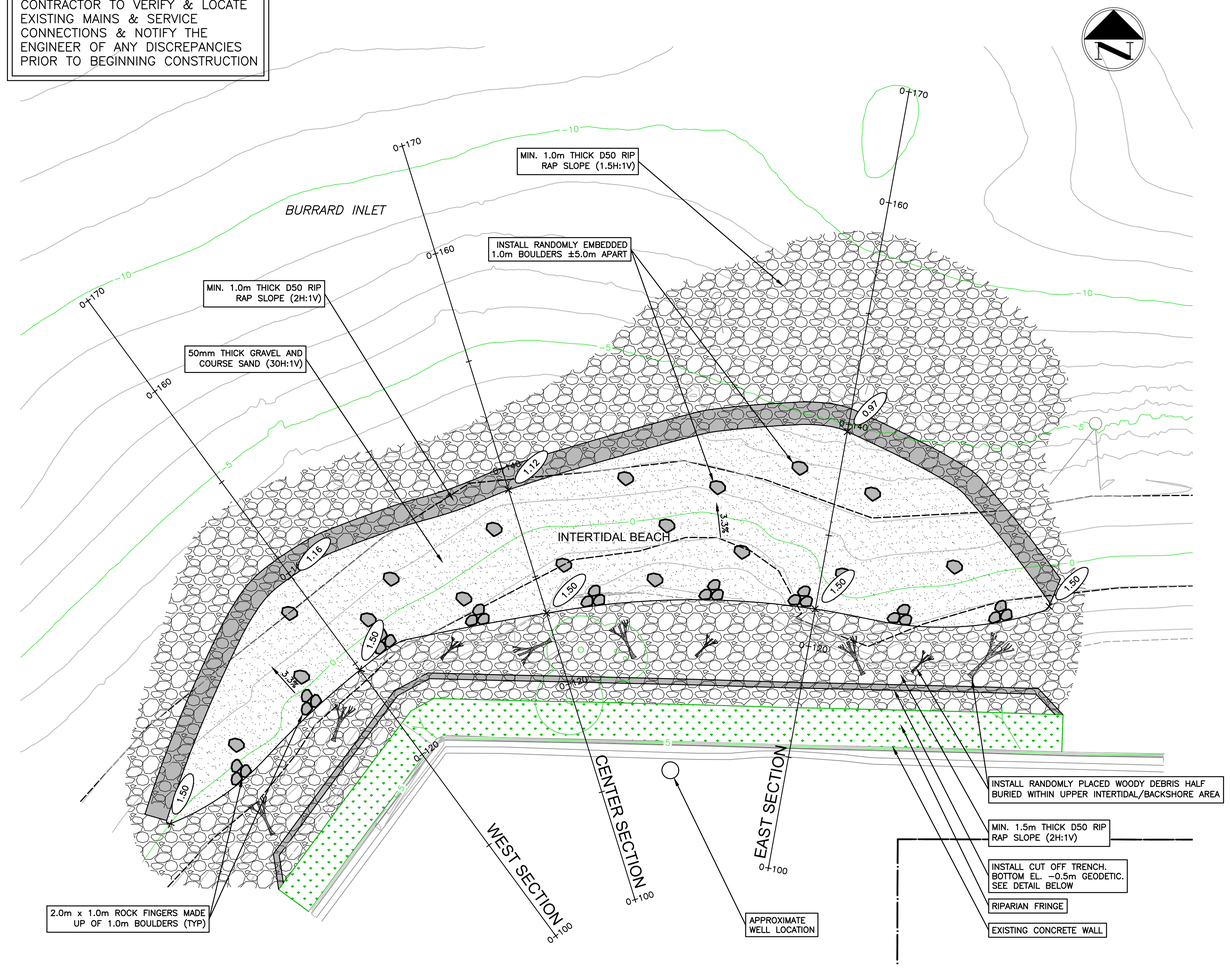
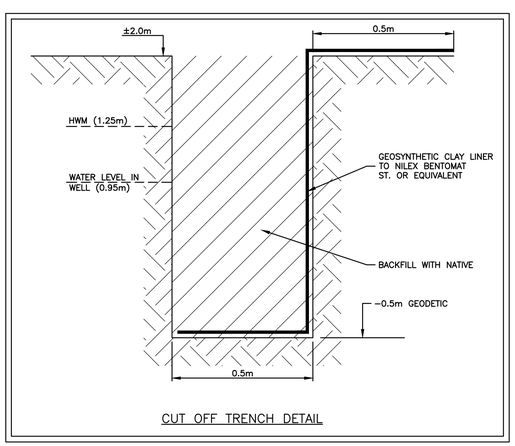
CONTRACTOR TO VERIFY & LOCATE EXISTING MAINS & SERVICE CONNECTIONS & NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING CONSTRUCTION




## NOTES

1. THIS DRAWING IS IN ZONE 10M NAD83 (CSRS) UTM COORDINATES. ELEVATIONS ARE IN METERS, TO GEODETIC DATUM BASED ON DUAL FREQUENCY DIFFERENTIAL CARRIER PHASE GPS OBSERVATIONS TO BCVC (GCM#875864), VANCOUVER CITY FIRE HALL #1 ACP
2. ALL WORK PERIODS MUST BE UNDERTAKEN IN "DRY" CONDITIONS WHEN THE TIDAL WATER LEVEL IS BELOW THE GRADE IN WHICH WORK IS TO TAKE PLACE.
3. THE TOP OF BACKFILL AT THE END OF A GIVEN WORK PERIOD MUST BE GRADED DOWNWARDS TOWARDS BURRAD INLET AT 2% TO PREVENT PONDING WATER AND MUST BE FREE OF ANY OBSTRUCTIONS, OTHER THAN PERSONAL SAFETY MEASURES, WITH POTENTIAL TO CAUSE FISH ENTRAPMENT




CUT OFF TRENCH DETAIL

ELEVATIONS MEASURED FROM PARKING LOT GRADE (7.0m) GEODETIC ELEVATIONS NOTED ON RIGHT

Figure 1: Groundwater Level in Well

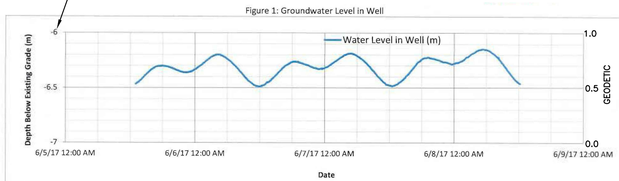
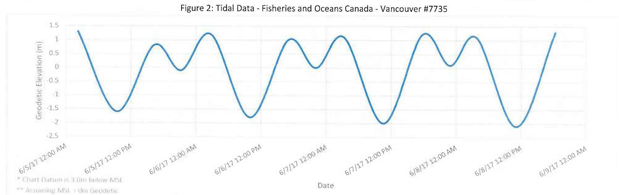



Figure 2: Tidal Data - Fisheries and Oceans Canada - Vancouver #7735




* Chart Datum is 3.0m Below MSL
** Assuming MSL = 0m Geodetic

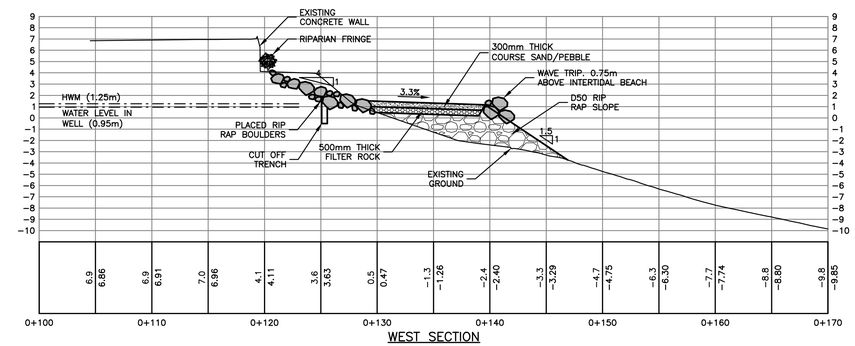
***Project:*** **Columbia Containers - Facility Upgrades**
***Site Location:*** 2775 Commissioner Street, Vancouver, B.C.
***Project No.:*** 11280 ***Recent Data:*** 8/06/2017

*GeoPacific Consultants Ltd.*
*1779 West 75th Avenue, Vancouver, BC*
Tel: 604-439-0922 Fax: 604-439-9189

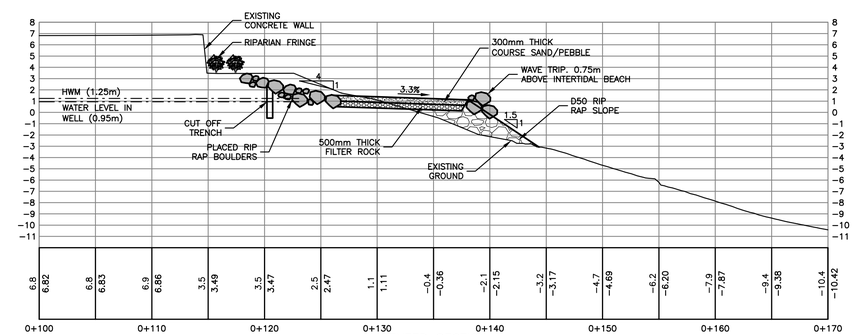
WELL DATA

## GENERAL NOTES

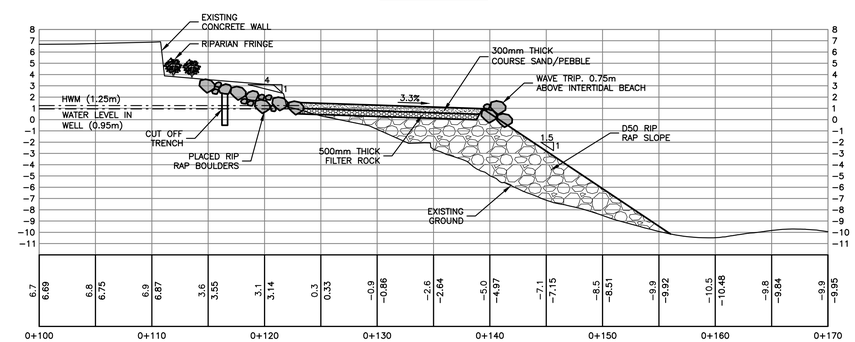
1. ALL CONSTRUCTION MUST CONFORM TO THE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) AND CITY OF VANCOUVER SERVICING BYLAWS SUPPLEMENTARY SPECIFICATIONS AND STANDARD DETAIL DRAWINGS MUST PASS THE CITY AND ENGINEER'S INSPECTIONS.
2. THE CONTRACTOR SHALL ENSURE THAT ALL APPROVALS REQUIRED FOR THE PROPOSED WORK HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.
3. A PRE−CONSTRUCTION MEETING BETWEEN ENGINEER & THE CONTRACTOR IS REQUIRED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
4. THE CONTRACTOR WILL PERFORM AT HIS OWN COST ALL TESTING REQUIRED BY THE REGULATORY AUTHORITY, MMCD AND THE ENGINEER. TESTING SHALL BE DONE BY AN INDEPENDENT SPECIALTY TESTING FIRM. CONTRACTOR TO GIVE ENGINEER NOTICE ON ALL TESTING. COPIES OF TESTS TO BE FORWARDED DIRECTLY BY THE TESTING FIRM TO ENGINEER AND GEOTECHNICAL ENGINEER BY EMAIL.
5. SUB−CONTRACTORS SHALL NOT COMMUNICATE WITH THE ENGINEERS OR OWNER DIRECTLY ON ANY CONTRACTUAL OR TECHNICAL ISSUE. THEY SHALL DIRECT THEIR ISSUES TO THE CONTRACTOR DIRECTLY WHOSE RESPONSIBILITY IT TO DEAL WITH THESE ISSUES ON THEIR BEHALF WITH THE ENGINEER. REVIEW AND APPROVAL OF ANY CONTRACTUAL MATTER INCLUDING PROGRESS PAYMENT, CHANGE ORDER, PAYMENT OF HOLDBACK, FINAL PAYMENT, INSURANCE AND WARRANTY, ETC. SHALL DIRECTED TO THE ENGINEER. CONTRACTOR MUST ONLY TAKE DIRECTION FROM THE ENGINEER IN REGARDS TO CHANGES TO DESIGN OR EXTRA WORKS.
6. UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS OR NOTIFIED TO THE CONTRARY BY THE ENGINEER, THE CONTRACTOR IS THE "PRIME CONTRACTOR" FOR THE PURPOSE OF ALL APPLICABLE LAWS RELATIVE TO OCCUPATIONAL HEALTH AND SAFETY, INCLUDING THE DISCHARGE OF ALL DUTIES OF THE "PRIME CONTRACTOR" UNDER THE WORKERS COMPENSATION ACT (BRITISH COLUMBIA), NOTWITHSTANDING THAT THE ENGINEER, THE OWNER OR AN OTHER CONTRACTOR MAY PROVIDE FROM TIME TO TIME SOME OF THE SERVICES NORMALLY PROVIDED BY SUCH "PRIME CONTRACTOR". IN THIS SECTION "PRIME CONTRACTOR" MEANS THE CONTRACTOR SO DEFINED UNDER THE WORKERS COMPENSATION ACT (BRITISH COLUMBIA).
7. LOCATIONS OF EXISTING UNDERGROUND SERVICES HAVE BEEN DETERMINED FROM UTILITY AS−CONSTRUCTED DRAWINGS. CONTRACTOR TO CONTACT BC ONE CALL AND PROVIDE COPIES TO ENGINEER AND VERIFY THE LOCATION OF ALL EXISTING SERVICES AND TO NOTIFY ENGINEER OF ANY DISCREPANCIES, CONFLICTS OR OMISSIONS PRIOR TO BEGINNING OF CONSTRUCTION.
8. THE CONTRACTOR SHALL USE EXTREME CARE WHEN WORKING NEAR EXISTING SERVICES AND ANY SERVICES DISTURBED ARE TO BE REPLACED TO THE SATISFACTION OF THE ENGINEER AND/OR APPROPRIATE UTILITY CORPORATION.
9. THE CONTRACTOR'S SURVEYOR WILL RECORD AND CERTIFY ALL INFORMATION REQUIRED FOR THE ENGINEER TO PROVIDE A COMPLETE SET OF AS−CONSTRUCTED DRAWINGS INCLUDING CENTERLINE, FOG LINE, EDGE OF ASPHALT, SIGNS, AND ALL APPURTENANCES.
10. WHEN NO IMPROVEMENTS ARE PROPOSED UNDER THIS CONTRACT, THE EXISTING SECTION(S) OF ROADWAY SHALL BE KEPT CLEAN AND CLEAR FOR THE DURATION OF CONSTRUCTION AND LEFT IN SAME CONDITION AS PRIOR TO CONSTRUCTION.
11. TRAFFIC CONTROL PER THE MINISTRY OF TRANSPORTATION "TRAFFIC MANUAL FOR WORK ON ROADWAYS" AND AS PER THE TRANSPORTATION ASSOCIATION OF CANDA "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" CONTRACTOR TO SUBMIT PLAN FOR TRAFFIC MANAGEMENT FOR APPROVAL AND RECEIVE SAME PRIOR TO PROCEEDING WITH WORKS.
12. VEHICULAR ACCESS TO EXISTING DWELLINGS TO BE MAINTAINED BY THE CONTRACTOR FOR THE DURATION OF THE CONTRACT.
13. PEDESTRIANS SHALL BE PROTECTED AT ALL TIMES. ANY CLOSURES OF THE SIDEWALK OR LANES TO BE COORDINATED WITH AND APPROVED BY THE ENGINEER AND A PERMIT FROM REGULATORY AUTHORITY OBTAINED AND FORWARDED TO ENGINEER. CONTRACTOR TO PROVIDE REQUIRED NOTICES.
14. RESIDENTS DIRECTLY AFFECTED BY CONSTRUCTION OF THIS PROJECT SHALL BE GIVEN 48 HOURS WRITTEN NOTICE OF THE PROPOSED START OF CONSTRUCTION. IF CONSTRUCTION ENTERS ONTO PRIVATE PROPERTY, THE CONTRACTOR OR DEVELOPER'S AGENT WILL REQUIRED WRITTEN AUTHORIZATION FROM THE PRIVATE PROPERTY OWNER.
15. RETAINING DESIGNATED TREES IS OF PRIME IMPORTANCE. WHEN WORKING IN PROXIMITY TO A DESIGNATED TREE OR WHEN ROOTS ARE ENCOUNTERED, THE CONTRACTOR SHALL CONSULT A CERTIFIED ARBORIST BEFORE PROCEEDING TO PREVENT DAMAGE TO TREES.
16. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO ENSURE THAT NO SILT IS DISCHARGED TO THE STORM DRAINAGE SYSTEM, ROADWAYS OR ADJACENT PROPERTIES DURING THE COURSE OF CONSTRUCTION IN ACCORDANCE WITH DFO/MOELP'S "LAND DEVELOPMENT GUIDELINES FOR THE PROTECTION OF AQUATIC HABITAT".




WEST SECTION




CENTER SECTION

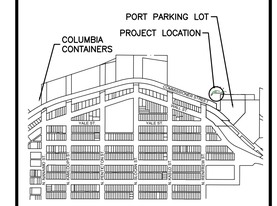



EAST SECTION

NOT FOR CONSTRUCTION

CREUS Engineering


Civil Engineers & Project Managers
#610 EAST TOWER - 221 ESPLANADE WEST, NORTH VANCOUVER BC, V7M3J3
PH: 604-987-9070 WEBSITE: www.creus.ca


DRAWING LEGEND

| | EXISTING | PROP. | TO BE REMOVED |
|---|---|---|---|
| LEGAL LINE | | | |
| EASEMENT | | | |
| WATERMAIN | | | |
| SANITARY | | | |
| STORM | | | |
| HYDRO | | | |
| TEL | | | |
| STREETLIGHT | | | |
| GAS | | | |

| | EXISTING | PROP. | TO BE REMOVED |
|---|---|---|---|
| FIRE HYDRANT | | | |
| GATE VALVE | | | |
| AIR VALVE | | | |
| REDUCER | | | |
| INSPECTION CHAMBER | | | |
| CATCHBASIN (STD/SI) | | | |
| CAP | | | |
| MANHOLE | | | |
| POWER POLE | | | |
| STREETLIGHT | | | |

approved

client

project
COLUMBIA CONTAINERS
VANCOUVER, BC

title
GRADING PLAN

| no. | (y/m/d) | revision | chk'd |
|---|---|---|---|
| 1 | 17/09/01 | ADDED WELL AND WATER LEVEL DATA | AFG |


COPYRIGHT RESERVED. THIS DRAWING AND DESIGN ARE, AND AT ALL TIMES REMAIN THE EXCLUSIVE PROPERTY OF CREUS ENGINEERING LTD. AND CANNOT BE USED, REPRODUCED OR DISTRIBUTED WITHOUT WRITTEN CONSENT.
© 2016 CREUS ENGINEERING LTD.


current rev. # 1

| | |
|---|---|
| engineer of record: FMC | scales: hor: 1:250 vert:1:250 |
| designed by: FMC | file no. 17287 |
| drawn by: AFG | drawing no. GRAD-1 |
| date: 2017-09-01 | |