CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

Case ID 1500159307

Erf 106913, 3 Adrian Herberg Road, Lansdowne

Development Management

LJ GLUCKMAN

TOWN PLANNING

MOTIVATIONAL REPORT:

PREPARED BY: LJ GLUCKMAN TOWN PLANNING

APPLICATION: APPLICATION FOR PROPOSED REZONING, DEPARTURE & AMENDMENT/REMOVAL OF RESTRICTIVE CONDITIONS ASSOCIATED WITH ERF 106913, CAPE TOWN

DATE: 17 FEBRUARY 2026

ERF Number	106913, Cape Town
Address	3 Adrian Herbert Road, Lansdowne
Title Deed	
Title Deed Date	29 October 2024
Restrictive Conditions	Yes
Registered Extent	3595
Zoning	Limited Use Zone
Overlay Zoning	NA

INTRODUCTION

The subject property was utilised as a centre for Epilepsy by the Western Cape Branch of Epilepsy South Africa. It is our understanding that this institution, or branch thereof, ran into financial difficulties resulting in their inability to maintain the property and sustain the activities operating thereon. As such, the property was put up for sale and purchased by after the City of Cape Town was given first option to purchase.

The property is currently utilised by SA Fire Watch one of the largest consulting companies on fire safety and training to the private and public sector in the Western Cape. This property currently serves as their headquarters and facilitates a number of activities including offices, a training centre and small scale refurbishment and manufacturing of fire safety equipment. These actives are discussed in greater detail throughout this report.

This application serves to seek approval for the proposed land uses on the property which requires proposed rezoning, removal of restrictive conditions and a departure.

THE APPLICATION

1) Application is hereby made in terms of 42(a) of the MPBL, for the rezoning of the property from Limited Use to Mixed Use 1.
2) Application is hereby made in terms of 42(b) of the MPBL, for a permanent departure from item 137 to permit a total of 21 parking bays in lieu of 31 parking bays.
3) Application is hereby made in terms of 42(g) of the MPBL, for the removal of restrictive conditions C1 & C2 as contained in title deed

THE APPLICANT

The subject property is owned by A resolution letter has been provided authorising to act on the companies behalf. has in turn authorised LJ Gluckman Town Planners to act as the applicant in all matters pertaining to the submission of a land use application to the City of Cape Town.

PROPERTY DETAILS

The subject property is located off of Govan Mbeki Road in Lansdowne. Its official address however is 3 Adrian Herbert Road.

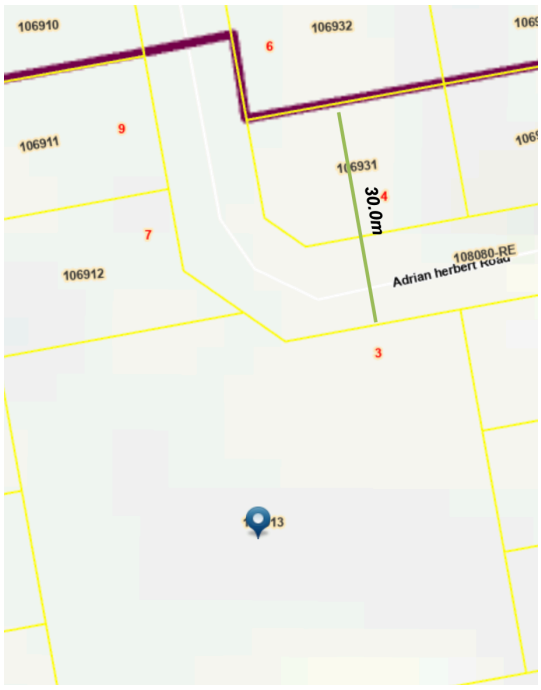
The aerial image above shows the position of the subject property relative to Govan Mbeki Street and Adrian Herbert Road and depicts the current buildings located on the property as well as the existing parking area. There are no significant biophysical or natural features present on the subject property and there are no features which are considered to be of value from a heritage perspective.

The image above from 2022, taken from the City's online resources, shows that all structures were existing and in their current form prior to the purchase of this property by the current owners.

The above image depicts the size and zoning of properties in relation to the subject property. The majority of properties in the local area are zoned Residential 1 and a neighbouring property to the east is zoned

Local Business 2. This extract also indicates that there is a property zoned Open Space between the subject property and Govan Mbeki.

A wider view (above) shows that there is a wide array of different zonings present in the local area and that the subject property is located in close proximity to an industrial and commercial precinct.



There are no overlay zones currently registered over the subject property but the above image does indicate that it is located +-30m from the boundary of the current PT1 overlay zone in the area.

DESCRIPTION OF APPLICATIONS:

1) PROPOSED REZONING TO ACCOMMODATE PROPOSED USE OF PROPERTY & ASSOCIATED DEPARTURES

The zoning certificate confirms that the subject property is currently zoned Limited Use. Thus, any proposals for a change in use requires an application for proposed rezoning. The below details permissible development and land use on a property zoned Mixed Use 1 and indicates how existing development and proposed land use conforms to these provisions of the by-law.

PERMISSIBLE DEVELOPEMNT

PERMISSIBLE DEVELOPMENT ASSOCIATED WITH PROPERTIES ZONED MIXED USE 1

Floor Factor: 1.5 = 5392.5 total permissible floor space
Coverage: 75%
Height: 15m
Street boundary building line: 0m (up to 10m in height)
Common Boundary Building line: 0m (up to 10m in height)

PROPOSED DEVELOPMENT:

Although no new development is proposed on the subject property the below calculations show how the building plans conform with the permissible development on the subject property.

Floor Space: 2014.81 square meters (3377.69 square meters less than permissible)
Coverage: 55% (20% less than permissible)
Height: 8.242 (+- 6.5m less than what is permissible)
Street boundary building line: Compliant
Common Boundary Building line: Compliant

As indicated above, the existing structures conform to all provisions of the by-laws associated with permissible development on a property zoned Mixed Use 1. It has also been indicated that these development parameters are all much less than that which is permissible.

PERMISSIBLE USE

PERMISSIBLE USE OF MIXED USE 1 ZONING:

Primary use rights are listed as follows: business premises, industry, dwelling house, second dwelling, boarding house, flats, place of instruction, place of worship, institution, hospital, place of assembly, place of entertainment, hotel, conference facility, authority use, utility service, rooftop base telecommunication station, transport use, multiple parking garage, private road, filming, chancery, electric vehicle charging stations, micro wind turbine, structure-mounted energy system and open space.

Additional use rights are supplementary dwelling unit, small-scale wind turbine.

PROPOSED LAND USES:

The following uses are proposed on the subject property:

1) Business Premises
2) Place of Instruction
3) Industry

Description of Uses:

TRAINING FACILITY(S):

The training facility is used to train fire fighters and fire safety officers in a simulated environment. As practitioners of fire safety and fire safety consultants, great precautions have been taken to ensure the safety of trainees and the building as it relates to this simulated environment. These simulations are confined to within the container structures shown to be located in the building which have in-built safety features to ensure that the fire simulations are contained. A report has been included as an annexure which provides further in depth description of this.

SA Fire Watch facilitates the following courses:

1) First Aid Training

These courses run over 3 days and are available to a maximum of 15 students at a time. The classrooms are each used for different purposes associated with this course which includes a combination of theory and practical training

2) Fire Training

These courses run over 2 days and are available to a maximum of 15 students at a time. The theory component is facilitated in the classrooms on the portion proposed to be rezoned to GB1 while the practical component associated with the more advanced courses is facilitated in the simulator discussed above.

Each class can accommodate 15 students and the entire facility can accommodate a maximum of 50 students on a single day.

WORKSHOP:

There are two primary purposes that the workshops are used for: 1) Refilling and refurbishment of portable fire extinguishers. 2) The manufacturing of small sprinkler heads to be fitted to fire safety infrastructure inside of buildings.

OFFICES:

The majority of the offices are utilised for the business operations associated with SA Fire Watch and the remainder are offices designated to the training facility.

SITE CONTAINER:

The site container is stored on site and is from time to time made use of as an on-site office when the company completes fire safety and protection installations for clients.

2) PROPOSED PARKING DEPARTURE

Table of Room Areas		
Number	Name	Internal Area
1	EX Female Ablution	15 m²
2	EX Male Ablution	12 m²
3	EX Paraplegic	3 m²
4	Ex. Classroom	58 m²
5	EX. Classroom	27 m²
6	Ex Communial Office	12 m²
7	Ex. Office	7 m²
8	Ex Office	8 m²
9	Ex Lobby	9 m²
10	Ex Office	15 m²
11	Ex Office	21 m²
12	Ex Office	16 m²
13	EX Classroom	18 m²
14	EX Classroom	18 m²
15	EX Classroom	16 m²
16	EX Classroom	23 m²
17	Ex Storeroom	7 m²
18	Ex Storeroom	9 m²
19	Ex CEO Office	15 m²
20	Ex Planning Office	43 m²
21	Ex Storeroom	47 m²
22	Ex Filling Room	6 m²
23	Ex Office	33 m²
24	Site Container	14 m²
25	Ex Workshop	69 m²
26	Ex Prayer room	13 m²
27	Ex Prayer room	16 m²
28	Ex Passage	10 m²
29	Ex Workshop	40 m²
30	Ex Office	23 m²
31	Workshop	161 m²
32	Workshop	34 m²
33	Workshop	46 m²
34	Training Facility	237 m²
35	Ex Gaurd House	4 m²
36	Ex Reception	37 m²
37	Ex Office	22 m²
38	Ex Office	10 m²
39	Ex Office	9 m²
40	Ex Office	23 m²
41	Ex Storeroom	16 m²
42	Ex Office	18 m²
43	Ex Office	15 m²
44	Ex Female Ablution	13 m²
45	Ex Male Ablution	13 m²
46	Ex Storeroom	13 m²
47	Ex Storeroom	4 m²
48	Ex Kitchen	21 m²
49	Ex Storeroom	5 m²
50	Ex Storeroom	4 m²
51	Ex Canteen	15 m²
52	Ex Tea Room	127 m²
53	Ex Storeroom	5 m²
54	Ex Open Office	34 m²
55	Ex. Office	16 m²
56	Ex Passage	20 m²
57	Ex Male Ablution	17 m²
58	Ex Female Ablution	16 m²
59	Ex Storeroom	3 m²
60	Ex Storage Cage	8 m²
61	Ex Passage	29 m²
62	Ex Passage	33 m²
63	Fire Pump	2 m²
64	Ex Passage	6 m²
Grand total: 64		1661 m²

The above extract from the proposed building plans depicts the areas which are required to be included for the purposes of calculating parking provision on the property.

Total Areas:

Offices: 340 square meters

Industry: 350 square meters

Place of Instruction: 397

Parking Requirements:

Offices: 4 bays per 100 sqm floor space - (340/100) x 4 = 13.6 bays
Industry: 1,5 bays per 100 m2 GLA for facilities up to 3000m2 GLA. (350/100) x 1.5 = 5.25 bays
Place of Instruction: 0,1 bays per student, plus 1 bay per classroom and 1 bay per office. 0.1 x 50 students = 5 bays. 7 classrooms including the simulator facility = 7 bays

Total Parking Bays Required = 30.85 = 31 bays required
Bays Provided = 21 bays

Departure for 21 bays in lieu of 31 bays

MITIGATING FACTORS:

While the facility can accommodate up to 50 students the courses themselves only accommodate 15 students with typically only one course running at a time for a period of 2-3 days. These students will then move between the various classrooms depending on the subject. The courses are typically booked by private companies or organisations and form part of the training of their employees. As such, the companies or organisations typically arrange transport for their employees to and from the subject property for the days that they attend training at the facility. There are also fewer instructors than classrooms and, as a result, overall demand for parking on site by both students and instructors is far less than what is required. Further to the above, a large number of the staff working on the property make use of public transport which is well developed in the area. This is indicated by the location of the boundary of the PT1 overlay zone which is in close proximity to the subject property. It must also be noted that there are currently large scale upgrades taking place to the local road network. If this property were to be within the PT1 overlay zone a total of 22 bays would be required to be provided for on-site parking. This is a significantly reduced parking requirement and the subject property is only located 30m away from the overlay zone which allows for this reduced on-site parking provision.

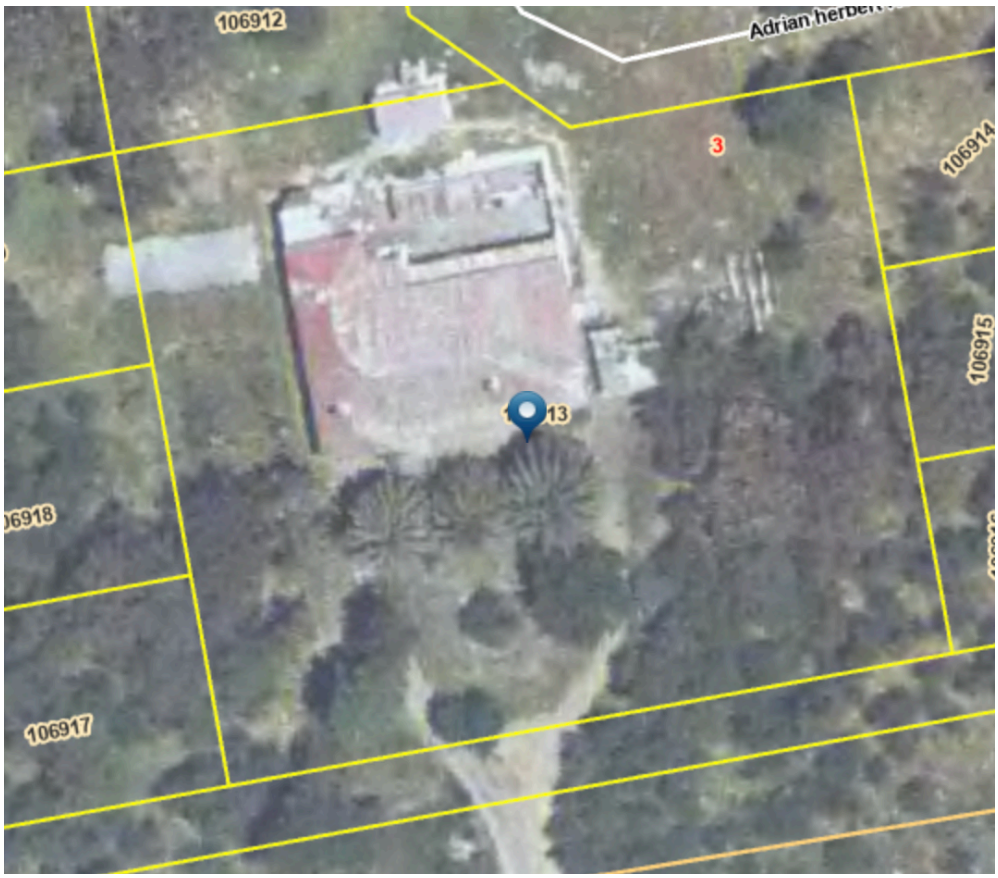
3) REMOVAL OF TITLE DEED RESTRICTIVE CONDITIONS

SUBJECT FURTHER to the following conditions contained in Deed of Transfer No. imposed by the Municipality of the City of Cape Town for its own benefit:

1. No access to the property is to be permitted off Lansdowne Road.
2. The property shall be used exclusively for welfare purposes.

The conditions above, conditions C1 and C2 as contained in title deed were imposed by the City of Cape Town and there is no evidence to suggest that these were imposed by LUPO or any other applicable planning law and, as such, are not considered conditions of approval by the MPBL.

Despite this application is included to remove these conditions from the title deeds to permit, 1) access of Govan Mbeki (Lansdowne Road) and, 2) to permit a use on the property other than for welfare purposes.



Aerial Image of Subject Property - 1969

Aerial Image of Subject Property - 1986

Aerial Image of Subject Property - 1997 (9 years after the restrictive conditions were imposed)

The aerial imagery shown above clearly indicates that, at no point, even following the imposition of restrictive conditions in the title deeds, was access to the property taken off Adrian Herbert Road. The positioning of the buildings did not make this possible as access to the parking area can only be gained off of Govan Mbeki. It is therefor unclear why this condition was imposed and it was presumably never enforced.

Application is included within this application for the removal of the following restrictive conditions:

C1: No access to the property is to be permitted off Lansdowne Road.
C2: The property shall be used exclusively for welfare purposes.

In order to permit access off of Govan Mbeki Street and allow for land uses other than 'for welfare purposes'.

MOTIVATION

This section serves to motivate for the proposals included in this application in terms of the Municipal Planning By-Laws, as well as the Spatial Planning and Land Use Management Act and the Land Use Planning Act.

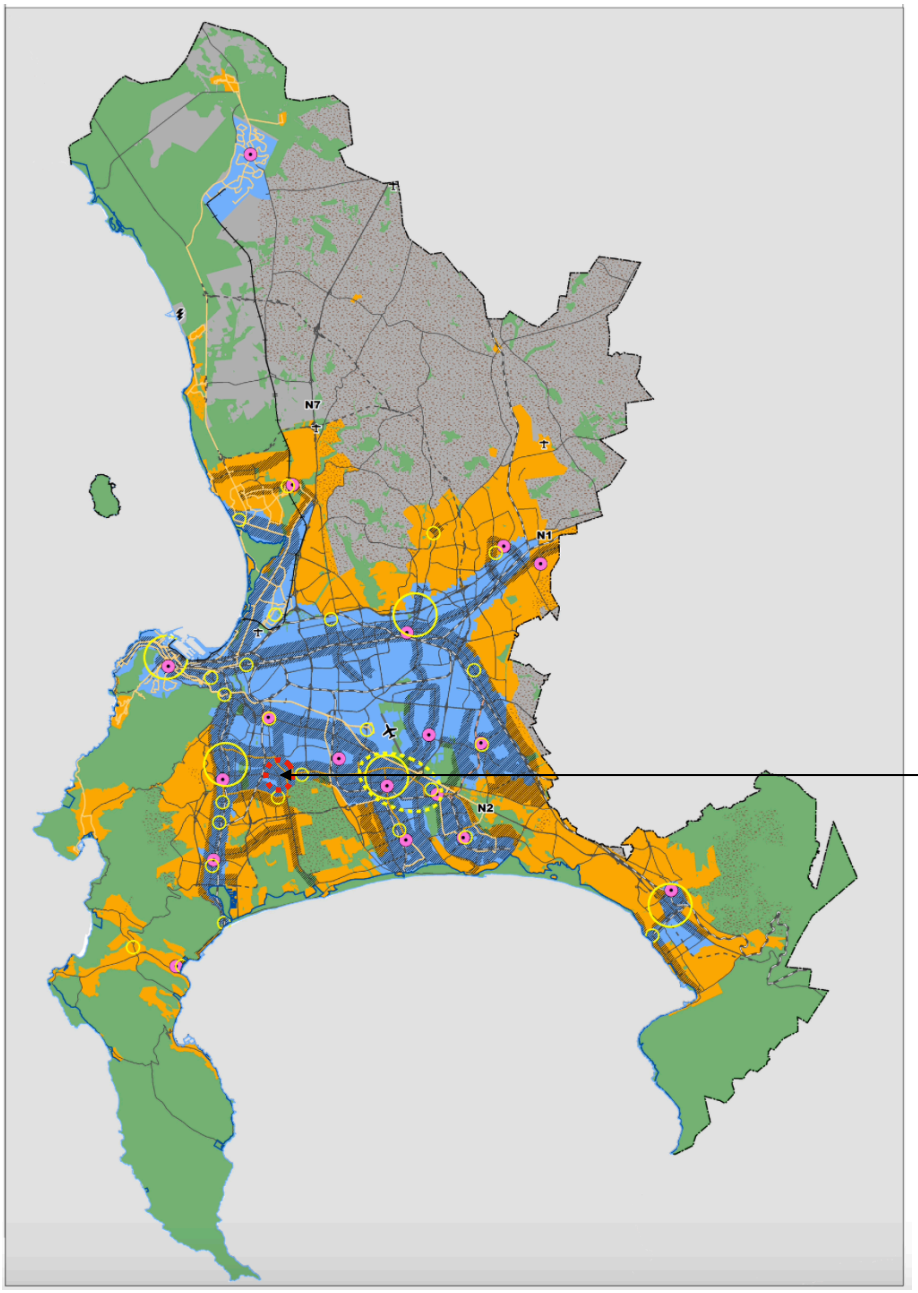
PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK

The Provincial Spatial Development Framework has been assessed against the proposals made herein and it has been found that the approval of these proposals cannot reasonably be expected to contravene this framework nor could they be expected to have a negative impact upon the directives contained within this policy.

MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK

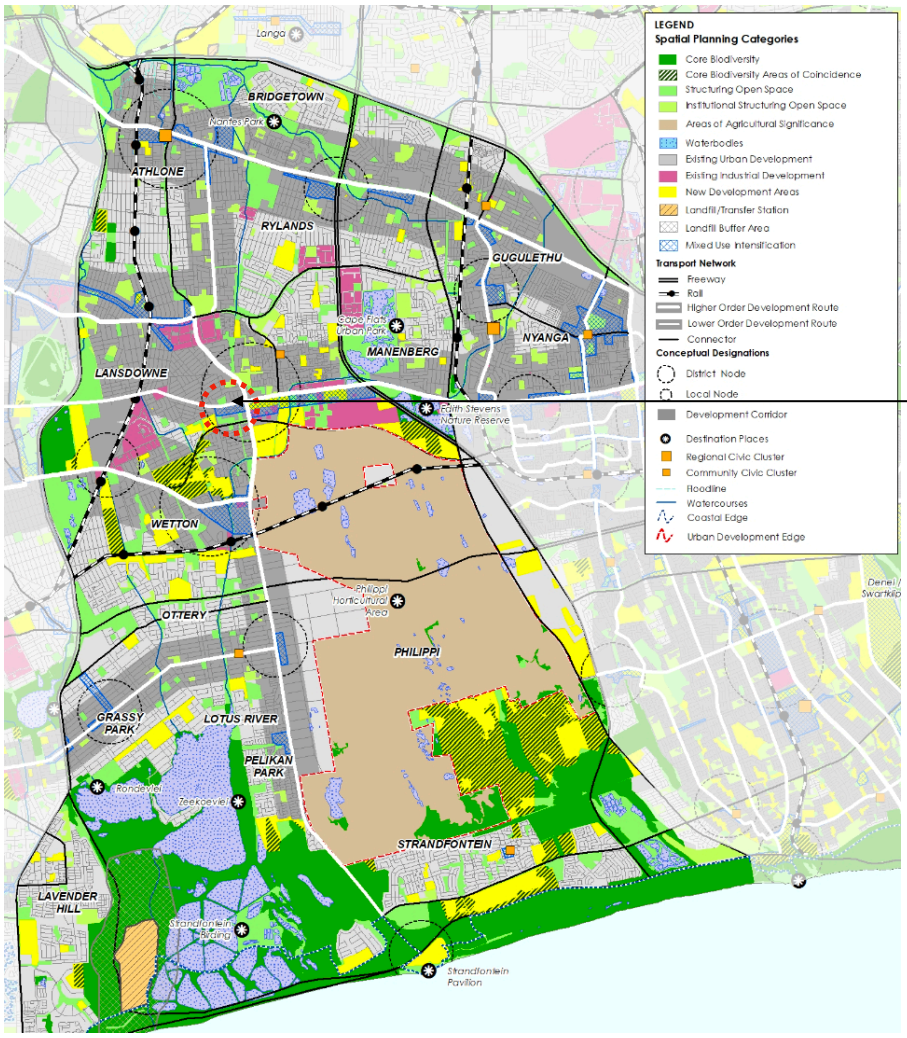
The Municipal Spatial Development Framework provides a high level spatial planning guideline for the city of Cape Town and is adjusted periodically to account for changes in policy which inform both public and private investment throughout the city.

This policy contains three spatial strategies namely; Spatial Strategy 1: Build an inclusive, integrated, vibrant city; Spatial Strategy 2: Manage urban growth and create a balance between urban development and environmental protection; Spatial Strategy 3: Plan for employment and improve access to economic opportunities. The proposals contained within this application are believed to be in support of the above spatial strategies. Making efficient and effective use of available land within the urban edge reduces pressures on urban sprawl which results in the loss of valuable agricultural land and environmental resources. Limiting the use of the subject property to only a single use does not allow for free market conditions which allows businesses to flourish and for employment opportunities to be created. The welfare institute that was operating on the subject property ran into financial issues and could no longer afford to operate the facility or maintain existing buildings and infrastructure on site. The proposed rezoning of the subject property and removal of restrictive conditions limiting the use of the property enables the creation of employment opportunities and supports economic growth. Enabling this property to be utilised for business purposes creates employment opportunities providing more people with access to jobs in an area which needs increased economic opportunities for local residents and the training facility also provides the opportunity for individuals to up-skill themselves. These factors are all seen as contributors toward creating a more inclusive and integrated city.



The above extract from the MSDF indicates that the subject property is located within the Urban Inner Core and within a defined development corridor. The MSDF promotes the intensification and diversification of land uses in these areas. The Urban Inner Core is seen as the heart of the city which contains high concentrations of commercial activity and employment opportunities, major mobility routes, a concentration of an array of public and private infrastructure and high density residential development. The proposals made herein are not expected to be in conflict with the desired uses and outcomes for this area.

CAPE FLATS DISTRICT PLAN



The above extract from the Cape Flats District Plan shows that the subject property is located within the Existing Urban Development Spatial Planning Category as defined by this policy. The district plan indicates that the focus in these areas should be on the further intensification, optimisation and appropriate redevelopment of existing land uses and upgrading/maintenance of associated infrastructure. The plan also indicates the location of the property within a defined development corridor and district node, areas, "Typified by intensified and diversified land use, these corridors reflect the targeted, prioritised areas earmarked for the largest spectrum of land use mix associated with the highest density of population and employment". The plan also indicates that the property is located in close proximity to a defined Mixed Use Intensification zone.

Given the above, the proposed rezoning of the subject property to Mixed Use 1 is believed to be well aligned with the relevant spatial plan and policies for the district. Further to this, there are no proposals

contained within this application that are believed to contravene the Cape Flats District Plan and, in many ways, they are expected to support the directives of the SPC in which the subject property is located.

SOCIAL DEVELOPMENT STRATEGY

The Social Development Strategy has been considered and this application is not believed to contravene any of the policy directives, nor is it expected to jeopardise the achievement of the policies, contained within this strategy. It is maintained that the proposals made herein largely support the directives of this policy largely through the creation of enhanced employment opportunities and enhanced access to an institution which provides opportunities for skills development.

The proposal is believed to support a number of the objectives by 1) creating more job opportunities and providing increased opportunities for business and, 2) The effective utilisation of available land and the upkeep and maintenance of infrastructure on the subject property is seen as a contributing factor toward promoting safer spaces. In contrast, abandoned properties which are left in disrepair are commonly associated with nefarious activities. The above factors contribute toward enhanced opportunities and a safer and more inclusive city.

INCLUSIVE ECONOMIC GROWTH STRATEGY

One of the major problems currently faced by the City is a rate of declining private investment which is impacting on economic growth. This lack of investment, as identified by this policy, is also experienced in public investment and under investment by both private and public entities places large amounts of pressure on local infrastructure including transport systems and service delivery which the residents of the city are heavily dependant on.

This proposal promotes enhanced private investment in the city which directly results in job creation and contributes toward economic growth thereby further enhancing the creation of an opportunity city.

SPLUMA

Chapter 2 of the Spatial Planning and Land Use Management Act (SPLUMA), 2013, sets out a number of development principles designed to guide spatial planning and land use management. There are 5

development principles stipulated, these are; 1. Spatial Justice, 2. Spatial Sustainability, 3. Efficiency, 4. Spatial Resilience, 5. Good Administration.
The proposals made herein support a number of these principles. Spatial sustainability is supported as the deletion of these restrictive conditions will allow for the more efficient use of well located land within the urban edge. The current zoning of the subject property is also extremely limiting and so the proposed rezoning will also allow for the more effective and efficient use of this property. This enhancement of efficiency includes the efficient use of existing infrastructure on the subject property in a manner which allows for a thriving business and enhanced job creation. Spatial resilience is also created by enabling the subject property to be more adaptable to the changing needs of the city and to be able to respond effectively. The proposals contained within this application are in no way expected to jeopardise the achievement of the development principles as set out by SPLUMA.

LUPA

Chapter 6 of the Land Use Planning Act (LUPA), 2014, stipulates the Land Use Planning Principles to be upheld by the Province. These principles are in line with SPLUMA's development principles. These principles are promoted as described above and it is maintained that the proposals made within this application do not contravene any of these principles.

LUPA & SPLUMA CRITERIA

This section motivates for the proposals made herein in terms of the relevant criteria stipulated in LUPA & SPLUMA.

SPLUMA

Section 42(1)(c) provides a list of factors that must be assessed when determining an application for the removal of restrictive conditions:

1. The public interest

No proposals made within this application are expected to have a negative impact on the public interest. All proposals are made on private property and none of these proposals are expected to result in harmful or negative impacts to individuals or the community at large. The proposed industrial activity on site is not a danger to the public and all simulators have been designed with safety of trainees and the public in mind.

SA Fire Watch is one of the leaders in the fire safety industry consulting to both the public and private sector on best practise fire safety. They themselves have installed, and operate, the simulator training infrastructure and have all the required safety mechanisms in place.

2. The constitutional transformation imperatives and the related duties of the state

The applications contained herein have been made according to applicable laws.

3. The facts and circumstances relevant to the application

This report has detailed the facts and circumstances of the application. Building plans have been provided detailing the proposed uses on the subject property and, among other factors, local policies and laws have been taken into consideration.

4. The respective rights and obligations of all those affected

The owners of the subject properties are operating within their rights to submit an application requesting the approval of the City for the proposed applications. This application in turn provides interested and affected parties the right to submit comments in response to these proposals. The City of Cape Town is required to assess the applications and proposals contained herein.

5. The state and impact of engineering services, social infrastructure and open space requirements

The proposals contained within this report are not expected to have a negative impact on engineering services, social infrastructure or open space requirements.

6. Any factors that may be prescribed, including time frames for making a decision

These factors are prescribed largely by the Municipal Planning By-Laws.

Section 47(2) of the Spatial Planning and Land Use Management Act (SPLUMA), 2013, provides that a removal, amendment or suspension of a restrictive condition must occur:

(a). *in accordance with section 25 of the Constitution and SPLUMA*

The property rights of any party will not be affected by the removal of these restrictive conditions.

(b). *With due regard to the respective rights of all those affected, and to the public interest*
It is believed that rights of any party and the public interest will not be negatively impacted upon by the removal of these restrictive conditions. The public interest is currently protected by the Municipal Planning By-Laws and the rules and regulations prescribed within the DMS. The restrictive conditions which have been registered over this property are older than these, more current, development regulations. The conditions were put in place to control the use of, and access to, the subject property. Following the removal of these restrictive conditions the public interest will continue to be protected by the MPBL and the DMS and will allow the owner of the property to exercise new rights as proposed herein.

(c). *in the prescribed manner if such suspension, amendment or removal will deprive any person of property as contemplated in section 25 of the Constitution.*
The proposed removal of these restrictive conditions will not result in any person being deprived of property.

LUPA

Section 39(5) of the Land Use Planning Act (LUPA), 2014, must be considered when motivating for the deletion of a restrictive condition.

Section 39(5) stipulates that *when a municipality considers the removal, suspension or amendment of a restrictive condition, the municipality must have regard to at least the following:*

(a). *The financial or other value of the rights in terms of the restrictive condition enjoyed by a person or entity, irrespective of whether these rights are personal or vest in the person as an owner of the dominant tenement.*

We are not in a position, nor are we qualified, to provide accurate information pertaining to the current financial value. It is our opinion however, that the removal of these restrictive conditions will not impact upon financial value, or any other value, enjoyed by a person or entity. The removal of these conditions will not negatively affect the rights of surrounding properties, as neighbouring owners continue to retain their full zoning rights and development opportunities applicable to their individual erven.

The value in the rights of the restrictive conditions is to allow the City to control the use of, and access to, the subject property. Following the financial difficulties experienced by the previous owners, Epilepsy South

Africa (Western Cape Branch), they willingly sold the current property to the current owner. The conditions placed over the use of the property severely limits the currents owners ability to utilise the property and, as such, limits the value of the property.
It is our view that the rights of owners of the surrounding properties will not be negatively affected by the proposed removal of these restrictive conditions.

(b). *The personal benefits which accrue to the holder of the rights in terms of the restrictive condition.*
The personal benefits which accrue to the holder of the rights are the expectations that the the use of the property will be solely for the purposes of welfare and that access to the property will be off Adrian Herbert Road. It has been shown that access has historically (even following the imposition of these conditions) been taken off of Govan Mbeki with the location of buildings on the subject properties not making it possible to access the parking area from Adrian Herbert Road. The ability of the former owner to continue operating a welfare related service on the property was jeopardised by their financial position which resulted in their inability to continue their operations or maintain existing infrastructure on the property. This led to the sale of the property (private sale). It is clear that the circumstances surrounding the property and that of its former owners has changed significantly since the conditions were imposed in 1988 (37 years ago) and there appears to be no rationale in retaining these conditions in the title deed given these changes.

The subject conditions do not provide a 'personal benefit' to the neighbours who also do not have any other rights over the subject property (i.e. servitude), nor are they entitled to a real right which will be impacted upon following the removal of the stipulated restrictive conditions. The City of Cape Town will retain the benefit of controlling use and development on the subject property via the MPBL and associated DMS.

(c). *The personal benefits which will accrue to the person seeking the removal, suspension or amendment of the restrictive condition if it is removed, suspended or amended.*
The removal of these restrictive conditions will enable the landowner to access the property via Govan Mbeki Street, as has historically been the case, and to utilise the property as per the proposed land uses contained within this application. The removal of these restrictive conditions will allow for less restrictive controls on land use and will enable enhanced investment in the property by the owner.

(d). *The social benefit of the restrictive condition remaining in place in its existing form.*
It is believed that there will be no social benefit in retaining these restrictive conditions. The restrictive conditions provide no meaningful social benefit in the current legislative context as their original purpose

was to impose land use controls prior to the current Municipal Planning By-Laws which, together with the DMS and zoning scheme, provide a comprehensive and strict set of laws associated with development and land use within the Cape Town.

While the property was reserved for use as welfare facilities only, changing circumstances over the years resulted in the inability of the previous owners to continue the use and retain the property. The previous owners therefore failed to maintain the social benefit derived these restrictions and keeping these restrictions in place now negatively impacts the ability of the property to adapt to changing circumstances. The social benefit of removing these conditions is discussed below.

(e). *The social benefit of the removal, suspension or amendment of the restrictive condition.*
The limitations currently placed on the subject property place severe limitations on its ability to provide any social benefits. As discussed above, the previous owners were no longer able to continue to provide any social benefit derived from a welfare facility and were required to sell the property. The new owner now is now severely restricted in terms of utilising the property in an effective and efficient manner which would provide social benefit via job creation and equational facilities that allows individuals to up-skill themselves via certain certifications that these courses provide. The removal of the restrictive condition limiting the use of the subject property will enable the provision of these social benefits.

(f). *whether the removal, suspension or amendment of the restrictive condition will completely remove all rights enjoyed by the beneficiary or only some of those rights.*
The beneficiary in this case is the City of Cape Town. The removal of these restrictive conditions will not remove all rights enjoyed by the beneficiary as the CoCT will maintain control over development of the property through the MPBL and the Development Management Scheme.

IMPACT ON EXISTING RIGHTS

The rights of surrounding property owners are not expected to be negatively impacted upon as a result of the proposals made within this application. The restrictive conditions contained within this application afford rights over the subject property in favour of the City of Cape Town who will still retain control via the MPBL and associated DMS.

ADDITIONAL CONSIDERATIONS

CRITERIA	IMPACT
(a) Socio-Economic Impact	The proposals contained within this application are not expected to result in any negative socio-economic impacts. The proposed land uses will result in enhanced job creation and the proposed business activities on site will contribute towards local economic growth.
(b) Compatibility with Surrounding Area	The proposed new works are believed to be compatible with the surrounding area. The proposed industrial uses are of a nature which is not expected to result in a disturbance to the area and given the location of the property on Govan Mbeki Street and in close proximity to industrial nodes, the proposal is not expected to be incompatible with the local area.
(c) Impact on External Engineering Services	There is believed to be sufficient external engineering capacity within the area to accommodate the proposed uses on the subject property.
(d) Impact on Safety, Health and Wellbeing of the Surrounding Community	The approval of this application is in no way expected to result in detrimental impacts to the safety, health and well-being of the local community.
(e) Impact on Heritage	Heritage has been considered as it relates to the subject property and the proposals made within this application. The property is not graded nor is it located within an HPOZ.
(f) Impact on Biophysical Environment	The property is not situated in an environmentally sensitive area nor are the proposals made expected to impact negatively on the biophysical environment.
(g) Traffic Impacts	There is no proposals contained herein which will be expected to have a negative impact on traffic in the local area.
(j) Imposition of Conditions	Not deemed to be applicable in this case

CONCLUSION

This report contains the required information to effectively motivate for the proposed applications and we respectfully request that this application be reviewed and approved.

1. INTRODUCTION

Liquefied Petroleum Gas (LPG) firefighting training facilities play a critical role in preparing firefighters for real-world scenarios. This report outlines the design and installation of a fire sprinkler protection system for such a facility. Our goal is to enhance safety, minimize property damage, and ensure effective training.

SIGNIFICANCE OF LPG FIREFIGHTING TRAINING FACILITIES

Real-World Preparedness: LPG firefighting training facilities simulate actual fire scenarios, allowing firefighters to practice and refine their skills. These facilities expose trainees to the unique challenges posed by LPG fires, such as rapid combustion, flammable vapours, and potential explosions.

Risk Mitigation: By training in controlled environments, firefighters learn safe handling techniques, effective extinguishing methods, and hazard assessment. This knowledge is crucial for minimizing risks during real emergencies involving LPG.

OBJECTIVES OF THE FIRE SPRINKLER PROTECTION SYSTEM

Enhance Safety:

- Protect trainees, instructors, and property within the facility.
- Ensure rapid fire suppression to prevent injuries and limit fire spread.

Minimize Property Damage:

- LPG facilities often contain valuable equipment, training props, and infrastructure. A well-designed sprinkler system can prevent extensive damage.
- Water damage from sprinklers is preferable to the destruction caused by uncontrolled fires.

Effective Training:

- A reliable sprinkler system allows realistic fire scenarios without compromising safety.
- Trainees can practice response protocols, teamwork, and coordination under controlled conditions.
- The system ensures that mock fires can be safely extinguished, providing valuable learning experiences.

2. FACILITY OVERVIEW

Location: LPG Firefighting Training Facility
Purpose: This facility serves as a controlled environment for training firefighters in handling LPG-related emergencies.

FEATURES

Mock-Up Rooms: These rooms simulate real-world scenarios, allowing trainees to practice firefighting techniques.

Safety Measures: The facility incorporates safety protocols to protect trainees during training exercises.

Access Control: Restricted access ensures only authorized personnel can enter the training area.

Gas Storage: 48 kg of LPG

SIGNIFICANCE

- The stored LPG represents the hazard firefighters may encounter in actual incidents.
- Trainees learn safe handling, leak detection, and emergency shutdown procedures.

SAFETY MEASURES

- Proper storage containers (cylinders or tanks) are essential to prevent leaks or accidents.
- Emergency shutoff valves and pressure relief devices are installed for safety.

TRAINING SCENARIO: MOCK FIRES INSIDE SHIPPING CONTAINERS

Purpose:

- Trainees practice extinguishing fires involving LPG within confined spaces (shipping containers).
- Simulates real-world challenges, such as limited visibility, ventilation issues, and rapid fire spread.

Safety Considerations:

- Controlled fuel release ensures safety during mock fires.
- Instructors closely monitor trainees to prevent risks.

3. FIRE PROTECTION MEASURES

3.1. FIRE-RATED WALLS

Purpose:

- Fire-rated walls serve as critical barriers to contain fires within specific compartments or rooms.
- They prevent fire, heat, and smoke from spreading beyond their designated areas.

Construction and Features: Materials:

- Fire-rated walls are constructed using materials with high fire resistance. Common choices include:
  - Gypsum Board (Drywall): Provides fire resistance due to its composition and thickness.
  - Concrete or Masonry: Offers excellent fire protection.
  - Steel Studs with Fire-Resistant Insulation: Combines strength and fire resistance.
- The specific material depends on the required fire rating (e.g., 1-hour, 2-hour, etc.).

Fire Ratings:

- Fire-rated walls are assigned specific ratings based on their ability to withstand fire exposure. Common ratings include:
  - 1-Hour: Can withstand fire exposure for one hour.
  - 2-Hour: Provides two hours of fire resistance.
  - Higher ratings (e.g., 3-hour) are also available for more critical applications.

Construction Details:

- Fire-rated walls extend from floor to ceiling, creating a continuous barrier.
- Joints, gaps, and penetrations (such as electrical conduits) are sealed with fire-resistant materials to maintain integrity.
- Doors and windows within fire-rated walls must also meet fire-rated specifications.

Benefits:

- **Containment:** Fire-rated walls compartmentalize the facility, limiting fire spread to specific zones.
- **Evacuation Routes:** Clear pathways between fire-rated walls allow safe evacuation during emergencies.
- **Property Protection:** By preventing fire spread, these walls minimize damage to adjacent areas and property.

Fire-rated walls are essential safety features that enhance the effectiveness of fire protection systems within the LPG firefighting training facility. Their proper design, construction, and maintenance contribute significantly to overall safety and preparedness.

3.2. SMOKE EXTRACTION AND DETECTION MEASURES

SMOKE EXTRACTION

Purpose:

- **Visibility Maintenance:** Smoke extraction systems play a crucial role in maintaining visibility within enclosed spaces during a fire.
    - **During Fires:** Smoke generated during a fire significantly reduces visibility. In enclosed spaces like the LPG firefighting training facility, thick smoke can obscure exits, obstacles, and other critical elements.
    - **Smoke Extraction:** By promptly removing smoke, visibility is maintained. This allows occupants (trainees, instructors, or firefighters) to navigate safely, locate exits, and respond effectively.
- **Health Risks Mitigation:**
    - **Smoke Inhalation:** Smoke contains toxic gases, particulates, and chemicals. Inhaling smoke can lead to respiratory distress, irritation, and long-term health issues.
    - **Smoke Extraction:** Prevents prolonged exposure to harmful smoke, reducing the risk of respiratory problems and ensuring a healthier environment for all occupants.
- **Facilitates Safe Evacuation:**
    - **Clear Pathways:** Smoke extraction systems create clear evacuation routes. Trainees and personnel can move swiftly without panic or confusion.
    - **Emergency Response:** Firefighters can access affected areas more efficiently when visibility is maintained. This aids in rapid fire suppression and rescue operations.
    - **Safe Evacuation:** Clear visibility allows occupants (trainees, instructors, or firefighters) to evacuate safely without obstruction.

Components:

- **Fans:** High-capacity fans are strategically placed to create airflow patterns that channel smoke toward designated extraction points.
- **Vents:** Roof vents or wall-mounted vents serve as exit points for smoke. These vents open automatically when smoke is detected.
- **Ducts:** Smoke ducts connect the extraction points (fans and vents) to the exterior of the building.

Importance:

- **Prevents Smoke Inhalation:** Smoke inhalation is a significant hazard during fires. By removing smoke promptly, the risk of respiratory distress and toxic exposure is minimized.
- **Facilitates Safe Evacuation:** Clear visibility enables efficient evacuation routes, preventing panic and ensuring everyone can exit the facility swiftly.

Smoke extraction ensures visibility, prevents smoke-related health risks, and facilitates safe evacuation. Smoke extraction is a critical safety measure that directly impacts visibility, health, and evacuation effectiveness during emergencies. Properly designed and maintained systems enhance overall safety within the facility.

SMOKE DETECTION

Purpose:

- **Early Warning:** Smoke detectors provide early warning of fire, allowing timely response and evacuation.
- **Smoke Extraction Activation:** Linked to the smoke extraction system, smoke detectors trigger the extraction fan activation when smoke is detected.

Placement:

- Throughout the Facility: Install smoke detectors in key areas, including:
    - Training Rooms: Near mock fires and potential ignition sources.
    - Corridors and Exits: To detect smoke along evacuation routes.
    - Control Rooms: Where instructors monitor training exercises.

Types of Smoke Detectors:

- **Ionization Detectors:** Sensitive to fast-flaming fires (e.g., paper, wood).
- **Photoelectric Detectors:** Effective for smoldering fires (e.g., overheated wiring).

Smoke detectors serve as early warning systems, enhancing overall safety within the LPG firefighting training facility. Smoke detectors act as sentinels, promptly detecting the presence of smoke or fire. Occupants can evacuate swiftly and efficiently when alerted early. When smoke is detected, alarms sound, providing early warning to occupants and responders. These initial seconds are crucial for evacuation, fire suppression, and preventing escalation. By detecting smoke at its inception, smoke detectors minimize risks to life and property. Smoke detectors play a pivotal role in safeguarding lives, enabling timely responses, and preventing catastrophic outcomes within the LPG firefighting training facility.

3.3. SPRINKLER PROTECTION SYSTEM

A wet pipe sprinkler system would be beneficial for fire protection in the LPG firefighting training facility. Here's why:

Reliability and Simplicity:

- **Constantly Pressurized:** Water is always maintained in the pipes, ready for immediate discharge upon sprinkler activation.
- **Ease of Operation:** Simple design with minimal components ensures reliability and ease of modification.

Low Installation and Maintenance Costs:

- **Affordable:** Wet pipe systems are cost-effective to install and maintain.
- **Minimal Complexity:** Fewer components mean lower maintenance efforts.

Rapid Response:

- **Immediate Water Discharge:** When a sprinkler activates due to fire, water flows instantly.
- **Effective Fire Suppression:** Quick response limits fire growth and damage.

Design Density for LPG Facilities:

- The design density specifies the amount of water flow required per square meter (m^2) of protected area. It ensures adequate coverage based on the hazard classification of the facility. Here is the recommended design density for LPG facilities:
  - **Extra High Hazard:**
    - Density: 10.0 mm/m^2
    - Coverage Area: 324m^2 (Total Room Exposure Protection)

4. WATER SUPPLY REQUIREMENTS

Flow and Pressure:

- **Flow:** The system must deliver sufficient water flow to meet the hydraulic demands of the sprinkler heads. This includes both the sprinkler operation and any additional hose stream requirements for firefighting.
- **Pressure:** Adequate pressure ensures effective sprinkler activation and distribution. It's essential to maintain the required pressure at all points in the system.

Reliability:

- The water supply should be reliable, even during power outages or other emergencies. Backup systems (such as generators or gravity-fed tanks) can ensure continuous water availability.

Dedicated Water Main:

- A dedicated water main specifically for fire protection ensures that firefighting needs won't compete with other water demands (e.g., domestic use). The pipe size (150mm trunk main) should accommodate the required flow rate.
- **Unmetered:** The water main must be unmetered.

An acceptable water supply for a fire sprinkler system provides sufficient flow, adequate pressure, and reliability. It ensures timely response and effective fire suppression, safeguarding both life and property.

5. CONCLUSION

In conclusion, the fire protection system design for the LPG firefighting training facility is critical for safety and preparedness. By incorporating wet pipe sprinkler systems, smoke extraction, and fire-rated walls, we enhance overall security. The design densities ensure efficient water coverage, while smoke detectors serve as early warning systems. These measures collectively create a controlled yet realistic environment for training firefighters, minimizing property damage and safeguarding lives during LPG-related emergencies.