



# DELTA FIRE & EMERGENCY SERVICES

## BILL OF MATERIALS

ITEM	DESCRIPTION	SUPPLIED BY	
<b>SWIVEL ADAPTER &amp; PLUG</b>			
	<b>AKRON:</b>	<b>NORTHLINE:</b>	
1	AKRON STYLE 357 DOUBLE FEMALE SWIVEL ADAPTER CHROME C/W ROCKER LUGS 6" NST (4 THREADS PER INCH) x 6" FEMALE I.P.T. (8 THREADS PER INCH)	NORTHLINE SINGLE FEMALE SWIVEL ADAPTER N53-60-60 C/W 6" NST (4 THREADS PER INCH) & 6" FEMALE I.P.T. (TAPERED) ANODIZED ALUMINUM C/W ROCKER LUGS	DELTA
2	AKRON STYLE 347 HOSE PLUG-CHROME C/W ROCKER LUGS 6" NST (4 THREADS PER INCH)	NORTHLINE HOSE PLUG (TO FIT SWIVEL ADAPTER) 6" NST (4 THREADS PER INCH) - ANODIZED ALUMINUM C/W ROCKER LUGS	DELTA
	<b>SUPPLIERS:</b> ROCKY MOUNTAIN FIRE & SAFETY INC. (TEL: 604-888-7038) FLOCK BROTHERS (TEL: 604-808-3000) WEST COAST HYDRANT SERVICES (TEL: 604-270-0236)	<b>SUPPLIER:</b> ROCKY MOUNTAIN FIRE & SAFETY INC. (TEL: 604-888-7038 - KEN WILSON)	
3	STEEL BUTT WELD FITTINGS (TO ANSI B16.9 - H.D. GALVANIZED) 6"-90 LR. ELBOWS, 6" COUPLINGS, 6" SHORT NIPPLES		OWNER
	6" STEEL FLAT FACE SLP-ON FLANGES (TO ASTM A105, GRADE I L CLASS 150 - H.D. GALVANIZED) FLANGE BOLTS SHALL BE STEEL TO ASTM A 307-82 HEAVY SERIES WITH HEXAGONAL HEADS & ZINC COATED FLANGE GASKETS TO BE FULL FACE FROM BLACK NATURAL RUBBER WITH A LAYER OF COTTON ON BOTH SIDES		
3	<b>ALTERNATIVE FITTINGS &amp; COUPLINGS (H.D. GALVANIZED)</b>		OWNER
	<b>VICTALIKE FITTINGS &amp; COUPLINGS:</b>	<b>MALLEABLE IRON THREADED FITTINGS:</b>	
	6" VICTALIC STYLE 75 COUPLING 6" VICTALIC No. 10 - 90 ELBOW 6" NIPPLE - GROOVE x N.P.T	6" THREADED COUPLINGS 6" 90 ELBOW 6" SHORT NIPPLE	
4	6" SCHED.40 STEEL PIPE (TO ASTM A53, ERW, GRADE B - H.D. GALVANIZED)		OWNER
6	6" BINFLOW BASKET STRAINER (H.D. GALVANIZED) <b>SUPPLIER:</b> SPECIALTY EQUIPMENT LTD. (TEL: 604-327-7867)		DELTA
8	5 LB. ZINC ANODE C/W 10' COPPER WIRE <b>SUPPLIER:</b> THOMCO SUPPLY LTD. (TEL: 604-590-0304)		DELTA
7	4" SCHED 40 STEEL PIPE BOLLARDS C/W CAP (TO ASTM A53, ERW, GRADE B - H.D. GALVANIZED)		OWNER

### PRELIMINARY MEASUREMENTS, FABRICATIONS AND INSTALLATION NOTES

**1. PRELIMINARY:**

REVIEW THIS DRAWING FOR REQUIRED ARRANGEMENT AND MATERIALS TO ENSURE ALL DETAILS OF THE INSTALLATION ARE UNDERSTOOD. SUBSEQUENT TO REVIEW SHOULD CLARIFICATION BE REQUIRED CONTACT MR. HUGH FRASER OF THE CORPORATION OF DELTA AT 604-048-3486. DIMENSIONS SHOWN ON THE INSTALLATION SKETCH AS MINIMUM REQUIRED DIMENSIONS ARE CRITICAL DIMENSIONS AND CAN BE EXCEEDED BUT CANNOT BE REDUCED WITHOUT APPROVAL FROM THE CORPORATION.

THE CORPORATION TO APPROVE LOCATION OF STANDPIPE TO ENSURE SUITABLE ACCESS.

**2. MARK-UP & SUBMIT**

THE INSTALLER SHALL CONFIRM ALL REQUIRED PIPE LENGTHS AND FITTINGS BY MARKING UP A COPY OF THIS STANDARD DRAWING SHOWING A DIMENSION FOR EACH PIPE PIECE AND INDICATING WHERE JOINTS ARE REQUIRED. THE SKETCH SHALL ALSO SHOW THE INSTALLERS CALCULATIONS FOR THE DEPTH OF THE INSTALLATION FROM THE CENTRELINE OF THE OUTLET CONNECTION DOWN TO THE WATER LEVEL AND ALSO DOWN TO THE CENTRELINE OF THE INLET PIPE AS INDICATED ON THE DRAWINGS. THE DEPTH FROM THE OUTLET TO THE PIPE INLET SHOULD BE AS SMALL AS POSSIBLE TO PROVIDE MINIMUM SUCTION LIFT TO THE CORPORATION PUMPER TRUCKS. THE DEPTH FROM THE OUTLET TO THE INLET SHOULD NORMALLY NOT EXCEED 10 FEET DEPTHS UP TO 16 FEET MAY BE ACCEPTABLE FOR INSTALLATIONS WHERE THIS DEPTH WOULD EXCEED 16 FEET THE CORPORATION OF DELTA MUST BE CONTACTED FOR INSTRUCTIONS PRIOR TO PROCEEDING. THE MARKED UP DRAWING SHALL BE SUBMITTED TO THE CORPORATION FOR GENERAL REVIEW. FOLLOWING THE CORPORATION REVIEW THE MARKED UP DRAWING SHALL BECOME THE INSTALLATION DRAWING.

**3. FABRICATE & INSTALL**

THE INSTALLER SHALL BLOCK OFF THE DITCH AREA WITH SAND BAGS TO PROVIDE A COMPLETE LENGTH OF TRENCH TO BE EXCAVATED AND DE-WATERED FOR THE INSTALLATION.

FOLLOWING THE TRENCH EXCAVATION AND PIPE/SCREEN INSTALLATION, THE EXCAVATED TRENCH SHALL BE BACKFILLED WITH SAND TO A MINIMUM HEIGHT OF 12 INCHES (300mm) ABOVE THE TOP OF THE PIPE AND COMPACTED (SEE NOTE #5 FOR SACRIFICIAL ANODE INSTALLATION). PERFORATED FILTER FABRIC SHALL BE PLACED ON TOP OF THE SAND LAYER FOR THE FULL LENGTH AND WIDTH OF THE EXCAVATION. DRY EXCAVATED MATERIAL CAN THEN BE REUSED AND PLACED IN THE TRENCH ON TOP OF THE FILTER FABRIC UP TO THE SURFACE GRADE.

EXCAVATED MATERIAL SHALL BE COMPACTED DURING PLACEMENT. A LAYER OF COMPACTED ROAD MULCH SHALL BE PLACED AROUND THE VERTICAL STANDPIPE. STEEL BOLLARDS SHALL ALSO BE INSTALLED TO PROTECT THE INSTALLATION FROM IMPACT DAMAGE.

A SACRIFICIAL 5 LB. ZINC ANODE SHALL BE PLACED IN THE EXCAVATED PIPE TRENCH AS SHOWN AND CONNECTED TO THE PIPE USING THE INTEGRAL COPPER WIRE CONNECTED TO THE ANODE. THE ANODE WIRE SHALL BE FIRMLY CONNECTED TO THE STEEL PIPE USING 3/8 INCH DIAMETER 316 STAINLESS STEEL BOLTS, NUTS AND WASHERS. THE ANODE SHALL BE SURROUNDED WITH A CONTINUOUS 12 INCH THICK SAND LAYER.

SEE THE ATTACHED BILL OF MATERIALS FOR ALL COMPONENTS REQUIRED FOR THE INSTALLATION.

**4. CERTIFICATION OF INSTALLATION:**

THE OWNER SHALL HAVE INSTALLATION INSPECTED AND CERTIFIED BY A QUALIFIED PROFESSIONAL ENGINEER (P.ENG) REGISTERED IN B.C. AND A MEMBER OF THE APECBC. THE CERTIFIER WILL INDICATE BY SIGNING AND SEALING A COPY OF THE APPROVED INSTALLATION DRAWING THAT THE DRAFTING STANDPIPE HAS BEEN FABRICATED AND INSTALLED IN GENERAL COMPLIANCE WITH THE STANDARD DRAWING. THE SIGNED & SEALED DRAWING SHALL BE SUBMITTED AT TO THE DELTA FIRE DEPARTMENT AS A RECORD OF THE INSTALLATION.

**5. TESTING:**

ON COMPLETION OF INSTALLATION OWNER SHALL REQUEST THE STANDPIPE TO BE TESTED BY THE CORPORATION OF DELTA. THE CORPORATION WILL ADVISE DATE SCHEDULE FOR TESTING AND THE OWNER SHALL COMPLY WITH THE CORPORATIONS SCHEDULE.

SHOULD DEFICIENCIES IN THE INSTALLATION BE DETERMINED BASED ON THE CORPORATIONS TEST, THE OWNER SHALL CORRECT SUCH DEFICIENCIES AT HIS OWN COST AS DIRECTED BY THE CORPORATION AND THEN REQUEST A RE-TEST. THE CORPORATION SHALL DETERMINE IF THE INSTALLATION REQUIRES RE-TESTING.

PROJECT : AGRICULTURAL DRAFTING STANDPIPE  
GENERAL ARRANGEMENT

LOCATION : —