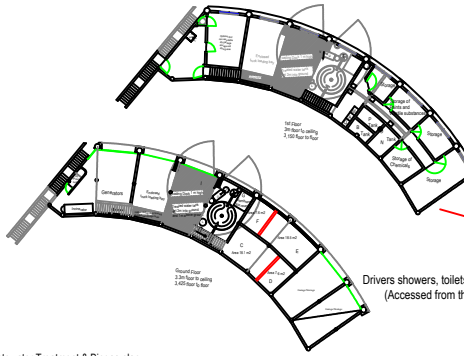


Section 17

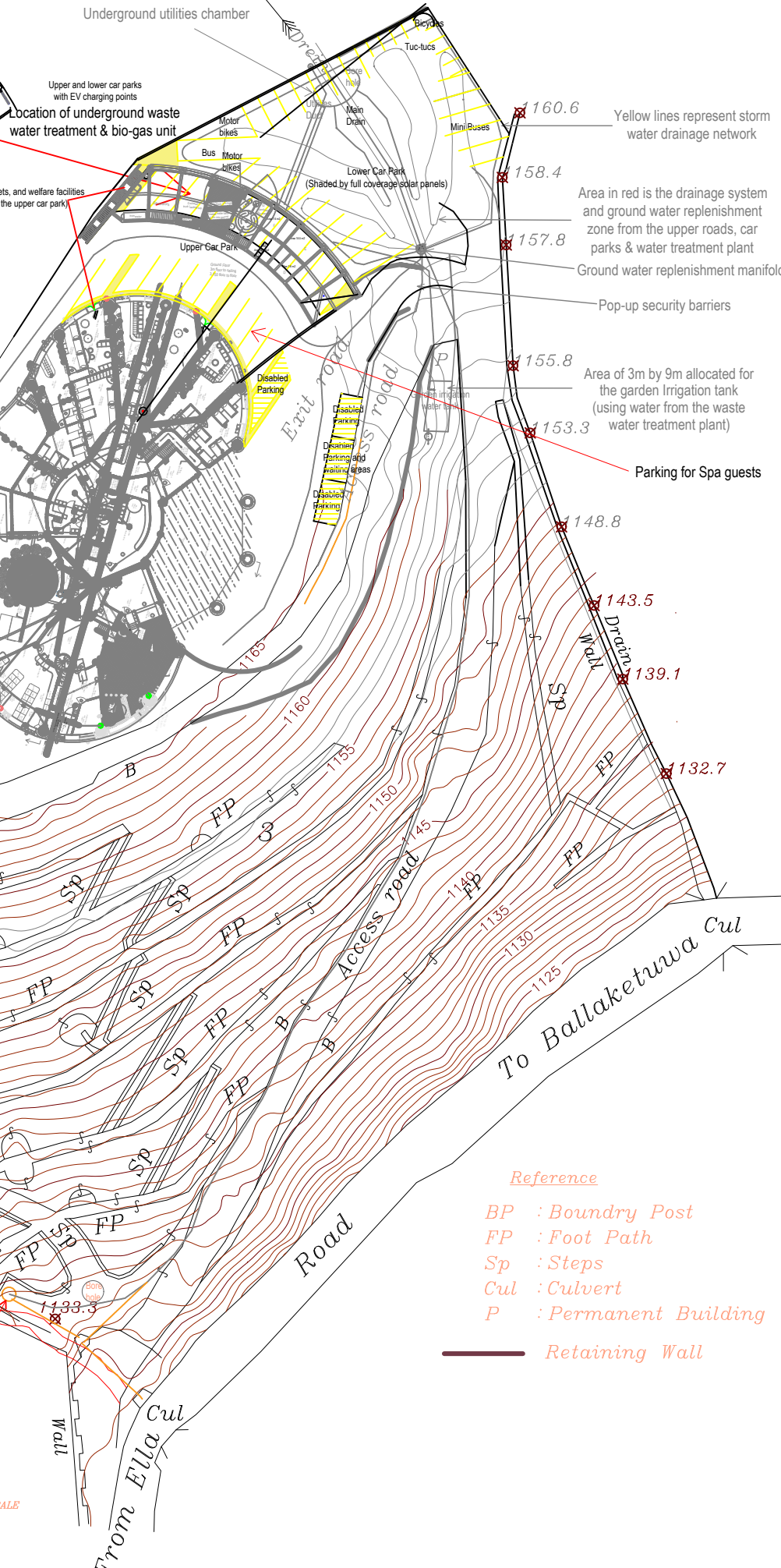
Project Layout Plan

1st floor above the waste water treatment plant (Beneath the upper car park)



Legend for Wastewater Treatment & Biogas plant

- A: Bar screen & grit chamber for black & grey (bathroom) wastewater
 - B: Grease trap for wastewater from food prep and dishwashing (high in FOG) and settler to pump solids into the biogas digester
 - C: Equalization tank with an air blower to keep solids suspended
 - D: Primary settling tank (Sludge is pumped to the biogas digester)
 - E: Aeration tank
 - F: Secondary settling tank
 - G: Membrane Bio-Reactor
 - H: Disinfectant dosing pump
 - I: Treated water storage tank
 - J: Garden Irrigation storage tank
 - K: Garden irrigation carbon filter to remove chlorine
 - L: Ultra-Violet water treatment & filtration unit on toilet flushing supply line
 - M: Bar screen and grit chamber on the laundry wastewater line
 - N: Laundry wastewater equalization tank (With a fat oil & grease trap then initial aerator)
 - O: Chemical balance dosing pump
 - P: Laundry wastewater, tube settler tank (Sludge is pumped to the biogas digester)
 - Q: Bar screen & grit chamber for macerated organic waste from food preparation areas
 - R: Feed tank for the biogas digester
 - S: Floating dome biogas digester
 - T: Exit collection tank of the biogas digester
 - U: Liquid-solid separator & bacterial feed loop
 - V: Garden compost bagging machine
 - W: Manual valve to divert activated sludge back into the system/loop line
 - X: Anaerobic sludge loop line to feed bacteria back into the system
 - Y: Overhead slew crane
 - Z: Disinfectant dosing pump for treated water going to the groundwater replenishment system
- N.B. E01, E02, E03, = Order of use/take-off priority regarding Effluent Outlet water



Underground utilities chamber

Upper and lower car parks with EV charging points
Location of underground waste water treatment & bio-gas unit

Drivers showers, toilets, and welfare facilities (Accessed from the upper car park)

Yellow lines represent storm water drainage network

Area in red is the drainage system and ground water replenishment zone from the upper roads, car parks & water treatment plant

Ground water replenishment manifold

Pop-up security barriers

Area of 3m by 9m allocated for the garden Irrigation tank (using water from the waste water treatment plant)

Parking for Spa guests

Rainwater harvesting underground storage tanks and gas bottle storage



Scale 1:1,000
Contour Interval 1m

- Reference**
- BP : Boundry Post
 - FP : Foot Path
 - Sp : Steps
 - Cul : Culvert
 - P : Permanent Building
 - Retaining Wall

Ground water replenishment system from the lower section of access road

Surveyed by :
K. L. Sudantha Rathnayake,
Registered Licensed Surveyor,
Udumulla Watta,
Nugathalawa,
Welimada.
Registration No. 19971078,
Tel: 0777228006, 0718221395,
Fax: 0572244943
CONTOUR PLAN No. KLSR/2019/04
Surveyed on 9th September 2019

VILLAGE : NAWALAGAMA
MINOR DIVISION : KUBALWELA KORALE
D.S. DIVISION : ELLA
DISTRICT : BADULLA
PROVINCE : UVA