Permit

Environmental Protection Act 1994

Environmental authority EPPR00488813

This environmental authority is issued by the administering authority under Chapter 5 of the Environmental Protection Act 1994.

Environmental authority number: EPPR00488813

Anniversary date: 21 January

Environmental authority holder(s)

Name(s)	Registered address
LUTHERAN CHURCH OF AUSTRALIA QLD DISTRICT	5 Faith Avenue PLAINLAND QLD 4341

Environmentally relevant activity and location details

Environmentally relevant activity/activities	Location(s)
ERA 63 - Sewage Treatment 1: Operating sewage treatment works, other than no-release works, with a total daily peak design capacity of (a-i) 21 to 100EP if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme	Lot 4 on RP208154

Additional information for applicants

Environmentally relevant activities

The description of any environmentally relevant activity (ERA) for which an environmental authority (EA) is issued is a restatement of the ERA as defined by legislation at the time the EA is issued. Where there is any inconsistency between that description of an ERA and the conditions stated by an EA as to the scale, intensity or manner of carrying out an ERA, the conditions prevail to the extent of the inconsistency.

An EA authorises the carrying out of an ERA and does not authorise any environmental harm unless a condition stated by the EA specifically authorises environmental harm.

A person carrying out an ERA must also be a registered suitable operator under the *Environmental Protection Act 1994* (EP Act).

ABN 46 640 294 485

Queensland Government

Contaminated land

It is a requirement of the EP Act that an owner or occupier of contaminated land give written notice to the administering authority if they become aware of the following:

- the happening of an event involving a hazardous contaminant on the contaminated land (notice must be given within 24 hours); or
- a change in the condition of the contaminated land (notice must be given within 24 hours); or
- a notifiable activity (as defined in Schedule 3) having been carried out, or is being carried out, on the contaminated land (notice must be given within 20 business days);

that is causing, or is reasonably likely to cause, serious or material environmental harm.

For further information, including the form for giving written notice, refer to the Queensland Government website www.qld.gov.au, using the search term 'duty to notify'.

Take effect

Please note that, in accordance with section 200 of the EP Act, an EA has effect:

a) if the authority is for a prescribed ERA and it states that it takes effect on the day nominated by the holder of the authority in a written notice given to the administering authority-on the nominated day; or

b) if the authority states a day or an event for it to take effect-on the stated day or when the stated event happens; or

c) otherwise-on the day the authority is issued.

However, if the EA is authorising an activity that requires an additional authorisation (a relevant tenure for a resource activity, a development permit under the *Planning Act 2016* or an SDA Approval under the *State Development and Public Works Organisation Act 1971*), this EA will not take effect until the additional authorisation has taken effect.

If this EA takes effect when the additional authorisation takes effect, you must provide the administering authority written notice within 5 business days of receiving notification of the related additional authorisation taking effect.

If you have incorrectly claimed that an additional authorisation is not required, carrying out the ERA without the additional authorisation is not legal and could result in your prosecution for providing false or misleading information or operating without a valid environmental authority.

Dorota Rosiak
Department of Environment and Science
Delegate of the administering authority
Environmental Protection Act 1994

Date issued: 23 August 2019

Enquiries:
Heritage, Utilities and Government Assessment
Department of Environment and Science

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Obligations under the *Environmental Protection Act 1994*

In addition to the requirements found in the conditions of this environmental authority, the holder must also meet their obligations under the EP Act, and the regulations made under the EP Act. For example, the holder must comply with the following provisions of the Act:

- general environmental duty (section 319)
- duty to notify environmental harm (section 320-320G)
- offence of causing serious or material environmental harm (sections 437-439)
- offence of causing environmental nuisance (section 440)
- offence of depositing prescribed water contaminants in waters and related matters (section 440ZG)
- offence to place contaminant where environmental harm or nuisance may be caused (section 443)

Conditions of environmental authority

Activity

63 – Sewage Treatment: (1) operating sewage treatment works, other than no-release works, with a total daily peak design capacity of (a) 21 to 100EP— (i) if treated effluent is discharged from the works to an infiltration trench or through an irrigation scheme.

Location

Lot 4 Plan RP208154

The environmentally relevant activitie(s) conducted at the location(s) as described above must be conducted in accordance with the following site specific conditions of the approval.

Agency interest: General	
Condition number	**Condition**
General 1	All reasonable and practicable measures must be taken to prevent or minimise environmental harm caused by the **activity**.
General 2	The **activity** must be undertaken in accordance with written procedures that: (a) identify potential risks to the environment from the **activity** during routine operations, closure and an emergency (b) establish and maintain control **measures** that minimise the potential for environmental harm (c) ensure plant, equipment and **measures** are maintained in a proper and effective condition (d) ensure plant, equipment and **measures** are operated in a proper and effective manner (e) ensure that staff are trained in and aware of their obligations under the *Environmental Protection Act 1994;* and (f) ensure that reviews of environmental performance are undertaken at least annually.
General 3	All information and **records** required by the conditions of this environmental authority must be kept for a minimum of five years with the exception of environmental monitoring results which must be kept until surrender of this environmental authority. All information and records required by the conditions of this environmental authority must be provided to the **administering authority** upon request and in the format requested.
General 4	Any breach of a condition of this environmental authority must be reported to the **administering authority** as soon as practicable within 24 hours of becoming aware of the breach. Records must be kept including full details of the breach and any subsequent actions taken.

General 5	An annual monitoring report must be prepared and submitted to the **administering authority** by 30 November each year, for the preceding financial year.
General 6	**You** must record the following details for all environmental complaints received: (a) date and time complaint was received (b) name and contact details of the complainant when provided and authorised by the complainant (c) nature of the complaint (d) investigations undertaken (e) conclusions formed (f) actions taken.
General 7	An **appropriately qualified person(s)** must monitor, record and interpret all parameters that are required to be monitored by this environmental authority and in the manner specified by this environmental authority.
General 8	Other than as permitted by this environmental authority, the **release of a contaminant into the environment** must not occur.
General 9	When required by the **administering authority**, monitoring must be undertaken in the manner prescribed by the **administering authority** to investigate a complaint of **environmental nuisance** arising from the **activity**. The monitoring results must be provided within 10 business days to the **administering authority** upon its request.
Agency interest: Acoustic	
Condition number	**Condition**
Noise 1	Noise generated by the **activity** must not cause **environmental nuisance** to any **sensitive place** or **commercial place**
Agency interest: Air	
Condition number	**Condition**
Air 1	Other than as permitted within this environmental authority, odours or airborne contaminants must not cause **environmental nuisance** at a **sensitive place** or **commercial place**.
Agency interest: Land	
Condition number	**Condition**
Land 1	The only contaminants to be released to land are treated effluent in accordance with *Table 1 – Effluent Release Limits to Land* and the associated requirements.

Table 1 – Effluent Release Limits to Land

Quality Characteristic (units)	Sample Point	Release Limit		
		Minimum	Median	Maximum
pH	Outlet of disinfection tank	6.0	-	8.5
BOD5 (mg/L)	Outlet of disinfection tank	-	-	20
Total Suspended Solids (mg/L)	Outlet of disinfection tank	-	-	30
Total Nitrogen (mg/L)	Outlet of disinfection tank	-	-	40
Total Phosphorous (mg/L)	Outlet of disinfection tank	-	-	15
Free Chlorine Residual	Outlet of disinfection tank	-	-	0.5
E.Coli (CFU/100ml)	Outlet of disinfection tank	-	10	-

Associated requirements

1. The irrigation area of 0.65ha must be in accordance with *Attachment 1 - Effluent Irrigation Area Plan, Reference Number 5069-190725-0.1*, prepared by Future-Plus Environmental.
2. Monitoring must be in accordance with the administering authority's Water Quality Sampling Manual and all monitoring devices must be effectively calibrated and maintained.
3. Releases of treated effluent must not be outside of Irrigation Area A and Irrigation Area B indicated on *Attachment 1 - Effluent Irrigation Area Plan, Reference Number 5069-190725-0.1,* prepared by Future-Plus Environmental.
4. Monitoring must be undertaken when treated sewage effluent is being irrigated, unless irrigation has ceased for longer than the relevant parameters specified minimum frequency (e.g. if TSS was only required to be monitored once a week, then a TSS sample would not be required after the first week following cessation of the release).
5. Volume of release must be calculated based on the total irrigation area when irrigating the maximum volume or the worked out for the area of application based on the actual volume irrigated.
6. Indicators for TN and TP are recommended to be done as grab samples.

Land 2	Subject to condition Land 3, effluent must be monitored monthly ("the monitoring period") for each of the quality characteristics mentioned in *Table 1 – Effluent Release Limits to Land*.
Land 3	The frequency of monitoring for condition Land 2 is reduced to once in each period of three months: (a) If the release limits for each of the quality characteristics comply with all limits specified in *Table 1 – Effluent Release Limits to Land* for three consecutive monitoring periods; and (b) until such time as any non-compliance with those limits is recorded.

Land 4	Notwithstanding the quality characteristic limits in *Table 1 – Effluent Release Limits to Land*, releases of treated effluent must not have any properties nor contain any organisms or other contaminants in concentrations that are capable of causing environmental harm.
Land 5	The daily irrigation rate must not exceed 9,912 litres (equivalent to 1.5 mm/day) over the minimum 0.65 hectares.
Land 6	A minimum of 0.65 hectares of land, excluding any necessary buffers, must be provided for the irrigation of treated effluent to land.
Land 7	The location of the sewage treatment plant and associated infrastructure and effluent irrigation areas must be in accordance with the *Effluent Irrigation Area Plan, Reference Number 5069-190725-0.1*, prepared by Future-Plus Environmental.
Land 8	Treated effluent released to land must be done in accordance with documentation that ensures: (a) drainage to **groundwater** and subsurface flows of contaminants to surface waters are prevented (b) surface pondage and run-off of effluent is prevented (c) degradation of soil structure is minimised (d) soil sodicity and the build-up of nutrients and heavy metals in the soil and subsoil are minimised (e) spray drift or overspray does not carry beyond effluent disposal areas (f) effluent disposal areas are maintained with an appropriate crop in a viable state for transpiration and nutrient uptake (g) sufficient buffer zones are maintained between irrigation sites and sensitive environmental receptors.
Land 9	When weather conditions or soil conditions preclude the release of treated sewage effluent to land, effluent must not be irrigated to land.
Land 10	A minimum wet weather storage capacity of 100,000 L must be provided.
Land 11	Excess effluent beyond the daily discharge allowance, when measured against Land 5 must be diverted to the wet weather storage tanks or removed to a facility that can lawfully accept the waste.
Land 12	The holder of this environmental authority must monitor and record quality characteristics biennially for the characteristics in *Table 2 – Soil Impact Monitoring*. Monitoring is to include the taking of top-soil and sub-soil samples from monitoring sites as identified in *Attachment 2 – Borehole Location Plan*, Site: 5 Faith Avenue, Plainland. FPE Reference Number: 3647.

Table 2 – Soil Impact Monitoring

Quality Characteristic	Units
pH (1:5)	pH scale
Specific conductance or electrical conductivity	µS/cm
Calcium	mg/kg
Magnesium	mg/kg
Potassium	mg/kg
Cation Exchange Capacity	meq/100g
Exchangeable calcium	meq/100g
Exchangeable magnesium	meq/100g
Exchangeable sodium	meq/100g
Exchangeable potassium	meq/100g
Exchangeable aluminium	meq/100g
Exchangeable sodium percentage	%
Total Nitrogen as N	mg/kg
Phosphorous (Colwell)	mg/kg
Boron	mg/kg
Chloride	mg/kg

Land 13	When requested, the holder of this environmental authority must submit to the **administering authority** a report by an **appropriately qualified person** on the Soil Impact Monitoring required in Condition Land 12. The report must include: (a) an assessment of the impact of effluent release to irrigation areas, (b) an assessment of whether the release is being carried out in an environmentally sustainable manner (c) interpretation of the results and conclusions, including any recommendations to achieve sustainability should monitoring indicate non-sustainability.
Agency interest: Water	
Condition number	**Condition**
Water 1	**Contaminants** must not be released to **waters**.
Agency interest: Waste	
Condition number	**Condition**
Waste 1	All waste generated in carrying out the **activity** must be lawfully reused, recycled or removed to a facility that can lawfully accept the waste.

Definitions

Activity means the environmentally relevant activities, whether resource activities or prescribed activities, to which the environmental authority relates.

Administering authority means the Department of Environment and Science or its successor or predecessors.

Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills and experience relevant to the EA requirements and can give authoritative assessment, advice and analysis in relation to the EA requirements using the relevant protocols, standards, methods or literature.

BOD5 means the 5 day biochemical oxygen demand determined using standard tests (e.g. those used by NATA laboratories). This test is not inhibited for nitrification, otherwise would be referred to as “carbonaceous” BOD.

Commercial place means a place used as a workplace, an office or for business or commercial purposes and includes a place within the curtilage of such a place reasonably used by persons at that place.

Day means any 24 hour period.

Environmental nuisance as defined under Chapter 1 of the Environmental Protection Act 1994.

Environmental value as defined under Chapter 1 of the Environmental Protection Act 1994.

Groundwater means water that occurs naturally in, or is introduced artificially into, an aquifer.

Measures has the broadest interpretation and includes plant, equipment, physical objects, monitoring, procedures, actions, directions and competency.

Median means the middle value, where half the data are smaller and half the data are larger. If the number of samples is even, the median is the arithmetic average of the two middle values.

meq means milliequivalent.

NATA means National Association of Testing Authorities. Noxious means harmful or injurious to health or physical well-being. Offensive means causing offence or displeasure; is unreasonably disagreeable to the sense; disgusting, nauseous or repulsive. Prescribed contaminants means contaminants listed within Schedule 9 of the Environmental Protection Regulation 2008.

Records include breach notifications, written procedures, analysis results, monitoring reports and monitoring programs required under a condition of this authority.

Release of a contaminant into the environment means to: (a) deposit, discharge, emit or disturb the contaminant (b) cause or allow the contaminant to be deposited, discharged, emitted or disturbed (c) fail to prevent the contaminant from being deposited, discharged emitted or disturbed (d) allow the contaminant to escape (e) fail to prevent the contaminant from escaping.

Sensitive place includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:
1. a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises; or
2. a motel, hotel or hostel; or
3. a kindergarten, school, university or other educational institution; or
4. a medical centre or hospital; or
5. a protected area under the Nature Conservation Act 1992, the Marine Parks Act 1992 or a World Heritage Area; or
6. a public thoroughfare, park or gardens; or
7. for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2008.

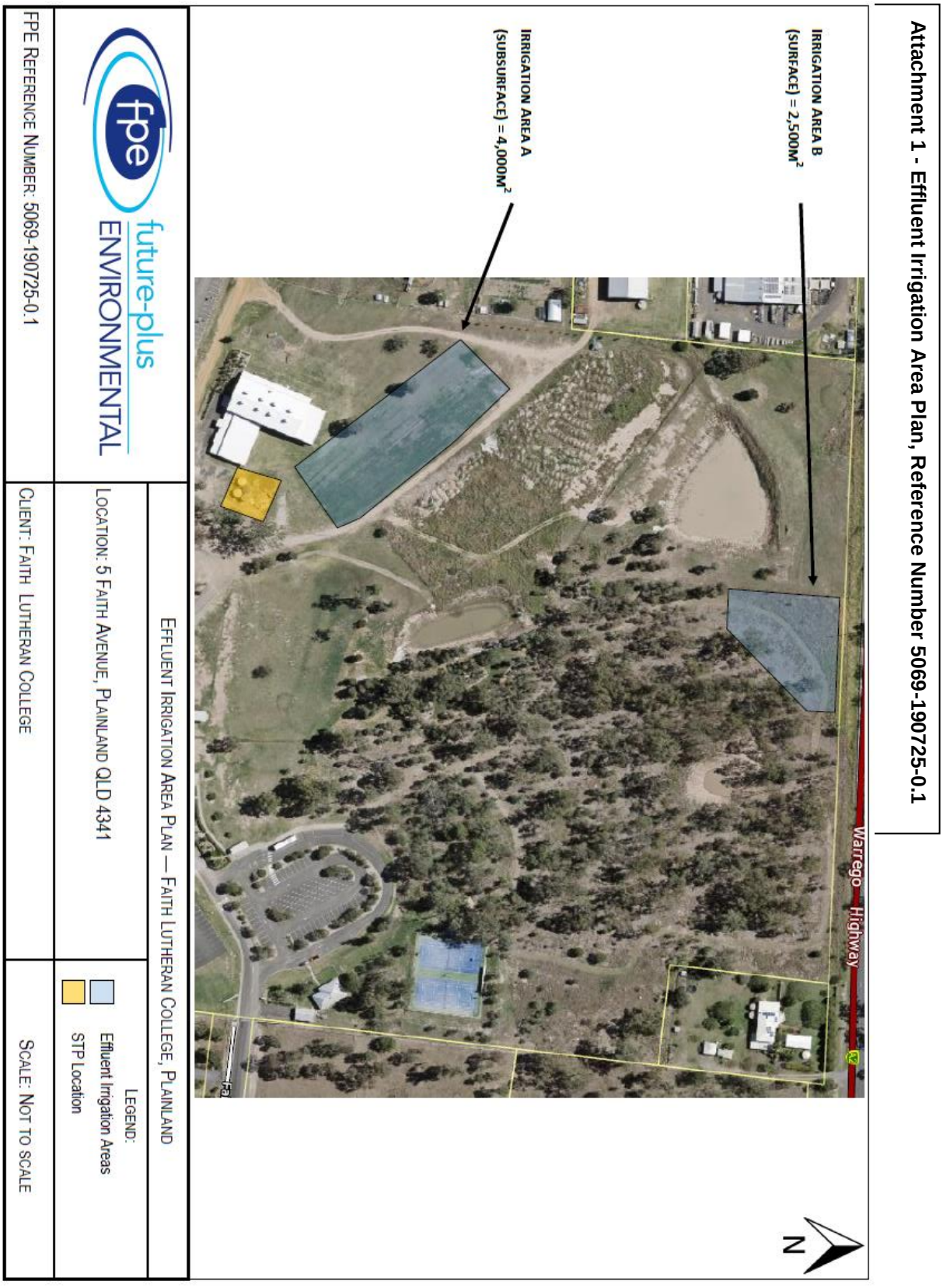
Total Nitrogen (TN) means the sum of Organic Nitrogen, Ammonia Nitrogen, Nitrite plus Nitrate Nitrogen, expressed as mg/L as Nitrogen. This includes both the inorganic and organic fraction of nitrogen.

Total Phosphorus (TP) means the sum of the reactive phosphorus, acid-hydrolysable phosphorus and organic phosphorus, as mg/L of Phosphorus. This includes both the inorganic and organic fraction of phosphorus.

Waters includes river, stream, lake, lagoon, pond, swamp, wetland, unconfined surface water, unconfined water, natural or artificial watercourse, bed and bank of any waters, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof. WaTERS is the Water Tracking and Electronic Reporting System database formally known as the Point Source Database. Wet Weather Day means a day which is not a dry weather day.

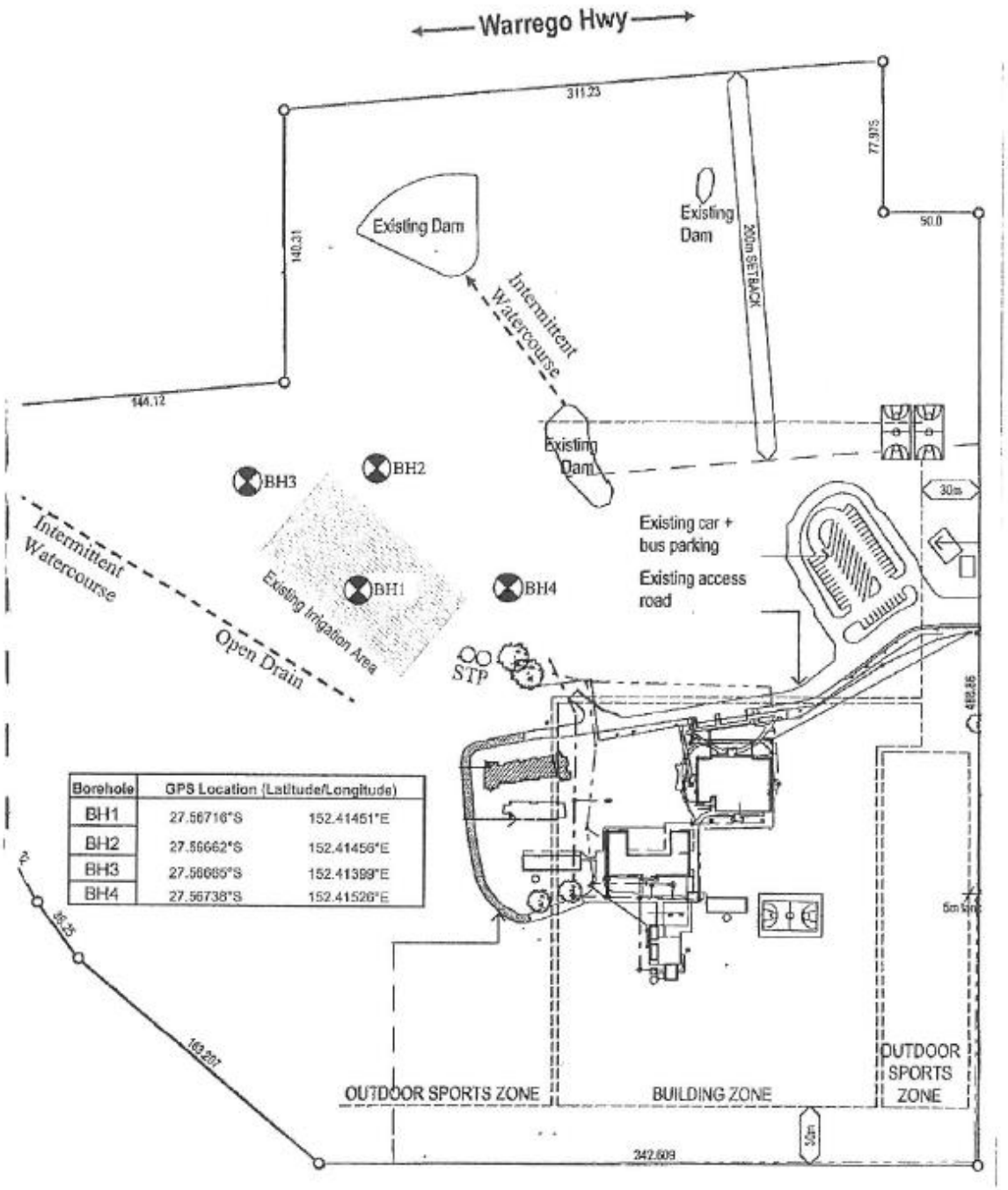
You means the holder of the environmental authority.

Attachment 1 - Effluent Irrigation Area Plan, Reference Number 5069-190725-0.1



Queensland Government

ATTACHMENT 2
BOREHOLE LOCATION PLAN



Borehole	GPS Location (Latitude/Longitude)	
BH1	27.56716°S	152.41451°E
BH2	27.56662°S	152.41456°E
BH3	27.56685°S	152.41399°E
BH4	27.56738°S	152.41526°E

fpe future-plus ENVIRONMENTAL	BOREHOLE LOCATION PLAN	Scales: Not To Scale
	Site: 5 Faith Avenue, Plainland	*Figure Measurements To Take Precedence Over Scale Measurements*
FPE Reference Number: 3647	Client: Faith Lutheran College	

Queensland Government

END OF ENVIRONMENTAL AUTHORITY