Corbinton Commons Final Punchlist updated 2/6/2023

Planning Punchlist- Tom King 919-296-9475 Tom.King@hillsboroughnc.gov

- The perimeter asphalt walking trail stops at the end of Market House Way.
 Asphalt trail needs to extend to the east property line (eastern phase) (condition of SUP & shown on approved plans).
- 2. A paved, "meandering sidewalk" with a surface material meeting NCDOT standards & serving as a walking trail must be constructed along US 70 East as shown on the approved plans. The portion on the western side of the development needs to either be completed or a financial guarantee for completion needs to be posted. A projection of the property line separating the eastern & western parcels into the US 70 East right-of-way can be used as the boundary (condition of SUP approval).
- 3. The required opaque, vegetative perimeter buffer isn't planted between the asphalt trail & exterior property lines (condition of SUP approval).
- 4. A fence with a gate needs to be installed to block neighboring views along the southwest sewer easement at Caine St <u>if approved by utilities</u> (condition of SUP approval).

Public Works Punchlist Dustin Hill 919-296-9602 Dustin.Hill@hillsboroughnc.gov

- 1. Damage to the alleys will need to be repaired consistent with on-site communication. There is some significant cracking occurring that needs fixed, there are raised manholes in some alleys that need additional asphalt.
- Since so much time has lapsed an additional final walk-through inspection of all curbing, sidewalks, gutters, drains will need to take place before the town will accept these improvements.
- 3. The low spot in the southern turn of the easter alley needs to be corrected as water ponds there.



4. The attached **Final Street Acceptance Checklist** will need to be completed with a letter from the developer indicating that all checklist items are completed and a request for the town to accept the streets for maintenance.

Stormwater Punchlist Heather Fisher 919-296-9622 Heather.Fisher@hillsboroughnc.gov

- A. As-Built Plans and Certification, Site-Specific Requirements
 - 1. For the as-built plans, we require a plan sheet showing the as-built condition and key elevations of the entire stormwater system and a separate detailed as-built plan sheet of the SCM, with both cross-section and plan views and key elevations.
 - 2. The certification may be provided as a separate letter or included on the as-built plans.
 - 3. With the as-built plans and certification, please provide photos and video of the entire lengths of each outlet pipe from the riser or siphon headwall inlets to the outlets, showing all seams. This documentation should also include the riser structure showing that there are no leaks after a large rain event.
 - 4. In addition, include a statement in the certification that all structures have been inspected for leaks and/or pipe separation and that no leaks or other deficiencies were found, or similar language.
- B. Clubhouse Area
 - The roof drain outflow on the northeast corner of the clubhouse is eroding the slope. Stabilize area, add protection measures, and re-vegetate.
- C. Pump Station Drive, Open Space, and Parking Area
 Runoff from the clubhouse parking, adjacent grass area, and
 alley/driveway has formed a gully on the hill above the pump station.
 This flow is also depositing sediment in front of the pump station and
 eroding an area past the pump station just before the flow enters the
 stream. Redirect this concentrated flow to the pond and repair
 gully using the following measures:
 - Re-grade open space so that runoff from the parking area and open space is directed to the berm or otherwise reaches the pond.
 - Add curbs along the driveway/alley way to direct flow to pond.



3. Repair gully, including filling and compacting as appropriate, and stabilize and revegetate area. Compost or topsoil amendment may be necessary to re-establish vegetation.

D. Outlet Structures

- 1. Pre-cast Riser Outlet Structure
 - Repair any leaks and provide video of riser function during the design storm event, or provide equivalent measure of functionality.
- 2. Low flow/water quality outlet and rip rap dissipater area:
 - a. Repair deteriorated outlet pipe joint just above the scour hole.
 - b. Correct all leaks or pipe separation and provide photos or video of all seams along entire length of pipe.
 - c. Verify the scour hole matches the designed size or correct to meet plan specification.
- 3. Overflow outlet and rip rap dissipater area:
 - Correct all leaks or pipe separation and provide photos or video of all seams along entire length of pipe.

4. Water Level

a. The current water level is below normal pool. The SCM will not be closed out until the water level has reached the normal pool elevation per the approved plans and pond function has been demonstrated during a design storm event.



E. Main Pool Area

- Install aquatic plants and irrigate until established. Reference: Aquatic shelf plants are required to be planted per the State's 1999 stormwater BMP manual:
 https://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-permit-guidance/stormwater-bmp-manual/archive
 To be spaced 2 feet apart, recommended species are Juncus effusus, Hibiscus coccineus, Carex grayi, and Saururus cernuus. Evidence of plant survival and establishment will be necessary prior to close-out.
- 2. The permanent grass cover will need to be fully established on all side slopes and both sides of the dam prior to close-out. Re-seeding is needed near the inlet to the forebay where a significant bare area exists and along the western cut slope.
- Vegetation is currently well-maintained. If any trees or shrub seedlings establish within the SCM area, these will need to be removed by the developer prior to SCM close-out.

F. By-pass Swale along Trail

 Near the trail entrance, a corrugated pipe leading to the swale is broken in several places. Replace pipe with a more permanent and stable conveyance method.



Utilities – updated with walk-through 2/1/2023 – Bryant Green 919-296-9630 Bryant.Green@hillsboroughnc.gov

A. Sewer comments:

- 1. All manhole ring and covers need to be cleaned of residual asphalt.
- 2. Club house and corresponding sewer connection not reflected on record drawings.
- 3. Water diversion/speed bump in front of pumping station needs to be removed or reduced in size to allow town vehicle accessibility. Refer to stormwater comment C. The installed bump is unacceptable.



- 4. All Town side cleanouts need brass screw-type lid and precast concrete ring.
- 5. Remove asphalt from the following manholes:
 - a. SSMH-A17
 - b. SSMH-A18
 - c. SSMH-A19
- 6. Ring and cover need to be adjusted to surface course asphalt grade at the following manholes:
 - a. SSMH-A20
 - b. SSMH-A21
- 7. Cleanout cap is upside down at the following lots:
 - a. 1 and 59.
- 8. Town cleanout cannot be located at the following lots:
 - a. 10, 14, 27, 33, 44, 45, 46, 50, 51, and 62.
- 9. Replace broken cleanout caps at the following lots:
 - a. 13, 15, 35, 40, and 70.
- 10. Cleanout needs to be raised at the following lots:
 - a. 48 and 63
- 11. Relocate poorly placed cleanouts:
 - a. Lot 11 too close to driveway
 - b. Lot 56 too close to foundation

B. Water

- 1. All water valves boxes need to be cleaned of residual asphalt.
- Northern intersection of Market House Way and Bridge St.- Water valve group needs to be raised to surface course asphalt grade. Water line heading east has out of service hydrant and as-builts do not reflect method in which this water line was capped or if it has a blow off.
- 3. Club house not reflected on record drawings.
- 4. Mainline valve in front of lot 38 not reflected on record drawings.
- 5. Cannot find blow off assembly listed on record drawings at intersection of Alley E & D and Market House Way.

- 6. Fire hydrant beside lot 35 in bridge street- Missing bolts in bonnet and isolation valve is too low.
- 7. Water valve set in front of lot 50 on Bridge street All valves are too low and need to be raised to surface course asphalt grade.
- 8. Raise the meter box at the following lots:
 - a. 50, 59, and 61
- 9. Town cannot find meter boxes at the following lots:
 - a. 37, 53, and 62.
- 10. Other meter box repairs needed, by lot:
 - a. Lot 18 Broken antenna on water meter
 - b. Lot 52 meter box is broken replace
 - c. Lot 56 meter box lid warped replace

C. Repairs needed based on CCTV review:

- 1. A11 A101 at 62' and 141.9' Surface damage on pipe spalling and corrosion.
- 2. A10 A9 at 9.5′, 13.6′ and 60.2′ Damaged pipe coating.
- 3. A17 A18 at 76.7′ tap break-in/hammer tap.
- 4. A17 A3 at 205.2' tap break-in/hammer tap.
- 5. A4 A3 at 180.2', 194.1', 203' and 245.7' tap break-ins/hammer taps

D. Other Comments

- 1. The record drawings show 9 lots on the east side of Market House Way, south of Alley E, but only 8 exist onsite.
- 2. Ponding is evident at the intersections of alleys and residential streets. Additional wedging recommended during final resurfacing to improve drainage.