

GENERAL NOTES
(Revised June 2011)

1. All work and materials shall be according to the latest addition of "Standard Specifications for Municipal Public Works Construction" prepared by Washington State chapter, American Public Works Association (APWA), Washington State Department of Transportation (WSDOT), City of Lynnwood Standard Plans and Plan Notes, Specifications and any conditions of approval. It shall be the sole responsibility of the applicant and the Professional Engineer of Record to correct any error, omissions, or variation from the above requirements found in these plans. All corrections shall be at no additional cost or liability to the City of Lynnwood.
2. All construction is subject to inspection by the City of Lynnwood. The contractor shall notify the City of their schedule in sufficient time to permit inspection prior to and during work. 24 hours notification is required for all inspections. Call 425-670-5201 for inspection requests.
3. Before issuance of permits, construction or any development activity, a preconstruction meeting is required between the City of Lynnwood Inspector, the Applicant and the Applicant's construction representative. Request a preconstruction meeting on the City of Lynnwood Public Works Inspection Line at 425-670-5201.
4. All work within the site and City of Lynnwood right of way shall be subject to inspection by the City's Inspector. The contractor shall notify the City Inspector in sufficient time to permit inspection prior to and during work.
5. Conflicts shall be brought to the attention of the developer's engineer and permitting agency and shall be resolved prior to proceeding with construction.
6. Work not ready for a requested inspection upon the arrival of the City of Lynnwood inspector must be rescheduled for inspection and a re-inspection fee may be imposed.
7. The contractor shall keep 3 sets of plans on site at all times for recording "As-Built" information. One set shall be submitted to the developer's engineer and one set to the City of Lynnwood at the completion of construction. In addition, a survey shall be provided as necessary.
8. The City of Lynnwood shall be provided, "As-Built" plans as required at the completion of construction stamped and signed by a licensed surveyor and/or the design engineer, verifying the information as provided by the contractor and/or the surveyor upon completion of the project. **As Built shall be provided in the following forms: 1 set of prints and electronic copy (CAD and pdf).**
9. The location of utilities is approximate. The contractor shall be responsible for

verifying the location of existing utilities prior to construction. Utilities shown here are for the purpose of assisting the contractor in locating said utilities. The contractor shall contact the underground utilities location center (1-800-424-5555) 48 hours minimum prior to the beginning of construction and obtain on-site utilities locations. Conflicts shall be brought to the attention of the engineer and shall be resolved prior to proceeding with construction.

10. The contractor shall be responsible for obtaining all applicable permits and easements as required by the City of Lynnwood Public Works Department.
11. Construction noise shall be limited as per Lynnwood Municipal Code (Section 10.12.300) from 7am to 6pm (M-F). Weekend work prohibited unless approved per LMC10.12.300.
12. Datum shall be City of Lynnwood (NAVD88) unless otherwise approved by the Director of Public Works. The Benchmark shall tie to the City of Lynnwood Benchmark list.
13. Approval must be obtained from the Department of Public Works before any structures, fill or obstructions, including fences, are located within any drainage easement, flood plain or Native Growth Protection Easement. Structures shall not be permitted within 15 feet of the top of bank of any channel or pond (LMC13.40.070).
14. Where construction is carried out in areas not specified on the plans and which have existing improvements, appropriate measures shall be taken to restore such areas to conditions existing prior to construction or as required by The City of Lynnwood Department of Public Works.
15. Off site premise staging or storage areas shall require a written release from the affected property owner. In addition, a release from the City shall be required designating that damage to City property is negligible or non-existent.
16. The contractor shall take all necessary precautions for the safety of employees on the project and shall comply with all applicable provisions of federal, state, and municipal safety laws and building codes. The contractor shall erect and properly maintain, at all times, as required by the conditions and progress of the work, all necessary safeguards for protection of workmen and the public; shall post danger signs warning against known or unusual hazards; and shall designate a responsible member of their organization on the construction site whose duty shall be the prevention of accidents.
17. The developer shall provide street name and traffic control signs (e.g. stop or dead end). All traffic markings and signage to be per the current Manual on Uniform Traffic Control Devices and City of Lynnwood current standards. Signs are to be installed by the developer prior to any building construction within the project site.

SEWER STANDARD NOTES

1. Refer to GENERAL PLAN NOTES for further requirements.
2. All sanitary sewer pipe, materials and manholes shall conform with current applicable APWA & WSDOT standards and specifications and as approved by the Director of Public Works.
3. Trench backfill of sanitary sewers shall be in accordance with WSDOT standard specification 7-08.3(3). Backfill material as specified by the approved plans, Engineer or City of Lynnwood Public Works Inspector.
4. All side sewers shall be installed by the requirements per section 7-18 of the most current edition of the WSDOT standard specification for Road, Bridge and Municipal construction.
5. All side sewers shall be installed as follows:
 - a) 2 percent minimum uniform grade.
 - b) Clean outs per section 7-19 of the WSDOT Standard Specifications. Clean outs shall be installed at every 90 degrees of total bends, every 100 feet or as approved by the Public Works Inspector. A clean out shall also be installed within 2 feet of the building or at an alternate location approved by the City.
 - c) A 6 inch clean out installed, "to grade" at the property line with a City of Lynnwood approved box/lid.
 - d) 2 feet between bends or as approved by the City of Lynnwood Inspector.
 - e) All field bends not to exceed 2 inches per foot deflection.
 - f) Cleaning and testing per section 7-17.3(2) of the WSDOT standard specifications.
 - g) All couplers, fittings, adapters and connections shall subject to the approval of the Public Works Inspector.
 - h) No pipe shall be backfilled until permitted, inspected and As-Built by a Public Works Inspector. 24 hour notice shall be provided for all inspections and shall be requested on the inspection request line at 425-670-5201.
6. All vertical and horizontal control for construction staking shall be performed under the direction of a professional land surveyor or engineer. All construction staking shall be performed by a Licensed Professional Engineer, Professional

Land Surveyor or competent individuals as approved by the City of Lynnwood. All construction staking shall be installed and verified for grade and alignment prior to the start of construction.

7. All connections to a new or existing sewer line shall be performed in a manner that will prevent any foreign materials from entering existing sewers.
8. A certified electronic video record of all newly constructed 8 inch and larger sewer mains shall be submitted to the City for approval. Acceptance of the sewer main video is subject to criteria established by the City of Lynnwood Director of Public Works.

WATER STANDARD NOTES

1. Refer to GENERAL PLAN NOTES for additional requirements.
2. All water mains shall be pressure tested and disinfected in accordance with the most current addition of the Washington State Standard Specifications for Road, Bridge and Municipal Construction, NFPA 24 and the City of Lynnwood requirements. All pressure testing shall be done in the presence of a representative of the City of Lynnwood. All mains shall be sterilized and flushed prior to placing lines into services. The main shall be inspected by the City of Lynnwood Public Works inspector prior to backfill. An as-built copy shall be provided to the City of Lynnwood prior to Public Works acceptance.
3. Ductile iron pipe shall be new, Class 52, cement-mortar lined, centrifugally cast pipe conforming to the requirements of AWWA C-151 and WSDOT standard spec. 9.30.1(1). Non restrained joints shall be rubber gasket, push on type, or mechanical type meeting the requirements of AWWA C111. Restrained joints shall be as specified in section 9-30.2(6) of Washington State Standard Specifications for Road, Bridge and Municipal Construction. All pipe shall be clearly marked with the manufacturer's name, type, class and thickness as applicable. All fittings shall be per WSDOT standard specification 9-30.2 and 9-30.2(1).
4. Concrete thrust blocking shall be placed at all bends, tees, dead ends, crosses and as designated by the Public Works Director. Blocking shall be class 3000 concrete mix or as approved, poured in place and cured against approved forms and native cut slopes. All blocking shall be inspected and approved prior to back fill.
5. Fire hydrants shall conform to 9-30.5 of the most current addition of Washington State Standard Specifications for Road, Bridge and Municipal Construction, AWWA C502, AWWA 110, AWWA C111, NFPA 24 and applicable City of Lynnwood specifications and standards.
6. Hydrant connection pipes shall be 6 inch inside diameter with 6 inch auxiliary gate valve. Barrels shall have a 7 inch minimum inside diameter. Valve openings shall be 5- ¼ inch minimum diameter. Hydrants shall have two, 2- ½ inch hose ports and one National Standard Thread w/4 inch Storz adaptor and cap on the 4-½ inch port. Retainer glands to be Megalug or approved equivalent. ½ cubic yards of ¾ inch to 1-½ inch drain rock required. Two coats of "Rust-Oleum" high gloss caterpillar yellow required or acceptable alternative.
7. All hydrants shall be Mueller Super Centurion 200 A 423; or M&H Valve Co., Style 929; or American Darling B62B per City of Lynnwood Std. 5-7.
8. 2 inch and smaller water service(s) within City of Lynnwood right of way and on private property shall be installed per WSDOT standard specification 9-30.6, the

approved plans and City of Lynnwood standards 5-1 & 5-2. All services, unless specified, shall be installed by a City of Lynnwood approved contractor and at the developer's expense. All 3 inch and larger services are always installed by the developer at no expense to the City of Lynnwood. The 3 inch and larger services shall be installed per the approved plans, WSDOT specifications and City of Lynnwood Standard 5-3.

9. Valve boxes shall be installed on all buried valves. The box shall be of cast iron, two-piece slip type standard design with a base corresponding to the size of the valve. The box shall be coal-tar painted by the manufacturer using the standard. The cover shall have the word "WATER" cast in it. Valve boxes shall conform to WSDOT spec. 9-30.3(4) and Lynnwood Standard 5-4.
10. Bedding for pipe shall be per WSDOT Standard Plan No. B-11. Backfill shall be placed per section 7-10 of the Washington State Standard Specifications for Road, Bridge and Municipal Construction, approved plans and City of Lynnwood Specifications and standards.
11. All water mains to maintain a minimum cover of 36 inches below finish grade. 12 inches minimum separation is required between utilities crossing perpendicularly, (18 inches for sanitary sewer). At no point should these depths exceed 6 feet except when specifically approved on the plans or by the Public Works Inspector.
12. All pipe is to be laid at true line and grade unless otherwise approved by the City of Lynnwood. At no time shall the maximum pipe deflection exceed the manufactures requirements. The maximum permissible deflection per stick is as follows:

Pipe Diameter	Max Deflection per 18 feet
4" _____	21"
6" _____	19"
8" _____	19"
10" _____	19"
12" _____	19"

STORM DRAINAGE NOTES

1. See GENERAL PLAN NOTES for additional requirements.
2. All required storm water retention/detention facilities shall be constructed and operable prior to paving and building construction unless otherwise approved by Lynnwood Department of Public Works.
3. All pipes within the public right-of-way shall meet current WSDOT/APWA standards and specifications and/or as approved by the Director of Public Works and shall be installed per WSDOT section 7-08.
4. Backfill shall be placed equally on both sides of the pipe or pipe-arch in layers with a loose average depth of 6 inches, compacted to a density of 95%. Refer to WSDOT Std. Spec. 7-08.3(3) and Std. Spec. 2-03.3(14)C, Method B & C.
5. Where shown on the plans or where directed by the Engineer or Director of Public Works, the existing manholes, catch basins, or inlets shall be adjusted to the grade as staked. All pipe and structures shall be staked for survey line and grade prior to the start of construction. All conflicts shall be brought to the attention of the Engineer and Director of Public Works prior to commencing construction.
6. All storm catch basins with a depth over 5 feet to flow line shall be Type 2 structures per current WSDOT/APWA standards. All Type 1 and 2 structures shall be provided with locking bolts. Ladder access is required on all Type 2 structures when 4 feet or greater in depth as measured to the inside finish floor or as approved by the Director of Public Works.
7. Developer to provide a certified electronic video record of storm drainage construction after final cleaning. Final cleaning as required Per WSDOT Spec 7-04.3(1) and as directed by the City of Lynnwood Public Works Inspector.
8. Drainage outlets (stub-outs) shall be provided for each individual lot, unless otherwise approved by the City of Lynnwood. Stub-outs shall conform to the following:
 - a) Each outlet shall be suitably located at the lowest elevation on the lot, so as to service all future roof downspouts and footing drains, driveways, yard drains, and any other surface or subsurface drains necessary to render the lots suitable for their intended use.
 - b) Each outlet shall have free flowing, positive drainage to an approved storm water conveyance system or an approved outfall location.
 - c) Outlets on each lot shall be located with a pressure treated 2"x4". Each marker board shall be clearly identifiable, protected and stubbed 5 feet

above the finish grade.

- d) All pipe material shall conform to the approved plans and/or current WSDOT/APWA standards and specifications. All Substitutions are subject to approval by the Engineer and City of Lynnwood Director of Public Works prior to construction.
- e) 12 to 14 gauge tracer wire or locating tape shall be installed as required by the City of Lynnwood Public Works Inspector.
- f) Drainage easements are required for drainage systems designed to convey flows through individual lots. Verification and approval is required prior to construction.
- g) The applicant/contractor is responsible for coordinating the locations of all stub-out conveyance lines with respect to the utilities (e.g. power, gas, telephone, television).
- h) All individual stub-outs shall be privately owned and maintained by the lot home owner, shall be a minimum of 4 inch diameter, and shall be provided with backflow protection as required.

STANDARD GRADING NOTES

1. Refer to GENERAL PLAN NOTES for further requirements.
2. Grading shall not result in any additional water to adjoining property. If additional water does result, the applicant will submit a plan of corrective action for City approval and will commence with that action immediately upon notice from City.
3. The Contractor shall obtain approval for all fill and road construction material within the City of Lynnwood right of way from the Director of Public Works prior to its use.
4. The Contractor shall be responsible for maintaining and repairing existing improvements, as required, until construction is approved by the City of Lynnwood Public Works Department.
5. The City shall verify and approve all backfill trenches and roadway subgrade prior to paving. The City of Lynnwood is to be provided with the density report from a certified "Testing lab" showing satisfactory compaction per WSDOT 2-06.3(14)D. All subgrade preparatory requirements shall conform to section 2-06 of the Washington State Standard Specifications for Road, Bridge and Municipal Construction.
6. A preconstruction soils investigation shall be required as needed to evaluate soils stability.
7. The maximum cut/fill slope shall not exceed two feet horizontal to one foot vertical unless otherwise approved by the Director of Public Works. At no time shall the toe of any fill slope be nearer to the property line than 1/2 the fill height with a minimum of 2 feet. Cut slopes shall not be nearer to a property line than 1/5 the height of the cut with a minimum of 2 feet.
8. All retaining structures four (4) feet in height or carrying a surcharge shall be designed by a Professional Engineer experienced in soils mechanics.
9. A performance bond is required for concurrently reviewed early grade permits. The bond shall be received prior to the issuance of the early grade permit and shall not be released until approved by the City of Lynnwood Director of Public Works.
10. All native growth protection areas shall be left in a substantially natural state. No clearing, grading, filling, building construction or placement, fence construction, or road construction of any kind shall occur within these areas; provided that underground utility lines and drainage discharge swales may cross such areas utilizing the shortest alignment possible if, and only if, no feasible alignment is available which would avoid such a crossing. Removal of vegetation by the property owner shall be limited to that which is dead, diseased or hazardous, and

then only with the permission of the City of Lynnwood Department of Public Works.

11. Special inspection by an approved geotechnical firm is required as directed by the City of Lynnwood Director of Public Works. Inspection reports shall be submitted to the City of Lynnwood for review, comment and approval prior to Public Works final approval of the work.

TEMPORARY EROSION AND SEDIMENT CONTROL STANDARD NOTES

1. Refer to GENERAL PLAN NOTES for additional requirements.
2. Approval of this erosion/sedimentation control (ESC) plan does not constitute an approval of permanent road or drainage design (e.g. size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.).
3. The implementation of these ESC plans and the construction, maintenance, replacement, and upgrading of these ESC facilities is the responsibility of the applicant/contractor until all construction is approved, and the potential for on-site erosion has passed.
4. The boundaries of the clearing limits shown on this plan (including individual trees to be saved) shall be clearly flagged in the field prior to construction. During the construction period, no disturbance beyond the flagged clearing limits shall be permitted. The flagging shall be maintained by the applicant/contractor for the duration of construction.
5. The ESC facilities shown on this plan must be constructed as outlined on the typical construction sequence and in such a manner as to insure that sediment laden water does not enter the drainage system or violate applicable water standards.
6. The ESC facilities shown on this plan are the minimum requirements for anticipated site conditions. During the construction period, these ESC facilities shall be upgraded (e.g. additional sumps, relocation of ditches and silt fences, etc.) as needed for unexpected storm events.
7. Construction access to the site shall be only as shown on the approved plans. All vehicles leaving the site, onto public rights of way, shall be cleaned to prevent "tracking" of mud, dirt or other debris.
8. The Contractor shall sweep access streets and right-of-way at least daily or more frequently as may be necessary and so directed by the City.
9. Clean or remove and replace inlet protection devices when sediment has filled one-third of the available storage. All catch basins and conveyance lines shall be cleaned prior to paving. The cleaning operation shall not flush sediment laden water into the downstream system.
10. Stockpiles are to be located in safe areas and adequately protected by temporary secured plastic cover, seeding or mulching. Hydroseeding is preferred.
11. Where straw mulch for temporary erosion control is required, it shall be applied at a minimum thickness of two inches.

12. Any area stripped of vegetation, including roadway embankments, where no further work is anticipated for a period of 2 days during the wet season or 7 days during the dry, shall be immediately stabilized with the approved ESC methods (e.g. seeding, mulching, netting, erosion blankets, etc.).
13. Vegetation shall be established on areas disturbed or on areas of construction as necessary to minimize erosion. Areas to be rough graded with finished grading to follow near project completion are to be seeded with annual, perennial or hybrid rye grass. This also includes perimeter dikes and the sediment basin embankment. Hydroseeding is preferred.
14. Immediately following finish grading, permanent vegetation will be applied as approved per the approved plans, current WSDOT standards and specifications and the City of Lynnwood requirements.

NGPA Notes

1. All native growth protection areas (NGPA) shall be left in a substantially natural state once specified landscaping has been installed, inspected and approved by the community development department. No clearing, grading, filling, building construction or placement, fence construction or road construction of any kind shall occur within these areas, provided that underground utility lines and drainage discharge swales may cross such areas utilizing the shortest alignment possible if and only if no feasible alignment is available which would avoid such a crossing. Removal of vegetation by the property owner shall be limited to that which is dead, diseased or hazardous and as approved by the City. No adjustment to the boundary of any such area shall occur unless first approved through the formal replat process.