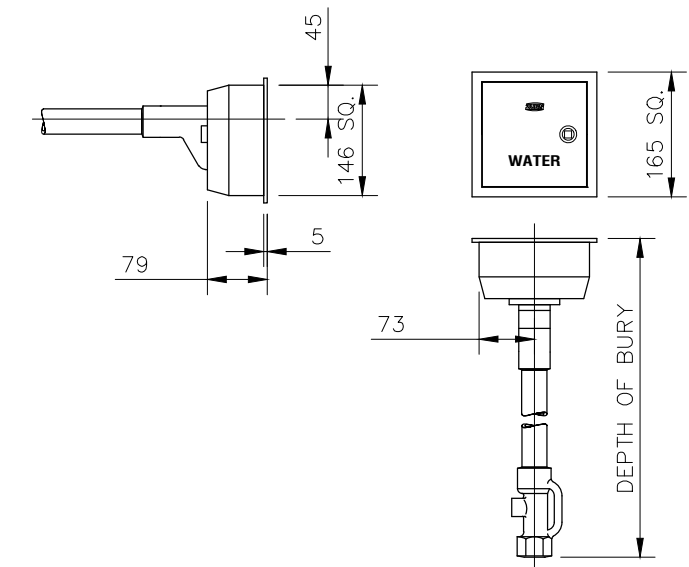


STORM WATER DISCHARGE CRITERIA						5. STORAGE REQUIREMENT					
1. ALLOWABLE DISCHARGE DETERMINED BY THE ISOCHRONAL METHOD						NORTH					
C ^{ALLOWABLE} = 0.10						ISOCHRONAL METHOD SUMMARY					
T _c = 10 min						CATCHMENT			CATCHMENT		
A = 0.375 ha						0.214 ha			0.161 ha		
ALLOWED = 0.011 m ³ /s						% IMPERVIOUS 43%			% IMPERVIOUS 13%		
						PEAK RUNOFF 0.117 m ³ /s			PEAK RUNOFF 0.087 m ³ /s		
2. SITE RUNOFF RESTRICTED						RUNOFF VOLUME 124 m ³			RUNOFF VOLUME 89 m ³		
Surface	Area (ha)	C	CA	% IMP		REQUIRED STORAGE _{25YR} 84 m ³			REQUIRED STORAGE _{25YR} 61 m ³		
Non-contributing		0.00	0.000	0%							
Controlled Roof		0.20	0.000	100%	C ^{IMP} = 0.42						
Grass	0.263	0.20	0.053	0%	T _c = 10 min						
Gravel		0.70	0.000	50%	125 = 1842/(1+9) ^{0.842}						
Sloped Roof		0.90	0.000	100%	= 154 mm/hr						
Paved	0.112	0.95	0.106	100%	A = 0.375 ha						
Catchment Total	0.375	0.42	0.159	30%	Q _{POST(25)} = 0.068 m ³ /s						
3. RESTRICTED SITE DISCHARGE						SURFACE STAGE STORAGE TABLE					
NORTH						Surface			Surface		
RESTRICTOR DIAMETER = 0.100 m						ELEV	AREA	VOL.	ELEV	AREA	VOL.
RESTRICTOR INVERT = 30.06 m						(m)	(m ²)	(m ³)	(m)	(m ²)	(m ³)
HWL ₂₅ = 31.69 m						31.39	1	0	31.40	2	0
TAILWATER = 31.64 m						31.50	131	5	31.50	225	8
HYDRAULIC HEAD = 0.05 m						31.60	362	29	31.60	907	61
DISCHARGE COEFFICIENT = 0.60						31.69	892	84			
Q _{NORTH} = 0.005 m ³ /s						RIM LEVEL = 31.39 m			RIM LEVEL = 31.40 m		
						HWL ₂₅ = 31.69 m			HWL ₂₅ = 31.60 m		
						25 YR. VOL. = 84 m ³			25 YR. VOL. = 61 m ³		
						TOTAL AVAILABLE STORAGE					
						NORTH 84 m ³			SOUTH 61 m ³		
						SOUTH 61 m ³			TOTAL 145 m ³		
						6. ADDITIONAL NOTES					
						INSTALL 100 mm RESTRICTORS IN THE OUTLETS OF CB2 AND CB3					
4. TOTAL SITE DISCHARGE TOTAL											
Q _{NORTH} = 0.005 m ³ /s											
Q _{SOUTH} = 0.005 m ³ /s											
Q _{TOTAL} = 0.010 m ³ /s											

NOTES:

1. ALL UTILITIES ARE SHOWN AS INFORMATION ONLY. CONTRACTOR TO CONFIRM LOCATION OF ALL UTILITIES ON SITE PRIOR TO CONSTRUCTION.
2. CONTRACTOR TO STAKE OUT LOCATION OF ALL WORKS FOR APPROVAL BY CONTRACT ADMINISTRATOR PRIOR TO ANY CONSTRUCTION OR REMOVALS.
3. CONTRACTOR TO CONFIRM ALL DIMENSIONS ON SITE AND REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR PRIOR TO CONSTRUCTION.
4. CONTRACTOR IS RESPONSIBLE FOR ALL REMOVALS AS REQUIRED TO CONSTRUCT ALL WORKS AS SHOWN ON PLANS AND DETAILS. ALL ITEMS TO BE REMOVED MUST BE DISPOSED OF LEGALLY OFF SITE.
5. DURING CONSTRUCTION, CONTRACTOR TO PROTECT, TO CITY OF WINNIPEG STANDARDS ALL EXISTING TREES, SIDEWALKS, CURBS, SOD, UTILITIES, AND PAVING TO REMAIN. AREAS DAMAGED DURING CONSTRUCTION TO BE REPAIRED TO CITY OF WINNIPEG STANDARDS AT CONTRACTOR'S COST.
6. ALL WORK TO BE DONE IN ACCORDANCE WITH CITY OF WINNIPEG STANDARD CONSTRUCTION SPECIFICATIONS UNLESS OTHERWISE NOTED.

7. CONTRACTOR TO REPAIR ALL ON AND OFF SITE SODDED AREAS, SHRUB BEDS, TREES, CONCRETE, ROAD PAVING AND CURBS ETC., DAMAGED DURING CONSTRUCTION TO CONTRACT ADMINISTRATOR'S SATISFACTION AND TO THE CITY OF WINNIPEG STANDARDS AT HIS/HER OWN COST.
8. REFER ALSO TO WRITTEN SPECIFICATIONS.
9. ENSURE POSITIVE DRAINAGE ON PATHWAYS AND IN ADJACENT SODDED AREAS.
10. MAINTAIN EXISTING GRADE AND DRAINAGE PATTERNS WHERE POSSIBLE.
11. CONSTRUCTION ACCESS TO BE LIMITED TO THE ROUTES SPECIFIED ON SITE BY CONTRACT ADMINISTRATOR.
12. CONTRACTOR TO ADJUST GRADES OF ALL SERVICES WITHIN LIMIT OF WORK AS REQUIRED INCLUDING ALL MANHOLES, CATCH BASINS, FIRE HYDRANT, CURB STOPS, ETC.
13. SUITABLE GRANULAR BASE COURSE MATERIAL TO BE SALVAGED AND RE-USED AS INSTRUCTED BY CONTRACT ADMINISTRATOR.



2 ZURN Z1361 GROUND HYDRANT
HOSE BIBB CONNECTION BOX DETAIL
C501 N.T.S.

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ORIGINAL SHEET - ISO 11x17 - v17.05

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Legend



Notes

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

WARNING

IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT, THE CONTRACTOR MUST:
1) NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.
2) TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.
SEE PROVINCIAL REGULATION 140/92 FOR DETAILS

Client/Project
THE CITY OF WINNIPEG - GORD DONG PARK
348 PACIFIC AVENUE, WINNIPEG MB

Figure No.
C-501

Title
GENERAL NOTES AND DETAIL