

2024 Engineering Division

Plan Review Process Packet



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PLAN REVIEW PROCESS

This packet contains an outline of the City of Happy Valley's Site Development Plan Review process. Detailed requirements are in the [Engineering Design and Standards Manual](#). The following outline applies only to the public improvements and civil site development; it does not apply to building structures, private plumbing, or mechanical improvements which are reviewed by the Building Division. **Note:** *The design engineer for the project shall be a licensed professional engineer in the State of Oregon.*

1. Initial Submittal

The design engineer submits the following to the City's engineering division online permitting portal: [HVWorks.com](https://hvworks.com)

- Site Development Application (either residential, commercial, or minor) to be filled out online.
- Electronic construction plans - PDF format shall be uploaded with the application.
- Supporting documentation (in PDF format) may include:
 - Geotechnical engineering report
 - Sight distance exhibit
 - Design exception request
 - Retaining wall design
 - Temporary traffic control plan
 - Other as required
- Engineer's estimate of construction costs covered under the engineering permit. This includes grading, erosion control, paving, base rock, signing and striping, curb and gutter, sidewalk, streetlights, landscaping in the right of way, trench backfill, storm improvements, and others. Final permit fees will be assessed based on the final engineer's estimate which may change between the initial submittal and final plan approval. Final fees will be invoiced once the plans are ready to be approved, prior to the pre-construction conference or issuance of permits.
- Plan Review deposit. The deposit amount is based on the number of proposed lots for residential developments and the engineer's estimate of permitted work for all other permits. This will be calculated at the time of application or may be requested once the information is reviewed, and the engineer's estimate is confirmed. **NOTE:** ONLY the deposit is due at time of initial submittal but is required before City review will begin.

2. Plan Review Checklist Requirements

A. Public Improvement Plans shall include:

- Cover Sheet, Vicinity Map, General Notes
- Existing Conditions
- Erosion and Sediment Control
- Clearing and Grading
- Street Improvements
- Storm, Sanitary and Water Improvements
- Signage and Striping
- Landscaping and Irrigation
- Details

B. Grading and Civil Site Plans (Comm/Industrial/Multi-Family) shall include:

- Cover Sheet, Vicinity Map General Notes
- Existing Conditions
- Erosion and Sediment Control
- Clearing and Grading
- Site Plan with finish grades and ADA routes
- On-site Utilities
- Signing and Striping
- Landscaping
- Details

3. Submittals to Other Entities

It is the responsibility of the design engineer/applicant to submit separately to the following (as needed):

- The City's Service Providers such as Sunrise Water, and Clackamas County Water Environment Services (WES)
- Clackamas County DTD (county roads)
- Clackamas Fire District #1
- Other regulatory jurisdictions: Oregon DEQ, Oregon DSL, ODOT, USACE
- City of Happy Valley Building Division for private on-site utilities

4. City Engineering Division Plan Review

City review of the engineering plans will include review by the City's Planning and Building Divisions as appropriate. (engineering permits do NOT include private onsite utilities that are permitted separately through Building Division plumbing permits.) Upon completion of a detailed review, the City will return "redline" comments to the design engineer. Depending on the size of the project, multiple reviews may be required. The fee schedule assumes there will not be more than 4 reviews required. If more than this is required, additional fees may be assessed.

5. Construction Plan Review and Inspection Fees

Prior to construction plan approval, the developer shall submit the Construction Plan Review and Inspection Fees for the project. The fees are based upon the construction value of the project and will be invoiced through our permitting program. [View Fee Schedule](#)

6. Performance and Maintenance Guarantees

Prior to construction plan approval, the developer shall submit a financial guarantee for the improvements as required in [Section 16.50.080 of the City's Municipal Code](#). Upon satisfactory completion of the required public improvements, a two-year 25% maintenance guarantee shall be submitted.

7. Pre-construction Meeting

The developer's design engineer is responsible for arranging the pre-construction meeting between principal representatives of the project including the engineer, contractor, developer, City, and WES. The meetings are generally set up virtually, but options are possible for in-person meetings at City Hall or at the project site, depending on the need. Unless approved by the City's project manager, the following must occur PRIOR to the meeting:

- Final plans ready for approval from engineering and all other entities.
- All supporting documentation received and approved.
- Construction Plan Review and Inspection Fees paid.
- Performance Guarantee received and approved.
- Approved Certificate of Insurance (COI) for both the developer and the contractor (including supporting endorsement documentation on our [approved form](#)) naming the City of Happy Valley as additional insured and as certificate holder received and approved.

8. Final Plan Review and Approval

After the pre-construction conference has taken place, and the design engineer has completed any required revisions and obtained the necessary permits/approvals from affected jurisdictions (i.e., Sunrise Water, WES, DEQ, and Clackamas County DTD, etc.), the permits will be issued and the final approved plans provided to all necessary parties.

PLAN REVIEW FEE & PERFORMANCE GUARANTEE CALCULATIONS SCHEDULE

The list below represents the basis for calculating the Engineering Division's Plan Fees and Performance Guarantee amounts. The list is not all-inclusive; additional items may need to be added to account for the full cost of construction. Administration, overhead, profit, incidentals, testing, surveying, and construction staking costs shall be considered incidental to mobilization and each line item. Items in parentheses are to be broken out individually within the estimate.

ITEMS IN PLACE	UNITS	PUBLIC IMPROVEMENT PLANS		GRADING & CIVIL SITE PLANS (COMMERCIAL/INDUSTRIAL/MULTI-FAMILY)	
		Review Fee	Performance Guarantee	Review Fee	Performance Guarantee
PUBLIC IMPROVEMENTS					
Mobilization	LS	✓	✓		
Centerline Monument	EA	✓	✓		
Curb and Gutter	LF	✓	✓		
Type C Curb	LF	✓	✓		
Driveways (Residential and Commercial)	SF	✓	✓		
Subgrade Treatments, Special Compaction, Soft Spot Repair	SY	✓	✓		
Pavement (AC thickness, class, base & wear lifts)	SY	✓	✓		
Crushed Rock Pavement Base	SY	✓	✓		
Paving Treatments (fabric, grinding to match existing, seals)	SY	✓	✓		
Sidewalk	SF	✓	✓		
Sidewalk Ramps	EA	✓	✓		
Traffic Calming (circles, tables, and humps)	EA	✓	✓		
Street Barricade – Type II	EA/LF	✓	✓		
Street Sign Assembly	EA	✓	✓		
Thermoplastic Striping (width, color, buttons)	EA/LF	✓	✓		
Street Lights and Poles	EA	✓	✓		
Landscaping (street trees, planter strip ground cover, open spaces)	EA/LS	✓			

ITEMS IN PLACE	UNITS	PUBLIC IMPROVEMENT PLANS		GRADING & CIVIL SITE PLANS (COMMERCIAL/INDUSTRIAL/MULTI-FAMILY)	
		Review Fee	Performance Guarantee	Review Fee	Performance Guarantee
SITE GRADING					
Erosion Control Measures, Tree-Protection Fencing	LS/LF/EA		✓		✓
Mass Grading Activities (clearing, stripping, grubbing, excavation, import fill, stockpiling, excluding haul-off and disposal costs)	CY	✓	✓	✓	✓
Retaining Walls	SF	✓	✓		
PRIVATELY MAINTAINED STREETS & PARKING LOTS					
Curbs (streets only)	LF	✓	✓		
Paving (fire access, common drives)	SY	✓	✓		
Sidewalks (subdivisions only)	SF	✓	✓		
ADA infrastructure	SF	✓	✓		
Private signage and striping	LS	✓	✓	✓	
STORM SEWER SYSTEM					
Taps, connect to existing, special fittings, and collars	EA	✓			
Pipe (size, material, class, anchor blocks, trench excavation & backfill)	LF	✓			
Structures (manholes, clean-outs, inlets: types, size)	EA	✓			
Headwalls and other special construction	EA	✓			
Private sewer laterals (subdivisions only)	LF	✓			
Storm Water Management Facilities – Public and private (include plants and border plantings, fencing, gates and other amenities)	LS/EA	✓		✓	

ENGINEERING DIVISION PLAN SUBMITTAL CHECKLIST

Land Use File No.: _____

Project Name: _____

1. Civic Access – Online Plan Submittal

NOTE: Before you can submit online, you must create an account

- ☐ Apply online via the EPL portal – [HVWorks.com](https://hvworks.com)
- ☐ Upload Electronic PDF Construction Plans
 - Construction Plans are 95% complete
 - Plans are stamped by a professional engineer, registered in the State of Oregon
- ☐ Plan Review Deposit
- ☐ Submittals and supporting documentation (as required):
 - Engineer's Cost Estimate
 - Geotechnical Engineering Report
 - Sight Distance Exhibits
 - Signed and Stamped Plan Submittal Checklist
 - Storm Drainage Report
 - Temporary Traffic Control Plans
 - Traffic Study
 - Turning Exhibits for Garbage/Delivery Trucks and Emergency Vehicles
 - Wall design

2. Construction Drawing Format

- ☐ Plan sheets are 22" x 34" (ANSI D) or 24" x 36" (ARCH D)
- ☐ Vicinity map is located on the Title Sheet with proper title and the land use number
- ☐ City's standard General Notes shall be included in the Construction Notes for each project. [See Engineering Design and Standard Details Manual.](#)
- ☐ North arrow shown on each plan view sheet. The orientation of the north arrow is up or to the right on the plan sheet, with stationing from left to right
- ☐ Scale shall be 1" = 2', 4', 5' or 10' vertically and 1" = 10', 20', 30', 40' or 50' horizontally for all drawings except structural drawings
- ☐ Letter size shall not be smaller than 0.10 of an inch high
- ☐ Detail drawings, including standard drawings, shall be included in the plans
- ☐ Title block is provided on each sheet with any applicable land use numbers

3. Required Plan Sheets

- ☐ Title Sheet
- ☐ Existing Conditions
- ☐ Grading and Erosion Control Plan - minimum 2-foot contour intervals
- ☐ Composite Utility Plan
- ☐ Sanitary Sewer, Storm Sewer and Water Plan and Profile
- ☐ Street Plan and Profile - provide a stand-alone street plan and profile, not combined with any other utility
- ☐ Signing and Striping Plan - prepared by a professional engineer registered in the State

of Oregon

- ☐ Pathways - provide a separate plan and profile for each pathway
- ☐ PGE Approved Street Lighting design
- ☐ Retaining Walls - walls greater than four feet in height shall be designed by a registered professional engineer
- ☐ Curb Returns - each curb return shall be individually designed and shall include a profile and plan view
- ☐ Site Plan - provide for private site development
- ☐ City Standard Drawings - shall be full size
- ☐ Tree Removal Plan
- ☐ Landscape Plan

4. Happy Valley Specific Design Elements

- ☐ All utilities associated with development shall be placed underground
- ☐ Provide an 8' Public Utility Easement (PUE) behind the right-of-way
- ☐ All excavations within the public right-of-way shall be backfilled with crushed rock or Control Density Fill (CDF)
- ☐ Temporary trench patches shall be hot mix asphalt
- ☐ Weep holes through the curb are not allowed in the City of Happy Valley
- ☐ Detention/Water Quality Pond Fencing - Fencing around storm water detention facilities shall be six-foot tall, black, vinyl-coated chain link

5. Required Approvals, Submittals and Permits

- ☐ Water Environment Services (WES) plan approval – Storm and Sanitary Sewer
- ☐ Sunrise Water Authority (SWA) or Clackamas River Water (CRW) – Domestic Water
- ☐ Clackamas Fire District #1 – Access and water supply
- ☐ Clackamas County Department of Transportation & Development (DTD) – County Roads
- ☐ DEQ NPDES 1200 PC Permit (for projects with over an acre of disturbance)
- ☐ PGE - Street Lighting Plan
- ☐ [USPS Mode of Delivery Agreement](#) – signed by the applicant
- ☐ Geotechnical Engineer of Record if necessary
- ☐ Planning Division
- ☐ Engineering Plan Review Fees and Performance Guarantees
- ☐ Development Guarantee Agreement
- ☐ [Engineering Service Agreement](#)
- ☐ Private Plumbing Permit from the Building Division if necessary

Engineer of Record Signature

Date

FORMS AND REFERENCE MATERIALS

- Engineering Design Manual & Details
<https://www.happyvalleyor.gov/business/engineering-division/design-manual-details/>
- Engineering Services Agreement
<https://www.happyvalleyor.gov/wp-content/uploads/2021/07/Engineering-Services-Agreement-for-Development.pdf>
- USPS Mode of Delivery [Mode-of-Delivery-Form.pdf \(happyvalleyor.gov\)](#)
- Right of Way (ROW) Application Checklist
<https://www.happyvalleyor.gov/wp-content/uploads/2023/04/CHECKLIST-Right-of-Way-Permit-Insurance-Requirements.pdf>
- Engineering Fee Schedule
<https://www.happyvalleyor.gov/wp-content/uploads/2023/10/Fee-Schedule-10182023.pdf>
- Engineering Reference Materials & Links – Includes Clackamas Fire, WES and other jurisdictions
<https://www.happyvalleyor.gov/business/engineering-division/engineering-links/>
- Title 16 Land Development Code
https://library.gcode.us/lib/happy_valley_or/pub/municipal_code/item/title_16
- Clackamas Fire District's submittal process and design requirements
<https://clackamasfire.com/access-and-water-supply-plan-review-submittal/>