

FINAL SURVEY SUBMITTAL FOR MULTIFAMILY AND COMMERCIAL DEVELOPMENT (Triplex and Above):

ENGINEERING REQUIREMENTS FOR AS-BUILT (RECORD DRAWINGS) AND FINAL SURVEY

The following are required to be submitted to the Engineering Permitting Division for review and/or approval prior to issuance of Certificate of Occupancy. A final survey is required prior to final inspection. All information on the drawings must be clear and understandable to the division staff. If any of the requirement(s) is not applicable, please explain in writing why the item(s) does not apply.

1. General requirements for As-built (Record Drawings) and Final Surveys:

All distances, elevations, and coordinates shall be in feet. All elevations and benchmarks shall be referenced to the North American Vertical Datum (NAVD88). The coordinate and horizontal control system shall be referenced to the North American Datum (NAD83). The plans should depict all above ground improvements including but not limited to utilities, structures, flood walls, retaining walls, site, and perimeter grades in order to verify substantial conformance with the approved plans.

Show elevations to the nearest tenth of a foot including but not limited to the green areas, top of pipe for water mains, force mains at vertical deflection points and every 200 feet along straight runs, top of pipe of water or sewer facilities where they cross all other facilities (drainage, telephone, cable TV, electric, etc.),

Show elevations to the nearest one hundredth of a foot including but not limited to, finished floor elevation(s), paved areas, manhole rims, inverts of every gravity sewer, stormwater pipe and force main connections to manholes, lift station top of slab, bottom of wet well, influent pipe invert and control set points.

Provide proper close-out of the engineering permit and inspections such as, but not limited to, pavement restoration in the right of way, sidewalk, curbing, storm drainage, building driveway permit, water & sewer connection and erosion sediment control, etc.

Provide Broward County Environmental Engineering and Permit Division (EPPD) Surface Water Management Release of Certificate of Occupancy Letter or a copy of the General License (if applicable) indicating only the Florida Department of Environmental Protection (FDEP) self-certification is required as part of the Broward County Special Conditions, for Final Survey approval.

Signed and sealed letter from a Florida registered Professional Engineer certifying all components of the site was constructed in substantial conformance with the approved plans and that all the sidewalks and ramps constructed in right of way comply with accessibility - federal, state, and local standards.

2. As-built (Record Drawings): Two (2) Originals and one electronic copy (PDF and AutoCAD) of the Paving Grading & Drainage and Water & Sewer, signed sealed by a Florida registered Professional Surveyor and Professional Engineer, meeting the following conditions:

Entire water system including potable water, and private systems. Sewer system includes gravity sewer, manholes, force mains and lift stations. Show all abandoned in place facilities including the extent and method of abandonment. Indicate facilities that are, or will be, owned by City of Margate (City) versus private or other utilities' facilities. Show the size of all water and irrigation meters, and indicate if meter box is a "double meter" box.

Each main (water and sewer) will be marked with its size and type of material. Gravity pipes will also be marked with their length and slope. Each fitting will be marked with its size and type (i.e. 45-degree bend or 6" X 8" Tee). Valves will be marked with their size and type. Each water service line will be marked with its size. Each water service line and sewer lateral will be marked with its material.

- Indicate pipe joint locations where potable, wastewater and stormwater piping cross other city-owned assets. Show all main horizontal and vertical deflection points. A deflection point is a change in horizontal or vertical alignment other than the normal minor alignment change associated with a “straight” pipe.
- Show the location of all bacteriological sampling points. If the sampling points are subsequently modified during the Florida Department of Environmental Protection permitting process, the Engineer of Record will adjust the drawings accordingly and resubmit to Broward County Water and Wastewater Services (BCWWS) for re-approval.
- State Plane Coordinates to the nearest tenth of a foot or better shall be provided for City maintained facilities including, but not limited to, water mains and force mains at deflection points and every 200 feet along straight runs, the center of each manhole, fitting, valve, blow off, hydrant, water meter box, sewer cleanout, lift station wetwell, double detector check or other non-pipe water or sewer facility, the location of each connection to existing facilities, storm inlets/catch basins and outfalls, the corners (vertices) of all easements being granted to the City as a part of the project and other locations designated by the City.
- Show all known potential underground conflicts, using “blow-up” views and digital photographs when necessary. Show vertical clearances between potable water/ sanitary sewer facilities and other features.
- 3. Final Survey: Two (2) Originals and one electronic copy (PDF) signed and sealed by a Florida registered Professional Surveyor, meeting the following conditions:**
 - Show and dimension all rights of way and easements and reference as to whether by plat or otherwise (i.e. instrument number and ORB book and page). All easements to be identified as to type: City Utility Easements, FP&L Easements, etc.
 - The survey must show elevations every 50 feet or three (3) elevations (minimum) along the property line whichever is more stringent. Elevations are also required for detailing retention of stormwater runoff (including right of way frontage, swale areas, and catch basins).
 - Please show all the utilities in the public right-of-way and within easements or the end of the publicly owned portion of the utility such as, but not limited to, meter and backflow preventer, cleanout, etc. Final Survey needs to show all right of way improvements such as, but not limited to, sidewalks, water, sewer & stormwater connections and existing & proposed easements provided to the City for Final Survey approval.
- 4. If required,**
 - Right of way or easement recording documentation (certified legal and/or survey sketch) with description, current opinion of title, joinder, consent, and partial release of mortgagees/lienholders.
 - Provide the Florida Department of Environmental Protection certification for clearance (for sewer or water main extension).
 - Provide Broward County Environmental Protection Department for Water Resources Division and Wastewater License program certification for clearance (for sewer main or extension).
 - Provide a copy of all other jurisdictions final permit close-out and relevant documentation pertaining to the project and completion of the work.



NOTES:

1. Final inspections will not be scheduled until all the above requirements are submitted and deemed satisfied. A successful submittal of the required items will prevent unnecessary delays in the inspection and Certificate(s) of Occupancy release process.
2. In the event of a failed final inspection, all observed field deficiencies must be corrected prior to rescheduling an inspection. With your cooperation, the revised final survey will be approved upon correction of all field deficiencies. . Final survey review will remain in failed status until the final inspection is passed.
3. Please note that this checklist is not intended to be all-inclusive due to changes in codes, regulations, and ordinances whereas other requirements may apply.