

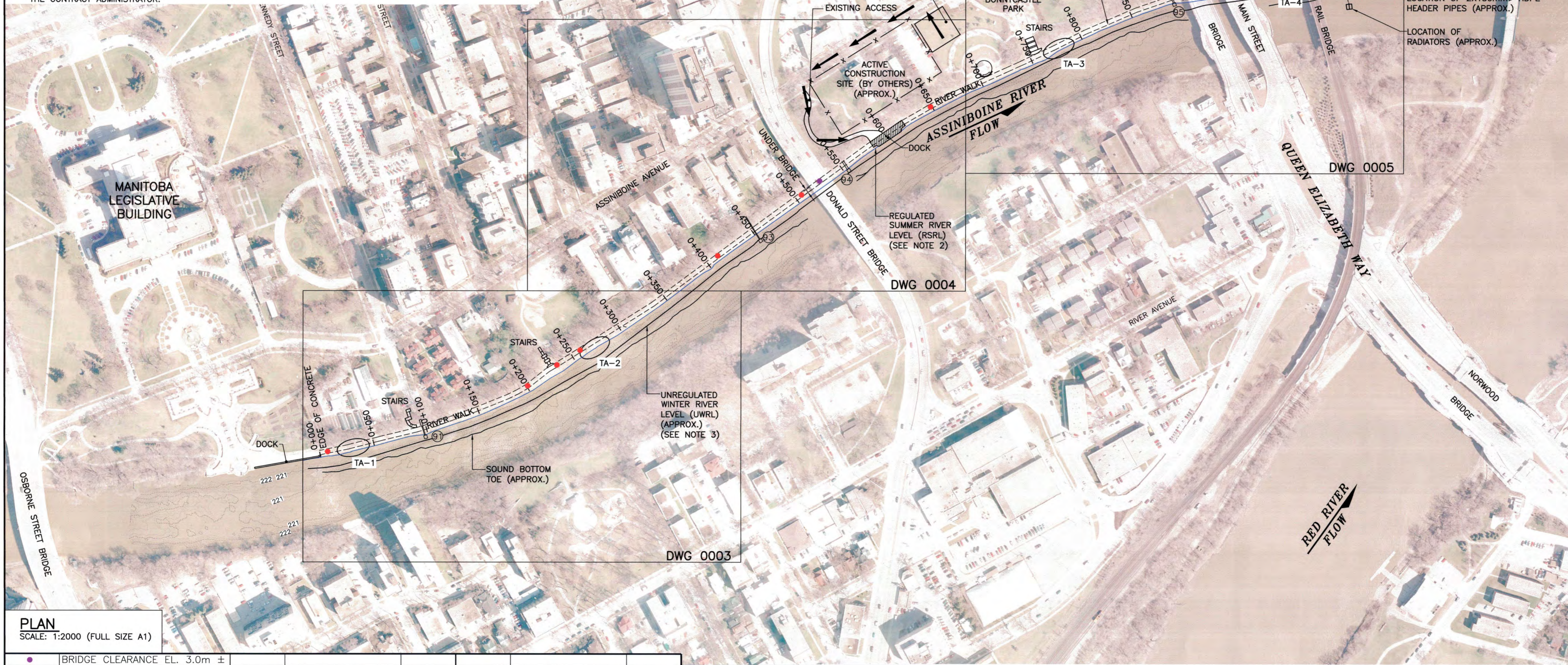
TABLE OF MATERIALS							
Station	Rockfill Thickness (mm)	Rockfill Quantity (Tonnes)			Limestone Block Repairs (L.M.)		
		Above UWRL	Above UWRL	Below UWRL	Cumulative Total	Reset	New
0+000	0+025	400	118	122	240	7	14
0+025	0+067	300	140	236	616	10	33
0+067	0+102	400	129	218	963	13	20
0+102	0+108	300	25	37	1,025	0	4
0+108	0+366	N.A.	0	1,477	2,502	20	0
0+366	0+422	200	145	484	3,131	10	23
0+422	0+445	N.A.	0	199	3,330	0	0
0+445	0+461	400	86	138	3,554	2	11
0+461	0+515	N.A.	0	467	4,021	0	0
0+515	0+520	400	24	32	4,077	1	4
0+520	0+540	N.A.	0	0	4,077	0	0
0+540	0+550	400	48	49	4,174	5	15
0+550	0+584	400	176	165	4,515	10	14
0+584	0+620	N.A.	0	0	4,515	0	0
0+620	0+646	500	126	168	4,809	13	13
0+646	0+688	300	145	91	5,045	12	12
0+688	0+718	300	84	73	5,202	2	25
0+718	0+748	300	94	324	5,620	2	10
0+748	0+765	N.A.	0	281	5,901	10	10
0+765	0+778	300	49	215	6,165	4	5
0+778	0+815	300	128	400	6,693	14	6
0+815	0+851	300	124	313	7,130	4	12
0+851	0+862	N.A.	0	95	7,225	0	0
0+862	0+875	200	38	70	7,333	0	4
0+875	0+897	500	171	71	7,575	0	5
0+897	0+916	350	91	82	7,748	3	0
0+916	0+932	500	232	69	8,049	3	0
0+932	0+952	500	108	86	8,243	6	3
0+952	0+975	500	144	99	8,486	13	7
0+975	0+999	500	130	104	8,720	10	10
0+999	1+021	N.A.	0	52	8,772	0	0
Sum			2,555	8,217	8,772	174	250

**NOTE:**

1. THE TERM UNREGULATED WINTER RIVER LEVEL (UWRL) REFERS TO THE HYDRAULIC PROFILE ON THE RED RIVER AND WILL VARY DEPENDING ON RIVER DISCHARGE AND LOCATION.
2. ALL DIMENSIONS AND QUANTITIES PROVIDED ABOVE ARE APPROXIMATE AND MAY BE USED FOR PLANNING OF THE CONSTRUCTION. QUANTITIES MAY BE MODIFIED TO SUIT THE ACTUAL CONDITIONS, AS ACCEPTED AND DIRECTED BY THE CONTRACT ADMINISTRATOR.

**NOTES:**

1. PROJECT CONTROL LINE AND STATIONING REFERENCE SHALL BE THE INSIDE (DRY) SIDE ALIGNMENT OF LIMESTONE BLOCKS ALONG SIDE OF RIPRAP. CONTROL TO BE ESTABLISHED BY THE CONTRACT ADMINISTRATOR.
2. THE TERM REGULATED SUMMER RIVER LEVEL (RSRL) REFERS TO THE WATER LEVEL AT THE JAMES AVENUE PUMPING STATION WITH THE ST. ANDREWS LOCK AND DAM IN OPERATION AND FOR FLOWS LESS THAN 12,000 CFS.
3. THE TERM UNREGULATED WINTER RIVER LEVEL (UWRL) REFERS TO THE HYDRAULIC PROFILE ON THE RED RIVER AND WILL VARY DEPENDING ON RIVER DISCHARGE AND LOCATION.
4. OUTFALL LOCATIONS SHOWN ARE APPROXIMATE ONLY AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE PRECISELY PRIOR TO START OF RIPRAP PLACEMENT.



**PLAN**  
SCALE: 1:2000 (FULL SIZE A1)

- BRIDGE CLEARANCE EL. 3.0m ±
- PINCH POINT (WIDTH LESS THAN 4m)
- TA-1 TEMPORARY TURNAROUND AREA 1
- ← CONSTRUCTION ACCESS
- Ⓢ CITY OF WINNIPEG OUTFALL

EXISTING	LEGEND-PLAN	EXISTING	LEGEND-PLAN	PROPOSED	EXISTING	LEGEND-PROFILE	PROPOSED

**LOCATION APPROVED UNDERGROUND STRUCTURES**

SUPV. 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. ELEV.	KGS BASE	DRAWINGS BASED ON C.S.R.S NAD 83 SYSTEM, UTM GRID

DESIGNED BY		CHECKED BY	
BPA	MRJ		
DRAWN BY		APPROVED BY	
PwD			
HOR. SCALE: AS NOTED		RELEASED FOR CONSTRUCTION:	
VERTICAL: AS NOTED		DATE	
NO. REVISIONS		DATE BY	

ENGINEER'S SEAL

PROVINCE OF MANITOBA

**B.P. APIN**  
Member  
24582

REGISTERED PROFESSIONAL ENGINEER

CONSULTANT DRAWING NO.  
**13-0107-023\_02**

**THE CITY OF WINNIPEG**  
URBAN DESIGN DIVISION  
PLANNING, PROPERTY & DEVELOPMENT DEPARTMENT

PROJECT TITLE  
**REPAIR OF THE ASSINIBOINE RIVERWALK GENERAL PLAN OF RIVERWALK REPAIR WORKS**

SHEET OF  
**03** OF **08**

COMPUTER FILE NAME  
13-0107-023\_02

CITY DRAWING NUMBER  
815-2013\_0002\_01-00

**UTILITIES**

EXISTING SERVICES AND UTILITIES SHALL BE LOCATED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MAINTAINING THE STRUCTURAL INTEGRITY OF THE SERVICES AND UTILITIES.

**PROPERTY LIMITS DELINEATION**

DELINEATION OF PROPERTY LIMITS AS SHOWN ON THIS DWG DOES NOT REPRESENT A "LEGAL SURVEY". KGS GROUP MAKES NO REPRESENTATION OR WARRANTY AS TO THE ACCURACY OF PROPERTY LIMITS DELINEATED ON THIS DWG, NOR ON THE DIMENSIONAL ACCURACY OF DWG FEATURES RELATIVE TO THOSE PROPERTY LIMITS.

**WARNING**

1. NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.
2. TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.
3. SEE PROVINCIAL REGULATION 210/72 FOR DETAILS.

**METRIC**

WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES

**APEGN**  
Certificate of Authorization  
KGS Group  
No. 245

COWLEND