ENGINEERING STANDARDS FOR PUBLIC WORKS CONSTRUCTION

APPENDIX B

Construction Checklists

Approved by Ridgefield City Council, Resolution 655
October 10, 2024

City of Ridgefield

Preconstruction Conference Checklist

Project Name:

Contractor*:

WA State Contractor License #*:

City of Ridgefield Business

License Endorsement from WSDOR*:

Date:

Time:

Meeting Location: PW Building
487 S 56th Place
Ridgefield, WA 98642

Introduction

City of Ridgefield
PO Box 608
Ridgefield, WA 98642

Development Review Coordinator

Development Inspector

Building Official

General

- ☐ Introductions
- ☐ Attendance Sign-off Sheet
- ☐ Printed Plans 22” x 34”, or 24” x 36”

*Notify Permitting

Contact List

Developer
Name: Phone:

Engineer
Name: Phone:

Project Manager
Name: Phone:

Superintendent
Name: Phone:

Traffic Control Supervisor
Name:

Erosion and Sediment Control Lead
Name: Phone:

Project Surveyor
Name: Phone:

Geotech
Name: Phone:

Foreman
Name: Phone:

Emergency Contact
Name: Phone:

Starting Date: Project Duration:

City of Ridgefield Engineering Standards

All work must conform to the *City of Ridgefield Engineering Standards for Public Works Construction, Volume II.* A copy is available on the City website or can be emailed to you upon request.

Hours of Work

- The hours of construction work including time to warm up equipment shall be confined to the period of 7:00 A.M. to 10:00 P.M, Monday through Friday. 9:00 AM to 6:00 PM weekends and holidays. Work outside these hours will only be allowed with written permission from the City.

Contact

- City of Ridgefield
  - Development Review Coordinator
  - City Inspector
  - Building Department

Utilities

- Location of utilities requested (NW Utility Notification Center: 1-800-424-5555)
- Any utility concerns/conflict? If so, explain.
- Underground services must be located before excavation.

Water:

- Water lines must be tested and disinfected prior to connection to the City water system. Notify the City for inspections.
- Fire Flow Testing will be required, if applicable.
- If water is needed before meters are installed, hydrant meter is required. Backflow devices are required when using hydrant meter (air gap is allowed).
- Shoring required when water tie-ins are 4 feet, or deeper.
- Meter Setters: Installed level, no twists, and gasket faces need to line up. Top of setter should be 9-12" from bottom of lid.

- Toning wire should be brought up to caps of fire hydrants.
- Hydrants should sit 2-6" above cement pad. No troughs around bottom of bolts or mounding cement.
- Combination air release valve shut-off needs to be accessible by reaching in. Should not need to fully enter the space.
- Watch compaction around Raven meter boxes. Do not allow the sides to bow in.
- Valve Cans:
  - Vac'd out - no rocks.
  - Toning wire on the outside of the sleeve and accessible from the valve can.
  - Extensions required if over 4' deep.

Stormwater:

- Vac catch basins and manholes before final inspection.
- Flush mains before final inspection
- Establish vegetation and plantings in Stormwater Facilities before pre-pave inspection.
- Fencing around stormwater facilities complete before final inspection.

Street Clean Up

- All existing roads shall be cleaned and debris removed at the end of each work day.
- Mud and dust shall be controlled.
- Trench cover plates shall be ramped and pinned.
- All erosion and sediment control shall be provided in accordance with the approved erosion control plan.
- Erosion control measures must be in place prior to disturbing ground.

Traffic Control

- Email traffic@ridgefieldwa.us at least 48 hours prior to any traffic disruptions.

- ☐ Emergency services must be notified at least 48 hours prior to a lane closure or other traffic delay.
- ☐ Flaggers must be certified with flagger card on them:
    - Flaggers should use standard paddle and vest.
- ☐ All necessary agencies have been given advanced notice of anticipated scope of work and construction schedule.

Soil Testing Requirements

- ☐ The Contractor shall have an approved testing laboratory perform compaction tests on all bedding and backfill. Proctors used for materials test shall be less than two months' old.
- ☐ All compaction results shall be supplied to the Development Review Coordinator.

Submittals Required

- ☐ Project Schedule, including weekly updates
- ☐ Site Safety Plan
- ☐ Confined Space Entry Plan
- ☐ Encroachment Permit:
    - Traffic Control Plan

Pipe Installation

- ☐ Standard details sheets G-1.2 and G-1.3;
- ☐ Section 7-08 WSDOT Standard specifications;
- ☐ First section of pipe (not less than 100 ft) witnessed by City inspector;
- ☐ Installed pipe not subject to construction traffic until minimum of 2 ft of backfill covers pipe regardless of material or size;
- ☐ Tracer wire installed with all pipe sections with manufactured connection unless exempted by City Engineer or Development Inspector (Pro-Trace);
- ☐ Pipe less than 3 feet of cover on approved plans? Yes / No
    - If yes, where at? _____

- Pipe greater than 20 feet deep? Yes / No
    - If yes, where at? _____
- Bed and Backfill in accordance with Section 7-9 of the WSDOT Standard Specifications:
    - Bedding – 90% of max theoretical density measured by proctor method
    - Backfill – 95% of max dry density measured by proctor method

Manholes

- Constructed to finished grade
- Locking manhole covers in easements and outside public right of way
- Pipe connections to manholes made with gasketed boot connections (Kor-N-Seal boot)
-
- closure collars provided around all manhole adjustment sections
- Terminal manholes not channeled
- Slope manhole base for positive drainage toward pipe (3000 psi cement concrete)
- Channels centered in manhole
- Ladder rungs on side of manhole with largest shelf
- Any manhole less than 5 feet deep shall be provided without a cone. All others provided with eccentric cone
- Connection to existing manhole shall be core drilled for connection
- Connection to existing manhole requires ¼ inch mesh screen in the downstream line

Testing

- The designated Inspector will monitor work, progress, and performance of testing results

- The Development Review Coordinator will maintain a file containing the results of material tests, compaction test, and soil analysis
- Compaction testing shall be performed by certified independent testing laboratory with results being supplied to Development Review Coordinator
- The developer or contractor shall hire and pay for testing
- Compaction test shall be performed in 2 foot increment max
- Asphalt testing
  - Compaction shall be 91%
  - Public Streets – one test every 5000 sq ft
  - Surface restoration of utility trenches – one test every 200 ft of trench
- Subgrade and Crushed Surface Testing
  - One subgrade test and one crushed surfacing test every 5000 sq ft
- Bedding and Backfill for Utility Trenches
  - One test at bottom of trench excavation prior to placement of pipe or bedding for every 500 feet of trench, whichever is less
  - One test at top of bedding for each pipe or every 500 feet of trench, whichever is less
  - One test for each lift of backfill for each pipe run or every 500 feet of trench, whichever is less
- Embankment
  - Under pavement, curb, or sidewalk – one test every 100 cubic yards of fill material or every 5000 square feet of pavement or sidewalk, whichever is less
  - Outside limits of pavement, curb, or sidewalk – one test for every 2 feet of fill material placed or per Geotech recommendation
- New waterline piping shall not be connected to existing systems until all pressure testing and disinfection has been completed
- Hydrostatic tests

    - Pressure and leakage tests on all newly laid pipe
    - City inspector shall witness the test
    - Pressure testing against valves not allowed unless approved by the city engineer
- All waterlines subject to pass a pressure test prior to sterilization
- The Contractor shall hire an independent laboratory to collect and analyze water samples for presence of bacteria. Results given to inspector upon completion
- All backflow prevention assemblies must be tested upon installation. Results shall be received by City prior to issuance of "final occupancy"

General Construction Discussion

- Contractor to explain how they plan to pursue work
- Review of anticipated construction problems
- Project schedule

Other Items?

THE CITY OF RIDGEFIELD
230 Pioneer Street | P.O. Box 608 | Ridgefield, WA 98642

REQUIRED PUBLIC WORKS DEVELOPMENT INSPECTIONS:

1. Initial Erosion Control (prior to any grading work)
2. Continuous Utility Pipe Inspections:
   a. Stormwater Main and Lateral Installation and Backfill (2 business days' notice)
   b. Water Main and Services Installation and Backfill (2 business days' notice)
   c. Sanitary Sewer Main and Lateral Backfill - Contact CRWWD
3. Street subgrade proof roll
4. Curb Line and street base rock proof roll
5. A Pre-Pave Storm meeting is available upon request
6. Pre-Asphalt Paving Inspection:
   a. Functioning stormwater system
   b. Established vegetation/plants in stormwater facilities prior to pre-pave inspection
   c. Storm and Water Tone Testing
   d. Waterline pressure testing
   e. Waterline disinfection and bacteria testing (send clear test results)
   f. Schedule Water tie-in into the existing water main (remove debris in water valve cans)
   g. Storm main TV
   h. Storm Mandrel testing
   i. Trench, Subgrade, and Base Rock Compaction Reports
   j. Utility As-Builts
7. Asphalt paving inspection
8. Streetlight base forms and rebar inspection
9. ADA ramp forms inspection prior to concrete placement
10. Joint to joint removal to repour for driveways. No exposed aggregate, no horizontal saw cutting.

11. Final Inspections:
    a. Water System (City of Ridgefield or Clark PUD)
    b. Storm System
    c. Street - Paving, Sidewalks, Curbs/Gutters, Striping (Bike Lanes, Crosswalks, Stop Bars, etc.), Streetlights, ADA compliance, Trails, Parks, Signs, Trees, Street Signs
    d. Clark-Cowlitz Fire Rescue - Fire Lanes, Hydrants, Turn Arounds
    e. Clark Regional Wastewater District (CRWWD) - Sanitary System
    f. City Building Department - Lot Grade

PROCEDURE:

To request an inspection call (360) 857-5012 or email Lisa.Marmo@ridgefieldwa.us and specify which inspection you are requesting. Every effort will be made to complete inspections within 5 business days of request.

After each inspection, a punch list will be provided if necessary. After all punch list items have been addressed, contact Lisa for reinspection. If upon reinspection all items are found to be complete, each inspector will sign inspection card.

To obtain final acceptance, submit a copy of the fully signed inspection card and a Maintenance Bond Cost Estimate (provided by the City), for all public infrastructure improvements to lisa.marmo@ridgefieldwa.us

After review and approval of the cost estimate, a bond for 20% of the cost of all public infrastructure is required. As-built drawings must be submitted in PDF and CAD format. No final occupancies can be issued prior to Engineering Acceptance.

To request inspections from Clark-Cowlitz Fire Rescue, request it through the online portal under the approved project at https://clarkfr.geocivix.com/secure/ or call no later than 4:00 p.m. the

business day prior to your desired inspection date at 360-887-1684, or email firemarshal@clarkfr.org

Please also note the following requirements:

- To get Water Meters:
  - Inspection approval of water lines and meter boxes
- To get Final Occupancy:
  - Engineering Acceptance, which requires the above plus:
    - Inspection approval of all Public Improvements and Storm Facilities;
    - A Maintenance Bond for 20% of all Public Improvements; and
    - Submittal of approved as-builts in AutoCAD versions.