



APLIN MARTIN

ENGINEERING ARCHITECTURE PLANNING SURVEYING

#910 – 1111 West Hastings Street, Vancouver, B.C. V6E 2J3
Tel: (604) 678-9434, Fax: (604) 597-9061, Email: general@aplinmartin.com

CLIENT:

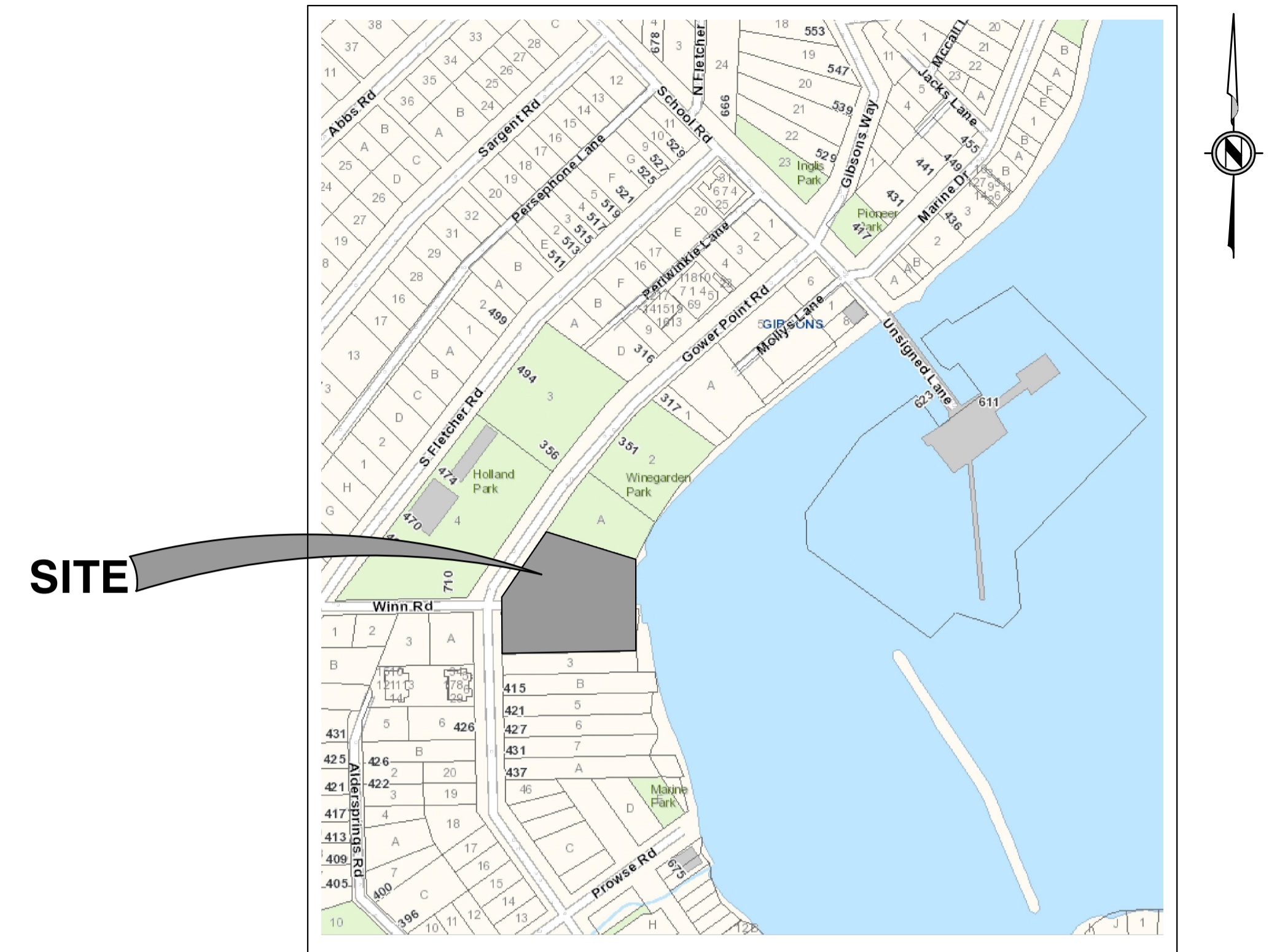
KLAUS FUERNISS ENTERPRISES INC.

521 BRIDGEMAN ROAD, GIBSONS, BC V0N 1V1
PH. 604-220-9835

PROJECT:

THE GEORGE GIBSONS OCEANFRONT MARINE HOTEL

GOWER POINT ROAD, GIBSONS, BC



SITE LOCATION PLAN

SCALE: 1:5000

OFFSITE DRAWING INDEX

- 01 COVER SHEET**
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A. GENERAL NOTES

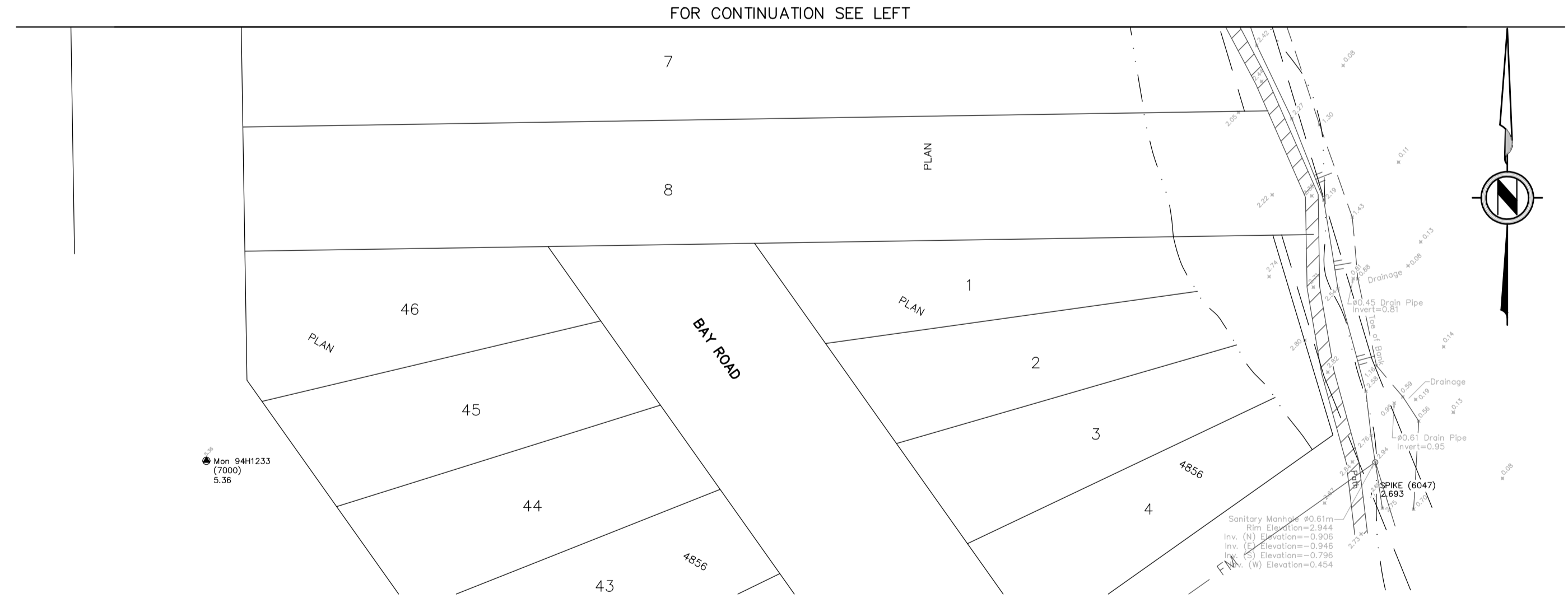
1. THE CONTRACTOR IS TO NOTIFY THE ENGINEER 48 HRS. PRIOR TO CONSTRUCTION TO VERIFY THAT THEY HAVE THE LATEST DRAWINGS ISSUED FOR CONSTRUCTION.
2. THE CONTRACTOR IS TO MAINTAIN A COMPLETE SET OF CIVIL DRAWINGS MARKED UP IN RED TO RECORD THE CONSTRUCTION OF ALL SITE SERVICES ON THIS PROJECT. THIS REDLINED SET IS TO BE AVAILABLE ONSITE FOR THE CIVIL ENGINEER TO REVIEW AT ALL TIMES. AT THE COMPLETION OF THE CIVIL WORKS, THIS MARKED UP SET IS TO BE SUBMITTED TO APLIN AND MARTIN FOR THEIR RECORDS.
3. THE CONTRACTOR IS TO NOTIFY THE TOWN OF GIBSONS ENGINEERING DEPARTMENT 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION WITHIN ROAD ALLOWANCES AND RIGHTS-OF-WAY
4. ANY REVISIONS TO THESE DRAWINGS MUST BE APPROVED BY THE ENGINEER, WHO SHALL REVIEW ANY CHANGES WITH THE TOWN OF GIBSONS ENGINEER.
5. ALL ON-SITE SERVICES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF GIBSONS BUILDING CODE, THE B.C. BUILDING CODE AND THE B.C. PLUMBING CODE AND ARE TO PASS THE INSPECTION OF THE TOWN OF GIBSONS BUILDING DEPARTMENT. ANY PIPE WORKS CONSTRUCTED WITHIN THE PROPOSED AND EXISTING MUNICIPAL RIGHTS-OF-WAY ARE TO CONFORM TO THE TOWN OF GIBSONS ENGINEERING DEPARTMENTS STANDARDS AND SPECIFICATIONS AND ARE TO BE CARRIED OUT UNDER THEIR INSPECTION.
6. ALL SITEWORK, TRENCHING, EXCAVATION, BACKFILL, ROADWORKS AND CONCRETE WORKS ARE TO BE SUPPLIED AND CONSTRUCTED IN ACCORDANCE WITH TOWN OF GIBSONS STANDARDS. IN CASES WHERE NO TOWN OF GIBSONS STANDARD EXISTS, THEN MMCD STANDARDS ARE TO BE ADHERED TO.
7. THE CONTRACTOR SHALL ENSURE THAT ALL APPROVALS REQUIRED FOR THE PROPOSED WORK HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. THE CONTRACTOR IS TO CHECK WITH FORTIS BC, B.C. HYDRO AND TELUS PRIOR TO COMMENCING WORK TO VERIFY THE LOCATIONS AND INVERTS OF THESE SERVICES.
8. ALL MATERIALS TESTING MUST BE DONE IN ACCORDANCE WITH THE B.C. PLUMBING CODE AND THE M.M.C.D. TESTING IS TO BE CARRIED OUT BY A QUALIFIED MATERIALS TESTING FIRM AND PAID FOR BY THE CONTRACTOR THE ENGINEER SHALL RECEIVE COPIES OF ALL TEST RESULTS FROM THE CONTRACTOR.
9. TRAFFIC CONTROL (SIGNS, BARRICADES, FLAG PERSONS) IS TO BE MAINTAINED AT ALL TIMES WHILE WORKING ON MUNICIPAL RIGHT-OF-WAYS. A TRAFFIC OBSTRUCTION PERMIT MUST BE OBTAINED FROM THE CITY'S ENGINEERING DEPARTMENT PRIOR TO PARTIAL OR FULL ROAD CLOSURES.
10. ANY MATERIAL SUBSTITUTION MUST BE APPROVED BY THE ENGINEER.
11. SEE ARCHITECTURAL DRAWINGS FOR PARKING, PARKING LOT DETAILS AND LAYOUT DIMENSIONS, AND BUILDING DETAILS AND LAYOUT DIMENSIONS.
12. ALL TREES DESIGNATED TO BE SAVED ARE TO BE PROTECTED BY SNOW FENCING.
13. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR REPAIR OF ANY DAMAGE CAUSED TO EXISTING STREET OR SERVICES BY CONSTRUCTION EQUIPMENT AND/OR TRUCKS HAULING MATERIAL TO THE SITE. THIS MAY INCLUDE DAILY CLEANING OR SWEEPING EXISTING ROADS OF DIRT AND DEBRIS CAUSED BY THE CONSTRUCTION ACTIVITY.
14. REFER TO MECHANICAL DRAWINGS FOR LOCATIONS OF UNDERGROUND HYDRO, TELEPHONE AND GAS DUCTWORK TO SERVICE THE BUILDINGS. THE CONTRACTOR IS TO CONFIRM THE LOCATIONS OF STORM, SANITARY AND WATER CONNECTIONS SERVICING THE BUILDINGS WITH THE MECHANICAL ENGINEER PRIOR TO CONSTRUCTION.
15. ALL LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND SERVICES HAVE BEEN DETERMINED FROM TOWN OF GIBSONS AS-CONSTRUCTED RECORDS AND THE ENGINEER CANNOT BE HELD RESPONSIBLE FOR THEIR ACCURACY. THE CONTRACTOR IS TO VERIFY THE LOCATIONS AND ELEVATION OF ALL EXISTING SERVICES AND TIE-IN POINTS PRIOR TO CONSTRUCTION AND TO NOTIFY THE ENGINEER OF ANY DISCREPANCIES, CONFLICTS OR OMISSIONS.
16. OPEN TRENCH OPERATIONS IN EXISTING PAVEMENT SHALL BE VERTICAL AND REPLACED WITH HOT MIX ASPHALT AFTER BACKFILL AND COMPACTION WITHIN 48 HOURS OF TRENCH WORK. NO TRENCHES IN EXISTING ROADWAYS SHALL BE LEFT UNCOVERED OVERNIGHT; THEY SHALL BE TEMPORARILY BACKFILLED AND SURFACED WITH COLD MIX ASPHALT, OR STEEL PLATES SHALL BE USED TO COVER THE TRENCHES. ALL PAVEMENT, BOULEVARDS, ETC. ARE TO BE RESTORED TO ORIGINAL CONDITIONS WHERE NO IMPROVEMENT IS PROPOSED UNDER THIS CONTRACT.
17. THE CONTRACTOR SHALL USE EXTREME CARE WHEN WORKING NEAR EXISTING SERVICES AND ANY SERVICES DISTURBED ARE TO BE REPLACED TO THE SATISFACTION OF THE TOWN OF GIBSONS OR OTHER APPROVING AGENCIES.
18. ALL SURVEY MONUMENTS MUST BE PROTECTED AND ANY DAMAGE IS TO BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
19. ALL EXISTING IMPROVEMENTS ARE TO BE RESTORED TO THE SATISFACTION OF THE TOWN OF GIBSONS.
20. FIGURED DIMENSIONS SHALL GOVERN OVER SCALED DIMENSION.
21. THE CONTRACTOR IS ADVISED TO REVIEW THE ELECTRICAL DRAWINGS FOR COORDINATION AND INSTALLATION OF ELECTRICAL DUCT WORK AND FACILITIES.

MUNICIPAL PROJECT No. SD-YYYY-##

APLIN & MARTIN PROJECT No. 13-020



TOPOGRAPHIC SURVEY
BY LARRY W. PENONZEIC,
GIBSONS, B.C.



NOTICE TO CONTRACTOR
IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S SURVEYOR TO VERIFY THAT ALL LEGAL SURVEY DIMENSIONS SHOWN ON THE ENGINEER'S DRAWINGS AGREE WITH THOSE ON THE REGISTERED LEGAL SURVEY PLAN. SHOULD THERE BE ANY DISCREPANCIES, THEN IMMEDIATELY NOTIFY THE ENGINEER OF RECORD

LEGAL DESCRIPTION:					
B.M. MONUMENT NO. . ELEVATION: . LOCATED AT 24 AVENUE AND 164 STREET					
REV. NO.	DESCRIPTION	DR	CH	DATE	APP
1	150% DESIGN	AS	MB	XX-XX-16	TMJS
2	TENDER SUBMISSION	VG	MB	29-11-16	TMJS
3	DP SUBMISSION	VG	MB	13-12-16	TMJS
4	REVISED DP SUBMISSION	VG	MB	26-01-17	TMJS
5	REVISED DP SUBMISSION	VG	MB	19-04-17	TMJS

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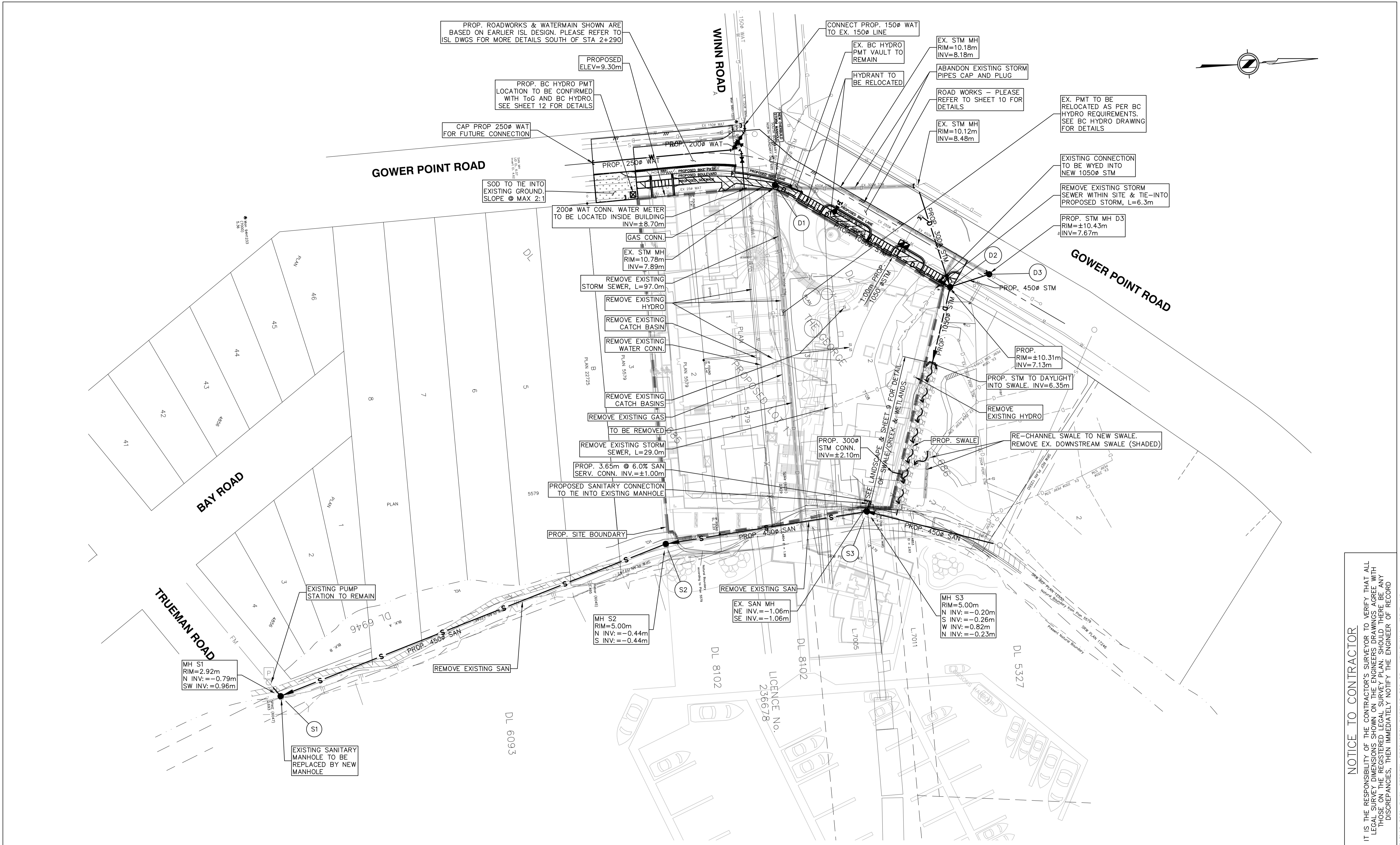
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PROJECT:
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GOWER POINT ROAD, GIBSONS, BC

The location of existing underground utilities are shown in an approximate way only & have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agree to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

TITLE:
PRELIMINARY SUBDIVISION PLAN

DESIGN: VG/MB	CHECK: MB
DRAWN: VG/AS	APPR: TMJS
A & M FILE: 13-020	
DRAWING DATE: OCTOBER 2016	
PROJECT NO. .	SCALE: HORZ. 1:500 VERT. N.A.
DRAWING NO. .	A & M DRAWING NO. 13-020-02
SHEET NO. 02 OF 14	REV. 5



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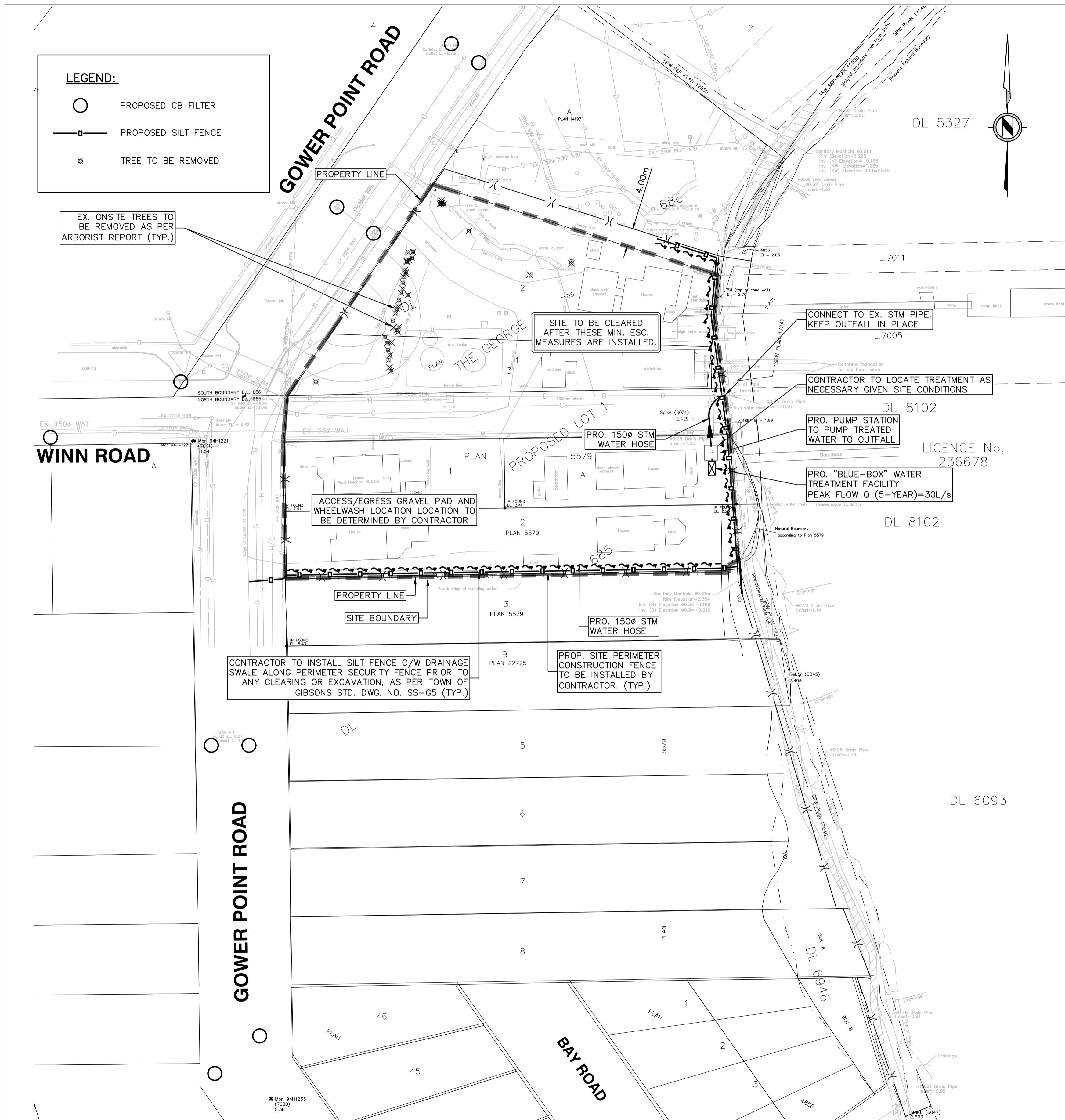
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TITLE:		KEY PLAN	
PROJECT NO.	SCALE :	DRAWING DATE:	
DRAWING NO.	HORZ. 1:500 VERT. N.A.	OCTOBER 2016	
	A & M DRAWING NO.	SHEET NO.	REV.
	13-020-03	03 OF 14	5

DESIGN: VG/MB **CHECK:** MB
DRAWN: VG/AS **APPR:** TMJS

A & M FILE:
13-020



- LEGEND:**
- PROPOSED CB FILTER
 - PROPOSED SILT FENCE
 - ⊗ TREE TO BE REMOVED

EX. ONSITE TREES TO BE REMOVED AS PER ARBORIST REPORT (TYP.)

SITE TO BE CLEARED AFTER THESE MIN. ESC. MEASURES ARE INSTALLED.

CONNECT TO EX. STM PIPE. KEEP OUTFALL IN PLACE.

CONTRACTOR TO LOCATE TREATMENT AS NECESSARY GIVEN SITE CONDITIONS

PRO. PUMP STATION TO PUMP TREATED WATER TO OUTFALL

PRO. "BLUE-BOX" WATER TREATMENT FACILITY PEAK FLOW Q (5-YEAR)=30L/s

ACCESS/EGRESS GRAVEL PAD AND WHEELWASH LOCATION TO BE DETERMINED BY CONTRACTOR

CONTRACTOR TO INSTALL SILT FENCE C/W DRAINAGE SWALE ALONG PERIMETER SECURITY FENCE PRIOR TO ANY CLEARING OR EXCAVATION, AS PER TOWN OF GIBSONS STD. DWG. NO. SS-G5 (TYP.)

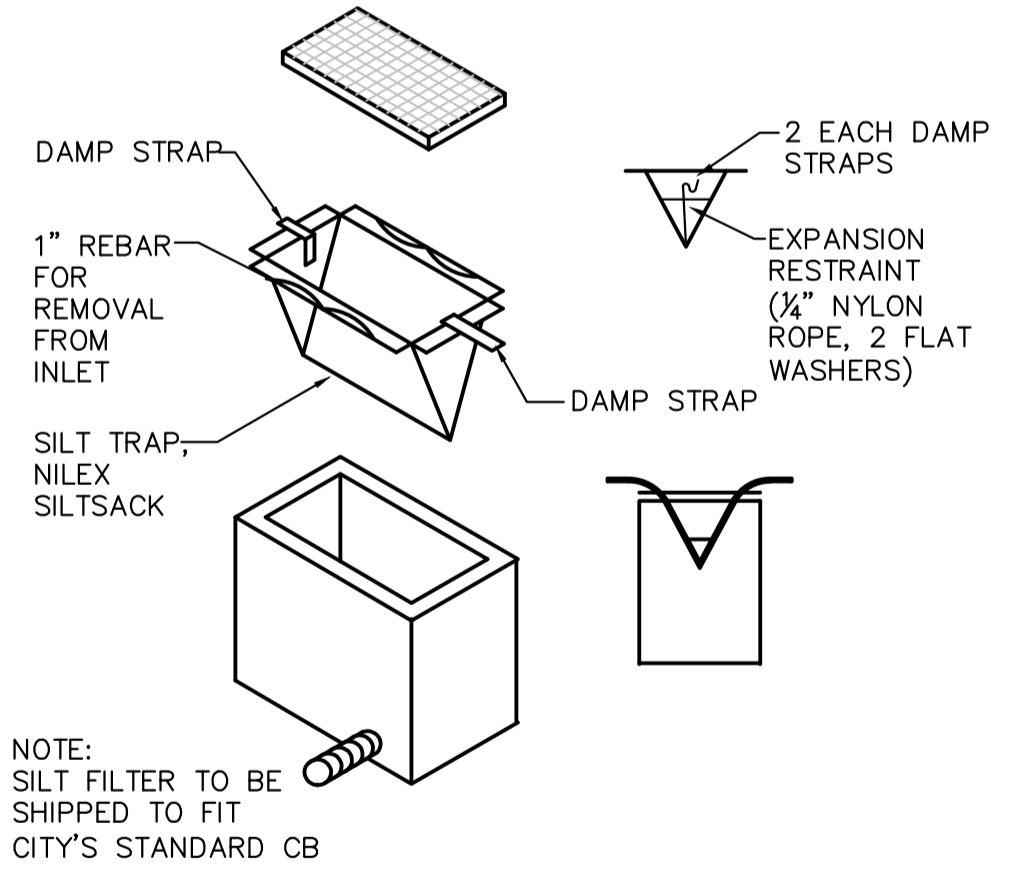
PROP. SITE PERIMETER CONSTRUCTION FENCE TO BE INSTALLED BY CONTRACTOR. (TYP.)

PRIOR TO START OF CONSTRUCTION:

1. ALL WORK TO BE UNDERTAKEN AND COMPLETED BY DEVELOPER AND CONTRACTOR IN SUCH A MANNER AS TO PREVENT THE RELEASE OF SEDIMENT LADEN WATER INTO ANY WATERCOURSE OR STORM SEWER.
2. ALL SEDIMENT CONTROL FACILITIES SHOWN MUST REMAIN IN PLACE UNTIL APPROVAL FROM TOWN OF GIBSONS TO REMOVE.
3. THE CONTRACTOR SHALL INSTALL THE FOLLOWING ITEMS PRIOR TO THE START OF CONSTRUCTION (INCLUDING CLEARING, STRIPPING, EXCAVATION OR OTHER RELATED WORKS):
 - SILT FENCES ALONG THE EAST AND SOUTH BOUNDARY OF THE SITE
4. ONSITE TREES ARE TO BE FELLED ALL AT THE SAME TIME. STUMPS ARE TO BE REMOVED AT THIS STAGE.
5. WHILE SITE CONSTRUCTION IS ONGOING, SITE CONTRACTOR IS TO BE RESPONSIBLE FOR ENSURING SEDIMENT CONTROL FACILITIES ARE MAINTAINED AND WORKING ADEQUATELY TO CONTROL ALL DISCHARGES FROM THE SITE. SHALL BE INSPECTED BY THE DEVELOPER ON A WEEKLY BASIS TO ENSURE PROPER OPERATION UNTIL REMOVAL.
6. SILT FENCE IS TO BE 'NILEX SILT' OR EQUIVALENT AS APPROVED BY THE ENGINEER. FENCE TO HAVE MINIMUM CLEAR WATER FLOW RATE OF 325lps/s/m. FENCE TO BE STAPLED @ 150mm O/C TO 100mmØ TREATED POSTS SPACED AT 1.0m O/C. BOTTOM OF SILT FENCE TO BE ANCHORED AS PER DETAIL.
7. ANY IRREGULARITIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
8. ALL DISTURBED AREAS TO BE PROTECTED FROM EROSION RUNOFF WITH COCONUT FIBRE MAT, EROSION CONTROL MATTING, HYDRO-SEEDING ...ETC.
9. COVER ALL TEMPORARY STOCKPILES WITH SUITABLE POLY OR TARPS.
10. INSTALL, MAINTAIN ONCE WEEKLY AND REPLACE, AS NECESSARY, IN ALL CATCH BASINS/LAWN DRAINS IN VICINITY OF CONSTRUCTION AREA WHERE SURFACE RUNOFF MAY ENTER THE STORM SEWER SYSTEM.
11. ALL AFFECTED STREETS TO BE MECHANICALLY VACUUM SWEEPED CLEAN REGULARLY ON A DAILY BASIS AS REQUIRED. FLUSHING OF THE ROADWAY IS PROHIBITED.
12. ALL SEDIMENT SWALES, BERMS AND SILT FENCES SHALL BE REMOVED AT DECOMMISSIONING.
13. DUST NUISANCE SHALL BE REDUCED BY THE APPLICATION OF WATER SPRAY TO THE EXPOSED SOURCE OF THE DUST. THE FREQUENCY OF SUPPRESSION WILL BE AS REQUIRED OR AS DIRECTED BY THE EOR OR THE TOWN OF GIBSONS STAFF.
14. CONTRACTOR TO ALLOW FOR PROVISIONAL STREET SWEEPING PENDING ON-SITE INSPECTION REVIEW.
15. NO WORKS TO OCCUR UNTIL ALL REQUIRED DEVELOPMENT PERMITS HAVE BEEN ISSUED BY THE TOWN OF GIBSONS (DPA 1, 2 & 9).

MAINTENANCE:

16. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT FACILITIES ONCE WEEKLY AND PRIOR TO THE ONSET OF A SIGNIFICANT RAINFALL.
17. CATCH BASINS AND LAWN BASINS SHALL BE CLEANED ONCE WEEKLY.
18. ANY IRREGULARITIES SHALL BE REPORTED TO THE ESC MONITOR.
19. ESC MONITOR TO SUBMIT ESC REPORTS TO THE TOWN OF GIBSONS ON A BI-WEEKLY BASIS OR AFTER SIGNIFICANT RAINFALL (MORE THAN 25mm IN 24 HOUR PERIOD).



SILT FILTER FOR CATCH BASINS
N.T.S.

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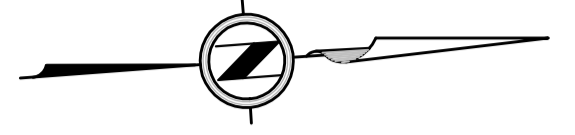
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TITLE: EROSION AND SEDIMENT CONTROL PLAN		DESIGN: VG/MB DRAWN: VG/AS	CHECK: MB APPR: TMJS
PROJECT NO. .		A & M FILE: 13-020	
DRAWING NO. .		DRAWING DATE: NOV 2016	
SCALE: HORZ. 1:1000 VERT. N.A.		SHEET NO. 04 OF 14	
A & M DRAWING NO. 13-020-04		REV. 5	

LEGEND:
 MEET EXISTING ELEVATION ∇ (11.50) M
 EXISTING ELEVATION ∇ (11.50)
 PROPOSED ELEVATION ∇ (11.50)
NOTE:
 PROPOSED ELEVATIONS SHOWN ARE PROPERTY LINE AND GUTTER LINE



SEE SHEET 11 FOR MORE ROADWORKS DETAILS

SEE ARCHITECTURAL AND LANDSCAPE DRAWINGS FOR ONSITE GRADING DETAILS

SEE ARCHITECTURAL AND LANDSCAPE DRAWINGS FOR BROADWALK, RAMP AND LANDSCAPING GRADING DETAILS

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TITLE:
SITE AND LOT GRADING PLAN

PROJECT NO.
 .

DRAWING NO.
 .

SCALE:
 HORZ. 1:500
 VERT. 1:100

A & M DRAWING NO.
13-020-05

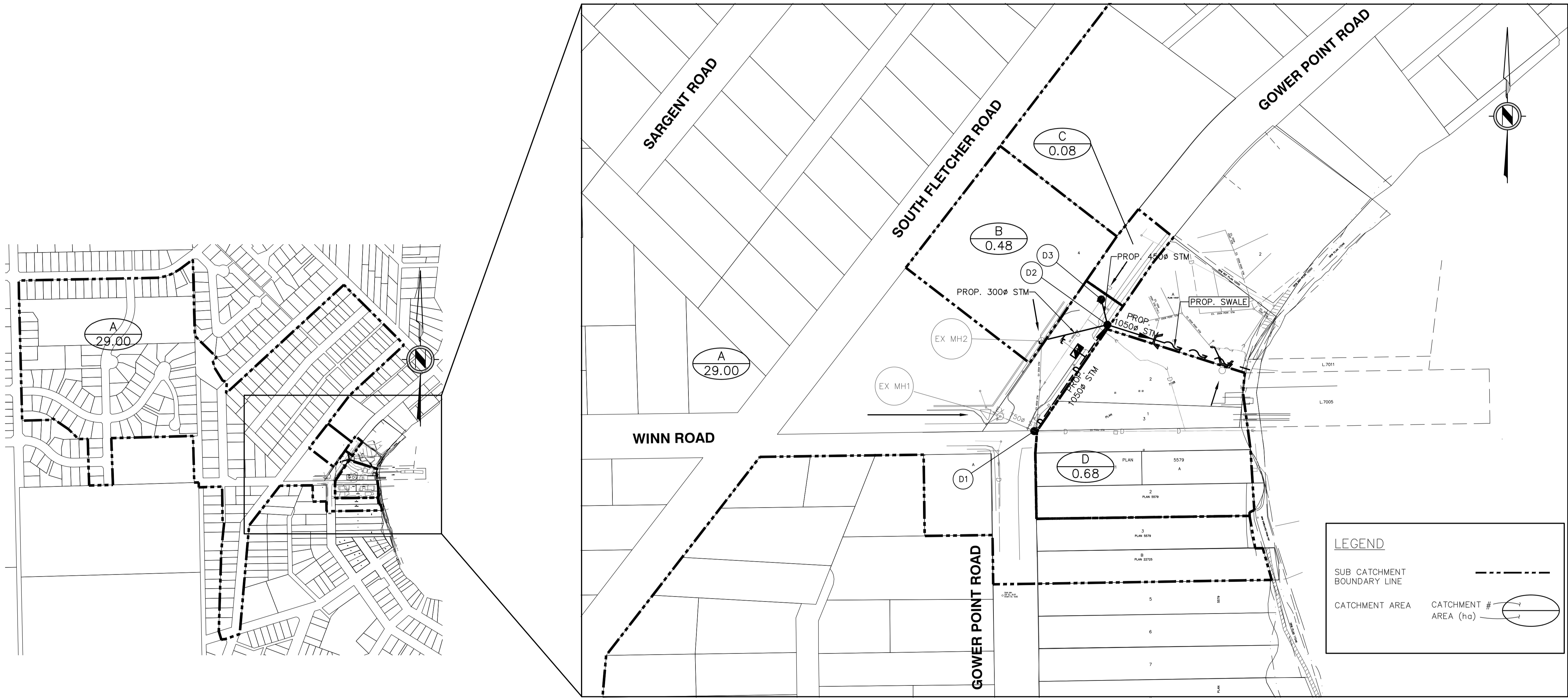
DESIGN: VG/MB **CHECK:** MB
DRAWN: VG/AS **APPR:** TMJS

A & M FILE:
13-020

DRAWING DATE:
OCTOBER 2016

SHEET NO. 05 OF 14 **REV.** 5

DRAINAGE SYSTEM DESIGN - CALCULATION SHEET																		
MUN. PROJ. #: N/A					DESIGN RETURN PERIOD: 10 year / 100 year ("I" as per Schedule 9 - ToG Bylaw No. 1175, 2012)					A&M Project No:		13-020						
PROJECT TITLE: THE GEORGE GIBSONS OCEANFRONT MARINE HOTEL					Manning's "n": 0.013					Sheet:		1 of 1						
PROJECT LOCATION: OCEANFRONT MARINE HOTEL GIBSONS					Q10/100 = RAIN N = 0.00278					Date:		Dec-7-16						
PROJECT LOCATION: GIBSONS										By:		VG						
										Chk:		TMJS						
Location of Drainage Area	From MH	To MH	Tributary Area "ha"			SUM AxR	Time of Concentration "Min"			Rain Fall Int. "I"	Q10 Q100	Sewer Design						
			A	R	AxR		Inlet	Sect.	Total			S %	DIA mm	L m	V m/s	Qcap cms	10 YEAR FLOW ROUTES	100 YEAR FLOW ROUTES
A	EX MH1	D1	29.00	0.70	20.30	20.30	30.00		30.00	21	1.185	2.48	750	16.67	3.968	1.753	IN PIPE	IN PIPE
				0.70	20.30	20.30												
B	D1	D2	0.48	0.70	0.34	20.64	30.00	0.07	30.07	21	1.205	1.30	1050	58.13	3.596	3.114	IN PIPE	IN PIPE
				0.70	0.34	20.64												
C	D2	SWALE	0.08	0.70	0.06	20.69	30.07	0.27	30.34	21	1.208	3.47	1050	22.69	5.875	5.087	IN PIPE	IN PIPE
				0.70	0.06	20.69												



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TITLE: **OFFSITE SWMP**

PROJECT NO.

DRAWING NO.

SCALE: HORZ. VERT. A & M DRAWING NO. 13-020-06

DESIGN: VG/MB CHECK: MB
DRAWN: VG/AS APPR: TMJS

A & M FILE: 13-020

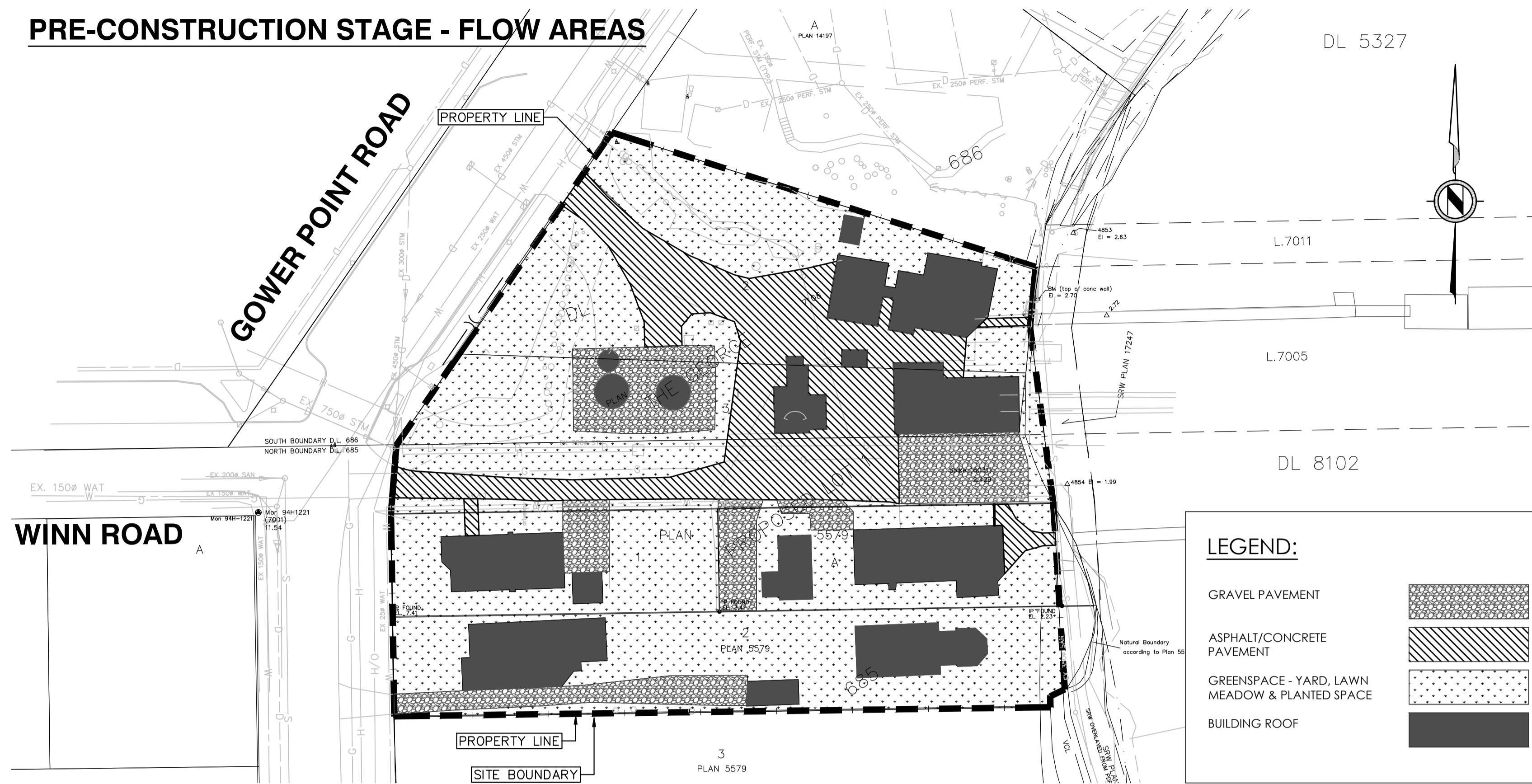
DRAWING DATE: **OCTOBER 2016**

SHEET NO. 06 OF 14 REV. 5

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PRE-CONSTRUCTION STAGE - FLOW AREAS



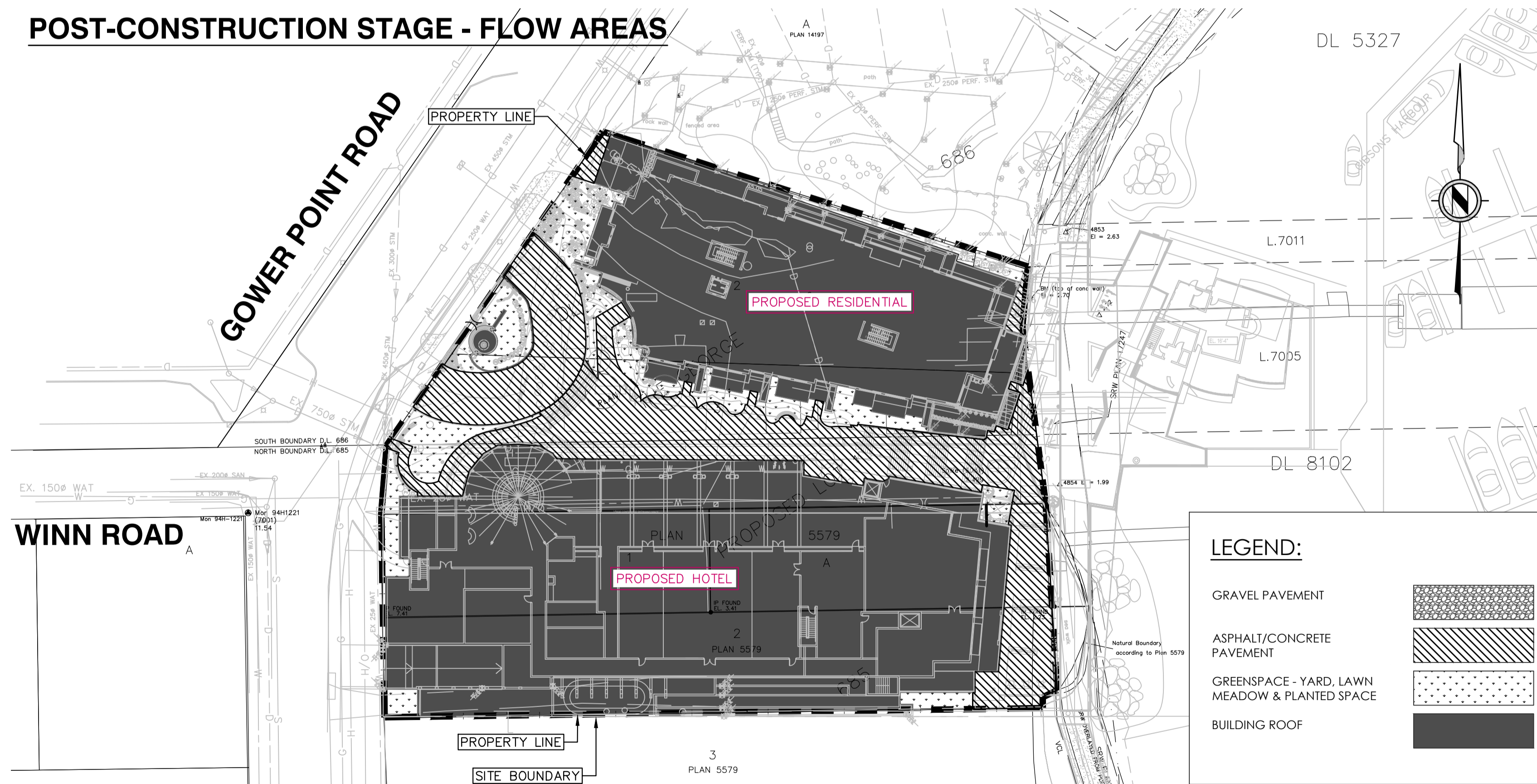
PRE-CONSTRUCTION RUN-OFF COEFFICIENT

Lot Area (m ²)	Gravel Pavement	Building Roof	Asphalt/Concrete	Greenspace
6749	768	1254	1179	3548
A (ha)				
0.6749				
Total A (m ²)	768	1254	1179	3548
R (Runoff Coefficient)	0.7	0.95	0.95	0.25
A*R	537.6	1191.3	1120.05	887
Average R =				0.55

POST-CONSTRUCTION RUN-OFF COEFFICIENT

Lot Area (m ²)	Gravel Pavement	Building Roof	Asphalt/Concrete	Greenspace
6749	0	4807	997	516
A (ha)				
0.6749			14	91
Total A (m ²)	0	4807	1307	635
R (Runoff Coefficient)	0.7	0.95	0.95	0.25
A*R	0	4566.65	1241.65	158.75
Average R =				0.88

POST-CONSTRUCTION STAGE - FLOW AREAS



Gower Point Road, Gibsons, BC 13-020
12-Jan-17

10 Year Peak Flow Calculations

	T _c min	Runoff coefficient %	Area Ha	Intensity mm	n	Q cms
Q _{pre}	15	0.55	0.6749	32	0.00278	0.033
Q _{post}	10	0.88	0.6749	40	0.00278	0.066

Storage Volume Required (Modified Rational Method)

$$\text{Storage Volume} = T_r (Q_{p2} - Q_{rel}) + 0.5 \times T_c \times Q_{rel}^2 (1/Q_{p2} - 1/Q_{p1})$$

- T_r = Duration of storm, in seconds
- T_c = Time to concentration, in seconds
- Q_{p1} = Peak flow for storm, T_r = T_c, cms
- Q_{p2} = Peak flow for storm specified, cms
- Q_{rel} = Maximum release rate, cms = Q_{pre}
- I = Rainfall Intensity, mm (Gibsons, Schedule L)

Maximum Storage Required = **16.35 cubic metres**

Rainfall Duration T _r min	Rainfall Intensity I mm	Peak Flow Q _{p1} cms	Peak Flow Q _{p2} cms	Required Storage cm
5	50	0.066	0.083	13.98
8	40	0.066	0.066	15.88
10	36	0.066	0.059	16.35
20	26	0.066	0.042	14.05
35	20	0.066	0.032	3.77
50	16	0.066	0.027	-10.31
65	15	0.066	0.024	-26.56

NOTICE TO CONTRACTOR

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LEGAL DESCRIPTION:
B.M. MONUMENT NO. . ELEVATION: .
LOCATED AT 24 AVENUE AND 164 STREET

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
1	DP SUBMISSION	VG	MB	13-01-17	TMJS
2	REVISED DP SUBMISSION	VG	MB	07-04-17	TMJS

APLIN MARTIN
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#910 - 1111 West Hastings Street, Vancouver, B.C. Canada V6E 2J3
Tel: (604) 678-9434, Fax: (604) 597-9061, Email: general@aplinmartin.com

CLIENT: **KLAUS FUERNISS ENTERPRISES INC.**
521 BRIDGEMAN ROAD, GIBSONS, BC V0N 1V1
PH. 604-220-9835

PROJECT: **THE GEORGE GIBSONS OCEANFRONT MARINE HOTEL**
GOWER POINT ROAD, GIBSONS, BC

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TITLE: **ONSITE SWMP**

PROJECT NO. .
DRAWING NO. .

SCALE :
HORZ. 1:500
VERT. N.A.

A & M DRAWING NO. **13-020-07**

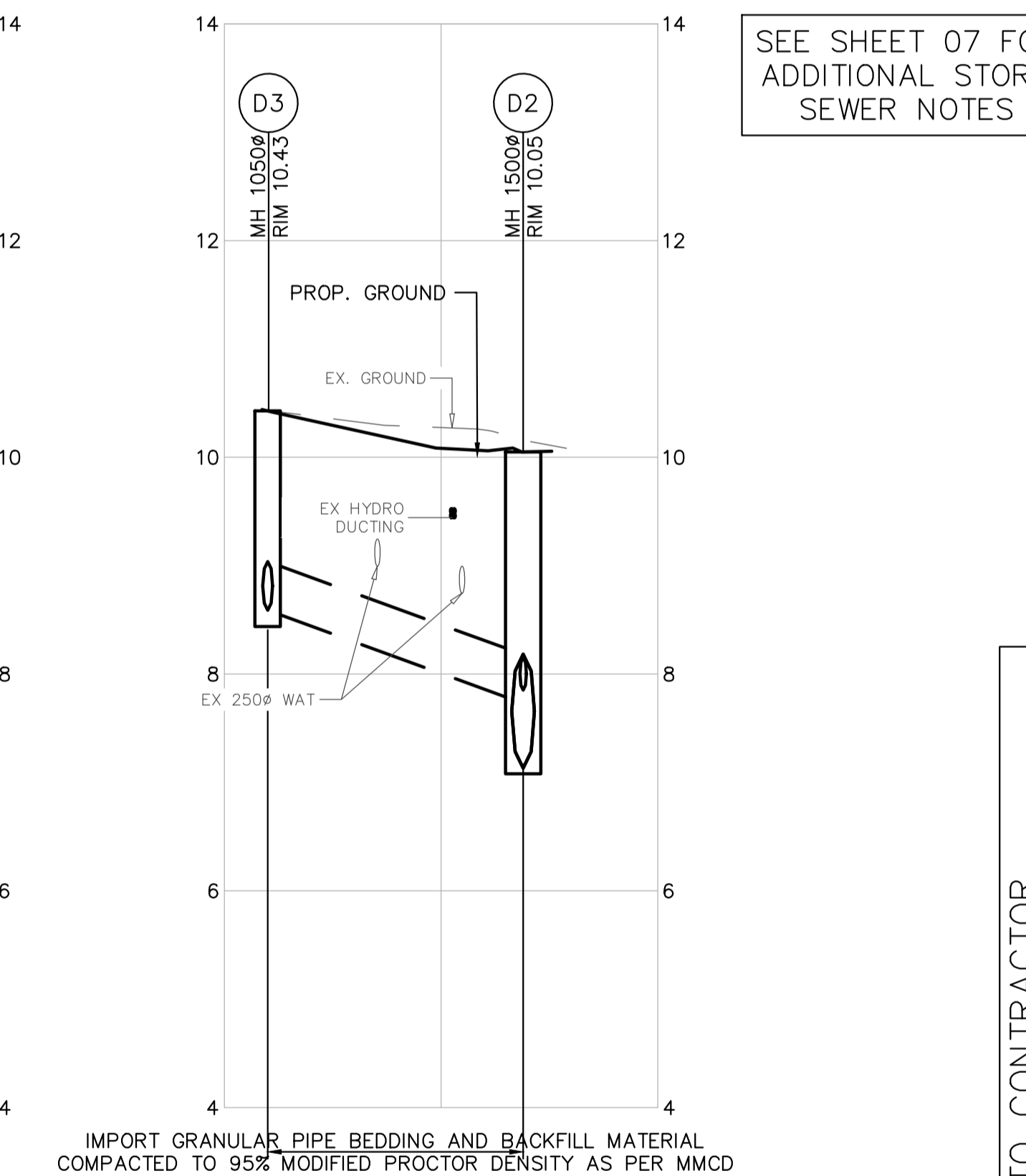
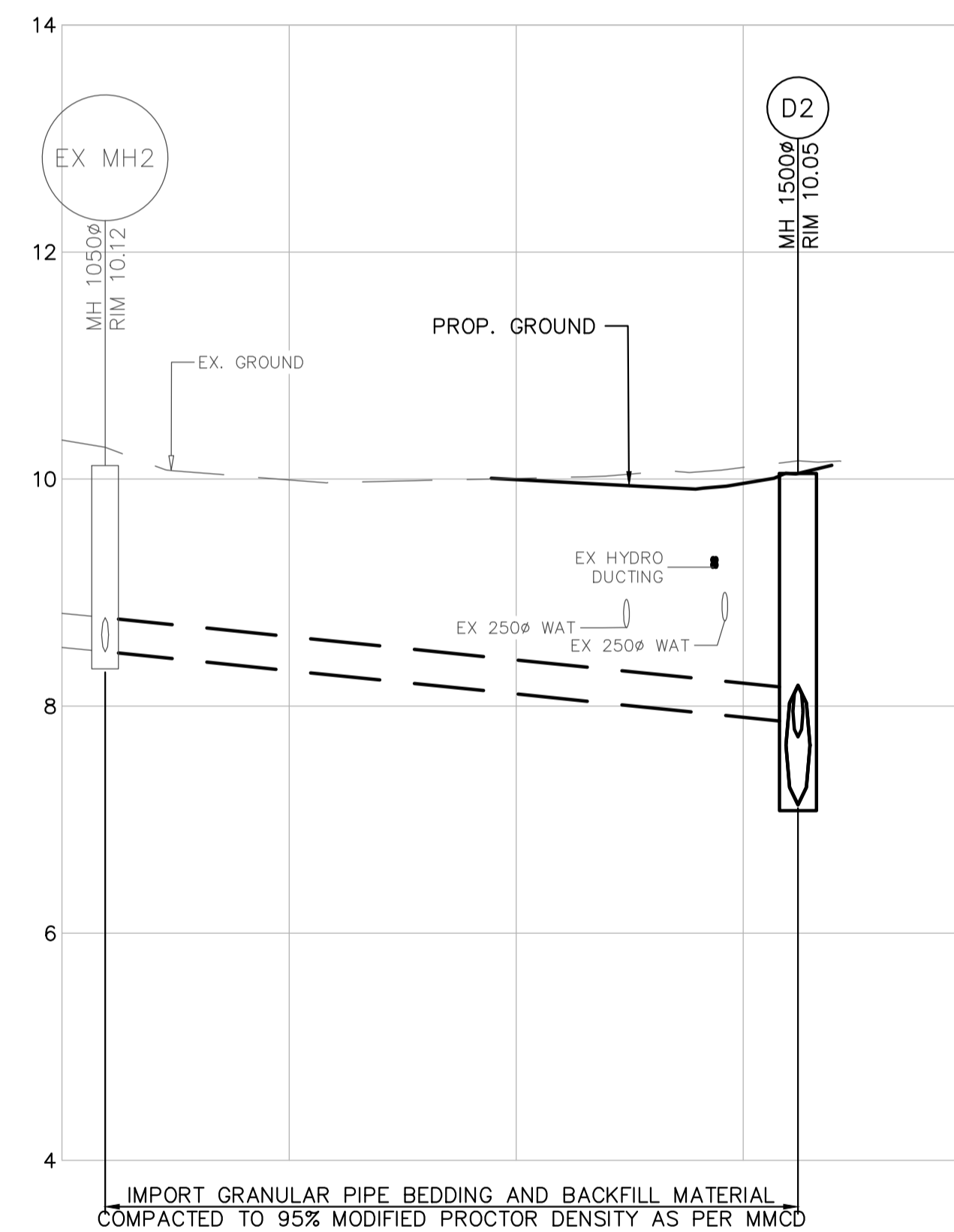
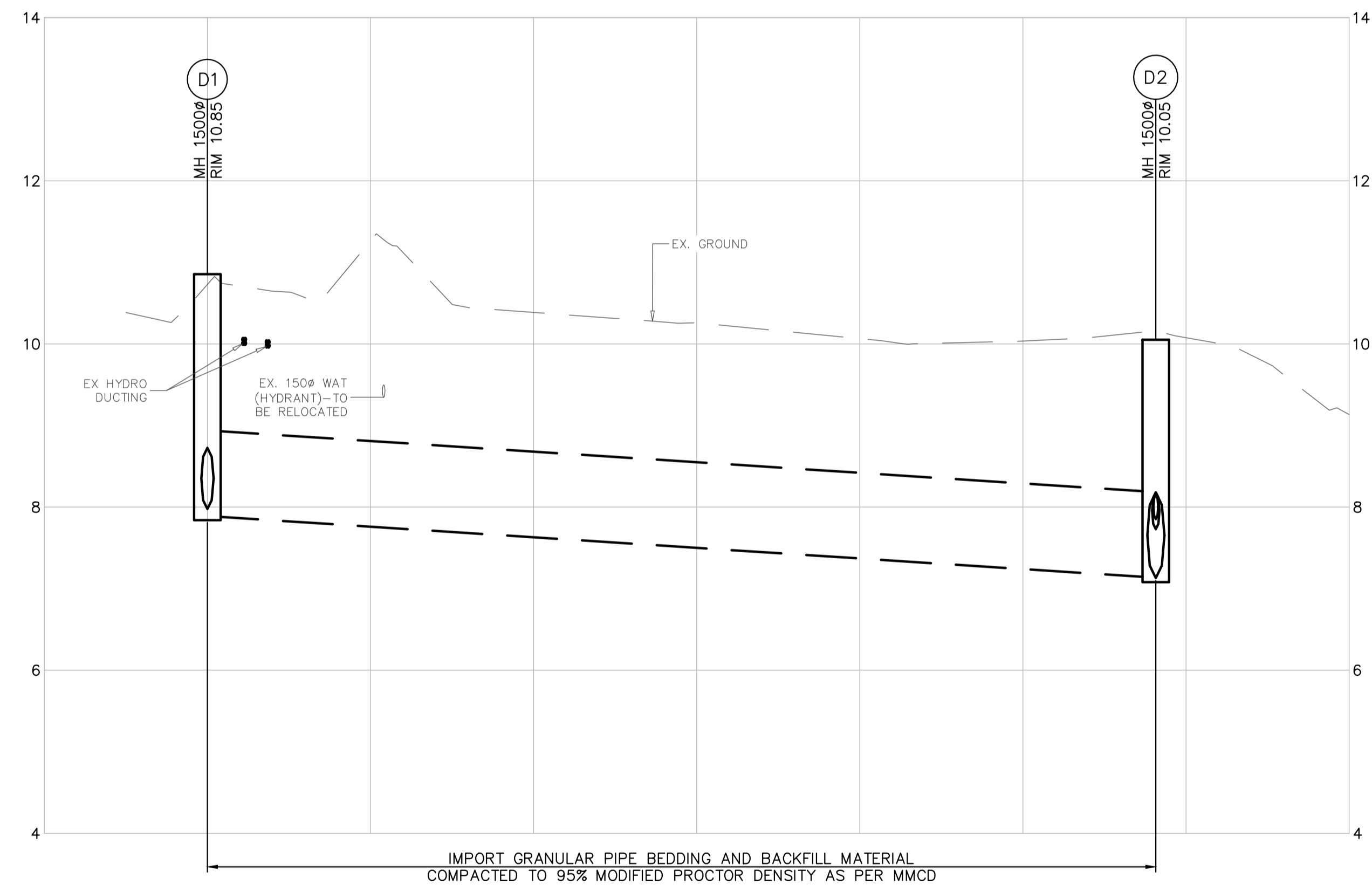
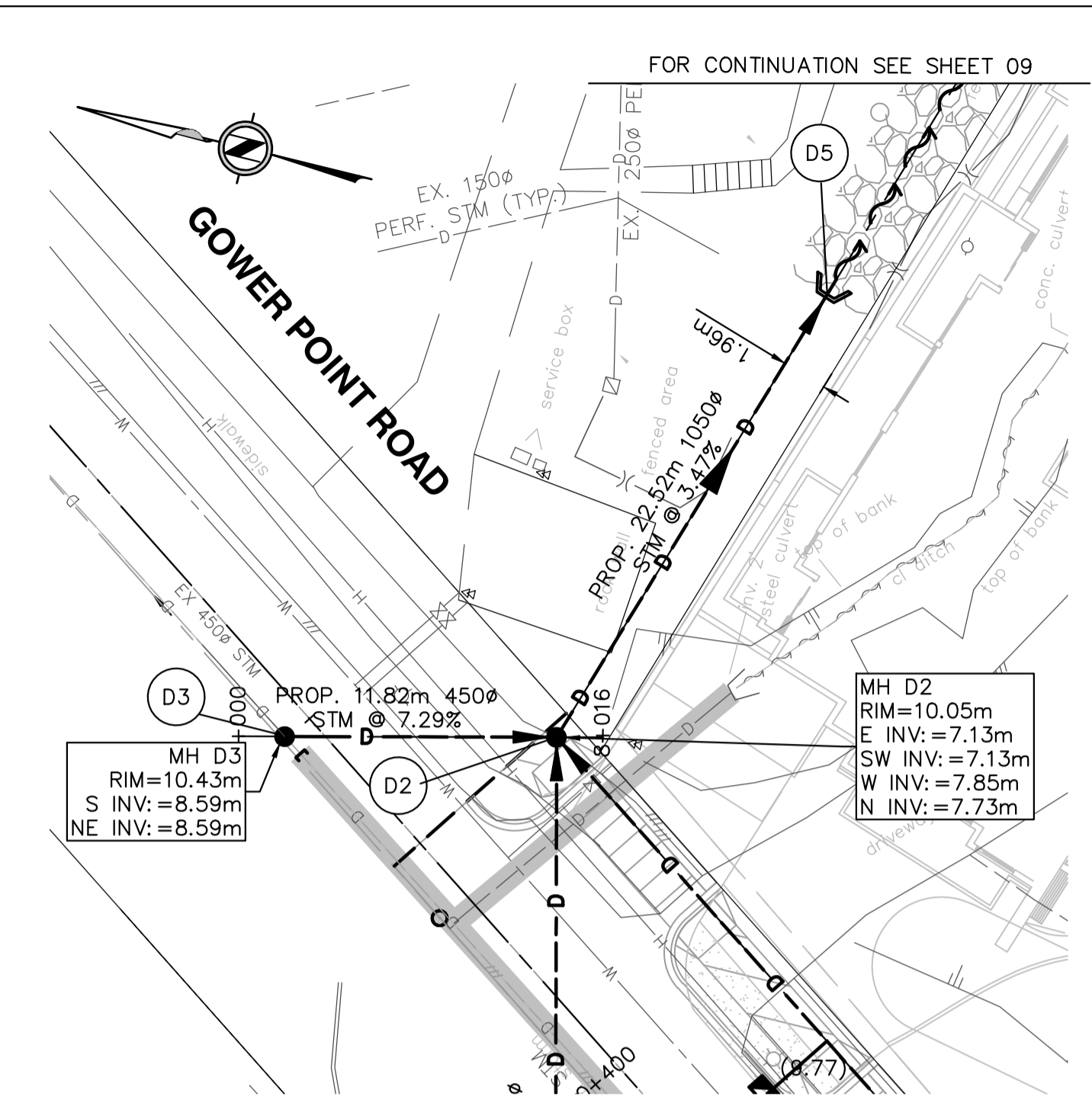
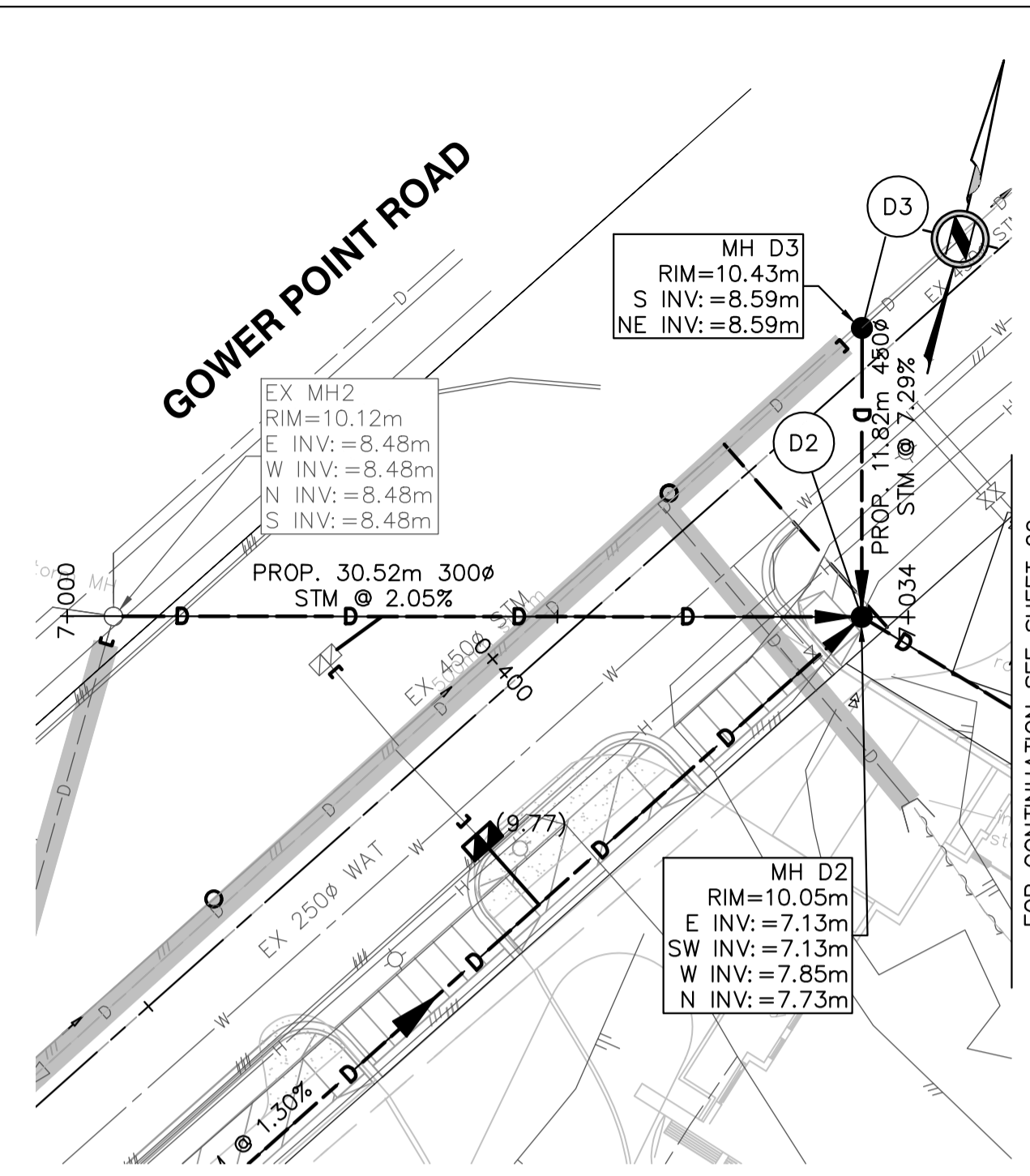
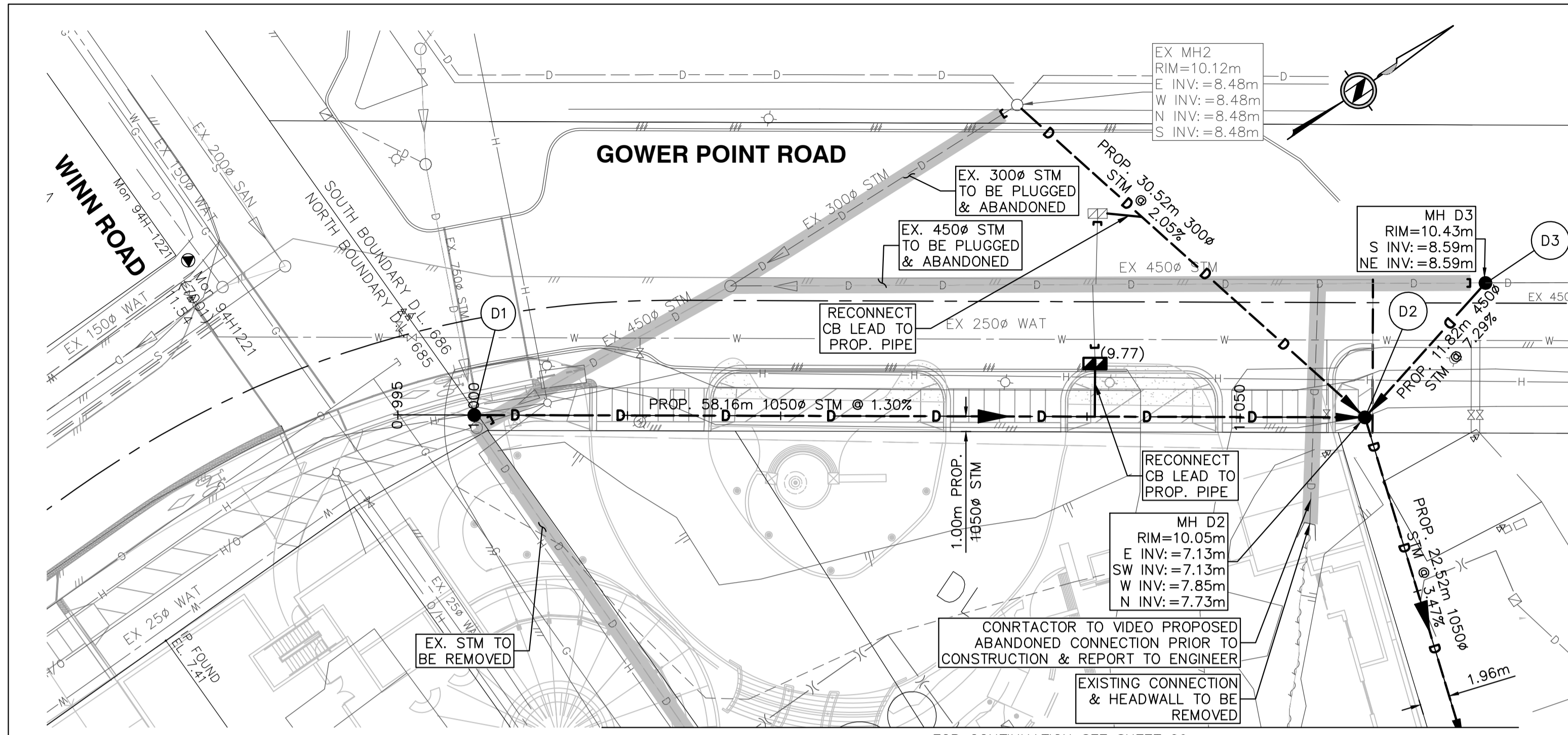
DESIGN: VG/MB CHECK: MB
DRAWN: VG/AS APPR: TMJS

A & M FILE: **13-020**

DRAWING DATE: **JANUARY 2017**

SHEET NO. **07 OF 14** REV. **2**

Apr 19, 2017 12:46pm M:\2013\13-020\DRAWINGS\OFFSITE\PRODUCTION\DWG\13-020-07 - ONSITE SWMP.dwg/07 - ONSITE SWMP - V.GAR



STORM LENGTH, SIZE, TYPE AND GRADE	58.15m-1050Ø PVC SDR 35 STM @ 1.30%
INVERT ELEVATION	7.98 NW 7.89 NE
CHAINAGE	0+990

0+990	1+000	1+010	1+020	1+030	1+040	1+050	1+058.15	1+060	1+070
	7.98 NW						7.13 SW		
	7.89 NE						7.85 W		
							7.73 N		
							7.13 E		

7+000	7+001.89	7+010	7+020	7+030	7+030	1+058.15	7+040
	8.48 W					7.13 SW	
	8.48 N					7.85 W	
	8.46 S					7.73 N	
	8.48 E					7.13 E	

8+000	8+002	8+010	8+010	1+058.15	8+020
	8.59 NE			7.13 SW	
	8.59 S			7.85 W	
				7.73 N	
				7.13 E	

LEGAL DESCRIPTION:					
B.M. MONUMENT NO.		ELEVATION:			
LOCATED AT 24 AVENUE AND 164 STREET					
REV. NO.	DESCRIPTION	DR	CH	DATE	APP
1	150% DESIGN	AS	MB	XX-XX-16	TMJS
2	TENDER SUBMISSION	VG	MB	29-11-16	TMJS
3	DP SUBMISSION	VG	MB	13-12-16	TMJS
4	REVISED DP SUBMISSION	VG	MB	26-01-17	TMJS
5	REVISED DP SUBMISSION	VG	MB	19-04-17	TMJS

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521 BRIDGEMAN ROAD, GIBSONS, BC V0N 1V1
PH. 604-220-9835

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GOWER POINT ROAD, GIBSONS, BC

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TITLE: **STORM SEWER PLAN AND PROFILE 1**

PROJECT NO.

DRAWING NO.

SCALE:

HORZ. 1:250
VERT. 1:50

A & M DRAWING NO. **13-020-08**

DESIGN: VG/MB CHECK: MB
DRAWN: VG/AS APPR: TMJS

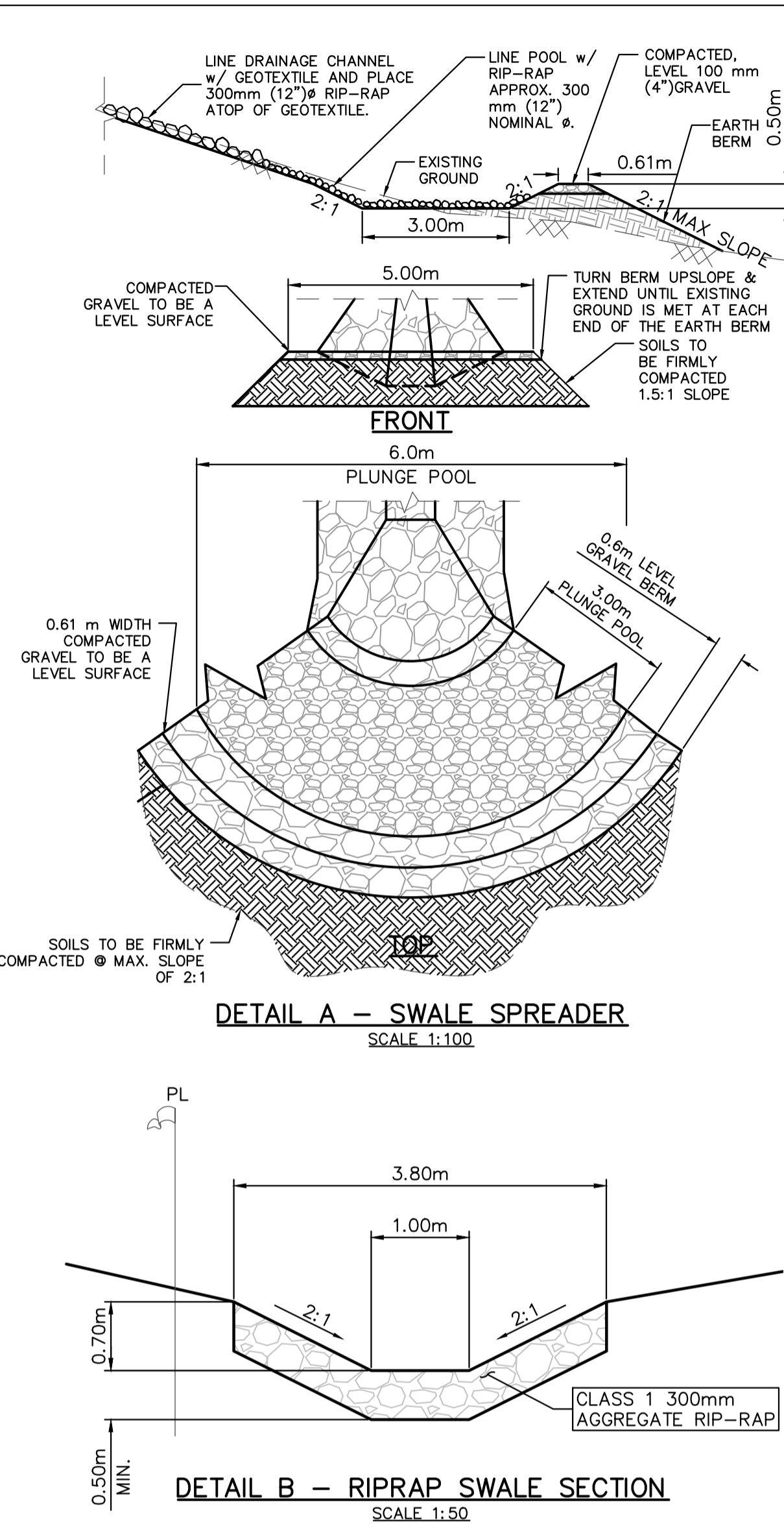
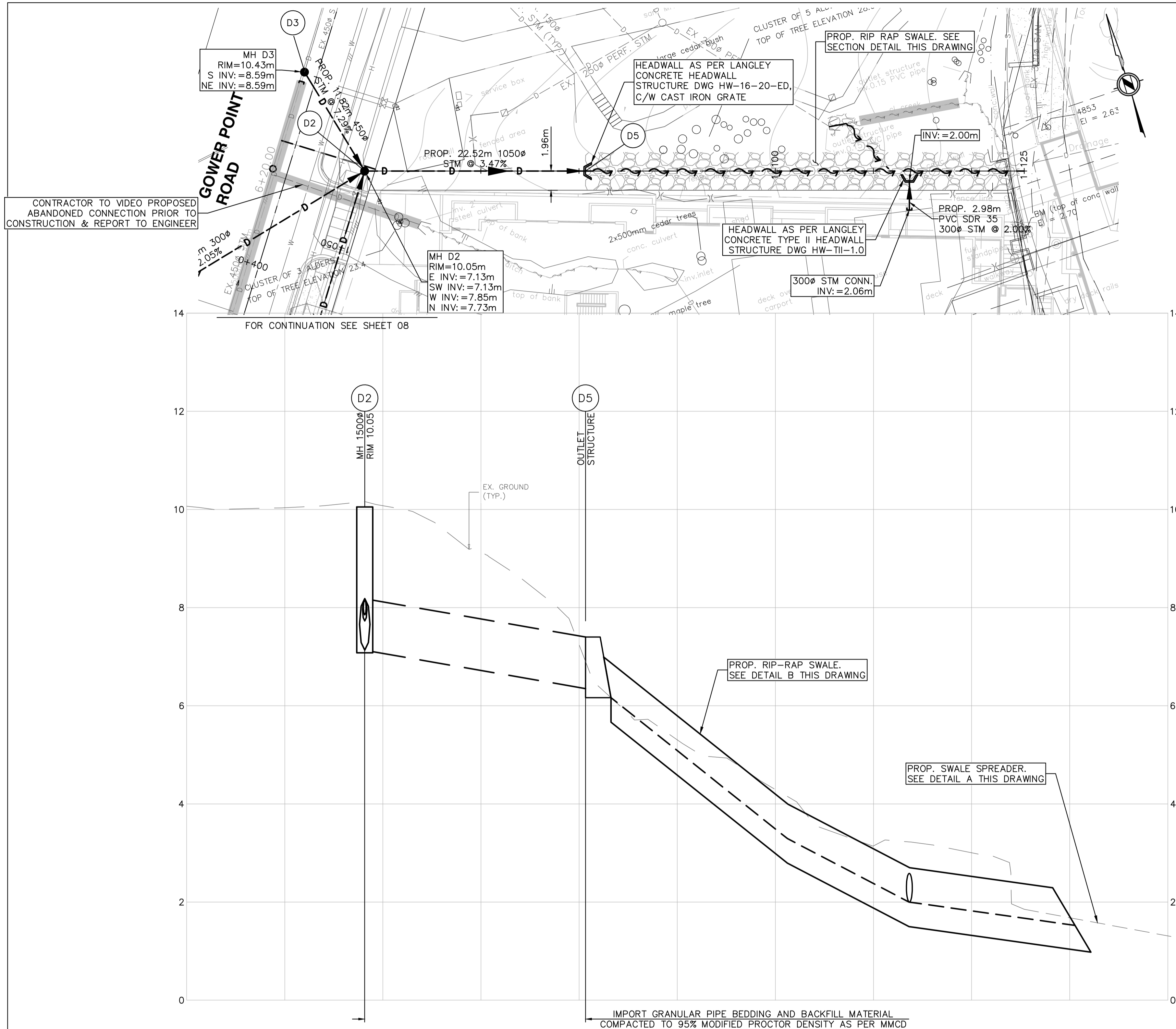
A & M FILE: **13-020**

DRAWING DATE: **OCTOBER 2016**

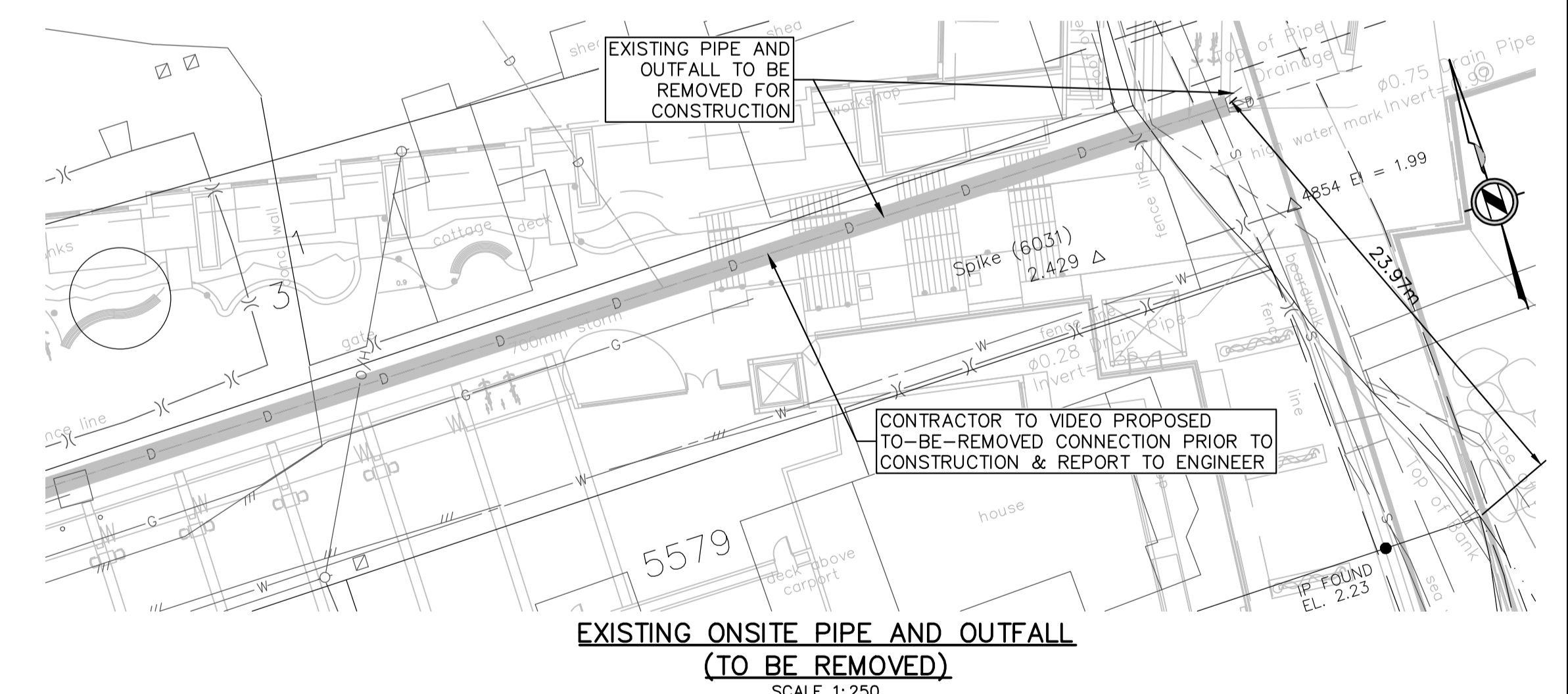
SHEET NO. **08 OF 14** REV. **5**

NOTICE TO CONTRACTOR

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- ### STORM SEWER NOTES
- OFFSITE SEWERS TO BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF GIBSONS SEWER SPECIFICATIONS AND STANDARDS.
 - ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE B.C. PLUMBING CODE UNLESS SPECIFIED ELSEWHERE.
 - THE CONTRACTOR IS TO ESTABLISH LOCATIONS, ELEVATIONS AND ALIGNMENTS OF ALL EXISTING STORM AND SANITARY SEWER SERVICES PRIOR TO CONSTRUCTION TO FACILITATE TIE-INS. ANY DISCREPANCIES WITH THE INFORMATION SHOWN THAT MAY ALTER THE DESIGN SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
 - A MINIMUM OF 0.9m COVER IS REQUIRED OVER EXTERIOR STORM PIPING. IF 0.9m COVER IS NOT ACHIEVABLE USE DWV PIPING CONFORMING TO CAN/CSA B 181.2-M STANDARD OR CONCRETE STORM SEWER PIPING CONFORMING TO ASTM C-14 CLASS 3 SPECIFICATION FOR NON-REINFORCED BELL AND SPIGOT AND ASTM C-76 CLASS III SPECIFICATION FOR REINFORCED BELL AND SPIGOT. THE ENGINEER IS TO BE NOTIFIED OF ANY CHANGES PRIOR TO INSTALLATION.
 - ALL MANHOLES ARE TO BE 1050mm DIAMETER AS PER M.M.C.D. STANDARD DRAWING No. S1
 - ALL CATCH BASINS ARE TO BE AS PER DETAIL UNLESS OTHERWISE NOTED.
 - ALL STORM AND SANITARY SEWER MAIN DEFLECTIONS ARE TO CONFORM TO THE MANUFACTURER'S SPECIFICATIONS.
 - CATCH BASIN LEADS ARE TO BE 150mm DIAMETER AT 1.0% MINIMUM UNLESS OTHERWISE NOTED.
 - STORM AND SANITARY SEWERS ARE TO BE PVC SDR 28 FOR PIPES LESS THAN 150mm DIAMETER AND PVC SDR 35 FOR 150mm DIAMETER PIPE OR GREATER UNLESS OTHERWISE NOTED.
 - ALL WYES ARE TO BE MANUFACTURED.
 - THE CONTRACTOR MUST PRESSURE TEST AND FLUSH ALL NEW SANITARY LINES PRIOR TO TIE-IN PROCEDURES. TESTS ARE TO BE PERFORMED AS PER TOWN OF GIBSONS BUILDING DEPARTMENT REQUIREMENTS. THE CONTRACTOR IS TO PROVIDE THE ENGINEER WITH THE TEST RESULTS.
 - THE CONTRACTOR MUST LAMP OR PIG TEST ALL EXISTING STORM LINES PRIOR TO TIE-IN PROCEDURES. THE CONTRACTOR IS TO PROVIDE THE ENGINEER WITH THE TEST RESULTS.
 - THE CONTRACTOR IS TO REVIEW THE GEOTECHNICAL REPORT AND DETERMINE IF DEWATERING MEASURES ARE NECESSARY DURING TRENCHING OPERATIONS. THE CONTRACTOR IS TO PROVIDE A COST FOR NECESSARY DEWATERING MEASURES IN THE CONTRACT BID.
 - STORM AND SANITARY SEWERS ARE TO BE CONSTRUCTED WITH SEALED JOINTS UNLESS NOTED OTHERWISE.
 - SANITARY AND STORM SERVICE CONNECTIONS ARE TO BE TERMINATED 1.0m FROM THE BUILDING BY THE ONSITE SERVICING CONTRACTOR. CONTINUATION TO THE BUILDING IS TO BE PERFORMED BY THE BUILDING PLUMBING CONTRACTORS, INCLUDING ANY SERVICE CURB STOPS, VALVES OR SEWER CLEANOUTS REQUIRED IMMEDIATELY OUTSIDE BUILDING.
 - CONTRACTOR TO PERFORM VIDEO INSPECTIONS ON TO-BE-ABANDONED PIPES TO CONFIRM NO UNSURVEYED CONNECTIONS EXIST.
 - CONTRACTOR TO PERFORM VIDEO INSPECTIONS ON MAINS AND SERVICE CONNECTIONS POST-CONSTRUCTION.



STORM LENGTH, SIZE, TYPE AND GRADE	22.50m-1050# PVC SDR 35 STM @ 3.47%	
INVERT ELEVATION	7.13 SW 7.85 W 7.73 N 7.13 E	6.35 W 6.35 E
CHAINAGE	1+040, 1+050, 1+058.15, 1+060	1+070, 1+080, 1+080.66, 1+090, 1+100, 1+110, 1+120, 1+130, 1+140

LEGAL DESCRIPTION:
B.M. MONUMENT NO. LOCATED AT 24 AVENUE AND 164 STREET ELEVATION: .

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
1	150% DESIGN	AS	MB	XX-XX-16	TMJS
2	TENDER SUBMISSION	VG	MB	29-11-16	TMJS
3	DP SUBMISSION	VG	MB	13-12-16	TMJS
4	REVISED DP SUBMISSION	VG	MB	26-01-17	TMJS
5	REVISED DP SUBMISSION	VG	MB	19-04-17	TMJS

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521 BRIDGEMAN ROAD, GIBSONS, BC V0N 1V1
PH. 604-220-9835

PROJECT: **THE GEORGE GIBSONS OCEANFRONT MARINE HOTEL**
GOWER POINT ROAD, GIBSONS, BC

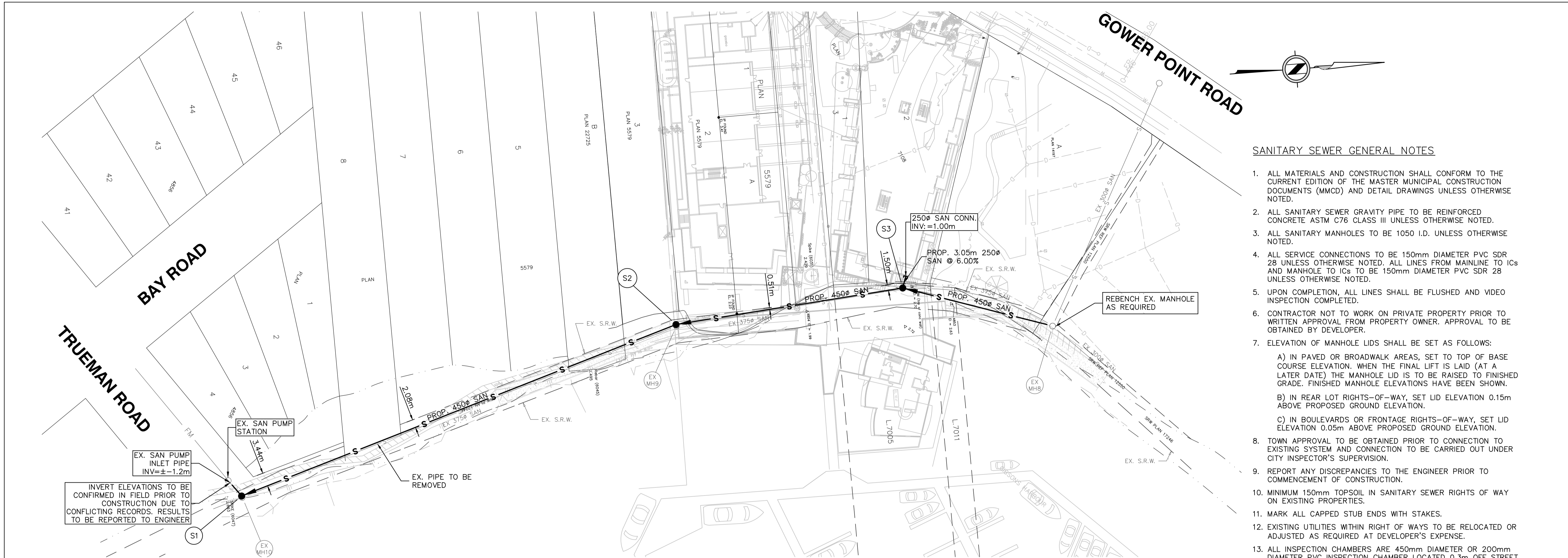
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TITLE: **STORM SEWER PLAN AND PROFILE 2**

DESIGN: VG/MB CHECK: MB
DRAWN: VG/AS APPR: TMJS

A & M FILE: **13-020**

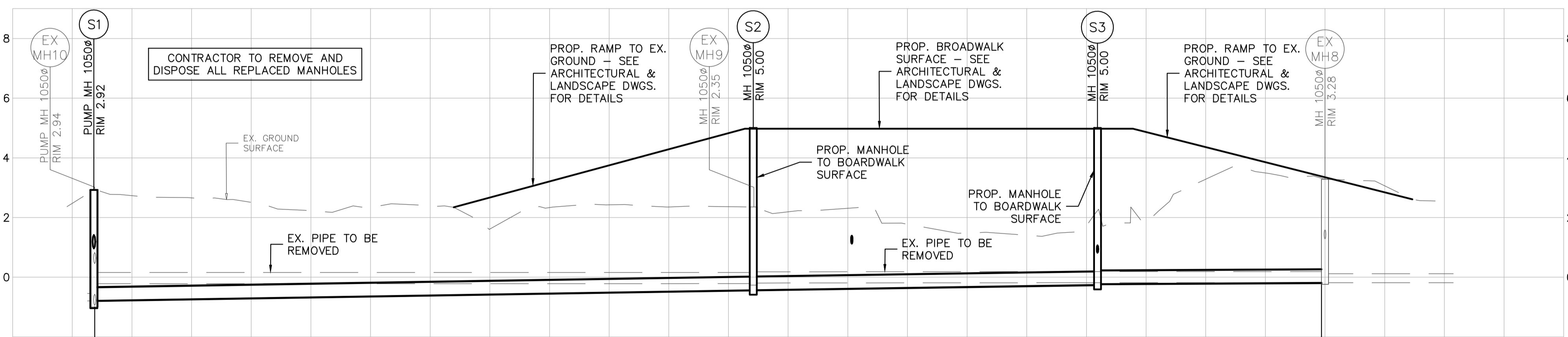
PROJECT NO.	SCALE: HORZ. 1:250 VERT. 1:50	DRAWING DATE: OCTOBER 2016
DRAWING NO.	A & M DRAWING NO. 13-020-09	SHEET NO. 09 OF 14 REV. 5



SANITARY SEWER GENERAL NOTES

- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF THE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) AND DETAIL DRAWINGS UNLESS OTHERWISE NOTED.
- ALL SANITARY SEWER GRAVITY PIPE TO BE REINFORCED CONCRETE ASTM C76 CLASS III UNLESS OTHERWISE NOTED.
- ALL SANITARY MANHOLES TO BE 1050 I.D. UNLESS OTHERWISE NOTED.
- ALL SERVICE CONNECTIONS TO BE 150mm DIAMETER PVC SDR 28 UNLESS OTHERWISE NOTED. ALL LINES FROM MAINLINE TO ICs AND MANHOLE TO ICs TO BE 150mm DIAMETER PVC SDR 28 UNLESS OTHERWISE NOTED.
- UPON COMPLETION, ALL LINES SHALL BE FLUSHED AND VIDEO INSPECTION COMPLETED.
- CONTRACTOR NOT TO WORK ON PRIVATE PROPERTY PRIOR TO WRITTEN APPROVAL FROM PROPERTY OWNER. APPROVAL TO BE OBTAINED BY DEVELOPER.
- ELEVATION OF MANHOLE LIDS SHALL BE SET AS FOLLOWS:
 - IN PAVED OR BROADWALK AREAS, SET TO TOP OF BASE COURSE ELEVATION. WHEN THE FINAL LIFT IS LAID (AT A LATER DATE) THE MANHOLE LID IS TO BE RAISED TO FINISHED GRADE. FINISHED MANHOLE ELEVATIONS HAVE BEEN SHOWN.
 - IN REAR LOT RIGHTS-OF-WAY, SET LID ELEVATION 0.15m ABOVE PROPOSED GROUND ELEVATION.
 - IN BOULEVARDS OR FRONTAGE RIGHTS-OF-WAY, SET LID ELEVATION 0.05m ABOVE PROPOSED GROUND ELEVATION.
- TOWN APPROVAL TO BE OBTAINED PRIOR TO CONNECTION TO EXISTING SYSTEM AND CONNECTION TO BE CARRIED OUT UNDER CITY INSPECTOR'S SUPERVISION.
- REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- MINIMUM 150mm TOPSOIL IN SANITARY SEWER RIGHTS OF WAY ON EXISTING PROPERTIES.
- MARK ALL CAPPED STUB ENDS WITH STAKES.
- EXISTING UTILITIES WITHIN RIGHT OF WAYS TO BE RELOCATED OR ADJUSTED AS REQUIRED AT DEVELOPER'S EXPENSE.
- ALL INSPECTION CHAMBERS ARE 450mm DIAMETER OR 200mm DIAMETER PVC INSPECTION CHAMBER LOCATED 0.3m OFF STREET SIDE PROPERTIES AND 0.5m FROM SIDE PROPERTIES. (REFER TO MMCD DRAWINGS S7 & S9 FOR DETAILS) UNLESS OTHERWISE NOTED.
- ALL CHAINAGES ARE MEASURED ALONG THE CENTRELINE OF ROAD OR SANITARY SEWER MAIN.
- ALL ICs WITHIN ROAD PAVING AREAS TO HAVE SOLID LIDS SUITABLE FOR H2O LOADING.

INVERT ELEVATIONS TO BE CONFIRMED IN FIELD PRIOR TO CONSTRUCTION DUE TO CONFLICTING RECORDS. RESULTS TO BE REPORTED TO ENGINEER



SANITARY LENGTH, SIZE, TYPE AND GRADE	INVERT ELEVATION	CHAINAGE
118.83m-450 ϕ CONC. ASTM C76 CLASS III SAN @ 0.30%	-0.22 N 0.45 W -0.95 E -0.80 S -0.80 N	2+220 2+245.43 2+245.43 2+200 2+180 2+160 2+140 2+120 2+100 2+126.64 2+080 2+060 2+040 2+028.25 2+020 2+000 2+028.32 1+980 1+960
58.46m-450 ϕ CONC. ASTM C76 CLASS III SAN @ 0.30%	-0.44 N -0.44 S	
39.35m-450 ϕ CONC. ASTM C76 CLASS III SAN @ 0.10%	0.82 W -0.23 N -0.26 S -0.20 N	
28.32m-300 ϕ PVC SDR 35 EX. SAN @ 0.00%	-0.19 S 1.28 NW -0.18 NE -0.19 SW	

LEGAL DESCRIPTION:
B.M. MONUMENT NO. ELEVATION: .
LOCATED AT 24 AVENUE AND 164 STREET

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
1	150% DESIGN	AS	MB	XX-XX-16	TMJS
2	TENDER SUBMISSION	VG	MB	29-11-16	TMJS
3	DP SUBMISSION	VG	MB	13-12-16	TMJS
4	REVISED DP SUBMISSION	VG	MB	26-01-17	TMJS
5	REVISED DP SUBMISSION	VG	MB	19-04-17	TMJS

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521 BRIDGEMAN ROAD, GIBSONS, BC V0N 1V1
PH. 604-220-9835

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GOWER POINT ROAD, GIBSONS, BC

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TITLE: **SANITARY SEWER PLAN AND PROFILE**

PROJECT NO.
DRAWING NO.

SCALE :
HORZ. 1:500
VERT. 1:100

A & M DRAWING NO.
13-020-10

DESIGN: VG/MB CHECK: MB
DRAWN: VG/AS APPR: TMJS

A & M FILE:
13-020

DRAWING DATE:
OCTOBER 2016

SHEET NO.
10 OF 14

REV.
5

NOTICE TO CONTRACTOR

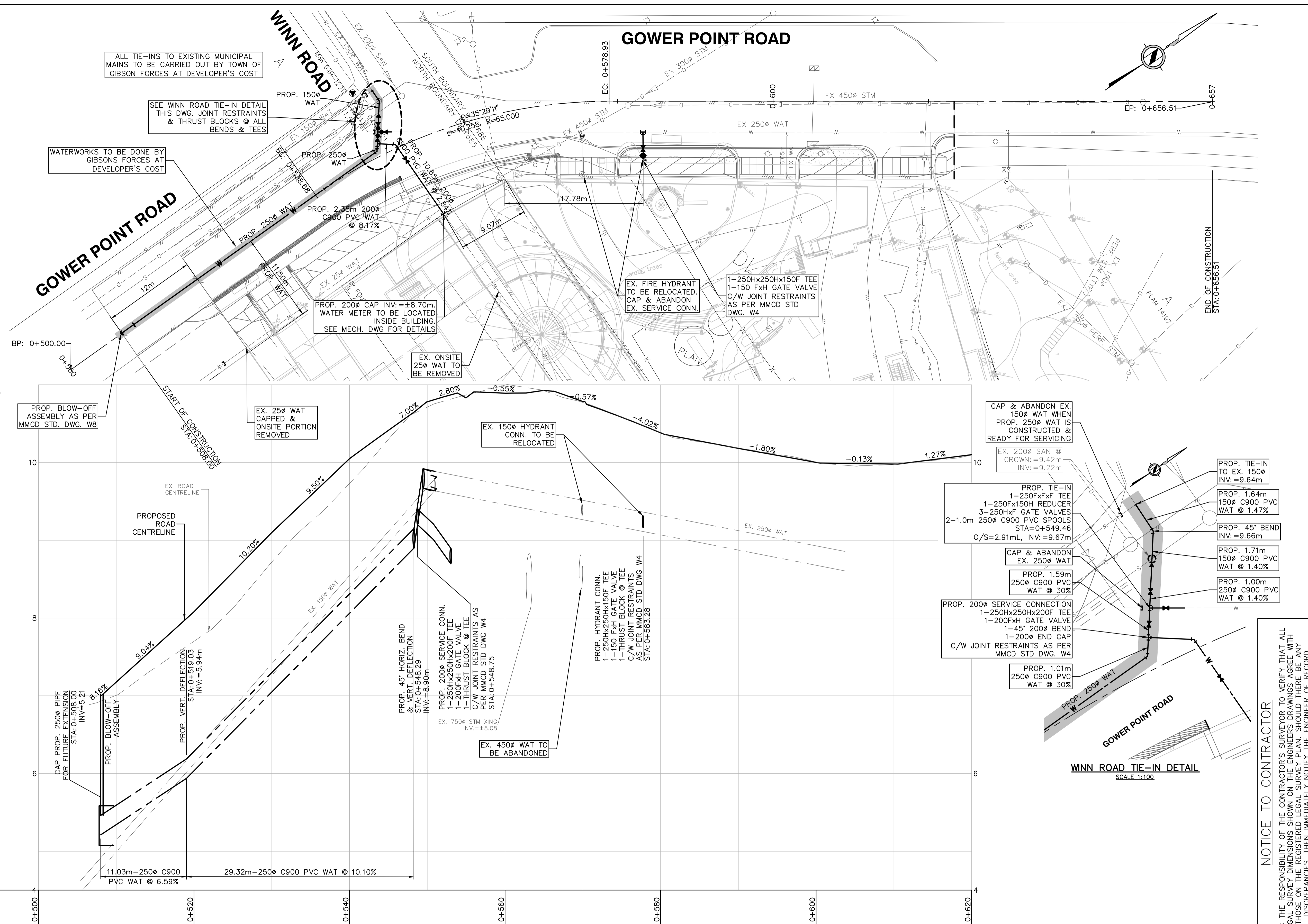
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WATERMAIN GENERAL NOTES:

- ALL MATERIALS AND CONSTRUCTION TO BE IN ACCORDANCE WITH THE CURRENT 'MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD)' AND THE CURRENT TOWN OF GIBSON'S 'SUBDIVISION AND DEVELOPMENT SERVICING AND STORM MANAGEMENT BYLAW NO. 1175 SPECIFICATIONS.
- CONTRACTOR NOT TO INSTALL SERVICES NOR WORK ON PRIVATE PROPERTY WITHOUT WRITTEN APPROVAL FROM PROPERTY OWNER. APPROVAL TO BE OBTAINED BY THE DEVELOPER.
- BUILDING CONTRACTOR IS RESPONSIBLE FOR CONFIRMING ALL DRIVEWAY LOCATIONS PRIOR TO CONSTRUCTION AND IS RESPONSIBLE FOR ANY NECESSARY WATER SERVICE CONNECTION RELOCATIONS.
- REPORT ANY DISCREPANCIES TO THE ENGINEER, PRIOR TO CONSTRUCTION.
- CONTRACTOR TO MINIMIZE WATER SERVICE DISRUPTION AND PROVIDE RESIDENTS WITH NOTICE OF DISRUPTION 48 HOURS PRIOR TO WORK.
- ALL WATERMAIN JOINTS TO BE WRAPPED AS PER CITY STANDARDS AND SPECIFICATIONS IN LOCATIONS WHERE THE HORIZONTAL CENTERLINE DISTANCE BETWEEN THE WATERMAIN ALIGNMENT AND THE STORM SEWER AND/OR SANITARY SEWER ALIGNMENT, IS LESS THAN 3.00m.
- ALL WATERMAIN INSTALLATION, AT STORM SEWER AND/OR SANITARY SEWER X-INGS, TO BE SUCH THAT A 6.0m LONG WATERMAIN PIPE SECTION IS CENTERED OVER/UNDER THE X-ING.
- ALL PEAT TO BE REMOVED FROM PIPE TRENCH AREAS.
- SERVICE CONNECTIONS TO WATERMAIN TO HAVE 1.00m MIN. SEPARATION.
- ALL CHAINAGES MEASURED ALONG THE CENTERLINE OF ROAD. SEE TYPICAL X-SECTION ON ROADWORKS DRAWING FOR DETAILS.
- 'MICROBIOLOGICAL ANALYSIS' REQUIRED ON ALL NEW WATERMANS AS PER MMCD AWWA C605-94.
- 'NEVER SEEZ' PRODUCT, OR APPROVED EQUIVALENT, REQUIRED ON ALL NUTS AND BOLTS.
- ALL TIE-INS TO EXISTING MUNICIPAL MAINS TO BE CARRIED OUT BY TOWN OF GIBSON FORCES AT DEVELOPER'S COST.

JOINT RESTRAINT NOTES:

- ALL JOINTS FROM EACH FIRE HYDRANT TO WATER MAIN TO BE RESTRAINED.
- ALL JOINTS FROM EACH SERVICE CONNECTION CAP TO WATER MAIN TO BE RESTRAINED.
- ALL PIPE JOINTS ALONG THE WATER MAIN WITHIN 4m ON EITHER SIDE OF EACH SERVICE CONNECTION TEE OR FIRE HYDRANT TEE TO BE RESTRAINED.
- ALL JOINT RESTRAINTS TO BE EBAA AND UNI-FLANGE OR APPROVED EQUIVALENT.



CHAINAGE	0+500	0+520	0+540	0+560	0+580	0+600	0+620
		11.03m-250 C900 PVC WAT @ 6.59%	29.32m-250 C900 PVC WAT @ 10.10%				

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LEGAL DESCRIPTION:					
B.M.	MONUMENT NO.	ELEVATION:			
LOCATED AT 24 AVENUE AND 164 STREET					
REV. NO.	DESCRIPTION	DR	CH	DATE	APP
1	150% DESIGN	AS	MB	XX-XX-16	TJMS
2	TENDER SUBMISSION	VG	MB	29-11-16	TJMS
3	DP SUBMISSION	VG	MB	13-12-16	TJMS
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5	REVISED DP SUBMISSION	VG	MB	19-04-17	TJMS

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TITLE:
WATER PLAN AND PROFILE

DESIGN: VG/MB **CHECK:** MB
DRAWN: VG/AS **APPR:** TJMS

A & M FILE:
13-020

DRAWING DATE:
OCTOBER 2016

PROJECT NO.	SCALE :	DRAWING DATE:	
	HORZ. 1:250	OCTOBER 2016	
	VERT. 1:25		
DRAWING NO.	A & M DRAWING NO.	SHEET NO.	REV.
	13-020-11	11 OF 14	5

- ROADS - GENERAL NOTES**
- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF THE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) AND TOWN OF GIBSONS SUPPLEMENTARY SPECIFICATIONS AND DETAIL DRAWINGS, UNLESS OTHERWISE NOTED.
 - THE DEVELOPER SHALL BE RESPONSIBLE FOR CONTACTING ALL PROPERTY OWNERS WHOSE LAND WILL BE AFFECTED BY THE PROPOSED WORKS ONE MONTH IN ADVANCE OF COMMENCEMENT OF CONSTRUCTION. THIS APPLIES PARTICULARLY WHERE WORKS WILL ENCROACH ON PRIVATE LANDS SUCH AS FILL SLOPES FROM RAISED ROADWAYS, INSTALLATION OF INSPECTION CHAMBERS AND CONSTRUCTION OF SANITARY SEWERS IN EASEMENTS. THE DEVELOPER SHALL OBTAIN FROM THE PRIVATE PROPERTY OWNERS WRITTEN PERMISSION FOR ANY INCURSIONS ONTO THEIR LANDS AS STATED ABOVE IN A FORM ACCEPTABLE TO THE TOWN OF GIBSONS. PROOF OF PERMISSION SHALL BE DEPOSITED WITH THE TOWN OF GIBSONS PRIOR TO PLANS BEING APPROVED.
 - IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO NEGOTIATE WITH PRIVATE PROPERTY OWNERS FOR THE SUCCESSFUL ACQUISITION OF ALL LANDS REQUIRED TO COMPLETE THE WORKS SHOWN ON THESE DRAWINGS.
 - FOR CONSTRUCTION DETAILS OF CURB, GUTTER AND SIDEWALK SEE MMCD STANDARD DETAIL DRAWINGS. PHYSICAL DIMENSIONS SHOWN ON THE DRAWINGS MAY CONFLICT. IN SUCH INSTANCES, SUCH CONFLICTS SHALL BE REFERRED TO THE ENGINEER.
 - DURING THE ONE YEAR MAINTENANCE PERIOD FOLLOWING COMPLETION OF CONSTRUCTION, THE TOWN ENGINEER'S DECISION SHALL BE FINAL AND BINDING REGARDING ANY NECESSARY REPAIRS, REPLACEMENTS OR OTHER CORRECTIONS REQUIRED.
 - ELEVATIONS OF EXISTING UNDERGROUND UTILITIES SHALL BE PROVEN IN THE FIELD PRIOR TO COMMENCEMENT OF CONSTRUCTION BY THE CONTRACTOR. WHERE THE POSSIBILITY OF DAMAGE TO EXISTING UNDERGROUND UTILITIES MAY BE CAUSED BY NEW CONSTRUCTION SHOWN ON THESE PLANS, SUCH UTILITIES SHALL BE EXPOSED, RAISED, LOWERED, RELOCATED OR, IF NECESSARY, REMOVED BY THE OWNER OF THE UTILITY AT THE DEVELOPER'S EXPENSE.
 - MINIMUM DEPTH OF COVER FOR RESPECTIVE UTILITIES ARE:

WATERMAIN	1000MM
STORM SEWER	900MM
SANITARY SEWER	1000MM
STREET LIGHT CONDUIT	1000MM
TRAFFIC LIGHT CONDUIT	1000MM

 FOR OTHER UTILITIES SUCH AS TRUNK PRESSURE GAS MAINS, TELUS, BC HYDRO AND TELECOMMUNICATIONS CONDUITS REFER TO RESPECTIVE AGENCIES' STANDARDS.
 - ALL RESIDENTIAL DRIVEWAY CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RESIDENTIAL LOT (VEHICULAR) ACCESS REGULATION BYLAW NO. 7222.
 - EXISTING DRIVEWAYS SHALL BE REINSTATED FROM BACK OF CURB OR SIDEWALK AS FOLLOWS:
 - CONCRETE DRIVEWAYS WITH CONCRETE
 - ASPHALT OR GRAVEL DRIVEWAYS WITH ASPHALT.
 - REINSTATED DRIVEWAYS, AND WHERE REQUIRED, STEPS TO PRIVATE WALKWAYS, HANDRAILS AND RETAINING WALLS SHALL BE INSTALLED AT THE DEVELOPER'S EXPENSE.
 - ALL CURB RADII SHALL BE 9 METERS FOR ARTERIAL ROAD AND 7 METERS FOR RESIDENTIAL ROADS MEASURED TO BACK OF CURB, UNLESS OTHERWISE NOTED.
 - ALL MANHOLES, VALVE BOXES, ETC., LOCATED IN ROADWAY AREA SHALL BE RAISED/LOWERED TO MEET NEW SURFACE ELEVATION.
 - ALL CHAINAGES MEASURED ALONG THE ALIGNMENT OF ROAD SHOWN.
 - ALL SERVICE CONNECTIONS BETWEEN INTERNAL WORKS AND EXISTING TOWN SERVICES SHALL BE MADE AT THE EXPENSE OF THE DEVELOPER.
 - FOR NEW SUBDIVISIONS THE DEVELOPER SHALL SET THE LOCATION OF COMMUNITY MAILBOXES WITHIN THE DEVELOPMENT AND SHALL OBTAIN AN AGREEMENT IN WRITING FROM CANADA POST REGARDING THE LOCATION(S). THE DEVELOPER SHALL PROVIDE THE REQUIRED ADDITIONAL STREET RIGHT-OF-WAY AT THE COMMUNITY BOX LOCATIONS TO ENABLE CANADA POST TO INSTALL THE BOX(S).
 - ALL SURFACE RESTORATIONS REQUIRED FOR THE PRIVATE UTILITY SERVICING OF THIS DEVELOPMENT SHALL BE DONE TO TOWN SPECIFICATIONS AT THE DEVELOPER'S EXPENSE.
 - PRIOR TO CONSTRUCTION, CONTRACTOR MUST PROVIDE TO TRANSPORTATION DEPARTMENT A CONSTRUCTION PARKING & TRAFFIC MANAGEMENT PLAN. PLAN SHOULD INCLUDE: LOCATION FOR PARKING FOR SERVICES, DELIVERIES & WORKERS; APPLICATION FOR REQUEST FOR ANY LANE CLOSURES (INCLUDING DATES, TIMES & DURATION) & PROPER TRAFFIC CONTROLS AS PER TRAFFIC CONTROL MANUAL FOR WORKS ON ROADWAYS (BY MINISTRY OF TRANSPORTATION) AND MMCD TRAFFIC REGULATION SECTION 01570.

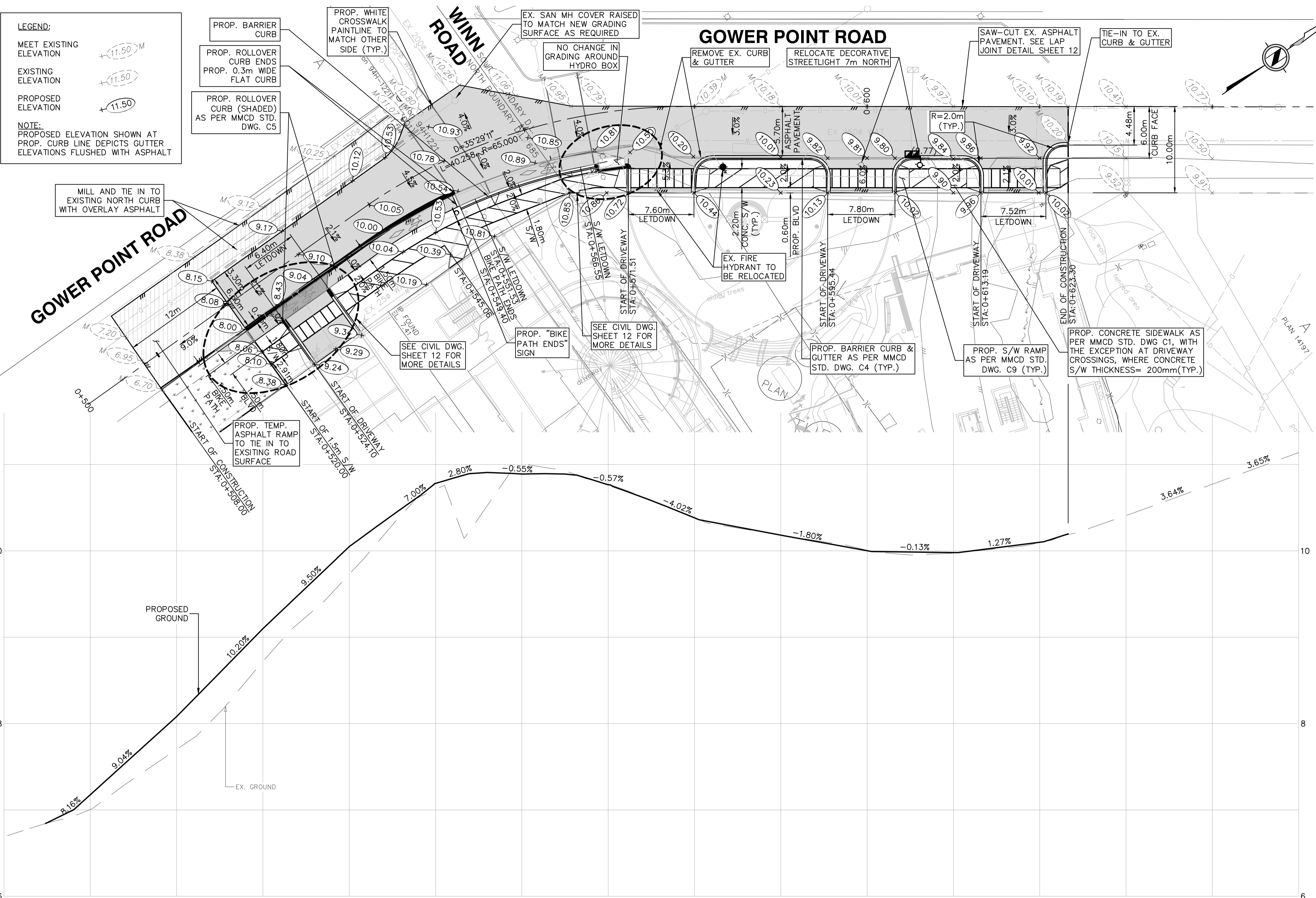
LEGEND:

MEET EXISTING ELEVATION

EXISTING ELEVATION

PROPOSED ELEVATION

NOTE:
PROPOSED ELEVATION SHOWN AT PROP. CURB LINE DEPICTS GUTTER ELEVATIONS FLUSHED WITH ASPHALT



CHAINAGE	CENTRELINE ROAD ELEVATIONS	
	EXISTING	PROPOSED
0+500	7.76	8.06
0+520	8.73	10.05
0+540	11.00	10.89
0+560	10.39	10.38
0+580	10.01	10.00
0+600	10.10	10.10
0+620	10.77	10.77
0+640	11.14	11.14
0+650		

NOTICE TO CONTRACTOR

IT IS THE RESPONSIBILITY OF THE CONTRACTOR'S SURVEYOR TO VERIFY THAT ALL LEGAL SURVEY DIMENSIONS SHOWN ON THE ENGINEERS DRAWINGS AGREE WITH THOSE ON THE REGISTERED LEGAL SURVEY PLAN. SHOULD THERE BE ANY DISCREPANCIES, THEN IMMEDIATELY NOTIFY THE ENGINEER OF RECORD

LEGAL DESCRIPTION:

B.M. MONUMENT NO. ELEVATION:
LOCATED AT 24 AVENUE AND 164 STREET

REV. NO.	DESCRIPTION	DR	CH	DATE	APP
1	150% DESIGN	AS	MB	XX-XX-16	TMJS
2	TENDER SUBMISSION	VG	MB	29-11-16	TMJS
3	DP SUBMISSION	VG	MB	13-12-16	TMJS
4	REVISED DP SUBMISSION	VG	MB	26-01-17	TMJS
5	REVISED DP SUBMISSION	VG	MB	19-04-17	TMJS

APLIN MARTIN
ENGINEERING ARCHITECTURE PLANNING SURVEYING

#910 - 1111 West Hastings Street, Vancouver, B.C. Canada V6E 2J3
Tel: (604) 678-9434, Fax: (604) 597-9061, Email: general@aplinmartin.com

CLIENT:
KLAUS FUERNISS ENTERPRISES INC.
521 BRIDGEMAN ROAD, GIBSONS, BC V0N 1V1
PH. 604-220-9835

PROJECT:
THE GEORGE GIBSONS OCEANFRONT MARINE HOTEL
GOWER POINT ROAD, GIBSONS, BC

The location of existing underground utilities are shown in an approximate way only & have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agree to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

TITLE:
ROAD PLAN AND PROFILE

PROJECT NO.
DRAWING NO.

SCALE :
HORZ. 1:250
VERT. 1:25

A & M DRAWING NO.
13-020-12

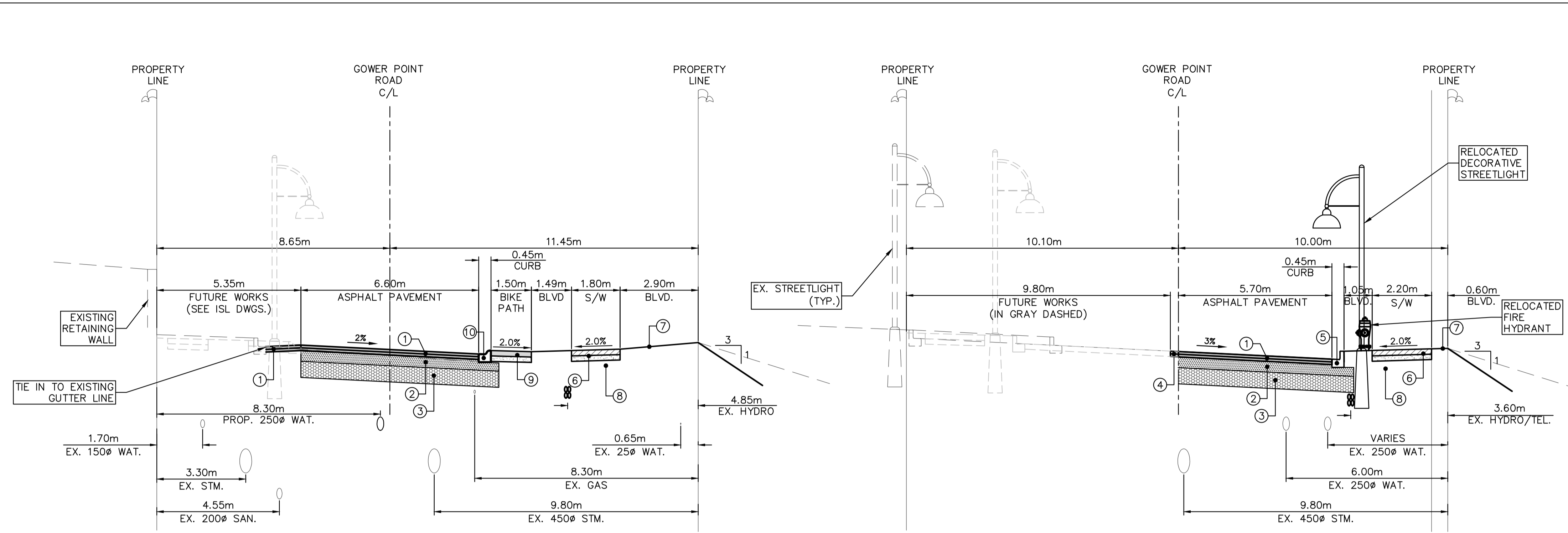
DRAWING DATE:
OCTOBER 2016

SHEET NO.
12 OF 14

REV.
5

DESIGN: VG/MB **CHECK:** MB
DRAWN: VG/AS **APPR:** TMJS

A & M FILE:
13-020

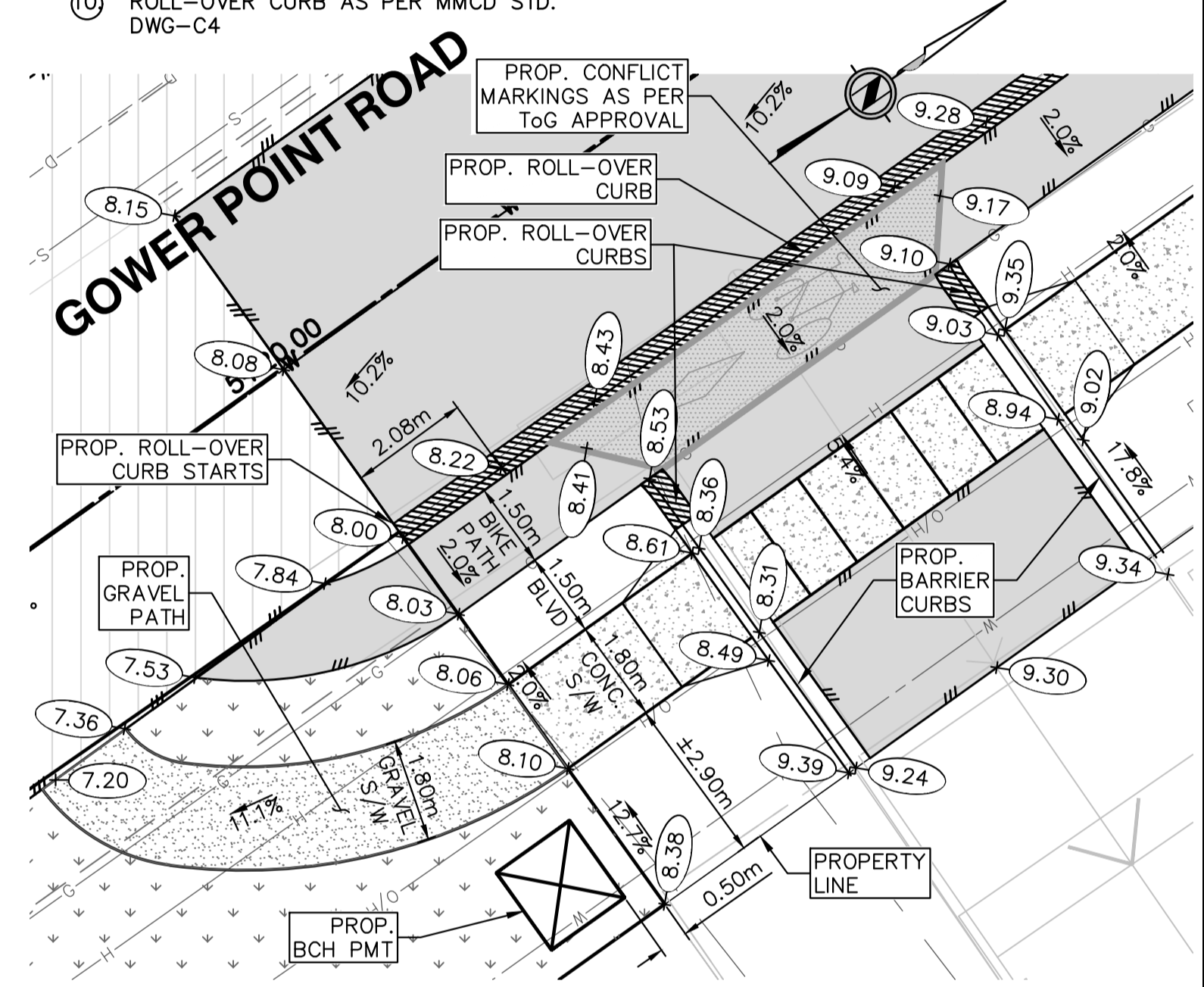


**TYPICAL CROSS SECTION
GOWER POINT ROAD
STA: 0+520.00 - 0+549.40**
HOR. SCALE 1:100
VER. SCALE 1:50

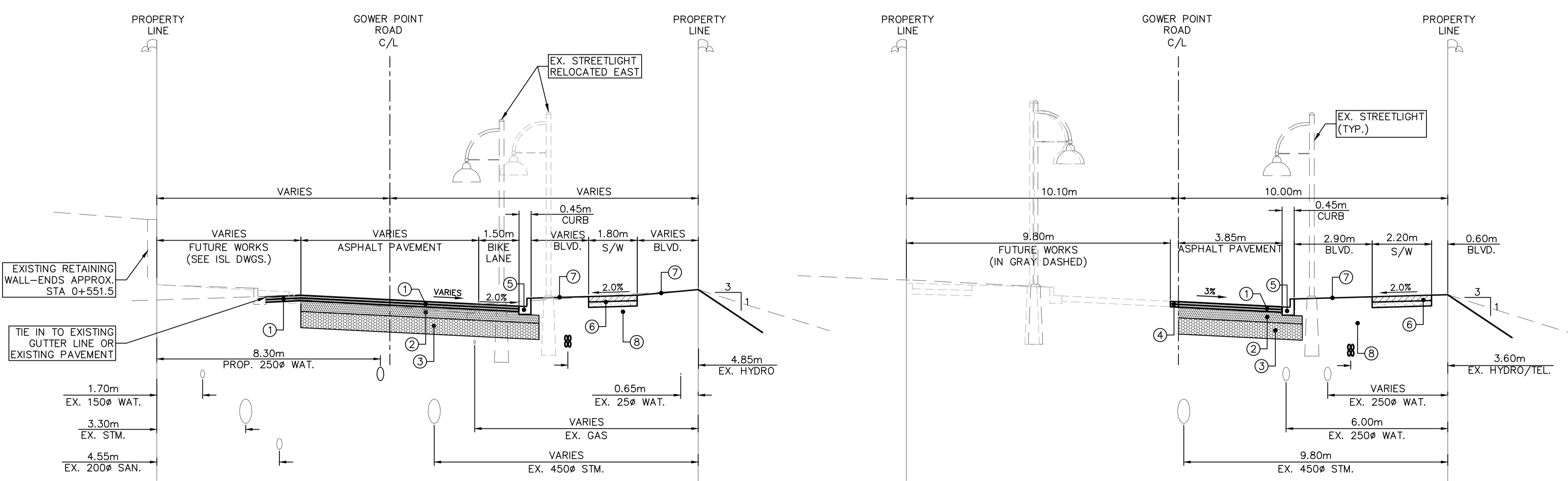
**TYPICAL CROSS SECTION
GOWER POINT ROAD
STA: 0+571.51 - 0+620.70**
HOR. SCALE 1:100
VER. SCALE 1:50

**TYPICAL ROAD STRUCTURE
FOR GOWER POINT ROAD:**

- ① UPPER COURSE ASPHALT: 50mm
LOWER COURSE ASPHALT: 50mm
- ② 200mm GRANULAR BASE
- ③ 300mm GRANULAR SUB-BASE
- ④ 100mm THICK MILL & PAVE LAP JOINT.
(MIN 0.30m WIDE)
- ⑤ CONCRETE BARRIER CURB AS PER MMCD
STD. DWG-C4
- ⑥ 100mm CONCRETE SIDEWALK. C/W 100mm
(MIN) GRANULAR BASE
- ⑦ HARDSCAPE C/W 100mm (MIN) GRANULAR
BASE AND/OR VEGETATED BOULEVARD
SEE LANDSCAPE DRAWINGS FOR DETAILS
- ⑧ IMPORTED SUBGRADE AS PER MMCD
02226-2.3
- ⑨ 100mm MACHINE-LAYED ASPHALT BIKE
PATH, C/W 100mm (MIN) GRANULAR BASE
- ⑩ ROLL-OVER CURB AS PER MMCD STD.
DWG-C4

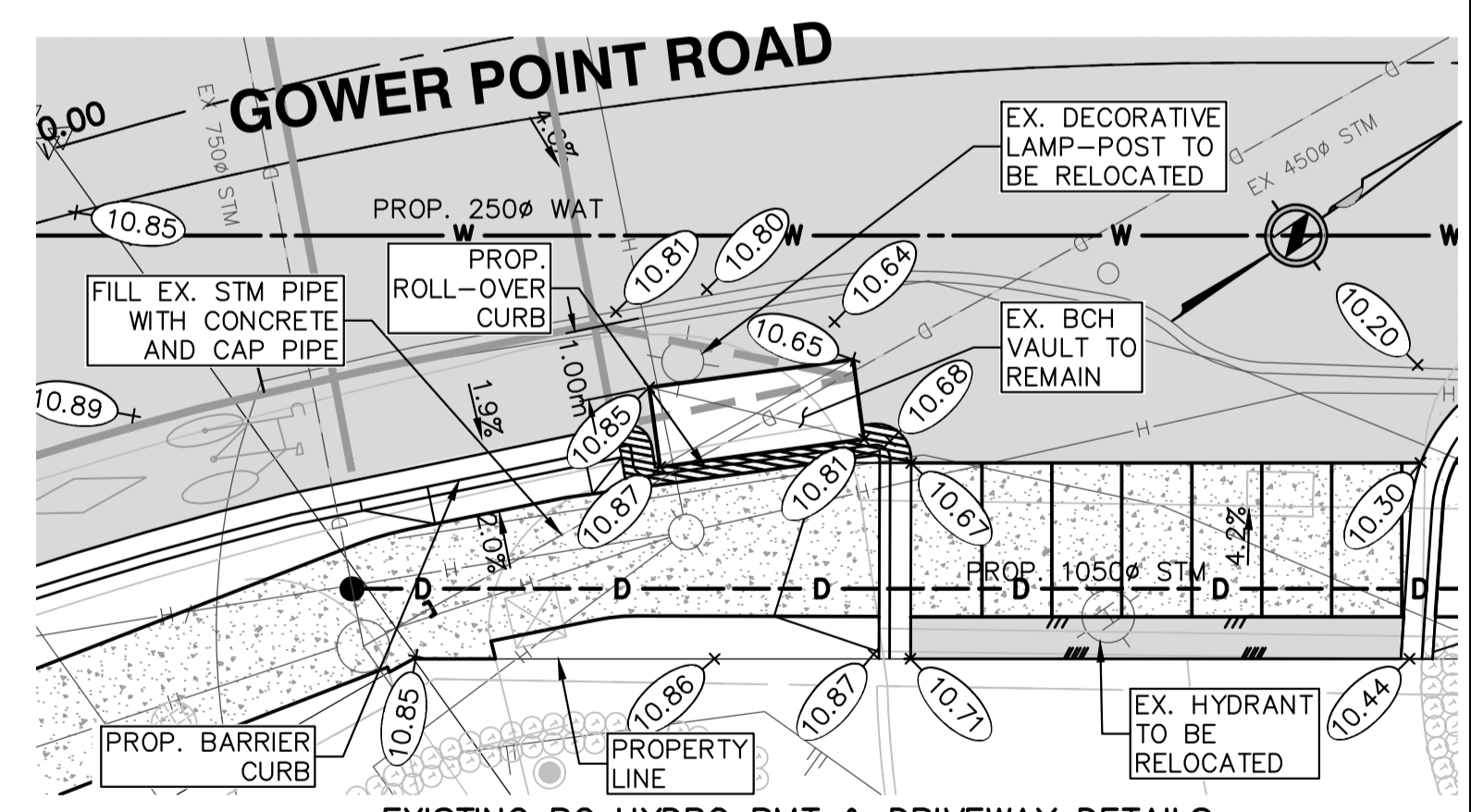


**PROP. BCH PMT, BIKEPATH & SOUTH PARKADE
DRIVEWAY DETAILS**
SCALE 1:100



**TYPICAL CROSS SECTION
GOWER POINT ROAD
STA: ±0+549.40 - 0+571.51**
HOR. SCALE 1:100
VER. SCALE 1:50

**TYPICAL CROSS SECTION
GOWER POINT ROAD
STA: 0+620.70 - 1+623.30**
HOR. SCALE 1:100
VER. SCALE 1:50



EXISTING BC HYDRO PMT & DRIVEWAY DETAILS
SCALE 1:100

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TITLE: ROAD TYPICAL SECTIONS & DETAIL		DESIGN: VG/MB CHECK: MB DRAWN: VG/AS APPR: TMJS	
A & M FILE: 13-020		DRAWING DATE: OCTOBER 2016	
PROJECT NO. .	SCALE: HORZ. VERT.	DRAWING NO. .	SHEET NO. 13 OF 14
DRAWING NO. .	A & M DRAWING NO. 13-020-13	REV. .	5