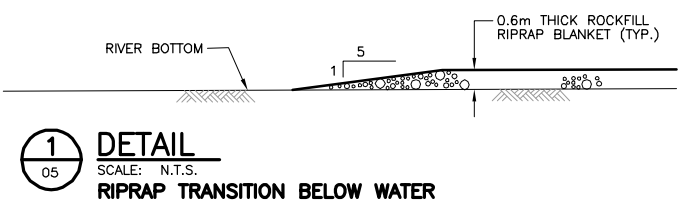
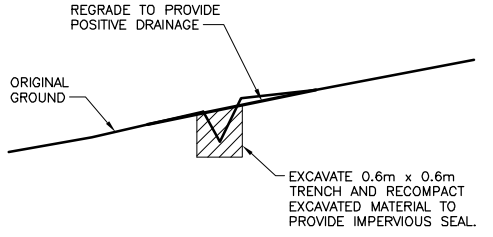


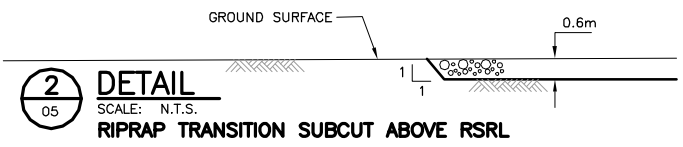
A SECTION
05



1 DETAIL
05
SCALE: N.T.S.
RIPRAP TRANSITION BELOW WATER



3 DETAIL
SCALE: N.T.S.
TENSION CRACK



2 DETAIL
05
SCALE: N.T.S.
RIPRAP TRANSITION SUBCUT ABOVE RSRL

LEGEND

- UWRL UNREGULATED WINTER RIVER LEVEL
- RSRL REGULATED SUMMER RIVER LEVEL
- PNEUMATIC PIEZOMETER WITH MEASURED GROUNDWATER LEVEL (SEPTEMBER, 2005)
- PIEZOMETER TIP LOCATION

NOTES

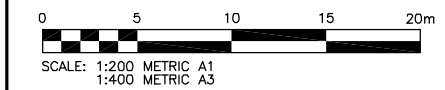
1. REGULATED SUMMER RIVER LEVEL (RSRL) REFERS TO REGULATION OF THE RED RIVER LEVEL TO APPROXIMATE EL. 223.75 m. AT THE CITY OF WINNIPEG JAMES AVENUE PUMPING STATION BY OPERATION OF THE ST. ANDREWS LOCK AND DAM.
2. UNREGULATED WINTER RIVER LEVEL (UWRL) REFERS TO THE NATURAL UNREGULATED LEVEL OF THE RED RIVER WHEN THE ST. ANDREWS LOCK AND DAM IS NOT OPERATING. ACTUAL RIVER LEVELS AT THE SITE MAY VARY FROM THOSE SHOWN ON THE DRAWING.
3. RIPRAP ABOVE EL. 223.7 m SHALL BE SUB-CUT INTO THE BANK AND PLACED FLUSH WITH THE ORIGINAL GROUND SURFACE. ALL EXCAVATED SOIL SHALL BE REMOVED OFF SITE. EXISTING CONCRETE RUBBLE AND/OR LIMESTONE RIPRAP SHALL BE SALVAGED AND BLENDED INTO THE NEW RIPRAP TO FORM A SMOOTH UNIFORM GRADE.
4. INTERPRETATION OF THE STRATIGRAPHY BASED ON KGS GROUP TEST HOLE DRILLING, OCTOBER 2004.
5. REMOVE PIPE OUTLET TO ALLOW FOR ROCKFILL COLUMN INSTALLATION.
6. TEMPORARILY REMOVE AND STOCKPILE EXISTING RIPRAP WITHIN LIMITS OF ROCKFILL COLUMNS. REPLACE RIPRAP TO EXISTING GRADE FOLLOWING INSTALLATION OF ROCKFILL COLUMNS.
7. WHERE REQUIRED LOCALLY REVISE TOP OF RIPRAP ELEVATION TO BEST SUIT EXISTING TREES.
8. RIVERBANK ABOVE EL. 227.7m± SHALL BE REVEGETATED WITH TOPSOIL AND SOD TO MATCH EXISTING SOD AREA. BELOW EL 227.7m± SHALL BE REVEGETATED WITH NATIVE GRASSES DOWN TO THE EXISTING VEGETATION ALONG THE SHORELINE.
9. GEOTEXTILE TO BE PLACED SUCH THAT THE PIPE GRANULAR BACKFILL AND TOP OF CLAY CAP ARE COMPLETELY COVERED AND THE FABRIC EXTEND A MINIMUM OF 1.0m ONTO THE ADJACENT NATIVE SOILS.
10. EXTENT OF RIPRAP SHALL BE 10 METRES INTO RIVER AS MEASURED FROM WINTER WATERLINE. ROCKFILL COLUMNS SHALL BE LOCATED BETWEEN THE WINTER WATERLINE (DEPENDENT ON FLOW CONDITIONS) AND SUMMER WATERLINE AS APPROVED BY THE CONTRACT ADMINISTRATOR.

WARNING

NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.

TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.

SEE PROVINCIAL REGULATION 210/72 FOR DETAILS.



150_WM	WATERMAIN	150_WM	-----	HYDRO	-----			
300_LDS	LAND DRAINAGE SEWER	300_LDS	-----	M.T.S.	-----			
250_WWS	WASTE WATER SEWER	250_WWS	-----	PROPERTY LINE	-----			
MANHOLE	MANHOLE	MANHOLE	○	SURVEY BAR	+			
CATCH BASIN	CATCH BASIN	CATCH BASIN	□	LIGHT STANDARD	•			
CURB INLET	CURB INLET	CURB INLET	▽	HYDRO POLE	•			
JUNCTIONS	JUNCTIONS	JUNCTIONS	+	GUY WIRE	—			
CULVERT	CULVERT	CULVERT	—	SIGN	○			
GAS	GAS	GAS	---	BUSH/TREE LINE	~~~~~			
EXISTING	LEGEND-PLAN	PROPOSED	---	FENCE	=====			
			---	ELEVATION	(32.231)			
			---	LEGEND-PROFILE	PROPOSED			

LOCATION APPROVED UNDERGROUND STRUCTURES

SUPPLY, U/G STRUCTURES COMMITTEE DATE

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

B.M. 34-013	ELEV. 230.472m	3/5 (24/10/08) - E. SIDE TAKE AVE. N. OF RUE DESPINS TRAIL IN 7.50 CONC. PILE, 34.1m N. OF ALL-TILE SEWERS & 5.0m N. OF END OF TRUCK AVE. 0.75m N. ON N. SIDE OF PILE TO LOCATE SAME.
1	ISSUED WITH ADDENDUM No 1	31/12/08 RKe
0	ISSUED FOR TENDER	16/12/08 RKe
NO.	REVISIONS	DATE BY

KGS GROUP CONSULTING ENGINEERS & PROJECT MANAGERS
WINNIPEG (204) 896-1209 THUNDER BAY (807) 345-2233

DESIGNED BY: CWC/RD	CHECKED BY: CWC
DRAWN BY: PD	APPROVED BY: RKe
HOR. SCALE: 1:250	RELEASED FOR CONSTRUCTION: DATE
VERTICAL: DATE	DATE

ENGINEER'S SEAL

ORIGINAL SIGNED BY
R.M. KENYON
31/12/08

CONSULTANT DRAWING NO.
08-0107-12_06

THE CITY OF WINNIPEG
WATER & WASTE DEPARTMENT

2008 OUTFALL REPAIRS
RUE DESPINS

SECTIONS AND DETAILS

SHEET **06** OF **09**

CAD FILE DRAWING NUMBER
RR_54-55 DETAILS

CITY DRAWING NUMBER
LD-5243