



- NOTES**
- ALL DIMENSIONS ARE IN MILLIMETERS. ALL LEVELS ARE IN METERS.
 - DO NOT SCALE FROM THIS DRAWING. USE FIGURED DIMENSIONS ONLY.
 - THIS DRAWING TO BE READ IN CONJUNCTION WITH THE LATEST ENGINEERS, ARCHITECTS DRAWINGS & SPECIFICATIONS.
 - ALL RELEVANT DRAINAGE AND ASSOCIATED WORKS TO BE LAID IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION AND BUILDING REGULATIONS PART H (2010) UNLESS OTHERWISE STATED.
 - COVERS TO BE APPROPRIATELY CLASSIFIED. D400 FOR VEHICLE ACCESS AND B125 FOR PEDESTRIAN ONLY AREAS.
 - ALL SURFACE WATER PIPES TO BE 110mm DIA. OSMAL ULTRARIB (EXCEPT WHERE INDICATED OTHERWISE), OR SIMILAR APPROVED.
 - ROCKER PIPES TO BE 600mm LONG TO ALL MANHOLES.
 - ALL PIPEWORK TO HAVE A FULL GRANULAR BED AND SURROUND (TYPE S) UNLESS NOTED OTHERWISE.
 - ALL PIPES BENEATH VEHICULAR CIRCULATION AREAS, WHERE COVER TO PIPE IS LESS THAN 1200mm RECEIVE A FULL CONCRETE SURROUND (TYPE Z).
 - WHERE APPLICABLE CONCRETE BENCHING TO MANHOLES TO RECEIVE A 20mm THICK GRANULITHIC RENDER TROWELLED HARD, PROVIDING A DENSE DURABLE SMOOTH FINISH.
 - ALL MANHOLE COVERS WITHIN VEHICULAR AREAS TO BE NON-ROCKING TYPE.
 - THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES TO VERIFY LOCATION AND DEPTHS PRIOR TO ANY CONSTRUCTION WORK BEING UNDERTAKEN.
 - ALL PIPES AND FITTINGS TO BE PROPRIETARY PLASTIC SYSTEM COMPLYING WITH BS EN 1401-1:1998 AND BUILDING REGULATIONS DOC. H.
 - INLET AND OUTLET PIPES TO BE LAID WITH LEVEL SOFFITS.
 - DRAINAGE CHANNELS TO BE LAID IN ACCORDANCE TO MANUFACTURERS RECOMMENDATION. ACCESS POINTS AND SUMPS TO BE INSTALLED AT INTERVALS TO MANUFACTURERS RECOMMENDATION.

ALL DRAINAGE ELEMENTS TO C D GRAY & ASSOCIATES SPECIFICATION OR SIMILAR APPROVED

Althon KLSA-R -P or F 150mm Inline Penstock
Manufactured by: KWT Waterbeheersing
Materials: HDPE, SS316, OLG, EPDM and POM
Standard Culvert: Ø 100mm to Ø 500mm
Working Pressure: 10 MwC on/off seating
 The penstock is of the "guillotine" type and made of SS316L. The housing is produced in HDPE and sufficiently strengthened with SS316L to resist internal liquid pressures and/or any external ground pressures. The penstock is tested to a pressure of 20 MwC and is rated at 10MwC as standard. The EPDM seals and the OLG bearing are integral parts of the KLSA housing. The SS 316 spindle is of the non-rising type. All stainless steel used in the construction is of grade 316L.
 PLEASE NOTE THIS DRAWING IS NOT TO SCALE AND SHOULD ONLY BE USED AS A VISUAL REPRESENTATION
 All dimensions shown in mm.

A	FURTHER DETAILS ADDED	MB	17/12/2014
rev.	description	by	date
CONSTRUCTION			
C D GRAY & ASSOCIATES CONSULTING CIVIL & STRUCTURAL ENGINEERS			
5-6 Deryn Court, Wharfedale Road, Penwyn Cardiff, CF23 7HB			
BAYLISS METALS			
METAL RECYCLING CENTRE			
DRAINAGE DETAILS			
drawn	MB	chkd	ML
date	11/12/2014	projct no.	8801
scale	DO NOT SCALE	drw no.	102
		rev.	A