



Record Drawing Checklist

1. GENERAL

Project	Details
Project Name: (w/ section # and phase #)	
Project TMS #:	
City ID #:	
Project Developer: (w/ name, address, email, and phone #)	
Engineer of Record: (w/ name, address, email, and phone #)	

Project Reviews	1 st Review	2 nd Review	3 rd Review	4 th Review		
Reviews By (initials):						
<i>Engineering:</i>						
<i>Stormwater:</i>						
Submittal Dates:						
Review Dates:						
<i>Engineering:</i>						
<i>Stormwater:</i>						
Comments Provided to Applicant:						
<i>Engineering:</i>	<u>Yes</u> <input type="checkbox"/>	<u>No</u> <input type="checkbox"/>	<u>Yes</u> <input type="checkbox"/>	<u>No</u> <input type="checkbox"/>	<u>Yes</u> <input type="checkbox"/>	<u>No</u> <input type="checkbox"/>
<i>Stormwater:</i>	<u>Yes</u> <input type="checkbox"/>	<u>No</u> <input type="checkbox"/>	<u>Yes</u> <input type="checkbox"/>	<u>No</u> <input type="checkbox"/>	<u>Yes</u> <input type="checkbox"/>	<u>No</u> <input type="checkbox"/>



2. ENGINEERING RECORD DRAWINGS

General Item/Description	1 st Review		2 nd Review		3 rd Review		4 th Review	
	Yes	No	Yes	No	Yes	No	Yes	No
Requirements								
a. The record drawings are to be based on the approved construction drawings and revised to reflect any changes made during construction. Both the original design and constructed condition must be clearly shown. The drawings need to be clearly labeled as "Record" drawings.	<input type="checkbox"/>							
b. Engineer's statement (with embossed or wet seal and with an original signature on each sheet) shall verify that record drawings reflect the true conditions in the field.	<input type="checkbox"/>							
c. Street names shall be on all streets. All easements and right-of-ways shall be shown and clearly labeled.	<input type="checkbox"/>							
d. If the utility system is to be private (not to be dedicated to City), then so state on each sheet.	<input type="checkbox"/>							
e. The location and elevation of the benchmark referenced will be shown on the drawing. If the referenced benchmark is not within the project, then a complete description of its location will be provided to assist in future locating.	<input type="checkbox"/>							
f. The locations and description of any utility lines and other installations of any kind or other description known to exist within the construction area. The location includes dimensions to permanent features.	<input type="checkbox"/>							
g. The locations and dimensions of any changes to buildings and structures.	<input type="checkbox"/>							
h. Correct grade or alignment of roads.	<input type="checkbox"/>							
i. Correct elevations to changes made in site grading.	<input type="checkbox"/>							
j. Changes in details of design or additional information such as approved placement details, pipe sizes, material changes, etc.	<input type="checkbox"/>							
k. Where drawings and/or specifications allow options, only the option actually used in the construction shall be shown on the record drawings.	<input type="checkbox"/>							



General Item/Description	1 st Review		2 nd Review		3 rd Review		4 th Review	
	Yes	No	Yes	No	Yes	No	Yes	No
I. The location and description of any safety features such as guardrails, attenuators, etc.	<input type="checkbox"/>							
Comments:								

Streets, Sidewalks, Ramps, Curbs, Gutters and Others Item/Description	1 st Review		2 nd Review		3 rd Review		4 th Review	
	Yes	No	Yes	No	Yes	No	Yes	No
Requirements								
a. Show all right-of-way or easement lines, clearly labeled public or private. Label City of Charleston, County, SCDoT, etc.	<input type="checkbox"/>							
b. Provide typical offset dimensions from property, right-of-way or easement lines.	<input type="checkbox"/>							
c. ADA ramp or curb opening installation that deviate from original plans shall be noted on record drawings. Locate all sidewalks and ADA pedestrian access features. Provide material type and width.	<input type="checkbox"/>							
d. Provide special detail drawings or shop drawings where installations were not shown on original drawings due to field conditions or where required for clarity.	<input type="checkbox"/>							
e. Monuments installed or encountered within the project.	<input type="checkbox"/>							
f. Locate and describe all installed regulatory or warning signage and pavement markings within the project. Any deviations from the approved construction drawings shall be noted.	<input type="checkbox"/>							
g. Location and species information on installed street trees and lighting fixtures.	<input type="checkbox"/>							
h. Locate irrigation and domestic water meters. Show all installed sanitary sewer and water lines.	<input type="checkbox"/>							
i. Location, type, material and reinforcement, height, drainage systems and foundation information of all retaining walls.	<input type="checkbox"/>							



Streets, Sidewalks, Ramps, Curbs, Gutters and Others Item/Description	1 st Review		2 nd Review		3 rd Review		4 th Review	
	Yes	No	Yes	No	Yes	No	Yes	No
j. Note any changes to the alignment, either vertically or horizontally, of curb & gutter, sidewalk, pavers or any other surface improvement.	<input type="checkbox"/>							
k. Provide crown line spot elevations approximately on 100-foot stations, or as field conditions warrant.	<input type="checkbox"/>							
l. Locate and describe all surface parking areas. Provide description as to surface material.	<input type="checkbox"/>							
Comments:								

3. STORMWATER RECORD DRAWINGS (section 6.3 of SWDSM)

As part of the project closeout process, a full size hard copy and one electronic PDF format copy of the record drawings, properly identified, executed, and certified shall be delivered to the Engineering Division. File format, data standards, and other information shall conform to the current data submittal requirements as issued by the City of Charleston GIS Division. Additionally, the record drawings for stormwater facilities shall contain the following information:

6.3.1 Piped Drainage Systems Item/Description	1 st Review		2 nd Review		3 rd Review		4 th Review	
	Yes	No	Yes	No	Yes	No	Yes	No
Requirements								
a. Enter actual values beside planned values on the approved construction plans.	<input type="checkbox"/>							
b. Show elevations to the nearest 0.01'. Actual elevations within 0.10' of the planned values are sufficient except where higher accuracy is needed to indicate positive flow.	<input type="checkbox"/>							
c. Diameter, material and class of all pipes.	<input type="checkbox"/>							
d. Type of joint of all pipes (O-Ring, T&G, etc.).	<input type="checkbox"/>							
e. Invert of pipe at outfall and all structures.	<input type="checkbox"/>							
f. Slope and lengths of all pipe.	<input type="checkbox"/>							
g. Structure type and elevations (top of grate, throat elevation, etc.)	<input type="checkbox"/>							
h. Location of all pipe and structures in relation to drainage easements on plan view.	<input type="checkbox"/>							
i. Centerline roadway elevations at all low points and other stormwater crossings.	<input type="checkbox"/>							



6.3.1 Piped Drainage Systems Item/Description	1 st Review		2 nd Review		3 rd Review		4 th Review	
	Yes	No	Yes	No	Yes	No	Yes	No
j. Length, depth, and width of all outfall protection as specified.	<input type="checkbox"/>							
k. Profiles of as constructed pipe and structures in relation to as constructed finished grade. Show all crossing pipes (sanitary, water, gas, etc.) as applicable with separation distance. This includes above and below crossings	<input type="checkbox"/>							
Comments:								

6.3.2 Open Channel Drainage System Item/Description	1 st Review		2 nd Review		3 rd Review		4 th Review	
	Yes	No	Yes	No	Yes	No	Yes	No
Requirements								
a. Enter actual values beside planned values on the approved construction plans.	<input type="checkbox"/>							
b. Show elevations to the nearest 0.1' except where higher accuracy is needed to indicate positive flow.	<input type="checkbox"/>							
c. Actual elevations within 0.1' of the planned values are sufficient except where higher accuracy is needed to indicate positive flow.	<input type="checkbox"/>							
d. Slope of all open channels.	<input type="checkbox"/>							
e. For swales 1' or less in depth, show actual side slopes and spot invert elevations at a frequency of at least every 100'.	<input type="checkbox"/>							
f. For swales or ditches greater than 1' in depth, show top of bank and toe of slope designations and elevations at a frequency of at least than every 100'.	<input type="checkbox"/>							
g. For ditches 3' or greater in depth, generate actual 1' contours.	<input type="checkbox"/>							
h. Location of ditch or swale in relation to drainage easements on plan view.	<input type="checkbox"/>							
i. Length, depth, and width of all outfall protection or other erosion control as specified.	<input type="checkbox"/>							
Comments:								



6.3.3 Stormwater Management Pond or Basin Item/Description	1 st Review		2 nd Review		3 rd Review		4 th Review	
	Yes	No	Yes	No	Yes	No	Yes	No
Requirements								
a. Enter actual values beside planned values on the approved construction plans.	<input type="checkbox"/>							
b. Show elevations to the nearest 0.01'. Actual elevations within 0.10' of the planned values are sufficient except where higher accuracy is needed to indicate positive flow.	<input type="checkbox"/>							
c. Sufficient elevations along top of dam/pond to verify design elevation.	<input type="checkbox"/>							
d. Sufficient elevations along toe of slope and bottom of pond to verify design elevation.	<input type="checkbox"/>							
e. Generate actual 1' contours and provide a stage-volume table to confirm design volume.	<input type="checkbox"/>							
f. Verify pond slopes and vegetative cover.	<input type="checkbox"/>							
g. Location, elevations, slopes, and dimensions of all orifices, weirs, spillways, trash racks or any other aspects of outfall control.	<input type="checkbox"/>							
h. Location, dimensions, and elevations of emergency spillway.	<input type="checkbox"/>							
i. Outfall protection location and dimensions.	<input type="checkbox"/>							
j. Water elevation in pond at time of survey, if applicable.	<input type="checkbox"/>							
k. Provide location, dimensions, make or brand, model, serial number and maintenance manual for any engineered water quality treatment devices.	<input type="checkbox"/>							
l. Applicable record drawing supplement forms have been provided (UDS, MTD, Level Spreader / Vegetative Filter Strip,	<input type="checkbox"/>							
m. In situ testing of permanent structural BMPs that rely on infiltration has been provided (section 6.9 of the 2020 SWDSM)	<input type="checkbox"/>							
Comments:								



6.3.4 Project Datum Item/Description	1 st Review		2 nd Review		3 rd Review		4 th Review	
	Yes	No	Yes	No	Yes	No	Yes	No
Requirements								
<i>The record drawing shall clearly state the project datum (NAVD88) on all pages where elevations are noted.</i>	<input type="checkbox"/>							
Comments:								

6.3.5 Certifications Statement Item/Description	1 st Review		2 nd Review		3 rd Review		4 th Review	
	Yes	No	Yes	No	Yes	No	Yes	No
Requirements								
<i>The record drawing must include the following statements if the Engineer of record and the Surveyor of record are not one in the same:</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>"I hereby sign and affix my seal to certify to the best of my knowledge that the comprehensive stormwater management system and road infrastructure as constructed is in substantial conformance with the standards, dimensions and specifications of the approved construction drawings."</i>	<hr/> SC Registered Professional Engineer (Reg. No.)		<hr/> Date					
<i>"The dimensions shown on the record drawings were obtained in accordance with the requirements of the minimum standards manual for the practice of land surveying in South Carolina. The horizontal dimensions shown are within ±1 foot tolerance. Vertical dimensions are accurate to within ±0.01 foot."</i>								
<i>SC Registered Land Surveyor (Reg. No.)</i>	<hr/> Date							
<i>If the South Carolina registered Engineer and Surveyor are one in the same, the record drawing must include the following statement:</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>"I hereby sign and affix my seal to certify to the best of my knowledge that this record drawing accurately represents existing field conditions and that the comprehensive stormwater management system and road infrastructure as constructed is in substantial conformance with the standards, dimensions and specifications of the approved construction drawings."</i>								
<i>SC Registered Professional Engineer (Reg. No.)/Surveyor (Reg. No.)</i>	<hr/> Date							
Comments:								



Covenants for Permanent Maintenance of Stormwater Facilities	1 st Review		2 nd Review		3 rd Review		4 th Review	
	Yes	No	Yes	No	Yes	No	Yes	No
Requirements								
a. All information on page 1 of 8 filled out	<input type="checkbox"/>							
b. Exhibit A (legal description) provided	<input type="checkbox"/>							
c. Additional information provided in Section E for additional maintenance responsibilities for the property owner. If applicable, an additional exhibit showing the required maintenance requirements included in the submittal.	<input type="checkbox"/>							
d. All sections of page 6 of 8 filled out. Location of BMP clearly described or a plan view provided in submittal as an exhibit	<input type="checkbox"/>							
e. Property owner information filled out (page 7 of 8)	<input type="checkbox"/>							
f. All signatures provided as necessary (page 8 of 8)	<input type="checkbox"/>							
g. Additional maintenance included as Exhibit B.	<input type="checkbox"/>							
h. The approved Record Drawing is included as Exhibit C.	<input type="checkbox"/>							
i. Completed Dye Test provided in a separate document (as applicable)	<input type="checkbox"/>							
Comments:								