

- GENERAL NOTES
1. PIPE MARK AT GROUND LEVEL THE DIRECT ROUTE OF A BURIED PIPE.

2. ALL PIPE WORK TO BE PROTECTED AGAINST CORROSION ACCORDING TO SANS 10121  
PUMPING PLANT FOR PRODUCT

2.1. GENERAL  
ALL PUMPS FOR APPLICATION AND INTENDED SERVICES IN THE PETROLEUM INDUSTRY SHALL BE DESIGNED TO AN APPROVED STANDARD

2.2. PUMPS  
THE TYPE OF PUMP TO BE USED WILL BE DETERMINED BY THE PRODUCT REQUIRMENTS. PREFERABLY USE CENTRIFUGAL PUMPS OF SINGLE-STAGE OR MULTISTAGE DESIGN FOR ALL PRODUCTS EXCEPT VISCIOUS FUEL OILS. WHERE POSITIVE-DISPLACEMENTS PUMPS CAN HAVE SIGNIFCATE ADVANTAGES. THEY MAY BE USED. SCREW PUMPS AND PISTON-TYPE ARE PARTICULARLY SUITABLE FOR HANDLING HEAVY, HEATED PRODUCTS. PUMPS SHALL BE ADEQUATELY SUPPORTED. SPILL CONTAINMENT SHALL BE PROVIDED FOR ALL PUMPS, AND SHALL INCLUDE SUITABLE DRAINAGE.

DRAINAGE

3. PIPE BE PROTECTED ON AN ACCEPTABLE WAY FROM STRESS INDUCED BY THE EXPANSION AND CONTRACTION OF PIPES

4. ELECTRICAL EQUIPMENT BE INSTALLED ON ACCORDANCE WITH THE REQUIREMENTS OF SANS 10086, SANS 10089-2, SANS 10108, SANS 10142-1

5. WARNING NOTES AND SIGNS ACCORDING SANS 1186-1 AT THE ENTRANCES TO HAZARDOUS AREAS.

6. HYDRANTS: 65mm HANDWHEEL, PILLAR TYPE  
EMERGENCY PLANS ON SITE AND OFF SITE

6.1. EMERGENCY PLANS SHALL BE PREPARED TO COVER FORESEEABLE TYPES OF EMERGENCIES, WHICH SHALL COVER SITUATIONS THAT RANGE FROM A SMALL INCIDENT TO ONE OF DISASTER PROPORTIONS WHERE CONSIDERABLE ASSISTANCE FROM OUTSIDE ORGANIZATIONS IS NEEDED. ANY EMERGENCY PLAN SHALL COMPLY WITH THE REGULATIONS FOR MAJOR HAZARD INSTALLATIONS AS LAID DOWN IN THE OHS ACT, 1993

6.2. PORTABLE AND MOBILE FIRE EXTINGUISHERS TO BE INSTALLED AS INDICATED ON PLAN.

7. FIRE DANGER

7.1. IN HAZARDOUS AREAS, SPECIAL PRECAUTIONS SHALL BE TAKEN, SUCH AS THE TEMPORARY RESITING OR SUPPLEMENTING OF FIRE EQUIPMENT TO COVER AN EMERGENCY OR, WHEN IT IS DEEMED EXPEDIENT, THE PROVISION OF FIRE-WATCHERS.  
TO DETECT INCIPENT FIRE AND TO BRING FIRST-AID AND FIRE-FIGHTING EQUIPMENT INTO IMMEDIATE USE. BRIEF BUT EXPLICIT INSTRUCTIONS SHALL BE GIVEN TO ANY CONTRACTOR THE ACTION TO BE TAKEN IN THE EVENT OF A FIRE.

8. ALL SLOPE OF AT LEAST 1:100 AWAY FROM THE TANK SHALL BE PROVIDED FOR AT LEAST 15m OR THE DISTANCE TO THE BUND WALL TOE, WHICHEVER LESS.

9. TRAFFIC ARRANGEMENTS

9.1. ON-SITE ROADS SHALL NOT BE USED FOR PARKING.  
SPECIAL PARKING AREAS SHALL BE ALLOCATED FOR PETROLEUM-CARRYING VEHICLES. PARKING AREAS FOR BULK TANKERS SHALL BE SO DESIGNED THAT A LARGE SPILL WILL NOT ENDANGER THE TANK FARM, BUILDINGS OR ANY OTHER STRUCTURES. IF POSSIBLE ALLOCATE A PARKING AREA FOR PRIVATE CARS, PREFERABLY ON PART OF THE THAT IS REMOTE AND SEPARATED FROM OPERATIONAL AREAS.

9.2. VEHICLES (OTHER THAN THOSE NORMALLY EMPLOYED ON THE PREMISES) SHALL NOT BE USED ON ON-SITE ROADS WITHOUT THE PRIOR APPROVAL OF THE MANAGER OR HIS AUTHORIZED REPRESENTATIVE. SUITABLE LIGHTING IS ESSENTIAL FOR NIGHT OPERATIONS (SEE ALSO SANS 10089-2, (SABS 089-2) AND SANS 10114-1 (SABS 0114-1))

9.3. WHERE PIPELINES OR CABLES ARE ROUTED ADJACENT TO ROADS, PROTECTIVE KERBING SHALL BE PROVIDED TO PREVENT ACCIDENTAL DAMAGE.

9.4. SYMBOLIC SAFETY SIGNS AND WARNING SIGNS SHALL BE PROVIDED WHERE NECESSARY. IN LARGE DEPOTS, THE NUMBERING OR NAMING OF ROADS IS DESIRABLE.

10. ACCESS FOR FIRE-FIGHTING EQUIPMENT

10.1. THE EFFECTIVENESS WITH WHICH FIRE-FIGHTING EQUIPMENT CAN BE USED, PARTICULARLY IN THE EARLY STAGES OF A PETROLEUM-PRODUCT FIRE, DEPENDS PRIMARILY ON THE SPEED WITH SUCH EQUIPMENT CAN BE BROUGHT INTO ACTIVE USE.

10.2. TANKER AREA MUST OR CAN BE ENTERED FROM A OTHER POINT.

10.3. NO UNAUTHORISED VEHICLES

11. DRAINAGE AND INTERCEPTORS

11.1. LOADING AND DISHARGING FACILITIES, SAFETY, THE ENVIRONMENT AND EFFICIENCY BE REGARDED AS THE BASIC CONSIDERATION.

12.1. SPILL CONTAINMENT SHALL BE PROVIDED FROM ALL PUMPS, AND SHALL INCLUDE SUITABLE DRAINAGE.

13.1. OVER FILL PROTECTION METHOD SHALL BE INSTALLED TO PROVIDE CONTROL OF THE QUANTITY DELIVERED TO VEHICLE TANKS

14. LOADING AND UNLOADING OF ROAD VEHICLES

14.1. THE FOLLOWING GENERAL SAFETY RULES SHALL APPLY DURING LOADING AND UNLOADING OF ROAD VEHICLES:

14.A. NO VEHICLE SHALL BE LEFT UNATTENDED WHILE LOADING OR UNLOADING IS IN PROGRESS.

14.B. ACCIDENTAL MOVEMENT OF THE VEHICLE SHALL BE LEFT IN A GEAR THAT PREVENTS MOVEMENT.

14.C. ALL VEHICLE ENGINES SHALL BE SWITCH OFF BEFORE LOADING, AND SHALL NOT BE RESTARTED UNTIL ALL CAPS, COCKS, VALVES AND COVERS HAVE BEEN CLOSED AND SECURED.

14.D. NO INTERNAL COMBUSTION ENGINE (OTHER THAN THAT OF A VEHICLE SPECIALLY EQUIPMENT FOR TRANSPORTING, HANDLING, OR PUMPING FLAMMABLE LIQUIDS) SHALL BE CLOSER THAN 15m TO THE AREA IN WHICH CLASS I OR CLASS II PRODUCTS ARE BEING LOADED OR UNLOADED.

14.E. VEHICLES AWAITING LOADING SHALL REMAIN AT A SAFE DISTANCE FROM THE LOADING POINT.

14.F. SMOKING SHALL ONLY PERMITTED IN DESIGNATED AREAS.

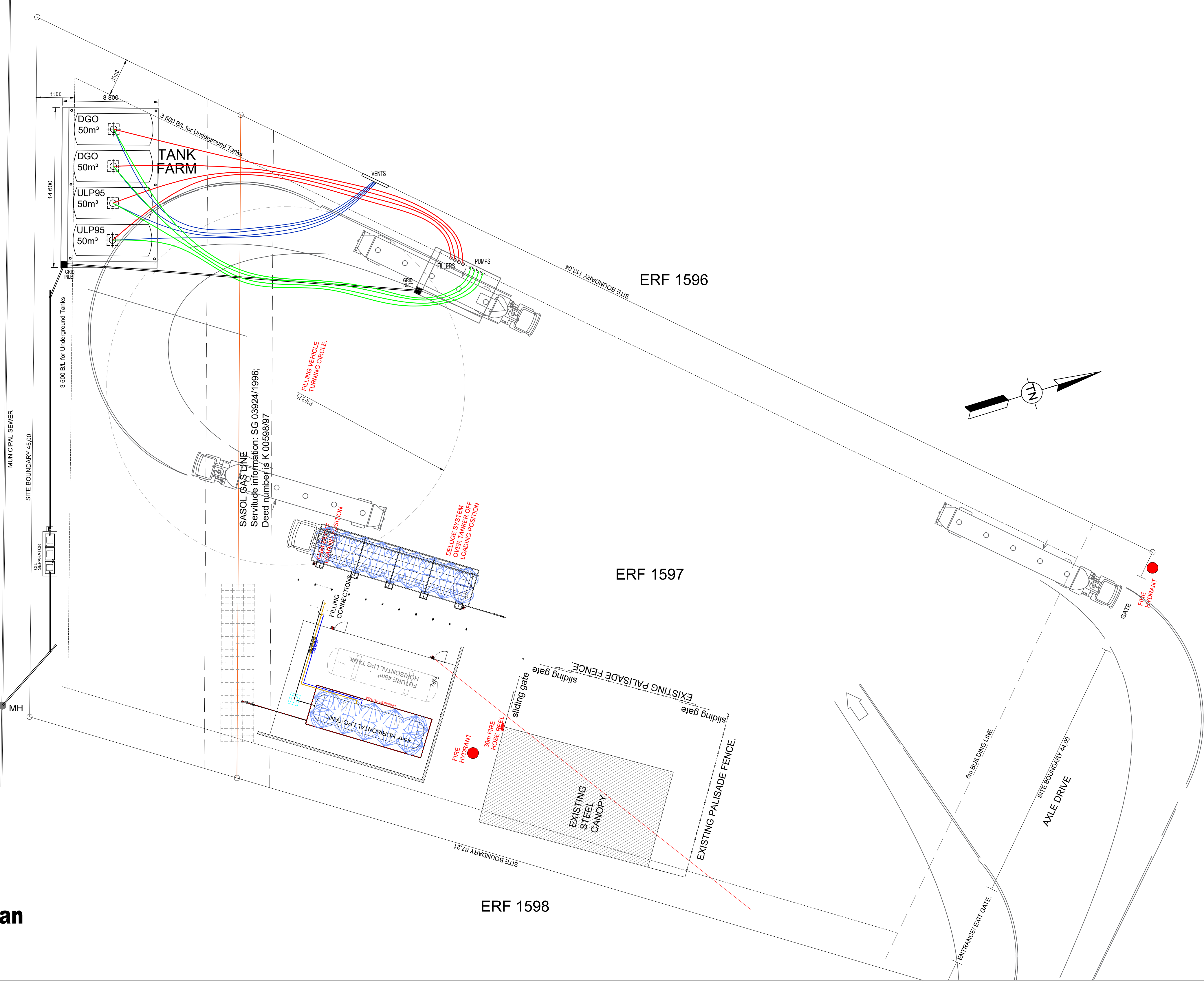
14.G. HEATING PRODUCTS SHALL BE HANDLED WITH GREAT CARE.

14.H. ALL PERSONNEL SHALL BE PROVIDED WITH PROTECTIVE CLOTHING FOR LOADING OR UNLOADING OPERATIONS (SEE THE OHS Act, 1993)

14.I. WHERE OPERATIONS INVOLVE SWITCH LOADINGS, SAFETY PROCUDURES SHALL BE IMPLEMENTED (SEE APT RP 2003)

14.J. SPLASH FILLING OR SPLASH LOADING SHALL NOT BE ALLOWED (SEE SANS 10089-20)

15. THE FILLING STATION AND TANKS MUST BE INSTALLED ACCORDING SANS 089-3



- GENERAL NOTES
- a) THE TANK MUST BE INSTALLED IN COMPLIANCE WITH SANS 10400, 10089-3 & 100108.

b) SABS APPROVED SYMBOLIC "NO SMOKING" SIGNS MUST BE PROVIDED

c) PUMPS MUST BE PROTECTED BY BOLLARDS

d) NO ABOVE GROUND FUEL TANKS ARE ALLOWED

e) FILLER PIPES - 100mm

f) THE VENT + SUCTION PIPES - 50mm, MIN 3600 ABOVE GROUND AND MIN 600mm ABOVE ROOF LEVEL

g) NO LIQUID FUEL DISPENSING PUMP, PIPES OR STORAGE TANK TO BE SITUATED LESS THAN 3.5m FROM ANY LATERAL BOUNDARY OR STREET BOUNDARY

h) THE TANK SHALL BE FITTED WITH AN OVERFILL PROTECTOR. THE CRITICAL LEVEL SHALL BE SUCH THAT A SPACE REMAINS IN THE TANK TO ACCOMMODATE THE DELIVERY PIPES VOLUME.
- GENERAL
- THE LOCAL FIRE DEPARTMENT MUST BE INFORMED AT LEAST TWO (2) WORKING DAYS IN ADVANCE BEFORE WORK ON THE INSTALLATION COMMENCES AND THEREAFTER FOR THE FOLLOWING INSPECTIONS WITHOUT EXCEPTIONS.

a) AFTER EXCAVATION IS COMPLETE

b) WITH THE INSTALLATION OF SUITABLE NON - METALLIC SHEET ON THE BED OF RIVER SAND.

c) WITH THE INSTALLING OF THE TANK

d) COMPACTION OF THE SAND AROUND THE TANK. (300mm LAYERS)

e) ALL BURIED PIPE WORK SHALL BE COVERED BY BACKFILL OF THICKNESS AT LEAST 300mm

f) PRESSURE TEST OF THE PIPE WORK AND TANK AT 30 kPa (SUCTION LINES), SUBMERSIBLE LINES ON 1000kPa.

g) CASTING OT THE 150mm REINFORCED CONCRETE SLAB WITH 2 LAYERS 6mm STEEL REINFORCING, TOP AND BOTTOM - 30Mpa AFTER 30 DAYS. (PROOF MUST BE SUBMITTED)
- IN ANY GROUND WORK AND / OR LEVELS ARE DONE AFTER COMPLETION OF THE INSTALLATION, A PRESURE TEST WILL AGAIN BE REQUIRED.
- SABS APPROVED SYMBOLIC "NO SMOKING" SIGNS MUST BE PROVIDED.
- GENERAL
- APPLICATION FOR A CERTIFICATE OF REGISTRATION MUST BE APPLIED FOR AT THE FIRE DEPARTMENT, ON COMPLETION OF THE INSTALLATION BEFORE ANY PRODUCT IS DECANATED INTO THE TANK.

Site Layout Plan

Scale 1:1000

GENERAL NOTES:	REV.	DATE	DESCRIPTION	DRAWN	CHECK
1. ALL LEVELS AND DIMENSIONS ARE TO BE CHECKED ON SITE BEFORE THE COMMENCEMENT OF WORK. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT OR PROJECT MANAGER IMMEDIATELY.					
2. ALL SITE AND BUILDING WORKS ARE TO COMPLY WITH THE NATIONAL BUILDING REGULATIONS OR THE LOCAL AUTHORITY STANDARDS. THE ONUS IS ON THE CONTRACTOR TO CHECK WITH THE RELEVANT AUTHORITIES.					

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PROJECT PROPOSED 4 x NEW 46m³ UNDER-GROUND TANKS ON ERF 1597, CLAYVILLE EXT. 22, OLIFANTSFONTEIN.		ISSUED FOR		TYPE
CLIENT DORRIS HILL TRANSPORT (Pty) Ltd		SCALE as indicated	DATE FEB 2022	
DRAWING FUEL INSTALLATION LAYOUT		PROJ. 22006	DRWG No. 100	DRAWN J.C. Kruger