

#### **PROCUREMENT SERVICES**

CITY OF SURREY, SURREY CITY HALL 13450 – 104 Avenue, Surrey, B.C., V3T 1V8 Tel: 604-590-7274

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**ADDENDUM No. 2** 

REQUEST FOR QUOTATIONS No.: 1220-040-2022-013

TITLE: Supply and Delivery of Flap Gates for Flood Boxes

ADDENDUM ISSUE DATE: February 9, 2022

DATE: PREFER TO RECEIVE SUBMISSION ON OR

BEFORE February 10, 2022.

#### INFORMATION FOR CONTRACTORS

Contractors are advised that Addendum No.2 to RFQ # 1220-040-2022-013 is hereby issued by the City. This addendum shall form part of the contract documents and is to be read, interpreted and coordinated with all other parts. The following information is provided to answer questions raised by Contractors for the above-named project, to the extent referenced and shall become a part thereof. No consideration will be allowed for extras due to the Contractors or any sub-contractor not being familiar with this addendum. This Addendum No.2 contains four (4) pages in total.

### **QUESTIONS AND ANSWERS:**

- Q1. Are there any further mechanical drawings showing the installation? And if this is a gravity or pumped application?
- A1. For drawings, see attached. The application of the flap gates is for a gravity system.

All Addenda will become part of the Contract Documents.

- GENERAL TRENCH BACKFILL TO CONSIST OF APPROVED NATIVE EXCAVATION SOIL PLACED IN 300 mm LIFTS AND COMPACTED TO 95% OF THE STANDARD BACKFILL'S PROCTOR MAXIMUM DRY DENSITY (SPMDD) (OR TO MATCH THE DENSITY OF THE EXISTING EMBANKMENT FILL IF DIRECTED BY GEOTECHNICAL ENGINEER.)

BACKFILL SHOULD BE SELECT NATIVE FILL PLACED IN 150 mm LIFTS AND COMPACTED TO A
MINIMUM OF 95% OF THE SPMDD TO A MINIMUM OF 600 mm ABOVE THE PIPE CROWN
ELEVATION. COMPACT USING HAND EQUIPMENT ONLY (JUMPING JACK OR PLATE TAMPER).
CARE SHOULD BE EXERCISED SO AS NOT TO DAMAGE THE NATIVE CLAY SUBGRADE BY
EXCESSIVE VIBRATION. ALTERNATE COMPACTION EQUIPMENT MAY BE USED IF APPROVED
BY THE GEOTECHNICAL ENGINEER

INVERT OF TRENCH AS SHOWN ON 5/C1.00

SURFACE OF EXISTING DIKE AND TRENCH
WALLS TO BE SCARIFIED PRIOR TO BACKFILL
PLACEMENT

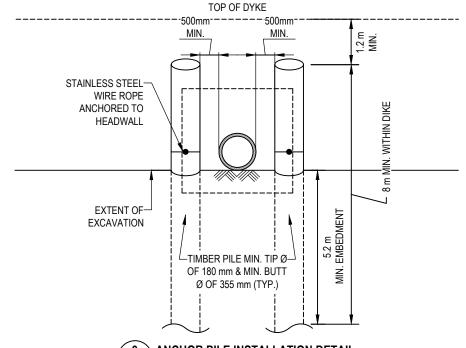
SUPPLY AND PLACE BENTONITE CLAY ALONG

#### NOTE:

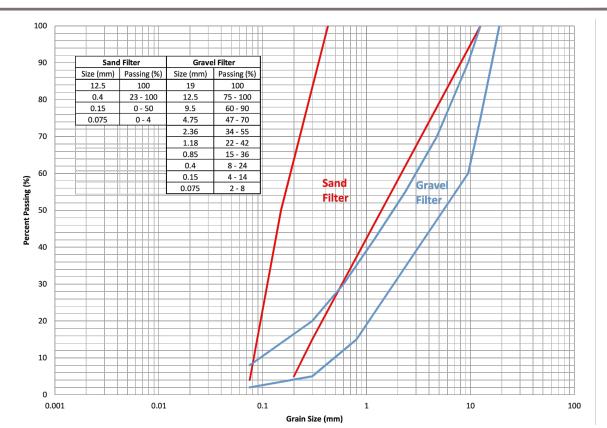
TRENCH CONFIGURATION SHOWN IS CONCEPTUAL ONLY. EXCAVATION SLOPES TO BE ESTABLISHED BY CONTRACTOR IN ACCORDANCE WITH WORKSAFEBC REGULATIONS FOR WORKER ENTRY INTO UN-SHORED TRENCH

500mm MIN.

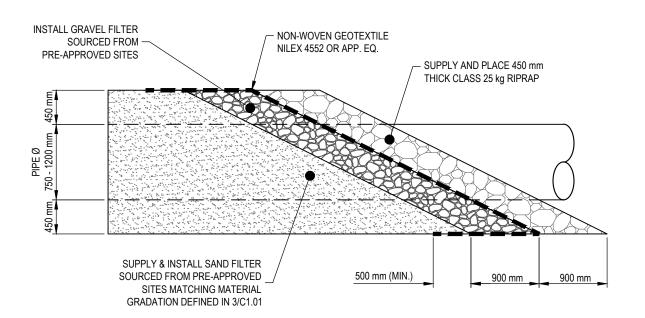
# 1 TYPICAL TRENCH DETAIL WITH BENTONITE INSTALLATION C1.01) N.T.S



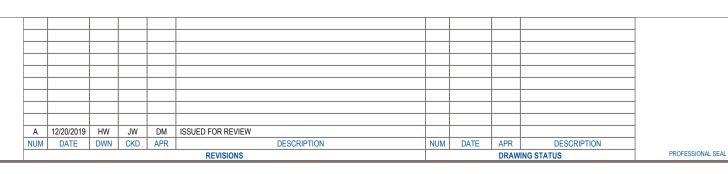
ANCHOR PILE INSTALLATION DETAIL
On N.T.S



## 2 GRANULAR FILTER GRADATION C1.01 / N.T.S



# GRANULAR FILL SEQUENCE C1.01 N.T.S





# SURREY LOWLANDS FLOOD BOXES SURREY, B.C.

### FLOOD BOX INSTALLATION

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PROJECT No.	OFFICE	DES	CKD	REV	
V13203062-02	VANC	DM	JW	A	04.04
DATE:	SHEET No.	DWN	APP	STATUS	C1.01
December 20, 2019	2 of 3	HW	DM	IFR	

SCHEDULE OF MATERIALS (HEADWALL TO PIPE CONNECTION)									
				KOR-N-SEAL		LANGLEY CONCRETE		FONTAINE	
NOMINAL SIZE (mm)	PIPE	PIPE OD	PIPE JOINT SYSTEM	CONNECTOR MODEL	PIPE OD RANGE	HEADWALL OPENING RANGE	HEADWALL SPECIFIED OPENING	HEADWALL MODEL	FLAP GATE MODEL
	BOSS 2000 + SLEEVE	908	ULTRA STAB 75	S206-40	905-939	1017-1021	1019	SD-337	60-42-A-CW-20
	ALL ALUMINUM (68x13 mm CORRUGATION)	786	600 mm ANNULAR COUPLER WITH NEOPRENE GASKET	S206-34	753-787	864-868	866	SD-334	60-36-A-CW-20
750	ALL ALUMINUM + SLEEVE (REF.TO 6/C1.00)	794	600 mm ANNULAR COUPLER WITH NEOPRENE GASKET	S206-34L	788-803	864-868	866	SD-334	60-36-A-CW-20
	DURROMAXX	785	HIGH PERFORMANCE (HP) JOINT	S206-34	753-787	864-868	866	SD-334	60-36-A-CW-20
	DUROMAXX + SLEEVE	798	HIGH PERFORMANCE (HP) JOINT	S206-34L	788-803	864-869	866	SD-334	60-36-A-CW-20
	BOSS 2000 + SLEEVE	1100	ULTRA STAB 75	S206-46L	1093-1108	1169-1173	1171	SD-336	60-48-A-CW-20
	ALL ALUMINUM (68x13 mm CORRUGATION)	938	600 mm ANNULAR COUPLER WITH NEOPRENE GASKET	S206-40	905-939	1017-1021	1019	SD-337	60-42-A-CW-20
900	ALL ALUMINUM + SLEEVE (REF.TO 6/C1.00)	946	600 mm ANNULAR COUPLER WITH NEOPRENE GASKET	S206-40L	940-955	1017-1021	1019	SD-337	60-42-A-CW-20
	DURROMAXX	942	HIGH PERFORMANCE (HP) JOINT	S206-40L	940-955	1017-1021	1019	SD-337	60-42-A-CW-20
	DUROMAXX + SLEEVE	955	HIGH PERFORMANCE (HP) JOINT	S206-40L	940-955	1017-1021	1019	SD-337	60-42-A-CW-20
	ALL ALUMINUM (76x25 mm CORRUGATION)	1260	600 mm ANNULAR COUPLER WITH NEOPRENE GASKET	S206-54	1245-1260	1372-1377	1375	SD-338	60-56-A-CW-20
1200	ALL ALUMINUM + SLEEVE (REF.TO 6/C1.00)	1268	600 mm ANNULAR COUPLER WITH NEOPRENE GASKET	S206-54L	1261-1295	1372-1377	1375	SD-338	60-56-A-CW-20
1200	DURROMAXX	1257	HIGH PERFORMANCE (HP) JOINT	S206-54	1245-1260	1372-1377	1375	SD-338	60-56-A-CW-20
	DUROMAXX + SLEEVE	1270	HIGH PERFORMANCE (HP) JOINT	S206-54L	1261-1295	1372-1377	1375	SD-338	60-56-A-CW-20

- FOR LANGLEY CONCRETE HEADWALL SHOP DRAWINGS REFER TO ISSUE FROM DEC 09,2019
   "SLEEVE" REFERS TO THE SUPPLIER ADAPTER FROM HELICAL WOUND EXTERIOR TO SMOOTHED WALLED EXTERIOR TO FACILITATE
- ATTACHEMENT TO THE KOR-N-SEAL BAND. SEE DETAIL 6/C1.00.
- MATERIAL SUPPLIERS TO PROVIDE SHOP DRAWINGS FOR APPROVAL BEFORE MANUFACTURING.
- CONTRACTOR TO CONFIRM MATERIAL DIMENSIONS IS CONSISTENT WITH SPECIFIED COUPLERS. (DIMENSIONS MAY VARY)

#### GENERAL NOTES

- 1.1. CONTRACTOR TO REMOVE AND DISPOSE OFFSITE ALL EXISTING PILES, HEADWALLS AND PIPES.
- 1.2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR BY THE CONTRACTOR'S FAILURE TO LOCATE ANY AND ALL UNDERGROUND
- 1.3. CONTRACTOR TO PROVIDE A SEDIMENT & EROSION CONTROL PLAN.
- 1.4. CONTRACTOR IS ENCOURAGED TO INSTALL THE FLOODBOX OUTFALL DURING LOW TIDES TO LIMIT THE AMOUNT OF EFFORT NEEDED TO DEWATER THE SITE. SUMP PUMP DEWATERING IS LIKELY REQUIRED DURING THE EXCAVATION. USE OF SHEET PILES IS RECOMMENDED TO ISOLATE THE CONSTRUCTION SITE.

#### 2. GENERAL EXCAVATION & COMPACTION

- 2.1. A MINIMUM OF 500 mm CLEARANCE IS RECOMMENDED BETWEEN THE EXCAVATION SIDE SLOPES AND THE FLOODBOX TO ALLOW FOR ACCESS, PLACEMENT AND COMPACTION OF BACKFILL.
- 2.2. CONTRACTOR TO PROTECT STOCKPILES FROM RAINFALL
- 2.3. CONTRACTOR TO HAVE WALK-BEHIND COMPACTOR OR JUMPING JACK AVAILABLE ON-SITE TO COMPACT COARSE GRAINED SAND/GRAVEL FILTERS IF NECESSARY.

#### 3. CITY OF SURREY SUPPLIED MATERIALS

3.1. MATERIAL SUPPLIED BY THE CITY WILL BE DELIVERED TO THE CLOSEST INTERSECTION BETWEEN THE RIVER & THE CLOSEST PUBLIC ROAD. THE CONTRACTOR WILL BE RESPONSIBLE FOR TRANSPORTING THE SUPPLIED MATERIAL TO ITS FINAL DESTINATION...

- 4.1. INSTALLATION OF PIPES TO BE CARRIED OUT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
- 4.2. AIL ALUMINUM PIPE TO BE SUPPLIED WITH ALUMINUM SLEEVE ON ONE PIPE SEGMENT TO CONNECT TO KOR-N-SEAL CONNECTION. SEE DETAIL 7/C1.00.

#### 5. PRECAST HEADWALL

- 5.1. HEADWALLS SUPPLIED TO BE 2.1 m x 1.8 m x 2.0 m CUSTOM SURREY LOWLANDS FLOOD BOX HEADWALL C/W KOR-N-SEAL II 206 SERIES CONNECTOR, CRADLE, STOP-LOGS, AND FLAP GATE.
- 5.2. HEADWALL OPENING VARIES TO SUITE SUPPLIED PIPE
- 5.3. INSTALLED FLAPGATE TO BE FONTAINE SERIES 60 FLAP GATE OR APPROVED HDPE EQUIVALENT.

6.1. GEOTEXTILE TO BE INSTALLED WITH A MINIMUM OVERLAP OF 500 mm.

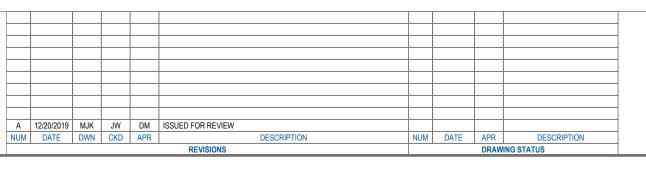
#### 7. TIMBER PILE

PROFESSIONAL SEAL

7.1. PILES TO BE INSTALLED WITHIN 2% OF VERTICAL WHILE BEING MONITORED BY A GEOTECHNICAL ENGINEER.

#### 8. DIKE MATERIAL

- 8.1. SELECT NATIVE FILL MATERIAL IS TO BE USED FOR BACKFILL.
- 8.2. WHERE NATIVE MATERIAL IS UNSUITABLE FOR COMPACTION, CONTRACTOR IS TO REQUEST APPROVED IMPORT DIKE MATERIAL FROM THE CITY OF





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### FLOOD BOX INSTALLATION



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V13203062-02	VANC	DM	JW	Α	
DATE:	SHEET No.	DWN	APP	STATUS	
December 20, 2019	3 of 3	MJK	DM	IFR	

C1.02