OREGON CITY

Public Works – Engineering Development Services

625 Center Street | PO Box 3040 | Oregon City OR 97045
Ph (503) 657-0891 | Fax (503) 657-7892

CITY OF OREGON CITY
ENGINEERING PLAN REVIEW
CHECKLIST
FOR PUBLIC WORKS CONSTRUCTION

Project No. _____ Project Name: _____

Submittal Completeness Date: _____

	Date received		Date returned		120-Day Tracker
Review #1	_____	-	_____	-	_____Days
Review #2	_____	-	_____	-	_____Days
Review #3	_____	-	_____	-	_____Days
Review #4	_____	-	_____	-	_____Days
Review #5	_____	-	_____	-	_____Days

Date of Approval _____ _____Total Days

Per Senate Bill 974, engineering plans must be approved within 120 days (in the City offices for review) from date of completeness. 120 days is calculated as calendar days and does not include time where plans are with the applicant or their representative for revision. See Engineering Plan Review Submittal Completeness Checklist.

Disclaimer : This checklist does not prevent the designer from knowing all of the standards. This checklist is to be used as a guide, not a replacement for :

- Sanitary Sewer Design Standards
- Water Distribution System Design Standards
- Pavement Cut Standards
- Stormwater and Grading Design Standards or City Code Section 13.12
- Street Design Standards in City Code Title 12 and 16
- Any other applicable City or General Engineering Design Standards

LEGEND: X = O.K. blank = INCOMPLETE NA = NOT APPLICABLE

The following sheets should be included in most engineering plan sets :

_____ COVER SHEET

_____ GENERAL CONSTRUCTION NOTES

https://www.orcity.org/DocumentCenter/View/3227/Standard-Notes-PDF

_____ EXISTING CONDITIONS PLAN

_____ TREE PRESERVATION, REMOVAL, AND MITIGATION PLAN

(* This is reviewed by the Planner)

_____ DEMOLITION PLAN

_____ SITE DIMENSIONAL PLAN

_____ GRADING PLAN

_____ EROSION & SEDIMENT CONTROL PLAN

_____ COMPOSITE (OVERALL) UTILITY PLAN

_____ STREET PLAN AND PROFILE

_____ STORM PLAN AND PROFILE

_____ SANITARY PLAN AND PROFILE

_____ WATER PLAN AND PROFILE

_____ STREET LIGHTING PLAN (if required)

_____ SIGNING AND STRIPING PLAN (if required)

_____ SIGNAL PLAN (if required)

_____ LANDSCAPE PLAN (* This is reviewed by the Planner)

_____ CONSTRUCTION DETAILS

PLAN PREPARATION

_____ Prepared and stamped by a Professional Civil Engineer (PE) registered in Oregon. Verify current registration date.

_____ Plan Sheet size - 24" x 36" with margins.

_____ Scale: Horizontal 1" = 50', typical, 1" = 20' when more detail needed.

_____ Use City Title Block

COVER SHEET

_____ Sheet Index

_____ Legend of symbols, existing and proposed

_____ Vicinity Map.

_____ Title Block.

https://www.orcity.org/DocumentCenter/View/3232/City-Titleblock-PDF

_____ North Arrow.

_____ Reference Bench Mark. For Vertical and Horizontal Control. Must reference a NAVD88 datum unless another is approved by the City Engineer.

_____ Temporary Benchmark, including description.

_____ City GPS Control.

_____ Project Name, placed at top center of the sheet

_____ Planning File Number, placed just below the Project Name

_____ As-Built Number, placed on the bottom right corner of the sheet

_____ Utility Contact Information

_____ Owner/Developer and Civil Engineer Contact Information

GENERAL CONSTRUCTION NOTES

_____ Using City General Notes as modified to be applicable to the project

_____ Include the statement that exists at the end of the notes to show what version note you are using (i.e. STANDARD NOTES UPDATED: 02/12/2018)

EXISTING CONDITIONS PLAN

_____ Existing Grade Contours within 50 feet of the site

_____ Existing Structures and existing finished floor elevation of existing buildings

_____ Existing Driveways/Access Points stating dimension at property line and material of approach

_____ Names of existing adjacent streets

_____ Property Dimensions and Bearings

_____ All existing impervious areas

_____ Table showing total site area, existing pervious area, existing impervious area

_____ Any existing easements

_____ All existing trees

_____ Site Water Resources (NROD, Floodplain, wetlands, etc)

TREE PRESERVATION, REMOVAL, AND MITIGATION PLAN

_____ Provided. (see City Planning Department for requirements and approval)

DEMOLITION PLAN

_____ Clearly show what items are being removed from the private property

_____ Clearly show what items will be demolished offsite within the public r.o.w.

SITE DIMENSIONAL PLAN

_____ Driveway dimensions

_____ New roadway dimensions which includes sidewalk, parkway, etc.

_____ Proposed roadway dimensions to existing public r.o.w.

_____ Sight Triangle

_____ Proposed Property / Right of way Dedication

_____ Number all lots to be created

_____ Any existing and proposed easements

_____ Names of existing adjacent streets

_____ Any existing structures to remain

_____ Location of any retaining walls or fences

_____ Names of proposed new streets

_____ Property Dimensions and Bearings

_____ Table showing total site area, existing pervious area, existing impervious area compared with proposed pervious area and proposed impervious area

_____ All proposed trees

_____ Proposed stormwater facilities

_____ Provide a Shadow Plat if required

_____ Table of Number of Parking spaces and ADA Spaces

_____ Accessible Route defined

_____ Pavement Section (Non-Single family subdivision projects)

_____ Location and description of existing survey monuments (and note if protection or replacement will be needed)

GRADING PLAN

_____ Existing Grade Contours within 50 feet of the site

_____ Proposed Grade Contours (at 1 foot intervals) onsite

_____ Spot Grades where needed

_____ Finished Floor Elevations of proposed house footprints

_____ Designation of slopes (i.e. 3:1, 4:1)

_____ All excavated slopes no steeper than 2:1, unless approved otherwise

_____ Fill slopes shall not be constructed on natural slopes steeper than 2:1

_____ Benched ground where natural slopes are steeper than 4:1 and the height is greater than 5 feet, at a minimum of 10 feet wide, unless approved otherwise

_____ Drainage Arrows to show intent of proposed grading

_____ Overland Flow Arrows to show intent of stormwater flow beyond 10 year storm

_____ Stormwater Facility

_____ Proposed and Existing Swales

_____ No slope or wall shall be placed on a property line, drainage shall flow to a swale or drainage structure to prevent ponding on neighboring property. Minimum 2 foot setback required.

_____ Rock sizes greater than 6 inches in maximum dimension shall be 5 feet or more below grade

_____ Site Water Resources (NROD, Floodplain, wetlands, etc)

_____ Locations of Disturbed Areas including a statement on the area (i.e. 1.23 acres)

_____ Quantities of Cut/Fill

_____ Locations of Drainage Structures

_____ Construction Information

_____ Standard Grading Notes

_____ Any other requirements found in the Engineering Stormwater Review Checklist

EROSION & SEDIMENT CONTROL PLAN

_____ Silt Fence

_____ Inlet Protection

_____ Use of Approved BMPs

_____ Stockpile Locations

_____ Sedimentation Basin (if needed)

_____ Gravel Construction Entrance

COMPOSITE (OVERALL) UTILITY PLAN

_____ Site Geometric Plan

_____ Storm sewer, sanitary sewer, and water main lines and structures

_____ Stormwater Facilities

_____ Proposed Street Light locations

_____ Existing trees to remain

_____ Proposed Street Trees

_____ Proposed Utility Easements (P.U.E. and any others)

_____ Proposed Structures (Buildings, Fences, Walls, etc)

_____ Proposed Driveways (if known)

_____ Proposed Mailboxes (if known)

STREET PLAN AND PROFILE

_____ Classification of existing and/or proposed streets

_____ Driveway width and/or location

_____ Sidewalk width and location

_____ Travel Lane (Road) width and location

_____ Bike lane width and location

_____ Parking lane width and location

_____ Streetscape width and location

_____ Curb type and location

_____ Pavement section

_____ Right of Way lines (proposed and existing)

_____ Approved temporary turn around if a dead end street with a future extension

_____ Access control for a future extension (also shown on the plat)

_____ Street alignment with other streets, offset no more than 5 feet

_____ Dimension of spacing of driveways and/or proposed streets

_____ Pedestrian amenity alignment with existing amenities

_____ Accessways if required

_____ Intersection angle of 90 degrees (no less than 80 degrees)

_____ Dead end street or cul-de-sac = maximum 25 dwelling units, maximum street length of 200 feet

_____ Dead end street or cul-de-sac = sufficient radius for emergency vehicles

_____ Vertical Curve information if required

_____ Cross Slope of Road (crown to edge)

_____ Profile of proposed road versus existing grade

_____ Superelevation if required

_____ Storm sewer profile can be part of street profile

STORM PLAN AND PROFILE

_____ Manhole Stationing, numbers, dimensional control.

_____ Line designation (A, B, etc.)

_____ Size, type of pipe, length, slope of pipe

_____ Rim elevation, inverts, existing/proposed finished grades

_____ Backfill designation

_____ Utility crossings (Field locate / pothole to provide detailed information)

_____ Match lines (with sheet number reference).

_____ Pipe System Requirements

- _____ Minimum 2 feet cover under collector and above roads
- _____ May use Class 52 Ductile Iron or Class V concrete for 1 ft cover
- _____ PVC and HDPE require 2 feet minimum cover
- _____ Minimum velocity = 2.5 fps
- _____ Maximum velocity = 15 fps
- _____ Minimum 12” in size
- _____ Maximum pipe length = 400 feet
- _____ Minimum separation = 6” vertical, 3 ft horizontal from other utilities
- _____ Debris grates for 18” in diameter or larger
- _____ Minimum pipe slope = 0.5%
- _____ Manhole shall be at all pipe junctions
- _____ Outfall shall have energy dissipaters
- _____ Drainage easements = 15 feet
- _____ Foundation drains piped directly to storm system for commercial/industrial
- _____ Foundation drains piped to street with plastic pipe for residential per code
- _____ Culverts

SANITARY SEWER PLAN AND PROFILE

_____ Manhole Stationing, numbers, dimensional control.

_____ Line designation (A, B, etc.)

_____ Size, type of pipe, length, slope of pipe

_____ Rim elevation, inverts, existing/proposed finished grades

_____ Backfill designation

_____ Utility crossings (Field locate / pothole to provide detailed information)

_____ Match lines (with sheet number reference)

2.00 GENERAL DESIGN CONSIDERATION

_____ Provide for removal of domestic and industrial wastes.

_____ Separate Sanitary & Storm Systems.

_____ Designed for Ultimate Flows, per Sewer Master Plan.

_____ Provide for Adjacent Upstream Property. (Extend across street frontage and through easements if required).

2.01 SANITARY SEWER SYSTEM CAPACITY

_____ Design Calculations (if required).

2.04 SANITARY SEWER PLAN AND PROFILE

_____ Service Locations with size, material, depth at property line, station

_____ Location of existing water courses, stream and railroad crossings, culverts and storm drains crossing the alignment within 500 feet of proposed and future extension

_____ Location of existing 100 year floodplain

_____ Location of wells, water main valves, pump stations, fire hydrants and blow offs within a 100 foot radius of proposed and future extension

2.07 PIPE MATERIAL

_____ All public sanitary sewers shall be constructed with PVC pipe

_____ Class 50 ductile iron pipe shall be used when determined by the City Engineer

2.08 PIPE SIZE

_____ Shown on plan and profile.

_____ 8" minimum.

_____ Exception, 6" minimum if non-extendable, less than 250 ft. in length.

_____ Sized for Master Plan Ultimate Flows.

2.09 MINIMUM/MAXIMUM SLOPE

_____ Meets standard minimum.

_____ 6” = 0.60

_____ 8” = 0.40

_____ Meets preferred minimum for non-extendable sewer, shall be used for last 400 feet

_____ 6” = 1.00

_____ 8” = 0.75

_____ Maximum slopes (for slopes exceeding 19%, check criteria formula).

2.10 ELEVATION OFFSET AT MANHOLES

_____ 0.10’ drop for less than 45° deflection angle.

_____ 0.20’ drop for greater than 45° deflection angle.

_____ Maximum off-set one-foot (1') for conflicts.

_____ Drop connection.

2.11 ANCHOR WALLS

_____ 20% or greater slope, anchor walls are required.

_____ If velocity exceeds 15 Feet Per Second, use Ductile Iron pipe

2.12 MINIMUM DEPTH

_____ Lateral Sewer - Four feet (4').

_____ Main and trunk sewer/within roadway - 8 feet.

_____ Main and trunk sewer/within easements - 6 feet.

_____ If flat topography where existing sewers are shallow (5 feet or less), minimum cover is 3 feet

_____ When sewer has cover of 3 feet or less, ductile iron pipe must be used

2.13 LOCATION

_____ 10-foot horizontal separation with waterlines.

_____ 18-inch vertical clearance with water lines.

_____ Waterline crossings at, or near 90 degrees.

_____ 12-inch vertical separation with storm, exception (Ductile Iron pipe to be used).

_____ 5 feet North and West of street centerline.

_____ 10 feet from East curb on curves.

_____ 6 feet from West curb on curves.

_____ Easements shown on plan - Minimum width 15 feet (less than 15" diameter).

_____ Easements shown on plan - Minimum width 20 feet (more than 15" diameter).

_____ Easement description/sketch/documents or show on plat as appropriate .

_____ Vehicular access to manholes.

_____ Stream crossings - Special requirements.

_____ Well, spring separation (50' minimum)

2.14 ALIGNMENT

_____ Straight and uniform slope.

2.15 MANHOLES

_____ Manhole spacing 400 feet.

_____ Manhole locations (check list Section 2.15c).

_____ Drop manholes - last resort, drop >24", maximum diameter 12". Outside Only

_____ For rims over 2 feet high, use aluminum lid.

2.16 LATERAL SEWER (SERVICE LATERALS) AND PRIVATE COLLECTOR SYSTEMS

_____ Each lot/parcel provided service lateral.

_____ 5-foot separation with manholes and tees

_____ Located 90° to main, except at a cul-de-sac.

_____ Connections not at manholes, except cul-de-sac (Case-by-case).

_____ 2 way Clean-out at property line.

_____ Minimum cover 4 feet at property line.

_____ Minimum size 4 inches for building sewer.

_____ Minimum size 6 inches for multi-family/commercial.

_____ Minimum slope 2% (1% when approved by City Engineer).

_____ Residential building sewer/crossing private property not allowed unless approved by City Engineer with easement.

WATER PLAN AND PROFILE

_____ Valve Stationing, numbers, dimensional control.

_____ Fire Hydrants, numbers, dimensional control.

_____ Air Release Valves, numbers, dimensional control.

_____ Size, type of pipe

_____ Rim elevation, line elevation, existing/proposed finished grades

_____ Backfill designation

_____ Utility crossings (Field locate / pothole to provide detailed information)

_____ Match lines (with sheet number reference).

2.0 GENERAL DESIGN CONSIDERATION

_____ Adequate Fire Flow

_____ Min./Max. Working Pressure 40 - 100 psi, Normal, 60 psi

_____ Provide for Adjacent Property and Maximum Development.
(extend across street frontage and through easements, if required)

_____ Maximum Velocity - 10 fps for average demand plus fire flow.

_____ 20 psi residual pressure under calculated fire flow conditions.

2.01 WATER SYSTEM CAPACITY

_____ Minimum Fire Flow in Residential Area
1,000 gpm

_____ Minimum Fire Flow in Industrial and Commercial Areas per Fire Department (Case by case - Minimum 1,500 gpm)
Required fire flow = _____

2.08 WATER MASTER PLAN REQUIREMENTS

_____ Oversizing Per Master Plan Included

2.09 PIPE MATERIALS

_____ Less than 30” = Ductile Iron

_____ 10” and above = thickness Class 50

_____ 8” and below = thickness Class 52

_____ Push on Titon Joint

_____ Rubber gaskets on joints

_____ Omni Balls at all “T”s

2.10 MAIN SIZE

_____ System Grid (looped)

_____ Shown on Plan

_____ 8″ minimum. Exceptions as approved by the City Engineer.

_____ Dead end lines avoided. If not, then Fire Hydrant at end unless line meets criteria for a blow-off in Section 2.17B. Approved by City Engineer on a case-by case basis.

_____ 10″+ Primary Feeder Mains, Industrial Subdivisions, or as Dictated by Water Master Plan and Required Fire Flow

2.11 MINIMUM DEPTH

_____ 36″ in Right-of-Way, 36″ in Easements (3 feet of cover to top of pipe)

_____ Request for less Than Standard shall be approved by the City Engineer.

2.12 LOCATION

_____ 4' From Curb Under Street Section

_____ Bends 4' From Face of Curb

_____ Water/Sanitary Separation (10' Horiz.) (18" Vert.), OAR 333-61-050

_____ Water/Other Utility Separation (10' Preferred, 3′ Minimum)

_____ Parallel Mains (12" Vertical Separation)

_____ Utility Crossings (6″ Vertical Clearance)

Minimum Radius for curved streets:

_____ 6" through 12" - 500'

_____ 14" through 16" - 600'

_____ 18" through 24" - 800'

_____ Offset From Property Lines (42″) - Parallel Lines

_____ Easements (15' - Distribution) (20' – Transmission)

_____ 20 foot separation to proposed structures (Commercial)

_____ Located in parking lots/drives for access (Apartments, Commercial)

2.14 VALVES

_____ Gate Valves 8" or Less

_____ Butterfly Valves (only used to replace existing butterfly valves)

_____ Combination Air & Vacuum Release Valves (See 2.17 Blow-offs)

_____ Spacing Maximum - 500' - 800' for Distribution

_____ Spacing Maximum - 1,300' - 2,000' for Transmission

_____ Tee Intersection, Valved on All Branches (See OCPW Std Dwg 413)

_____ Cross Intersection, Valved on All Branches (See OCPW Std Dwg 413)

_____ Located at Tee or Cross fitting as near as possible

_____ At Hazardous Crossing, Valved Each Side

_____ At Terminus of Phased Construction (See 2.17 Blow-offs)

2.15 BACKFLOW PREVENTION

_____ Provided, if required. Coord with City Water Quality personnel

2.16 FIRE HYDRANTS

_____ Spacing, Residential 500 feet (When Measured Along Road)

_____ Spacing High Value - 200-500 feet (as Determined by Fire Department)

_____ Preferred At Street Intersections/Property Line

_____ No further than 250 feet from any dwelling, business, garage, or building

_____ Maximum 200 foot Centerline Distance to Cul de-sac Radius Point

_____ Main Size for Dead End Mains, 8" Minimum (Avoid long dead end leads, if possible) (Need City Engineer Approval)

_____ 5-foot Separation with Utility Poles/Guys

_____ Bollards as necessary in exposures to vehicle traffic. No closer than five feet from FH

2.17 AIR RELEASE VALVES/BLOW-OFFS

_____ Air Release Valve at High Points on All Mains in Hilly Terrain as Approved by the City Engineer

_____ Installed in a Manhole off the Street. Provide for Drainage

_____ Blow-Off Hydrants are used on Main Lines to be Extended Later, Dead End Lines, Low Points. Locate at Least 2 feet Behind Curbs.

2.18 SERVICE LINES

_____ Size

_____ Service Location

_____ Meter Location

2.19 METERS

_____ Install by City (In Construction Notes)

_____ Located in Right-of-way or Easement

_____ Same Size as Service Line, Unless Supporting Calculations Supplied and Approved

_____ 3″ and Larger, Special Location and Vault Requirements, Flow Calculations

STREET LIGHTING PLAN (if required)

_____ Street Lighting Design Provided. To be reviewed by PGE.

_____ Photometric Plan Provided. To be reviewed by PGE.

_____ Shall follow Statement of Streetlight Installation Responsibilities by PGE dated June 20, 2018. (Option B)

_____ Single Family Residential : Local Streets use 25 foot poles. Arterial and Collector streets use 30 foot poles unless otherwise noted.

_____ Shall follow PGE Approved Street Lighting Equipment for New Installations for Outdoor Lighting Services – 2018 (LED is the only allowed public lighting type)

_____ The maximum height of any lighting pole serving a multi-family residential use shall be 20 feet.

_____ Commercial : The maximum height serving any other type of use shall be 25 feet, except in parking lots larger than five acres, the maximum height shall be 35 feet if the pole is located at least one hundred feet from any residential use.

SIGNING AND STRIPING PLAN (if required)

_____ Location of any signs

_____ Size of signs

_____ Location and Type of Striping (lane lines, turn lanes, crosswalks, bike lanes, stop bars, etc.)

_____ Note if striping shall be painted or thermoplastic

_____ Note location and type of any bollards, barricades, or end markers

SIGNAL PLAN (if required)

_____ Provided. To be reviewed by Clackamas County.

LANDSCAPE PLAN (* This is reviewed by the Planner)

_____ Provided. (see City Planning Department for requirements and approval)

_____ Overlay Plan of landscaping, utility mains and service, streetlights and other structures

- _____ 15 feet from streetlights
- _____ 5 feet from fire hydrants
- _____ 20 feet from intersections
- _____ 5 feet from all public utilities

CONSTRUCTION DETAILS

**Designer should provide the most recent details found at : https://www.orcity.org/publicworks/design-and-construction-standardsdrawings*

These details should be provided on all plan sheets with City Public Improvements where applicable.

Consultant Details or other agency details should only be provided when no City detail exists or applies.

_____ OC 313 – Pipe Bedding and Trench Backfill

_____ Residential Lot Grading Types

_____ Residential Lot Grading Notes

_____ OC 301 – Manhole

_____ OC 302 – Shallow Manhole

_____ OC 303 – Drop Manhole Connection

_____ OC 303A – Inside Drop Manhole Connection

_____ OC 305 – Manhole Frames and Covers

_____ OC 306 – Waterproof & Tamperproof Manhole Frame & Cover

_____ OC 307 – Manhole Step

_____ OC 308 – Poured In Place Manhole Base

_____ OC 309 – Sanitary Sewer Cleanout on Main Line

_____ OC 310 – Sanitary Sewer Service

_____ OC 310-A – 2-way Cleanout for Sanitary Sewer Service

_____ OC 311 – Sanitary Sewer Service Tap to Existing Sewers

_____ OC 317 – Marker Post

_____ OC 401 – Standard Fire Hydrant Installation

_____ OC 402 – Standard 1" Water Service

_____ OC 404 – Standard 2" Water Service

_____ OC 405 – Standard Blowoff

_____ OC 407 – Thrust Blocking

_____ OC 408 – Standard Straddle Block

_____ OC 409 – Standard Sanitary Sewer Crossing

_____ OC 410 – Standard Valve Box

_____ OC 411 – Standard Wet Tap

_____ OC 412 – Tie Rod Requirements

_____ OC 413 –Standard Valve Location and Joint Requirements

_____ OC 415 – Sampling Station

_____ OC 416 – Standard Fire Line Installation

_____ OC 417 – 1" Combination Air Release & Vacuum Valve

_____ OC 418 – 2" Combination Air Release & Vacuum Valve

_____ OC 419-1 – 4" & Larger Water Meter Vault (Plan)

_____ OC 419-2 – 4" & Larger Typical Water Meter Vault (Profile)

_____ OC 419-3 – 4" & Larger Water Meter Vault (Detail Notes)

_____ OC 420 – Water Vault Ladder Installation

_____ OC 421-1 – 4" & Larger Typical Double Check Valve Assembly (DC)

_____ OC 421-2 – 4" & Larger Typical Double Check Valve Assembly (Side)

_____ OC 421-3 – 4" & Larger Typical Double Check Valve Assembly (Front)

_____ OC 421-4 – 4" & Larger Typical Double Check Valve Assembly (Notes)

_____ OC 422 – Typical Backflow Preventers for Residential Irrigation Systems

_____ OC 423 – AV + PV Breaker Assembly for Residential Irrigation Systems

_____ OC 424 – 1" or 2" Double Check Assembly

_____ OC 425 – 1” or 2” Reduced Pressure Backflow Assembly (Above Ground)

_____ OC 426 – 1” or 2” Reduced Pressure Backflow Assembly (Below Ground)

_____ OC 427 – 4” & Larger Reduced Pressure Backflow Assembly (Above Ground)_

_____ OC 428 – 4” & Larger Reduced Pressure Backflow Assembly (In Berm)

_____ OC 429 – Reduced Pressure Backflow Assembly Discharge Rates for Drain Pipe Size

_____ OC 430 – 1” & 2” Pressure Reducing Valve

_____ OC 500 – Local Street Section

_____ OC 501 – Collector Street Section

_____ OC 502 – Arterial Street Section

_____ OC 503 – Standard Cul-de-sac

_____ OC 504 – Standard Residential Driveway

_____ OC 504A – Standard Residential Driveway Notes

_____ OC 505 – Standard Commercial Driveway

_____ OC 506 – Commercial Driveway with Curbs

_____ OC 507 – Curb Cut for Driveways

_____ OC 508 – Sidewalk Detail

_____ OC 509 – Sidewalk Ramp Details and Placement Options

_____ OC 510 – Standard Curb

_____ OC 511 – Monolithic Curb and Gutter

_____ OC 512 – Street Barricade

_____ OC 513 – Typical Utility Placement

_____ OC 514 – Manhole Adjustment Detail

_____ OC 515 – Pedestrian Path or Bikeway

_____ OC 517 – Offset Crown & Shed Street

_____ OC 518 – Eyebrow - Corner

_____ OC 519 – Mailbox Location

_____ OC 520 – Centerline Survey Monuments

_____ OC 521 – Street Name Sign with 4-inch Lettering for 25 MPH or Less Speed Limits

_____ OC 522 - Street Name Sign with 6-inch Lettering for 30-40 MPH or Less Speed Limits

_____ OC 523 – Typical Sign Assembly and Mounting Hardware

_____ OC 524 – Street Sign General Notes

_____ OC 525 – End of Roadway Marker

_____ OC 526 – Alley Section

_____ OC 527 – Removable Vehicle Barrier Post

_____ OC 528 – Local Residential Speed Hump

_____ OC 529 – Pavement Markings Placement

_____ OC 529A – Bike Lane & Crosswalk Notes

_____ OC 530 – Street Tree Planting in Planter Strip

_____ OC 531 – Project Notification Sign

_____ OC 532 – Pavement Cut Standard, Typical Layout

_____ OC 533 – Pavement Cut Standard, Intersections

_____ OC 534 – Pavement Cut Standard, Cul-de-sacs (Local Streets)

_____ OC 535 – Median Striping & Sign Detail

_____ OC 536 – Typical Acorn Style Decorative Street Light Pole Detail

_____ OC 536A – Typical Light Pole Wining to Junction Box

_____ OC 536B – 24" Cast-in-Place Decorative Luminaire Foundation

_____ OC 536C – Street Light Locations & Fixture Details

_____ OC 537 – Bike Rack Detail

_____ OC 538 – Pothole Restoration

_____ OC 539 – Decorative Corridor, Typical Tree Grate Installation

_____ OC 540 – Decorative Corridor, Typical Sidewalk Scoring Pattern Detail

_____ OC 541 – Future Road Sign

_____ OC 601-1 – Flow Control Manhole, Page 1 of 2

_____ OC 601-2 – Flow Control Manhole, Page 2 of 2

_____ OC 602-1 – High Flow Bypass Manhole, Page 1 of 2

_____ OC 602-2 – High Flow Bypass Manhole, Page 2 of 2

_____ OC 603 – Primary Pond Outlet for Type "A" Detention Pond

_____ OC 604 – On Site Catch basin

_____ OC 605 – Pipe Anchor Wall

_____ OC 606 – Bore Casing

_____ OC 607 – Pollution Control Manhole

_____ OC 608 – Storm Manhole for Large Diameter Pipe (27" and Larger)

_____ OC 609 – Precast Curb Inlet

_____ OC 610-1 – Catch Basin

_____ OC 610-3 – Frames & Grates G-1, G-2, Type 3

_____ OC 610-4 – Type G-1, G-2 Catch Basin with Sump

_____ OC 610-5 – Type 4 Catch Basin

_____ OC 611-1 – Area Drainage Basin or Field Inlet

_____ OC 611-2 – Ditch Inlet

_____ OC 612 – Storm Sewer Service

_____ OC 613-2 – Pollution Control Manhole with Outside Drop

_____ OC 614 – Carry Through Manhole

_____ OC 616 – Subsurface Drain

_____ OC 618 – Stormwater Planter Facility – One Way Cleanout

_____ OC 619 – Roadside Stormwater Planter – Plan View

_____ OC 620 – Roadside Stormwater Planter – Elevation

_____ OC 621 – Roadside Stormwater Planter – Section

_____ OC 622 – Roadside Stormwater Planter – Detail

_____ OC 623 – Curb Cut Scupper and Sediment Catch Basin

_____ OC 624 – Roadside Stormwater Planter – Concrete Check Dam

_____ OC 625 – Waterproof Liner Attachment and Pipe Boot

_____ OC 626 – Beehive Overflow Structure

_____ OC 627 – Stormwater Planter Facility – 2 Way Cleanout

_____ OC 630 – Roadside Stormwater Planter – Plant Spacing

_____ OC 631 – Tree Well in Stormwater Planter

_____ OC 632 – Storm Outfall Detail

_____ OC 633 – Chain Link Fence & Gate

_____ Stormwater Pond Signage

_____ Silt Fence

_____ Inlet Protection

_____ Gravel Construction Entrance

_____ Other Erosion Control Details (as applicable)

MISCELLANEOUS

**Other plans may be required, including, but not limited to :*

- Phasing Plan

- Traffic Control Plan

Checklist last updated October 2025