



Development Services Department

BOARD ACTION REPORT – APPEALABLE ITEM

Project Name: 215 NE 7th Avenue

Project Location: 215 NE 7th Avenue

Request: Class V Site Plan, Architectural Elevations, Landscape Plans

Board: Site Plan Review and Appearance Board

Meeting Date: February 13, 2019

Board Action:

Internal Adjustment approved (7-0) Site Plan approved (6-1 John Brewer dissenting) Landscape Plan approved (5-2 John Brewer and Price Patton dissenting) Architectural elevations denied (2-5).

Project Description:

The project is located on the west side of NE 7th Avenue between NE 2nd Street and NE 3rd Street and consists of Lot 3, Less the south 10 feet thereof, Wellbrock Subdivision, according to the plat thereof as recorded in Plat Book 24, Page 219, of the Public Records of palm Beach County Florida. The property consists of 0.38 acres and is zoned RM (Multiple Family Residential). The Future Land Use Map designation is Medium Density (MD). The project consists of the demolition or the possible relocation of an existing single-family home and the construction of 2 story 3-unit townhome development.

The development proposal consists of the following: demolition or possible relocation of the existing structure; construction of three fee simple townhomes in the Masonry Modern style. Unit “B” sharing party walls with Units “A” and “C” giving a finished appearance of a single building; each townhomes consist of three-bedroom units, (Unit “A” and “C” under air square footage is 3,241 square footage and Unit “B” is 3,337 square feet; all units are two stories and accommodate a two-car garage; installation of an 8-foot-tall masonry wall for privacy; ;Installation of grade level pools; Installation of associated landscaping.

Board Comments:

Board comments were not supportive of the requests for the architectural plan. Several of the board members expressed concern that another Masonry Modern type development was being developed on this street and that maybe a text amendment to the LDR’s was in order.

Public Comments:

Several members of the community spoke against the project due to the proposed landscaping and architectural elevations.

Associated Actions:

N/A

Next Action: The SPRAB action is final unless appealed by the City Commission.



SITE PLAN REVIEW AND APPEARANCE BOARD STAFF REPORT

DEVELOPMENT SERVICES DEPARTMENT

100 NW 1ST AVENUE, DELRAY BEACH, FLORIDA 33444

PLANNING & ZONING DIVISION: (561) 243-7040 • BUILDING DIVISION: (561) 243-7200

SITE PLAN REVIEW AND APPEARANCE BOARD

Meeting: February 27, 2019

File No.: 2019-001-SPM-SPR-CL5

Application Type: Class V Site Plan Modification

General Data:

Agent: Silberstein Architecture

Owner: Gary S. Scarafile

Location: 215 NE 7th Avenue

PCN: 12-43-46-16-06-122-0031

Property Size: 0.38 Acres

FLUM: MD (Medium Density)

Zoning: RM (Multiple Family Residential)

Adjacent Zoning:

- RM (North)
- RM (West)
- RM (South)
- R-1-AA (East)

Existing Land Use: Single Family Home

Proposed Land Use: Multiple Family



Item before the Board:

The action before the Board is for the approval of A Class V Site Plan for 215 NE 7th Avenue, pursuant to Land Development Regulations (LDR) Section 2.4.5(F)(H), and (I). This includes:

- Internal Adjustment
- Site Plan
- Landscape Plan
- Architectural Elevations

Recommendation: By Separate Motions

Internal Adjustment:

Move approval of the Internal Adjustment to LDR Section 4.6.15(G)(1) Pool Setbacks, which requires a minimum ten-foot setback for swimming pools located in the rear, interior or side street setback areas and shall not extend into the front setback area noted in Section 4.3.4(K), based on positive findings with LDR Section 2.4.7(C)(5).

Site Plan:

Move approval of the Class V Site Plan Modification (2019-001) for 215 NE 7th Avenue, by adopting the findings of fact and law contained in the staff report and finding that the request is consistent with the Comprehensive Plan and meets criteria set forth in Sections 2.4.5(G)(5) and Chapter 3 of the Land Development Regulations.

Landscape Plan:

Move approval of the request for Landscape Plan (20198-001) for 215 NE 7th Avenue, by adopting the findings of fact and law contained in the staff report, and finding that the request and approval thereof is consistent with the Comprehensive Plan and meets criteria set forth in Sections 4.6.16 of the Land Development Regulations.

Project Planner:
Jen Buce, Assistant Planner;
buce@mydelraybeach.com,
561-243-7138

Review Dates:
SPRAB Board:

- Attachments:
1. Site Plans
 2. Architectural Elevations
 3. Landscape Plans



Architectural Elevations:

Move approval of the Architectural Elevations (2019-001) for **215 NE 7th Avenue**, by adopting the findings of fact and law contained in the staff report and finding that the request meets criteria set forth in Section 4.6.18(E) of the Land Development Regulations.

Notes:

1. Prior to issuance of a building permit a Sidewalk Easement needs to be executed and recorded
2. Prior to issuance of a building permit the tree mitigation fund must be paid.
3. Prior to certification a note on the plans that all utilities shall be placed underground.

Background:

The project is located on the west side of NE 7th Avenue between NE 2nd Street and NE 3rd Street and consists of Lot 3, Less the south 10 feet thereof, Wellbrock Subdivision, according to the plat thereof as recorded in Plat Book 24, Page 219, of the Public Records of palm Beach County Florida. The property consists of 0.38 acres and is zoned RM (Multiple Family Residential). The Future Land Use Map designation is Medium Density (MD). The project consists of the demolition or the possible relocation of an existing single-family home and the construction of 2 story 3-unit townhome development.

Project Description:

The development proposal consists of the following:

- Demolition or possible relocation of the existing structure
- Construction of three fee simple townhomes in the Masonry Modern style. Unit "B" sharing party walls with Units "A" and "C" giving a finished appearance of a single building. The townhomes consist of three-bedroom units, (Unit "A" and "C" under air square footage is 3,241 square footage and Unit "B" is 3,337 square feet. All units are two stories and accommodate a two-car garage.
- Installation of an 8-foot-tall masonry wall for privacy
- Installation of grade level pools
- Installation of associated landscaping

Site Plan Analysis:

Compliance with The Land Development Regulations (LDR):

Items identified in the Land Development Regulations shall specifically be addressed by the body taking final action on the site and development application/request

LDR Section 4.4.6 Medium Density Residential (RM) purpose and intent:

The Medium Density Residential (RM) District provides a residential zoning district with flexible densities having a base of six units per acre and a maximum of twelve units per acre for this property. The actual density of a particular RM development is based upon its ability to achieve certain performance standards which are intended to mitigate the impacts of the increased density and ensure that the project is compatible with surrounding land uses. Further, the Medium Density Residential District provides for implementation of those objectives and policies contained within the Housing Element of the Comprehensive Plan which call for accommodating a variety of housing types.

LDR Section 4.4.6(I) Performance Standards:

The following standards shall apply to all site plans approved subsequent to October 7, 1997, and for modifications to existing developments which involve the creation of additional residential units. In order to increase a project density beyond six units per acre, the approving body must make a finding that the development substantially complies with the performance standards listed in



this section. The intent of the standards is to mitigate the impacts of the additional density both internal and external to the site. The extent to which a project meets the standards will determine the number of units per acre that will be permitted. For example, if a project meets or exceeds all the standards and is otherwise consistent with applicable standards and policies of the City's Comprehensive Plan and Land Development Regulations, the maximum density is permitted. Projects which only partially achieve these standards will be permitted a correspondingly lower density. The performance standards are as follows:

The density of the overall development is 8.57 units per acre, which requires a finding of substantial compliance with all applicable Performance Standards since it exceeds six units per acre. The following are the specific Performance Standards with an analysis of each:

- a) The traffic circulation system is designed to control speed and reduce volumes on the interior and exterior street network. This can be accomplished through the use of traffic calming devices; street networks consisting of loops and short segments; multiple entrances and exits into the development; and similar measures that are intended to minimize through traffic and keep speeds within the development at or below 20 m.p.h.

Analysis

Since the project is an infill development within an existing residential neighborhood and not a larger development with an interior road network, this performance standard is not applicable.

- b) Buildings are placed throughout the development in a manner that reduces the overall massing and provides a feeling of open space.

Analysis

The proposed residential units are designed within the required setbacks for the RM (Multiple Family) zoning district. The chosen architectural style of Modern Masonry carves away at the solid mass of a block building to reduce its massing effect. Based on the above, a finding of compliance can be made.

- c) Where immediately adjacent to residential zoning districts having a lower density, building setbacks and landscape materials along those adjacent property lines are increased beyond the required minimums in order to provide a meaningful buffer to those lower density areas. Building setbacks are increased by at least 25% of the required minimum; at least one tree per 30 linear feet (or fraction thereof) is provided; trees exceed the required height at time of planting by 25% or more; and a hedge, wall or fence is provided as a visual buffer between the properties.

Analysis

The proposed development is surrounded to the north, south and west by RM (Multiple Family Residential - Medium Density) zoned properties and to the east by R-1-AA (Single Family Residential). This is three fee simple, two story townhomes with a 25-foot setback from the rear. There is lush mature landscaping that exists of several Areca Palms. Additional Areca Palms and Japanese Blueberry trees will be planted for more privacy. There is also an existing chain link fence. Based on the above, this performance standard is partially met.

- d) The development offers a varied streetscape and building design. For example, setbacks are staggered and offset, with varying roof heights (for multi-family buildings, the planes of the facades are offset to add interest and distinguish individual units). Building elevations incorporate diversity in window and door shapes and locations; features such as balconies, arches, porches, courtyards; and design elements such as shutters, window mullions, quoins, decorative tiles, etc.

Analysis

The three-unit development faces NE 7th Avenue. Unit B is setback 4 feet to break the monotony of the straight-line affect. The modern masonry look consists of flat roofs, shiplap tongue and groove wood siding in silver stain, float finish stucco and clear glass railings. There are ground level pools, and individual courtyards with a perimeter wall and landscaping. Based on the above, a finding of compliance can be made.

- e) A number of different unit types, sizes and floor plans are available within the development in order to accommodate households of various ages and sizes. Multi-family housing will at a minimum have a mix of one, two- and three-bedroom units with varying floor plans.



Analysis

The project consists of an infill development that proposes three townhomes. The three units will range from 3,241 sf to 3,337 sf under air conditioning. Each unit has a slightly different overall floor plan therefore, a finding of compliance can be made.

- f) The development is designed to preserve and enhance existing natural areas and/or water bodies. Where no such areas exist, new areas which provide open space and native habitat are created and incorporated into the project.

Analysis

Since this standard is for larger projects, it does not apply to smaller in-fill developments of this type. Therefore, this performance standard is not applicable.

- g) The project provides a convenient and extensive bicycle/pedestrian network, and access to available transit.

Analysis

The development proposes the replacement of the existing sidewalk along NE 7th Avenue. This will improve the bicycle/pedestrian network of the area and enhances the walkability of the neighborhood. In addition, the proposed development is one block east of NE 6th Avenue which has access to Palm Beach County Palm Tran Bus Service. Based on the above, a finding of compliance can be made.

Summary

In conclusion, a finding of compliance can be made to (b), (d), (e), and (g). With respect to (c) the standard is partially met and (a) and (f) each of the standards is not applicable to the project. Pursuant to section 4.4.6(l)(2), it is acknowledged that some of the above referenced standards may not be entirely, applicable to small infill type residential projects. For those types of projects, the ultimate density should be based on the attainment of those standards which are applicable, as well as the developments ability to meet or exceed other minimum code requirements. As the development is following the applicable standards, the 8.57 unit per acre density is acceptable.

LDR Section 4.4.6 (H) (Special Regulations - RM zone district):

Recreational areas shall be required for all owner-occupied developments which have homeowner associations that must care for retention areas, private streets, or common areas.

This development will consist of three fee simple townhomes with individual courtyards and pool areas. There are not common areas, retention or private streets, therefore there will not be an HOA. Based upon the above, compliance with this code requirement has been achieved.

LDR Section 4.3.3(O) (Townhouse Design Standards):

As described below, the development proposal complies with the design standards for townhouse developments outlined in LDR Sections 4.3.3(O)(4)(a) through (d):

- a) No more than two townhouses may be constructed without providing a front setback of no less than 4' offset front to rear.

The purpose of this requirement is to prevent a long linear appearance. The front setback for the proposed development is along NE 7th Avenue. There are no more than two townhomes proposed along the front setback; therefore the 4' offset is not required.

- b) No townhouse row shall consist of more than 8 units or a length of 200'.

The townhouse row consists of three units and is 88' in length, thus meeting this code requirement.



- c) Service features, garages, parking areas, and entrances to dwelling units shall, whenever possible, be located on a side of the individual lot having access to the interior street. Walkways should be designed to connect dwelling units with each other and connect each dwelling unit with common open space

This standard applies to large townhouse developments and does not apply to this infill situation.

- d) Not less than 25% of the total area, less water bodies, shall be usable open space, either for recreational or some other suitable purpose, public or private.

The basis for this standard is to assure that larger residential developments provide adequate recreational amenities. With smaller developments, provision of these amenities is not considered financially feasible, and the required contribution of \$500.00 per unit (park impact fee) is considered adequate. It is noted, however, that 28.9% will be landscape/open space.

LDR Section 4.3.4(K) Development Standards Matrix:

The following table indicates that the proposal complies with LDR Section 4.3.4(K), as it pertains to the RM (Multiple Family Residential – Medium Density) zoning district:

RM Zoning Standards	Required (1&2)	Proposed (1&2)
Building Setbacks (min.):		
Front (NE 7 th Avenue)	25'	25'1"/25'1"
Side Interior Setback (south)	15'	15'1"
Rear	25'	36'10"/25'1"
Maximum Lot Coverage:	40% max.	35.5%
Open Space:	25% min.	28.9%
Building Height (max.):	35'	28'6"
Minimum Floor Area:		
3BR (Unit A and C)	1,250 sf	3,241 sf
...3BR (Unit B)	1,250 sf	3,337 sf
Minimum/Maximum Density:	6-12 units/acre	8 du/ac
Min. Lot Size (sf.)	8,000 sf	15,316 sf
Min. Lot Frontage (ft.)	60 ft.	98.60
Min. Lot Width (ft.)	60 ft.	98.60
Min. Lot Depth (ft.)	100 ft.	155.50

LDR Chapter 4.6 Supplementary District Regulations:

LDR Section 4.6.9(C)(2)(c) Vehicle Parking:

Two or more-bedroom dwelling units shall provide two spaces per unit and one-half space per unit for guest parking. The parking requirement for the site is 7.5 spaces. The development proposes two standard guest spaces in front of the two-car garage for each unit for a total of 12 parking spaces. The parking requirement is met.

LDR Sections 4.6.15(G)(1) Pool Setbacks:

A minimum ten-foot setback is required for swimming pools located in the rear, interior or side street setback areas. Swimming pools shall not extend into the front setback area noted in Section 4.3.4(K). The proposed pools meet the required perimeter setbacks., but do not meet the interior setbacks within the interior sides of the units. Pursuant to LDR section 2.4.7(C)(1) **Internal Adjustments:** An adjustment involves the lessening, or a total waiver, of those development standards which affect the spatial relationship among improvements on the land. An adjustment shall only be considered during the site and development plan review process and shall be only for requirements which do not pertain to, or affect, standards that apply to the perimeter of an overall development proposal (plan). An adjustment may be granted by the body or board which is empowered to approve or deny the site and development plan.



Pursuant to LDR Section 2.4.7(C)(5) *Findings*. Concurrent with granting relief from a development standard or regulation, the granting body must find that such relief does not diminish the practical application of the affected regulation (requirement) and that by granting such relief a superior development product will result.

The applicant has applied for an internal adjustment for the pool setback requirement within the confinements of internal side setbacks within Unit A and C, which have a zero setback and Unit B which has a 7'10" setback from Unit A and B. Staff supports the internal adjustment based on the history of several projects in the past being approved with zero to 5' foot setbacks being applied to similar projects as the code section does not specifically state otherwise. This current LDR section specifically speaks to setbacks in the rear, interior or side street setback areas regarding pools but does not refer to internal setbacks within the interior of a townhome development. This is one of the sections of the code that is on the list for clarification in the future. The applicant has also supplied a justification letter. Therefore, granting this relief from section 4.6.15(G)(1) pool setbacks; does not diminish the practical application of the affected regulation and by granting such relief a superior development product will result.

LDR Section 5.3.1(D)(2) Right-of-Way:

The existing right-of-way width on NE 7th Avenue is 40 feet. The City Engineer has approved a 5-foot ROW dedication and a 5-foot sidewalk easement along NE 7th Avenue to bring the ROW width closer to compliance within the 60-foot ROW required. The plans comply with the request. A sidewalk easement will be required prior to building permit issuance.

LDR Section 6.1.8 Undergrounding of Utilities:

Utility facilities serving the development shall be located underground throughout the development. All utilities lines that will serve the subject development shall be placed underground. A note shall be placed on the plans prior to certification.

Landscape Analysis

A landscape plan has been submitted, evaluated and recommended for approval by the City Senior Landscape Planner. Landscape Plan L-1 details the mitigation of the existing trees for the development. A mitigation in lieu fee of \$515.00 will be collected and the City Senior Landscape Planner will verify the in-lieu fees. Other trees will be mitigated by replacing in kind on site. The proposed landscaping consists of planting Japanese Blueberry Tree, Silver Buttonwood, Areca Palms, Blue Latin Palm, Cabbage Palmetto, Montgomery Palm, shrubs such as Japanese Blueberry Column, Rojo Congo, Shrubbery Yew Green Island Ficus Dwarf Podocarpus and Walter's Viburnum. The in-lieu fee must be paid prior to building permit issuance.

Architectural Elevations and Aesthetics

Pursuant to **LDR Section 4.6.18(E), Criteria for Board Action**, the following criteria shall be considered, by the Site Plan Review and Appearance Board (SPRAB), in the review of plans for building permits. If the following criteria are not met, the application shall be disapproved:

- 1) The plan or the proposed structure is in conformity with good taste; good design, and in general contributes to the image of the City as a place of beauty, spaciousness, harmony, taste, fitness, broad vistas, and high quality.
- 2) The proposed structure, or project, is in its exterior design and appearance of quality such as not to cause the nature of the local environment or evolving environment to materially depreciate in appearance and value.
- 3) The proposed structure, or project, is in harmony with the proposed developments in the general area, with the Comprehensive Plan, and with the supplemental criteria which may be set forth for the Board from time to time.

The development proposal consists of three townhomes with two car garages. The building is a Masonry Modern architecture style with flat roofs, float finish stucco painted in Ice Cubes Silver, vertical windows with clear glass anodized aluminum frames, with clear glass hand rails and shiplap tongue and groove wood siding in Silver. The first floor has covered porches with ground level pools, individual courtyards and a six-foot white vinyl fence and landscaping.

The proposed architectural elevations present design elements that will contribute to the image of the residential area by introducing a development that will maintain the architectural harmony, compatibility and quality of the neighborhood. It will not cause the nature of the local environment or evolving environment to materially depreciate in appearance and value. Based on the above, positive findings with respect to LDR Section 4.6.18(E) can be made.



Required Findings:

Pursuant to LDR Section 2.4.5(F)(1)(a), **Class V Site Plan Modification**, a new application for development of vacant land, or for modification of a developed property when no valid site plan of record exists, and which requires full review of Performance Standards found in Section 3.1.1.

Pursuant to Section 3.1.1 (Required Findings), prior to the approval of development applications, certain findings must be made in a form which is part of the official record. This may be achieved through information on the application, written materials submitted by the applicant, the staff report, or minutes. Findings shall be made by the body which has the authority to approve or deny the development application. These findings relate to the following areas:

Section 3.1.1 (A), Future Land Use Map: The subject property has a Future Land Use Map designation of MD (Medium Density Residential) and is zoned RM (Medium Density Residential). Pursuant to LDR Section 4.4.6(B)(3), within the RM zoning district, multiple family structures up to 12 units per acre are allowed as a permitted use, subject to compliance with the performance standards of LDR Section 4.4.6(I). Since compliance with the Performance Standards has been provided, the proposed density increase to 8.57 units per acre is permitted and appropriate.

Section 3.1.1 (B), Concurrency: As described in Appendix A, a positive finding of concurrency can be made as it relates to water, streets and traffic, sewer, drainage, parks and recreation, open space, and solid waste.

Section 3.1.1 (C), Consistency (Standards for Site Plan Actions): As described in Appendix B, a positive finding of consistency can be made as it relates to Standards for Site Plan Actions.

Section 3.1.1 (D), Compliance with the Land Development Regulations: As described under the Site Plan Analysis Section of this report, a positive finding of compliance with the Land Development Regulations can be made, subject to compliance.

Section 2.4.5 (F)(5), Compatibility (Site Plan Findings): The approving body must make a finding that development of the property pursuant to the site plan will be compatible and harmonious with adjacent and nearby properties and the City as a whole, so as not to cause substantial depreciation of property values.

Compatibility is not a concern, as similar uses exist on the surrounding properties. This townhouse development will be compatible and harmonious with the adjacent and nearby properties and should enhance property values in the area.

Comprehensive Plan Policies: A review of the objectives and policies of the adopted Comprehensive Plan was conducted, and the following applicable policies and objectives are noted:

Future Land Use Element Objective A-1: Property shall be developed or redeveloped in a manner so that the future use and intensity is appropriate and complies in terms of soil, topographic, and other applicable physical considerations, is complimentary to adjacent land uses, and fulfills remaining land use needs.

The proposed fee simple townhome development is appropriate and consistent with the surrounding area. There are existing multi-family residential developments on the adjacent properties to the north, south, and west. Located to the east is R-1-AA (Single Family Residential). Thus, the proposed development can be deemed a compatible and appropriate use for this site.

Housing Element Policy A-12.3: In evaluating proposals for new development or redevelopment, the City shall consider the effect that the proposal will have on the stability of nearby neighborhoods. Factors such as noise, odors, dust, traffic volumes and circulation patterns shall be reviewed in terms of their potential to negatively impact the safety, habitability and stability of residential areas. If it is determined that a proposed development will result in a degradation of any neighborhood, the project shall be modified accordingly or denied.

The development is surrounded RM the north, south and west. There is a single- family residence to the east (R-1-AA). A 6 foot- high fence and landscaping is proposed to negate nuisances such as noise, odors, and dust. The traffic volumes will be minimal as there are only 3 units. They can be accommodated by the surrounding road network. Thus, the proposal will not negatively impact the stability of the adjacent residential areas.



Review by Others:

The development proposal is not located in an area which requires review by the Community Redevelopment Agency (CRA), the Downtown Development Authority (DDA), Pineapple Grove Main Street (PGMS) or West Atlantic Redevelopment Coalition (WARC). On June 19, 2018, the development proposal was reviewed by the Green Implementation Board (GIAB). A copy of the review has been attached to the report.

Courtesy notices have been sent to the following homeowner's and/or civic associations:

- Palm Trail

Letters of objection or support, if any, will be presented at the SPRAB meeting.

Green Initiative Advancement Board (GIAB)

The GIAB reviewed the site plans for sustainable design on November 15, 2019 and was supportive of the project as the applicant was providing Energy Star Appliances, LED lighting, and low flow water fixtures and have skylights to allow sunlight into the unit, reducing electrical consumption. The insulation of the roof is R30 and the wall are R5, meeting state code. In addition, the builder has agreed to install infrastructure for solar panels.

Assessment and Conclusion

The property consists of 0.38 acres and is currently zoned RM (Multiple Family Residential). The development consists of the construction of three townhomes; all units consists of three bedrooms (the under air square footage of Units A and C are 3,241 SF and Unit B is 3337 SF). All units accommodate a two-car garage and will be two stories with grade level pools and individual courtyards in the rear. There will also be individual landscaping. The Masonry Modern Architectural style of the townhomes will be a visual asset and is compatible with existing and new multi developments on adjacent properties. The original home was built in 1939, which qualifies it to be designated Individually Historic. For this process to happen, the homeowner is the responsible party to designate the home. In this case, the home was not designated historic but has aesthetic qualities for a relocation to an empty plot of land to save it. Therefore, interested parties have investigated the possible relocation. This is not a requirement but would be a wonderful asset to the Delray Community of the home could be saved. The development substantially meets the performance standards of LDR 4.4.6.

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Alternative Actions:

- A. Continue with direction.
- B. Move approval of the request for an Internal Adjustment, Class V Site Plan Modification, Landscape Plan and Architectural Elevations 2019-001 for **215 NE 7th Avenue**, by adopting the findings of fact and law contained in the staff report and finding that the request is consistent with the Comprehensive Plan and meets criteria set forth in LDR Section 2.4.7(C)(5), Chapter 3, Section 4.6.18(E), and Section 4.6.16.
- C. Move denial of the request for an Internal Adjustment, Class V Site Plan Modification, Landscape Plan and Architectural Elevations (2019-001) for **215 NE 7th Avenue**, by adopting the findings of fact and law contained in the staff report and finding that the request is inconsistent with the Comprehensive Plan and does not meet criteria set forth in LDR Section 2.4.7(C)(5), Chapter 3, Section 4.6.18(E), and Section 4.6.16.

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Appendix "A" – Concurrency Findings

Pursuant to LDR Section 3.1.1(B), Concurrency, as defined pursuant to Objective B-2 of the Land Use Element of the Comprehensive Plan, must be met and a determination made that the public facility needs of the requested land use and/or development application will not exceed the ability of the City to fund and provide, or to require the provision of, needed capital improvements for the following areas:

Water and Sewer: Water and sewer service will be provided to the site through an existing 12" water main and an 8" sewer main along NE 7th Avenue. The Comprehensive Plan states that adequate water and sewer treatment capacity exists to meet the adopted level of service standard at the City's build-out population based on the current FLUM.

Streets and Traffic: A traffic statement through EnviroDesign was provided on September 27, 2018 it has been determined the proposal development has an insignificant impact on the surrounding roadway network, meeting the requirement of Palm Beach County's Traffic Performance Standards. Therefore, a positive finding can be made.

Parks and Recreation Facilities: Pursuant to Land Development Regulations (LDR) Section 5.3.2, a park impact fee of \$500.00 per dwelling unit will be collected prior to issuance of a building permit for each unit. Based upon the proposed units, a park impact fee of \$1,500 will be required. Therefore, a positive finding can be made.

Solid Waste: The subject property will consist of three new units. Based on a waste generation rate of 0.8 tons per year for apartment and townhome units, the new units will generate an additional 4.9 tons of solid waste per year. The Solid Waste Authority has indicated that its facilities have enough capacity to handle all development proposals till the year 2048. Therefore, a positive finding can be made.

Drainage:

Preliminary engineering and drainage plans have been submitted with the proposed development. Drainage will be accommodated via an exfiltration trench system. Therefore, there appears to be no problems anticipated in accommodating on-site drainage. Based upon the above, positive findings with respect to this level of service standard can be made.

APPENDIX "B" - STANDARDS FOR SITE PLAN ACTIONS Sec. 3.2.3 (A) through (J)

- A. Building design, landscaping and lighting (glare) shall be such that they do not create unwarranted distractions or blockage of visibility as it pertains to traffic circulation.
 - Not applicable
 - Meets intent of standard
 - Does not meet intent

- B. Separation of different forms of transportation shall be encouraged. This includes pedestrians, bicyclists and vehicles in a manner consistent with policies found under Objectives D-1 and D-2 of the Transportation Element.
 - Not applicable
 - Meets intent of standard
 - Does not meet intent

- C. Open space enhancements as described in Policies found under Objective B-1 of the Open Space and Recreation Element are appropriately addressed.
 - Not applicable
 - Meets intent of standard
 - Does not meet intent



- D. The City shall evaluate the effect that any street widening or traffic circulation modification may have upon an existing neighborhood. If it is determined that the widening or modification will be detrimental and result in a degradation of the neighborhood, the project shall not be permitted.
 - Not applicable
 - Meets intent of standard
 - Does not meet intent

- E. Development of vacant land which is zoned for residential purposes shall be planned in a manner which is consistent with adjacent development regardless of zoning designations.
 - Not applicable
 - Meets intent of standard
 - Does not meet intent

- F. Property shall be developed or redeveloped in a manner so that the future use and intensity are appropriate in terms of soil, topographic, and other applicable physical considerations; complementary to adjacent land uses; and fulfills remaining land use needs.
 - Not applicable
 - Meets intent of standard
 - Does not meet intent

- G. Redevelopment and the development of new land shall result in the provision of a variety of housing types which shall continue to accommodate the diverse makeup of the City's demographic profile and meet the housing needs identified in the Housing Element. This shall be accomplished through the implementation of policies under Objective B-2 of the Housing Element.
 - Not applicable
 - Meets intent of standard
 - Does not meet intent

- H. The City shall consider the effect that the proposal will have on the stability of nearby neighborhoods. Factors such as noise, odors, dust, traffic volumes and circulation patterns shall be reviewed in terms of their potential to negatively impact the safety, habitability and stability of residential areas. If it is determined that a proposed development will result in a degradation of any neighborhood, the project shall be modified accordingly or denied.
 - Not applicable
 - Meets intent of standard
 - Does not meet intent

- I. Development shall not be approved if traffic associated with such development would create a new high accident location, or exacerbate an existing situation causing it to become a high accident location, without such development taking actions to remedy the accident situation.
 - Not applicable
 - Meets intent of standard
 - Does not meet intent

- J. Tot lots and recreational areas, serving children from toddler to teens, shall be a feature of all new housing developments as part of the design to accommodate households having a range of ages. This requirement may be waived or modified for residential developments located in the downtown area, and for infill projects having fewer than 25 units.
 - Not applicable
 - Meets intent of standard
 - Does not meet intent

SILBERSTEIN ARCHITECTURE

Date: November 5, 2018

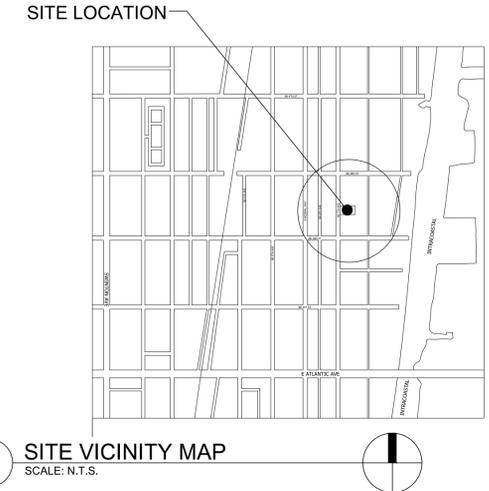
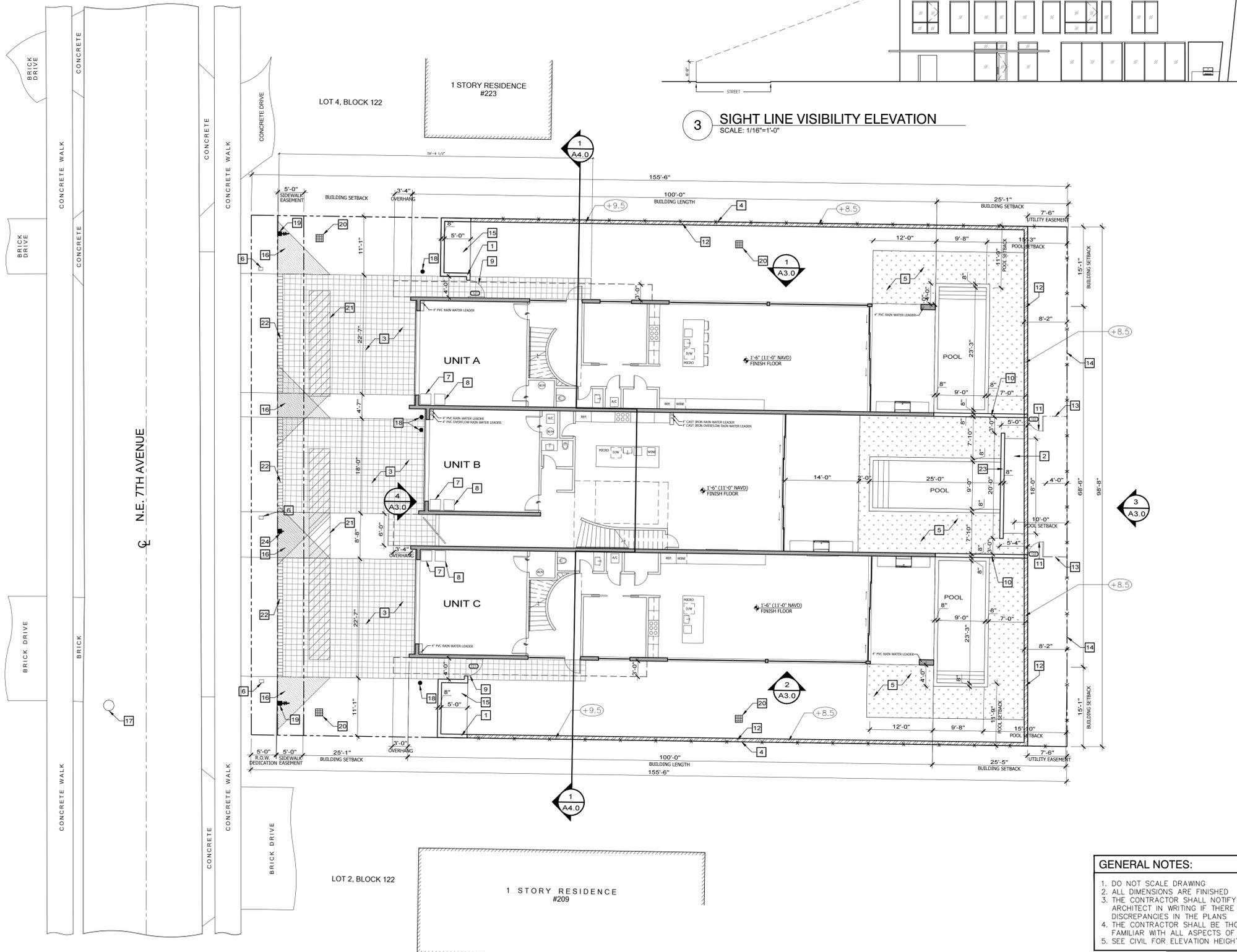
To: Jennifer Buce

From: Jeffrey Silberstein
Silberstein Architecture

Re: 215 NE 7th Ave
Justification letter for an internal adjustment as per LDR 2.4.7 (C)

1. The adjustment does not affect nor pertain to the perimeter of the overall proposed development plan. All pool setbacks meet perimeter setback requirements
2. The adjustment provides for a superior product that if the project were to comply with the letter of the regulations. All units A, B and C share a common interior demising wall and exterior demising wall. With a larger density, land is at a premium and the goal is to create a better exterior living environment. Keeping the interior setback to a minimum for the interior lot lines between units allows for a larger a pool and makes the garden pool area feel larger. This has been applied to several projects in the past 11 years in Delray and has met with positive results.

Respectfully yours,



SITE INFORMATION

ADDRESS: 215 NE 7TH AVE, DELRAY BEACH FL 33483
 LEGAL DESCRIPTION: WELBROCK SUB LT 3 (LESS S 10 FT) BLK 122
 PROJECT DESCRIPTION: THREE TOWNHOME UNITS
 CURRENT PROPERTY USE: TWO STORY SINGLE FAMILY RESIDENCE
 ZONING DISTRICT: RM - MEDIUM DENSITY, 6 - 12 UNITS PER ACRE

APPLICABLE CODES:
 - 2017 FLORIDA BUILDING CODE
 - FLORIDA FIRE PREVENTION CODE 6TH EDITION
 - FLORIDA SPECIFIC NFPA 1 FIRE CODE, 2015 EDITION
 - FLORIDA SPECIFIC NFPA 101 LIFE SAFETY CODE, 2015 EDITION

TYPE OF BUILDING CONSTRUCTION: TYPE V-B

SETBACKS	REQUIRED	PROVIDED
FIRST FLOOR		
FRONT - NE 7TH AVE	25'-0"	25'-1"
SIDE INTERIOR	15'-0"	15'-1"
REAR	25'-0"	36'-10"
SECOND FLOOR		
FRONT - NE 7TH AVE	25'-0"	25'-1"
SIDE INTERIOR	15'-0"	15'-1"
REAR	25'-0"	25'-1"
DWELLING UNITS	6-12 UNITS/ACRE	3/0.35=8.57 DU/AC

BUILDING HEIGHT	REQUIRED	PROVIDED
TOP OF ROOF	35'-0" MAX	28'-6"

BUILDING AREA: (A/C)	AIR CONDITIONED	GROSS AREA
UNIT A	3,241 S.F.	3,931 S.F.
UNIT B	3,337 S.F.	4,137 S.F.
UNIT C	3,241 S.F.	3,931 S.F.
TOTAL	9,819 S.F.	11,999 S.F.

SITE AREA CALCULATIONS

LOT SIZE	0.35 ACRES (15,316 S.F.)	
LOT COVERAGE	40% MAX	5,443 S.F. (35.5%)
OPEN SPACE	25% MIN	4,422 S.F. (28.9%)

PARKING CALCULATIONS

	REQUIRED	PROVIDED
(3) 3+ BEDROOM UNITS	2 PER UNIT	2 IN GARAGE
GUEST PARKING	0.5 PER UNIT	2 IN EACH DRIVEWAY x 3 UNITS = 6 GUEST PARKING SPACES

LEGEND

- 8'-0" TALL STUCCO MASONRY WALL - WHITE
- CONCRETE PAD FOR POOL EQUIPMENT & FUTURE GENERATOR - UNIT B
- 12" x 12" CHARCOAL GRAY CONCRETE PAVERS. SEE ATTACHED CUT SHEET
- 8'-0" VINYL FENCE - WHITE
- ARTIFICIAL TURF
- LOCATION OF MAILBOX
- SOLID WASTE BIN
- RECYCLING BIN
- 8'-0" TALL WOOD GATE - SILVER
- 8'-0" TALL STUCCO MASONRY WALL - WHITE
- 8'-0" TALL ALUMINUM GATE - WHITE
- RETAINING WALL-BETWEEN +9.5 AND +8.5 IN HEIGHT. SEE CIVIL SHEET 1 OF 7.
- 8'-0" VINYL FENCE - WHITE. SEE ATTACHED CUT SHEET
- EXISTING CHAIN LINK FENCE ON EASTERN PROPERTY LINE
- CONCRETE PAD FOR POOL EQUIPMENT & FUTURE GENERATOR - UNIT A & C
- 10' x 10' SITE VISIBILITY TRIANGLE TYP.
- SANITARY SEWER MANNHOLE
- SANITARY SEWER CLEAN-OUT
- WATER METER WITH BACKFLOW PREVENTER
- CATCH BASIN
- 4' WIDE x 4' DEEP ROCK TRENCH
- TRENCH DRAIN
- 4' FOUNTAIN WALL
- PROPOSED WATER METER

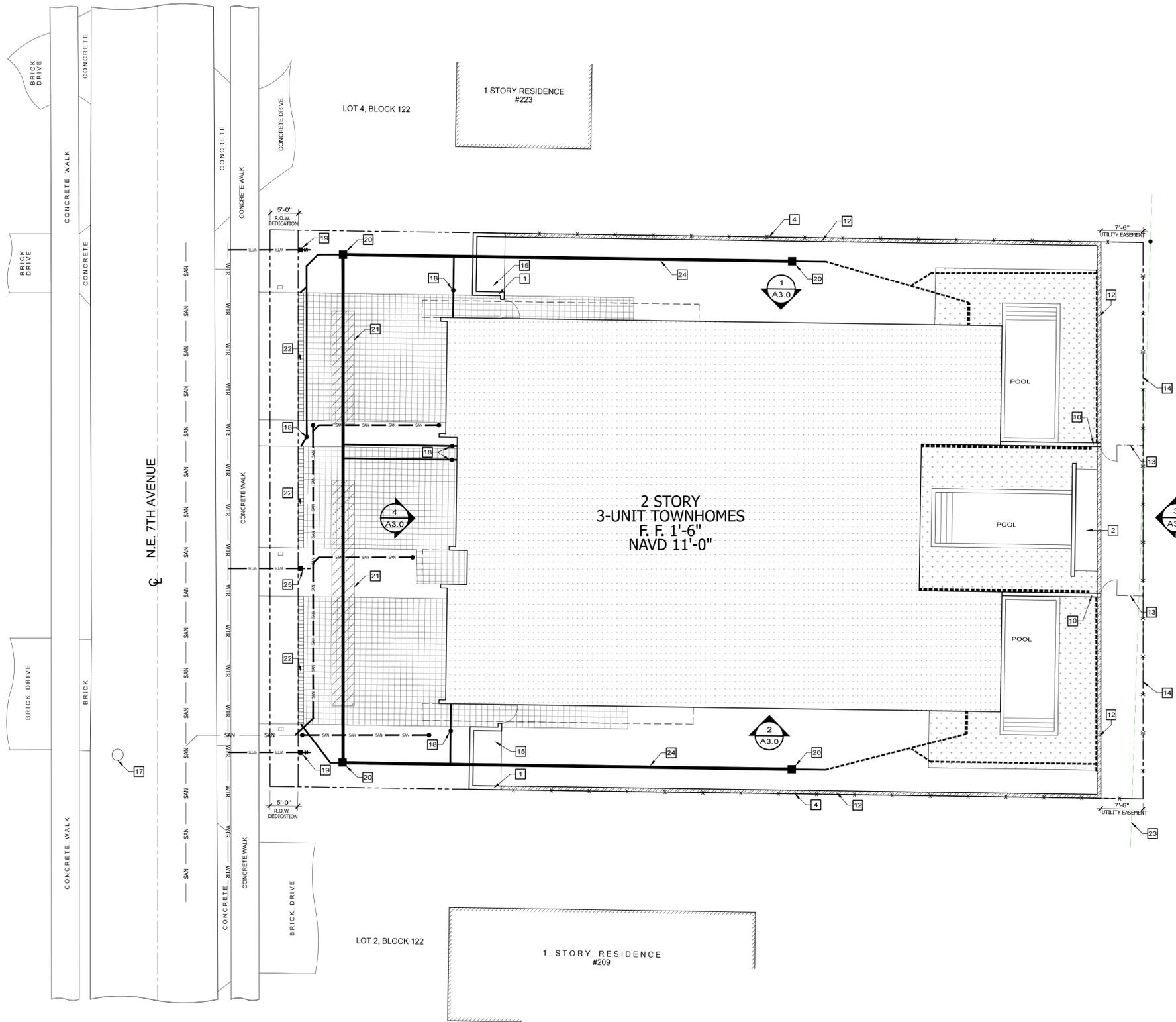
GENERAL NOTES:

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- THE CONTRACTOR SHALL BE THOROUGHLY FAMILIAR WITH ALL ASPECTS OF THE PROJECT
- SEE CIVIL FOR ELEVATION HEIGHTS

NOTES
TOWNHOUSES SHALL BE FEE SIMPLE

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1 COMPOSITE UTILITY PLAN
SCALE: 1"=10'-0"

LEGEND	
1	8'-0" TALL STUCCO MASONRY WALL - WHITE
2	CONCRETE PAD FOR POOL EQUIPMENT & FUTURE GENERATOR - UNIT B
4	8'-0" VINYL FENCE - WHITE
10	8'-0" TALL STUCCO MASONRY WALL - WHITE
12	RETAINING WALL
13	8'-0" VINYL FENCE - WHITE
14	EXISTING CHAIN LINK FENCE ON EASTERN PROPERTY LINE
15	CONCRETE PAD FOR POOL EQUIPMENT & FUTURE GENERATOR - UNIT A & C
17	SANITARY SEWER MANHOLE
18	SANITARY SEWER CLEAN-OUT
19	PROPOSED WATER METER WITH BACKFLOW PREVENTER
20	CATCH BASIN
21	4' WIDE x 4' DEEP ROCK TRENCH
22	TRENCH DRAIN
23	OVERHEAD UTILITY LINE
24	HIGH-DENSITY POLYETHYLENE PIPE
25	PROPOSED WATER METER

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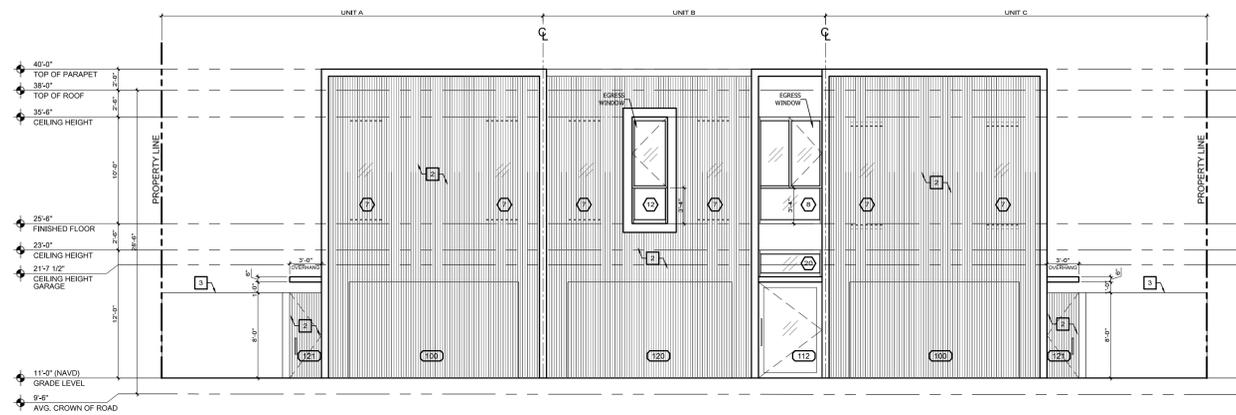
A-1.4

PRINT DATE:
JAN. 10, 2019

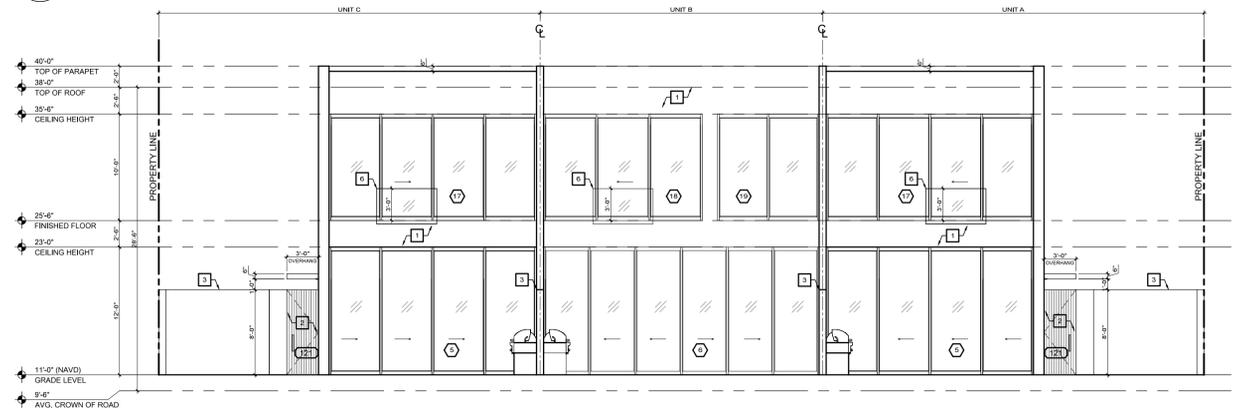
215 NE 7TH AVE
215 NE 7TH AVE
DELRAY BEACH, FL 33483

SILBERSTEIN ARCHITECTURE
524 NE 2ND STREET DELRAY BEACH FL 33483
TEL 561 276 9393 LICENSE # AA26000778
WWW.SILBERSTEINARCHITECT.COM
jsilbersteinarchitect.com or studio@silbersteinarchitect.com

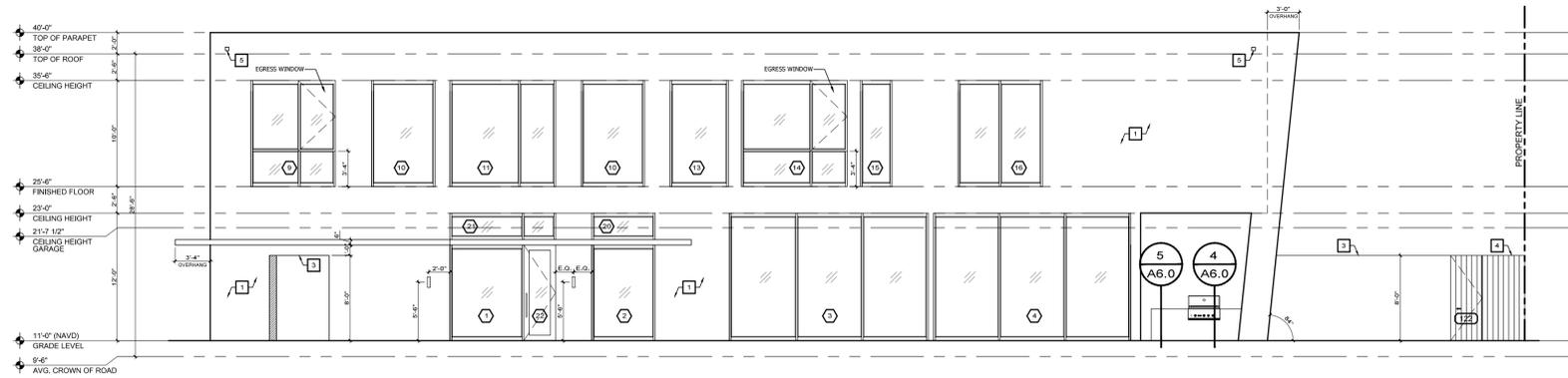
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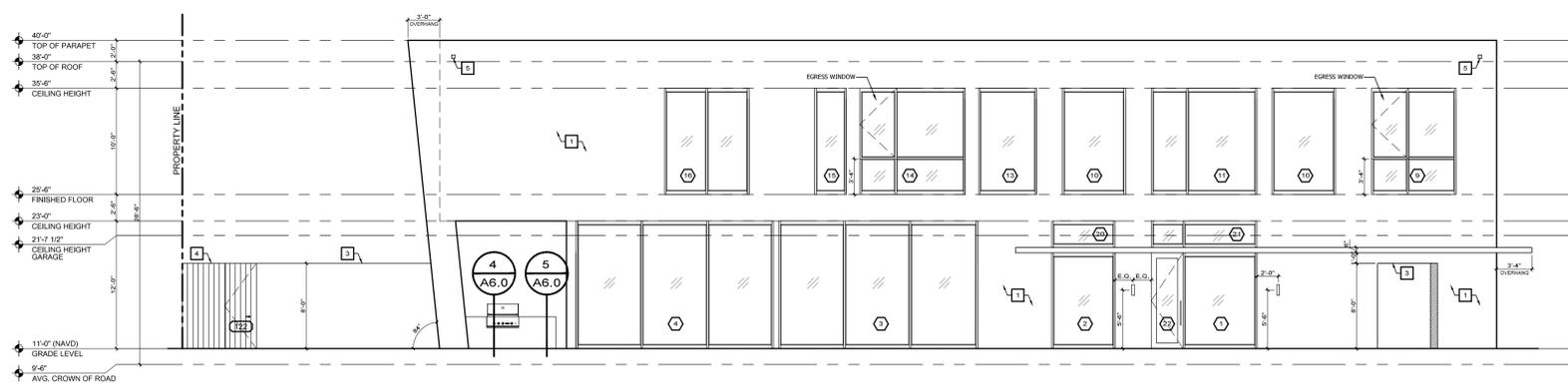
4 EAST ELEVATION
SCALE: 1/8"=1'-0"



3 WEST ELEVATION
SCALE: 1/8"=1'-0"



2 SOUTH ELEVATION
SCALE: 1/8"=1'-0"



1 NORTH ELEVATION
SCALE: 1/8"=1'-0"

EXTERIOR GLAZING SCHEDULE								ALL GLAZING: CLEAR LAMINATED IMPACT GLASS - SOLARBAN 60	
SYM	MASONRY OPENING		WINDOW TYPE	MANUFACTURER	FRAME	FINISH	DETAILS	REMARKS	
	WIDTH	HEIGHT							
1	7'-0"	9'-0"	FIXED	SIW - "SERIES 1000"	ALUM.	ANODIZED ALUMINUM			
2	6'-0"	9'-0"	FIXED	SIW - "SERIES 1000"					
3	18'-8"	12'-0"	FIXED	SIW - "SERIES 1000"					
4	18'-8"	12'-0"	FIXED	SIW - "SERIES 1000"					
5	20'-0"	12'-0"	SLIDERS	SIW - "SERIES 600KM-12"					
6	26'-0"	12'-0"	SLIDERS	SIW - "SERIES 600KM-12"					
7	3'-4"	10'-0"	FIXED	SIW - "SERIES 1000"					
8	6'-0"	10'-0"	FIXED/CASEMENT	SIW - "SERIES S-400"					
9	8'-0"	10'-0"	FIXED/CASEMENT	SIW - "SERIES S-400"					
10	6'-0"	10'-0"	FIXED	SIW - "SERIES 1000"					
11	10'-0"	10'-0"	FIXED	SIW - "SERIES 1000"					
12	3'-4"	10'-0"	FIXED/CASEMENT	SIW - "SERIES S-400"					
13	5'-6"	10'-0"	FIXED	SIW - "SERIES 1000"					
14	10'-0"	10'-0"	FIXED/CASEMENT	SIW - "SERIES S-400"					
15	3'-0"	10'-0"	FIXED	SIW - "SERIES 1000"					
16	8'-0"	10'-0"	FIXED	SIW - "SERIES 1000"					
17	19'-7"	10'-0"	SLIDERS	SIW - "SERIES 600KM-12"					
18	15'-0"	10'-0"	SLIDERS	SIW - "SERIES 600KM-12"					
19	9'-7"	10'-0"	FIXED	SIW - "SERIES 1000"					
20	6'-0"	2'-6"	FIXED	SIW - "SERIES 1000"					
21	10'-0"	2'-6"	FIXED	SIW - "SERIES 1000"					
22	3'-0"	9'-0"	OUTSWING DOOR	SIW - "SERIES S-700"					

NOTES:
 1. SUBMIT SHOP DRAWINGS FOR ARCHITECT'S APPROVAL
 2. SEE ELEVATION DRAWINGS FOR MULLION LOCATIONS

SOLID DOOR SCHEDULE									
SYM	NOMINAL SIZE		DOOR TYPE	FRAME	FINISH	THK.	HARDWARE GROUP	DETAIL(S)	REMARKS
	WIDTH	HEIGHT							
100	16'-0"	9'-0"			STAINED WOOD; SILVER				EXTERIOR-SUPERSNEAKY FLUSH MOUNT GARAGE DOOR
101	3'-0"	8'-0"							
102	3'-0"								
103	2'-6"								
104									
105									
106	8'-0"								
110	3'-0"								
111	3'-0"								
112	6'-0"	9'-0"	PIVOT	ALUM.	ANODIZED ALUM.				EXTERIOR-SIW IMPACT PIVOT DOOR "SERIES S-900"
114	2'-6"	8'-0"							
116									
119									
120	15'-6"	9'-0"			STAINED WOOD; SILVER				EXTERIOR-SUPERSNEAKY FLUSH MOUNT GARAGE DOOR
121	3'-4"	8'-0"			STAINED WOOD; SILVER				EXTERIOR-GATE, SHIPLAP TONGUE&GROOVE WOOD SIDING
122	3'-4"	8'-0"							EXTERIOR-VINYL GATE, TO MATCH VINYL FENCE, WHITE
201	2'-6"								
202	3'-0"								
202A	2'-8"								
202B	3'-0"								
205	3'-0"								
205A	2'-6"								
205B	2'-6"								
206	2'-8"								
207	3'-0"								
207A	3'-0"								
207B	2'-6"								
207C									
207D									
211									
212	3'-0"								
212A	3'-0"								
212B	6'-0"								
213	3'-0"								
213A	2'-6"								
213B	3'-0"								
214									
215									
215A	2'-6"								
215B									
215C									
215D									
215E									

NOTES:
 1. ALL HARDWARE TO BE SELECTED BY OWNER
 2. ALL QUANTITIES AND DIMENSIONS TO BE VERIFIED ON SITE
 3. FG. = FIBERGLASS

- GENERAL NOTES:**
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 - SEE CIVIL FOR ELEVATION HEIGHTS

LEGEND	
DESCRIPTION	
1	3/4" FLOAT FINISH STUCCO - SILVER
2	2 3/4" x 3/4" SHIPLAP TONGUE & GROOVE WOOD SIDING - SILVER STAIN
3	8'-0" TALL STUCCO MASONRY WALL - SILVER
4	8'-0" TALL VINYL FENCE - WHITE
5	4" DIAMETER OVERFLOW SCUPPER FLUSH WITH STUCCO
6	36" CLEAR GLASS RAILING

REVISIONS	
NO.	DESCRIPTION

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215 NE 7TH AVE

215 NE 7th Avenue
Delray Beach, FL 33483



SILBERSTEIN ARCHITECTURE:

CV-1.0	Cover Sheet
	Survey
A-1.0	Site Plan
A-1.1	Roof Plan
A-1.2	First Floor Plan
A-1.3	Second Floor Plan
A-1.4	Composite Utility Plan
A-3.0	Exterior Elevations
A-4.0	Exterior Renders
A-4.1	Exterior Renders

ENVIRODESIGN (CIVIL)

1 of 7	Civil Site Plan Improvements
2 of 7	Paving & Drainage Details
3 of 7	Paving & Drainage Details
4 of 7	Paving & Drainage Details
5 of 7	Water & Wastewater Details
6 of 7	Demolition Plan
7 of 7	Pollution Prevention Plan

PK DESIGN STUDIO (LANDSCAPE)

L-1	Landscape Disposition Plan
L-2	Landscape Plan
L-3	Landscape Schedule & Details
L-4	Landscape Specifications

O'BRIEN, SUITER & O'BRIEN (SURVEY):

Survey

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CV-1.0

PRINT DATE:
JAN. 16, 2019



WEST VIEW
SCALE: N.T.S.



EAST VIEW
SCALE: N.T.S.

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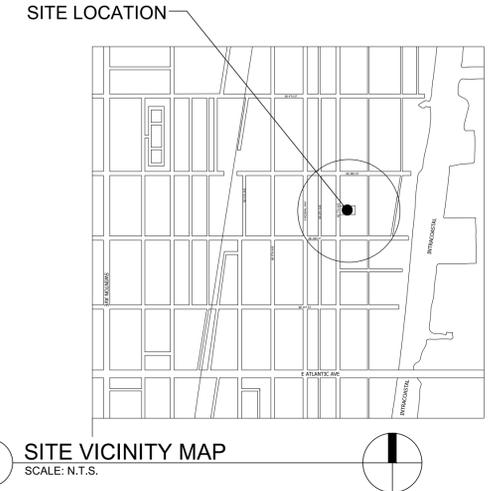
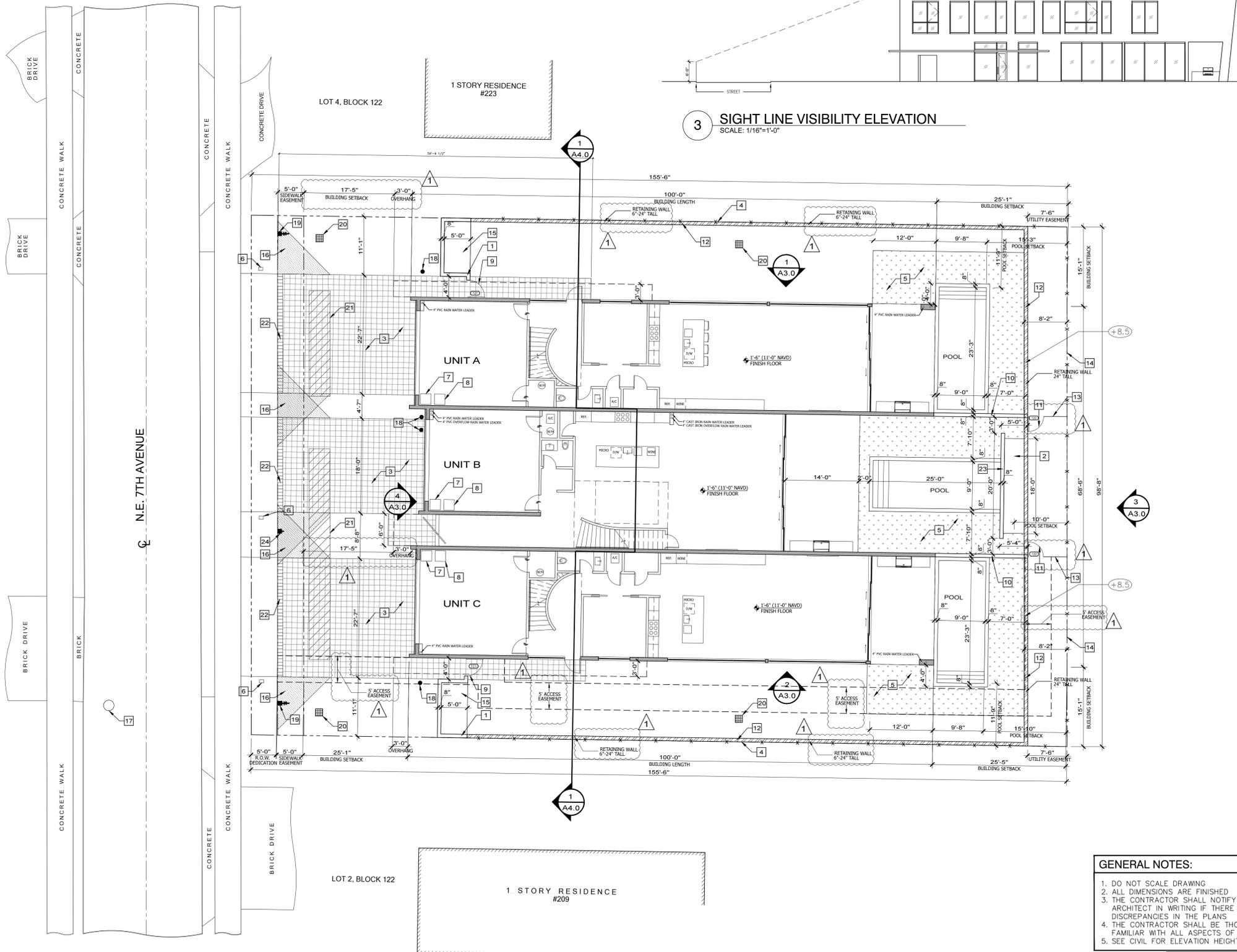
SOUTH VIEW
SCALE: N.T.S.



NORTH VIEW
SCALE: N.T.S.

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TYPE OF BUILDING CONSTRUCTION: TYPE V-B

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- SOLID WASTE BIN
- RECYCLING BIN
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- 8'-0" TALL ALUMINUM GATE - WHITE
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REVISIONS

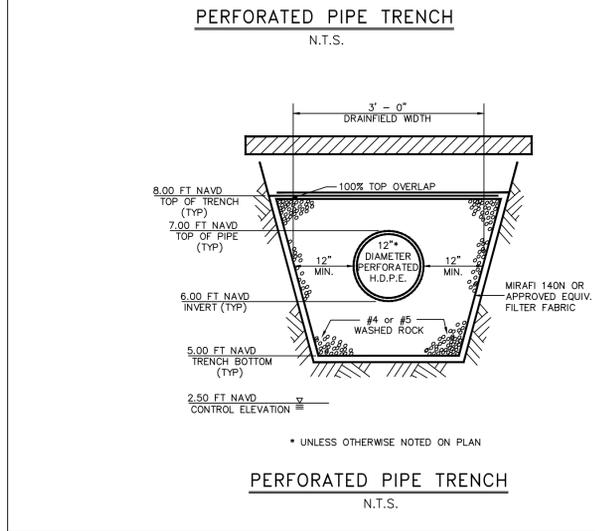
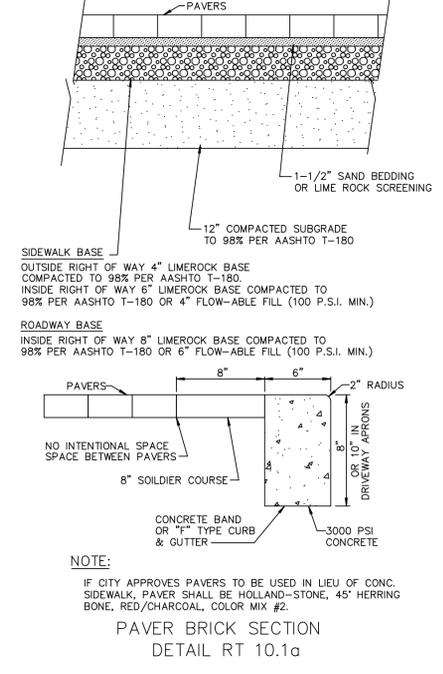
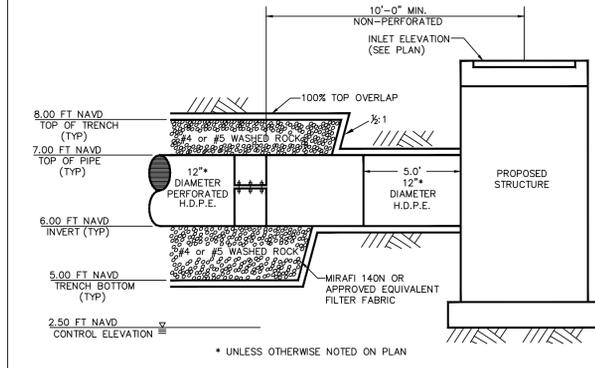
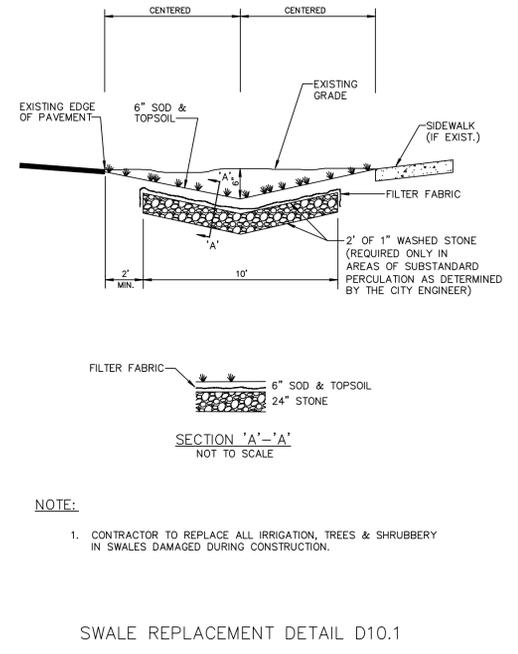
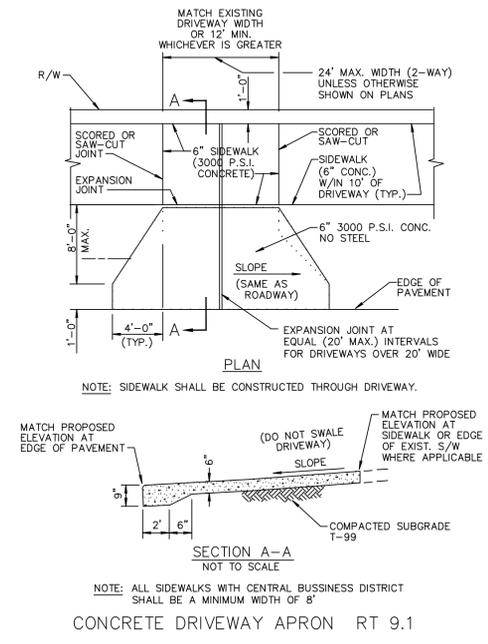
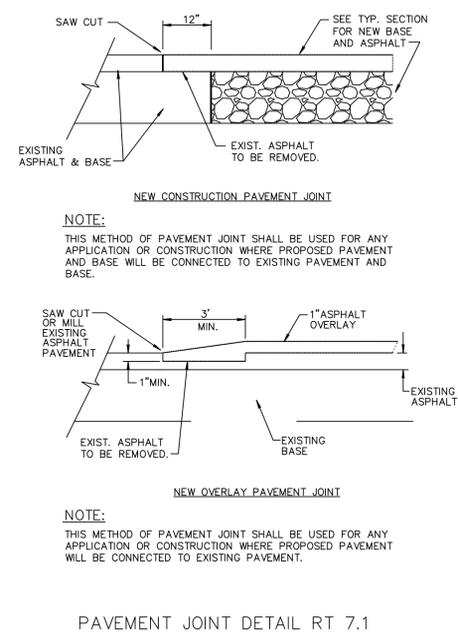
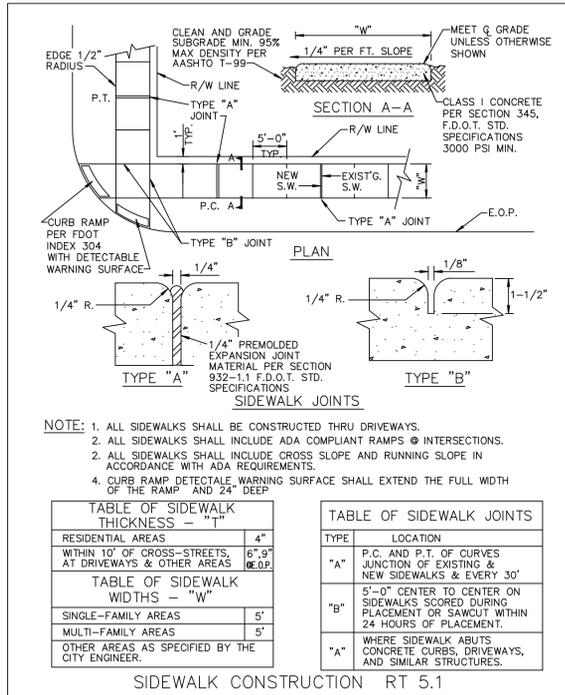
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"NOT FOR CONSTRUCTION"

PAVING & DRAINAGE DETAILS FOR:
 215 NE 7TH AVE
 3-UNIT TOWNHOMES
 DELRAY BEACH, FLORIDA

EnviroDesign Associates Inc.
 www.envirodesign.com
ENGINEERS • ENVIRONMENTAL CONSULTANTS
 FLORIDA CERTIFICATE OF AUTHORIZATION No. 6506
 298 Pineapple Grove Way Delray Beach, Florida 33444
 Phone: (561) 274-6500 Fax: (561) 274-8558

DRAWN:
 B.A.B.
 CHECKED:
 J.A.P.
 DATE:
 12/19/18
 JOB NO.
 18127-DTL
 SHEET NO.
2 OF 7



CALL 48 HOURS BEFORE YOU DIG.
 IT'S THE LAW
 1-800-432-4770
 SUNSHINE STATE ONE CALL OF FLORIDA, INC.

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DRAINAGE CALCULATIONS
215 NE 7TH AVE- Job #18127

WATER QUALITY VOLUME:
BASED ON F.A.C. CHAPTER 62-302 & SFWMD BASIS OF REVIEW

GIVEN:

TOTAL SITE AREA	14842 sf
ROOF AREA	6678 sf
WATER SURFACE AREA	0 sf
WATER QUALITY SITE AREA	8164 sf (Total Site - water surface + roofs)
WATER QUALITY IMPERVIOUS AREA	4037 sf (W.Q. Site Area - Pervious)
WATER QUALITY PERVIOUS AREA	4127 sf (W.Q. Site Area - Impervious)
WATER QUALITY % IMPERVIOUS	49.4 % (Impervious / W.Q. Site Area)

REQUIRED STORAGE VOLUME: WET DETENTION VOLUME = 1" OVER TOTAL SITE AREA OR 2.5" OVER IMPERVIOUS AREA (IF SITE IS OVER 40% IMPERVIOUS, USE 2.5" OVER IMPERVIOUS)

→ COMPUTE 1" OVER TOTAL SITE AREA:

1in * 14842 = 1237 cf

→ COMPUTE 2.5" OVER % IMPERVIOUS AREA:

2.5in * 0.49 * 14842 = 1529 cf (THIS METHOD CONTROLS)

PER SFWMD SWERP APPLICANT'S HANDBOOK VOLUME II, 4.2.1

PROVIDE 100% FOR EXFILTRATION (exfil calcs includes 50% reduction & safety factor 2)

WATER QUALITY VOLUME = 1529 * 1 = 1529 cf

PRE- vs. POST-DEVELOPMENT 10-YEAR, 1-DAY RUN-OFF VOLUME:

GIVEN:	REQUIRED STORAGE: 7.5" PER SFWMD TECHNICAL PUBLICATION EMA #390 FIGURE 9	PRE	POST
		14842	14842
	TOTAL SITE AREA	14842	14842
	IMPERVIOUS AREA	4315	10715
	PERVIOUS AREA	10527	4127

USDA SCS RUNOFF EQUATION:	
A = 14842 sf	
Q = RUNOFF = (P-0.2S) ² / (P+0.8S)	
P = ACCUMULATED RAINFALL = 7.50	
S = SOIL STORAGE * %PERVIOUS	
AVERAGE PERVIOUS ELEVATION = 8.5 ft	9.5 ft
WATER TABLE ELEVATION = 4 ft	2.5 ft
DEPTH TO WATER TABLE = 4 ft	4 ft
CUMULATIVE WATER STORAGE WITHIN SOIL STORAGE PER SFWMD BASIS OF 25% REDUCTION = 8.18 in	8.18 in
S = 5.80 in	2.27 in
0.2S = 1.16 in	0.45 in
NOTE: IF 0.2S IS > OR = P, THEN Q = 0	
Q = 3.31 in	5.33 in
V = 4096 cf	6588 cf

TOTAL VOLUME REQUIRED:	
WATER QUALITY VOLUME:	
V = 1529 cf	= 0.42
10-YR. ONE DAY PRE- vs. POST-DEVELOPMENT RUNOFF VOLUME:	
V = 2492 cf	= 0.69 (THIS METHOD CONTROLS)
REQUIRED VOLUME:	
V = 2492 cf	= 0.69 AC-IN
PROVIDED VOLUME:	
V = 3551 cf	= 0.98 AC-IN
see exfil calcs	

EXFILTRATION TRENCH CALCULATIONS
215 NE 7TH AVE- Job #18127

L =	LENGTH OF TRENCH REQ'D (FT)	=	24.80
V wq =	WTR QUALITY VOLUME TO BE TREATED (AC-IN)	=	0.42
V add =	ADD'L VOLUME TO BE TREATED (AC-IN)	=	0.27
W =	TRENCH WIDTH (FT)	=	3
H =	DEPTH TO WATER TABLE (FT)	=	6
Du =	NON-SATURATED TRENCH DEPTH (FT)	=	3
Ds =	SATURATED TRENCH DEPTH (FT)	=	0
FS =	SAFETY FACTOR NOT LESS THAN 2	=	2
%WQ =	PERCENT REDUCTION IN WATER QUALITY	=	50
K =	HYDRAULIC CONDUCTIVITY (CFS/FT ² -FT HEAD)	=	8.25 X 10 ⁻⁴
OR K =		=	0.00083

STANDARD FORMULA:

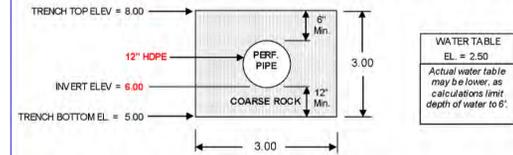
$L = \frac{FS[\%WQ(V wq + V add)]}{K(HW+2HDu-Du^2 + 2HDs) + (1.39 \times 10^{-4}) wDu} = 24.80 \text{ FEET}$

[L wq = 10.98 FT + L add = 13.83 FT]

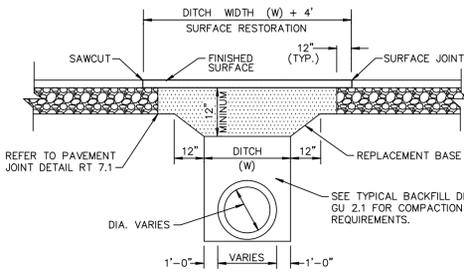
CONSERVATIVE FORMULA: (NOT APPLICABLE - STANDARD FORMULA APPLIES)

$L = \frac{V}{K(2HDu-Du^2 + 2HDs) + (1.39 \times 10^{-4}) wDu} = N/A$

STANDARD TRENCH DETAIL - REFER TO ENGINEERING PLANS FOR ACTUAL SPECIFICATIONS

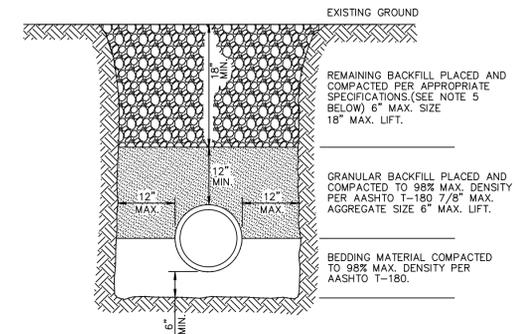


THEREFORE, MIN. TRENCH LENGTH REQUIRED = 25 FEET
ACTUAL TRENCH LENGTH PROVIDED = 40 FEET
ACTUAL TREATMENT VOLUME PROVIDED=0.98 AC-IN OR 0.08 AC-FT
TRENCH DIMENSIONS: 3.00 FT. WIDE BY 3.00 FT. DEEP



- REPLACEMENT BASE TO BE AT MIN. 12" THICK.
- BASE MATERIAL SHALL BE PLACED IN TWO LIFTS AND EACH LIFT COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180 (MAX. LIFT THICKNESS = 6").
- ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.
- ALL DISTURBED PAVEMENT MARKINGS SHALL BE RESTORED IN ACCORDANCE WITH CITY STANDARDS.
- SURFACE MATERIAL SHALL BE F.D.O.T. TYPE S-I OR S-III ASPHALTIC CONC. (MIN. THICKNESS 1 1/2").
- ANY PAVT. CUTS SHALL BE COLD PATCHED AT END OF EACH WORKING DAY TO FACILITATE UNHINDERED TRAFFIC FLOW.

PAVEMENT REPAIR DETAIL GU 1.1

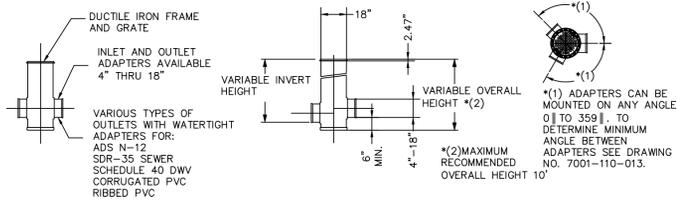


NOTES:

- UNSATURABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGE ROCKS SHALL BE REMOVED; BEDDING MATERIAL AND BACKFILL CONSISTING OF WASHED AND GRADED LIMESTOCK 3/8" - 7/8" SIZING.
- THE PIPE AND/OR STRUCTURE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
- THE PIPE AND/OR STRUCTURE SHALL BE PLACED IN A DRY TRENCH.
- BACKFILL SHALL BE FREE OF UNSATURABLE MATERIAL SUCH AS LARGE ROCK, MUCK, AND DEBRIS.
- COMPACT BACKFILL TO 98% DENSITY UNDER PAVEMENT AND TO 95% DENSITY ELSEWHERE (AASHTO T-180)
- COMPACTION AND DENSITY TESTS SHALL BE COMPLETED DURING BACKFILL OPERATIONS. CONTRACTORS NOT FOLLOWING THIS PROCEDURE, FOR WHATEVER REASONS, SHALL BE REQUIRED TO RE-EXCAVATE THE AREA IN QUESTION, DOWN TO THE BEDDING MATERIAL, THEN BACKFILL FOLLOWING THE ABOVE PROCEDURES.

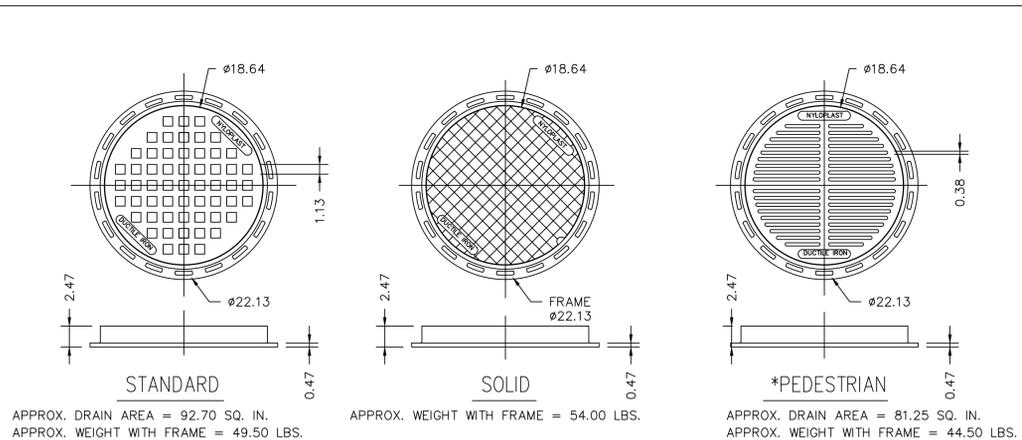
TYPICAL BACKFILL DETAIL GU 2.1

18" DRAIN BASIN



18" DRAIN BASIN

N.T.S.



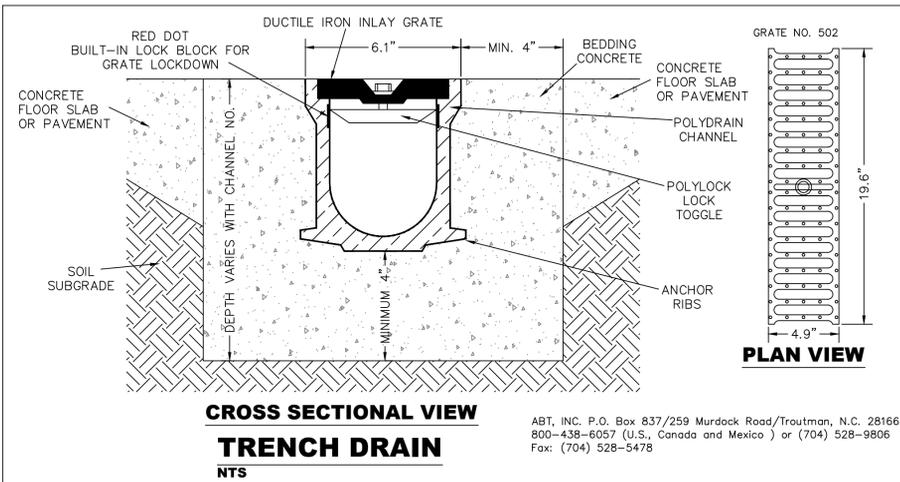
NYLOPLAST 18" GRATES/COVERS

STANDARD GRATE HAS H-25 HEAVY DUTY RATING
SOLID COVER HAS H-25 HEAVY DUTY RATING
PEDESTRIAN GRATE HAS H-10 MEDIUM DUTY RATING
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
MATERIAL: DUCTILE IRON
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST
PRICE INCLUDES FRAME & GRATE/COVER

* SIZE OF OPENING MEETS REQUIREMENTS OF AMERICAN DISABILITY ACT AS STATED IN FEDERAL REGISTER PART III, DEPARTMENT OF JUSTICE, 28 CFR PART 36, NONDISCRIMINATION ON THE BASIS OF DISABILITY BY PUBLIC ACCOMMODATIONS AND IN COMMERCIAL FACILITIES; FINAL RULE.

18" GRATES/COVERS

N.T.S.



CROSS SECTIONAL VIEW
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PAVING & DRAINAGE DETAILS FOR:
215 NE 7TH AVE
3-UNIT TOWNHOMES
DELRAY BEACH, FLORIDA

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CITY OF DELRAY BEACH GENERAL NOTES

DEFINITIONS

1. CITY – THE CITY OF DELRAY BEACH
2. CONTRACTOR – UTILITY CONTRACTOR AND ALL UTILITY SUBCONTRACTORS
3. ENGINEER – ENGINEER RESPONSIBLE FOR INSPECTION AND CERTIFICATION

PROCEDURE

1. A PRE-CONSTRUCTION MEETING IS TO BE HELD PRIOR TO DELIVERY OF MATERIALS AND INITIATION OF ANY WATER AND SEWER CONSTRUCTION. THE MEETING SHALL BE ATTENDED BY THE CITY, CONTRACTOR, SUBCONTRACTORS, ENGINEER AND OTHER INTERESTED PARTIES.
2. ANY REVISIONS TO THE APPROVED PLANS MUST BE APPROVED BY THE CITY PRIOR TO THE PRE-CONSTRUCTION MEETING.
3. A MINIMUM OF THREE (3) COPIES OF THE CURRENT APPROVED PRODUCT LIST AND ALL NECESSARY SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO SCHEDULING THE PRE-CONSTRUCTION MEETING. ALL PIPE MANUFACTURERS SHALL SUBMIT THREE (3) COPIES OF AN AFFIDAVIT THAT THE PIPE AND COATINGS WERE MANUFACTURED IN ACCORDANCE WITH AWWA C151/A21.51-91.
4. ALL APPLICABLE PERMITS MUST BE OBTAINED WITH COPIES PROVIDED TO THE CITY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. THE CONTRACTOR SHALL MAINTAIN A CURRENT APPROVED SET OF CONSTRUCTION DOCUMENTS ON SITE AT ALL TIMES.
6. ALL MATERIALS SUPPLIED SHALL CONFORM TO PRODUCT LIST AND SHOP DRAWINGS AS APPROVED BY THE CITY PRIOR TO CONSTRUCTION. ALL REQUESTS FOR MATERIAL SUBSTITUTION SHALL BE APPROVED PRIOR TO DELIVERY OF THESE MATERIALS TO THE JOB SITE.
7. THE LOCATION OF THE EXISTING UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF OTHER UTILITIES (NOT SHOWN ON THE PLAN) EXIST WITHIN THE AREA OF CONSTRUCTION. SHOULD THERE BE UTILITY CONFLICTS, THE CONTRACTOR SHALL INFORM THE CITY AND NOTIFY THE RESPECTIVE UTILITY OWNER TO RESOLVE THE UTILITY CONFLICTS AND THE UTILITY ADJUSTMENTS AS REQUIRED.
8. THE CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES THROUGHOUT THE DURATION OF CONSTRUCTION FOR THE PROTECTION OF EXISTING AND NEWLY INSTALLED UTILITIES FROM DAMAGE OR DISRUPTION OF SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING SUCH MEASURES AS NECESSARY TO PROTECT THE HEALTH, SAFETY, AND WELFARE OF THOSE PERSONS HAVING ACCESS TO THE WORK SITE.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATIONS OF ALL OTHER UTILITY FACILITIES.
10. THE CONTRACTOR SHALL SCHEDULE INSPECTIONS AND TESTS WITH THE CITY A MINIMUM OF 24 HOURS IN ADVANCE.
11. CONTRACTOR SHALL NOT DISTURB EXISTING CITY MAINS OR STRUCTURES WITHOUT THE PRESENCE OF A CITY INSPECTOR. CITY UTILITY SYSTEM VALVES AND APPURTENANCES MAY ONLY BE OPERATED BY CITY PERSONNEL.
12. FACILITIES PROPOSED HEREIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED PLANS. DEVIATIONS FROM THE APPROVED PLANS MUST BE APPROVED IN ADVANCE BY THE CITY.
13. UPON COMPLETION OF CONSTRUCTION AND PRIOR TO FINAL ACCEPTANCE OF THE WORK, A FINAL INSPECTION SHALL VERIFY PROPER ADHERENCE TO ALL FACETS OF THE PLANS AND SPECIFICATIONS.
14. PAVING, DRAINAGE AND TRAFFIC CONSTRUCTION SHALL CONFORM TO FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND DESIGN STANDARDS, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND PALM BEACH COUNTY TYPICAL T-P-17 (LATEST REVISION) UNLESS SHOWN OTHERWISE.
15. AS-BUILT DRAWINGS SHALL BE PREPARED BY A REGISTERED LAND SURVEYOR, REGISTERED IN THE STATE OF FLORIDA, AND SUBMITTED BY THE CONTRACTOR TO THE CITY.
16. PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH FLORIDA STATUTE 553-851 FOR PROTECTION OF UNDERGROUND GAS PIPE LINES.
17. CONTRACTOR SHALL NOTIFY SUNSHINE STATE ONE (1-800-432-4770) 48 HOURS IN ADVANCE OF CONSTRUCTION.

18. GRADES SHOWN ON PLANS ARE FINISHED GRADES. THE CONTRACTOR SHALL BE REQUIRED TO ADJUST EXISTING SANITARY SEWER MANHOLE TOPS AND VALVE BOX COVERS TO FINISHED GRADE.
19. CONTRACTOR SHALL MAINTAIN LOCAL TRAFFIC AT ALL TIMES DURING CONSTRUCTION AND SHALL BE REQUIRED TO PROVIDE ALL BARRICADES, LIGHTING, SIGNAGE AND FLAGMEN AS NECESSARY TO PROVIDE FOR THE SAFETY OF THE PUBLIC IN THE WORK AREA. THE CONTRACTOR SHALL SUBMIT A DETAILED TRAFFIC MAINTENANCE PLAN PRIOR TO CONSTRUCTION.
20. EXISTING BASE MATERIAL THAT IS REMOVED DURING CONSTRUCTION SHALL NOT BE USED IN THE CONSTRUCTION OF NEW LIMEROCK BASE.
21. ALL VEGETATION, DEBRIS, CONCRETE OR OTHER UNSUITABLE MATERIAL SHALL BE LEGALLY DISPOSED OF OFF-SITE IN AN AREA AT THE CONTRACTOR'S EXPENSE.
22. CONTRACTOR SHALL UTILIZE CONSTRUCTION METHODS AND DEVICES, SUCH AS TURBIDITY SCREENS, CURTAINS AND FLOATING SILT BARRIERS WHERE NECESSARY IN ORDER TO COMPLY WITH ALL STATE AND LOCAL WATER QUALITY STANDARDS.
23. ALL REINFORCED CONCRETE STORM SEWER PIPE SHALL BE CLASS III, UNLESS OTHERWISE NOTED.
24. ALL PAVED SURFACES SHALL BE PROPERLY MARKED PRIOR TO HOURS OF DARKNESS. PERMANENT PAVEMENT MARKING STALLS SHALL BE LAID OUT USING MARKING CHALK. LAYOUT TO BE REVIEWED BY THE CITY PRIOR TO PLACEMENT OF FINAL MARKING.
25. EMBANKMENT (FILL) AND EXCESS MATERIAL REQUIRED FOR ROADWAY RECONSTRUCTION AND UTILITY INSTALLATIONS SHALL BE SUPPLIED AND/OR DISPOSED OF BY THE CONTRACTOR. ALL COSTS ASSOCIATED WITH EARTHWORK REQUIREMENTS TO COMPLETE THE ROADWAY RECONSTRUCTION AND UTILITY IMPROVEMENTS SHALL BE INCLUDED IN THE COSTS OF OTHER APPROPRIATE PAY ITEMS.
26. CONTINUITY OF WATER AND SEWER SERVICE TO CITY UTILITY CUSTOMERS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THIS PROJECT. IF A BREAK IN SERVICE IS UNAVOIDABLE TO ACCOMMODATE CONNECTION OF NEW FACILITIES, IT SHALL BE SCHEDULED FOR OFF PEAK HOURS WITH THE CITY. DETERMINATION OF SERVICE BREAK REQUIREMENT WILL BE MADE BY THE CITY.
27. SITE INFORMATION BASED ON A SURVEY PREPARED BY: O'BRIEN, SUITER, & O'BRIEN
28. THE EXTENT OF ROAD CONSTRUCTION WORK TO BE COMPLETED BY THE CONTRACTOR, WITHIN THE RAILROAD RIGHT-OF-WAY SHALL BE DETERMINED BY THE CITY AND COORDINATED WITH THE FLORIDA EAST COAST RAILWAY COMPANY AT THE TIME OF CONSTRUCTION.
29. RELOCATION OF UTILITY POLES AND GAS PIPE LINES SHALL BE COORDINATED BY THE CONTRACTOR WITH FLORIDA POWER AND LIGHT, AND FLORIDA PUBLIC UTILITIES, RESPECTIVELY. EACH UTILITY HAS BEEN NOTIFIED THAT THEY WILL BE REQUIRED TO RELOCATE THEIR UTILITIES.
30. ALL CITY OF DELRAY BEACH STANDARD DETAILS INCLUDED IN THE CIVIL PLANS PREPARED BY ENVIRODESIGN ASSOCIATES, INC. HAVE NOT BEEN MODIFIED FROM THEIR ORIGINAL CONTENT.
31. CONTRACTOR TO FIELD VERIFY EXACT LOCATION, SIZE, AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO ENVIRODESIGN ASSOCIATES, INC.
32. NO PROPOSED IMPROVEMENTS, BUILDINGS OR ANY KIND OF CONSTRUCTION CAN BE PLACED ON OR WITHIN ANY WATER, SEWER OR DRAINAGE EASEMENTS, UNLESS APPROVED BY THE CITY OF DELRAY BEACH CITY ENGINEER.
33. NO PROPOSED STRUCTURES SHALL BE INSTALLED WITHIN A HORIZONTAL DISTANCE OF 10- FEET FROM ANY EXISTING OR PROPOSED WATER, SEWER OR DRAINAGE FACILITIES, UNLESS APPROVED BY THE CITY OF DELRAY BEACH CITY ENGINEER.
34. NOTE: ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER OR DRAINAGE EASEMENTS, THEY SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS; LD 1.1 & LD 1.2
35. ALL SIDEWALKS TO BE CONSTRUCTED IN ACCORDANCE WITH ADA REQUIREMENTS. ALL SIDEWALKS NOT TO EXCEED 1:48 CROSS-SLOPE AND 1:20 RUNNING SLOPES. ALL RAMPS NOT TO EXCEED 1:48 CROSS-SLOPE AND 1:12 RUNNING SLOPES WITH MAXIMUM RISE AND RUNS PER ADA REQUIREMENTS WITH RAILINGS WHERE NEEDED. LANDINGS WITH 1:48 CROSS- AND RUNNING-SLOPES ARE TO BE PROVIDED AT TOPS AND BOTTOMS OF ALL RAMPS.
36. CITY OF DELRAY BEACH UTILITY DIVISION MUST BE CONTACTED AT LEAST 48 HOURS PRIOR TO ANY SHUTDOWN AND/OR REMOVAL OF EXISTING WATER MAIN OR SANITARY SEWER LINES AT 561-243-7312.
37. THE EXISTING SANITARY SEWER LINE MUST BE TELEVIEWED PRIOR TO AND AFTER ANY SANITARY SEWER SERVICE CONNECTION, REMOVAL AND/OR ABANDONMENT.
38. UPON APPROVAL AND RECEIPT OF PERMIT, THE CONTRACTOR SHALL CONTACT THE CITY OF DELRAY BEACH DEPUTY DIRECTOR OF CONSTRUCTION AT 561-243-7320 TO SCHEDULE A PRECONSTRUCTION MEETING PRIOR TO STARTING ANY SITE WORK.
39. ALL WATER METER SIZES TO BE DETERMINED BY PLUMBING ENGINEERING OF RECORD AND SHALL BE CHECKED AND AUTHORIZED BY CITY OF DELRAY BEACH UTILITIES DIVISION.
40. ALL CITY OF DELRAY BEACH 2016 STANDARD DETAILS INCLUDED IN THIS SET OF PLANS AND DETAILS HAVE NOT BEEN MODIFIED FROM THEIR ORIGINAL CONTENT.

PAVING, GRADING AND DRAINAGE NOTES

1. ALL PAVING AND DRAINAGE WORK IN THE PALM BEACH COUNTY (PBC) RIGHT-OF-WAY SHALL BE CONSTRUCTED IN FULL ACCORDANCE WITH THE PBC LATEST STANDARDS. ALL PAVING AND DRAINAGE WORK IN THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) RIGHT-OF-WAY SHALL BE CONSTRUCTED IN FULL ACCORDANCE WITH THE FDOT LATEST STANDARDS.
2. COMPACTED SUBGRADE SHALL BE COMPACTED AND MEET THE DENSITY REQUIREMENTS AS DETERMINED BY THE AASHTO T-180 SPECIFICATIONS. SUBGRADE SHALL EXTEND 12 INCHES BEYOND THE PROPOSED EDGE OF PAVEMENT AND/OR 6" BEYOND VALLEY GUTTER, TYPE "T" CURB & GUTTER, OR TYPE "D" CURB. SUBGRADE SHALL BE 12 INCHES THICK COMPACTED TO 98% ACCORDING TO AASHTO T-180. ALL MUCK, STUMPS, ROOTS OR OTHER DELETERIOUS MATTER ENCOUNTERED IN THE PREPARATION OF THE SUBGRADE SHALL BE REMOVED COMPLETELY FROM THE CENTERLINE OF THE ROADWAY TO A WIDTH OF TEN FEET BEYOND THE EDGE OF PAVEMENT. IF SUBGRADE IS REQUIRED TO BE STABILIZED, THE REQUIRED BEARING VALUE DETERMINATIONS SHALL BE MADE BY THE FLORIDA BEARING TEST, TEST METHOD "C" OF AASHTO T-180 SPECIFICATIONS.
3. SHELLROCK BASE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 250 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. THE THICKNESS OF THE SHELLROCK BASE SHALL BE AS SHOWN ON THE DETAILED DRAWINGS AND SHALL BE COMPACTED TO A DENSITY OF 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. THE SHELLROCK SHALL HAVE A MINIMUM OF 40% CARBONATES OF CALCIUM AND MAGNESIUM IN THE MATERIAL.
4. LIMEROCK BASE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 200 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. THE THICKNESS OF THE LIMEROCK BASE SHALL BE AS SHOWN ON THE DETAILED DRAWINGS AND SHALL BE COMPACTED TO A DENSITY OF 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
5. MUCK AND PEAT – IF MUCK AND/OR PEAT ARE ENCOUNTERED IN THE ROAD OR PARKING AREA, THEY WILL BE REMOVED COMPLETELY TO A WIDTH OF TEN FEET BEYOND THE EDGE OF PAVEMENT AND SHALL BE BACKFILLED WITH GRANULAR MATERIAL. IF HARDPAN IS ENCOUNTERED IN THE SWALE AREA, IT WILL BE REMOVED TO A WIDTH OF TWO FEET AT THE SWALE INVERT AND REPLACED WITH GRANULAR MATERIAL.
6. WHERE SOD IS DESIRED, LOWER THE GRADE 2 INCHES BELOW THE FINISHED GRADE TO ALLOW FOR THE THICKNESS OF THE SOD.
7. CLEARING AND GRUBBING – WITHIN THE LIMITS OF CONSTRUCTION ALL VEGETATION AND ROOT MATERIAL SHALL BE REMOVED.
8. GUMBO – WHERE GUMBO OR OTHER PLASTIC CLAYS ARE ENCOUNTERED, THEY SHALL BE REMOVED WITHIN THE ROADWAY AND PARKING AREAS ONE FOOT BELOW THE SUBGRADE EXTENDING HORIZONTALLY TO THE OUTSIDE EDGE OF THE SHOULDER AREA.
9. PRIME COAT SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. PRIME COAT SHALL BE RC-70 OR ASPHALT EMULSION PRIME (AEP). PRIME COAT SHALL BE APPLIED AT A RATE OF APPLICATION NOT LESS THAN 0.10 GALLONS PER SQUARE YARD FOR LIMEROCK BASES AND NOT LESS THAN 0.15 GALLONS PER SQUARE YARD FOR SHELL ROCK OR COQUINA SHELL BASES.
10. TACK COAT – BITUMINOUS TACK COAT SHALL CONFORM WITH THE REQUIREMENTS OF THE FDOT SPECIFICATIONS, LATEST EDITION AND SHALL BE APPLIED AT THE RATE OF 0.08 GALLONS PER SQUARE YARD, UNLESS A VARIATION IS APPROVED BY THE ENGINEER.
11. ASPHALTIC CONCRETE SURFACE COURSE SHALL BE IN ACCORDANCE WITH SECTION 334 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. THE THICKNESS OF THE SURFACE COURSE SHALL BE AS SHOWN ON THE DETAILED DRAWINGS.
12. ALL CONCRETE SHALL DEVELOP 2500 p.s.i. (MINIMUM) 28 DAY COMPRESSIVE STRENGTH OR GREATER WHERE NOTED ON PLANS. CLASS I CONCRETE SHALL CONFORM WITH THE FDOT SPECIFICATIONS, LATEST EDITION. CLASS I CONCRETE USED AS PAVING SHALL DEVELOP 3000 p.s.i. (MINIMUM) 28 DAYS COMPRESSIVE STRENGTH.
13. PAVEMENT TRAFFIC STRIPES AND MARKINGS SHALL BE IN ACCORDANCE WITH CITY OF DELRAY BEACH CURRENT STANDARDS AND/OR MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND/OR PALM BEACH COUNTY TRAFFIC DEPARTMENT TYPICAL T-P-17, WHERE APPLICABLE.
14. SEQUENCE OF CONSTRUCTION – THE SEQUENCE OF CONSTRUCTION SHALL BE SUCH THAT ALL UNDERGROUND INSTALLATIONS OF EVERY KIND THAT ARE BENEATH THE PAVEMENT, SHALL BE IN PLACE AND HAVE PROPER DENSITY PRIOR TO THE CONSTRUCTION AND COMPACTION OF THE SUBGRADE.
15. INLETS AND MANHOLES – ALL INLETS AND MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FDOT SPECIFICATIONS, LATEST EDITION, AND ROADWAY AND TRAFFIC DESIGN STANDARDS, LATEST EDITION, AND PBC STANDARDS LATEST EDITION, WHERE APPLICABLE.
16. GRATE ELEVATIONS REFER TO THE FLOWLINE OF THE GRATE.
17. GRADES SHOWN ARE FINISHED GRADES.
18. MINIMUM ROAD CROWN ELEVATION SHALL BE EL. N/A N.A.V.D.
19. REINFORCED CONCRETE PIPE – THE PIPE SHALL CONFORM WITH THE REQUIREMENTS OF CLASS III OF ASTM C-76 AND WITH THE FDOT SPECIFICATIONS, LATEST EDITION. THE FIRST JOINT OF PIPE ENTERING OR LEAVING A MANHOLE OR INLET SHALL BE WRAPPED WITH FILTER FABRIC PER FDOT SPECIFICATIONS.
20. CORRUGATED ALUMINUM PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M196 AND SECTIONS 125, 430 AND 343 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
21. MEASUREMENT OF THE LENGTH OF PIPE SHALL BE FROM THE CENTER OF THE STRUCTURE TO THE CENTER OF THE STRUCTURE.
22. PIPE BACKFILL – REQUIREMENTS FOR PIPE BACKFILL CROSSING ROADS OR PARKING AREAS SHALL BE DEFINED IN THE FDOT SPECIFICATIONS, LATEST EDITION. PIPELINE BACKFILL SHALL BE PLACED IN SIX INCH LIFTS AND COMPACTED TO 100% OF THE STANDARD PROCTOR (AASHTO) T-99 SPECIFICATIONS.
23. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THREE (3) CERTIFIED COPIES OF A CHEMICAL AND SIEVE ANALYSIS OF THE SHELL ROCK BY A STATE OF FLORIDA CERTIFIED LAB WHEN CONSTRUCTING A SHELL ROCK BASE FOR ROADWAY.
24. PRIOR TO CERTIFICATION OF THE DRAINAGE SYSTEM, THE CONTRACTOR MUST PUMP DOWN AND LAMP THE DRAINAGE SYSTEM FOR INSPECTION BY THE ENGINEER AFTER FINISHED ROCK FOR THE ROADWAYS HAS BEEN INSTALLED.

GENERAL NOTES

1. CONTRACTOR SHALL PROTECT ALL PERMANENT REFERENCE MONUMENTS AND TAKE ALL PRECAUTIONS NECESSARY TO AVOID SURVEY MARKERS DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF PERMANENT REFERENCE MONUMENTS DISTURBED DURING CONSTRUCTION, AT NO ADDITIONAL COST TO THE OWNER.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UNDERGROUND UTILITIES WHETHER OR NOT SHOWN ON THE PLANS. UTILITIES SHOWN ON THE PLANS ARE FOR REFERENCE ONLY AND MAY NOT DEPICT ACTUAL LOCATIONS. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES FOR LOCATION AND DEPTH OF THEIR LINES PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND PAY FOR THE DEENERGIZING OF POWER LINES AND/OR HOLDING POWER POLES DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
4. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND PAY FOR THE REPLACEMENT OF TRAFFIC LOOPS IF DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
5. ALL ELEVATIONS REFER TO N.A.V.D. 1988. MINIMUM FINISHED FLOOR ELEVATION FOR ANY RESIDENTIAL STRUCTURE SHALL BE SET AT OR ABOVE ELEVATION 11.0' (WHICH IS ABOVE THE 100-YEAR FREQUENCY STORM).
6. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION OR INSTALLATION AS REQUIRED BY THE ENGINEER OR BY THE APPROPRIATE GOVERNING AGENCIES.
7. CONTRACTOR SHALL BE RESPONSIBLE TO SECURE AND PAY FOR, AT NO ADDITIONAL COST TO THE OWNER, ALL NECESSARY PERMITS, FEES AND LICENSES.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR GIVING THE REQUIRED NOTICES AND COMPLYING WITH ALL PERMIT(S) CONDITIONS.
9. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND PAY FOR THE HOLDING OF OTHER UTILITY POLES DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
10. ALL CONCRETE SHALL DEVELOP 2500 p.s.i. (MINIMUM) 28 DAY COMPRESSIVE STRENGTH OR GREATER WHERE NOTED ON PLANS. CLASS I CONCRETE SHALL CONFORM WITH THE FDOT SPECIFICATIONS, LATEST EDITION. CLASS I CONCRETE USED AS PAVING SHALL DEVELOP 3000 p.s.i. (MINIMUM) 28 DAYS COMPRESSIVE STRENGTH.
11. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL UTILITY.
12. ENVIRODESIGN ASSOC. INC. SHALL NOT BE RESPONSIBLE FOR THE SAFETY OF THE WORKERS OR THE GENERAL PUBLIC. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFETY TO THE WORKERS IN ACCORDANCE WITH OCCUPATIONAL SAFETY & HEALTH ADMINISTRATIONS (OSHA) REQUIREMENTS AND THE SAFETY OF THE GENERAL PUBLIC.
13. ALL MATERIALS AND WORKMANSHIP MUST BE IN ACCORDANCE WITH THE LOCAL UTILITY STANDARDS AND SPECIFICATIONS.
14. THE CONTRACTOR SHALL CALL SUNSHINE 1-800-432-4770 48 HOURS BEFORE DIGGING FOR FIELD LOCATIONS OF UNDERGROUND UTILITIES.
15. CORRUGATED ALUMINUM PIPE USED BENEATH PAVEMENT SHALL BE IN CONFORMANCE WITH SEC. 8.24.E.5.i
16. ALL CONSTRUCTION ACTIVITY, INCLUDING TRENCHING, IS TO BE A MINIMUM OF SIX FEET FROM THE BASE OF ANY TREE THAT IS DESIGNATED TO REMAIN.
17. ALL LIMEROCK AND BASE MATERIALS SHALL BE REMOVED FROM THE PLANTER AREAS/ISLANDS AND REPLACED WITH APPROPRIATE PLANTING SOIL PRIOR TO THE LANDSCAPING OF THE SITE.
18. THE REMOVAL OF ANY TREE ON THE SITE IS PROHIBITED WITHOUT THE REQUIRED PERMITS.
19. ALL MATERIALS AND CONSTRUCTION WITHIN THE FDOT RIGHT-OF-WAY SHALL CONFORM TO THE FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM (LATEST ED.).
20. LANE CLOSURES WITHIN THE FDOT RIGHT-OF-WAY SHALL BE LIMITED TO THE HOURS OF 9AM-3PM, MONDAY-FRIDAY EXCLUDING GOVERNMENTAL HOLIDAYS. MAINTENANCE OF TRAFFIC SHALL BE PROVIDED IN ACCORDANCE WITH INDEX 613 OF THE FDOT DESIGN STANDARDS (LATEST ED.).



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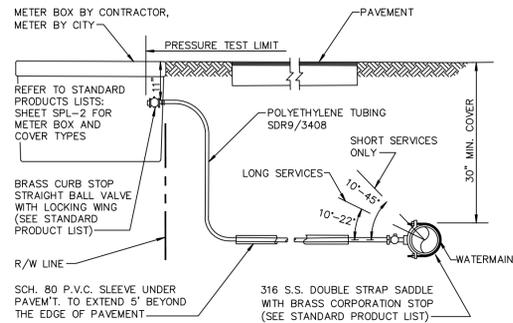
PAVING & DRAINAGE DETAILS FOR:
215 NE 7TH AVE
3-UNIT TOWNHOMES
DELRAY BEACH, FLORIDA

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FLORIDA CERTIFICATE OF AUTHORIZATION No. 6506
298 Pineapple Grove Way Delray Beach, Florida 33444
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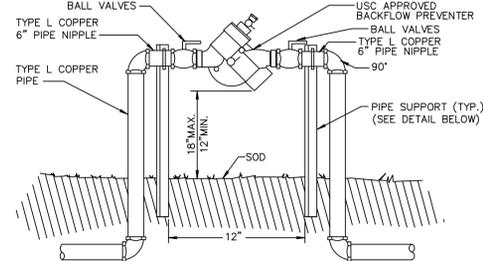
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J.A.P.
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JOB NO.
18127-DTL
SHEET NO.
4 OF 7

BY:	
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DATE:	
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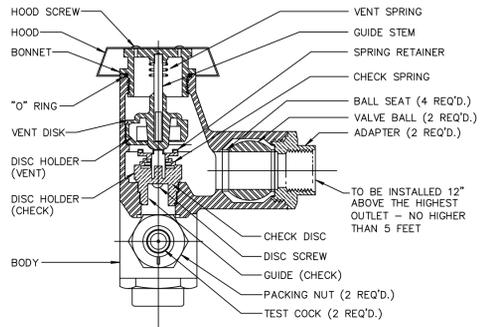
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FL REG # 42696



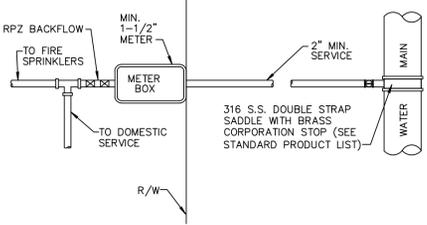
- NOTES:**
- SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" ON CENTER.
 - SERVICE LINES SHALL NOT BE PLACED UNDER DRIVEWAYS.
 - ALL METERS REQUIRE A LOCKING BRASS CURB STOP WITH LOCK WING (1" MIN.).
 - NO FITTINGS BETWEEN CORPORATION STOP AND BRANCH ASSEMBLY.
 - MAXIMUM SERVICE LENGTH IS 100' TO METER.
 - CASING PIPE I.D. SHALL BE SERVICE O.D. PLUS 1" MINIMUM.
 - MINIMUM BEND RADIUS ON SERVICES SHALL BE 14" ON ALL SERVICES BEHIND METER.
 - METER SIZE WILL BE DETERMINED BY PUBLIC UTILITIES DEPT. UPON APPLICATION FOR SERVICE.
 - ALL VALVES TO BE BALL VALVES.
 - METER BOX SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR.
 - ALL SERVICES UNDER ROADWAYS ARE TO BE INSTALLED BY TRENCHLESS METHOD, UNLESS OTHERWISE APPROVED.
 - ALL EXISTING SERVICES TO BE FIELD VERIFIED BY BUILDER/CONTRACTOR/DEVELOPER; IF EXISTING SERVICE IS GALVANIZED, BUILDER/CONTRACTOR/DEVELOPER SHALL REPLACE WITH POLYETHYLENE PIPING FROM MAIN TO THE METER.
- TYPICAL SERVICE CONNECTION PW 9.1a



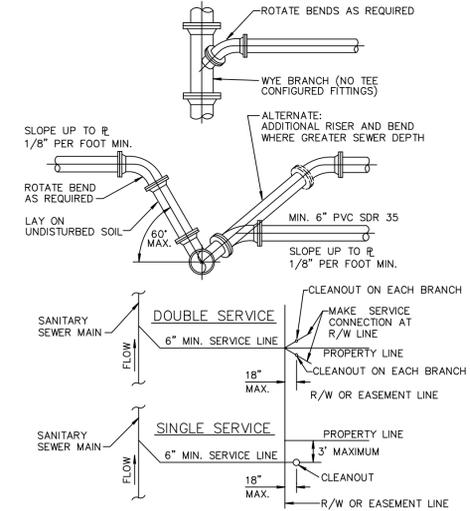
- NOTES:**
- FOR ALL SERVICES LESS THAN OR EQUAL TO 2" DIA.
 - ABOVE GRADE PIPING SHALL BE BRASS OR TYPE "L" COPPER TUBING.
 - ALL COPPER JOINTS SHALL BE MADE WITH 95/5 SOLDER.
 - RPZ BACKFLOW PREVENTER IS REQUIRED IN ACCORDANCE WITH CITY OF DELRAY BEACH CODE OF ORDINANCES TITLE V, CHAPTER 52.80.
 - USE OF OTHER PIPE MATERIALS WITH APPROVAL OF DEPUTY DIRECTOR OF UTILITIES.
 - RPZ BACKFLOW PREVENTER IS REQUIRED FOR ALL COMMERCIAL PROPERTIES AND ALL RESIDENTIAL PROPERTIES WITH FIRE SPRINKLER SYSTEMS.
- REDUCED PRESSURE ZONE BACKFLOW PREVENTER PW 10.2



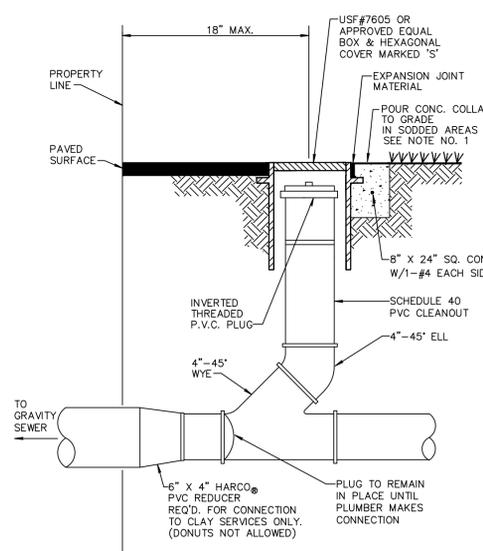
- TYPICAL IRRIGATION SYSTEM ANTI-SIPHON PRESSURE TYPE VACUUM BREAKER**
- NOTES:**
- WATTS REGULATOR COMPANY OR EQUIVALENT.
 - VALVE SHALL MEET OR EXCEED THE A.S.S.E., BS&A AND U.S.C.F. REQUIREMENTS.
 - SHALL ALSO BE LISTED BY IAPMO (UPC).
 - USE OF OTHER PIPE MATERIALS WITH APPROVAL OF DEPUTY DIR. OF UTILITIES.
 - ABOVE GRADE PIPING SHALL BE PVC OR COPPER.
- ANTI-SIPHON PRESSURE TYPE VACUUM BREAKER PW 10.3



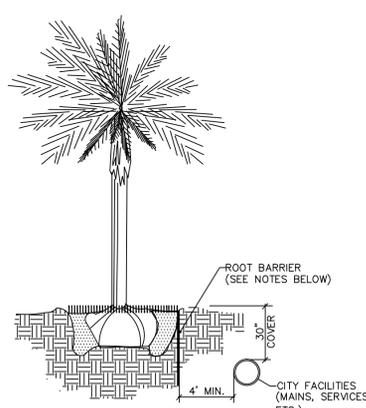
- NOTES:**
- SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" ON CENTER.
 - SERVICE LINES SHALL NOT BE PLACED UNDER DRIVEWAYS.
 - ALL SERVICE LINES REQUIRE A LOCKING BRASS CURB STOP WITH LOCK WING (1" MIN.).
 - NO FITTINGS BETWEEN CORPORATION STOP AND BRANCH ASSEMBLY.
 - MAXIMUM SERVICE LENGTH IS 100' TO METER.
 - CASING PIPE I.D. SHALL BE SERVICE O.D. PLUS 1" MINIMUM.
 - MINIMUM BEND RADIUS ON SERVICES SHALL BE 14" ON ALL SERVICES BEHIND METER.
 - ALL VALVES TO BE BALL VALVES.
 - METER BOX SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR.
 - ALL EXISTING SERVICES TO BE FIELD VERIFIED BY BUILDER/CONTRACTOR/DEVELOPER; IF EXISTING SERVICE IS GALVANIZED, BUILDER/CONTRACTOR/DEVELOPER SHALL REPLACE WITH POLYETHYLENE PIPING FROM MAIN TO METER.
- TYPICAL DOUBLE SERVICE CONNECTION PW 9.1c



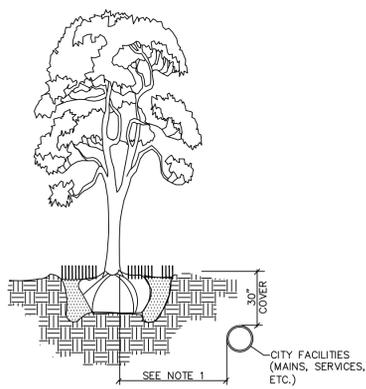
- NOTE:**
- SERVICE LATERALS SHALL TERMINATE INSIDE PROPERTY LINE A DEPTH OF 3 FEET AND MARKED WITH A 2" X 4" TREATED STAKE.
 - CLEANOUT INSTALLATION SHALL BE PROPERTY OWNERS RESPONSIBILITY AND SHALL BE INSTALLED BY LICENSED PLUMBER.
 - SEE DETAIL PW 2.1 FOR SEPARATION REQUIREMENTS.
- SEWER SERVICE CONNECTIONS WW 4.1



- NOTE:**
- INVERTED BRASS CAP SHALL BE USED IN GRASS AREAS IN LIEU OF CASTING AND CONE COLLAR.
 - MINIMUM DEPTH OF SERVICE LATERAL SHALL BE 3 FEET.
- TYPICAL RESIDENTIAL CLEANOUT WW 5.1



- NOTES:**
- ALL ROOT BARRIERS SHALL BE 4' MINIMUM FROM ALL CITY FACILITIES.
 - THE INSTALLATION OF ROOT BARRIERS SHALL BE COORDINATED WITH CITY AND INSPECTED BY CITY PRIOR TO BACKFILLING. ALL ROOT BARRIERS SHALL EXTEND UP TO FINISHED GRADE.
 - ROOT BARRIERS SHALL BE MINIMUM 36" DEEP. APPROVED PRODUCTS INCLUDE "DEEP ROOT" AND "ROOT SOLUTIONS". FLEXIBLE BARRIERS SHALL BE 36" PANELS MANUFACTURED BY BIOBARRIER.
 - ALL ROOT BARRIERS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS.
- TYPICAL TREE WITH ROOT BARRIER LD 1.1



- NOTES:**
- THIS DISTANCE SHALL BE 10' MINIMUM FROM ALL CITY FACILITIES IF NO ROOT BARRIER IS USED.
- TYPICAL TREE WITHOUT ROOT BARRIER LD 1.2

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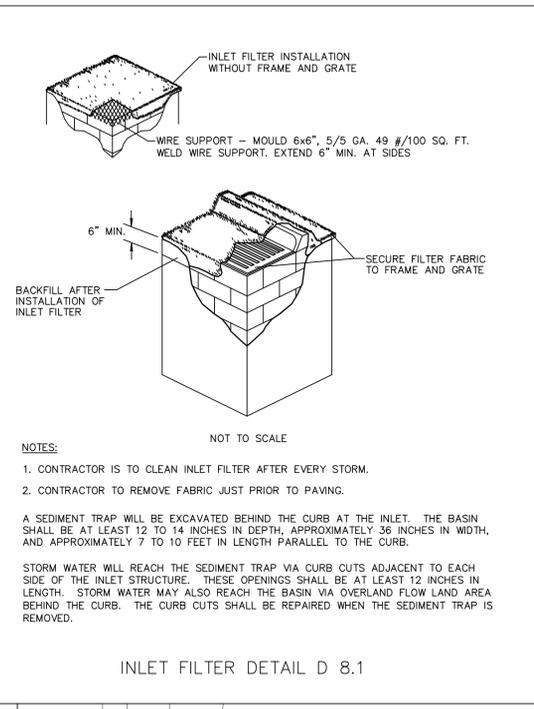
BY:	
DATE:	
REVISIONS:	
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NOT VALID WITHOUT ENGINEER'S SEAL	JOSEPH A. PIKE, P.E. FL REG # 42696
WATER & WASTEWATER DETAILS FOR: 215 NE 7TH AVE 3-UNIT TOWNHOMES DELRAY BEACH, FLORIDA	
EnviroDesign Associates Inc. www.envirodesign.com	ENGINERS • ENVIRONMENTAL CONSULTANTS
FLORIDA CERTIFICATE OF AUTHORIZATION No. 6506 298 Pineapple Grove Way Delray Beach, Florida 33444 Phone: (561) 274-6500 Fax: (561) 274-8558	
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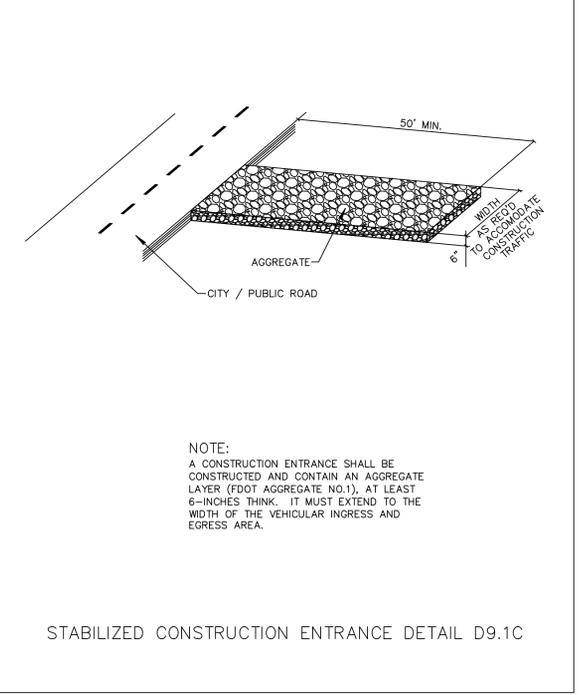
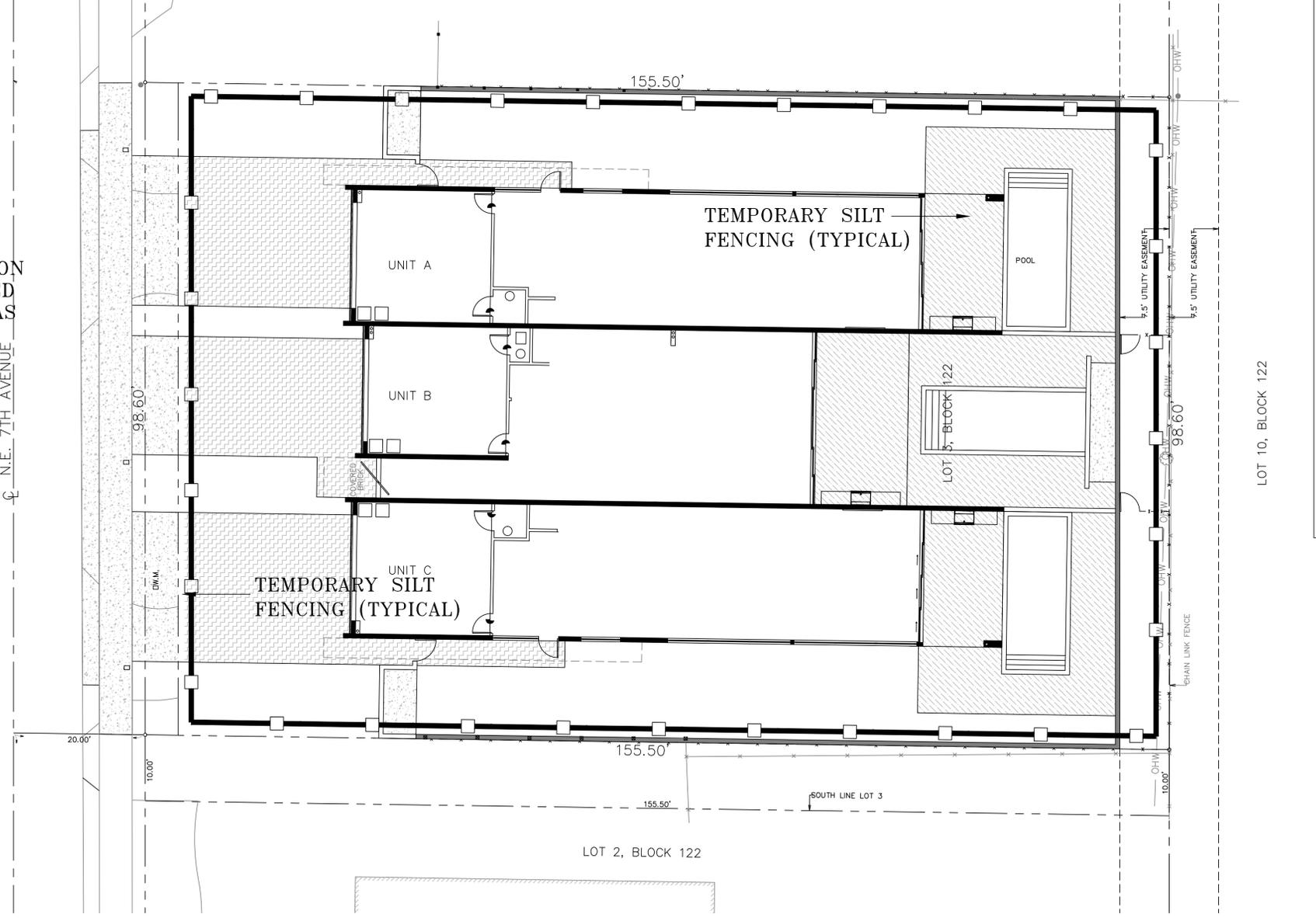
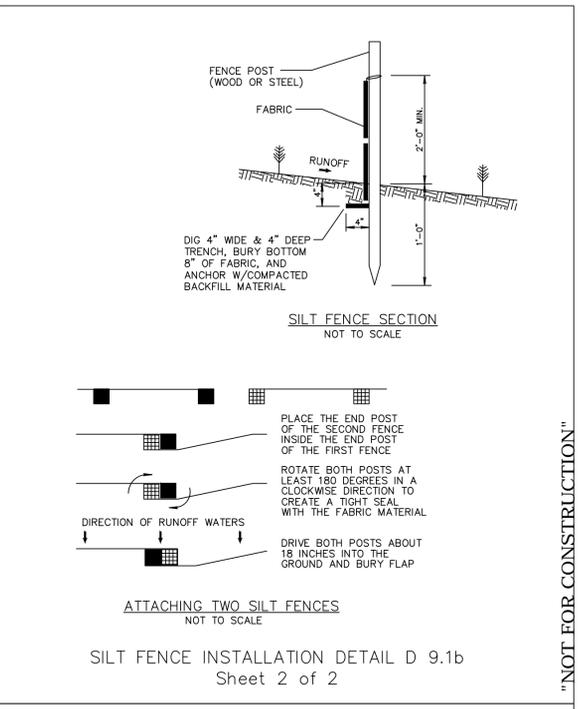
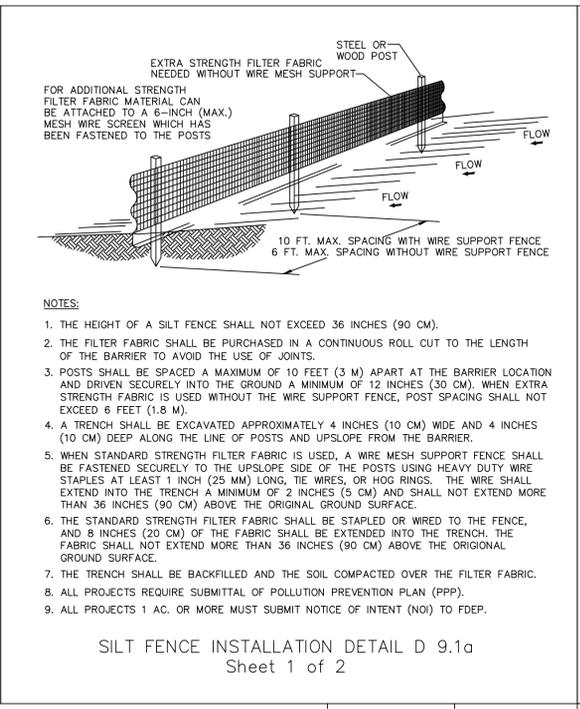
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EROSION CONTROL NOTES DETAIL D9.1

- THE INTENT OF EROSION CONTROL MEASURES INDICATED GRAPHICALLY ON PLANS IS TO PROVIDE A BARRIER TO CONTAIN SILT AND SEDIMENT ON THE PROJECT SITE. THIS REPRESENTATION IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE TEST OF EROSION CONTROL EFFECTIVENESS IS NOT TO BE DETERMINED BY ADHERENCE TO THE REPRESENT SET FORTH ON THE DRAWINGS AND SPECIFICATIONS, BUT BY MEETING THE REGULATIONS SET FORTH BY THE AUTHORITY HAVING JURISDICTION OVER WATER QUALITY CONTROL AND OTHER SEDIMENTATION RESTRICTION REQUIREMENTS IN THE REGION.
- APPROVED EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING, EXCAVATION, FILLING, OR OTHER LAND DISTURBANCE ACTIVITIES, EXCEPT THOSE OPERATIONS NEEDED TO INSTALL SUCH MEASURES.
- INSPECTION OF ALL EROSION CONTROL MEASURES SHALL BE CONDUCTED WEEKLY, OR AFTER EACH RAINFALL EVENT, REPAIR, AND/OR REPLACEMENT OF SUCH MEASURES SHALL BE MADE PROMPTLY, AS NEEDED.
- KEEP DUST WITHIN TOLERABLE LIMITS BY SPRINKLING OR OTHER ACCEPTABLE MEANS.
- ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED IF DEEMED NECESSARY BY ONSITE INSPECTION.
- FAILURE TO PROPERLY INSTALL AND MAINTAIN EROSION CONTROL PRACTICES SHALL RESULT IN CONSTRUCTION BEING HALTED.
- DRAINAGE INLETS SHALL BE PROTECTED BY FILTER AND GRADED ROCK AS PER INLET PROTECTION DETAIL.
- ANY ACCESS ROUTES TO SITE SHALL BE BASED WITH CRUSHED STONE, WHERE PRACTICAL.
- EROSION CONTROL MEASURES ARE TO BE MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
- WHENEVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED.
- ALL WORK IS TO BE IN COMPLIANCE WITH THE RULES AND REGULATIONS SET FORTH BY THE STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE CITY OF DELRAY BEACH.
- DISCHARGE FROM DEWATERING OPERATIONS SHALL BE RETAINED ONSITE IN A CONTAINMENT AREA.



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SCALE: 1" = 10'

0 5 10 15 20

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POLLUTION PREVENTION PLAN FOR:
215 NE 7TH AVE
3-UNIT TOWNHOMES
DELRAY BEACH, FLORIDA

EnviroDesign Associates Inc.
www.envirodesign.com

ENGINEERS • ENVIRONMENTAL CONSULTANTS
FLORIDA CERTIFICATE OF AUTHORIZATION No. 6506
298 Pineapple Grove Way Delray Beach, Florida 33444
Phone: (561) 274-6500 Fax: (561) 274-8558

BY: BAB

REVISIONS: UPDATE TO MATCH SHIFT OF EAST GATES

DATE: 1/30/19

NO.: Δ

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JOSEPH A. PIKE, P.E.
FL REG # 42696

DRAWN: B.A.B.

CHECKED: J.A.P.

DATE: 2/06/19

JOB NO.: 18127-ENG

SHEET NO.: 7 OF 7