

# DEVELOPMENT ENGINEERING PERMIT CHECKLIST AND STANDARDS

Use this document to help you submit all the required documents and standards for Civil Engineering permits

#### Note:

- Please refer to the Electronic Submittal Requirements for naming conventions and other electronic file requirements
- We reserve the right to request additional information and documents as needed
- This checklist is meant to guide the applicant to include necessary information for a successful permit application • Please contact us at <a href="mailto:deveng@lynnwoodwa.gov">deveng@lynnwoodwa.gov</a> to discuss specific requirements for your project
- This checklist is not intended to take the place of a formal plan review
- See the Standard Plan Index for current City of Lynnwood Standard Drawings and Standard Notes
- See the Lynnwood Engineering Design Manual for design guidelines in the city.

# **Required Submittal Documents**

	Civil Site Plans	SPCC	SWPPP	Survey Base Map	Geotechnical Report	ADA MEF	Emergency Vehicle Tracking Plan	Pump Size Calculations	ТСР	Drainage Report	Plumbing Calculations for GT's
Water											
Private – meter to building	Х	Х									
City lateral from main to meter	Х	Х		Х							
Mains	Х	Х	Х	Х							
Repairs	Х	Х	Х								
Hydrants	Х	Х	Х	Х							
Fire Depart. Connection (FDC)	Х	Х		Х							
Hydrant Use	Х										
Water Meter						•				_	
Meter	Х										
Setter Box	Х										
Mall Meters	Х										





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	Civil Site Plans	SPCC	SWPPP	Survey Base Map	Geotechnical Report	ADA MEF	Emergency Vehicle Tracking Plan	Pump Size Calculations	ТСР	Drainage Report	Plumbing Calculations for GT's
Site Plan Review										1	
ADA	X			X		Х					
Paving	Х			Χ	Х						
Striping	Х			Χ							
Signage	Х			Χ							
Emergency Vehicle Circulation	X			Χ			X				
Storm Water											
SD Connections	X	Х	X							Х	
Public (mains)	X	Х	X	Χ	X					Х	
Private (arterials/manholes/CBs)	Х	Х	Х	Х	Х					Х	
Flow Control (Detention)	X	X	Х	Χ	X					Х	
Pump System	Х			Х				Х		Х	
Repairs	Х	Х	Х	Χ							
Footing Drains	Х				Х						
Roof Drains	Х										
Street Right of Way											
Traffic Control Plan									Х		
Road Improvements	Х	Х	Х	Х	Х					Х	
Restoration	Х			Х					Х		
Repairs	Х			Х					Х		
Decommission/removal	Х	Χ	Х	Χ					Х		
Fire Lanes	Х			Х			Х				
ADA Compliance	Х	Χ	Х	Х		Х					
Grading											
Retaining walls under 4'	Х	Х	Х	Х	Х						



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Cut/fill	Χ	Χ	Х	Χ	X						

Clearing: please see separate che	cklist								
LINK	Х								
Sewer									
Main	Х	Х	X	X				Х	
Lateral/Side	Х	Х						Х	
Connection	Х	Х						Х	
Force system	Х	Х		Х				Х	
Repair	Х	Х	Х	Х				Х	
Shoring									
Cut/Fill	Х	Х	Х	X	Х			Х	
Cross Connection Control Pre-Tre	atment								
Cross connection (backflow)	Х								
Pretreatment (grease)	Х			Х					Х
Industrial waste Discharge	Х			Х					

# **Required Documents Standards**

Civil Site Plans - All plans need to be prepared, stamped, and signed by a Washington State-licensed Civil Engineer

☐ Name of the development
$\hfill\square$ Name, address, and contact information of property owner(s), developer, and consultants
☐ Parcel Number(s)
☐ Graphic engineering scale (1" = 20' minimum, 1"=100' Max; 1"=10' for enlargement details accepted

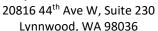


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□ North arrow
☐ Licensed Professional Stamp, if applicable
□ Legend
☐ Conditions of approval from Land Use Action, if applicable
☐ City of Lynnwood Standard Plan Notes
• General Notes
• <u>TESC Notes</u>
• Grading Notes
Storm Drainage Notes
• <u>Sewer Notes</u>
• Water Notes
• NGPA Notes
• <u>Trench Patching Notes</u>
Traffic Control Notes
• Street Sign Notes
☐ Property lines and lot dimensions
☐ Existing/proposed easements with AFN (Snohomish County Auditor File Number)
☐ Location of existing/proposed structures or improvements and the setbacks thereto
$\square$ Location of any critical areas on or adjacent to the site with any required buffers
☐ Temporary Erosion Control Plan, if necessary
☐ Existing/proposed contours at a minimum 2-foot interval
☐ Finished floor elevations of all existing and proposed structures
☐ Quantity of cuts and fills
☐ Minimum easement width of 20′, 10′ for private easments
☐ Proposed storm drain systems
<ul> <li>Plan and profile of storm including pipe lengths, slopes, types, sizes, flow direction, etc. Minimum pipe slope 0.5%</li> </ul>

• Manhole/catch basin locations and details, including types, invert elevations (including in/out identification, pipe size, and compass direction of pipe)





- Catch basin minimum spacing: 150' (gutter slopes < 1%), 200' (gutter slope 1-3%0, 300' (gutter slope. 3%)
- Plan and section of proposed detention systems, designed per Department of Ecology Stormwater Manual
- Flow Control structure details match on plan and drainage report
- Water quality system plan and details
- City of Lynnwood Standard Plans for all structures, trench details and backfill requirements
- City of Lynnwood Design Manual for all other requirements
- ☐ Proposed sanitary sewer systems
  - Plan and profile of sewer including pipe lengths, slopes, types, sizes, etc.
  - Minimum pipe slopes:
    - 0 8" 0.4%
    - 0 10" 0.28%
    - o 12" 0.22%
    - Side Sewer 2%
  - Backwater valve if FFE to IE < 3'
  - Manhole locations and details, including types, invert elevations (including in/out identification, pipe size, and compass direction of pipe
  - 0.1' drop in MH (IN to OUT)
  - RPBA on water service, alarm, generator, and placard for grinder pump/force mains
  - Cleanout locations and details
  - Drop connection locations and details
  - Reused side sewers requires upgrade to PVC or relining
  - Shared side sewers not allowed unless approved by Public Works Director
  - Location of side sewer stubs
  - City of Lynnwood Standard Plans for all structures, trench details and backfill requirements
  - City of Lynnwood Design Manual for all other requirements
- ☐ Proposed water systems
  - Pipe lengths, types, sizes, fittings, etc.
  - Pipe Material: Cl. 52 DIP
  - Separation from sewer: 10' horizontal, 18" vertical (from crown of SS to invert of water)
  - Meter locations and details on plan. Meters located at ROW line



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- Shut off valve in ROW for meters located on private property
- Air Vac and blowoff assembly at local high and low points
- Cover: Min 3', Max 5'
- 1,000 If max spacing between inline valves
- Fire hydrant locations and details
- Locations and details for all backflow prevention devices
- Locations and details of all valves, connections, anchors, etc.
- City of Lynnwood Design Manual for all other requirements

□ Location and design of proposed parking including dimensions of parking stalls, drive aisles, and curb cuts – please include labeled number of stalls
$\square$ Location of any electrical vehicle parking stations and ADA parking locations
$\square$ Location of any indoor and/or outdoor bicycle parking
☐ Proposed walkways including widths and materials
$\square$ Proposed service areas including trash enclosures and turning radius for delivery vehicles and trash trucks
☐ Emergency Vehicle Tracking Plan (see below)
☐ Proposed right-of-way improvements and dimensions
☐ Roadway profiles with utilities, maximum road grades per Design Manual
☐ All existing/proposed traffic striping, signing, and signalization
☐ Show Entering Site and/or Stop Site Distance triangles on plan per Standard Plan <a href="TR-STRP-7">TR-STRP-7</a>
$\square$ Roadway sections showing proposed widths and surfacing depths, including the driving surfaces and sidewalks
$\square$ ADA compliant curb ramps shown, MEF referenced if non-compliant
☐ Location and details of roadways signs
☐ Location of mail boxes
☐ Location and details of proposed roadway cuts, driveways
☐ Sidewalk locations and details
☐ Survey monumentation per <u>ST-ROA-6</u> of the proposed centerline at intersections and curve points
$\square$ Right of Way radii and pavement radii in turnarounds, minimum radii and tangents per Design Manual
☐ Private road geometry per Design Manual
☐ Details on the repair of any damaged or reconstructed pavement per <u>ST-TRE-1</u> and <u>ST-TRE-2</u>



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☐ Curb line spot elevations at all intersections
$\square$ A note on the plan requiring a Traffic Control Plan to be submitted prior to construction
SPCC – Spill Prevention, Control, and Countermeasure Plan
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☐ SPCC is required when a project uses equipment with any hazardous materials (e.g. hydraulic fluid, diesel fuel, gasoline, oils, etc.)  Please see the City of Lynnwood's template
SWPPP - Stormwater Pollution Prevention Plan
☐ A full SWPPP is required for 7,000 sf or more of land disturbing activity or 2,000 sf new and/or replaced hard surface area. For any other project, review and submit
with your application a "13 Element Checklist Handout." Please see the <u>City of Lynnwood's template</u>
Survey Base Map
☐ Vertical and horizontal datum
☐ Quarter section shown
☐ Existing property lines and lot dimensions
☐ Location of any Critical Areas within 200 ft. of the site
☐ Existing easements including drainage and access — all recorded encumbrances
☐ Existing structures and parking
☐ Existing tree survey
☐ Width, materials and location of all on-site roads & drive aisles, curb cuts, trails, sidewalks, and walkways and any other vehicular or pedestrian ways
$\square$ Show their connections to adjacent and off-site improvements
☐ Assessment of all public sidewalks and curbs. Indicate the location of utility vaults, hydrants, electrical equipment pads, traffic signals, power poses, exposed \HVAC
equipment, refuse/recycling enclosures and routes of all utilities, including water, sewer, and storm
☐ Indicate all structures and trees on adjacent properties within 10 ft.



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<ul> <li>□ Existing Contours at 2-foot interval</li> <li>□ Locations, dimensions, and names of adjacent public rights-of-ways or tracts</li> <li>□ Location of any sensitive areas on or adjacent to the site</li> </ul>
ADA MEF – American Disabilities Act Maximum Extent Feasible
ADA MEF Form
Emergency Vehicle Tracking Plan
$\Box$ Graphic engineering scale (1" = 20' minimum)
□ North Arrow
□ Legend
☐ Property lines and lot dimensions
☐ Existing/proposed fire lanes, widths, lengths, and turning radii
☐ Location of all existing/new fire hydrant(s) and FDC's
☐ Existing/proposed buildings
□ Underground storage tanks/vaults
☐ Fire lane markings
☐ Identify vertical clearances for overhead obstructions/utilities
$\square$ Roadway and parking striping
$\square$ Existing/proposed grades and/or contours. Identify maximum fire lane slopes
☐ Identify roadway surfacing types

# **Pump Size Calculations**

☐ Pump calculations to be provided by a pump manufacturer or Civil/Mechanical Engineer





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Traffic Control Plan
☐ Location of advance warning signage
☐ Location of flagger stations or uniformed police officer(s)
☐ Taper length table and signage/cone spacing tables
☐ Street name labels
☐ Proposed roadway detour route if road is proposed to be completely closed
☐ Pedestrian detour route if sidewalk is proposed to be closed
☐ Work area
Note:
<ul> <li>If any open cuts in existing right-of-way are proposed, you will need to submit all information as required by <u>LMC 12.04</u></li> </ul>
<ul> <li>If the barricading of any right-of-way is proposed, the applicant must supply information as required by <u>LMC 12.04</u></li> </ul>
Please review and adhere to <u>City of Lynnwood Standard Plans</u> and <u>Manual on Uniform Traffic Control Devices (MUTCD)</u>
Drainage Report
☐ Prepared in accordance with the Department of Ecology 2019 Stormwater Management Manual for Western Washington, Volume III, Chapter 3.2
☐ Submit Drainage Covenant for private drainage systems
Plumbing Calculations for Grease Traps
☐ Please be advised that the City of Lynnwood adheres to the <u>Uniform Plumbing Code</u> Please see Chapter 10 - Traps and Interceptors
☐ LINK to Grease Interceptor Sizing and Installation Guidelines
☐ Civil Site Plans (see above)