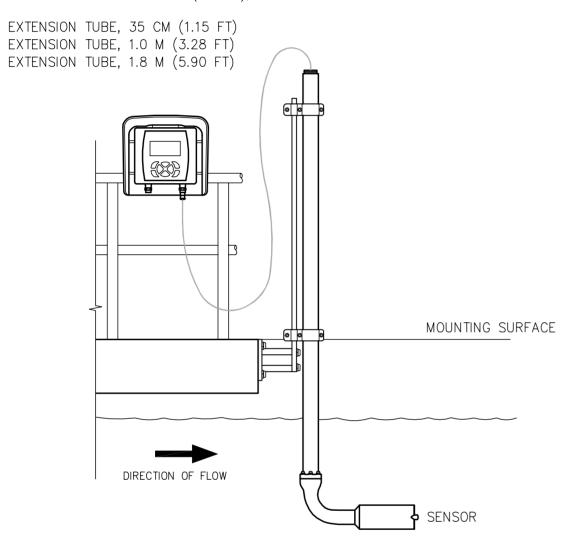
## TURBIDITY/TSS INSTALLATION

## INSTALLATION OVERVIEW

THE MAXIMUM DISTANCE FROM THE MOUNTING SURFACE TO THE SENSOR WITHOUT THE USE OF AN EXTENSION TUBE IS 1.5 M (4.9 FT), AS SHOWN.

WHEN THAT DISTANCE EXCEEDS 1.5 M (4.9 FT), ONE OF THE FOLLOWING EXTENSION TUBES IS REQUIRED:

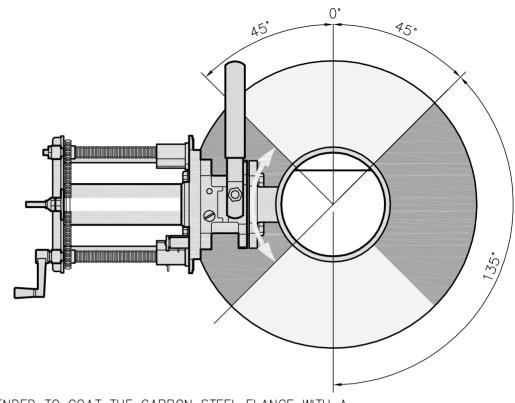


## TO ENSURE A SUITABLE MEASURING POSITION, INSTALL THE PROBE TO THE FOLLOWING CONDITIONS:

- THE PROBE OPTICAL WINDOW MUST HAVE A GROUND CLEARANCE OF AT LEAST 30 CM (11.8 IN.).
- INSTALL THE PROBE WITH THE OPTICAL WINDOW FACING (DOWNSTREAM) IN THE DIRECTION OF THE FLOW TO MINIMIZE THE RISK OF FOULING.
- AVOID INSTALLATION SITES WHERE AIR BUBBLES ARE INCONSISTENT. IF THIS IS NOT POSSIBLE, TRY MOVING THE PROBE SLIGHTLY OR
  - ADJUSTING ITS ALIGNMENT TO MINIMIZE THE BUBBLE EFFECT.
- PROTECT THE PROBE AGAINST THE ONCOMING FLOW OF LARGE OBJECTS, SUCH AS BRANCHES OR ICE AND AGAINST FLOW SURGES.
- AVOID INSTALLING THE PROBE WITH THE OPTICAL WINDOW FACING INTO DIRECT LIGHT OR FACING A
  HIGHLY-REFLECTIVE SURFACE.

## PIPE INSTALLATION

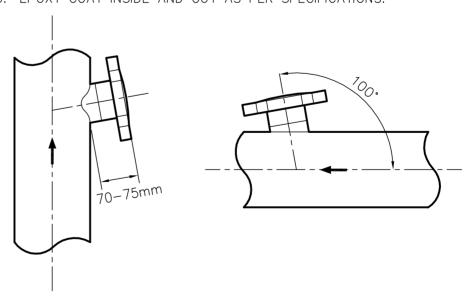
FOR INSTALLING SENSOR IN A PIPE THE FOLLOWING INSTALLATION KIT SHOULD BE USED.

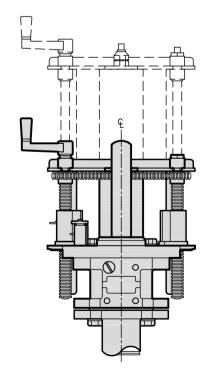


- 1. IT IS RECOMMENDED TO COAT THE CARBON STEEL FLANGE WITH A PROTECTIVE COATING TO PROHIBIT RUST.
- 2. RECOMMENDED INSTALLATION ANGLE 45-135°
- 3. WELDED FLANGE CARBON STEEL LZx703
- 4. PIPE INSTALLATION LZx337

NOTES: -

- 5. NO ONSITE WELDING ALLOWED. FABRICATE CARBON STEEL MOUTING SYSTEM IN FACTORY.
- 6. EPOXY COAT INSIDE AND OUT AS PER SPECIFICATIONS.





		B.M. ELEV.					MINISTELL	EarthTech		ENGINEER'S SEAL	THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT	
- 1							ickson Cooper	A Type Informactional Ltd. Company		ORIGINAL SIGNED BY	Winnipeg ENGINEERING DIVISION	
	Certificate of Authorization	F			$\mp$	DESIGNED BY	NT	CHECKE		WATER TREATMENT PLANT CONSTRUCTION OF DEWATERING CELLS		
- 1	Earth Tech Canada Inc.					DRAWN BY	SRP	APPRO' BY	VED DJT	2006/03/07	CONSTRUCTION OF DEWATERING CELLS	
- 1	No. 730 Expiry: April 30, 2006					SCALE:	NTS	CONST	SED FOR RUCTION BY:	CONSULTANT DRAWING NO.	AUTOMATION I&C CITY DRAWING NUMBER	
				06/03/07			0000 (04 (07		SOROKOWSKI	WL-A0403	TURBITITY / TSS SENSOR 1-0601L-D-A0403-001-000 INSTRUMENTATION STANDARD DETAILS	
		NO.	REVISIONS	DATE	BY	DATE	2006/01/03	DATE	06/03/07	WL-70403	INSTRUMENTATION STANDARD DETAILS	