

ORDINANCE NO. 1659-13

AN ORDINANCE OF THE CITY OF ALTAMONTE SPRINGS, FLORIDA AMENDING THE CITY CODE OF ORDINANCES, CHAPTER 28, "LAND DEVELOPMENT CODE," BY AMENDING ARTICLE I, "GENERAL PROVISIONS," BY AMENDING SECTION 1.2.1, "DEFINITIONS," BY REPEALING THE DEFINITION OF "AS BUILT"; BY AMENDING ARTICLE VI, "DESIGN STANDARDS," BY REPEALING SECTIONS 6.1.2, "INSPECTIONS AND TESTS," AND 6.1.13, "DEVELOPER CONTROL DURING CONSTRUCTION PERIOD," IN THEIR ENTIRETY; BY REPEALING ARTICLE XVI, "SUBDIVISION AND SITE DEVELOPMENT INSPECTIONS AND CLOSEOUT," IN ITS ENTIRETY AND ENACTING NEW ARTICLE XVI, "SUBDIVISION AND SITE DEVELOPMENT - PERMITTING, INSPECTION PROCEDURES, AND PROJECT CLOSE-OUT," BY SETTING FORTH DEFINITIONS, BY PROVIDING FOR SITE IMPROVEMENT WORK PERMITS, BY PROVIDING FOR TESTS AND INSPECTION PROCEDURES, BY REQUIRING CONSTRUCTION RECORD DRAWINGS AND SETTING FORTH CONSTRUCTION FEATURE TABLES, BY REQUIRING AS-BUILT SURVEYS, BY SETTING FORTH THE PROCESS FOR ISSUANCE OF CERTIFICATES OF COMPLETION AND OCCUPANCY AND BY SETTING FORTH MAINTENANCE RESPONSIBILITY DURING CONSTRUCTION AND MAINTENANCE BOND PERIOD; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Commission of the City of Altamonte Springs finds that it is desirable to revise the process by which subdivision and site development permits, inspections and project close-out occurs; and

WHEREAS, the City Commission of the City of Altamonte Springs finds that this ordinance sets forth a revised process of development permitting, inspections and project close-out procedures which will enable city staff to more fully review and assess construction project progress and compliance with applicable laws; and

WHEREAS, the City Commission finds that the new regulations require the repeal of redundant or obsolete definitions or regulation in other areas of the Land Development Code; and

WHEREAS, the City Commission finds that this ordinance promotes the public health, safety and welfare.

NOW, THEREFORE, BE IT ORDAINED by the City Commission of the City of Altamonte Springs, Florida, as follows:

SECTION ONE: Section 1.2.1, "Definitions," of Article I, "General Provisions," of Chapter 28, "Land Development Code," of the City Code of Ordinances is hereby amended as follows:

Article I. General Provisions

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1.2.1. Definitions.

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~~As built. Plans certified by a registered Florida land surveyor showing, but not limited to all utilities and public improvements. These plans shall depict actual locations, elevations, types, sizes and other appurtenances of the improvements.~~

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SECTION TWO: Section 6.1.2., "Inspections and tests," and Section 6.1.13, "Developer control during construction period," of Article VI, "Design Standards," of Chapter 28, "Land Development Code," of the City Code of Ordinances are hereby repealed in their entirety:

~~6.1.2 - Inspections and tests.~~

~~Staged inspections during construction are required, and it shall be the responsibility of the developer, or his contractor, to notify the inspection official assigned to the project, hereafter referred to as the city's inspector and arrange for the required inspections.~~

~~When special testing is required by these standards, an appropriate person or agency shall be engaged, by the developer or his contractor, to perform the tests and provide a certified report to the city as to the test results. Certain tests may require certification by an engineer licensed to practice in Florida and qualified in the field associated with the type of testing being performed. Other tests may be performed by an appropriate person or agency certified as competent in the type of testing being performed.~~

~~During construction and upon completion of the following construction stages, the builder shall notify the city's inspector that each stage is ready for inspection and shall await clearance by the city before proceeding to the next stage:~~

- ~~(a) Clearing and grubbing;~~
- ~~(b) Utility systems;~~
- ~~(c) Storm drainage;~~
- ~~(d) Removal of unsuitable material;~~
- ~~(e) Stabilization of subgrade;~~
- ~~(f) Underdrains;~~
- ~~(g) Curb and gutter and backfill;~~
- ~~(h) Inlets, box culverts, and all other concrete structures when steel is in place prior to pouring;~~
- ~~(i) Base course during construction or mixing;~~
- ~~(j) Finishing base course prior to paving;~~
- ~~(k) Wearing surface during application;~~
- ~~(l) Clean-up and dressing of right-of-way limits;~~
- ~~(m) Sodding and/or seeding;~~
- ~~(n) Street name signs and traffic control signs;~~
- ~~(o) Pavement marking;~~
- ~~(p) Final inspection.~~

~~The city's inspection office(s) will require a minimum of 24 hours' notice to schedule inspections.~~

~~The purpose of these inspections is to ensure compliance with the approved development plan and to advise the city commission whether or not the roads, storm drainage, utilities, and other required improvements being constructed appear to qualify for acceptance by the city. The city accepts no responsibility or liability for the work, or for any contractual conditions involving acceptance, payment, or guarantees between the contractor and the developer, by virtue of these stage inspections. The city assumes no responsibility or commitment guaranteeing acceptance of the work, or for subsequent failure, by virtue of these stage inspections. However, if any aspect of the work being performed does not comply with acceptable standards, corrections will be required by the city inspector as a condition for city acceptance. All required improvements shall be installed, and have the approval of the city engineer and/or other city department(s) prior to acceptance by the city commission.~~

~~6.1.2.1 *Inspection of private facilities.* Inspections and verifications of private streets and drainage facilities in the approved development shall be conducted by a registered engineer. Appropriate reports shall be submitted to the city's inspector to determine if the construction has provided what was required in the approved plans.~~

~~6.1.2.2 *Completion of installation of required improvements:*~~

~~(a) Upon completion of the above inspections or prior thereto, the following must be provided to the city engineer:~~

~~(1) Test results as required;~~

~~(2) Maintenance bond for facilities to be conveyed to the city;~~

~~(3) Record drawing plans shall be submitted for projects which will be either publicly or privately maintained. The project engineer shall be responsible for recording information on a set of approved plans concurrently with construction progress. The final record drawings shall comply with the following requirements:~~

~~(a) Drawings shall be three-mil black-line or sepiamylar.~~

~~(b) Drawings shall be legibly marked to record actual construction.~~

~~(c) Drawings shall show actual location of all water and wastewater piping and related appurtenances, both above and below ground. All changes to piping location including horizontal and vertical locations of utilities and appurtenances shall be clearly shown and referenced to permanent surface improvements. Drawings shall indicate actual pipe material, class, etc.~~

~~(d) Drawings shall clearly show all field changes of dimension and detail including changes made by field order or by change order.~~

~~(e) Drawings shall clearly show all details not on original contract drawings but constructed in the field. All equipment and piping relocation shall be clearly shown.~~

~~(f) Location of all manholes, hydrants, valves, and valve boxes shall be shown. All valves shall be referenced from at least two and preferably three permanent points.~~

~~(g) Dimensions between all manholes shall be field verified and shown. The inverts and grade elevations of all manholes shall be shown.~~

~~Each sheet of the plans shall be signed and dated by the project engineer as being "record drawings". The plans are to be accompanied by a signed and sealed letter from the project engineer certifying the plans. Construction plans simply stamped "as-built" or "record drawings" and lacking in the above requirements, or in conflict with the "as-built" drawings as required and described below, will not be accepted and will be returned to the project engineer. Water service will not be provided and service(s) will remain locked until correct "record drawings" have been submitted.~~

~~(4) As-built drawings shall be submitted for all roadways, utilities, and drainage systems, both on-site and off-site, which will be publicly maintained. These drawings shall be based on field surveys and will show all property boundaries, rights-of-way, easements, lot lines, and shall be certified by a Florida state registered/professional land~~

~~surveyor in accordance with Rule 61G17-6.002 through 6.006 of the Florida Administrative Code, and shall document the location of the items listed below:~~

- ~~(a) The location of all valves, hydrants, and services and elevations at any point where a water line crosses a wastewater or drainage line.~~
- ~~(b) Location of all sanitary sewer manholes and the service end of all laterals and elevations of all manhole tops and inverts.~~
- ~~(c) Location of all lift stations including the top and invert elevations, and the location and elevation of all valves, and the point where the force main crosses any wastewater, water, or drainage lines.~~
- ~~(d) The location, size, type and invert elevations of all drainage pipes.~~
- ~~(e) Spot elevations at reasonable intervals along the top of the berm and bottom of all retention and/or detention ponds to indicate conformance with the approved design.~~
- ~~(f) Spot elevations at reasonable intervals along all off-site drainage swales/ditches.~~
- ~~(g) Roadway plans, including, but not limited to, plan and profiles; cross-sections and typical pavement section.~~
- ~~(h) Location of building footprint and finished floor elevation.~~
- ~~(5) Florida Department of Environmental Protection (FDEP) "clearance for service" letter(s) for water and wastewater;~~
- ~~(6) Surveyor's letter (from a Florida state registered/ professional land surveyor) certifying that all permanent reference monuments and control points have been placed as required by Chapter 177, Florida Statutes, as amended;~~
- ~~(7) Itemized cost for all facilities dedicated to the city;~~
- ~~(8) Copy of engineer's certification of completion letters to the Florida Department of Environmental Protection (FDEP), the water management district, and any other agencies regulating the project for stormwater system.~~
- ~~(b) Upon satisfactory completion of the installation of the required improvements, a certificate of completion shall be signed by both the city engineer and director of public works and shall be transmitted to the city commission for acceptance.~~

~~6.1.2.3 Responsibility during maintenance period. All improvements to be owned and operated by the city will be covered by a maintenance bond in the amount of ten percent of the construction costs. The bond will be in effect for two years from the date of acceptance of the certificate of completion by the city commission. During that maintenance period, the owner/developer will be expected to provide any maintenance required. This includes, but is not limited to:~~

- ~~(a) Repair and replacement of any system components, failed section of paving, etc.~~
- ~~(b) Control of erosion, replacement of sod, removal of soil washed onto pavement or into drainage system.~~

~~6.1.2.4 Inspection for maintenance bond release:~~

- ~~(a) Approximately 60 days prior to the expiration of the scheduled two-year maintenance period, but only after formal request by the applicant, the city engineer will schedule an inspection for the release of the maintenance bond.~~
- ~~(b) Prior to release of the maintenance bond the owner/developer will be required to correct all deficiencies which have been determined by the city to be construction deficiencies and the responsibility of the owner/developer.~~
- ~~(c) The maintenance bond shall remain in effect until inspected and released by the city commission.~~

6.1.13 – Developer control during construction period.

~~The developer shall be required during the entire construction period to control, regulate and maintain the development in such a manner as to prevent the accumulation of trash and debris, resulting from his construction activities, on both the site and adjacent public and private property, which would detract from the enjoyment and pleasure in the natural scenic beauty of the city, and, in turn, injuriously affect the economic well-being of the public. This should be interpreted to include controlling the tracking of sediments by traffic out of the construction area, the overflow of stormwater out of the construction site during severe storms and the blowing of soil, dust and other debris from the site. The use of residential lots in nearby developments or substantially completed phases of the same development, under the ownership and control of said developer, for the bulk storage of construction materials substantially unrelated to the development of those residential lots is prohibited. A development shall be deemed to be substantially completed when 70 percent of the planned units are completed and ready for occupancy, or are actually occupied.~~

SECTION THREE: Article XVI, “Subdivision and Site Development Inspections and Closeout,” of Chapter 28, “Land Development Code,” of the City Code of Ordinances is hereby repealed in its entirety and new Article XVI, “Subdivision and Site Development – Permitting, Inspection Procedures, and Project Close-Out,” of Chapter 28, “Land Development Code,” of the City Code of Ordinances is hereby enacted to read as follows:

DIVISION 1. GENERAL PROVISIONS

16.1.1 Purpose and intent.

The City of Altamonte Springs currently maintains a Geographic Information System (GIS) to track constructed features such as utilities and roadway improvements. This information is used by city personnel, other government agency personnel, developers, engineers, business owners/operators, and citizens for planning, design and maintenance purposes. One of the main sources of information for GIS is the drawing of record supplied to the city by the project engineer after features are constructed. The City of Altamonte Springs requires that persons constructing improvements in the city provide accurate drawings (Construction Record Drawings – CRDs) documenting improvements. The purpose of the phased and final inspections, professional certifications, and partial and final CRD submittal requirements contained in this article is to ensure compliance with the city approved plan. In addition, where public infrastructure is proposed, requirements of this article enable the city's public works and utilities department to: a) prepare a report requesting city manager approval for the acceptance of roads, storm drainage, and/or utilities, as public infrastructure; and b) prepare a report of dedicated assets to the city finance department for compliance with Governmental Accounting Standards Board Statement No. 34 (GASB 34).

The certificate of subdivision completion for newly platted subdivisions, or certificate of site completion for new site development or for extensions of the city's utility systems by private development, includes satisfactorily completing subdivision and site construction in accordance with the city's Land Development Code and in accordance with other applicable local, state, and federal regulations and permitting requirements. The various departments in the city involved in the subdivision and site development process must ensure that minimum design standards and specifications provided by this Code are met and appropriate support documents are received prior to the city's issuance of a certificate of subdivision completion or certificate of site completion and building code certificate of completion or certificate of occupancy.

The purpose and intent of this article is to complement other articles of this Code pertaining to subdivision and site development or extensions of the city's utility systems by private development.

16.1.2 Applicability.

The procedures contained in this article are applicable to all subdivision and site development projects, extensions of the city's utility systems by private development which involve the construction of private and/or city dedicated infrastructure, and to any project that requires the city's issuance of a certificate of subdivision completion or certificate of site completion.

16.1.3 Definitions.

As used in this article, the following terms shall have the meanings indicated below:

Approved plans. The approved plans is the set of plans approved by the city's development review committee, or by the appropriate city representative(s) by approved field change request, for construction.

Certificate of site completion. The certificate of site completion certifies that all improvements conveyed to the city as public infrastructure have been installed, inspected, and approved by the City of Altamonte Springs. The certificate of site completion shall also certify the city's receipt of all applicable fees, bonds, and deposits related to site improvements conveyed to the city as public infrastructure. Public and/or private infrastructure shall include, without limitation, potable water, sanitary sewer, reclaimed water, paving and drainage, sidewalks, streetlights, and entry or buffer walls. When a certificate of site completion is required for site development, the certificate of site completion must be approved by the city manager prior to the city's issuance of a building code certificate of completion or certificate of occupancy.

Certificate of subdivision completion. A certificate of subdivision completion certifies that all public and/or private infrastructure improvements, required in support of platted lands, have been installed, inspected, and approved by the City of Altamonte Springs. The certificate of subdivision completion shall also certify the city's receipt of all applicable fees, bonds, and deposits related to site improvements. Public and/or private infrastructure shall include, without limitation, potable water, sanitary sewer, reclaimed water, paving and drainage, sidewalks, streetlights, and entry or buffer walls. When a certificate of subdivision completion is required for site development, the certificate of subdivision completion must be approved by the city manager prior to the city's issuance of any building code certificate of completion or certificate of occupancy.

Certified record drawings (CRDs). The drawings prepared, signed and sealed by the project engineer depicting the as-built condition of site work improvements and demonstrating compliance with the approved plans.

City engineer. The city engineer of the City of Altamonte Springs, acting directly or through an assistant or other representative authorized by him.

Contractor. The person, firm, or corporation with whom the contract for work has been made by the owner, the developer, or the city and shall include any sub-contractors under the contractor's authority.

Developer. The person, firm, or corporation engaged in developing or improving real estate for use or occupancy.

Director. The director of the public works and utilities department of the City of Altamonte Springs, acting directly or through an assistant or other representative authorized by him.

Engineering and technical services division. The engineering and technical services division of the public works and utilities department of the city of Altamonte Springs, Florida.

Engineering inspector. The inspector employed by the city of Altamonte Springs, whether directly or by a contract for inspection services.

FDEP. The Florida department of environmental protection.

FDOT. The Florida department of transportation.

Owner. The person, firm, corporation, or governmental unit holding right of possession of the real estate upon which construction is to take place.

Project engineer. The engineer or engineering firm registered with the state of Florida department of professional regulation, retained by the developer to provide professional civil engineering services for the project. For the purposes of project development, the project engineer shall be the city's main contact and shall serve as the project manager for the owner and/or developer for all site development related activities.

Project landscape architect. The registered landscape architect pursuant to Article VIII, Landscape and Tree Protection, retained by the developer to provide professional landscape architectural services for the project.

Project surveyor. The surveyor or surveying firm registered with the State of Florida department of professional regulation, retained by the developer to provide professional surveying and mapping services for the project.

16.1.4 Sanctions.

If the developer, contractor, or engineer fails to comply with any of the requirements described in this Article, then the city may choose one or more of the following sanctions:

- (a) Refuse to perform additional inspections of site work until compliance is met;
- (b) Issue a stop work order for all work on the job including the building construction activity;
- (c) Pursue code enforcement action in accordance with F.S. 162;
- (d) Refuse to issue a certificate of subdivision completion or certificate of site completion; or,

- (e) Refuse to issue a building code certificate of completion or certificate of occupancy for any or all of the development.

16.1.5 Third party technical assistance.

The city is authorized to require testing, inspections or plans review by an approved independent third party with expertise in the matter to be reviewed at the developer's expense.

DIVISION 2. SITE IMPROVEMENT WORK PERMIT.

16.2.1 Commencement of site and utility construction.

16.2.1.1 Pre-construction conference. Prior to the city's issuance of a site improvement work permit, a pre-construction conference with the city is required. The developer or his authorized agent shall be responsible for arranging this conference with the city by submitting the required site improvement work permit application with request for pre-construction conference forms to the city's building/fire safety division.

16.2.1.1.1 The following conditions must be met before a pre-construction conference will be scheduled by the city:

- (a) Final site plan approval must be obtained.
- (b) Applicable conditions of site plan approval must be addressed.
- (c) The plat and support documents must have been accepted by the city for transmittal to the city commission for approval. (If a permit for building construction is to be issued concurrent with the construction of site improvements and prior to the city's issuance of a certificate of subdivision completion, then a performance bond must be posted with the city.)
- (d) Applicable county permits must be obtained.
- (e) Applicable easements must be obtained.
- (f) Developer's agreement must be drafted by the city and submitted to the owner/developer for review and signature.

16.2.1.1.2. The site improvement work permit application must be accompanied by the following:

- (a) A project contact list including the general contractor and all approved site subcontractor information. The contact list must include emergency contact information for after-hours responses.

- (b) Copies of all applicable county permits.
- (c) Request for fee estimate form (if not addressed earlier in the process).
- (d) The proposed construction schedule including, but not limited to, information regarding the start date, date of final site work completion, and anticipated date of building occupancy.

16.2.1.1.3 Pursuant to section 166.033, F.S., the developer shall obtain all other applicable state or federal permits before commencement of the development. When possible, it is advisable that applicable state or federal agency permits be submitted with the request for pre-construction application. The developer shall provide a copy of any and all applicable state or federal permits or letters of determination to the public works department prior to the first city site improvement inspection. Failure to submit any applicable agency permit prior to the commencement of development under a site improvement work permit may result in the city's issuance of a stop work order, fines, and/or other penalties. Copies of all applicable agency permits and letters of determination must be posted on the site with the city's site inspection placard.

A pre-construction conference will be scheduled by the city typically within seven (7) calendar days on the next available meeting schedule. A preconstruction conference shall typically be held at least two (2) calendar days before a city site improvement work permit can be issued.

During the pre-construction conference, and at other times during the course of the project, the developer, contractor, or project engineer may be prompted by city personnel to submit the appropriate documents, under their respective responsibilities, for inclusion into the project files for successful project close-out. This includes, but is not limited to, a number of administrative project close-out submittals items required prior to the city's issuance of a certificate of subdivision completion, certificate of site completion, building code certificate of completion or certificate of occupancy. Project close-out for the city will be coordinated by the development coordinator with the public works and utilities department.

16.2.2 Suspension of site improvement work. The city's public works and utilities' engineering inspector shall be notified by the contractor any time that work is to stop for a period of time in excess of seven calendar days. The contractor shall place the site in a safe condition and shall call for an engineering inspection prior to cessation of work to demonstrate that safety precautions are in place.

16.2.3 Expiration of a site improvement work permit. The site improvement work permit shall expire after six months of no documented work on the site and a new site improvement work permit must be obtained. Work is documented by the city through the phased inspection process.

DIVISION 3. TESTS AND INSPECTION PROCEDURES

16.3.1. Approved plans.

The engineering inspector shall periodically visit the project site to make a visual inspection of the progress of the work and methods of construction. The Contractor shall maintain a set of city-approved plans on the job site, along with all appropriate agency permits, at all times during the course of construction from the first day of the project until final acceptance of the project by the city. The approved plan is the set of plans approved by the city's development review committee, or by the appropriate city representative(s) by approved field change request, for construction. These plans are for the use of all contractors, sub-contractors, vendors and also for review by city personnel during construction and must be available for their use in the performance of inspections. Failure to comply with this requirement constitutes a breach of permit requirements and is justification for suspension of work by stop work order(s), and/or revocation of the permits.

16.3.1.1 Approved plan revisions. Revisions to the approved plans shall be submitted by the project engineer to all applicable government agencies for review and approval prior to construction of the revision. Any and all revisions to the approved plans shall also be submitted to the city's development review committee and approval must be obtained prior to implementing/constructing the revised portion of the project. Non-compliance will cause the revisions to be null and void and will result in non-acceptance of the work in place. It is not the policy of inspection services to suspend work due to revisions of the plans resulting from varying field conditions, field changes due to conflicts with existing facilities, or other normal occurrences. However, when a field condition is encountered that results in a substantial field change, it is the sole responsibility of the project engineer to submit a field change request form and drawing to the engineering inspector for review and approval by the appropriate city representative(s). The proposed field change drawing must be 8-1/2" x 11" or 11" x 17", and must be signed/sealed by the project engineer. If approved by the appropriate city representative(s), the appropriate city representative(s) shall indicate on the field change request whether the change requires that the project engineer a) submit a revised site plan to the city's development review committee for approval prior to any related inspections being approved by the city; or, b) incorporate the change into the partial and final construction record drawing (CRD) submittals. All approved changes must be indicated on a site plan revision application prior to project close-out and shown on the construction record drawings (CRDs).

Final approval of the project by the city is based upon the project's conformance with the approved plans and city codes. Construction not conforming to the approved plans and codes will not be accepted until all revisions are approved by the City of Altamonte Springs and all other appropriate governmental entities.

16.3.2. Scheduled inspections.

Scheduled inspections during construction are required, and it shall be the responsibility of the developer, his contractor, or authorized agent to notify the public works and utilities department, project engineer, or other applicable agency inspectors, and arrange for the required inspections. The purpose of these inspections is to ensure compliance with the approved plans, permits, and city codes. The city accepts no responsibility or liability for the work, or for any contractual conditions involving acceptance, payment, or guarantees between the contractor and the developer, by virtue of these inspections. The city assumes no responsibility or commitment guaranteeing acceptance of the work, or for subsequent failure, by virtue of these inspections. However, if any aspect of the work being performed does not comply with acceptable standards, corrections will be required by the engineering inspector as a condition for city approval and/or acceptance.

Upon observation of work not done in accordance with the approved plans, permits, city codes, or specifications, the engineering inspector will notify the contractor, the developer, or his designee and request that the necessary corrections be made or tests performed to assure compliance at no cost to the city.

During construction and upon completion of the specified stages of construction, the contractor shall notify the city's engineering inspector, project engineer, or other applicable agency inspector as each inspection stage is ready for inspection. Advance notification for inspections by the City is required in accordance with the issued permit and inspection placard.

16.3.2.1 Specified stages of construction requiring inspections shall be coordinated with the city's engineering inspector, project engineer, or other applicable agency inspector during a scheduled pre-construction meeting prior to commencement of construction activities. During construction and upon completion of the specified stages of construction, the contractor shall notify the city's engineering inspector, project engineer, or other applicable agency inspector as each inspection stage is ready for inspection.

16.3.2.2 Prerequisites to a final site inspection for project close-out. Upon substantial completion of the work under the site improvement work permit, including both private and public infrastructure, the project engineer will be required to submit an application for project completion and final site inspection. This application, and all associated submittals, must be received and reviewed by the city and determined sufficient prior to the scheduling of a final site inspection by the city.

16.3.2.3 Other scheduled inspections and/or activities. When public infrastructure improvements are proposed, or when otherwise deemed appropriate for the project, the engineering inspector may identify additional key stages as requiring a scheduled inspection. Other scheduled activities include:

- (a) Tests which involve the operation of existing valves must be scheduled in advance through the city.
- (b) Activities which involve an interruption of water or wastewater service must be scheduled in advance through the city.
- (c) Line locations must be scheduled in advance through Sunshine One-Call at 811.

Advance notification for inspections by the City is required in accordance with the issued permit and inspection placard.

16.3.3 Uncovering work.

If any work that is to be inspected, tested, or approved is covered prior to inspection sign-off by the city, it must, if requested by the engineering inspector or city engineer, be uncovered for observation at the developer's or contractor's expense. The contractor shall, at the engineering inspector's or city engineer's request uncover, expose or otherwise make available for observation, inspection or testing as may be required, that portion of the work in question, furnishing all necessary labor, material and equipment.

16.3.4 Inspection standards.

All required site infrastructure improvements must be installed and tested in accordance with city code. Inspections and testing of these improvements will be conducted or observed by the project engineer and/or the city's public works and utilities department in accordance with current procedures.

16.3.4.1 Activation of water and sewer services.

Final activation of newly constructed water and sewer facilities will be done once clearance for use of the system is received from the Florida department of environmental protection and activation is scheduled through the engineering inspector. The contractor shall be required to utilize a temporary meter for water until preliminary construction record drawings (CRDs) of the potable water and/or sanitary sewer systems are reviewed and approved by the city.

16.3.5 Materials testing.

City codes and applicable standards require material testing as an integral part of all construction within the city or for work on city utilities outside the corporate limits. Testing shall be of sufficient quantity to present an actual representation of the work as installed.

When special testing is required, an appropriate person or agency shall be engaged by the developer, contractor, or project engineer to perform the tests and provide a certified report to the city as to the test results. Certain tests may require

certification by an engineer licensed to practice in Florida and qualified in the field associated with the type of testing being performed. Other tests may be performed by an appropriate person or agency certified as competent in the type of testing being performed.

16.3.6 Reinspection fees.

The city's building/fire safety division shall, in all cases involving reinspection fees, withhold issuance of the building code certificate of completion or certificate of occupancy on any structure and/or acceptance of the infrastructure for the project until all outstanding fees are collected by the city.

16.3.7 After-hours inspections and overtime reimbursements.

Except as noted in the permit conditions, all inspections at the site shall be performed during normal working hours. Normal working hours are between 7:30 a.m. and 4:00 p.m., exclusive of weekends and city holidays. The contractor may schedule inspections at other times only after giving written notice to the city and receiving prior approval of same.

Requests for after-hours inspections shall be submitted in writing to the public works and utilities department on an after hours inspection request form. The request will be evaluated on a case-by-case basis depending on the specific circumstances of the job, engineering inspector availability and the inspection workload.

The contractor shall be responsible for the full cost of the after-hours inspection in accordance with the city's currently adopted fee schedule. When an after-hours inspection requires an engineering inspector to report to duty after assigned working hours (including weekends, holidays) a four-hour minimum shall be charged. The city's finance department is responsible for after-hours inspection billing.

After hours inspections shall be documented by the engineering inspector and submitted to the city engineer along with a copy of the contractor's written request for the inspection. A certificate of subdivision completion, certificate of site completion, building code certificate of completion, or a certificate of occupancy shall not be issued until all after-hours inspection costs have been paid.

16.3.8 Inspection of private facilities.

In addition to inspections of private infrastructure improvements conducted by the engineering inspector, inspections and verifications of private streets, water, sewer, drainage facilities, or other infrastructure in the approved development shall be conducted by the project engineer as provided by city code. Appropriate reports and certifications shall be submitted to the engineering inspector to determine if the construction has provided what was required in the approved plans.

DIVISION 4. CONSTRUCTION RECORD DRAWINGS

16.4.1 Purpose.

The purpose of construction record drawings (CRDs) is to provide a permanent, factual record of all aspects of public and private site construction improvements, both concealed and visible, to enable future location and identification of the improvements without specialized equipment, lengthy and expensive site measurement, or extensive field excavations. Information shown on the CRDs must include field measurements that are easily understood by city personnel, city customers that might need to connect to or extend the constructed improvements, and other utility providers that might need the information to avoid conflicts with constructed improvements. These standards and procedures are also for integration of digital engineering CAD drawings and attribute data into the database environments, while maintaining the integrity and positional accuracy of the data. The requirement for collection of coordinate data for installed improvements and the digital submittal of CRDs (including as-built and boundary survey) is to provide the City GIS with a right-of-way, easement parcel boundary, and utility base for City field maintenance and operations utilizing GPS equipment and technologies. CRDs shall be supported by, and be consistent with the “as-built” survey drawings as required and described further in this Article. The drawings and/or certifications of the CRDs shall provide verification that the facilities are constructed in accordance with the approved plans. Deviations in the approved plans and as-constructed data shall be marked on the CRDs for review and acceptance by the city. However, CRDs do not replace or supersede the city-approved site plan or site plan revisions since they are not reviewed by the city’s development review committee for code compliance. CRDs simply stamped “record drawings” or that include statements “not field verified, information provided by others,” etc., will not be accepted and will be returned to the project engineer. When improvements have been constructed and conveyed as public infrastructure, the CRDs enable the city to more efficiently inventory, operate, and maintain the dedicated improvements. When constructed improvements are to remain under private ownership, the CRDs assist the current and future owner(s) of the site in making sure that the improvements are identified and maintained. The CRDs of private improvements also assist the city with annual site inspections to ensure that these private infrastructure improvements are being maintained in accordance with city and or state regulations.

16.4.2 Applicability.

The city requires construction record drawings (CRDs) and project engineer and project surveyor certifications for all subdivision and site development, or extensions of the city’s utility systems by a private developer, which involve the construction of private or city dedicated infrastructure. The required timing for submittal and approval of these various requirements is as indicated herein; however, the city accepts and encourages combined submittals to fulfill multiple CRD requirements. For example, the project

engineer and project surveyor are encouraged to submit interim CRDs of the potable water system concurrent with CRDs of the reclaimed water system and sanitary sewer system. Combined submittals should be provided for review and approval in advance of the first deadline for the components of the combined CRDs.

16.4.3. Construction Feature Tables

CRDs shall show accurate locations of all site improvements, including but not limited to potable water mains and appurtenances, reclaimed water mains and appurtenances, sanitary sewer mains and appurtenances, storm drainage and stormwater management systems and appurtenances, structures, conduits, power poles, light standards, vaults, right-of-way limits, pavement widths, sidewalks, landscaping areas, building footprints, channelization and pavement markings, property lines, easements, etc. The CRDs shall indicate all necessary information about the improvement or system to evaluate whether the constructed features will be able to function as intended by the design. CRD information shall be field verified and/or surveyed as outlined in the construction feature tables that follow, and coordinate values shall be provided for the improvements in accordance with the city's standard detail requirements. The completed as-built asset attribute data table shall be incorporated into the CRDs. The party responsible for collecting the information to be shown on the CRDs is noted in the table by parenthesis. All information field verified or surveyed shall be transferred to the CRDs.

TABLE 16.1 WATER SYSTEM – POTABLE AND RECLAIMED (Features that are intended to move or hold potable or reclaimed water)			
<u>Water System Feature</u>	<u>Field Verify</u> (Responsibility: Contractor, Project Engineer, and Engineering Inspector) <i>Mark on field set of the approved plans, all changes from design drawings</i>	<u>Survey</u> (Responsibility: Licensed Surveyor)	<u>Indicate on CRDs</u> (Responsibility: Record Drawing Preparer / Project Engineer)
<u>Pipes and Fittings</u>	1) <u>Material, class, size, joint type, fittings.</u> 2) <u>Measure distance between fittings (center of tees, crosses, bends).</u> 3) <u>Depth of pipes during installation at every fitting and appurtenance.</u> 4) <u>Limits of pipe restraint.</u> 5) <u>Location and elevation of pipes at utility crossings.</u>	1) <u>Horizontal and vertical location of main (top of pipe): Measurements/offset ties shall be referenced to permanent surface improvements at the point of connection, all changes in direction or elevation but not to exceed intervals of 50 feet or less along straight runs and at the pipe terminus.</u> 2) <u>Top and bottom of crossings (drainage, sewer, telephone, cable, TV, electric, etc.) for location and verification of pipe separation requirements.</u>	<u>Redraw pipe on drawings if location differs from approved plans.</u> <u>Label pipe sections to be dedicated to the city as "City Owned."</u> <u>Show bacteriological sample points.</u> <u>Revise pipe profiles if change is more than 0.5 feet.</u> <u>Indicate new information on plans (ex. diameter, horizontal and vertical location of main, length between fittings, joint type, backfill material, etc.)</u> <u>Detail any connection to existing utilities and any horizontal and vertical pipe alignment change.</u>

TABLE 16.1 WATER SYSTEM – POTABLE AND RECLAIMED

(Features that are intended to move or hold potable or reclaimed water)

<u>Water System Feature</u>	<u>Field Verify</u> (Responsibility: Contractor, Project Engineer, and Engineering Inspector) <i>Mark on field set of the approved plans, all changes from design drawings</i>	<u>Survey</u> (Responsibility: Licensed Surveyor)	<u>Indicate on CRDs</u> (Responsibility: Record Drawing Preparer / Project Engineer)
<u>Valves:</u> <u>Gate Valves (GV);</u> <u>Butterfly Valves (BV);</u> <u>Air Release Valves (ARV);</u> <u>Blow Off Valves (BO)</u>	<u>Type and size.</u>	<u>1) Horizontal locations of valve: Valve shall be referenced for future recovery from three (3) permanent surface improvements.</u> <u>2) Vertical locations of valve: Valve shall be measured to the center of the operating nut.</u>	<u>Redraw on drawings if location differs from approved plan.</u> <u>Label valves to be dedicated to the city as “City Owned.”</u> <u>Indicate new information on plans.</u>
<u>Hydrants</u>	<u>Date set, manufacturer, size, depth of bury, distances main to valve, and valve to hydrant.</u>	<u>Horizontal location of hydrant at center of the operating nut. Hydrant location shall be referenced for future recovery from three permanent surface improvements</u>	<u>Redraw on drawings if location differs from approved plan.</u> <u>Label hydrants to be dedicated to the city as “City Owned.”</u> <u>Indicate new information on plans. (The use of a hydrant table is encouraged where the addition of this information to the drawings will make the information illegible.)</u>
<u>Service Lines</u>	<u>Material, class, size, location</u>		<u>Redraw on drawings if location differs from approved plans.</u> <u>Indicate new information on plans (ex. type, size, etc.)</u>
<u>Meters</u>	<u>Type, size, box location</u>	<u>Horizontal location of center of box.</u>	<u>Redraw on drawings if location differs from approved plans.</u> <u>Indicate new information on plans (ex. type, size, etc.)</u>

TABLE 16.1 WATER SYSTEM – POTABLE AND RECLAIMED (Features that are intended to move or hold potable or reclaimed water)			
<u>Water System Feature</u>	<u>Field Verify</u> <u>(Responsibility: Contractor, Project Engineer, and Engineering Inspector)</u> <i>Mark on field set of the approved plans, all changes from design drawings</i>	<u>Survey</u> <u>(Responsibility: Licensed Surveyor)</u>	<u>Indicate on CRDs</u> <u>(Responsibility: Record Drawing Preparer / Project Engineer)</u>
<u>Fire System: Point of Service (POS), Fire Department Connection (FDC), and Private Fire Pipe</u>	<u>Materials, class, sizes, locations of pipe and appurtenances.</u>	<u>1) Horizontal and vertical location of POS, FDC (center)</u> <u>2) All valves and connections to city mains</u>	<u>Redraw pipe, vault, POS, FDC on drawings if location differs from approved plans.</u> <u>Indicate new information on plans (ex. type, size, etc.)</u>
<u>Backflow Devices (exterior to building)</u>	<u>Manufacture, type, size, service line size, location of drain.</u>	<u>Horizontal location of center of device.</u>	<u>Redraw on drawings if location differs from approved plans.</u> <u>Indicate new information on plans (ex. type, size, etc.)</u>
<u>Backflow Devices (interior to building)</u>	<u>Manufacture, type, size, service line size, general location within building.</u>		<u>Indicate new information on plans (ex. type, size, etc.)</u>
<u>Bacteriological Sample Points</u>	<u>Sampling point locations.</u>		<u>If the sampling points are substantially modified during the permitting and clearance process, adjust the drawing accordingly.</u>

TABLE 16.2 SANITARY SEWER SYSTEM FEATURES (Features that are intended to transport sanitary waste into a collection system)			
<u>Sanitary Sewer System Feature</u>	<u>Field Verify</u> <u>(Responsibility: Contractor, Project Engineer, and Engineering Inspector)</u> <i>Mark on field set of the approved plans, all changes from design drawings</i>	<u>Survey</u> <u>(Responsibility: Licensed Surveyor)</u>	<u>Indicate on CRDs</u> <u>(Responsibility: Record Drawing Preparer / Project Engineer)</u>
<u>Manholes</u>	1) <u>Manhole diameter, manufacturer, type.</u> 2) <u>Verify manhole lids for dedicated city systems are labeled as "City Owned."</u>	1) <u>Horizontal location of center of manhole lid.</u> 2) <u>Rim elevations and all invert elevations.</u>	<u>Redraw on drawings if location differs from approved plans.</u> <u>Label manholes to be dedicated to the city as "City Owned."</u> <u>Indicate all changes and correct elevations in plan and profile views. Table may be used where the addition of this information to the drawings will make the information illegible.</u>
<u>Pipe (Gravity Sewer Main)</u>	1) <u>Material, class, and size.</u> 2) <u>Distance between all manholes including a length of pipe reference from the manhole to the downstream laterals to record the location of all laterals at the point of connection to the mainline.</u>	1) <u>Length (horizontal length of pipe from center of manhole to center of manhole).</u> 2) <u>Invert elevation of pipe at manholes, clean-outs and/or pipe terminus.</u>	<u>Redraw on drawings if location differs from approved plans.</u> <u>Label pipe sections to be dedicated to the city as "City Owned."</u> <u>Revise pipe profiles if change is more than 0.5 feet.</u> <u>Recalculate slope based upon record length and surveyed inverts.</u> <u>Indicate new information (ex. length, diameter, slope, etc.) in plan and profile views.</u>

TABLE 16.2 SANITARY SEWER SYSTEM FEATURES

(Features that are intended to transport sanitary waste into a collection system)

<u>Sanitary Sewer System Feature</u>	<u>Field Verify</u> (Responsibility: Contractor, Project Engineer, and Engineering Inspector) <i>Mark on field set of the approved plans, all changes from design drawings</i>	<u>Survey</u> (Responsibility: Licensed Surveyor)	<u>Indicate on CRDs</u> (Responsibility: Record Drawing Preparer / Project Engineer)
<u>Pipe and Fittings</u> (Force Main)	<u>1) Material, class, size, joint type, fittings.</u> <u>2) Measure distance between fittings (center of tees, crosses, bends).</u> <u>3) Location and elevation of pipes at utility crossings.</u> <u>4) Depth of pipes during installation at every fitting and appurtenance.</u> <u>5) Joint restraint.</u>	<u>1) Horizontal and vertical location of main (top of pipe): Measurements/offset ties shall be referenced to permanent surface improvements at the point of connection, all changes in direction or elevation but not to exceed intervals of 50 feet along straight runs and at the pipe terminus.</u> <u>2) Top and bottom of crossing pipes (drainage, sewer, telephone, cable, TV, electric, etc.) for location and verification of pipe separation requirements.</u>	<u>Redraw on drawings if location differs from approved plans.</u> <u>Label force mains to be dedicated to the city as "City Owned."</u> <u>Revise pipe profiles if change is more than 0.5 feet.</u> <u>Indicate new information on plans (ex. length diameter, etc.)</u>
<u>Laterals</u>	<u>Material, class, size, joint type, fittings.</u>	<u>Invert elevation at building connection and cleanout at property line.</u>	<u>Redraw on drawings if location differs from approved plans.</u> <u>Label laterals to be dedicated to the city as "City Owned."</u> <u>Indicate new information on plans.</u>
<u>Cleanouts</u>	<u>Material, size.</u>	<u>Horizontal and vertical location at center of cap.</u>	<u>Redraw on drawings if location differs from approved plans.</u> <u>Indicate new information on plans.</u>

TABLE 16.2 SANITARY SEWER SYSTEM FEATURES

(Features that are intended to transport sanitary waste into a collection system)

<u>Sanitary Sewer System Feature</u>	<u>Field Verify</u> (Responsibility: Contractor, Project Engineer, and Engineering Inspector) <i>Mark on field set of the approved plans, all changes from design drawings</i>	<u>Survey</u> (Responsibility: Licensed Surveyor)	<u>Indicate on CRDs</u> (Responsibility: Record Drawing Preparer / Project Engineer)
<u>Valves:</u> <u>By-pass Valve (BPV):</u> <u>Plug Valves (PV):</u> <u>Air Release Valves (ARV):</u>	<u>Type and size</u>	<u>1) Horizontal locations of valve: Valve shall be referenced for future recovery from three permanent surface improvements.</u> <u>2) Vertical locations of valve: Valve shall be measured to the center of the operating nut.</u>	<u>Redraw on drawings if location differs from approved plan.</u> <u>Label valves to be dedicated to the city as "City Owned."</u> <u>Indicate new information on plans.</u>
<u>Pump / Lift Stations</u>	<u>Material, diameter, pump manufacturer, size.</u>	<u>1) Location of concrete pad, center of wet well structures, control panel and/or telemetry stations, fuel tank emergency generator, perimeter fencing, and easements.</u> <u>2) Top of invert elevations.</u> <u>3) Location and elevation of top of slab, bottom of wet well, influent pipe invert, control floats, and all valves.</u>	<u>Redraw on drawings if location differs from approved plans.</u> <u>Indicate new information on plans (ex. location of pad, wet well structures, control panel and/or telemetry station, tanks, generators, fencing, easements, etc.)</u>
<u>Grease Interceptor/Oil Water Separators</u>		<u>Horizontal and vertical location of sample points and manholes.</u>	<u>Redraw on drawings if location differs from approved plans.</u> <u>Indicate new information on plans.</u>

TABLE 16.3 TRANSPORTATION SYSTEM FEATURES

(Features that are intended to facilitate the movement of pedestrians, bicycles, and/or motorized vehicular traffic)

<u>Transportation System Feature</u>	<u>Field Verify</u> (Responsibility: Contractor, Project Engineer, and Engineering Inspector) <i>Mark on field set of the approved plans, all changes from design drawings</i>	<u>Survey</u> (Responsibility: Licensed Surveyor)	<u>Indicate on CRDs</u> (Responsibility: Record Drawing Preparer / Project Engineer)
<u>Right-of-way</u>		<u>Plot edge and center line of right-of-way.</u> <u>Provide recording information (ORB/Page or PB/Page).</u>	<u>Redraw right-of-way if location differs from approved plans (ex. width, centerline, etc.)</u>
<u>Pavement</u>	<u>Material, depth, width, and pavement markings.</u>	<u>1) Horizontal and vertical location of pavement:</u> <u>Depict edge of pavement within right-of-way to confirm that pavement improvements have been satisfactorily constructed within right-of-way limits.</u> <u>2) Provide spot elevations or cross-section elevations at reasonable intervals to confirm positive drainage flows in accordance with approved plans.</u>	<u>Redraw pavement on drawings if location differs from approved plans.</u> <u>Indicate new information on plans.</u>

TABLE 16.3 TRANSPORTATION SYSTEM FEATURES

(Features that are intended to facilitate the movement of pedestrians, bicycles, and/or motorized vehicular traffic)

<u>Transportation System Feature</u>	<u>Field Verify</u> (Responsibility: Contractor, Project Engineer, and Engineering Inspector) <i>Mark on field set of the approved plans, all changes from design drawings</i>	<u>Survey</u> (Responsibility: Licensed Surveyor)	<u>Indicate on CRDs</u> (Responsibility: Record Drawing Preparer / Project Engineer)
<u>Curb and Gutter</u>	<u>Location of face of curb, type.</u>	<u>Provide spot elevations or cross-section elevations at reasonable intervals to confirm positive drainage flows in accordance with approved plans.</u>	<u>Redraw on drawings if location differs from approved plans.</u> <u>Indicate new information on plans.</u>
<u>Driveways and Curb Cuts</u>	<u>Materials, layout.</u>	<u>Provide spot elevations or cross-section elevations at reasonable intervals to confirm positive drainage flows in accordance with approved plans.</u>	<u>Redraw on drawings if location differs from approved plans.</u> <u>Indicate new information on plans.</u>
<u>Signage</u>	<u>Location, size, type.</u>	<u>Pole or foundation location.</u>	<u>Redraw location on drawings if location differs from the approved plans.</u> <u>Indicate new information on plans.</u>
<u>Sidewalk</u>	<u>Location, material, width.</u>	<u>Edge of sidewalk.</u>	<u>Redraw on drawings if location differs from the approved plans. Indicate new information on plans.</u>
<u>Street Lighting</u>	<u>Height, wattage, materials.</u>	<u>Pole locations.</u>	<u>Redraw on drawings if location differs from the approved plans. Indicate new information on plans.</u>
<u>Traffic Signals</u>	<u>Location, size, type.</u>	<u>Pole locations</u>	<u>Redraw on drawings if location differs from the approved plans. Indicate new information on plans.</u>

TABLE 16.3 TRANSPORTATION SYSTEM FEATURES

(Features that are intended to facilitate the movement of pedestrians, bicycles, and/or motorized vehicular traffic)

<u>Transportation System Feature</u>	<u>Field Verify</u> <u>(Responsibility: Contractor, Project Engineer, and Engineering Inspector)</u> <i>Mark on field set of the approved plans, all changes from design drawings</i>	<u>Survey</u> <u>(Responsibility: Licensed Surveyor)</u>	<u>Indicate on CRDs</u> <u>(Responsibility: Record Drawing Preparer / Project Engineer)</u>
<u>Monument, Cases</u>		<u>Horizontal and vertical coordinates</u>	
<u>Conduit</u>			
<u>Junction Boxes</u>			

TABLE 16.4 STORM DRAINAGE FEATURES

(Features that are intended to move rainwater and/or groundwater)

<u>Storm Drainage Feature</u>	<u>Field Verify</u> (Responsibility: Contractor, Project Engineer, and Engineering Inspector) <i>Mark on field set of the approved plans, all changes from design drawings</i>	<u>Survey</u> (Responsibility: Licensed Surveyor)	<u>Indicate on CRDs</u> (Responsibility: Record Drawing Preparer / Project Engineer)
<u>Pipes</u>	1) <u>Material, class, and size.</u> 2) <u>Distance between all manholes</u>	1) <u>Length (horizontal length of pipe from center of manhole to center of manhole).</u> 2) <u>Inverts – All pipe ends in structures or out.</u> 3) <u>Location of ends - not in structures.</u>	<u>Redraw pipe on drawings if location differs from approved plans.</u> <u>Label lines to be dedicated to the city as “City Owned.”</u> <u>Revise pipe profiles if change is more than 0.5 feet.</u> <u>Recalculate slope based upon record length and surveyed inverts.</u> <u>Indicate new information on plans (ex. length, diameter, slope, etc.)</u>
<u>Manholes and Inlets</u>	<u>Size, type, cover type (throat, vane grate, etc.)</u>	1) <u>Location of structure.</u> 2) <u>Rim elevation</u>	<u>Redraw structure on drawings if location differs from approved plans.</u> <u>Label manholes to be dedicated to the city as “City Owned.”</u> <u>Indicate new information on plans (ex., length, diameter, slope, etc.)</u>
<u>Culverts</u>	<u>Material, type, size and shape of end structure</u>	<u>Invert elevations.</u>	<u>Redraw structure on drawings if location differs from approved plans.</u> <u>Label culverts to be dedicated to the city as “City Owned.”</u> <u>Recalculate slope based on record length and surveyed inverts.</u> <u>Indicate new information on plans (ex. length, diameter, slope).</u>
<u>Underdrains</u>	<u>Pipe location, material, cleanout locations.</u>		<u>Redraw structure on drawings if location differs from approved plans</u>

TABLE 16.4 STORM DRAINAGE FEATURES

(Features that are intended to move rainwater and/or groundwater)

<u>Storm Drainage Feature</u>	<u>Field Verify</u> (Responsibility: Contractor, Project Engineer, and Engineering Inspector) <i>Mark on field set of the approved plans, all changes from design drawings</i>	<u>Survey</u> (Responsibility: Licensed Surveyor)	<u>Indicate on CRDs</u> (Responsibility: Record Drawing Preparer / Project Engineer)
<u>Pump Stations</u>	<u>Material, diameter, pump manufacturer, size.</u>	<u>1) Location of concrete pad, center of wet well structures, control panel and/or telemetry stations, fuel tank emergency generator, perimeter fencing, and easements. 2) Top of invert elevations. 3) Location and elevation of top of slab, bottom of wet well, influent pipe invert, control floats, and all valves.</u>	<u>Redraw on drawings if location differs from approved plans. Indicate new information on plans (ex. location of pad, wet well structures, control panel and/or telemetry station, tanks, generators, fencing, easements, etc.)</u>
<u>Other Drainage Features</u>			<u>Redraw structure on drawings if location differs from approved plans</u>

TABLE 16.5 STORMWATER MANAGEMENT FEATURES

(Features that are intended to control the rate and/or quality of the rainwater runoff)

<u>Stormwater Management Feature</u>	<u>Field Verify</u> (Responsibility: Contractor, Project Engineer, and Engineering Inspector) <i>Mark on field set of the approved plans, all changes from design drawings</i>	<u>Survey</u> (Responsibility: Licensed Surveyor)	<u>Indicate on CRDs</u> (Responsibility: Record Drawing Preparer / Project Engineer)
<u>Vaults</u>	<u>Material, type, size, control systems (orifice size, weir dimensions)</u>	1) <u>Control structure location.</u> 2) <u>Control elevations (orifice inverts, weir, skimmer, etc.)</u> 3) <u>Bottom elevation</u> 4) <u>Access locations</u>	<u>Redraw structure on drawings if location differs from the approved plans.</u>
<u>Ponds</u>	<u>Layout materials, outfall, skimmers, structures, fences, walls, plantings, etc.</u>	1) <u>Spot elevations at 50' intervals along top of berm, retaining walls, and bottom of all retention and/or detention ponds to indicate conformance with approved plans.</u> 2)	<u>Redraw pond on drawings if location has differs from approved plans by more than one foot.</u> <u>Recalculate size based on water surface shape.</u> <u>Indicate new information on plans (ex. size, depth, shape, material type, etc.)</u>
<u>Biofilters/ swales</u>	<u>Length, width</u>	1) <u>Inlet invert.</u> 2) <u>Outlet invert.</u> 3) <u>Spot elevations at 50' intervals along all swales/ditches.</u>	<u>Redraw biofilter/swale on drawings if location differs from the approved plans or if swale has moved more than five feet.</u>
<u>Infiltration/ Exfiltration Systems and French Drains</u>	<u>Material, size, pipe (size, type and diameter)</u>	1) <u>Inlet invert.</u> 2) <u>Bottom elevation.</u> 3) <u>Chamber grid and location of clean outs and inspection ports.</u>	<u>Redraw feature on drawings if location differs from the approved plans.</u> <u>Revise pipe profiles if change is more than 0.5 feet.</u>

TABLE 16.6 NATURAL RESOURCES FEATURES (Features that are non structural features that convey and/or hold water)			
<u>Natural Resources Feature</u>	<u>Field Verify</u> (Responsibility: Contractor, Project Engineer, and Engineering Inspector) <i>Mark on field set of the approved plans, all changes from design drawings</i>	<u>Survey</u> (Responsibility: Licensed Surveyor)	<u>Indicate on CRDs</u> (Responsibility: Record Drawing Preparer / Project Engineer)
Streams or Waterbodies		Centerline of stream or edge of waterbody.	Redraw feature on drawings if location differs from the approved plans. Indicate new information on plans.
Wetlands		Boundary of created or modified wetlands	Redraw feature on drawings if location differs from the approved plans. Indicate new information on plans.
FEMA 100 Year Flood Elevation		1) Boundary of FEMA 100 Year Flood Elevation. 2) FIRM panel and date reference or LOMR information.	Redraw feature on drawings if location differs from the approved plans. Indicate new information on plans.

TABLE 16.7 GENERAL SITE FEATURES

(Features include other improvements on the site that require identification and/or verification)

<u>General Site Improvement Features</u>	<u>Field Verify</u> (Responsibility: Contractor, Project Engineer, and Engineering Inspector) <i>Mark on field set of the approved plans, all changes from design drawings</i>	<u>Survey</u> (Responsibility: Licensed Surveyor)	<u>Indicate on CRDs</u> (Responsibility: Record Drawing Preparer / Project Engineer)
<u>Other Utilities</u>	<u>Identify location and depth of all existing utilities encountered and new utilities constructed.</u>		<u>Draw utilities encountered and their depth relative to proposed utility crossing.</u>
<u>Easements</u>	<u>Note any known encroachments or improvements constructed outside of easement.</u>	<u>1) Plot easement legal description. Provide recording information (ORB/Page or PB/Page).</u> <u>2) Depict all facilities (e.g., utility pipe, lift/pump station, sign, or other improvement) to be included within easement to confirm that easement is of sufficient location and/or width to accommodate intended facility.</u>	<u>Draw easement edges from surveyor's legal description.</u>
<u>Building Footprint</u>		<u>Location of building footprint and finish floor elevation.</u>	<u>Redraw location on drawings if location differs from the approved plans.</u>
<u>Trash Collection Facilities Pad</u>		<u>Location of trash collection facilities pad and enclosure.</u>	<u>Redraw location on drawings if location differs from the approved plans.</u>

TABLE 16.7 GENERAL SITE FEATURES

(Features include other improvements on the site that require identification and/or verification)

<u>General Site Improvement Features</u>	<u>Field Verify</u> (Responsibility: Contractor, Project Engineer, and Engineering Inspector) <i>Mark on field set of the approved plans, all changes from design drawings</i>	<u>Survey</u> (Responsibility: Licensed Surveyor)	<u>Indicate on CRDs</u> (Responsibility: Record Drawing Preparer / Project Engineer)
<u>Optional Constructed Feature</u>			<u>Where the drawings or specifications present options, only the option selected for construction shall be shown on the final CRD.</u>
<u>Fences and Walls</u>	<u>Material, type, size and general location.</u>	<u>Location of fences and walls relative to property boundaries and other surface feature improvements.</u>	<u>Redraw location on drawings if location differs from the approved plans.</u>
<u>Benchmark</u>	<u>Note any disturbed by construction.</u>	<u>Benchmark elevation including datum and source</u>	<u>Indicate benchmark elevation including datum and source.</u>
<u>Irrigation, Monitoring, or Abandoned Drinking Wells</u>	<u>Type, size.</u>	<u>Horizontal location.</u>	<u>Redraw location on drawings if location differs from the approved plans.</u>

16.4.4 CRD certifications and title blocks.

CRD certifications shall be as provided herein.

16.4.4.1 CRD Sheet Certifications.

The following CRD certification statements shall be placed on the cover sheet of the mylars and prints submitted to the city:

<u>CONSTRUCTION RECORD DRAWING CERTIFICATION</u>
<p><u>CRD PREPARING PROFESSIONAL: My firm prepared the Construction Record Drawings (CRDs) depicting installed utility and/or site infrastructure improvements, and, with respect to those improvements:</u></p> <ul style="list-style-type: none">a. <u>They were installed in accordance with the approved plans, including but not limited to the standard details, notes and criteria specified therein, any applicable agency permits, and/or supplementary approved shop drawings;</u>b. <u>Any additional information furnished by the installing contractor (such as valve information and hydrant information) has been accurately transcribed onto these CRDs;</u>c. <u>With regard to that portion of the improvements which require survey accuracy, I have reviewed the as-built survey provided by _____ and dated _____ and that this information has been accurately transcribed onto these CRDs;</u>d. <u>They have been indicated on the following sheets accurately and in a manner which distinguishes this as-installed information from the as-designated information; and that:</u>e. <u>Review of test reports and reasonable site inspections and inquiries during and after the construction of the project were made by me or a qualified employee or agent under my supervision or employment to ensure the truth and accuracy of this statement.</u> <p>Firm Name: _____</p> <p>Signature and Date: _____</p> <p>Name, Title, License Type and Number: _____</p>

The following CRD Certification Statement shall be placed on all plan sheets, excluding the cover sheet and standard detail sheets.

<u>CONSTRUCTION RECORD DRAWING CERTIFICATION</u>
<p><u>By my dated signature below, I reaffirm my declaration on the first sheet (cover sheet) of these CONSTRUCTION RECORD DRAWINGS, as relates specifically to the contents of this sheet. My responsibility for the accuracy of the information hereon is limited as set forth in those declarations.</u></p> <p>Signature and Date: _____</p>

16.4.4.2 Title block revisions. In addition, the revision title block shall show as its last entry the date of the record drawing submittal and referenced thoroughly. The date for every sheet within the complete set shall be the same.

16.4.5 Partial CRD and final CRD submittals.

All CRDs (partial and final) shall be prepared on the approved plans, with additional as-constructed information specified herein. Construction feature locations that deviate from the approved plans shall be redrawn or clearly distinguished with as-constructed drawing information and/or details added. Callouts for pipe materials and/or elevations as shown on the approved plans are not to be erased. Callouts for pipe materials and/or elevation information that deviates from the approved plans shall be clearly distinguished by strike-through, bubble, or other as-constructed format to clearly denote all deviations from the design as depicted on the approved plans. The CRDs shall be of suitable quality for producing legible prints through scanning, microfilming or other standard copy procedures. All sheets of the CRD submittals to the city shall be signed/sealed by the project engineer.

16.4.5.1 Partial CRD submittals and agency permit certification approvals. The purpose of any partial CRD submittals is to provide verification that underground utility, and/or other site improvement, has been constructed in accordance with the approved plan prior to the construction of additional site improvements that might obscure a thorough inspection of the facilities. Partial CRDs shall be prepared on the appropriate sheets of the approved site plan, with any field changes or modifications clearly shown, and must show the entire utility and/or other site improvement in addition to the construction data as indicated by the construction feature tables (Table 16.1 through Table 16.7). Partial CRD submittals are required in support of:

- (a) Florida department of environment protection (FDEP) water permit certifications for clearance of use. When regulatory permits have been issued from the FDEP for the construction of water improvements, partial CRD submittals are required prior to the city's sign-off on any regulatory permit certifications for clearance of use. Partial CRD submittals shall be prepared on the appropriate sheets of the approved plan and must show the entire utility being certified complete. FDEP permit certification for clearance requests for water must be accompanied by bacteriological sample reports. Sampling points must be shown on the CRDs and must be consistent with the FDEP permit. City staff will review the partial CRDs to insure all required information has been provided prior to the city's sign-off. Providing CRD information is consistent with the approved plans, the city's sign-off on a regulatory permit clearance is typically provided within seven (7) calendar days of the city's receipt of a complete document submittal. However, should CRD information indicate any substantial deviation from the approved plans, city sign-off on the regulatory permit clearance shall be withheld and the project engineer shall be notified of the deviation typically within seven (7) calendar days. The project engineer shall be required to satisfactorily resolve or address the deviation with the city within thirty (30) calendar days of notification, or sooner if

warranted by the city engineer, or a stop work notice shall be issued by the city.

- (b) Florida department of environmental protection (FDEP) sewer permit certifications for clearance of use. When regulatory permits have been issued from the FDEP for the construction of sewer improvements, partial CRD submittals are required prior to the city's sign-off on any regulatory permit certifications for clearance of use. Partial CRD submittals shall be prepared on the appropriate sheets of the approved plan and must show the entire utility being certified complete. City staff will review the partial CRDs to insure all required information has been provided prior to the city's sign-off. Providing CRD information is consistent with the approved plans, the city's sign-off on a regulatory permit clearance is typically provided within seven (7) calendar days of the city's receipt of a complete document submittal. However, should CRD information indicate any substantial deviation from the approved plans, city sign-off on the regulatory permit clearance shall be withheld and the project engineer shall be notified of the deviation typically within seven (7) calendar days. The project engineer shall be required to satisfactorily resolve or address the deviation with the city within thirty (30) calendar days of notification, or sooner if warranted by the city engineer, or a stop work notice shall be issued by the city.
- (c) St. Johns River water management district (SJRWMD) permit certifications. When a permit has been issued from the SJRWMD for the construction of a stormwater management system, a complete submittal of the project engineer's certification of completion to the SJRWMD shall be submitted to the city prior to the issuance of certificate of subdivision completion, certificate of site completion or certificate of occupancy by the city. The submittal packet shall contain partial CRD submittals prepared on the appropriate sheets of the approved plan and must show the entire utility being certified complete. City staff will review the partial CRDs to insure all required information has been provided. However, should CRD information indicate any substantial deviation from the approved plans, the project engineer shall be notified of the deviation typically within seven (7) calendar days. The project engineer shall be required to satisfactorily resolve or address the deviation with the city and the SJRWMD within thirty (30) calendar days of notification, or sooner if warranted by the city engineer, or a stop work notice shall be issued by the city.
- (d) Cost share agreement. When a cost share agreement with the city has been approved by the city commission, partial payment requests to the city by the developer shall be supported by partial CRD submittals documenting work complete.

16.4.5.2 Final CRD submittals. Final CRD submittals must be reviewed and approved by the city prior to the city's issuance of a final certificate of subdivision completion, certificate of site completion or certificate of occupancy. Final CRDs must consist of each sheet of the approved plans, updated to reflect any field changes or modifications and all as-built survey information in accordance with Section 16.4.3 - Construction Feature Tables. Coordinate values shall be provided for the improvements in accordance with the city's standard detail requirements. Upon approval, the CRDs must be submitted to the public works and utilities department in the following formats:

- (a) 1 full set of reproducible mylars (3 mil minimum),
- (b) 1 electronic copy (compact disc, read-only memory (CD-ROM)). The drawing files shall be converted to AutoCAD 2005 or higher in "DWG" format. CDs shall be labeled and include the following information: Project Name, Project Address / Location, and Date. CD's shall be submitted in hard protective plastic cases.

DIVISION 5. AS-BUILT (OR RECORD) SURVEY

16.5.1 Purpose.

The as-built (or record) survey is an integral part of the construction record drawing (CRD) process since this document is required to verify the horizontal and vertical location of installed improvements in phases as they are constructed. The project surveyor shall be retained by the developer during all phases of construction and an as-built survey shall be prepared depicting all constructed improvements shown on the approved plans. The as-built survey shall be updated periodically during construction to accurately depict location and direction of utilities, slope/elevation in parking areas, and all other construction features of the approved plan that require field survey accuracy. Refer to construction feature tables (Table 16.1 through Table 16.7) Coordinate values shall be provided for the improvements in accordance with the city's standard detail requirements. When performing as-built surveys, the project surveyor shall obtain field measurements of vertical and/or horizontal dimensions of constructed improvements, and the as-built survey shall clearly show by symbols, notations, or delineations those constructed improvements located by the survey. The as-built survey shall also note all revisions to the drawing during construction by revision note and date. Each as-built survey submittal shall be certified by a Florida licensed/registered professional surveyor and mapper (PSM) in accordance with Chapter 61G17 of the Florida Administrative Code, and shall, at minimum, document the location of the items listed below as they are constructed and surveyed:

- (a) The boundary of the site, all rights-of-way, easements, and lot lines.
- (b) Location of building footprint and finished floor elevation.

- (c) Substantial visible improvements (in addition to buildings) such as signs, trash collection facilities pad, sidewalks, swimming pools, etc.
- (d) Parking areas and structures, and if striped, the striping and the type (e.g., handicapped, motorcycle, regular, etc.) and number of parking spaces.
- (e) Indication of access to a public right-of-way such as curb cuts and driveways.
- (f) The location of all valves, hydrants, services and spot elevations of water lines at the point of connection to the existing system, all changes in direction or elevation but not to exceed intervals of 50 feet or less, and at the pipe terminus. Elevations of pipe shall be provided at any point where a water line crosses a wastewater or drainage line.
- (g) Location of all sanitary sewer manholes, cleanouts, and the service end of all laterals and elevations of all manhole tops and inverts.
- (h) Location of all valves, and spot elevations of force mains at the station, and at the point of connection to the existing system, all changes in direction or elevation but not to exceed intervals of 50 feet or less.
- (i) Location of all lift stations including the top and invert elevations, and the location and elevation of all valves, and the point where the force main crosses any wastewater, water or drainage lines.
- (j) The location, size, type and invert elevations of all drainage pipes.
- (k) Spot elevations at twenty five foot (25') intervals along the top of the berm and sufficient bottom elevations of all retention and/or detention ponds to indicate conformance with the approved design.
- (l) Spot elevations at twenty five foot (25') intervals along all off-site drainage swales/ditches.
- (m) Roadway plans, including but not limited to, plan and profiles, cross-sections, and typical pavement section.
- (n) Coordinate values shall be provided for the improvements in accordance with the city's standard detail requirements.

16.5.2 As-built survey certifications and title blocks.

As-built certifications shall be as provided herein.

16.5.2.1 As-built survey certifications.

The following as-built survey certification statements shall be placed on the cover sheet of the mylars and prints submitted to the city:

<u>AS-BUILT SURVEY CERTIFICATION</u>																	
<u>INFORMATION PROVIDED BY:</u> <u>(Company Name)</u> <u>(Company Address, City, State, Zip)</u> <u>(Telephone Number / Fax Number)</u>																	
<u>REVISED:</u> <u>REVISED:</u> <u>REVISED:</u>																	
<p><u>I HEREBY CERTIFY THAT THE:</u></p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border-bottom: 1px solid black;">Pavement (Roadway/Parking)</td> <td style="width: 50%; border-bottom: 1px solid black;">Potable Water System</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Curb, Gutter & Driveways</td> <td style="border-bottom: 1px solid black;">Reclaimed Water System</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Stormwater & Drainage</td> <td style="border-bottom: 1px solid black;">Sanitary Gravity System</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Easements</td> <td style="border-bottom: 1px solid black;">Lift Station & Force Main</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Finished Floor Elevation</td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;">Other (as described)</td> </tr> <tr> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;">Other (as described)</td> </tr> <tr> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;">Other (as described)</td> </tr> </table> <p>ARE AT THE HORIZONTAL AND VERTICAL LOCATIONS AS SHOWN ON THESE "AS-BUILT" DRAWINGS AND MEET THE MINIMUM TECHNICAL STANDARDS SET FORM BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 61G17-6, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027 FLORIDA STATUTES. <u>THIS DRAWING IS NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED/REGISTERED PROFESSIONAL SURVEYOR AND MAPPER.</u></p> <p>Firm Name: _____</p> <p>Signature: _____</p> <p>Name: _____ Date: _____</p> <p>Florida Licensed/Registered Professional Surveyor & Mapper Number: _____</p>		Pavement (Roadway/Parking)	Potable Water System	Curb, Gutter & Driveways	Reclaimed Water System	Stormwater & Drainage	Sanitary Gravity System	Easements	Lift Station & Force Main	Finished Floor Elevation			Other (as described)		Other (as described)		Other (as described)
Pavement (Roadway/Parking)	Potable Water System																
Curb, Gutter & Driveways	Reclaimed Water System																
Stormwater & Drainage	Sanitary Gravity System																
Easements	Lift Station & Force Main																
Finished Floor Elevation																	
	Other (as described)																
	Other (as described)																
	Other (as described)																
<p>NOTE: THIS IS NOT A BOUNDARY SURVEY. BOUNDARY INFORMATION SHOWN HEREON IS SHOWN FOR INFORMATIONAL PURPOSES ONLY.</p>																	

The following CRD certification statement shall be placed on all plan sheets of the other than the cover sheet and standard detail sheets.

<u>AS BUILT SURVEY CERTIFICATION</u>
<u>REVISED:</u> <u>REVISED:</u> <u>REVISED:</u>
By my dated signature below, I reaffirm my declaration on the first sheet (cover sheet) of these AS BUILT DRAWINGS , as relates specifically to the contents of this sheet. My responsibility for the accuracy of the information hereon is limited as set forth in those declarations.
Signature and Date: _____

16.5.2.2 Title block revisions. In addition, the revision title block shall show as its last entry the date of the as built survey submittal and referenced thoroughly. The date for every sheet within the complete set shall be the same.

16.5.3 As-built (record) survey submittals.

An as-built survey, prepared by a Florida licensed/registered professional surveyor and mapper (PSM), shall be submitted concurrent with partial and final CRDs for all public and private site improvements. Partial and final as-built survey submittals shall note all revisions to the drawing by revision note and date. Final as-built surveys at project completion must be reviewed and approved by the city prior to the city's issuance of a final certificate of subdivision completion, certificate of site completion, or certificate of occupancy. Upon approval, a signed reproducible mylar (3 mil minimum) of the as-built (record) survey must be submitted to the public works and utilities department along with one (1) signed/sealed copy. The final as-built survey shall also be provided as an electronic copy on compact disc, read-only memory (CD-ROM). The drawing files shall be converted to AutoCAD 2005 or higher in "DWG" format. CDs shall be labeled and include the following information: Project Name, Project Address / Location, and Date. CD's shall be submitted in hard protective plastic cases.

DIVISION 6. CERTIFICATE OF SUBDIVISION COMPLETION, CERTIFICATE OF SITE COMPLETION, BUILDING CODE CERTIFICATE OF COMPLETION, AND CERTIFICATE OF OCCUPANCY

16.6.1 General.

In order to avoid close-out delays, several times during the course of the project the developer, contractor, and project engineer may be prompted by city personnel to submit documents, under their respective responsibilities, for inclusion into the project files. This includes, but is not limited to, a number of administrative project close-out submittals items required prior to the city's issuance of a certificate of subdivision completion, certificate of site completion, building code certificate of completion, or

certificate of occupancy. Following the requirements of this article for project close-out will improve the chances that a project will be closed out on time in accordance with the developer's project schedule. Any questions project representatives may have regarding the project status related to site improvements can be answered by the public works and utilities department.

16.6.2 Platted property.

Where property is platted, a certificate of subdivision completion will be prepared for approval by the city manager prior to the city's issuance of any building code certificate of completion or certificate of occupancy. The application for project completion and final site inspection shall initiate the certificate of subdivision completion approval process.

16.6.3 Dedicated infrastructure improvements.

When utility systems are constructed or extended or utility systems are conveyed to the city for ownership and maintenance, a certificate of site completion will be prepared for approval by the city manager prior to the city's issuance of any building code certificate of completion or certificate of occupancy. The application for project completion and final site inspection shall initiate the certificate of site completion approval process.

16.6.4 Existing platted property or parceled land having no dedicated infrastructure improvements.

When property is developed on existing platted property or parceled land, the certificate of occupancy will serve as the city's acceptance of the project. The application for project completion and final site inspection shall initiate the certificate of occupancy approval process.

16.6.5 Application for project completion and final site inspection submittals.

Upon substantial completion (approximately 30 - 45 calendar days prior to project completion) of work under the site improvement work permit, including both private and city dedicated infrastructure, the project engineer shall submit an application for project completion and final site inspection for project close-out. The application for project completion and final site inspection for project close-out must be accompanied by the appropriate support documents required for certificate of subdivision completion, and certificate of site completion and building code certificate of completion or certificate of occupancy approvals by the city. Support document requirements for certification of subdivision completion, certificate of site completion, and building code certificate of completion or certificate of occupancy approvals by the city are identified below.

The following items shall be required concurrent with, or prior to, the submittal of the application for project completion and final site inspection:

16.6.5.1 Required for all projects:

- (a) Final Construction Record Drawings (CRDs). Two complete signed/sealed paper sets shall be provided for review purposes. Refer to Section 16.4.5.2 for final submittal requirements.
- (b) As-built survey. Two complete signed/sealed paper sets shall be provided for review purposes. Refer to Section 16.5.3 for final submittal requirements.
- (c) Project engineer's certification letter.
- (d) Project surveyor's certification letter.
- (e) Payment of retest and overtime fees.
- (f) FEMA (Federal Emergency Management Agency) elevation certificate. A signed/sealed finished construction elevation certificate on the current FEMA form is required for any project having all or a portion of the property located within a special flood hazard area (SFHA). The Elevation Certificate is used by the city to ensure the community's compliance with the National Flood Insurance Program (NFIP). Where the special flood hazard area encroaches onto the property but building improvements are outside the SFHA, the elevation certificate shall demonstrate that the building, machinery and equipment servicing the building, and the building's lowest adjacent grade are at or above the base flood elevation. Where building improvements are approved as an exception by the city engineer, within a special flood hazard area, the finished construction elevation certificate shall demonstrate that building, machinery and equipment servicing the building, and building's lowest adjacent grade are constructed a minimum of one (1) foot above the base flood elevation. Elevation certificates used to obtain NFIP flood insurance must include building photographs. This certificate is used only to certify building elevations. A separate certificate is required for floodproofing.

16.6.5.2 Required for all projects with agency permits:

- (a) Florida department of environmental protection (FDEP) clearances. FDEP "clearance for service" letters for sanitary sewer (including reclaimed water) and potable water systems as required.
- (b) Stormwater certification. A copy of the project engineer's transmittal of the certificate of completion letter, with support documents, to the Florida department of environmental protection (FDEP), the water management district, and any other agencies regulating the project's stormwater

system. In the event that the system has been altered or modified, support documents shall include stormwater calculations demonstrating that the system is in compliance with the permit and city code.

- (c) County, state or other regulatory agency certifications. When other regulatory permits have been issued to a project, evidence of that agency's final inspection and/ or approval of the improvement shall be provided. Examples of county, state or other regulatory agency certifications are as follows: County or state roadway or right-of-way utilization permits, etc.

16.6.5.3 Required for all platted projects:

- (a) Project surveyor's letter regarding permanent reference monuments (PRMs). The project surveyor's letter certifying that permanent reference monuments (PRMs) and control points have been placed as required by Chapter 177 of the Florida Administrative Code, amended shall be submitted. The surveyor's letter must be signed and sealed.
- (b) Lot Grading Certificate.

16.6.5.4 Required for all projects with dedicated infrastructure or easements:

- (a) Final itemized construction costs. Final itemized construction costs shall be submitted concurrently with the maintenance bond for review by the city engineer. A corrected contractor's bid reflecting any additional cost increase or change orders shall be required. All cost documents shall be signed and sealed where appropriate.
- (b) Bill of sale. A bill of sale shall be submitted for all infrastructure improvements to be owned and maintained by the city regardless of whether they are located in city right-of-way, easement or private property. The bill of sale is to be accompanied by a check from the developer equal to the amount of all recording fees. (Obtain standard form from the public works and utilities department or in the city's on-line developer's guide.) The city will facilitate the recording of the bill of sale in the public records upon its approval. A recorded copy will be provided upon request.
- (c) Easements. All easements, exclusive of those recorded by plat, are to be submitted for review by the city engineer. All easement documents are to be accompanied by a check from the developer equal to the amount of all recording fees. (Obtain standard form from the public works and utilities department or city's on-line developer's guide.) The city will facilitate the recording of the easement agreement in the public records upon its approval. A recorded copy will be provided upon request.

- (d) Meter easement agreement. Water meters installed on private property require prior approval of the city engineer. Approval must be evidenced by a "meter easement agreement" document executed by the property owner and the city. When a meter easement agreement is required, it must be executed prior to the city's installation of any meters on private property. All easement documents are to be accompanied by a check from the developer equal to the amount of all recording fees. (Obtain standard form from the public works and utilities department or city's on-line developer's guide.) The city will facilitate the recording of the easement agreement in the public records upon its approval. A recorded copy will be provided upon request.
- (e) Maintenance bond. A bond shall be posted by the developer and executed by a corporate surety company authorized to do business in the State of Florida, that is satisfactory to the city, and shall be payable to the City of Altamonte Springs. The bond shall be in the amount of five thousand dollars (\$5,000.00) or ten percent of the construction cost, whichever is greater, of all required improvements, excluding mechanical equipment, to be conveyed or dedicated to the city. Such bond shall guarantee maintenance, materials, workmanship and structural integrity of improvements conveyed or dedicated to the city for a two-year period commencing after the date of acceptance of the certificate of subdivision completion or certificate of site completion by the city manager. The manufacturer's warranty will be acceptable for mechanical equipment. As an alternative to the provision of a surety bond, the developer may provide for the deposit of cash in an escrow account or a letter of credit acceptable to the city. A completed maintenance bond and escrow agreement shall be submitted when utilizing a cashier's check or certified check as the form of guaranty in lieu of surety. (Obtain standard form from the public works and utilities department or city's on-line developer's guide.)
- (f) Lift station support materials. Operation and maintenance manuals of the pumps, valves, and control panel, shop drawings, and/or other lift station support materials, approved by the project engineer, shall be submitted to the city.
- (g) Lift station fees. Where a lift station is being dedicated for city ownership and maintenance the developer shall be required to submit the following documentation and fees:

 - (1) Detailed equipment literature, including but not limited to, shop drawings, specifications, manufacturers details, parts catalogs, installation manuals, operation and maintenance manuals along with a lift station start-up report certified by the project engineer.

- (2) Seven thousand dollars for interfacing the lift station to the city's telemetry system.
- (3) Three thousand dollars for emergency generator funds to provide backup power during emergencies.
- (h) Street light deposit. A street light start-up fee per street light, must be paid to the city. This fee is based upon current adopted city ordinance.

16.6.6 Certificate of Subdivision Completion, Certificate of Site Completion, and Building Code Certificate of Completion and Certificate of Occupancy approvals.

The process for obtaining city approval of a certificate of subdivision completion, certificate of site completion, and building code certificate of completion or certificate of occupancy approval is through the submittal of the application for project completion and final site inspection for project close-out, scheduling of final inspection, support document sufficiency review, and final inspection reporting procedures is provided in the following sections.

16.6.6.1 Application for project completion and final site inspection review. A review of all documents submitted in support of the application for project completion and final site inspection shall be performed by the public works and utilities department to determine the general sufficiency of the application submittal. Typically, within seven (7) calendar days of a complete submittal packet (complete submittal shall mean that all required documents have been submitted for review) an application sufficiency report will be prepared. The report will consist of the following parts.

- (a) As-built survey and final CRDs sufficiency review. This part of the report will list any discrepancies between the final as-built survey and final CRDs and will identify additional information required on the plans for a sufficient submittal based upon city Code regulations. Since the intent of the sufficiency review is to determine if additional information is required to support an on-site walk through, the report will not include a punch-list of on-site deficiencies.
- (b) Support document sufficiency review. This part of the report will list any discrepancies between the support documents and the final as-built survey and final CRDs. The report will also identify additional information required with the application for project completion. For example, an additional easement may be required to accommodate a utility that has been constructed outside of an existing easement; if a utility adjustment affected state or county right-of-way, other agency approvals, not identified on the approved plan, may be required; or, additional shop drawing submittals may be required to support the final inspection process.

Resubmittals or new information will be reviewed in additional seven (7) calendar day review cycles until the submittal packet is determined to be sufficient for final inspection based upon the information provided. However, since the city's review of the documents up to this point does not include a final inspection, it is possible that additional changes to items included with the submittal packet may be required if necessitated by field observations. For example, itemized costs in support of the maintenance bond and/or bill of sale may require adjustment if field conditions do not correspond with the information provided; additional easements could be required if utilities or other infrastructure improvements have not been constructed in accordance with the approved design; or, as-built surveys or CRDs may require additional information if they do not adequately reflect field conditions. The efficiency of the project close-out process and the schedule for final certificate of occupancy issuance by the city is greatly dependent of the owner/developer's contractor and the project engineer's coordination throughout the construction process.

16.6.6.2 Final Site Inspection: Once it is determined by the public works and utilities department that the application for project completion and final site inspection submittal is sufficient based upon information provided or known to date, a final inspection shall typically be scheduled within three (3) working days. The final inspection shall be conducted by the city engineering inspector together with the project engineer and representatives of other interested agencies, and shall be performed with the CRDs and as-built survey drawings to determine site, drawing accuracy, and support document accuracy. Typically within seven (7) calendar days of the final inspection, the city shall prepare a project completion report consisting of the following parts.

- (a) Part I - Final site inspection report. This part of the report will be a summary of the city engineering inspector's field inspections and results of tests, and other inspections performed by the developer's project engineer and/or other consultants as required. Any deficiencies will be appropriately noted.
- (b) Part II – CRD and as-built (record) survey report. This part of the report will list any CRD and/or as-built (record) survey deficiencies.
- (c) Part III - Support document accuracy report. This part of the report will list any deficiencies with the support documents that have been provided, and previously reviewed prior to final inspection, based upon a final inspection of the site and actual field conditions. Since support documents must correspond with actual field conditions, and final CRD information, modifications to support document information may be required. For example, itemized costs in support of the maintenance bond and/or bill of sale may require adjustment if field conditions do not correspond with the information provided; additional easements could be required if utilities or other infrastructure improvements have not been constructed in accordance with the approved design; or, as-built surveys or CRDs may

require additional information if they do not adequately reflect field conditions.

Deficiencies noted must be satisfactorily corrected and mylar of the CRDs and as-built (record) survey drawings must be submitted prior to the city's issuance of the certificate of subdivision completion, certificate of site completion or certificate of occupancy. A failing report for Part I, Part II, or Part III items will result in delays in certificate of subdivision completion, certificate of site completion, and certificate of occupancy issuance by the city.

16.6.6.3 Certificate of subdivision completion and certificate of site completion approval by the city manager. Within seven calendar days of a passing Part I, Part II, and Part III report, the public works and utilities department will prepare a certificate of subdivision completion or certificate of site completion, as applicable, for execution by the director of public works and utilities and the city manager. Once the certificate of subdivision completion or certificate of site completion form has been prepared, it will be transmitted by the public works and utilities department to the city manager's office for city approval and typically approved within five (5) calendar days.

16.6.6.4 Building code certificate of completion or certificate of occupancy approval by city departments. Once the certificate of subdivision completion or certificate of site completion has been approved by the city manager's office, the public works and utilities department shall be authorized to sign-off on its portion of the certificate of occupancy. Final issuance of a building code certificate of completion or certificate of occupancy shall also be contingent upon approval by the growth management department and building/fire safety division.

DIVISION 7. MAINTENANCE RESPONSIBILITY DURING CONSTRUCTION AND MAINTENANCE BOND PERIOD

16.7.1 Site maintenance during construction.

The developer and contractor shall be required during the entire construction period to control, regulate and maintain the development in such a manner as to prevent the accumulation of trash and debris, resulting from his construction activities, on both the site and adjacent public and private property. This should be interpreted to include controlling the tracking of sediments by traffic out of the construction area, the overflow of stormwater out of the construction site during severe storms and the blowing of soil, dust and other debris from the site. The use of residential lots in nearby developments or substantially complete phase of the same development, under the ownership and control of said developer, for the bulk storage of construction material substantially unrelated to the development of those residential lots is prohibited. A development shall be deemed substantially completed when seventy percent (70%) of the plan units are completed and ready for occupancy, or are actually occupied.

The project site will at all times be maintained by the developer's contractor in a state of cleanliness for the health and safety of persons working on or visiting the site and those persons living adjacent to the construction site. Site cleanliness shall not be limited to on-site conditions. The contractor at times shall remove materials and debris from public roadways and/or other public facilities as may become necessary during the course of the project. All refuse and excess scrap materials shall be disposed of in a proper manner. The site shall be kept as clean as possible during construction.

Once the project has progressed to a point where building/fire safety division inspection services begins to approve building finals, the contractor shall maintain the roadways and part of the site that are open to the general public free of soils and other materials which may have migrated to that area. In addition to on-going maintenance of the roadways and public areas, the contractor shall isolate on-going construction and hazards therein from the public.

All portions of the project open to the general public shall be fenced, barricaded and otherwise protected from all construction activity in accordance with city LDC requirements and/or other applicable rules, regulations, or laws. Failure to comply will result in the withholding of finals on the project and could result in work delays.

The developer shall prohibit, by the proper use of Manual on Uniform Traffic Control Devices (MUTCD) approved closures and devices, public traffic from using all newly constructed roadways until they are accepted and approved to be open by the appropriate regulatory authority (e.g., city, county, state). It is also highly recommended that all construction traffic be routed through a separate designated and controlled construction entrance.

16.7.2 Erosion and sediment control during construction.

Erosion and sediment control best management practices shall be used as necessary during construction to retain sediment on-site. These management practices shall be designed and certified by an appropriate registered professional experienced in the fields of soil conservation or sediment control according to specified site conditions and shall be shown or noted on the plans of the stormwater management system. The registered professional shall furnish the contractor with information pertaining to the construction, operation and maintenance of the erosion and sediment control practice.

Before any offsite discharge from the stormwater management system occurs, the retention and detention storage must be excavated to rough grade prior to building construction or placement of impervious surface within the area served by those systems. Adequate measures shall be taken to prevent siltation of these treatment systems and control structures during construction. In the event such protection is found to be inadequate, it will be the developer's responsibility to remove any downstream siltation as directed by the city.

16.7.3 Infrastructure maintenance bond.

All improvements to be dedicated, owned, and operated by the city will be covered by a maintenance bond in the amount of ten percent of the construction costs. The bond will be in effect for two years from the date of acceptance of the certificate of completion by the city manager. During that maintenance period, the owner or owner and/or developer will be expected to provide any maintenance required due to improper installation, poor workmanship, or manufacturer defect. This includes, but is not limited to:

- (a) Repair and replacement of any system components, failed section of paving, etc.
- (b) Control of erosion, replacement of sod, removal of soil or debris washed onto pavement or into drainage system.

16.7.4 Inspection for maintenance bond release.

Approximately sixty (60) calendar days prior to the expiration of the scheduled two (2) year maintenance period, but only after formal request by the applicant, the city engineer will schedule an inspection for the release of the maintenance bond.

Prior to the release of the maintenance bond the owner and/or developer will be required to correct all deficiencies which have been determined by the city to be construction deficiencies and the responsibility of the owner and/or developer.

The maintenance bond shall remain in effect until inspected and released by the city manager.

SECTION FOUR: If any provision of this ordinance or the application thereof to any person or circumstance is held invalid, the invalidity shall not affect other provisions or applications of the ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are declared severable.

SECTION FIVE: Any and all ordinances or parts of ordinances in conflict herewith be and the same are hereby repealed to the extent of the conflict.

SECTION SIX: This ordinance shall become effective upon adoption.

PASSED AND ADOPTED THIS 2ND DAY OF JULY, 2013.


FIRST READING: JUNE 18, 2013

ADVERTISED: JUNE 6, 2013



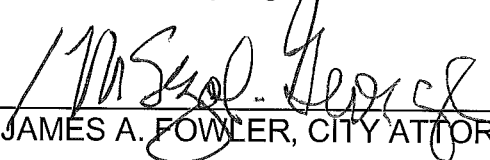
PAT BATES, MAYOR
CITY OF ALTAMONTE SPRINGS, FLORIDA

ATTEST:



ERIN O'DONNELL, CITY CLERK

Approved as to form and legality
for use and reliance of the City
of Altamonte Springs, Florida



JAMES A. FOWLER, CITY ATTORNEY

