



DCWS Construction/Record Drawing Submittal Checklist

Checklist to be included with each initial and revised submittal of construction or record drawings.

Project Name: _____
 Professional Engineer: _____
 Engineering Firm: _____

General

Engineer QC	Item Description	DCWS
_____	PRELIMINARY PLANS - ONE (1) Full Size (24X36) complete, bound set of construction drawing*	_____
_____	PRELIMINARY PLANS - PDF file uploaded to Evolve	_____
_____	APPROVED CONSTRUCTION PLANS - TWO (2) Full Size (24X36) complete, bound set of construction drawing*	_____
_____	APPROVED CONSTRUCTION PLANS - PDF file uploaded to Evolve	_____
_____	Cover sheet (to include the correct project title, site map, and revision block)	_____
_____	Project title (including title on border & project design information sheet)	_____
_____	Site map (legible site map with hatched/highlighted phase)	_____
_____	Revision block (list each date any sheet within the set was amended)	_____
_____	Engineer's seal, signed and dated on each sheet	_____
_____	Corporate seal on each sheet	_____
_____	Overall project utility plan sheet with current phase accentuated	_____
_____	Road names labeled (generic road names are acceptable)	_____
_____	Width and center line of each R/W and EOP indicated	_____
_____	All lots, adjacent TMS numbers, and/or buildings labeled	_____
_____	Scale (not to exceed 1" = 50') and north arrow shown on each plan and profile sheet	_____
_____	All easements properly delineated & labeled as DCWS Water or Sewer Easement (min. 20' on center)	_____
_____	All other easements & R/W (existing or proposed) shown & labeled	_____
_____	Easements extended to include the end of the water and sewer mains outside the phase line	_____
_____	Horizontal datum is NAD83 and labeled - record drawings only	_____
_____	Vertical datum is NAV88 and labeled - record drawings only	_____
_____	Recorded road names provided - record drawings only	_____
_____	Lot addresses provided - record drawings only	_____
_____	Lot TMS numbers provided - record drawings only	_____
_____	Landscape plans	_____
_____	Plat references for existing easements	_____
_____	Address, phone number and contact for owner, contractor, engineer, & surveyor - record drawings only	_____
_____	Construction completion date - record drawings only	_____
_____	Length of gravity main pipe by size and material - record drawings only	_____
_____	Length of force main pipe by size and material - record drawings only	_____
_____	Length of service line pipe by size and material to be accepted by DCWS - record drawings only	_____
_____	Number of manholes - record drawings only	_____
_____	Number of single services - record drawings only	_____
_____	Number of double services - record drawings only	_____
_____	Number of valves by size and type (gate, air release, etc.) - record drawings only	_____
_____	State plane coordinates of all features shown - record drawings only	_____
_____	PUPS note	_____

Sewer Plan Set

Engineer QC	Item Description	DCWS
	Sewer stationing labeled on both plan and profile views (center of MH to center of MH)	
	Profile includes all crossings (water main, storm drainage, road center line, etc.), label vertical clearances, MH diameters, and existing and final grades	
	Include pipe labels - LF, size, material, pipe class, and slope (i.e. 200LF of 8" PVC SCR26 @ 0.40%)	
	Method of road crossing indicated (jack and bore, open-cut, etc.)	
	Slopes checked (use the Ten States Standard for design)	
	Plan view includes manholes, manhole numbers, and other buried pipelines	
	Drop manholes and doghouse manholes labeled and proper diameter	
	Matching crowns for differing pipe diameters	
	All lots served with a gravity sewer service of adequate depth (min. 3' cover for services)	
	All services located inside R/W or easement but outside of drainage easements	
	Services located at lot corners	
	All manholes accessible and located at property corners wherever possible	
	IE Out for existing manholes at tie-in points labeled	
	Current sewer details (Find the most current details on www.dorchestercountysc.gov , Water and Sewer	
	Current sewer notes	
	Sewer tie-in note: Contractors to verify existing MH elevation and notify engineer and DCWS of any discrepancies. Contact DCWS a minimum of 72 hours prior for connection.	
	Existing main location	
	Existing main size	
	Easements for mains near R/W lines	
	Encroachments meet agency requirements	

Water Plan Set

Engineer QC	Item Description	DCWS
	Road stationing labeled on the plan view	
	All bends, tees, reducers, valves, hydrants, and pipe material labeled (size, material, pipe class)	
	Plan view includes all other buried pipelines	
	Show BFP at the tie-in locations	
	Terminations of the line labeled (Hydrant, blow-off, plug, etc.)	
	DIP under roadways labeled	
	Each lot served with a potable water service	
	All services located inside R/W or easment but outside of drainage easements	
	Services located at the lot corners	
	Fire hydrants located at lot corners	
	Label size of service lines, meters and backflow preventer on commercial projects	
	Horizontal directional drill profiles (if applicable)	
	Current water details (Find the most current details on www.dorchestercountysc.gov), Water and Sewer	
	Current water notes	
	Profiles for mains 12" and larger	
	Existing main location	
	Existing main size	
	Water mains labeled over/under stormdrains	
	Valves at all branches	
	Valves spaced at no more than 500 (commercial) or 800' (residential)	
	Water mains looped at all road intersections	
	Thrust restraint with approved retainer glands unless thrust blocks approved	
	Easements for mains near R/W lines	
	Fire flow with meter or backflow preventer with flow detector	
	Encroachments meet agency requirements	

Pump Station Plan Set

Engineer QC	Item Description	DCWS
	Site plan with maximum scale of 1" = 20'	
	Minimum 50' X 50' lot	
	Property lines and dimensions	
	Location and dimensions of major components (control panel, generator, etc.)	
	Pump Station Notes	
	Wetwell cross-sections with float/sensor and alarm elevations	
	Control panel info w/data	
	Paved surface	
	Fence	
	Emergency Sign	
	Buoyancy calculations	
	Existing main location	
	Existing main size	

Plan View of Station

Engineer QC	Item Description	DCWS
	Wet well diameter	
	Minimum allowable hatch dimensions	
	Discharge main components and size	
	Specify type of valves on force main discharge piping	
	Control panel location	
	Generator location	
	Frame and crane location (if applicable)	
	Slab dimensions & elevations (Site to be a minimum 1' above existing/new FEMA flood elevations)	
	Access road labeled as DCWS Ingress/Egress Easement (Note dimensions)	
	Need to make Pump Station accessible by large vehicles	

Profile View of Station

Engineer QC	Item Description	DCWS
	Wet well diameter	
	Base slab dimensions	
	Slab top and corner elevations	
	Discharge main components and size	
	Specify type of valves on force main discharge piping	
	Pipe supports	
	Pump size, TDH, calculated pump rate, voltage	
	Influent line invert elevation	
	Minimum water level	

Pump Station Electrical Plans

Engineer QC	Item Description	DCWS
	Entrance power sizing	
	Entrance power disconnect sizing	
	Generator sizing	
	Pump riser diagram	
	Grounding design	
	One line diagram	

Force Main Plan & Profile View

Engineer QC	Item Description	DCWS
_____	Force main profile views (same requirements as sewer profiles)	_____
_____	Label air release valve locations	_____
_____	Coating specified: line the two gravity sewer manholes downstream from FM discharge	_____
_____	Current details	_____
_____	FM elevations shot at 50' min. intervals - record drawings only	_____
_____	Plug valves spaced at no more than 4,000'	_____

Not Required for Record Drawing Submittals

Engineer QC	Item Description	DCWS
_____	Water System Design Calculations (Use MID, Fire Flow, and Peak Hourly Demand) for each phase	_____
_____	Sewer System Design Calculations (Cerify flow through designed pipe & slope) for each	_____
_____	Pump Station Calculations (Min. Peaking factor 2.5, Max 6 starts per hour)	_____

I certify the submitted construction plans and calculations or record drawings meet the above criteria. If any of the above criteria is missing or not provided, I understand that DCWS has the right to reject my submittal. I understand that DCWS reviews itams that are not included on this checklist and that comments may be issued on checklist items and other items DCWS reviews.

PE Signature: _____

Date: _____