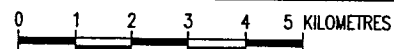
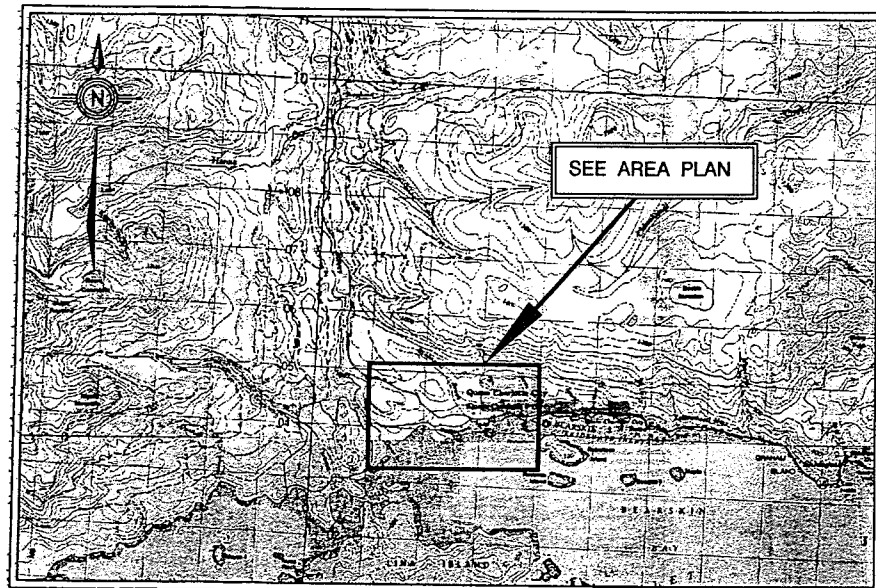


VILLAGE OF QUEEN CHARLOTTE
HONNA RIVER WATER SUPPLY
WATER TREATMENT PLANT

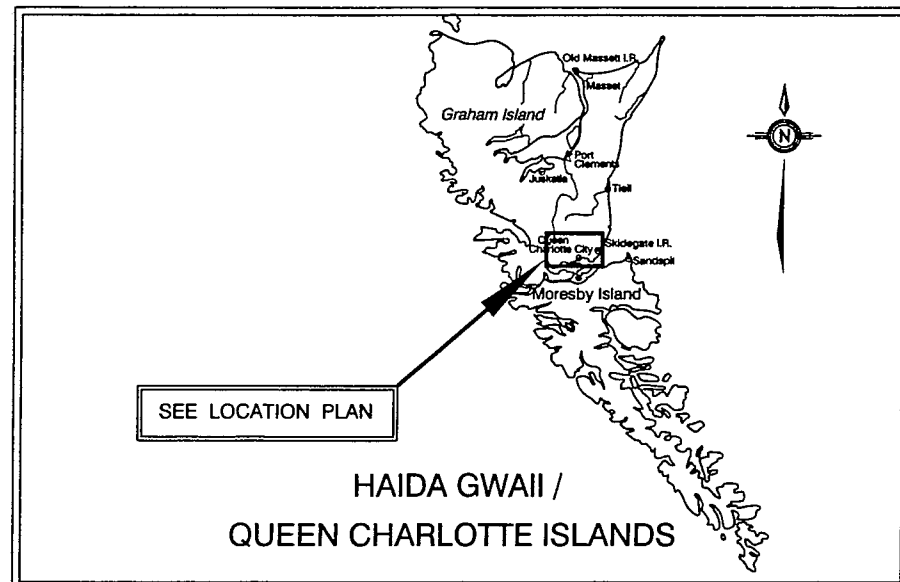
CONTRACT No. 163.8.4.2



ISSUED FOR TENDER

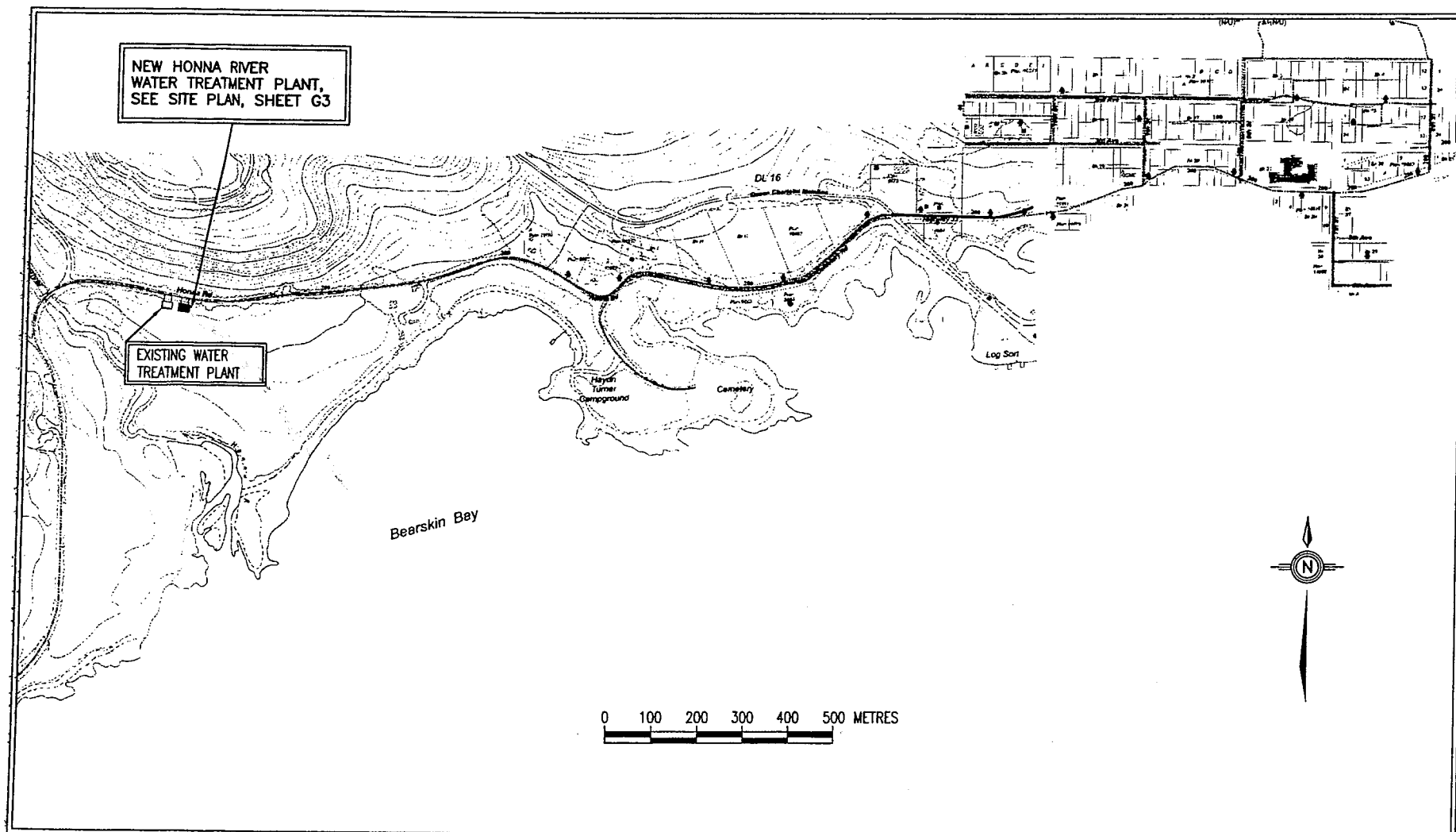


LOCATION PLAN



HAIDA GWAI /
QUEEN CHARLOTTE ISLANDS

KEY PLAN
NTS



AREA PLAN

INDEX TO DRAWINGS (TOTAL DWGS. = 56)

SHEET No.	TITLE
GENERAL	
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G3	SITE LAYOUT
G4	SITE GRADING
G5	SITE SECTIONS
G6	SITE SECTIONS
G7	SITE SECTIONS
G8	OUTSIDE PIPING
G9	SITE SECTIONS
G10	PIPING PROFILES
G11	DETAILS
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P1	P&ID STANDARD TAGS AND ABBREVIATIONS
P2	P&ID STANDARD SYMBOLS, EQUIPMENT, VALVES AND INSTRUMENTATION
P3	PROCESS SCHEMATIC
P4	P&ID - RAW WATER PRE-TREATMENT
P5	P&ID - DAF TREATMENT - TRAIN No.1
P6	P&ID - DAF TREATMENT - TRAIN No.2
P7	P&ID - CLEARWELL
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P9	P&ID - CHEMICAL FEED SYSTEMS - COAGULANT AND POLYMER
P10	P&ID - CAUSTIC SYSTEM AND BACKWASH RESIDUALS STORAGE TANK
P11	P&ID - CHLORINATION SYSTEM
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S4	CONCRETE OUTLINE - FLOOR PLAN
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S7	BACKWASH RESIDUALS SETTLING TANK - PLAN - SECTIONS
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M5	MECHANICAL - MISCELLANEOUS DETAILS
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E2	ELECTRICAL - MCC LAYOUT AND SINGLE LINE DIAGRAM
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E7	ELECTRICAL - LIGHTING AND UTILITY LAYOUT
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E9	ELECTRICAL - PANELBOARD SCHEDULE AND MISCELLANEOUS ELECTRICAL DETAILS
E10	ELECTRICAL - CABLE SCHEDULE
E11	ELECTRICAL - CABLE SCHEDULE - VENDOR SUPPLIED EQUIPMENT
E12	ELECTRICAL - PLC I/O WIRING DIAGRAM - PAGE 1
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E15	ELECTRICAL - COMMUNICATION ARCHITECTURE

VILLAGE OF QUEEN CHARLOTTE
HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
CONTRACT No. 163.8.4.2

FILE: P:\Drawing\QUEEN - CHARLOTTE\163-8-4-2\GENERAL\163-8-4-2_G1.dwg Tcb G1 09-03-19 DCURTIS

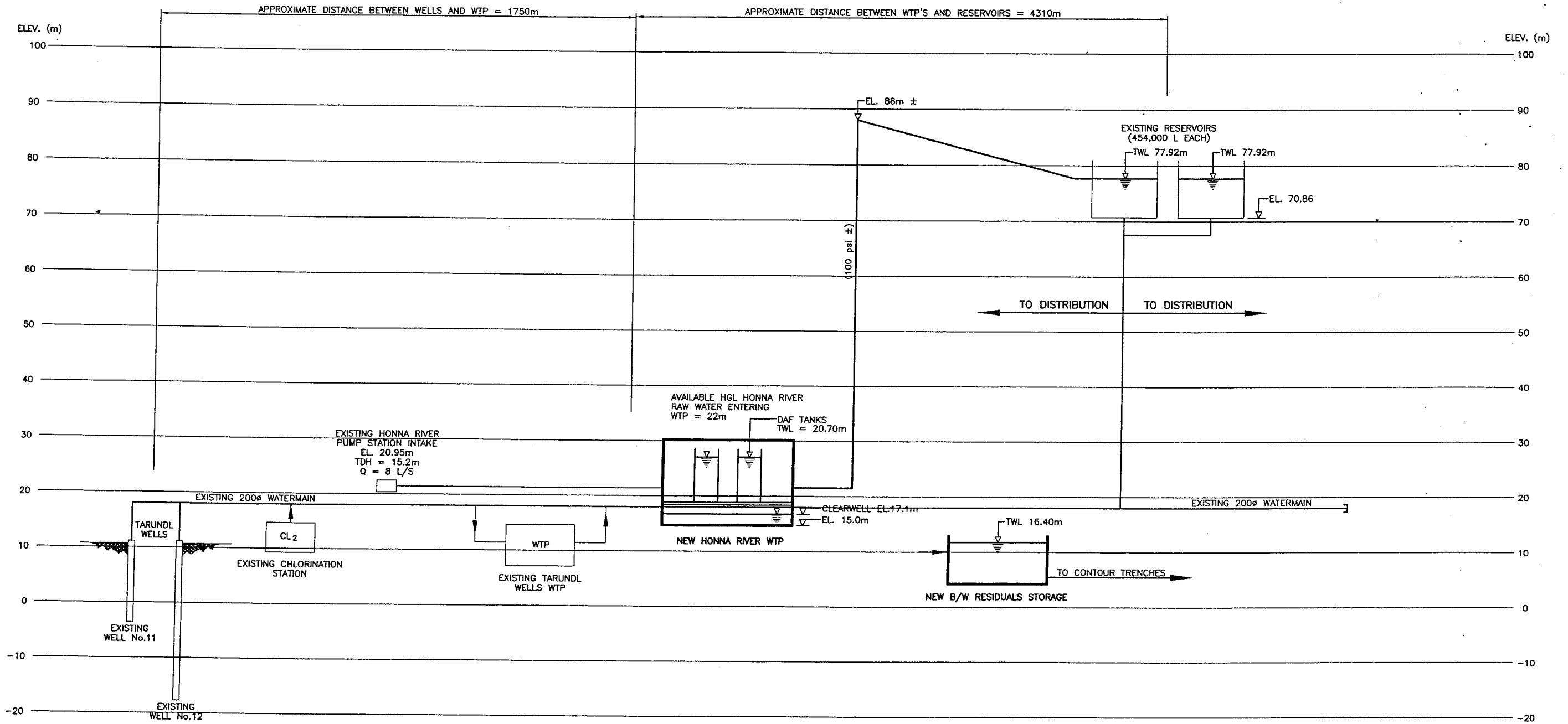
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DESIGNED CB
 DRAWN DBC
 CHECKED CC



VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 KEY PLAN - LOCATION PLAN - AREA PLAN - INDEX TO DRAWINGS

SCALE: AS SHOWN
DRAWING No. 163.8.4.2
SHEET No. G1 ISSUE A
THIS DRAWING REDUCED TO HALFSIZE



HYDRAULIC PROFILE
NTS

NOTES :

1. TARUNDL WELLS PRODUCTION CAPACITY 687m³/d (1992, PITEAU). SUSTAINING FLOWS 500m³/d (2002, PITEAU).
2. DAF TANKS FINAL TWL TO BE DETERMINED FROM EQUIPMENT SHOP DRAWINGS.
3. ELEVATION ZERO DATUM. CANADIAN HYDROGRAPHIC SERVICES.

NOTE :

INFORMATION ON THIS DRAWING IS ADAPTED FROM NUMEROUS SOURCES, INCLUDING McELHANNEY CONSULTING SERVICES LTD. JOB No. 2321-00363 DRAWING No.1 TARUNDL CREEK WATER TREATMENT PLANT SUPPLY SCHEMATIC (1998). PITEAU REPORT (NOVEMBER 20, 2002, FILE 2386), DAYTON & KNIGHT FILE 163.3.7, DRAWING, SHEET 4, DAYTON & KNIGHT FILE 163.8.6, DRAWING, SHEET G2.

FILE: P:\Drawings\QUEEN - CHARLOTTE\163-8-4-2\GENERAL\163-8-4-2_G2.dwg, Job G2 09-03-18 DCURTISS

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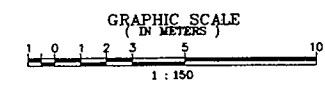
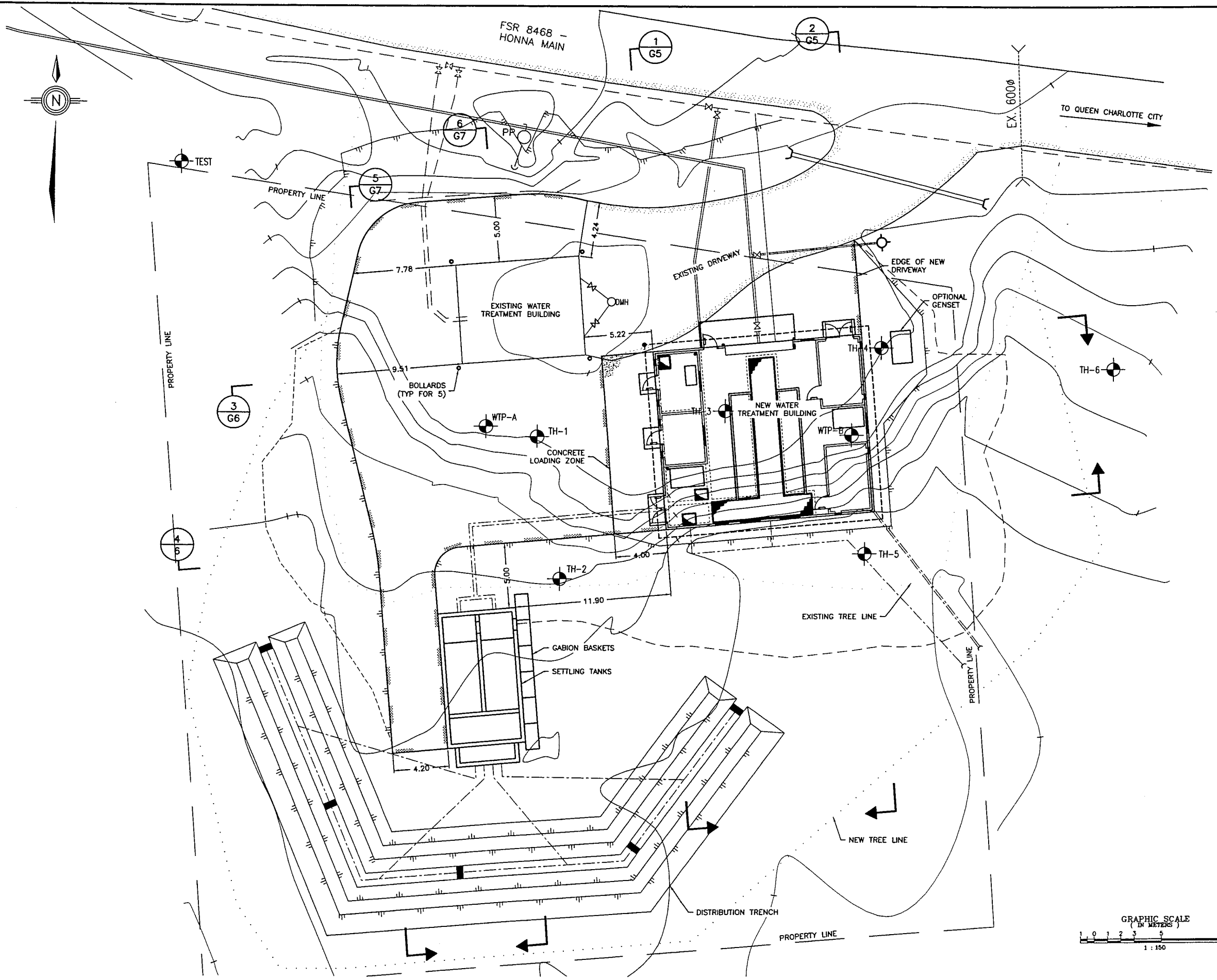
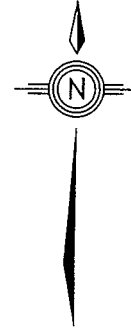
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VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 HYDRAULIC PROFILE

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DRAWING No. 163.8.4.2		
SHEET No.	G2	ISSUE A
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 DCJURISS
 09-03-19

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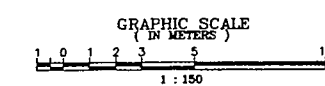
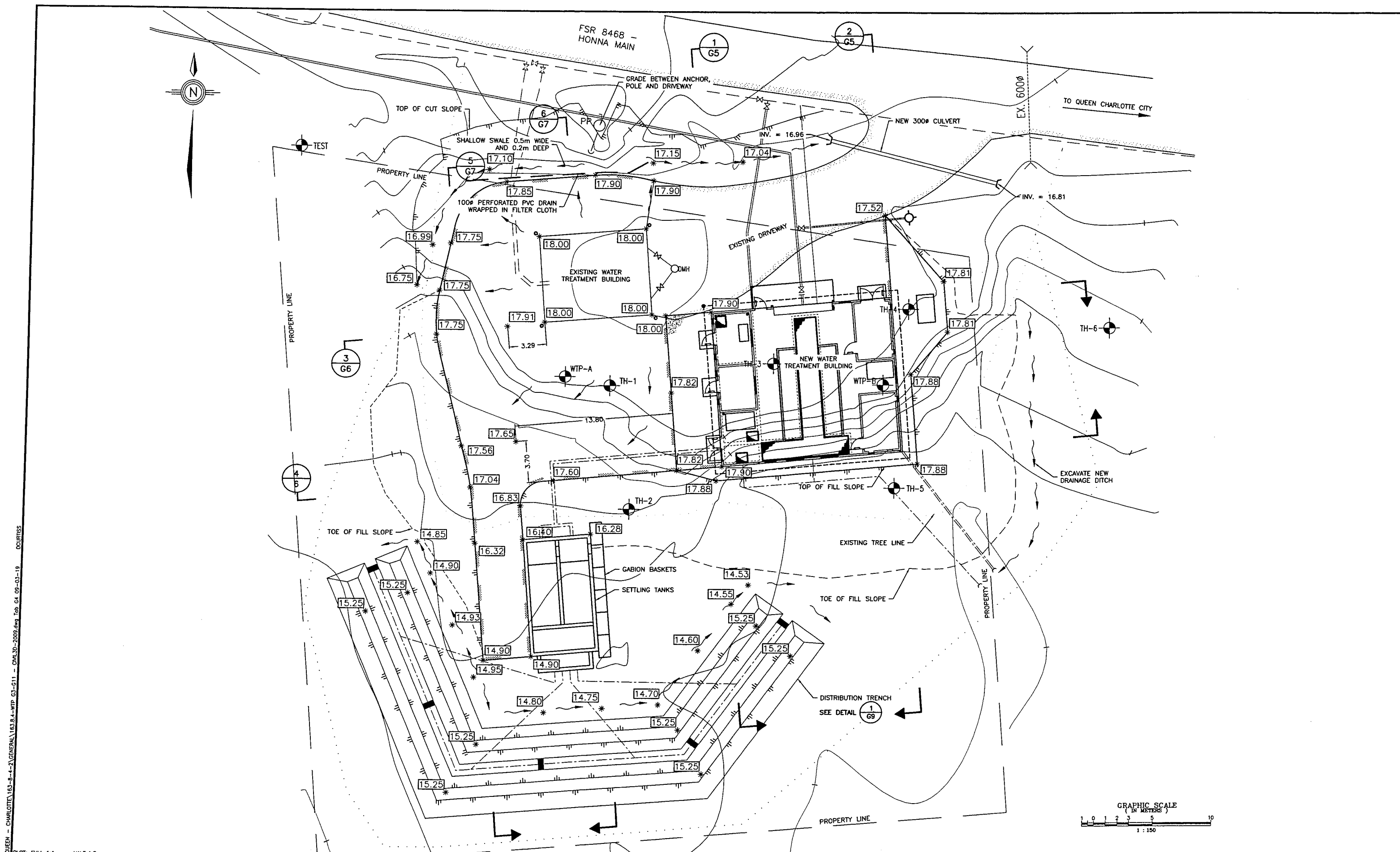
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VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 SITE LAYOUT

SCALE: 1:150		
DRAWING No. 163.008.004		
SHEET No.	G3	ISSUE A
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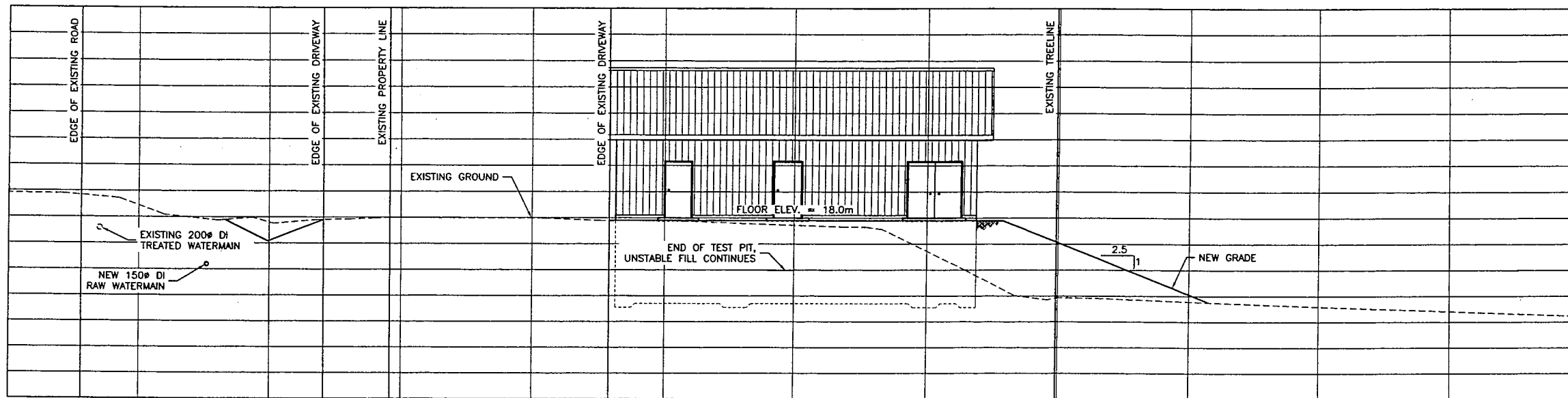
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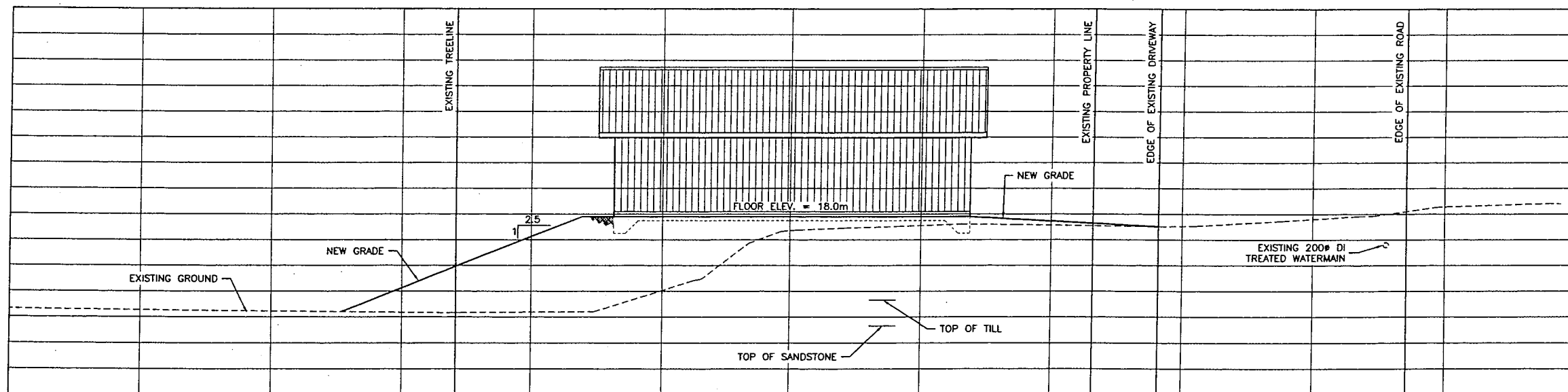
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VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 SITE GRADING

SCALE: 1:150
DRAWING No. 163.008.004
SHEET No. G4 ISSUE A
THIS DRAWING REDUCED TO HALFSIZE



SECTION 1
G3



SECTION 2
G3

FILE: P:\Drawings\QUEEN - CHARLOTTE\163-8-4-2\GENERAL\163.B.4-WTP-G3-G11 - CIVIL3D-2009.dwg Tab: G5 08-03-19 00:00:55

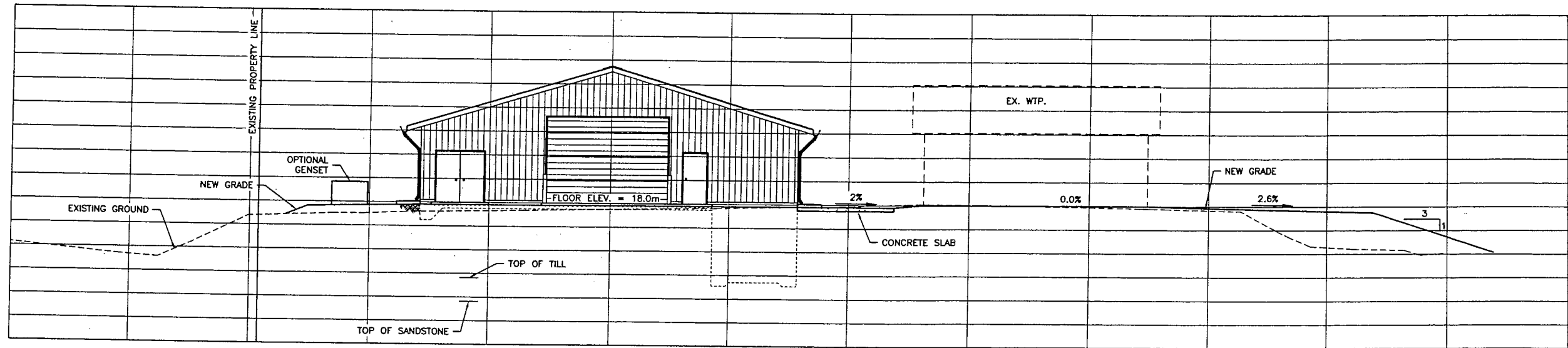
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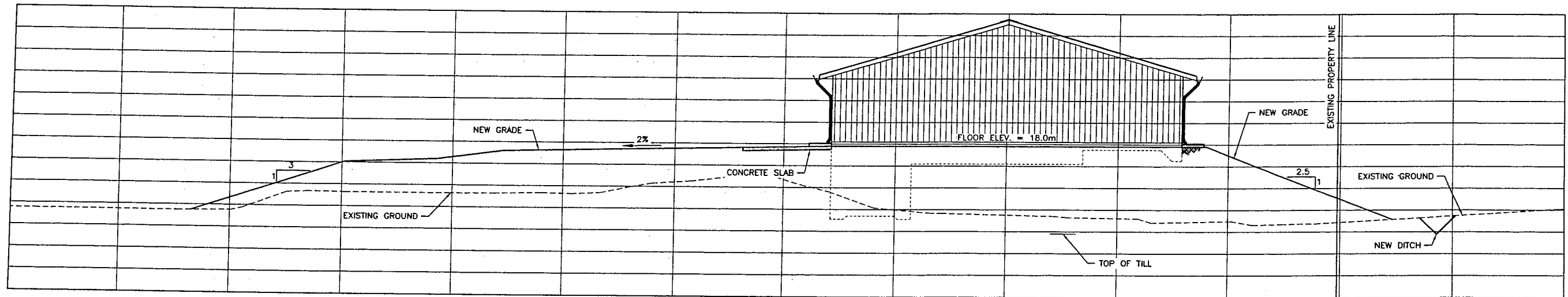

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VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 SITE SECTIONS

SCALE: 1:100
 DRAWING No. 163.008.004
 SHEET No. G5 ISSUE A
 THIS DRAWING REDUCED TO HALFSIZE



SECTION $\frac{3}{G3}$



SECTION $\frac{4}{G3}$

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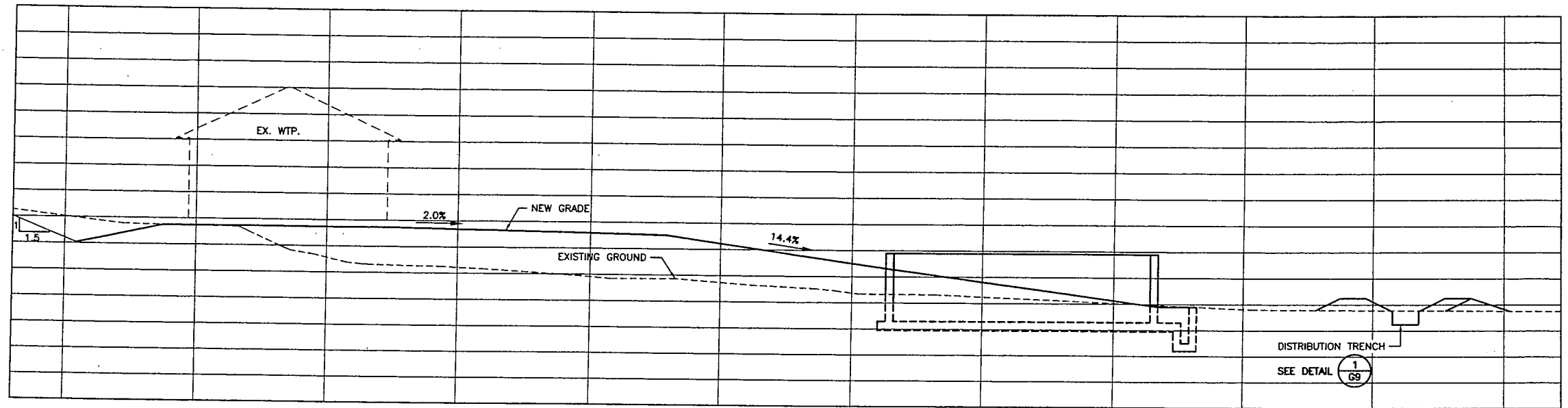
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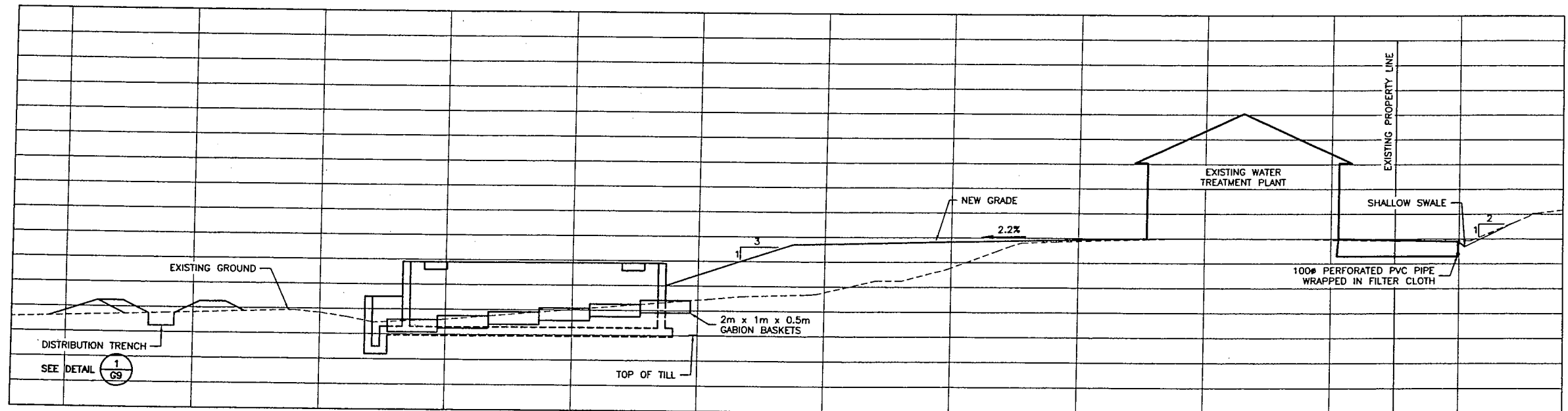

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VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 SITE SECTIONS

SCALE: 1:100
 DRAWING No. 163.008.004
 SHEET No. G6 ISSUE A
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SECTION 5
G3



SECTION 6
G3

FILE: P:\Drawing\QUEEN - CHARLOTTE\163-B-4-2\GENERAL\163.B.4-WTP G3-G11 - CML30-2009.dwg, Job: G7 09-03-19, DCURISS

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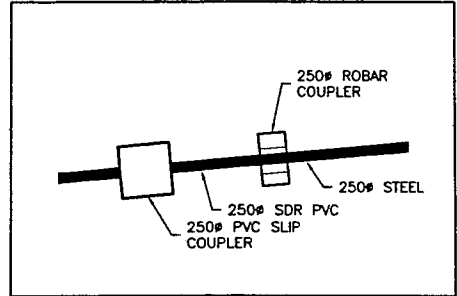
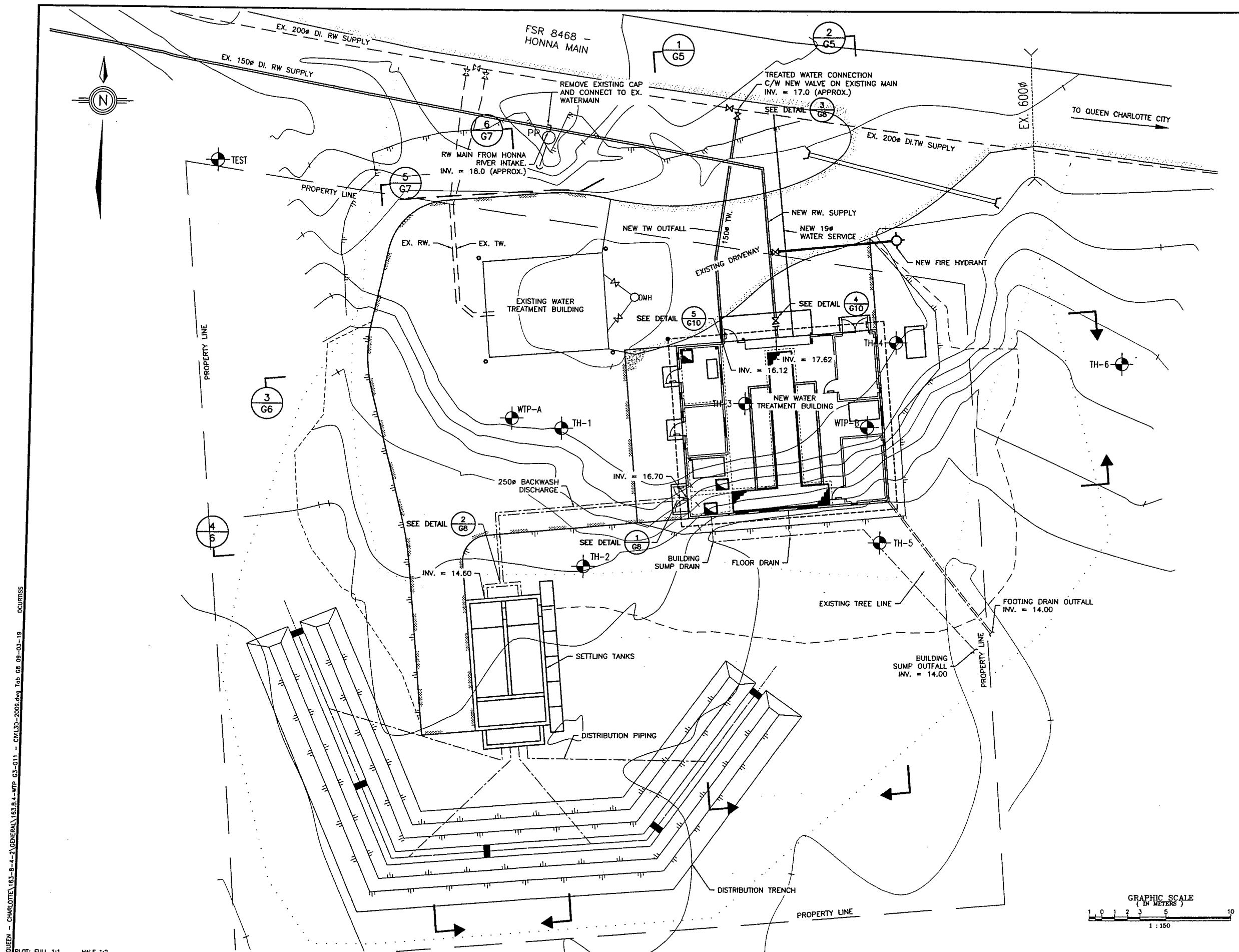
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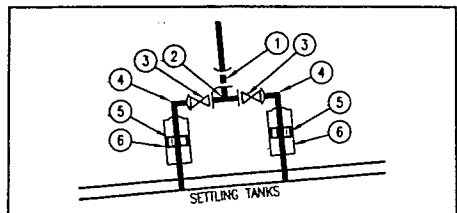

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VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 SITE SECTIONS

SCALE: 1:100
 DRAWING No. 163.008.004
 SHEET No. G7 ISSUE A
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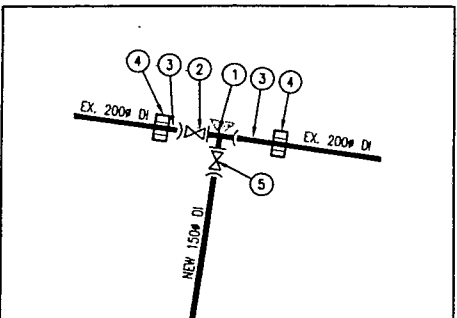


SEE DETAIL 1 G8
NTS



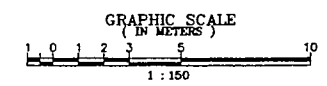
- ① 1 - 250# SDR TO C300 ADAPTOR
- ② 1 - 250# TEE
- ③ 2 - 250# FLG. x HUB GATE VALVE
- ④ 2 - 250# HUB x HUB 90° BEND
- ⑤ 2 - 250# ROBAR COUPLER
- ⑥ 2 - 250# FLEX JOINT

SEE DETAIL 2 G8
NTS



- ① 1 - 200# FLG. x 200# HUB x 150# FLG. TEE c/w THRUST BLOCK
- ② 1 - 200# HUB x FLG. GATE VALVE
- ③ 2 - 200# DI SPOOL
- ④ 2 - 200# ROBAR COUPLING
- ⑤ 1 - 150# HUB x FLG. GATE VALVE

SEE DETAIL 3 G8
NTS



FILE: P:\Drawing\QUEEN - CHARLOTTE\163-8-4-2\GENERAL\163.8.4-WTP G3-G11 - CIVIL3D-2008.dwg, Job: G3, 09-03-19
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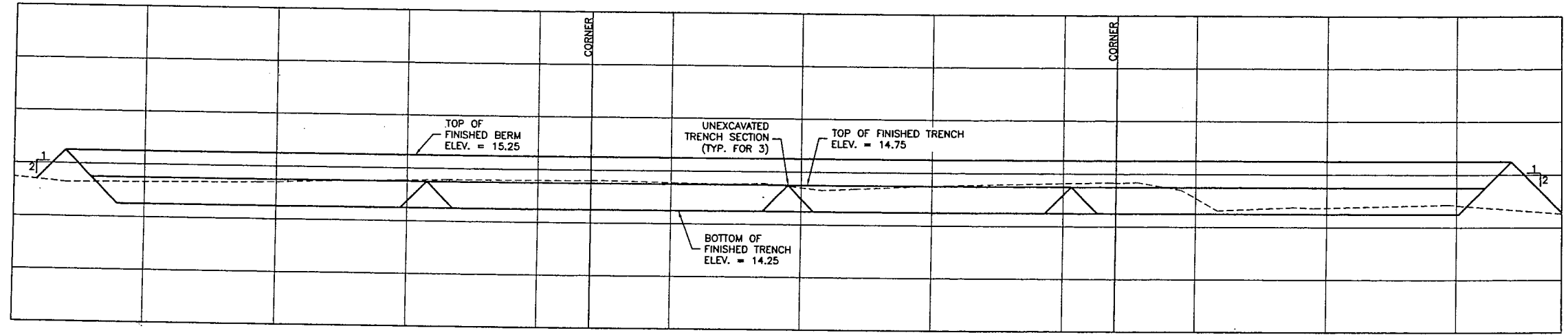
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 DRAWN JE
 CHECKED PW

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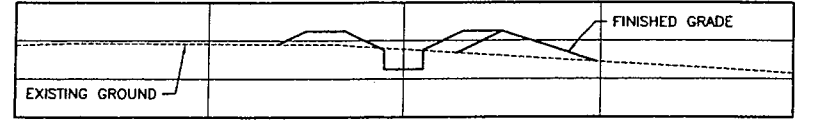
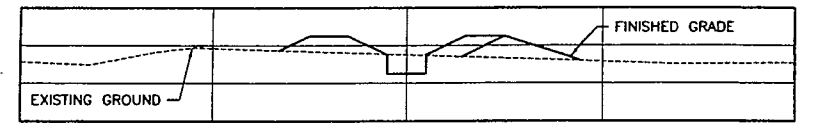
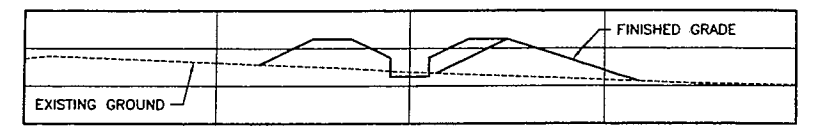
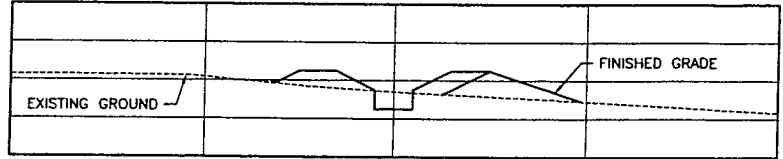
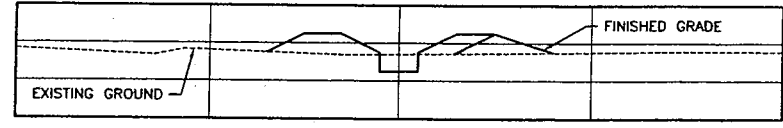
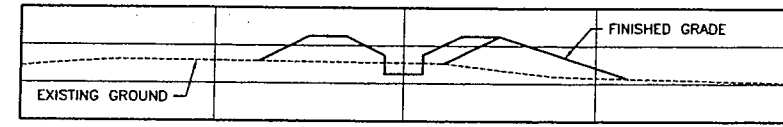
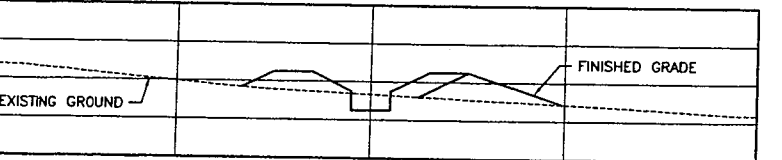
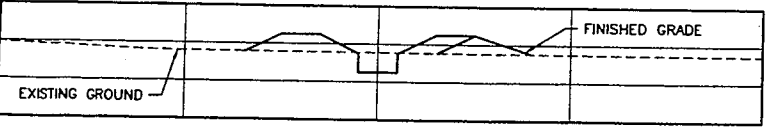
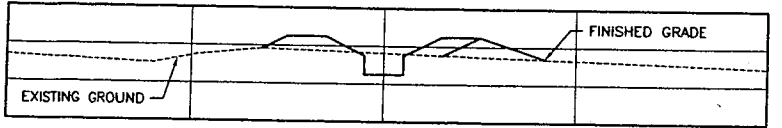
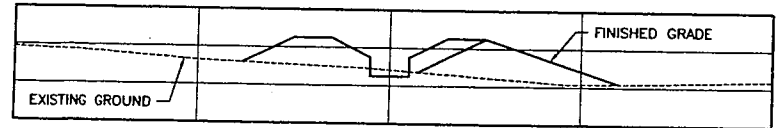
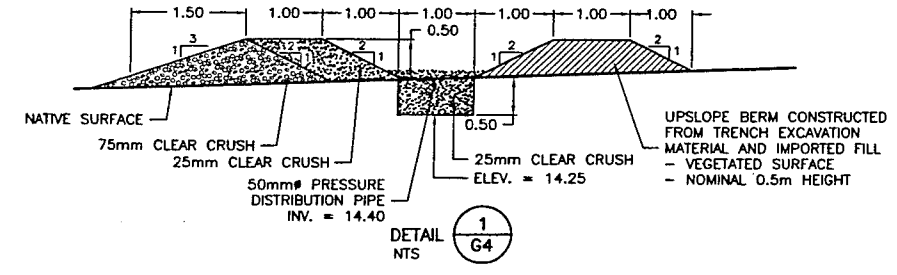
VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 OUTSIDE PIPING

SCALE: 1:150

DRAWING No. 163.008.004		
SHEET No.	G8	ISSUE A
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DISTRIBUTION TRENCH PROFILE
SCALE: (H) 1:100 (V) 1:50



DISTRIBUTION TRENCH SECTIONS
SCALE: (H) 1:100 (V) 1:100

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 AutoCAD DRAWING
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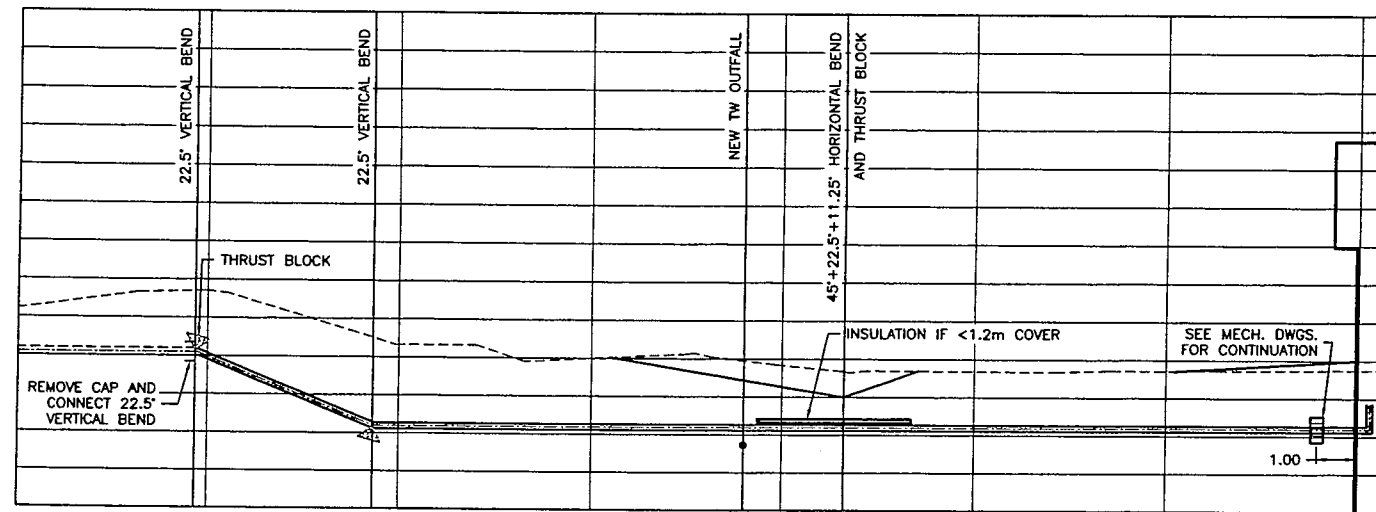
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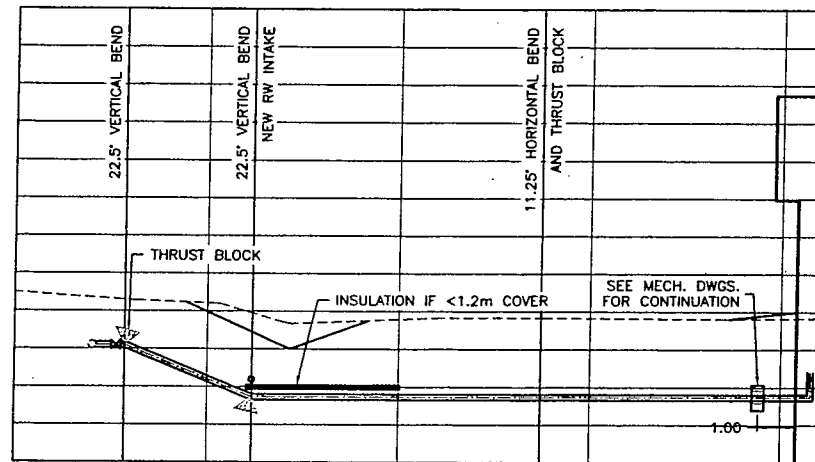
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VILLAGE OF QUEEN CHARLOTTE
 HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
 SITE SECTIONS

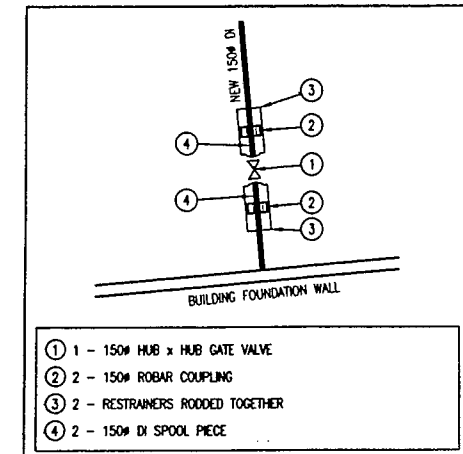
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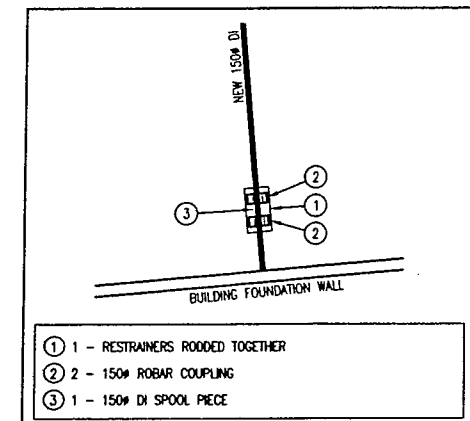
PROFILE - NEW 150 ϕ RAW WATERMAIN



PROFILE - NEW 150 ϕ TREATED WATERMAIN



SEE DETAIL $\frac{4}{G8}$
NTS



SEE DETAIL $\frac{5}{G8}$
NTS

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PLOT: FULL 1:1 HALF 1:2

AutoCAD
DRAWING

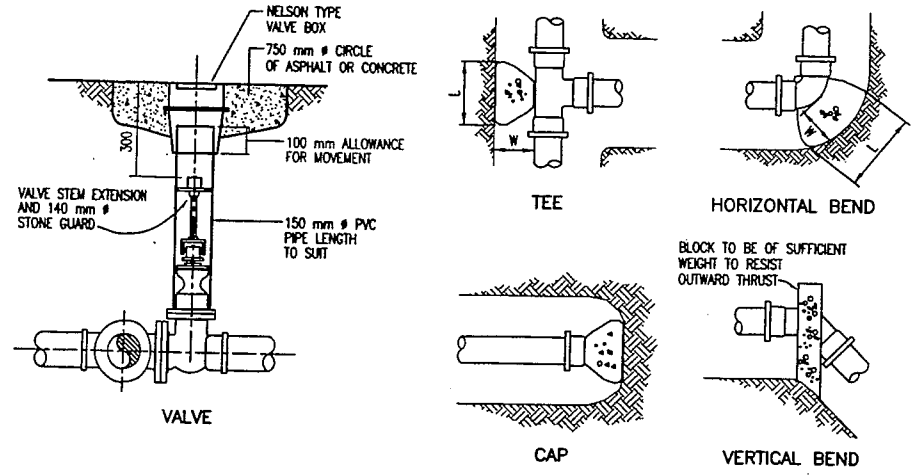
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A	MAR20/09	JE	PW	CB	ISSUED FOR TENDER						

DESIGNED PW
DRAWN JE
CHECKED PW

Dayton & Knight Ltd.
CONSULTING ENGINEERS
#210-888 HARBOURSIDE DR., NORTH VANCOUVER, B.C. V7P 3S1
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VILLAGE OF QUEEN CHARLOTTE
HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
PIPING PROFILES

SCALE: 1:100
DRAWING No. 163.008.004
SHEET No. G10 ISSUE A
THIS DRAWING REDUCED TO HALFSIZE



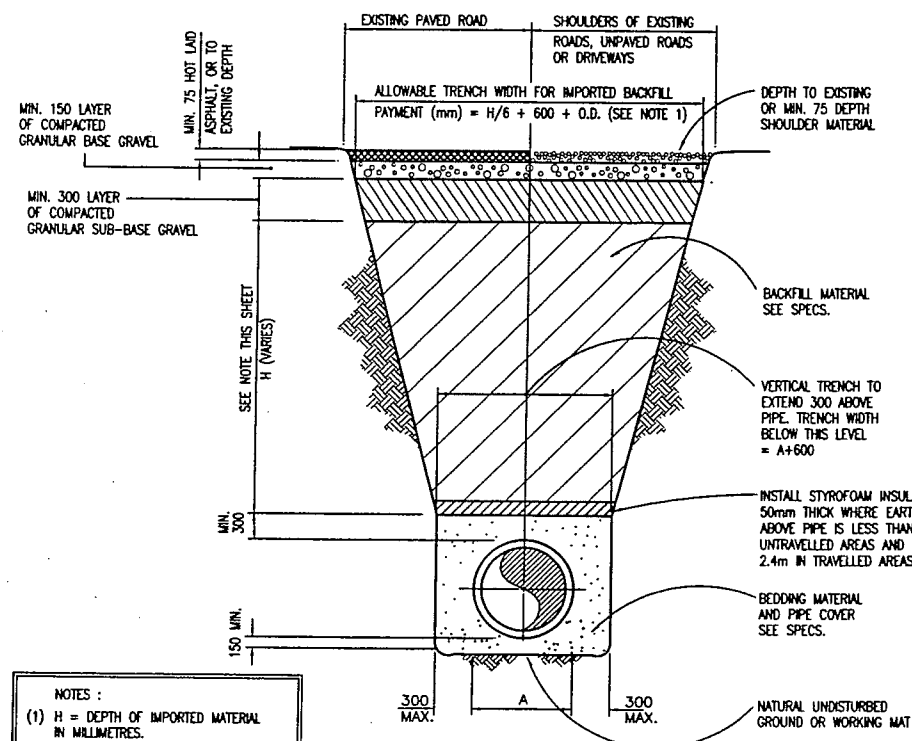
MINIMUM THRUST AREAS FOR FITTINGS AT 1030 kPa PRESSURE AND FOR SOILS WITH MIN. BEARING OF 96 kPa (NOT TO BE USED FOR SOFT CLAY, MUCK, PEAT ETC.)

TYPE OF FITTING	FITTING SIZE	OUTSIDE OF FITTING TO BEARING FACE	LENGTH	HEIGHT	TYPE OF FITTING	FITTING SIZE	OUTSIDE OF FITTING TO BEARING FACE	LENGTH	HEIGHT
	D	W	L	H		D	W	L	H
90° BEND	100	300	300	300	CAPS AND PLUGS (IF NOT BOLTED)	100	300	300	300
	150	300	920	460		150	300	460	460
	200	350	1070	610		200	350	610	610
	250	380	1450	760		250	380	760	760
TEE	100	300	300	300	300	400	920	920	
	150	300	610	460					
	200	350	760	510					
	250	380	990	740					
	300	400	1220	920					

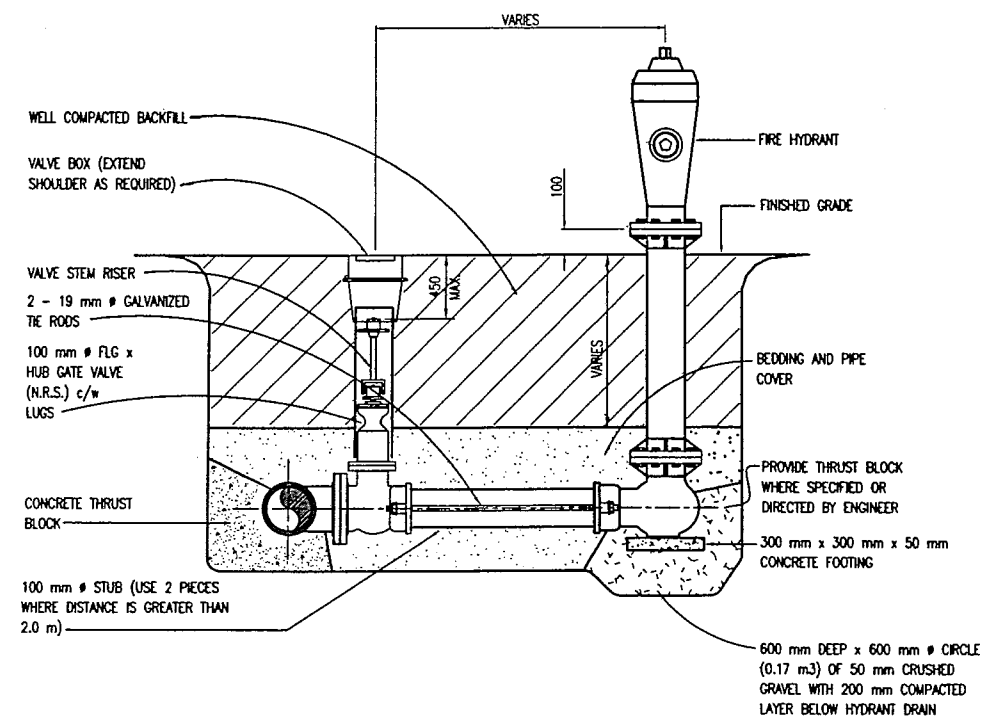
DIMENSIONS APPLY TO THE LARGER DIAMETER END OF FITTING.

THRUST BLOCKS
NOT YET CALCULATED

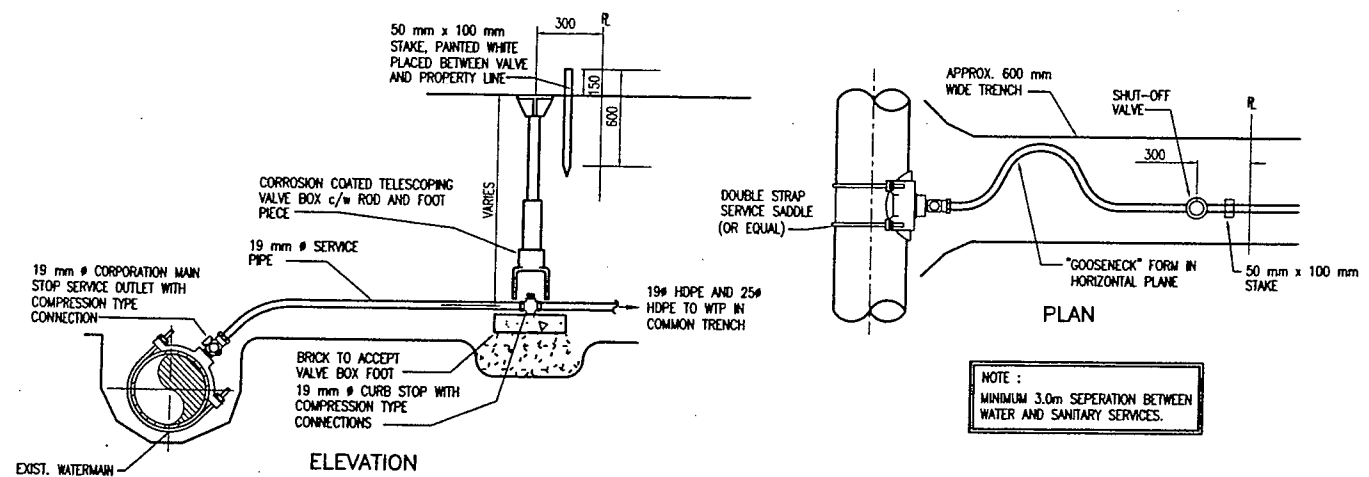
NOTES:
(1) H = DEPTH OF IMPORTED MATERIAL IN MILLIMETRES.
O.D. = PIPE OUTSIDE DIAMETER IN MILLIMETRES.
TOP OF TRENCH = H/6 + 600 + O.D. WIDTH (mm).
(2) ALL UNITS ARE IN MILLIMETRES (mm) UNLESS OTHERWISE SHOWN.



TRAVELLED ROADS AND ROAD R/W
TRENCH-GRANULAR-BED

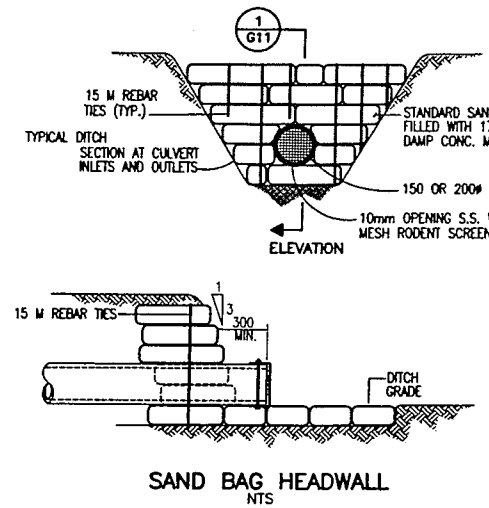


FIRE HYDRANT ASSEMBLY

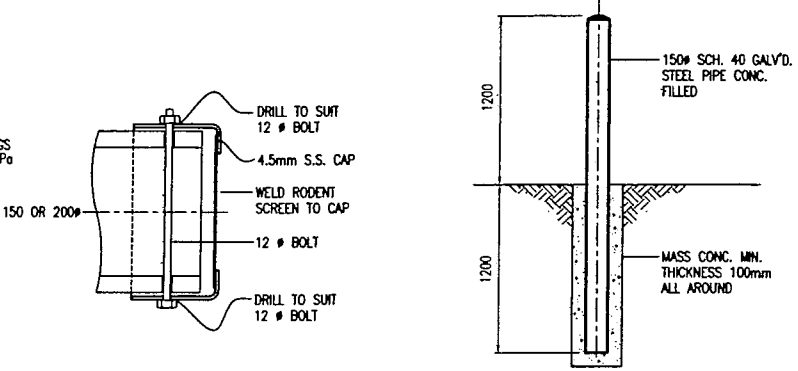


WATER SERVICE CONNECTION

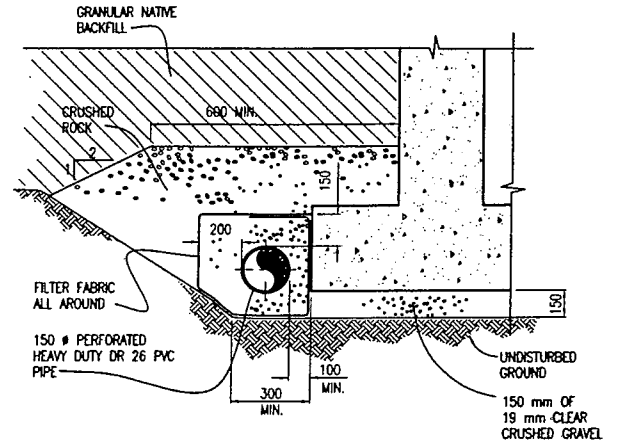
NOTE:
MINIMUM 3.0m SEPARATION BETWEEN WATER AND SANITARY SERVICES.



SAND BAG HEADWALL
NTS



BOLLARD DETAIL
NTS



TYPICAL FOUNDATION DRAIN DETAIL

FILE: P:\Drawing\GREEN - CHARLOTTE\163-8-4-2\GENERAL\163.8.4-WTP-G3-G11 - CIVIL-2009.dwg Tab: G11 09-03-19 DCURTISS

PLOT: FULL 1:1 HALF 1:2

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VILLAGE OF QUEEN CHARLOTTE
HONNA RIVER WATER SUPPLY - WATER TREATMENT PLANT
DETAILS

SCALE: NTS
DRAWING No. 163.008.004
SHEET No. G11 ISSUE A
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