

## STORMWATER DRAINAGE

1. ALL STORMWATER DRAINAGE WORKS ARE TO BE COMPLETED IN ACCORDANCE WITH THE RELEVANT STANDARDS AND SPECIFICATIONS OUTLINED IN THE PROJECT SPECIFICATION.
8. PRIOR TO COMMENCING WORK ONSITE THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND SERVICES THROUGH MEANS OF POT-HOLING. DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND CONDITIONS ONSITE SHALL BE REPORTED TO THE **SUPERINTENDENT** PRIOR TO THE COMMENCEMENT OF WORKS.
9. COVER LEVELS OF STORMWATER STRUCTURES ARE PROVISIONAL AND SHALL BE ADJUSTED TO SUIT THE SURROUNDING FINISHED GROUND LEVELS IN ACCORDANCE WITH DRAWINGS AND CONSTRUCTED KERB PROFILES.
10. GRATES AND COVERS FOR STORMWATER STRUCTURES SHALL CONFORM WITH AS 3996 AND AS 1428.1 FOR ACCESS REQUIREMENTS.
11. PIPES ARE TO BE INSTALLED IN ACCORDANCE WITH AS 3725. ALL BEDDING IS TO BE TYPE H2 UNLESS OTHERWISE NOTED.
12. ALL CURVED PIPE ALIGNMENTS ARE TO BE ACHIEVED VIA DEFLECTION THROUGH THE JOINTS BETWEEN PIPES IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.
13. ALL STORMWATER PIPES ARE TO BE AT MINIMUM 1% GRADE UNLESS NOTED OTHERWISE.
14. STORMWATER PIPES GREATER THAN 7% SHALL HAVE SCOUR STOPS CONSTRUCTED AT 5m MAXIMUM SPACING.
15. ALL PIPE LENGTH, GRADES AND INVERT LEVELS ARE MEASURED AT THE CENTRE OF STORMWATER STRUCTURES OR FACE OF HEADWALLS UNLESS OTHERWISE NOTED.
16. INVERT LEVELS ARE TO BE USED FOR CONSTRUCTION, GRADES SHOWN ARE NOMINAL ONLY.
17. TRENCH BACKFILL SHALL BE IN ACCORDANCE WITH CONTRACT SPECIFICATIONS.
18. GRADES OF STORMWATER LINES ARE NOT TO BE REDUCED WITHOUT APPROVAL FROM THE **SUPERINTENDENT**.
19. PIPES Ø300 OR LARGER TO BE REINFORCED CONCRETE (RCP) CLASS "2" APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS UNLESS NOTED OTHERWISE.
20. PIPES LESS THAN Ø300 TO BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS UNLESS NOTED OTHERWISE.
21. ANY CHANGES IN MATERIAL MUST BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
22. ALL CONNECTIONS, JUNCTIONS AND ENLARGERS ARE TO BE MADE WITH MANUFACTURER'S FITTINGS.
23. ALL PIPES ARE DESIGNED FOR OPERATIONAL LOADS ONLY. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO PROTECT PIPES DURING CONSTRUCTION.
24. THE CONTRACTOR SHALL UNDERTAKE TEMPORARY DIVERSION WORKS TO ENSURE THE EXISTING STORMWATER SYSTEM REMAINS OPERATIONAL DURING CONSTRUCTION.
25. THE CONTRACTOR SHALL UNDERTAKE TEMPORARY DIVERSION WORKS TO ENSURE ALL WORK IN PROGRESS IS PROTECTED UNTIL DEEMED FINISHED BY THE **SUPERINTENDENT**.
26. WORKS AS EXECUTED DOCUMENTATION IS THE RESPONSIBILITY OF THE CONTRACTOR UNLESS AGREED OTHERWISE.

### STORMWATER PIPE INFORMATION

### PIPE INFORMATION

IL  
Ø000  
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0.0m  
0.0 m/s  
%0.0  
IL

UPSTREAM INVERT LEVEL  
PIPE INTERNAL DIAMETER  
PIPE MATERIAL AND CLASS  
PIPE LENGTH  
HYDRAULIC FLOW RATE  
PIPE GRADE  
DOWNSTREAM INVERT LEVEL

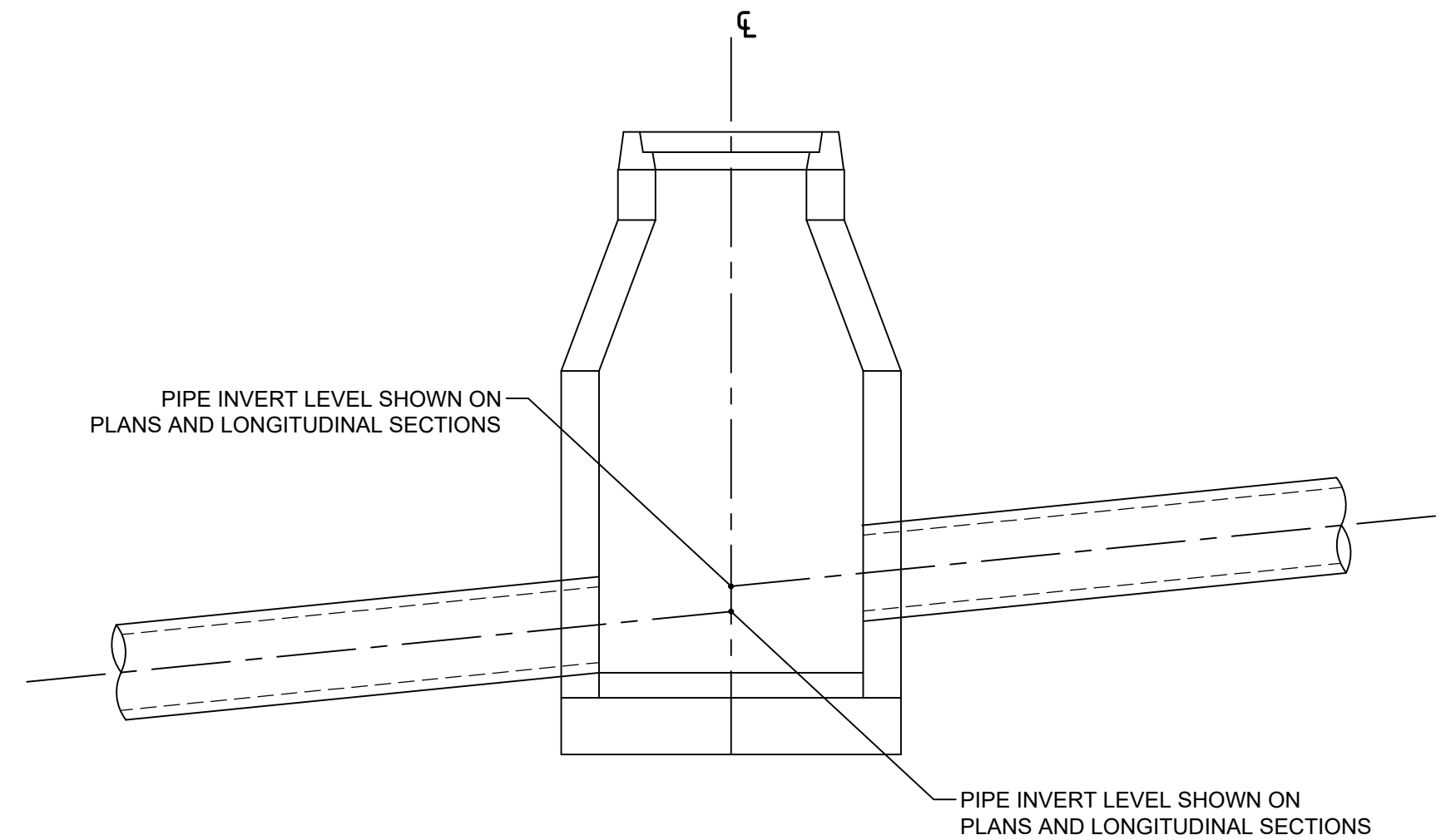
### TIE INFORMATION

SW  
L 10.0m  
D 1.0m  
Ø150

TIE LENGTH  
TIE DEPTH  
TIE DIAMETER

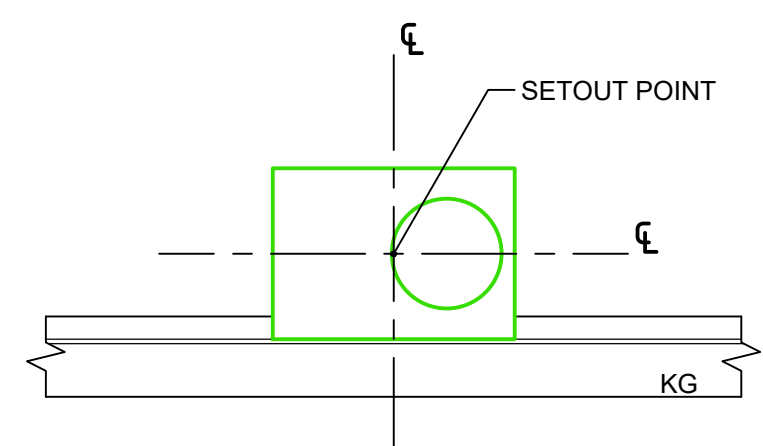
## STORMWATER STRUCTURE IDENTIFICATION

SW1-2 LINE NUMBER 1 - STRUCTURE NUMBER 2

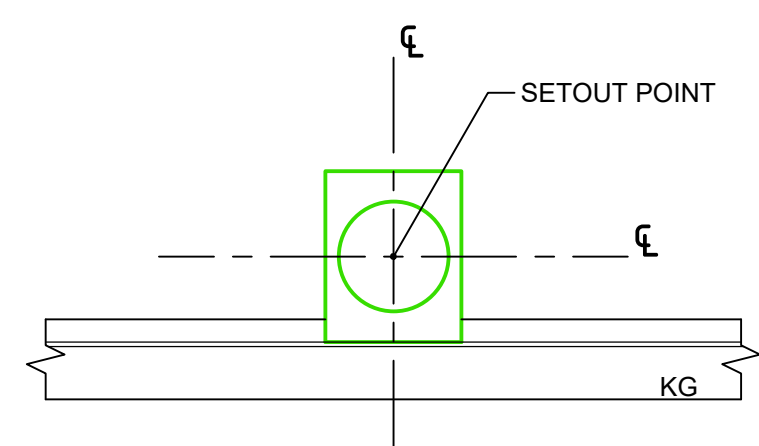


## DESIGN INVERT LEVELS AT STORMWATER SUMPS AND MANHOLES

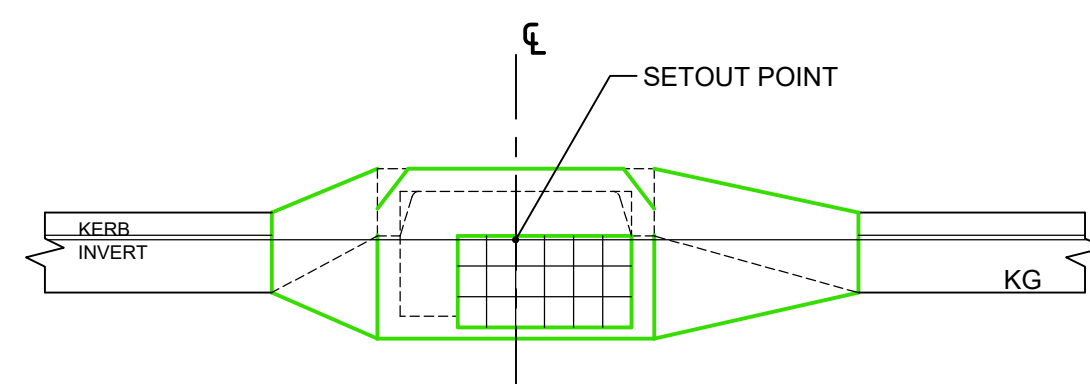
SCALE 1:50



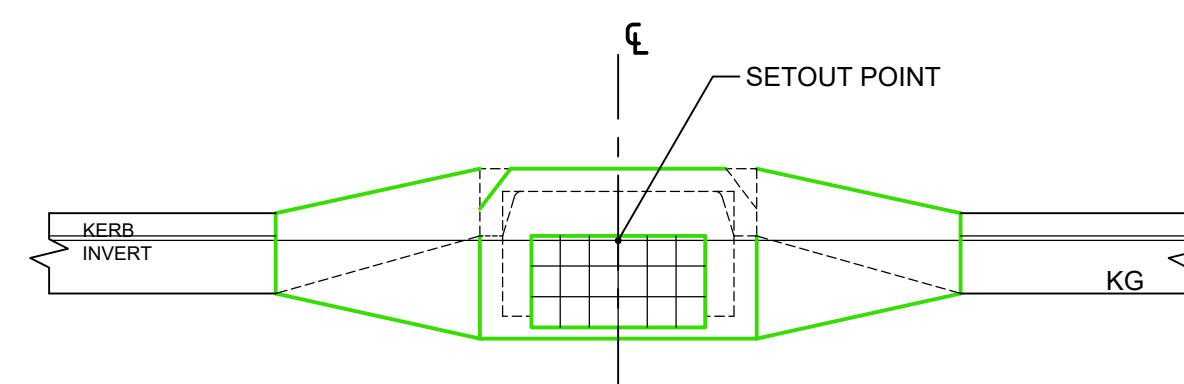
R-SUMP SETOUT  
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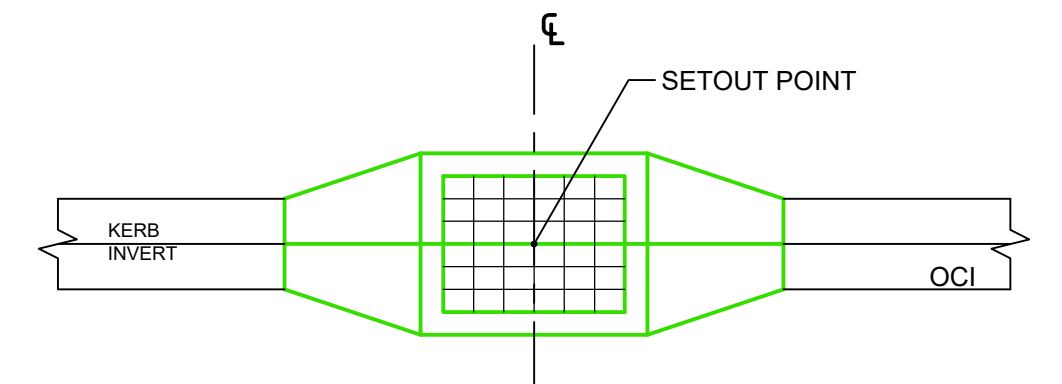
QS SUMP  
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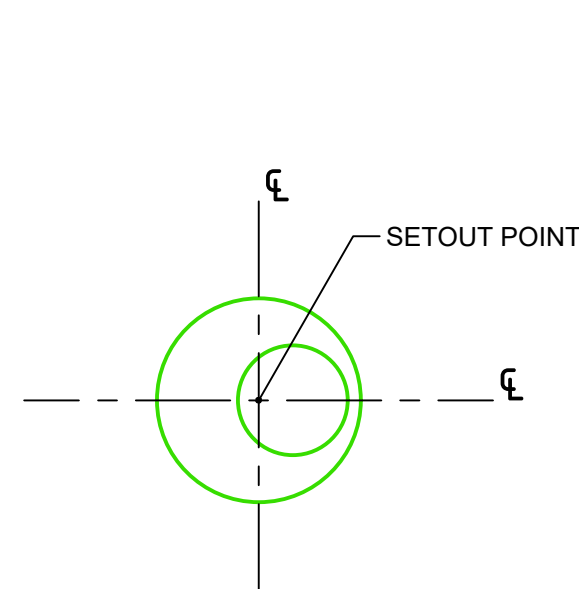
KERB INLET SUMP (KIS) - ON GRADE  
SCALE 1:50



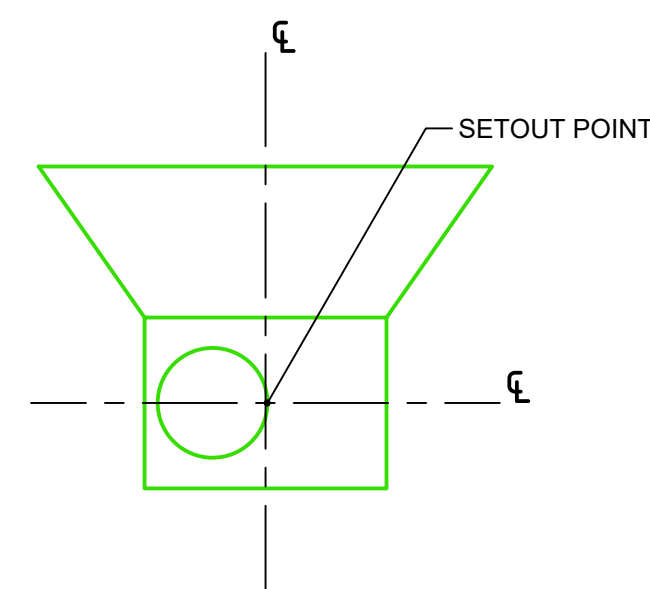
KERB INLET SUMP (KIS) - SAG  
SCALE 1:50



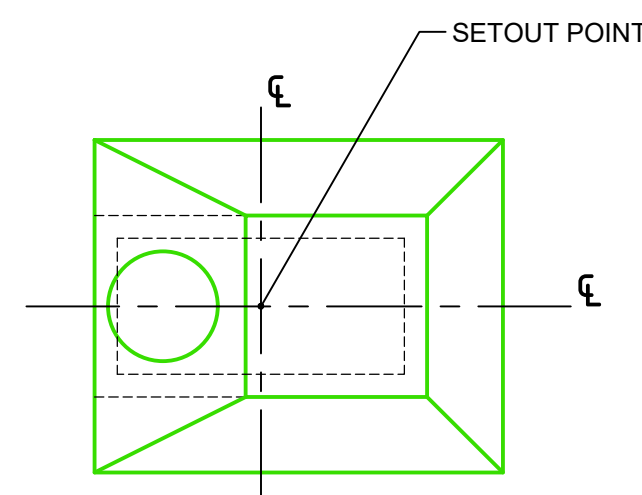
OPEN CHANNEL INVERT (OCI) SUMP  
SCALE 1:50



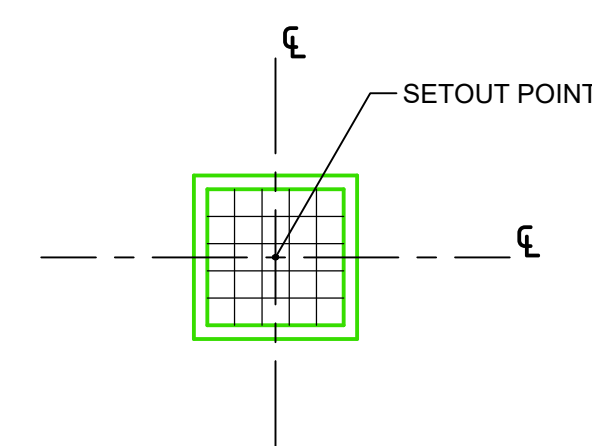
MANHOLE  
SCALE 1:50



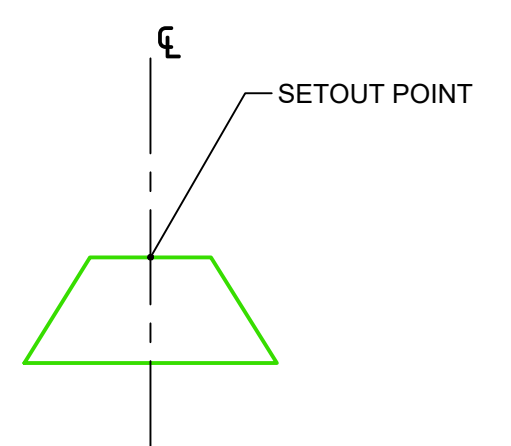
PLANTATION SUMP  
SCALE 1:50



**SURCHARGE SUMP**  
SCALE 1:50



GRATED INLET SUMP  
SCALE 1:50



HEADWALL  
SCALE 1:50

NOT FOR CONSTRUCTION

[illegible]