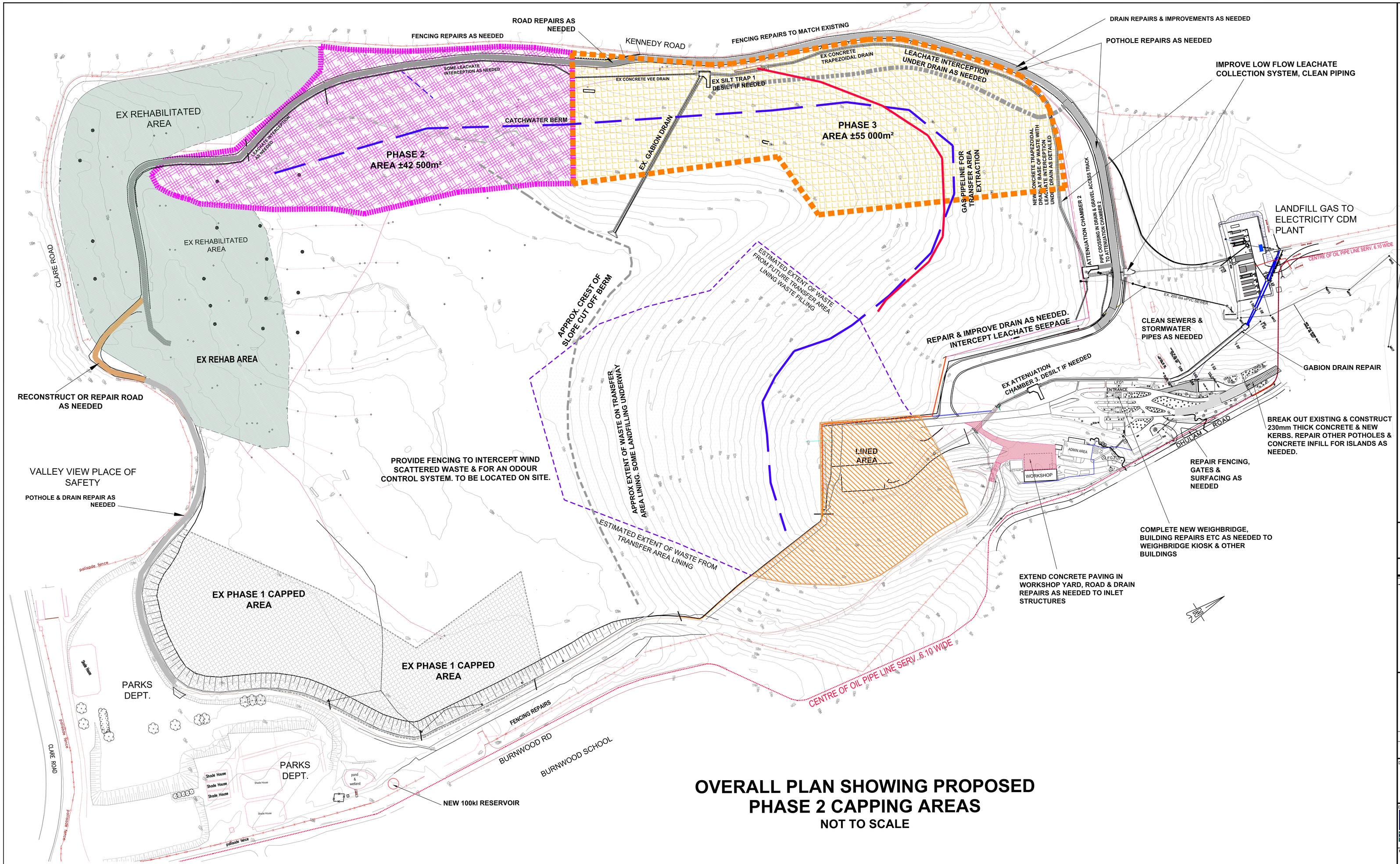
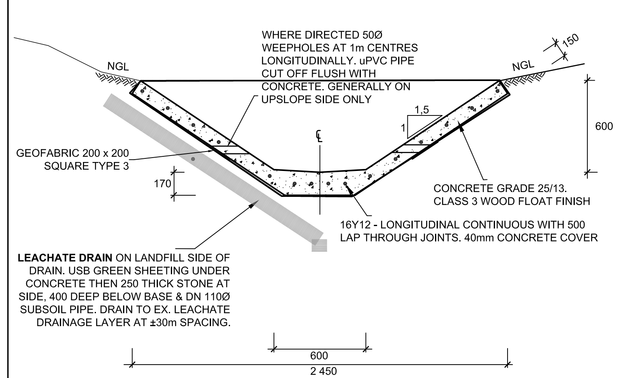
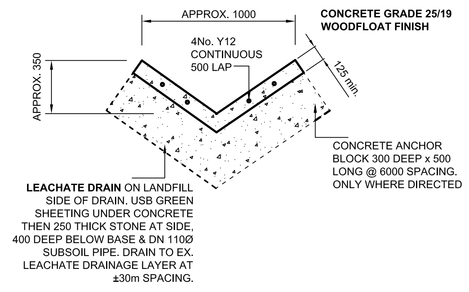


OVERALL PLAN SHOWING PROPOSED PHASE 2 CAPPING AREAS

NOT TO SCALE

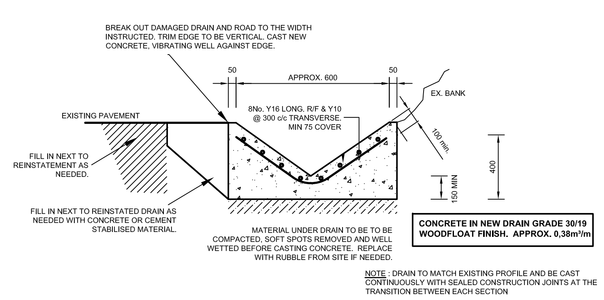


CONCRETE LINED TRAPEZOIDAL DRAIN
SCALE 1 : 20



NOTE : DRAIN MAY BE CAST CONTINUOUSLY WITH SEALED CONSTRUCTION JOINTS AT THE TRANSITION BETWEEN EACH SECTION

DETAIL FOR NEW CONCRETE VEE DRAIN (PROV.)
Scale 1:20



NOTE : DRAIN TO MATCH EXISTING PROFILE AND BE CAST CONTINUOUSLY WITH SEALED CONSTRUCTION JOINTS AT THE TRANSITION BETWEEN EACH SECTION

DETAIL FOR THE REPAIR OF CONCRETE VEE DRAINS
Scale 1:20

CAPPING LAYER

THICKNESS	LAYER	DESCRIPTION
150 / 200mm	TOPSOIL	Topsoil. Planted with indigenous grasses and shrubs, Supplemented with compost and wood chippings. PROVISIONAL
450mm MIN	CAPPING	Imported clayey and silty soil PI ±12 - ±30%. Compacted to min 90% Proctor density at OMC to +2% above Proctor OMC, generally in 150mm layers. Infiltration to be less than 0,5m/yr (1,6 x 10-8 cm/s). Graded to falls.
		Geotextile filter layer (340g/m², needle punched, non-woven)
300mm to 500mm	DRAINS	Single sized crushed stone drains installed as needed prior to capping to collect leachate. PROVISIONAL.
		Geotextile filter layer. PROVISIONAL.
±150mm	FORMATION	Existing final daily cover soil layer, rip 100 or 150 deep, scarify, grade & smooth to be free draining; remove oversize & unsuitable materials, supplement with material from site stockpile as needed. Compact to 90% Mod AASHTO density. On slopes of up to 1v:2,5h,
EXISTING COMPACTED MSW.		

GENERAL CONCRETE PAVEMENT LAYERWORKS

THICKNESS		DESCRIPTION
230mm		35MPa concrete. Where specified, Multi Armour 100 or equal approved inc curing compound, application etc at 9kg/m2 as a dry shake.
150mm	Subbase	Subbase. G5 quality gravel / crushed rock compacted to 98% Mod AASHTO density.
150mm	Subgrade	In situ material, generally minimum G7 quality in situ soil or fill compacted to 93% Mod AASHTO density.

NOTES:

BEFORE WORK IS STARTED ALL SERVICES LIKELY TO BE AFFECTED ARE TO BE IDENTIFIED, LOCATED AND PROTECTED TO THE APPROVAL OF THE ENGINEER.

THE EXTENT OF THE WORKS MAY BE CHANGED SUBJECT TO BUDGET AND APPROVALS.

THE SERVICES (GAS PIPELINES) SHOWN ARE NOT THE ONLY PIPELINES ON THE SITE SO THE CONTRACTOR IS TO LIAISE WITH DSW PERSONNEL TO ESTABLISH THE EXTENT AND POSITION OF THE **ACTUAL PIPING AND GAS SYSTEMS WITHIN THE AREA TO BE CAPPED.**

THE AREAS PROVIDED ARE INDICATIVE ONLY AND WILL BE CONFIRMED IN THE CONTRACT DRAWINGS & ON SITE.

SAFETY WARNING: The Contractor will be working on the landfill so attention is drawn to the flammable, explosive and asphyxiative nature of landfill gas resulting from the de-composition of waste. Landfill gas can migrate through ground and the Contractor shall take all necessary precautions to ensure the safety of his/her personnel and all third parties from the dangers of landfill gas. Landfill gas is particularly dangerous in enclosed spaces (manholes etc.) The Contractor's personnel shall not enter the operational areas and contact with refuse and leachate should be kept to a minimum. No scavenging of refuse is allowed. Workmen are to be provided with the appropriate safety clothing and equipment.

The lighting of fires is strictly prohibited, due to the possible presence of landfill gas, and smoking on site will also be prohibited. The use of naked flames must only take place under safe conditions. Smoking shall only be allowed in designated safe areas.

The Contractor's attention is also drawn to the possible hazards to health of waste and contaminated water, and adequate health and safety precautions shall be taken.

The Contractor shall make all Sub-Contractors, visitors, third parties and agents aware of the hazards of landfill gas on the site, and shall ensure that they take the necessary precautions.

The Contractor shall take adequate Health and Safety precautions when working in and adjacent to waste. The wastes placed in the in-filled areas are reported to have been predominantly municipal wastes (domestic, commercial, industrial and inert). However, the Contractor should also make provision for the fact that any landfill may contain small quantities of hazardous substances other than those permitted under a site licence. No guarantee can be given that small quantities of other substances, including hazardous industrial waste, have not been concealed within other wastes and disposed without knowledge of the site operator.

DRAWING PURPOSE

FOR TENDER PURPOSES

SCALE ON REDUCED DRAWING

100mm ON ORIGINAL DRAWING

SCHEDULE OF DRAWINGS

6W-25751-01	PLANS FOR EXCAVATION OF CLAY SOIL FROM STOCKPILED FILL OFF CENTRE ROAD
6W-25751-02	BISASAR ROAD LANDFILL SITE PLAN & DETAILS FOR THE APPROXIMATE EXTENT OF THE PHASE 2 CAPPING

No.	DATE	REVISION DESCRIPTION
AB	17-10-2024	CONCRETE AREAS AMENDED.
AA	12-08-2024	FOR TENDER PURPOSES ONLY

REVISIONS

DESIGN ENGINEER:
WILSON & PASS Inc
email jon.pass@pixie.co.za
contact: +2782 463 1127

EMPLOYER
eThekwini Municipality
CLEANSING & SOLID WASTE
DSW

MANAGER PLANT & DISPOSAL:

HEAD CLEANSING & SOLID WASTE:

CONTRACT No:
6W-25751

PROJECT:
CONSTRUCTION OF CLAY CAPPING LAYER AT THE BISASAR ROAD LANDFILL : **PHASE 2**

DRG. TITLE:
BISASAR ROAD LANDFILL SITE PLAN & DETAILS FOR THE APPROXIMATE EXTENT OF THE PHASE 2 CAPPING

DESIGN:
J PASS PrEng 890126
for Wilson & Pass Inc
SIGN:

DATE: 3/05/2024

ORIGINAL SCALE:	DATE:
AS SHOWN	MAY 2024
DWG No.: 6W-25751-02	REV No.: AB