	09/01/2022
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**HOWEY IN THE HILLS**  
SR-19 IMPROVEMENTS  
LAKE COUNTY, FLORIDA  
PREPARED FOR  
LENNAR - ORLANDO

Project No: 21-04-0008  
Designed: E.O.W.  
Checked: J.L.W.  
Date: JUNE 2022  
Scale: 1" = 50'  
Sheet 3

PROPERTY OWNER: TAYLOR MEMORIAL CEMETERY  
PARCELS ID NUMBER: 352025000400000600

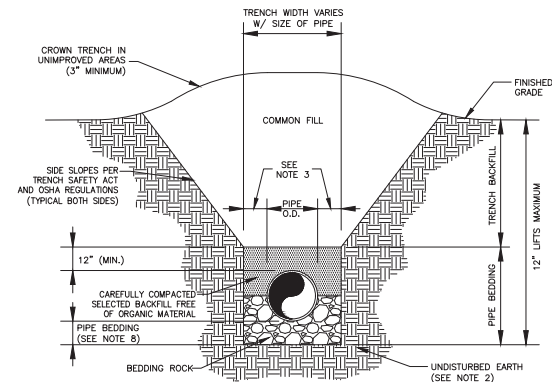
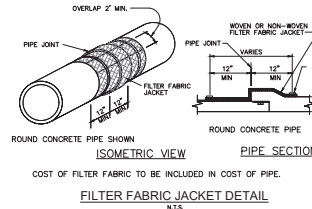
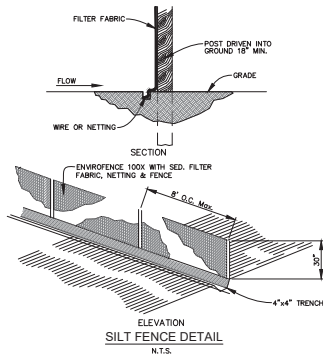
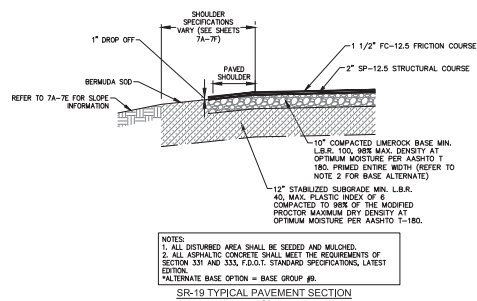
ERIC DANIEL EVANS, P.E.  
P.E. NUMBER: 23395

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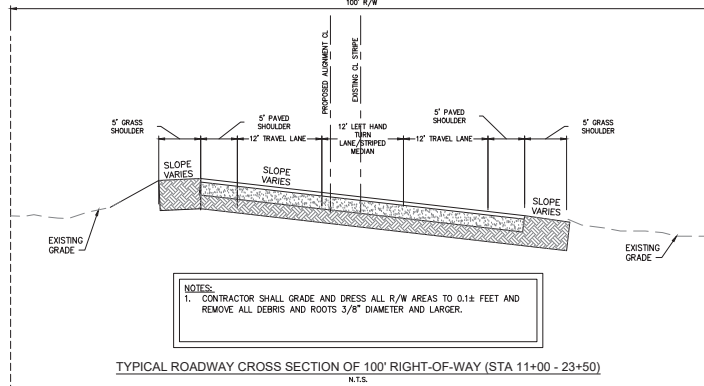
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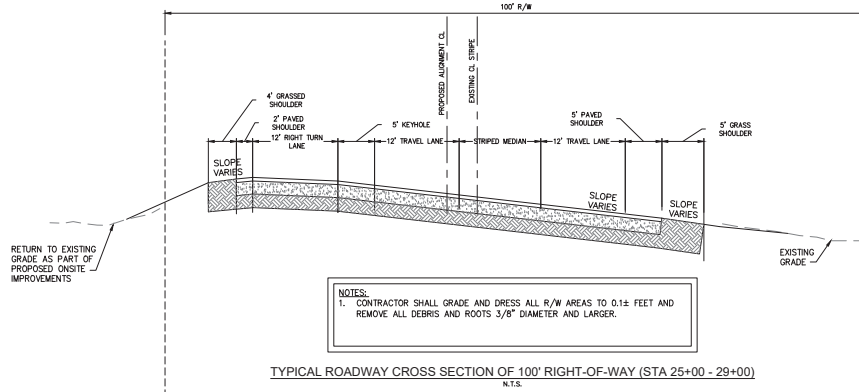
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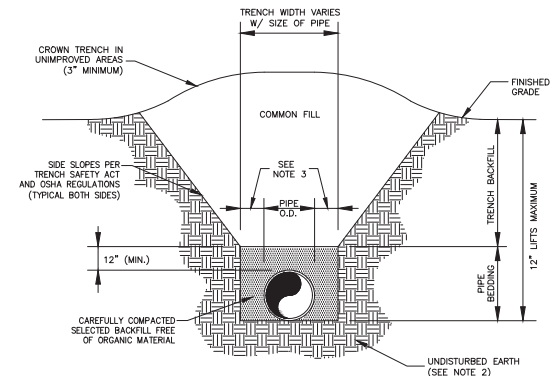
- NOTES:**  
 1. TRENCH AND PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% MAX DENSITY (AASHTO T-180).  
 2. USE TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE COUNTY.  
 3. 15" MAX FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX FOR PIPE DIAMETER 24" AND LARGER.  
 4. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.  
 5. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.  
 6. REFER TO MANUAL FOR SHEETING AND BRACING IN EXCAVATIONS.  
 7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES SURFACE RESTORATION WITHIN COUNTY RIGHT-OF-WAY SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS AND ROAD CONSTRUCTION SPECIFICATIONS.  
 8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. THE COUNTY SHALL DETERMINE IN THE FIELD REQUIRED REMOVAL OF UNSUITABLE MATERIAL TO REACH SUITABLE FOUNDATION.



TYPICAL ROADWAY CROSS SECTION OF 100' RIGHT-OF-WAY (STA 11+00 - 23+50)  
 N.T.S.



TYPICAL ROADWAY CROSS SECTION OF 100' RIGHT-OF-WAY (STA 25+00 - 29+00)  
 N.T.S.



- NOTES:**  
 1. TRENCH AND PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% MAX DENSITY (AASHTO T-180).  
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**OW Connelly & Wicker Inc.**  
 Planning • Engineering • Landscape Architecture  
 10060 Skimmer Lake Drive, Suite 500 Jacksonville, Florida 32246  
 (904) 444-1111 Fax: (904) 444-1112  
 Florida Registry 36501 L.A. Number: LC26000311

**HOWEY IN THE HILLS**  
 SR-19 IMPROVEMENTS  
 LAKE COUNTY, FLORIDA  
 PREPARED FOR  
 LENNAR - ORLANDO

**Eric Daniel Evans, P.E.**  
 P.E. NUMBER: 33985

**Project No:** 21-04-0008  
**Designed:** E.D.E. **Drawn:** G.R.D.  
**Checked:** J.L.W. **O.C.:** R.C.W.  
**Date:** JUNE, 2022  
**Scale:** N/A

**Sheet 6**

### GENERAL NOTES

1. WORK OPERATIONS SHALL BE CONFINED TO ONE TRAFFIC LANE, LEAVING THE OPPOSITE LANE OPEN TO TRAFFIC.
  2. ADDITIONAL ONE-WAY CONTROL MAY BE EFFECTED BY THE FOLLOWING MEANS:
    1. FLAG CARRYING VEHICLE
    2. OFFICIAL VEHICLE
    3. PILOT VEHICLES
    4. TRAFFIC SIGNALS
- WHEN FLAGGERS ARE THE SOLE MEANS OF ONE-WAY CONTROL, THE FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.
3. THE ONE-LANE ROAD SIGNS ARE TO BE FULLY COVERED AND THE FLAGGER SIGNS EITHER REMOVED OR FULLY COVERED WHEN NO WORK IS BEING PERFORMED AND THE HIGHWAY IS OPEN TO TWO-WAY TRAFFIC. REMOVE THE "PREPARE TO STOP" SIGNS AND REPLACE WITH THE SYMBOL FOR WHEN WORKING WHEN NO LANE CLOSURE IS IN USE.
  4. WHEN A SIDE ROAD INTERSECTS THE HIGHWAY WITHIN THE TTC ZONE, ADDITIONAL TTC DEVICES SHALL BE PLACED IN ACCORDANCE WITH OTHER APPLICABLE TTC INDEXES.
  5. FOR GENERAL TTC REQUIREMENTS AND ADDITIONAL INFORMATION, REFER TO INDEX NO. 600.
  6. SHOULD A CONFLICT ARISE BETWEEN THE DETAILS SHOWN IN THE PLANS AND THE DEPARTMENT OF TRANSPORTATION STANDARDS, THE ENGINEER/PERMITTEE SHALL IMMEDIATELY CONFER WITH THE DEPARTMENT'S ENGINEER IN ORDER TO RESOLVE THE DISCREPANCY. IN NO CASE WILL ANYTHING LESS THAN THE DEPARTMENT'S MINIMUM STANDARD BE ALLOWED.
  7. REMOVAL OF EXISTING STRIPPING SHALL BE ACCOMPLISHED USING THE "HYDRO-BLAST" METHOD TO GRUBBERIZE OBSOLETE PAVEMENT MARKINGS. IF THIS PROCESS DAMAGES/SCARS PAVEMENT, THEN THE PAVEMENT SHALL BE MILLED AND RESURFACED PER FOOT STANDARDS.
  8. ALL WORK SHALL BE PERFORMED IN A SAFE MANNER. ALL SAFETY RULES AND GUIDELINES OF O.S.H.A. SHALL BE FOLLOWED. THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ANY INJURIES OF HIS EMPLOYEES, AND ANY DAMAGE TO PRIVATE PROPERTY OR PERSONS DURING THE COURSE OF THIS PROJECT. ALL COSTS ASSOCIATED WITH COMPLIING WITH O.S.H.A. REGULATIONS AND THE FLORIDA TRENCH SAFETY ACT MUST BE INCLUDED IN THE CONTRACTORS BID.
  9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VISITING THE JOB SITE PRIOR TO PREPARING THE BID FOR THE PURPOSE OF FAMILIARIZING HIMSELF WITH THE NATURE AND THE EXTENT OF THE WORK AND LOCAL CONDITIONS, EITHER SURFACE OR SUB-SURFACE, WHICH MAY AFFECT THE WORK TO BE PERFORMED, AND THE EQUIPMENT, LABOR AND MATERIALS REQUIRED. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF COMPLETE PERFORMANCE UNDER THIS CONTRACT. THE CONTRACTOR IS ALSO BIDDING TO TAKE COLOR PHOTOGRAPHS ALONG THE ROUTE OF THE PROJECT TO RECORD EXISTING CONDITIONS PRIOR TO CONSTRUCTION, AND TO Aid IN RECTIFYING POSSIBLE FUTURE COMPLAINTS THAT MAY OCCUR DUE TO THE CONSTRUCTION OF THE PROJECT.
  10. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EITHER CONDUCT ANY FIELD EXPLORATION OR ACQUIRE ANY GEOTECHNICAL ASSISTANCE REQUIRED TO ESTIMATE THE AMOUNT OF UNSTABLE MATERIAL THAT WILL REQUIRE REMOVAL AND/OR TO ESTIMATE THE AMOUNT OF OFF SITE BORROW THAT WILL BE REQUIRED.
  11. ALL IMPROVEMENTS SHOWN ARE TO BE WARRANTED BY THE CONTRACTOR TO THE DEVELOPER AND THE FOOT FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE BY THE OWNER AND THE FOOT.
  12. ELEVATIONS ARE BASED ON NATIONAL AMERICAN VERTICAL DATUM OF 1988 (NAVD88) UNITED STATES COASTAL AND GEODETIC SURVEY (U.S.C & G.S.), AS DETERMINED BY PEC SURVEYING AND MAPPING, LLC.
  13. THE CONTRACTOR WILL CONTRACT WITH AN INDEPENDENT TESTING LABORATORY TO PERFORM MATERIAL TESTING AND SOIL TESTING IN ACCORDANCE WITH FOOT REQUIREMENTS. THIS SHALL INCLUDE DENSITY TESTS IN ALL PAVEMENT AREAS AND IN ALL UTILITY TRENCHES LOCATED IN PAVEMENT AREAS CONCRETE TESTING AND ALL OTHER MATERIAL TESTING. PRIOR TO UNDERLAY PLACEMENT, THE PROJECT GEOTECHNICAL ENGINEER SHALL MAKE RECOMMENDATION FOR UNDERDRAIN PLACEMENT.
  14. THE CONTRACTOR SHALL COORDINATE THE WORK WITHIN STATE RIGHT-OF-WAY WITH THE PROPER AGENCIES FOR MAINTENANCE OF TRAFFIC AND METHOD OF CONSTRUCTION AND REPAIR.
  15. "AS-BUILT" DRAWINGS - AS-BUILTS TO THE FOOT ARE REQUIRED TO BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR THEREFORE, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTRACT WITH A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA FOR THE PREPARATION, FIELD LOCATIONS, CERTIFICATION AND SUBMITTAL OF "AS-BUILT" DRAWINGS IN ACCORDANCE WITH CURRENT FOOT STANDARDS AND SPECIFICATIONS AND SURVEY REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROCESS THE "AS-BUILT" DRAWINGS FOR APPROVAL BY THE FOOT.

16. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION WITH ALL OTHER CONTRACTORS, IN THE EVENT OF ANY CONFLICT WHATSOEVER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER PRIOR TO PROCEEDING WITH CONSTRUCTION.
17. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL SURVEY AND PROPERTY MONUMENTS. IF A MONUMENT IS DISTURBED, THE CONTRACTOR SHALL CONTRACT WITH THE SURVEYOR OF RECORD FOR REINSTALLATION OF THE MONUMENT.
18. ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE PROPOSED ROADWAY DEVELOPMENT SHALL BE REMOVED BY THE CONTRACTOR AS DESCRIBED IN NOTE #2.
19. IF THE WORK OPERATION ENDOCHORES ON THE THROUGH TRAFFIC LANES OR WHEN FOUR OR MORE WORK VEHICLES ENTER THE THROUGH TRAFFIC LANES IN A ONE HOUR PERIOD A FLAGGER SHALL BE PROVIDED AND A FLAGGER SIGN SHALL BE SUBSTITUTED FOR THE WORKERS SIGN. THE FLAGGER SHALL BE POSITIONED AT THE POINT OF VEHICLE ENTRY OR DEPARTURE FROM THE WORK AREA.
20. THIS TRAFFIC CONTROL THROUGH WORK ZONES PLAN ALSO APPLIES TO WORK PERFORMED IN THE MEDIAN MORE THAN 2' BUT LESS THAN 15' FROM THE EDGE OF EITHER PAVEMENT.
21. WORKERS SIGNS TO BE REMOVED OR FULLY COVERED WHEN NO WORK IS BEING PERFORMED.
22. ALL WORK PERFORMED IN THE DEPARTMENT'S RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT EDITIONS OF:
  - A. F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
  - B. F.D.O.T. DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM.
  - C. F.D.O.T. ROADWAY PLANS PREPARATION MANUAL, VOLUME 1, CHAPTER 2 AND/OR 25.
  - D. F.D.O.T. FLEXIBLE PAVEMENT DESIGN MANUAL FOR NEW CONSTRUCTION AND PAVEMENT REHABILITATION.
23. ALL DISTURBED AREA WITH THE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY WILL RESTORED TO ORIGINAL OR BETTER CONDITION BY GRADING AND SEEDING THE AREA DISTURBED (BENIGNA IN RURAL, CENTRIDE IN UTILITY STRIPS).
24. LANE CLOSURES WILL ONLY BE PERMITTED DURING DAYLIGHT HOURS OF 8:00AM - 3:30PM. THE F.D.O.T. ENGINEER MUST APPROVE NIGHT WORK AND LANE CLOSURES AT LEAST 48 HOURS IN ADVANCE. THE APPLICANT MUST NOTIFY THE FLORIDA DEPARTMENT OF TRANSPORTATION LOCAL MAINTENANCE OFFICE 48 HOURS IN ADVANCE OF STARTING ANY PROPOSED WORK.
25. ALL TRAFFIC STRIPES AND PAVEMENT MARKINGS ARE TO BE LEAD-FREE, NON-SOLVENT BASED THERMOPLASTIC. THE PERMITTEE SHALL FURNISH THE DEPARTMENT WITH THE MANUFACTURER'S CERTIFICATION THAT THE THERMOPLASTIC IS "LEAD FREE".
26. ALL PROPOSED TRAFFIC SIGNS AND PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH AND CONSTRUCTED TO THE FOOT DESIGN STANDARDS INDEX SERIES 11000, 17000, 17300, 9035 AND 11800 SERIES. THE PROPERTY OWNER MUST MAINTAIN THE DRIVEWAY TRAFFIC SIGNS AND MARKINGS.
27. THE FOOT REQUIRES DOCUMENTATION FOR SUCCESSFUL COMPLETION OF AN APPROVED WORK ZONE TRAFFIC CONTROL TRAINING COURSE FOR THE AGENCY, UTILITY OR CONTRACTOR EMPLOYEE(S) INSTALLING AND/OR MAINTAINING THE APPROVED MAINTENANCE OF TRAFFIC PLAN. DOCUMENTATION IS TO BE FURNISHED TO THE DEPARTMENT AT THE PRE-CONSTRUCTION MEETING OR BEFORE OCCUPYING STATE RIGHT-OF-WAY.
28. MAINTENANCE OF TRAFFIC PLAN FOR WORK ZONES SHALL BE IN CONFORMANCE WITH ALL APPLICABLE INDEXES OF THE FOOT DESIGN STANDARDS INDEX 800 SERIES ACCORDING TO THE TYPE OF ROADWAY AND TYPE OF WORK BEING PERFORMED.
29. ALL LANES MUST BE OPENED FOR TRAFFIC DURING AN EVACUATION NOTICE OF A HURRICANE OR OTHER CATASTROPHIC EVENT AND SHALL REMAIN OPEN FOR THE DURATION OF THE EVACUATION OR EVENT.
30. EXISTING PAVED SHOULDERS TO BE SLOPED AT THE WHITE EDGE LINE AND REMOVED FULL DEPTH BEFORE NEW TURN LANES, DRIVEWAYS, PAVED SHOULDERS, AND/OR OTHER NEW APPLICABLE FEATURES ARE CONSTRUCTED.

### DURATION NOTES

1. ROAD WORK AHEAD AND THE BE PREPARED TO STOP SIGNS MAY BE OMITTED IF ALL OF THE FOLLOWING CONDITIONS ARE MET:
  - A. WORK OPERATIONS ARE 40 MINUTES OR LESS
  - B. SPEED LIMIT IS 45 MPH OR LESS
  - C. NO SIGHT OBSTRUCTIONS TO VEHICLES APPROACHING THE WORK AREA FOR A DISTANCE EQUAL TO THE BUFFER SPACE
  - D. VEHICLES IN THE WORK AREA HAVE HIGH-INTENSITY, ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS OPERATING
  - E. VOLUME AND COMPLEXITY OF THE ROADWAY HAS BEEN CONSIDERED

### LEGEND



WORK AREA, HAZARD OR WORK PHASE



SIGN WITH 18"x18" (MIN.) ORANGE FLAG AND TYPE B LIGHT



DRUM



WORK ZONE SIGN



FLAGGER



ORANGE FLAG FOR TCC SIGNS



TYPE B LIGHT FOR TCC SIGNS



LANE IDENTIFICATION + DIRECTION OF TRAFFIC

**OW Connelly & Wicker Inc.**  
Planning • Engineering • Landscape Architecture  
10060 Skinner Lake Drive, Suite 500 Jacksonville, Florida 32246  
(904) 424-1000 Fax: (904) 424-1001  
Florida Registry 36501 A, Number: LC26000311

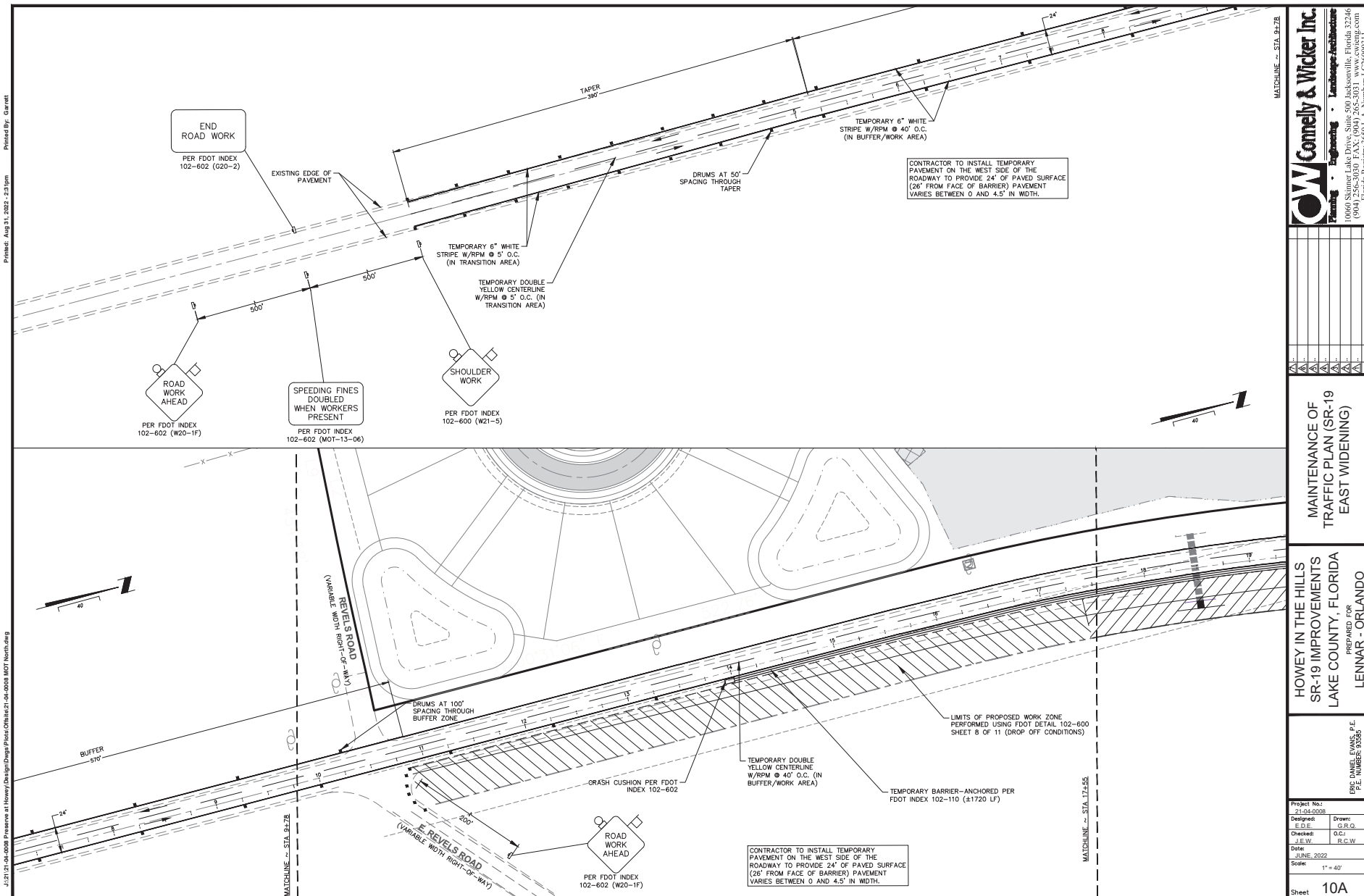
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MAINTENANCE OF  
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AND LEGEND)

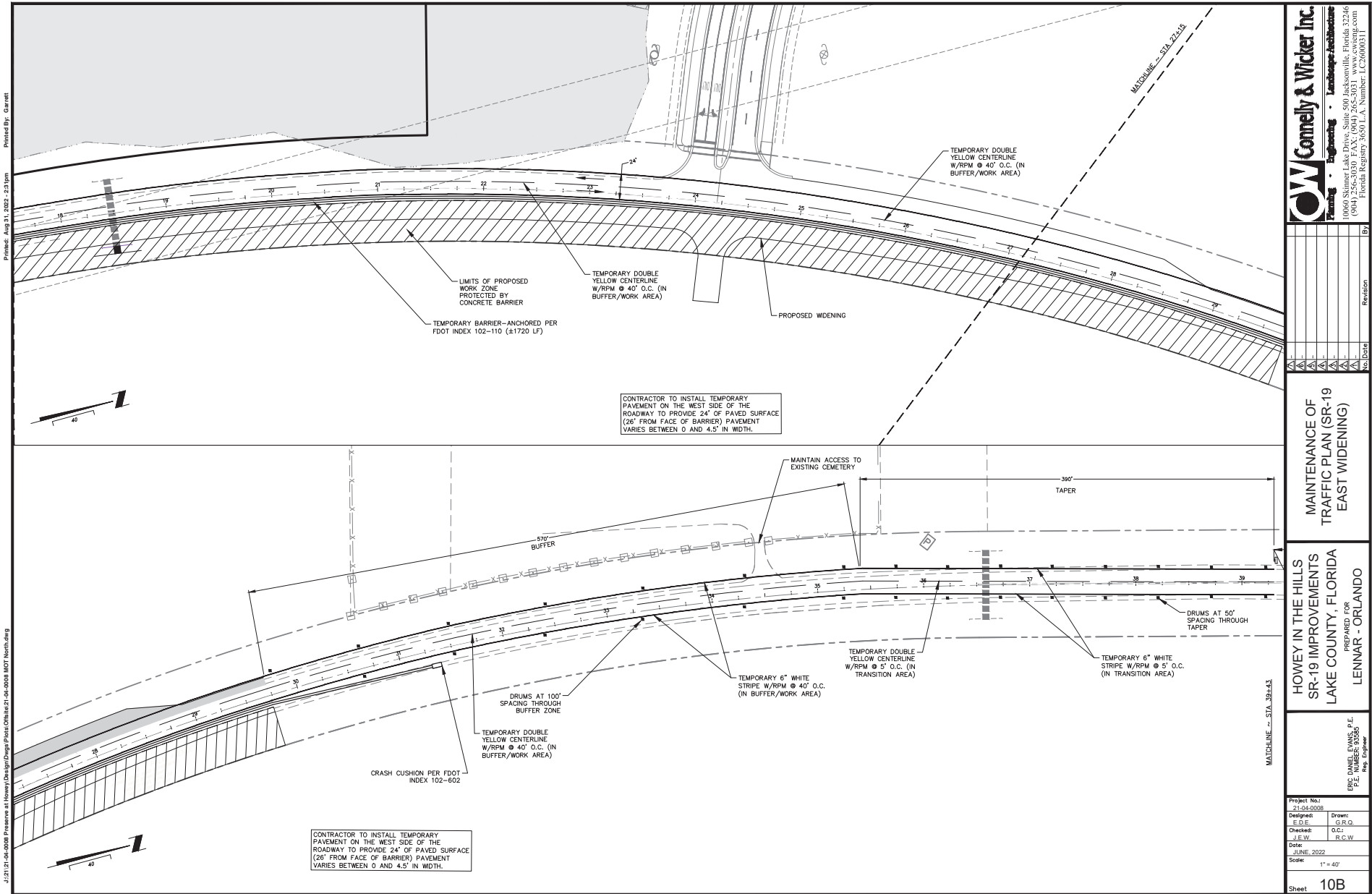
HOWEY IN THE HILLS  
SR-19 IMPROVEMENTS  
LAKE COUNTY, FLORIDA  
PREPARED FOR  
LENNAR - ORLANDO

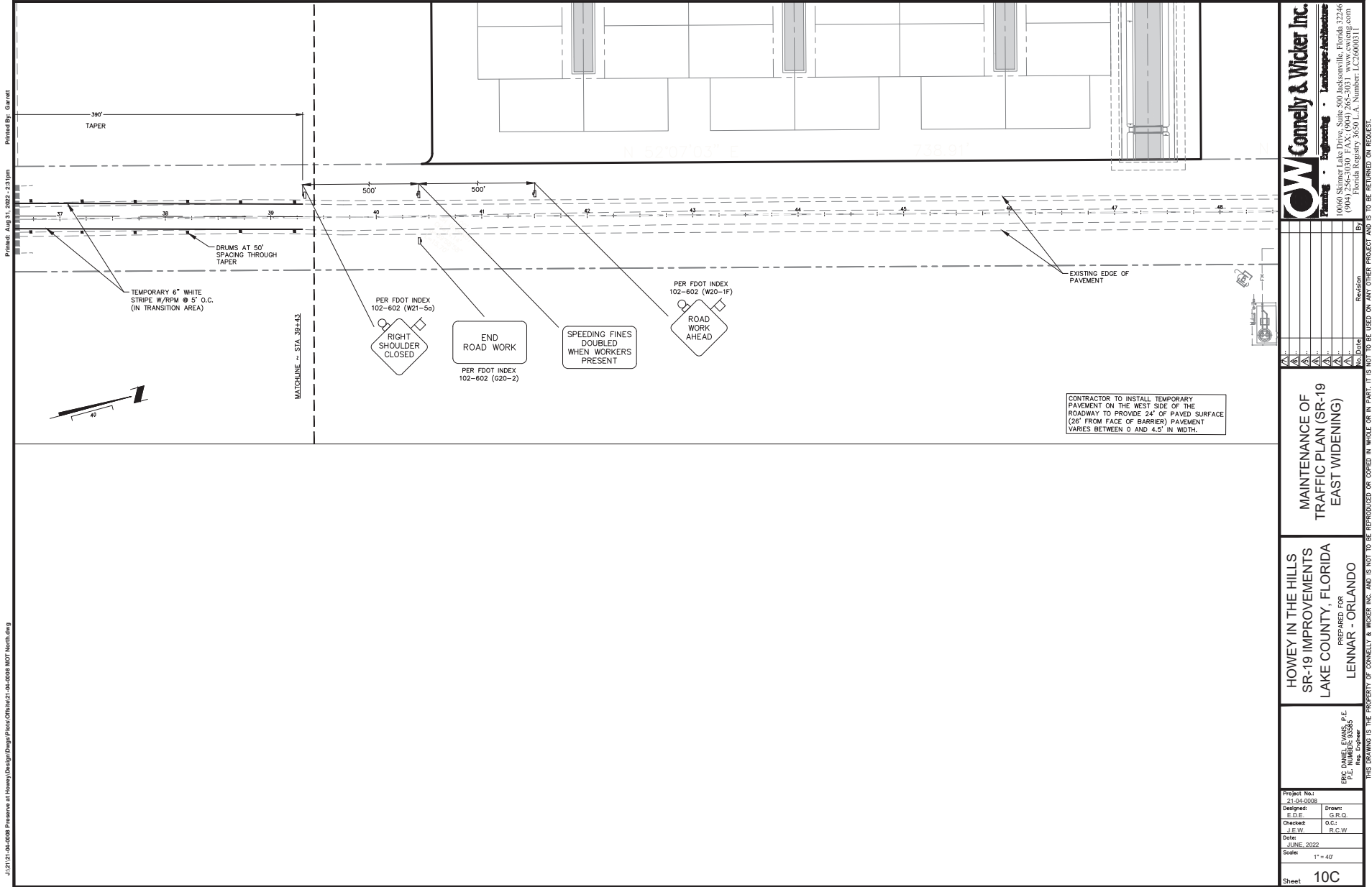
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Designed:  
E.O.E. G.P.O.  
Checked:  
J.E.W. O.C.  
Date:  
JUNE, 2022  
Scale:  
Sheet  
9

ERIC DANIEL EVANS, P.E.  
P.E. NUMBER: 23395

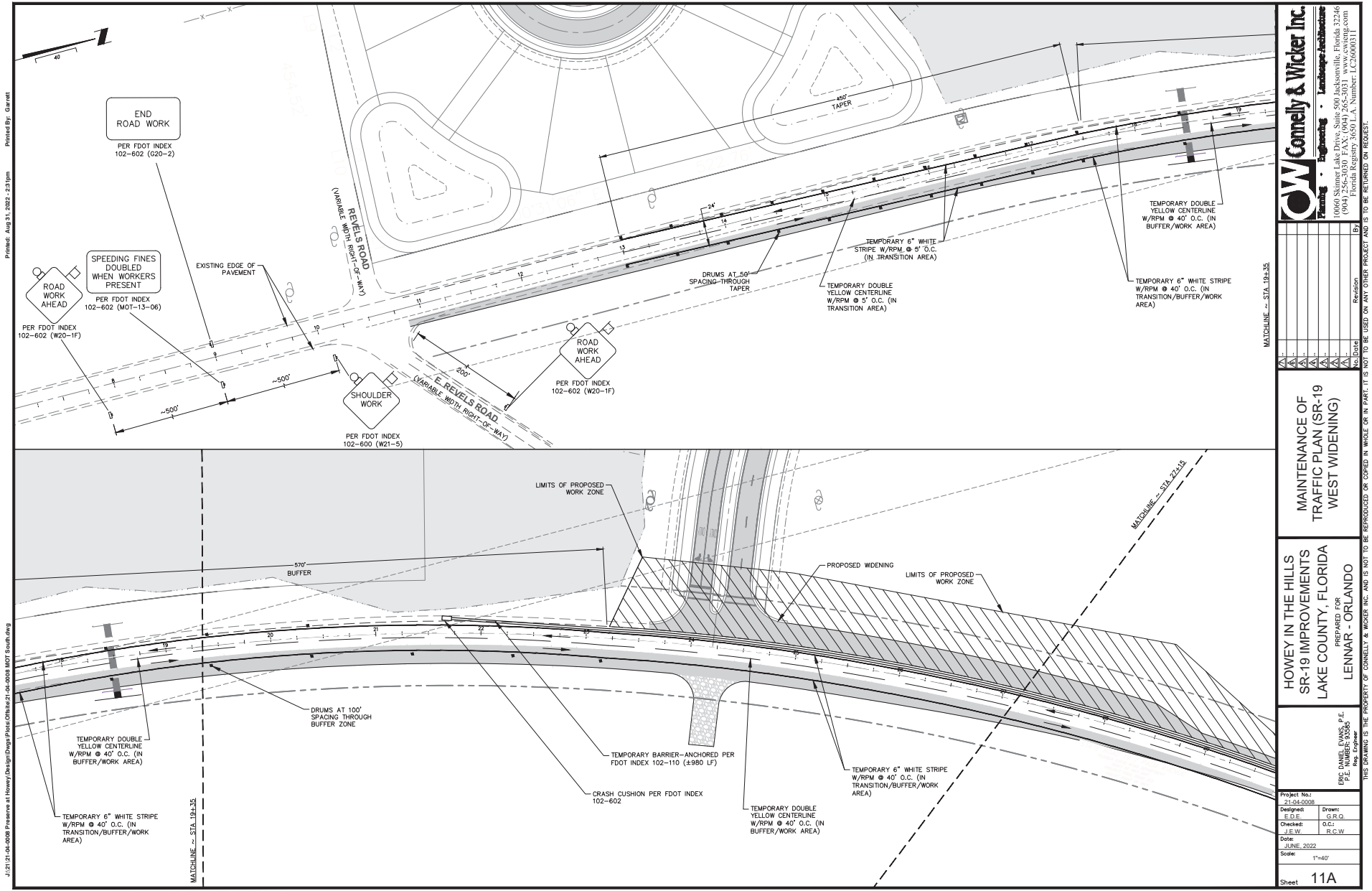












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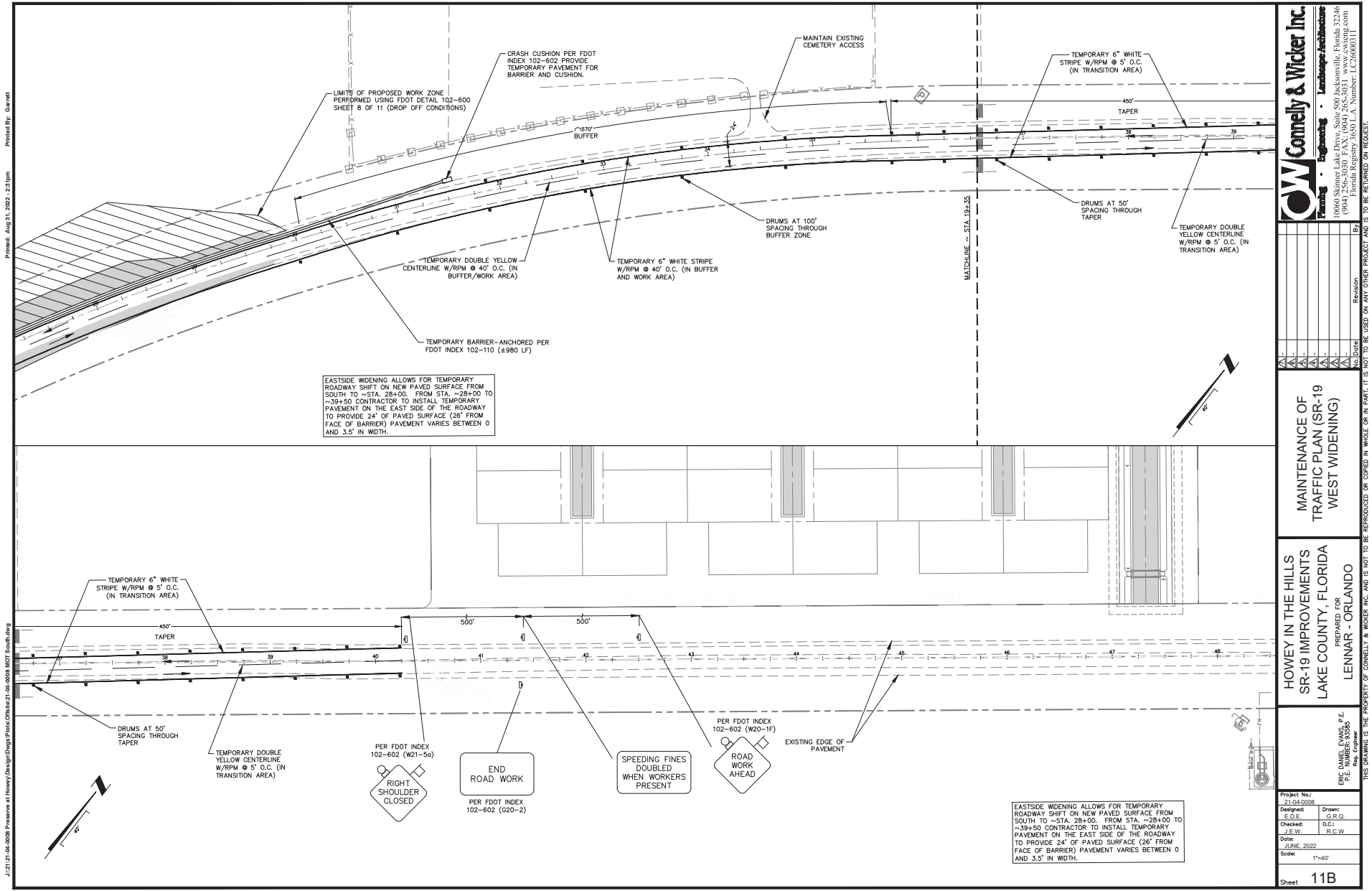
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**MAINTENANCE OF  
TRAFFIC PLAN (SR-19  
WEST WIDENING)**

**HOWEY IN THE HILLS  
SR-19 IMPROVEMENTS  
LAKE COUNTY, FLORIDA**  
PREPARED FOR  
**LENNAR - ORLANDO**

Project No: 21-04-0008  
Designed: E.D.E. Drawn: G.R.O.  
Checked: J.E.W. O.C.: R.C.W.  
Date: JUNE 2022  
Scale: 1"=40'  
Sheet 11A

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 (904) 444-1000  
 Florida Registry 36501 J.A. Number: LC26000311

**MAINTENANCE OF TRAFFIC PLAN (SR-19 WEST WIDENING)**

**HOWEY IN THE HILLS SR-19 IMPROVEMENTS LAKE COUNTY, FLORIDA**  
 PREPARED FOR  
**LENNAR - ORLANDO**

Project No: 21-04-0008  
 Designed: E.O.E. Drawn: G.R.O.  
 Checked: J.E.W. O.C.: R.C.W.  
 Date: JUNE 2022  
 Scale: 1"=40'

Eric Daniel Evans, P.E.  
 P.E. NUMBER: 33395

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Sheet **11B**

**From:** [toddhawkins@comcast.net](mailto:toddhawkins@comcast.net)  
**To:** [Martha Macfarlane](#); [George Lehning](#); [Rick Klein](#); [Marie V Gallelli](#); [David Miles](#)  
**Cc:** [Sean O'Keefe](#)  
**Subject:** The Reserve development and proposal to convert 4 lane spine to 2 lane w turn lanes and greenspace  
**Date:** Tuesday, October 11, 2022 10:40:37 AM

**Caution:** This email originated from outside the organization. DO NOT CLICK links or open attachments unless you recognize the sender and know the content is safe.

Councilmembers,

I am reaching out concerning the council meeting last night and in particular the amendment to convert the 4 lane spine to 2 lanes at the Reserve development. Even though this amendment was not accepted by two council members, I would encourage the council to take another look at this for the following reasons:

1. **This change was asked for by the city and recommended by the PZB**
2. **The developers never intended this street to be a main thoroughfare**
3. **It is in the best interest of the homeowners in the development to not have a 4 lane cut through going through the center of their neighborhood**
4. **Having single lanes with dedicated turn lanes will enable traffic to flow and will also act as a traffic calmer. Traffic calmers are going to be very important in helping control the speed of traffic in Howey as our town grows, and our town will want to incorporate these where possible.**
5. **Another benefit of the 2 lane is that the developer can add more trees and green space, which is a high priority for the town.**
6. **Everyone in the audience was baffled when the four lane was reinstated, and no one understands why that road should be a four lane.**

We as Howey residents encourage the council to bring this back up for further review.

Thank you for your time and consideration.

Todd Hawkins  
 1110 N Lakeshore Blvd  
 Howey in the Hills, FL  
 (615)476-9577  
[toddhawkins@comcast.net](mailto:toddhawkins@comcast.net)

# Hillside Grove

Howey-in-the-Hills, Lake County, FL



# Road Design



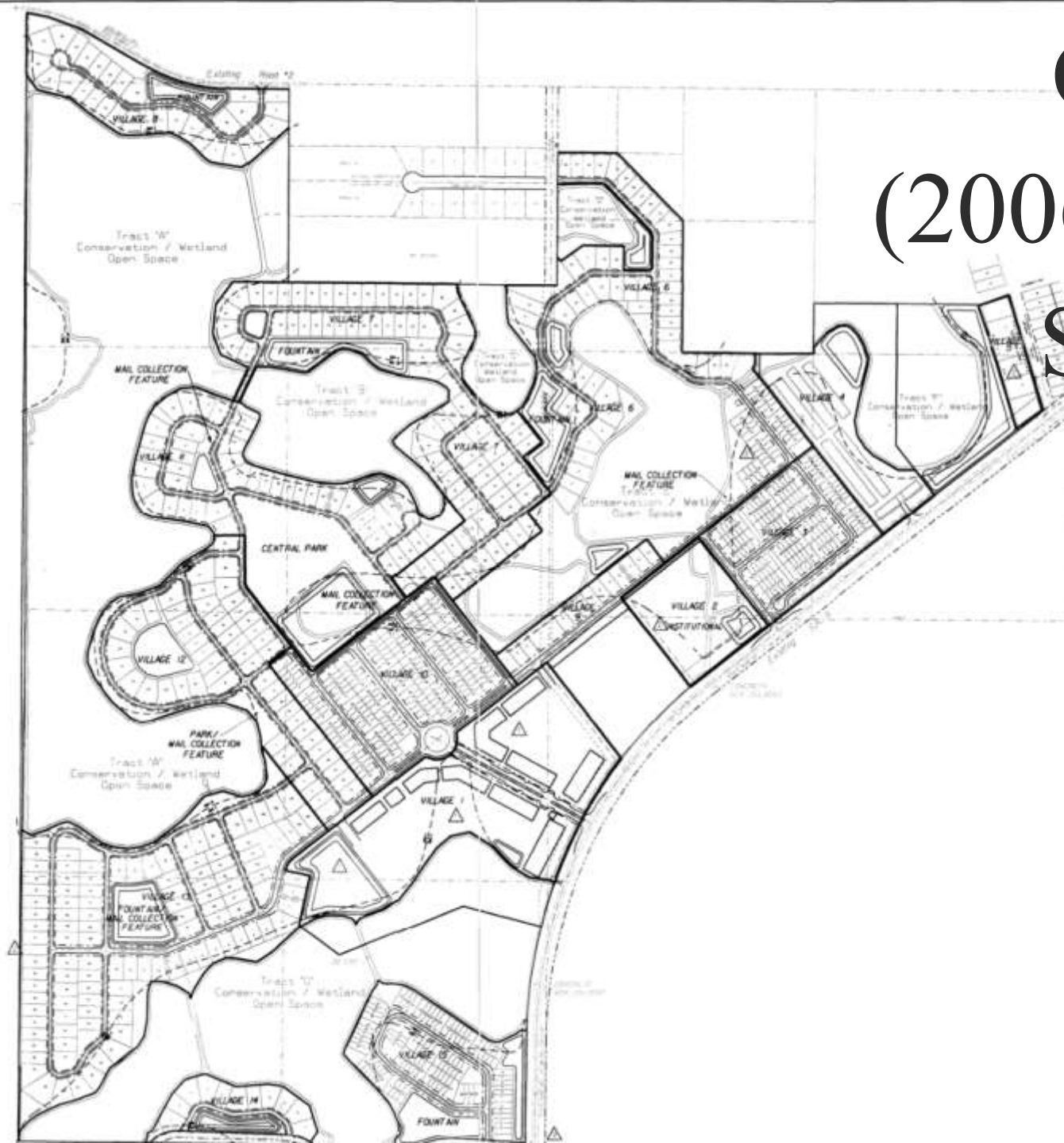
# Aerial Site Location



Original

Item 3.

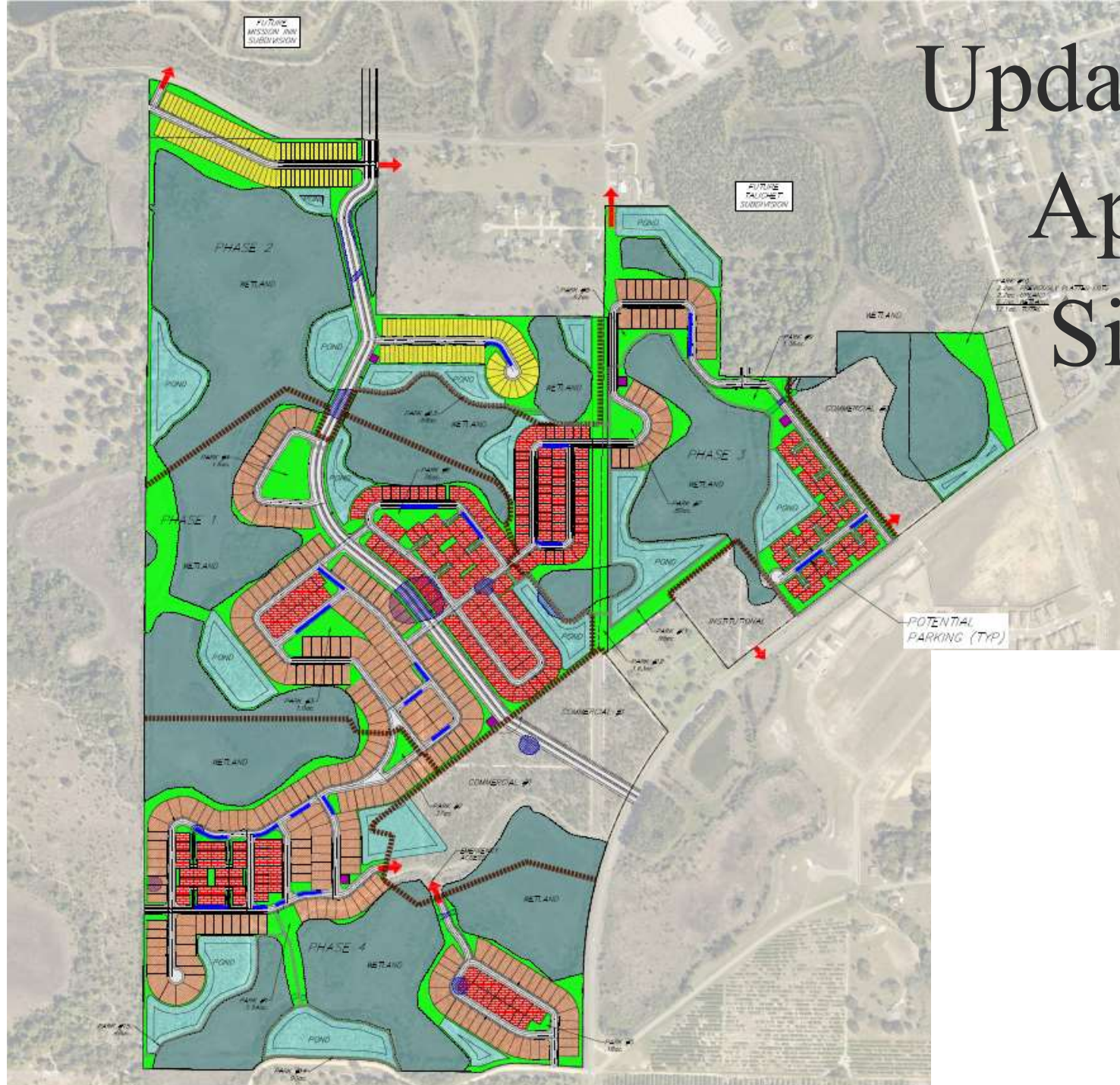
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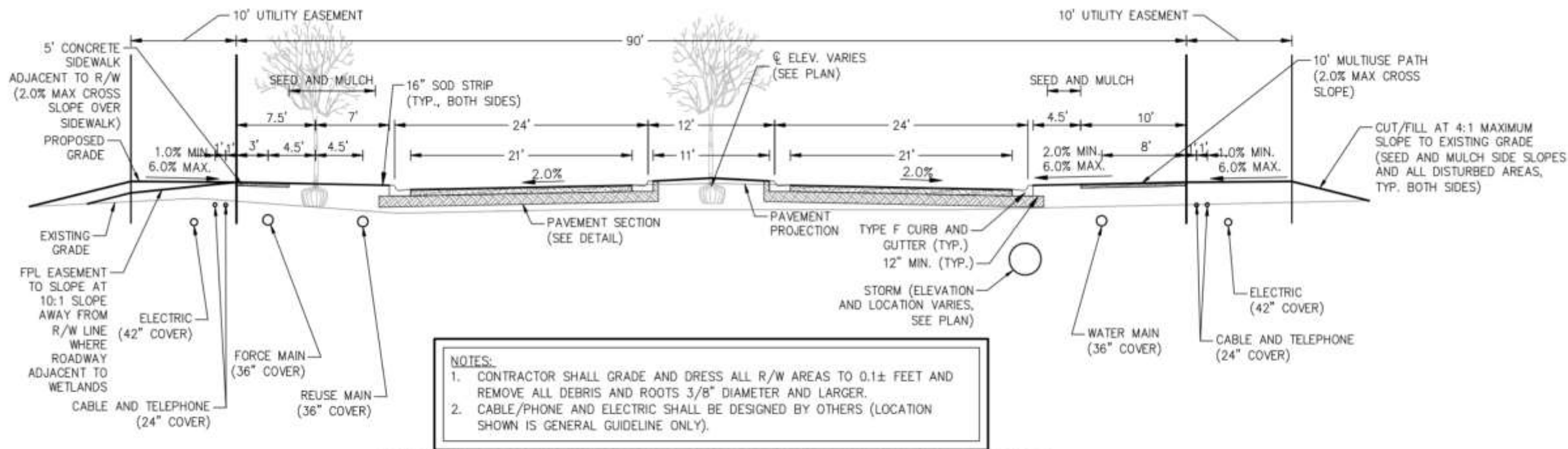




Updated (2021) Item 3.

# Approved Site Plan





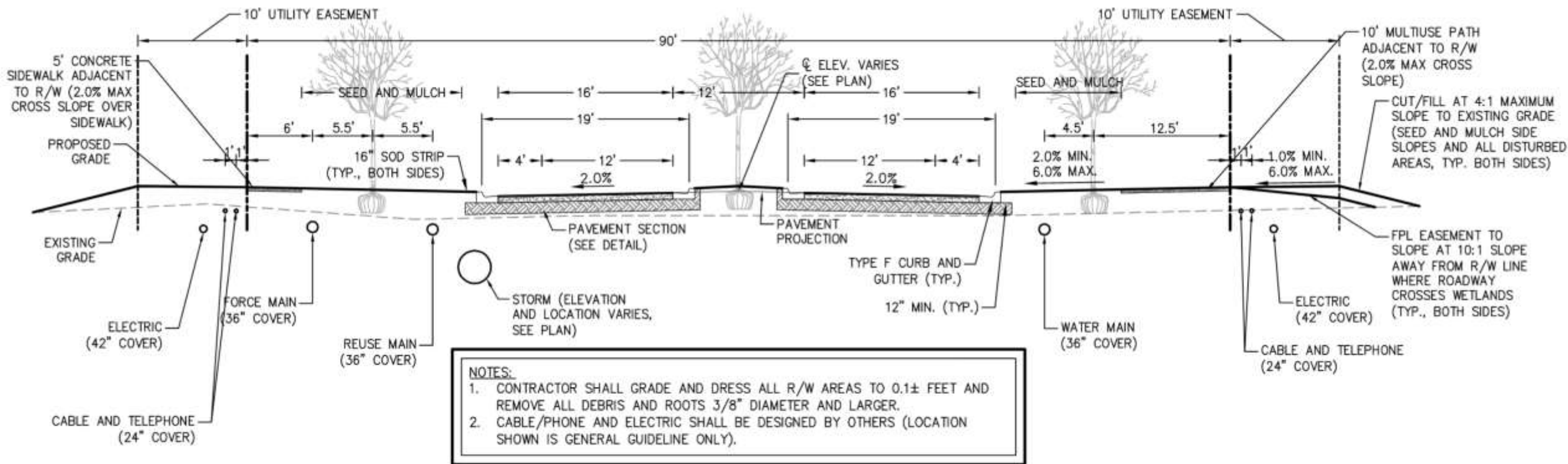
**TYPICAL ROADWAY CROSS SECTION FOR 90' RIGHT OF WAY  
(4 LANE SECTION)**

N.T.S.



# Updated (2022) Site Plan





### TYPICAL ROADWAY CROSS SECTION FOR 90' RIGHT OF WAY

N.T.S.

# FDOT Comments

**Sheet 3 (SR -19 Signing & Striping Plan):**

1. The proposed connection width (**62'**) at SR 19 needs to be reduced not to exceed the 36 feet maximum. The traffic separator does not serve a transportation purpose but is contributing to the excessive driveway width. Due to the only stop control (**Stop Sign**) being proposed at this connection, allowing 2 ingress and 2 egress lanes with limited sight distance at a posted speed limit of **55mph** is a huge safety concern and cannot be approved for permit. This driveway connection width should be **24** feet or the width necessary to accommodate the prevailing fire apparatus, whichever is greater.

**Please apply the following:**

**a.** Reduce the driveway connection to **24'** or the width necessary to accommodate the prevailing fire apparatus, whichever is greater. Please consider using **35'** ingress / **25'** egress radii. Determining the results of the AutoTurn, driveway width and radii may need to be adjusted (+/-) to the minimum turning vehicle wheel swept path.

**b.** Please continue the existing width of shoulder around the radii to State ROW.

**c.** Include Dimension Lines on both Turn Lanes. Please show distance including Taper and total length.

**d.** A skip stripe bike slot across the opening of the driveway will need to be shown on plans.

**e.** The Stop bar should be no more than **30** feet from the nearest edge of the intersecting roadway per **MUTCD**

**Section 3B.16 Stop and Yield Lines #10.** Please include dimension line on plans to ensure compliance with MUTCD.

**f.** Crosswalk needs to be a minimum of **4 foot** from the Stop Bar. Please show dimension line to insure a minimum of **4 foot** per **MUTCD Section 3B.16 Stop and Yield Lines.**

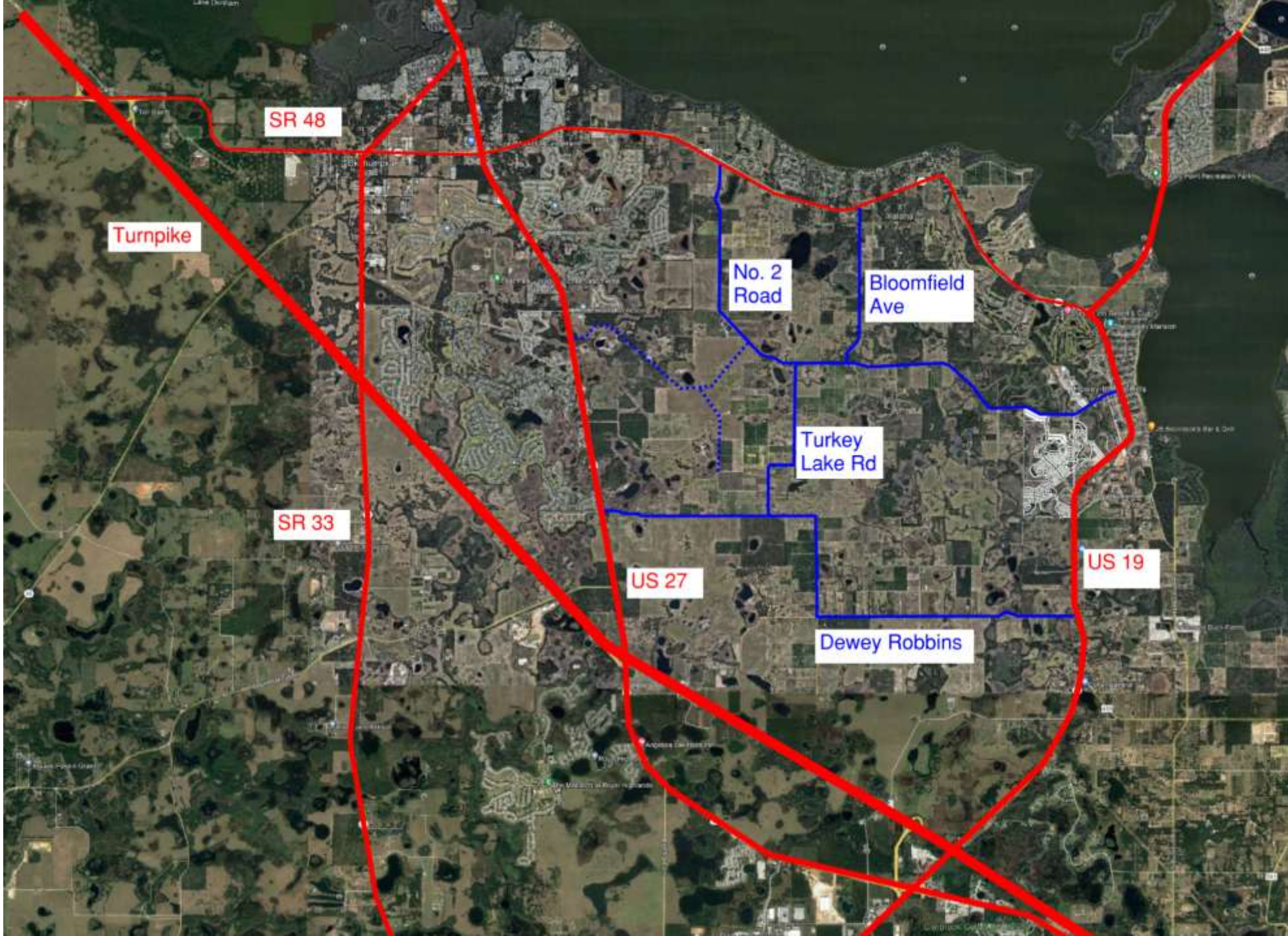






# Road Capacity

# Traffic Flow Assumptions



ORDINANCE NO. 2022-021

AN ORDINANCE OF THE TOWN OF HOWEY-IN-THE-HILLS, FLORIDA,  
CREATING CHAPTER 54 IN THE TOWN OF HOWEY-IN-THE-HILLS'  
CODE OF ORDINANCES TITLED "ANIMAL CONTROL"; PROVIDING  
REGULATIONS FOR RESTRAINT OF ANIMALS, NUISANCE ANIMALS,  
THE POSSESSION, OWNERSHIP, CARE, AND CUSTODY OF ANIMALS;  
PROVIDING FOR SEVERABILITY, CODIFICATION AND AN EFFECTIVE  
DATE.

*Whereas*, under the Constitution of the State of Florida, specifically Article VIII, subsection 1(f), the animal-control ordinance enacted by the Lake County Board of County Commissioners, codified at Chapter 4 of the Lake County Code of Ordinances, is fully in effect within the boundaries of the Town of Howey-in-the-Hills; and

*Whereas*, the Town of Howey-in-the-Hills entered into an interlocal agreement with Lake County Sheriff for animal services and enforcement of Chapter 4 of the County Code; and

*Whereas*, the Town Council has determined that (i) the Town's Code of Ordinances should reference Chapter 4 and inform Town residents of the location of regulations governing animals in the Town.

**NOW, THEREFORE, BE IT ORDAINED BY THE TOWN OF HOWEY-IN-THE-HILLS, FLORIDA:**

**Section 1. Recitals.** The recitals set forth above are true and correct and constitute the legislative findings of the Town Council.

**Section 2. Amendments to the Town of Howey-in-the-Hills Code of Ordinances.** Chapter 54 of the Town of Howey-in-the-Hills' Code of Ordinances is added as follows:

**Chapter 54 - ANIMALS**

**Sec. 54-1. – County ordinance to apply.**

Chapter 4 of the Lake County Code of Ordinances, as it may be amended from time to time, is fully in effect within the boundaries of the Town and shall regulate the possession, ownership, care, and custody of animals, including licensure of animals, dangerous dogs and animals, and seizure and impoundment of animals. Enforcement of this Chapter 54 shall be as set forth in said chapter 4 of the Lake County Code of Ordinances.

**Section 3. Severability.** The provisions of this ordinance are declared to be severable. If any section, sentence, clause or phrase of this ordinance shall for any reason be held invalid or unconstitutional, such decision shall not affect the validity of the remaining sections, sentences, clauses and phrases of this ordinance, but they shall remain in effect, it being the legislative intent that this ordinance shall stand notwithstanding the invalidity of any part.

**Section 4. Codification.** The provisions of only section 2 shall be codified in the Town's Code of Ordinances.

**Section 5. Effective Date.** This ordinance takes effect upon its enactment.

**PASSED AND ORDAINED** this 28th day of November, 2022, by the Town Council of the Town of Howey-in-the-Hills, Florida.

**Town of Howey-in-the-Hills, Florida**

By: its Town Council

By: \_\_\_\_\_  
Martha MacFarlane, Mayor

**ATTEST:**

**APPROVED AS TO FORM AND LEGALITY**

(for the use and reliance of the Town only)

\_\_\_\_\_  
John Brock, Town Clerk

\_\_\_\_\_  
Thomas J. Wilkes, Town Attorney

First Reading held November 14, 2022

Second Reading, Public Hearing and Adoption held November 28, 2022

Advertised November 18, 2022

#48764759 v2



**ORDINANCE NO. 2022-021**

**AN ORDINANCE OF THE TOWN OF HOWEY-IN-THE-HILLS, FLORIDA, CREATING CHAPTER 54 IN THE TOWN OF HOWEY-IN-THE-HILLS' CODE OF ORDINANCES TITLED "ANIMAL CONTROL"; PROVIDING REGULATIONS FOR RESTRAINT OF ANIMALS, NUISANCE ANIMALS, THE POSSESSION, OWNERSHIP, CARE, AND CUSTODY OF ANIMALS; PROVIDING FOR SEVERABILITY, CODIFICATION AND AN EFFECTIVE DATE.**

*Whereas*, under the Constitution of the State of Florida, specifically Article VIII, subsection 1(f), the animal-control ordinance enacted by the Lake County Board of County Commissioners, codified at Chapter 4 of the Lake County Code of Ordinances, is fully in effect within the boundaries of the Town of Howey-in-the-Hills; and

*Whereas*, the Town of Howey-in-the-Hills entered into an interlocal agreement with Lake County Sheriff for animal services and enforcement of Chapter 4 of the County Code; and

*Whereas*, the Town Council has determined that (i) the Town's Code of Ordinances should reference Chapter 4 and inform Town residents of the location of regulations governing animals in the Town.

**NOW, THEREFORE, BE IT ORDAINED BY THE TOWN OF HOWEY-IN-THE-HILLS, FLORIDA:**

**Section 1. Recitals.** The recitals set forth above are true and correct and constitute the legislative findings of the Town Council.

**Section 2. Amendments to the Town of Howey-in-the-Hills Code of Ordinances.** Chapter 54 of the Town of Howey-in-the-Hills' Code of Ordinances is added as follows:

**Chapter 54 - ANIMALS**

**Sec. 54-1. – County ordinance to apply.**

Chapter 4 of the Lake County Code of Ordinances, as it may be amended from time to time, is fully in effect within the boundaries of the Town and shall regulate the possession, ownership, care, and custody of animals, including licensure of animals, dangerous dogs and animals, and seizure and impoundment of animals. Enforcement of this Chapter 54 shall be as set forth in said chapter 4 of the Lake County Code of Ordinances.

**Section 3. Severability.** The provisions of this ordinance are declared to be severable. If any section, sentence, clause or phrase of this ordinance shall for any reason be held invalid or unconstitutional, such decision shall not affect the validity of the remaining sections, sentences, clauses and phrases of this ordinance, but they shall remain in effect, it being the legislative intent that this ordinance shall stand notwithstanding the invalidity of any part.

**Section 4. Codification.** The provisions of only section 2 shall be codified in the Town's Code of Ordinances.

**Section 5. Effective Date.** This ordinance takes effect upon its enactment.

**PASSED AND ORDAINED** this 28th day of November, 2022, by the Town Council of the Town of Howey-in-the-Hills, Florida.

**Town of Howey-in-the-Hills, Florida**

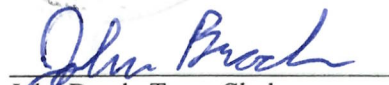
By: its Town Council

By:   
Martha MacFarlane, Mayor

**ATTEST:**

**APPROVED AS TO FORM AND LEGALITY**

(for the use and reliance of the Town only)

  
John Brock, Town Clerk

  
Thomas J. Wilkes, Town Attorney

First Reading held November 14, 2022

Second Reading, Public Hearing and Adoption held November 28, 2022

Advertised November 18, 2022



## ORDINANCE 2022-016

**AN ORDINANCE OF THE TOWN OF HOWEY IN THE HILLS, FLORIDA, PERTAINING TO LAND USE; PROVIDING FINDINGS OF THE TOWN COUNCIL; AMENDING THE TOWN'S OFFICIAL ZONING MAP TO REZONE FROM MDR-1 AND MDR-2 TO PLANNED UNIT DEVELOPMENT CERTAIN LANDS LOCATED IN THE SOUTHEAST QUADRANT OF THE INTERSECTION OF STATE ROAD 19 AND REVELS ROAD, AS MORE PARTICULARLY DESCRIBED IN ATTACHMENT A TO THIS ORDINANCE; INCORPORATING CONDITIONS, REQUIREMENTS, RESTRICTIONS, AND OTHER TERMS GOVERNING THE USE AND DEVELOPMENT OF THE PROPERTY; PROVIDING FOR SEVERABILITY, CONFLICTS, CODIFICATION, AND AN EFFECTIVE DATE.**

**BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF HOWEY-IN-THE-HILLS, FLORIDA:**

**Section 1. Findings.** In enacting this ordinance, the Town Council of the Town of Howey-in-the-Hills, Florida makes the following findings and declarations:

(1) The land described in **Attachment A**, located generally in the southeast quadrant of the intersection of State Road 19 and Revels Road ("**Property**"), is located within the town limits of the Town of Howey-in-the-Hills;

(2) The Town's Comprehensive Plan designates the Property on the Town's Future Land Use Map for medium density residential future land use, and current zoning of the Property is MDR-1 and MDR-2.

(3) The owner of the Property intends to use and develop the Property for single-family residential purposes.

(4) The Town Council finds that rezoning the Property from MDR-1 and MDR-2 to Planned Unit Development is consistent with both the Town's Comprehensive Plan and the Town's Land Development Code ("LDC") and will not adversely affect the public health, safety, and welfare of the Town.

**Section 2. Amendment to the Official Zoning Map.** The Town Council hereby amends the Town's Official Zoning Map to zone the Property for Planned Unit Development.

**Section 3. Use and Development of the Property.** Use and development of the Property under its Planned Unit Development zoning is subject to the conditions, requirements, restrictions, and other terms of the following:

- (1) This Ordinance 2022- 016
- (2) A development agreement, to be approved by Town Council and executed by the Mayor, setting forth the specific conditions, requirements, restrictions and other terms for the use and development of the Property;
- (3) The Town's Land Development Code; and
- (4) The Town Code and all other Town ordinances governing the development of the Property.

**Section 4. Severability.** If any part of this ordinance is declared by a court of competent jurisdiction to be void, unconstitutional, or unenforceable, the remaining parts of this ordinance shall remain in full effect. To that end, this ordinance is declared to be severable.

**Section 5. Conflicts.** If this ordinance conflicts with other ordinances in regulation of the use and development of the Property, this ordinance shall control and supersede to the extent of the conflict.

**Section 6. Codification.** The amendment to the Official Zoning Map in Section 2 shall be codified and made part of the Town's LDC and Official Zoning Map.

**Section 7. Effective Date.** This ordinance shall take effect upon the later of (i) its enactment by the Town Council or (ii) the date by which a development agreement for the Property has been approved by Town Council and taken effect.

*[ Signatures on the next page ]*

**ENACTED AND ORDAINED** this \_\_\_\_ day of \_\_\_\_\_, 2022, by the Town Council of the Town of Howey-in-the-Hills, Florida.

**TOWN OF HOWEY-IN-THE-HILLS,  
FLORIDA**

**By: its Town Council**

By: \_\_\_\_\_  
Hon. Martha MacFarlane, Mayor

**ATTEST:**

**APPROVED AS TO FORM AND LEGALITY**  
(for use and reliance of the Town only)

\_\_\_\_\_  
John Brock  
Town Clerk

\_\_\_\_\_  
Thomas J. Wilkes  
Town Attorney

Planning and Zoning Meeting held \_\_\_\_\_, **2022**

First Reading held \_\_\_\_\_, **2022**

Second Reading and Adoption held \_\_\_\_\_, **2022**

Advertised \_\_\_\_\_, **2022**, \_\_\_\_\_, **2022**

and \_ \_\_\_\_\_, **2022**

**Attachment A  
To  
Ordinance 2022 - 016**

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**LEGAL DESCRIPTION**

(35-20-25-0150-000-01200)  
ORB 2732, PG 1039

LOT 12; ALSO BEGIN 99 FEET SOUTH 1°32' WEST OF THE NORTHWEST CORNER OF LOT 16, THENCE RUN EAST TO THE SOUTHEASTERN BOUNDARY OF LOT 16; THENCE SOUTHWESTERLY ALONG THE SOUTHEASTERN BOUNDARY OF LOT 16; THENCE NORTHERLY ALONG THE WESTERN BOUNDARY OF LOT 16 TO THE POINT OF BEGINNING; LOTS 26 AND 27, LESS THAT PART INCLUDED IN CLAY PIT, ALL ACCORDING TO THE PLAT OF FIRST SUBDIVISION OF HOWEY, RECORDED IN PLAT BOOK 5, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.  
ORB 2732 PG 1041

PARCEL NO. 1 (35-20-25-0150-000-00100)  
LOT 1 IN 1ST SUBDIVISION OF HOWEY, ACCORDING TO THE TO THE PLAT THEREOF, RECORDED IN PLAT BOOK 5, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.

PARCEL NO.2 (35-20-25-0150-000-00100)  
THAT PART OF 1ST SUBDIVISION OF HOWEY, ACCORDING TO THE PLAT THEREOF, RECORDED IN PLAT BOOK 5, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA, BOUNDED AND DESCRIBED AS FOLLOWS: BEGIN AT THE INTERSECTION OF THE NORTH LINE OF SECTION 1, TOWNSHIP 21 SOUTH, RANGE 25 EAST, IN LAKE COUNTY, FLORIDA, WITH THE EASTERLY LINE OF THE RIGHT OF WAY OF SUNSET DRIVE AS SHOWN UPON SAID PLAT AND RUN THENCE EAST ALONG SAID NORTH LINE TO A POINT ON THE WATERS-EDGE OF LAKE BERTHA, SAID POINT BEING HEREBY DESIGNATED AS POINT "A". BEGIN AGAIN AT THE POINT OF BEGINNING AND RUN SOUTHERLY AND SOUTHEASTERLY ALONG THE EASTERLY LINE OF SAID RIGHT OF WAY TO THE WESTERLY LINE OF LOT 4 AS SHOWN UPON SAID PLAT; THENCE NORTHEASTERLY ALONG THE WESTERLY LINE OF SAID LOT 4 TO THE WATERS OF LAKE BERTHA; THENCE WESTERLY AND NORTHERLY ALONG AND WITH THE WATERS OF LAKE BERTHA TO THE ABOVE-DESIGNATED POINT "A".

PARCEL NO. 3 (02-21-25-0001-000-03700)  
THAT PART OF THE NORTH 1/2 OF GOVERNMENT LOTS 1 AND 2 IN SECTION 2, TOWNSHIP 21 SOUTH, RANGE 25 EAST, IN LAKE COUNTY, FLORIDA, BOUNDED AND DESCRIBED AS FOLLOWS: BEGIN AT THE NORTHEAST CORNER OF SAID SECTION

2, RUN THENCE SOUTH 00°06'05" EAST ALONG THE EAST LINE THERE OF, 1139.8 FEET; THENCE RUN NORTH 89°29'20" WEST 2668.76 FEET TO THE WEST LINE OF SAID GOVERNMENT LOT 2; THENCE RUN NORTH 00°09'00" WEST ALONG SAID WEST LINE 1125.96 FEET TO THE NORTHWEST CORNER OF SAID GOVERNMENT LOT 2; THENCE RUN SOUTH 89°46'40" EAST ALONG THE NORTH LINE OF SAID SECTION 2 FOR 2669.20 FEET TO THE POINT OF BEGINNING.

Total Acreage: 99.19

#47800843 v2

This instrument prepared by  
and should be returned to:

Thomas J. Wilkes  
GrayRobinson  
301 East Pine Street, Suite 1400  
Orlando, Florida 32801

As approved by Town Council  
for the Town of Howey-in-the-Hills, Florida

## WATERMARK PUD DEVELOPMENT AGREEMENT

---

This **WATERMARK PUD DEVELOPMENT AGREEMENT** (“Agreement”) is made as of the \_\_\_\_\_ day of \_\_\_\_\_, 2022 (“Effective Date”), between the **Town of Howey-in-the-Hills, Florida**, a Florida municipal corporation (the “Town”), and **Revels Road Investors, LLC**, a Florida limited liability company (the “Owner”).

### *RECITALS*

A. The Owner owns approximately 99.19 acres of property more particularly described in **Attachment A** to this Agreement (“the Property”).

B. The Property is within the corporate limits of the Town. The Town has assigned the Property a future-land-use designation of Medium Density Residential and has rezoned the Property from MDR-1 and MDR-2 to PUD - Planned Unit Development.

C. The Owner intends to develop and use the Property for single-family residential purposes as more specifically set forth herein (“the Project”), to be known as the “Watermark PUD.”

D. The Town and Owner enter into this Agreement to set forth the terms and conditions of approval negotiated between them for the development and use of the Property as the Watermark PUD.

***NOW, THEREFORE, the Town and the Owner agree as follows:***

**Section 1: Land development and uses.** Development and use of the Property is subject to the following conditions, requirements, restrictions, and terms:

(a) **General.** Development of the Project and use of the Property shall be governed by this Agreement, the Town’s Comprehensive Plan, the Town’s Land Development Code (“LDC”) and Code of Ordinances (“Town Code”), and all other applicable state laws and regulations and Town ordinances and rules. Where in conflict, the terms of this Agreement shall supersede and prevail over the LDC and Town Code, but only to the extent of the conflict.

In the Conceptual Land Use Plan for the Project the term “conceptual” means the location of land uses on the site, including areas for residential development, open space, stormwater management, parks, and roads in relation to the site area and other uses on the site. Subsequent plan development may refine the details based on detailed engineering design. “Conceptual” does not mean or contemplate the modification of proposed housing types or the relocation of land uses and roads other than minor adjustments dictated by engineering needs and best practices.

Unless otherwise noted, the definition of terms in this Agreement shall be the same as the definitions set forth in the LDC.

**(b) Phasing** The project will be developed in two phases, as shown on the Conceptual Land Use/Preliminary Subdivision Plan. Each phase must be designed and built to operate independently with regard to traffic and utility services. Revisions to the phasing schedule shall be considered as minor amendments to this Agreement, which may be approved by Town Council with no formal amendment to this Agreement required.

**(c) Purpose.** The purpose of the Watermark PUD is to:

1. Create an attractive and high-quality single-family housing development compatible with the scale and character of existing residential development and land uses in the Town;
2. Develop a residential area that is safe, comfortable and attractive for and to pedestrians;
3. Create a community with direct visual and physical access to open land, with a strong community identity, and with amenities in the form of community open space;
4. Provide a network of open space for future homeowners; and
5. Provide a variety of lot sizes and housing choices for diverse age and income groups and residential preferences.

**(d) Land uses.** The Conceptual Land Use Plan for the Project is contained in **Attachment B** and is an integral part of the approval of the Project. Elements in the Concept Plan include single-family detached homes and approximately 31.32 acres of recreation.

**(e) Development standards.**

**Setbacks**

The following setbacks shall be applied:

Front:	20 feet
Rear:	25 feet
Side:	7.5 feet

Wetland:	25 feet
Corner:	12.5 feet
Pool / Accessory	10 feet



The recorded covenants, conditions, and restrictions for the Property must recite that (i) 65-foot lots may require a zoning variance before a pool can be installed and (ii) the Town Council legally may grant or deny such a zoning variance in its sole discretion. Also, each initial purchaser of a home on a 65-foot lot must be informed in writing by the developer or homebuilder before closing the purchase that Town Council may refuse to grant a variance for a pool on the lot, should the purchaser need a variance to install a pool. The substance of the disclosure statement used by the developer or builder must be approved by the Town Manager before being delivered to prospective homebuyers.

### **Lot Size**

A range of lot sizes shall be provided in order to create variety and offer opportunity for different income households. Minimum lot size will be 65' x 120'. The Project may consist of up to 235 total lots of 65' x 120' and 75' x 120'. No fewer than 118 lots must be 75' x 120'.

### **Dwelling Size**

The minimum dwelling size for all single-family residences shall be 1,600 square feet of heated/air-conditioned space under roof plus a two-car garage with a minimum of 400 square feet.

### **Lot Width**

The minimum lot width at building line shall be 65 feet with a minimum street frontage of 30 feet.

### **Lot Coverage**

Lots shall have a maximum lot coverage of 60%, to include principal dwelling, all paved areas, and swimming pools, except that on a 65-foot lot the maximum lot coverage may be 70% if a swimming pool is built.

### **Height of Structures**

No residential structure may exceed 35 feet in height.

### **Building Design**

Building design shall be in accordance with the Architectural Requirements of the Town's LDC and will comply specifically with the design requirements of LDC Sections 4.06.02 and 4.06.03.

The following principles seek to promote a high quality development that will create a sense of place and community through the development of the site.

- Housing styles, shapes and materials shall meet the Towns Land Development Regulations.
- The different housing types shall be integrated architecturally in order to give the development a harmonious appearance.

- The creation of visual richness shall be considered when choosing materials and details. Local characteristics are encouraged.
- Side entrances for garages are encouraged.
- A variety of roof heights, pitches and materials will be encouraged.
- Landscaping shall be incorporated into the overall design as a means of linking the development areas with the open spaces.
- Each exterior wall for a single-family home must be a minimum of two materials and a minimum of two colors. Primary facades must have one base color and a complementary wall material may be used to meet the second color requirement.
- Block face restrictions may be reduced to 300 linear feet. The same house model may not be used more than three times within a single block face. For purposes of this requirement, a different house model is a different floor plan, not the same floor plan flipped in a different direction and not the same floor plan with a different exterior treatment.

**(f) Wetlands Buffer Requirement.** No development is allowed within jurisdictional wetlands on the property. A minimum upland buffer of 25 feet along each wetland must be platted in a tract, to be maintained by the HOA. No development except passive recreation is permitted in wetland areas.

**(g) Potable water, wastewater, and reclaimed water.** Well and septic systems are not allowed. The Project must be connected to and served by the Town's potable-water and wastewater systems prior to a certificate of occupancy being issued for a structure in the Project (except temporary construction uses).

Except as may be set forth otherwise in this Agreement, the Owner must install all on-site potable-water, wastewater, and reclaimed-water infrastructure and connect to the Town's water and wastewater systems, and to the Town's reclaimed-water system when available at the Property boundary, all at no cost to the Town. The Owner must pay potable-water, wastewater, and reclaimed-water capital and connection charges, impact fees, and other Town rates, fees, and charges, either applicable currently or in the future.

*1. Potable Water.* The Town will provide potable water, and may in the future provide reclaimed water, to the Project in accordance with its applicable ordinances, resolutions, operating regulations, policies and procedures. The Town will provide potable water to the Property in sufficient quantities for development of the Project as contemplated herein, subject to the limitations and requirements of permits issued to the Town from time to time by the St. John's River Water Management District in connection with water consumption.

The Owner shall construct, at no expense to the Town, all off-site potable-water-system facilities, lines, pumps, valves, control structures, and appurtenances (other than water-treatment plants) necessary to serve the Project. The construction and route of off-site lines and other structures shall be done according to engineering plans prepared by the Owner and approved by the Town Manager.

2. *Wastewater.* The Town will provide wastewater-collection and -transmission service to the Project, transmitting Project wastewater to the Central Lake Community Development District (“CDD”). The Owner must obtain from the CDD a contract right for the Project to receive treatment and disposal of its wastewater at the CDD’s treatment and disposal facilities.

The Owner shall construct, at no expense to the Town, all off-site wastewater-system facilities, lines, lift stations, pumps, valves, control structures, and appurtenances (other than wastewater-treatment plants and disposal facilities) necessary to serve the Project. The construction and route of off-site lines, lift stations, pumps, and other structures shall be done according to engineering plans prepared by the Owner and approved by the Town Manager.

3. *Town Option to Oversize Water and Wastewater Lines.* Within 180 days of the effective date of the Owner’s contract right to receive wastewater-treatment and –disposal service from the CDD, as referenced above, the Town may elect to oversize the off-site lines, pumps, improvements, or other facilities or appurtenances for the Town’s water or wastewater system, or for both. If the Town elects to oversize one or both systems, it must inform the Owners in writing of the specifications for the oversizing(s) within the 180-day period. The Town shall reimburse the Owner for the difference in the increase in cost of design, materials and construction to oversize the improvements based on plans and cost estimates provided by the Owner to the Town and approved by the Town Manager, which approval shall not be unreasonably withheld, conditioned or delayed. The Town shall reimburse the Owners for the difference in the costs within 60 days following (i) completion of the improvements and (ii) receipt by the Town of documentation reasonably demonstrating that the Owner has completed the work and has incurred the costs attributable to the over-sizing, all in keeping with the plans and cost estimate previously approved by the Town Manager.

4. *Permit-Induced Costs, Restrictions, Requirements, and Risks.* Under state and federal laws and regulations, the Town may provide its potable-water and wastewater services to the Property and the Owner and its successors only if the Town first has been issued certain required permits. The Owner acknowledges that the permits are inevitably conditioned with requirements and restrictions that typically impose costs and risks. The Owner further acknowledges that, for the Town to operate its potable-water and wastewater systems in an orderly, dependable, and cost-effective manner, the Town must have the ability legally to spread the costs and risks among customers and property owners benefiting from the services. The Owner acknowledges, therefore, that (i) from time to time the Town may impose rates, fees, and charges and may issue potable-water system and wastewater-system regulations and policies that impose restrictions and requirements on its customers and benefiting property owners, such as the Owner and its successors, and (ii) so long as the Owner or successors are required to pay only their fair share for such rates, fees, and charges, then the imposition of such rates, fees, and charges and the issuance of such system regulations are not prohibited by or otherwise a breach of this Agreement.

5. *Reclaimed Water.* The Owner must install reclaimed water lines as required by the Town’s Code of Ordinances, and shall obtain reclaimed-water service for the Project when the Town constructs reclaimed-water lines to the Project’s boundaries. Until such time as the Town supplies reclaimed water, the Owner and its successors shall use the reclaimed

water lines to irrigate properties within the Project boundaries, but only with stormwater from on-site stormwater-retention ponds or with sources other than potable water as may be approved by the Town.

**(h) Solid Waste**

Solid Waste collection shall be pursuant to Town regulations.

**(i) Drainage**

The maintenance, repair, and replacement of the drainage system shall be the responsibility of the homeowners association(s).

**(j) Transportation**

**Street and Sidewalks**

There must be two ingress and egress points to Revels Road and one ingress/egress point to Lake County-A, each a full intersection in the approximate location shown on the Conceptual Land Use Plan. Also, there must be paved access stubbed to the north line of the property at the parcel owned by the Town, as shown on the Conceptual Land Use Plan.

All streets must have a minimum 50-foot right-of-way, curb and gutter, and a minimum 24-foot-wide pavement with minimum 12-foot travel lanes. Provision must be made in the rights-of-way for underground utilities.

Realignment of East Revels Road must be completed as part of the first phase of the Project and approved as part of the subdivision construction plans. The realignment is a material condition of approval of the Project and this Agreement. If the realignment is not approved by FDOT substantially as shown on the Conceptual Land Use Plan, the Town may require resubmittal and further review and approval, as a major amendment, of a revised Conceptual Land Use Plan.

The Project must have a connected street system that serves vehicles, pedestrians and bicycles and that connects to recreation facilities and adjacent residential/community areas. All streets must be public, dedicated to and maintained by the Town. No streets in the Project may be gated or otherwise restricted or obstructed by the Owner, by a homeowners' or property owners' association, or by any other person or entity.

All portions of the development must be accessible by a direct, convenient, attractive, safe, and comfortable system of pedestrian facilities. The development must provide appropriate pedestrian amenities. A bicycle/pedestrian path with minimum width of ten feet must be constructed along Revels Road, consistent with the Town's bicycle/pedestrian plan and connecting to the proposed trailhead on SR 19 and a pathway to be built through The Reserve PUD to No. 2 Road. A minimum five-foot sidewalk must be constructed along both sides of each interior street. All sidewalks within rights-of-way must be dedicated to and maintained by the Town.

**Transportation Concurrency and Proportionate Fair Share Mitigation**

The Project must undergo concurrency review. The Owner must complete and submit for review prior to building permits a traffic-impact analysis. If required based on that traffic study, the Owner must fund its proportionate fair share of traffic improvements along SR-19 and other key roads as concluded by the traffic study's analysis of project traffic contributing to the needed improvements. Payment of the Owner's fair share must be made on or before the issuance of the 50th building permit.

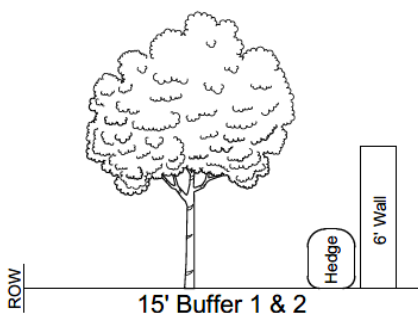
**(k) Schools.** The Project must apply for concurrency review at Lake County Public Schools. The school district has a specific application process. The Project must be shown to have appropriate school concurrency before building permits are issued.

**(l) Landscaping Requirements.** All landscaping and buffer requirements shall be in accordance with the LDC and as illustrated on the Conceptual Land Use Plan with the exception of the following:

1. All buffer, street, and canopy trees planted at the Project will be a minimum of a 2" caliper;
2. the Owner shall require homebuilders to plant at least one canopy tree for each single-family lot of at least 3" DBH; and
3. the developer will replace the equivalent of 30% of total tree-inches removed.

All trees planted at the Project shall adhere to the current guidelines established by the Florida Grades and Standards for nursery-grown trees and must be Florida grade #1 or better.

Developer must install street trees along the roadway where common areas abuts the road as required by the LDC. The cross section for the buffer areas is shown below.



Cross-Section of Buffers 1 and 2

**(m) Tree Protection.** Under no circumstances may any tree, regardless of size or species, be removed from any designated wetland or conservation easement. Trees proposed to be maintained on site must comply with LDC requirements. No construction activity, equipment or material is permitted inside a tree protection barrier.

Citrus trees are excluded from Town tree-protection requirements. However, where citrus grove exists in an open-space area on the Conceptual Land Use Plan, all or a portion of the grove, as

determined by the Town Manager, must remain in the open-space area as a community-garden type activity.

**(n) Lighting.** Decorative street lighting (Sanibel fixture, a Duke Energy standard fixture) must be installed (i) at every intersection, (ii) at the end of each cul-de-sac, and (iii) at intervals of 300 feet or as approved otherwise by the Town Manager. Street lighting must be installed by the Owner. All lighting must be directional, shielded lighting designed to minimize light pollution. All lighting must be maintained by the HOA.

**(o) Utilities.** All utilities must be underground.

**(p) Signage.** Entrance signs and informational signage may be located in buffers, setbacks/and or signage easements as approved by the Planning and Zoning Board. The Owner shall present a sign plan for review and approval by the Planning and Zoning Board with the final site plan. The Town Council has approved use by the Owner and/or builder(s) of vertical marketing flags, also known as feather banners, with the following stipulations:

1. Feather banners must be placed no less than 200 feet apart.
2. A maximum of 10 feather banners, in total.
3. Feather banners cannot be placed within the right of way.
4. Feather banners cannot be located offsite of PUD property.
5. Feather banners cannot exceed 12 feet in height.
6. Feather banners must be replaced or removed if they become faded, torn, or tattered.
7. Feather banners must be removed when 90% of the homes in the development have received building permit approval.

Pole signs and billboards are prohibited. All additional signage not previously approved must be in compliance with the requirements in the LDC.

**(q) Maintenance of Common Areas.** Maintenance of all common areas within the Project is the responsibility of the homeowners' association(s) for the affected subdivision.

**(r) Prohibited Uses.** No manufactured or modular homes are allowed.

**Section 2. Amendments.** A substantial deviation from the Conceptual Land Use Plan in Attachment B or deviation from the other terms of this Agreement may occur only if approved by the Town Council in the manner required by law or otherwise as determined by Town Council, which may include public notice(s) and hearing(s).

Minor amendments needed once final engineering is completed may be reviewed and approved by the Town Manager without referral to the Planning and Zoning Board or Town Council. Whether a proposed amendment is major or minor will be determined by the Town Manager.

**Section 3: Notices.** All notices or payments required to be made hereunder shall be made at the following addresses:

To Town: Sean O’Keefe, Town Manager  
Town of Howey-in-the-Hills  
101 North Palm Avenue  
Howey-in-the-Hills, FL 34737  
[sokeefe@howey.org](mailto:sokeefe@howey.org)

With copies to: John Brock, CMC, Town Clerk  
Town of Howey-in-the-Hills  
101 North Palm Avenue  
Howey-in-the-Hills, FL 34737  
[jbrock@howey.org](mailto:jbrock@howey.org)

Thomas J. Wilkes, Town Attorney  
Gray Robinson, P.A.  
301 East Pine Street, Suite 1400  
Orlando, FL 32801  
[twilkes@gray-robinson.com](mailto:twilkes@gray-robinson.com)

To Owner: Craig C. Harris, Manager  
Revels Road Investors, LLC  
210 Hangar Road  
Kissimmee, FL 34741

With copies to: Chris Gardner, Manager  
CKG Development and Realty, LLC  
1482 Granville Drive  
Winter Park, FL 32789  
[chris@condevfl.com](mailto:chris@condevfl.com)

Carolyn Haslam  
Akerman LLP  
420 S. Orange Avenue, Suite 1200  
Orlando, Florida 32801  
[carolyn.haslam@akerman.com](mailto:carolyn.haslam@akerman.com)

**Section 4: Severability.** If any provision or portion of this Agreement is declared by a court of competent jurisdiction to be void, unconstitutional, or unenforceable, then all remaining provisions and portions of this Agreement shall remain in full force and effect. To that end, this Agreement is declared to be severable.

**Section 5: Binding Effect.** This Agreement runs with the land and is binding on and enforceable by and against the parties hereto and all their successors in interest. However, no Lot Owner shall have the obligations imposed on the Owner as the developer of the Project under this Agreement. For that purpose, a “Lot Owner” means an end-user of a lot created within the Property with a completed residential unit constructed thereon, for which a certificate of occupancy has been issued. Each party covenants to each other party that this Agreement is a legal, valid, and binding agreement, enforceable against the party in accordance with its terms.



**Section 6: Negotiated Agreement.** The land uses, densities, intensities, and other conditions of approval of the Project have been negotiated and agreed to by the Owner and the Town. The Conceptual Land Use Plan and this Agreement together constitute an agreement between the parties with the knowledge that the Owner's successors in title, the future homeowners, and other landowners within the Property, as well as the Town and its affected property owners and residents, all will rely justifiably on the agreed-to land uses, densities, and intensities authorized hereby for the Property. For that reason, the Owner and the Owner's successors in interest have the contract right to develop the PUD with the uses, densities, and intensities approved by the Town, subject to the restrictions and requirements in the conditions of approval set forth in this Agreement. Neither the Owner (and its successors in interest) nor the Town shall have the right in the future to rezone or downzone the property, or otherwise alter the uses, densities and intensities, or delete, waive or amend any conditions of approval except through an amendment to the Plan negotiated and approved by the Town Council and the owner of the then-subject parcel. This section shall survive the termination and expiration of this Agreement.

**Section 7. Homeowners' Association(s).**

(a) **Association Responsibilities.** A homeowner's association and/or a property owner's association ("HOA") must be created by the Owner. Membership in the HOA shall be mandatory for all property owners within the Project. The HOA shall be responsible for maintaining all parks, open-space and buffer areas, streetlights, stormwater-management areas and drainage systems, entrance features, boundary walls and/or fences, access tracts, and landscaped tracts within the Project.

(b) **Requirement for Plat Recording.** Before a plat may be recorded for the Property and the Project, the Owner shall furnish to the Town copies of the pertinent documents for the homeowners' or property owners' association or associations, plus the covenants, conditions and restrictions for the Property, setting forth the requirements and restrictions enumerated in this section 7 and other applicable parts of this Agreement.

**Section 8. Additional Requirements.**

a. **Letter of credit.** Construction and dedication to the Town of the public facilities and improvements required under this Agreement will be a condition precedent to final plat approval. In lieu of construction and dedication, however, the Owner may post a letter of credit with the Town for 125% of the cost of such improvements, in which event this condition precedent to final plat approval will be deemed satisfied.

b. **Conveyances to the Town.** Property dedicated or otherwise conveyed to the Town under this Agreement must be free and clear of encumbrances unless and to the extent an encumbrance is acceptable to the Town. Encumbrances discovered after the Effective Date of this Agreement must be removed or resolved by the Owner or its successor developer prior to dedication or conveyance of the affected property to the Town.

c. **Changes in status of land.** Until completion of the Project, the Owner or its successor developer of the Project has a continuing duty (i) to disclose promptly to the Town all changes in ownership, encumbrances, and other matters of record affecting the Property and (ii) to resolve all issues, title or otherwise, that may be identified by the Town as a result of such changes. Failure to disclose such changes or to resolve resulting issues may result in delay in issuance of development permits.

d. **Developer representations binding.** If at Town Council hearings on the approval of the Project the Owner makes a written or oral promise or representation, and if the promise or representation was relied upon by Town Council in approving the Project or otherwise acted to induce or materially influence Town Council in its vote to approve the Project, the promise or representation is a condition of approval of the Project. The promise or representation is binding on the Owner and its successors and enforceable by the Town against the Owner and its successors as if set forth fully in this Agreement.

**Section 9. Governing Law.** This Agreement shall be governed by the laws of the State of Florida. Venue for any judicial proceeding pertaining to the Agreement shall be in the Fifth Judicial Circuit of Florida, in Lake County, Florida.

**Section 10. Effective Date; Termination.**

(a) **Effective Date.** This Agreement shall take effect upon the Effective Date above, or on the date when it has been executed by both the Town Council and the Owner, whichever is later.

(b) **Termination.** This Agreement shall remain in effect unless and until terminated under one of the following conditions:

1. If as of the **second** anniversary of the Effective Date of this Agreement an Owner's contract right to treatment and disposal services by the CDD, as required under Section 1(g)1 above, has not taken effect, the Town may terminate this Agreement by vote of its Town Council. The vote must occur no later than (i) the **third** anniversary of the Effective Date or (ii) the CDD Contract Date, whichever occurs first. The "CDD Contract Date" is the date on which the Owner's contract right to treatment and disposal services by the CDD takes effect.
2. If as of the **second** anniversary of the CDD Contract Date no building permit for a residential unit in the Project has been issued, the Town may terminate this Agreement by vote of its Town Council. The vote must occur no later than (i) the **third** anniversary of the CDD Contract Date or (ii) the date a building permit is issued, whichever occurs first.
3. If as of the **fifth** anniversary of the CDD Contract Date no building permit for a residential unit in the second phase of the Project has been issued, the Town may terminate this Agreement by vote of its Town Council, but only as it applies to development of the second phase. The vote must occur no later than (i) the **sixth** anniversary of the CDD Contract Date or (ii) the date a building permit is issued

for a residential unit in the second phase, whichever occurs first. Termination of the Agreement for this reason will not act to preclude the Owner or its successor from completing the first phase of the Project.

Termination of this Agreement, in whole or in part, under this section shall be without prejudice to the Owner or its successor to apply for Town approvals to undertake or continue development of the Property in accordance with the circumstances and land-development regulations then existing in the Town.

**Section 11. Recording.** This Agreement shall be recorded by the Town, at the Owner's expense, in the Public Records of Lake County, Florida, and shall constitute a covenant running with the land.

**Section 12. Authority.** This Agreement is entered into by the Town under the home-rule powers granted to it by the Florida constitution (including specifically Article VIII, Section 2(b) thereof), the home-rule powers granted municipalities by statute (including specifically Chapter 166, Florida Statutes), and the Town's Charter. This Agreement does not constitute a "development agreement" under the Florida Local Government Development Agreement Act.

**Section 13. Entire Agreement.** This Agreement constitutes the entire agreement of the parties with respect to the transactions contemplated herein. It supersedes all prior understandings or agreements between the parties relating to the Property and the Project. No amendment to the terms of this Agreement shall be effective unless in writing signed by all parties hereto. Amendments to this Agreement will take effect and will be binding against the Town only if approved by a vote of the Town Council.

**Section 14. Waiver.** The failure of a party hereto to insist upon or enforce any right or privilege granted hereunder shall not constitute or operate as a waiver thereof and nothing shall constitute a waiver of any party's right to insist upon strict compliance with the terms hereof. However, any party may waive in writing the benefit of any provision or condition for its benefit which is contained herein. Waivers of material provisions of either this Agreement or the Town's LDC will be valid and binding against the Town only if approved by a vote of the Town Council.

*[ Signature pages follow ]*

***IN WITNESS WHEREOF, the parties are signing this Agreement as of the Effective Date or, if later, the date by which both parties have fully executed this Agreement.***

**TOWN OF HOWEY-IN-THE HILLS,  
FLORIDA**

By: its Town Council

By: \_\_\_\_\_  
Hon. Martha McFarlane, Mayor

Attest:

By: \_\_\_\_\_  
John Brock, CMC, Town Clerk

Approved as to form and legality:  
(for the use and reliance of the Town only)

\_\_\_\_\_  
Thomas J. Wilkes, Town Attorney

**STATE OF FLORIDA  
COUNTY OF LAKE**

The foregoing instrument was executed, sworn to and acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2022, by Martha McFarlane, as Mayor of the Town of Howey-in-the-Hills.

(SEAL)

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
Name of Notary Public  
(Typed, Printed or stamped)

Personally Known \_\_\_\_ OR Produced Identification \_\_\_\_  
Type of Identification Produced: \_\_\_\_\_

Witnesses:

**REVELS ROAD INVESTORS, LLC**

By: \_\_\_\_\_

Craig C. Harris  
As its Manager

\_\_\_\_\_  
Printed Name: \_\_\_\_\_

\_\_\_\_\_  
Printed Name: \_\_\_\_\_

STATE OF FLORIDA  
COUNTY OF \_\_\_\_\_

The foregoing instrument was executed, sworn to and acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2022, by Craig C. Harris, Manager of REVELS ROAD INVESTORS, LLC, a Florida limited liability company, on their behalf.

(SEAL)

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
Name of Notary Public  
(Typed, Printed or stamped)

Personally Known \_\_\_\_ OR Produced Identification \_\_\_\_

Type of Identification Produced: \_\_\_\_\_

**Attachment A  
To  
WATERMARK PUD DEVELOPMENT AGREEMENT**

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**LEGAL DESCRIPTION**

(35-20-25-0150-000-01200)  
ORB 2732, PG 1039

LOT 12; ALSO BEGIN 99 FEET SOUTH 1°32' WEST OF THE NORTHWEST CORNER OF LOT 16, THENCE RUN EAST TO THE SOUTHEASTERN BOUNDARY OF LOT 16; THENCE SOUTHWESTERLY ALONG THE SOUTHEASTERN BOUNDARY OF LOT 16; THENCE NORTHERLY ALONG THE WESTERN BOUNDARY OF LOT 16 TO THE POINT OF BEGINNING; LOTS 26 AND 27, LESS THAT PART INCLUDED IN CLAY PIT, ALL ACCORDING TO THE PLAT OF FIRST SUBDIVISION OF HOWEY, RECORDED IN PLAT BOOK 5, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.  
ORB 2732 PG 1041

PARCEL NO. 1 (35-20-25-0150-000-00100)  
LOT 1 IN 1ST SUBDIVISION OF HOWEY, ACCORDING TO THE TO THE PLAT THEREOF, RECORDED IN PLAT BOOK 5, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.

PARCEL NO.2 (35-20-25-0150-000-00100)  
THAT PART OF 1ST SUBDIVISION OF HOWEY, ACCORDING TO THE PLAT THEREOF, RECORDED IN PLAT BOOK 5, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA, BOUNDED AND DESCRIBED AS FOLLOWS: BEGIN AT THE INTERSECTION OF THE NORTH LINE OF SECTION 1, TOWNSHIP 21 SOUTH, RANGE 25 EAST, IN LAKE COUNTY, FLORIDA, WITH THE EASTERLY LINE OF THE RIGHT OF WAY OF SUNSET DRIVE AS SHOWN UPON SAID PLAT AND RUN THENCE EAST ALONG SAID NORTH LINE TO A POINT ON THE WATERS-EDGE OF LAKE BERTHA, SAID POINT BEING HEREBY DESIGNATED AS POINT "A". BEGIN AGAIN AT THE POINT OF BEGINNING AND RUN SOUTHERLY AND SOUTHEASTERLY ALONG THE EASTERLY LINE OF SAID RIGHT OF WAY TO THE WESTERLY LINE OF LOT 4 AS SHOWN UPON SAID PLAT; THENCE NORTHEASTERLY ALONG THE WESTERLY LINE OF SAID LOT 4 TO THE WATERS OF LAKE BERTHA; THENCE WESTERLY AND NORTHERLY ALONG AND WITH THE WATERS OF LAKE BERTHA TO THE ABOVE-DESIGNATED POINT "A".

PARCEL NO. 3 (02-21-25-0001-000-03700)  
THAT PART OF THE NORTH 1/2 OF GOVERNMENT LOTS 1 AND 2 IN SECTION 2, TOWNSHIP 21 SOUTH, RANGE 25 EAST, IN LAKE COUNTY, FLORIDA, BOUNDED AND DESCRIBED AS FOLLOWS: BEGIN AT THE NORTHEAST CORNER OF SAID

SECTION 2, RUN THENCE SOUTH 00°06'05" EAST ALONG THE EAST LINE THERE OF, 1139.8 FEET; THENCE RUN NORTH 89°29'20" WEST 2668.76 FEET TO THE WEST LINE OF SAID GOVERNMENT LOT 2; THENCE RUN NORTH 00°09'00" WEST ALONG SAID WEST LINE 1125.96 FEET TO THE NORTHWEST CORNER OF SAID GOVERNMENT LOT 2; THENCE RUN SOUTH 89°46'40" EAST ALONG THE NORTH LINE OF SAID SECTION 2 FOR 2669.20 FEET TO THE POINT OF BEGINNING.

Total Acreage: 99.19



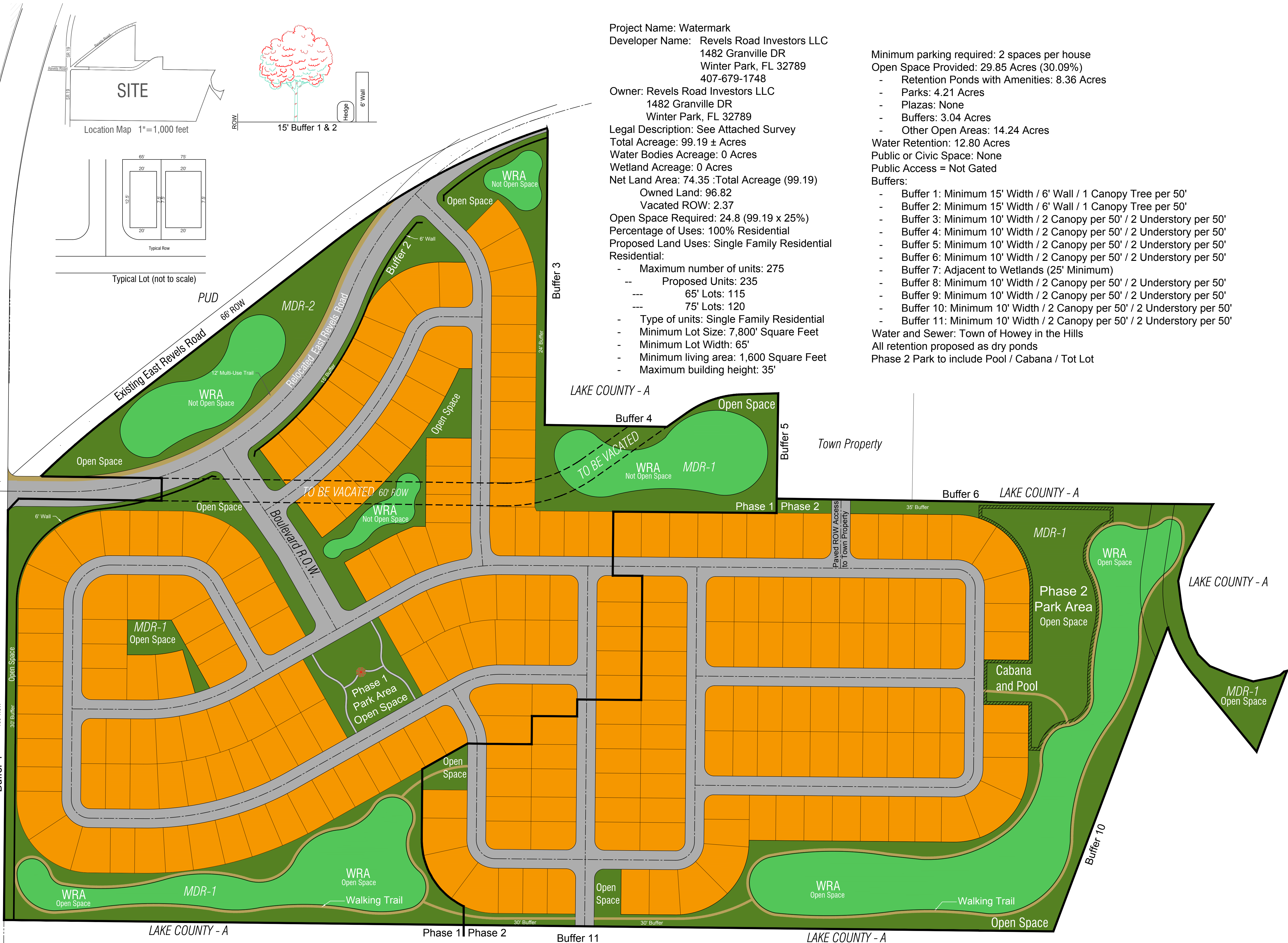
**Attachment B**  
**To**  
**WATERMARK PUD DEVELOPMENT AGREEMENT**

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**CONCEPTUAL LAND USE PLAN**

[ to be added ]

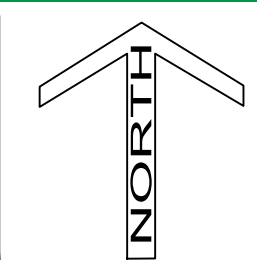
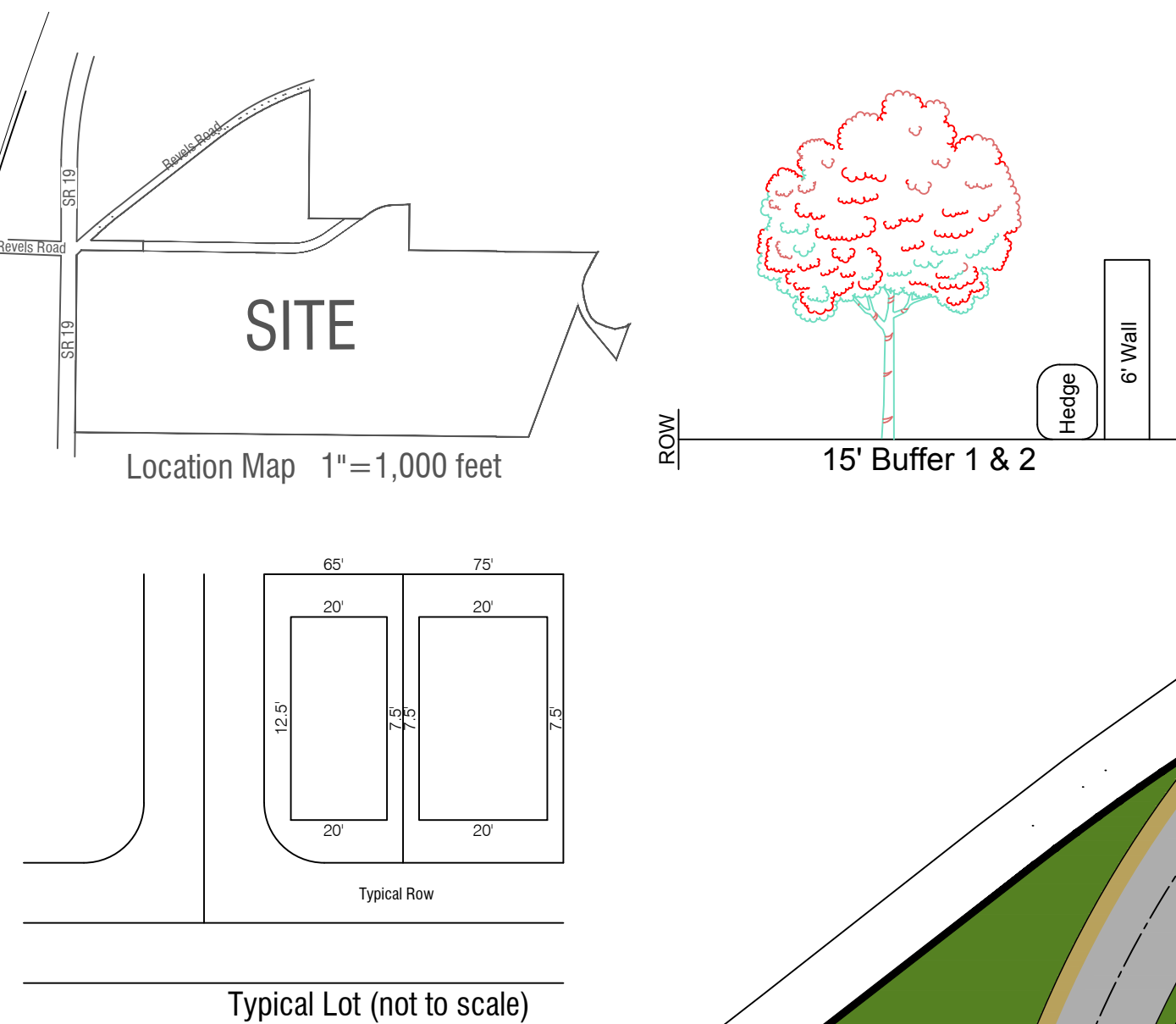
#47805050 v6



Project Name: Watermark  
Developer Name: Revels Road Investors LLC  
1482 Granville DR  
Winter Park, FL 32789  
407-679-1748

Owner: Revels Road Investors LLC  
1482 Granville DR  
Winter Park, FL 32789  
Legal Description: See Attached Survey  
Total Acreage: 99.19 ± Acres  
Water Bodies Acreage: 0 Acres  
Wetland Acreage: 0 Acres  
Net Land Area: 74.35 :Total Acreage (99.19)  
Owned Land: 96.82  
Vacated ROW: 2.37  
Open Space Required: 24.8 (99.19 x 25%)  
Percentage of Uses: 100% Residential  
Proposed Land Uses: Single Family Residential  
Residential:  
- Maximum number of units: 275  
-- Proposed Units: 235  
--- 65' Lots: 115  
--- 75' Lots: 120  
- Type of units: Single Family Residential  
- Minimum Lot Size: 7,800' Square Feet  
- Minimum Lot Width: 65'  
- Minimum living area: 1,600 Square Feet  
- Maximum building height: 35'

Minimum parking required: 2 spaces per house  
Open Space Provided: 29.85 Acres (30.09%)  
- Retention Ponds with Amenities: 8.36 Acres  
- Parks: 4.21 Acres  
- Plazas: None  
- Buffers: 3.04 Acres  
- Other Open Areas: 14.24 Acres  
Water Retention: 12.80 Acres  
Public or Civic Space: None  
Public Access = Not Gated  
Buffers:  
- Buffer 1: Minimum 15' Width / 6' Wall / 1 Canopy Tree per 50'  
- Buffer 2: Minimum 15' Width / 6' Wall / 1 Canopy Tree per 50'  
- Buffer 3: Minimum 10' Width / 2 Canopy per 50' / 2 Understory per 50'  
- Buffer 4: Minimum 10' Width / 2 Canopy per 50' / 2 Understory per 50'  
- Buffer 5: Minimum 10' Width / 2 Canopy per 50' / 2 Understory per 50'  
- Buffer 6: Minimum 10' Width / 2 Canopy per 50' / 2 Understory per 50'  
- Buffer 7: Adjacent to Wetlands (25' Minimum)  
- Buffer 8: Minimum 10' Width / 2 Canopy per 50' / 2 Understory per 50'  
- Buffer 9: Minimum 10' Width / 2 Canopy per 50' / 2 Understory per 50'  
- Buffer 10: Minimum 10' Width / 2 Canopy per 50' / 2 Understory per 50'  
- Buffer 11: Minimum 10' Width / 2 Canopy per 50' / 2 Understory per 50'  
Water and Sewer: Town of Howey in the Hills  
All retention proposed as dry ponds  
Phase 2 Park to include Pool / Cabana / Tot Lot



Drawing Number: 1561-16  
Originated From: 1561-15  
Date: October 3, 2022  
Scale: 1"=120'  
Drawn By: JMA  
Layout: 24"x36"

This instrument prepared by  
and should be returned to:

Thomas J. Wilkes  
GrayRobinson  
301 East Pine Street, Suite 1400  
Orlando, Florida 32801

As approved by Town Council  
for the Town of Howey-in-the-Hills, Florida

### **WATERMARK PUD DEVELOPMENT AGREEMENT**

This **WATERMARK PUD DEVELOPMENT AGREEMENT** ("Agreement") is made as of the \_\_\_\_\_ day of \_\_\_\_\_, 2022 ("Effective Date"), between the **Town of Howey-in-the-Hills, Florida**, a Florida municipal corporation (the "Town"), and **Revels Road Investors, LLC**, a Florida limited liability company (the "Owner").

#### ***RECITALS***

A. The Owner owns approximately 99.19 acres of property more particularly described in **Attachment A** to this Agreement ("the Property").

B. The Property is within the corporate limits of the Town. The Town has assigned the Property a future-land-use designation of Medium Density Residential and has rezoned the Property from MDR-1 and MDR-2 to PUD - Planned Unit Development.

C. The Owner intends to develop and use the Property for single-family residential purposes as more specifically set forth herein ("the Project"), to be known as the "Watermark PUD."

D. The Town and Owner enter into this Agreement to set forth the terms and conditions of approval negotiated between them for the development and use of the Property as the Watermark PUD.

***NOW, THEREFORE, the Town and the Owner agree as follows:***

**Section 1: Land development and uses.** Development and use of the Property is subject to the following conditions, requirements, restrictions, and terms:

(a) **General.** Development of the Project and use of the Property shall be governed by this Agreement, the Town's Comprehensive Plan, the Town's Land Development Code ("LDC") and Code of Ordinances ("Town Code"), and all other applicable state laws and regulations and Town ordinances and rules. Where in conflict, the terms of this Agreement shall supersede and prevail over the LDC and Town Code, but only to the extent of the conflict.

In the Conceptual Land Use Plan for the Project the term “conceptual” means the location of land uses on the site, including areas for residential development, open space, stormwater management, parks, and roads in relation to the site area and other uses on the site. Subsequent plan development may refine the details based on detailed engineering design. “Conceptual” does not mean or contemplate the modification of proposed housing types or the relocation of land uses and roads other than minor adjustments dictated by engineering needs and best practices.

Unless otherwise noted, the definition of terms in this Agreement shall be the same as the definitions set forth in the LDC.

**(b) Phasing.** The project will be developed in two phases, as shown on the Conceptual Land Use/Preliminary Subdivision Plan. Each phase must be designed and built to operate independently with regard to traffic and utility services. Revisions to the phasing schedule shall be considered as minor amendments to this Agreement, which may be approved by Town Council with no formal amendment to this Agreement required.

**(c) Purpose.** The purpose of the Watermark PUD is to:

1. Create an attractive and high-quality single-family housing development compatible with the scale and character of existing residential development and land uses in the Town;
2. Develop a residential area that is safe, comfortable and attractive for and to pedestrians;
3. Create a community with direct visual and physical access to open land, with a strong community identity, and with amenities in the form of community open space;
4. Provide a network of open space for future homeowners; and
5. Provide a variety of lot sizes and housing choices for diverse age and income groups and residential preferences.

**(d) Land uses.** The Conceptual Land Use Plan for the Project is contained in **Attachment B** and is an integral part of the approval of the Project. Elements in the Concept Plan include single-family detached homes and approximately 31.32 acres of recreation.

**(e) Development standards.**

**Setbacks**

The following setbacks shall be applied:

Front:	20 feet
Rear:	25 feet
Side:	7.5 feet

Wetland:	25 feet
Corner:	12.5 feet
Pool / Accessory	10 feet



The recorded covenants, conditions, and restrictions for the Property must recite that (i) 65-foot lots may require a zoning variance before a pool can be installed and (ii) the Town Council legally may grant or deny such a zoning variance in its sole discretion. Also, each initial purchaser of a home on a 65-foot lot must be informed in writing by the developer or homebuilder before closing the purchase that Town Council may refuse to grant a variance for a pool on the lot, should the purchaser need a variance to install a pool. The substance of the disclosure statement used by the developer or builder must be approved by the Town Manager before being delivered to prospective homebuyers.

#### **Lot Size**

A range of lot sizes shall be provided in order to create variety and offer opportunity for different income households. Minimum lot size will be 65' x 120'. The Project may consist of up to 235 total lots of 65' x 120' and 75' x 120'. No fewer than ~~44~~ fifty percent (50%) or 118 lots if the development includes 235 lots must be 75' x 120'.

#### **Dwelling Size**

The minimum dwelling size for all single-family residences shall be 1,600 square feet of heated/air-conditioned space under roof plus a two-car garage with a minimum of 400 square feet.

#### **Lot Width**

The minimum lot width at building line shall be 65 feet with a minimum street frontage of 30 feet.

#### **Lot Coverage**

Lots shall have a maximum lot coverage of 60%, to include principal dwelling, all paved areas, and swimming pools, except that on a 65-foot lot the maximum lot coverage may be 70% if a swimming pool is built.

#### **Height of Structures**

No residential structure may exceed 35 feet in height

#### **Building Design**

Building design shall be in accordance with the Architectural Requirements of the Town's LDC and will comply specifically with the design requirements of LDC Sections 4.06.02 and 4.06.03.

The following principles seek to promote a high quality development that will create a sense of place and community through the development of the site.

- Housing styles, shapes and materials shall meet the Towns Land Development Regulations.
- The different housing types shall be integrated architecturally in order to give the development a harmonious appearance.

- The creation of visual richness shall be considered when choosing materials and details. Local characteristics are encouraged.
- Side entrances for garages are encouraged.
- A variety of roof heights, pitches and materials will be encouraged.
- Landscaping shall be incorporated into the overall design as a means of linking the development areas with the open spaces.
- Each exterior wall for a single-family home must be a minimum of two materials and a minimum of two colors. Primary facades must have one base color and a complementary wall material may be used to meet the second color requirement.
- Block face restrictions may be reduced to 300 linear feet. The same house model may not be used more than three times within a single block face. For purposes of this requirement, a different house model is a different floor plan, not the same floor plan flipped in a different direction and not the same floor plan with a different exterior treatment.

(f) **Wetlands Buffer Requirement.** No development is allowed within jurisdictional wetlands on the property. A minimum upland buffer of 25 feet along each wetland must be platted in a tract, to be maintained by the HOA. No development except passive recreation is permitted in wetland areas.

(g) **Potable water, wastewater, and reclaimed water.** Well and septic systems are not allowed. The Project must be connected to and served by the Town's potable-water and wastewater systems prior to a certificate of occupancy being issued for a structure in the Project (except temporary construction uses).

Except as may be set forth otherwise in this Agreement, the Owner must install all on-site potable-water, wastewater, and reclaimed-water infrastructure and connect to the Town's water and wastewater systems, and to the Town's reclaimed-water system when available at the Property boundary, all at no cost to the Town. The Owner must pay potable-water, wastewater, and reclaimed-water capital and connection charges, impact fees, and other Town rates, fees, and charges, either applicable currently or in the future.

1. *Potable Water.* The Town will provide potable water, and may in the future provide reclaimed water, to the Project in accordance with its applicable ordinances, resolutions, operating regulations, policies and procedures. The Town will provide potable water to the Property in sufficient quantities for development of the Project as contemplated herein, subject to the limitations and requirements of permits issued to the Town from time to time by the St. John's River Water Management District in connection with water consumption.

The Owner shall construct, at no expense to the Town, all off-site potable-water-system facilities, lines, pumps, valves, control structures, and appurtenances (other than water-treatment plants) necessary to serve the Project. The construction and route of off-site lines and other structures shall be done according to engineering plans prepared by the Owner and approved by the Town Manager.

2. *Wastewater.* The Town will provide wastewater-collection and transmission service to the Project, transmitting Project wastewater to the Central Lake Community Development District (“CDD”). The Owner must obtain from the CDD a contract right for the Project to receive treatment and disposal of its wastewater at the CDD’s treatment and disposal facilities.

The Owner shall construct, at no expense to the Town, all off-site wastewater-system facilities, lines, lift stations, pumps, valves, control structures, and appurtenances (other than wastewater-treatment plants and disposal facilities) necessary to serve the Project. The construction and route of off-site lines, lift stations, pumps, and other structures shall be done according to engineering plans prepared by the Owner and approved by the Town Manager.

3. *Town Option to Oversize Water and Wastewater Lines.* Within 180 days of the effective date of the Owner’s contract right to receive wastewater-treatment and –disposal service from the CDD, as referenced above, the Town may elect to oversize the off-site lines, pumps, improvements, or other facilities or appurtenances for the Town’s water or wastewater system, or for both. If the Town elects to oversize one or both systems, it must inform the Owners in writing of the specifications for the oversizing(s) within the 180-day period. The Town shall reimburse the Owner for the difference in the increase in cost of design, materials and construction to oversize the improvements based on plans and cost estimates provided by the Owner to the Town and approved by the Town Manager, which approval shall not be unreasonably withheld, conditioned or delayed. The Town shall reimburse the Owners for the difference in the costs within 60 days following (i) completion of the improvements and (ii) receipt by the Town of documentation reasonably demonstrating that the Owner has completed the work and has incurred the costs attributable to the over-sizing, all in keeping with the plans and cost estimate previously approved by the Town Manager.

4. *Permit-Induced Costs, Restrictions, Requirements, and Risks.* Under state and federal laws and regulations, the Town may provide its potable-water and wastewater services to the Property and the Owner and its successors only if the Town first has been issued certain required permits. The Owner acknowledges that the permits are inevitably conditioned with requirements and restrictions that typically impose costs and risks. The Owner further acknowledges that, for the Town to operate its potable-water and wastewater systems in an orderly, dependable, and cost-effective manner, the Town must have the ability legally to spread the costs and risks among customers and property owners benefiting from the services. The Owner acknowledges, therefore, that (i) from time to time the Town may impose rates, fees, and charges and may issue potable-water system and wastewater-system regulations and policies that impose restrictions and requirements on its customers and benefiting property owners, such as the Owner and its successors, and (ii) so long as the Owner or successors are required to pay only their fair share for such rates, fees, and charges, then the imposition of such rates, fees, and charges and the issuance of such system regulations are not prohibited by or otherwise a breach of this Agreement.

5. *Reclaimed Water.* The Owner must install reclaimed water lines as required by the Town’s Code of Ordinances, and shall obtain reclaimed-water service for the Project when the Town constructs reclaimed-water lines to the Project’s boundaries. Until such time as the Town supplies reclaimed water, the Owner and its successors shall use the reclaimed water lines to irrigate properties within the Project boundaries, but only with stormwater from on-site



stormwater-retention ponds or with sources other than potable water as may be approved by the Town. Except for installation of reclaimed lines at the time of development as noted above, connection to reclaimed water after the development of the Project may not result in additional costs to the Owner or developer.

- (h) **Solid Waste.** Solid Waste collection shall be pursuant to Town regulations.
- (i) **Drainage.** The maintenance, repair, and replacement of the drainage system shall be the responsibility of the homeowners association(s).
- (j) **Transportation**

#### **Street and Sidewalks**

There must be two ingress and egress points to Revels Road and one ingress/egress point to Lake County-A, each a full intersection in the approximate location shown on the Conceptual Land Use Plan. Also, there must be paved access stubbed to the north line of the property at the parcel owned by the Town, as shown on the Conceptual Land Use Plan.

All streets must have a minimum 50-foot right-of-way, curb and gutter, and a minimum 24-foot-wide pavement with minimum 12-foot travel lanes. Provision must be made in the rights-of-way for underground utilities.

Realignment of East Revels Road must be completed as part of the first phase of the Project and approved as part of the subdivision construction plans. The realignment is a material condition of approval of the Project and this Agreement. If the realignment is not approved by FDOT substantially as shown on the Conceptual Land Use Plan, the Town may require resubmittal and further review and approval, as a major amendment, of a revised Conceptual Land Use Plan.

The Project must have a connected street system that serves vehicles, pedestrians and bicycles and that connects to recreation facilities and adjacent residential/community areas. All streets must be public, dedicated to and maintained by the Town. No streets in the Project may be gated or otherwise restricted or obstructed by the Owner, by a homeowners' or property owners' association, or by any other person or entity.

All portions of the development must be accessible by a direct, convenient, attractive, safe, and comfortable system of pedestrian facilities. The development must provide appropriate pedestrian amenities. A bicycle/pedestrian path with minimum width of ten feet must be constructed along Revels Road along the length of the Property, consistent with the Town's bicycle/pedestrian plan and connecting to the proposed trailhead on SR 19 and a pathway to be built through The Reserve PUD to No. 2 Road. A minimum five-foot sidewalk must be constructed along both sides of each interior street. All sidewalks within rights-of-way must be dedicated to and maintained by the Town.

#### **Transportation Concurrency and Proportionate Fair Share Mitigation**

The Project must undergo concurrency review. The Owner must complete and submit for review prior to building permits a traffic-impact analysis. If required based on that traffic

study, the Owner must fund its proportionate fair share of traffic improvements along SR-19 and other key roads as concluded by the traffic study's analysis of project traffic contributing to the needed improvements. Payment of the Owner's fair share must be made on or before the issuance of the ~~12550~~th building permit.

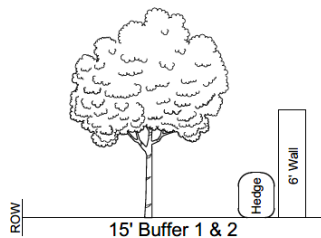
**(k) Schools.** The Project must apply for concurrency review at Lake County Public Schools. The school district has a specific application process. The Project must be shown to have appropriate school concurrency before building permits are issued.

**(l) Landscaping Requirements.** All landscaping and buffer requirements shall be in accordance with the LDC and as illustrated on the Conceptual Land Use Plan with the exception of the following:

1. All buffer, street, and canopy trees planted at the Project will be a minimum of a 2" caliper;
2. the Owner shall require homebuilders to plant at least one canopy tree for each single-family lot of at least 3" DBH; and
3. the developer will replace the equivalent of 30% of total tree-inches removed.

All trees planted at the Project shall adhere to the current guidelines established by the Florida Grades and Standards for nursery-grown trees and must be Florida grade #1 or better.

Developer must install street trees along the roadway where common areas abuts the road as required by the LDC. The cross section for the buffer areas is shown below.



Cross-Section of Buffers 1 and 2

**(m) Tree Protection.** Under no circumstances may any tree, regardless of size or species, be removed from any designated wetland or conservation easement. Trees proposed to be maintained on site must comply with LDC requirements. No construction activity, equipment or material is permitted inside a tree protection barrier.

Citrus trees are excluded from Town tree-protection requirements. ~~However, where citrus grove exists in an open space area on the Conceptual Land Use Plan, all or a portion of the grove, as determined by the Town Manager, must remain in the open space area as a community garden type activity.~~

**Commented [A1]:** Based on grading of the site, this is not likely possible

(n) **Lighting.** Decorative street lighting (Sanibel fixture, a Duke Energy standard fixture) must be installed (i) at every intersection, (ii) at the end of each cul-de-sac, and (iii) at intervals of 300 feet or as approved otherwise by the Town Manager. Street lighting must be installed by the Owner. All lighting must be directional, shielded lighting designed to minimize light pollution. All lighting must be maintained by the HOA.

(o) **Utilities.** All utilities must be underground.

(p) **Signage.** Entrance signs and informational signage may be located in buffers, setbacks/and or signage easements as approved by the Planning and Zoning Board. The Owner shall present a sign plan for review and approval by the Planning and Zoning Board with the final site plan. The Town Council has approved use by the Owner and/or builder(s) of vertical marketing flags, also known as feather banners, with the following stipulations:

1. Feather banners must be placed no less than 200 feet apart.
2. A maximum of 10 feather banners, in total.
3. Feather banners cannot be placed within the right of way.
4. Feather banners cannot be located offsite of PUD property.
5. Feather banners cannot exceed 12 feet in height.
6. Feather banners must be replaced or removed if they become faded, torn, or tattered.
7. Feather banners must be removed when 90% of the homes in the development have received building permit approval.

~~Pole signs and billboards~~ are prohibited. All additional signage not previously approved must be in compliance with the requirements in the LDC.

**Commented [A2]:** Removed as there is no definition in the Town Code

(q) **Maintenance of Common Areas.** Maintenance of all common areas within the Project is the responsibility of the homeowners' association(s) for the affected subdivision.

(r) **Prohibited Uses.** No manufactured or modular homes are allowed.

**Section 2. Amendments.** A substantial deviation from the Conceptual Land Use Plan in Attachment B or deviation from the other terms of this Agreement may occur only if approved by the Town Council in the manner required by law or otherwise as determined by Town Council, which may include public notice(s) and hearing(s).

Minor amendments needed once final engineering is completed may be reviewed and approved by the Town Manager without referral to the Planning and Zoning Board or Town Council. Whether a proposed amendment is major or minor will be determined by the Town Manager.

**Section 3: Notices.** All notices or payments required to be made hereunder shall be made at the following addresses:

To Town: Sean O'Keefe, Town Manager  
Town of Howey-in-the-Hills

101 North Palm Avenue  
 Howey-in-the-Hills, FL 34737  
[sokeefe@howey.org](mailto:sokeefe@howey.org)

With copies to: John Brock, CMC, Town Clerk  
 Town of Howey-in-the-Hills  
 101 North Palm Avenue  
 Howey-in-the-Hills, FL 34737  
[jbrock@howey.org](mailto:jbrock@howey.org)

Thomas J. Wilkes, Town Attorney  
 Gray Robinson, P.A.  
 301 East Pine Street, Suite 1400  
 Orlando, FL 32801  
[twilkes@gray-robinson.com](mailto:twilkes@gray-robinson.com)

To Owner: Craig C. Harris, Manager  
 Revels Road Investors, LLC  
 210 Hangar Road  
 Kissimmee, FL 34741

With copies to: Chris Gardner, Manager  
 CKG Development and Realty, LLC  
 1482 Granville Drive  
 Winter Park, FL 32789  
[chris@condevfl.com](mailto:chris@condevfl.com)

Carolyn Haslam  
 Akerman LLP  
 420 S. Orange Avenue, Suite 1200  
 Orlando, Florida 32801  
[carolyn.haslam@akerman.com](mailto:carolyn.haslam@akerman.com)

**Section 4: Severability.** If any provision or portion of this Agreement is declared by a court of competent jurisdiction to be void, unconstitutional, or unenforceable, then all remaining provisions and portions of this Agreement shall remain in full force and effect. To that end, this Agreement is declared to be severable.

**Section 5: Binding Effect.** This Agreement runs with the land and is binding on and enforceable by and against the parties hereto and all their successors in interest. However, no Lot Owner shall have the obligations imposed on the Owner as the developer of the Project under this Agreement. For that purpose, a “Lot Owner” means an end-user of a lot created within the Property with a completed residential unit constructed thereon, for which a certificate of occupancy has been issued. Each party covenants to each other party that this Agreement is a legal, valid, and binding agreement, enforceable against the party in accordance with its terms.

**Section 6: Negotiated Agreement.** The land uses, densities, intensities, and other conditions of approval of the Project have been negotiated and agreed to by the Owner and the Town. The Conceptual Land Use Plan and this Agreement together constitute an agreement between the parties with the knowledge that the Owner's successors in title, the future homeowners, and other landowners within the Property, as well as the Town and its affected property owners and residents, all will rely justifiably on the agreed-to land uses, densities, and intensities authorized hereby for the Property. For that reason, the Owner and the Owner's successors in interest have the contract right to develop the PUD with the uses, densities, and intensities approved by the Town, subject to the restrictions and requirements in the conditions of approval set forth in this Agreement. Neither the Owner (and its successors in interest) nor the Town shall have the right in the future to rezone or downzone the property, or otherwise alter the uses, densities and intensities, or delete, waive or amend any conditions of approval except through an amendment to the Plan negotiated and approved by the Town Council and the owner of the then-subject parcel. This section shall survive the termination and expiration of this Agreement.

**Section 7. Homeowners' Association(s).**

(a) **Association Responsibilities.** A homeowner's association and/or a property owner's association ("HOA") must be created by the Owner. Membership in the HOA shall be mandatory for all property owners within the Project. The HOA shall be responsible for maintaining all parks, open-space and buffer areas, streetlights, stormwater-management areas and drainage systems, entrance features, boundary walls and/or fences, access tracts, and landscaped tracts within the Project.

(b) **Requirement for Plat Recording.** Before a plat may be recorded for the Property and the Project, the Owner shall furnish to the Town copies of the pertinent documents for the homeowners' or property owners' association or associations, plus the covenants, conditions and restrictions for the Property, setting forth the requirements and restrictions enumerated in this section 7 and other applicable parts of this Agreement.

**Section 8. Additional Requirements.**

a. **Letter of credit.** Construction and dedication to the Town of the public facilities and improvements required under this Agreement will be a condition precedent to final plat approval. In lieu of construction and dedication, however, the Owner may post a letter of credit [or performance bond](#) with the Town for 125% of the cost of such improvements [not completed at the time of plat](#), in which event this condition precedent to final plat approval will be deemed satisfied.

b. **Conveyances to the Town.** Property dedicated or otherwise conveyed to the Town under this Agreement must be free and clear of encumbrances unless and to the extent an encumbrance is acceptable to the Town. Encumbrances discovered after the Effective Date of this Agreement must be removed or resolved by the Owner or its successor developer prior to dedication or conveyance of the affected property to the Town.

c. **Changes in status of land.** Until completion of the Project, the Owner or its successor developer of the Project has a continuing duty (i) to disclose promptly to the Town all

changes in ownership, encumbrances, and other matters of record affecting the Property and (ii) to resolve all issues, title or otherwise, that may be identified by the Town as a result of such changes. Failure to disclose such changes or to resolve resulting issues may result in delay in issuance of development permits.

d. **Developer representations binding.** If at Town Council hearings on the approval of the Project the Owner makes a written or oral promise or representation, and if the promise or representation was relied upon by Town Council in approving the Project or otherwise acted to induce or materially influence Town Council in its vote to approve the Project, the promise or representation is a condition of approval of the Project. The promise or representation is binding on the Owner and its successors and enforceable by the Town against the Owner and its successors as if set forth fully in this Agreement.

**Section 9. Governing Law.** This Agreement shall be governed by the laws of the State of Florida. Venue for any judicial proceeding pertaining to the Agreement shall be in the Fifth Judicial Circuit of Florida, in Lake County, Florida.

**Section 10. Effective Date; Termination.**

(a) **Effective Date.** This Agreement shall take effect upon the Effective Date above, or on the date when it has been executed by both the Town Council and the Owner, whichever is later.

(b) **Termination.** This Agreement shall remain in effect unless and until terminated under one of the following conditions:

1. If as of the **second** anniversary of the Effective Date of this Agreement an Owner's contract right to treatment and disposal services by the CDD, as required under Section 1(g)1 above, has not taken effect, the Town may terminate this Agreement by vote of its Town Council. The vote must occur no later than (i) the **third** anniversary of the Effective Date or (ii) the CDD Contract Date, whichever occurs first. The "CDD Contract Date" is the date on which the Owner's contract right to treatment and disposal services by the CDD takes effect.
2. If as of the **second** anniversary of the CDD Contract Date no building permit for a residential unit in the Project has been issued, the Town may terminate this Agreement by vote of its Town Council. The vote must occur no later than (i) the **third** anniversary of the CDD Contract Date or (ii) the date a building permit is issued, whichever occurs first.
3. If as of the **fifth** anniversary of the CDD Contract Date no building permit for a residential unit in the second phase of the Project has been issued and there is inactivity in the development process within Phase 1, the Town may terminate this Agreement by vote of its Town Council, but only as it applies to development of the second phase. The vote must occur no later than (i) the **sixth** anniversary of the CDD Contract Date or (ii) the date a building permit is issued for a residential unit in the second phase, whichever occurs first. Termination of the Agreement for this

reason will not act to preclude the Owner or its successor from completing the first phase of the Project.

Termination of this Agreement, in whole or in part, under this section shall be without prejudice to the Owner or its successor to apply for Town approvals to undertake or continue development of the Property in accordance with the circumstances and land-development regulations then existing in the Town.

**Section 11. Recording.** This Agreement shall be recorded by the Town, at the Owner's expense, in the Public Records of Lake County, Florida, and shall constitute a covenant running with the land.

**Section 12. Authority.** This Agreement is entered into by the Town under the home-rule powers granted to it by the Florida constitution (including specifically Article VIII, Section 2(b) thereof), the home-rule powers granted municipalities by statute (including specifically Chapter 166, Florida Statutes), and the Town's Charter. This Agreement does not constitute a "development agreement" under the Florida Local Government Development Agreement Act.

**Section 13. Entire Agreement.** This Agreement constitutes the entire agreement of the parties with respect to the transactions contemplated herein. It supersedes all prior understandings or agreements between the parties relating to the Property and the Project. No amendment to the terms of this Agreement shall be effective unless in writing signed by all parties hereto. Amendments to this Agreement will take effect and will be binding against the Town only if approved by a vote of the Town Council.

**Section 14. Waiver.** The failure of a party hereto to insist upon or enforce any right or privilege granted hereunder shall not constitute or operate as a waiver thereof and nothing shall constitute a waiver of any party's right to insist upon strict compliance with the terms hereof. However, any party may waive in writing the benefit of any provision or condition for its benefit which is contained herein. Waivers of material provisions of either this Agreement or the Town's LDC will be valid and binding against the Town only if approved by a vote of the Town Council.

*[ Signature pages follow ]*



*IN WITNESS WHEREOF, the parties are signing this Agreement as of the Effective Date or, if later, the date by which both parties have fully executed this Agreement.*

**TOWN OF HOWEY-IN-THE HILLS,  
FLORIDA**

By: its Town Council

By: \_\_\_\_\_  
Hon. Martha McFarlane, Mayor

Attest:

By: \_\_\_\_\_  
John Brock, CMC, Town Clerk

Approved as to form and legality:  
(for the use and reliance of the Town only)

\_\_\_\_\_  
Thomas J. Wilkes, Town Attorney

**STATE OF FLORIDA  
COUNTY OF LAKE**

The foregoing instrument was executed, sworn to and acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2022, by Martha McFarlane, as Mayor of the Town of Howey-in-the-Hills.

(SEAL)

\_\_\_\_\_  
Signature of Notary Public

\_\_\_\_\_  
Name of Notary Public  
(Typed, Printed or stamped)

Personally Known \_\_\_\_ OR Produced Identification \_\_\_\_

Type of Identification Produced: \_\_\_\_\_

Witnesses:

**REVELS ROAD INVESTORS, LLC**

By: \_\_\_\_\_

Craig C. Harris  
As its Manager\_\_\_\_\_  
Printed Name: \_\_\_\_\_\_\_\_\_\_  
Printed Name: \_\_\_\_\_

STATE OF FLORIDA

COUNTY OF \_\_\_\_\_

The foregoing instrument was executed, sworn to and acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2022, by Craig C. Harris, Manager of REVELS ROAD INVESTORS, LLC, a Florida limited liability company, on their behalf.

(SEAL)

\_\_\_\_\_  
Signature of Notary Public\_\_\_\_\_  
Name of Notary Public  
(Typed, Printed or stamped)

Personally Known \_\_\_\_ OR Produced Identification \_\_\_\_

Type of Identification Produced: \_\_\_\_\_

**Attachment A  
To  
WATERMARK PUD DEVELOPMENT AGREEMENT**

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**LEGAL DESCRIPTION**

**LEGAL DESCRIPTION:**

LEGAL DESCRIPTION (PER O.R.N.T.I.C. COMMITMENT NO. 1076543)

**PARCEL 1:**

THAT PART OF THE NORTH 1/2 OF GOVERNMENT LOTS 1 AND 2 IN SECTION 2, TOWNSHIP 21 SOUTH, RANGE 25 EAST, IN LAKE COUNTY, FLORIDA, BOUNDED AND DESCRIBED AS FOLLOWS: BEGIN AT THE NORTHEAST CORNER OF SAID SECTION 2, RUN THENCE SOUTH 00°06'05" EAST ALONG THE EAST LINE THEREOF, 1139.8 FEET; THENCE RUN NORTH 89°29'20" WEST 2668.76 FEET TO THE WEST LINE OF SAID GOVERNMENT LOT 2; THENCE RUN NORTH 00°09'00" WEST ALONG SAID WEST LINE 1125.96 FEET TO THE NORTHWEST COMER OF SAID GOVERNMENT LOT 2; THENCE RUN SOUTH 89°46'40" EAST ALONG THE NORTH LINE OF SAID SECTION 2 FOR 2669.20 FEET TO THE POINT OF BEGINNING.

**PARCEL 2:**

LOTS 26 AND 27, LESS THAT PART INCLUDED IN CLAY PIT, 1ST SUBDIVISION OF HOWEY, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 5, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.

**PARCEL 3:**

BEGIN 99 FEET SOUTH 1°32' WEST OF THE NORTHWEST CORNER OF LOT 16, 1ST SUBDIVISION OF HOWEY, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 5, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA, THENCE RUN EAST TO THE SOUTHEASTERN BOUNDARY OF LOT 16, THENCE SOUTHWESTERLY ALONG THE SOUTHEASTERN BOUNDARY OF LOT 16 TO THE SOUTHWEST COMER OF LOT 16, THENCE NORTHERLY ALONG THE WESTERN BOUNDARY OF LOT 16 TO POINT OF BEGINNING.

**PARCEL 4:**

LOT 12, 1ST SUBDIVISION OF HOWEY, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 5, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.

PARCEL 5:

LOT 1, 1ST SUBDIVISION OF HOWEY, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 5, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA.

AND

THE NORTHEASTERLY 1/2 OF VACATED SUNSET DRIVE LYING NORTH OF THE EXTENSION OF THE SOUTH LINE OF LOT 4 AND THE WESTERLY 1/2 OF VACATED SUNSET DRIVE LYING NORTHERLY OF THE NORTHERLY EXTENSION OF THE WEST LINE OF LOT 2 IN THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 1, TOWNSHIP 21 SOUTH, RANGE 25 EAST, 1ST SUBDIVISION OF HOWEY, AS RECORDED IN PLAT BOOK 5, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

LESS THAT PART OF SUNSET DRIVE THAT LIES WITHIN THE FOLLOWING DESCRIBED PARCEL:

AN AREA OF LAND, BEING A CIRCLE WITH A RADIUS OF 60.00 FEET, WHOSE RADIUS POINT IS LOCATED AS FOLLOWS: BEGIN AT THE INTERSECTION OF THE NORTH LINE OF LOT 1, 1ST SUBDIVISION OF HOWEY, RECORDED IN PLAT BOOK 5, PAGE 32, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA, AND THE WESTERLY RIGHT OF WAY LINE OF SUNSET DRIVE AS SHOWN ON THE PLAT OF SAID 1ST SUBDIVISION OF HOWEY; THENCE RUN SOUTH 08°15' WEST, ALONG SAID WESTERLY RIGHT OF WAY LINE, A DISTANCE OF 60.00 FEET TO THE AFOREMENTIONED RADIUS POINT.

Total Acreage: 99.19

**Attachment B**  
**To**  
**WATERMARK PUD DEVELOPMENT AGREEMENT**  

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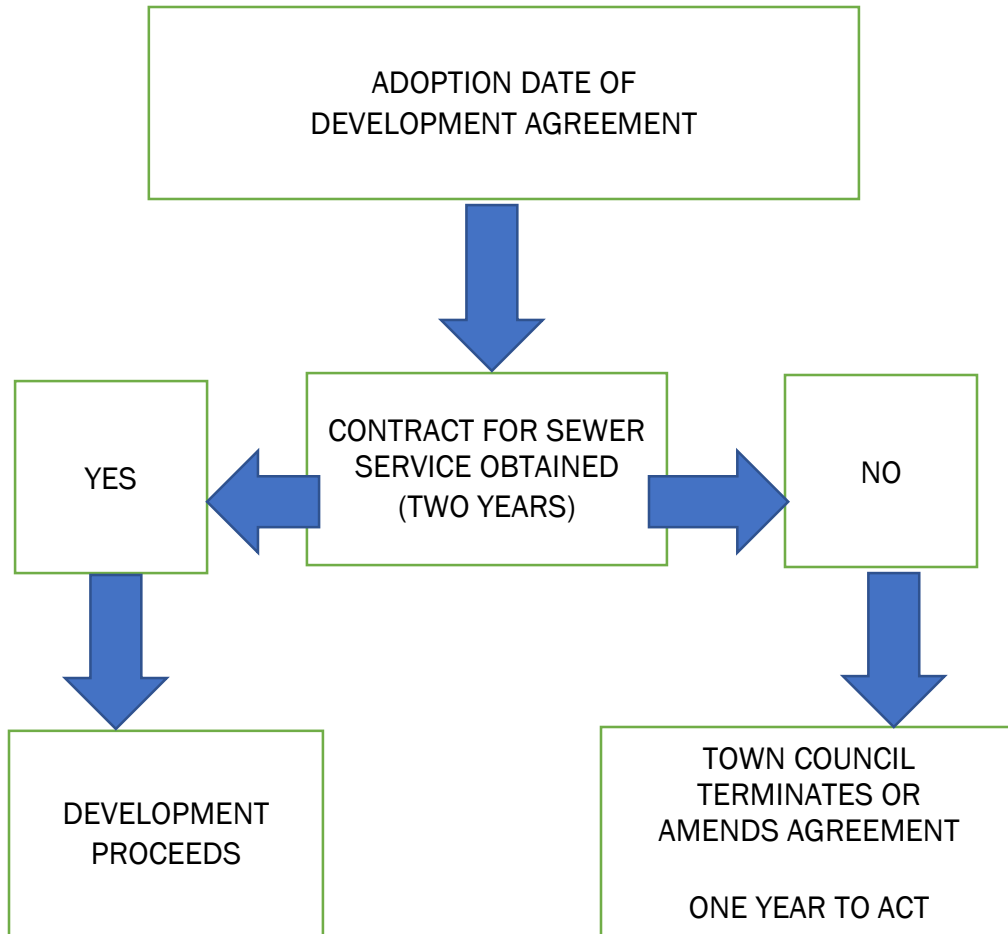
**CONCEPTUAL LAND USE PLAN**

[ to be added ]

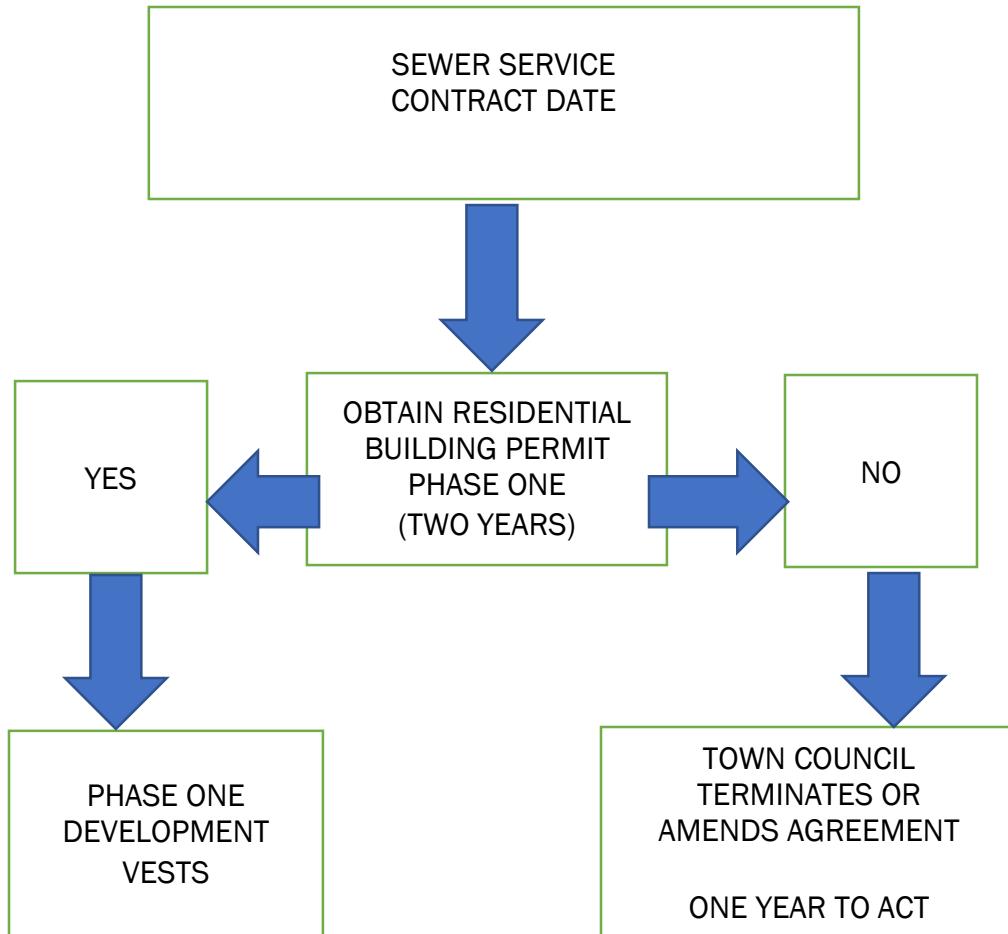
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**WATERMARK DEVELOPMENT AGREEMENT  
FIRST TERMINATION OPTION  
SECTION 10 (B) 1**

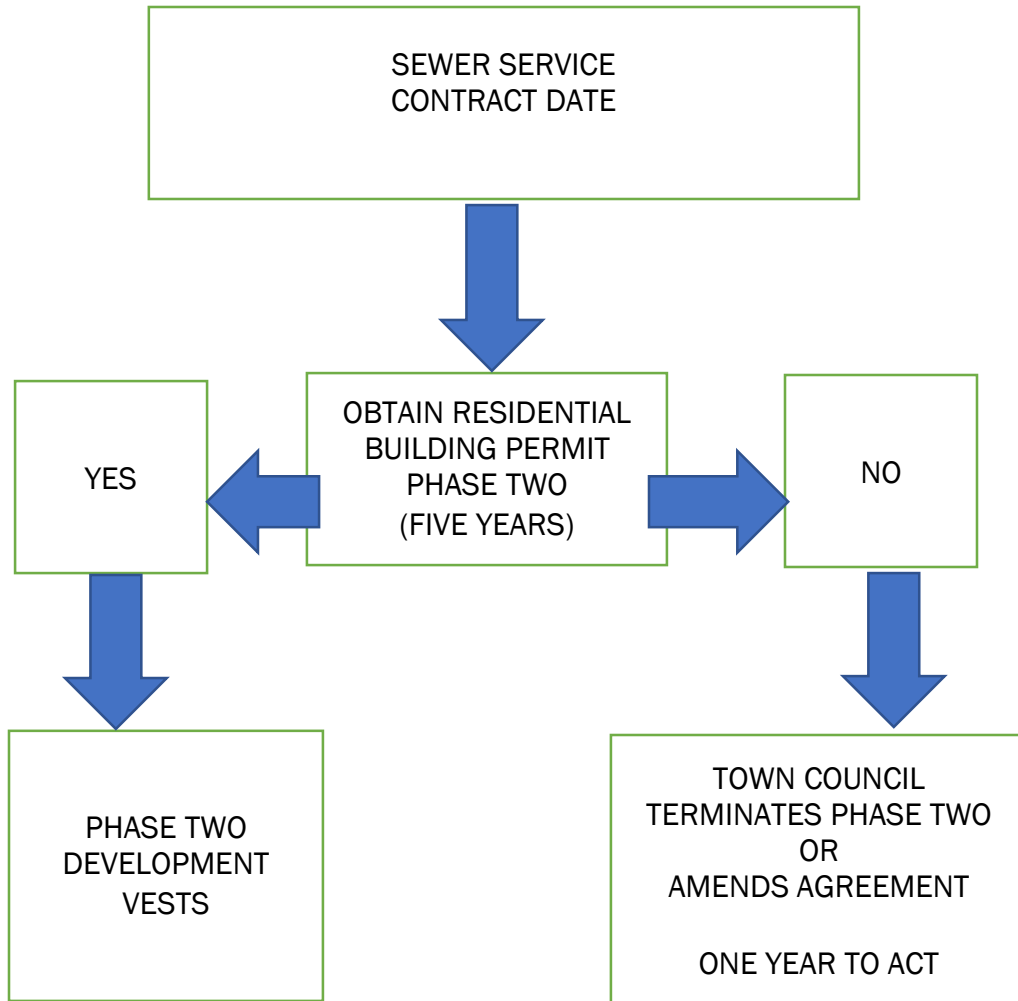


# WATERMARK DEVELOPMENT AGREEMENT SECOND TERMINATION OPTION SECTION 10 (B) 2

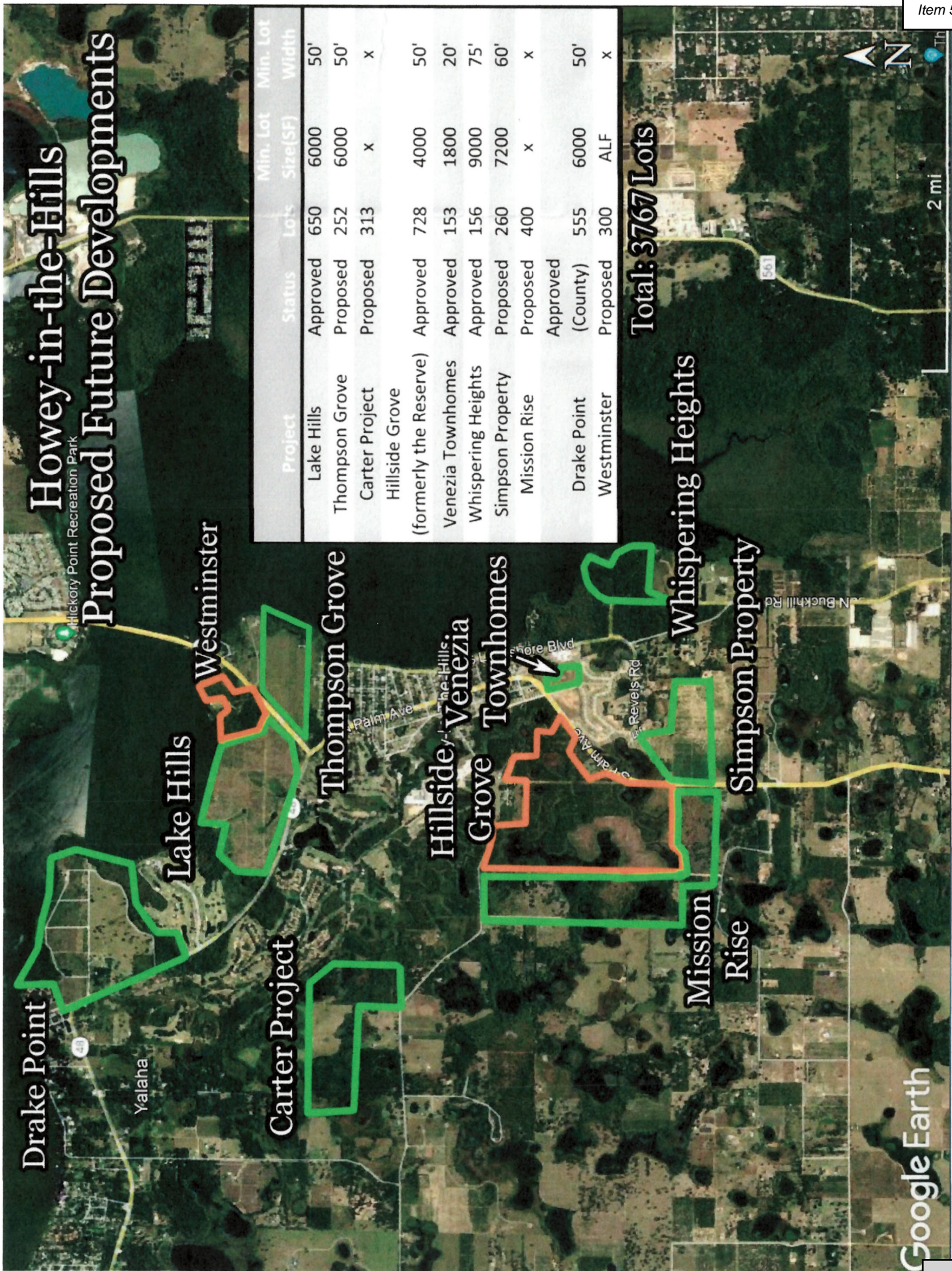




**WATERMARK DEVELOPMENT AGREEMENT  
THIRD TERMINATION OPTION  
SECTION 10 (B) 3**



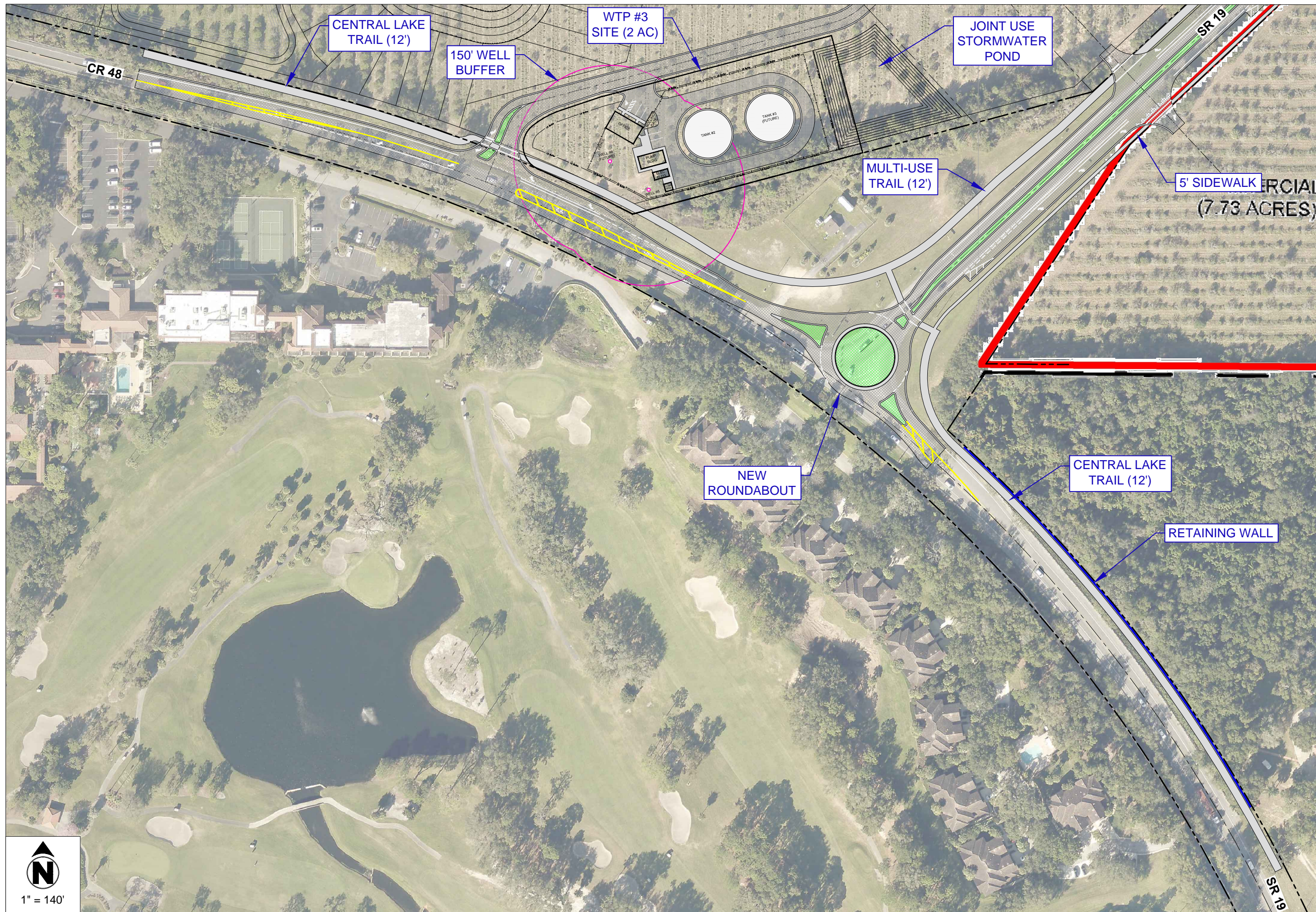












Item 7.

DONALD A. GR  
FLORIDA 036799

GRIFFEY ENGINEERING, INC.  
36202 East Eldorado Lake Dr.  
EUSTIS, FLORIDA 32736  
(352) 589-2368

TOWN OF  
HOWEY-IN-THE-HILLS  
101 N. PALM AVENUE  
P.O. BOX 128  
HOWEY-IN-THE-HILLS, FL 34737  
(352) 324-2290

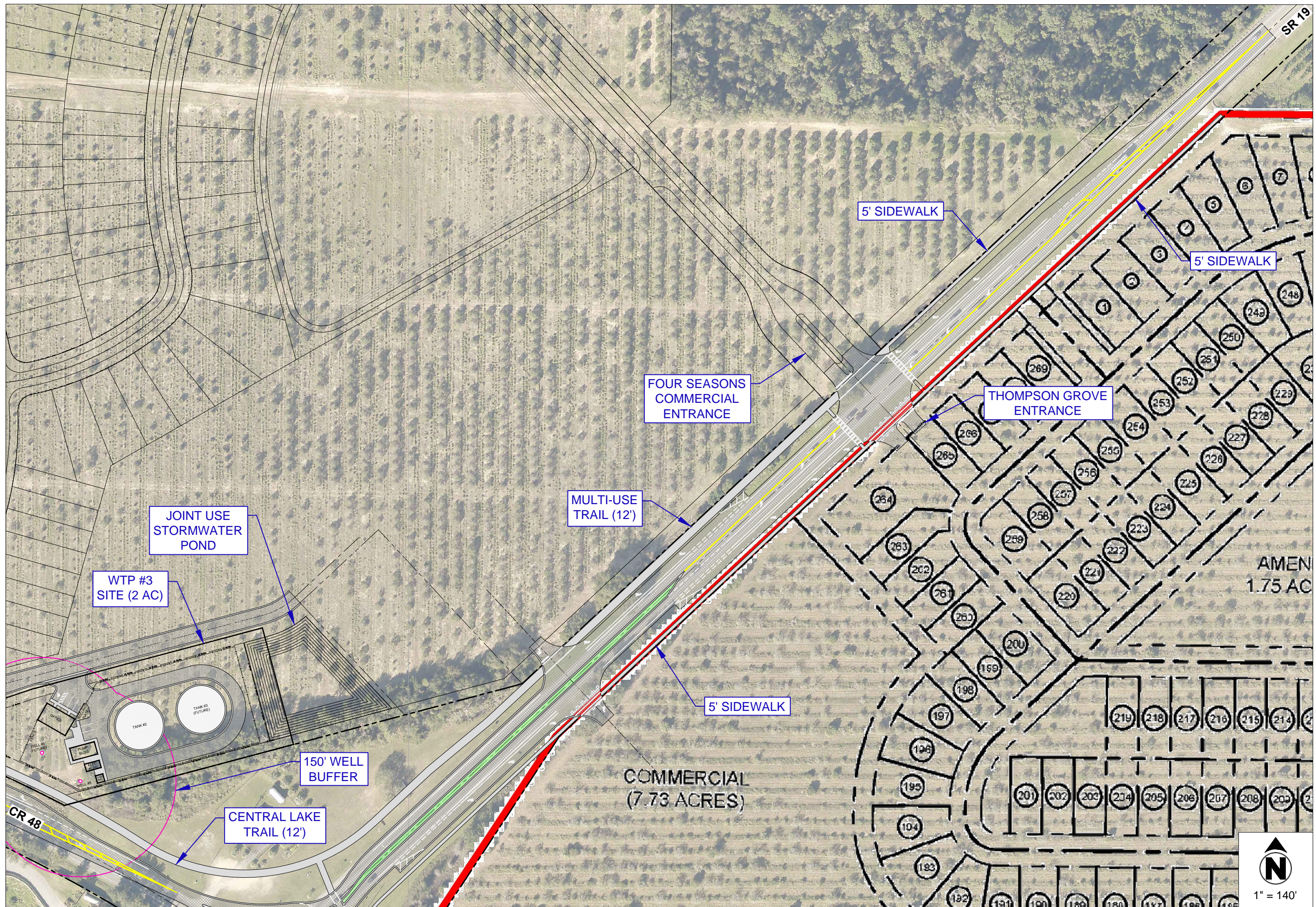
SR 19 & CR 48  
INTERSECTION IMPROVEMENT

CONCEPTUAL PLAN

Date	Drawn By:
	DAG
	Drawing #:
	Intersections
09/08/2022	Project #:
07/06/2022	15028
03/22/2022	Scale:

SHEET 1 205





Item 7.

DONALD A. GR  
FLORIDA 036799

GRIFFEY ENGINEERING, INC.  
36202 East Eldorado Lake Dr.  
EUSTIS, FLORIDA 32736  
(352) 589-2368

TOWN OF  
HOWEY-IN-THE-HILLS  
101 N. PALM AVENUE  
P.O. BOX 128  
HOWEY-IN-THE-HILLS, FL 34737  
(352) 324-2290

SR 19 & CR 48  
INTERSECTION IMPROVEMENT

CONCEPTUAL PLAN

Date	Drawn By:
	DAG
	Drawing #:
	Intersections
	Project #:
	15028
09/08/2022	Scale:
03/22/2022	



# TOWN OF HOWEY-IN-THE-HILLS

## APPLICATION FOR BOARDS/COMMITTEES

**Please Print Legibly**

Name: Joshua Husemann Date: 24 OCT 2022  
 Home Mailing Address: 671 Avila Place Howey-In-The-Hills, FL 32737  
 Home Physical Address: same  
 Florida Drivers License or ID: \_\_\_\_\_  
 Phone Number: 443-876-2615 E-mail Address: joshua.husemann@gmail.com  
 Education: M.S. Kinesiology  
 Business (Name & Type): Lake County Virtual School  
 Business Address: 2000 W. Golf Links Ave Eustis, FL 32726  
 Business Phone: 352-483-4260 Position: Teacher  
 Training or experience related to activities of boards or committees to which appointment is sought:

N/A

Professional Organizations: National Academy of Sports Medicine, National Soccer Coaches Association of America

Have you served on a Town Board(s)/Committee(s) in the past? Yes ☒ No

Name of Boards/Committee(s):

N/A

Dates Served:

**Please check Board(s)/Committee(s) that interest you.**

- |  |   |
|--|---|
| <input type="checkbox"/> Cemetery Board                      | <input type="checkbox"/> Police Pension Board   |
| <input type="checkbox"/> Historic Preservation Board         | <input type="checkbox"/> Utility Advisory Board |
| <input type="checkbox"/> Library Board                       | <input type="checkbox"/> Visioning Committee    |
| <input checked="" type="checkbox"/> Parks & Recreation Board | <input type="checkbox"/> Other                  |
| <input type="checkbox"/> Planning & Zoning Board             | <input type="checkbox"/> Other                  |

*I will attend meetings in accordance with the adopted policies of the Town of Howey-in-the-Hills. If at any time my business or professional interests conflict with the interests of this Board or Committee, I will not participate in such deliberations. References may be secured from the following individuals:*

Name	Address	Phone Number
1 Mr. Sean O'Keefe	101 N. Palm Ave	352-324-2790
2 Mr. Paul Miller	2000 W. Golf Links Ave	352-483-4260
3 Mrs. Stacie Clark	2000 W. Golf Links Ave	352-483-4260

[Signature]  
Signature of Applicant

In completing this application, you are acknowledging that personal information you provide is subject to Florida's Public Records Policy as stated in Chapter 119, Florida Statutes, and Article I, Section 24 of the State Constitution.

**Additional information may be attached to this form.**

**FOR TOWN HALL USE**

Received by \_\_\_\_\_ Date \_\_\_\_\_  
 Reviewed by Board \_\_\_\_\_  
 Appointed by Town Council \_\_\_\_\_ Date \_\_\_\_\_

**TOWN OF HOWEY-IN-THE-HILLS**  
**APPLICATION FOR BOARDS/COMMITTEES**

Item 8.

**Please Print Legibly**

Name: JONATHAN ARNOLD Date: 18 OCT 2022

Home Mailing Address: 303 TERRACOTTA TERRACE, Howey in the Hills, FL 34737

Home Physical Address: (SAME AS MAILING ADDRESS)

Florida Drivers License or ID: \_\_\_\_\_

Phone Number: (571) 243-6790

E-mail Address: jon.arnold15@gmail.com

Education: MBA

Business (Name & Type): \_\_\_\_\_

Business Address: \_\_\_\_\_

Business Phone: \_\_\_\_\_

Position: \_\_\_\_\_

Training or experience related to activities of boards or committees to which appointment is sought:

28 YEARS USAF, 7 YEARS Defense CONTRACTOR

Professional Organizations: \_\_\_\_\_

UCF ALUMNI ASSOCIATION

Have you served on a Town Board(s)/Committee(s) in the past? ☒ Yes ☐ No

Name of Boards/Committee(s):

POLICE PENSION BOARD (Howey in the Hills)

Dates Served:

JULY 2022 - PRESENT

**Please check Board(s)/Committee(s) that interest you.**

☐ Cemetery Board

☐ Historic Preservation Board

☐ Library Board

☒ Parks & Recreation Board

☐ Planning & Zoning Board

☐ Police Pension Board

☐ Utility Advisory Board

☐ Visioning Committee

☐ Other

☐ Other

*I will attend meetings in accordance with the adopted policies of the Town of Howey-in-the-Hills. If at any time my business or professional interests conflict with the interests of this Board or Committee, I will not participate in such deliberations. References may be secured from the following individuals:*

Name

Address

Phone Number

1

2

3

Jonathan Arnold  
Signature of Applicant

In completing this application, you are acknowledging that personal information you provide is subject to Florida's Public Records Policy as stated in Chapter 119, Florida Statutes, and Article I, Section 24 of the State Constitution.

**Additional information may be attached to this form.**

**FOR TOWN HALL USE**

Received by \_\_\_\_\_

Date \_\_\_\_\_

Reviewed by Board \_\_\_\_\_

Appointed by Town Council \_\_\_\_\_

Date \_\_\_\_\_



TABLE 20							
TOWN OF HOWEY-IN-THE-HILLS, FLORIDA							
5-YEAR ESTIMATED SCHEDULE OF CAPITAL IMPROVEMENTS							
Description	Funding Source	FY 2023	FY 2024	FY 2025	FY2026	FY2027	Total
<b>Public Services</b>							
N. Water Treatment Plant Replacement	A/B/D/F	\$ 500,000	\$ 2,000,000	\$ 1,500,000	\$ 500,000	\$ 500,000	\$ 5,000,000
Drilling for Well #5 & #6	A/B/D/F	\$ 1,500,000					\$ 1,500,000
Land Acquisition for WTP #3	A/B/D/F	\$ 95,000					\$ 95,000
Water mains - south	A/B			\$ 50,000	\$ 50,000		\$ 100,000
Water mains - north	A/B	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 500,000
Water Master Plan	A/B/D					\$ 80,000	\$ 80,000
Emergency Lift Station Generators	F		\$ 200,000				\$ 200,000
Central Avenue Streetscape	A				\$ 30,000	\$ 500,000	\$ 530,000
Street Paving	A/F		\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 400,000
Venezia South Second Access	A				\$ 10,000		\$ 10,000
Sidewalk Improvements	A	\$ 5,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 45,000
Annual stormwater improvements	A/B/D/F	\$ 10,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 130,000
							<b>\$ 8,590,000</b>
<b>Library</b>							
Library Expansion	A/B/D/F	\$ 100,000	\$ 800,000	\$ 100,000			\$ 1,000,000
							<b>\$ 1,000,000</b>
<b>Police Department</b>							
New police station	B/D/F		\$ 2,000,000	\$ 3,000,000	\$ 1,500,000	\$ 500,000	\$ 7,000,000
							<b>\$ 7,000,000</b>
<b>Community Facilities</b>							
Design for New Town Hall	A					\$ 50,000	\$ 50,000
Central Lake Bike Trail and Town Trails	A/B/D/F		\$ 40,000				\$ 40,000
							<b>\$ 90,000</b>
<b>Parks and Recreation</b>							
Purchase land for new park	A/B/D/E/F					\$ 150,000	\$ 150,000
Repair/replace finger piers	A/B/D	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 50,000
Main Pier Improvements	A/B/D		\$ 100,000				\$ 100,000
Repair/renovate Sara Maude Park	A/B/D	\$ 100,000	\$ 100,000		\$ 100,000		\$ 300,000
Improvements to Griffin Park	A/B/D		\$ 10,000		\$ 90,000		\$ 100,000
Central Park Courts and Upgrades	A/D/D	\$ 48,500		\$ 150,000			\$ 198,500
Neighborhood Park North End	A/B/D/E/F					\$ 125,000	\$ 125,000
Neighborhood Park South End (Venezia)	A/B/D/E/F	35,000					\$ 35,000
Grove Square Park	A/B/D	\$ 10,000					\$ 10,000
Community Campus near Public Safety	A/B/D/E/F		\$ 300,000	\$ 300,000	\$ 250,000		\$ 850,000
Mausoleum	A/B/D/F	\$ 10,000					\$ 10,000
Cemetery Sidewalk and Fencing	A/B/D/F	\$ 15,000					\$ 15,000
Lakeshore Shoreline Improvements				100,000			\$ 100,000
							<b>\$ 2,043,500</b>
Per Year		\$ 2,423,500	\$ 5,000,000	\$ 5,250,000	\$ 2,780,000	\$ 2,155,000	
Program Total							<b>\$ 18,723,500</b>

<b>TABLE 20 A</b>							
<b>TOWN OF HOWEY-IN-THE-HILLS, FLORIDA</b>							
<b>5-YEAR ESTIMATED SCHEDULE OF CAPITAL IMPROVEMENTS</b>							
<b>Description</b>	<b>Funding Source</b>	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY2026</b>	<b>FY2027</b>	<b>CIP Total</b>
<b>Transportation Mitigation Projects</b>							
SR 19 @ CR 48 Intersection	A/B/E/F		\$ 500,000				\$ 500,000
SR 19 @ Central Ave Intersection	A/B/E/F		\$ 500,000				\$ 500,000
Revels Rd @ SR 19 Intersection	A/B/E/F					\$ 500,000	\$ 500,000
Florida Ave @ SR 19 Intersection	A/B/E/F			\$ 100,000			\$ 100,000
Florida Ave @ Number 2 Rd. Intersectio	A/B/E/F				\$ 100,000		\$ 100,000
Pedestrian Improvements	A/B/E/F		\$ 20,000	\$ 20,000	\$ 20,000	\$ 40,000	\$ 100,000
Bicycle Improvements	A/B/E/F			\$ 20,000	\$ 30,000	\$ 50,000	\$ 100,000
Streetscape	A/B/E/F					\$ 250,000	\$ 250,000
Road Reconstruction	Infrastructure	\$ 215,000			\$ 20,000	\$ 20,000	\$ 255,000
<b>Total</b>		<b>\$ 215,000</b>	<b>\$ 1,020,000</b>	<b>\$ 140,000</b>	<b>\$ 170,000</b>	<b>\$ 860,000</b>	<b>\$ 2,405,000</b>