## Minimum Technical Standards Checklist For Utility As-builts

## **City of Panama City Beach**

## Dated May 2012

Surveyors and mappers must meet the following minimum standards of accuracy, completeness, and quality for the City of Panama City Beach to accept as-builts:

- 1. Must identify the responsible surveyor and mapper.
- 2. Shall state the type of survey it depicts and the purpose of the survey.
- 3. Must bear the name, certificate of authorization number, and street and mailing address of the business entity issuing the as-built survey, along with the name and license number of the surveyor in responsible charge.
- 4. Must reflect a survey date, which is the date of acquisition. When the graphics of the as-built survey are revised, but the survey date stays the same, the as-built survey must list dates for all revisions.
- 5. Must be signed and sealed by the surveyor in responsible charge.
- 6. A designated "north arrow" and either a stated scale or graphic scale shall be shown.
- 7. Appropriate line types, line weights, and line widths shall be used on the as-built drawing to differentiate existing from proposed and water from sewer, reclaim, and storm. All physical items (i.e. pipes, valves, etc.), surveyed boundaries, and easements should be clearly marked, and dimensioned, and identified by size and material.
- 8. All utilities in the public right of way and within easements or to the end of the publicly owned portion of the utility (i.e. meter and backflow preventer, cleanout, etc.) shall be shown with associated sizes labeled. This includes, but is not limited to, stub-outs/laterals, meters, bfp's, water mains, force mains, gravity sewer mains, manholes, storm water piping and associated structures, valves, fire hydrants, lift stations, etc. All pipe line work must be connected within the site as well as the connection to existing utilities adjacent to the site (It is the surveyor's responsibility to coordinate with all contractors for locations and sizing). All utility connections to the buildings must be shown.
- 9. All proposed utility/ingress/egress easements must be shown on the drawing and must have the associated legal description written.
- 10. Edge of pavement, roads (asphalt shaded), curbs, driveway connections, buildings, parking lots, right-of-way, and street names must be shown in all applications. All items mentioned above must be field located.

- 11. If a lift station is to be dedicated to the City the plan must show a detail scaled at 1"=10' showing all improvements including: water and sewer services, manholes, inverts, rims, bfp's, yard hydrants, control panels, fencing, parcel boundary, legal description of parcel boundary, wet well, valve box, force main, flow meter (if applicable), driveway, gate.
- 12. Property boundary must be clearly labeled and dimensioned.
- 13. Inverts, grates, tops, rims must be shown for all storm water drainage structures. Inverts (pipes and cleanouts) and rims must be shown for all gravity sewer manholes. Slopes must be shown on each run of pipe for review and approval.
- 14. "As-Built" profile of all Directional Bores and Jack-and-Bores indicating grade and pipe elevations at 10 foot intervals shall be provided on as-built plan sheets based on bore logs developed by boring contractor during installation. Profiles shall use horizontal stationing which ties to stationing on plans. Profiles shall also show existing surface elevations as well as any proposed surface elevations on the profile. Surface profiles must show any pavement, sidewalks, ditches, swales etc. Note that profiles locating pipe solely by "depth below existing ground" will not be accepted.
- 15. Coastal Setback Line or Coastal Construction Control Line should be designated.
- 16. Elevations and location of any flood zones along the flood hazard boundaries shall be delineated.
- 17. Nearby wetlands and other environmentally significant resources clearly labeled.
- 18. Storm water management system features including dimensions of: wet and dry swales, wet and dry ponds, conveyance systems, easements, along with all associated m.e.s. structures and inverts, outfall structures and inverts, skimmers, discharge structures and inverts and slot elevations, top of bank, slope of bank and bottom of all ponds, swales, closed and open conveyances. For FEMA LOMR submittals also provide: finished floor elevations, spot elevations and/or contours showing lowest lot elevations.
- 19. The engineer of record shall review and approve the as-built prior to submission to the City for final approval. Written approval by the engineer of record shall be noted on a transmittal with a statement of no exceptions to minimum standards provided herein.

Storm water requirements for the as-built surveys only apply to parcels within City limits. Please submit three (3) hardcopies and one (1) digital (AutoCAD format) for review and approval.