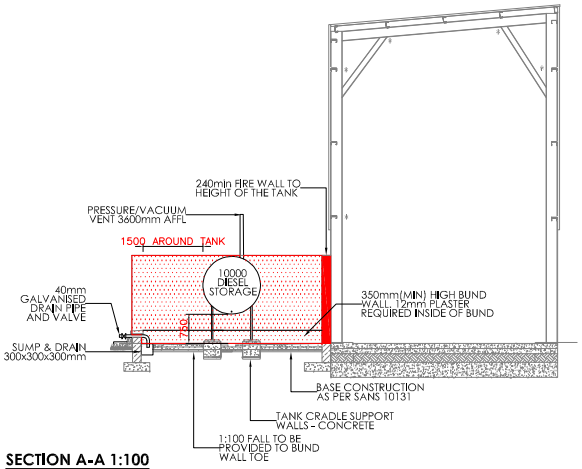
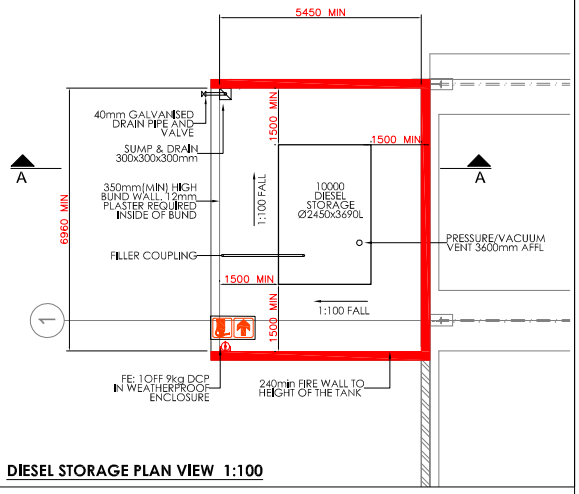


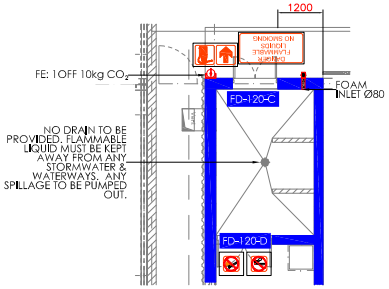
SECTION A-A 1:100



DIESEL STORAGE PLAN VIEW 1:100

DIESEL STORAGE NOTES:

1. NEW DIESEL STORAGE.
2. BUND TO CONTAIN 110% OF STORED QUANTITY.
3. BUND WALL TO BE MINIMUM 350mm HIGH WITH MINIMUM 12mm PLASTER.
4. BUND FLOOR TO BE 75mm CONCRETE WITH 1/100 FALL TO SUMP.
5. 300x300x300mm SUMP TO BE PROVIDED WITH A VALVE DRAIN OUTLET.
6. THE TANK CRADLES TO BE SUPPORTED ON FOOTINGS. FOOTINGS TO HAVE A VEE SHAPE TO ALLOW FLOW OF LIQUIDS TOWARD SUMP.
7. TANK CONNECTIONS TO HAVE VALVES CLOSE TO TANK SHELL AS POSSIBLE. VALVES INSIDE THE BUND AREA TO BE STEEL FIRE SAFE TYPE.
8. FILLER COUPLING WITH ISOLATING VALVE TO BE INSTALLED WITHIN THE BUND AREA TO CONTAIN ANY SPILLAGE DURING FILLING.
9. TANK TO BE VENTED BY MEANS OF PRESSURE/VACUUM VENT TO MINIMUM 3.6m ABOVE PAVING LEVEL.
10. SIGNAGE CONFORMING TO SANS 1186-1 SHALL BE DISPLAYED. "NO SMOKING", "NO NAKED FLAME" SIGNAGE TO BE DISPLAYED.
11. INSTALLATION TO CONFORM TO SANS 10131. REFER TO SANS 10131 - 12.3 FOR UNDERGROUND PIPING INSTALLATION.
12. FUEL DELIVERY:- FUEL TRUCK IS NOT ALLOWED TO REVERSE TO FILLER POINT. THE FUEL TRUCK TRAVELS ALONG THE ROAD & STOPS AT THE DIESEL TANK. ONCE THE FILLING HAS COMPLETED THE TRUCK WILL CARRY ON ALONG THE ROAD & EXIT THE SITE.



FLAMMABLE STORE:

STORE AREA: 10m²
BUND WALL HEIGHT: 200mm

ALLOWABLE VOLUME OF LIQUID TO BE STORED: ±1800L

FLAMMABLE STORE PLAN VIEW 1:100

FLAMMABLE STORE NOTES:

1. THE CONSTRUCTION OF A FLAMMABLE STORE MUST BE IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS (T1)READ IN CONJUNCTION WITH SANS 10400.
2. THE FLOOR MUST BE OF CONCRETE CONSTRUCTION OR OTHER IMPERMEABLE MATERIAL AND MUST BE RECESSED BELOW THE DOOR LEVEL OR INCORPORATE THE SILL.
3. THE RECESS OR SILL MUST BE OF SUCH A DEPTH OR HEIGHT THAT IN THE CASE OF SPILLAGE IT WILL BE CAPABLE OF CONTAINING THE QUANTITY OF FLAMMABLE LIQUID AS INDICATED ON THE FLAMMABLE SUBSTANCE CERTIFICATE AND AN ADDITIONAL 10% OF QUANTITY MENTIONED ON THE CERTIFICATE.
4. NOTWITHSTANDING THE NATIONAL BUILDING REGULATIONS (T1) READ IN CONJUNCTION WITH SANS 10400:-
   A) THE ROOF ASSEMBLY OF THE FLAMMABLE STORE MUST BE CONSTRUCTED OF A CONCRETE SLAB CAPABLE OF PROVIDING A 2 HOUR FIRE RESISTANCE WHEN IT FORMS PART OF ANOTHER BUILDING.
   B) IN THIS INSTANCE THE FLAMMABLE STORE MUST BE MECHANICALLY VENTILATED BY INTRINSICALLY SAFE FAN MOTORS.
5. NOTWITHSTANDING THE NATIONAL BUILDING REGULATIONS (T1) READ IN CONJUNCTION WITH SANS 10400, A FLAMMABLE STORE DOOR MUST BE CONSTRUCTED OF MATERIAL WITH A FIRE RESISTANCE OF 2 HOURS PROVIDED THAT ALL SAFETY DISTANCES ARE COMPLIED WITH AND THE DOOR MUST OPEN OUTWARDS.
6. WHEN REQUIRED BY THE CONTROLLING AUTHORITY, A FLAMMABLE STORE DOOR MUST BE A C-CLASS FIRE DOOR WHICH COMPLIES WITH SANS 1253.
7. NOTWITHSTANDING THE NATIONAL BUILDING REGULATIONS (T1) READ IN CONJUNCTION WITH SANS 10400, ARTIFICIAL LIGHTING IN THE FLAMMABLE STORE MUST BE BY ELECTRIC LIGHT HAVING VAPOUR PROOF FITTINGS WIRED THROUGH SEAMLESS STEEL CONDUIT AND THE SWITCHES OPERATING THE LIGHTS MUST BE LOCATED OUTSIDE THE STORE.
8. NO OTHER ELECTRICAL APPARATUS MAY BE INSTALLED IN THE FLAMMABLE STORE.
9. A FLAMMABLE STORE MUST PROVIDE WITH A FOAM INLET CONSISTING OF A 65mm MALE INSTANTANEOUS COUPLING AND MILD STEEL PIPEWORK LEADING TO THE INSIDE THEREOF AND THE FOAM INLET MUST BE IDENTIFIED BY MEANS OF A SIGN DISPLAYING THE WORDS "FOAM INLET" IN 100mm BLOCK LETTERS.
10. RACKING OR SHELVING ERECTED IN THE FLAMMABLE STORE MUST BE OF NON-COMBUSTIBLE MATERIAL.
11. THE FLAMMABLE STORE MUST BE IDENTIFIED BY THE WORDS "FLAMMABLE STORE—BEWAARPLEK VIR VLAMBARE VLOEISTOWWE—ISITORO INDAWO YOKUGCINA IZIXHOBO EZITHATHA LULA UMULO, AND THE PERMISSIBLE QUANTITY ALLOWED WITHIN THE FLAMMABLE STORE [1000 LITRES], INDICATED IN 100mm BLOCK LETTERS ON BOTH INSIDE AND OUTSIDE OF ALL DOORS COMMUNICATING DIRECTLY WITH THE STORE.
12. THE OWNER OR PERSON IN CHARGE OF THE FLAMMABLE STORE MUST ENSURE THAT THE FLAMMABLE STORE DOORS ARE KEPT LOCKED WHEN THE STORE IS NOT IN USE.
13. A PERSON SHALL NOT ENTER A FLAMMABLE STORE OR CAUSE OR PERMIT IT TO BE ENTERED WITHOUT PERMISSION OF THE OWNER OR PERSON IN CHARGE OF THE PREMISES.
14. SUFFICIENT FIRE EXTINGUISHERS AS DETERMINED BY THE CONTROLLING AUTHORITY MUST BE MOUNTED ON THE EXTERNAL WALL OF THE FLAMMABLE STORE IN A CONSPICUOUS AND ACCESSIBLE POSITION.
15. ANY HAND TOOL USED IN THE FLAMMABLE STORE MUST BE INTRINSICALLY SAFE.
16. PROVIDE A SPILL KIT. STAFF TO BE TRAINED ON HOW TO USE THE SPILL KIT.

FIRE AND DIRECTIONAL SIGNAGE	
	E1
	E2
	E3
EXIT	E6
	E16
	E17
	F31
	F20
	F17
	F14
	F16
	F19
	F13
	F15
	F4
	F5
	F6
	F10
	F1
	F2
	F3
	F26
	F27
	F35
IN THE EVENT OF FIRE EXIT DOWN THE STAIRWAY. DO NOT USE LIFTS	F39
IN THE EVENT OF FIRE, BREAK GLASS AND ACTIVATE ALARM IN NOODGEVAL BREEK GLAS EN AKTIWEER ALARM	F44
FIRE EXIT KEEP CLEAR	F45
DANGER FLAMMABLE LIQUIDS NO SMOKING	F46

FIRE NOTES

1. DEEMED TO SATISFY FIRE PLAN IN ACCORDANCE WITH SANS 10400 PAR T.
2. NEW BUIDLING, OCCUPANCIES AS INDICATED.
3. STRUCTURAL STABILITY AS PER SANS 10400: PART-T 30min.
4. FIRE EXTINGUISHERS, FIRE HOSE REELS AND FIRE HYDRANTS TO SANS 10400: PART-T.
5. FIRE SIGNAGE TO SANS 1186, PHOTO LUMINESCENT TYPE, 190x190mm FOR OFFICES, 290x290mm FOR WORKSHOP AREA, INTERNALLY ILLUMINATED "EXIT" SIGN WITH BATTERY BACKUP TO BE PROVIDED, EXCEPT WHERE EMERGENCY LIGHTING IS CLOSE ENOUGH TO PROVIDE SUFFICIENT LIGHT ON PHOTO LUMINESCENT SIGNS. SIGNS TO BE MECHANICALLY FIXED.
6. TRAVEL DISTANCE DO NOT EXCEED 45m NO EMERGENCY ROUTES REQUIRED.
7. ANY OPENING IN ANY EXTERNAL WALL OF ANY DIVISION MUST BE EQUAL OR GREATER 1000MM APART.
8. DOORS ON ACCESS CONTROL TO CLOSE/RELEASE ON FIRE DETECTION SIGNAL.
9. FIRE SEALING OF PENETRATIONS, OPENINGS AND DIVISIONS (FIRE RATED WALLS). ALL PENETRATIONS AND OPENINGS IN WALLS INDICATED ON THE FIRE PLAN TO BE FIRE WALLS ARE TO BE CLOSED UP AND FIRE SEALED TO THE SAME RATING REQUIRED FOR SAID WALLS USING SABS APPROVED PRODUCTS.
10. FIRE DETECTION IN ACCORDANCE WITH SANS 10139.
11. NATURAL SMOKE VENTILATION TO BE INSTALLED VIA LOUVRES AT HIGH LEVEL.

NEW BUILDING FOR ACSA

- FIRE EXTINGUISHERS: 11OFF
- FIRE HOSE REELS: 2OFF
- FIRE HYDRANTS: 1 PER UNIT

FIRE LEGEND

SYMBOL	DESCRIPTION
	FIRE EXTINGUISHERS
	30M FIRE HOSE REEL
	FIRE HYDRANT
	BOOSTER CONNECTION
	FIRE WATER RETICULATION PIPING
	ESCAPE ROUTE
	30min FIRE RATED WALL
	60min FIRE RATED WALL
	120min FIRE RATED WALL
	240min FIRE RATED WALL
	30min NO COMBUSTIBLE FIRE STOP
	120min FIRE SHUTTER ON FIRE SIGNAL
P/B	PUSH BAR/PANIC BOLT ON DOOR

FD-120-C
- CLASS OF THE FIRE DOOR
- FIRE RATING OF DOOR
- FIRE DOOR

** DOOR CLOSERS TO BE INSTALLED ON ALL FIRE DOORS.
** IRONMONGERY FOR FIRE DOORS AS SHOWN ON DRAWING.

FOR APPROVAL

Rev.	Date	Description	Rev. by
B	18/08/20	FOR COUNCIL SUBMISSION	JJ
A	18/08/20	FOR INFORMATION ONLY	JJ

Scale: AS SHOWN

ORIGINAL SIZE A2

	Name	Signature
Checked	JOVANNE JACOBS	
Approved	JOVANNE JACOBS	
ECSA Pr. No.	20190621	

Client/Employer

AIRPORTS COMPANY SOUTH AFRICA

TROIKA ENGINEERING CONSULTANTS
19 Santraline Denneburg Paarl
Tel: +27 72 835 9123
E-Mail: jovanne@tengc.co.za

Project

ACSA CTIA GSE

Plan Description

FIRE PROTECTION
DIESEL TANK STORAGE
FLAMMABLE STORE

Contract No. 20017

Drawing No. 20017 - 120 - 03

Revision B

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