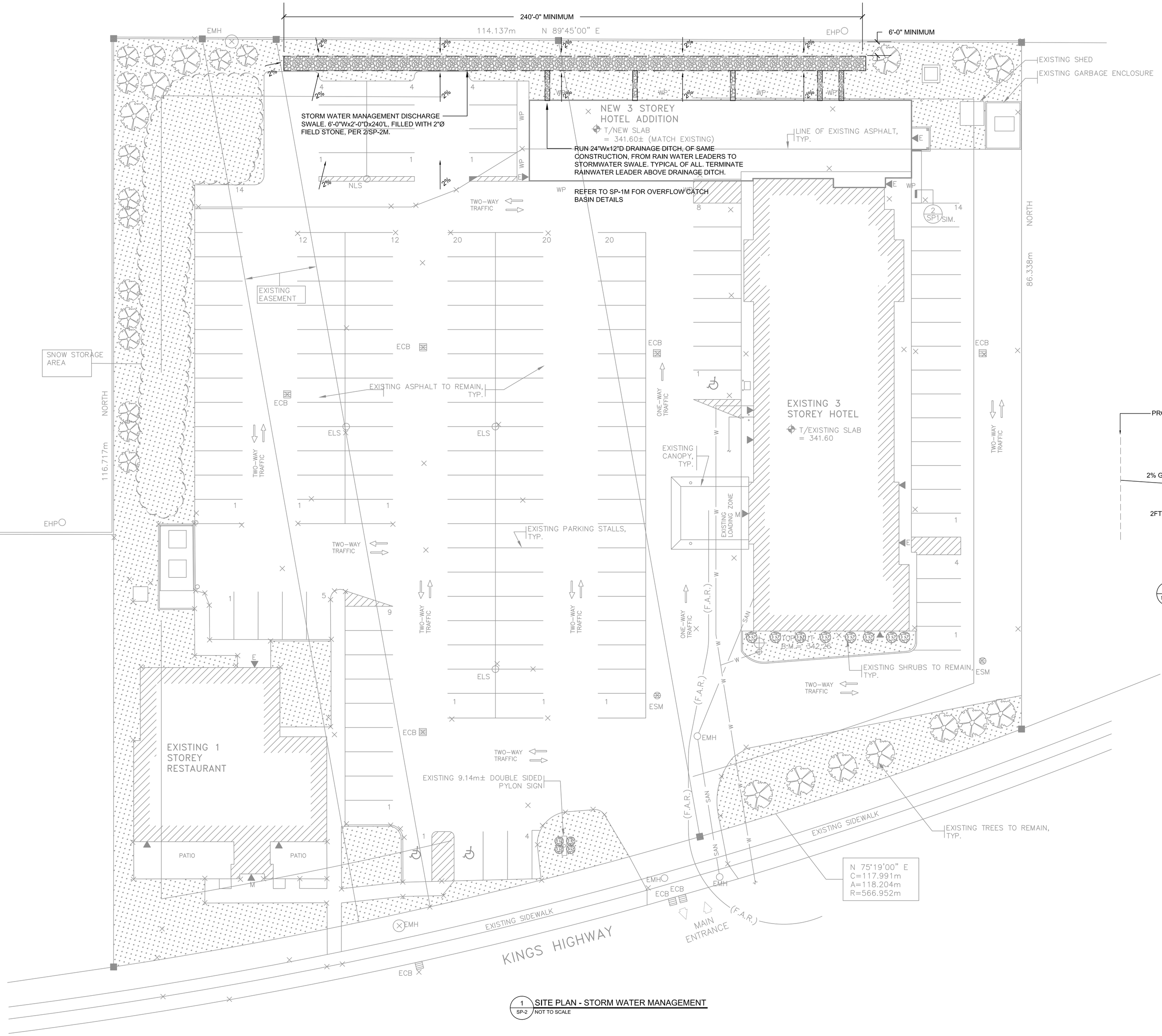
PLOT DATE: 10/22/2018 4:19 PM



1 SP-2 SITE PLAN - STORM WATER MANAGEMENT
NOT TO SCALE

EXISTING SITE COVERAGE SUMMARY

SURFACE	Area ft²	Area m²	Area ha	Runoff Coefficient	Q (L/s)
EXISTING HOTEL	12,150	1,129	0.1128	0.90	35
EXISTING RESTAURANT	5,314	494	0.0490	0.90	15
EXISTING PAVED SURFACE	75,427	7,007	0.7007	0.90	214
EXISTING GREEN SPACE	34,677	3,222	0.3222	0.20	22
SITE	127,568	11,852	0.1185 -		286

NEW SITE COVERAGE SUMMARY

SURFACE	Area ft²	Area m²	Area ha	Runoff Coefficient	Q (L/s)
EXISTING HOTEL	12,150	1,129	0.1129	0.90	35
EXISTING RESTAURANT	5,314	494	0.0494	0.90	15
NEW PAVED SURFACE	78,828	7,323	0.7323	0.90	224
NEW GREEN SPACE	25,873	2,404	0.2404	0.20	16
HOTEL ADDITION	5,403	502	0.0502	0.90	15
SITE	127,568	11,852	1.1852		305

STORMWATER MANAGEMENT CALCULATIONS:

LOT AREA = 1.1852 ha (11,852m²)

WATER RETENTION = 305 - 286 L/s
= 19 L/s (301 GPM)

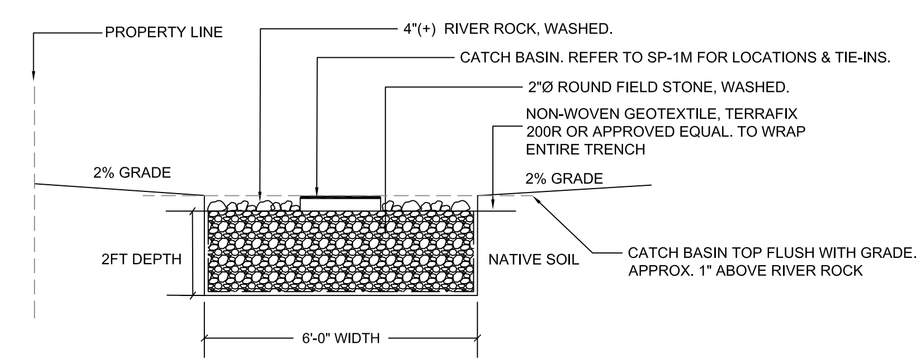
RAINFALL INTENSITY: 122.3 mm/hr FOR 100-YEAR EVENT
DURATION USED: 15 MIN.

RETENTION REQUIRED = 301 GPM * 15 MIN.
= 4,515 GAL.

USING TRENCH W/2" FIELD STONE: 0.4 FACTOR

REVISED RETENTION REQUIRED = 4,515 GAL / 0.4
= 11,288 GAL (1,508 FT³)

RETENTION PROVIDED = 1,432 FT² * 2'-0"
= 2,864 FT³



2 SP-2M DETAIL - STORMWATER DISCHARGE SWALE
NOT TO SCALE

SynCOR CONTRACTING LIMITED

No.	REVISION	BY	DATE
2	ISSUED FOR SITE PLAN CONTROL REV 2	SV	10/22/18
1	ISSUED FOR SITE PLAN CONTROL REV 1	SV	10/18/18
0	ISSUED FOR SITE PLAN CONTROL	SV	10/05/18

RVI Group Ltd.
THUNDER BAY, ON | (807) 625-5430 | info@rvigroup.ca

LICENSED PROFESSIONAL ENGINEER
10/22/18
S. VEILLEUX
100150939
PROVINCE OF ONTARIO

PROJECT
SUPER 8
BUILDING ADDITION
810 KINGS HWY
FORT FRANCES ONTARIO

DRAWING TITLE
SITE SERVICE
STORMWATER MANAGEMENT PLAN

DRAWN BY	DATE	JOB No.
SV	OCTOBER 22, 2018	RVI-18090
CHECKED BY	DATE	SCALE
SV	OCTOBER 22, 2018	AS NOTED

DRAWING No.	SHEET No.	REV. No.
SP-2M	2 OF 2	2

DRAWING SIZE ARCH D